APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
Shenzhen HouTian Network Communication Technology Co., Ltd.

WiFi Bridge
Model No.: VAP11N

FCC ID: OM7-VAP11N

Prepared for	:	Shenzhen HouTian Network Communication Technology Co., Ltd.
Address	:	RM803, Floor 8, Building Five, Industrial Plant, Donghua Yuan, Nanhai Road, Nanshan District, Shenzhen, China
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Report Number	:	ATE20130181
Date of Test	:	January 31-February 7, 2013
Date of Report	:	February 20, 2013

TABLE OF CONTENTS

Description Page

Test Report Certification

1. GENERAL INFORMATION 5
1.1. Description of Device (EUT) 5
1.2. Carrier Frequency of Channels 6
1.3. Test Procedure 6
1.4. Special Accessory and Auxiliary Equipment 6
1.5. Description of Test Facility 7
1.6. Measurement Uncertainty 7
2. MEASURING DEVICE AND TEST EQUIPMENT 8
3. OPERATION OF EUT DURING TESTING 9
3.1. Operating Mode 9
3.2. Configuration and peripherals 9
4. TEST PROCEDURES AND RESULTS 10
5. 6DB BANDWIDTH MEASUREMENT 11
5.1. Block Diagram of Test Setup 11
5.2. The Requirement For Section 15.247(a)(2) 11
5.3. EUT Configuration on Measurement 11
5.4. Operating Condition of EUT 11
5.5. Test Procedure 12
5.6. Test Result 12
6. MAXIMUM PEAK OUTPUT POWER 26
6.1. Block Diagram of Test Setup 26
6.2. The Requirement For Section 15.247(b)(3) 26
6.3. EUT Configuration on Measurement 26
6.4. Operating Condition of EUT 26
6.5. Test Procedure 27
6.6. Test Result 27
7. POWER SPECTRAL DENSITY MEASUREMENT 41
7.1. Block Diagram of Test Setup 41
7.2. The Requirement For Section 15.247(e) 41
7.3. EUT Configuration on Measurement 41
7.4. Operating Condition of EUT 41
7.5. Test Procedure 42
7.6. Test Result 43
8. BAND EDGE COMPLIANCE TEST 57
8.1. Block Diagram of Test Setup 57
8.2. The Requirement For Section 15.247(d) 57
8.3. EUT Configuration on Measurement 57
8.4. Operating Condition of EUT 58
8.5. Test Procedure 58
8.6. Test Result 59
9. RADIATED SPURIOUS EMISSION TEST 92
9.1. Block Diagram of Test Setup 92
9.2. The Limit For Section 15.247(d) 93
9.3. Restricted bands of operation 93

9.4. Configuration of EUT on Measurement 94
9.5. Operating Condition of EUT 94
9.6. Test Procedure 94
9.7. The Field Strength of Radiation Emission Measurement Results 95
10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST 179
10.1. Block Diagram of Test Setup 179
10.2. The Requirement For Section 15.247(d) 179
10.3. EUT Configuration on Measurement 179
10.4. Operating Condition of EUT 180
10.5. Test Procedure 180
10.6. Test Result 180
11. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A) 193
11.1. Block Diagram of Test Setup 193
11.2. The Emission Limit 193
11.3. Configuration of EUT on Measurement 194
11.4. Operating Condition of EUT 194
11.5. Test Procedure 194
11.6. Power Line Conducted Emission Measurement Results 195
12. ANTENNA REQUIREMENT 198
12.1. The Requirement 198
12.2. Antenna Construction 198

Test Report Certification

Applicant **:** Shenzhen HouTian Network Communication Technology Co., Ltd.

Manufacturer **:** Shenzhen HouTian Network Communication Technology Co., Ltd.

EUT Description **:** WiFi Bridge

(A) MODEL NO.: VAP11N

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 5V (Power by PC)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.4: 2009

The EUT was tested according to DTS test procedure of October 04, 2012 KDB558074 D01 DTS Meas Guidance v02 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : January 31-February 7, 2013

Prepared by :

(Engineer)

Approved & Authorized Signer :

(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	WiFi Bridge
Model Number	:	VAP11N
Frequency Range	:	802.11b/g/n(20MHz): 2412-2462MHz 802.11n(40MHz): 2422-2452MHz
Number of Channels	:	802.11b/g/n (20MHz):11 802.11n (40MHz): 7
Antenna Gain	:	3dBi
Power Supply	:	DC 5V (Power by PC)
Data Rate	:	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: up to 150Mbps
Applicant	:	Shenzhen HouTian Network Communication Technology Co., Ltd.
Address	:	RM803, Floor 8, Building Five, Industrial Plant, Donghua Yuan, Nanhai Road, Nanshan District, Shenzhen, China
Manufacturer	:	Shenzhen HouTian Network Communication Technology Co., Ltd.
Address	:	RM803, Floor 8, Building Five, Industrial Plant, Donghua Yuan, Nanhai Road, Nanshan District, Shenzhen, China
Date of sample received	:	January 31, 2013
Date of Test	:	January 31-February 7, 2013

1.2.Carrier Frequency of Channels

802.11b, 802.11g, 802.11n (20MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	---	---

802.11n (40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
03	2422	09	2452
04	2427	---	---
05	2432	---	---
06	2437	---	---

1.3.Test Procedure

The EUT was tested according to DTS test procedure of October 04, 2012 KDB558074 D01 DTS Meas Guidance v02 for compliance to FCC 47CFR 15.247 requirements

1.4.Special Accessory and Auxiliary Equipment

Notebook PC	Manufacturer: LENOVO M/N: 4290-RT8 S/N: R9-FW93G 11/08

1.5.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.6.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 12, 2013	Jan. 11, 2014
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 12, 2013	Jan. 11, 2014
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 12, 2013	Jan. 11, 2014
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 12, 2013	Jan. 11, 2014
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Feb. 6, 2013	Feb. 5, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 6, 2013	Feb. 5, 2014
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Feb. 6, 2013	Feb. 5, 2014
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2013	Jan. 11, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2013	Jan. 11, 2014
Highpass Filter	Wainwright Instruments	WHKX3.6/18G-10SS	N/A	Jan. 12, 2013	Jan. 11, 2014
Band Reject Filter	Wainwright Instruments	WRCG2400/2485-2375/2510-60/11SS	N/A	Jan. 12, 2013	Jan. 11, 2014

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: **1.802.11b Transmitting mode**

Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

2.802.11g Transmitting mode

Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

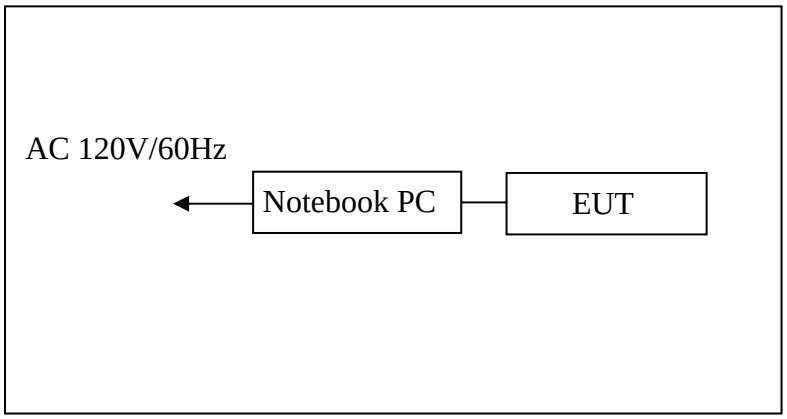
3.802.11n (20MHz) Transmitting mode

Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

4.802.11n (40MHz) Transmitting mode

Low Channel: 2422MHz
Middle Channel: 2437MHz
High Channel: 2452MHz

3.2.Configuration and peripherals

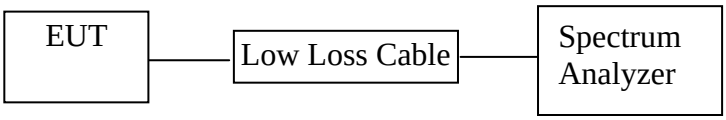


4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. 6DB BANDWIDTH MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: WiFi Bridge)

5.2.The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1.WiFi Bridge (EUT)

Model Number	**:**	VAP11N
Serial Number	**:**	N/A
Manufacturer	**:**	Shenzhen HouTian Network Communication Technology Co., Ltd.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

5.5. Test Procedure

1. Set resolution bandwidth (RBW) = 1-5% or DTS BW, not to exceed 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.6. Test Result

PASS.

Date of Test:	February 1, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	TX	Test Engineer:	Pei

The test was performed with 802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	10.04	> 0.5MHz
Middle	2437	10.08	> 0.5MHz
High	2462	10.04	> 0.5MHz

The test was performed with 802.11g

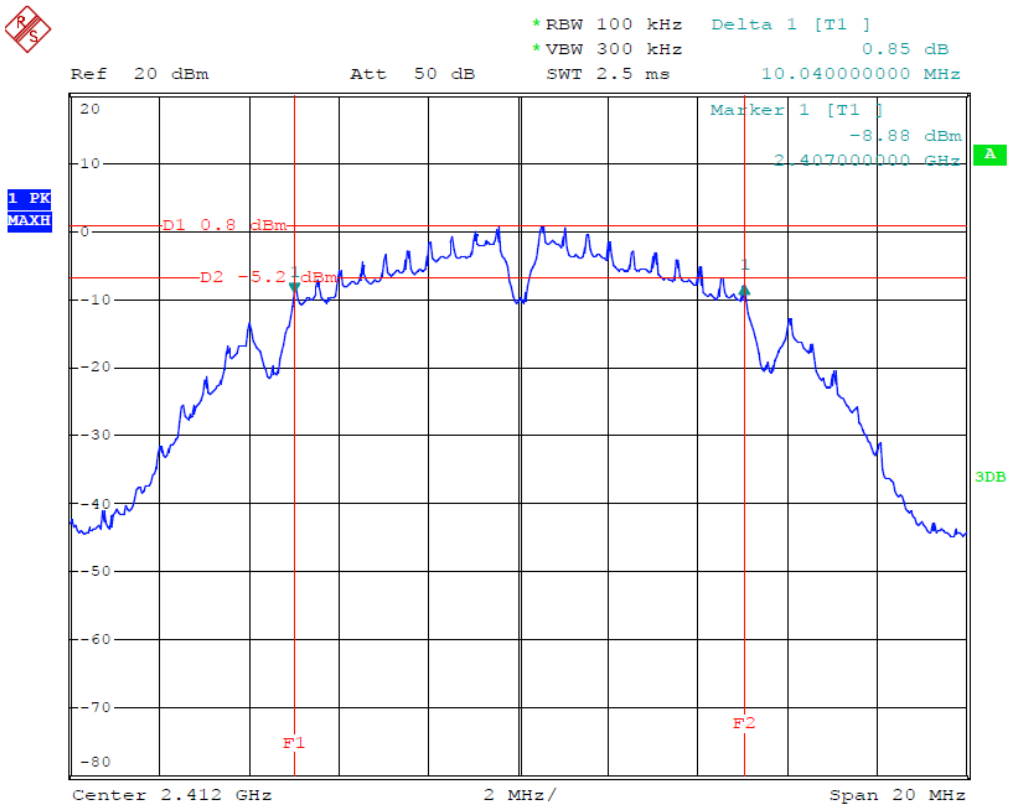
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	16.28	> 0.5MHz
Middle	2437	16.24	> 0.5MHz
High	2462	16.32	> 0.5MHz

The test was performed with 802.11n (Bandwidth: 20 MHz)			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	17.52	> 0.5MHz
Middle	2437	17.52	> 0.5MHz
High	2462	17.56	> 0.5MHz

The test was performed with 802.11n (Bandwidth: 40 MHz)			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2422	35.36	> 0.5MHz
Middle	2437	35.48	> 0.5MHz
High	2452	35.52	> 0.5MHz

The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



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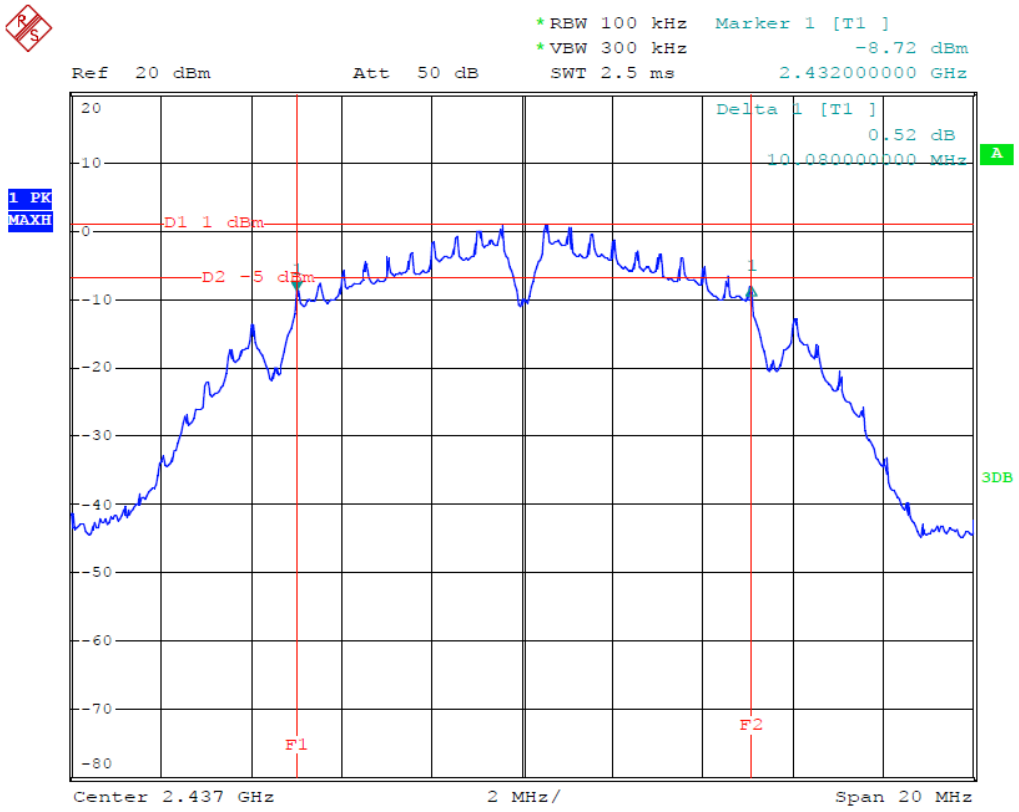
802.11b Channel Middle 2437MHz



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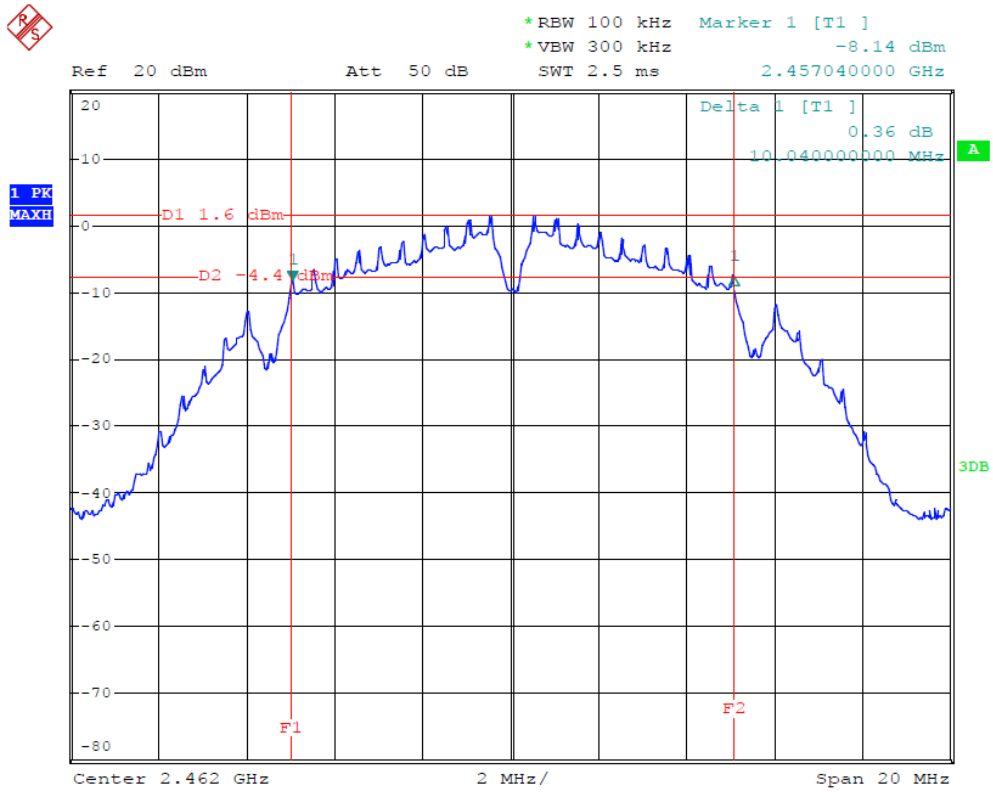
802.11b Channel High 2462MHz



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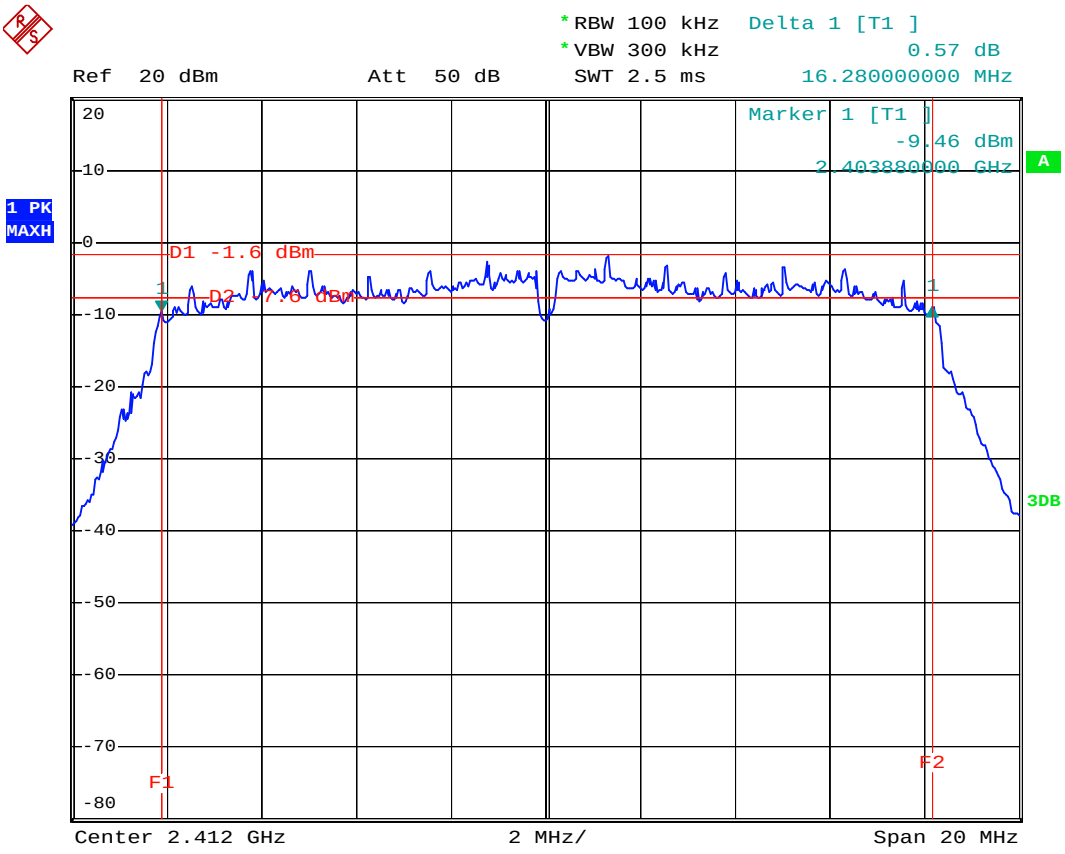
802.11g Channel Low 2412MHz



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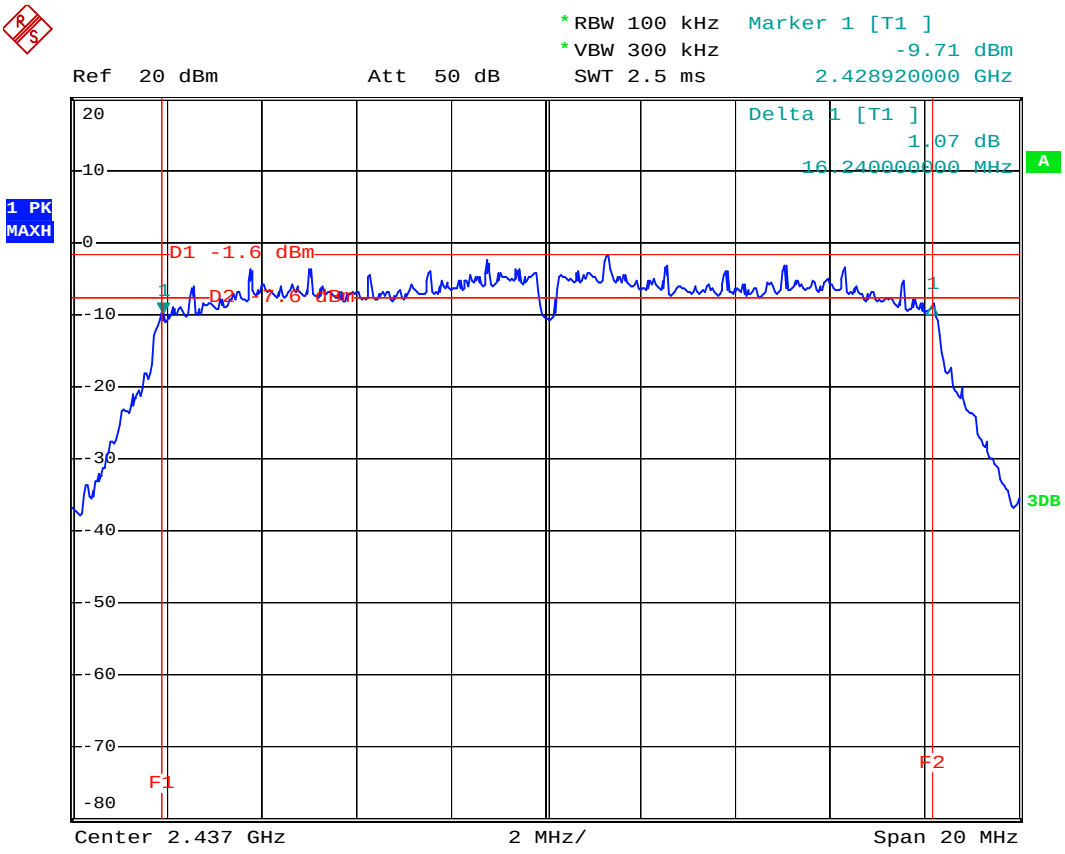
802.11g Channel Middle 2437MHz



