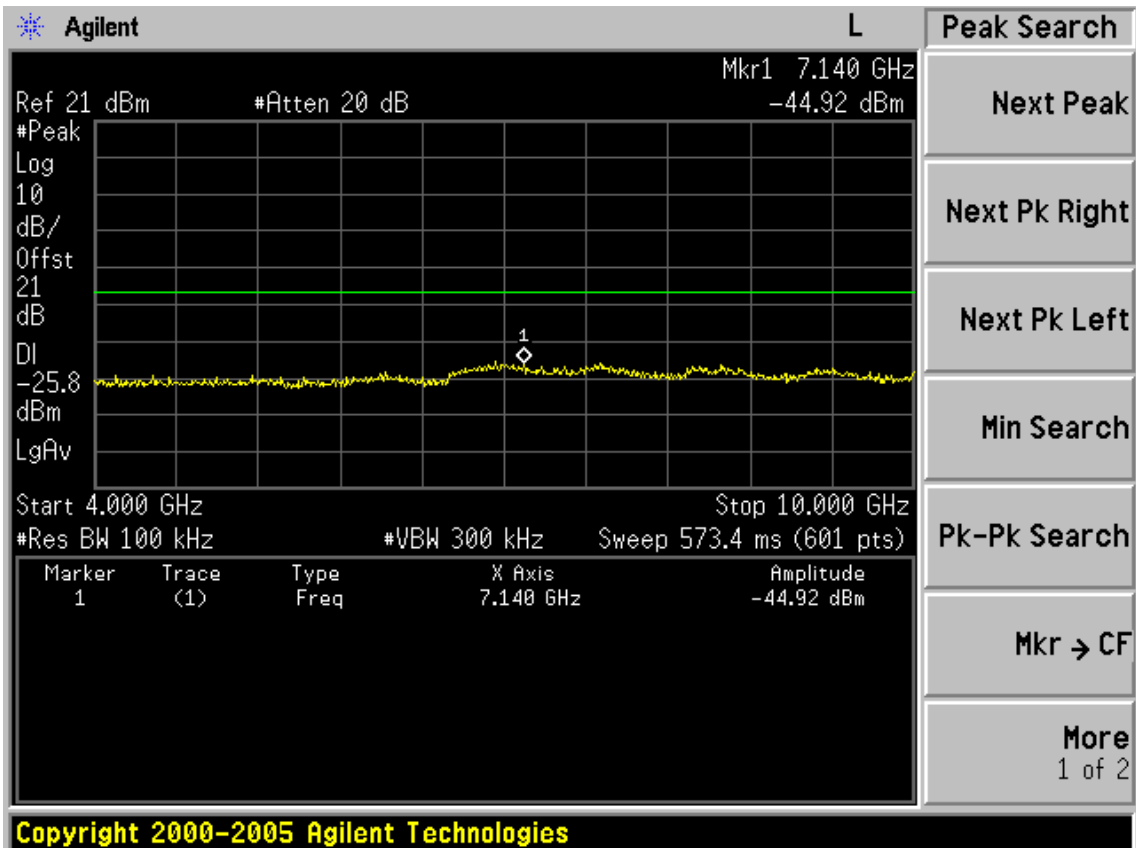
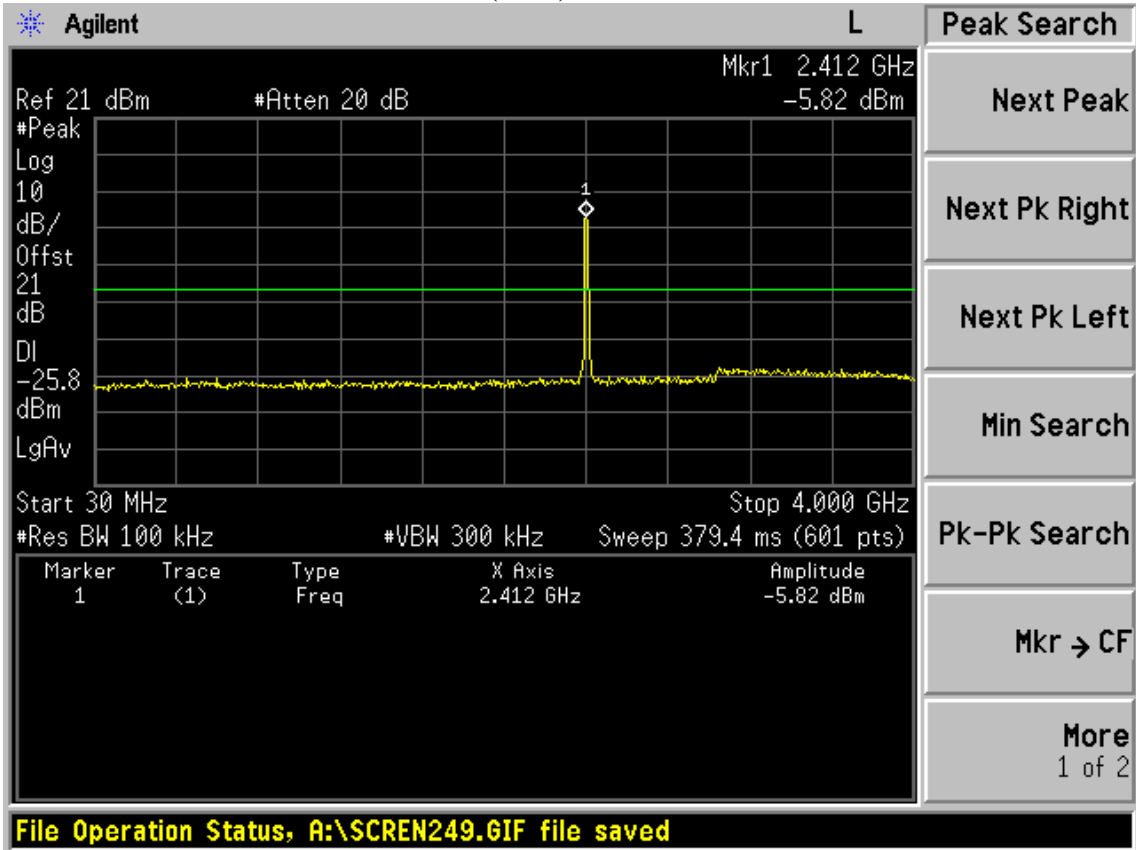
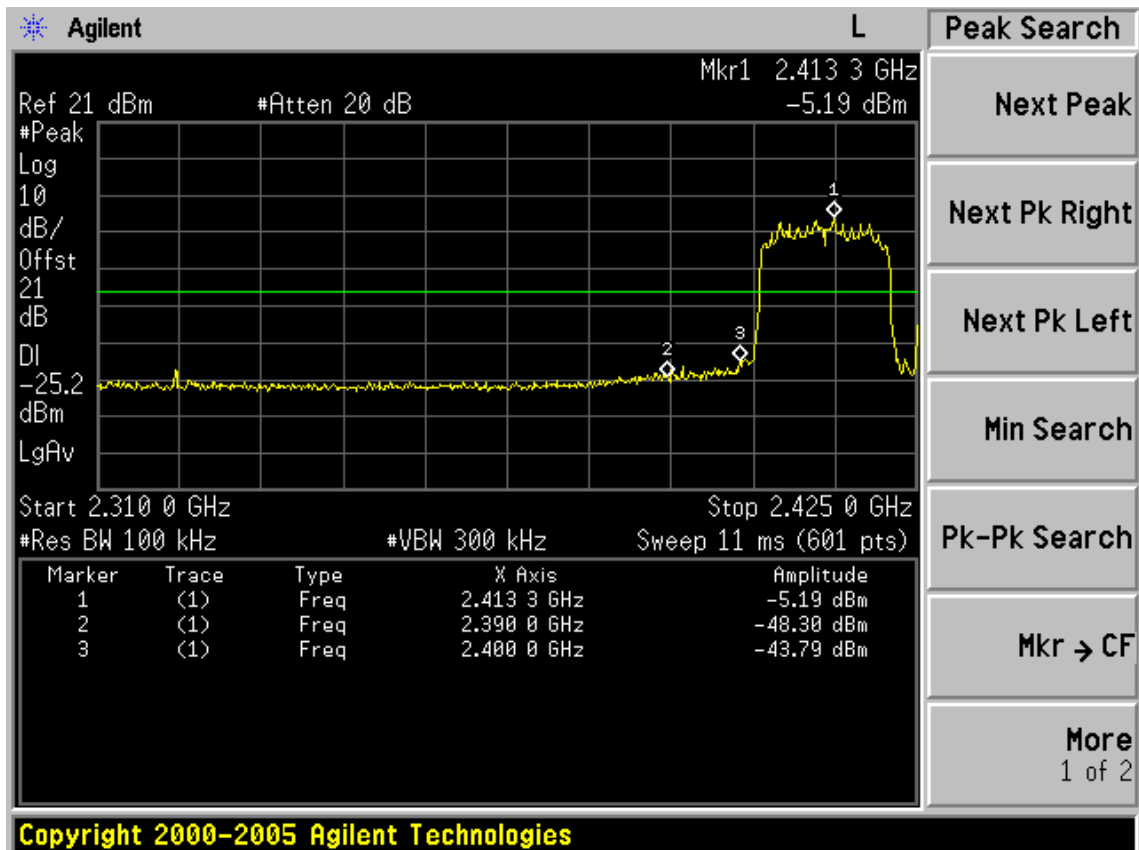
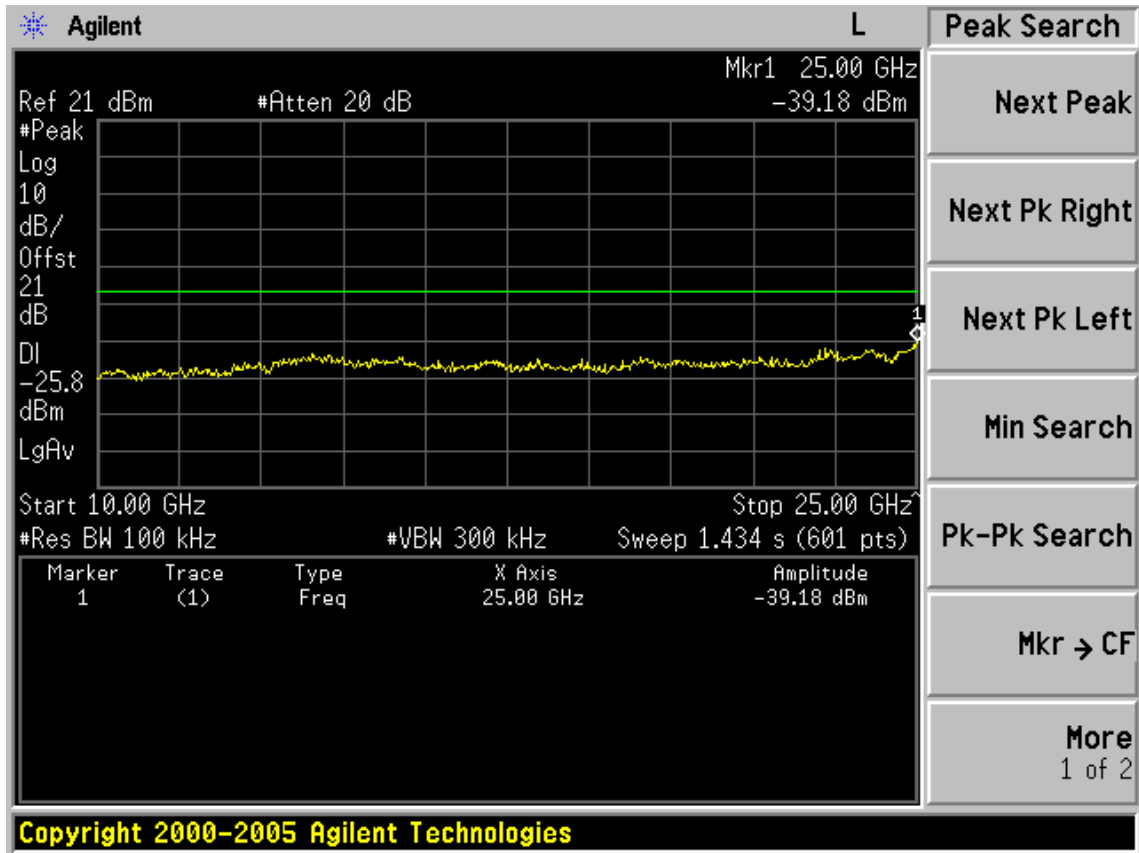
