FCC RADIO TEST REPORT

FCC ID	:	**2AS3Y-6275**
Equipment	:	**Digital Media Receiver**
Model Name	:	**R9P2A5**
Applicant	:	**Engineering Cowboys US LLC** **7 Skyline Drive, 3rd Floor,** **Hawthorne, New York, 10532, USA**
Standard	:	**FCC Part 15 Subpart C §15.247**

The product was received on Mar. 01, 2019 and testing was started from May 31, 2019 and completed on Jul. 08, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR930103-01C	01	Initial issue of report	Jul. 19, 2019
FR930103-01C	02	Revise Antenna gain	Aug. 01, 2019

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: Ann Lee

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	R9P2A5
FCC ID	2AS3Y-6275
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2472 MHz
Maximum Output Power to Antenna	802.11b : 19.00 dBm (0.0794 W) 802.11g : 19.50 dBm (0.0891 W) 802.11n HT20 : 18.40 dBm (0.0692 W)
99% Occupied Bandwidth	802.11b : 13.75 MHz 802.11g : 17.05 MHz 802.11n HT20 : 17.85 MHz
Antenna Type / Gain	PCB Inv F Antenna type with gain 4.37 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

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.**	
	TH05-HY	CO05-HY

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH12-HY

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

FCC designation No.: TW1190 and TW0007

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. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in two setup, without accessories and with accessories. The worst cases (with accessories) 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	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437	12	2467
			13	2472

2.2 Test Mode

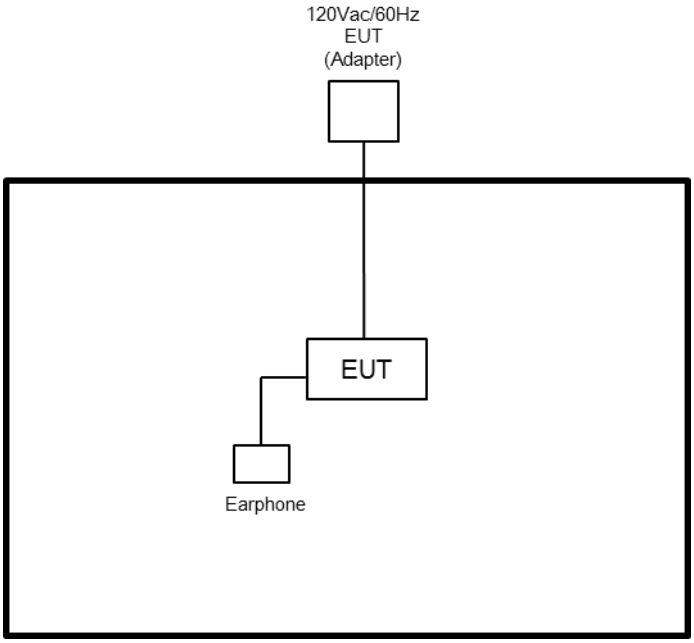
Final test modes are considering the modulation and worse data rates as below table.

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

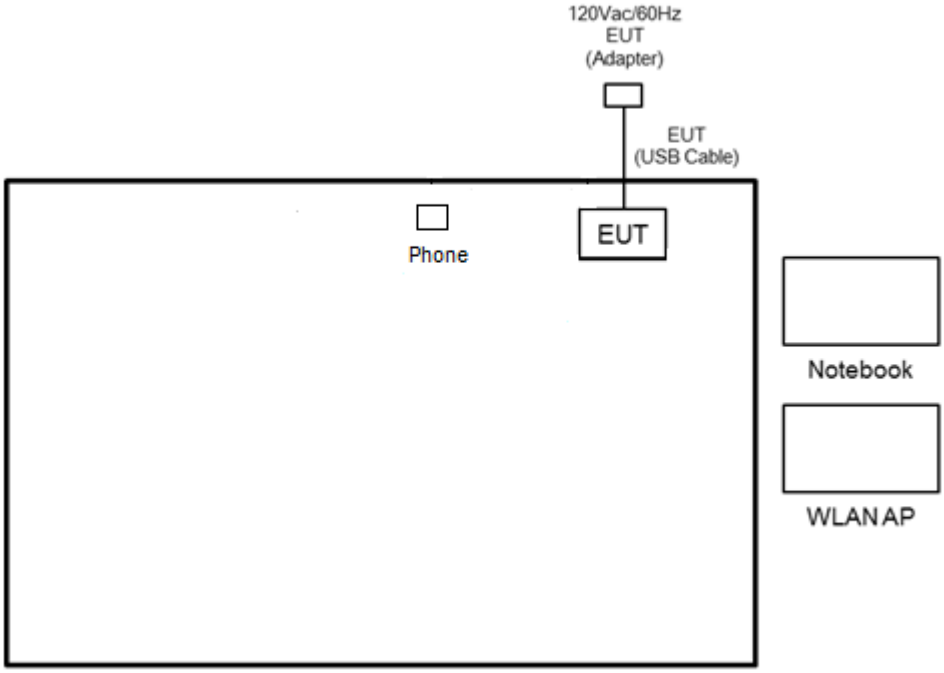
Test Cases	
AC Conducted Emission	Mode 1 :WLAN (2.4GHz) Link + Bluetooth Link + MUSIC + LED + Charging from AC Adapter

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC1750	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Mobile Phone	APPLE	A1524	NM8PB31200	N/A	N/A
4.	iPod Earphone	Apple	A1285	verification	Unshielded, 1.2 m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “Compliance.exe 1.0.0.49” 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.

The EUT was set to connect with the WLAN AP under large packet of transmission.

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 10dB 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.

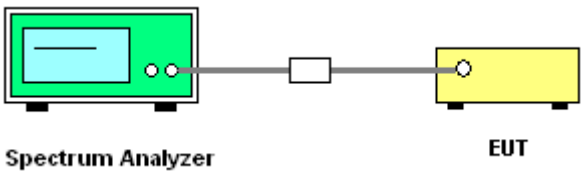
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

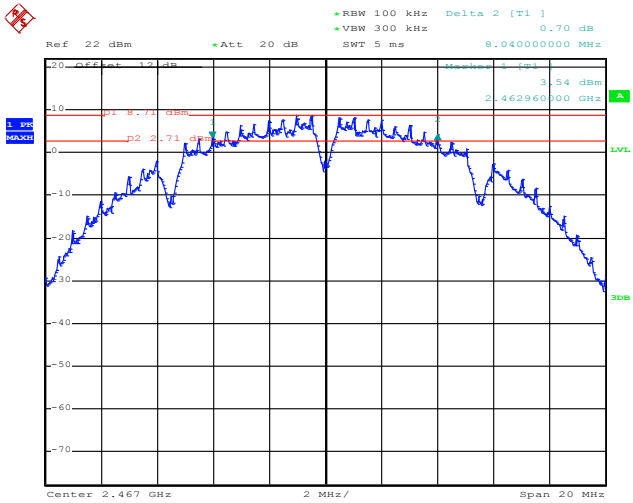
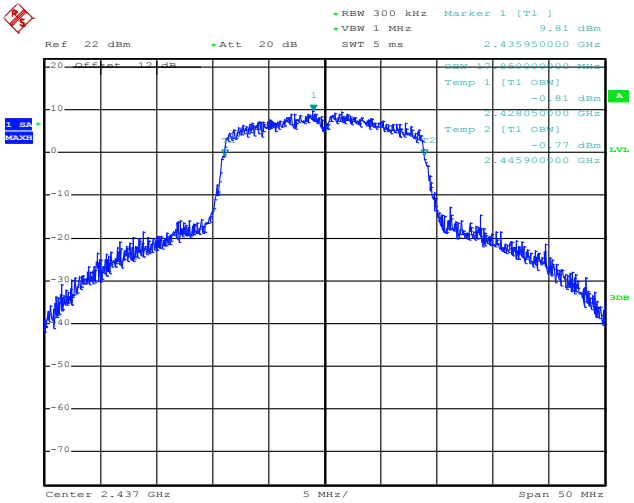
1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit 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
	
Date: 12.JUN.2019 22:03:31	Date: 12.JUN.2019 23:09:14

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 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi 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 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

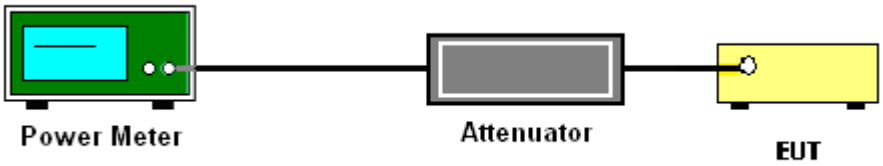
3.2.2 Measuring Instruments

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 to the maximum power setting and enable the EUT 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 8dBm in any 3kHz band at any time interval of continuous transmission.

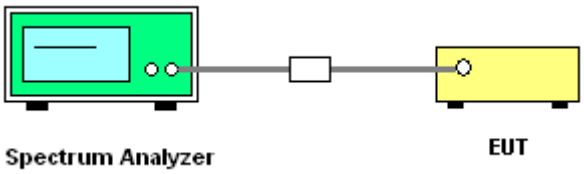
3.3.2 Measuring Instruments

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 to the maximum power setting and enable the EUT 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.

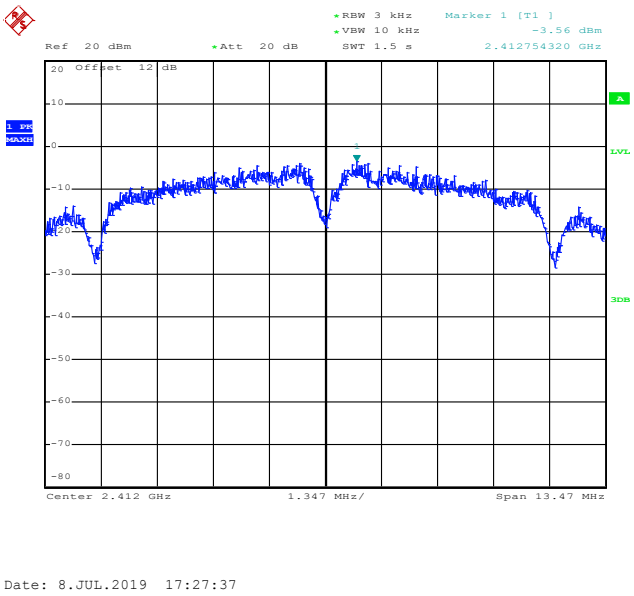
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/3kHz)



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.

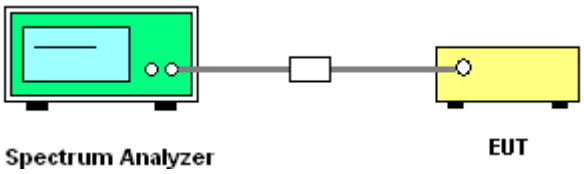
3.4.2 Measuring Instruments

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 to the maximum power setting and enable the EUT 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



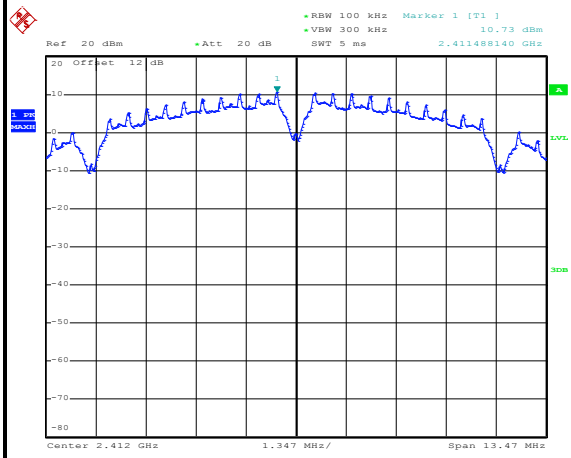
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Leo Li, CreedWu	**Temperature :**	21~25℃
		Relative Humidity :	51~54%

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

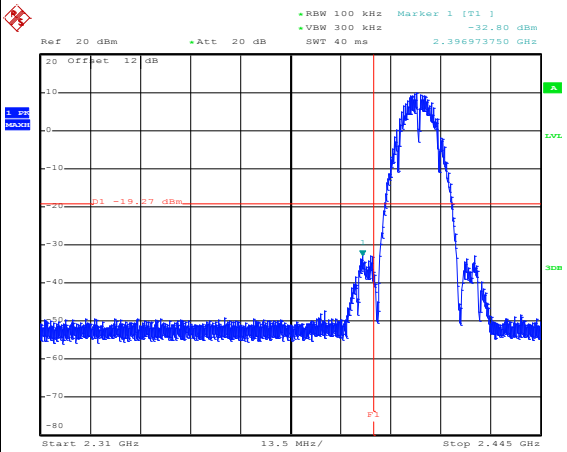
Test Mode :	802.11b	**Test Channel :**	01

100kHz PSD reference Level



Date: 8.JUL.2019 17:27:53

Low Channel Plot



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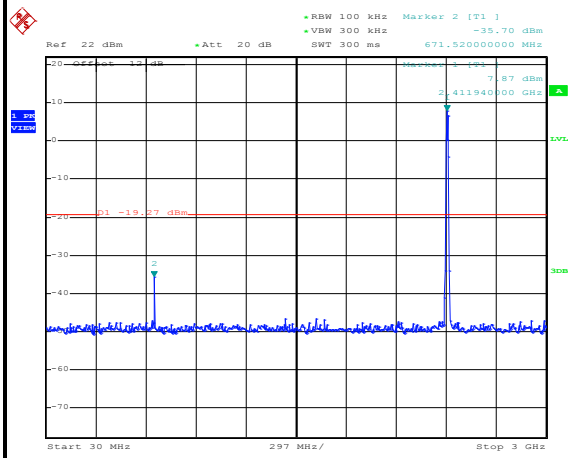
Spurious Emission 30MHz~3GHz



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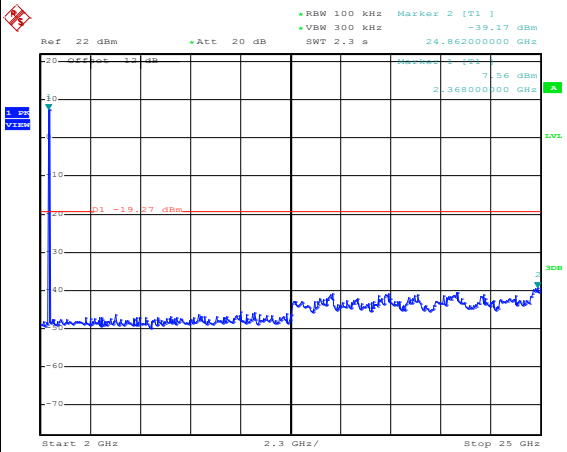
Spurious Emission 2GHz~25GHz



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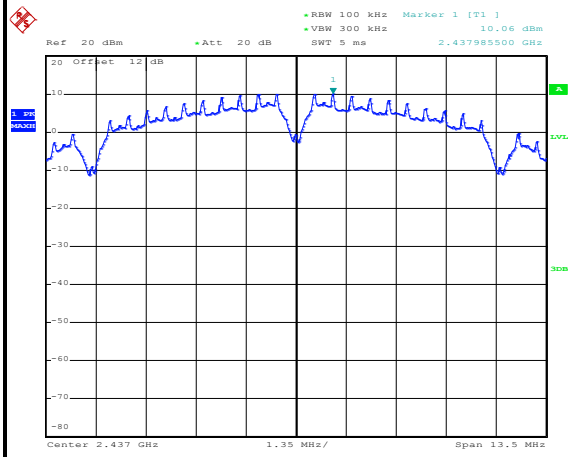
Test Mode :	802.11b	Test Channel :	06

100kHz PSD reference Level	Mid Channel Plot
	

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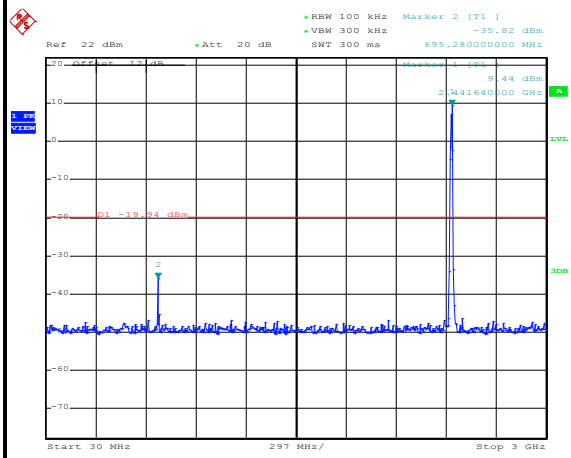
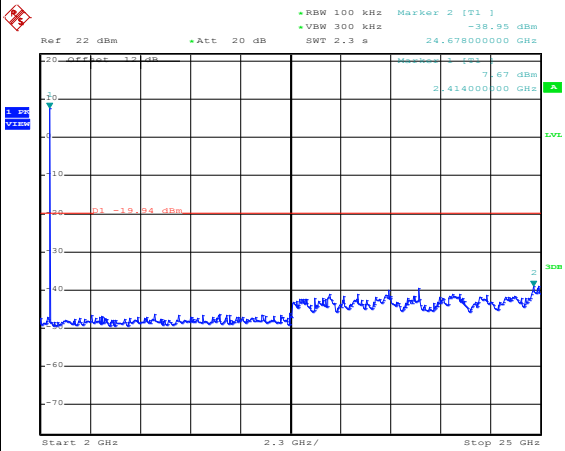
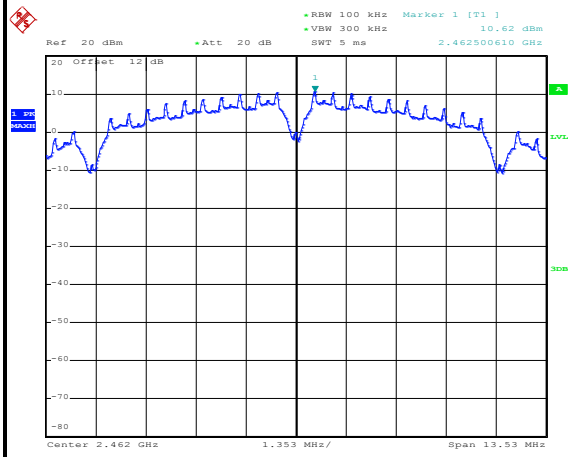
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 8.JUL.2019 17:41:03

Date: 8.JUL.2019 17:41:20

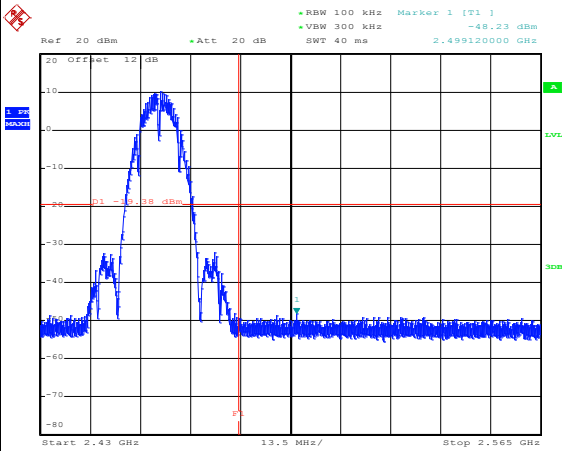
Test Mode :	802.11b	Test Channel :	11

100kHz PSD reference Level



Date: 8.JUL.2019 17:44:36

High Channel Plot



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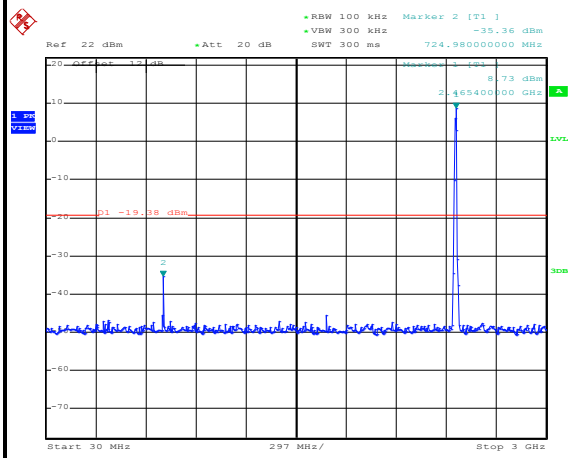
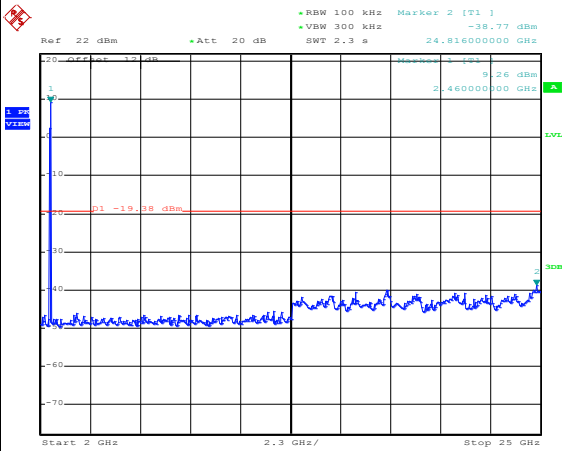
Spurious Emission 30MHz~3GHz



