FCC RADIO TEST REPORT

FCC ID	:	**2AYXP-6253**
Equipment	:	**Electronic Display Device**
Model Name	:	**M2L4EK**
Applicant	:	**Avalite Bakerite LLC 101 East Park Boulevard Plano, TX 75074**
Standard	:	**FCC Part 15 Subpart C §15.247**

The product was received on Mar. 18, 2021 and testing was started from Mar. 26, 2021 and completed on May 17, 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.

Louis Wu

Approved by: Louis Wu

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

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History of this test report

Report No.	Version	Description	Issued Date
FR0N1024-01C	01	Initial issue of report	May 18, 2021
FR0N1024-01C	02	Revise list of measuring equipment	Jun. 23, 2021
FR0N1024-01C	03	1. Correct the WPC function is supporting receive only 2. Add the description for WPC charging mode 3. Revise Radiated Spurious Emission Data	Jun. 25, 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: Wii Chang

Report Producer: Cindy Liu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Electronic Display Device
Model Name	M2L4EK
FCC ID	2AYXP-6253
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE WPC Receive only

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	802.11b: 16.90 dBm (0.0490 W) 802.11g: 17.40 dBm (0.0550 W) 802.11n HT20: 16.00 dBm (0.0398 W)
99% Occupied Bandwidth	802.11b : 12.85 MHz 802.11g : 16.70 MHz 802.11n HT20 : 17.80 MHz
Antenna Type / Gain	IFA Antenna with gain 4.0 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

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

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, 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.**
	03CH13-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.
- 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, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane and WPC Charging Mode) were recorded in this report.

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	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 + USB Cable (Charging from Adapter (AP15)) Mode 2 ：Bluetooth Link +USB Cable (Charging from Adapter (AP15))

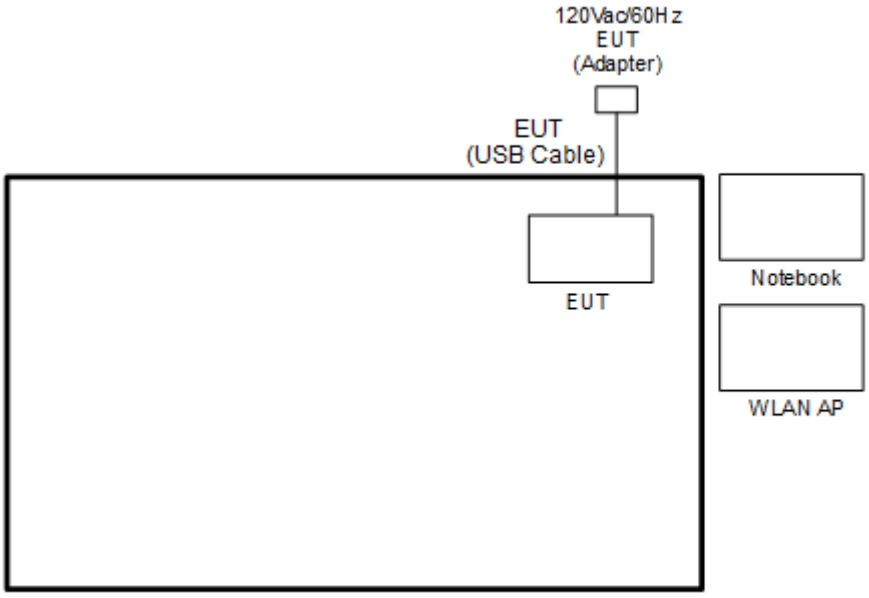
Remark:
1. For AC Conducted Emission test item, the special software tool was used for changing screens automatically and was made the EUT send transmitting signal for all testing.
2. The worst case of conducted emission is mode 2; only the test data of it was reported.
3. For Radiated Test Cases, the tests were performed with Adapter (AP15)
4. The worst mode is 11g CH11, so we additional verified the worst case (11g CH11) under WPC charging mode and found it passed the test.

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

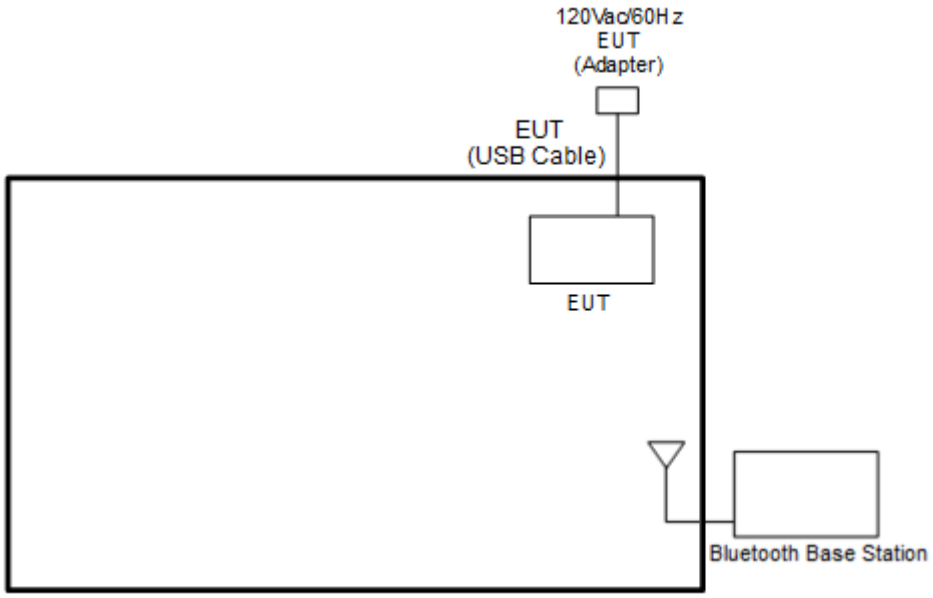
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

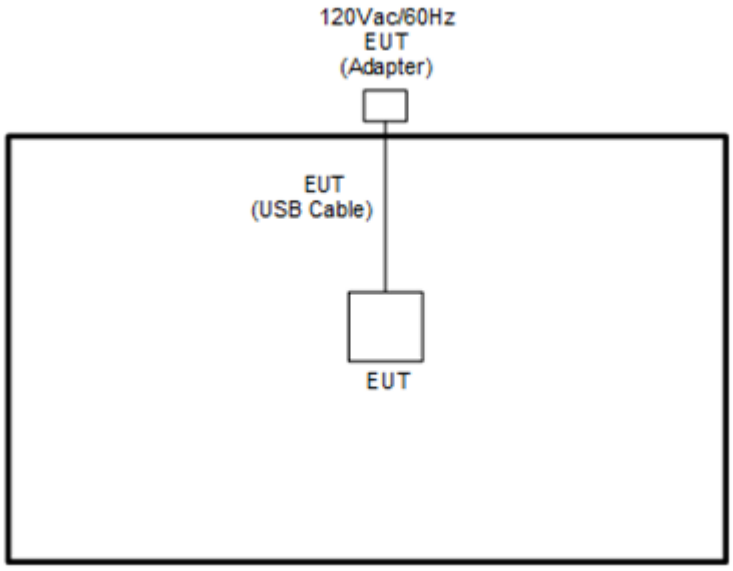
<AC Conducted Emission with WLAN Link Mode>



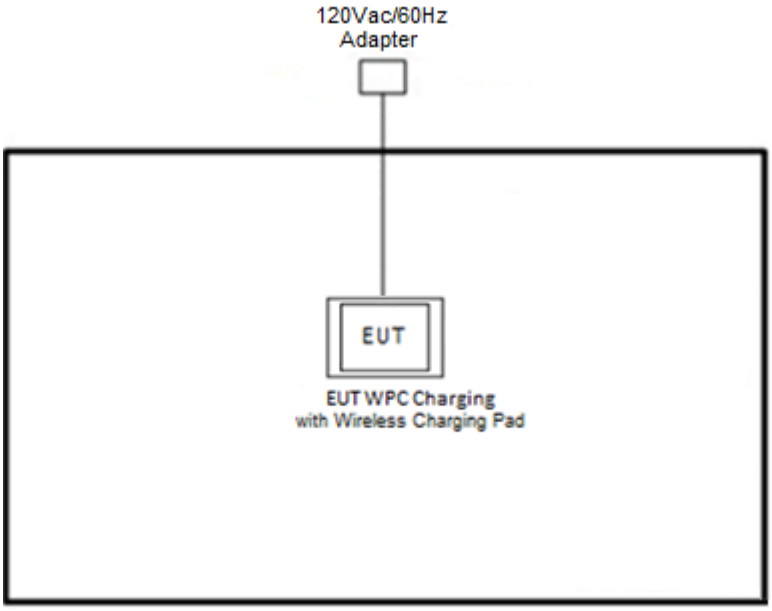
<AC Conducted Emission with Bluetooth Link Mode>



<WLAN Tx Mode>



<WPC Charging 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 Base Station	R&S	CBT32	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Notebook	Acer	A515-54G-51QB	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Wireless Charging Pad	belkin	F7U027	K7SF7U027	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “CMD_version 1.0.32” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

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

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

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

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

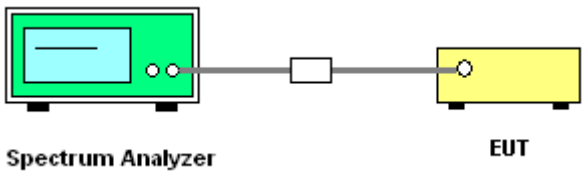
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

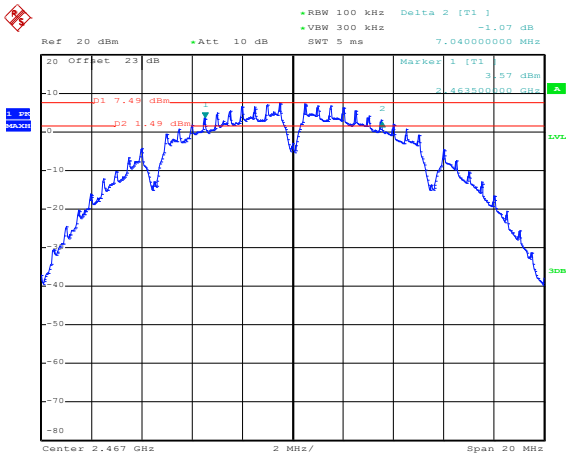
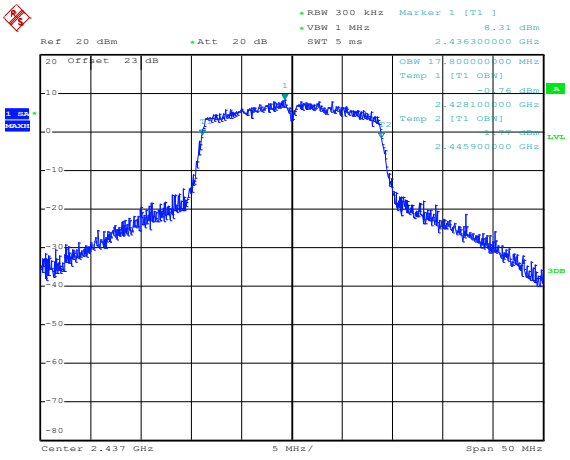
1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit 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) ≥ 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.

Minimum 6dB Bandwidth	Maximum 99% Occupied Bandwidth
	
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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.

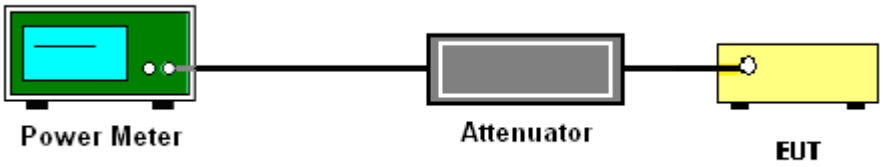
3.2.2 Measuring Instruments

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.

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.

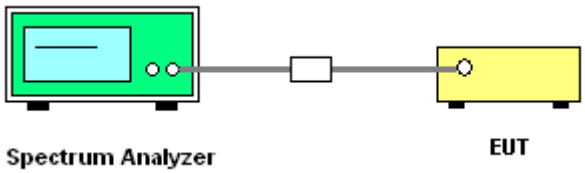
3.3.2 Measuring Instruments

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.

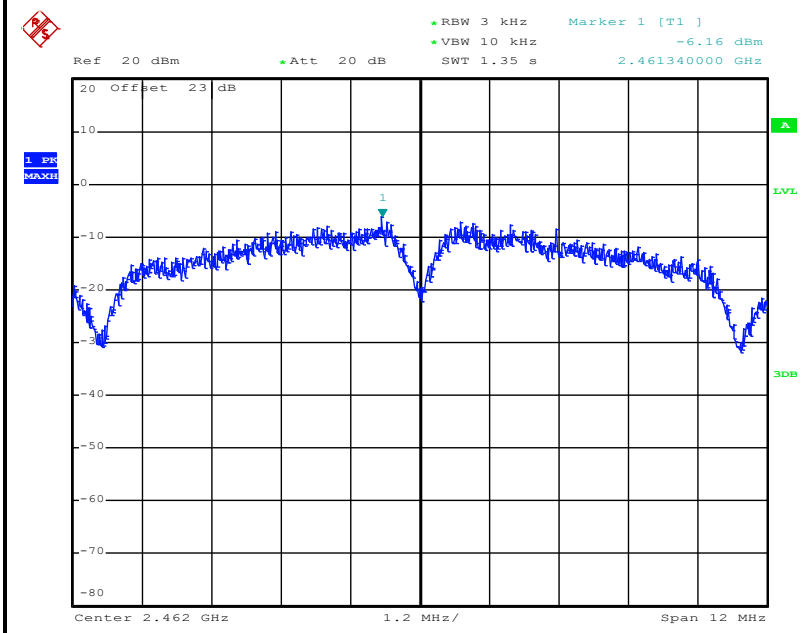
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/3kHz)



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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.

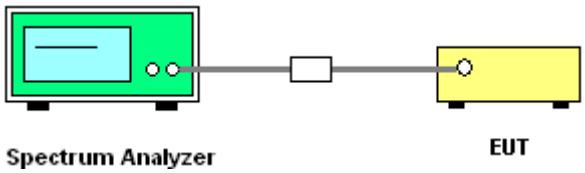
3.4.2 Measuring Instruments

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



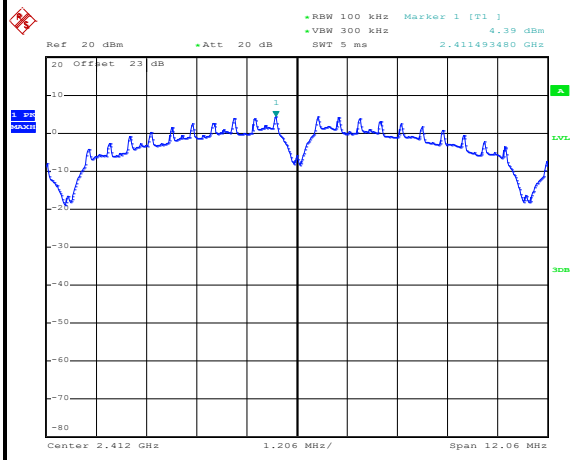
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Kathy Chen and Mina Liu	**Temperature :**	21~25℃
		Relative Humidity :	51~54%

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

Test Mode :	802.11b	**Test Channel :**	01

100kHz PSD reference Level



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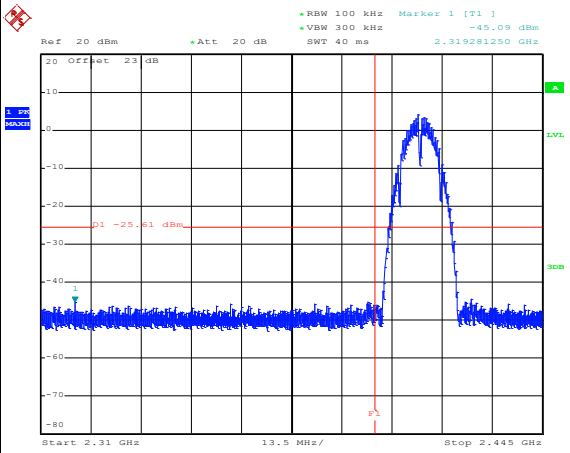
Channel Plot



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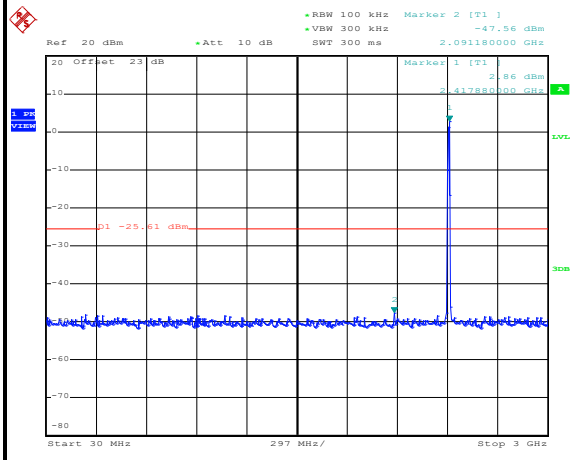
Spurious Emission 30MHz~3GHz



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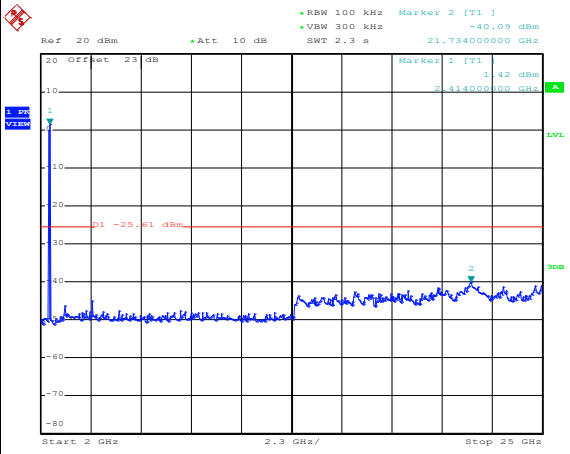
Spurious Emission 2GHz~25GHz



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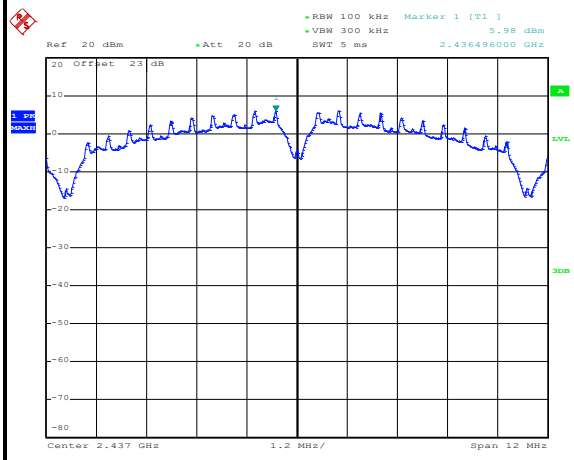
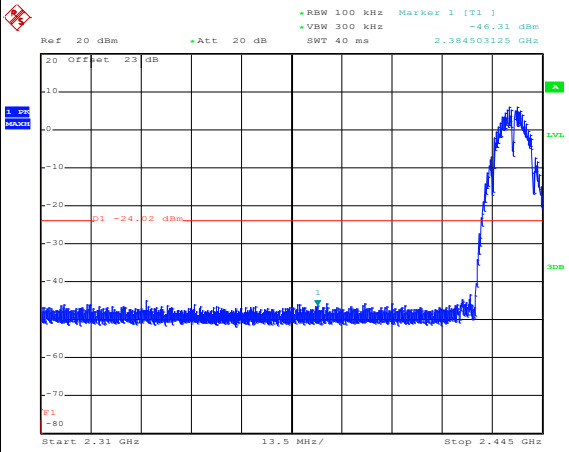
Test Mode :	802.11b	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	
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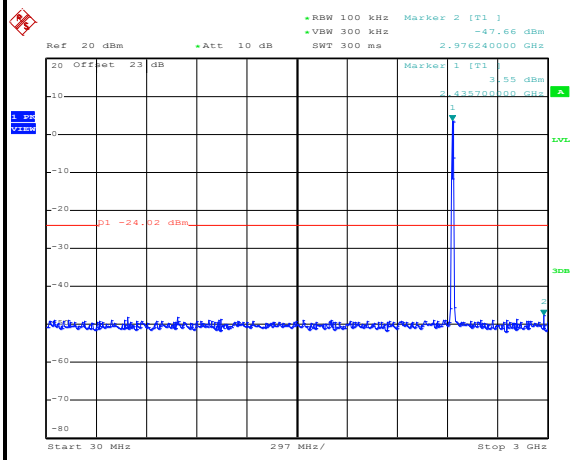
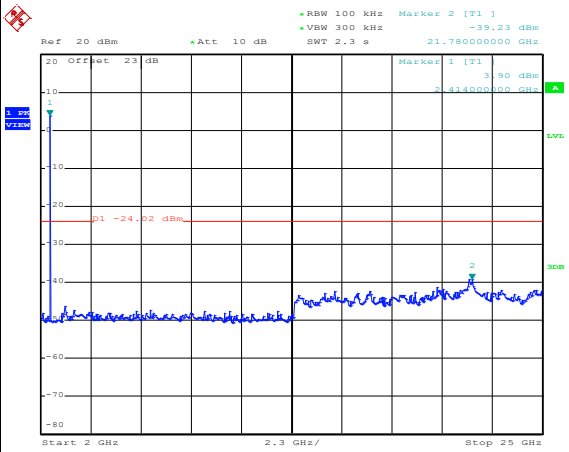
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
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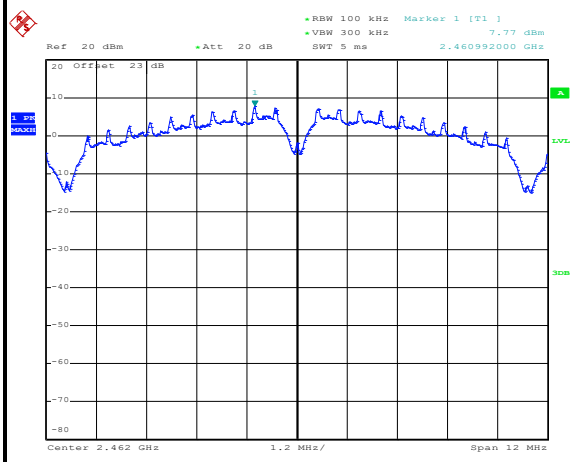
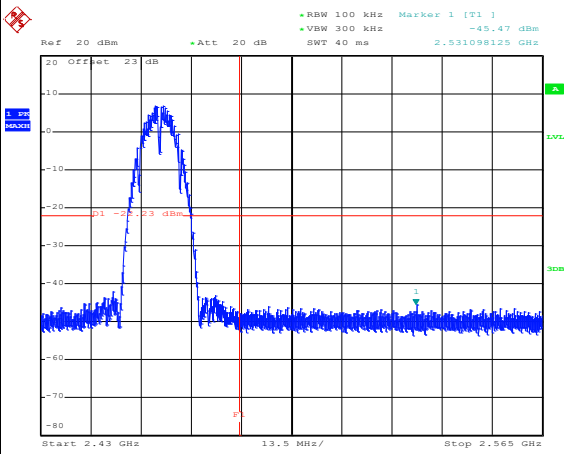
Test Mode :	802.11b	Test Channel :	11

