NetView Technologies (Shenzhen) Co., Ltd.

FCC ID: Z92NI-1200

RADIO TEST REPORT

Prepared By :	NetView Technologies (Shenzhen) Co., Ltd.
Product Name:	NETVUE
Model : Brand Name:	NI-1200 NETVIEW
Prepared By : Test Date :	NetView Technologies (Shenzhen) Co., Ltd. Oct 27, 2011~ Nov 16, 2011
Test Standards:	FCC Part 15 Subpart C, Paragraph 15.247
Report No.: Date of Report :	BATT20111027RF-4-01 Nov 16, 2011
Prepared For:	SHENZHEN BATT TESTING TECHNOLOGY CO.,LTD. 11F,Bldg.B,Xinbaoyuan,Xinanhu Commercial city, Bao'an District,Shenzhen,Guangdong,China

Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAS-LAB Code: L3503

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 607248

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: **607248**

IC- Registration No.: IC8058A-01

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: **8058A-01**.

Test Report Conclusion

Content

1.0	**General Details** ……	4
1.1	Test Lab Details……	4
1.2	Applicant Details……	4
1.3	Description of EUT ……	4
1.4	Submitted Sample……	5
1.5	Test Duration……	5
1.6	Test Uncertainty……	5
1.7	Test By……	5
2.0	**List of Measurement Equipment**……	7
3.0	**Technical Details**……	8
3.1	Description of test modes……	8
3.2	Summary of Test Results……	9
3.3	Test Standards……	9
4.0	EUT Modification……	9
5.0	Power Line Conducted Emission Test……	10
5.1	Schematics of the Test……	10
5.2	Test Method and Test Procedure……	10
5.3	Configuration of the EUT……	10
5.4	EUT Operating Condition……	11
5.5	Conducted Emission Limit……	11
5.6	Test Result……	11
6.0	**Radiated Emission test**……	14
6.1	Test Method and Test Procedure……	14
6.2	Configuration of the EUT……	14
6.3	EUT Operation Condition……	14
6.4	Radiated Emission Limit……	15
7.0	6dB Bandwidth Measurement……	39
8.0	Maximum Peak Output Power……	56
9.0	Power Spectral Density Measurement……	58
10.0	Out of Band Measurement……	72
11.0	Antenna Requirement……	82
12.0	RF Exposure……	83
13.0	FCC ID Label……	85
14.0	Photo of Test Setup and EUT View……	86

1.0 General Details

1.1 Test Lab Details

Name : SHENZHEN BATT TESTING TECHNOLOGY CO.,LTD.

Address: Room B1104,Bldg.B,Xinbaoyuan,Xinanhu Commercialcity,Bao'anDistrict,Shenzhen, Guangdong, China.

Telephone: +86(755) 27754004 Fax: +86 (755) 27754182

Http://www.batt-lab.com

Name : Anbotek Compliance Laboratory Limited

Address: 1/F，1/Building, SEC Industrial Park, Qianhai Road, Nanshan District, Shenzhen , China

Telephone: +86(755)-26066365 Fax: +86(755)-26014772

Site on File with the Federal Communications Commission – United Sates

Registration Number: 607248

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: IC8058A-01

For 3m & 10 m OATS

1.2 Applicant Details

Applicant: NetView Technologies (Shenzhen) Co., Ltd.

Address: RM 2901, East Tower, Nanshan Software Park (Nanshan Digital Culture Industry Base), Nanshan District, Shenzhen, Guangdong Province, PRC

Telephone: +86-755-8660 7399

Fax: +82-755-8660 7322

1.3 Description of EUT

Product:	NETVUE
Manufacturer:	NetView Technologies (Shenzhen) Co., Ltd.
Brand Name:	NETVIEW
Model Number:	NI-1200
Additional model number:	N/A
Power Source Adapter	Model:FJ-SW1201000U Input: AC 100-240V～,50/60Hz, 0.35A Output: DC 12.0V, 1.0A.
Type of Modulation	802.11b： CCK,DQPSK,DBPSK; 802.11g OFDM; 802.11n： OFDM with PSK,BPSK,16-QAM,64-QAM
Frequency range	2422-2452 MHz for 802.11n HT40 and 2412-2462MHz for 802.11b/g, 802.11n HT20
Antenna Designation:	PCB Printed antenna. The maximum Gain of antennas is 2.0dBi.
Frequency Selection	By software
Channel Number	7 for 802.11n HT40 and 11 channels for 802.11b/g, 802.11n HT20

1.4 Submitted Sample: 1 Sample

1.5 Test Duration
2011-10-27 to 2011-11-16

1.6 Test Uncertainty
Conducted Emissions Uncertainty =3.6dB
Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by _____

Print Name: Jones Song

2.0	Test Equipments				
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESCI Test Receiver	ROHDE&SCHWARZ	ESCI	100035	2011-04-26	2012-04-25
Absorbing Clamp	ROHDE&SCHWARZ	MDS-21	100126	2011-04-26	2012-04-25
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100294	2011-04-26	2012-04-25
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100253	2011-04-26	2012-04-25
Ultra Broadband ANT	ROHDE&SCHWARZ	HL562	100157	2011-04-26	2012-04-25
ESDV Test Receiver	ROHDE&SCHWARZ	ESDV	100008	2011-04-26	2012-04-25
4-WIRE ISN	ROHDE&SCHWARZ	ENY 41	830663/044	2011-04-26	2012-04-25
GG ENY22 Double 2-Wire ISN	ROHDE&SCHWARZ	ENY22	83066/016	2011-04-26	2012-04-25
Impuls-Begrenzer	ROHDE&SCHWARZ	ESH3-Z2	100281	2011-04-26	2012-04-25
System Controller	CT	SC100	-	2011-04-26	2012-04-25
Printer	EPSON	PHOTO EX3	CFNH234850	2011-04-26	2012-04-25
FM-AM Signal Generator	JUNGJIN	SG-150M	389911177	2011-04-26	2012-04-25
Color TV Pattern Generator	PHILIPS	PM5418	LO621747	2011-04-26	2012-04-25
Computer	IBM	8434	1S8434KCE99BLX LO*	-	-
Oscillator	KENWOOD	AG-203D	3070002	2011-04-26	2012-04-25
Spectrum Analyzer	HAMEG	HM5012	-	-	-
Power Supply	LW	APS1502	-	-	-
5K VA AC Power Source	California Instruments	5001iX	56060	2011-04-26	2012-04-25
CDN	EM TEST	CDN M2/M3	-	2011-04-26	2012-04-25
Attenuation	EM TEST	ATT6/75	-	2011-04-26	2012-04-25
Resistance	EM TEST	R100	-	2011-04-26	2012-04-25
Electromagnetic Injection Clamp	LITTHI	EM101	35708	2011-04-26	2012-04-25

Inductive Components	EM TEST	MC2630	-	2011-04-26	2012-04-25
Antenna	EM TEST	MS100	-	2011-04-26	2012-04-25
Signal Generator	ROHDE&SCHWARZ	SMT03	100029	2011-04-26	2012-04-25
Power Amplifier	AR	150W1000	300999	2011-04-26	2012-04-25
Field probe	Holaday	HI-6005	105152	2011-04-26	2012-04-25
Bilog Antenna	Chase	CBL6111C	2576	2011-04-26	2012-04-25
Loop Antenna	EMCO	6502	00042960	2011-04-26	2012-04-25
ESPI Test Receiver	ROHDE&SCHWARZ	ESI26	838786/013	2011-04-26	2012-04-25
3m OATS	--	--	N/A	2011-04-26	2012-04-25

3.0 Technical Details

3.1 Description of test modes

IEEE 802.11b, 802.11g, 802.11n HT20mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11n HT40mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2422
Middle	2437
High	2452

IEEE 802.11b mode : 1Mbps data rate (worst case) were chosen for full testing. IEEE 802.11g mode : 6Mbps data rate (worst case) were chosen for full testing. IEEE 802.11n HT20 mode : 65Mbps data rate (worst case) were chosen for full testing. IEEE 802.11n HT40 mode : 135Mbps data rate (worst case) were chosen for full testing.

The worst-case data rates are determined according to the description above, based on the investigations by measuring the PSD and average power across all the data rates, bandwidths, modulations and spatial stream modes.

3.2 Summary of test results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

3.3 Test Standards

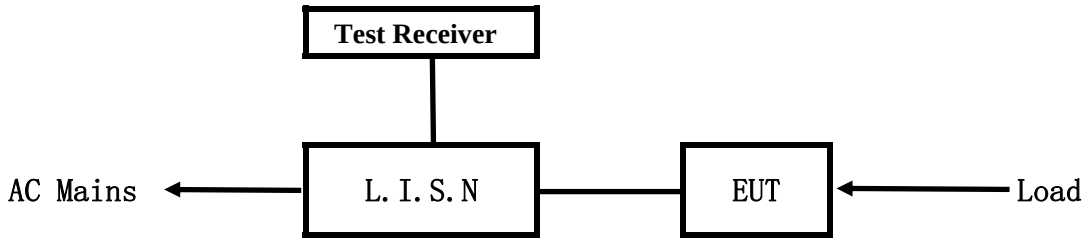
FCC Part 15 Subpart & Subpart C, Paragraph 15.247

4.0 EUT Modification

No modification by SHENZHEN BATT TESTING TECHNOLOGY CO.,LTD.

5.0 Power Line Conducted Emission Test

5.1 Schematics of the test



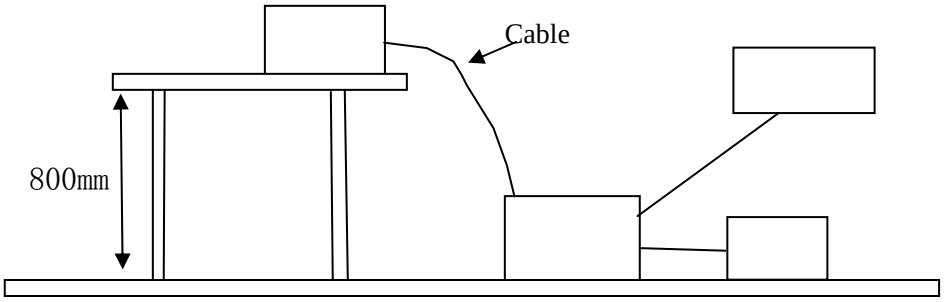
EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2009.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2009.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2003. All interface ports were connected to the

appropriate peripherals. All peripherals and cables are listed below.

A. EUT

Device	Manufacturer	Model	FCC ID
NETVUE	NetView Technologies (Shenzhen) Co., Ltd.	NI-1200	Z92NI-1200

B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable
U-disk	Netac	U208	FCC DOC	--
Monitor	SAMSUNG	P2450	FCC DOC	Data cable of 1.5m length

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2009.

A Setup the EUT and simulators as shown on follow

B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency (MHz)	Class A Limits (dB μ V)		Class B Limits (dB μ V)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ～ 0.50	79.0	66.0	66.0～56.0*	56.0～46.0*
0.50 ～ 5.00	73.0	60.0	56.0	46.0
5.00 ～ 30.00	73.0	60.0	60.0	50.0

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

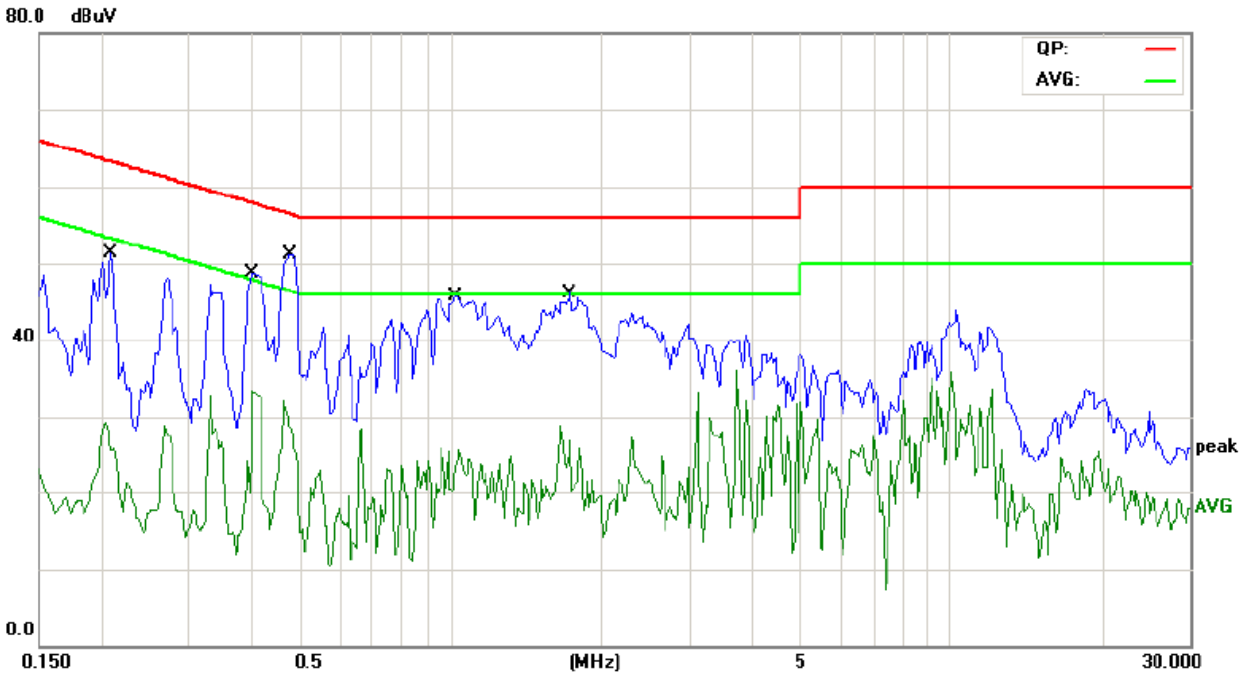
Note: the worse cases was selected to conducted the test

A Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT set Condition: **Ping Wireless Network, Full Load**

Results: **Pass**

Please refer to following diagram for individual



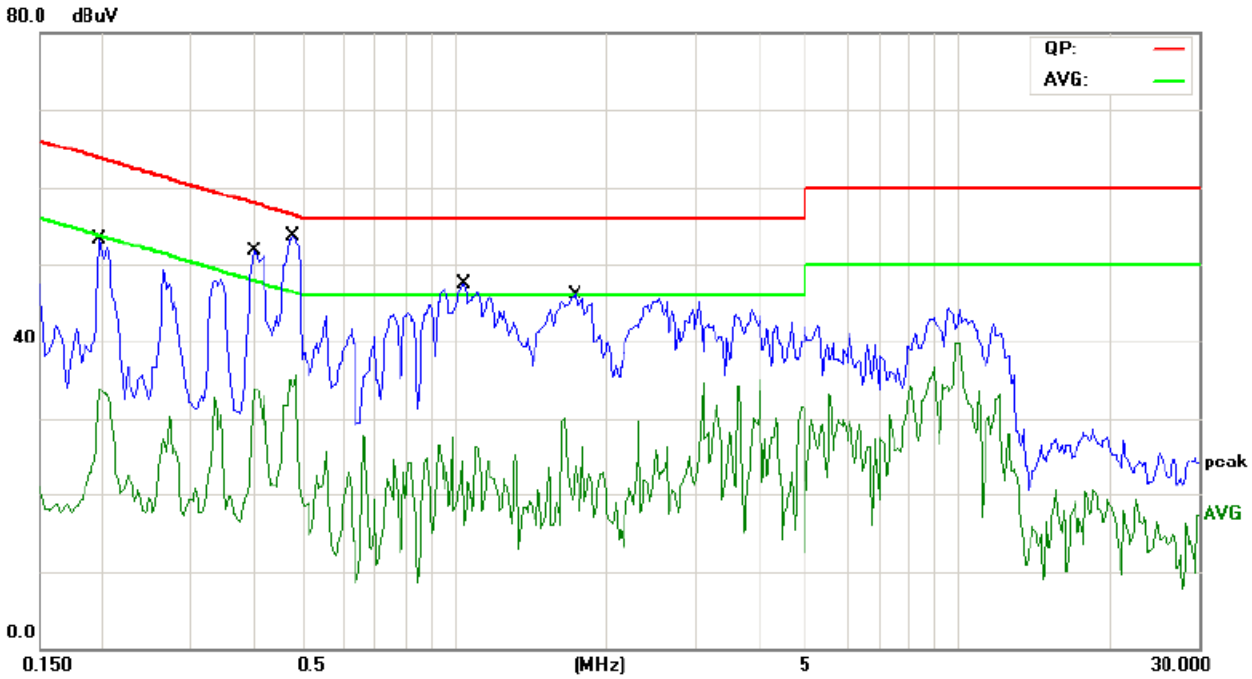
Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Line		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.208	43.71	27.44	--	--	63.26	53.26
0.400	45.52	29.81	--	--	57.85	47.85
0.478	46.24	29.35	--	--	56.37	46.37
1.025	39.36	19.56	--	--	56.00	46.00
1.728	39.70	21.22	--	--	56.00	46.00

B **Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)**

EUT set Condition: **Ping Wireless Network, Full Load**

Results: **Pass**

Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.196	--	--	44.77	28.85	63.74	53.74
0.400	--	--	47.99	32.52	57.85	47.85
0.478	--	--	49.02	32.55	56.37	46.37
1.044	--	--	39.64	18.36	56.00	46.00
1.735	--	--	39.92	19.92	56.00	46.00

6.0 Radiated Emission Test

6.1 Test Method and test Procedure:

(1) The EUT was tested according to ANSI C63.4 –2009. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No. 607248

(2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2009.

(3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK detector. Measurements were made at 3 meters.

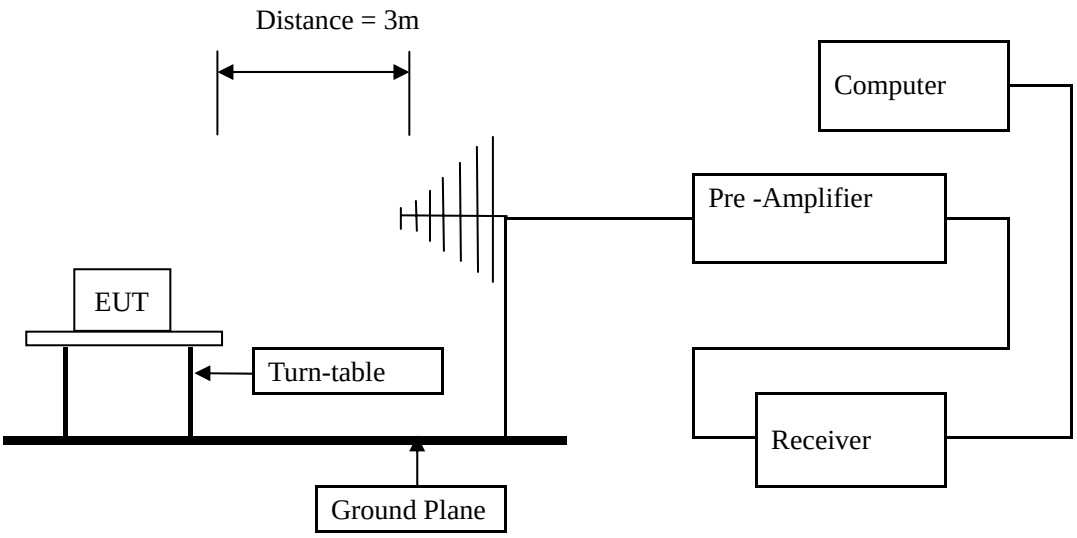
(4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.

(5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "**QP**" in the data table.

(6) The antenna polarization : Vertical polarization and Horizontal polarization.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



6.2 Configuration of The EUT

Same as section 5.3 of this report

6.3 EUT Operating Condition

Same as section 5.4 of this report.

6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109

Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
0.009-0.490	3	20log 2400/F (kHz) + 80
0.490-1.705	3	20log 24000/F (kHz) + 40
1.705-30	3	20log 30 + 40
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the higher limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep transmitting，Full Load

Results: **Pass**

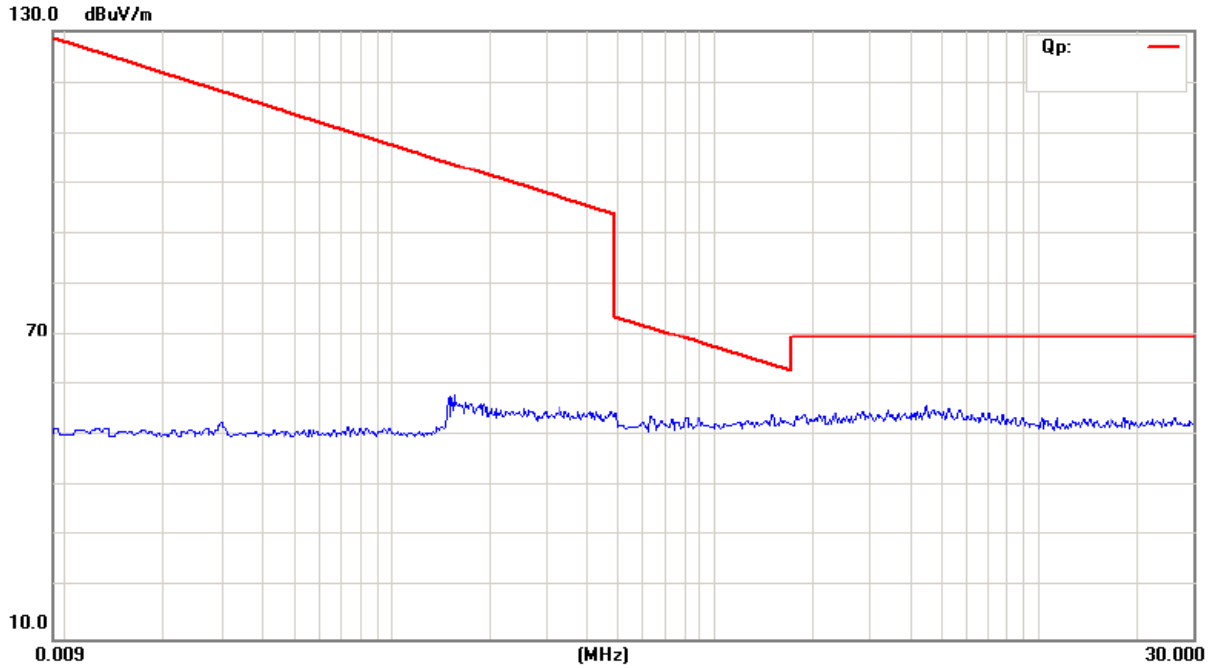
Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
63.046	36.01	H	40.00
94.313	37.40	H	43.50
220.723	36.24	H	46.00
346.853	42.40	H	46.00
636.493	42.11	H	46.00
		H	46.00
33.887	35.82	V	40.00
63.046	36.80	V	40.00
94.313	39.28	V	43.50
119.418	39.60	V	43.50
183.567	38.42	V	43.50

Radiated Emission from 0.009MHz-30MHz

EUT set Condition: Keep transmitting，Full Load

Results: Pass

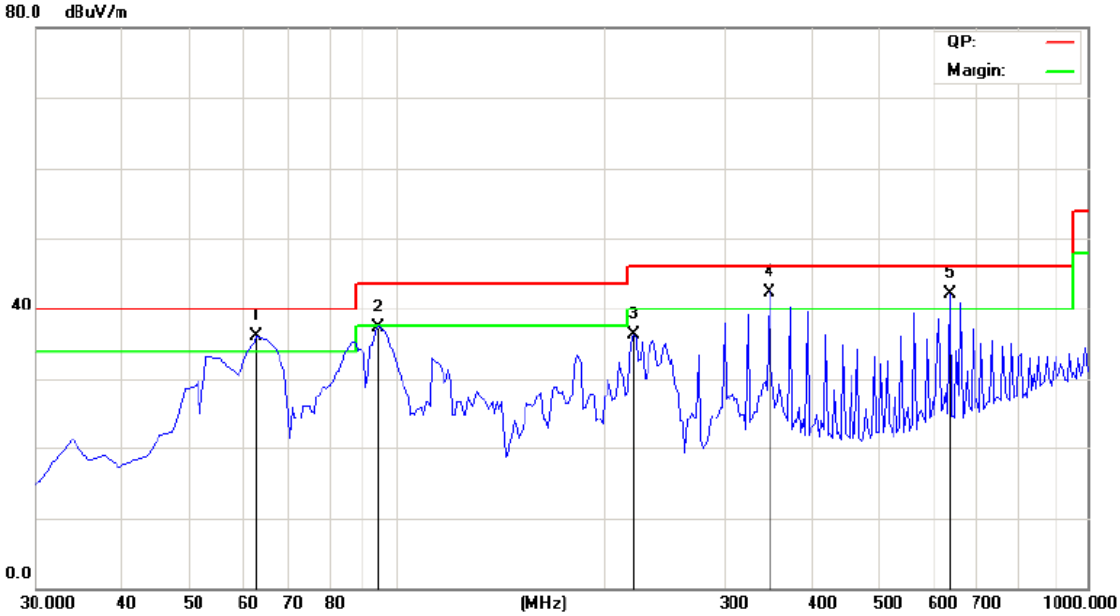
Please refer to following diagram for individual



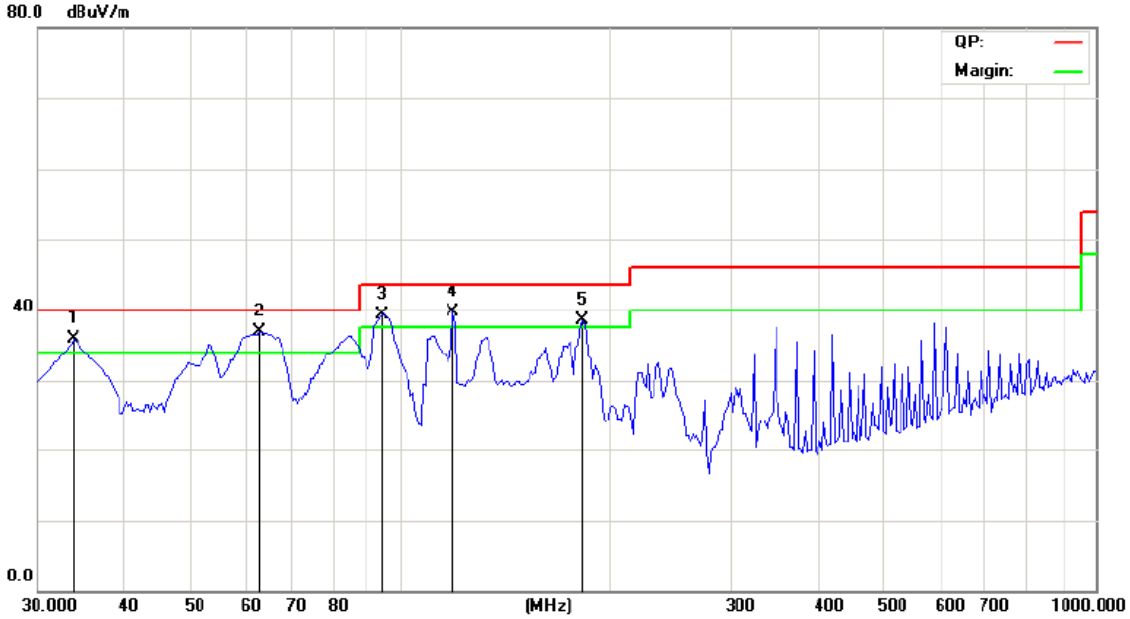
Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
--	--	--	--

Test Figure:

Horizontal



Vertical



Operation Mode: Keep Transmitting in CH01 at 6Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2412.00	87.13（PK）	H	Fundamental Frequency
2412.00	100.24（PK）	V	
4824.00	48.32（PK）	H	74(Peak)/ 54(AV)
4824.00	49.63（PK）	V	74(Peak)/ 54(AV)
7236.00	--	H/V	74(Peak)/ 54(AV)
9648.00	--	H/V	74(Peak)/ 54(AV)
12060	--	H/V	74(Peak)/ 54(AV)
14472	--	H/V	74(Peak)/ 54(AV)
16884	--	H/V	74(Peak)/ 54(AV)
19296	--	H/V	74(Peak)/ 54(AV)
21708	--	H/V	74(Peak)/ 54(AV)
24120	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11g mode 6Mbps

Operation Mode: Keep Transmitting in CH06 at 6Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2437.00	90.89（PK）	H	Fundamental Frequency
2437.00	98.72（PK）	V	
4874.00	47.53（PK）	H	74(Peak)/ 54(AV)
4874.00	49.70（PK）	V	74(Peak)/ 54(AV)
7311.00	--	H/V	74(Peak)/ 54(AV)
9748.00	--	H/V	74(Peak)/ 54(AV)
12185	--	H/V	74(Peak)/ 54(AV)
14622	--	H/V	74(Peak)/ 54(AV)
17059	--	H/V	74(Peak)/ 54(AV)
19496	--	H/V	74(Peak)/ 54(AV)
21933	--	H/V	74(Peak)/ 54(AV)
24370	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11g mode 6Mbps

Operation Mode: Keep Transmitting in CH11 at 6Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2462.00	99.03（PK）	V	Fundamental Frequency
2462.00	92.93（PK）	H	
4924	45.69（PK）	H	74(Peak)/ 54(AV)
4924	48.72（PK）	V	74(Peak)/ 54(AV)
7368	--	H/V	74(Peak)/ 54(AV)
9848	--	H/V	74(Peak)/ 54(AV)
12310	--	H/V	74(Peak)/ 54(AV)
14772	--	H/V	74(Peak)/ 54(AV)
17234	--	H/V	74(Peak)/ 54(AV)
19696	--	H/V	74(Peak)/ 54(AV)
22158	--	H/V	74(Peak)/ 54(AV)
24650	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

