FCC RADIO TEST REPORT

FCC ID	:	**2ANZ4-2793**
Equipment	:	**Electronic Display Device**
Model Name	:	**S8IN4O**
Applicant	:	**Gigico International LLC** **3523 45th Street South, Suite 100 Fargo, North Dakota 58104**
Standard	:	**FCC Part 15 Subpart C §15.247**

The testing was completed on Jan. 21, 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.

Jones Tsai

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
FR8O0113-01C	01	Initial issue of report	Feb. 14, 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: Nancy Yang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Electronic Display Device
Model Name	S8IN4O
FCC ID	2ANZ4-2793
EUT supports Radios application	WLAN 11b/g/n HT20 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 (Peak) Output Power to antenna	**<Ant. 1>** 802.11b : 23.80 dBm (0.2399 W) 802.11g : 26.16 dBm (0.4130 W) 802.11n HT20 : 26.16 dBm (0.4130 W) **<Ant. 2>** 802.11b : 24.08 dBm (0.2559 W) 802.11g : 26.05 dBm (0.4027 W) 802.11n HT20 : 26.55 dBm (0.4519 W)
99% Occupied Bandwidth	**<Ant. 1>** 802.11b : 14.55 MHz 802.11g : 17.65 MHz 802.11n HT20 : 18.50 MHz **<Ant. 2>** 802.11b : 14.50 MHz 802.11g : 18.35 MHz 802.11n HT20 : 19.40 MHz
Antenna Type / Gain	Ant. 1: Fixed Internal Antenna with gain -0.40 dBi Ant. 2: Fixed Internal Antenna with gain -4.00 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
Antenna Function for Transmitter	

	Ant. 1	Ant. 2
802.11 b/g/n	V	V

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.	
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.
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.**
	03CH16-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 v05
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane for Ant. 1 and Y plane for Ant. 2) 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		

2.2 Test Mode

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

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

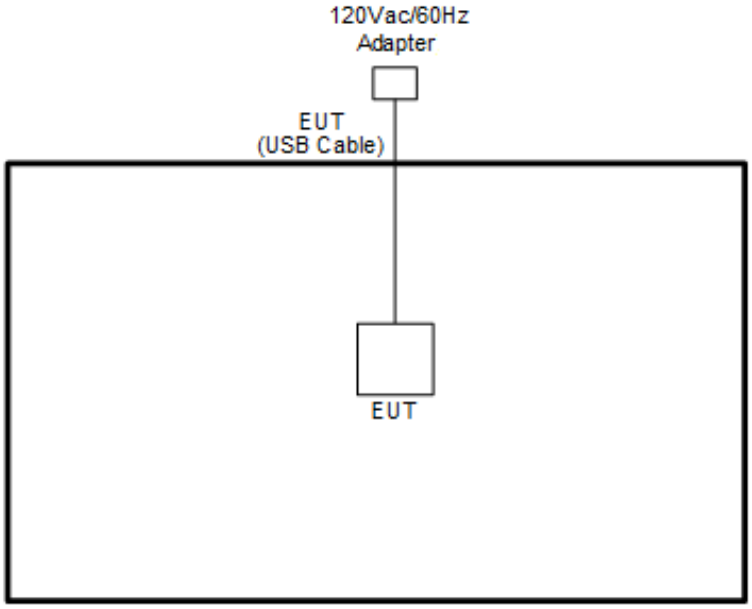
Test Cases	
AC Conducted Emission	Mode 1: WLAN (2.4GHz) Link + USB Cable 1 (Charging from Adapter) Mode 2: Bluetooth Link + USB Cable 1 (Charging from Adapter)

Remark:

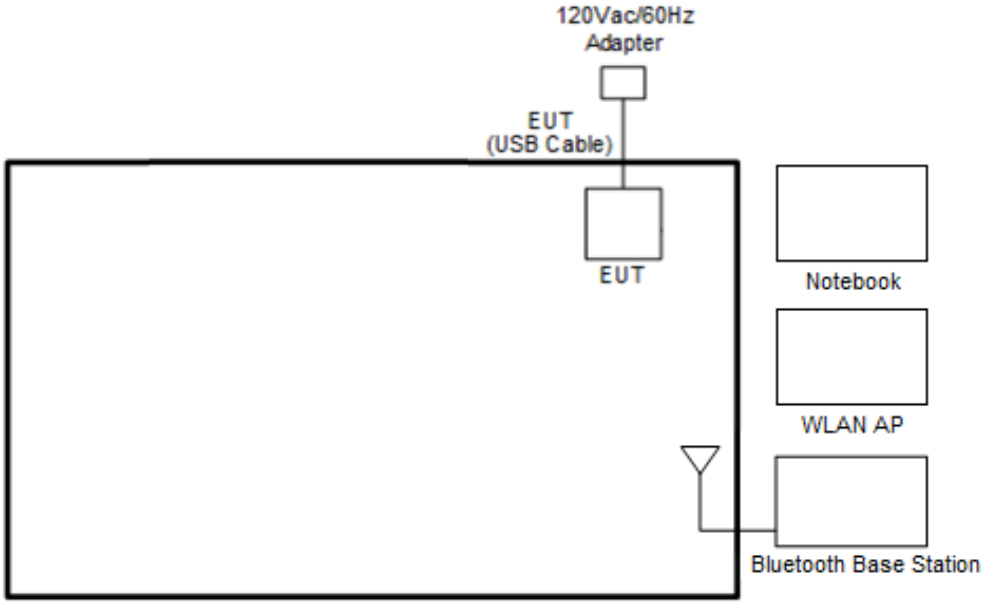
1. The worst case of conducted emission is mode 1; only the test data of it was reported.
2. For Radiated Test Cases, the tests were performed with USB Cable 1.

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.	Bluetooth Base Station	R&S	CBT32	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	ASUS	P2430U	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Adapter	N/A	N/A	N/A	N/A	N/A

2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 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.

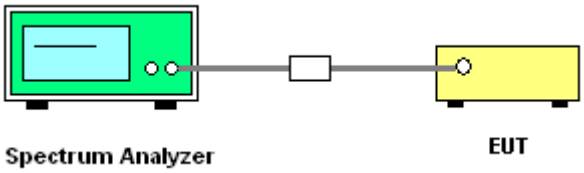
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

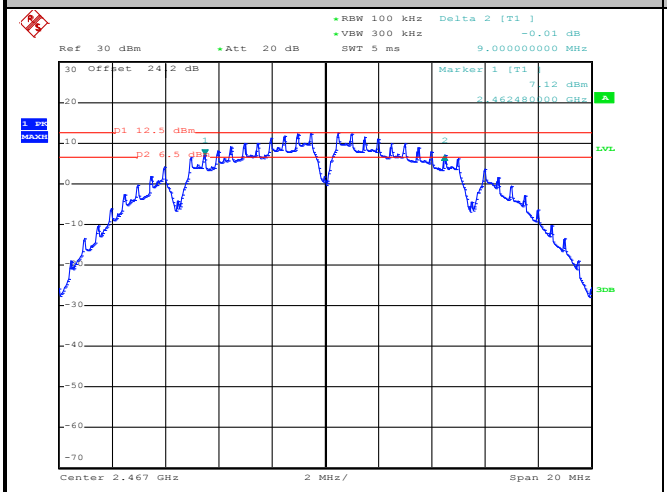
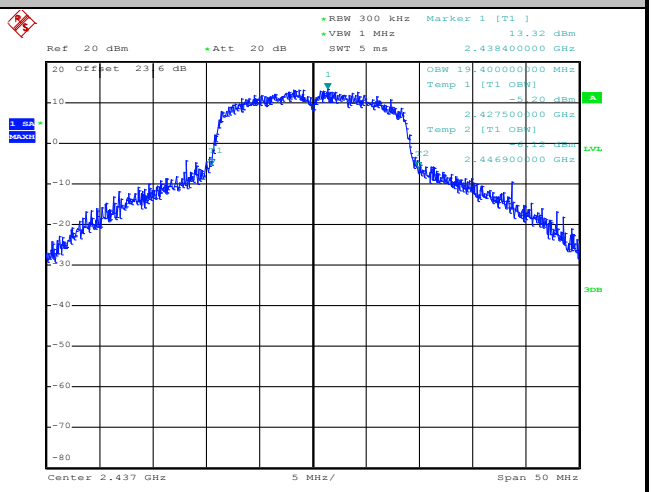
1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit 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: 14.JAN.2019 14:34:40	Date: 14.JAN.2019 14:03:32

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.

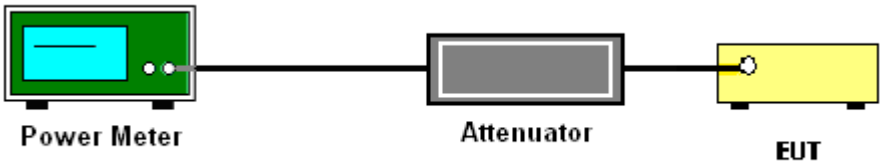
3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

1. For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.3 PKPM1
2. For Average Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v05 section 9.2.3.1 Method AVGPM.
3. 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.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Please refer to Appendix A.

3.2.6 Test Result of Average output Power (Reporting Only)

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

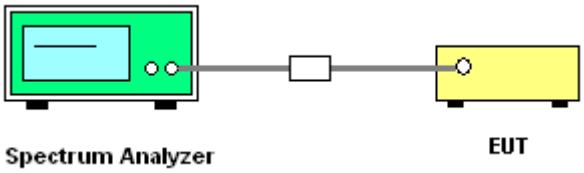
3.3.2 Measuring Instruments

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.

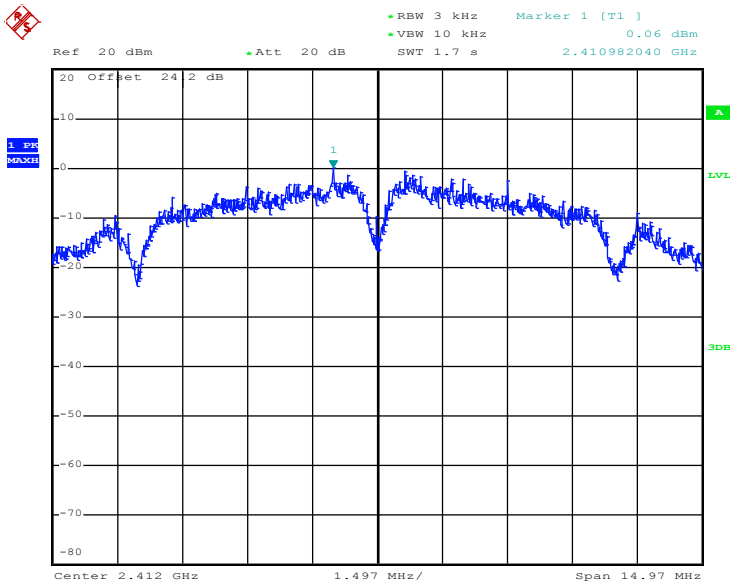
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/3kHz)



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3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

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

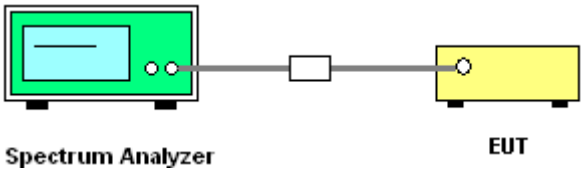
3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set 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



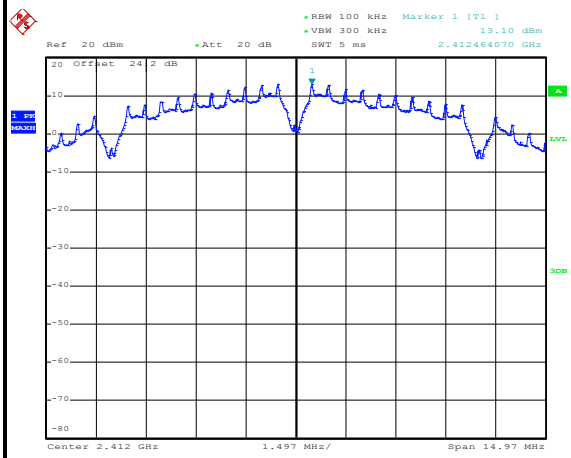
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Luffy Lin	**Temperature :**	21~25℃
		Relative Humidity :	51~54%

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

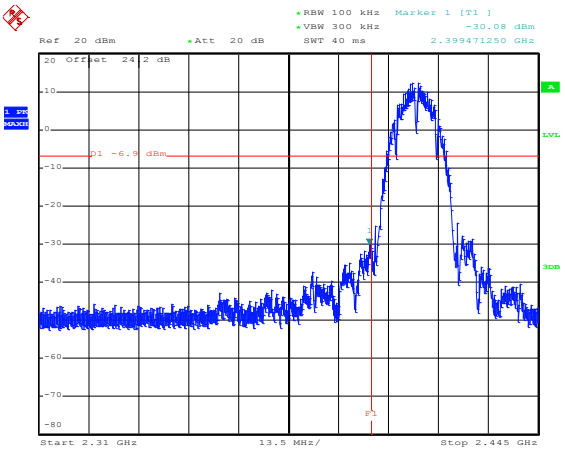
Test Mode :	802.11b	**Test Channel :**	01

100kHz PSD reference Level



Date: 17.JAN.2019 19:40:05

Channel Plot



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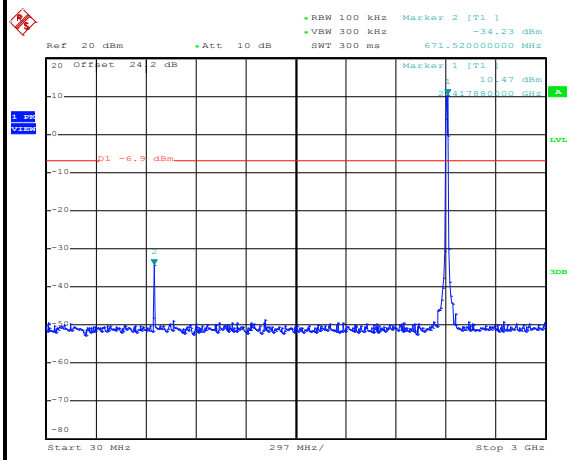
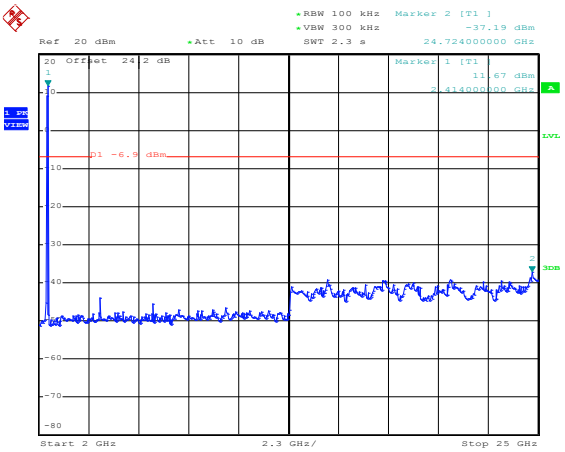
Spurious Emission 30MHz~3GHz



Date: 17.JAN.2019 19:41:27

Spurious Emission 2GHz~25GHz



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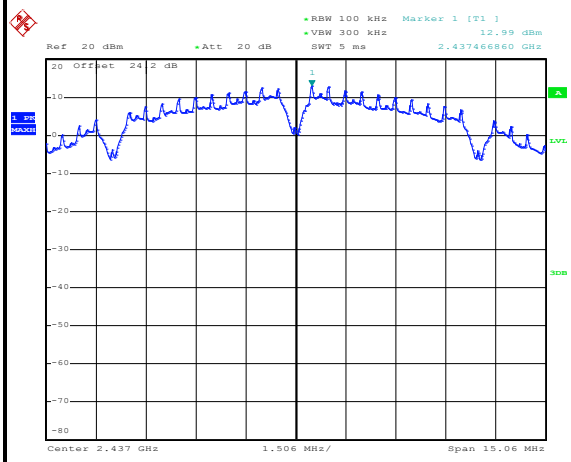
Test Mode :	802.11b	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

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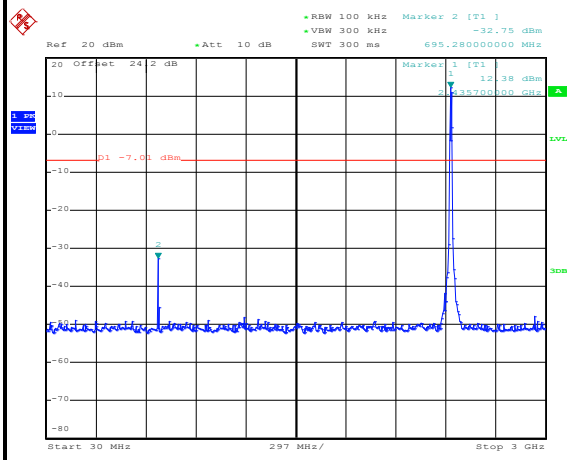
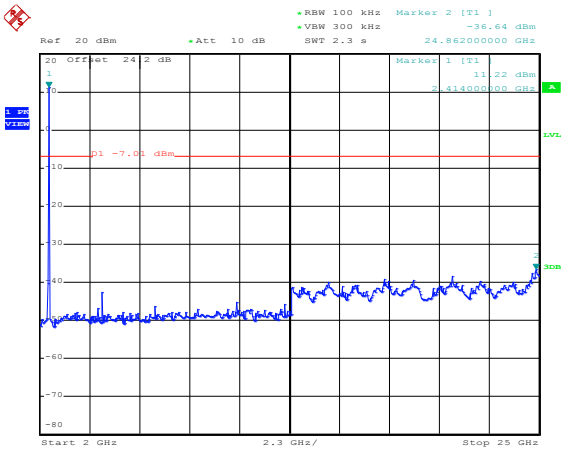
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

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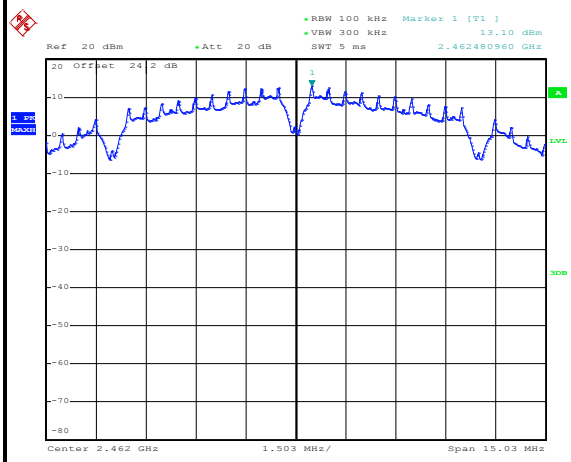
Date: 14.JAN.2019 14:28:04

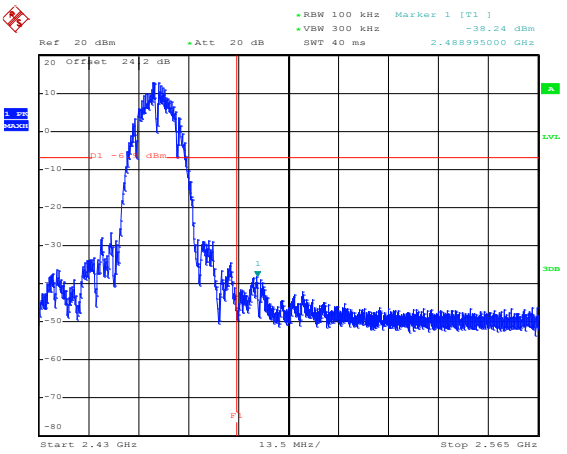
Test Mode :	802.11b	Test Channel :	11

100kHz PSD reference Level



Date: 14.JAN.2019 14:31:18

Channel Plot



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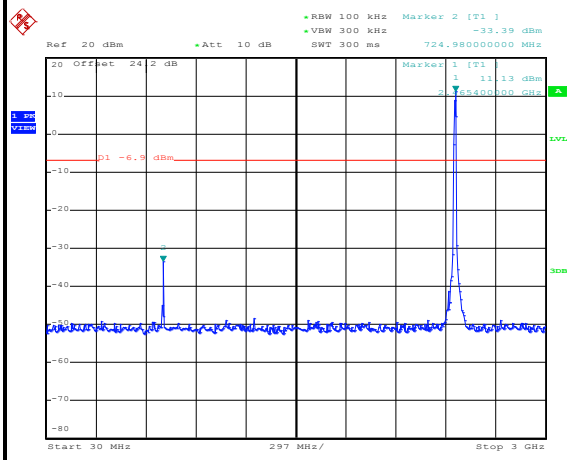
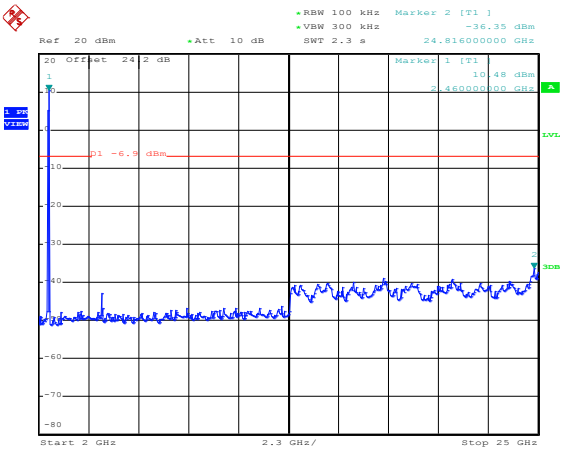
Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:31:51

Spurious Emission 2GHz~25GHz



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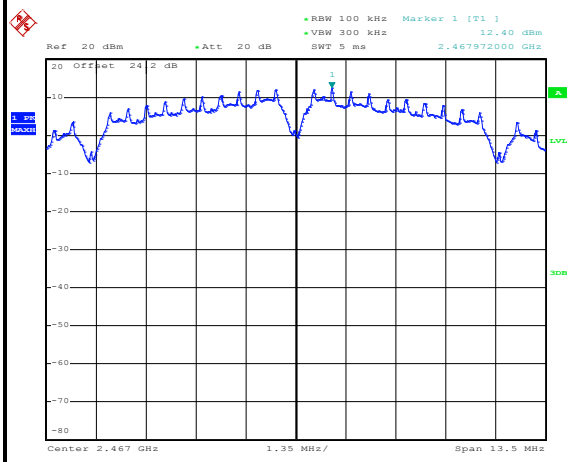
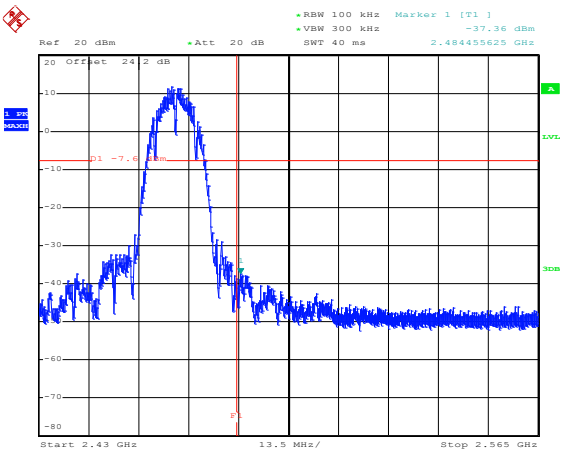
Test Mode :	802.11b	Test Channel :	12

100kHz PSD reference Level



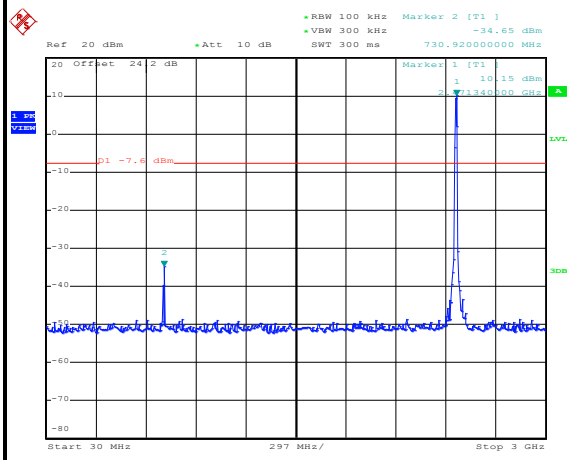
Date: 14.JAN.2019 14:35:14

Channel Plot



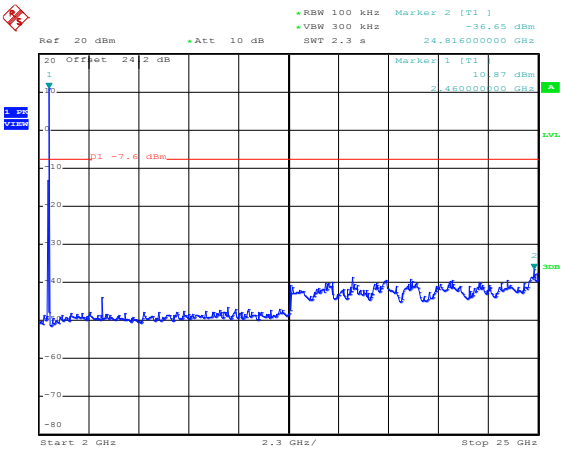
Date: 14.JAN.2019 14:35:33

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:35:50

Spurious Emission 2GHz~25GHz



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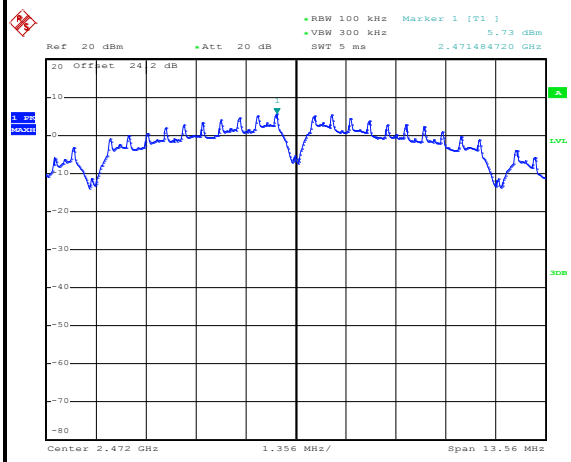
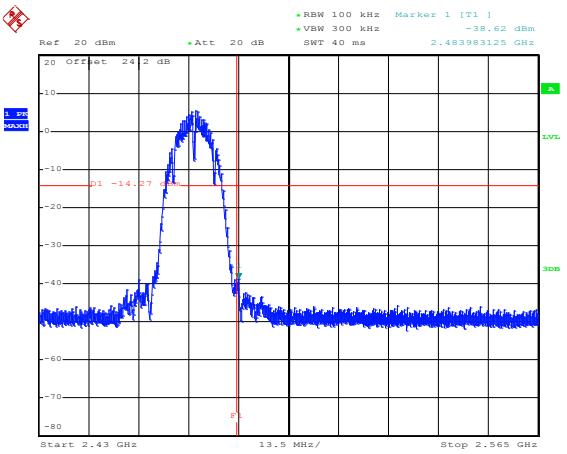
Test Mode :	802.11b	Test Channel :	13