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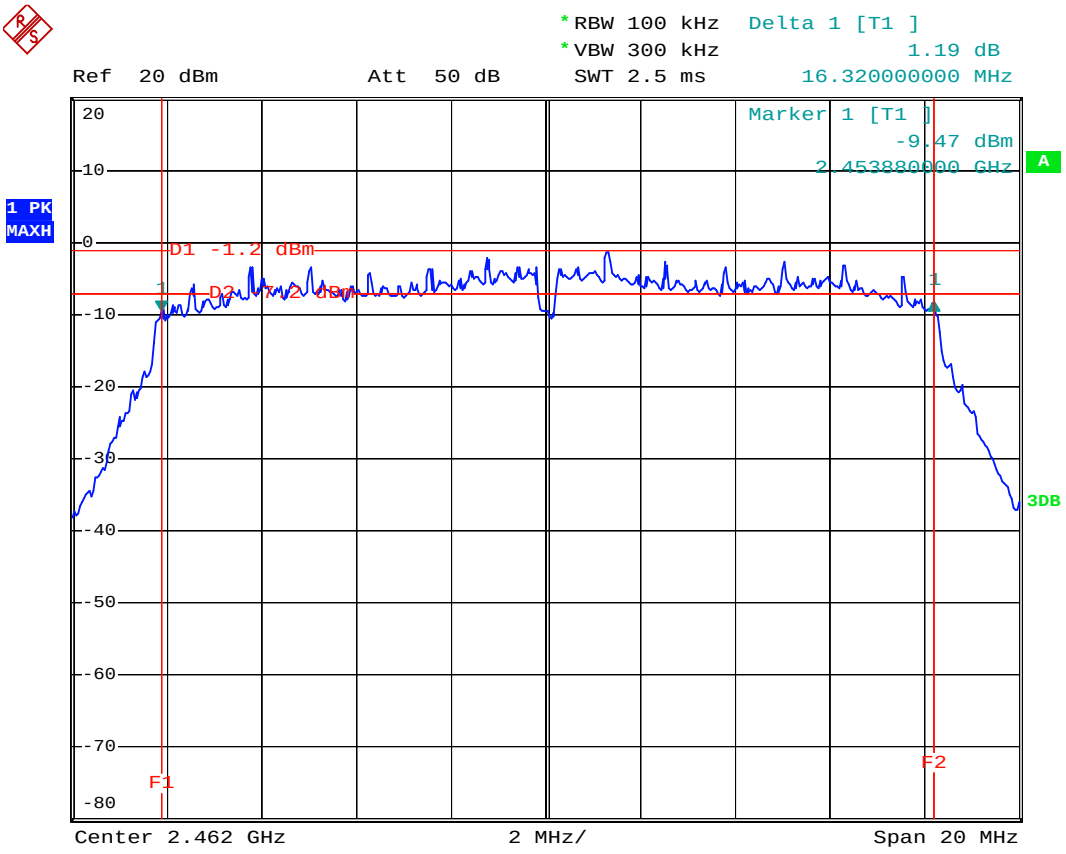
802.11g Channel High 2462MHz



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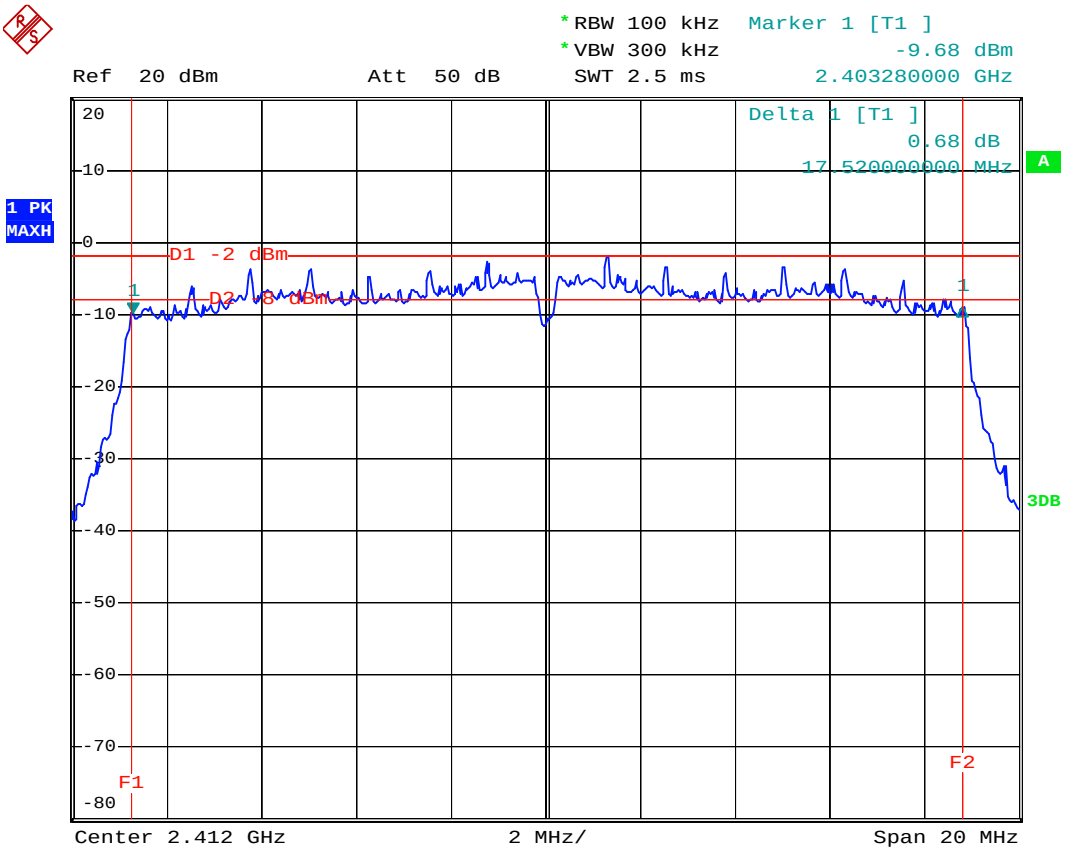
802.11n Channel Low 2412MHz (20MHz)



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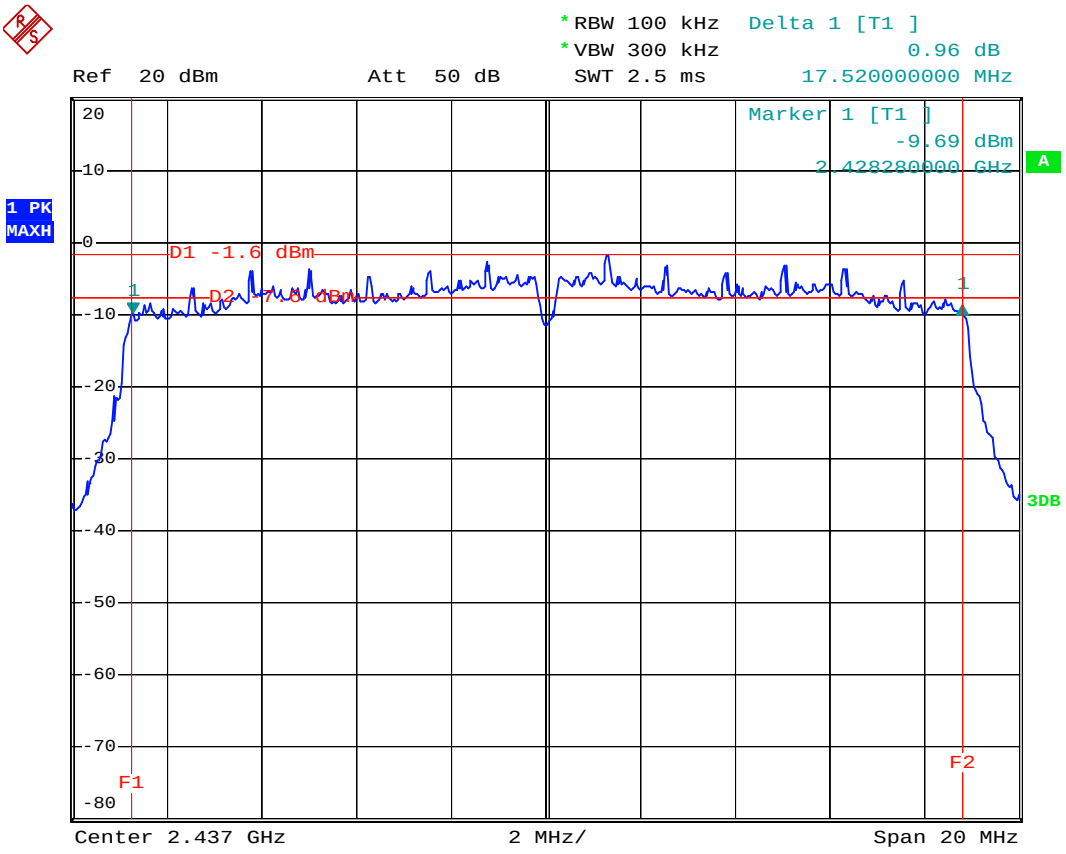
802.11n Channel Middle 2437MHz(20MHz)



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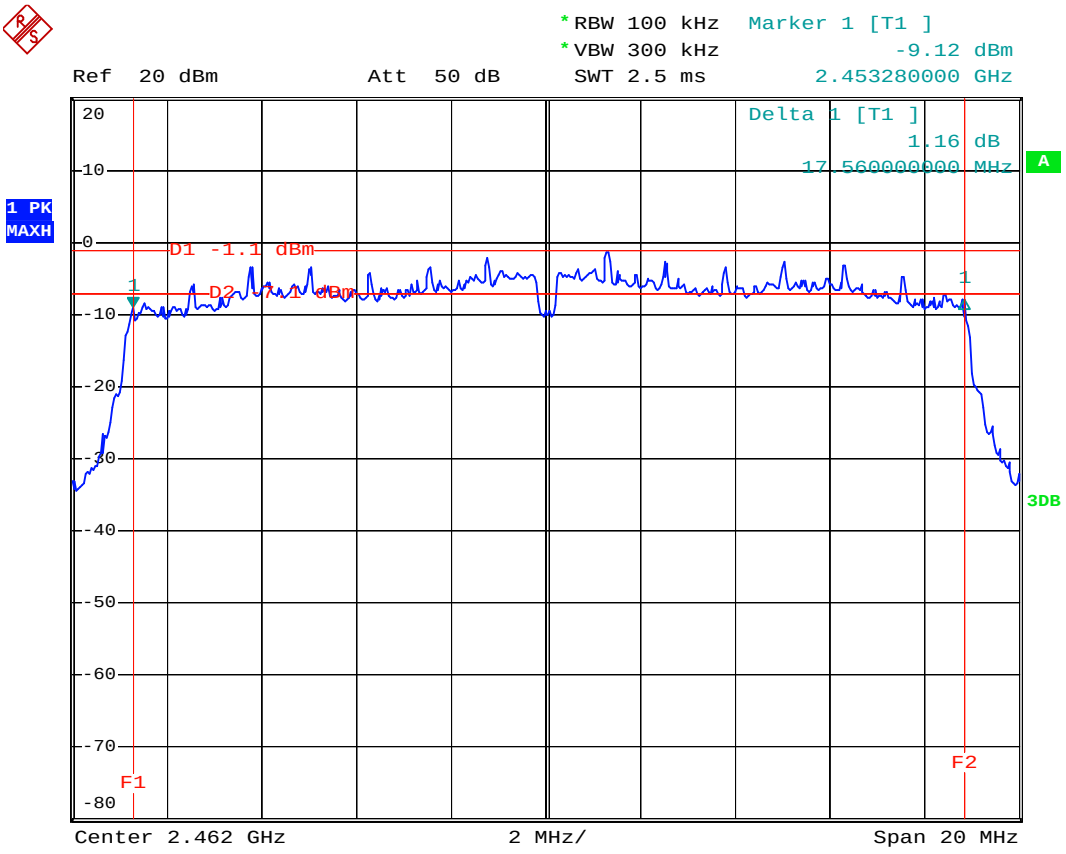
802.11n Channel High 2462MHz(20MHz)



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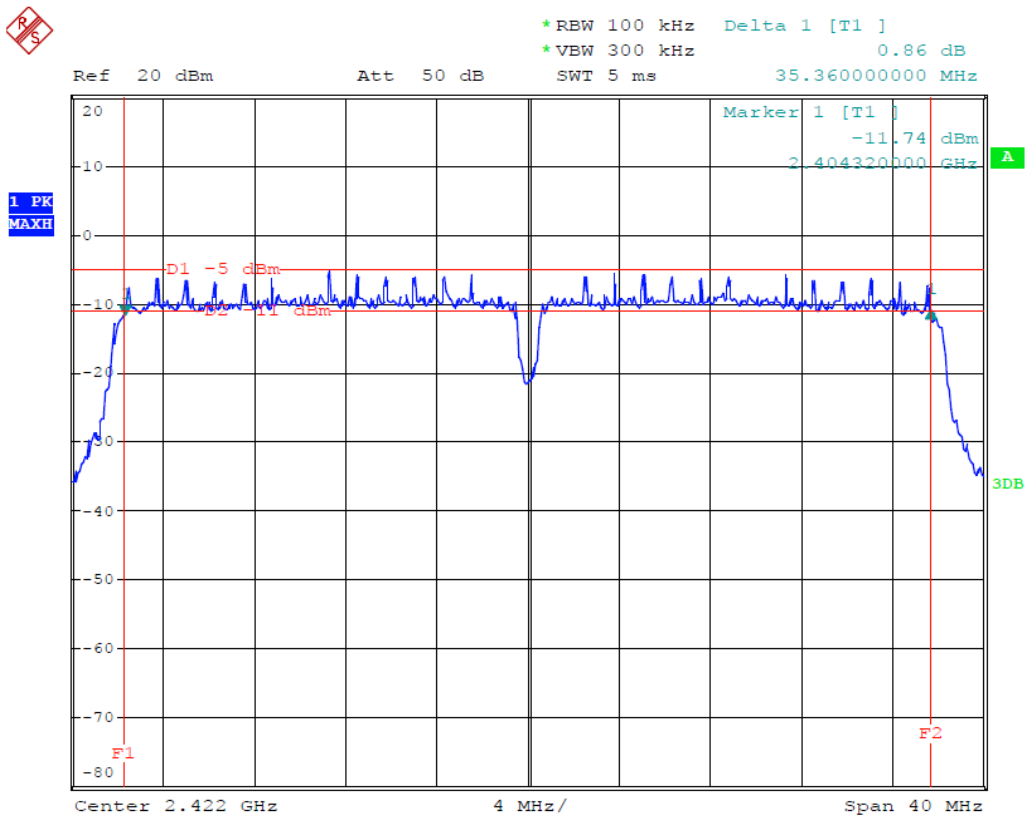
802.11n Channel Low 2422MHz (40MHz)



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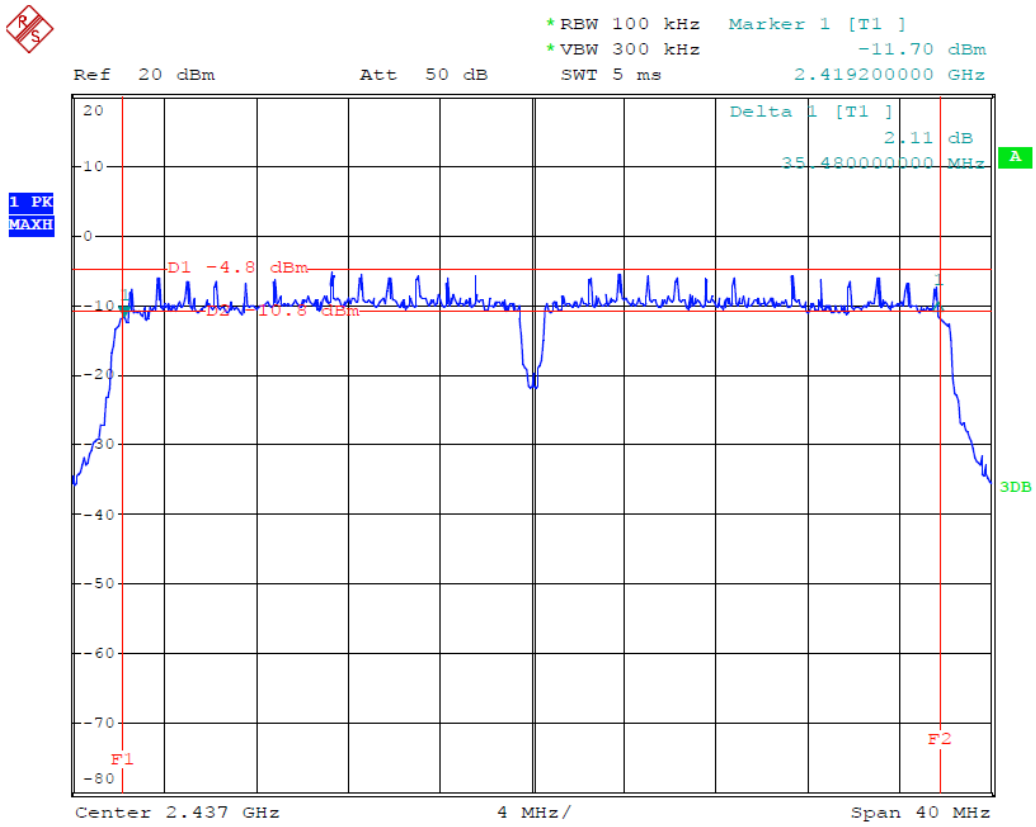
802.11n Channel Middle 2437MHz(40MHz)



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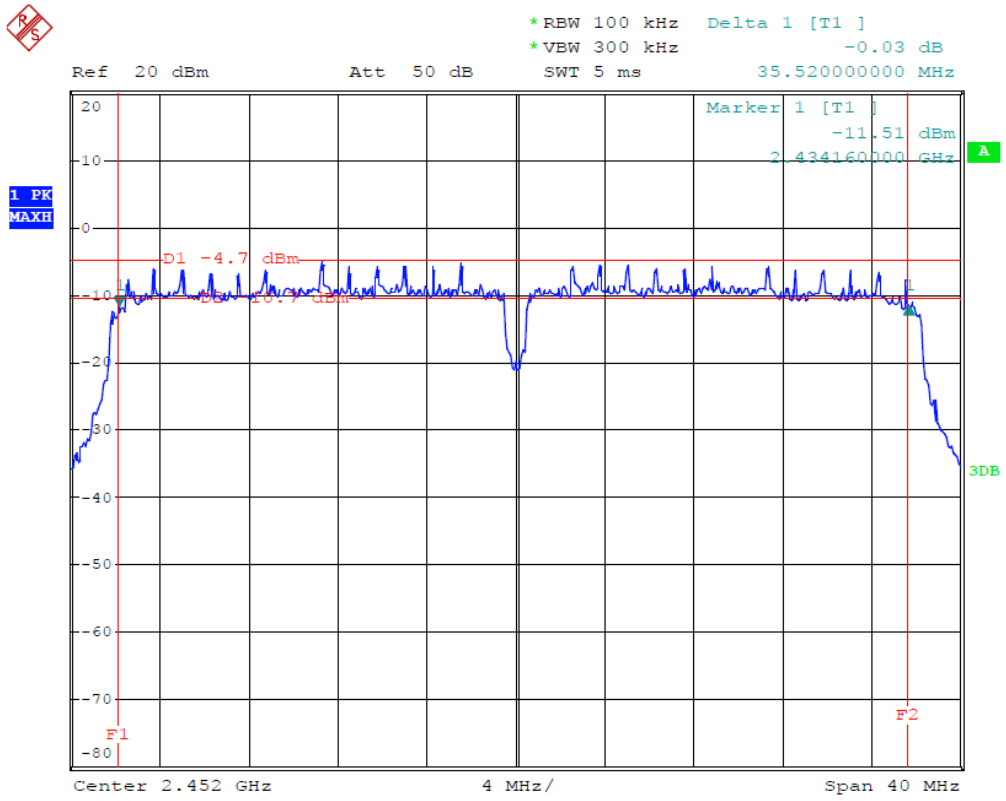
802.11n Channel High 2452MHz(40MHz)



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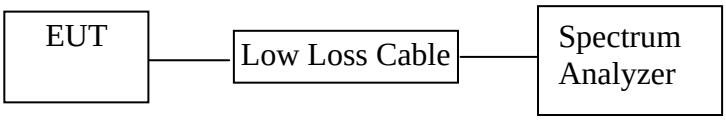
6. MAXIMUM PEAK OUTPUT POWER

6.1.Block Diagram of Test Setup



(EUT: WiFi Bridge)

6.2.The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

6.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.3.1.WiFi Bridge (EUT)

Model Number	**:**	VAP11N
Serial Number	**:**	N/A
Manufacturer	**:**	Shenzhen HouTian Network Communication Technology Co., Ltd.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

6.5. Test Procedure

6.5.1. The EUT was tested according to DTS test procedure of October 04, 2012 KDB558074 D01 DTS Meas Guidance v02 for compliance to FCC 47CFR 15.247 requirements.

6.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.3. Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.

6.5.4. Measurement the maximum peak output power.

6.6. Test Result

PASS.

Date of Test:	February 1, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	TX	Test Engineer:	Pei

The test was performed with 802.11b

Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	11.08	12.82	30 dBm / 1 W
Middle	2437	10.95	12.45	30 dBm / 1 W
High	2462	11.47	14.03	30 dBm / 1 W

The test was performed with 802.11g

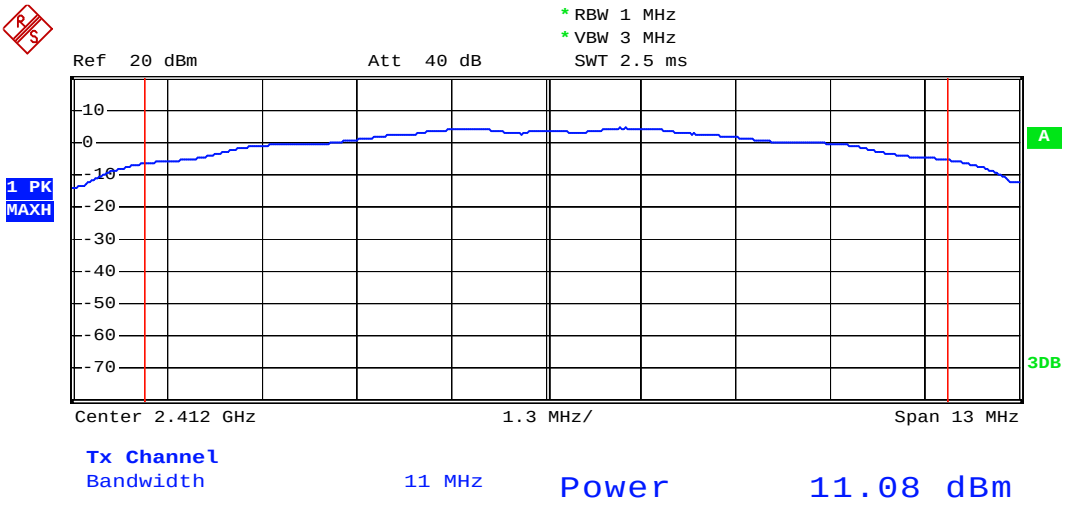
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	12.82	19.14	30 dBm / 1 W
Middle	2437	12.53	17.91	30 dBm / 1 W
High	2462	12.40	17.38	30 dBm / 1 W

The test was performed with 802.11n (20MHz)				
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2412	12.69	18.58	30 dBm / 1 W
Middle	2437	12.88	19.41	30 dBm / 1 W
High	2462	12.82	19.14	30 dBm / 1 W

The test was performed with 802.11n (40MHz)				
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2422	12.84	19.23	30 dBm / 1 W
Middle	2437	13.28	21.28	30 dBm / 1 W
High	2452	13.83	24.15	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



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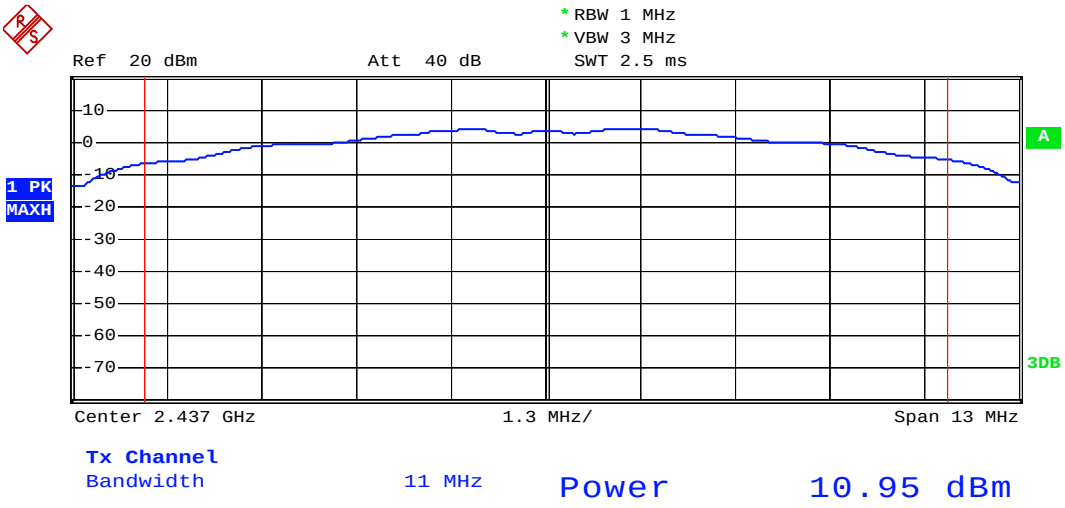
802.11b Channel Middle 2437MHz



