

FCC Part 15C (Wi-Fi Portion) Measurement and Test Report

For

Verykool USA Inc

4350 Executive Dr. #100, San Diego

FCC ID: WA6I675

Report Concerns: Original Report	Equipment Type: GSM/GPRS Quad-band Mobile Phone
Model:	<u>i675 & i674</u>
Report No.:	<u>STR12038074I-3</u>
Test Date:	<u>2012-03-08 to 2012-03-22</u>
Issue Date:	<u>2012-04-05</u>
Tested By:	<u>Seven Song / Engineer</u> <i>Seven Song</i>
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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Verykool USA Inc
Address of applicant: 350 Executive Dr. #100, San Diego

Manufacturer: Verykool Hong Kong Limited
Address of manufacturer: SUITE 2311 SHELL TOWER TIMES SQUARE 1
MATHESON ST CAUSEWAY BAY HK

General Description of E.U.T

Items	Description
EUT Description:	GSM/GPRS Quad-band Mobile Phone
Trade Name:	Verykool
Model No.:	i675 & i674
Rated Voltage:	Battery DC 3.7V, Adapter DC USB 5V
RF Output Power(Conducted)	For 802.11b: 15.25dBm For 802.11g: 12.88dBm For 802.11n-HT20: 11.79dBm For 802.11n-HT40: 11.36dBm
Antenna Gain:	2 dBi
Frequency range:	For 802.11b/g/n-HT20: 2412MHz~2462MHz For 802.11n-HT40: 2422MHz~2452MHz
Number of channels:	For 802.11b/g/n-HT20: 11 For 802.11n-HT40: 7
Channel Separation:	5MHz
Type of Antenna:	Integral Antenna
Battery:	M/N: 414455Ar; DC 3.7V/1100mAh
Power Adapter:	M/N: ASUC30a-050050; Input: 100-240V ~ 50/60Hz, 0.3A

The test data is gathered from a production sample, provided by the manufacturer. Test is carried out with i675 since the other model listed in this report is only different SIM socket without others circuit and electronic construction changed, declared by the manufacture.

1.2 Test Standards

The following report is prepared on behalf of the Verykool USA Inc 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 C63.4-2003, 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.

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted with Low Channel, Middle Channel and High Channel, accordingly in reference to the Operating Instructions.

1.4 Test Facility

- **FCC – Registration No.: 994117**

SEM.Test Compliance Services 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 994117.

- **Industry Canada (IC) Registration No.: 7673A**

The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

- **CNAS Registration No.: L4062**

Shenzhen SEM.Test Electronics Service 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 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C (518101)

1.5 EUT Exercise Software

The EUT exercise program used during the testing was designed to exercise the system components.

1.6 Accessories Equipment List and Details

Description	Manufacturer	Model	Serial Number
Notebook	SAMSUNG	NP-R20	/

1.7 EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.2	Shielded	Without Core
Earphone Cable	1.6	Unshielded	Without Core

2. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§ 15.203; § 15.247(c)(1)(i)	Antenna Requirement	Compliant
§ 15.207	Conducted Emission	Compliant
§ 15.247(e)	Power Spectral Density	Compliant
§ 15.247(a)(2)	6 dB Bandwidth	Compliant
§ 15.247(b)(3)	Power Output	Compliant
§ 15.209(a)(d)	Radiated Emission	Compliant
§ 15.247(d)	Band edge	Compliant

3. §15.203 - ANTENNA REQUIREMENT

3.1 Standard Applicable

According to FCC 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.

3.2 Test Result

This product has a integral antenna, fulfill the requirement of this section.

4. POWER SPECTRAL DENSITY

4.1 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.

4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2011-12-20	2012-12-19
Attenuator	ATTEN	ATS100-4-20	/	2011-12-20	2012-12-19

Statement of Traceability: All calibrations have been performed per the NVLAP requirements traceable to the NIST.

4.3 Test Procedure

1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set center frequency of spectrum analyzer = operating frequency.
3. Set the spectrum analyzer as RBW, VBW=3 KHz, Span = 20MHz.
4. Repeat above procedures until all frequency measured was complete.

4.4 Environmental Conditions

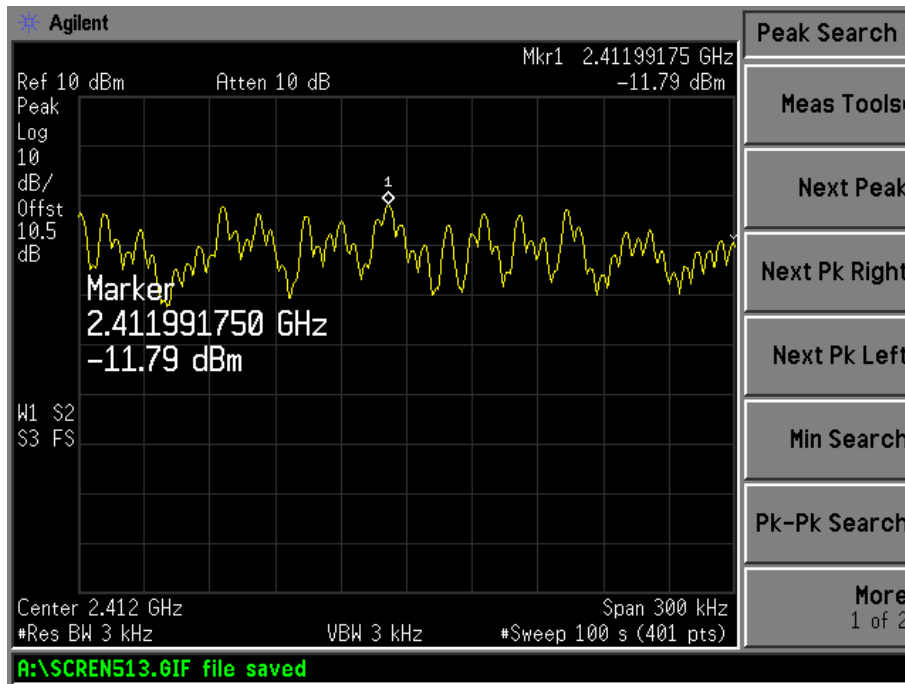
Temperature:	20° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

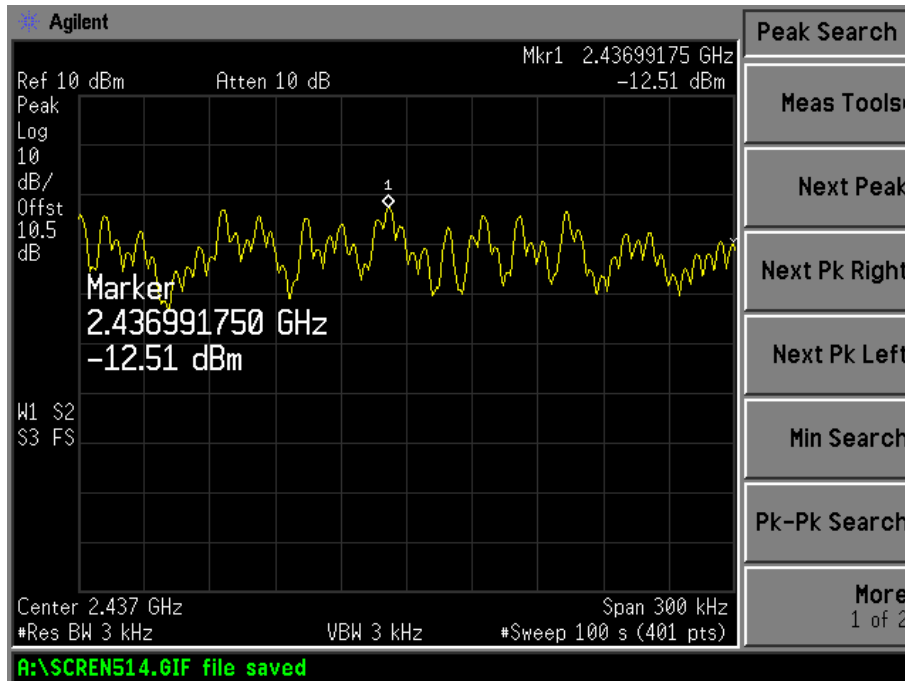
Test mode	Test channel	Reading dBm/3kHz	Limit dBm/3kHz
802.11b	Low channel (2412MHz)	-11.79	8
	Middle channel (2437MHz)	-12.51	8
	High channel (2462MHz)	-10.86	8
802.11g	Low channel (2412MHz)	-22.49	8
	Middle channel (2437MHz)	-20.20	8
	High channel (2462MHz)	-21.24	8
802.11n-HT20	Low channel (2412MHz)	-22.70	8
	Middle channel (2437MHz)	-21.51	8
	High channel (2462MHz)	-19.55	8
802.11n-HT40	Low channel (2422MHz)	-22.26	8
	Middle channel (2437MHz)	-22.31	8
	High channel (2452MHz)	-20.57	8

For 802.11b

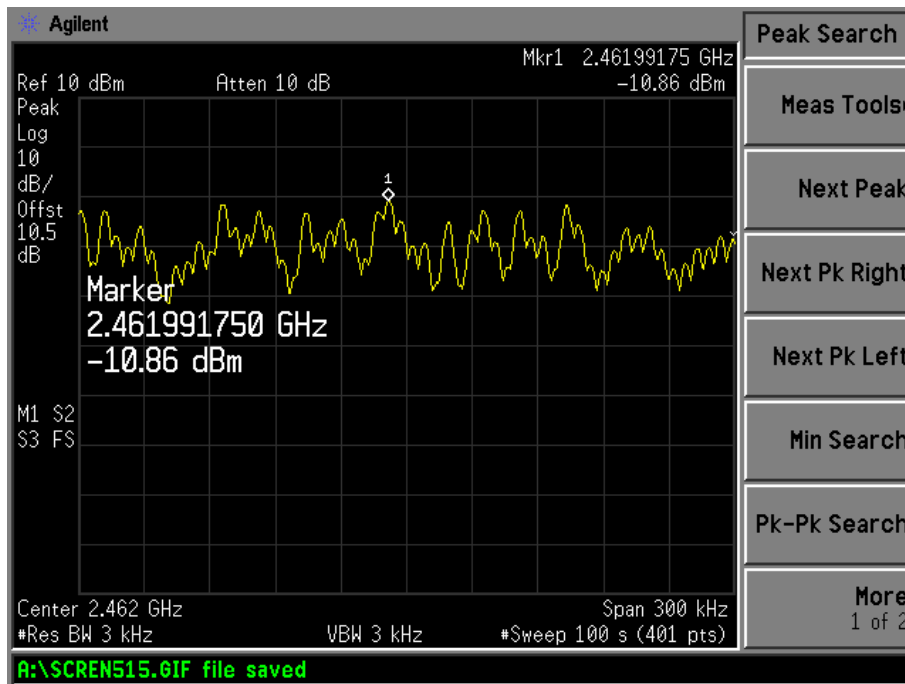
Low Channel:



Middle Channel:

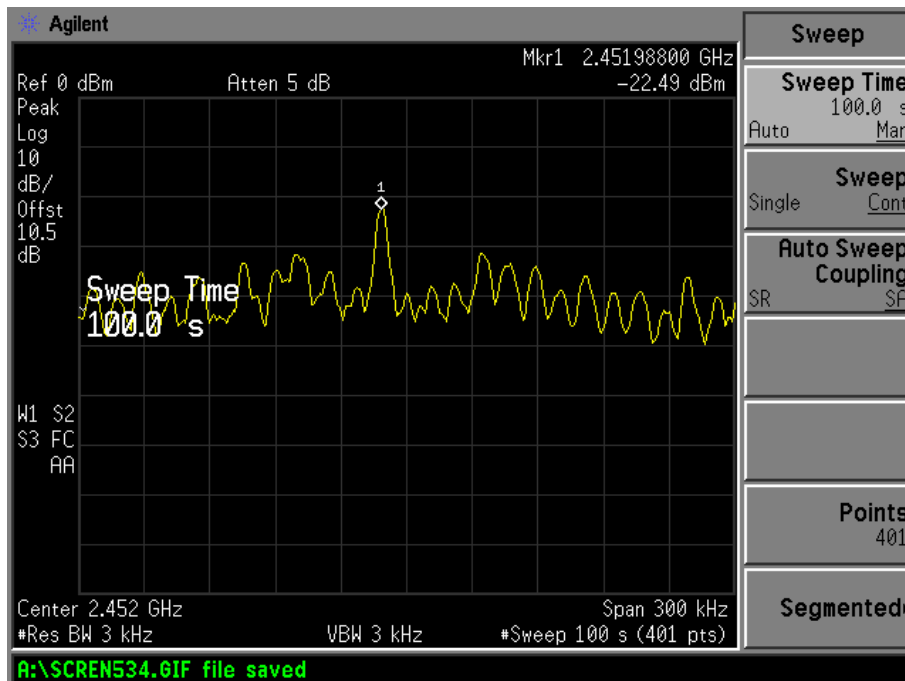


High Channel:

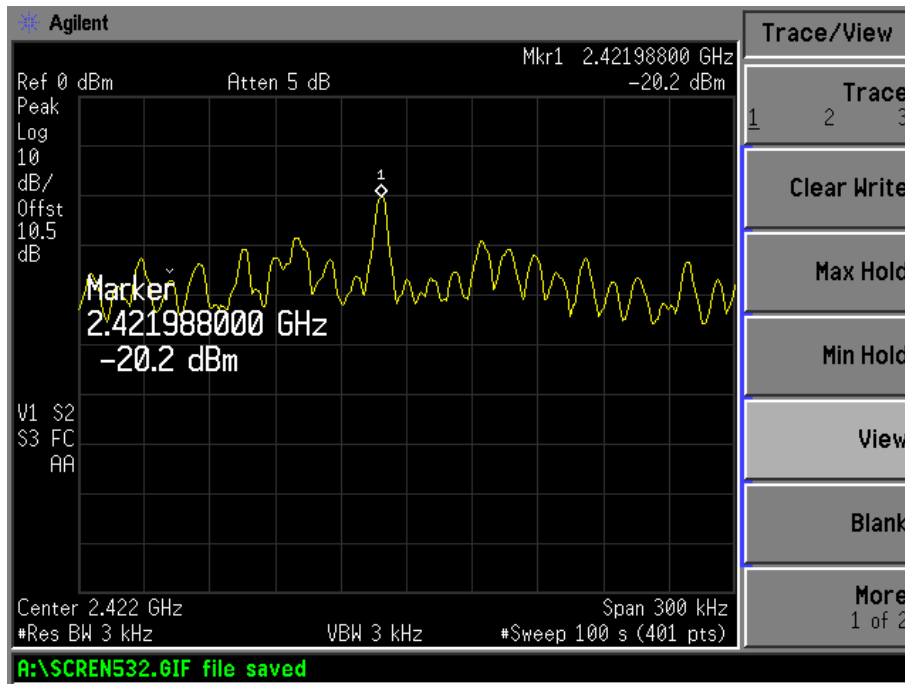


For 802.11g

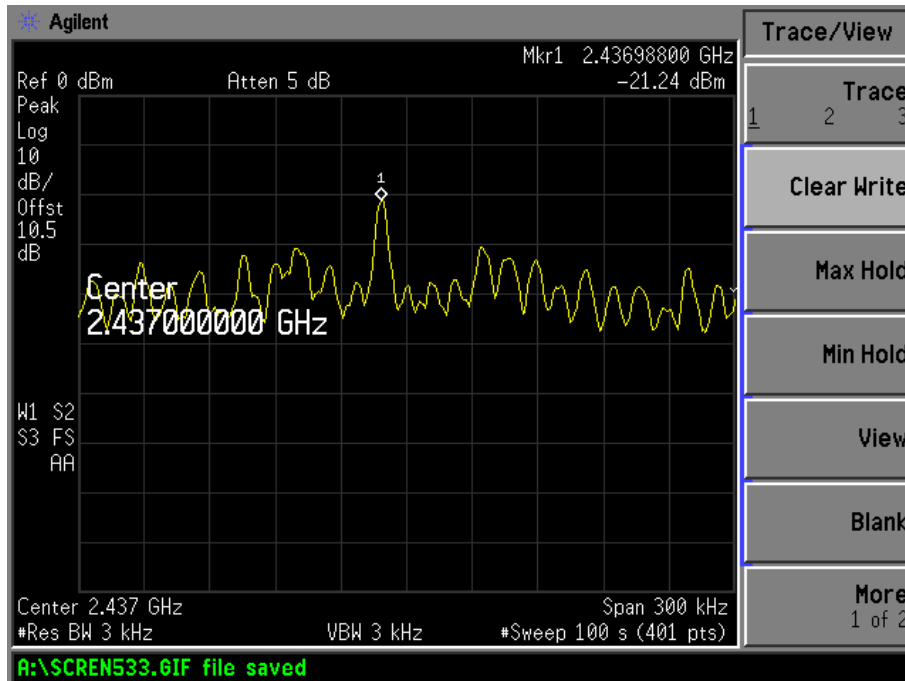
Low Channel:



Middle Channel:

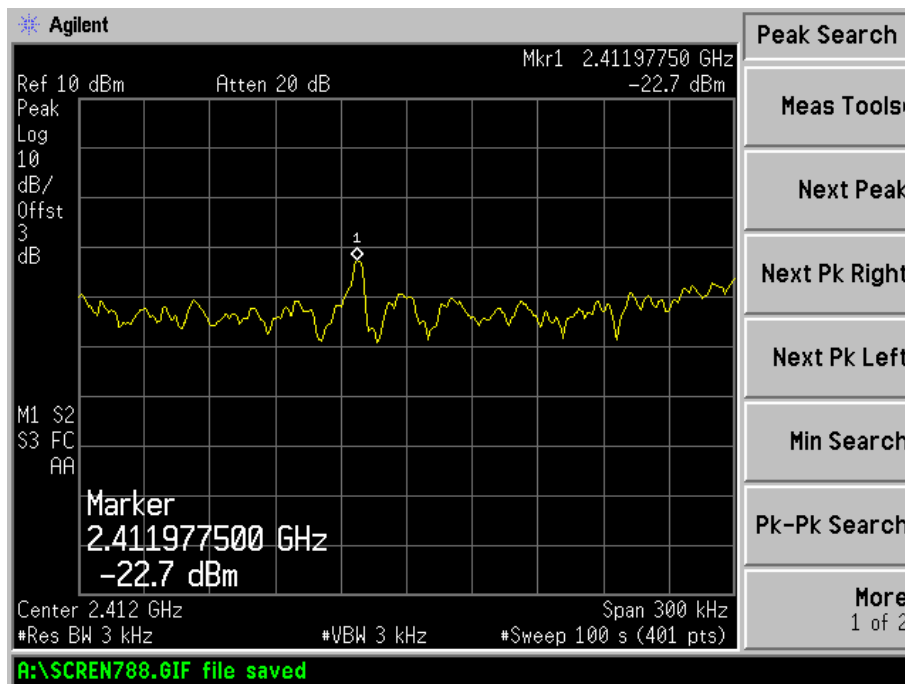


High Channel:

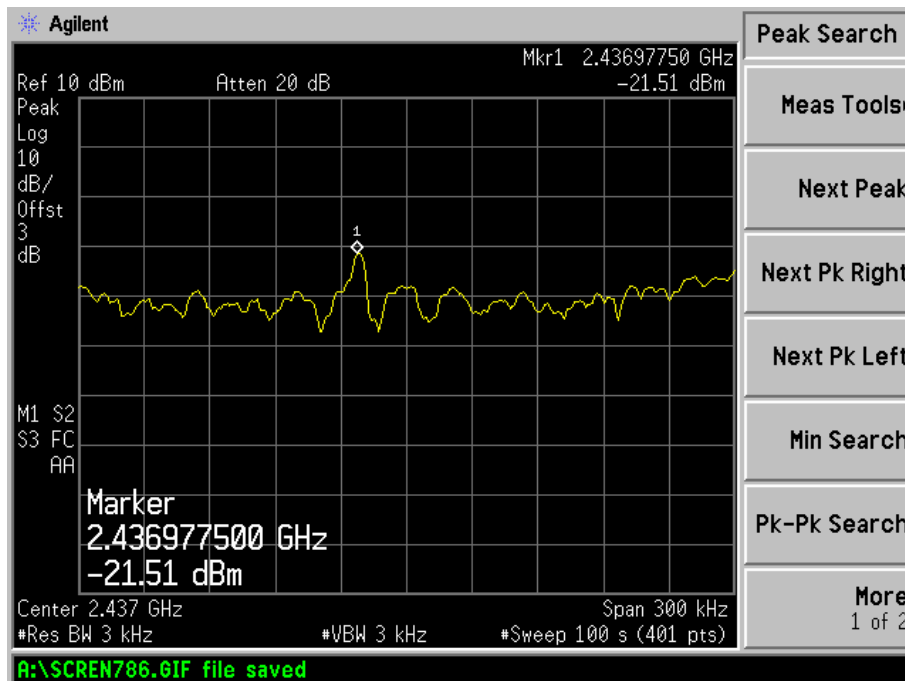


For 802.11n-HT20

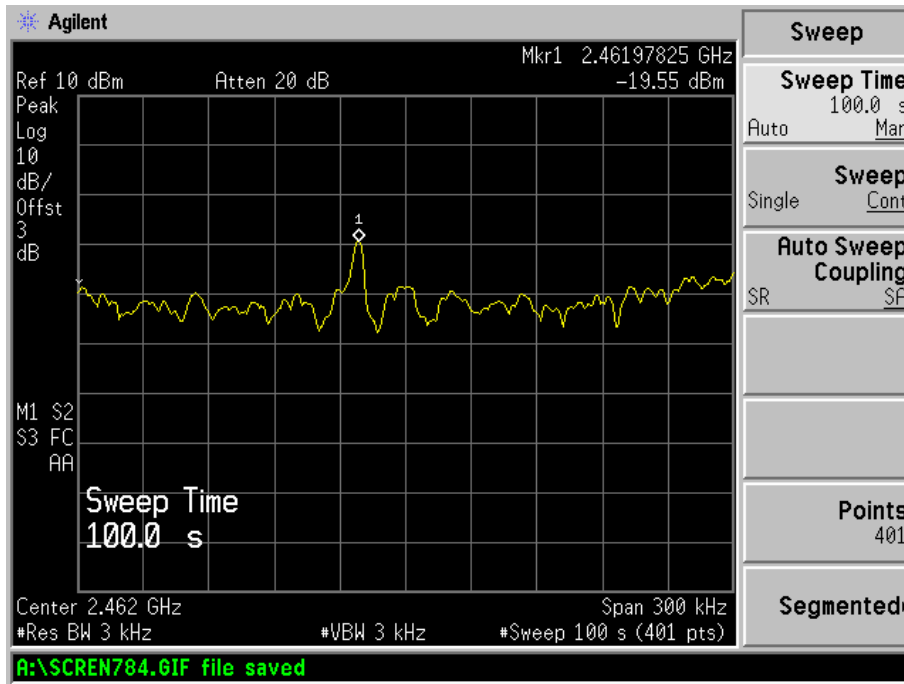
Low Channel:



Middle Channel:

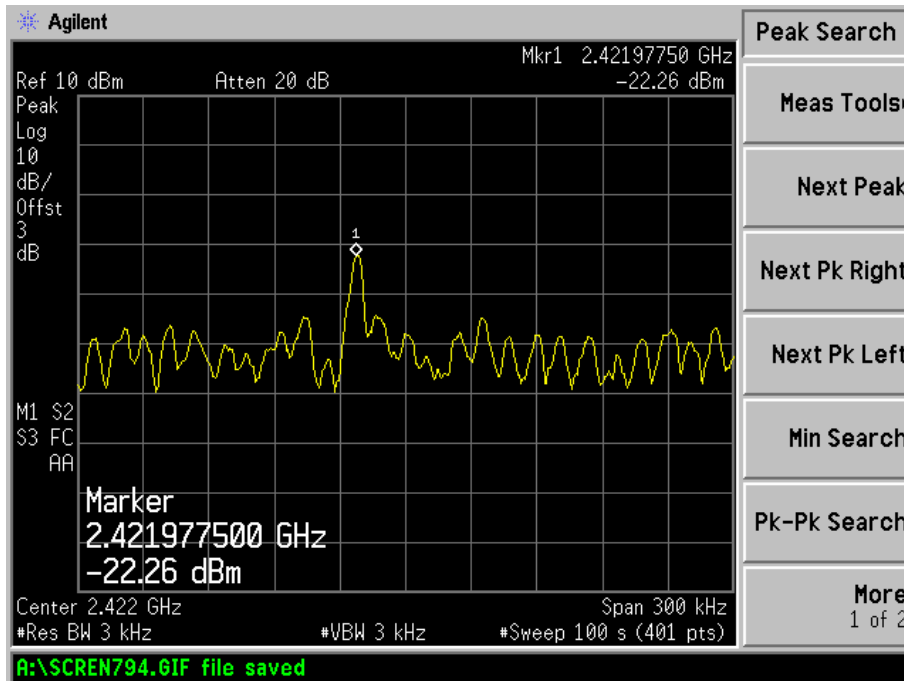


High Channel:

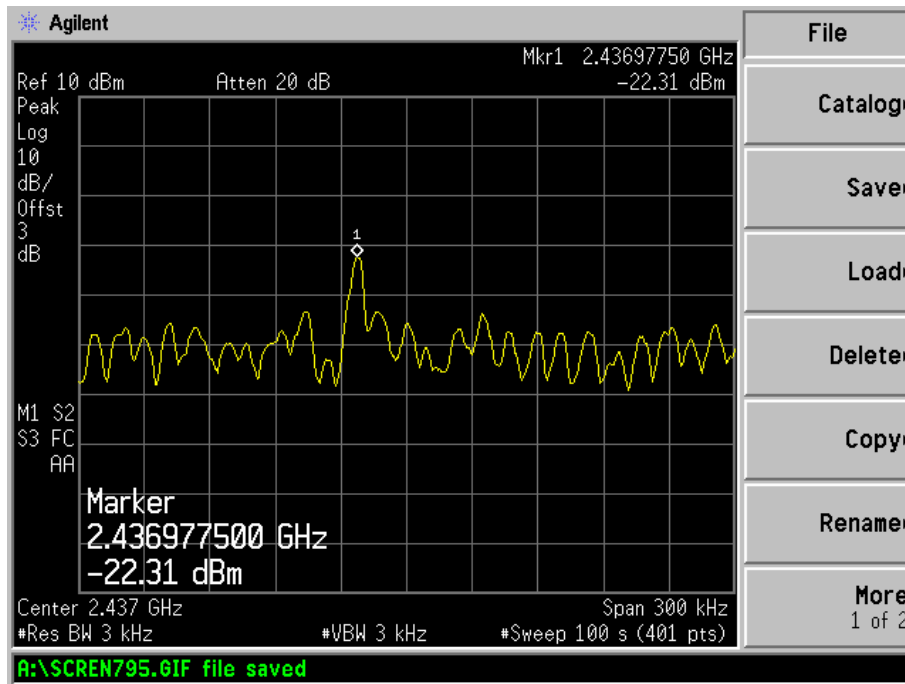


For 802.11n-HT40

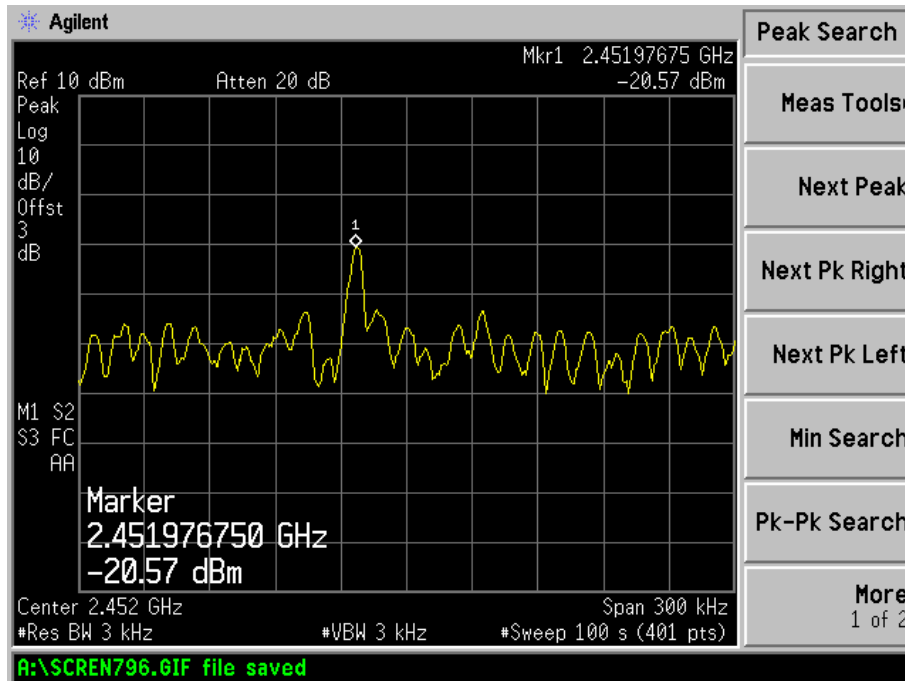
Low Channel:



Middle Channel:



High Channel:



5. 6-dB BANDWIDTH

5.1 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.

5.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2011-12-20	2012-12-19
Attenuator	ATTEN	ATS100-4-20	/	2011-12-20	2012-12-19

Statement of Traceability: All calibrations have been performed per the NVLAP requirements traceable to the NIST.

5.3 Test Procedure

1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set center frequency of spectrum analyzer = operating frequency.
3. The spectrum analyzer as RBW=100KHz (1 % of Bandwidth.), Sweep=auto
4. Mark the peak frequency and –6dB (upper and lower) frequency.

5.4 Environmental Conditions

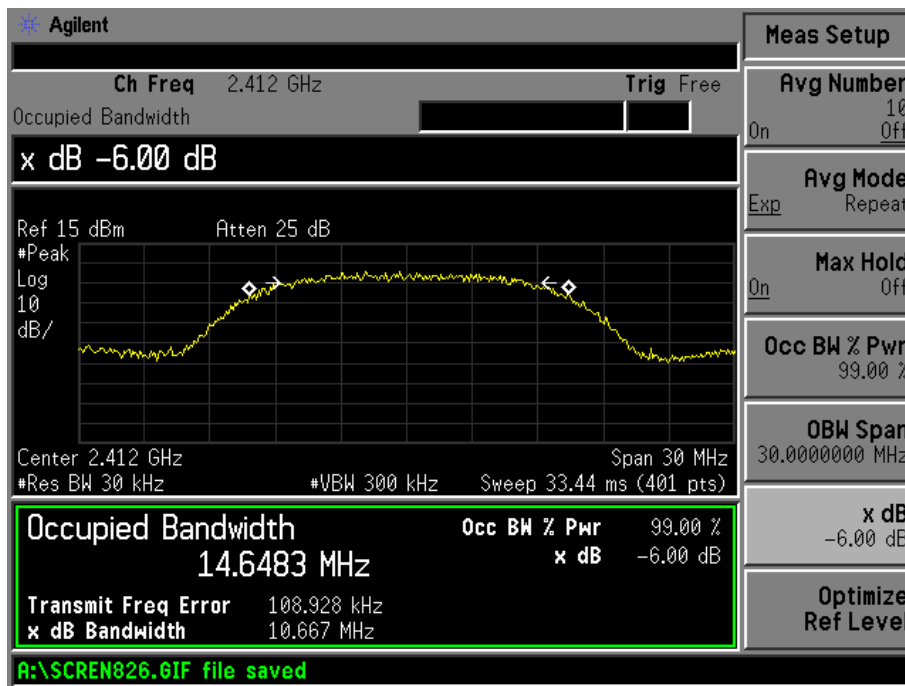
Temperature:	24° C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

5.5 Summary of Test Results/Plots

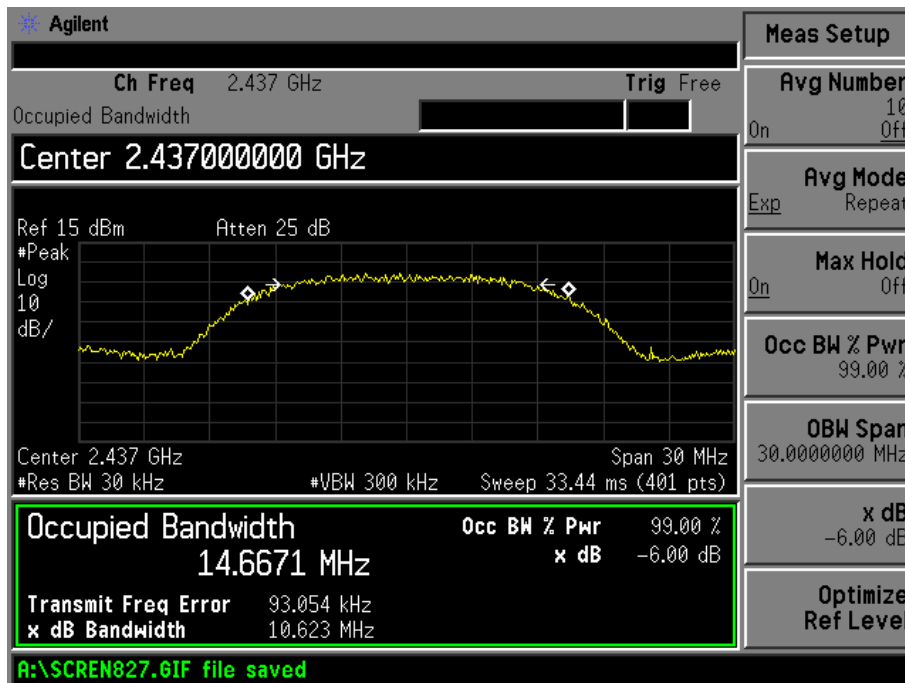
Test mode	Frequency	6 dB Bandwidth	Limit
	MHz	kHz	kHz
802.11b	2412	10667	500
	2437	10623	500
	2462	10642	500
802.11g	2412	16490	500
	2437	16495	500
	2462	16535	500
802.11n-HT20	2412	16476	500
	2437	16486	500
	2462	16457	500
802.11n-HT40	2422	36309	500
	2437	36391	500
	2452	36388	500

For 802.11b

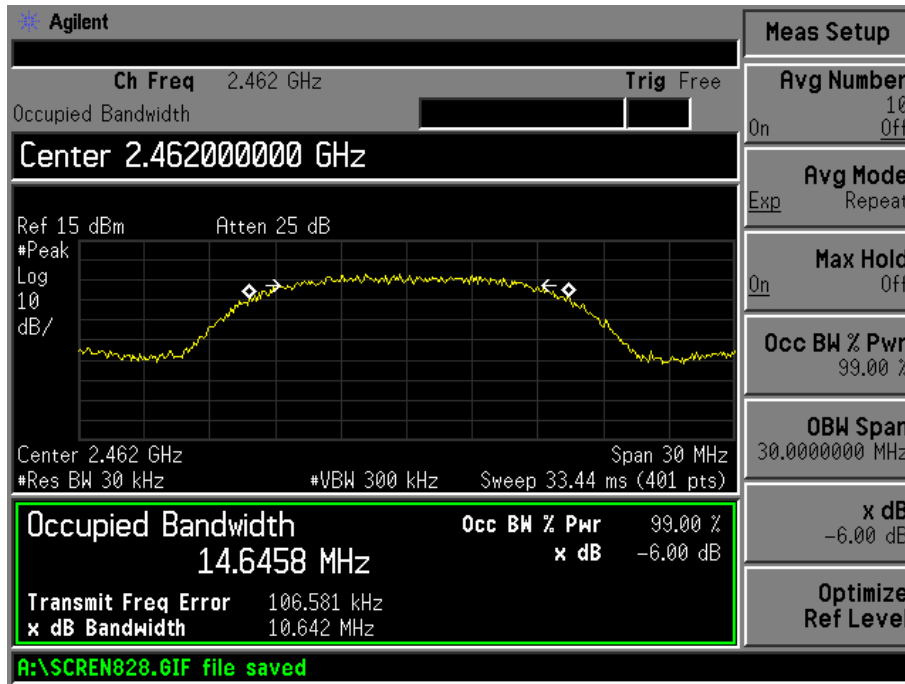
Low Channel:



Mid Channel:

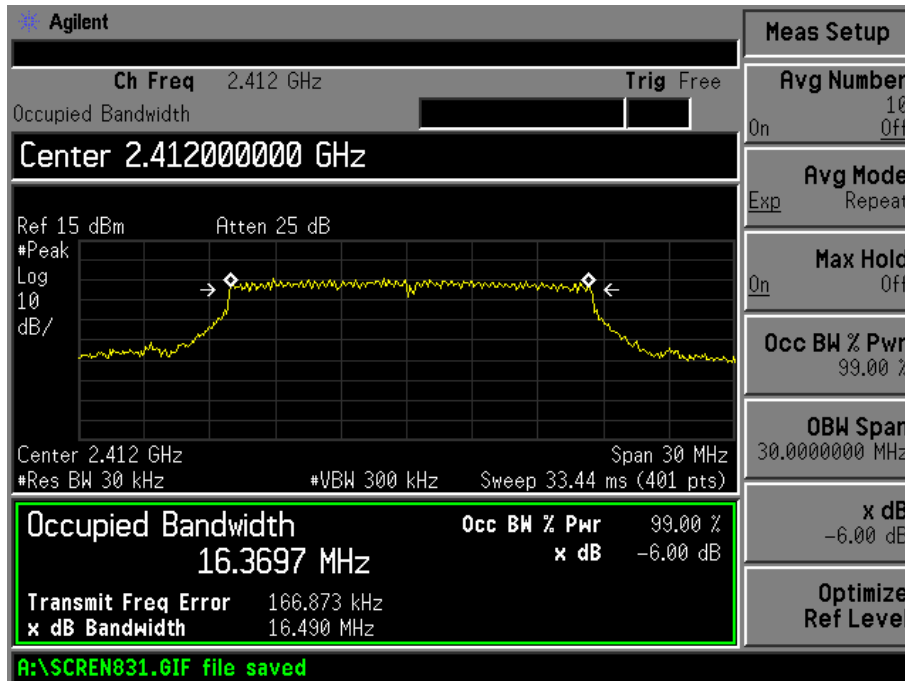


High Channel:

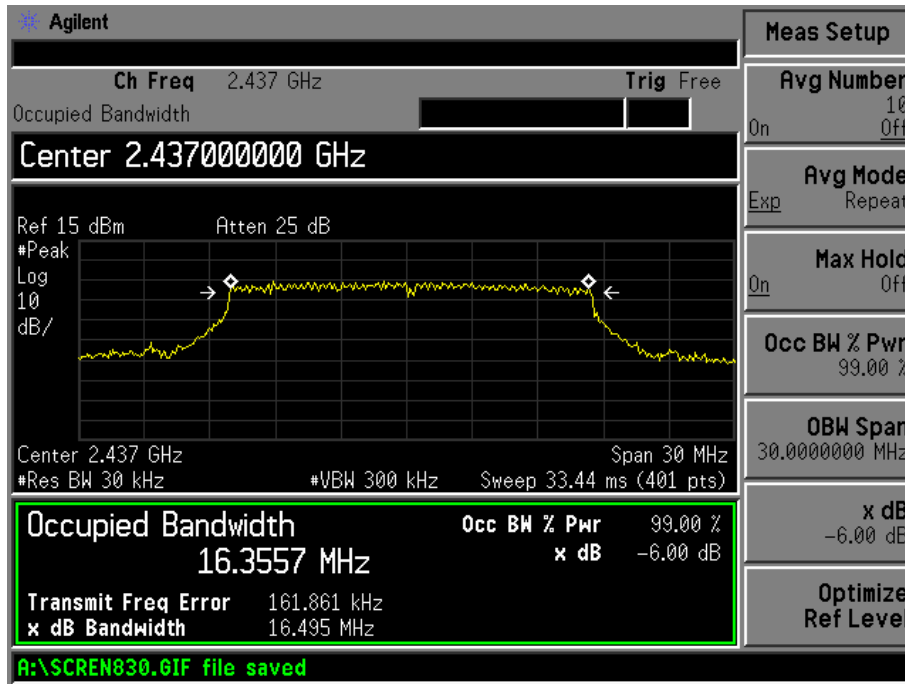


For 802.11g

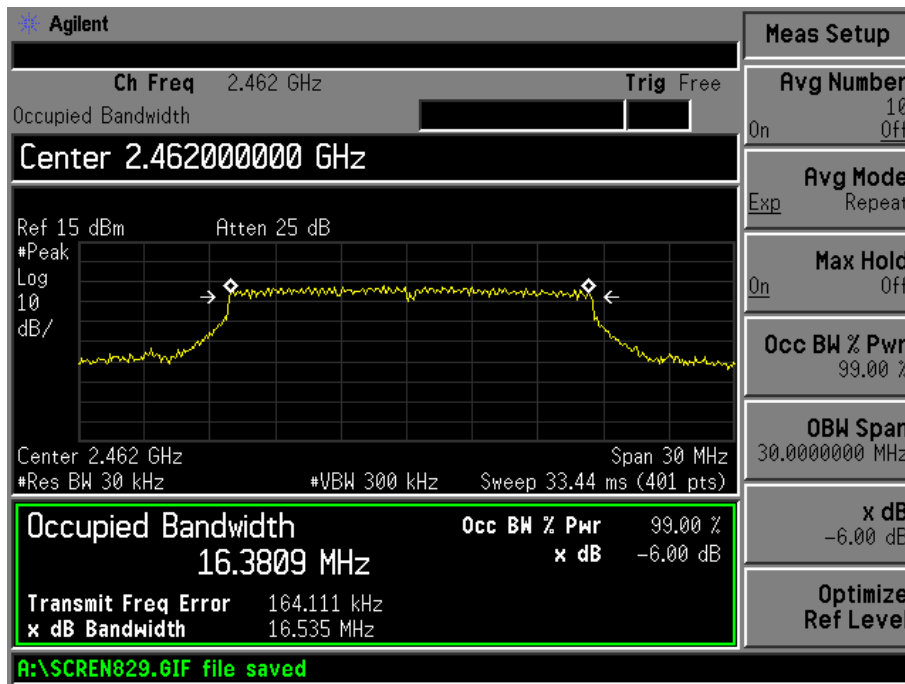
Low Channel:



Mid Channel:

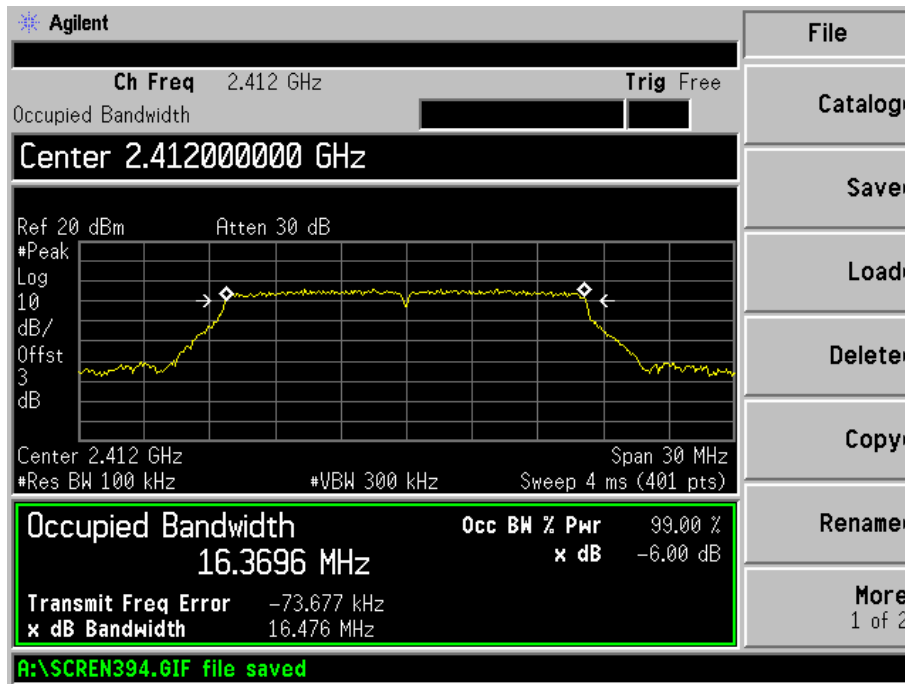


High Channel:

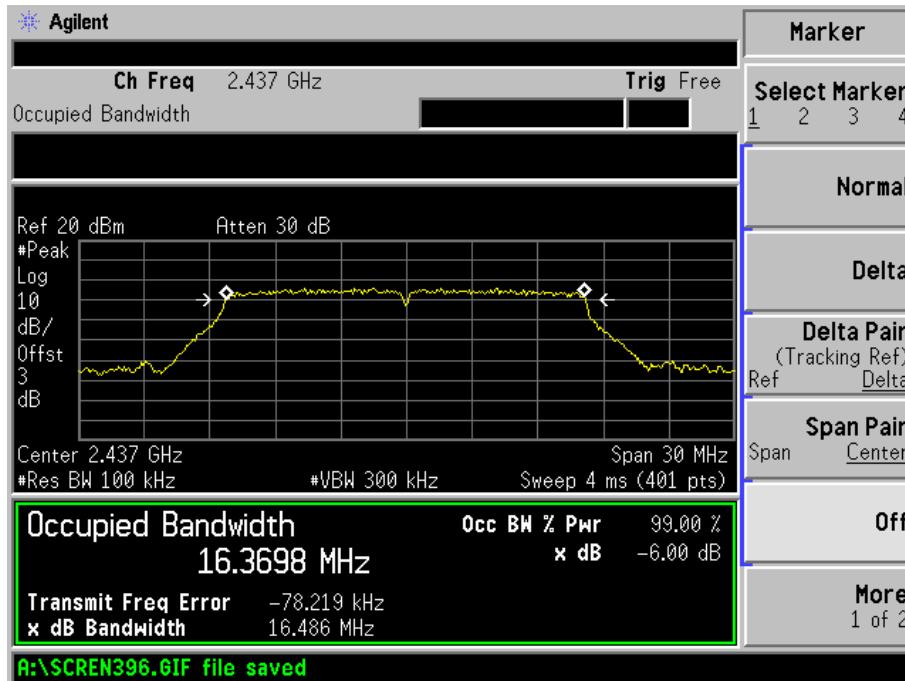


For 802.11n-HT20

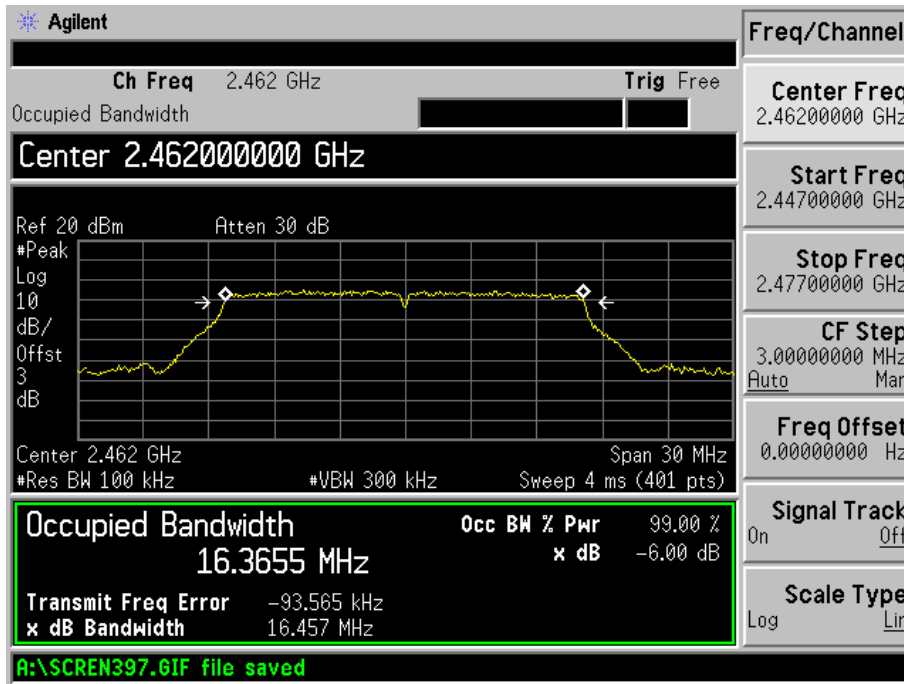
Low Channel:



Mid Channel:

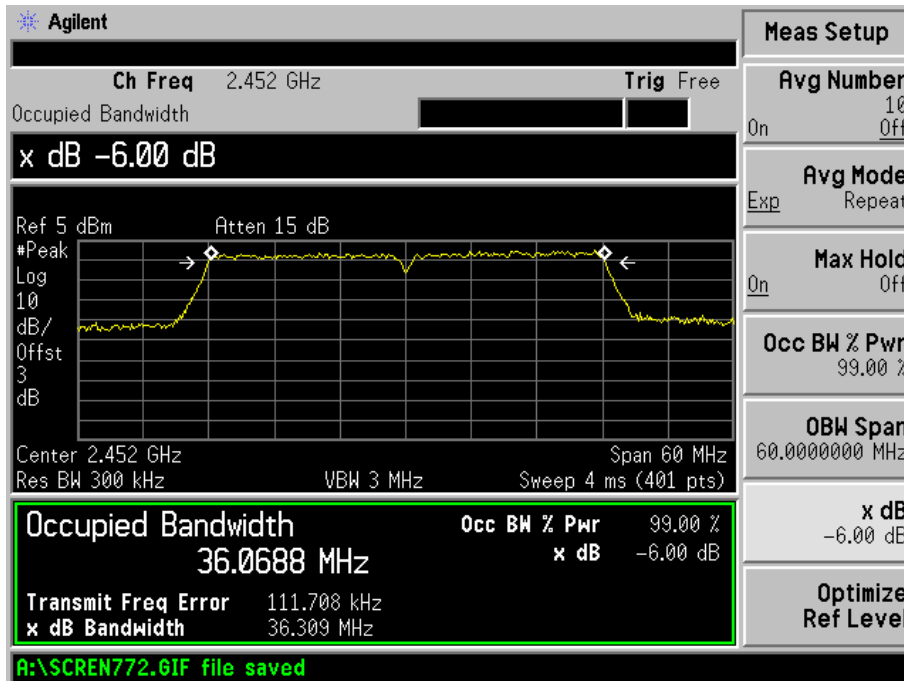


High Channel:

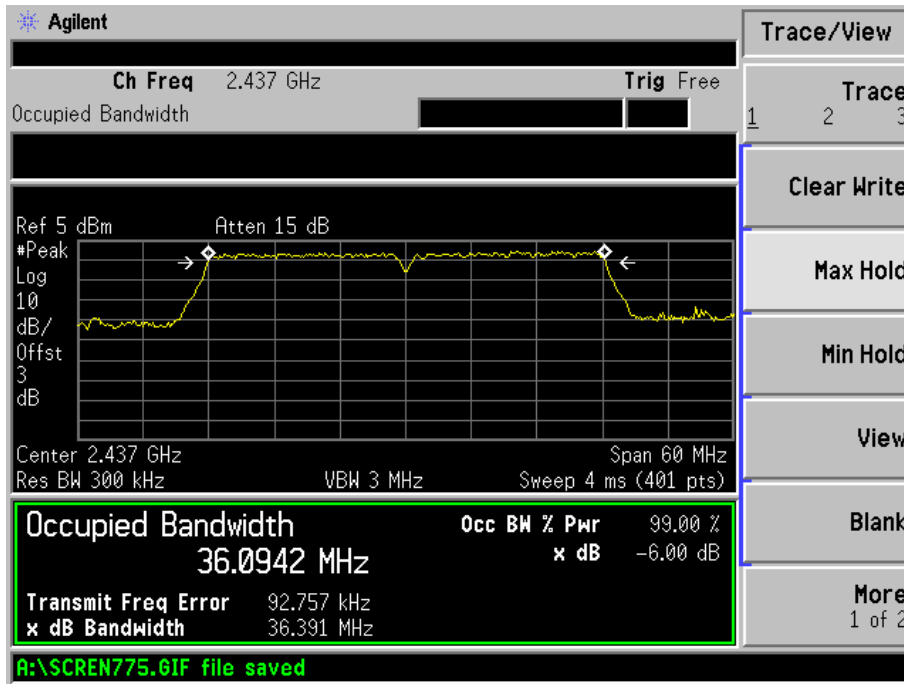


For 802.11n-HT40

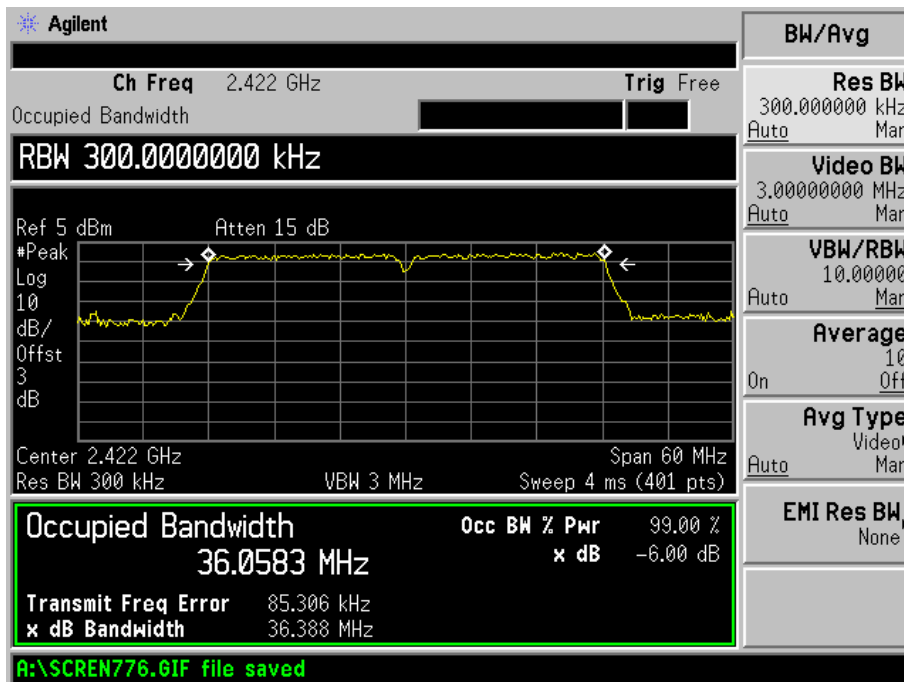
Low Channel:



Mid Channel:



High Channel:



6. POWER OUTPUT

6.1 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.

6.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2011-12-20	2012-12-19
Attenuator	ATTEN	ATS100-4-20	/	2011-12-20	2012-12-19

Statement of Traceability: All calibrations have been performed per the NVLAP requirements traceable to the NIST.

6.3 Test Procedure

According to section 15.247(b)-power output of the KDB-558074 (2005), the method #1 of the power output option2 was used, the following is the measurement procedure.

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW \geq 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) $<$ 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to “free run”.
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer’s band power measurement function with band limits set equal to the EBW band edges.

6.4 Environmental Conditions

Temperature:	21° C
Relative Humidity:	55%
ATM Pressure:	1011 mbar

6.5 Summary of Test Results/Plots

Test mode	Frequency MHz	Reading dBm	Output power W	Limit W
802.11b_1M	2412	15.25	0.0335	1
	2437	15.21	0.0332	1
	2462	15.18	0.0330	1
802.11b_11M	2412	15.22	0.0333	1
	2437	15.19	0.0330	1
	2462	15.14	0.0327	1
802.11g_6M	2412	12.88	0.0194	1
	2437	12.85	0.0193	1
	2462	12.77	0.0189	1
802.11_54M	2412	12.85	0.0193	1
	2437	12.82	0.0191	1
	2462	12.73	0.0187	1
802.11n-HT20	2412	11.79	0.0151	1
	2437	11.76	0.0150	1
	2462	11.72	0.0149	1
802.11N-HT40	2422	11.36	0.0137	1
	2437	11.23	0.0133	1
	2452	11.22	0.0132	1

7. FIELD STRENGTH OF SPURIOUS EMISSIONS

7.1 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.

7.2 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.

7.3 Test Equipment List and Details

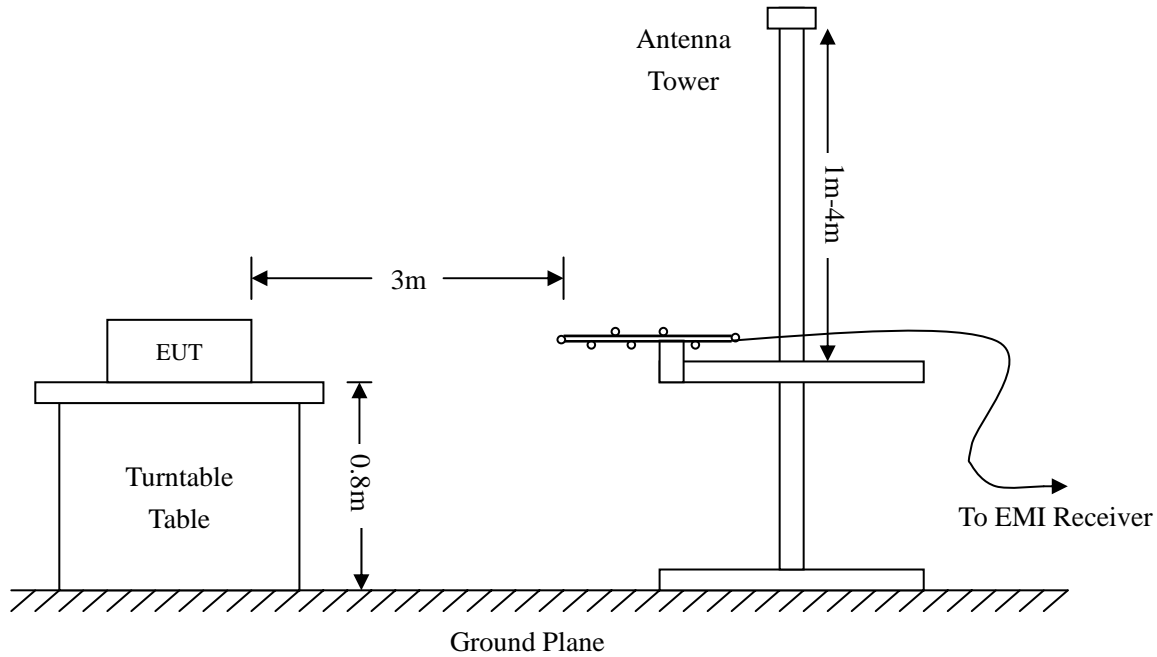
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2011-12-20	2012-12-19
EMI Test Receiver	R&S	ESVB	825471/005	2011-12-20	2012-12-19
Positioning Controller	C&C	CC-C-1F	N/A	2011-12-20	2012-12-19
RF Switch	EM	EMSW18	SW060023	2011-12-20	2012-12-19
Pre-amplifier	Agilent	8447F	3113A06717	2011-12-20	2012-12-19
Pre-amplifier	Compliance Direction	PAP-0118	24002	2011-12-20	2012-12-19
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24
Horn Antenna	ETS	3116B	00088203	2012-02-25	2013-02-24
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2012-02-25	2013-02-24

7.4 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 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.



7.5 Corrected Amplitude & Margin Calculation

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

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

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 for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

7.6 Environmental Conditions

Temperature:	22° C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

7.7 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 margin of:

-4.4 dB μ V at 4924.0 MHz in the Vertical polarization for Low Channel 802.11b Mode, 9kHz to 25 GHz, 3

Meters

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

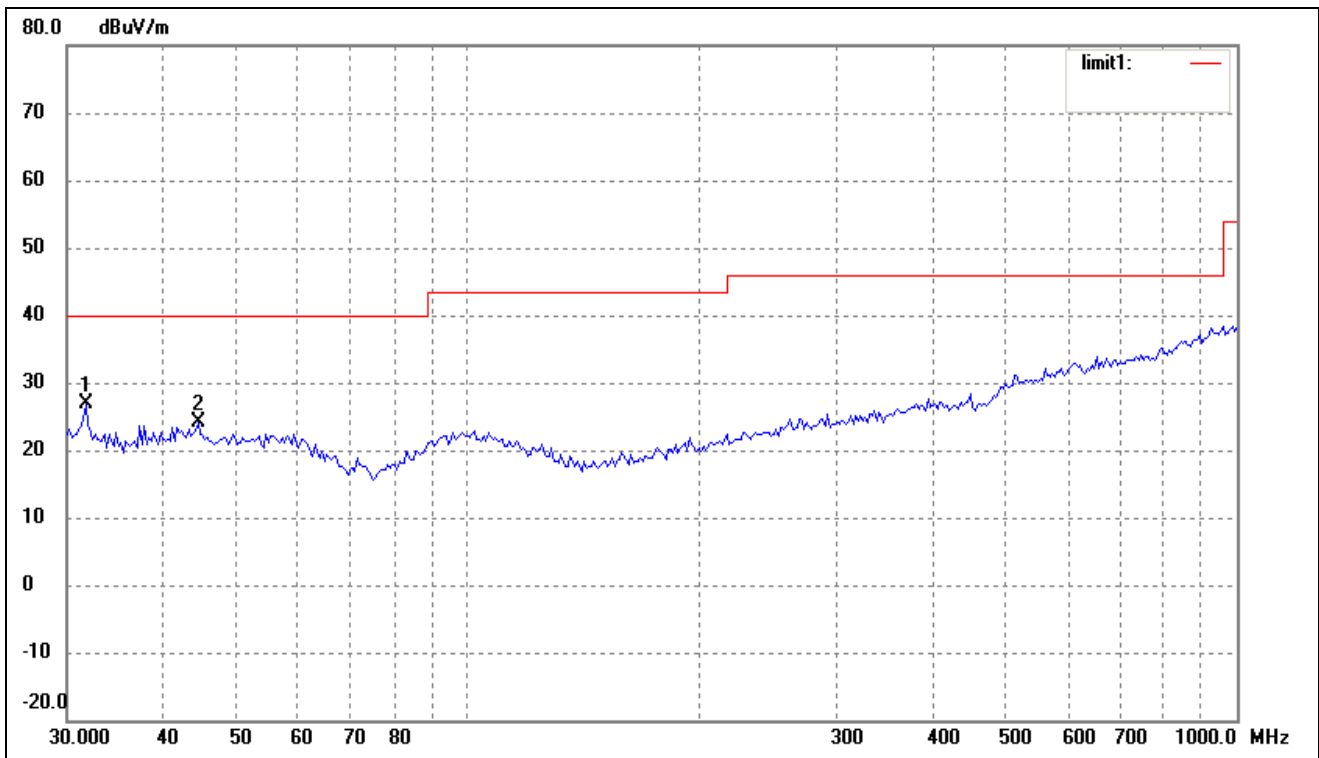
Test Result/Plots:

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11b) Low Channel

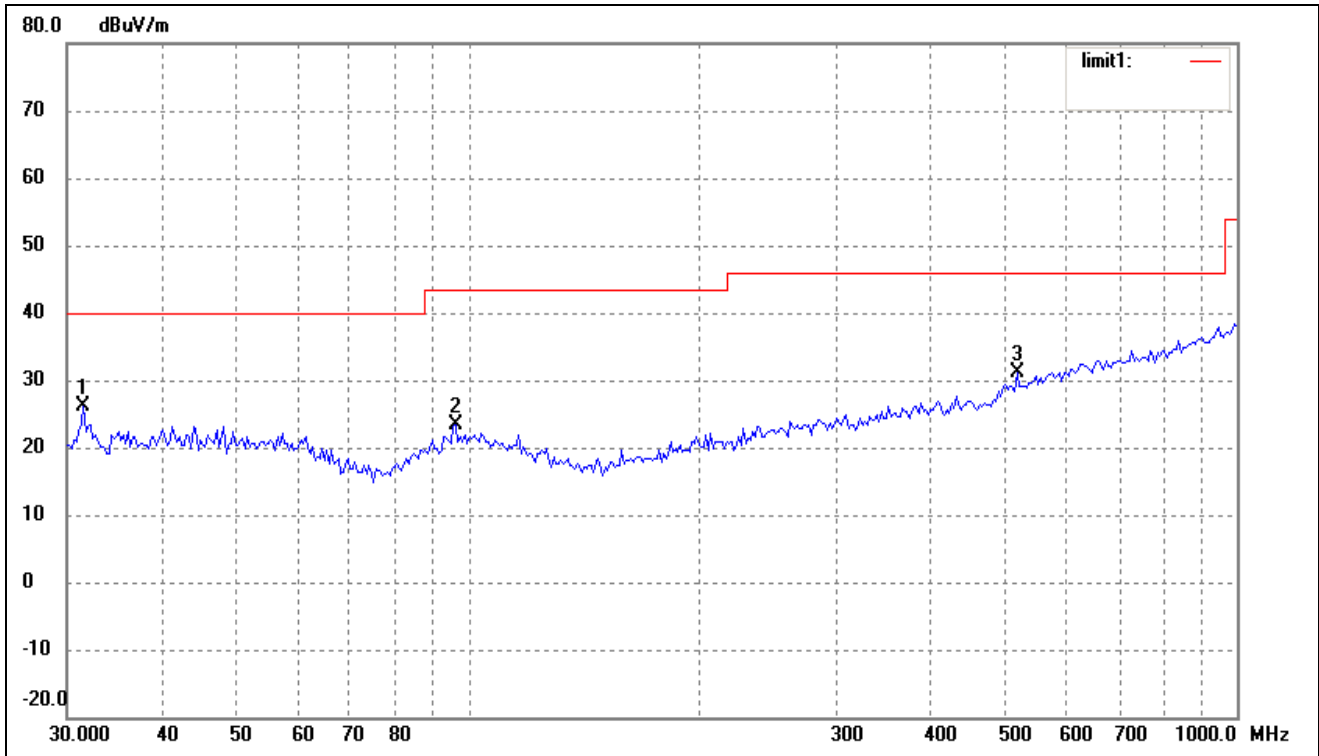
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.7313	20.09	6.77	26.86	40.00	-13.14	221	100	peak
2	44.4308	15.81	8.22	24.03	40.00	-15.97	135	100	peak

Vertical



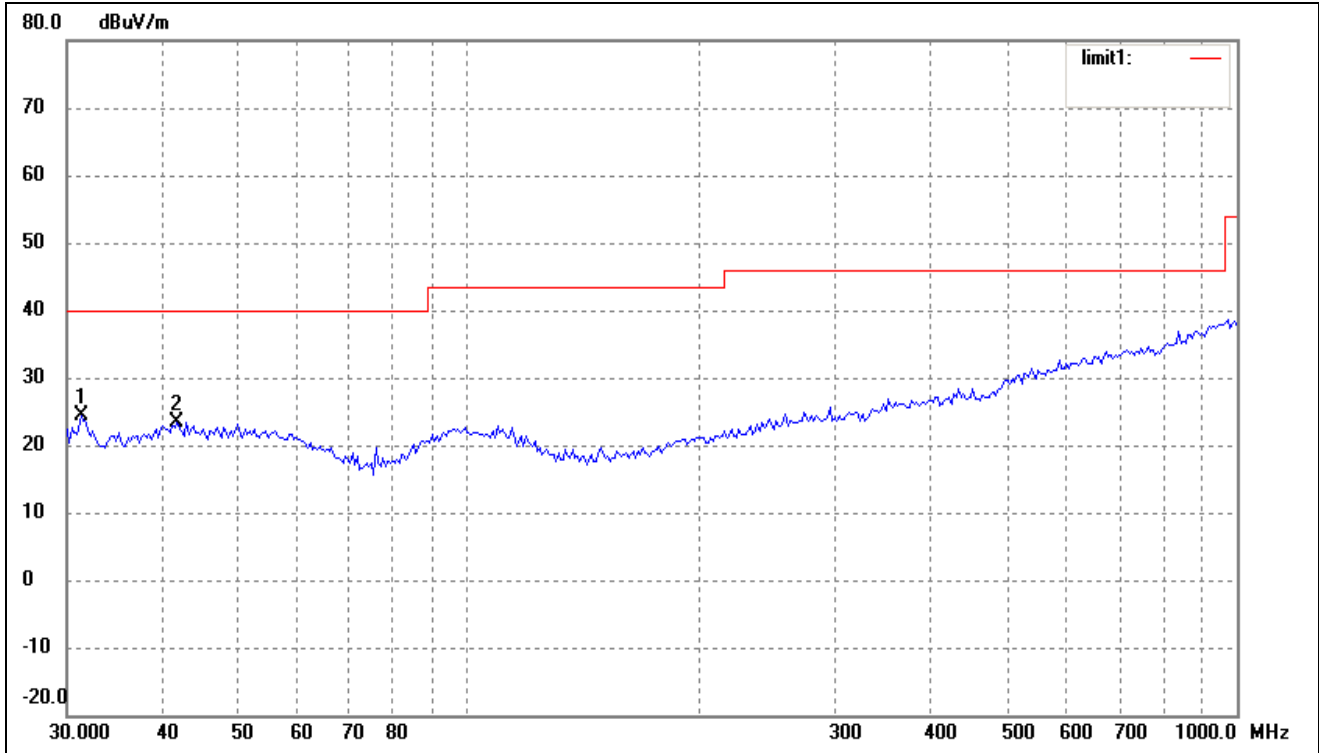
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.5095	19.46	6.77	26.23	40.00	-13.77	264	100	peak
2	96.0986	15.12	8.14	23.26	43.50	-20.24	115	100	peak
3	517.2480	16.25	14.80	31.05	46.00	-14.95	320	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11b) Middle Channel