100kHz PSD reference Level



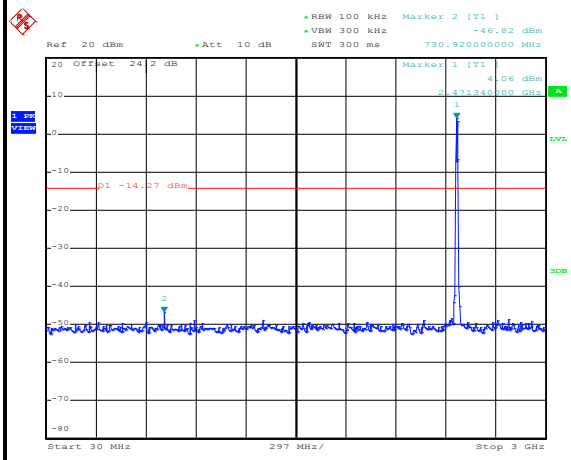
Date: 14.JAN.2019 14:39:32

Channel Plot



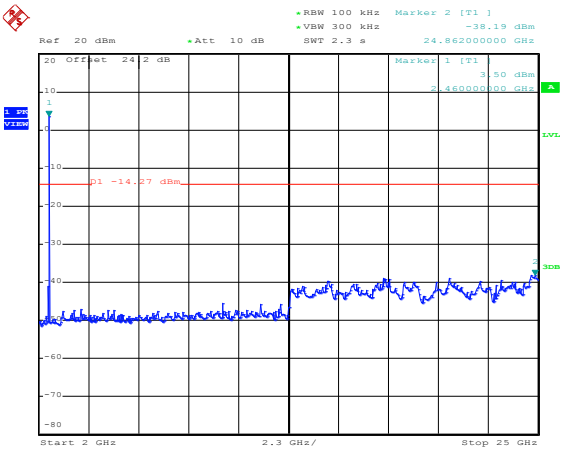
Date: 14.JAN.2019 14:39:56

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:40:13

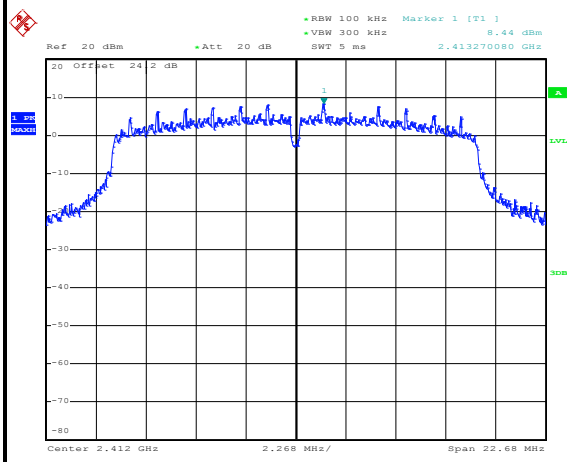
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:40:28

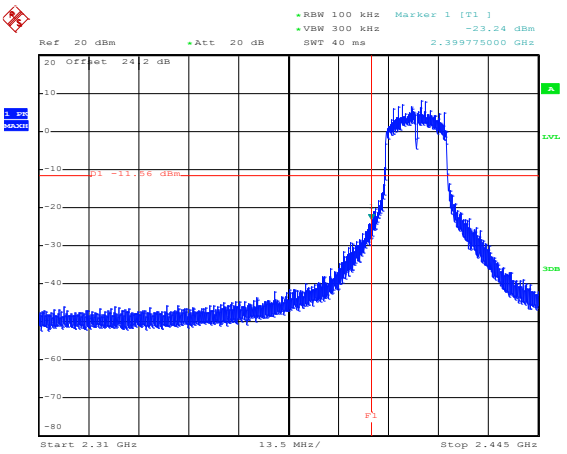
Test Mode :	802.11g	Test Channel :	01

100kHz PSD reference Level



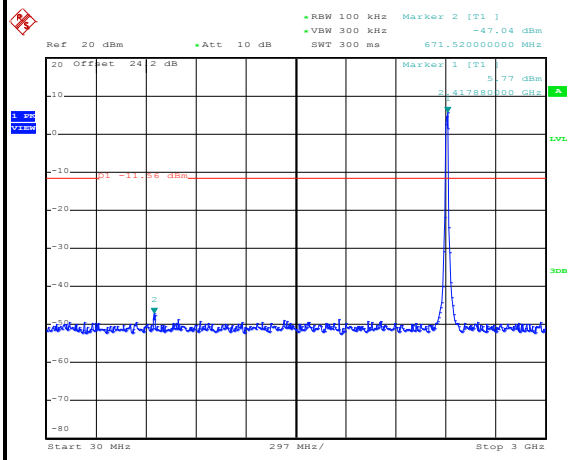
Date: 14.JAN.2019 14:43:25

Channel Plot



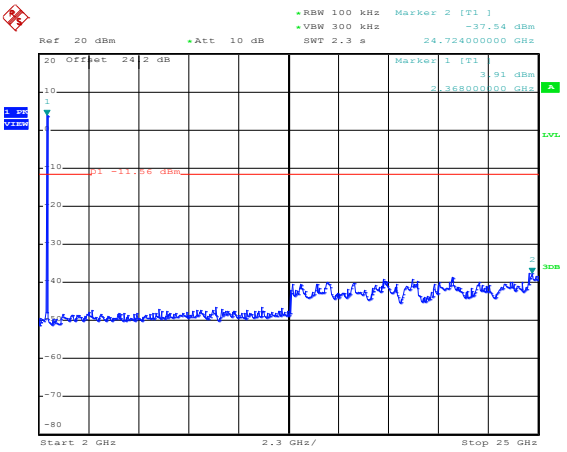
Date: 14.JAN.2019 14:43:42

Spurious Emission 30MHz~3GHz



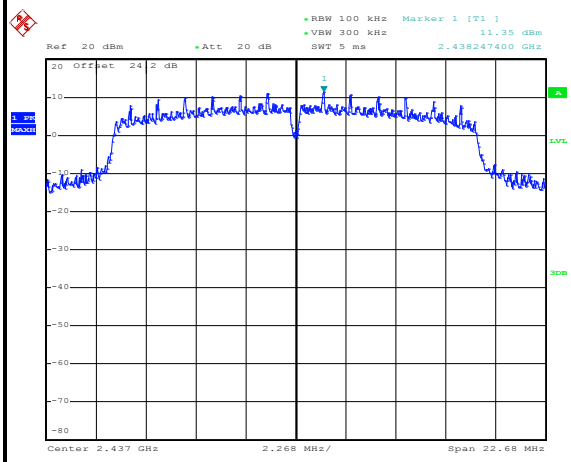
Date: 17.JAN.2019 20:00:06

Spurious Emission 2GHz~25GHz

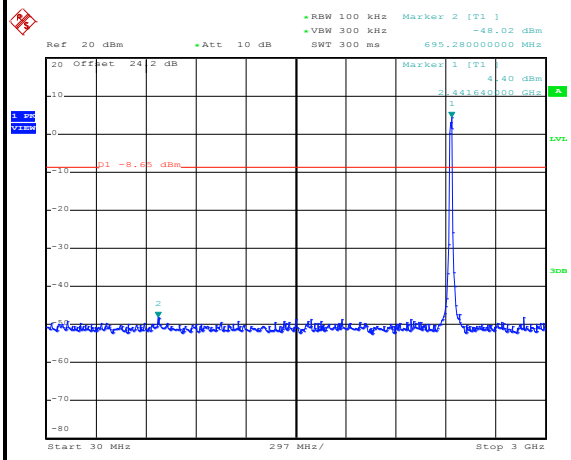
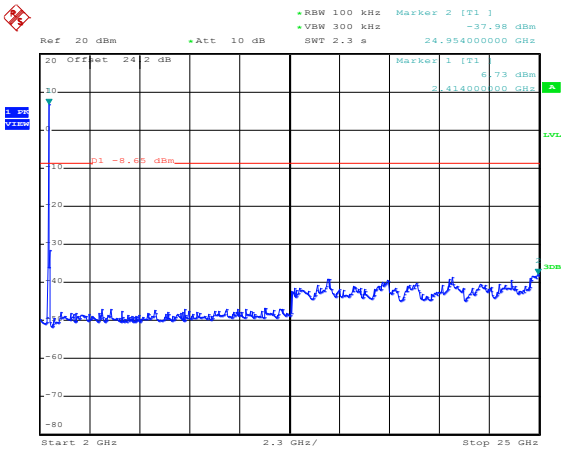


Date: 14.JAN.2019 14:44:23

Test Mode :	802.11g	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

Date: 14.JAN.2019 14:46:51

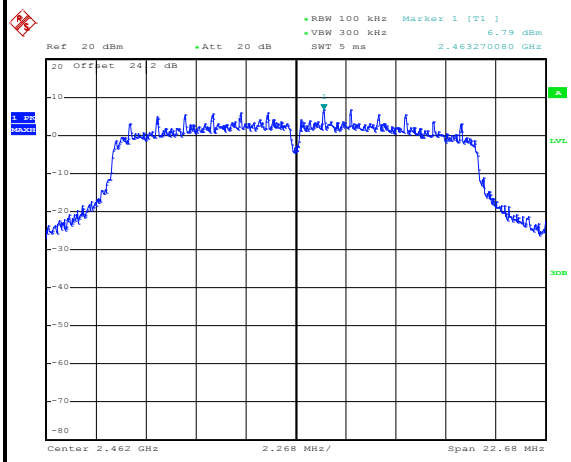
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 17.JAN.2019 20:03:31

Date: 14.JAN.2019 14:47:31

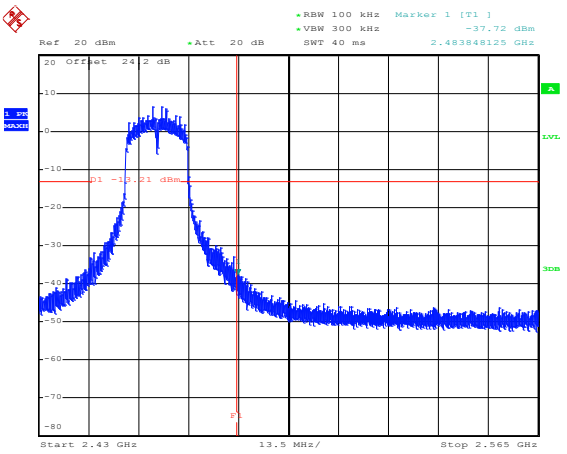
Test Mode :	802.11g	Test Channel :	11

100kHz PSD reference Level



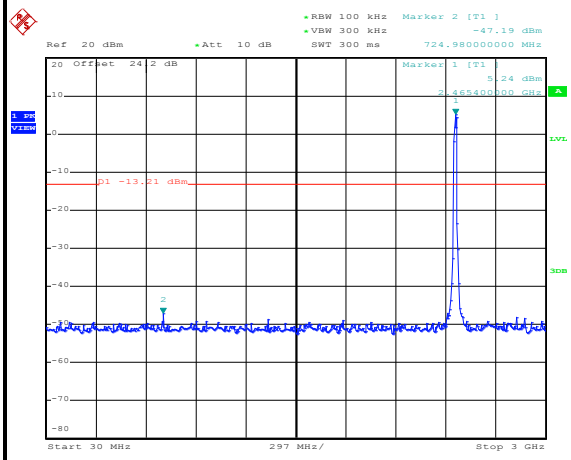
Date: 14.JAN.2019 14:50:27

Channel Plot



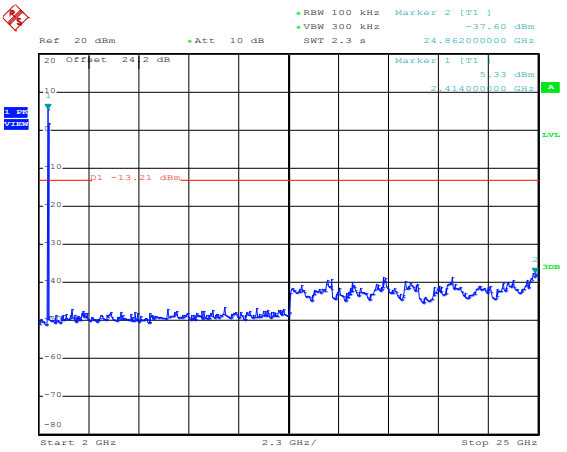
Date: 14.JAN.2019 14:50:50

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:51:08

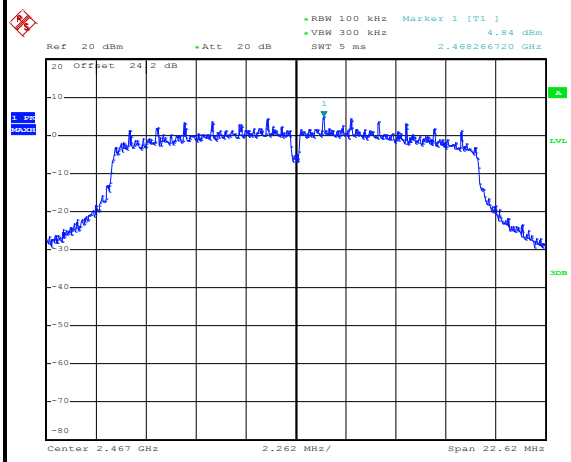
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:51:25

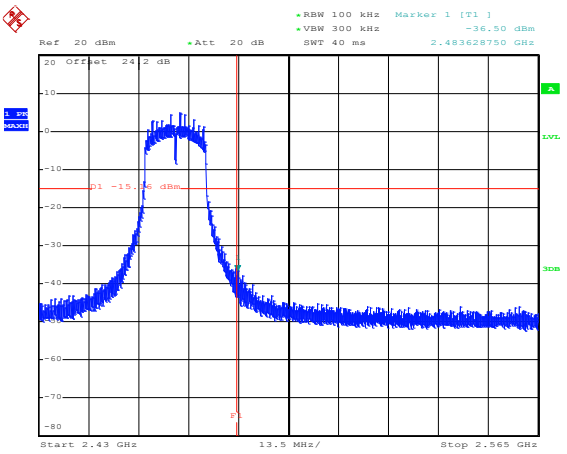
Test Mode :	802.11g	Test Channel :	12

100kHz PSD reference Level



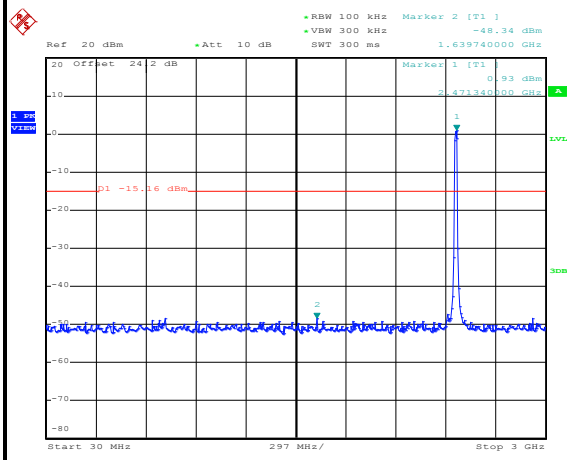
Date: 14.JAN.2019 14:54:29

Channel Plot



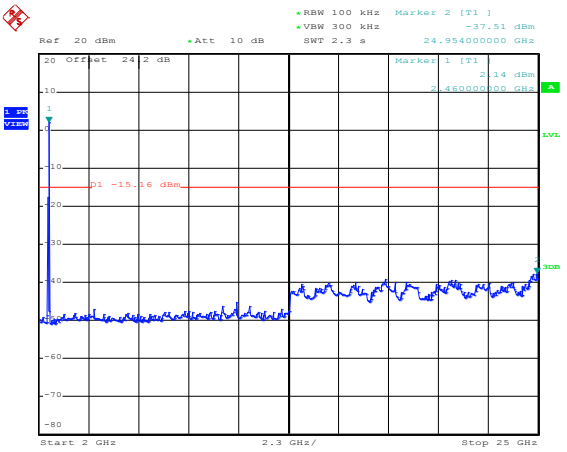
Date: 14.JAN.2019 14:55:44

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:56:01

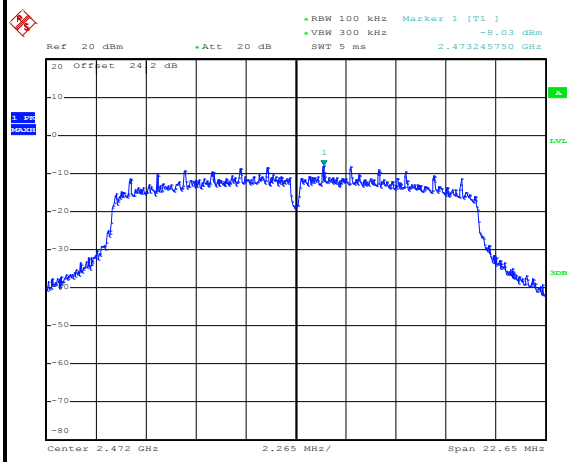
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:56:15

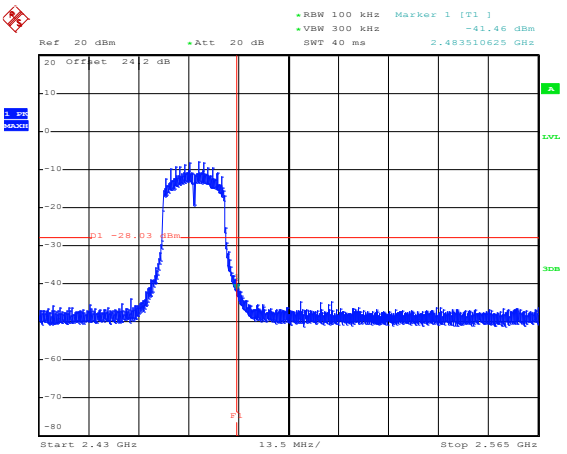
Test Mode :	802.11g	Test Channel :	13

100kHz PSD reference Level



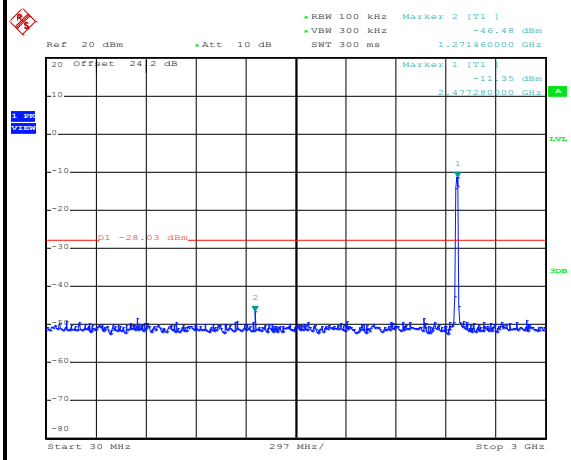
Date: 14.JAN.2019 14:59:45

Channel Plot



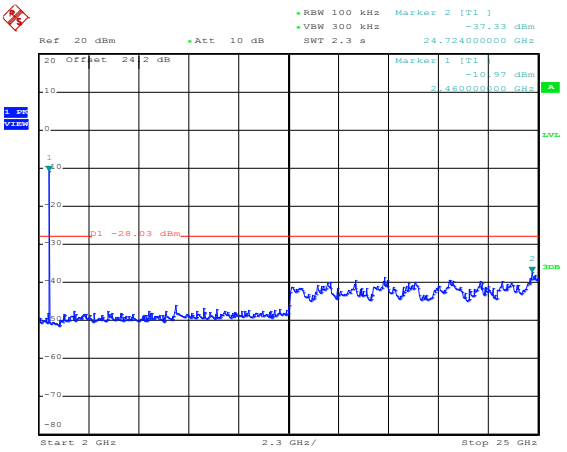
Date: 14.JAN.2019 15:00:21

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:00:38

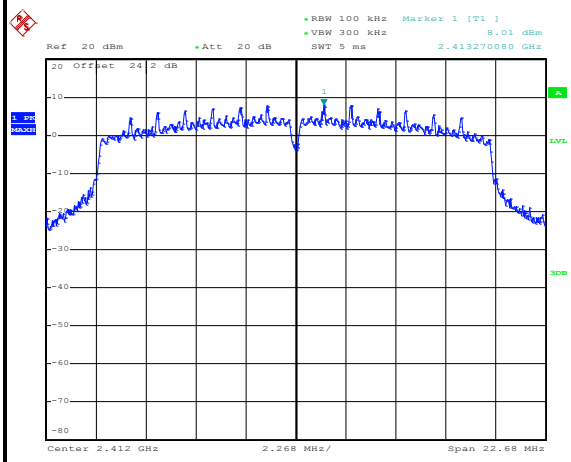
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 15:00:53

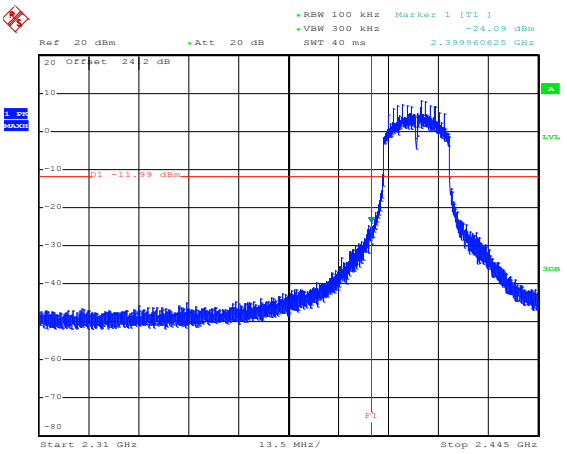
Test Mode :	802.11n HT20	Test Channel :	01

100kHz PSD reference Level



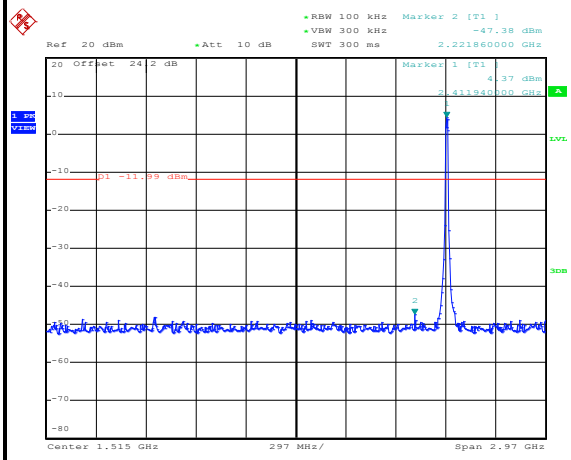
Date: 14.JAN.2019 15:04:50

Channel Plot



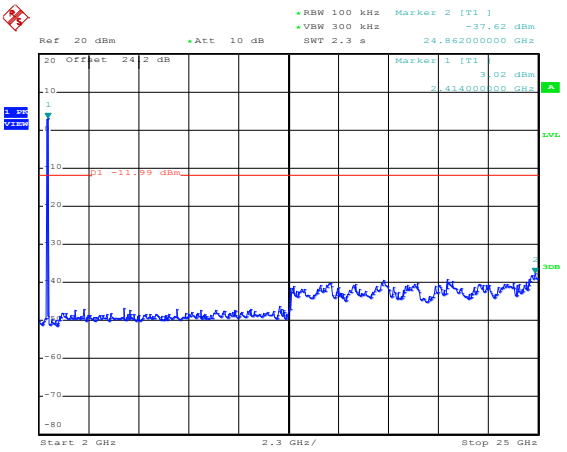
Date: 14.JAN.2019 15:05:08

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:05:31

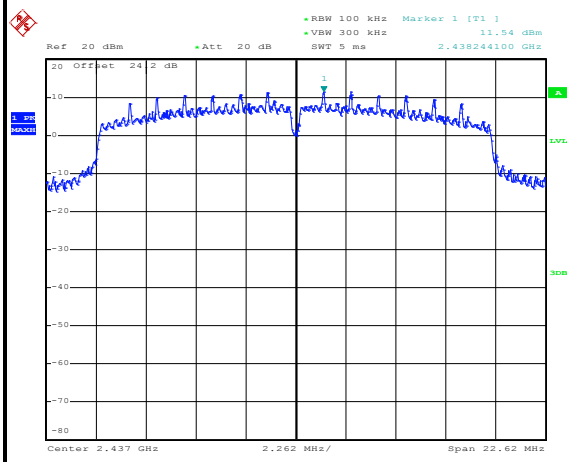
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 15:05:46