Date: 8.JUL.2019 17:45:40

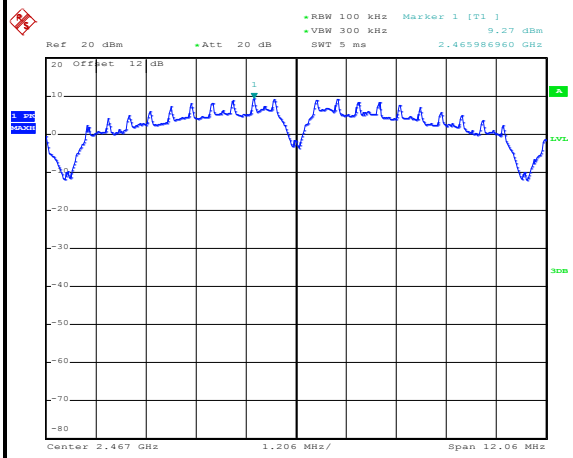
Spurious Emission 2GHz~25GHz



Date: 8.JUL.2019 17:45:57

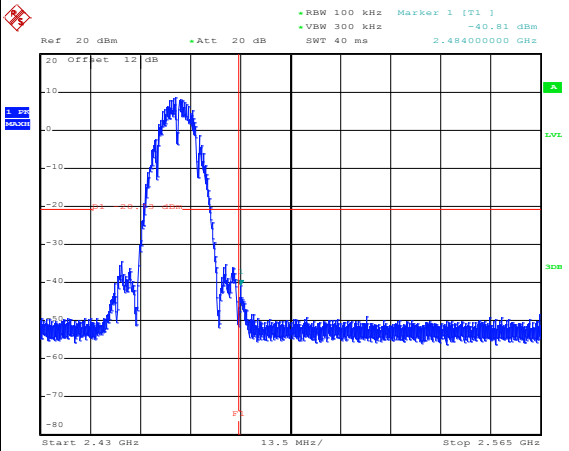
Test Mode :	802.11b	Test Channel :	12

100kHz PSD reference Level



Date: 12.JUN.2019 22:04:37

High Channel Plot



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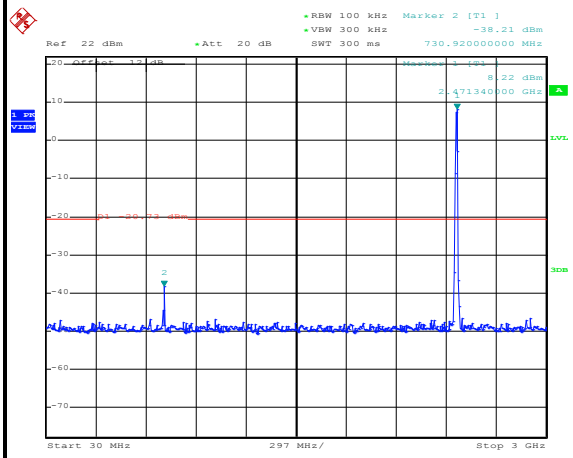
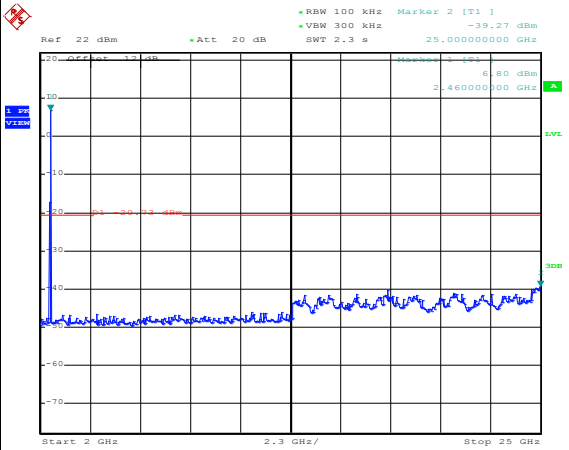
Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 22:05:51

Spurious Emission 2GHz~25GHz



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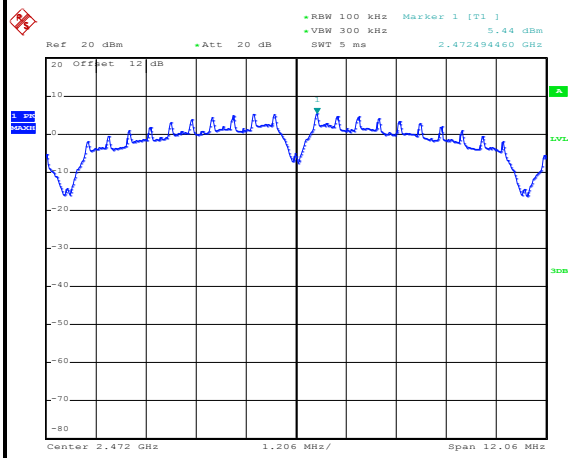
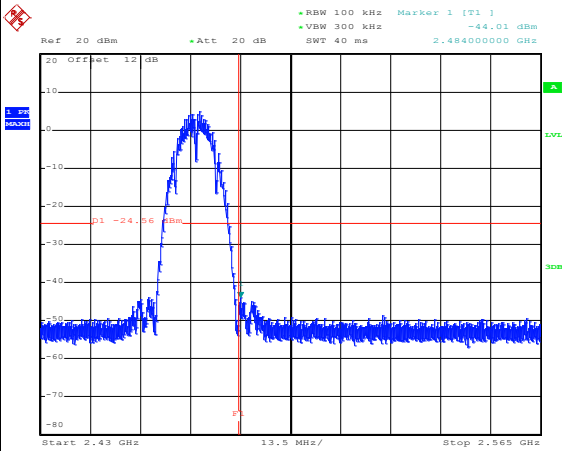
Test Mode :	802.11b	Test Channel :	13

100kHz PSD reference Level



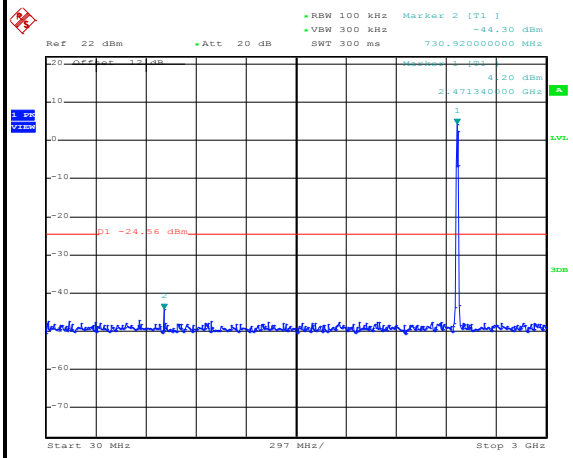
Date: 12.JUN.2019 22:09:15

High Channel Plot



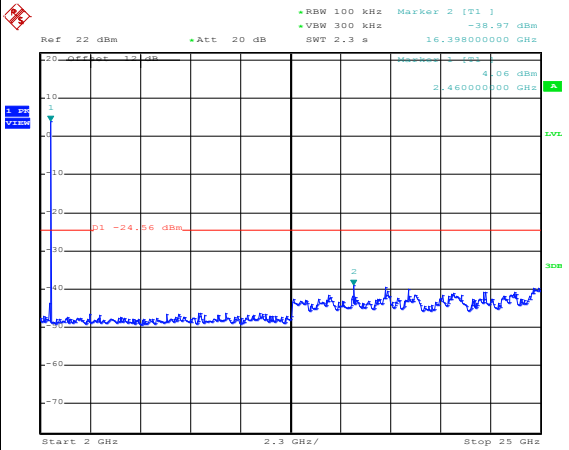
Date: 12.JUN.2019 22:09:35

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 22:13:29

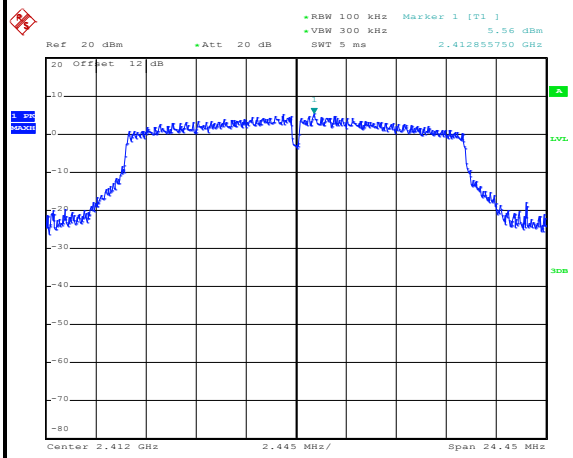
Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 22:13:42

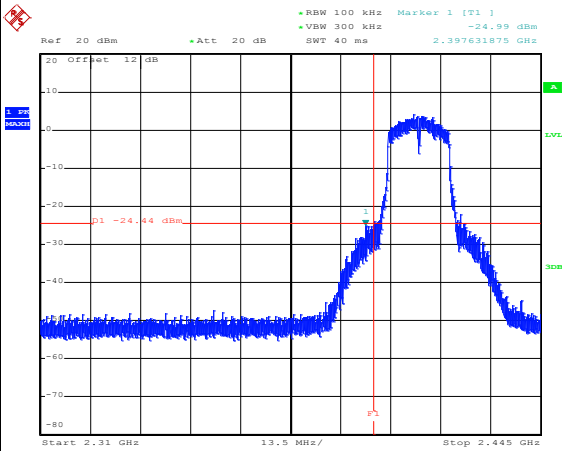
Test Mode :	802.11g	Test Channel :	01

100kHz PSD reference Level



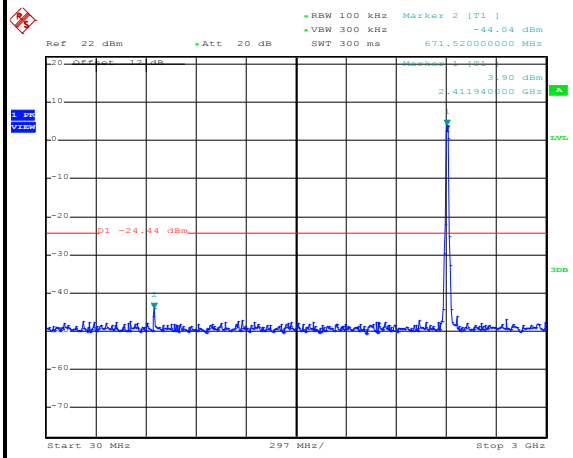
Date: 12.JUN.2019 22:23:56

Low Channel Plot



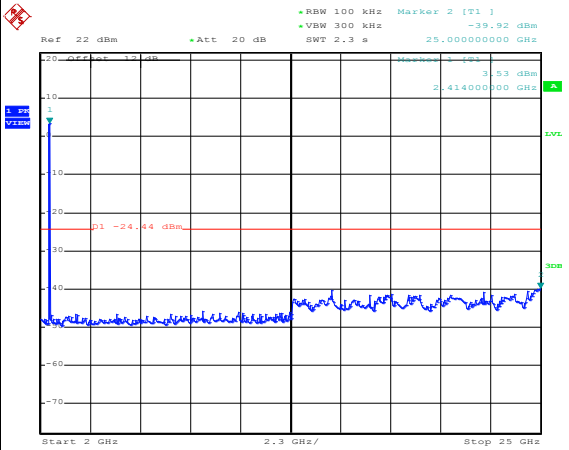
Date: 6.JUL.2019 10:04:29

Spurious Emission 30MHz~3GHz



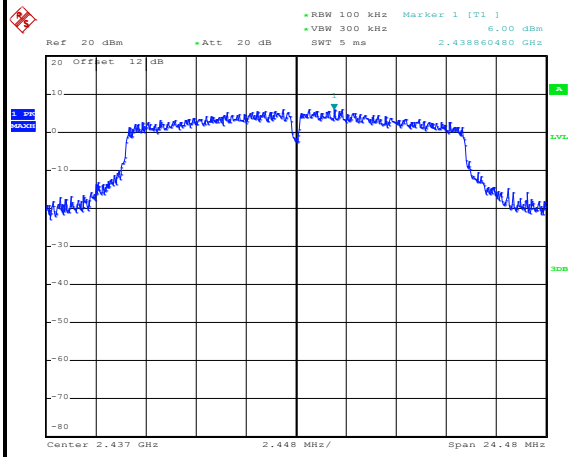
Date: 12.JUN.2019 22:25:54

Spurious Emission 2GHz~25GHz

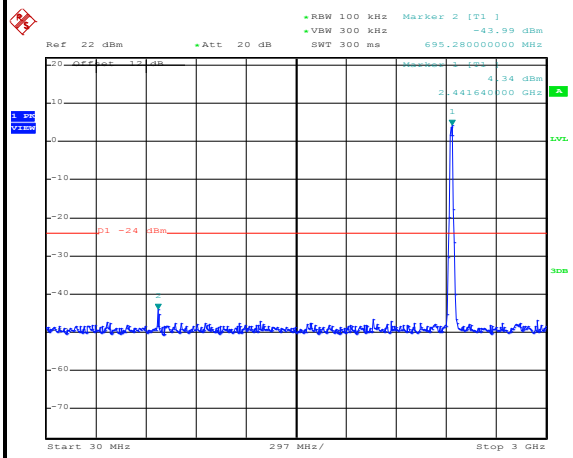
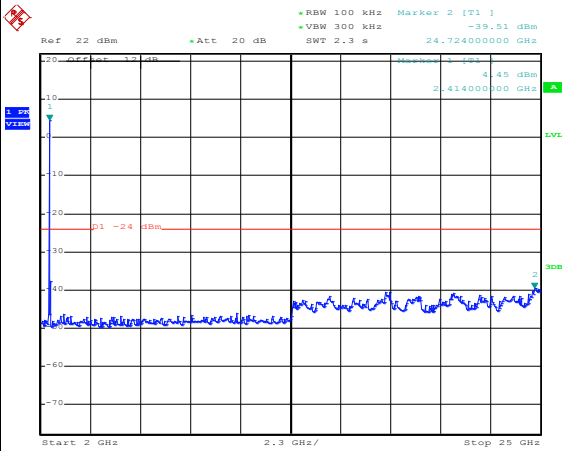


Date: 12.JUN.2019 22:26:19

Test Mode :	802.11g	Test Channel :	06

100kHz PSD reference Level	Mid Channel Plot
	

Date: 12.JUN.2019 22:38:05

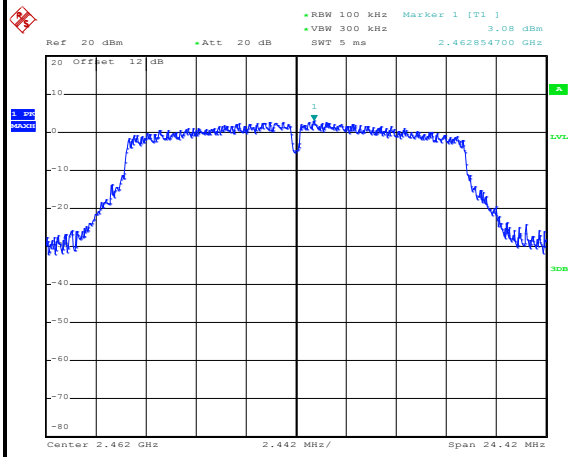
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 12.JUN.2019 22:38:27

Date: 12.JUN.2019 22:38:41

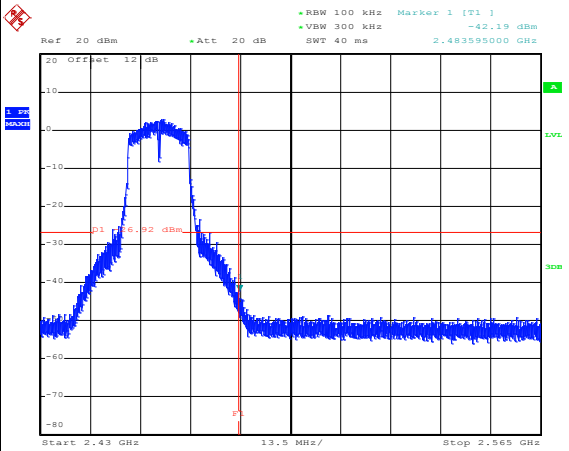
Test Mode :	802.11g	Test Channel :	11

100kHz PSD reference Level



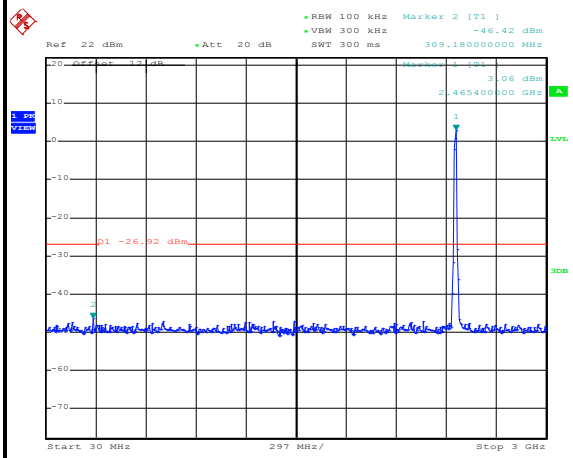
Date: 12.JUN.2019 22:48:54

High Channel Plot



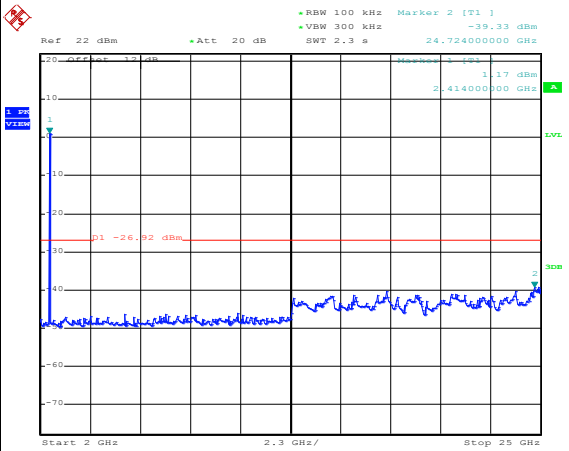
Date: 12.JUN.2019 22:49:30

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 22:50:31

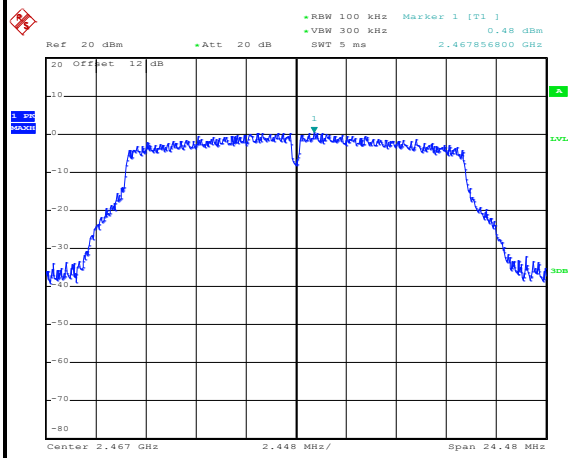
Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 22:50:45

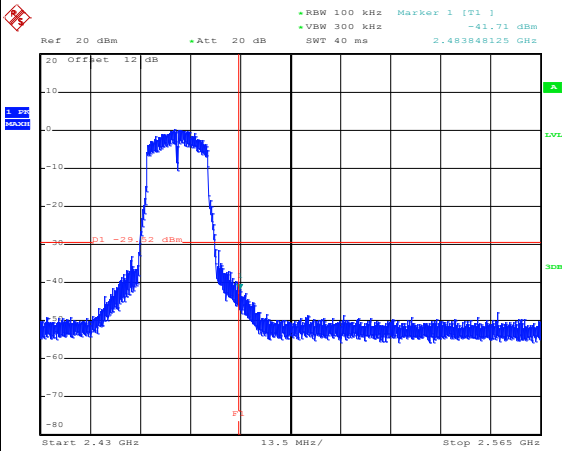
Test Mode :	802.11g	Test Channel :	12

100kHz PSD reference Level



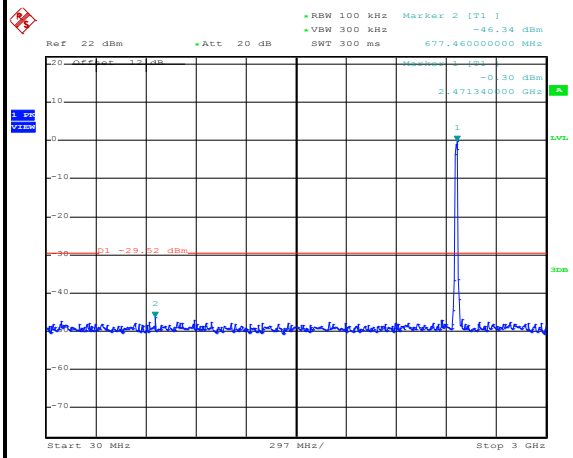
Date: 12.JUN.2019 22:54:31

High Channel Plot



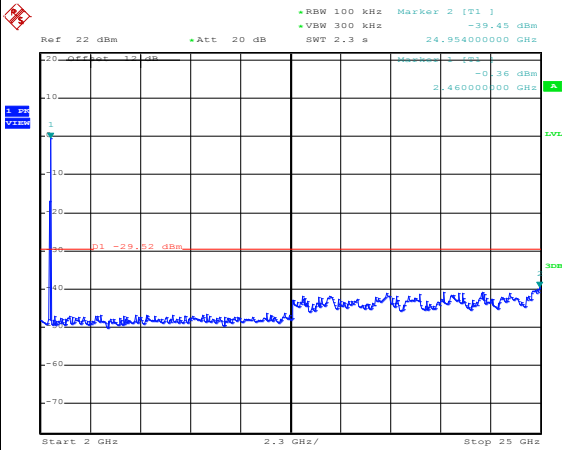
Date: 12.JUN.2019 22:54:53

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 22:55:17

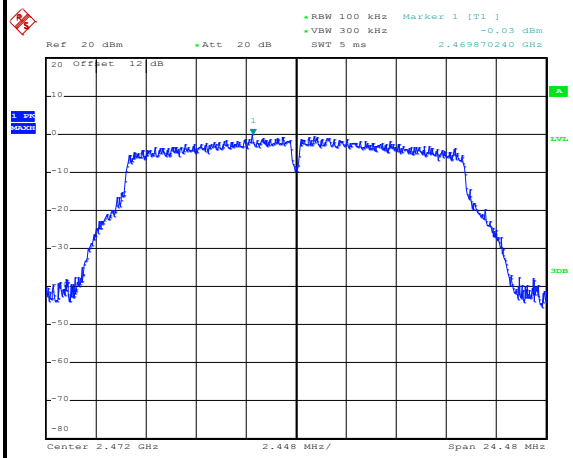
Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 22:55:31