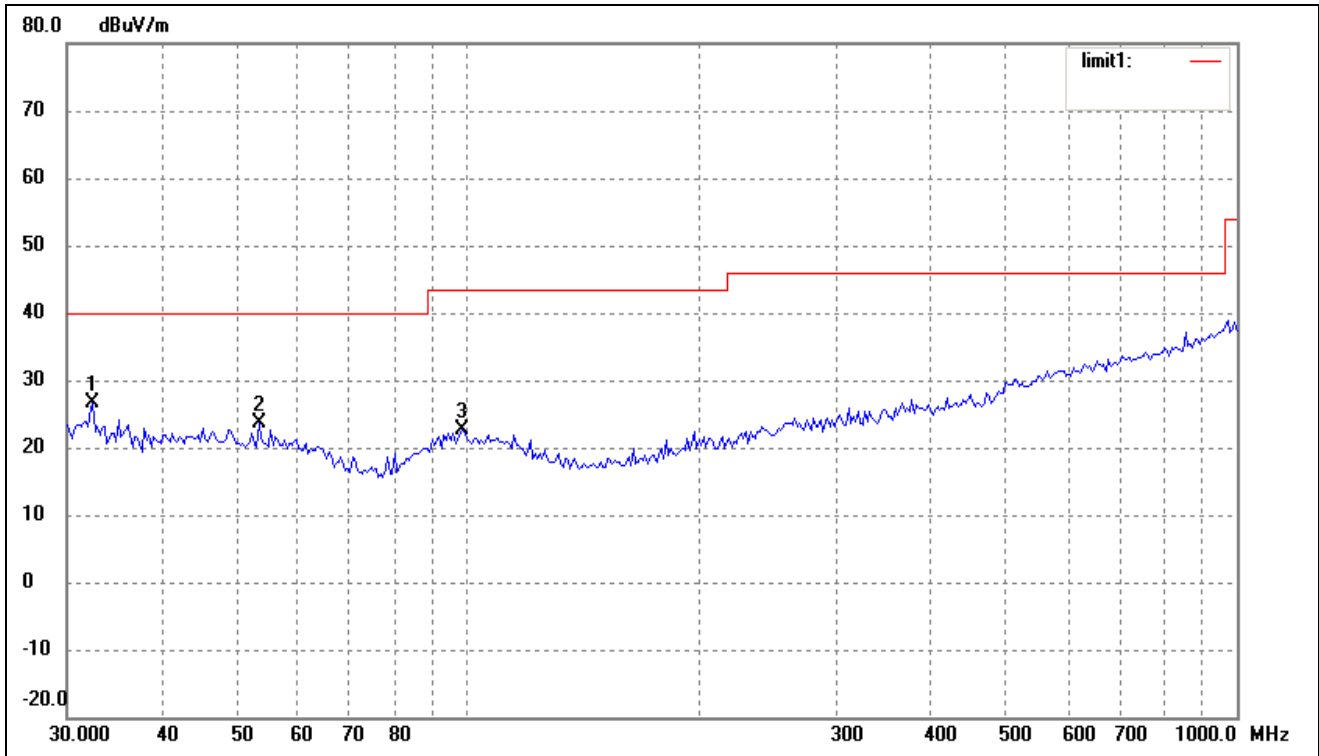
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.2893	17.67	6.77	24.44	40.00	-15.56	345	100	peak
2	41.7130	15.17	8.17	23.34	40.00	-16.66	302	100	peak

Vertical



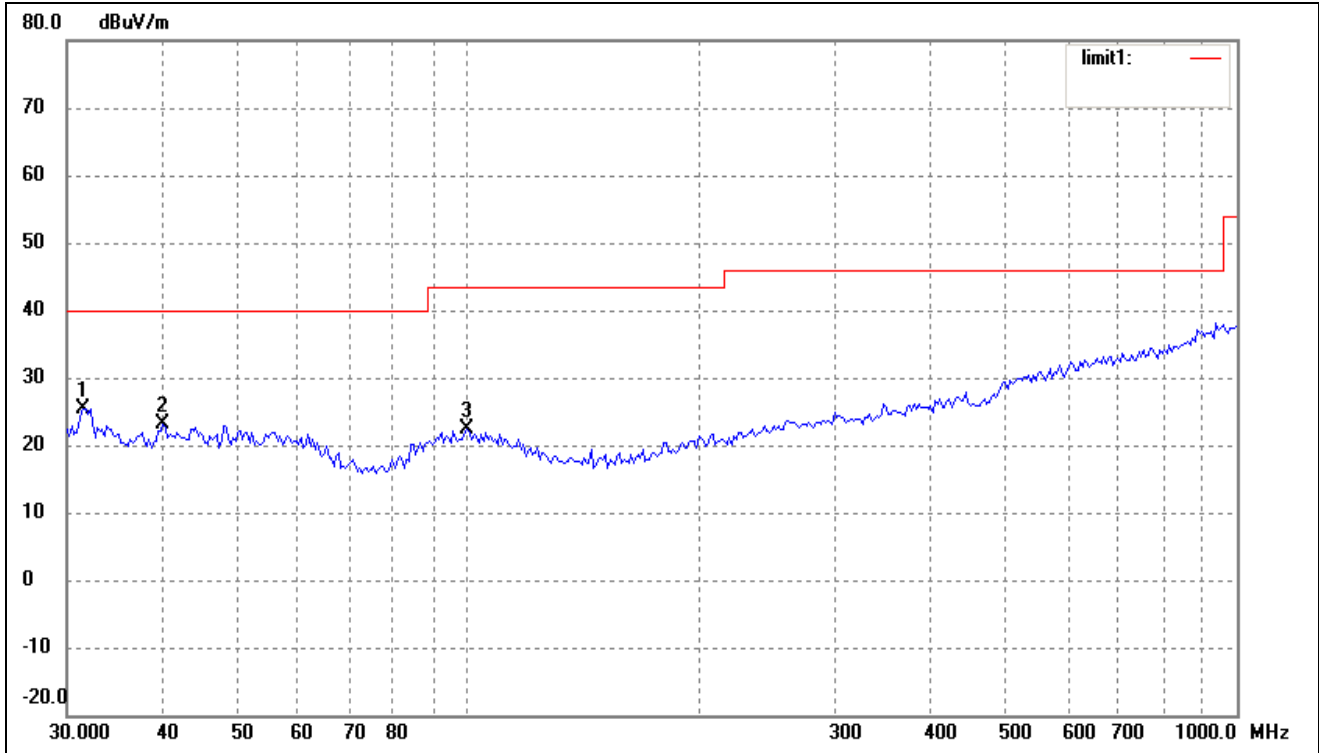
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.4059	19.78	6.77	26.55	40.00	-13.45	360	100	peak
2	53.3179	15.81	7.84	23.65	40.00	-16.35	360	100	peak
3	98.1419	14.28	8.30	22.58	43.50	-20.92	360	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11b) High Channel

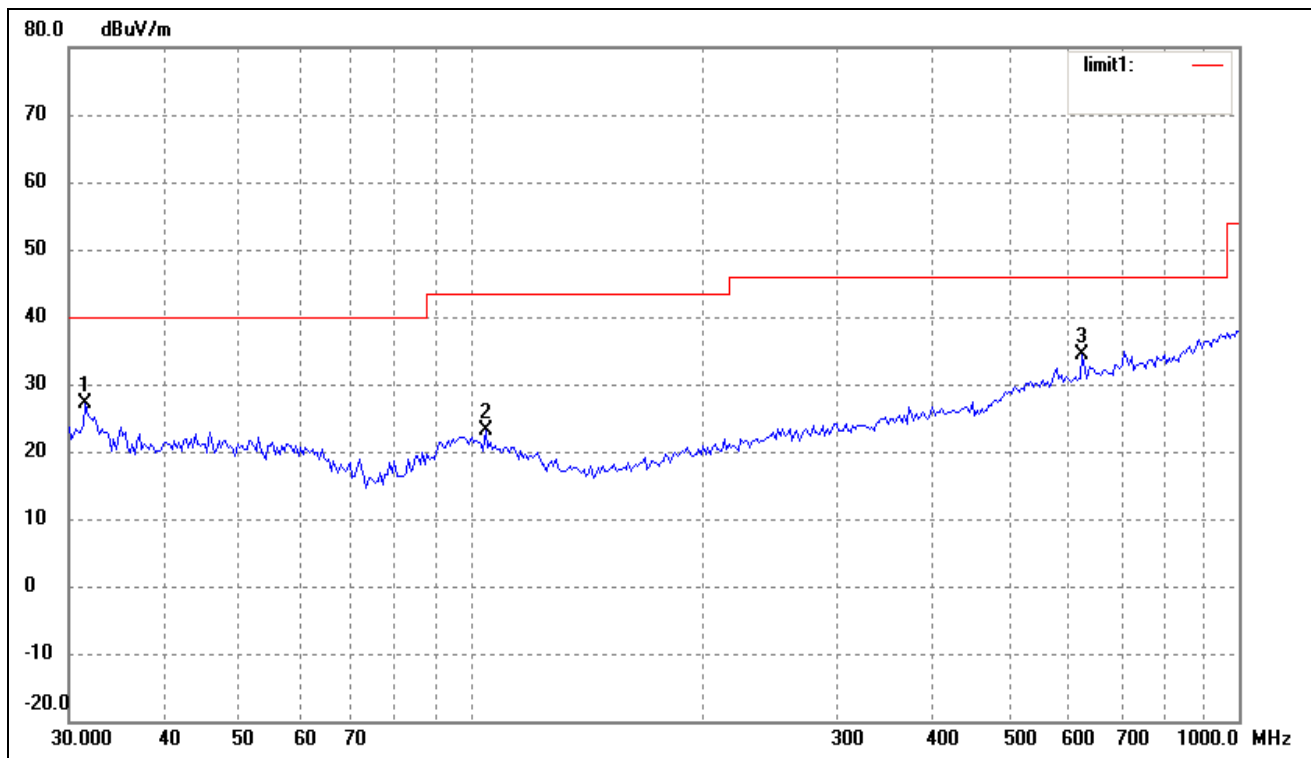
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.5095	18.67	6.77	25.44	40.00	-14.56	26	100	peak
2	39.9942	15.04	8.14	23.18	40.00	-16.82	360	100	peak
3	99.5281	14.06	8.40	22.46	43.50	-21.04	350	100	peak

Vertical



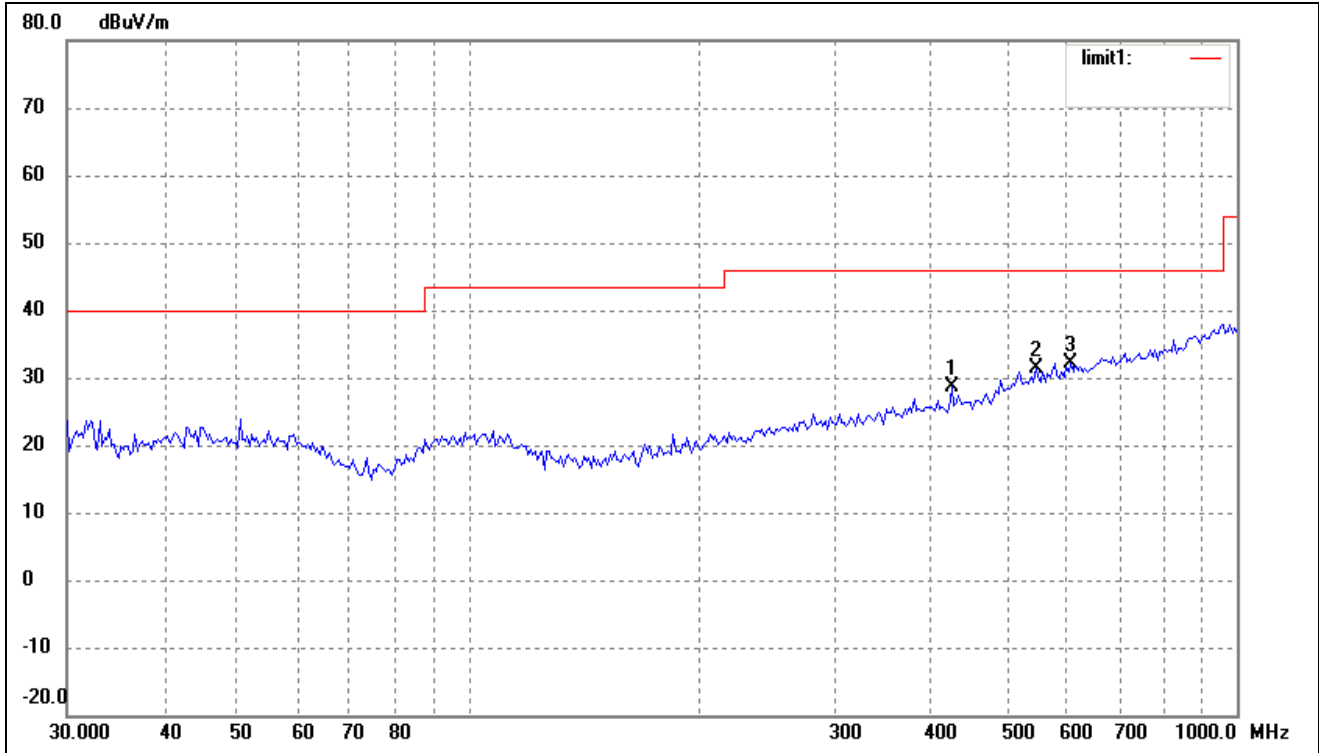
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.5095	20.45	6.77	27.22	40.00	-12.78	116	100	peak
2	104.5361	15.01	8.04	23.05	43.50	-20.45	321	100	peak
3	625.0780	17.41	16.88	34.29	46.00	-11.71	85	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11g) Low Channel

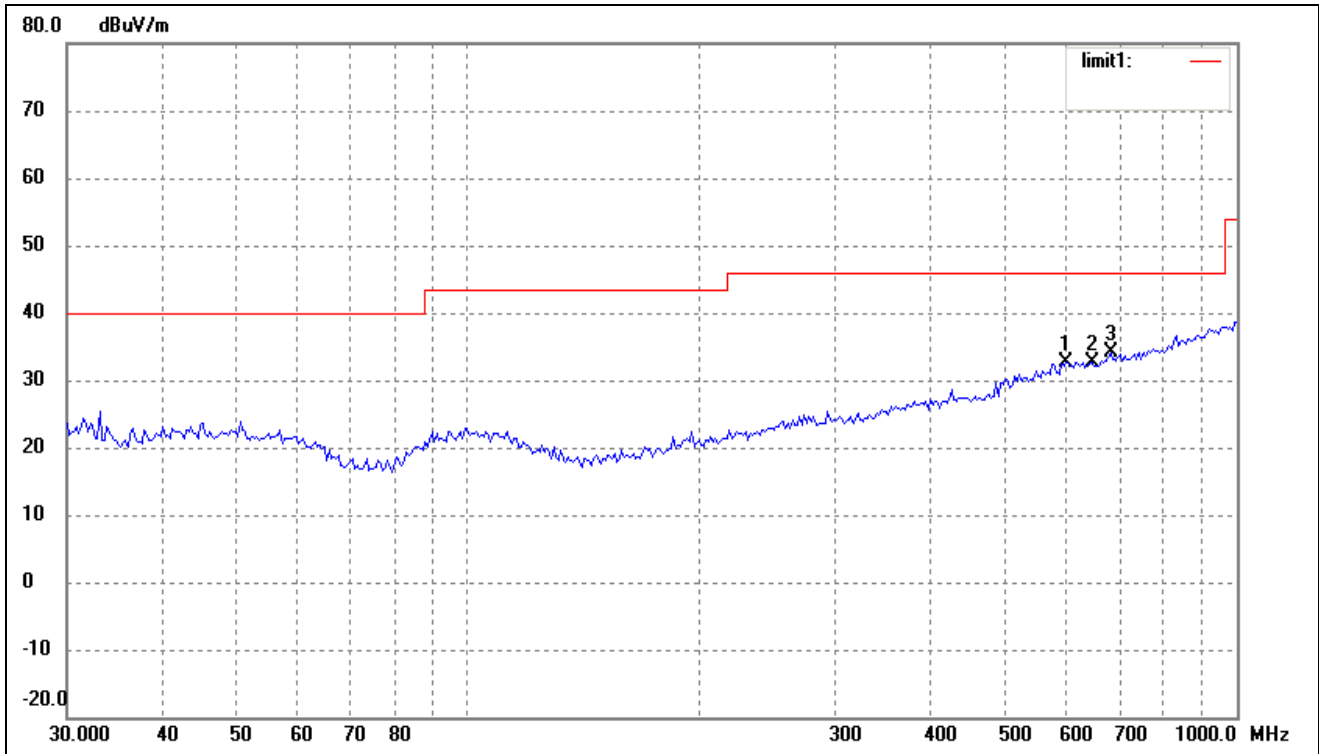
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	425.0280	17.02	11.57	28.59	46.00	-17.41	341	100	peak
2	547.0977	16.01	15.48	31.49	46.00	-14.51	221	100	peak
3	607.7867	15.32	16.73	32.05	46.00	-13.95	103	100	peak

Vertical



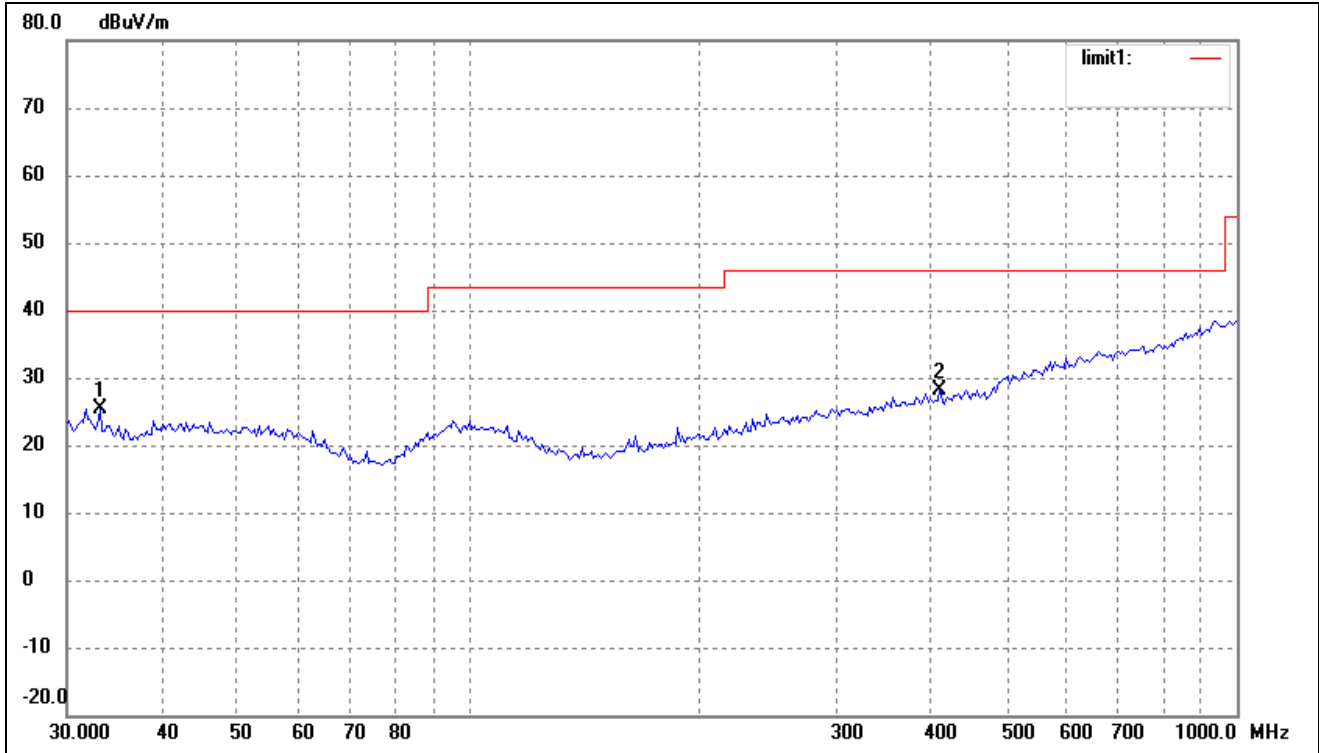
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	599.3213	15.88	16.65	32.53	46.00	-13.47	64	100	peak
2	647.3856	15.62	17.07	32.69	46.00	-13.31	360	100	peak
3	684.7454	16.69	17.38	34.07	46.00	-11.93	135	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11g) Middle Channel

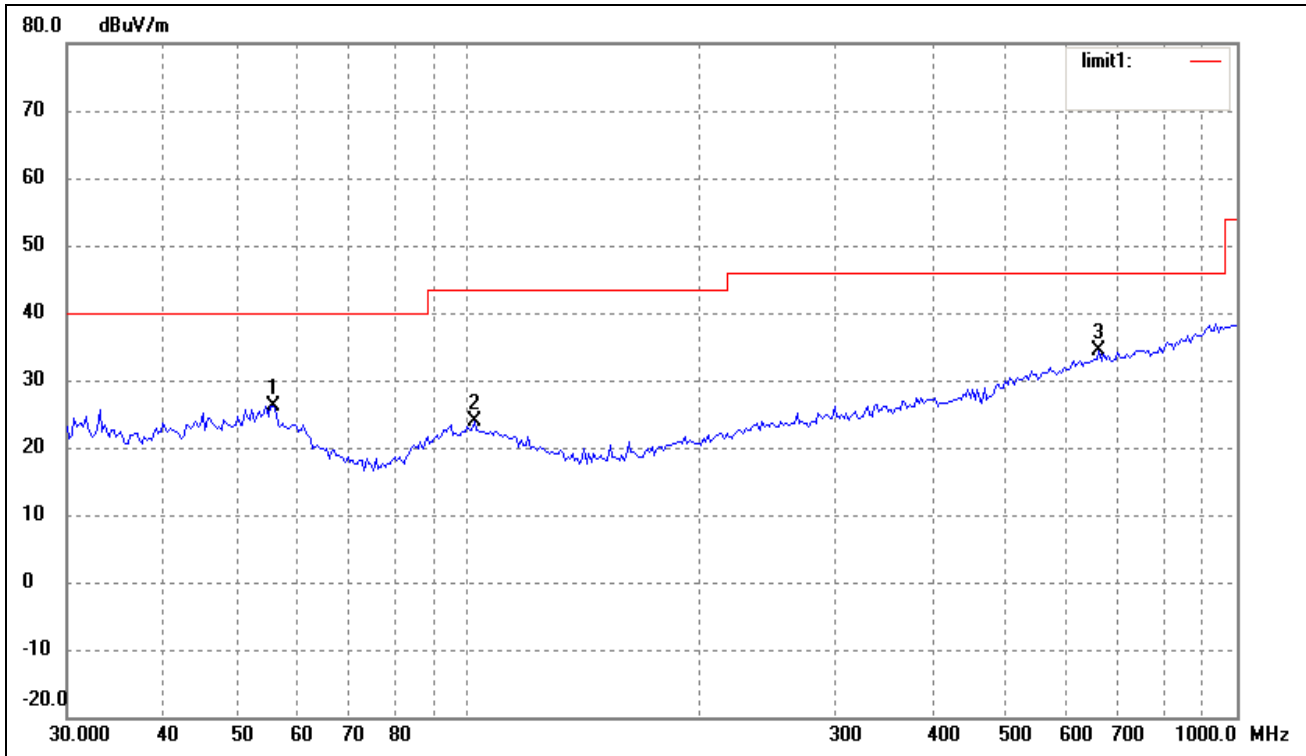
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	33.0950	18.53	6.77	25.30	40.00	-14.70	360	100	peak
2	410.3825	16.86	11.39	28.25	46.00	-17.75	238	100	peak