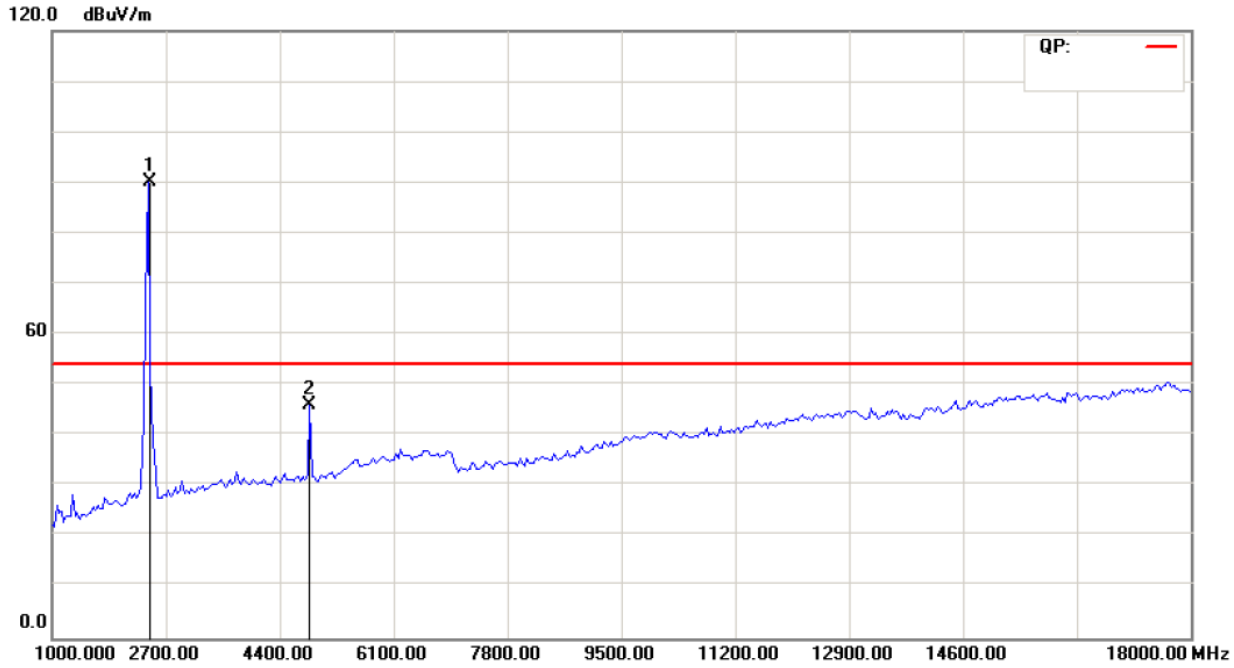
3. For 802.11g mode at 6Mbps

Please refer to the following test plots for details:

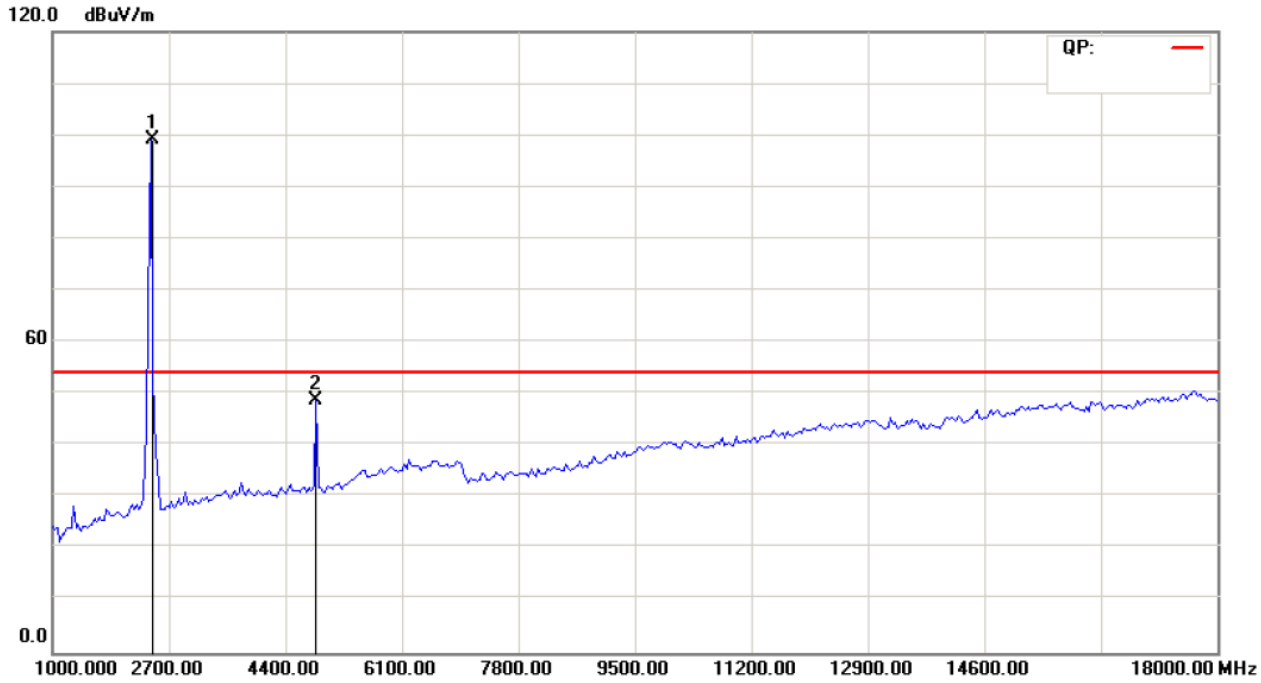
Suprious emission in restricted band: 802.11 g Mode at 6MHz

Frequency (MHz)	Level (dBuV/m)	Detecter (PK/AV)	Antenna Polarity	Limit (dBuV/m)	Comment
Low Channel(2412MHz)					
2390.00	54.54	PK	H	74	Spurious
2390.00	44.01	AV	H	54	Spurious
2390.00	56.75	PK	V	74	Spurious
2390.00	45.68	AV	V	54	Spurious
High Channel (2462MHz)					
2483.50	56.57	PK	H	74	Spurious
2483.50	48.43	AV	H	54	Suprious
2483.50	55.83	PK	V	74	Suprious
2483.50	46.52	AV	V	54	Suprious

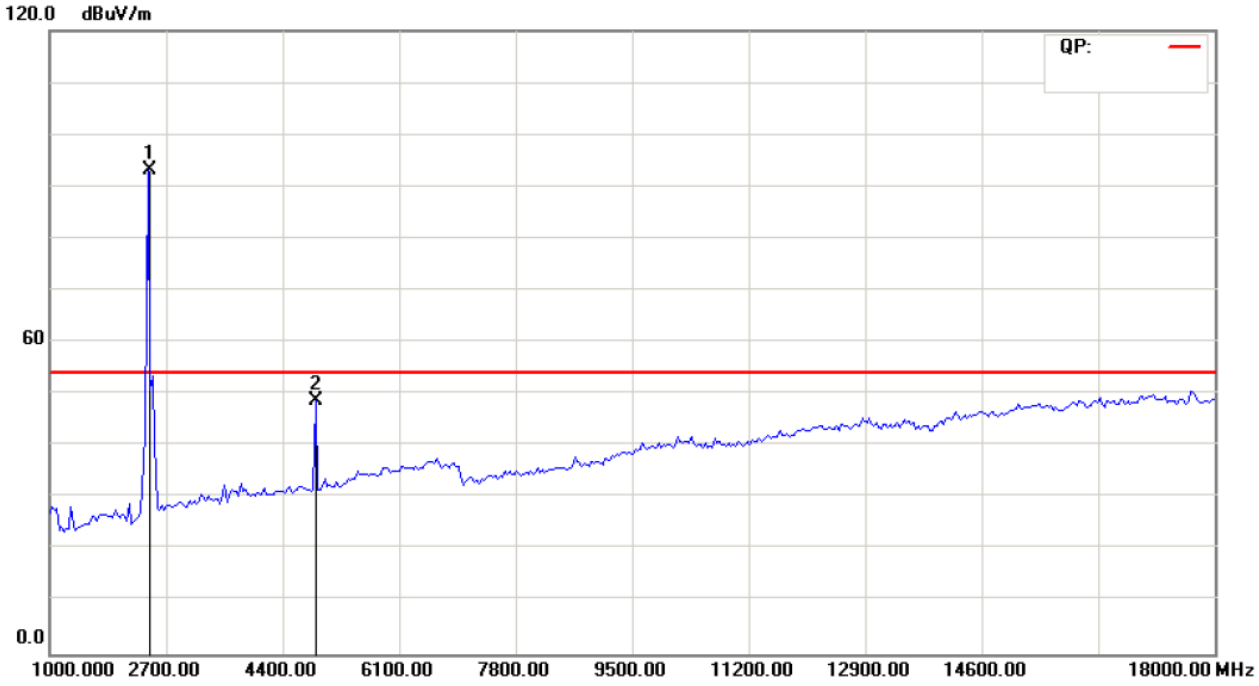
CH01 at 6Mbps: Horizontal



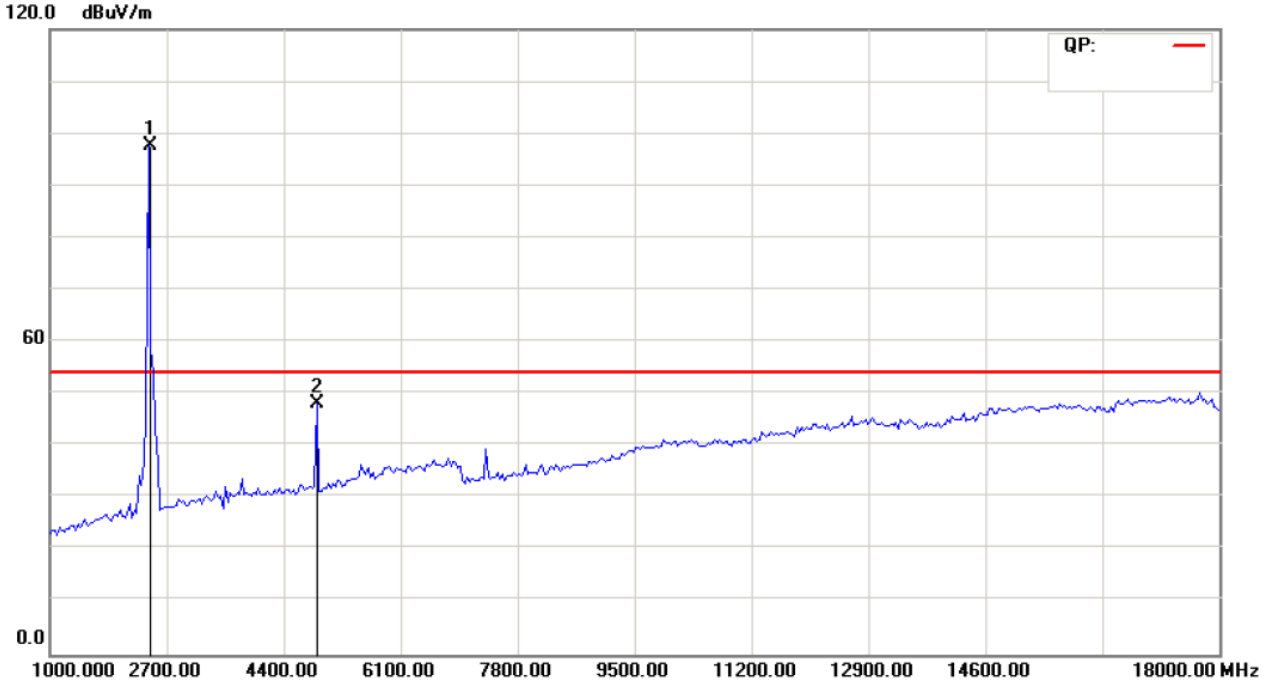
CH01 at 6Mbps: Vertical



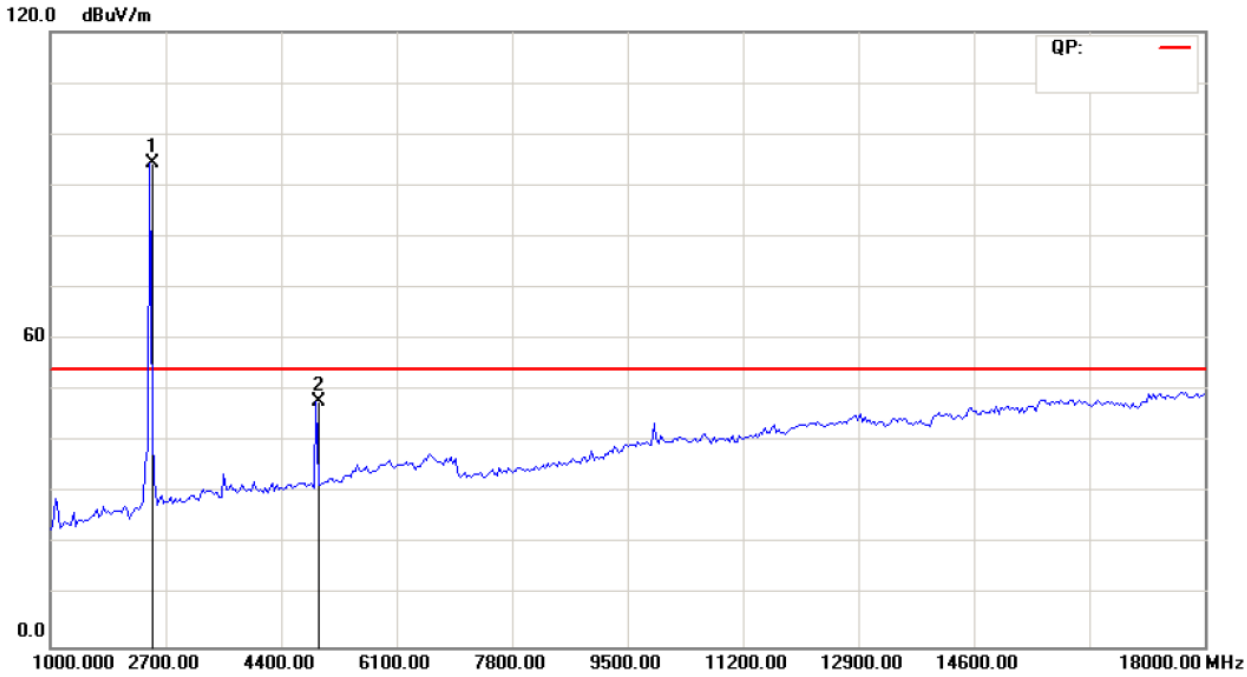
CH06 at 6Mbps: Horizontal



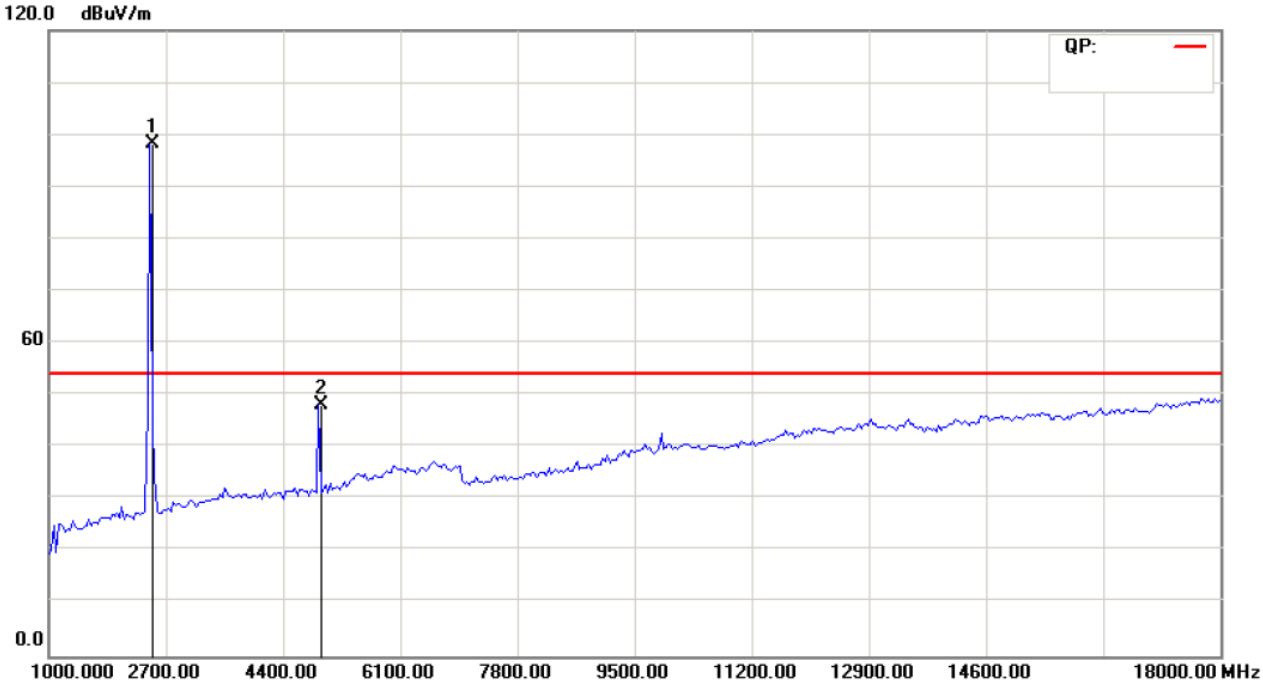
CH06 at 6Mbps: Vertical



CH11 at 6Mbps: Horizontal



CH11at 6Mbps: Vertical



Note: For the radiated emissions from 18GHz-25GHz, it is the floor noise that meets the requirement of FCC rule.

Operation Mode: Keep Transmitting in CH01 at 1Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2412.00	93.05 (PK)	H	Fundamental Frequency
2412.00	100.12 (PK)	V	
4824.00	46.93 (PK)	H	74(Peak)/ 54(AV)
4824.00	50.17 (PK)	V	74(Peak)/ 54(AV)
7236.00	--	H/V	74(Peak)/ 54(AV)
9648.00	--	H/V	74(Peak)/ 54(AV)
12060	--	H/V	74(Peak)/ 54(AV)
14472	--	H/V	74(Peak)/ 54(AV)
16684	--	H/V	74(Peak)/ 54(AV)
19296	--	H/V	74(Peak)/ 54(AV)
21708	--	H/V	74(Peak)/ 54(AV)
24120	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11b mode 1Mbps

Operation Mode: Keep Transmitting in CH06 at 1Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2437.00	91.67(PK)	H	Fundamental Frequency
2437.00	100.10 (PK)	V	
4874.00	46.75(PK)	H	74(Peak)/ 54(AV)
4874.00	49.84(PK)	V	74(Peak)/ 54(AV)
7311.00	--	H/V	74(Peak)/ 54(AV)
9748.00	--	H/V	74(Peak)/ 54(AV)
12185	--	H/V	74(Peak)/ 54(AV)
14622	--	H/V	74(Peak)/ 54(AV)
17059	--	H/V	74(Peak)/ 54(AV)
19496	--	H/V	74(Peak)/ 54(AV)
21933	--	H/V	74(Peak)/ 54(AV)
24370	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11b mode **1Mbps**

Operation Mode: Keep Transmitting in CH11 at 1Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2462.00	91.87(PK)	H	Fundamental Frequency
2462.00	99.64(PK)	V	
4924	46.46(PK)	H	74(Peak)/ 54(AV)
4924	49.23(PK)	V	74(Peak)/ 54(AV)
7368	--	H/V	74(Peak)/ 54(AV)
9848	--	H/V	74(Peak)/ 54(AV)
12310	--	H/V	74(Peak)/ 54(AV)
14772	--	H/V	74(Peak)/ 54(AV)
17234	--	H/V	74(Peak)/ 54(AV)
19696	--	H/V	74(Peak)/ 54(AV)
22158	--	H/V	74(Peak)/ 54(AV)
24650	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

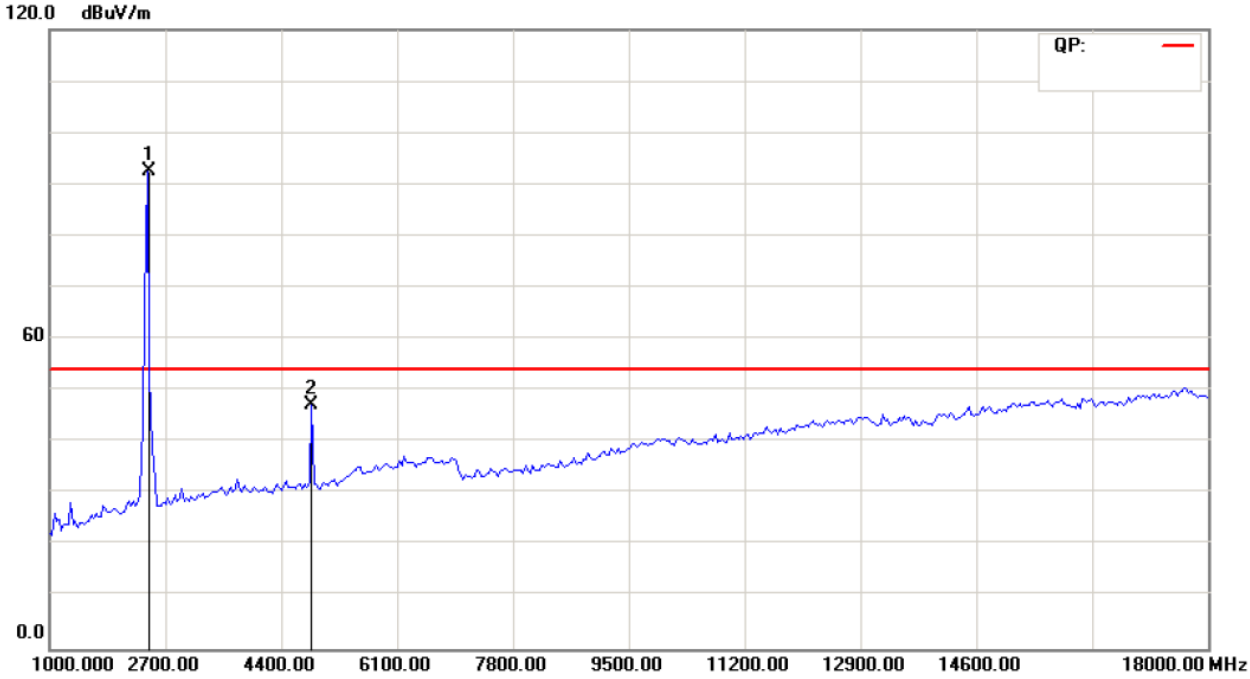
3. For 802.11b mode at **1Mbps**

Please refer to the following test plots for details:

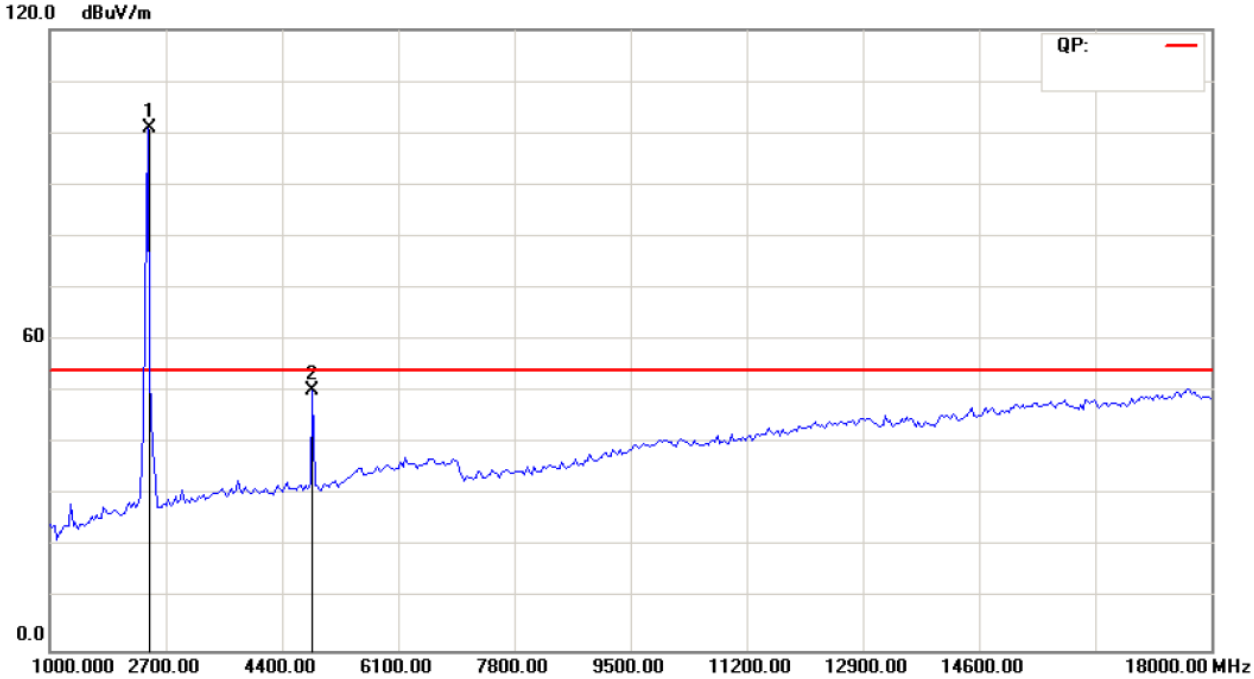
Suprious emission in restricted band: 802.11 b Mode at 1MHz

Frequency (MHz)	Level (dBuV/m)	Detecter (PK/AV)	Antenna Polarity	Limit (dBuV/m)	Comment
Low Channel(2412MHz)					
2390.00	46.42	PK	H	74	Suprious
2390.00	40.75	AV	H	54	Suprious
2390.00	47.36	PK	V	74	Suprious
2390.00	41.85	AV	V	54	Suprious
High Channel (2462MHz)					
2483.50	46.57	PK	H	74	Suprious
2483.50	38.43	AV	H	54	Suprious
2483.50	52.83	PK	V	74	Suprious
2483.50	46.52	AV	V	54	Suprious

