FCC Part 15C
Measurement and Test Report

For

Smartron India Private Limited

1st Floor, Kapil Tower, Gachibowli, Hyderabad, Telangana

FCC ID:2AGCE-T1211

FCC Rule(s):	FCC Part 15C
Product Description:	Tablet PC
Tested Model:	T1211
Report No.:	STR15098043I-3
Tested Date:	2015-12-15 to 2016-06-09
Issued Date:	2016-07-29
Tested By:	Leo Lee / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy so / PSQ Manager

Prepared By:

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Smartron India Private Limited
Address of applicant:	1st Floor, Kapil Tower, Gachibowli, Hyderabad, Telangana
Manufacturer:	Shenzhen Wisky Technology Co., LTD.
Address of manufacturer:	5th Floor, W2-A Building, Hi-tech Park South 1st Road, Nanshan District, Shenzhen

General Description of EUT	
Product Name:	Tablet PC
Trade Name:	SMARTRON
Model No.:	T1211
Adding Model(s):	/
Rated Voltage:	DC 7.4V battery, Adapter DC 12V charging
Power Adapter Model:	PSY1203000 I/P: AC 100-240V; O/P: DC 12V/3A
Note: The test data is gathered from a production sample provided by the manufacturer. The appearance of others models listed in the report is different from main-test model T1211, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 802.11b/g/n(HT20) 2422-2452MHz for 802.11n(HT40)
RF Output Power:	17.47 dBm (Conducted)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	11/7
Channel Separation:	5MHz
Type of Antenna:	Integral antenna
Antenna Gain:	Antenna 1:2.26dBi, Antenna 2:3.59dBi
Lowest Internal Frequency	32.768kHz

1.2 Test Standards

The following report is prepared on behalf of the Smartron India Private Limited in accordance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices, and ANSI C63.4-2014, 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. The measurement guide KDB 558074 D01 v03r05 for digital transmission systems and KDB 662911 D01 v02r01 for Multiple Transmitter Output shall be performed also.

1.4 Table for parameters of Test Software setting

The test utility software used during testing was “RPTA1-71W.M4300.01.GD.2015Sep1”. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)		
	NCB: 20MHz		
	2412	2437	2462
802.11b 11Mbps	38	38	38
802.11g 54Mbps	36	36	36
802.11n-HT20 MCS7	34	34	34
Mode	NCB: 40MHz		
	2422	2437	2452
802.11n-HT40 MCS7	34	34	34

1.5 EUT Operating during test

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under WIN10 were executed.

1.6 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. 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 and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11b	2412MHz, 2437MHz, 2462MHz
TM2	802.11g	2412MHz, 2437MHz, 2462MHz
TM3	802.11n-HT20	2412MHz, 2437MHz, 2462MHz
TM4	802.11n-HT40	2422MHz, 2437MHz, 2452MHz

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Adapter Cable	1.45	Unshielded	Without Core

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB cable	1.0	Unshielded	Without Ferrite
HDMI cable	1.0	Shielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Remark
Notebook	Lenovo	E10	/
Earphone	Sony	/	/
TF card	Kingston	/	/
Display	Dell	/	/

1.8 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Spectrum Analyzer	Agilent	E4407B	MY41440400	2015-06-17	2016-06-16
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2015-06-17	2016-06-16
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2015-06-17	2016-06-16
Amplifier	Agilent	8447F	3113A06717	2015-06-17	2016-06-16
Amplifier	C&D	PAP-1G18	2002	2015-06-17	2016-06-16
Broadband Antenna	Schwarz beck	VULB9163	9163-333	2015-06-17	2016-06-16
Horn Antenna	ETS	3117	00086197	2015-06-17	2016-06-16
Horn Antenna	ETS	3116B	00088203	2015-06-17	2016-06-16
Loop Antenna	Schwarz beck	FMZB 1516	9773	2015-06-17	2016-06-16
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2015-06-17	2016-06-16
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2015-06-17	2016-06-16
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2015-06-17	2016-06-16

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 2.1093	RF Exposure	Compliant
§ 15.203; § 15.247(b)(4)(i)	Antenna Requirement	Compliant
§ 15.207(a)	Conducted Emission	Compliant
§ 15.247(e)	Power Spectral Density	Compliant
§ 15.247(a)(2)	6 dB Bandwidth	Compliant
§ 15.247(b)(3)	RF Output Power	Compliant
§ 15.209(a)	Radiated Emission	Compliant
§ 15.247(d)	Band Edge (Out of Band Emissions)	Compliant

N/A: not applicable

3. RF Exposure

3.1 Standard Applicable

According to § 1.1307 and § 2.1093, the portable transmitter must comply the RF exposure requirements.

3.2 Test Result

This product complied with the requirement of the RF exposure, please see the SAR Report.

4. Antenna Requirement

4.1 Standard Applicable

According to FCC Part 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

4.2 Evaluation Information

This product has two integral antennas, fulfill the requirement of this section.

5. Power Spectral Density

5.1 Standard Applicable

According to 15.247(a)(1)(iii), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

5.2 Test Procedure

According to the KDB 558074 D01 v03r05, such specifications require that the same method as used to determine the conducted output power shall also be used to determine the power spectral density. The test method of power spectral density as below:

a) Set instrument center frequency to DTS channel center frequency.
b) Set span to at least 1.5 times the OBW.
c) Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz. .
d) Set VBW ≥3 x RBW.
e) Detector = power averaging (RMS) or sample detector (when RMS not available).
f) Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
g) Sweep time = auto couple.
h) Employ trace averaging (RMS) mode over a minimum of 100 traces.
i) Use the peak marker function to determine the maximum amplitude level.
j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span in order to meet the minimum measurement point requirement as the RBW is reduced).

5.3 Environmental Conditions

Temperature:	26° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

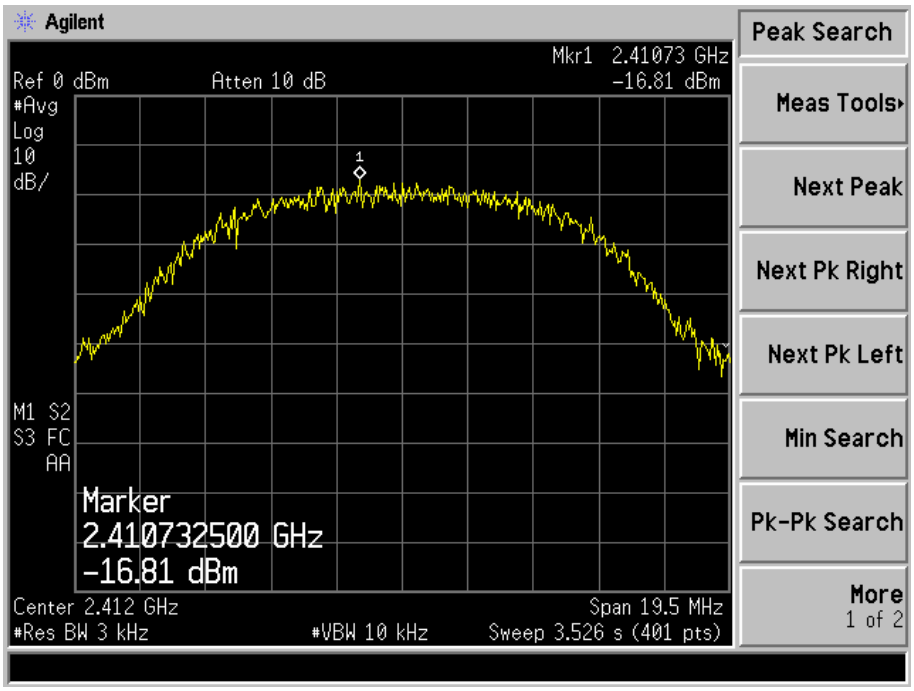
5.4 Summary of Test Results/Plots

Test Mode	Test Channel MHz	Chain 1 dBm/3kHz	Chain 2 dBm/3kHz	Total dBm/3kHz	Limit dBm/3kHz
802.11b	2412	-16.81	-8.540	-7.94	8
	2437	-17.08	-9.724	-8.99	8
	2462	-17.27	-10.800	-9.92	8
802.11g	2412	-22.95	-14.49	-13.91	8
	2437	-23.17	-15.48	-14.80	8
	2462	-23.41	-16.56	-15.74	8
802.11n HT20	2412	-23.49	-16.16	-15.42	8
	2437	-23.55	-16.19	-15.46	8
	2462	-23.89	-17.40	-16.52	8
802.11n HT40	2422	-28.39	-17.44	-17.10	8
	2437	-28.55	-18.07	-17.70	8
	2452	-28.85	-18.76	-18.35	8

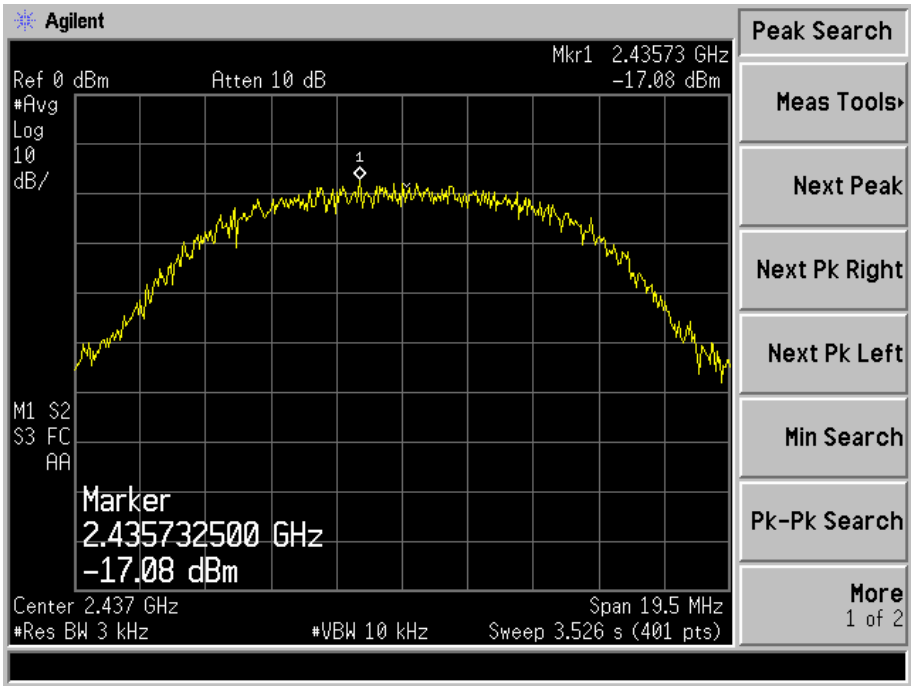
Please refer to the following test plots:

Antenna 1

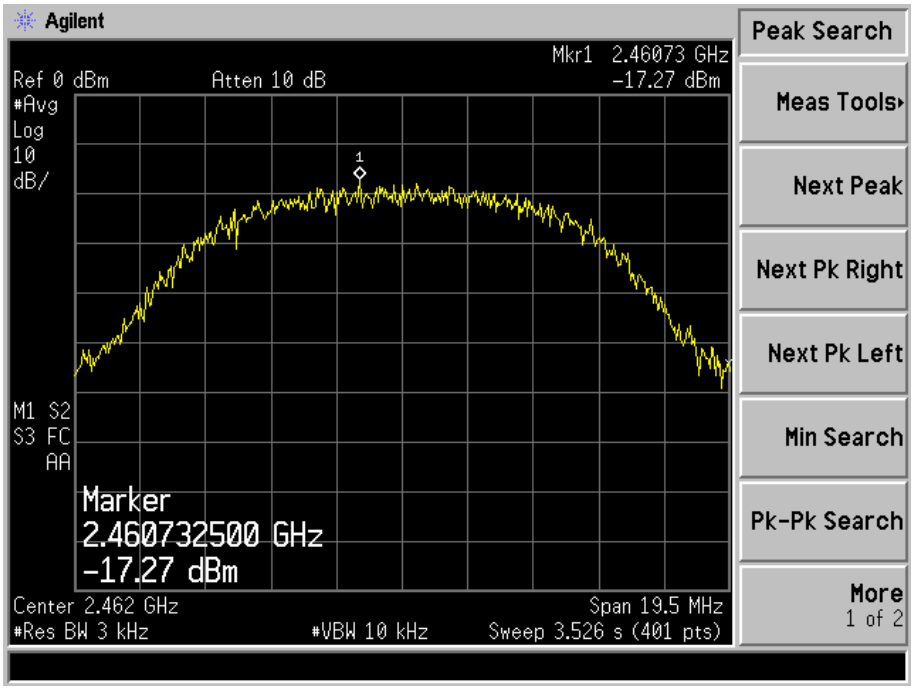
802.11b-Low Channel



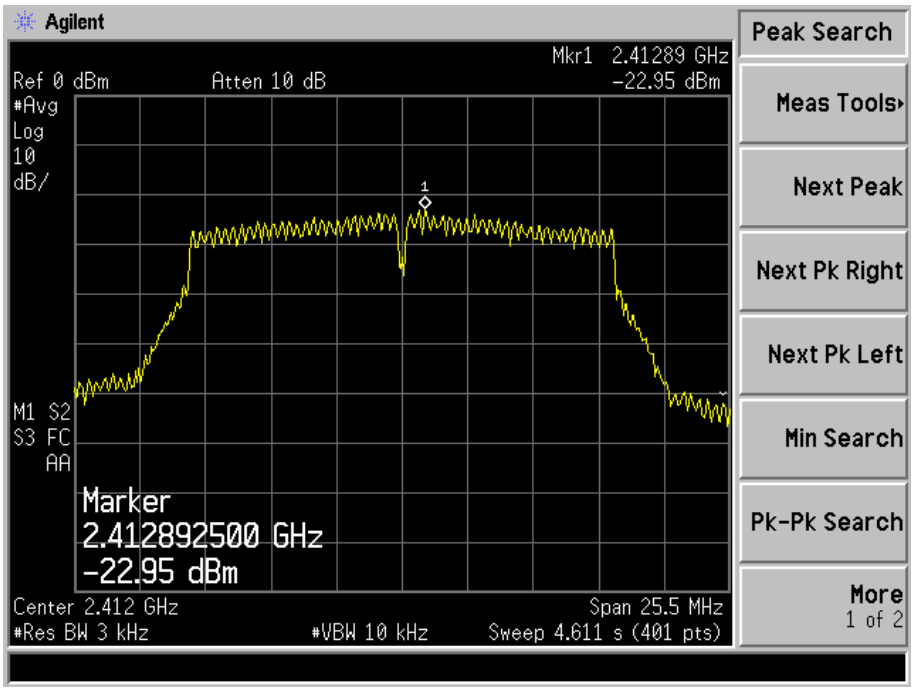
802.11b-Middle Channel



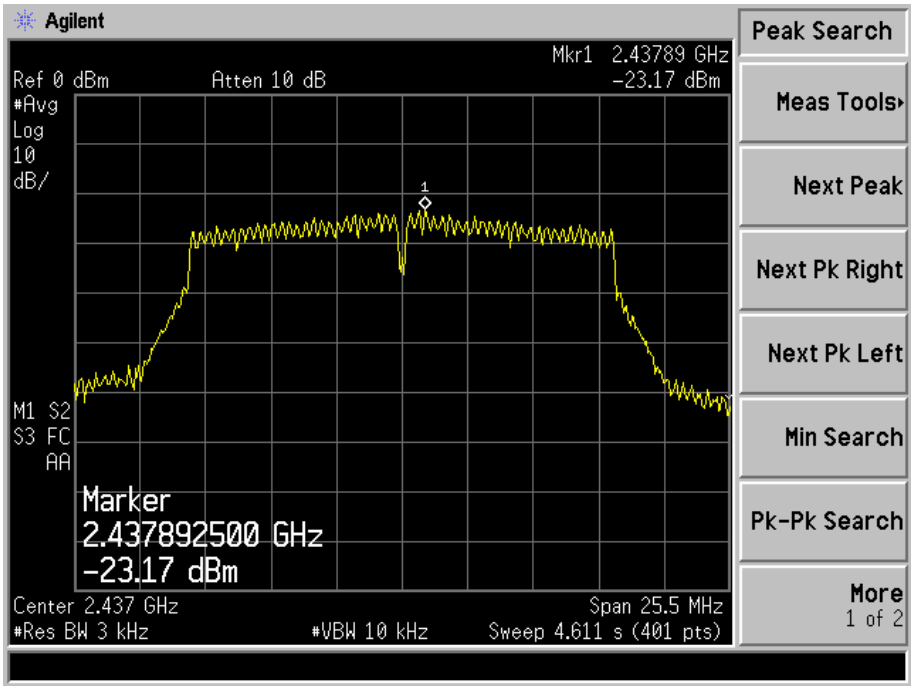
802.11b-High Channel



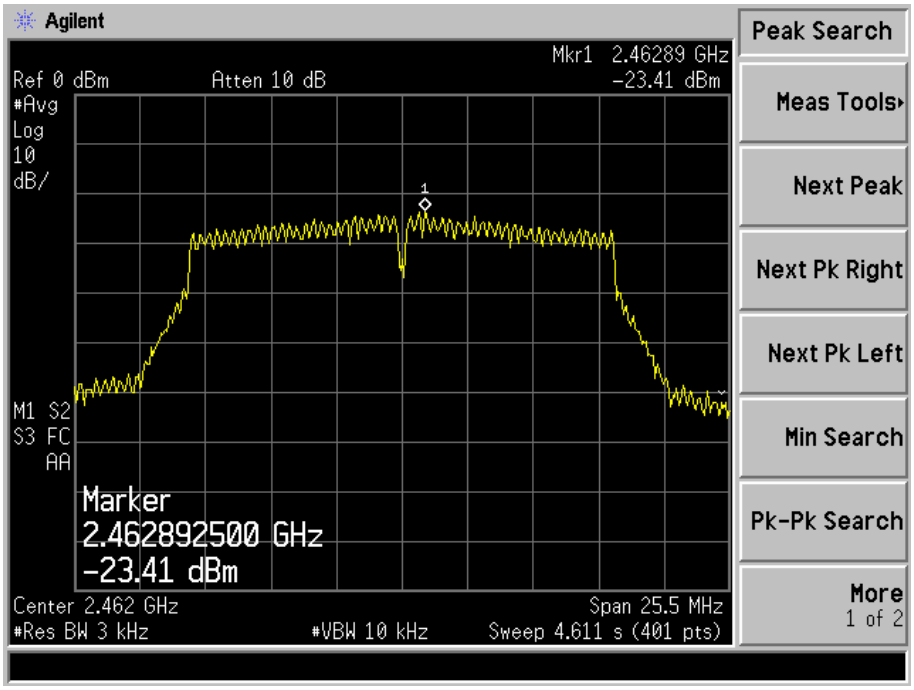
802.11g-Low Channel



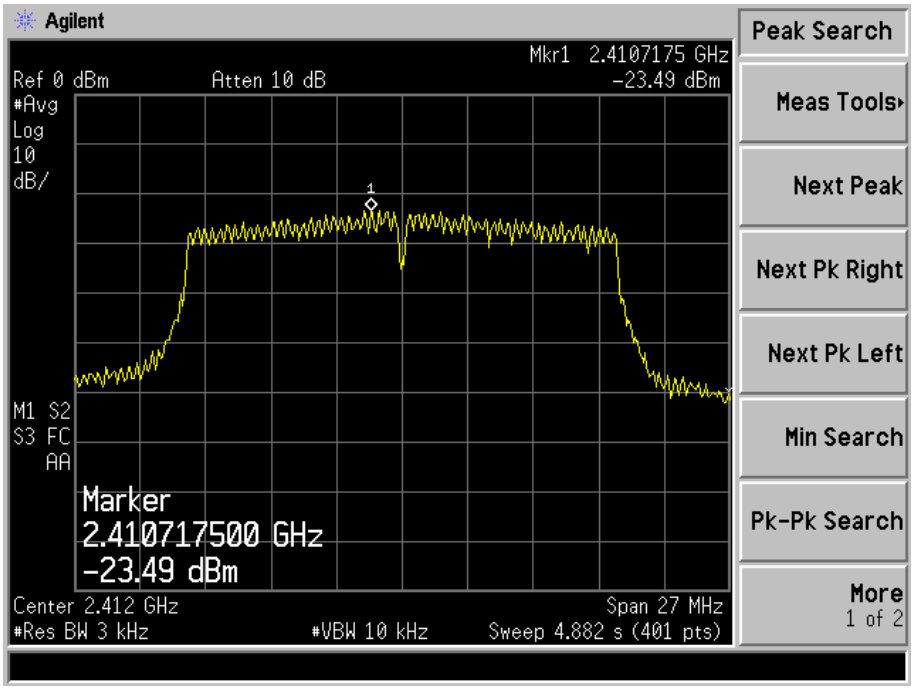
802.11g-Middle Channel



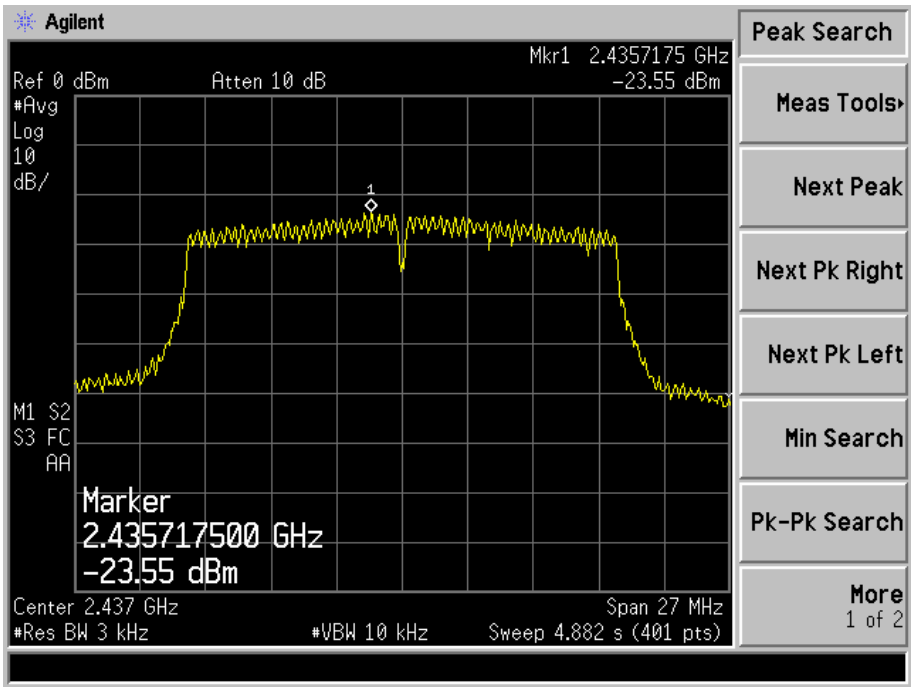
802.11g-High Channel



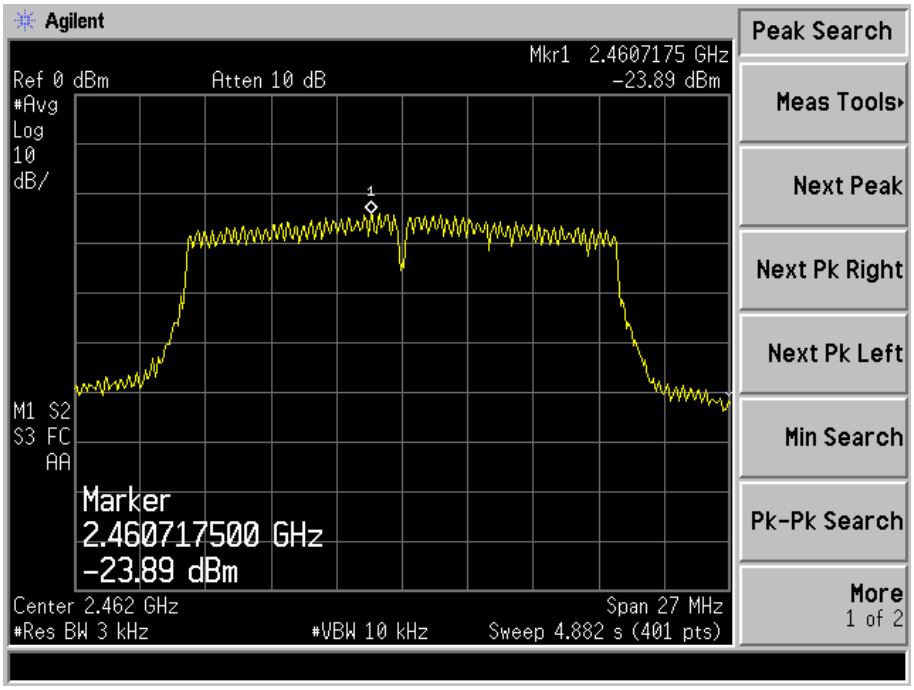
802.11n-HT20-Low Channel



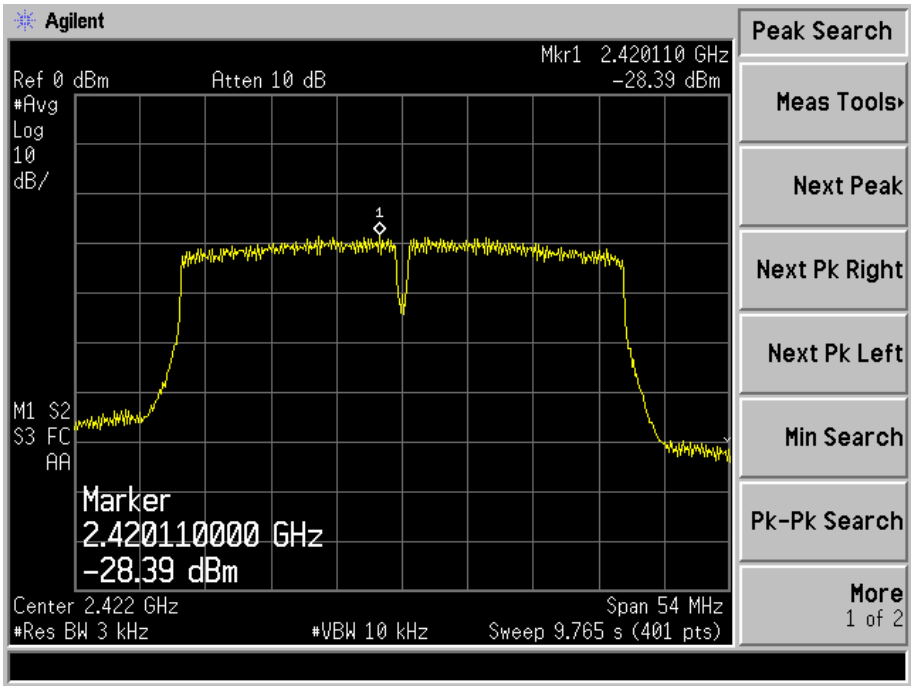
802.11n-HT20-Middle Channel



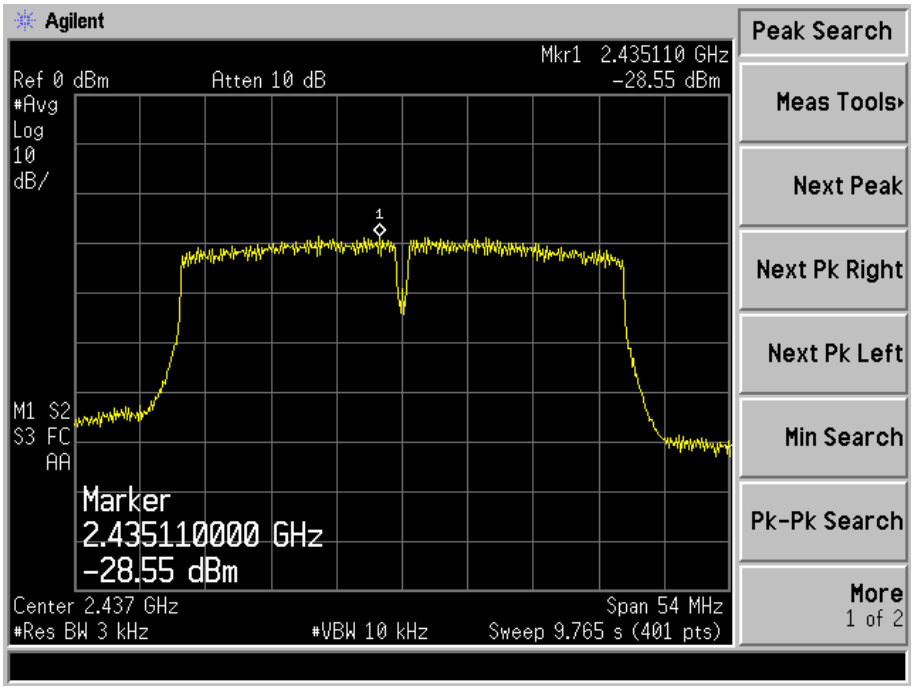
802.11n-HT20-High Channel



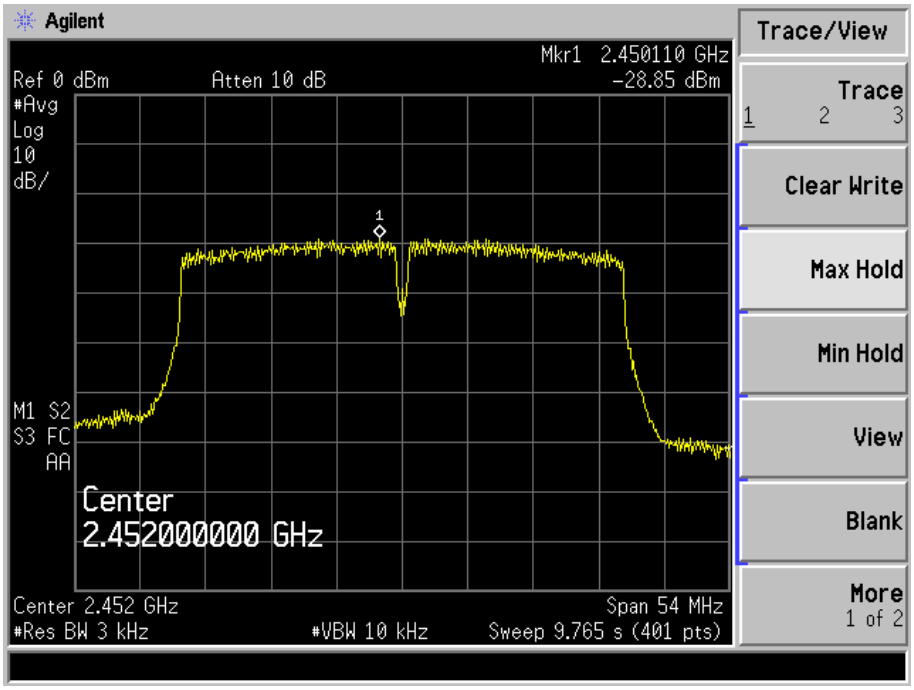
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel

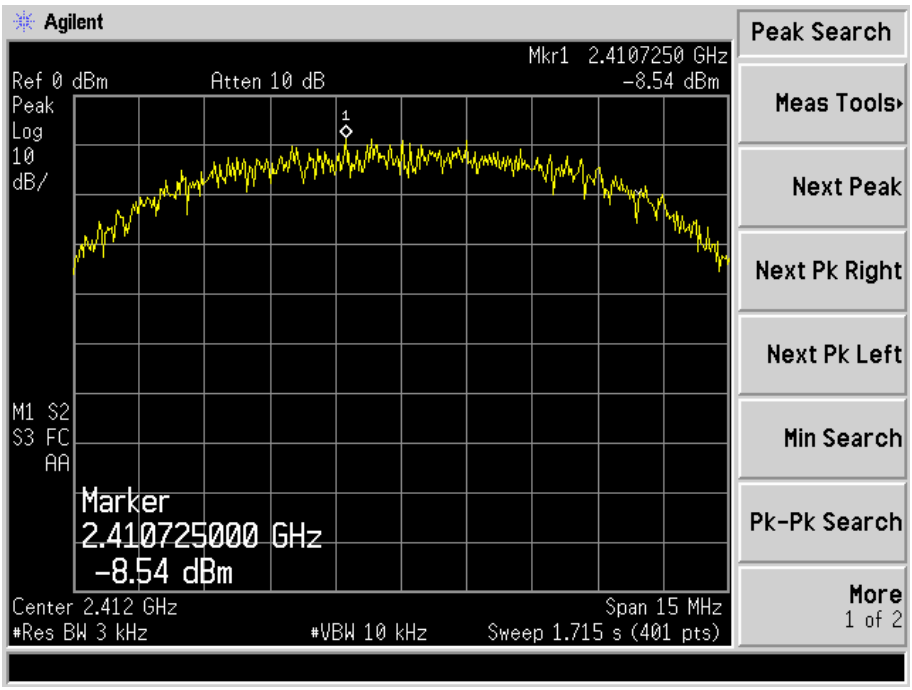


802.11n-HT40-High Channel

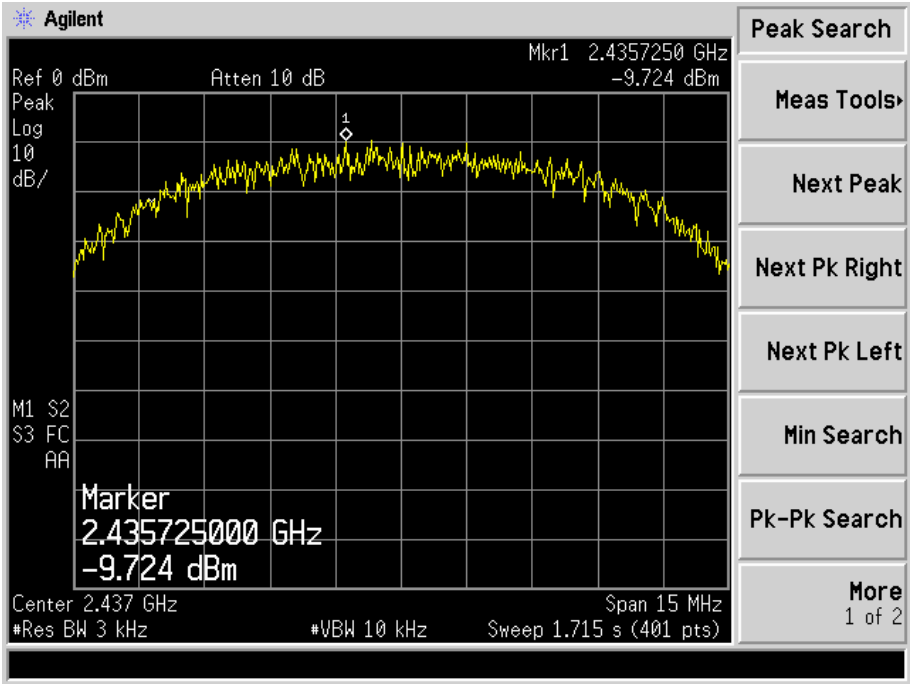


Antenna 1

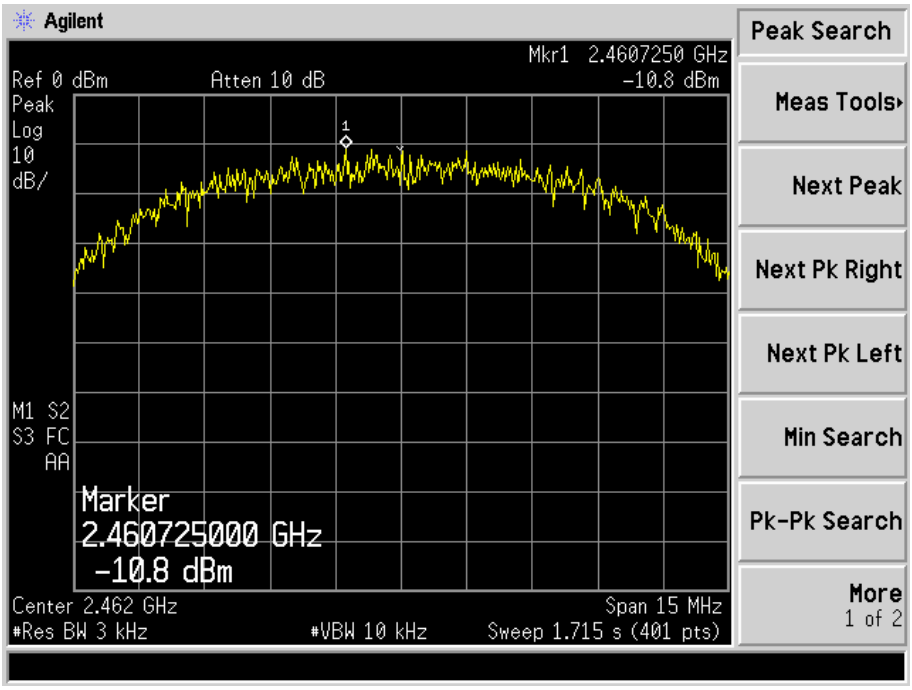
802.11b-Low Channel



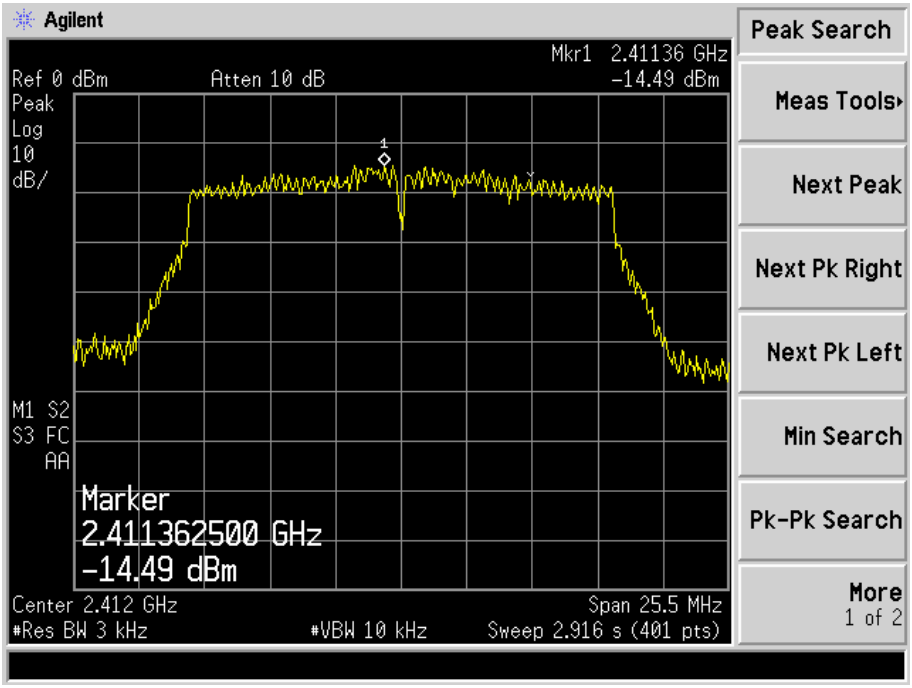
802.11b-Middle Channel



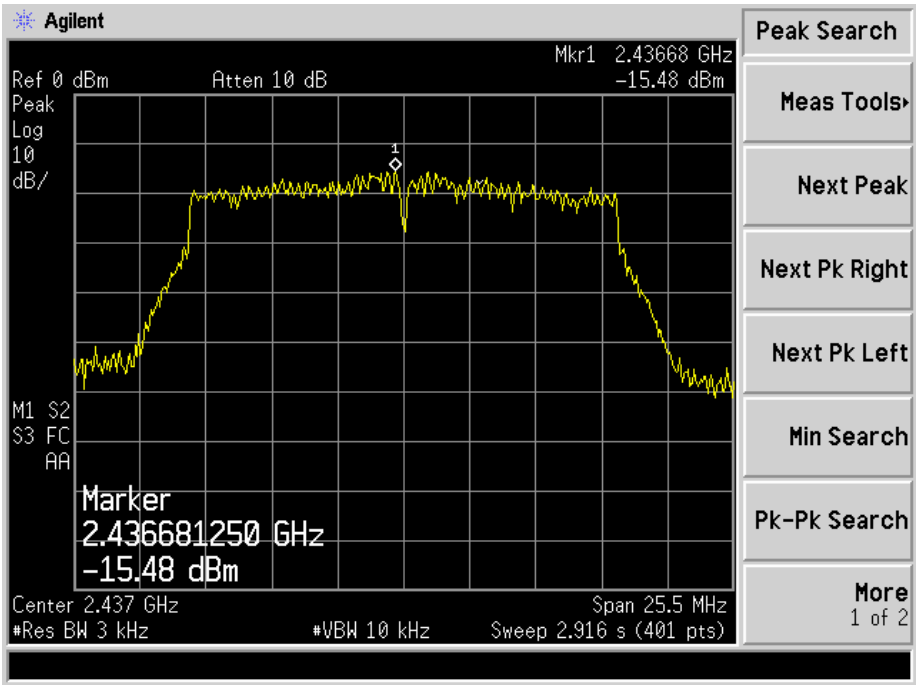
802.11b-High Channel



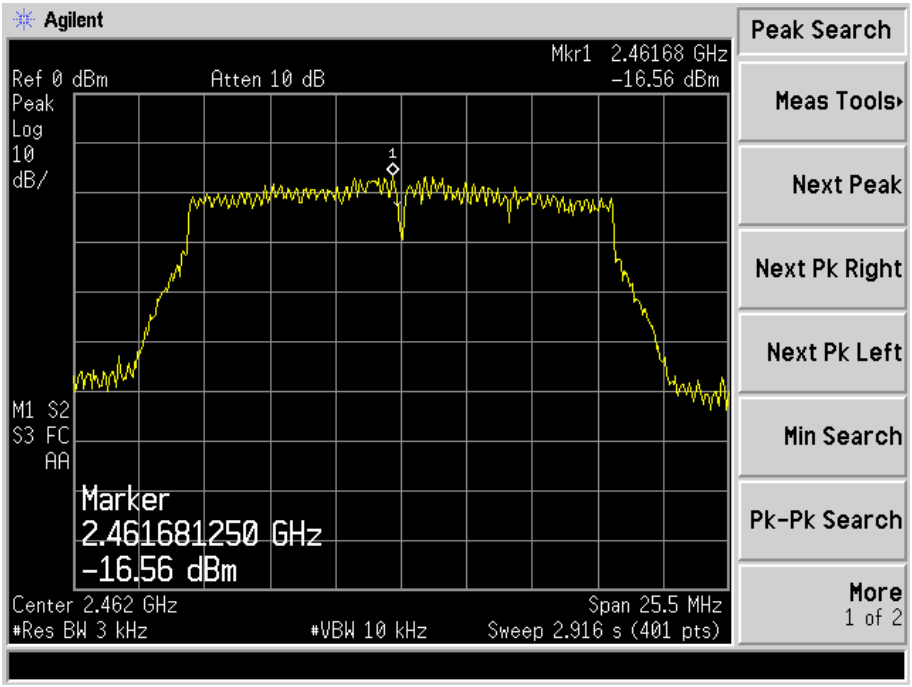
802.11g-Low Channel



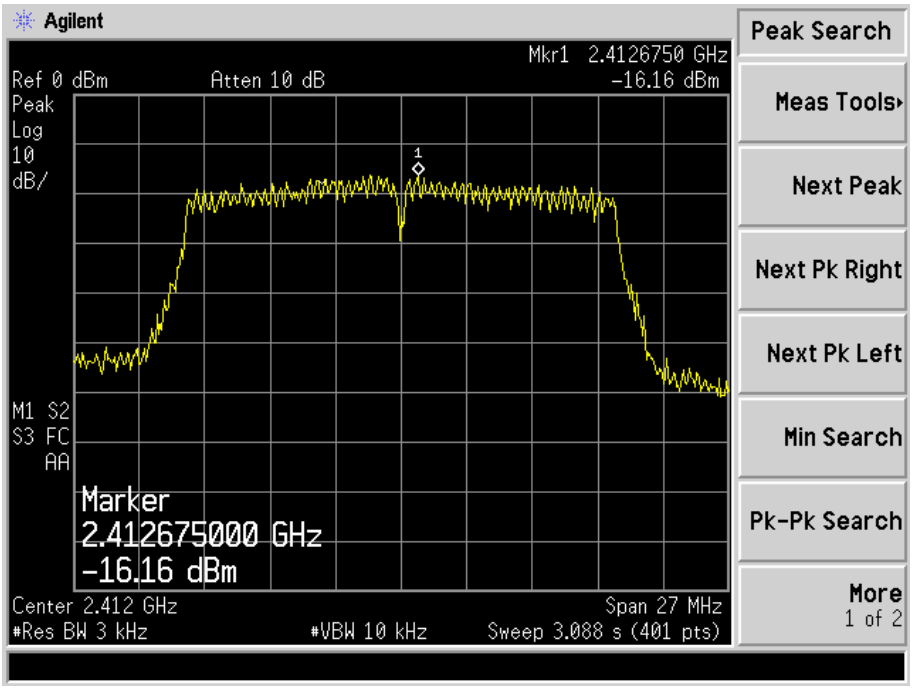
802.11g-Middle Channel



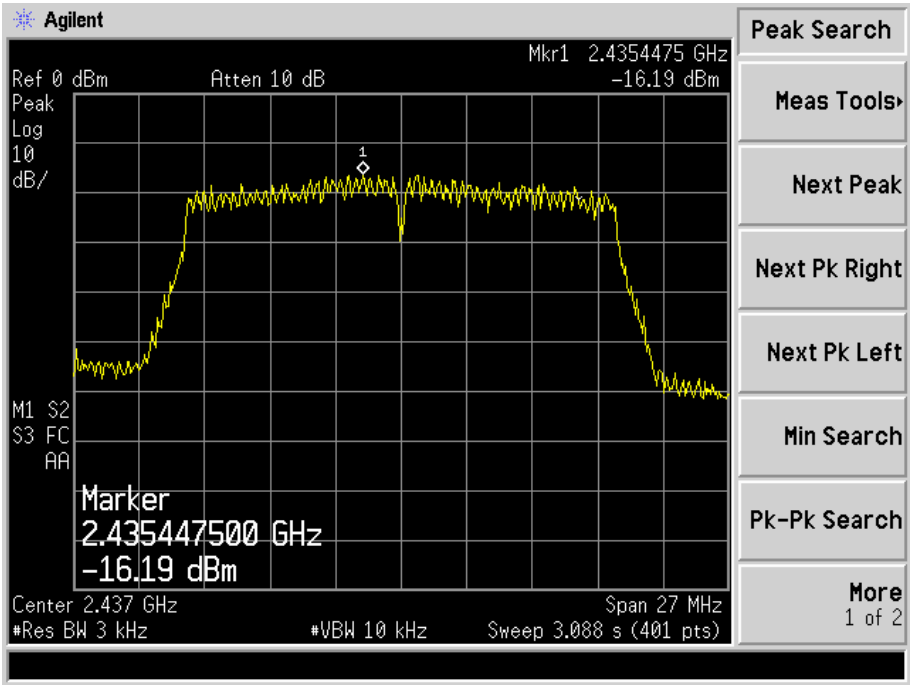
802.11g-High Channel



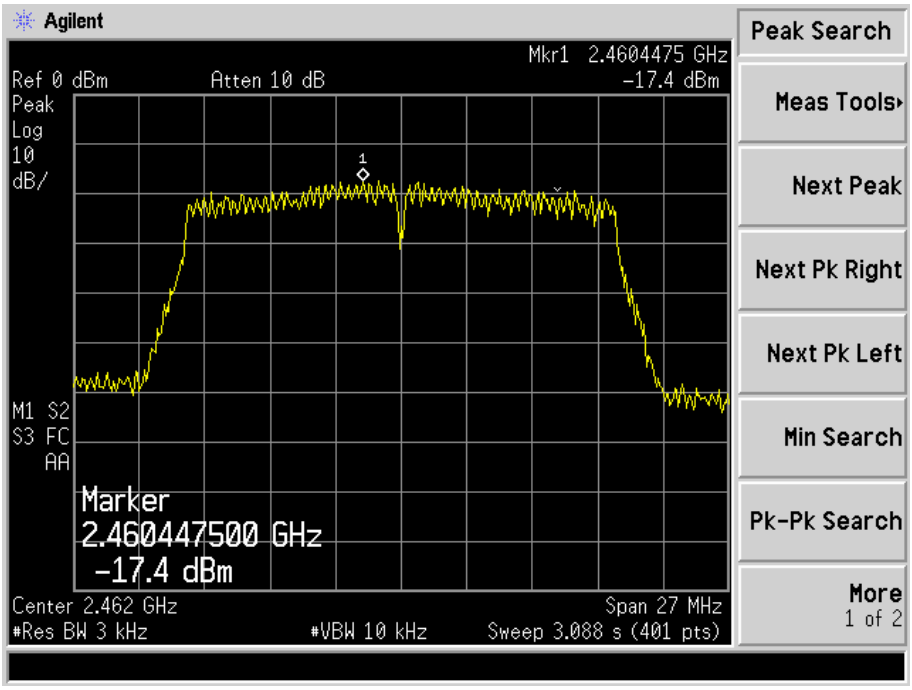
802.11n-HT20-Low Channel



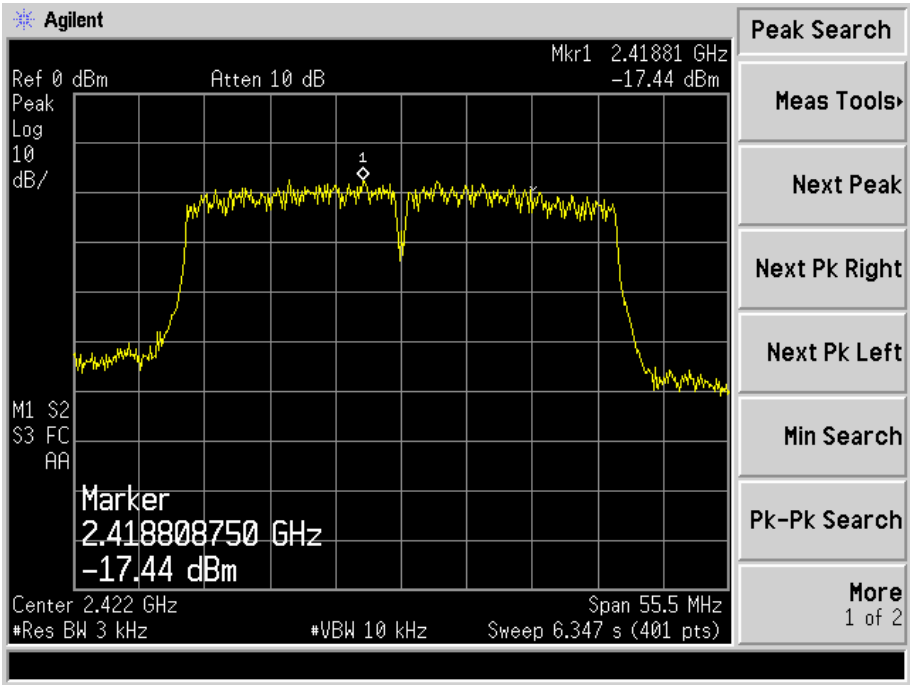
802.11n-HT20-Middle Channel



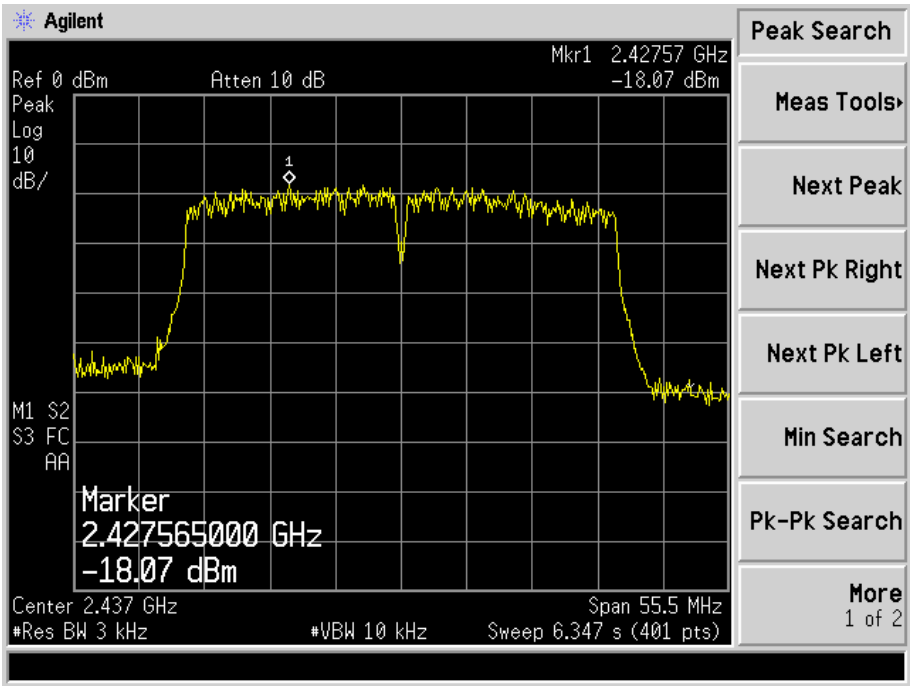
802.11n-HT20-High Channel



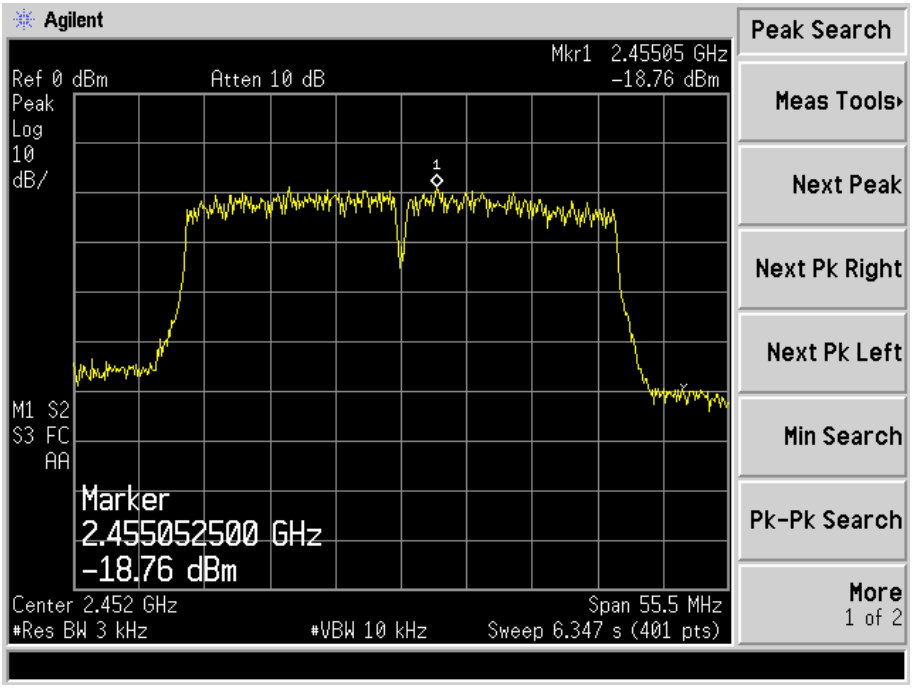
802.11n-HT40-Low Channel



802.11n-HT20-Middle Channel



802.11n-HT20-High Channel



6. 6dB Bandwidth

6.1 Standard Applicable

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

6.2 Test Procedure

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.3 Environmental Conditions

Temperature:	25° C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

6.4 Summary of Test Results/Plots

Antenna 1

Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit kHz
802.11b	2412	9.942	12.6554	≥500
	2437	8.374	12.0881	≥500
	2462	6.771	11.4194	≥500
802.11g	2412	16.545	16.5020	≥500
	2437	12.668	16.3341	≥500
	2462	10.038	16.1419	≥500
802.11n-HT20	2412	17.713	17.6340	≥500
	2437	13.460	17.3560	≥500
	2462	8.631	17.1148	≥500
802.11n-HT40	2422	15.282	35.9226	≥500
	2437	17.842	35.6854	≥500
	2452	34.494	35.9057	≥500

