

FCC Part 15C Measurement and Test Report

For

Shenzhen NuboMed Technology Co., Ltd.

Tangtou 1st Rd., Skyworth Innovation Valley #5, Building C, 6F, Shiyan,

Baoan, Shenzhen, China

FCC ID: 2AQK4S3000

FCC Rule(s): FCC Part 15C

Product Description: Mobile Medical Cart

Tested Model: S3000

Report No.: STR16128219I

Tested Date: 2017-08-17 to 2017-08-29

Issued Date: 2017-08-29

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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 Shenzhen SEM Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Shenzhen NuboMed Technology Co., Ltd.
Address of applicant: Tangtou 1st Rd., Skyworth Innovation Valley #5,
Building C, 6F, Shiyan, Baoan, Shenzhen, China

Manufacturer: Shenzhen NuboMed Technology Co., Ltd.
Address of manufacturer: Tangtou 1st Rd., Skyworth Innovation Valley #5,
Building C, 6F, Shiyan, Baoan, Shenzhen, China

General Description of EUT	
Product Name:	Mobile Medical Cart
Trade Name:	NuboMed
Model No.:	S3000
Adding Model(s):	S3010, S3020, S3030, S30X0, S4000, R4000, SXXXX (the 1st "X" stands for 0-9, the 2nd to 4th "X" stands for 0-3)
Rated Voltage:	DC 24V
Power Adapter Model:	Model: GA120SD1-24005000 INPUT:100-240V~50/60Hz,2.0A; OUTPUT:24V,5A
Software Version:	/
Hardware Version:	/
<i>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 S3000, but the circuit and the electronic construction do not change, declared by the manufacturer.</i>	

Technical Characteristics of EUT	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz
Max. RF Output Power:	9.47 dBm (Conducted)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	11
Channel Separation:	5MHz
Type of Antenna:	Integral
Antenna Gain:	Antenna A: 0dBi; Antenna B: 0dBi

1.2 Test Standards

The following report is prepared on behalf of the Shenzhen NuboMed Technology Co., Ltd. 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 v04 for digital transmission systems shall be performed also.

1.4 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.

1.5 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
Note: All test modes (different data rate and different modulation) are performed, but only the worst case is recorded in this report.		

Accessories Equipment List and Details			
Description	Manufacturer	Model No.	Serial Number
Notebook	Lenovo	E10	LR-63C8R
Accessories Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With Core/Without Core
AC Cable	0.8	Shielded	Without Ferrite
DC Cable	1.0	Shielded	With Ferrite
EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.0	Shielded	Without Ferrite

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Power Spectral Density	Conducted	$\pm 1.8\text{dB}$
Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	$\pm 2.88\text{dB}$
Transmitter Spurious Emissions	Radiated	$\pm 5.1\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2017-06-12	2018-06-11
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2017-06-12	2018-06-11
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2017-06-12	2018-06-11
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2017-06-12	2018-06-11
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2017-06-12	2018-06-11
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2017-06-12	2018-06-11
SEMT-1042	Horn Antenna	ETS	3117	00086197	2017-06-12	2018-06-11
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2017-06-12	2018-06-11
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2017-06-12	2018-06-11
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2017-06-12	2018-06-11
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2017-06-12	2018-06-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2017-06-12	2018-06-11

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
§15.205	Restricted Band of Operation	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 RF Exposure 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 v04, 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: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set VBW $\geq 3 \times \text{RBW}$.
- e) Detector = power averaging (RMS) or sample detector (when RMS not available).
- f) Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span/RBW}$.
- 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

Antenna A

Test Mode	Test Channel MHz	Power Spectral Density dBm/3kHz	Limit dBm/3kHz
802.11b	2412	-6.59	8
	2437	-8.823	8
	2462	-9.017	8
802.11g	2412	-12.89	8
	2437	-13.19	8
	2462	-12.49	8
802.11n HT20	2412	-12.88	8
	2437	-12.72	8
	2462	-12.35	8
802.11n HT40	2422	-13.92	8
	2437	-16.31	8
	2452	-13.68	8

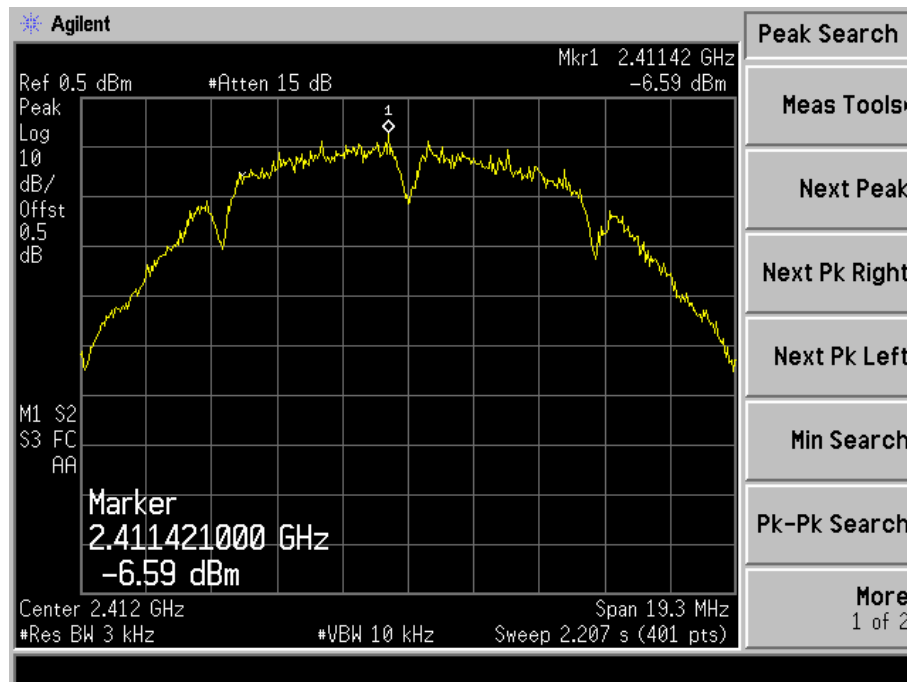
Antenna B

Test Mode	Test Channel MHz	Power Spectral Density dBm/3kHz	Limit dBm/3kHz
802.11b	2412	-8.507	8
	2437	-8.460	8
	2462	-8.709	8
802.11g	2412	-12.10	8
	2437	-13.31	8
	2462	-10.87	8
802.11n HT20	2412	-13.05	8
	2437	-12.44	8
	2462	-12.19	8
802.11n HT40	2422	-13.93	8
	2437	-16.27	8
	2452	-15.05	8

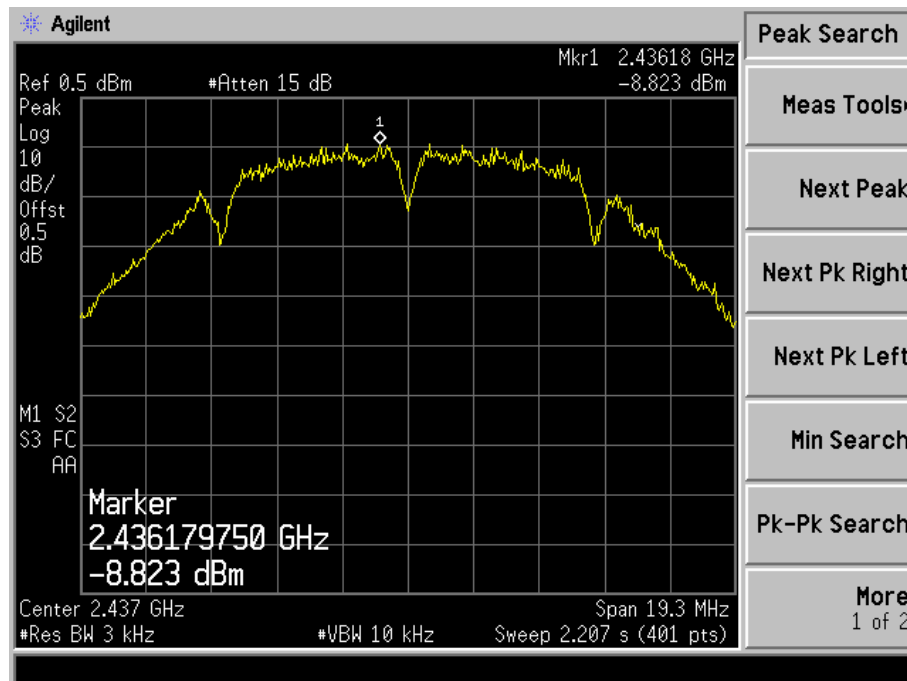
Please refer to the following test plots:

Antenna A

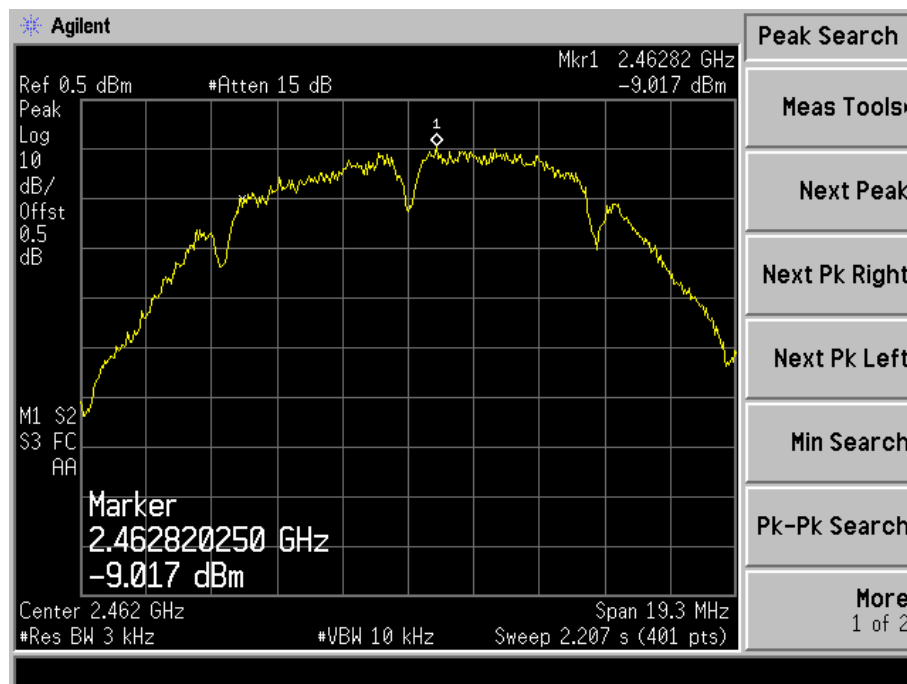
802.11b-Low Channel



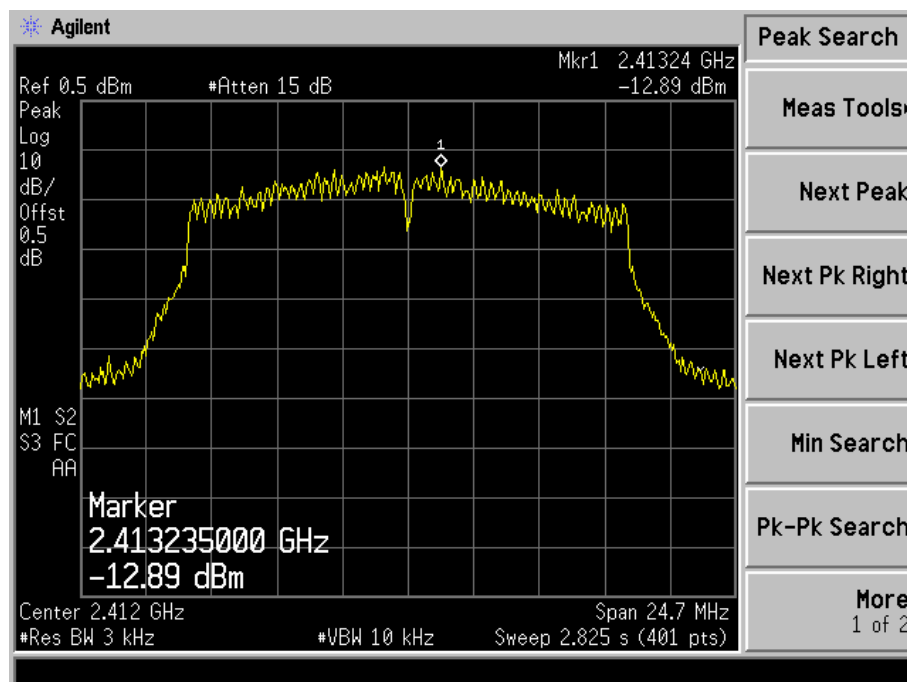
802.11b-Middle Channel



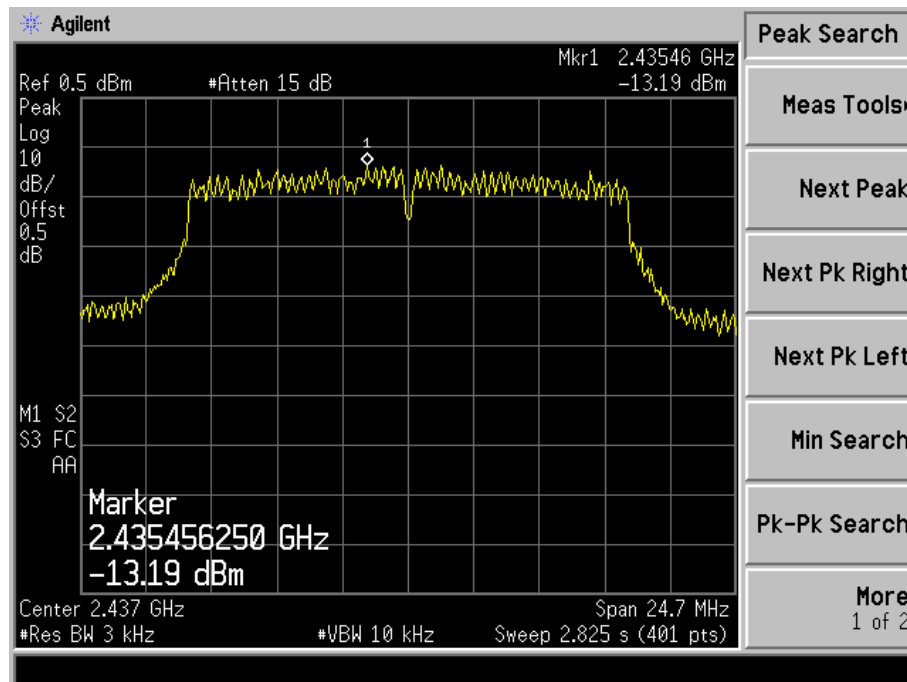
802.11b-High Channel



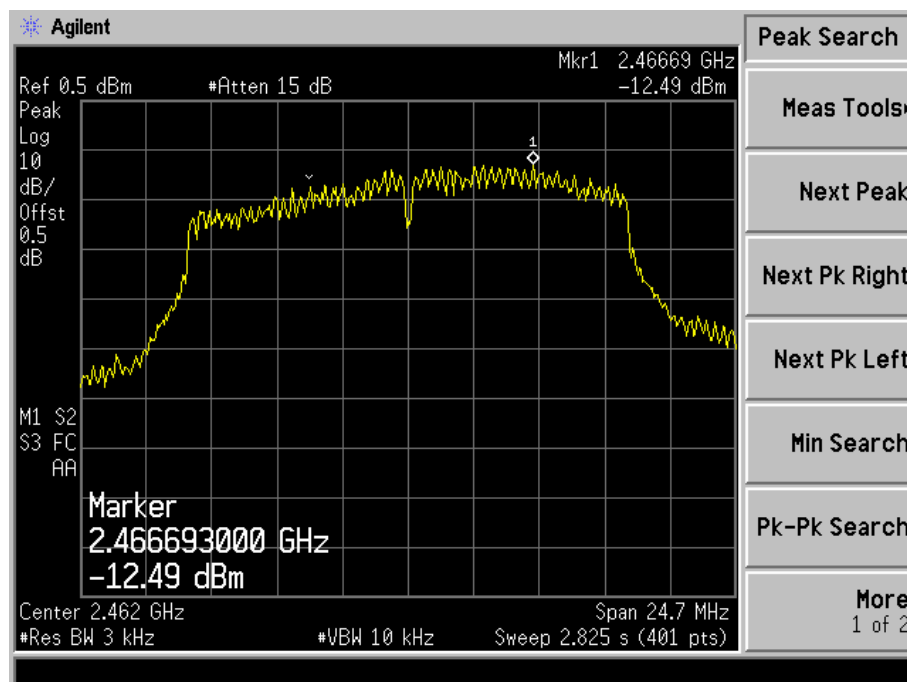
802.11g-Low Channel



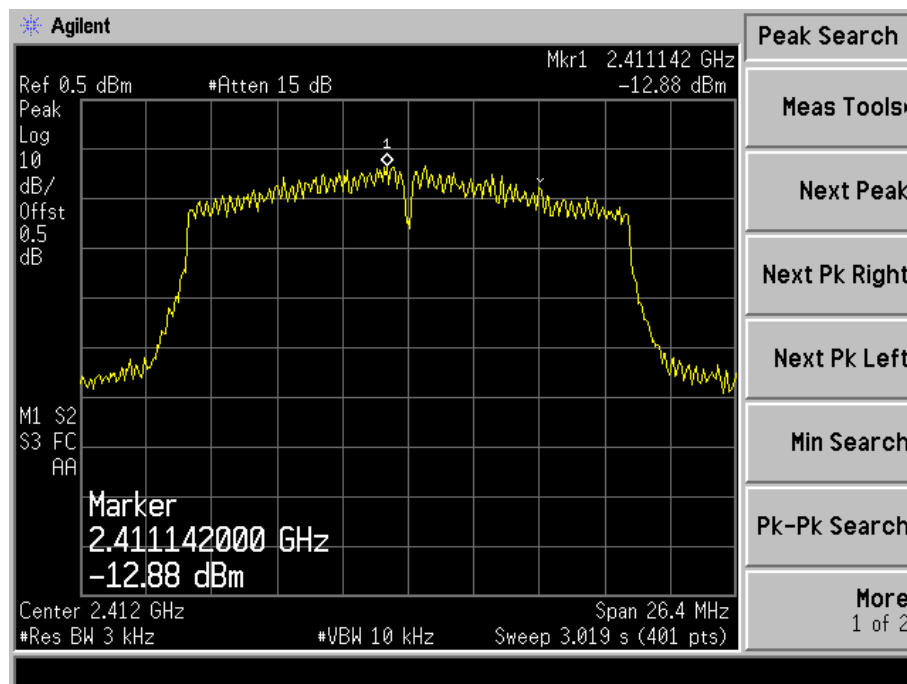
802.11g-Middle Channel



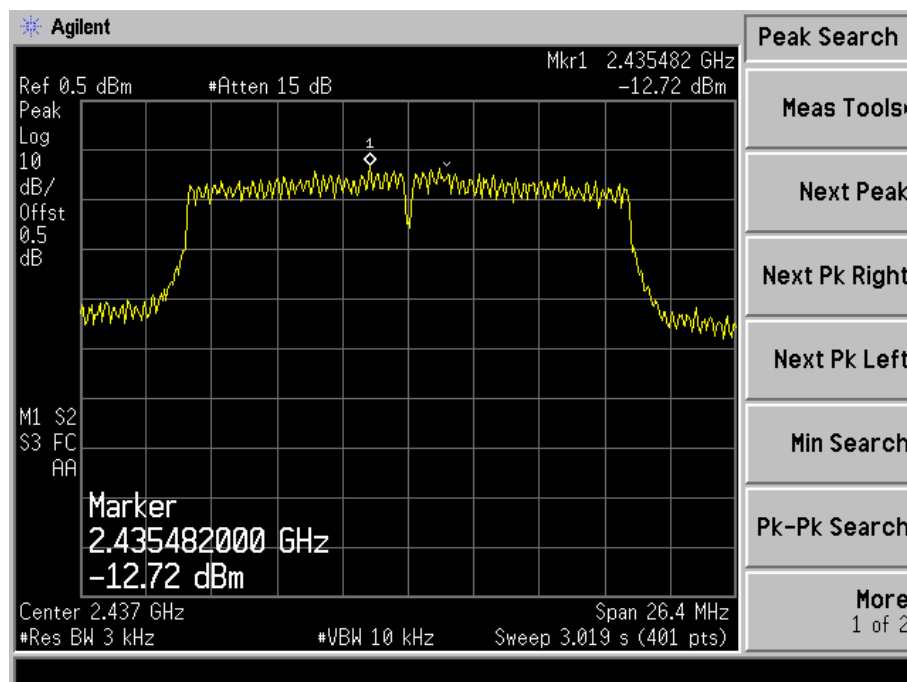
802.11g-High Channel



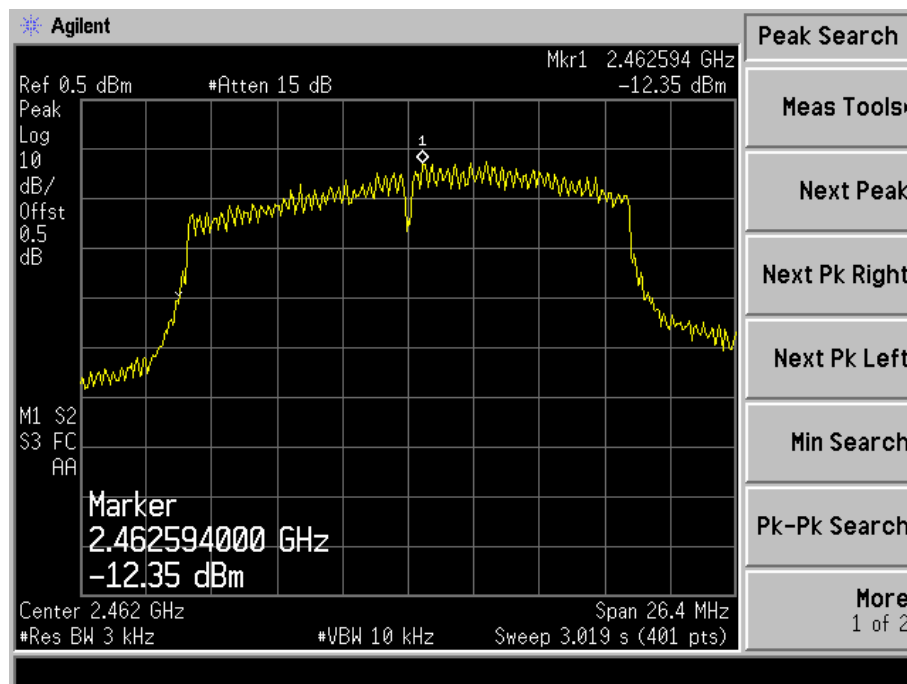
802.11n-HT20-Low Channel



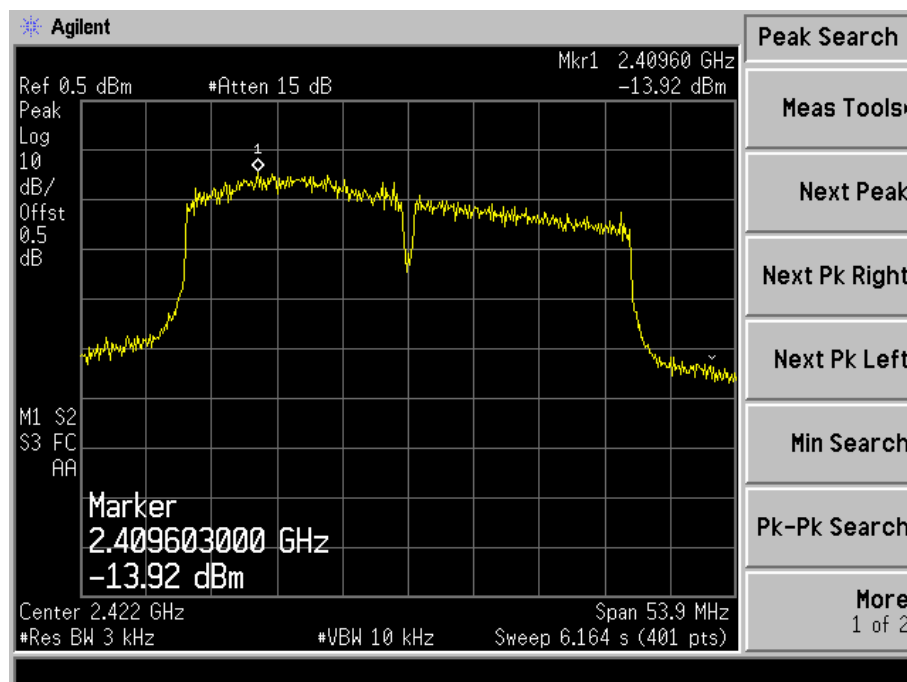
802.11n-HT20-Middle Channel



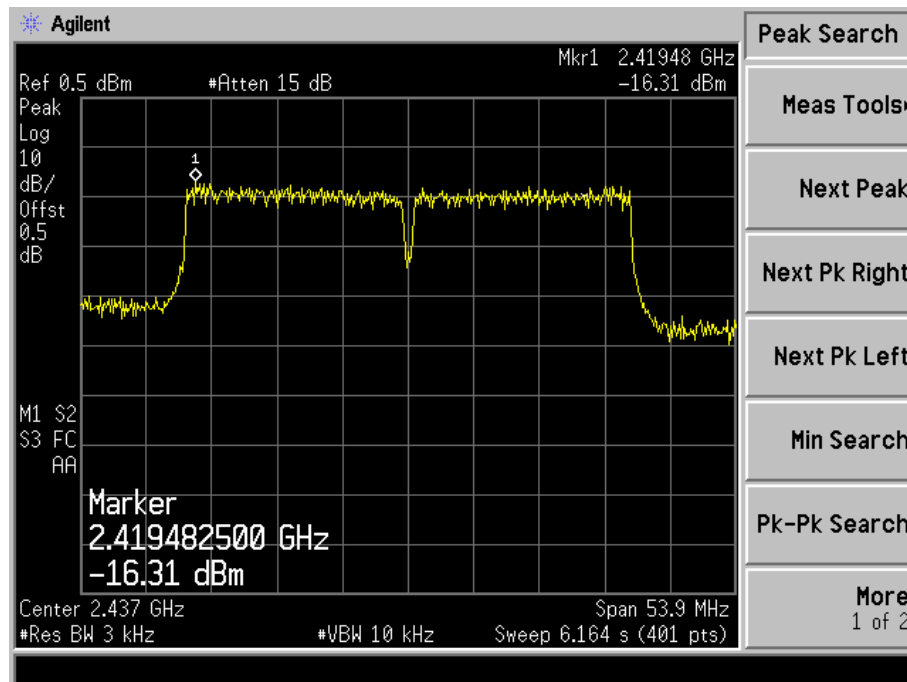
802.11n-HT20-High Channel



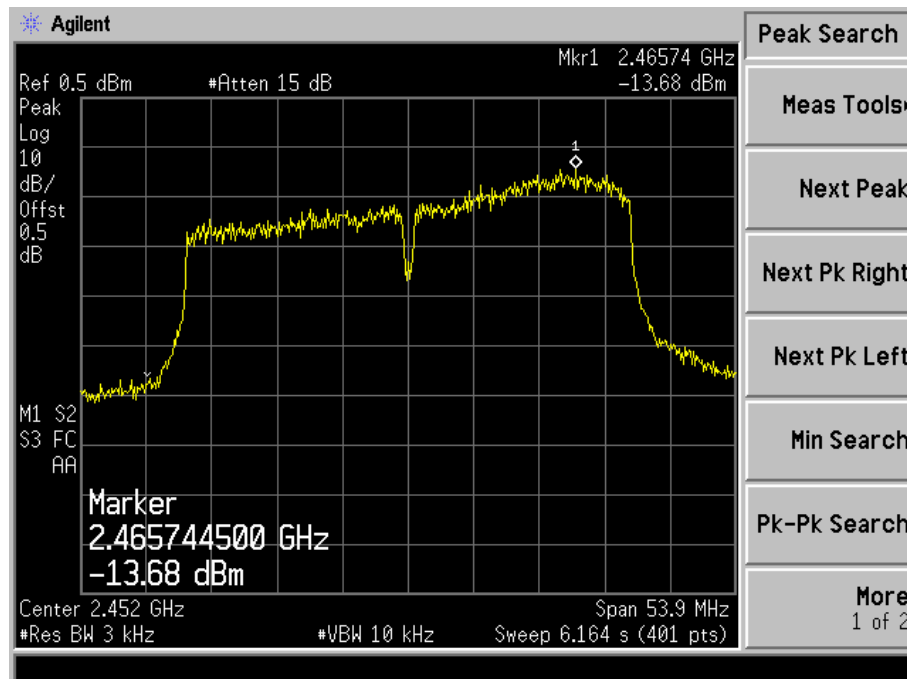
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel

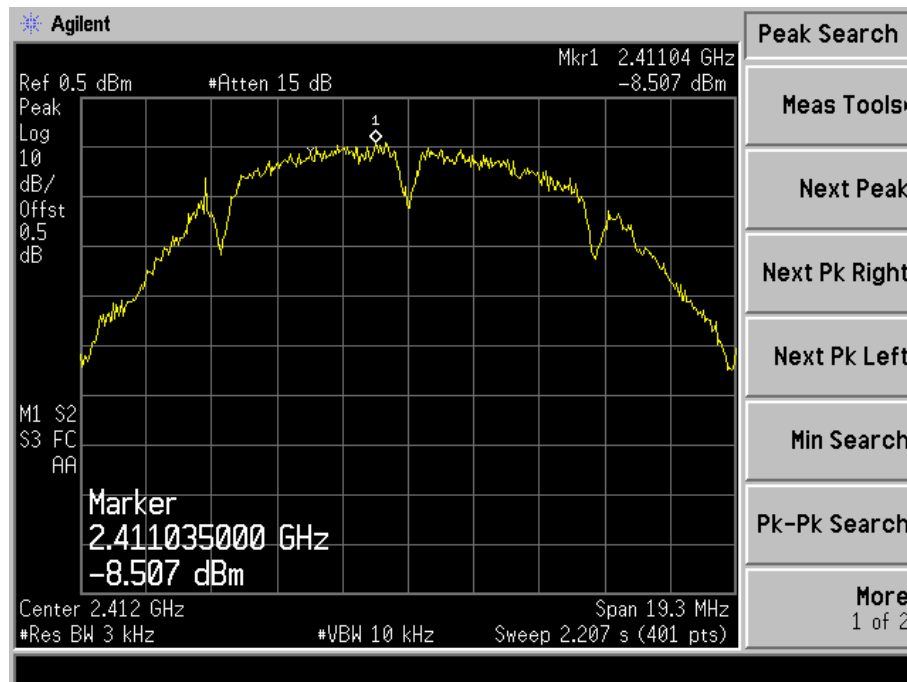


802.11n-HT40-High Channel

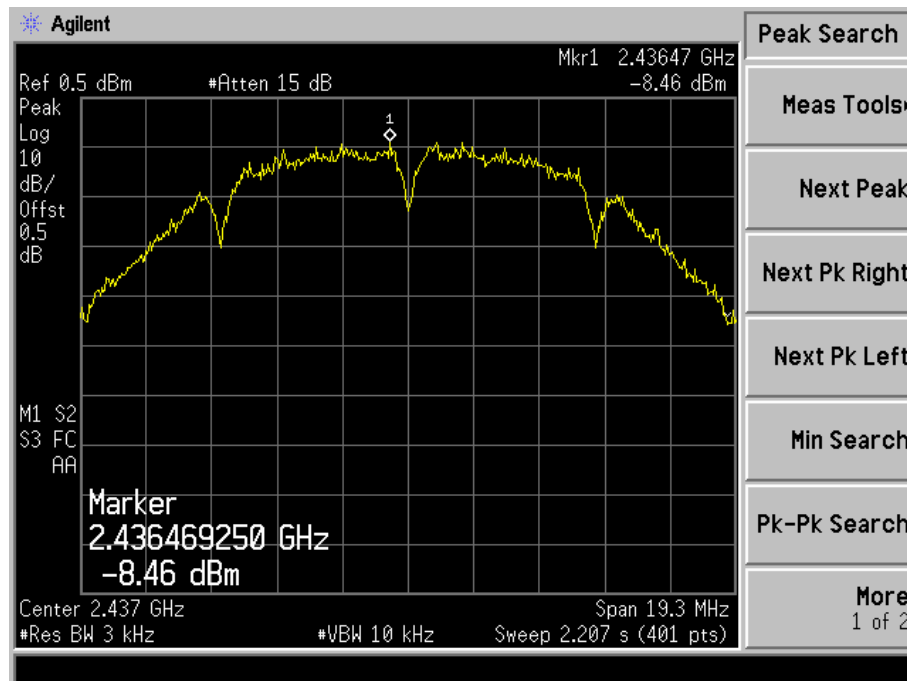


Antenna B

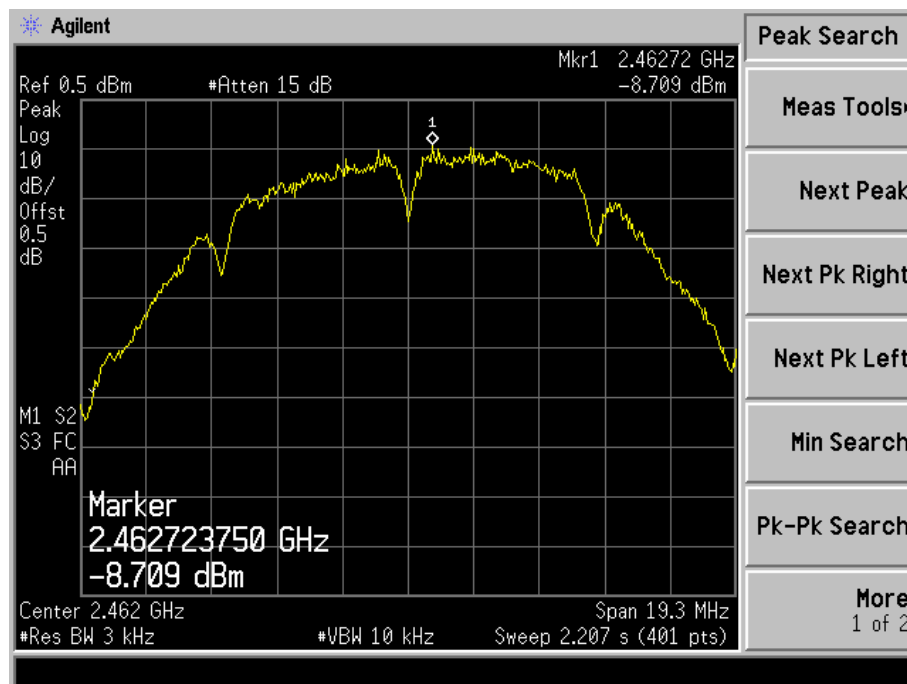
802.11b-Low Channel



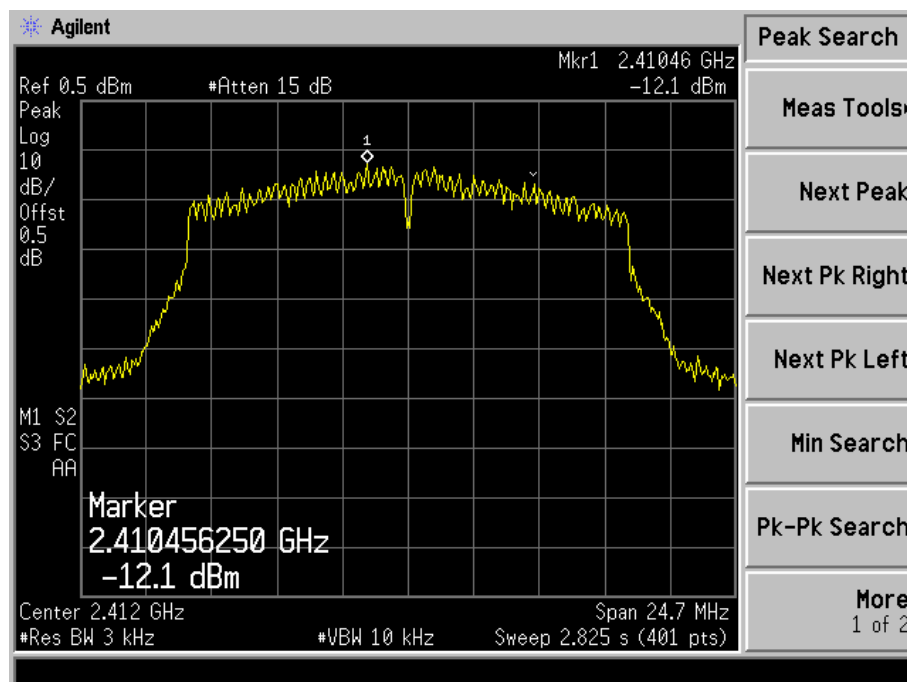
802.11b-Middle Channel



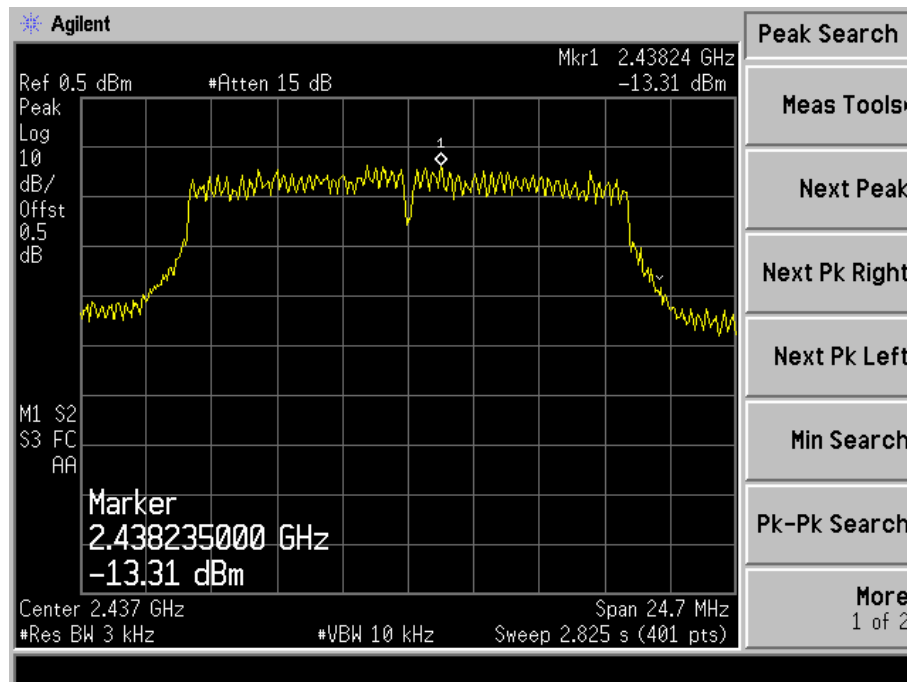
802.11b-High Channel



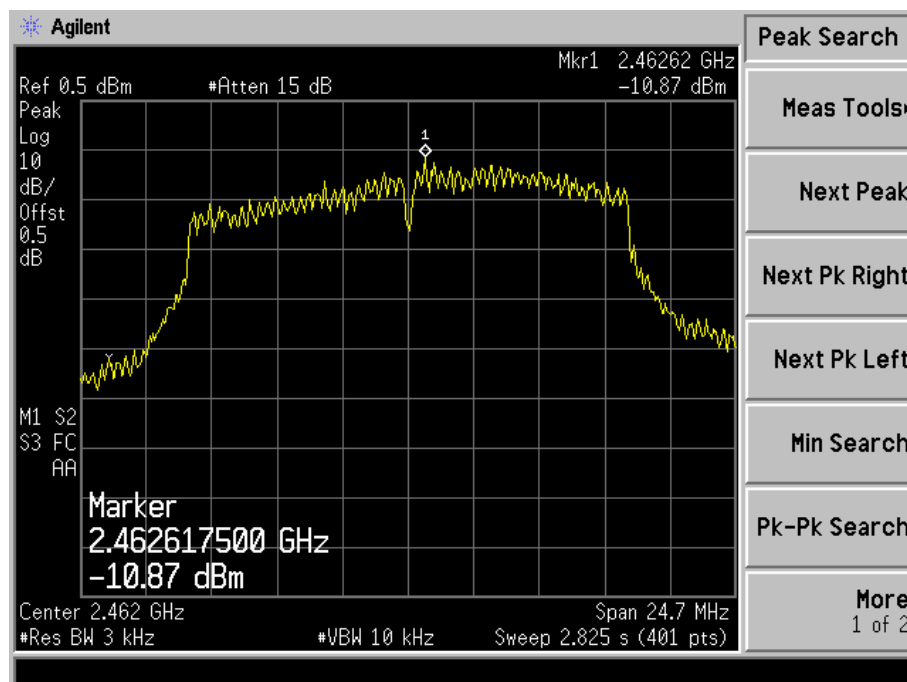
802.11g-Low Channel



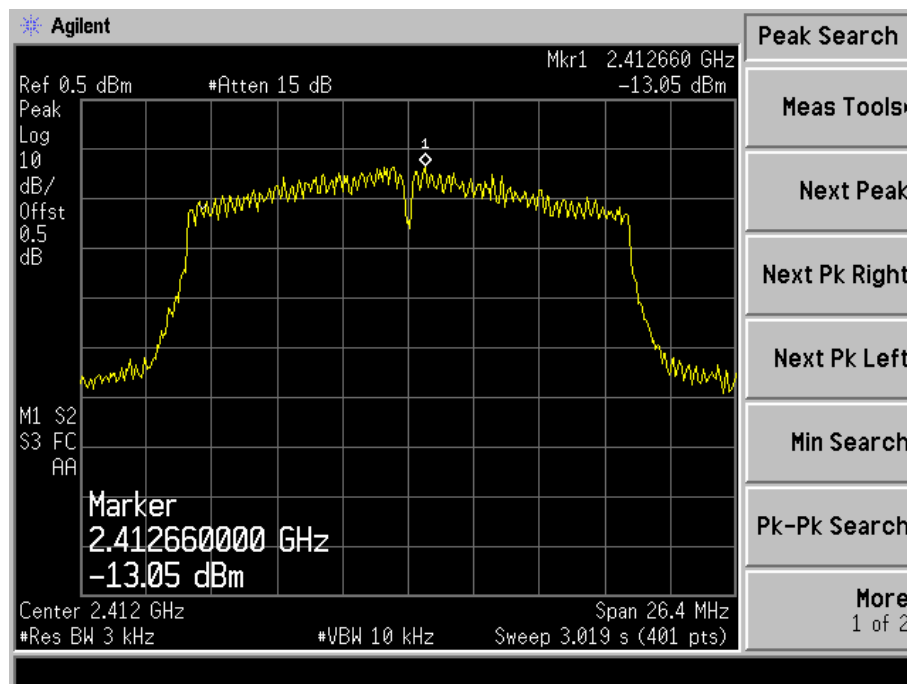
802.11g-Middle Channel



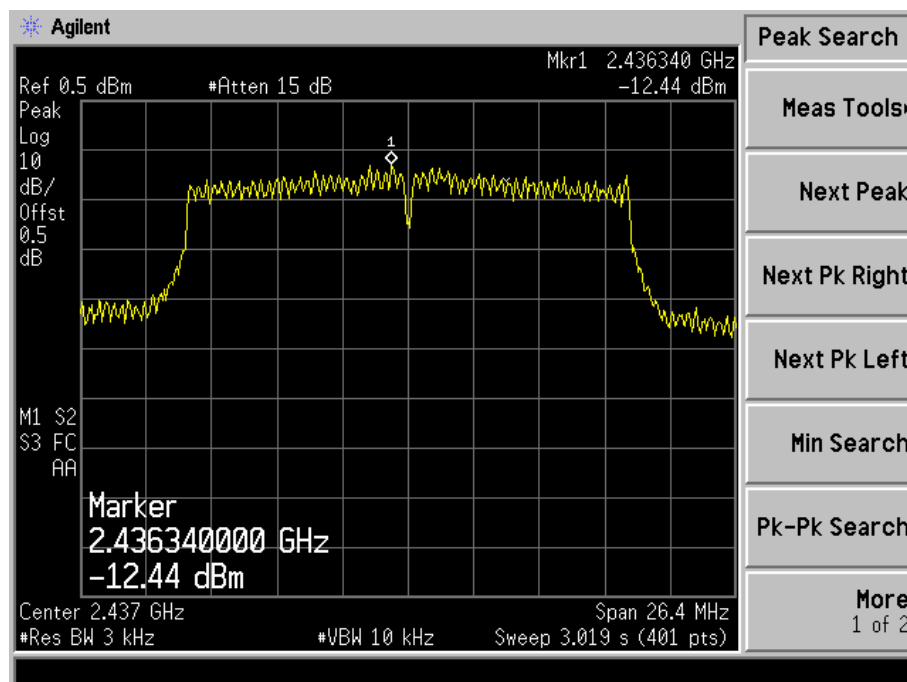
802.11g-High Channel



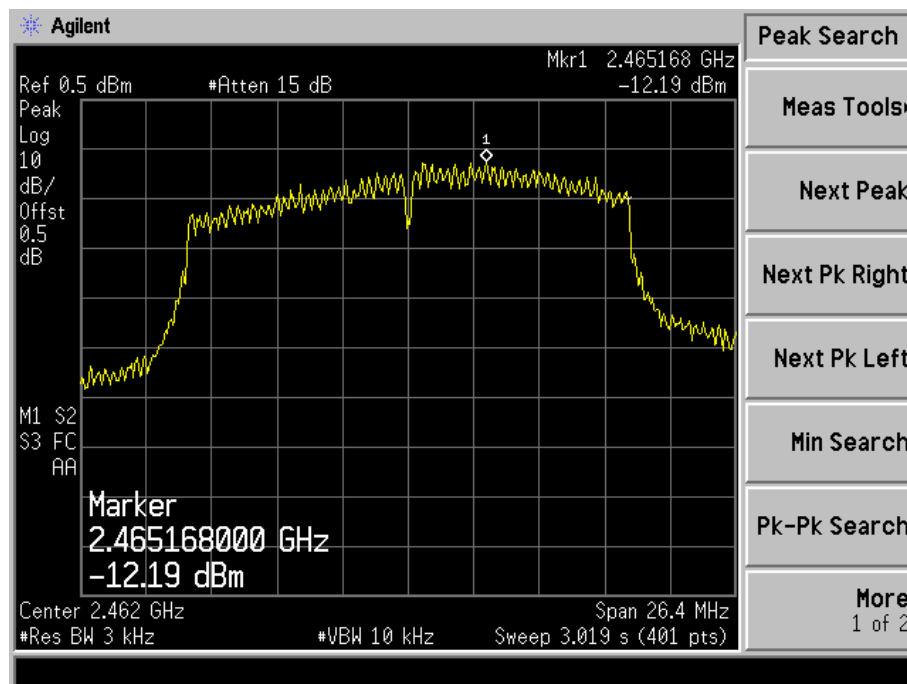
802.11n-HT20-Low Channel



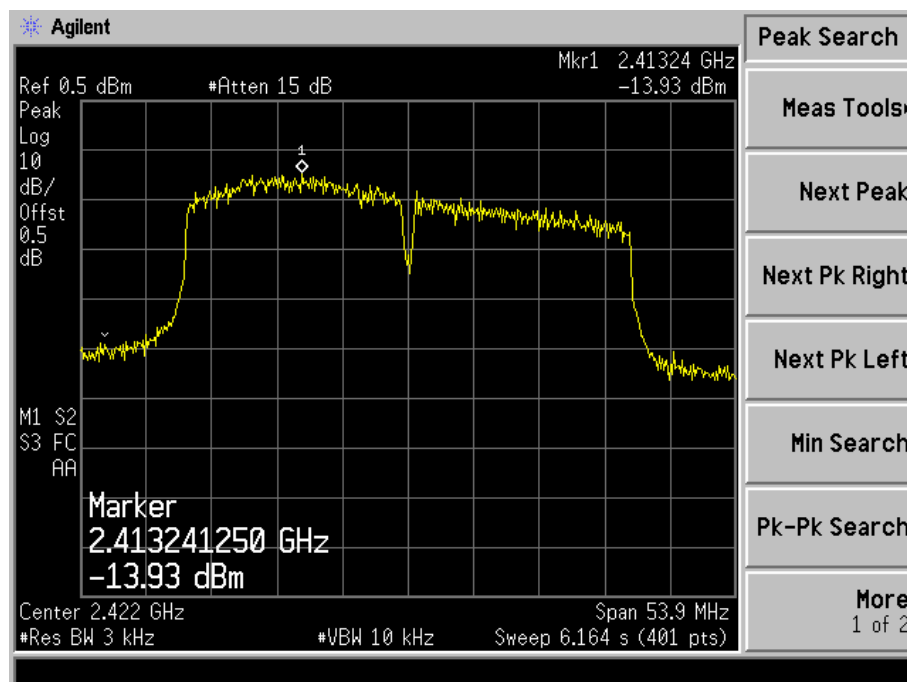
802.11n-HT20-Middle Channel



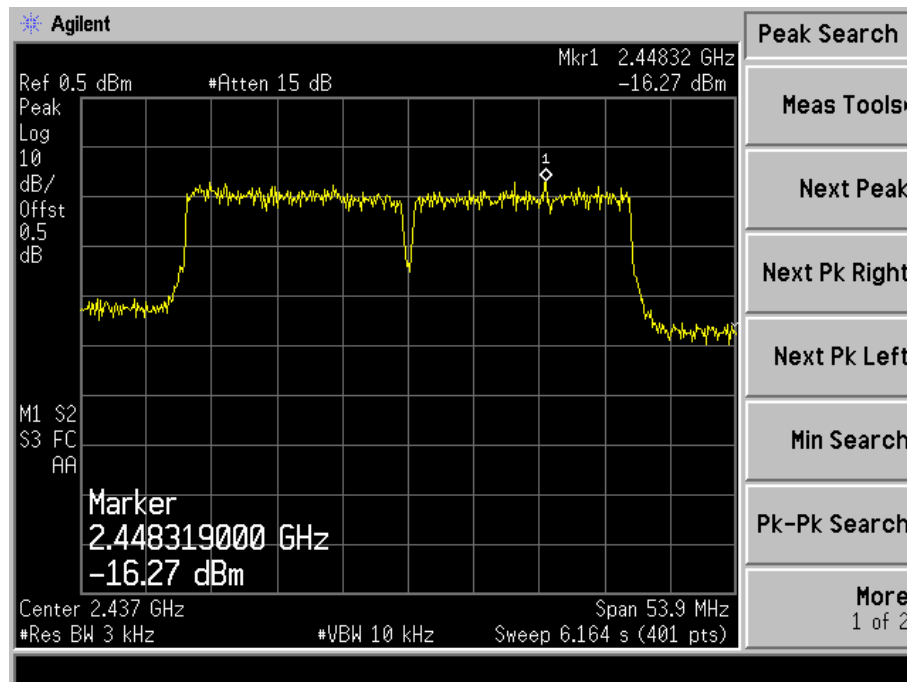
802.11n-HT20-High Channel



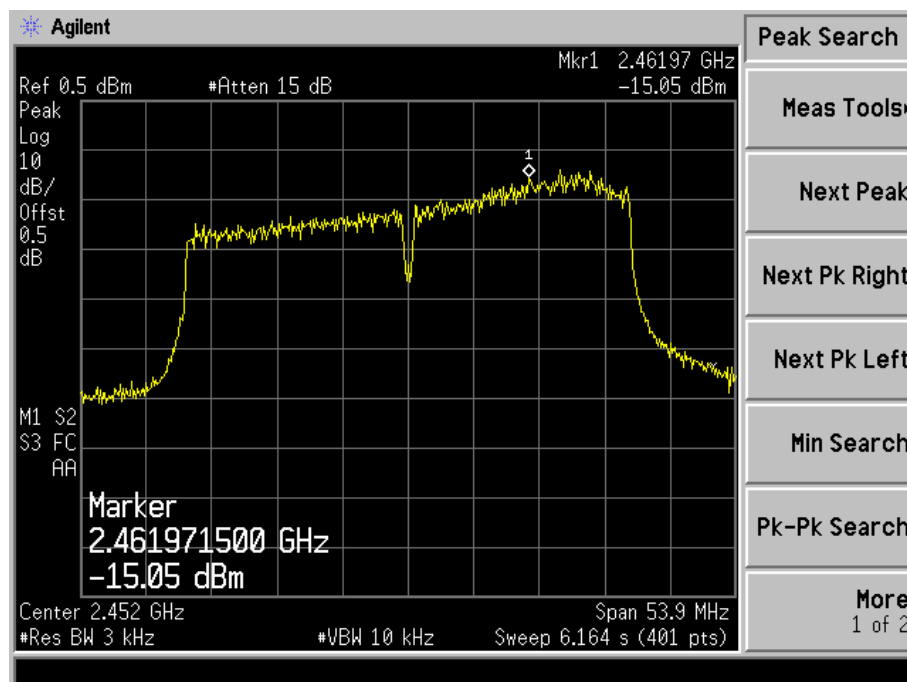
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel



802.11n-HT40-High Channel



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

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- 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 A

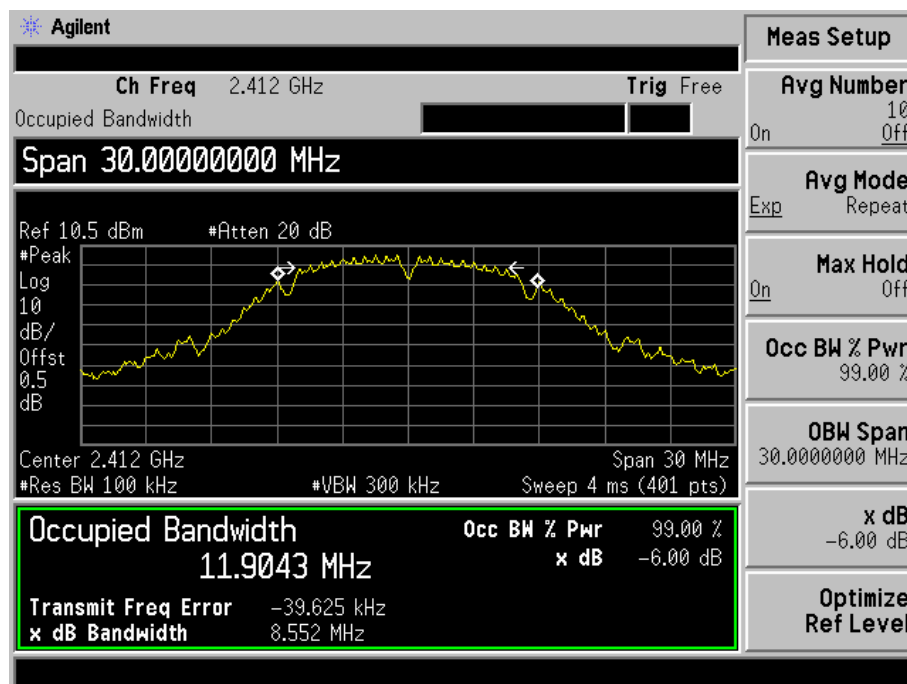
Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit kHz
802.11b	2412	8.552	11.9043	≥ 500
	2437	10.052	13.0435	≥ 500
	2462	8.574	11.3721	≥ 500
802.11g	2412	11.395	16.0145	≥ 500
	2437	16.109	16.4559	≥ 500
	2462	11.323	15.9992	≥ 500
802.11n-HT20	2412	11.574	17.1727	≥ 500
	2437	16.470	17.6327	≥ 500
	2462	11.376	17.0982	≥ 500
802.11n-HT40	2422	20.235	35.3597	≥ 500
	2437	35.954	36.3676	≥ 500
	2452	13.950	35.4283	≥ 500

Antenna B

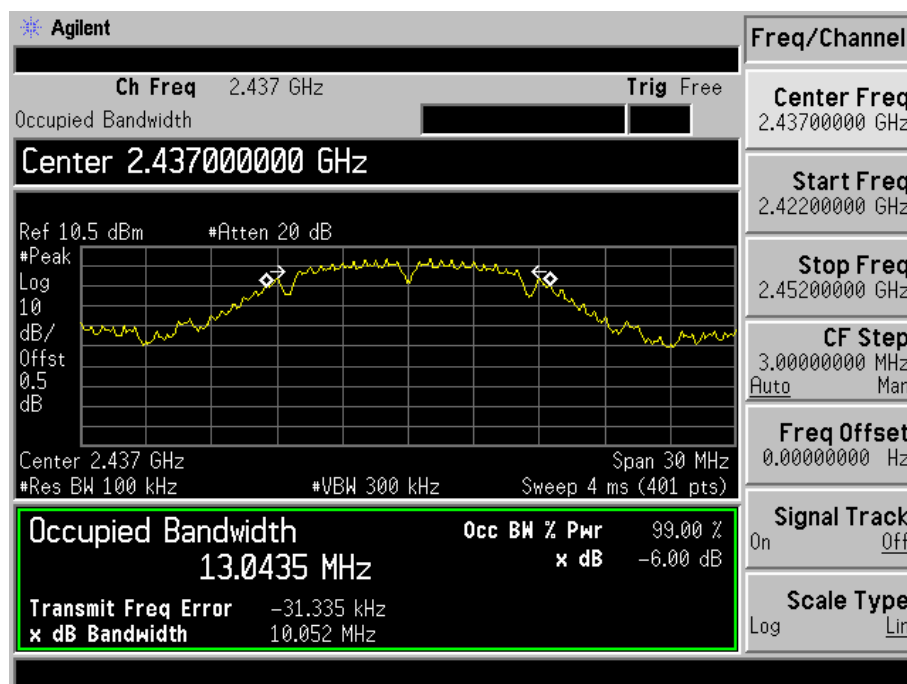
Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit kHz
802.11b	2412	8.069	11.8940	≥ 500
	2437	10.098	13.0237	≥ 500
	2462	8.106	11.3632	≥ 500
802.11g	2412	13.744	16.0051	≥ 500
	2437	15.684	16.4919	≥ 500
	2462	11.375	16.0177	≥ 500
802.11n-HT20	2412	11.278	17.1259	≥ 500
	2437	17.215	17.6071	≥ 500
	2462	12.690	17.1312	≥ 500
802.11n-HT40	2422	20.263	35.3425	≥ 500
	2437	36.031	36.3968	≥ 500
	2452	20.256	35.2860	≥ 500

Please refer to the following test plots:

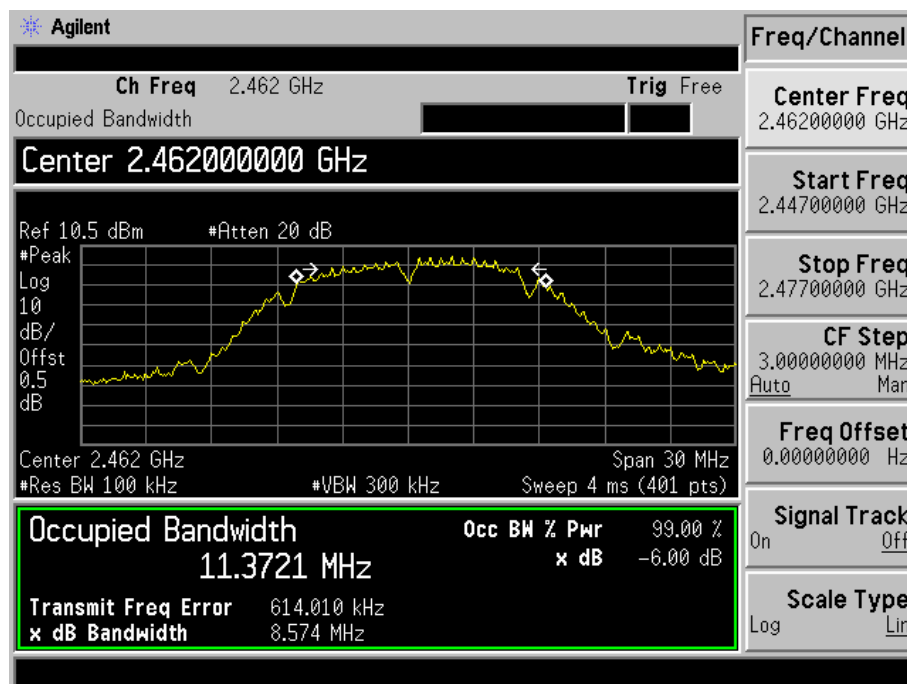
Antenna A
802.11b-Low Channel



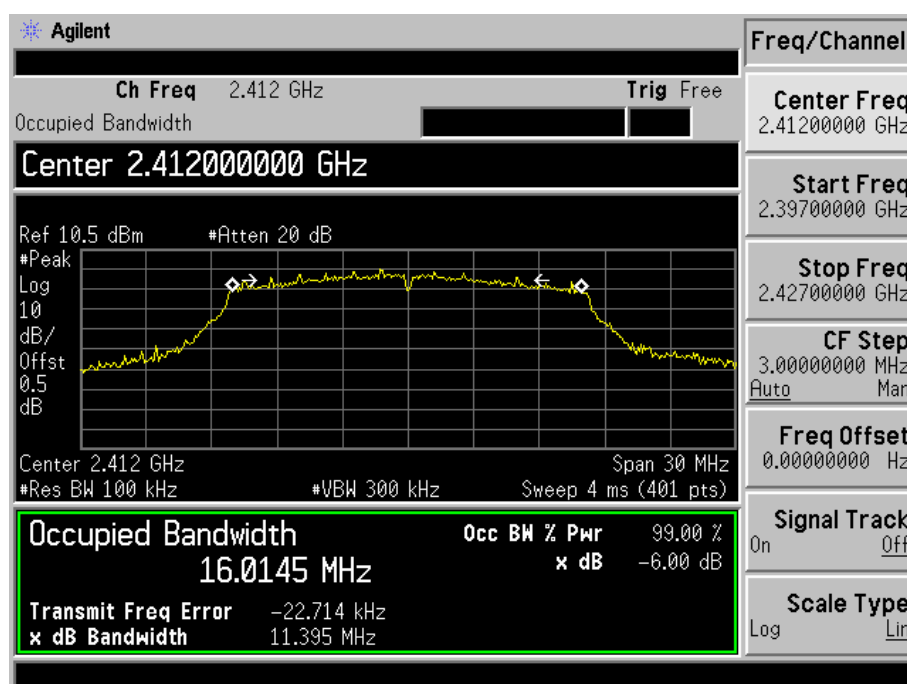
802.11b-Middle Channel



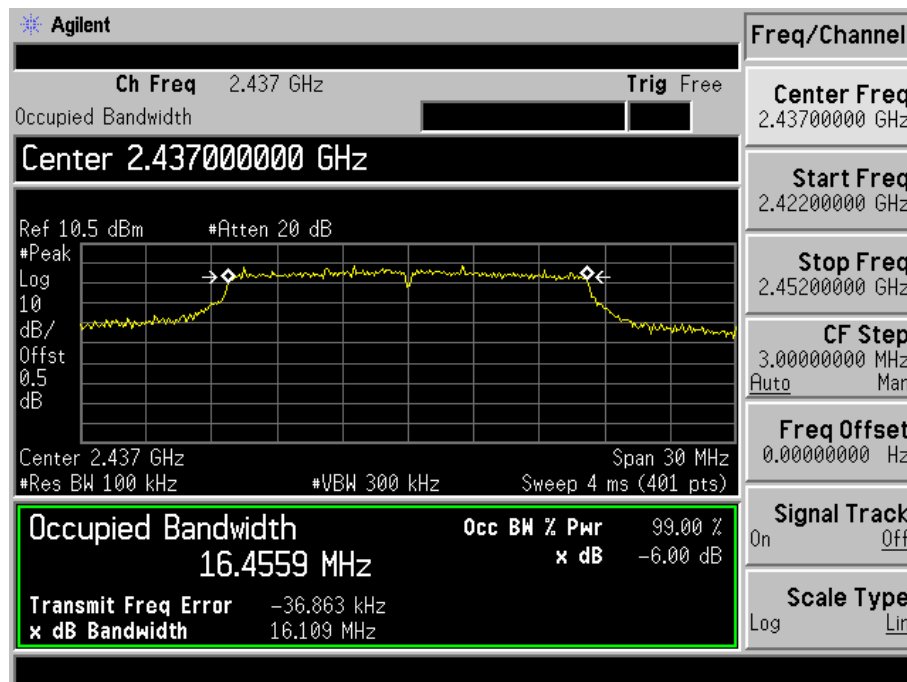
802.11b-High Channel



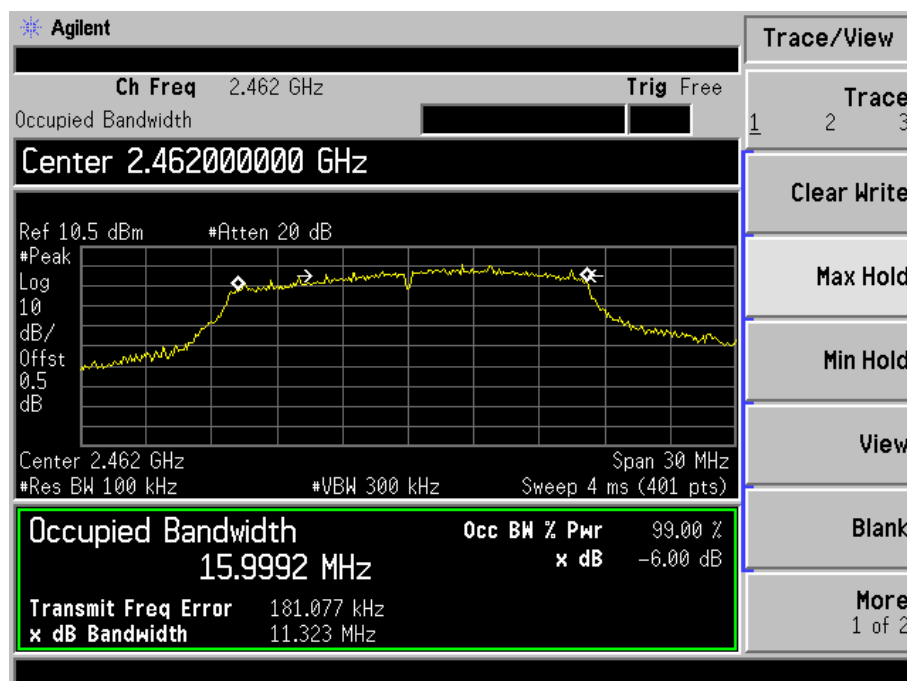
802.11g-Low Channel



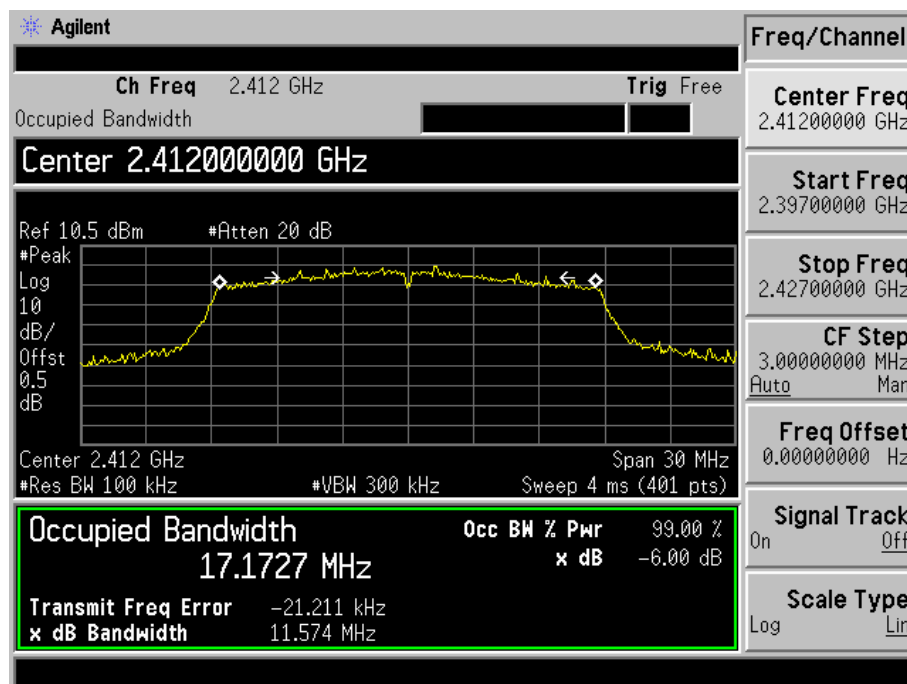
802.11g-Middle Channel



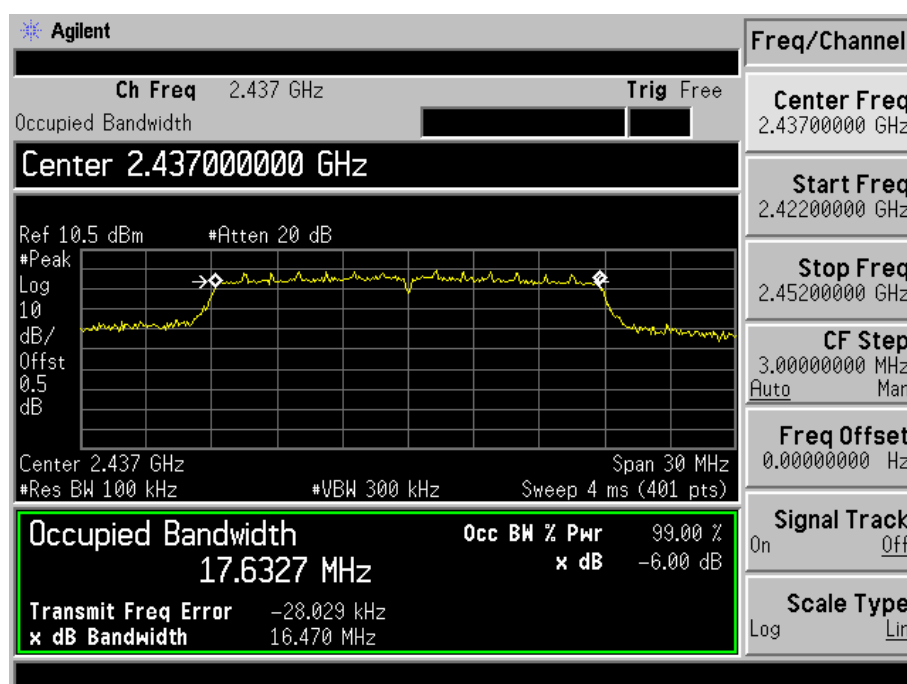
802.11g-High Channel



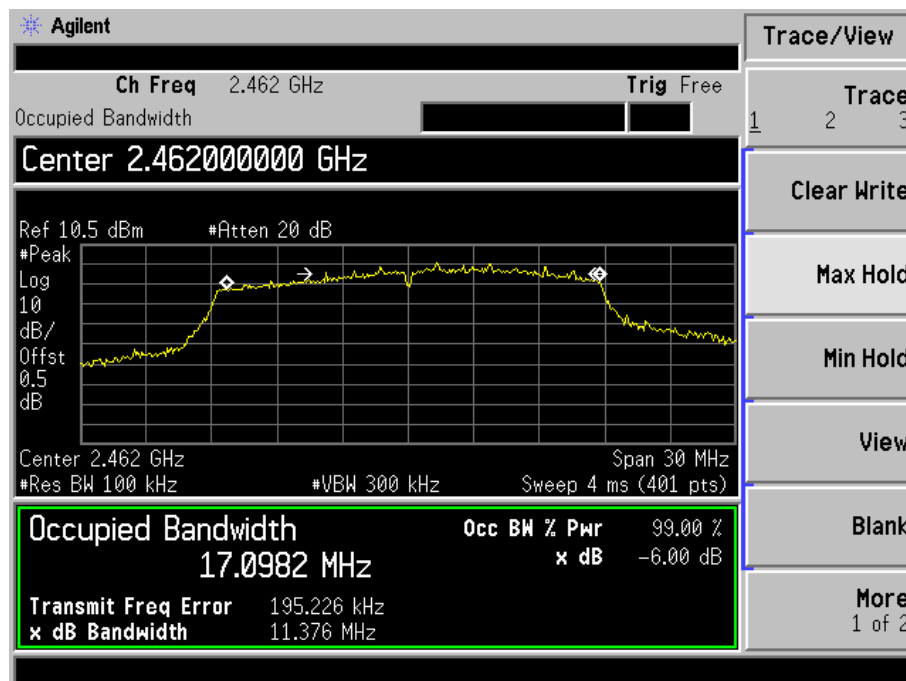
802.11n-HT20-Low Channel



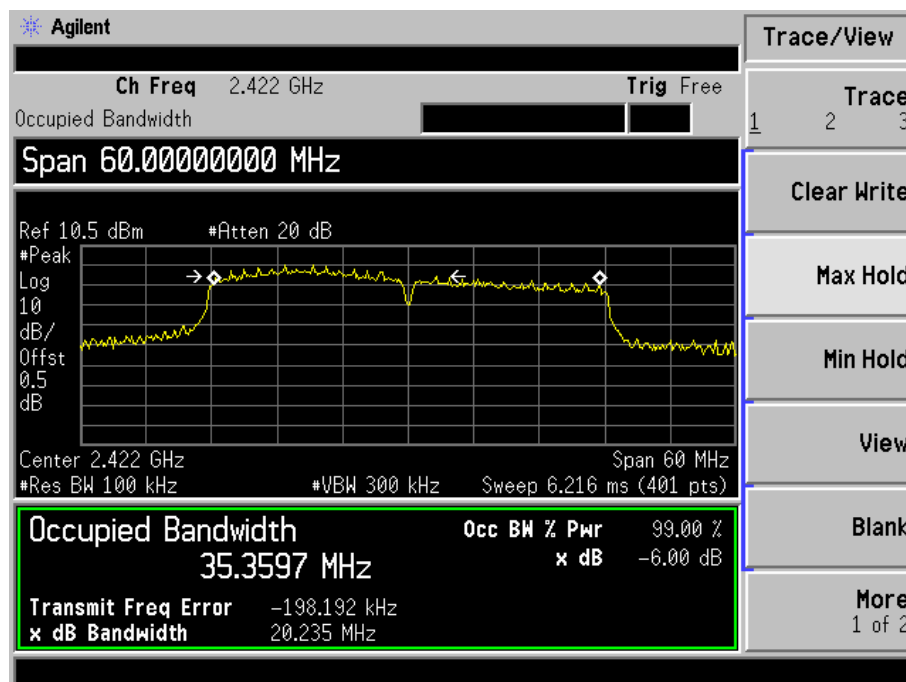
802.11n-HT20-Middle Channel



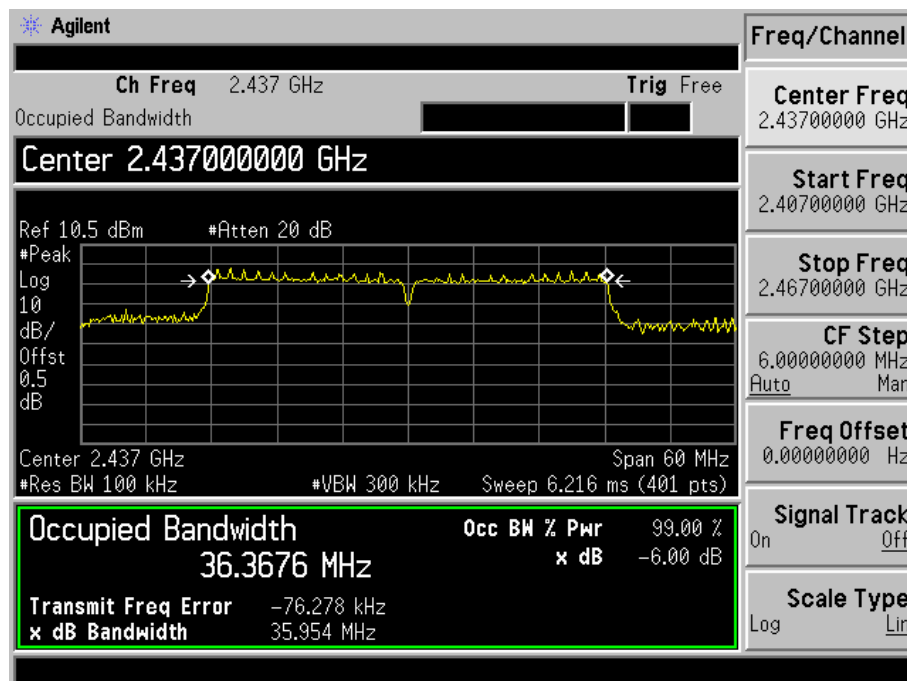
802.11n-HT20-High Channel



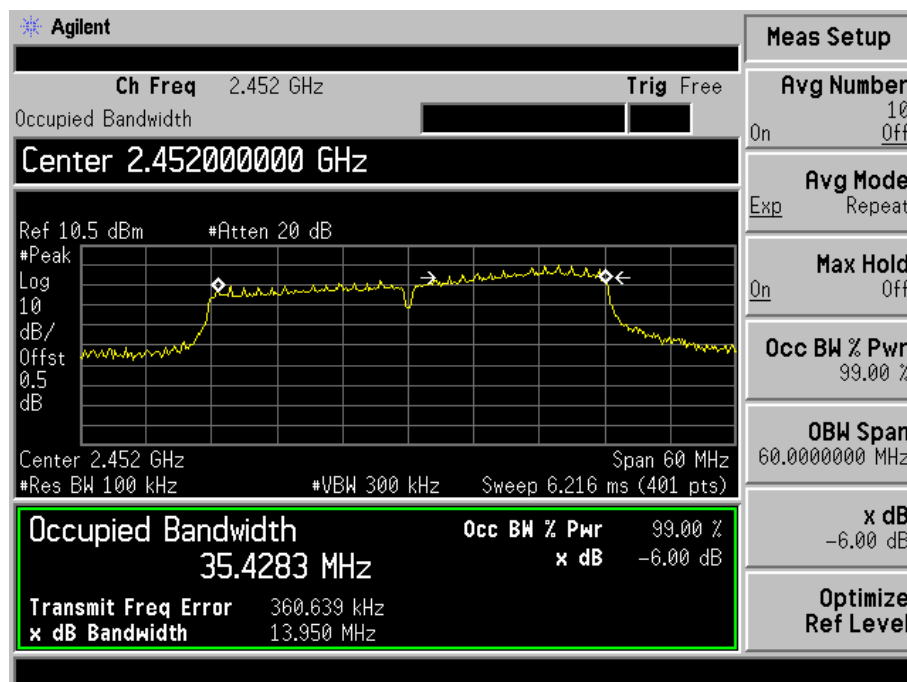
802.11n-HT40-Low Channel



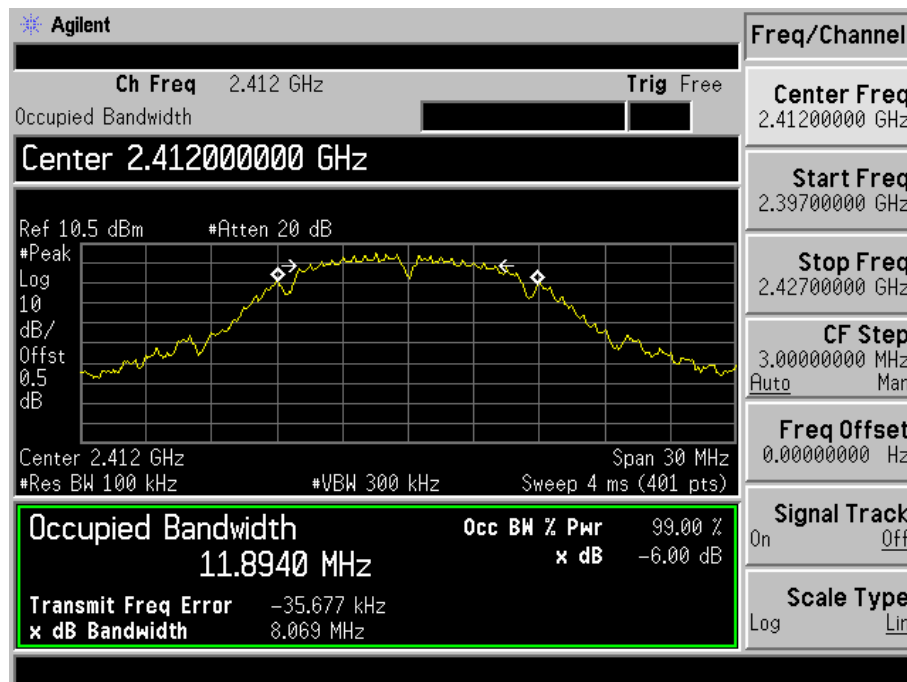
802.11n-HT40-Middle Channel



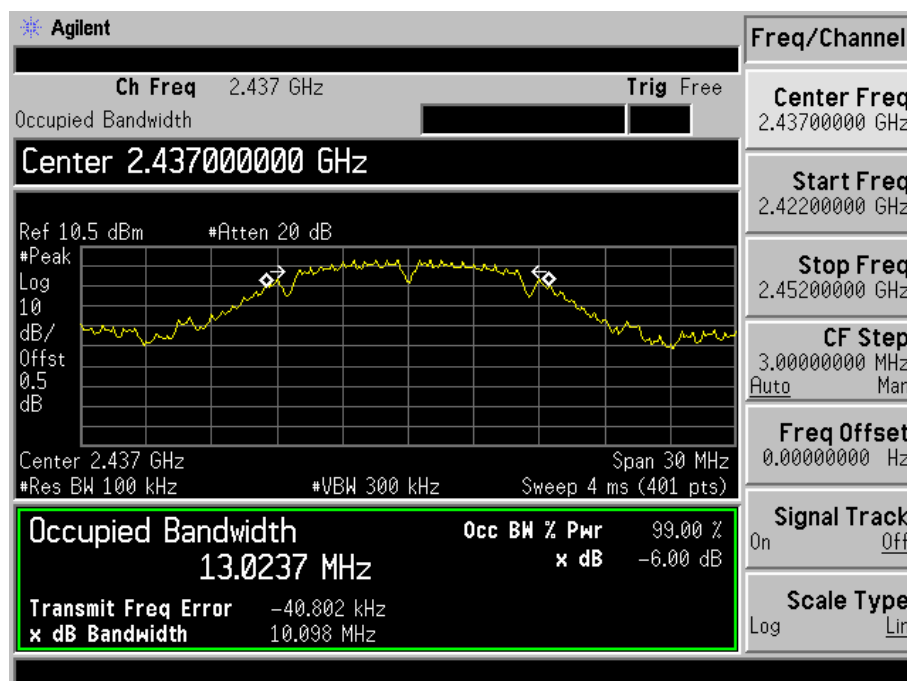
802.11n-HT40-High Channel



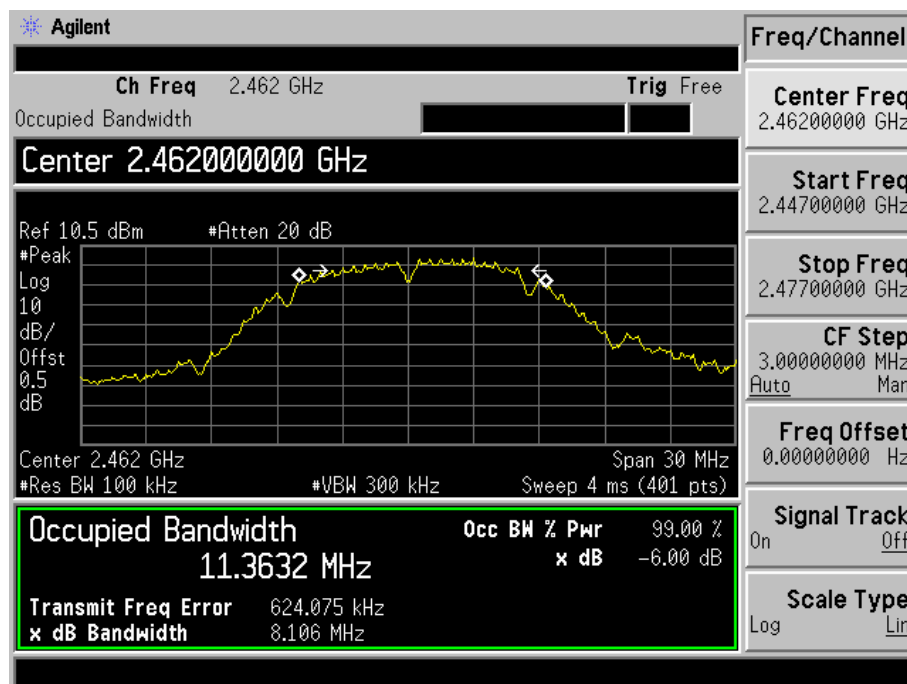
Antenna B 802.11b-Low Channel



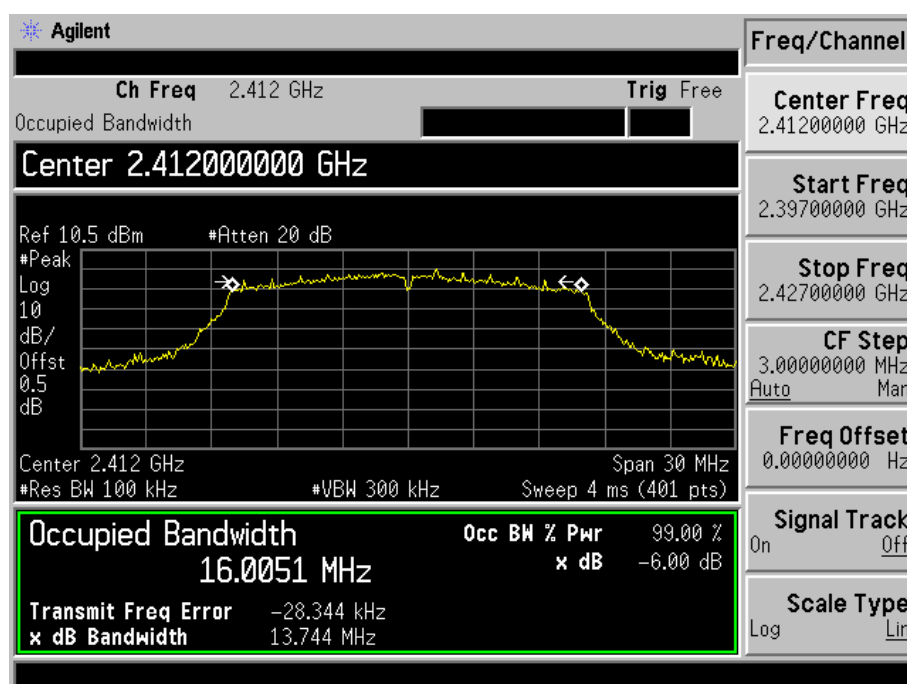
802.11b-Middle Channel



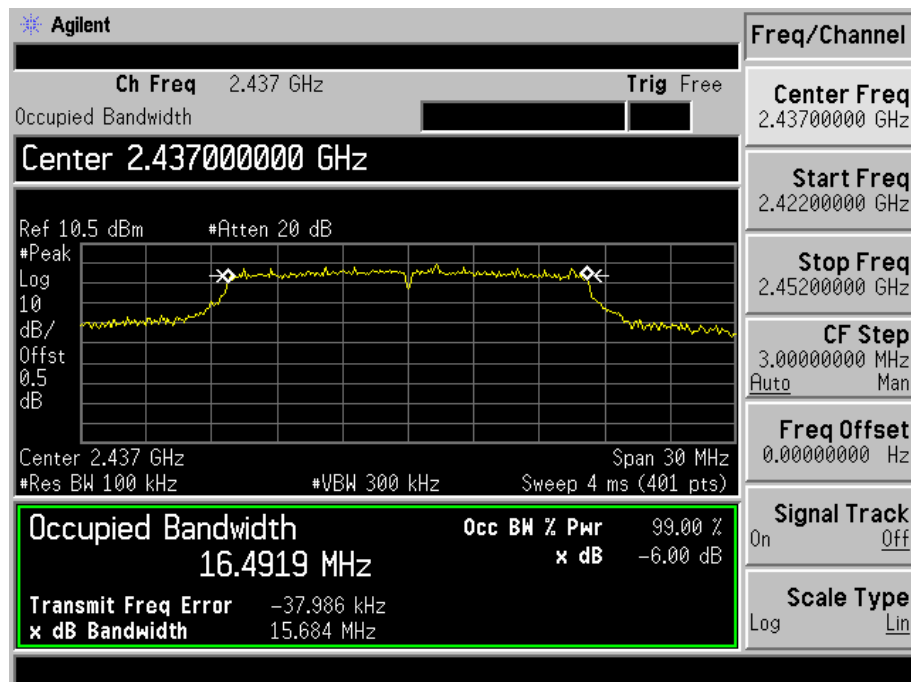
802.11b-High Channel



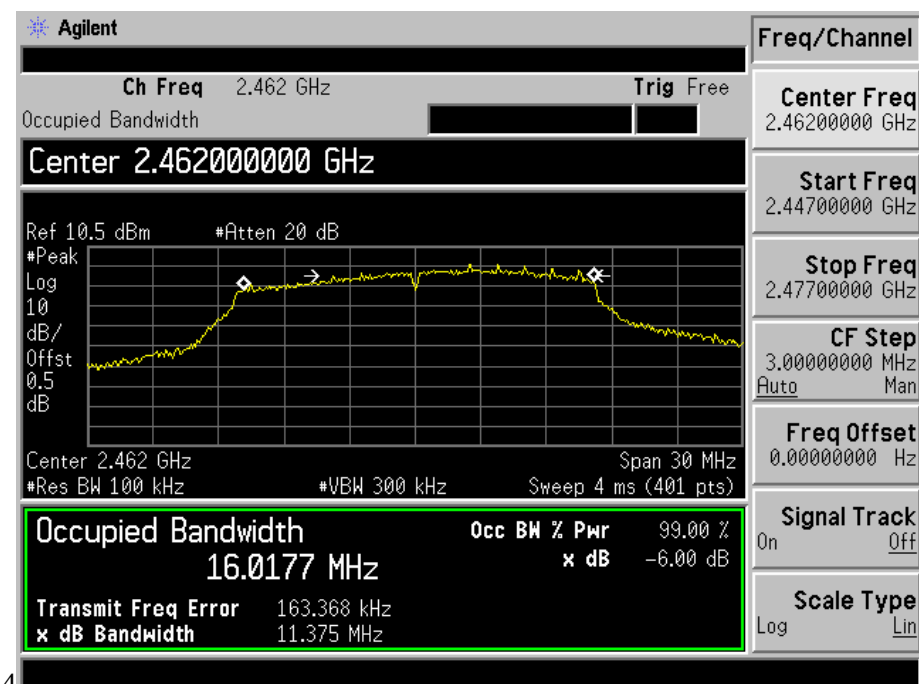
802.11g-Low Channel



802.11g-Middle Channel

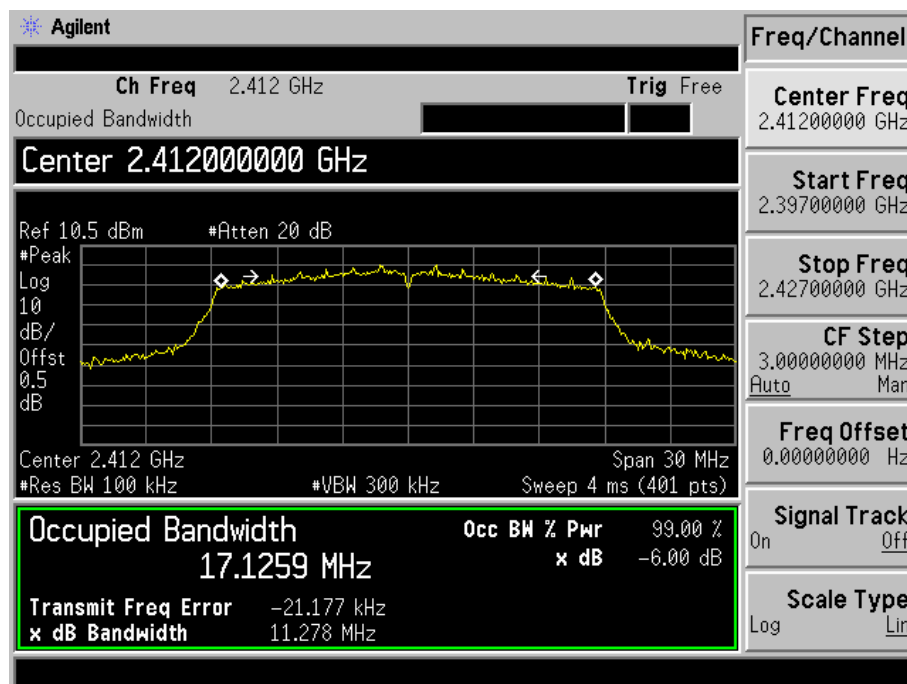


802.11g-High Channel

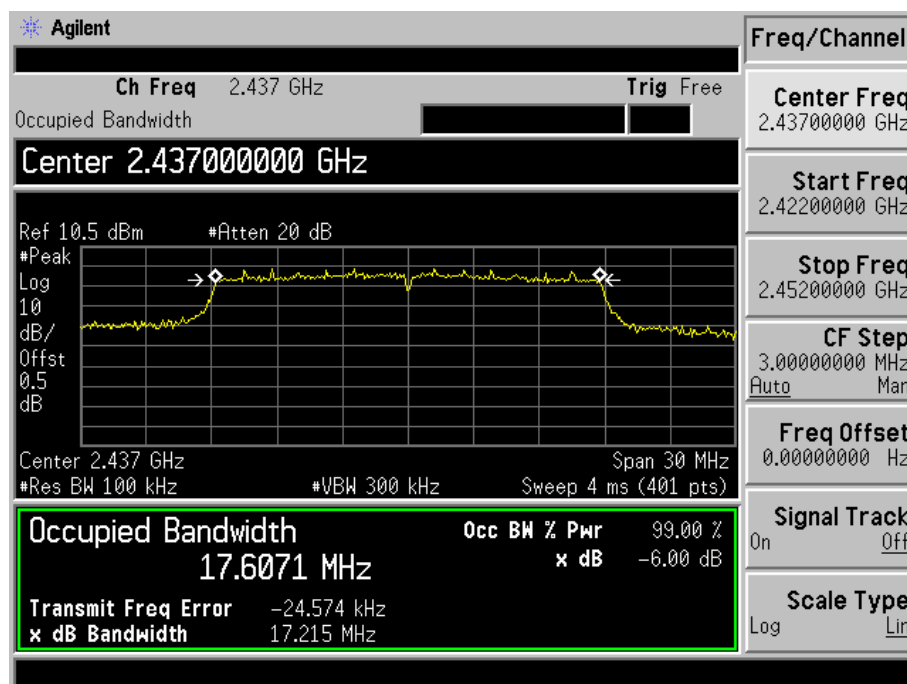


4

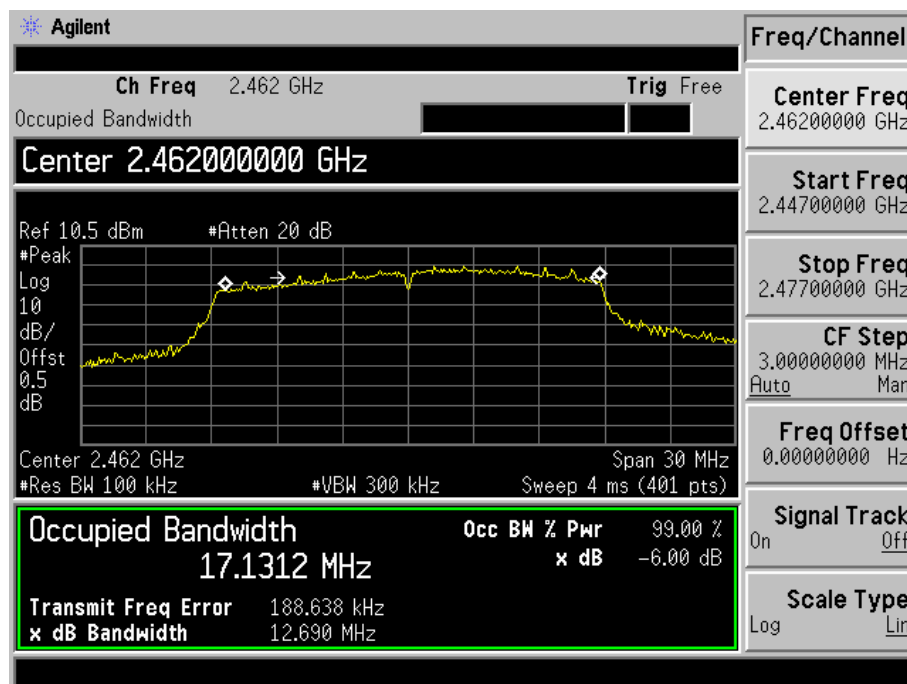
802.11n-HT20-Low Channel



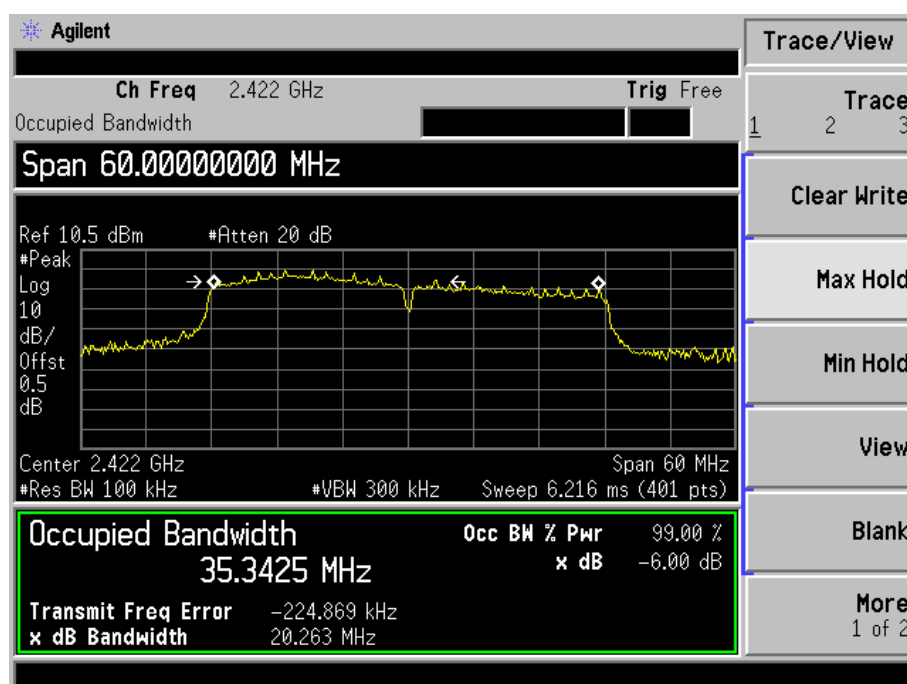
802.11n-HT20-Middle Channel



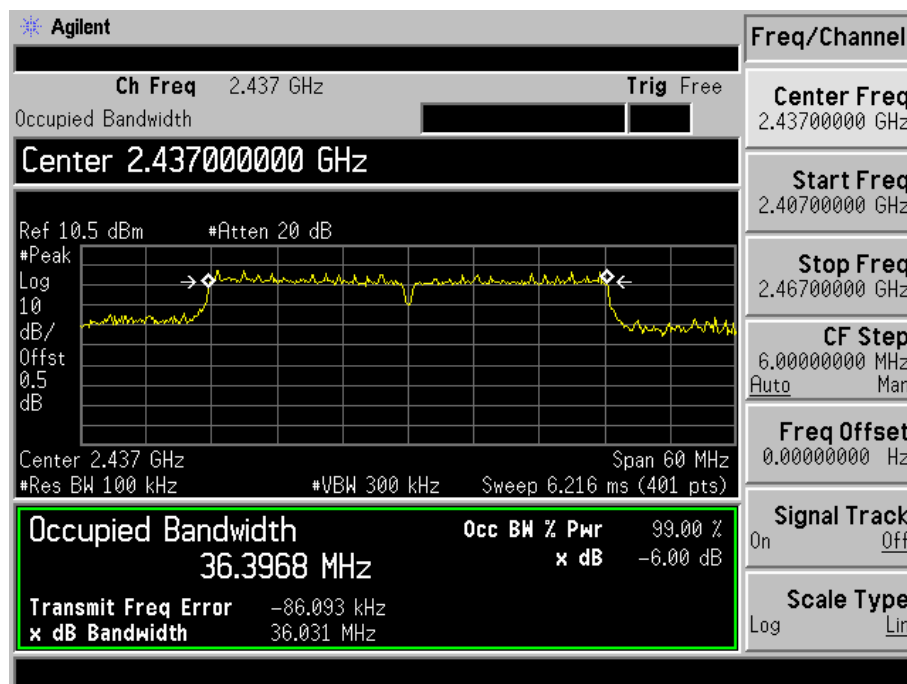
802.11n-HT20-High Channel



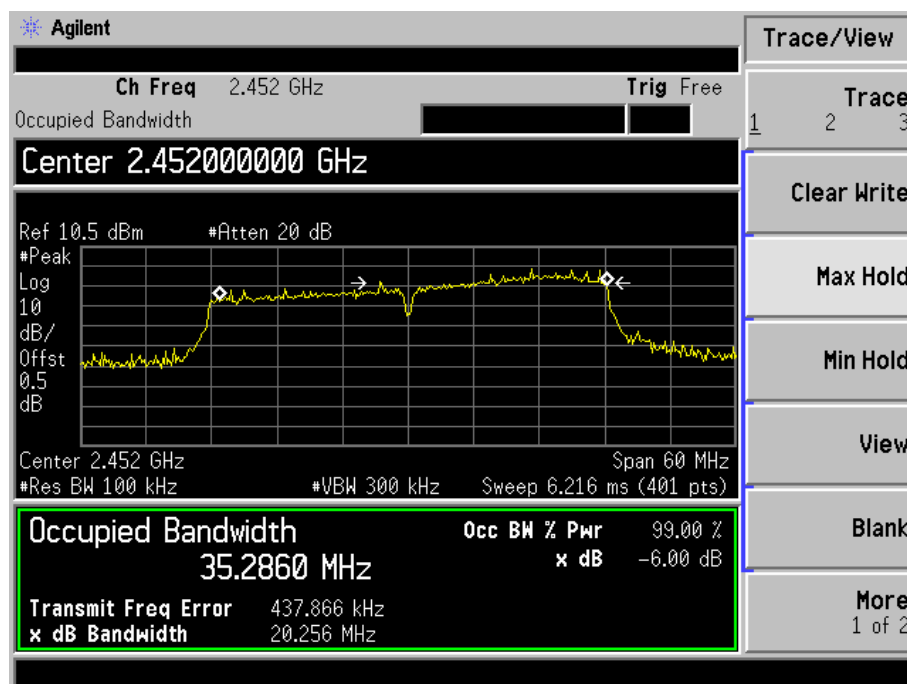
802.11n-HT40-Low Channel



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 v04, 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 $\geq 3 \times$ RBW.
- d) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This gives bin-to-bin spacing $\leq \text{RBW}/2$, 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 $\geq 98\%$, 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

Antenna A

Test Mode	Frequency MHz	Reading dBm	Output Power mW	Limit mW
802.11b _ 11Mbps	2412	9.17	8.26	1000
	2437	8.64	7.31	1000
	2462	9.47	8.85	1000
802.11g_54Mbps	2412	9.05	8.04	1000
	2437	8.38	6.89	1000
	2462	8.18	6.58	1000
802.11n HT20_MCS7	2412	8.69	7.40	1000
	2437	8.29	6.75	1000
	2462	8.95	7.85	1000
802.11n HT40_MCS7	2422	7.98	6.28	1000
	2437	8.71	7.43	1000
	2452	7.86	6.11	1000

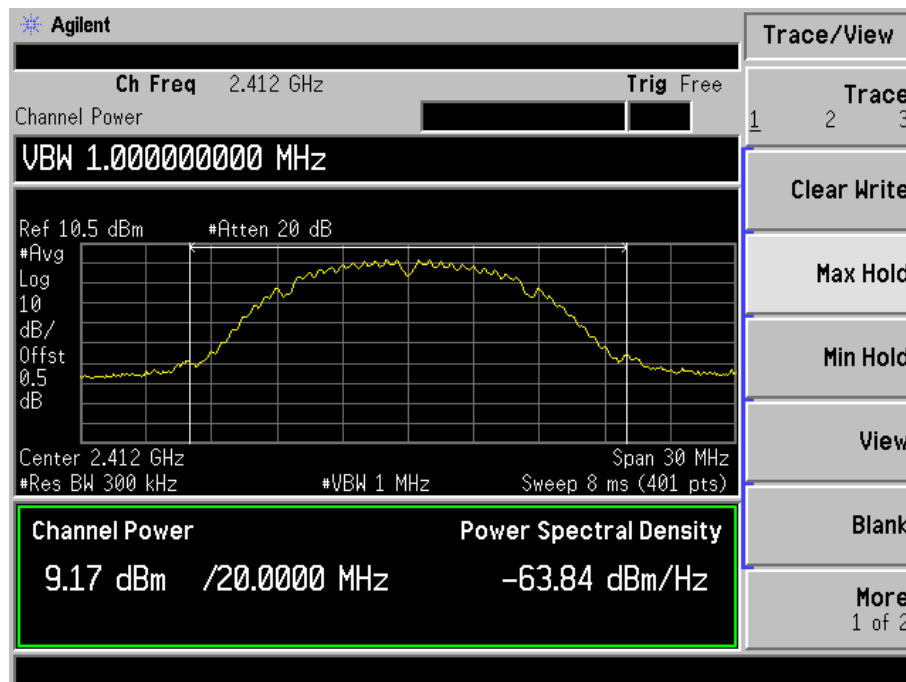
Antenna B

Test Mode	Frequency MHz	Reading dBm	Output Power mW	Limit mW
802.11b _ 11Mbps	2412	9.39	8.69	1000
	2437	8.63	7.29	1000
	2462	9.13	8.18	1000
802.11g_54Mbps	2412	9.22	8.36	1000
	2437	8.19	6.59	1000
	2462	8.85	7.67	1000
802.11n HT20_MCS7	2412	8.76	7.52	1000
	2437	8.69	7.40	1000
	2462	8.92	7.80	1000
802.11n HT40_MCS7	2422	8.14	6.52	1000
	2437	8.95	7.85	1000
	2452	8.21	6.62	1000

