Test Report No. 8812328348

Applicant: ***Wavion Ltd.***

Equipment Under Test:
2.4 GHz Band Outdoor WiFi (802.11b/g) Wireless Base Station

Model: ***WBS-2400***
FCC ID: ***UGM-WBS2400-1***

From The Standards Institution
Of Israel
Industry Division
Electronics & Telematics Laboratory
EMC Section

ACCREDITED

Certificate No.1487-01

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Test Report No.: 8812328348 **Page 1 of 105 Pages**
Title: Test on 2.4 GHz Band Outdoor WiFi (802.11b/g) Wireless Base Station
Model: WBS-2400 **FCC ID: UGM-WBS2400-1**

Applicant:	Wavion Ltd.
Address:	6 Ha'yetsira Street, Yoqne'am-Illit, 20692, Israel
Sample for test selected by:	The customer
The date of test:	April 2008

Description of Equipment Under Test (EUT): 2.4 GHz Band Outdoor WiFi (802.11b/g) Wireless Base Station
Model: WBS-2400
Manufactured by: Wavion Ltd.

Reference Documents:

- **CFR 47 FCC:** Rules and Regulations; Part 15. “Radio frequency devices”; Subpart C: “Intentional radiators” (2006).

- **Test Results:** The EUT was found meeting with the relevant requirements of CFR 47 FCC Part 15 Sections: 15.205, 15.207, 15.209, 15.247.

This Test Report contains 105 Pages and may be used only in full.	This Test Report applies only to the specimen tested and may not be applied to other specimens of the same product.

Table of Contents

1. Applicant information

Company: Wavion Ltd.
Address :6 Ha'yetsira Street
City: Yoqne'am-Illit
Country : Israel

2. Test performance

Location: SII EMC Section
Wavion Ltd.
Purpose of test: Apparatus compliance verification in according with CFR 47 FCC Requirement
Test specification: CFR 47 FCC Part 15 Sections: 15.205, 15.207, 15.209, 15.247

Test	FCC Part 15	Test result
Radiated emissions in restricted bands	Sec.15.205	Complies
Radiated Emission on Radio Unit: spurious	Sec.15.209	Complies
Conducted emission	Sec.15.207	Complies
Radiated emission – general requirements	Sec.15.209	Complies
Minimum bandwidth	Sec. 15.247 (a) (2)	Complies
Maximum peak output power	Sec.15.247 (b)	Complies
Peak power spectral density	Sec.15.247 (d)	Complies
Conducted spurious emissions	Sec.15.247 (c)	Complies

Electronics &
Telematics Laboratory
30 April 2008

Approved by: Eng. Yuri Rozenberg
Position: Head of EMC Branch

Tested by: Albert Herzenshtein
Position: Test Engineer

3. Scope

This test report contains results measured on 2.4 GHz Band Outdoor WiFi (802.11b/g) Wireless Base Station (FCC ID: UGM-WBS2400-1) according to the relevant requirements of CFR 47 FCC Part 15 Subpart C.

4. EUT (equipment under test) description.

4.1. General Description

The WBS-2400 is a new category of Wi-Fi Wireless Base Station designed from the ground up for metro-Wi-Fi deployments. It is based on six antennas and radios and custom-built ASICs, utilizes Wavion's powerful multi-antenna signal processing technologies, and provides significant performance gains to off-the-shelf 802.11 standards-based Wi-Fi clients.
The WBS-2400 Wi-Fi Wireless Base Station uses six omni-directional antennas and beam-forming technology in order to provide significant performance gains to off-the-shelf 802.11 standards-based Wi-Fi clients.

The EUT's block diagram is shown in Figure 1.

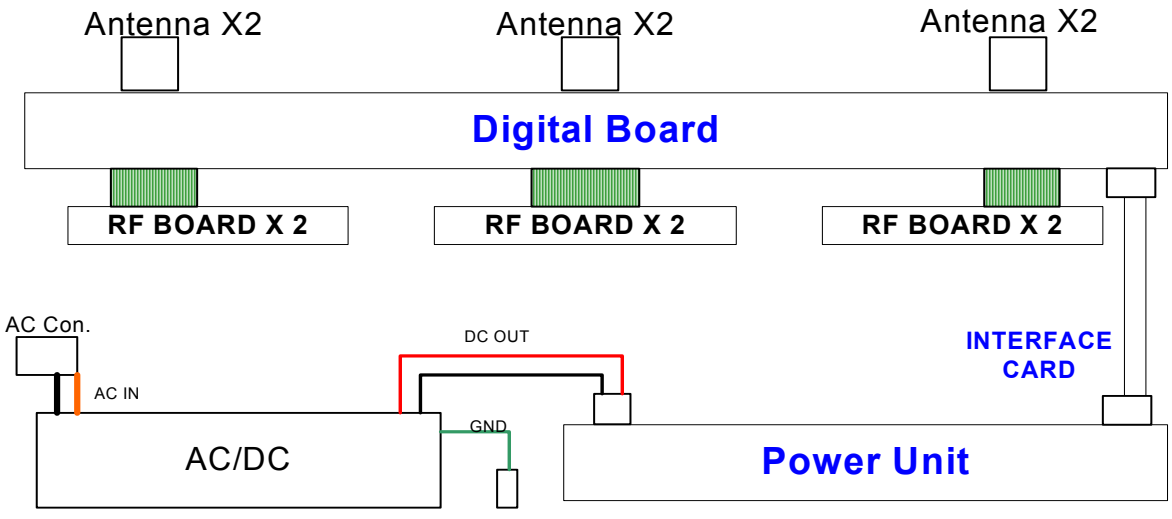


Figure 1. EUT's block diagram

4.2. EUT's sub-assemblies list.

The EUT ports and lines are detailed in Table 1.

No.	Description	P/N; Model	Manufacturer
1	Digital Board	PC00018	Wavion
2	RF Board	PC00041	Wavion
3	RF Board	PC00040	Wavion
4	Interface card	PC00023	Wavion
5	AC/DC PS	LS75-48	Nemic Lambda
6	DC/DC PS	PKB4711PINB	Ericsson
7	AC Connector	50909	Remke
8	Antenna	MT-341017/N/A	MTI
9	Power Unit	PC00019	Wavion
10	RF filter	DFCH52G43HFHAA-TM1	Murata
11	RF filter	SRP2437K8N50SB	Bitel
12	RF filter	6BCR4B-2437/C67-L	Comnav
13	RF filter	SKY33100	Skyworks

Table 1. Sub-assemblies list

4.3. EUT ports and lines.

The EUT ports and lines are detailed in Table 2.

Port Type	Port Description	Connected from / to	Connector type	Qty.	Cable Type	Cable Length
AC Power	**AC inlet**	**Wall outlet/Power TAP-inlet**	**Standard**	**1**	**Unshielded**	**6m**
Data	**Data/PoE**	**PD-Client**	**RJ-45 shielded**	**4**	**CAT-5e**	**Up to 100m**

Table 2. The EUT ports and lines

4.4. Potential emission source:

The potential emission sources are detailed in Table 3.

Frequency	Location	Remarks
40 MHz	On board	Crystal Oscillator with PLL

Table 3. Potential emission sources

4.5. EUT technical characteristic

Type of equipment								
	Stand-alone (Equipment with or without its own control provisions)							
Intended use		**Condition of use**						
	Fixed	Always at a distance more than 2 m from all people						
Assigned frequency range		2400MHz to 2483.5MHz						
Operating frequency range		2412MHz to 2462MHz (WLAN channels 1 to 11)						
RF channel spacing		5MHz						
Maximum rated output power		At transmitter 50 Ω RF output connector		19dBm@2412MHz				
				19dBm@2437MHz				
				19dBm@2462MHz				
Is transmitter output power variable?			Yes	minimum RF power	4dBm			
				maximum RF power	19dBm			
Antenna connection								
	unique coupling	V (N-Type)	standard connector		integral		with temporary RF connector	
						V	without temporary RF connector	

External antenna/s technical characteristics

Type	Manufacturer	Model number	Gain
Omni-directional	MTI	MT-341017/N/A	7.4dBi

Transmitter 99% power bandwidth	12000kHz to 16000kHz				
Transmitter aggregate data rate/s (min-maximum)	1Mbps to 54Mbps				
Type of modulation	OFDM, DSSS, CCK				
Type of multiplexing	CSMA/CA				
Modulating test signal (baseband)	Random data				
Maximum transmitter duty cycle in normal use	90.%	Tx ON time	…X….msec	Period	…X….msec
Transmitter duty cycle supplied for test	100%	Tx ON time	…X….msec	Period	…X….msec

Transmitter power source						
V	DC	**Nominal rated voltage**	PoE 55VDC			
V	AC mains	**Nominal rated voltage**	90-240VAC	Frequency: 50/60Hz		

Spread spectrum technique used	Frequency hopping (FHSS)	
	Digital transmission system (DTS)	V
	Hybrid	

Spread spectrum parameters for transmitters tested per FCC 15.247 only		
DSSS	chip sequence length	11bits
	spectrum width	12MHz

5. Test configuration:

The WBS-2400 unit has 4 possible RF board configurations. The difference between all the RF board configurations is the manufacturer of the transmit filter. Below is a list of all the supported filter manufacturers:
RF board PCB number PC00040: 1) Murata; 2) Bitel; 3) Comnav
RF board PCB number PC00041: 4) Skyworks
All of the above filters have the same operating frequency range. Also, the only difference between PCB number PC00040 and PCB number PC00041 is the footprint of the transmit filter.
The transmission power of each RF board is calibrated during the production process to a predetermined level, which is independent of the transmit filter manufacturer.
To withstand in every configuration and to use filters and boards in any complicating for the
WBS-2400 device has been performed the following:

1. Conducted Test: the conducted test (Minimum bandwidth; Peak power spectral density and Conducted spurious emissions) was performed with all possible configurations of Murata, Skyworks, Bitel and Comnav.
2. Find the worst case sample, where it is most critical at band edge.
3. Radiated (on the band edge) and repeat Conducted Tests of worst case sample.

In order to find the “worst case” sample, which can represent all kinds of RF filters, each filter was pre-tested as described above. After all radio conducted tests the Skyworks models were chosen as the “worst case”, all final measurements were performed with 6 Skyworks filters.

For Radiated emission measurements per sec. 15.209 requirements the EUT was configured for tests as shown in Figure 2.

For transmitter measurements per sec. 15.247 requirements the EUT was configured for tests as shown in Figure 3.

For Radiated emission measurements per sec. 15.205 requirements the Radio unit was tested with antennas, detailed in Table 4.

Mnuf.	Freq. Range GHz	Gain dBi	Model	Type
MTI	2.4-2.4835	7.4	MT-341017/N/A	Omni-directional-

Table 4. Details of antenna used in WBS-2400.

RF output terminated by 50Ω

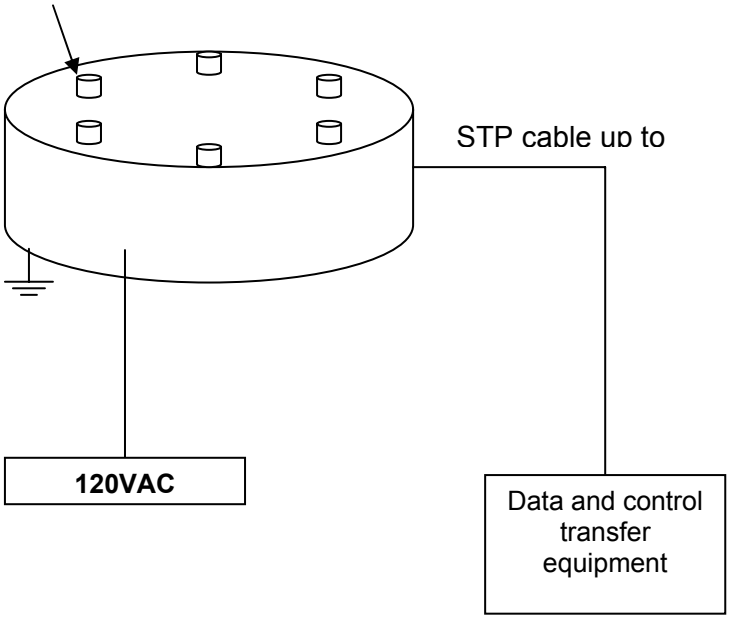


Figure 2. Radiated emission test setup

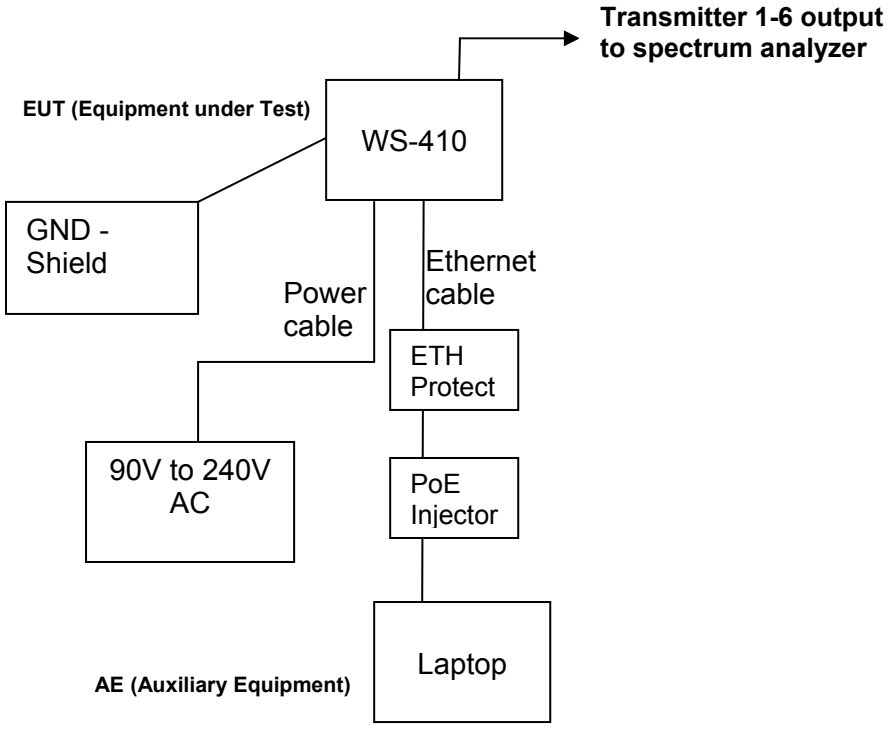


Figure 3. Transmitter measurements test setup

5.1. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, §1.1307, §1.1310

Limit for power density for general population/uncontrolled exposure is 1 mW/cm^2.

The power density P (mW/cm^2) = Pt /4π r^2.