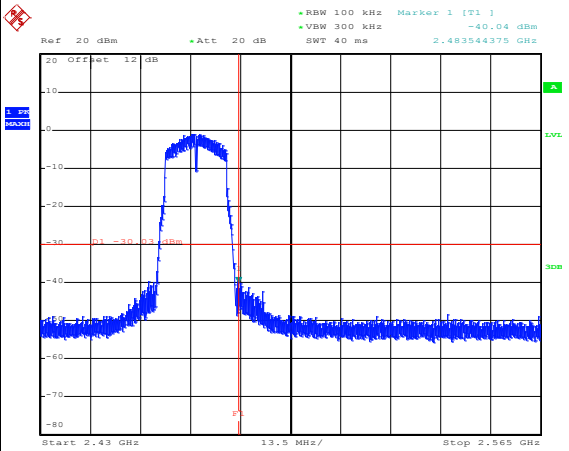
Test Mode :	802.11g	Test Channel :	13

100kHz PSD reference Level



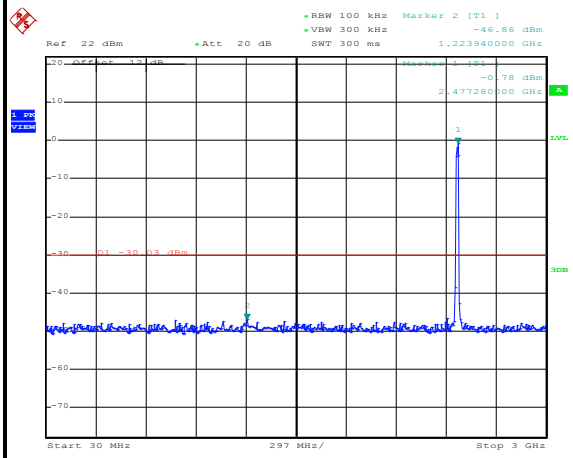
Date: 12.JUN.2019 22:58:23

High Channel Plot



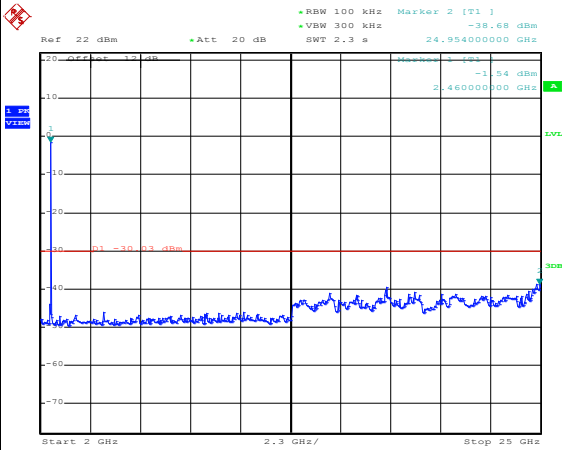
Date: 12.JUN.2019 22:58:45

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 22:59:23

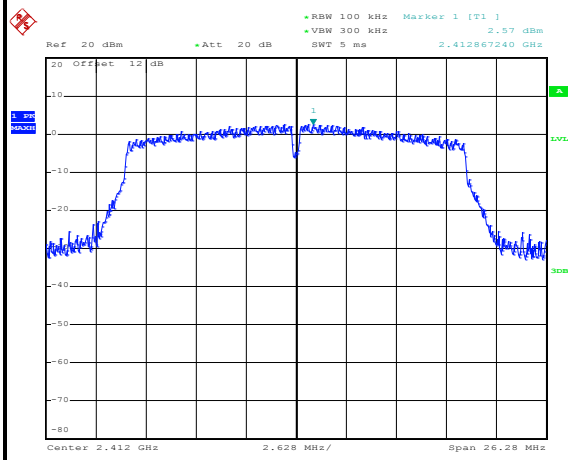
Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 22:59:38

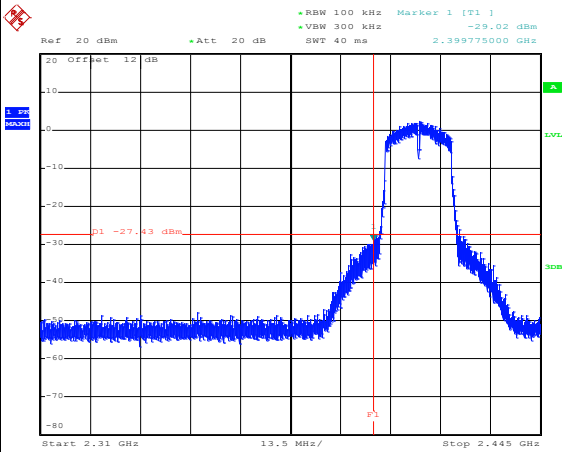
Test Mode :	802.11n HT20	Test Channel :	01

100kHz PSD reference Level



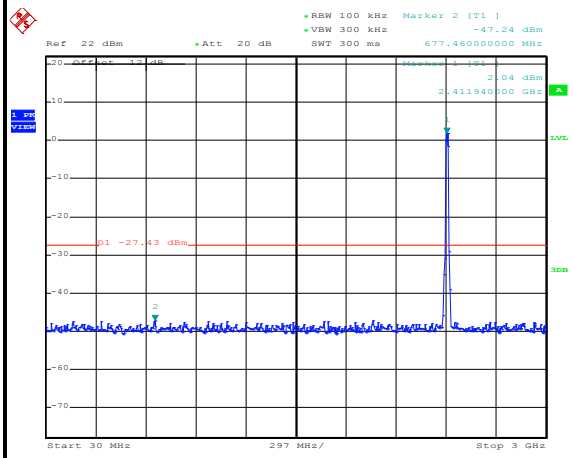
Date: 12.JUN.2019 23:03:17

Low Channel Plot



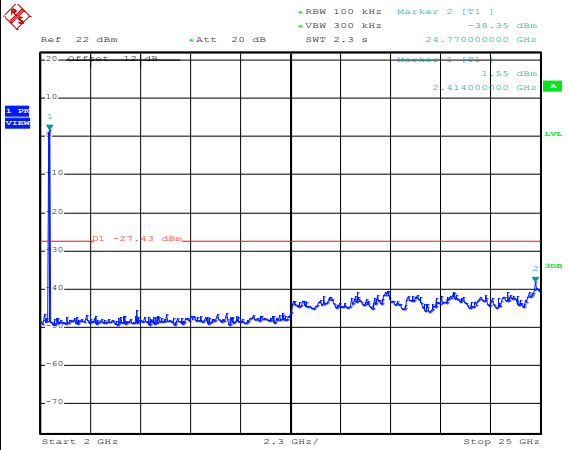
Date: 12.JUN.2019 23:03:37

Spurious Emission 30MHz~3GHz



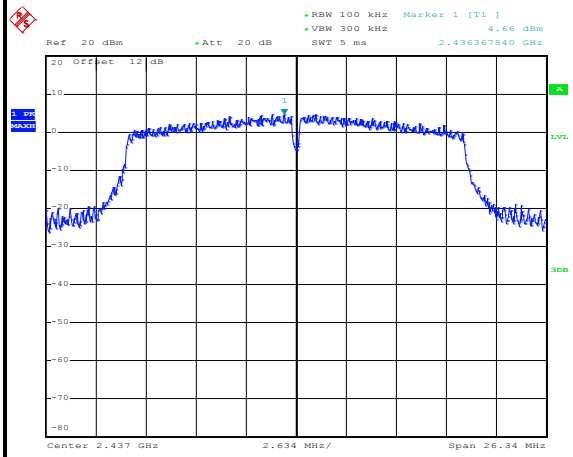
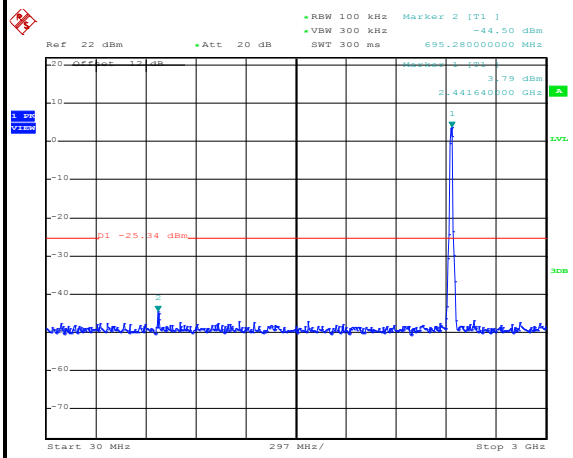
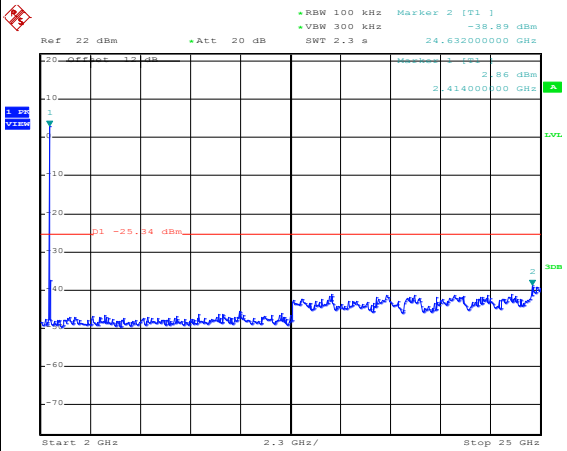
Date: 12.JUN.2019 23:04:21

Spurious Emission 2GHz~25GHz



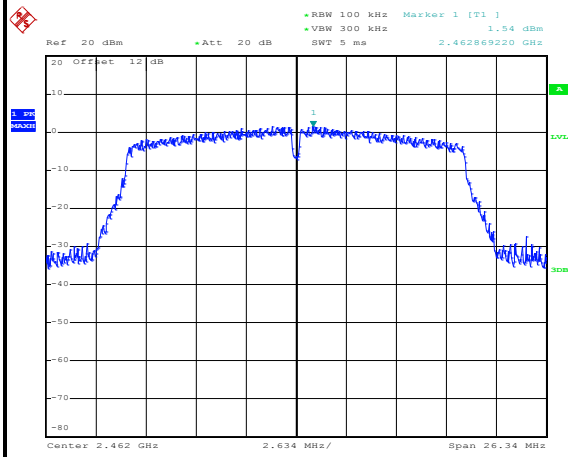
Date: 12.JUN.2019 23:04:35

Test Mode :	802.11n HT20	Test Channel :	06

100kHz PSD reference Level	Mid Channel Plot
	
Date: 12.JUN.2019 23:08:16	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 12.JUN.2019 23:08:38	Date: 12.JUN.2019 23:08:51

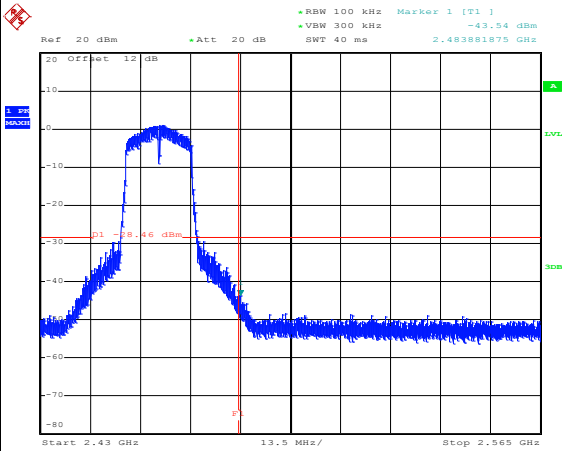
Test Mode :	802.11n HT20	Test Channel :	11

100kHz PSD reference Level



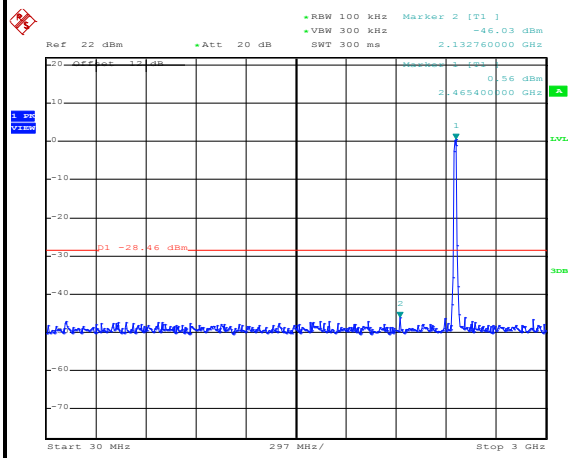
Date: 12.JUN.2019 23:11:47

High Channel Plot



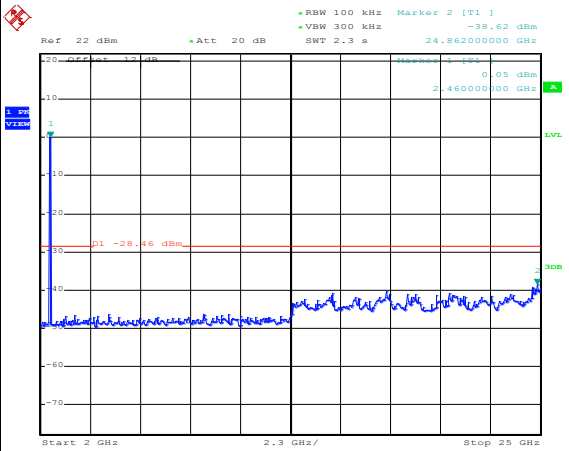
Date: 12.JUN.2019 23:12:08

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 23:12:38

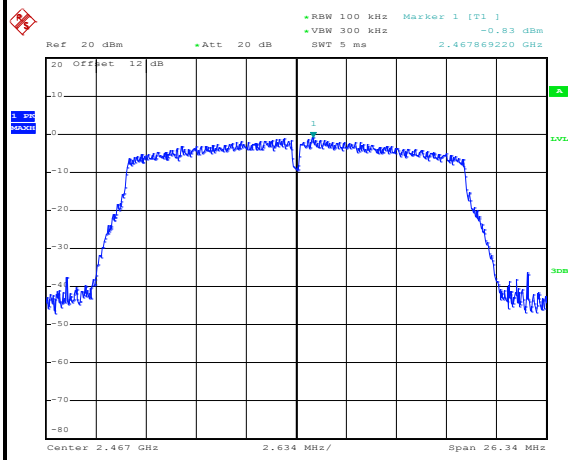
Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 23:12:51

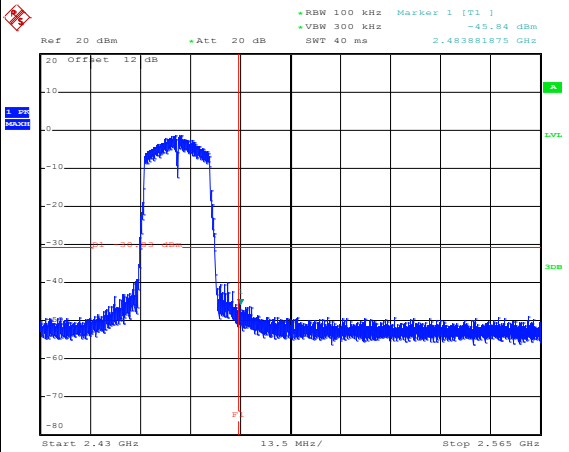
Test Mode :	802.11n HT20	Test Channel :	12

100kHz PSD reference Level



Date: 12.JUN.2019 23:15:57

High Channel Plot



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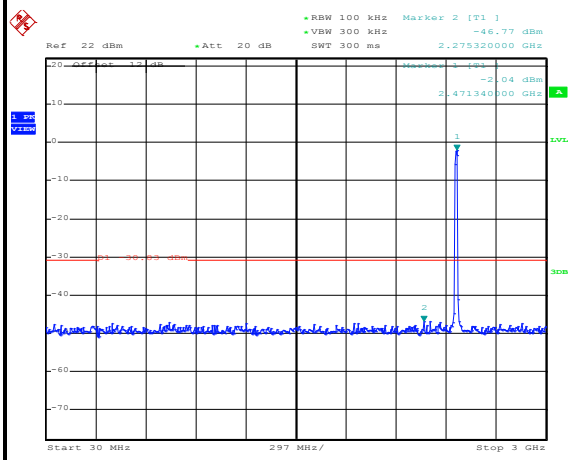
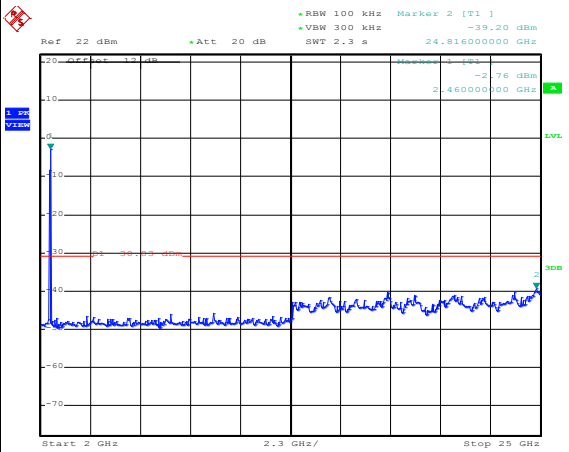
Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 23:17:12

Spurious Emission 2GHz~25GHz



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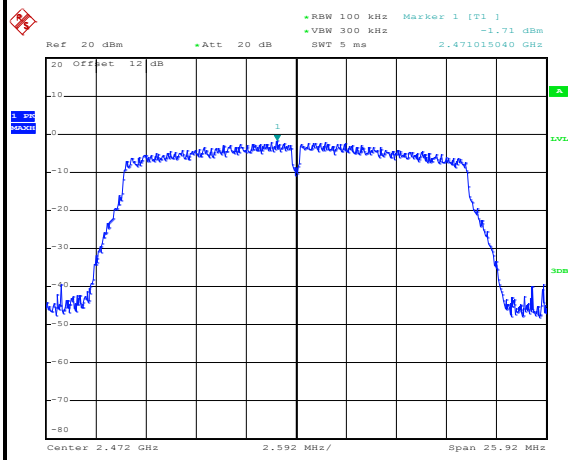
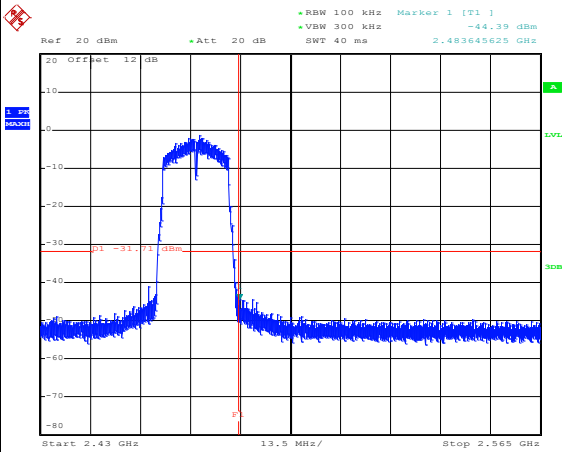
Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level



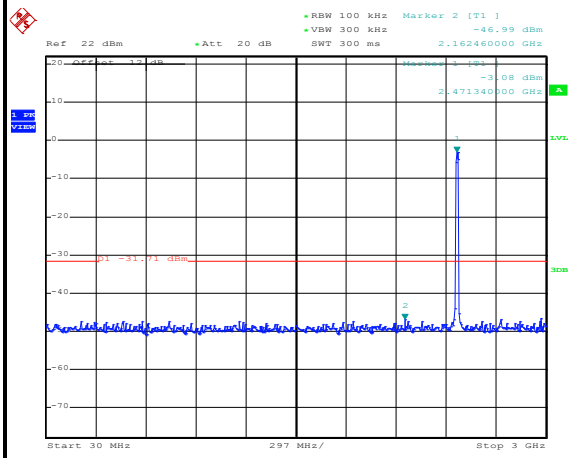
Date: 12.JUN.2019 23:21:06

High Channel Plot



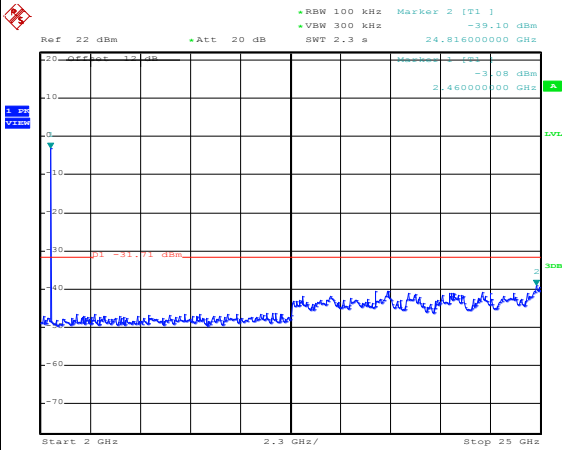
Date: 12.JUN.2019 23:21:30

Spurious Emission 30MHz~3GHz



Date: 12.JUN.2019 23:21:54

Spurious Emission 2GHz~25GHz



Date: 12.JUN.2019 23:22:07

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

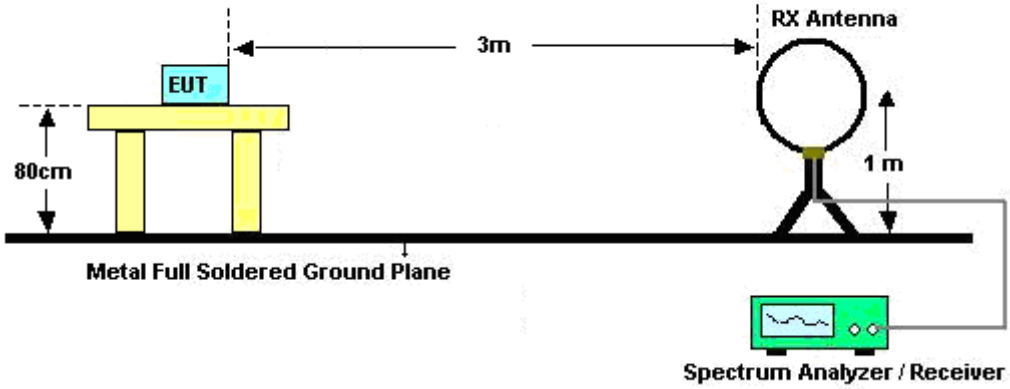
See list of measuring equipment of this test report.