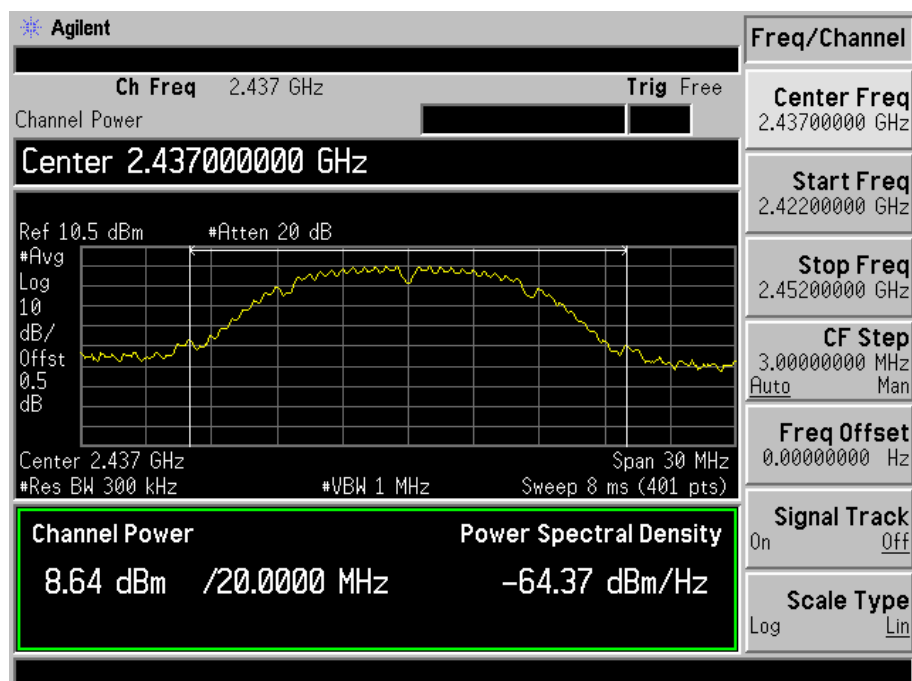
Please refer to the following test plots:

Antenna A

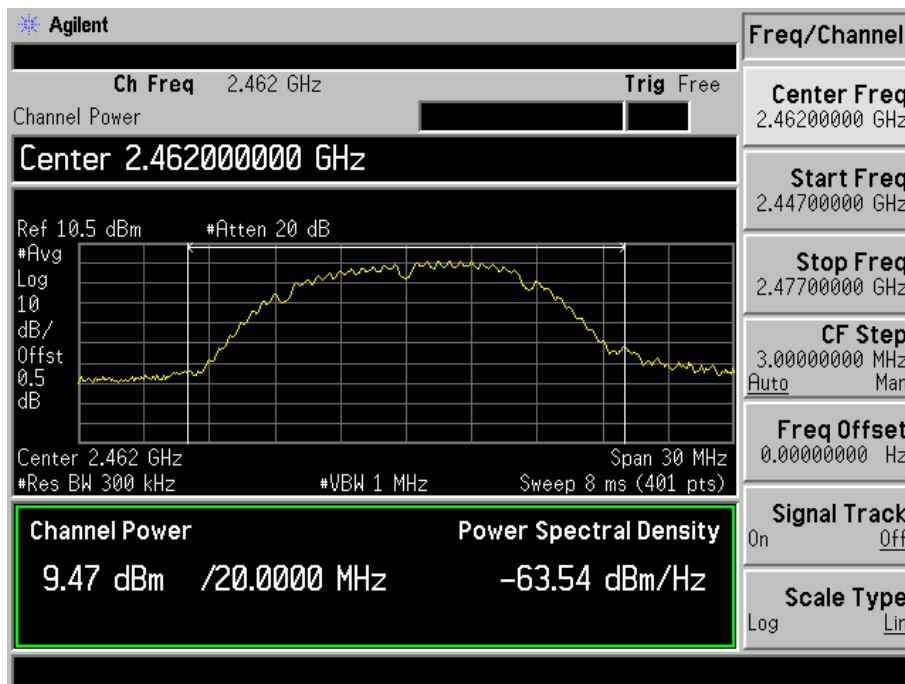
802.11b-11Mbps-Low Channel



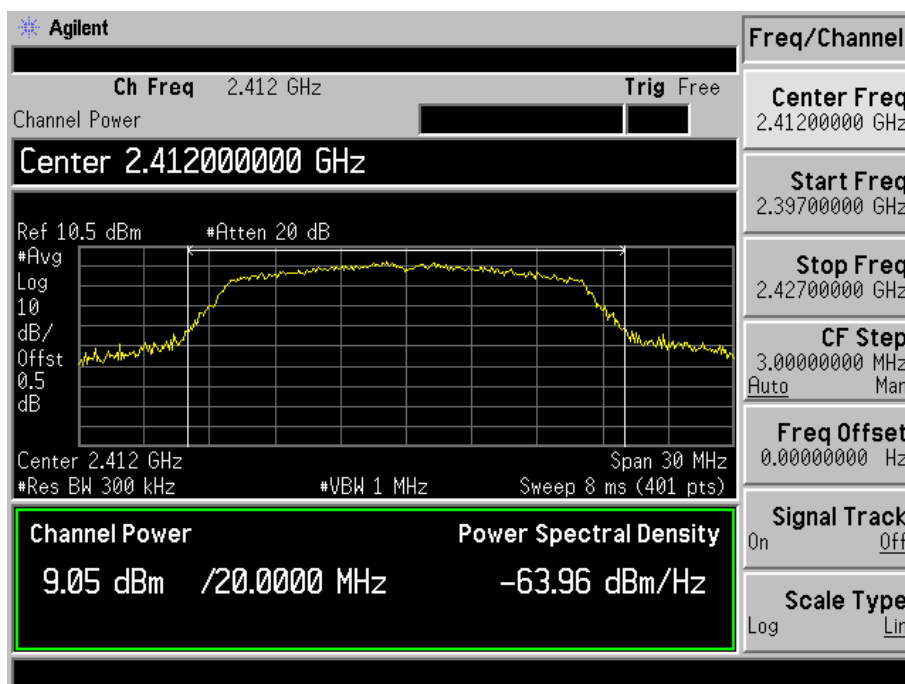
802.11b -11Mbps-Middle Channel



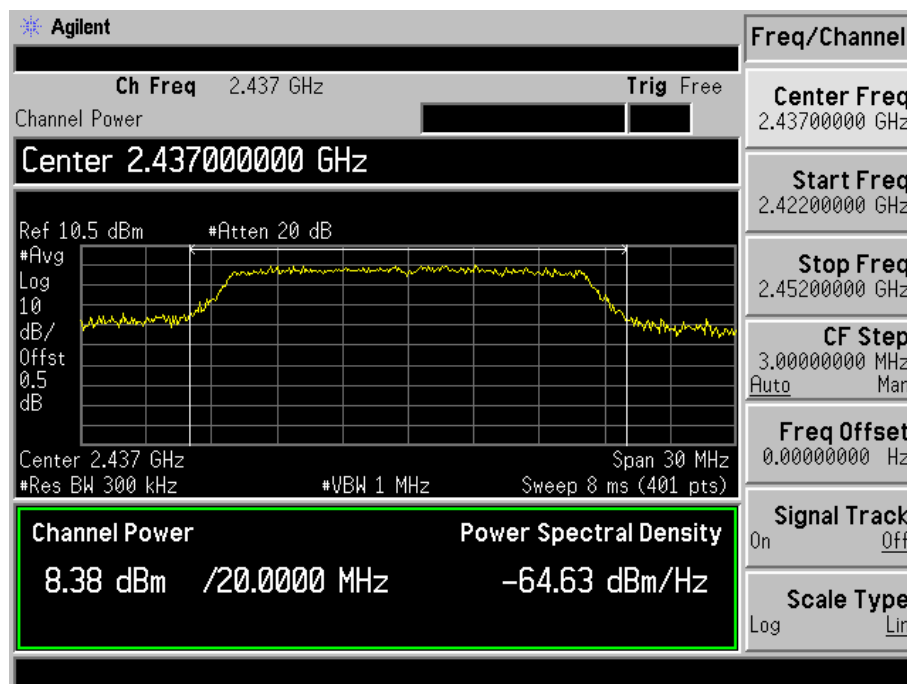
802.11b -11Mbps-High Channel



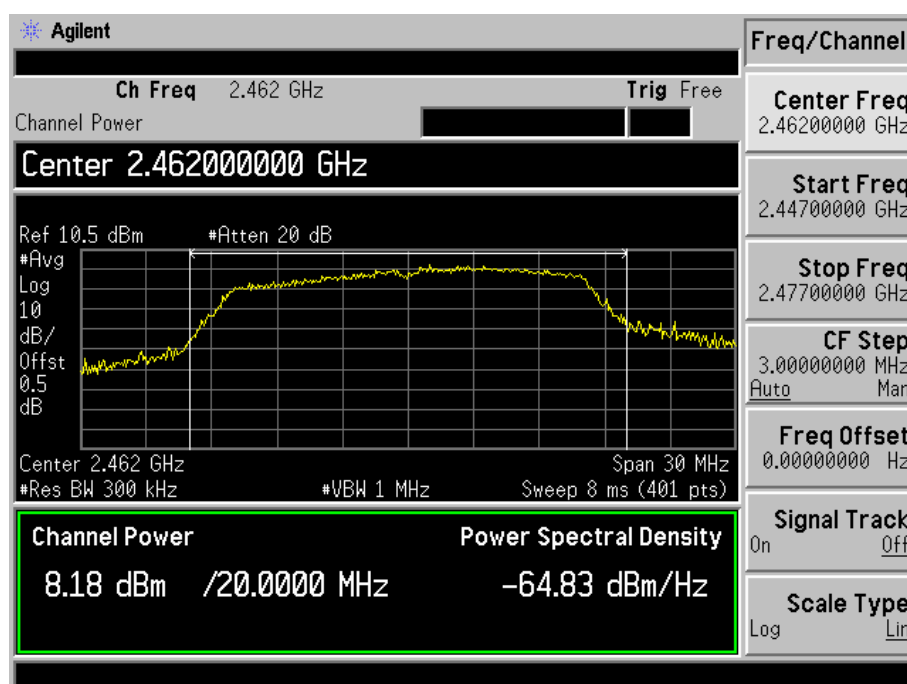
802.11g-54Mbps-Low Channel



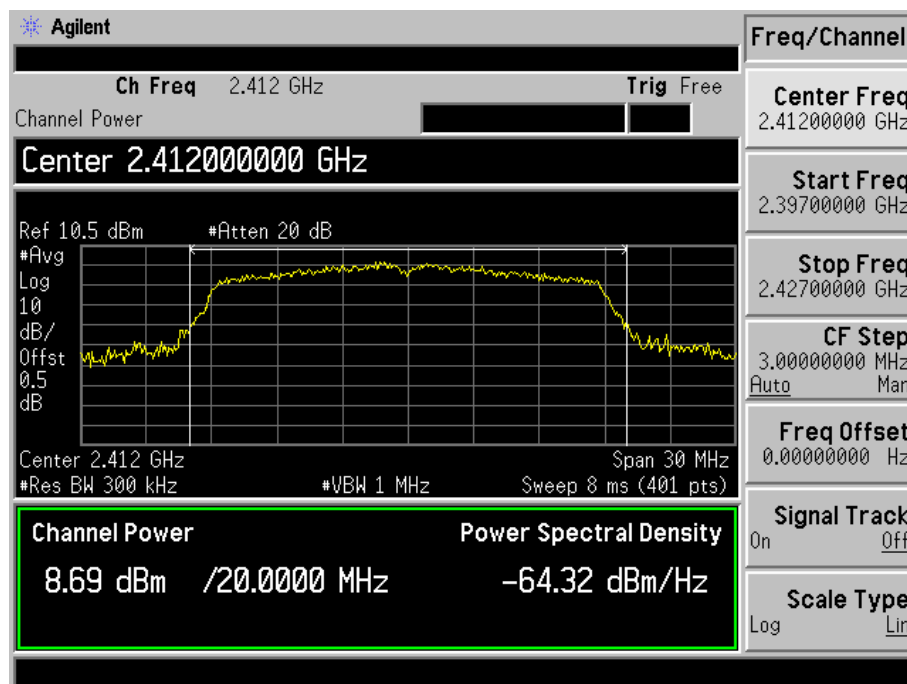
802.11g-54Mbps-Middle Channel



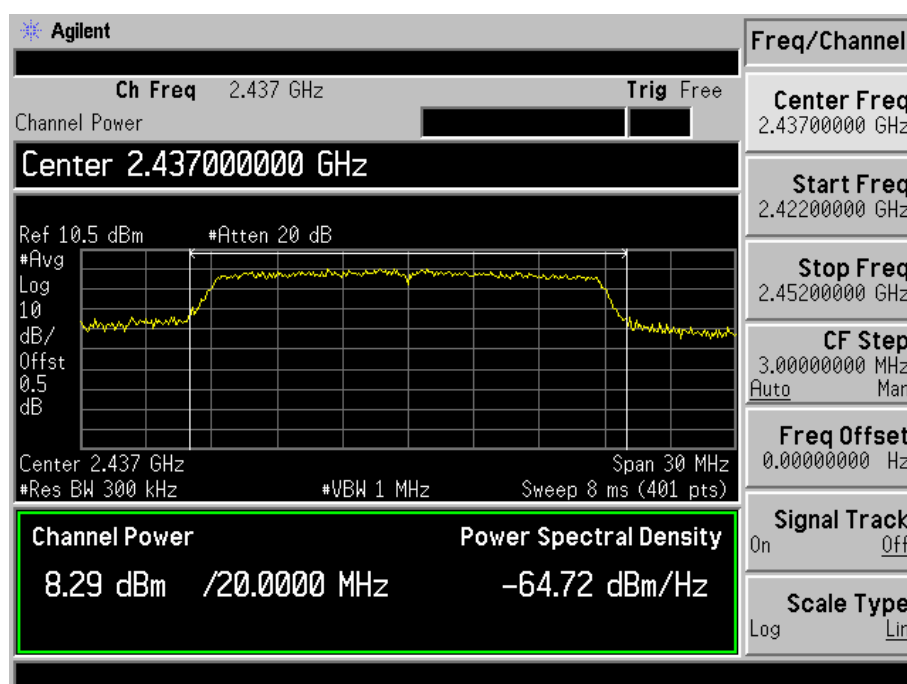
802.11g-54Mbps-High Channel



802.11n-HT20-MCS7-Low Channel



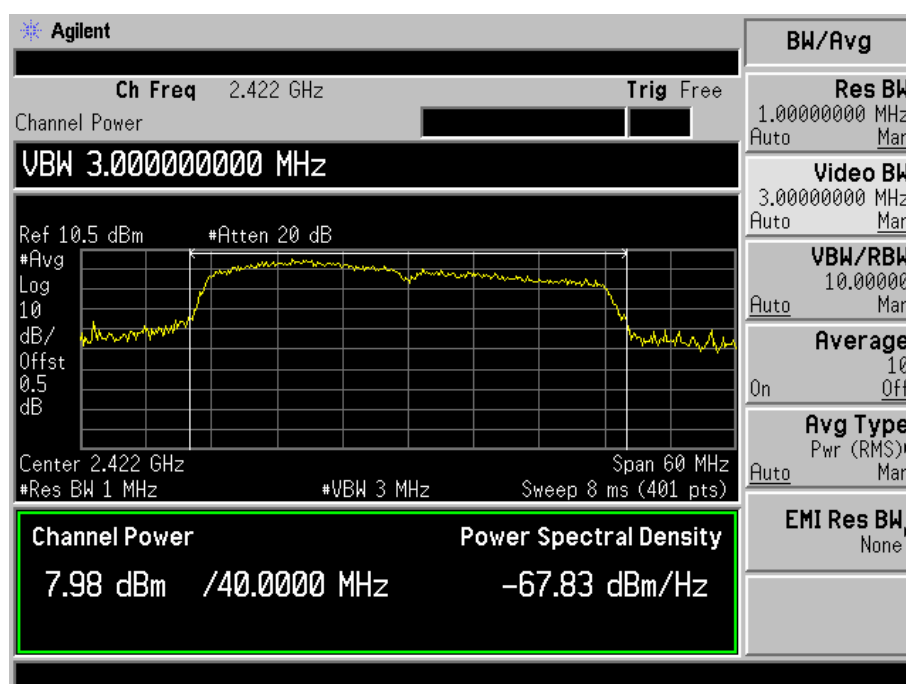
802.11n-HT20-MCS7-Middle Channel



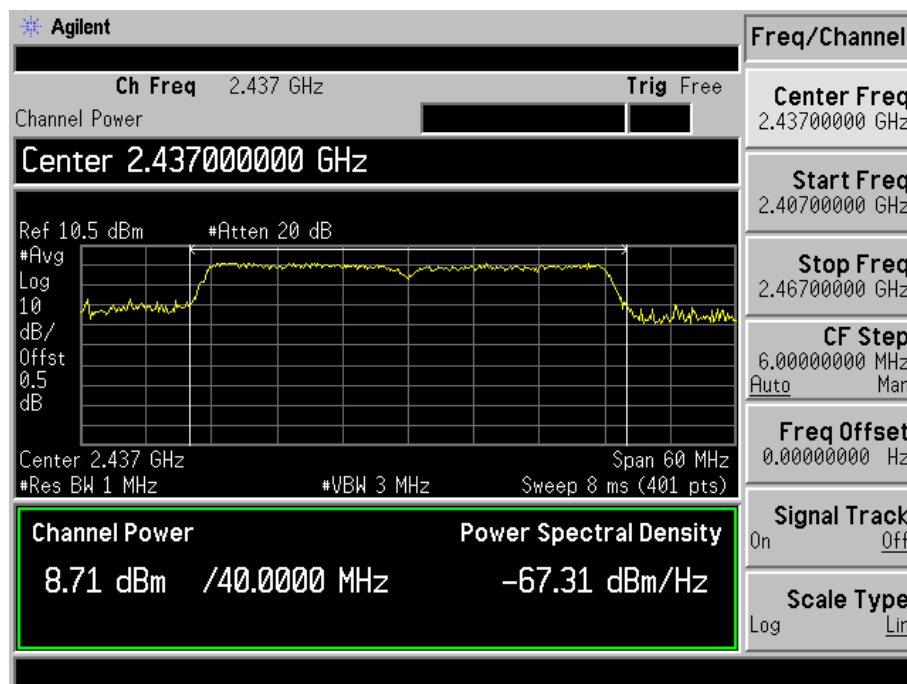
802.11n-HT20-MCS7-High Channel



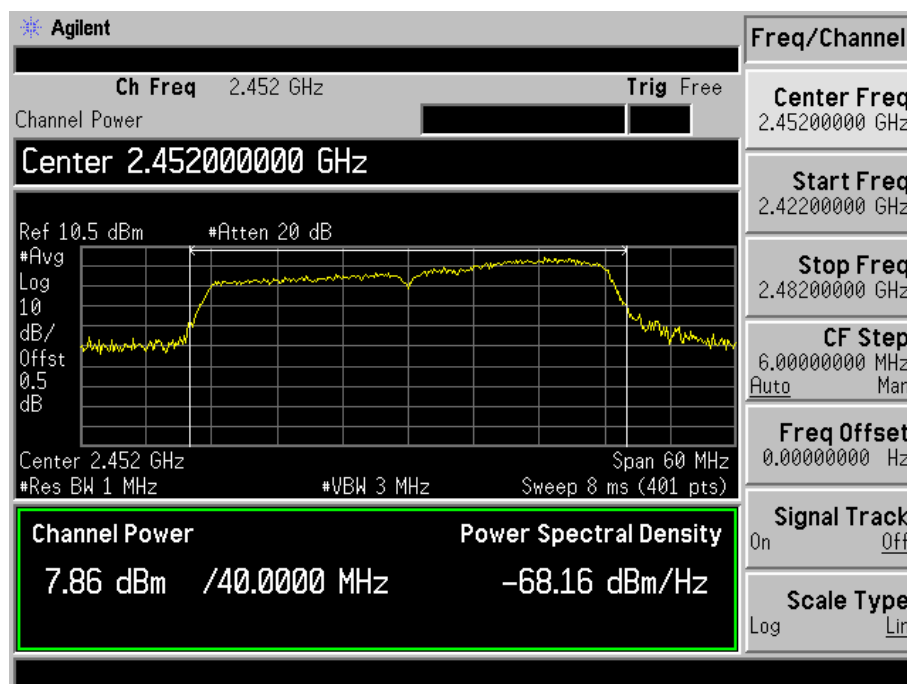
802.11n-HT40-MCS7-Low Channel



802.11n-HT40-MCS7-Middle Channel

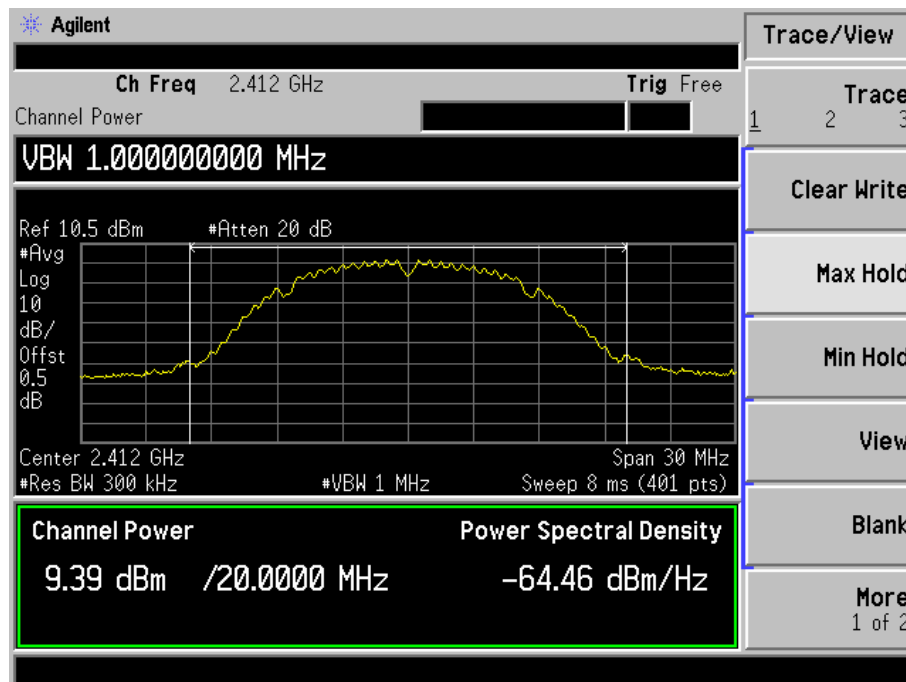


802.11n-HT40-MCS7-High Channel

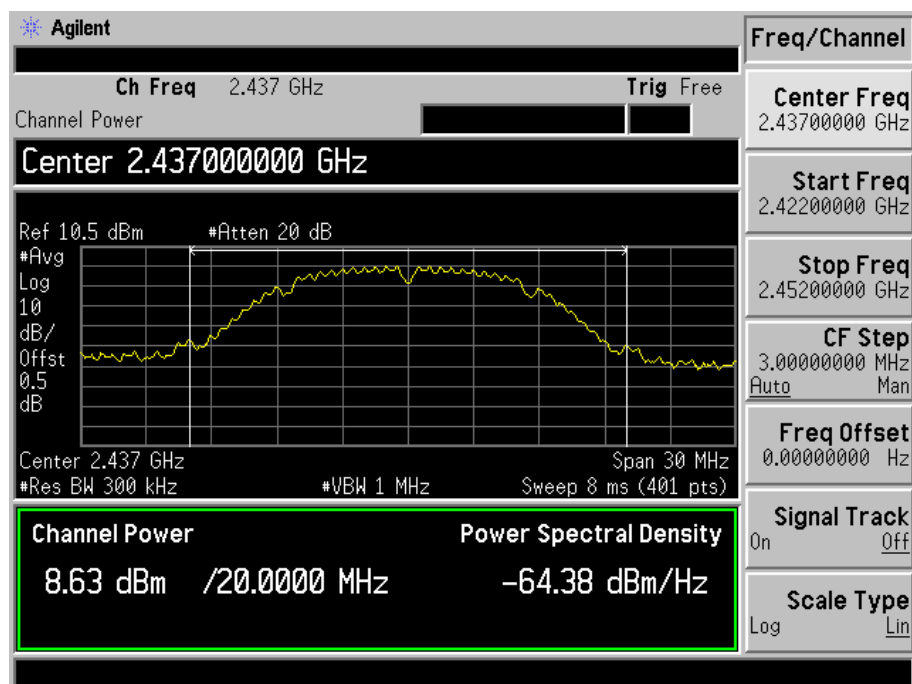


Antenna B

802.11b-11Mbps-Low Channel



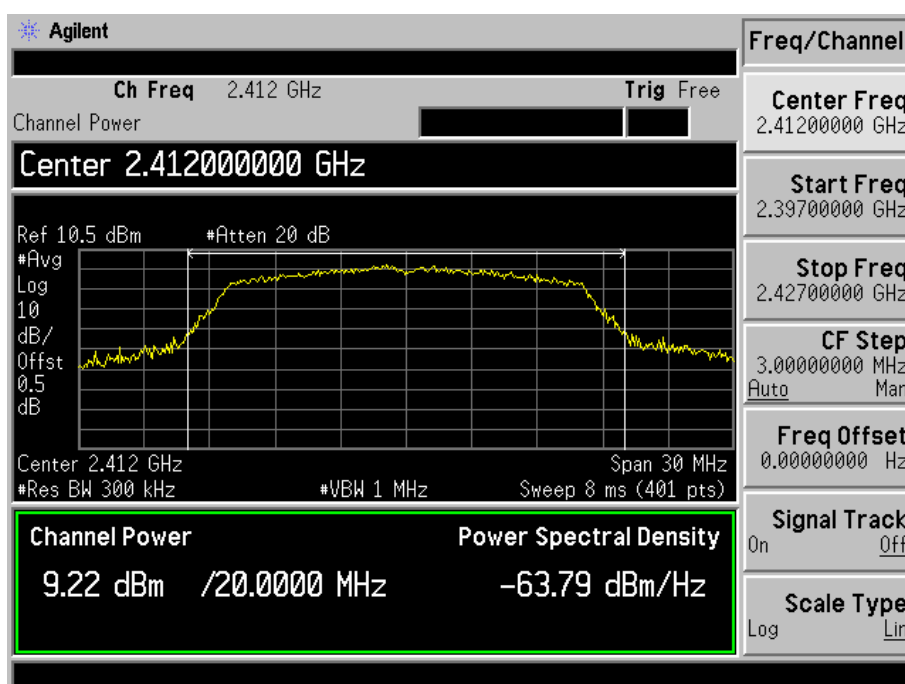
802.11b -11Mbps-Middle Channel



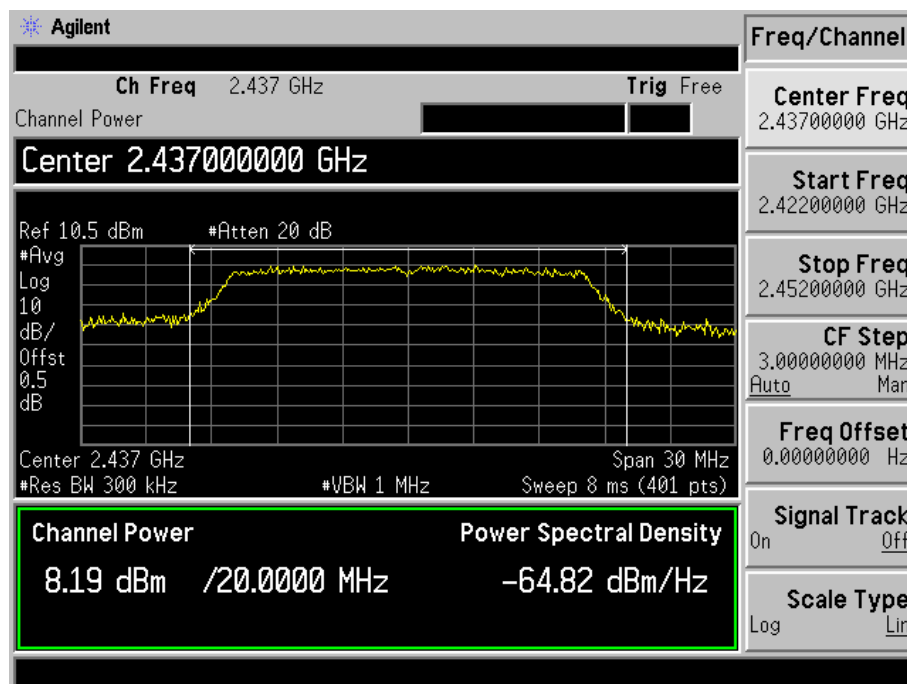
802.11b -11Mbps-High Channel



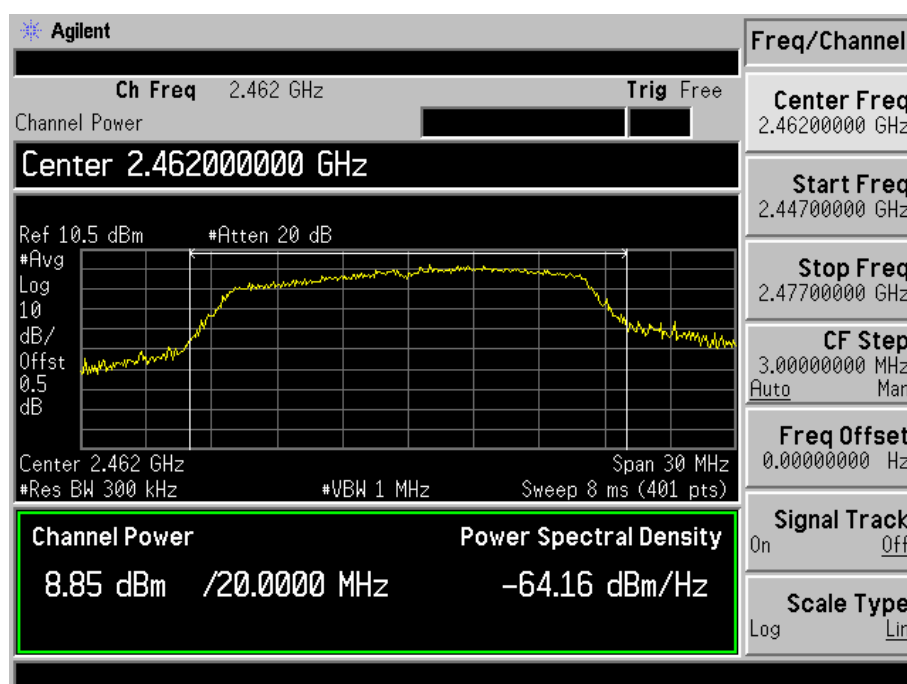
802.11g-54Mbps-Low Channel



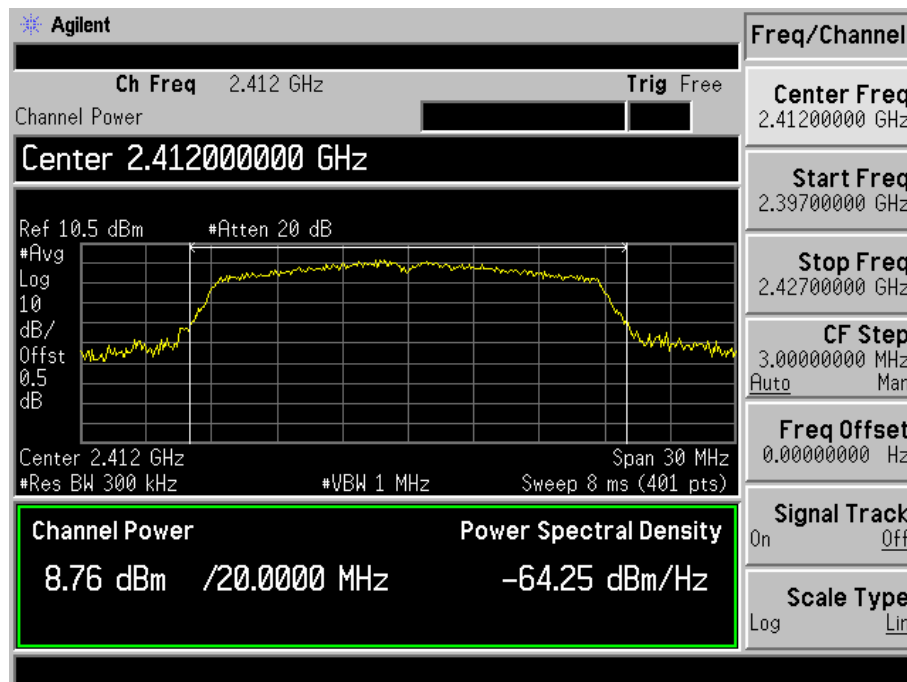
802.11g-54Mbps-Middle Channel



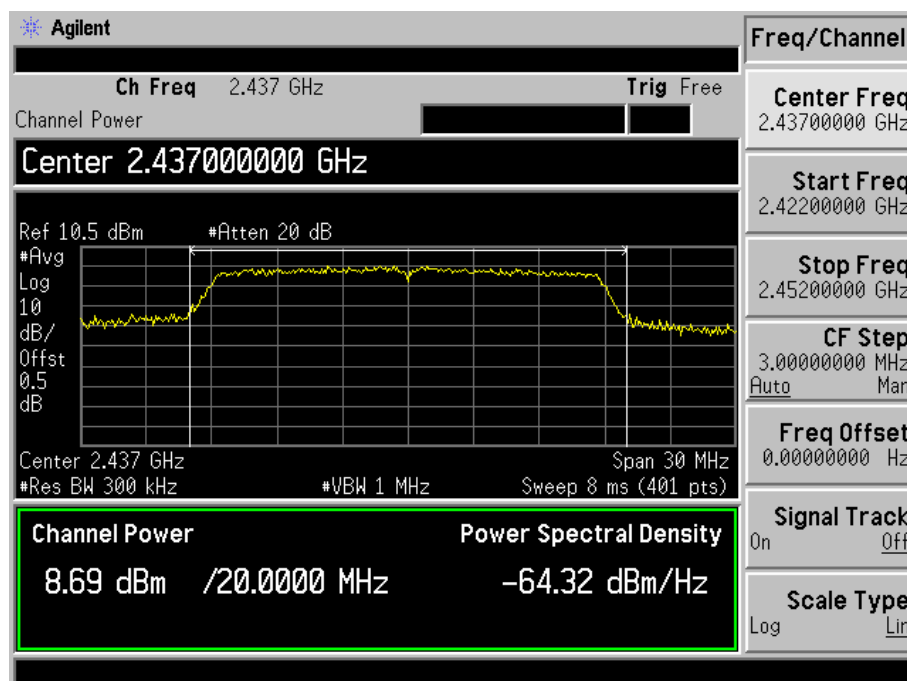
802.11g-54Mbps-High Channel



802.11n-HT20-MCS7-Low Channel



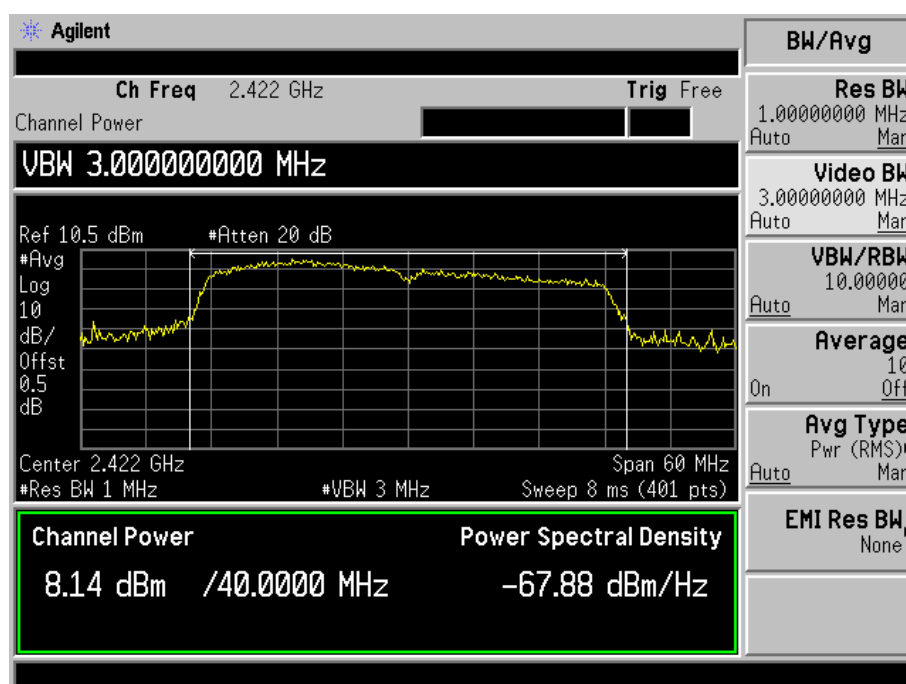
802.11n-HT20-MCS7-Middle Channel



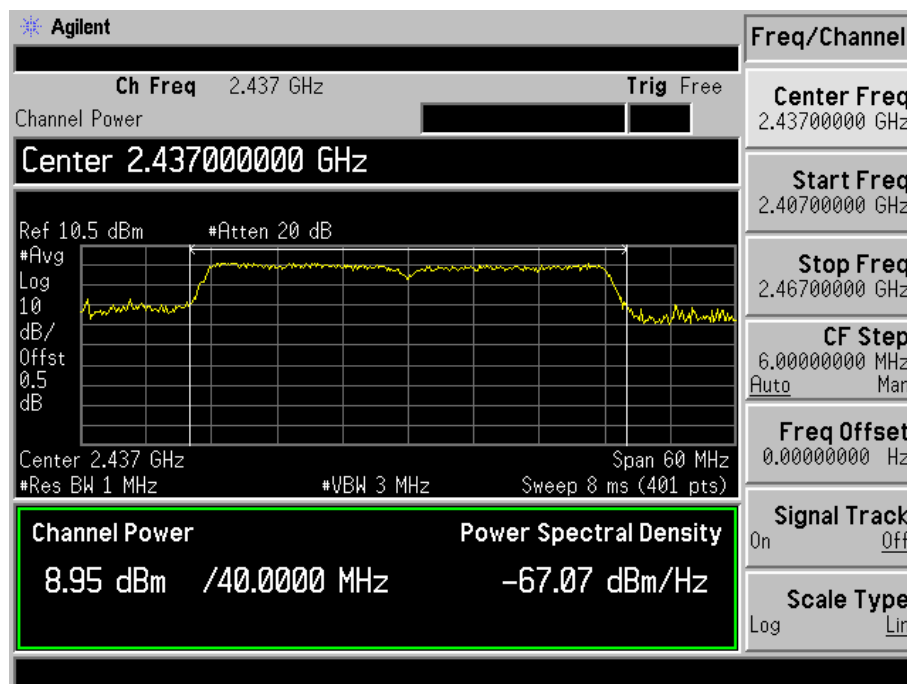
802.11n-HT20-MCS7-High Channel



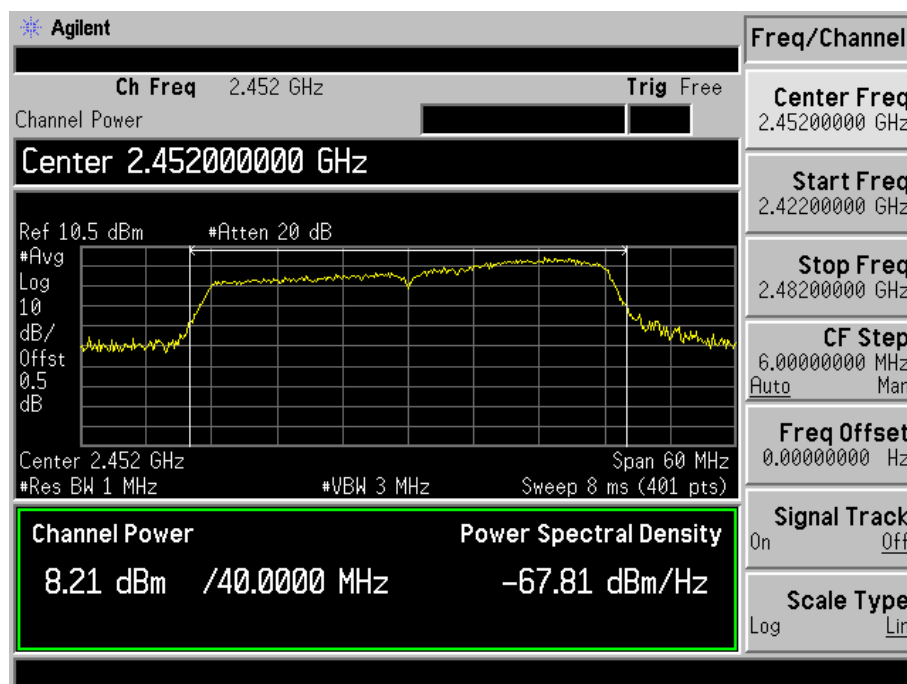
802.11n-HT40-MCS7-Low Channel



802.11n-HT40-MCS7-Middle Channel



802.11n-HT40-MCS7-High Channel



8. Field Strength of Spurious Emissions

8.1 Standard Applicable

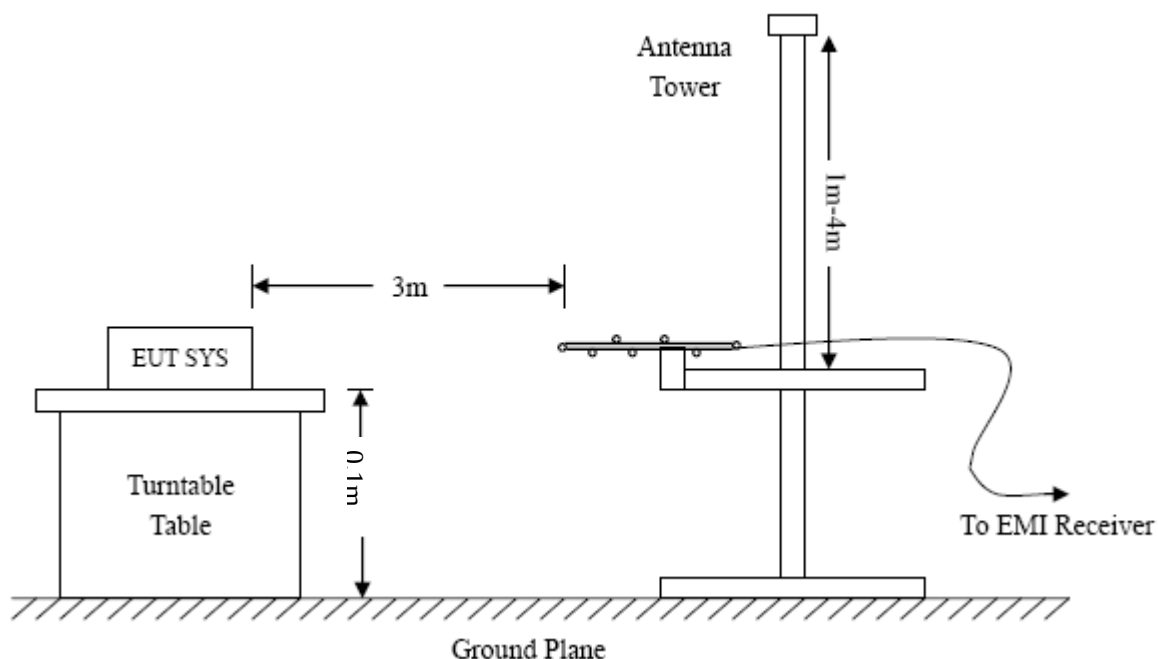
According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within 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).

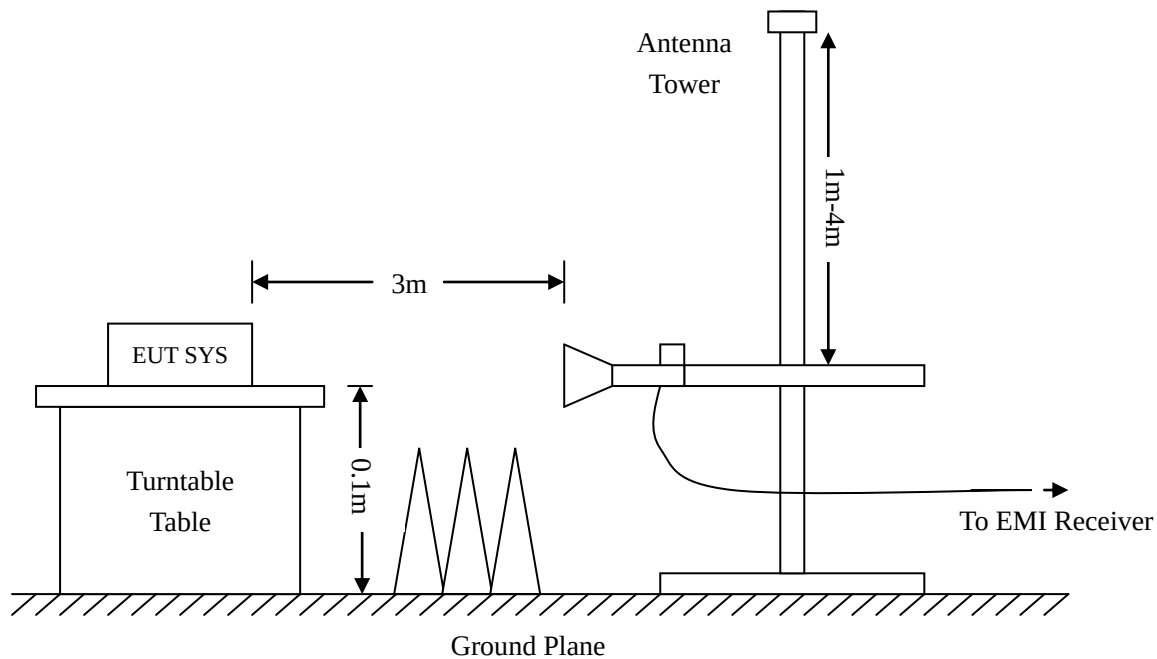
The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

8.2 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

RBW=10KHz,

VBW =30KHz

Sweep time= Auto

Trace = max hold

Detector function = peak

Frequency :30MHz-1GHz

RBW=120KHz,

VBW=300KHz

Sweep time= Auto

Trace = max hold

Detector function = peak, QP

Frequency :Above 1GHz

RBW=1MHz,

VBW=3MHz(Peak), 10Hz(AV)

Sweep time= Auto

Trace = max hold

Detector function = peak, AV

8.3 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:

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

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

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

8.4 Environmental Conditions

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

8.5 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: Only the worst case data was reported.

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

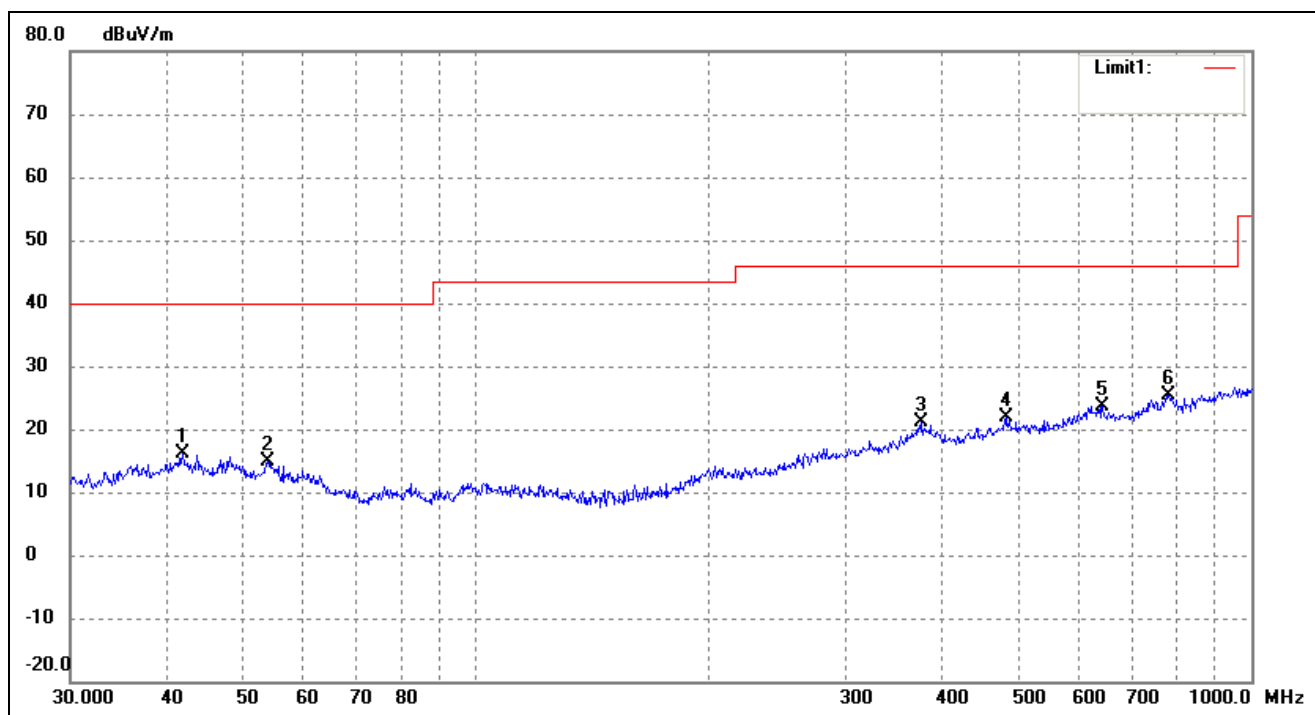
EUT: Mobile Medical Cart

Tested Model: S4000

Operating Condition: 802.11b Transmitting Low Channel-2412MHz (Antenna A worst case)

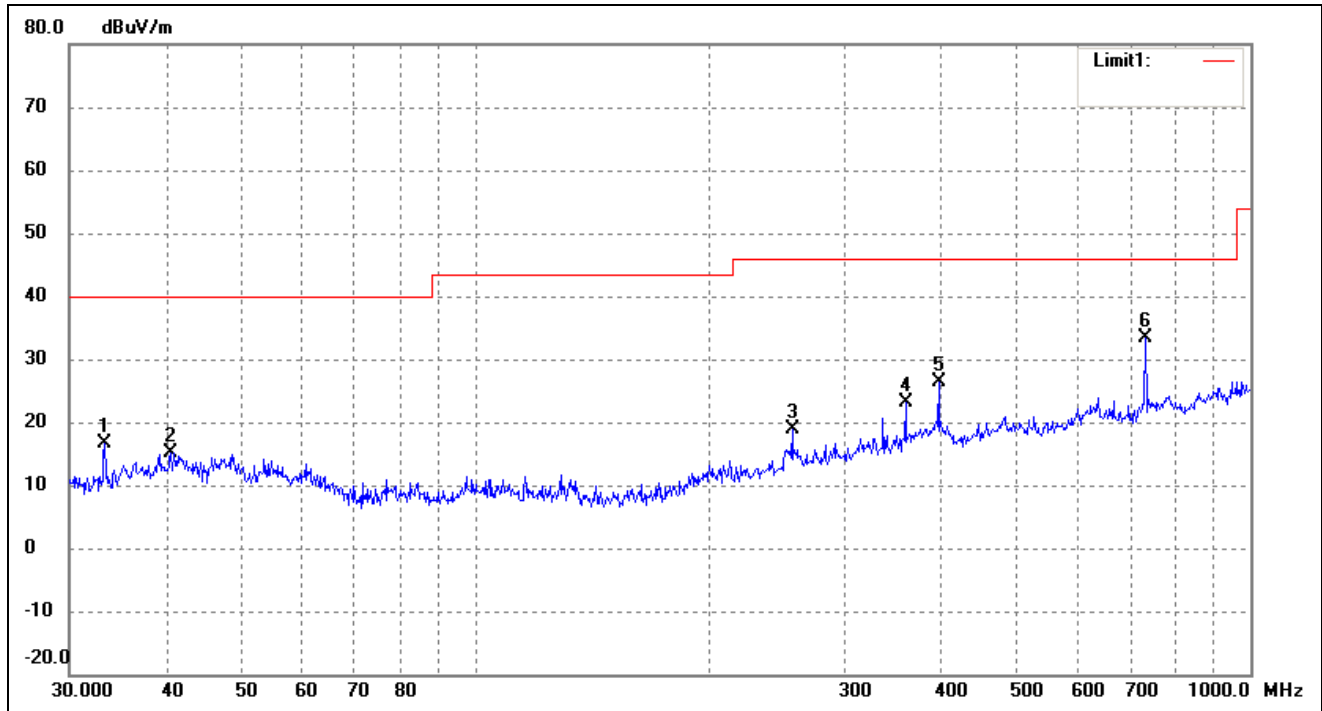
Comment: DC 24V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.8596	23.85	-7.79	16.06	40.00	-23.94	345	100	QP
2	53.8818	23.75	-8.81	14.94	40.00	-25.06	97	100	QP
3	375.9385	23.42	-2.33	21.09	46.00	-24.91	67	100	QP
4	483.9094	23.03	-1.27	21.76	46.00	-24.24	110	100	QP
5	642.8613	22.99	0.65	23.64	46.00	-22.36	252	100	QP
6	782.3453	22.63	2.78	25.41	46.00	-20.59	330	100	QP

Test Specification: Vertical

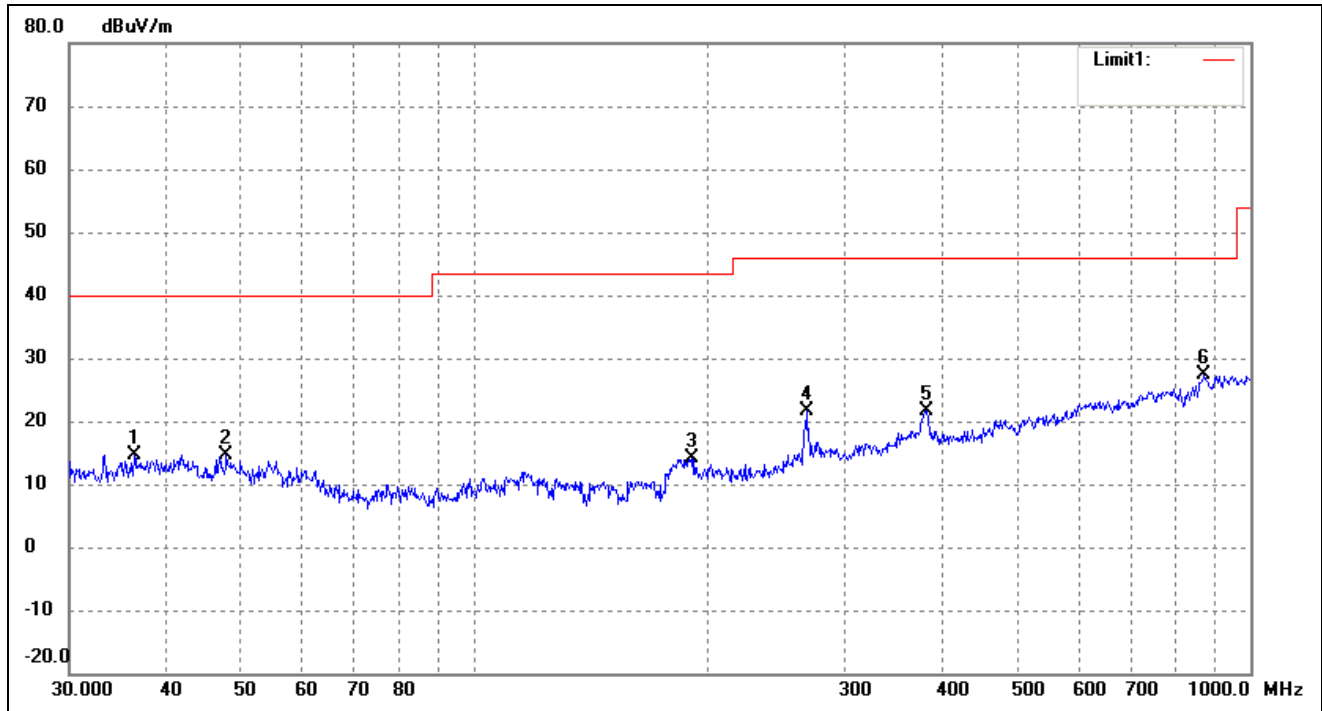


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.3279	26.14	-9.46	16.68	40.00	-23.32	258	100	QP
2	40.5591	22.85	-7.70	15.15	40.00	-24.85	94	100	QP
3	256.5211	26.02	-7.18	18.84	46.00	-27.16	65	100	QP
4	359.1860	26.57	-3.32	23.25	46.00	-22.75	92	100	QP
5	396.2415	29.28	-2.95	26.33	46.00	-19.67	203	100	QP
6	731.9203	31.73	1.66	33.39	46.00	-12.61	153	100	QP

Operating Condition: 802.11b Transmitting Middle Channel-2437MHz(Antenna A worst case)

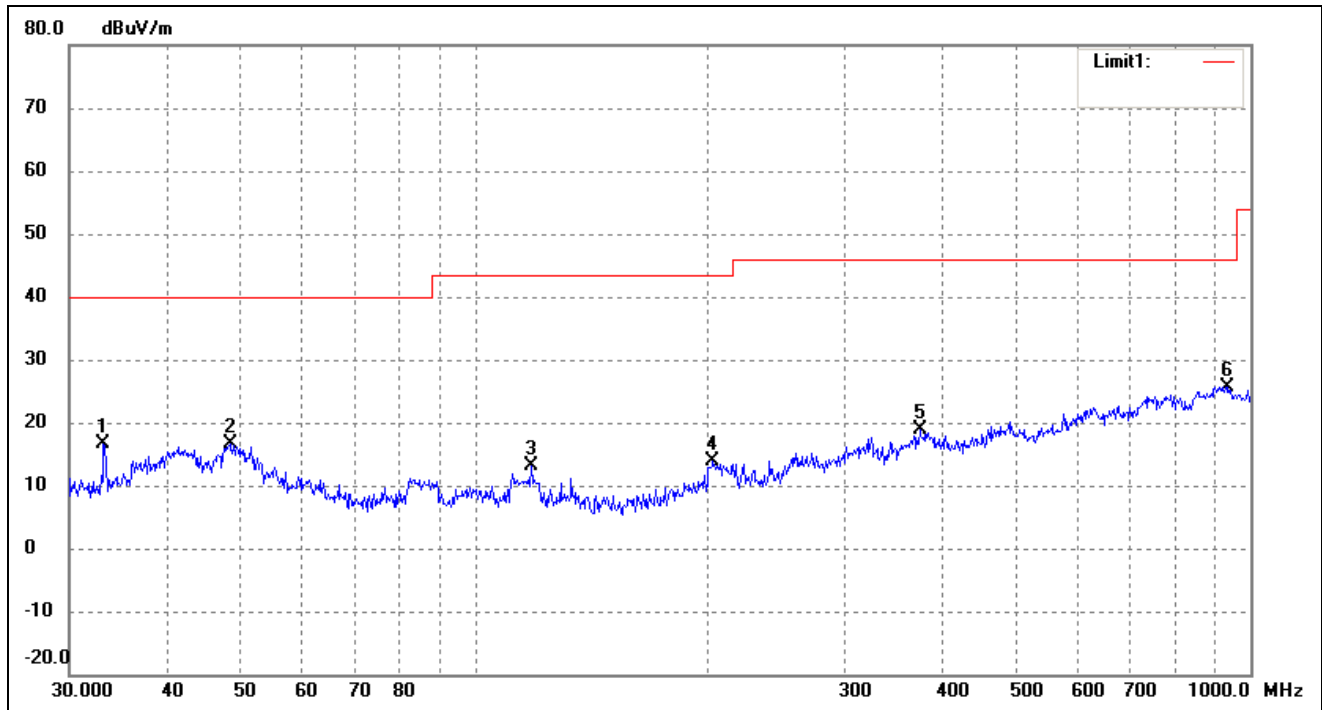
Comment: DC 24V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.3814	23.36	-8.66	14.70	40.00	-25.30	74	100	QP
2	47.8260	22.92	-8.18	14.74	40.00	-25.26	191	100	QP
3	190.4050	23.97	-9.96	14.01	43.50	-29.49	69	100	QP
4	267.5455	28.23	-6.63	21.60	46.00	-24.40	324	100	QP
5	382.5879	23.97	-2.23	21.74	46.00	-24.26	232	100	QP
6	872.1832	24.34	3.05	27.39	46.00	-18.61	208	100	QP

Test Specification: Vertical

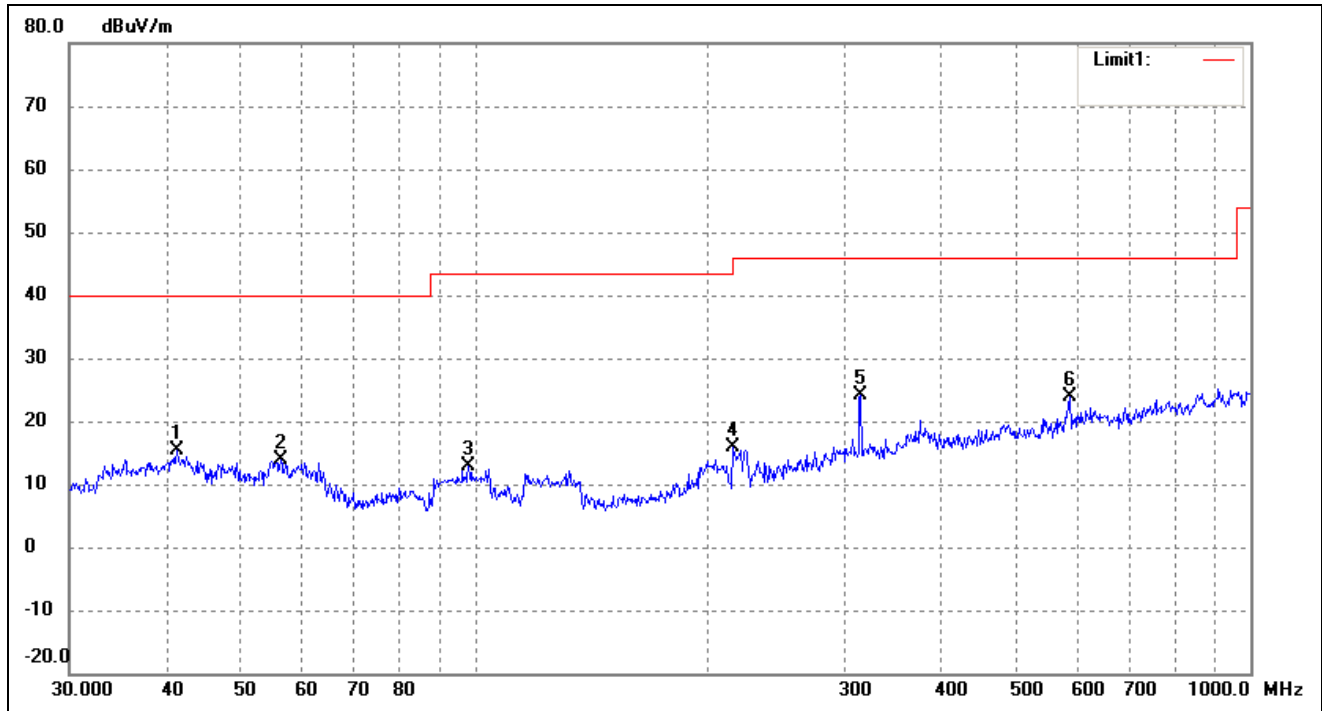


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.2112	26.04	-9.50	16.54	40.00	-23.46	214	100	QP
2	48.3318	24.80	-8.21	16.59	40.00	-23.41	349	100	QP
3	118.1862	24.59	-11.38	13.21	43.50	-30.29	51	100	QP
4	202.8104	22.51	-8.68	13.83	43.50	-29.67	267	100	QP
5	374.6226	21.32	-2.41	18.91	46.00	-27.09	180	100	QP
6	935.5463	21.57	4.13	25.70	46.00	-20.30	315	100	QP

Operating Condition: 802.11b Transmitting High Channel-2462MHz(Antenna A worst case)

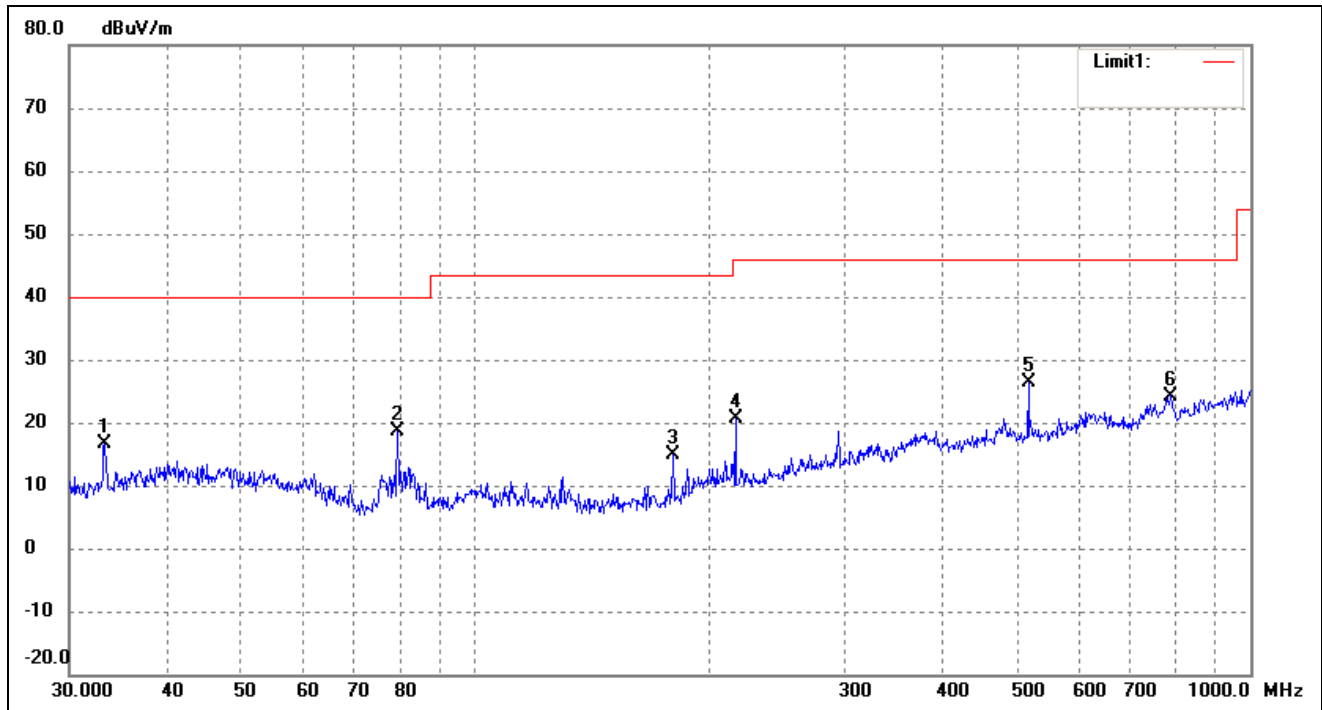
Comment: DC 24V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.2765	23.20	-7.75	15.45	40.00	-24.55	173	100	QP
2	56.1974	22.86	-9.10	13.76	40.00	-26.24	199	100	QP
3	98.1419	24.14	-11.28	12.86	43.50	-30.64	100	100	QP
4	215.2678	24.74	-8.79	15.95	43.50	-27.55	125	100	QP
5	314.3765	29.04	-4.92	24.12	46.00	-21.88	137	100	QP
6	584.7895	24.60	-0.77	23.83	46.00	-22.17	173	100	QP

Test Specification: Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.3279	26.18	-9.46	16.72	40.00	-23.28	73	100	QP
2	79.5209	30.62	-12.03	18.59	40.00	-21.41	157	100	QP
3	180.0165	26.14	-11.36	14.78	43.50	-28.72	108	100	QP
4	216.7828	29.40	-8.81	20.59	46.00	-25.41	96	100	QP
5	517.2480	28.21	-1.94	26.27	46.00	-19.73	187	100	QP
6	790.6188	21.88	2.37	24.25	46.00	-21.75	242	100	QP

Spurious Emissions Above 1GHz

Test Mode: 802.11b (Antenna A worst case)

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2412MHz							
4824.00	59.71	-3.87	55.84	74	-18.16	H	PK
4824.00	42.63	-3.87	38.76	54	-15.24	H	AV
7236.00	54.17	1.14	55.31	74	-18.69	H	PK
7236.00	40.95	1.19	42.14	54	-11.86	H	AV
4824.00	61.73	-3.86	57.87	74	-16.13	V	PK
4824.00	43.68	-3.86	39.82	54	-14.18	V	AV
7236.00	54.28	1.1	55.38	74	-18.62	V	PK
7236.00	38.67	1.1	39.77	54	-14.23	V	AV
Middle Channel-2437MHz							
4874.00	58.06	-3.74	54.32	74	-19.68	H	PK
4874.00	41.7	-3.74	37.96	54	-16.04	H	AV
7311.00	53.35	1.47	54.82	74	-19.18	H	PK
7311.00	39.81	1.47	41.28	54	-12.72	H	AV
4874.00	61.63	-3.74	57.89	74	-16.11	V	PK
4874.00	43.37	-3.74	39.63	54	-14.37	V	AV
7311.00	54.09	1.47	55.56	74	-18.44	V	PK
7311.00	38.06	1.47	39.53	54	-14.47	V	AV
High Channel-2462MHz							
4924.00	61.73	-3.59	58.14	74	-15.86	H	PK
4924.00	41.31	-3.59	37.72	54	-16.28	H	AV
7386.00	54.23	1.79	56.02	74	-17.98	H	PK
7386.00	39.48	1.79	41.27	54	-12.73	H	AV
4924.00	60.26	-3.59	56.67	74	-17.33	V	PK
4924.00	41.58	-3.59	37.99	54	-16.01	V	AV
7386.00	54.99	1.79	56.78	74	-17.22	V	PK
7386.00	40.62	1.79	42.41	54	-11.59	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

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 v04, 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 v04, 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 $\geq$ 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