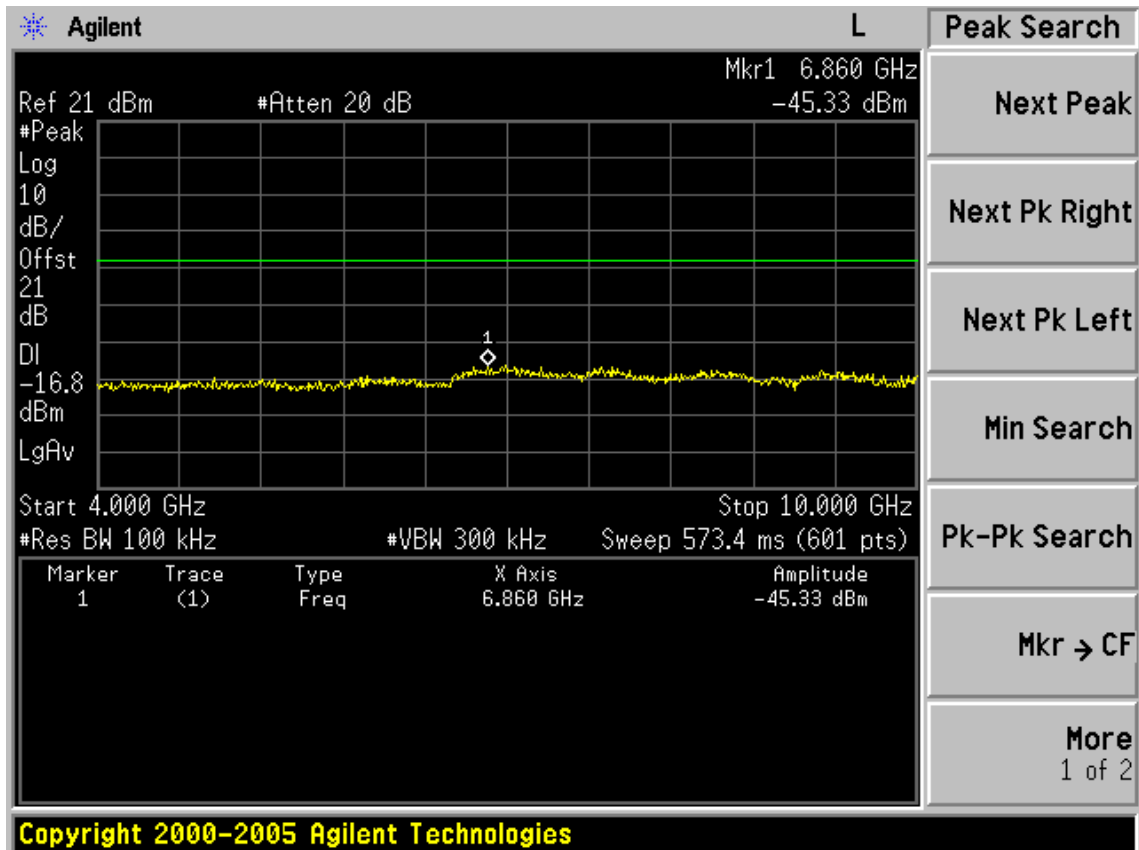
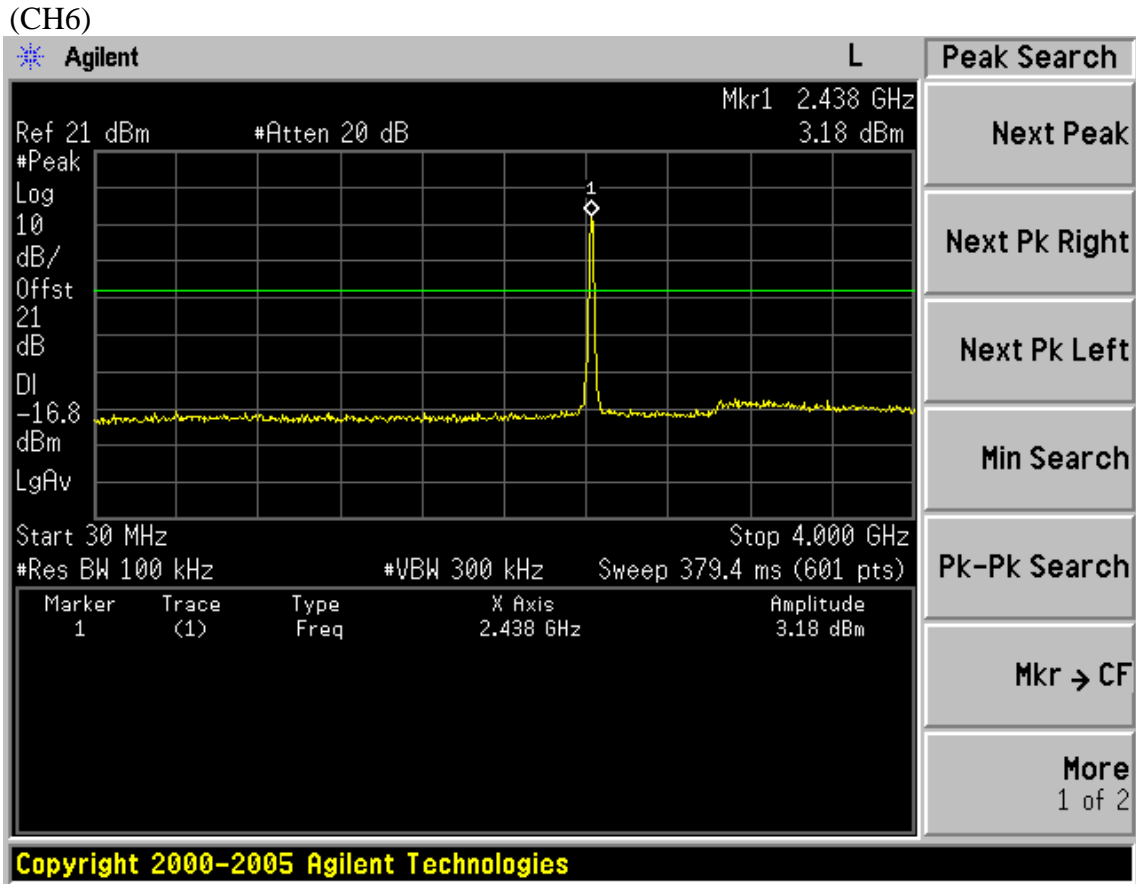
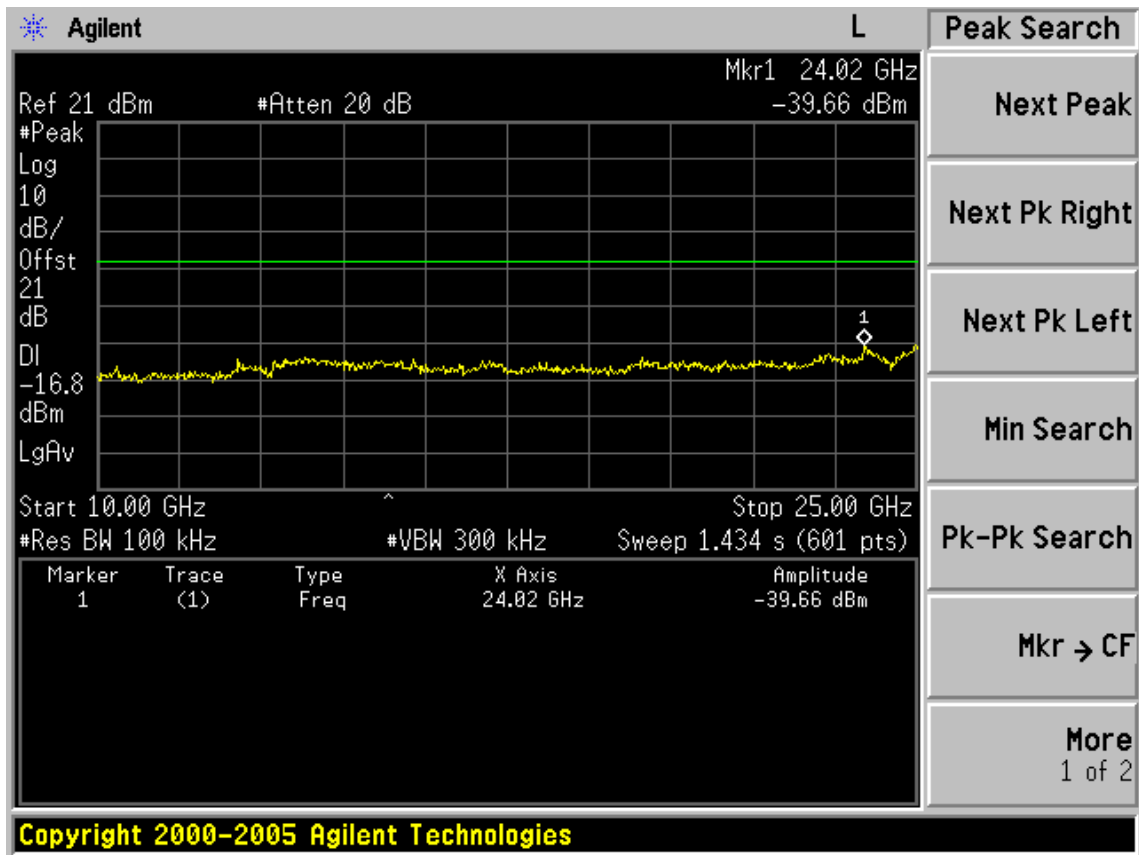