3.5.3 Test Procedures

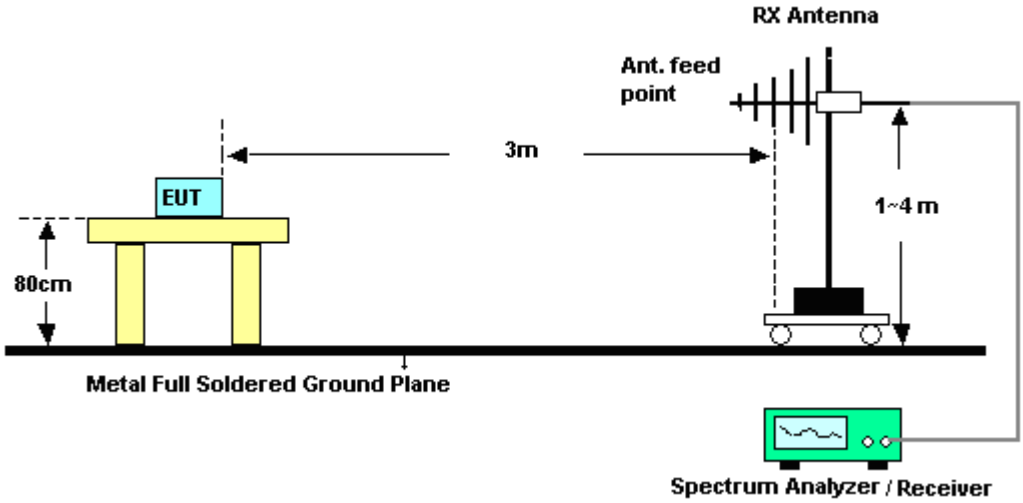
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz 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 1GHz, 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 1GHz, the emission level of the EUT in peak mode was 20dB 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= 3MHz 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

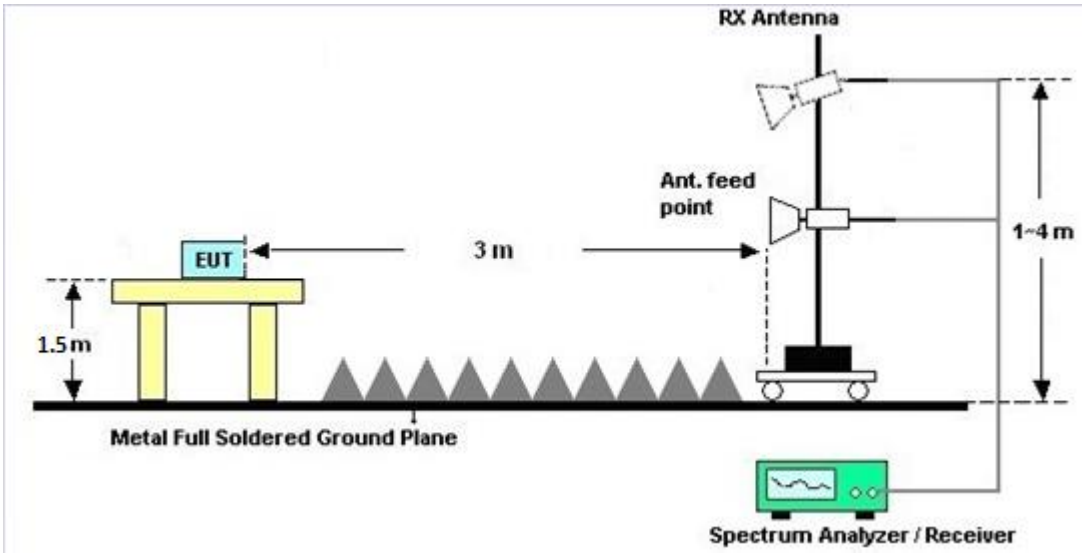
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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.

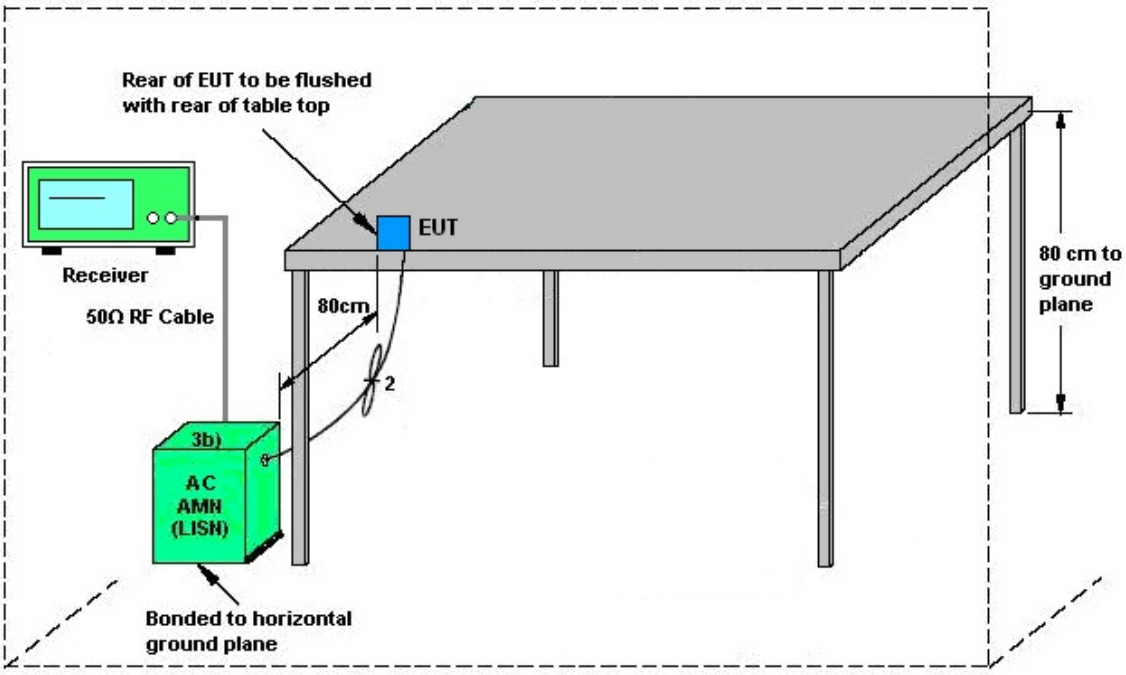
3.6.2 Measuring Instruments

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 should 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



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. 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	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Sensor	DARE	RPR3006W	16I00054SNO12	10MHz~6GHz	Dec. 27, 2018	Jun. 10, 2019~ Jul. 08, 2019	Dec. 26, 2019	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 13, 2018	Jun. 10, 2019~ Jul. 08, 2019	Nov. 12, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz~30GHz	Nov. 15, 2018	Jun. 10, 2019~ Jul. 08, 2019	Nov. 14, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1208382	N/A	Mar. 27, 2019	Jun. 10, 2019~ Jul. 08, 2019	Mar. 26, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 25, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 12, 2018	Jun. 25, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Jun. 25, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Jun. 25, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 25, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Jun. 25, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Jun. 25, 2019	Dec. 30, 2019	Conduction (CO05-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 07, 2019	May 31, 2019~ Jul. 05, 2019	Jan. 06, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	37059&01	30MHz~1GHz	Oct. 13, 2018	May 31, 2019~ Jul. 05, 2019	Oct. 12, 2019	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120D	9120D-132 8	1GHz ~ 18GHz	Nov. 09, 2018	May 31, 2019~ Jul. 05, 2019	Nov. 08, 2019	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz ~ 40GHz	Dec. 05, 2018	May 31, 2019~ Jul. 05, 2019	Dec. 04, 2019	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2019	May 31, 2019~ Jul. 05, 2019	Mar. 24, 2020	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A023 75	1GHz~26.5GHz	May 27, 2019	May 31, 2019~ Jul. 05, 2019	May 26, 2020	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 20, 2019	May 31, 2019~ Jul. 05, 2019	May 19, 2020	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	May 31, 2019~ Jul. 05, 2019	Dec. 05, 2019	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 26, 2018	May 31, 2019~ Jul. 05, 2019	Dec. 25, 2019	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 19, 2019	May 31, 2019~ Jul. 05, 2019	Mar. 18, 2020	Radiation (03CH12-HY)
Filter	Wainwright	WLK4-1000-1 530-6000-40S S	SN11	1 GHz Lowpass	Sep. 16, 2018	May 31, 2019~ Jul. 05, 2019	Sep. 15, 2019	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-270 0-3000-18000 -60SS	SN3	3 GHz Highpass	Sep. 16, 2018	May 31, 2019~ Jul. 05, 2019	Sep. 15, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 13, 2019	May 31, 2019~ Jul. 05, 2019	Mar. 12, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 16, 2018	May 31, 2019~ Jul. 05, 2019	Oct. 15, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 16, 2018	May 31, 2019~ Jul. 05, 2019	Oct. 15, 2019	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	May 31, 2019~ Jul. 05, 2019	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	May 31, 2019~ Jul. 05, 2019	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-00098 9	N/A	N/A	May 31, 2019~ Jul. 05, 2019	N/A	Radiation (03CH12-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.10

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.70

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Leo Li/CreedWu	Temperature:	21~25	°C
Test Date:	2019/6/10~2019/7/8	Relative Humidity:	51~54	%
TX Tool	Compliance Tool	TX Tool Version	1.0.0.57	

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2		
11b	1Mbps	1	1	2412	13.70	-	8.98	-	0.50	Pass
11b	1Mbps	1	6	2437	13.70	-	9.00	-	0.50	Pass
11b	1Mbps	1	11	2462	13.75	-	9.02	-	0.50	Pass
11b	1Mbps	1	12	2467	13.60	-	8.04	-	0.50	Pass
11b	1Mbps	1	13	2472	13.40	-	8.04	-	0.50	Pass
11g	6Mbps	1	1	2412	16.80	-	16.30	-	0.50	Pass
11g	6Mbps	1	6	2437	17.05	-	16.32	-	0.50	Pass
11g	6Mbps	1	11	2462	16.65	-	16.28	-	0.50	Pass
11g	6Mbps	1	12	2467	16.60	-	16.32	-	0.50	Pass
11g	6Mbps	1	13	2472	16.65	-	16.32	-	0.50	Pass
HT20	MCS0	1	1	2412	17.75	-	17.52	-	0.50	Pass
HT20	MCS0	1	6	2437	17.85	-	17.56	-	0.50	Pass
HT20	MCS0	1	11	2462	17.70	-	17.56	-	0.50	Pass
HT20	MCS0	1	12	2467	17.65	-	17.56	-	0.50	Pass
HT20	MCS0	1	13	2472	17.70	-	17.28	-	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band																
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
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	18.90	-	-	30.00	-	4.37	-	23.27	-	36.00	-	Pass
11b	1Mbps	1	6	2437	18.60	-		30.00	-	4.37	-	22.97	-	36.00	-	Pass
11b	1Mbps	1	11	2462	19.00	-		30.00	-	4.37	-	23.37	-	36.00	-	Pass
11b	1Mbps	1	12	2467	17.80	-		30.00	-	4.37	-	22.17	-	36.00	-	Pass
11b	1Mbps	1	13	2472	13.50	-		30.00	-	4.37	-	17.87	-	36.00	-	Pass
11g	6Mbps	1	1	2412	17.80	-		30.00	-	4.37	-	22.17	-	36.00	-	Pass
11g	6Mbps	1	6	2437	19.50	-		30.00	-	4.37	-	23.87	-	36.00	-	Pass
11g	6Mbps	1	11	2462	16.10	-		30.00	-	4.37	-	20.47	-	36.00	-	Pass
11g	6Mbps	1	12	2467	13.50	-		30.00	-	4.37	-	17.87	-	36.00	-	Pass
11g	6Mbps	1	13	2472	12.40	-		30.00	-	4.37	-	16.77	-	36.00	-	Pass
HT20	MCS0	1	1	2412	16.30	-		30.00	-	4.37	-	20.67	-	36.00	-	Pass
HT20	MCS0	1	6	2437	18.40	-		30.00	-	4.37	-	22.77	-	36.00	-	Pass
HT20	MCS0	1	11	2462	15.00	-		30.00	-	4.37	-	19.37	-	36.00	-	Pass
HT20	MCS0	1	12	2467	12.90	-		30.00	-	4.37	-	17.27	-	36.00	-	Pass
HT20	MCS0	1	13	2472	11.20	-		30.00	-	4.37	-	15.57	-	36.00	-	Pass

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

Report Number : FR930103-01C

TEST RESULTS DATA
Average Power Spectral Density

2.4GHz Band															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average PSD (dBm/3kHz)			DG (dBi)		Average PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	0.00	-	-3.56	-	-	4.37	-	8.00	-	Pass
11b	1Mbps	1	6	2437	0.00	-	-4.12	-		4.37	-	8.00	-	Pass
11b	1Mbps	1	11	2462	0.00	-	-3.70	-		4.37	-	8.00	-	Pass
11b	1Mbps	1	12	2467	0.00	-	-3.89	-		4.37	-	8.00	-	Pass
11b	1Mbps	1	13	2472	0.00	-	-9.34	-		4.37	-	8.00	-	Pass
11g	6Mbps	1	1	2412	0.00	-	-6.63	-		4.37	-	8.00	-	Pass
11g	6Mbps	1	6	2437	0.00	-	-5.88	-		4.37	-	8.00	-	Pass
11g	6Mbps	1	11	2462	0.00	-	-8.67	-		4.37	-	8.00	-	Pass
11g	6Mbps	1	12	2467	0.00	-	-10.92	-		4.37	-	8.00	-	Pass
11g	6Mbps	1	13	2472	0.00	-	-12.17	-		4.37	-	8.00	-	Pass
HT20	MCS0	1	1	2412	0.00	-	-8.62	-		4.37	-	8.00	-	Pass
HT20	MCS0	1	6	2437	0.00	-	-6.91	-		4.37	-	8.00	-	Pass
HT20	MCS0	1	11	2462	0.00	-	-10.56	-		4.37	-	8.00	-	Pass
HT20	MCS0	1	12	2467	0.00	-	-12.64	-		4.37	-	8.00	-	Pass
HT20	MCS0	1	13	2472	0.00	-	-13.55	-		4.37	-	8.00	-	Pass

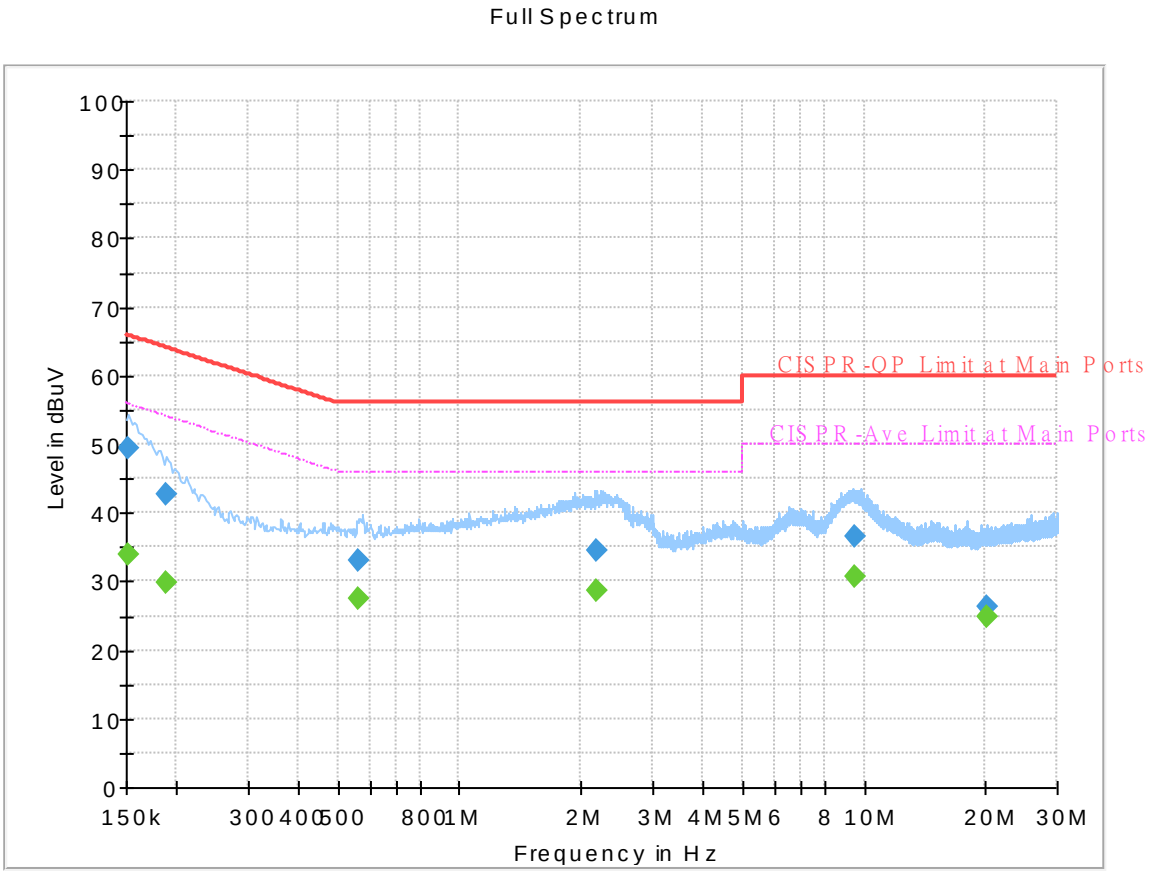
Measured power density (dBm) has offset with cable loss.

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	52~55%

EUT Information

Report NO :	930103-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

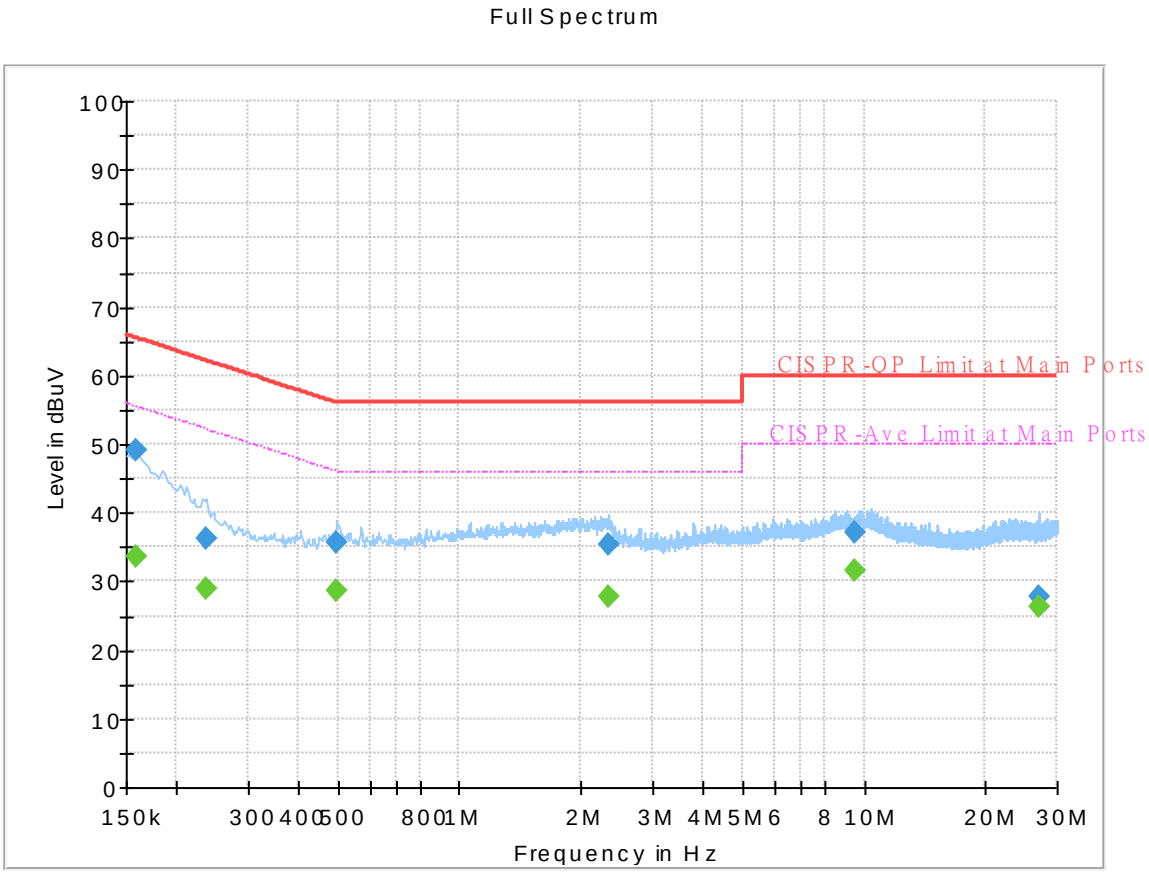


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	33.95	55.88	21.93	L1	OFF	19.4
0.152250	49.48	---	65.88	16.40	L1	OFF	19.4
0.188250	---	29.71	54.11	24.40	L1	OFF	19.4
0.188250	42.79	---	64.11	21.32	L1	OFF	19.4
0.564000	---	27.39	46.00	18.61	L1	OFF	19.4
0.564000	33.17	---	56.00	22.83	L1	OFF	19.4
2.186250	---	28.74	46.00	17.26	L1	OFF	19.4
2.186250	34.57	---	56.00	21.43	L1	OFF	19.4
9.516750	---	30.80	50.00	19.20	L1	OFF	19.8
9.516750	36.56	---	60.00	23.44	L1	OFF	19.8
20.026500	---	24.88	50.00	25.12	L1	OFF	20.2
20.026500	26.19	---	60.00	33.81	L1	OFF	20.2

