FCC RF Test Report

APPLICANT	:	**Nimbostratus LLC**
EQUIPMENT	:	**Digital Media Receiver**
MODEL NAME	:	**ZE39KL**
FCC ID	:	**2AHUF-6294**
STANDARD	:	**FCC Part 15 Subpart C §15.247**
CLASSIFICATION	:	**(DTS) Digital Transmission System**

The testing was completed on May 25, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory
1190

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

TABLE OF CONTENTS

REVISION HISTORY **3**
SUMMARY OF TEST RESULT **4**
1 GENERAL DESCRIPTION **5**
1.1 Applicant 5
1.2 Product Feature of Equipment Under Test 5
1.3 Product Specification of Equipment Under Test 6
1.4 Modification of EUT 6
1.5 Testing Location 7
1.6 Applicable Standards 7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **8**
2.1 Carrier Frequency and Channel 8
2.2 Test Mode 9
2.3 Connection Diagram of Test System 10
2.4 Support Unit used in test configuration and system 11
2.5 EUT Operation Test Setup 11
2.6 Measurement Results Explanation Example 11
3 TEST RESULT **12**
3.1 6dB and 99% Bandwidth Measurement 12
3.2 Peak Output Power Measurement 14
3.3 Power Spectral Density Measurement 15
3.4 Conducted Band Edges and Spurious Emission Measurement 17
3.5 Radiated Band Edges and Spurious Emission Measurement 68
3.6 AC Conducted Emission Measurement 72
3.7 Antenna Requirements 74
4 LIST OF MEASURING EQUIPMENT **75**
5 UNCERTAINTY OF EVALUATION **77**
APPENDIX A. CONDUCTED TEST RESULTS
APPENDIX B. AC CONDUCTED EMISSION TEST RESULT
APPENDIX C. RADIATED SPURIOUS EMISSION
APPENDIX D. RADIATED SPURIOUS EMISSION PLOTS
APPENDIX E. DUTY CYCLE PLOTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR693034-02D	Rev. 01	Initial issue of report	May 26, 2017
FR693034-02D	Rev. 02	Updating report of revising KDB 558074 version	Jul. 13, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result
3.1	15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass
3.1	-	99% Bandwidth	-	Pass
3.2	15.247(b)	Power Output Measurement	≤ 30dBm	Pass
3.3	15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass
3.4	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass
		Conducted Spurious Emission		Pass
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass
3.6	15.207	AC Conducted Emission	15.207(a)	Pass
3.7	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass

1 General Description

1.1 Applicant

Nimbostratus LLC
945 Concord St. Framingham, MA 01701

1.2 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	ZE39KL
FCC ID	2AHUF-6294
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE Zigbee

1.3 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 : 23.05 dBm (0.2018 W) 802.11g : 25.42 dBm (0.3483 W) 802.11n HT20 : 25.54 dBm (0.3581 W) **<Ant. 2>** 802.11b : 25.15 dBm (0.1905 W) 802.11g : 25.60 dBm (0.2891 W) 802.11n HT20 : 25.85 dBm (0.2742 W) **MIMO <Ant. 1 + 2>** 802.11g : 27.95 dBm (0.6237 W) 802.11n HT20 : 28.11 dBm (0.6471 W)
99% Occupied Bandwidth	**<Ant. 1>** 802.11b : 11.65MHz 802.11g : 18.70MHz 802.11n HT20 : 19.35MHz **<Ant. 2>** 802.11b : 11.80MHz 802.11g : 18.55MHz 802.11n HT20 : 19.15MHz **MIMO <Ant. 1>** 802.11g : 18.60MHz 802.11n HT20 : 19.25MHz **MIMO <Ant. 2>** 802.11g : 18.55MHz 802.11n HT20 : 19.05MHz
Antenna Type / Gain	**<Ant 1>** Fixed Internal Antenna type with gain 4.80 dBi **<Ant 2>** Fixed Internal Antenna type with gain 4.10 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
802.11 g/n MIMO	V	V

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

1.4 Modification of EUT

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

1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan 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. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	03CH11-HY, 03CH12-HY

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

1.6 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 v04
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- 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

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: conducted emission (150 kHz to 30 MHz) and radiated 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 (Y plane) were recorded in this report.

2.1 Carrier Frequency and Channel

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

2.2 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

Single Antenna

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

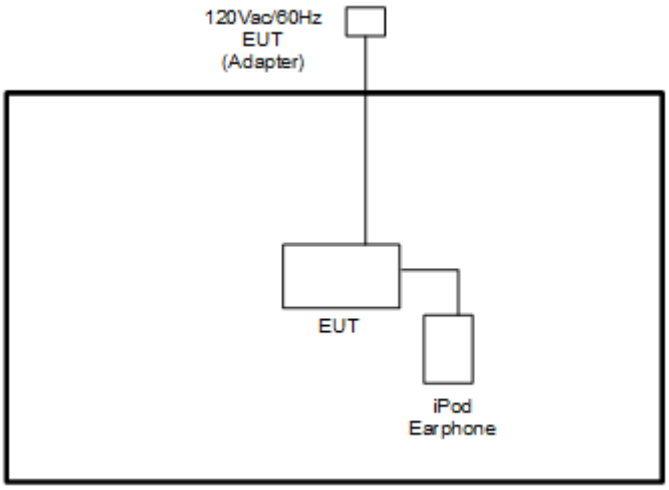
MIMO Antenna

Modulation	Data Rate
802.11g	6 Mbps
802.11n HT20	MCS0

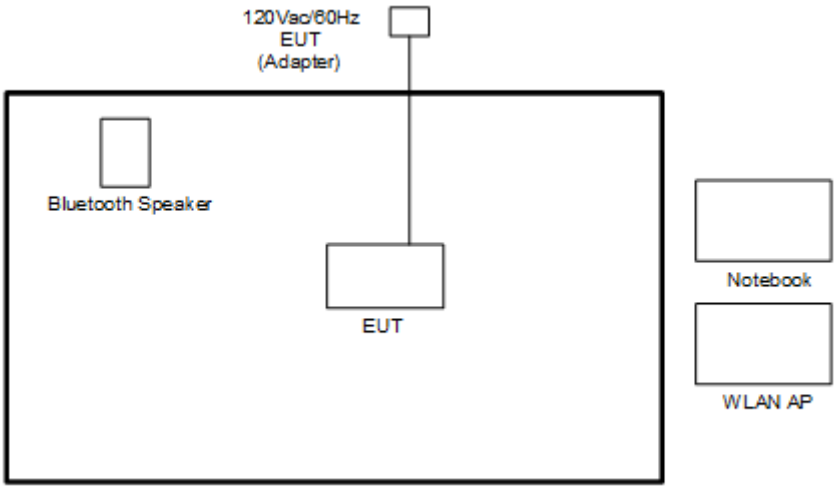
AC Conducted Emission	
AC Conducted Emission	Mode 1: WLAN (2.4GHz) Link + Bluetooth Link with Speaker + MP3 + Adapter

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Bluetooth Speaker	JAWBONE	JAWBONE JAMBOX	V3J-JBE	N/A	N/A
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

For RF test itme, programmed RF utility, “Compliance.exe” installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving 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.

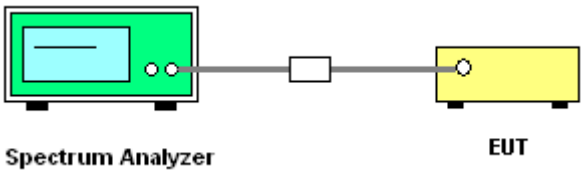
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

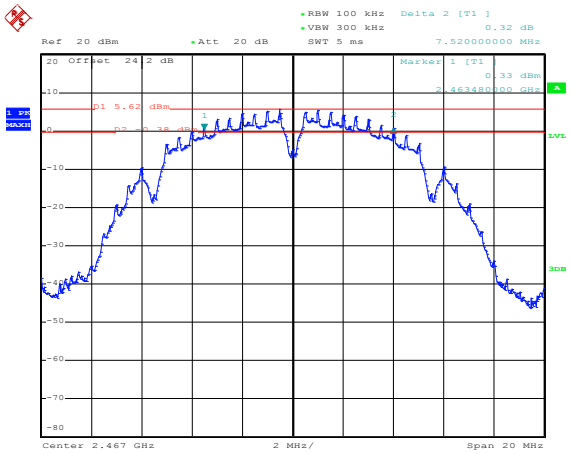
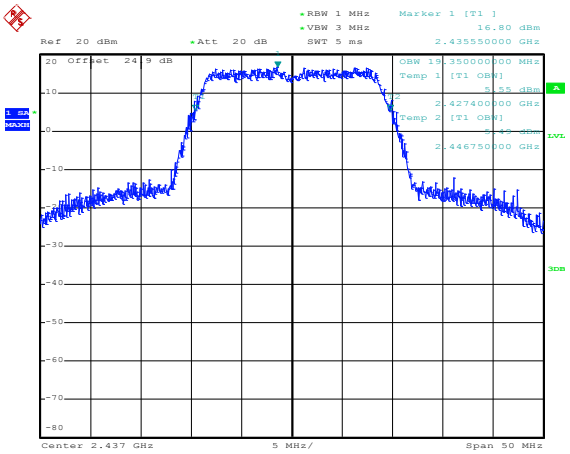
1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v03r05.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit 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) = 1MHz and set the Video bandwidth (VBW) = 3MHz.
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: 16.APR.2017 16:16:40	Date: 21.APR.2017 22:30:22

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

3.2 Peak Output Power Measurement

3.2.1 Limit of Peak 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.

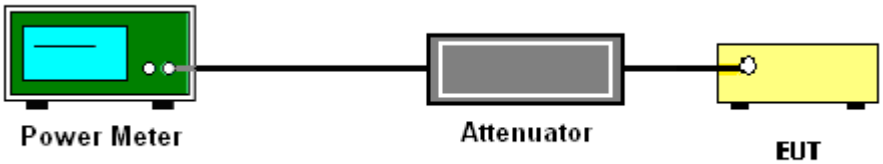
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r05 section 9.1.3 PKPM1 Peak power meter method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of 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

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The testing follows Measurement Procedure 10.2 Method PKPSD of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
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.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

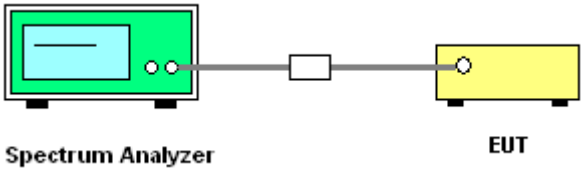
   If measurements performed using method (2) plus 10 log (N) exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

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

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

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

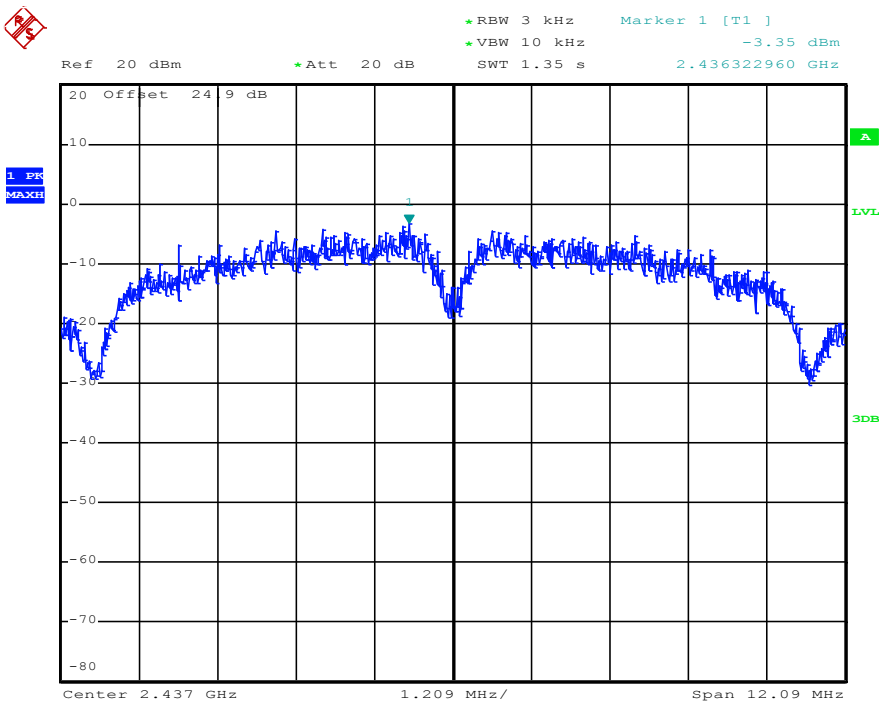
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/3kHz) for Ant. 2



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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 and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

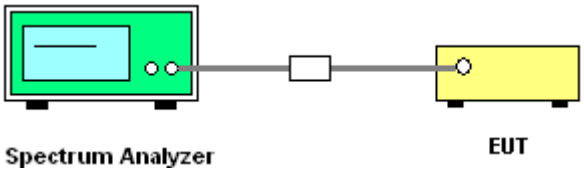
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
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



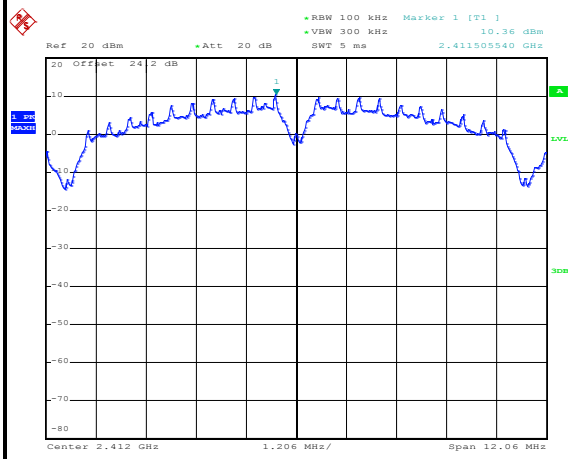
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

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

Number of TX	1	**Ant. :**	1
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

WLAN 802.11b Channel 01

100kHz PSD reference Level



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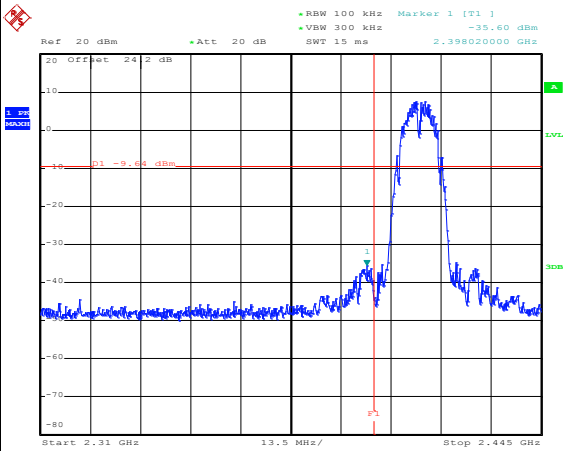
Low Channel Plot



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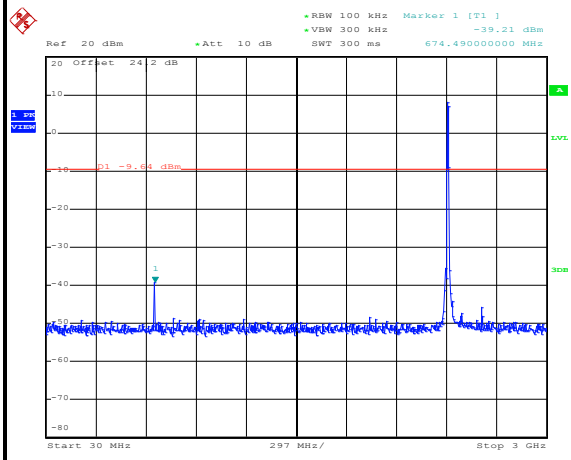
Spurious Emission 30MHz~3GHz



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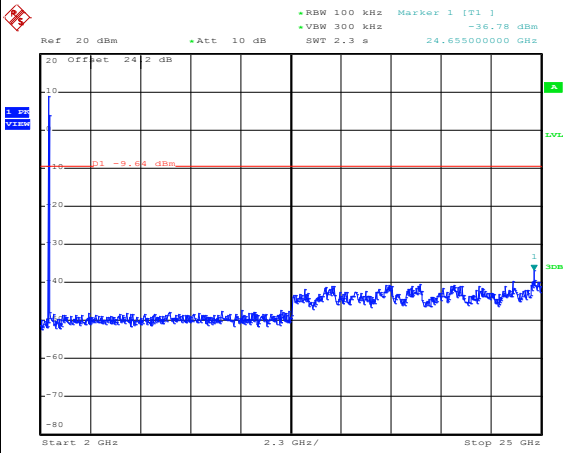
Spurious Emission 2GHz~25GHz

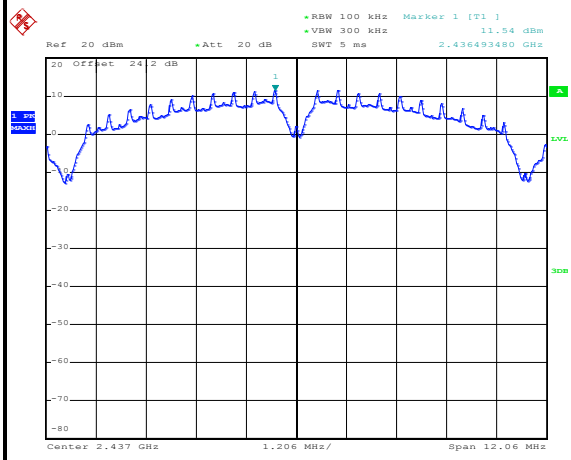


Date: 16.APR.2017 16:09:57

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

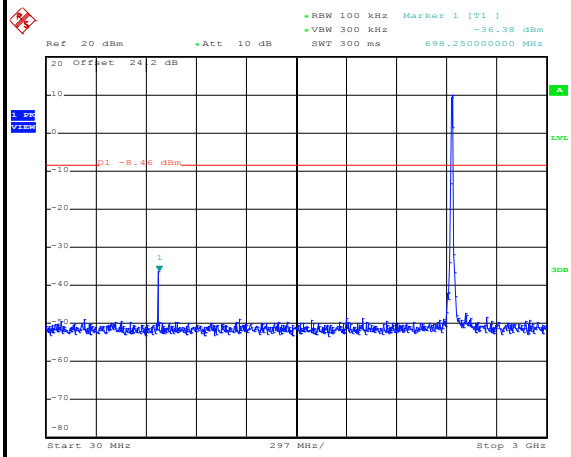
WLAN 802.11b Channel 06

100kHz PSD reference Level



Date: 16.APR.2017 16:11:32

Spurious Emission 30MHz~3GHz



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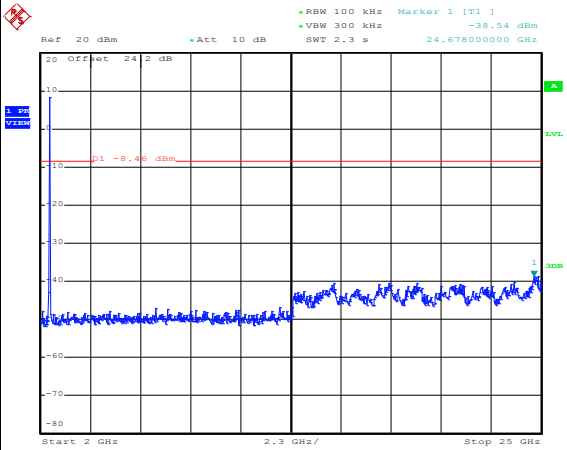
Spurious Emission 2GHz~25GHz

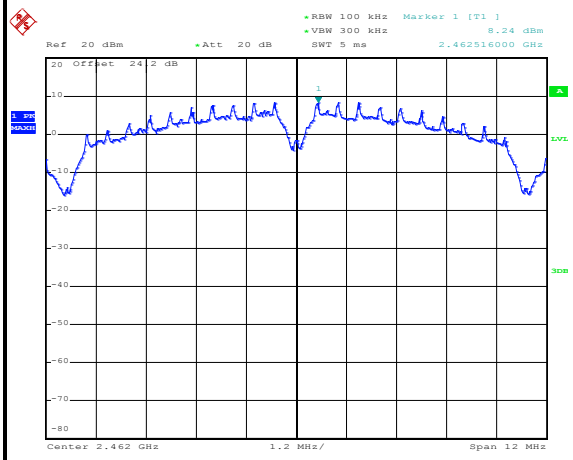


Date: 16.APR.2017 16:11:52

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

WLAN 802.11b Channel 11

100kHz PSD reference Level



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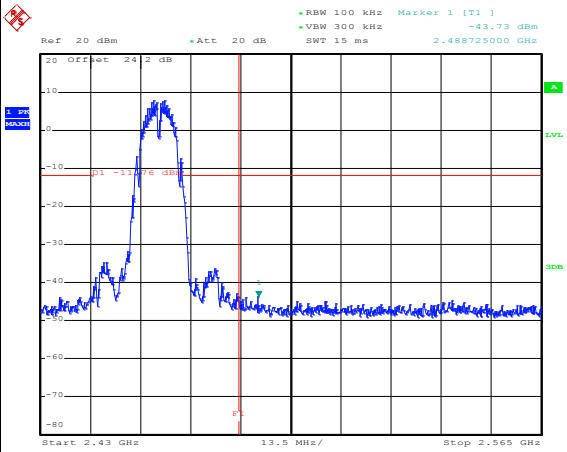
High Channel Plot



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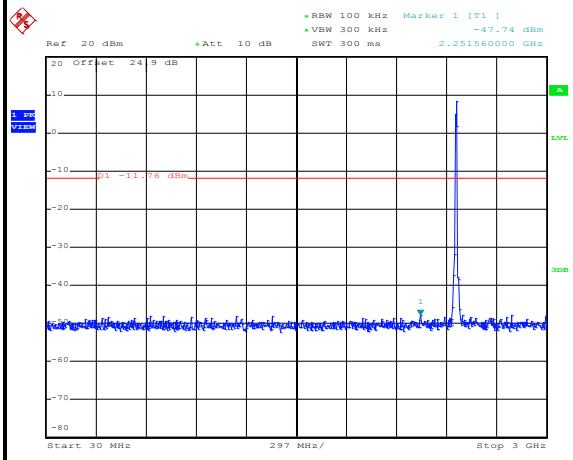
Spurious Emission 30MHz~3GHz



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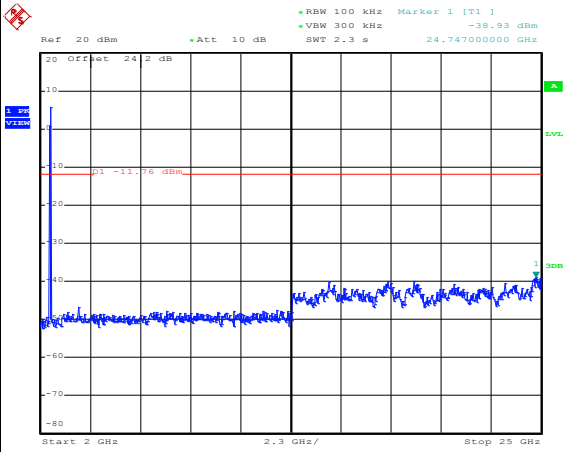
Spurious Emission 2GHz~25GHz