Vertical



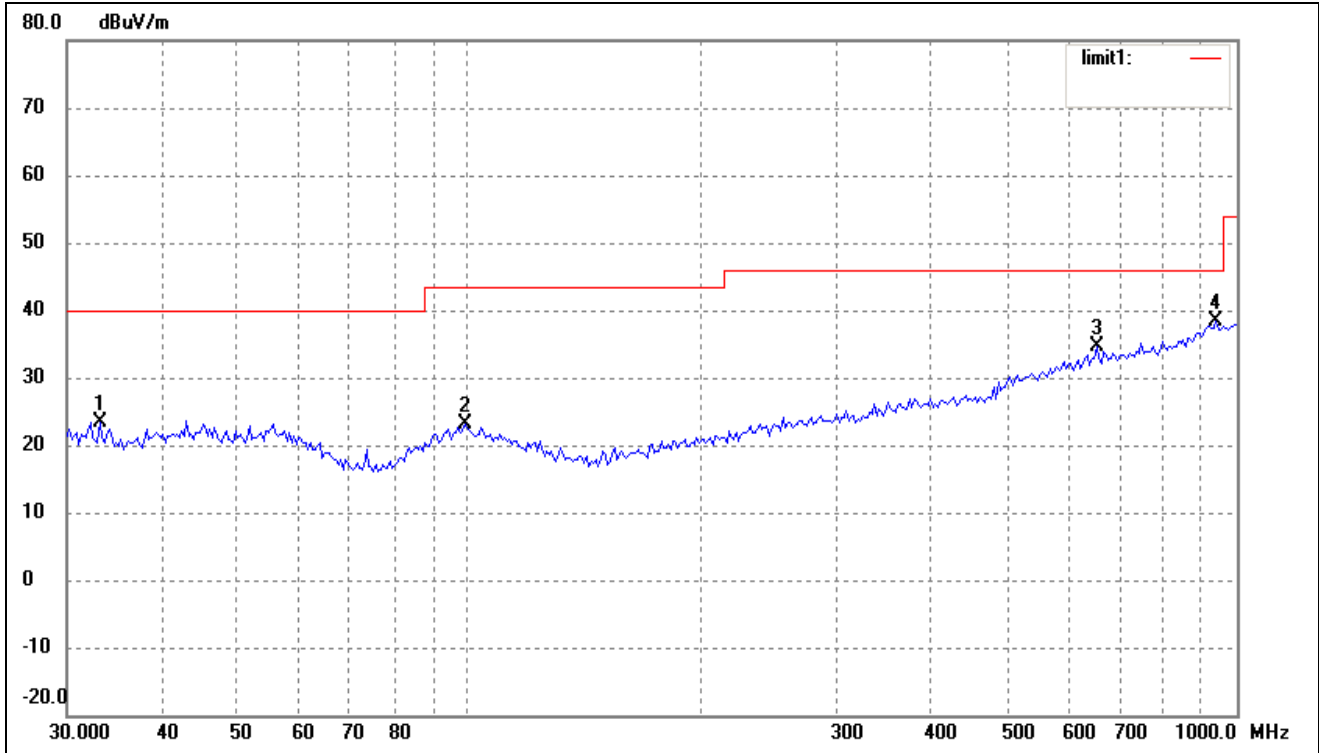
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	55.6094	18.39	7.74	26.13	40.00	-13.87	87	100	peak
2	101.6443	15.49	8.29	23.78	43.50	-19.72	115	100	peak
3	661.1505	17.32	17.18	34.50	46.00	-11.50	234	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11G) High Channel

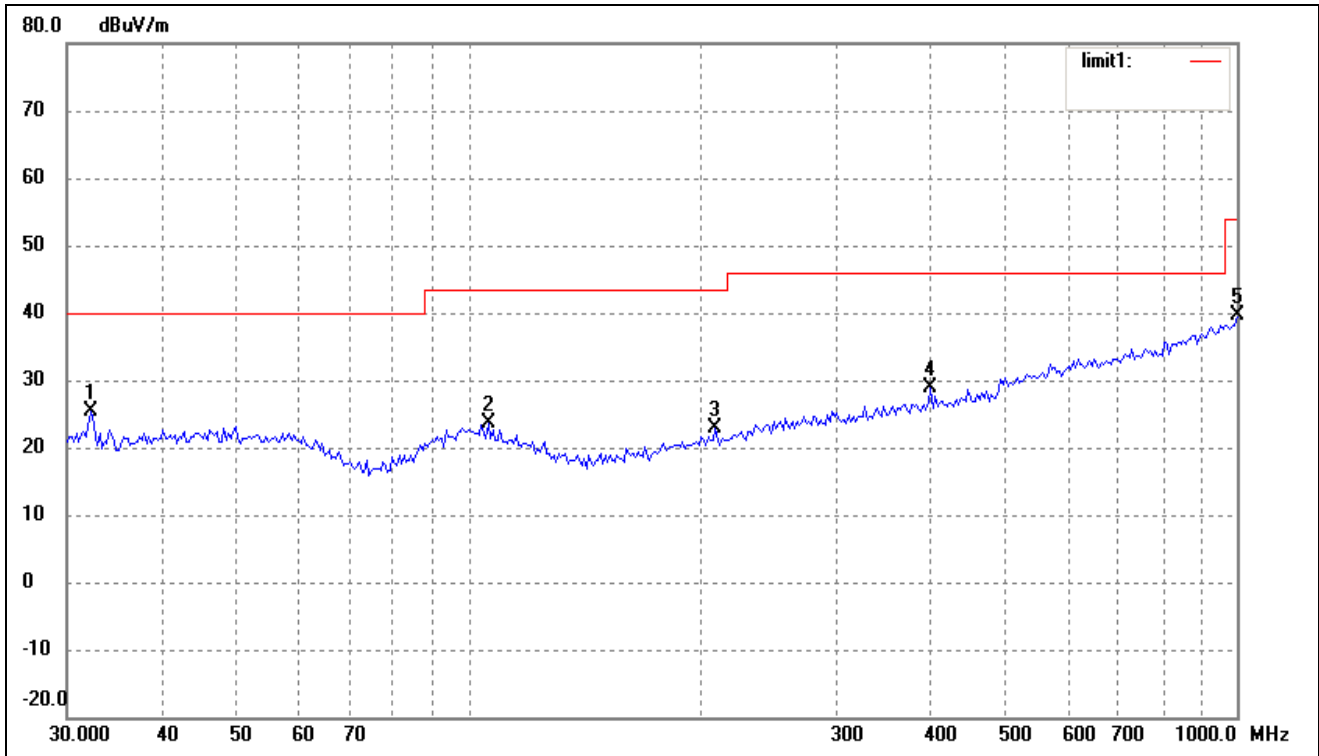
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	33.0950	16.66	6.77	23.43	40.00	-16.57	360	100	peak
2	98.8326	14.78	8.34	23.12	43.50	-20.38	255	100	peak
3	656.5300	17.41	17.14	34.55	46.00	-11.45	213	200	peak
4	938.8326	16.87	21.61	38.48	46.00	-7.52	92	100	peak

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.1795	18.58	6.77	25.35	40.00	-14.65	160	100	peak
2	106.0126	15.62	7.93	23.55	43.50	-19.95	320	100	peak
3	209.3129	15.97	6.91	22.88	43.50	-20.62	52	100	peak
4	399.0302	17.53	11.40	28.93	46.00	-17.07	116	100	peak
5	1000.0000	16.88	22.74	39.62	54.00	-14.38	129	100	peak

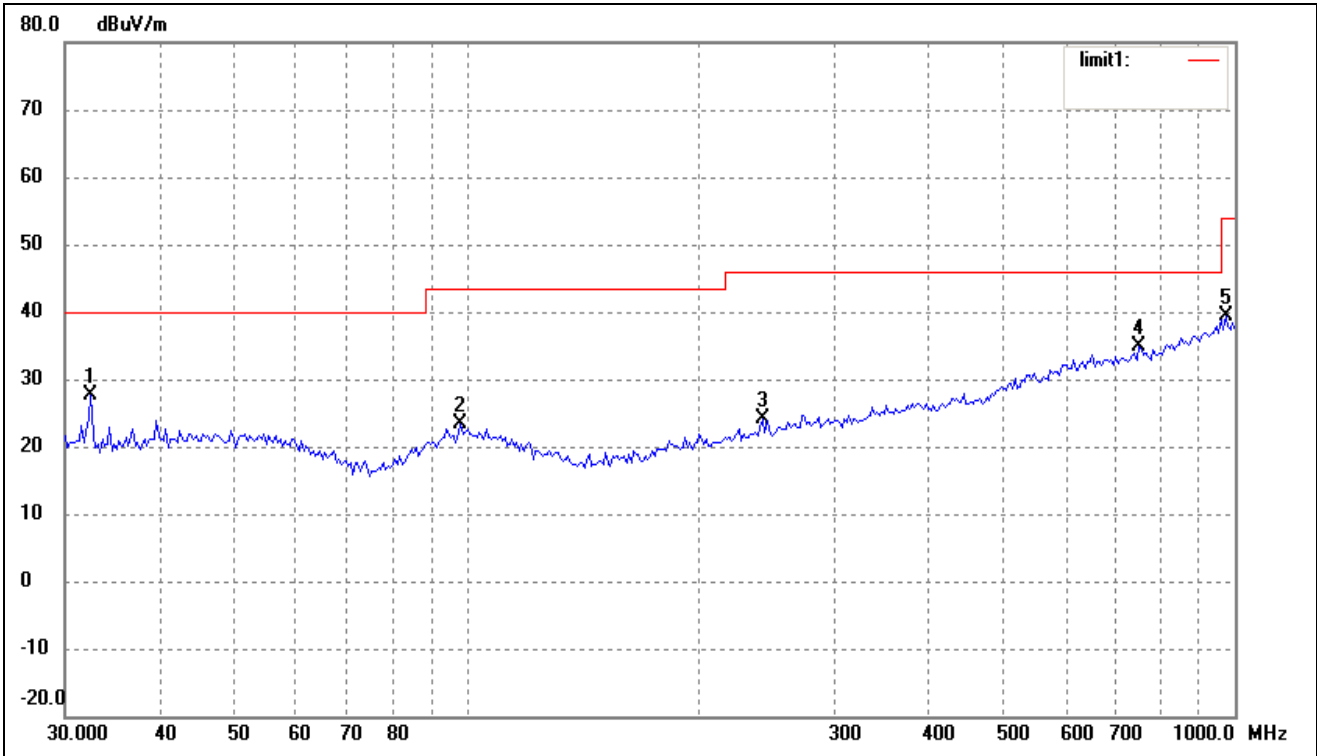
Test Result/Plots:

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11n-HT20) Low Channel

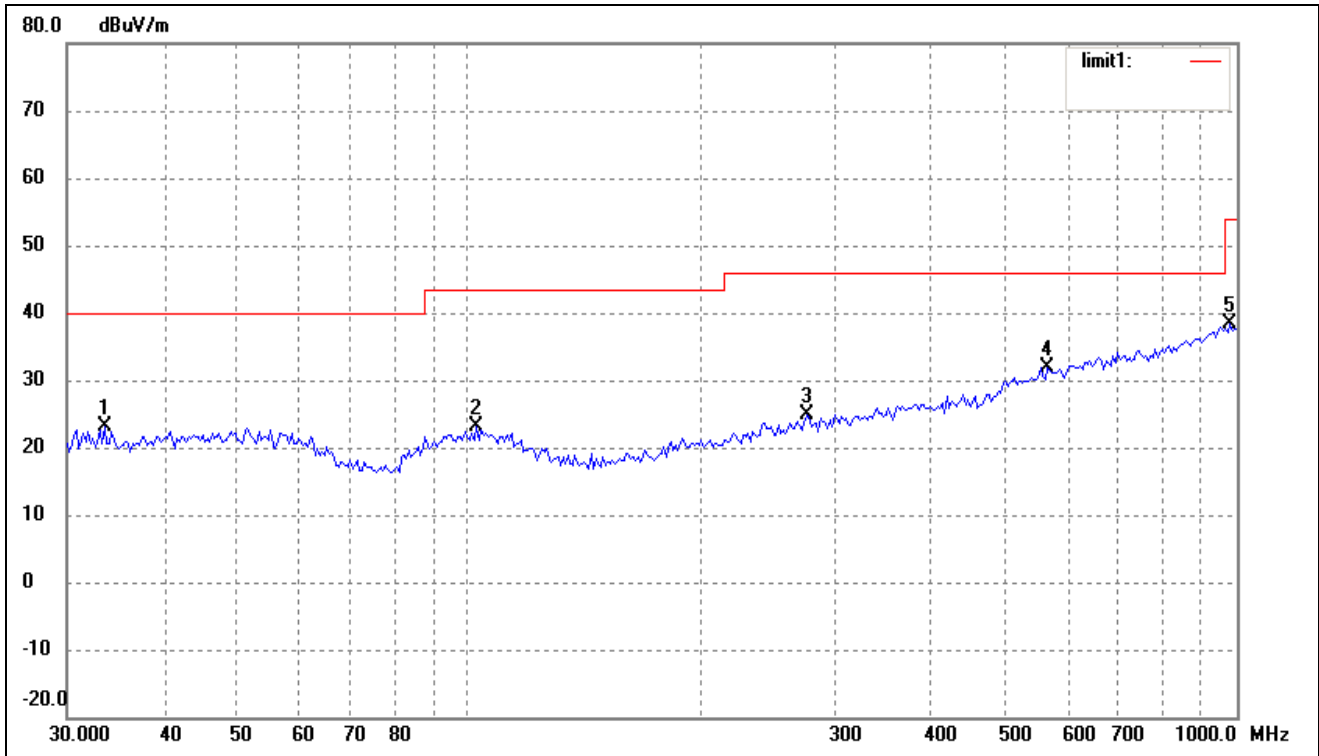
Comment:

Horizontal



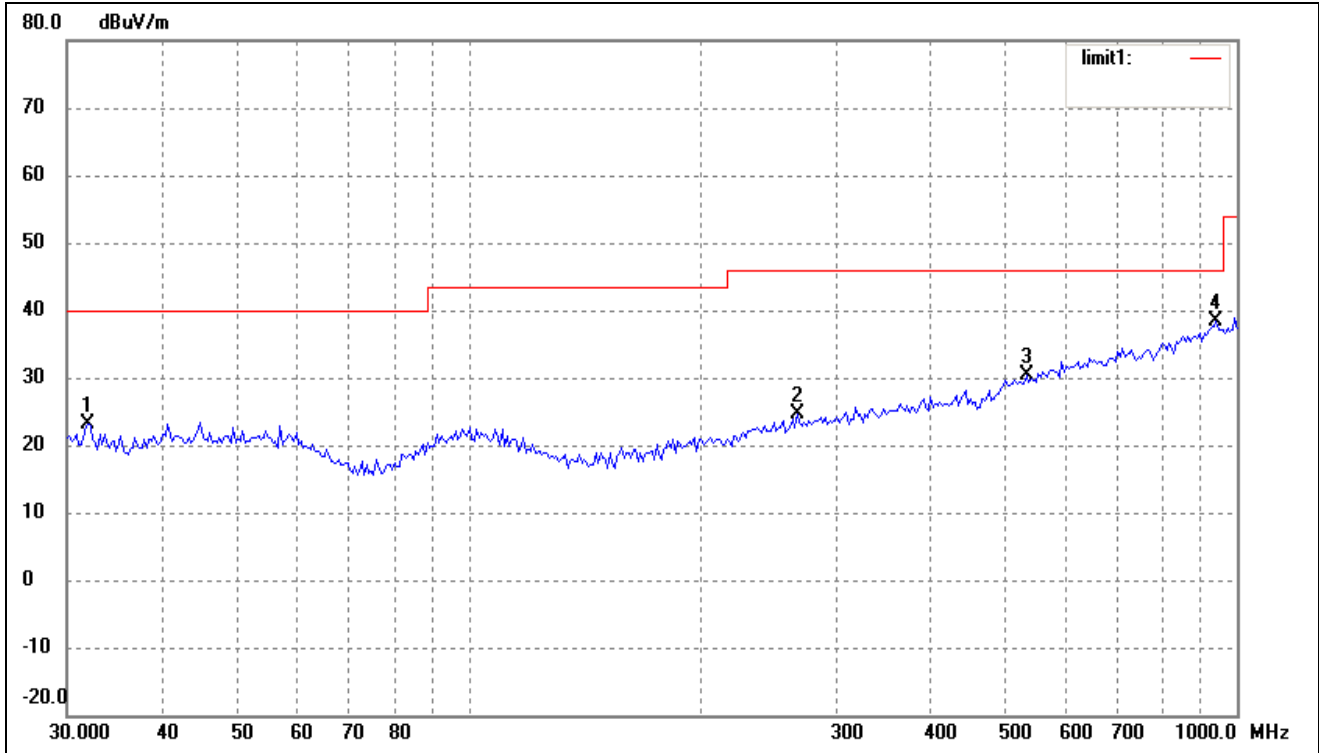
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.4059	20.84	6.77	27.61	40.00	-12.39	360	100	peak
2	98.1419	15.00	8.30	23.30	43.50	-20.20	360	100	peak
3	242.5253	15.60	8.50	24.10	46.00	-21.90	360	100	peak
4	750.1083	16.65	18.26	34.91	46.00	-11.09	360	100	peak
5	972.3374	17.18	22.23	39.41	54.00	-14.59	90	100	peak

Vertical



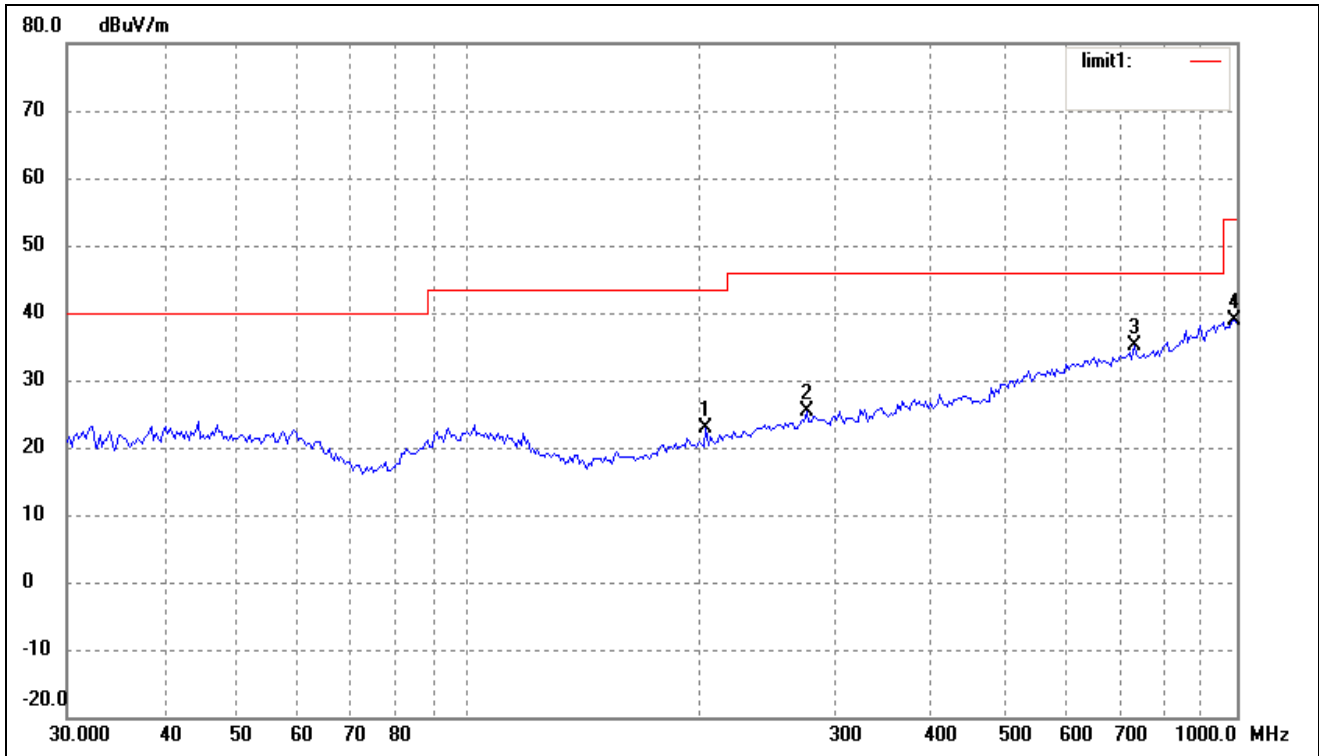
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	33.5624	16.29	6.77	23.06	40.00	-16.94	360	100	peak
2	102.3597	14.93	8.23	23.16	43.50	-20.34	226	100	peak
3	275.1570	15.55	9.38	24.93	46.00	-21.07	154	100	peak
4	566.6223	16.05	15.91	31.96	46.00	-14.04	100	100	peak
5	979.1804	16.04	22.36	38.40	54.00	-15.60	120	100	peak

Spurious Emission From 30 MHz to 1 GHz
 Test mode: Transmitting (802.11n-HT20) Middle Channel
 Comment:
 Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.9546	16.41	6.77	23.18	40.00	-16.82	136	100	peak
2	267.5455	15.37	9.17	24.54	46.00	-21.46	54	100	peak
3	531.9635	15.15	15.12	30.27	46.00	-15.73	95	100	peak
4	938.8326	16.80	21.61	38.41	46.00	-7.59	116	200	peak