100kHz PSD reference Level	Channel Plot
	
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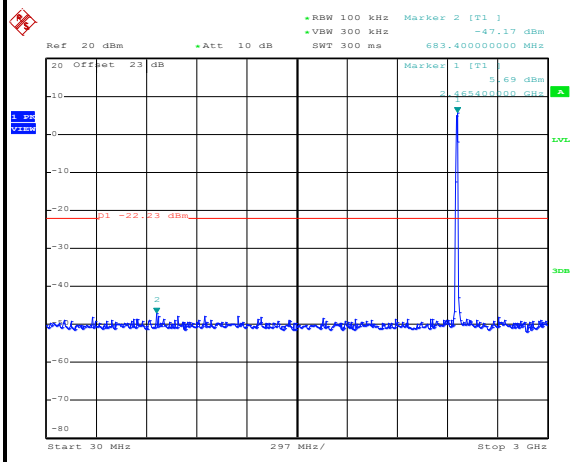
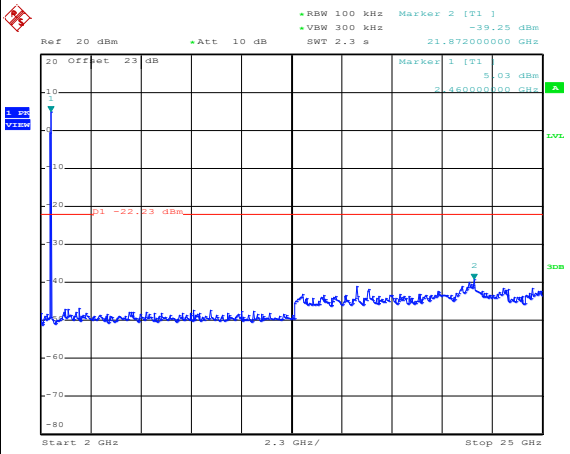
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
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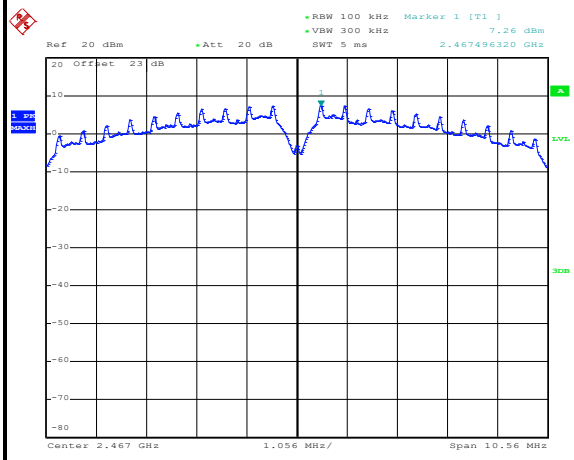
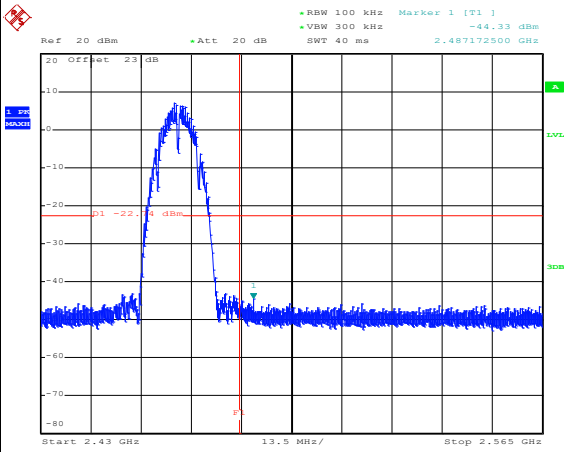
Test Mode :	802.11b	Test Channel :	12

100kHz PSD reference Level	Channel Plot
	
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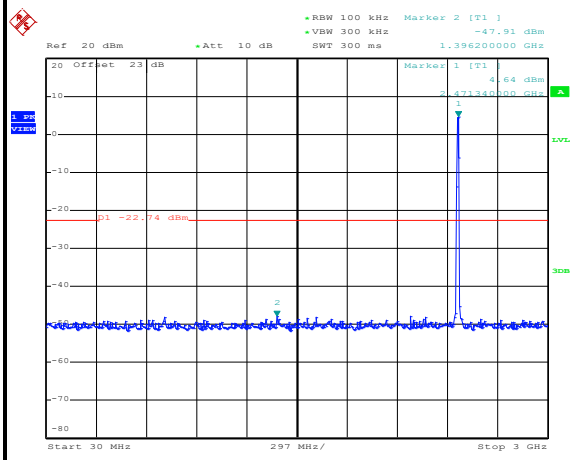
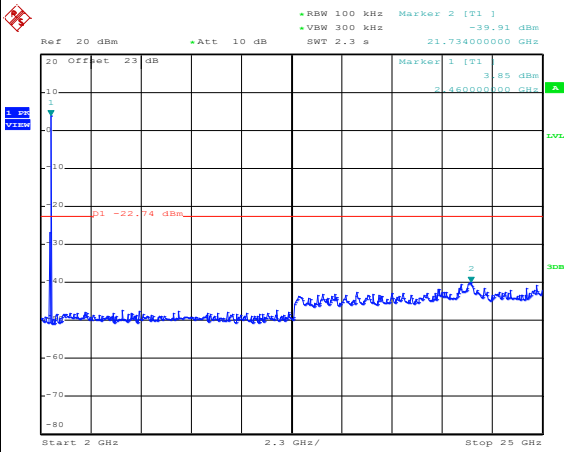
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
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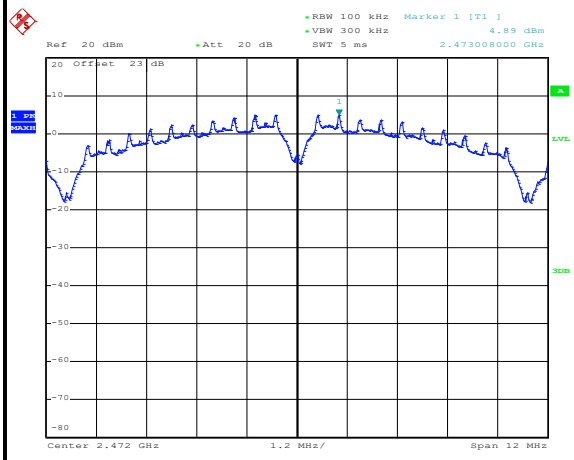
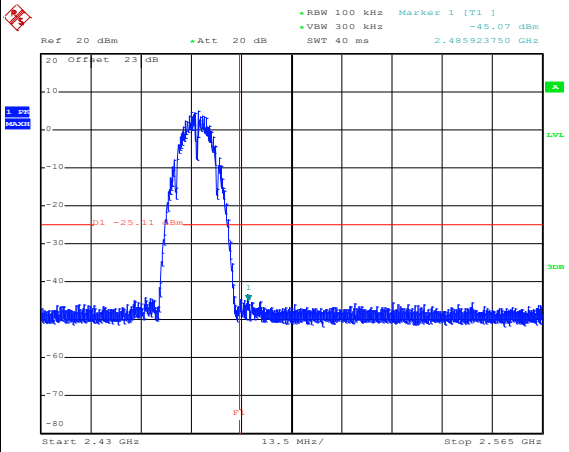
Test Mode :	802.11b	Test Channel :	13

100kHz PSD reference Level	Channel Plot
	
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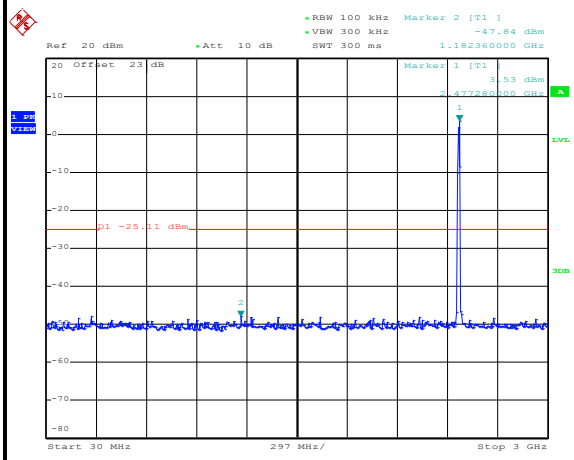
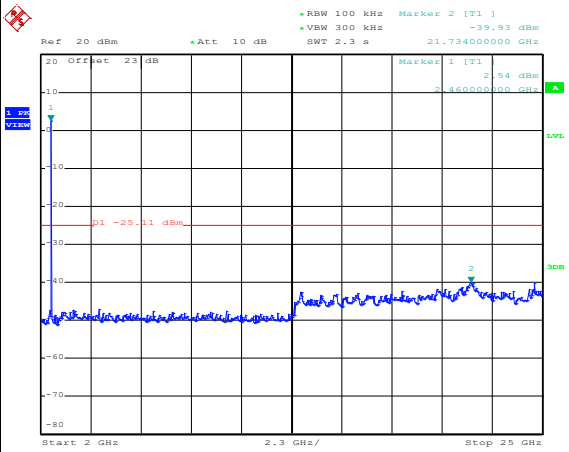
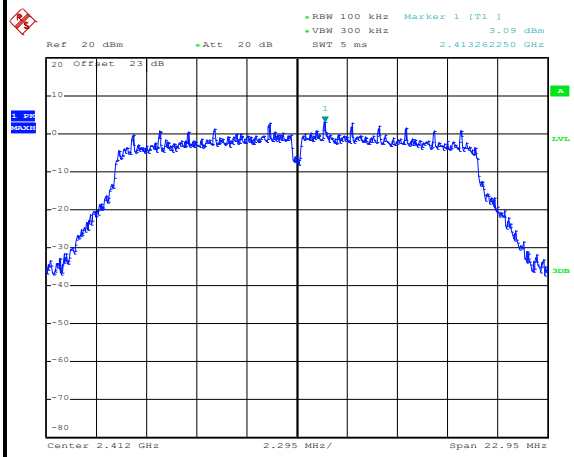
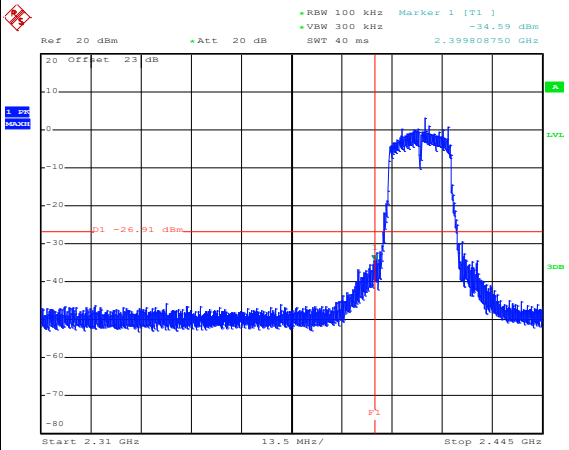
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 10.APR.2021 17:55:49	Date: 10.APR.2021 17:56:08

Test Mode :	802.11g	Test Channel :	01

100kHz PSD reference Level	Channel Plot
	
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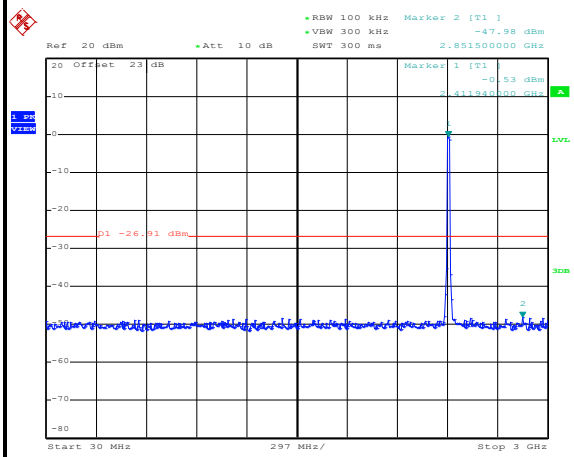	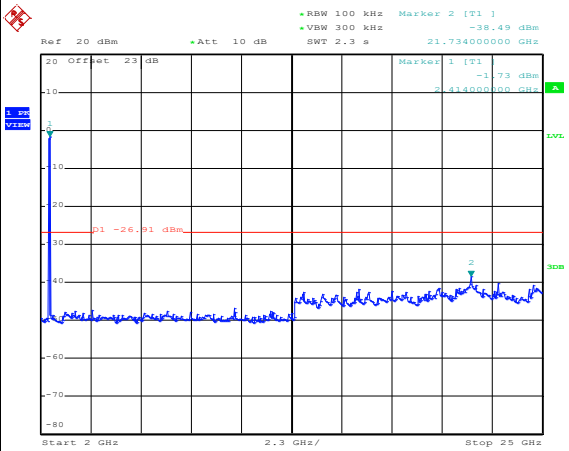
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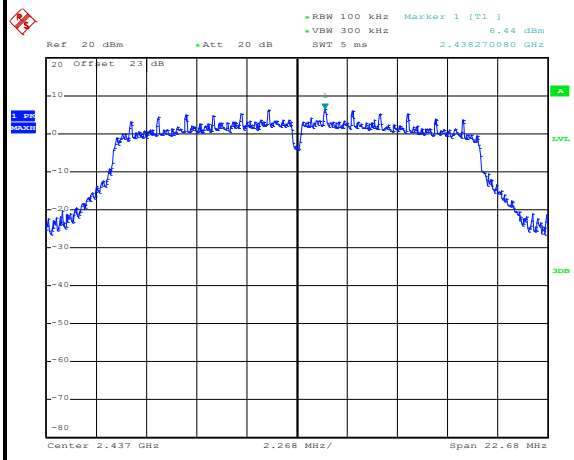
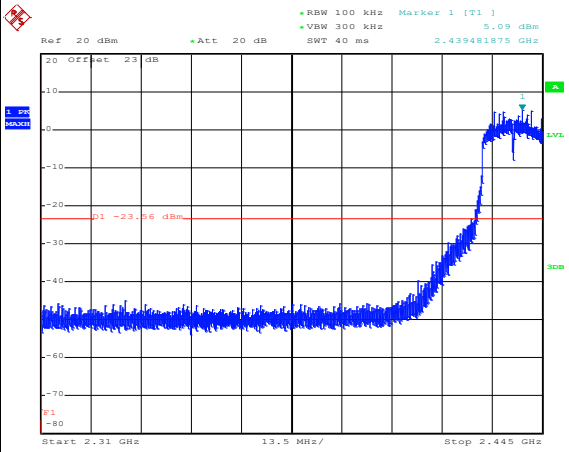
Test Mode :	802.11g	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	
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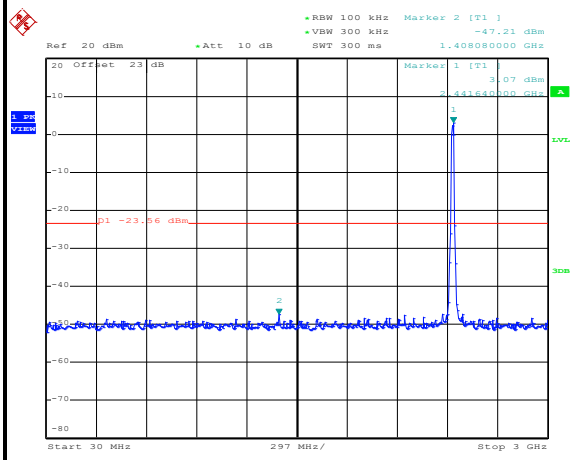
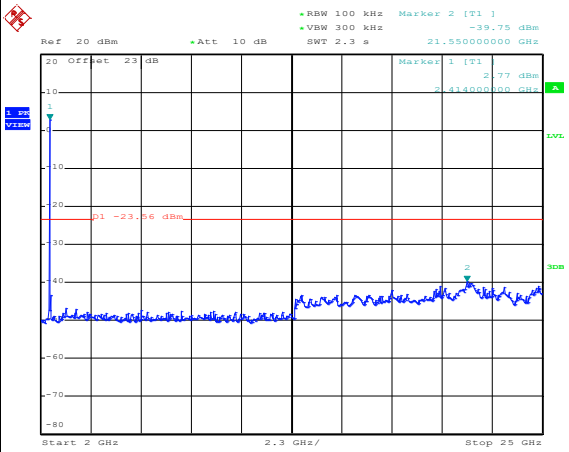
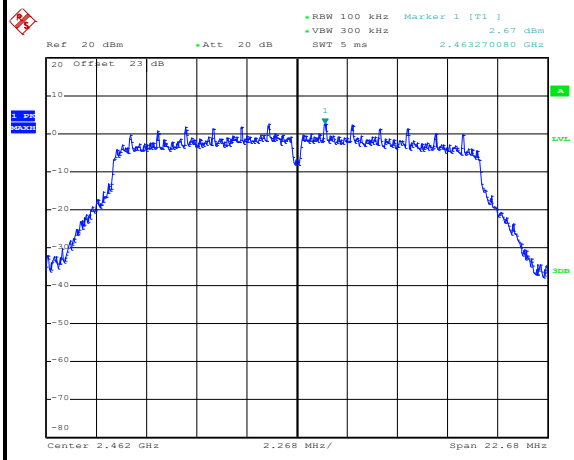
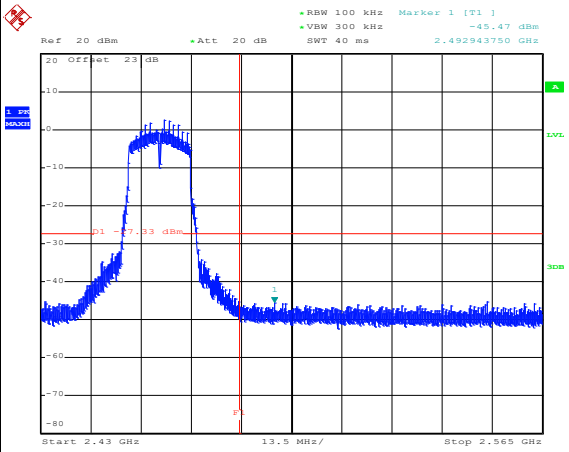
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 10.APR.2021 18:11:29	Date: 10.APR.2021 18:11:47

Test Mode :	802.11g	Test Channel :	11

100kHz PSD reference Level	Channel Plot
	
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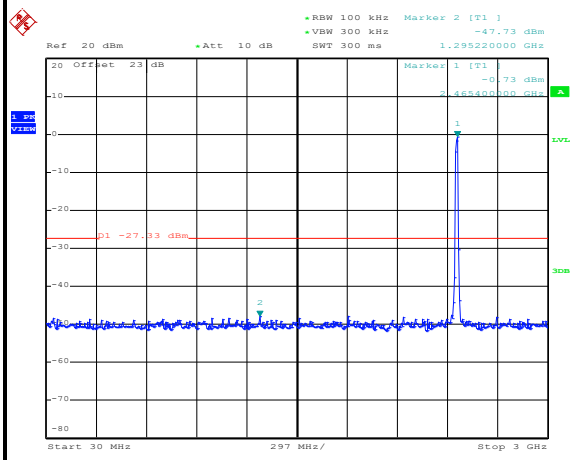
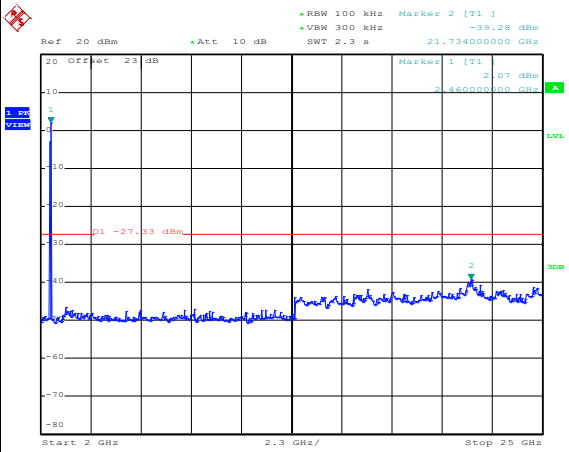
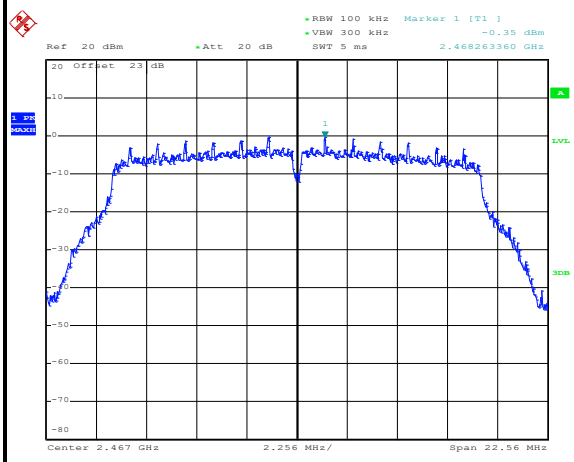
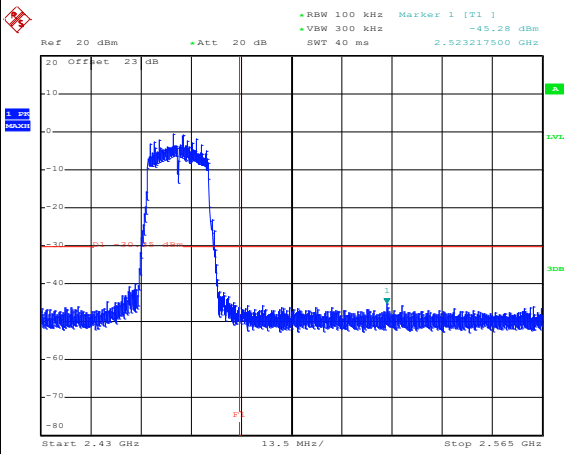
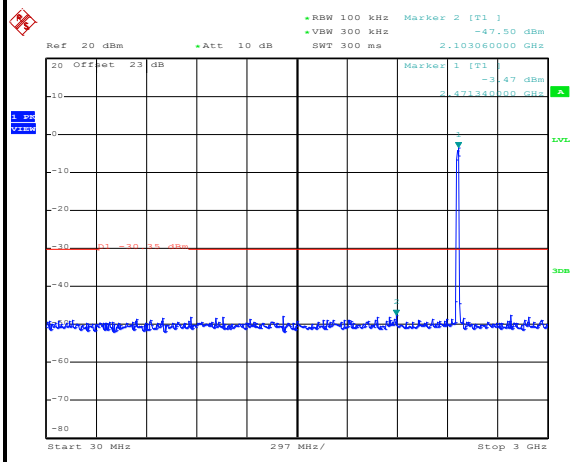
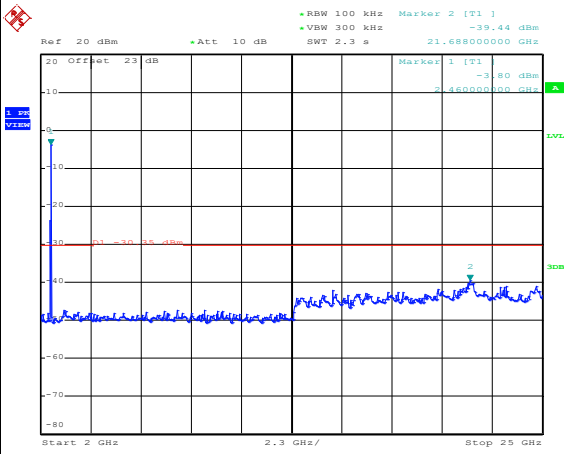
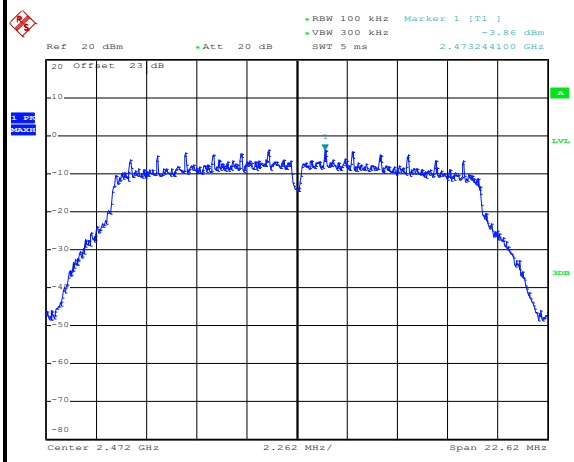
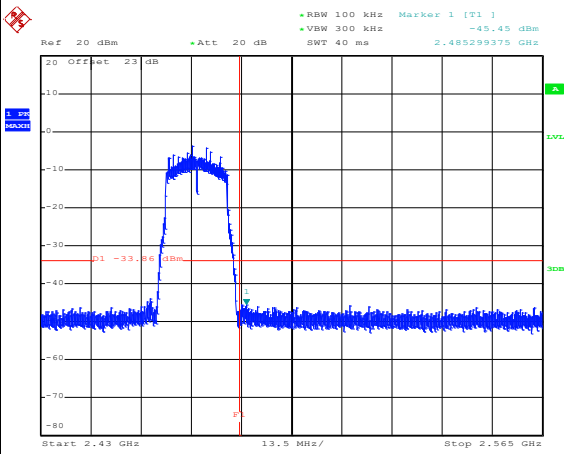
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 10.APR.2021 18:18:13	Date: 10.APR.2021 18:18:30