Test Mode: IEEE 802.11n HT20 TX (CH1)

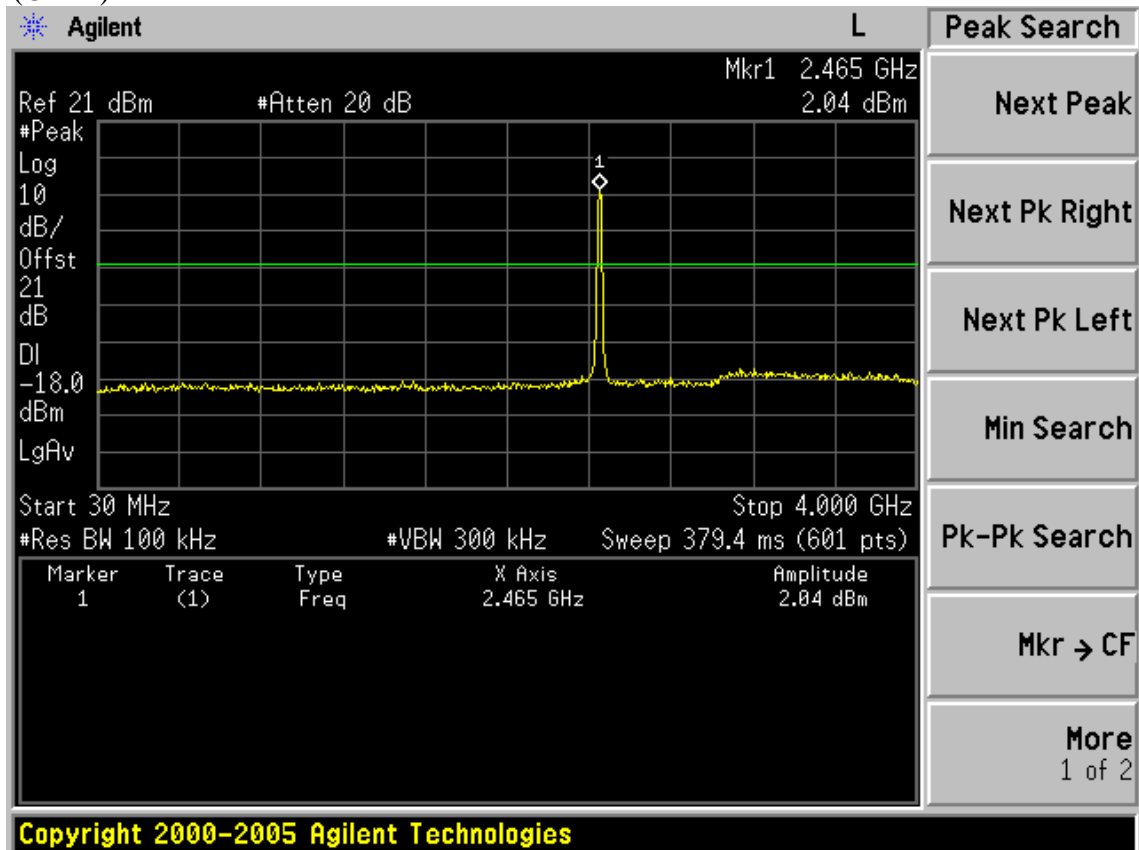


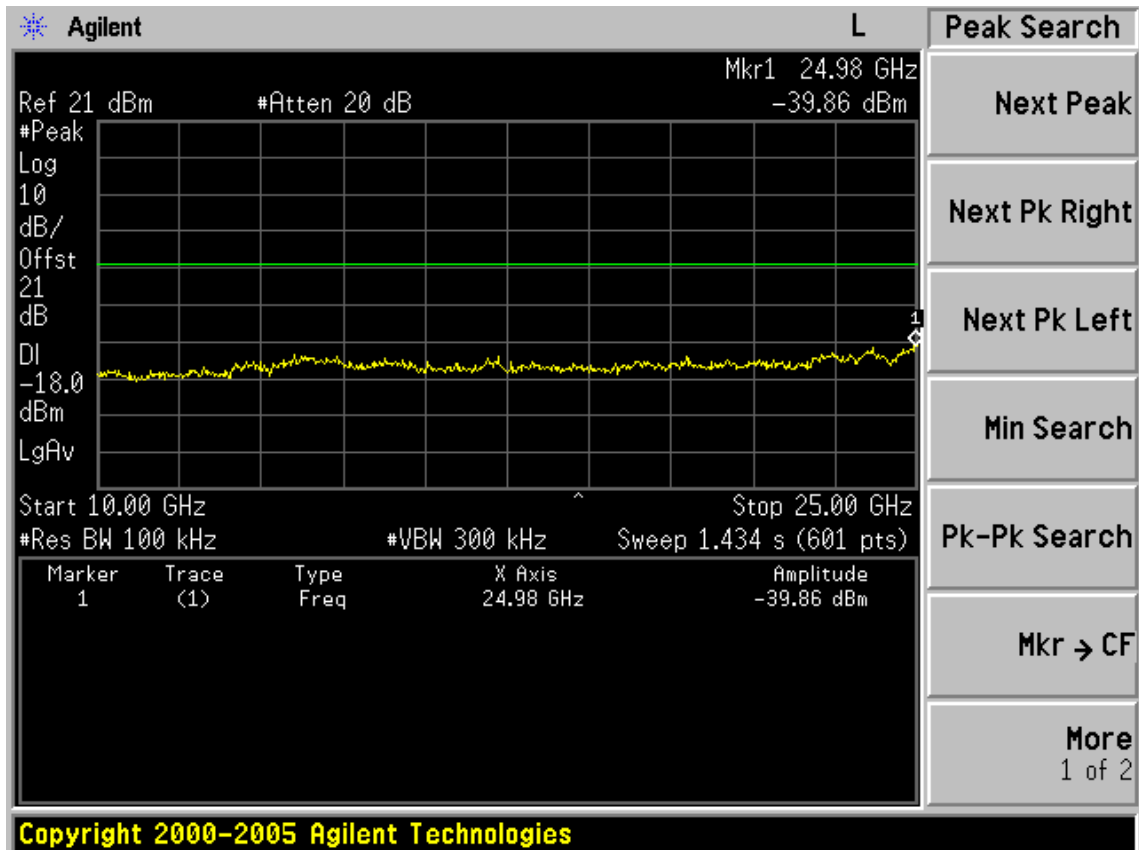
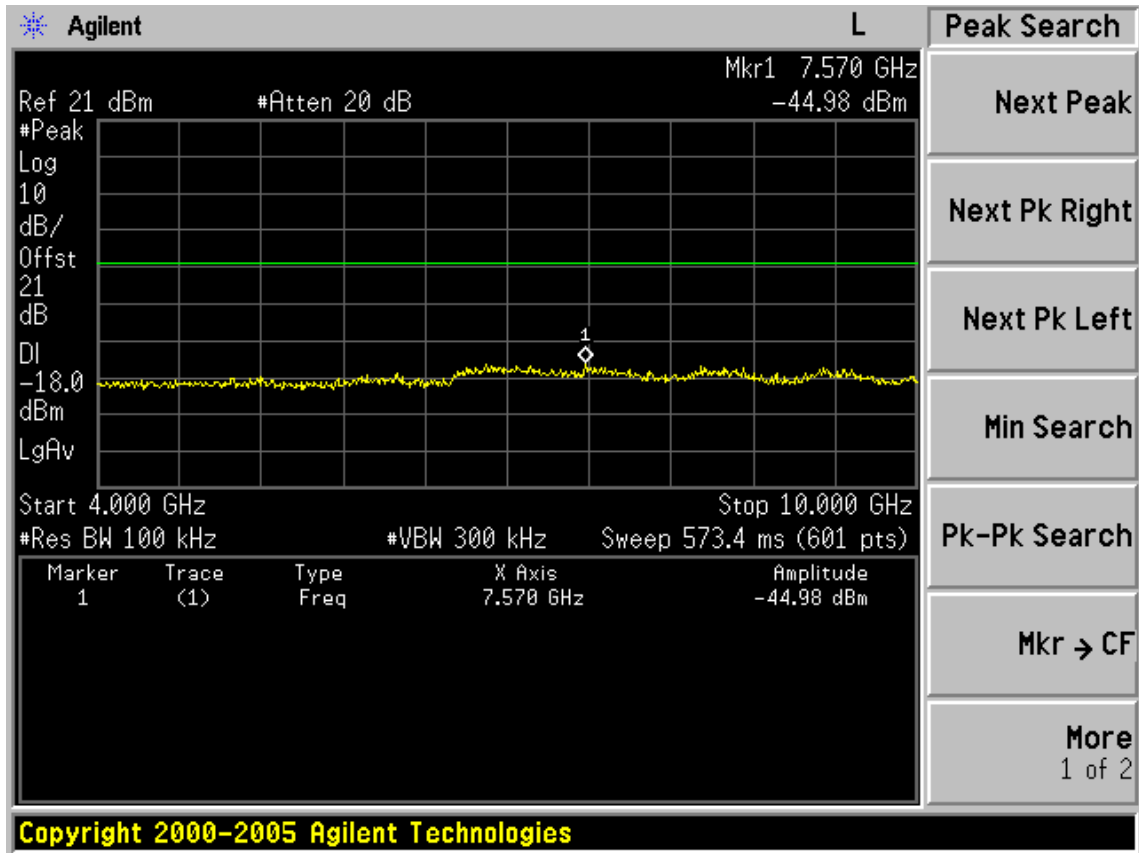


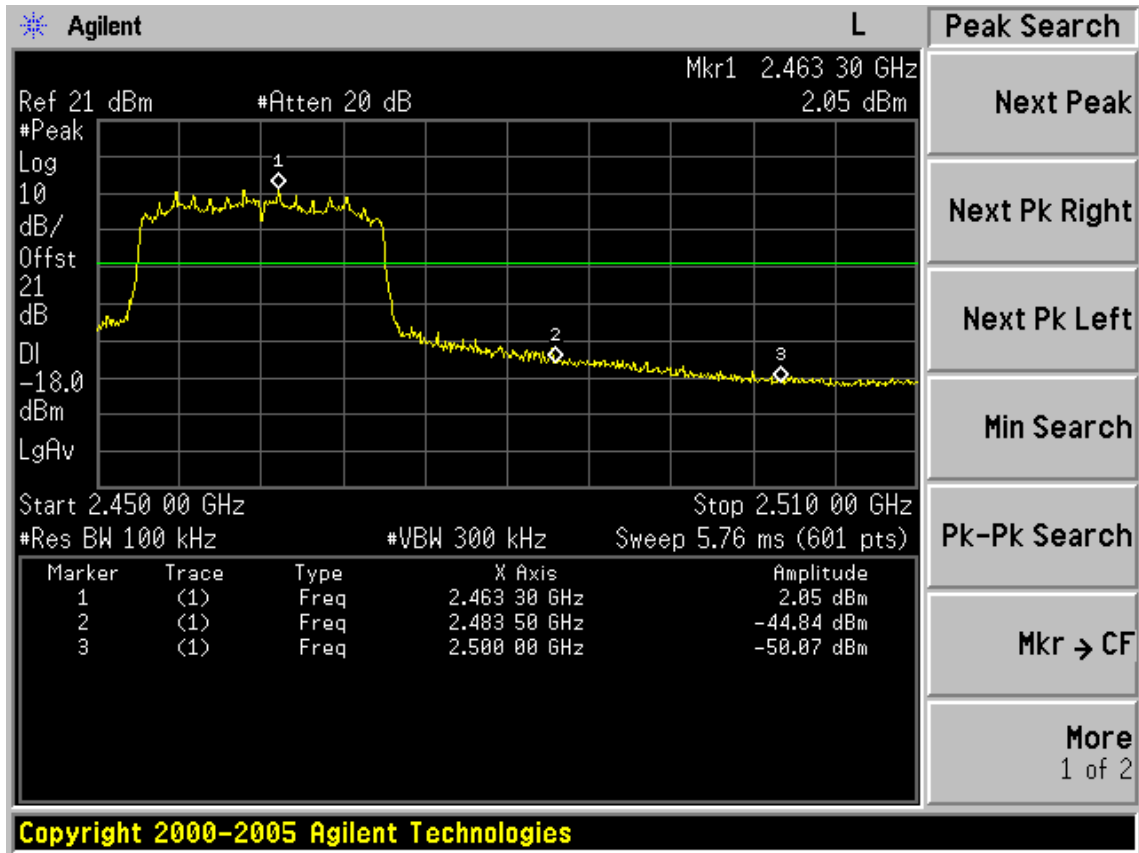




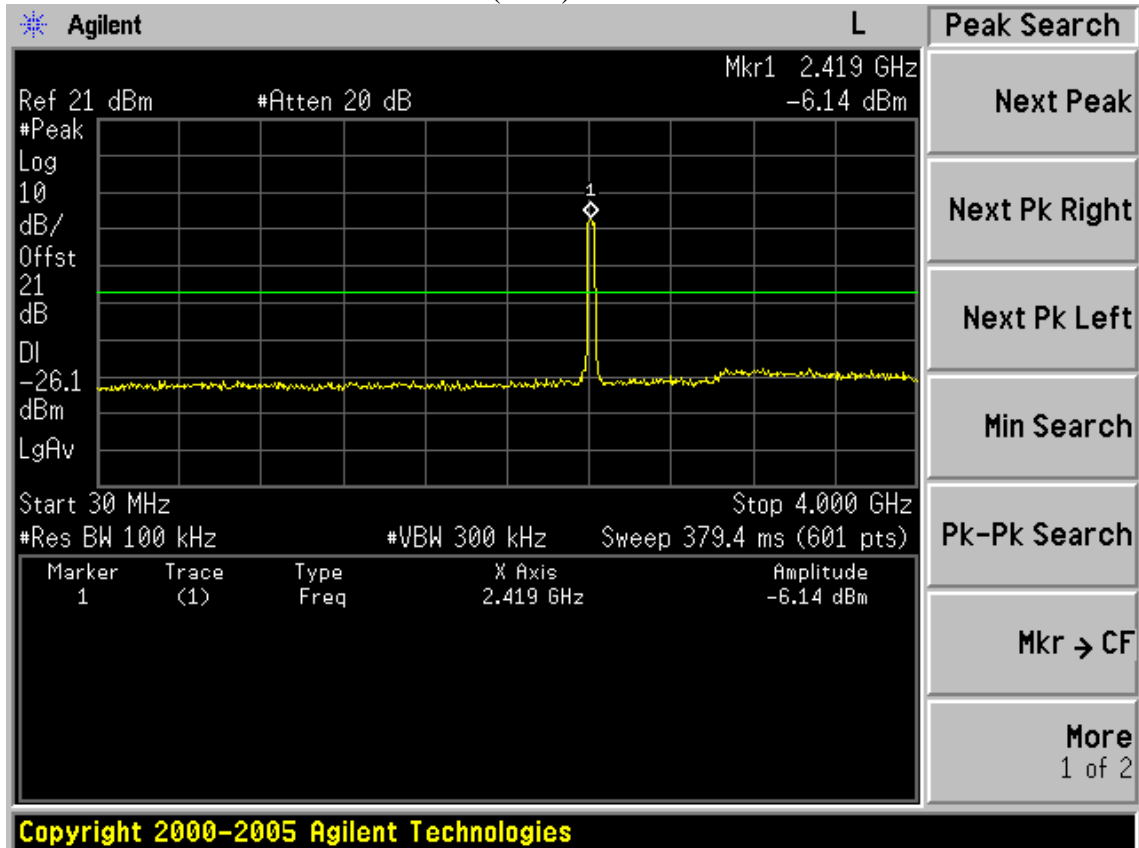
(CH11)