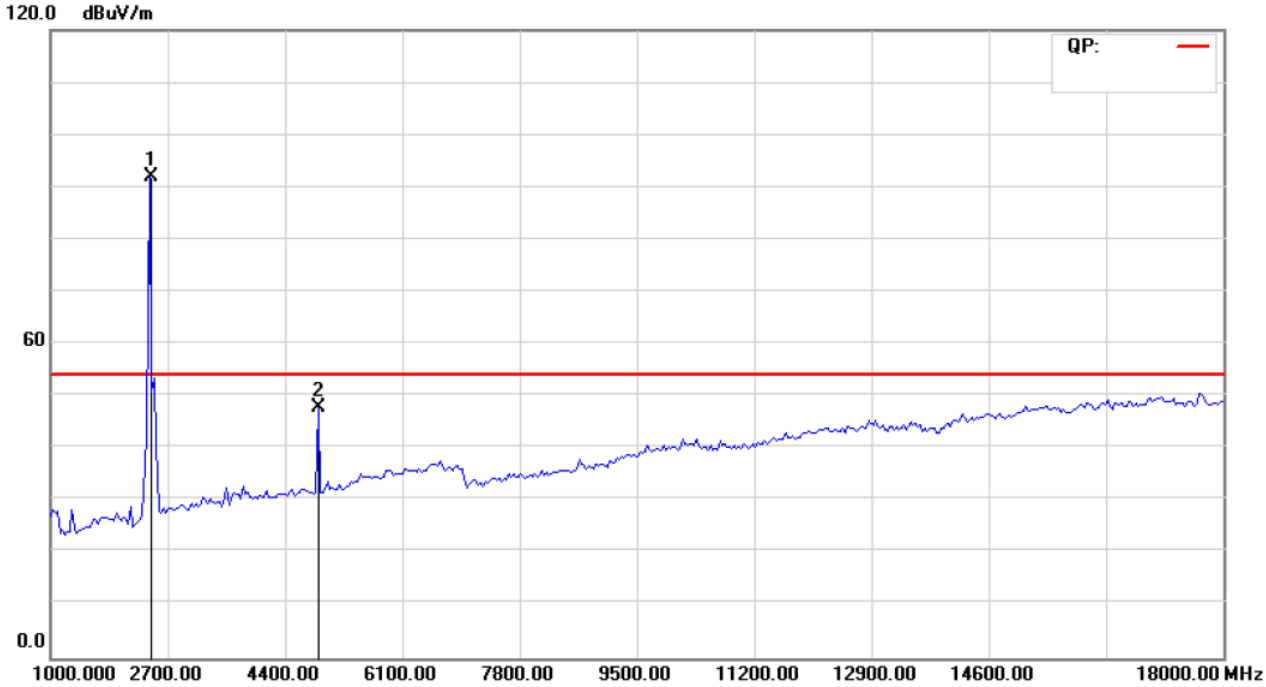
CH01 at 1Mbps: Horizontal



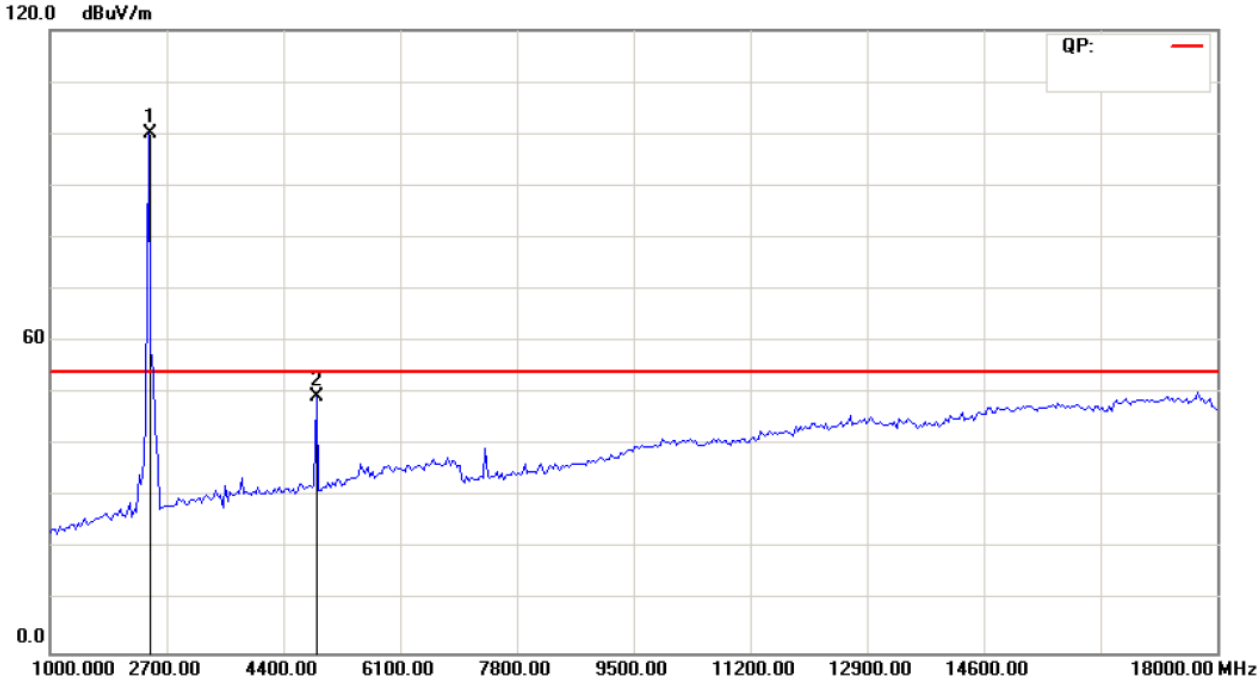
CH01 at 1Mbps: Vertical



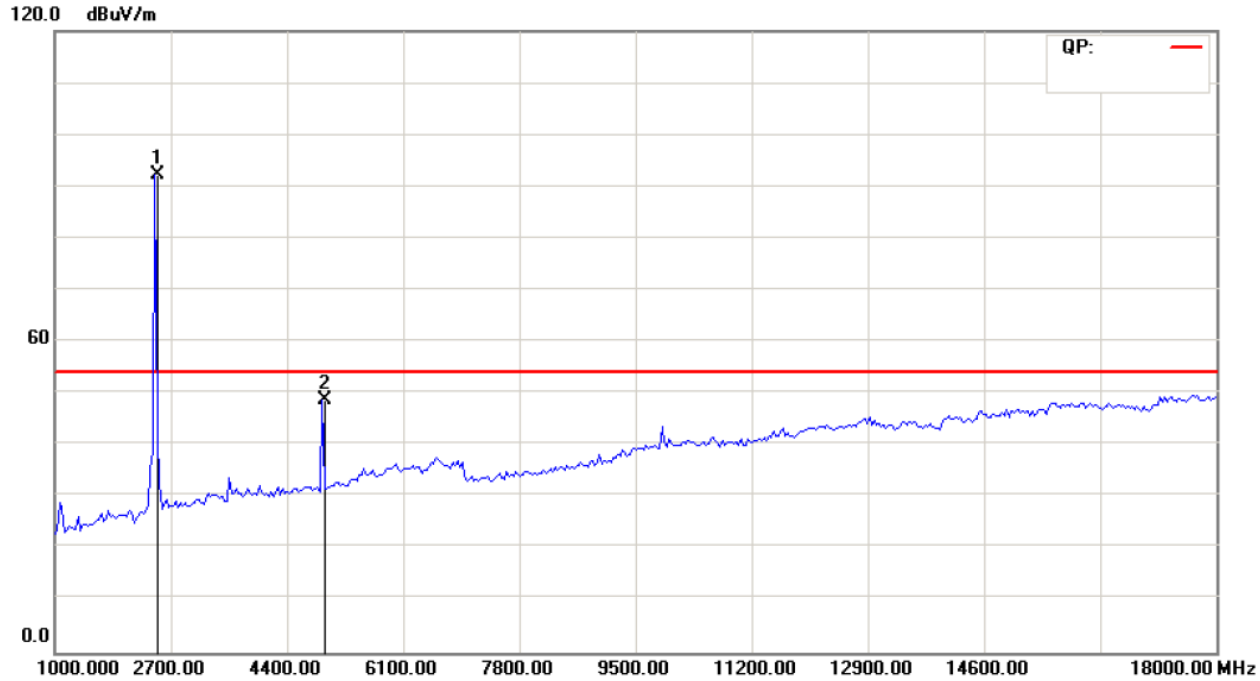
CH06 at 1Mbps: Horizontal



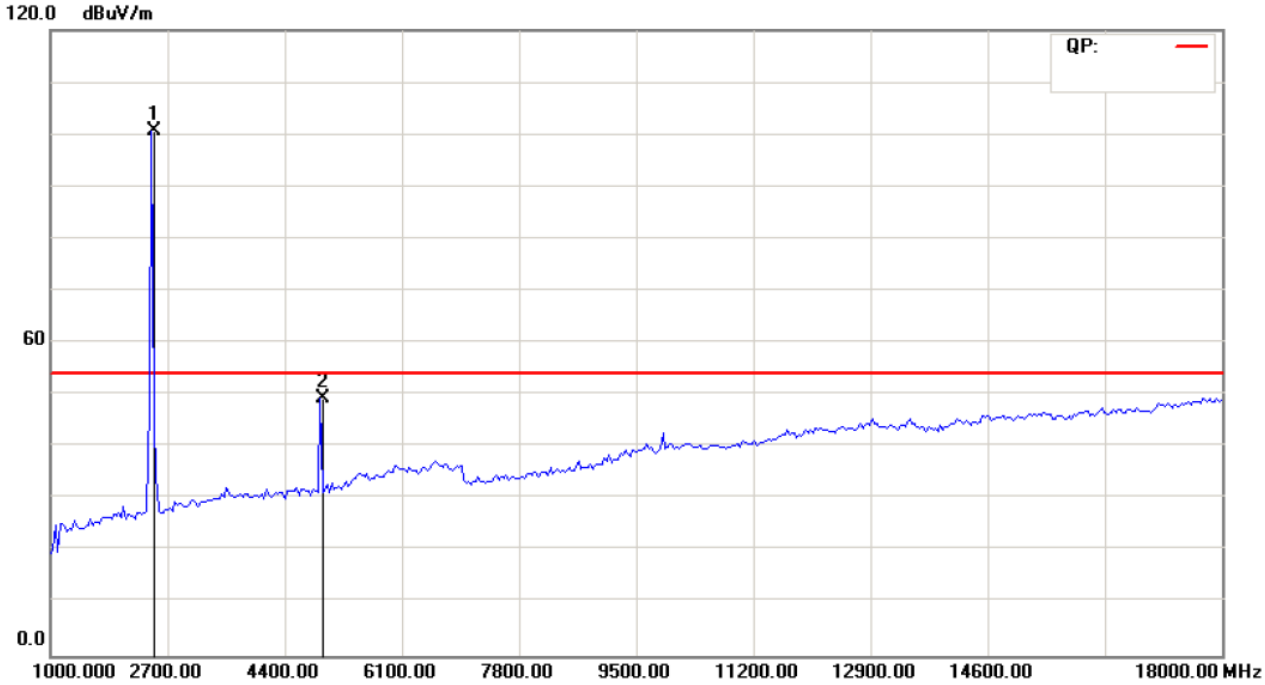
CH06 at 1Mbps: Vertical



CH11 at 1Mbps: Horizontal



CH11 at 1Mbps: Vertical



Note: For the radiated emissions from 18GHz-25GHz, it is the floor noise that meet the requirement of FCC rule.

Operation Mode: Keep Transmitting in CH01 at 65Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2412.00	81.78(PK)	H	Fundamental Frequency
2412.00	88.52 (PK)	V	
4824.00	--	H	74(Peak)/ 54(AV)
4824.00	--	V	74(Peak)/ 54(AV)
7236.00	--	H/V	74(Peak)/ 54(AV)
9648.00	--	H/V	74(Peak)/ 54(AV)
12060	--	H/V	74(Peak)/ 54(AV)
14472	--	H/V	74(Peak)/ 54(AV)
16684	--	H/V	74(Peak)/ 54(AV)
19296	--	H/V	74(Peak)/ 54(AV)
21708	--	H/V	74(Peak)/ 54(AV)
24120	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT20 mode at **65Mbps**

Operation Mode: Keep Transmitting in CH06 at 65Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2437.00	83.57 (PK)	H	Fundamental Frequency
2437.00	89.63(PK)	V	
4874.00	--	H	74(Peak)/ 54(AV)
4874.00	--	V	74(Peak)/ 54(AV)
7311.00	--	H/V	74(Peak)/ 54(AV)
9748.00	--	H/V	74(Peak)/ 54(AV)
12185	--	H/V	74(Peak)/ 54(AV)
14622	--	H/V	74(Peak)/ 54(AV)
17059	--	H/V	74(Peak)/ 54(AV)
19496	--	H/V	74(Peak)/ 54(AV)
21933	--	H/V	74(Peak)/ 54(AV)
24370	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT20 mode at **65Mbps**

Operation Mode: Keep Transmitting in CH11 at 65Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2462.00	82.56 (PK)	H	Fundamental Frequency
2462.00	89.72 (PK)	V	
4924	--	H	74(Peak)/ 54(AV)
4924	--	V	74(Peak)/ 54(AV)
7368	--	H/V	74(Peak)/ 54(AV)
9848	--	H/V	74(Peak)/ 54(AV)
12310	--	H/V	74(Peak)/ 54(AV)
14772	--	H/V	74(Peak)/ 54(AV)
17234	--	H/V	74(Peak)/ 54(AV)
19696	--	H/V	74(Peak)/ 54(AV)
22158	--	H/V	74(Peak)/ 54(AV)
24650	--	H/V	74(Peak)/ 54(AV)

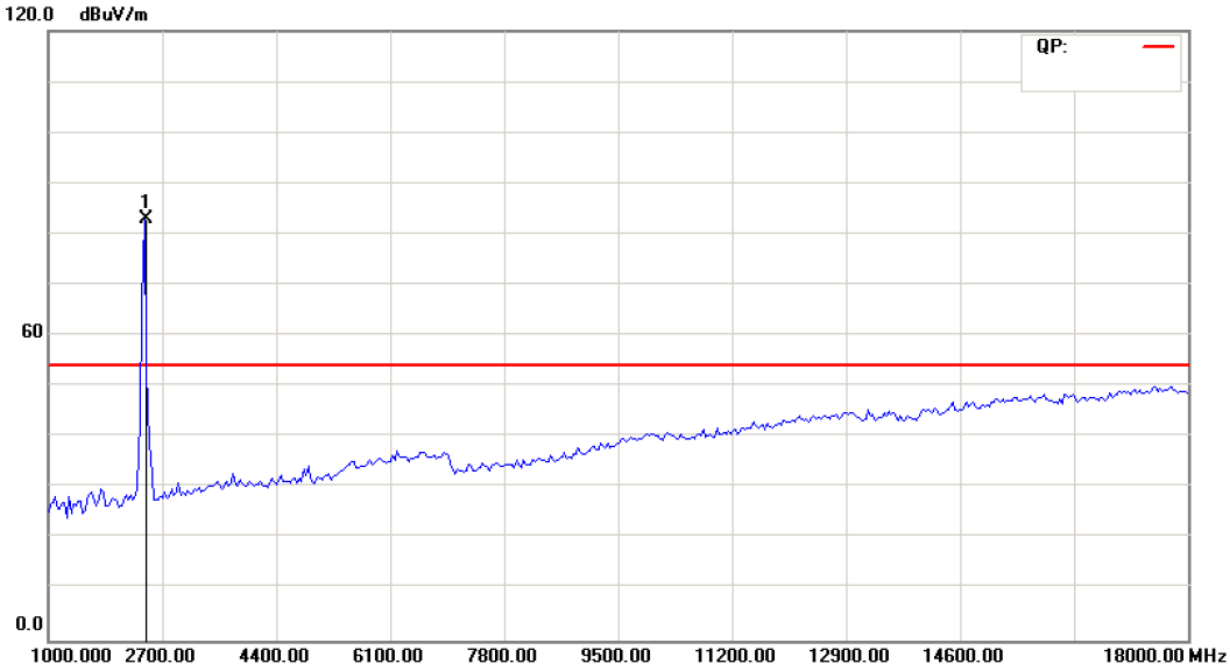
Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT20 mode at **65Mbps**

Suprious emission in restricted band: 802.11n HT20 Mode at 65MHz

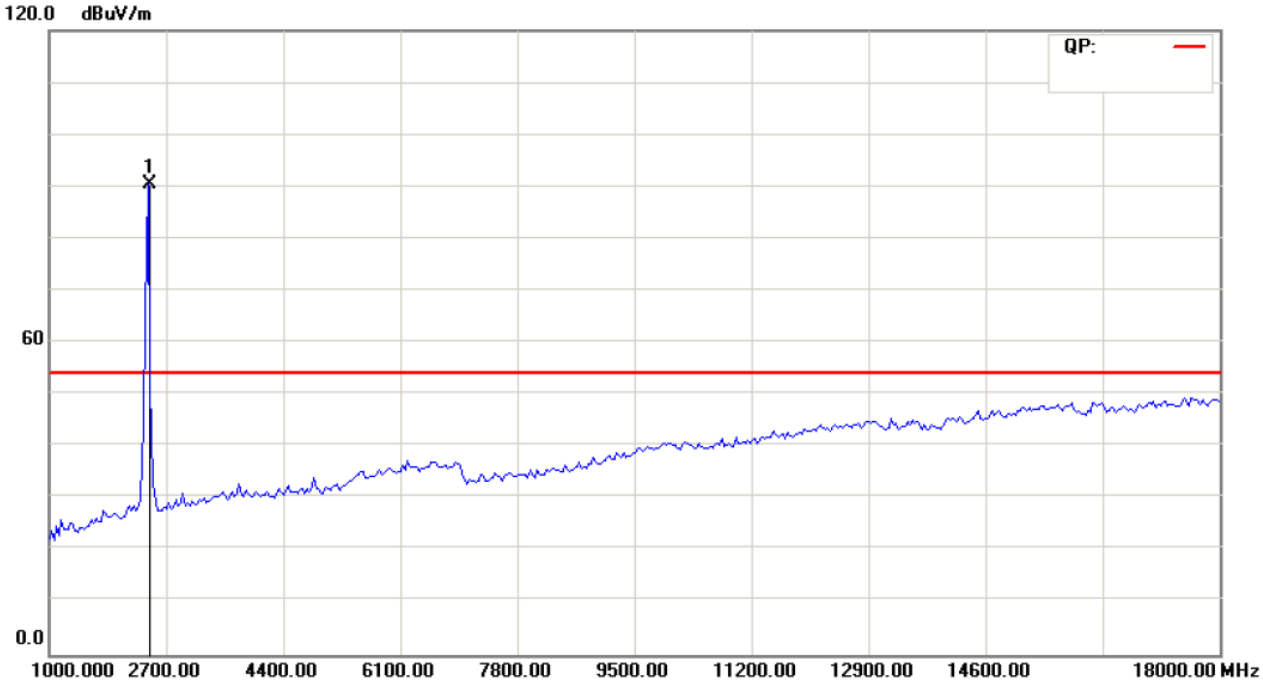
Frequency (MHz)	Level (dBuV/m)	Detecter (PK/AV)	Antenna Polarity	Limit (dBuV/m)	Comment
Low Channel(2412MHz)					
2390.00	43.64	PK	H	74	Suprious
2390.00	32.72	AV	H	54	Suprious
2390.00	44.38	PK	V	74	Suprious
2390.00	34.65	AV	V	54	Suprious
High Channel (2462MHz)					
2483.50	44.64	PK	H	74	Suprious
2483.50	35.62	AV	H	54	Suprious
2483.50	43.38	PK	V	74	Suprious
2483.50	34.81	AV	V	54	Suprious

Please refer to the following test plots for details:

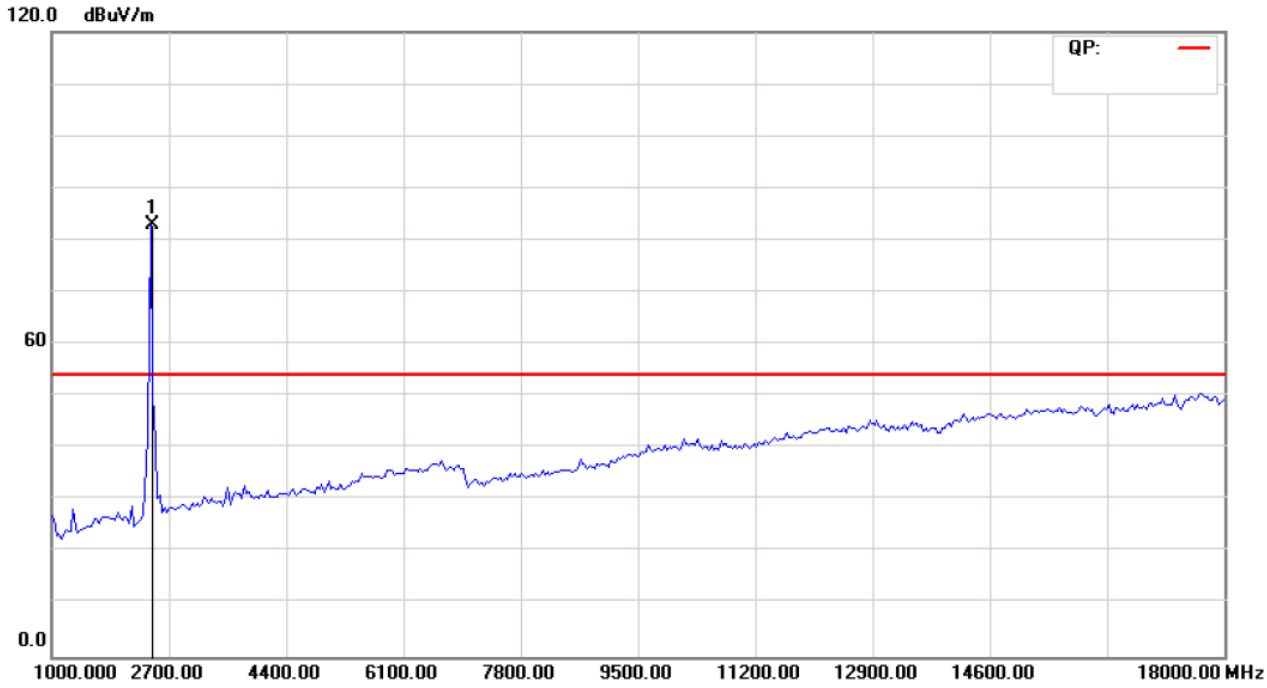
CH01 at 65Mbps: Horizontal



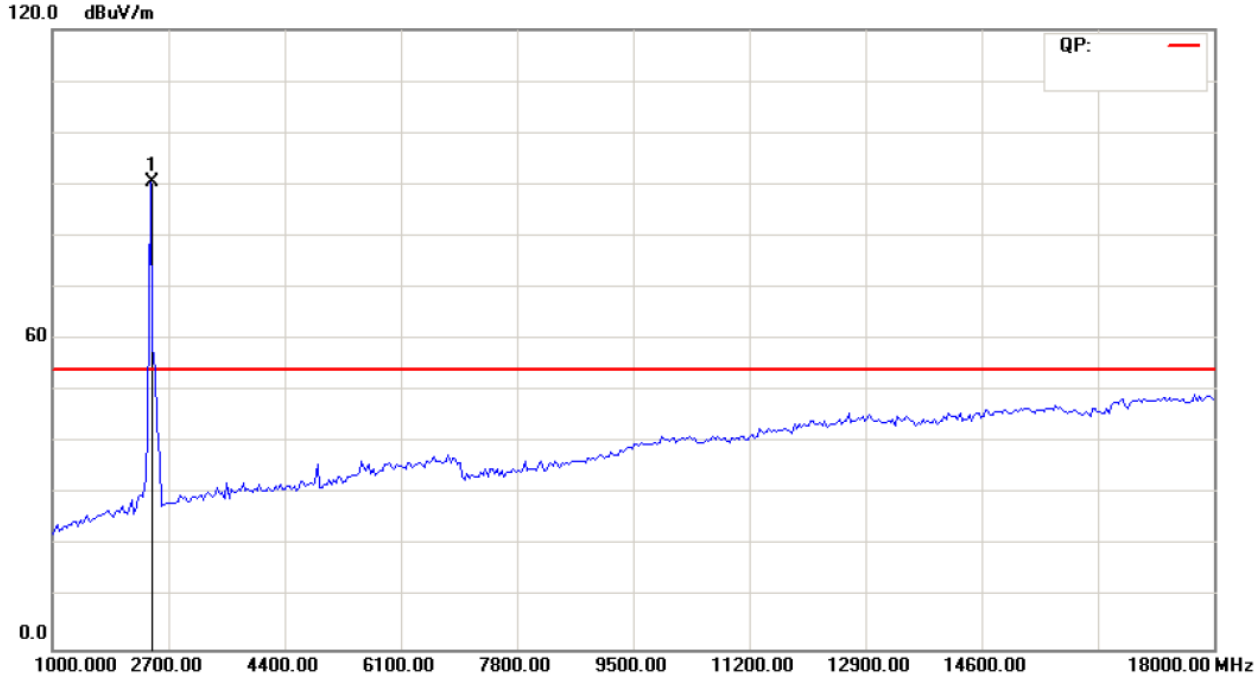
CH01 at 65Mbps: Vertical



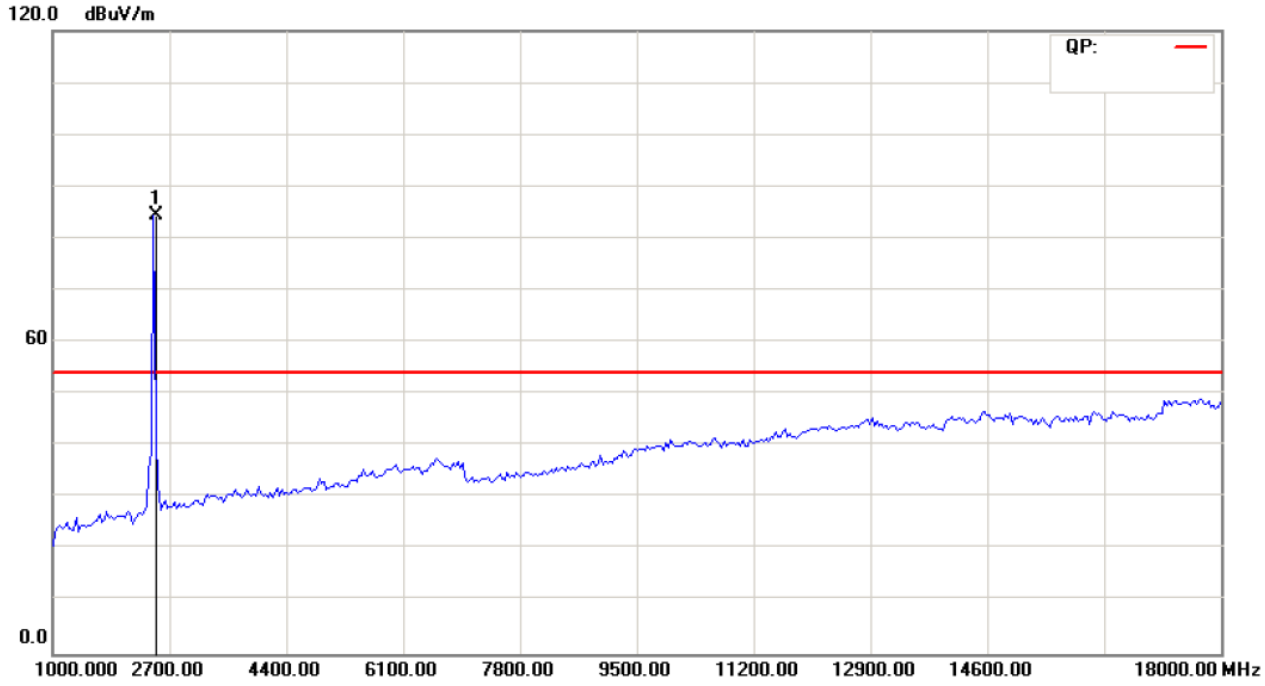
CH06 at 65Mbps: Horizontal



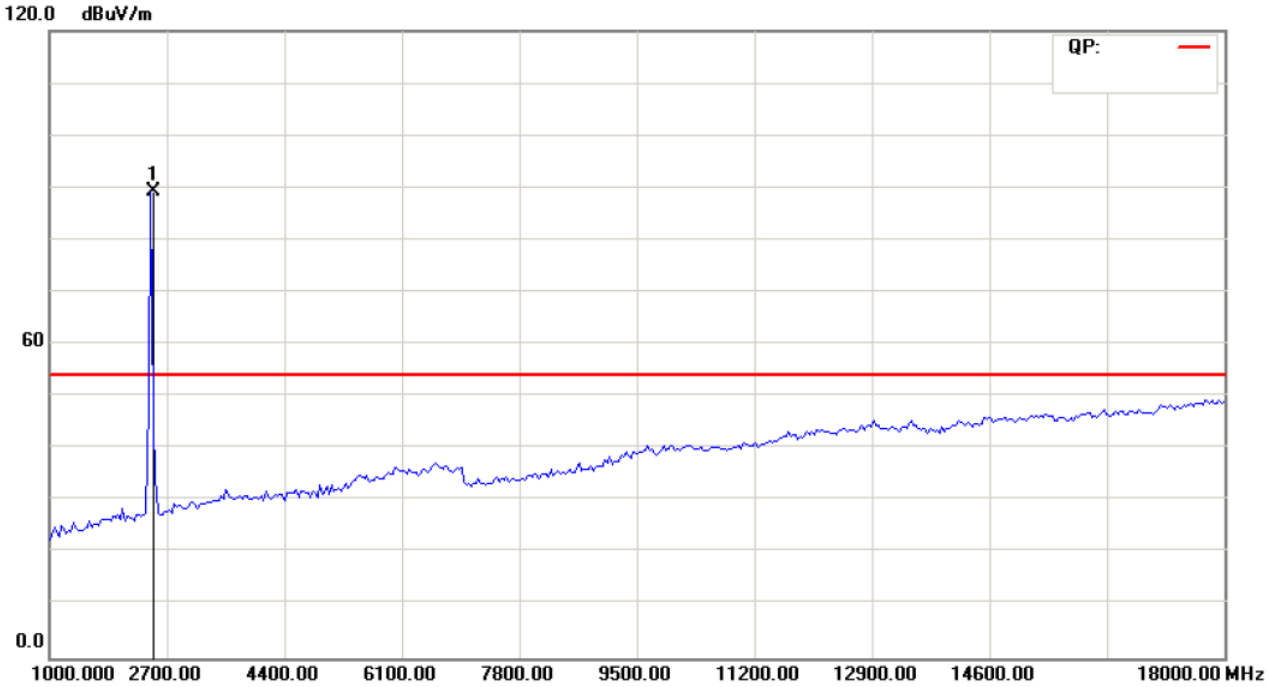
CH06 at 65Mbps: Vertical



CH11 at 65Mbps: Horizontal



CH11 at 65Mbps: Vertical



Note: For the radiated emissions from 18GHz-25GHz, it is the floor noise that meet the requirement of FCC rule.