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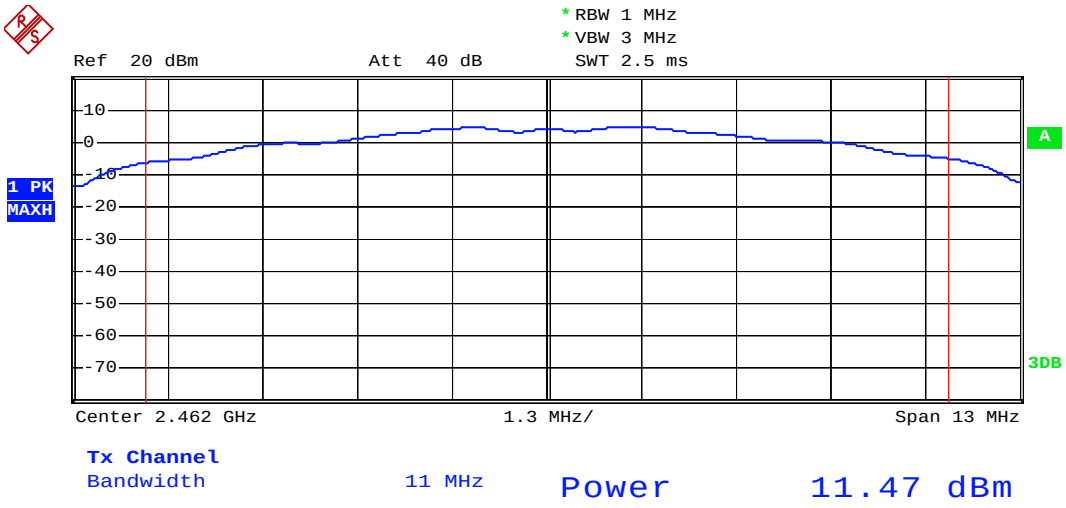
802.11b Channel High 2462MHz



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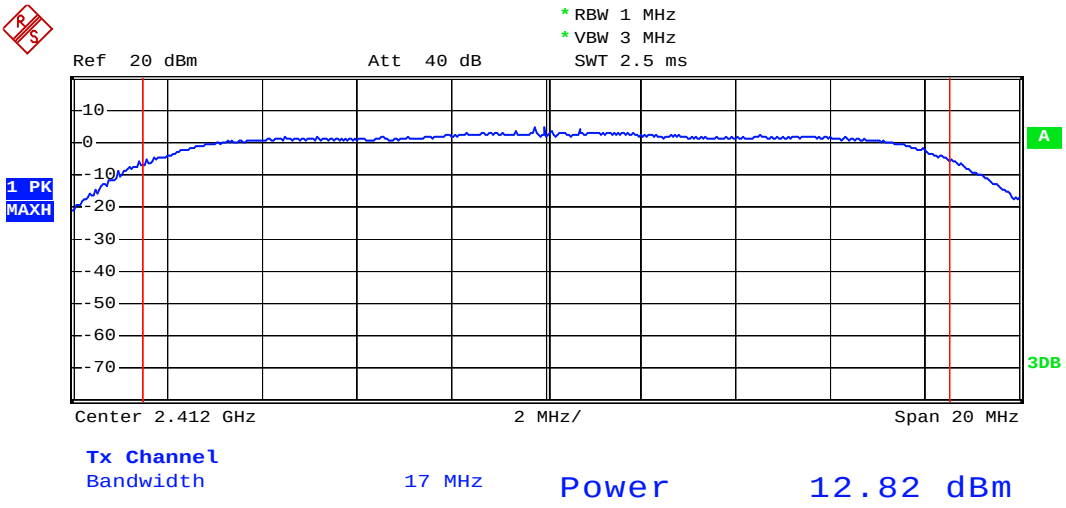
802.11g Channel Low 2412MHz



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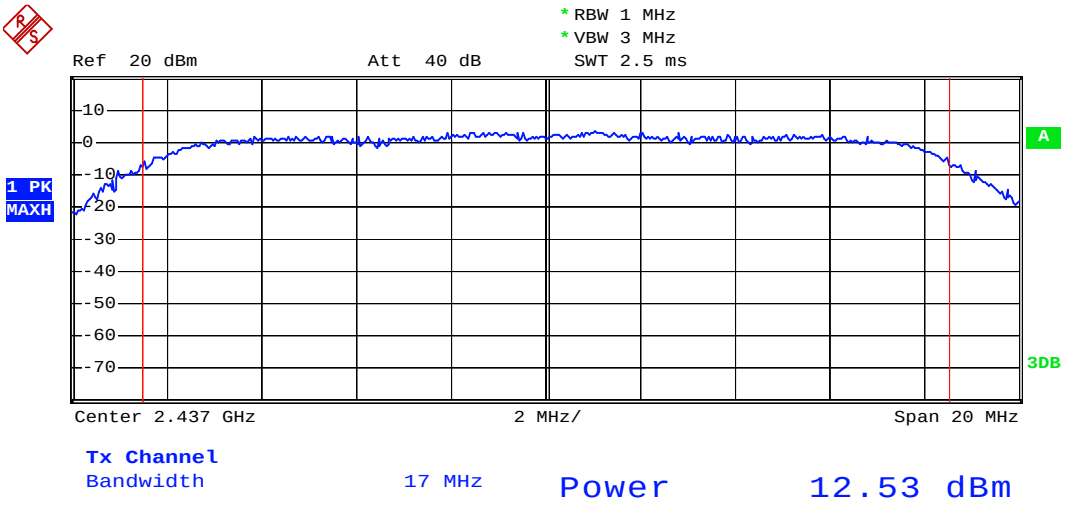
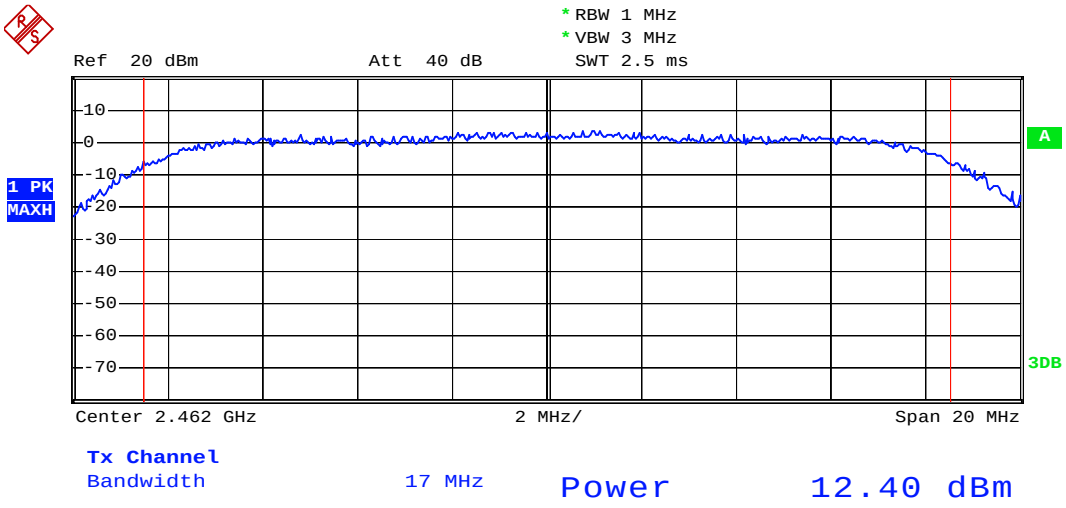
802.11g Channel Middle 2437MHz



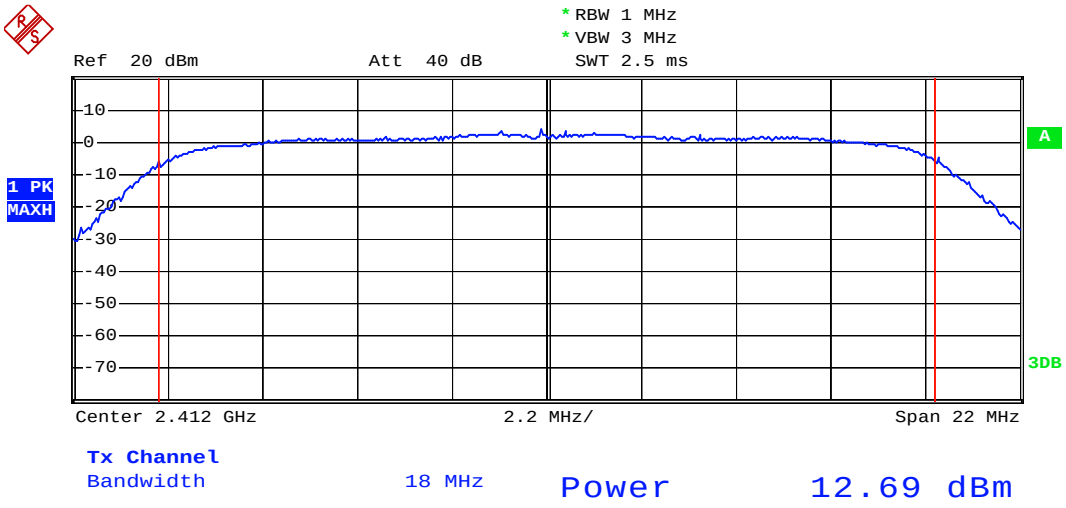
Date: 1.FEB.2013 15:53:21

802.11g Channel High 2462MHz



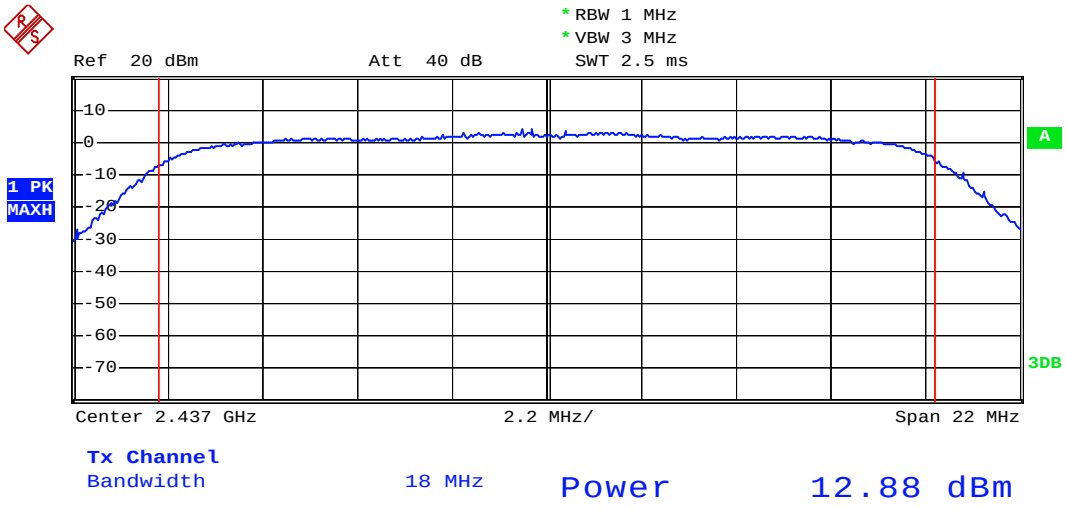
Date: 1.FEB.2013 15:52:37

802.11n Channel Low 2412MHz (20MHz)



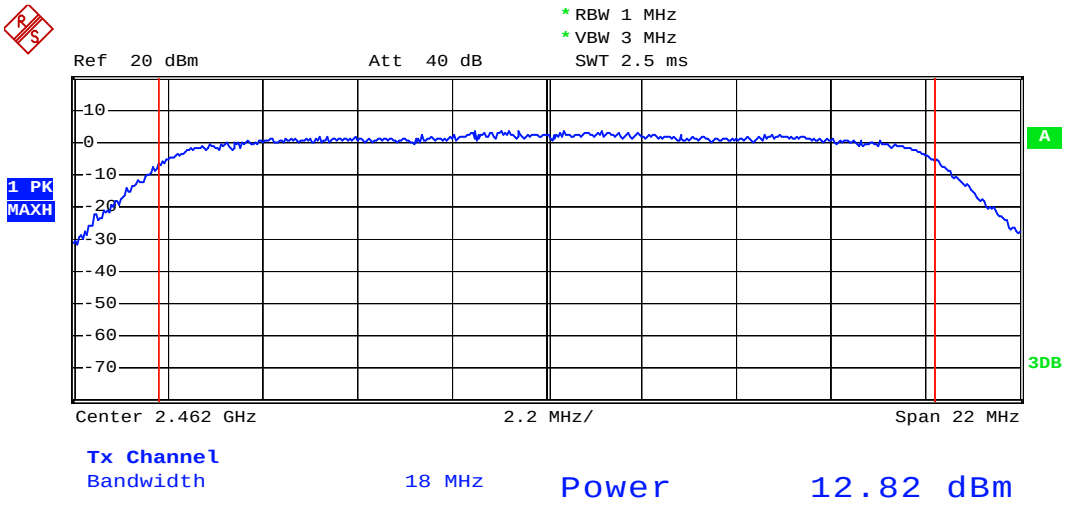
Date: 1.FEB.2013 15:54:21

802.11n Channel Middle 2437MHz (20MHz)



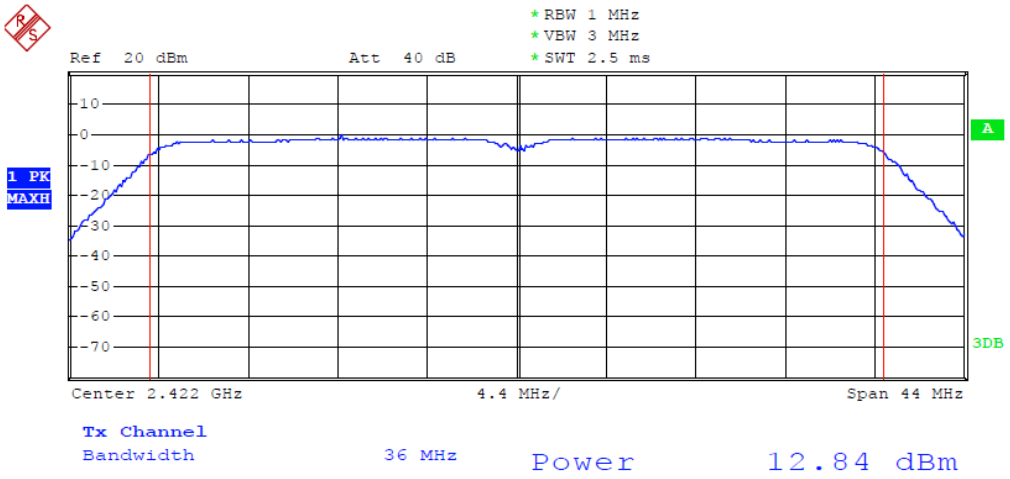
Date: 1.FEB.2013 15:54:42

802.11n Channel High 2462MHz (20MHz)



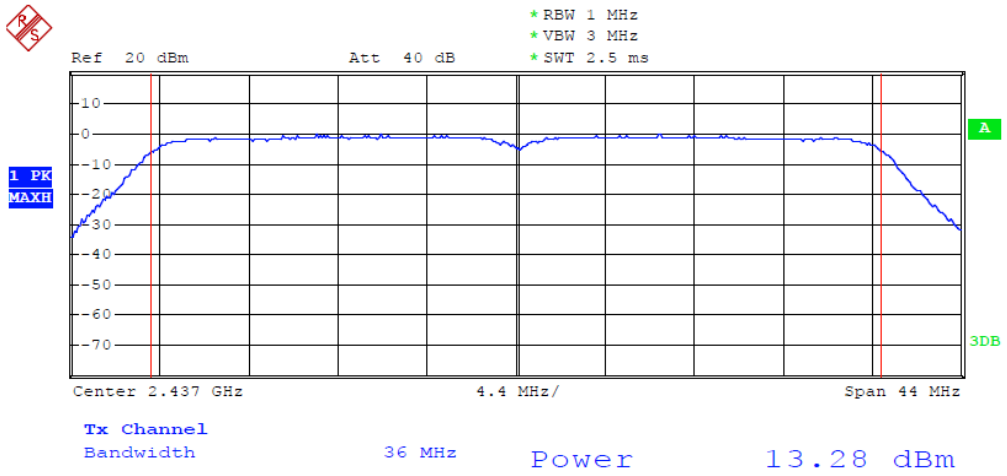
Date: 1.FEB.2013 15:55:27

802.11n Channel Low 2422MHz (40MHz)



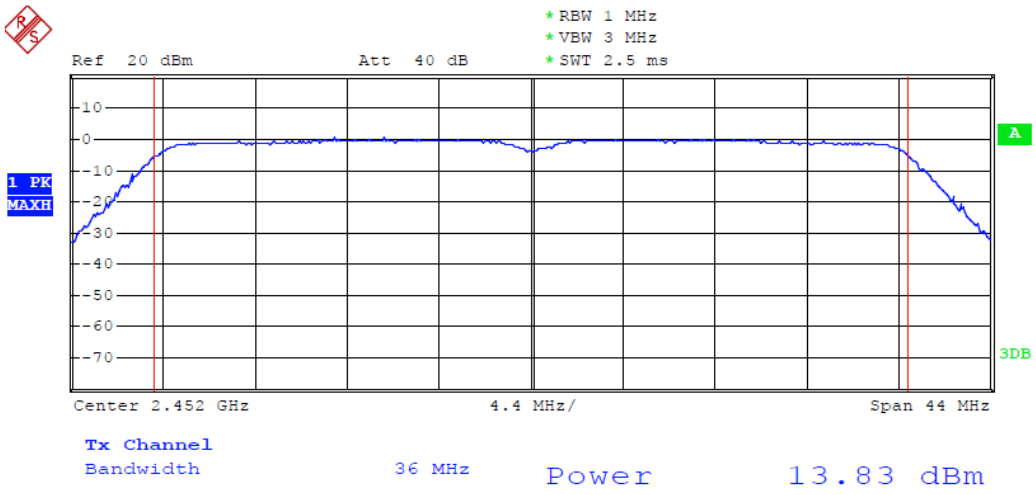
Date: 1.FEB.2013 14:37:49

802.11n Channel Middle 2437MHz (40MHz)



Date: 1.FEB.2013 14:38:26

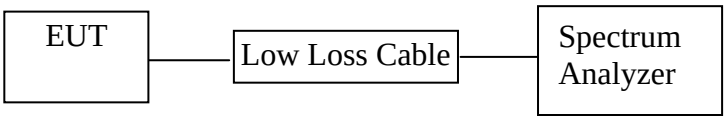
802.11n Channel High 2452MHz (40MHz)



Date: 1.FEB.2013 14:39:18

7. POWER SPECTRAL DENSITY MEASUREMENT

7.1.Block Diagram of Test Setup



(EUT: WiFi Bridge)

7.2.The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1.WiFi Bridge (EUT)

Model Number	:	VAP11N
Serial Number	:	N/A
Manufacturer	:	Shenzhen HouTian Network Communication Technology Co., Ltd.

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

7.5.Test Procedure

7.5.1.The EUT was tested according to DTS test procedure of October 04, 2012 KDB558074 D01 DTS Meas Guidance v02 for compliance to FCC 47CFR 15.247 requirements.

7.5.2.The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.3.Measurement Procedure PKPSD:

This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW ≥ 3 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

7.5.4.Measurement the maximum power spectral density.

7.6. Test Result

PASS.

Date of Test:	February 1, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	TX	Test Engineer:	Pei

The test was performed with 802.11b

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-13.35	8 dBm
Middle	2437	-13.85	8 dBm
High	2462	-12.08	8 dBm

The test was performed with 802.11g

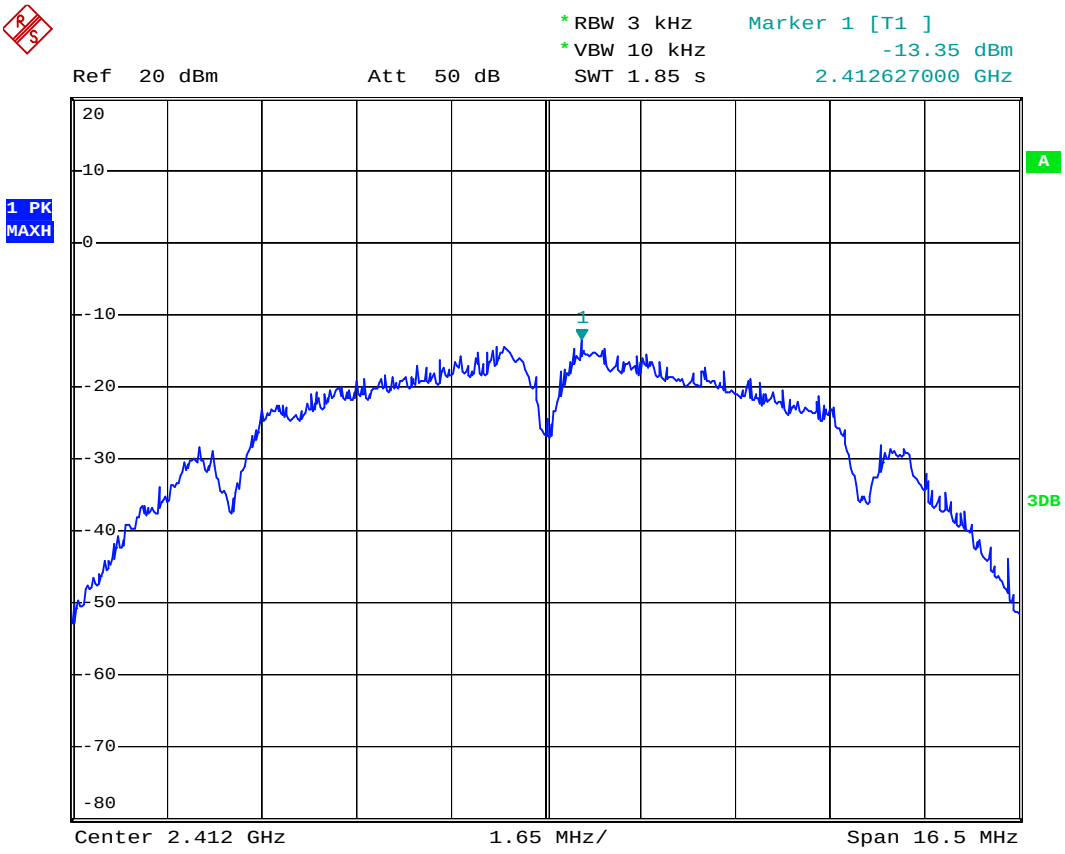
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-16.49	8 dBm
Middle	2437	-15.86	8 dBm
High	2462	-14.89	8 dBm

The test was performed with 802.11n (20MHz)			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-15.77	8 dBm
Middle	2437	-16.94	8 dBm
High	2462	-15.57	8 dBm

The test was performed with 802.11n (40MHz)			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2422	-24.68	8 dBm
Middle	2437	-24.85	8 dBm
High	2452	-24.74	8 dBm

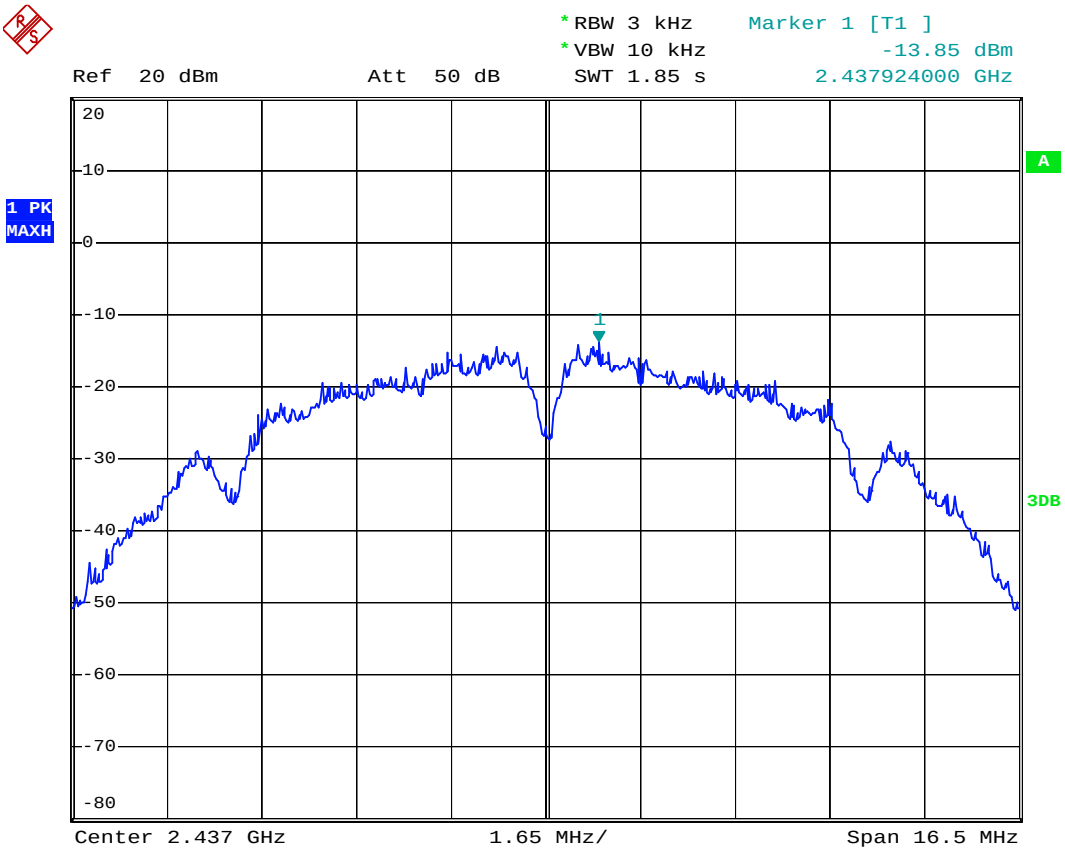
The spectrum analyzer plots are attached as below.