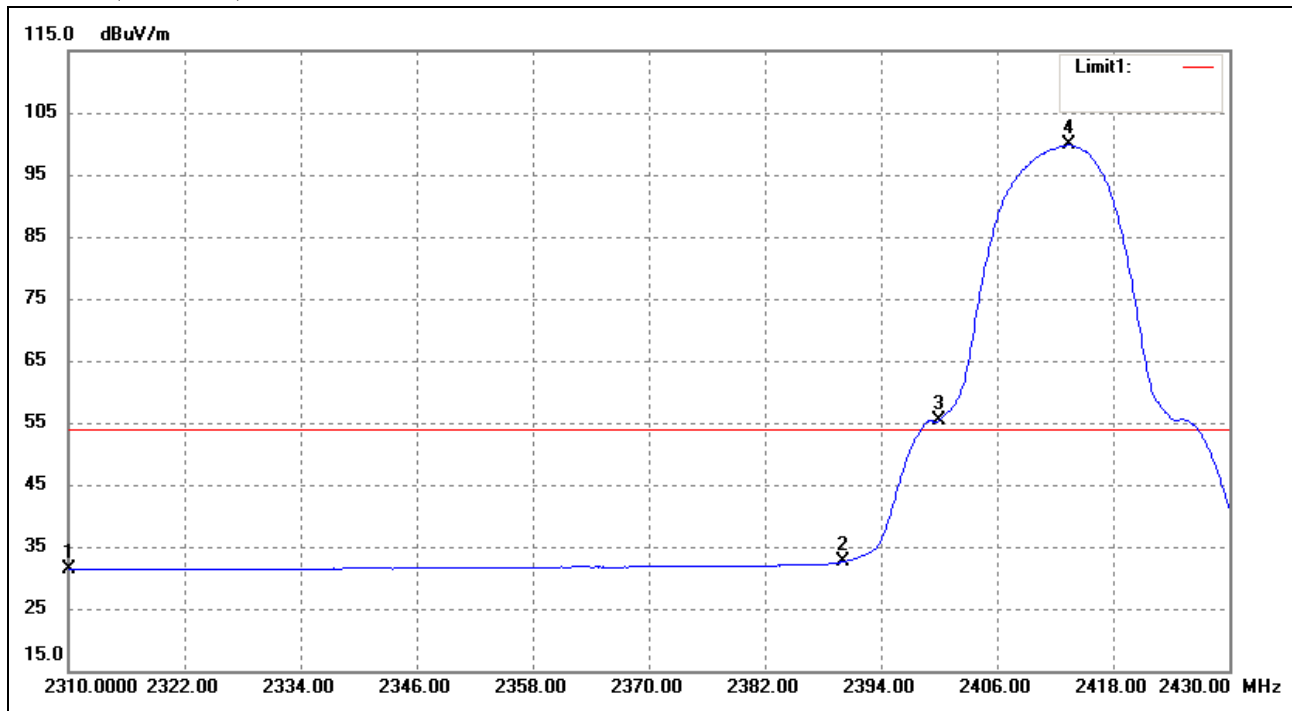
Temperature:	23°C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

9.4 Summary of Test Results/Plots

Antenna A

802.11b-Lowest Bandedge

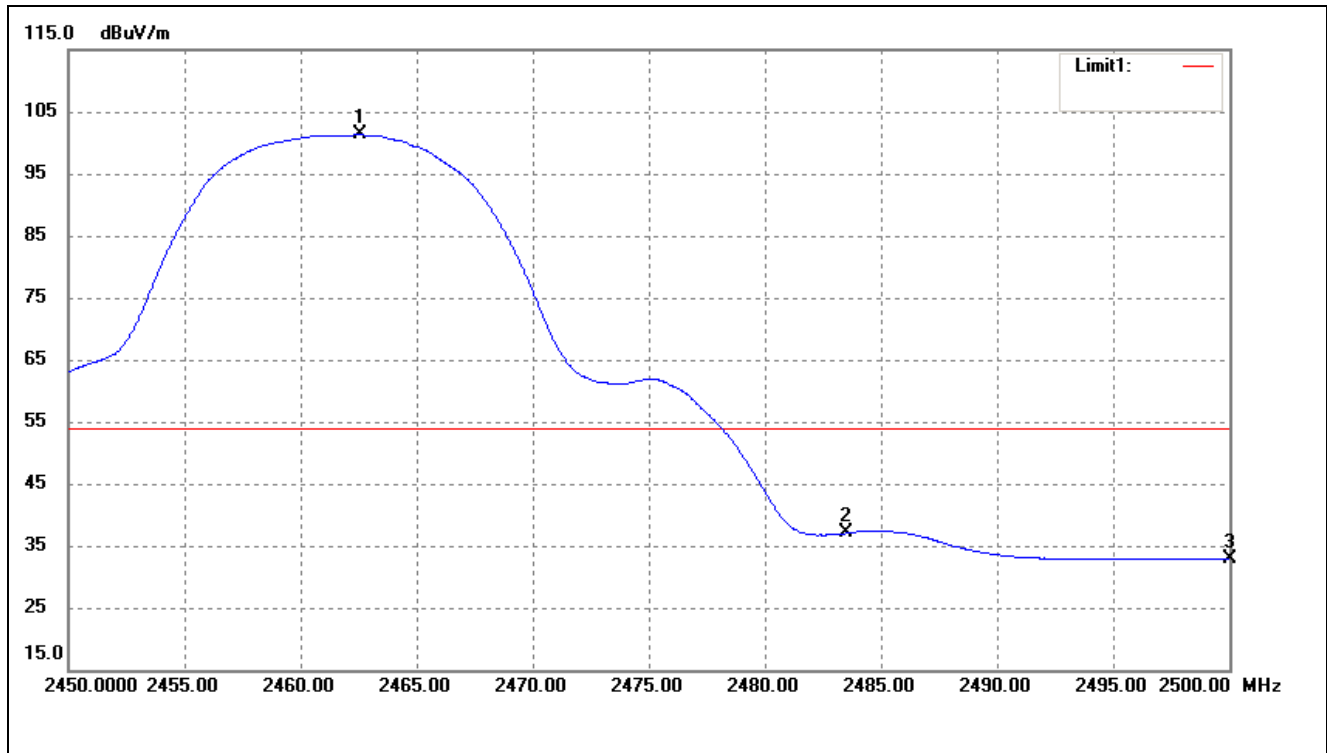
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	36.40	-4.98	31.42	54.00	-22.58	Average Detector
	2310.000	47.92	-4.98	42.94	74.00	-31.06	Peak Detector
2	2390.000	36.85	-4.26	32.59	54.00	-21.41	Average Detector
	2390.000	48.65	-4.26	44.39	74.00	-29.61	Peak Detector
3	2400.000	59.58	-4.18	55.40	Delta =44.43dBc		Average Detector
4	2413.440	103.90	-4.07	99.83			Average Detector

802.11b-Highest Bandedge

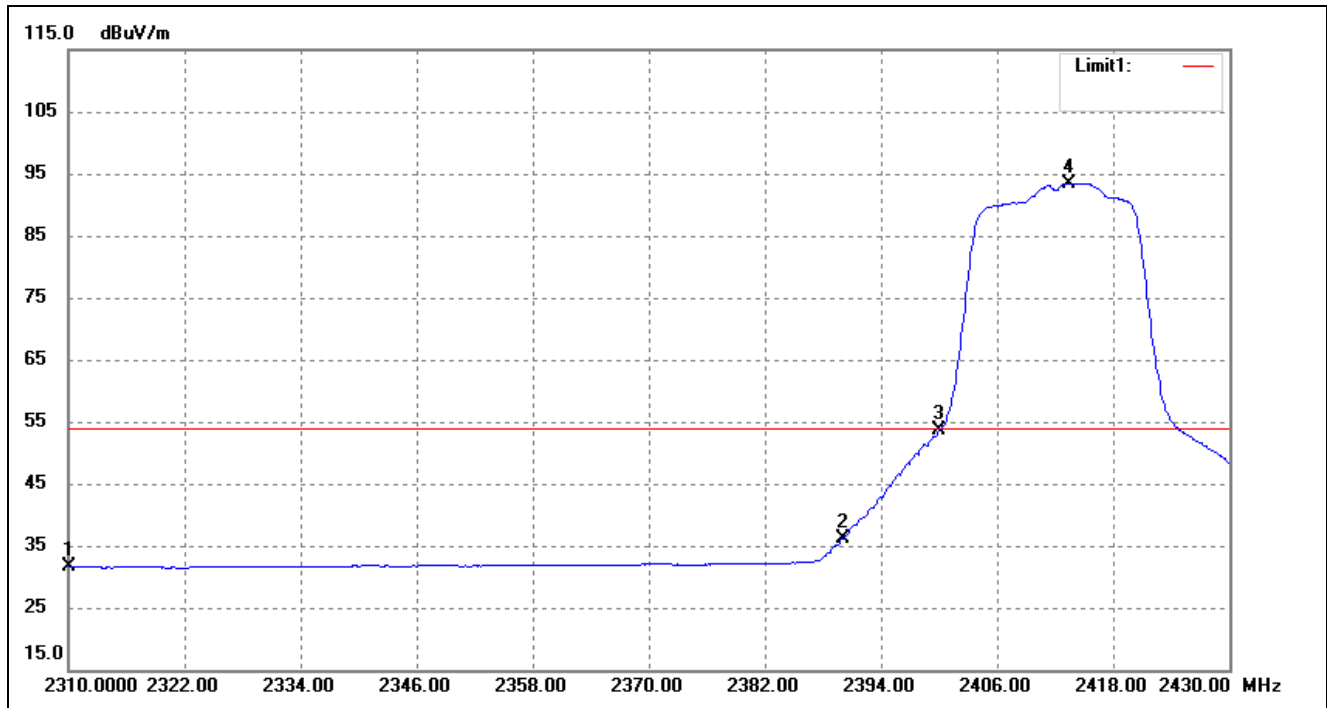
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2462.550	104.96	-3.69	101.27	/	/	Average Detector
	2463.350	113.38	-3.68	109.70	/	/	Peak Detector
2	2483.500	40.54	-3.53	37.01	54.00	-16.99	Average Detector
	2483.500	51.36	-3.53	47.83	74.00	-26.17	Peak Detector
3	2500.000	36.35	-3.39	32.96	54.00	-21.04	Average Detector
	2500.000	48.63	-3.39	45.24	74.00	-28.76	Peak Detector

802.11g-Lowest Bandedge

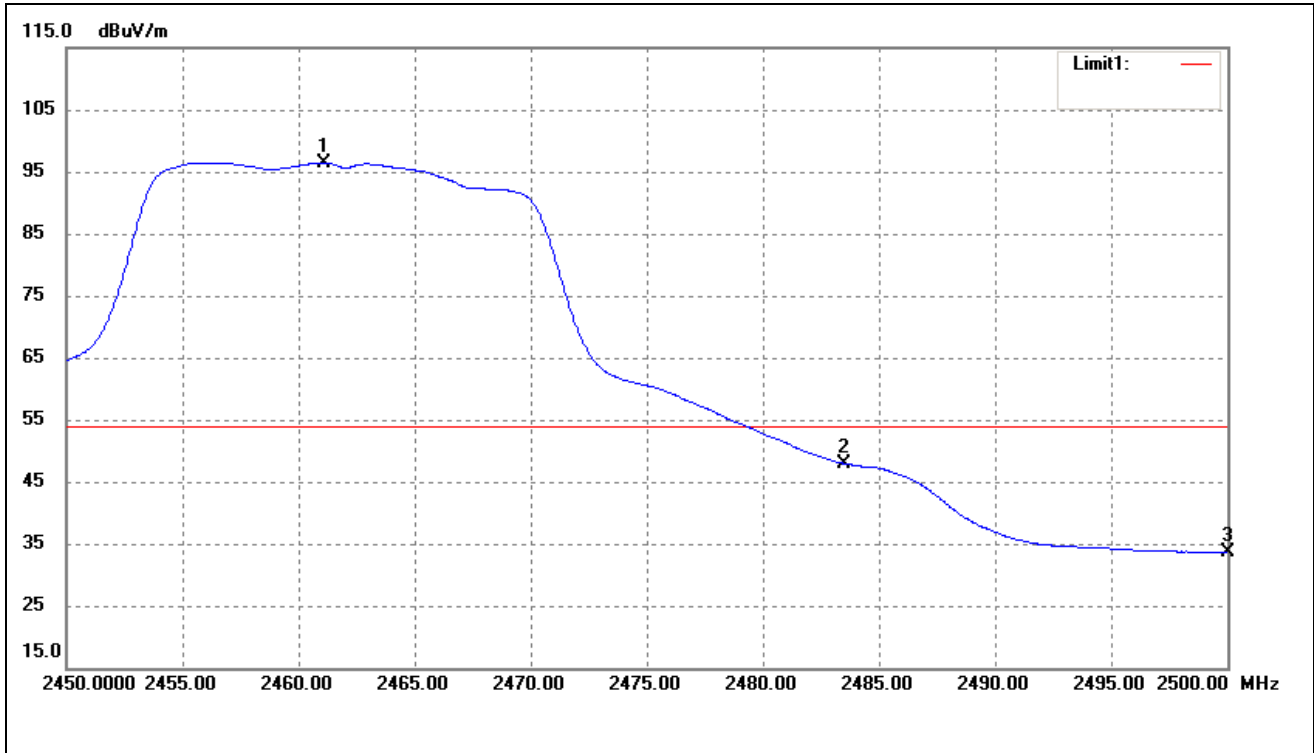
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	36.60	-4.98	31.62	54.00	-22.38	Average Detector
	2310.000	47.03	-4.98	42.05	74.00	-31.95	Peak Detector
2	2390.000	40.51	-4.26	36.25	54.00	-17.75	Average Detector
	2390.000	54.67	-4.26	50.41	74.00	-23.59	Peak Detector
3	2400.000	57.87	-4.18	53.69	Delta =39.76dBc		Average Detector
4	2413.440	97.52	-4.07	93.45			Average Detector

802.11g-Highest Bandedge

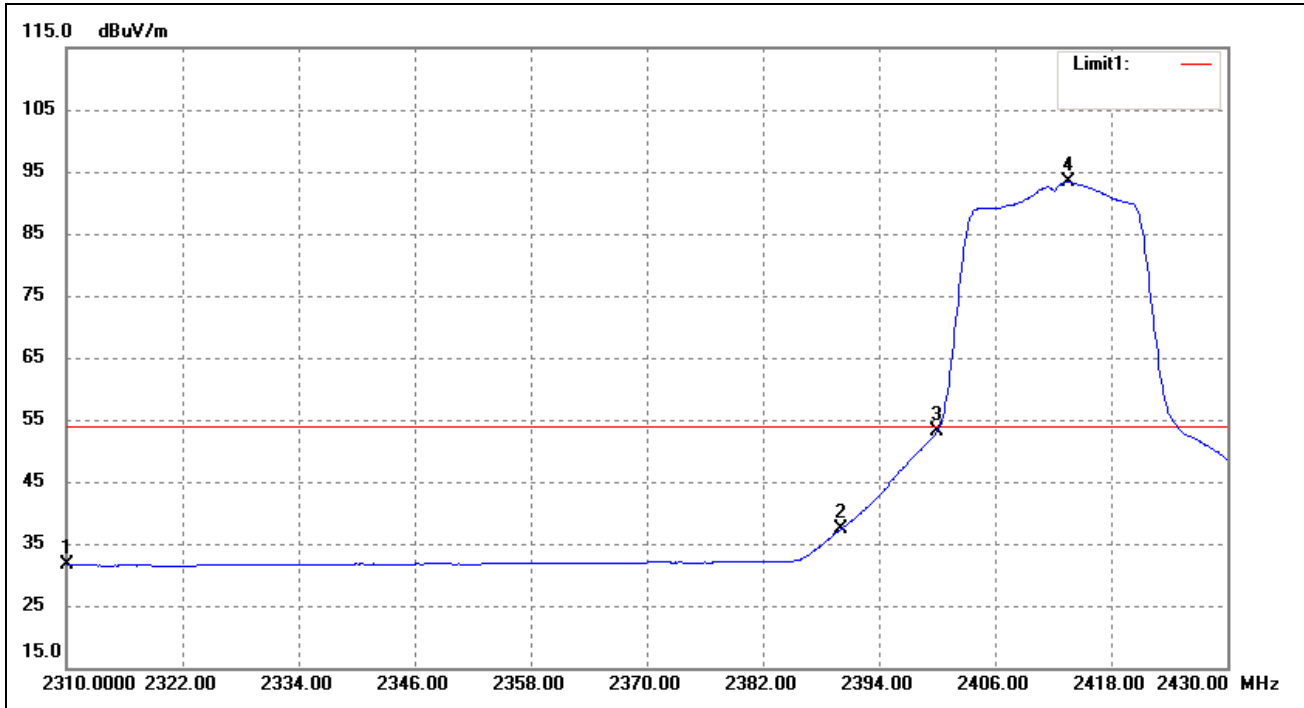
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.100	100.18	-3.70	96.48	/	/	Average Detector
	2461.400	111.01	-3.69	107.32	/	/	Peak Detector
2	2483.500	51.47	-3.53	47.94	54.00	-6.06	Average Detector
	2483.500	72.17	-3.53	68.64	74.00	-5.36	Peak Detector
3	2500.000	37.04	-3.39	33.65	54.00	-20.35	Average Detector
	2500.000	54.02	-3.39	50.63	74.00	-23.37	Peak Detector

802.11n-HT20-Lowest Bandedge

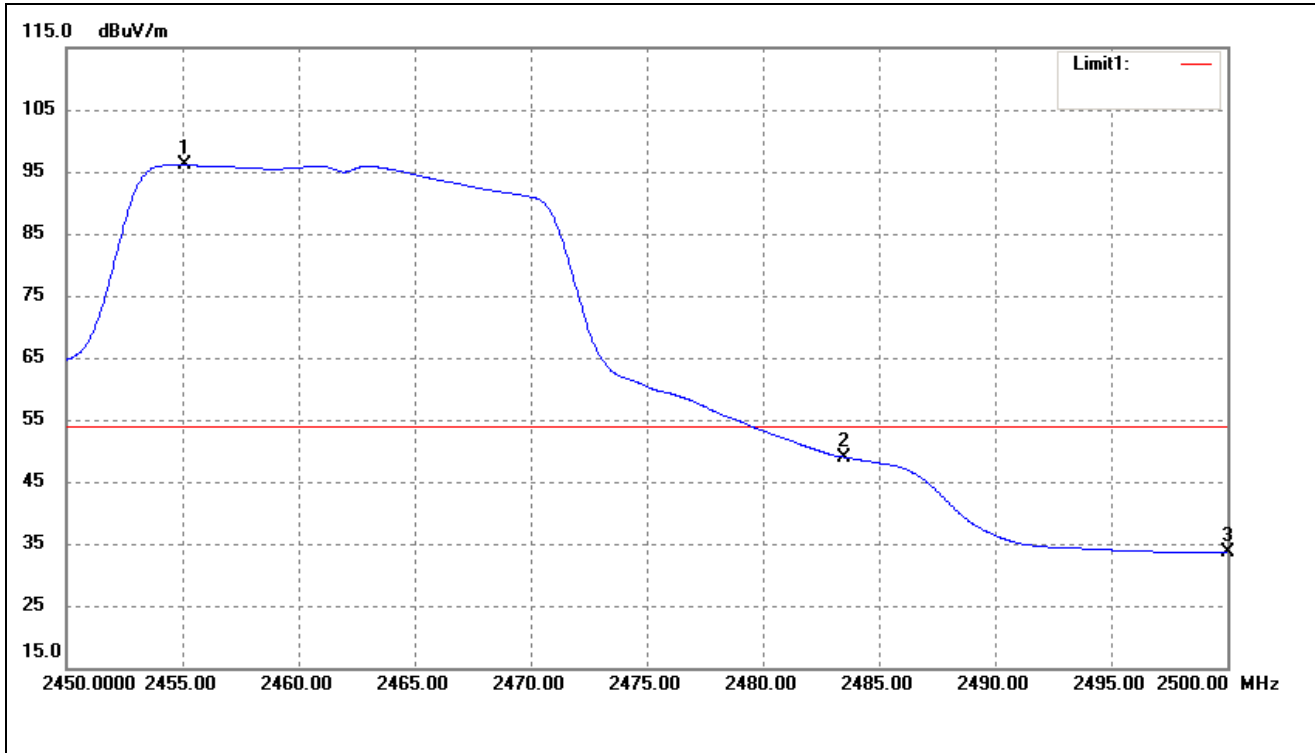
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	36.56	-4.98	31.58	54.00	-22.42	Average Detector
	2310.000	49.00	-4.98	44.02	74.00	-29.98	Peak Detector
2	2390.000	41.57	-4.26	37.31	54.00	-16.69	Average Detector
	2390.000	58.18	-4.26	53.92	74.00	-20.08	Peak Detector
3	2400.000	57.37	-4.18	53.19	Delta =40.25dBc		Average Detector
4	2413.560	97.51	-4.07	93.44			Average Detector

802.11n-HT20-Highest Bandedge

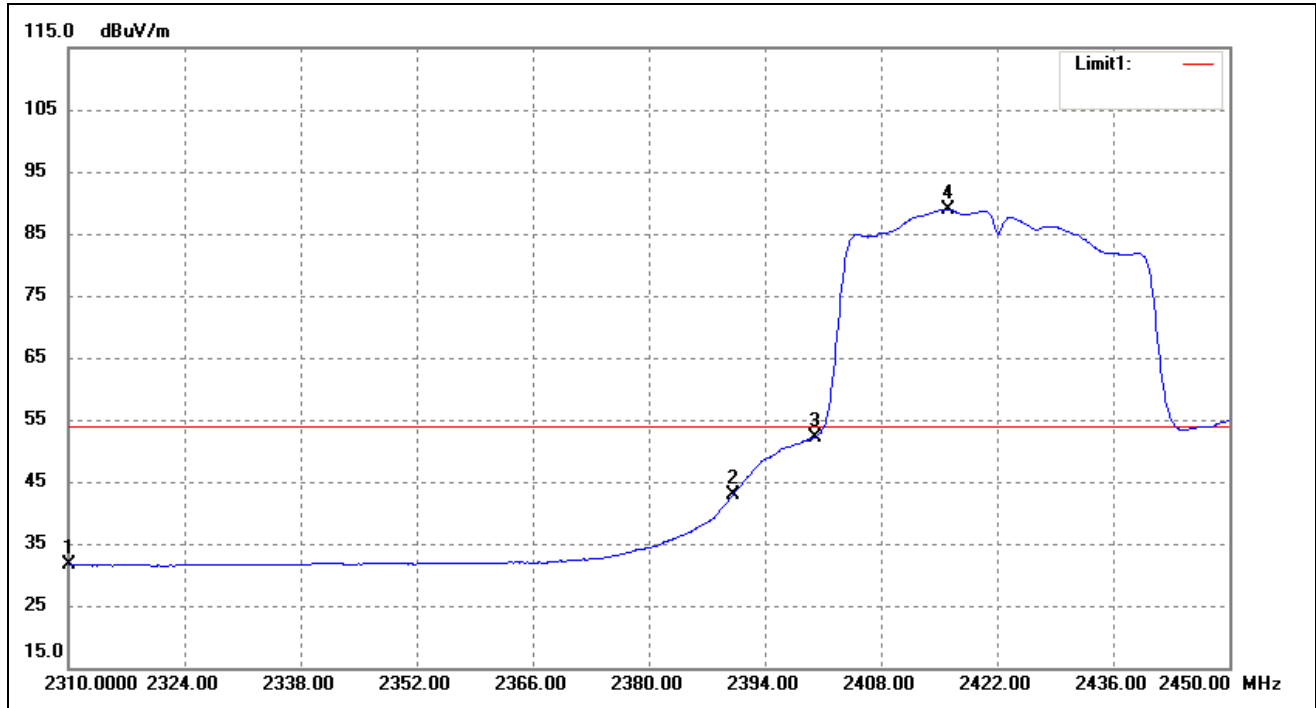
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2455.100	99.79	-3.74	96.05	/	/	Average Detector
	2461.400	111.18	-3.69	107.49	/	/	Peak Detector
2	2483.500	52.51	-3.53	48.98	54.00	-5.02	Average Detector
	2483.500	73.62	-3.53	70.09	74.00	-3.91	Peak Detector
3	2500.000	36.93	-3.39	33.54	54.00	-20.46	Average Detector
	2500.000	53.42	-3.39	50.03	74.00	-23.97	Peak Detector

802.11n-HT40-Lowest Bandedge

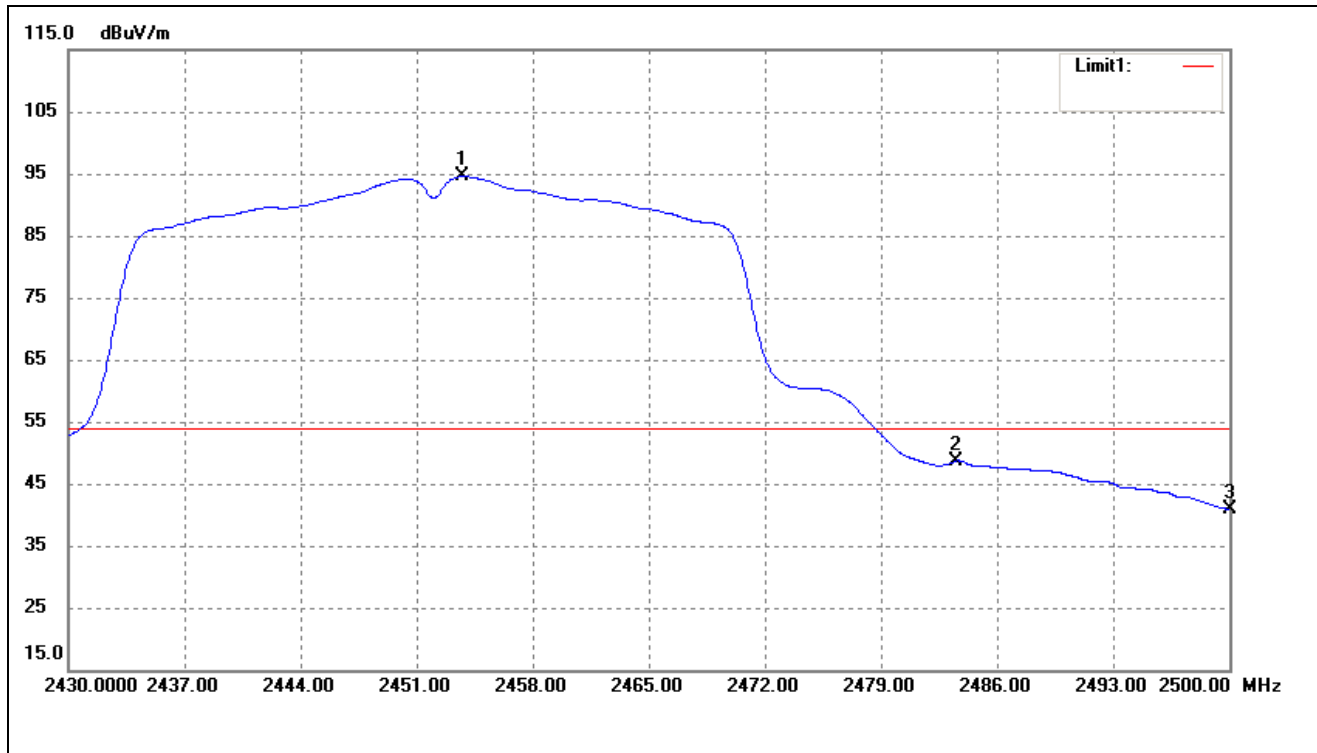
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	36.58	-4.98	31.60	54.00	-22.40	Average Detector
	2310.000	47.31	-4.98	42.33	74.00	-31.67	Peak Detector
2	2390.000	47.06	-4.26	42.80	54.00	-11.20	Average Detector
	2390.000	65.53	-4.26	61.27	74.00	-12.73	Peak Detector
3	2400.000	56.38	-4.18	52.20	Delta =36.69dBc		Average Detector
4	2416.120	92.94	-4.05	88.89			Average Detector

802.11n-HT40-Highest Bandedge

Vertical (Worst case)

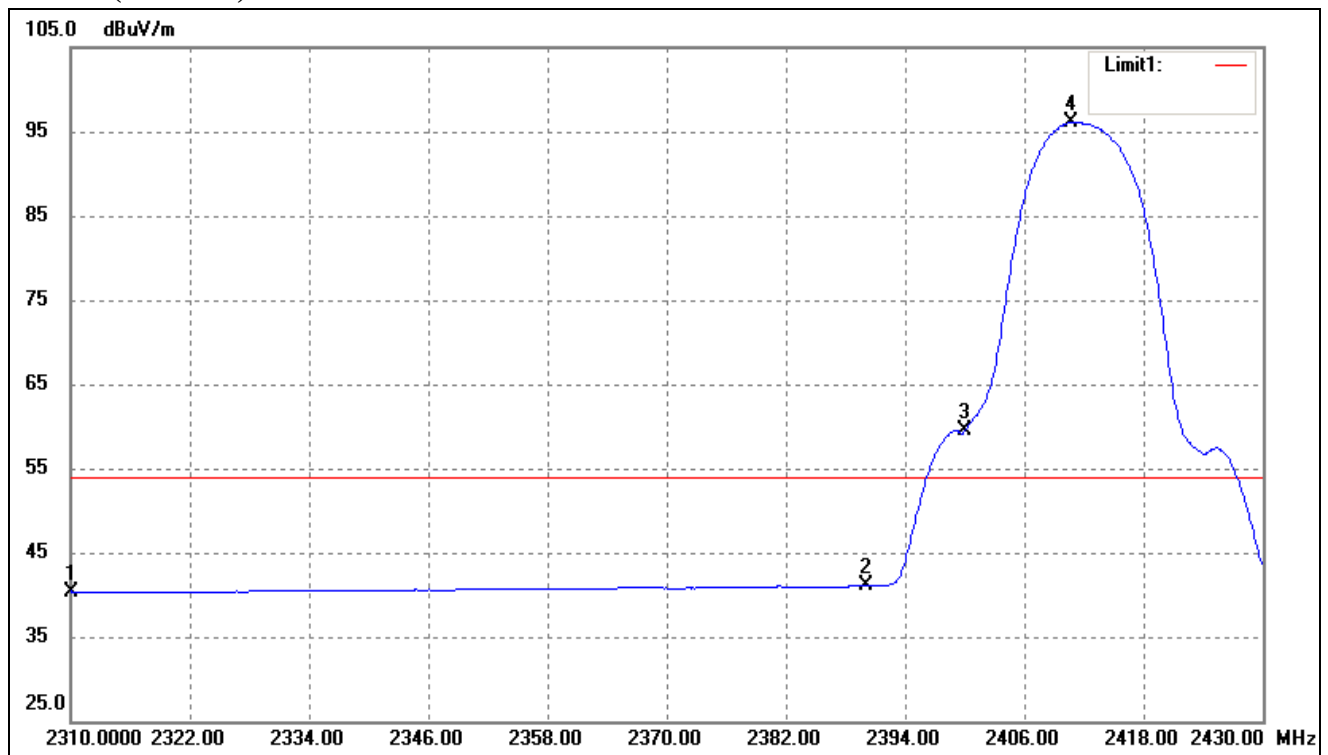


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2453.730	98.30	-3.75	94.55	/	/	Average Detector
	2455.130	108.57	-3.74	104.83	/	/	Peak Detector
2	2483.500	52.22	-3.53	48.69	54.00	-5.31	Average Detector
	2483.500	69.80	-3.53	66.27	74.00	-7.73	Peak Detector
3	2500.000	44.24	-3.39	40.85	54.00	-13.15	Average Detector
	2500.000	61.77	-3.39	58.38	74.00	-15.62	Peak Detector

Antenna B

802.11b-Lowest Bandedge

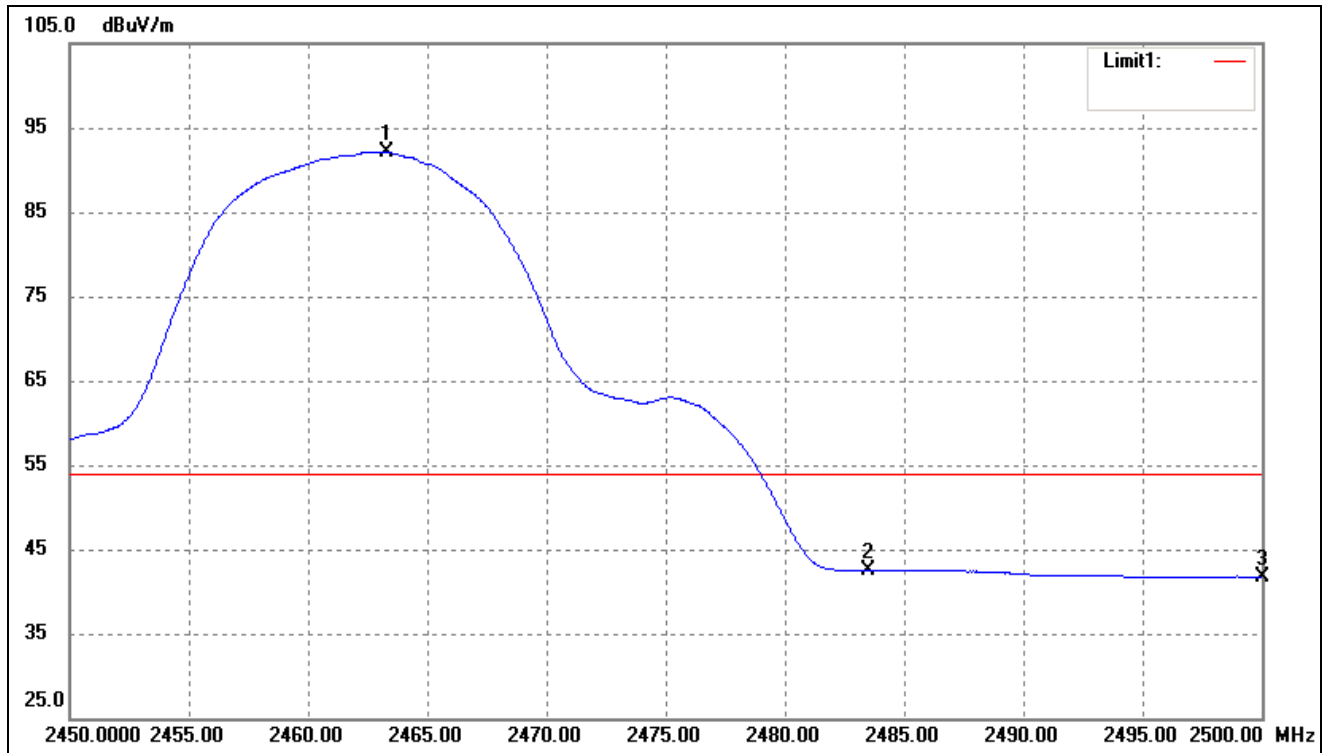
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	24.06	16.34	40.40	54.00	-13.60	Average Detector
	2310.000	34.52	16.34	50.86	74.00	-23.14	Peak Detector
2	2390.000	24.05	17.03	41.08	54.00	-12.92	Average Detector
	2390.000	35.17	17.03	52.20	74.00	-21.80	Peak Detector
3	2400.000	42.36	17.11	59.47	Delta=36.66dBc		Average Detector
4	2410.680	78.94	17.19	96.13			Average Detector