Test Mode :	802.11g	Test Channel :	12

100kHz PSD reference Level	Channel Plot
	
Date: 10.APR.2021 18:28:49	Date: 10.APR.2021 18:29:55
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 10.APR.2021 18:30:14	Date: 10.APR.2021 18:30:29

Test Mode :	802.11g	Test Channel :	13

100kHz PSD reference Level	Channel Plot
	
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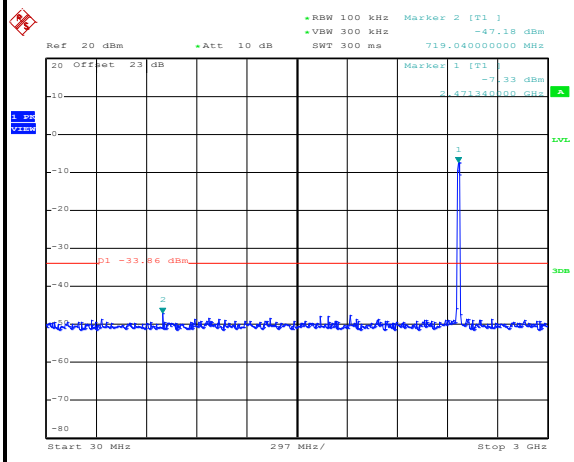
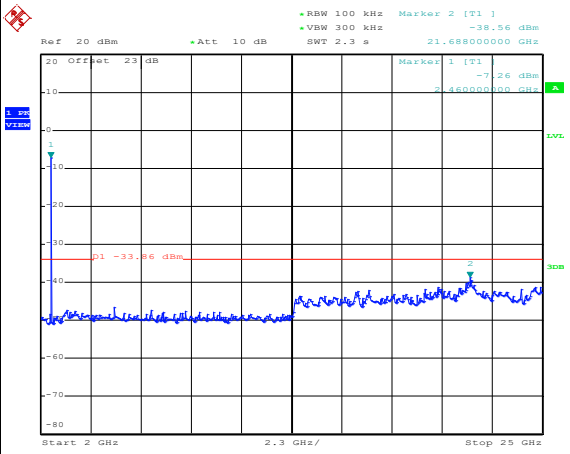
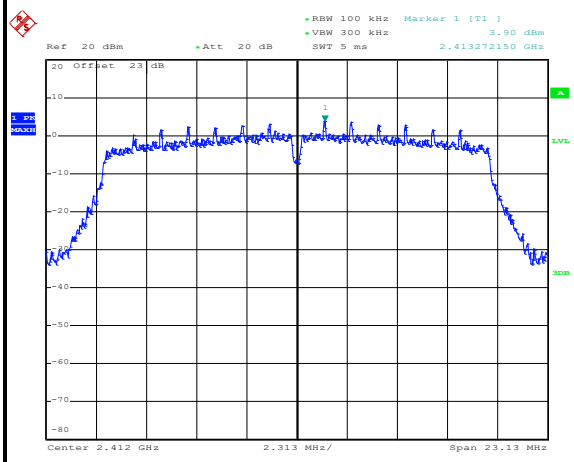
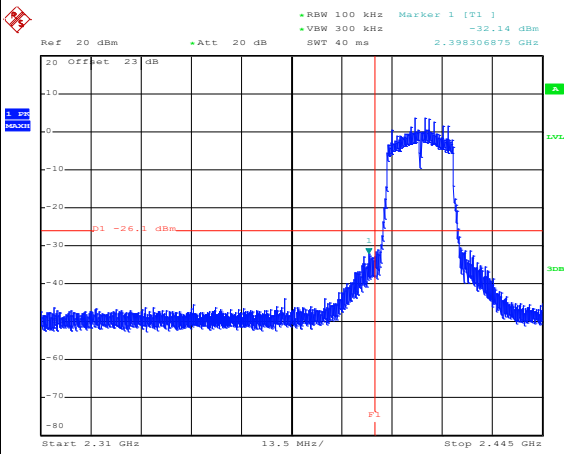
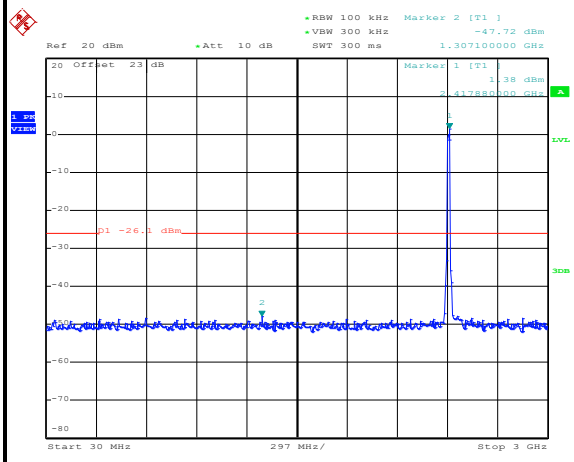
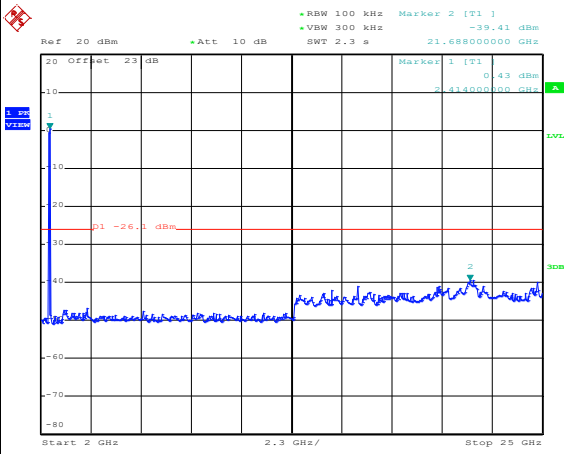
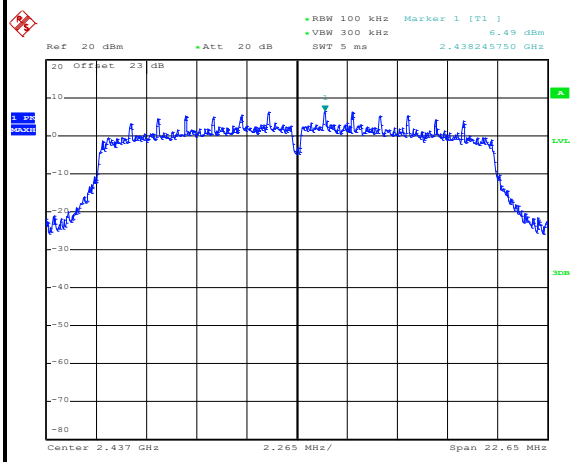
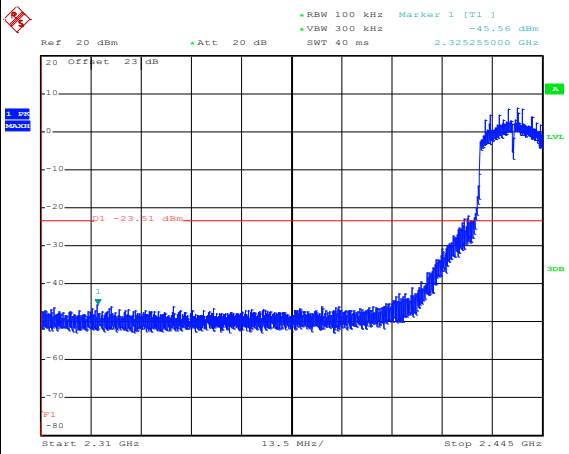
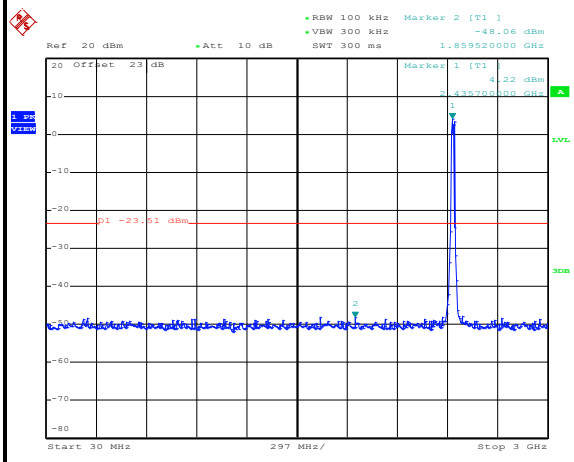
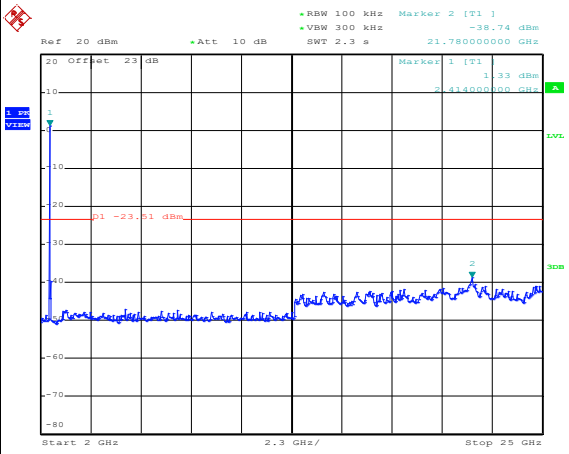
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 10.APR.2021 18:34:37	Date: 10.APR.2021 18:34:56

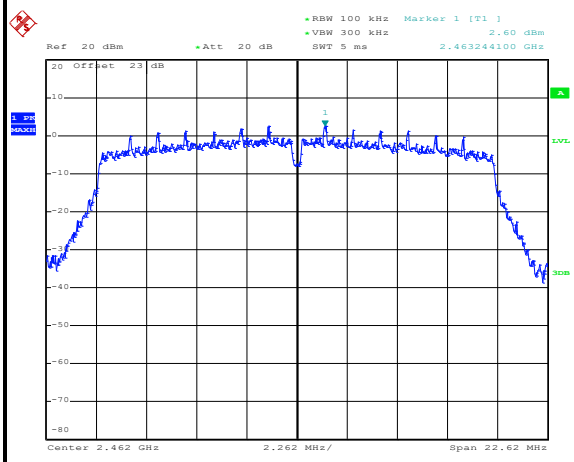
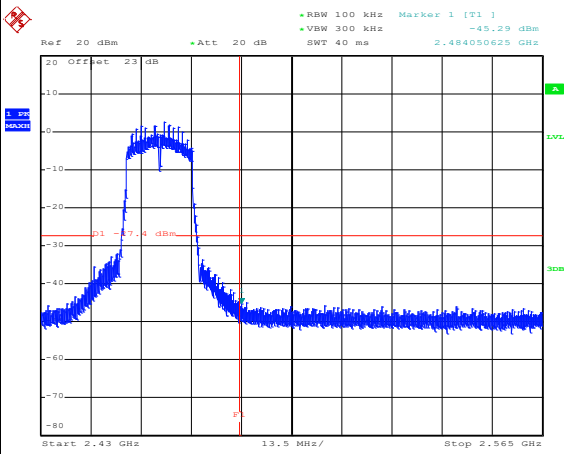
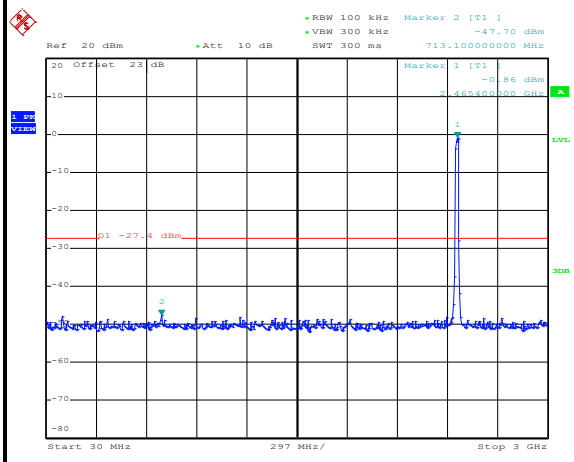
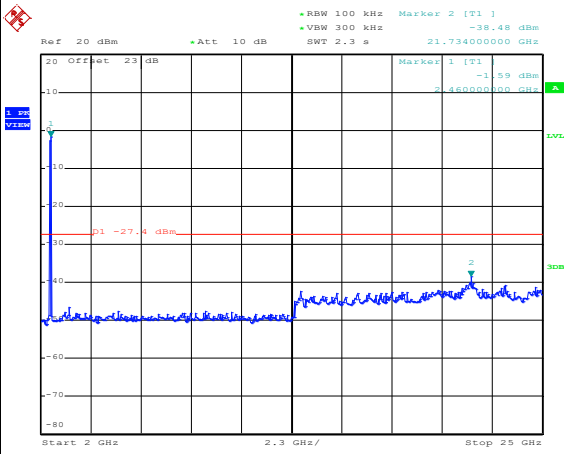
Test Mode :	802.11n HT20	Test Channel :	01

100kHz PSD reference Level	Channel Plot
	
Date: 12.APR.2021 10:56:23	Date: 12.APR.2021 10:56:51
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 12.APR.2021 10:57:44	Date: 12.APR.2021 10:57:59

Test Mode :	802.11n HT20	Test Channel :	06

100kHz PSD reference Level	Channel Plot
 Date: 12.APR.2021 11:02:05	 Date: 12.APR.2021 11:02:20
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
 Date: 12.APR.2021 11:02:40	 Date: 12.APR.2021 11:02:54

Test Mode :	802.11n HT20	Test Channel :	11

100kHz PSD reference Level	Channel Plot
	
Date: 12.APR.2021 11:05:09	Date: 12.APR.2021 11:08:30
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
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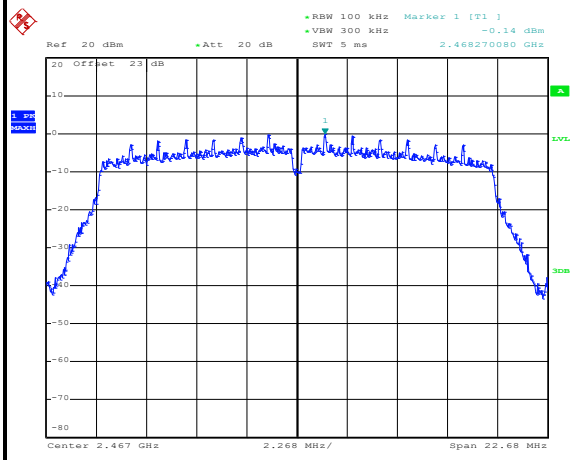
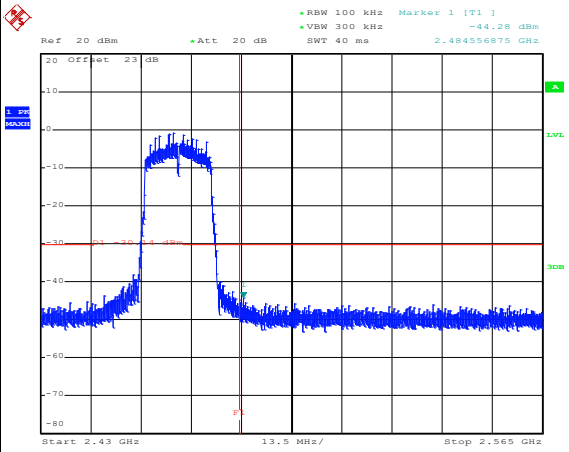
Test Mode :	802.11n HT20	Test Channel :	12

100kHz PSD reference Level	Channel Plot
	
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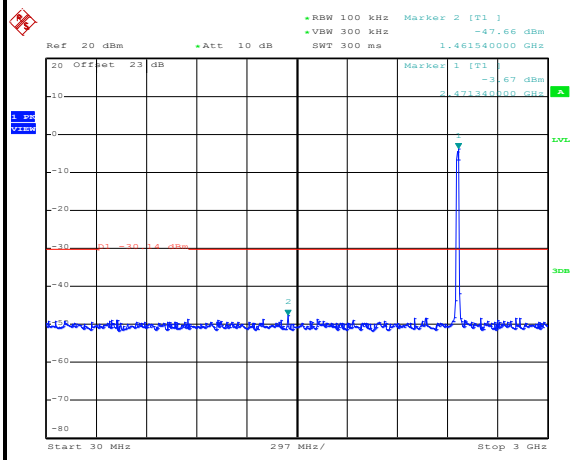
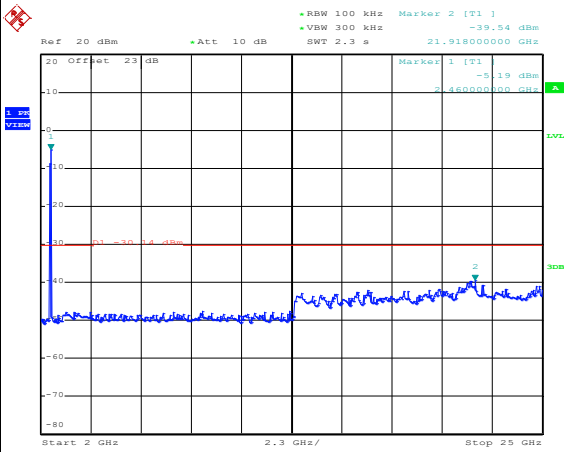
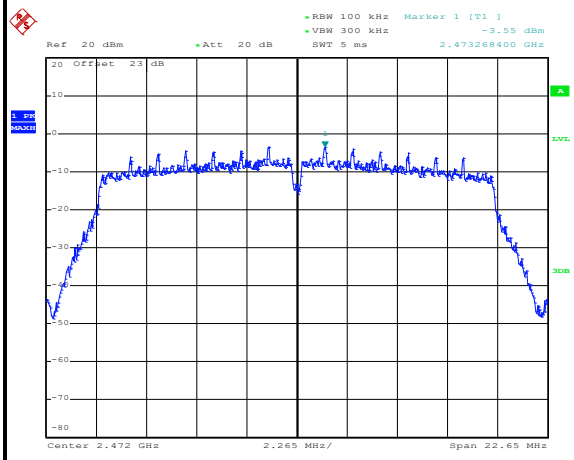
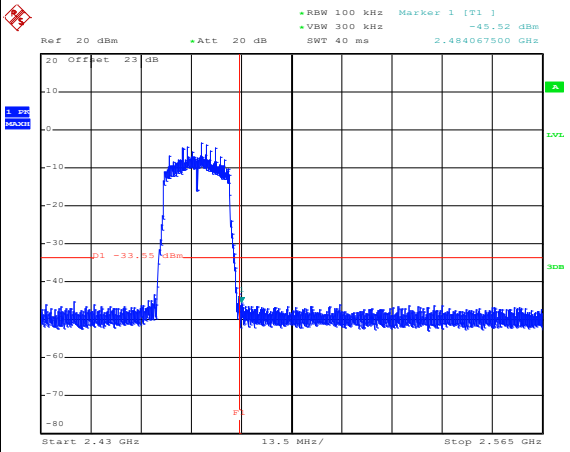
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 12.APR.2021 11:17:10	Date: 12.APR.2021 11:17:24

Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level	Channel Plot
	
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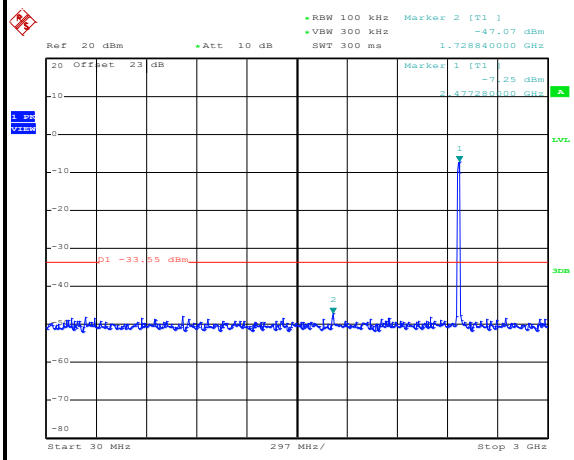
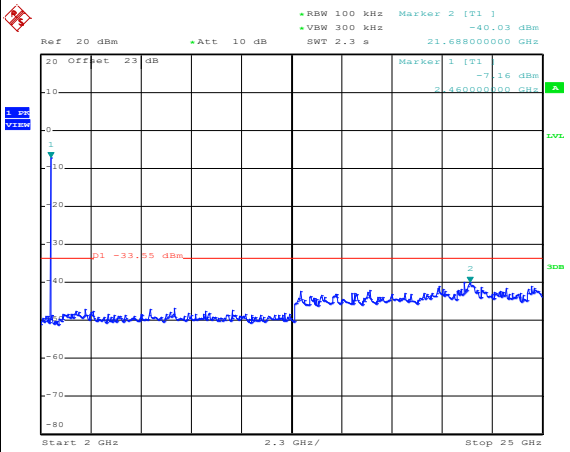
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 12.APR.2021 11:28:27	Date: 12.APR.2021 11:28:42

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

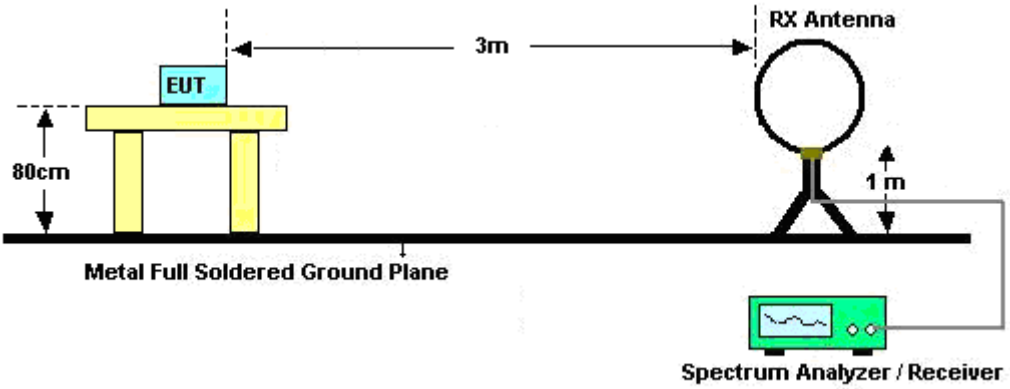
See list of measuring equipment of this test report.