Operation Mode: Keep Transmitting in CH03 at 135Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2422.00	74.62 (PK)	H	Fundamental Frequency
2422.00	80.26 (PK)	V	
4824.00	--	H	74(Peak)/ 54(AV)
4824.00	--	V	74(Peak)/ 54(AV)
7266.00	--	H/V	74(Peak)/ 54(AV)
9688.00	--	H/V	74(Peak)/ 54(AV)
12110	--	H/V	74(Peak)/ 54(AV)
14532	--	H/V	74(Peak)/ 54(AV)
16954	--	H/V	74(Peak)/ 54(AV)
19376	--	H/V	74(Peak)/ 54(AV)
21798	--	H/V	74(Peak)/ 54(AV)
24220	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT40 mode at **135Mbps**

Operation Mode: Keep Transmitting in CH06 at 135Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2437.00	73.67 (PK)	H	Fundamental Frequency
2437.00	80.85(PK)	V	
4874.00	--	H	74(Peak)/ 54(AV)
4874.00	--	V	74(Peak)/ 54(AV)
7311.00	--	H/V	74(Peak)/ 54(AV)
9748.00	--	H/V	74(Peak)/ 54(AV)
12185	--	H/V	74(Peak)/ 54(AV)
14622	--	H/V	74(Peak)/ 54(AV)
17059	--	H/V	74(Peak)/ 54(AV)
19496	--	H/V	74(Peak)/ 54(AV)
21933	--	H/V	74(Peak)/ 54(AV)
24370	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT40 mode at **135Mbps**

Operation Mode: Keep Transmitting in CH09 at 135Mbps

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
2452.00	73.54(PK)	H	Fundamental Frequency
2452.00	81.03(PK)	V	
4904	--	H	74(Peak)/ 54(AV)
4904	--	V	74(Peak)/ 54(AV)
7356	--	H/V	74(Peak)/ 54(AV)
9808	--	H/V	74(Peak)/ 54(AV)
12260	--	H/V	74(Peak)/ 54(AV)
14712	--	H/V	74(Peak)/ 54(AV)
17164	--	H/V	74(Peak)/ 54(AV)
19616	--	H/V	74(Peak)/ 54(AV)
22068	--	H/V	74(Peak)/ 54(AV)
24520	--	H/V	74(Peak)/ 54(AV)

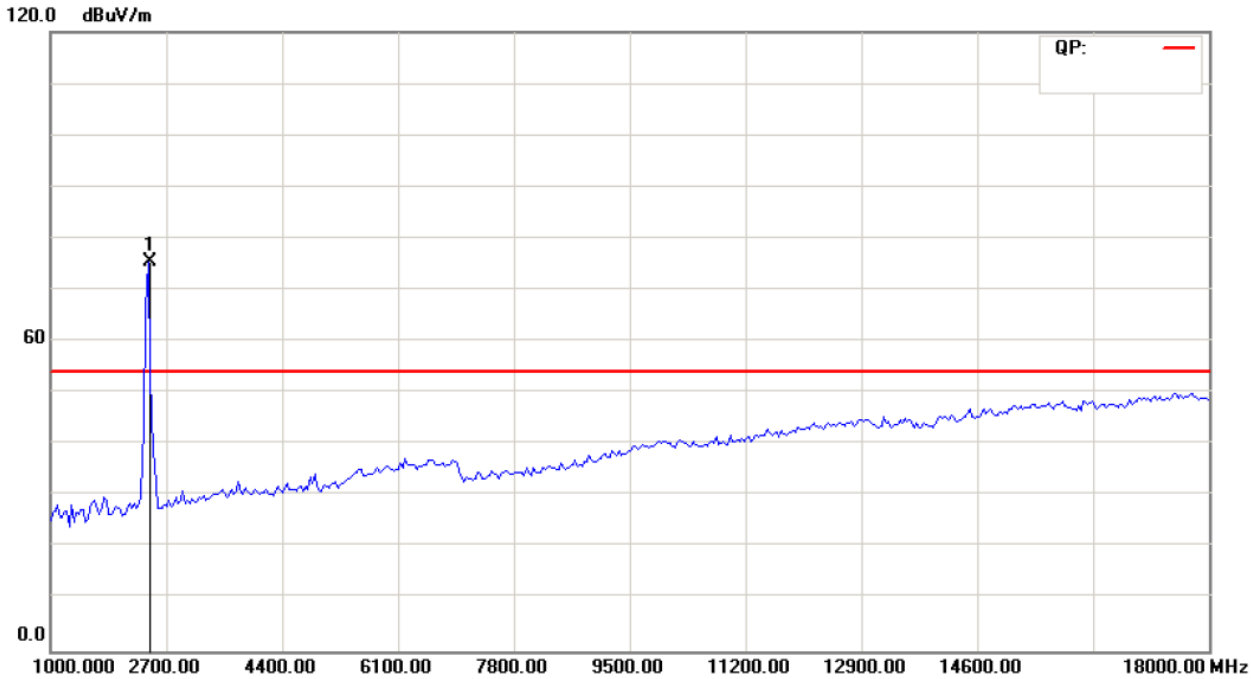
Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured
3. For 802.11n HT40 mode at **135Mbps**

Suprious emission in restricted band: 802.11n HT40 Mode at 135MHz

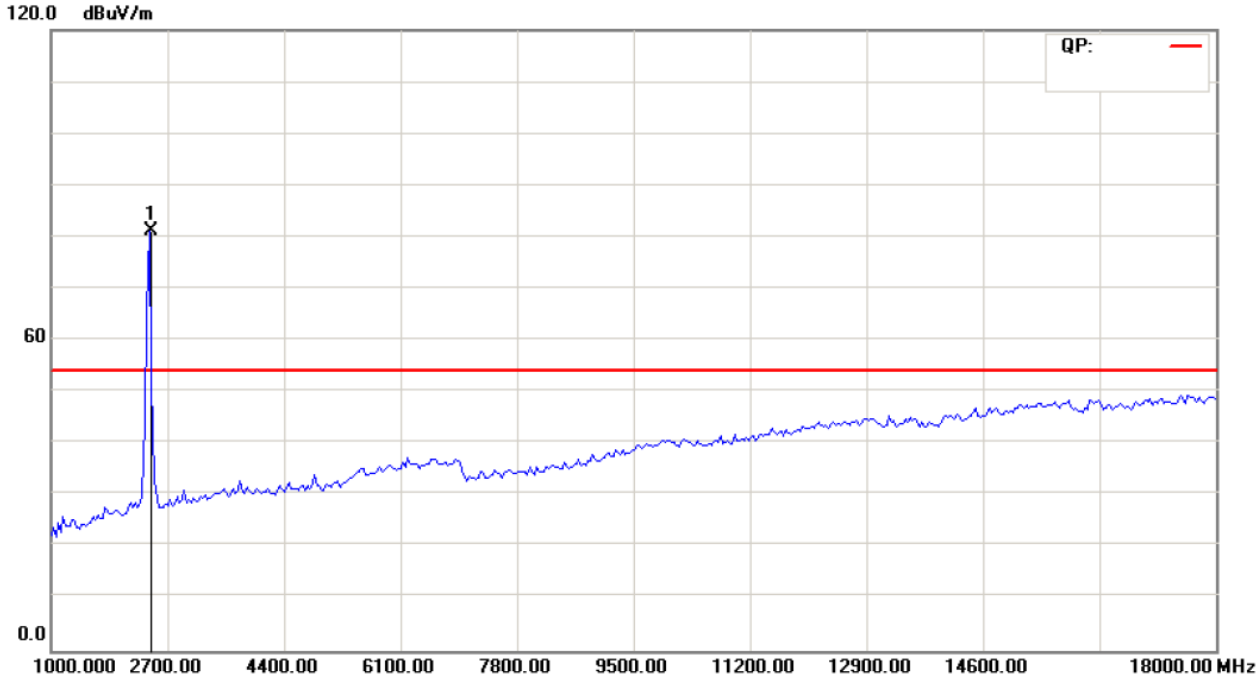
Frequency (MHz)	Level (dBuV/m)	Detecter (PK/AV)	Antenna Polarity	Limit (dBuV/m)	Comment
Low Channel(2422MHz)					
2390.00	45.53	PK	H	74	Suprious
2390.00	34.82	AV	H	54	Suprious
2390.00	46.73	PK	V	74	Suprious
2390.00	34.98	AV	V	54	Suprious
High Channel (2452MHz)					
2483.50	44.25	PK	H	74	Suprious
2483.50	36.87	AV	H	54	Suprious
2483.50	43.78	PK	V	74	Suprious
2483.50	34.60	AV	V	54	Suprious

Please refer to the following test plots for details:

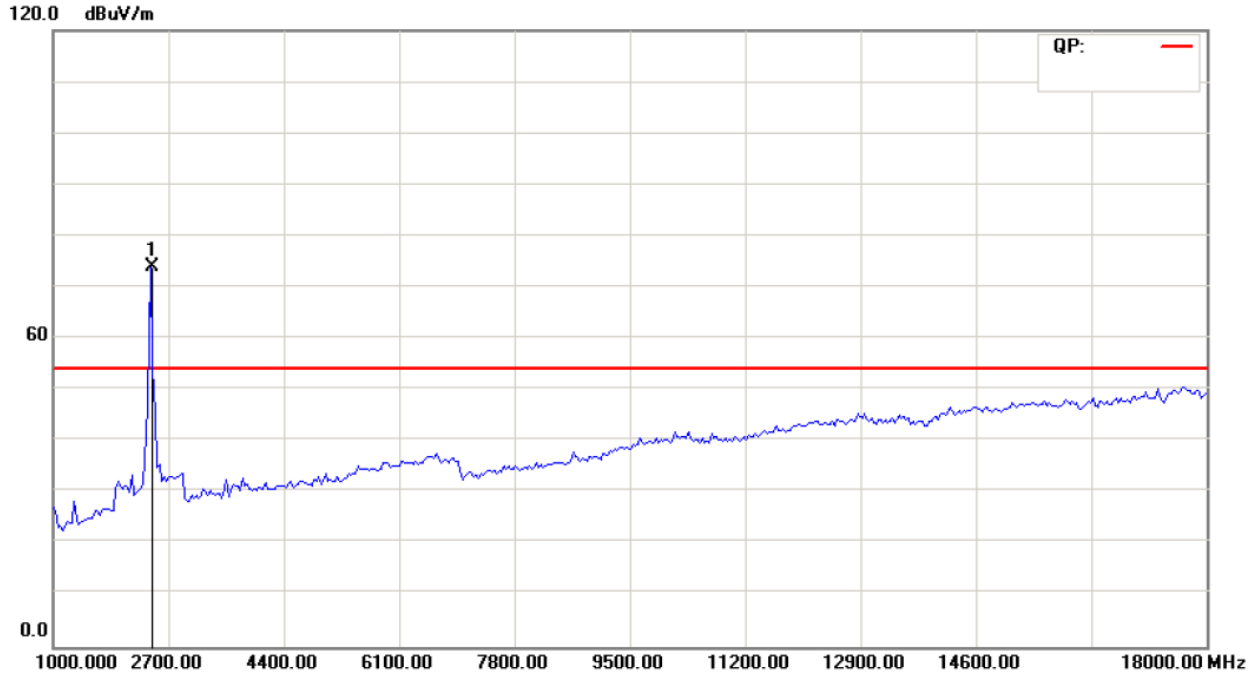
CH03 at 135Mbps: Horizontal



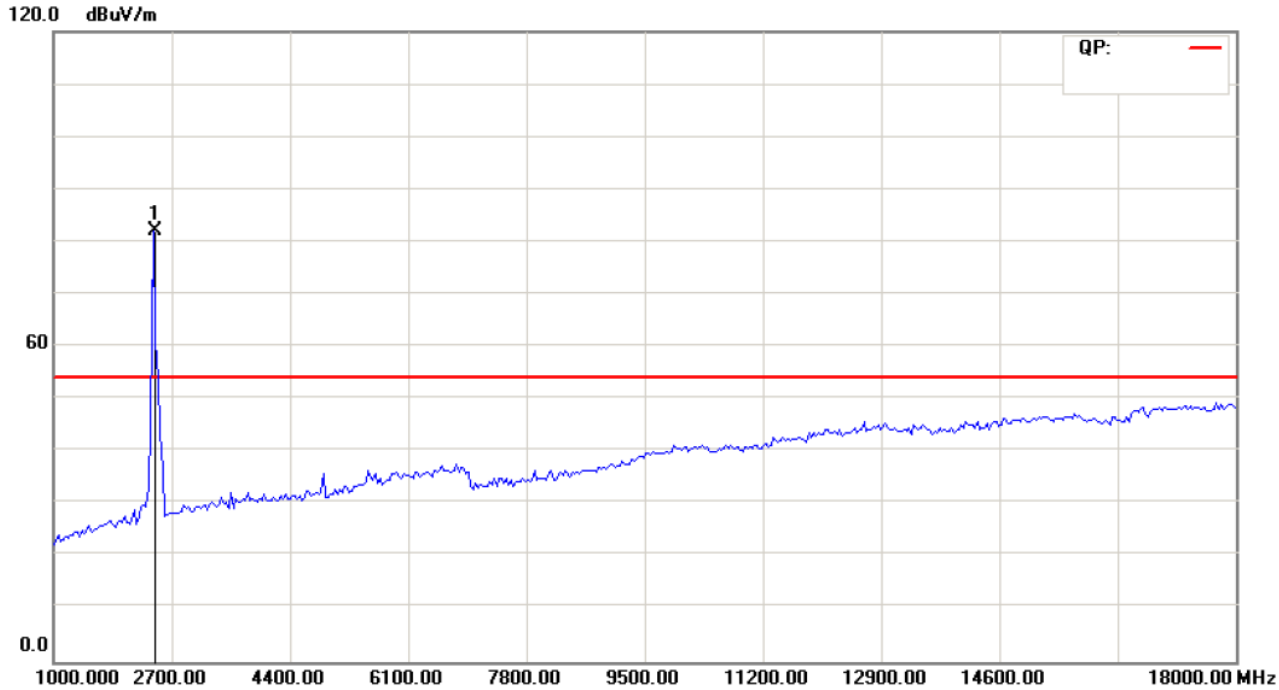
CH03 at 135Mbps: Vertical



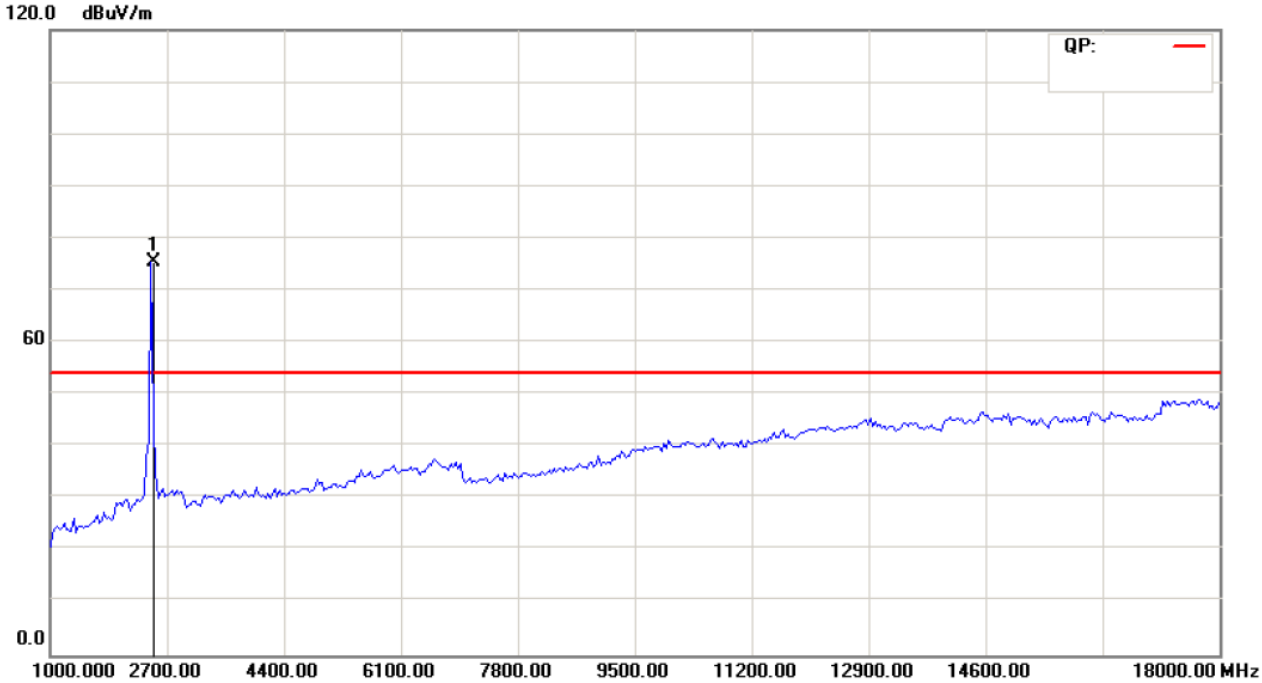
CH06 at 135Mbps: Horizontal



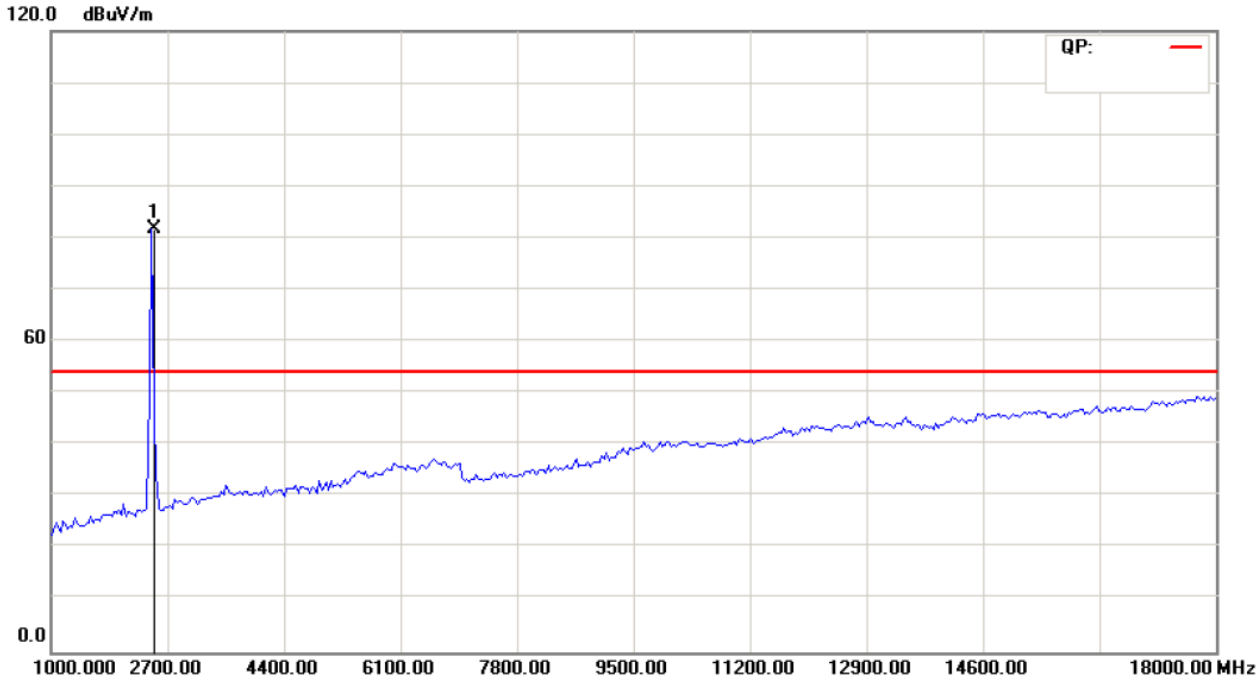
CH06 at 135Mbps: Vertical



CH09 at 135Mbps: Horizontal



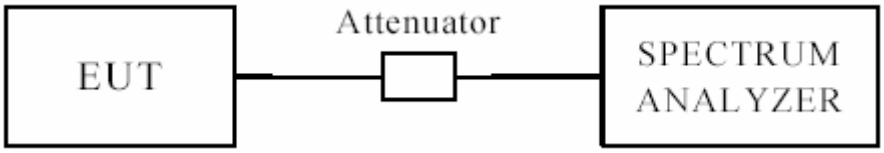
CH09 at 135Mbps: Vertical



Note: For the radiated emissions from 18GHz-25GHz, it is the floor noise that meet the requirement of FCC rule.

7.0 6dB Bandwidth Measurement

7.1 Test Setup



7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500kHz

7.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator.

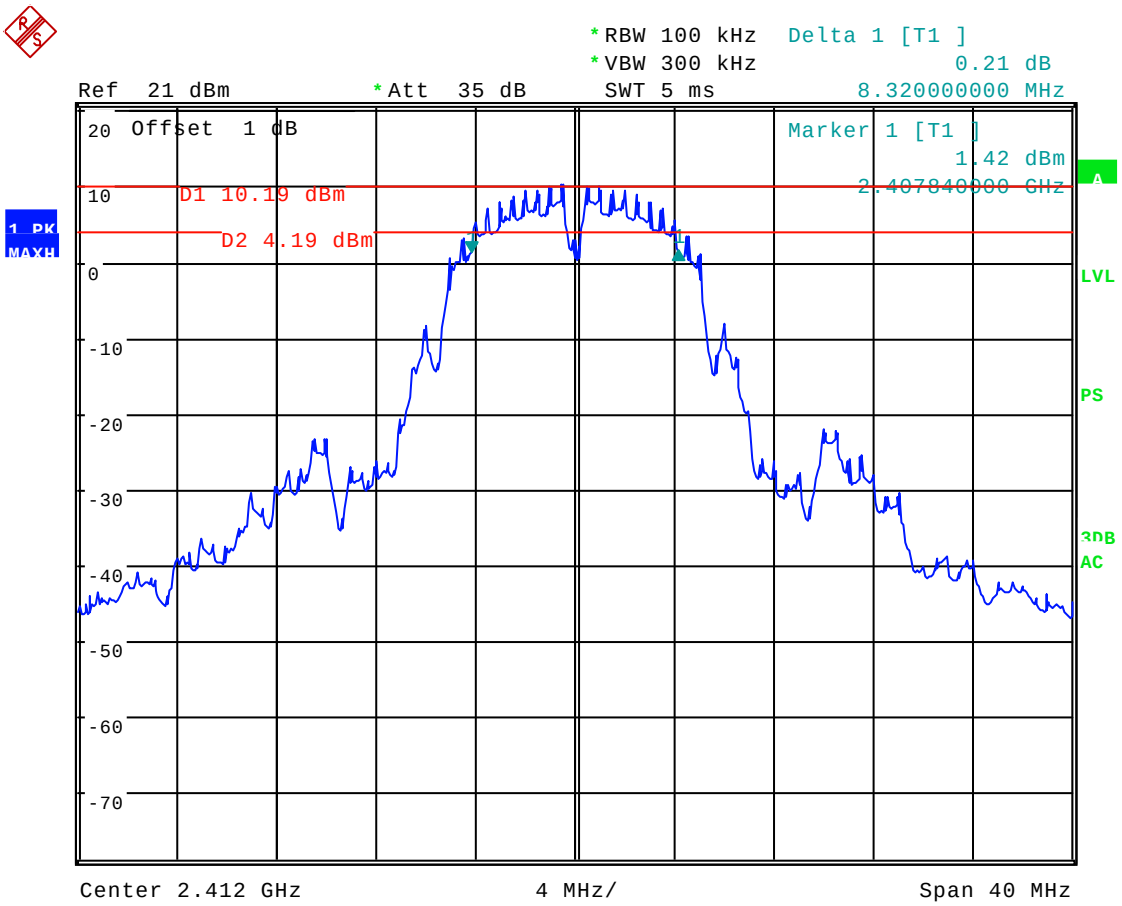
The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100 kHz VBW for 802.11b/g/n mode; The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4 Test Result

EUT	NETVUE	Model	NI-1200
Mode	802.11b	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

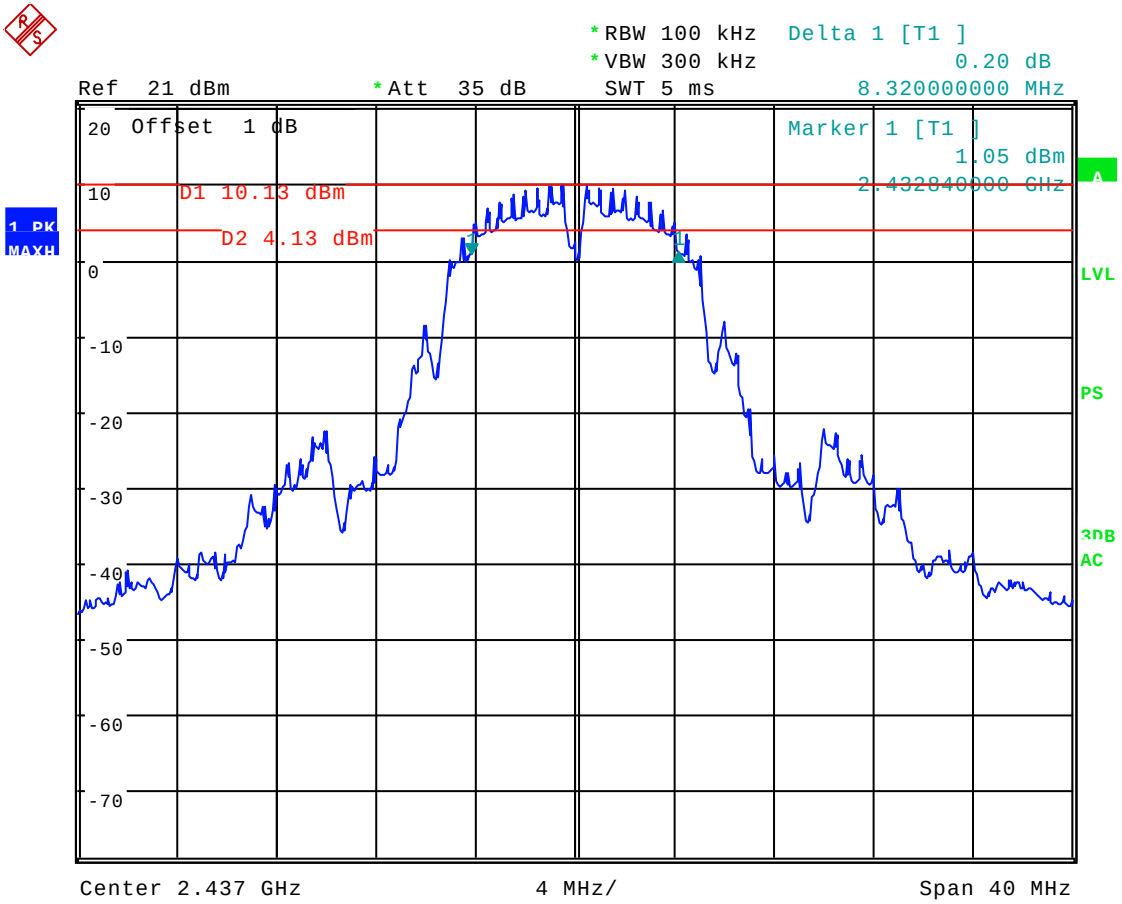
Channel	Channel Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass/ Fail
1	2412	1	8.32	0.5	Pass
6	2437	1	8.32	0.5	Pass
11	2462	1	8.32	0.5	Pass

1. 802.11b at 1Mbps of CH01



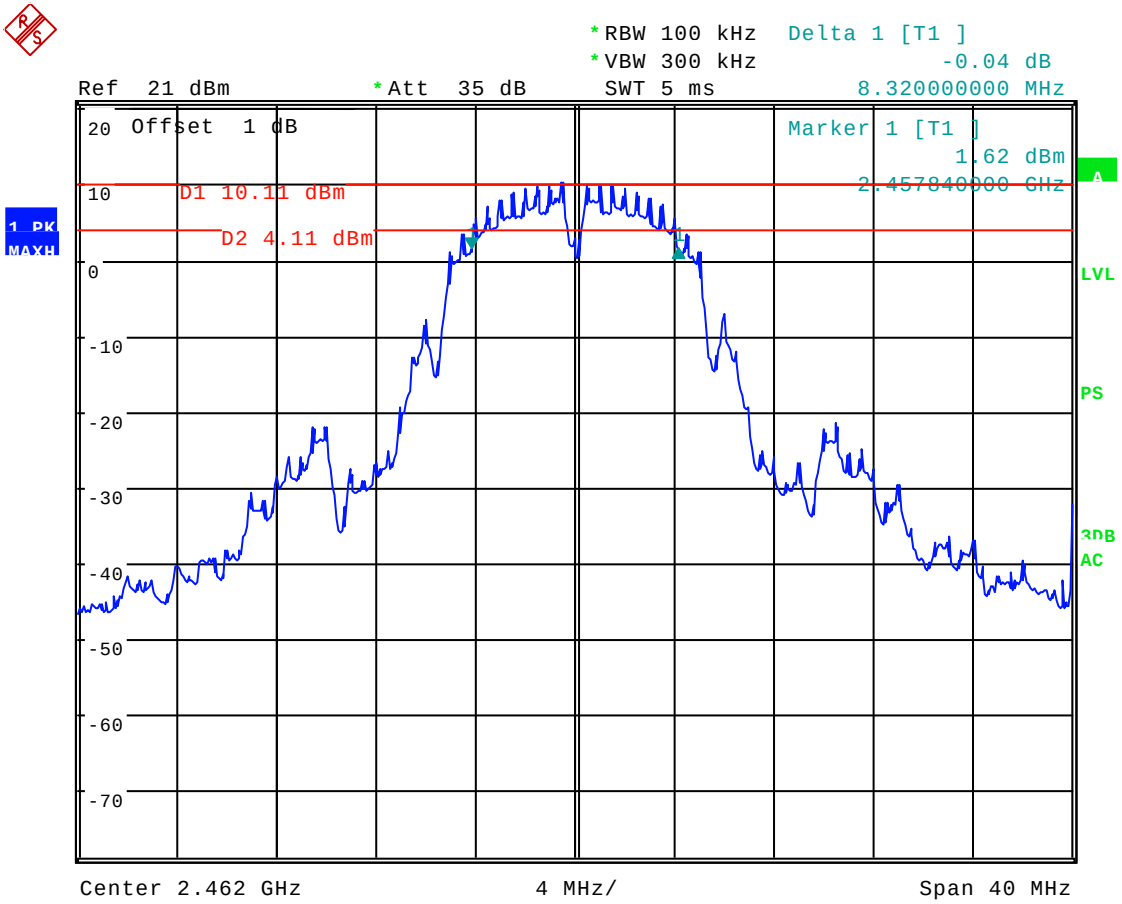
Date: 04.Nov.2011 16:57:26

2. 802.11b at 1Mbps of CH06



Date: 04.Nov.2011 16:55:32

3. 802.11b at 1Mbps of CH11



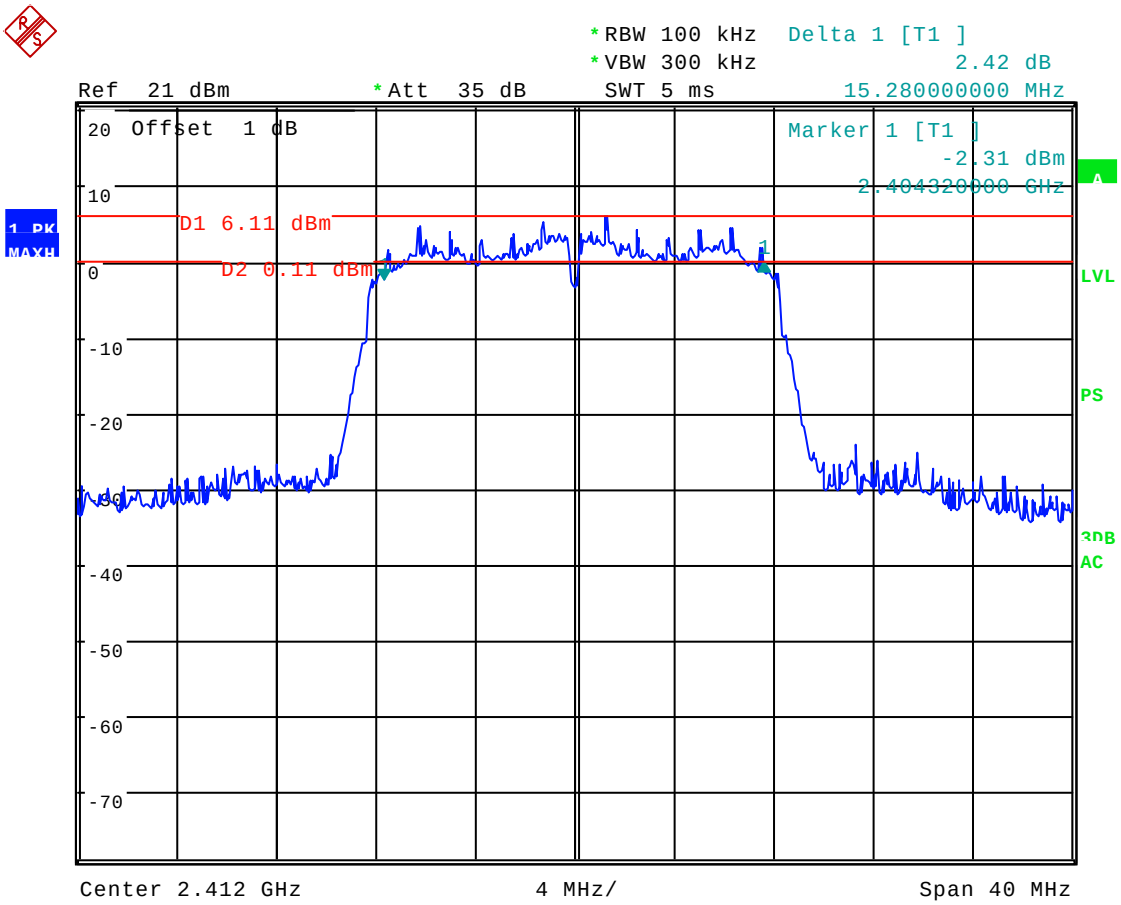
Date: 04.Nov.2011 16:54:01

EUT	NETVUE	Model	NI-1200
Mode	802.11g	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass/ Fail
1	2412	6	15.28	0.5	Pass
6	2437	6	15.28	0.5	Pass
11	2462	6	15.28	0.5	Pass