Test Mode :	802.11n HT20	Test Channel :	06

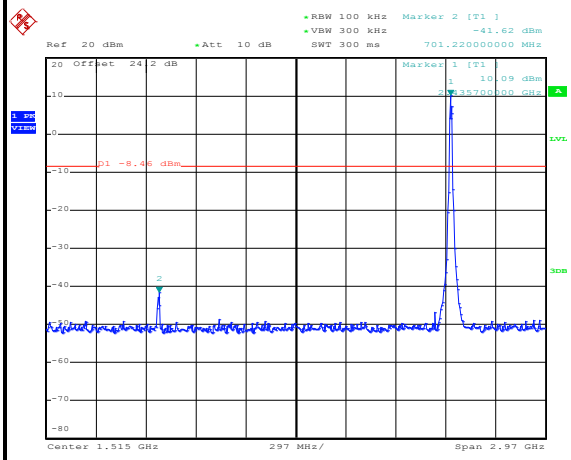
100kHz PSD reference Level



Date: 14.JAN.2019 15:08:30

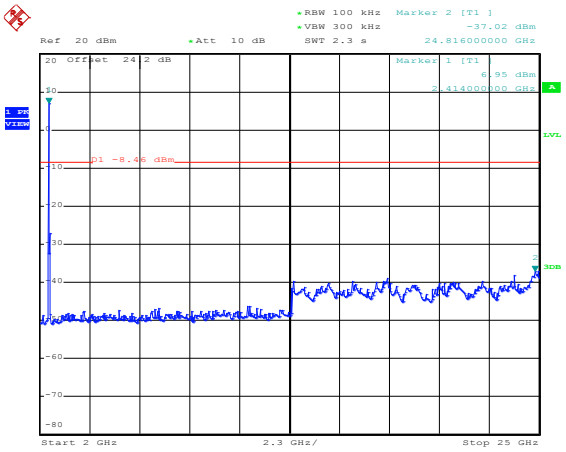
Channel Plot

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:08:56

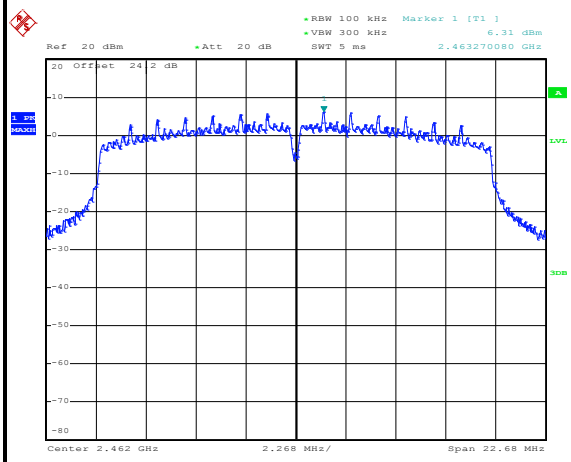
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 15:09:14

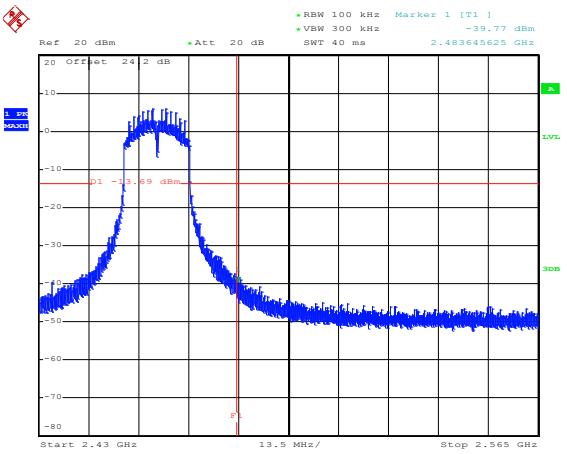
Test Mode :	802.11n HT20	Test Channel :	11

100kHz PSD reference Level



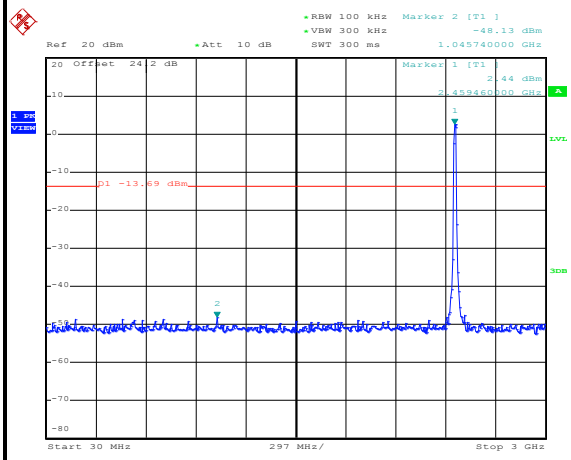
Date: 14.JAN.2019 15:14:48

Channel Plot



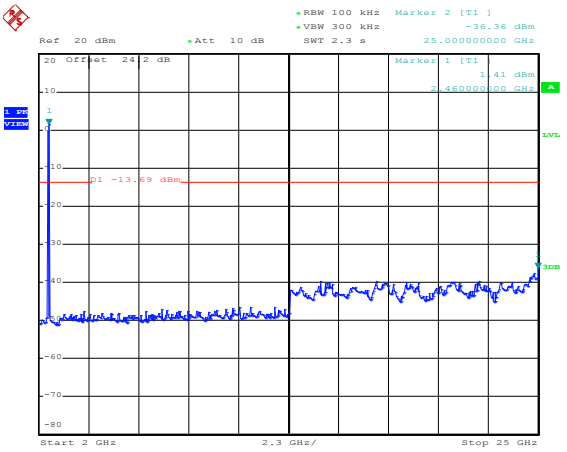
Date: 14.JAN.2019 15:15:10

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:15:27

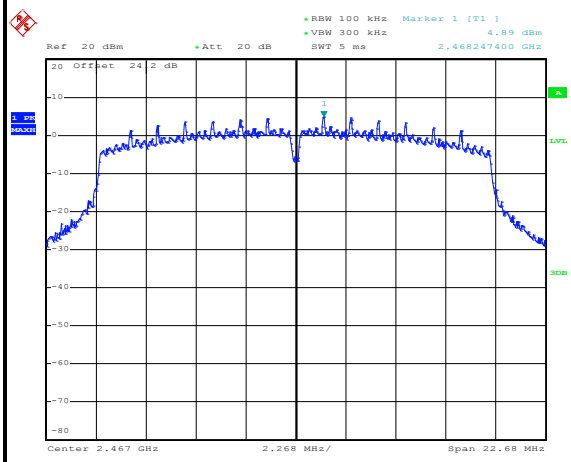
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 15:15:42

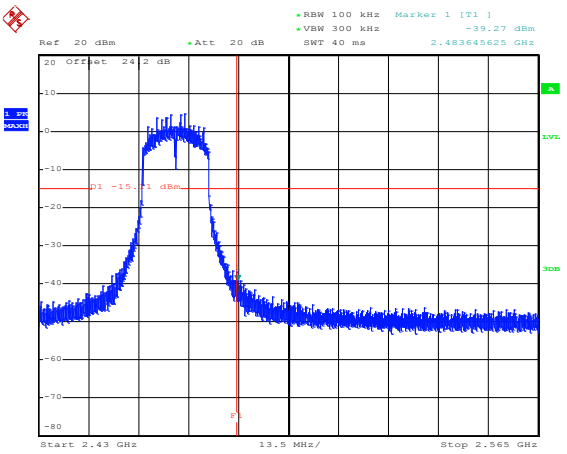
Test Mode :	802.11n HT20	Test Channel :	12

100kHz PSD reference Level



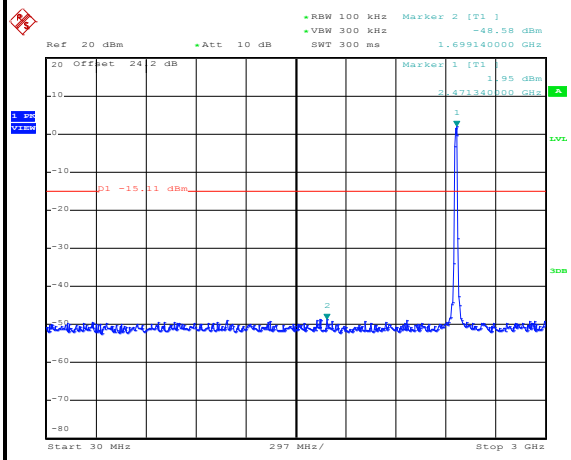
Date: 14.JAN.2019 15:18:31

Channel Plot



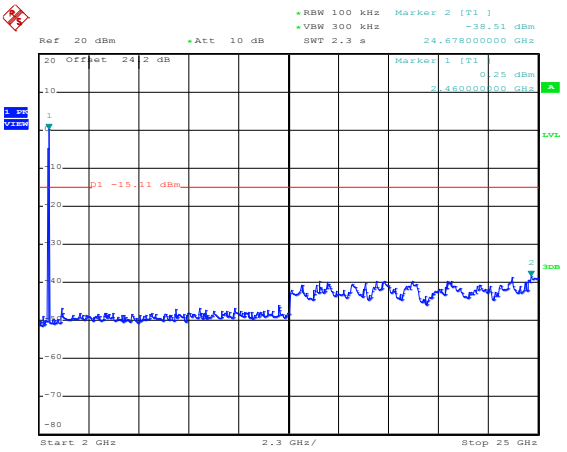
Date: 14.JAN.2019 15:18:45

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:19:11

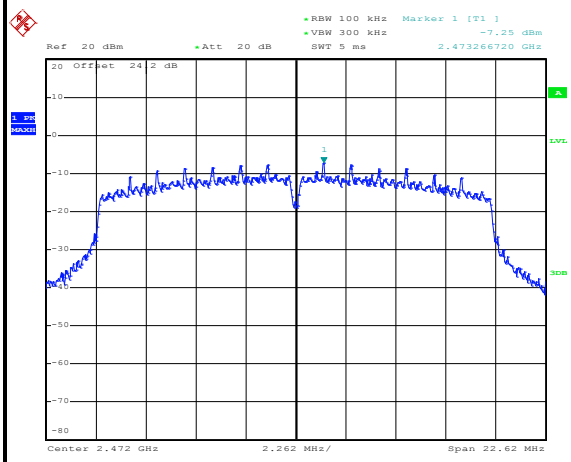
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 15:19:29

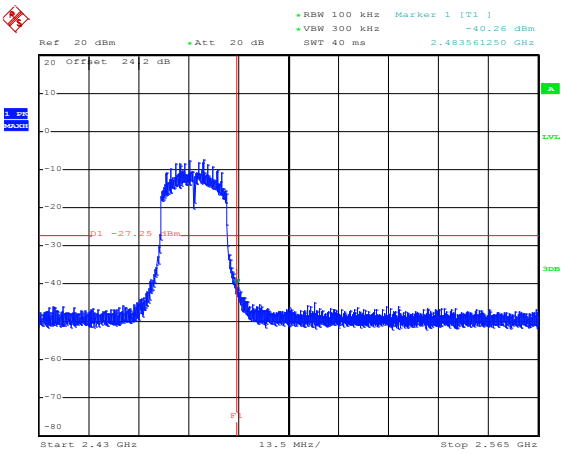
Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level



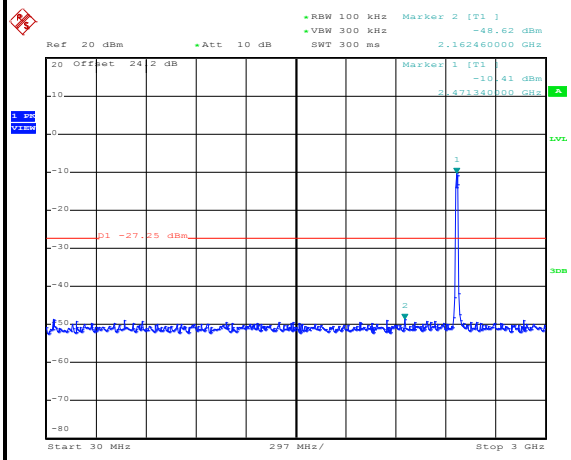
Date: 14.JAN.2019 15:22:39

Channel Plot



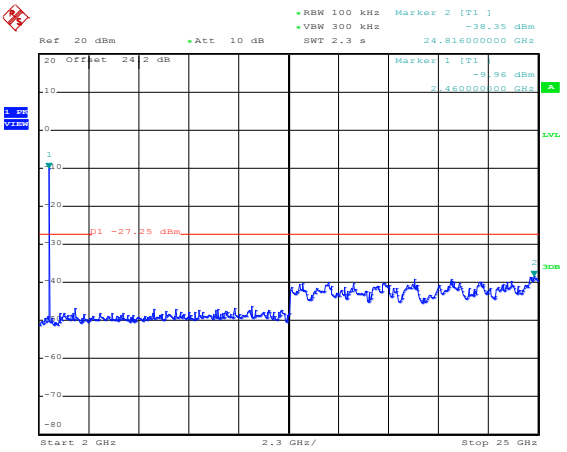
Date: 14.JAN.2019 15:23:04

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 15:23:22

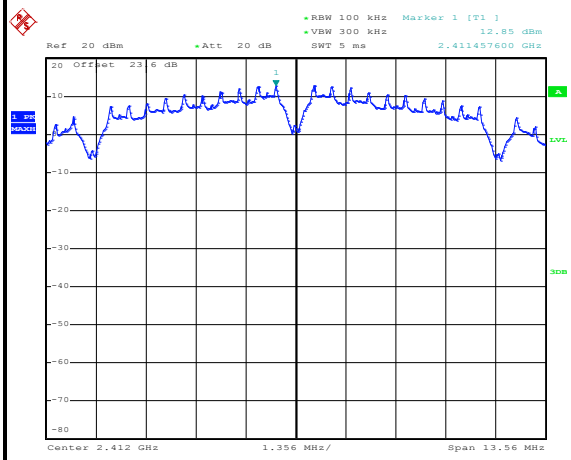
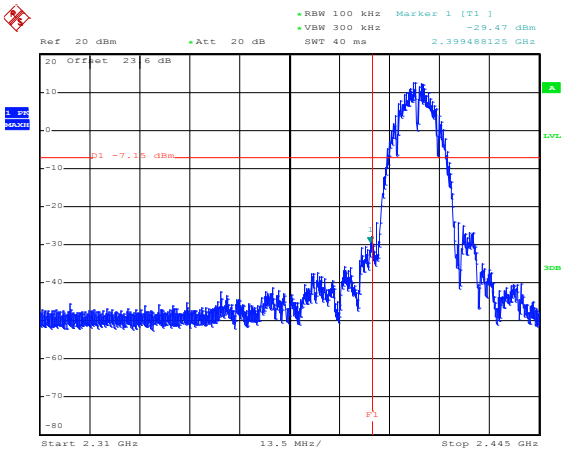
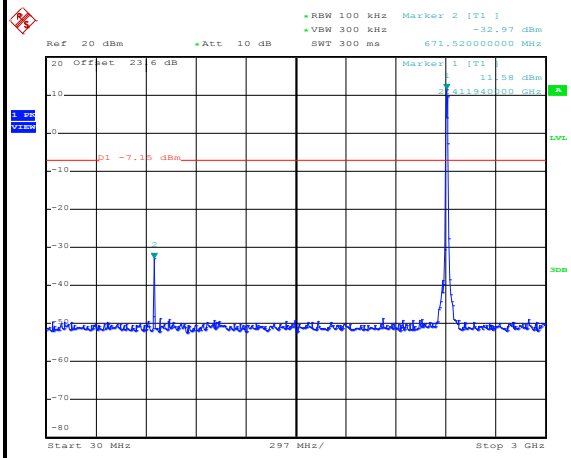
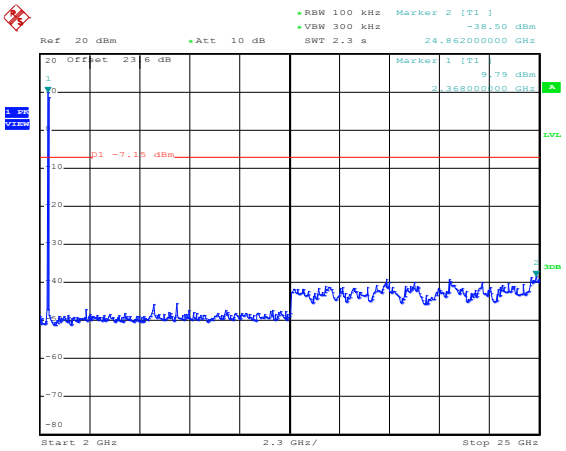
Spurious Emission 2GHz~25GHz



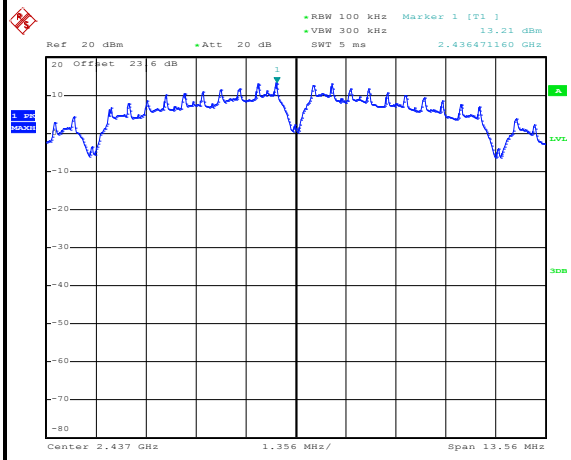
Date: 14.JAN.2019 15:23:37

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

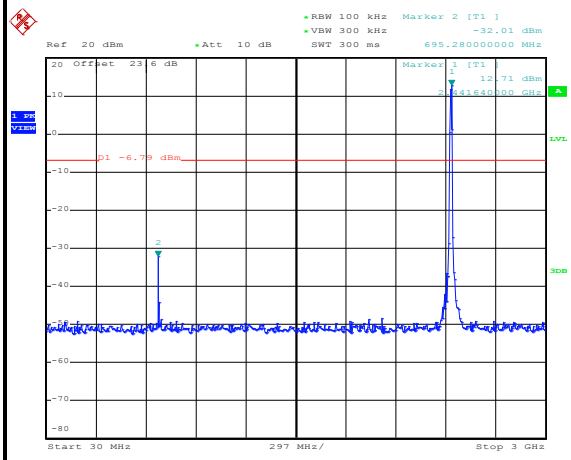
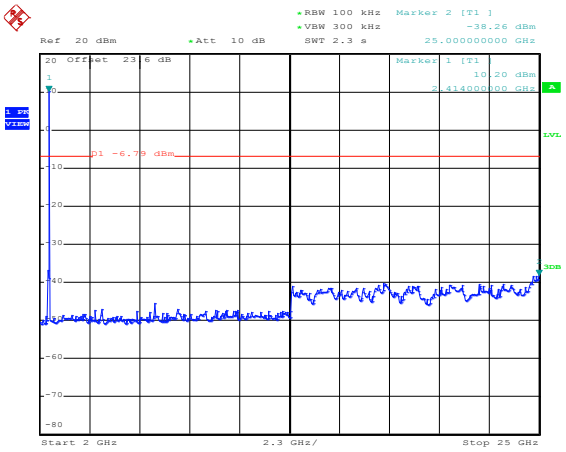
Test Mode :	802.11b	Test Channel :	01

100kHz PSD reference Level	Channel Plot
	
Date: 14.JAN.2019 11:26:39	Date: 14.JAN.2019 11:26:56
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 17.JAN.2019 19:48:43	Date: 14.JAN.2019 11:27:36

Test Mode :	802.11b	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

Date: 14.JAN.2019 11:30:10

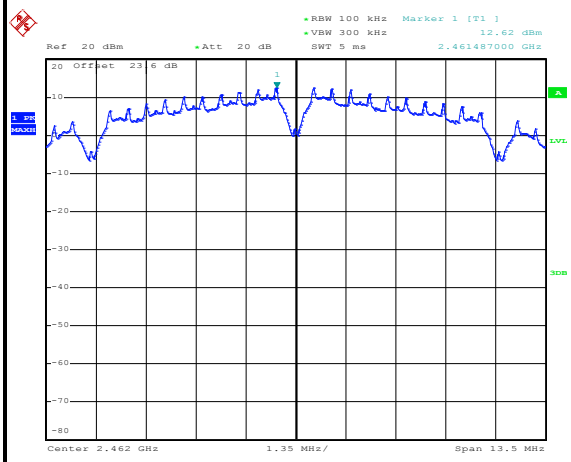
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 14.JAN.2019 11:30:26

Date: 14.JAN.2019 11:30:40

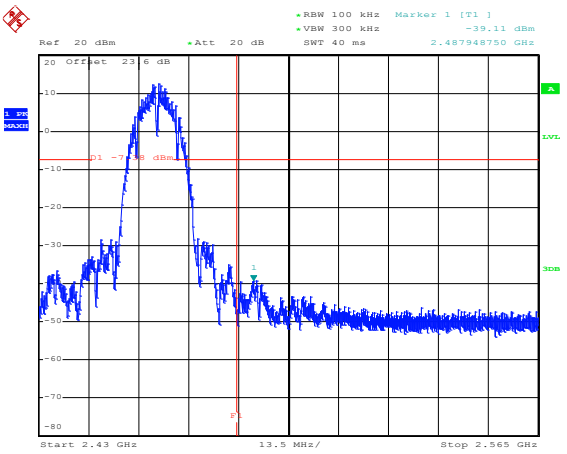
Test Mode :	802.11b	Test Channel :	11

100kHz PSD reference Level



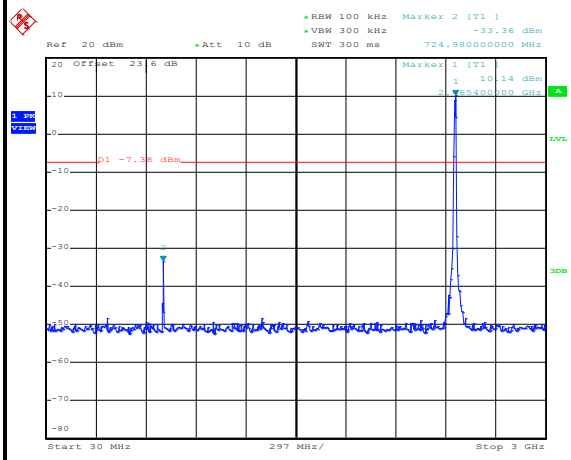
Date: 14.JAN.2019 11:33:27

Channel Plot



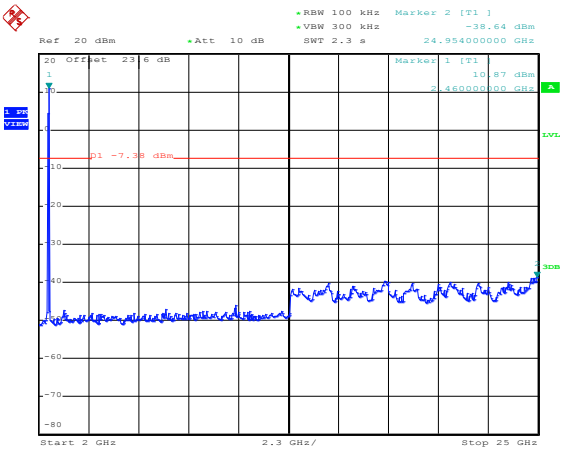
Date: 14.JAN.2019 11:33:42

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 11:34:00

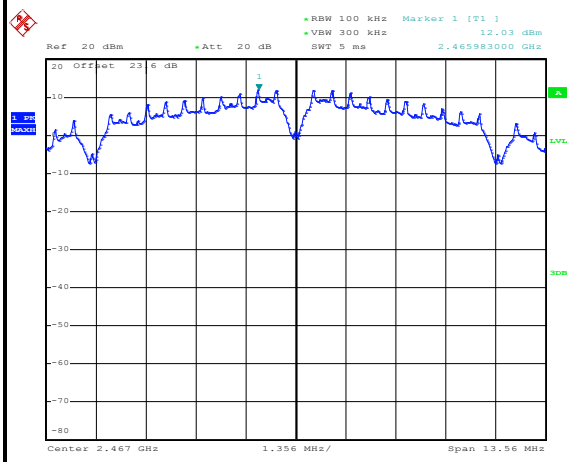
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 11:34:18

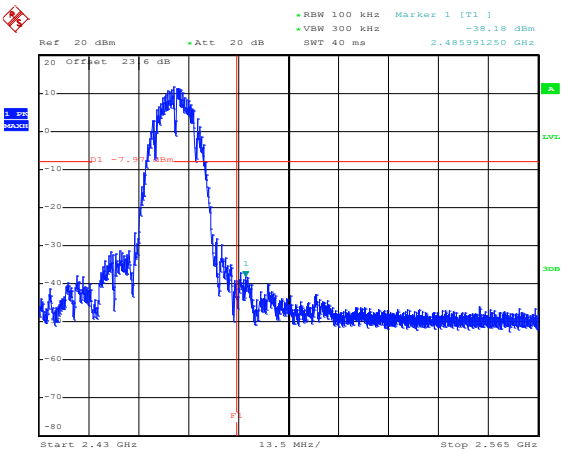
Test Mode :	802.11b	Test Channel :	12

100kHz PSD reference Level



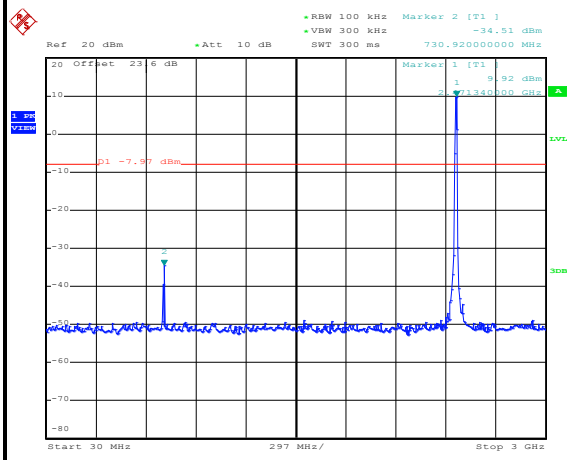
Date: 14.JAN.2019 11:40:37

Channel Plot



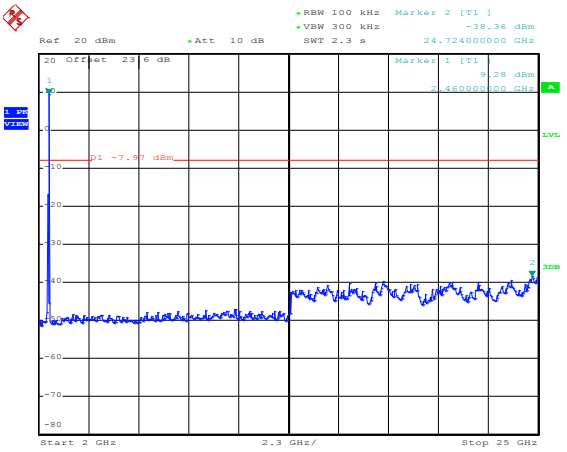
Date: 14.JAN.2019 11:41:06

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 11:41:22

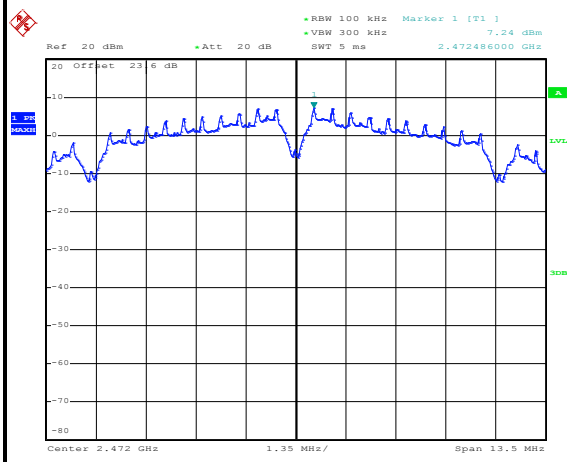
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 11:41:36