Where:

Pt - The transmitted power (EIRP) (mW)

Pt- the transmitted power whish is equal to the output power 19 dBm plus maximum antenna gain – 7.4 dBi

r - The distance from the unit (cm)

The 1(mW/cm^2) limit can be calculated from the above based on the following data:

The maximum EIRP for each transmit output = 26.4 dBm = 436.5mW

r = sqrt(436.5/4π) = 5.9 cm

For aggregate Pt- the transmitted power whish is equal to the output power 26.9 dBm plus maximum directional antenna gain – 15.2 dBi

The maximum aggregate EIRP = 42.1 dBm = 16218 mW:

r = sqrt(16218/4π) = 35.9 cm

The allowed distance “r”, where RF exposure limits may not be exceeded, is 35.9 cm from the unit antenna main lobe.

The EUT with the attached antenna are mounted only outside the building on the high level pole or wall, which are above general public, see the manufacturer instructions for installation provided in attached documentation.

6. Test specification, Methods and Procedures

Test Specification:

- CFR 47 FCC: Rules and Regulations; Part 15. "Radio frequency devices";
  Subpart C: "Intentional radiators" (2006).

Methods and Procedures:

- ANSI C63/4/2003: "American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz".

7. Measurements, examinations and derived results

7.1. Location of the Test Site:

The tests were conducted in the EMC laboratory of the Standards Institution of Israel in Tel-Aviv, in Wavion's laboratory and at open test site located at Kibbutz Native Halamed Hai in Emek HaEla, Israel.

7.2. Normal test condition:

Temperature: 22 °C
Humidity: 50 %

7.3. Conducted emission test (per Section 15.207):

7.3.1. Requirements:

The EUTs conducted emission within the band 150 kHz to 30 MHz shall not exceed value required in section 15.207 (a).

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

7.3.2. Test procedure:

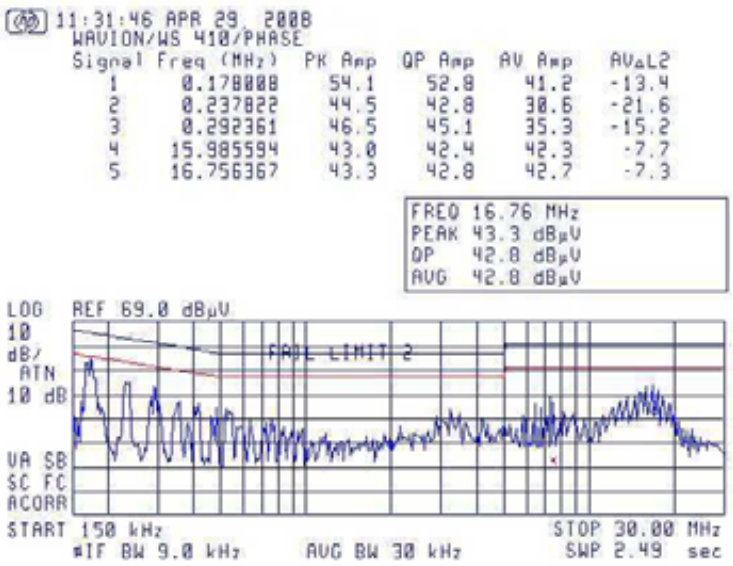
Each EUT was placed on a non-metallic table in a shielded chamber at a height of 80 cm from the floor and 40 cm from the nearest wall.
The EUT was operated to transmitting through the customer software.
First, initial scans were performed in normal (transmitting) mode of operation for carrier (channel) frequency at low, middle and the high of the 2.412 - 2.462 GHz frequency range under 4 data transfer bit rates. The worst results from all measurements (2412MHz frequency, 6Mbps bit rate) are presented at the plots 1 and 2.
Test equipment (EMI receiver) setup was as follow:

Initial scan:	
Detector type	Peak
Mode	Max hold
Bandwidth	9 kHz
Step size	Continuous sweep
Sweep time	>100 msec
Measurements	
Detector type	Quasi-peak, Avg (CISPR)
Bandwidth	9 kHz
Measurement time	200 seconds/MHz
Observation	>15 seconds

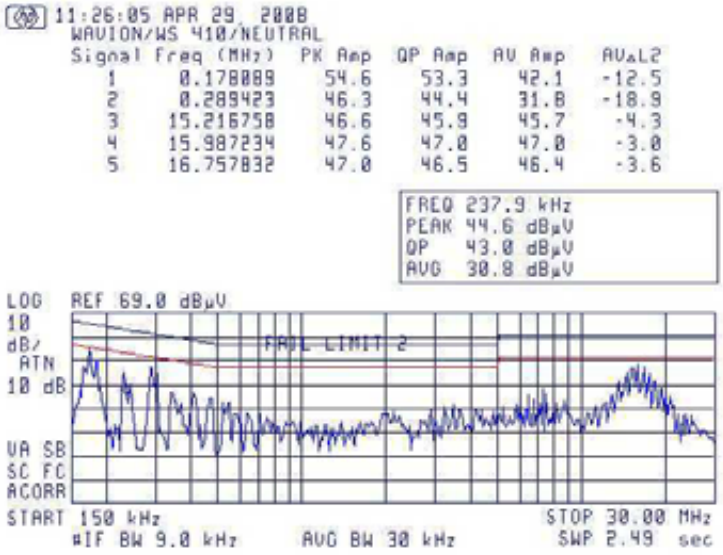
7.3.3.

7.3.4. Test results:

The test results were found complies with relevant standard requirements.
Test results are shown in Plots #1, 2.



Plot # 1. Conducted emissions measurement result on 120 VAC power. Line- phase.



Plot # 2. Conducted emissions measurement result on 120 VAC power. Line- neutral.

7.4. Radiated emission test, general requirements (per section 15.209):

7.4.1. Requirements:

The EUT's radiated emission shall not exceed value required in section 15.209.

7.4.2. Test description:

The measurements were performed at the Open Area Test Site.
The test configuration is shown in Fig.2.
The EUT was arranged on a non-metallic table 0.8 m placed on the turn-table.
The measurements were performed at a 10 m measurement distance.
The Biconilog 30 MHz-2 GHz antenna was used.
The frequency range was investigated from 30 MHz to 2 GHz.
The measurements were performed at each frequency at which the signal was 20 dB below the limit or less.
The level were maximized by initially rotating turntable through 360°, varying the antenna height between 1 m and 4 m, rerouting EUT cables and changing antenna polarization from vertical to horizontal. The measuring equipment settings were:

Initial scan:	
Detector type	Peak
Mode	Max hold
Bandwidth	120 kHz
Step size	Continuous sweep
Sweep time	>1 seconds/MHz
Measurements:	
Detector type	Quasi-peak (CISPR 16)
Bandwidth	120 kHz
Measurement time	20 seconds/MHz
Observation	>15 seconds

7.4.3. Radiated emission test results:

The test results were found complies with relevant standard requirements.
Test results are presented in Table 5.

Table 5. Radiated emission test results
FCC Part 15 section 15.209

Frequency (MHz)	Turn-table Angle (°)	Antenna Polariz.	Antenna Height (m)	Emission Level Note 1 (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin Note 2 (dB)	Results
113	354	V	115	36.3	43.5	7.2	Complies
80	355	H	400	39.0	40	1.0	Complies
73.1	321	V	146	38.1	40	1.9	Complies
152.9	227	V	120	36.8	43.5	6.7	Complies
186.9	171	V	386	35.6	43.5	7.9	Complies
200	26	V	289	34.1	43.5	9.4	Complies
240	18	V	321	37.1	46	8.9	Complies
300	15	V	236	38.9	46	7.1	Complies
320	34	H	151	40.9	46	5.1	Complies
400	104	H	385	36.4	46	9.6	Complies

Note 1: Emission level = E Reading (dBμV) + Cable loss (dB) + Antenna Factor (dB/m) + 10 dB
Where 10 dB is an extrapolation to 3m distance factor.
For Cable Loss and Antenna Factor refer to Appendix 2.

Note 2: Margin (dB) = Limit (dBμV/m) – Emission level (dBμV/m)

7.5. Conducted spurious emission

7.5.1. Requirements:

Clause 15.247(c). 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.

7.5.2. Pre-test scanning:

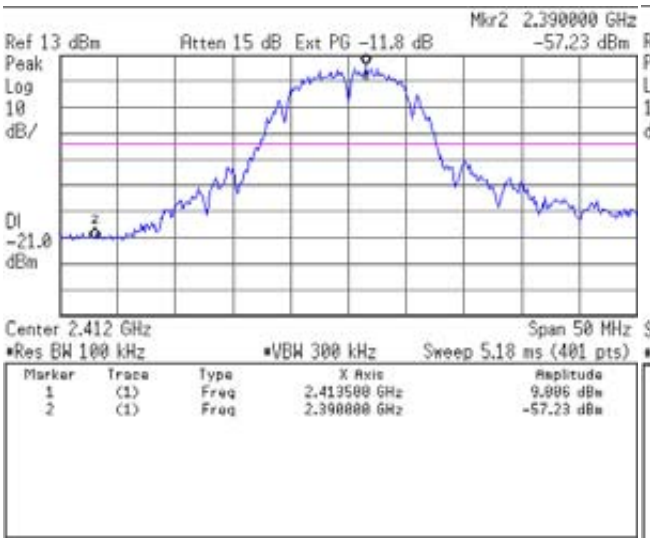
In order to find the "worst case" sample, which can represent all kinds of RF filters, each filter was pre-tested. The following filters were pre-tested: Murata, Comnav, Bitel, Skyworks. After all conducted spurious emissions tests the Skyworks models were chosen as the "worst case", all final measurements were performed with 6 Skyworks filters (see 7.5.4).

7.5.3. Test Procedure:

The transmitter output is connected to a spectrum analyzer.
The RBW is set to 100 kHz.
The VBW is set to 300 kHz.
The spectrum from 30MHz to 26GHz is investigated with the transmitter set to the low, middle and high frequencies.

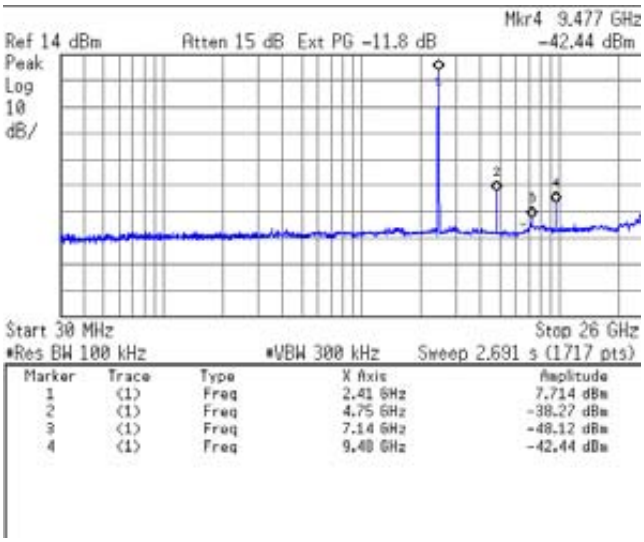
7.5.4. Test Results:

The WBS-2400 configurations for preliminary tests were as following: 2 RF filters Skyworks (outputs 1 & 2), 1 RF filter Comnav (output 3), 2 RF filter Bitel (outputs 4 & 5), 1 RF filter Murata (output 6).
The plots of conducted spurious emissions pre-scan for each RF filters (outputs 1-6 accordantly) are presented on the plots # 3-62. The most differences in spurious emissions were found. Following pre-scan tests results the "worst case" from the point of view of spurious emissions is Skyworks filter.



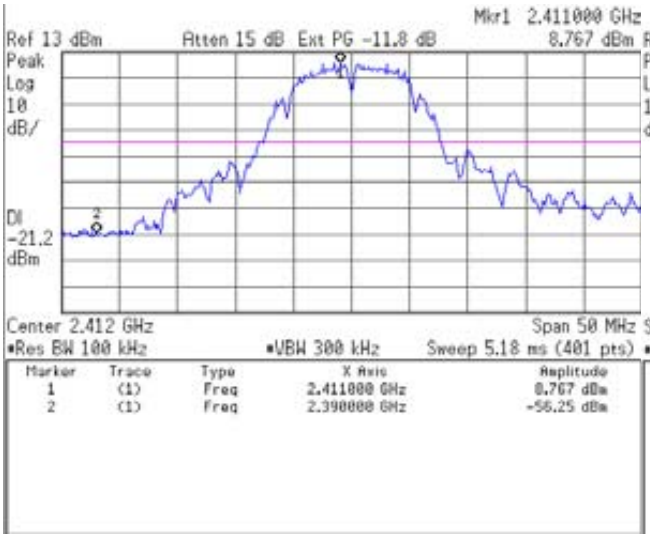
Plot # 3.

Output 1. Low frequency bandedge.
802.11b mode.



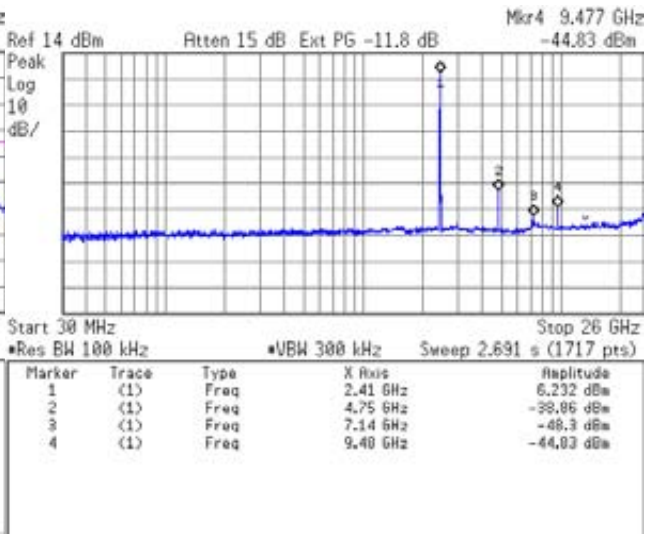
Plot # 4.

Output 1. Low frequency spurious.
802.11b mode.



Plot # 5.

Output 2. Low frequency bandedge.
802.11b mode.



Plot # 6.

Output 2. Low frequency spurious.
802.11b mode.