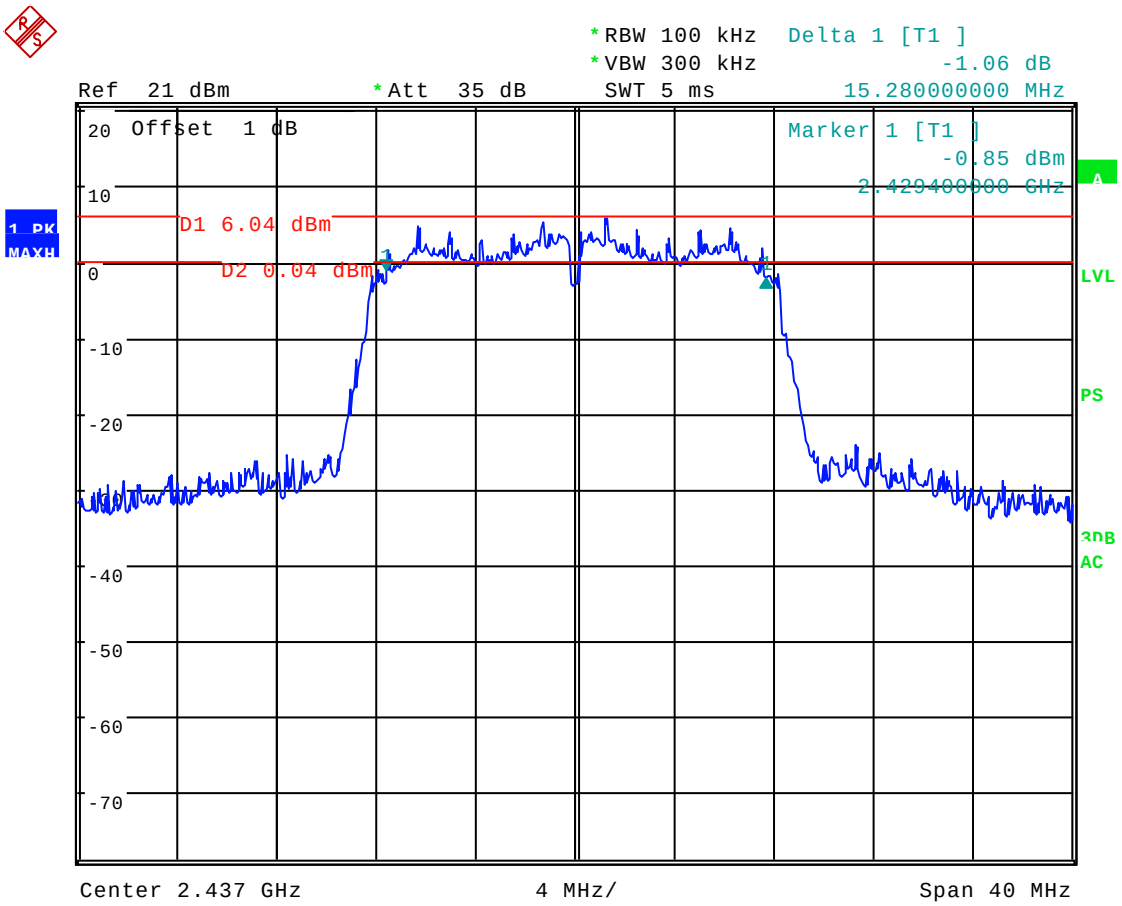
Test Plots:

1. 802.11g at 6Mbps of CH01



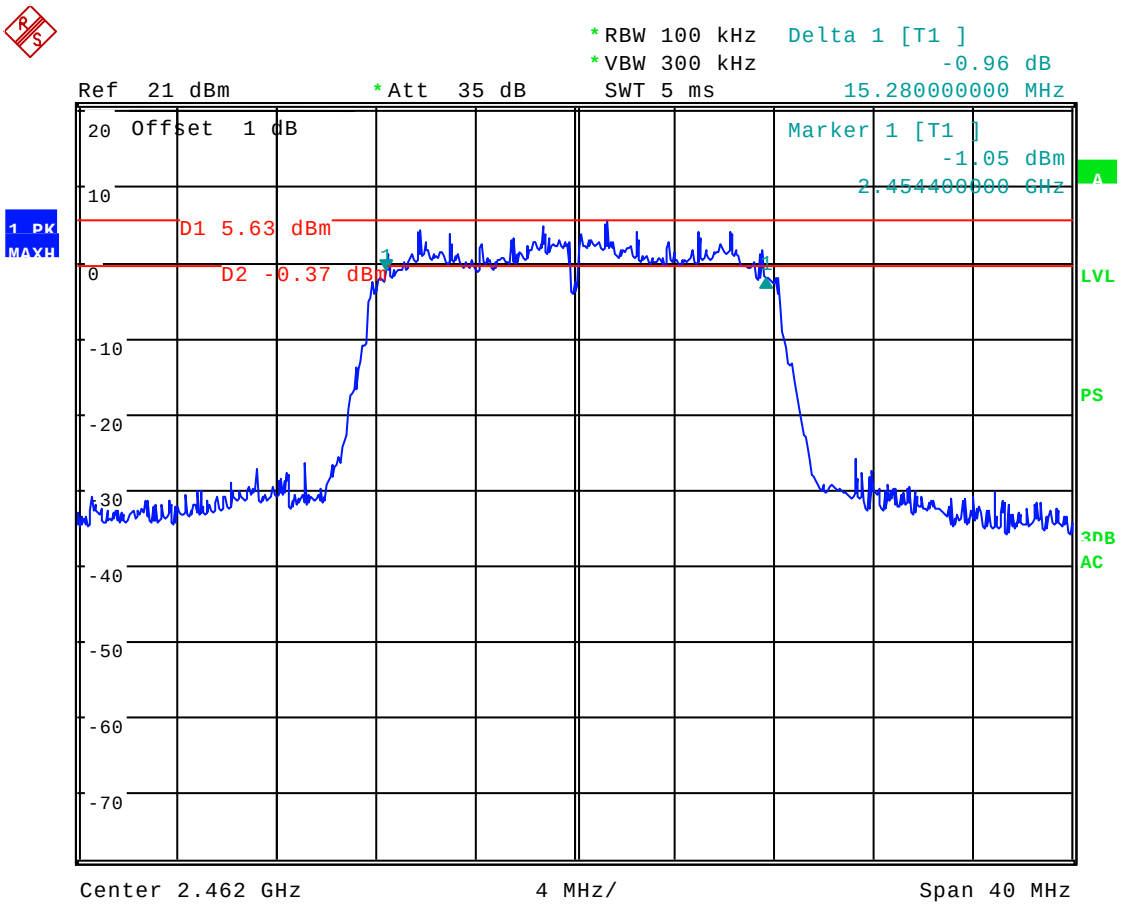
Date: 04.Nov.2011 17:06:07

2. 802.11g at 6Mbps of CH06



Date: 04.Nov.2011 17:07:57

3. 802.11g at 6Mbps of CH11



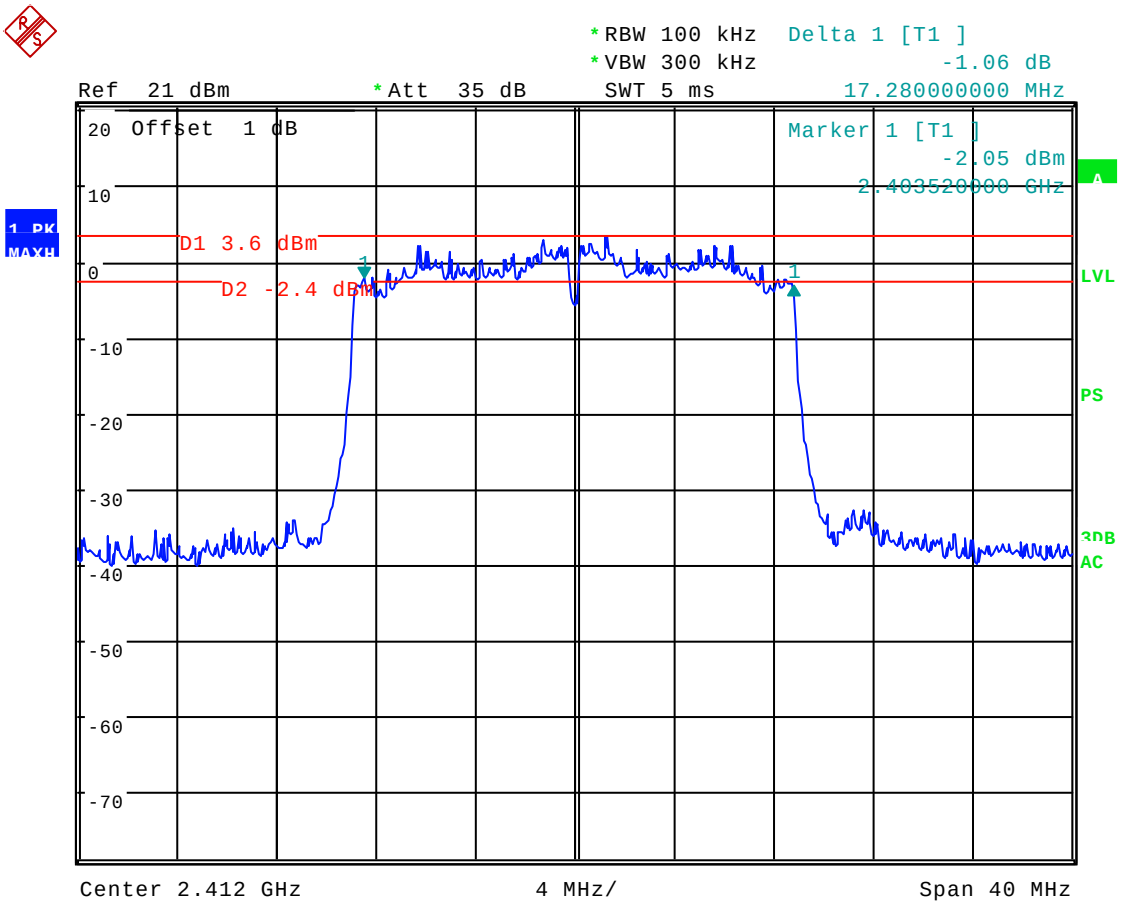
Date: 04.Nov.2011 17:15:36

EUT	NETVUE	Model	NI-1200
Mode	802.11n HT20	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass/ Fail
1	2412	65	17.28	0.5	Pass
6	2437	65	17.36	0.5	Pass
11	2462	65	17.36	0.5	Pass

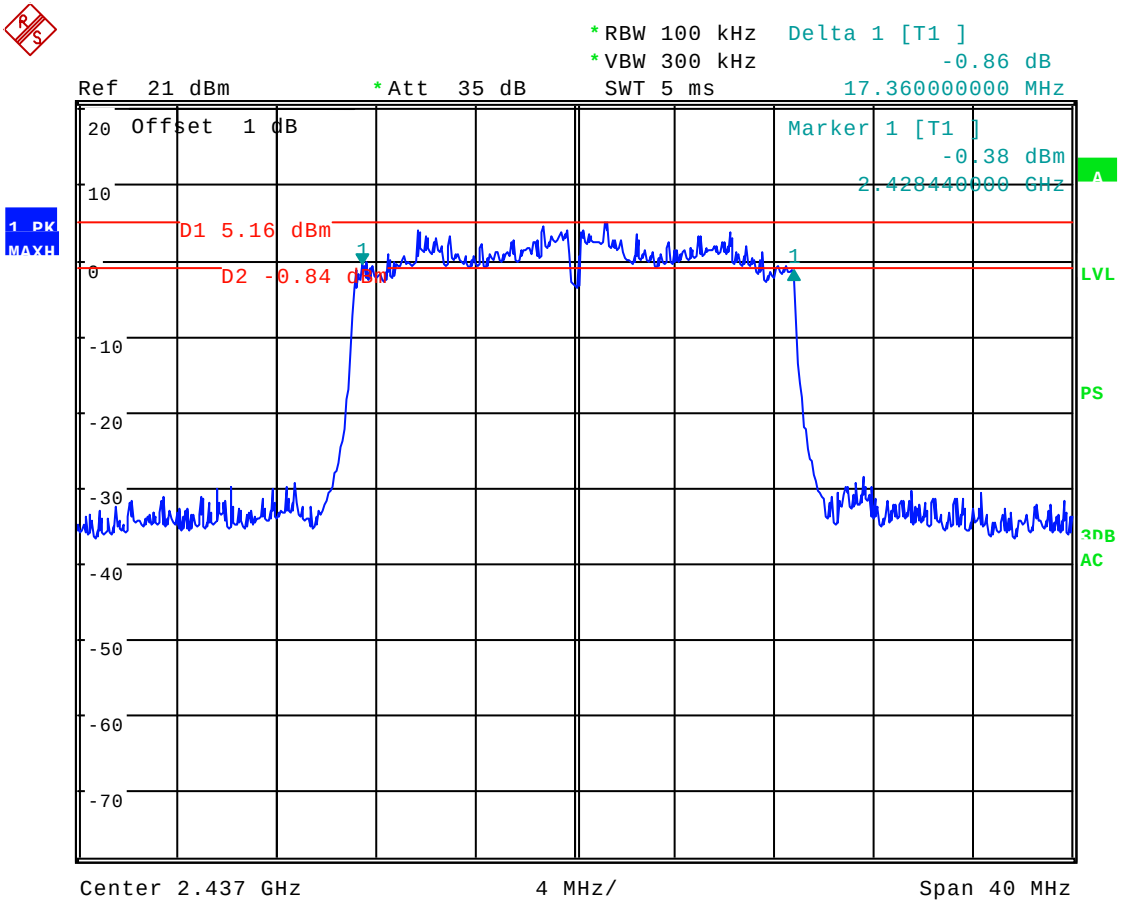
Test Plots:

1. 802.11 n HT20 at 65Mbps of CH01



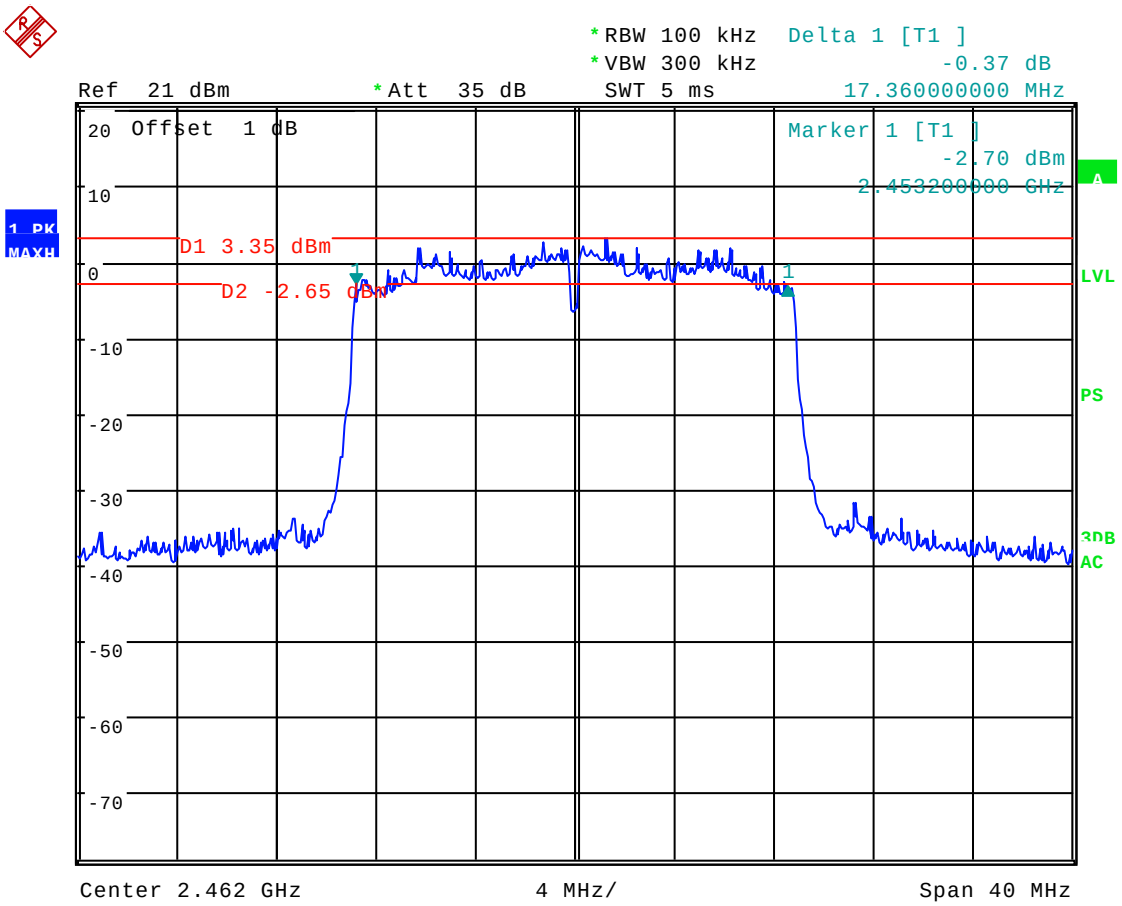
Date: 04.Nov.2011 17:25:43

2. 802.11 n HT20 at 65Mbps of CH06



Date: 04.Nov.2011 17:23:36

3. 802.11n HT20 at 65Mbps of CH11



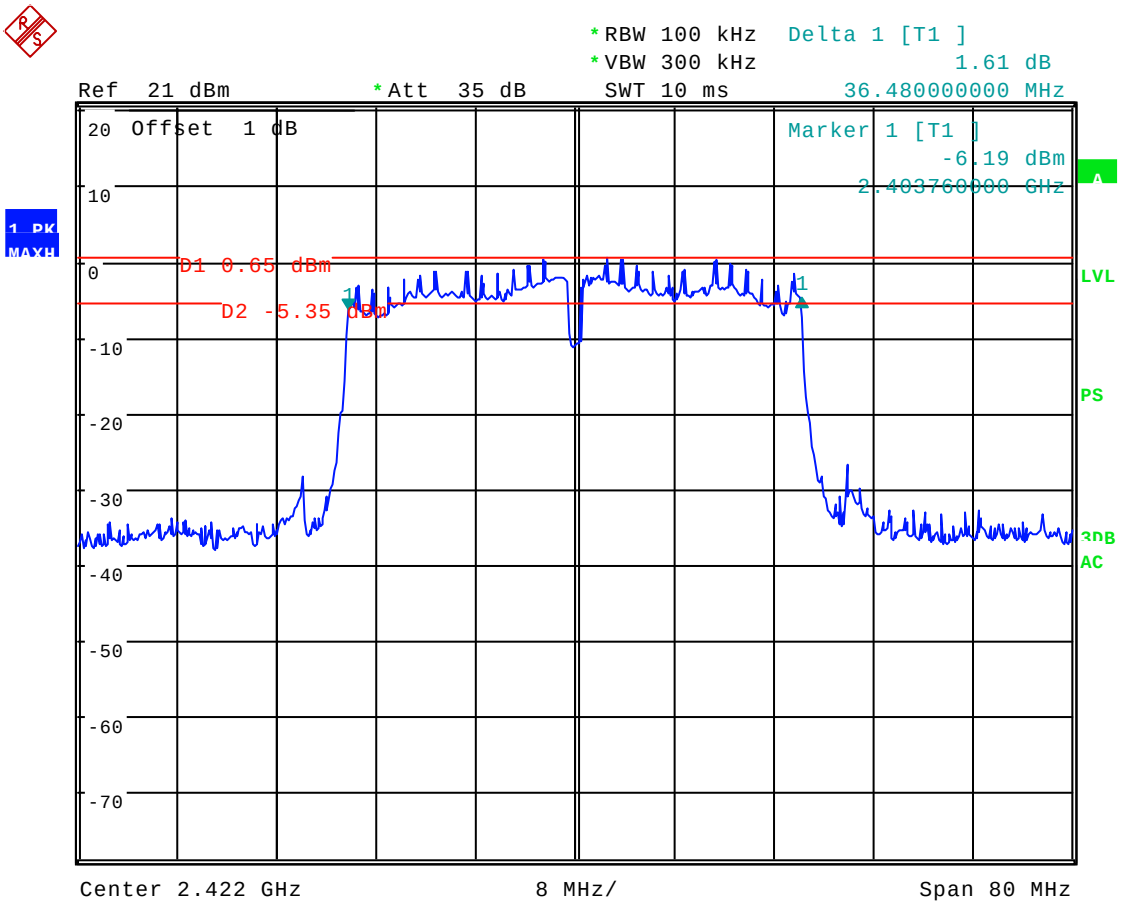
Date: 04.Nov.2011 17:19:52

EUT	NETVUE	Model	NI-1200
Mode	802.11n HT40	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass/ Fail
3	2422	130	36.48	0.5	Pass
6	2437	130	36.48	0.5	Pass
9	2452	130	36.48	0.5	Pass

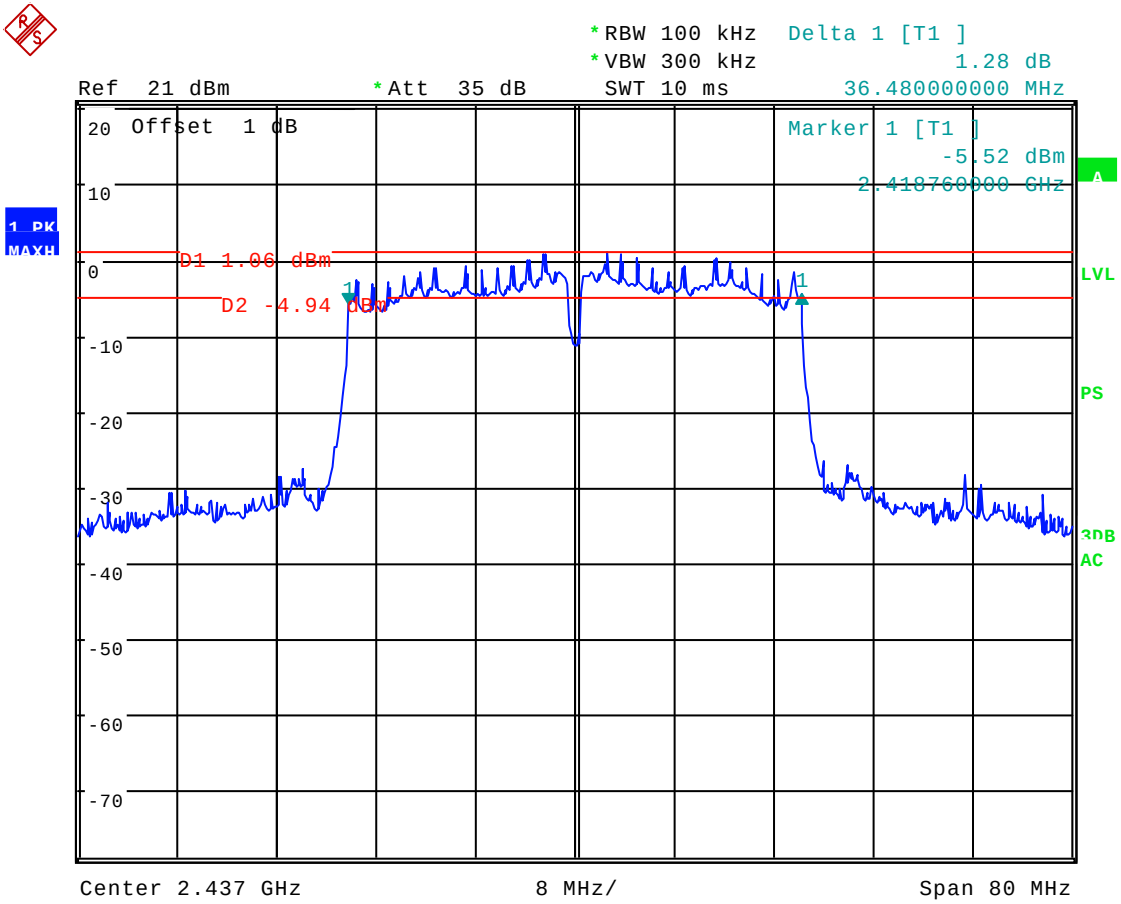
Test Plots:

1. 802.11 n HT40 at 135Mbps of CH03



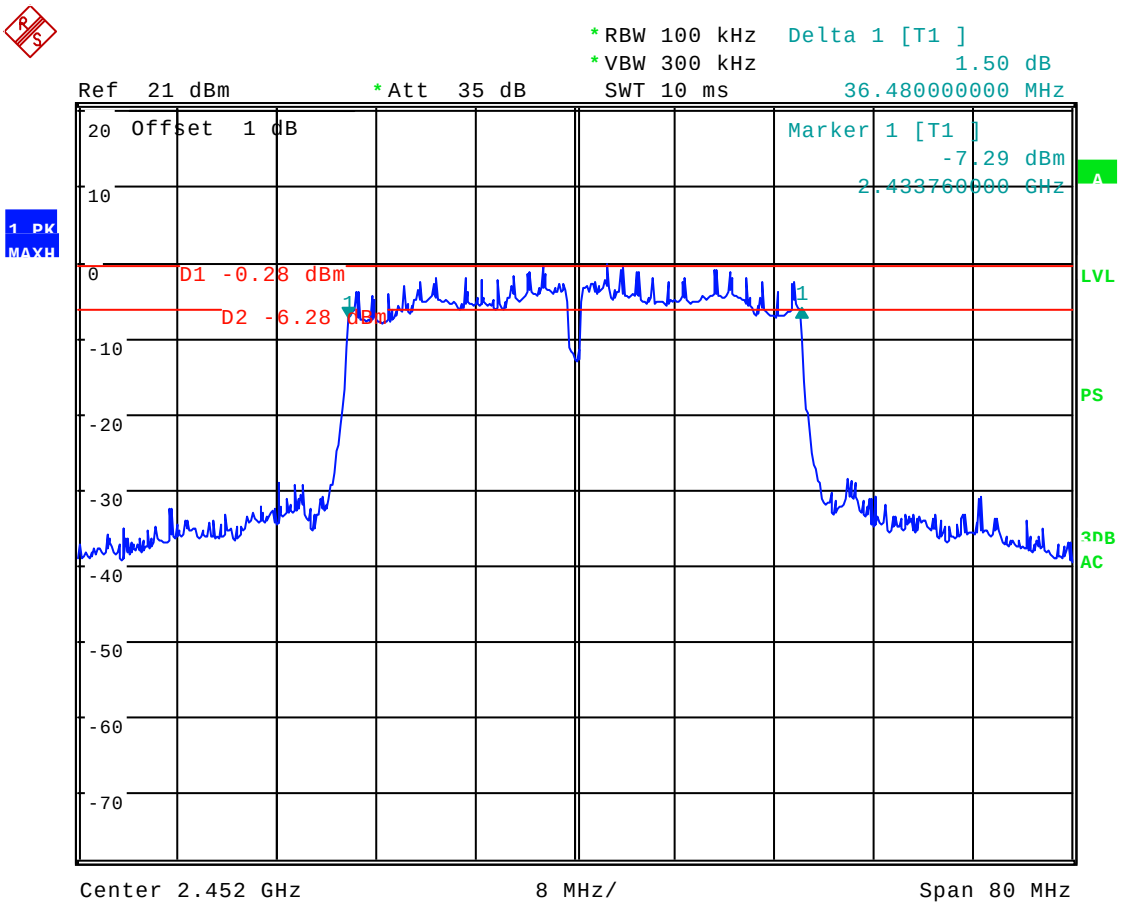
Date: 04.Nov.2011 17:12:15

2. 802.11 n HT40 at 135Mbps of CH06



Date: 04.Nov.2011 17:09:25

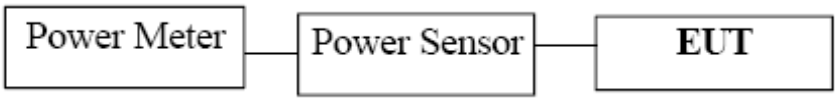
3. 802.11n HT40 at 135Mbps of CH09



Date: 04.Nov.2011 17:07:52

8.0 Maximum Peak Output Power

8.1 Test Setup



8.2 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

8.3 Test Procedure

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: the peak power was measured