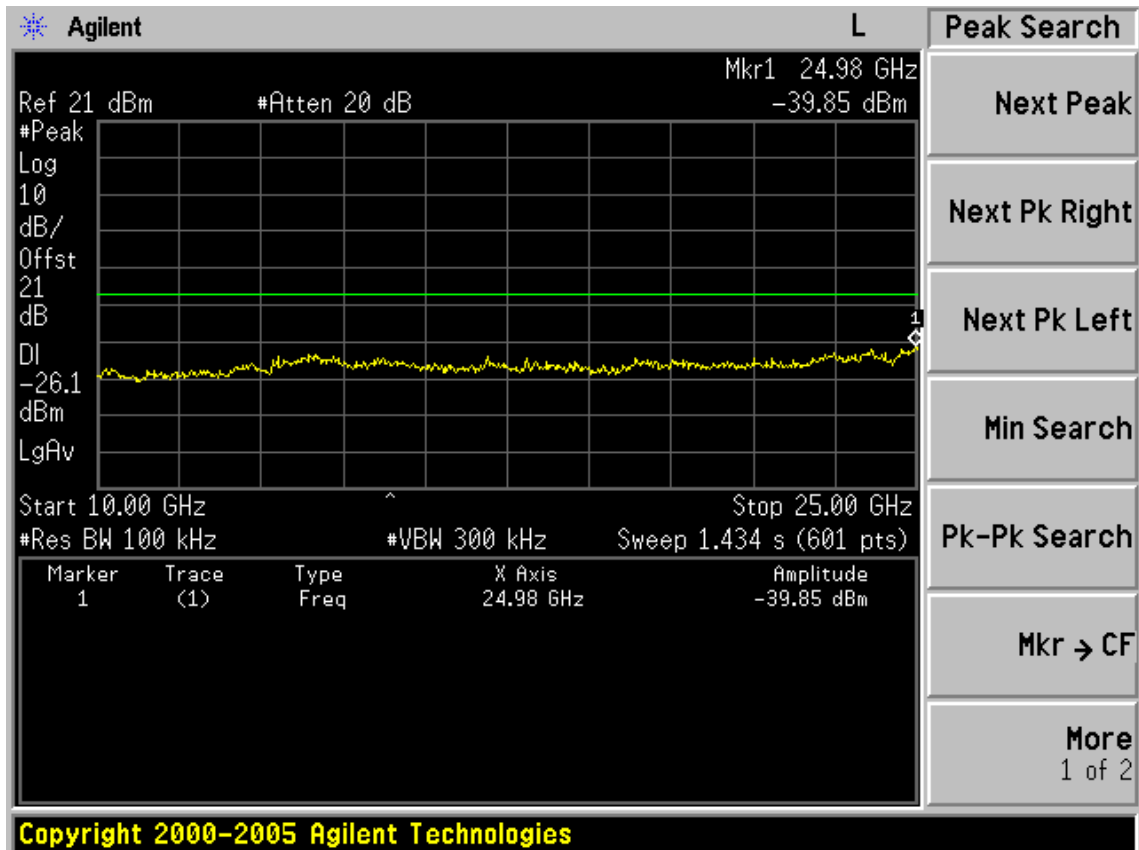
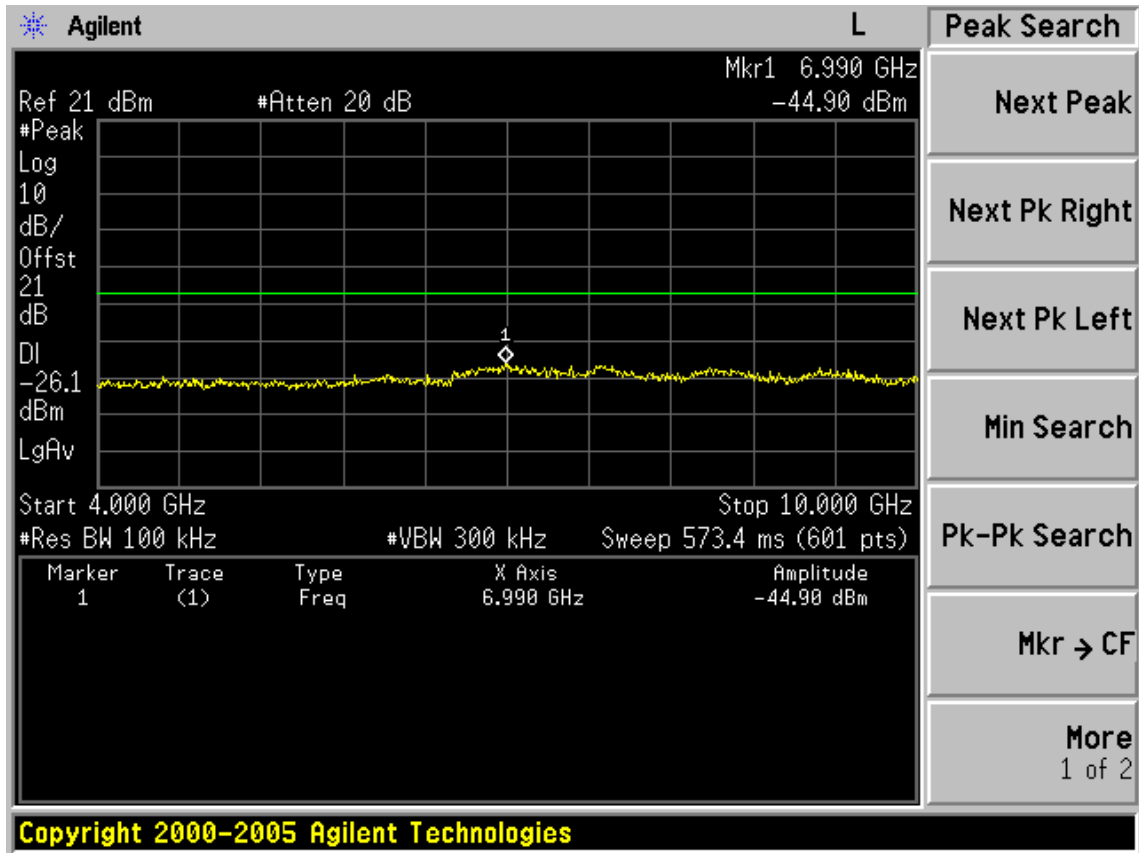




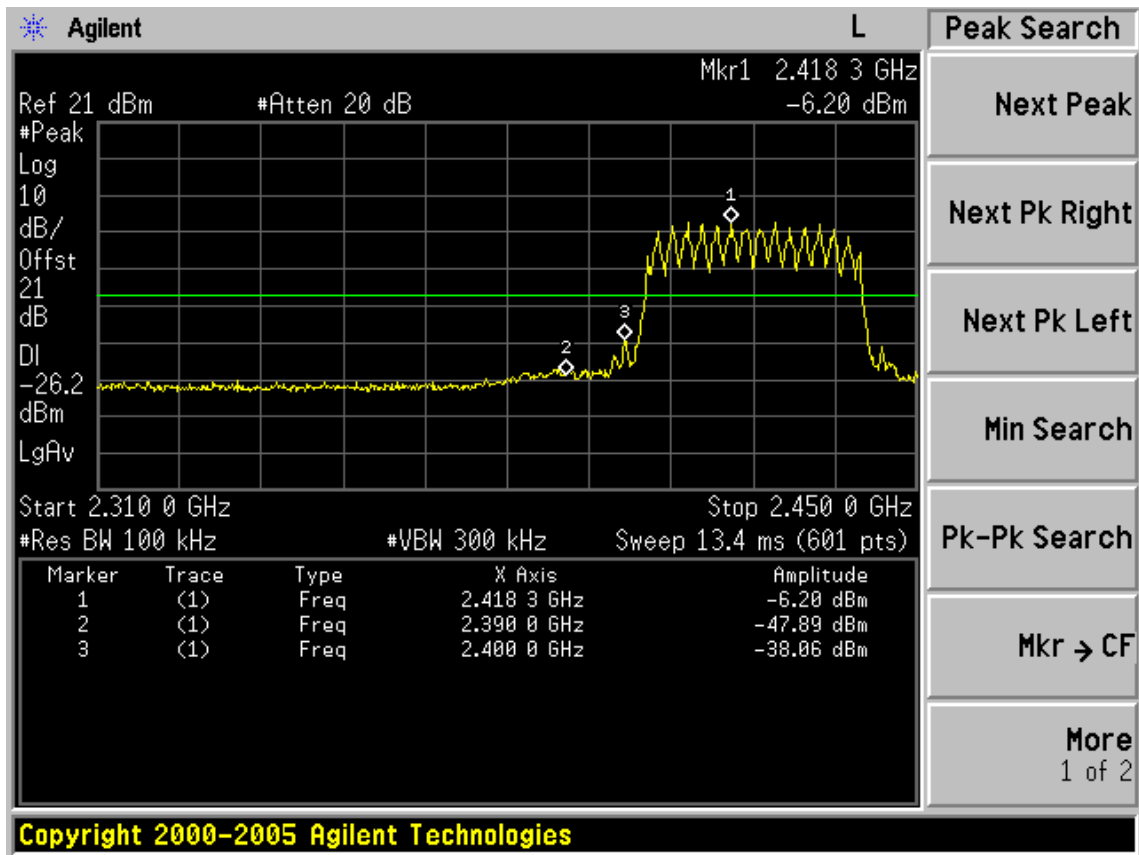


Test Mode: IEEE 802.11n HT40 TX (CH3)