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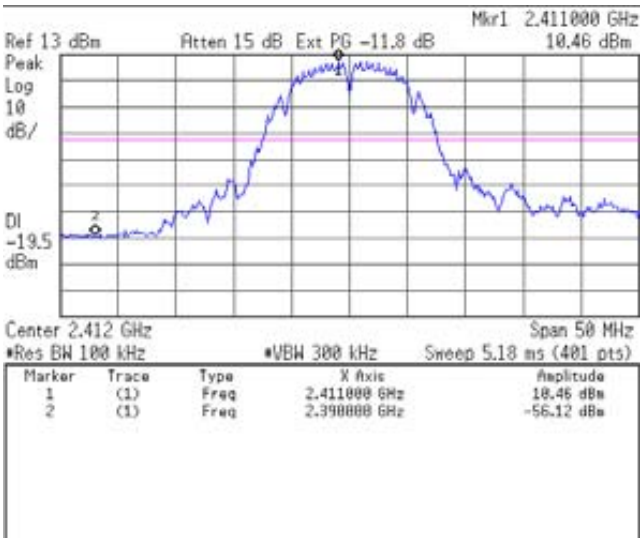
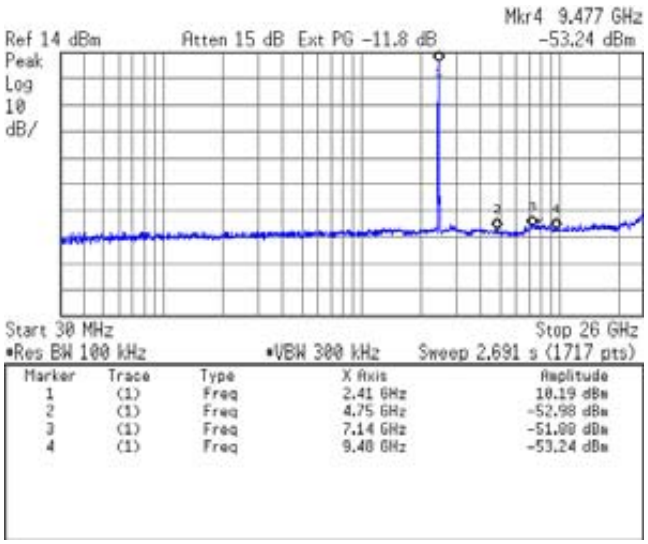
Title: Test on 2.4 GHz Band Outdoor WiFi (802.11b/g) Wireless Base Station
Model: WBS-2400 **FCC ID: UGM-WBS2400-1**



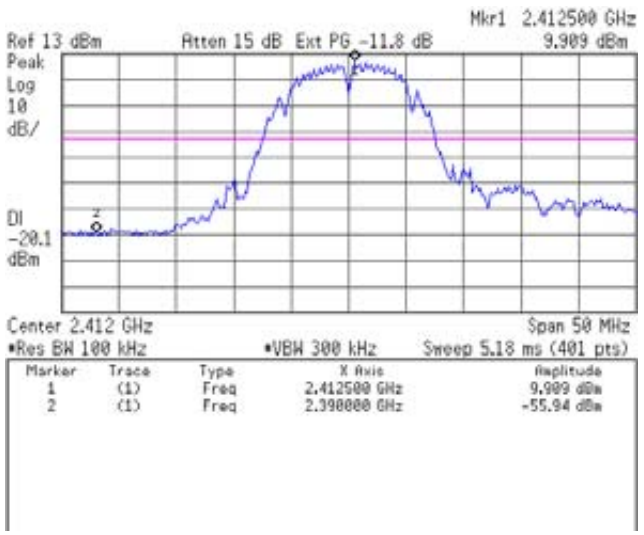
Plot # 7.

Output 3. Low frequency bandedge.
802.11b mode.



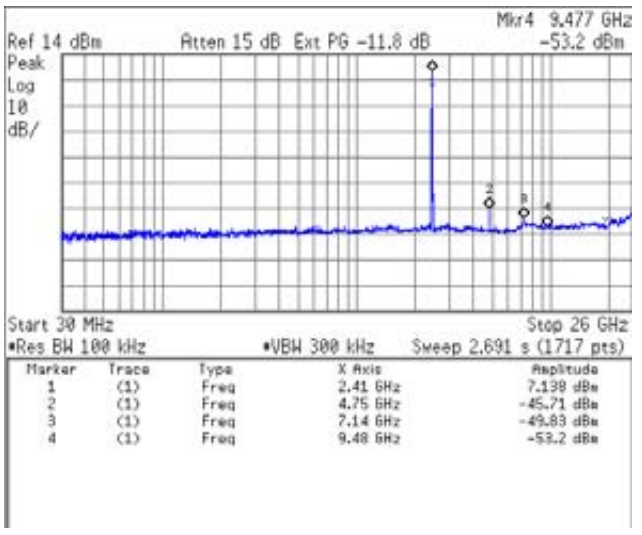
Plot # 8.

Output 3. Low frequency spurious.
802.11b mode.



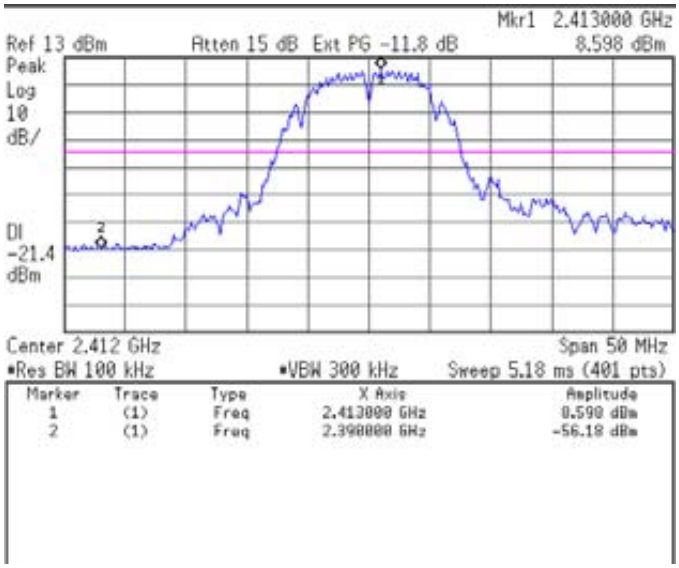
Plot # 9.

Output 4. Low frequency bandedge.
802.11b mode.



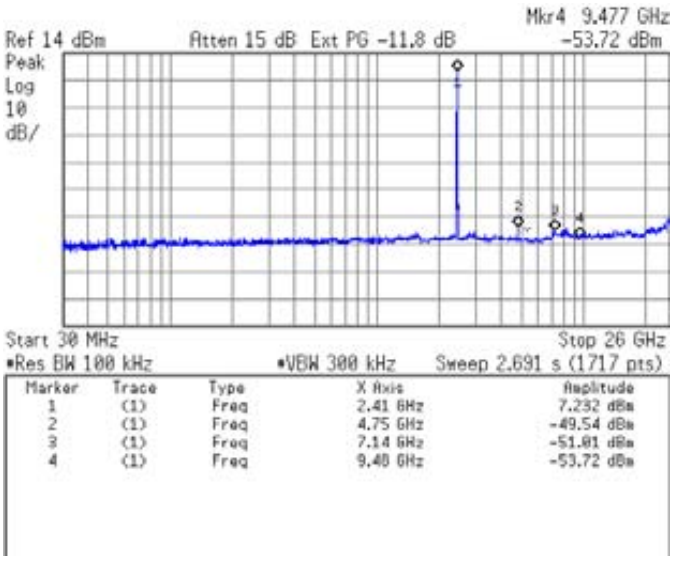
Plot # 10.

Output 4. Low frequency spurious.
802.11b mode.



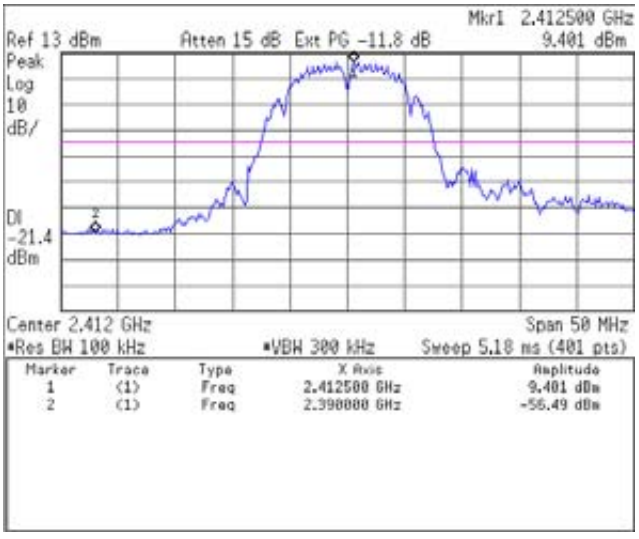
Plot # 11.

Output 5. Low frequency bandedge.
802.11b mode.



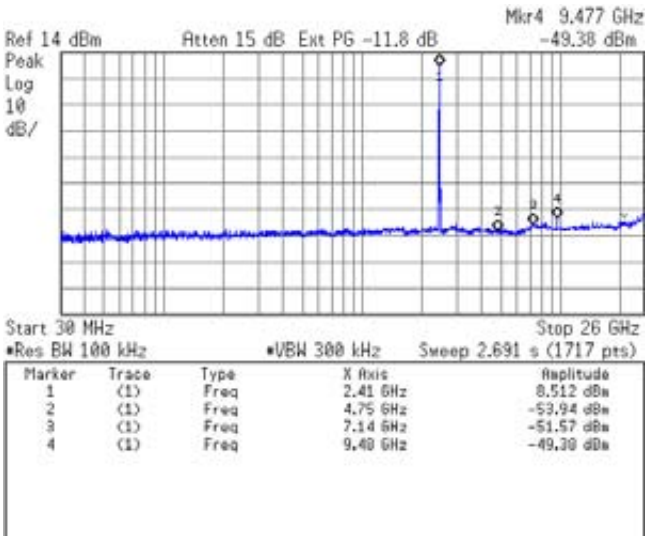
Plot # 12.

Output 5. Low frequency spurious.
802.11b mode.



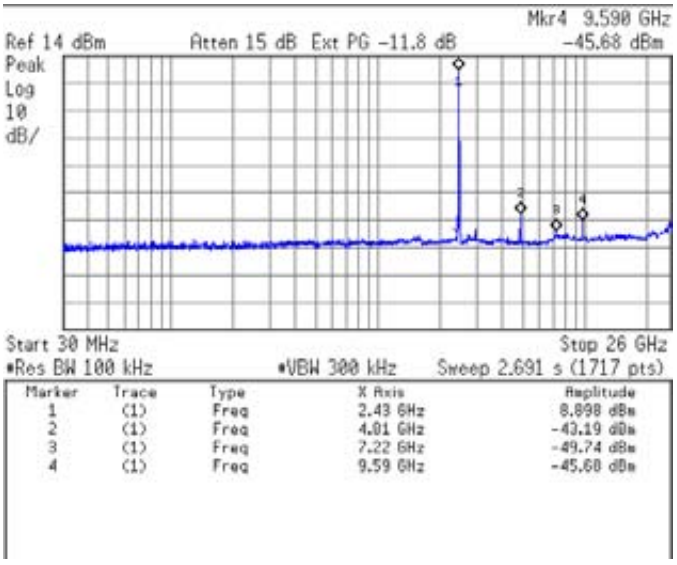
Plot # 13.

Output 6. Low frequency bandedge.
802.11b mode.



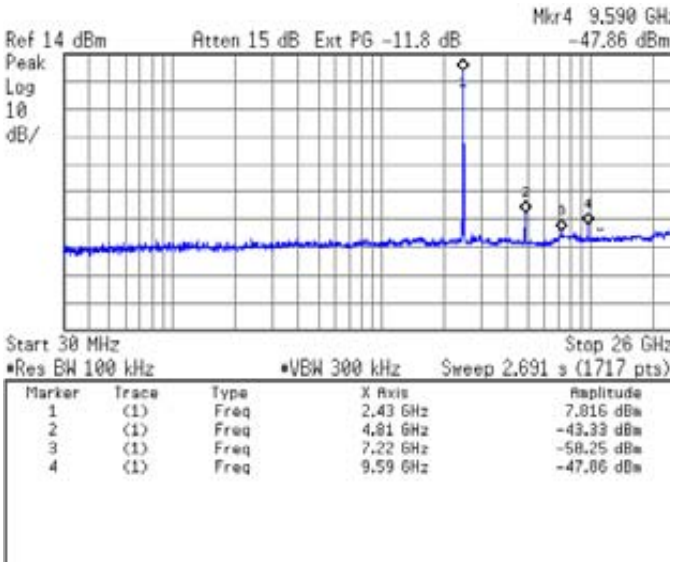
Plot # 14.

Output 6. Low frequency spurious.
802.11b mode.



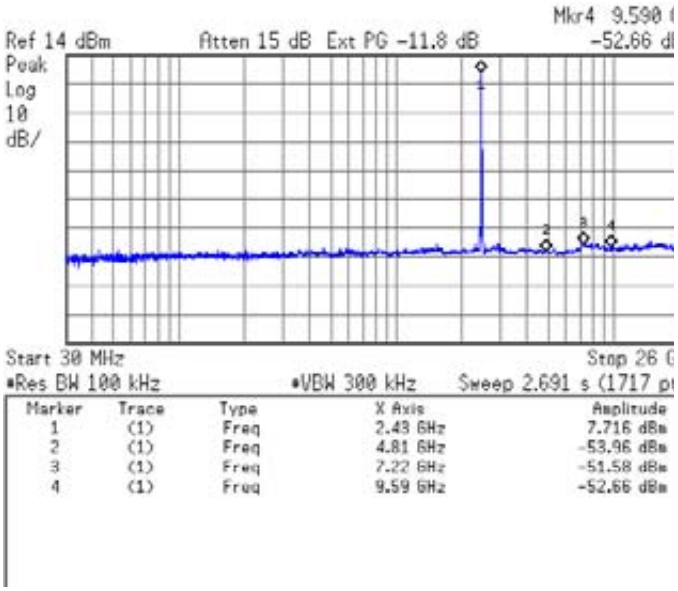
Plot # 15.

Output 1. Middle frequency spurious. 802.11b mode.



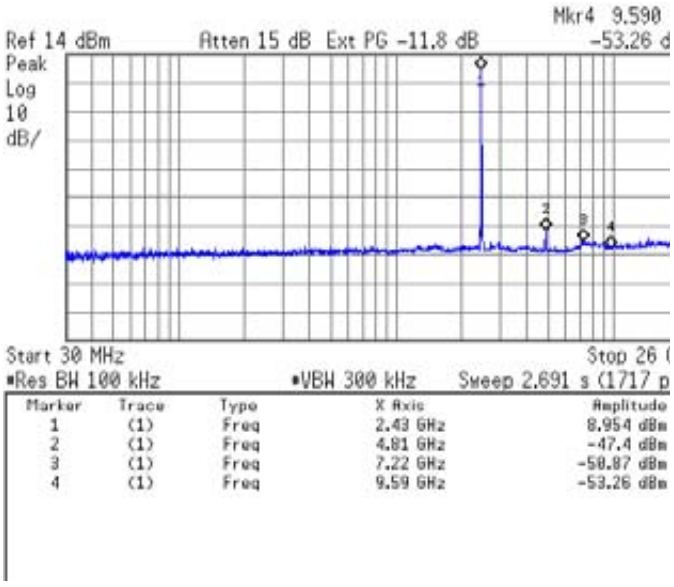
Plot # 16.

Output 2. Middle frequency spurious. 802.11b mode.