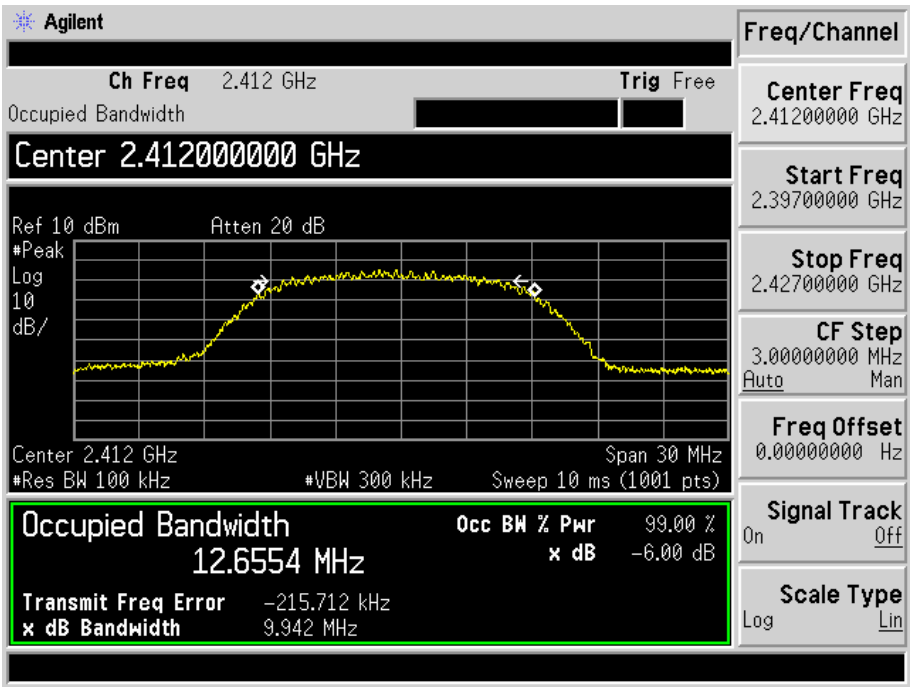
Antenna 2

Test Mode	Test Channel MHz	6 dB Bandwidth kHz	99% Bandwidth kHz	Limit kHz
802.11b	2412	9.903	12.3959	500
	2437	9.464	12.3663	500
	2462	9.513	12.3660	500
802.11g	2412	16.529	16.3918	500
	2437	16.505	16.3726	500
	2462	16.534	16.3855	500
802.11n-HT20	2412	17.363	17.5159	500
	2437	17.279	17.5107	500
	2462	17.663	17.5514	500
802.11n-HT40	2422	36.123	35.8218	500
	2437	36.090	35.8312	500
	2452	36.162	35.8536	500

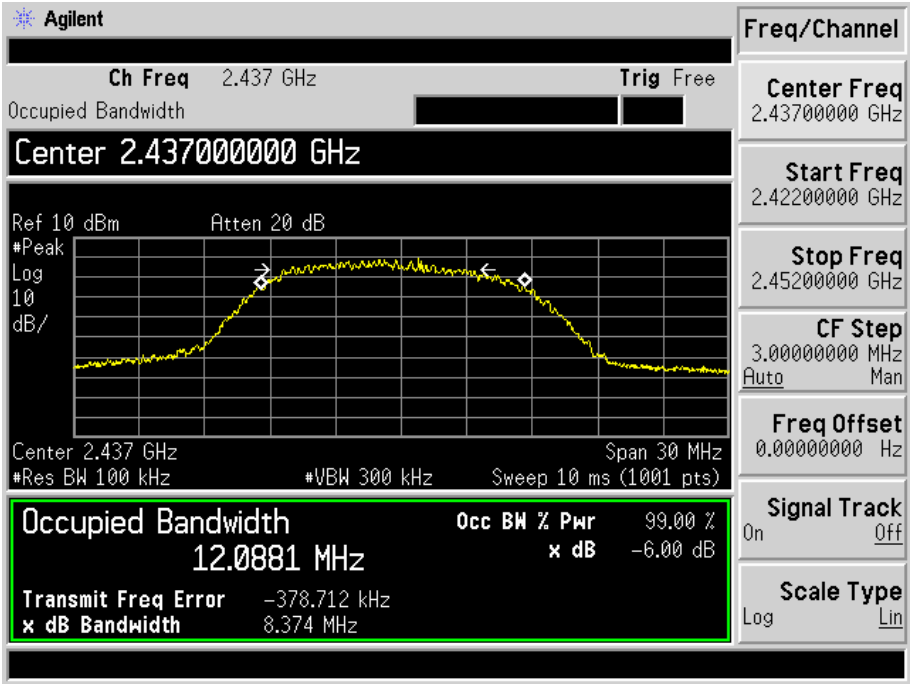
Please refer to the following test plots:

Antenna 1

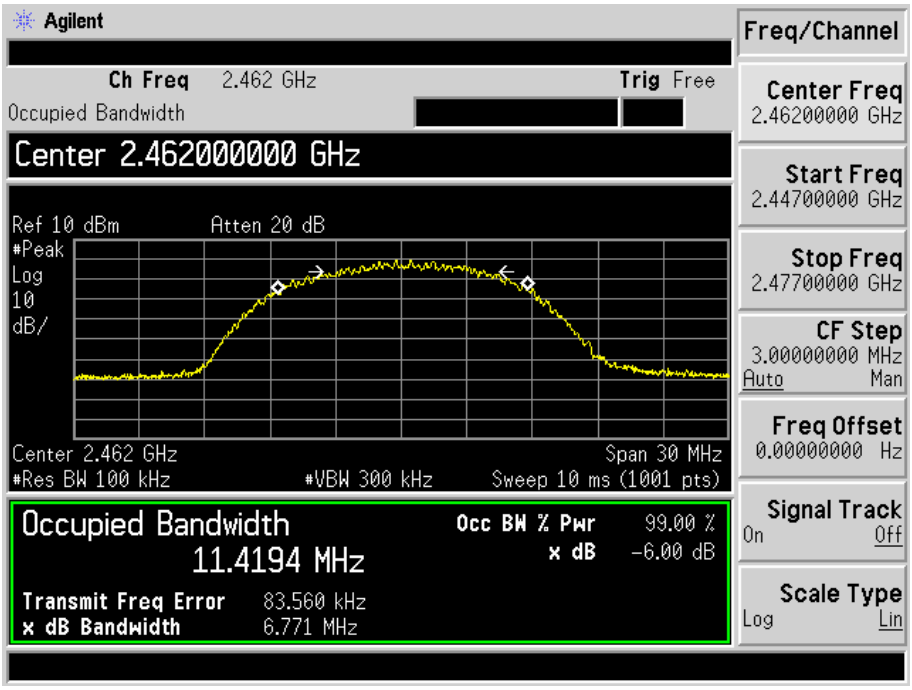
802.11b-Low Channel



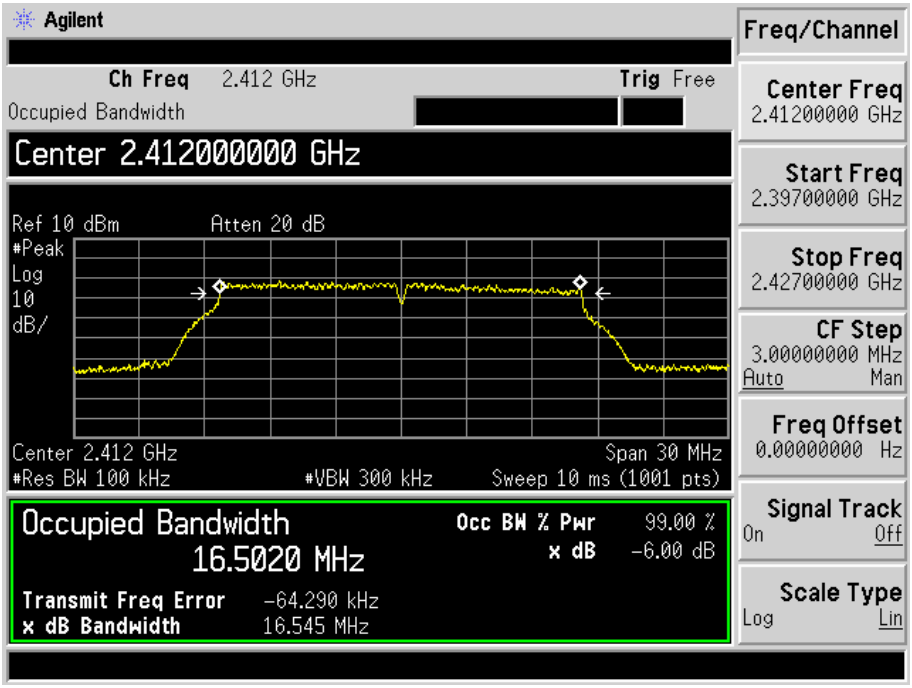
802.11b-Middle Channel



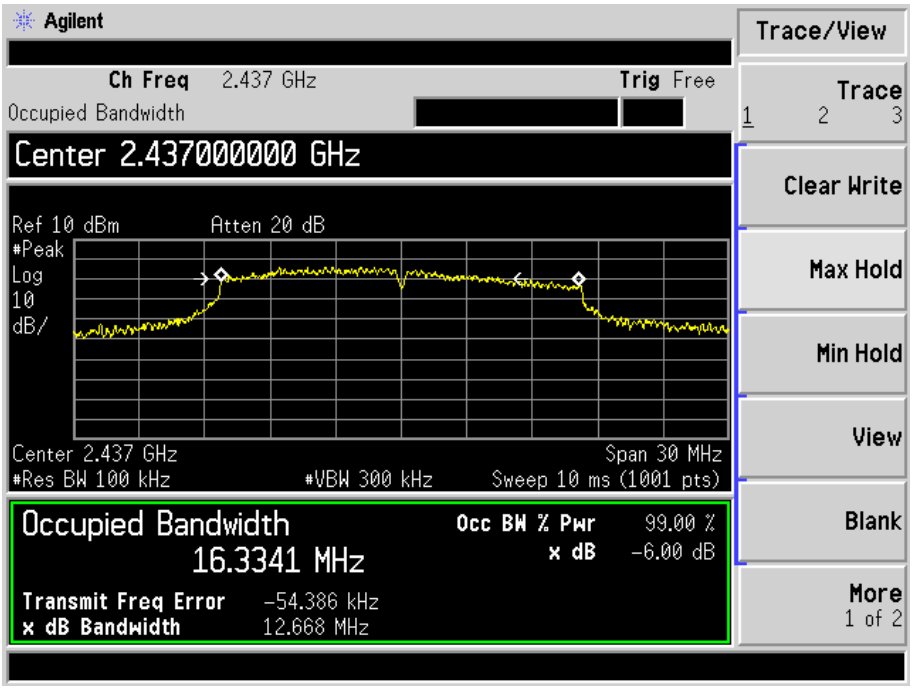
802.11b-High Channel



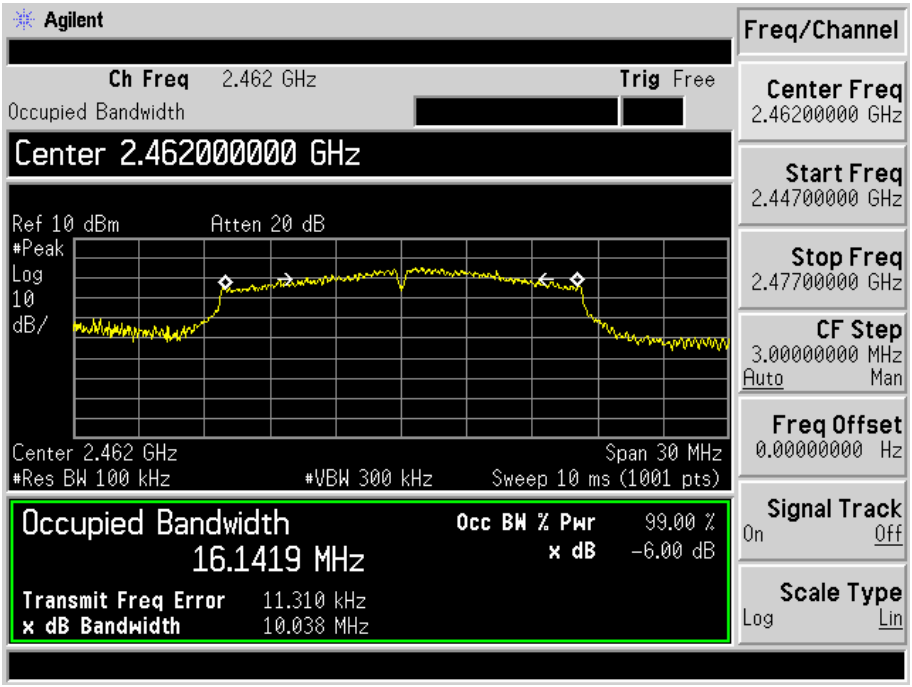
802.11g-Low Channel



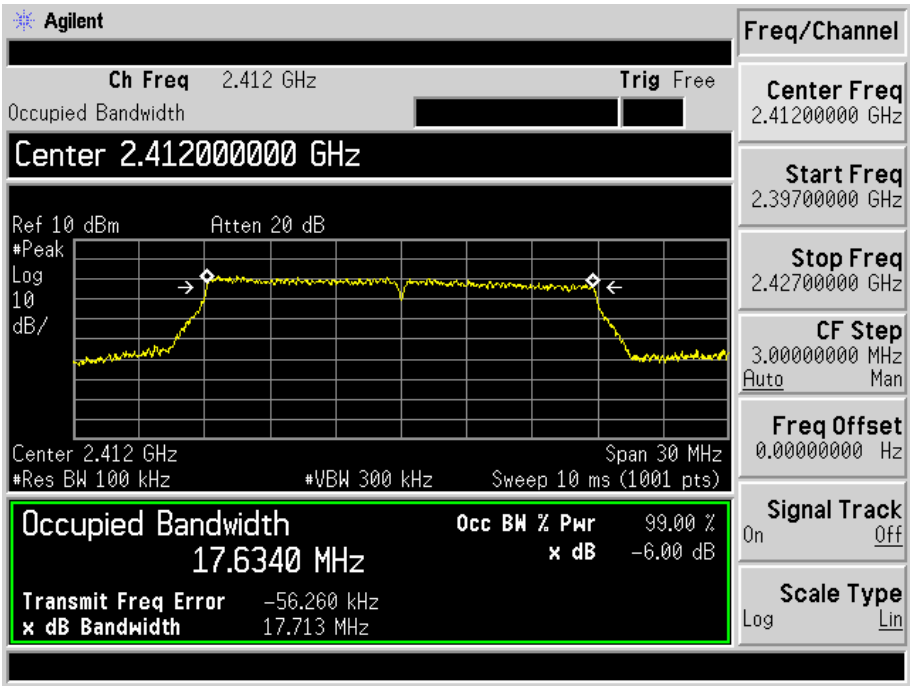
802.11g-Middle Channel



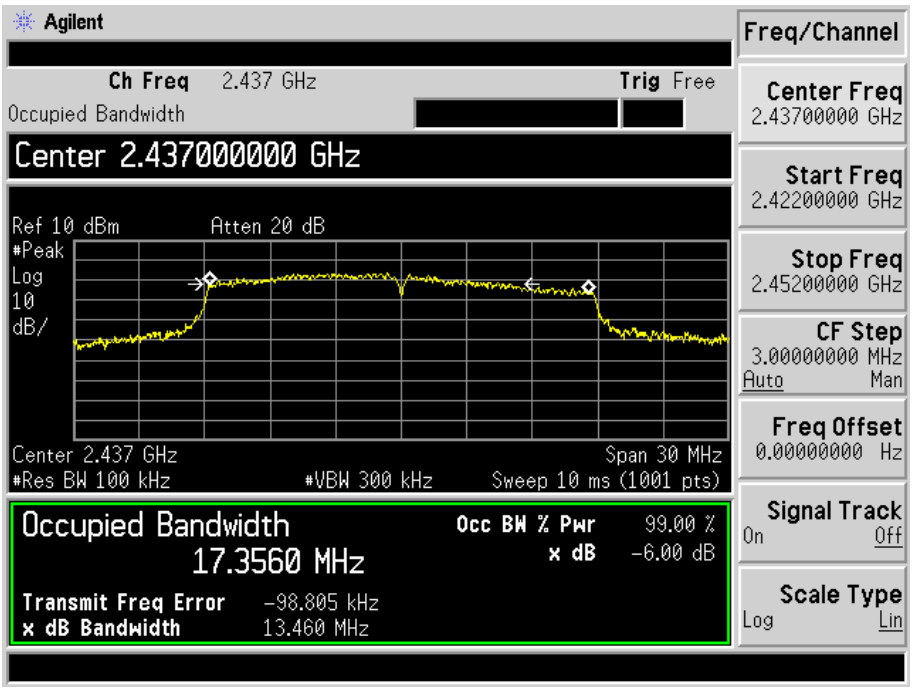
802.11g-High Channel



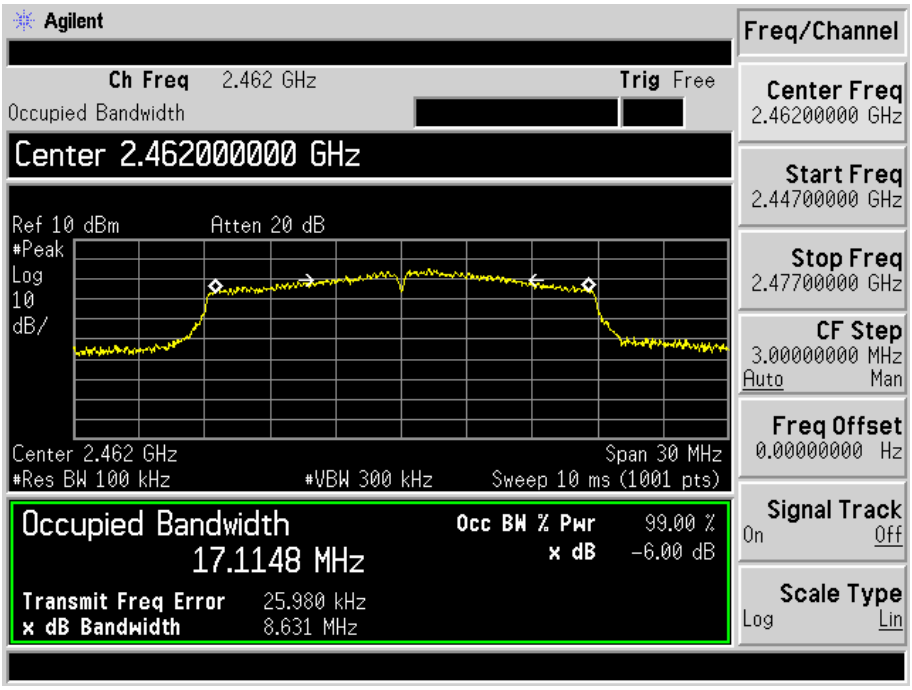
802.11n-HT20-Low Channel



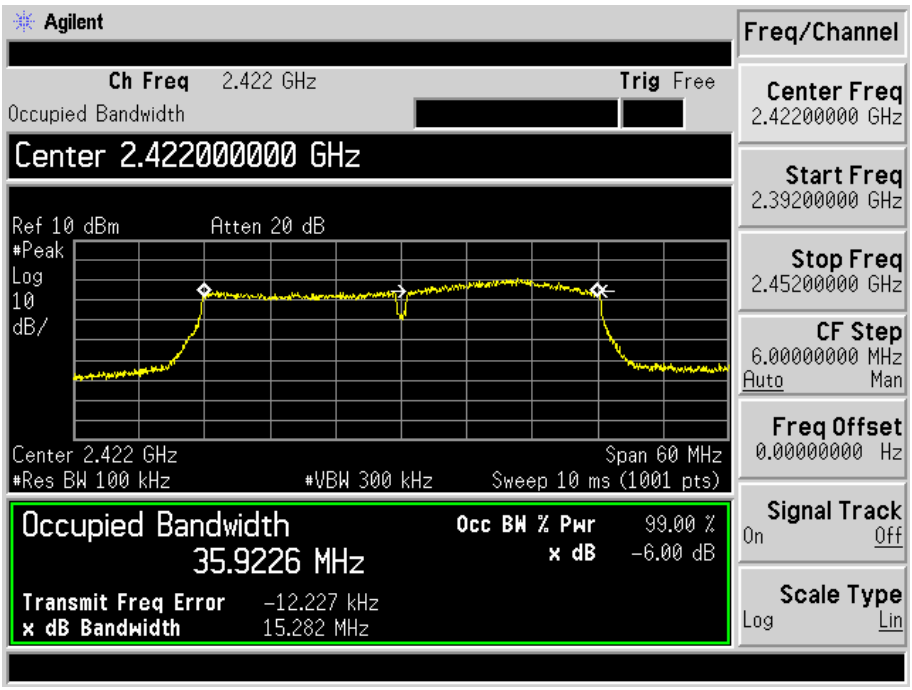
802.11n-HT20-Middle Channel



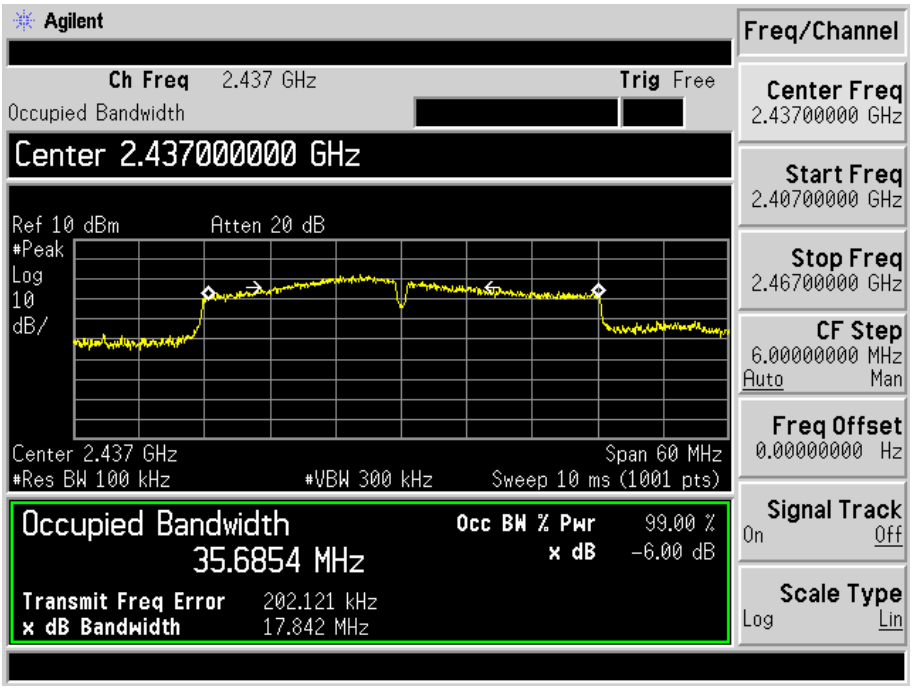
802.11n-HT20-High Channel



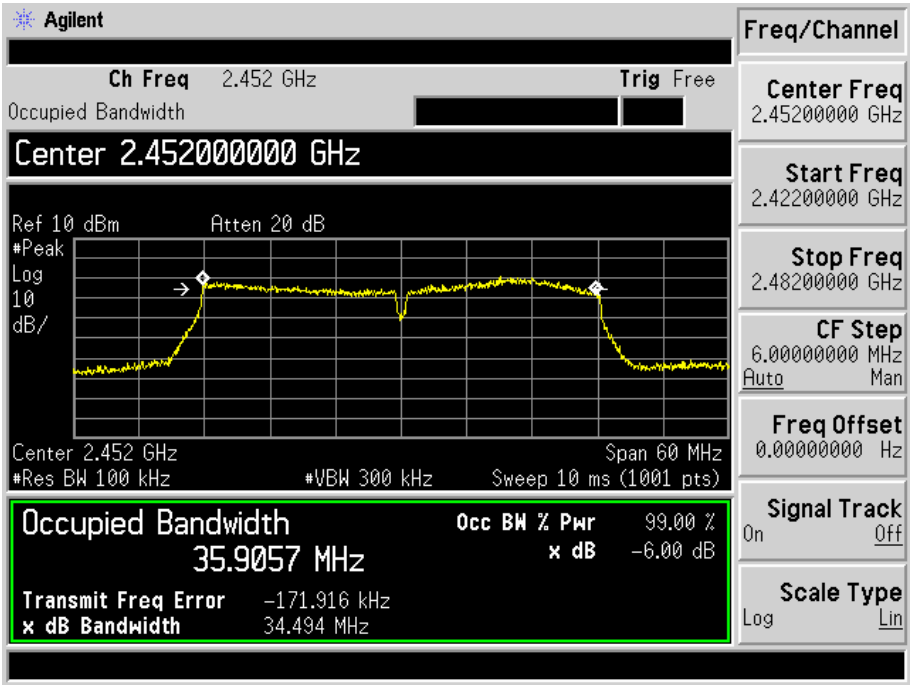
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel

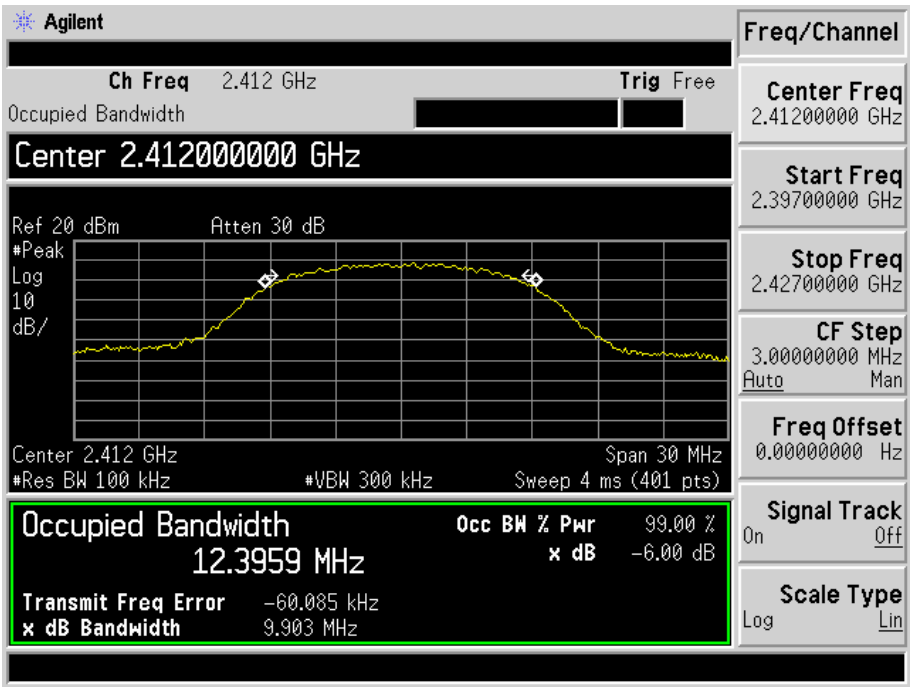


802.11n-HT40-High Channel

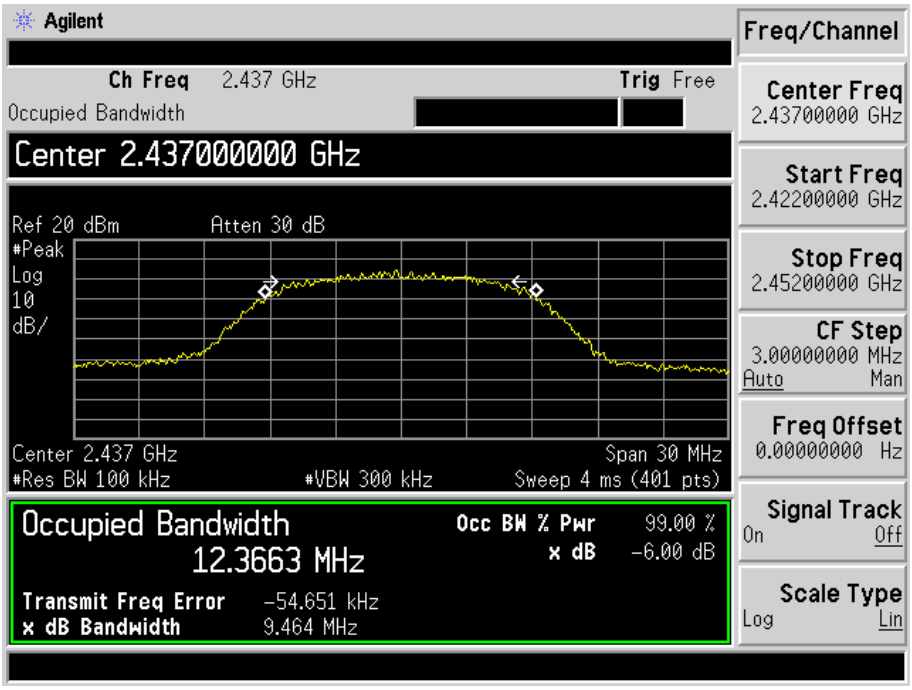


Antenna 2

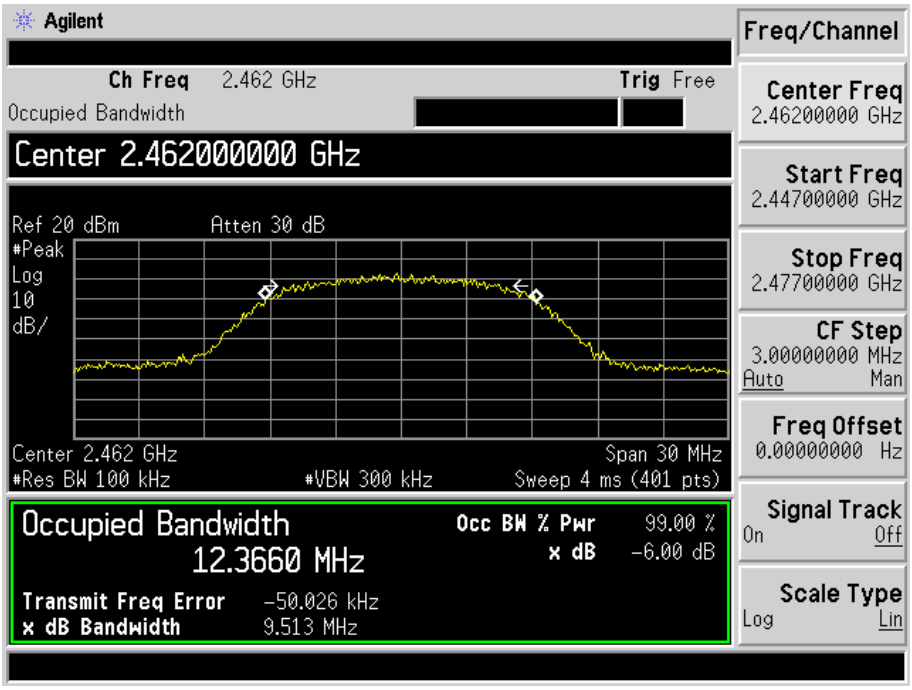
802.11b-Low Channel



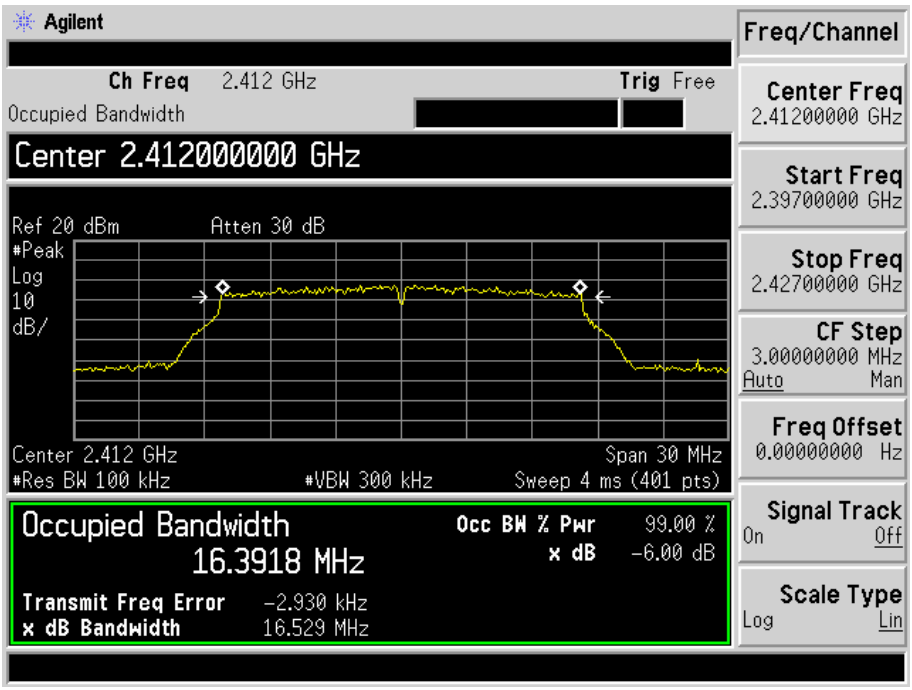
802.11b-Middle Channel



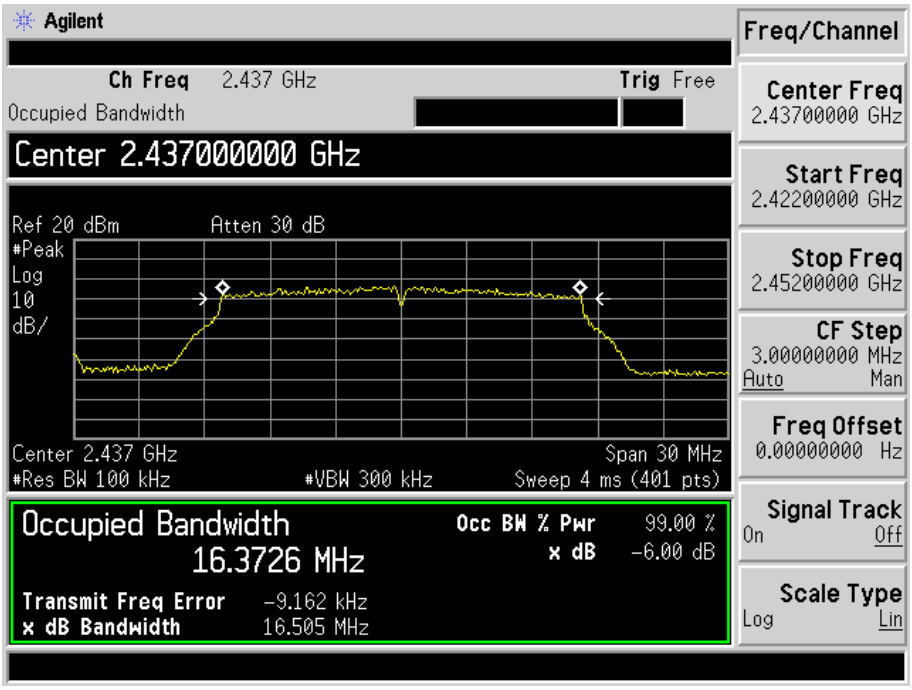
802.11b-High Channel



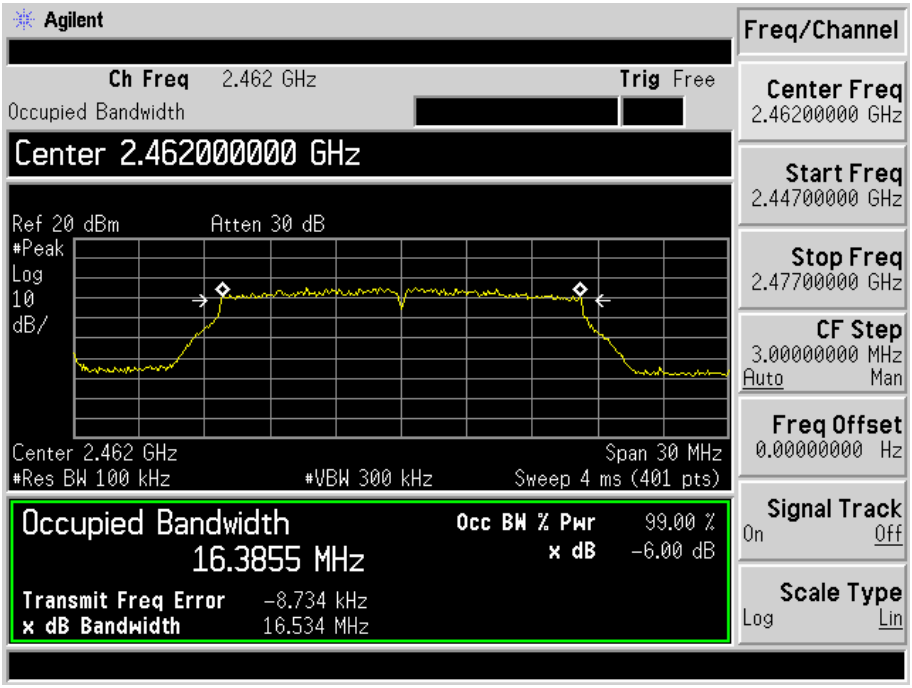
802.11g-Low Channel



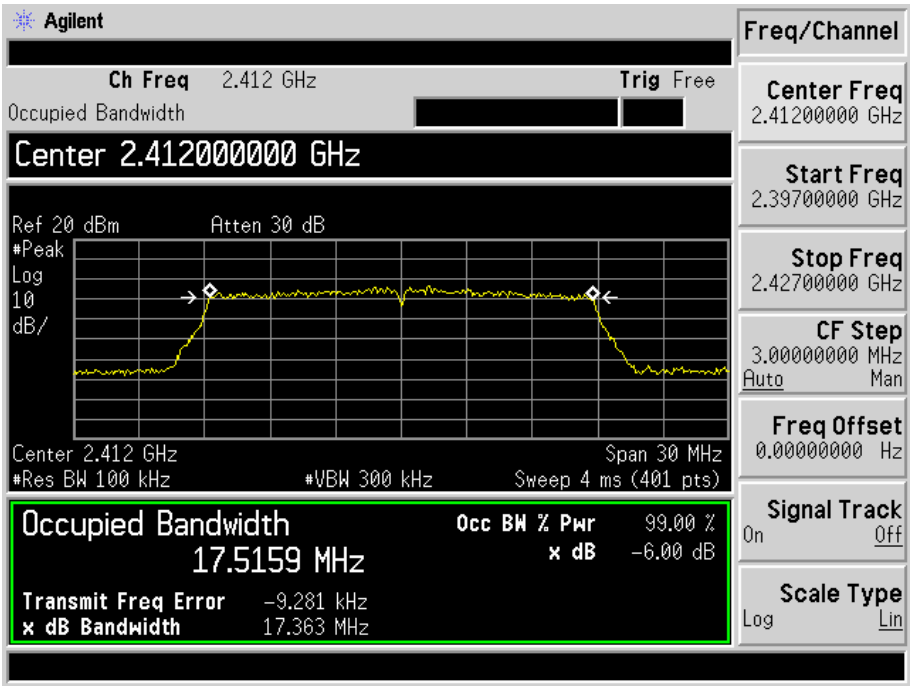
802.11g-Middle Channel



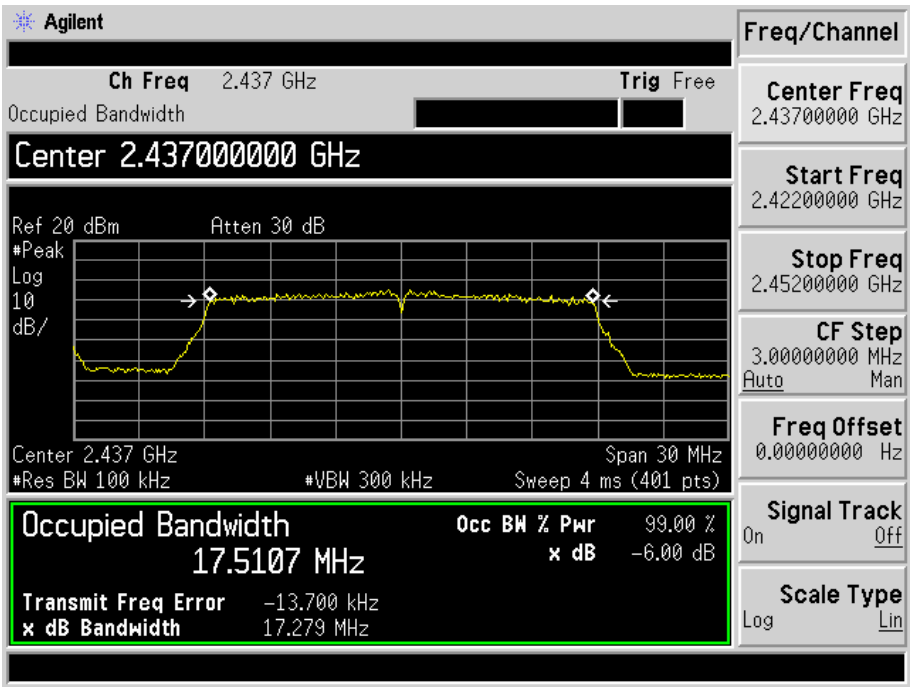
802.11g-High Channel



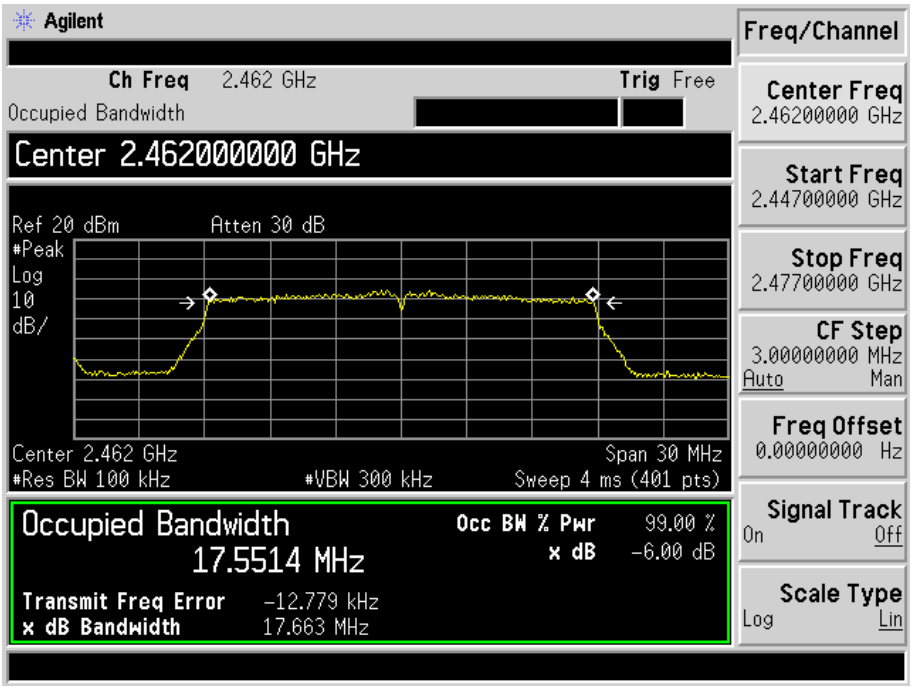
802.11n-HT20-Low Channel



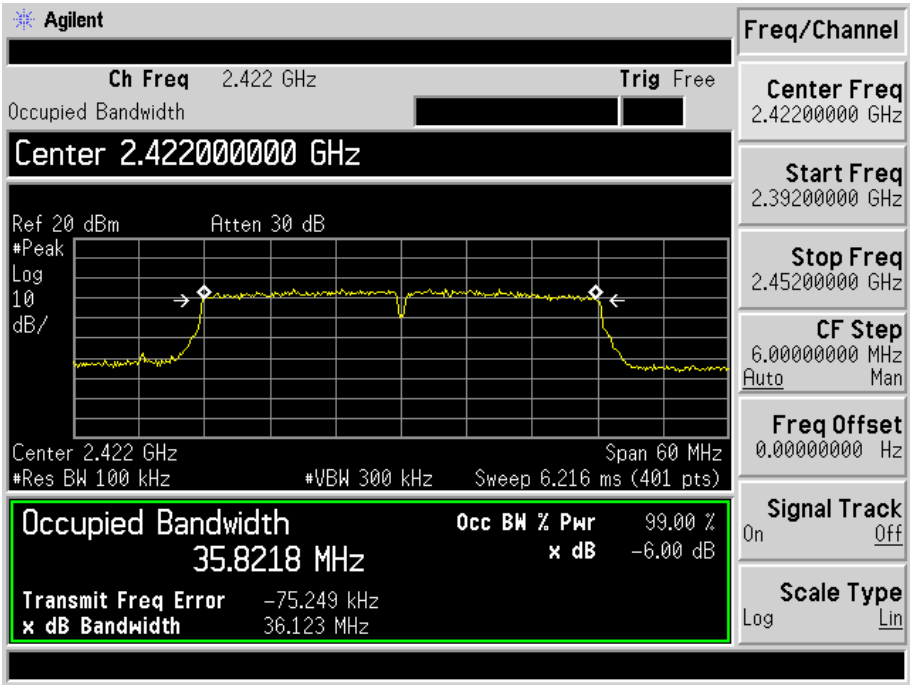
802.11n-HT20-Middle Channel



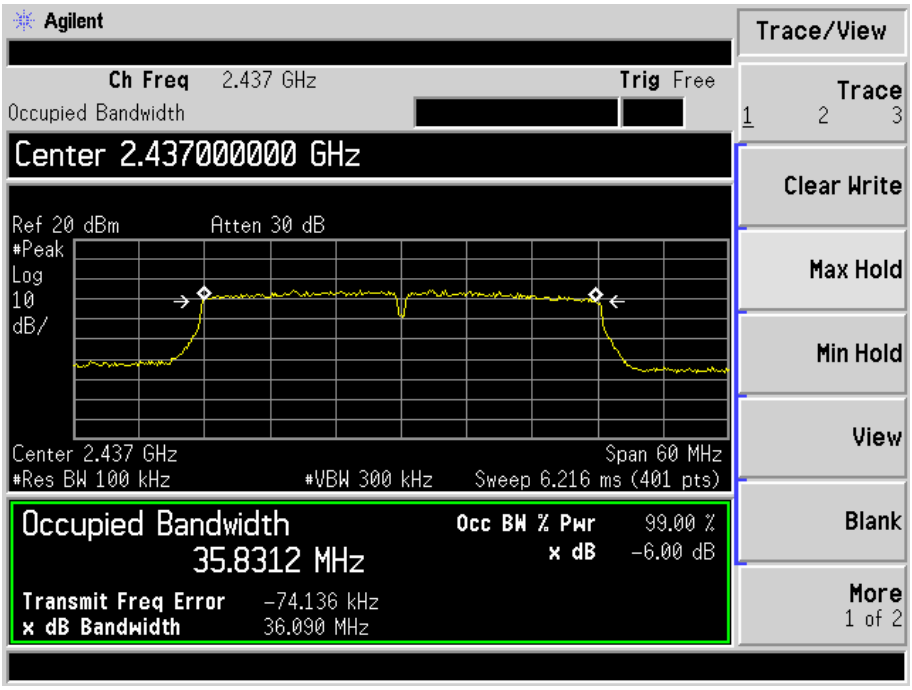
802.11n-HT20-High Channel



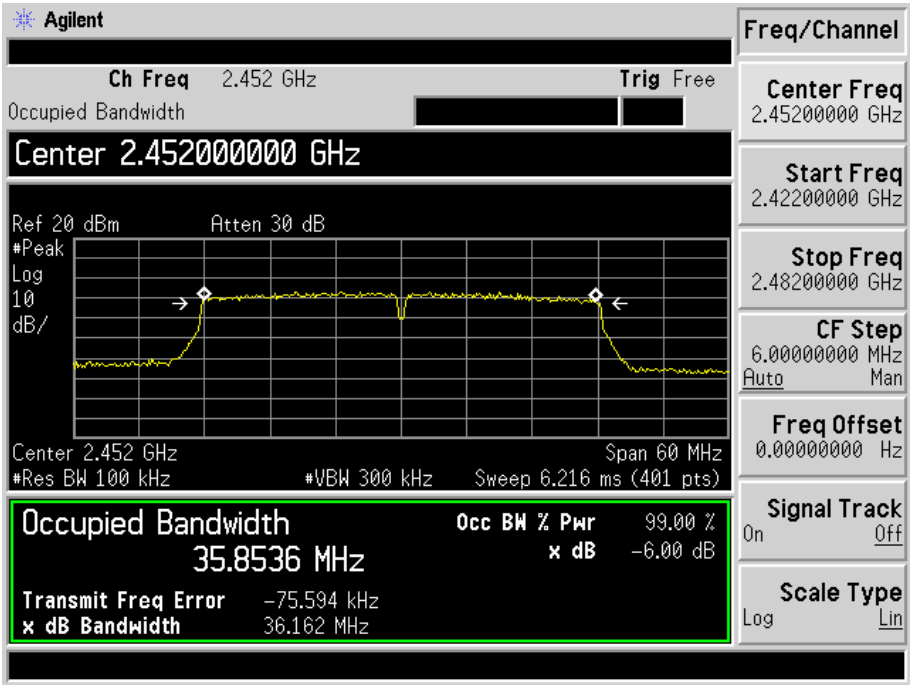
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel



802.11n-HT40-High Channel



7. RF Output Power

7.1 Standard Applicable

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

7.2 Test Procedure

According to the KDB-558074 D01 v03r05, 9.2.2.2, when this option is exercised, the measured power is to be referenced to the OBW rather than the DTS bandwidth

a) Set span to at least 1.5 times the OBW.
b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
c) Set VBW ≥ 3 x RBW.
d) Number of points in sweep ≥ 2 × span / RBW. (This gives bin-to-bin spacing ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
e) Sweep time = auto.
f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
g) If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".
h) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
i) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

7.3 Environmental Conditions

Temperature:	26° C
Relative Humidity:	57%
ATM Pressure:	1011 mbar

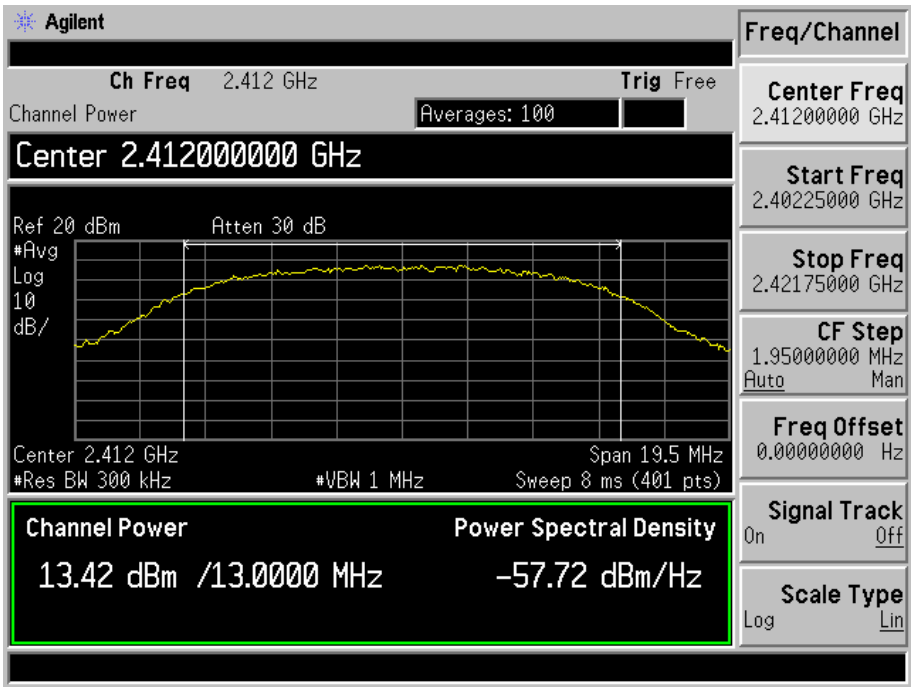
7.4 Summary of Test Results/Plots

Test Mode	Frequency MHz	Power 1 dBm	Power 2 dBm	Total Power dBm	Total Power mW	Limit mW
802.11b_11Mbps	2412	13.42	15.30	17.47	55.86	1000
	2437	12.69	14.33	16.60	45.68	1000
	2462	12.27	13.15	15.74	37.52	1000
802.11g_54Mbps	2412	10.48	10.64	13.57	22.76	1000
	2437	10.04	9.92	12.99	19.91	1000
	2462	9.83	8.97	12.43	17.50	1000
802.11n HT20_MCS7	2412	10.28	10.44	13.37	21.73	1000
	2437	9.80	9.50	12.66	18.46	1000
	2462	9.51	8.27	11.94	15.65	1000
802.11n HT40_MCS7	2422	8.76	8.83	11.81	15.15	1000
	2437	8.57	8.36	11.48	14.05	1000
	2452	8.53	8.06	11.31	13.53	1000

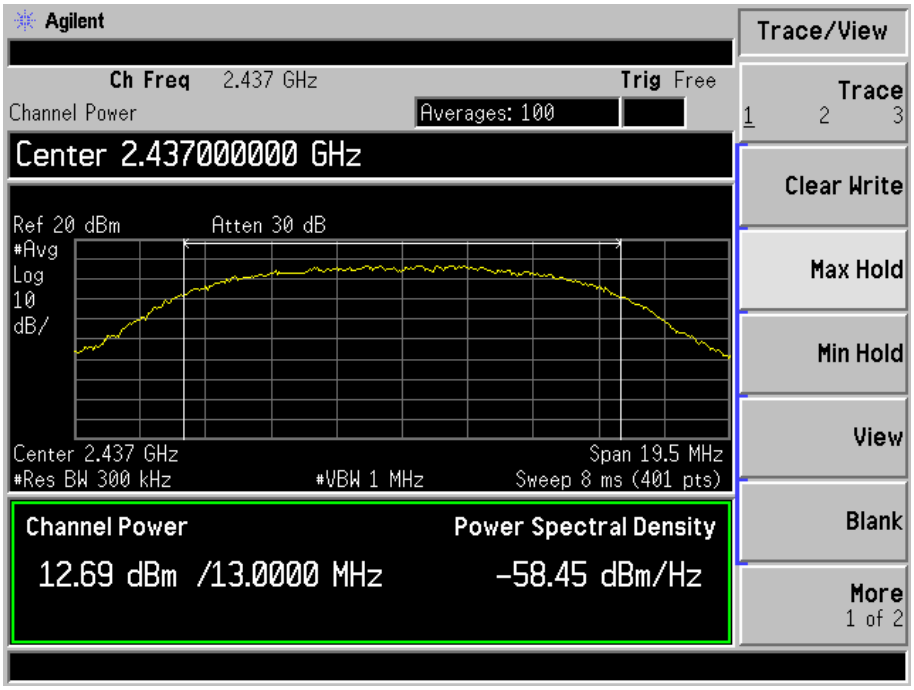
Please refer to the following test plots:

Antenna 1

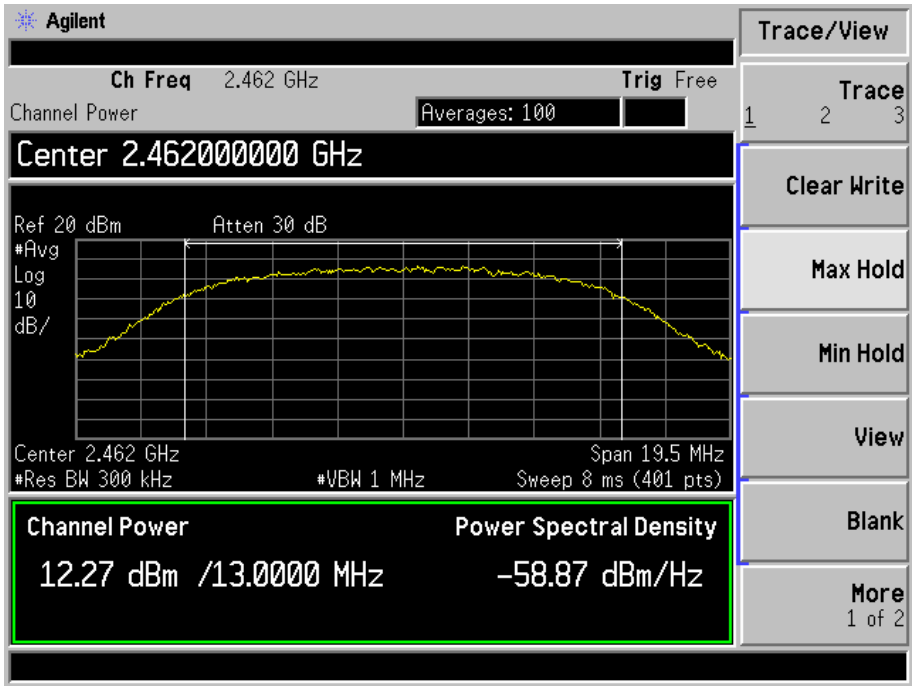
802.11b-11Mbps-Low Channel



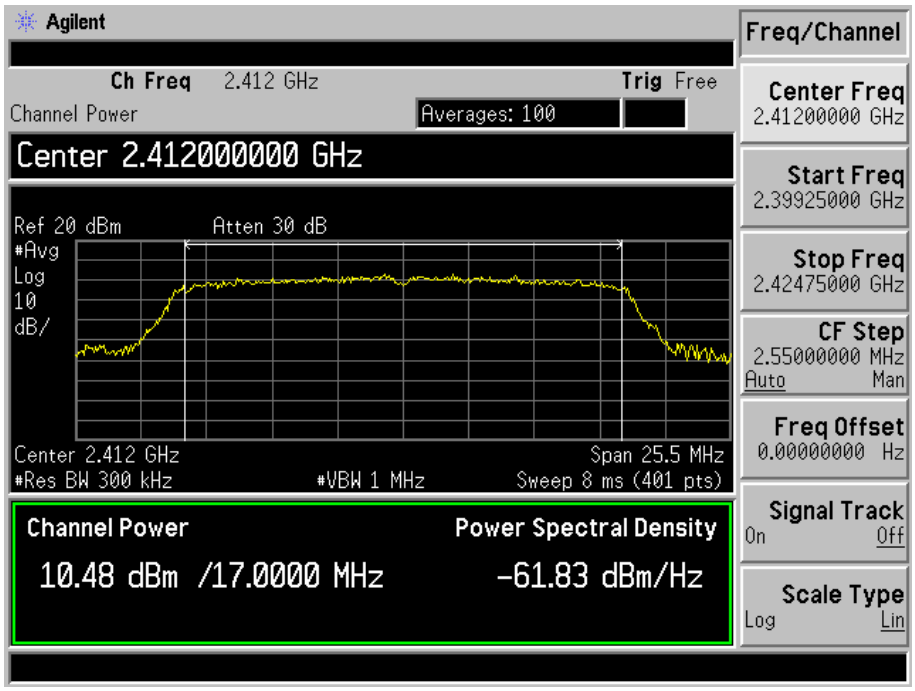
802.11b -11Mbps-Middle Channel



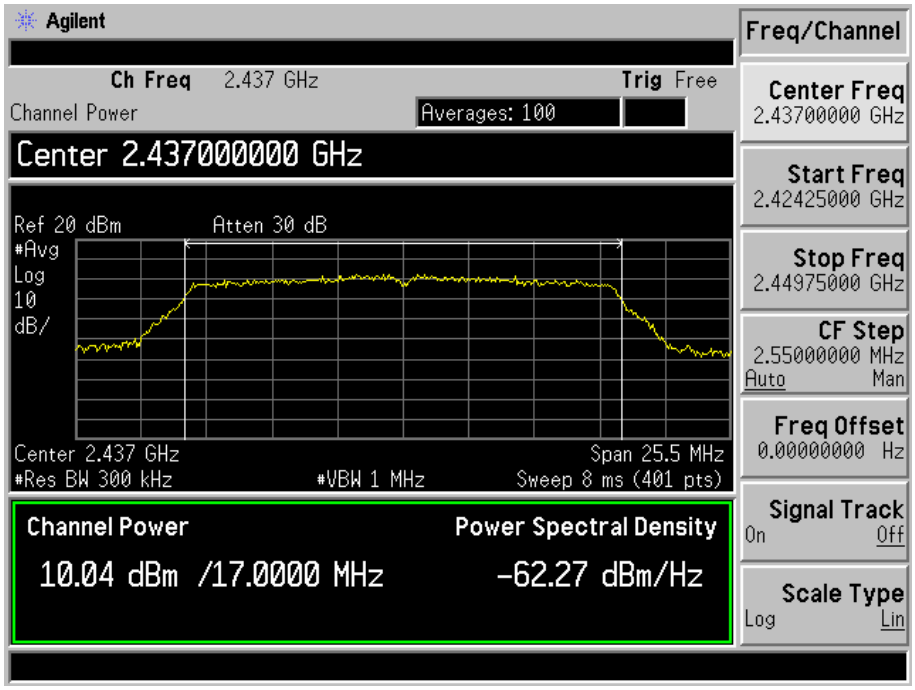
802.11b -11Mpbs-High Channel



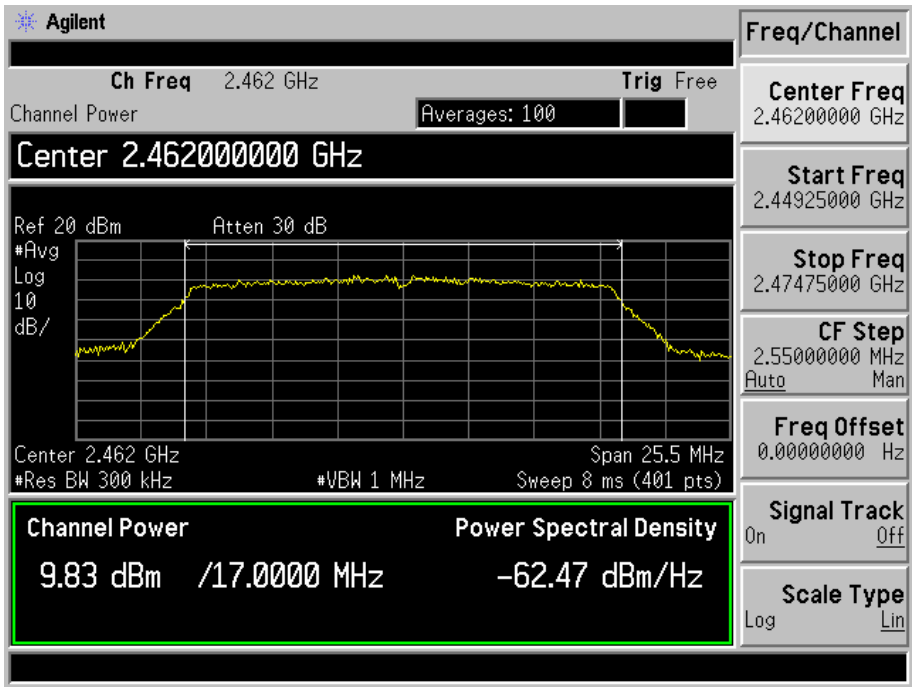
802.11g-54Mbps-Low Channel



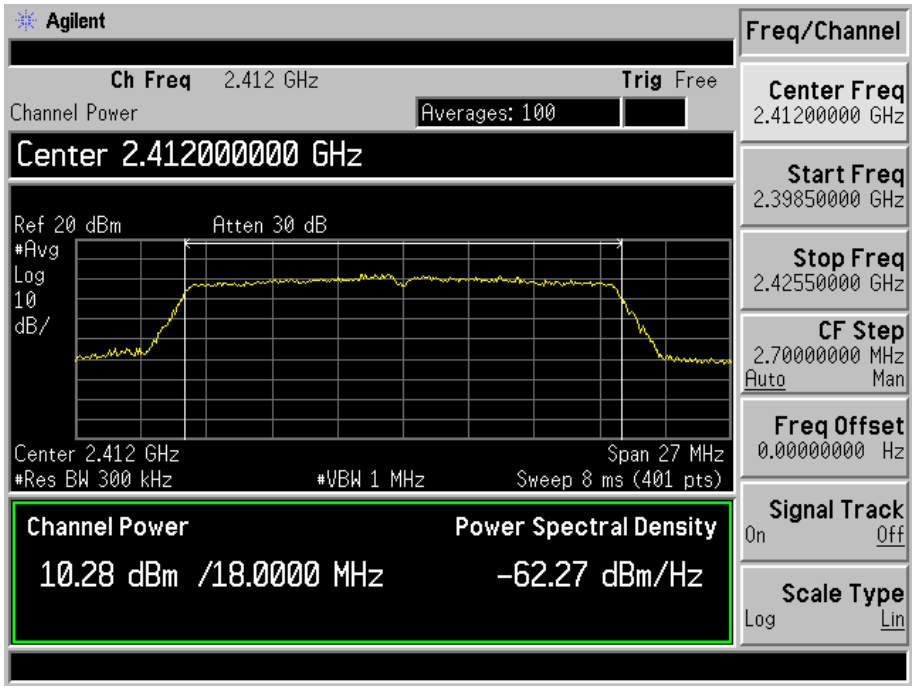
802.11g-54Mbps-Middle Channel



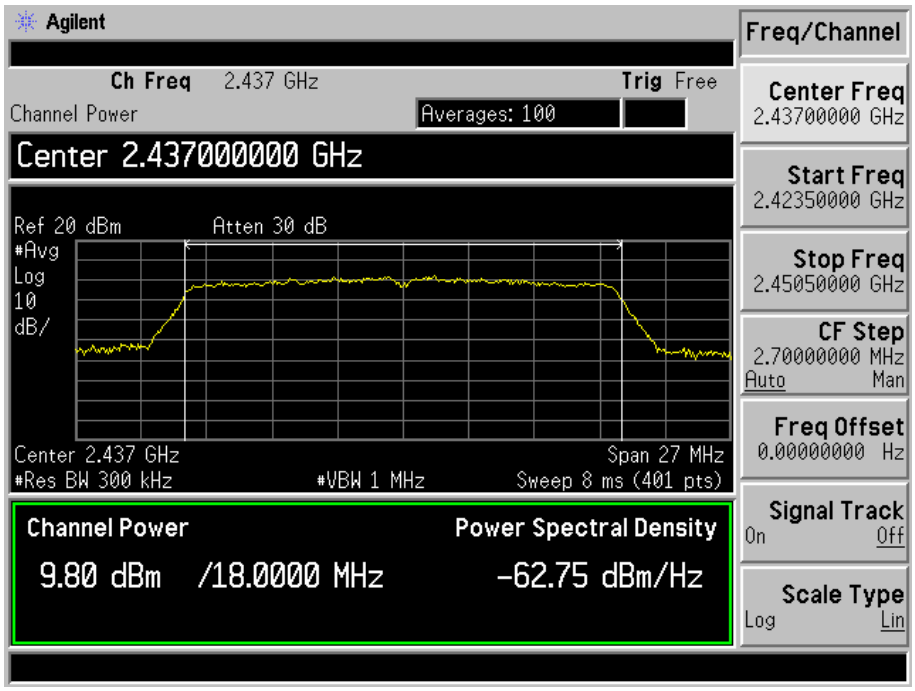
802.11g-54Mpbs-High Channel



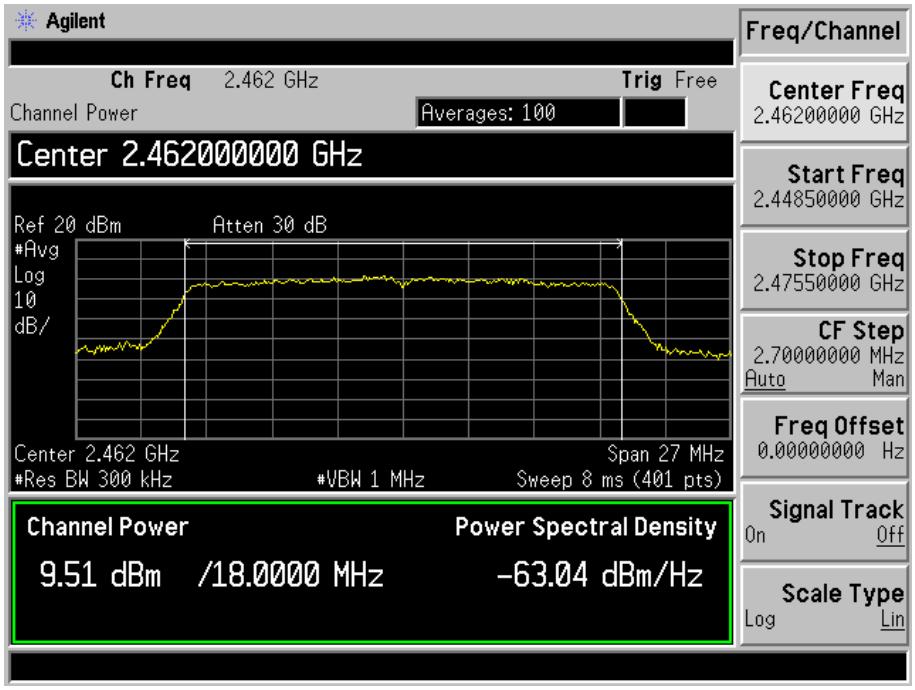
802.11n-HT20-MCS7-Low Channel



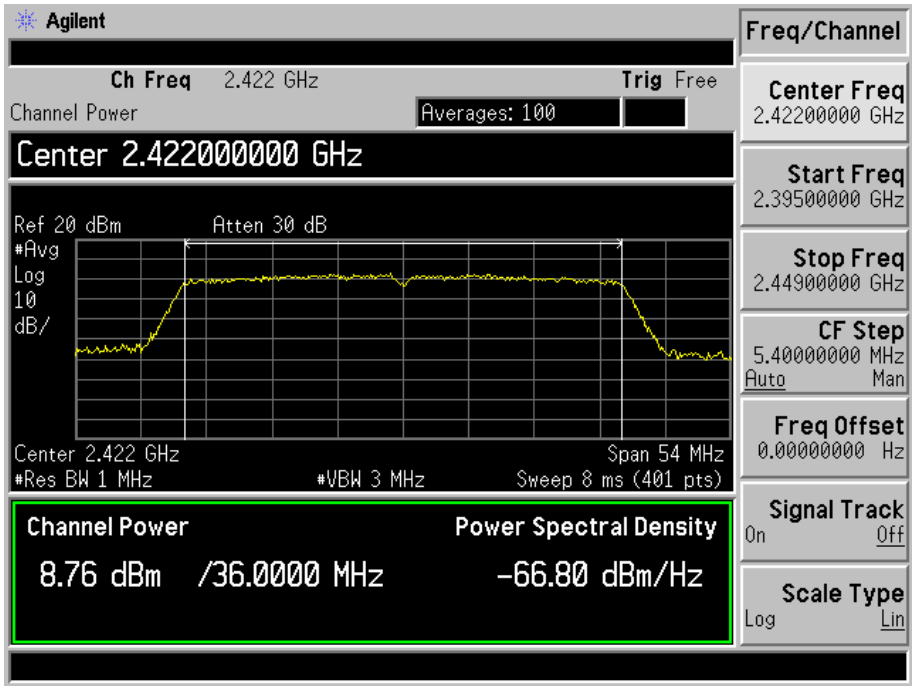
802.11n-HT20-MCS7-Middle Channel



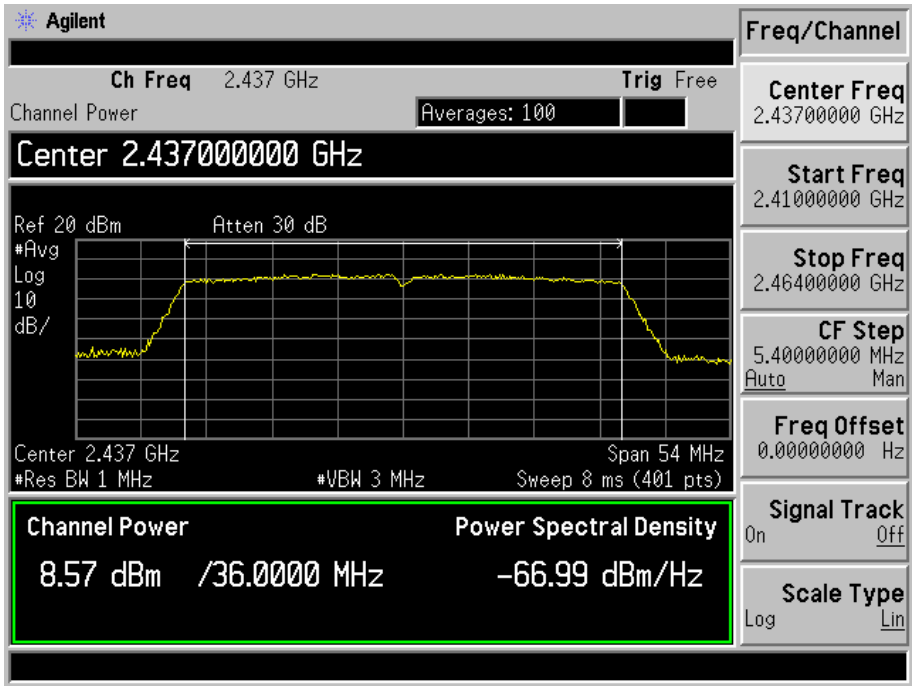
802.11n-HT20-MCS7-High Channel



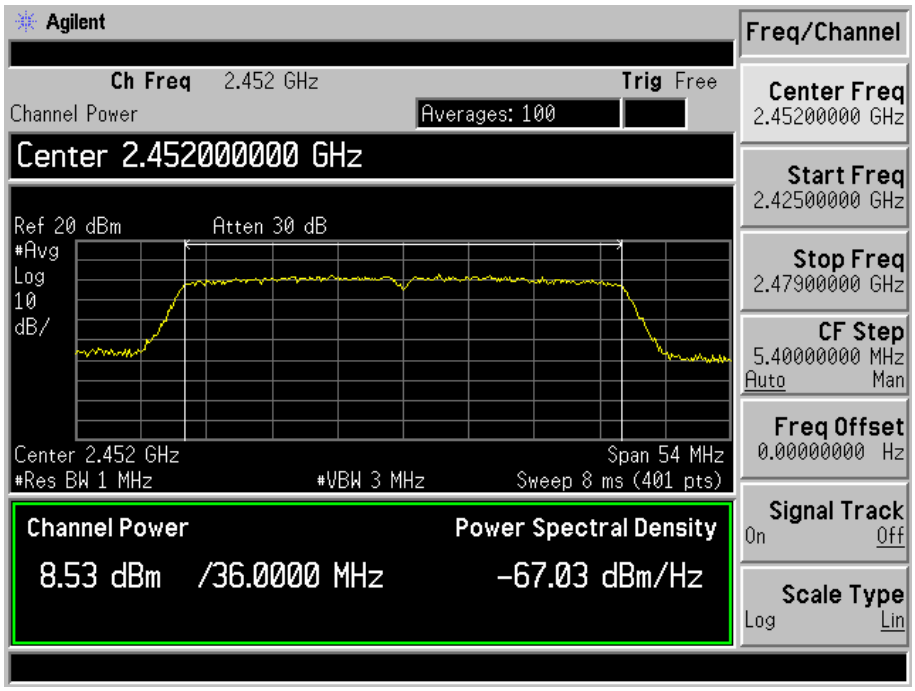
802.11n-HT40-MCS7-Low Channel



802.11n-HT40-MCS7-Middle Channel

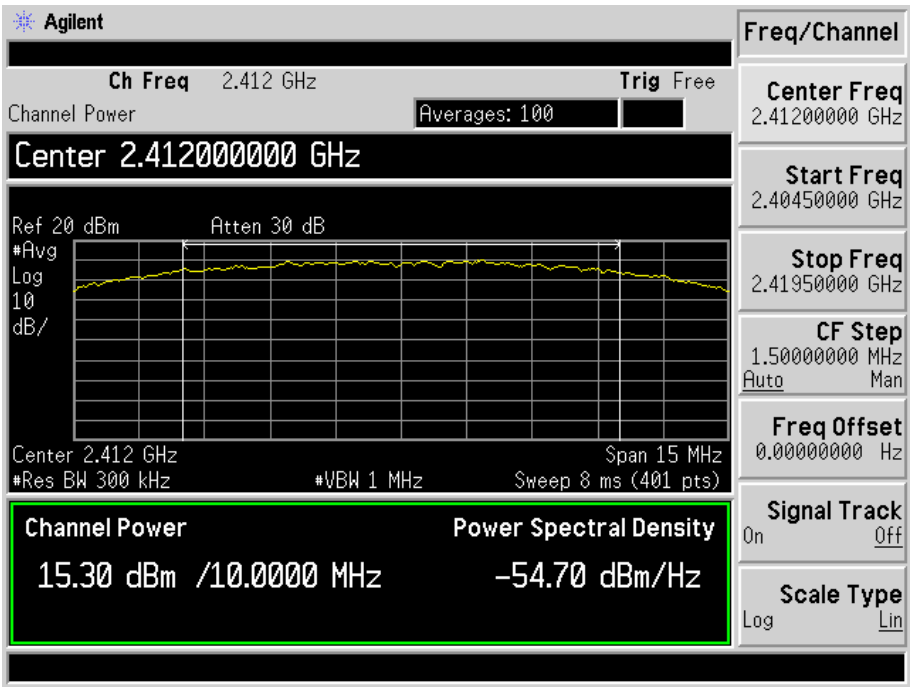


802.11n-HT40-MCS7-High Channel

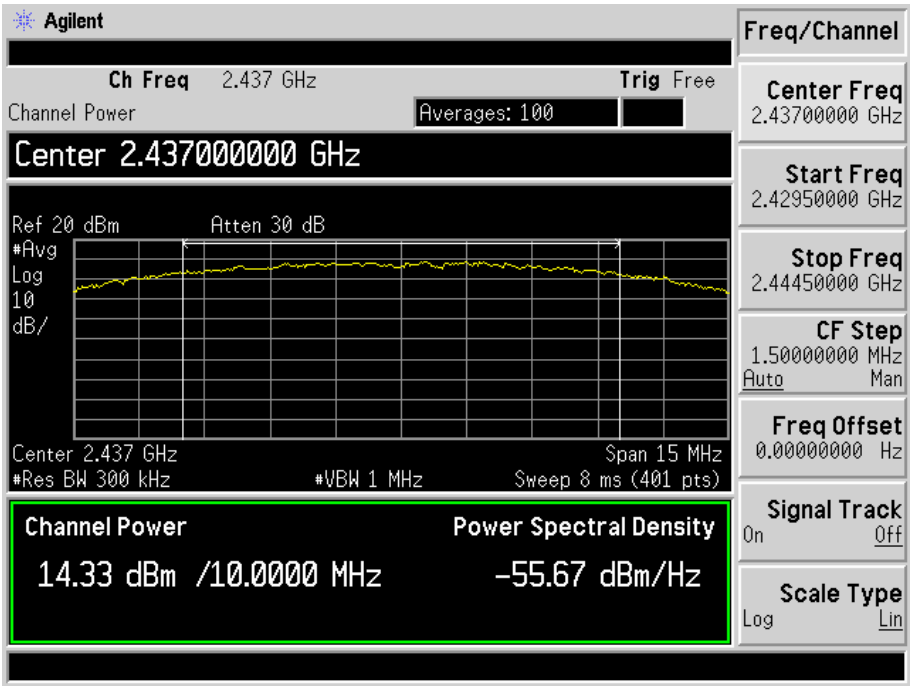


Antenna 2

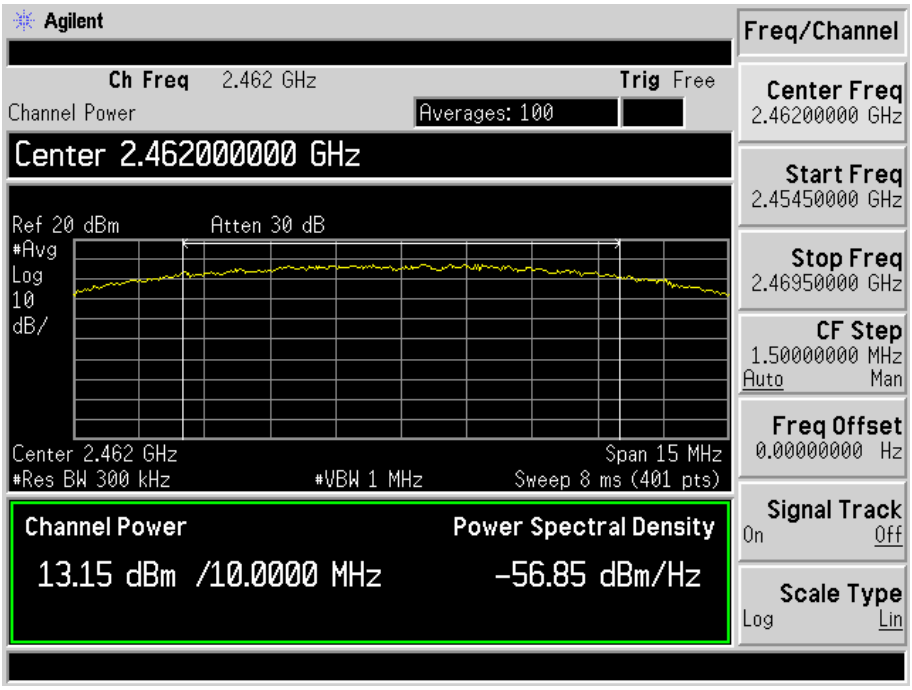
802.11b-11Mbps-Low Channel



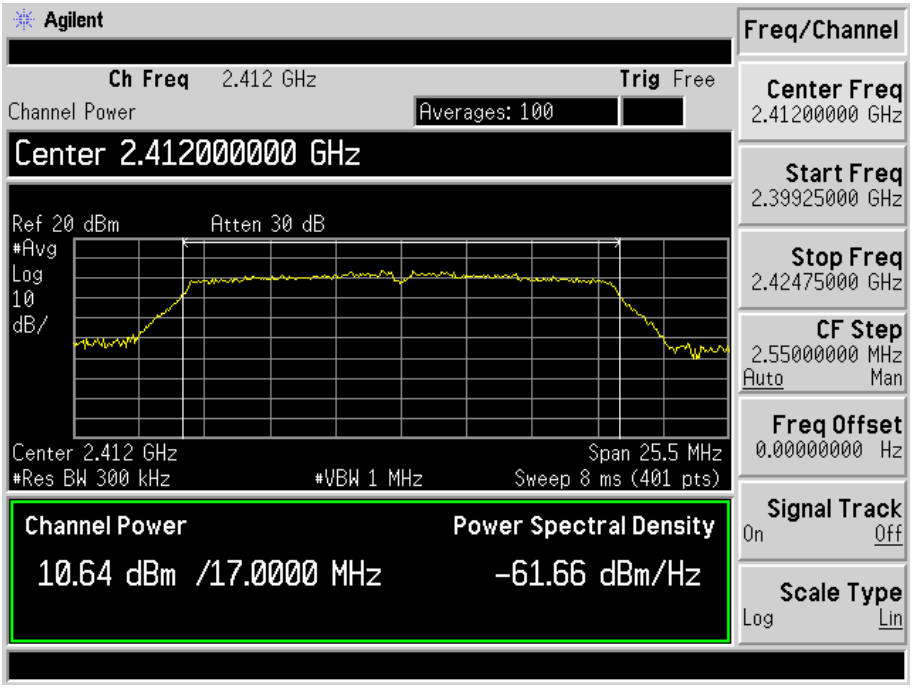
802.11b -11Mbps-Middle Channel



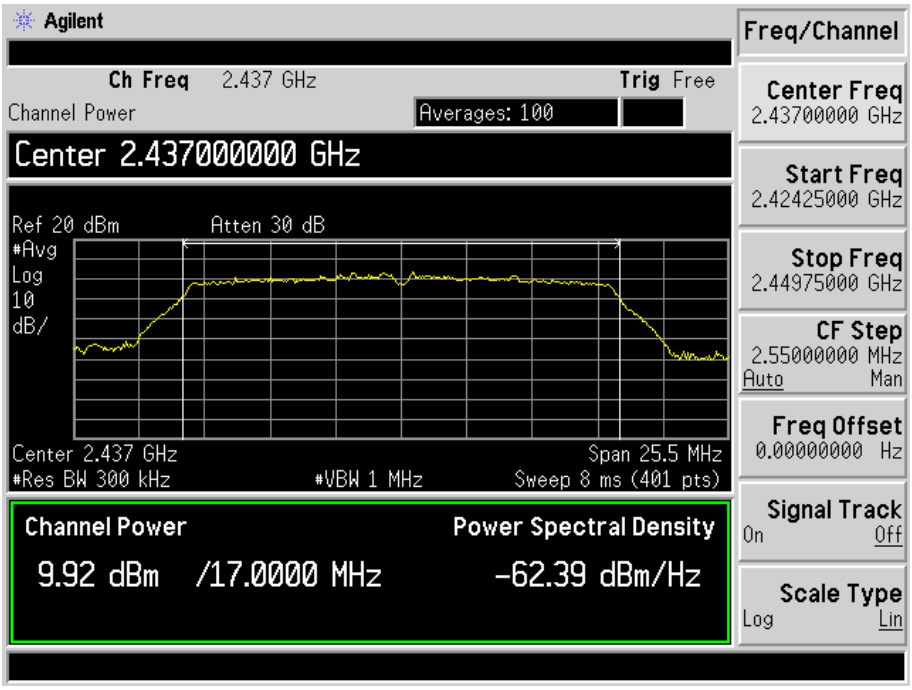
802.11b -11Mpbs-High Channel



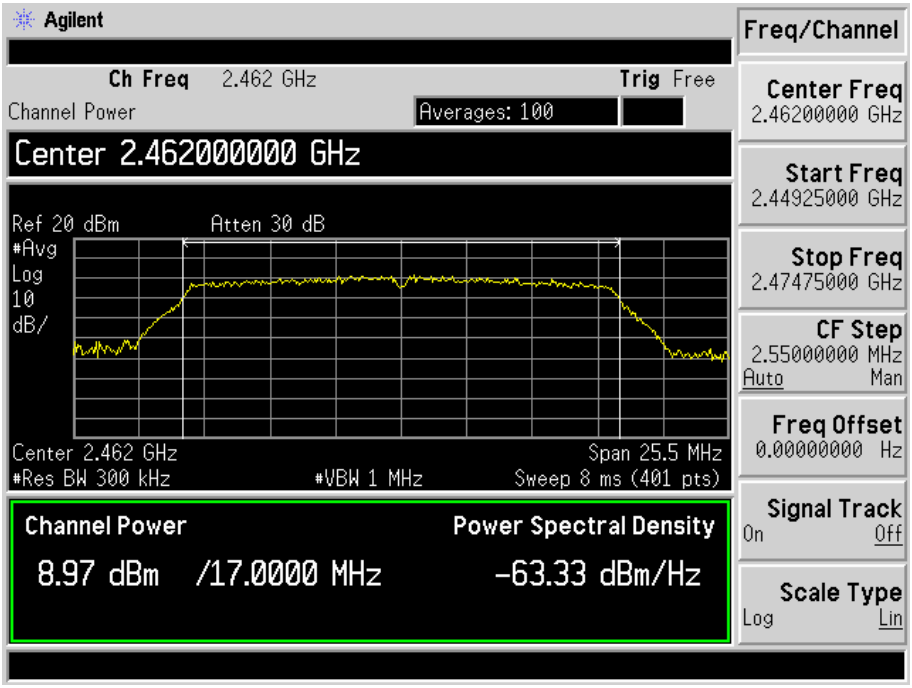
802.11g-54Mbps-Low Channel



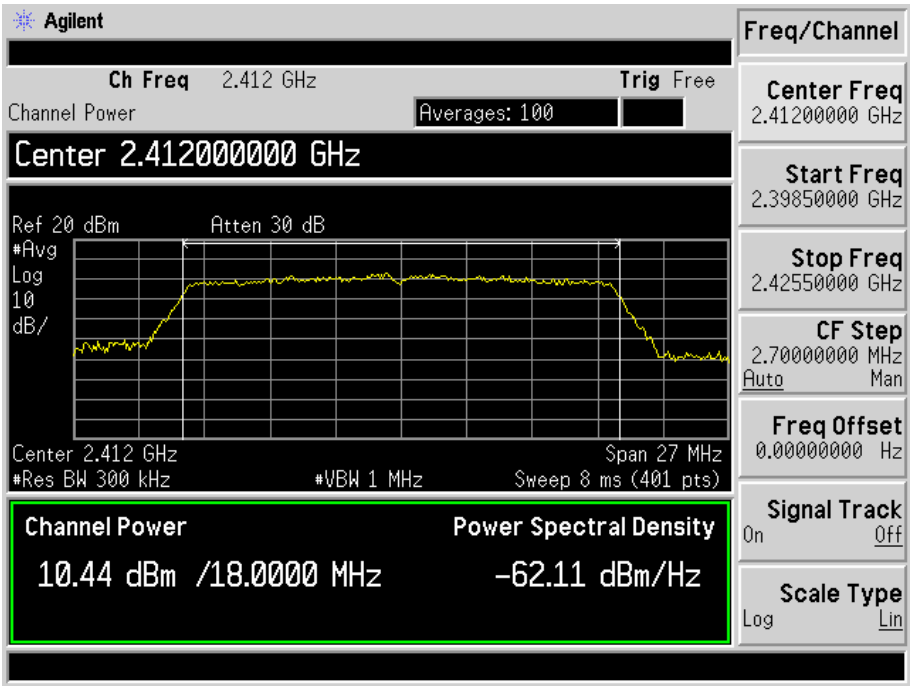
802.11g-54Mbps-Middle Channel



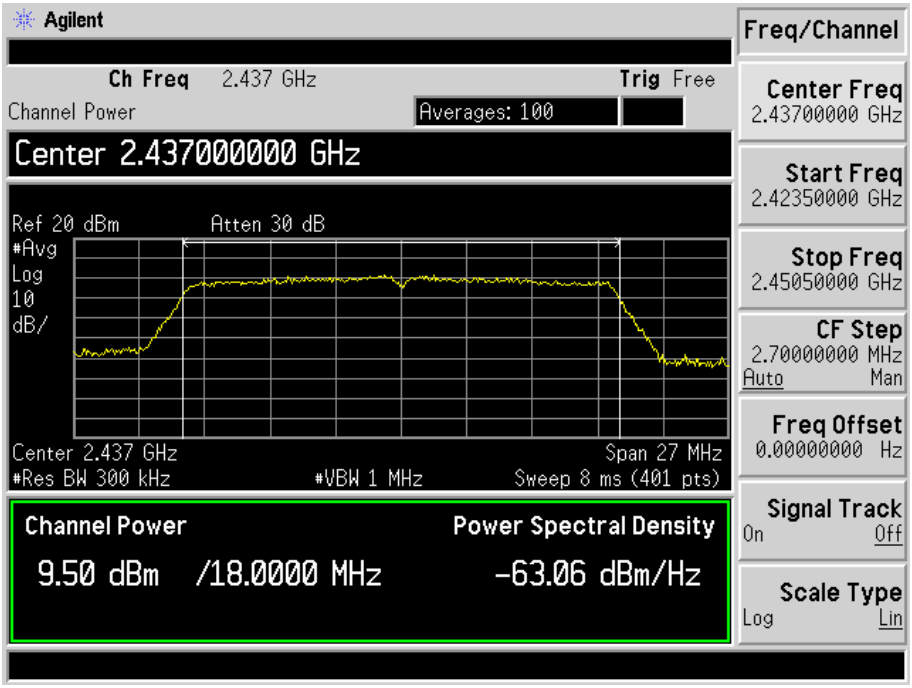
802.11g-54Mpbs-High Channel



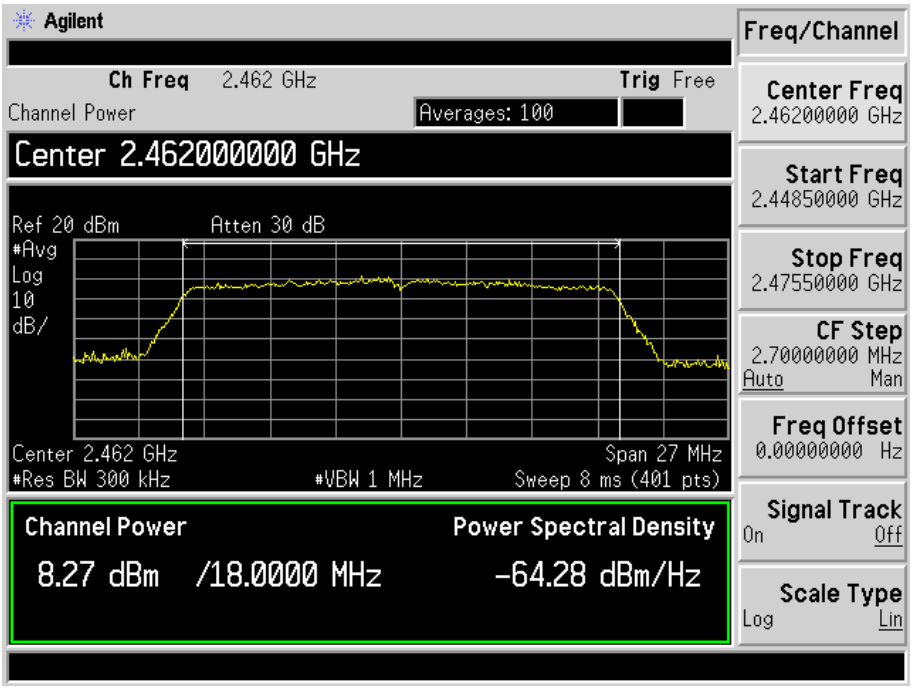
802.11n-HT20-MCS7-Low Channel



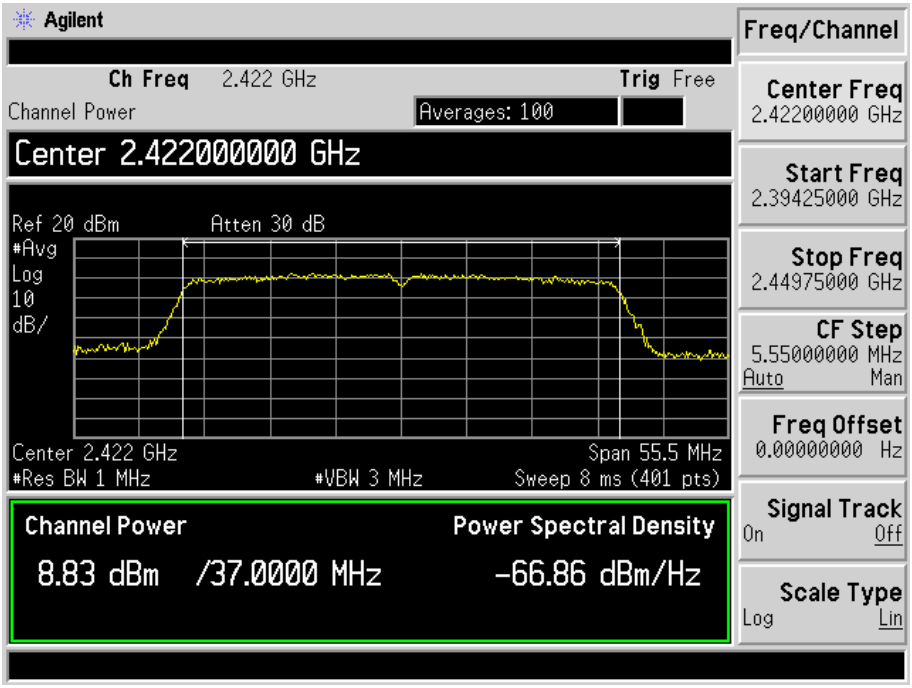
802.11n-HT20-MCS7-Middle Channel



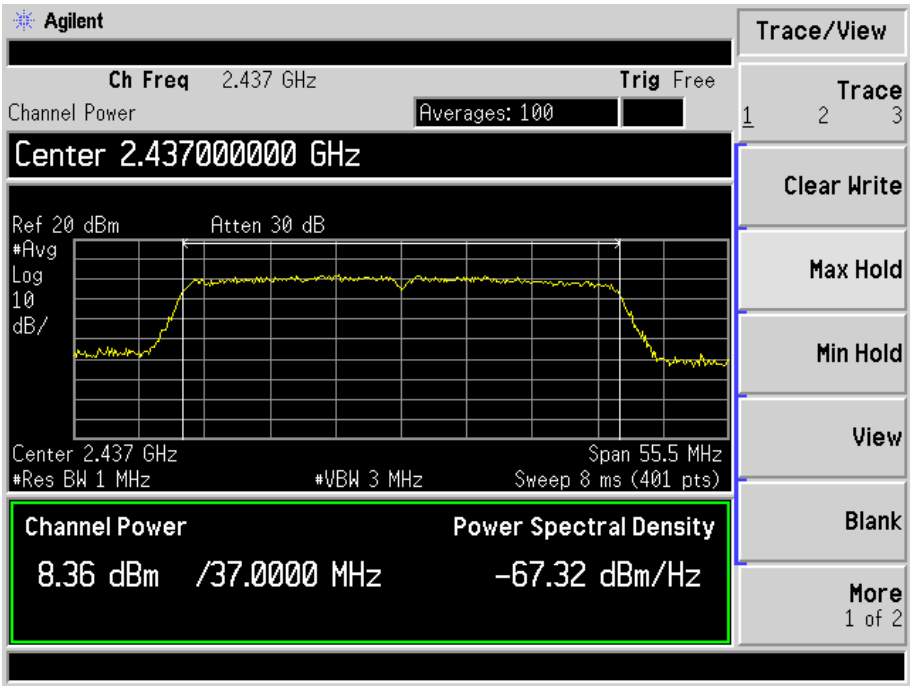
802.11n-HT20-MCS7-High Channel



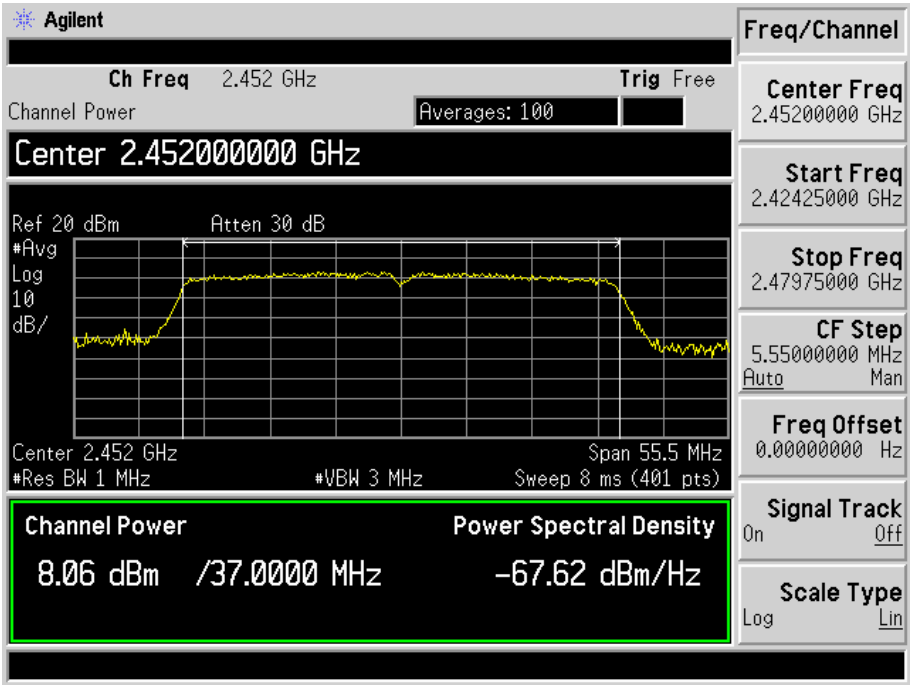
802.11n-HT40-MCS7-Low Channel



802.11n-HT40-MCS7-Middle Channel



802.11n-HT40-MCS7-High Channel



8. Field Strength of Spurious Emissions

8.1 Measurement Uncertainty

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement is ±5.10 dB.

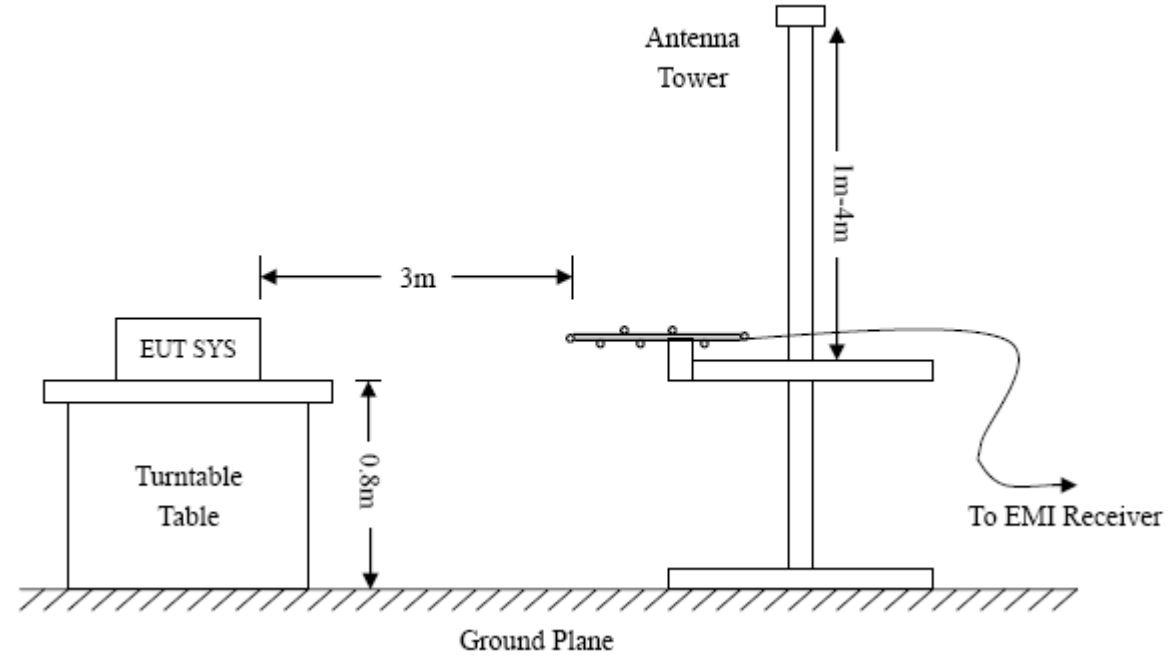
8.2 Standard Applicable

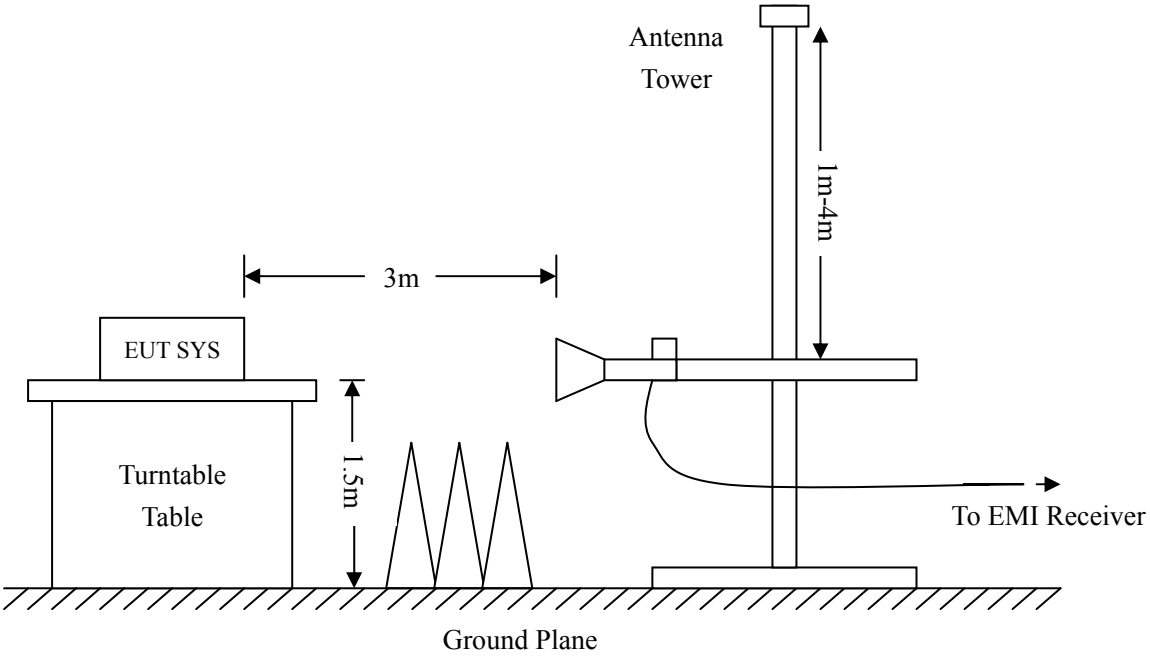
According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

8.3 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.247(a) and FCC Part 15.209 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.





Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

8.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Ant. Factor + Cable Loss – Ampl. Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15 Limit

8.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

8.6 Summary of Test Results/Plots

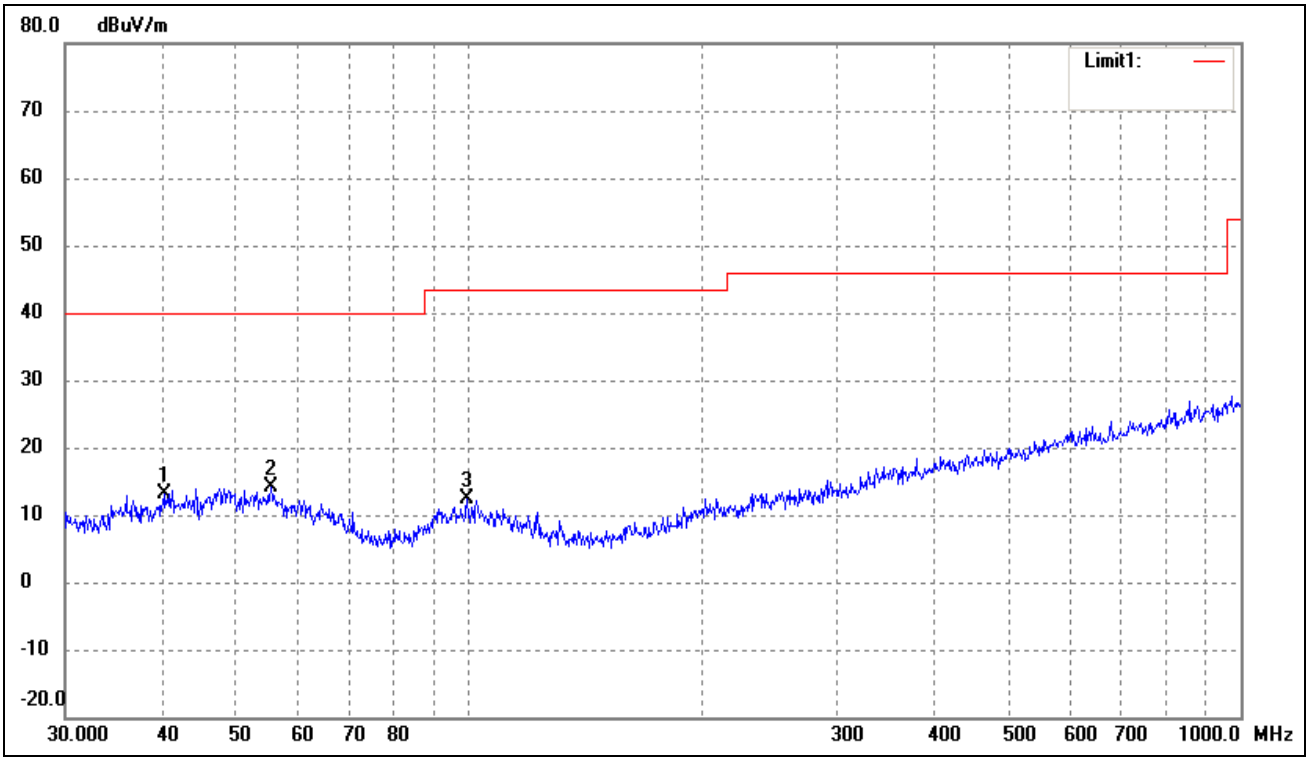
According to the data below, the FCC Part 15.205, 15.209 and 15.247 standards, and had the worst cases:

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

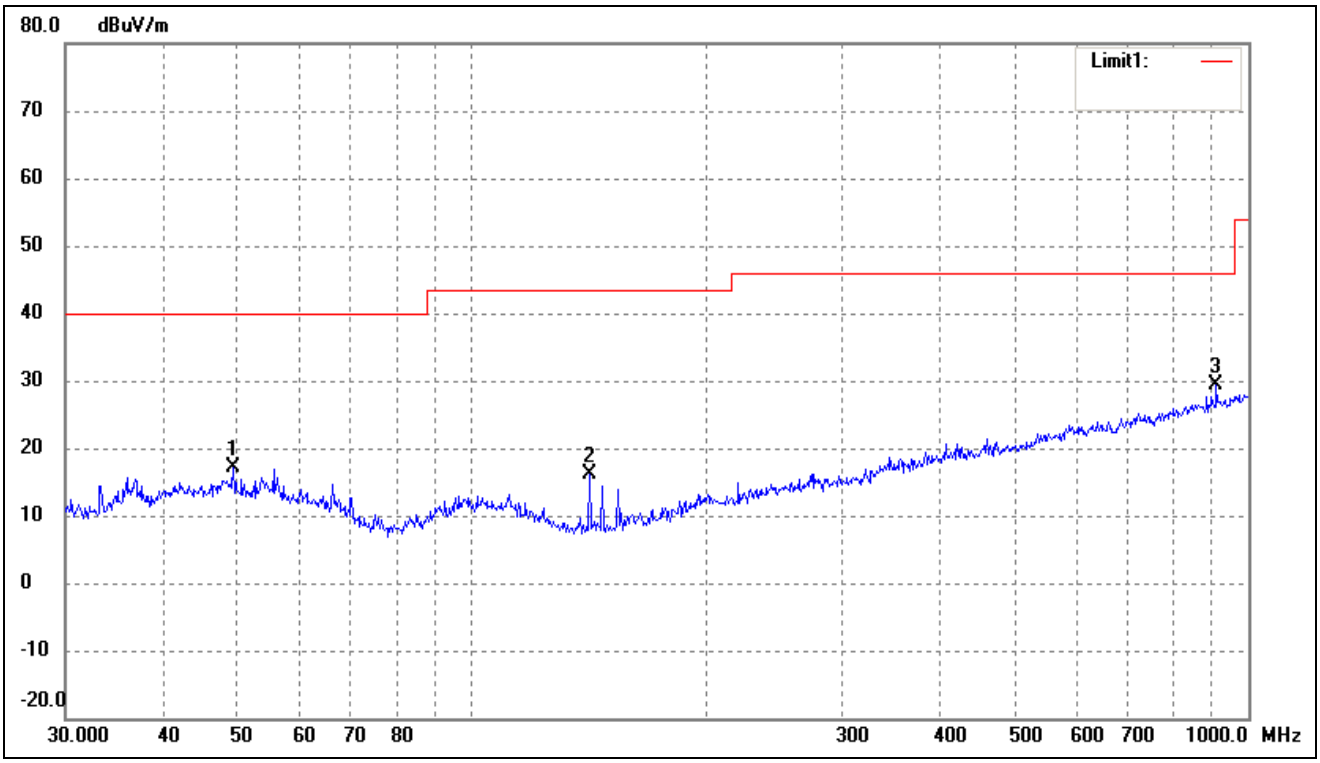
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *802.11b Transmitting Low Channel-2412MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	40.2757	21.64	-8.39	13.25	40.00	-26.75	254	100	peak
2	55.4147	22.15	-7.99	14.16	40.00	-25.84	113	100	peak
3	99.5281	21.88	-9.61	12.27	43.50	-31.23	284	100	peak

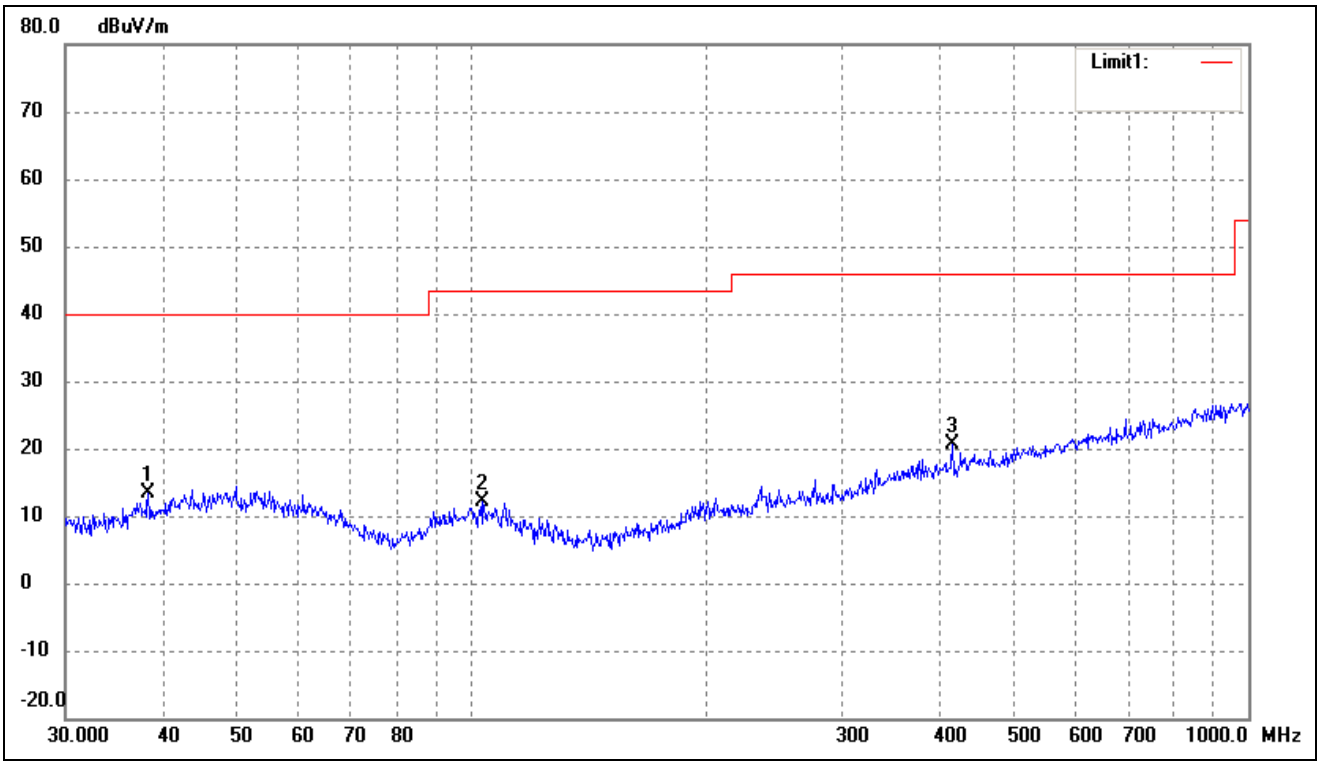
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.3594	24.54	-7.45	17.09	40.00	-22.91	114	100	peak
2	141.8262	29.29	-13.12	16.17	43.50	-27.33	270	100	peak
3	909.6667	23.90	5.38	29.28	46.00	-16.72	360	100	peak

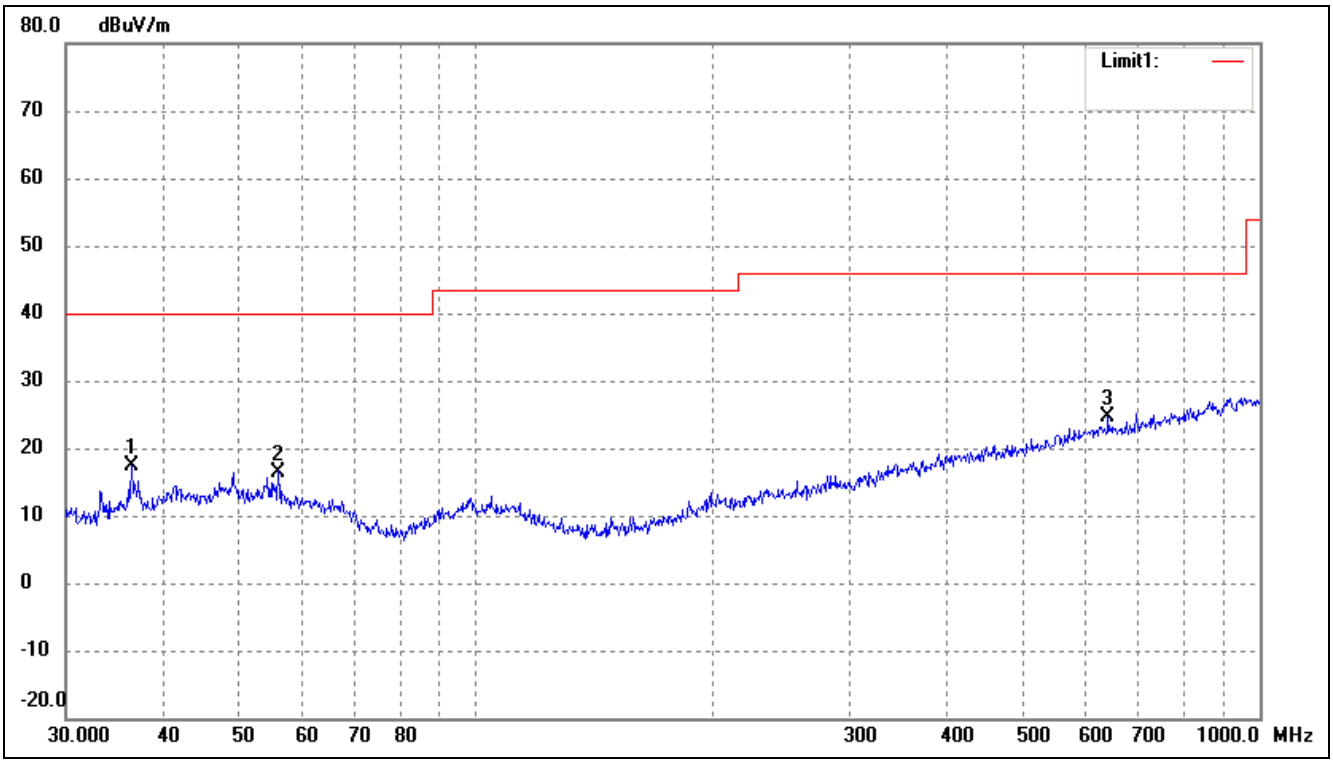
Operating Condition: *802.11b Transmitting Middle Channel-2437MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	38.3462	22.12	-8.77	13.35	40.00	-26.65	178	100	peak
2	103.4421	21.68	-9.57	12.11	43.50	-31.39	224	100	peak
3	416.1791	23.29	-2.56	20.73	46.00	-25.27	160	100	peak

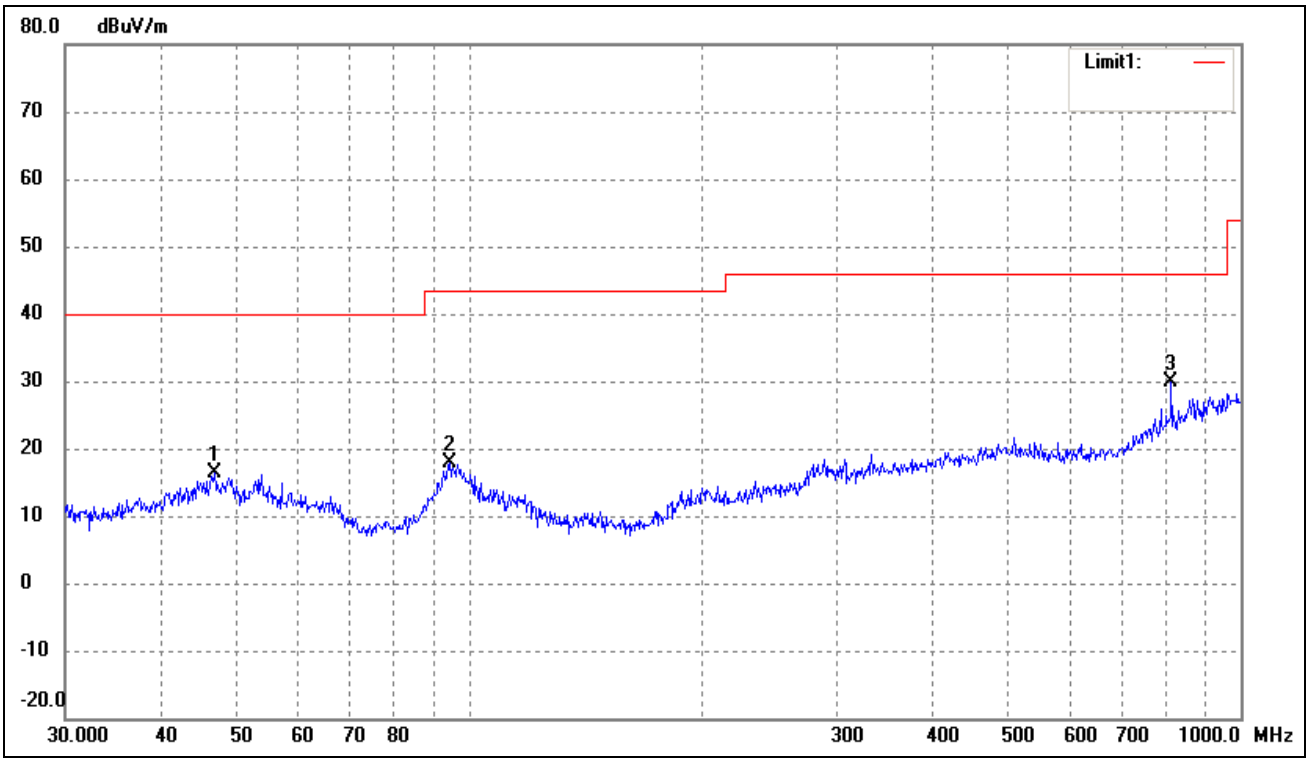
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	36.3814	26.86	-9.52	17.34	40.00	-22.66	256	100	peak
2	56.0007	24.57	-8.07	16.50	40.00	-23.50	360	100	peak
3	640.6110	22.98	1.70	24.68	46.00	-21.32	360	100	peak

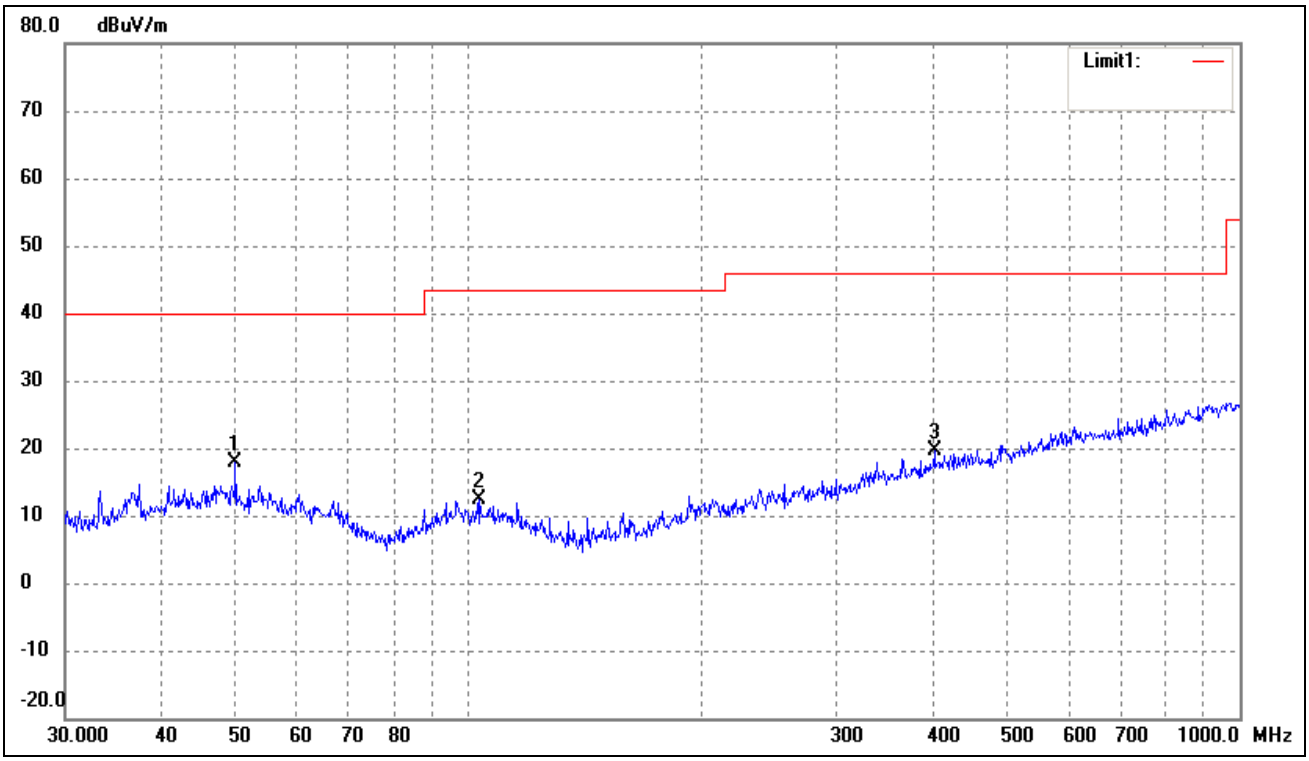
Operating Condition: *802.11b Transmitting High Channel-2462MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.0145	22.54	-7.44	15.10	40.00	-24.90	176	100	peak
2	275.1570	23.41	-6.91	16.50	46.00	-29.50	255	100	peak
3	734.4913	25.08	0.45	25.53	46.00	-20.47	360	100	peak

Test Specification: *Vertical*

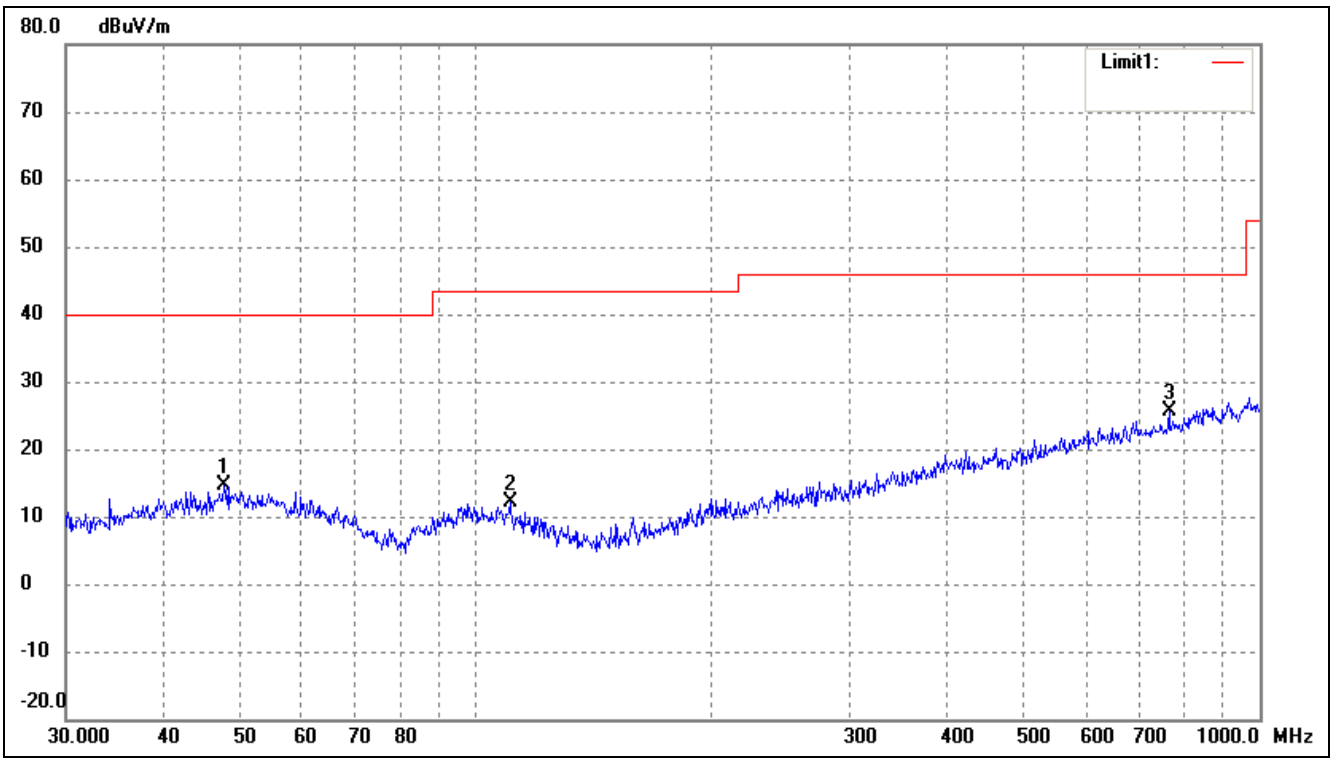


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.8814	25.39	-7.44	17.95	40.00	-22.05	360	100	peak
2	103.4421	21.93	-9.57	12.36	43.50	-31.14	225	100	peak
3	401.8385	22.52	-2.89	19.63	46.00	-26.37	160	100	peak

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

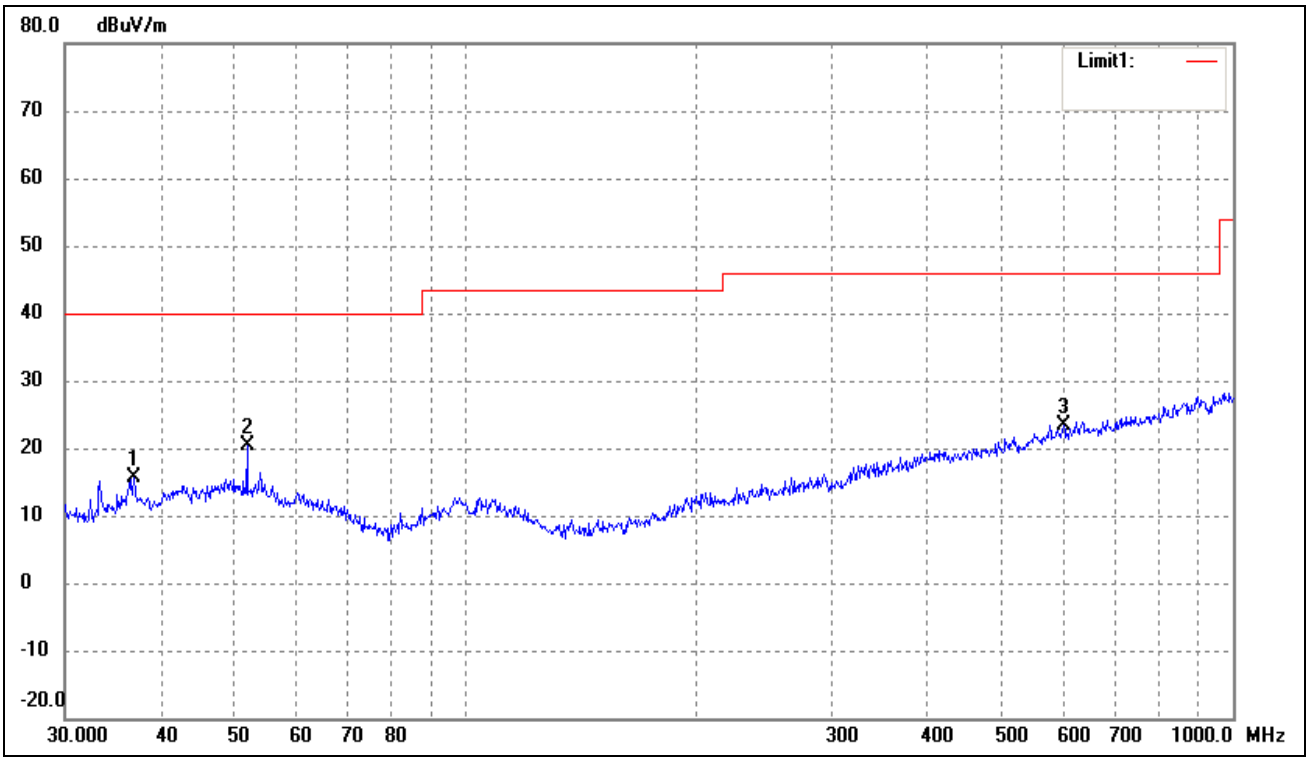
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *802.11g Transmitting Low Channel-2412MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	47.8260	22.04	-7.46	14.58	40.00	-25.42	174	100	peak
2	110.5687	21.75	-9.70	12.05	43.50	-31.45	160	100	peak
3	766.0572	24.04	1.55	25.59	46.00	-20.41	320	100	peak

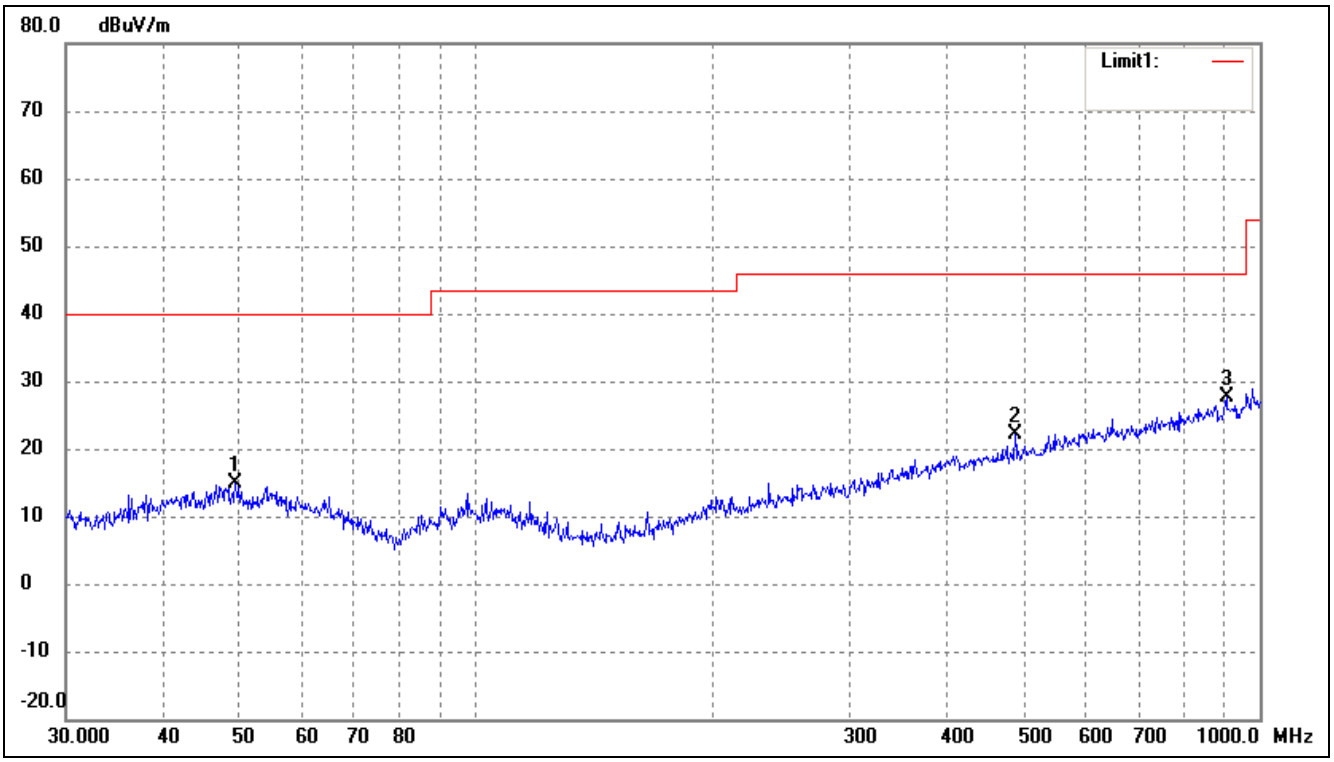
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.3279	24.81	-10.48	14.33	40.00	-25.67	177	100	peak
2	108.2667	22.08	-9.59	12.49	43.50	-31.01	90	100	peak
3	345.5952	22.25	-4.38	17.87	46.00	-28.13	336	100	peak

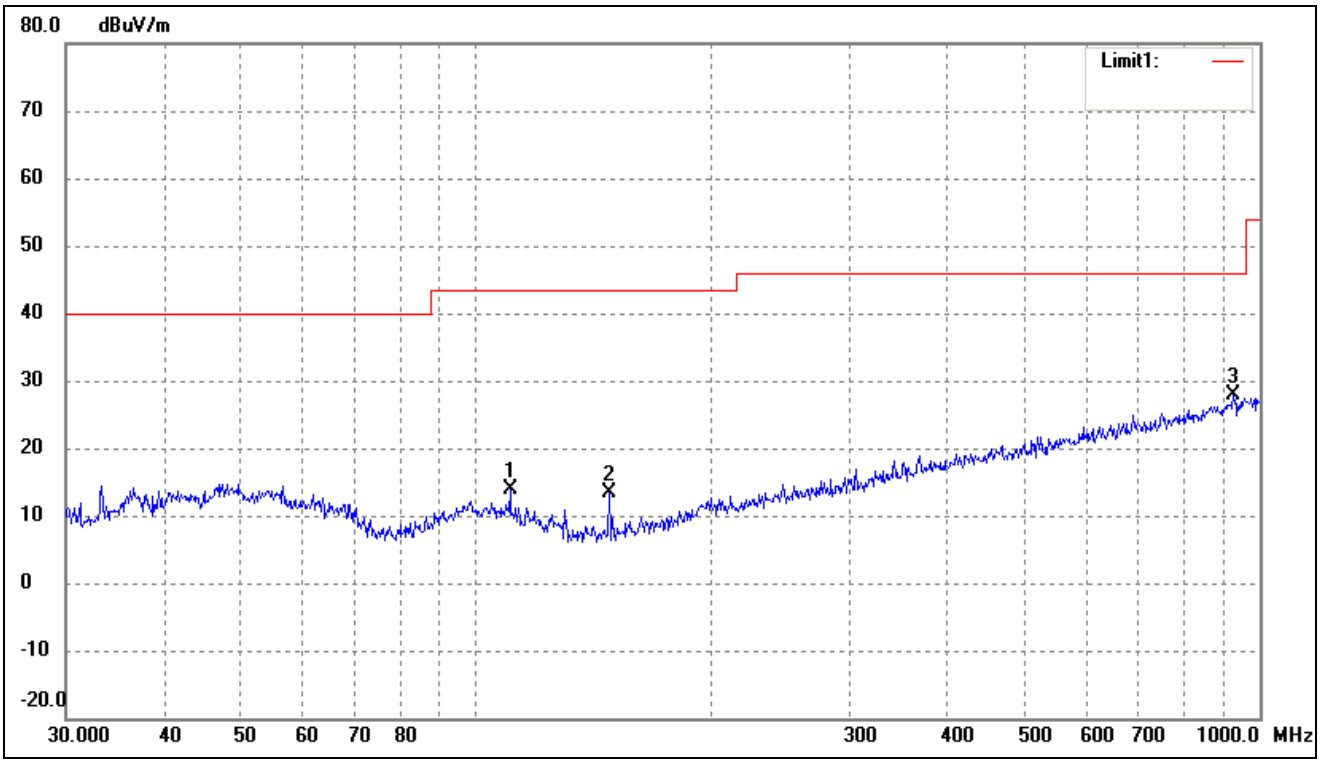
Operating Condition: *802.11g Transmitting Middle Channel-2437MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.3594	22.31	-7.45	14.86	40.00	-25.14	270	100	peak
2	487.3151	23.63	-1.59	22.04	46.00	-23.96	164	100	peak
3	906.4824	22.39	5.34	27.73	46.00	-18.27	228	200	peak