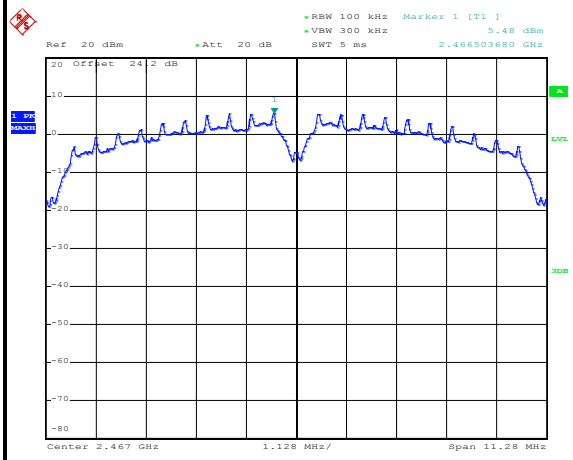


Date: 16.APR.2017 16:15:01

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

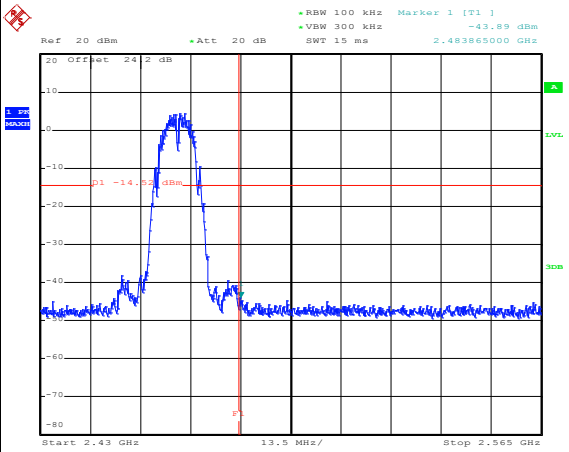
WLAN 802.11b Channel 12

100kHz PSD reference Level



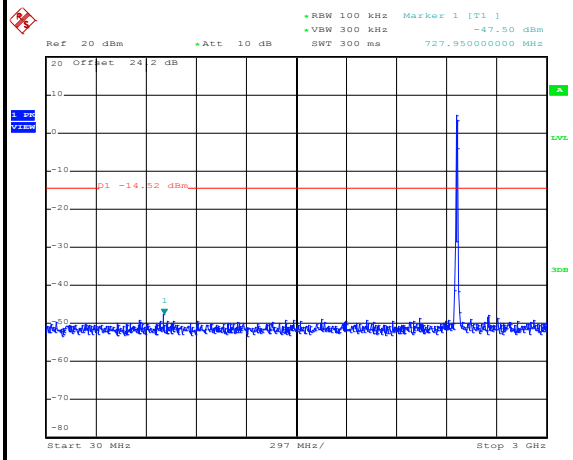
Date: 16.APR.2017 16:17:22

High Channel Plot



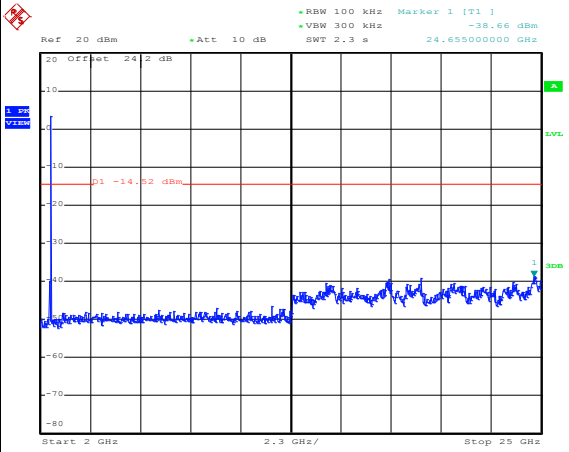
Date: 21.APR.2017 20:21:32

Spurious Emission 30MHz~3GHz



Date: 16.APR.2017 16:18:32

Spurious Emission 2GHz~25GHz

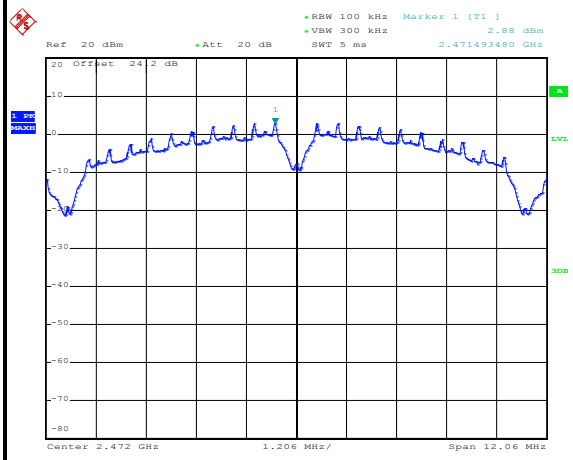


Date: 16.APR.2017 16:18:41

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

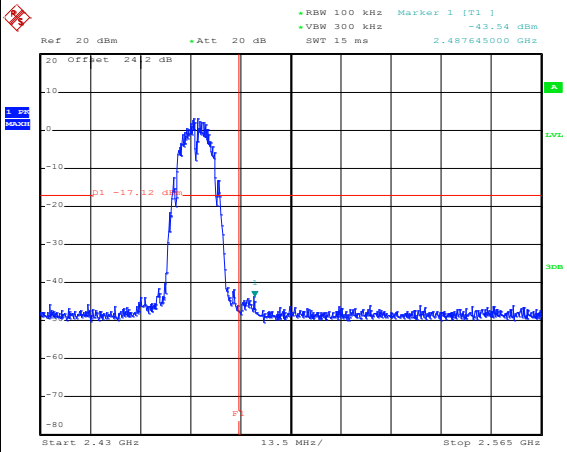
WLAN 802.11b Channel 13

100kHz PSD reference Level



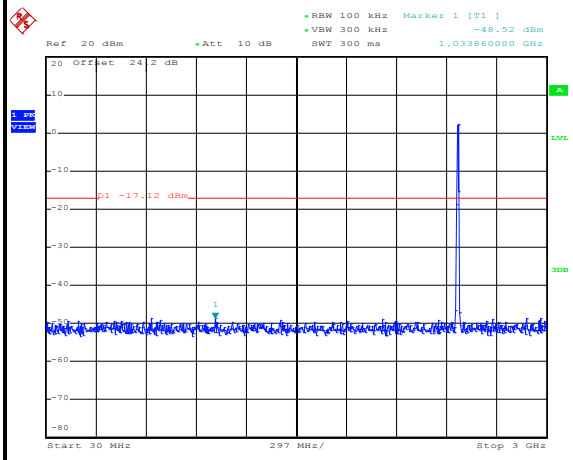
Date: 16.APR.2017 16:22:27

High Channel Plot



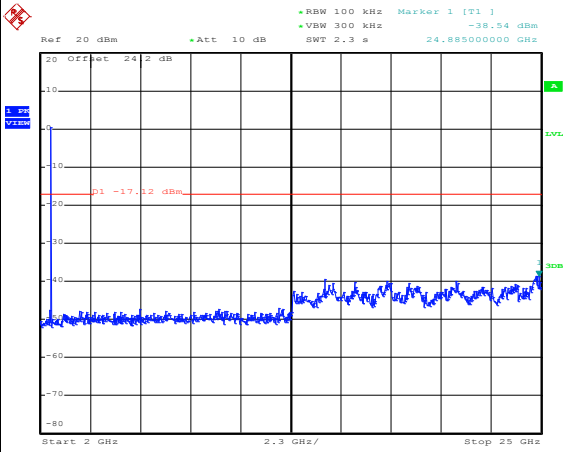
Date: 16.APR.2017 16:23:26

Spurious Emission 30MHz~3GHz



Date: 16.APR.2017 16:22:39

Spurious Emission 2GHz~25GHz

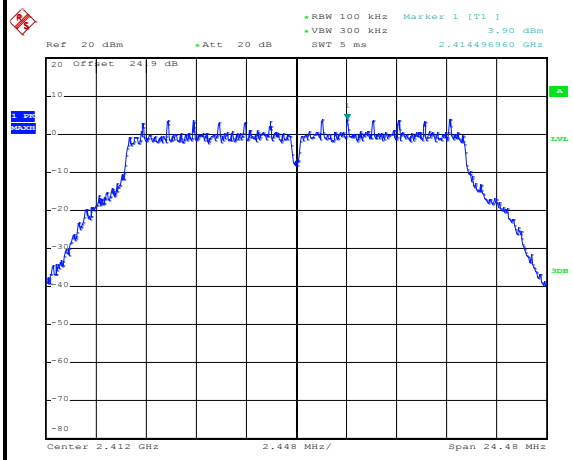


Date: 16.APR.2017 16:22:47

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

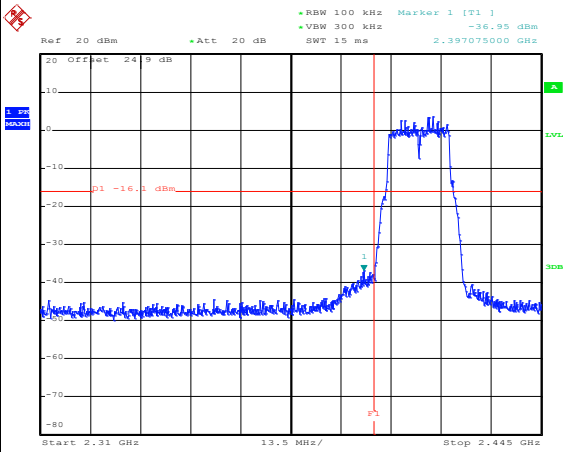
WLAN 802.11g Channel 01

100kHz PSD reference Level



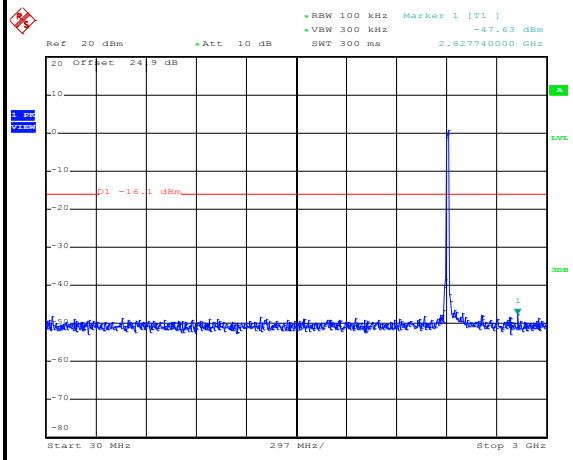
Date: 21.APR.2017 20:27:03

Low Channel Plot



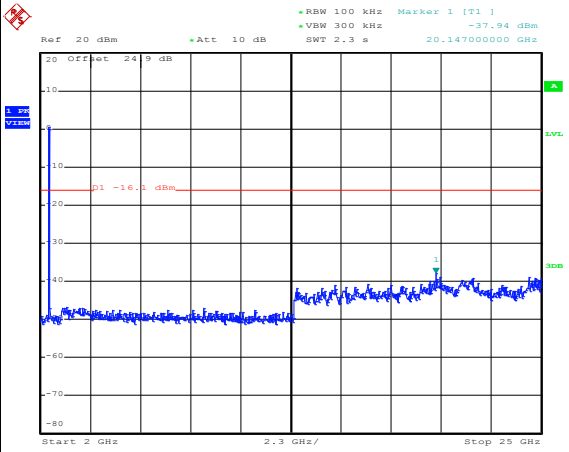
Date: 21.APR.2017 20:27:31

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:27:44

Spurious Emission 2GHz~25GHz

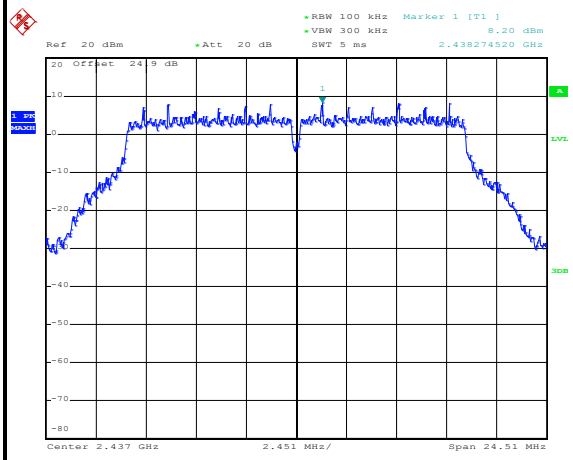


Date: 21.APR.2017 20:27:53

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

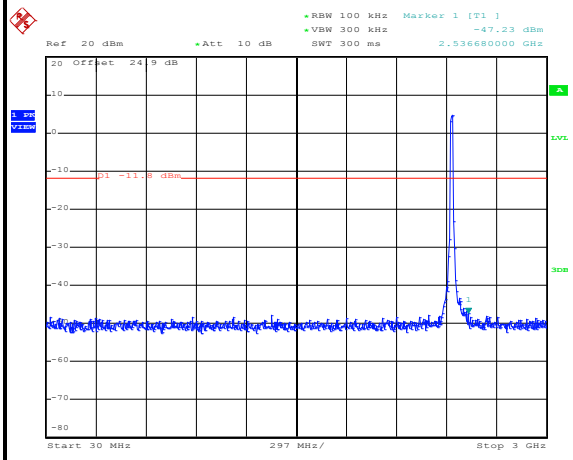
WLAN 802.11g Channel 06

100kHz PSD reference Level



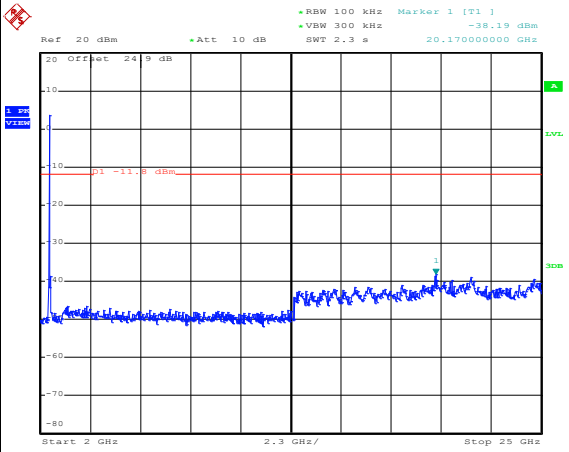
Date: 21.APR.2017 20:32:53

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:34:04

Spurious Emission 2GHz~25GHz

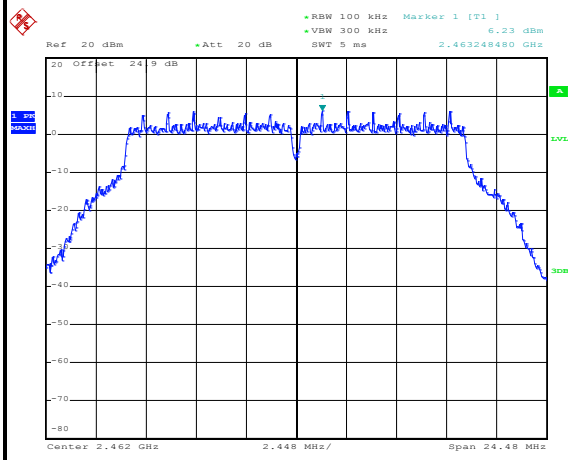


Date: 21.APR.2017 20:34:12

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

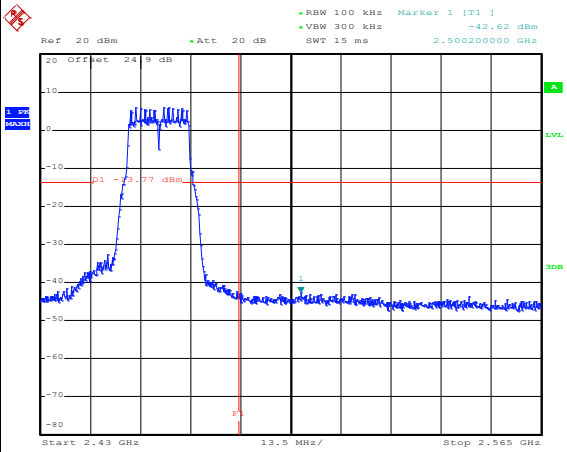
WLAN 802.11g Channel 11

100kHz PSD reference Level



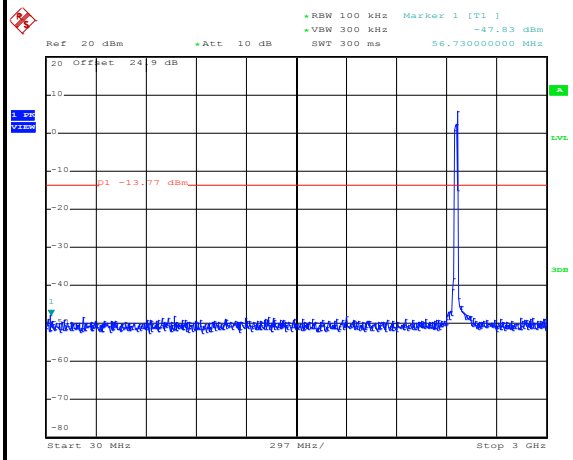
Date: 21.APR.2017 20:37:26

High Channel Plot



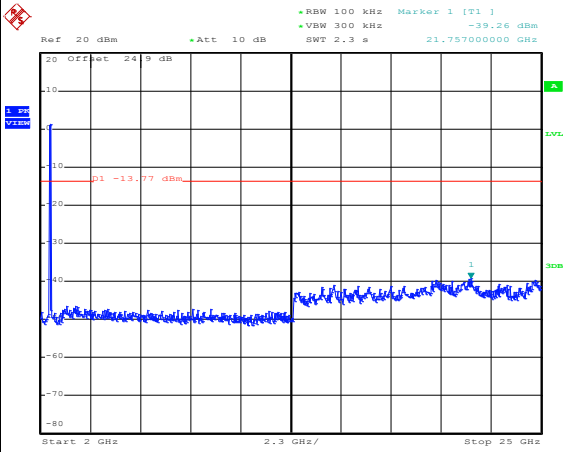
Date: 21.APR.2017 20:38:15

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:38:26

Spurious Emission 2GHz~25GHz

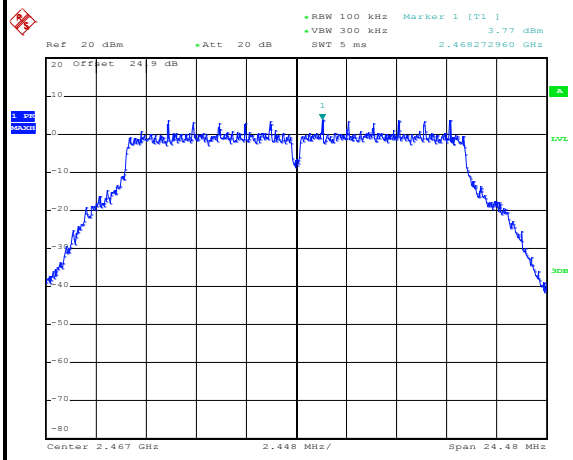


Date: 21.APR.2017 20:38:34

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

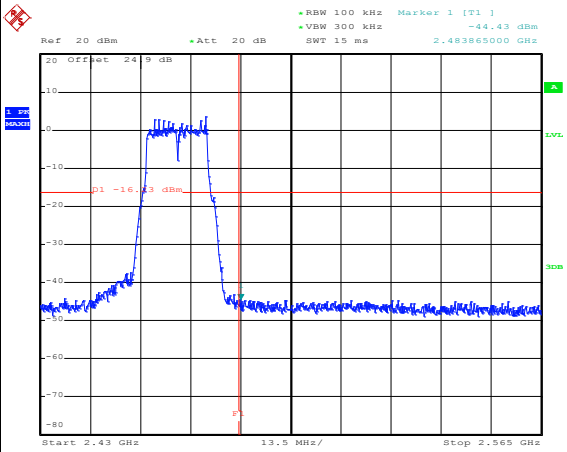
WLAN 802.11g Channel 12

100kHz PSD reference Level



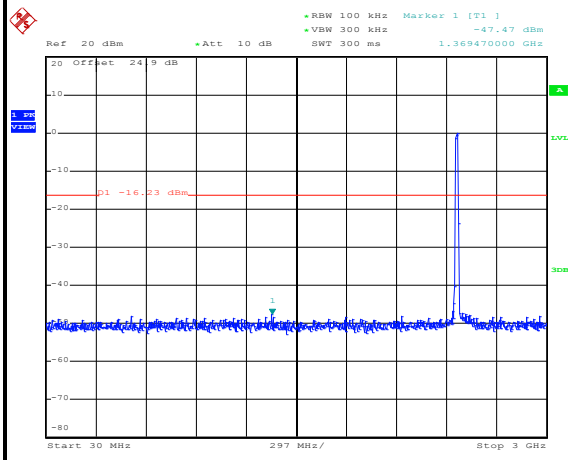
Date: 21.APR.2017 20:41:35

High Channel Plot



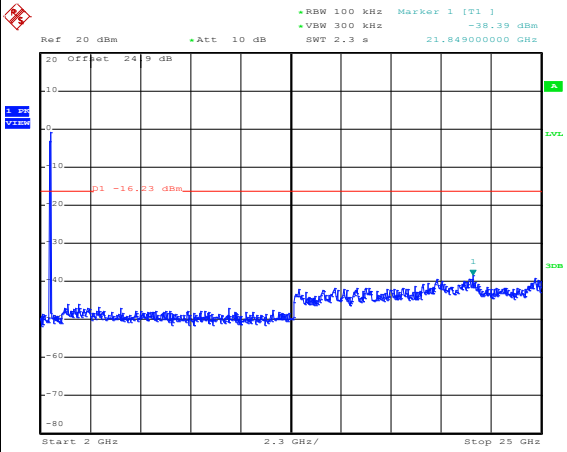
Date: 21.APR.2017 20:42:03

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:42:23

Spurious Emission 2GHz~25GHz

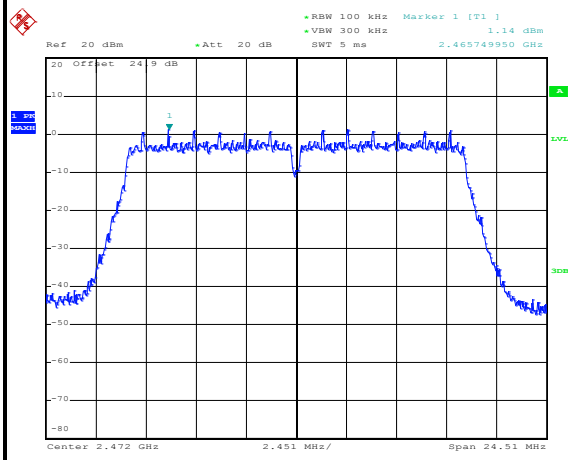


Date: 21.APR.2017 20:42:32

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

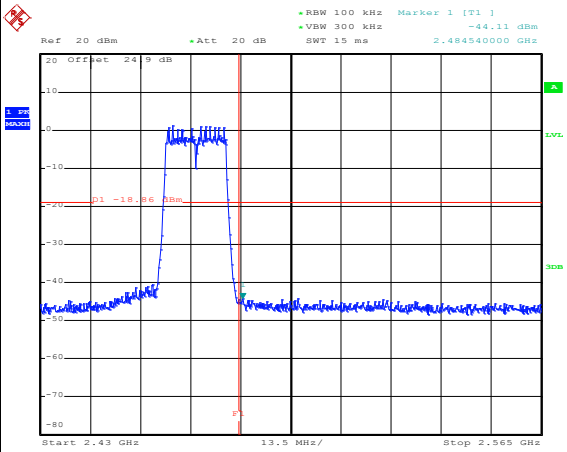
WLAN 802.11g Channel 13

100kHz PSD reference Level



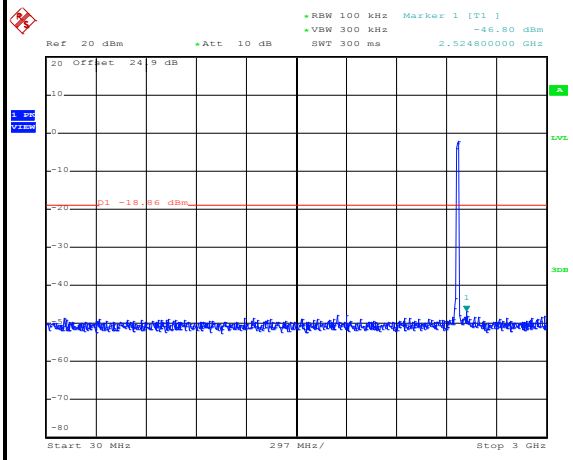
Date: 21.APR.2017 20:44:47

High Channel Plot



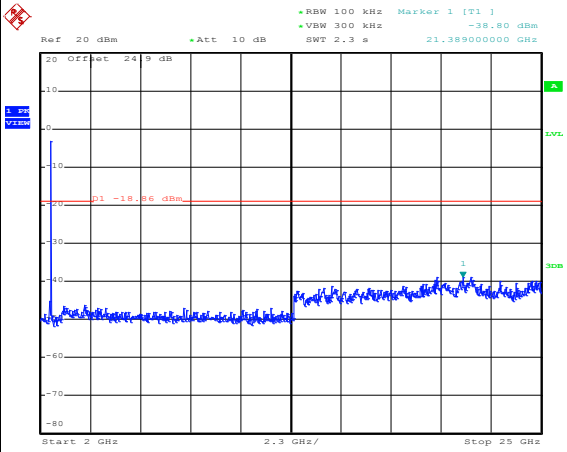
Date: 21.APR.2017 20:45:15

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:49:28

Spurious Emission 2GHz~25GHz

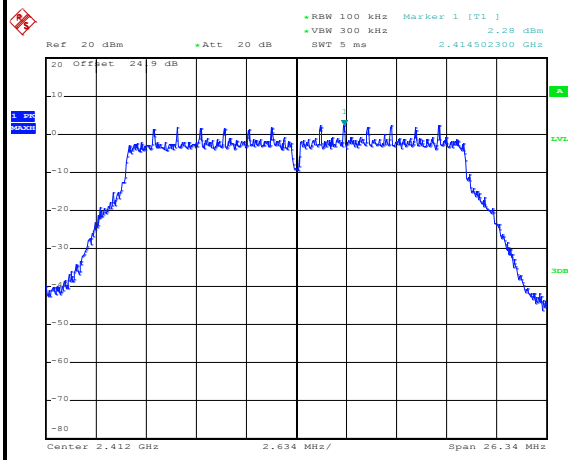


Date: 21.APR.2017 20:49:36

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

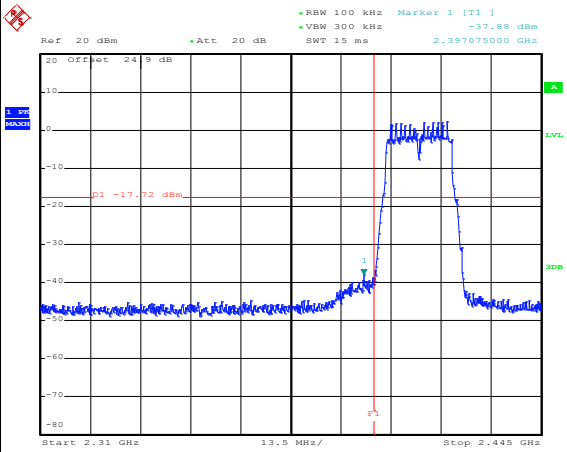
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



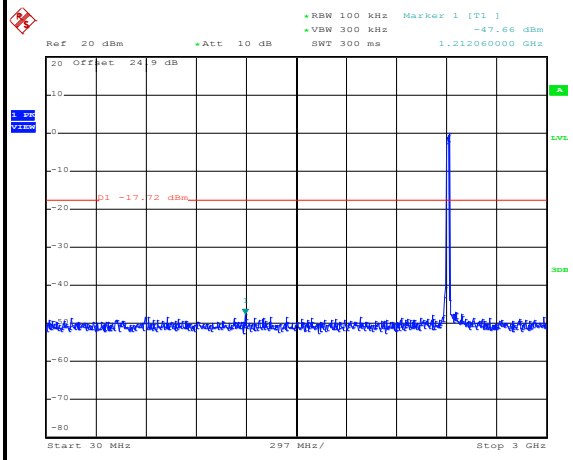
Date: 21.APR.2017 22:26:14

Low Channel Plot



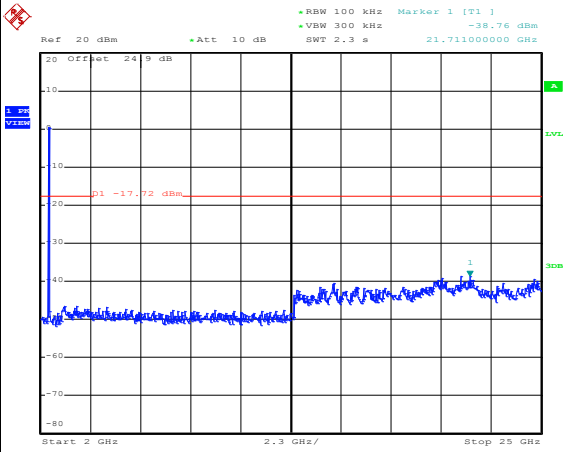
Date: 21.APR.2017 22:26:34

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:26:45

Spurious Emission 2GHz~25GHz

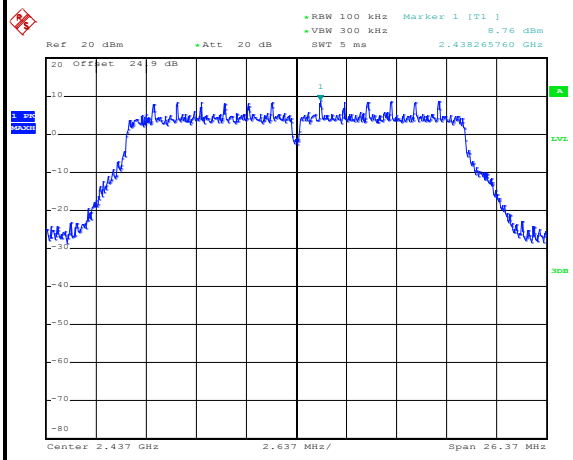


Date: 21.APR.2017 22:26:54

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

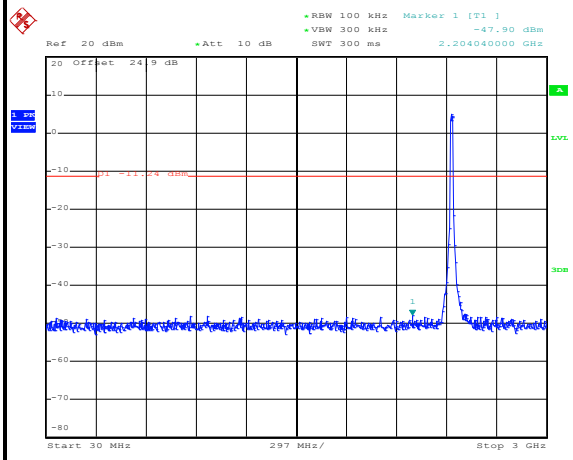
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



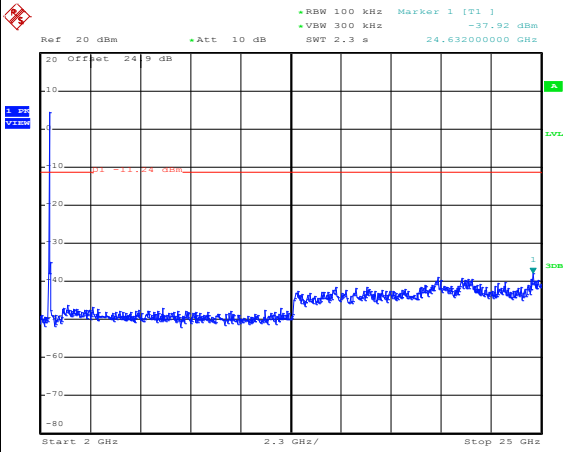
Date: 21.APR.2017 22:29:40

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:29:52

Spurious Emission 2GHz~25GHz

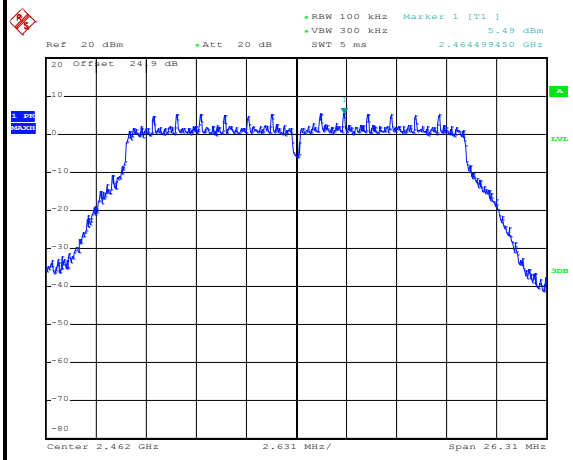


Date: 21.APR.2017 22:30:00

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

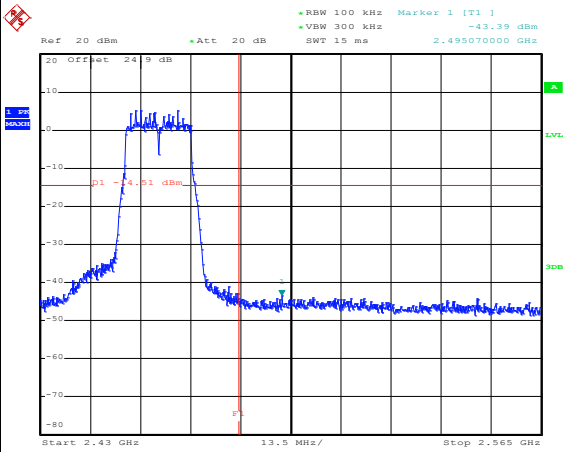
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