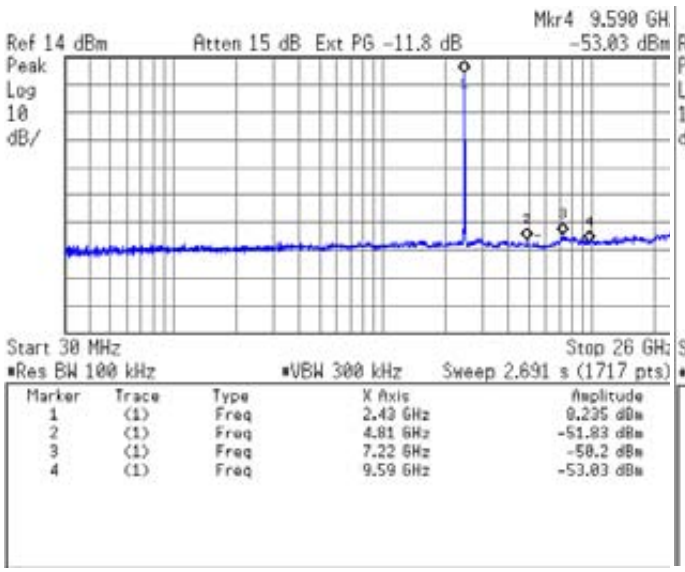
Plot # 17.

Output 3. Middle frequency spurious. 802.11b mode.



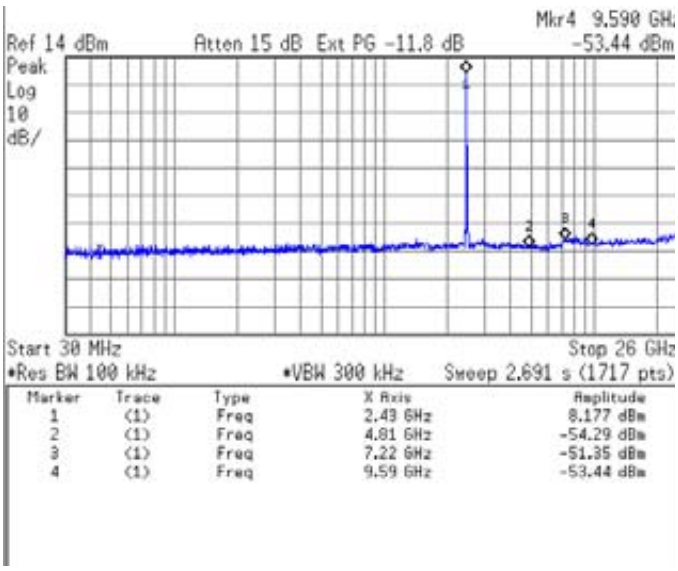
Plot # 18.

Output 4. Middle frequency spurious. 802.11b mode.



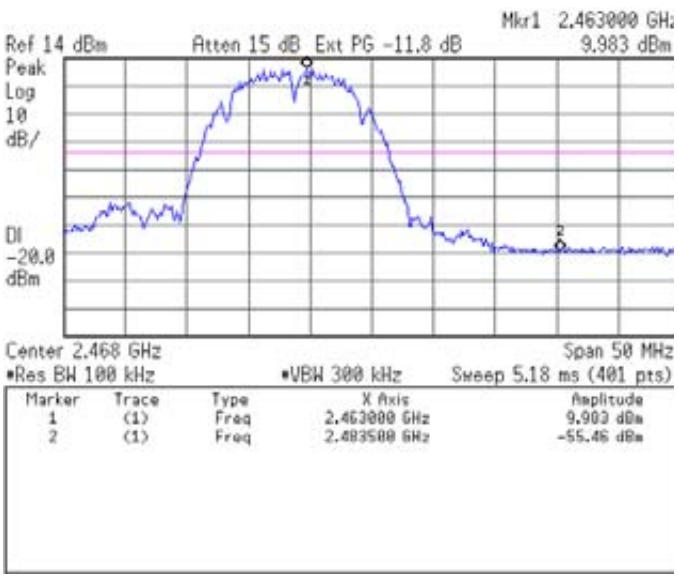
Plot # 19.

Output 5. Middle frequency spurious. 802.11b mode.



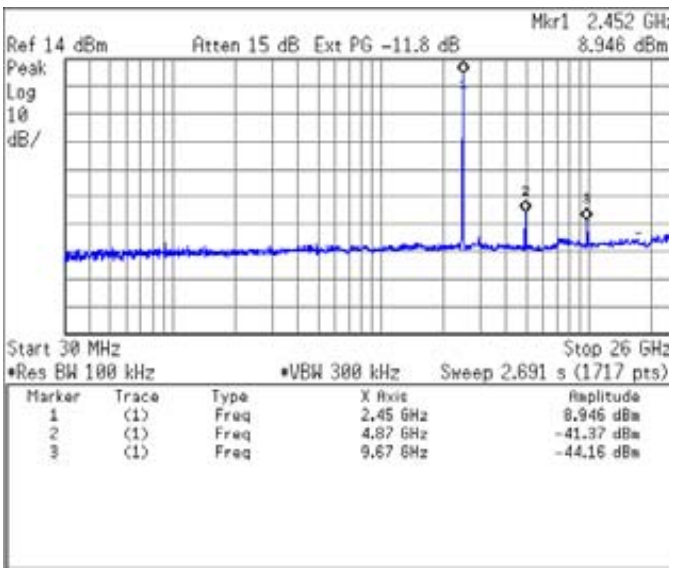
Plot # 20.

Output 6. Middle frequency spurious. 802.11b mode.



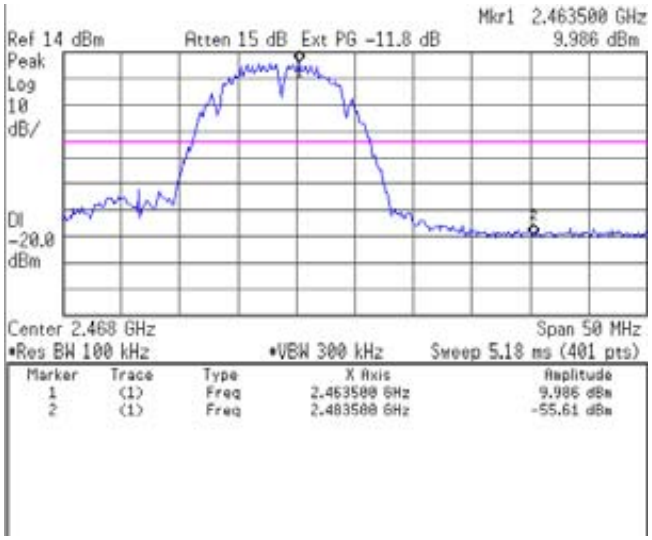
Plot # 21.

Output 1. High frequency bandedge.
802.11b mode.



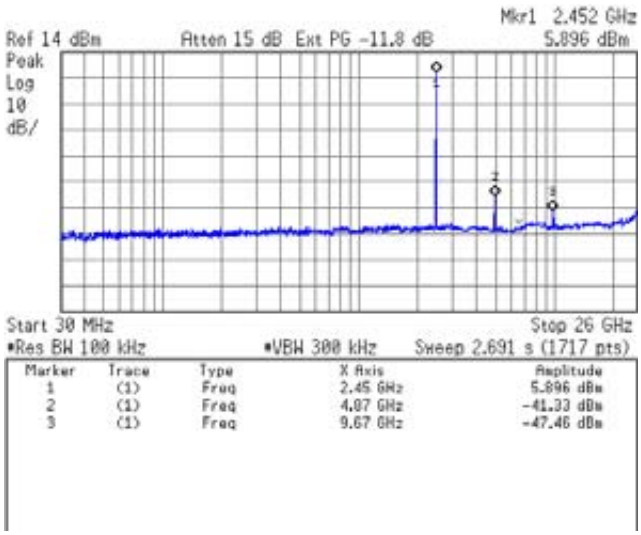
Plot # 22.

Output 1. High frequency spurious.
802.11b mode.



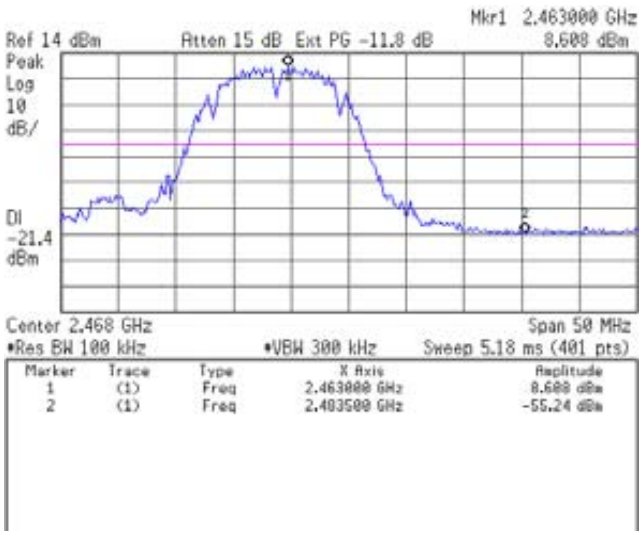
Plot # 23.

Output 2. High frequency bandedge.
802.11b mode.



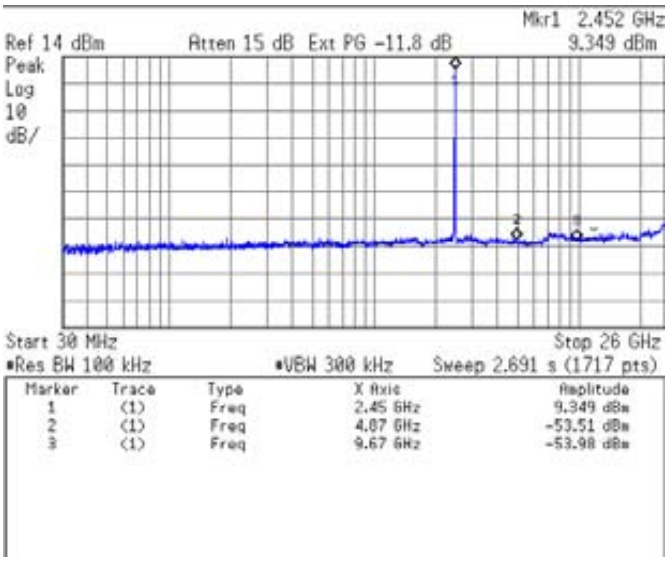
Plot # 24.

Output 2. High frequency spurious.
802.11b mode.



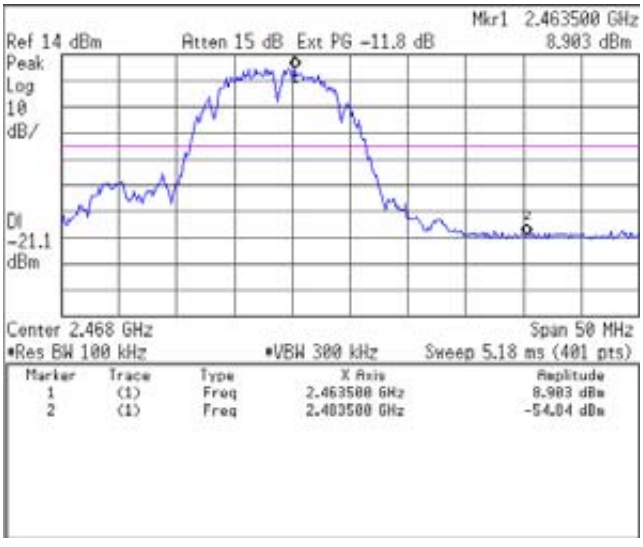
Plot # 25.

Output 3. High frequency bandedge.
802.11b mode.



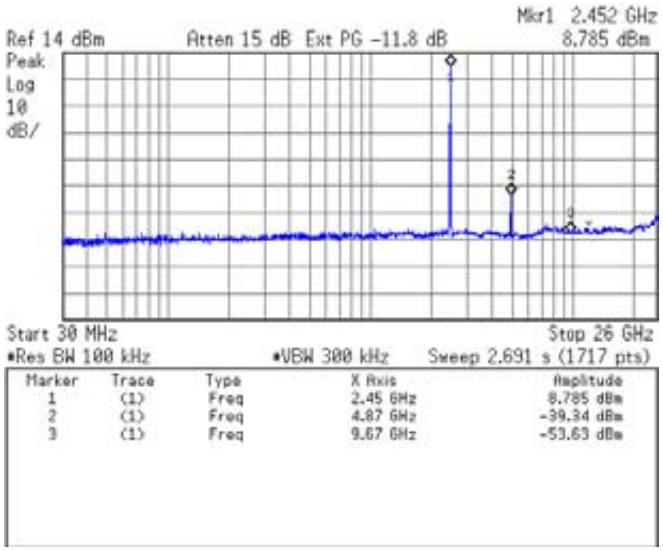
Plot # 26.

Output 3. High frequency spurious.
802.11b mode.



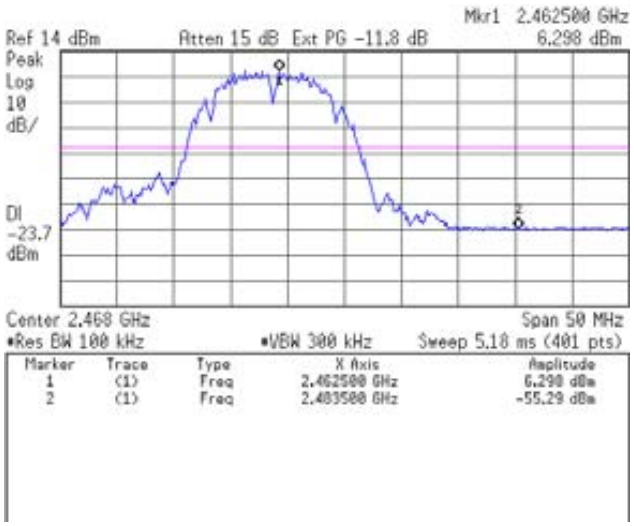
Plot # 27.

Output 4. High frequency bandedge.
802.11b mode.



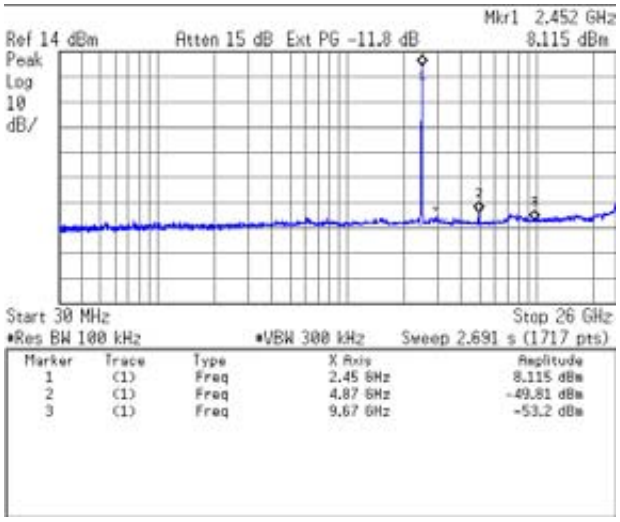
Plot # 28.

Output 4. High frequency spurious.
802.11b mode.