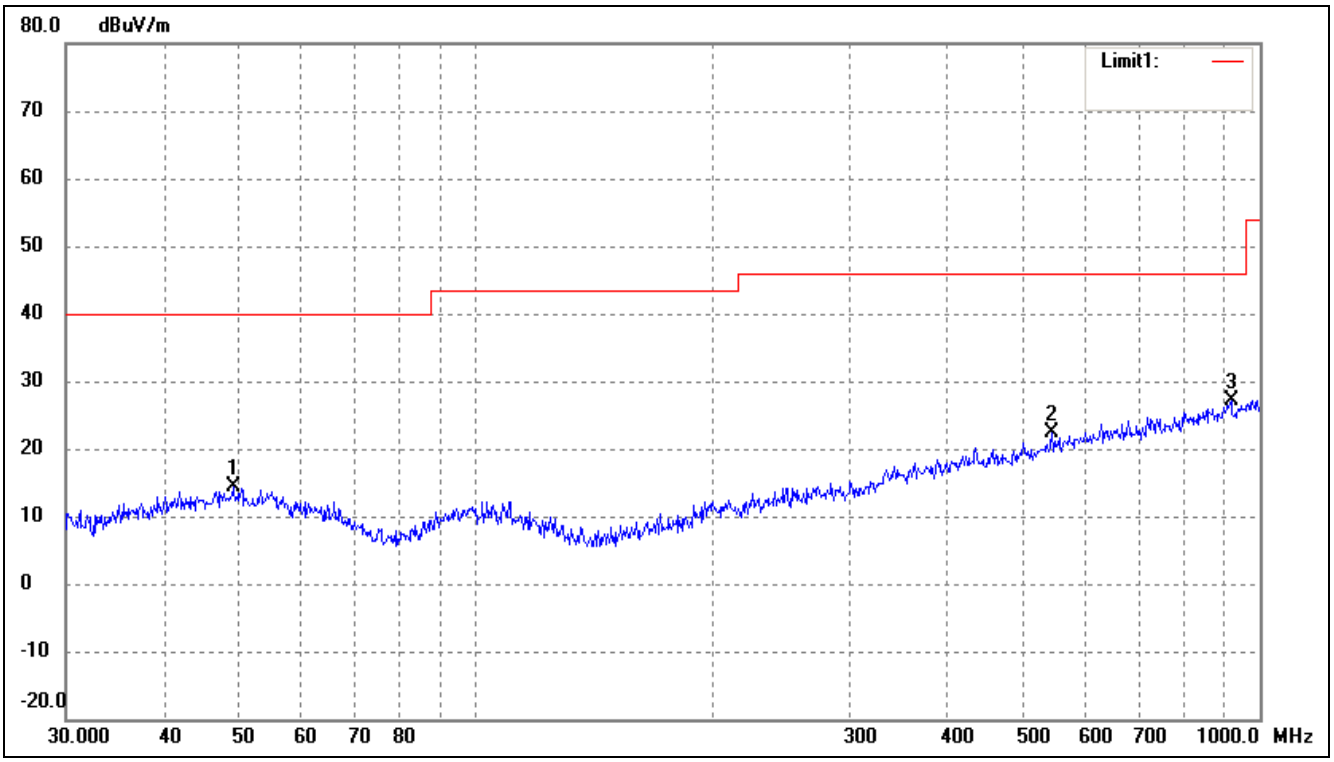
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	35.4993	36.79	-9.88	26.91	40.00	-13.09	360	100	peak
2	45.3755	34.39	-7.46	26.93	40.00	-13.07	255	100	peak
3	93.1132	33.00	-10.57	22.43	43.50	-21.07	270	100	peak

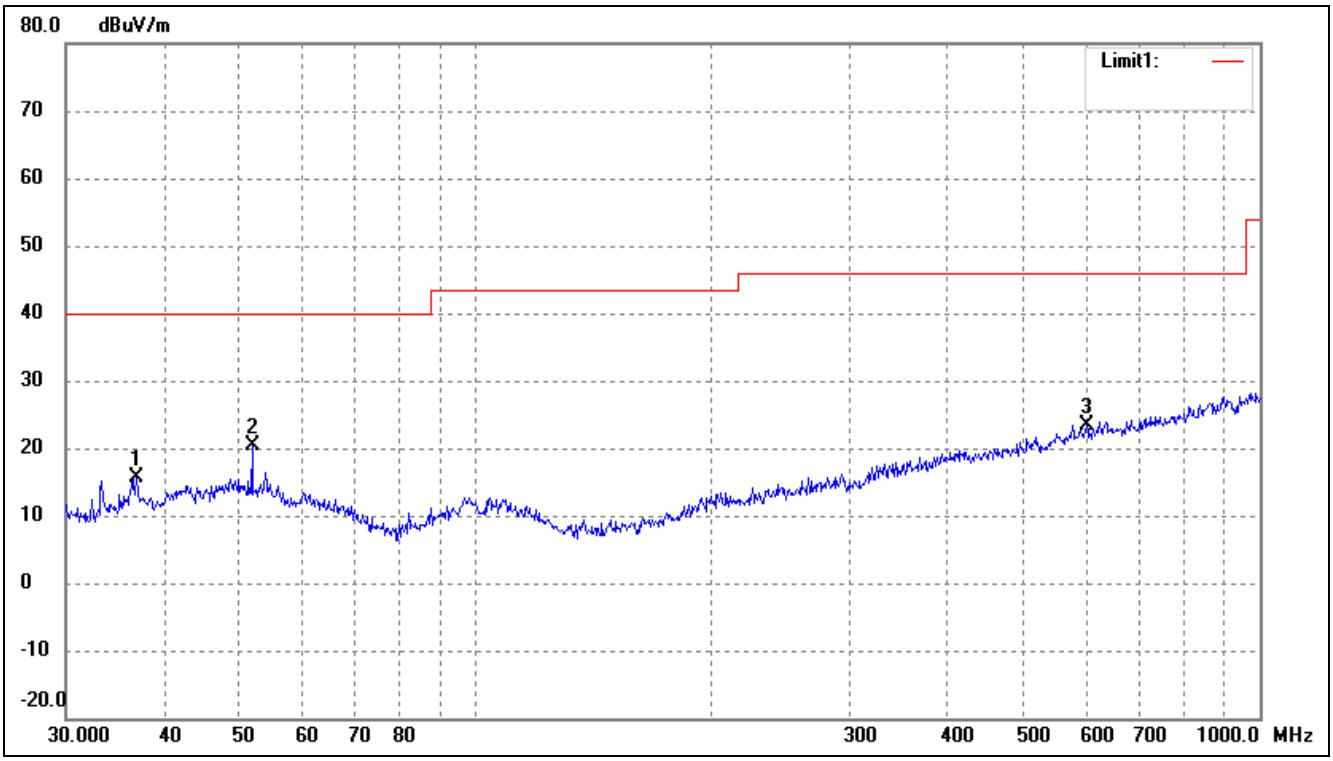
Operating Condition: *802.11g Transmitting High Channel-2462MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.0145	21.82	-7.44	14.38	40.00	-25.62	270	100	peak
2	543.2742	23.82	-1.36	22.46	46.00	-23.54	51	200	peak
3	919.2866	21.65	5.51	27.16	46.00	-18.84	360	200	peak

Test Specification: *Vertical*

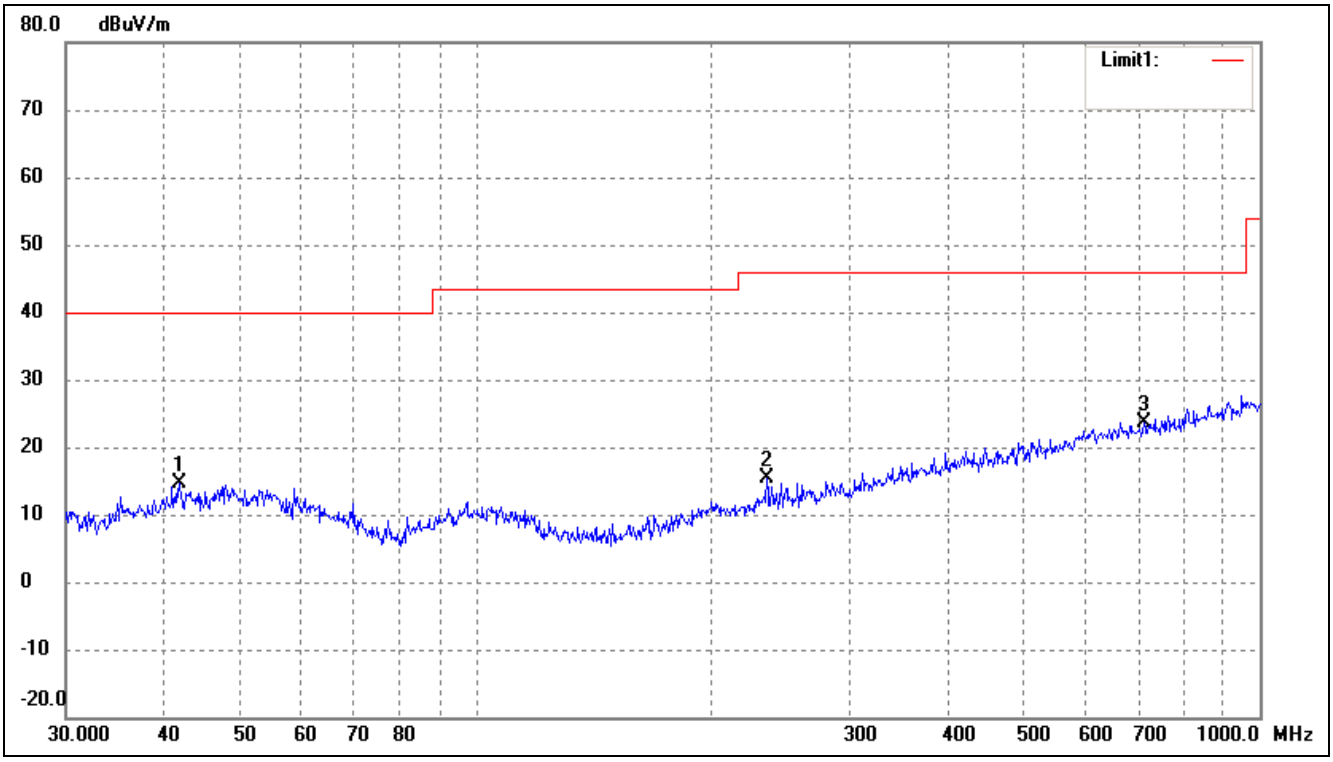


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	36.8953	24.99	-9.26	15.73	40.00	-24.27	360	100	peak
2	51.8430	28.03	-7.63	20.40	40.00	-19.60	180	100	peak
3	601.4265	22.32	1.16	23.48	46.00	-22.52	225	100	peak

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

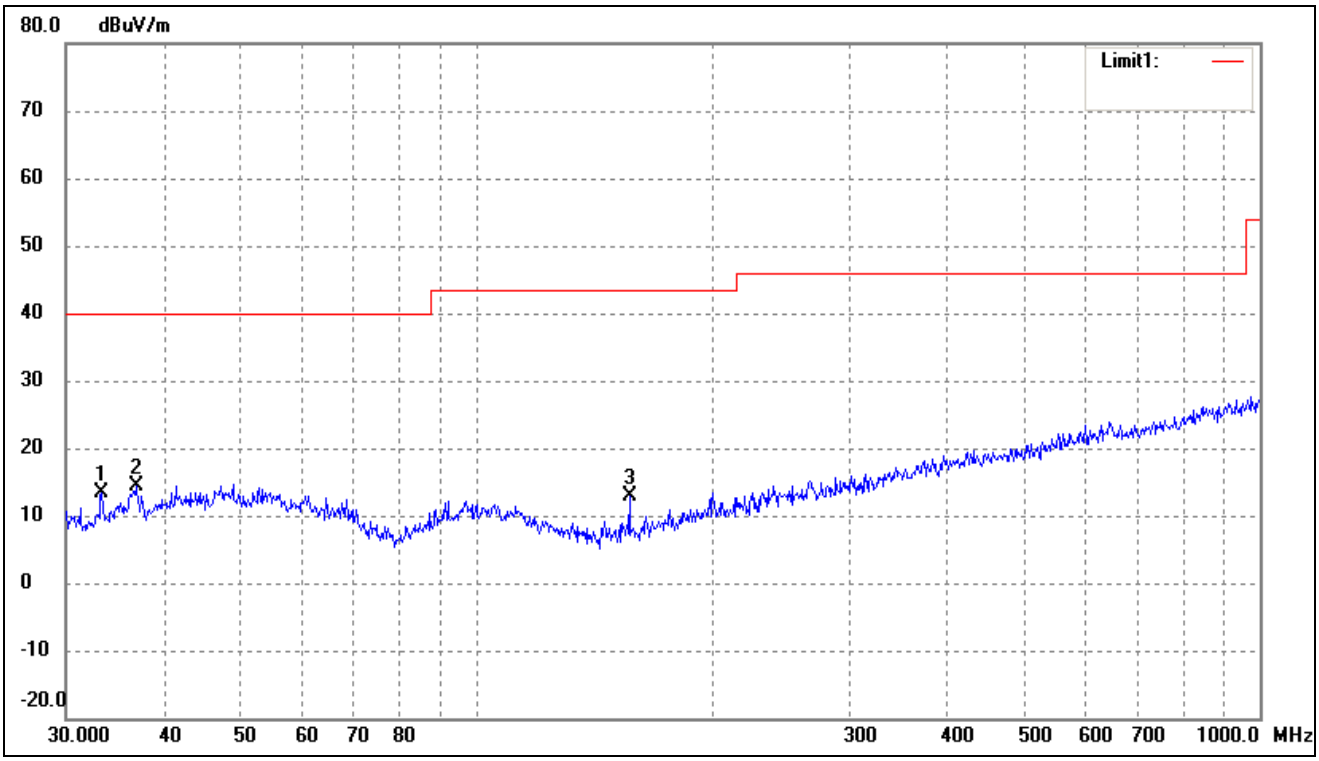
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *802.11n-HT20 Transmitting Low Channel-2412MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	41.8596	22.72	-8.08	14.64	40.00	-25.36	260	100	peak
2	234.9909	23.32	-8.06	15.26	46.00	-30.74	131	200	peak
3	711.6734	24.00	-0.38	23.62	46.00	-22.38	285	200	peak

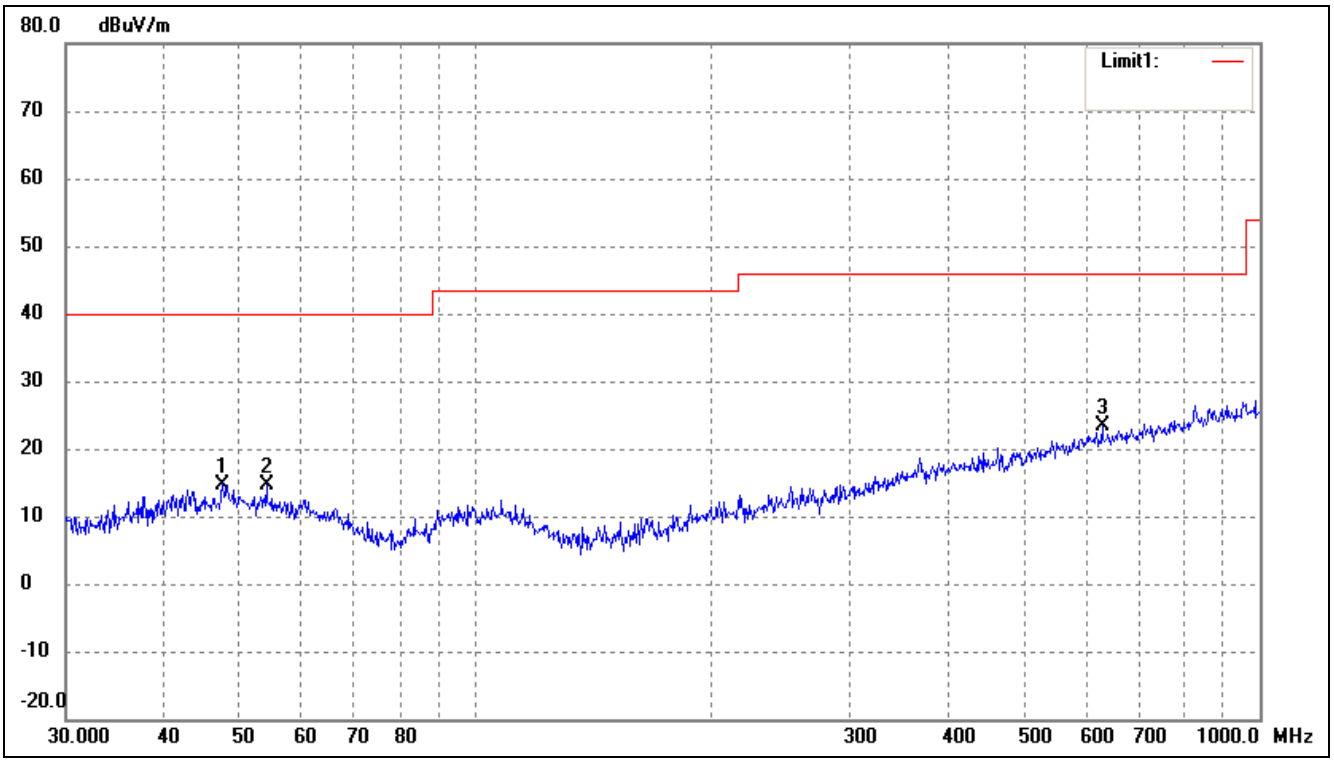
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.3279	23.81	-10.48	13.33	40.00	-26.67	155	100	peak
2	36.8953	23.67	-9.26	14.41	40.00	-25.59	197	100	peak
3	157.0074	25.31	-12.52	12.79	43.50	-30.71	310	100	peak

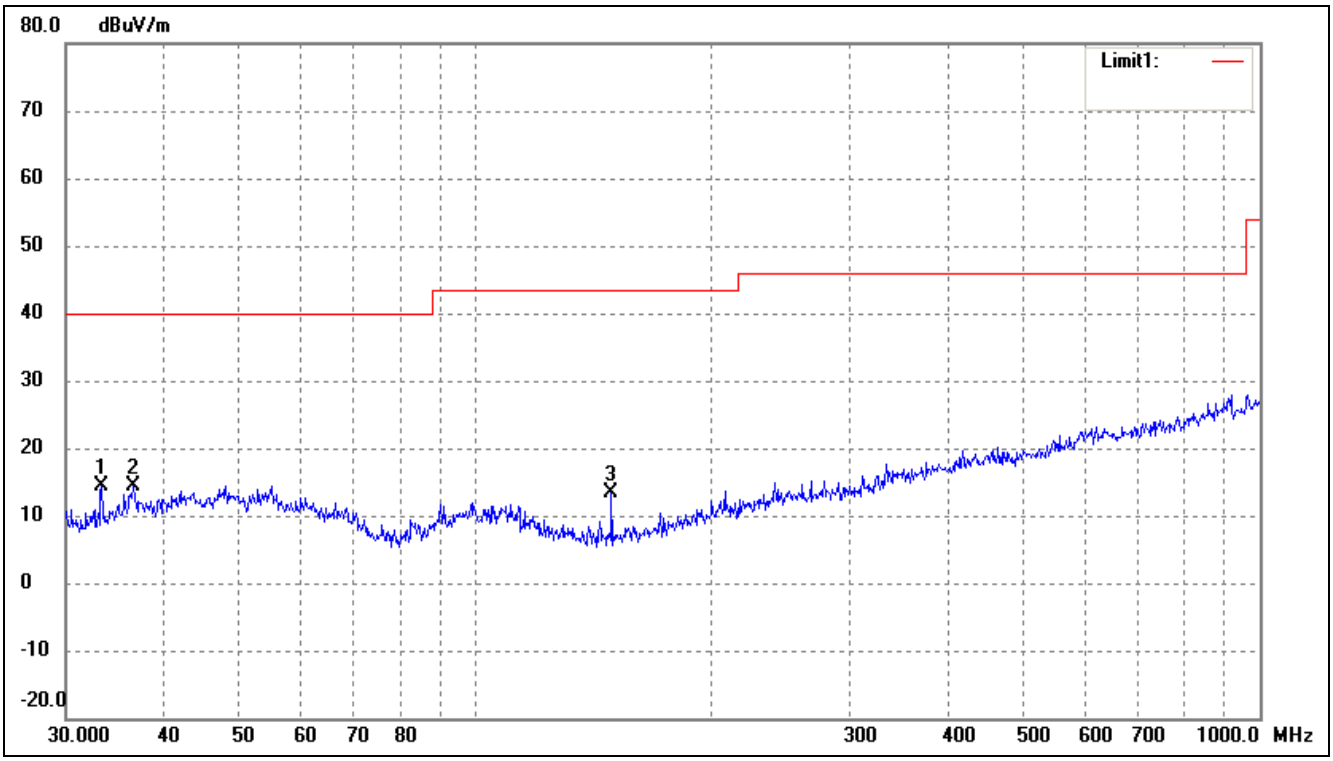
Operating Condition: *802.11n-HT20 Transmitting Middle Channel-2437MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	47.4918	22.20	-7.45	14.75	40.00	-25.25	274	100	peak
2	54.0711	22.56	-7.85	14.71	40.00	-25.29	116	100	peak
3	629.4772	24.71	-1.44	23.27	46.00	-22.73	82	100	peak

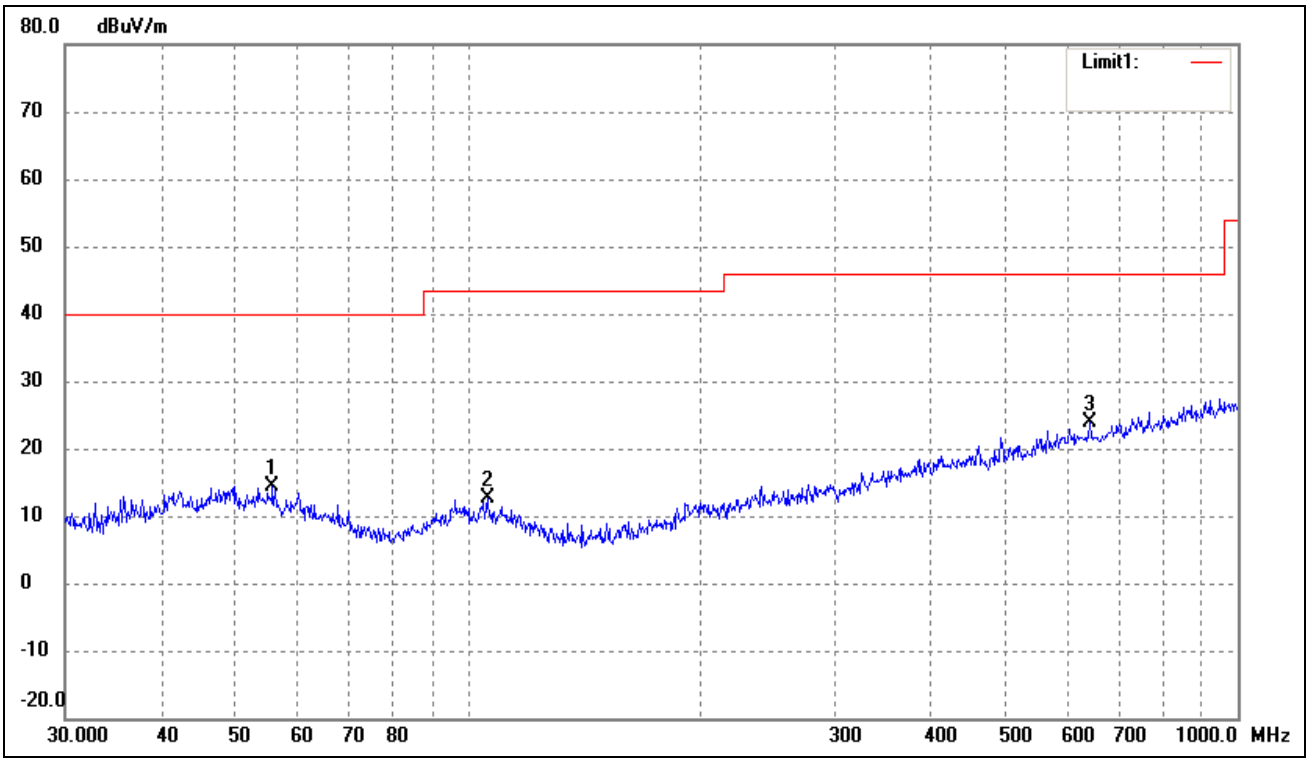
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.3279	24.81	-10.48	14.33	40.00	-25.67	264	100	peak
2	36.6375	23.77	-9.39	14.38	40.00	-25.62	110	100	peak
3	148.9625	26.35	-12.98	13.37	43.50	-30.13	136	100	peak

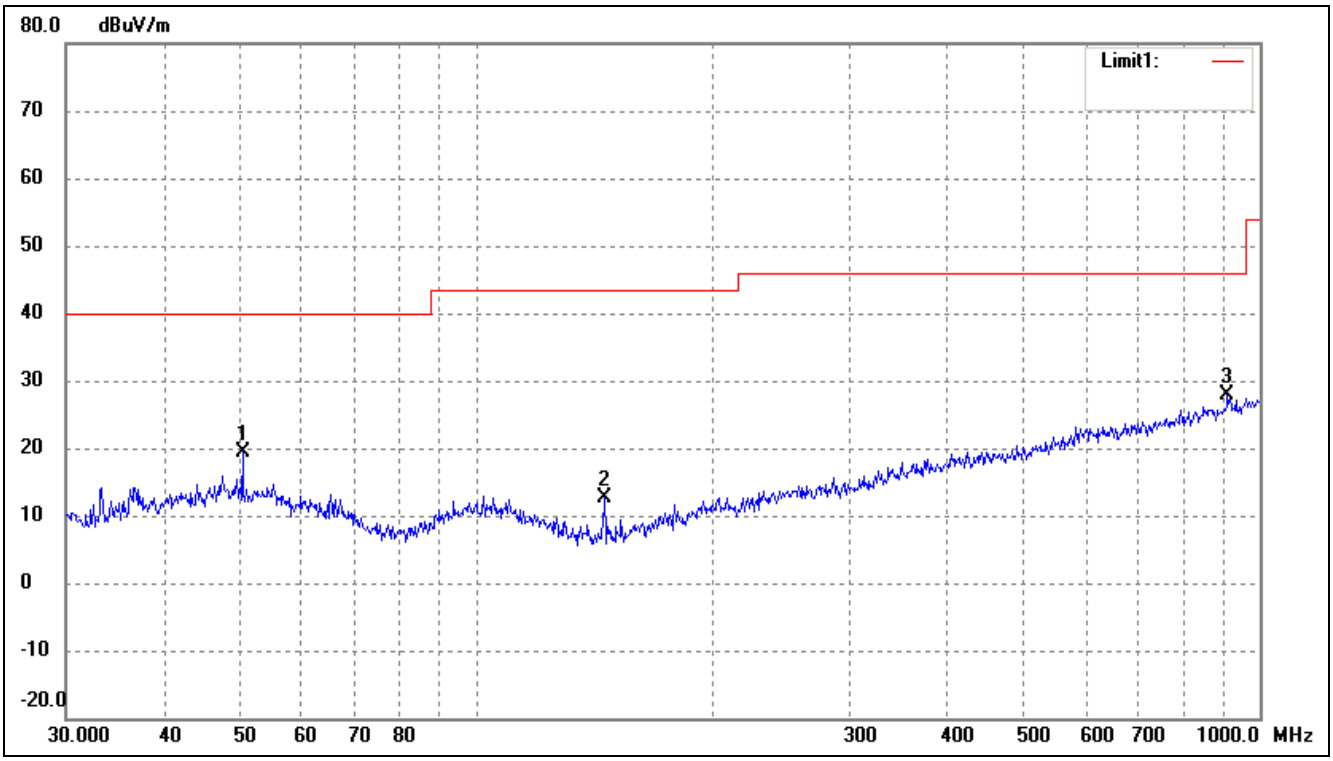
Operating Condition: *802.11n-HT20 Transmitting High Channel-2462MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	55.8047	22.44	-8.04	14.40	40.00	-25.60	360	100	peak
2	106.0126	22.28	-9.58	12.70	43.50	-30.80	112	100	peak
3	642.8613	25.04	-1.26	23.78	46.00	-22.22	180	200	peak

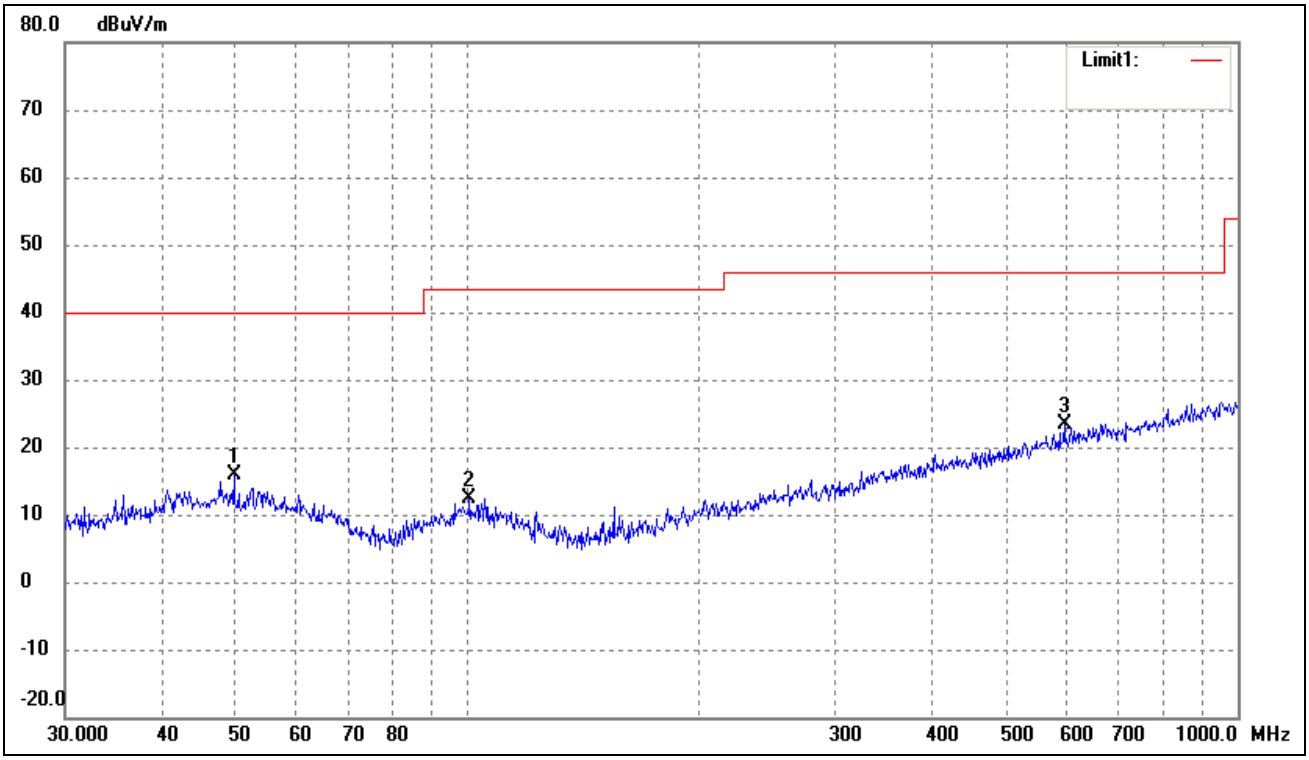
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	50.4089	26.75	-7.49	19.26	40.00	-20.74	267	100	peak
2	145.8611	25.70	-13.04	12.66	43.50	-30.84	116	100	peak
3	909.6667	22.53	5.38	27.91	46.00	-18.09	360	100	peak

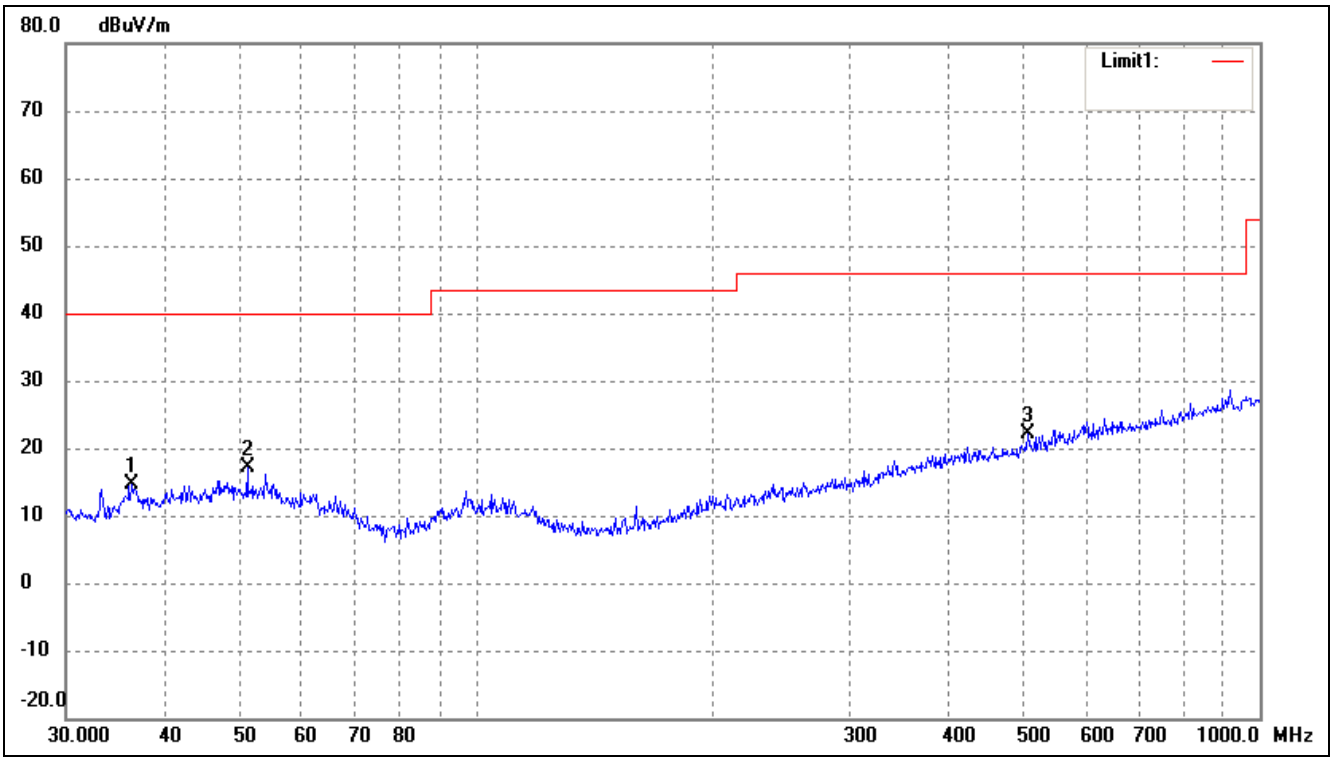
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *802.11n-HT40 Transmitting Low Channel-2422MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	49.7068	23.33	-7.44	15.89	40.00	-24.11	267	100	peak
2	100.5806	22.04	-9.57	12.47	43.50	-31.03	114	200	peak
3	595.1329	25.13	-1.81	23.32	46.00	-22.68	35	200	peak

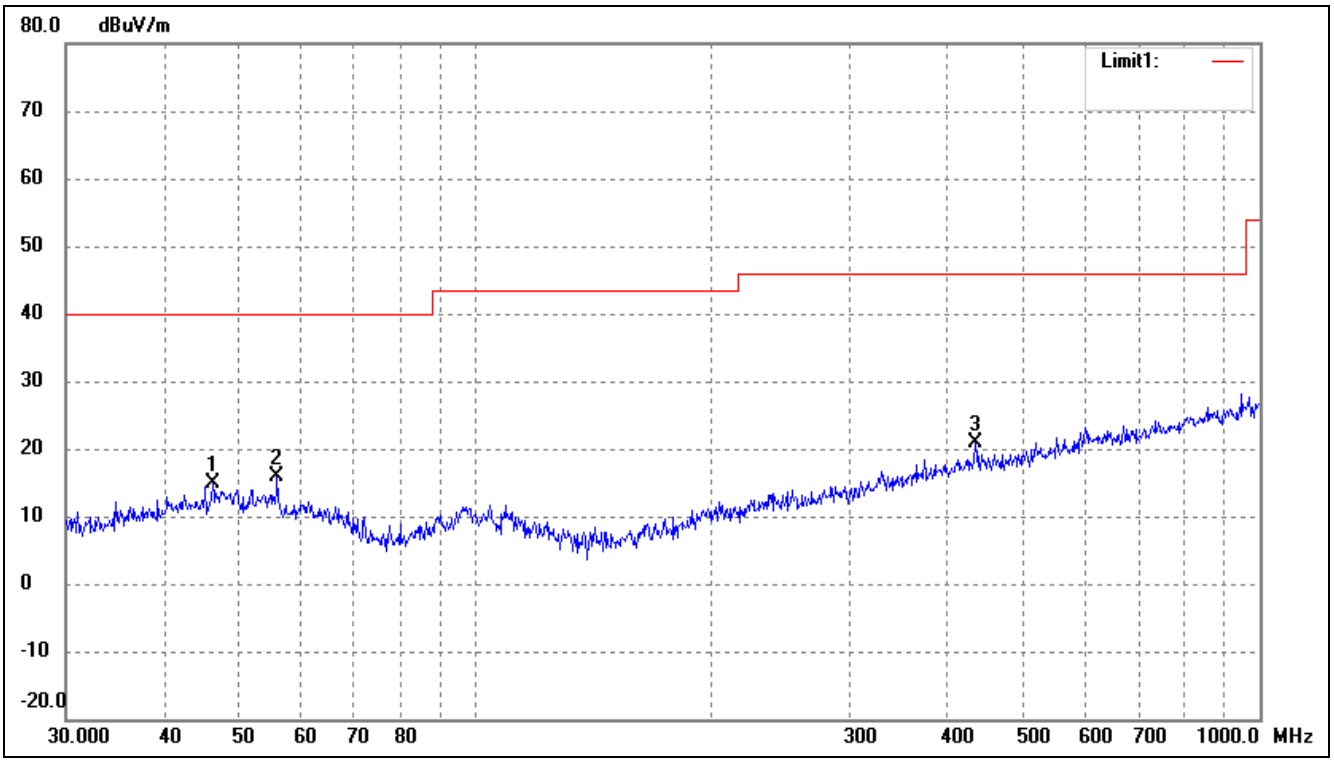
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	36.3814	24.24	-9.52	14.72	40.00	-25.28	360	100	peak
2	51.1209	24.69	-7.56	17.13	40.00	-22.87	258	100	peak
3	506.4791	23.25	-1.17	22.08	46.00	-23.92	347	100	peak

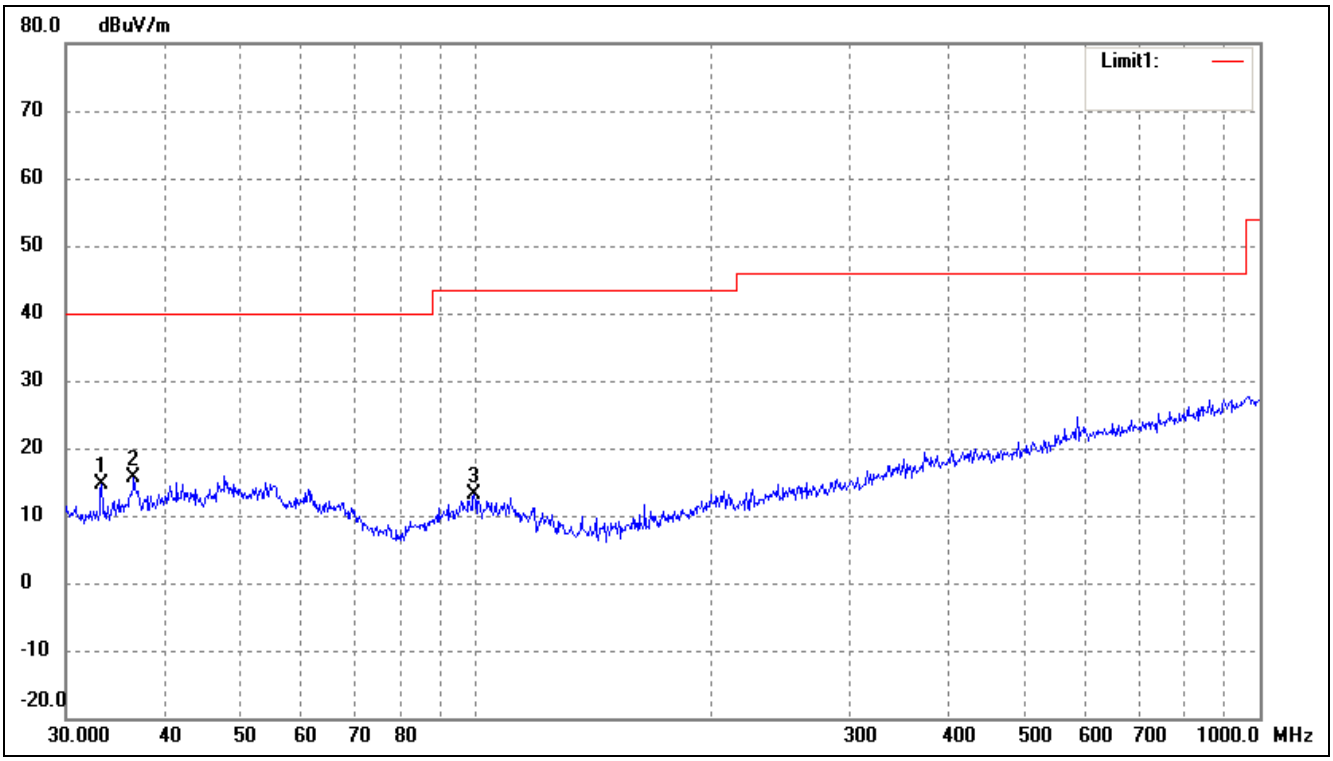
Operating Condition: *802.11n-HT40 Transmitting Middle Channel-2437MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	46.1780	22.25	-7.46	14.79	40.00	-25.21	251	100	peak
2	55.8047	24.02	-8.04	15.98	40.00	-24.02	167	100	peak
3	434.0651	23.14	-2.32	20.82	46.00	-25.18	44	100	peak

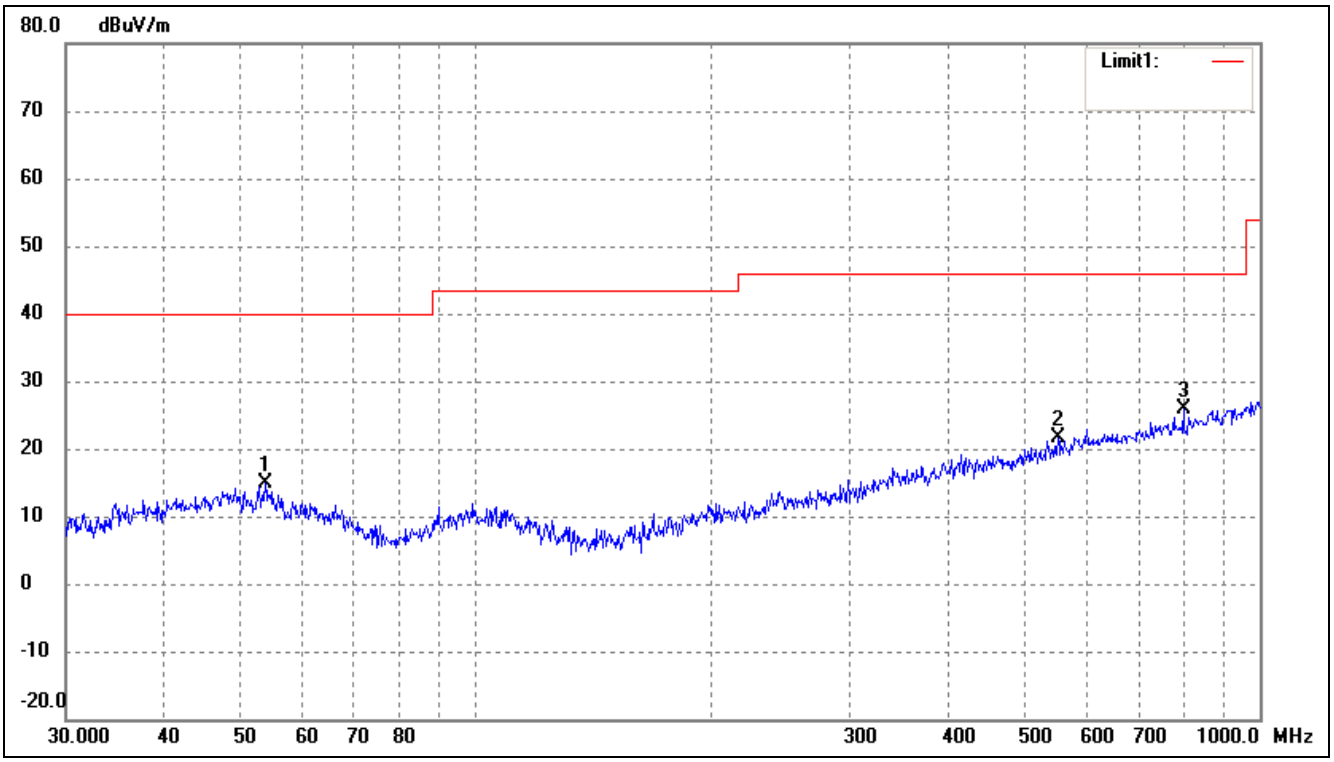
Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.3279	25.07	-10.48	14.59	40.00	-25.41	47	100	peak
2	36.6375	24.94	-9.39	15.55	40.00	-24.45	264	100	peak
3	99.5281	22.72	-9.61	13.11	43.50	-30.39	225	100	peak