EUT Information

Report NO :	930103-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	33.60	55.52	21.92	N	OFF	19.5
0.159000	49.17	---	65.52	16.35	N	OFF	19.5
0.237750	---	28.92	52.17	23.25	N	OFF	19.5
0.237750	36.15	---	62.17	26.02	N	OFF	19.5
0.496500	---	28.55	46.06	17.51	N	OFF	19.5
0.496500	35.59	---	56.06	20.47	N	OFF	19.5
2.339250	---	27.82	46.00	18.18	N	OFF	19.5
2.339250	35.26	---	56.00	20.74	N	OFF	19.5
9.453750	---	31.63	50.00	18.37	N	OFF	19.9
9.453750	37.14	---	60.00	22.86	N	OFF	19.9
26.952000	---	26.27	50.00	23.73	N	OFF	20.5
26.952000	27.70	---	60.00	32.30	N	OFF	20.5

Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Cheng , Lance Chiang ,Chuan Chu	Temperature :	21~24°C
		Relative Humidity :	56~68%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2312.52	55.37	-18.63	74	44.08	27.82	6.51	33.07	100	135	P	H
		2384.97	44.81	-9.19	54	33.81	27.53	6.59	33.15	100	135	A	H
	*	2412	110.1	-	-	99.15	27.48	6.62	33.18	100	135	P	H
	*	2412	107.15	-	-	96.2	27.48	6.62	33.18	100	135	A	H
		2376.255	55.66	-18.34	74	44.64	27.55	6.58	33.14	100	198	P	V
		2385.075	44.36	-9.64	54	33.36	27.53	6.59	33.15	100	198	A	V
	*	2412	107.8	-	-	96.85	27.48	6.62	33.18	100	198	P	V
	*	2412	104.72	-	-	93.77	27.48	6.62	33.18	100	198	A	V
802.11b CH 06 2437MHz		2362.64	55.61	-18.39	74	44.57	27.57	6.57	33.13	105	132	P	H
		2388.96	44.48	-9.52	54	33.49	27.52	6.6	33.16	105	132	A	H
	*	2437	110.76	-	-	99.87	27.43	6.64	33.21	105	132	P	H
	*	2437	107.66	-	-	96.77	27.43	6.64	33.21	105	132	A	H
		2489.08	54.98	-19.02	74	44.22	27.32	6.69	33.28	105	132	P	H
		2488.17	44.56	-9.44	54	33.81	27.32	6.68	33.28	105	132	A	H
		2367.26	54.98	-19.02	74	43.94	27.57	6.57	33.13	100	203	P	V
		2310	44.26	-9.74	54	32.95	27.84	6.5	33.06	100	203	A	V
	*	2437	107.54	-	-	96.65	27.43	6.64	33.21	100	203	P	V
	*	2437	104.57	-	-	93.68	27.43	6.64	33.21	100	203	A	V
		2491.6	55.04	-18.96	74	44.28	27.32	6.69	33.28	100	203	P	V
		2488.03	44.1	-9.9	54	33.35	27.32	6.68	33.28	100	203	A	V

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 11 2462MHz	*	2462	111.37	-	-	100.54	27.38	6.66	33.24	100	130	P	H
	*	2462	108.24	-	-	97.41	27.38	6.66	33.24	100	130	A	H
		2496.36	55.96	-18.04	74	45.22	27.31	6.69	33.29	100	130	P	H
		2483.52	45.09	-8.91	54	34.32	27.33	6.68	33.27	100	130	A	H
	*	2462	107.81	-	-	96.98	27.38	6.66	33.24	100	207	P	V
	*	2462	104.73	-	-	93.9	27.38	6.66	33.24	100	207	A	V
		2499.32	54.84	-19.16	74	44.11	27.3	6.69	33.29	100	207	P	V
		2483.52	44.43	-9.57	54	33.66	27.33	6.68	33.27	100	207	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	110.34	-	-	99.52	27.37	16.7	33.25	100	115	P	H
	*	2467	107.21	-	-	96.39	27.37	16.7	33.25	100	115	A	H
		2483.92	59.99	-14.01	74	49.22	27.33	16.71	33.27	100	115	P	H
		2484.04	53.3	-0.7	54	42.53	27.33	16.71	33.27	100	115	A	H
	*	2467	106.77	-	-	95.95	27.37	16.7	33.25	100	198	P	V
	*	2467	103.68	-	-	92.86	27.37	16.7	33.25	100	198	A	V
		2483.56	58.3	-15.7	74	47.53	27.33	16.71	33.27	100	198	P	V
		2484.08	50.55	-3.45	54	39.78	27.33	16.71	33.27	100	198	A	V
802.11b CH 13 2472MHz	*	2472	106.66	-	-	95.86	27.36	16.7	33.26	100	121	P	H
	*	2472	103.54	-	-	92.74	27.36	16.7	33.26	100	121	A	H
		2484.56	59.39	-14.61	74	48.62	27.33	16.71	33.27	100	121	P	H
		2487.32	52.81	-1.19	54	42.04	27.33	16.71	33.27	100	121	A	H
	*	2472	102.17	-	-	91.37	27.36	16.7	33.26	100	195	P	V
	*	2472	99.1	-	-	88.3	27.36	16.7	33.26	100	195	A	V
		2487.48	57.81	-16.19	74	47.04	27.33	16.71	33.27	100	195	P	V
		2487.32	49.5	-4.5	54	38.73	27.33	16.71	33.27	100	195	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	42.76	-31.24	74	58.75	31.1	9.93	57.55	100	0	P	H
		4824	44.3	-29.7	74	60.29	31.1	9.93	57.55	100	0	P	V
802.11b CH 06 2437MHz		4874	42.01	-31.99	74	57.92	31.1	9.92	57.45	100	0	P	H
		7311	44.66	-29.34	74	52.39	36.58	12.61	57.27	100	0	P	H
		4874	44.08	-29.92	74	59.99	31.1	9.92	57.45	100	0	P	V
		7311	44.92	-29.08	74	52.65	36.58	12.61	57.27	100	0	P	V
802.11b CH 11 2462MHz		4924	40.42	-33.58	74	56.15	31.2	9.92	57.35	100	0	P	H
		7386	42.99	-31.01	74	51.01	36.36	12.69	57.36	100	0	P	H
		4924	41.63	-32.37	74	57.36	31.2	9.92	57.35	100	0	P	V
		7386	44.53	-29.47	74	52.55	36.36	12.69	57.36	100	0	P	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	39.06	-34.94	74	54.73	31.24	10.42	57.33	100	0	P	H
		7401	43.45	-30.55	74	51.54	36.3	12.99	57.38	100	0	P	H
		4934	40.19	-33.81	74	55.86	31.24	10.42	57.33	100	0	P	V
		7401	43.46	-30.54	74	51.55	36.3	12.99	57.38	100	0	P	V
802.11b CH 13 2472MHz		4944	38.5	-35.5	74	54.12	31.28	10.41	57.31	100	0	P	H
		7416	43.72	-30.28	74	51.78	36.33	13.01	57.4	100	0	P	H
		4944	37.41	-36.59	74	53.03	31.28	10.41	57.31	100	0	P	V
		7416	43.41	-30.59	74	51.47	36.33	13.01	57.4	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (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		2390	69.69	-4.31	74	58.7	27.52	16.63	33.16	199	130	P	H
		2390	53.41	-0.59	54	42.42	27.52	16.63	33.16	199	130	A	H
	*	2412	112.2	-	-	101.25	27.48	16.65	33.18	199	130	P	H
	*	2412	105.36	-	-	94.41	27.48	16.65	33.18	199	130	A	H
		2389.8	66.95	-7.05	74	55.96	27.52	16.63	33.16	100	211	P	V
		2390	52.14	-1.86	54	41.15	27.52	16.63	33.16	100	211	A	V
	*	2412	109.85	-	-	98.9	27.48	16.65	33.18	100	211	P	V
	*	2412	102.41	-	-	91.46	27.48	16.65	33.18	100	211	A	V
802.11g CH 06 2437MHz		2350.04	55.55	-18.45	74	44.48	27.6	16.58	33.11	100	117	P	H
		2389.94	45.06	-8.94	54	34.07	27.52	16.63	33.16	100	117	A	H
	*	2437	114.07	-	-	103.18	27.43	16.67	33.21	100	117	P	H
	*	2437	106.76	-	-	95.87	27.43	16.67	33.21	100	117	A	H
		2484.04	59.48	-14.52	74	48.71	27.33	16.71	33.27	100	117	P	H
		2483.69	45.61	-8.39	54	34.84	27.33	16.71	33.27	100	117	A	H
		2386.02	55.48	-18.52	74	44.48	27.53	16.62	33.15	100	197	P	V
		2388.12	44.59	-9.41	54	33.6	27.52	16.63	33.16	100	197	A	V
	*	2437	111.27	-	-	100.38	27.43	16.67	33.21	100	197	P	V
	*	2437	103.67	-	-	92.78	27.43	16.67	33.21	100	197	A	V
		2485.79	55.28	-18.72	74	44.51	27.33	16.71	33.27	100	197	P	V
		2483.76	44.91	-9.09	54	34.14	27.33	16.71	33.27	100	197	A	V

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	*	2462	111.05	-	-	100.22	27.38	16.69	33.24	100	124	P	H
	*	2462	103.65	-	-	92.82	27.38	16.69	33.24	100	124	A	H
		2483.56	68.83	-5.17	74	58.06	27.33	16.71	33.27	100	124	P	H
		2483.52	52.62	-1.38	54	41.85	27.33	16.71	33.27	100	124	A	H
	*	2462	107.39	-	-	96.56	27.38	16.69	33.24	100	200	P	V
	*	2462	100.17	-	-	89.34	27.38	16.69	33.24	100	200	A	V
		2483.56	65.38	-8.62	74	54.61	27.33	16.71	33.27	100	200	P	V
		2483.52	49.98	-4.02	54	39.21	27.33	16.71	33.27	100	200	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	108.43	-	-	97.61	27.37	16.7	33.25	100	125	P	H
	*	2467	100.83	-	-	90.01	27.37	16.7	33.25	100	125	A	H
		2484.88	69.63	-4.37	74	58.86	27.33	16.71	33.27	100	125	P	H
		2483.52	53.32	-0.68	54	42.55	27.33	16.71	33.27	100	125	A	H
	*	2467	104.95	-	-	94.13	27.37	16.7	33.25	100	192	P	V
	*	2467	97.48	-	-	86.66	27.37	16.7	33.25	100	192	A	V
		2484.44	66.33	-7.67	74	55.56	27.33	16.71	33.27	100	192	P	V
		2483.52	50.95	-3.05	54	40.18	27.33	16.71	33.27	100	192	A	V
802.11g CH 13 2472MHz	*	2472	107.34	-	-	96.54	27.36	16.7	33.26	104	133	P	H
	*	2472	99.54	-	-	88.74	27.36	16.7	33.26	104	133	A	H
		2485.8	72.79	-1.21	74	62.02	27.33	16.71	33.27	104	133	P	H
		2483.52	51.44	-2.56	54	40.67	27.33	16.71	33.27	104	133	A	H
	*	2472	103.05	-	-	92.25	27.36	16.7	33.26	100	204	P	V
	*	2472	95.64	-	-	84.84	27.36	16.7	33.26	100	204	A	V
		2486.12	69.61	-4.39	74	58.84	27.33	16.71	33.27	100	204	P	V
		2483.52	48.77	-5.23	54	38	27.33	16.71	33.27	100	204	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	43.87	-30.13	74	59.86	31.1	10.46	57.55	100	0	P	H
		4824	44.88	-29.12	74	60.87	31.1	10.46	57.55	100	0	P	V
802.11g CH 06 2437MHz		4874	44.53	-29.47	74	60.44	31.1	10.44	57.45	100	0	P	H
		7311	44.54	-29.46	74	52.27	36.58	12.96	57.27	100	0	P	H
		4874	43.93	-30.07	74	59.84	31.1	10.44	57.45	100	0	P	V
		7311	45.83	-28.17	74	53.56	36.58	12.96	57.27	100	0	P	V
802.11g CH 11 2462MHz		4924	39.9	-34.1	74	55.63	31.2	10.42	57.35	100	0	P	H
		7386	44.19	-29.81	74	52.21	36.36	12.98	57.36	100	0	P	H
		4924	39.71	-34.29	74	55.44	31.2	10.42	57.35	100	0	P	V
		7386	43.13	-30.87	74	51.15	36.36	12.98	57.36	100	0	P	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	37.92	-36.08	74	53.59	31.24	10.42	57.33	100	0	P	H
		7401	43.8	-30.2	74	51.89	36.3	12.99	57.38	100	0	P	H
		4934	38.75	-35.25	74	54.42	31.24	10.42	57.33	100	0	P	V
		7401	43.47	-30.53	74	51.56	36.3	12.99	57.38	100	0	P	V
802.11g CH 13 2472MHz		4944	39.15	-34.85	74	54.77	31.28	10.41	57.31	100	0	P	H
		7416	43.73	-30.27	74	51.79	36.33	13.01	57.4	100	0	P	H
		4944	39.36	-34.64	74	54.98	31.28	10.41	57.31	100	0	P	V
		7416	43.27	-30.73	74	51.33	36.33	13.01	57.4	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n 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)
802.11n HT20 CH 01 2412MHz		2389.695	67.21	-6.79	74	56.22	27.52	16.63	33.16	202	132	P	H
		2390	52.08	-1.92	54	41.09	27.52	16.63	33.16	202	132	A	H
	*	2412	111.07	-	-	100.12	27.48	16.65	33.18	202	132	P	H
	*	2412	103.55	-	-	92.6	27.48	16.65	33.18	202	132	A	H
		2389.275	65.76	-8.24	74	54.77	27.52	16.63	33.16	100	199	P	V
		2390	50.54	-3.46	54	39.55	27.52	16.63	33.16	100	199	A	V
	*	2412	108.01	-	-	97.06	27.48	16.65	33.18	100	199	P	V
	*	2412	100.6	-	-	89.65	27.48	16.65	33.18	100	199	A	V
802.11n HT20 CH 06 2437MHz		2337.72	55.91	-18.09	74	44.77	27.67	16.57	33.1	105	132	P	H
		2389.94	45	-9	54	34.01	27.52	16.63	33.16	105	132	A	H
	*	2437	113.34	-	-	102.45	27.43	16.67	33.21	105	132	P	H
	*	2437	105.7	-	-	94.81	27.43	16.67	33.21	105	132	A	H
		2494.05	56.1	-17.9	74	45.35	27.31	16.72	33.28	105	132	P	H
		2483.9	45.45	-8.55	54	34.68	27.33	16.71	33.27	105	132	A	H
		2389.8	56.08	-17.92	74	45.09	27.52	16.63	33.16	100	200	P	V
		2388.82	44.63	-9.37	54	33.64	27.52	16.63	33.16	100	200	A	V
	*	2437	109.68	-	-	98.79	27.43	16.67	33.21	100	200	P	V
	*	2437	102.48	-	-	91.59	27.43	16.67	33.21	100	200	A	V
		2490.69	55.01	-18.99	74	44.25	27.32	16.72	33.28	100	200	P	V
		2486.07	44.78	-9.22	54	34.01	27.33	16.71	33.27	100	200	A	V

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 11 2462MHz	*	2462	109.67	-	-	98.84	27.38	16.69	33.24	100	124	P	H
	*	2462	102.41	-	-	91.58	27.38	16.69	33.24	100	124	A	H
		2484.04	68.13	-5.87	74	57.36	27.33	16.71	33.27	100	124	P	H
		2483.52	52.32	-1.68	54	41.55	27.33	16.71	33.27	100	124	A	H
	*	2462	106.54	-	-	95.71	27.38	16.69	33.24	100	203	P	V
	*	2462	98.93	-	-	88.1	27.38	16.69	33.24	100	203	A	V
		2483.6	63.6	-10.4	74	52.83	27.33	16.71	33.27	100	203	P	V
		2483.52	49.54	-4.46	54	38.77	27.33	16.71	33.27	100	203	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)
802.11n HT20 CH 12 2467MHz	*	2467	108.34	-	-	97.52	27.37	16.7	33.25	100	132	P	H
	*	2467	100.72	-	-	89.9	27.37	16.7	33.25	100	132	A	H
		2484.6	73.24	-0.76	74	62.47	27.33	16.71	33.27	100	132	P	H
		2483.52	51.11	-2.89	54	40.34	27.33	16.71	33.27	100	132	A	H
	*	2467	103.85	-	-	93.03	27.37	16.7	33.25	101	196	P	V
	*	2467	96.64	-	-	85.82	27.37	16.7	33.25	101	196	A	V
		2484.08	69.84	-4.16	74	59.07	27.33	16.71	33.27	101	196	P	V
		2483.52	48.23	-5.77	54	37.46	27.33	16.71	33.27	101	196	A	V
802.11n HT20 CH 13 2472MHz	*	2472	106.37	-	-	95.57	27.36	16.7	33.26	102	131	P	H
	*	2472	98.85	-	-	88.05	27.36	16.7	33.26	102	131	A	H
		2483.96	73.13	-0.87	74	62.36	27.33	16.71	33.27	102	131	P	H
		2483.52	50.17	-3.83	54	39.4	27.33	16.71	33.27	102	131	A	H
	*	2472	102.15	-	-	91.35	27.36	16.7	33.26	111	200	P	V
	*	2472	94.82	-	-	84.02	27.36	16.7	33.26	111	200	A	V
		2484.2	68.72	-5.28	74	57.95	27.33	16.71	33.27	111	200	P	V
		2483.52	47.46	-6.54	54	36.69	27.33	16.71	33.27	111	200	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		4824	41.58	-32.42	74	57.57	31.1	10.46	57.55	100	0	P	H
HT20 CH 01 2412MHz		4824	41.37	-32.63	74	57.36	31.1	10.46	57.55	100	0	P	V
802.11n		4874	42.37	-31.63	74	58.28	31.1	10.44	57.45	100	0	P	H
HT20		7311	45.38	-28.62	74	53.11	36.58	12.96	57.27	100	0	P	H
CH 06		4874	42.19	-31.81	74	58.1	31.1	10.44	57.45	100	0	P	V
2437MHz		7311	44.5	-29.5	74	52.23	36.58	12.96	57.27	100	0	P	V
802.11n		4924	39.45	-34.55	74	55.18	31.2	10.42	57.35	100	0	P	H
HT20		7386	43.22	-30.78	74	51.24	36.36	12.98	57.36	100	0	P	H
CH 11		4924	39.06	-34.94	74	54.79	31.2	10.42	57.35	100	0	P	V
2462MHz		7386	43.48	-30.52	74	51.5	36.36	12.98	57.36	100	0	P	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)
802.11n		4934	39.68	-34.32	74	55.35	31.24	10.42	57.33	100	0	P	H
HT20		7401	43.87	-30.13	74	51.96	36.3	12.99	57.38	100	0	P	H
CH 12		4934	39.12	-34.88	74	54.79	31.24	10.42	57.33	100	0	P	V
2467MHz		7401	43.72	-30.28	74	51.81	36.3	12.99	57.38	100	0	P	V
802.11n		4944	38.88	-35.12	74	54.5	31.28	10.41	57.31	100	0	P	H
HT20		7416	43.29	-30.71	74	51.35	36.33	13.01	57.4	100	0	P	H
CH 13		4944	38.73	-35.27	74	54.35	31.28	10.41	57.31	100	0	P	V
2472MHz		7416	43.72	-30.28	74	51.78	36.33	13.01	57.4	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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		30	23.09	-16.91	40	28.32	24.17	0.78	30.18	-	-	P	H
		125.04	23.95	-19.55	43.5	35.43	17.49	1.43	30.4	-	-	P	H
		162.84	24.28	-19.22	43.5	36.53	16.36	1.75	30.36	-	-	P	H
		729.1	34.21	-11.79	46	32.31	27.46	3.89	29.45	-	-	P	H
		885.9	34.11	-11.89	46	29.75	29.07	4.45	29.16	-	-	P	H
		944.7	35.02	-10.98	46	28.93	30.35	4.75	29.01	100	0	P	H
		40.26	26.56	-13.44	40	37.05	19.07	0.78	30.34	-	-	P	V
		59.43	24.69	-15.31	40	42.55	11.82	0.78	30.46	-	-	P	V
		100.74	25.9	-17.6	43.5	38.96	15.94	1.43	30.43	-	-	P	V
		715.8	34.15	-11.85	46	32.75	26.99	3.89	29.48	-	-	P	V
		832.7	33.04	-12.96	46	29.35	28.65	4.28	29.24	-	-	P	V
		904.1	37.56	-8.44	46	33.02	29.07	4.6	29.13	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against 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