Vertical



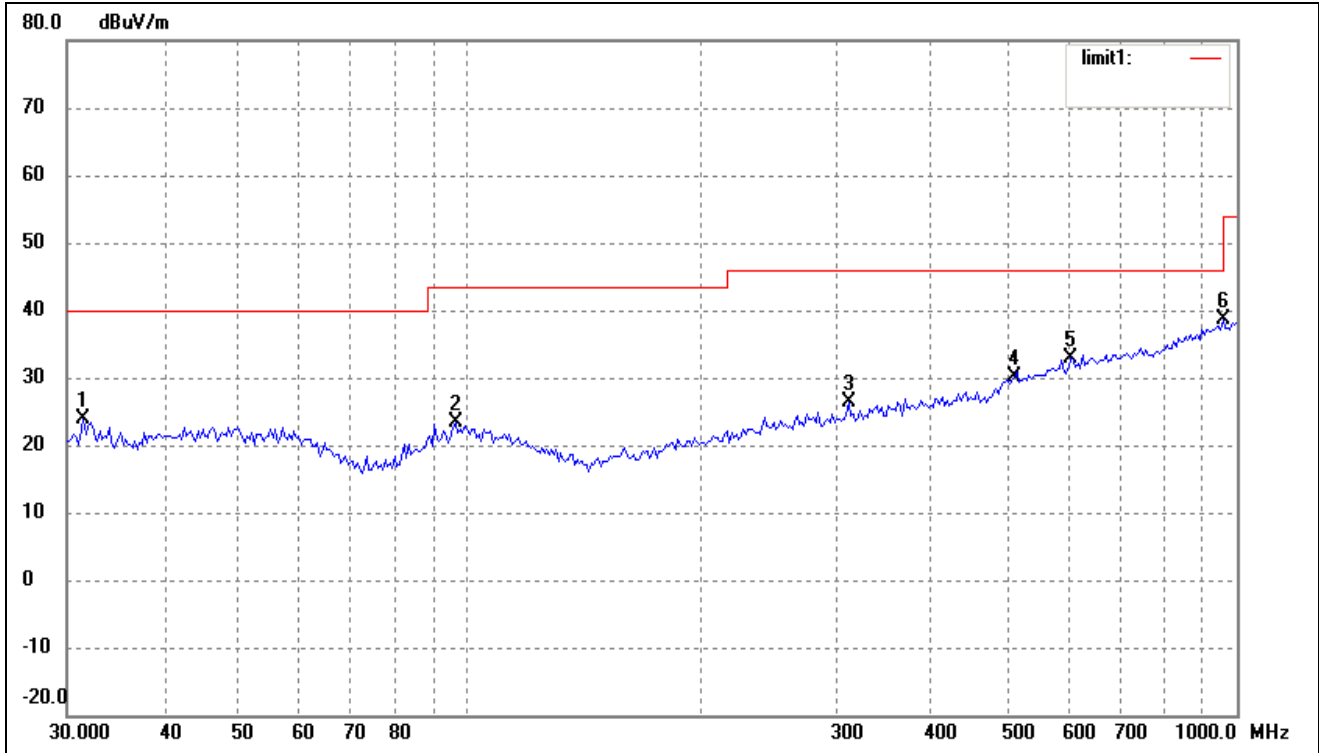
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	203.5228	16.17	6.71	22.88	43.50	-20.62	155	100	peak
2	275.1570	15.99	9.38	25.37	46.00	-20.63	241	200	peak
3	734.4913	17.02	18.02	35.04	46.00	-10.96	203	100	peak
4	993.0114	16.29	22.61	38.90	54.00	-15.10	100	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11n-HT20) High Channel

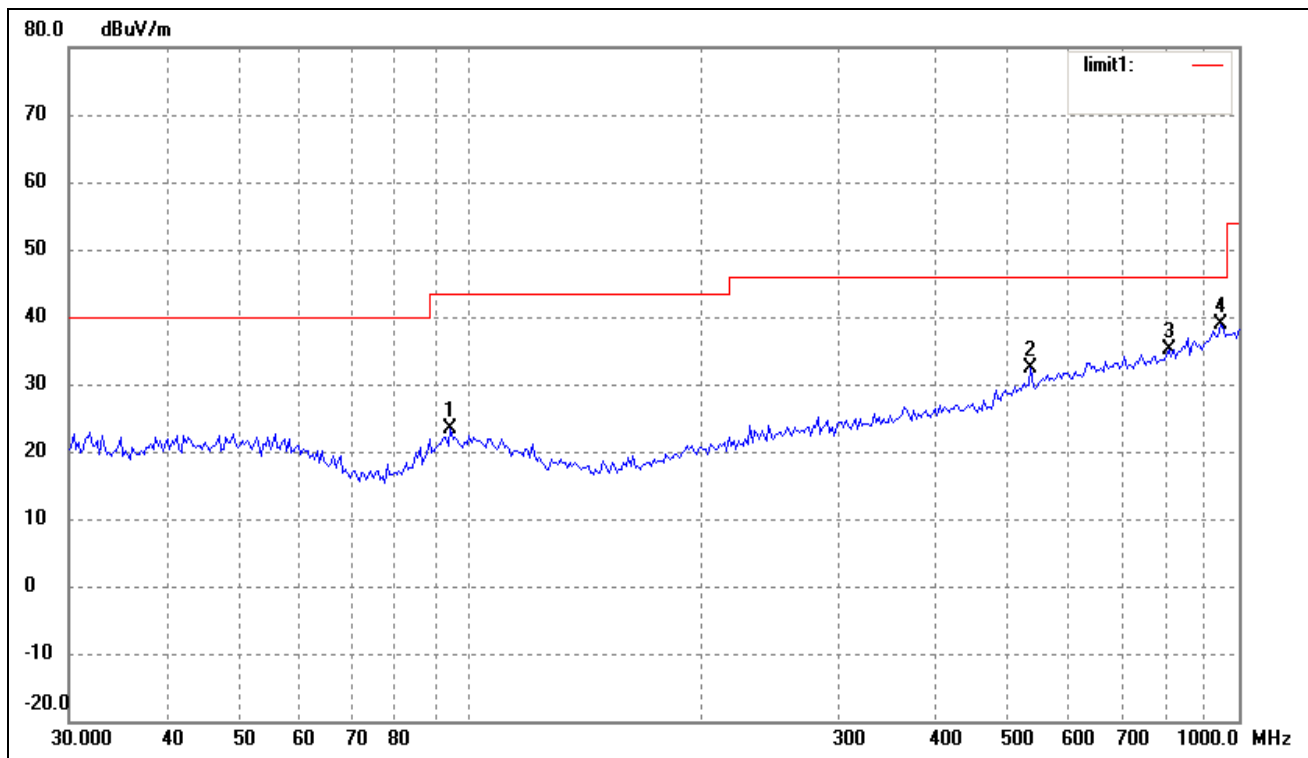
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.5095	17.18	6.77	23.95	40.00	-16.05	61	100	peak
2	96.0986	15.18	8.14	23.32	43.50	-20.18	346	100	peak
3	312.1794	16.51	9.90	26.41	46.00	-19.59	260	100	peak
4	513.6331	15.37	14.72	30.09	46.00	-15.91	168	100	peak
5	607.7867	16.03	16.73	32.76	46.00	-13.24	153	100	peak
6	958.7943	16.61	21.98	38.59	46.00	-7.41	360	100	peak

Vertical



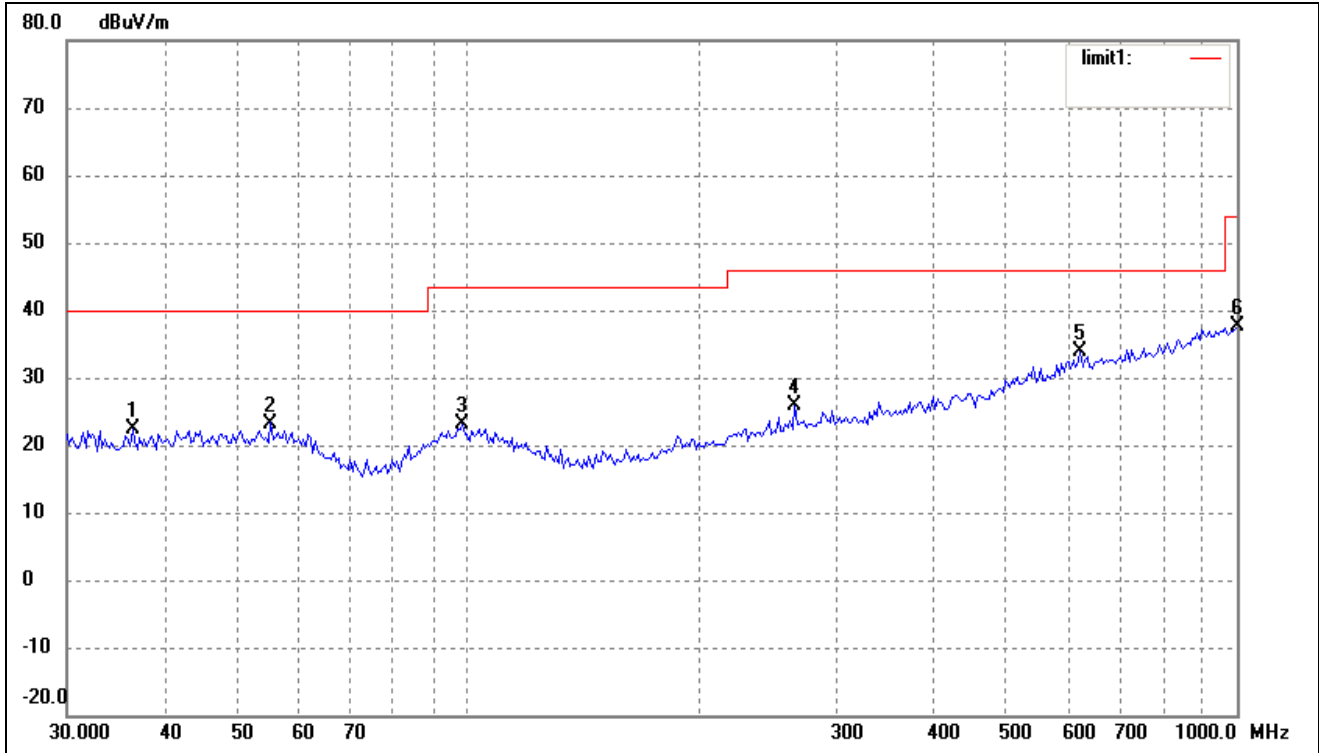
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	94.0979	15.46	7.88	23.34	43.50	-20.16	62	100	peak
2	535.7073	17.27	15.21	32.48	46.00	-13.52	360	100	peak
3	810.2654	16.00	19.20	35.20	46.00	-10.80	164	100	peak
4	945.4399	17.21	21.73	38.94	46.00	-7.06	55	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11n-HT40) Low Channel

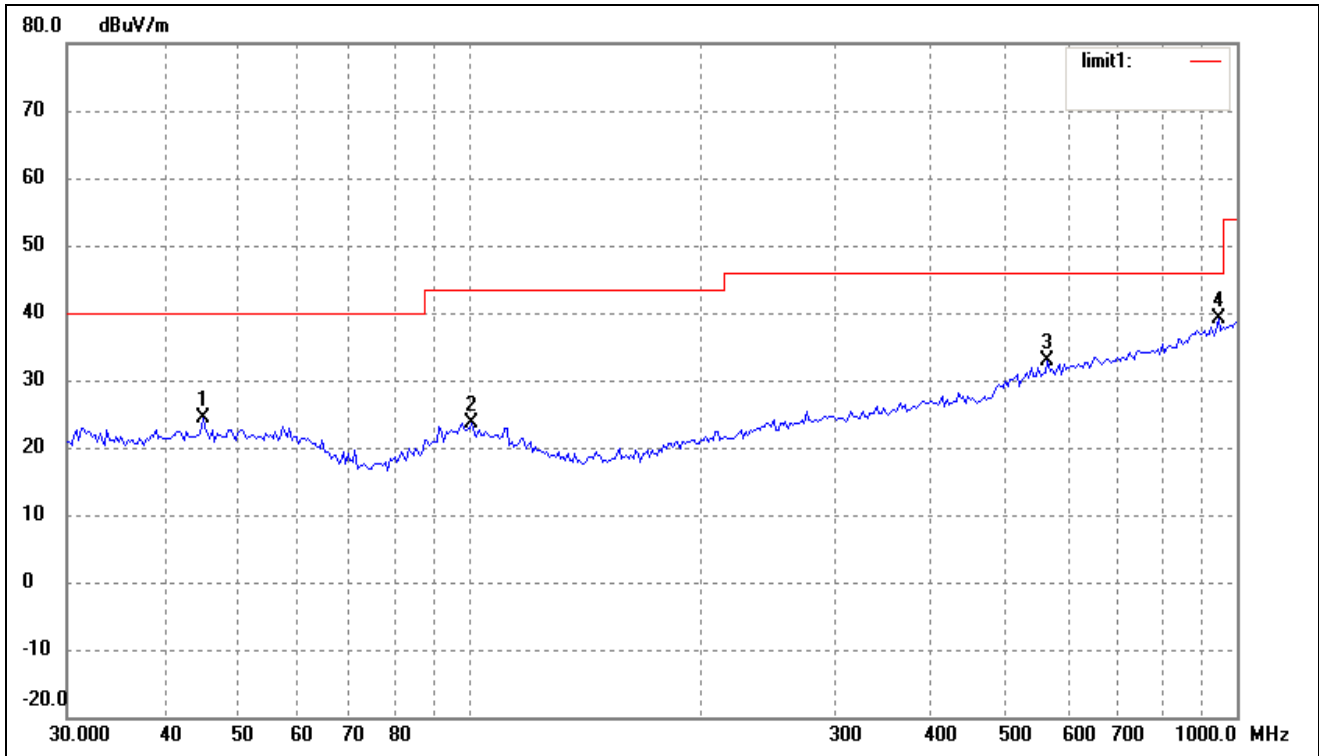
Comment:

Horizontal



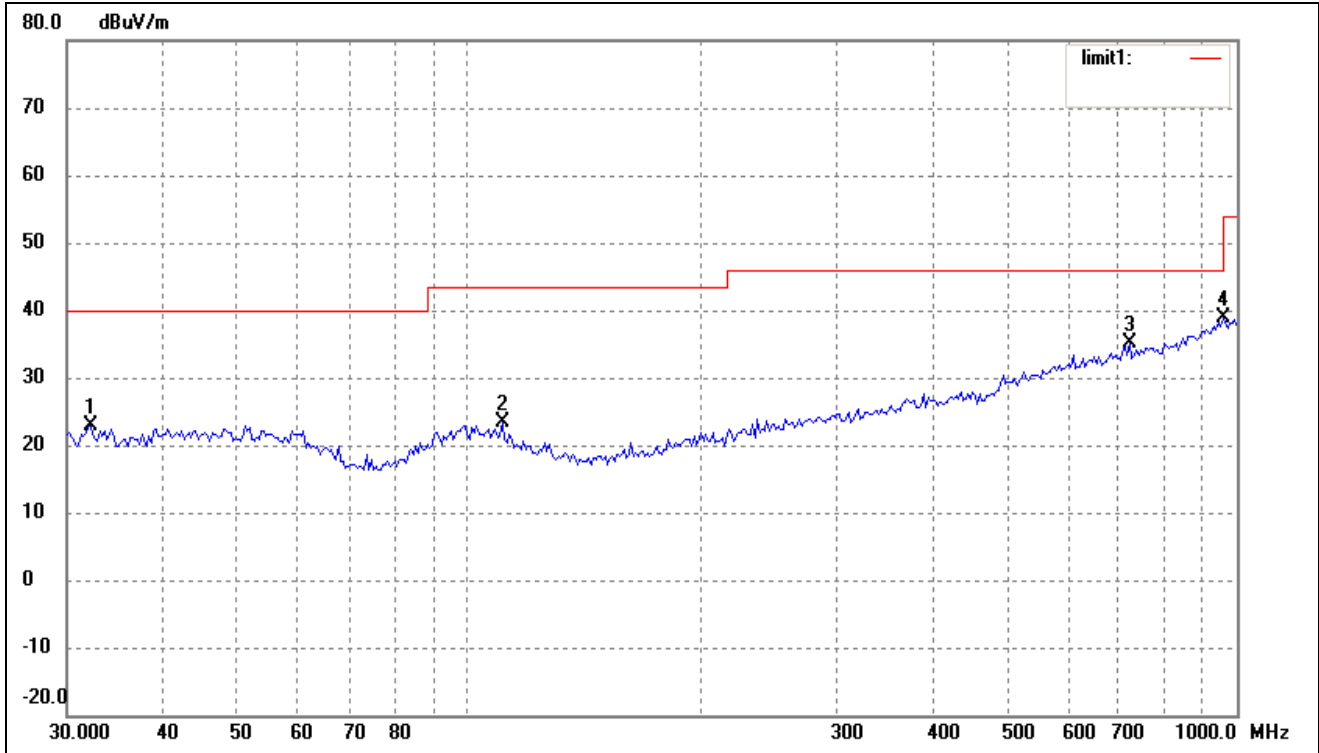
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	36.5092	15.25	7.19	22.44	40.00	-17.56	65	100	peak
2	55.2207	15.49	7.76	23.25	40.00	-16.75	225	100	peak
3	98.1419	14.75	8.30	23.05	43.50	-20.45	138	100	peak
4	265.6757	16.73	9.11	25.84	46.00	-20.16	92	100	peak
5	625.0780	16.97	16.88	33.85	46.00	-12.15	117	100	peak
6	1000.0000	14.81	22.74	37.55	54.00	-16.45	201	100	peak

Vertical



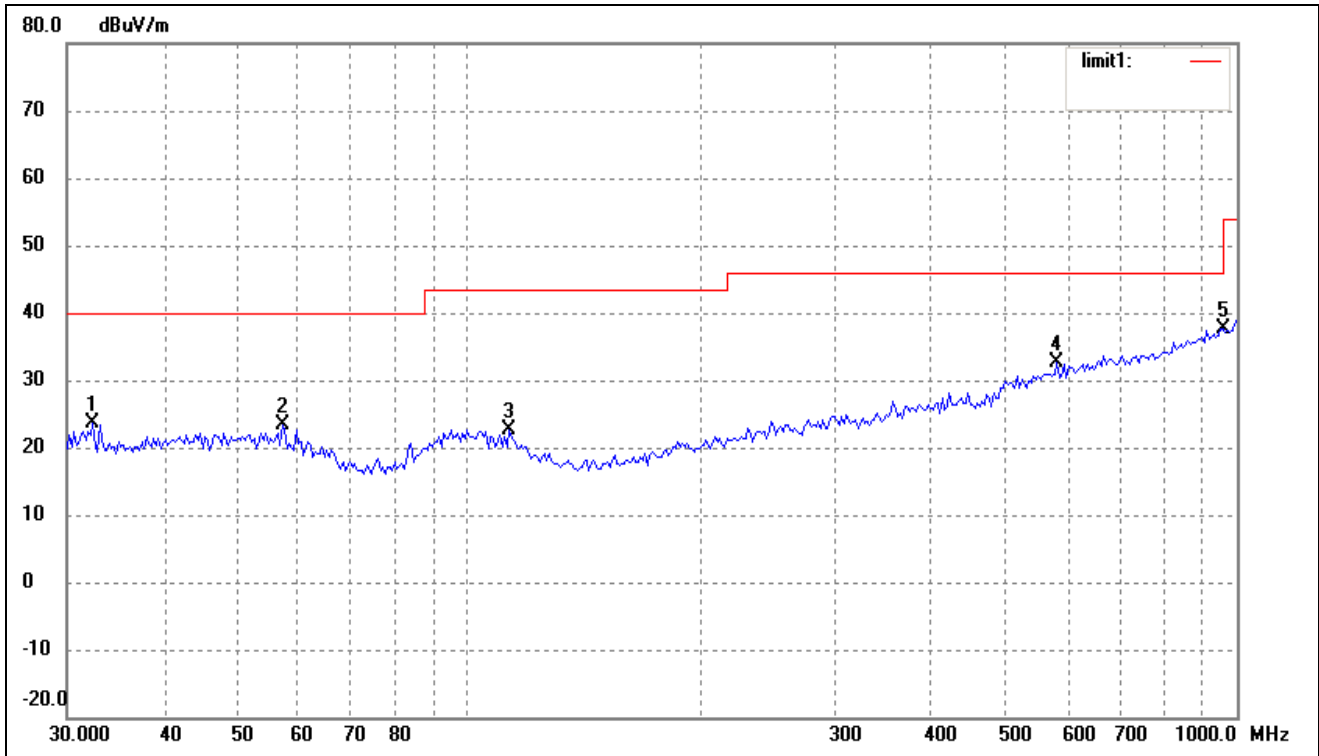
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	45.0583	16.04	8.23	24.27	40.00	-15.73	62	100	peak
2	100.9340	15.20	8.34	23.54	43.50	-19.96	252	100	peak
3	566.6223	16.97	15.91	32.88	46.00	-13.12	62	100	peak
4	945.4399	17.32	21.73	39.05	46.00	-6.95	113	100	peak

Spurious Emission From 30 MHz to 1 GHz
 Test mode: Transmitting (802.11n-HT40) Middle Channel
 Comment:
 Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.1795	16.07	6.77	22.84	40.00	-17.16	64	100	peak
2	110.5687	15.82	7.50	23.32	43.50	-20.18	115	100	peak
3	724.2611	17.21	17.86	35.07	46.00	-10.93	264	100	peak
4	958.7943	16.81	21.98	38.79	46.00	-7.21	302	100	peak

Vertical



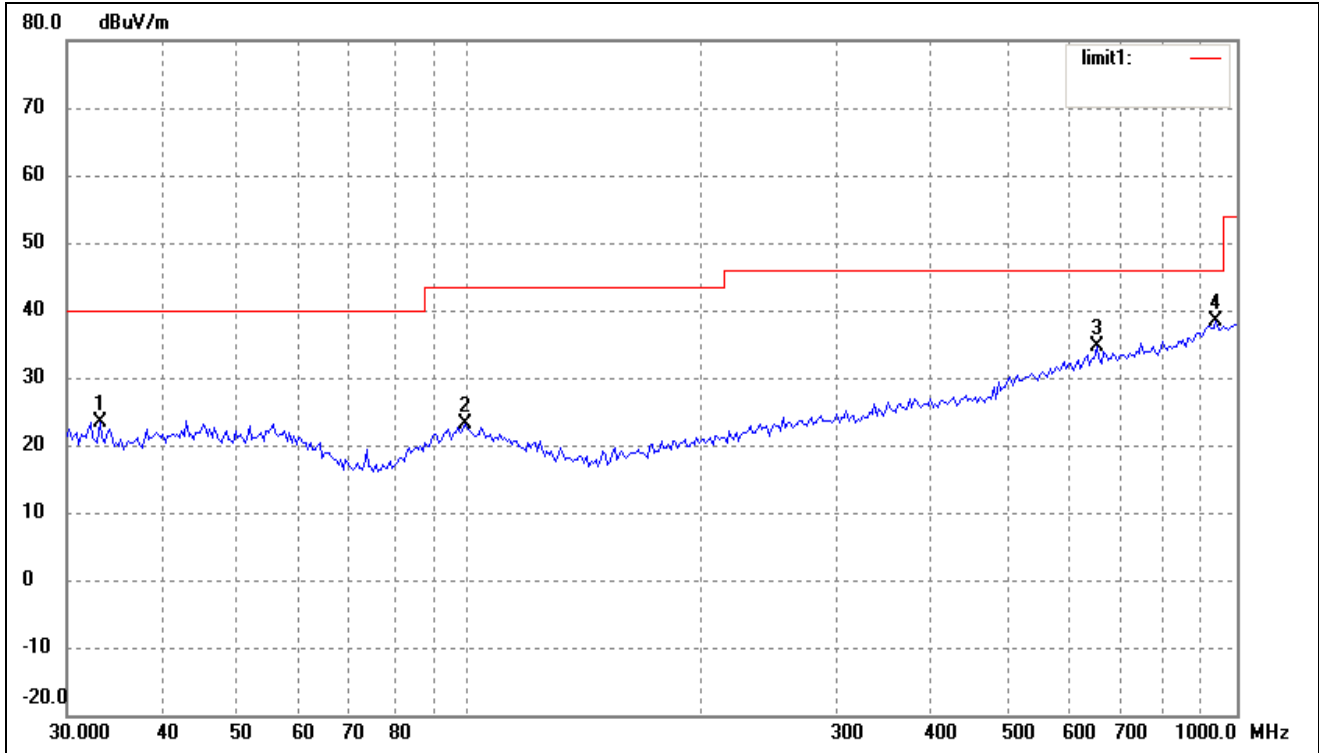
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.4059	16.88	6.77	23.65	40.00	-16.35	164	100	peak
2	57.1914	15.80	7.66	23.46	40.00	-16.54	85	100	peak
3	112.9196	15.45	7.11	22.56	43.50	-20.94	113	100	peak
4	582.7425	16.39	16.28	32.67	46.00	-13.33	26	100	peak
5	958.7943	15.66	21.98	37.64	46.00	-8.36	90	100	peak