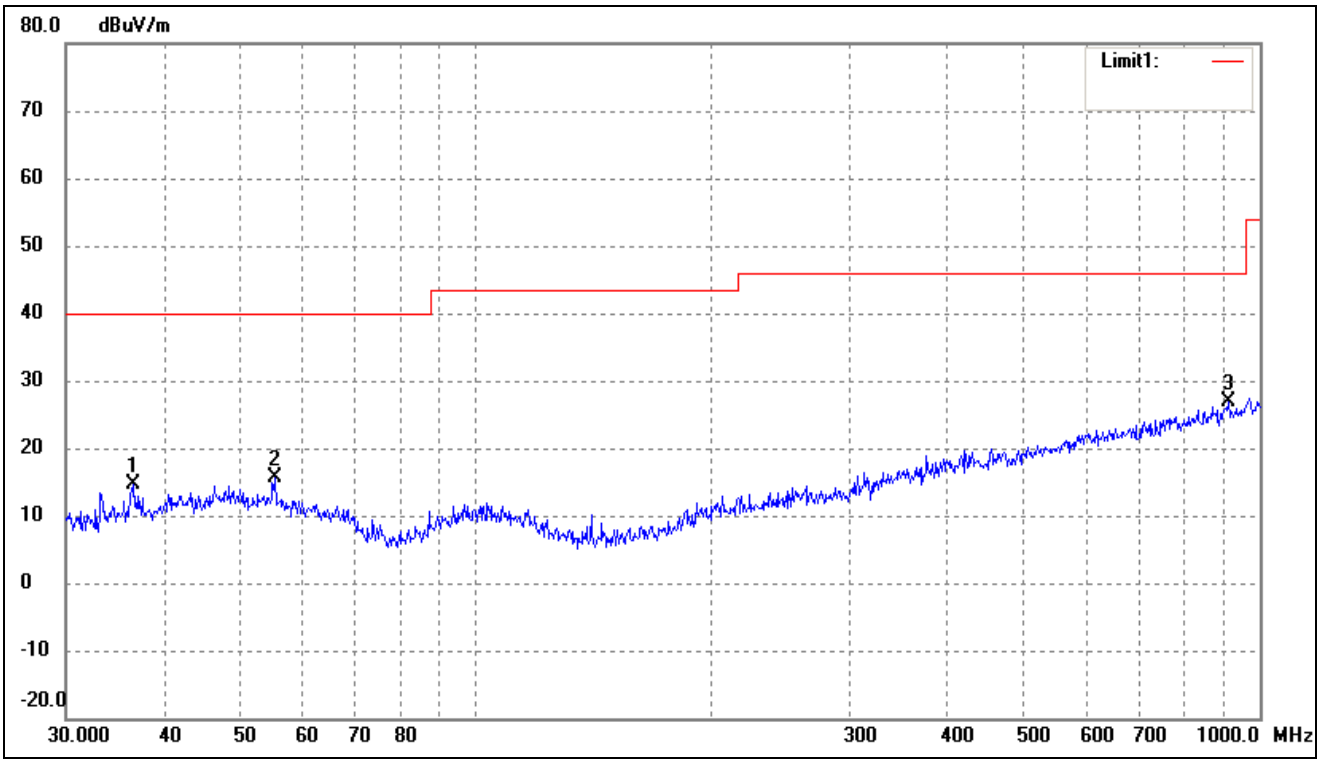
Operating Condition: *802.11n-HT40 Transmitting High Channel-2452MHz*
Comment: *DC 7.4V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	53.8818	22.60	-7.83	14.77	40.00	-25.23	360	100	peak
2	552.8833	22.91	-1.38	21.53	46.00	-24.47	287	100	peak
3	798.9797	23.17	2.60	25.77	46.00	-20.23	168	100	peak

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	36.6375	23.98	-9.39	14.59	40.00	-25.41	78	100	peak
2	55.4147	23.65	-7.99	15.66	40.00	-24.34	136	100	peak
3	912.8620	21.34	5.43	26.77	46.00	-19.23	284	100	peak

Spurious Emissions Above 1GHz

Test Mode: 802.11b

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2412MHz							
4824.000	42.23	12.37	54.60	74.00	-19.40	H	PK
4824.000	31.60	12.37	43.97	54.00	-10.03	H	AV
7236.000	34.01	15.49	49.50	74.00	-24.50	H	PK
7236.000	25.20	15.49	40.69	54.00	-13.31	H	AV
4824.000	42.85	12.37	55.22	74.00	-18.78	V	PK
4824.000	31.59	12.37	43.96	54.00	-10.04	V	AV
7236.000	33.99	15.49	49.48	74.00	-24.52	V	PK
7236.000	24.34	15.49	39.83	54.00	-14.17	V	AV
Middle Channel-2437MHz							
4874.000	42.68	12.46	55.14	74.00	-18.86	H	PK
4874.000	31.62	12.46	44.08	54.00	-9.92	H	AV
7311.000	37.32	15.56	52.88	74.00	-21.12	H	PK
7311.000	24.39	15.56	39.95	54.00	-14.05	H	AV
4874.000	43.57	12.46	56.03	74.00	-17.97	V	PK
4874.000	31.62	12.46	44.08	54.00	-9.92	V	AV
7311.000	36.39	15.56	51.95	74.00	-22.05	V	PK
7311.000	25.78	15.56	41.34	54.00	-12.66	V	AV
High Channel-2462MHz							
4924.000	46.69	12.55	59.24	74.00	-14.76	H	PK
4924.000	33.48	12.55	46.03	54.00	-7.97	H	AV
7386.000	37.06	15.64	52.70	74.00	-21.30	H	PK
7386.000	26.20	15.64	41.84	54.00	-12.16	H	AV
4924.000	48.73	12.55	61.28	74.00	-12.72	V	PK
4924.000	34.75	12.55	47.30	54.00	-6.70	V	AV
7386.000	37.23	15.64	52.87	74.00	-21.13	V	PK
7386.000	26.33	15.64	41.97	54.00	-12.03	V	AV

Test Mode: 802.11g

Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel-2412MHz							
4824.000	48.61	12.37	60.98	74.00	-13.02	H	PK
4824.000	36.31	12.37	48.68	54.00	-5.32	H	AV
7236.000	34.59	15.49	50.08	74.00	-23.92	H	PK
7236.000	22.71	15.49	38.20	54.00	-15.80	H	AV
4824.000	43.52	12.37	55.89	74.00	-18.11	V	PK
4824.000	32.71	12.37	45.08	54.00	-8.92	V	AV
7236.000	34.93	15.49	50.42	74.00	-23.58	V	PK
7236.000	21.28	15.49	36.77	54.00	-17.23	V	AV
Middle Channel-2437MHz							
4874.000	43.28	12.46	55.74	74.00	-18.26	H	PK
4874.000	31.80	12.46	44.26	54.00	-9.74	H	AV
7311.000	37.27	15.56	52.83	74.00	-21.17	H	PK
7311.000	25.86	15.56	41.42	54.00	-12.58	H	AV
4874.000	43.68	12.46	56.14	74.00	-17.86	V	PK
4874.000	31.91	12.46	44.37	54.00	-9.63	V	AV
7311.000	37.41	15.56	52.97	74.00	-21.03	V	PK
7311.000	25.91	15.56	41.47	54.00	-12.53	V	AV
High Channel-2462MHz							
4924.000	43.05	12.55	55.60	74.00	-18.40	H	PK
4924.000	31.55	12.55	44.10	54.00	-9.90	H	AV
7386.000	38.34	15.64	53.98	74.00	-20.02	H	PK
7386.000	26.30	15.64	41.94	54.00	-12.06	H	AV
4924.000	42.93	12.55	55.48	74.00	-18.52	V	PK
4924.000	31.62	12.55	44.17	54.00	-9.83	V	AV
7386.000	37.53	15.64	53.17	74.00	-20.83	V	PK
7386.000	26.35	15.64	41.99	54.00	-12.01	V	AV

Test Mode: 802.11n-HT20

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2412MHz							
4824.000	43.42	12.37	55.79	74.00	-18.21	H	PK
4824.000	31.69	12.37	44.06	54.00	-9.94	H	AV
7236.000	33.68	15.49	49.17	74.00	-24.83	H	PK
7236.000	22.70	15.49	38.19	54.00	-15.81	H	AV
4824.000	42.50	12.37	54.87	74.00	-19.13	V	PK
4824.000	31.54	12.37	43.91	54.00	-10.09	V	AV
7236.000	34.15	15.49	49.64	74.00	-24.36	V	PK
7236.000	22.63	15.49	38.12	54.00	-15.88	V	AV
Middle Channel-2437MHz							
4874.000	35.10	12.46	47.56	54.00	-6.44	H	PK
4874.000	45.40	12.46	57.86	74.00	-16.14	H	AV
7311.000	38.26	15.56	53.82	74.00	-20.18	H	PK
7311.000	25.92	15.56	41.48	54.00	-12.52	H	AV
4874.000	37.00	12.46	49.46	54.00	-4.54	V	PK
4874.000	48.77	12.46	61.23	74.00	-12.77	V	AV
7311.000	36.78	15.56	52.34	74.00	-21.66	V	PK
7311.000	26.02	15.56	41.58	54.00	-12.42	V	AV
High Channel-2462MHz							
4924.000	42.24	12.55	54.79	74.00	-19.21	H	PK
4924.000	31.42	12.55	43.97	54.00	-10.03	H	AV
7386.000	37.67	15.64	53.31	74.00	-20.69	H	PK
7386.000	26.15	15.64	41.79	54.00	-12.21	H	AV
4924.000	42.53	12.55	55.08	74.00	-18.92	V	PK
4924.000	31.63	12.55	44.18	54.00	-9.82	V	AV
7386.000	37.16	15.64	52.80	74.00	-21.20	V	PK
7386.000	26.11	15.64	41.75	54.00	-12.25	V	AV

Test Mode: 802.11n-HT40

Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel-2422MHz							
4844.000	43.78	12.40	56.18	74.00	-17.82	H	PK
4844.000	32.92	12.40	45.32	54.00	-8.68	H	AV
7266.000	35.24	15.52	50.76	74.00	-23.24	H	PK
7266.000	26.40	15.52	41.92	54.00	-12.08	H	AV
4844.000	45.88	12.40	58.28	74.00	-15.72	V	PK
4844.000	32.11	12.40	44.51	54.00	-9.49	V	AV
7266.000	35.85	15.52	51.37	74.00	-22.63	V	PK
7266.000	25.79	15.52	41.31	54.00	-12.69	V	AV
Middle Channel-2437MHz							
4874.000	43.83	12.46	56.29	74.00	-17.71	H	PK
4874.000	31.79	12.46	44.25	54.00	-9.75	H	AV
7311.000	36.70	15.56	52.26	74.00	-21.74	H	PK
7311.000	26.40	15.56	41.96	54.00	-12.04	H	AV
4874.000	43.19	12.46	55.65	74.00	-18.35	V	PK
4874.000	31.70	12.46	44.16	54.00	-9.84	V	AV
7311.000	37.01	15.56	52.57	74.00	-21.43	V	PK
7311.000	26.62	15.56	42.18	54.00	-11.82	V	AV
High Channel-2452MHz							
4904.000	43.28	12.52	55.80	74.00	-18.20	H	PK
4904.000	31.50	12.52	44.02	54.00	-9.98	H	AV
7356.000	37.61	15.61	53.22	74.00	-20.78	H	PK
7356.000	26.50	15.61	42.11	54.00	-11.89	H	AV
4904.000	43.12	12.52	55.64	74.00	-18.36	V	PK
4904.000	31.50	12.52	44.02	54.00	-9.98	V	AV
7356.000	37.52	15.61	53.13	74.00	-20.87	V	PK
7356.000	26.05	15.61	41.66	54.00	-12.34	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 3th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
The measurements greater than 20dB below the limit from 9kHz to 30MHz.

9. Out of Band Emissions

9.1 Standard Applicable

According to §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

9.2 Test Procedure

According to the KDB 558074D01 v03r05, the band-edge radiated test method as follows:

Set span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation (2310MHz to 2420MHz for low bandedge, 2460MHz to 2500MHz for the high bandedge)
RBW = 1MHz, VBW = 1MHz for peak value measured
RBW = 1MHz, VBW = 10Hz for average value measured
Sweep = auto; Detector function = peak/average; Trace = max hold
All the trace to stabilize, set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. Those emission must comply with the 15.209 limit for fall in the restricted bands listed in section 15.205. Note that the method of measurement KDB publication number: 913591 may be used for the radiated bandedge measurements.

According to the KDB 558074 D01 v03r04, the conducted spurious emissions test method as follows:
1. Set start frequency to DTS channel edge frequency.
2. Set stop frequency so as to encompass the spectrum to be examined.
3. Set RBW = 100 kHz.
4. Set VBW ≥ 300 kHz.
5. Detector = peak.
6. Trace Mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize (this may take some time, depending on the extent of the span).
9. Use peak marker function to determine maximum amplitude of all unwanted emissions within any 100 kHz bandwidth.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in section 8.1. Report the three highest emissions relative to the limit.

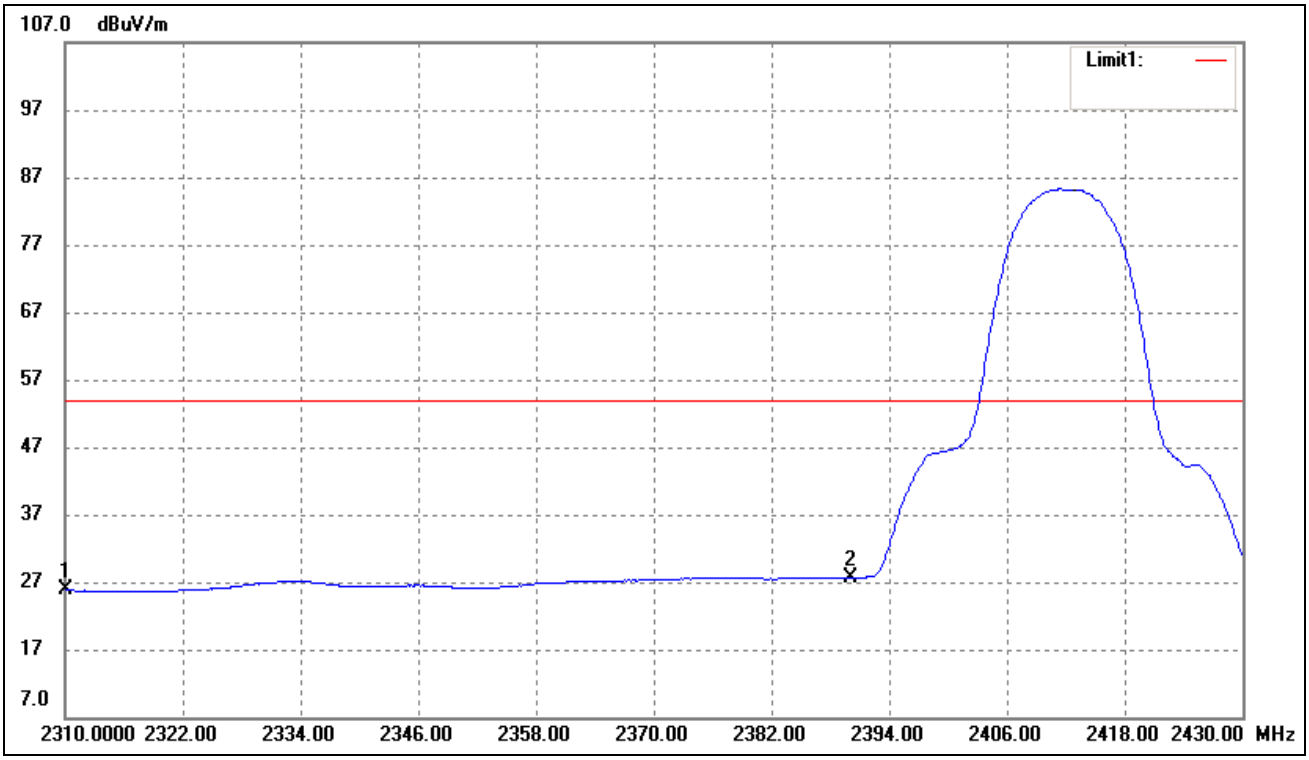
9.3 Environmental Conditions

Temperature:	23°C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

9.4 Summary of Test Results/Plots

802.11b-Lowest Bandedge

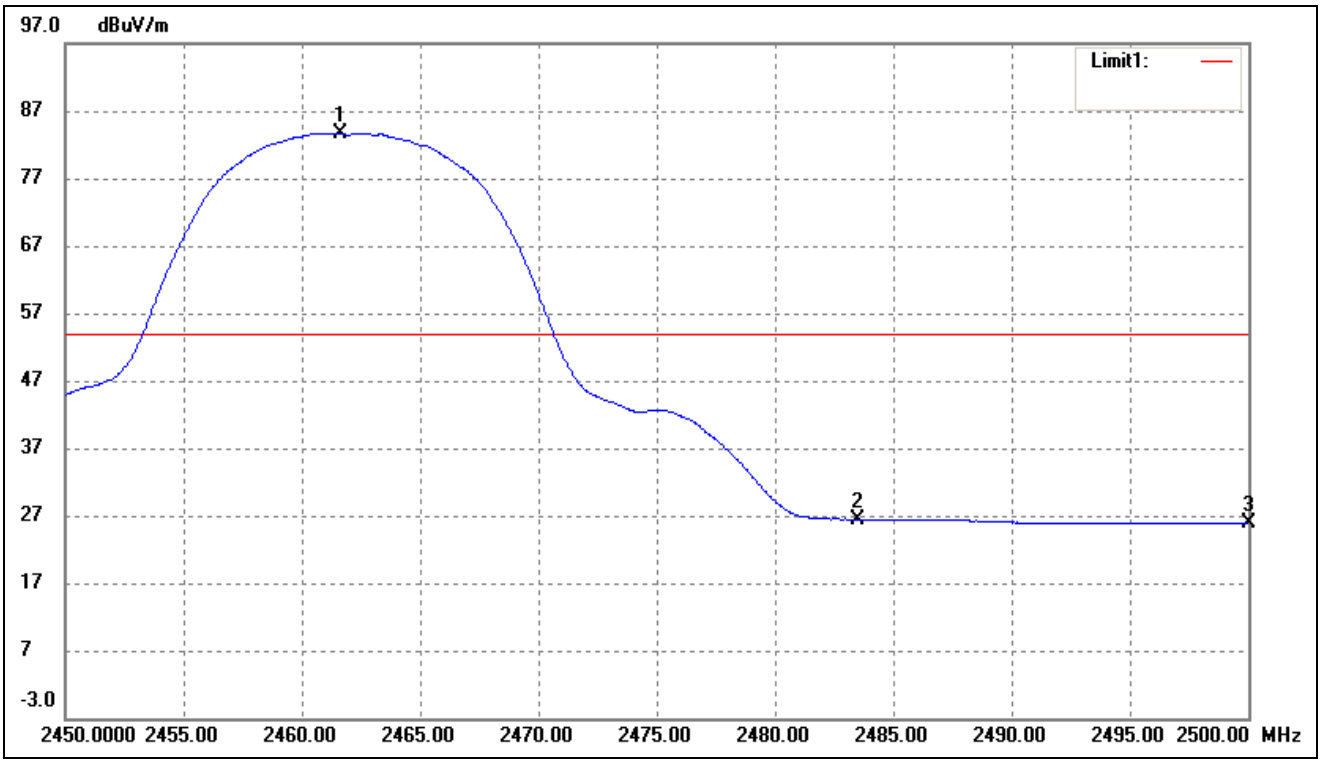
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	29.50	-3.71	25.79	54.00	-28.21	Average Detector
	2310.000	42.81	-3.71	39.10	74.00	-34.90	Peak Detector
2	2390.000	31.27	-3.54	27.73	54.00	-26.27	Average Detector
	2390.000	44.12	-3.54	40.58	74.00	-33.42	Peak Detector

802.11b-Highest Bandedge

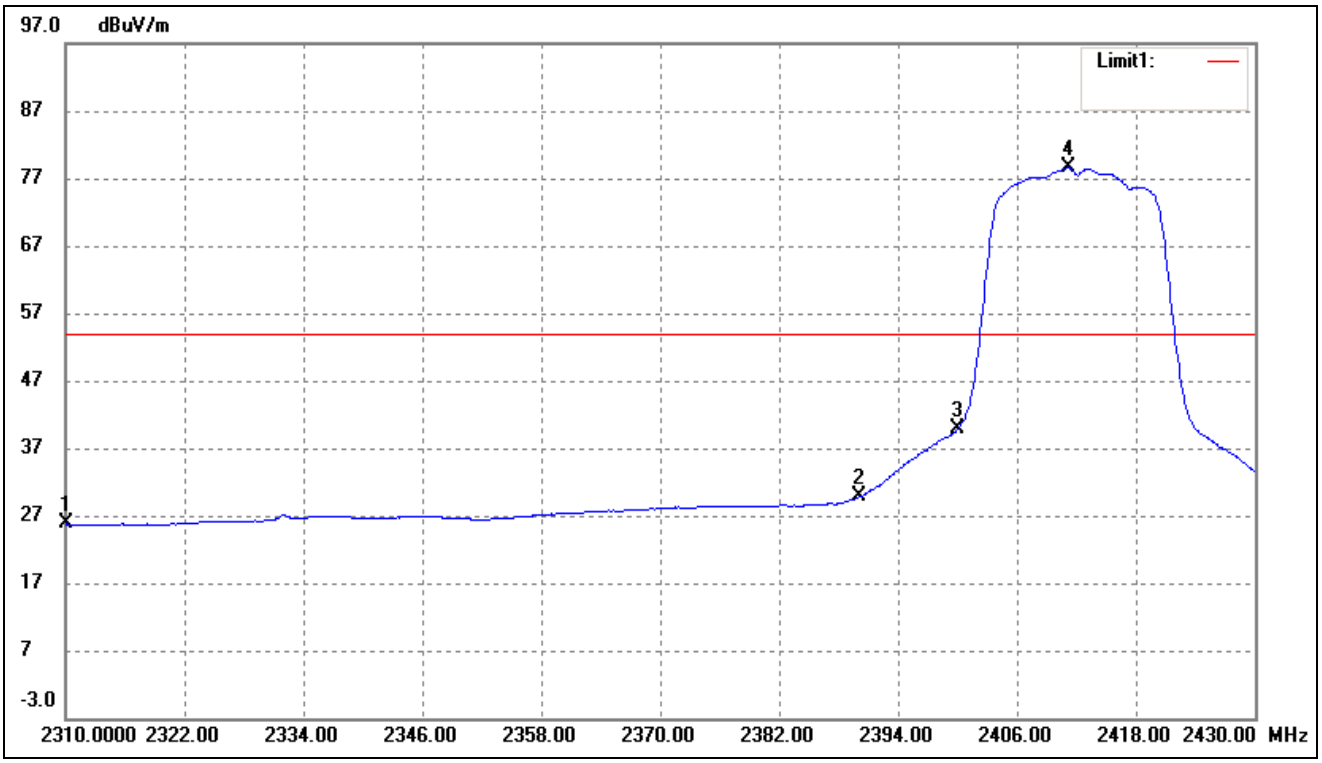
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2461.600	87.03	-3.37	83.66	/	/	Average Detector
	2463.300	96.02	-3.36	92.66	/	/	Peak Detector
2	2483.500	Delta = 58.99dBc		24.67	54.00	-29.33	Average Detector
	2483.500			33.67	74.00	-40.33	Peak Detector
3	2500.000	29.17	-3.28	25.89	54.00	-28.11	Average Detector
	2500.000	41.43	-3.28	38.15	74.00	-35.85	Peak Detector

802.11g-Lowest Bandedge

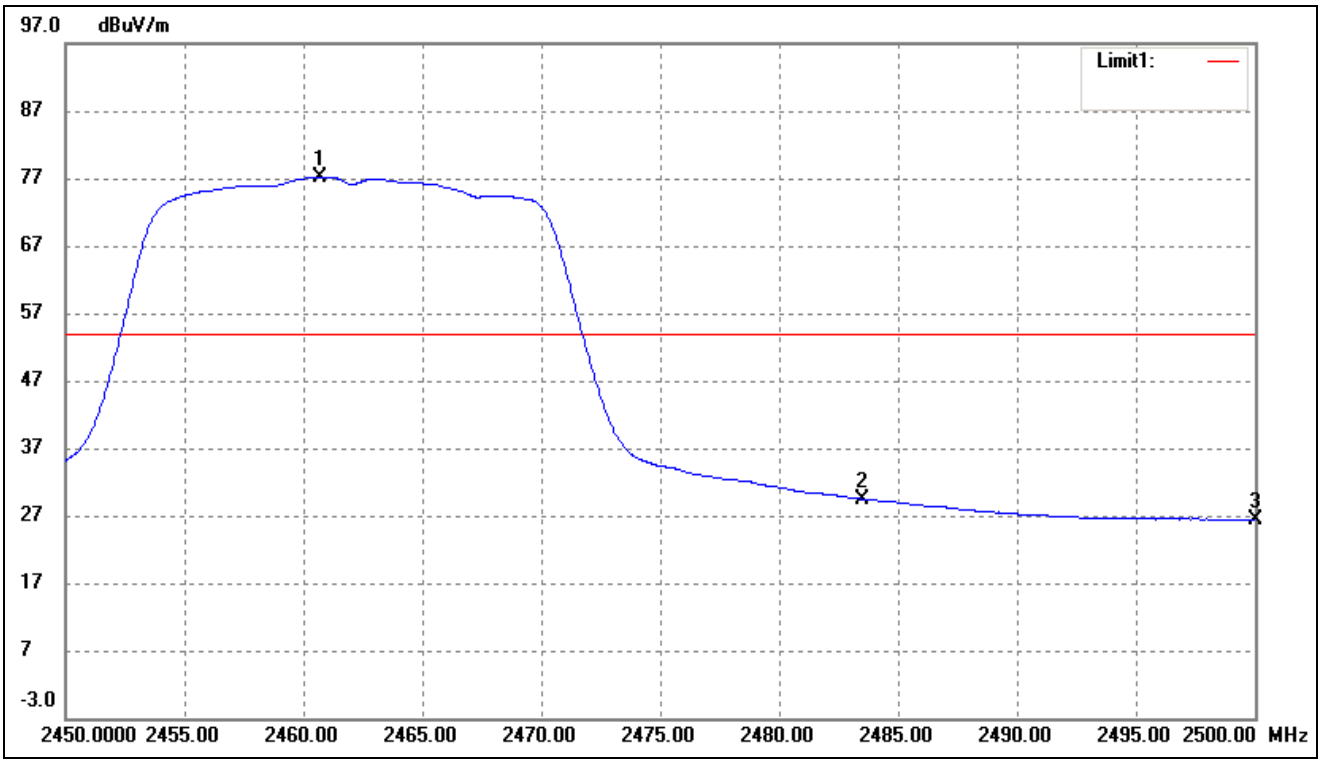
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	29.51	-3.71	25.80	54.00	-28.20	Average Detector
	2310.000	41.73	-3.71	38.02	74.00	-35.98	Peak Detector
2	2390.000	33.32	-3.54	29.78	54.00	-24.22	Average Detector
	2390.000	47.51	-3.54	43.97	74.00	-30.03	Peak Detector
3	2400.000	43.36	-3.51	39.85	54.00	-14.15	Average Detector
	2400.000	40.33	17.11	57.44	74.00	-16.56	Peak Detector

802.11g-Highest Bandedge

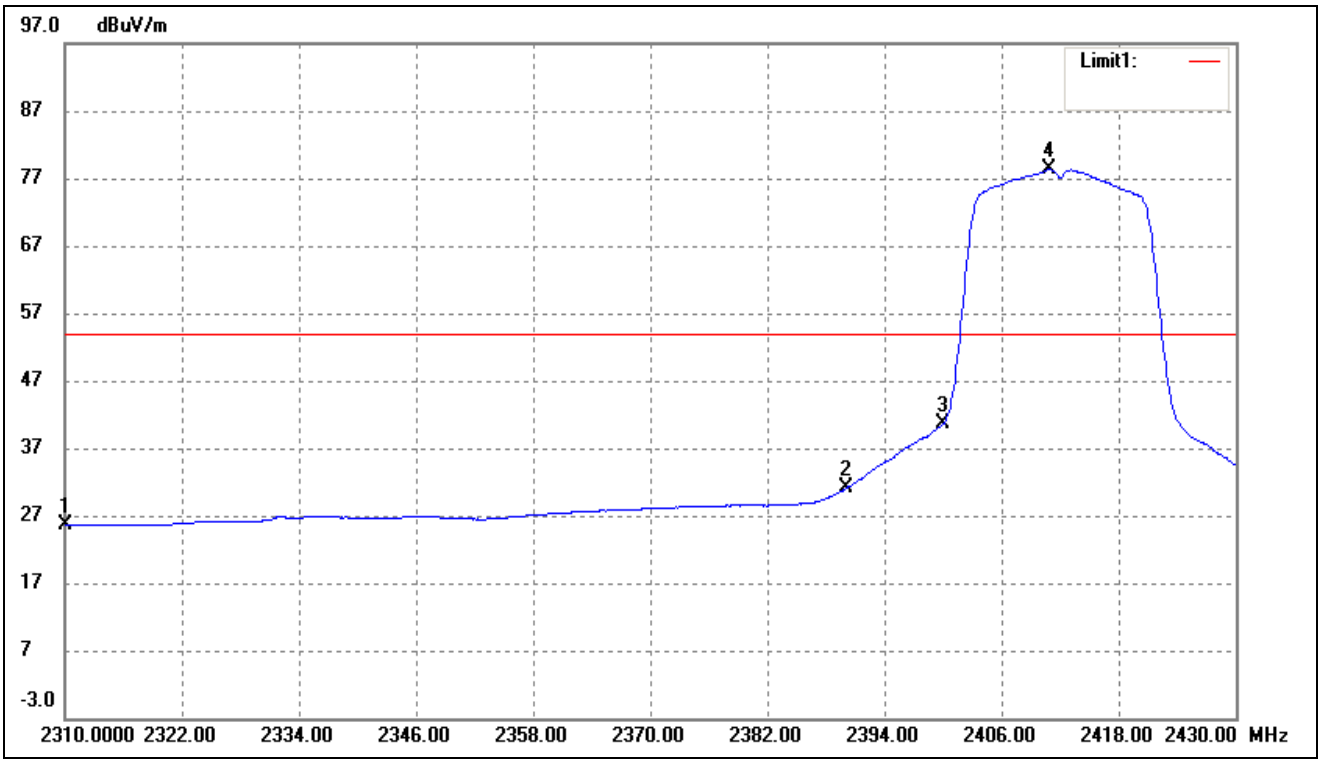
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2460.700	80.60	-3.37	77.23	/	/	Average Detector
	2463.450	91.85	-3.36	88.49	/	/	Peak Detector
2	2483.500	Delta = 46.90dBc		30.33	54.00	-23.67	Average Detector
	2483.500			41.59	74.00	-32.41	Peak Detector
3	2500.000	29.60	-3.28	26.32	54.00	-27.68	Average Detector
	2500.000	42.55	-3.28	39.27	74.00	-34.73	Peak Detector

802.11n-HT20-Lowest Bandedge

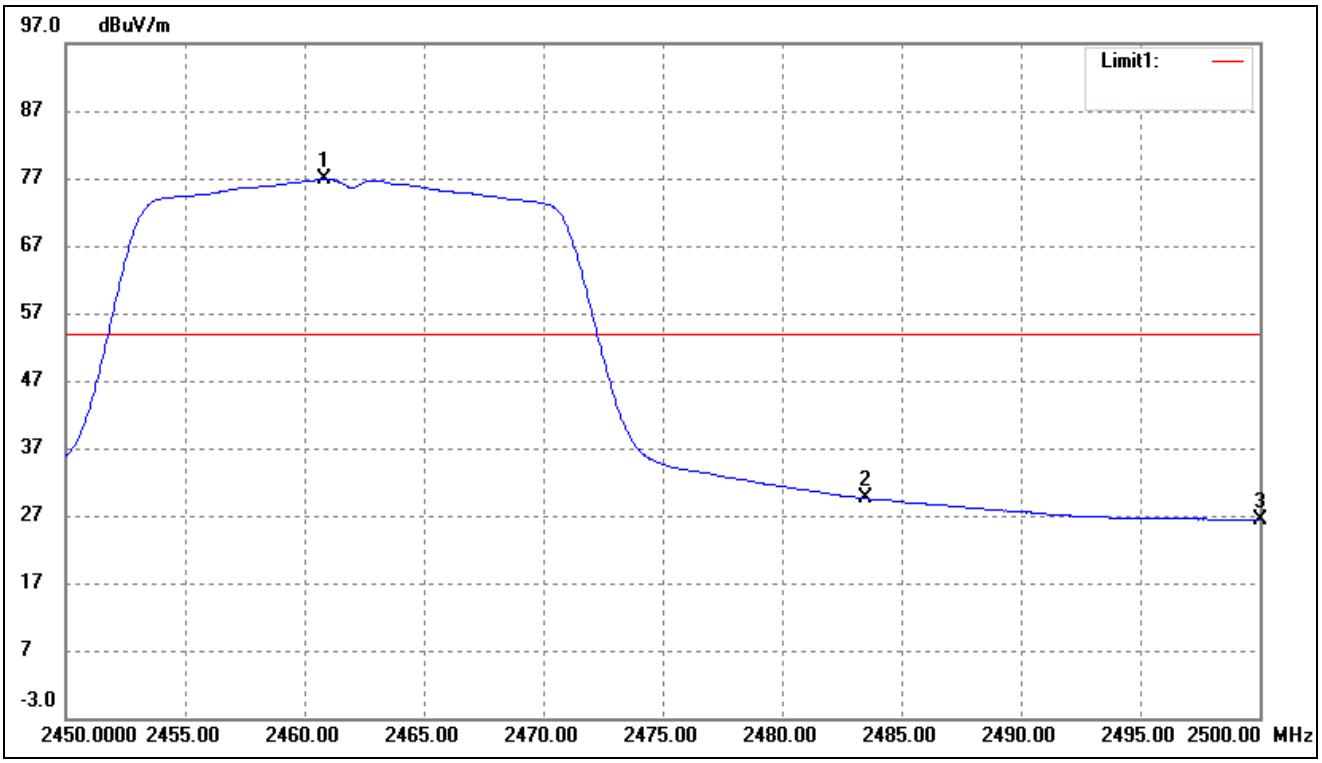
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	29.43	-3.71	25.72	54.00	-28.28	Average Detector
	2310.000	42.34	-3.71	38.63	74.00	-35.37	Peak Detector
2	2390.000	34.55	-3.54	31.01	54.00	-22.99	Average Detector
	2390.000	51.10	-3.54	47.56	74.00	-26.44	Peak Detector
3	2400.000	44.09	-3.51	40.58	54.00	-13.42	Average Detector
	2400.000	57.41	-3.51	53.90	74.00	-20.10	Peak Detector

802.11n-HT20-Highest Bandedge

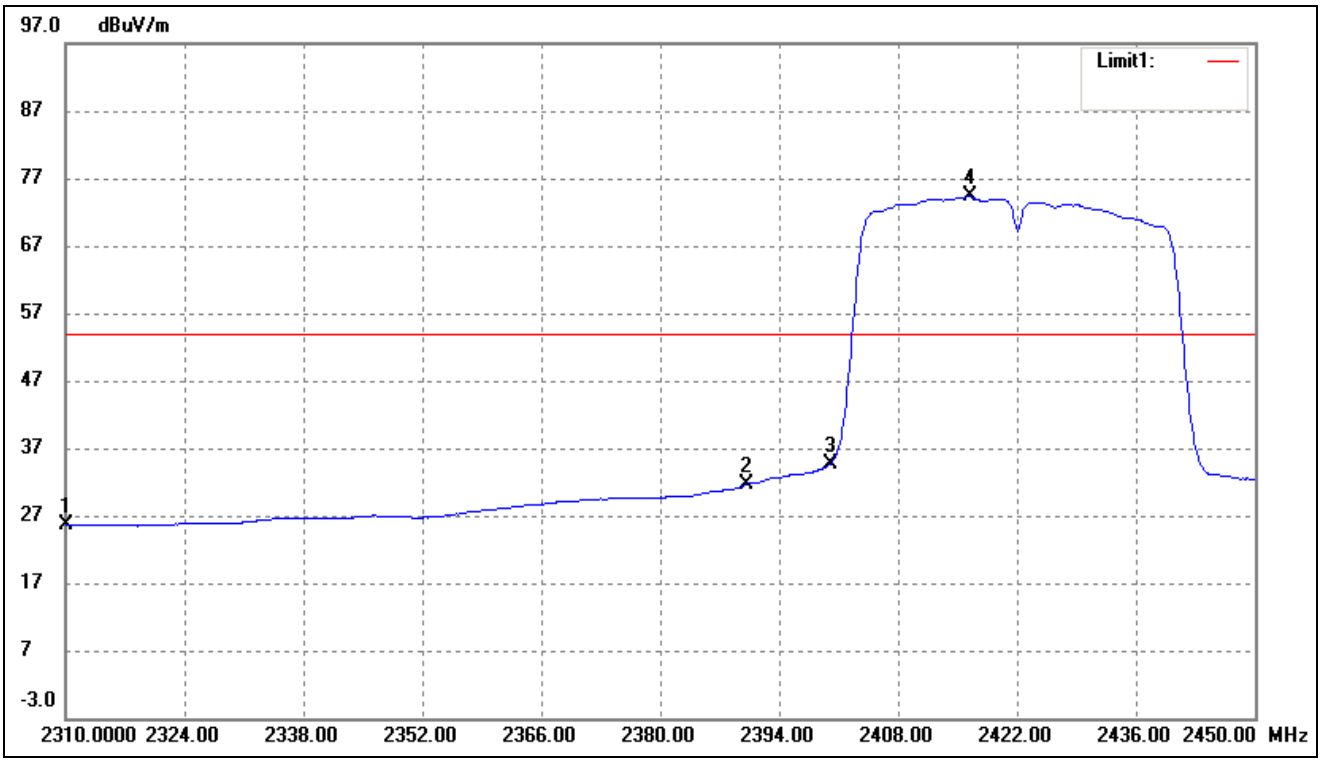
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2460.850	80.29	-3.37	76.92	/	/	Average Detector
	2461.400	91.78	-3.37	88.41	/	/	Peak Detector
2	2483.500	Delta =48.25dBc		28.67	54.00	-25.33	Average Detector
	2483.500			40.16	74.00	-33.84	Peak Detector
3	2500.000	29.63	-3.28	26.35	54.00	-27.65	Average Detector
	2500.000	41.59	-3.28	38.31	74.00	-35.69	Peak Detector

802.11n-HT40-Lowest Bandedge

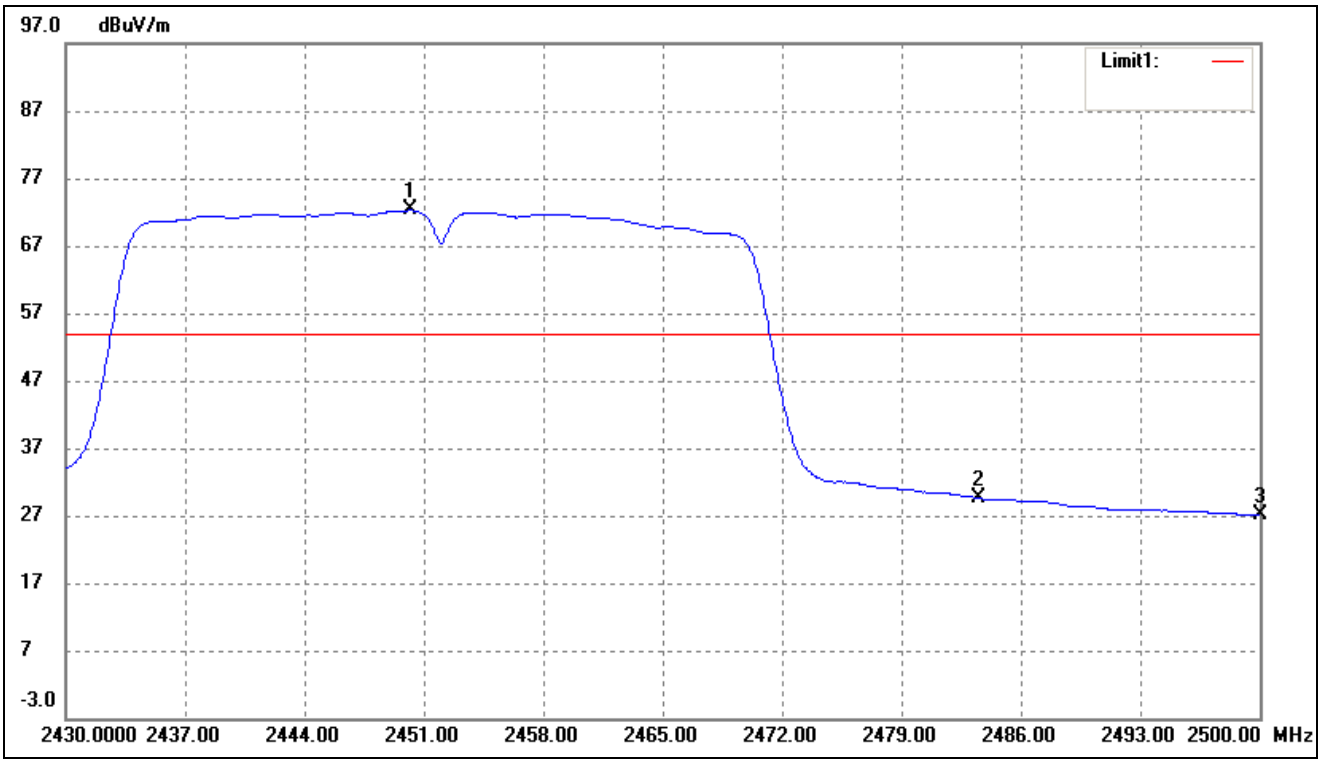
Vertical (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	29.35	-3.71	25.64	54.00	-28.36	Average Detector
	2310.000	41.55	-3.71	37.84	74.00	-36.16	Peak Detector
2	2390.000	35.14	-3.54	31.60	54.00	-22.40	Average Detector
	2390.000	48.65	-3.54	45.11	74.00	-28.89	Peak Detector
3	2400.000	38.12	-3.51	34.61	54.00	-19.39	Average Detector
	2400.000	56.12	-3.51	52.61	74.00	-21.39	Peak Detector

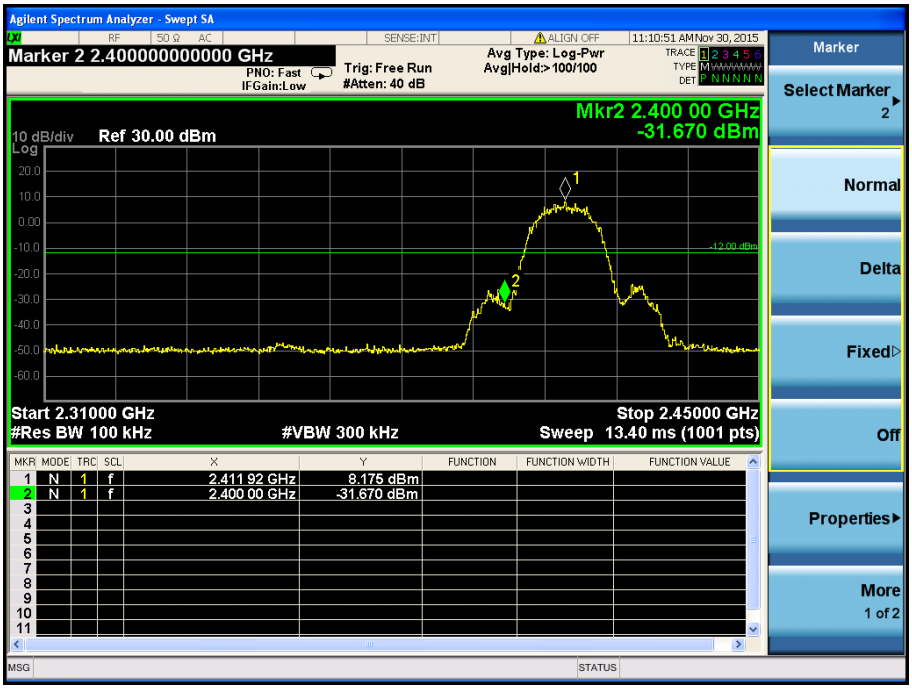
802.11n-HT40-Highest Bandedge

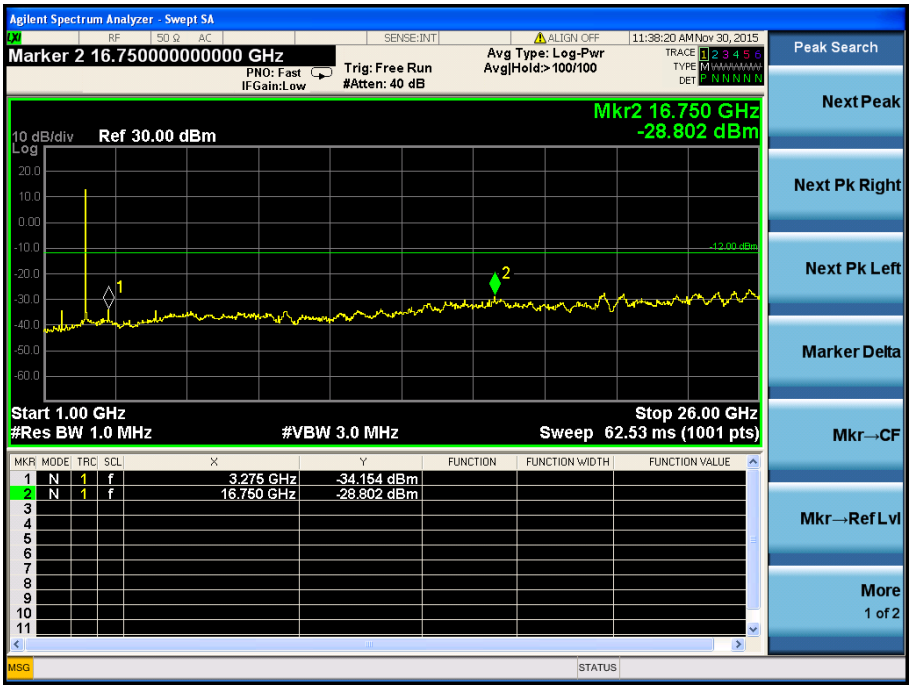
Vertical (Worst case)



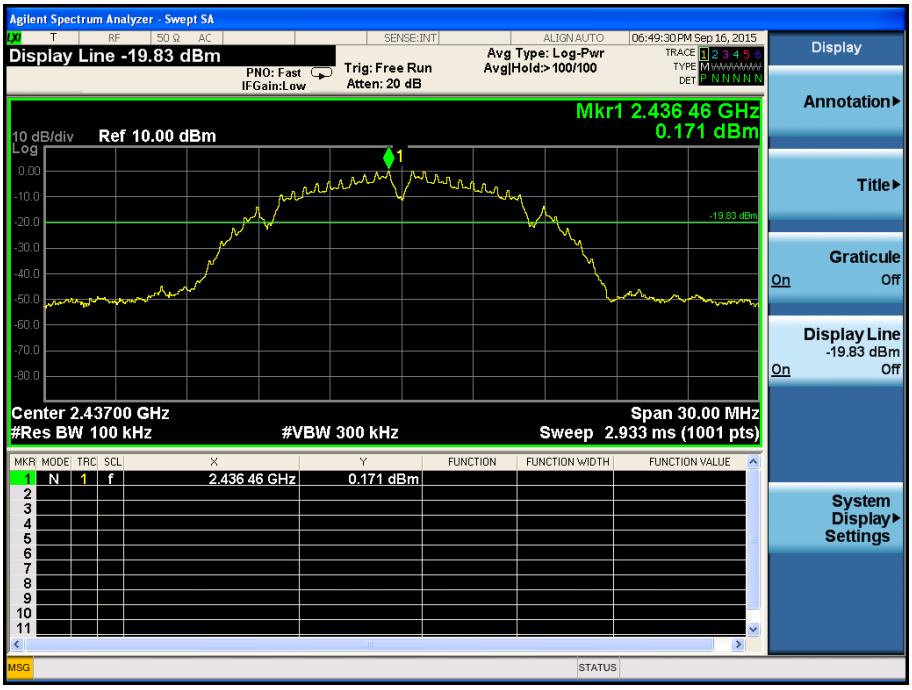
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2450.340	75.67	-3.40	72.27	/	/	Average Detector
	2459.530	86.70	-3.38	83.32	/	/	Peak Detector
2	2483.500	Delta = 44.36dBc		27.91	54.00	-26.09	Average Detector
	2483.500			38.96	74.00	-35.04	Peak Detector
3	2500.000	30.39	-3.28	27.11	54.00	-26.89	Average Detector
	2500.000	43.57	-3.28	40.29	74.00	-33.71	Peak Detector

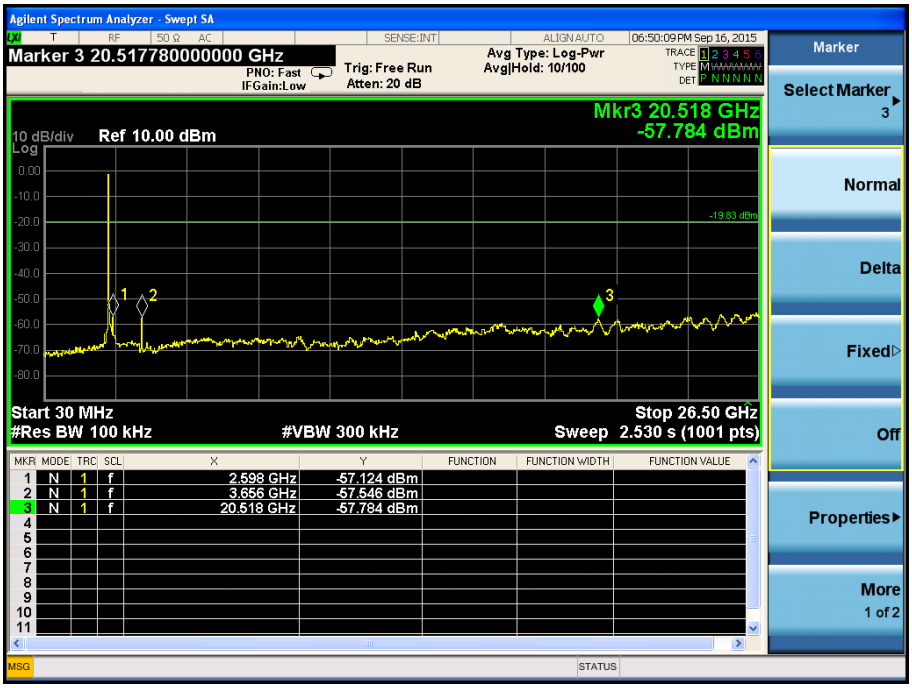
Ant. 1
Out-of-Band and Spurious Emission (Conducted)
802.11b
Low Channel