802.11b Channel Low 2412MHz



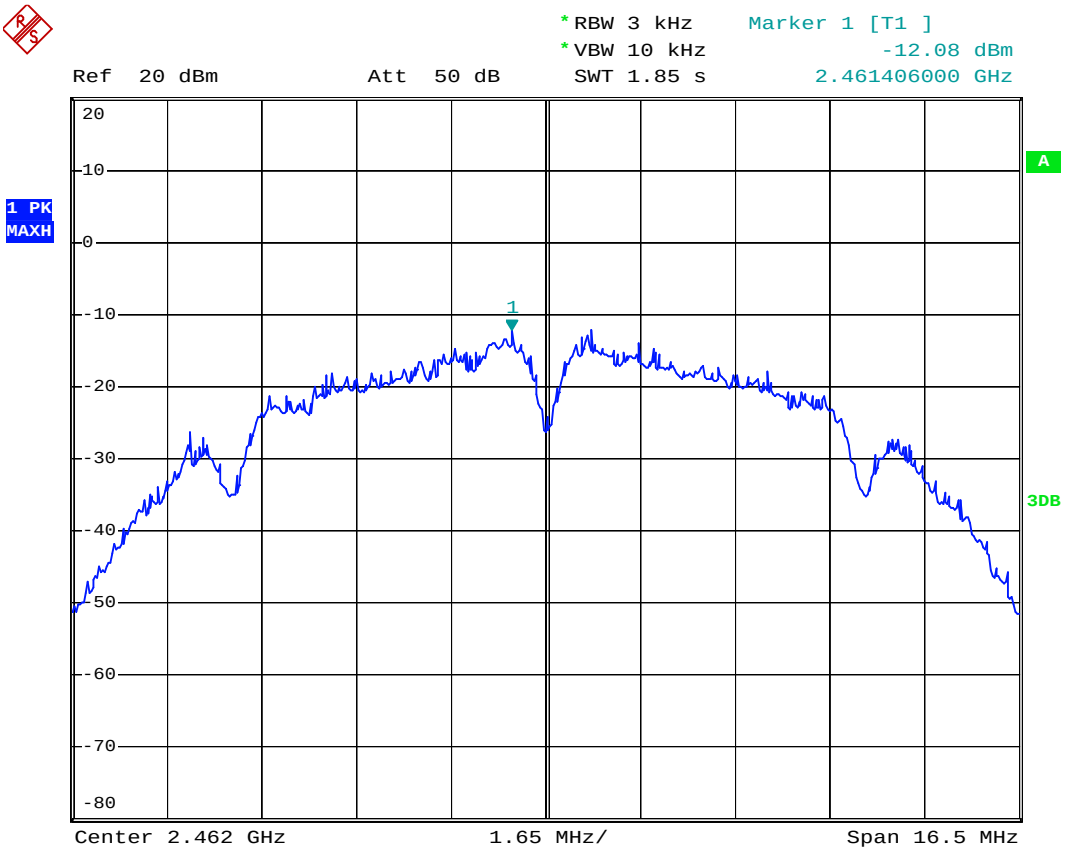
Date: 1.FEB.2013 15:57:32

802.11b Channel Middle 2437MHz



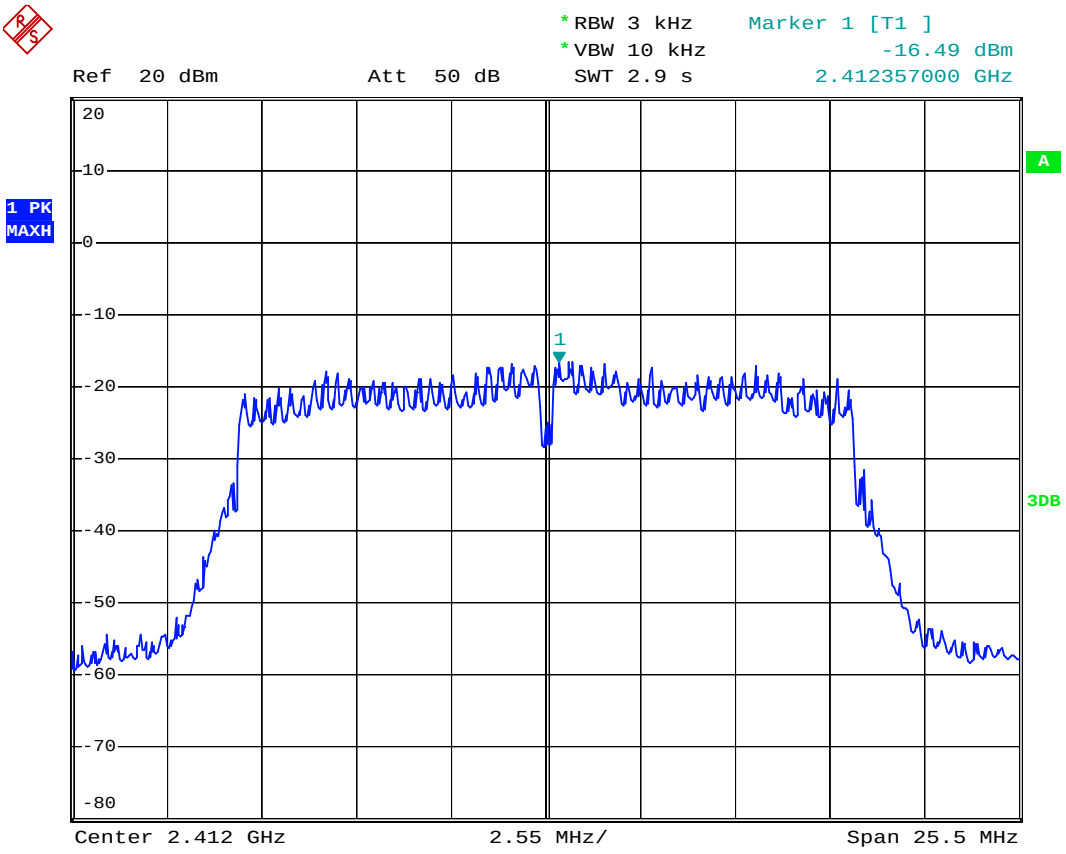
Date: 1.FEB.2013 15:58:00

802.11b Channel High 2462MHz



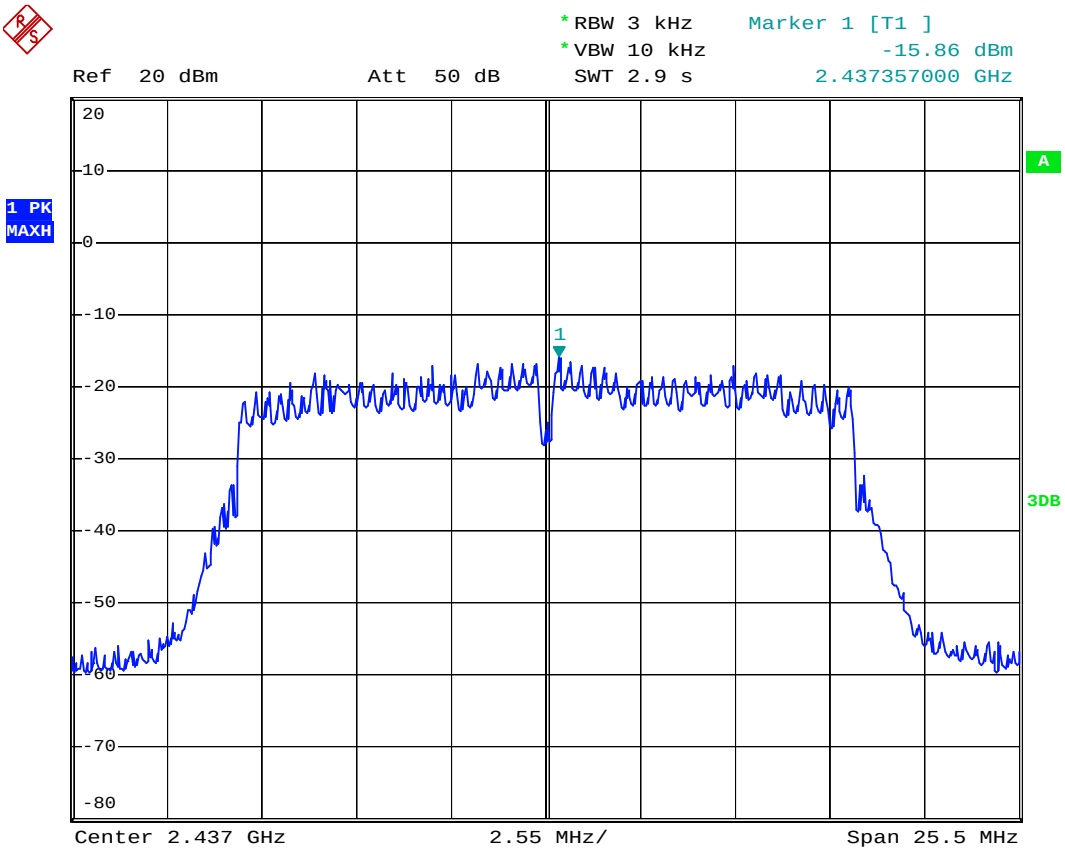
Date: 1.FEB.2013 15:59:03

802.11g Channel Low 2412MHz



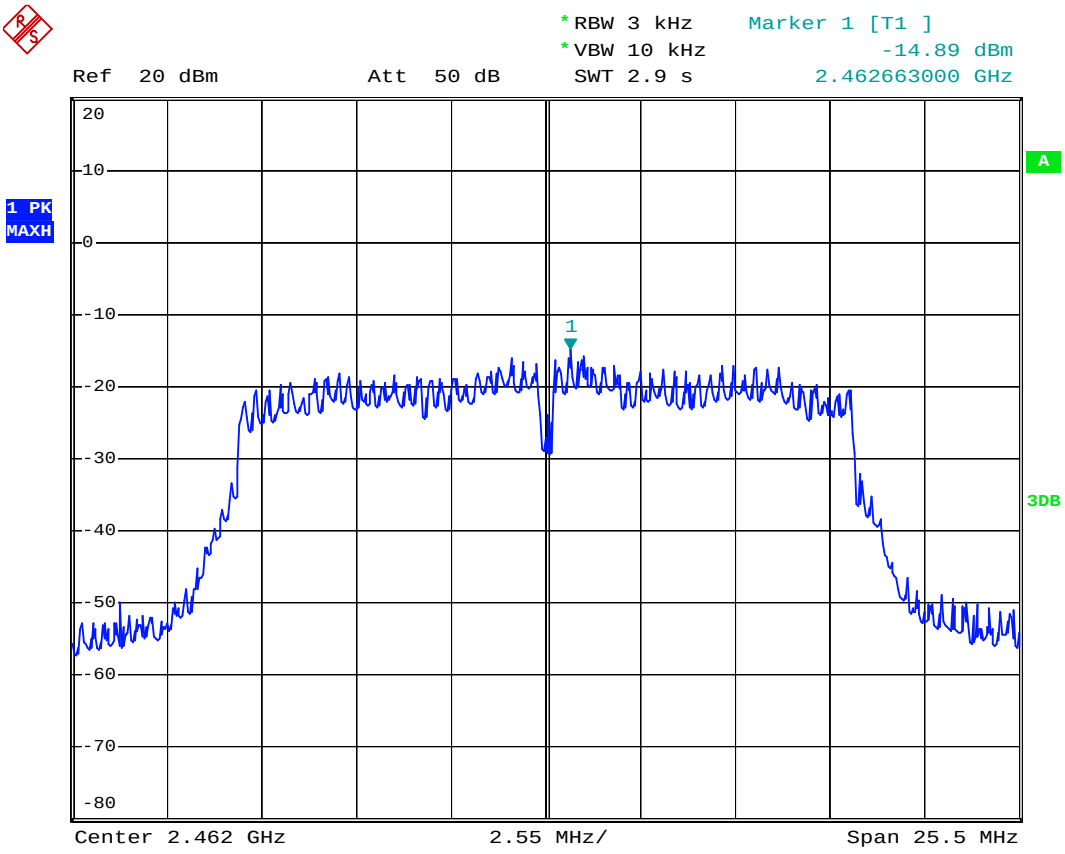
Date: 1.FEB.2013 17:21:42

802.11g Channel Middle 2437MHz



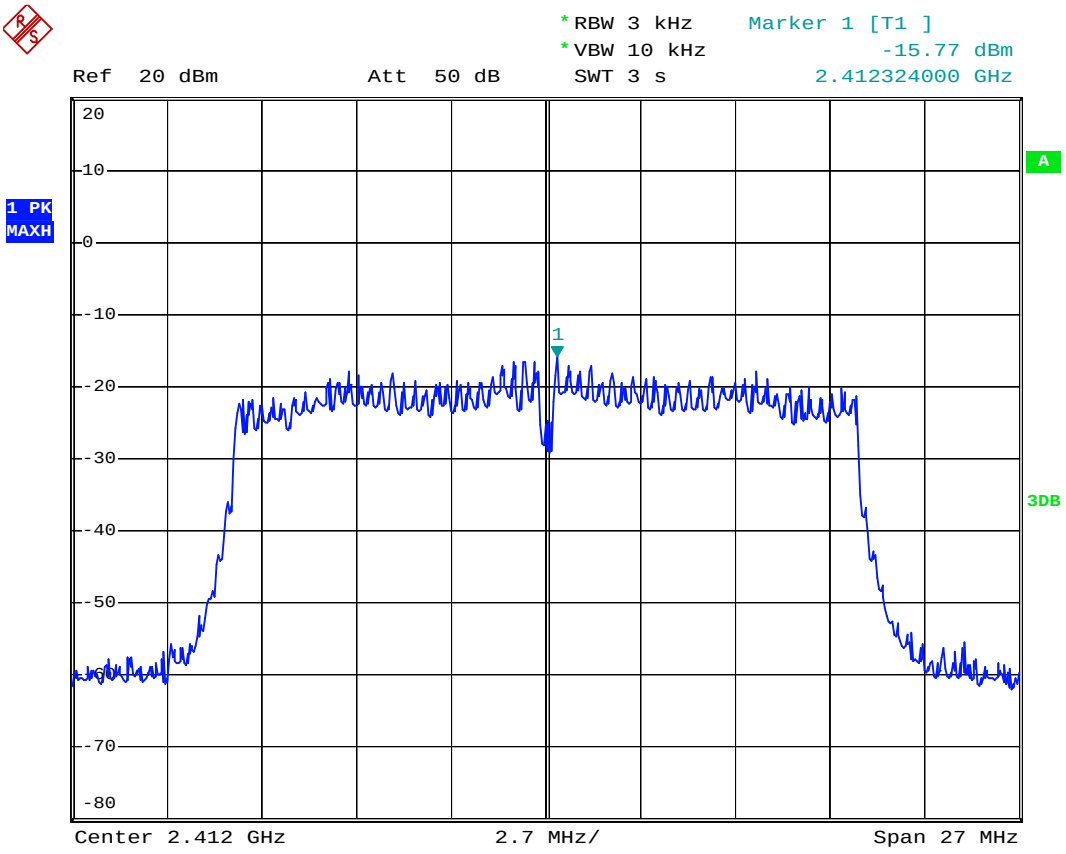
Date: 1.FEB.2013 17:22:20

802.11g Channel High 2462MHz



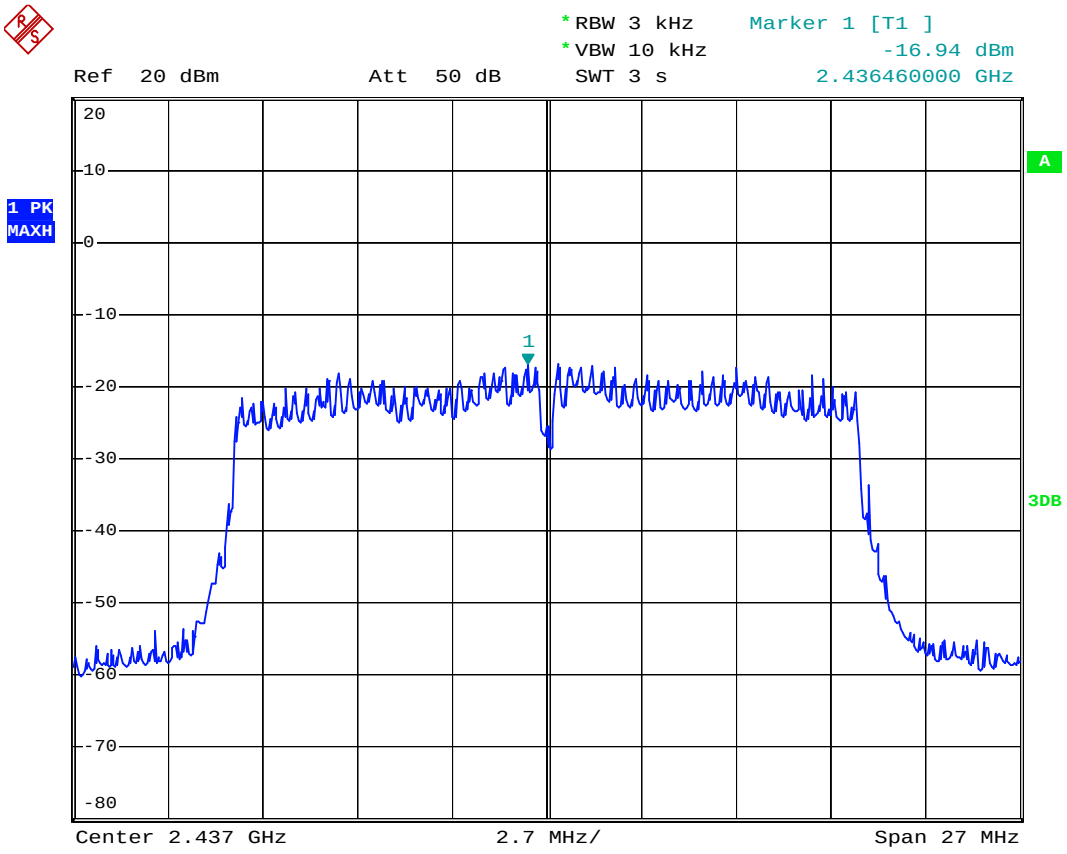
Date: 1.FEB.2013 17:22:50

802.11n Channel Low 2412MHz (20MHz)



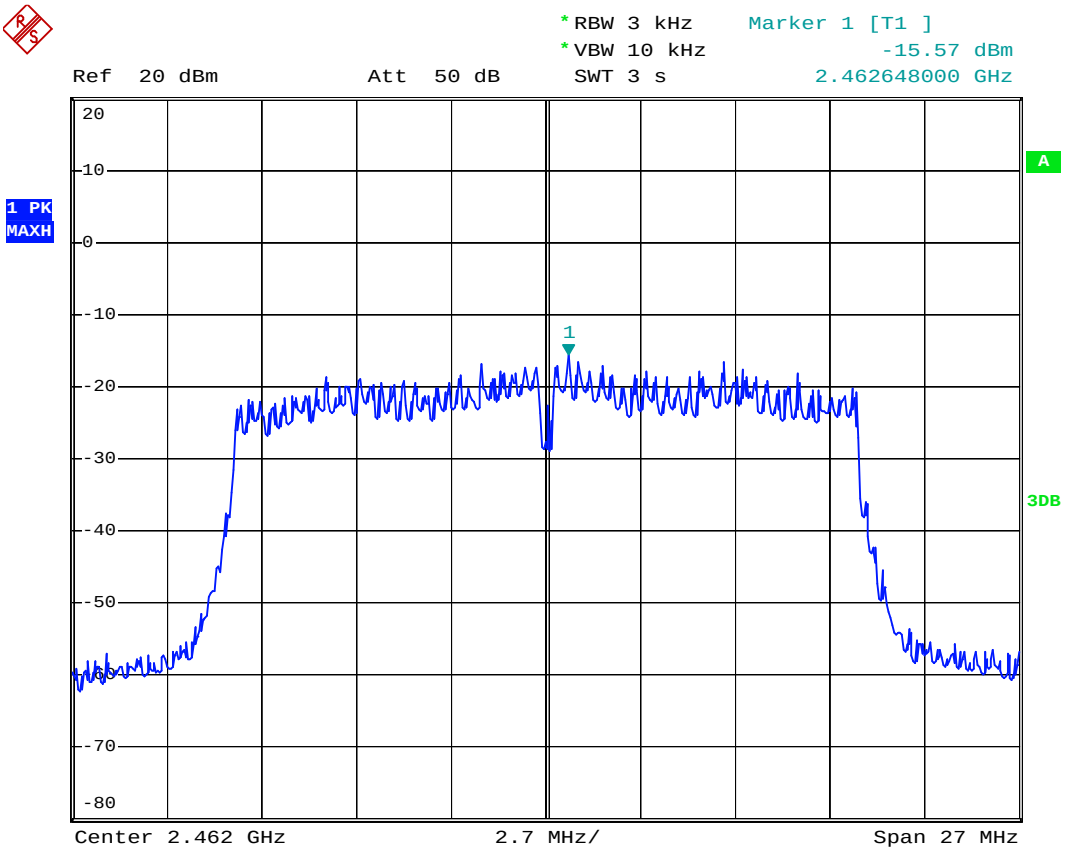
Date: 1.FEB.2013 17:26:56

802.11n Channel Middle 2437MHz (20MHz)