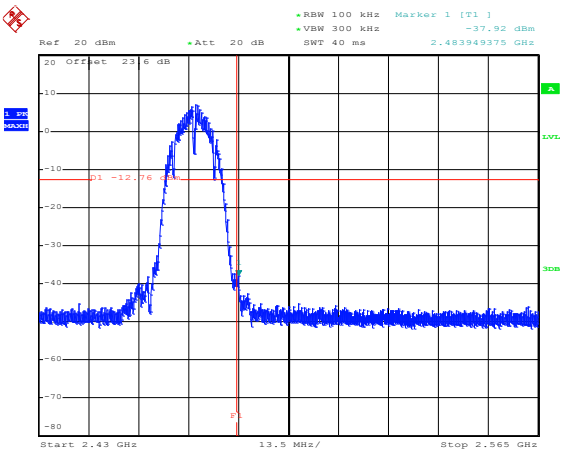
Test Mode :	802.11b	Test Channel :	13

100kHz PSD reference Level



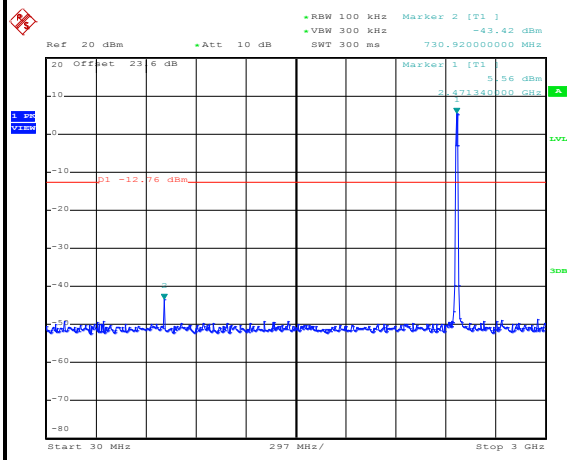
Date: 14.JAN.2019 11:45:30

Channel Plot



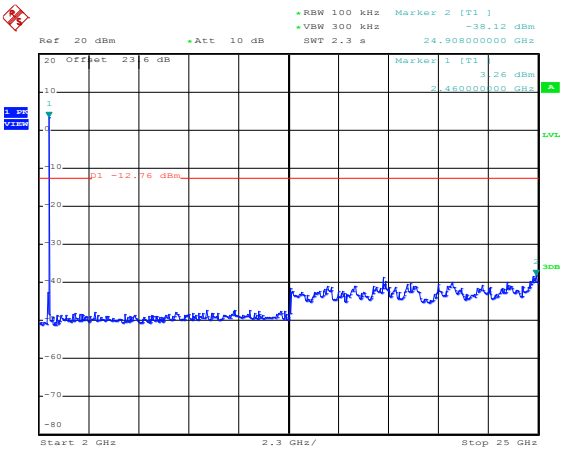
Date: 14.JAN.2019 11:46:00

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 11:46:17

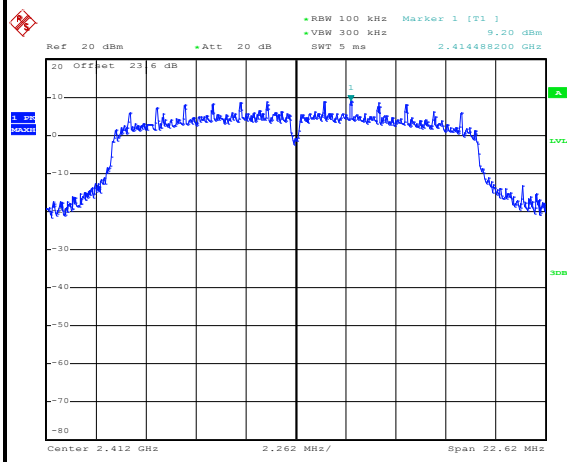
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 11:46:32

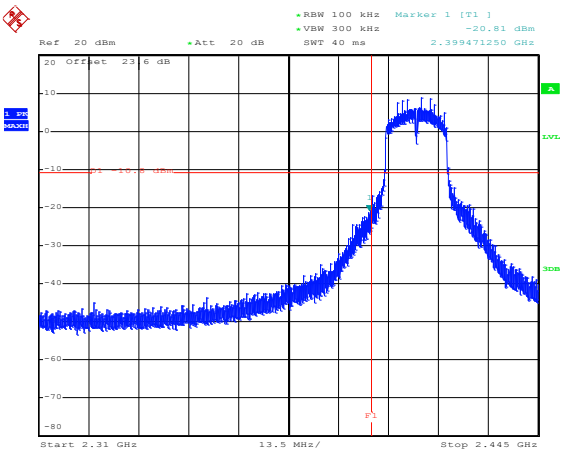
Test Mode :	802.11g	Test Channel :	01

100kHz PSD reference Level



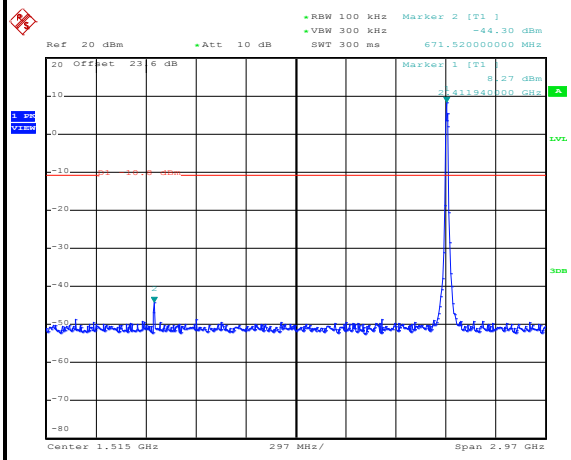
Date: 14.JAN.2019 11:51:29

Channel Plot



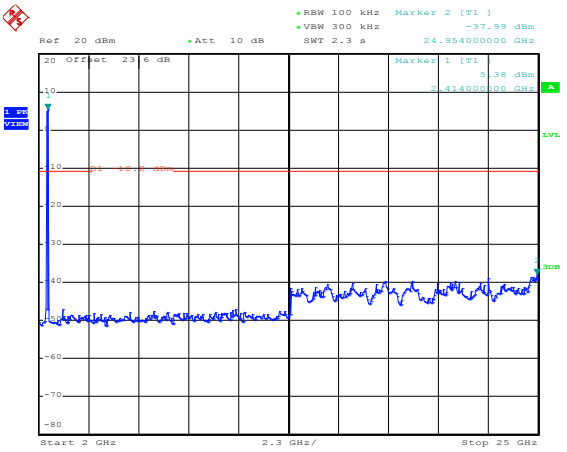
Date: 14.JAN.2019 11:51:45

Spurious Emission 30MHz~3GHz



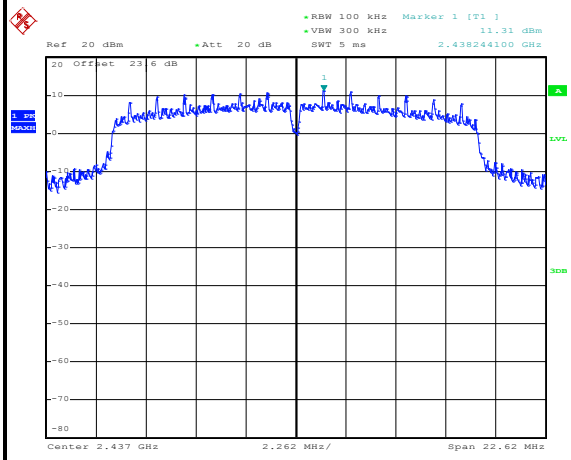
Date: 14.JAN.2019 11:52:11

Spurious Emission 2GHz~25GHz

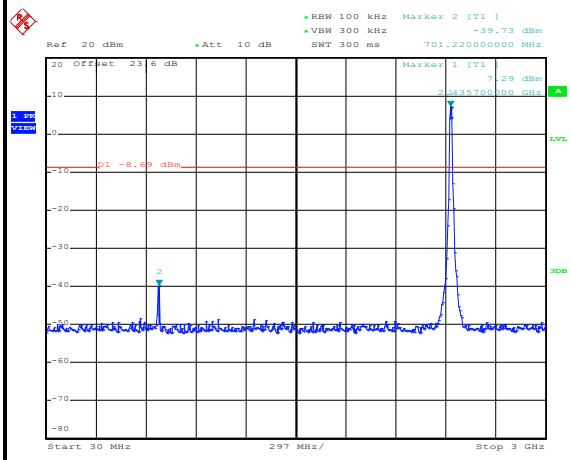
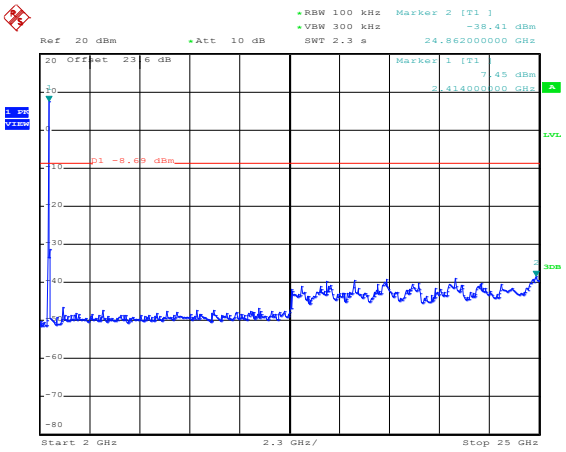


Date: 14.JAN.2019 11:52:25

Test Mode :	802.11g	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

Date: 14.JAN.2019 11:55:11

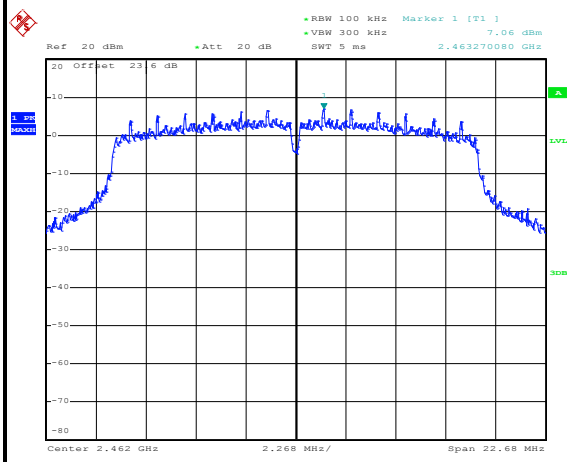
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 14.JAN.2019 11:55:45

Date: 14.JAN.2019 11:55:29

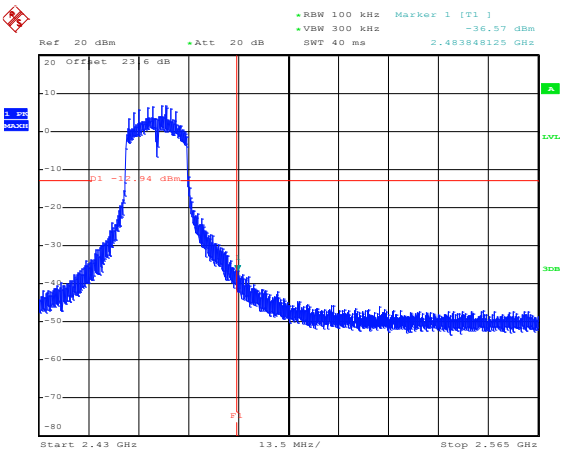
Test Mode :	802.11g	Test Channel :	11

100kHz PSD reference Level



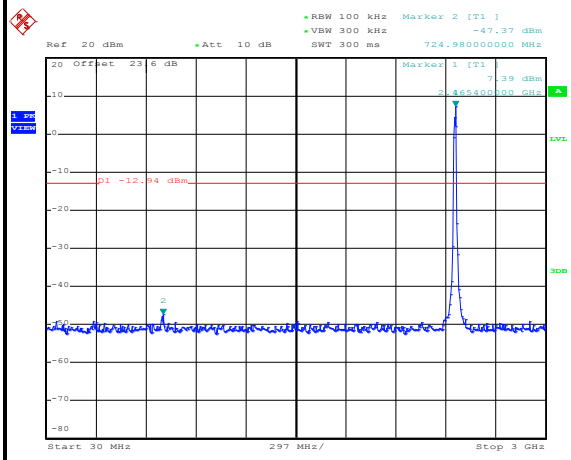
Date: 14.JAN.2019 12:00:39

Channel Plot



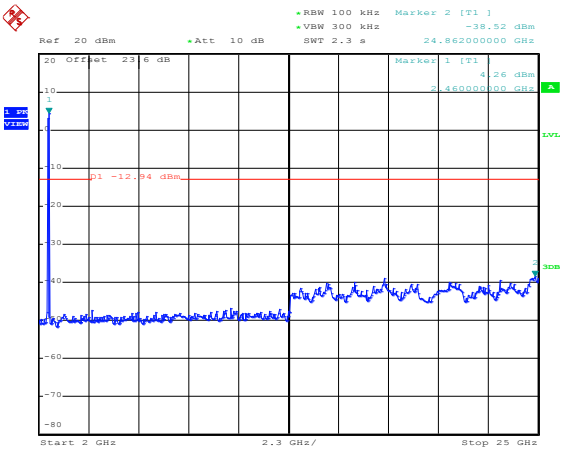
Date: 17.JAN.2019 20:14:43

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 12:03:19

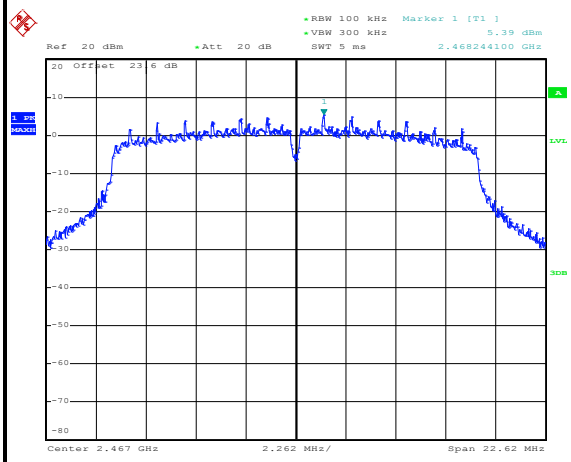
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 12:03:35

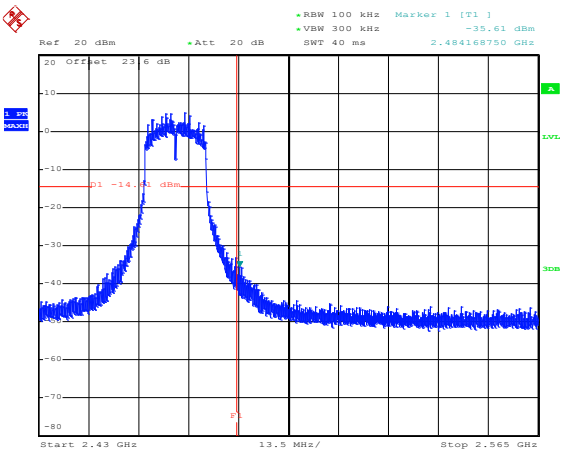
Test Mode :	802.11g	Test Channel :	12

100kHz PSD reference Level



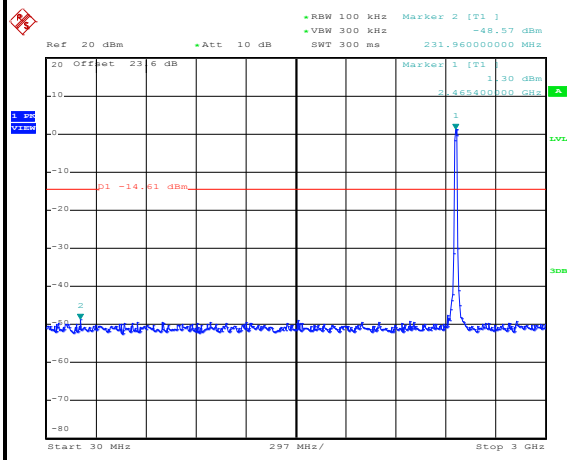
Date: 14.JAN.2019 13:40:38

Channel Plot



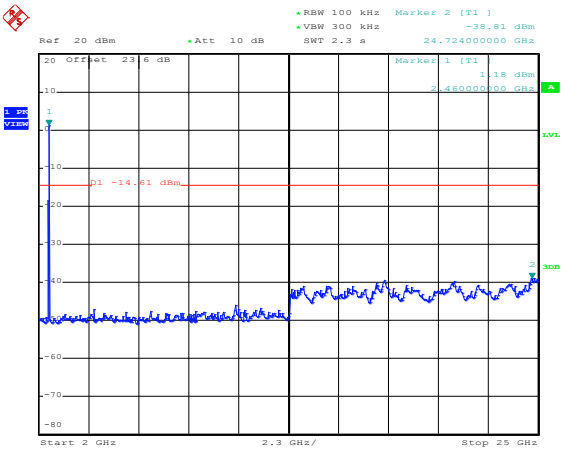
Date: 14.JAN.2019 13:41:01

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 13:41:20

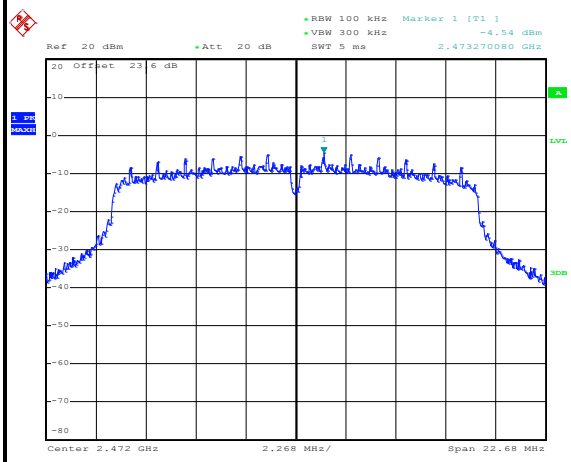
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 13:41:35

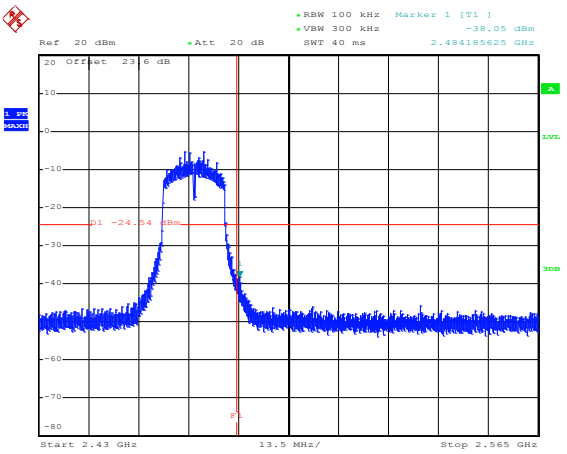
Test Mode :	802.11g	Test Channel :	13

100kHz PSD reference Level



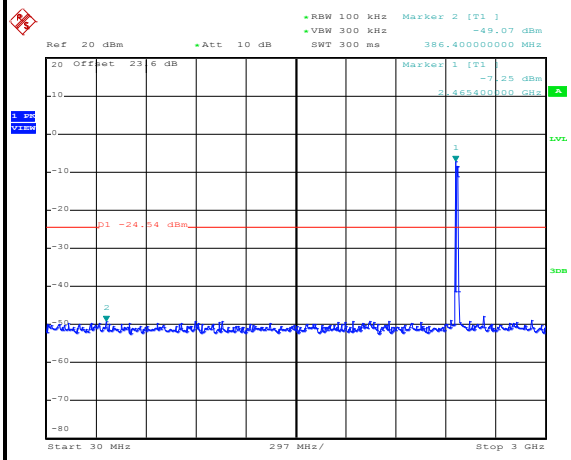
Date: 14.JAN.2019 13:46:49

Channel Plot



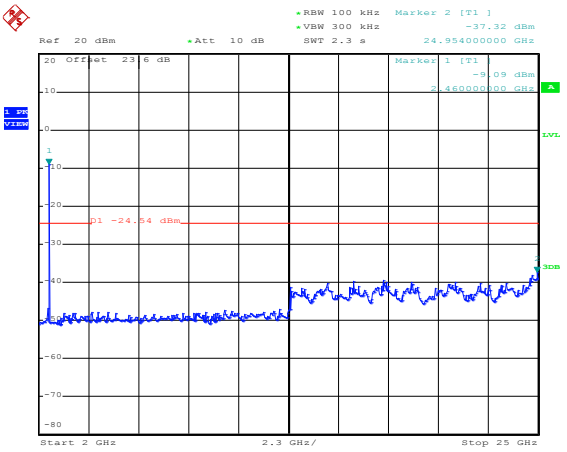
Date: 17.JAN.2019 20:19:36

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 13:47:47

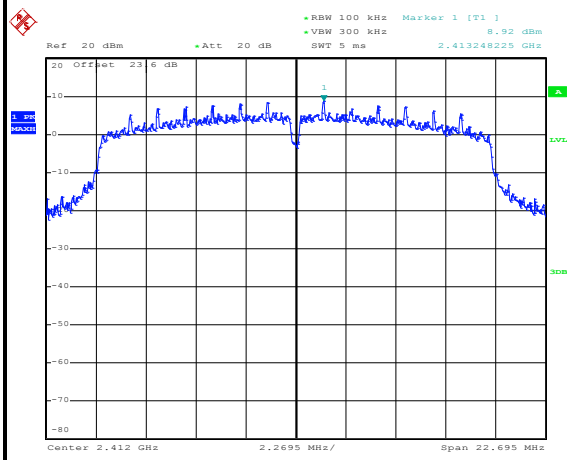
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 13:48:03

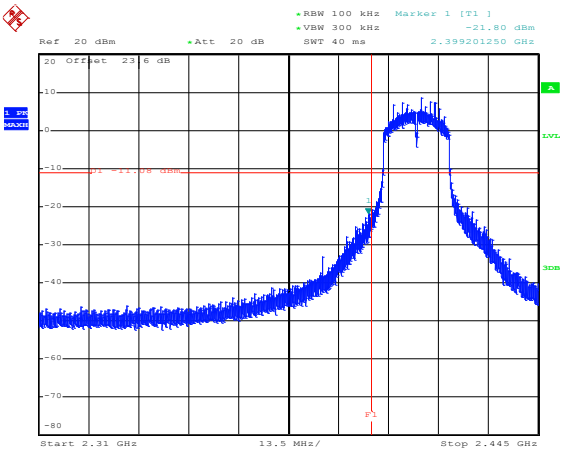
Test Mode :	802.11n HT20	Test Channel :	01

100kHz PSD reference Level



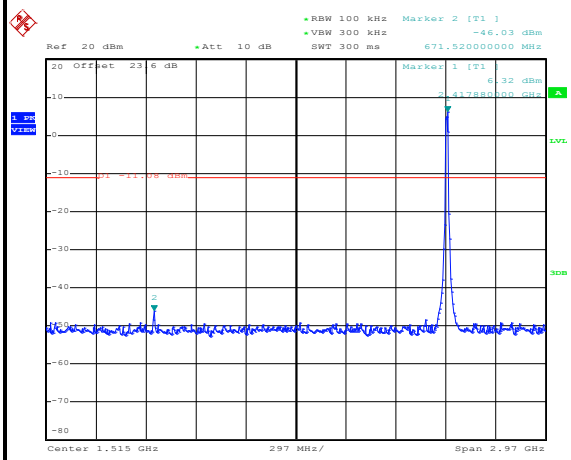
Date: 14.JAN.2019 13:54:53

Channel Plot



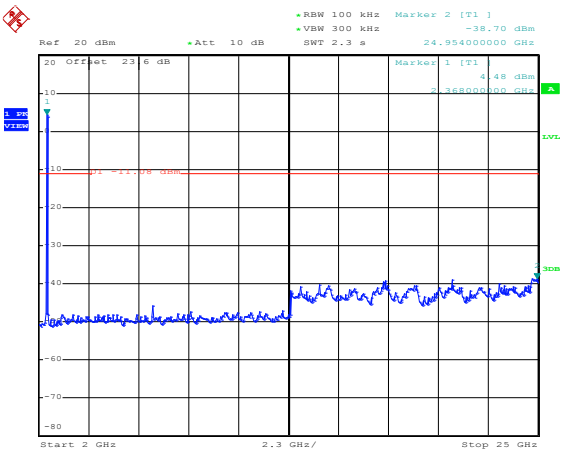
Date: 14.JAN.2019 13:55:10

Spurious Emission 30MHz~3GHz



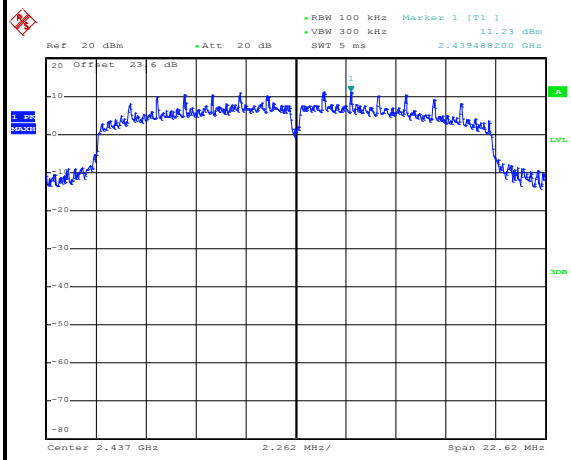
Date: 14.JAN.2019 13:55:43

Spurious Emission 2GHz~25GHz

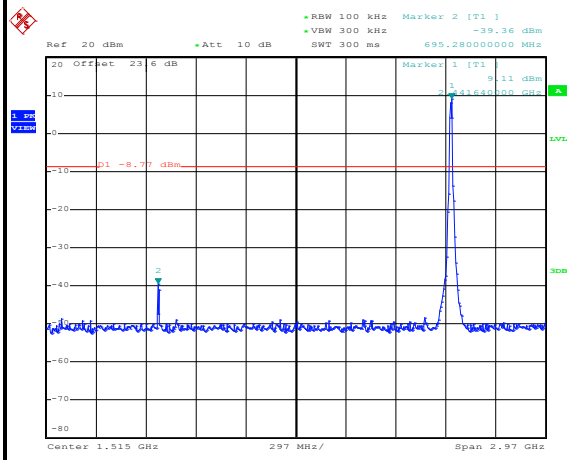
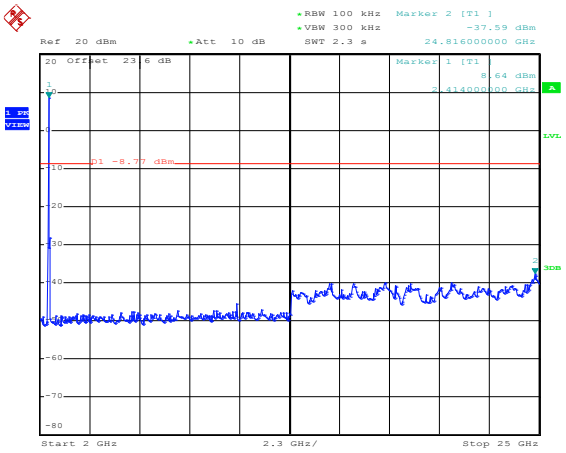