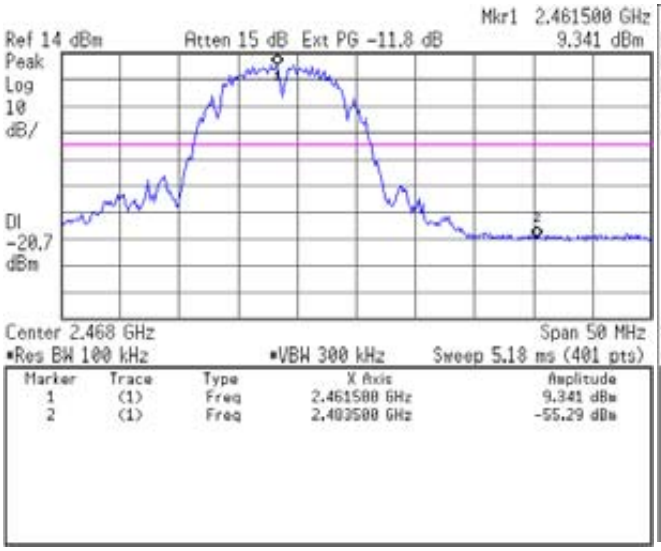
Plot # 29.

Output 5. High frequency bandedge.
802.11b mode.



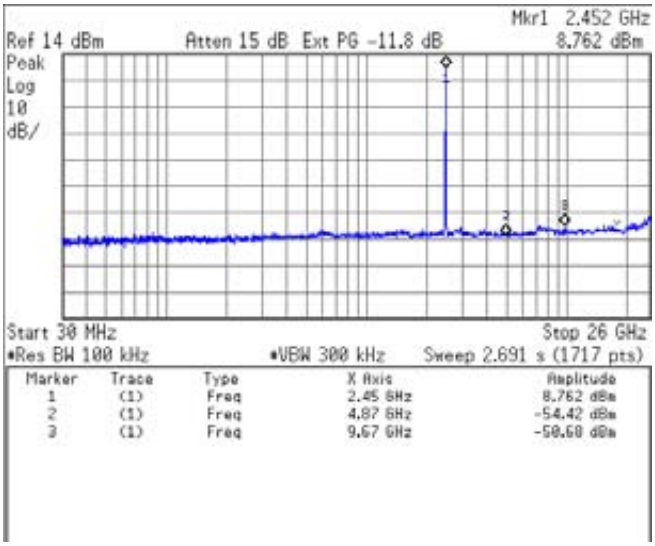
Plot # 30.

Output 5. High frequency spurious.
802.11b mode.



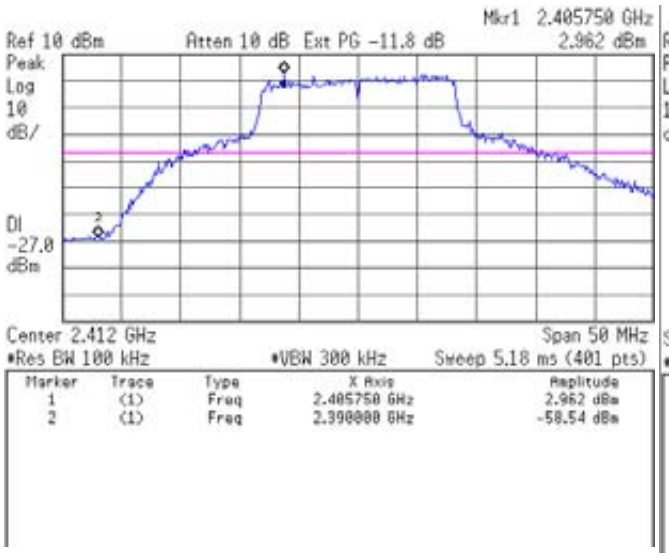
Plot # 31.

Output 6. High frequency bandedge.
802.11b mode.



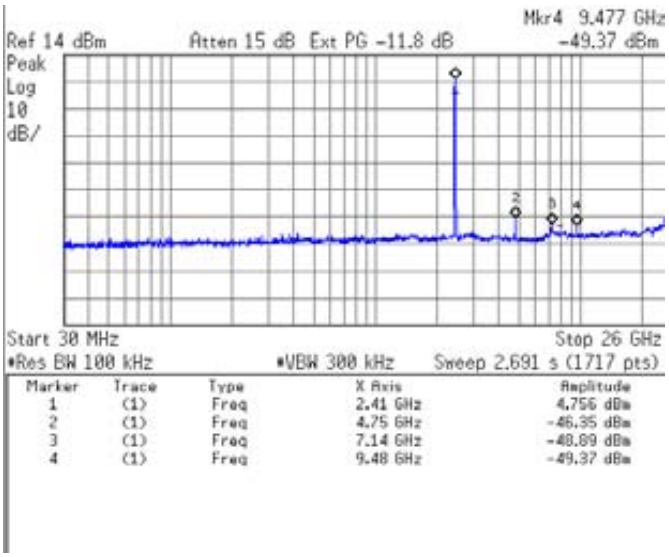
Plot # 32.

Output 6. High frequency spurious.
802.11b mode.



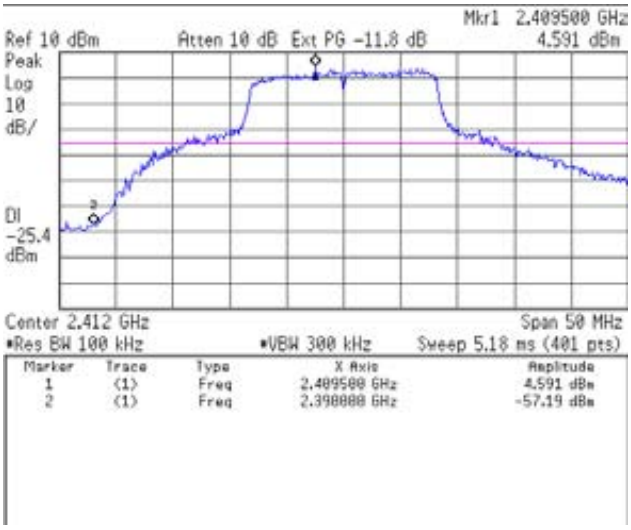
Plot # 33.

Output 1. Low frequency bandedge.
802.11g mode.



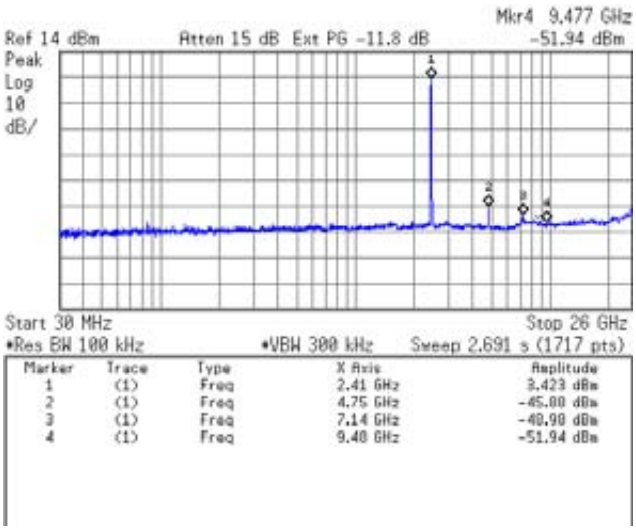
Plot # 34.

Output 1. Low frequency spurious.
802.11g mode.



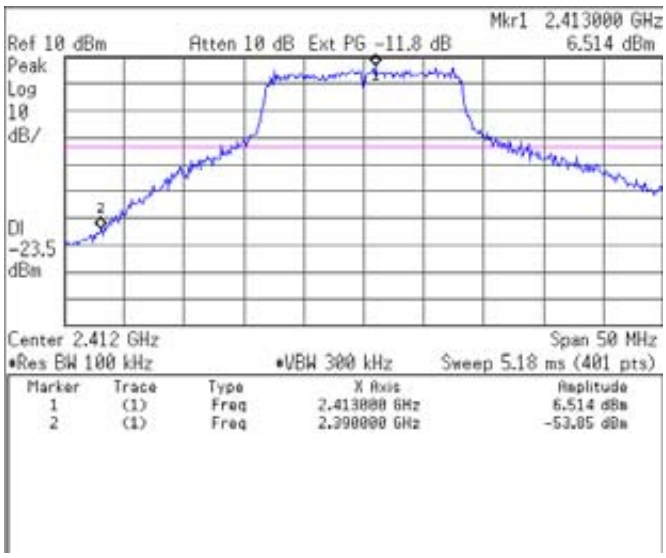
Plot # 35.

Output 2. Low frequency bandedge.
802.11g mode.



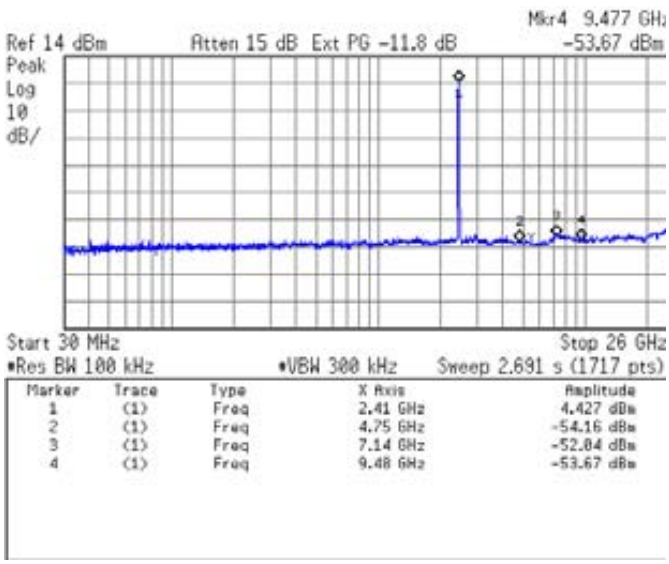
Plot # 36.

Output 2. Low frequency spurious.
802.11g mode.



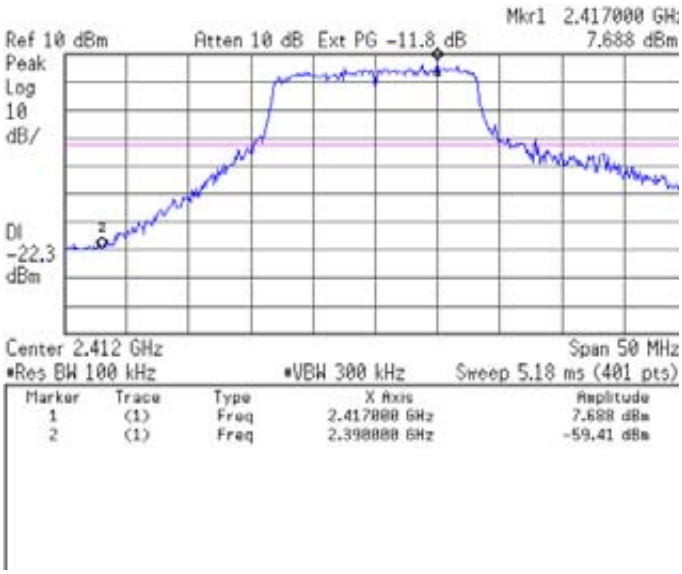
Plot # 37.

Output 3. Low frequency bandedge.
802.11g mode.



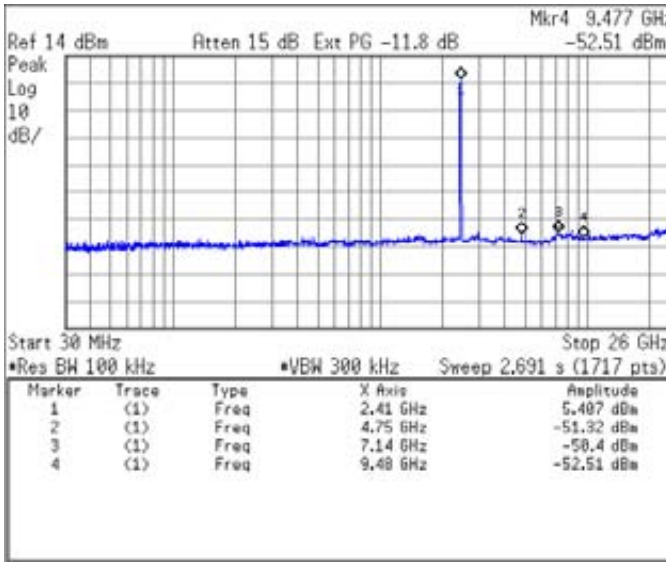
Plot # 38.

Output 3. Low frequency spurious.
802.11g mode.



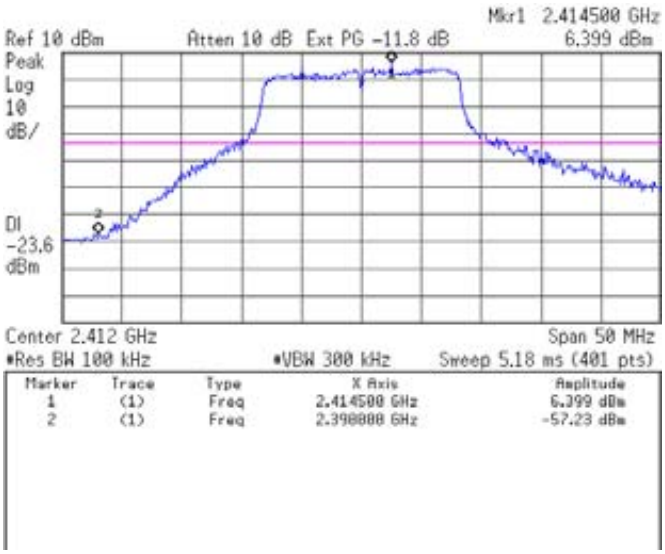
Plot # 39.

Output 4. Low frequency bandedge.
802.11g mode.



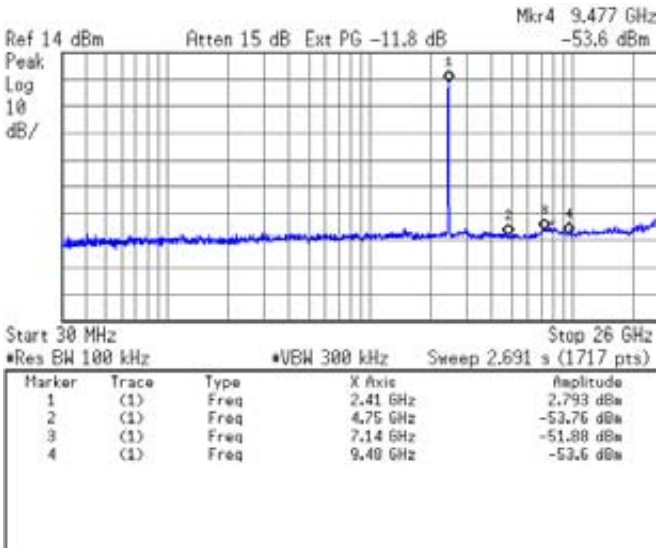
Plot # 40.

Output 4. Low frequency spurious.
802.11g mode.