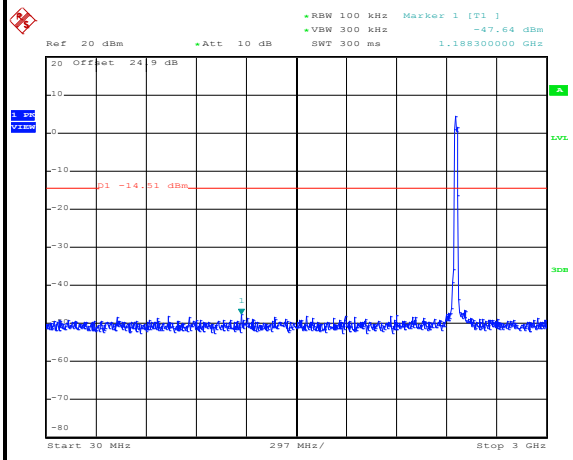
Date: 21.APR.2017 22:32:19

High Channel Plot



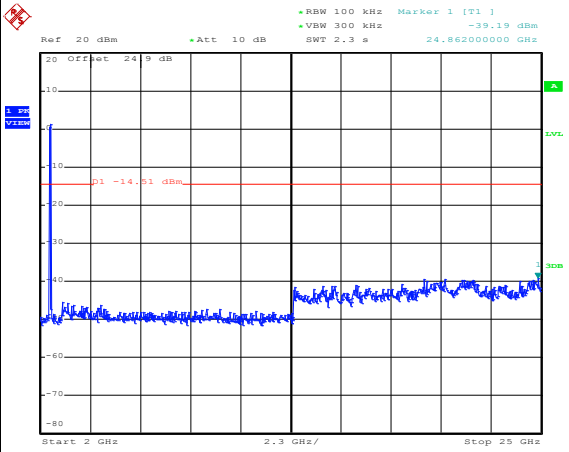
Date: 21.APR.2017 22:32:38

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:32:51

Spurious Emission 2GHz~25GHz

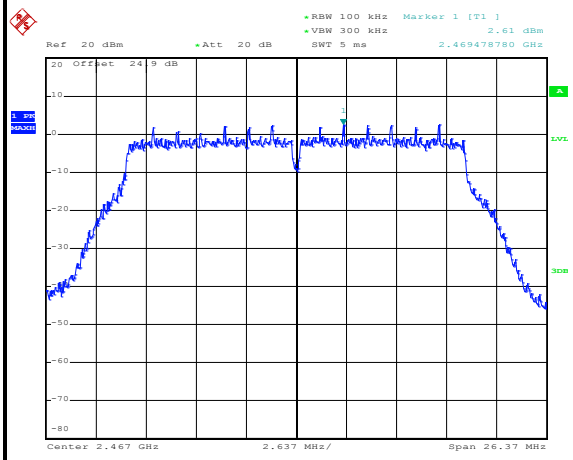


Date: 21.APR.2017 22:32:59

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

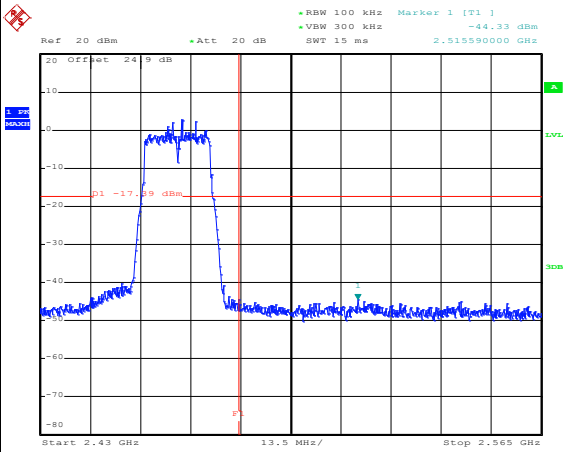
WLAN 802.11n HT20 Channel 12

100kHz PSD reference Level



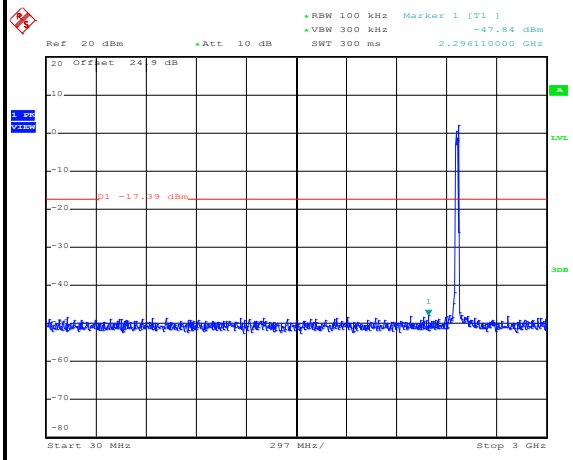
Date: 21.APR.2017 22:34:55

High Channel Plot



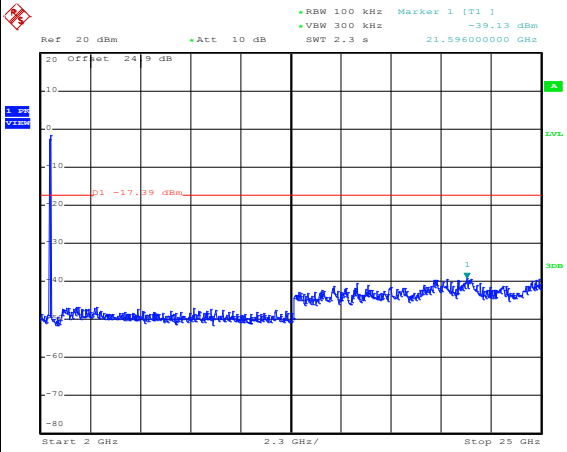
Date: 21.APR.2017 22:35:17

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:35:28

Spurious Emission 2GHz~25GHz

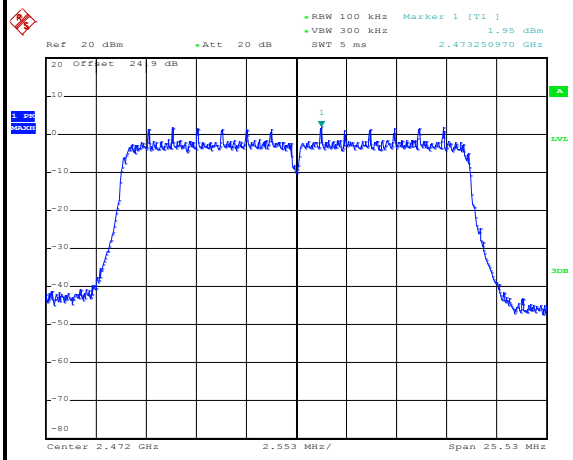


Date: 21.APR.2017 22:35:37

Number of TX :	1	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

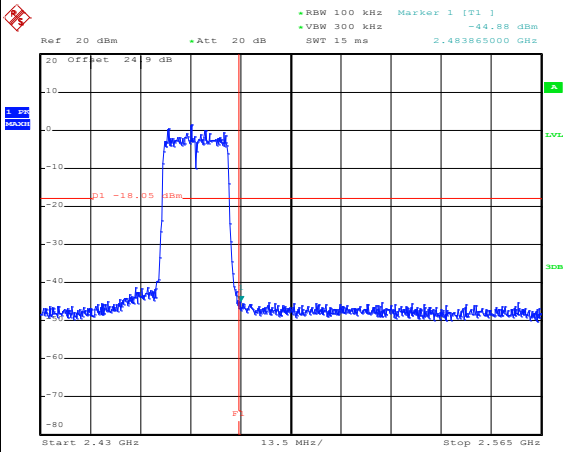
WLAN 802.11n HT20 Channel 13

100kHz PSD reference Level



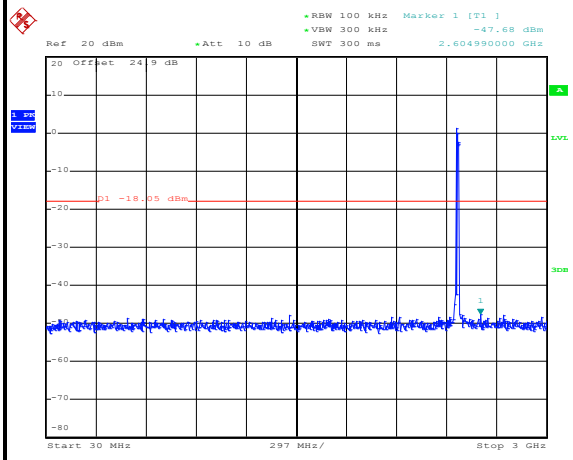
Date: 21.APR.2017 22:38:02

High Channel Plot



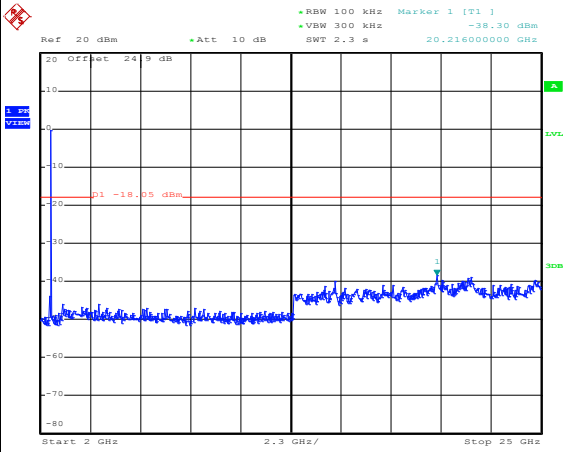
Date: 21.APR.2017 22:38:13

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:38:26

Spurious Emission 2GHz~25GHz



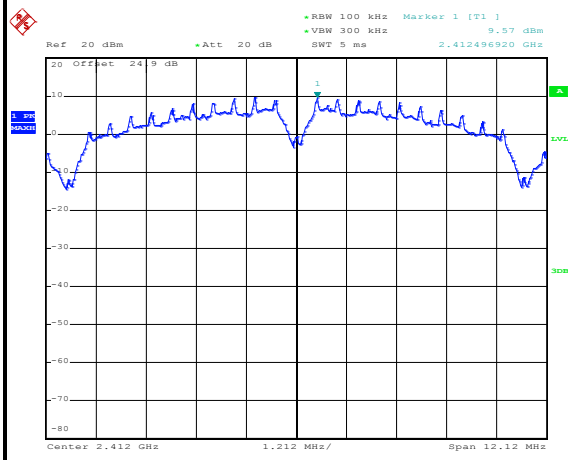
Date: 21.APR.2017 22:38:35

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

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

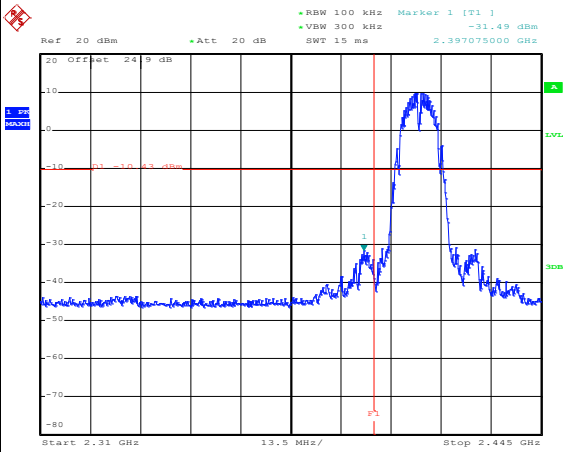
WLAN 802.11b Channel 01

100kHz PSD reference Level



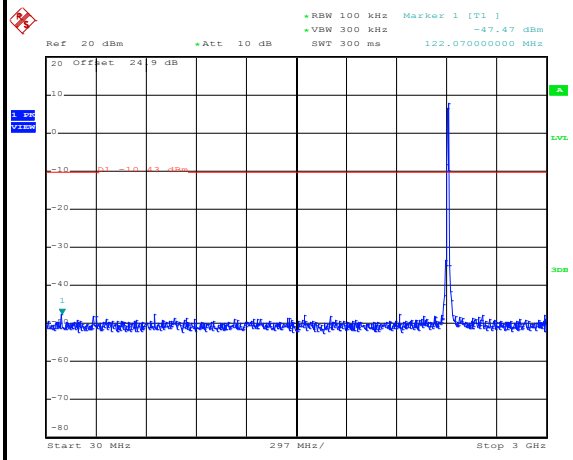
Date: 21.APR.2017 19:43:24

Low Channel Plot



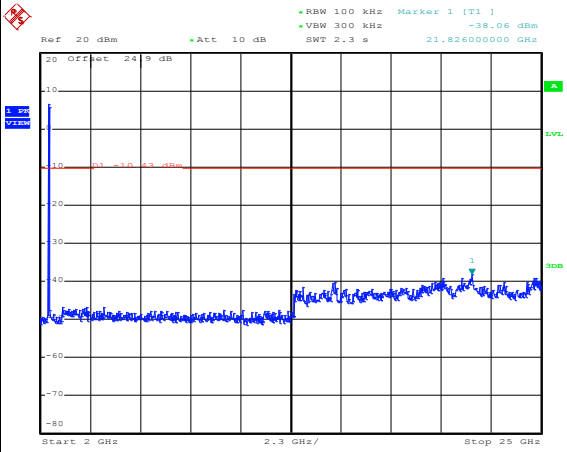
Date: 21.APR.2017 19:46:53

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 19:47:06

Spurious Emission 2GHz~25GHz

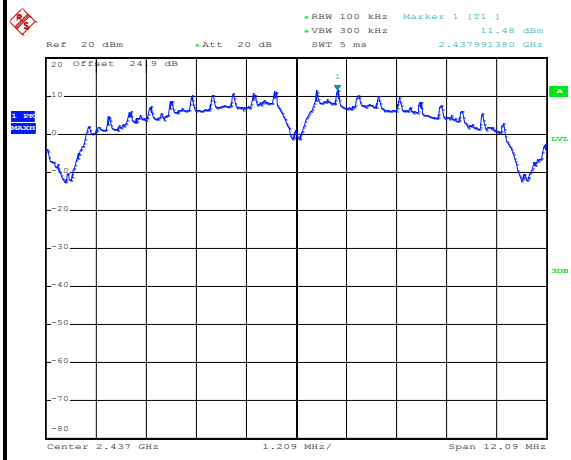


Date: 21.APR.2017 19:47:15

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

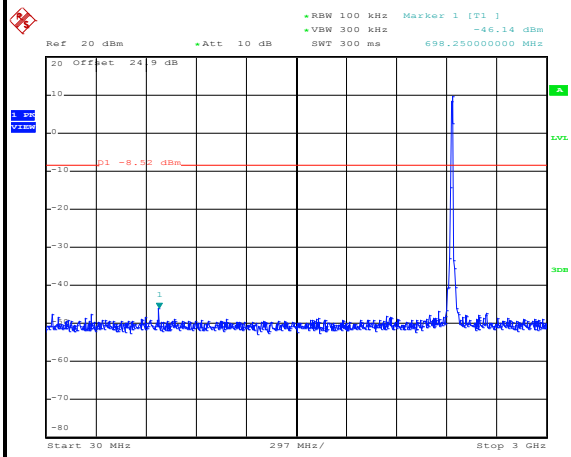
WLAN 802.11b Channel 06

100kHz PSD reference Level



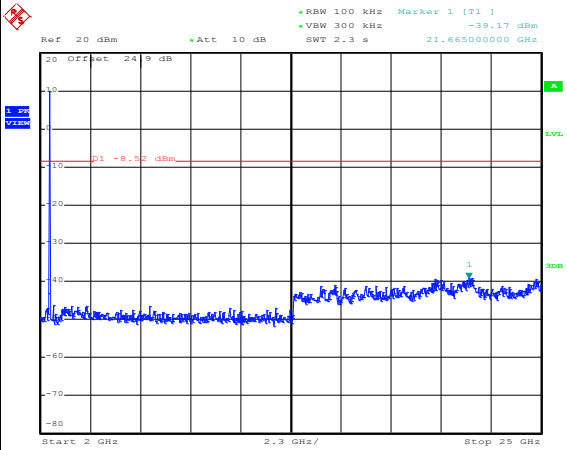
Date: 21.APR.2017 19:58:47

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 19:59:05

Spurious Emission 2GHz~25GHz

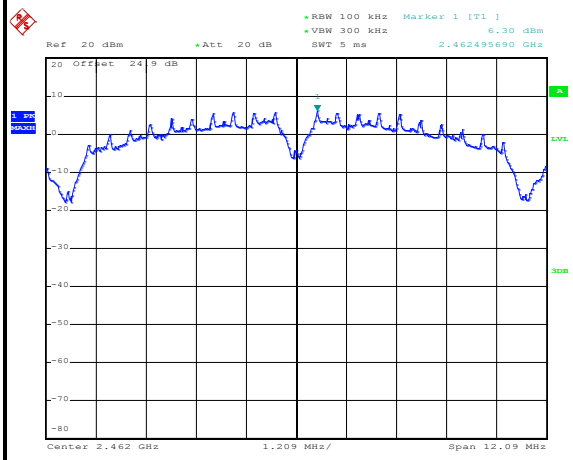


Date: 21.APR.2017 19:59:13

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

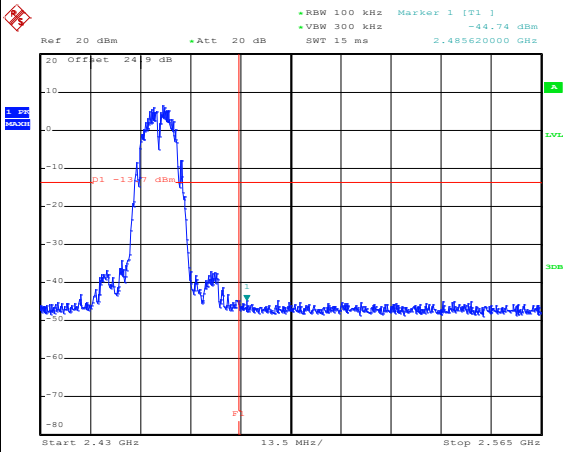
WLAN 802.11b Channel 11

100kHz PSD reference Level



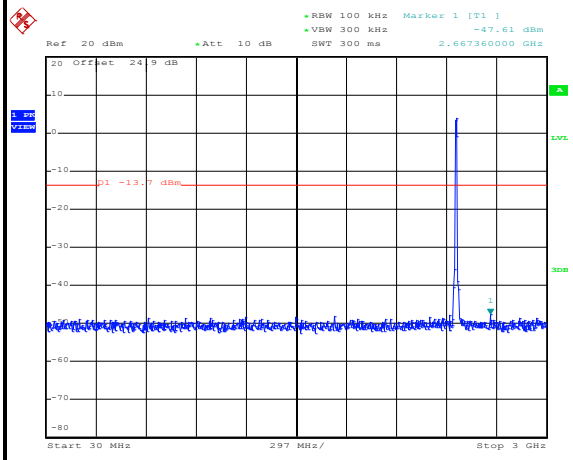
Date: 21.APR.2017 20:01:54

High Channel Plot



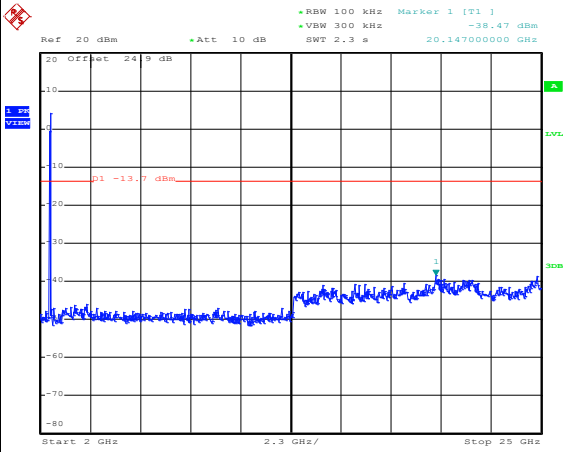
Date: 21.APR.2017 20:02:13

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:02:35

Spurious Emission 2GHz~25GHz

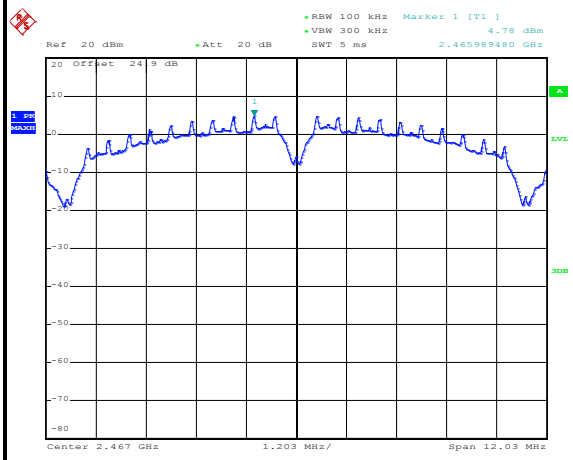


Date: 21.APR.2017 20:02:43

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

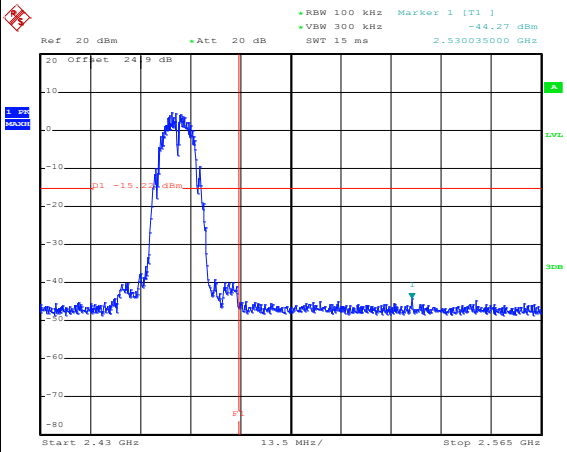
WLAN 802.11b Channel 12

100kHz PSD reference Level



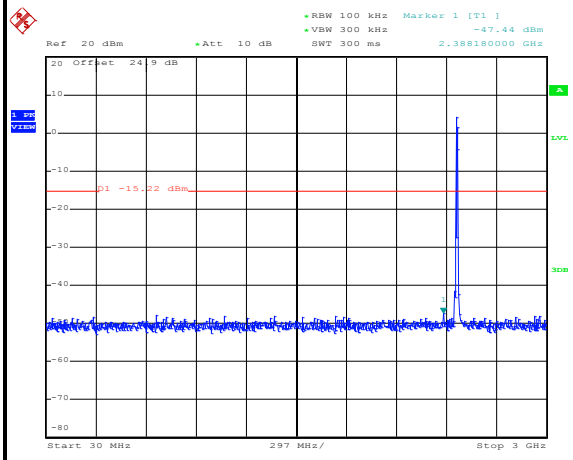
Date: 21.APR.2017 20:05:11

High Channel Plot



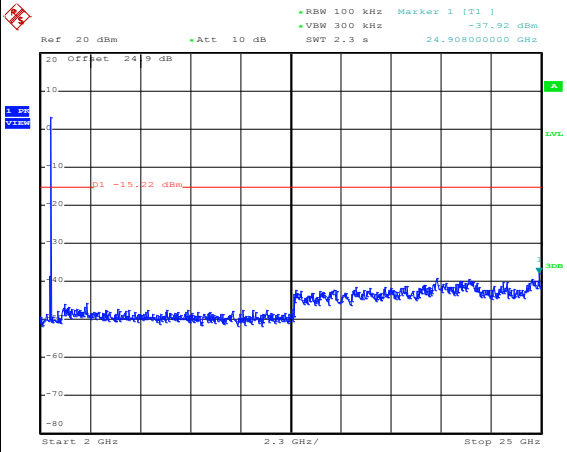
Date: 21.APR.2017 20:10:31

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:11:02

Spurious Emission 2GHz~25GHz

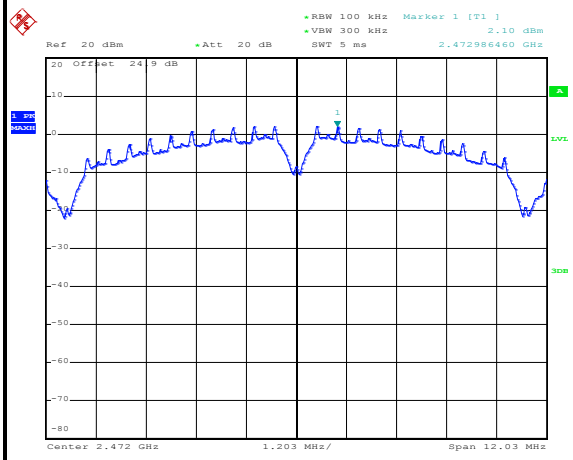


Date: 21.APR.2017 20:11:11

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

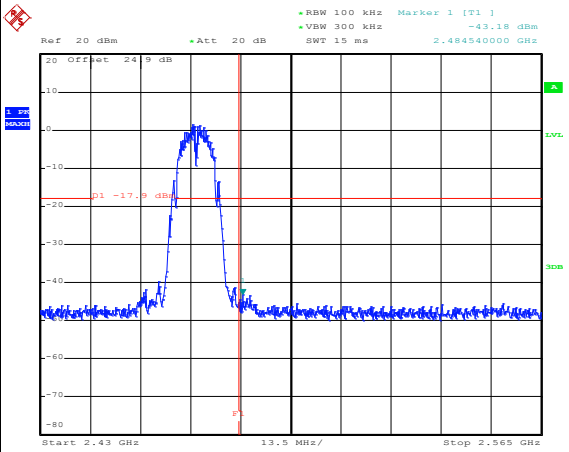
WLAN 802.11b Channel 13

100kHz PSD reference Level



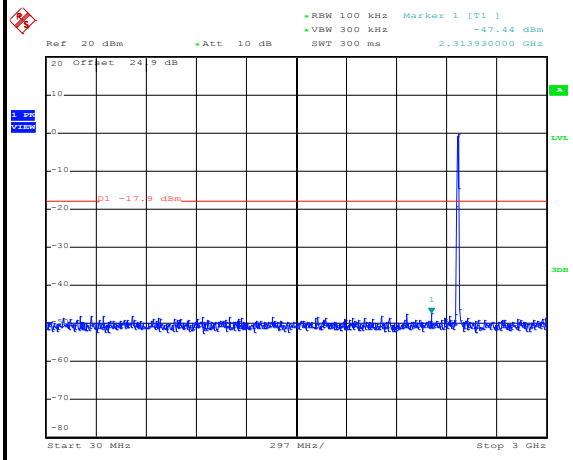
Date: 21.APR.2017 20:15:22

High Channel Plot



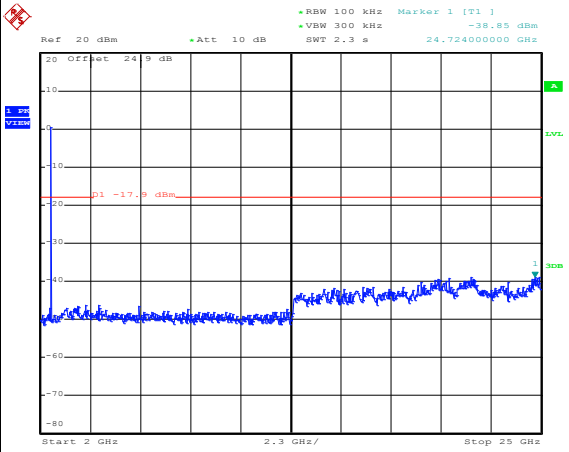
Date: 21.APR.2017 20:15:35

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 20:15:53

Spurious Emission 2GHz~25GHz

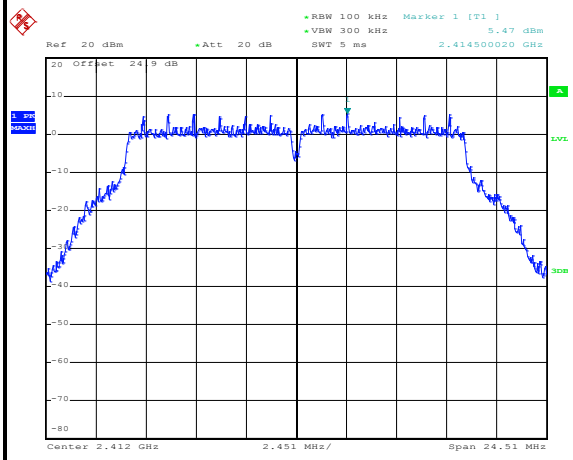


Date: 21.APR.2017 20:16:02

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

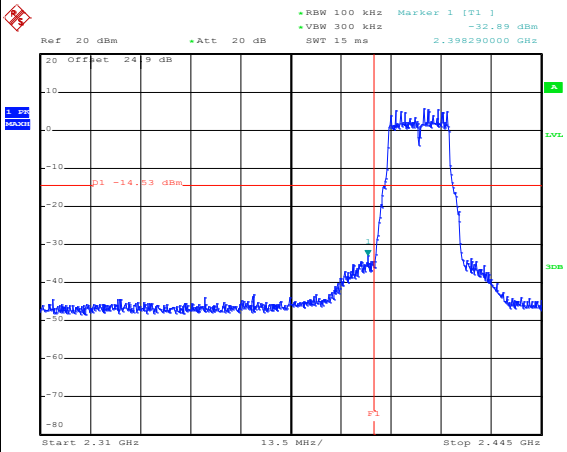
WLAN 802.11g Channel 01

100kHz PSD reference Level



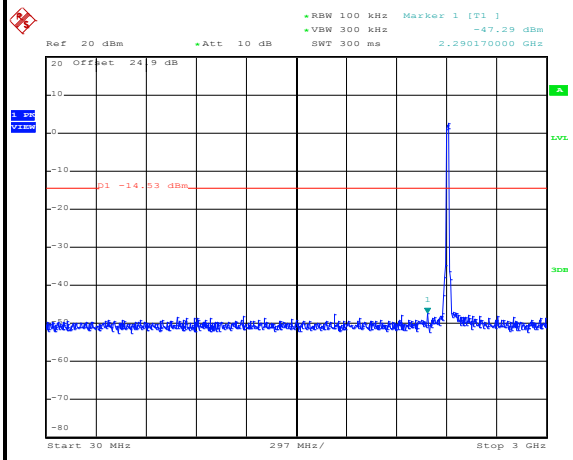
Date: 21.APR.2017 20:59:42

Low Channel Plot



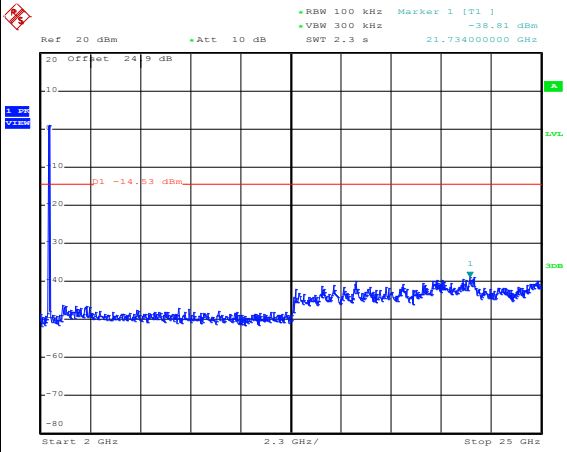
Date: 21.APR.2017 20:59:57

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:00:10

Spurious Emission 2GHz~25GHz

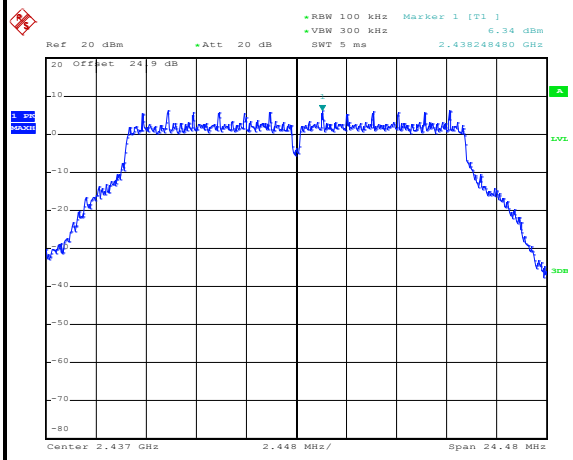


Date: 21.APR.2017 21:00:18

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

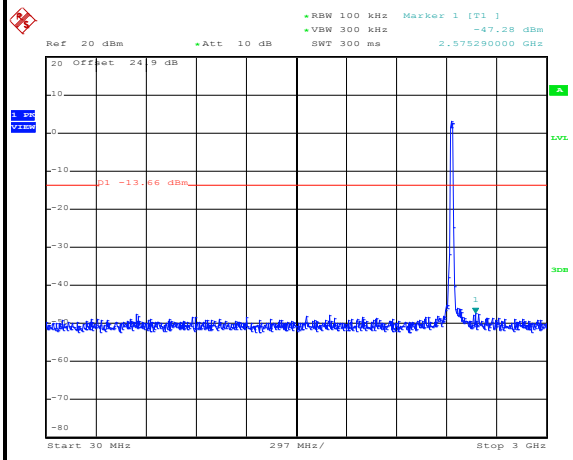
WLAN 802.11g Channel 06

100kHz PSD reference Level



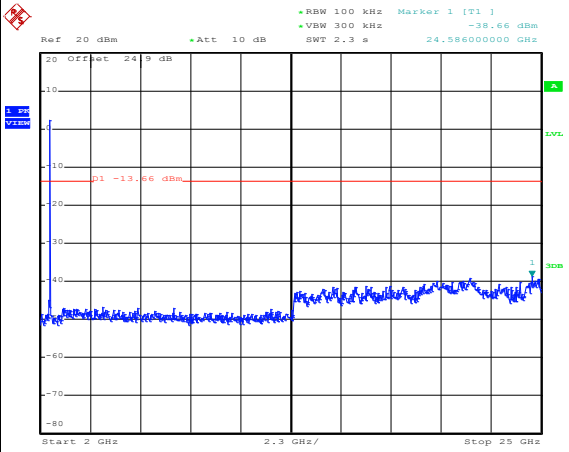
Date: 21.APR.2017 21:02:23

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:02:40

Spurious Emission 2GHz~25GHz

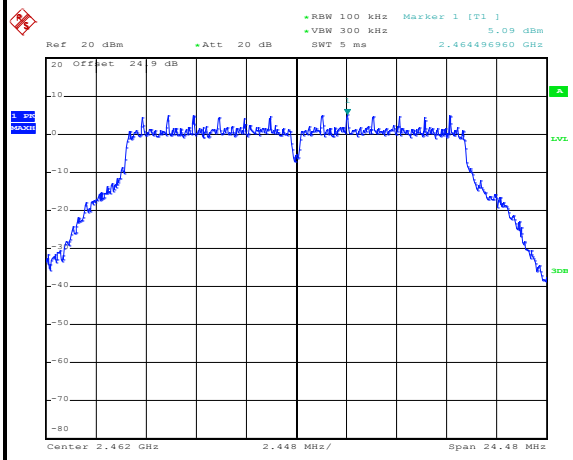


Date: 21.APR.2017 21:02:48

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

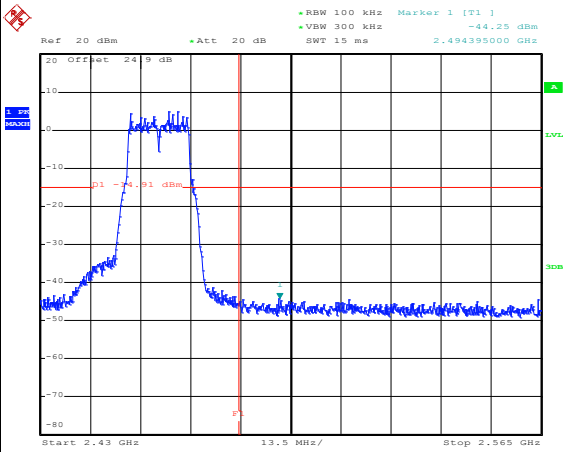
WLAN 802.11g Channel 11

100kHz PSD reference Level



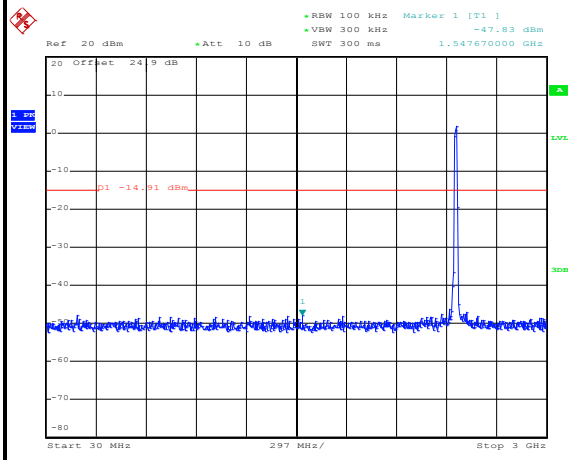
Date: 21.APR.2017 21:05:24

High Channel Plot



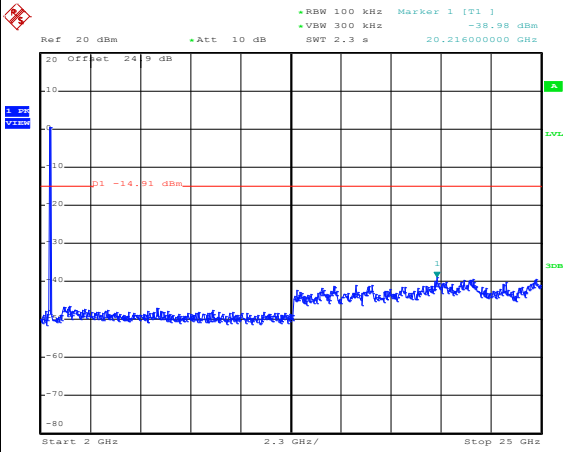
Date: 21.APR.2017 21:05:39

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:05:51

Spurious Emission 2GHz~25GHz

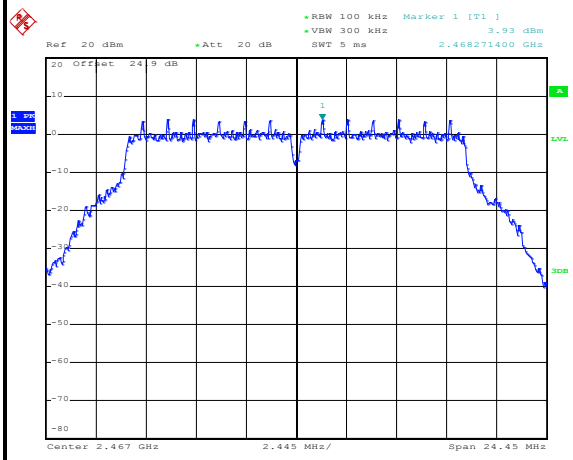


Date: 21.APR.2017 21:05:59

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

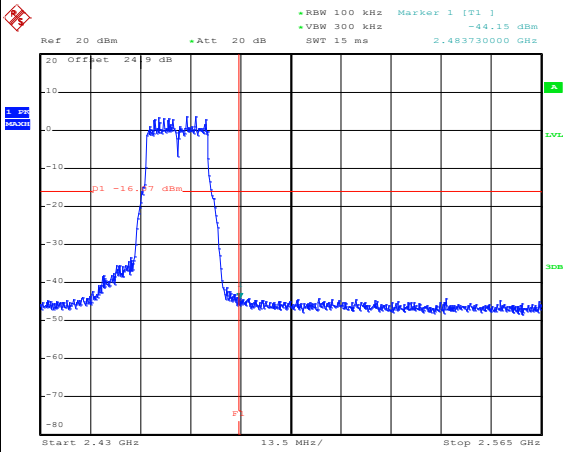
WLAN 802.11g Channel 12

100kHz PSD reference Level



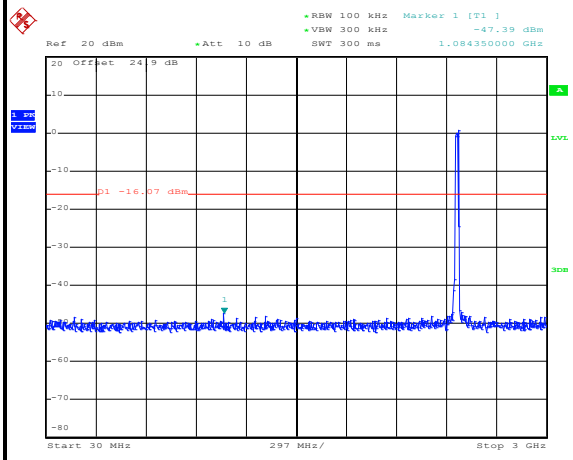
Date: 21.APR.2017 21:09:00

High Channel Plot



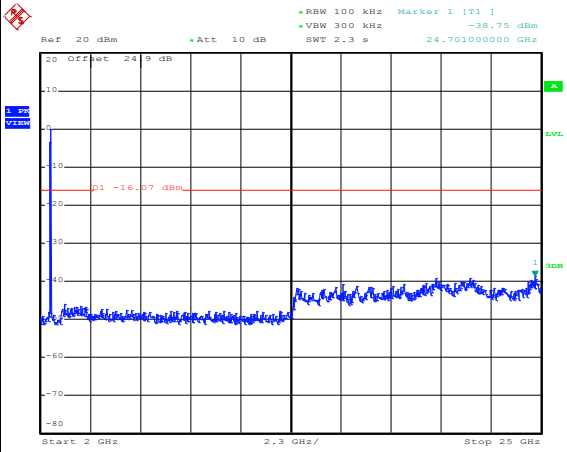
Date: 21.APR.2017 21:09:26

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:10:22

Spurious Emission 2GHz~25GHz

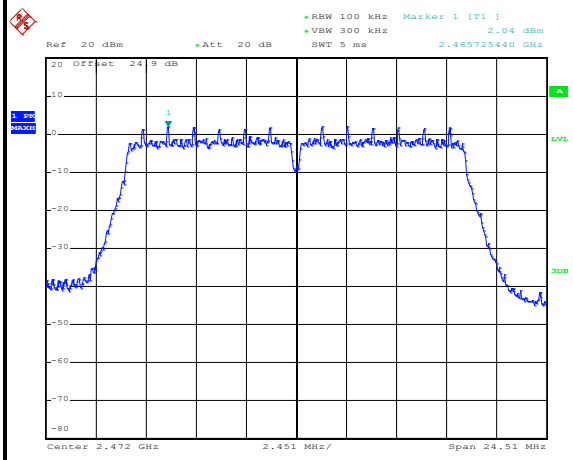


Date: 21.APR.2017 21:10:30

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

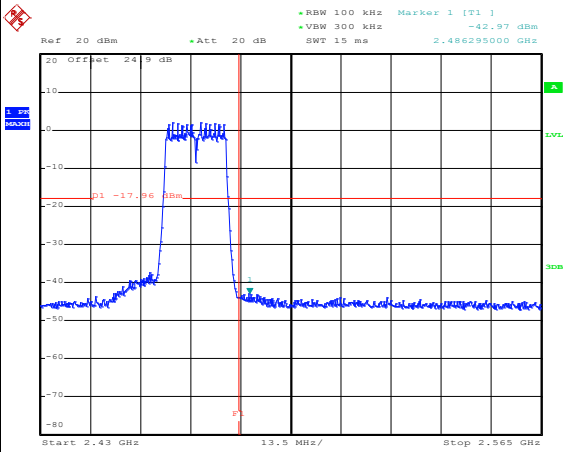
WLAN 802.11g Channel 13

100kHz PSD reference Level



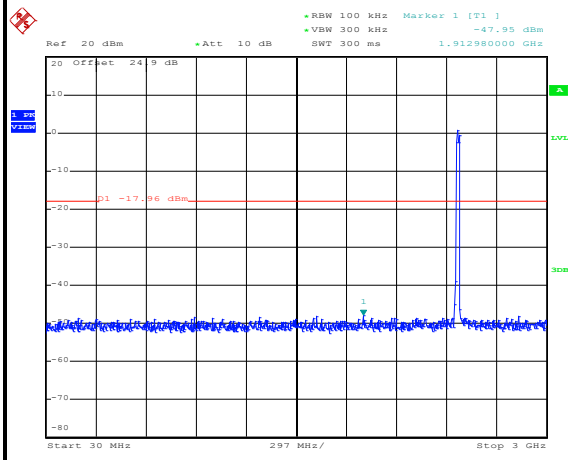
Date: 21.APR.2017 21:43:35

High Channel Plot



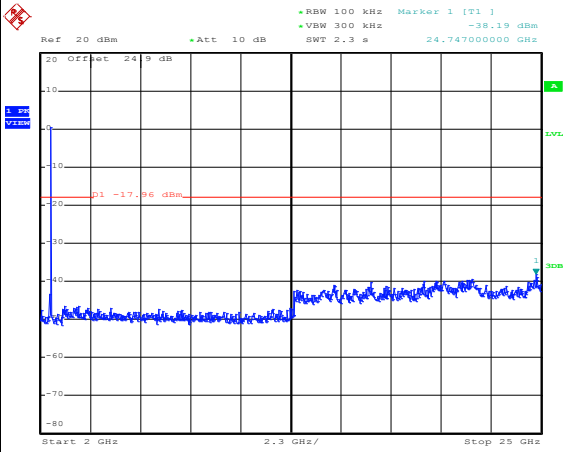
Date: 21.APR.2017 21:45:10

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:45:21

Spurious Emission 2GHz~25GHz

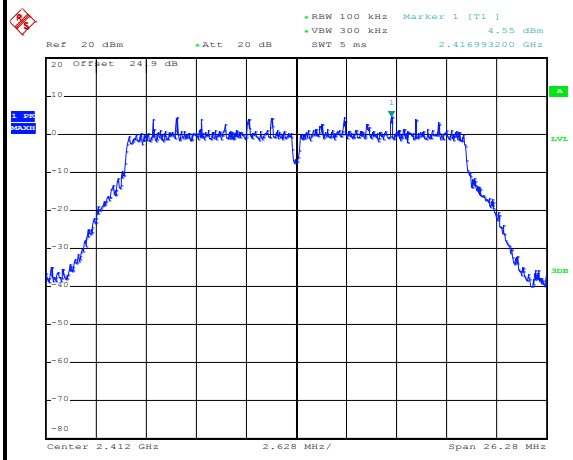


Date: 21.APR.2017 21:45:29

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

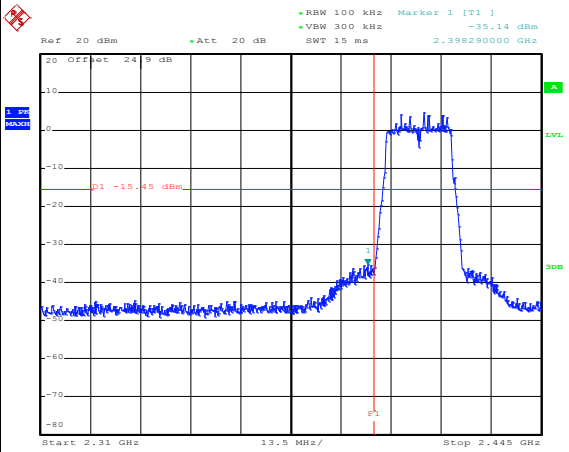
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



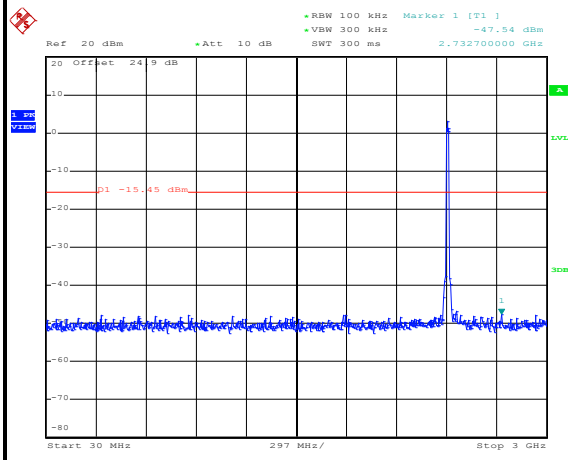
Date: 21.APR.2017 22:40:43

Low Channel Plot



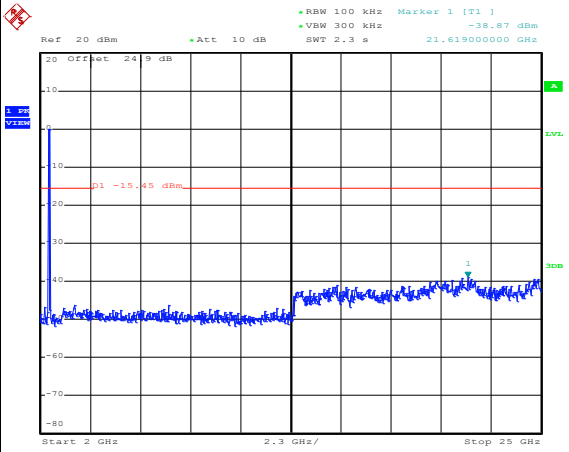
Date: 21.APR.2017 22:40:56

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:41:08

Spurious Emission 2GHz~25GHz

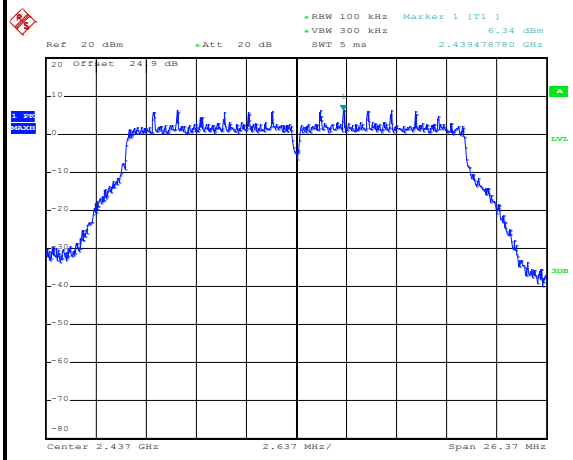


Date: 21.APR.2017 22:41:16

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

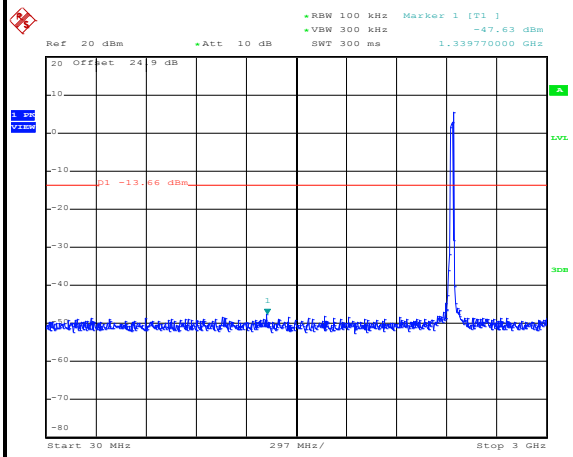
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



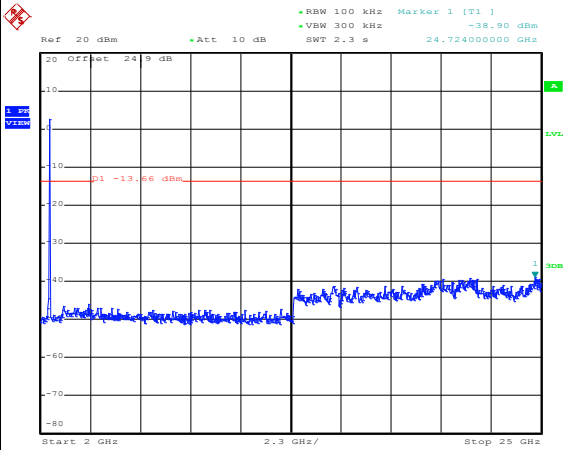
Date: 21.APR.2017 22:42:39

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:42:56

Spurious Emission 2GHz~25GHz

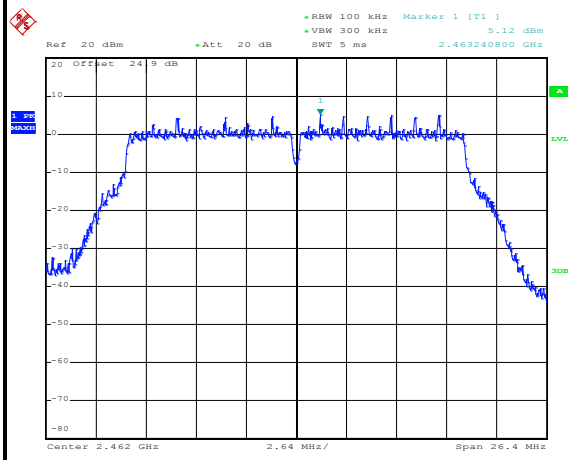


Date: 21.APR.2017 22:43:05

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

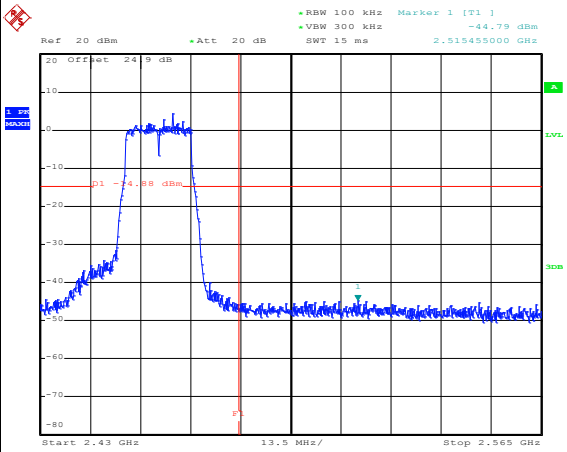
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