Date: 14.JAN.2019 13:55:58

Test Mode :	802.11n HT20	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

Date: 14.JAN.2019 14:02:36

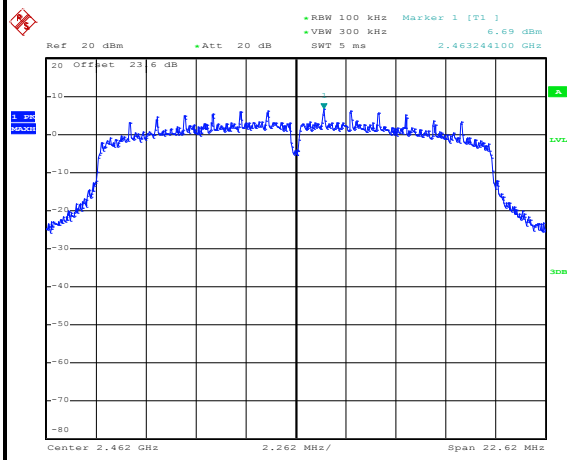
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Date: 14.JAN.2019 14:03:04

Date: 14.JAN.2019 14:03:18

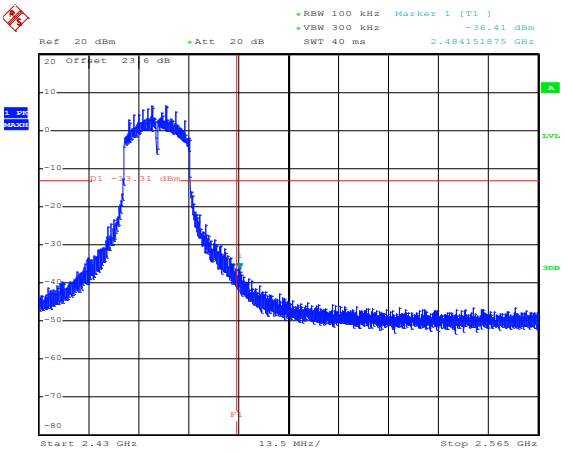
Test Mode :	802.11n HT20	Test Channel :	11

100kHz PSD reference Level



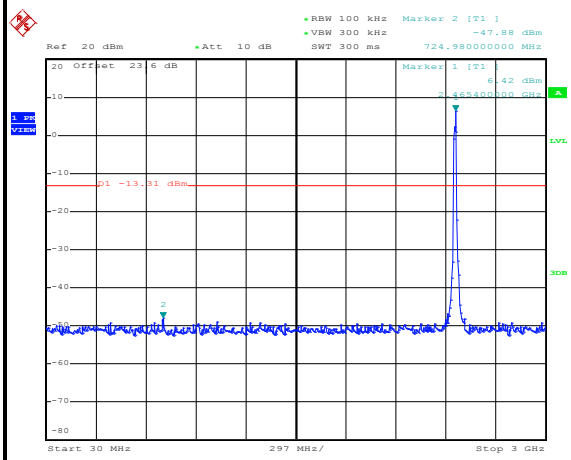
Date: 14.JAN.2019 14:07:11

Channel Plot



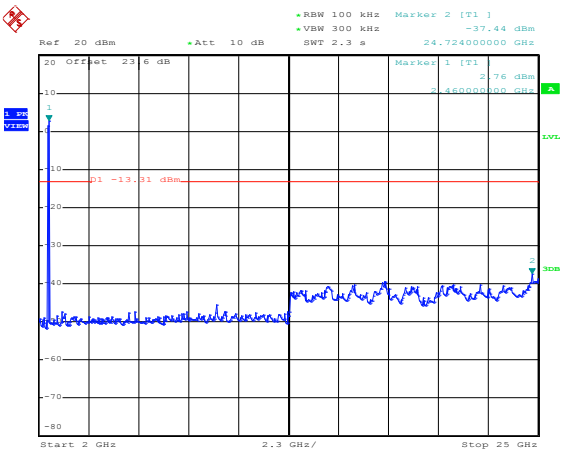
Date: 14.JAN.2019 14:07:30

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:07:47

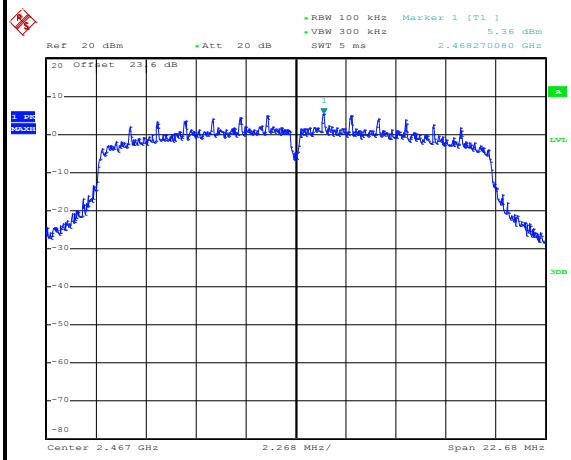
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:08:03

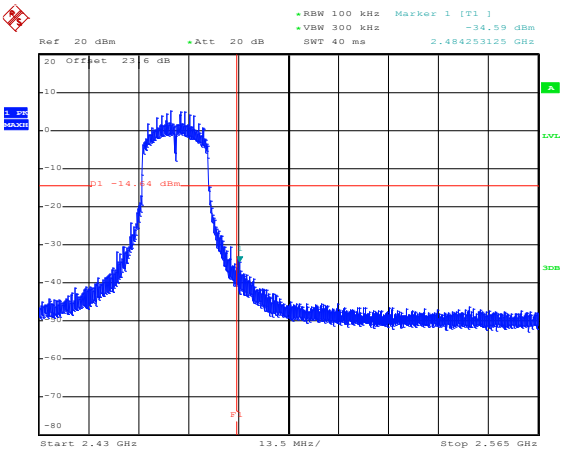
Test Mode :	802.11n HT20	Test Channel :	1

100kHz PSD reference Level



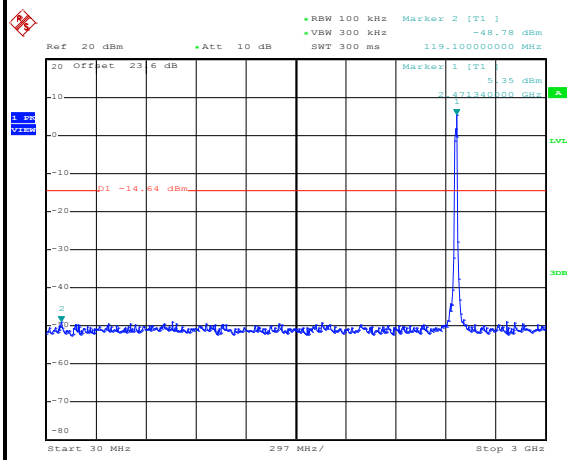
Date: 14.JAN.2019 14:11:44

Channel Plot



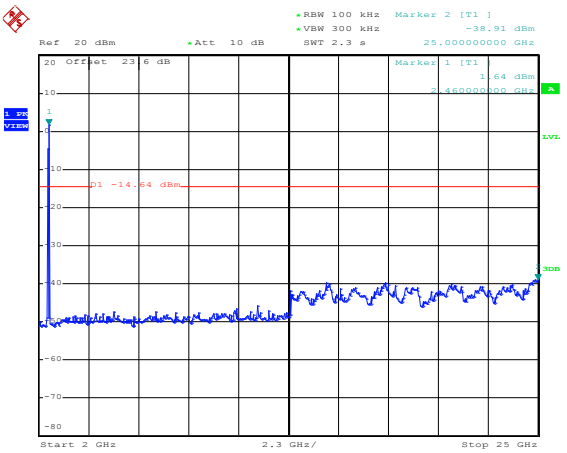
Date: 14.JAN.2019 14:12:04

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:12:22

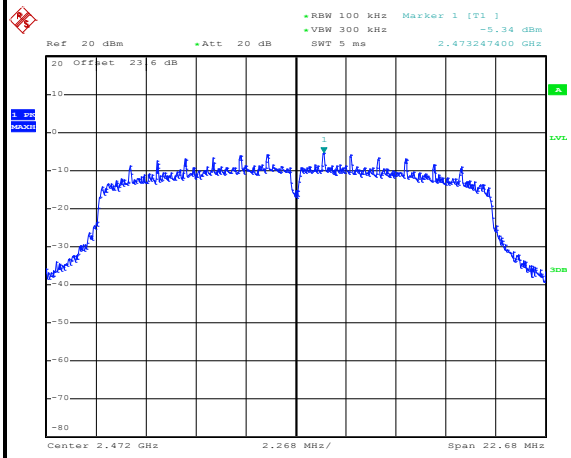
Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:12:38

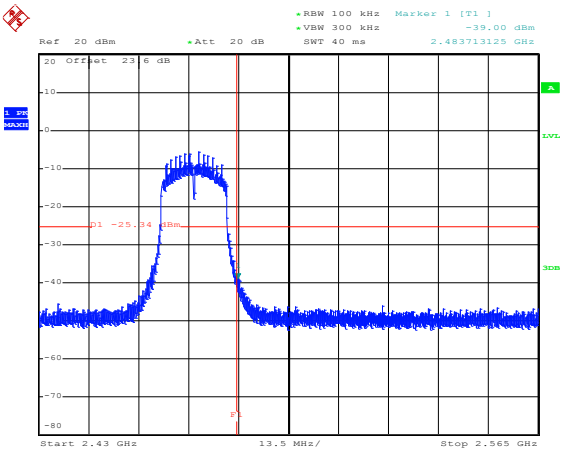
Test Mode :	802.11n HT20	Test Channel :	13

100kHz PSD reference Level



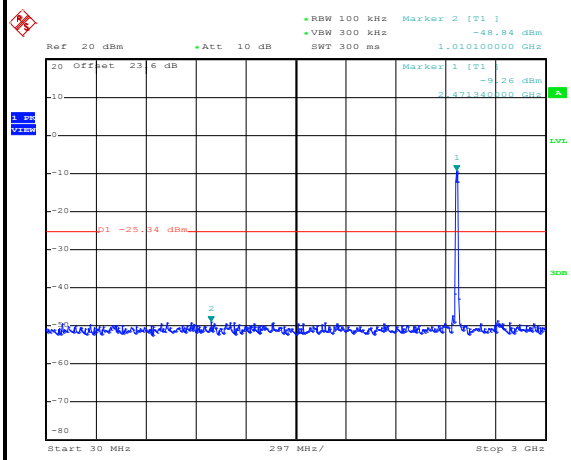
Date: 14.JAN.2019 14:16:03

Channel Plot



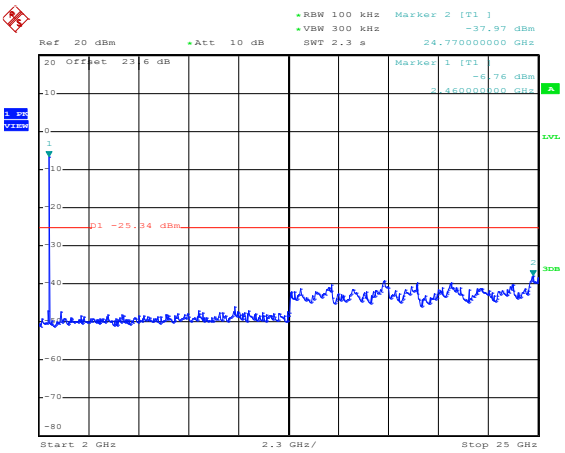
Date: 14.JAN.2019 14:16:27

Spurious Emission 30MHz~3GHz



Date: 14.JAN.2019 14:16:44

Spurious Emission 2GHz~25GHz



Date: 14.JAN.2019 14:16:59

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

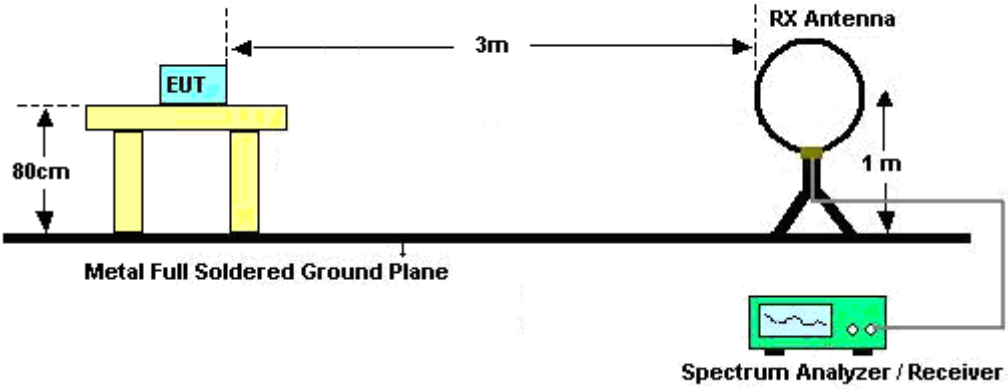
See list of measuring equipment of this test report.

3.5.3 Test Procedures

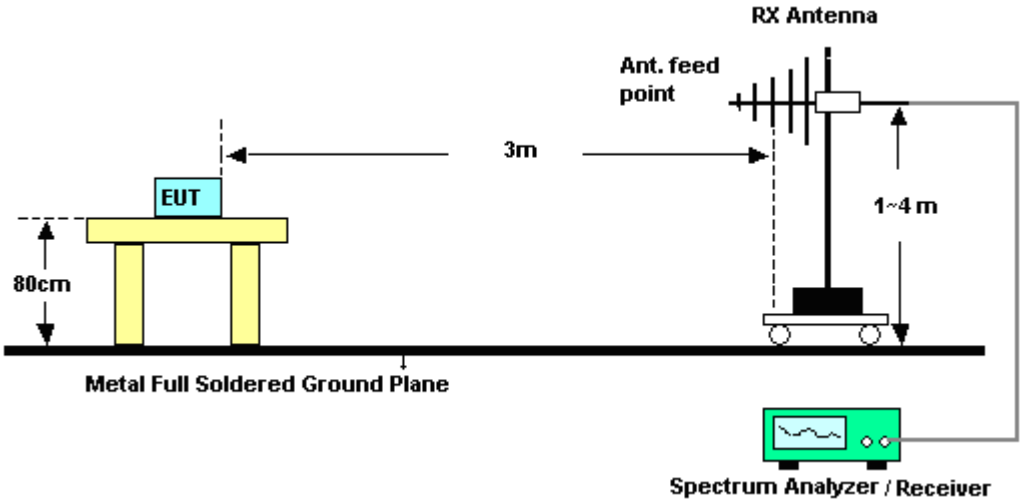
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the 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

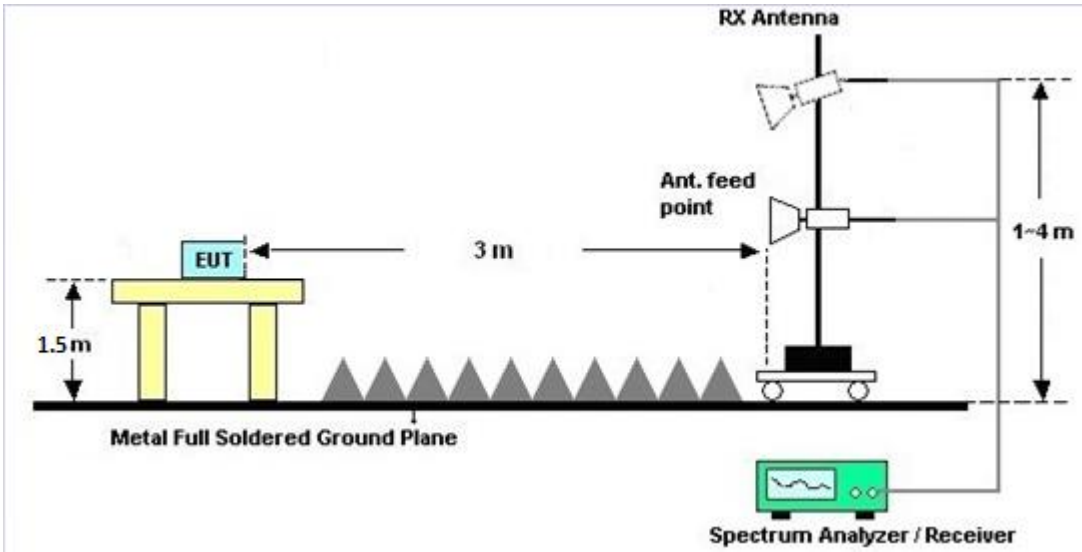
For radiated emissions below 30MHz



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.

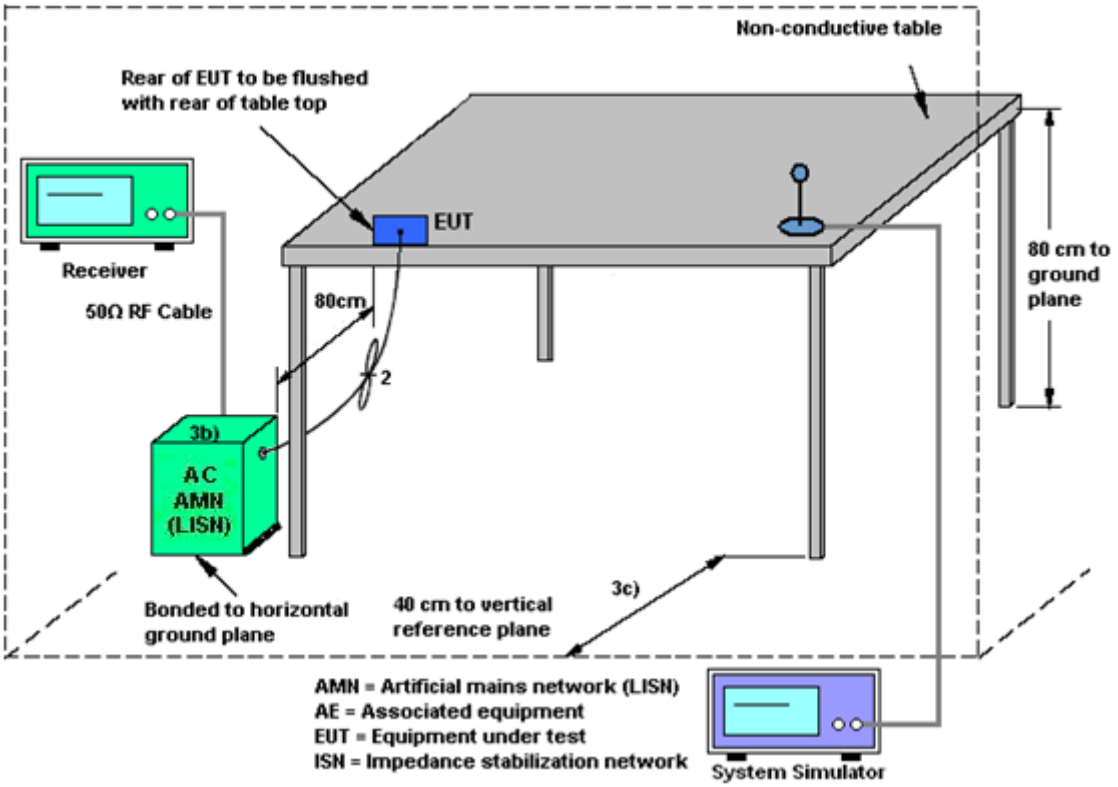
3.6.2 Measuring Instruments

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



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 Meter	Anritsu	ML2495A	1218006	N/A	Oct. 08, 2018	Jan. 08, 2019~ Jan. 21, 2019	Oct. 07, 2019	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 08, 2018	Jan. 08, 2019~ Jan. 21, 2019	Oct. 07, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Jan. 08, 2019~ Jan. 21, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Jan. 08, 2019~ Jan. 21, 2019	Feb. 28, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jan. 07, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Jan. 07, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Jan. 07, 2019	Nov. 13, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jan. 07, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2019	Jan. 07, 2019	Jan. 01, 2020	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Nov. 08, 2018	Jan. 07, 2019	Nov. 07, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 23, 2017	Jan. 10, 2019~ Jan. 14, 2019	Nov. 22, 2019	Radiation (03CH16-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Jan. 10, 2019~ Jan. 14, 2019	Jul. 15, 2019	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	May 08, 2018	Jan. 10, 2019~ Jan. 14, 2019	May 07, 2019	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 10, 2019~ Jan. 14, 2019	N/A	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800054001	1GHz~18GHz	Apr. 16, 2018	Jan. 10, 2019~ Jan. 14, 2019	Apr. 15, 2019	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY57290111	3Hz~26.5GHz	Nov. 29, 2018	Jan. 10, 2019~ Jan. 14, 2019	Nov. 28, 2019	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Sep. 07, 2018	Jan. 10, 2019~ Jan. 14, 2019	Sep. 06, 2019	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Feb. 02, 2018	Jan. 10, 2019~ Jan. 14, 2019	Feb. 01, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Jan. 22, 2018	Jan. 10, 2019~ Jan. 14, 2019	Jan. 21, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	335041/4	30M-18G	Jan. 22, 2018	Jan. 10, 2019~ Jan. 14, 2019	Jan. 21, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M~18GHz	Jan. 22, 2018	Jan. 10, 2019~ Jan. 14, 2019	Jan. 21, 2019	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2018	Jan. 10, 2019~ Jan. 14, 2019	Apr. 16, 2019	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M~18GHz	Jan. 22, 2018	Jan. 10, 2019~ Jan. 14, 2019	Jan. 21, 2019	Radiation (03CH16-HY)
Biconical Antenna	SCHWARZBECK	BBA 9106 & VHBB 9124	301	30MHz-300MHz	Feb. 06, 2018	Jan. 10, 2019~ Jan. 14, 2019	Feb. 05, 2019	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1000MHz	Oct. 02, 2018	Jan. 10, 2019~ Jan. 14, 2019	Oct. 01, 2019	Radiation (03CH16-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.2

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.8

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.9

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Luffy Lin	Temperature:	21~25	°C
Test Date:	2018/1/8 ~ 2018/01/21	Relative Humidity:	51~54	%

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	14.55	14.55	9.98	9.04	0.50	Pass
11b	1Mbps	1	6	2437	14.45	14.50	10.04	9.04	0.50	Pass
11b	1Mbps	1	11	2462	14.45	14.40	10.02	9.00	0.50	Pass
11b	1Mbps	1	12	2467	14.25	14.30	9.00	9.04	0.50	Pass
11b	1Mbps	1	13	2472	14.00	14.00	9.04	9.00	0.50	Pass
11g	6Mbps	1	1	2412	16.60	16.65	15.12	15.08	0.50	Pass
11g	6Mbps	1	6	2437	17.65	18.35	15.12	15.08	0.50	Pass
11g	6Mbps	1	11	2462	16.45	16.50	15.12	15.12	0.50	Pass
11g	6Mbps	1	12	2467	16.50	16.45	15.08	15.08	0.50	Pass
11g	6Mbps	1	13	2472	16.50	16.50	15.10	15.12	0.50	Pass
HT20	MCS0	1	1	2412	17.65	17.65	15.12	15.13	0.50	Pass
HT20	MCS0	1	6	2437	18.50	19.40	15.08	15.08	0.50	Pass
HT20	MCS0	1	11	2462	17.55	17.60	15.12	15.08	0.50	Pass
HT20	MCS0	1	12	2467	17.60	17.60	15.12	15.12	0.50	Pass
HT20	MCS0	1	13	2472	17.60	17.65	15.08	15.12	0.50	Pass

TEST RESULTS DATA
Peak Output Power

2.4GHz Band																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak 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	23.72	24.08	-	30.00	30.00	-0.40	-4.00	23.32	20.08	36.00	36.00	Pass
11b	1Mbps	1	6	2437	23.68	23.86	-	30.00	30.00	-0.40	-4.00	23.28	19.86	36.00	36.00	Pass
11b	1Mbps	1	11	2462	23.80	23.75	-	30.00	30.00	-0.40	-4.00	23.40	19.75	36.00	36.00	Pass
11b	1Mbps	1	12	2467	23.19	22.83	-	30.00	30.00	-0.40	-4.00	22.79	18.83	36.00	36.00	Pass
11b	1Mbps	1	13	2472	16.51	18.03	-	30.00	30.00	-0.40	-4.00	16.11	14.03	36.00	36.00	Pass
11g	6Mbps	1	1	2412	26.01	25.92	-	30.00	30.00	-0.40	-4.00	25.61	21.92	36.00	36.00	Pass
11g	6Mbps	1	6	2437	26.16	26.05	-	30.00	30.00	-0.40	-4.00	25.76	22.05	36.00	36.00	Pass
11g	6Mbps	1	11	2462	25.47	25.34	-	30.00	30.00	-0.40	-4.00	25.07	21.34	36.00	36.00	Pass
11g	6Mbps	1	12	2467	14.97	25.24	-	30.00	30.00	-0.40	-4.00	14.57	21.24	36.00	36.00	Pass
11g	6Mbps	1	13	2472	13.96	17.07	-	30.00	30.00	-0.40	-4.00	13.56	13.07	36.00	36.00	Pass
HT20	MCS0	1	1	2412	26.11	26.55	-	30.00	30.00	-0.40	-4.00	25.71	22.55	36.00	36.00	Pass
HT20	MCS0	1	6	2437	26.16	26.53	-	30.00	30.00	-0.40	-4.00	25.76	22.53	36.00	36.00	Pass
HT20	MCS0	1	11	2462	25.22	25.77	-	30.00	30.00	-0.40	-4.00	24.82	21.77	36.00	36.00	Pass
HT20	MCS0	1	12	2467	24.96	25.51	-	30.00	30.00	-0.40	-4.00	24.56	21.51	36.00	36.00	Pass
HT20	MCS0	1	13	2472	13.94	16.72	-	30.00	30.00	-0.40	-4.00	13.54	12.72	36.00	36.00	Pass