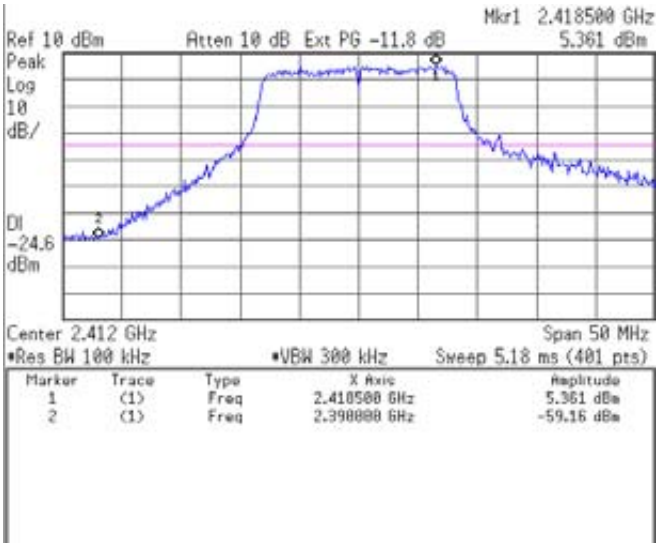
Plot # 41.

Output 5. Low frequency bandedge.
802.11g mode.



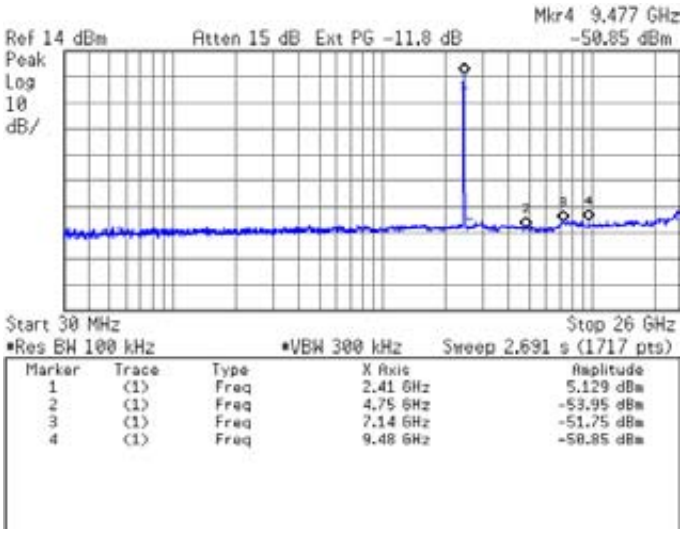
Plot # 42.

Output 5. Low frequency spurious.
802.11g mode.



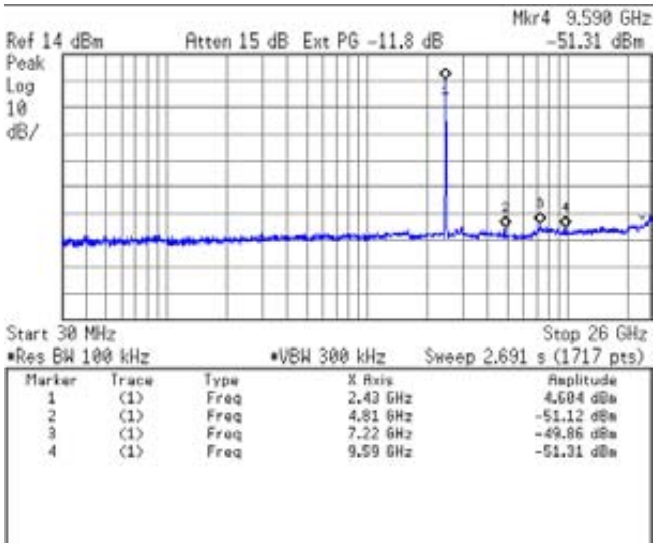
Plot # 43.

Output 6. Low frequency bandedge.
802.11g mode.



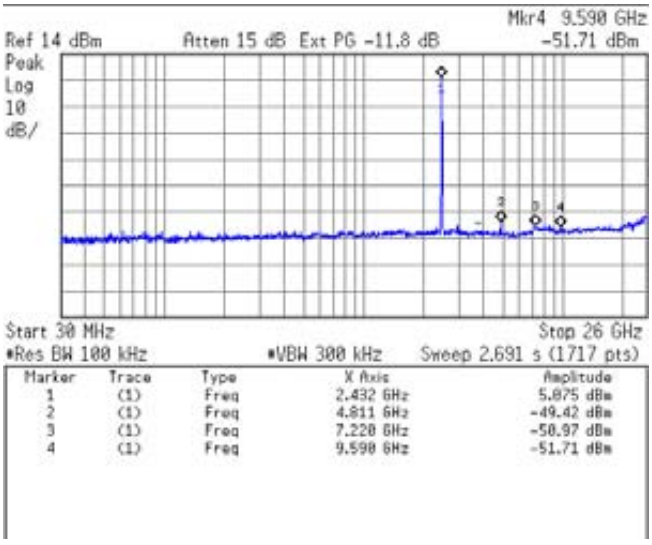
Plot # 44.

Output 6. Low frequency spurious.
802.11g mode.



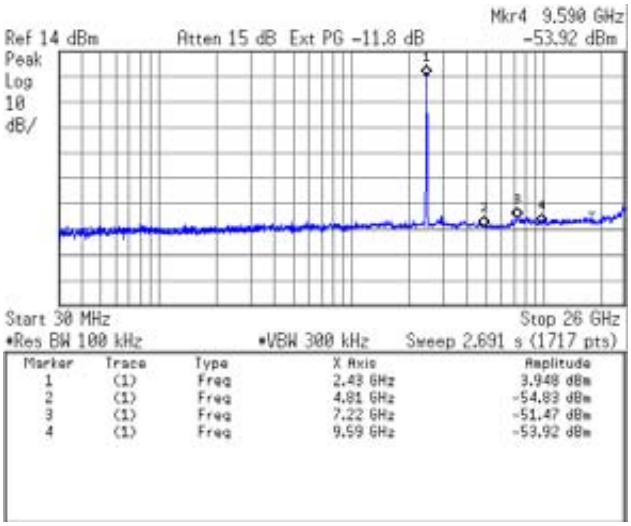
Plot # 45.

Output 1. Middle frequency spurious.
802.11g mode.



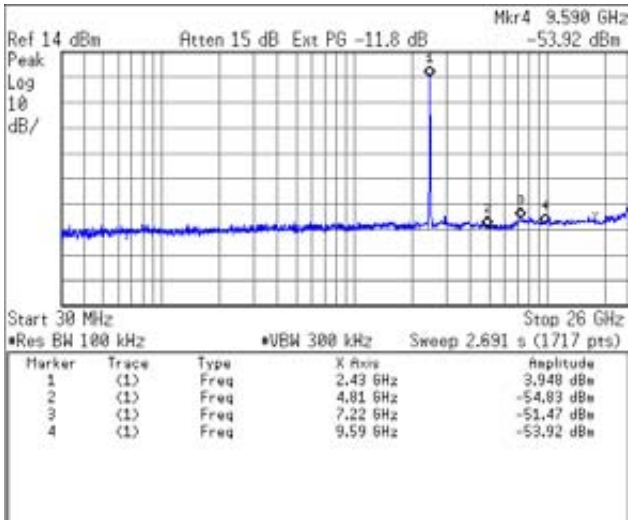
Plot # 46.

Output 2. Middle frequency spurious.
802.11g mode.



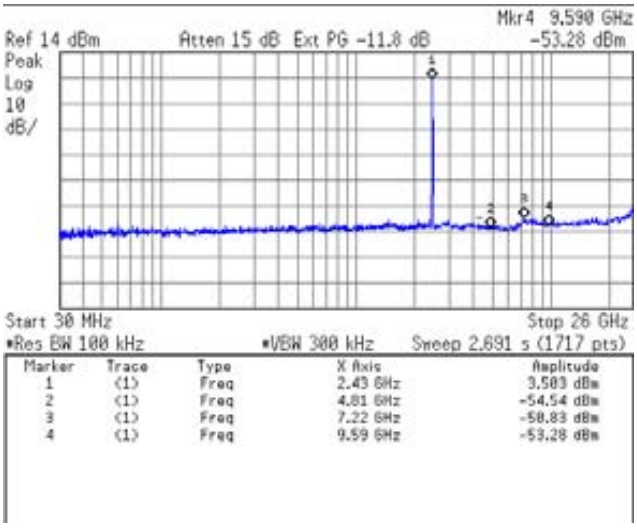
Plot # 47.

Output 3. Middle frequency spurious.
802.11g mode.



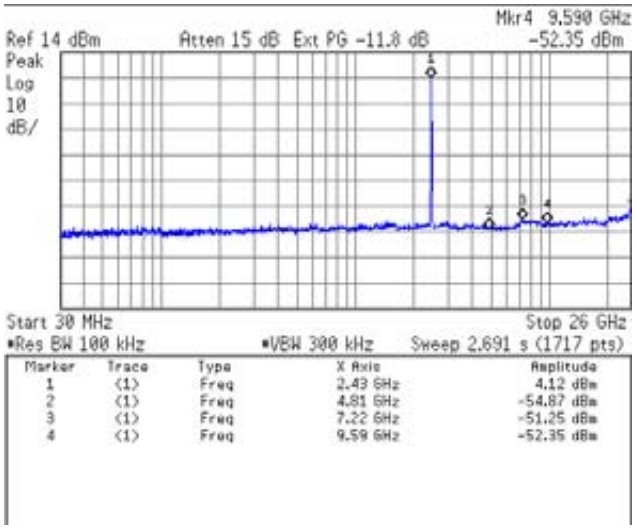
Plot # 48.

Output 4. Middle frequency spurious.
802.11g mode.



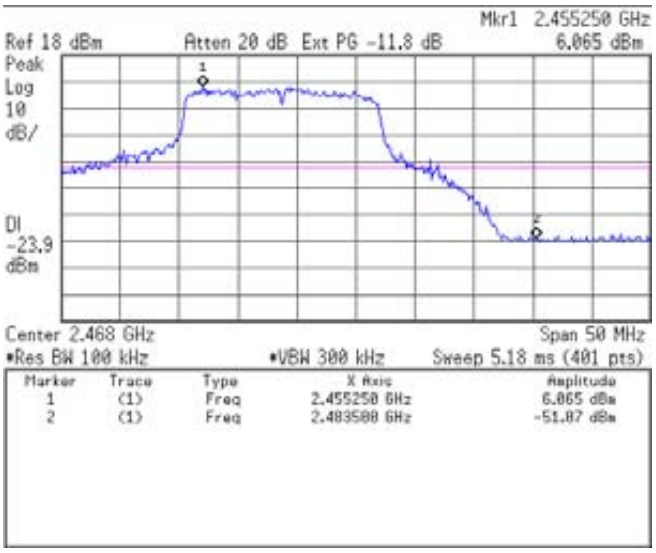
Plot # 49.

Output 5. Middle frequency spurious. 802.11g mode.



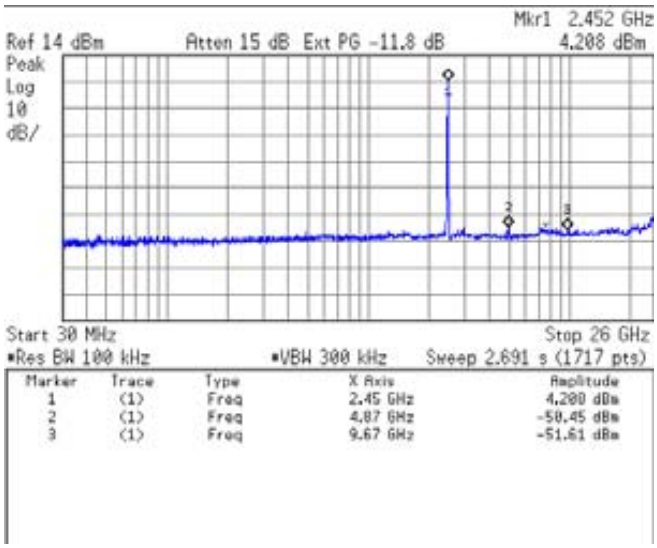
Plot # 50.

Output 6. Middle frequency spurious. 802.11g mode.



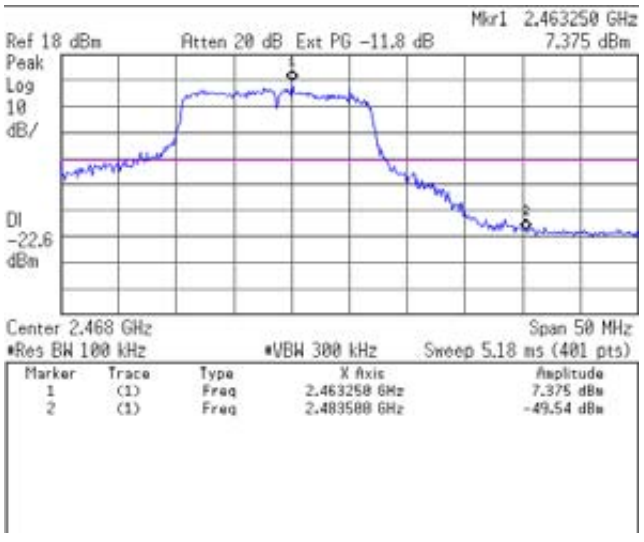
Plot # 51.

Output 1. High frequency bandedge.
802.11g mode.



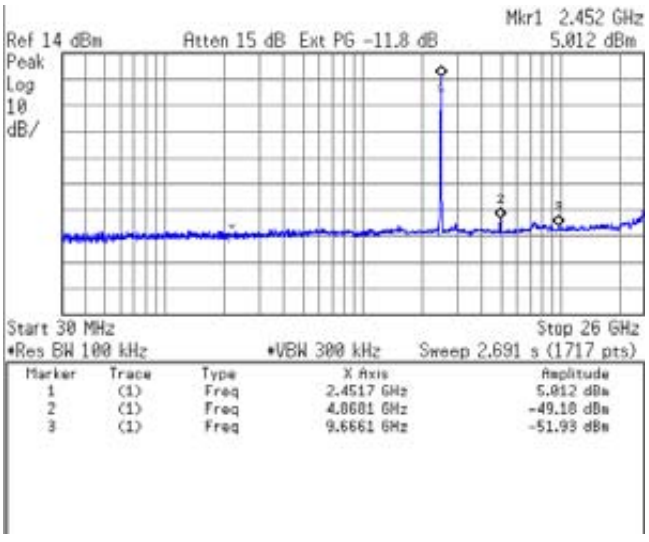
Plot # 52.

Output 1. High frequency spurious.
802.11g mode.