Spurious Emission From 30 MHz to 1 GHz

Test mode: Transmitting (802.11n-HT40) High Channel

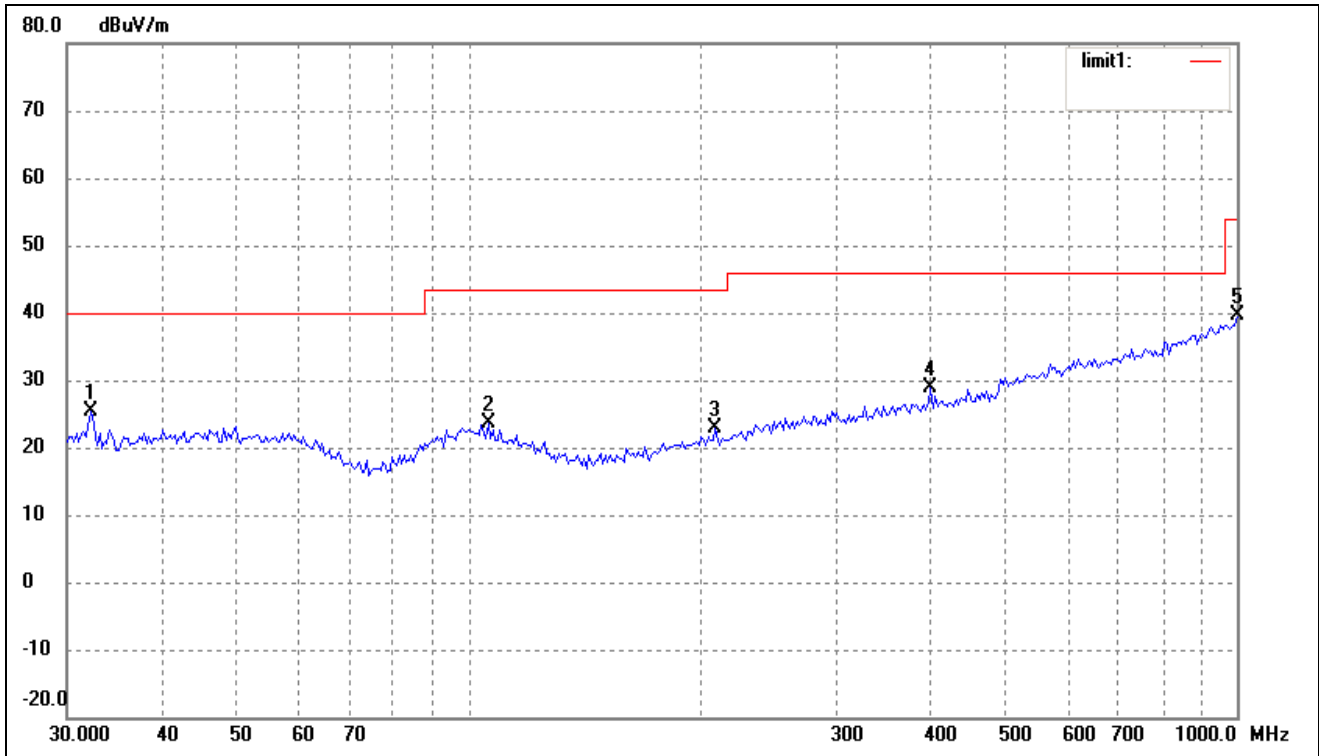
Comment:

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	33.0950	16.66	6.77	23.43	40.00	-16.57	360	100	peak
2	98.8326	14.78	8.34	23.12	43.50	-20.38	255	100	peak
3	656.5300	17.41	17.14	34.55	46.00	-11.45	213	200	peak
4	938.8326	16.87	21.61	38.48	46.00	-7.52	92	100	peak

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.1795	18.58	6.77	25.35	40.00	-14.65	160	100	peak
2	106.0126	15.62	7.93	23.55	43.50	-19.95	320	100	peak
3	209.3129	15.97	6.91	22.88	43.50	-20.62	52	100	peak
4	399.0302	17.53	11.40	28.93	46.00	-17.07	116	100	peak
5	1000.0000	16.88	22.74	39.62	54.00	-14.38	129	100	peak

Spurious Emission above 1GHz

Test Mode: Transmitting (802.11b)

Frequency MHz	Detector	Meter Reading dBuV	Direction Degree	Polar H / V	Antenna Loss dB	Cable loss dB	Amplifier dB	Correction Amplitude dBuV/m	Limit dBuV/m	Margin dB
Low Channel (2412MHz)										
4824.0	PK	53.1	95	V	34.1	5.2	33.0	59.4	74	-14.6
4824.0	PK	48.2	325	H	34.1	5.2	33.0	54.5	74	-19.5
7236.0	PK	45.3	244	V	37.4	6.1	33.5	55.3	74	-18.7
7236.0	PK	42.4	310	H	37.4	6.1	33.5	52.4	74	-21.6
4824.0	AV	42.4	252	V	34.1	5.2	33.0	48.7	54	-5.3
4824.0	AV	39.3	133	H	34.1	5.2	33.0	45.6	54	-8.4
7236.0	AV	34.2	300	V	37.4	6.1	33.5	44.2	54	-9.8
7236.0	AV	32.3	277	H	37.4	6.1	33.5	42.3	54	-11.7
Middle Channel (2437MHz)										
4874.0	PK	53.5	321	V	34.1	5.2	33.0	59.8	74	-14.2
4874.0	PK	49.0	252	H	34.1	5.2	33.0	55.3	74	-18.7
7311.0	PK	40.2	162	V	37.4	6.1	33.5	50.2	74	-23.8
7311.0	PK	38.7	174	H	37.4	6.1	33.5	48.7	74	-25.3
4874.0	AV	42.6	99	V	34.1	5.2	33.0	48.9	54	-5.1
4874.0	AV	39.4	68	H	34.1	5.2	33.0	45.7	54	-8.3
7311.0	AV	33.5	273	V	37.4	6.1	33.5	43.5	54	-10.5
7311.0	AV	32.2	142	H	37.4	6.1	33.5	42.2	54	-11.8
High Channel (2462MHz)										
4924.0	PK	54.2	207	V	34.1	5.2	33.0	60.5	74	-13.5
4924.0	PK	51.0	230	H	34.1	5.2	33.0	57.3	74	-16.7
7386.0	PK	44.4	51	V	37.4	6.1	33.5	54.4	74	-19.6
7386.0	PK	42.3	20	H	37.4	6.1	33.5	52.3	74	-21.7
4924.0	AV	43.3	186	V	34.1	5.2	33.0	49.6	54	-4.4
4924.0	AV	40.7	327	H	34.1	5.2	33.0	47.0	54	-7.0
7386.0	AV	34.4	125	V	37.4	6.1	33.5	44.4	54	-9.6
7386.0	AV	32.2	347	H	37.4	6.1	33.5	42.2	54	-11.8

Spurious Emission above 1GHz

Test Mode: Transmitting (802.11g)

Frequency MHz	Detector	Meter Reading dBuV	Direction Degree	Polar H / V	Antenna Loss dB	Cable loss dB	Amplifier dB	Correction Amplitude dBuV/m	Limit dBuV/m	Margin dB
Low Channel (2412MHz)										
4824.0	PK	50.4	194	V	34.1	5.2	33.0	56.7	74	-17.3
4824.0	PK	48.2	168	H	34.1	5.2	33.0	54.5	74	-19.5
7236.0	PK	41.2	67	V	37.4	6.1	33.5	51.2	74	-22.8
7236.0	PK	39.2	222	H	37.4	6.1	33.5	49.2	74	-24.8
4824.0	AV	42.3	101	V	34.1	5.2	33.0	48.6	54	-5.4
4824.0	AV	41.4	23	H	34.1	5.2	33.0	47.7	54	-6.3
7236.0	AV	34.4	65	V	37.4	6.1	33.5	44.4	54	-9.6
7236.0	AV	32.5	353	H	37.4	6.1	33.5	42.5	54	-11.5
Middle Channel (2437MHz)										
4874.0	PK	52.2	319	V	34.1	5.2	33.0	58.5	74	-15.5
4874.0	PK	48.0	36	H	34.1	5.2	33.0	54.3	74	-19.7
7311.0	PK	42.4	33	V	37.4	6.1	33.5	52.4	74	-21.6
7311.0	PK	40.2	300	H	37.4	6.1	33.5	50.2	74	-23.8
4874.0	AV	41.3	70	V	34.1	5.2	33.0	47.6	54	-6.4
4874.0	AV	40.0	14	H	34.1	5.2	33.0	46.3	54	-7.7
7311.0	AV	32.4	306	V	37.4	6.1	33.5	42.4	54	-11.6
7311.0	AV	31.4	319	H	37.4	6.1	33.5	41.4	54	-12.6
High Channel (2462MHz)										
4924.0	PK	51.0	315	V	34.1	5.2	33.0	57.3	74	-16.7
4924.0	PK	47.9	105	H	34.1	5.2	33.0	54.2	74	-19.8
7386.0	PK	44.4	324	V	37.4	6.1	33.5	54.4	74	-19.6
7386.0	PK	41.6	226	H	37.4	6.1	33.5	51.6	74	-22.4
4924.0	AV	41.0	358	V	34.1	5.2	33.0	47.3	54	-6.7
4924.0	AV	38.9	177	H	34.1	5.2	33.0	45.2	54	-8.8
7386.0	AV	33.3	198	V	37.4	6.1	33.5	43.3	54	-10.7
7386.0	AV	31.2	259	H	37.4	6.1	33.5	41.2	54	-12.8

Spurious Emission above 1GHz

Test Mode: Transmitting (802.11n-HT20)

Frequency MHz	Detector	Meter Reading dBuV	Direction Degree	Polar H / V	Antenna Loss dB	Cable loss dB	Amplifier dB	Correction Amplitude dBuV/m	Limit dBuV/m	Margin dB
Low Channel (2412MHz)										
4824.0	PK	51.0	260	V	34.1	5.2	33.0	57.3	74	-16.7
4824.0	PK	47.9	92	H	34.1	5.2	33.0	54.2	74	-19.8
7236.0	PK	40.3	19	V	37.4	6.1	33.5	50.3	74	-23.7
7236.0	PK	39.6	320	H	37.4	6.1	33.5	49.6	74	-24.4
4824.0	AV	40.2	260	V	34.1	5.2	33.0	46.5	54	-7.5
4824.0	AV	37.4	92	H	34.1	5.2	33.0	43.7	54	-10.3
7236.0	AV	32.2	19	V	37.4	6.1	33.5	42.2	54	-11.8
7236.0	AV	33.0	320	H	37.4	6.1	33.5	43.0	54	-11.0
Middle Channel (2437MHz)										
4874.0	PK	50.4	335	V	34.1	5.2	33.0	56.7	74	-17.3
4874.0	PK	47.2	40	H	34.1	5.2	33.0	53.5	74	-20.5
7311.0	PK	40.8	237	V	37.4	6.1	33.5	50.8	74	-23.2
7311.0	PK	39.7	249	H	37.4	6.1	33.5	49.7	74	-24.3
4874.0	AV	39.9	217	V	34.1	5.2	33.0	46.2	54	-7.8
4874.0	AV	36.5	340	H	34.1	5.2	33.0	42.8	54	-11.2
7311.0	AV	33.5	193	V	37.4	6.1	33.5	43.5	54	-10.5
7311.0	AV	32.8	309	H	37.4	6.1	33.5	42.8	54	-11.2
High Channel (2462MHz)										
4924.0	PK	52.1	291	V	34.1	5.2	33.0	58.4	74	-15.6
4924.0	PK	49.0	101	H	34.1	5.2	33.0	55.3	74	-18.7
7386.0	PK	41.3	229	V	37.4	6.1	33.5	51.3	74	-22.7
7386.0	PK	39.5	204	H	37.4	6.1	33.5	49.5	74	-24.5
4924.0	AV	39.7	292	V	34.1	5.2	33.0	46.0	54	-8.0
4924.0	AV	38.1	71	H	34.1	5.2	33.0	44.4	54	-9.6
7386.0	AV	33.5	17	V	37.4	6.1	33.5	43.5	54	-10.5
7386.0	AV	34.0	276	H	37.4	6.1	33.5	44.0	54	-10.0

Spurious Emission Above 1GHz

Test Mode: Transmitting (802.11n-HT40)

Frequency MHz	Detector	Meter Reading dBuV	Direction Degree	Polar H / V	Antenna Loss dB	Cable loss dB	Amplifier dB	Correction Amplitude dBuV/m	Limit dBuV/m	Margin dB
Low Channel (2422MHz)										
4844.0	PK	51.2	90	V	34.1	5.2	33.0	57.5	74	-16.5
4824.0	PK	50.0	270	H	34.1	5.2	33.0	56.3	74	-17.7
7266.0	PK	42.4	180	V	37.4	6.1	33.5	52.4	74	-21.6
7266.0	PK	39.0	45	H	37.4	6.1	33.5	49.0	74	-25.0
4844.0	AV	39.9	270	V	34.1	5.2	33.0	46.2	54	-7.8
4844.0	AV	38.4	90	H	34.1	5.2	33.0	44.7	54	-9.3
7266.0	AV	33.2	45	V	37.4	6.1	33.5	43.2	54	-10.8
7266.0	AV	32.3	60	H	37.4	6.1	33.5	42.3	54	-11.7
Middle Channel (2437MHz)										
4874.0	PK	51.2	45	V	34.1	5.2	33.0	57.5	74	-16.5
4874.0	PK	52.0	270	H	34.1	5.2	33.0	58.3	74	-15.7
7311.0	PK	40.4	45	V	37.4	6.1	33.5	50.4	74	-23.6
7311.0	PK	38.7	180	H	37.4	6.1	33.5	48.7	74	-25.3
4874.0	AV	39.3	270	V	34.1	5.2	33.0	45.6	54	-8.4
4874.0	AV	36.9	90	H	34.1	5.2	33.0	43.2	54	-10.8
7311.0	AV	32.5	60	V	37.4	6.1	33.5	42.5	54	-11.5
7311.0	AV	34.2	45	H	37.4	6.1	33.5	44.2	54	-9.8
High Channel (2452MHz)										
4904.0	PK	51.1	270	V	34.1	5.2	33.0	57.4	74	-16.6
4904.0	PK	48.3	45	H	34.1	5.2	33.0	54.6	74	-19.4
7356.0	PK	42.1	180	V	37.4	6.1	33.5	52.1	74	-21.9
7356.0	PK	38.3	45	H	37.4	6.1	33.5	48.3	74	-25.7
4904.0	AV	40.1	90	V	34.1	5.2	33.0	46.4	54	-7.6
4904.0	AV	38.9	270	H	34.1	5.2	33.0	45.2	54	-8.8
7356.0	AV	34.0	60	V	37.4	6.1	33.5	44.0	54	-10.0
7356.0	AV	33.2	60	H	37.4	6.1	33.5	43.2	54	-10.8

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 5th 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.

8. OUT OF BAND EMISSIONS

8.1 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.

8.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2011-12-20	2012-12-19
EMI Test Receiver	R&S	ESVB	825471/005	2011-12-20	2012-12-19
Positioning Controller	C&C	CC-C-1F	N/A	2011-12-20	2012-12-19
RF Switch	EM	EMSW18	SW060023	2011-12-20	2012-12-19
Pre-amplifier	Agilent	8447F	3113A06717	2011-12-20	2012-12-19
Pre-amplifier	Compliance Direction	PAP-0118	24002	2011-12-20	2012-12-19
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24

8.3 Test Procedure

1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW, VBW=100KHz, Span=50MHz, Sweep = auto
3. Set the Lowest and Highest Transmitting Channel, observed the outside band of 2400MHz to 2438.5MHz, then mark the higher-level emission for comparing with the FCC rules.

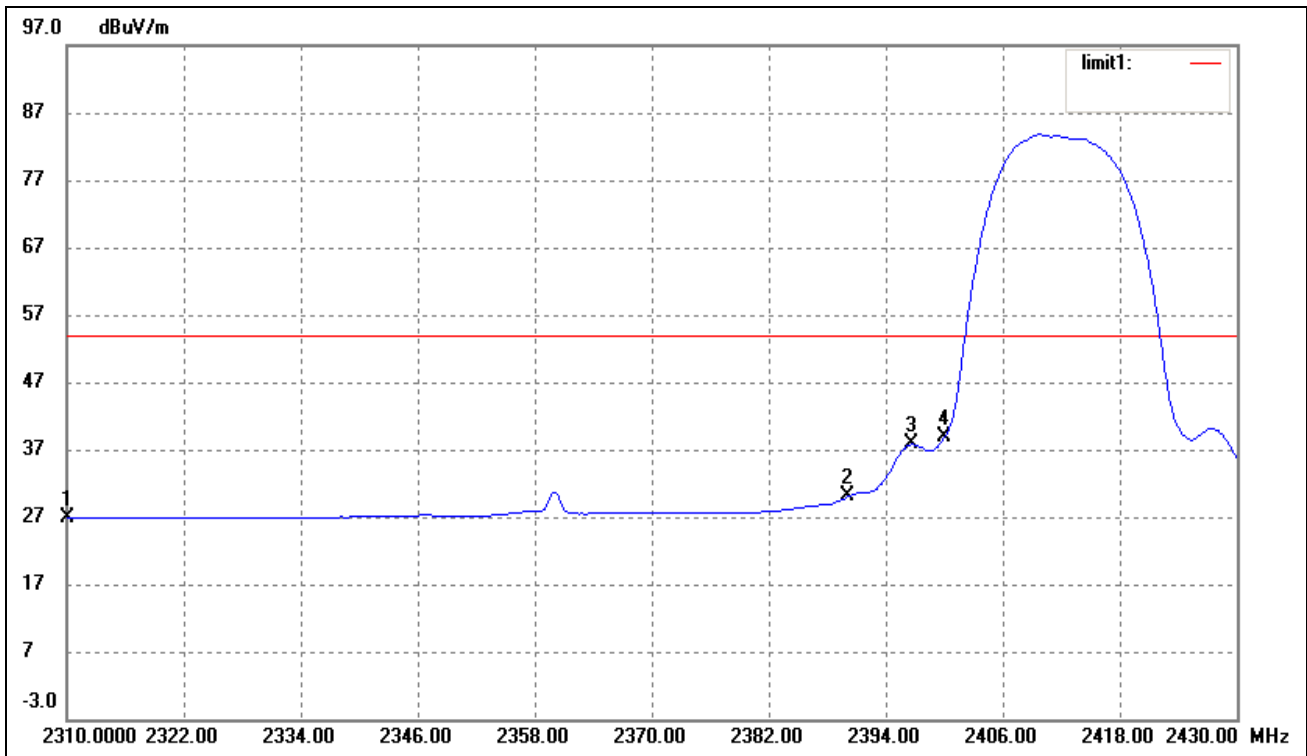
8.4 Environmental Conditions

Temperature:	21° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

8.5 Summary of Test Results/Plots

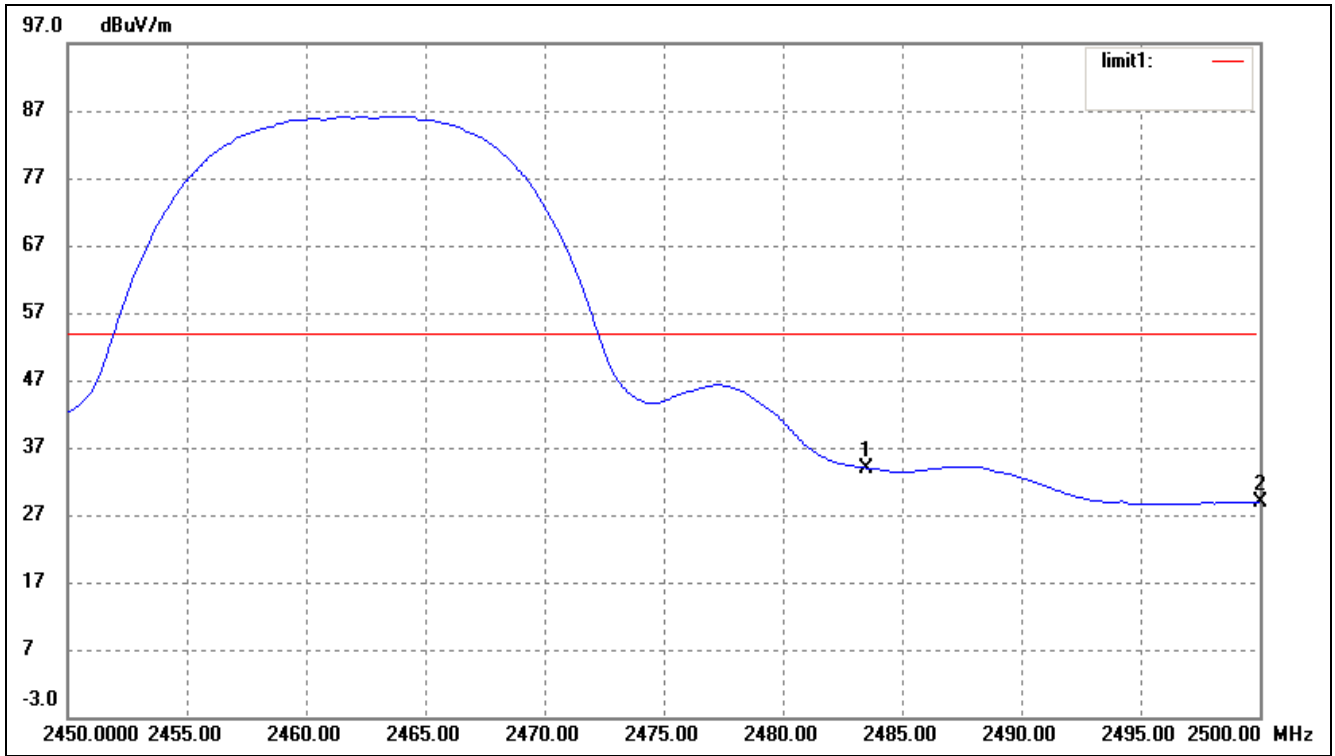
Test mode	Frequency	Limit	Result
	MHz	dBuV /dB	
802.11b	2310.00	<54dBuV	Pass
	2390.00	<54dBuV	Pass
	2396.00	<54dBuV	Pass
	2400.00	<54dBuV	Pass
	2483.50	<54dBuV	Pass
	2500.00	<54dBuV	Pass
802.11g	2310.00	<54dBuV	Pass
	2390.00	<54dBuV	Pass
	2400.00	<54dBuV	Pass
	2483.50	<54dBuV	Pass
	2500.00	<54dBuV	Pass
802.11n-HT20	2390.00	<54dBuV	Pass
	2310.00	<54dBuV	Pass
	2400.00	<54dBuV	Pass
	2483.50	<54dBuV	Pass
	2500.00	<54dBuV	Pass
802.11n-HT40	2310.00	<54dBuV	Pass
	2390.00	<54dBuV	Pass
	2400.00	<54dBuV	Pass
	2483.50	<54dBuV	Pass
	2500.00	<54dBuV	Pass