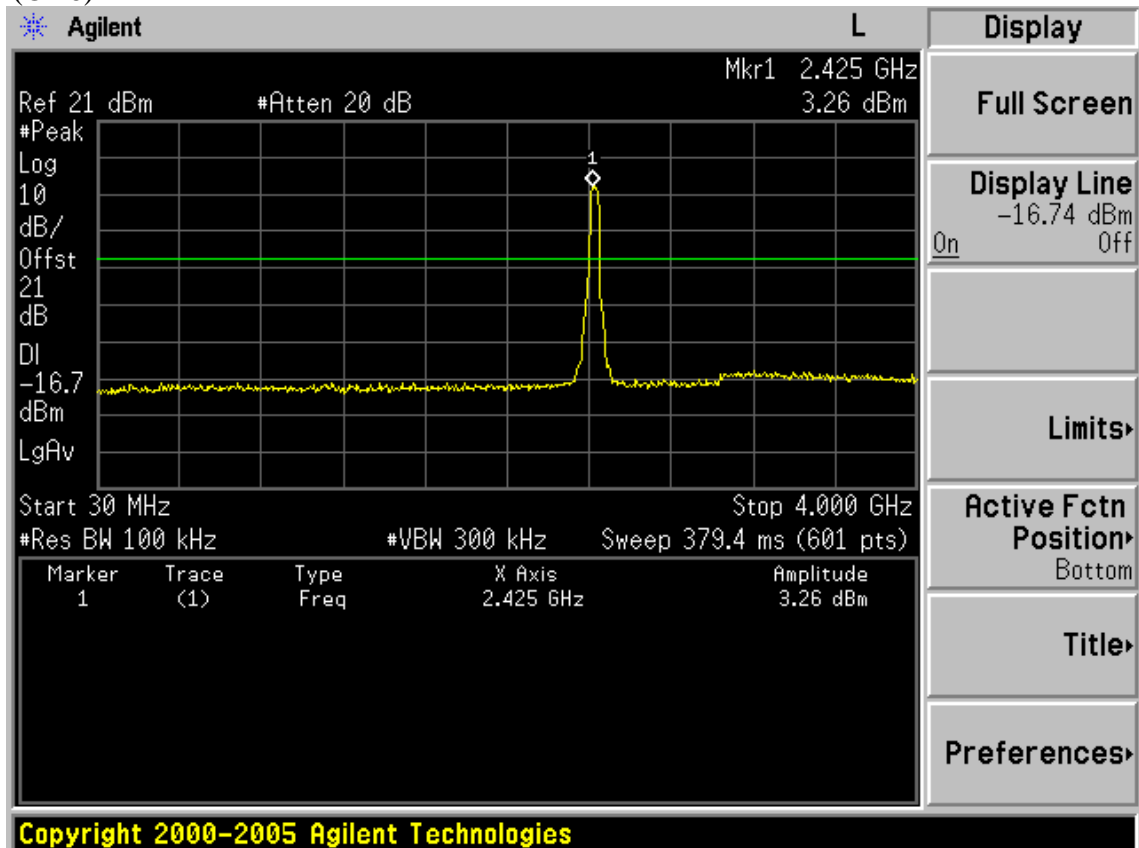


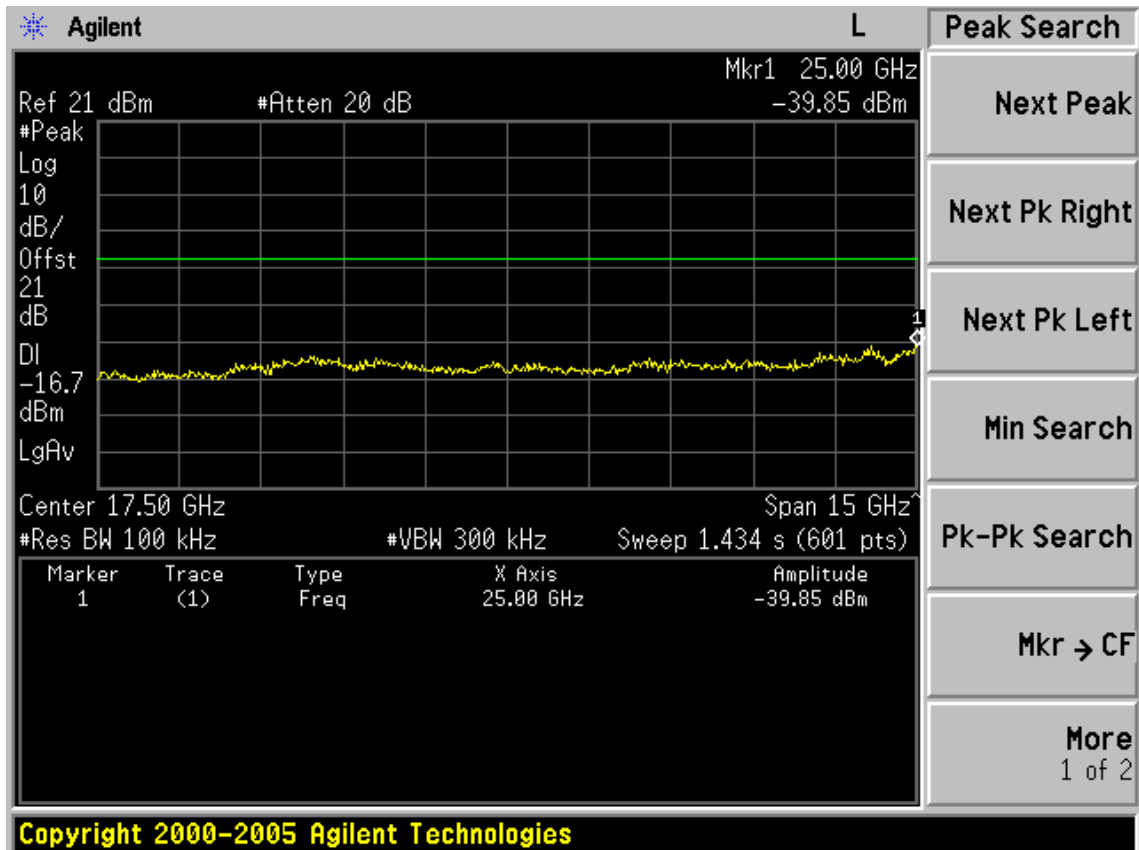
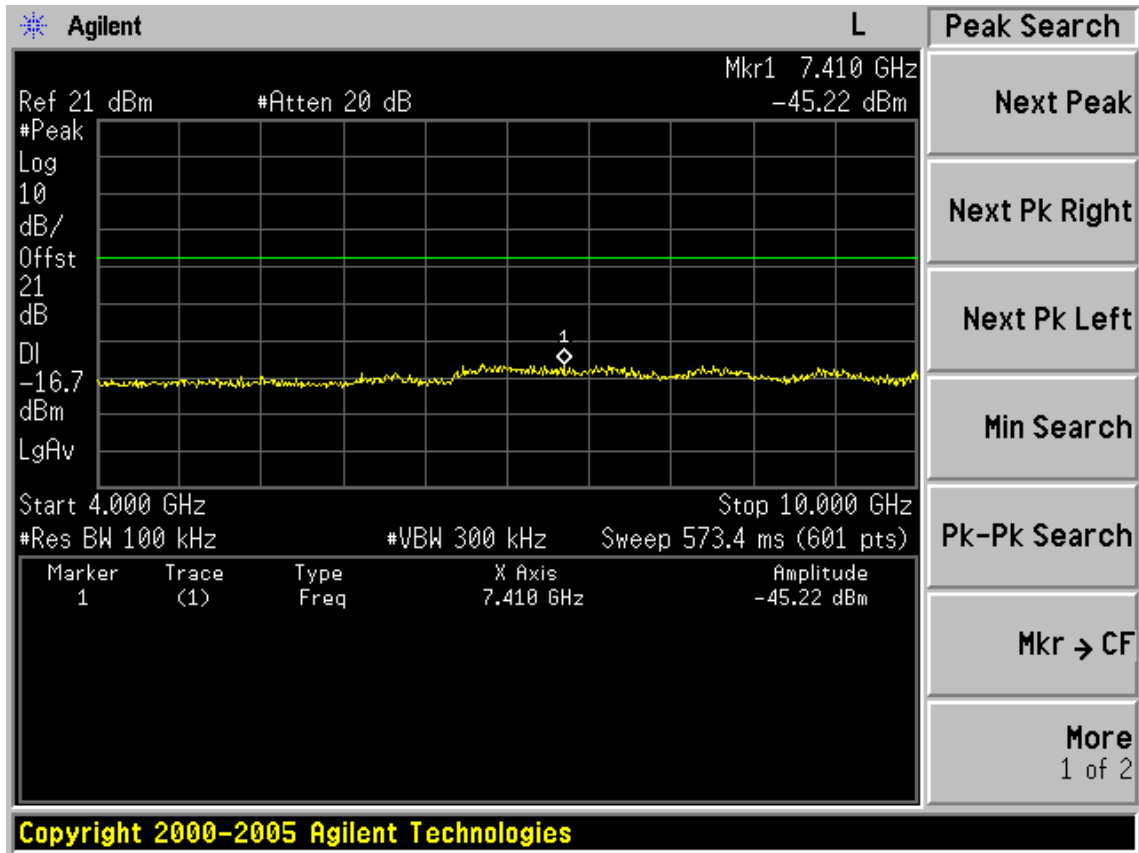




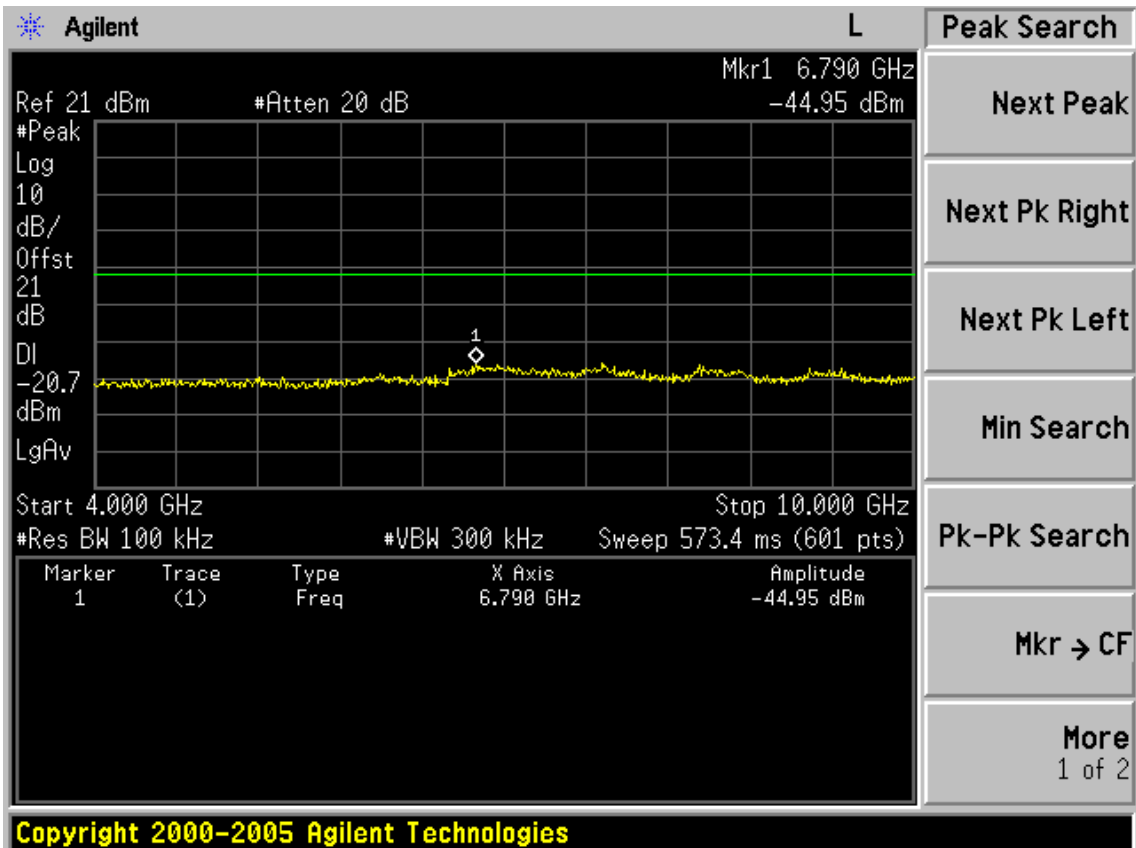
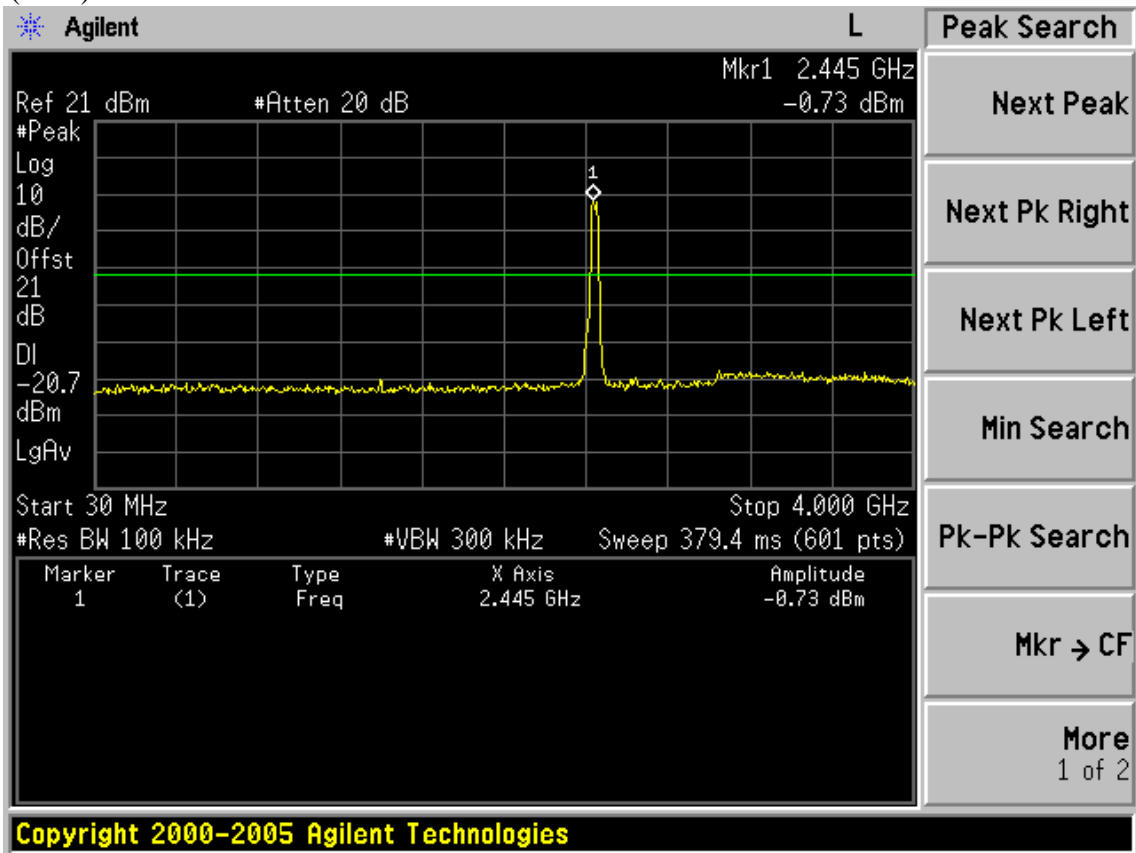


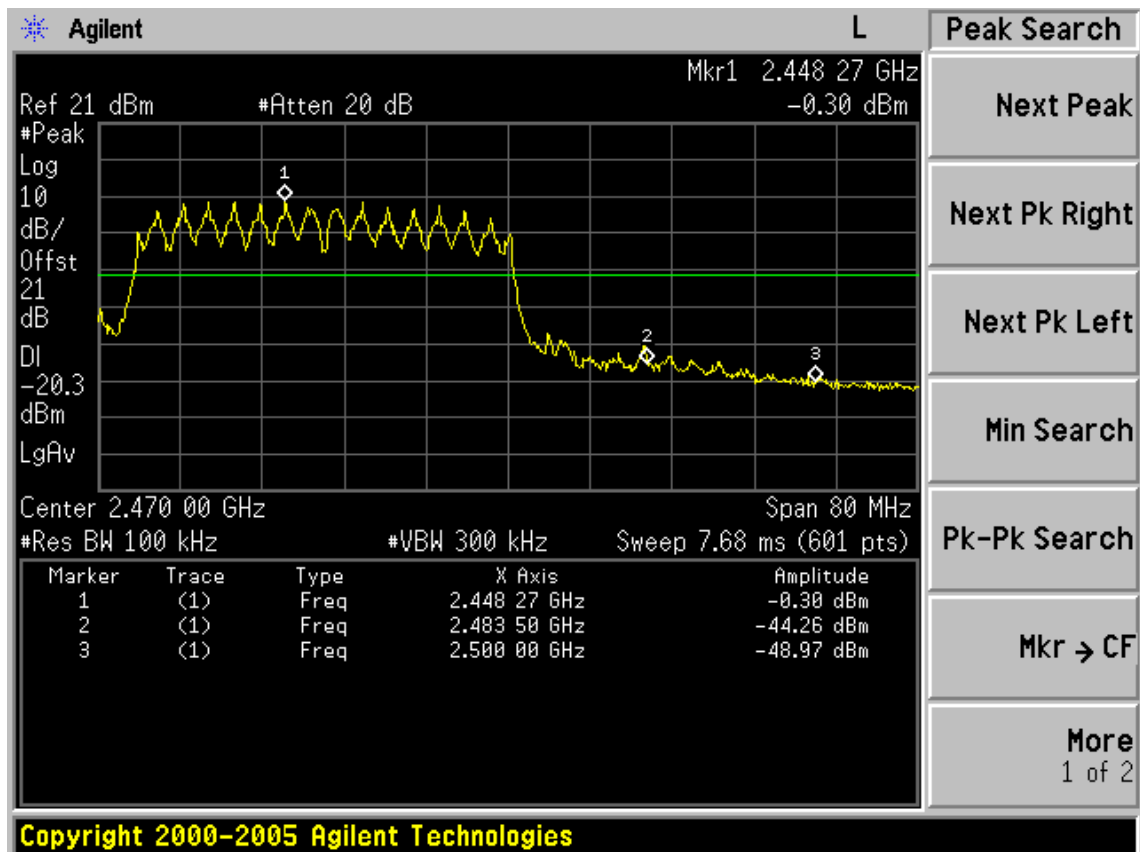
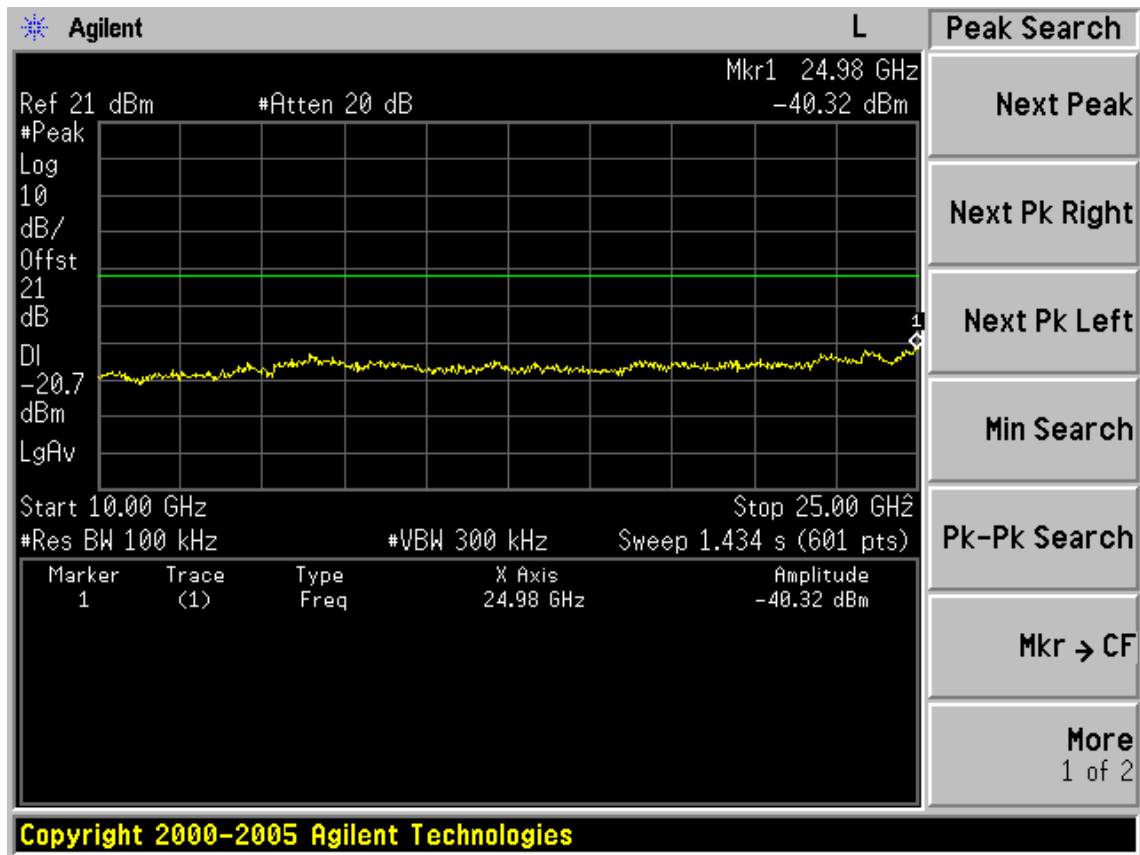
(CH6)