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

TEST RESULTS DATA
Average Output Power

2.4GHz Band									
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Ant 1	Ant 2	Ant 1	Ant 2	SUM
11b	1Mbps	1	1	2412	0.07	0.06	21.66	21.98	-
11b	1Mbps	1	6	2437	0.07	0.06	21.62	21.84	
11b	1Mbps	1	11	2462	0.07	0.06	21.83	21.68	
11b	1Mbps	1	12	2467	0.07	0.06	20.94	20.69	
11b	1Mbps	1	13	2472	0.07	0.06	14.29	15.76	
11g	6Mbps	1	1	2412	0.32	0.31	19.16	19.87	
11g	6Mbps	1	6	2437	0.32	0.31	21.64	21.59	
11g	6Mbps	1	11	2462	0.32	0.31	17.43	17.86	
11g	6Mbps	1	12	2467	0.32	0.31	15.70	16.24	
11g	6Mbps	1	13	2472	0.32	0.31	3.24	6.37	
HT20	MCS0	1	1	2412	0.31	0.31	18.55	19.42	
HT20	MCS0	1	6	2437	0.31	0.31	21.95	21.91	
HT20	MCS0	1	11	2462	0.31	0.31	16.71	17.53	
HT20	MCS0	1	12	2467	0.31	0.31	15.26	16.11	
HT20	MCS0	1	13	2472	0.31	0.31	3.39	5.51	

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

Report Number : FR8O0113-01C

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	0.06	-1.56	-	-0.40	-4.00	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-0.62	-0.11	-	-0.40	-4.00	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-0.36	-1.94	-	-0.40	-4.00	8.00	8.00	Pass
11b	1Mbps	1	12	2467	-2.06	-2.30	-	-0.40	-4.00	8.00	8.00	Pass
11b	1Mbps	1	13	2472	-8.32	-7.15	-	-0.40	-4.00	8.00	8.00	Pass
11g	6Mbps	1	1	2412	-6.51	-5.70	-	-0.40	-4.00	8.00	8.00	Pass
11g	6Mbps	1	6	2437	-4.02	-3.68	-	-0.40	-4.00	8.00	8.00	Pass
11g	6Mbps	1	11	2462	-7.74	-7.69	-	-0.40	-4.00	8.00	8.00	Pass
11g	6Mbps	1	12	2467	-10.03	-9.62	-	-0.40	-4.00	8.00	8.00	Pass
11g	6Mbps	1	13	2472	-21.76	-19.63	-	-0.40	-4.00	8.00	8.00	Pass
HT20	MCS0	1	1	2412	-6.97	-6.67	-	-0.40	-4.00	8.00	8.00	Pass
HT20	MCS0	1	6	2437	-2.68	-3.28	-	-0.40	-4.00	8.00	8.00	Pass
HT20	MCS0	1	11	2462	-7.72	-7.13	-	-0.40	-4.00	8.00	8.00	Pass
HT20	MCS0	1	12	2467	-9.69	-8.23	-	-0.40	-4.00	8.00	8.00	Pass
HT20	MCS0	1	13	2472	-22.61	-19.79	-	-0.40	-4.00	8.00	8.00	Pass

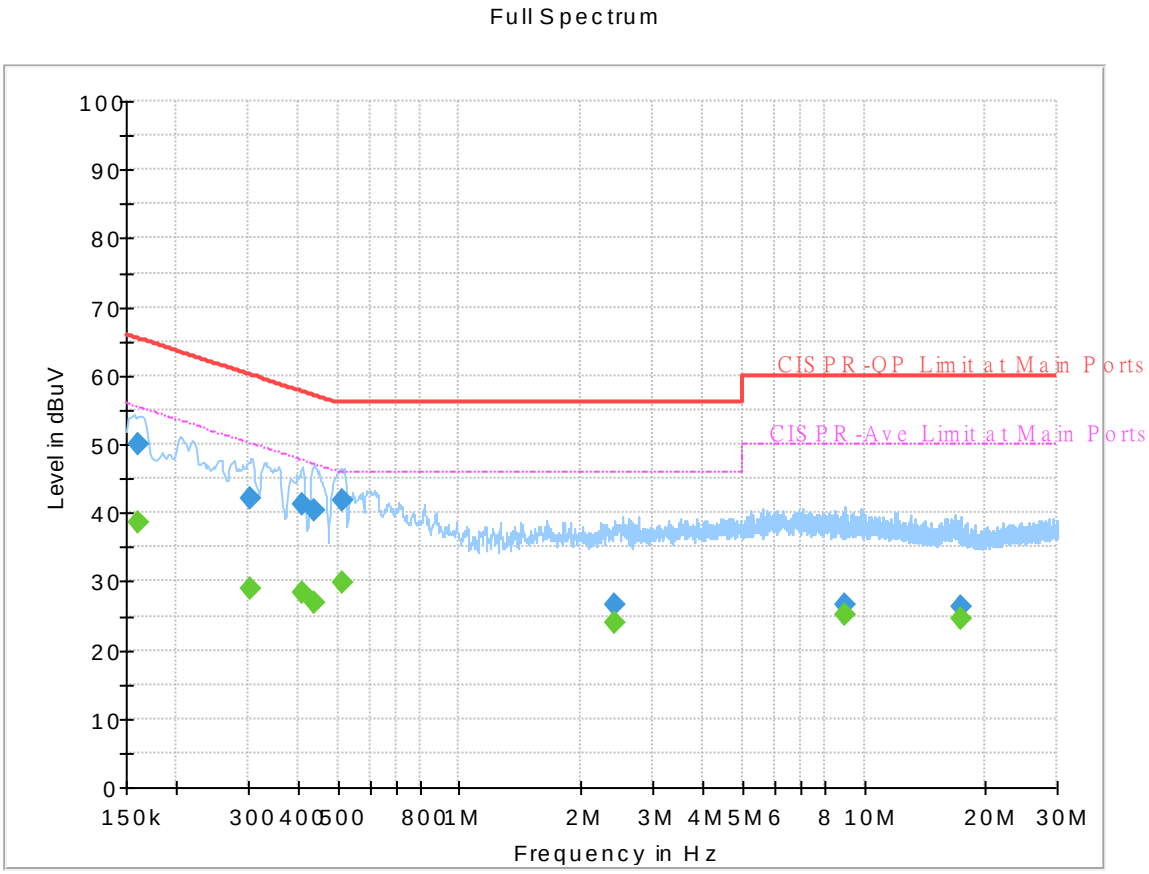
Measured power density (dBm) has offset with cable loss.

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	25~26℃
		Relative Humidity :	50~53%

EUT Information

Report NO :	8O0113-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

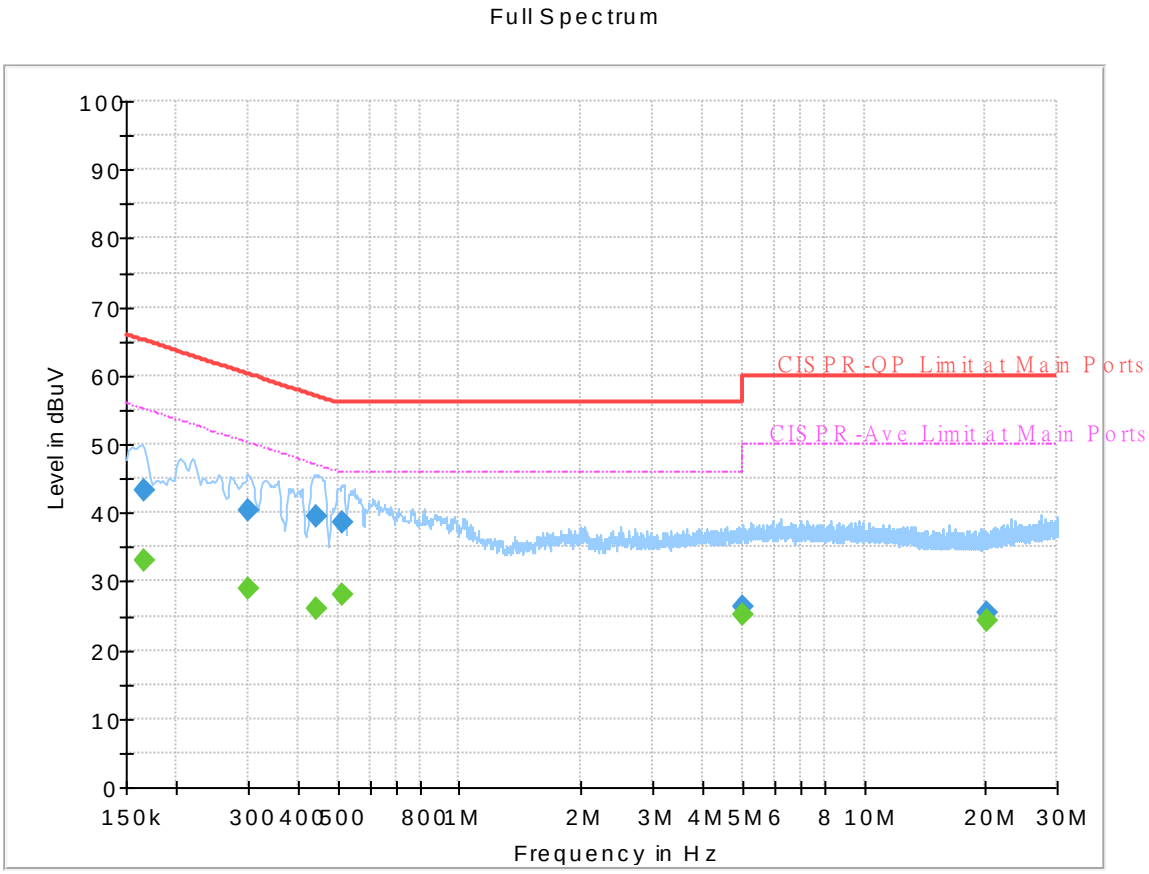


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	38.70	55.40	16.70	L1	OFF	19.5
0.161250	49.87	---	65.40	15.53	L1	OFF	19.5
0.305250	---	28.98	50.10	21.12	L1	OFF	19.5
0.305250	42.07	---	60.10	18.03	L1	OFF	19.5
0.411000	---	28.28	47.63	19.35	L1	OFF	19.5
0.411000	41.19	---	57.63	16.44	L1	OFF	19.5
0.438000	---	26.93	47.10	20.17	L1	OFF	19.5
0.438000	40.31	---	57.10	16.79	L1	OFF	19.5
0.512250	---	29.70	46.00	16.30	L1	OFF	19.5
0.512250	41.78	---	56.00	14.22	L1	OFF	19.5
2.418000	---	23.96	46.00	22.04	L1	OFF	19.6
2.418000	26.59	---	56.00	29.41	L1	OFF	19.6
8.943000	---	25.28	50.00	24.72	L1	OFF	19.9
8.943000	26.74	---	60.00	33.26	L1	OFF	19.9
17.423250	---	24.55	50.00	25.45	L1	OFF	20.2
17.423250	26.38	---	60.00	33.62	L1	OFF	20.2

EUT Information

Report NO :	8O0113-01
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)
0.165750	---	32.92	55.17	22.25	N	OFF	19.5
0.165750	43.39	---	65.17	21.78	N	OFF	19.5
0.300750	---	28.89	50.22	21.33	N	OFF	19.5
0.300750	40.40	---	60.22	19.82	N	OFF	19.5
0.442500	---	26.00	47.02	21.02	N	OFF	19.5
0.442500	39.48	---	57.02	17.54	N	OFF	19.5
0.512250	---	28.05	46.00	17.95	N	OFF	19.5
0.512250	38.60	---	56.00	17.40	N	OFF	19.5
5.034750	---	25.03	50.00	24.97	N	OFF	19.7
5.034750	26.33	---	60.00	33.67	N	OFF	19.7
20.082750	---	24.32	50.00	25.68	N	OFF	20.3
20.082750	25.36	---	60.00	34.64	N	OFF	20.3

Appendix C. Radiated Spurious Emission

Test Engineer :	Jacky Hung and CR Liao	Temperature :	23~25°C
		Relative Humidity :	55~57%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (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)
802.11b CH 01 2412MHz		2385.39	60	-14	74	44.46	27.22	18.31	29.99	225	145	P	H
		2385.495	50.52	-3.48	54	34.97	27.23	18.31	29.99	225	145	A	H
	*	2412	109.15	-	-	93.51	27.29	18.34	29.99	225	145	P	H
	*	2412	105.96	-	-	90.32	27.29	18.34	29.99	225	145	A	H
		2385.39	56.49	-17.51	74	40.95	27.22	18.31	29.99	104	98	P	V
		2385.39	47.09	-6.91	54	31.55	27.22	18.31	29.99	104	98	A	V
	*	2412	105.06	-	-	89.42	27.29	18.34	29.99	104	98	P	V
	*	2412	101.64	-	-	86	27.29	18.34	29.99	104	98	A	V
802.11b CH 06 2437MHz		2367.4	56.58	-17.42	74	41.11	27.18	18.28	29.99	192	141	P	H
		2388.4	45.12	-8.88	54	29.57	27.23	18.31	29.99	192	141	A	H
	*	2437	110.51	-	-	94.79	27.35	18.35	29.98	192	141	P	H
	*	2437	107.32	-	-	91.6	27.35	18.35	29.98	192	141	A	H
		2487.33	57.14	-16.86	74	41.26	27.47	18.38	29.97	192	141	P	H
		2485.65	45.71	-8.29	54	29.83	27.47	18.38	29.97	192	141	A	H
		2364.46	56.68	-17.32	74	41.22	27.17	18.28	29.99	100	97	P	V
		2388.68	44.24	-9.76	54	28.69	27.23	18.31	29.99	100	97	A	V
	*	2437	105.96	-	-	90.24	27.35	18.35	29.98	100	97	P	V
	*	2437	102.71	-	-	86.99	27.35	18.35	29.98	100	97	A	V
		2497.48	56.26	-17.74	74	40.34	27.49	18.39	29.96	100	97	P	V
		2485.72	44.77	-9.23	54	28.89	27.47	18.38	29.97	100	97	A	V

802.11b CH 11 2462MHz	*	2462	110.9	-	-	95.09	27.41	18.37	29.97	186	139	P	H
	*	2462	107.68	-	-	91.87	27.41	18.37	29.97	186	139	A	H
		2488.84	60.96	-13.04	74	45.08	27.47	18.38	29.97	186	139	P	H
		2488.8	52.88	-1.12	54	37	27.47	18.38	29.97	186	139	A	H
	*	2462	106.33	-	-	90.52	27.41	18.37	29.97	112	96	P	V
	*	2462	103.07	-	-	87.26	27.41	18.37	29.97	112	96	A	V
		2487.64	59.49	-14.51	74	43.61	27.47	18.38	29.97	112	96	P	V
		2488.8	49.61	-4.39	54	33.73	27.47	18.38	29.97	112	96	A	V
802.11b CH 12 2467MHz	*	2467	109.8	-	-	93.98	27.42	18.37	29.97	171	140	P	H
	*	2467	106.52	-	-	90.7	27.42	18.37	29.97	171	140	A	H
		2484.16	61.61	-12.39	74	45.74	27.46	18.38	29.97	171	140	P	H
		2484.44	53.41	-0.59	54	37.54	27.46	18.38	29.97	171	140	A	H
	*	2467	105.07	-	-	89.25	27.42	18.37	29.97	100	95	P	V
	*	2467	101.83	-	-	86.01	27.42	18.37	29.97	100	95	A	V
		2484.28	60.28	-13.72	74	44.41	27.46	18.38	29.97	100	95	P	V
		2484.4	50.46	-3.54	54	34.59	27.46	18.38	29.97	100	95	A	V
802.11b CH 13 2472MHz	*	2472	103.01	-	-	87.18	27.43	18.37	29.97	128	143	P	H
	*	2472	99.66	-	-	83.83	27.43	18.37	29.97	128	143	A	H
		2483.68	60.02	-13.98	74	44.15	27.46	18.38	29.97	128	143	P	H
		2483.52	53.02	-0.98	54	37.15	27.46	18.38	29.97	128	143	A	H
	*	2472	95.85	-	-	80.02	27.43	18.37	29.97	227	126	P	V
	*	2472	92.72	-	-	76.89	27.43	18.37	29.97	227	126	A	V
		2483.52	57.15	-16.85	74	41.28	27.46	18.38	29.97	227	126	P	V
		2483.52	47.28	-6.72	54	31.41	27.46	18.38	29.97	227	126	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	39.83	-34.17	74	53.36	31.25	13.76	58.54	100	0	P	H
		4824	39.61	-34.39	74	53.14	31.25	13.76	58.54	100	0	P	V
802.11b CH 06 2437MHz		4874	39.88	-34.12	74	53.22	31.35	13.84	58.53	100	0	P	H
		7311	43.48	-30.52	74	51.16	36.07	15.22	58.97	100	0	P	H
		4874	40.33	-33.67	74	53.67	31.35	13.84	58.53	100	0	P	V
		7311	42.85	-31.15	74	50.53	36.07	15.22	58.97	100	0	P	V
802.11b CH 11 2462MHz		4924	39.95	-34.05	74	53.1	31.45	13.92	58.52	100	0	P	H
		7386	42.82	-31.18	74	50.29	36.28	15.15	58.9	100	0	P	H
		4924	39.62	-34.38	74	52.77	31.45	13.92	58.52	100	0	P	V
		7386	43	-31	74	50.47	36.28	15.15	58.9	100	0	P	V
802.11b CH 12 2467MHz		4934	39.98	-34.02	74	53.09	31.47	13.93	58.51	100	0	P	H
		7401	43.19	-30.81	74	50.62	36.32	15.14	58.89	100	0	P	H
		4934	39.92	-34.08	74	53.03	31.47	13.93	58.51	100	0	P	V
		7401	43.5	-30.5	74	50.93	36.32	15.14	58.89	100	0	P	V
802.11b CH 13 2472MHz		4944	39.85	-34.15	74	52.92	31.49	13.95	58.51	100	0	P	H
		7416	43.25	-30.75	74	50.57	36.36	15.2	58.88	100	0	P	H
		4944	40	-34	74	53.07	31.49	13.95	58.51	100	0	P	V
		7416	43.13	-30.87	74	50.45	36.36	15.2	58.88	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		2389.59	63.05	-10.95	74	47.49	27.24	18.31	29.99	261	141	P	H
		2390	53.33	-0.67	54	37.76	27.24	18.32	29.99	261	141	A	H
	*	2412	108.87	-	-	93.23	27.29	18.34	29.99	261	141	P	H
	*	2412	101.46	-	-	85.82	27.29	18.34	29.99	261	141	A	H
		2390	59.78	-14.22	74	44.21	27.24	18.32	29.99	104	83	P	V
		2390	48.92	-5.08	54	33.35	27.24	18.32	29.99	104	83	A	V
	*	2412	104.63	-	-	88.99	27.29	18.34	29.99	104	83	P	V
	*	2412	96.57	-	-	80.93	27.29	18.34	29.99	104	83	A	V
802.11g CH 06 2437MHz		2389.66	59.47	-14.53	74	43.9	27.24	18.32	29.99	285	138	P	H
		2389.66	48.11	-5.89	54	32.54	27.24	18.32	29.99	285	138	A	H
	*	2437	112.39	-	-	96.67	27.35	18.35	29.98	285	138	P	H
	*	2437	104.74	-	-	89.02	27.35	18.35	29.98	285	138	A	H
		2483.83	61.32	-12.68	74	45.45	27.46	18.38	29.97	285	138	P	H
		2483.69	48.78	-5.22	54	32.91	27.46	18.38	29.97	285	138	A	H
		2387.7	56.43	-17.57	74	40.88	27.23	18.31	29.99	100	95	P	V
		2389.8	45.96	-8.04	54	30.39	27.24	18.32	29.99	100	95	A	V
	*	2437	107.64	-	-	91.92	27.35	18.35	29.98	100	95	P	V
	*	2437	100.33	-	-	84.61	27.35	18.35	29.98	100	95	A	V
		2485.72	59.3	-14.7	74	43.42	27.47	18.38	29.97	100	95	P	V
		2484.18	46.34	-7.66	54	30.47	27.46	18.38	29.97	100	95	A	V

802.11g CH 11 2462MHz	*	2462	107.88	-	-	92.07	27.41	18.37	29.97	276	142	P	H
	*	2462	100.34	-	-	84.53	27.41	18.37	29.97	276	142	A	H
		2484.2	66.08	-7.92	74	50.21	27.46	18.38	29.97	276	142	P	H
		2483.52	53.12	-0.88	54	37.25	27.46	18.38	29.97	276	142	A	H
													H
													H
	*	2462	102.93	-	-	87.12	27.4	18.37	29.97	111	95	P	V
	*	2462	95.66	-	-	79.85	27.4	18.37	29.97	111	95	A	V
		2483.76	60.99	-13.01	74	45.12	27.46	18.38	29.97	111	95	P	V
		2483.52	49.19	-4.81	54	33.32	27.46	18.38	29.97	111	95	A	V
													V
													V
802.11g CH 12 2467MHz	*	2467	107.37	-	-	91.55	27.42	18.37	29.97	277	139	P	H
	*	2467	98.91	-	-	83.09	27.42	18.37	29.97	277	139	A	H
		2485	67.27	-6.73	74	51.4	27.46	18.38	29.97	277	139	P	H
		2483.56	52.77	-1.23	54	36.9	27.46	18.38	29.97	277	139	A	H
	*	2467	101.56	-	-	85.74	27.42	18.37	29.97	100	95	P	V
	*	2467	93.79	-	-	77.97	27.42	18.37	29.97	100	95	A	V
		2484	61.26	-12.74	74	45.39	27.46	18.38	29.97	100	95	P	V
		2483.52	49.13	-4.87	54	33.26	27.46	18.38	29.97	100	95	A	V
802.11g CH 13 2472MHz	*	2472	93.96	-	-	78.13	27.43	18.37	29.97	281	141	P	H
	*	2472	86.3	-	-	70.47	27.43	18.37	29.97	281	141	A	H
		2483.8	65.68	-8.32	74	49.81	27.46	18.38	29.97	281	141	P	H
		2483.52	51.98	-2.02	54	36.11	27.46	18.38	29.97	281	141	A	H
	*	2472	88.73	-	-	72.9	27.43	18.37	29.97	116	95	P	V
	*	2472	81.19	-	-	65.36	27.43	18.37	29.97	116	95	A	V
		2484.12	61.37	-12.63	74	45.5	27.46	18.38	29.97	116	95	P	V
		2483.56	48.95	-5.05	54	33.08	27.46	18.38	29.97	116	95	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	39.34	-34.66	74	52.87	31.25	13.76	58.54	100	0	P	H
		4824	39.19	-34.81	74	52.72	31.25	13.76	58.54	100	0	P	V
802.11g CH 06 2437MHz		4874	39.51	-34.49	74	52.85	31.35	13.84	58.53	100	0	P	H
		7311	43.79	-30.21	74	51.47	36.07	15.22	58.97	100	0	P	H
		4874	39.68	-34.32	74	53.02	31.35	13.84	58.53	100	0	P	V
		7311	42.68	-31.32	74	50.36	36.07	15.22	58.97	100	0	P	V
802.11g CH 11 2462MHz		4924	40.8	-33.2	74	53.95	31.45	13.92	58.52	100	0	P	H
		7386	42.77	-31.23	74	50.24	36.28	15.15	58.9	100	0	P	H
		4924	39.32	-34.68	74	52.47	31.45	13.92	58.52	100	0	P	V
		7386	43.15	-30.85	74	50.62	36.28	15.15	58.9	100	0	P	V
802.11g CH 12 2467MHz		4934	39.32	-34.68	74	52.43	31.47	13.93	58.51	100	0	P	H
		7401	42.66	-31.34	74	50.09	36.32	15.14	58.89	100	0	P	H
		4934	40.02	-33.98	74	53.13	31.47	13.93	58.51	100	0	P	V
		7401	43	-31	74	50.43	36.32	15.14	58.89	100	0	P	V
802.11g CH 13 2472MHz		4944	40.44	-33.56	74	53.51	31.49	13.95	58.51	100	0	P	H
		7416	43.26	-30.74	74	50.58	36.36	15.2	58.88	100	0	P	H
		4944	40.05	-33.95	74	53.12	31.49	13.95	58.51	100	0	P	V
		7416	43.47	-30.53	74	50.79	36.36	15.2	58.88	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		2390	65.34	-8.66	74	49.77	27.24	18.32	29.99	254	142	P	H
		2390	52.73	-1.27	54	37.16	27.24	18.32	29.99	254	142	A	H
	*	2412	108.33	-	-	92.69	27.29	18.34	29.99	254	142	P	H
	*	2412	100.6	-	-	84.96	27.29	18.34	29.99	254	142	A	H
		2384.97	61.67	-12.33	74	46.13	27.22	18.31	29.99	102	95	P	V
		2389.905	48.54	-5.46	54	32.97	27.24	18.32	29.99	102	95	A	V
	*	2412	103.67	-	-	88.03	27.29	18.34	29.99	102	95	P	V
	*	2412	96.03	-	-	80.39	27.29	18.34	29.99	102	95	A	V
802.11n HT20 CH 06 2437MHz		2387.42	59.65	-14.35	74	44.1	27.23	18.31	29.99	286	139	P	H
		2389.8	49.14	-4.86	54	33.57	27.24	18.32	29.99	286	139	A	H
	*	2437	112.36	-	-	96.64	27.35	18.35	29.98	286	139	P	H
	*	2437	104.89	-	-	89.17	27.35	18.35	29.98	286	139	A	H
		2484.46	61.68	-12.32	74	45.81	27.46	18.38	29.97	286	139	P	H
		2483.76	49.9	-4.1	54	34.03	27.46	18.38	29.97	286	139	A	H
		2389.8	56.76	-17.24	74	41.19	27.24	18.32	29.99	100	95	P	V
		2389.8	46.48	-7.52	54	30.91	27.24	18.32	29.99	100	95	A	V
	*	2437	107.85	-	-	92.13	27.35	18.35	29.98	100	95	P	V
	*	2437	100.19	-	-	84.47	27.35	18.35	29.98	100	95	A	V
		2483.69	60.58	-13.42	74	44.71	27.46	18.38	29.97	100	95	P	V
		2483.55	47.34	-6.66	54	31.47	27.46	18.38	29.97	100	95	A	V