802.11b-Highest Bandedge

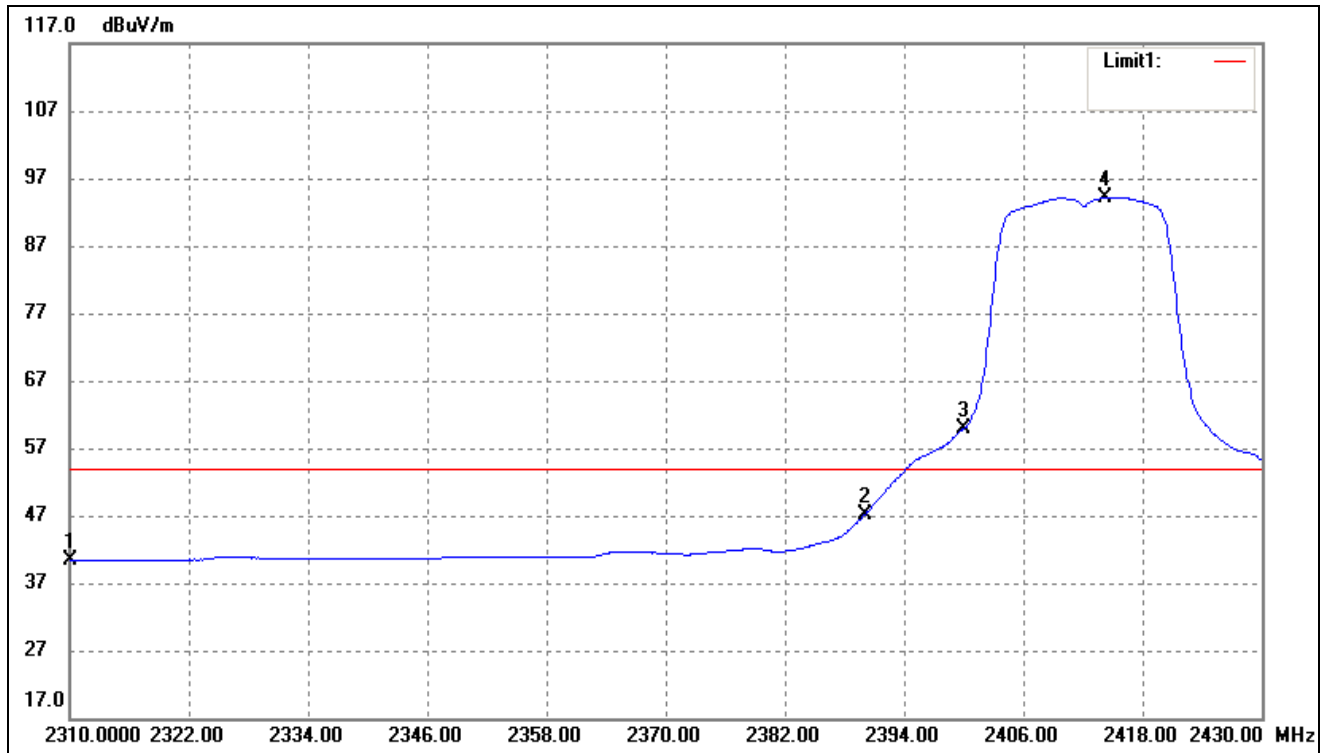
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2463.300	74.55	17.58	92.13	/	/	Average Detector
	2463.300	82.87	17.58	100.45			Peak Detector
2	2483.500	24.79	17.73	42.52	54.00	-11.48	Average Detector
	2483.500	36.10	17.73	53.83	74.00	-20.17	Peak Detector
3	2500.000	23.86	17.86	41.72	54.00	-12.28	Average Detector
	2500.000	34.29	17.86	52.15	74.00	-21.85	Peak Detector

802.11g-Lowest Bandedge

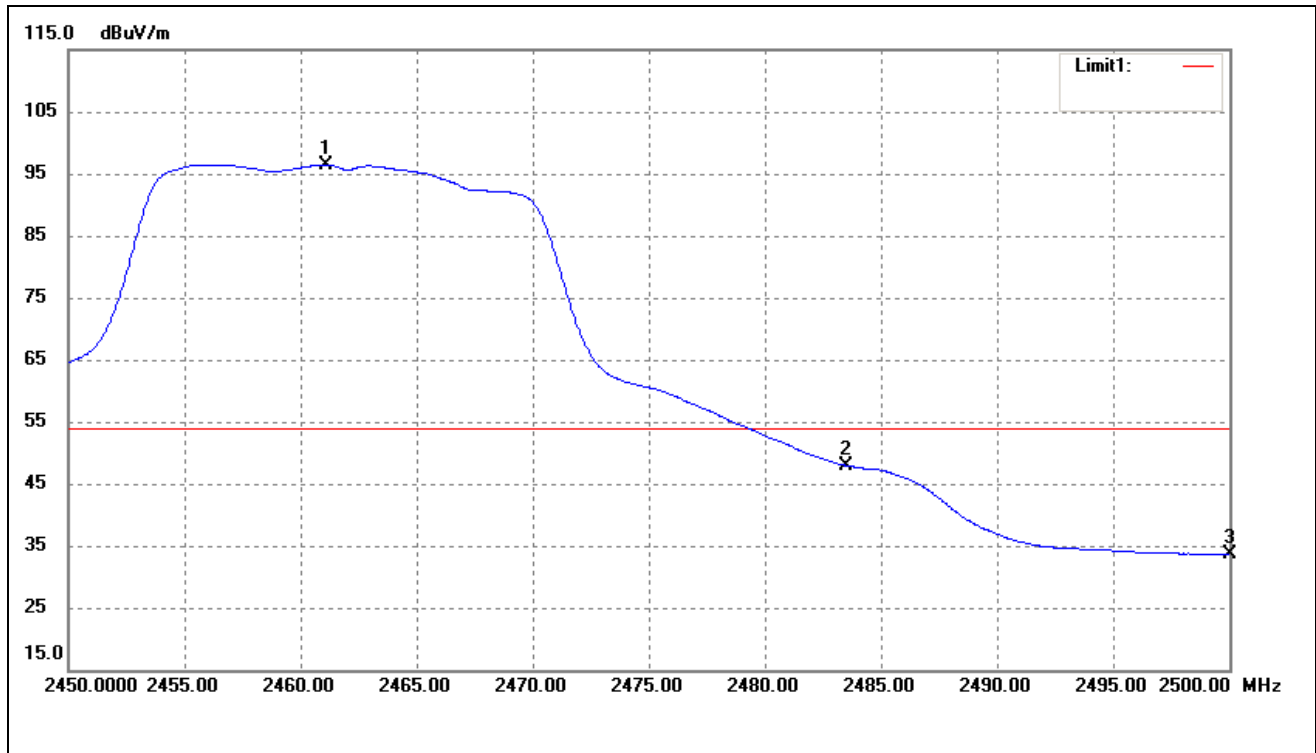
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	24.09	16.34	40.43	54.00	-13.57	Average Detector
	2310.000	35.88	16.34	52.22	74.00	-21.78	Peak Detector
2	2390.000	30.16	17.03	47.19	54.00	-6.81	Average Detector
	2390.000	48.68	17.03	65.71	74.00	-8.29	Peak Detector
3	2400.000	42.81	17.11	59.92	Delta=34.32dBc		Average Detector
4	2414.160	77.02	17.22	94.24			Average Detector

802.11g-Highest Bandedge

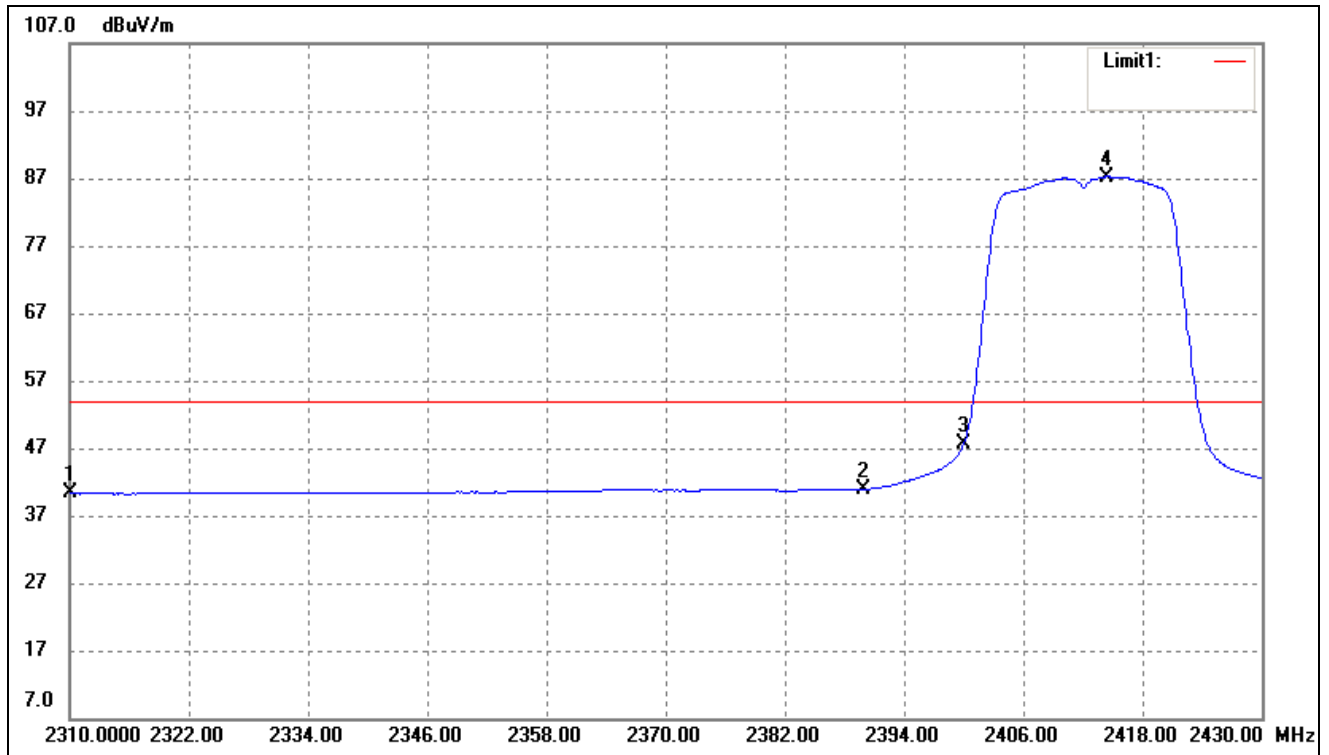
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.100	100.18	-3.70	96.48	/	/	Average Detector
	2461.400	111.01	-3.69	107.32	/	/	Peak Detector
2	2483.500	51.47	-3.53	47.94	54.00	-6.06	Average Detector
	2483.500	72.17	-3.53	68.64	74.00	-5.36	Peak Detector
3	2500.000	37.04	-3.39	33.65	54.00	-20.35	Average Detector
	2500.000	54.02	-3.39	50.63	74.00	-23.37	Peak Detector

802.11n-HT20-Lowest Bandedge

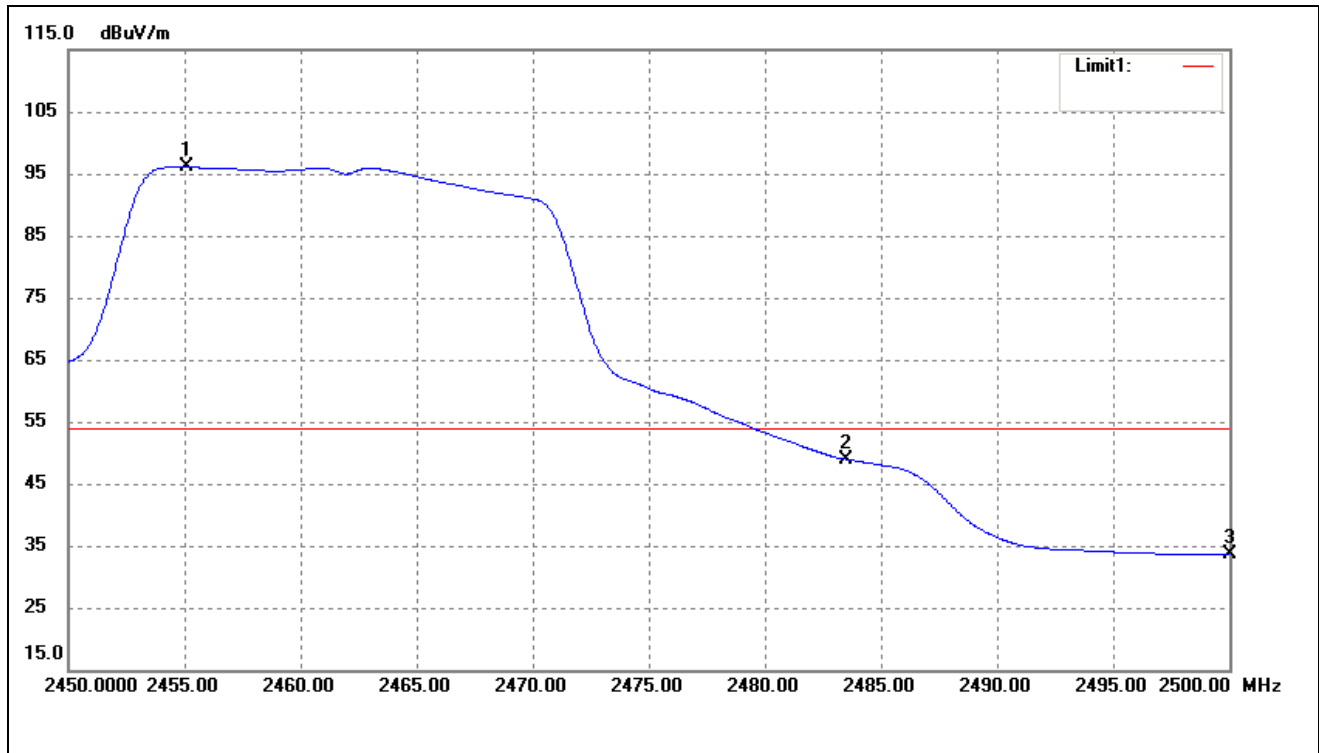
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	23.95	16.34	40.29	54.00	-13.71	Average Detector
	2310.000	35.16	16.34	51.50	74.00	-22.50	Peak Detector
2	2390.000	23.91	17.03	40.94	54.00	-13.06	Average Detector
	2390.000	34.92	17.03	51.95	74.00	-22.05	Peak Detector
3	2400.000	30.42	17.11	47.53	Delta=39.72dBc		Average Detector
4	2414.400	70.03	17.22	87.25			Average Detector

802.11n-HT20-Highest Bandedge

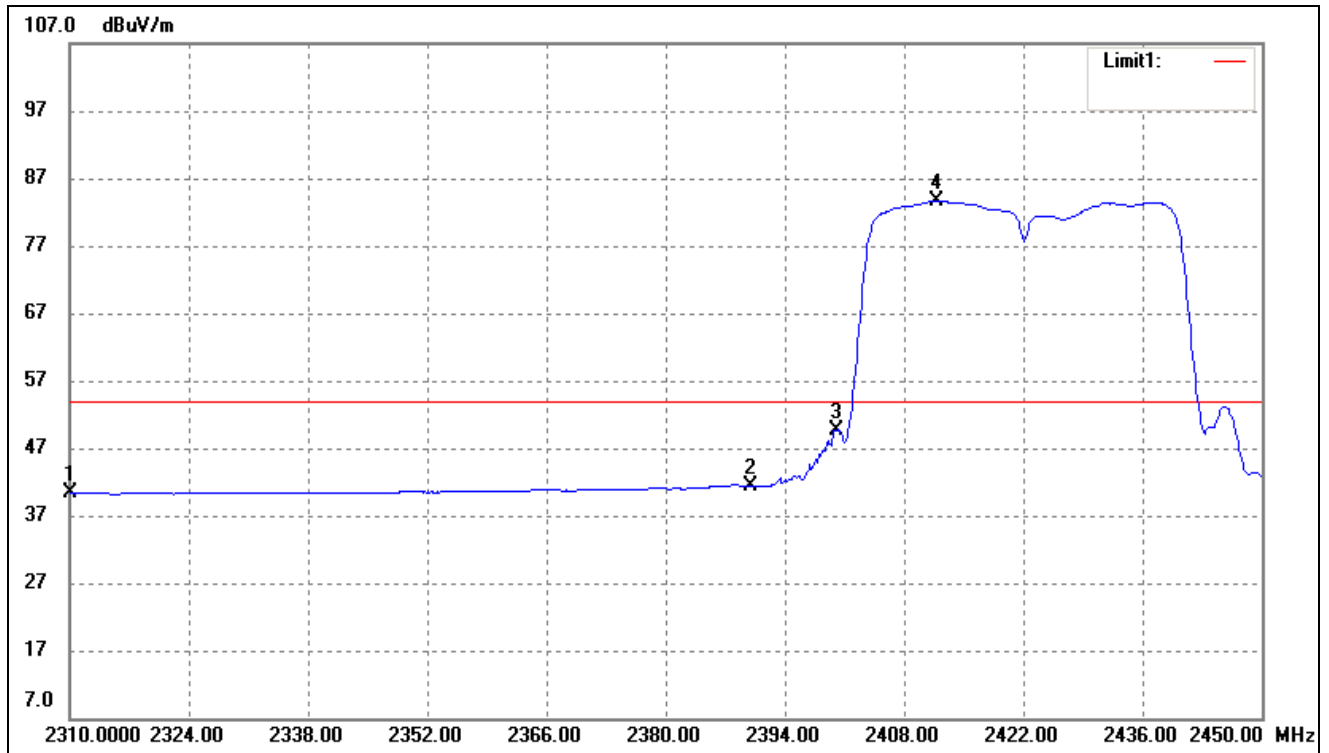
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2455.100	99.79	-3.74	96.05	/	/	Average Detector
	2461.400	111.18	-3.69	107.49	/	/	Peak Detector
2	2483.500	52.51	-3.53	48.98	54.00	-5.02	Average Detector
	2483.500	73.62	-3.53	70.09	74.00	-3.91	Peak Detector
3	2500.000	36.93	-3.39	33.54	54.00	-20.46	Average Detector
	2500.000	53.42	-3.39	50.03	74.00	-23.97	Peak Detector

802.11n-HT40-Lowest Bandedge

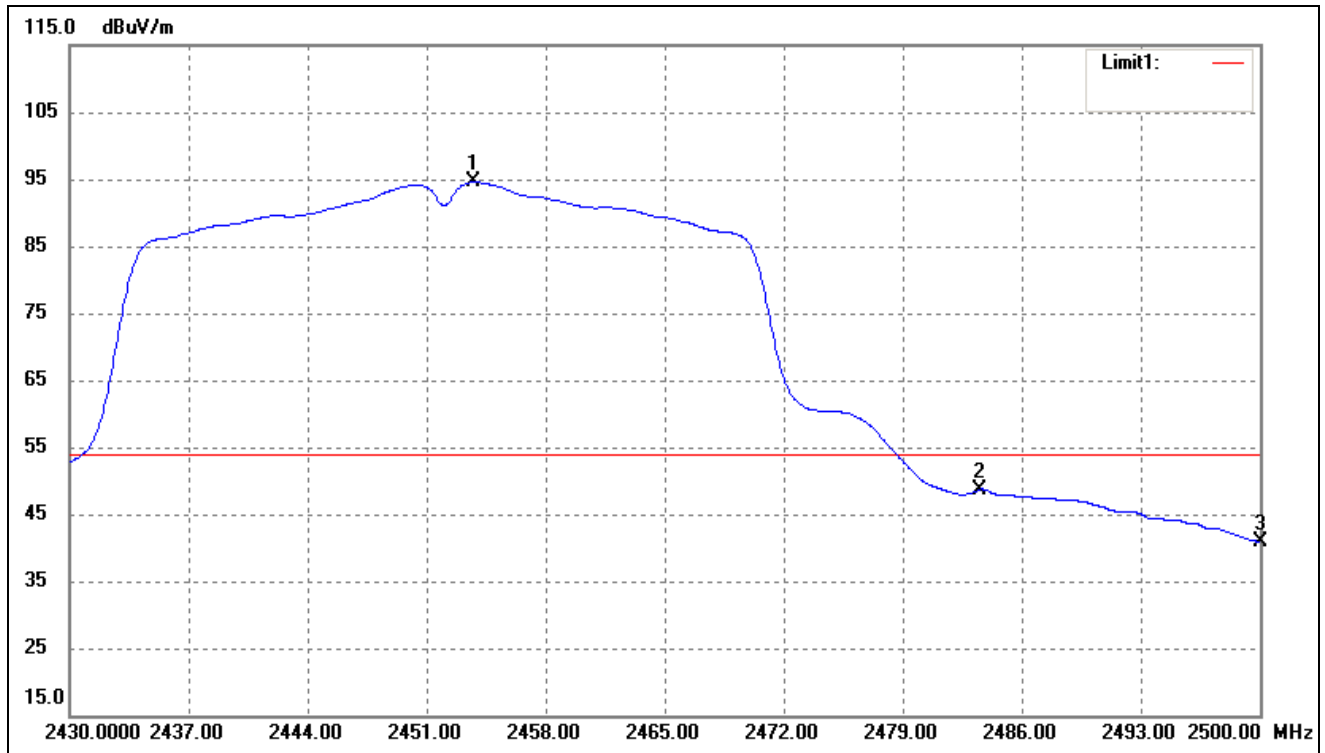
Vertical (Worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	23.96	16.34	40.30	54.00	-13.70	Average Detector
	2310.000	35.63	16.34	51.97	74.00	-22.03	Peak Detector
2	2390.000	24.30	17.03	41.33	54.00	-12.67	Average Detector
	2390.000	35.51	17.03	52.54	74.00	-21.46	Peak Detector
3	2400.000	32.62	17.11	49.73	Delta=34.02dBc		Average Detector
4	2413.780	66.55	17.20	83.75			Average Detector

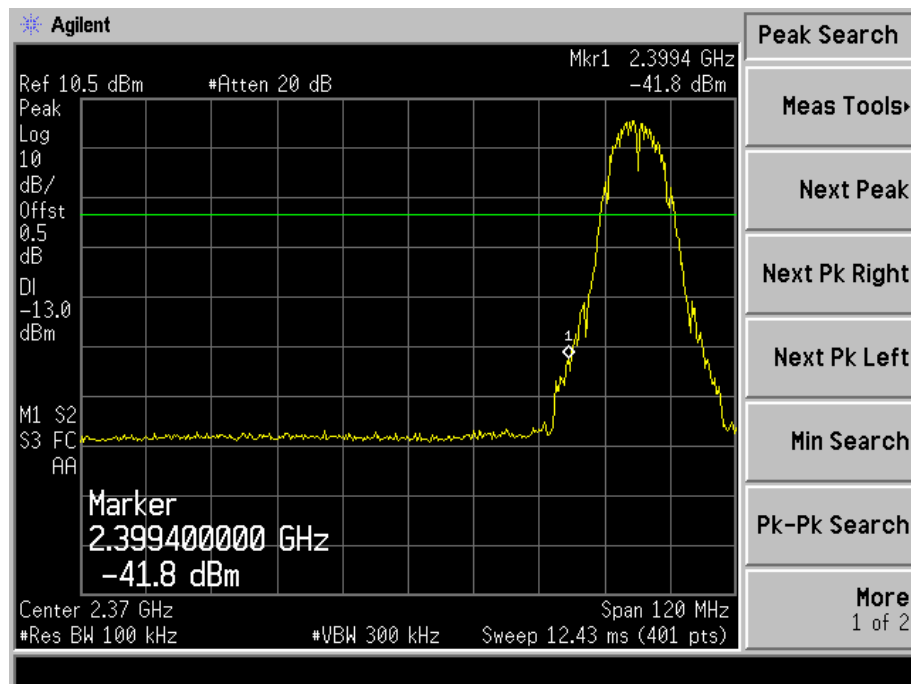
802.11n-HT40-Highest Bandedge

Vertical (Worst case)

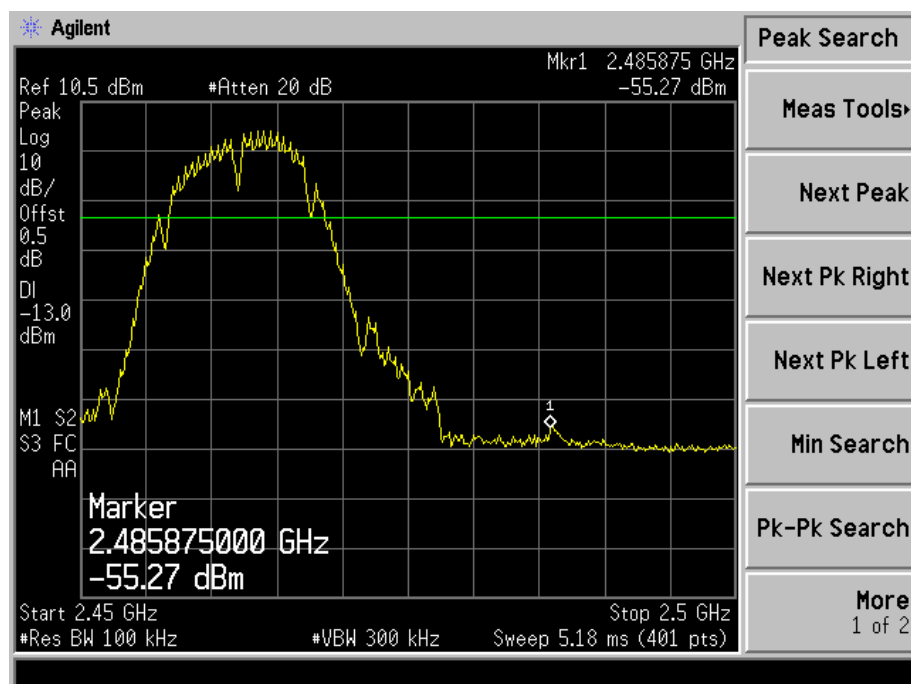


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2453.730	98.30	-3.75	94.55	/	/	Average Detector
	2455.130	108.57	-3.74	104.83	/	/	Peak Detector
2	2483.500	52.22	-3.53	48.69	54.00	-5.31	Average Detector
	2483.500	69.80	-3.53	66.27	74.00	-7.73	Peak Detector
3	2500.000	44.24	-3.39	40.85	54.00	-13.15	Average Detector
	2500.000	61.77	-3.39	58.38	74.00	-15.62	Peak Detector

Antenna A
 Spurious (Conducted)
 802.11b-Lowest
 Lowest



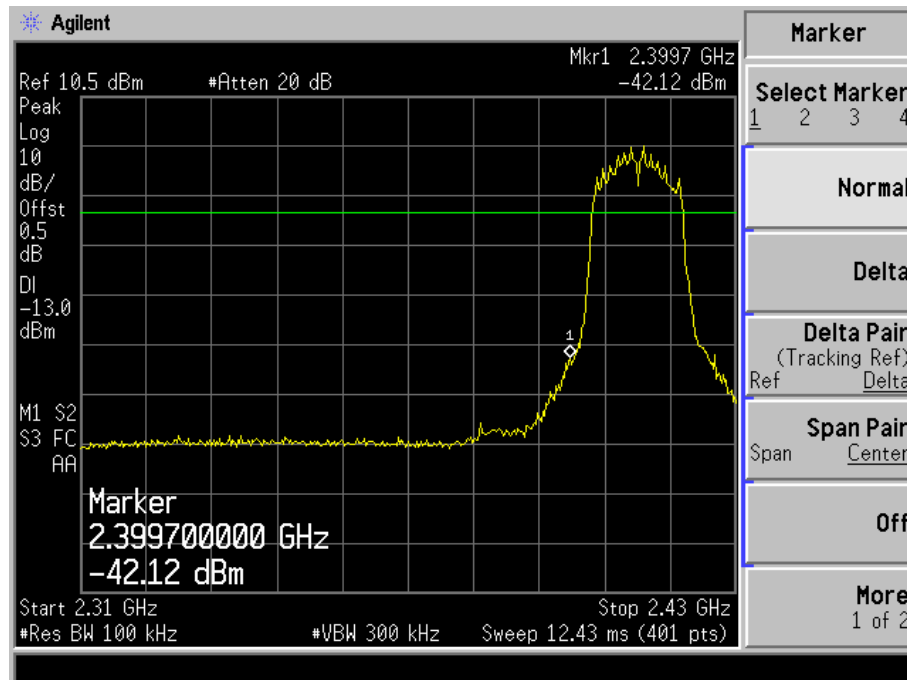
Highest



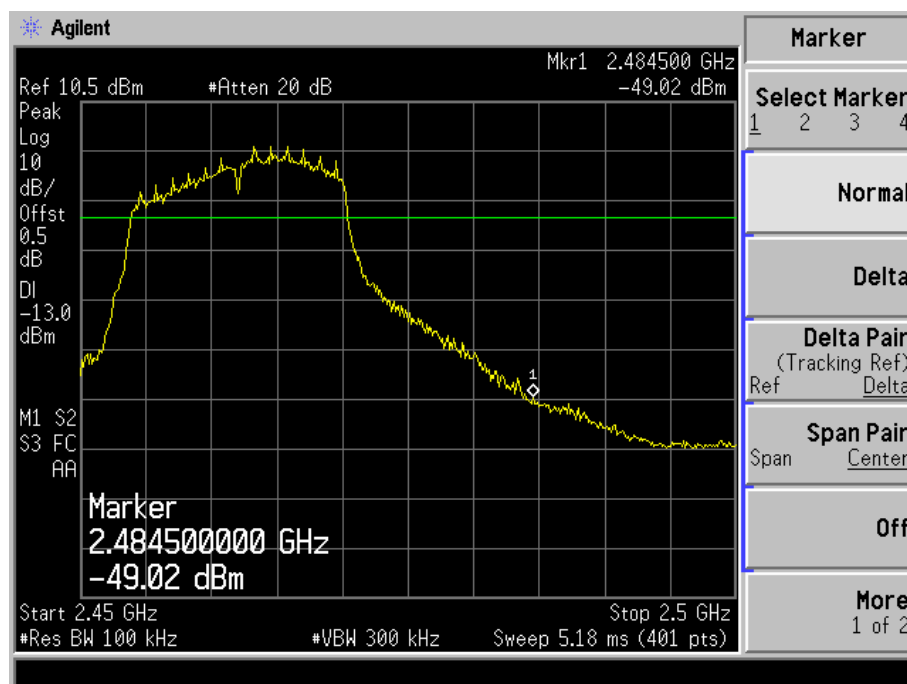
Spurious (Conducted)

802.11g-Lowest

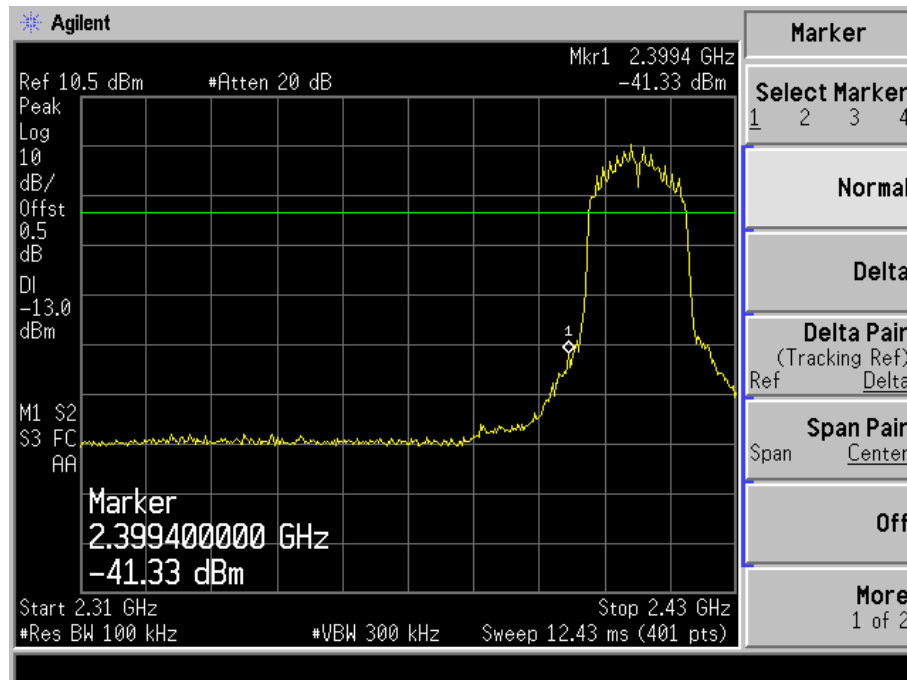
Lowest



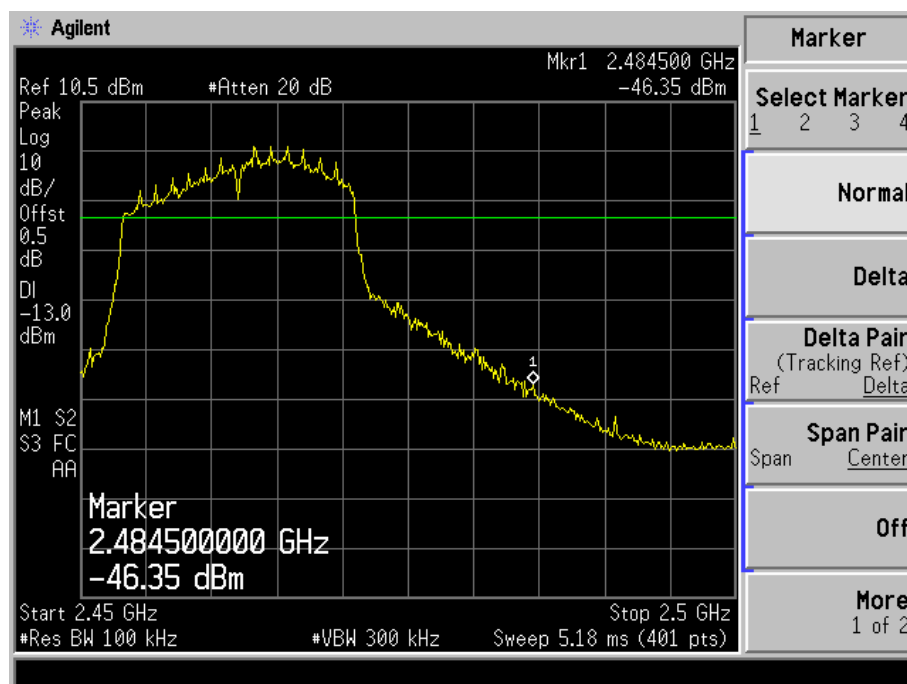
Highest



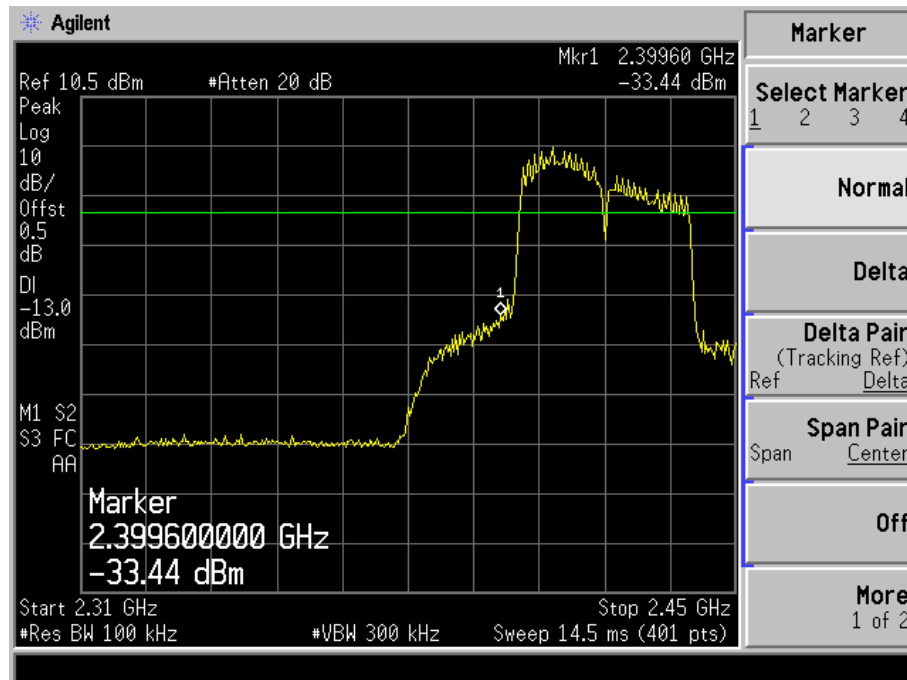
Spurious (Conducted)
802.11n-HT20-Lowest
Lowest