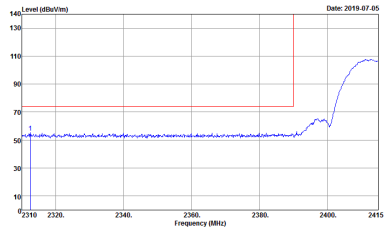
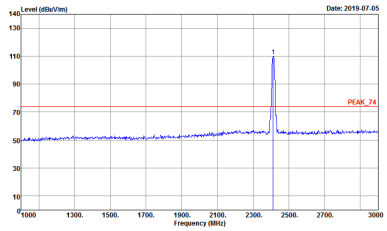
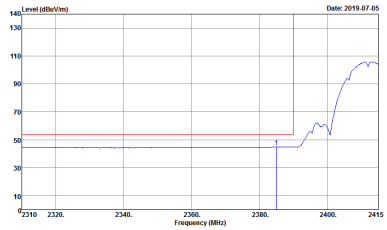
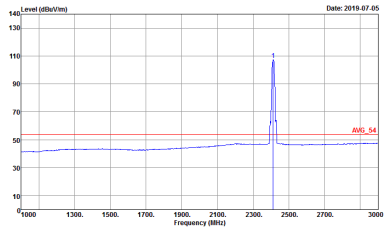
Test Engineer :	Jack Cheng , Lance Chiang ,Chuan Chu	**Temperature :**	21~24°C
		Relative Humidity :	56~68%

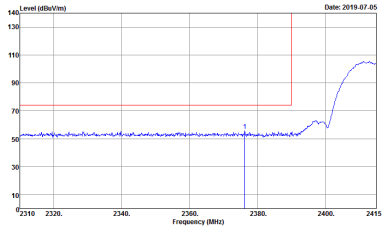
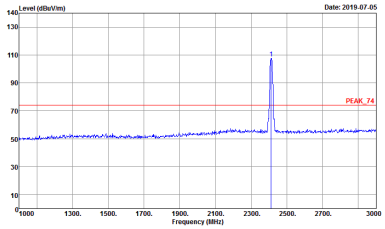
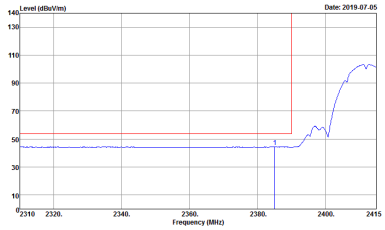
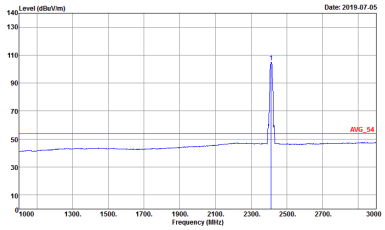
Note symbol

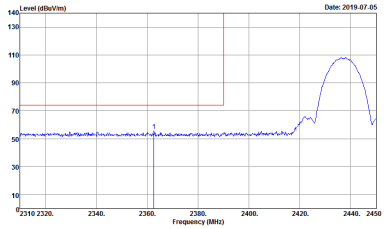
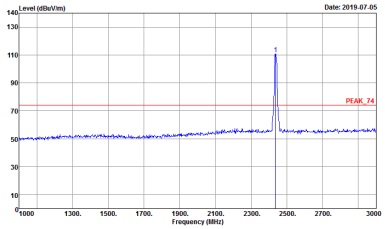
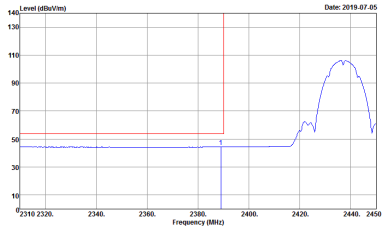
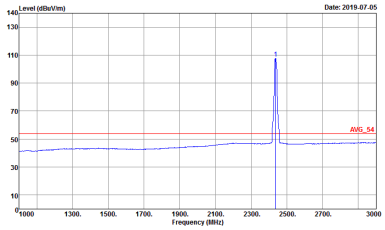
-L	**Low channel location**
-R	**High channel location**

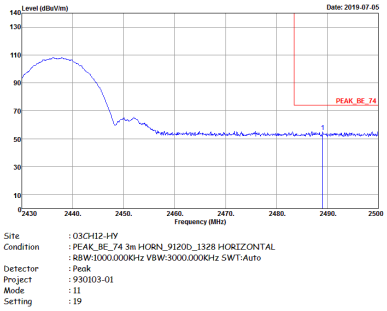
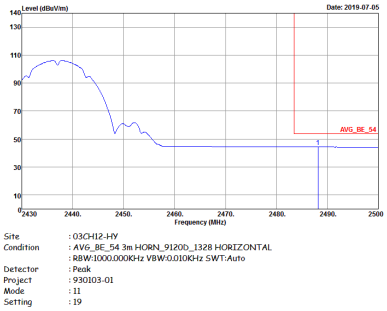
2.4GHz 2400~2483.5MHz

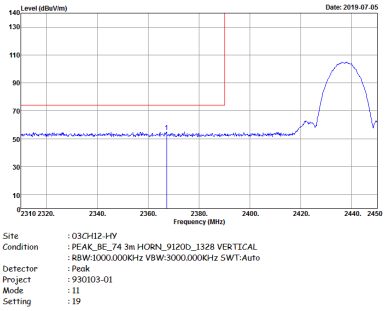
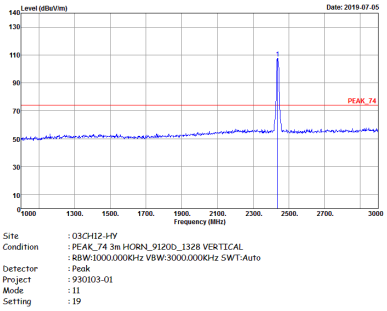
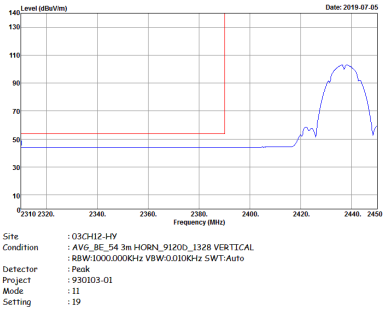
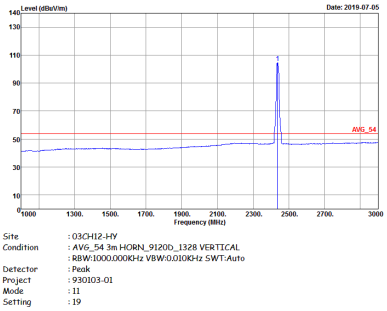
WIFI 802.11b (Band Edge @ 3m)

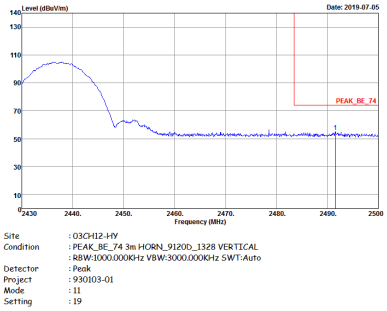
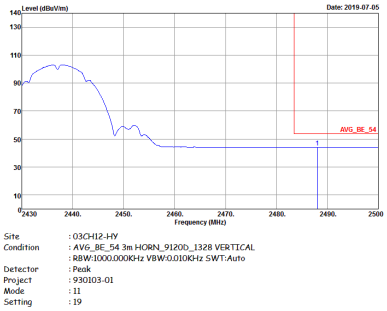
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19

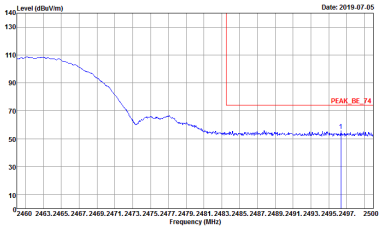
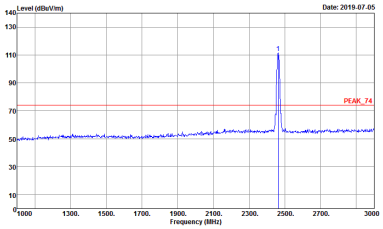
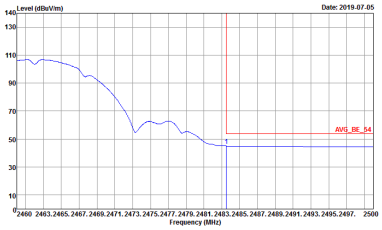
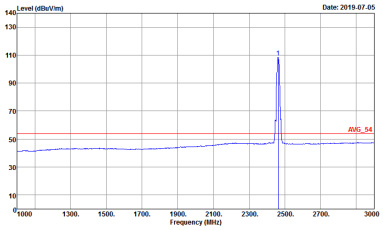
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 10 Setting : 19

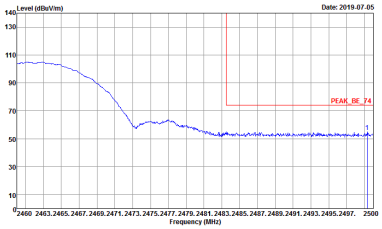
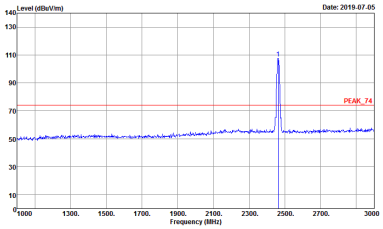
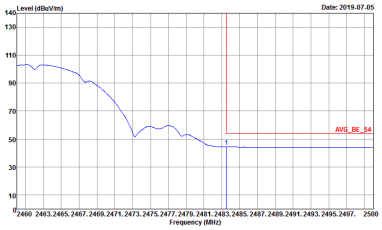
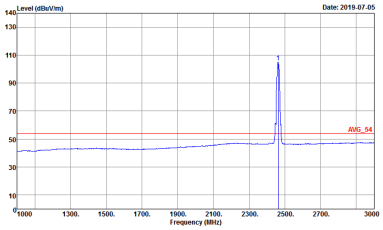
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 11 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 11 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 11 Setting : 19	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 11 Setting : 19

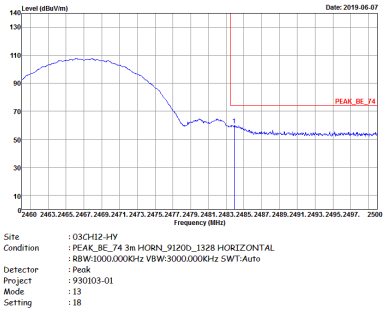
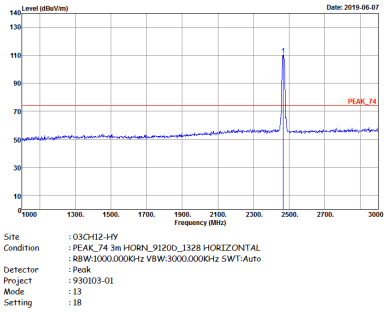
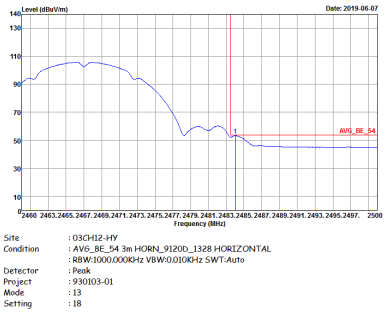
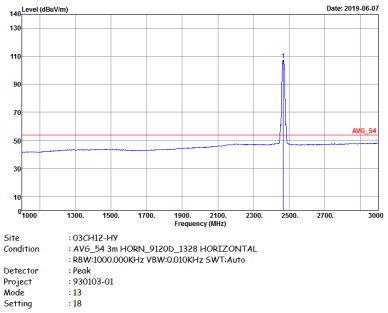
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

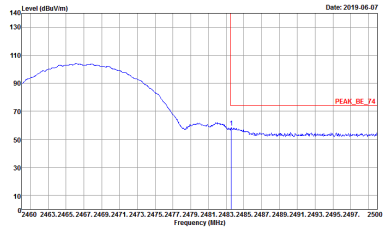
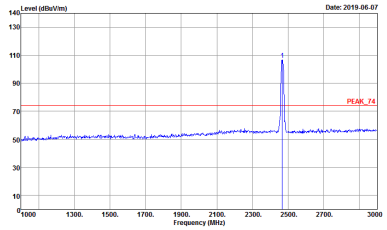
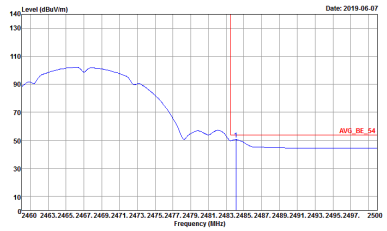
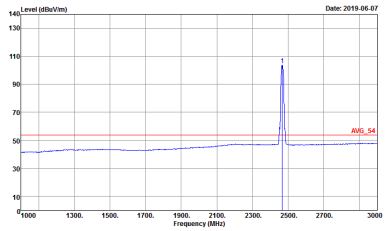
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

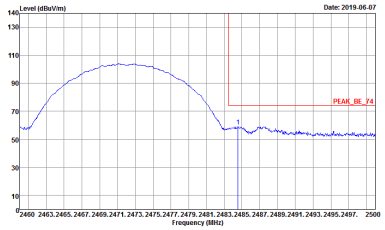
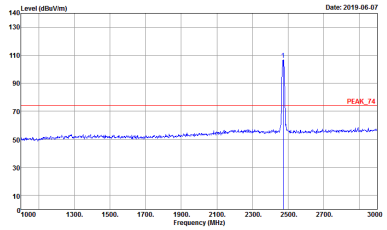
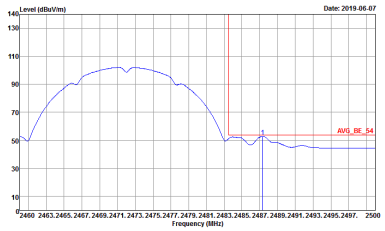
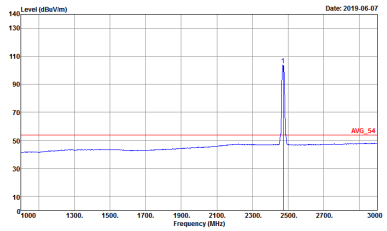
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

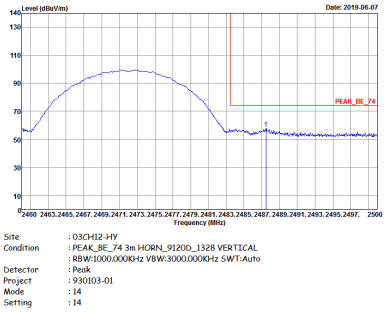
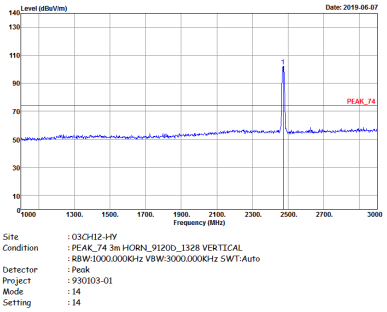
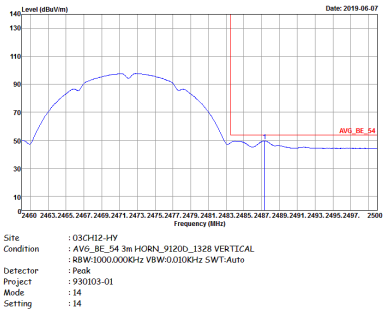
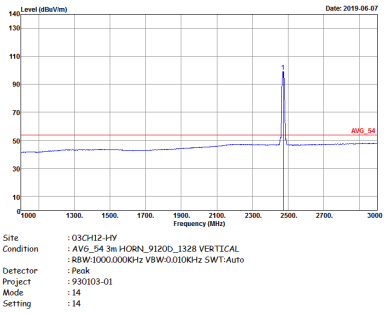
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 12 Setting : 19

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

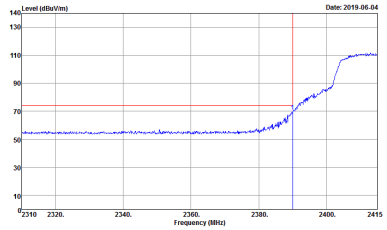
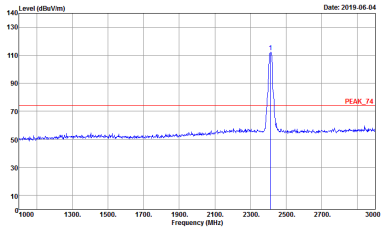
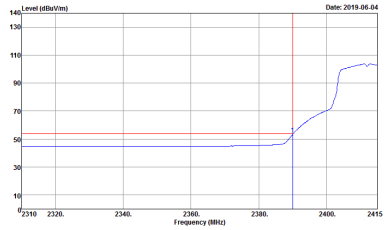
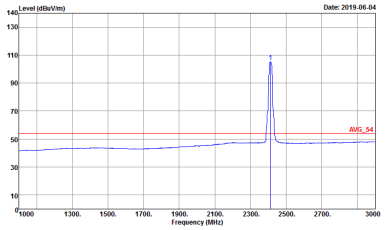
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 13 Setting : 18	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 13 Setting : 18
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 13 Setting : 18	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 13 Setting : 18

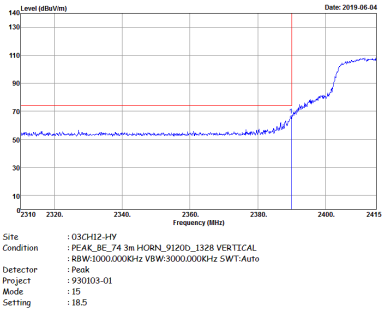
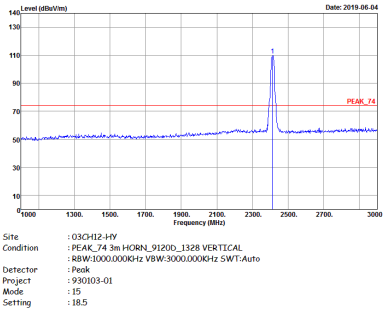
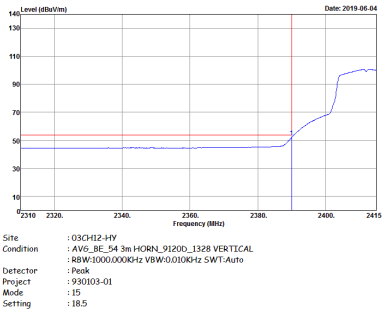
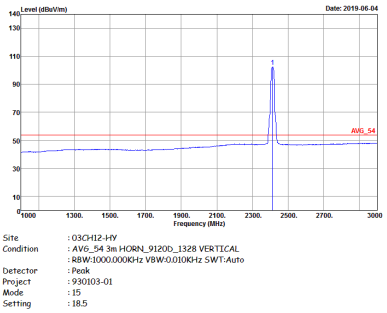
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 14 Setting : 14	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 14 Setting : 14
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 14 Setting : 14	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 14 Setting : 14

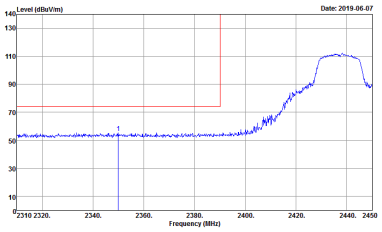
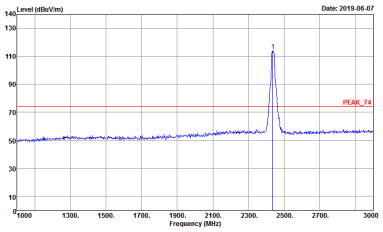
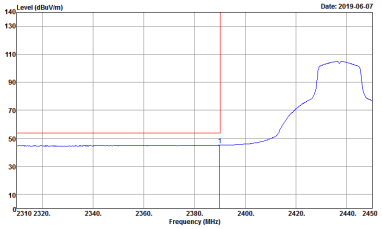
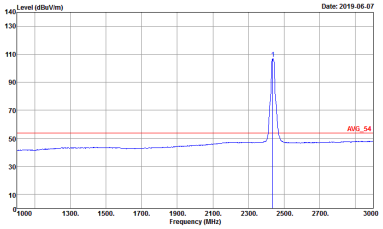
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Vertical	Fundamental
Peak		
Avg.		