802.11n HT20 CH 11 2462MHz	*	2462	108.34	-	-	92.53	27.41	18.37	29.97	278	139	P	H
	*	2462	100.31	-	-	84.5	27.41	18.37	29.97	278	139	A	H
		2484.4	66.67	-7.33	74	50.8	27.46	18.38	29.97	278	139	P	H
		2483.52	53.04	-0.96	54	37.17	27.46	18.38	29.97	278	139	A	H
	*	2462	102.68	-	-	86.87	27.41	18.37	29.97	113	95	P	V
	*	2462	95.33	-	-	79.52	27.41	18.37	29.97	113	95	A	V
		2486.52	62.17	-11.83	74	46.29	27.47	18.38	29.97	113	95	P	V
		2483.68	49.16	-4.84	54	33.29	27.46	18.38	29.97	113	95	A	V
802.11n HT20 CH 12 2467MHz	*	2467	106.49	-	-	90.67	27.42	18.37	29.97	279	139	P	H
	*	2467	99.05	-	-	83.23	27.42	18.37	29.97	279	139	A	H
		2484.68	67.01	-6.99	74	51.14	27.46	18.38	29.97	279	139	P	H
		2483.64	52.81	-1.19	54	36.94	27.46	18.38	29.97	279	139	A	H
	*	2467	101.18	-	-	85.36	27.42	18.37	29.97	112	112	P	V
	*	2467	93.6	-	-	77.78	27.42	18.37	29.97	112	112	A	V
		2483.8	64.28	-9.72	74	48.41	27.46	18.38	29.97	112	112	P	V
		2483.64	49.42	-4.58	54	33.55	27.46	18.38	29.97	112	112	A	V
802.11n HT20 CH 13 2472MHz	*	2472	94.17	-	-	78.34	27.43	18.37	29.97	278	139	P	H
	*	2472	86.48	-	-	70.65	27.43	18.37	29.97	278	139	A	H
		2483.56	66.9	-7.1	74	51.03	27.46	18.38	29.97	278	139	P	H
		2483.52	53.34	-0.66	54	37.47	27.46	18.38	29.97	278	139	A	H
	*	2472	88.9	-	-	73.07	27.43	18.37	29.97	111	94	P	V
	*	2472	80.9	-	-	65.07	27.43	18.37	29.97	111	94	A	V
		2483.72	63.19	-10.81	74	47.32	27.46	18.38	29.97	111	94	P	V
		2483.52	49.71	-4.29	54	33.84	27.46	18.38	29.97	111	94	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	38.98	-35.02	74	52.51	31.25	13.76	58.54	100	0	P	H
		4824	39.55	-34.45	74	53.08	31.25	13.76	58.54	100	0	P	V
802.11n HT20 CH 06 2437MHz		4874	39.34	-34.66	74	52.68	31.35	13.84	58.53	100	0	P	H
		7311	42.81	-31.19	74	50.49	36.07	15.22	58.97	100	0	P	H
		4874	39.28	-34.72	74	52.62	31.35	13.84	58.53	100	0	P	V
		7311	43.92	-30.08	74	51.6	36.07	15.22	58.97	100	0	P	V
802.11n HT20 CH 11 2462MHz		4924	39.43	-34.57	74	52.58	31.45	13.92	58.52	100	0	P	H
		7386	42.66	-31.34	74	50.13	36.28	15.15	58.9	100	0	P	H
		4924	39.34	-34.66	74	52.49	31.45	13.92	58.52	100	0	P	V
		7386	42.95	-31.05	74	50.42	36.28	15.15	58.9	100	0	P	V
802.11n HT20 CH 12 2467MHz		4934	39.69	-34.31	74	52.8	31.47	13.93	58.51	100	0	P	H
		7401	44.24	-29.76	74	51.67	36.32	15.14	58.89	100	0	P	H
		4934	39.5	-34.5	74	52.61	31.47	13.93	58.51	100	0	P	V
		7401	42.91	-31.09	74	50.34	36.32	15.14	58.89	100	0	P	V
802.11n HT20 CH 13 2472MHz		4944	39.2	-34.8	74	52.36	31.4	13.95	58.51	100	0	P	H
		7416	43.53	-30.47	74	50.83	36.38	15.2	58.88	100	0	P	H
		4944	39.22	-34.78	74	52.38	31.4	13.95	58.51	100	0	P	V
		7416	43.82	-30.18	74	51.12	36.38	15.2	58.88	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
Emission below 1GHz
2.4GHz WIFI 802.11b (LF)

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)
2.4GHz 802.11b LF		119.91	27.8	-15.7	43.5	41.28	17.7	1.19	32.37	-	-	P	H
		148.53	17.48	-26.02	43.5	30.51	17.85	1.48	32.36	-	-	P	H
		243.57	17.62	-28.38	46	29.56	18.23	2.21	32.38	-	-	P	H
		461.7	24.4	-21.6	46	30.2	23.55	3.2	32.55	-	-	P	H
		673.1	27.7	-18.3	46	29.85	26.33	4.09	32.57	-	-	P	H
		836.9	32.37	-13.63	46	31.4	28.55	4.57	32.15	100	0	P	H
		52.14	24.66	-15.34	40	41.7	14.48	0.91	32.43	100	0	P	V
		119.91	23.98	-19.52	43.5	37.46	17.7	1.19	32.37	-	-	P	V
		182.28	19.23	-24.27	43.5	34.51	15.42	1.65	32.35	-	-	P	V
		462.4	24.45	-21.55	46	30.23	23.57	3.2	32.55	-	-	P	V
		601.7	27.43	-18.57	46	30.67	25.61	3.83	32.68	-	-	P	V
		750.1	29.62	-16.38	46	29.83	27.7	4.53	32.44	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2385.495	58.97	-15.03	74	43.42	27.23	18.31	29.99	263	131	P	H
		2385.6	51.28	-2.72	54	35.73	27.23	18.31	29.99	263	131	A	H
	*	2412	106.84	-	-	91.2	27.29	18.34	29.99	263	131	P	H
	*	2412	103.52	-	-	87.88	27.29	18.34	29.99	263	131	A	H
		2368.485	57.02	-16.98	74	41.55	27.18	18.28	29.99	119	168	P	V
		2385.6	46.59	-7.41	54	31.04	27.23	18.31	29.99	119	168	A	V
	*	2412	101.38	-	-	85.74	27.29	18.34	29.99	119	168	P	V
	*	2412	98.09	-	-	82.45	27.29	18.34	29.99	119	168	A	V
802.11b CH 06 2437MHz		2358.86	57.01	-16.99	74	41.58	27.16	18.27	30	284	135	P	H
		2389.94	45.15	-8.85	54	29.58	27.24	18.32	29.99	284	135	A	H
	*	2437	107.06	-	-	91.34	27.35	18.35	29.98	284	135	P	H
	*	2437	103.85	-	-	88.13	27.35	18.35	29.98	284	135	A	H
		2496.92	57.09	-16.91	74	41.17	27.49	18.39	29.96	284	135	P	H
		2487.96	45.72	-8.28	54	29.84	27.47	18.38	29.97	284	135	A	H
		2378.04	56.31	-17.69	74	40.79	27.21	18.3	29.99	119	170	P	V
		2389.66	44.22	-9.78	54	28.65	27.24	18.32	29.99	119	170	A	V
	*	2437	101.24	-	-	85.52	27.35	18.35	29.98	119	170	P	V
	*	2437	98.08	-	-	82.36	27.35	18.35	29.98	119	170	A	V
		2498.32	56.98	-17.02	74	41.05	27.5	18.39	29.96	119	170	P	V
		2484.53	44.66	-9.34	54	28.79	27.46	18.38	29.97	119	170	A	V

802.11b CH 11 2462MHz	*	2462	107.23	-	-	91.42	27.41	18.37	29.97	277	137	P	H
	*	2462	104	-	-	88.19	27.41	18.37	29.97	277	137	A	H
		2490.6	59.51	-14.49	74	43.62	27.48	18.38	29.97	277	137	P	H
		2487.96	51.31	-2.69	54	35.43	27.47	18.38	29.97	277	137	A	H
	*	2462	101.73	-	-	85.92	27.41	18.37	29.97	111	166	P	V
	*	2462	98.4	-	-	82.59	27.41	18.37	29.97	111	166	A	V
		2489.36	56.69	-17.31	74	40.81	27.47	18.38	29.97	111	166	P	V
		2487.92	47.22	-6.78	54	31.34	27.47	18.38	29.97	111	166	A	V
802.11b CH 12 2467MHz	*	2467	106.37	-	-	90.55	27.42	18.37	29.97	249	134	P	H
	*	2467	103.11	-	-	87.29	27.42	18.37	29.97	249	134	A	H
		2484.52	60.81	-13.19	74	44.94	27.46	18.38	29.97	249	134	P	H
		2484.72	52.87	-1.13	54	37	27.46	18.38	29.97	249	134	A	H
	*	2467	100.86	-	-	85.04	27.42	18.37	29.97	110	168	P	V
	*	2467	97.57	-	-	81.75	27.42	18.37	29.97	110	168	A	V
		2486.16	57.99	-16.01	74	42.11	27.47	18.38	29.97	110	168	P	V
		2484.8	48.24	-5.76	54	32.37	27.46	18.38	29.97	110	168	A	V
802.11b CH 13 2472MHz	*	2472	101.24	-	-	85.41	27.43	18.37	29.97	250	128	P	H
	*	2472	98.04	-	-	82.21	27.43	18.37	29.97	250	128	A	H
		2483.52	59.57	-14.43	74	43.7	27.46	18.38	29.97	250	128	P	H
		2483.52	53.2	-0.8	54	37.33	27.46	18.38	29.97	250	128	A	H
	*	2472	95.67	-	-	79.84	27.43	18.37	29.97	112	158	P	V
	*	2472	92.47	-	-	76.64	27.43	18.37	29.97	112	158	A	V
		2483.6	58.17	-15.83	74	42.3	27.46	18.38	29.97	112	158	P	V
		2483.52	48.83	-5.17	54	32.96	27.46	18.38	29.97	112	158	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. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	38.64	-35.36	74	52.24	31.18	13.76	58.54	100	0	P	H
		4824	39.48	-34.52	74	53.08	31.18	13.76	58.54	100	0	P	V
802.11b CH 06 2437MHz		4874	38.79	-35.21	74	52.21	31.27	13.84	58.53	100	0	P	H
		7311	43.19	-30.81	74	50.83	36.11	15.22	58.97	100	0	P	H
		4874	38.9	-35.1	74	52.32	31.27	13.84	58.53	100	0	P	V
		7311	43.39	-30.61	74	51.03	36.11	15.22	58.97	100	0	P	V
802.11b CH 11 2462MHz		4924	39	-35	74	52.24	31.36	13.92	58.52	100	0	P	H
		7386	42.64	-31.36	74	50.09	36.3	15.15	58.9	100	0	P	H
		4924	39.92	-34.08	74	53.16	31.36	13.92	58.52	100	0	P	V
		7386	43.32	-30.68	74	50.77	36.3	15.15	58.9	100	0	P	V
802.11b CH 12 2467MHz		4934	38.69	-35.31	74	51.8	31.47	13.93	58.51	100	0	P	H
		7401	43.13	-30.87	74	50.56	36.32	15.14	58.89	100	0	P	H
		4934	38.98	-35.02	74	52.09	31.47	13.93	58.51	100	0	P	V
		7401	42.85	-31.15	74	50.28	36.32	15.14	58.89	100	0	P	V
802.11b CH 13 2472MHz		4944	40.18	-33.82	74	53.25	31.49	13.95	58.51	100	0	P	H
		7416	43.12	-30.88	74	50.44	36.36	15.2	58.88	100	0	P	H
		4944	39.46	-34.54	74	52.53	31.49	13.95	58.51	100	0	P	V
		7416	43.32	-30.68	74	50.64	36.36	15.2	58.88	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. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2390	67.98	-6.02	74	52.41	27.24	18.32	29.99	262	144	P	H
		2390	53.33	-0.67	54	37.76	27.24	18.32	29.99	262	144	A	H
	*	2412	107.4	-	-	91.76	27.29	18.34	29.99	262	144	P	H
	*	2412	99.02	-	-	83.38	27.29	18.34	29.99	262	144	A	H
		2390	61.1	-12.9	74	45.53	27.24	18.32	29.99	307	126	P	V
		2390	48.62	-5.38	54	33.05	27.24	18.32	29.99	307	126	A	V
	*	2412	100.78	-	-	85.14	27.29	18.34	29.99	307	126	P	V
	*	2412	93.21	-	-	77.57	27.29	18.34	29.99	307	126	A	V
802.11g CH 06 2437MHz		2382.1	62.39	-11.61	74	46.86	27.22	18.3	29.99	283	144	P	H
		2387.98	47.62	-6.38	54	32.07	27.23	18.31	29.99	283	144	A	H
	*	2437	108.94	-	-	93.22	27.35	18.35	29.98	283	144	P	H
	*	2437	101.32	-	-	85.6	27.35	18.35	29.98	283	144	A	H
		2496.08	61.08	-12.92	74	45.16	27.49	18.39	29.96	283	144	P	H
		2483.5	47.97	-6.03	54	32.1	27.46	18.38	29.97	283	144	A	H
		2384.62	56.31	-17.69	74	40.77	27.22	18.31	29.99	306	124	P	V
		2389.94	45.65	-8.35	54	30.08	27.24	18.32	29.99	306	124	A	V
	*	2437	103.05	-	-	87.33	27.35	18.35	29.98	306	124	P	V
	*	2437	95.7	-	-	79.98	27.35	18.35	29.98	306	124	A	V
		2484.39	57.57	-16.43	74	41.7	27.46	18.38	29.97	306	124	P	V
		2484.18	45.93	-8.07	54	30.06	27.46	18.38	29.97	306	124	A	V

802.11g CH 11 2462MHz	*	2462	105.74	-	-	89.93	27.41	18.37	29.97	248	138	P	H
	*	2462	97.95	-	-	82.14	27.41	18.37	29.97	248	138	A	H
		2484.36	67.95	-6.05	74	52.08	27.46	18.38	29.97	248	138	P	H
		2483.68	53.36	-0.64	54	37.49	27.46	18.38	29.97	248	138	A	H
	*	2462	100.35	-	-	84.54	27.41	18.37	29.97	299	123	P	V
	*	2462	92.57	-	-	76.76	27.41	18.37	29.97	299	123	A	V
		2484.56	60.46	-13.54	74	44.59	27.46	18.38	29.97	299	123	P	V
		2483.84	48.48	-5.52	54	32.61	27.46	18.38	29.97	299	123	A	V
802.11g CH 12 2467MHz	*	2467	103.92	-	-	88.1	27.42	18.37	29.97	248	133	P	H
	*	2467	96.29	-	-	80.47	27.42	18.37	29.97	248	133	A	H
		2483.96	69.35	-4.65	74	53.48	27.46	18.38	29.97	248	133	P	H
		2483.64	53.15	-0.85	54	37.28	27.46	18.38	29.97	248	133	A	H
	*	2467	98.62	-	-	82.8	27.42	18.37	29.97	290	125	P	V
	*	2467	90.4	-	-	74.58	27.42	18.37	29.97	290	125	A	V
		2484.96	63.71	-10.29	74	47.84	27.46	18.38	29.97	290	125	P	V
		2483.52	48.55	-5.45	54	32.68	27.46	18.38	29.97	290	125	A	V
802.11g CH 13 2472MHz	*	2472	93.39	-	-	77.56	27.43	18.37	29.97	246	136	P	H
	*	2472	85.71	-	-	69.88	27.43	18.37	29.97	246	136	A	H
		2483.76	67.89	-6.11	74	52.02	27.46	18.38	29.97	246	136	P	H
		2483.52	53.15	-0.85	54	37.28	27.46	18.38	29.97	246	136	A	H
	*	2472	87.96	-	-	72.13	27.43	18.37	29.97	111	160	P	V
	*	2472	80.33	-	-	64.5	27.43	18.37	29.97	111	160	A	V
		2483.52	63.42	-10.58	74	47.55	27.46	18.38	29.97	111	160	P	V
		2483.64	48.98	-5.02	54	33.11	27.46	18.38	29.97	111	160	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. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	39.02	-34.98	74	52.55	31.25	13.76	58.54	100	0	P	H
		4824	38.84	-35.16	74	52.37	31.25	13.76	58.54	100	0	P	V
802.11g CH 06 2437MHz		4874	38.81	-35.19	74	52.15	31.35	13.84	58.53	100	0	P	H
		7311	42.75	-31.25	74	50.43	36.07	15.22	58.97	100	0	P	H
		4874	38.94	-35.06	74	52.28	31.35	13.84	58.53	100	0	P	V
		7311	42.77	-31.23	74	50.45	36.07	15.22	58.97	100	0	P	V
802.11g CH 11 2462MHz		4924	38.84	-35.16	74	51.99	31.45	13.92	58.52	100	0	P	H
		7386	42.85	-31.15	74	50.32	36.28	15.15	58.9	100	0	P	H
		4924	39.15	-34.85	74	52.3	31.45	13.92	58.52	100	0	P	V
		7386	42.95	-31.05	74	50.42	36.28	15.15	58.9	100	0	P	V
802.11g CH 12 2467MHz		4934	39.01	-34.99	74	52.12	31.47	13.93	58.51	100	0	P	H
		7401	42.92	-31.08	74	50.35	36.32	15.14	58.89	100	0	P	H
		4934	38.73	-35.27	74	51.84	31.47	13.93	58.51	100	0	P	V
		7401	42.69	-31.31	74	50.12	36.32	15.14	58.89	100	0	P	V
802.11g CH 13 2472MHz		4944	38.63	-35.37	74	51.7	31.49	13.95	58.51	100	0	P	H
		7416	44.09	-29.91	74	51.41	36.36	15.2	58.88	100	0	P	H
		4944	38.74	-35.26	74	51.81	31.49	13.95	58.51	100	0	P	V
		7416	43.15	-30.85	74	50.47	36.36	15.2	58.88	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. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.38	67.1	-6.9	74	51.55	27.23	18.31	29.99	263	133	P	H
		2390	53.21	-0.79	54	37.64	27.24	18.32	29.99	263	133	A	H
	*	2412	105.71	-	-	90.07	27.29	18.34	29.99	263	133	P	H
	*	2412	98.3	-	-	82.66	27.29	18.34	29.99	263	133	A	H
		2388.12	58.57	-15.43	74	43.02	27.23	18.31	29.99	118	169	P	V
		2390	48.29	-5.71	54	32.72	27.24	18.32	29.99	118	169	A	V
	*	2412	100.53	-	-	84.89	27.29	18.34	29.99	118	169	P	V
	*	2412	92.88	-	-	77.24	27.29	18.34	29.99	118	169	A	V
802.11n HT20 CH 06 2437MHz		2385.32	58.29	-15.71	74	42.75	27.22	18.31	29.99	285	137	P	H
		2389.94	47.91	-6.09	54	32.34	27.24	18.32	29.99	285	137	A	H
	*	2437	108.58	-	-	92.86	27.35	18.35	29.98	285	137	P	H
	*	2437	101.23	-	-	85.51	27.35	18.35	29.98	285	137	A	H
		2485.02	60.81	-13.19	74	44.94	27.46	18.38	29.97	285	137	P	H
		2484.46	48.78	-5.22	54	32.91	27.46	18.38	29.97	285	137	A	H
		2388.26	56.23	-17.77	74	40.68	27.23	18.31	29.99	117	172	P	V
		2389.94	45.78	-8.22	54	30.21	27.24	18.32	29.99	117	172	A	V
	*	2437	103.24	-	-	87.52	27.35	18.35	29.98	117	172	P	V
	*	2437	95.39	-	-	79.67	27.35	18.35	29.98	117	172	A	V
		2486.35	56.91	-17.09	74	41.03	27.47	18.38	29.97	117	172	P	V
		2484.18	46.4	-7.6	54	30.53	27.46	18.38	29.97	117	172	A	V

802.11n HT20 CH 11 2462MHz	*	2462	104.4	-	-	88.59	27.41	18.37	29.97	282	136	P	H
	*	2462	96.96	-	-	81.15	27.41	18.37	29.97	282	136	A	H
		2483.76	67.43	-6.57	74	51.56	27.46	18.38	29.97	282	136	P	H
		2483.6	53.15	-0.85	54	37.28	27.46	18.38	29.97	282	136	A	H
	*	2462	99.62	-	-	83.81	27.41	18.37	29.97	111	160	P	V
	*	2462	91.91	-	-	76.1	27.41	18.37	29.97	111	160	A	V
		2483.52	60.58	-13.42	74	44.71	27.46	18.38	29.97	111	160	P	V
		2483.64	49.29	-4.71	54	33.42	27.46	18.38	29.97	111	160	A	V
802.11n HT20 CH 12 2467MHz	*	2467	103.21	-	-	87.39	27.42	18.37	29.97	252	138	P	H
	*	2467	95.59	-	-	79.77	27.42	18.37	29.97	252	138	A	H
		2484.64	68.14	-5.86	74	52.27	27.46	18.38	29.97	252	138	P	H
		2483.56	52.88	-1.12	54	37.01	27.46	18.38	29.97	252	138	A	H
	*	2467	98.27	-	-	82.45	27.42	18.37	29.97	111	157	P	V
	*	2467	90.69	-	-	74.87	27.42	18.37	29.97	111	157	A	V
		2483.56	65.66	-8.34	74	49.79	27.46	18.38	29.97	111	157	P	V
		2483.52	48.87	-5.13	54	33	27.46	18.38	29.97	111	157	A	V
802.11n HT20 CH 13 2472MHz	*	2472	92.5	-	-	76.67	27.43	18.37	29.97	248	134	P	H
	*	2472	84.67	-	-	68.84	27.43	18.37	29.97	248	134	A	H
		2483.56	66.88	-7.12	74	51.01	27.46	18.38	29.97	248	134	P	H
		2483.6	52.81	-1.19	54	36.94	27.46	18.38	29.97	248	134	A	H
	*	2472	87.13	-	-	71.3	27.43	18.37	29.97	109	157	P	V
	*	2472	79.34	-	-	63.51	27.43	18.37	29.97	109	157	A	V
		2484.04	61.6	-12.4	74	45.73	27.46	18.38	29.97	109	157	P	V
		2483.52	49.39	-4.61	54	33.52	27.46	18.38	29.97	109	157	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. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	39.31	-34.69	74	52.84	31.25	13.76	58.54	100	0	P	H
		4824	39.97	-34.03	74	53.5	31.25	13.76	58.54	100	0	P	V
802.11n HT20 CH 06 2437MHz		4874	38.74	-35.26	74	52.08	31.35	13.84	58.53	100	0	P	H
		7311	43.08	-30.92	74	50.76	36.07	15.22	58.97	100	0	P	H
		4874	39.36	-34.64	74	52.7	31.35	13.84	58.53	100	0	P	V
		7311	43.19	-30.81	74	50.87	36.07	15.22	58.97	100	0	P	V
802.11n HT20 CH 11 2462MHz		4924	39.36	-34.64	74	52.51	31.45	13.92	58.52	100	0	P	H
		7386	42.74	-31.26	74	50.21	36.28	15.15	58.9	100	0	P	H
		4924	39.01	-34.99	74	52.16	31.45	13.92	58.52	100	0	P	V
		7386	43.93	-30.07	74	51.4	36.28	15.15	58.9	100	0	P	V
802.11n HT20 CH 12 2467MHz		4934	38.79	-35.21	74	51.9	31.47	13.93	58.51	100	0	P	H
		7401	42.33	-31.67	74	49.76	36.32	15.14	58.89	100	0	P	H
		4934	39.53	-34.47	74	52.64	31.47	13.93	58.51	100	0	P	V
		7401	42.52	-31.48	74	49.95	36.32	15.14	58.89	100	0	P	V
802.11n HT20 CH 13 2472MHz		4944	39.62	-34.38	74	52.69	31.49	13.95	58.51	100	0	P	H
		7416	43.14	-30.86	74	50.46	36.36	15.2	58.88	100	0	P	H
		4944	38.98	-35.02	74	52.05	31.49	13.95	58.51	100	0	P	V
		7416	43.19	-30.81	74	50.51	36.36	15.2	58.88	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
Emission below 1GHz
2.4GHz WIFI 802.11g (LF)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11g LF		87.51	13.47	-26.53	40	30.3	14.6	0.96	32.39	-	-	P	H
		119.91	24.87	-18.63	43.5	38.35	17.7	1.19	32.37	-	-	P	H
		181.2	19	-24.5	43.5	34.3	15.41	1.24	32.35	-	-	P	H
		446.3	23.83	-22.17	46	29.96	23.24	3.71	32.54	-	-	P	H
		647.9	27.74	-18.26	46	30.2	26.08	4.07	32.61	-	-	P	H
		941.9	31.88	-14.12	46	28.75	29.93	4.62	31.42	100	0	P	H
		51.87	26.14	-13.86	40	43.19	14.48	0.9	32.43	100	0	P	V
		119.91	20.13	-23.37	43.5	33.61	17.7	1.19	32.37	-	-	P	V
		182.55	20.12	-23.38	43.5	35.4	15.42	1.65	32.35	-	-	P	V
		479.9	24.53	-21.47	46	29.88	23.96	3.25	32.56	-	-	P	V
		643	26.74	-19.26	46	29.28	26.03	4.05	32.62	-	-	P	V
		785.1	30.14	-15.86	46	30.15	27.98	4.4	32.39	-	-	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