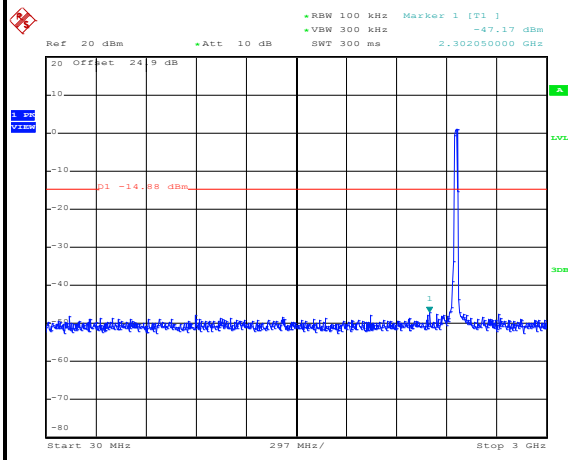
Date: 21.APR.2017 22:44:55

High Channel Plot



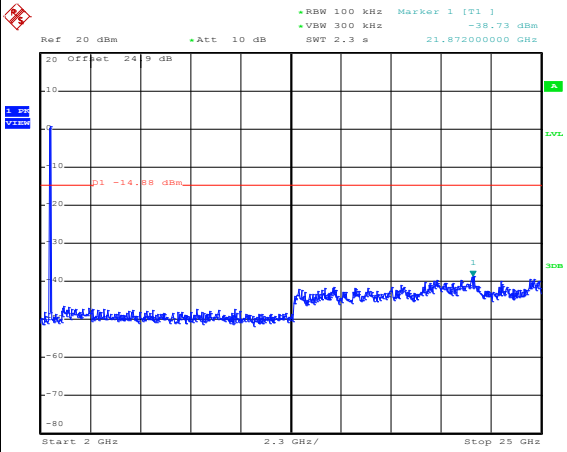
Date: 21.APR.2017 22:45:03

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:45:14

Spurious Emission 2GHz~25GHz

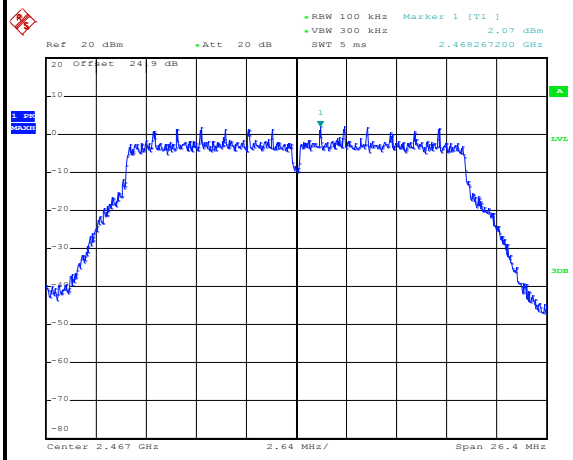


Date: 21.APR.2017 22:45:23

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

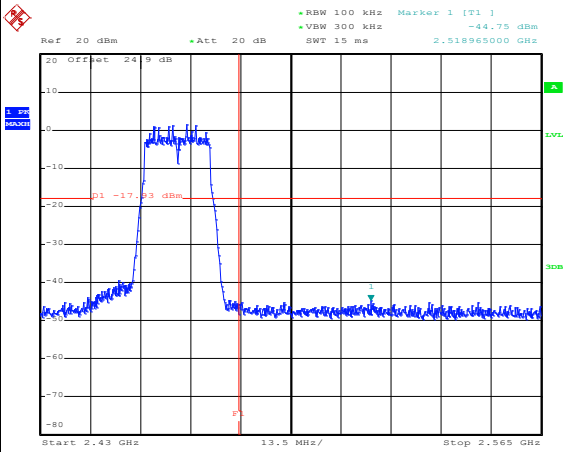
WLAN 802.11g Channel 12

100kHz PSD reference Level



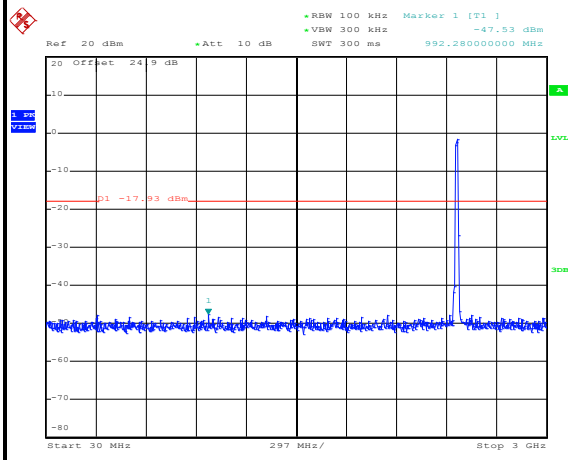
Date: 21.APR.2017 22:46:55

High Channel Plot



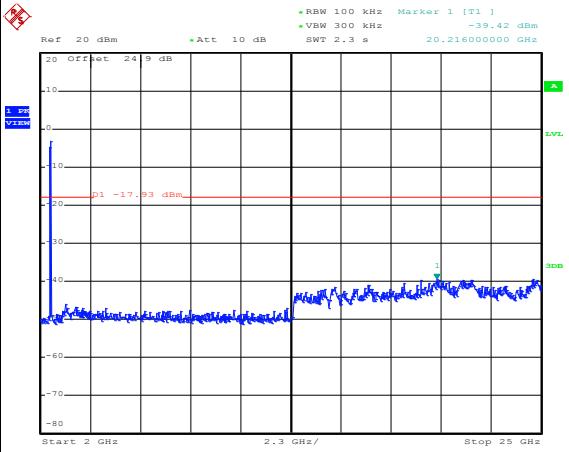
Date: 21.APR.2017 22:47:07

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:47:25

Spurious Emission 2GHz~25GHz

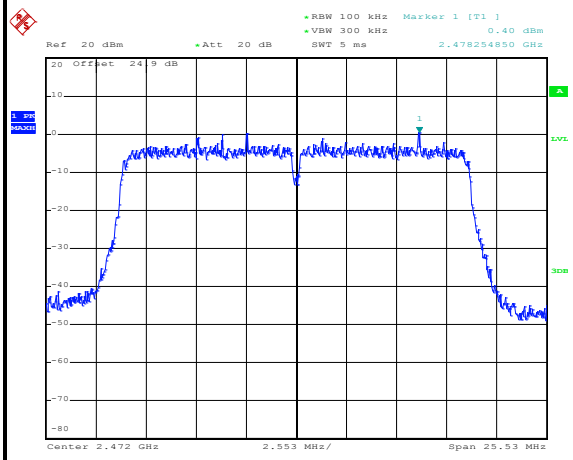


Date: 21.APR.2017 22:47:34

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

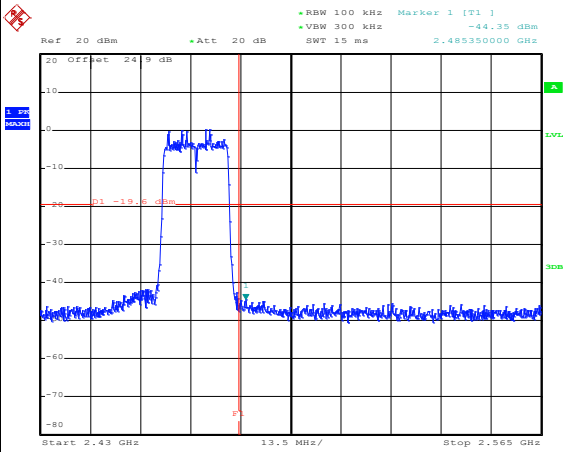
WLAN 802.11g Channel 13

100kHz PSD reference Level



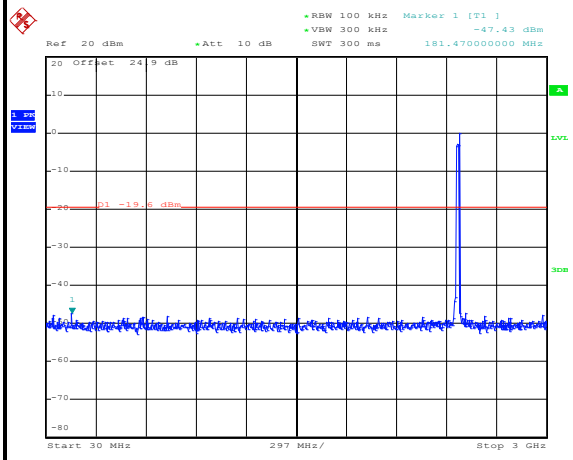
Date: 21.APR.2017 22:48:45

High Channel Plot



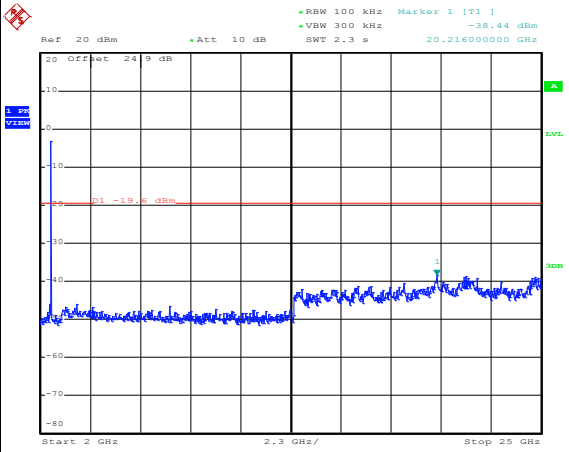
Date: 21.APR.2017 22:48:53

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:49:31

Spurious Emission 2GHz~25GHz



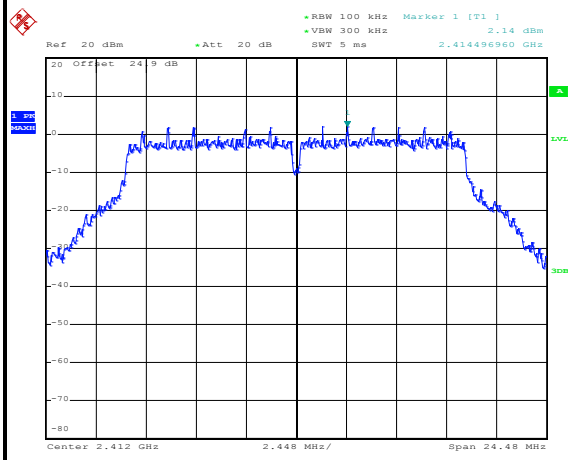
Date: 21.APR.2017 22:49:40

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

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

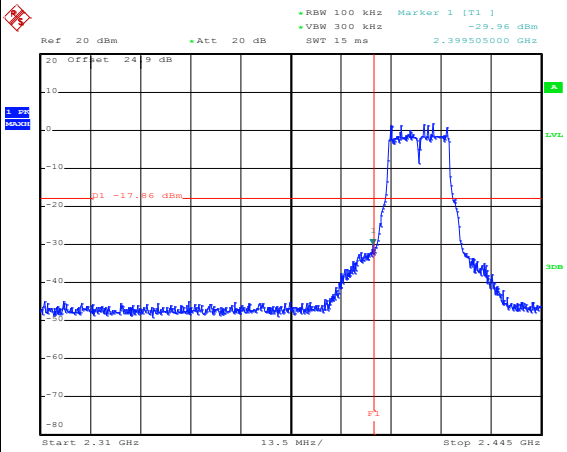
WLAN 802.11g Channel 01

100kHz PSD reference Level



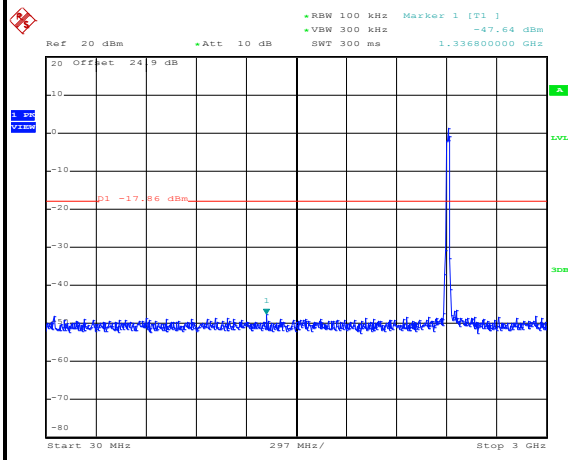
Date: 21.APR.2017 21:52:38

Low Channel Plot



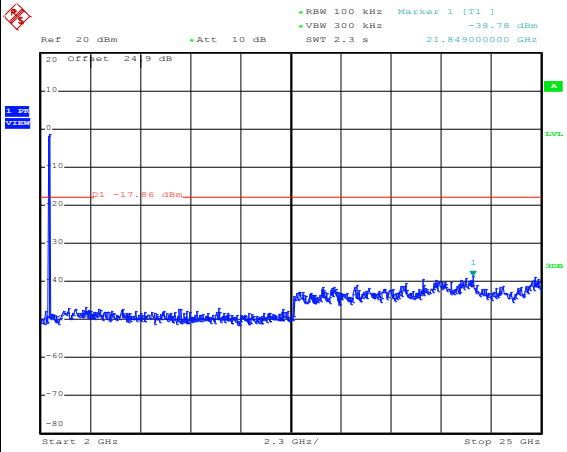
Date: 21.APR.2017 21:52:56

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:53:07

Spurious Emission 2GHz~25GHz

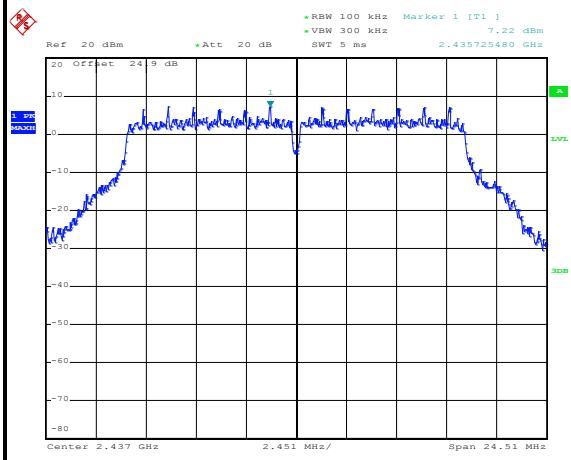


Date: 21.APR.2017 21:53:16

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

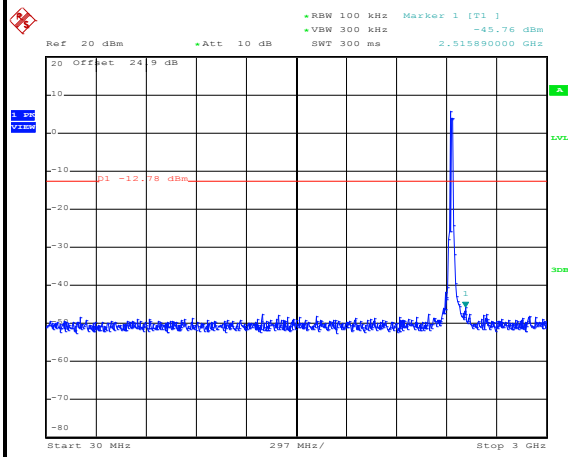
WLAN 802.11g Channel 06

100kHz PSD reference Level



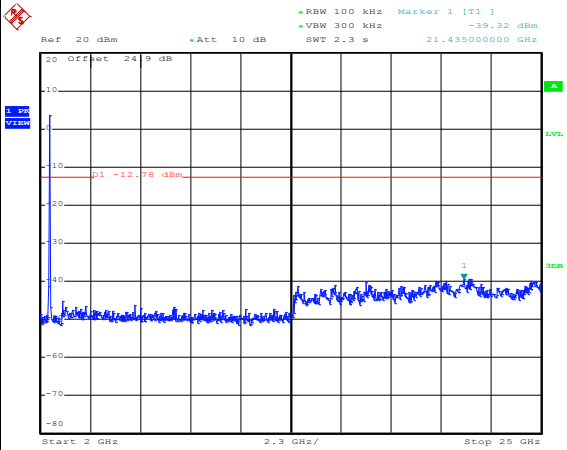
Date: 21.APR.2017 21:57:51

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 21:58:04

Spurious Emission 2GHz~25GHz

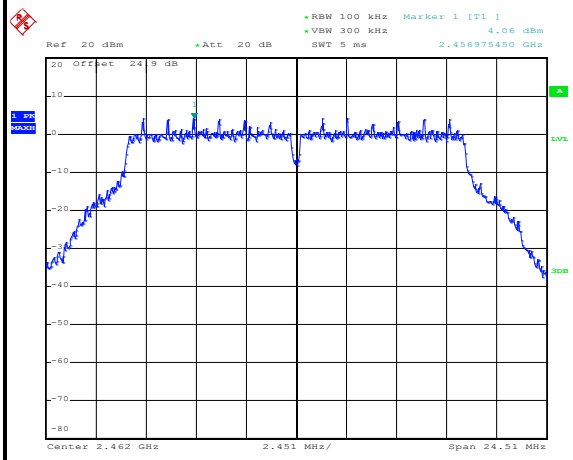


Date: 21.APR.2017 21:58:12

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

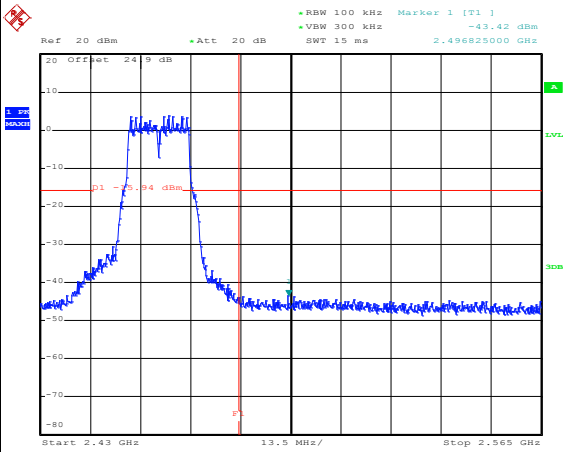
WLAN 802.11g Channel 11

100kHz PSD reference Level



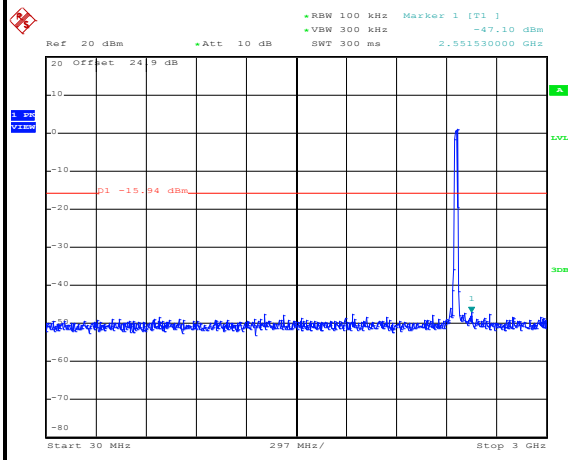
Date: 21.APR.2017 22:05:45

High Channel Plot



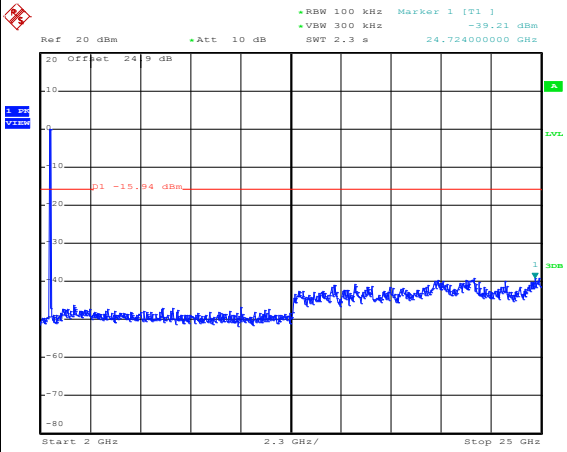
Date: 21.APR.2017 22:06:03

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:10:53

Spurious Emission 2GHz~25GHz

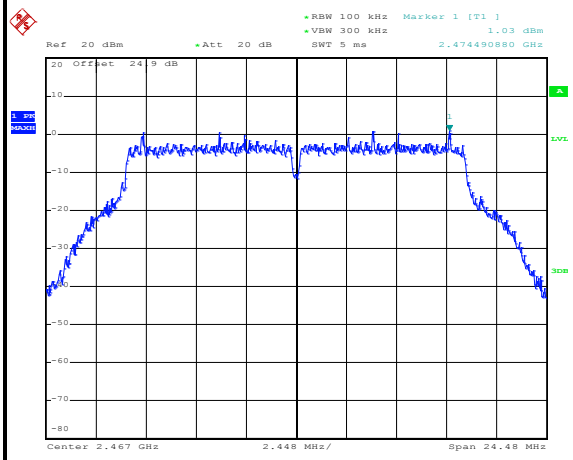


Date: 21.APR.2017 22:11:01

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

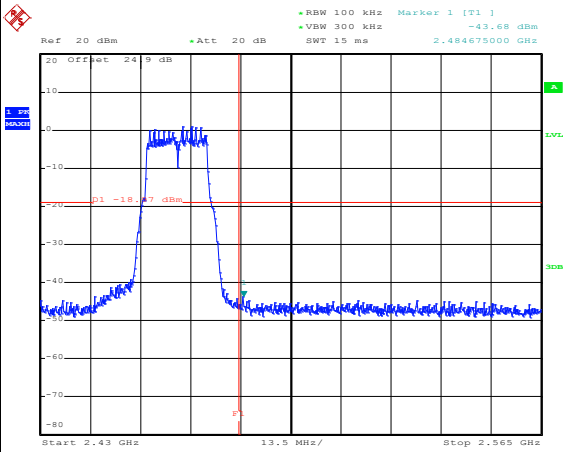
WLAN 802.11g Channel 12

100kHz PSD reference Level



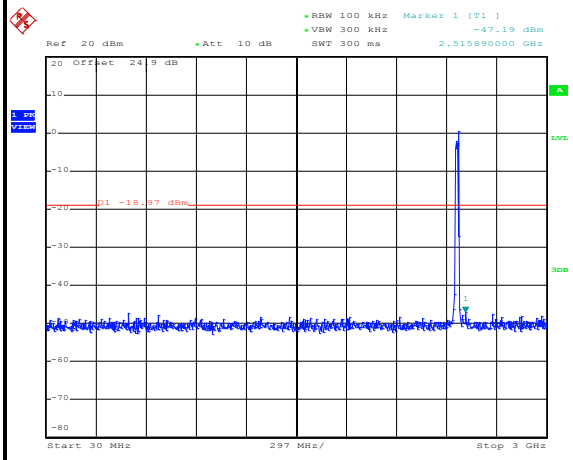
Date: 21.APR.2017 22:15:31

High Channel Plot



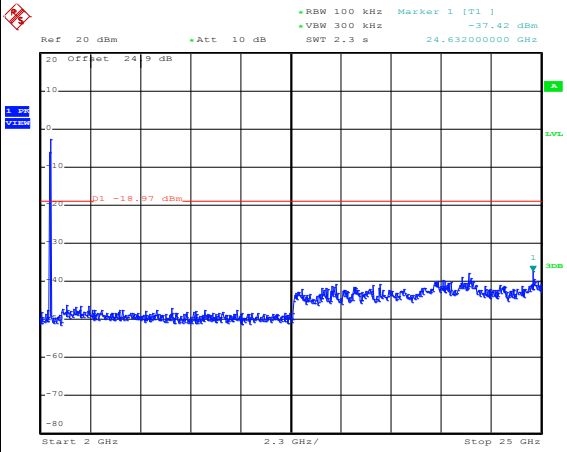
Date: 21.APR.2017 22:15:52

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:16:13

Spurious Emission 2GHz~25GHz

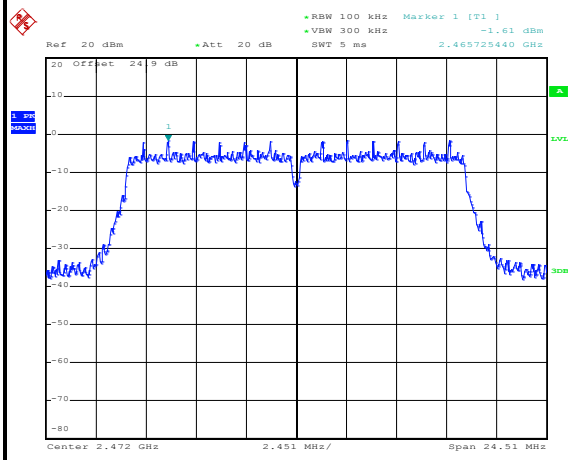


Date: 21.APR.2017 22:16:21

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

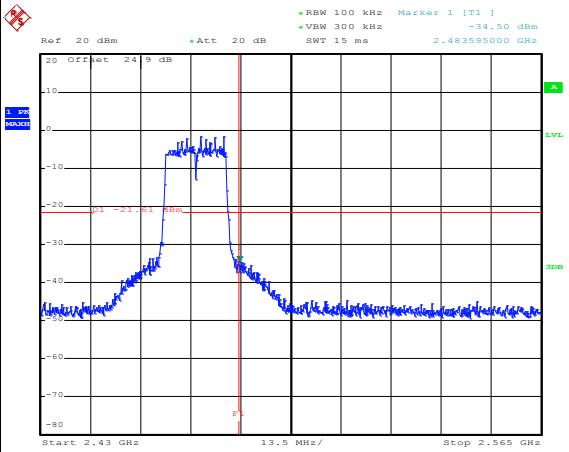
WLAN 802.11g Channel 13

100kHz PSD reference Level



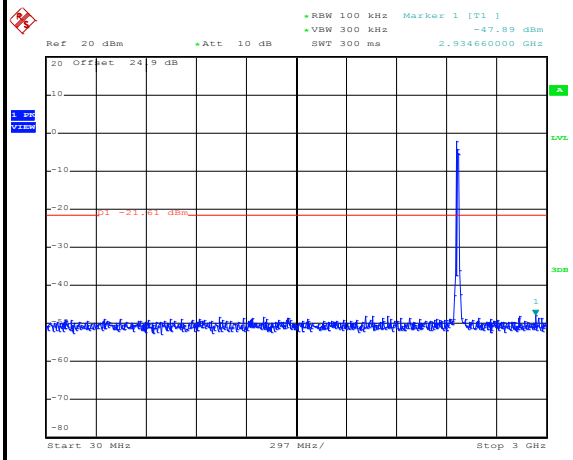
Date: 21.APR.2017 22:20:41

High Channel Plot



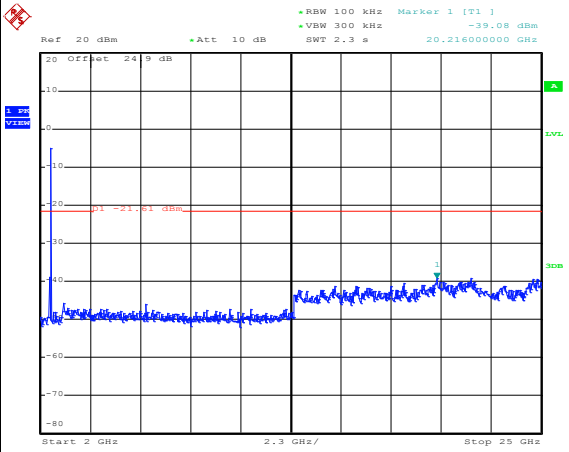
Date: 21.APR.2017 22:20:53

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:21:06

Spurious Emission 2GHz~25GHz

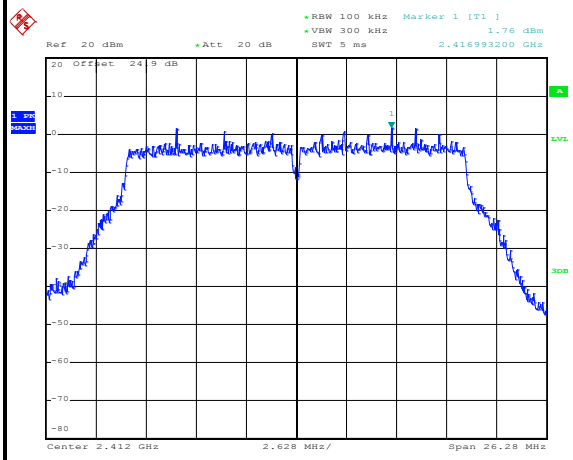


Date: 21.APR.2017 22:21:14

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

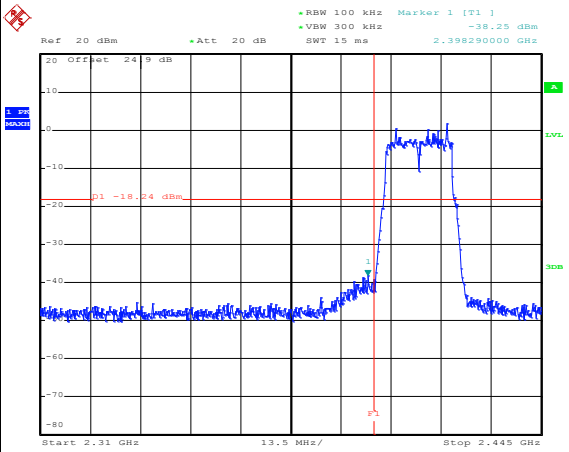
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



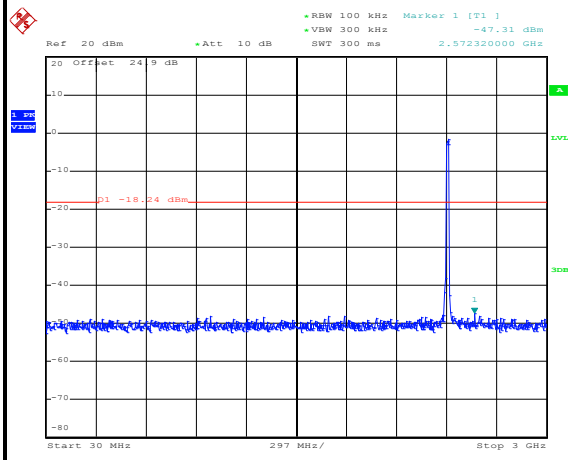
Date: 21.APR.2017 22:52:42

Low Channel Plot



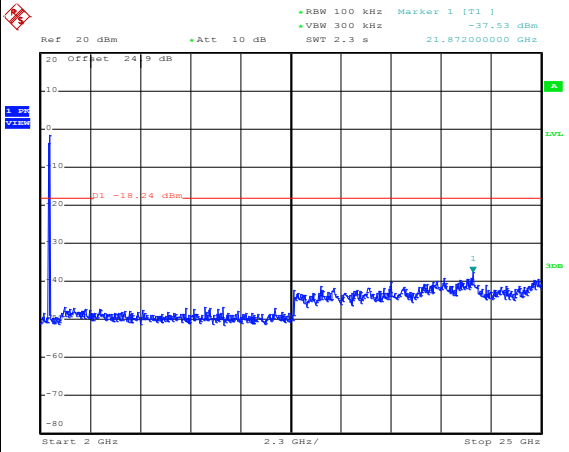
Date: 21.APR.2017 22:52:50

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:53:01

Spurious Emission 2GHz~25GHz

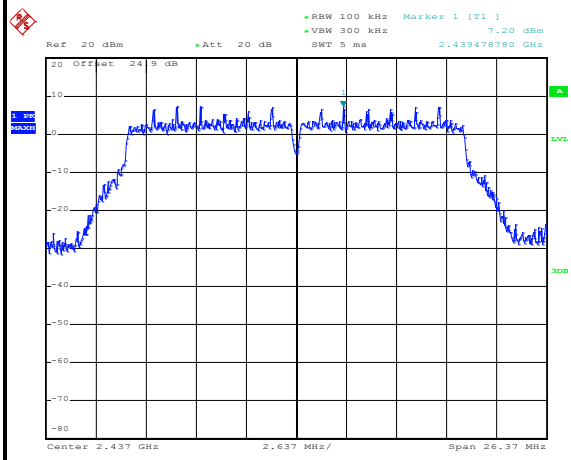


Date: 21.APR.2017 22:53:10

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

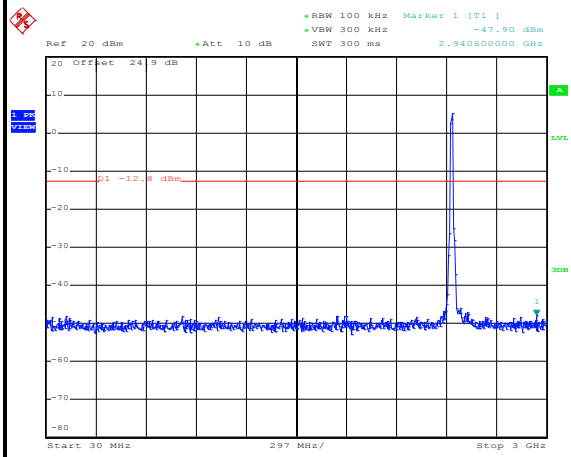
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



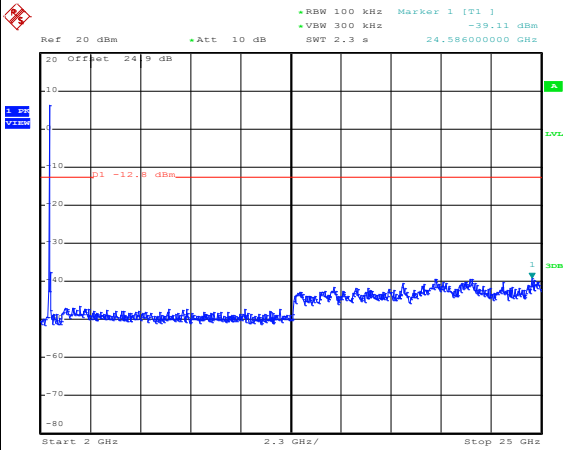
Date: 21.APR.2017 22:57:24

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:57:37

Spurious Emission 2GHz~25GHz

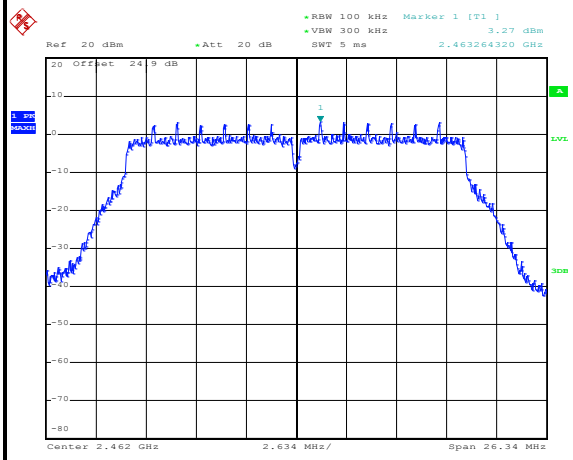


Date: 21.APR.2017 22:57:45

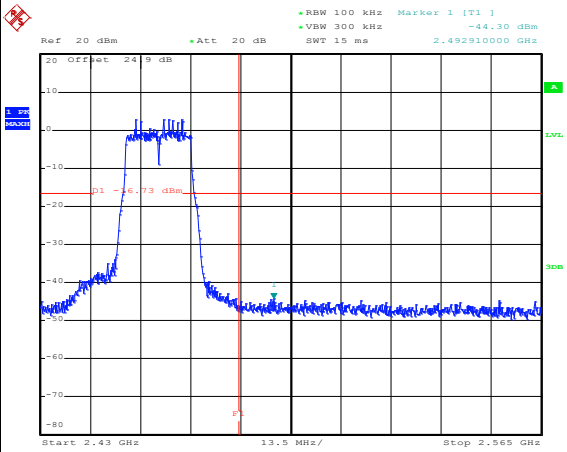
Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level