8.4Test Results

EUT	NETVUE	Model	NI-1200
Mode	802.11b	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass/ Fail
1	2412	17.68	30	Pass
6	2437	17.65	30	Pass
11	2462	17.54	30	Pass

Note: 1. At finial test to get the worst-case emission at 1Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

EUT	NETVUE	Model	NI-1200
Mode	802.11g	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass/ Fail
1	2412	16.28	30	Pass
6	2437	16.30	30	Pass
11	2462	15.91	30	Pass

Note: At finial test to get the worst-case emission at 6Mbps for CH01, CH06 and CH11

EUT	NETVUE	Model	NI-1200
Mode	802.11n HT20	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass/ Fail
1	2412	14.35	30	Pass
6	2437	15.19	30	Pass
11	2462	14.10	30	Pass

Note: At finial test to get the worst-case emission at 65Mbps for CH01, CH06 and CH11

EUT	NETVUE	Model	NI-1200
Mode	802.11 n HT40	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass/ Fail
3	2422	14.49	30	Pass
6	2437	13.04	30	Pass
9	2452	13.47	30	Pass

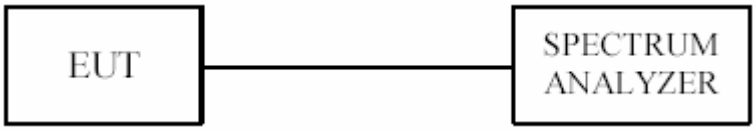
Note: 1.At finial test to get the worst-case emission at 135Mbps for CH03, CH06 and CH9

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

9.0 Power Spectral Density Measurement

9.1 Test Setup



9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

9.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 10kHz VBW, set sweep time=60s, **PK detector.**

The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

9.4Test Result

EUT	NETVUE	Model	NI-1200
Mode	802.11b	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Final RF Power Level in 3kHz BW (dBm)	Maximum Limit (dBm)	Pass/ Fail
1	2412	-1.42	8	Pass
6	2437	-1.97	8	Pass
11	2462	-2.45	8	Pass

Note: For 802.11b mode at finial test to get the worst-case emission at 1Mbps for CH11，CH06 and CH01

EUT	NETVUE	Model	NI-1200
Mode	802.11g	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Final RF Power Level in 3kHz BW (dBm)	Maximum Limit (dBm)	Pass/ Fail
1	2412	-5.97	8	Pass
6	2437	-6.81	8	Pass
11	2462	-9.44	8	Pass

Note: For 802.11g mode at finial test to get the worst-case emission at 6Mbps for CH11，CH06 and CH01

EUT	NETVUE	Model	NI-1200
Mode	802.11n HT20	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Final RF Power Level in 3kHz BW (dBm)	Maximum Limit (dBm)	Pass/ Fail
1	2412	-11.62	8	Pass
6	2437	-9.82	8	Pass
11	2462	-11.43	8	Pass

Note: For 802.11 n HT20 mode at finial test to get the worst-case emission at 65Mbps for CH11，CH06 and CH01

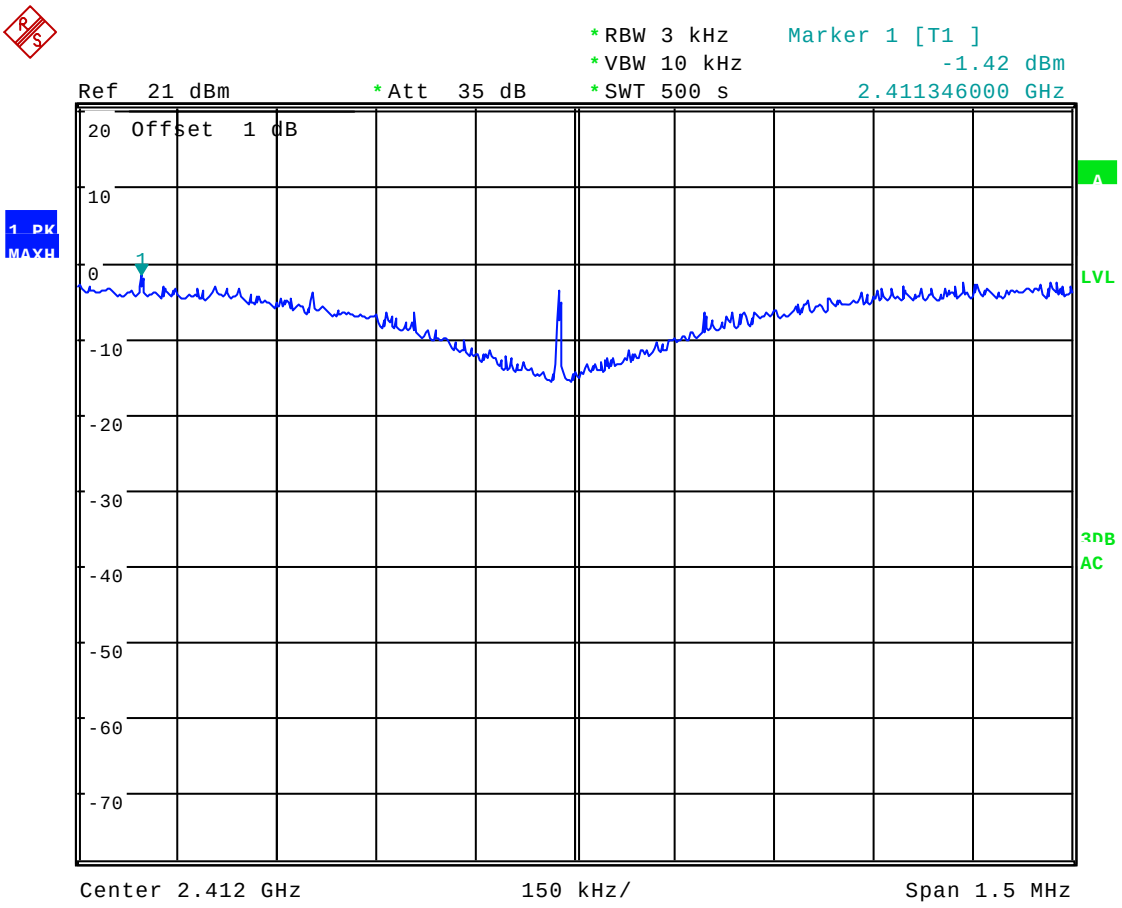
EUT	NETVUE	Model	NI-1200
Mode	802.11 n HT40	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH

Channel	Channel Frequency (MHz)	Final RF Power Level in 3kHz BW (dBm)	Maximum Limit (dBm)	Pass/ Fail
3	2422	-10.43	8	Pass
6	2437	-11.37	8	Pass
9	2452	-11.59	8	Pass

Note: For 802.11 n HT40 mode at finial test to get the worst-case emission at 135Mbps for CH03，CH06 and CH09

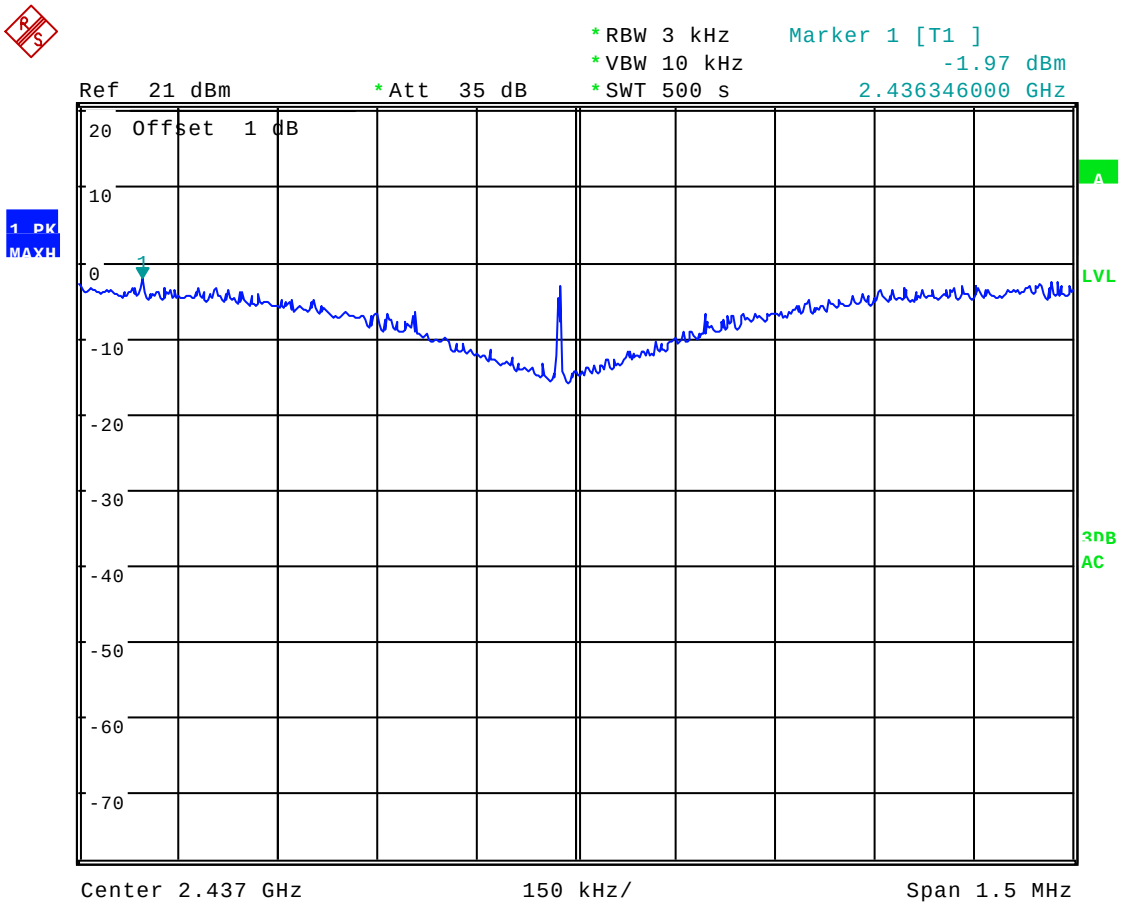
9.5 Photo of Power Spectral Density Measurement