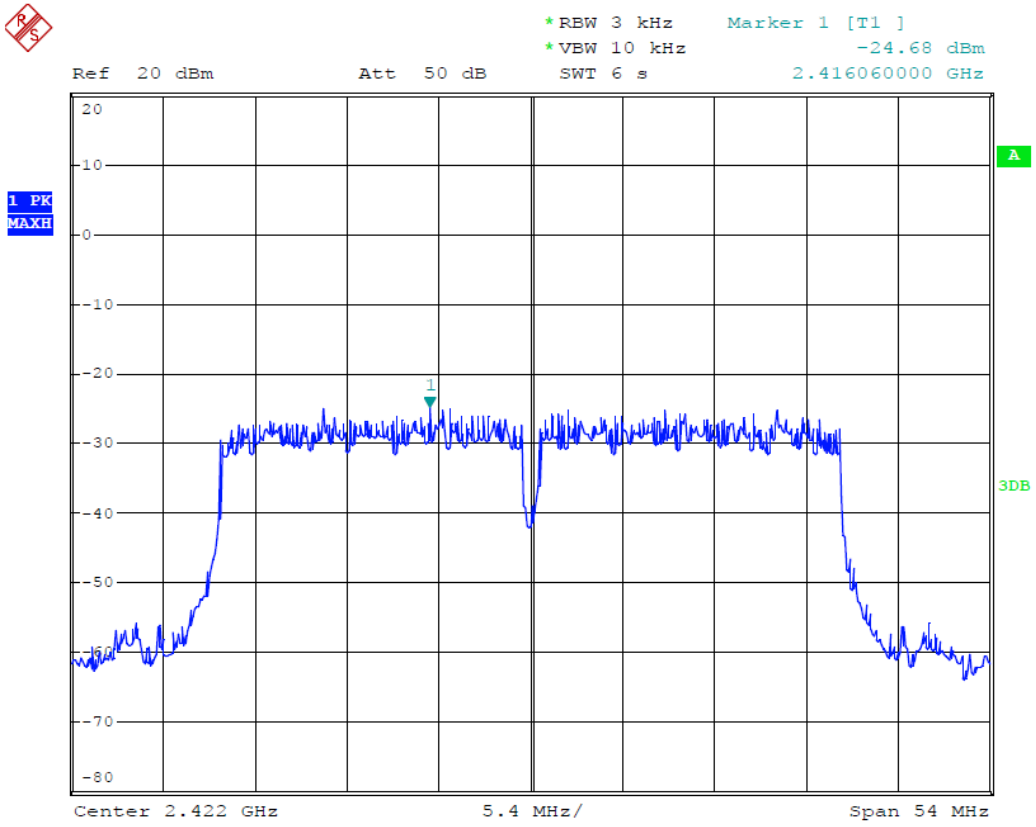
Date: 1.FEB.2013 17:26:22

802.11n Channel High 2462MHz(20MHz)



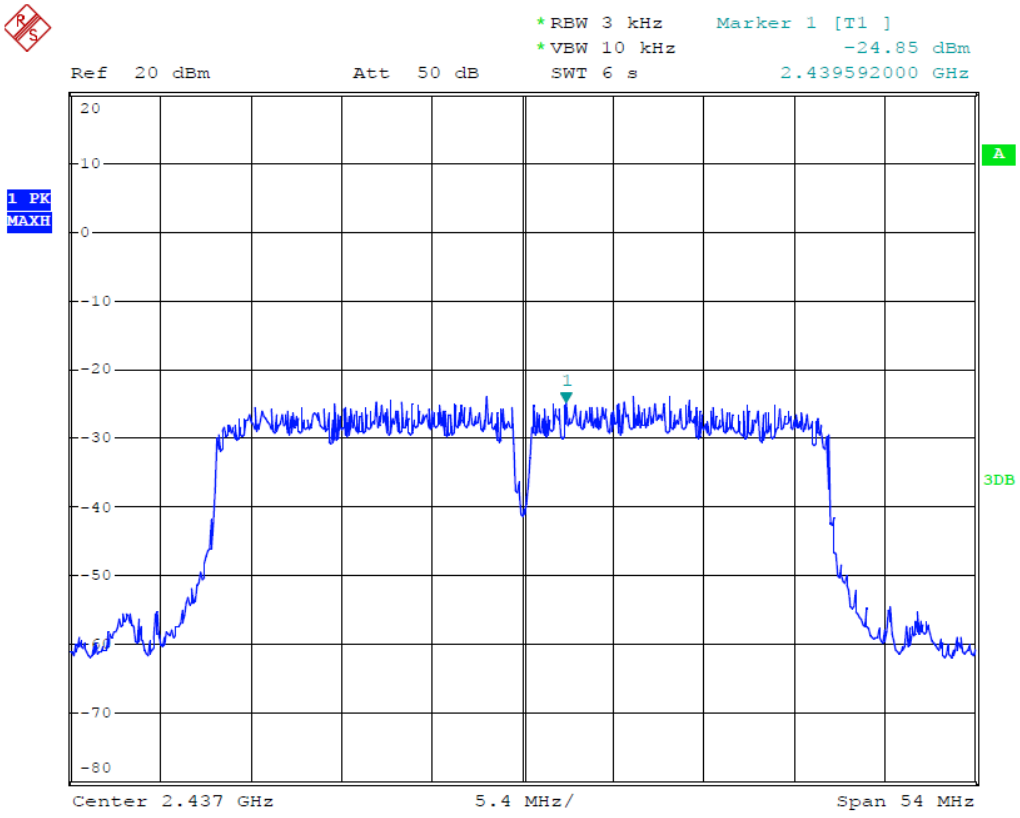
Date: 1.FEB.2013 17:25:50

802.11n Channel Low 2422MHz (40MHz)



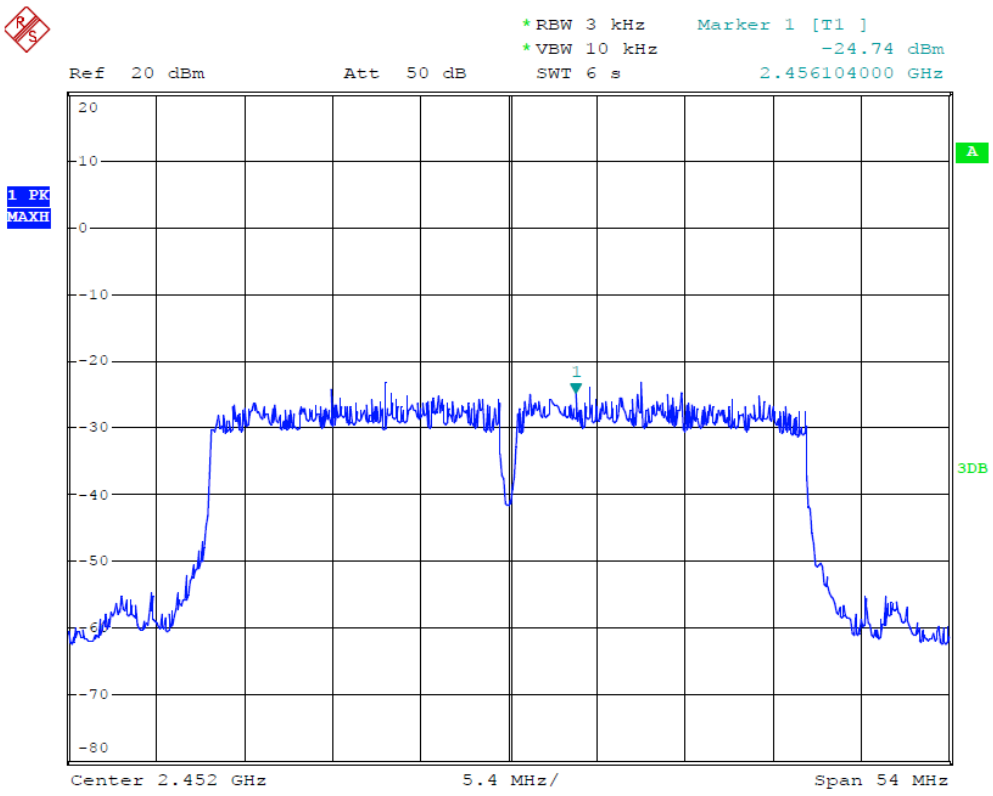
Date: 1.FEB.2013 15:01:33

802.11n Channel Middle 2437MHz(40MHz)



Date: 1.FEB.2013 15:00:53

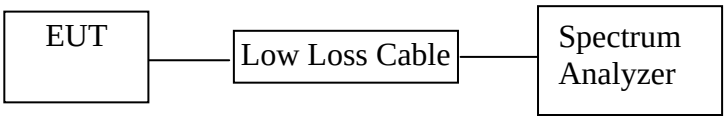
802.11n Channel High 2452MHz(40MHz)



Date: 1.FEB.2013 14:59:03

8. BAND EDGE COMPLIANCE TEST

8.1.Block Diagram of Test Setup



(EUT: WiFi Bridge)

8.2.The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, 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).

8.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.3.1.WiFi Bridge (EUT)

Model Number	:	VAP11N
Serial Number	:	N/A
Manufacturer	:	Shenzhen HouTian Network Communication Technology Co., Ltd.

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz MHz. We select 2412MHz, 2462MHz and 2422MHz, 2452MHz TX frequency to transmit.

8.5.Test Procedure

Conducted Band Edge:

8.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

8.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

Radiate Band Edge:

8.5.3. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

8.5.4. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

8.5.5. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

8.5.6. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

RBW=1MHz, VBW=1MHz

8.5.7.The band edges was measured and recorded.

8.6.Test Result

Pass

Conducted test

Date of Test:	February 1, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	TX	Test Engineer:	Pei

The test was performed with 802.11b

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	43.48	> 20dBc
2462	43.52	> 20dBc

The test was performed with 802.11g

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	39.87	> 20dBc
2462	41.09	> 20dBc

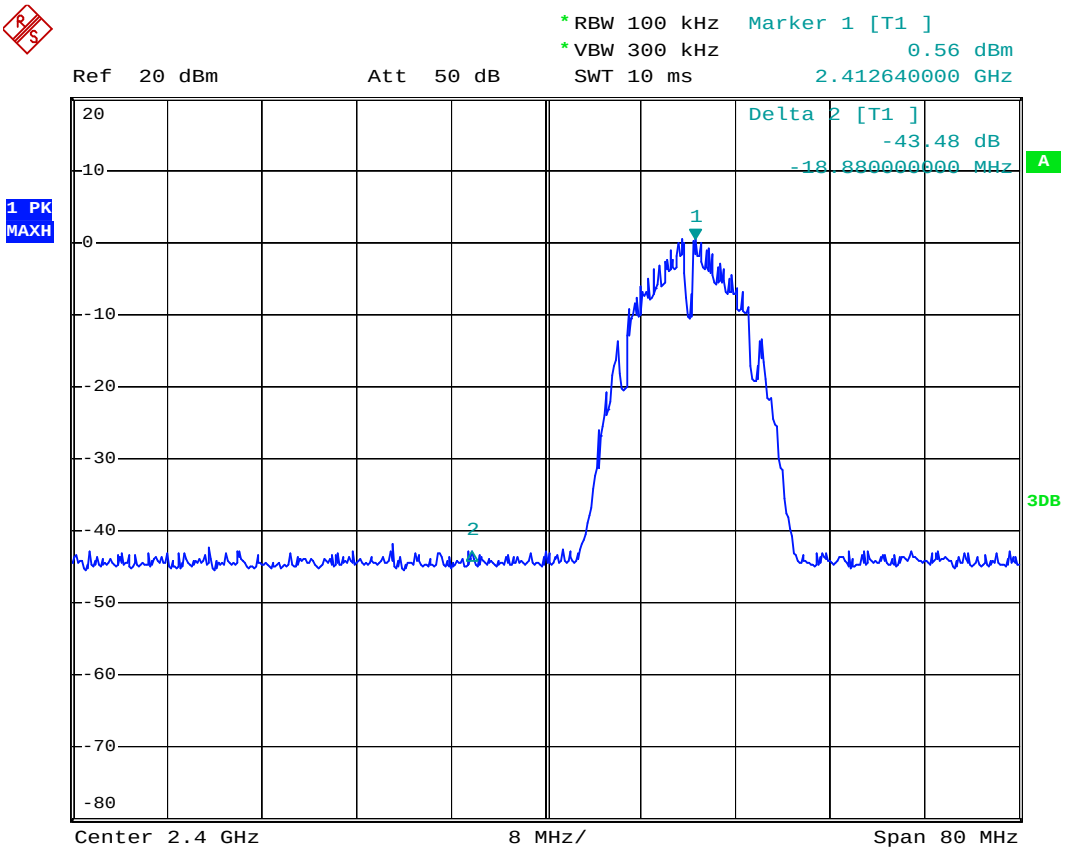
The test was performed with 802.11n (20MHz)

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	39.64	> 20dBc
2462	40.42	> 20dBc

The test was performed with 802.11n (40MHz)

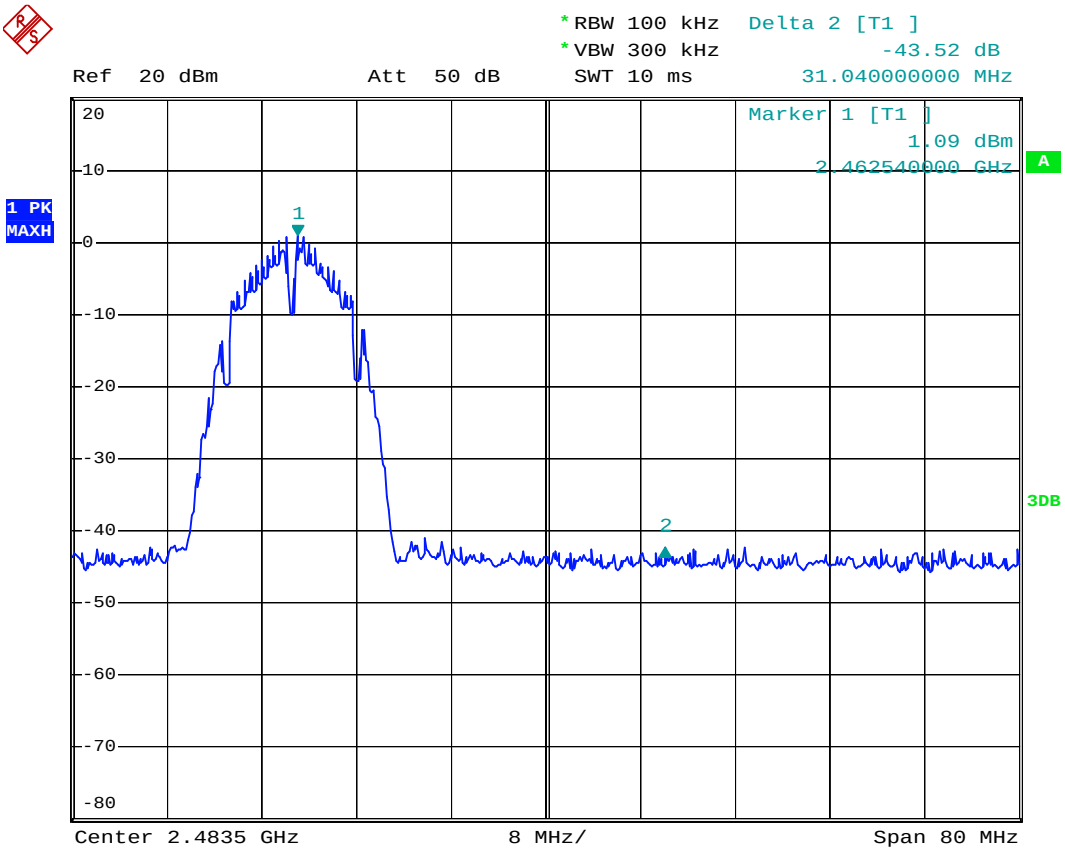
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2422	31.04	> 20dBc
2452	37.04	> 20dBc

802.11b Channel Low 2412MHz



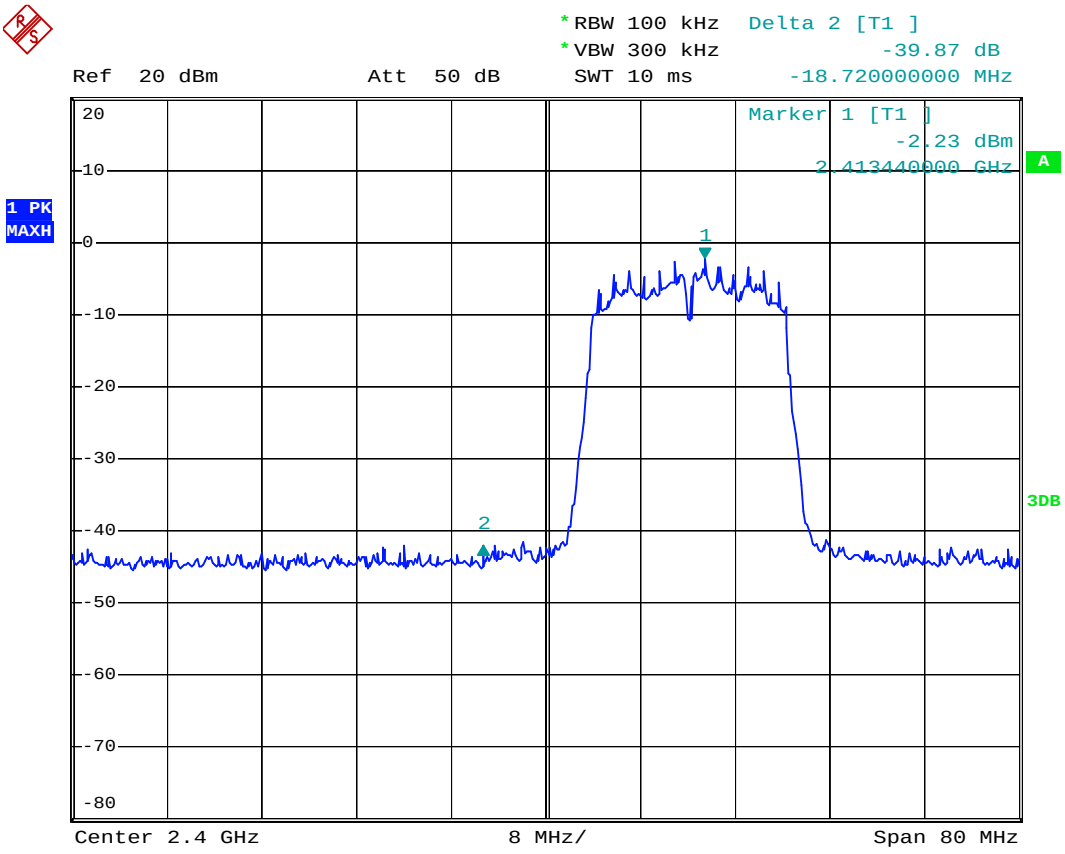
Date: 1.FEB.2013 17:29:54

802.11b Channel High 2462MHz



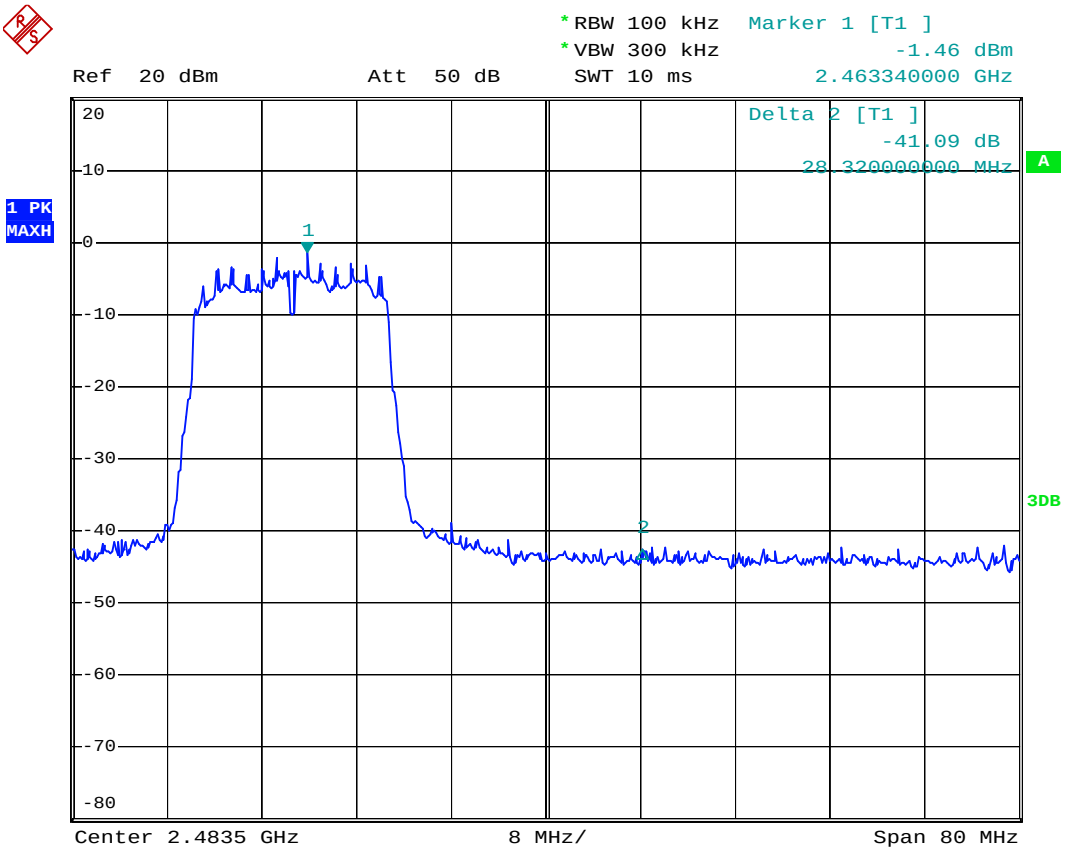
Date: 1.FEB.2013 17:29:21

802.11g Channel Low 2412MHz



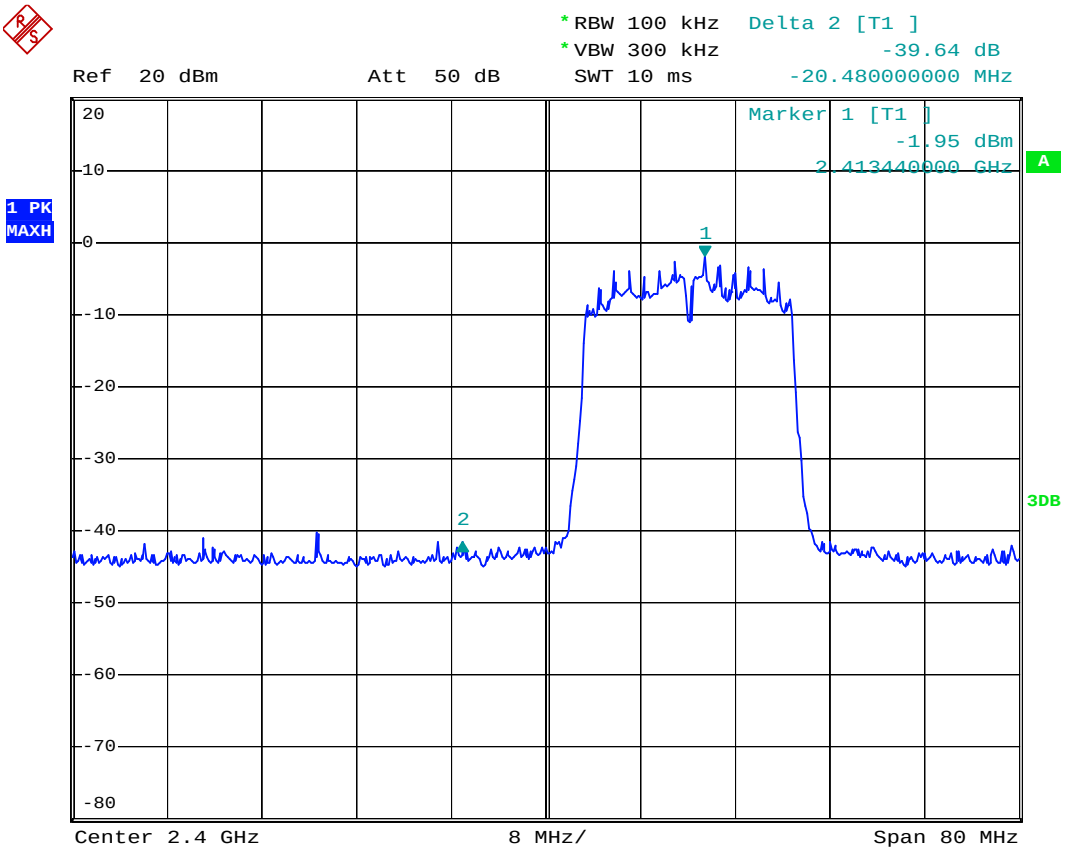
Date: 1.FEB.2013 17:30:30

802.11g Channel High 2462MHz



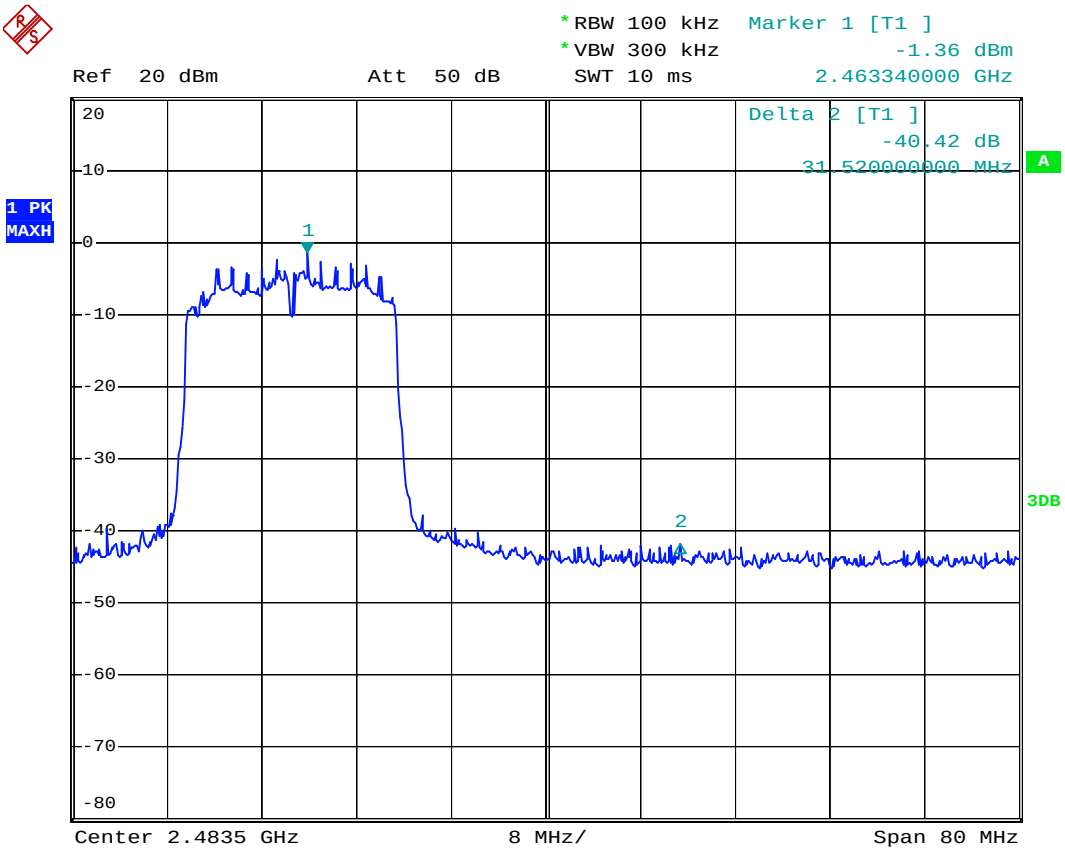
Date: 1.FEB.2013 17:31:03

802.11n Channel Low 2412MHz (20MHz)