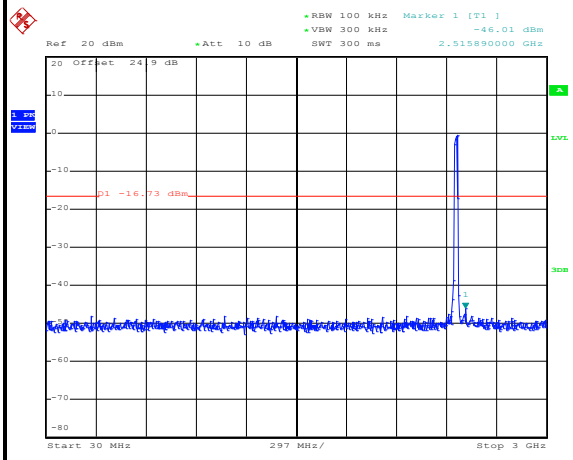


Date: 21.APR.2017 23:01:25



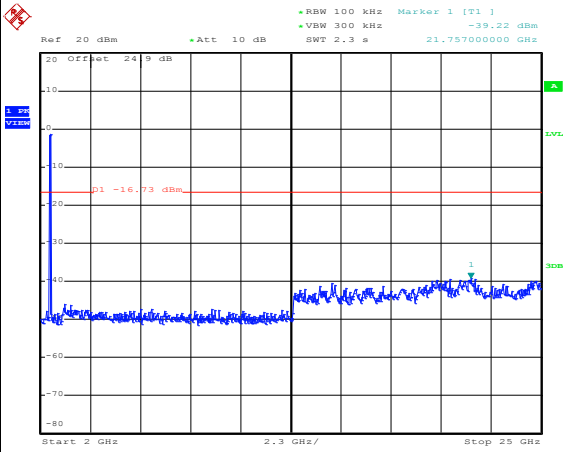
Date: 21.APR.2017 23:01:37

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:01:51

Spurious Emission 2GHz~25GHz

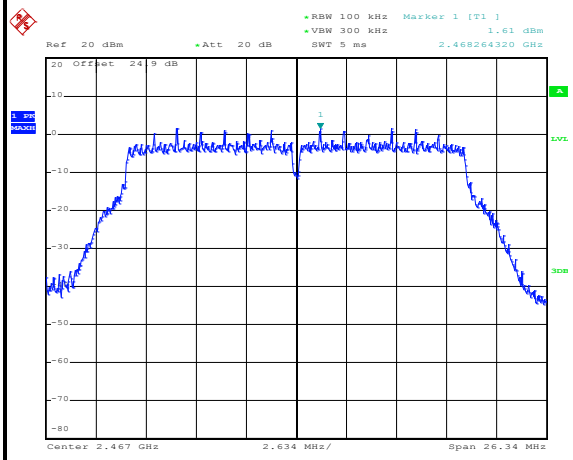


Date: 21.APR.2017 23:01:59

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

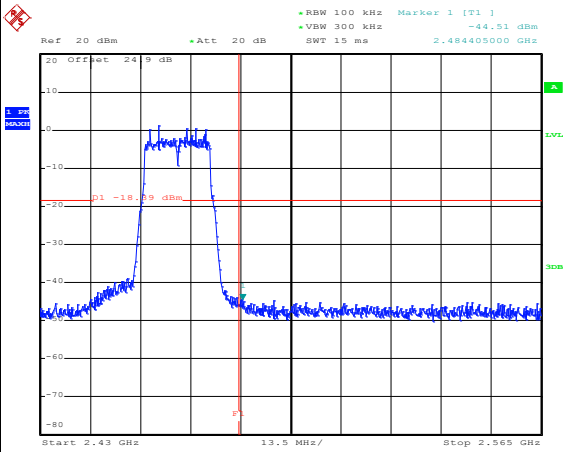
WLAN 802.11n HT20 Channel 12

100kHz PSD reference Level



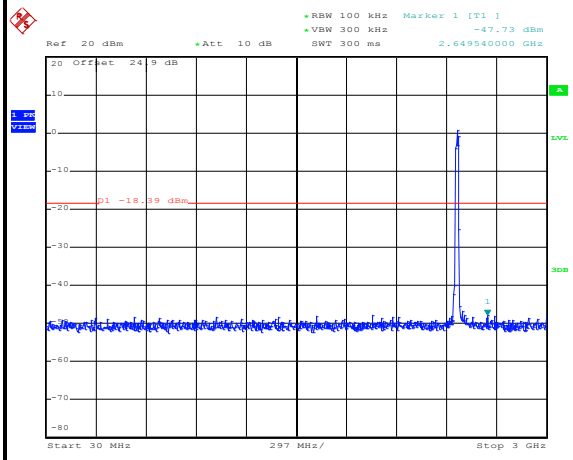
Date: 21.APR.2017 23:08:34

High Channel Plot



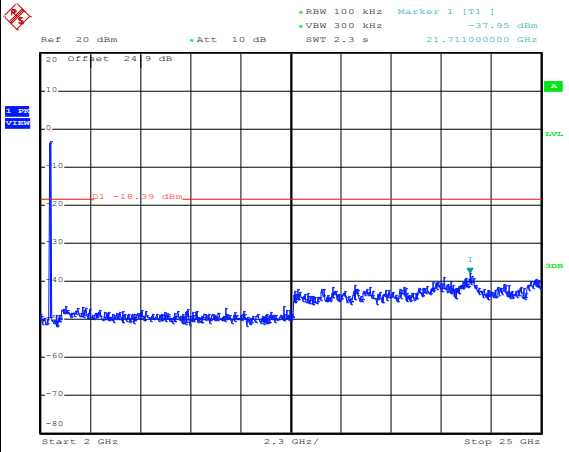
Date: 21.APR.2017 23:08:45

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:08:58

Spurious Emission 2GHz~25GHz

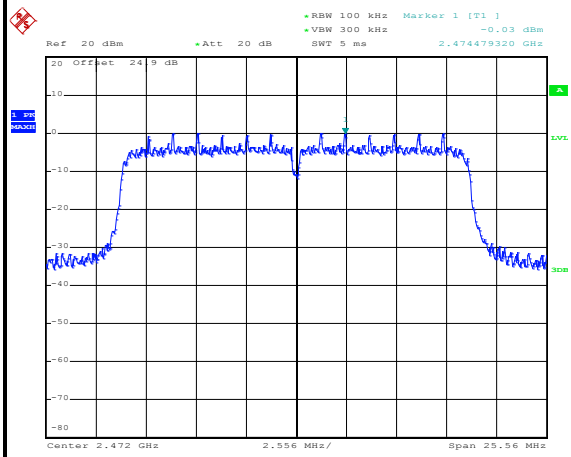


Date: 21.APR.2017 23:09:07

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

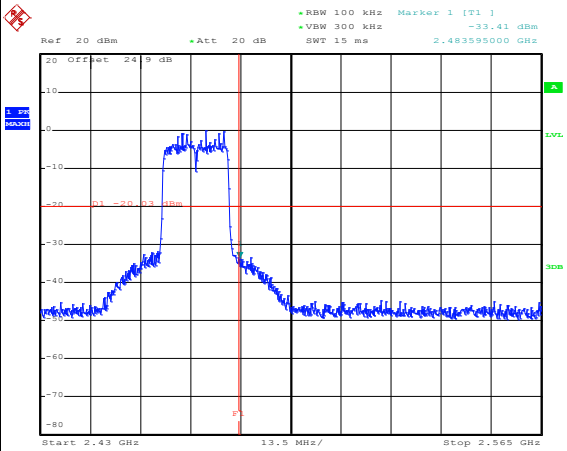
WLAN 802.11n HT20 Channel 13

100kHz PSD reference Level



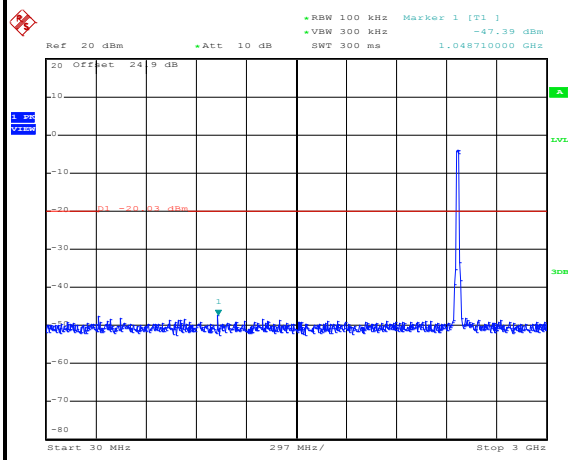
Date: 21.APR.2017 23:18:52

High Channel Plot



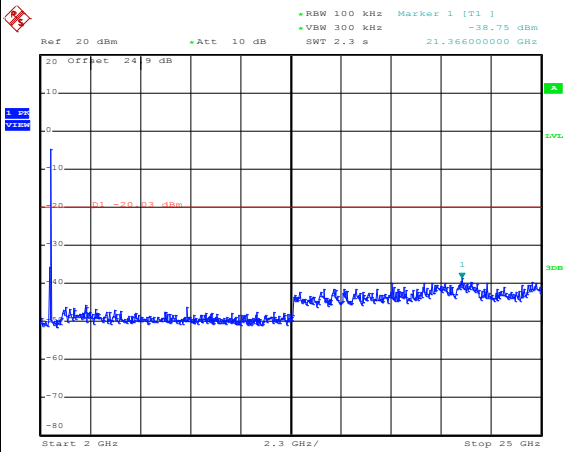
Date: 21.APR.2017 23:19:37

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:19:49

Spurious Emission 2GHz~25GHz



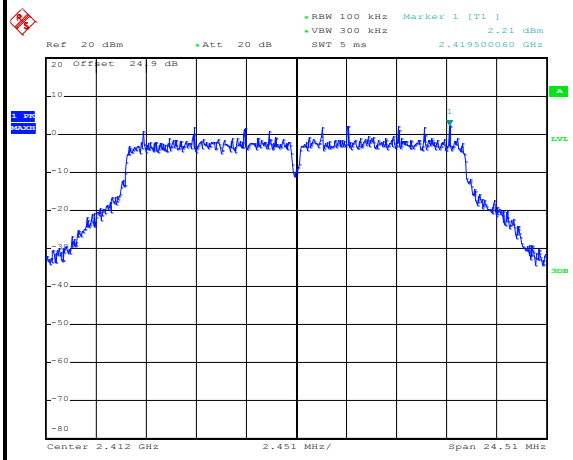
Date: 21.APR.2017 23:19:57

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

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

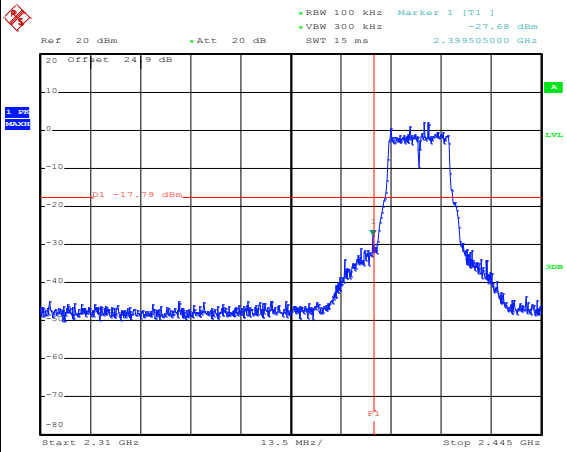
WLAN 802.11g Channel 01

100kHz PSD reference Level



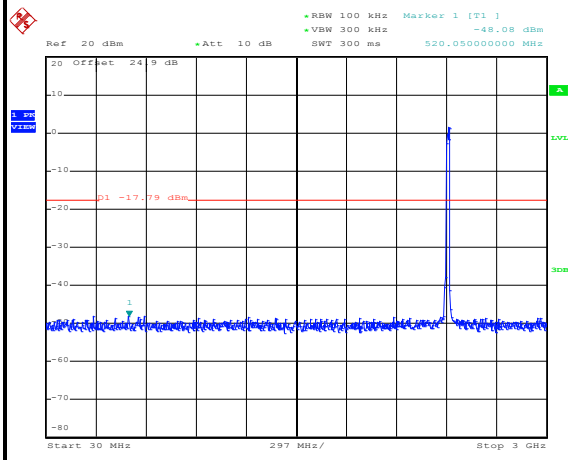
Date: 21.APR.2017 21:54:53

Low Channel Plot



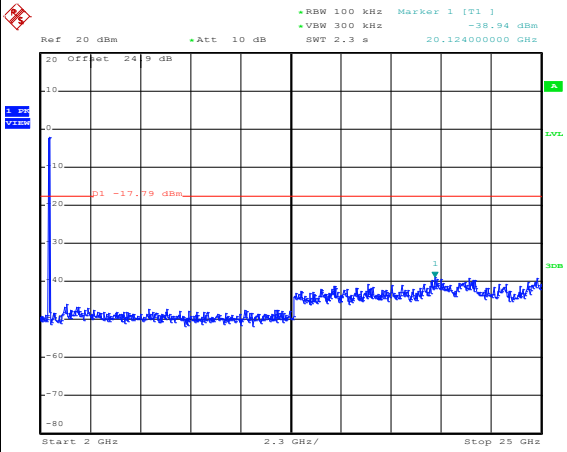
Date: 21.APR.2017 21:55:07

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:03:25

Spurious Emission 2GHz~25GHz

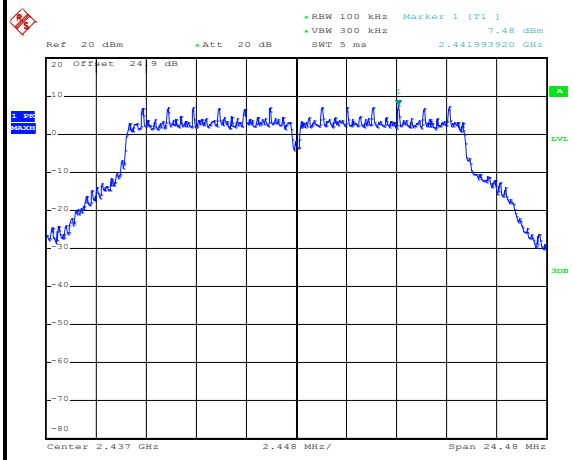


Date: 21.APR.2017 22:03:33

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

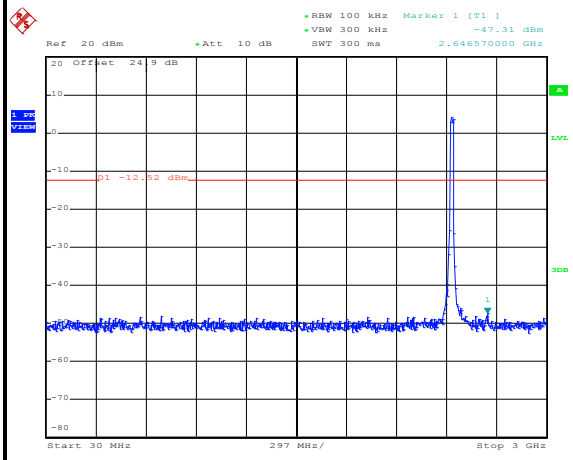
WLAN 802.11g Channel 06

100kHz PSD reference Level



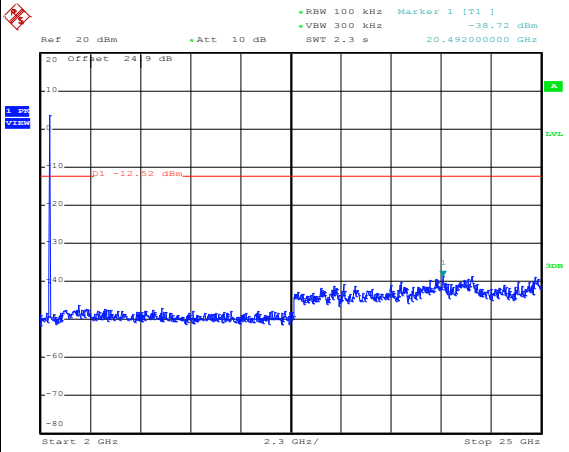
Date: 21.APR.2017 22:00:40

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:01:44

Spurious Emission 2GHz~25GHz

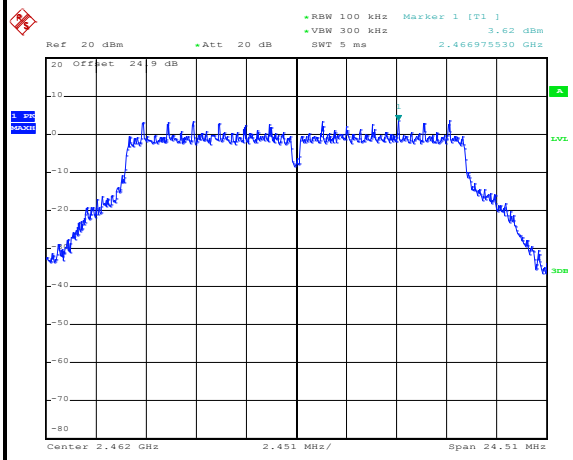


Date: 21.APR.2017 22:01:53

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

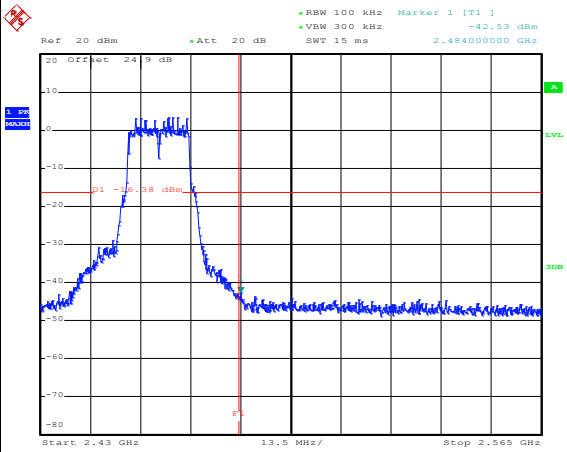
WLAN 802.11g Channel 11

100kHz PSD reference Level



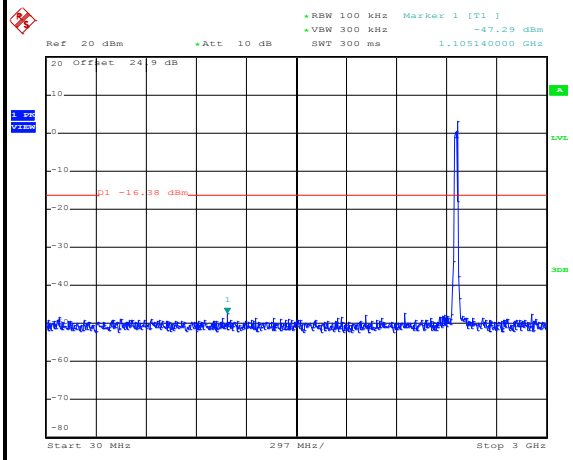
Date: 21.APR.2017 22:12:41

High Channel Plot



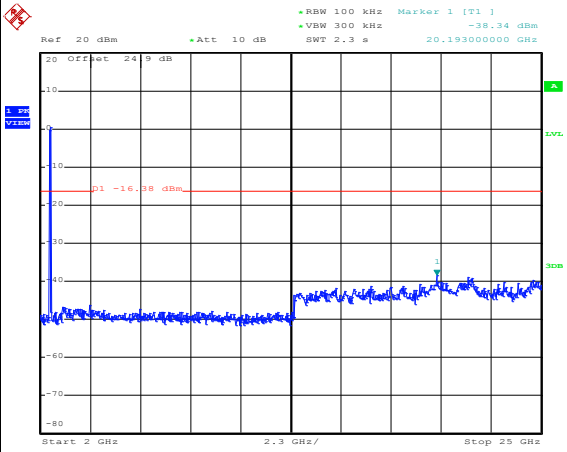
Date: 21.APR.2017 22:13:20

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:12:53

Spurious Emission 2GHz~25GHz

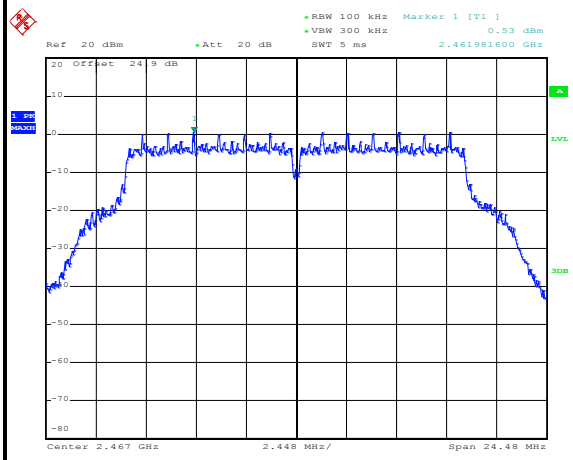


Date: 21.APR.2017 22:13:02

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

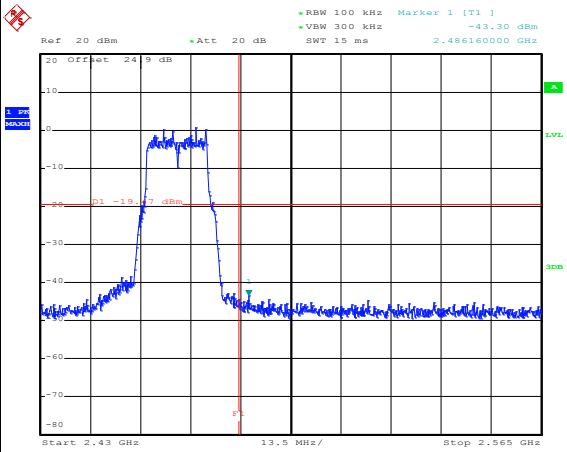
WLAN 802.11g Channel 12

100kHz PSD reference Level



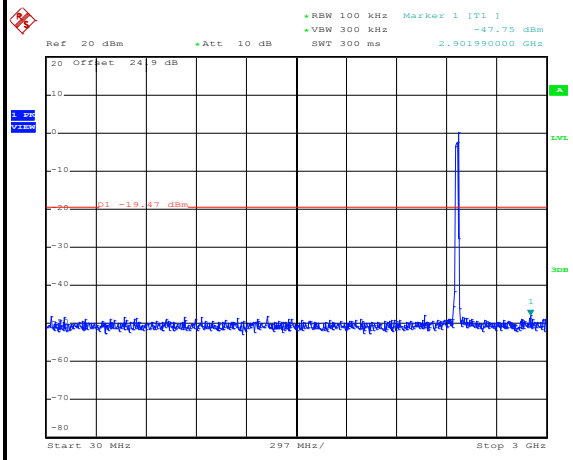
Date: 21.APR.2017 22:18:06

High Channel Plot



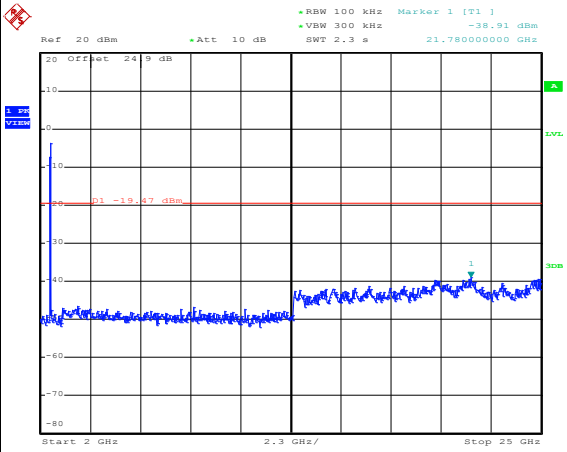
Date: 21.APR.2017 22:18:22

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:18:35

Spurious Emission 2GHz~25GHz

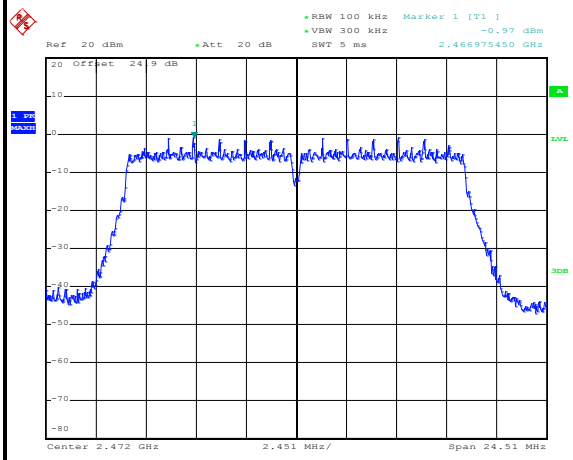


Date: 21.APR.2017 22:18:43

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

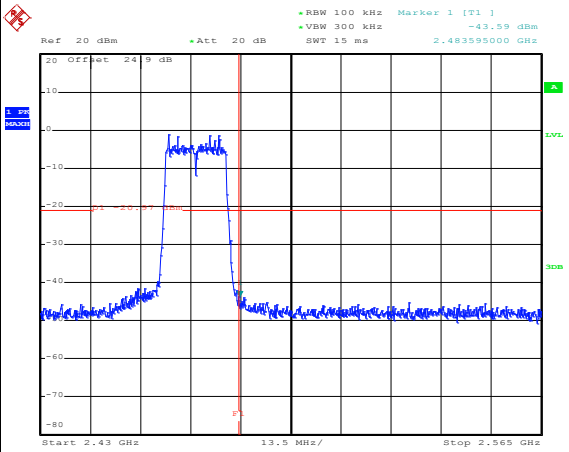
WLAN 802.11g Channel 13

100kHz PSD reference Level



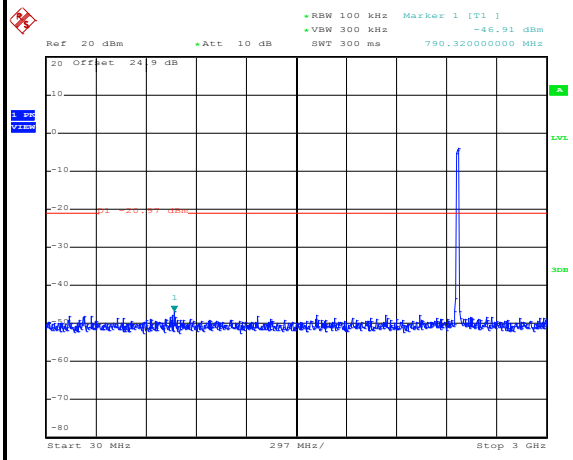
Date: 21.APR.2017 22:22:46

High Channel Plot



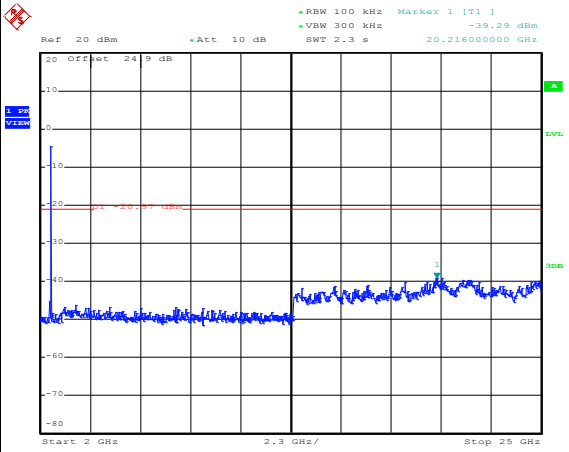
Date: 21.APR.2017 22:22:58

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:23:10

Spurious Emission 2GHz~25GHz

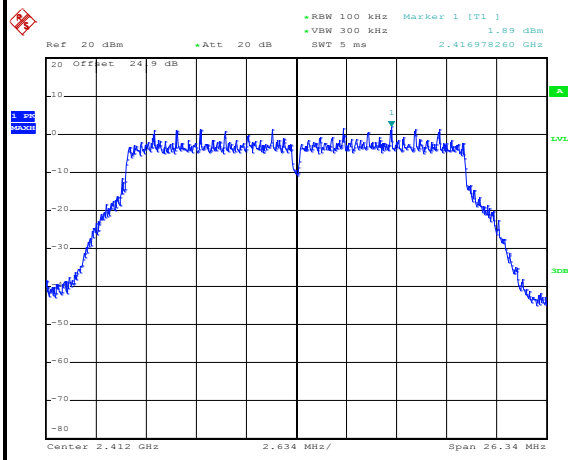


Date: 21.APR.2017 22:23:18

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	Aking Chang

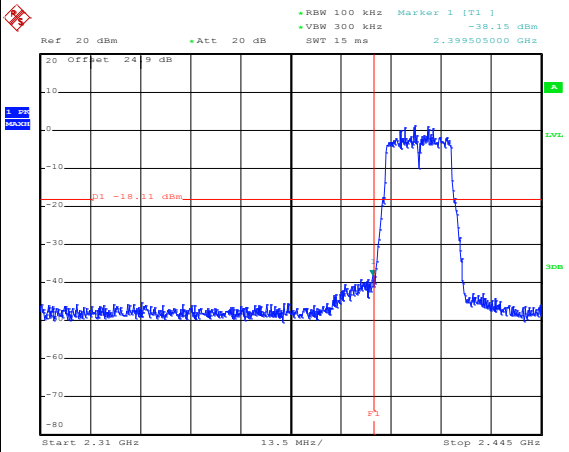
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



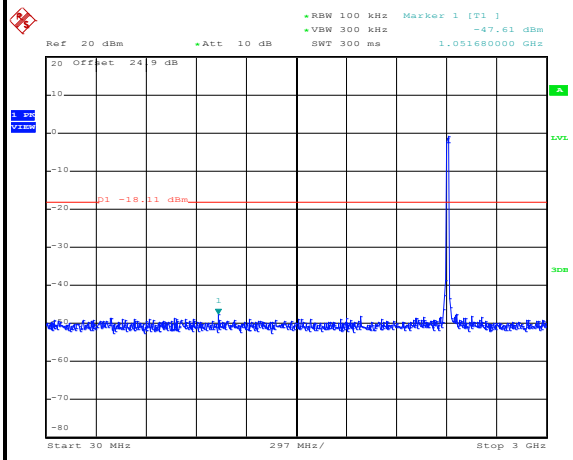
Date: 21.APR.2017 22:54:41

Low Channel Plot



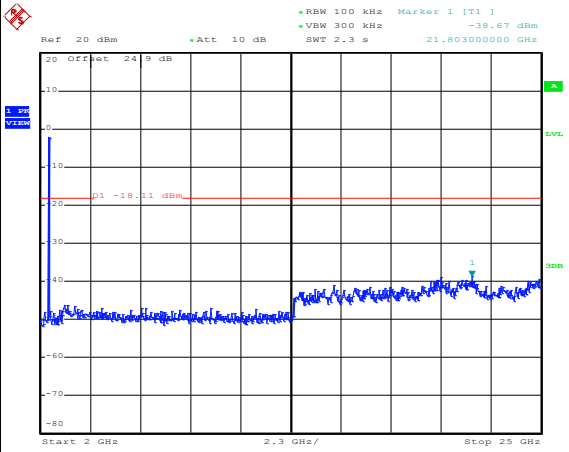
Date: 21.APR.2017 22:54:51

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:55:02

Spurious Emission 2GHz~25GHz

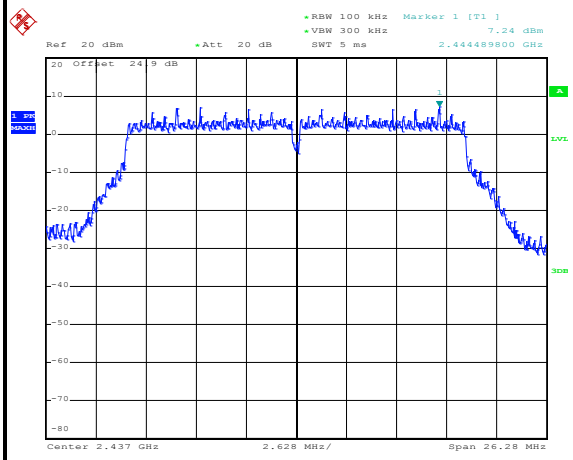


Date: 21.APR.2017 22:55:10

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	Aking Chang

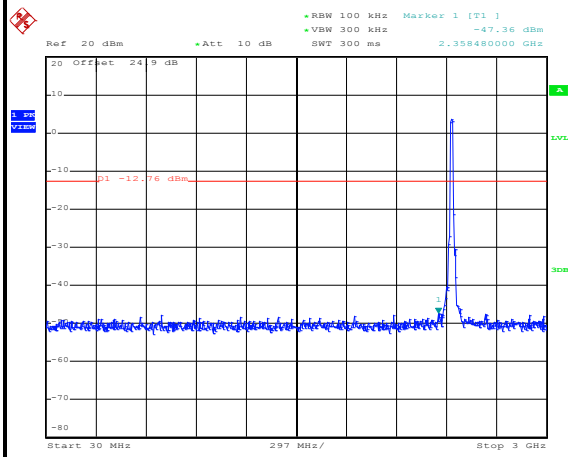
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



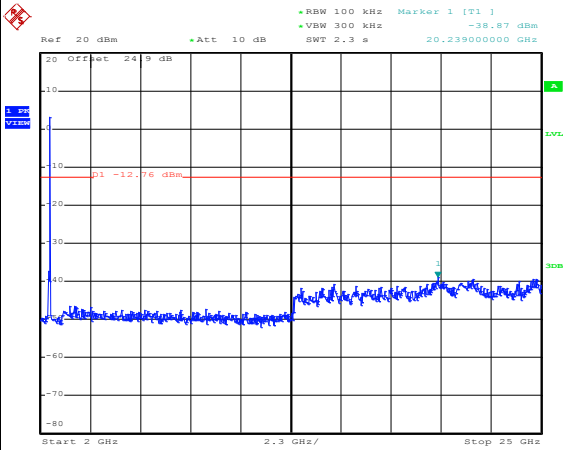
Date: 21.APR.2017 22:58:58

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 22:59:10

Spurious Emission 2GHz~25GHz

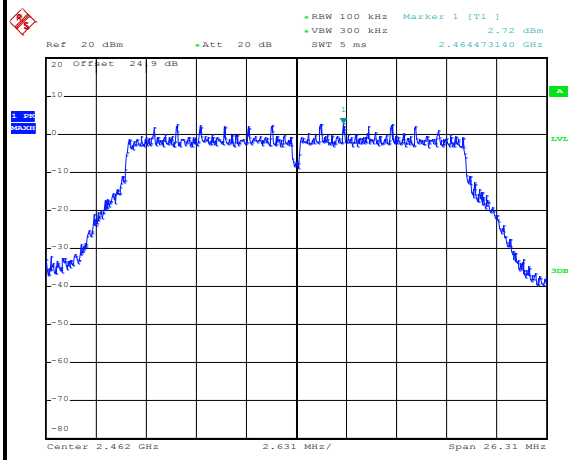


Date: 21.APR.2017 22:59:18

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	Aking Chang

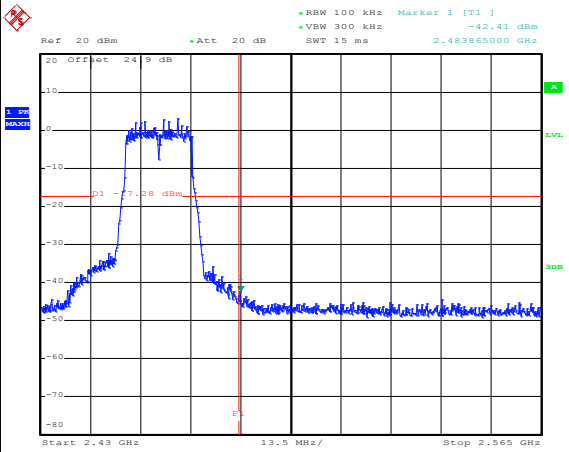
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



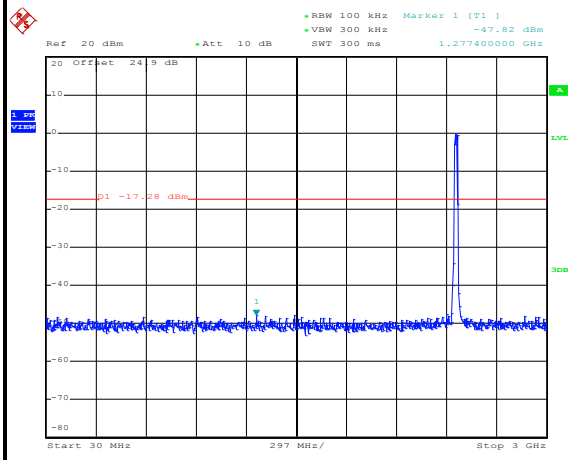
Date: 21.APR.2017 23:04:38

High Channel Plot



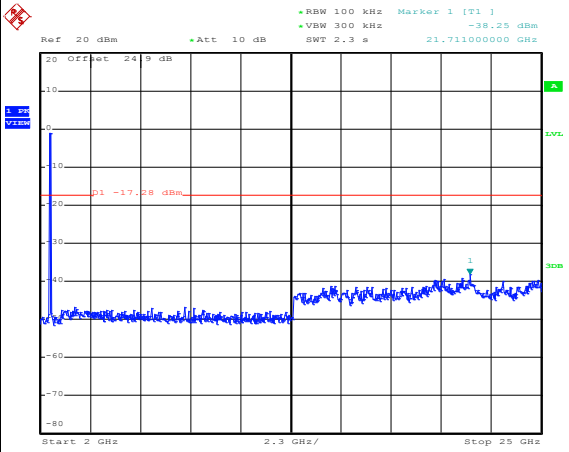
Date: 21.APR.2017 23:04:51

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:05:05

Spurious Emission 2GHz~25GHz

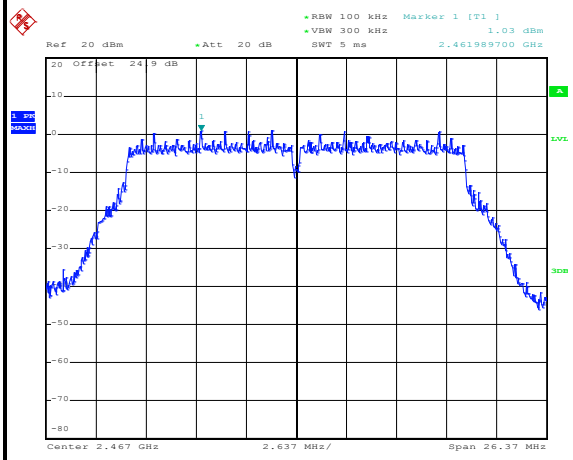


Date: 21.APR.2017 23:05:13

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	12	**Test Engineer :**	Aking Chang