1.802.11b at 1Mbps of CH01



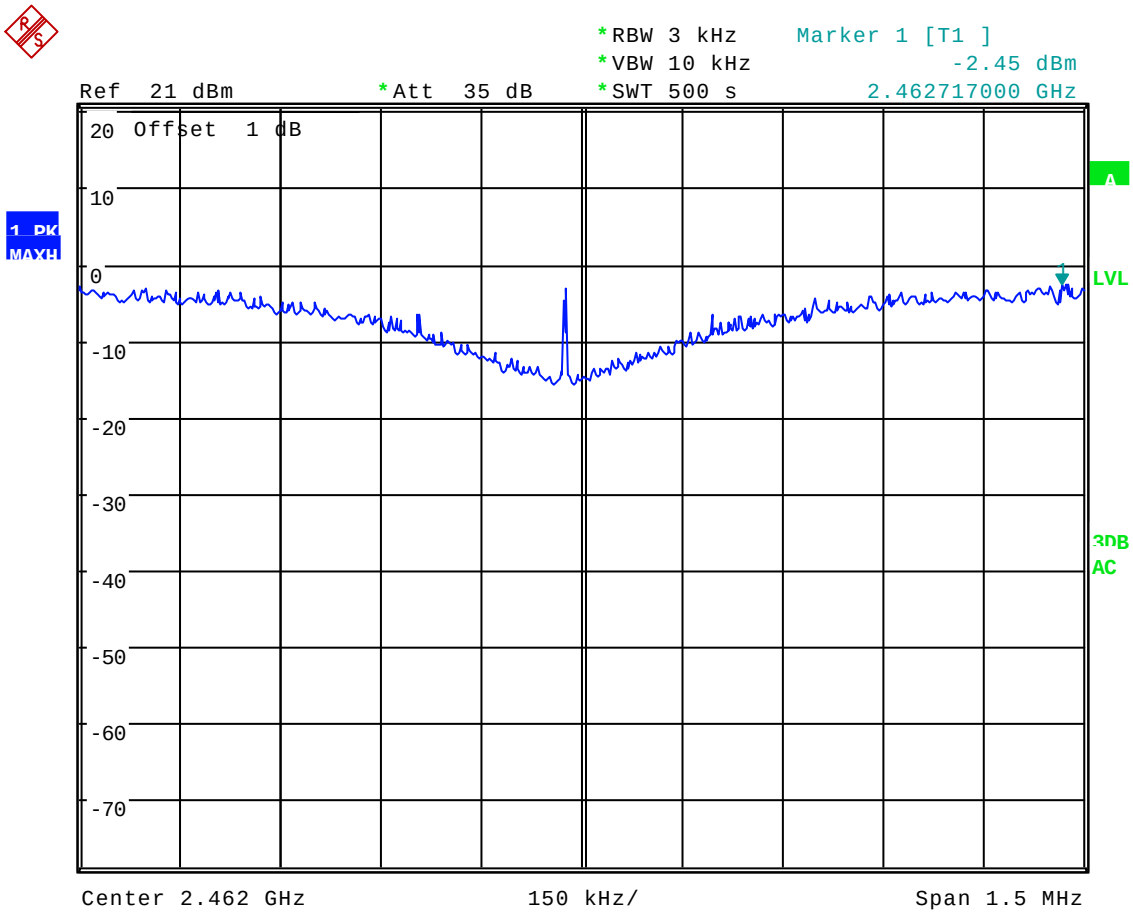
Date: 05.Nov.2011 14:15:12

2. 802.11b at 1Mbps at CH06



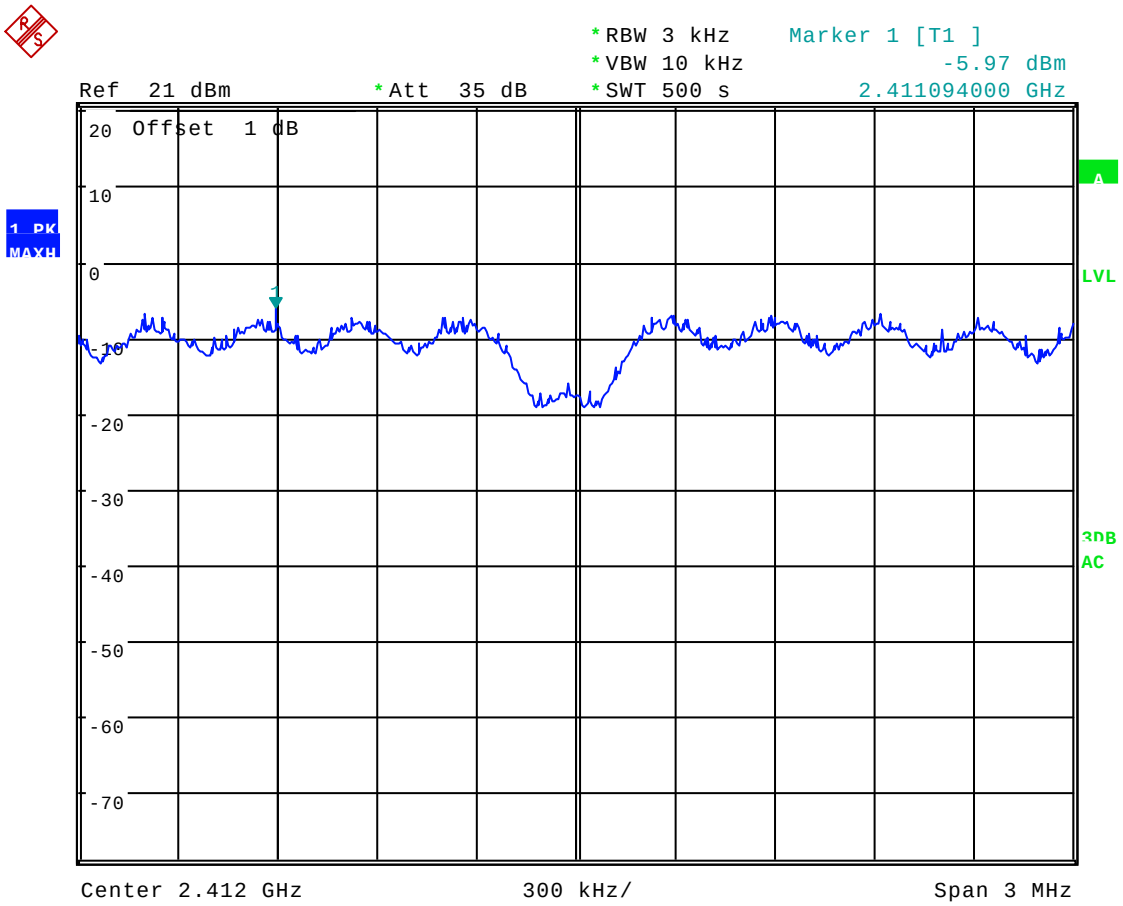
Date: 05.Nov.2011 14:25:00

3. 802.11b at 1Mbps of CH11



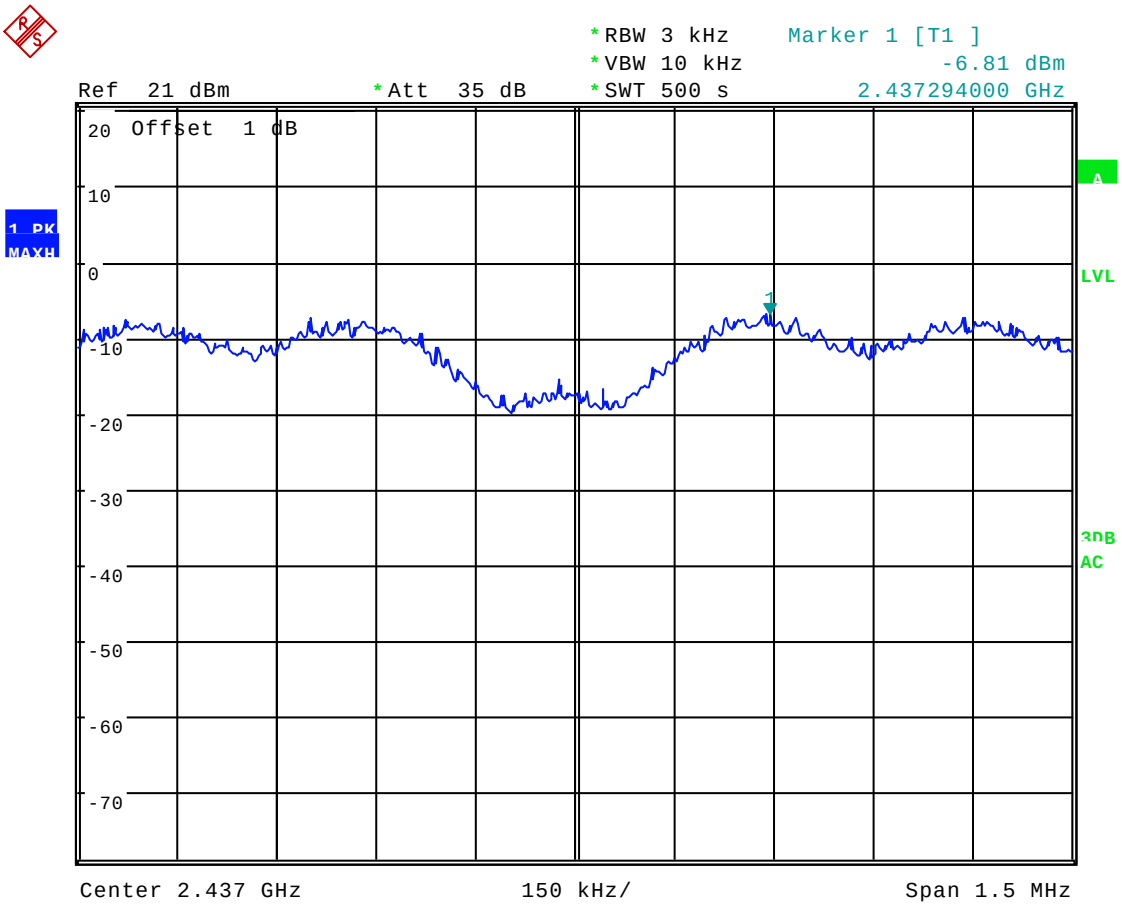
Date: 05.Nov.2011 14:34:05

4. 802.11g at 6Mbps of CH01



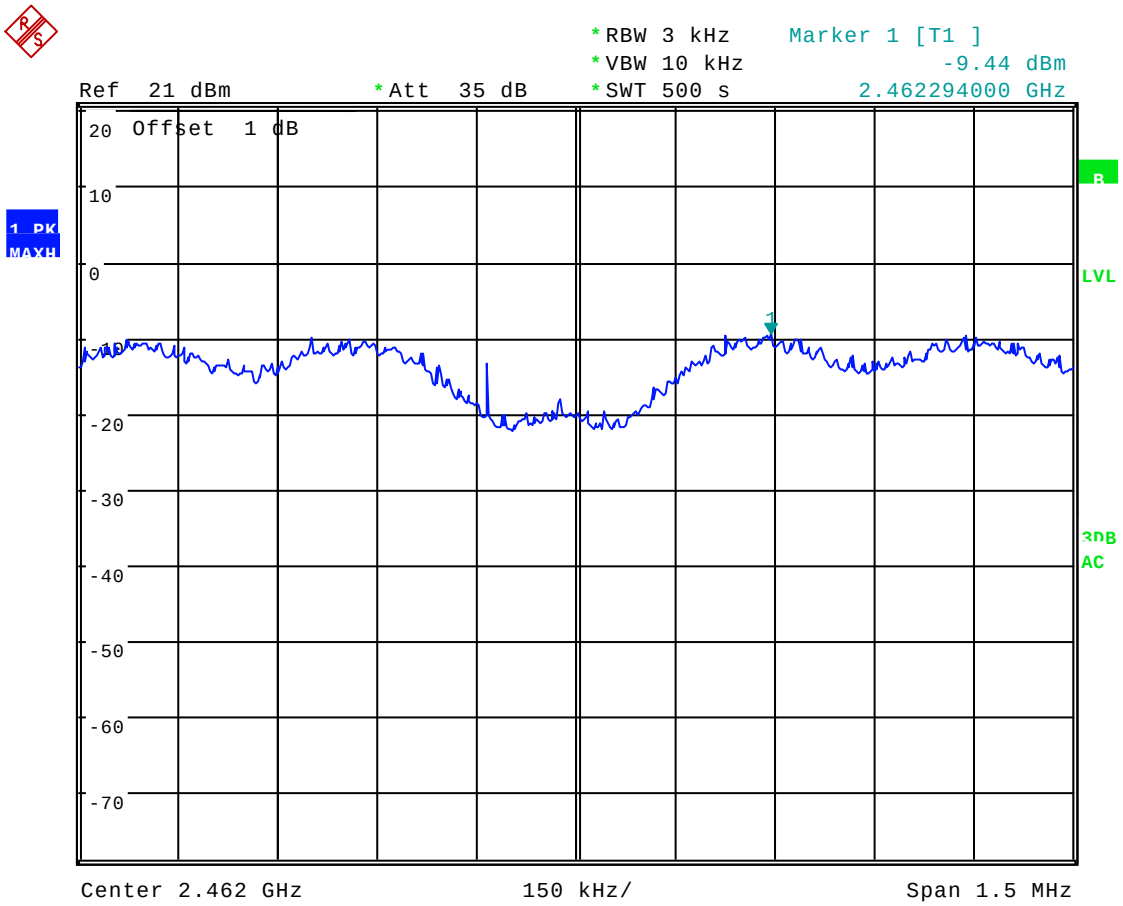
Date: 05.Nov.2011 14:46:34

5. 802.11g at 6Mbps of CH06



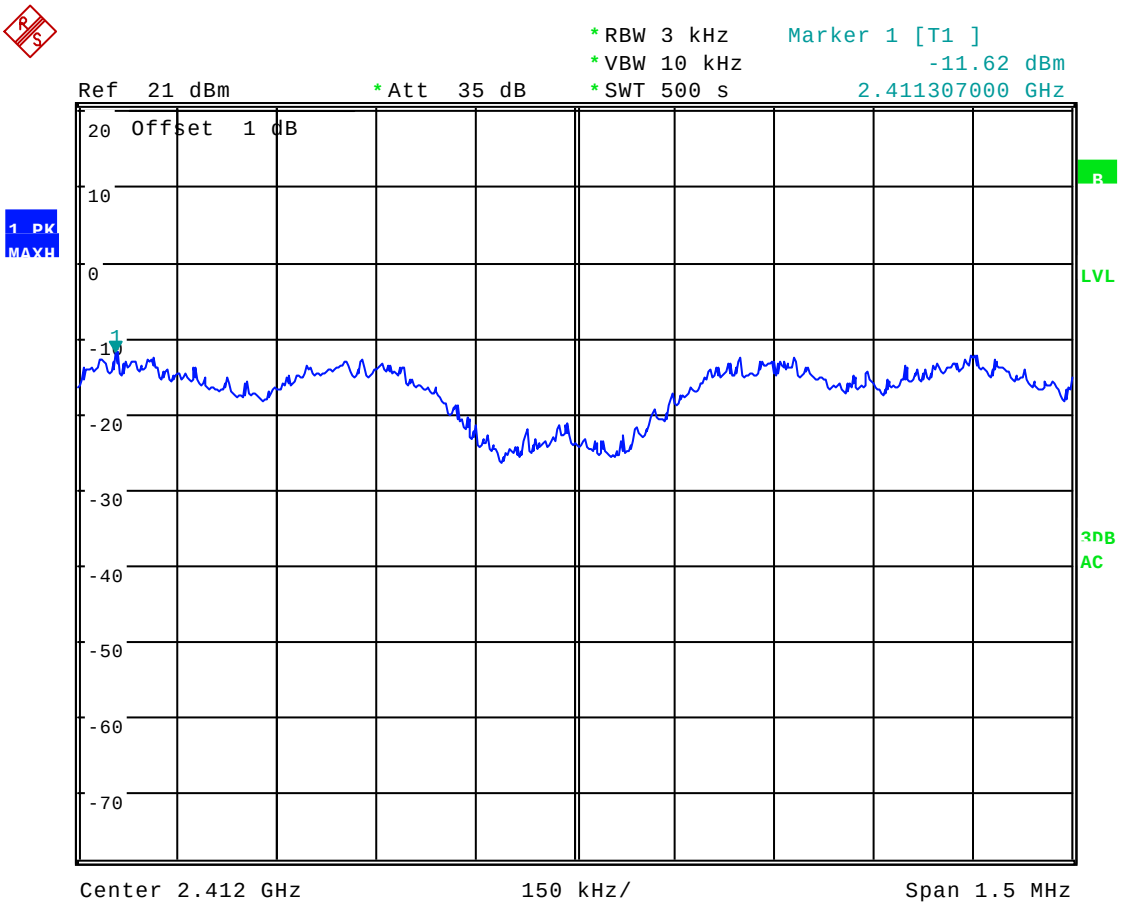
Date: 05.Nov.2011 14:55:34

6. 802.11g at 6Mbps of CH11



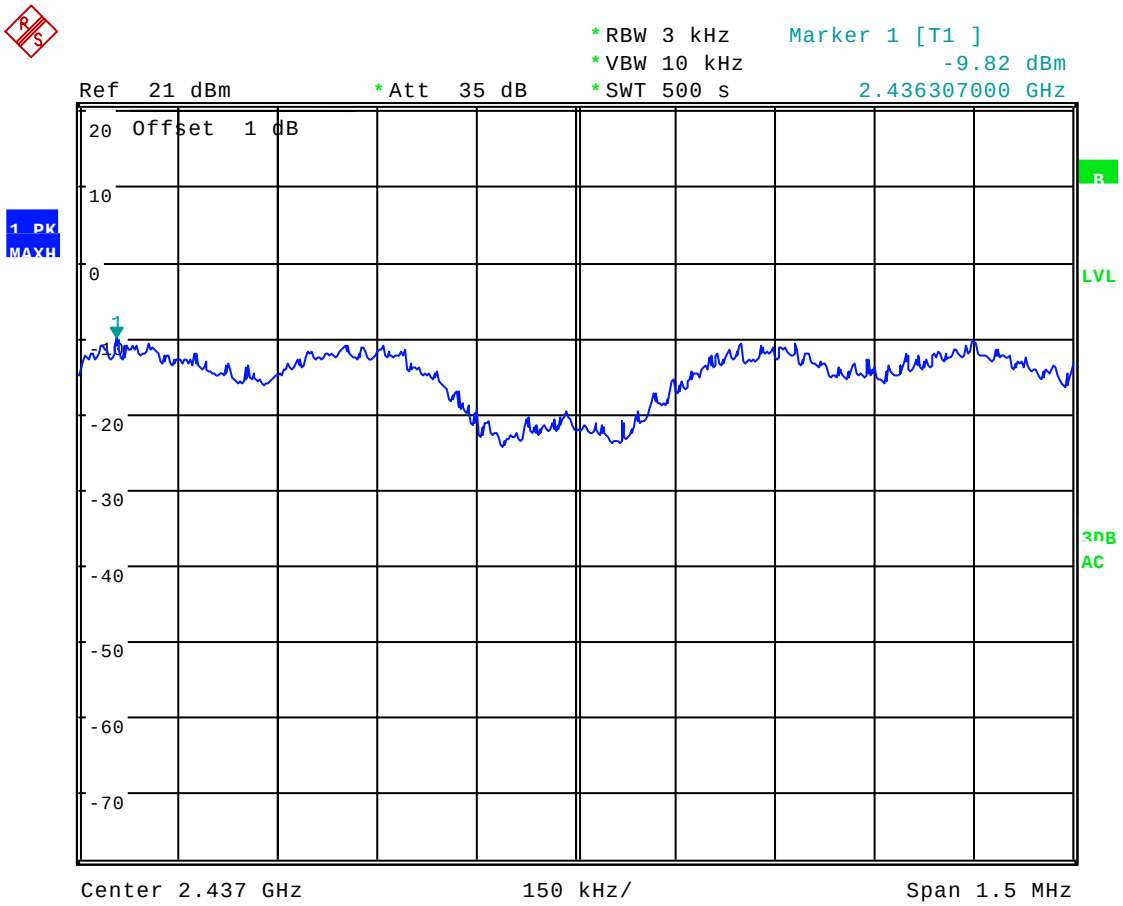
Date: 05.Nov.2011 15:06:10

7. 802.11 n HT20 at 6Mbps of CH01



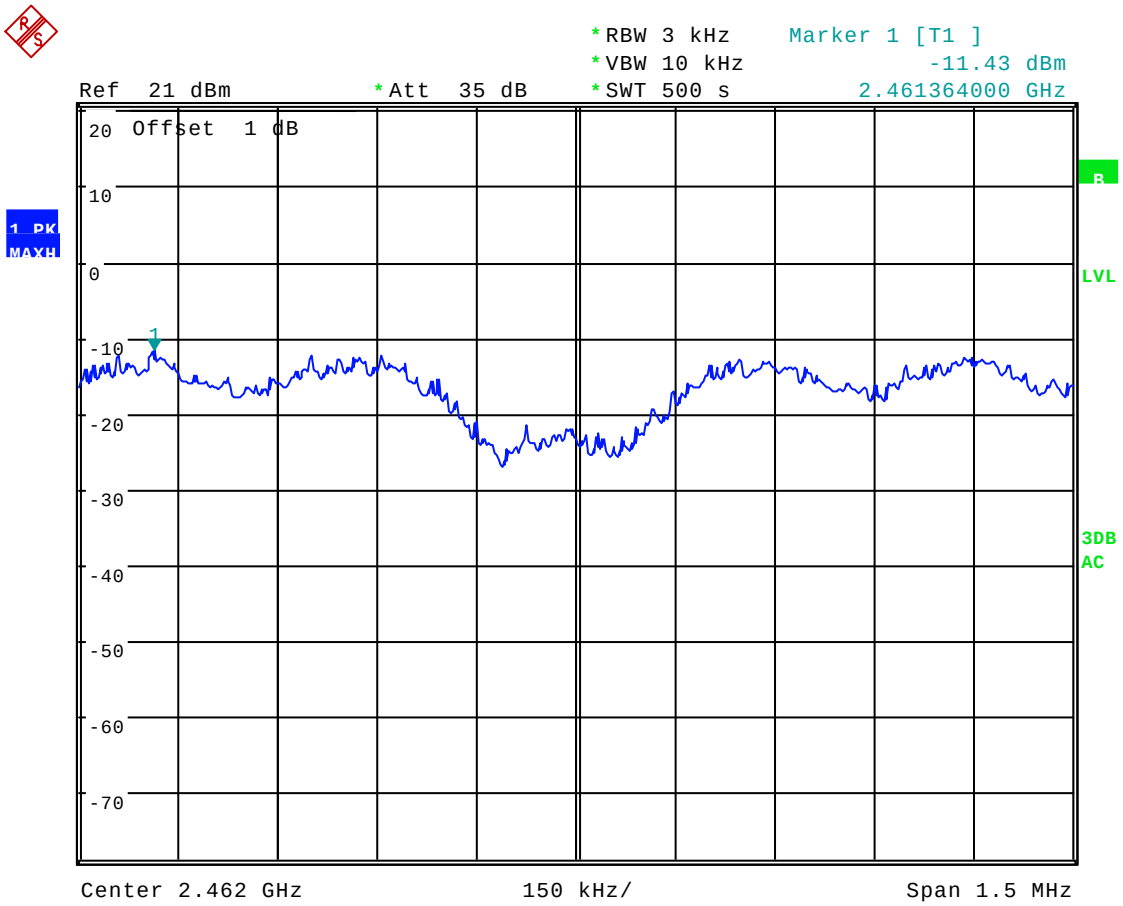
Date: 05.Nov.2011 15:14:30

8. 802.11 n HT20 at 65Mbps of CH06



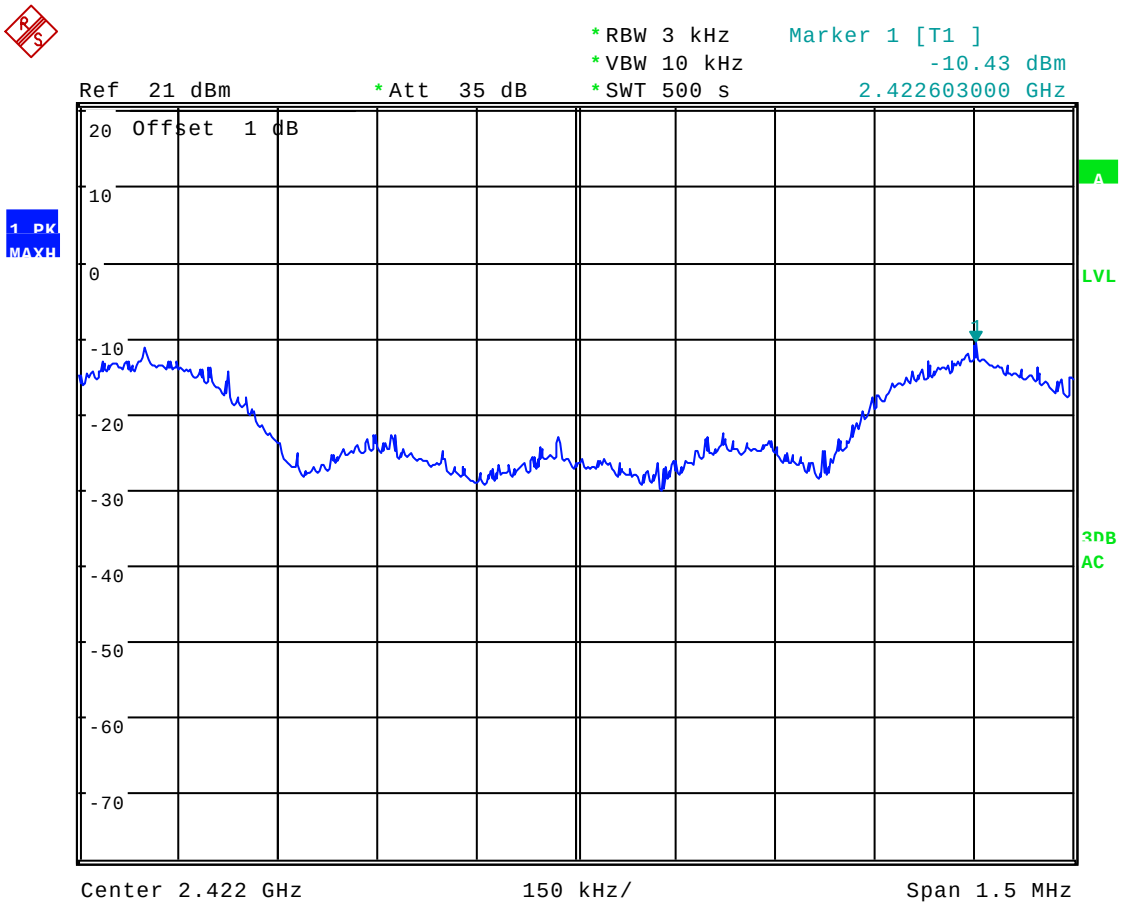
Date: 05.Nov.2011 15:25:19

9. 802.11 n HT20 at 65Mbps of CH11



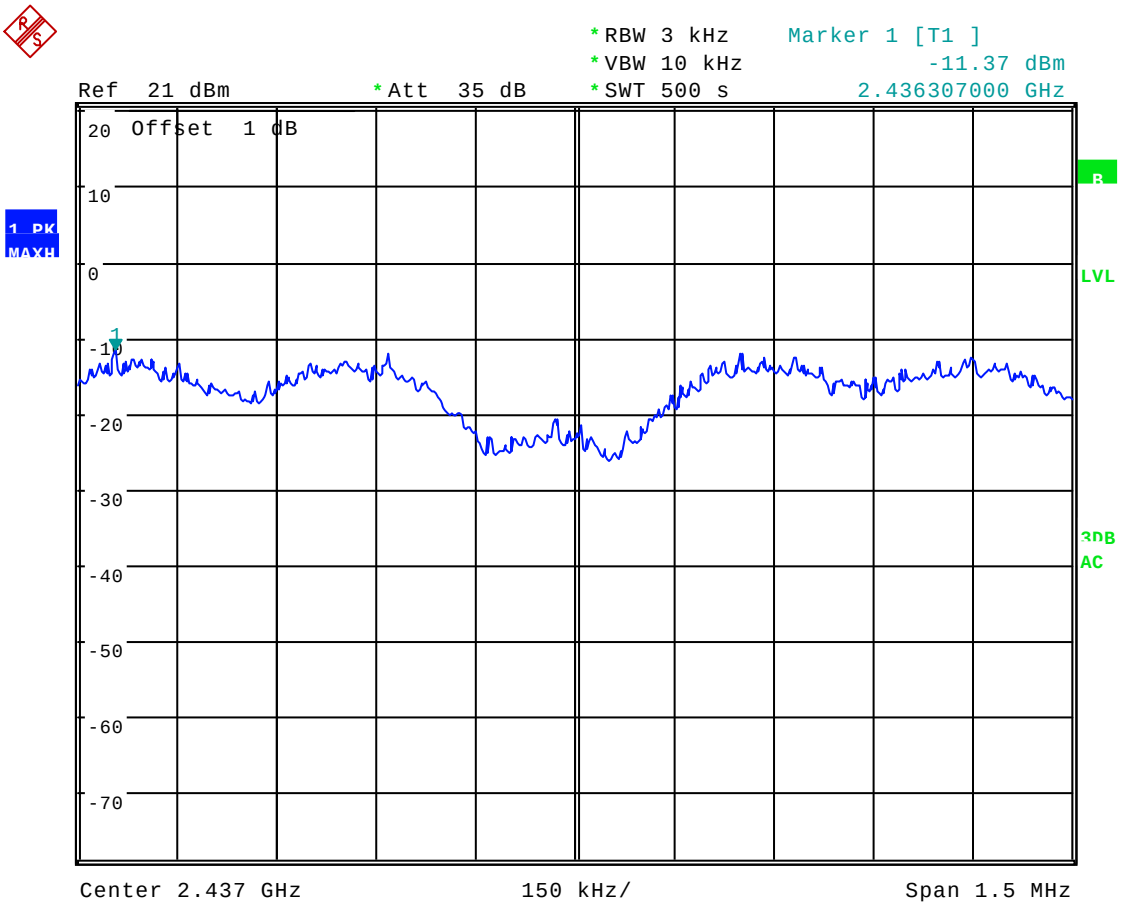
Date: 05.Nov.2011 15:37:03

10. 802.11n HT40 at 135Mbps of CH03



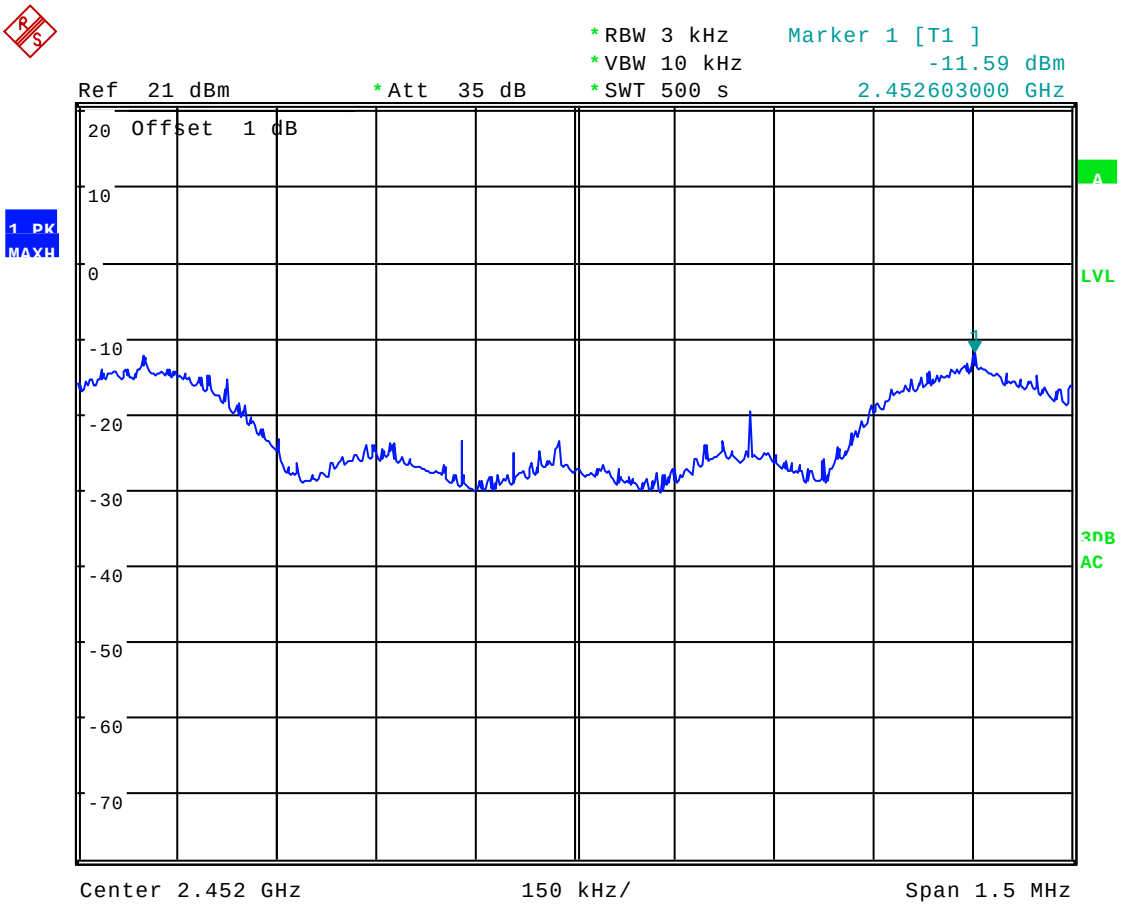
Date: 05.Nov.2011 15:46:36

11. 802.11 n HT40 at 135Mbps of CH06



Date: 05.Nov.2011 15:55:15

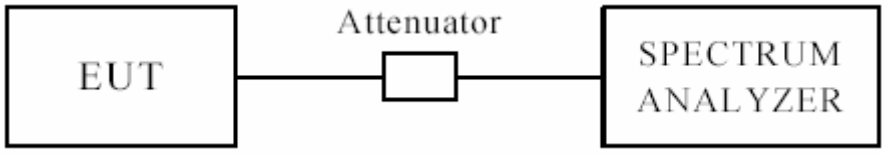
12. 802.11 n HT40 at 135Mbps of CH09



Date: 05.Nov.2011 16:04:44

10.0 Out of Band Measurement

10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

10.2 Limits of Out of Band Emissions Measurement

1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

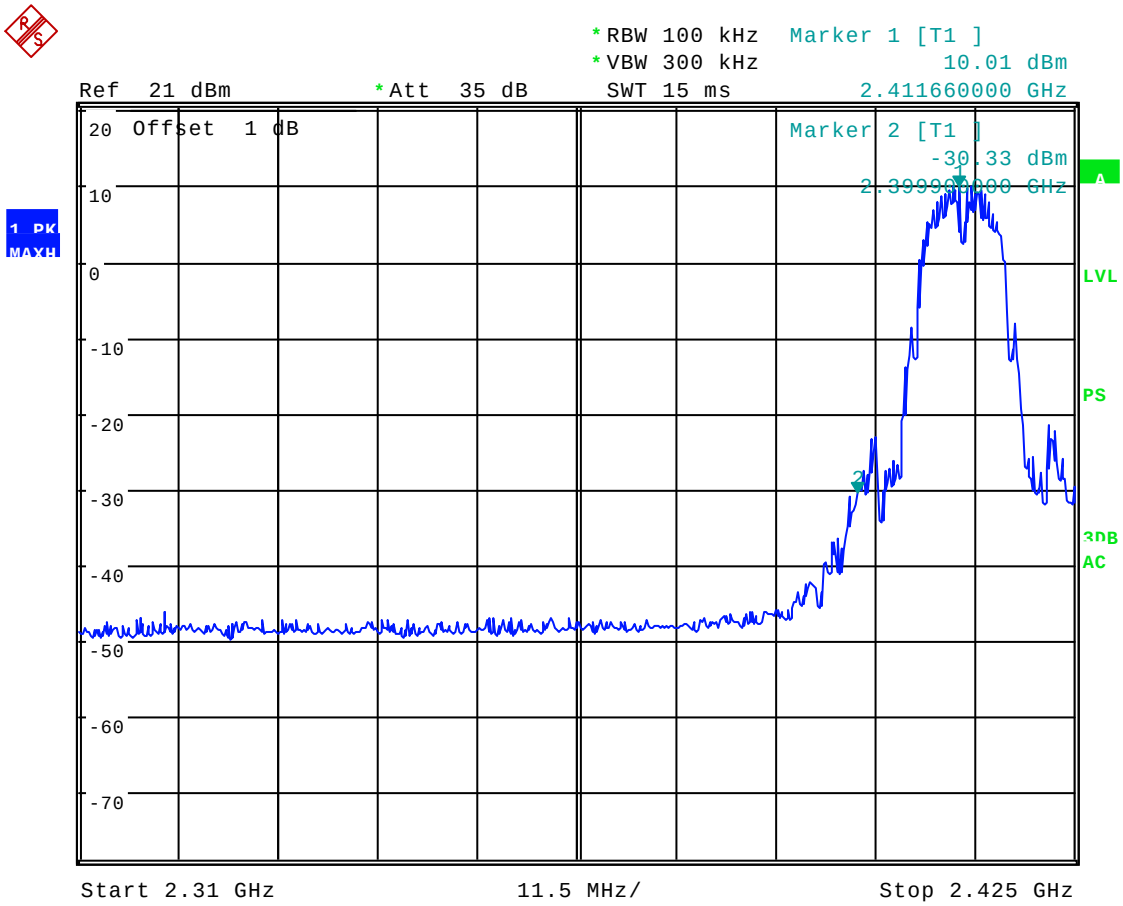
10.3 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator
2. Position the EUT without connection to measurement instrument. turn on the EUT and connect its antenna terminal to measurement via a low loss cable. then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. plot the graph with marking the highest point and edge frequency
5. Repeat above procedures until all measured frequencies were complete.

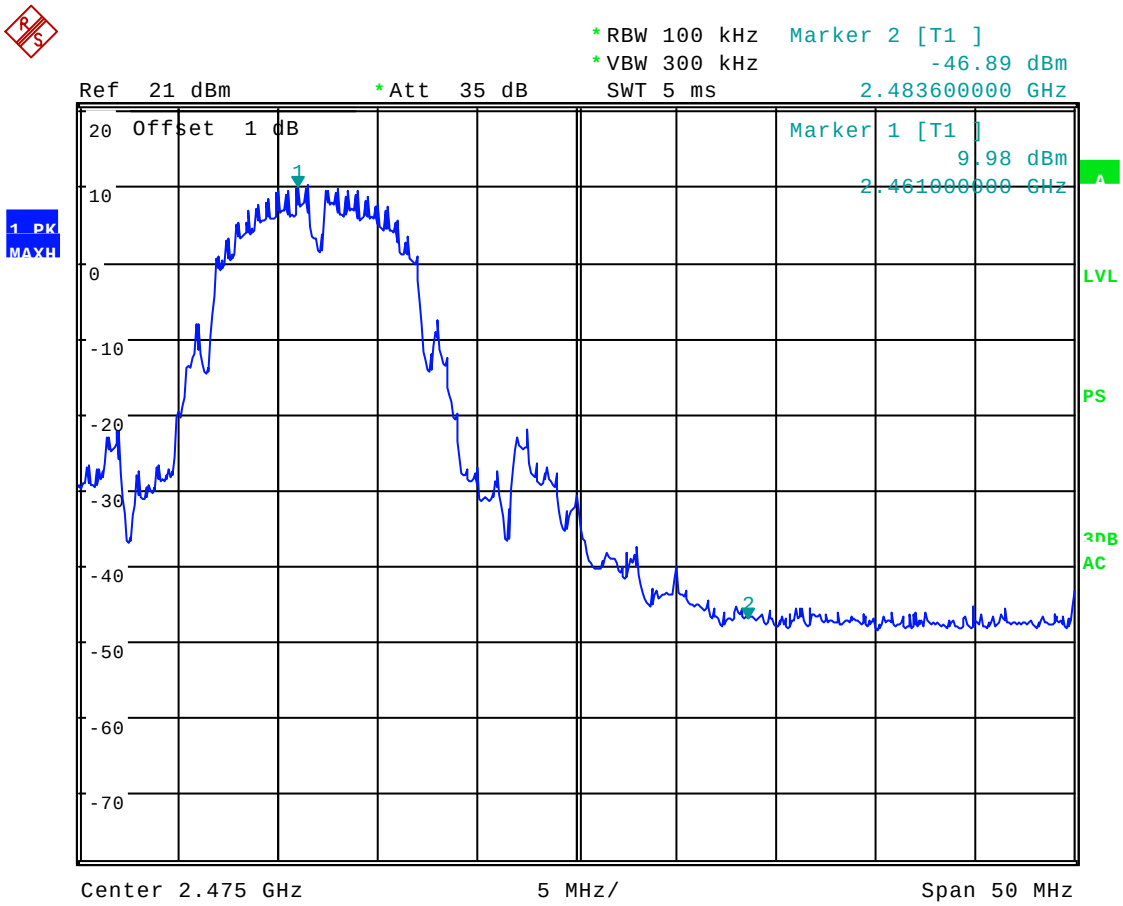
10.4 Test Result: Compliance

Product:	NETVUE	Mode	Keeping Transmitting	
Model	NI-1200	Input Voltage	120V~	
Temperature	24 deg. C,	Humidity	56% RH	
Channel	**Frequency(MHz)**	**Delta Peak to band emission(dBc)**	**Delta Limit (dBc)**	**Result**
802.11b mode at 1MHz				
Low	2399.90	40.34	20	Pass
High	2483.60	56.87	20	Pass
802.11g mode at 6MHz				
Low	2399.90	34.18	20	Pass
High	2483.60	42.16	20	Pass
802.11n HT20 mode at 65MHz				
Low	2399.90	40.59	20	Pass
High	2483.60	42.84	20	Pass
802.11Nht40 mode at 135MHz				
Low	2399.90	30.57	20	Pass
High	2484.58	34.09	20	Pass