3.5.3 Test Procedures

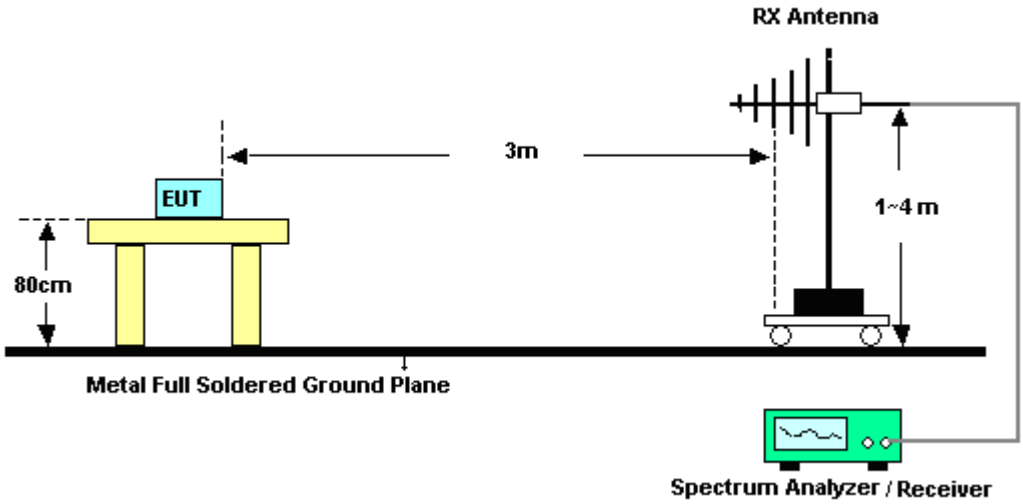
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the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

3.5.4 Test Setup

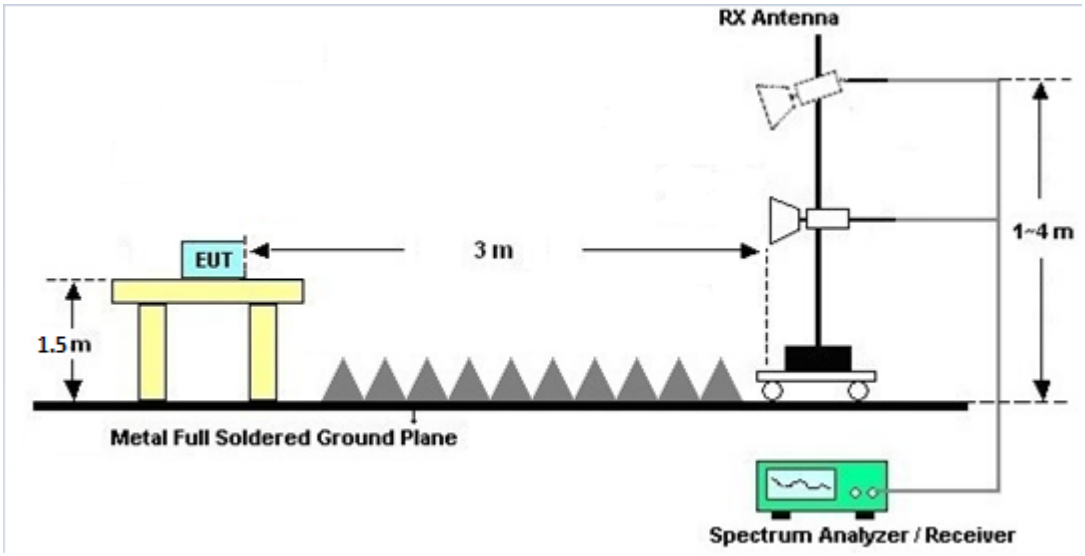
For radiated emissions below 30MHz



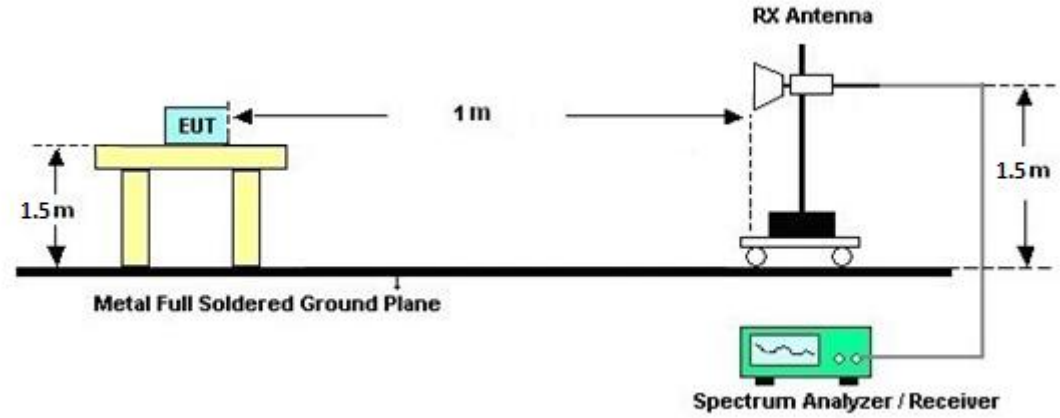
For radiated emissions from 30MHz to 1GHz



For radiated test 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 a comparison data 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 (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

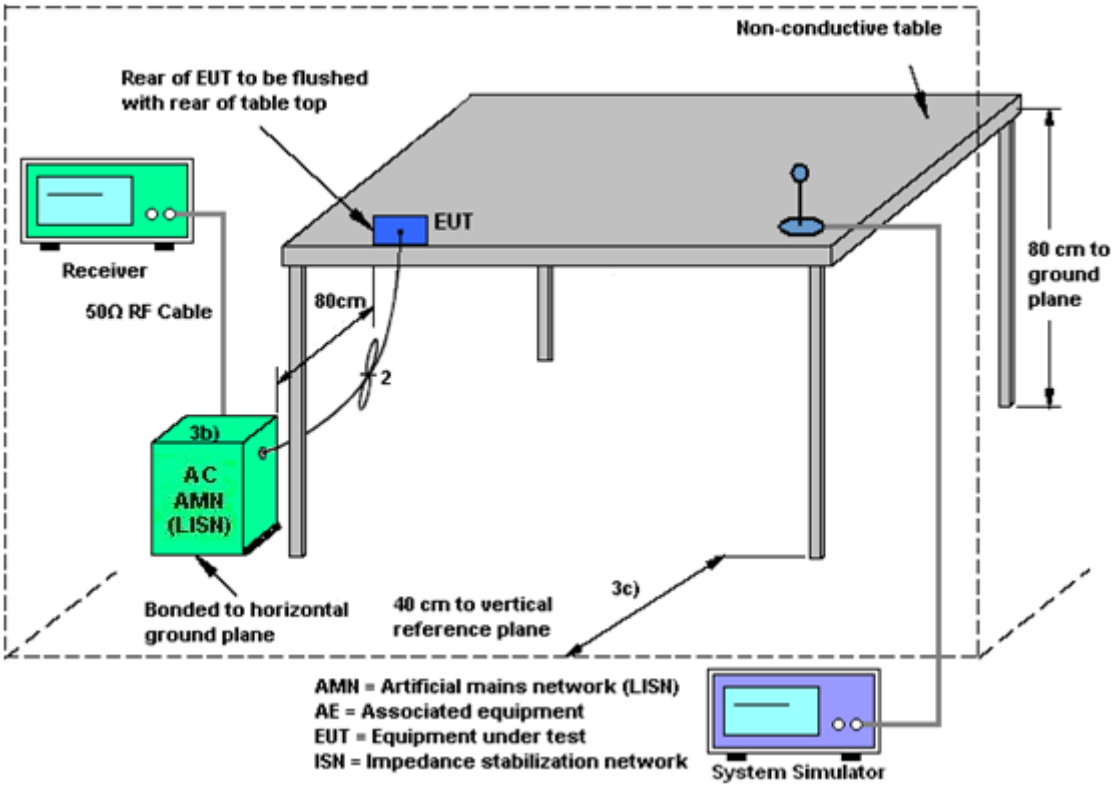
3.6.2 Measuring Instruments

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

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Apr. 01, 2021~ Apr. 23, 2021	Jul. 13, 2021	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 16, 2020	Apr. 01, 2021~ Apr. 23, 2021	Dec. 15, 2021	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	40103&07	30MHz to 1GHz	Apr. 29, 2020	Apr. 01, 2021~ Apr. 23, 2021	Apr. 28, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	May 20, 2020	Apr. 01, 2021~ Apr. 23, 2021	May 19, 2021	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 19, 2020	Apr. 01, 2021~ Apr. 23, 2021	May 18, 2021	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 28, 2020	Apr. 01, 2021~ Apr. 23, 2021	Oct. 27, 2021	Radiation (03CH13-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 31, 2021	Apr. 01, 2021~ Apr. 23, 2021	Jan. 30, 2022	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2021	Apr. 01, 2021~ Apr. 23, 2021	Mar. 17, 2022	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 01, 2021~ Apr. 23, 2021	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Apr. 01, 2021~ Apr. 23, 2021	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Apr. 01, 2021~ Apr. 23, 2021	N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-000992	N/A	N/A	Apr. 01, 2021~ Apr. 23, 2021	N/A	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 11, 2020	Apr. 01, 2021~ Apr. 23, 2021	Dec. 10, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 10, 2021	Apr. 01, 2021~ Apr. 23, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 10, 2021	Apr. 01, 2021~ Apr. 23, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 22, 2021	Apr. 01, 2021~ Apr. 23, 2021	Feb. 21, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz~40GHz	Mar. 11, 2021	Apr. 01, 2021~ Apr. 23, 2021	Mar. 10, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 10, 2021	Apr. 01, 2021~ Apr. 23, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 11, 2021	Apr. 01, 2021~ Apr. 23, 2021	Mar. 10, 2022	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 11, 2020	Apr. 01, 2021~ Apr. 23, 2021	Dec. 10, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN12	1.53GHz Low Pass Filter	Sep. 15, 2020	Apr. 01, 2021~ Apr. 23, 2021	Sep. 14, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN5	6.75GHz High Pass Filter	Mar. 11, 2021	Apr. 01, 2021~ Apr. 23, 2021	Mar. 10, 2022	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN2	3GHz High Pass Filter	Jul. 13, 2020	Apr. 01, 2021~ Apr. 23, 2021	Jul. 12, 2021	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303A	TP182676	N/A	Nov. 18, 2020	Apr. 01, 2021~ Apr. 23, 2021	Nov. 17, 2021	Radiation (03CH13-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 07, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Apr. 07, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Apr. 07, 2021	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Apr. 07, 2021	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 07, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Feb. 25, 2021	Apr. 07, 2021	Feb. 24, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Apr. 07, 2021	Dec. 30, 2021	Conduction (CO05-HY)
Hygrometer	TECPEL	TR-32	HE17XB2468	N/A	Mar. 09. 2021	Mar. 26, 2021~ May 17, 2021	Mar. 08. 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO12	10MHz~6GHz	Dec. 16, 2020	Mar. 26, 2021~ May 17, 2021	Dec. 15, 2021	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jan. 21, 2021	Mar. 26, 2021~ May 17, 2021	Jan. 20, 2022	Conducted (TH02-HY)
Switch Box & RF Cable	Burgeon	ETF058	EC1300484	N/A	Nov. 19, 2020	Mar. 26, 2021~ May 17, 2021	Nov. 18, 2021	Conducted (TH02-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**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.8**

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.6**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Kathy Chen/Mina Liu	Temperature:	21~25	°C
Test Date:	2021/3/26~2021/05/17	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant1	Ant2	Ant1	Ant2		
11b	1Mbps	1	1	2412	12.70	-	8.04	-	0.50	Pass
11b	1Mbps	1	6	2437	12.75	-	8.00	-	0.50	Pass
11b	1Mbps	1	11	2462	12.85	-	8.00	-	0.50	Pass
11b	1Mbps	1	12	2467	12.85	-	7.04	-	0.50	Pass
11b	1Mbps	1	13	2472	12.75	-	8.00	-	0.50	Pass
11g	6Mbps	1	1	2412	16.65	-	15.30	-	0.50	Pass
11g	6Mbps	1	6	2437	16.70	-	15.12	-	0.50	Pass
11g	6Mbps	1	11	2462	16.70	-	15.12	-	0.50	Pass
11g	6Mbps	1	12	2467	16.60	-	15.04	-	0.50	Pass
11g	6Mbps	1	13	2472	16.65	-	15.08	-	0.50	Pass
HT20	MCS0	1	1	2412	17.75	-	15.42	-	0.50	Pass
HT20	MCS0	1	6	2437	17.80	-	15.10	-	0.50	Pass
HT20	MCS0	1	11	2462	17.75	-	15.08	-	0.50	Pass
HT20	MCS0	1	12	2467	17.70	-	15.12	-	0.50	Pass
HT20	MCS0	1	13	2472	17.75	-	15.10	-	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band Single Antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	13.00	-		30.00	-	4.00	-	17.00	-	36.00	-	Pass
11b	1Mbps	1	6	2437	15.30	-		30.00	-	4.00	-	19.30	-	36.00	-	Pass
11b	1Mbps	1	11	2462	16.90	-		30.00	-	4.00	-	20.90	-	36.00	-	Pass
11b	1Mbps	1	12	2467	16.50	-		30.00	-	4.00	-	20.50	-	36.00	-	Pass
11b	1Mbps	1	13	2472	14.00	-		30.00	-	4.00	-	18.00	-	36.00	-	Pass
11g	6Mbps	1	1	2412	14.50	-		30.00	-	4.00	-	18.50	-	36.00	-	Pass
11g	6Mbps	1	6	2437	17.40	-		30.00	-	4.00	-	21.40	-	36.00	-	Pass
11g	6Mbps	1	11	2462	14.50	-		30.00	-	4.00	-	18.50	-	36.00	-	Pass
11g	6Mbps	1	12	2467	11.50	-		30.00	-	4.00	-	15.50	-	36.00	-	Pass
11g	6Mbps	1	13	2472	8.50	-		30.00	-	4.00	-	12.50	-	36.00	-	Pass
HT20	MCS0	1	1	2412	13.50	-		30.00	-	4.00	-	17.50	-	36.00	-	Pass
HT20	MCS0	1	6	2437	16.00	-		30.00	-	4.00	-	20.00	-	36.00	-	Pass
HT20	MCS0	1	11	2462	13.10	-		30.00	-	4.00	-	17.10	-	36.00	-	Pass
HT20	MCS0	1	12	2467	12.00	-		30.00	-	4.00	-	16.00	-	36.00	-	Pass
HT20	MCS0	1	13	2472	8.30	-		30.00	-	4.00	-	12.30	-	36.00	-	Pass

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

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band Single Antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant1	Ant2	Worse + 3.01	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	-10.19	-		4.00	-	8.00	-	Pass
11b	1Mbps	1	6	2437	-7.62	-		4.00	-	8.00	-	Pass
11b	1Mbps	1	11	2462	-6.16	-		4.00	-	8.00	-	Pass
11b	1Mbps	1	12	2467	-6.72	-		4.00	-	8.00	-	Pass
11b	1Mbps	1	13	2472	-10.16	-		4.00	-	8.00	-	Pass
11g	6Mbps	1	1	2412	-10.55	-		4.00	-	8.00	-	Pass
11g	6Mbps	1	6	2437	-7.64	-		4.00	-	8.00	-	Pass
11g	6Mbps	1	11	2462	-11.20	-		4.00	-	8.00	-	Pass
11g	6Mbps	1	12	2467	-14.83	-		4.00	-	8.00	-	Pass
11g	6Mbps	1	13	2472	-17.17	-		4.00	-	8.00	-	Pass
HT20	MCS0	1	1	2412	-10.70	-		4.00	-	8.00	-	Pass
HT20	MCS0	1	6	2437	-7.40	-		4.00	-	8.00	-	Pass
HT20	MCS0	1	11	2462	-11.63	-		4.00	-	8.00	-	Pass
HT20	MCS0	1	12	2467	-13.65	-		4.00	-	8.00	-	Pass
HT20	MCS0	1	13	2472	-17.82	-		4.00	-	8.00	-	Pass

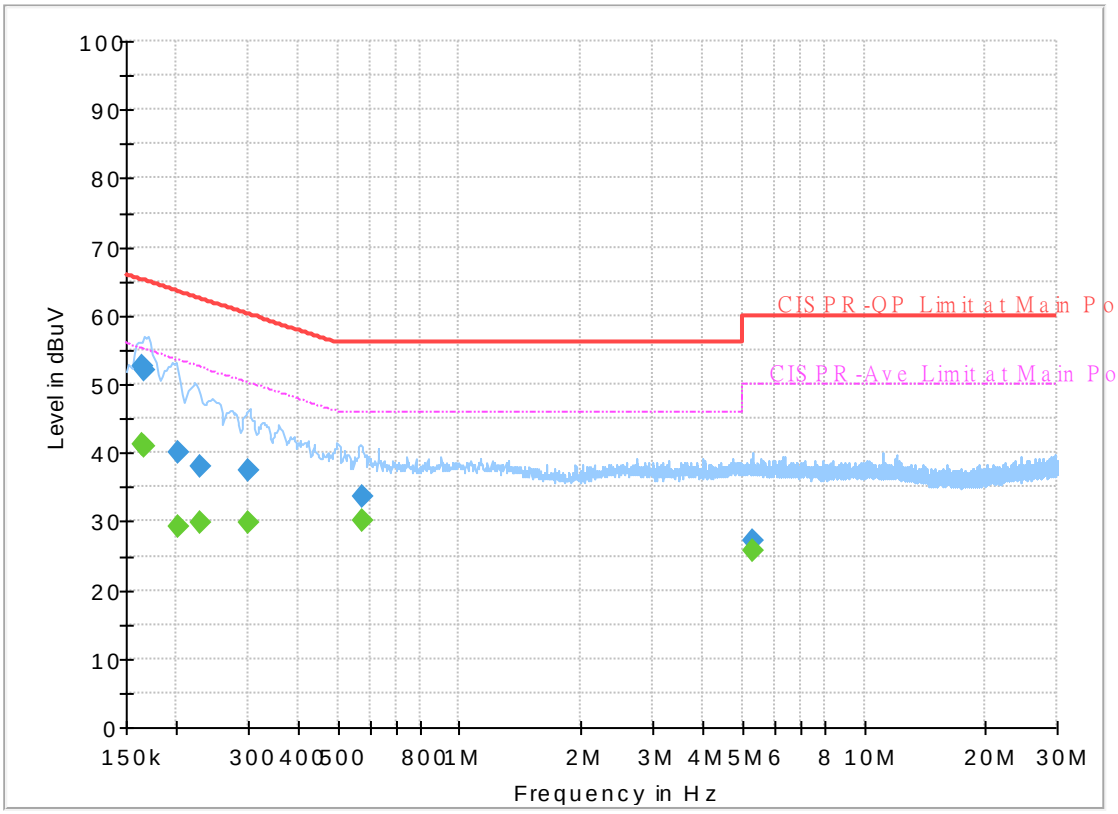
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	**Temperature :**	23~26℃
		Relative Humidity :	40~50%

EUT Information

Report NO :	0N1024-01
Test Mode :	Mode 2
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



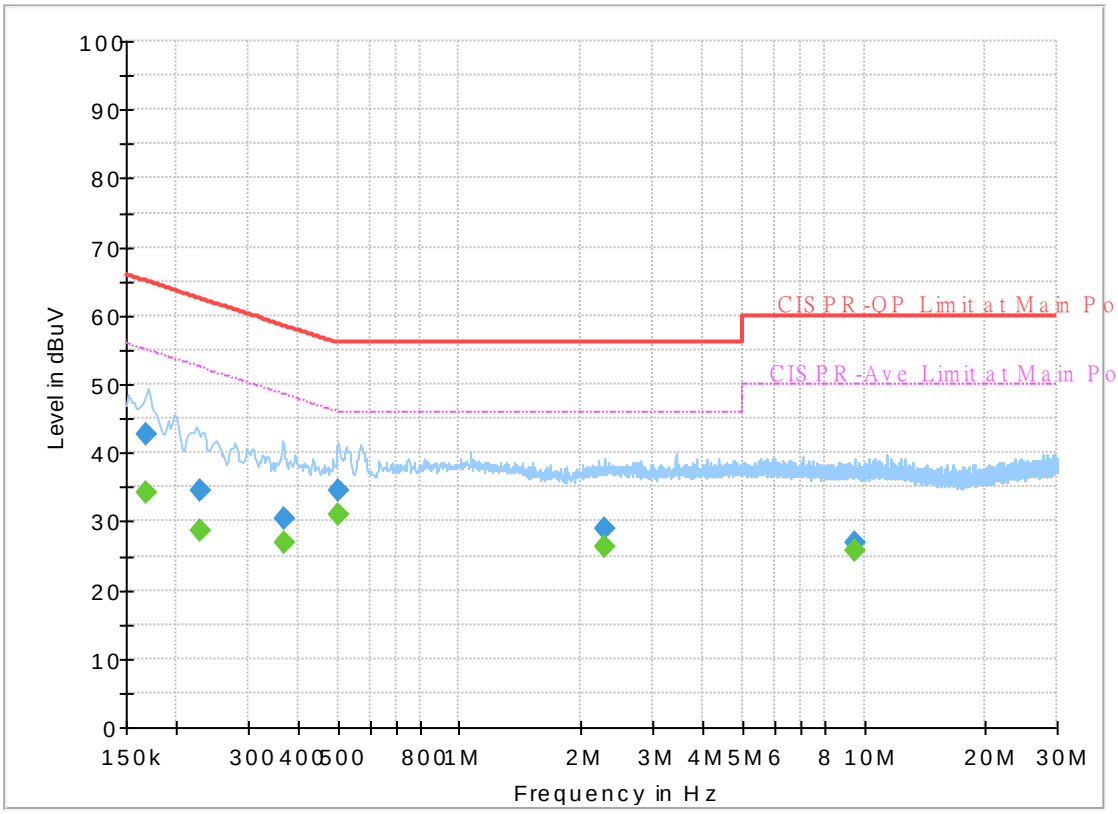
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.164130	---	41.27	55.25	13.98	L1	OFF	19.7
0.164130	52.54	---	65.25	12.71	L1	OFF	19.7
0.166740	---	40.82	55.12	14.30	L1	OFF	19.7
0.166740	52.11	---	65.12	13.01	L1	OFF	19.7
0.201750	---	29.18	53.54	24.36	L1	OFF	19.7
0.201750	39.95	---	63.54	23.59	L1	OFF	19.7
0.228750	---	29.70	52.50	22.80	L1	OFF	19.7
0.228750	38.01	---	62.50	24.49	L1	OFF	19.7
0.301020	---	29.71	50.22	20.51	L1	OFF	19.7
0.301020	37.35	---	60.22	22.87	L1	OFF	19.7
0.577500	---	29.98	46.00	16.02	L1	OFF	20.0
0.577500	33.76	---	56.00	22.24	L1	OFF	20.0
5.325000	---	25.82	50.00	24.18	L1	OFF	20.1
5.325000	27.10	---	60.00	32.90	L1	OFF	20.1

EUT Information

Report NO :	0N1024-01
Test Mode :	Mode 2
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.167370	---	34.24	55.09	20.85	N	OFF	19.7
0.167370	42.72	---	65.09	22.37	N	OFF	19.7
0.228750	---	28.74	52.50	23.76	N	OFF	19.7
0.228750	34.61	---	62.50	27.89	N	OFF	19.7
0.368790	---	26.88	48.53	21.65	N	OFF	19.8
0.368790	30.44	---	58.53	28.09	N	OFF	19.8
0.501360	---	30.90	46.00	15.10	N	OFF	19.9
0.501360	34.39	---	56.00	21.61	N	OFF	19.9
2.296140	---	26.41	46.00	19.59	N	OFF	20.2
2.296140	28.85	---	56.00	27.15	N	OFF	20.2
9.447090	---	25.69	50.00	24.31	N	OFF	20.2
9.447090	26.84	---	60.00	33.16	N	OFF	20.2

Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	Temperature :	20~25°C
		Relative Humidity :	50~60%

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2376.57	55.68	-18.32	74	41.76	27.65	14.11	27.84	282	21	P	H
		2387.07	44.85	-9.15	54	30.94	27.63	14.12	27.84	282	21	A	H
	*	2412	108.38	-	-	94.5	27.58	14.14	27.84	282	21	P	H
	*	2412	105.2	-	-	91.32	27.58	14.14	27.84	282	21	A	H
		2385.705	55.36	-18.64	74	41.45	27.63	14.12	27.84	355	344	P	V
		2386.965	44.26	-9.74	54	30.35	27.63	14.12	27.84	355	344	A	V
	*	2412	105.49	-	-	91.61	27.58	14.14	27.84	355	344	P	V
	*	2412	102.31	-	-	88.43	27.58	14.14	27.84	355	344	A	V
802.11b CH 06 2437MHz		2388.82	55.34	-18.66	74	41.44	27.62	14.12	27.84	271	25	P	H
		2389.94	44.26	-9.74	54	30.36	27.62	14.12	27.84	271	25	A	H
	*	2437	108.49	-	-	94.63	27.53	14.16	27.83	271	25	P	H
	*	2437	105.39	-	-	91.53	27.53	14.16	27.83	271	25	A	H
		2491.27	54.86	-19.14	74	40.98	27.5	14.2	27.82	271	25	P	H
		2483.89	44.46	-9.54	54	30.58	27.5	14.2	27.82	271	25	A	H
		2378.88	56.33	-17.67	74	42.42	27.64	14.11	27.84	305	345	P	V
		2389.8	44.12	-9.88	54	30.22	27.62	14.12	27.84	305	345	A	V
	*	2437	107.68	-	-	93.82	27.53	14.16	27.83	305	345	P	V
	*	2437	104.67	-	-	90.81	27.53	14.16	27.83	305	345	A	V
		2493.52	55.42	-18.58	74	41.54	27.5	14.2	27.82	305	345	P	V
		2484.07	44.47	-9.53	54	30.59	27.5	14.2	27.82	305	345	A	V

802.11b CH 11 2462MHz	*	2462	110.06	-	-	96.21	27.5	14.18	27.83	267	21	P	H
	*	2462	106.9	-	-	93.05	27.5	14.18	27.83	267	21	A	H
		2491.32	56.44	-17.56	74	42.56	27.5	14.2	27.82	267	21	P	H
		2483.52	45.66	-8.34	54	31.78	27.5	14.2	27.82	267	21	A	H
	*	2462	108.13	-	-	94.28	27.5	14.18	27.83	382	346	P	V
	*	2462	105.09	-	-	91.24	27.5	14.18	27.83	382	346	A	V
		2484	55.92	-18.08	74	42.04	27.5	14.2	27.82	382	346	P	V
		2483.52	44.97	-9.03	54	31.09	27.5	14.2	27.82	382	346	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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	109.31	-	-	95.46	27.5	14.18	27.83	267	22	P	H
	*	2467	106.14	-	-	92.29	27.5	14.18	27.83	267	22	A	H
		2483.96	58.04	-15.96	74	44.16	27.5	14.2	27.82	267	22	P	H
		2483.84	49.76	-4.24	54	35.88	27.5	14.2	27.82	267	22	A	H
	*	2467	107.95	-	-	94.1	27.5	14.18	27.83	380	347	P	V
	*	2467	104.83	-	-	90.98	27.5	14.18	27.83	380	347	A	V
		2484.08	56.69	-17.31	74	42.81	27.5	14.2	27.82	380	347	P	V
		2483.88	48.54	-5.46	54	34.66	27.5	14.2	27.82	380	347	A	V
802.11b CH 13 2472MHz	*	2472	107.54	-	-	93.68	27.5	14.19	27.83	300	24	P	H
	*	2472	104.41	-	-	90.55	27.5	14.19	27.83	300	24	A	H
		2483.52	58.21	-15.79	74	44.33	27.5	14.2	27.82	300	24	P	H
		2483.88	50.43	-3.57	54	36.55	27.5	14.2	27.82	300	24	A	H
	*	2472	105.23	-	-	91.37	27.5	14.19	27.83	381	345	P	V
	*	2472	102.03	-	-	88.17	27.5	14.19	27.83	381	345	A	V
		2485.48	56.53	-17.47	74	42.65	27.5	14.2	27.82	381	345	P	V
		2483.84	48.38	-5.62	54	34.5	27.5	14.2	27.82	381	345	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	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	53	-21	74	72.71	31.15	6.59	57.45	100	11	P	H
		4824	50.88	-3.12	54	70.59	31.15	6.59	57.45	100	11	A	H
		18000	56.12	-17.88	74	51.31	48.1	13.18	56.47	170	241	P	H
		18000	46.07	-7.93	54	41.26	48.1	13.18	56.47	170	241	A	H
		4824	51.97	-22.03	74	71.68	31.15	6.59	57.45	394	347	P	V
		4824	50.24	-3.76	54	69.95	31.15	6.59	57.45	394	347	A	V
		17985	57.06	-16.94	74	52.69	47.68	13.17	56.48	138	250	P	V
		17985	46.66	-7.34	54	42.29	47.68	13.17	56.48	138	250	A	V
802.11b CH 06 2437MHz		4874	51.89	-22.11	74	71.23	31.2	6.8	57.34	102	74	P	H
		4874	50.21	-3.79	54	69.55	31.2	6.8	57.34	102	74	A	H
		7311	44.36	-29.64	74	55.94	36.78	8.73	57.09	100	0	P	H
		17970	56.96	-17.04	74	53.03	47.26	13.16	56.49	163	230	P	H
		17970	47.64	-6.36	54	43.71	47.26	13.16	56.49	163	230	A	H
		4874	51.43	-22.57	74	70.77	31.2	6.8	57.34	300	355	P	V
		4874	49.17	-4.83	54	68.51	31.2	6.8	57.34	300	355	A	V
		7311	45.53	-28.47	74	57.11	36.78	8.73	57.09	100	0	P	V
		17970	56.07	-17.93	74	52.14	47.26	13.16	56.49	126	252	P	V
		17970	47.24	-6.76	54	43.31	47.26	13.16	56.49	126	252	A	V

802.11b CH 11 2462MHz		4924	52.45	-21.55	74	71.36	31.3	7.02	57.23	104	13	P	H
		4924	50.31	-3.69	54	69.22	31.3	7.02	57.23	104	13	A	H
		7386	44.76	-29.24	74	56.68	36.56	8.72	57.2	100	0	P	H
		18000	56.74	-17.26	74	51.93	48.1	13.18	56.47	160	237	P	H
		18000	46.16	-7.84	54	41.35	48.1	13.18	56.47	160	237	A	H
		4924	52.9	-21.1	74	71.81	31.3	7.02	57.23	379	347	P	V
		4924	50.73	-3.27	54	69.64	31.3	7.02	57.23	379	347	A	V
		7386	44.74	-29.26	74	56.66	36.56	8.72	57.2	100	0	P	V
		17985	56.32	-17.68	74	51.95	47.68	13.17	56.48	138	250	P	V
		17985	45.93	-8.07	54	41.56	47.68	13.17	56.48	138	250	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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	52.4	-21.6	74	71.21	31.34	7.06	57.21	101	22	P	H
		4934	49.99	-4.01	54	68.8	31.34	7.06	57.21	101	22	A	H
		7401	43.66	-30.34	74	55.66	36.51	8.71	57.22	100	0	P	H
		18000	57.11	-16.89	74	52.3	48.1	13.18	56.47	162	236	P	H
		18000	47.16	-6.84	54	42.35	48.1	13.18	56.47	162	236	A	H
		4934	52.19	-21.81	74	71	31.34	7.06	57.21	378	347	P	V
		4934	49.9	-4.1	54	68.71	31.34	7.06	57.21	378	347	A	V
		7401	44.6	-29.4	74	56.6	36.51	8.71	57.22	100	0	P	V
		18000	56.41	-17.59	74	51.6	48.1	13.18	56.47	130	251	P	V
		18000	46.63	-7.37	54	41.82	48.1	13.18	56.47	130	251	A	V
802.11b CH 13 2472MHz		4944	49.56	-24.44	74	68.26	31.38	7.11	57.19	100	0	P	H
		7416	43.84	-30.16	74	55.75	36.63	8.7	57.24	100	0	P	H
		17985	56.28	-17.72	74	51.91	47.68	13.17	56.48	166	235	P	H
		17985	46.19	-7.81	54	41.82	47.68	13.17	56.48	166	235	A	H
		4944	49.12	-24.88	74	67.82	31.38	7.11	57.19	100	0	P	V
		7416	45	-29	74	56.91	36.63	8.7	57.24	100	0	P	V
		17985	56.34	-17.66	74	51.97	47.68	13.17	56.48	133	248	P	V
		17985	46.34	-7.66	54	41.97	47.68	13.17	56.48	133	248	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	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		2389.38	62.96	-11.04	74	49.06	27.62	14.12	27.84	131	25	P	H
		2390	50.86	-3.14	54	36.96	27.62	14.12	27.84	131	25	A	H
	*	2412	110.94	-	-	97.06	27.58	14.14	27.84	131	25	P	H
	*	2412	103.33	-	-	89.45	27.58	14.14	27.84	131	25	A	H
		2388.75	59.25	-14.75	74	45.35	27.62	14.12	27.84	356	20	P	V
		2390	47.69	-6.31	54	33.79	27.62	14.12	27.84	356	20	A	V
	*	2412	107.07	-	-	93.19	27.58	14.14	27.84	356	20	P	V
	*	2412	99.26	-	-	85.38	27.58	14.14	27.84	356	20	A	V
802.11g CH 06 2437MHz		2385.6	57.61	-16.39	74	43.7	27.63	14.12	27.84	237	22	P	H
		2389.66	47.25	-6.75	54	33.35	27.62	14.12	27.84	237	22	A	H
	*	2437	113.2	-	-	99.34	27.53	14.16	27.83	237	22	P	H
	*	2437	105.53	-	-	91.67	27.53	14.16	27.83	237	22	A	H
		2487.82	58.57	-15.43	74	44.69	27.5	14.2	27.82	237	22	P	H
		2483.5	49.44	-4.56	54	35.56	27.5	14.2	27.82	237	22	A	H
		2388.4	56.32	-17.68	74	42.42	27.62	14.12	27.84	346	346	P	V
		2388.4	46.89	-7.11	54	32.99	27.62	14.12	27.84	346	346	A	V
	*	2437	111.95	-	-	98.09	27.53	14.16	27.83	346	346	P	V
	*	2437	104.48	-	-	90.62	27.53	14.16	27.83	346	346	A	V
		2485.51	57.32	-16.68	74	43.44	27.5	14.2	27.82	346	346	P	V
		2483.5	48.01	-5.99	54	34.13	27.5	14.2	27.82	346	346	A	V

802.11g CH 11 2462MHz	*	2462	107.72	-	-	93.87	27.5	14.18	27.83	115	228	P	H
	*	2462	100.22	-	-	86.37	27.5	14.18	27.83	115	228	A	H
		2483.56	63.6	-10.4	74	49.72	27.5	14.2	27.82	115	228	P	H
		2483.52	50.89	-3.11	54	37.01	27.5	14.2	27.82	115	228	A	H
	*	2462	105.64	-	-	91.79	27.5	14.18	27.83	373	27	P	V
	*	2462	97.85	-	-	84	27.5	14.18	27.83	373	27	A	V
		2484.44	61.52	-12.48	74	47.64	27.5	14.2	27.82	373	27	P	V
		2483.52	49.36	-4.64	54	35.48	27.5	14.2	27.82	373	27	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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	106.26	-	-	92.41	27.5	14.18	27.83	149	26	P	H
	*	2467	98.82	-	-	84.97	27.5	14.18	27.83	149	26	A	H
		2483.52	64.61	-9.39	74	50.73	27.5	14.2	27.82	149	26	P	H
		2483.64	50.41	-3.59	54	36.53	27.5	14.2	27.82	149	26	A	H
	*	2467	102.82	-	-	88.97	27.5	14.18	27.83	372	23	P	V
	*	2467	95.15	-	-	81.3	27.5	14.18	27.83	372	23	A	V
		2484.36	61.96	-12.04	74	48.08	27.5	14.2	27.82	372	23	P	V
		2483.76	47.85	-6.15	54	33.97	27.5	14.2	27.82	372	23	A	V
802.11g CH 13 2472MHz	*	2472	103.01	-	-	89.15	27.5	14.19	27.83	149	25	P	H
	*	2472	95.53	-	-	81.67	27.5	14.19	27.83	149	25	A	H
		2483.56	62.16	-11.84	74	48.28	27.5	14.2	27.82	149	25	P	H
		2484.2	50.54	-3.46	54	36.66	27.5	14.2	27.82	149	25	A	H
	*	2472	99.32	-	-	85.46	27.5	14.19	27.83	379	23	P	V
	*	2472	91.69	-	-	77.83	27.5	14.19	27.83	379	23	A	V
		2485.08	60.53	-13.47	74	46.65	27.5	14.2	27.82	379	23	P	V
		2484.2	47.96	-6.04	54	34.08	27.5	14.2	27.82	379	23	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	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	46.3	-27.7	74	66.01	31.15	6.59	57.45	100	0	P	H
		17985	57.27	-16.73	74	52.9	47.68	13.17	56.48	218	300	P	H
		17985	46.87	-7.13	54	42.5	47.68	13.17	56.48	218	300	A	H
		4824	43.57	-30.43	74	63.28	31.15	6.59	57.45	100	0	P	V
		17985	57.37	-16.63	74	53	47.68	13.17	56.48	312	189	P	V
		17985	47.17	-6.83	54	42.8	47.68	13.17	56.48	312	189	A	V
802.11g CH 06 2437MHz		4874	49.34	-24.66	74	68.68	31.2	6.8	57.34	100	0	P	H
		7311	44.51	-29.49	74	56.09	36.78	8.73	57.09	100	0	P	H
		17925	55.52	-18.48	74	52.92	46	13.13	56.53	136	237	P	H
		17925	46.05	-7.95	54	43.45	46	13.13	56.53	136	237	A	H
		4874	48.07	-25.93	74	67.41	31.2	6.8	57.34	100	0	P	V
		7311	45.43	-28.57	74	57.01	36.78	8.73	57.09	100	0	P	V
		17970	55.98	-18.02	74	52.05	47.26	13.16	56.49	122	221	P	V
		17970	47.35	-6.65	54	43.42	47.26	13.16	56.49	122	221	A	V
802.11g CH 11 2462MHz		4924	42.1	-31.9	74	61.01	31.3	7.02	57.23	100	0	P	H
		7386	44.32	-29.68	74	56.24	36.56	8.72	57.2	100	0	P	H
		17955	55.09	-18.91	74	51.6	46.84	13.15	56.5	125	225	P	H
		17955	47.01	-6.99	54	43.52	46.84	13.15	56.5	125	225	A	H
		4924	40.45	-33.55	74	59.36	31.3	7.02	57.23	100	0	P	V
		7386	45.29	-28.71	74	57.21	36.56	8.72	57.2	100	0	P	V
		17925	55.09	-18.91	74	52.49	46	13.13	56.53	161	208	P	V
		17925	46.02	-7.98	54	43.42	46	13.13	56.53	161	208	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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	38.64	-35.36	74	57.45	31.34	7.06	57.21	100	0	P	H
		7401	44.17	-29.83	74	56.17	36.51	8.71	57.22	100	0	P	H
		17970	55.54	-18.46	74	51.61	47.26	13.16	56.49	125	217	P	H
		17970	47.38	-6.62	54	43.45	47.26	13.16	56.49	125	217	A	H
		4934	39.35	-34.65	74	58.16	31.34	7.06	57.21	100	0	P	V
		7401	43.9	-30.1	74	55.9	36.51	8.71	57.22	100	0	P	V
		17970	55.63	-18.37	74	51.7	47.26	13.16	56.49	109	163	P	V
		17970	47.32	-6.68	54	43.39	47.26	13.16	56.49	109	163	A	V
802.11g CH 13 2472MHz		4944	38.53	-35.47	74	57.23	31.38	7.11	57.19	100	0	P	H
		7416	44.37	-29.63	74	56.28	36.63	8.7	57.24	100	0	P	H
		17985	55.65	-18.35	74	51.28	47.68	13.17	56.48	141	205	P	H
		17985	47.92	-6.08	54	43.55	47.68	13.17	56.48	141	205	A	H
		4944	38.96	-35.04	74	57.66	31.38	7.11	57.19	100	0	P	V
		7416	43.79	-30.21	74	55.7	36.63	8.7	57.24	100	0	P	V
		17985	56.1	-17.9	74	51.73	47.68	13.17	56.48	131	207	P	V
		17985	47.55	-6.45	54	43.18	47.68	13.17	56.48	131	207	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	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2389.485	64.21	-9.79	74	50.31	27.62	14.12	27.84	103	236	P	H
		2390	50.85	-3.15	54	36.95	27.62	14.12	27.84	103	236	A	H
802.11n	*	2412	108.4	-	-	94.52	27.58	14.14	27.84	103	236	P	H
HT20	*	2412	100.77	-	-	86.89	27.58	14.14	27.84	103	236	A	H
CH 01		2388.855	62.24	-11.76	74	48.34	27.62	14.12	27.84	397	24	P	V
2412MHz		2390	49.63	-4.37	54	35.73	27.62	14.12	27.84	397	24	A	V
	*	2412	105.92	-	-	92.04	27.58	14.14	27.84	397	24	P	V
	*	2412	98.72	-	-	84.84	27.58	14.14	27.84	397	24	A	V
		2389.24	58.39	-15.61	74	44.49	27.62	14.12	27.84	306	21	P	H
		2389.94	46.91	-7.09	54	33.01	27.62	14.12	27.84	306	21	A	H
	*	2437	112.02	-	-	98.16	27.53	14.16	27.83	306	21	P	H
	*	2437	104.42	-	-	90.56	27.53	14.16	27.83	306	21	A	H
802.11n		2484.04	59.55	-14.45	74	45.67	27.5	14.2	27.82	306	21	P	H
HT20		2483.97	48.47	-5.53	54	34.59	27.5	14.2	27.82	306	21	A	H
CH 06		2388.54	58.85	-15.15	74	44.95	27.62	14.12	27.84	306	346	P	V
2437MHz		2389.66	46.75	-7.25	54	32.85	27.62	14.12	27.84	306	346	A	V
	*	2437	111.67	-	-	97.81	27.53	14.16	27.83	306	346	P	V
	*	2437	104	-	-	90.14	27.53	14.16	27.83	306	346	A	V
		2491.81	58.06	-15.94	74	44.18	27.5	14.2	27.82	306	346	P	V
		2483.62	47.89	-6.11	54	34.01	27.5	14.2	27.82	306	346	A	V

802.11n HT20 CH 11 2462MHz	*	2462	106.57	-	-	92.72	27.5	14.18	27.83	105	142	P	H
	*	2462	98.97	-	-	85.12	27.5	14.18	27.83	105	142	A	H
		2483.8	64.03	-9.97	74	50.15	27.5	14.2	27.82	105	142	P	H
		2483.76	49.96	-4.04	54	36.08	27.5	14.2	27.82	105	142	A	H
	*	2462	104.77	-	-	90.92	27.5	14.18	27.83	374	27	P	V
	*	2462	97.1	-	-	83.25	27.5	14.18	27.83	374	27	A	V
		2483.88	61.34	-12.66	74	47.46	27.5	14.2	27.82	374	27	P	V
		2483.6	48.67	-5.33	54	34.79	27.5	14.2	27.82	374	27	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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)
	*	2467	104.4	-	-	90.55	27.5	14.18	27.83	100	227	P	H
	*	2467	96.7	-	-	82.85	27.5	14.18	27.83	100	227	A	H
802.11n		2484.2	65.97	-8.03	74	52.09	27.5	14.2	27.82	100	227	P	H
HT20		2483.88	50.18	-3.82	54	36.3	27.5	14.2	27.82	100	227	A	H
CH 12	*	2467	103.31	-	-	89.46	27.5	14.18	27.83	373	25	P	V
2467MHz	*	2467	95.63	-	-	81.78	27.5	14.18	27.83	373	25	A	V
		2483.92	64.81	-9.19	74	50.93	27.5	14.2	27.82	373	25	P	V
		2483.56	49.22	-4.78	54	35.34	27.5	14.2	27.82	373	25	A	V
	*	2472	100.88	-	-	87.02	27.5	14.19	27.83	143	224	P	H
	*	2472	93.28	-	-	79.42	27.5	14.19	27.83	143	224	A	H
802.11n		2483.56	63.51	-10.49	74	49.63	27.5	14.2	27.82	143	224	P	H
HT20		2483.52	50.73	-3.27	54	36.85	27.5	14.2	27.82	143	224	A	H
CH 13	*	2472	98.56	-	-	84.7	27.5	14.19	27.83	376	26	P	V
2472MHz	*	2472	90.77	-	-	76.91	27.5	14.19	27.83	376	26	A	V
		2483.56	61.22	-12.78	74	47.34	27.5	14.2	27.82	376	26	P	V
		2483.52	48.42	-5.58	54	34.54	27.5	14.2	27.82	376	26	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	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	45.6	-28.4	74	65.31	31.15	6.59	57.45	100	0	P	H
		17970	57.13	-16.87	74	53.2	47.26	13.16	56.49	285	204	P	H
		17970	46.83	-7.17	54	42.9	47.26	13.16	56.49	285	204	A	H
		4824	45.58	-28.42	74	65.29	31.15	6.59	57.45	100	0	P	V
		17985	57.17	-16.83	74	52.8	47.68	13.17	56.48	255	202	P	V
		17985	47.07	-6.93	54	42.7	47.68	13.17	56.48	255	202	A	V
802.11n HT20 CH 06 2437MHz		4874	48.05	-25.95	74	67.39	31.2	6.8	57.34	100	0	P	H
		7311	44.34	-29.66	74	55.92	36.78	8.73	57.09	100	0	P	H
		18000	57.11	-16.89	74	52.3	48.1	13.18	56.47	255	205	P	H
		18000	47.01	-6.99	54	42.2	48.1	13.18	56.47	255	205	A	H
		4874	47.91	-26.09	74	67.25	31.2	6.8	57.34	100	0	P	V
		7311	45.13	-28.87	74	56.71	36.78	8.73	57.09	100	0	P	V
		18000	57.21	-16.79	74	52.4	48.1	13.18	56.47	325	188	P	V
		18000	47.31	-6.69	54	42.5	48.1	13.18	56.47	325	188	A	V
802.11n HT20 CH 11 2462MHz		4924	41.29	-32.71	74	60.2	31.3	7.02	57.23	100	0	P	H
		7386	43.8	-30.2	74	55.72	36.56	8.72	57.2	100	0	P	H
		18000	56.91	-17.09	74	52.1	48.1	13.18	56.47	266	165	P	H
		18000	47.11	-6.89	54	42.3	48.1	13.18	56.47	266	165	A	H
		4924	41.82	-32.18	74	60.73	31.3	7.02	57.23	100	0	P	V
		7386	43.99	-30.01	74	55.91	36.56	8.72	57.2	100	0	P	V
		17985	56.97	-17.03	74	52.6	47.68	13.17	56.48	294	189	P	V
		17985	46.87	-7.13	54	42.5	47.68	13.17	56.48	294	189	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	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)
		4934	39.31	-34.69	74	58.12	31.34	7.06	57.21	100	0	P	H
		7401	45.47	-28.53	74	57.47	36.51	8.71	57.22	100	0	P	H
802.11n		18000	56.71	-17.29	74	51.9	48.1	13.18	56.47	222	204	P	H
HT20		18000	46.91	-7.09	54	42.1	48.1	13.18	56.47	222	204	A	H
CH 12		4934	39.64	-34.36	74	58.45	31.34	7.06	57.21	100	0	P	V
2467MHz		7401	44.08	-29.92	74	56.08	36.51	8.71	57.22	100	0	P	V
		18000	56.71	-17.29	74	51.9	48.1	13.18	56.47	206	302	P	V
		18000	47.21	-6.79	54	42.4	48.1	13.18	56.47	206	302	A	V
		4944	38.89	-35.11	74	57.59	31.38	7.11	57.19	100	0	P	H
		7416	43.48	-30.52	74	55.39	36.63	8.7	57.24	100	0	P	H
802.11n		17985	56.87	-17.13	74	52.5	47.68	13.17	56.48	245	205	P	H
HT20		17985	46.67	-7.33	54	42.3	47.68	13.17	56.48	245	205	A	H
CH 13		4944	38.11	-35.89	74	56.81	31.38	7.11	57.19	100	0	P	V
2472MHz		7416	43.32	-30.68	74	55.23	36.63	8.7	57.24	100	0	P	V
		18000	57.41	-16.59	74	52.6	48.1	13.18	56.47	311	159	P	V
		18000	47.01	-6.99	54	42.2	48.1	13.18	56.47	311	159	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 802.11g (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11g CH 11 2462MHz SHF		19113	39.28	-34.72	74	45.81	38.01	9.77	54.31	150	0	P	H
		18616	38.69	-35.31	74	46.02	37.72	9.43	54.48	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 802.11g (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11g LF		126.03	24.14	-19.36	43.5	37.66	17.67	1.05	32.24	-	-	P	H
		187.14	24.17	-19.33	43.5	40.29	14.85	1.29	32.26	-	-	P	H
		269.59	24.65	-21.35	46	36.07	19.06	1.5	31.98	-	-	P	H
		547.98	27.46	-18.54	46	32.49	25.13	2.09	32.25	-	-	P	H
		898.15	31.86	-14.14	46	31.4	28.8	2.71	31.05	-	-	P	H
		952.47	32.86	-13.14	46	30.23	30.61	2.8	30.78	100	0	P	H
		31.94	24.61	-15.39	40	32.69	23.62	0.53	32.23	-	-	P	V
		49.4	25.1	-14.9	40	41.98	14.75	0.66	32.29	-	-	P	V
		72.68	23.38	-16.62	40	42.07	12.78	0.79	32.26	-	-	P	V
		571.26	28.59	-17.41	46	32.83	26.03	2.13	32.4	-	-	P	V
		869.05	31.31	-14.69	46	30.82	28.96	2.66	31.13	-	-	P	V
		958.29	32.37	-13.63	46	29.7	30.6	2.82	30.75	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<WPC Charging Mode>