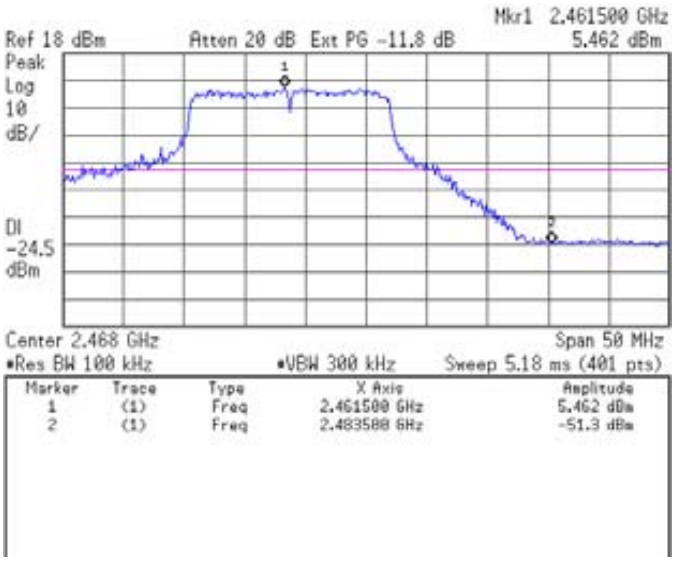
Plot # 53.

Output 2. High frequency bandedge.
802.11g mode.



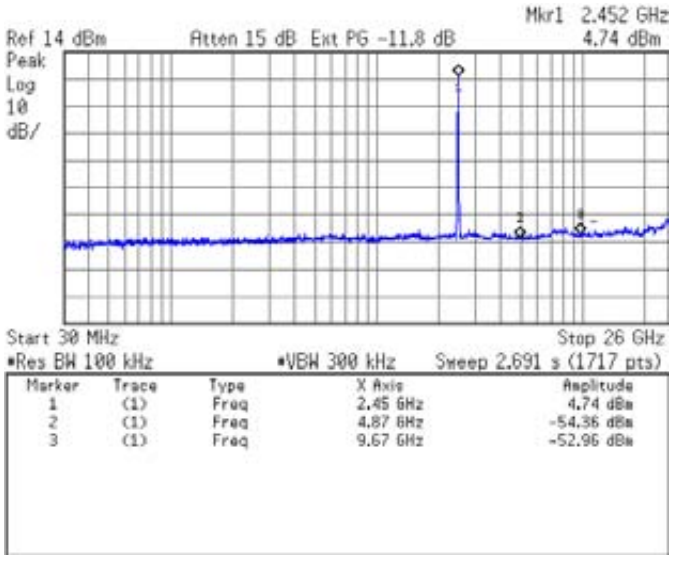
Plot # 54.

Output 2. High frequency spurious.
802.11g mode.



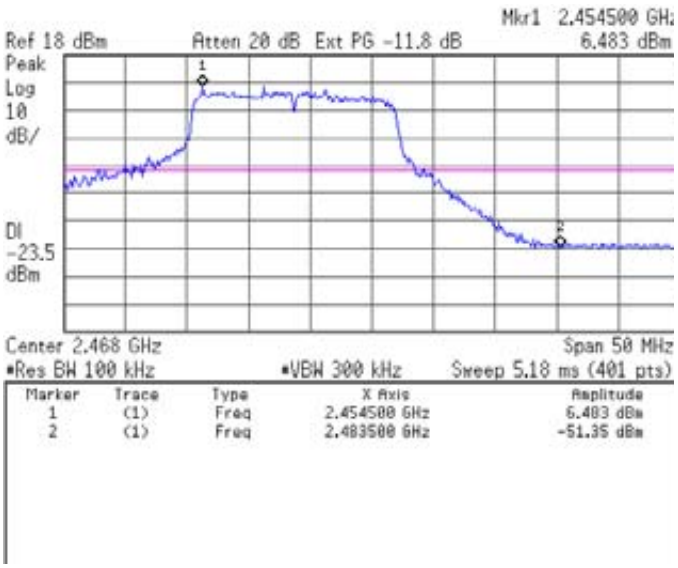
Plot # 55.

Output 3. High frequency bandedge.
802.11g mode.



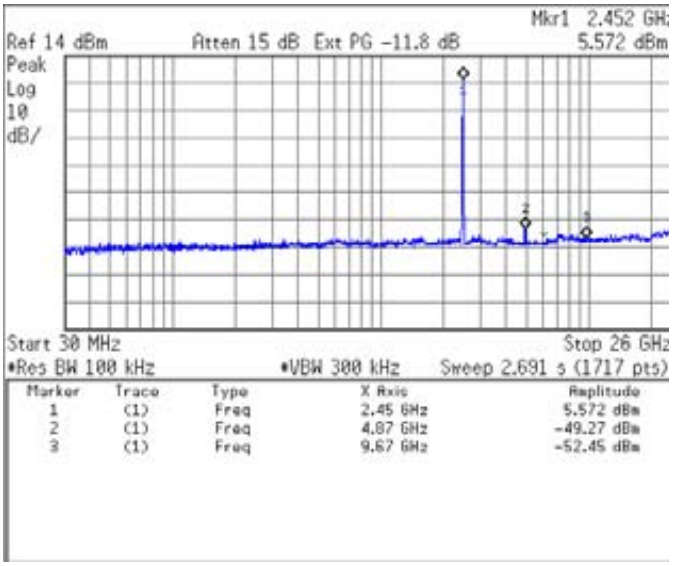
Plot # 56.

Output 3. High frequency spurious.
802.11g mode.



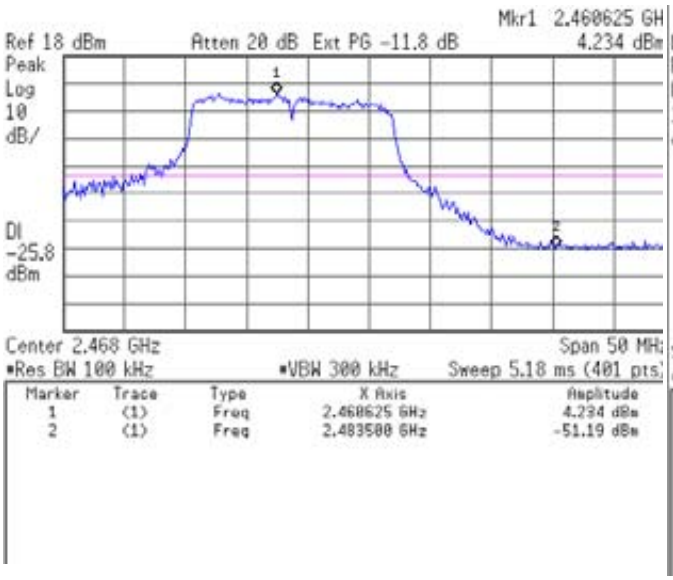
Plot # 57.

Output 4. High frequency bandedge.
802.11g mode.



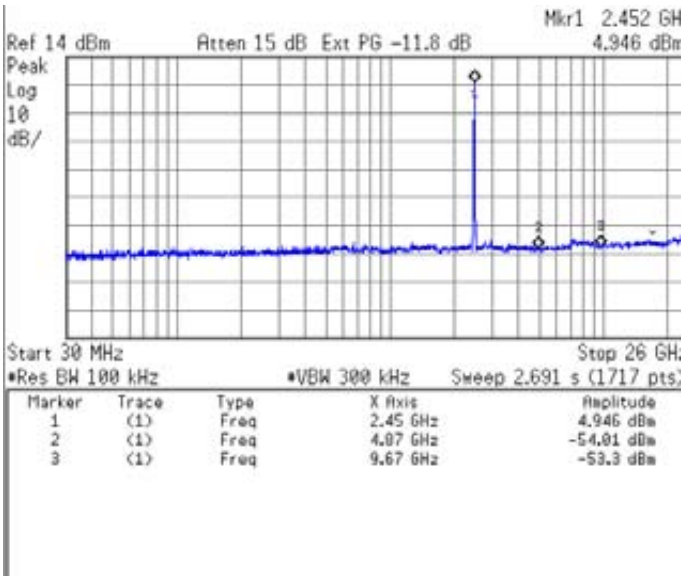
Plot # 58.

Output 4. High frequency spurious.
802.11g mode.



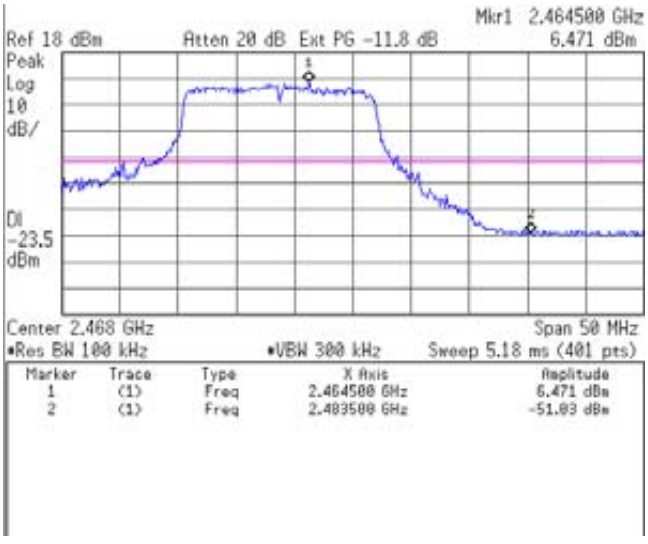
Plot # 59.

Output 5. High frequency bandedge.
802.11g mode.



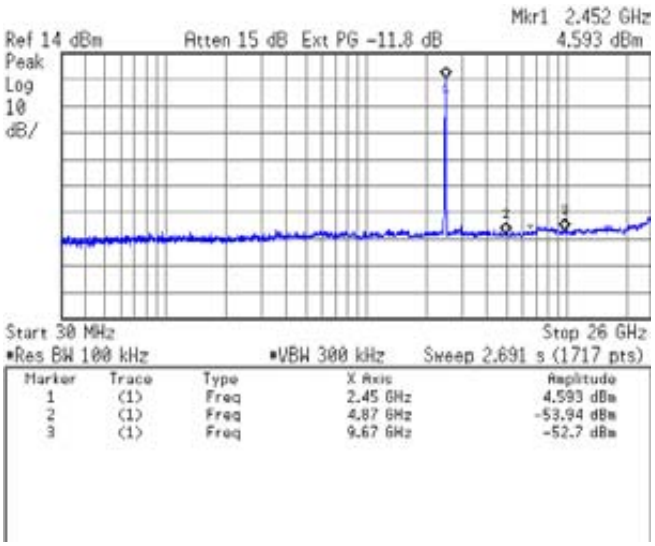
Plot # 60.

Output 5. High frequency spurious.
802.11g mode.



Plot # 61.

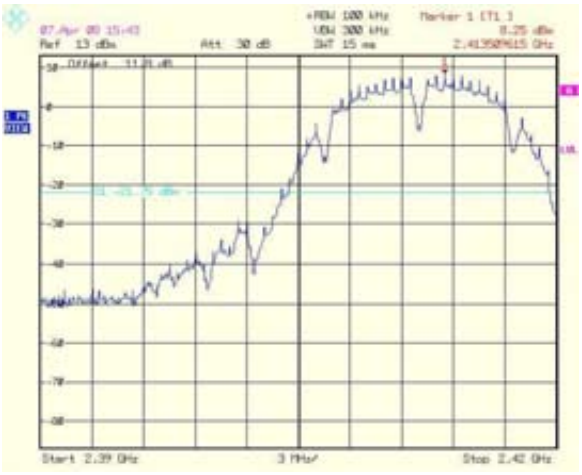
Output 6. High frequency bandedge.
802.11g mode.



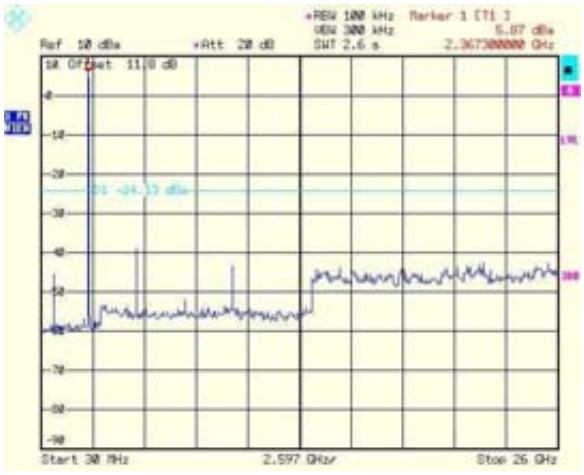
Plot # 62.

Output 6. High frequency spurious.
802.11g mode.

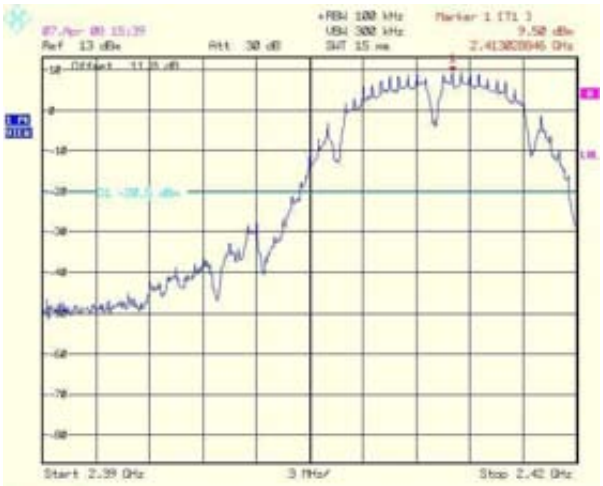
The final configuration has been built with 6 Skyworks RF filters.
All test results met the requirements.
The tests were performed with the worst case, which is higher power level.
All harmonics/spurs are at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
The results are shown in plots # 63-122.



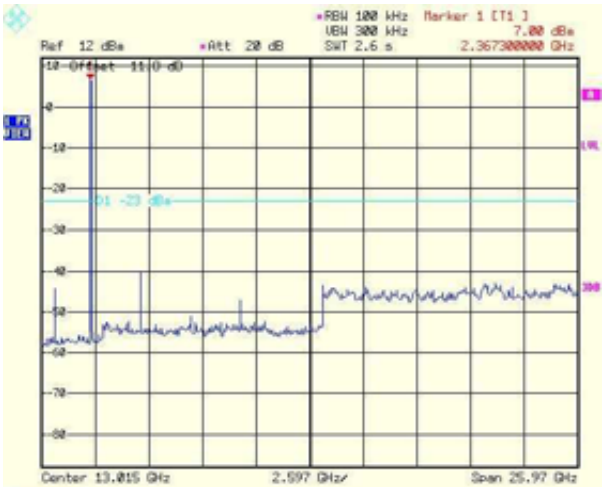
Plot # 63.
Output 1. Low frequency bandedge.
802.11b mode.



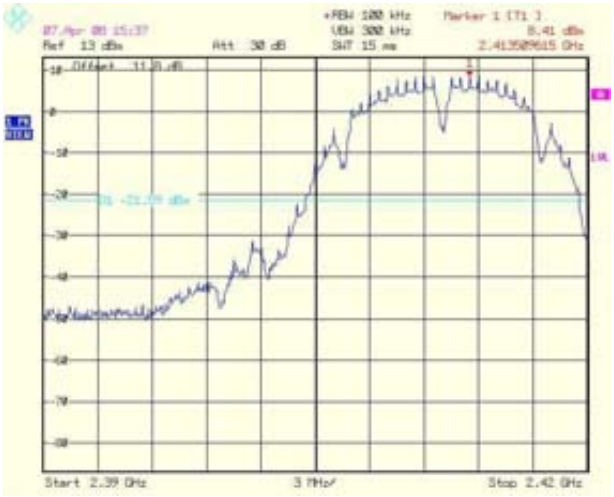
Plot # 64.
Output 1. Low frequency spurious.
802.11b mode.