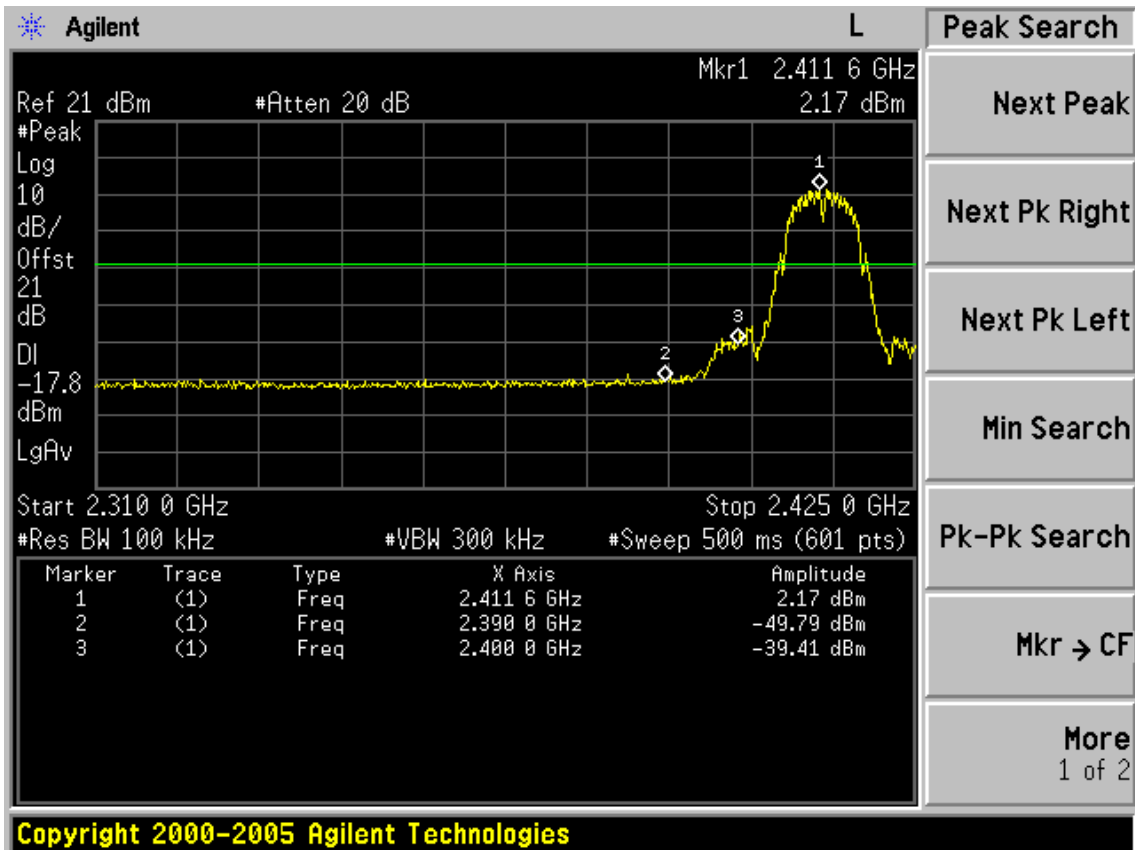
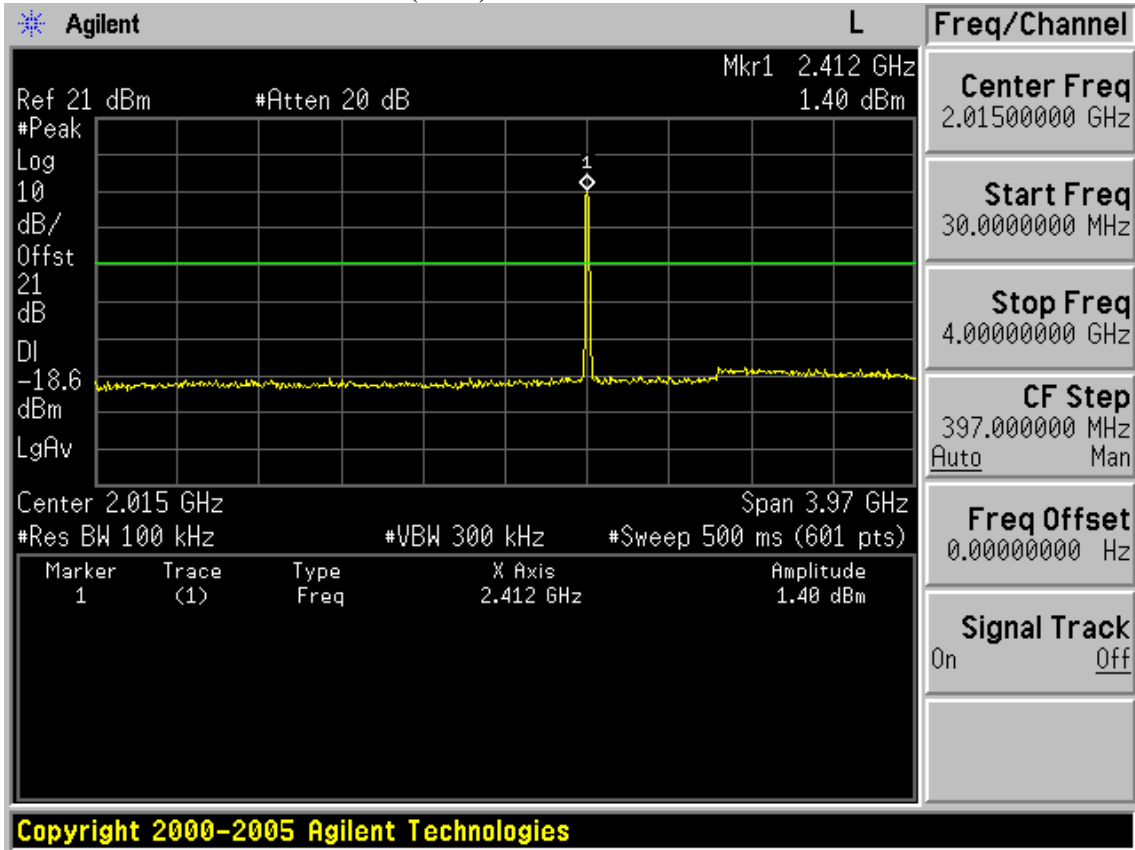
(CH9)

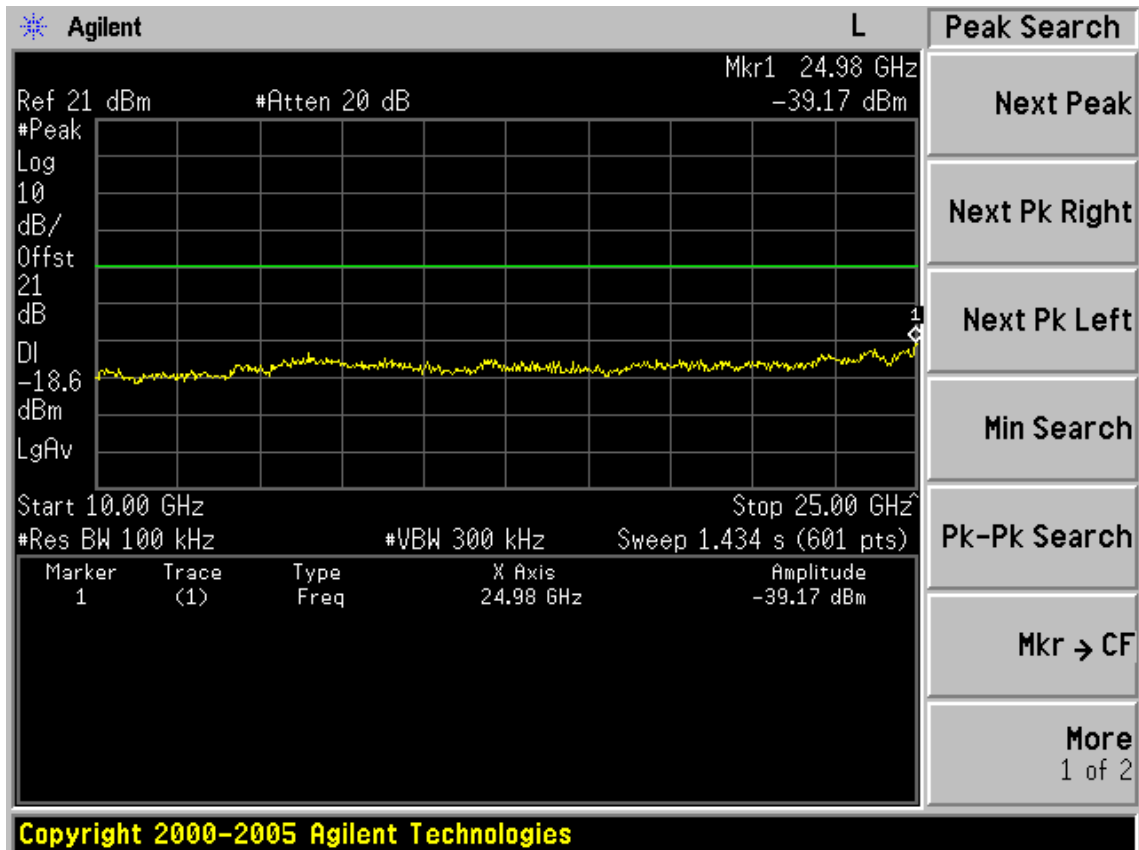
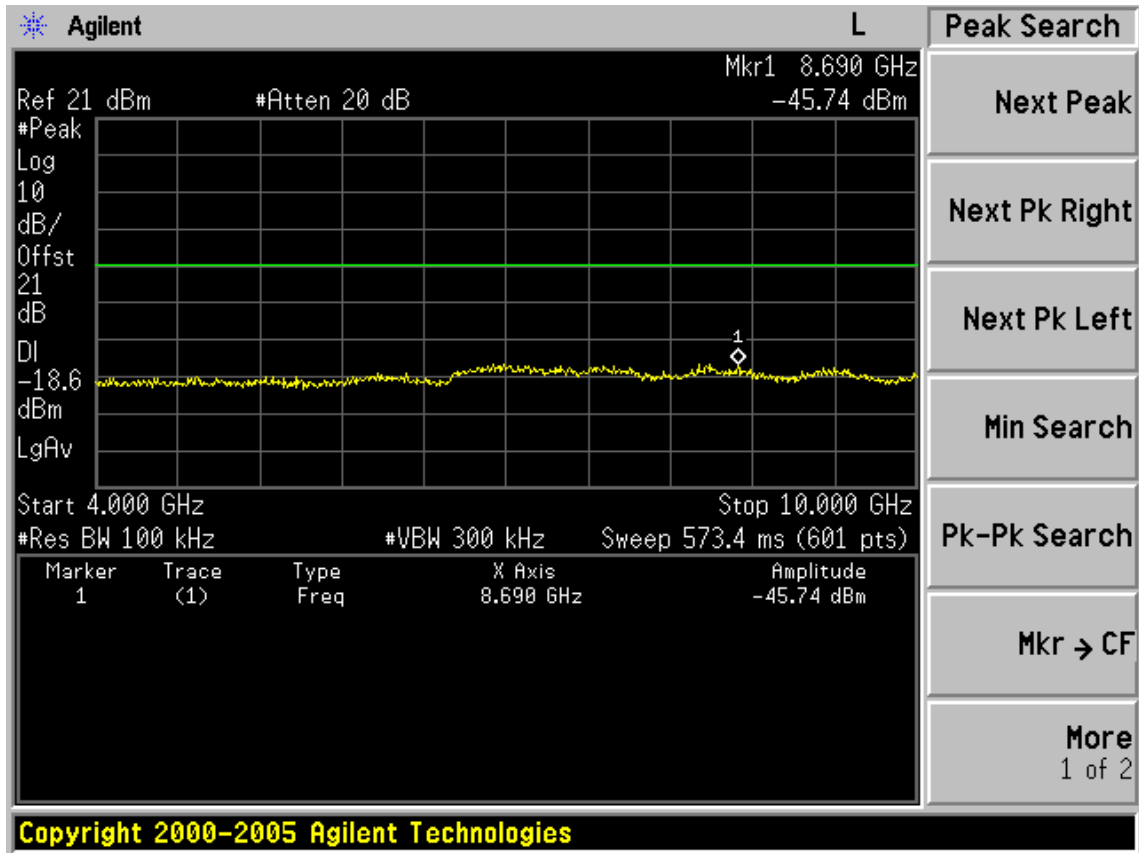