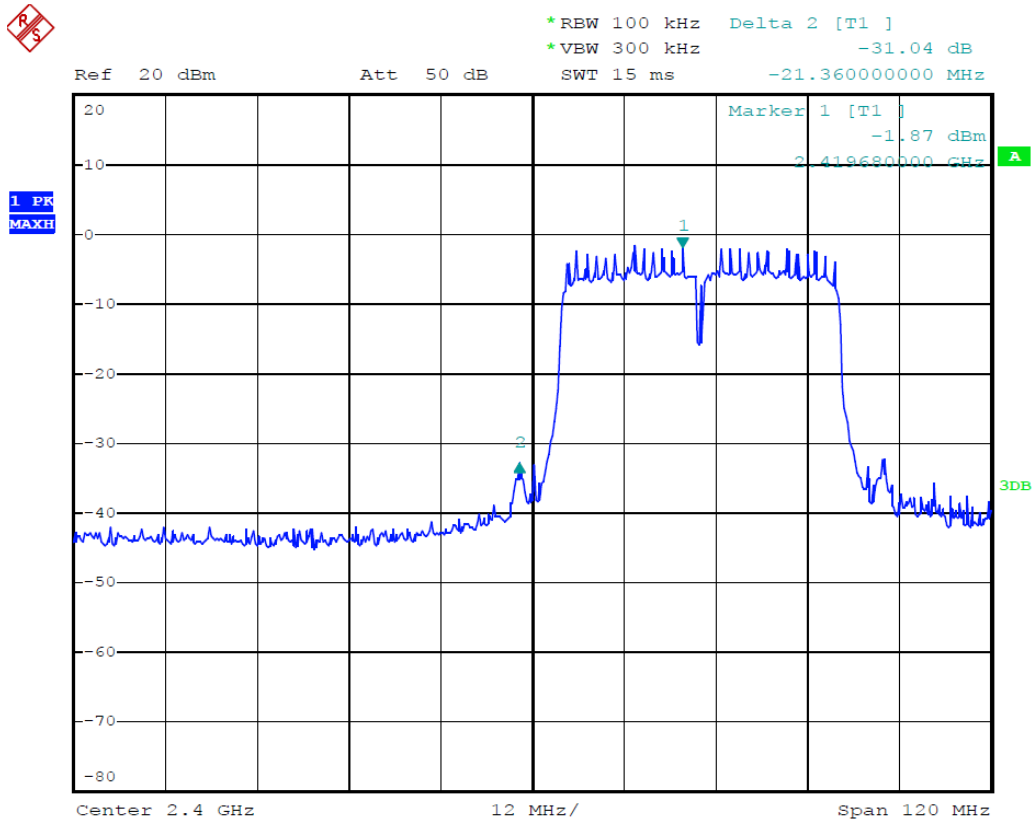
Date: 1.FEB.2013 17:28:10

802.11n Channel High 2462MHz (20MHz)



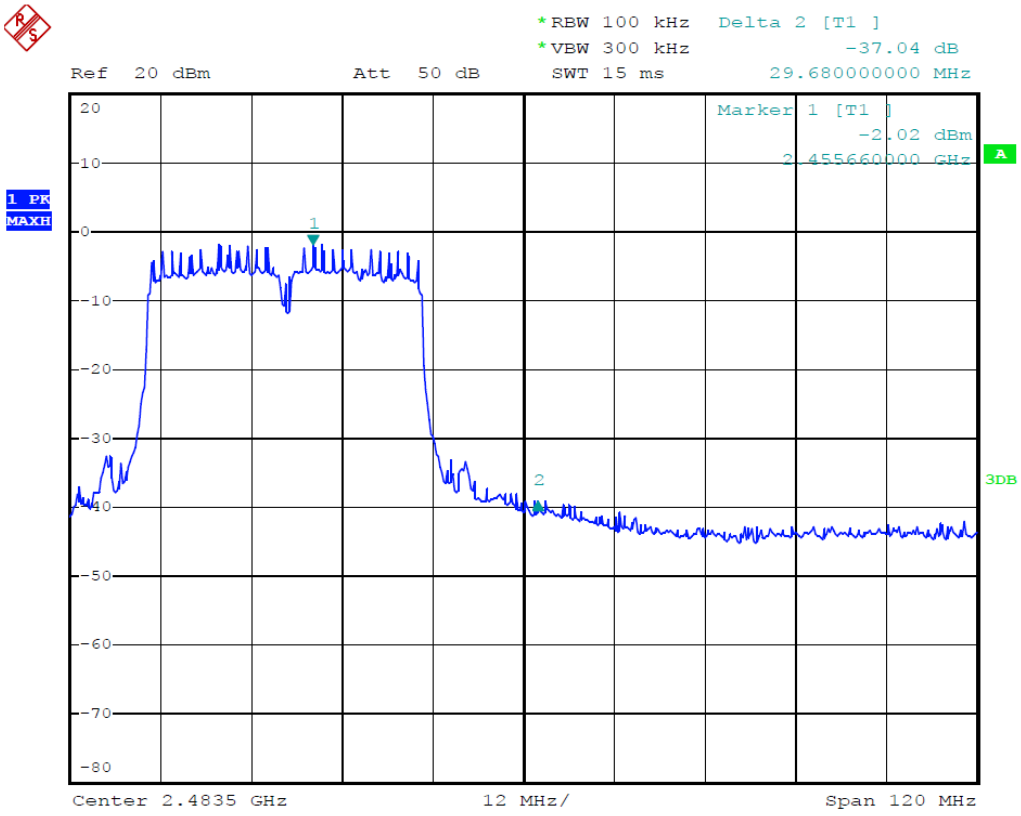
Date: 1.FEB.2013 17:28:51

802.11n Channel Low 2422MHz (40MHz)



Date: 1.FEB.2013 16:52:27

802.11n Channel High 2452MHz (40MHz)



Date: 1.FEB.2013 16:51:25

Radiated Band Edge Result

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11b Channel Low 2412MHz	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	39.00	47.63	-7.81	31.19	39.82	54.00	74.00	-22.81	-34.18	Vertical
2376.130	45.02	50.43	-7.62	37.40	42.81	54.00	74.00	-16.60	-31.19	Vertical
2390.000	38.69	38.99	-7.53	31.16	31.46	54.00	74.00	-22.84	-42.54	Vertical
2310.000	42.00	48.76	-7.81	34.19	40.95	54.00	74.00	-19.81	-33.05	Horizontal
2375.989	43.85	49.29	-7.62	36.23	41.67	54.00	74.00	-17.77	-32.33	Horizontal
2390.000	39.62	45.67	-7.53	32.09	38.14	54.00	74.00	-21.91	-35.86	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11b Channel High 2462MHz	Test Engineer:	Pei

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	41.42	47.94	-7.37	34.05	40.57	54.00	74.00	-19.95	-33.43	Vertical
2488.774	42.92	49.33	-7.39	35.53	41.94	54.00	74.00	-18.47	-32.06	Vertical
2500.000	39.32	45.17	-7.40	31.92	37.77	54.00	74.00	-22.08	-36.23	Vertical
2483.500	38.91	44.94	-7.37	31.54	37.57	54.00	74.00	-22.46	-36.43	Horizontal
2490.993	41.46	48.91	-7.38	34.08	41.53	54.00	74.00	-19.92	-32.47	Horizontal
2500.000	39.33	45.20	-7.40	-31.93	37.80	54.00	74.00	-22.07	-36.20	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11g Channel Low 2412MHz	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	41.69	46.75	-7.81	33.88	38.94	54.00	74.00	-20.12	-35.06	Vertical
2375.849	47.99	52.68	-7.62	40.37	45.06	54.00	74.00	-13.63	-28.94	Vertical
2390.000	47.98	53.15	-7.53	40.45	45.62	54.00	74.00	-13.55	-28.38	Vertical
2310.000	38.97	44.75	-7.81	31.16	36.94	54.00	74.00	-22.84	-37.06	Horizontal
2376.130	42.61	48.89	-7.62	34.99	41.27	54.00	74.00	-19.01	-32.73	Horizontal
2390.000	39.17	45.46	-7.53	31.64	37.93	54.00	74.00	-22.36	-36.07	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11g Channel High 2462MHz	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	43.97	49.00	-7.37	36.60	41.63	54.00	74.00	-17.40	-32.37	Vertical
2490.993	41.36	47.76	-7.38	33.98	40.38	54.00	74.00	-20.02	-33.62	Vertical
2500.000	40.00	45.77	-7.40	32.60	38.37	54.00	74.00	-21.40	-35.63	Vertical
2483.500	37.95	44.98	-7.37	30.58	37.61	54.00	74.00	-23.42	-36.39	Horizontal
2495.118	40.02	46.74	-7.39	32.63	39.35	54.00	74.00	-21.37	-34.65	Horizontal
2500.000	36.99	44.90	-7.40	29.59	37.50	54.00	74.00	-24.41	-36.50	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11n Channel Low 2412MHz (20MHz)	Test Engineer:	Pei

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	41.66	47.22	-7.81	33.85	39.41	54.00	74.00	-20.15	-34.59	Vertical
2376.130	43.93	53.41	-7.62	36.31	45.79	54.00	74.00	-17.69	-28.21	Vertical
2390.000	42.02	48.73	-7.53	34.49	41.20	54.00	74.00	-19.51	-32.80	Vertical
2310.000	36.69	45.84	-7.81	31.88	38.03	54.00	74.00	-22.12	-35.97	Horizontal
2375.849	42.71	48.48	-7.62	35.09	40.86	54.00	74.00	-18.91	-33.14	Horizontal
2390.000	41.22	47.35	-7.53	33.69	39.82	54.00	74.00	-20.31	-34.18	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11n Channel High 2462MHz (20MHz)	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	42.02	48.47	-7.37	34.65	41.10	54.00	74.00	-19.35	-32.90	Vertical
2492.578	40.00	46.57	-7.39	32.61	39.36	54.00	74.00	-21.39	-36.64	Vertical
2500.000	38.99	43.62	-7.40	31.59	36.22	54.00	74.00	-22.41	-37.78	Vertical
2483.500	39.17	45.35	-7.37	31.80	37.98	54.00	74.00	-22.20	-36.02	Horizontal
2489.566	40.02	46.87	-7.39	32.63	39.48	54.00	74.00	-21.37	-34.52	Horizontal
2500.000	36.91	43.69	-7.40	29.51	36.29	54.00	74.00	-24.49	-37.71	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11n Channel Low 2422MHz (40MHz)	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2310.000	40.02	46.60	-7.81	32.21	38.79	54.00	74.00	-21.79	-35.21	Vertical
2376.046	48.02	53.47	-7.62	40.40	45.85	54.00	74.00	-13.60	-28.15	Vertical
2390.000	49.32	54.18	-7.53	41.79	46.65	54.00	74.00	-12.21	-27.35	Vertical
2310.000	40.03	46.58	-7.81	32.22	38.77	54.00	74.00	-21.78	-35.23	Horizontal
2376.235	43.69	51.90	-7.62	36.07	44.28	54.00	74.00	-17.93	-29.72	Horizontal
2390.000	40.33	46.24	-7.53	32.80	38.71	54.00	74.00	-21.20	-35.29	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11n Channel High 2452MHz (40MHz)	Test Engineer:	Pei

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	40.08	46.57	-7.37	32.71	39.20	54.00	74.00	-21.29	-34.80	Vertical
2493.631	41.08	47.82	-7.39	33.69	40.43	54.00	74.00	-20.31	-33.57	Vertical
2500.000	39.62	46.05	-7.40	32.22	38.65	54.00	74.00	-21.78	-35.35	Vertical
2483.500	39.64	45.82	-7.37	32.27	38.45	54.00	74.00	-21.73	-35.55	Horizontal
2487.116	41.90	47.91	-7.38	34.52	40.53	54.00	74.00	-19.48	-33.47	Horizontal
2500.000	38.97	44.83	-7.40	31.57	37.43	54.00	74.00	-22.43	-36.57	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

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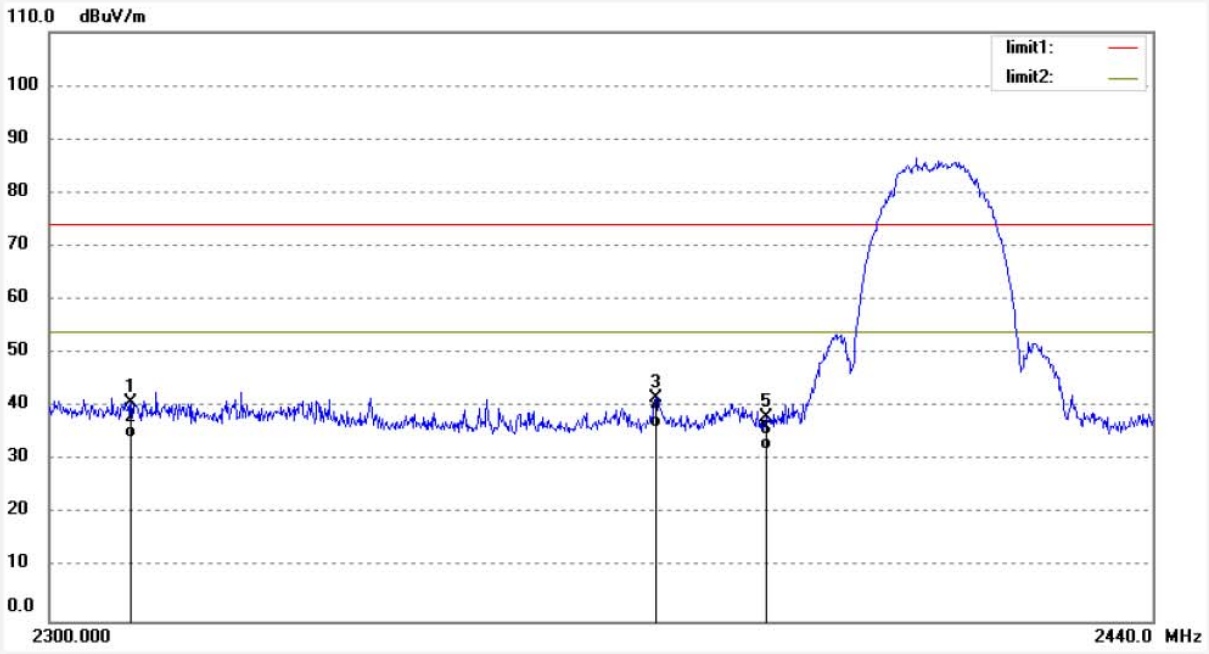
Job No.: Star_tmp #387	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/14/26
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 1(802.11b)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	48.76	-7.81	40.95	74.00	-33.05	peak			
2	2310.000	42.00	-7.81	34.19	54.00	-19.81	AVG			
3	2375.989	49.29	-7.62	41.67	74.00	-32.33	peak			
4	2375.989	43.85	-7.62	36.23	54.00	-17.77	AVG			
5	2390.000	45.67	-7.53	38.14	74.00	-35.86	peak			
6	2390.000	39.62	-7.53	32.09	54.00	-21.91	AVG			

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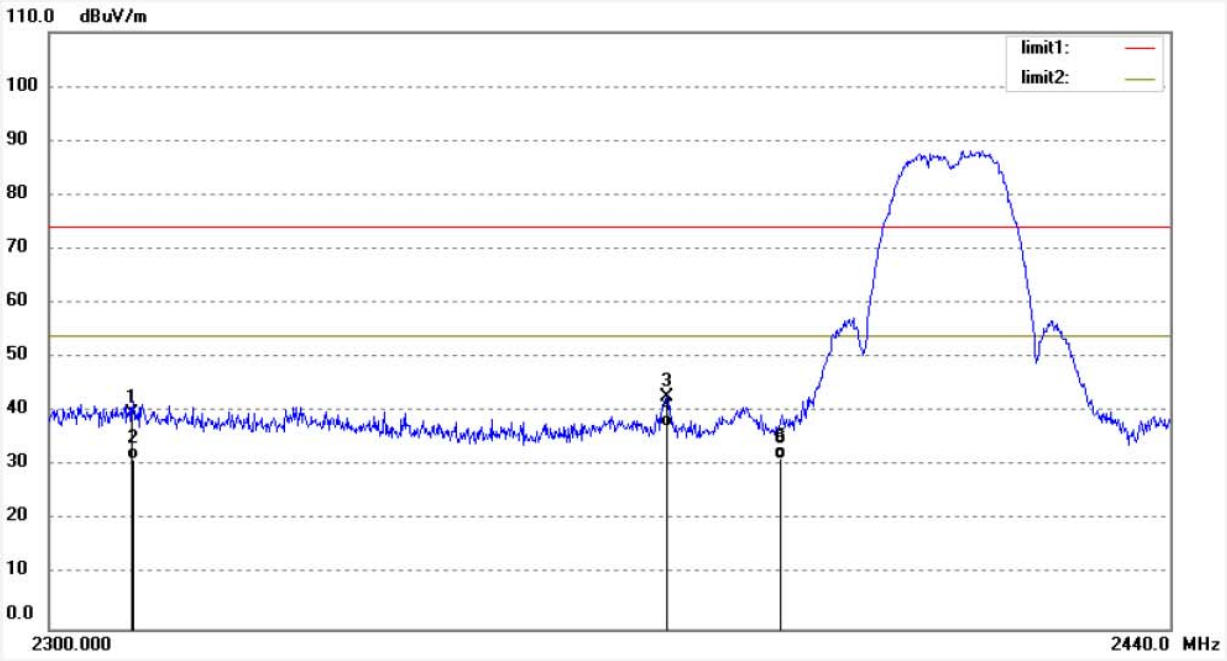
Job No.: Star_tmp #386	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/12/47
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 1(802.11b)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	47.63	-7.81	39.82	74.00	-34.18	peak			
2	2310.000	39.00	-7.81	31.19	54.00	-22.81	AVG			
3	2376.130	50.43	-7.62	42.81	74.00	-31.19	peak			
4	2376.130	45.02	-7.62	37.40	54.00	-16.60	AVG			
5	2390.000	38.99	-7.53	31.46	74.00	-42.54	peak			
6	2390.000	38.69	-7.53	31.16	54.00	-22.84	AVG			

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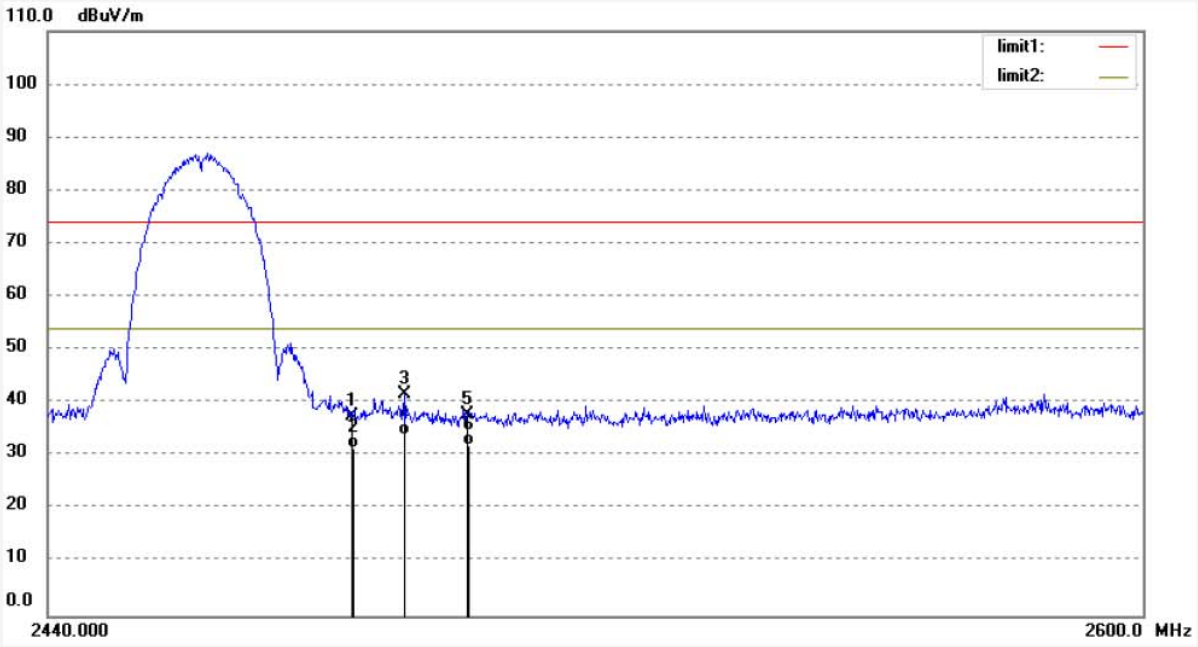
Job No.: Star_tmp #384
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 11(802.11b)
Model: VAP11N
Manufacturer: HouTian

Polarization: Horizontal
Power Source: DC 5V
Date: 13/02/04/
Time: 4/08/56
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.94	-7.37	37.57	74.00	-36.43	peak			
2	2483.500	38.91	-7.37	31.54	54.00	-22.46	AVG			
3	2490.993	48.91	-7.38	41.53	74.00	-32.47	peak			
4	2490.993	41.46	-7.38	34.08	54.00	-19.92	AVG			
5	2500.000	45.20	-7.40	37.80	74.00	-36.20	peak			
6	2500.000	39.33	-7.40	31.93	54.00	-22.07	AVG			