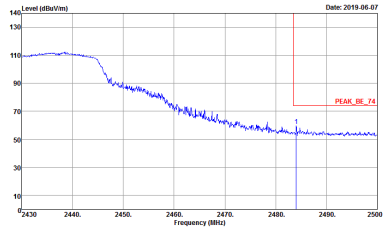
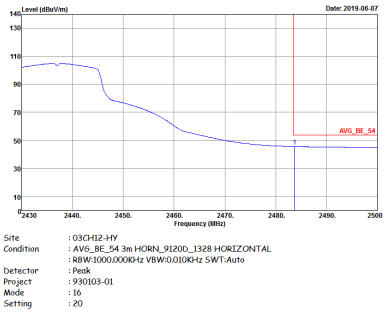
2.4GHz 2400~2483.5MHz

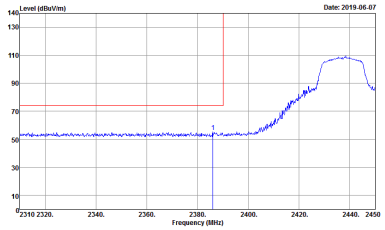
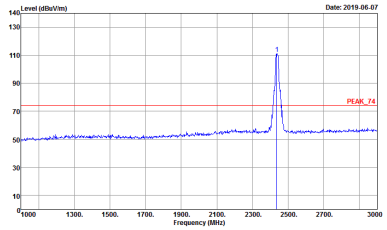
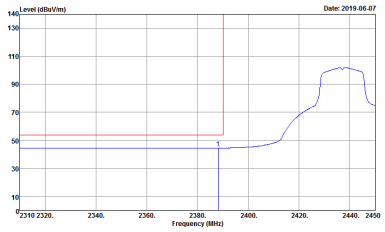
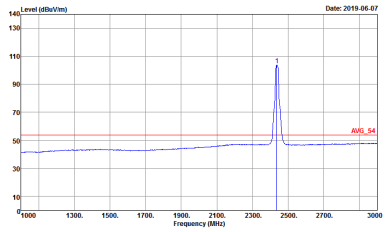
WIFI 802.11g (Band Edge @ 3m)

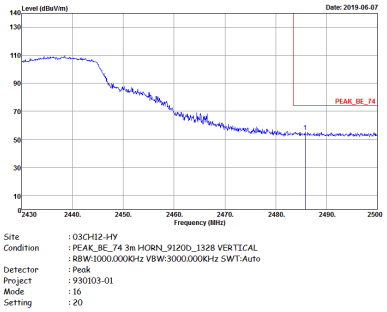
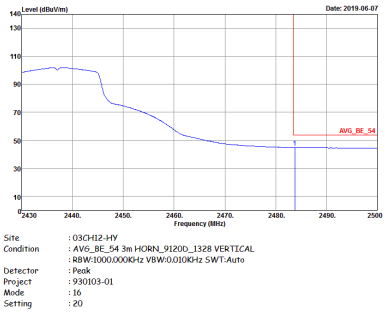
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5

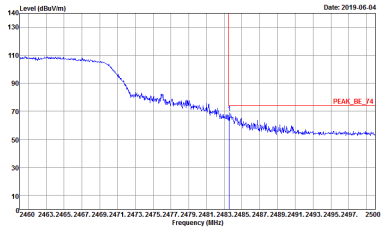
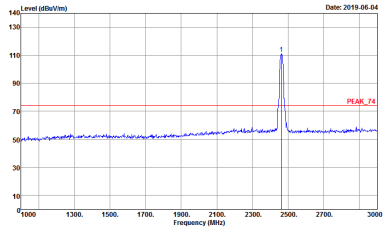
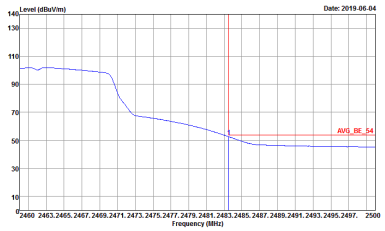
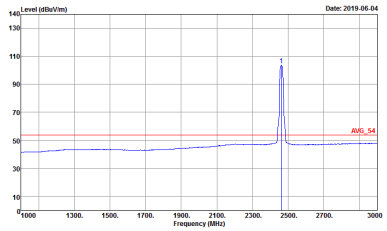
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

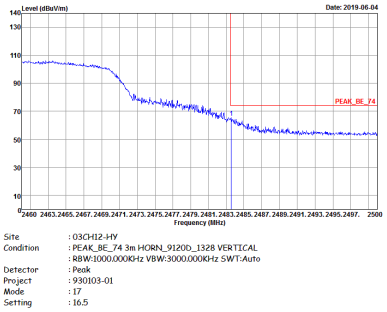
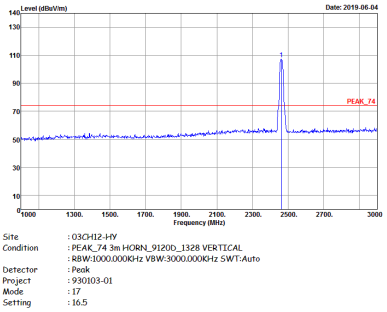
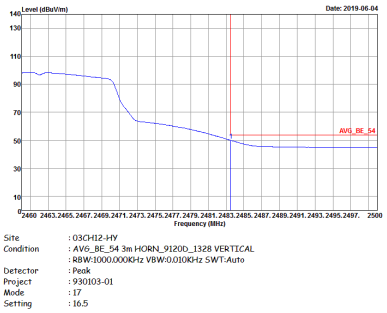
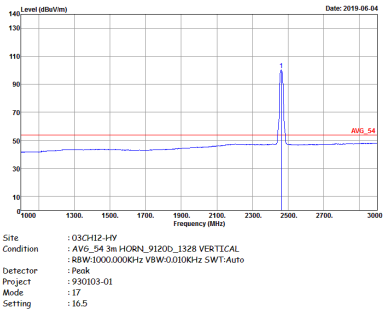
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_8E_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20
Avg.	 Site : 03CH12-HY Condition : AV6_8E_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20

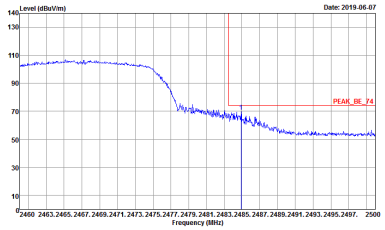
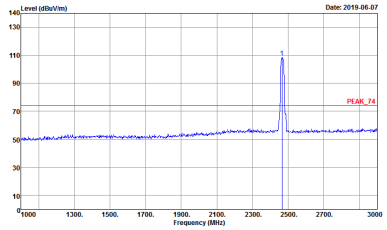
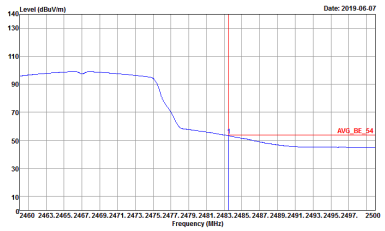
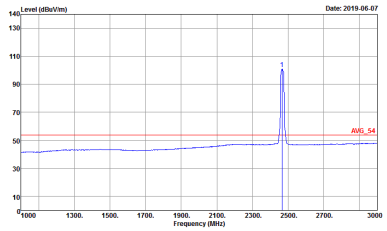
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

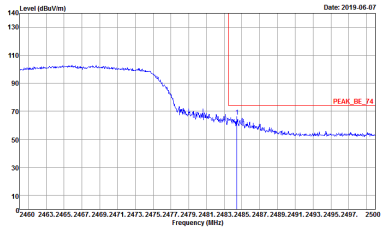
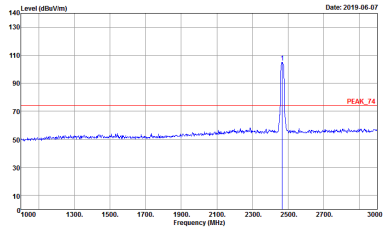
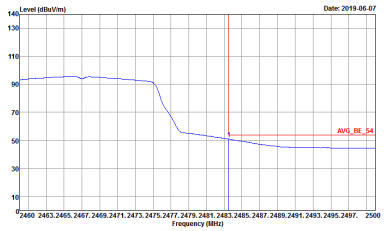
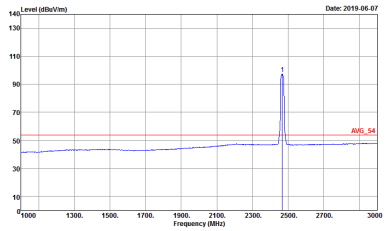
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 16 Setting : 20

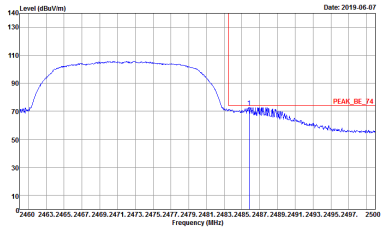
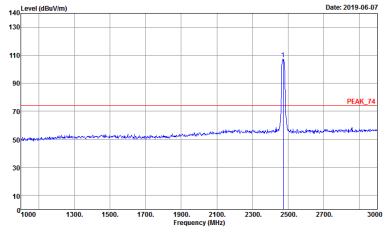
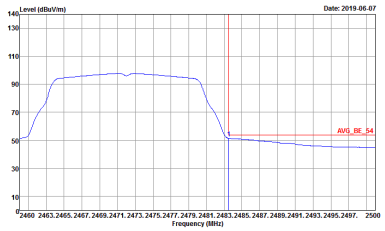
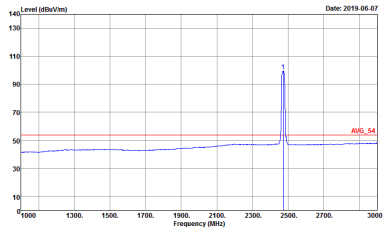
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

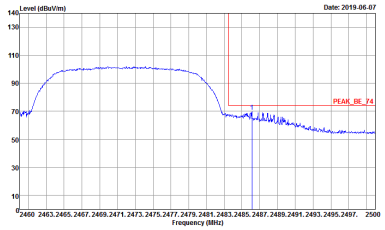
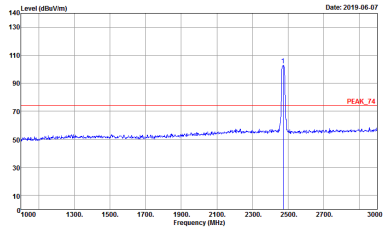
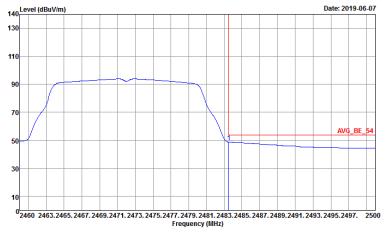
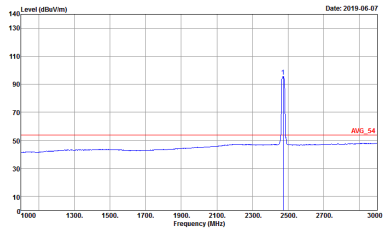
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 17 Setting : 16.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 17 Setting : 16.5
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 17 Setting : 16.5	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 17 Setting : 16.5

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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14

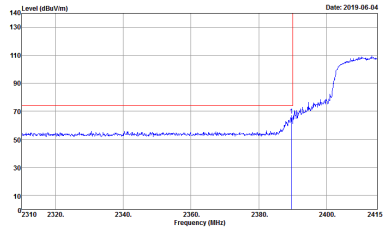
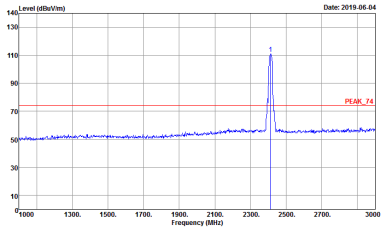
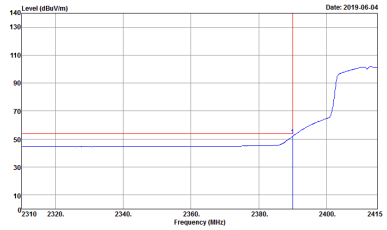
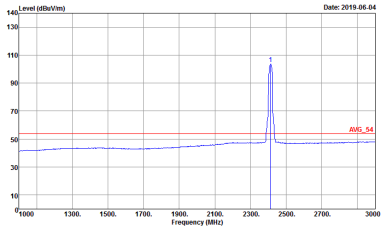
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 18 Setting : 14

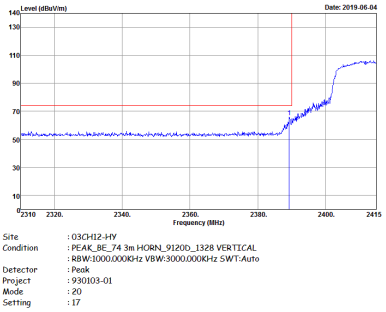
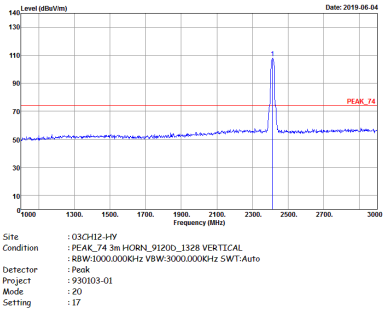
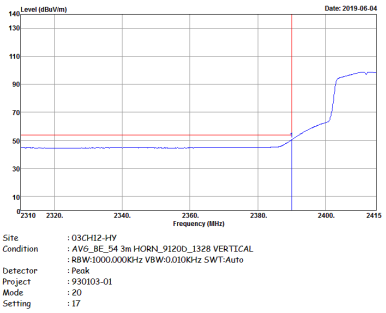
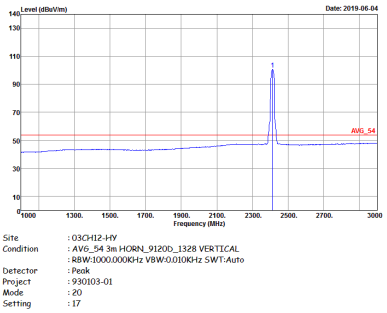
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5

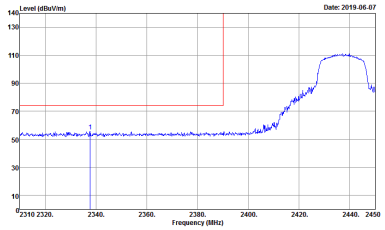
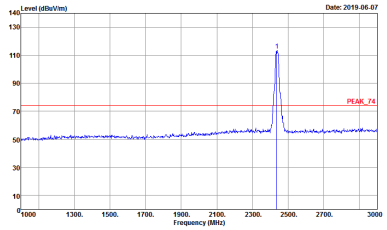
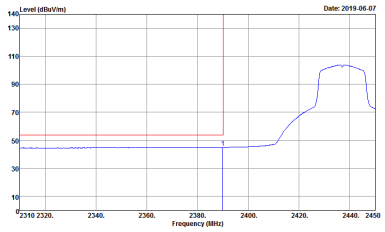
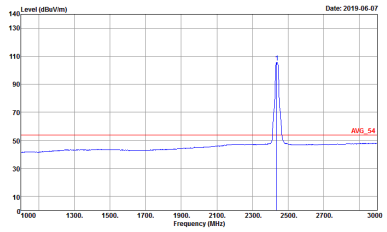
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 19 Setting : 12.5

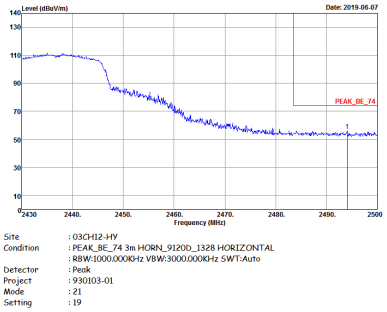
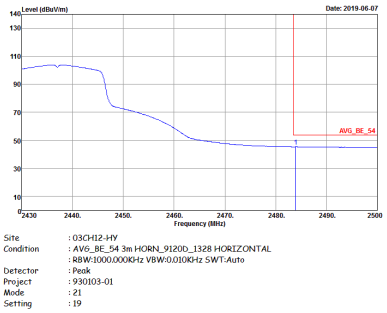
2.4GHz 2400~2483.5MHz

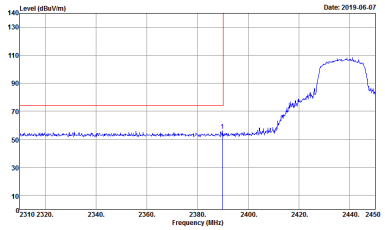
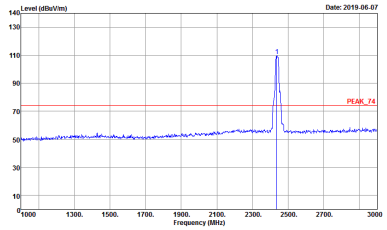
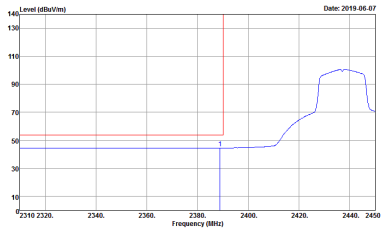
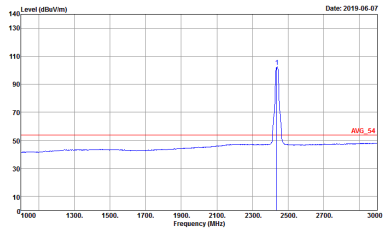
WIFI 802.11n HT20 (Band Edge @ 3m)

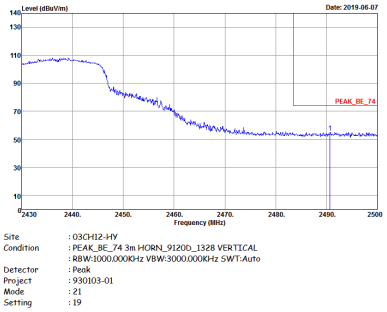
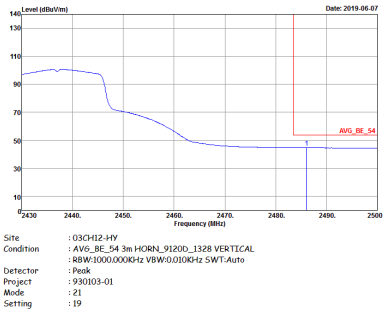
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 20 Setting : 17	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 20 Setting : 17
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 20 Setting : 17	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 20 Setting : 17

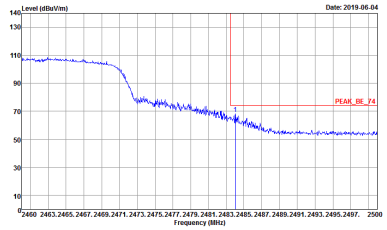
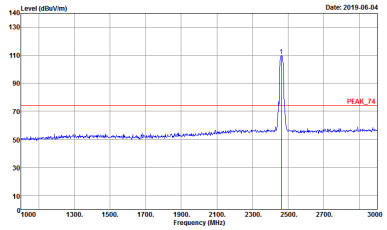
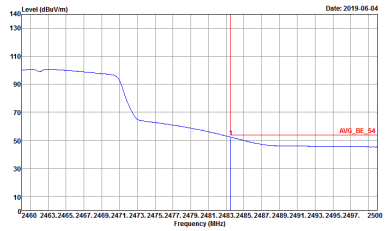
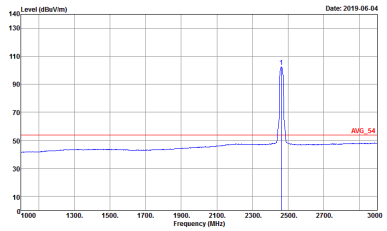
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

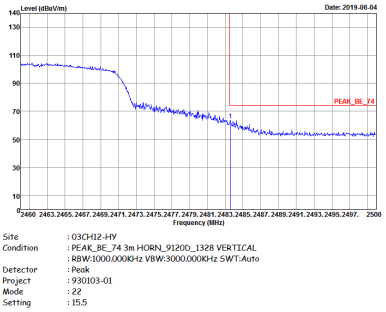
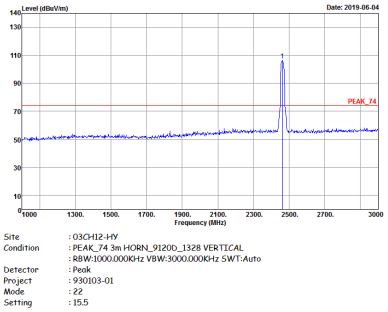
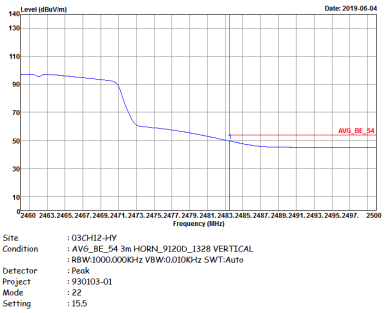
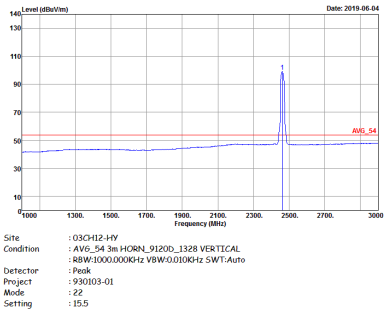
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19

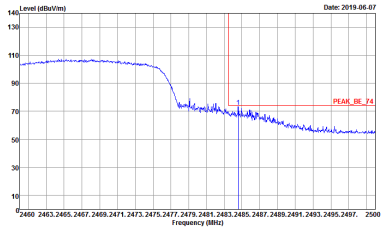
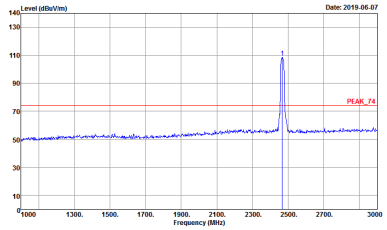
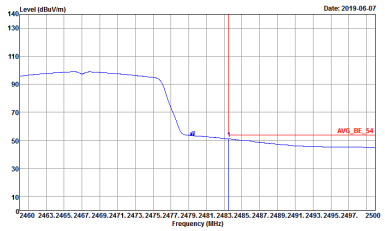
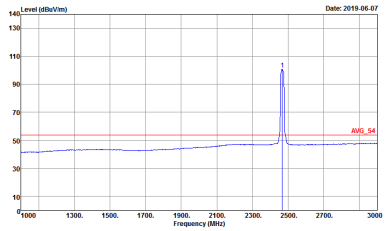
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

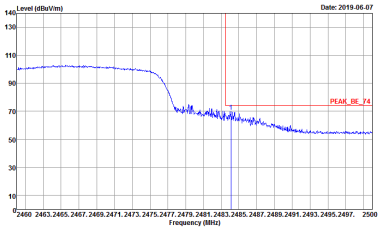
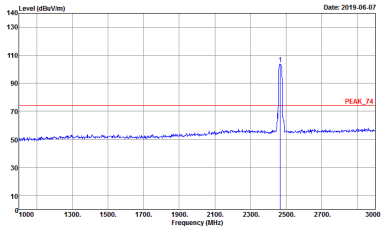
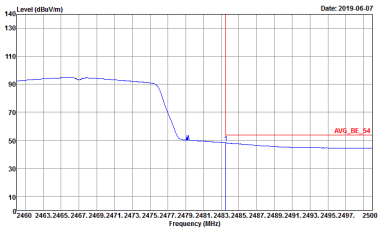
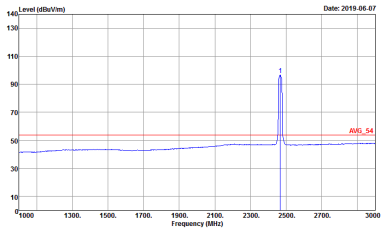
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 21 Setting : 19