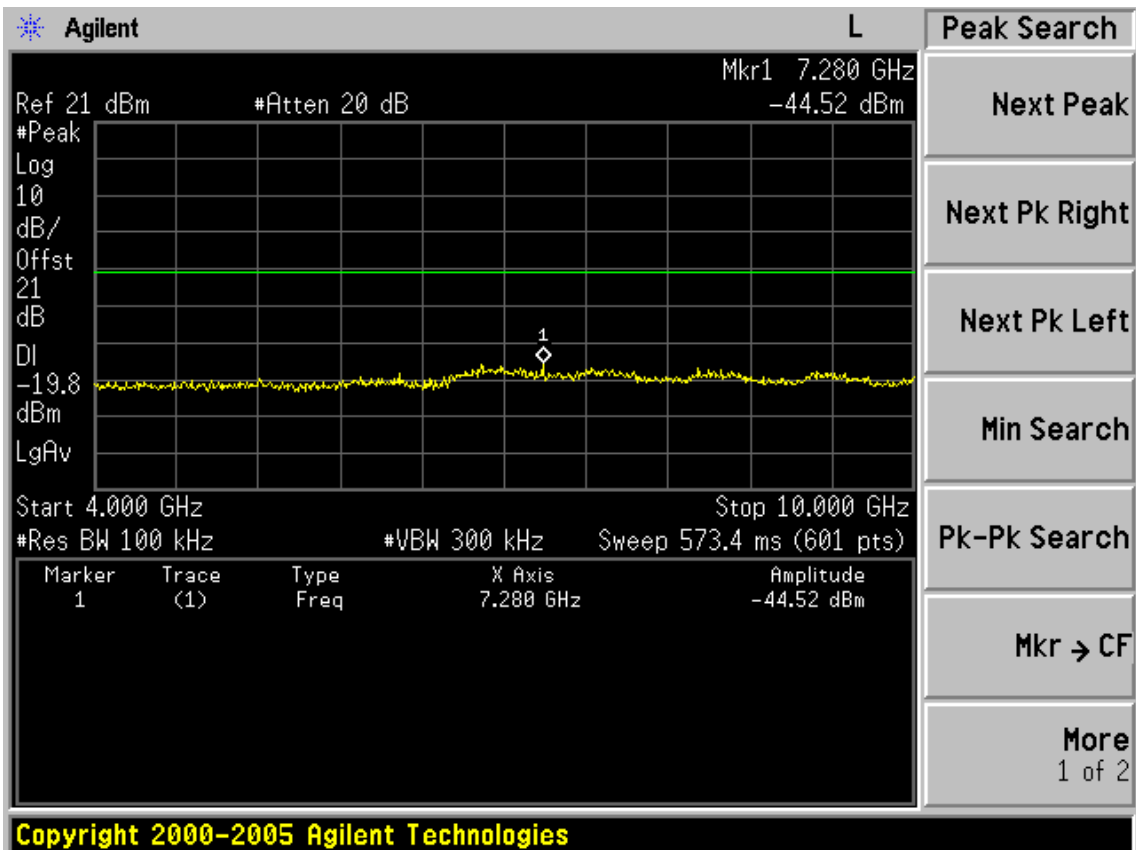
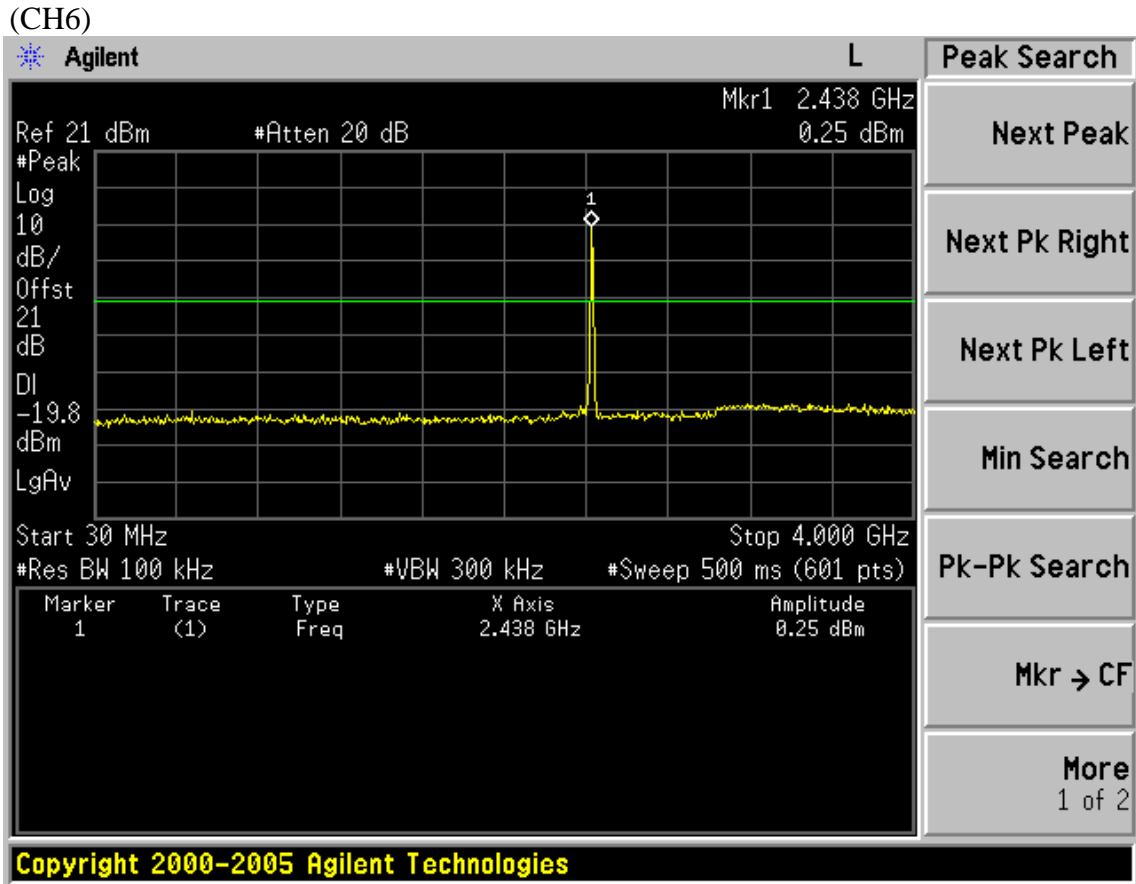


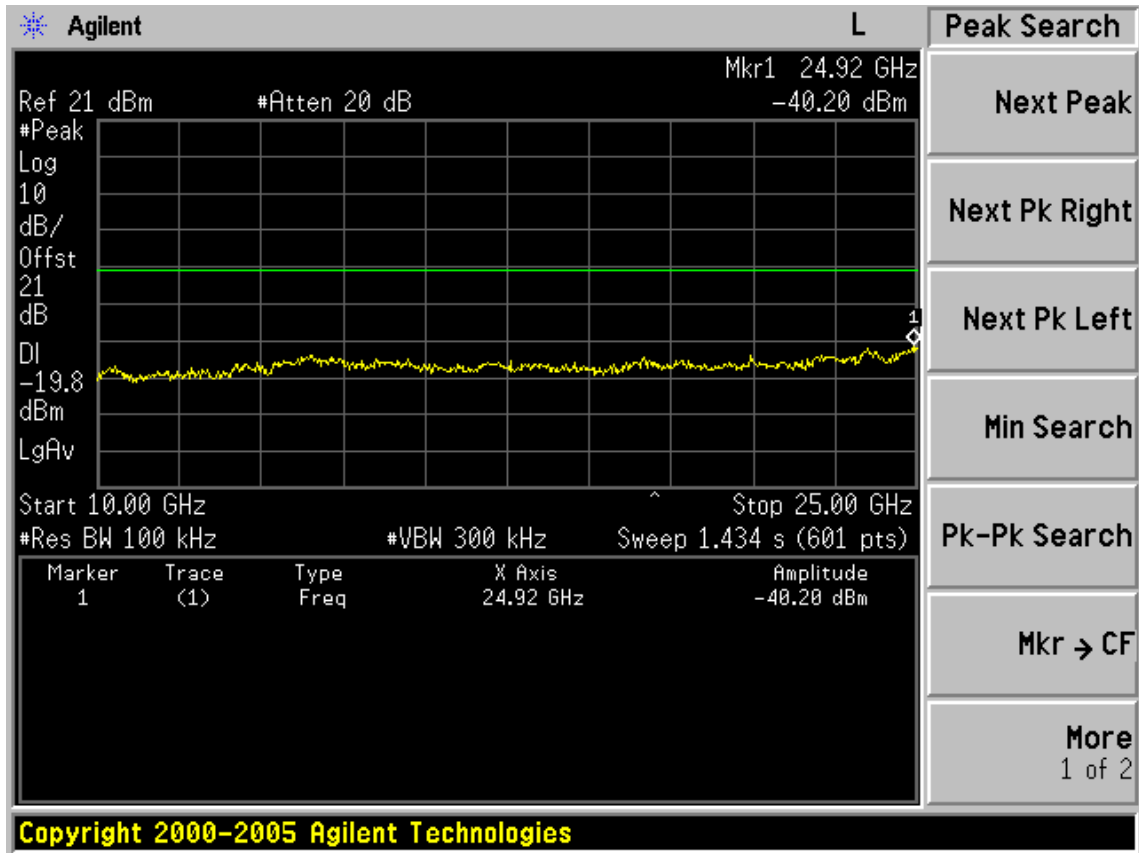
**Chain 1:**

Test Mode: IEEE 802.11b TX (CH1)