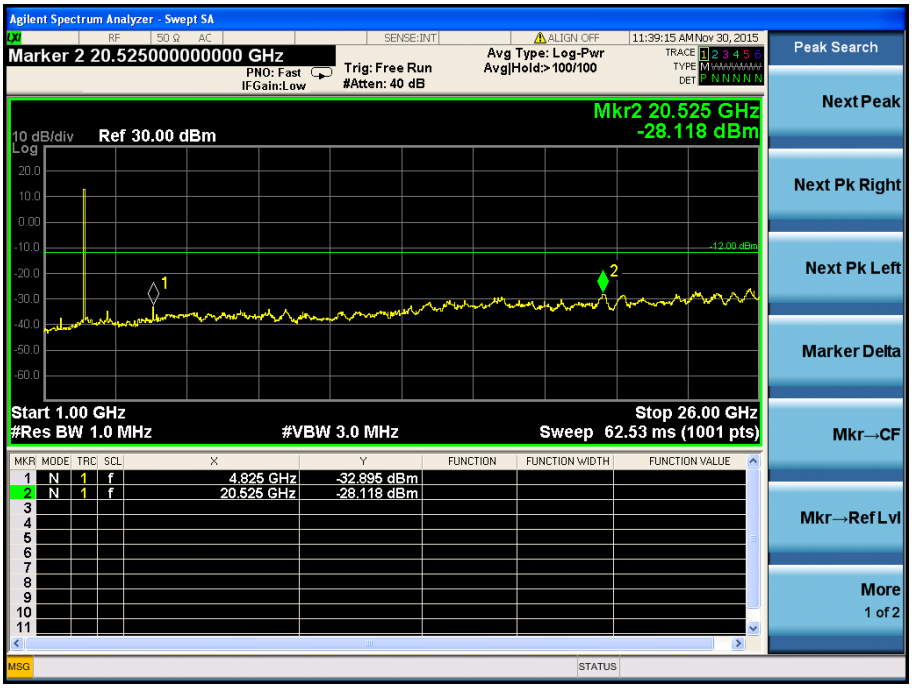


Middle Channel

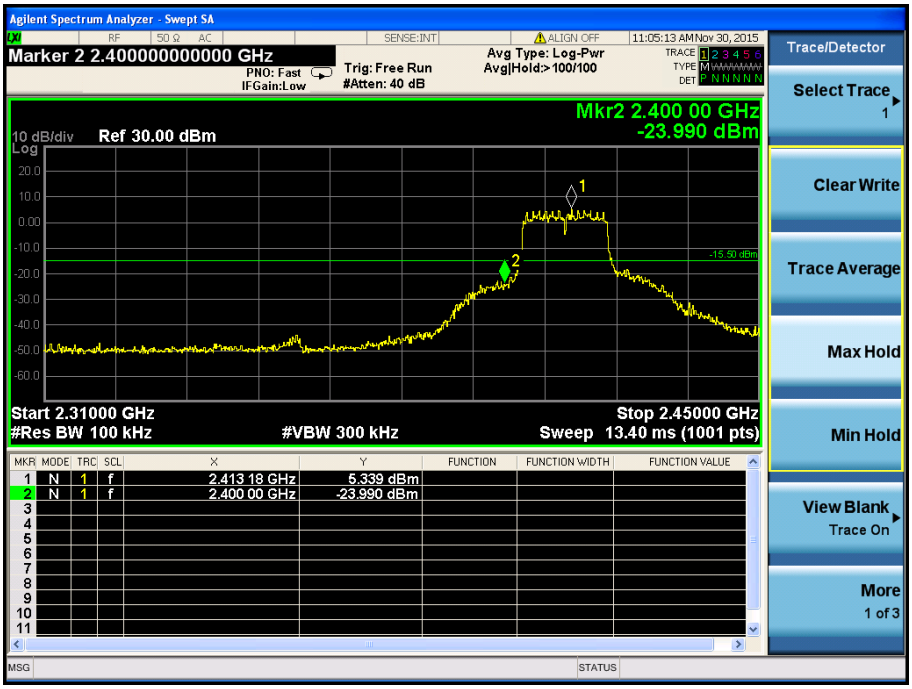


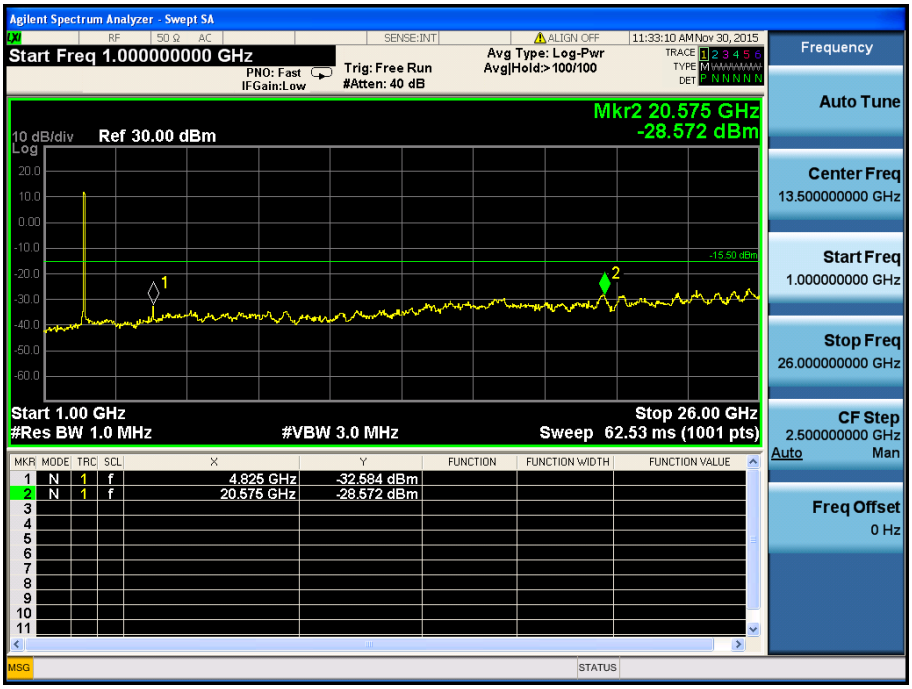


High Channel

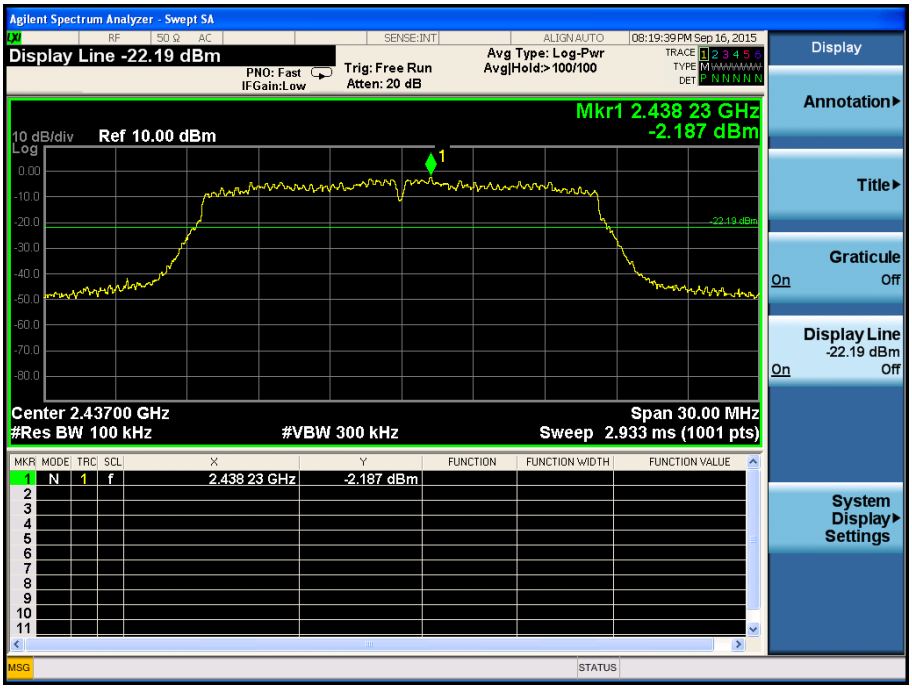


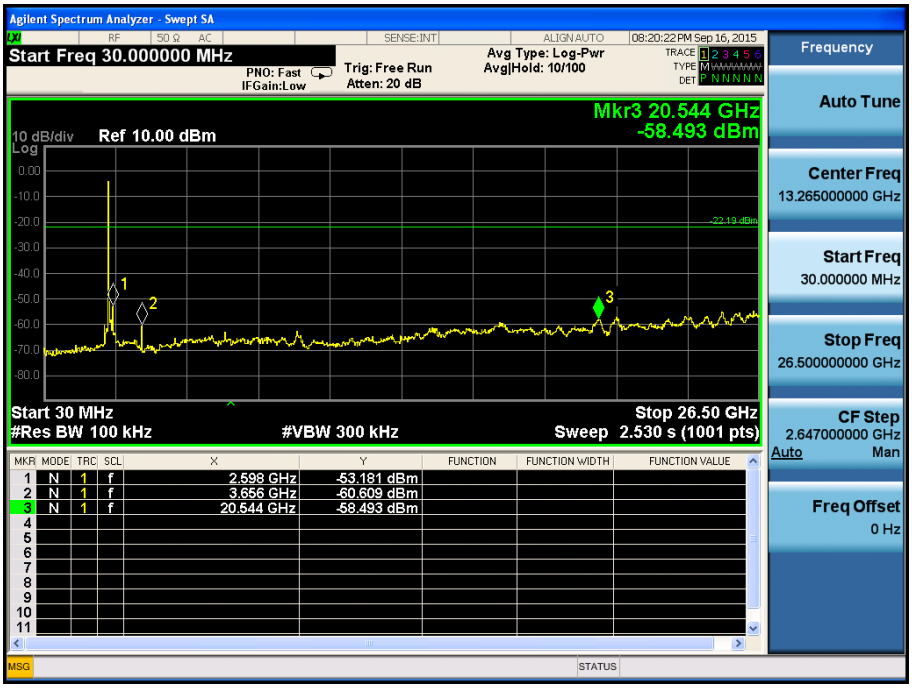
802.11g
Low Channel



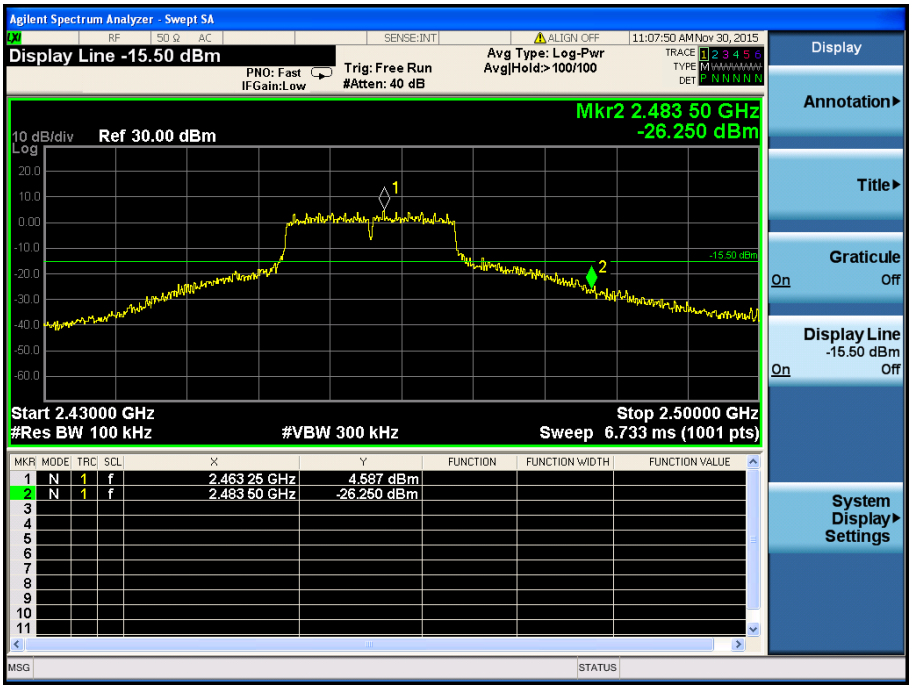


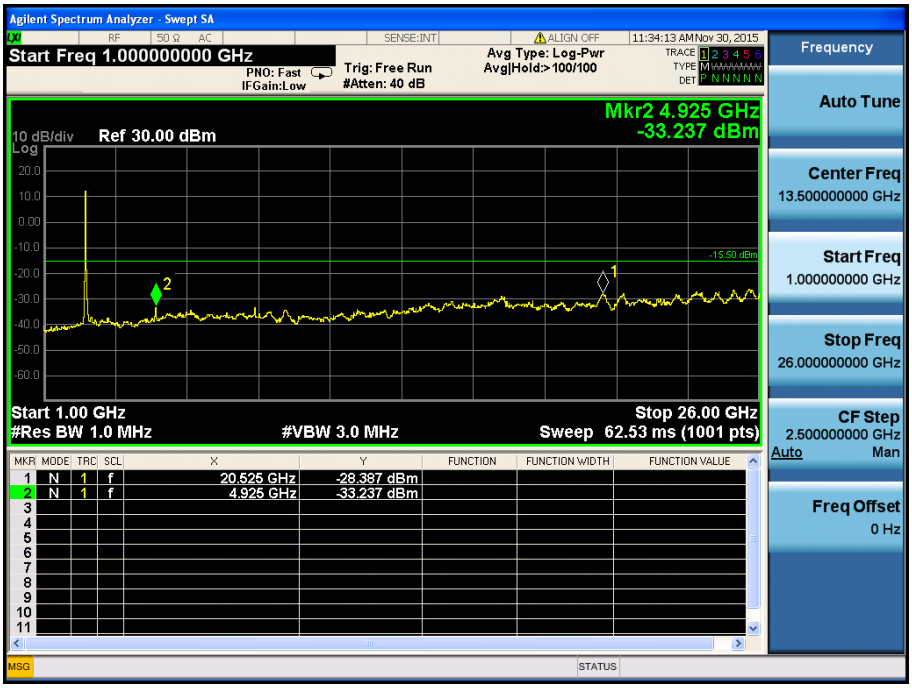
Middle Channel



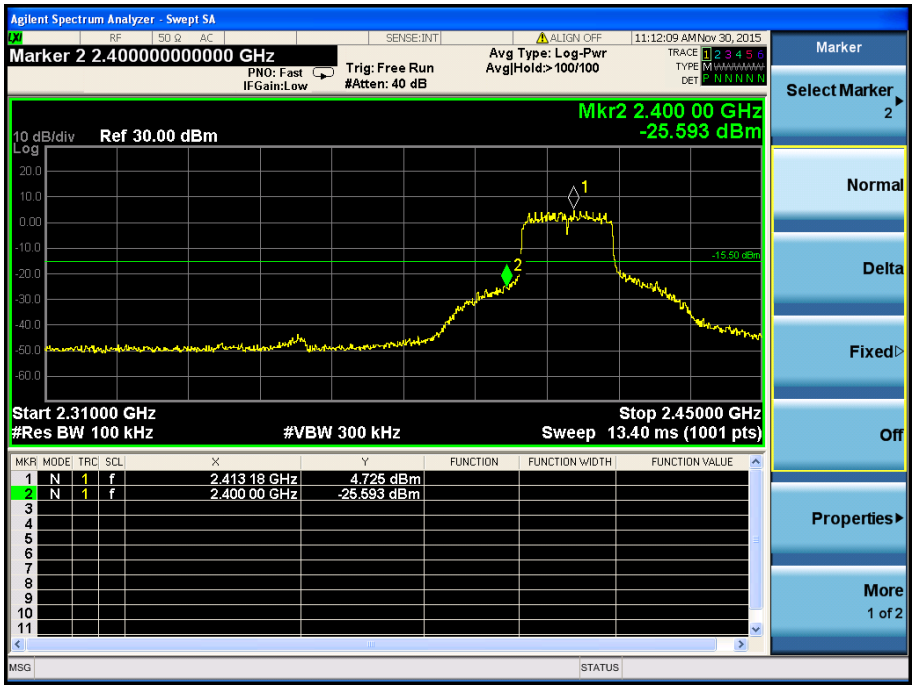


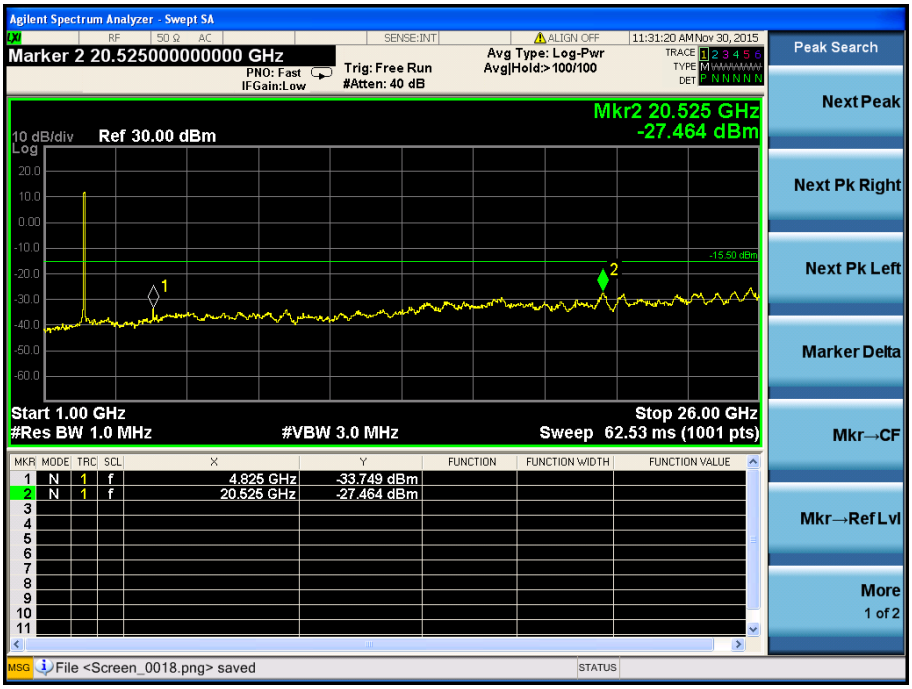
High Channel



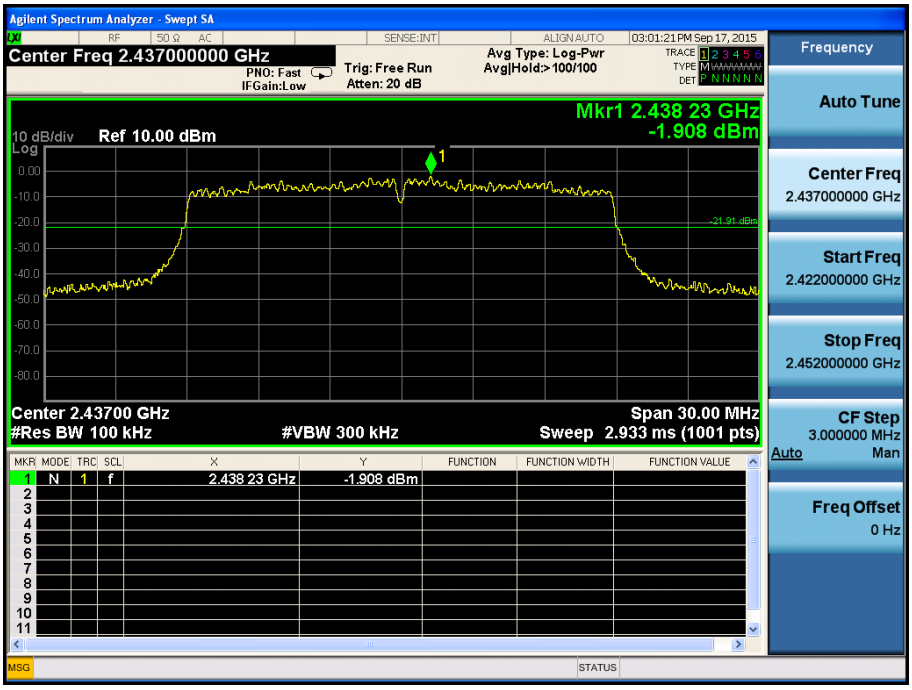


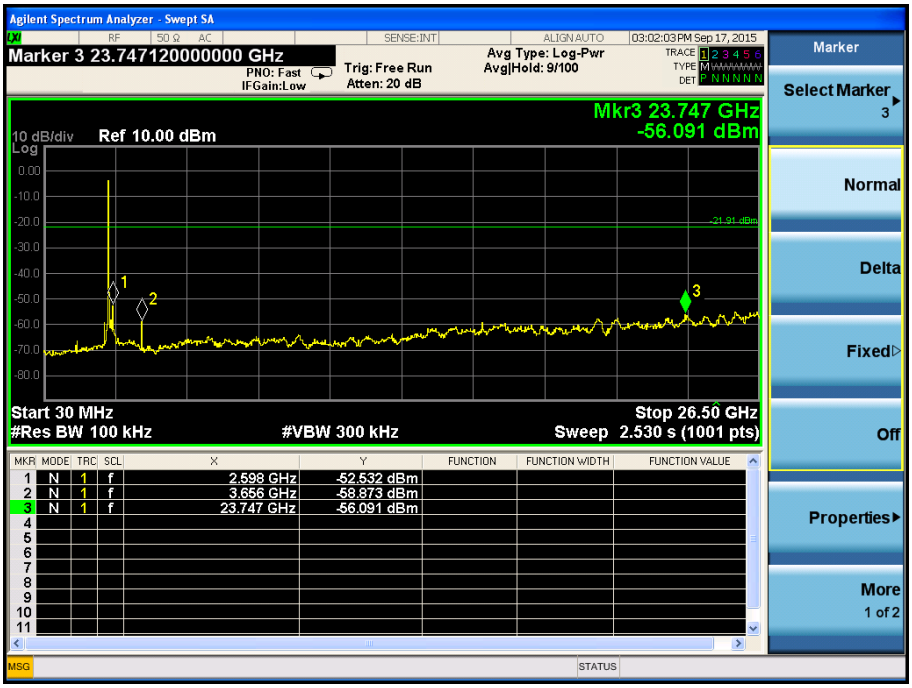
11n-HT20
Low Channel



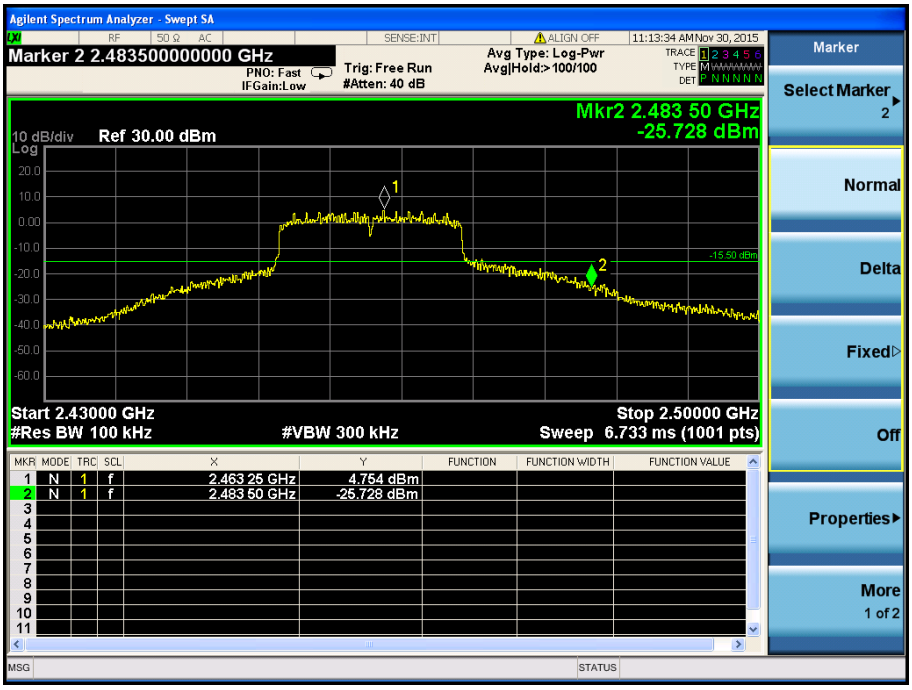


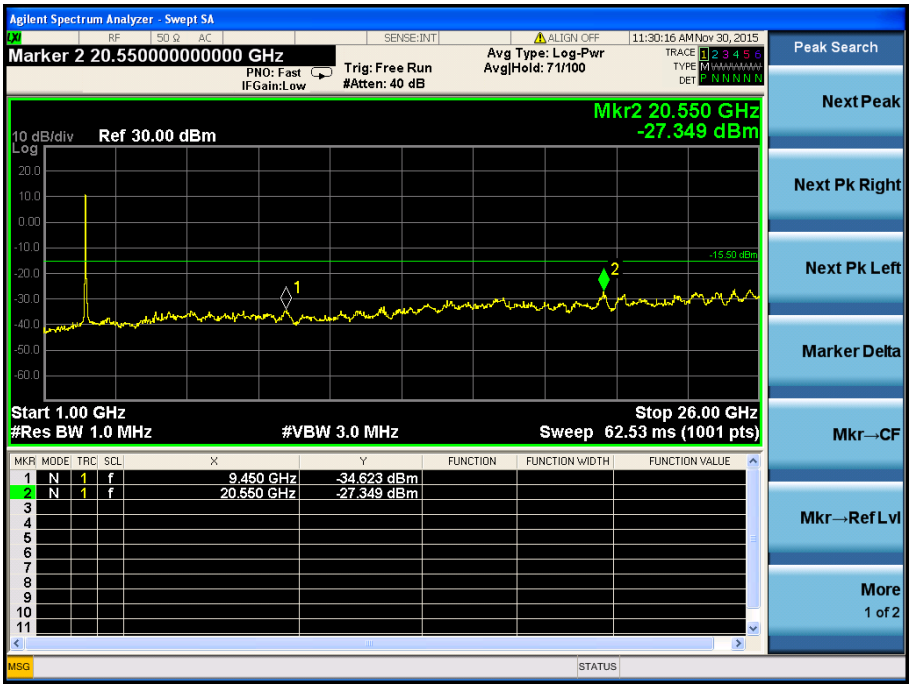
Middle Channel



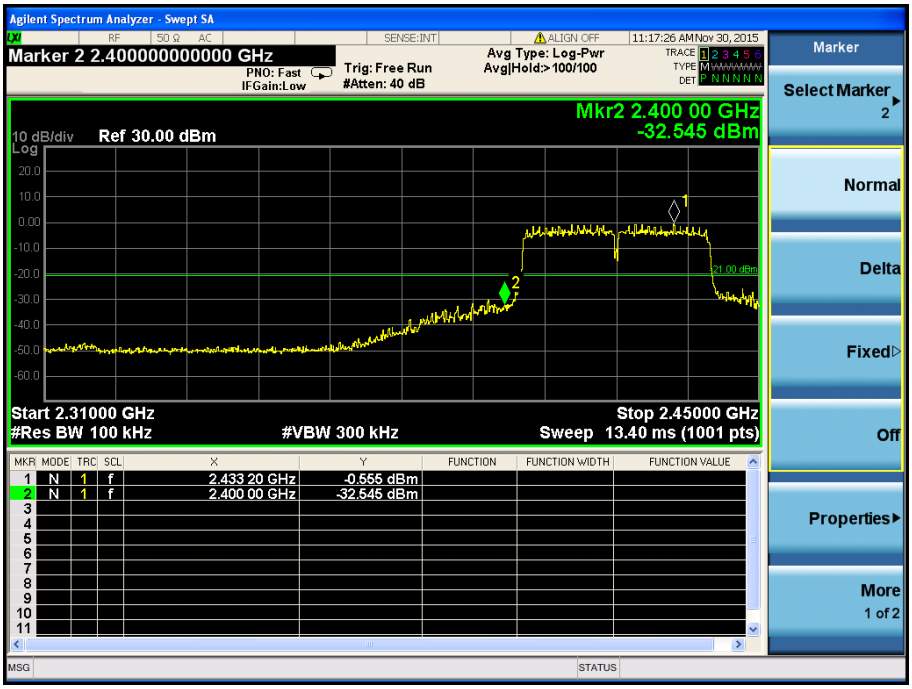


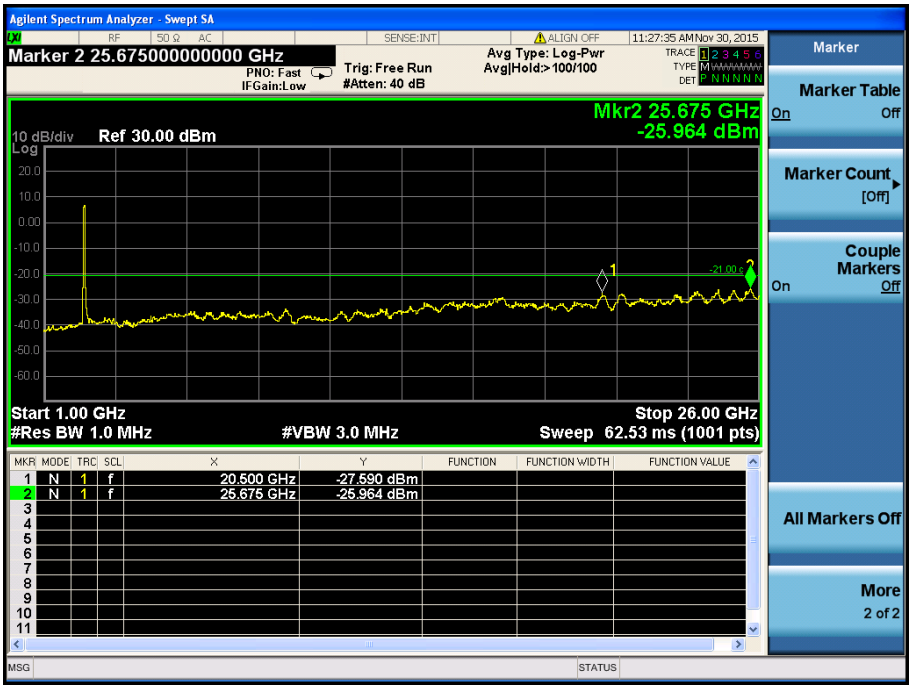
High Channel



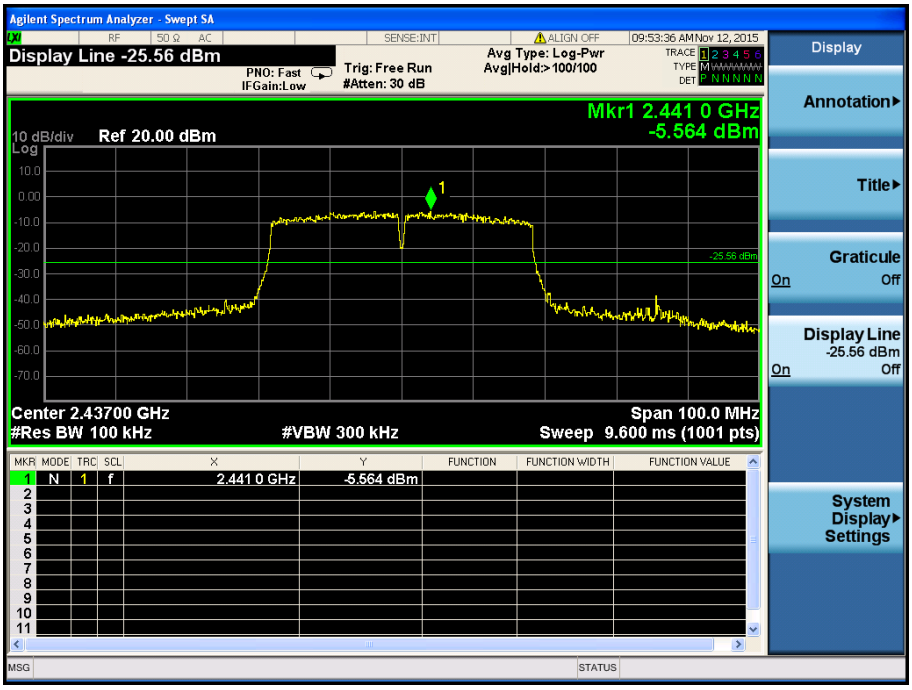


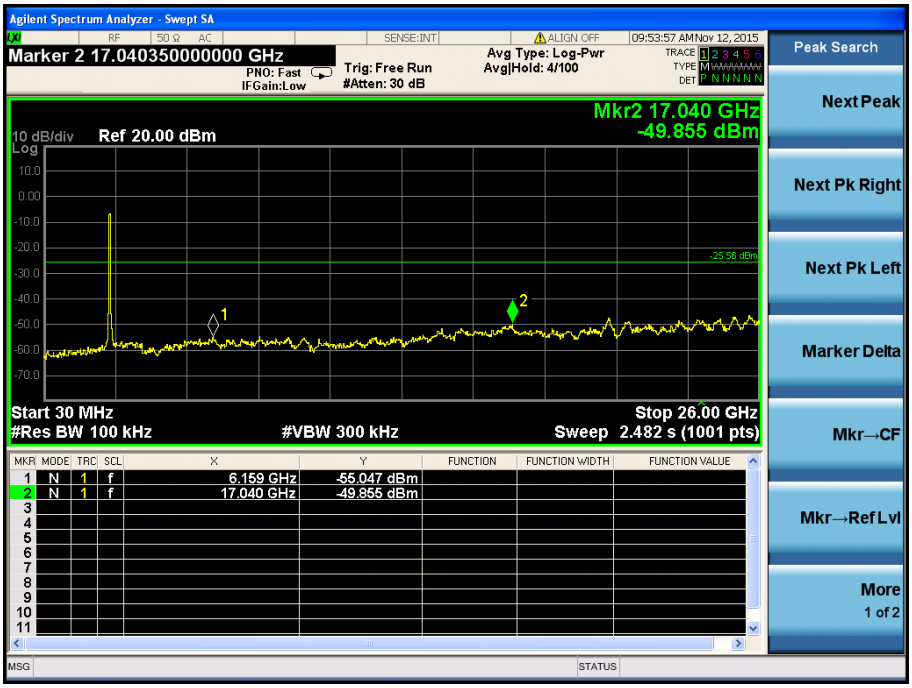
11n-HT40
Low Channel



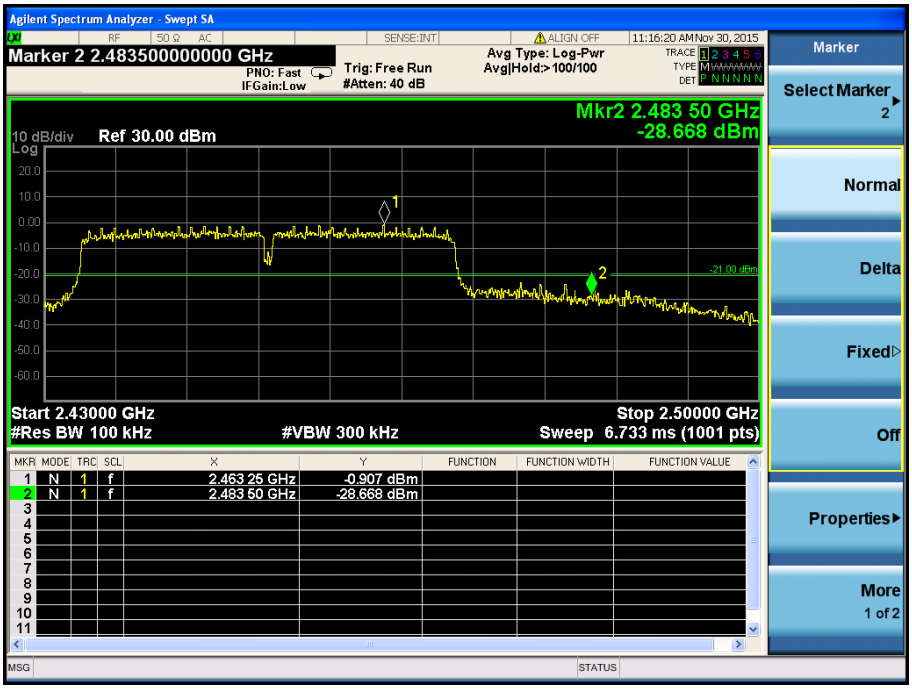


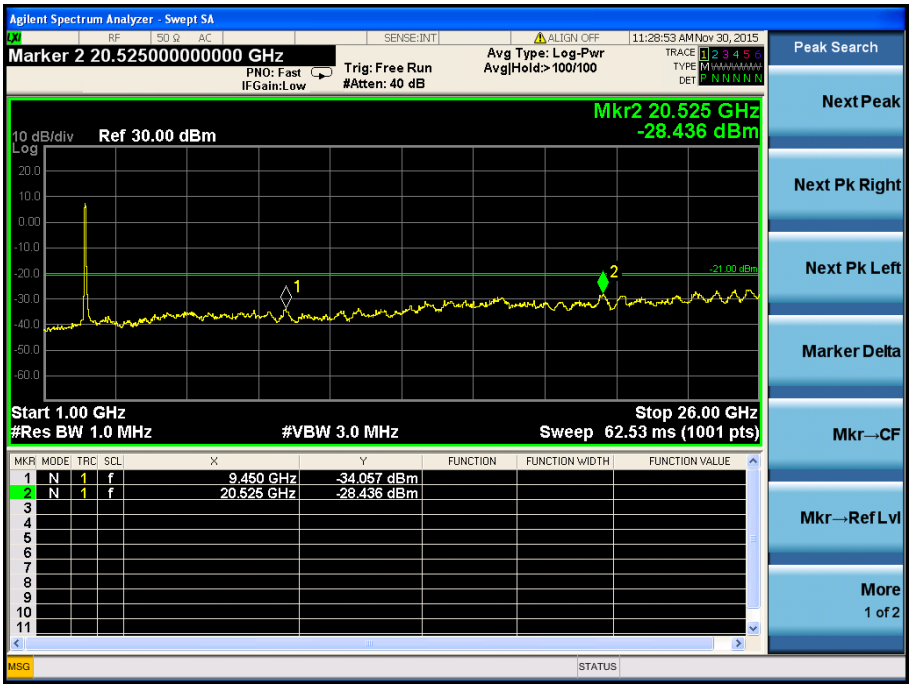
Middle Channel



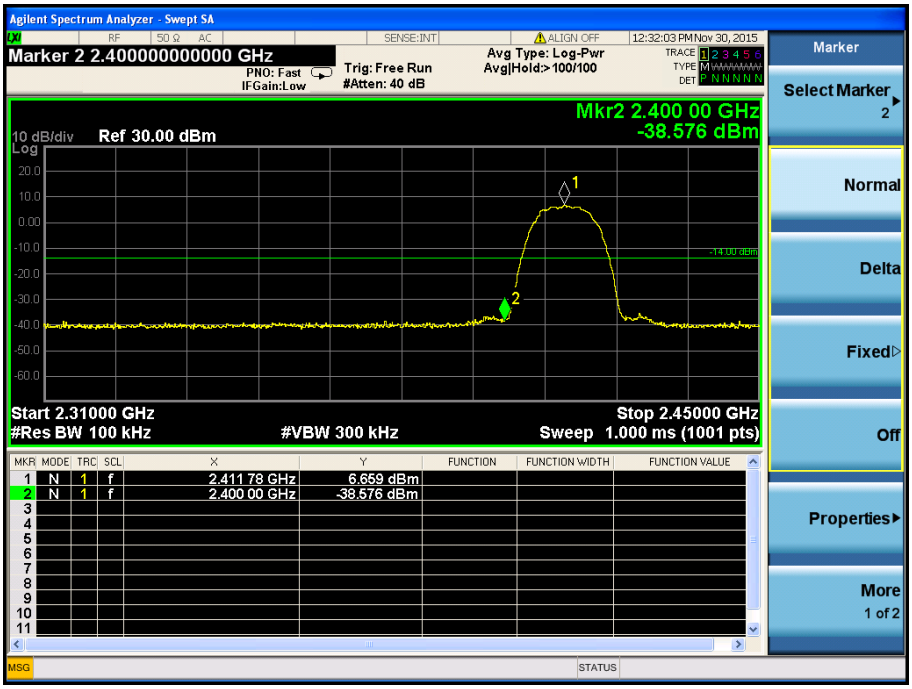


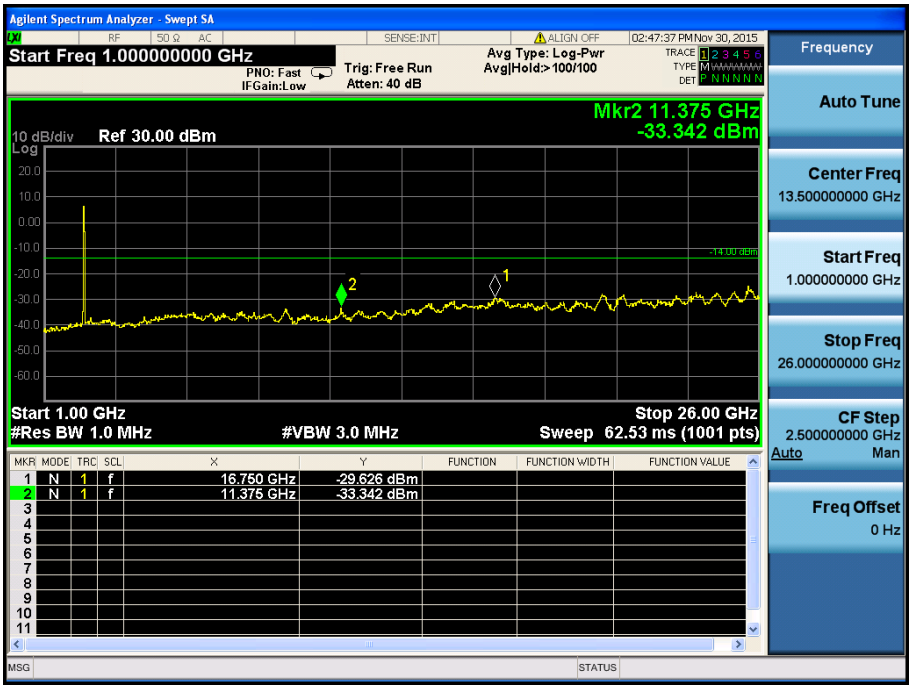
High Channel



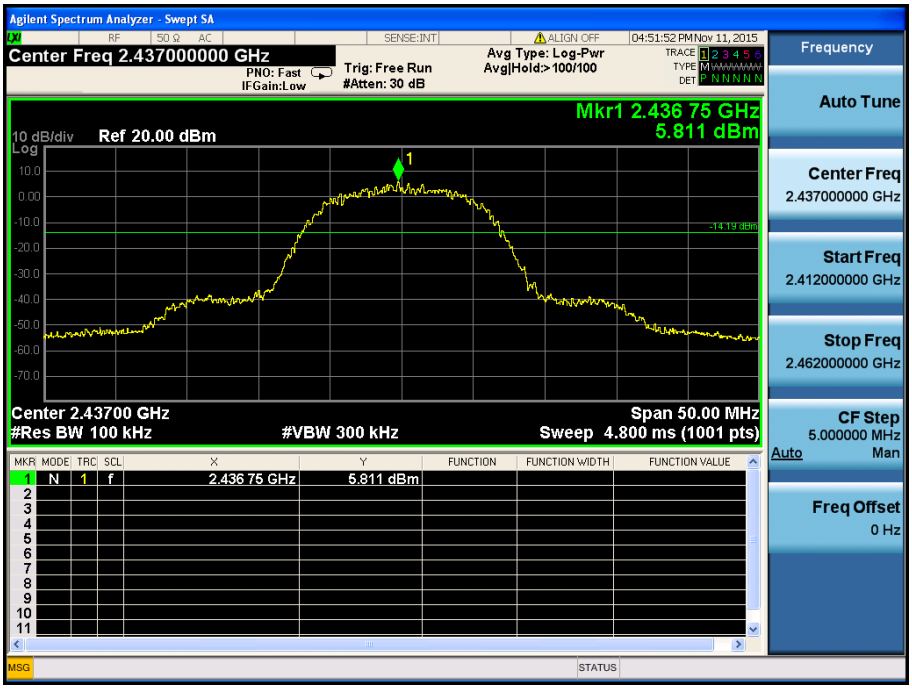


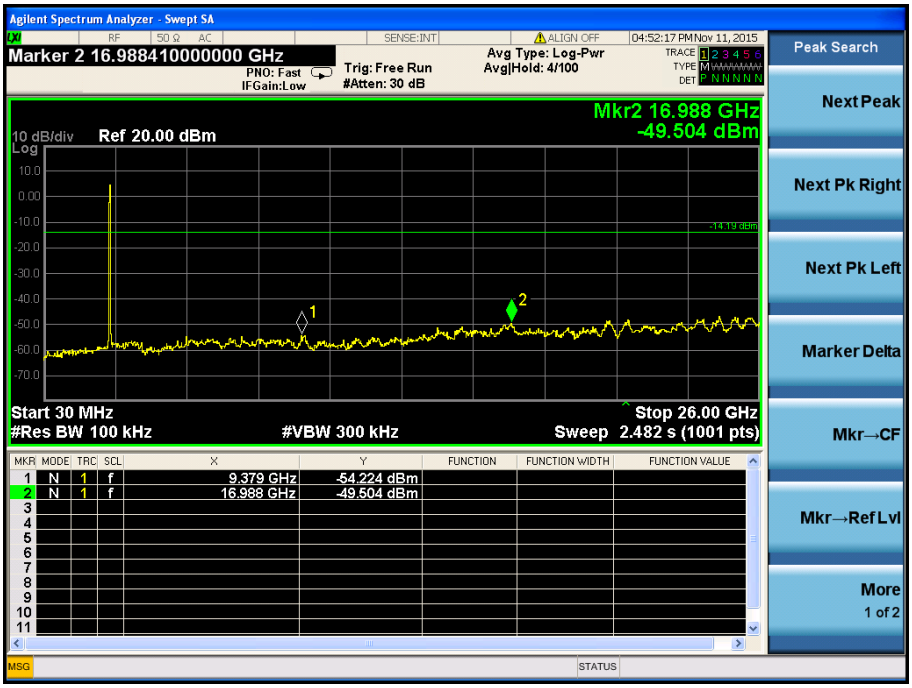
Ant. 2
802.11b
Low Channel



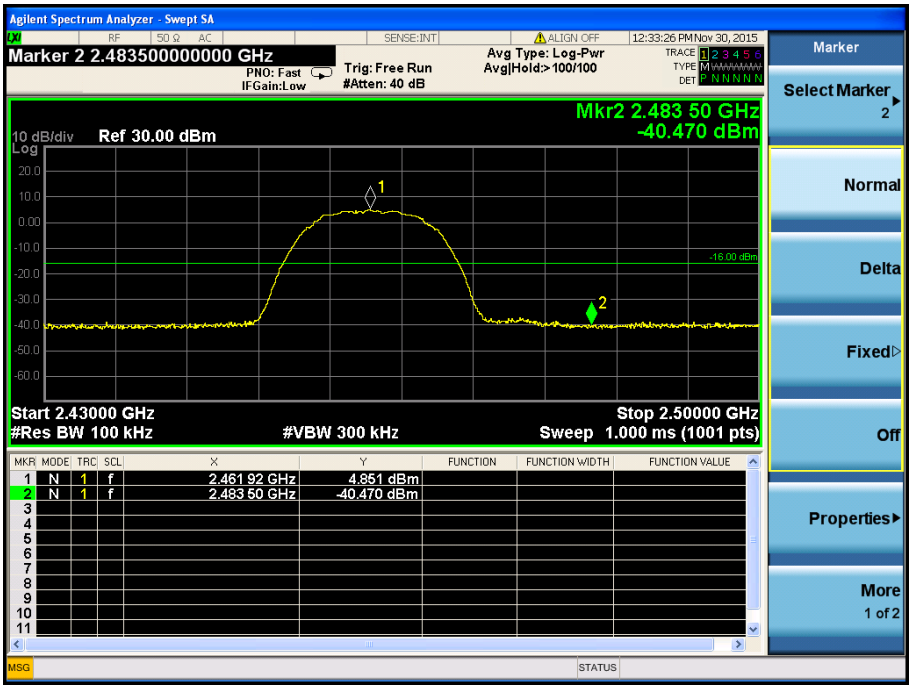


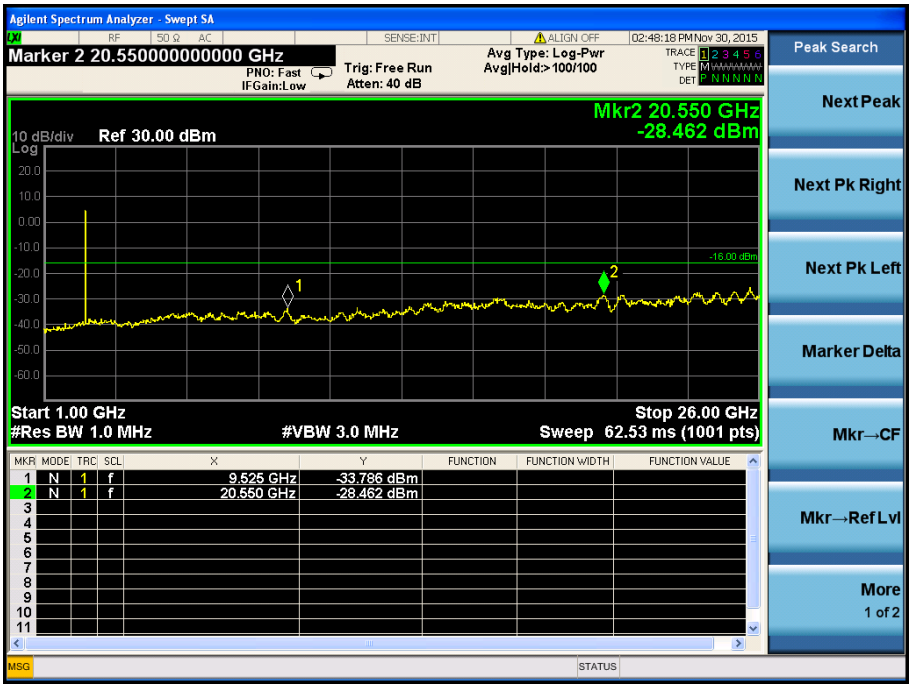
Middle Channel



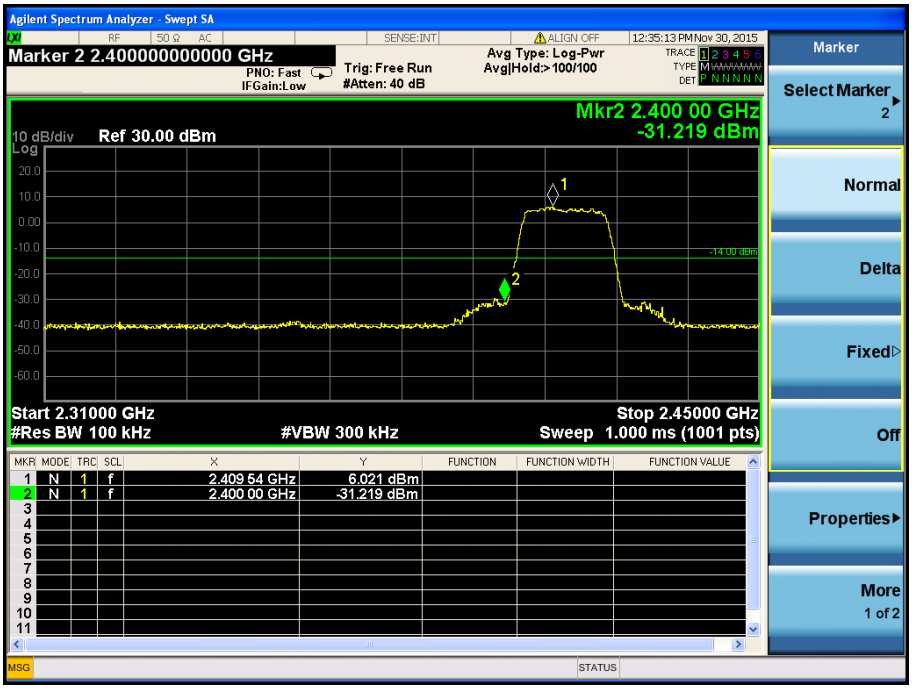


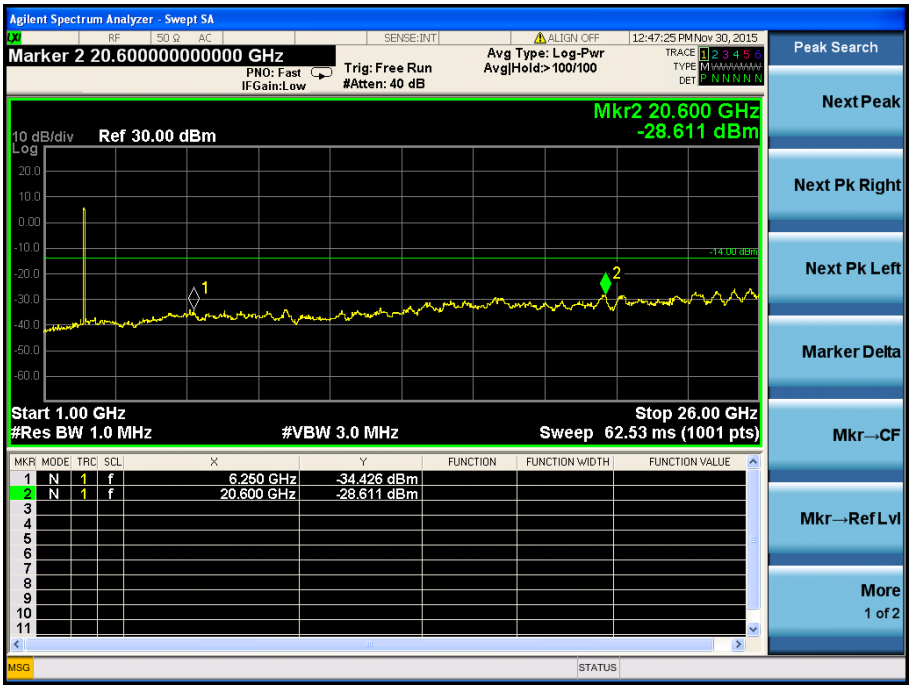
High Channel



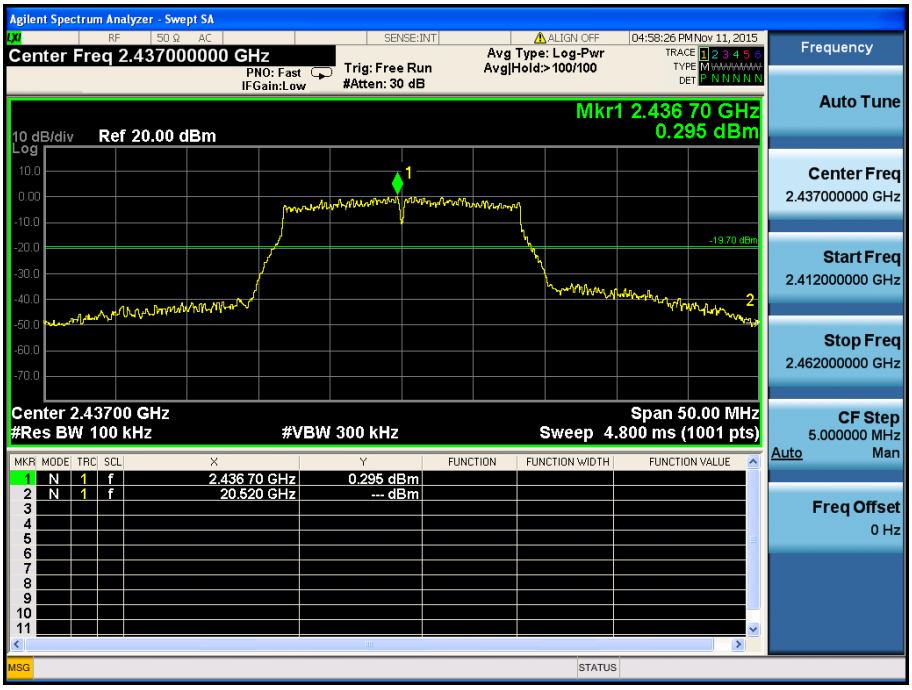


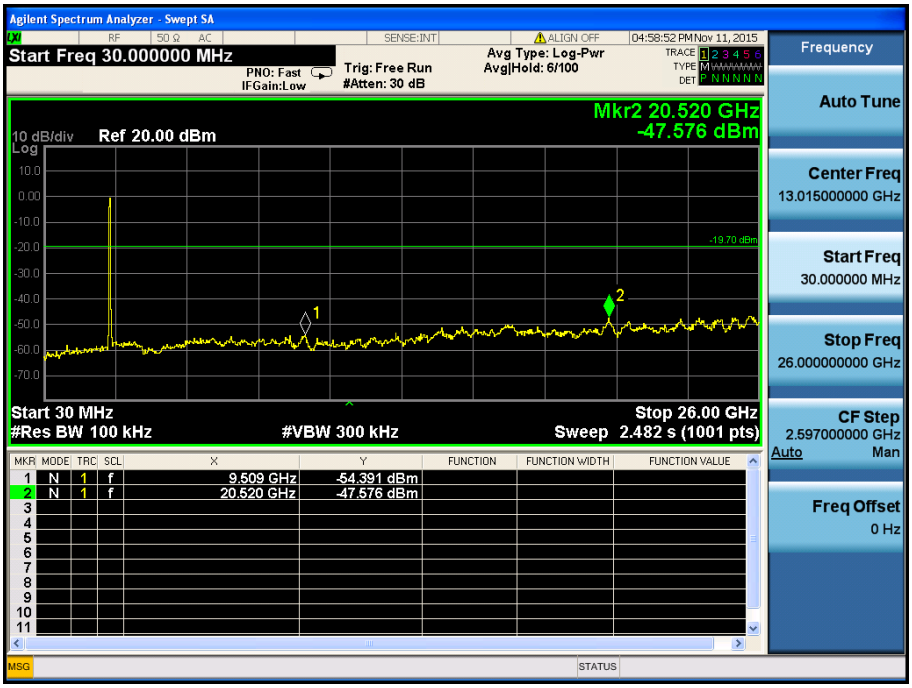
802.11g
Low Channel



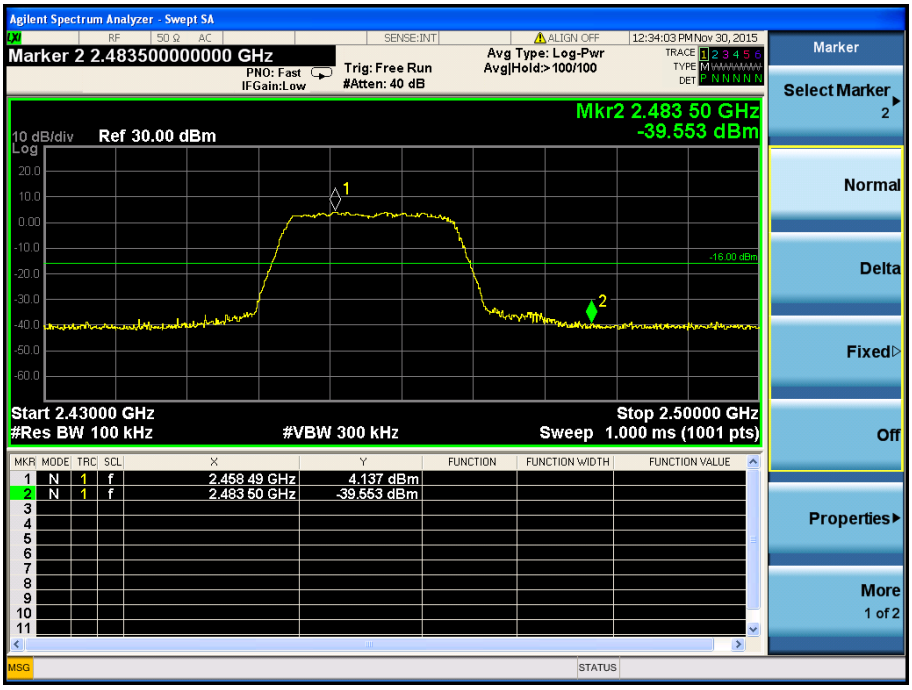


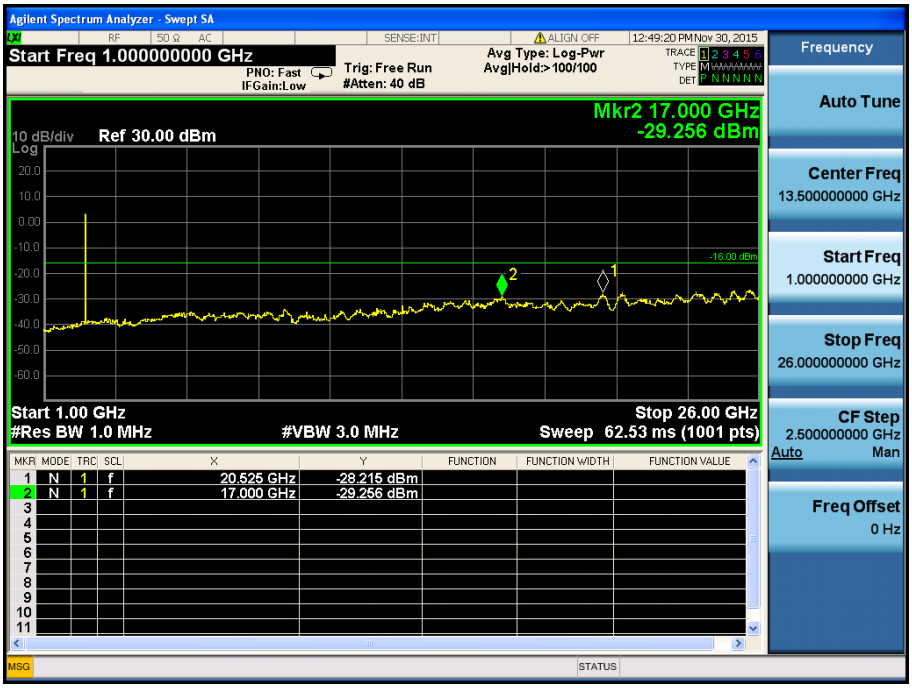
Middle Channel



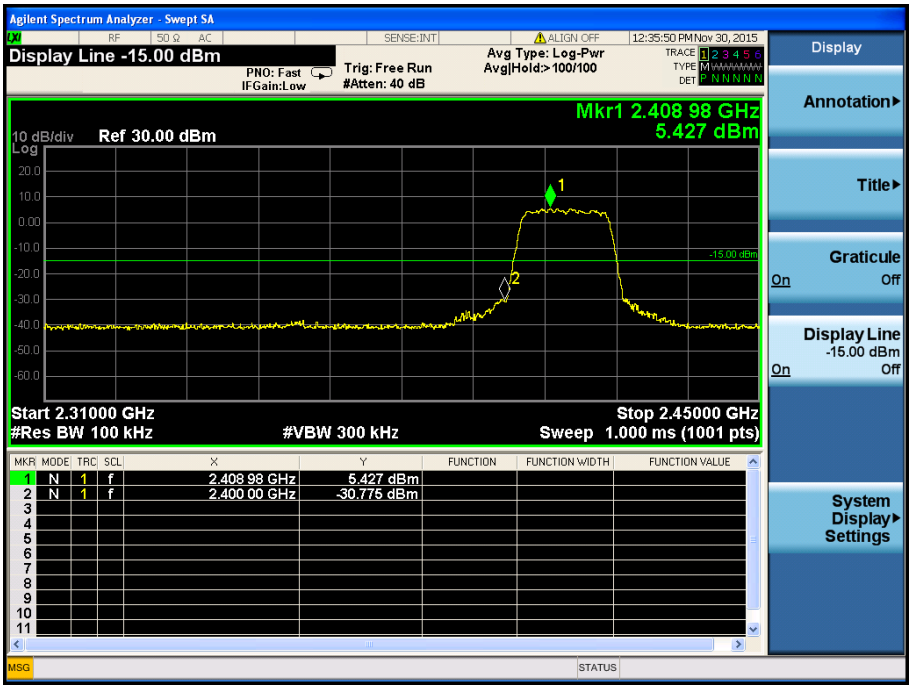


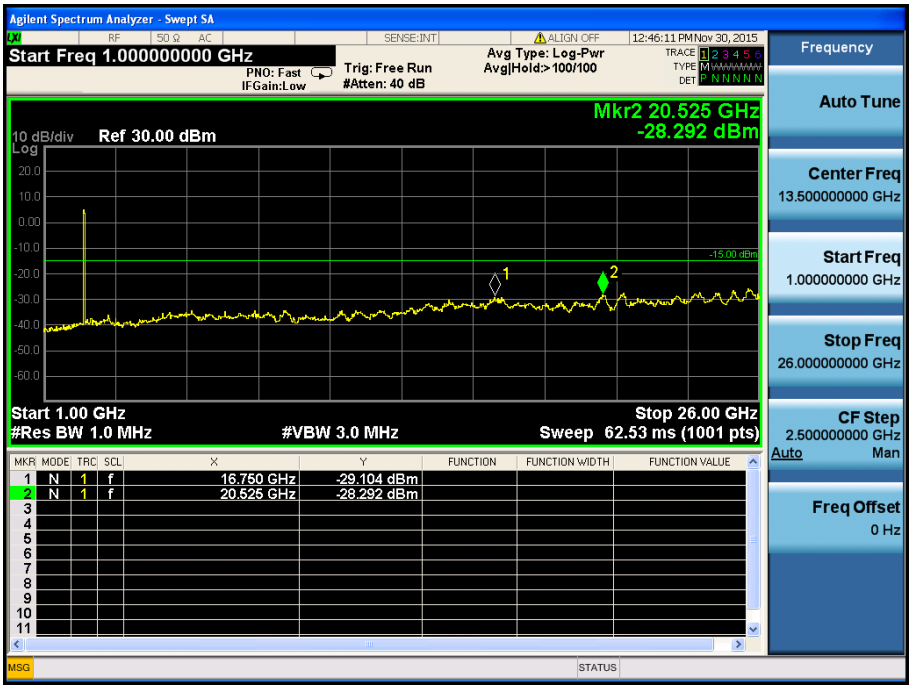
High Channel



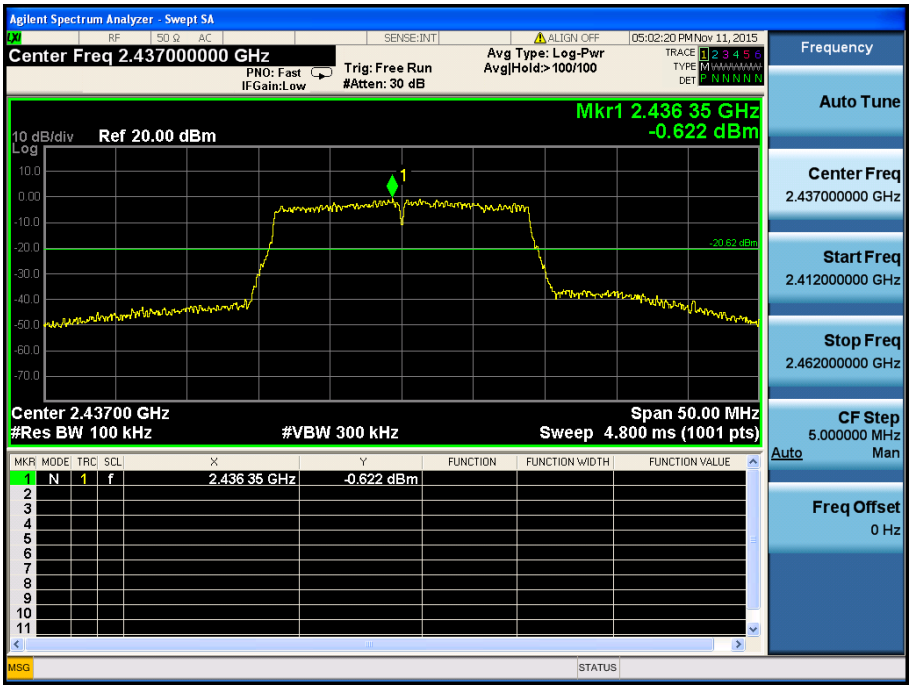


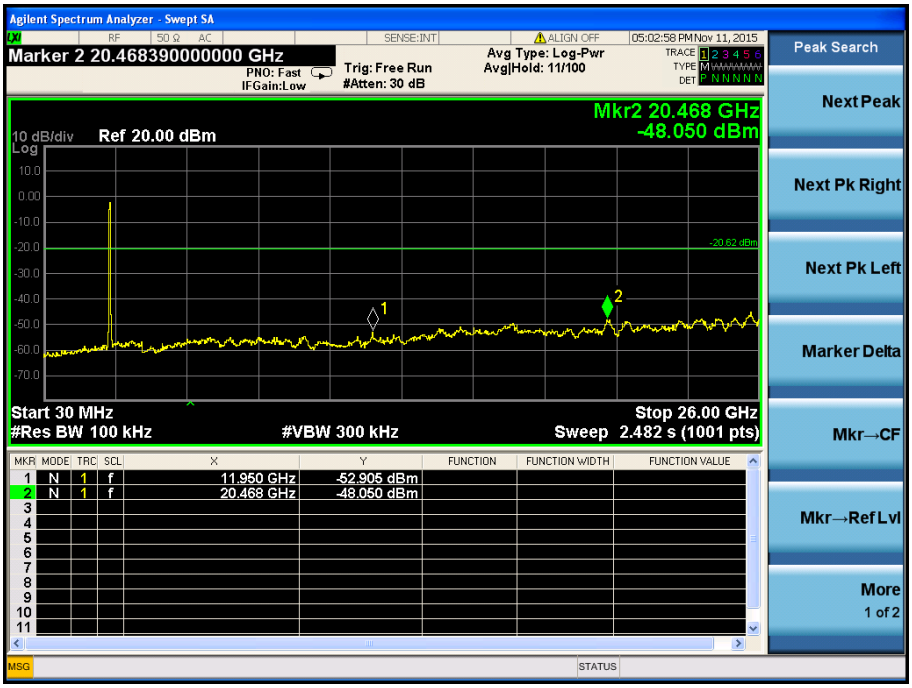
802.11n-HT20
Low Channel



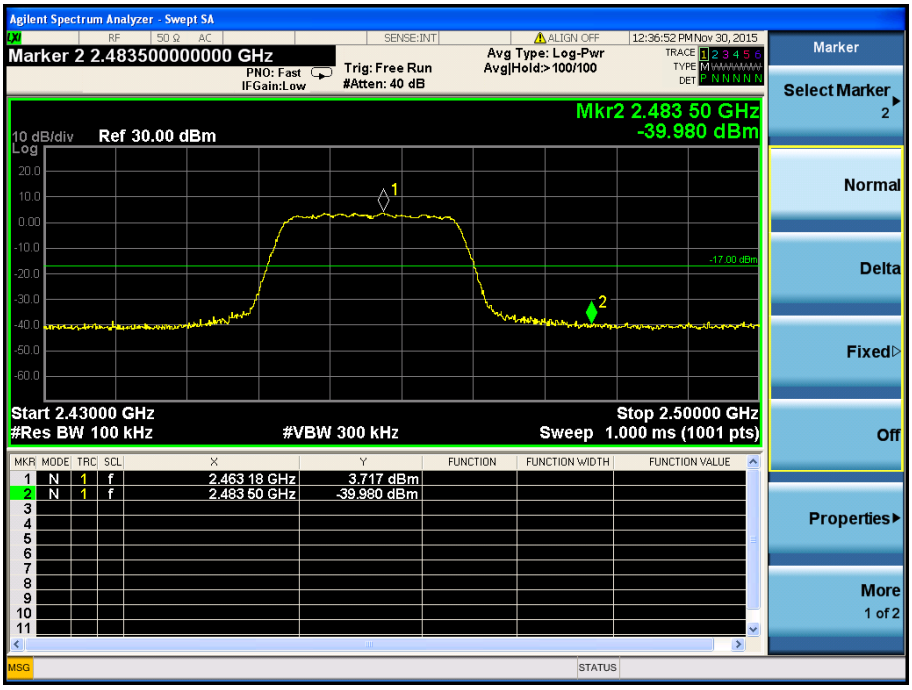


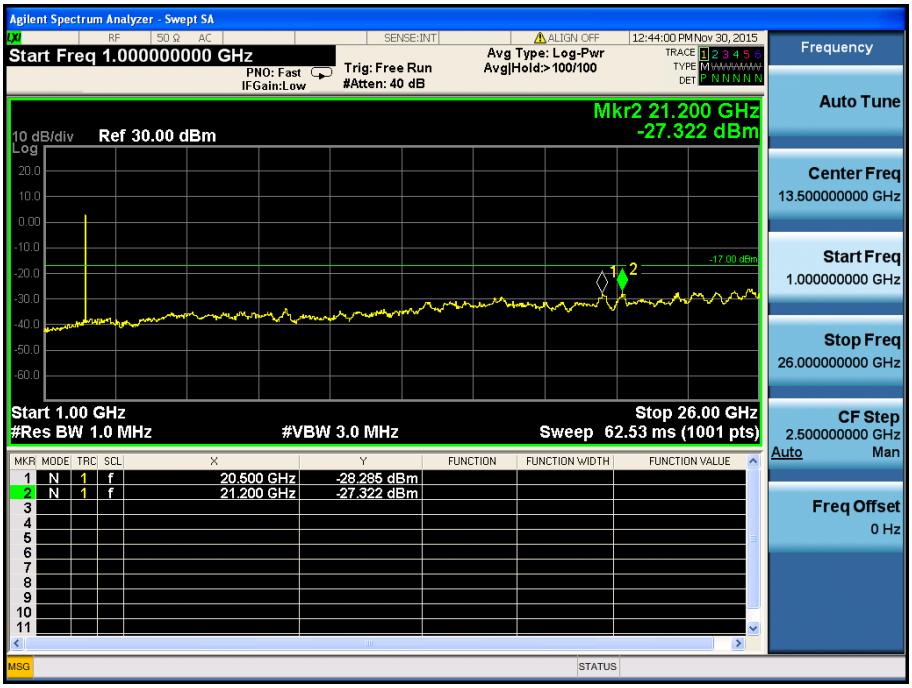
Middle Channel



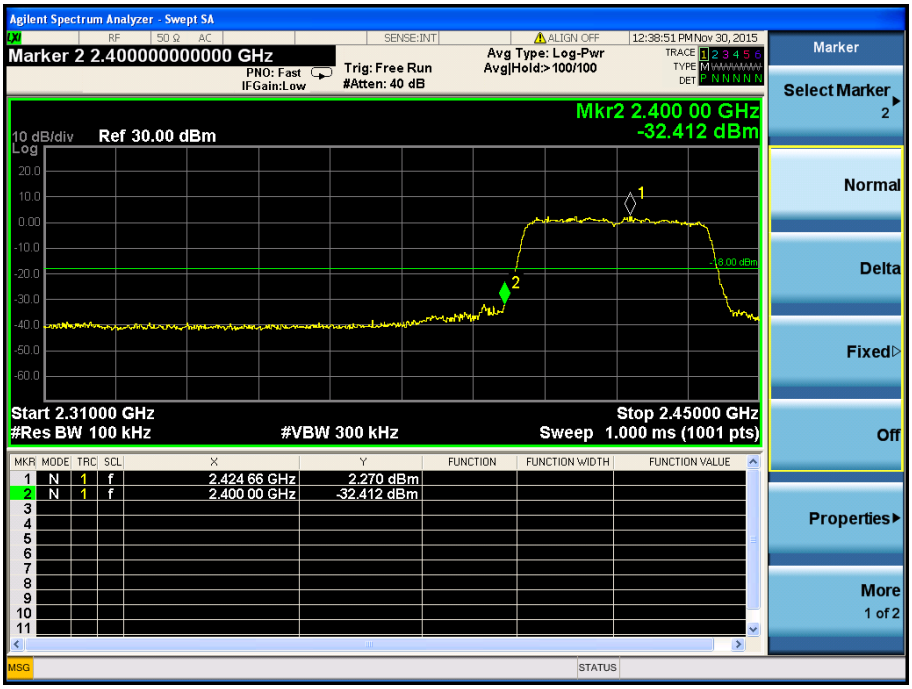


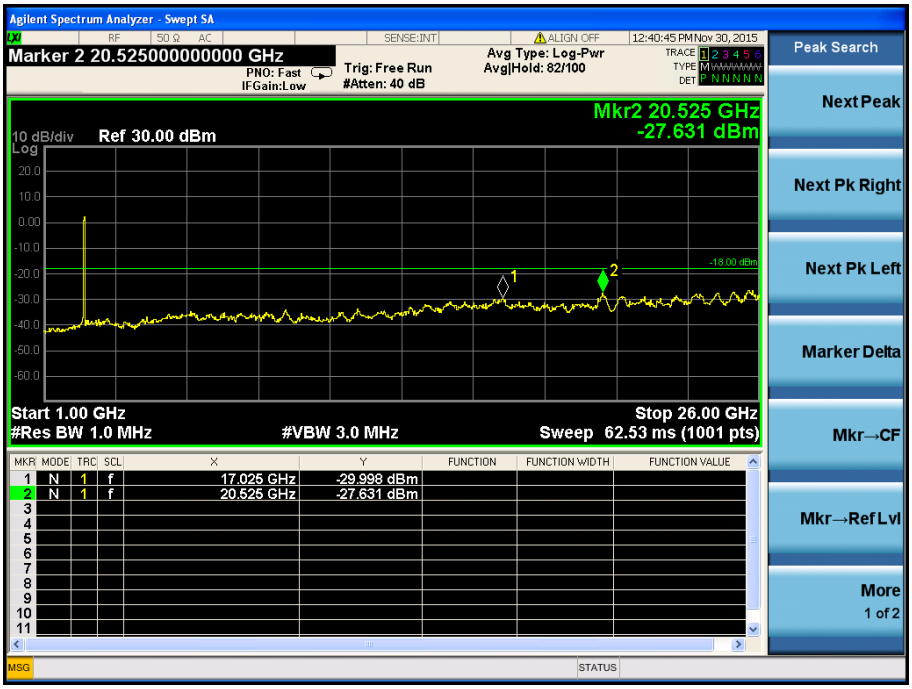