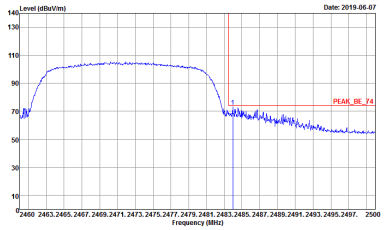
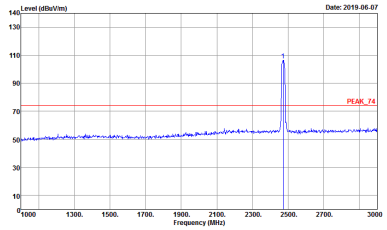
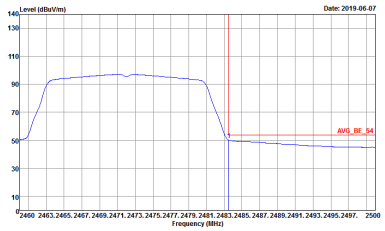
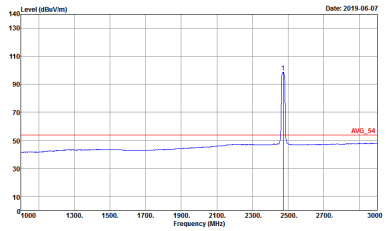
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

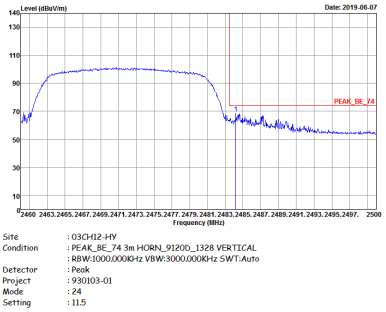
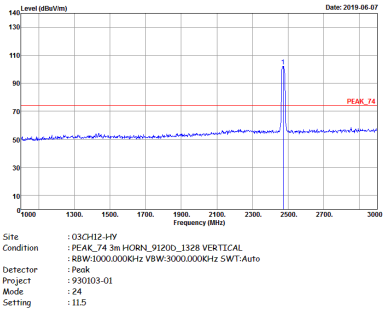
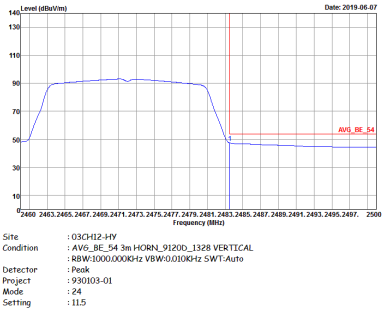
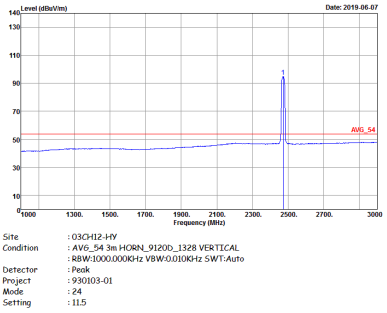
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 22 Setting : 15.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 22 Setting : 15.5
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 22 Setting : 15.5	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 22 Setting : 15.5

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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13

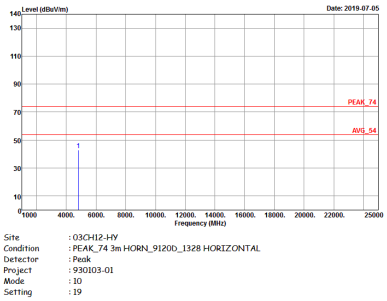
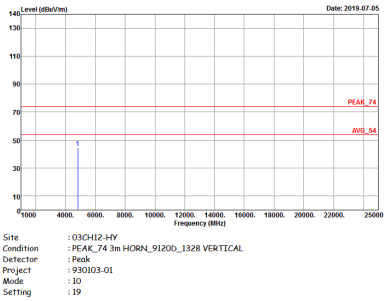
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 23 Setting : 13

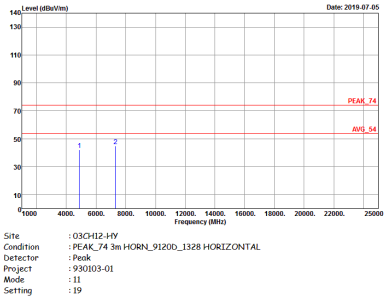
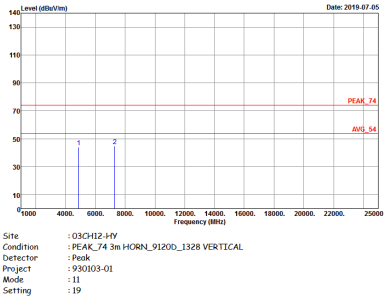
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 24 Setting : 11.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 24 Setting : 11.5
Avg.	 Site : 03CH12-HY Condition : AV6_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 24 Setting : 11.5	 Site : 03CH12-HY Condition : AV6_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 930103-01 Mode : 24 Setting : 11.5

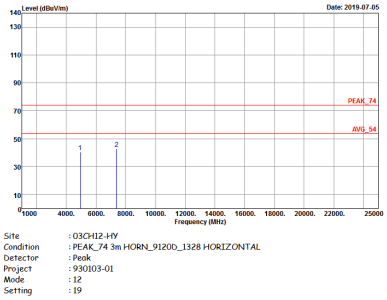
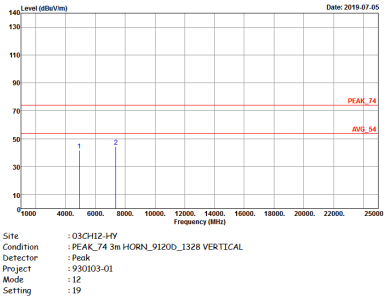
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1	Vertical	Fundamental
Peak		
Avg.		

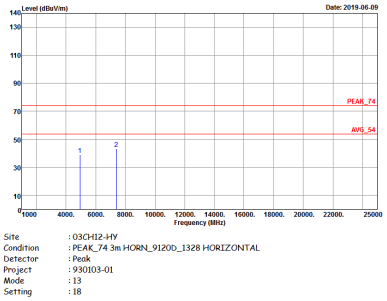
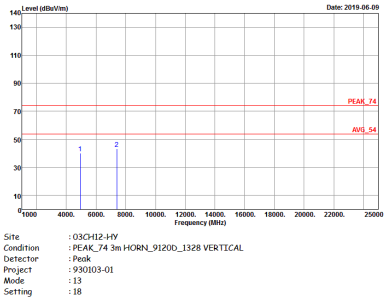
2.4GHz 2400~2483.5MHz

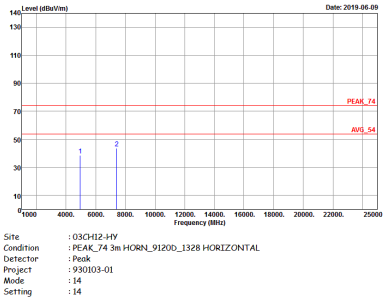
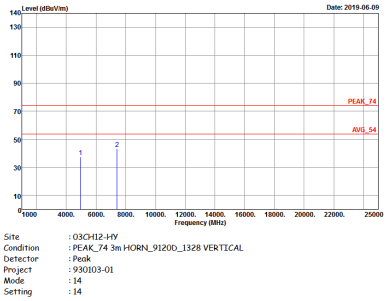
WIFI 802.11b (Harmonic @ 3m)

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

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

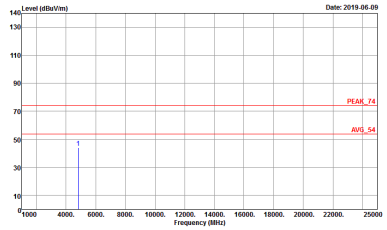
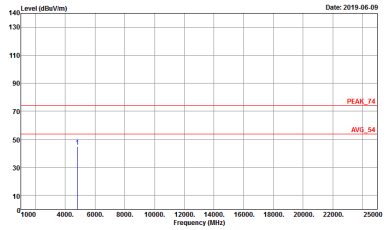
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

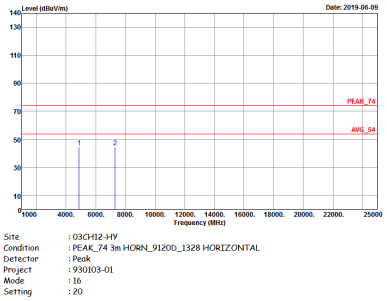
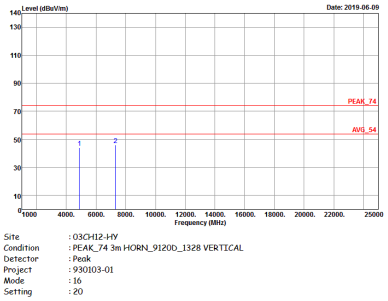
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1	Horizontal	Vertical
Peak Avg.		

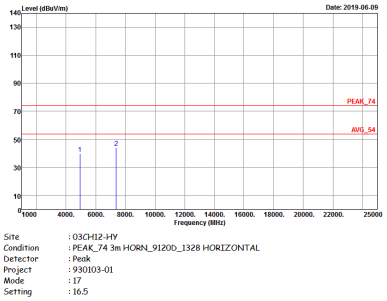
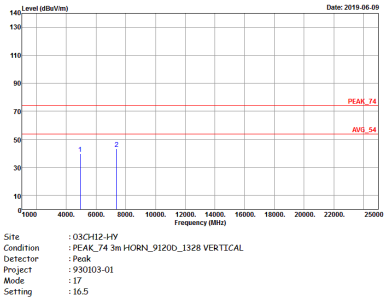
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Vertical
Peak Avg.		

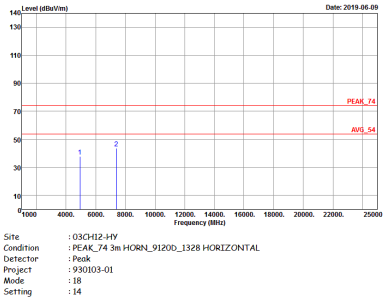
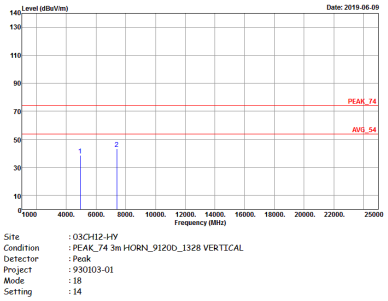
2.4GHz 2400~2483.5MHz

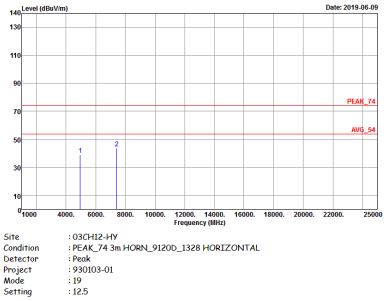
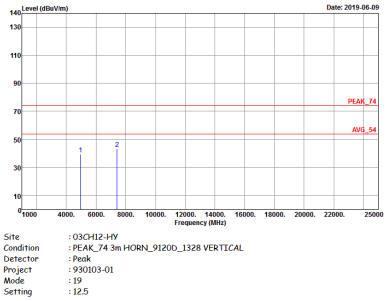
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 930103-01 Mode : 15 Setting : 18.5

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

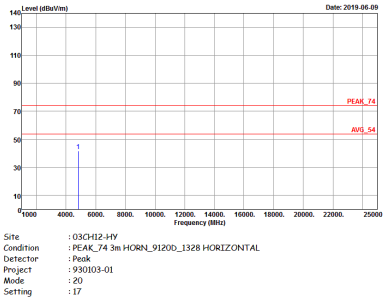
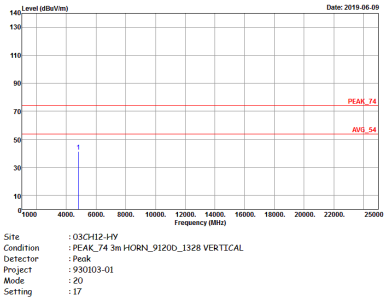
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

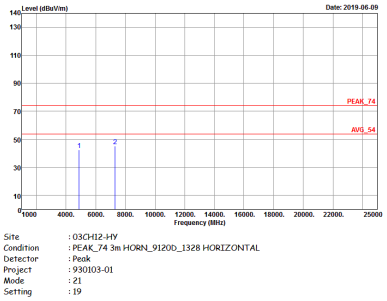
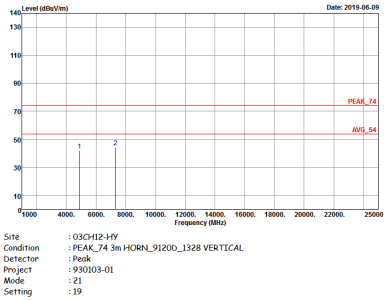
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
1	Horizontal	Vertical
Peak Avg.		

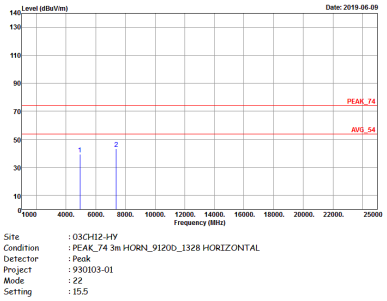
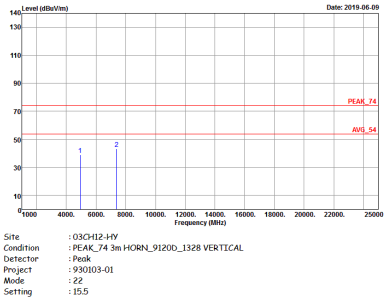
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
1	Horizontal	Vertical
Peak Avg.		

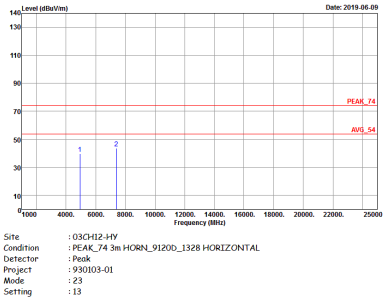
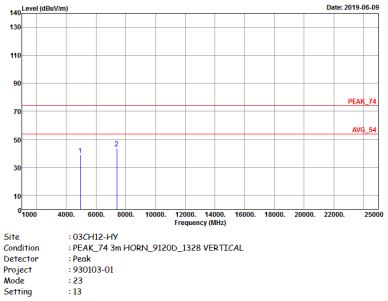
2.4GHz 2400~2483.5MHz

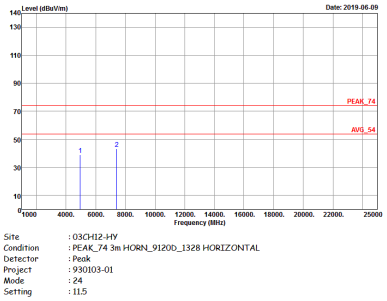
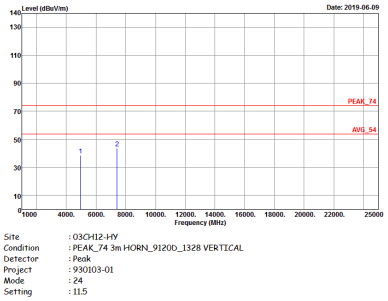
WIFI 802.11n HT20 (Harmonic @ 3m)

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.		

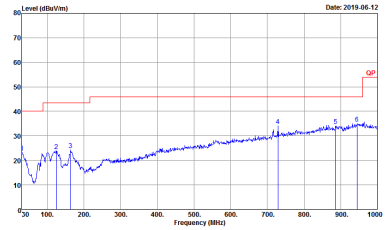
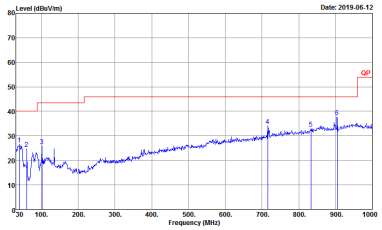
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
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 below 1GHz

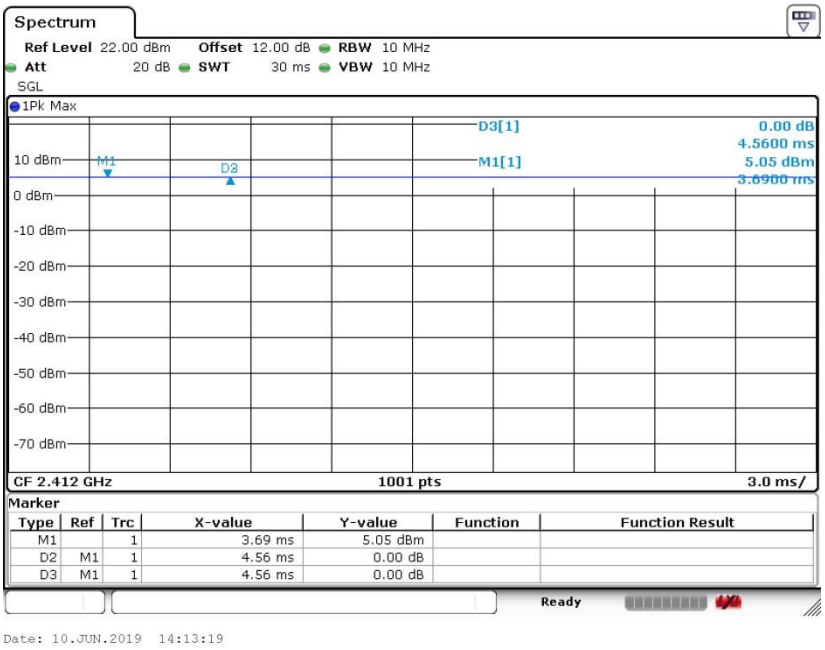
2.4GHz WIFI 802.11g (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11g LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH12-HY Condition : QP 3m BILOG_6111D_37059 HORIZONTAL Detector : Peak Project : 930103-01 Mode : 27 Setting : 18.5	 Site : 03CH12-HY Condition : QP 3m BILOG_6111D_37059 VERTICAL Detector : Peak Project : 930103-01 Mode : 27 Setting : 18.5

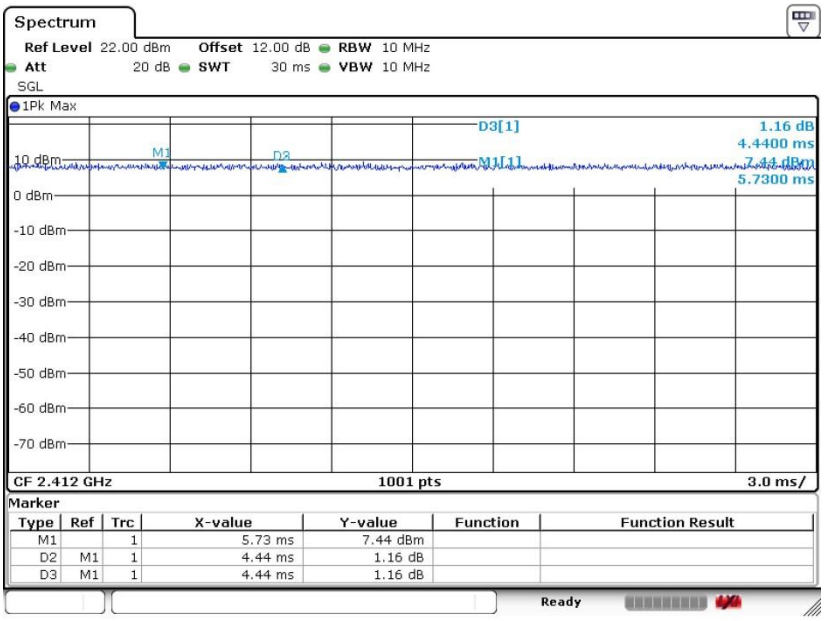
Appendix E. Duty Cycle Plots

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

802.11b



802.11g



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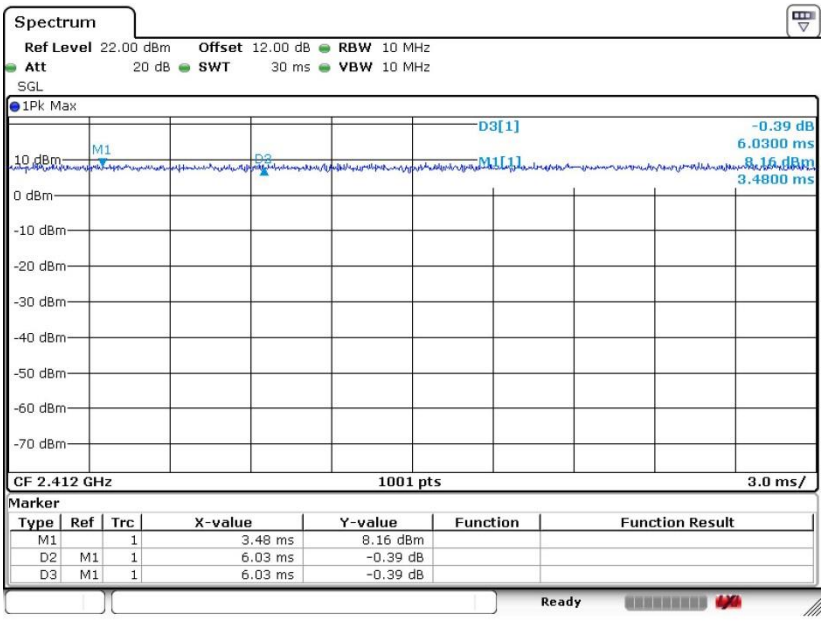
802.11n HT20



Date: 10.JUN.2019 14:16:14

————THE END————