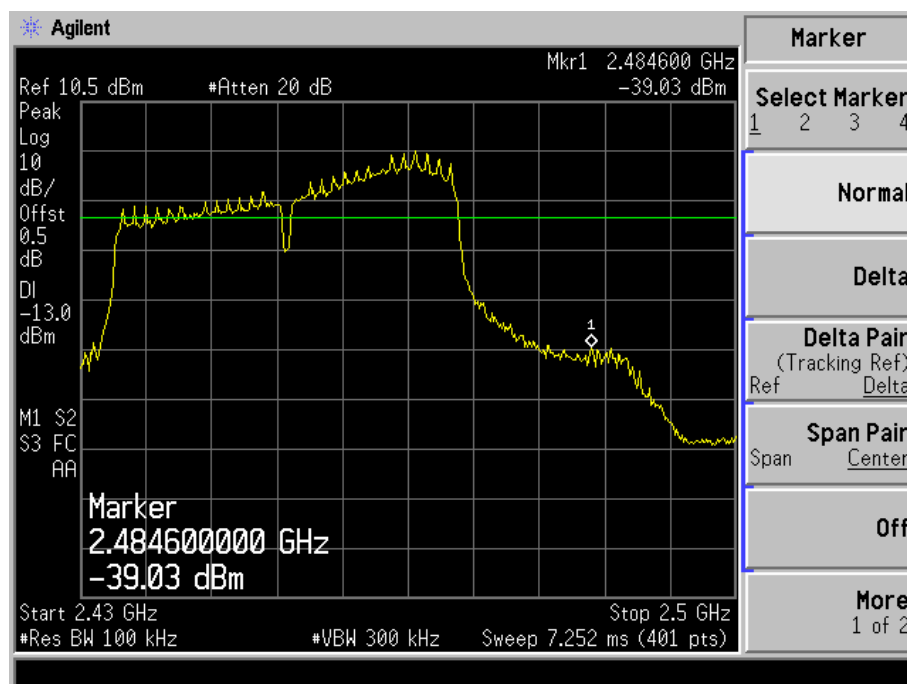
Highest



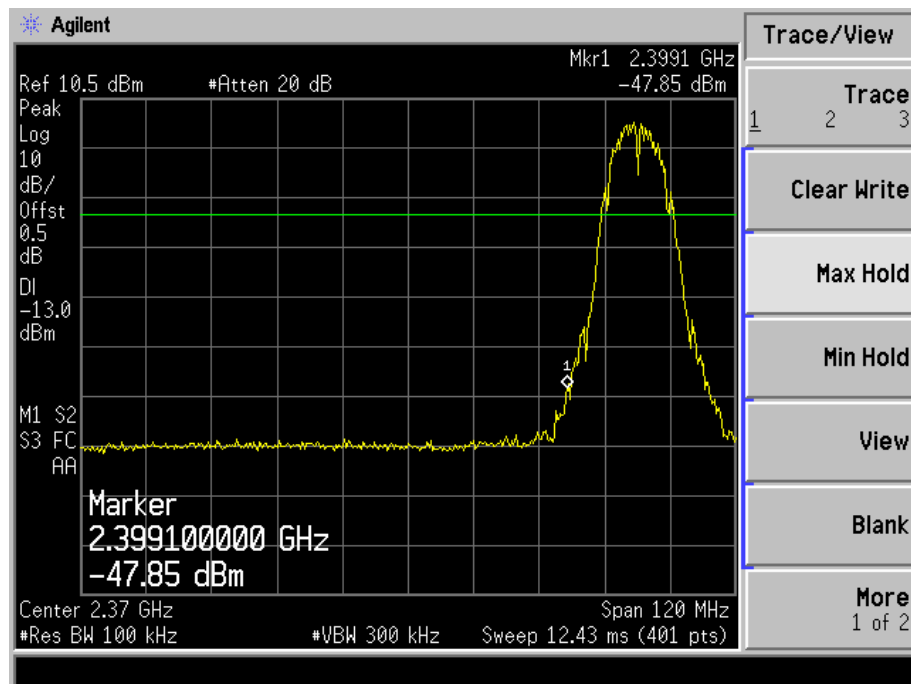
Spurious (Conducted)
802.11n-HT40-Lowest
Lowest



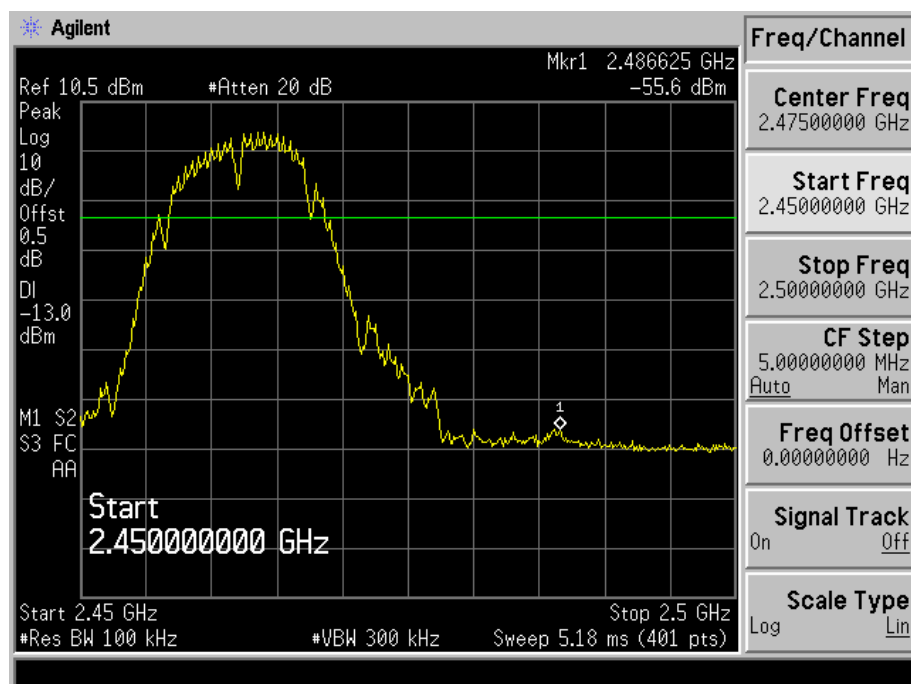
Highest



Antenna B
 Spurious (Conducted)
 802.11b-Lowest
 Lowest



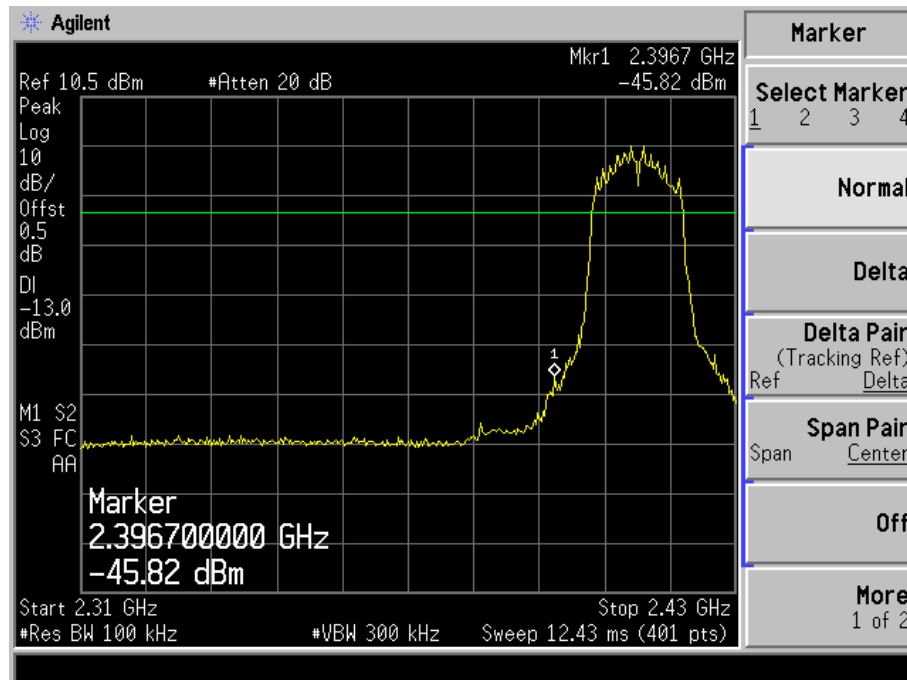
Highest



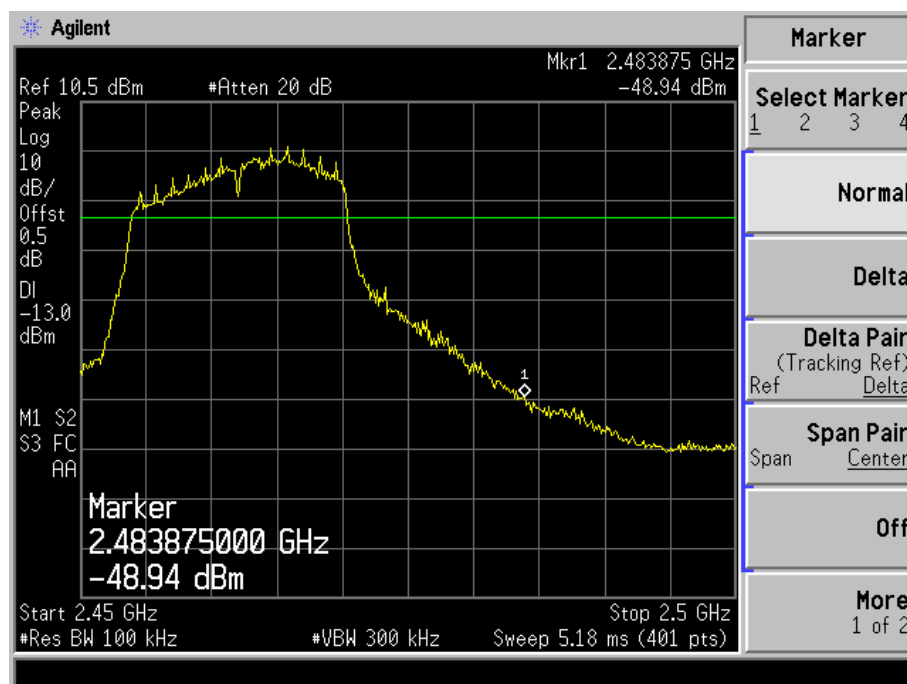
Spurious (Conducted)

802.11g-Lowest

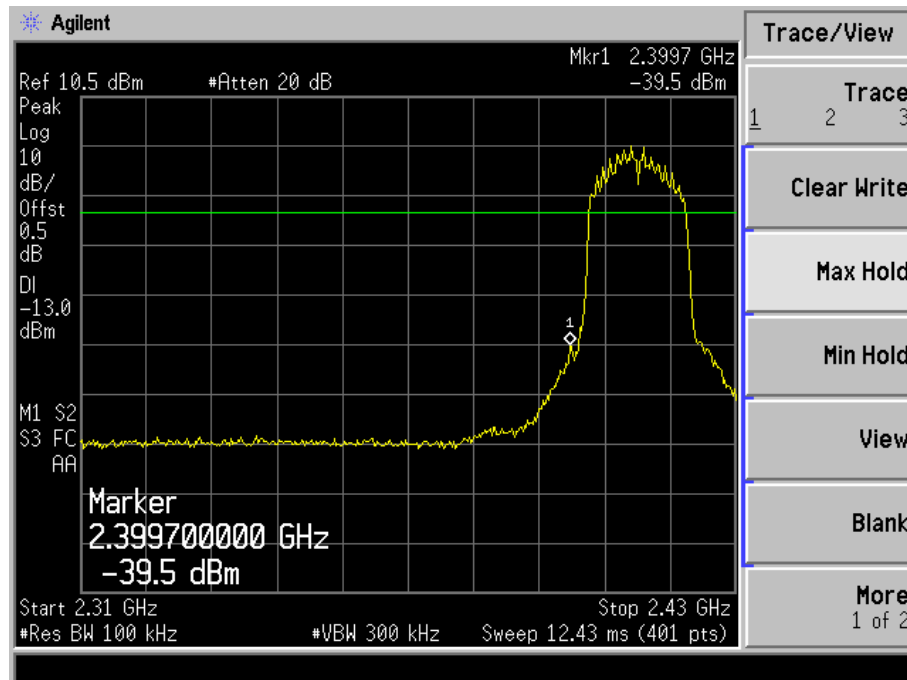
Lowest



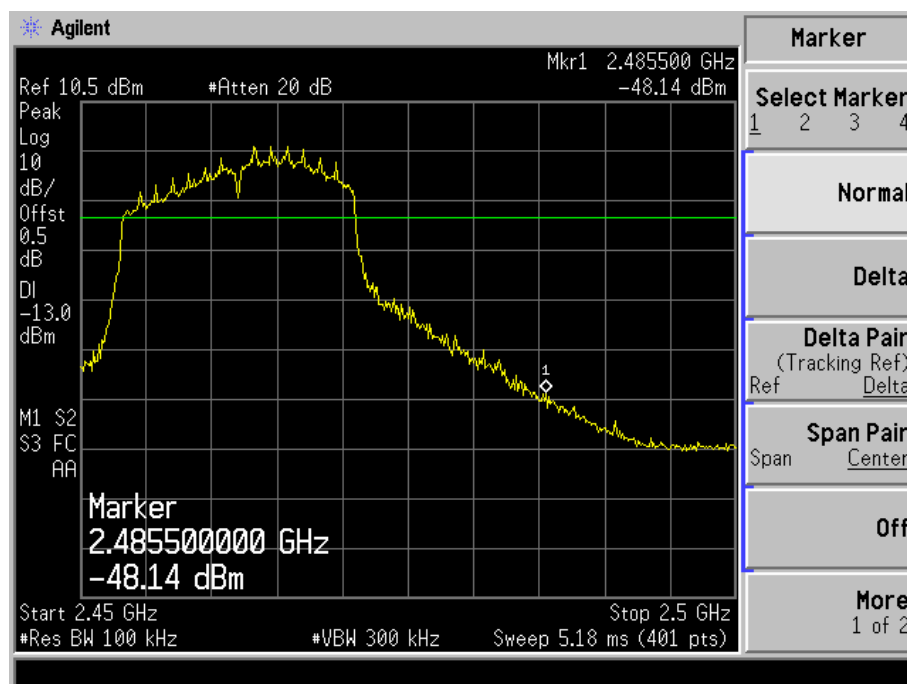
Highest



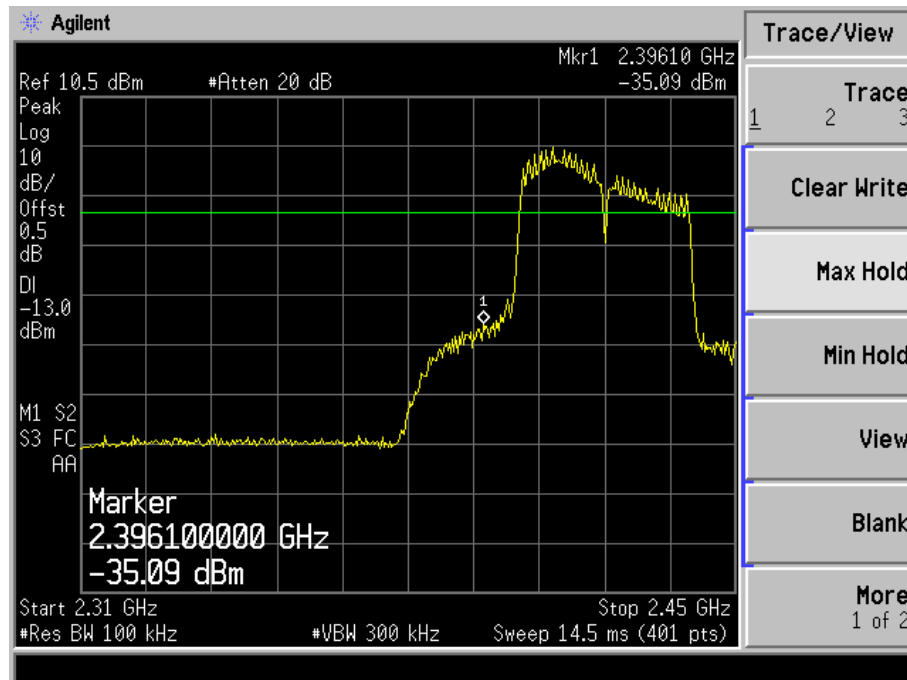
Spurious (Conducted)
802.11n-HT20-Lowest
Lowest



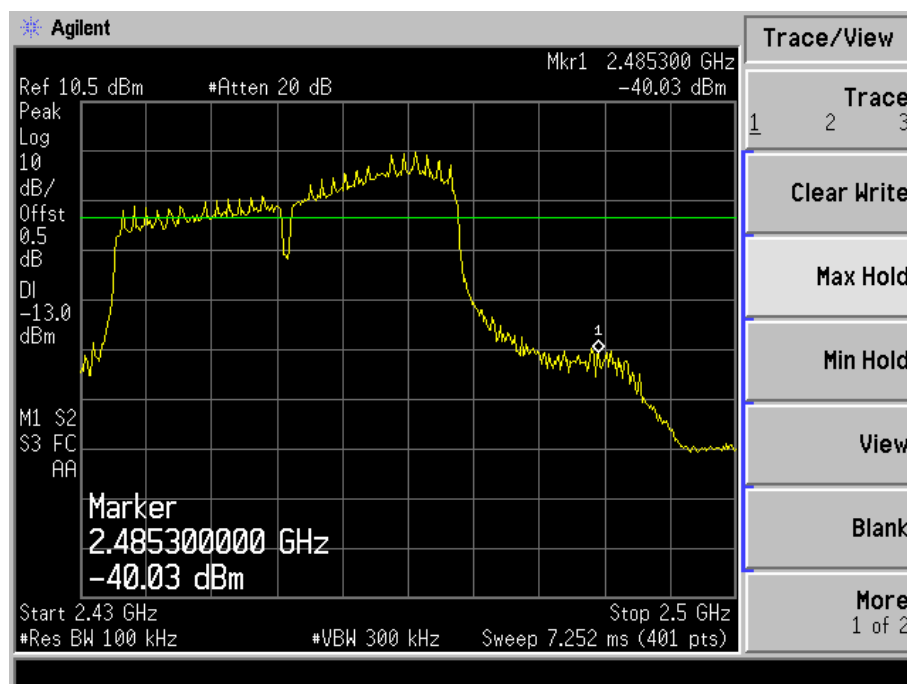
Highest



Spurious (Conducted)
802.11n-HT40-Lowest
Lowest



Highest



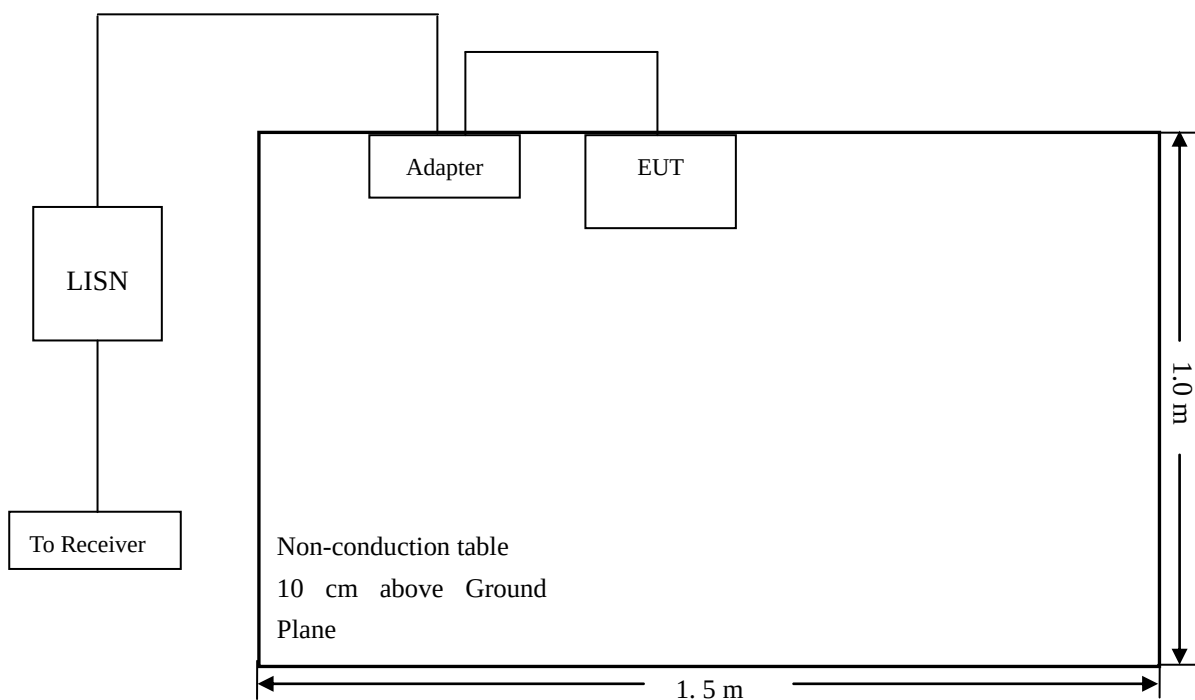
10. Conducted Emissions

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:

-0.87 dB at 3.5339 MHz in the **Neutral** mode, **Antenna A** mode, **QP** detector, **0.15-30MHz**

10.6 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data (Antenna A)

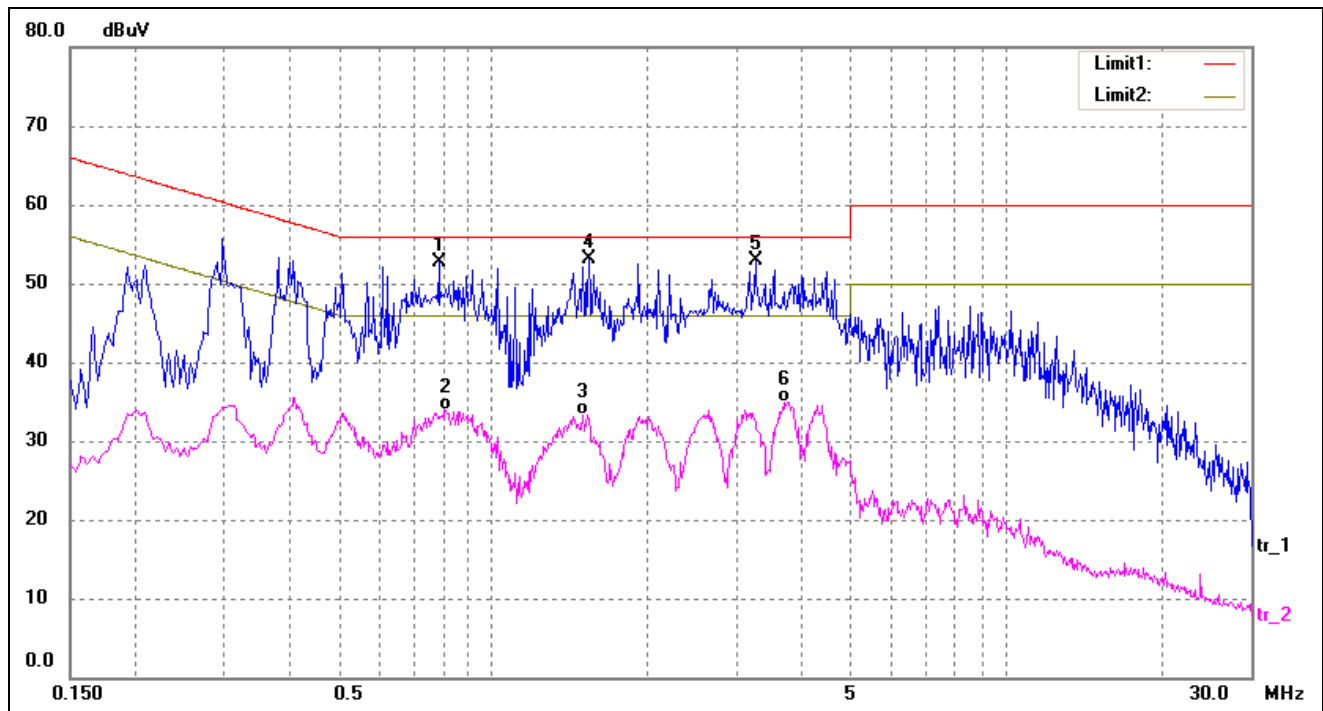
EUT: Mobile Medical Cart

Tested Model: S4000

Operating Condition: Transmitting(Wi-Fi)

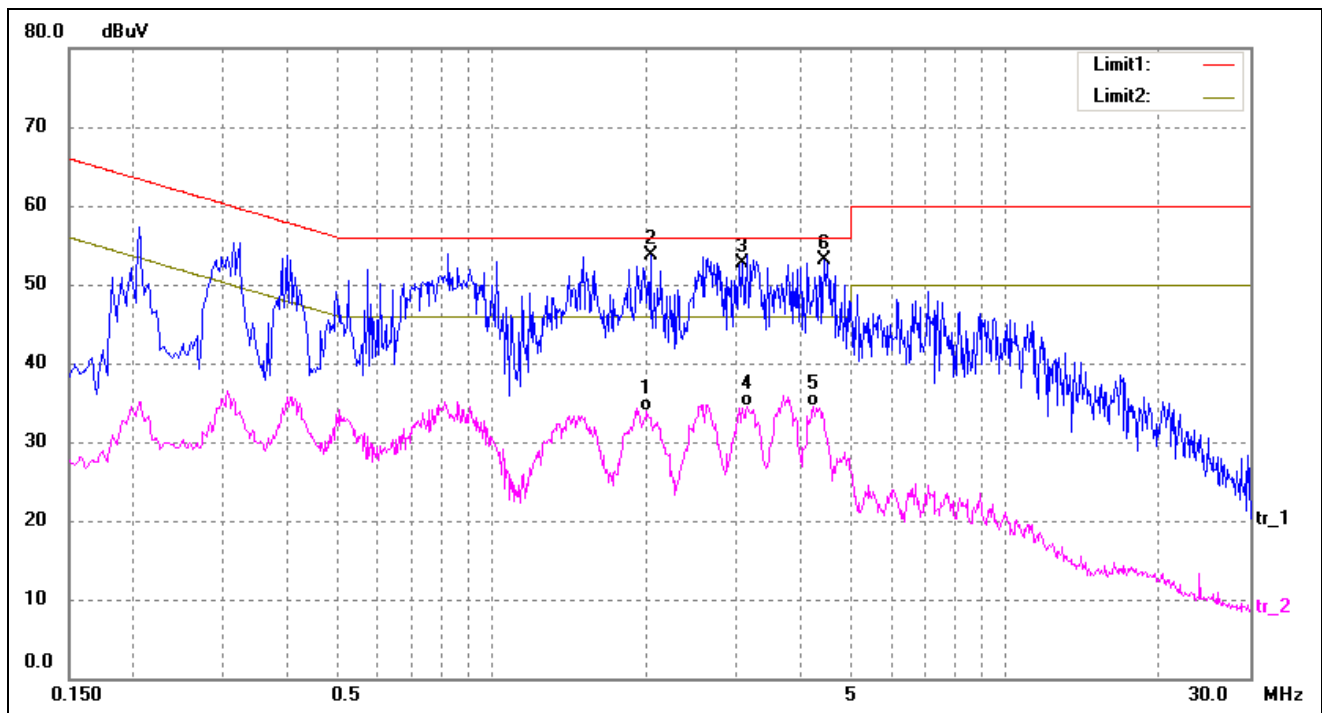
Comment: DC 24V

Test Specification: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.7860	43.02	9.63	52.65	56.00	-3.35	QP
2	0.8100	24.32	9.63	33.95	46.00	-12.05	AVG
3	1.4979	23.61	9.75	33.36	46.00	-12.64	AVG
4*	1.5380	43.38	9.76	53.14	56.00	-2.86	QP
5	3.2500	42.96	9.99	52.95	56.00	-3.05	QP
6	3.6939	24.89	10.06	34.95	46.00	-11.05	AVG

Test Specification: Live



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	2.0059	23.99	9.82	33.81	46.00	-12.19	AVG
2*	2.0379	43.87	9.83	53.70	56.00	-2.30	QP
3	3.0859	42.70	9.97	52.67	56.00	-3.33	QP
4	3.1459	24.49	9.98	34.47	46.00	-11.53	AVG
5	4.2378	24.28	10.13	34.41	46.00	-11.59	AVG
6	4.4378	43.02	10.16	53.18	56.00	-2.82	QP

Plot of Conducted Emissions Test Data (Antenna B)

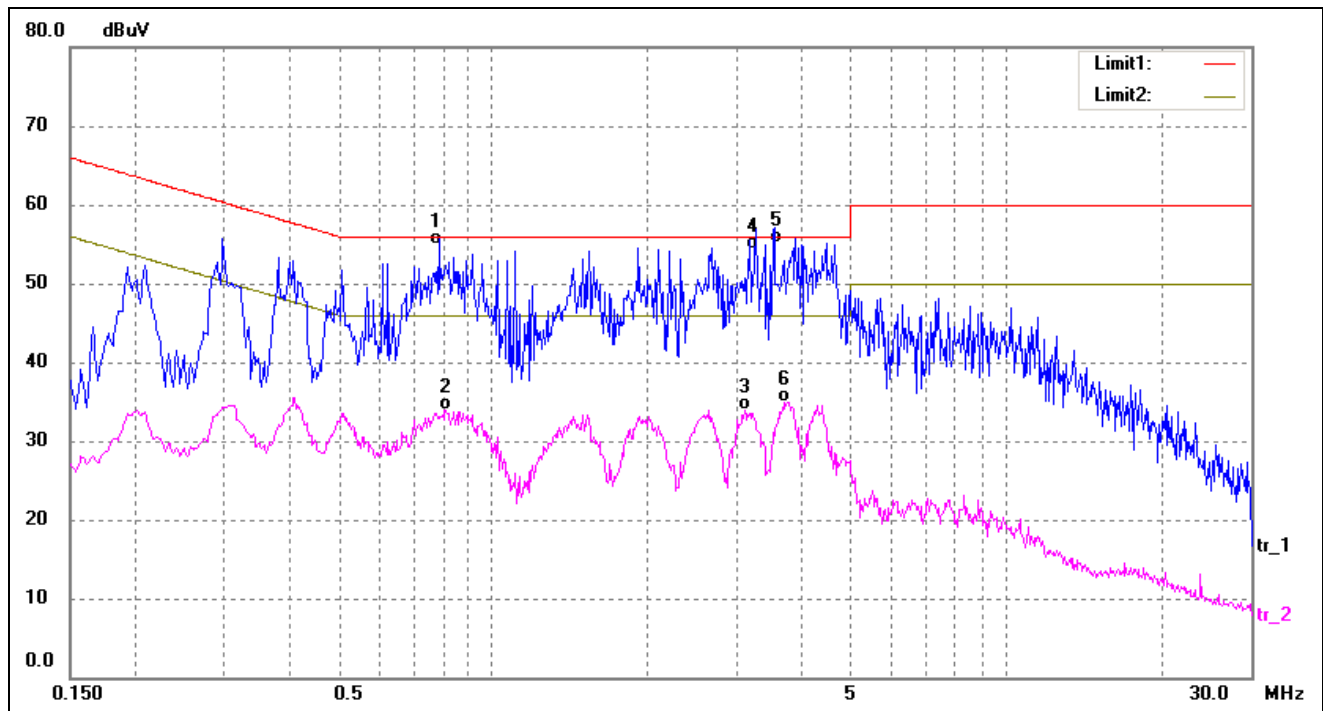
EUT: Mobile Medical Cart

Tested Model: S4000

Operating Condition: Transmitting(Wi-Fi)

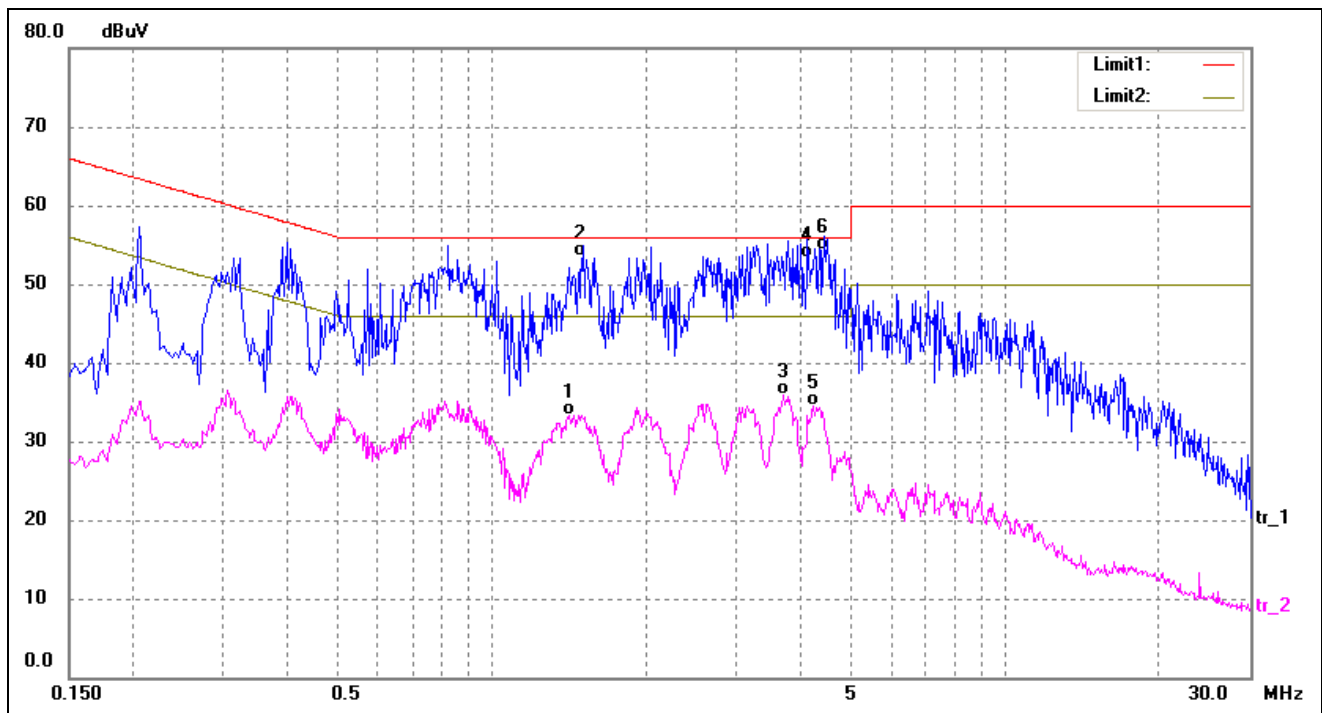
Comment: DC 24V

Test Specification: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.7860	45.20	9.63	54.83	56.00	-1.17	QP
2	0.8100	24.32	9.63	33.95	46.00	-12.05	AVG
3	3.1059	23.96	9.97	33.93	46.00	-12.07	AVG
4	3.2500	44.30	9.99	54.29	56.00	-1.71	QP
5*	3.5339	45.10	10.03	55.13	56.00	-0.87	QP
6	3.6939	24.89	10.06	34.95	46.00	-11.05	AVG

Test Specification: Live



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	1.4179	23.61	9.74	33.35	46.00	-12.65	AVG
2	1.5100	43.70	9.75	53.45	56.00	-2.55	QP
3	3.7099	25.83	10.06	35.89	46.00	-10.11	AVG
4	4.1139	43.10	10.12	53.22	56.00	-2.78	QP
5	4.2378	24.28	10.13	34.41	46.00	-11.59	AVG
6*	4.4378	44.20	10.16	54.36	56.00	-1.64	QP

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