Plot # 65.
Output 2. Low frequency bandedge.
802.11b mode.

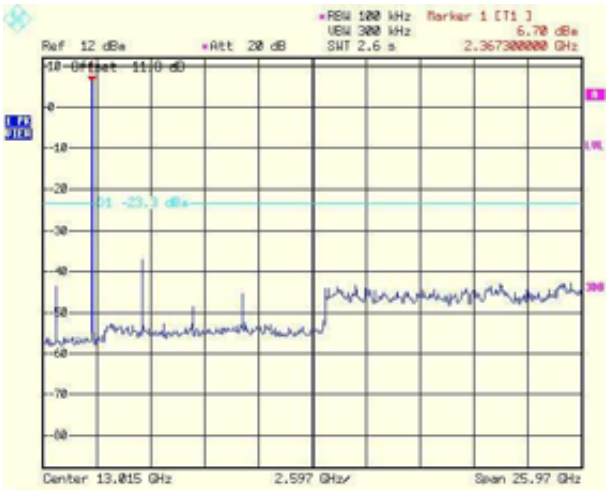


Plot # 66.
Output 2. Low frequency spurious.
802.11b mode.



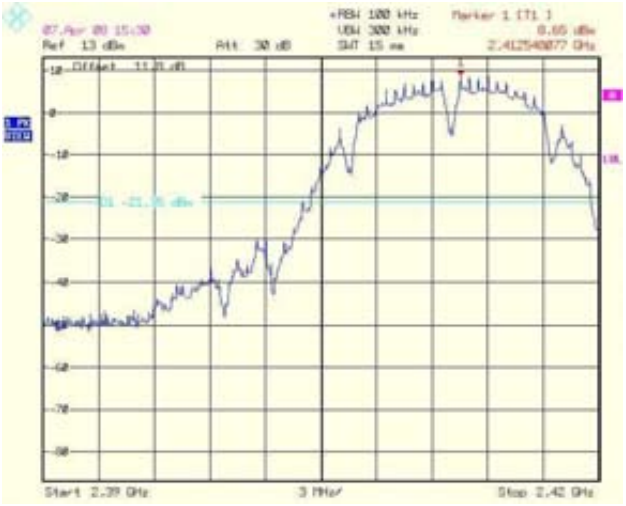
Plot # 67.

Output 3. Low frequency bandedge.
802.11b mode.



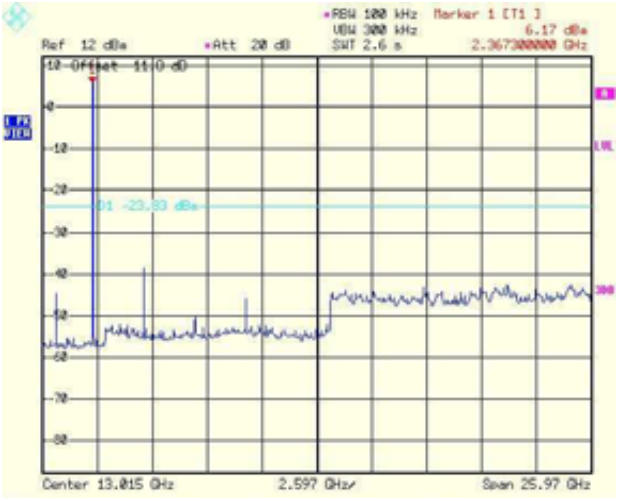
Plot # 68.

Output 3. Low frequency spurious.
802.11b mode.



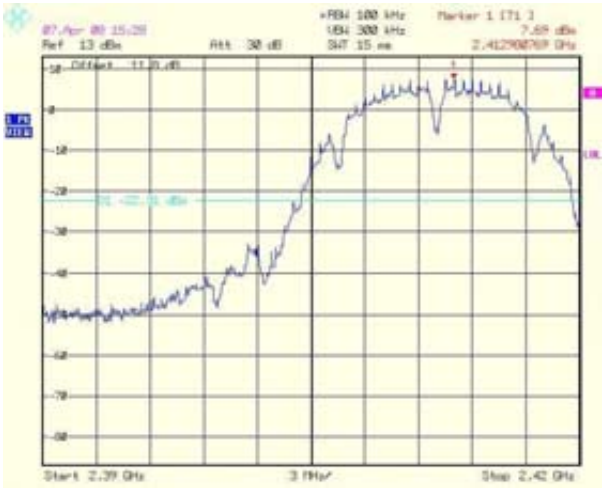
Plot # 69.

Output 4. Low frequency bandedge.
802.11b mode.



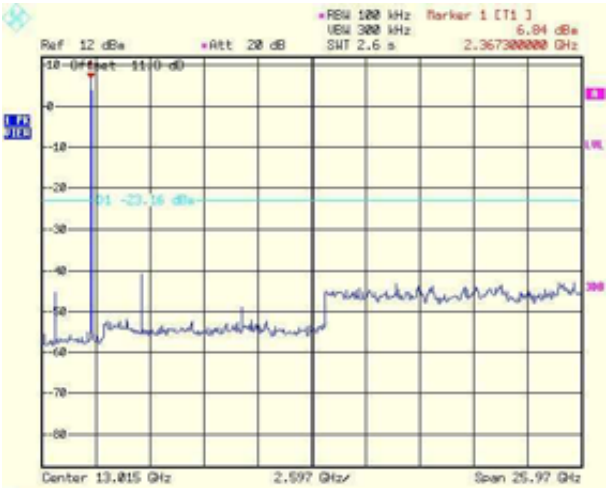
Plot # 70.

Output 4. Low frequency spurious.
802.11b mode.



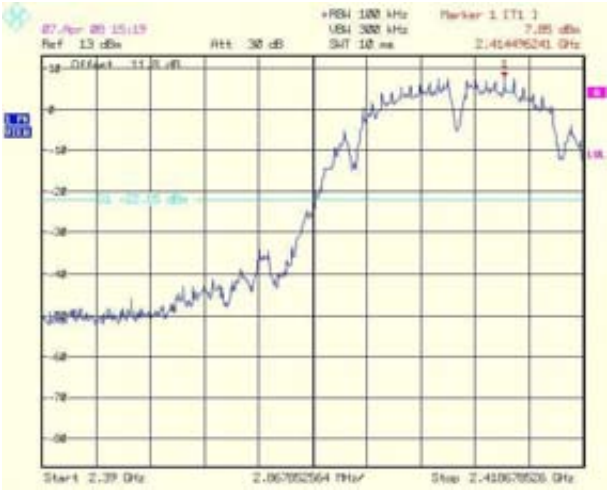
Plot # 71.

Output 5. Low frequency bandedge.
802.11b mode.



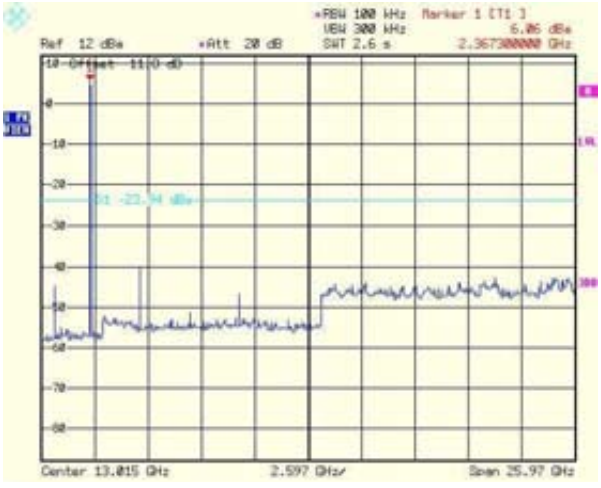
Plot # 72.

Output 5. Low frequency spurious.
802.11b mode.



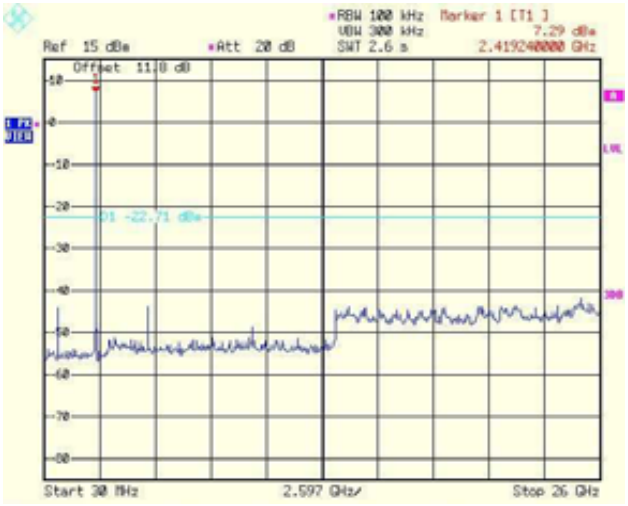
Plot # 73.

Output 6. Low frequency bandedge.
802.11b mode.



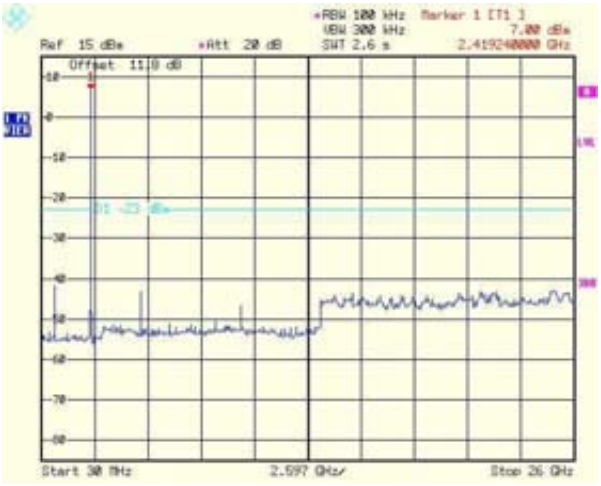
Plot # 74.

Output 6. Low frequency spurious.
802.11b mode.



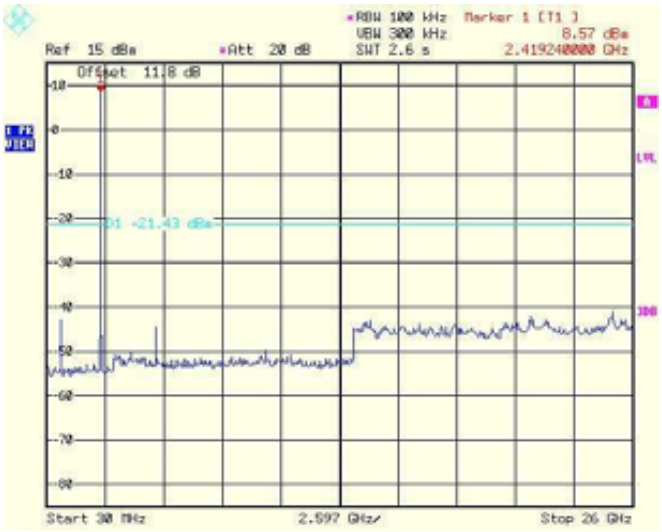
Plot # 75.

Output 1. Middle frequency spurious. 802.11b mode.



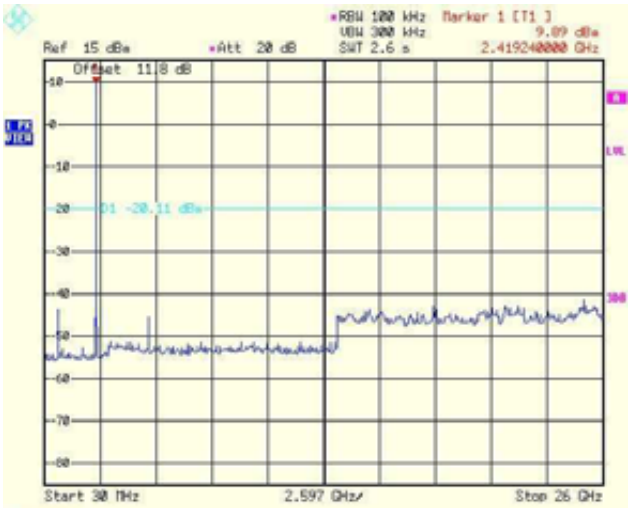
Plot # 76.

Output 2. Middle frequency spurious. 802.11b mode.



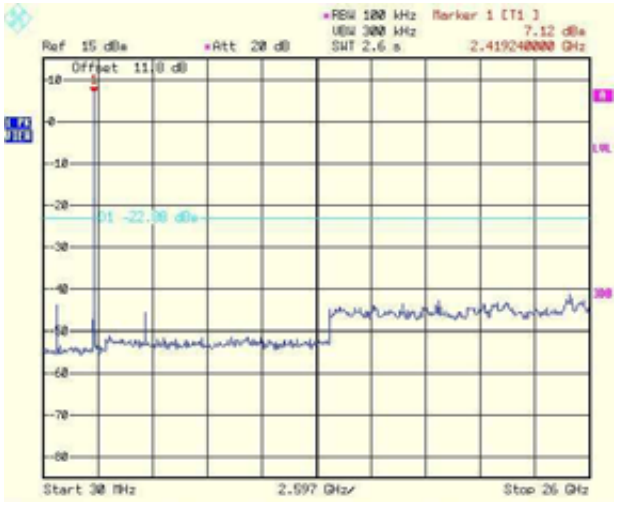
Plot # 77.

Output 3. Middle frequency spurious. 802.11b mode.



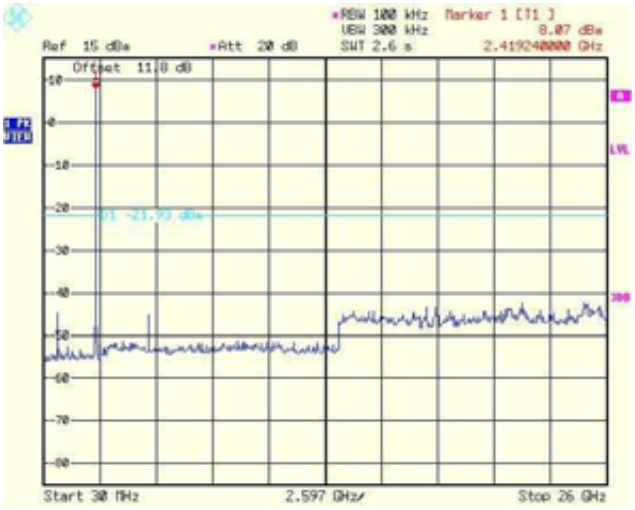
Plot # 78.

Output 4. Middle frequency spurious. 802.11b mode.



Plot # 79.

Output 5. Middle frequency spurious. 802.11b mode.



Plot # 80.

Output 6. Middle frequency spurious. 802.11b mode.