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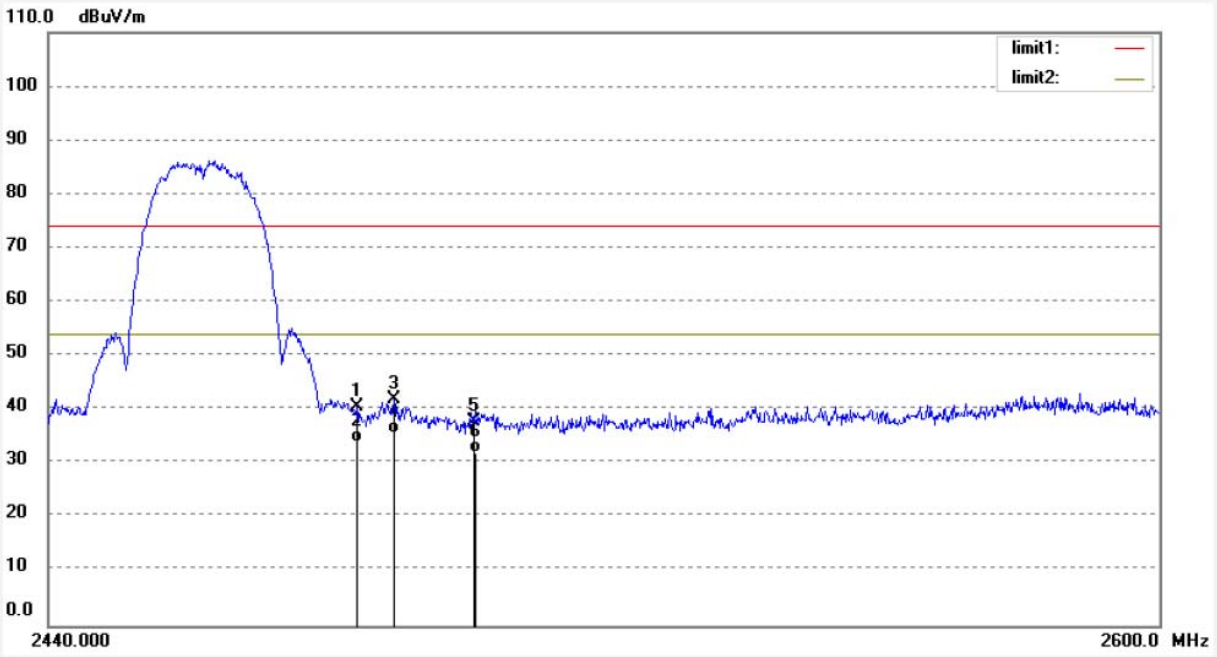
Job No.: Star_tmp #385
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 11(802.11b)
Model: VAP11N
Manufacturer: HouTian

Polarization: Vertical
Power Source: DC 5V
Date: 13/02/04/
Time: 4/10/12
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	47.94	-7.37	40.57	74.00	-33.43	peak			
2	2483.500	41.42	-7.37	34.05	54.00	-19.95	AVG			
3	2488.774	49.33	-7.39	41.94	74.00	-32.06	peak			
4	2488.774	42.92	-7.39	35.53	54.00	-18.47	AVG			
5	2500.000	45.17	-7.40	37.77	74.00	-36.23	peak			
6	2500.000	39.32	-7.40	31.92	54.00	-22.08	AVG			

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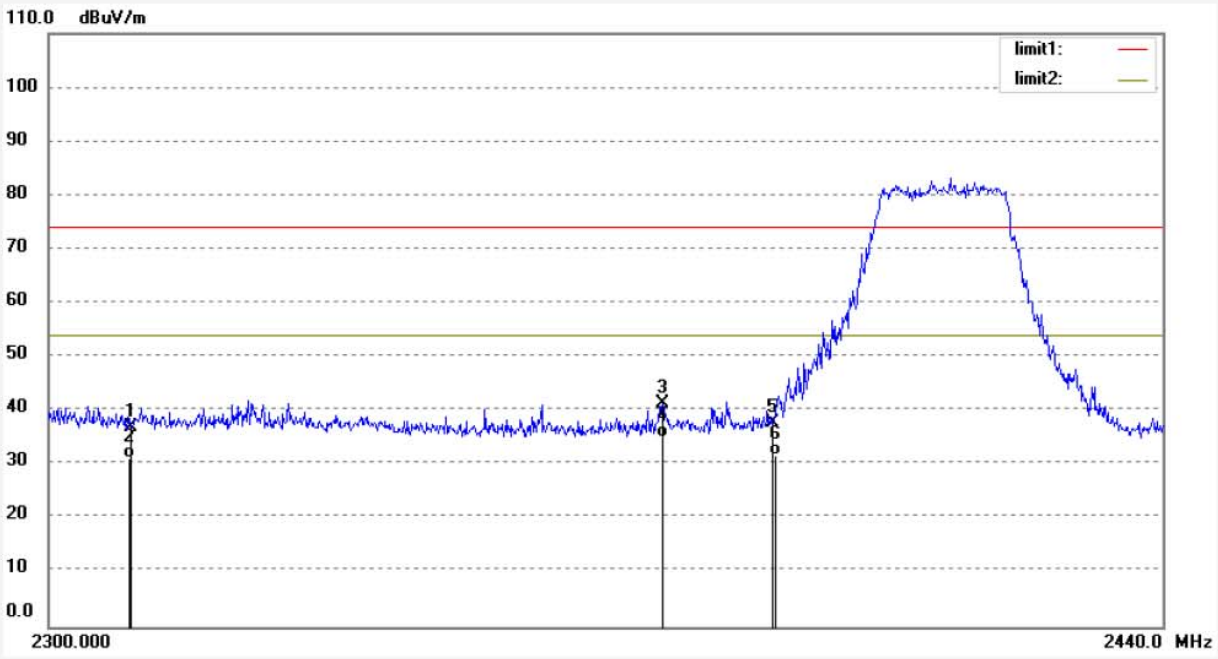
Job No.: Star_tmp #380	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/01/53
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 1(802.11g)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	44.75	-7.81	36.94	74.00	-37.06	peak			
2	2310.000	38.97	-7.81	31.16	54.00	-22.84	AVG			
3	2376.130	48.89	-7.62	41.27	74.00	-32.73	peak			
4	2376.130	42.61	-7.62	34.99	54.00	-19.01	AVG			
5	2390.000	45.46	-7.53	37.93	74.00	-36.07	peak			
6	2390.000	39.17	-7.53	31.64	54.00	-22.36	AVG			

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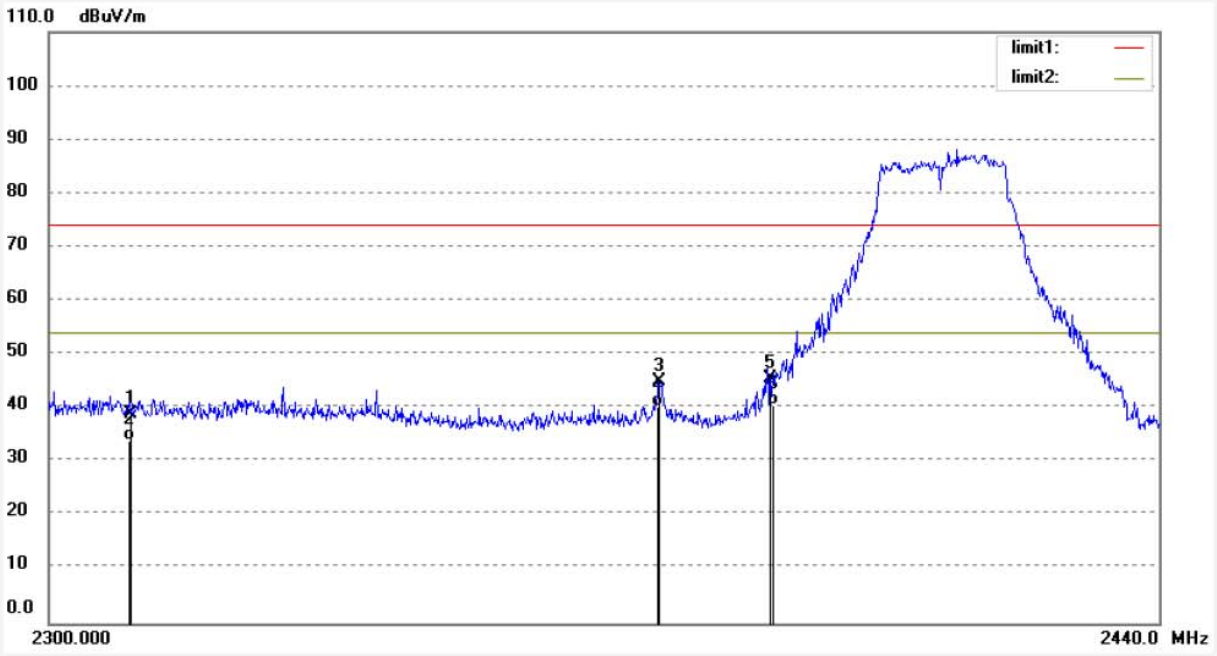
Job No.: Star_tmp #381	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/03/06
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 1(802.11g)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	46.75	-7.81	38.94	74.00	-35.06	peak			
2	2310.000	41.69	-7.81	33.88	54.00	-20.12	AVG			
3	2375.849	52.68	-7.62	45.06	74.00	-28.94	peak			
4	2375.849	47.99	-7.62	40.37	54.00	-13.63	AVG			
5	2390.000	53.15	-7.53	45.62	74.00	-28.38	peak			
6	2390.000	47.98	-7.53	40.45	54.00	-13.55	AVG			

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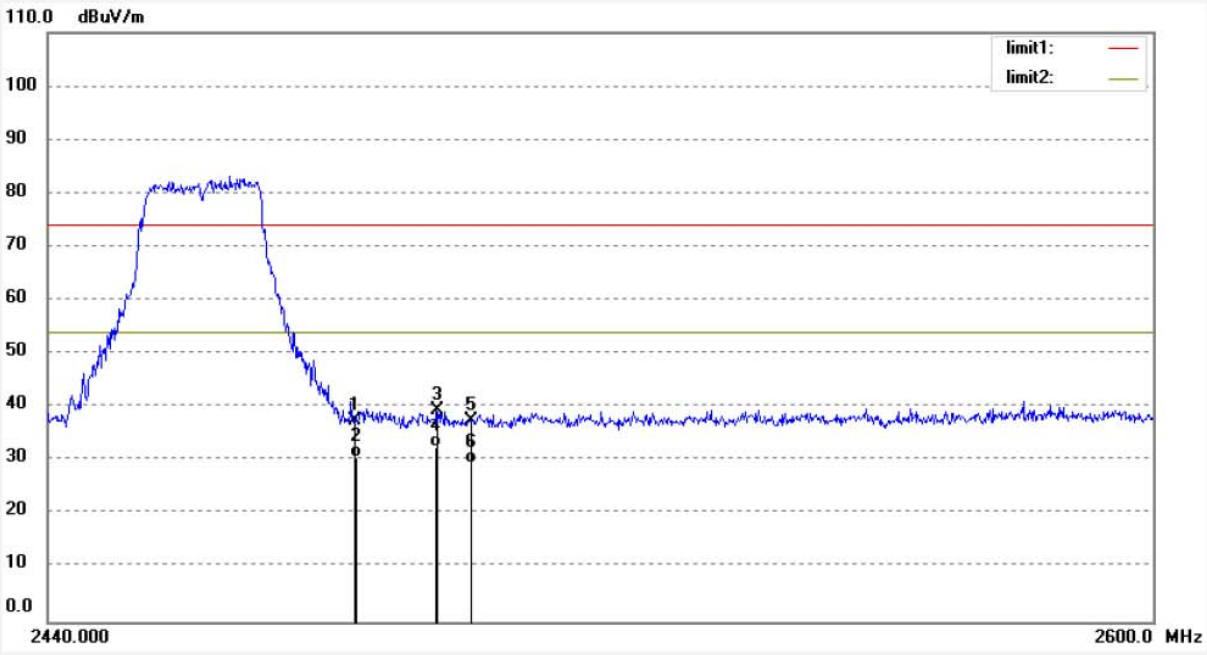
Job No.: Star_tmp #383
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 11(802.11g)
Model: VAP11N
Manufacturer: HouTian

Polarization: Horizontal
Power Source: DC 5V
Date: 13/02/04/
Time: 4/06/59
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.98	-7.37	37.61	74.00	-36.39	peak			
2	2483.500	37.95	-7.37	30.58	54.00	-23.42	AVG			
3	2495.118	46.74	-7.39	39.35	74.00	-34.65	peak			
4	2495.118	40.02	-7.39	32.63	54.00	-21.37	AVG			
5	2500.000	44.90	-7.40	37.50	74.00	-36.50	peak			
6	2500.000	36.99	-7.40	29.59	54.00	-24.41	AVG			

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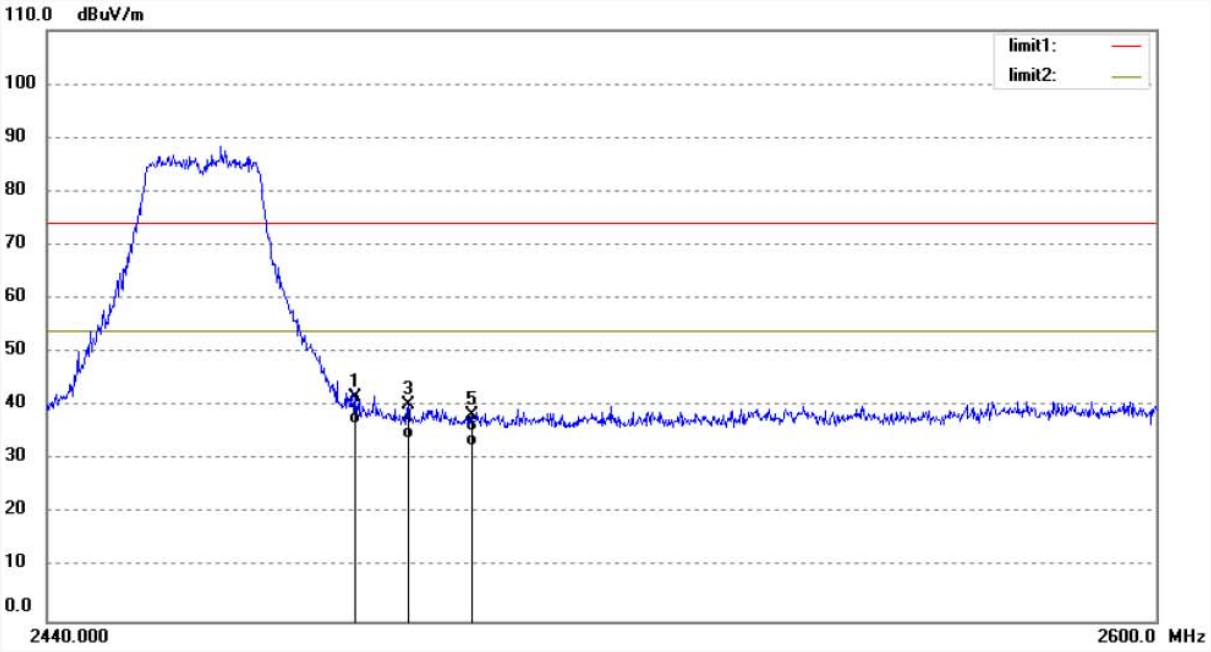
Job No.: Star_tmp #382	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/05/08
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 11(802.11g)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	49.00	-7.37	41.63	74.00	-32.37	peak			
2	2483.500	43.97	-7.37	36.60	54.00	-17.40	AVG			
3	2490.993	47.76	-7.38	40.38	74.00	-33.62	peak			
4	2490.993	41.36	-7.38	33.98	54.00	-20.02	AVG			
5	2500.000	45.77	-7.40	38.37	74.00	-35.63	peak			
6	2500.000	40.00	-7.40	32.60	54.00	-21.40	AVG			

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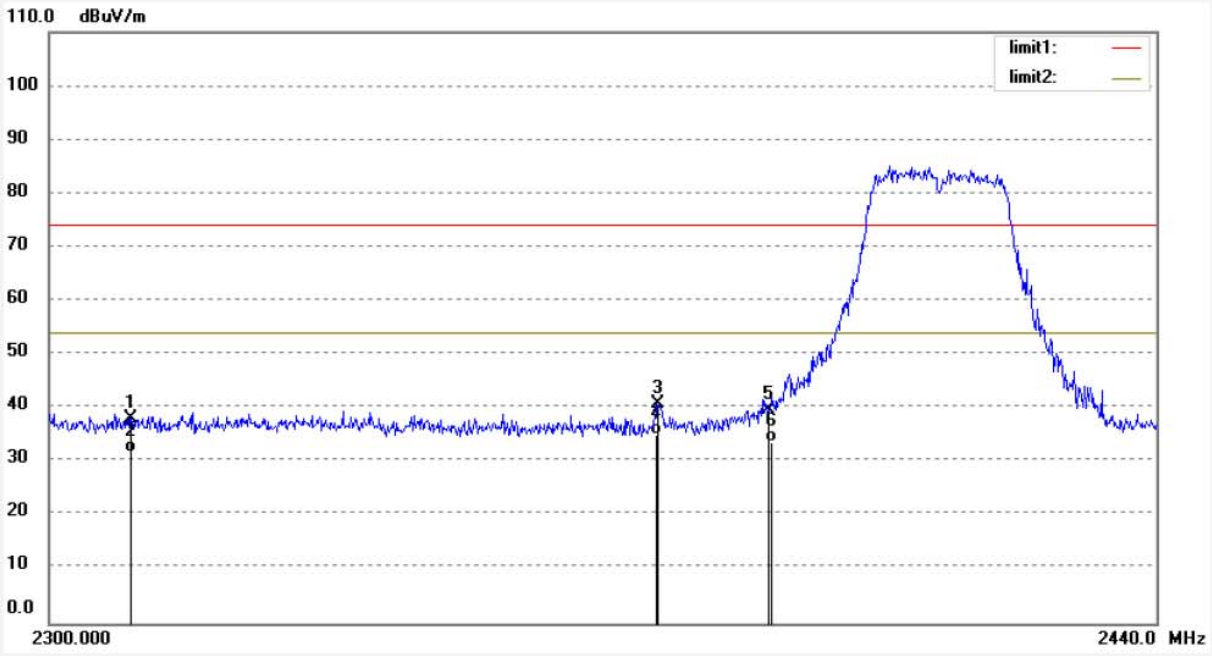
Job No.: Star_tmp #388	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/16/12
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 1(802.11n)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	45.84	-7.81	38.03	74.00	-35.97	peak			
2	2310.000	39.69	-7.81	31.88	54.00	-22.12	AVG			
3	2375.849	48.48	-7.62	40.86	74.00	-33.14	peak			
4	2375.849	42.71	-7.62	35.09	54.00	-18.91	AVG			
5	2390.000	47.35	-7.53	39.82	74.00	-34.18	peak			
6	2390.000	41.22	-7.53	33.69	54.00	-20.31	AVG			

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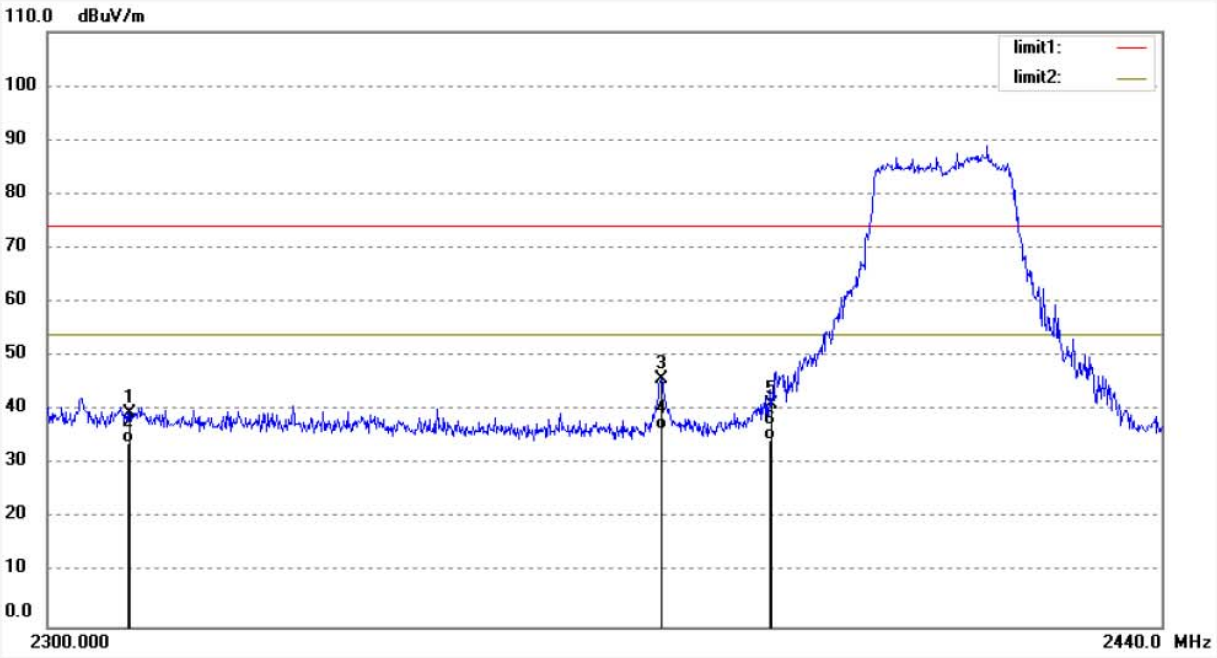
Job No.: Star_tmp #389
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 1(802.11n)
Model: VAP11N
Manufacturer: HouTian

Polarization: Vertical
Power Source: DC 5V
Date: 13/02/04/
Time: 4/17/39
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	47.22	-7.81	39.41	74.00	-34.59	peak			
2	2310.000	41.66	-7.81	33.85	54.00	-20.15	AVG			
3	2376.130	53.41	-7.62	45.79	74.00	-28.21	peak			
4	2376.130	43.93	-7.62	36.31	54.00	-17.69	AVG			
5	2390.000	48.73	-7.53	41.20	74.00	-32.80	peak			
6	2390.000	42.02	-7.53	34.49	54.00	-19.51	AVG			

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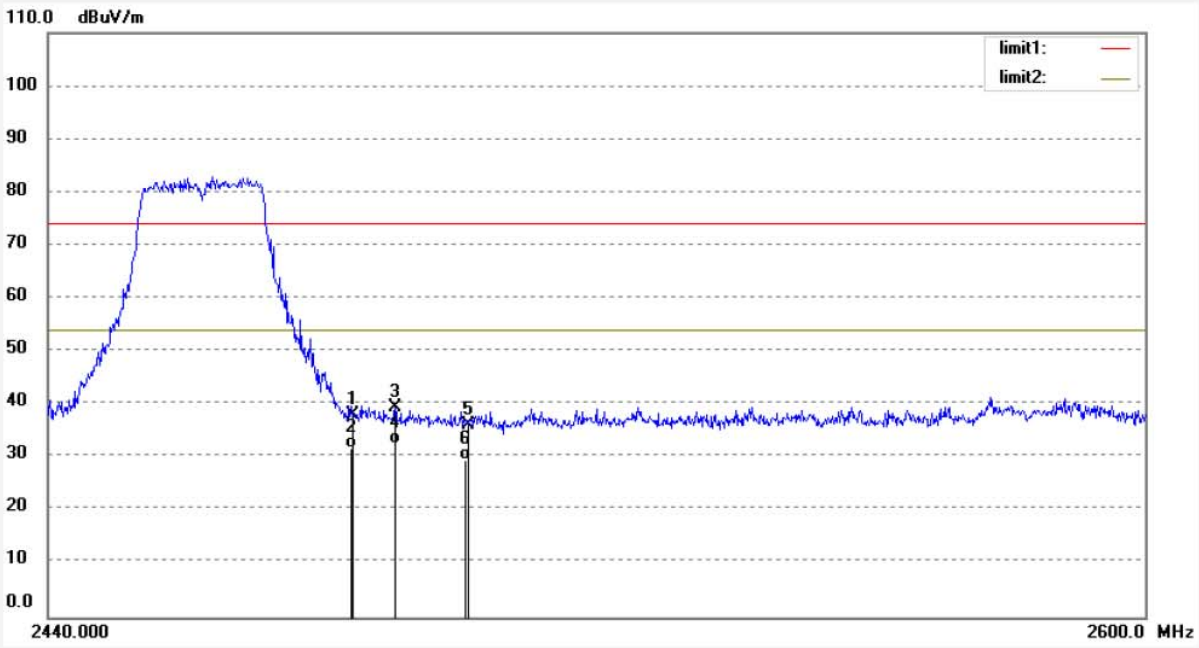
Job No.: Star_tmp #391
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 11(802.11n)
Model: VAP11N
Manufacturer: HouTian