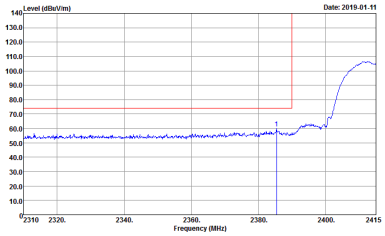
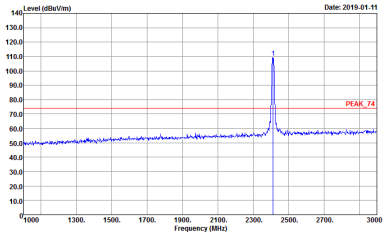
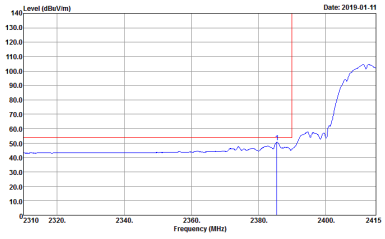
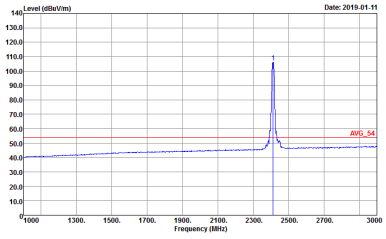
Test Engineer :	Jacky Hung and CR Liao	**Temperature :**	23~25°C
		Relative Humidity :	55~57%

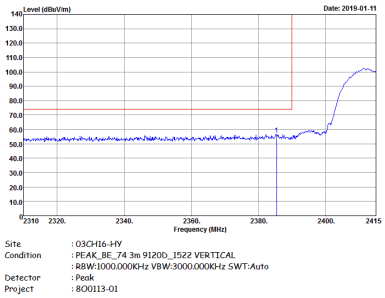
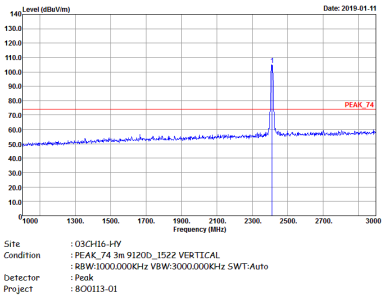
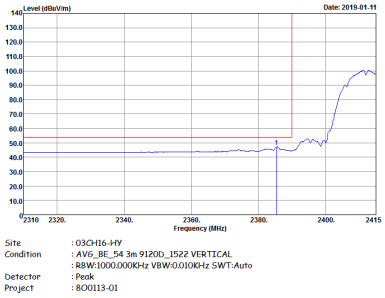
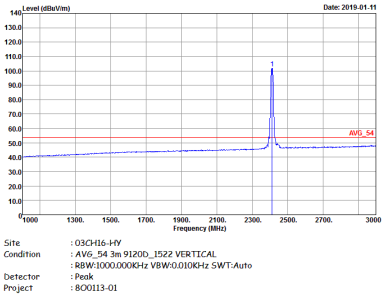
Note symbol

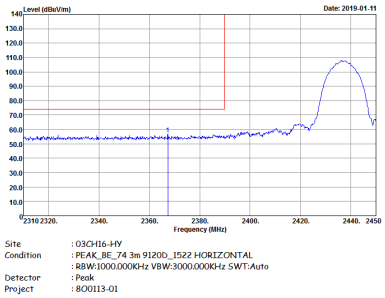
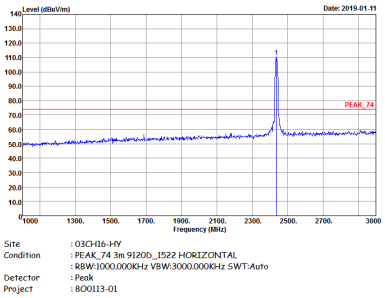
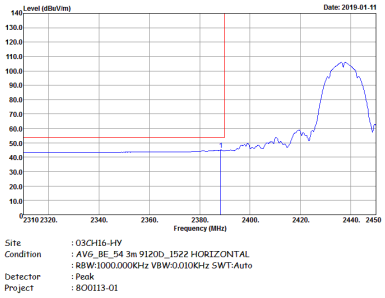
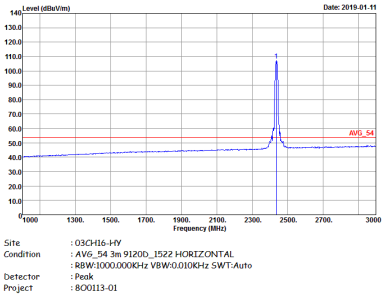
-L	**Low channel location**
-R	**High channel location**

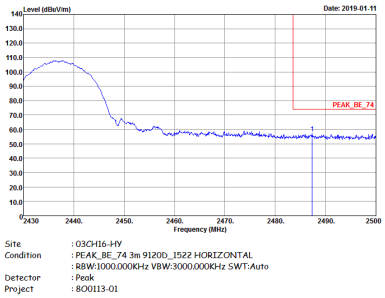
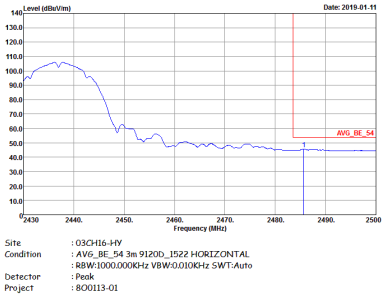
2.4GHz 2400~2483.5MHz

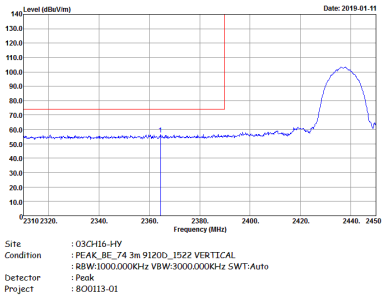
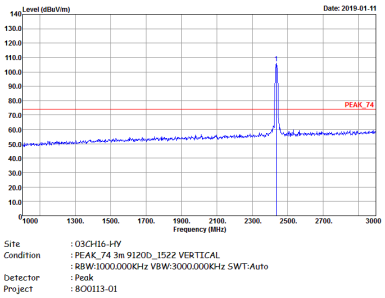
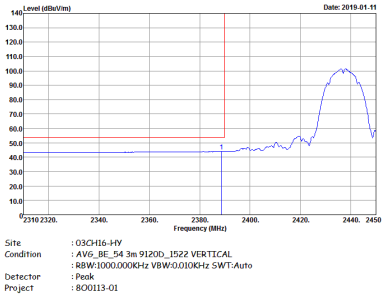
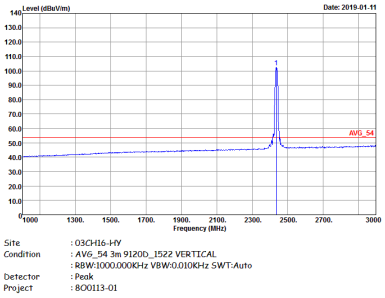
WIFI 802.11b (Band Edge @ 3m)

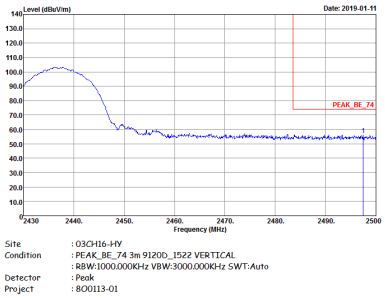
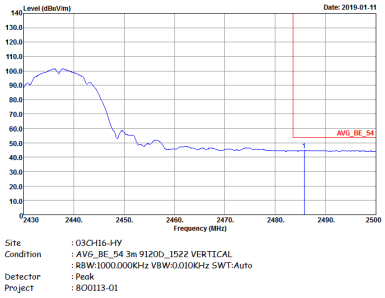
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

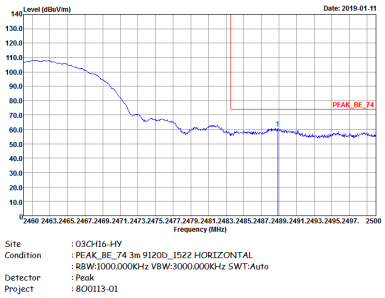
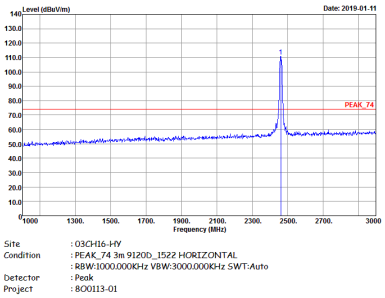
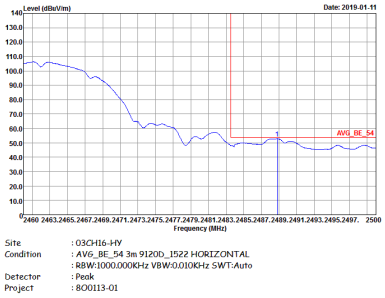
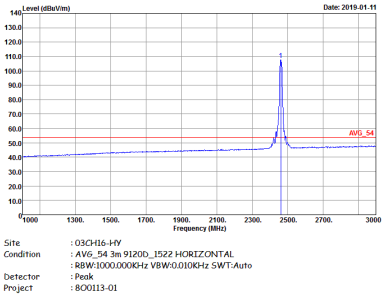
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

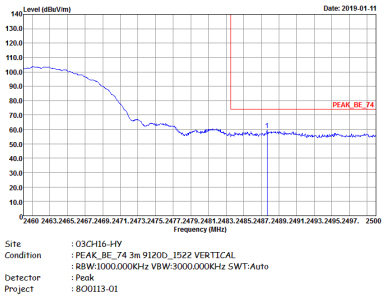
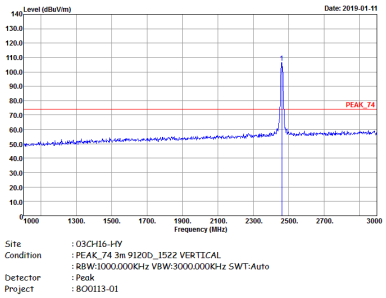
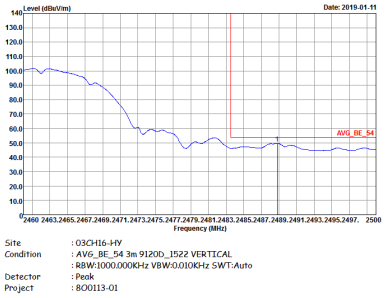
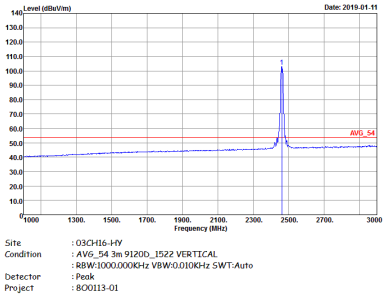
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		

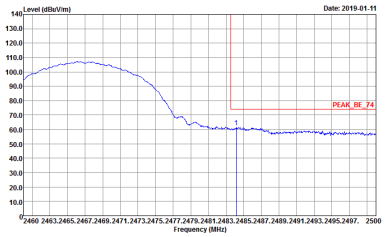
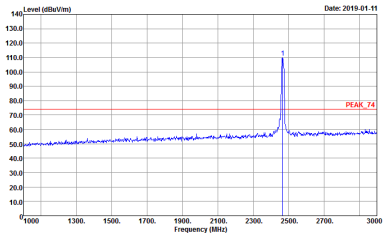
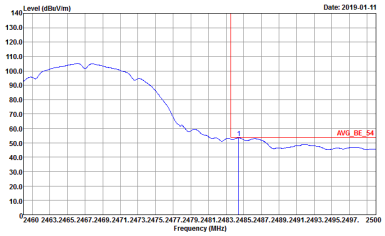
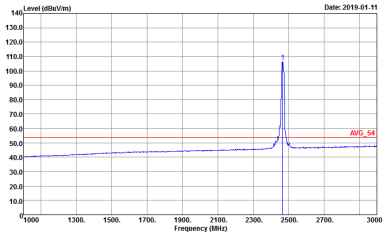
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

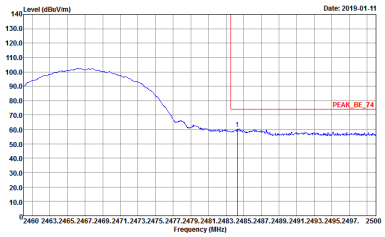
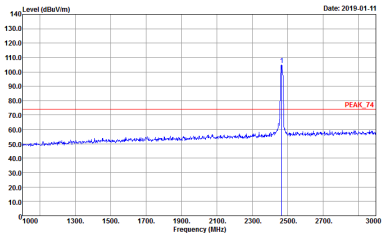
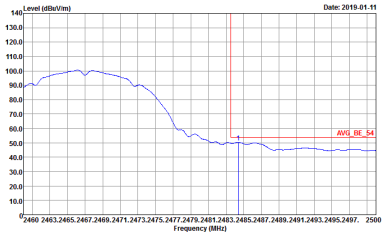
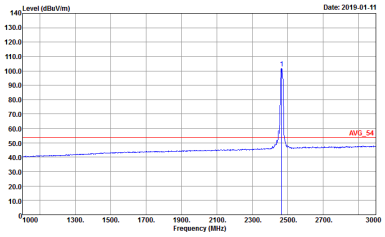
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		

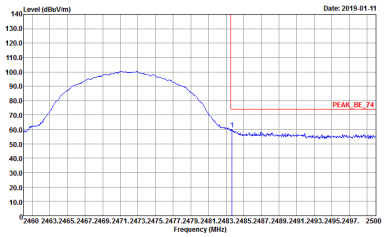
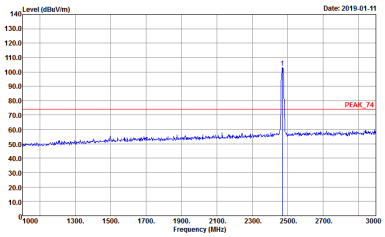
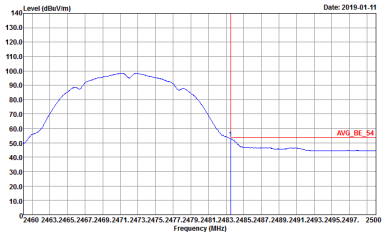
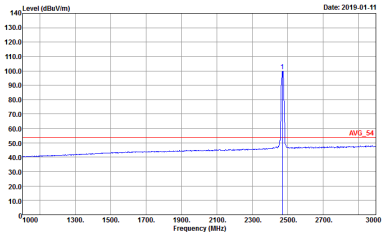
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

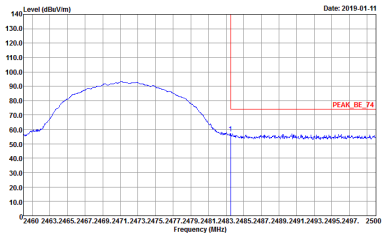
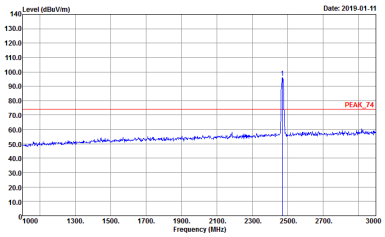
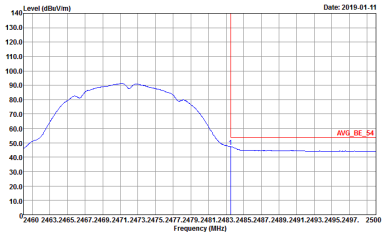
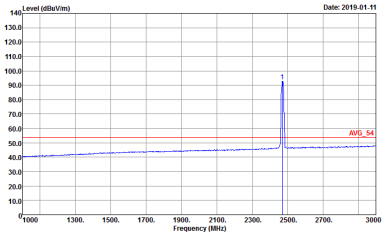
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak		
Avg.		

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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3

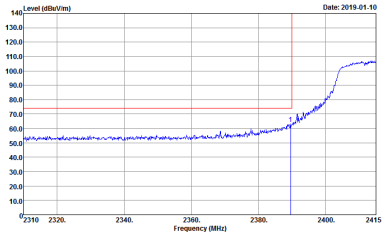
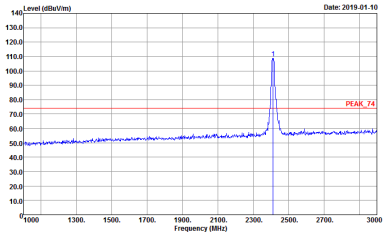
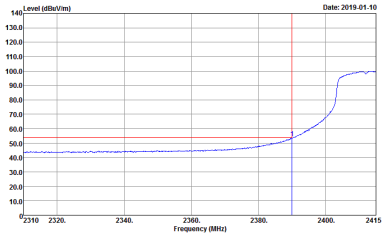
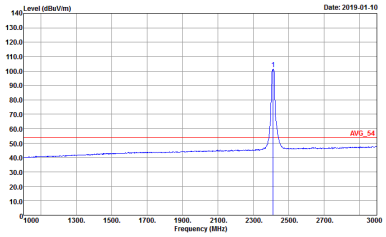
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : B3

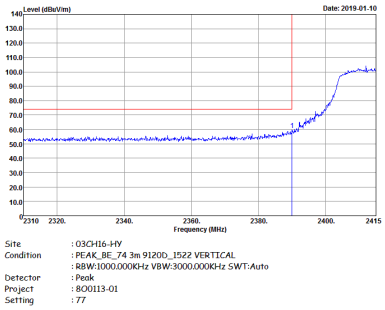
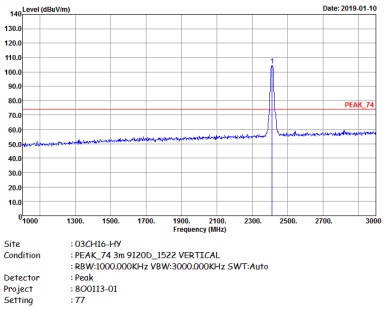
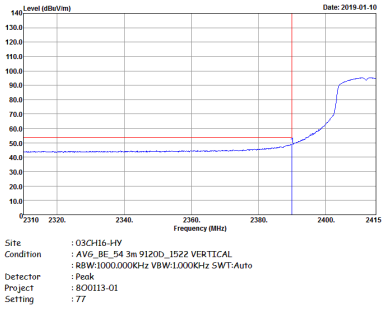
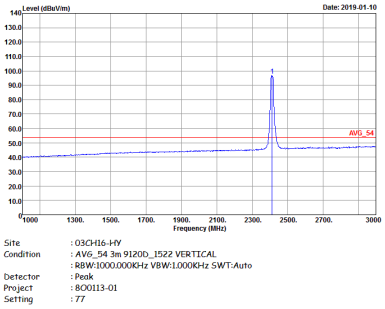
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59

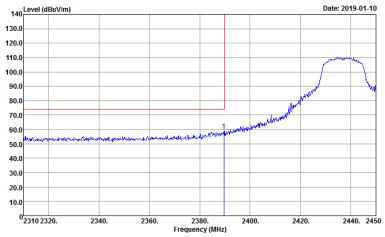
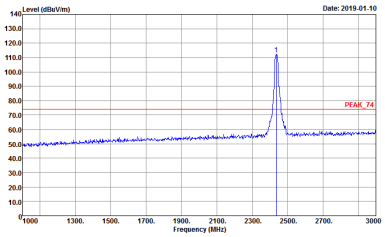
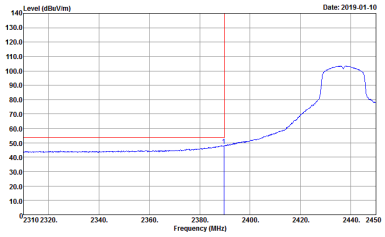
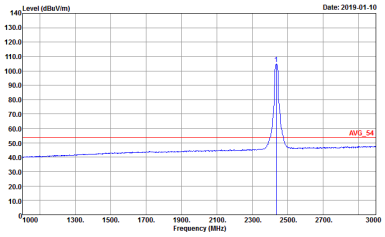
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 59

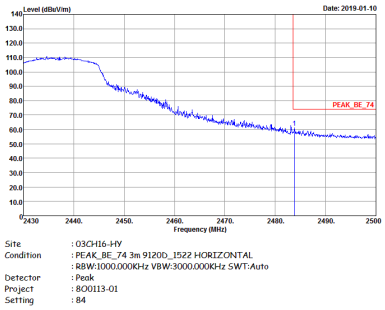
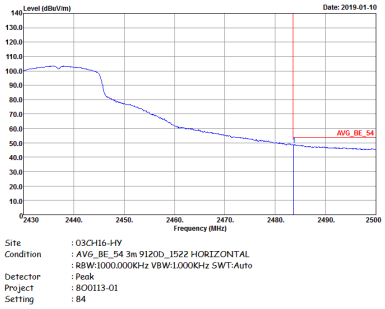
2.4GHz 2400~2483.5MHz

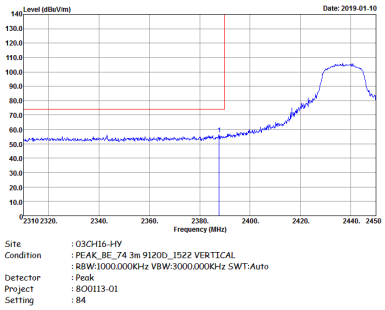
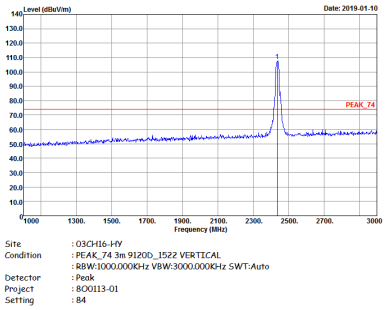
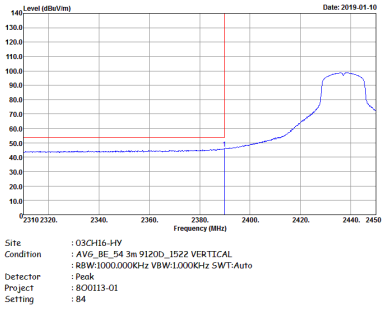
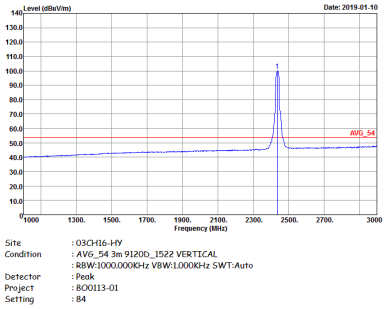
WIFI 802.11g (Band Edge @ 3m)

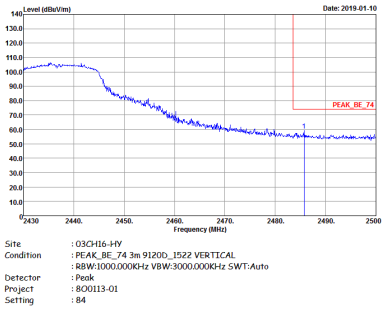
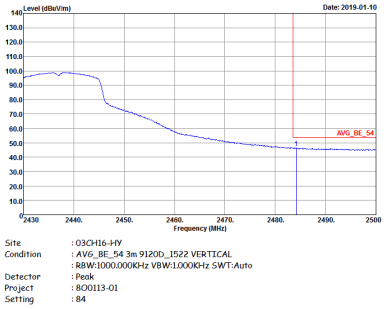
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 77	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 77
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 77	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 77

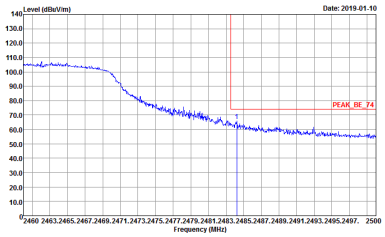
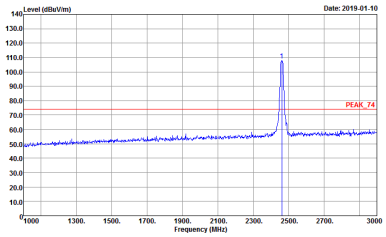
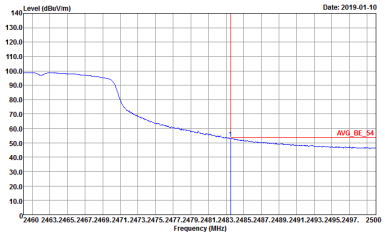
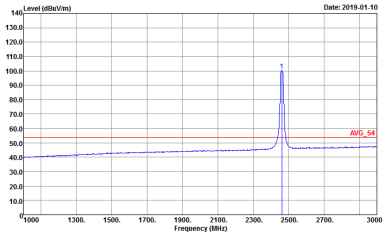
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak		
Avg.		

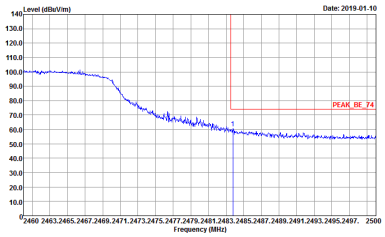
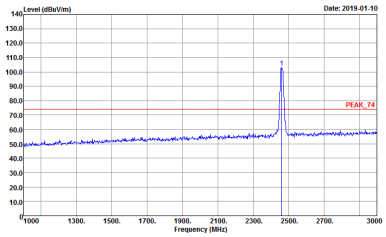
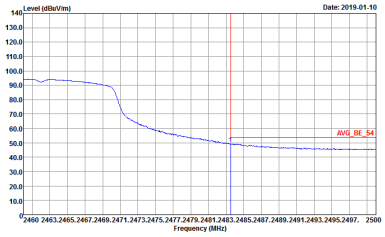
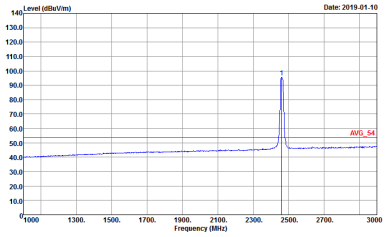
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 84	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 84
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 84	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 84

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		
Avg.		

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 : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_1522 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 8O0113-01 Setting : 71