High Channel



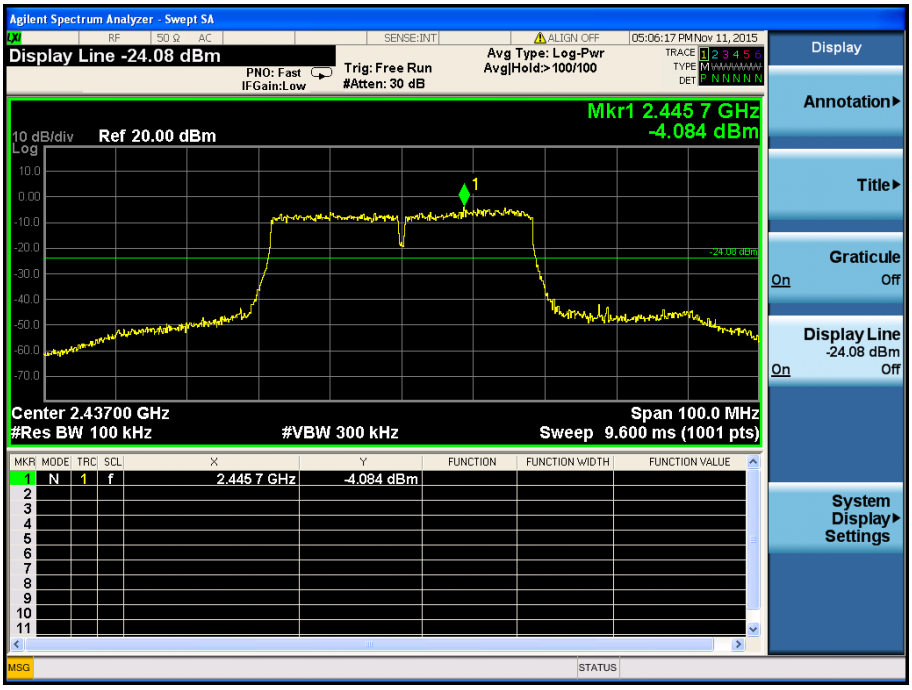


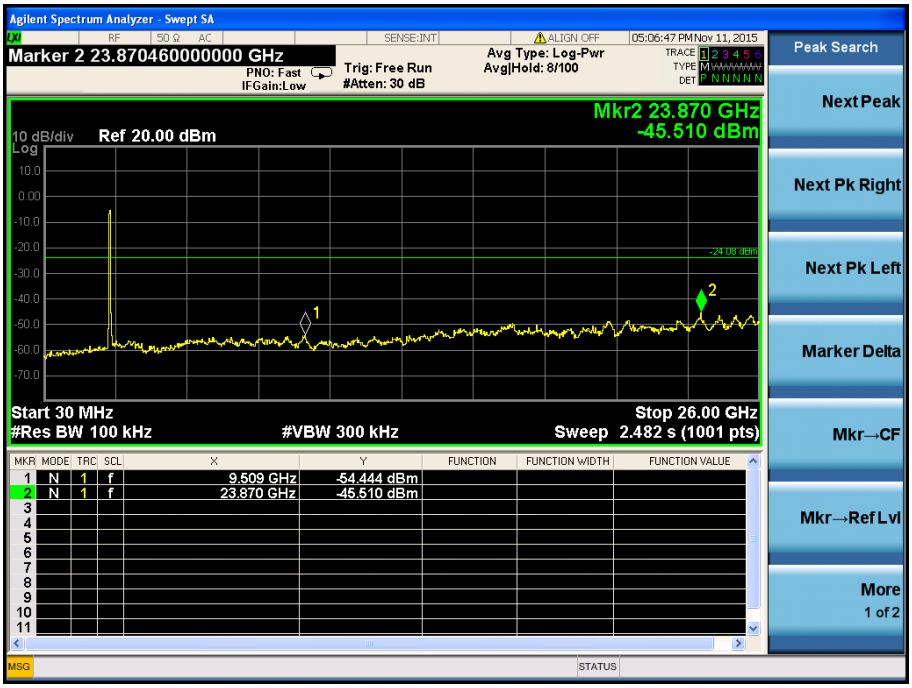
802.11n-HT40
Low Channel



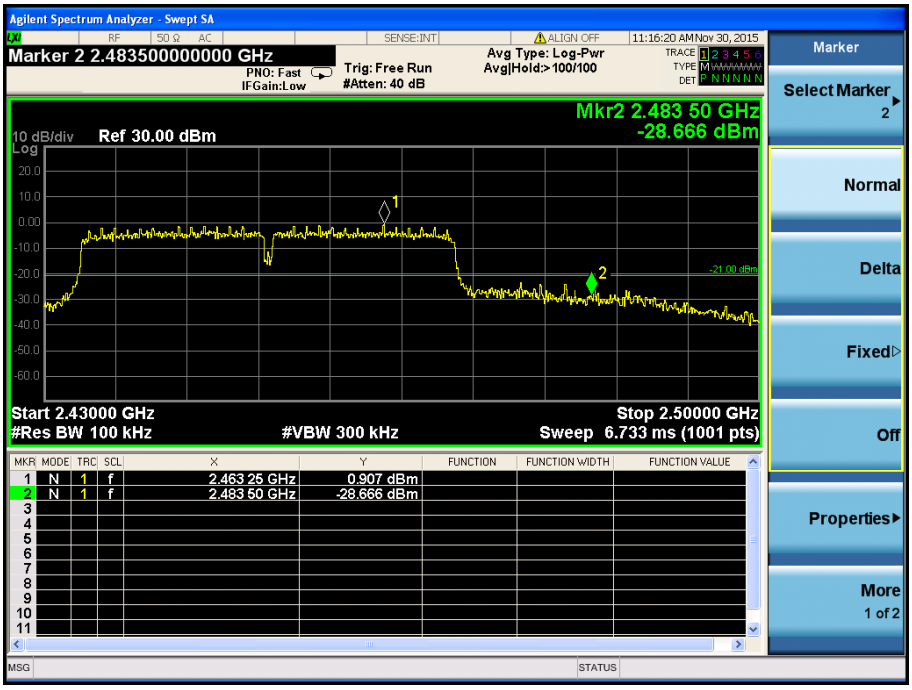


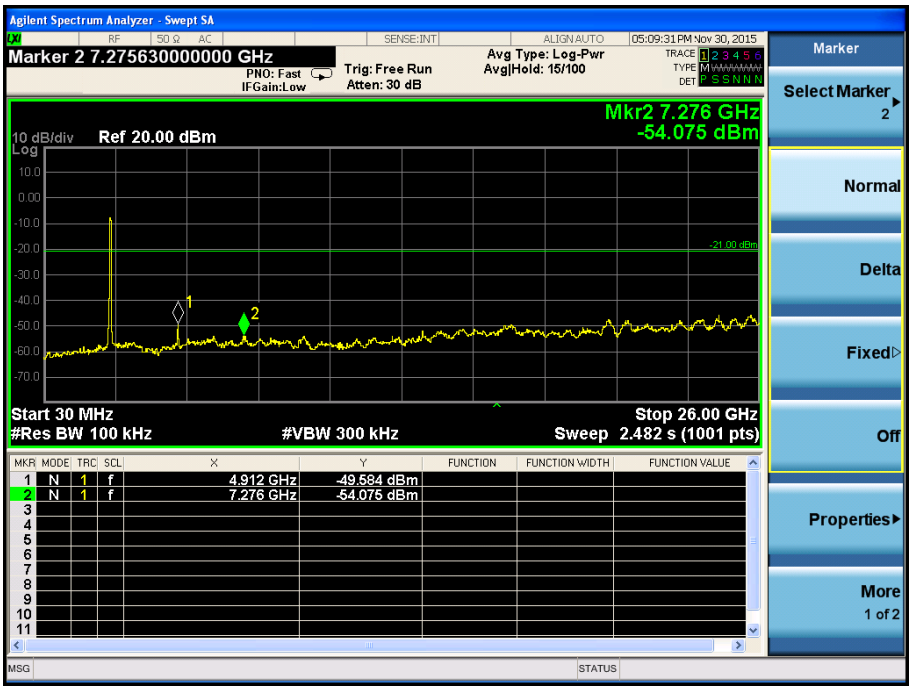
Middle Channel





High Channel



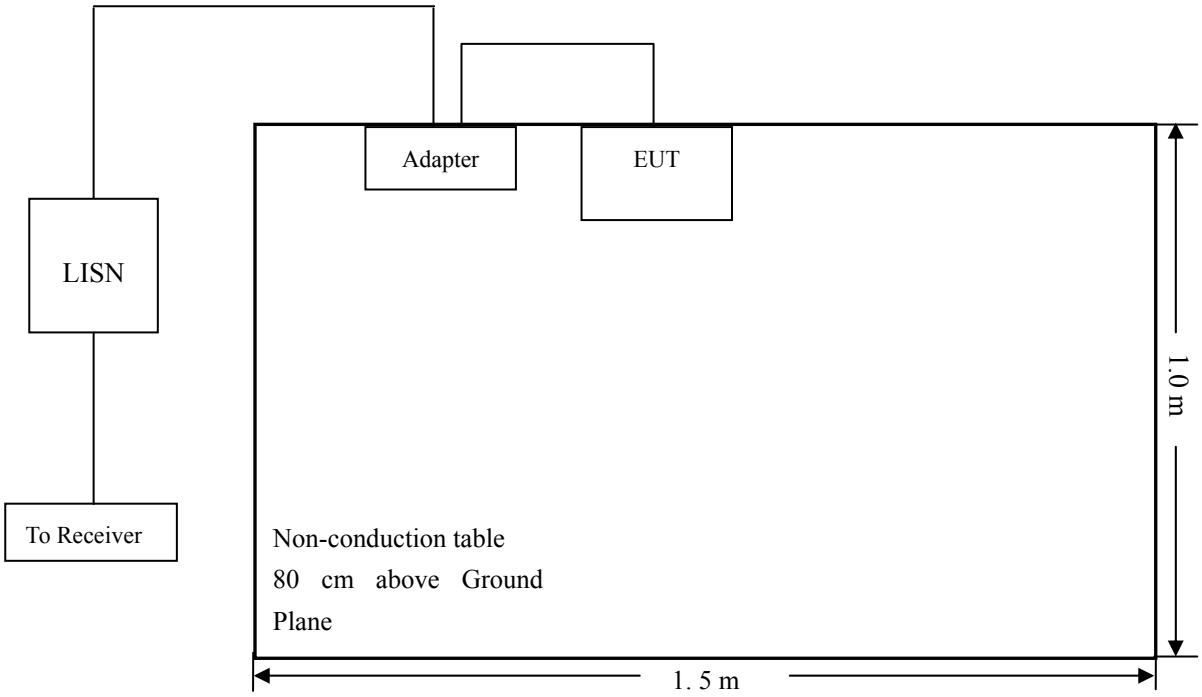


10. Conducted Emissions

10.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.207 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.

10.2 Basic Test Setup Block Diagram



10.3 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

10.4 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency ..... 150 kHz
Stop Frequency..... 30 MHz
Sweep Speed ..... Auto
IF Bandwidth..... 10 kHz
Quasi-Peak Adapter Bandwidth ..... 9 kHz
Quasi-Peak Adapter Mode ..... Normal

10.5 Summary of Test Results/Plots

According to the data in section 10.6, the EUT complied with the FCC Part 15.207 Conducted margin for this device, with the *worst* margin reading of:

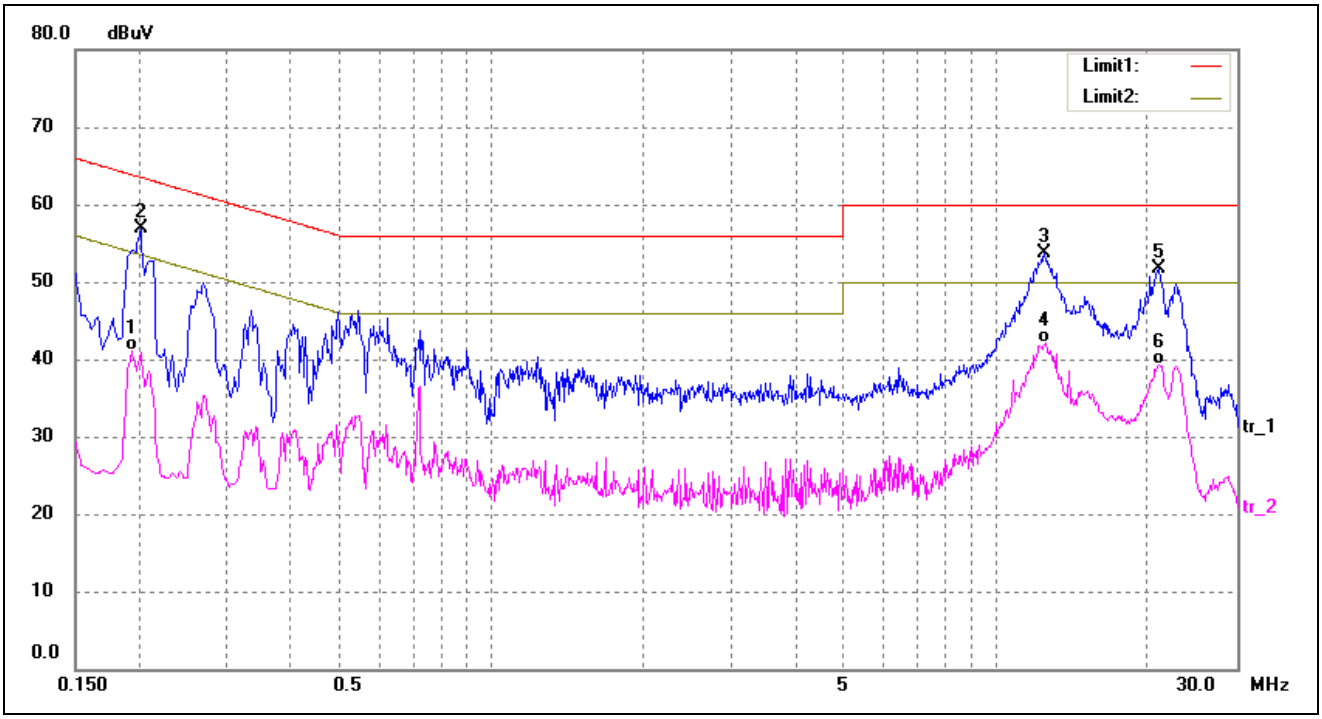
-6.28 dB at 12.4540 MHz in the **Neutral** mode**, Peak** detector, **0.15-30MHz**

10.6 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

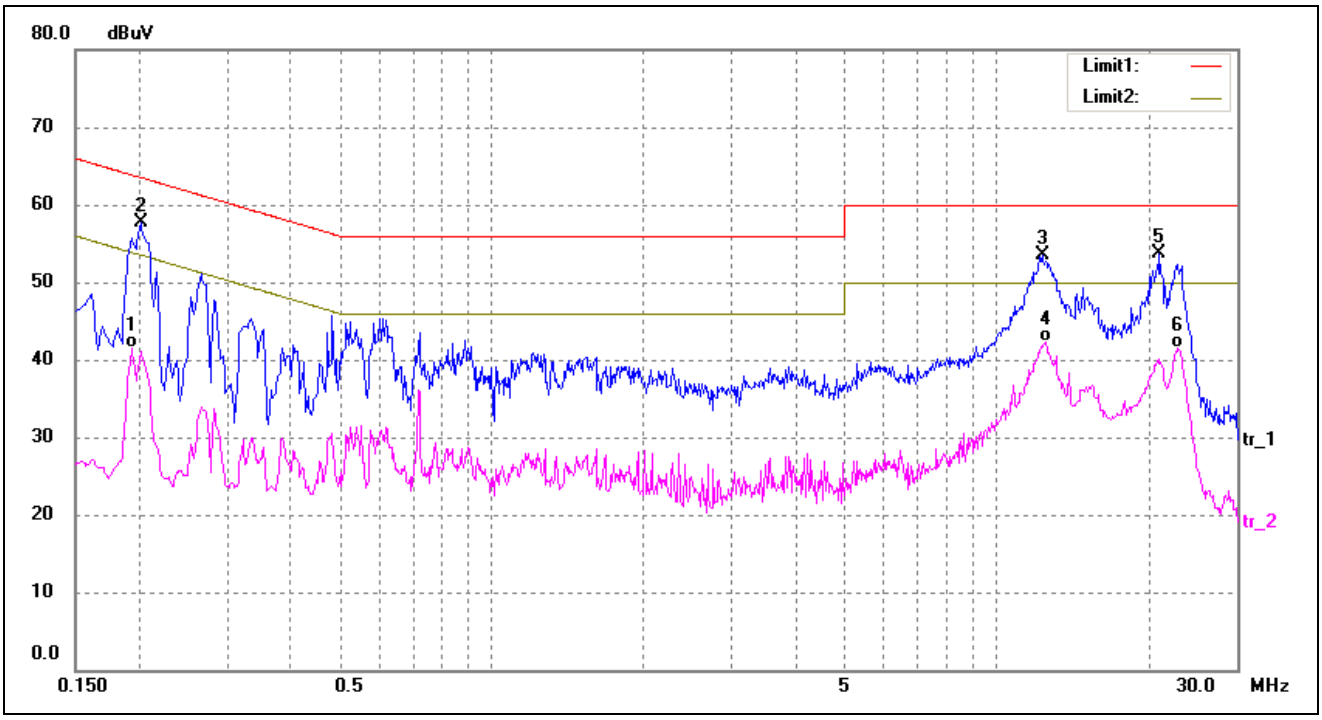
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *Transmitting(Wi-Fi)*
Comment: *AC 120V/60Hz; Adapter DC 12V/3A*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1940	28.61	12.50	41.11	53.86	-12.75	AVG
2	0.2020	44.47	12.50	56.97	63.53	-6.56	peak
3*	12.4540	42.72	11.00	53.72	60.00	-6.28	peak
4	12.5620	31.06	11.00	42.06	50.00	-7.94	AVG
5	21.0540	39.80	12.00	51.80	60.00	-8.20	peak
6	21.0540	27.38	12.00	39.38	50.00	-10.62	AVG

Test Specification: *Live*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1940	28.92	12.50	41.42	53.86	-12.44	AVG
2*	0.2020	45.28	12.50	57.78	63.53	-5.75	peak
3	12.3780	42.41	11.00	53.41	60.00	-6.59	peak
4	12.5500	31.30	11.00	42.30	50.00	-7.70	AVG
5	21.0900	41.65	12.00	53.65	60.00	-6.35	peak
6	22.9180	29.24	12.31	41.55	50.00	-8.45	AVG

******* END OF REPORT *******