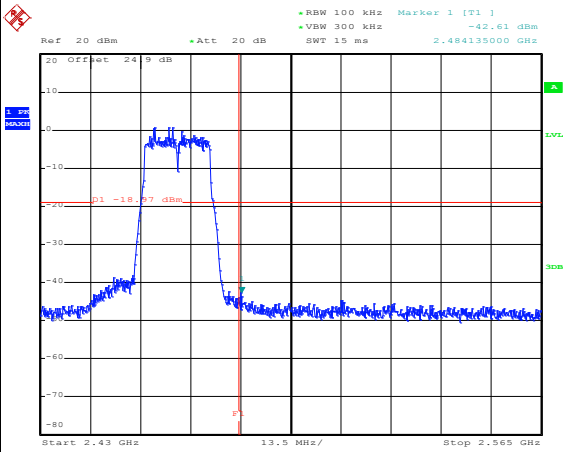
WLAN 802.11n HT20 Channel 12

100kHz PSD reference Level



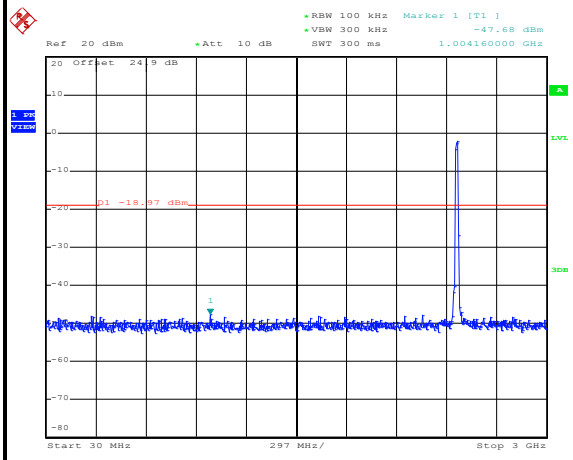
Date: 21.APR.2017 23:10:53

High Channel Plot



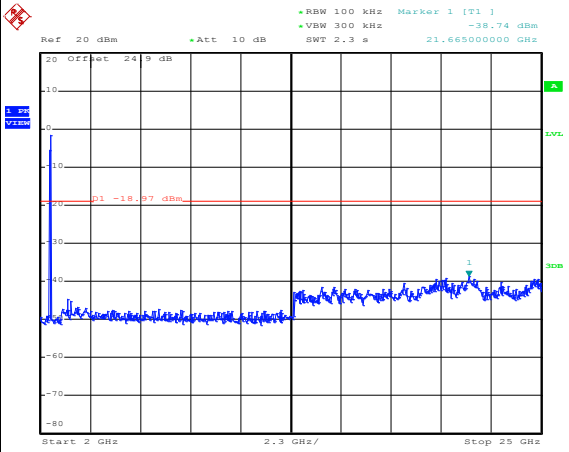
Date: 21.APR.2017 23:11:04

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:11:42

Spurious Emission 2GHz~25GHz

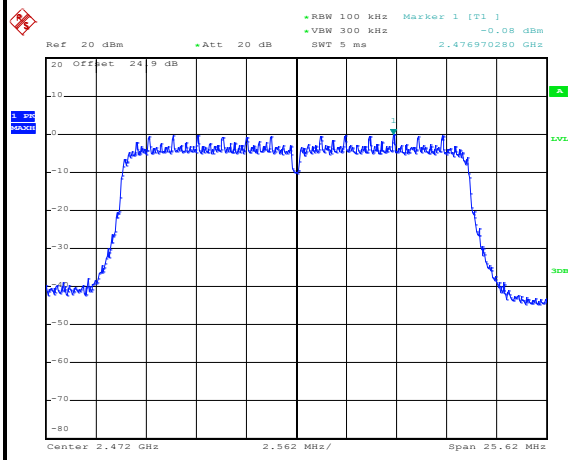


Date: 21.APR.2017 23:11:51

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	13	**Test Engineer :**	Aking Chang

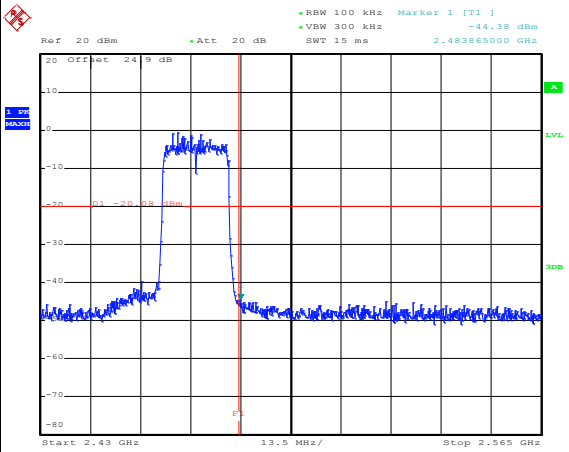
WLAN 802.11n HT20 Channel 13

100kHz PSD reference Level



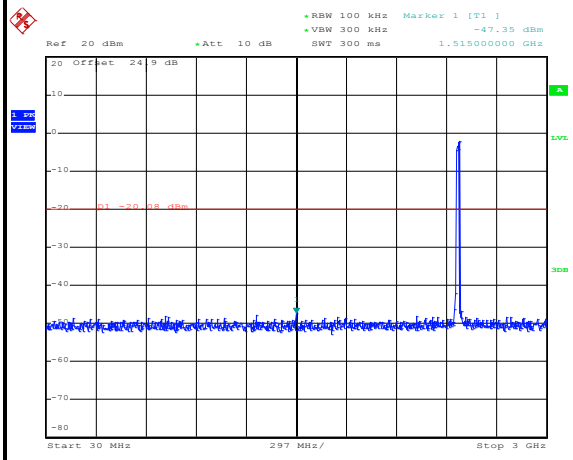
Date: 21.APR.2017 23:23:59

High Channel Plot



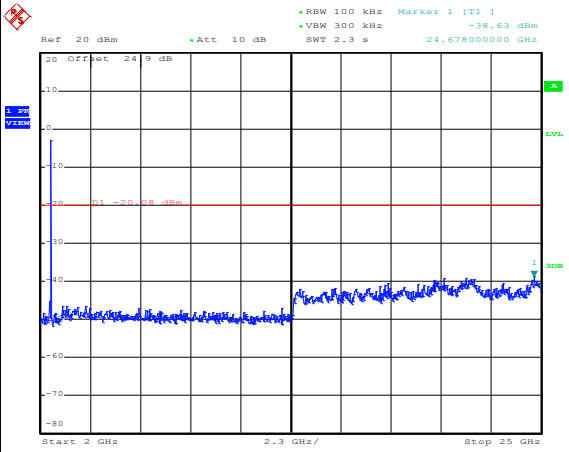
Date: 21.APR.2017 23:24:08

Spurious Emission 30MHz~3GHz



Date: 21.APR.2017 23:24:20

Spurious Emission 2GHz~25GHz



Date: 21.APR.2017 23:24:28

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 FCC section 15.209 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

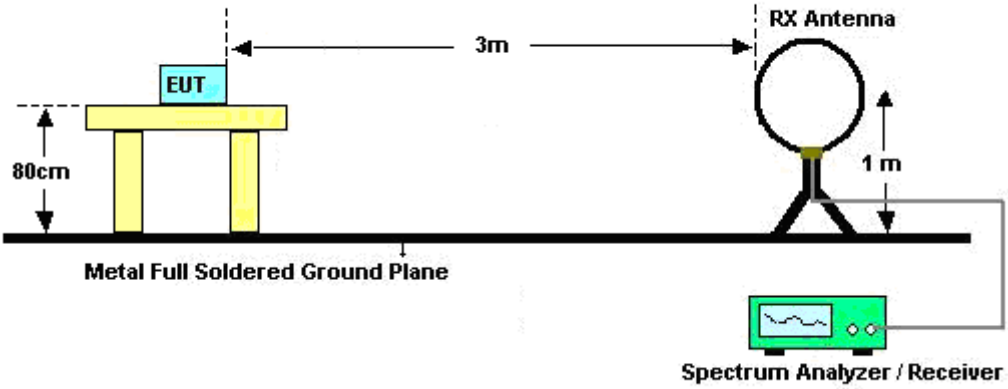
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

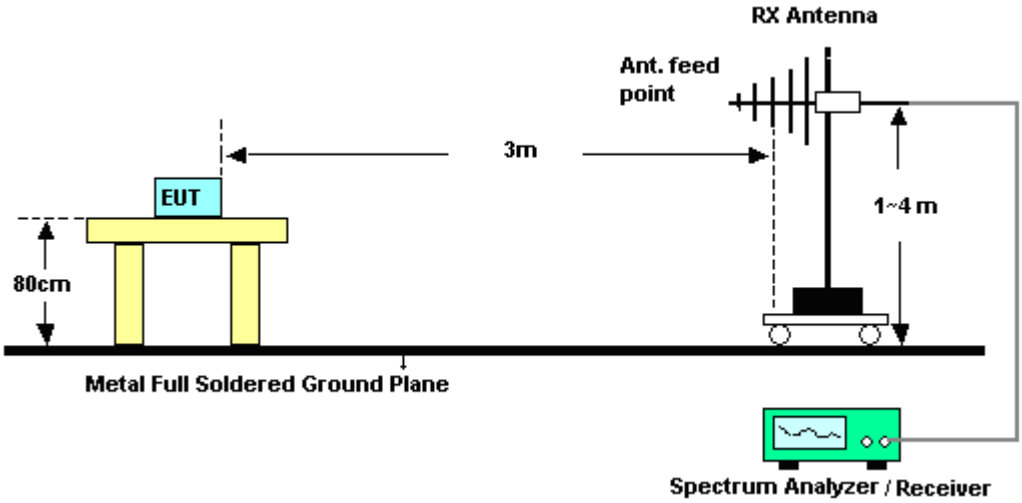
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test 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

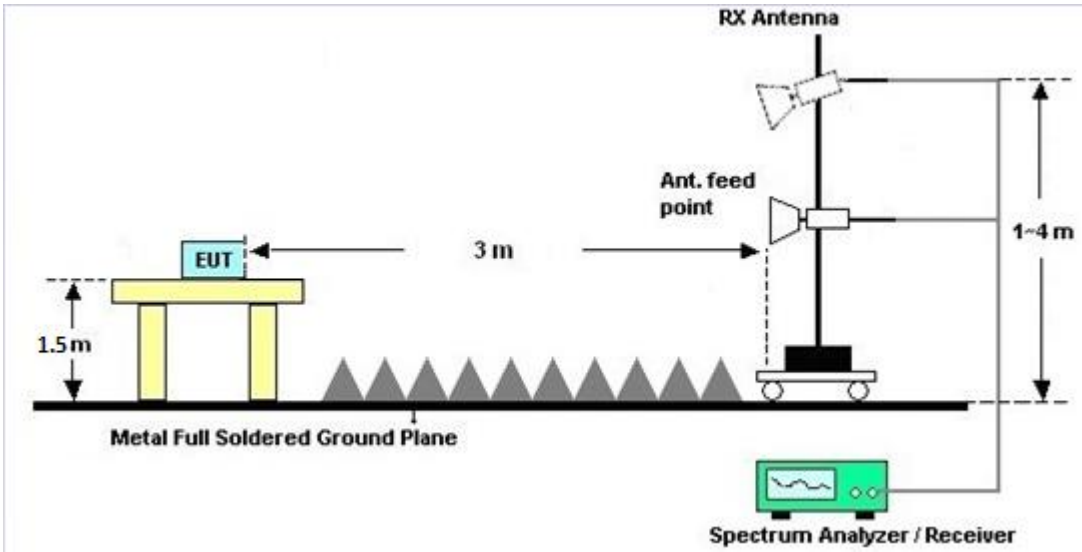
For radiated emissions below 30MHz



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 per 15.31(o) was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, 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.

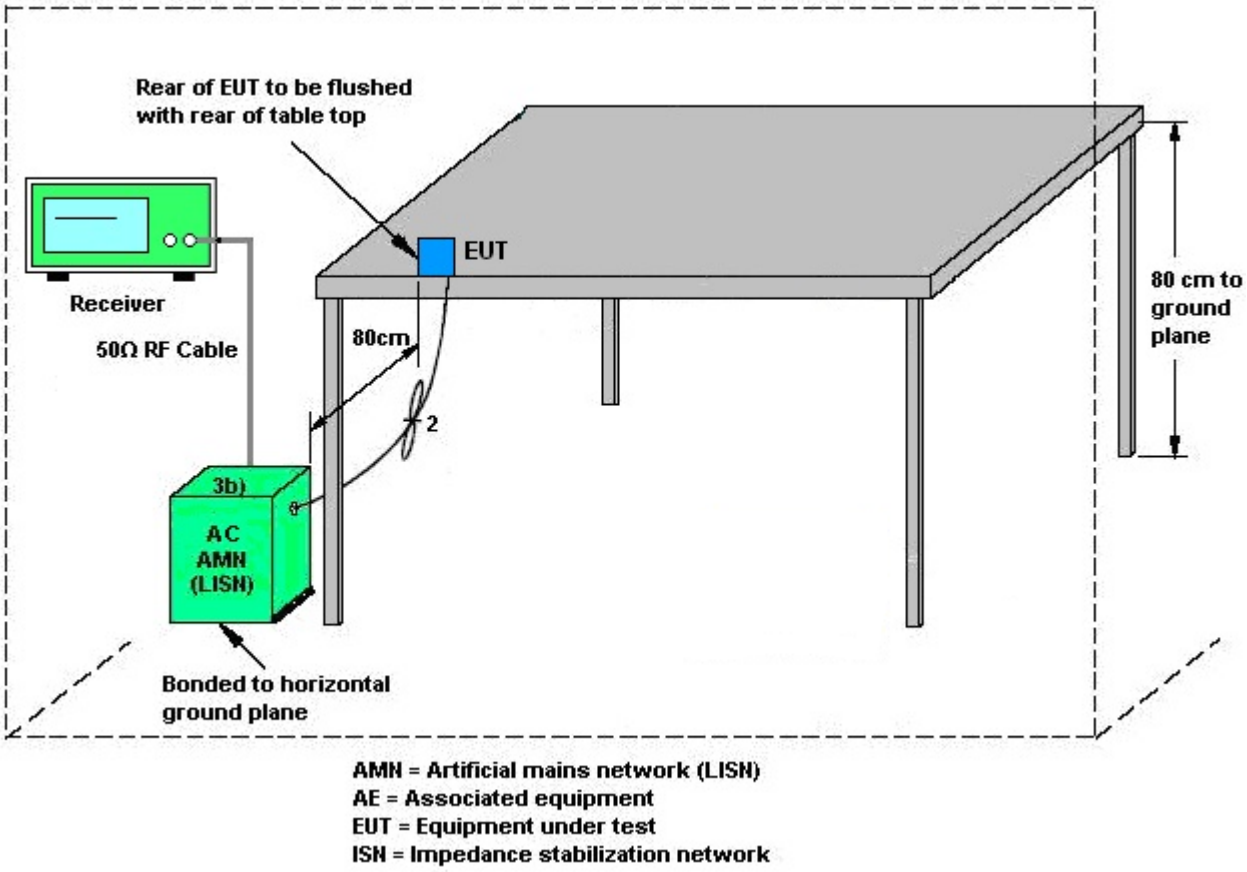
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 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. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the Antenna exceeds 6 dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

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

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

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

The directional gain “DG” is calculated as following table.

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	4.80	4.10	4.80	7.47	0.00	1.47

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 29, 2016	Mar. 28, 2017 ~ May 25, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Mar. 28, 2017 ~ May 25, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jul. 17, 2016	Mar. 28, 2017 ~ May 25, 2017	Jul. 16, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 07, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	May 07, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	May 07, 2017	Nov. 28, 2017	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D&N-6-06	35414&AT-N0602	30MHz~1GHz	Oct. 15, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Oct. 14, 2017	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 07, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Oct. 06, 2017	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Oct. 19, 2018	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHz	Oct. 12, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Oct. 11, 2017	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 28, 2017 ~ Apr. 17, 2017	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Mar. 28, 2017 ~ Apr. 17, 2017	N/A	Radiation (03CH11-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1815698	1GHz~18GHz	Dec. 01, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Nov. 30, 2017	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Mar. 28, 2017 ~ Apr. 17, 2017	Nov. 07, 2017	Radiation (03CH11-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 12, 2017	Mar. 28, 2017 ~ Apr. 17, 2017	Jan. 11, 2018	Radiation (03CH11-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 25, 2016	May 18, 2017 ~ May 24, 2017	Oct. 24, 2017	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 12, 2017	May 18, 2017 ~ May 24, 2017	Jan. 11, 2018	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 23, 2016	May 18, 2017 ~ May 24, 2017	Dec. 22, 2017	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	May 18, 2017 ~ May 24, 2017	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	May 18, 2017 ~ May 24, 2017	N/A	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	May 18, 2017 ~ May 24, 2017	Nov. 07, 2017	Radiation (03CH11-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.7

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz) for 03CH11-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz) for 03CH11-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.5

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz) for 03CH11-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz) for 03CH12-HY

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

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz) for 03CH12-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz) for 03CH12-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.7

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Aking chang	Temperature:	21~25	°C
Test Date:	2017/3/28~2017/05/25	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	11.65	11.80	8.04	8.08	0.50	Pass
11b	1Mbps	1	6	2437	11.65	11.70	8.04	8.06	0.50	Pass
11b	1Mbps	1	11	2462	11.55	11.65	8.00	8.06	0.50	Pass
11b	1Mbps	1	12	2467	11.55	11.65	7.52	8.02	0.50	Pass
11b	1Mbps	1	13	2472	11.60	11.65	8.04	8.02	0.50	Pass
11g	6Mbps	1	1	2412	18.70	18.30	16.32	16.34	0.50	Pass
11g	6Mbps	1	6	2437	18.55	18.25	16.34	16.32	0.50	Pass
11g	6Mbps	1	11	2462	18.50	18.55	16.32	16.32	0.50	Pass
11g	6Mbps	1	12	2467	18.20	18.50	16.32	16.30	0.50	Pass
11g	6Mbps	1	13	2472	17.20	17.30	16.34	16.34	0.50	Pass
HT20	MCS0	1	1	2412	19.05	19.05	17.56	17.52	0.50	Pass
HT20	MCS0	1	6	2437	19.35	19.15	17.58	17.58	0.50	Pass
HT20	MCS0	1	11	2462	19.15	18.95	17.54	17.60	0.50	Pass
HT20	MCS0	1	12	2467	19.15	18.80	17.58	17.60	0.50	Pass
HT20	MCS0	1	13	2472	18.05	18.00	17.02	17.02	0.50	Pass
11g	6Mbps	2	1	2412	18.30	18.55	16.32	16.34	0.50	Pass
11g	6Mbps	2	6	2437	18.60	18.25	16.34	16.32	0.50	Pass
11g	6Mbps	2	11	2462	18.25	18.35	16.34	16.34	0.50	Pass
11g	6Mbps	2	12	2467	18.25	18.10	16.32	16.32	0.50	Pass
11g	6Mbps	2	13	2472	17.40	17.20	16.34	16.34	0.50	Pass
HT20	MCS0	2	1	2412	19.00	18.90	17.52	17.56	0.50	Pass
HT20	MCS0	2	6	2437	19.10	18.90	17.58	17.52	0.50	Pass
HT20	MCS0	2	11	2462	19.15	19.05	17.56	17.54	0.50	Pass
HT20	MCS0	2	12	2467	19.25	18.90	17.56	17.58	0.50	Pass
HT20	MCS0	2	13	2472	18.05	18.00	17.04	17.08	0.50	Pass

Report Number : FR693034-02D

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	21.47	25.15		30.00	30.00	4.80	4.10	26.27	29.25	36.00	36.00	Pass
11b	1Mbps	1	6	2437	23.05	22.80		30.00	30.00	4.80	4.10	27.85	26.90	36.00	36.00	Pass
11b	1Mbps	1	11	2462	21.90	23.33		30.00	30.00	4.80	4.10	26.70	27.43	36.00	36.00	Pass
11b	1Mbps	1	12	2467	18.26	18.50		30.00	30.00	4.80	4.10	23.06	22.60	36.00	36.00	Pass
11b	1Mbps	1	13	2472	15.90	13.31		30.00	30.00	4.80	4.10	20.70	17.41	36.00	36.00	Pass
11g	6Mbps	1	1	2412	22.95	23.35		30.00	30.00	4.80	4.10	27.75	27.45	36.00	36.00	Pass
11g	6Mbps	1	6	2437	25.42	25.60		30.00	30.00	4.80	4.10	30.22	29.70	36.00	36.00	Pass
11g	6Mbps	1	11	2462	25.00	24.97		30.00	30.00	4.80	4.10	29.80	29.07	36.00	36.00	Pass
11g	6Mbps	1	12	2467	22.70	24.00		30.00	30.00	4.80	4.10	27.50	28.10	36.00	36.00	Pass
11g	6Mbps	1	13	2472	22.40	23.09		30.00	30.00	4.80	4.10	27.20	27.19	36.00	36.00	Pass
HT20	MCS0	1	1	2412	20.32	25.50		30.00	30.00	4.80	4.10	25.12	29.60	36.00	36.00	Pass
HT20	MCS0	1	6	2437	25.54	25.85		30.00	30.00	4.80	4.10	30.34	29.95	36.00	36.00	Pass
HT20	MCS0	1	11	2462	24.30	25.00		30.00	30.00	4.80	4.10	29.10	29.10	36.00	36.00	Pass
HT20	MCS0	1	12	2467	23.25	24.39		30.00	30.00	4.80	4.10	28.05	28.49	36.00	36.00	Pass
HT20	MCS0	1	13	2472	22.60	23.50		30.00	30.00	4.80	4.10	27.40	27.60	36.00	36.00	Pass
11g	6Mbps	2	1	2412	21.58	21.33	24.47	30.00		4.80		29.27		36.00		Pass
11g	6Mbps	2	6	2437	25.00	24.87	27.95	30.00		4.80		32.75		36.00		Pass
11g	6Mbps	2	11	2462	22.55	21.86	25.23	30.00		4.80		30.03		36.00		Pass
11g	6Mbps	2	12	2467	20.59	20.49	23.55	30.00		4.80		28.35		36.00		Pass
11g	6Mbps	2	13	2472	19.74	19.56	22.66	30.00		4.80		27.46		36.00		Pass
HT20	MCS0	2	1	2412	20.38	20.17	23.29	30.00		4.80		28.09		36.00		Pass
HT20	MCS0	2	6	2437	25.24	24.95	28.11	30.00		4.80		32.91		36.00		Pass
HT20	MCS0	2	11	2462	22.16	22.79	25.50	30.00		4.80		30.30		36.00		Pass
HT20	MCS0	2	12	2467	20.71	20.29	23.52	30.00		4.80		28.32		36.00		Pass
HT20	MCS0	2	13	2472	20.46	20.12	23.30	30.00		4.80		28.10		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	0.06	0.06	18.41	18.21	
11b	1Mbps	1	6	2437	0.06	0.06	19.96	19.71	
11b	1Mbps	1	11	2462	0.06	0.06	18.66	16.27	
11b	1Mbps	1	12	2467	0.06	0.06	15.02	15.02	
11b	1Mbps	1	13	2472	0.06	0.06	12.26	10.18	
11g	6Mbps	1	1	2412	0.32	0.29	16.58	18.62	
11g	6Mbps	1	6	2437	0.32	0.29	19.27	19.76	
11g	6Mbps	1	11	2462	0.32	0.29	17.93	18.01	
11g	6Mbps	1	12	2467	0.32	0.29	16.51	17.09	
11g	6Mbps	1	13	2472	0.32	0.29	14.28	15.34	
HT20	MCS0	1	1	2412	0.34	0.34	15.14	18.65	
HT20	MCS0	1	6	2437	0.34	0.34	19.34	19.66	
HT20	MCS0	1	11	2462	0.34	0.34	17.34	17.71	
HT20	MCS0	1	12	2467	0.34	0.34	15.79	16.90	
HT20	MCS0	1	13	2472	0.34	0.34	14.04	15.04	
11g	6Mbps	2	1	2412	0.32	0.32	15.02	14.81	17.93
11g	6Mbps	2	6	2437	0.32	0.32	18.62	18.38	21.51
11g	6Mbps	2	11	2462	0.32	0.32	16.56	16.65	19.62
11g	6Mbps	2	12	2467	0.32	0.32	13.57	13.54	16.57
11g	6Mbps	2	13	2472	0.32	0.32	11.95	11.91	14.94
HT20	MCS0	2	1	2412	0.34	0.34	13.06	12.75	15.92
HT20	MCS0	2	6	2437	0.34	0.34	18.52	18.15	21.35
HT20	MCS0	2	11	2462	0.34	0.34	15.55	15.51	18.54
HT20	MCS0	2	12	2467	0.34	0.34	13.39	13.35	16.38
HT20	MCS0	2	13	2472	0.34	0.34	12.45	12.24	15.36

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

Report Number : FR693034-02D

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	-6.72	-4.79	-	4.80	4.10	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-3.50	-3.35		4.80	4.10	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-7.07	-7.68		4.80	4.10	8.00	8.00	Pass
11b	1Mbps	1	12	2467	-8.70	-9.31		4.80	4.10	8.00	8.00	Pass
11b	1Mbps	1	13	2472	-12.05	-12.83		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	1	1	2412	-9.67	-9.04		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	1	6	2437	-5.73	-7.81		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	1	11	2462	-8.18	-8.24		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	1	12	2467	-10.01	-10.73		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	1	13	2472	-13.34	-11.31		4.80	4.10	8.00	8.00	Pass
HT20	MCS0	1	1	2412	-13.53	-9.94		4.80	4.10	8.00	8.00	Pass
HT20	MCS0	1	6	2437	-6.36	-8.34		4.80	4.10	8.00	8.00	Pass
HT20	MCS0	1	11	2462	-9.23	-9.25		4.80	4.10	8.00	8.00	Pass
HT20	MCS0	1	12	2467	-12.28	-13.30		4.80	4.10	8.00	8.00	Pass
HT20	MCS0	1	13	2472	-13.72	-13.36		4.80	4.10	8.00	8.00	Pass
11g	6Mbps	2	1	2412	-11.87	-12.22	-8.86	7.47		6.53		Pass
11g	6Mbps	2	6	2437	-6.67	-7.41	-3.66	7.47		6.53		Pass
11g	6Mbps	2	11	2462	-10.72	-10.06	-7.05	7.47		6.53		Pass
11g	6Mbps	2	12	2467	-13.09	-14.55	-10.08	7.47		6.53		Pass
11g	6Mbps	2	13	2472	-14.76	-15.83	-11.75	7.47		6.53		Pass
HT20	MCS0	2	1	2412	-13.08	-13.92	-10.07	7.47		6.53		Pass
HT20	MCS0	2	6	2437	-6.88	-6.91	-3.87	7.47		6.53		Pass
HT20	MCS0	2	11	2462	-11.82	-11.21	-8.20	7.47		6.53		Pass
HT20	MCS0	2	12	2467	-12.54	-13.88	-9.53	7.47		6.53		Pass
HT20	MCS0	2	13	2472	-13.41	-14.73	-10.40	7.47		6.53		Pass

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

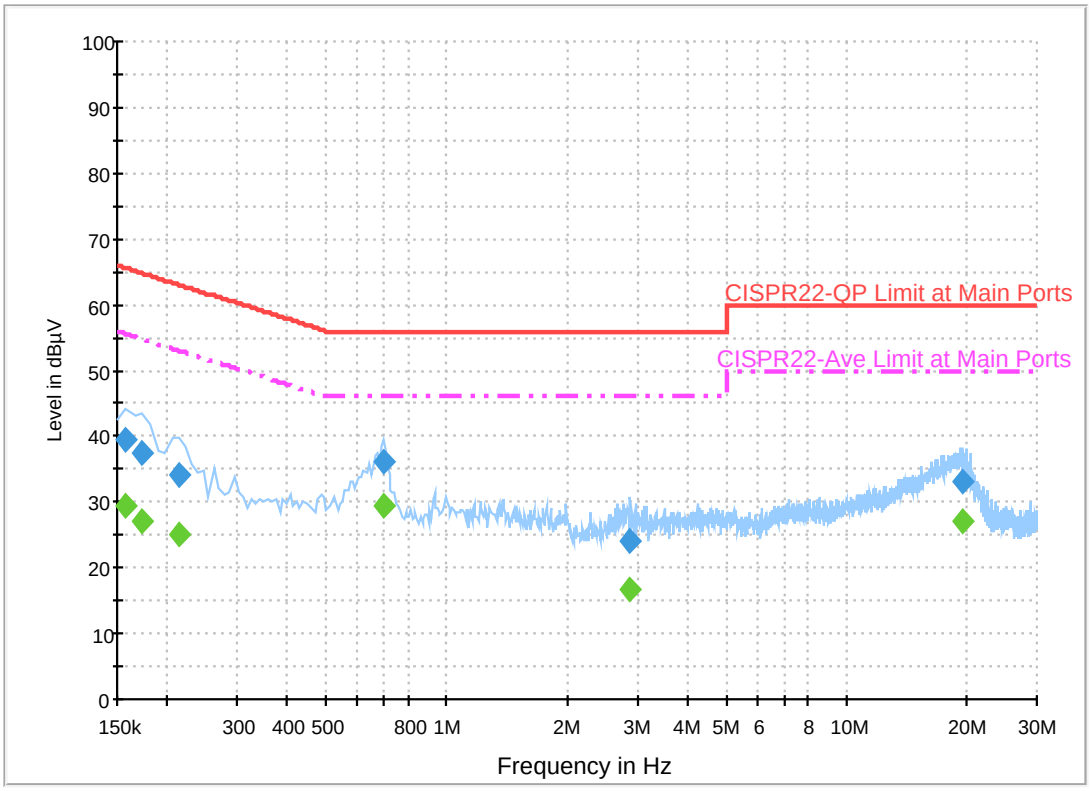
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Derreck Chen	**Temperature :**	20~22℃
		Relative Humidity :	50~52%

EUT Information

Report NO :	693034-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

ENV216 Auto Test FCC Power Bar - L



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	39.4	Off	L1	19.6	26.2	65.6
0.174000	37.6	Off	L1	19.6	27.2	64.8
0.214000	34.1	Off	L1	19.6	28.9	63.0
0.694000	36.0	Off	L1	19.6	20.0	56.0
2.886000	24.0	Off	L1	19.5	32.0	56.0
19.502000	33.0	Off	L1	20.6	27.0	60.0

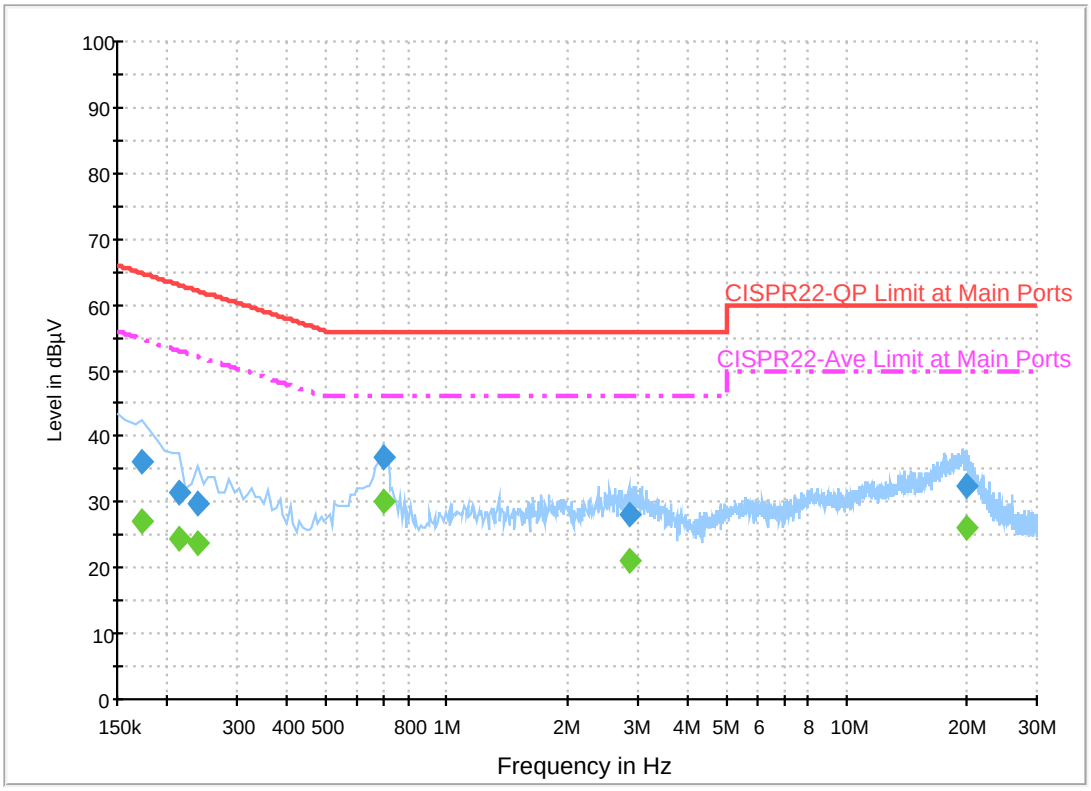
Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	29.3	Off	L1	19.6	26.3	55.6
0.174000	27.2	Off	L1	19.6	27.6	54.8
0.214000	25.0	Off	L1	19.6	28.0	53.0
0.694000	29.3	Off	L1	19.6	16.7	46.0
2.886000	16.8	Off	L1	19.5	29.2	46.0
19.502000	27.0	Off	L1	20.6	23.0	50.0

EUT Information

Report NO :	693034-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

ENV216 Auto Test FCC Power Bar - N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	36.0	Off	N	19.5	28.8	64.8
0.214000	31.4	Off	N	19.5	31.6	63.0
0.238000	29.9	Off	N	19.5	32.3	62.2
0.694000	36.8	Off	N	19.5	19.2	56.0
2.862000	28.2	Off	N	19.5	27.8	56.0
19.942000	32.5	Off	N	20.7	27.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	27.1	Off	N	19.5	27.7	54.8
0.214000	24.4	Off	N	19.5	28.6	53.0
0.238000	23.7	Off	N	19.5	28.5	52.2
0.694000	30.0	Off	N	19.5	16.0	46.0
2.862000	21.1	Off	N	19.5	24.9	46.0
19.942000	26.2	Off	N	20.7	23.8	50.0

Appendix C. Radiated Spurious Emission

Test Engineer :	J.C. Liang, Jacky Hung, Ken Wu	Temperature :	20~24°C
		Relative Humidity :	55~60%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2386.965	58.48	-15.52	74	48.64	27.19	6.32	33.6	100	349	P	H
		2387.175	52.54	-1.46	54	42.7	27.19	6.32	33.6	100	349	A	H
	*	2412	110.25	-	-	100.3	27.24	6.37	33.59	100	349	P	H
	*	2412	106.81	-	-	96.86	27.24	6.37	33.59	100	349	A	H
		2385.915	59	-15	74	49.16	27.19	6.32	33.6	119	26	P	V
		2387.175	52.55	-1.45	54	42.71	27.19	6.32	33.6	119	26	A	V
	*	2412	112.19	-	-	102.24	27.24	6.37	33.59	119	26	P	V
	*	2412	108.57	-	-	98.62	27.24	6.37	33.59	119	26	A	V
802.11b CH 06 2437MHz		2373.7	53.8	-20.2	74	44.06	27.14	6.27	33.6	137	325	P	H
		2389.94	43.02	-10.98	54	33.17	27.19	6.32	33.59	137	325	A	H
	*	2437	110.77	-	-	100.72	27.34	6.37	33.59	137	325	P	H
	*	2437	107.29	-	-	97.24	27.34	6.37	33.59	137	325	A	H
		2484.18	54.61	-19.39	74	44.42	27.45	6.39	33.58	137	325	P	H
		2489.5	43.51	-10.49	54	33.27	27.5	6.39	33.58	137	325	A	H
		2383.5	55.37	-18.63	74	45.58	27.14	6.32	33.6	121	27	P	V
		2388.96	44.21	-9.79	54	34.37	27.19	6.32	33.6	121	27	A	V
	*	2437	114.26	-	-	104.21	27.34	6.37	33.59	121	27	P	V
	*	2437	110.7	-	-	100.65	27.34	6.37	33.59	121	27	A	V
		2484.46	56.17	-17.83	74	45.98	27.45	6.39	33.58	121	27	P	V
		2483.9	46.25	-7.75	54	36.06	27.45	6.39	33.58	121	27	A	V