For 802.11b
Lowest Bandedge



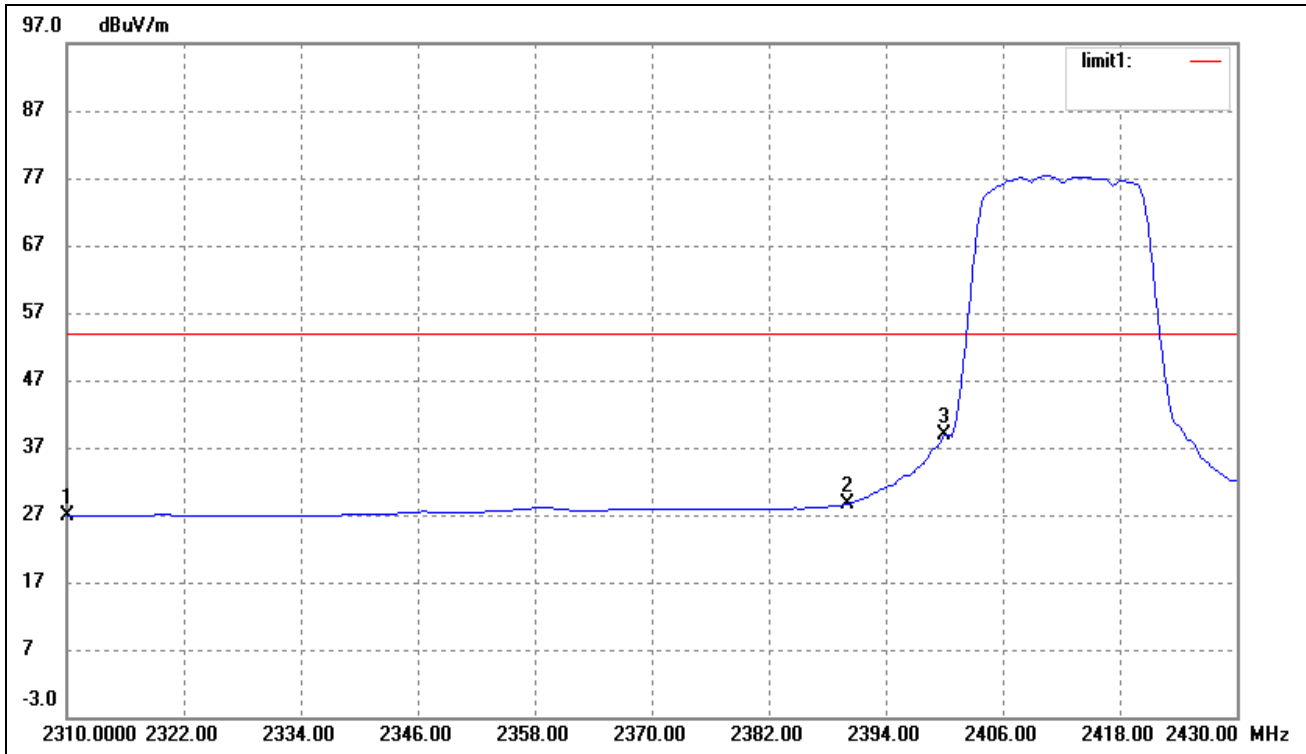
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	31.46	-4.65	26.81	54.00	-27.19	Average Detector
	2310.000	42.30	-4.65	37.65	74.00	-36.35	Peak Detector
2	2390.000	34.51	-4.46	30.05	54.00	-23.95	Average Detector
	2390.000	43.21	-4.46	38.75	74.00	-35.25	Peak Detector
3	2396.640	42.20	-4.44	37.76	54.00	-16.24	Average Detector
	2396.640	52.30	-4.44	47.86	74.00	-26.14	Peak Detector
4	2400.000	43.26	-4.43	38.83	54.00	-15.17	Average Detector
	2400.000	54.35	-4.43	49.92	74.00	-24.08	Peak Detector

For 802.11b
Highest Bandedge



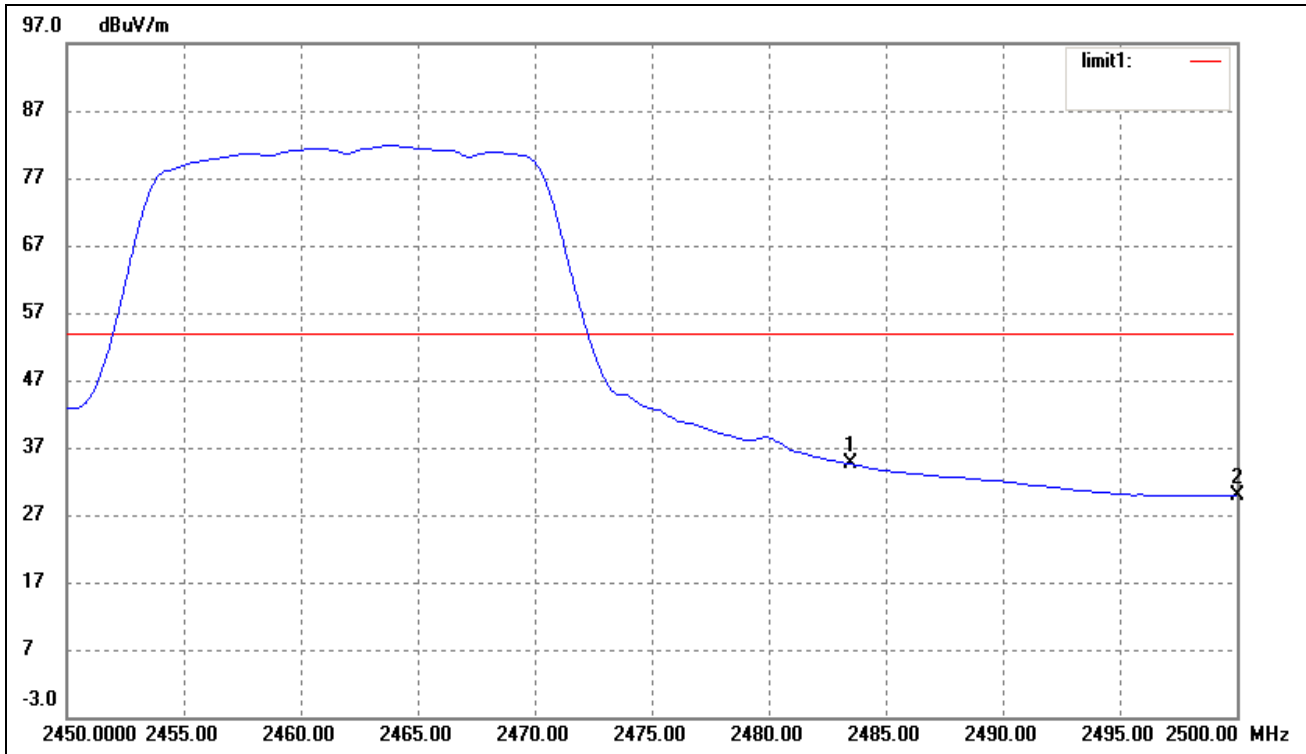
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	38.21	-4.23	33.98	54	-20.02	Average Detector
	2483.500	48.32	-4.23	44.09	74	-29.91	Peak Detector
2	2500.000	32.97	-4.18	28.79	54	-25.21	Average Detector
	2500.000	42.64	-4.18	38.46	74	-35.54	Peak Detector

For 802.11g
Lowest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	31.50	-4.65	26.85	54.00	-27.15	Average Detector
		41.52	-4.65	36.87	74.00	-37.13	Peak Detector
2	2390.000	33.18	-4.46	28.72	54.00	-25.28	Average Detector
		44.41	-4.46	39.95	74.00	-34.05	Peak Detector
3	2400.000	43.26	-4.43	38.83	54.00	-15.17	Average Detector
		52.96	-4.43	48.53	74.00	-25.47	Peak Detector

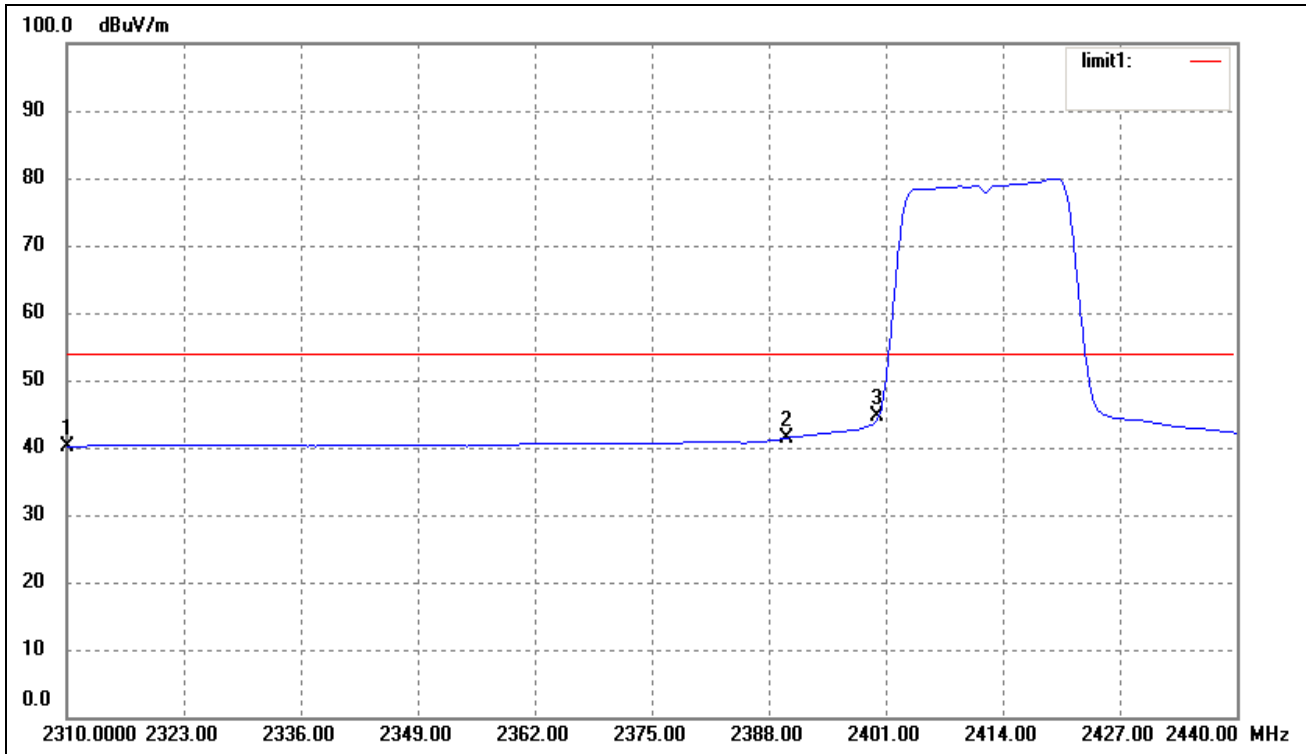
For 802.11g
Highest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	38.75	-4.23	34.52	54.00	-19.48	Average Detector
		47.84	-4.23	43.61	74.00	-30.39	Peak Detector
2	2500.000	34.02	-4.18	29.84	54.00	-24.16	Average Detector
		45.12	-4.18	40.94	74.00	-33.06	Peak Detector

For 802.11n-HT20

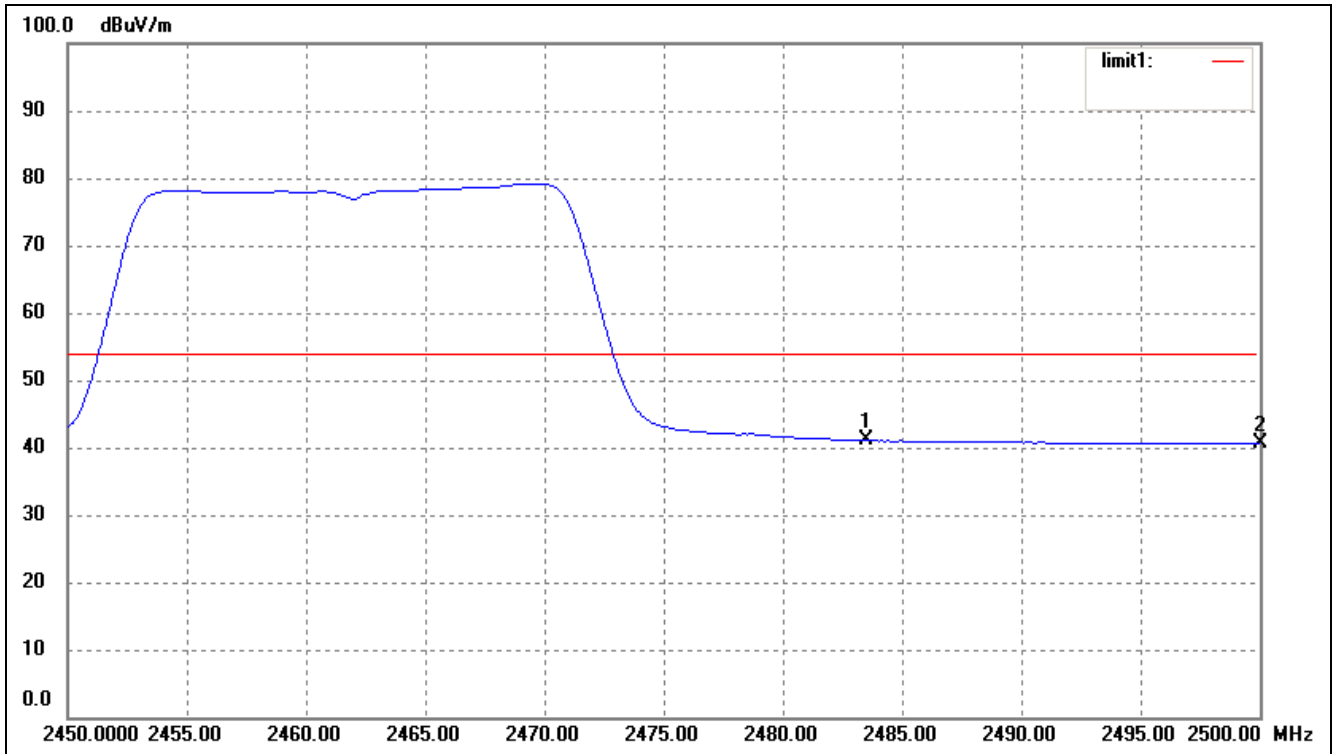
Lowest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	35.89	4.29	40.18	54.00	-13.82	Average Detector
	2310.000	44.37	4.29	48.66	74.00	-25.34	Peak Detector
2	2390.000	36.99	4.46	41.45	54.00	-12.55	Average Detector
	2390.000	46.58	4.46	51.04	74.00	-22.96	Peak Detector
3	2400.000	40.24	4.49	44.73	54.00	-9.27	Average Detector
	2400.000	45.73	4.49	50.22	74.00	-23.78	Peak Detector

For 802.11n-HT20

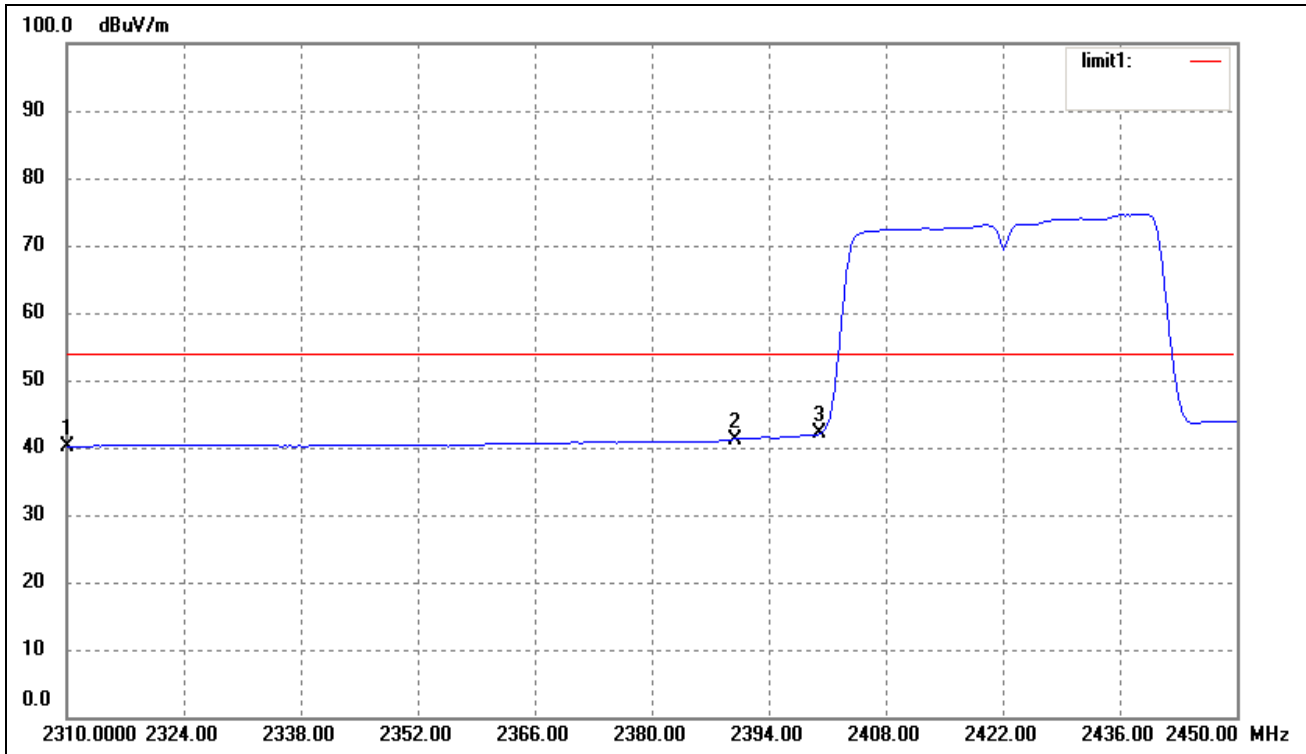
Highest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	36.35	4.67	41.02	54.00	-12.98	Average Detector
	2483.500	46.47	4.67	51.14	74.00	-22.86	Peak Detector
2	2500.000	35.94	4.72	40.66	54.00	-13.34	Average Detector
	2500.000	46.23	4.72	50.95	74.00	-23.05	Peak Detector

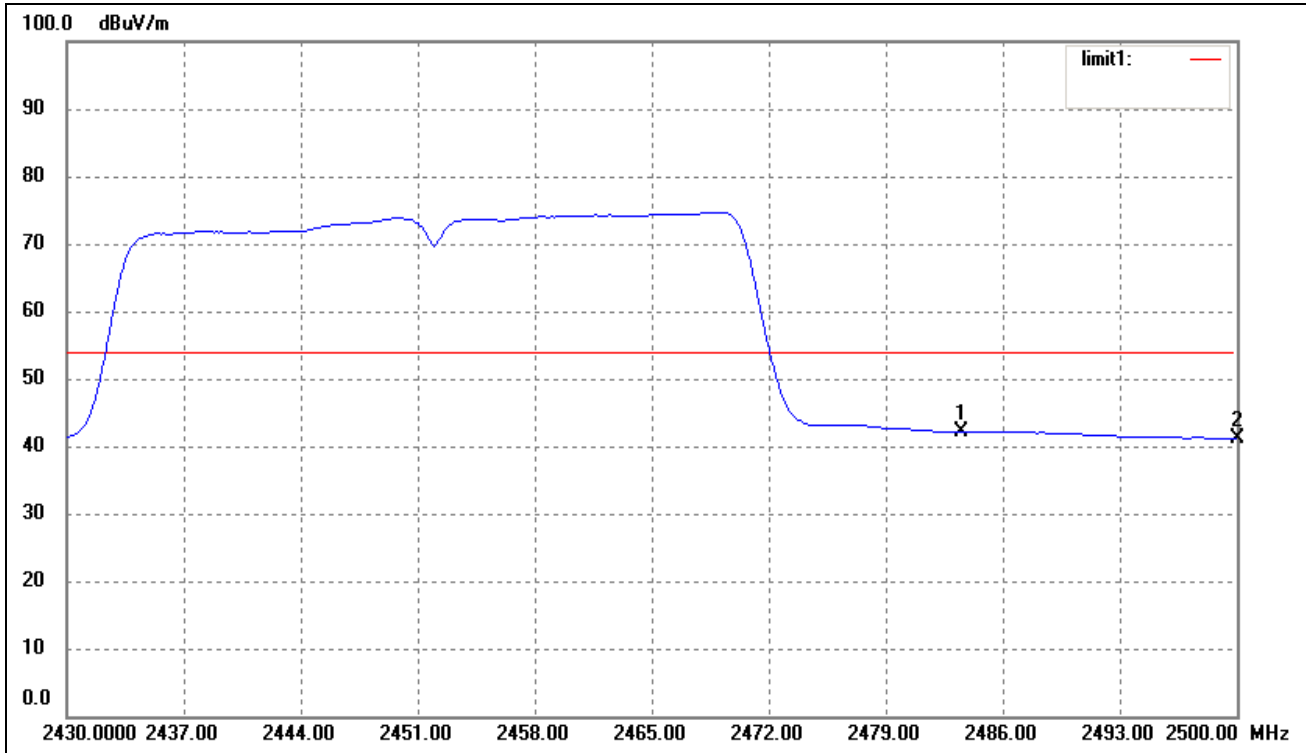
For 802.11n-HT40

Lowest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	35.87	4.29	40.16	54.00	-13.84	Average Detector
	2310.000	44.37	4.29	48.66	74.00	-25.34	Peak Detector
2	2390.000	36.79	4.46	41.25	54.00	-12.75	Average Detector
	2390.000	46.58	4.46	51.04	74.00	-22.96	Peak Detector
3	2400.000	37.61	4.49	42.10	54.00	-11.90	Average Detector
	2400.000	45.73	4.49	50.22	74.00	-23.78	Peak Detector

Highest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	37.43	4.67	42.10	54.00	-11.90	Average Detector
	2483.500	46.60	4.67	51.27	74.00	-22.73	Peak Detector
2	2500.000	36.35	4.72	41.07	54.00	-12.93	Average Detector
	2500.000	45.64	4.72	50.36	74.00	-23.64	Peak Detector

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