2.4GHz 2400~2483.5MHz

WIFI 802.11g (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		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 11 2462MHz	*	2462	110.05	-	-	96.2	27.5	14.18	27.83	118	31	P	H
	*	2462	102.49	-	-	88.64	27.5	14.18	27.83	118	31	A	H
		2485	65.14	-8.86	74	51.26	27.5	14.2	27.82	118	31	P	H
		2483.64	50.02	-3.98	54	36.14	27.5	14.2	27.82	118	31	A	H
	*	2462	107.28	-	-	93.43	27.5	14.18	27.83	373	4	P	V
	*	2462	99.7	-	-	85.85	27.5	14.18	27.83	373	4	A	V
		2484.72	59.98	-14.02	74	46.1	27.5	14.2	27.82	373	4	P	V
		2483.52	48.23	-5.77	54	34.35	27.5	14.2	27.82	373	4	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	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 11 2462MHz		4924	44.05	-29.95	74	62.96	31.3	6.5	57.23	100	0	P	H
		7386	44.91	-29.09	74	56.83	36.56	8.2	57.2	100	0	P	H
		17925	55.09	-18.91	74	52.49	46	12.34	56.53	158	196	P	H
		17925	46.35	-7.65	54	43.75	46	12.34	56.53	158	196	A	H
		4924	45.11	-28.89	74	64.02	31.3	6.5	57.23	100	0	P	V
		7386	44.81	-29.19	74	56.73	36.56	8.2	57.2	100	0	P	V
		17925	54.61	-19.39	74	52.01	46	12.34	56.53	123	201	P	V
		17925	46.43	-7.57	54	43.83	46	12.34	56.53	123	201	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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission Plots

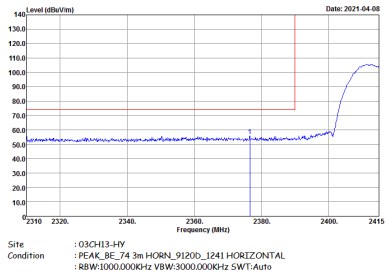
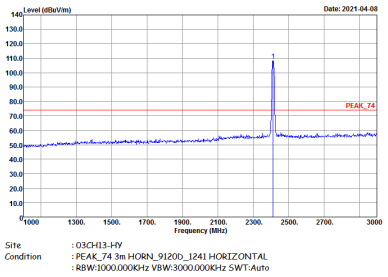
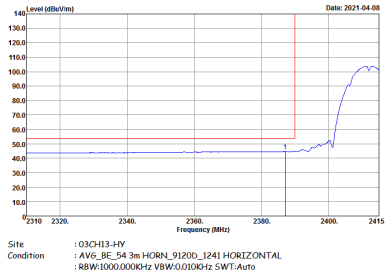
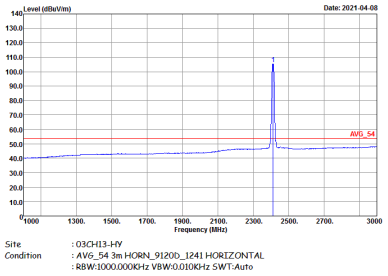
Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	**Temperature :**	20~25°C
		Relative Humidity :	50~60%

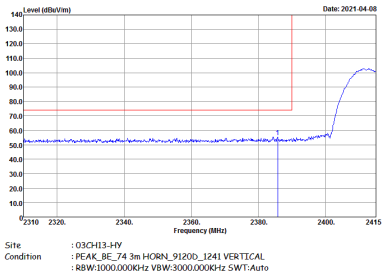
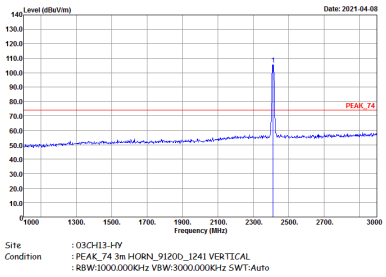
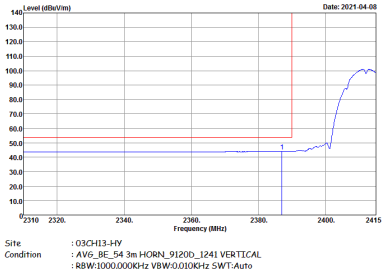
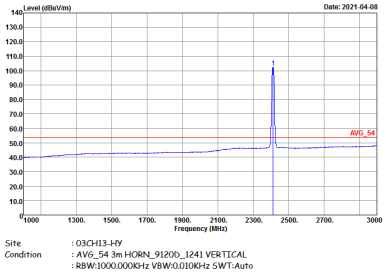
Note symbol

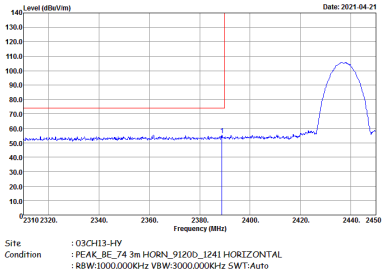
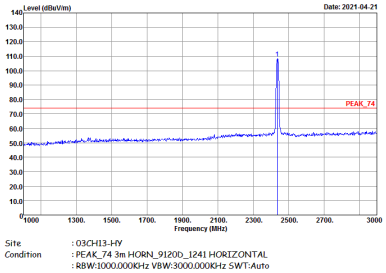
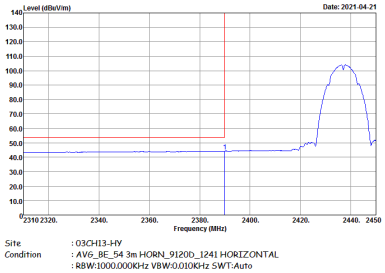
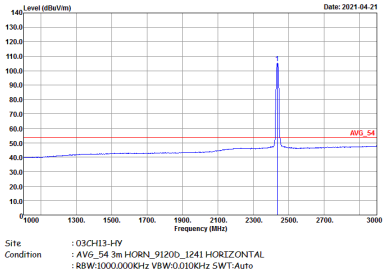
-L	**Low channel location**
-R	**High channel location**

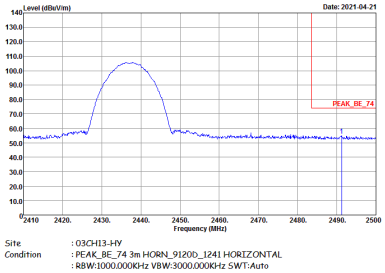
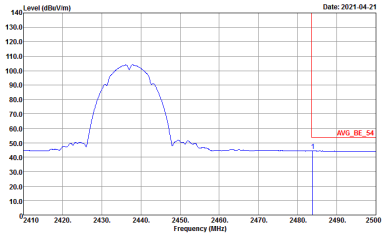
2.4GHz 2400~2483.5MHz

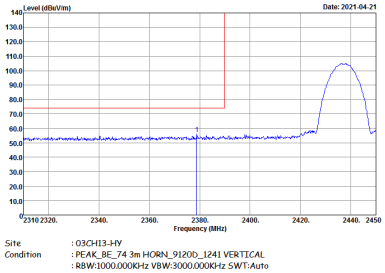
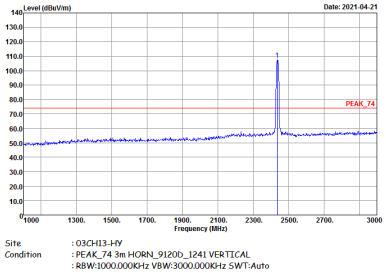
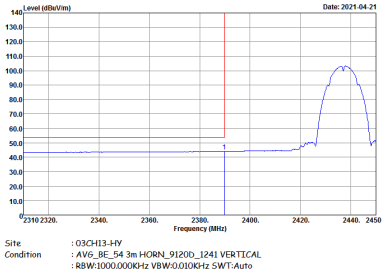
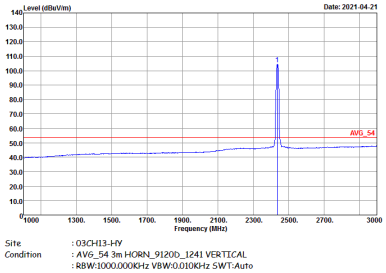
WIFI 802.11b (Band Edge @ 3m)

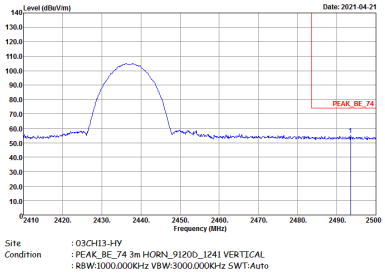
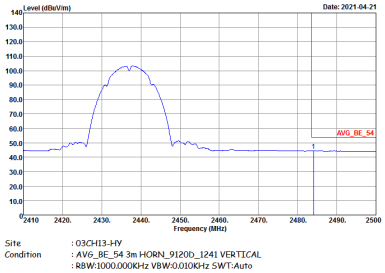
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

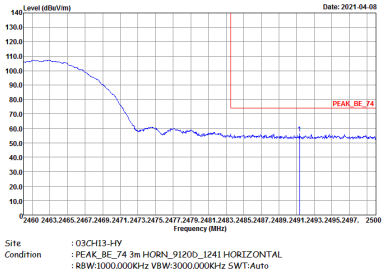
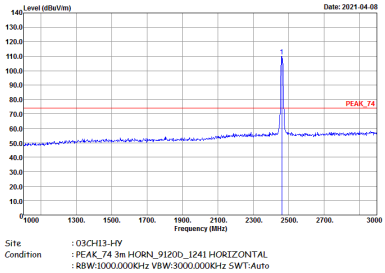
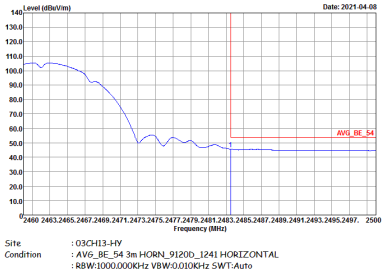
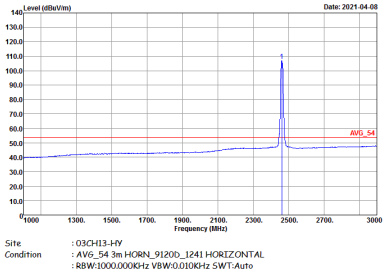
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

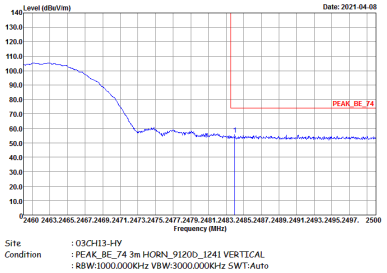
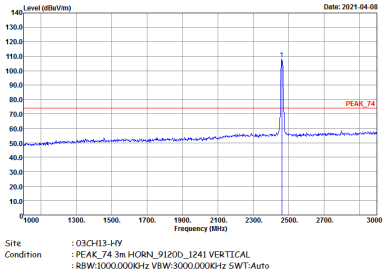
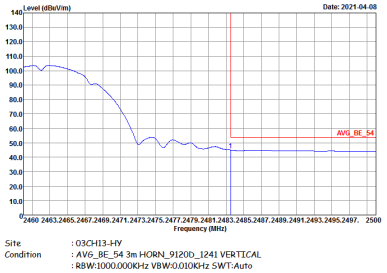
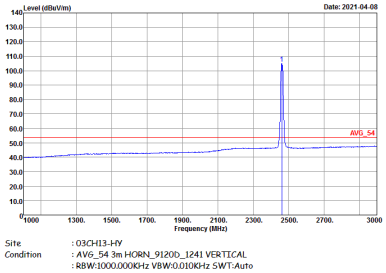
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

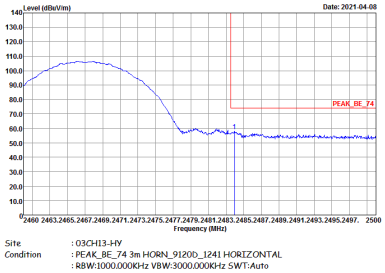
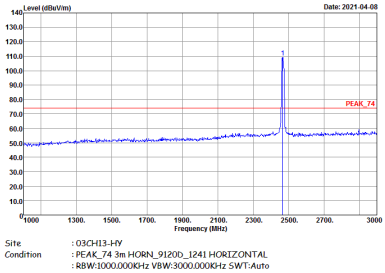
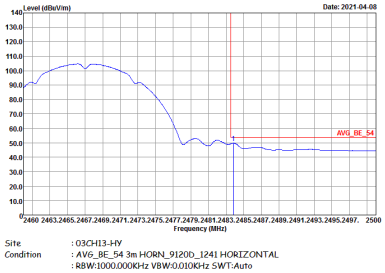
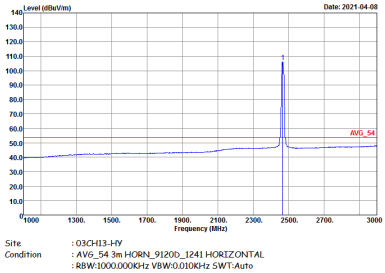
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

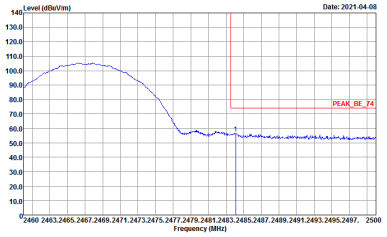
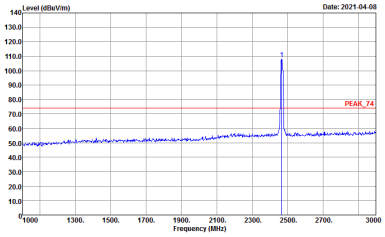
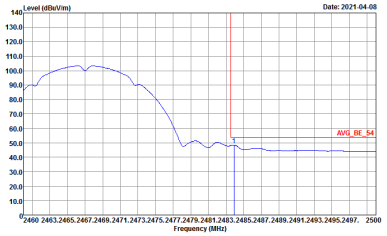
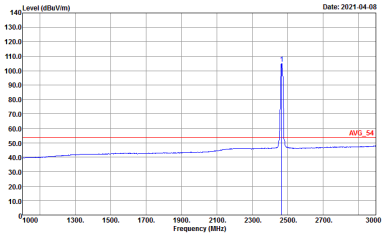
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

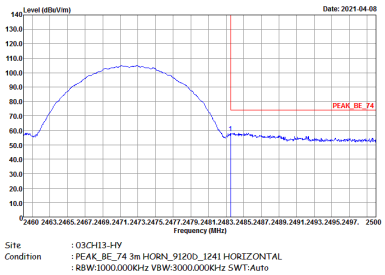
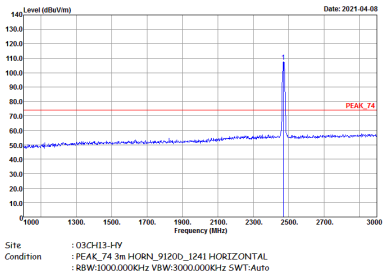
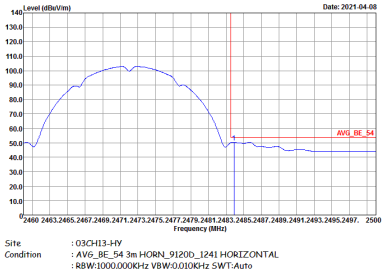
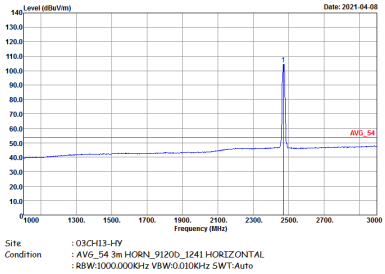
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

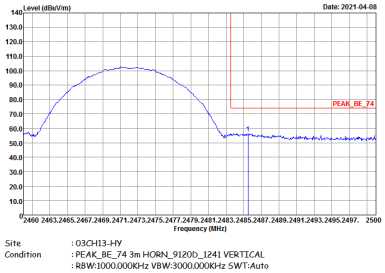
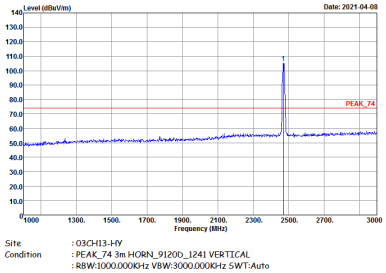
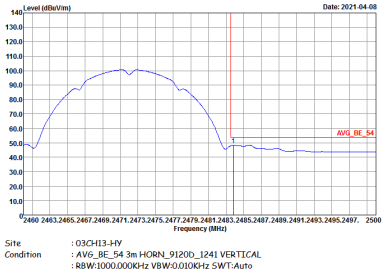
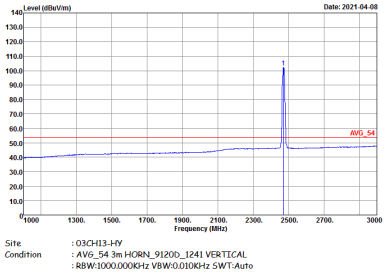
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

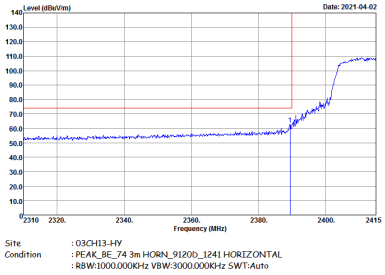
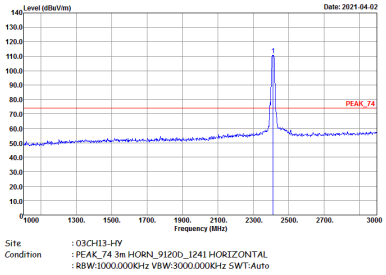
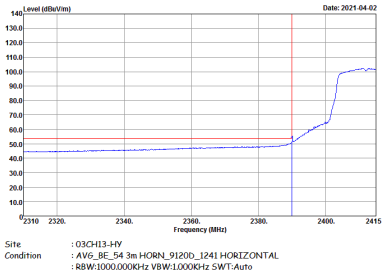
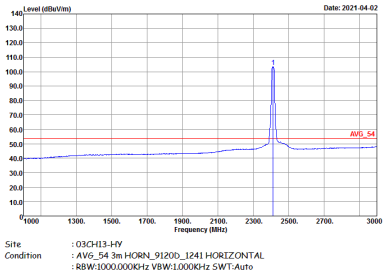
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

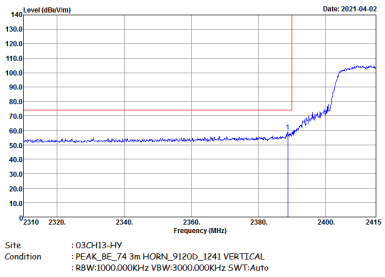
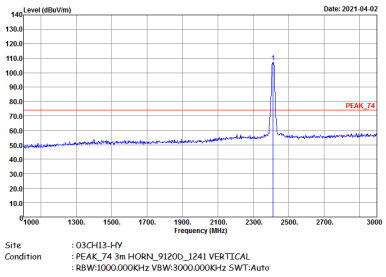
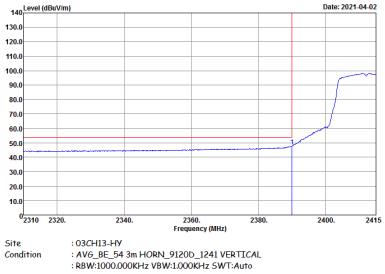
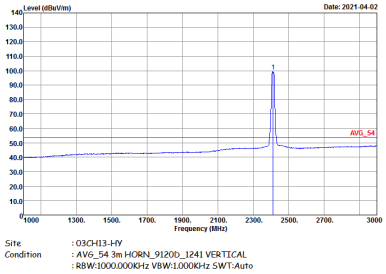
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

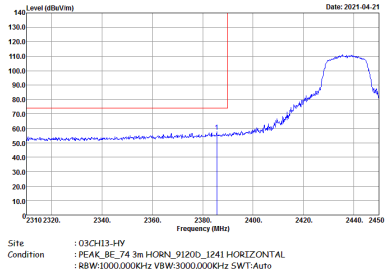
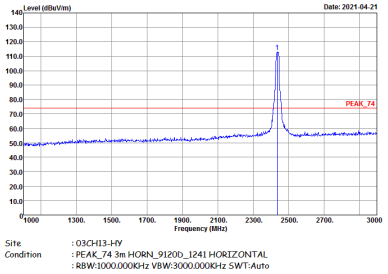
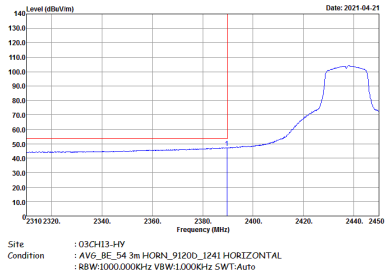
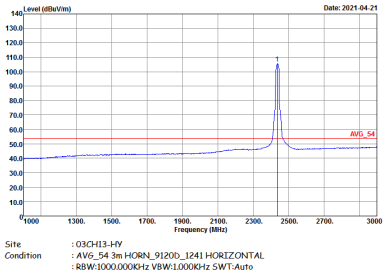
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Vertical	Fundamental
Peak		
Avg.		