1. 802.11b mode

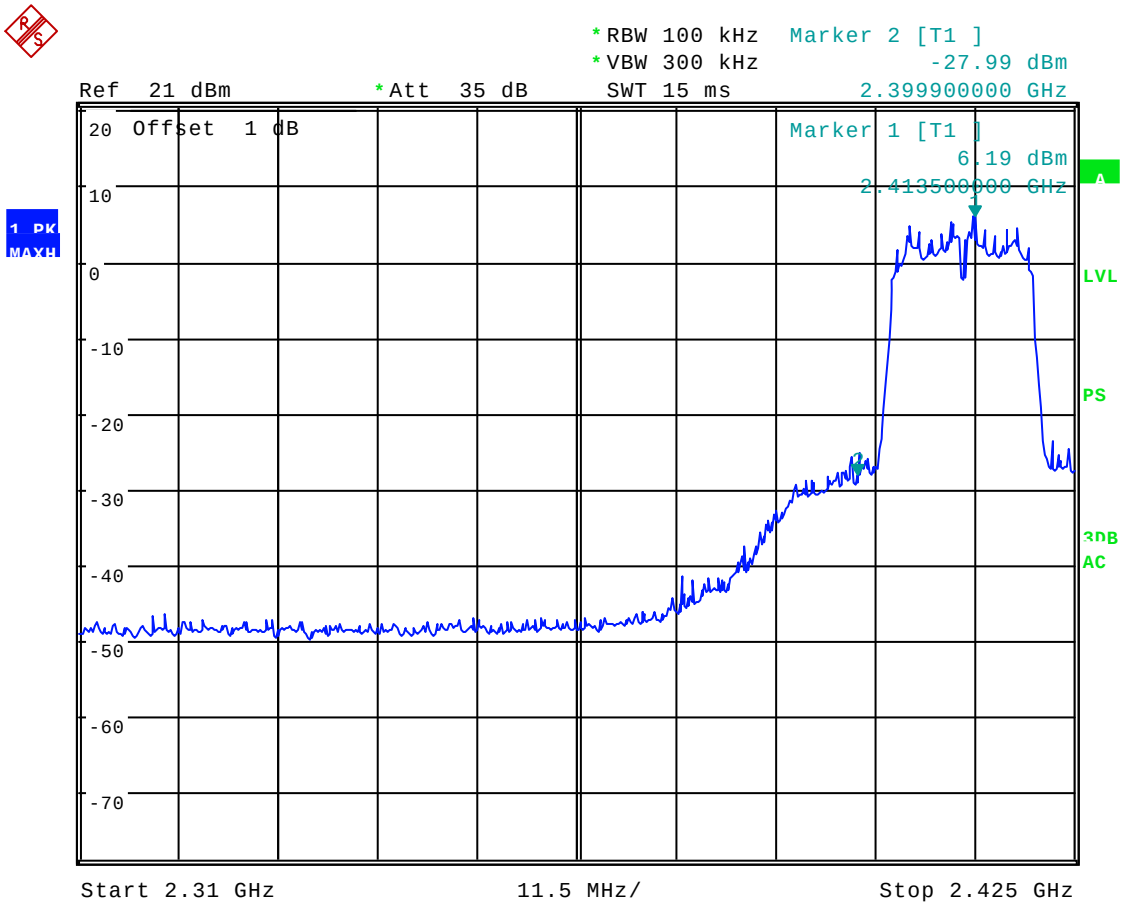


Date: 05.Nov.2011 10:54:42

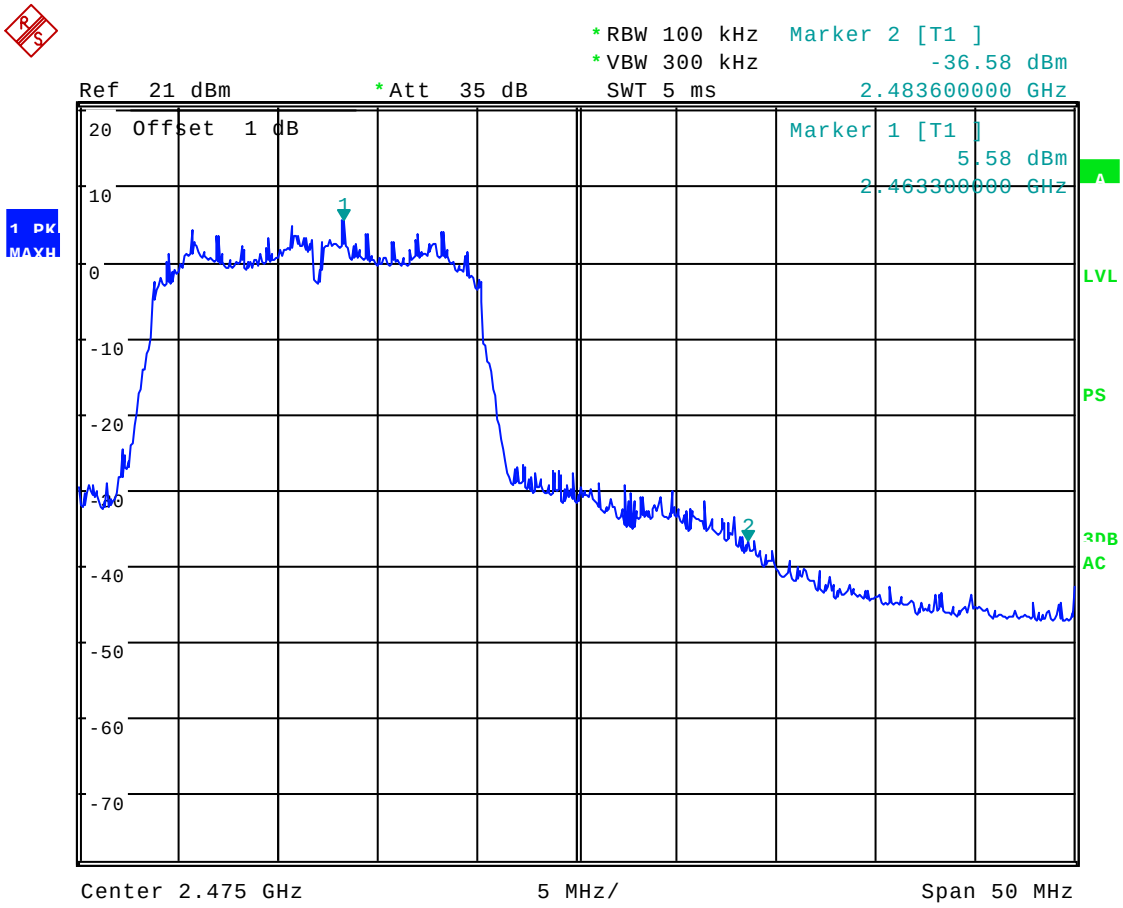


Date: 05.Nov.2011 10:53:11

2. 802.11g

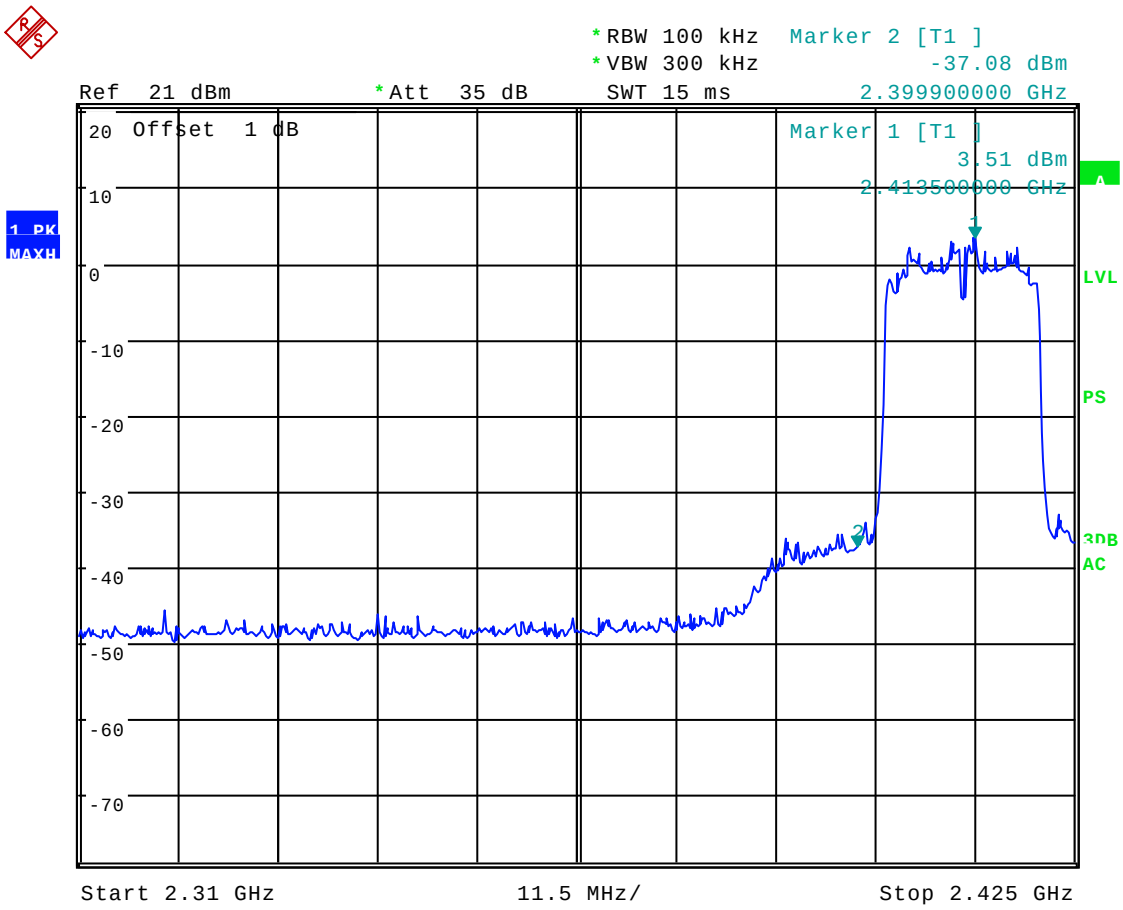


Date: 05.Nov.2011 10:48:47

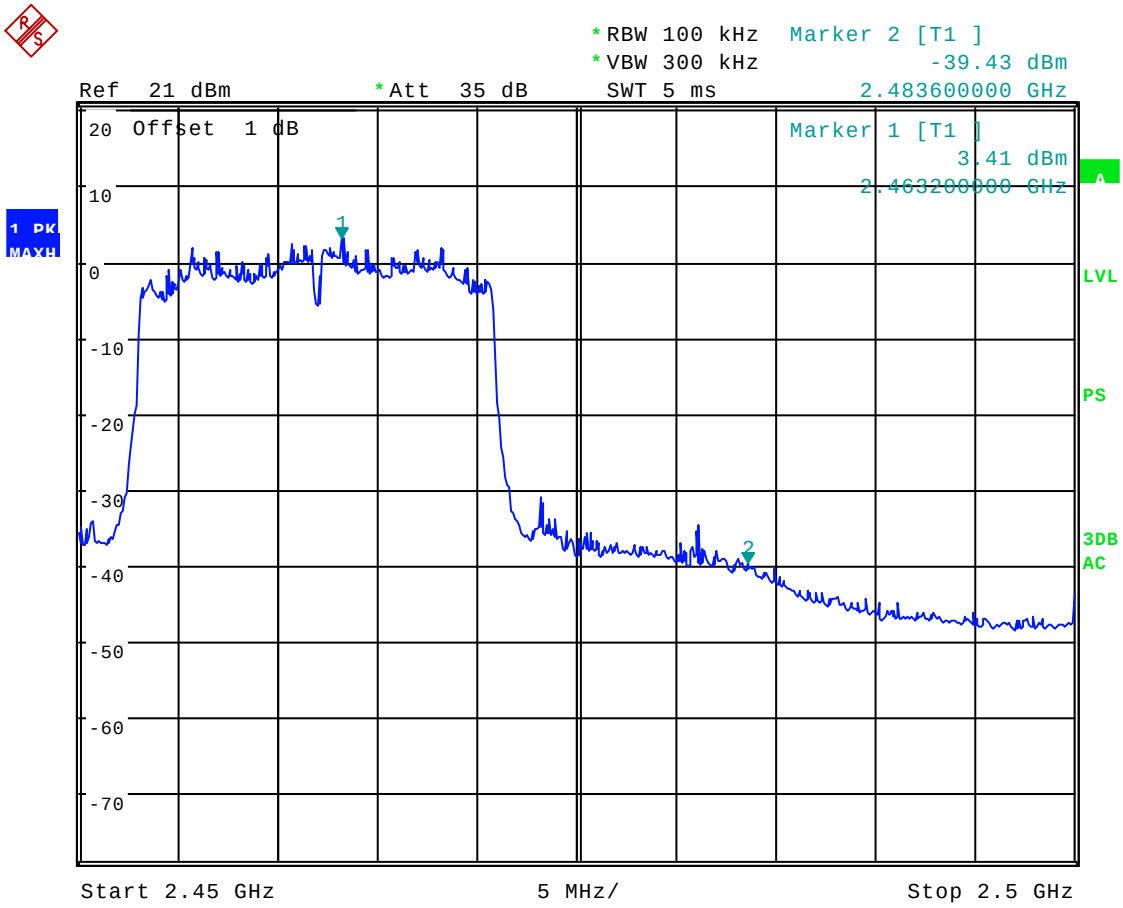


Date: 05.Nov.2011 10:51:55

3. 802.11n HT20

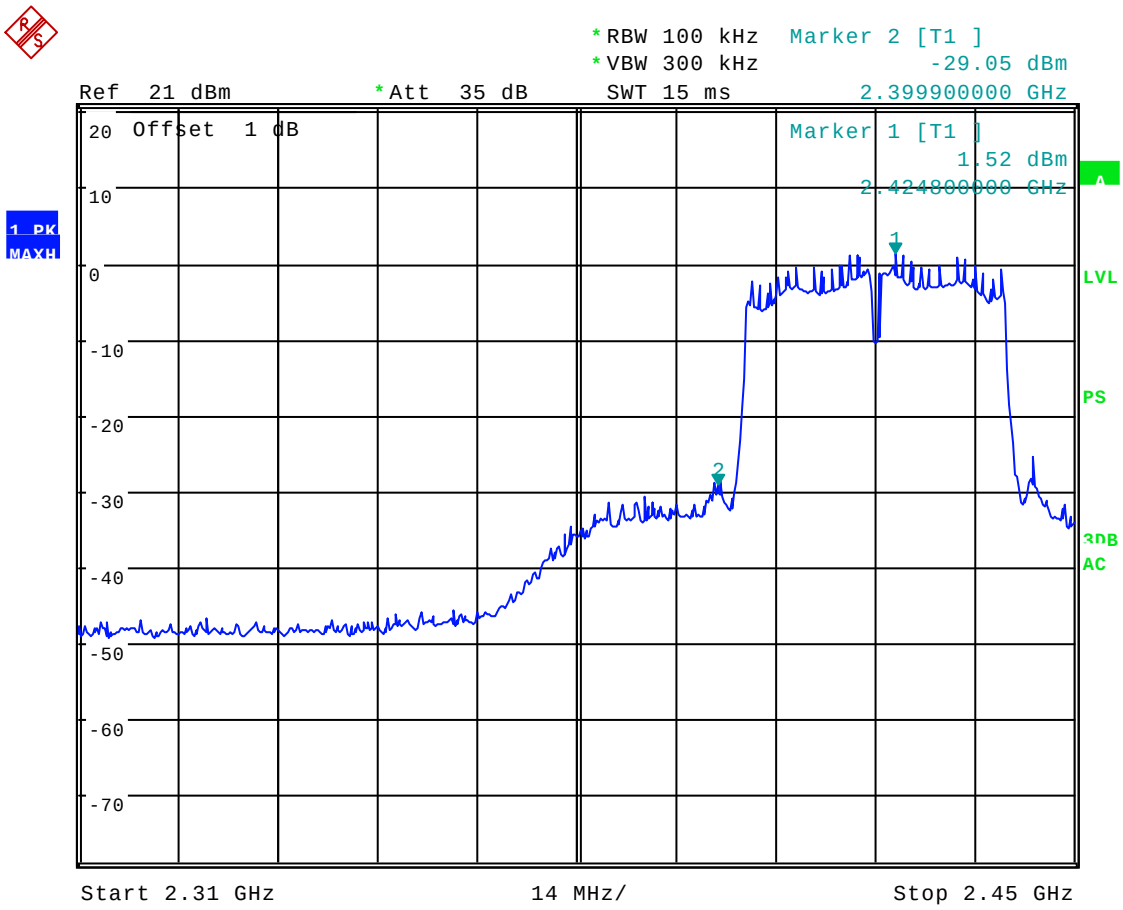


Date: 05.Nov.2011 11:06:46

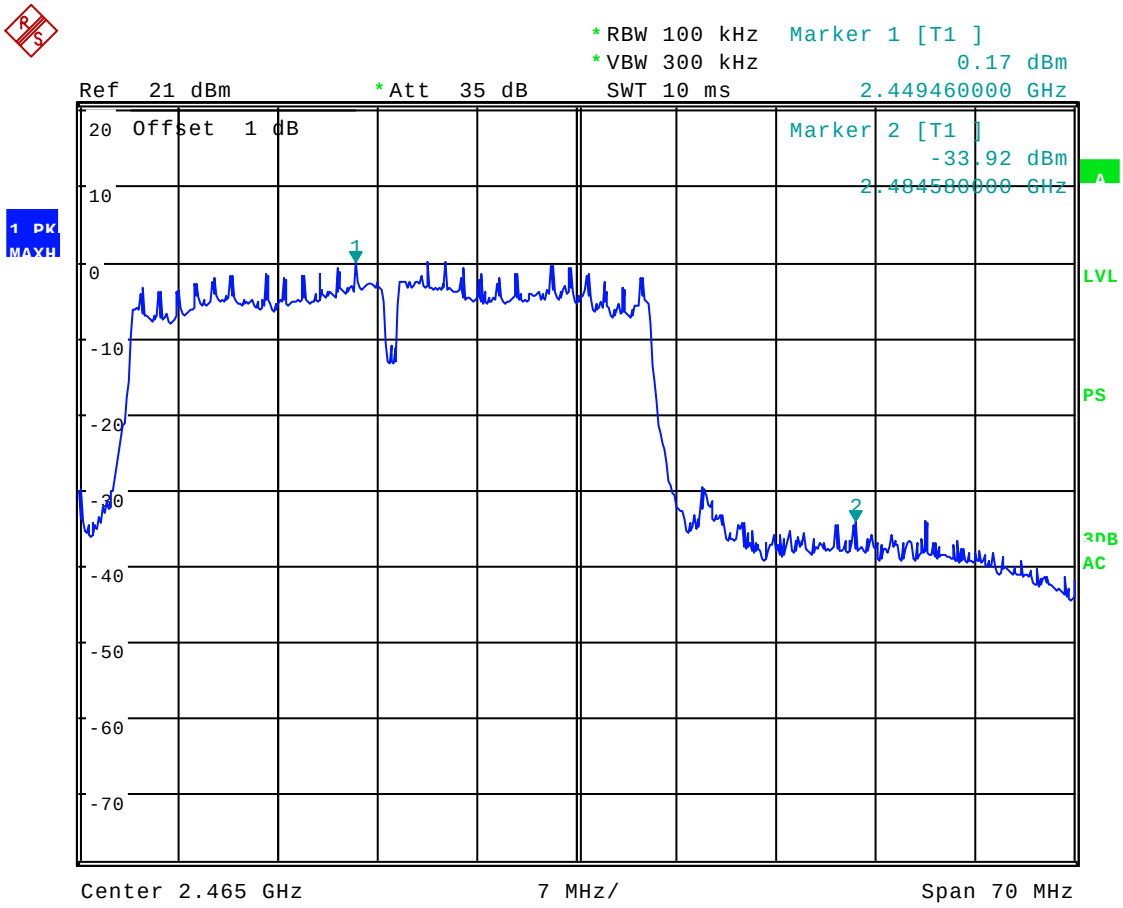


Date: 05.Nov.2011 11:14:51

4. 802.11n HT40



Date: 05.Nov.2011 11:02:31



Date: 05.Nov.2011 10:58:43

11.0 Antenna Requirement

11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

11.2 Antenna Connected construction

PCB antenna. The maximum Gain of the antenna is 2.0dBi.

12.0 Maximum Permissible Exposure

Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times |E|^2, |H|^2 or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100000			5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times |E|^2, |H|^2 or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100000			1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

MPE Calculation Method

E (V/m) = $(30*P*G)^{0.5}/d$

Power Density: Pd (W/m^2) = $E^2/377$

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

Pd = $(30*P*G) / (377*d^2)$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

Calculated Result and Limit

Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
1.585	17.68	58.6138	0.1848	1	Compiles

Note: 802.11b 1Mbps is the worse case.

13.0 FCC ID Label

FCC ID: Z92NI-1200

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:

14.0 Photo of testing

Conducted Emissions

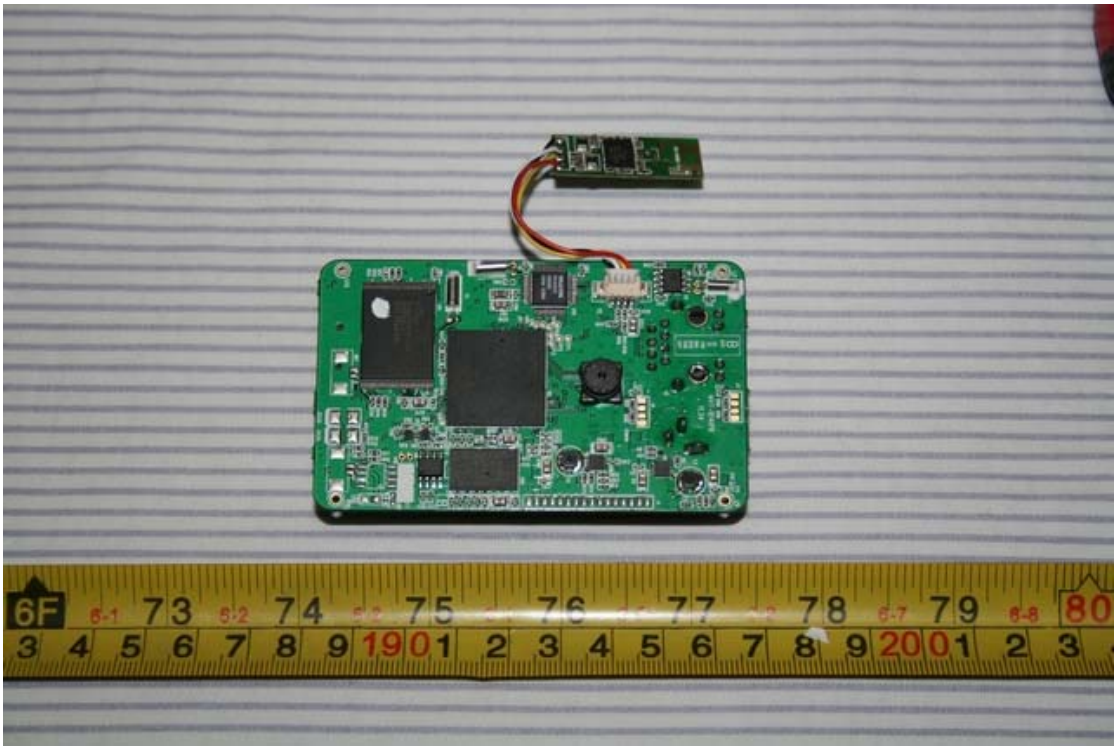
14.2 Radiated Emissions

14.3 Photo for the EUT

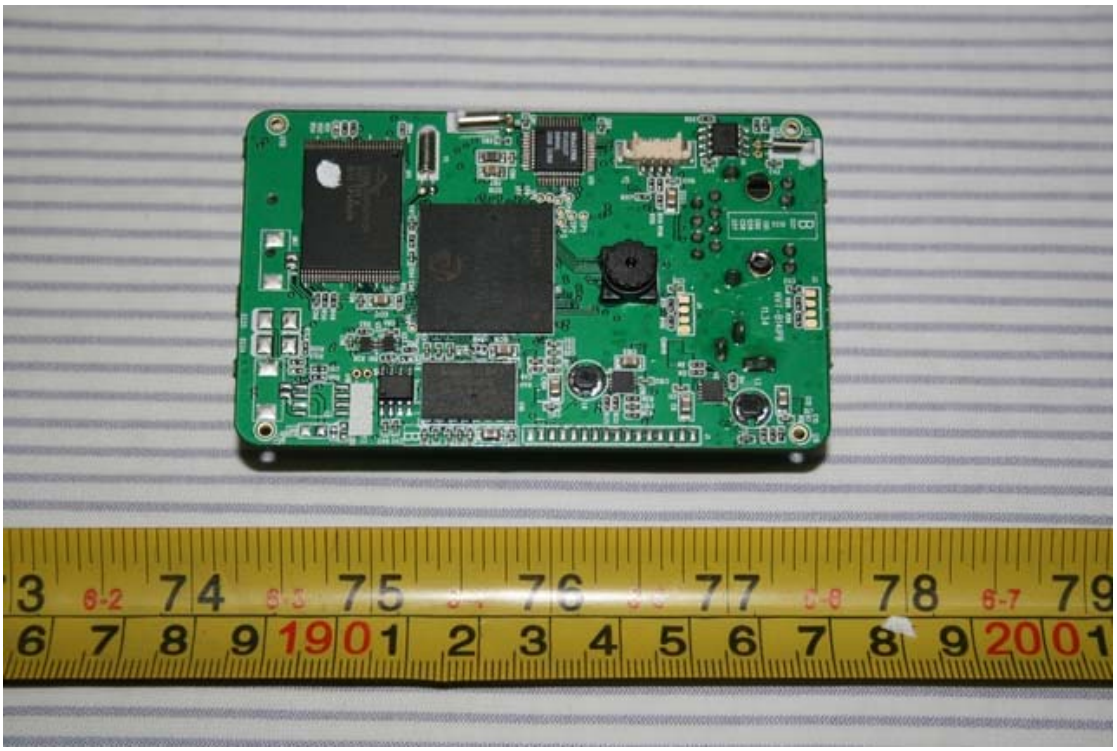
Front View

Back View

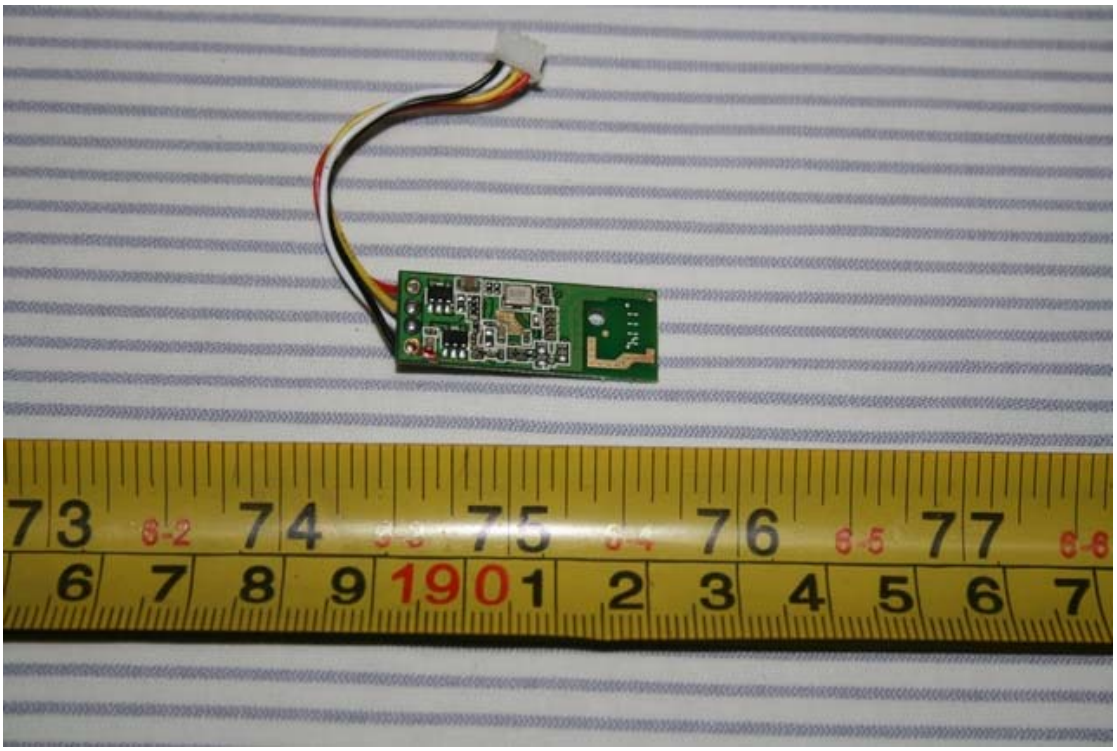
Interior View

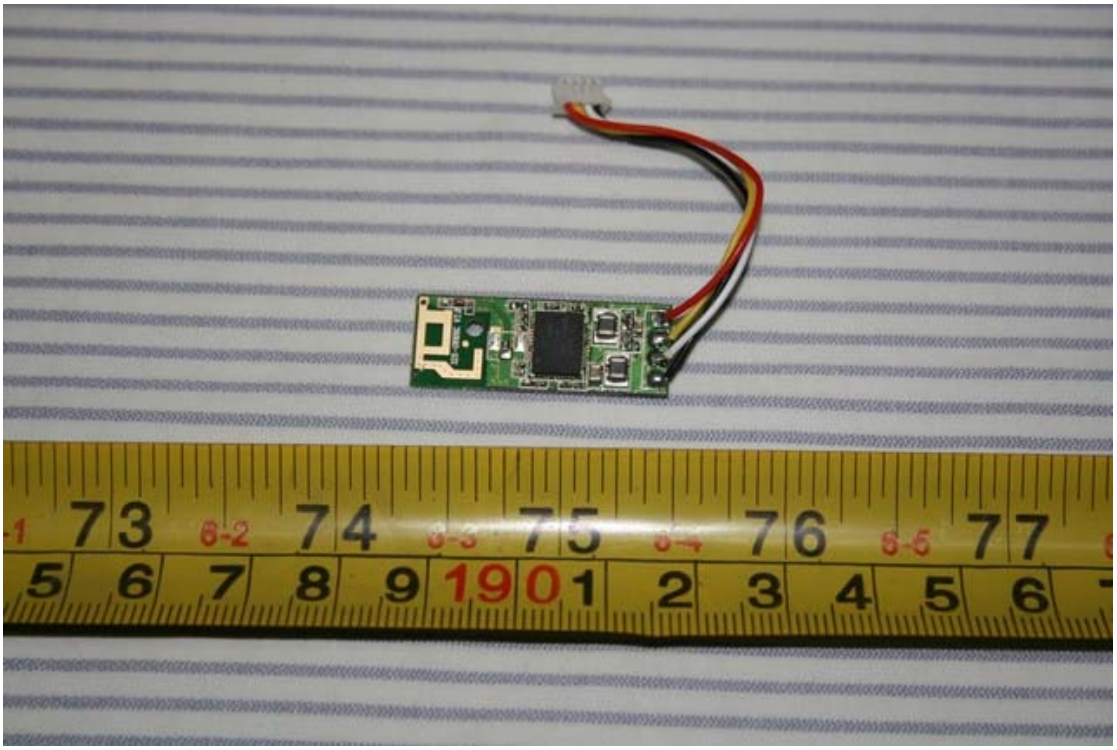


Interior View



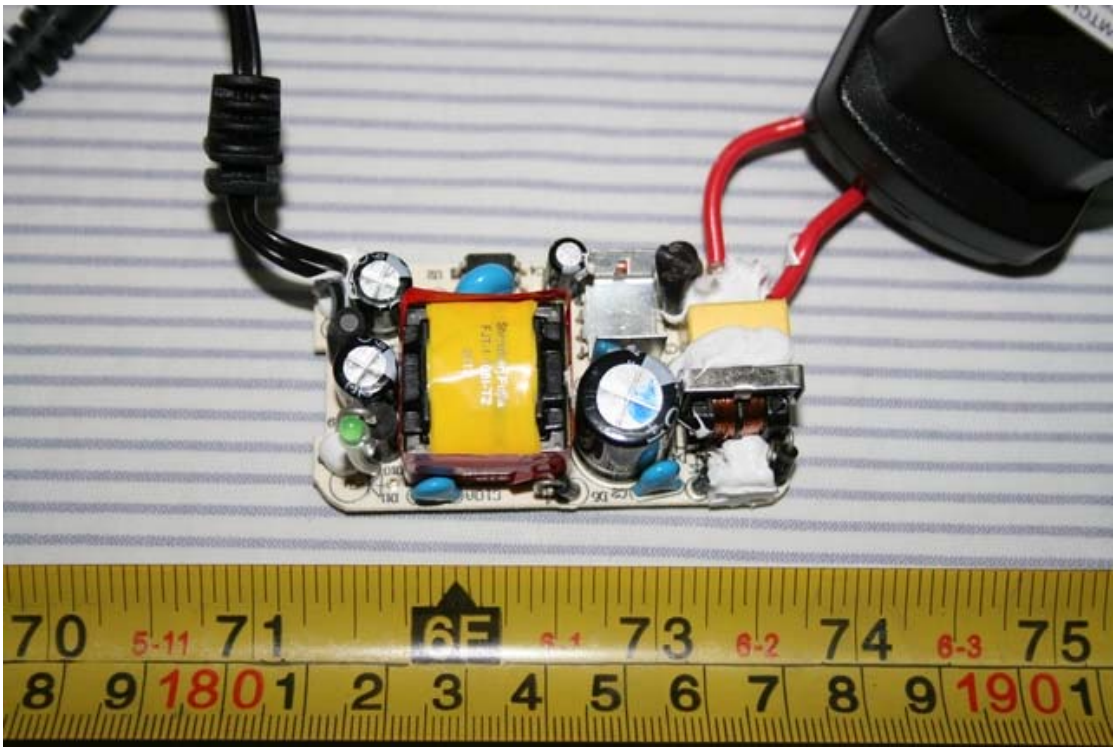
Interior View

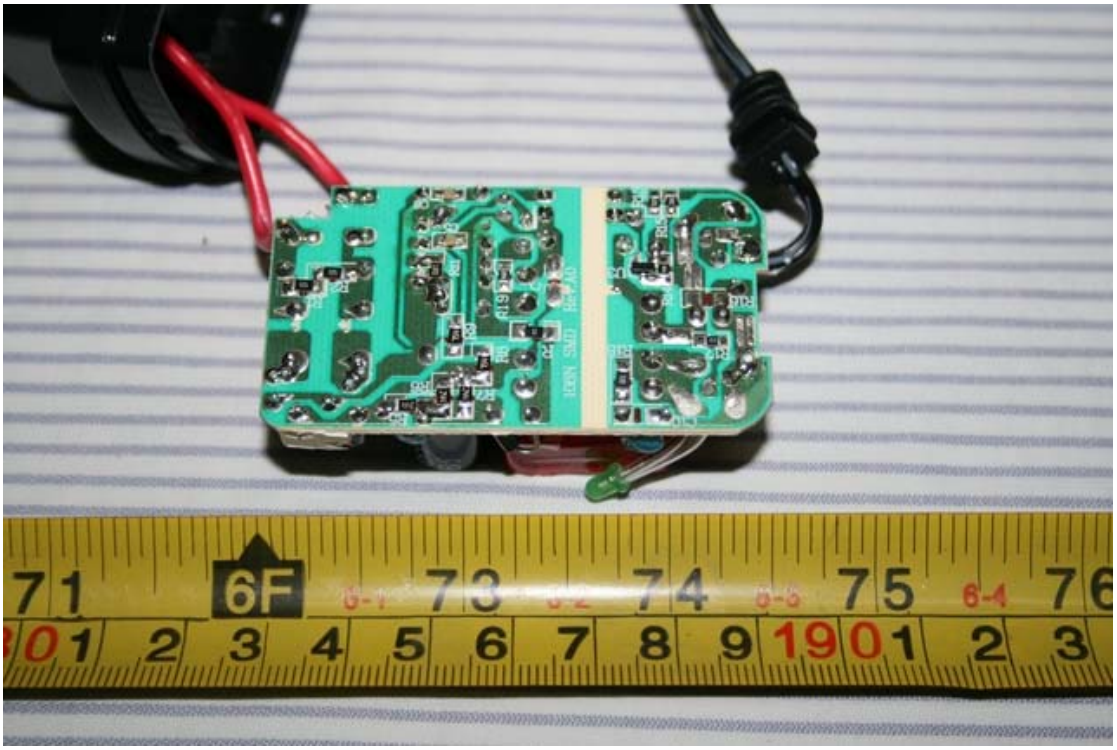




Power supply View

Interior View





End of the report