Polarization: Horizontal
Power Source: DC 5V
Date: 13/02/04/
Time: 4/20/42
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.35	-7.37	37.98	74.00	-36.02	peak			
2	2483.500	39.17	-7.37	31.80	54.00	-22.20	AVG			
3	2489.566	46.87	-7.39	39.48	74.00	-34.52	peak			
4	2489.566	40.02	-7.39	32.63	54.00	-21.37	AVG			
5	2500.000	43.69	-7.40	36.29	74.00	-37.71	peak			
6	2500.000	36.91	-7.40	29.51	54.00	-24.49	AVG			

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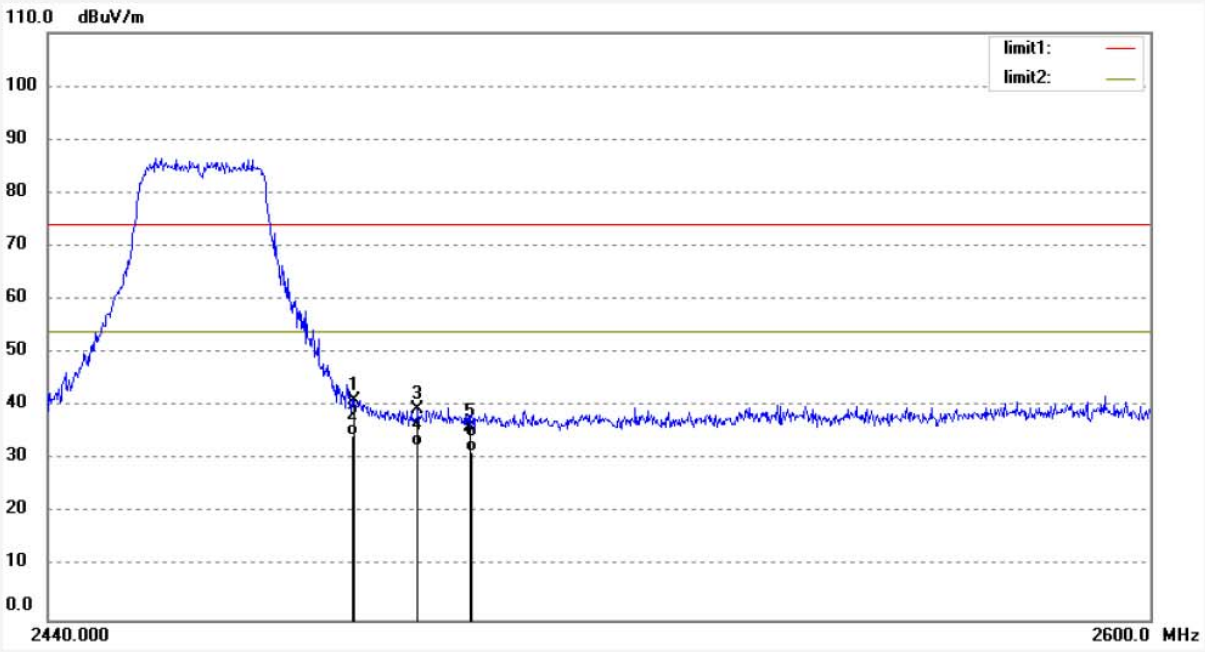
Job No.: Star_tmp #390	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/19/30
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 11(802.11n)	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	48.47	-7.37	41.10	74.00	-32.90	peak			
2	2483.500	42.02	-7.37	34.65	54.00	-19.35	AVG			
3	2492.578	46.75	-7.39	39.36	74.00	-34.64	peak			
4	2492.578	40.00	-7.39	32.61	54.00	-21.39	AVG			
5	2500.000	43.62	-7.40	36.22	74.00	-37.78	peak			
6	2500.000	38.99	-7.40	31.59	54.00	-22.41	AVG			

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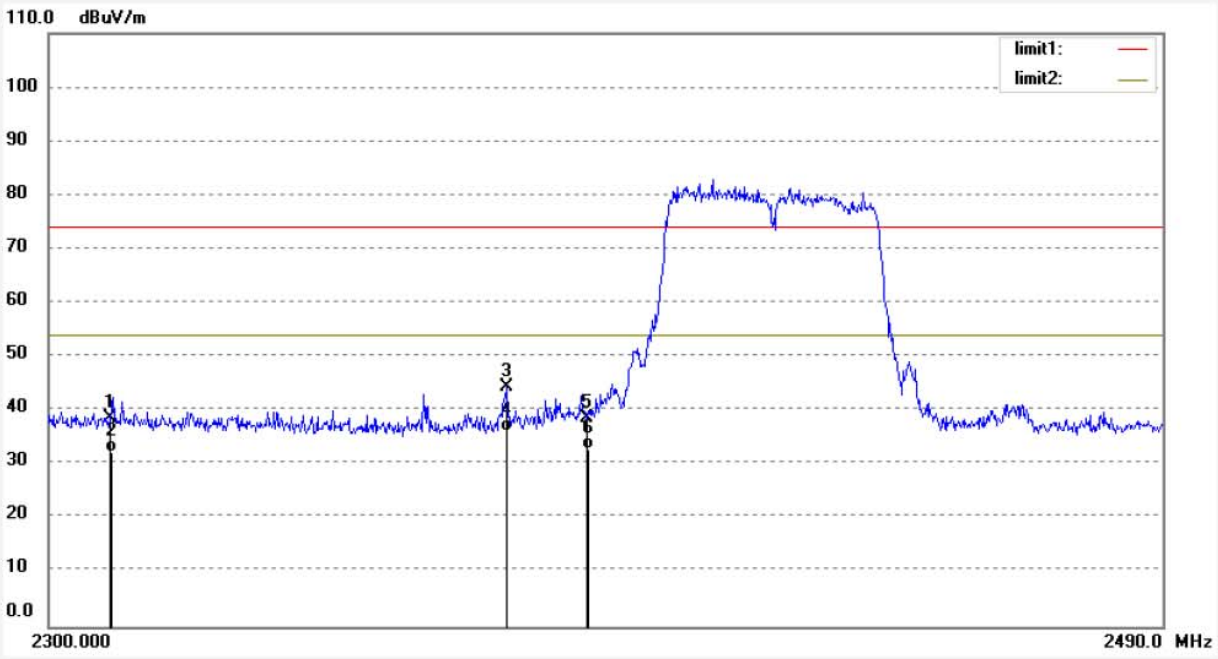
Job No.: Star_tmp #395
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 3(802.11n)40MHz
Model: VAP11N
Manufacturer: HouTian

Polarization: Horizontal
Power Source: DC 5V
Date: 13/02/04/
Time: 4/26/16
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	46.58	-7.81	38.77	74.00	-35.23	peak			
2	2310.000	40.03	-7.81	32.22	54.00	-21.78	AVG			
3	2376.235	51.90	-7.62	44.28	74.00	-29.72	peak			
4	2376.235	43.69	-7.62	36.07	54.00	-17.93	AVG			
5	2390.000	46.24	-7.53	38.71	74.00	-35.29	peak			
6	2390.000	40.33	-7.53	32.80	54.00	-21.20	AVG			

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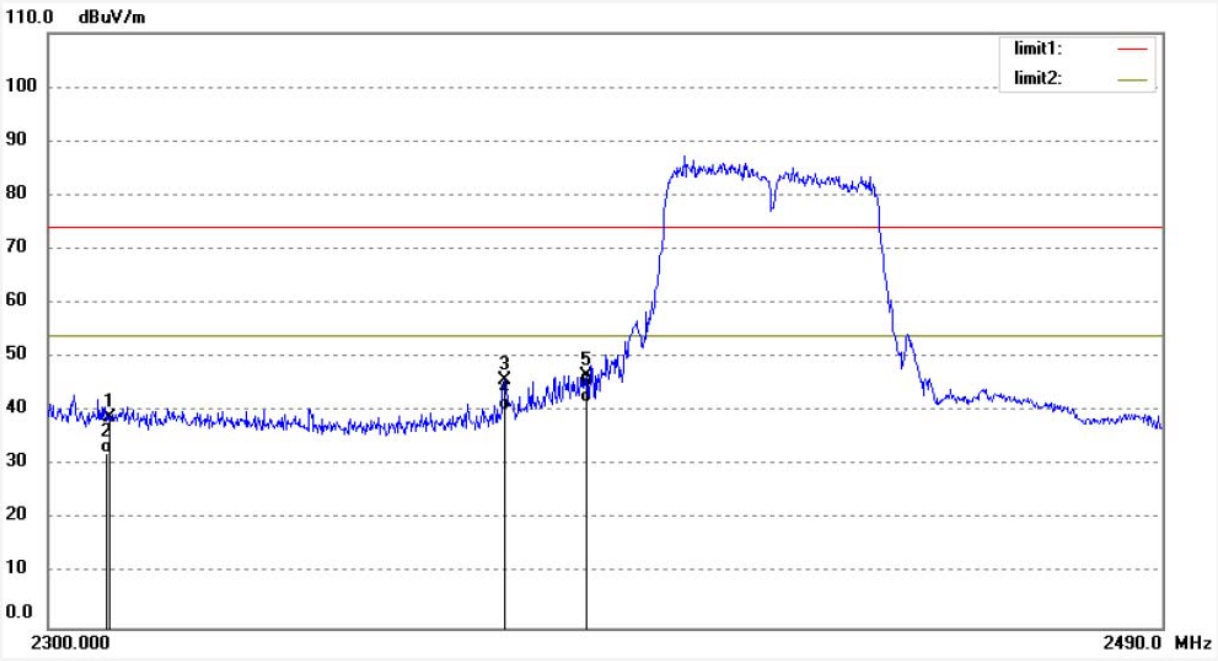
Job No.: Star_tmp #394	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 5V
Test item: Radiation Test	Date: 13/02/04/
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 4/25/04
EUT: WiFi Bridge	Engineer Signature:
Mode: TX Channel 3(802.11n)40MHz	Distance: 3m
Model: VAP11N	
Manufacturer: HouTian	

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	46.60	-7.81	38.79	74.00	-35.21	peak			
2	2310.000	40.02	-7.81	32.21	54.00	-21.79	AVG			
3	2376.046	53.47	-7.62	45.85	74.00	-28.15	peak			
4	2376.046	48.02	-7.62	40.40	54.00	-13.60	AVG			
5	2390.000	54.18	-7.53	46.65	74.00	-27.35	peak			
6	2390.000	49.32	-7.53	41.79	54.00	-12.21	AVG			

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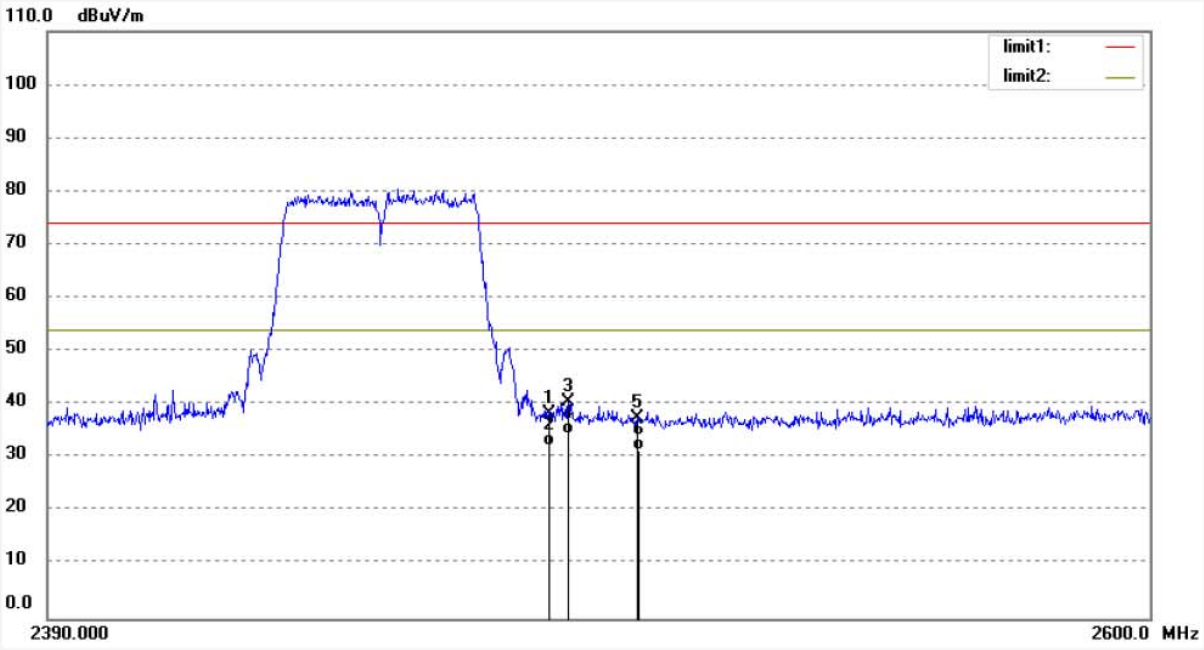
Job No.: Star_tmp #392
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 9(802.11n)40MHz
Model: VAP11N
Manufacturer: HouTian

Polarization: Horizontal
Power Source: DC 5V
Date: 13/02/04/
Time: 4/22/19
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.82	-7.37	38.45	74.00	-35.55	peak			
2	2483.500	39.64	-7.37	32.27	54.00	-21.73	AVG			
3	2487.116	47.91	-7.38	40.53	74.00	-33.47	peak			
4	2487.116	41.90	-7.38	34.52	54.00	-19.48	AVG			
5	2500.000	44.83	-7.40	37.43	74.00	-36.57	peak			
6	2500.000	38.97	-7.40	31.57	54.00	-22.43	AVG			

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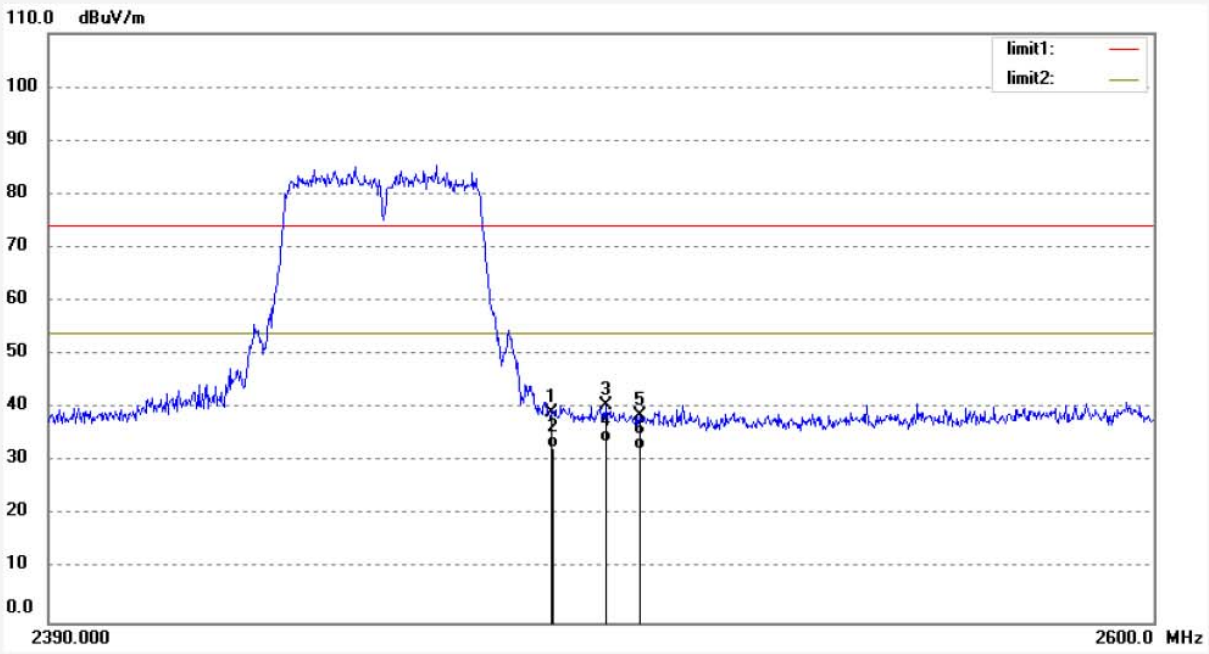
Job No.: Star_tmp #393
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: WiFi Bridge
Mode: TX Channel 9(802.11n)40MHz
Model: VAP11N
Manufacturer: HouTian

Polarization: Vertical
Power Source: DC 5V
Date: 13/02/04/
Time: 4/23/32
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20130181

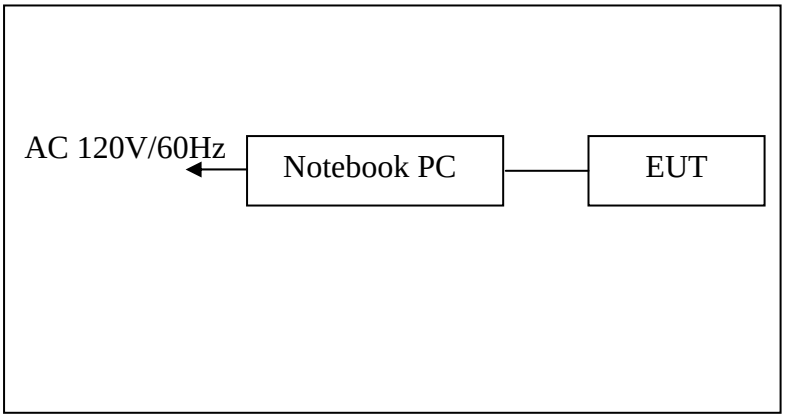


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	46.57	-7.37	39.20	74.00	-34.80	peak			
2	2483.500	40.08	-7.37	32.71	54.00	-21.29	AVG			
3	2493.631	47.82	-7.39	40.43	74.00	-33.57	peak			
4	2493.631	41.08	-7.39	33.69	54.00	-20.31	AVG			
5	2500.000	46.05	-7.40	38.65	74.00	-35.35	peak			
6	2500.000	39.62	-7.40	32.22	54.00	-21.78	AVG			

9. RADIATED SPURIOUS EMISSION TEST

9.1.Block Diagram of Test Setup

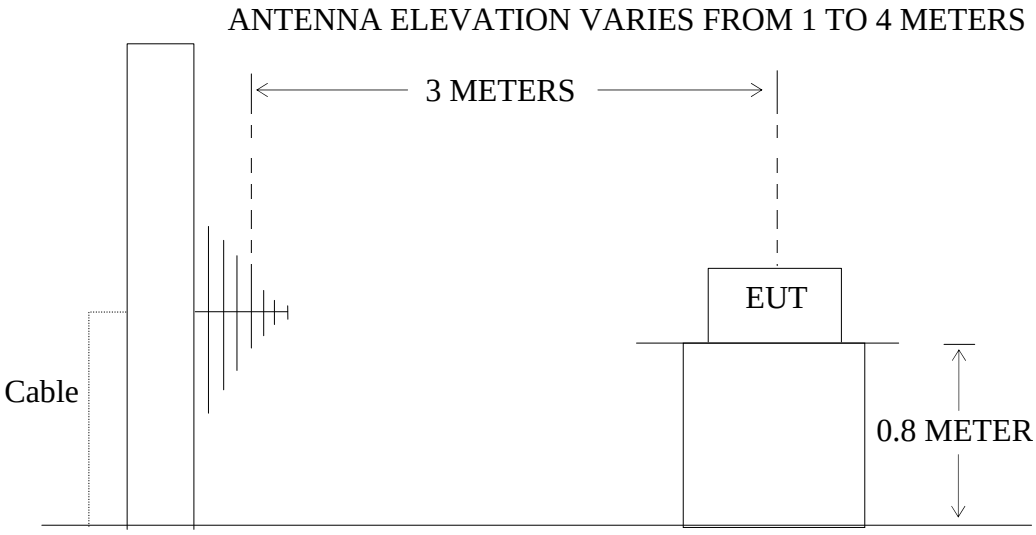
9.1.1.Block diagram of connection between the EUT and peripherals



Setup: Transmitting mode

(EUT: WiFi Bridge)

9.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: WiFi Bridge)

9.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, 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).

9.3.Restricted bands of operation

9.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510

[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

9.4. Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4.1. WiFi Bridge (EUT)

Model Number	:	VAP11N
Serial Number	:	N/A
Manufacturer	:	Shenzhen HouTian Network Communication Technology Co., Ltd.

9.5. Operating Condition of EUT

9.5.1. Setup the EUT and simulator as shown as Section 9.1.

9.5.2. Turn on the power of all equipment.

9.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

9.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.
The worst-case data rate for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and 150Mbps for 802.11n mode, based on previous with 802.11 WLAN product design architectures.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9kHz to 25GHz is checked.
The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:
Result = Reading + Corrected Factor
Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

9.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11b Channel Low 2412MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
117.6815	25.36	13.68	39.04	43.50	-4.46	Vertical
340.0473	20.14	18.04	38.18	46.00	-7.82	
590.3511	15.30	23.47	38.77	46.00	-7.23	
117.6815	28.20	1368	41.88	43.50	-1.62	Horizontal
354.6912	25.77	18.43	44.20	46.00	-1.80	
827.1795	16.52	27.20	43.72	46.00	-2.28	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11b Channel Middle 2437MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
117.6814	25.68	13.68	39.36	43.50	-4.14	Vertical
331.7857	20.32	17.79	38.11	46.00	-7.89	
117.6814	27.86	13.68	41.54	43.50	-1.96	Horizontal
210.1294	24.83	14.26	39.09	43.50	-4.41	
343.6505	23.55	18.19	41.74	46.00	-4.26	
827.1794	15.77	27.20	42.97	46.00	-3.03	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11b Channel High 2462MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
117.6815	25.72	13.68	39.40	43.50	-4.10	Vertical
337.6661	21.42	17.95	39.37	46.00	-6.63	
117.6815	27.91	13.68	41.59	43.50	-1.91	Horizontal
203.5886	24.68	14.13	38.81	43.50	-4.69	
338.8546	22.57	17.99	40.56	46.00	-5.44	
827.1795	16.26	27.20	43.46	46.00	-2.54	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11g Channel Low 2412MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
117.9814	25.73	13.68	39.41	43.50	-4.09	Vertical
340.0473	20.41	18.04	38.45	46.00	-7.55	
117.9814	26.98	13.68	40.66	43.50	-2.84	Horizontal
201.4539	24.35	14.07	38.42	43.50	-5.08	
341.2441	23.22	18.09	41.31	46.00	-4.69	
827.1794	15.09	27.20	42.29	46.00	-3.71	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11g Channel Middle 2437MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
117.6815	26.85	13.68	40.53	43.50	-2.97	Vertical
335.3016	20.27	17.86	38.13	46.00	-7.87	
117.6815	28.14	13.68	41.82	43.50	-1.68	Horizontal
203.5886	24.32	14.13	38.45	43.50	-5.05	
344.8602	22.92	18.24	41.16	46.00	-4.84	
478.1394	22.54	20.96	43.50	46.00	-2.50	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

Date of Test:	February 4, 2013	Temperature:	25°C
EUT:	WiFi Bridge	Humidity:	50%
Model No.:	VAP11N	Power Supply:	DC 5V (Power By PC)
Test Mode:	802.11g Channel High 2462MHz	Test Engineer:	Pei

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
117.6814	26.40	13.68	40.08	43.50	-3.42	Vertical
332.9534	20.17	17.81	37.98	46.00	-8.02	
117.6815	27.93	13.68	41.61	43.50	-1.89	Horizontal
202.1630	24.32	14.09	38.41	43.50	-5.09	
337.6661	23.12	17.95	41.07	46.00	-4.93	
590.3511	20.66	23.47	44.13	46.00	-1.87	

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.