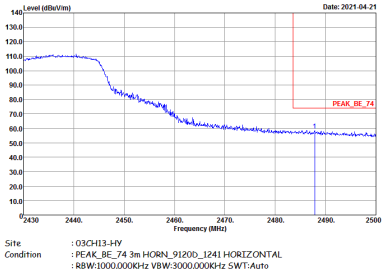
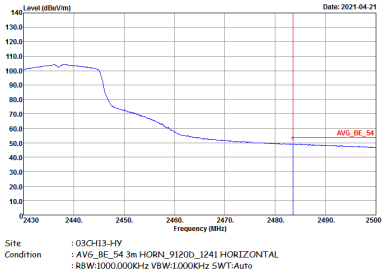
2.4GHz 2400~2483.5MHz

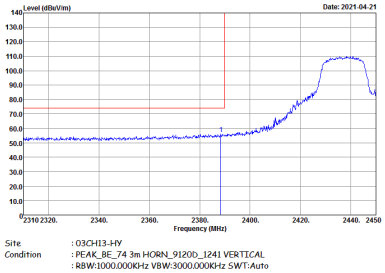
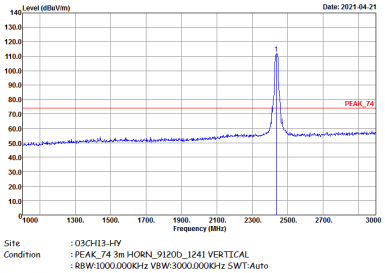
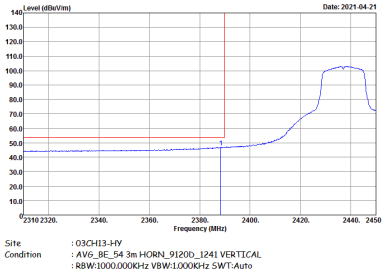
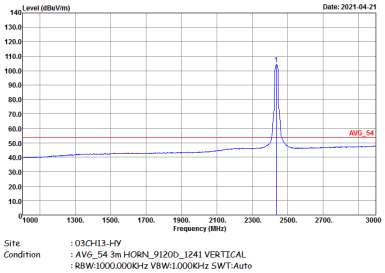
WIFI 802.11g (Band Edge @ 3m)

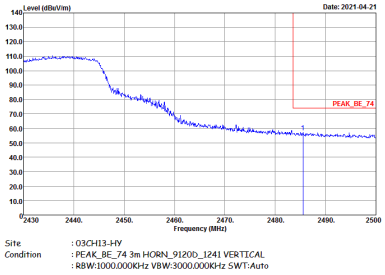
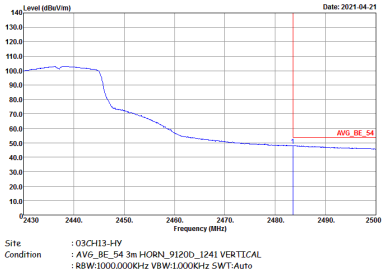
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

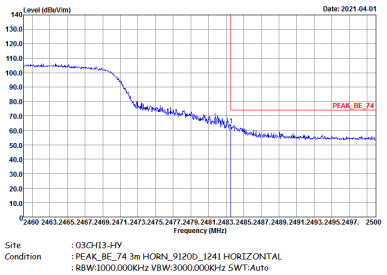
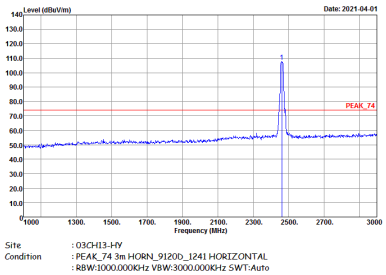
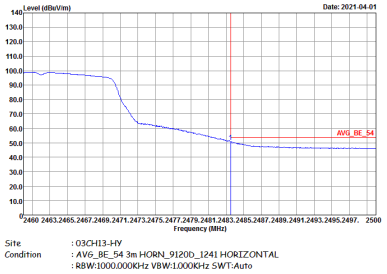
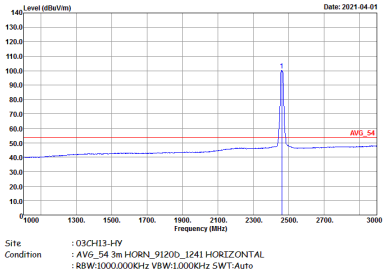
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

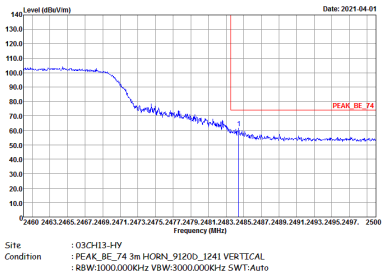
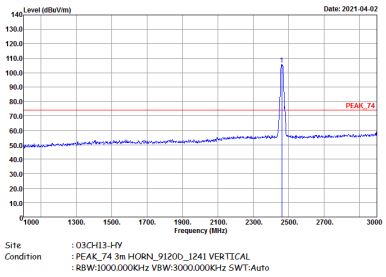
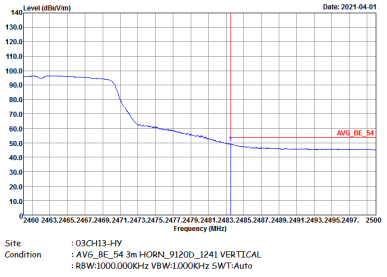
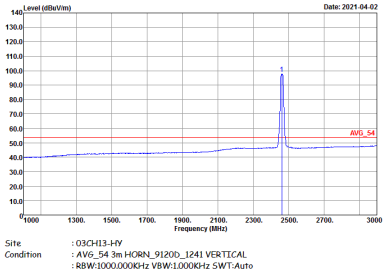
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

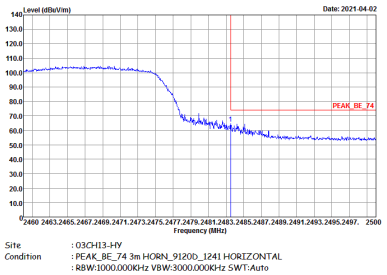
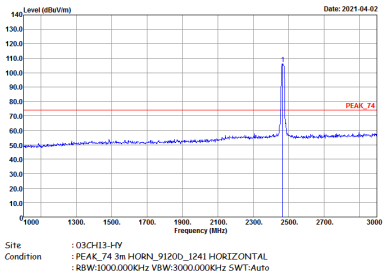
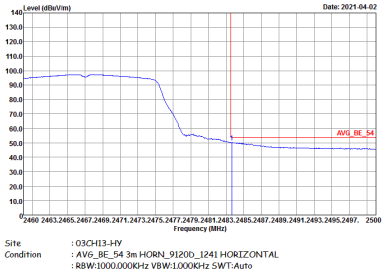
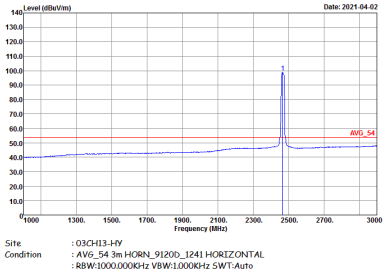
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

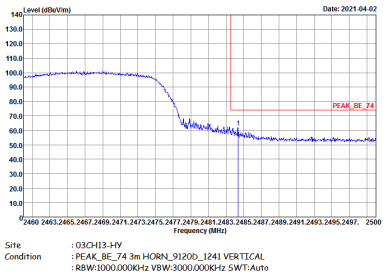
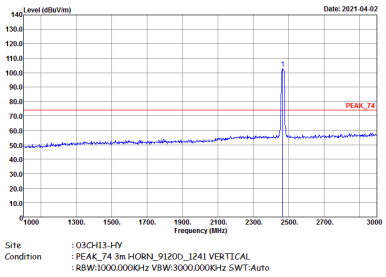
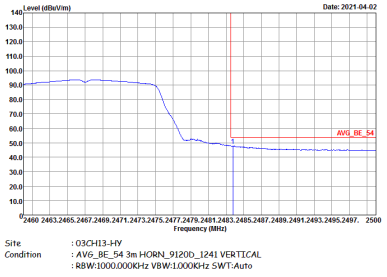
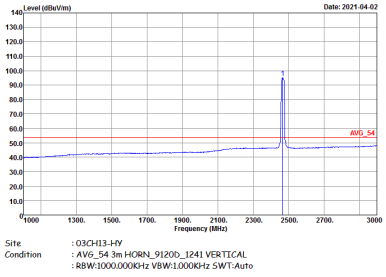
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

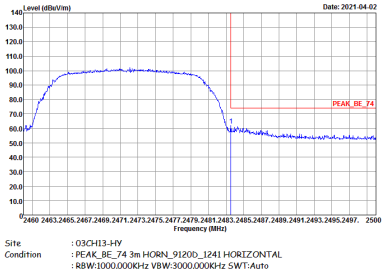
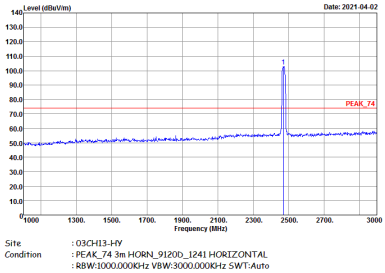
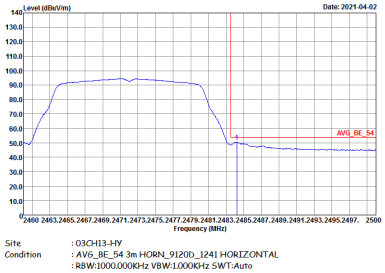
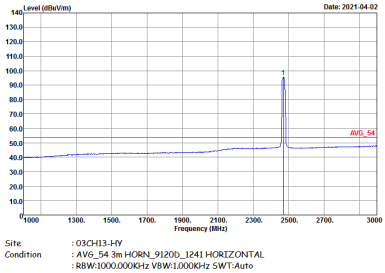
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

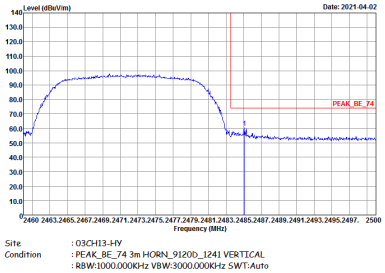
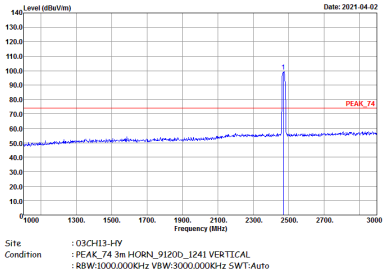
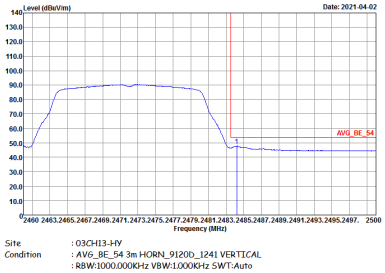
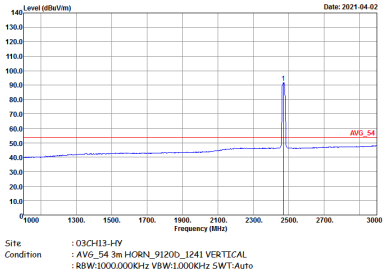
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

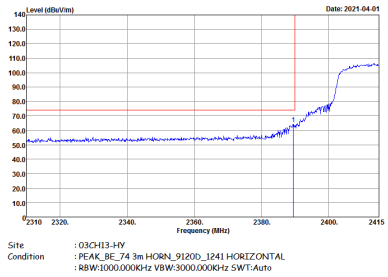
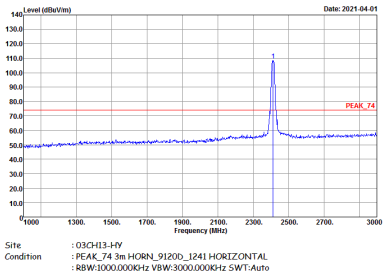
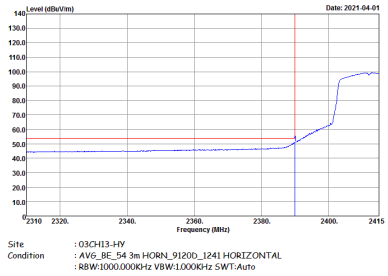
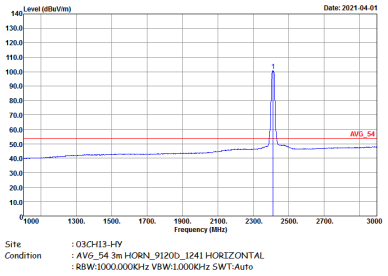
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

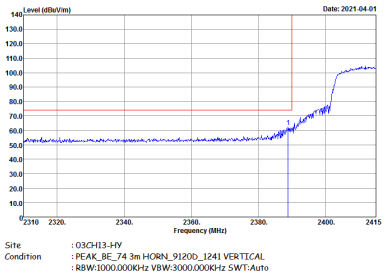
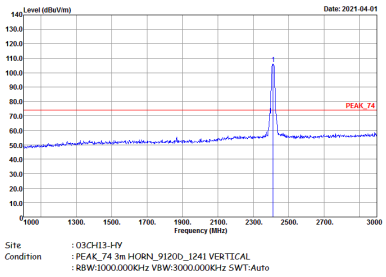
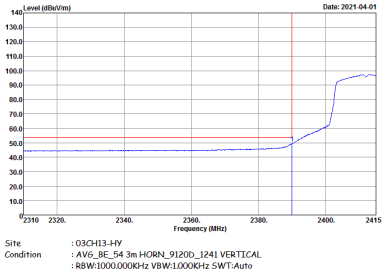
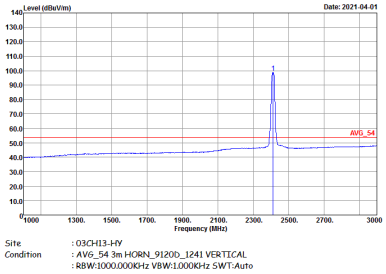
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

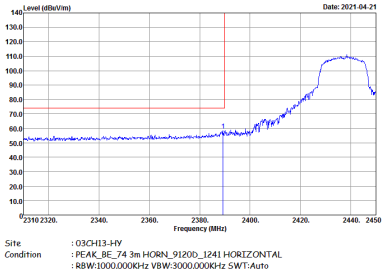
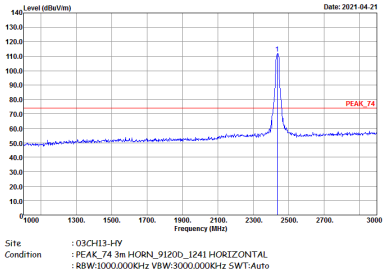
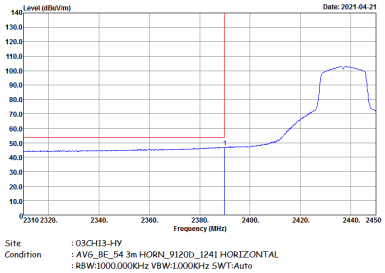
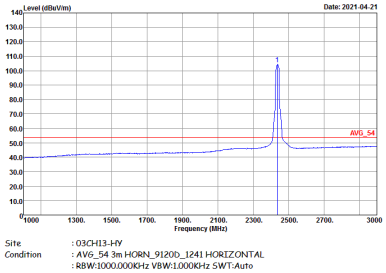
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

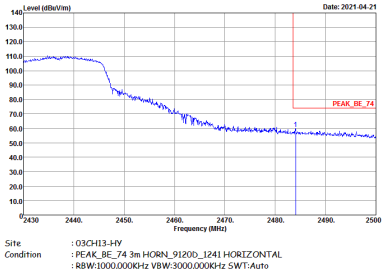
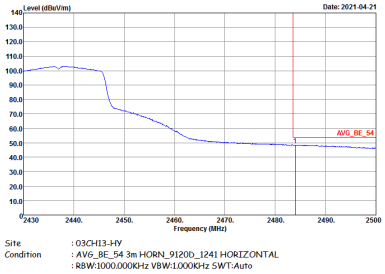
2.4GHz 2400~2483.5MHz

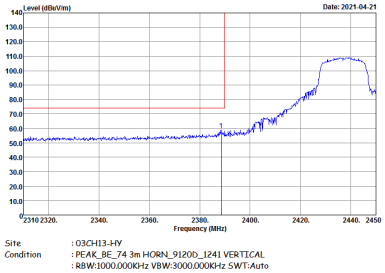
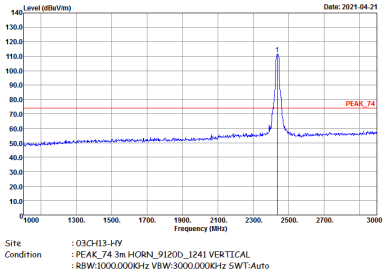
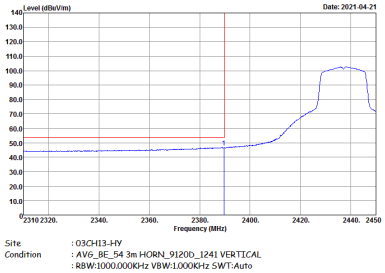
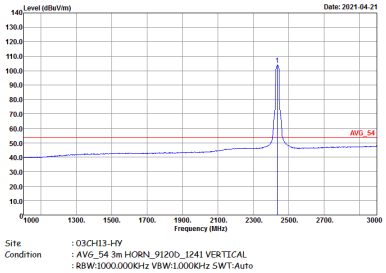
WIFI 802.11n HT20 (Band Edge @ 3m)

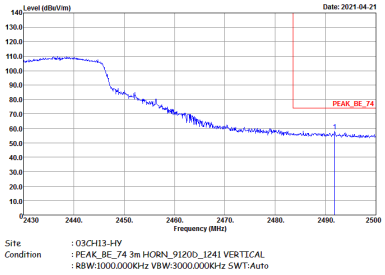
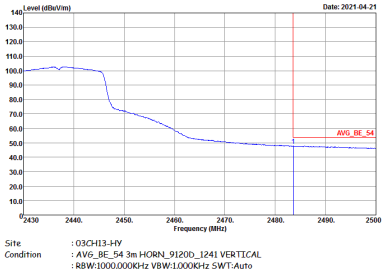
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

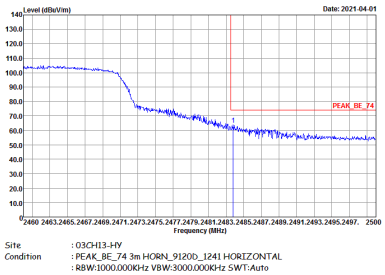
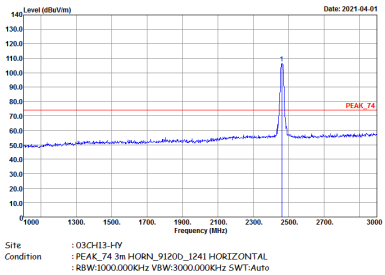
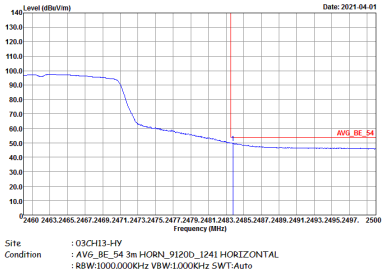
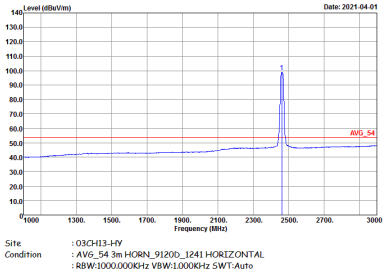
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

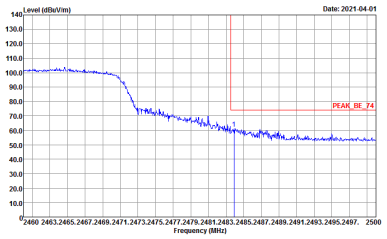
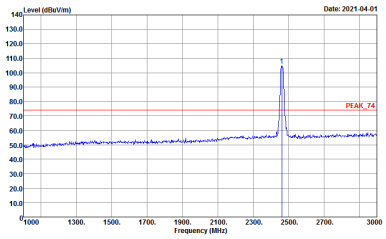
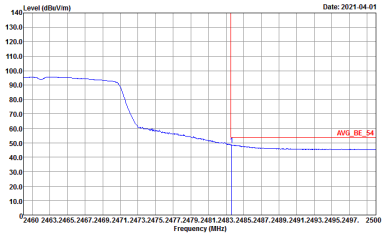
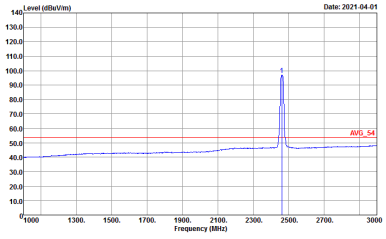
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

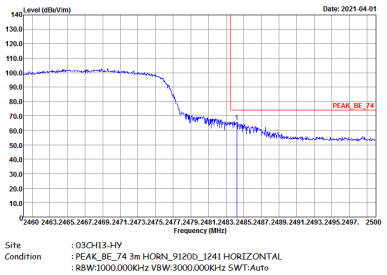
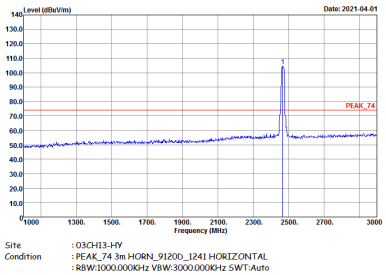
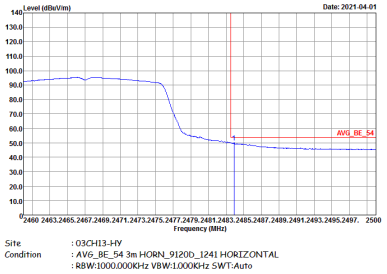
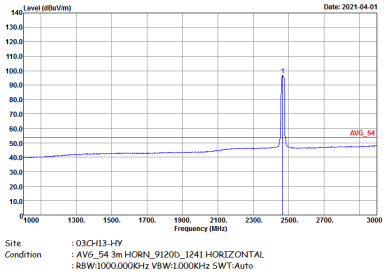
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

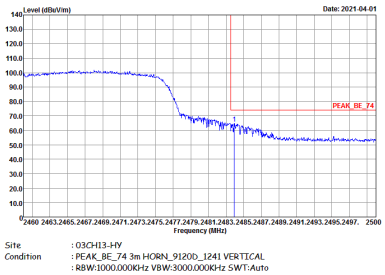
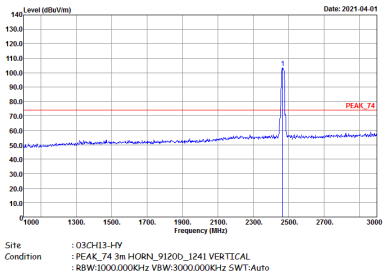
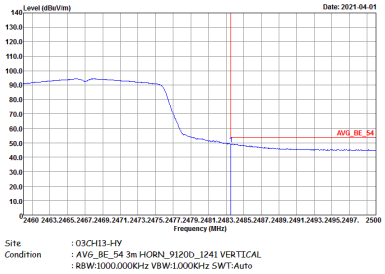
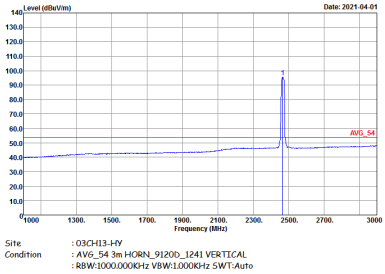
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