802.11b CH 11 2462MHz	*	2462	109.02	-	-	99.09	27.29	4.08	31.47	109	336	P	H
	*	2462	104.59	-	-	94.66	27.29	4.08	31.47	109	336	A	H
		2484.28	56.98	-17.02	74	46.96	27.35	4.11	31.47	109	336	P	H
		2488.2	47.12	-6.88	54	37.09	27.36	4.11	31.47	109	336	A	H
	*	2462	112.46	-	-	102.53	27.29	4.08	31.47	104	30	P	V
	*	2462	108.35	-	-	98.42	27.29	4.08	31.47	104	30	A	V
		2483.68	62.7	-11.3	74	52.68	27.35	4.11	31.47	104	30	P	V
		2483.52	53.44	-0.56	54	43.42	27.35	4.11	31.47	104	30	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	105.34	-	-	95.39	27.3	4.09	31.47	109	336	P	H
	*	2467	100.51	-	-	90.56	27.3	4.09	31.47	109	336	A	H
		2484.68	57.24	-16.76	74	47.22	27.35	4.11	31.47	109	336	P	H
		2484.16	46.12	-7.88	54	36.1	27.35	4.11	31.47	109	336	A	H
	*	2467	108.94	-	-	98.99	27.3	4.09	31.47	105	30	P	V
	*	2467	104.77	-	-	94.82	27.3	4.09	31.47	105	30	A	V
		2484.2	64.44	-9.56	74	54.42	27.35	4.11	31.47	105	30	P	V
		2484.2	52.6	-1.4	54	42.58	27.35	4.11	31.47	105	30	A	V
802.11b CH 13 2472MHz	*	2472	102.29	-	-	92.32	27.32	4.09	31.47	107	335	P	H
	*	2472	97	-	-	87.03	27.32	4.09	31.47	107	335	A	H
		2487.48	55.71	-18.29	74	45.68	27.36	4.11	31.47	107	335	P	H
		2485.8	46.86	-7.14	54	36.83	27.36	4.11	31.47	107	335	A	H
													H
													H
	*	2472	106.15	-	-	96.18	27.32	4.09	31.47	105	29	P	V
	*	2472	101.99	-	-	92.02	27.32	4.09	31.47	105	29	A	V
		2484.96	65.82	-8.18	74	55.8	27.35	4.11	31.47	105	29	P	V
		2485.72	53.3	-0.7	54	43.27	27.36	4.11	31.47	105	29	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2490	56.35	-17.65	74	46.41	27.2	6.39	33.58	100	352	P	H
		2490	48.76	-5.24	54	38.82	27.2	6.39	33.58	100	352	A	H
		2612	58.93	-15.07	74	48.59	27.53	6.44	33.56	100	349	P	H
		4824	49.57	-24.43	74	72.3	31.69	9.89	64.74	100	0	P	H
		2490	60.07	-13.93	74	50.13	27.2	6.39	33.58	100	24	P	V
		2490	51.5	-2.5	54	41.56	27.2	6.39	33.58	100	24	A	V
		2512	57.34	-16.66	74	47.34	27.25	6.39	33.57	119	26	P	V
		2614	58.64	-15.36	74	48.3	27.53	6.44	33.56	119	26	P	V
		4824	45.86	-28.14	74	68.59	31.69	9.89	64.74	100	0	P	V
802.11b CH 06 2437MHz		2518	57.48	-16.52	74	47.48	27.25	6.39	33.57	137	325	P	H
		2538	56.67	-17.33	74	46.62	27.29	6.4	33.57	137	325	P	H
		2642	57.79	-16.21	74	47.33	27.62	6.47	33.56	137	325	P	H
		4874	49.11	-24.89	74	71.74	31.78	9.86	64.7	100	0	P	H
		7311	53.92	-20.08	74	69.36	37.27	11.65	64.82	311	2	P	H
		7311	49.82	-4.18	54	65.26	37.27	11.65	64.82	311	2	A	H
		2516	59.33	-14.67	74	49.33	27.25	6.39	33.57	121	27	P	V
		2538	57.69	-16.31	74	47.64	27.29	6.4	33.57	121	27	P	V
		2640	57.47	-16.53	74	47.06	27.57	6.47	33.56	121	27	P	V
		4874	46.07	-27.93	74	68.7	31.78	9.86	64.7	100	0	P	V
		7311	54.91	-19.09	74	70.35	37.27	11.65	64.82	140	22	P	V
		7311	50.99	-3.01	54	66.43	37.27	11.65	64.82	140	22	A	V
802.11b CH 11 2462MHz		2540	57.54	-16.46	74	47.44	27.34	6.4	33.57	100	348	P	H
		2564	56.94	-17.06	74	46.77	27.39	6.41	33.56	100	348	P	H
		2668	56.64	-17.36	74	46.07	27.67	6.52	33.55	100	348	P	H
		4924	48.76	-25.24	74	71.27	31.88	9.83	64.66	100	0	P	H
		7386	51.88	-22.12	74	67.35	37.38	11.63	64.86	115	165	P	H
		7386	45.77	-8.23	54	61.24	37.38	11.63	64.86	153	310	A	H
		2542	57.41	-16.59	74	47.31	27.34	6.4	33.57	115	26	P	V
		2566	56.71	-17.29	74	46.54	27.39	6.41	33.56	115	26	P	V
		2668	57.09	-16.91	74	46.52	27.67	6.52	33.55	115	26	P	V

		4924	45.48	-28.52	74	67.99	31.88	9.83	64.66	100	0	P	V
		7386	51.69	-22.31	74	67.16	37.38	11.63	64.86	153	310	P	V
		7386	45.5	-8.5	54	60.97	37.38	11.63	64.86	153	310	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		2548	55.91	-18.09	74	45.8	27.34	6.4	33.56	100	348	P	H
		2676	55.53	-18.47	74	44.92	27.71	6.52	33.55	100	348	P	H
		4934	46.14	-27.86	74	68.66	31.88	9.82	64.66	100	0	P	H
		7401	45.38	-28.62	74	60.85	37.4	11.63	64.87	100	0	P	H
		2546	55.99	-18.01	74	45.88	27.34	6.4	33.56	100	27	P	V
		2672	55.58	-18.42	74	45.01	27.67	6.52	33.55	100	27	P	V
		4934	43.41	-30.59	74	66.37	31.88	9.82	64.66	100	0	P	V
		7401	45.36	-28.64	74	61.2	37.4	11.63	64.87	100	0	P	V
802.11b CH 13 2472MHz		2550	55.77	-18.23	74	45.66	27.34	6.4	33.56	101	349	P	H
		2680	54.22	-19.78	74	43.61	27.71	6.52	33.55	101	349	P	H
		4944	41.77	-32.23	74	64.24	31.91	9.82	64.64	100	0	P	H
		7416	43.48	-30.52	74	58.92	37.4	11.66	64.87	100	0	P	H
		2556	56.21	-17.79	74	46.04	27.39	6.41	33.56	100	27	P	V
		2680	55.42	-18.58	74	44.81	27.71	6.52	33.55	100	27	P	V
		4944	40.9	-33.1	74	63.81	31.91	9.82	64.64	100	0	P	V
		7416	43.9	-30.1	74	59.71	37.4	11.66	64.87	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.275	64.36	-9.64	74	54.72	27.07	4.03	31.49	106	12	P	H
		2390	51.38	-2.62	54	41.74	27.07	4.03	31.49	106	12	A	H
	*	2412	107.51	-	-	97.78	27.14	4.05	31.49	106	12	P	H
	*	2412	98.11	-	-	88.38	27.14	4.05	31.49	106	12	A	H
													H
													H
		2388.96	65.54	-8.46	74	55.9	27.07	4.03	31.49	175	27	P	V
		2390	53.2	-0.8	54	43.56	27.07	4.03	31.49	175	27	A	V
	*	2412	110.51	-	-	100.78	27.14	4.05	31.49	175	27	P	V
	*	2412	100.52	-	-	90.79	27.14	4.05	31.49	175	27	A	V
													V
													V
802.11g CH 06 2437MHz		2388.96	59.86	-14.14	74	50.02	27.19	6.32	33.6	100	3	P	H
		2388.82	49.27	-4.73	54	39.43	27.19	6.32	33.6	100	3	A	H
	*	2437	112.2	-	-	102.15	27.34	6.37	33.59	100	3	P	H
	*	2437	103.39	-	-	93.34	27.34	6.37	33.59	100	3	A	H
		2484.81	60.34	-13.66	74	50.15	27.45	6.39	33.58	100	3	P	H
		2484.11	48.79	-5.21	54	38.6	27.45	6.39	33.58	100	3	A	H
		2385.74	59.4	-14.6	74	49.56	27.19	6.32	33.6	121	23	P	V
		2389.66	49.73	-4.27	54	39.89	27.19	6.32	33.6	121	23	A	V
	*	2437	114.99	-	-	104.94	27.34	6.37	33.59	121	23	P	V
	*	2437	106.03	-	-	95.98	27.34	6.37	33.59	121	23	A	V
		2483.5	62.79	-11.21	74	52.6	27.45	6.39	33.58	121	23	P	V
		2483.76	53.05	-0.95	54	42.86	27.45	6.39	33.58	121	23	A	V

802.11g CH 11 2462MHz	*	2462	109.24	-	-	99.31	27.29	4.08	31.47	108	336	P	H
	*	2462	98.68	-	-	88.75	27.29	4.08	31.47	108	336	A	H
		2483.6	59.86	-14.14	74	49.84	27.35	4.11	31.47	108	336	P	H
		2483.52	46.88	-7.12	54	36.86	27.35	4.11	31.47	108	336	A	H
													H
													H
	*	2462	112.98	-	-	103.05	27.29	4.08	31.47	107	29	P	V
	*	2462	102.64	-	-	92.71	27.29	4.08	31.47	107	29	A	V
		2484.16	64.35	-9.65	74	54.33	27.35	4.11	31.47	107	29	P	V
		2483.56	52.37	-1.63	54	42.35	27.35	4.11	31.47	107	29	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	107.26	-	-	97.31	27.3	4.09	31.47	110	335	P	H
	*	2467	97.04	-	-	87.09	27.3	4.09	31.47	110	335	A	H
		2485.6	59.7	-14.3	74	49.67	27.36	4.11	31.47	110	335	P	H
		2483.64	48.03	-5.97	54	38.01	27.35	4.11	31.47	110	335	A	H
													H
													H
	*	2467	111.78	-	-	101.83	27.3	4.09	31.47	107	28	P	V
	*	2467	101.34	-	-	91.39	27.3	4.09	31.47	107	28	A	V
		2484	64.61	-9.39	74	54.59	27.35	4.11	31.47	107	28	P	V
		2483.84	53.46	-0.54	54	43.44	27.35	4.11	31.47	107	28	A	V
													V
													V
802.11g CH 13 2472MHz	*	2472	104.84	-	-	94.87	27.32	4.09	31.47	109	337	P	H
	*	2472	94.62	-	-	84.65	27.32	4.09	31.47	109	337	A	H
		2484.4	58.11	-15.89	74	48.09	27.35	4.11	31.47	109	337	P	H
		2483.56	46.79	-7.21	54	36.77	27.35	4.11	31.47	109	337	A	H
													H
													H
	*	2472	109.43	-	-	99.46	27.32	4.09	31.47	106	29	P	V
	*	2472	99.04	-	-	89.07	27.32	4.09	31.47	106	29	A	V
		2483.72	63.16	-10.84	74	53.14	27.35	4.11	31.47	106	29	P	V
		2483.52	52.74	-1.26	54	42.72	27.35	4.11	31.47	106	29	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2490	57.37	-16.63	74	47.43	27.2	6.39	33.58	100	352	P	H
		2490	46.75	-7.25	54	36.81	27.2	6.39	33.58	100	352	A	H
		2620	57.48	-16.52	74	47.14	27.53	6.44	33.56	100	349	P	H
		4824	43.83	-30.17	74	66.56	31.69	9.89	64.74	100	0	P	H
		2488	59.34	-14.66	74	49.4	27.2	6.39	33.58	100	24	P	V
		2488	49.08	-4.92	54	39.14	27.2	6.39	33.58	100	24	A	V
		2620	57.83	-16.17	74	47.49	27.53	6.44	33.56	120	27	P	V
		4824	40.8	-33.2	74	63.96	31.69	9.89	64.74	100	0	P	V
802.11g CH 06 2437MHz		2510	59.13	-14.87	74	49.13	27.25	6.39	33.57	100	3	P	H
		2644	57.89	-16.11	74	47.43	27.62	6.47	33.56	100	3	P	H
		4874	45.14	-28.86	74	67.77	31.78	9.86	64.7	100	0	P	H
		7311	54.71	-19.29	74	70.15	37.27	11.65	64.82	322	359	P	H
		7311	44.22	-9.78	54	59.66	37.27	11.65	64.82	322	359	A	H
		2516	60.76	-13.24	74	50.76	27.25	6.39	33.57	121	23	P	V
		2648	59.34	-14.66	74	48.85	27.62	6.49	33.55	121	23	P	V
		4874	42.53	-31.47	74	65.59	31.78	9.86	64.7	100	0	P	V
		7311	55.75	-18.25	74	71.65	37.27	11.65	64.82	245	26	P	V
		7311	44.97	-9.03	54	60.87	37.27	11.65	64.82	245	26	A	V
802.11g CH 11 2462MHz		2548	58.43	-15.57	74	48.32	27.34	6.4	33.56	100	8	P	H
		2666	56.59	-17.41	74	46.02	27.67	6.52	33.55	100	8	P	H
		4924	47.79	-26.21	74	70.3	31.88	9.83	64.66	100	0	P	H
		7386	49.51	-24.49	74	64.98	37.38	11.63	64.86	100	0	P	H
		2540	58.7	-15.3	74	48.6	27.34	6.4	33.57	100	23	P	V
		2672	57.56	-16.44	74	46.99	27.67	6.52	33.55	100	23	P	V
		4924	42.35	-31.65	74	65.3	31.88	9.83	64.66	100	0	P	V
		7386	49.67	-24.33	74	65.52	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		2554	57.02	-16.98	74	46.91	27.34	6.4	33.56	100	7	P	H
		2680	55.75	-18.25	74	45.14	27.71	6.52	33.55	100	7	P	H
		4934	41.45	-32.55	74	63.97	31.88	9.82	64.66	100	0	P	H
		7401	46.12	-27.88	74	61.59	37.4	11.63	64.87	100	0	P	H
		2540	58.51	-15.49	74	48.41	27.34	6.4	33.57	100	27	P	V
		2672	56.18	-17.82	74	45.61	27.67	6.52	33.55	100	27	P	V
		4934	40.98	-33.02	74	63.94	31.88	9.82	64.66	100	0	P	V
		7401	48.76	-25.24	74	64.6	37.4	11.63	64.87	100	0	P	V
802.11g CH 13 2472MHz		2550	55.44	-18.56	74	45.33	27.34	6.4	33.56	100	9	P	H
		2682	55.67	-18.33	74	45.04	27.71	6.54	33.55	100	9	P	H
		4944	42.01	-31.99	74	64.48	31.91	9.82	64.64	100	0	P	H
		7416	44.76	-29.24	74	60.2	37.4	11.66	64.87	100	0	P	H
		2554	56.91	-17.09	74	46.8	27.34	6.4	33.56	100	24	P	V
		2668	55.43	-18.57	74	44.86	27.67	6.52	33.55	100	24	P	V
		4944	39.98	-34.02	74	62.89	31.91	9.82	64.64	100	0	P	V
		7416	44.08	-29.92	74	59.89	37.4	11.66	64.87	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.905	64.89	-9.11	74	55.25	27.07	4.03	31.49	107	12	P	H
		2389.8	50.92	-3.08	54	41.28	27.07	4.03	31.49	107	12	A	H
	*	2412	105.91	-	-	96.18	27.14	4.05	31.49	107	12	P	H
	*	2412	96.21	-	-	86.48	27.14	4.05	31.49	107	12	A	H
													H
													H
		2389.065	65.32	-8.68	74	55.68	27.07	4.03	31.49	103	37	P	V
		2390	53.31	-0.69	54	43.67	27.07	4.03	31.49	103	37	A	V
	*	2412	107.83	-	-	98.1	27.14	4.05	31.49	103	37	P	V
	*	2412	98.17	-	-	88.44	27.14	4.05	31.49	103	37	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2388.4	61.88	-12.12	74	52.04	27.19	6.32	33.6	100	7	P	H
		2389.94	49.48	-4.52	54	39.63	27.19	6.32	33.59	100	7	A	H
	*	2437	111.61	-	-	101.56	27.34	6.37	33.59	100	7	P	H
	*	2437	102.75	-	-	92.7	27.34	6.37	33.59	100	7	A	H
		2485.37	58.45	-15.55	74	48.26	27.45	6.39	33.58	100	7	P	H
		2483.83	48.64	-5.36	54	38.45	27.45	6.39	33.58	100	7	A	H
		2385.74	62.11	-11.89	74	52.27	27.19	6.32	33.6	116	28	P	V
		2389.24	50.22	-3.78	54	40.38	27.19	6.32	33.6	116	28	A	V
	*	2437	114.35	-	-	104.3	27.34	6.37	33.59	116	28	P	V
	*	2437	105.5	-	-	95.45	27.34	6.37	33.59	116	28	A	V
		2484.88	62.83	-11.17	74	52.64	27.45	6.39	33.58	116	28	P	V
		2483.83	53.01	-0.99	54	42.82	27.45	6.39	33.58	116	28	A	V

	*	2462	108.46	-	-	98.53	27.29	4.08	31.47	108	335	P	H
	*	2462	97.48	-	-	87.55	27.29	4.08	31.47	108	335	A	H
		2485.92	60.06	-13.94	74	50.03	27.36	4.11	31.47	108	335	P	H
		2483.52	46.24	-7.76	54	36.22	27.35	4.11	31.47	108	335	A	H
802.11n													H
HT20													H
CH 11	*	2462	112.15	-	-	102.22	27.29	4.08	31.47	105	31	P	V
2462MHz	*	2462	101.69	-	-	91.76	27.29	4.08	31.47	105	31	A	V
		2484.4	65.25	-8.75	74	55.23	27.35	4.11	31.47	105	31	P	V
		2483.52	51.8	-2.2	54	41.78	27.35	4.11	31.47	105	31	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	2467	106.4	-	-	96.45	27.3	4.09	31.47	107	335	P	H
	*	2467	96.07	-	-	86.12	27.3	4.09	31.47	107	335	A	H
		2486.24	58.87	-15.13	74	48.84	27.36	4.11	31.47	107	335	P	H
		2483.8	47.38	-6.62	54	37.36	27.35	4.11	31.47	107	335	A	H
802.11n													H
HT20													H
CH 12	*	2467	111.18	-	-	101.23	27.3	4.09	31.47	105	28	P	V
2467MHz	*	2467	100.6	-	-	90.65	27.3	4.09	31.47	105	28	A	V
		2483.6	65.29	-8.71	74	55.27	27.35	4.11	31.47	105	28	P	V
		2483.6	53.14	-0.86	54	43.12	27.35	4.11	31.47	105	28	A	V
													V
													V
	*	2472	104.23	-	-	94.26	27.32	4.09	31.47	107	335	P	H
	*	2472	94.06	-	-	84.09	27.32	4.09	31.47	107	335	A	H
		2489.08	57.2	-16.8	74	47.16	27.37	4.11	31.47	107	335	P	H
		2483.52	46.57	-7.43	54	36.55	27.35	4.11	31.47	107	335	A	H
802.11n													H
HT20													H
CH 13	*	2472	109.36	-	-	99.39	27.32	4.09	31.47	104	29	P	V
2472MHz	*	2472	98.78	-	-	88.81	27.32	4.09	31.47	104	29	A	V
		2483.56	64.42	-9.58	74	54.4	27.35	4.11	31.47	104	29	P	V
		2483.6	52.8	-1.2	54	42.78	27.35	4.11	31.47	104	29	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2486	56.14	-17.86	74	46.26	27.14	6.39	33.58	100	10	P	H
		2486	45.47	-8.53	54	35.59	27.14	6.39	33.58	100	10	A	H
		2620	56.63	-17.37	74	46.29	27.53	6.44	33.56	100	8	P	H
		4824	41.25	-32.75	74	63.98	31.69	9.89	64.74	100	0	P	H
		2496	58.83	-15.17	74	48.88	27.2	6.39	33.57	100	25	P	V
		2496	48.31	-5.69	54	38.36	27.2	6.39	33.57	100	25	A	V
		2618	58.89	-15.11	74	48.55	27.53	6.44	33.56	100	32	P	V
		4824	39.41	-34.59	74	62.57	31.69	9.89	64.74	100	0	P	V
802.11n HT20 CH 06 2437MHz		2522	57.97	-16.03	74	47.92	27.29	6.4	33.57	100	7	P	H
		2646	57.89	-16.11	74	47.4	27.62	6.49	33.55	100	7	P	H
		4874	45.3	-28.7	74	67.93	31.78	9.86	64.7	100	0	P	H
		7311	53.06	-20.94	74	68.5	37.27	11.65	64.82	320	360	P	H
		7311	44.32	-9.68	54	59.76	37.27	11.65	64.82	320	360	A	H
		2524	59.69	-14.31	74	49.64	27.29	6.4	33.57	116	28	P	V
		2648	57.85	-16.15	74	47.36	27.62	6.49	33.55	116	28	P	V
		4874	43.26	-30.74	74	66.32	31.78	9.86	64.7	100	0	P	V
		7311	53.75	-20.25	74	69.65	37.27	11.65	64.82	235	27	P	V
		7311	45.8	-8.2	54	61.7	37.27	11.65	64.82	235	27	A	V
802.11n HT20 CH 11 2462MHz		2544	57.54	-16.46	74	47.43	27.34	6.4	33.56	104	9	P	H
		2674	55.91	-18.09	74	45.34	27.67	6.52	33.55	104	9	P	H
		4924	45.67	-28.33	74	68.18	31.88	9.83	64.66	100	0	P	H
		7386	49.22	-24.78	74	64.69	37.38	11.63	64.86	100	0	P	H
		2548	58.45	-15.55	74	48.34	27.34	6.4	33.56	100	25	P	V
		2674	57.53	-16.47	74	46.96	27.67	6.52	33.55	100	25	P	V
		4924	41.83	-32.17	74	64.78	31.88	9.83	64.66	100	0	P	V
		7386	49.52	-24.48	74	65.37	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz		2548	56.45	-17.55	74	46.34	27.34	6.4	33.56	100	6	P	H
		2680	55.69	-18.31	74	45.08	27.71	6.52	33.55	100	6	P	H
		4934	42.88	-31.12	74	65.4	31.88	9.82	64.66	100	0	P	H
		7401	45.56	-28.44	74	61.03	37.4	11.63	64.87	100	0	P	H
		2546	58	-16	74	47.89	27.34	6.4	33.56	100	25	P	V
		2674	56.6	-17.4	74	46.03	27.67	6.52	33.55	100	25	P	V
		4934	41.21	-32.79	74	64.17	31.88	9.82	64.66	100	0	P	V
		7401	45.94	-28.06	74	61.78	37.4	11.63	64.87	100	0	P	V
802.11n HT20 CH 13 2472MHz		2558	55.89	-18.11	74	45.72	27.39	6.41	33.56	102	8	P	H
		2686	55.05	-18.95	74	44.42	27.71	6.54	33.55	102	8	P	H
		4944	42.66	-31.34	74	65.13	31.91	9.82	64.64	100	0	P	H
		7416	44.05	-29.95	74	59.49	37.4	11.66	64.87	100	0	P	H
		2544	57.12	-16.88	74	47.01	27.34	6.4	33.56	100	26	P	V
		2672	55.82	-18.18	74	45.25	27.67	6.52	33.55	100	26	P	V
		4944	40.1	-33.9	74	63.01	31.91	9.82	64.64	100	0	P	V
		7416	44.68	-29.32	74	60.49	37.4	11.66	64.87	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11g LF		30.54	23.22	-16.78	40	29.84	25.18	0.68	32.5			P	H
		182.28	34.62	-8.88	43.5	50.44	15.22	1.69	32.82			P	H
		201.72	37.6	-5.9	43.5	52.58	16.04	1.8	32.88	124	58	P	H
		316.8	30.44	-15.56	46	40.26	20.18	2.28	32.36			P	H
		715.1	29.76	-16.24	46	31.69	26.99	3.38	32.43			P	H
		939.8	33.05	-12.95	46	30.02	30.33	3.82	31.29			P	H
													H
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													H
													H
													H
		59.7	30.59	-9.41	40	50.1	11.9	1.06	32.49			P	V
		182.28	32.44	-11.06	43.5	48.26	15.22	1.69	32.82			P	V
		201.72	36.66	-6.84	43.5	51.64	16.04	1.8	32.88	139	58	P	V
		489.7	29.12	-16.88	46	34.68	23.93	2.84	32.38			P	V
		598.2	28.42	-17.58	46	32.04	25.67	3.09	32.46			P	V
		953.8	33.37	-12.63	46	29.95	30.59	3.82	31.16			P	V
													V
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													V
													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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2386.965	59.41	-14.59	74	49.78	27.06	4.03	31.49	190	92	P	H
		2387.385	52.64	-1.36	54	43.01	27.06	4.03	31.49	190	92	A	H
	*	2412	111.59	-	-	101.86	27.14	4.05	31.49	190	92	P	H
	*	2412	107.24	-	-	97.51	27.14	4.05	31.49	190	92	A	H
		2387.595	58.06	-15.94	74	48.43	27.06	4.03	31.49	333	10	P	V
		2386.125	50.14	-3.86	54	40.51	27.06	4.03	31.49	333	10	A	V
	*	2412	110.41	-	-	100.68	27.14	4.05	31.49	333	10	P	V
	*	2412	106.29	-	-	96.56	27.14	4.05	31.49	333	10	A	V
802.11b CH 06 2437MHz		2356.48	55.64	-18.36	74	45.99	27.09	6.23	33.6	245	72	P	H
		2358.02	46.61	-7.39	54	36.92	27.09	6.27	33.6	245	72	A	H
	*	2437	116.55	-	-	106.5	27.34	6.37	33.59	245	72	P	H
	*	2437	113.1	-	-	103.05	27.34	6.37	33.59	245	72	A	H
		2487.61	57.44	-16.56	74	47.2	27.5	6.39	33.58	245	72	P	H
		2483.69	46.66	-7.34	54	36.47	27.45	6.39	33.58	245	72	A	H
		2355.64	54.41	-19.59	74	44.76	27.09	6.23	33.6	298	83	P	V
		2356.06	45.41	-8.59	54	35.76	27.09	6.23	33.6	298	83	A	V
	*	2437	111.82	-	-	101.77	27.34	6.37	33.59	298	83	P	V
	*	2437	108.4	-	-	98.35	27.34	6.37	33.59	298	83	P	V
		2496.43	53.99	-20.01	74	43.74	27.5	6.39	33.57	323	0	P	V
		2483.69	43.52	-10.48	54	33.33	27.45	6.39	33.58	323	0	A	V

802.11b CH 11 2462MHz	*	2462	111.39	-	-	101.46	27.29	4.08	31.47	230	71	P	H
	*	2462	107.24	-	-	97.31	27.29	4.08	31.47	230	71	A	H
		2489.56	61.95	-12.05	74	51.91	27.37	4.11	31.47	230	71	P	H
		2483.52	53.11	-0.89	54	43.09	27.35	4.11	31.47	230	71	A	H
	*	2462	109.43	-	-	99.5	27.29	4.08	31.47	287	10	P	V
	*	2462	105.2	-	-	95.27	27.29	4.08	31.47	287	10	A	V
		2485.28	61.73	-12.27	74	51.7	27.36	4.11	31.47	287	10	P	V
		2483.52	51.97	-2.03	54	41.95	27.35	4.11	31.47	287	10	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2468	109.83	-	-	99.88	27.3	4.09	31.47	182	73	P	H
	*	2466	105.61	-	-	95.66	27.3	4.09	31.47	182	73	A	H
		2484.04	64.22	-9.78	74	54.2	27.35	4.11	31.47	182	73	P	H
		2484.2	53.28	-0.72	54	43.26	27.35	4.11	31.47	182	73	A	H
	*	2467	107.12	-	-	97.17	27.3	4.09	31.47	350	360	P	V
	*	2467	102.88	-	-	92.93	27.3	4.09	31.47	350	360	A	V
		2484.8	60.8	-13.2	74	50.78	27.35	4.11	31.47	350	360	P	V
		2484.16	50.47	-3.53	54	40.45	27.35	4.11	31.47	350	360	A	V
802.11b CH 13 2472MHz	*	2472	107.2	-	-	97.02	27.45	6.38	33.58	257	73	P	H
	*	2472	103.72	-	-	93.54	27.45	6.38	33.58	257	73	A	H
		2484.04	64.7	-9.3	74	54.51	27.45	6.39	33.58	257	73	P	H
		2485.88	53.21	-0.79	54	43.02	27.45	6.39	33.58	257	73	A	H
	*	2472	102.1	-	-	91.92	27.45	6.38	33.58	293	81	P	V
	*	2472	98.54	-	-	88.36	27.45	6.38	33.58	293	81	A	V
		2483.52	60.13	-13.87	74	49.94	27.45	6.39	33.58	293	81	P	V
		2485.8	48.07	-5.93	54	37.88	27.45	6.39	33.58	293	81	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2336	54.38	-19.62	74	45.18	26.7	6.18	33.61	260	71	P	H
		2336	44.96	-9.04	54	35.76	26.7	6.18	33.61	260	71	A	H
		2490	58.94	-15.06	74	49	27.2	6.39	33.58	260	71	P	H
		2490	50.62	-3.38	54	40.68	27.2	6.39	33.58	260	71	A	H
		2570	57.62	-16.38	74	47.45	27.39	6.41	33.56	259	70	P	H
		2610	57.22	-16.78	74	46.88	27.53	6.44	33.56	259	70	P	H
		4824	47.1	-26.9	74	69.83	31.69	9.89	64.74	100	0	P	H
		2336	54.48	-19.52	74	45.28	26.7	6.18	33.61	311	83	P	V
		2336	46.18	-7.82	54	36.98	26.7	6.18	33.61	311	83	A	V
		2490	55.45	-18.55	74	45.51	27.2	6.39	33.58	311	83	P	V
		2490	45.54	-8.46	54	35.6	27.2	6.39	33.58	311	83	A	V
		2570	55.67	-18.33	74	45.5	27.39	6.41	33.56	311	83	P	V
		2614	54.03	-19.97	74	43.69	27.53	6.44	33.56	311	83	P	V
		4824	45.37	-28.63	74	68.53	31.69	9.89	64.74	100	0	P	V
802.11b CH 06 2437MHz		2358	56.26	-17.74	74	46.9	26.76	6.27	33.6	245	72	P	H
		2358	48.99	-5.01	54	39.63	26.76	6.27	33.6	245	72	A	H
		2516	59.11	-14.89	74	49.11	27.25	6.39	33.57	245	72	P	H
		2598	57.66	-16.34	74	47.39	27.48	6.42	33.56	245	72	P	H
		2638	57.19	-16.81	74	46.78	27.57	6.47	33.56	245	72	P	H
		4874	46.72	-27.28	74	69.35	31.78	9.86	64.7	100	0	P	H
		7311	46.08	-27.92	74	61.52	37.27	11.65	64.82	100	0	P	H
		2358	56.48	-17.52	74	47.12	26.76	6.27	33.6	298	83	P	V
		2358	47.44	-6.56	54	38.08	26.76	6.27	33.6	298	83	A	V
		2520	55.36	-18.64	74	45.35	27.25	6.4	33.57	298	83	P	V
		2596	55.45	-18.55	74	45.18	27.48	6.42	33.56	298	83	P	V
		4874	43.19	-30.81	74	65.82	31.78	9.86	64.7	100	0	P	V
		7311	46.84	-27.16	74	62.28	37.27	11.65	64.82	100	0	P	V
802.11b CH 11 2462MHz		2382	57.2	-16.8	74	47.74	26.81	6.32	33.6	260	71	P	H
		2382	49.46	-4.54	54	40	26.81	6.32	33.6	260	71	A	H
		2542	56.43	-17.57	74	46.33	27.34	6.4	33.57	258	71	P	H

		2624	55.82	-18.18	74	45.44	27.57	6.44	33.56	258	71	P	H
		2668	53.94	-20.06	74	43.37	27.67	6.52	33.55	258	71	P	H
		4924	48.19	-25.81	74	70.7	31.88	9.83	64.66	100	0	P	H
		7386	45.62	-28.38	74	61.09	37.38	11.63	64.86	100	0	P	H
		2380	55.45	-18.55	74	45.99	26.81	6.32	33.6	293	82	P	V
		2380	46.56	-7.44	54	37.1	26.81	6.32	33.6	293	82	A	V
		2544	54.99	-19.01	74	44.88	27.34	6.4	33.56	293	82	P	V
		4924	44.35	-29.65	74	67.3	31.88	9.83	64.66	100	0	P	V
		7386	45.39	-28.61	74	61.24	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		2390	55.76	-18.24	74	46.23	26.87	6.32	33.59	256	72	P	H
		2390	48.13	-5.87	54	38.6	26.87	6.32	33.59	256	72	A	H
		2550	56.96	-17.04	74	46.85	27.34	6.4	33.56	255	70	P	H
		2624	55.73	-18.27	74	45.35	27.57	6.44	33.56	255	70	P	H
		2678	55.31	-18.69	74	44.7	27.71	6.52	33.55	255	70	P	H
		4934	44.54	-29.46	74	67.06	31.88	9.82	64.66	100	0	P	H
		7401	43.91	-30.09	74	59.38	37.4	11.63	64.87	100	0	P	H
		2388	54.77	-19.23	74	45.25	26.87	6.32	33.6	296	81	P	V
		2388	45.75	-8.25	54	36.23	26.87	6.32	33.6	296	81	A	V
		2546	55.06	-18.94	74	44.95	27.34	6.4	33.56	296	81	P	V
		4934	42.74	-31.26	74	65.7	31.88	9.82	64.66	100	0	P	V
		7401	43.51	-30.49	74	59.35	37.4	11.63	64.87	100	0	P	V
802.11b CH 13 2472MHz		2390	55.69	-18.31	74	46.16	26.87	6.32	33.59	257	73	P	H
		2390	46.63	-7.37	54	37.1	26.87	6.32	33.59	257	73	A	H
		2552	55.03	-18.97	74	44.92	27.34	6.4	33.56	257	73	P	H
		2634	55.26	-18.74	74	44.85	27.57	6.47	33.56	257	73	P	H
		4944	43.01	-30.99	74	65.48	31.91	9.82	64.64	100	0	P	H
		7416	44.13	-29.87	74	59.57	37.4	11.66	64.87	100	0	P	H
		2390	54.07	-19.93	74	44.54	26.87	6.32	33.59	293	81	P	V
		2390	44.38	-9.62	54	34.85	26.87	6.32	33.59	293	81	A	V
		2550	53.41	-20.59	74	43.3	27.34	6.4	33.56	293	81	P	V
		4944	41.48	-32.52	74	64.39	31.91	9.82	64.64	100	0	P	V
		7416	43.72	-30.28	74	59.53	37.4	11.66	64.87	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.275	66.05	-	-	56.41	27.07	4.03	31.49	192	74	P	H
		2390	52.49	-	-	42.85	27.07	4.03	31.49	192	74	A	H
	*	2420	112.92	38.92	74	103.16	27.16	4.05	31.48	192	74	P	H
	*	2420	102.46	48.46	54	92.7	27.16	4.05	31.48	192	74	A	H
		2389.485	64.72	-	-	55.08	27.07	4.03	31.49	378	6	P	V
		2390	51.79	-	-	42.15	27.07	4.03	31.49	378	6	A	V
	*	2412	110.69	36.69	74	100.96	27.14	4.05	31.49	378	6	P	V
	*	2412	100.34	46.34	54	90.61	27.14	4.05	31.49	378	6	A	V
802.11g CH 06 2437MHz		2389.8	61.82	-12.18	74	52.18	27.07	4.03	31.49	202	75	P	H
		2389.52	50.13	-3.87	54	40.49	27.07	4.03	31.49	202	75	A	H
	*	2437	114.53	-	-	104.7	27.21	4.07	31.48	202	75	P	H
	*	2437	104.5	-	-	94.67	27.21	4.07	31.48	202	75	A	H
		2483.9	63.85	-10.15	74	53.83	27.35	4.11	31.47	202	75	P	H
		2483.69	52.52	-1.48	54	42.5	27.35	4.11	31.47	202	75	A	H
		2388.26	60.32	-13.68	74	50.69	27.06	4.03	31.49	330	9	P	V
		2388.26	48.22	-5.78	54	38.59	27.06	4.03	31.49	330	9	A	V
	*	2437	112.77	-	-	102.94	27.21	4.07	31.48	330	9	P	V
	*	2437	103.06	-	-	93.23	27.21	4.07	31.48	330	9	A	V
		2483.55	60.04	-13.96	74	50.02	27.35	4.11	31.47	330	9	P	V
		2483.83	49.03	-4.97	54	39.01	27.35	4.11	31.47	330	9	A	V