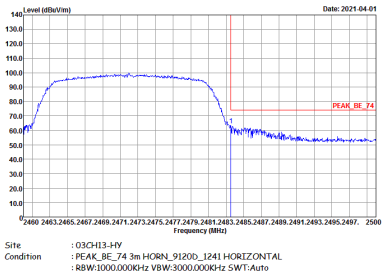
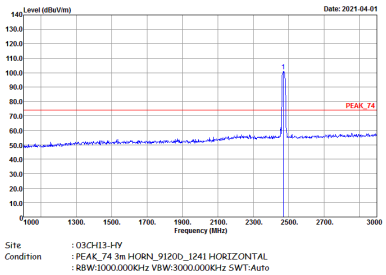
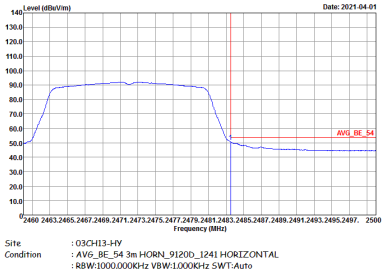
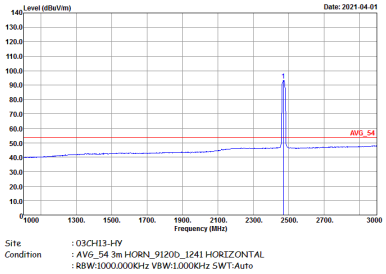
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

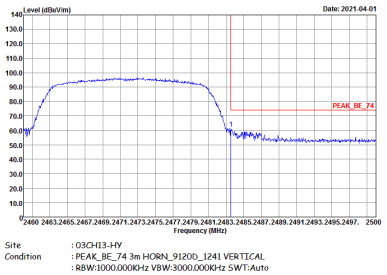
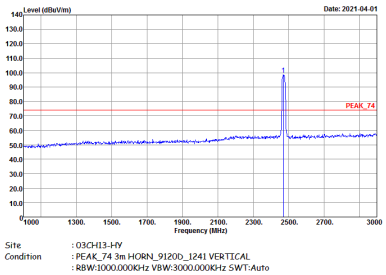
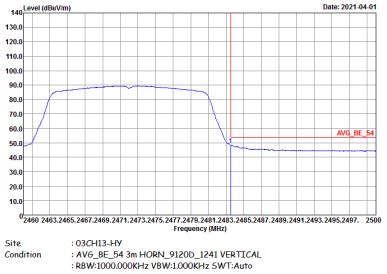
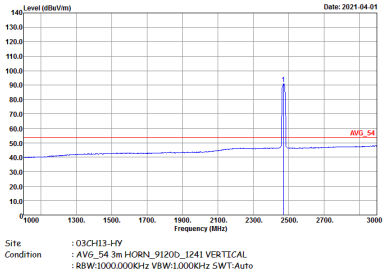
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

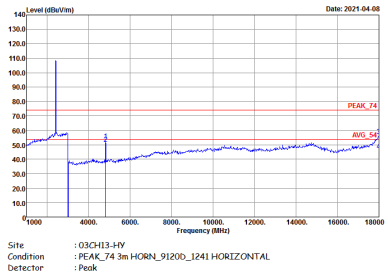
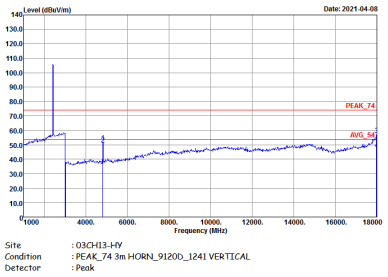
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

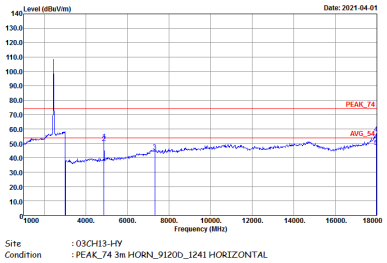
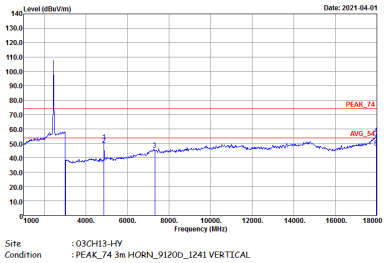
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

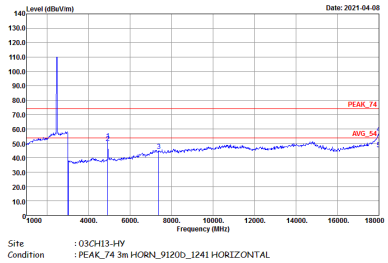
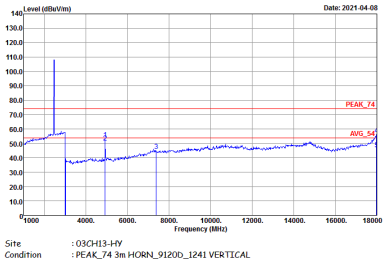
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

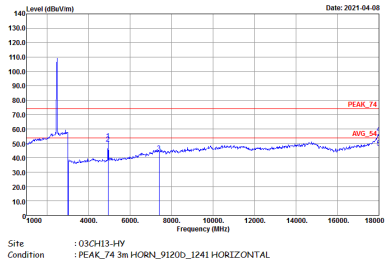
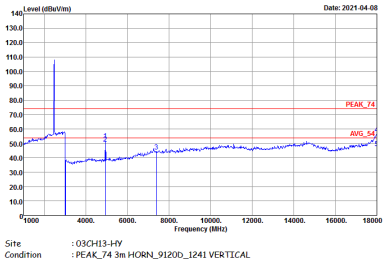
2.4GHz 2400~2483.5MHz

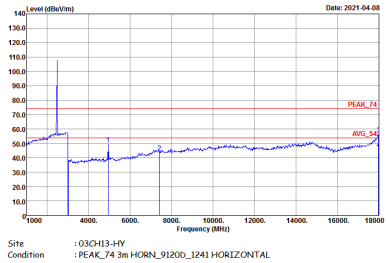
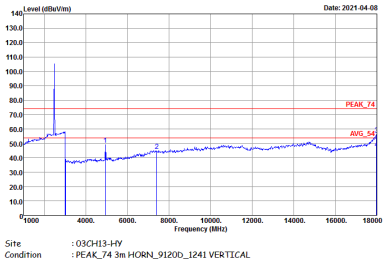
WIFI 802.11b (Harmonic @ 3m)

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

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

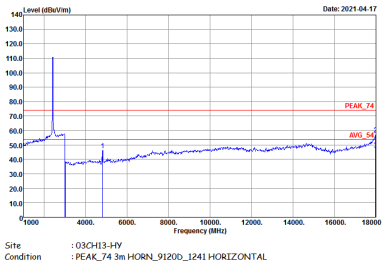
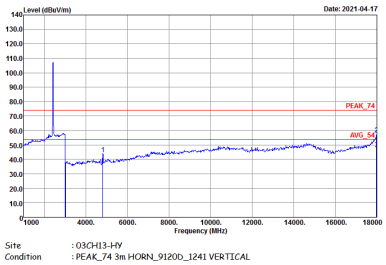
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 	

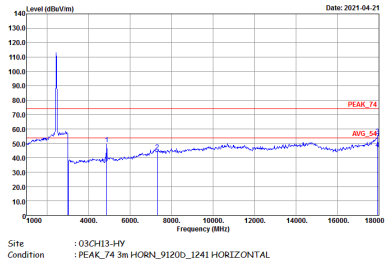
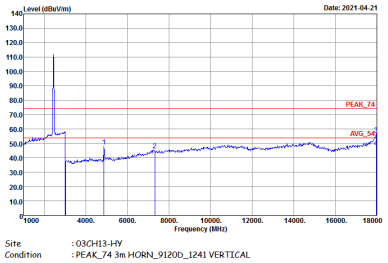
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1	Horizontal	Vertical
Peak Avg.		

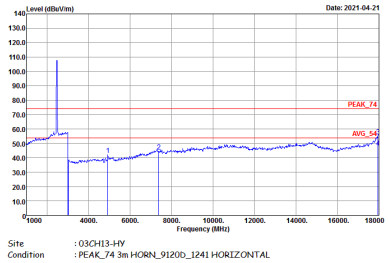
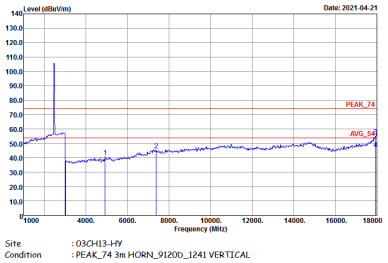
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Vertical
Peak Avg.		

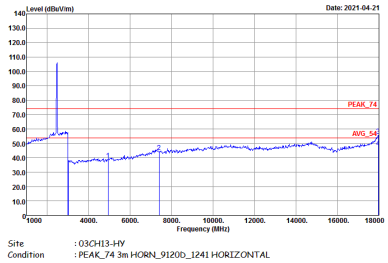
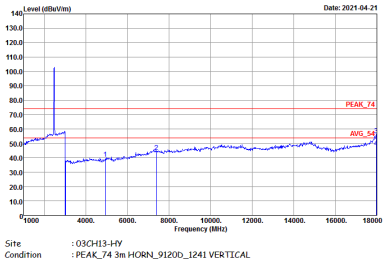
2.4GHz 2400~2483.5MHz

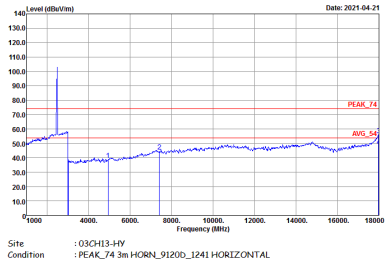
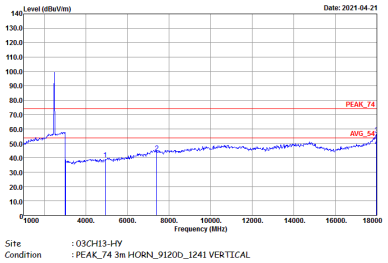
WIFI 802.11g (Harmonic @ 3m)

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

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

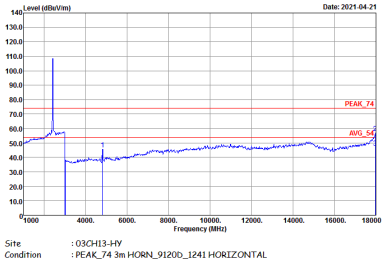
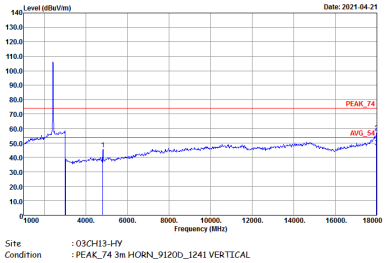
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

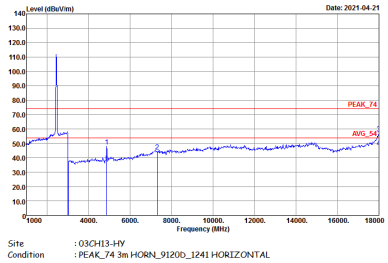
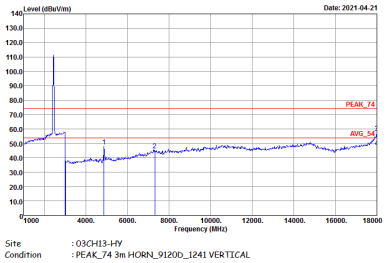
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
1	Horizontal	Vertical
Peak Avg.		

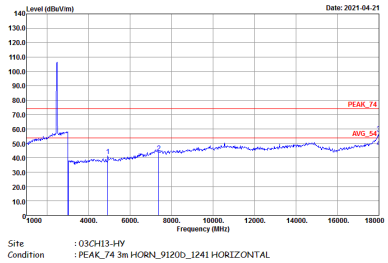
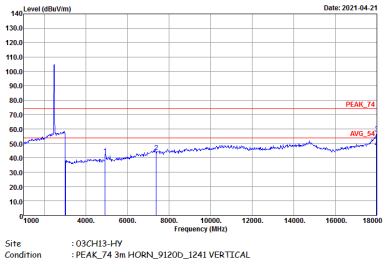
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
1	Horizontal	Vertical
Peak Avg.		

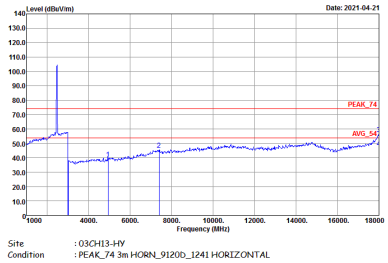
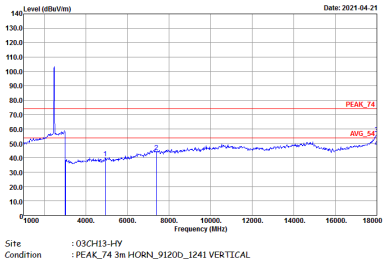
2.4GHz 2400~2483.5MHz

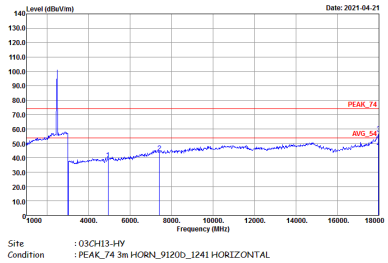
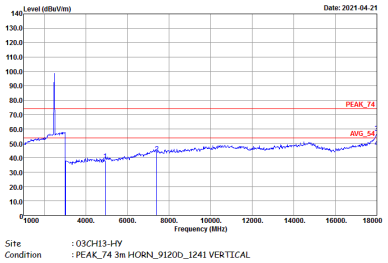
WIFI 802.11n HT20 (Harmonic @ 3m)

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

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

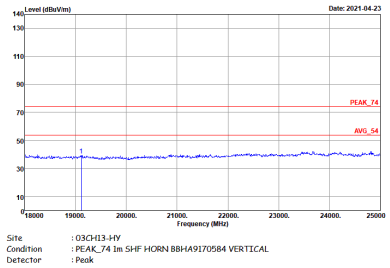
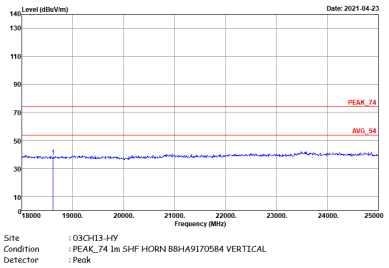
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH12 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1	Horizontal	Vertical
Peak Avg.		

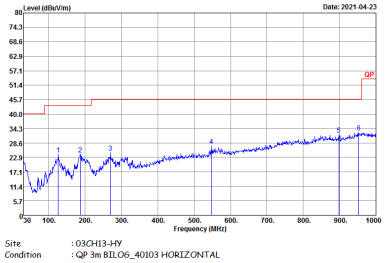
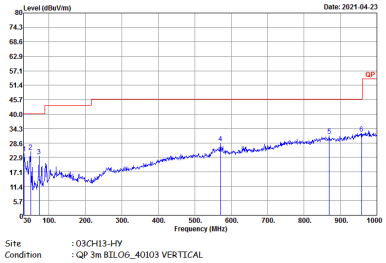
Emission above 18GHz

2.4GHz WIFI 802.11g (SHF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g Ch11 Super High Frequency (SHF)	
1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

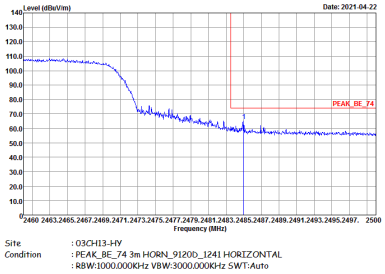
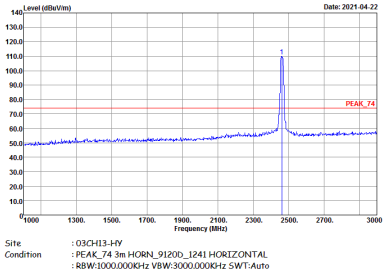
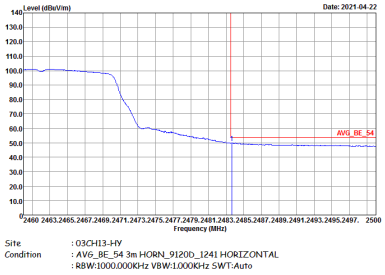
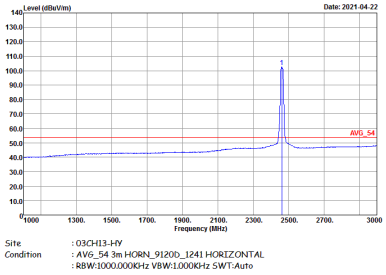
2.4GHz WIFI 802.11g (LF)

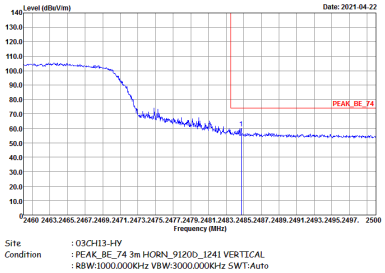
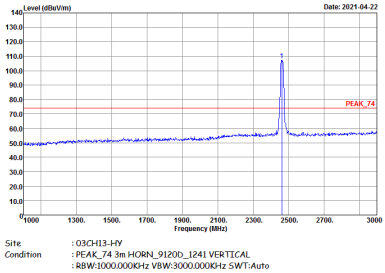
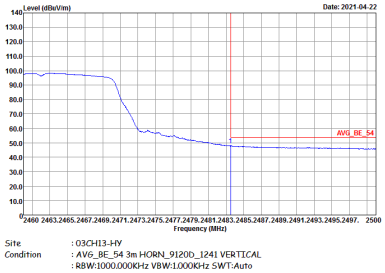
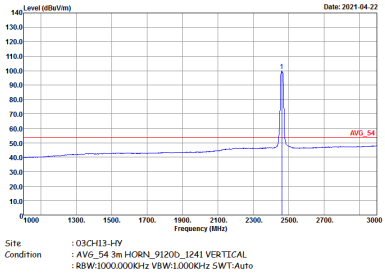
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g LF	
1	Horizontal	Vertical
QP / Peak		

<WPC Charging Mode>

2.4GHz 2400~2483.5MHz

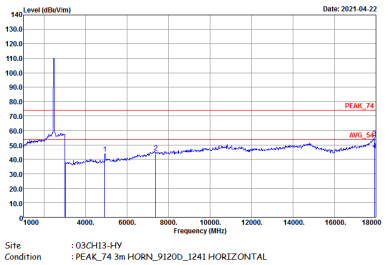
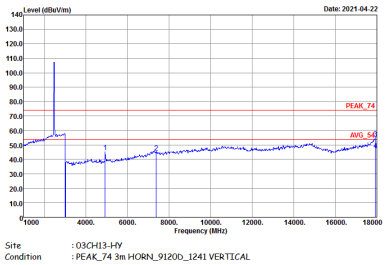
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH13-HY Condition : PEAK_74 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	 Site : 03CH13-HY Condition : AVG_54 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

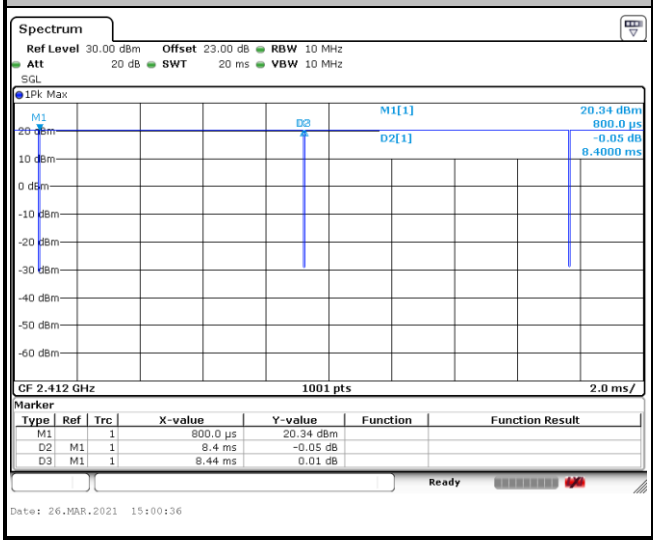
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

Appendix E. Duty Cycle Plots

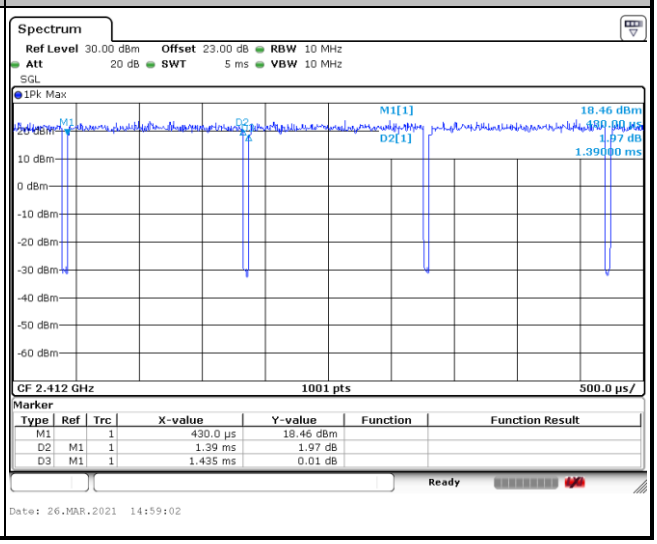
Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
802.11b	99.53	-	-	10Hz	0.02
802.11g	96.86	1390	0.72	1kHz	0.14
2.4GHz 802.11n HT20	97.01	1300	0.77	1kHz	0.13

<Ant. 1>

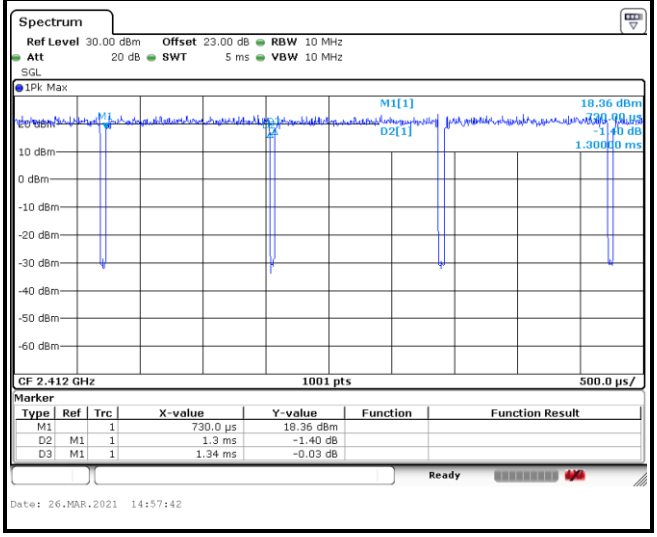
802.11b



802.11g



802.11n HT20



THE END