802.11g CH 11 2462MHz	*	2462	114.1	-	-	104.17	27.29	4.08	31.47	229	74	P	H
	*	2462	103.64	-	-	93.71	27.29	4.08	31.47	229	74	A	H
		2484.76	66.58	-7.42	74	56.56	27.35	4.11	31.47	229	74	P	H
		2483.52	52.44	-1.56	54	42.42	27.35	4.11	31.47	229	74	A	H
	*	2462	111.79	-	-	101.86	27.29	4.08	31.47	316	1	P	V
	*	2462	101.64	-	-	91.71	27.29	4.08	31.47	316	1	A	V
		2485.36	64.51	-9.49	74	54.48	27.36	4.11	31.47	316	1	P	V
		2484.52	51.07	-2.93	54	41.05	27.35	4.11	31.47	316	1	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	113.19	-	-	103.24	27.3	4.09	31.47	179	73	P	H
	*	2467	102.74	-	-	92.79	27.3	4.09	31.47	179	73	A	H
		2486.32	63.62	-10.38	74	53.59	27.36	4.11	31.47	179	73	P	H
		2483.56	51.32	-2.68	54	41.3	27.35	4.11	31.47	179	73	A	H
	*	2467	110.21	-	-	100.26	27.3	4.09	31.47	353	1	P	V
	*	2467	99.85	-	-	89.9	27.3	4.09	31.47	353	1	A	V
		2483.96	61.18	-12.82	74	51.16	27.35	4.11	31.47	353	1	P	V
		2483.64	49.51	-4.49	54	39.49	27.35	4.11	31.47	353	1	A	V
802.11g CH 13 2472MHz	*	2472	111.3	-	-	101.33	27.32	4.09	31.47	133	73	P	H
	*	2472	100.96	-	-	90.99	27.32	4.09	31.47	133	73	A	H
		2483.56	63.99	-10.01	74	53.97	27.35	4.11	31.47	133	73	P	H
		2483.52	51.43	-2.57	54	41.41	27.35	4.11	31.47	133	73	A	H
	*	2472	109.02	-	-	99.05	27.32	4.09	31.47	353	0	P	V
	*	2472	98.44	-	-	88.47	27.32	4.09	31.47	353	0	A	V
		2483.6	60.01	-13.99	74	49.99	27.35	4.11	31.47	353	0	P	V
		2483.52	48.68	-5.32	54	38.66	27.35	4.11	31.47	353	0	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2484	58.99	-15.01	74	49.11	27.14	6.39	33.58	268	66	P	H
		2484	49.12	-4.88	54	39.24	27.14	6.39	33.58	268	66	A	H
		2568	57.23	-16.77	74	47.06	27.39	6.41	33.56	268	66	P	H
		2606	57.5	-16.5	74	47.23	27.48	6.42	33.56	268	66	P	H
		4824	43.08	-30.92	74	65.81	31.69	9.89	64.74	100	0	P	H
		2338	54.23	-19.77	74	45.03	26.7	6.18	33.61	314	81	P	V
		2338	44.71	-9.29	54	35.51	26.7	6.18	33.61	314	81	A	V
		2578	54.01	-19.99	74	43.8	27.43	6.41	33.56	314	81	P	V
		4824	41.3	-32.7	74	64.46	31.69	9.89	64.74	100	0	P	V
802.11g CH 06 2437MHz		2364	56.51	-17.49	74	47.15	26.76	6.27	33.6	257	68	P	H
		2364	45.9	-8.1	54	36.54	26.76	6.27	33.6	257	68	A	H
		2510	59.43	-14.57	74	49.43	27.25	6.39	33.57	257	68	P	H
		2600	56.55	-17.45	74	46.28	27.48	6.42	33.56	257	68	P	H
		2634	55.96	-18.04	74	45.55	27.57	6.47	33.56	257	68	P	H
		4874	44.21	-29.79	74	66.84	31.78	9.86	64.7	100	0	P	H
		7311	46.94	-27.06	74	62.38	37.27	11.65	64.82	100	0	P	H
		2360	55.71	-18.29	74	46.35	26.76	6.27	33.6	298	84	P	V
		2360	45.66	-8.34	54	36.3	26.76	6.27	33.6	298	84	A	V
		2516	54.2	-19.8	74	44.2	27.25	6.39	33.57	298	84	P	V
		4874	41	-33	74	64.06	31.78	9.86	64.7	100	0	P	V
		7311	44.27	-29.73	74	60.17	37.27	11.65	64.82	100	0	P	V

802.11g CH 11 2462MHz		2388	56.98	-17.02	74	47.46	26.87	6.32	33.6	253	65	P	H
		2388	48.3	-5.7	54	38.78	26.87	6.32	33.6	253	65	A	H
		2536	56.44	-17.56	74	46.39	27.29	6.4	33.57	253	65	P	H
		2620	54.79	-19.21	74	44.45	27.53	6.44	33.56	253	65	P	H
		2662	55.15	-18.85	74	44.61	27.67	6.49	33.55	253	65	P	H
		4924	43.82	-30.18	74	66.33	31.88	9.83	64.66	100	0	P	H
		7386	46.18	-27.82	74	61.65	37.38	11.63	64.86	100	0	P	H
		2380	54.88	-19.12	74	45.42	26.81	6.32	33.6	294	82	P	V
		2380	46.26	-7.74	54	36.8	26.81	6.32	33.6	294	82	A	V
		2538	53.97	-20.03	74	43.92	27.29	6.4	33.57	294	82	P	V
		4924	41.57	-32.43	74	64.52	31.88	9.83	64.66	100	0	P	V
		7386	45.56	-28.44	74	61.41	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		2390	55.88	-18.12	74	46.35	26.87	6.32	33.59	256	68	P	H
		2390	47.67	-6.33	54	38.14	26.87	6.32	33.59	256	68	A	H
		2540	55.95	-18.05	74	45.85	27.34	6.4	33.57	256	68	P	H
		2622	55.22	-18.78	74	44.88	27.53	6.44	33.56	256	68	P	H
		2664	53.56	-20.44	74	42.99	27.67	6.52	33.55	256	68	P	H
		4934	44.83	-29.17	74	67.35	31.88	9.82	64.66	100	0	P	H
		7401	44.88	-29.12	74	60.35	37.4	11.63	64.87	100	0	P	H
		2388	55.17	-18.83	74	45.65	26.87	6.32	33.6	292	82	P	V
		2388	45.45	-8.55	54	35.93	26.87	6.32	33.6	292	82	A	V
		2542	53.94	-20.06	74	43.84	27.34	6.4	33.57	292	82	P	V
		4934	41.32	-32.68	74	64.28	31.88	9.82	64.66	100	0	P	V
		7401	45.25	-28.75	74	61.09	37.4	11.63	64.87	100	0	P	V
802.11g CH 13 2472MHz		2390	55.08	-18.92	74	45.55	26.87	6.32	33.59	260	66	P	H
		2390	46.23	-7.77	54	36.7	26.87	6.32	33.59	260	66	A	H
		2554	56.68	-17.32	74	46.57	27.34	6.4	33.56	260	66	P	H
		2628	55.4	-18.6	74	44.99	27.57	6.47	33.56	260	66	P	H
		4944	42.38	-31.62	74	64.85	31.91	9.82	64.64	200	0	P	H
		7416	43.69	-30.31	74	59.13	37.4	11.66	64.87	200	0	P	H
		2386	53.86	-20.14	74	44.34	26.87	6.32	33.6	292	80	P	V
		2386	44.68	-9.32	54	35.16	26.87	6.32	33.6	292	80	A	V
		2548	53.83	-20.17	74	43.72	27.34	6.4	33.56	292	80	P	V
		4944	40.89	-33.11	74	63.8	31.91	9.82	64.64	200	0	P	V
		7416	43.22	-30.78	74	59.03	37.4	11.66	64.87	200	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.275	67.18	-6.82	74	57.54	27.07	4.03	31.49	212	65	P	H
		2390	53.12	-0.88	54	43.48	27.07	4.03	31.49	212	65	A	H
	*	2412	112.54	-	-	102.81	27.14	4.05	31.49	212	65	P	H
	*	2412	102.18	-	-	92.45	27.14	4.05	31.49	212	65	A	H
		2389.905	66.97	-7.03	74	57.33	27.07	4.03	31.49	379	4	P	V
		2390	52.35	-1.65	54	42.71	27.07	4.03	31.49	379	4	A	V
	*	2412	110.17	-	-	100.44	27.14	4.05	31.49	379	4	P	V
	*	2412	100.03	-	-	90.3	27.14	4.05	31.49	379	4	A	V
802.11n HT20 CH 06 2437MHz		2389.24	61.44	-12.56	74	51.8	27.07	4.03	31.49	204	74	P	H
		2388.4	50.27	-3.73	54	40.63	27.07	4.03	31.49	204	74	A	H
	*	2437	113.9	-	-	104.07	27.21	4.07	31.48	204	74	P	H
	*	2437	104.24	-	-	94.41	27.21	4.07	31.48	204	74	A	H
		2483.69	63.4	-10.6	74	53.38	27.35	4.11	31.47	204	74	P	H
		2484.39	51.94	-2.06	54	41.92	27.35	4.11	31.47	204	74	A	H
		2389.94	59.64	-14.36	74	50	27.07	4.03	31.49	332	12	P	V
		2389.38	47.51	-6.49	54	37.87	27.07	4.03	31.49	332	12	A	V
	*	2437	112.71	-	-	102.88	27.21	4.07	31.48	332	12	P	V
	*	2437	102.79	-	-	92.96	27.21	4.07	31.48	332	12	A	V
		2483.55	59.16	-14.84	74	49.14	27.35	4.11	31.47	332	12	P	V
		2483.55	48.38	-5.62	54	38.36	27.35	4.11	31.47	332	12	A	V

802.11n HT20 CH 11 2462MHz	*	2462	112.86	-	-	102.93	27.29	4.08	31.47	229	72	P	H
	*	2462	103.44	-	-	93.51	27.29	4.08	31.47	229	72	A	H
		2483.8	68.55	-5.45	74	58.53	27.35	4.11	31.47	229	72	P	H
		2483.6	52.02	-1.98	54	42	27.35	4.11	31.47	229	72	A	H
	*	2462	110.83	-	-	100.9	27.29	4.08	31.47	323	5	P	V
	*	2462	100.93	-	-	91	27.29	4.08	31.47	323	5	A	V
		2484.08	64.99	-9.01	74	54.97	27.35	4.11	31.47	323	5	P	V
		2483.72	49.31	-4.69	54	39.29	27.35	4.11	31.47	323	5	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz	*	2467	112.91	-	-	102.96	27.3	4.09	31.47	182	74	P	H
	*	2467	102.52	-	-	92.57	27.3	4.09	31.47	182	74	A	H
		2484.16	64.24	-9.76	74	54.22	27.35	4.11	31.47	182	74	P	H
		2483.64	52	-2	54	41.98	27.35	4.11	31.47	182	74	A	H
	*	2467	110.66	-	-	100.71	27.3	4.09	31.47	353	0	P	V
	*	2467	100.21	-	-	90.26	27.3	4.09	31.47	353	0	A	V
		2488.6	61.77	-12.23	74	51.73	27.37	4.11	31.47	353	0	P	V
		2483.6	50.31	-3.69	54	40.29	27.35	4.11	31.47	353	0	A	V
802.11n HT20 CH 13 2472MHz	*	2472	111.82	-	-	101.85	27.32	4.09	31.47	162	72	P	H
	*	2472	100.5	-	-	90.53	27.32	4.09	31.47	162	72	A	H
		2483.96	65.27	-8.73	74	55.25	27.35	4.11	31.47	162	72	P	H
		2483.52	52.32	-1.68	54	42.3	27.35	4.11	31.47	162	72	A	H
	*	2472	108.44	-	-	98.47	27.32	4.09	31.47	353	2	P	V
	*	2472	98.22	-	-	88.25	27.32	4.09	31.47	353	2	A	V
		2483.56	60.81	-13.19	74	50.79	27.35	4.11	31.47	353	2	P	V
		2483.52	48.66	-5.34	54	38.64	27.35	4.11	31.47	353	2	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n 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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2340	53.97	-20.03	74	44.71	26.7	6.23	33.6	264	66	P	H
		2340	43.46	-10.54	54	34.2	26.7	6.23	33.6	264	66	A	H
		2488	57.61	-16.39	74	47.67	27.2	6.39	33.58	264	66	P	H
		2488	48.3	-5.7	54	38.36	27.2	6.39	33.58	264	66	A	H
		2574	55.41	-18.59	74	45.2	27.43	6.41	33.56	264	66	P	H
		2606	55.82	-18.18	74	45.55	27.48	6.42	33.56	264	66	P	H
		4824	41.41	-32.59	74	64.14	31.69	9.89	64.74	100	0	P	H
		2340	52.15	-21.85	74	42.89	26.7	6.23	33.6	314	81	P	V
		2340	44.01	-9.99	54	34.75	26.7	6.23	33.6	314	81	A	V
		2564	54.78	-19.22	74	44.61	27.39	6.41	33.56	314	81	P	V
		4824	39.63	-34.37	74	62.79	31.69	9.89	64.74	100	0	P	V
802.11n HT20 CH 06 2437MHz		2362	57.09	-16.91	74	47.73	26.76	6.27	33.6	258	65	P	H
		2362	45.99	-8.01	54	36.63	26.76	6.27	33.6	258	65	A	H
		2508	58.67	-15.33	74	48.67	27.25	6.39	33.57	258	65	P	H
		2600	56.55	-17.45	74	46.28	27.48	6.42	33.56	258	65	P	H
		2632	56.72	-17.28	74	46.31	27.57	6.47	33.56	258	65	P	H
		4874	44	-30	74	66.63	31.78	9.86	64.7	100	0	P	H
		7311	45.95	-28.05	74	61.39	37.27	11.65	64.82	100	0	P	H
		2362	54.24	-19.76	74	44.88	26.76	6.27	33.6	298	83	P	V
		2362	45.19	-8.81	54	35.83	26.76	6.27	33.6	298	83	A	V
		2508	54.42	-19.58	74	44.42	27.25	6.39	33.57	298	83	P	V
		2594	54.14	-19.86	74	43.87	27.48	6.42	33.56	298	83	P	V
		4874	40.52	-33.48	74	63.58	31.78	9.86	64.7	100	0	P	V
		7311	44.51	-29.49	74	60.41	37.27	11.65	64.82	100	0	P	V

802.11n HT20 CH 11 2462MHz		2388	57.02	-16.98	74	47.5	26.87	6.32	33.6	256	68	P	H
		2388	48.44	-5.56	54	38.92	26.87	6.32	33.6	256	68	A	H
		2536	58.72	-15.28	74	48.67	27.29	6.4	33.57	256	68	P	H
		2614	56.52	-17.48	74	46.18	27.53	6.44	33.56	256	68	P	H
		2660	54.85	-19.15	74	44.31	27.67	6.49	33.55	256	68	P	H
		4924	44.95	-29.05	74	67.46	31.88	9.83	64.66	100	0	P	H
		7386	45.27	-28.73	74	60.74	37.38	11.63	64.86	100	0	P	H
		2382	54.92	-19.08	74	45.46	26.81	6.32	33.6	293	80	P	V
		2382	46.05	-7.95	54	36.59	26.81	6.32	33.6	293	80	A	V
		2544	53.98	-20.02	74	43.87	27.34	6.4	33.56	293	80	P	V
		4924	42.98	-31.02	74	65.93	31.88	9.83	64.66	100	0	P	V
		7386	44.78	-29.22	74	60.63	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz		2390	55.57	-18.43	74	46.04	26.87	6.32	33.59	258	69	P	H
		2390	46.37	-7.63	54	36.84	26.87	6.32	33.59	258	69	A	H
		2544	55.04	-18.96	74	44.93	27.34	6.4	33.56	258	69	P	H
		2624	53.47	-20.53	74	43.09	27.57	6.44	33.56	258	69	P	H
		4934	44.38	-29.62	74	66.9	31.88	9.82	64.66	100	0	P	H
		7401	43.69	-30.31	74	59.16	37.4	11.63	64.87	100	0	P	H
		2382	55.03	-18.97	74	45.57	26.81	6.32	33.6	292	81	P	V
		2382	44.71	-9.29	54	35.25	26.81	6.32	33.6	292	81	A	V
		2544	54.06	-19.94	74	43.95	27.34	6.4	33.56	292	81	P	V
		4934	42.24	-31.76	74	65.2	31.88	9.82	64.66	100	0	P	V
		7401	45.17	-28.83	74	61.01	37.4	11.63	64.87	100	0	P	V
802.11n HT20 CH 13 2472MHz		2390	54.35	-19.65	74	44.82	26.87	6.32	33.59	255	67	P	H
		2390	45.74	-8.26	54	36.21	26.87	6.32	33.59	255	67	A	H
		2550	54.29	-19.71	74	44.18	27.34	6.4	33.56	255	67	P	H
		2626	53.17	-20.83	74	42.79	27.57	6.44	33.56	255	67	P	H
		4944	43.45	-30.55	74	65.92	31.91	9.82	64.64	100	0	P	H
		7416	43.49	-30.51	74	58.93	37.4	11.66	64.87	100	0	P	H
		2390	54.57	-19.43	74	45.04	26.87	6.32	33.59	304	77	P	V
		2390	44.08	-9.92	54	34.55	26.87	6.32	33.59	304	77	A	V
		2550	56.07	-17.93	74	45.96	27.34	6.4	33.56	304	77	P	V
		4944	43.83	-30.17	74	66.74	31.91	9.82	64.64	100	0	P	V
		7416	43.53	-30.47	74	59.34	37.4	11.66	64.87	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11g LF		96.96	22.54	-20.96	43.5	37.99	15.74	1.27	32.48			P	H
		182.28	34.55	-8.95	43.5	50.37	15.22	1.69	32.82			P	H
		201.72	36.92	-6.58	43.5	51.9	16.04	1.8	32.88	100	58	P	H
		316.8	30.28	-15.72	46	40.1	20.18	2.28	32.36			P	H
		539.4	27.33	-18.67	46	32.08	24.65	2.93	32.41			P	H
		955.9	32.93	-13.07	46	29.44	30.59	3.87	31.14			P	H
		59.7	31.72	-8.28	40	51.23	11.9	1.06	32.49			P	V
		182.28	32.74	-10.76	43.5	48.56	15.22	1.69	32.82			P	V
		201.72	36.3	-7.2	43.5	51.28	16.04	1.8	32.88	141	258	P	V
		489.7	29.95	-16.05	46	35.51	23.93	2.84	32.38			P	V
		598.2	31.32	-14.68	46	34.94	25.67	3.09	32.46			P	V
		954.5	33.22	-12.78	46	29.8	30.59	3.82	31.16			P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.065	64.65	-9.35	74	55.01	27.07	4.03	31.49	236	90	P	H
		2390	53.07	-0.93	54	43.43	27.07	4.03	31.49	236	90	A	H
	*	2412	111.75	-	-	102.02	27.14	4.05	31.49	236	90	P	H
	*	2412	102.47	-	-	92.74	27.14	4.05	31.49	236	90	A	H
		2388.96	65.69	-8.31	74	56.05	27.07	4.03	31.49	150	36	P	V
		2389.695	52.63	-1.37	54	42.99	27.07	4.03	31.49	150	36	A	V
	*	2412	111.8	-	-	102.07	27.14	4.05	31.49	150	36	P	V
	*	2412	102.27	-	-	92.54	27.14	4.05	31.49	150	36	A	V
802.11g CH 06 2437MHz		2388.68	62.61	-11.39	74	52.77	27.19	6.32	33.6	278	71	P	H
		2389.94	53.09	-0.91	54	43.24	27.19	6.32	33.59	278	71	A	H
	*	2437	117.78	-	-	107.73	27.34	6.37	33.59	278	71	P	H
	*	2437	109.23	-	-	99.18	27.34	6.37	33.59	278	71	A	H
		2485.37	63.07	-10.93	74	52.88	27.45	6.39	33.58	278	71	P	H
		2483.55	52.84	-1.16	54	42.65	27.45	6.39	33.58	278	71	A	H
		2389.52	60.93	-13.07	74	51.09	27.19	6.32	33.6	163	20	P	V
		2389.1	50.8	-3.2	54	40.96	27.19	6.32	33.6	163	20	A	V
	*	2437	117.78	-	-	107.73	27.34	6.37	33.59	163	20	P	V
	*	2437	109.08	-	-	99.03	27.34	6.37	33.59	163	20	A	V
		2489.43	62.48	-11.52	74	52.24	27.5	6.39	33.58	163	20	P	V
		2484.67	52.6	-1.4	54	42.41	27.45	6.39	33.58	163	20	A	V

802.11g CH 11 2462MHz	*	2462	112.98	-	-	103.05	27.29	4.08	31.47	231	90	P	H
	*	2462	103.43	-	-	93.5	27.29	4.08	31.47	231	90	A	H
		2483.68	64.13	-9.87	74	54.11	27.35	4.11	31.47	231	90	P	H
		2483.68	52.03	-1.97	54	42.01	27.35	4.11	31.47	231	90	A	H
	*	2462	113.91	-	-	103.98	27.29	4.08	31.47	106	28	P	V
	*	2462	104.29	-	-	94.36	27.29	4.08	31.47	106	28	A	V
		2483.68	65.24	-8.76	74	55.22	27.35	4.11	31.47	106	28	P	V
		2483.72	53.45	-0.55	54	43.43	27.35	4.11	31.47	106	28	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	111.34	-	-	101.39	27.3	4.09	31.47	131	80	P	H
	*	2467	100.64	-	-	90.69	27.3	4.09	31.47	131	80	A	H
		2483.52	62.39	-11.61	74	52.37	27.35	4.11	31.47	131	80	P	H
		2483.52	51.61	-2.39	54	41.59	27.35	4.11	31.47	131	80	A	H
	*	2467	111.44	-	-	101.49	27.3	4.09	31.47	105	21	P	V
	*	2467	101.39	-	-	91.44	27.3	4.09	31.47	105	21	A	V
		2483.52	64.86	-9.14	74	54.84	27.35	4.11	31.47	105	21	P	V
		2483.56	53.31	-0.69	54	43.29	27.35	4.11	31.47	105	21	A	V
802.11g CH 13 2472MHz	*	2472	109.68	-	-	99.71	27.32	4.09	31.47	111	81	P	H
	*	2472	99.27	-	-	89.3	27.32	4.09	31.47	111	81	A	H
		2483.52	64.78	-9.22	74	54.76	27.35	4.11	31.47	111	81	P	H
		2483.52	52.71	-1.29	54	42.69	27.35	4.11	31.47	111	81	A	H
	*	2472	109.26	-	-	99.29	27.32	4.09	31.47	105	22	P	V
	*	2472	99.29	-	-	89.32	27.32	4.09	31.47	105	22	A	V
		2484.44	65.19	-8.81	74	55.17	27.35	4.11	31.47	105	22	P	V
		2483.8	53.46	-0.54	54	43.44	27.35	4.11	31.47	105	22	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2340	53.46	-20.54	74	44.2	26.7	6.23	33.6	229	93	P	H
		2340	43.78	-10.22	54	34.52	26.7	6.23	33.6	229	93	A	H
		2488	56.23	-17.77	74	46.29	27.2	6.39	33.58	229	93	P	H
		2488	46.86	-7.14	54	36.92	27.2	6.39	33.58	229	93	A	H
		2620	54.13	-19.87	74	43.79	27.53	6.44	33.56	229	93	P	H
		4824	42.09	-31.91	74	64.82	31.69	9.89	64.74	100	0	P	H
		2328	53.15	-20.85	74	44	26.65	6.18	33.61	176	17	P	V
		2328	43.9	-10.1	54	34.75	26.65	6.18	33.61	176	17	A	V
		2488	57.36	-16.64	74	47.42	27.2	6.39	33.58	176	17	P	V
		2488	47.67	-6.33	54	37.73	27.2	6.39	33.58	176	17	A	V
		2620	56.98	-17.02	74	46.64	27.53	6.44	33.56	176	17	P	V
		4824	40.6	-33.4	74	63.76	31.69	9.89	64.74	100	0	P	V
802.11g CH 06 2437MHz		2364	57.67	-16.33	74	48.31	26.76	6.27	33.6	278	71	P	H
		2364	48.67	-5.33	54	39.31	26.76	6.27	33.6	278	71	A	H
		2510	59.95	-14.05	74	49.95	27.25	6.39	33.57	278	71	P	H
		2634	55.11	-18.89	74	44.7	27.57	6.47	33.56	278	71	P	H
		4874	46.07	-27.93	74	68.7	31.78	9.86	64.7	100	0	P	H
		7311	55.82	-18.18	74	71.26	37.27	11.65	64.82	319	6	P	H
		7311	45.39	-8.61	54	60.83	37.27	11.65	64.82	319	6	A	H
		2362	56.17	-17.83	74	46.81	26.76	6.27	33.6	163	20	P	V
		2362	47.98	-6.02	54	38.62	26.76	6.27	33.6	163	20	A	V
		2514	58.75	-15.25	74	48.75	27.25	6.39	33.57	163	20	P	V
		2648	56.23	-17.77	74	45.74	27.62	6.49	33.55	163	20	P	V
		4874	44.27	-29.73	74	67.33	31.78	9.86	64.7	100	0	P	V
		7311	56.43	-17.57	74	72.33	37.27	11.65	64.82	140	25	P	V
		7311	45.71	-8.29	54	61.61	37.27	11.65	64.82	140	25	A	V

802.11g CH 11 2462MHz		2388	56.39	-17.61	74	46.87	26.87	6.32	33.6	222	81	P	H
		2388	47.54	-6.46	54	38.02	26.87	6.32	33.6	222	81	A	H
		2662	55.11	-18.89	74	44.57	27.67	6.49	33.55	222	81	P	H
		4924	46.13	-27.87	74	68.64	31.88	9.83	64.66	100	0	P	H
		7386	50.45	-23.55	74	65.92	37.38	11.63	64.86	300	356	P	H
		7386	39.82	-14.18	54	55.29	37.38	11.63	64.86	300	356	A	H
		2388	54.4	-19.6	74	44.88	26.87	6.32	33.6	248	20	P	V
		2388	45.95	-8.05	54	36.43	26.87	6.32	33.6	248	20	A	V
		2544	55.22	-18.78	74	45.11	27.34	6.4	33.56	248	20	P	V
		2660	54.64	-19.36	74	44.1	27.67	6.49	33.55	248	20	P	V
		4924	40.83	-33.17	74	63.78	31.88	9.83	64.66	100	0	P	V
		7386	52.26	-21.74	74	68.11	37.38	11.63	64.86	200	24	P	V
		7386	40.92	-13.08	54	56.77	37.38	11.63	64.86	200	24	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		2390	55.51	-18.49	74	45.98	26.87	6.32	33.59	254	63	P	H
		2390	46.54	-7.46	54	37.01	26.87	6.32	33.59	254	63	A	H
		2550	54.71	-19.29	74	44.6	27.34	6.4	33.56	254	63	P	H
		4934	43.83	-30.17	74	66.35	31.88	9.82	64.66	100	0	P	H
		7401	46.11	-27.89	74	61.58	37.4	11.63	64.87	100	0	P	H
		2382	53.75	-20.25	74	44.29	26.81	6.32	33.6	216	15	P	H
		2382	44.7	-9.3	54	35.24	26.81	6.32	33.6	216	15	A	H
		2666	56.01	-17.99	74	45.44	27.67	6.52	33.55	216	15	P	V
		4934	41.08	-32.92	74	64.04	31.88	9.82	64.66	100	0	P	V
		7401	46.68	-27.32	74	62.52	37.4	11.63	64.87	100	0	P	V
802.11g CH 13 2472MHz		2390	54.33	-19.67	74	44.8	26.87	6.32	33.59	225	72	P	H
		2390	44.82	-9.18	54	35.29	26.87	6.32	33.59	225	72	A	H
		4944	42.6	-31.4	74	65.07	31.91	9.82	64.64	100	0	P	H
		7416	44.64	-29.36	74	60.08	37.4	11.66	64.87	100	0	P	H
		2384	54.78	-19.22	74	45.32	26.81	6.32	33.6	167	5	P	V
		2384	43.36	-10.64	54	33.9	26.81	6.32	33.6	167	5	A	V
		4944	39.9	-34.1	74	62.81	31.91	9.82	64.64	100	0	P	V
		7416	44.11	-29.89	74	59.92	37.4	11.66	64.87	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+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.905	65.45	-8.55	74	55.81	27.07	4.03	31.49	295	87	P	H
		2390	51.39	-2.61	54	41.75	27.07	4.03	31.49	295	87	A	H
	*	2412	108.76	-	-	99.03	27.14	4.05	31.49	295	87	P	H
	*	2412	99.11	-	-	89.38	27.14	4.05	31.49	295	87	A	H
		2389.695	65.28	-8.72	74	55.64	27.07	4.03	31.49	100	38	P	V
		2389.905	52.47	-1.53	54	42.83	27.07	4.03	31.49	100	38	A	V
	*	2412	108.74	-	-	99.01	27.14	4.05	31.49	100	38	P	V
	*	2412	98.98	-	-	89.25	27.14	4.05	31.49	100	38	A	V
802.11n HT20 CH 06 2437MHz		2389.38	63.53	-10.47	74	53.69	27.19	6.32	33.6	261	66	P	H
		2389.94	52.38	-1.62	54	42.53	27.19	6.32	33.59	261	66	A	H
	*	2437	117.23	-	-	107.18	27.34	6.37	33.59	261	66	P	H
	*	2437	107.91	-	-	97.86	27.34	6.37	33.59	261	66	A	H
		2485.93	62.54	-11.46	74	52.35	27.45	6.39	33.58	261	66	P	H
		2483.52	52.62	-1.38	54	42.43	27.45	6.39	33.58	261	66	A	H
		2389.24	60.87	-13.13	74	51.03	27.19	6.32	33.6	285	22	P	V
		2389.52	50.22	-3.78	54	40.38	27.19	6.32	33.6	285	22	A	V
	*	2437	115.55	-	-	105.5	27.34	6.37	33.59	285	22	P	V
	*	2437	106.85	-	-	96.8	27.34	6.37	33.59	285	22	A	V
		2487.05	60.3	-13.7	74	50.11	27.45	6.39	33.58	285	22	P	V
		2484.04	49.88	-4.12	54	39.69	27.45	6.39	33.58	285	22	A	V

802.11n HT20 CH 11 2462MHz	*	2462	112.59	-	-	102.66	27.29	4.08	31.47	229	64	P	H
	*	2462	101.92	-	-	91.99	27.29	4.08	31.47	229	64	A	H
		2483.72	63.14	-10.86	74	53.12	27.35	4.11	31.47	229	64	P	H
		2483.84	51.15	-2.85	54	41.13	27.35	4.11	31.47	229	64	A	H
	*	2462	111.21	-	-	101.28	27.29	4.08	31.47	105	31	P	V
	*	2462	102.4	-	-	92.47	27.29	4.08	31.47	105	31	A	V
		2485	64.03	-9.97	74	54.01	27.35	4.11	31.47	105	31	P	V
		2483.6	52.52	-1.48	54	42.5	27.35	4.11	31.47	105	31	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz	*	2467	110.09	-	-	100.14	27.3	4.09	31.47	105	81	P	H
	*	2467	99.34	-	-	89.39	27.3	4.09	31.47	105	81	A	H
		2484.36	63.72	-10.28	74	53.7	27.35	4.11	31.47	105	81	P	H
		2484.64	51.66	-2.34	54	41.64	27.35	4.11	31.47	105	81	A	H
	*	2467	109.88	-	-	99.93	27.3	4.09	31.47	105	25	P	V
	*	2467	99.69	-	-	89.74	27.3	4.09	31.47	105	25	A	V
		2485.64	63.72	-10.28	74	53.69	27.36	4.11	31.47	105	25	P	V
		2483.56	52.98	-1.02	54	42.96	27.35	4.11	31.47	105	25	A	V
802.11n HT20 CH 13 2472MHz	*	2472	108.59	-	-	98.62	27.32	4.09	31.47	105	77	P	H
	*	2472	98.53	-	-	88.56	27.32	4.09	31.47	105	77	A	H
		2484.48	62.89	-11.11	74	52.87	27.35	4.11	31.47	105	77	P	H
		2484.72	51.08	-2.92	54	41.06	27.35	4.11	31.47	105	77	A	H
	*	2472	108.69	-	-	98.72	27.32	4.09	31.47	105	31	P	V
	*	2472	98.63	-	-	88.66	27.32	4.09	31.47	105	31	A	V
		2483.56	63.63	-10.37	74	53.61	27.35	4.11	31.47	105	31	P	V
		2483.52	53.39	-0.61	54	43.37	27.35	4.11	31.47	105	31	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2340	53.66	-20.34	74	44.4	26.7	6.23	33.6	251	90	P	H
		2340	43.79	-10.21	54	34.53	26.7	6.23	33.6	251	90	A	H
		2490	55.03	-18.97	74	45.09	27.2	6.39	33.58	251	90	P	H
		2490	44.43	-9.57	54	34.49	27.2	6.39	33.58	251	90	A	H
		2606	55.64	-18.36	74	45.37	27.48	6.42	33.56	251	90	P	H
		4824	42.9	-31.1	74	65.63	31.69	9.89	64.74	100	0	P	H
		2490	55.03	-18.97	74	45.09	27.2	6.39	33.58	290	23	P	V
		2490	44.99	-9.01	54	35.05	27.2	6.39	33.58	290	23	A	V
		4824	39.74	-34.26	74	62.9	31.69	9.89	64.74	100	0	P	V
802.11n HT20 CH 06 2437MHz		2512	58.63	-15.37	74	48.63	27.25	6.39	33.57	261	66	P	H
		2600	56.4	-17.6	74	46.13	27.48	6.42	33.56	261	66	P	H
		2632	56.74	-17.26	74	46.33	27.57	6.47	33.56	261	66	P	H
		4874	46.16	-27.84	74	68.79	31.78	9.86	64.7	100	0	P	H
		7311	56.77	-17.23	74	72.21	37.27	11.65	64.82	316	3	P	H
		7311	45.53	-8.47	54	60.97	37.27	11.65	64.82	316	3	A	H
		2520	56.48	-17.52	74	46.47	27.25	6.4	33.57	285	22	P	V
		4874	42.39	-31.61	74	65.45	31.78	9.86	64.7	100	0	P	V
		7311	56.96	-17.04	74	72.86	37.27	11.65	64.82	212	25	P	V
		7311	45.93	-8.07	54	61.83	37.27	11.65	64.82	212	25	A	V

802.11n HT20 CH 11 2462MHz		2388	57.22	-16.78	74	47.7	26.87	6.32	33.6	254	71	P	H
		2388	47.86	-6.14	54	38.34	26.87	6.32	33.6	254	71	A	H
		2504	59.36	-14.64	74	49.41	27.2	6.39	33.57	254	71	P	H
		2546	55.58	-18.42	74	45.47	27.34	6.4	33.56	254	71	P	H
		2662	55.39	-18.61	74	44.85	27.67	6.49	33.55	254	71	P	H
		4924	44.55	-29.45	74	67.06	31.88	9.83	64.66	100	0	P	H
		7386	48.73	-25.27	74	64.2	37.38	11.63	64.86	100	0	P	H
		2390	55.09	-18.91	74	45.56	26.87	6.32	33.59	278	18	P	V
		2390	45.96	-8.04	54	36.43	26.87	6.32	33.59	278	18	A	V
		2670	54.95	-19.05	74	44.38	27.67	6.52	33.55	278	18	P	V
		4924	42.02	-31.98	74	64.97	31.88	9.83	64.66	100	0	P	V
		7386	47.54	-26.46	74	63.39	37.38	11.63	64.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												