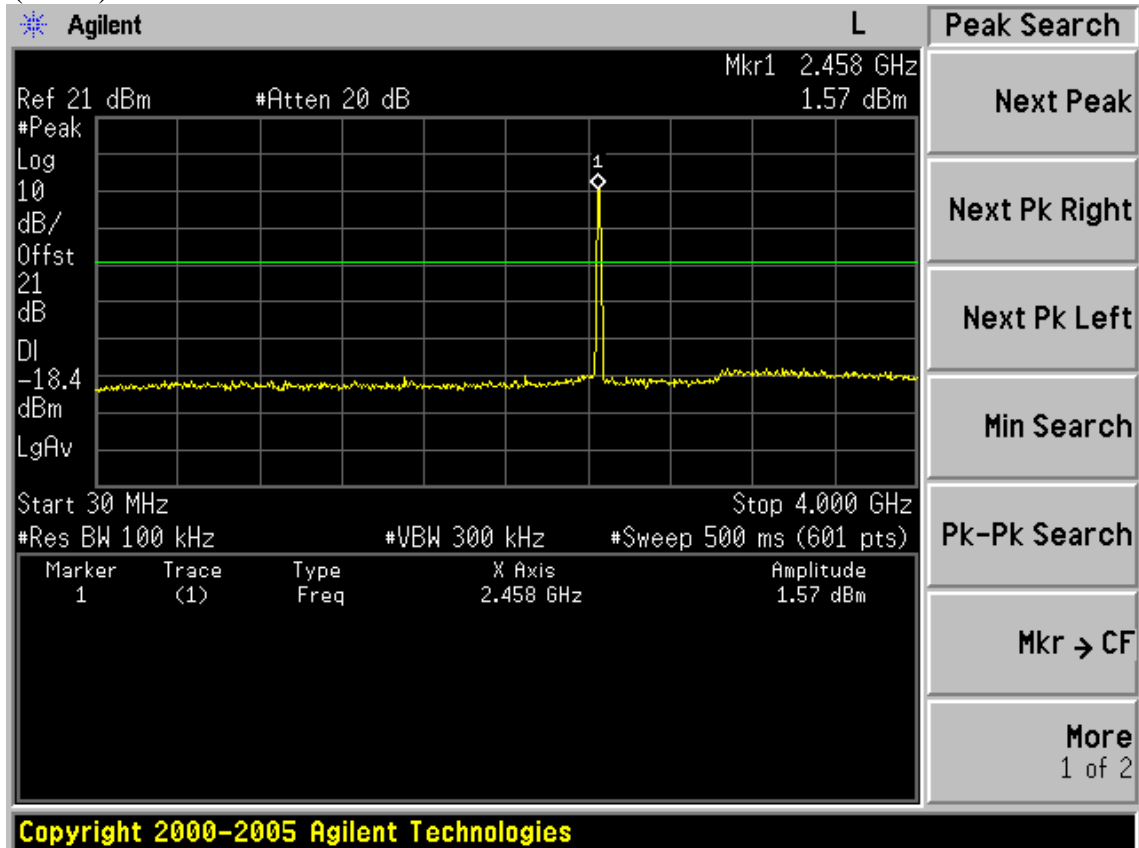




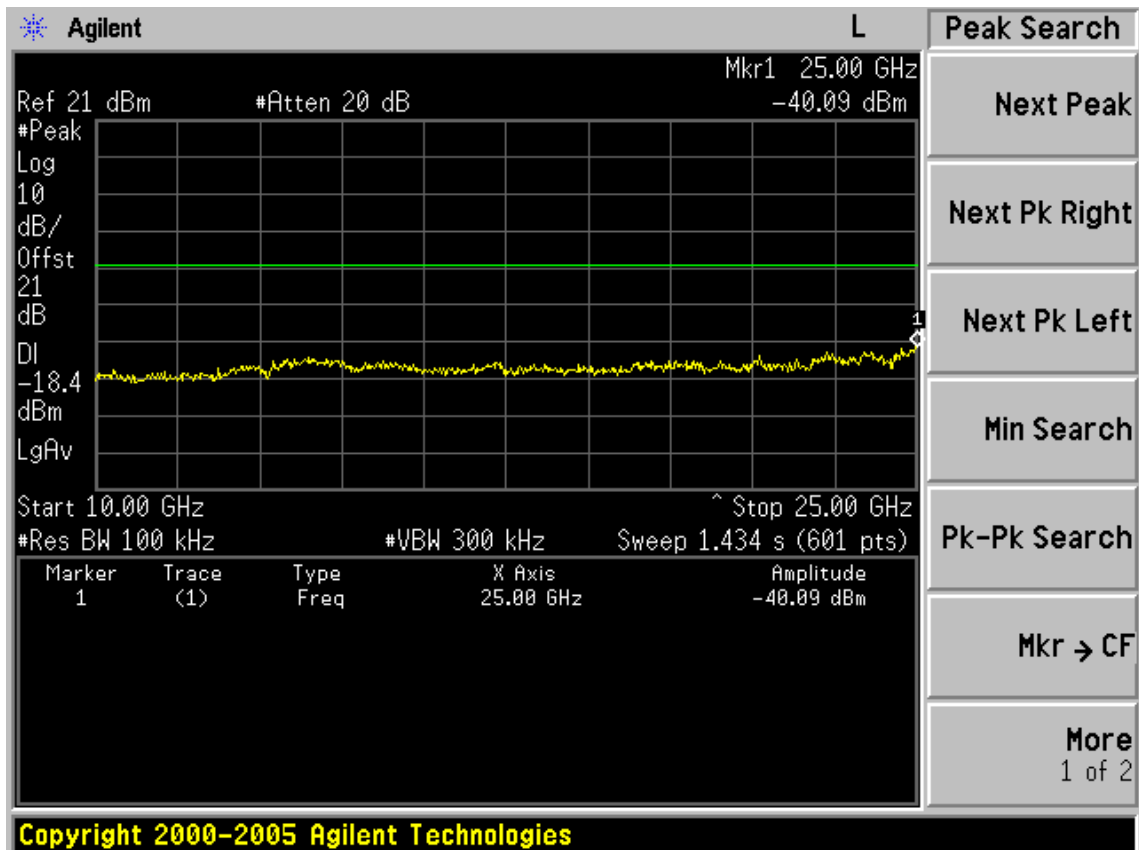
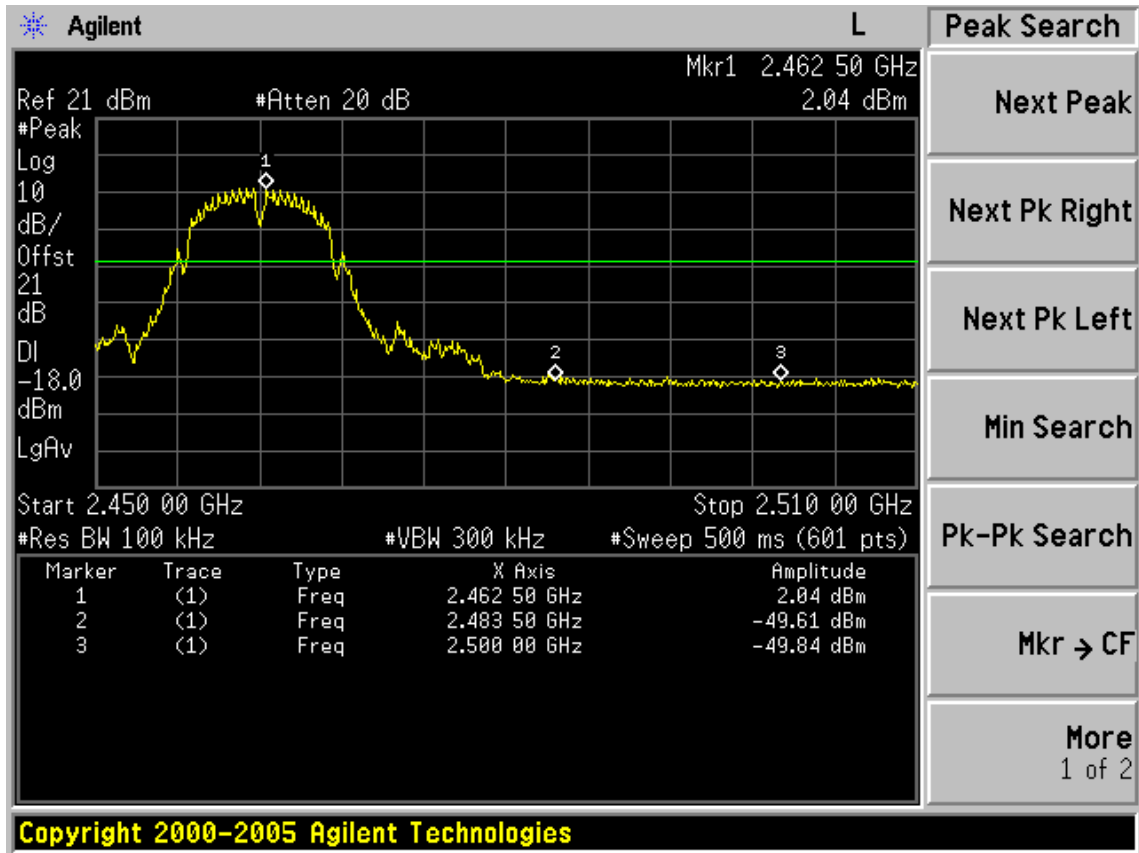


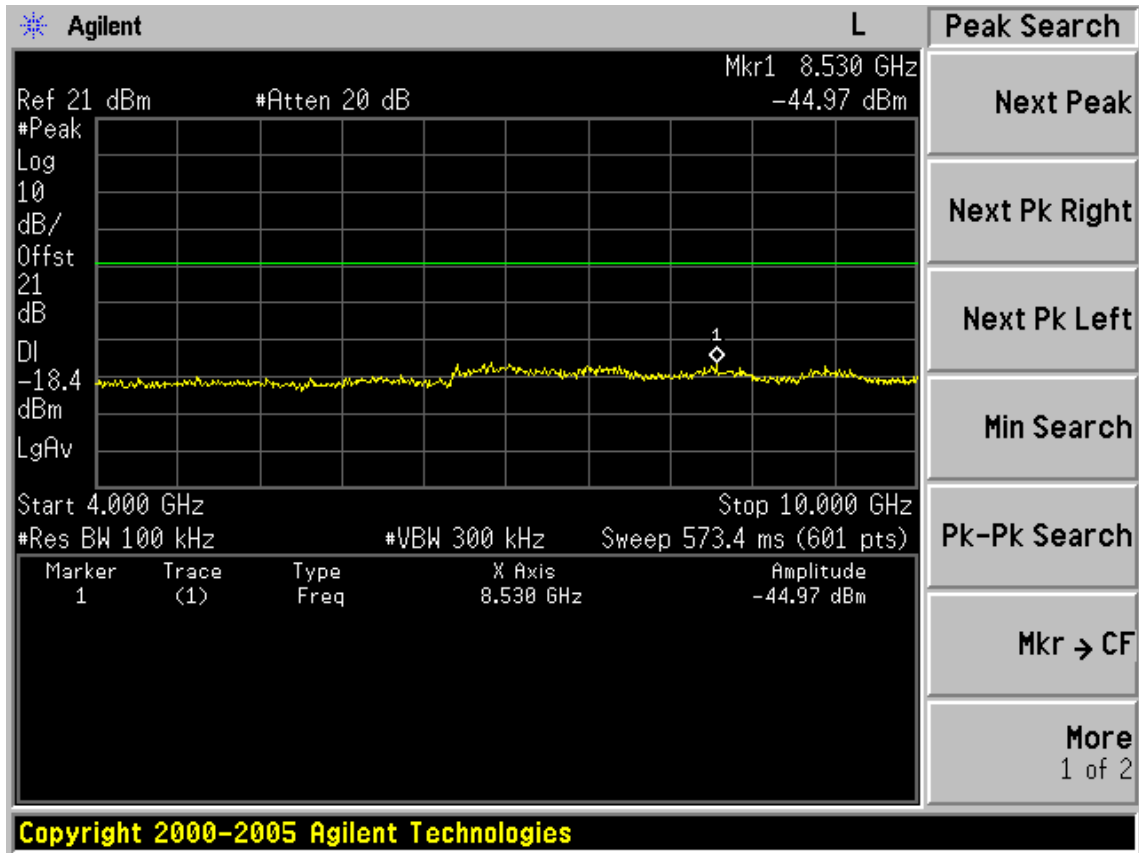


(CH11)

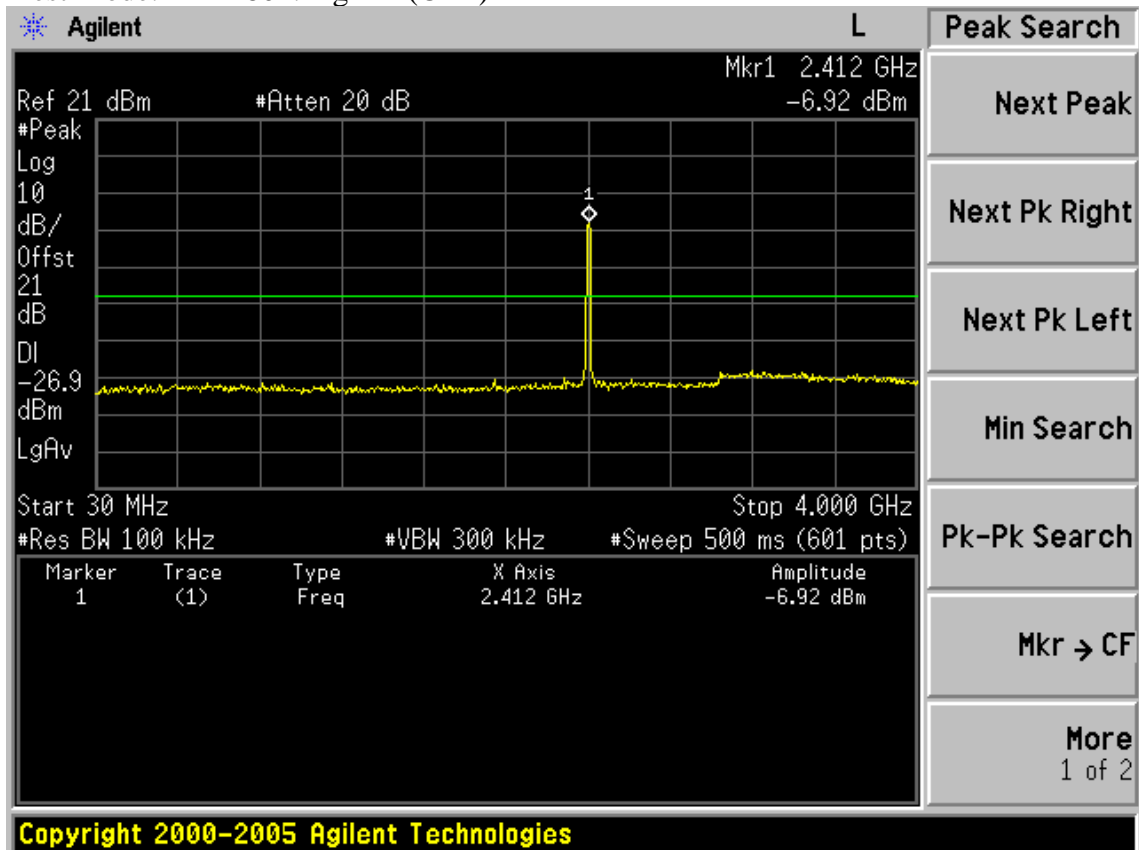


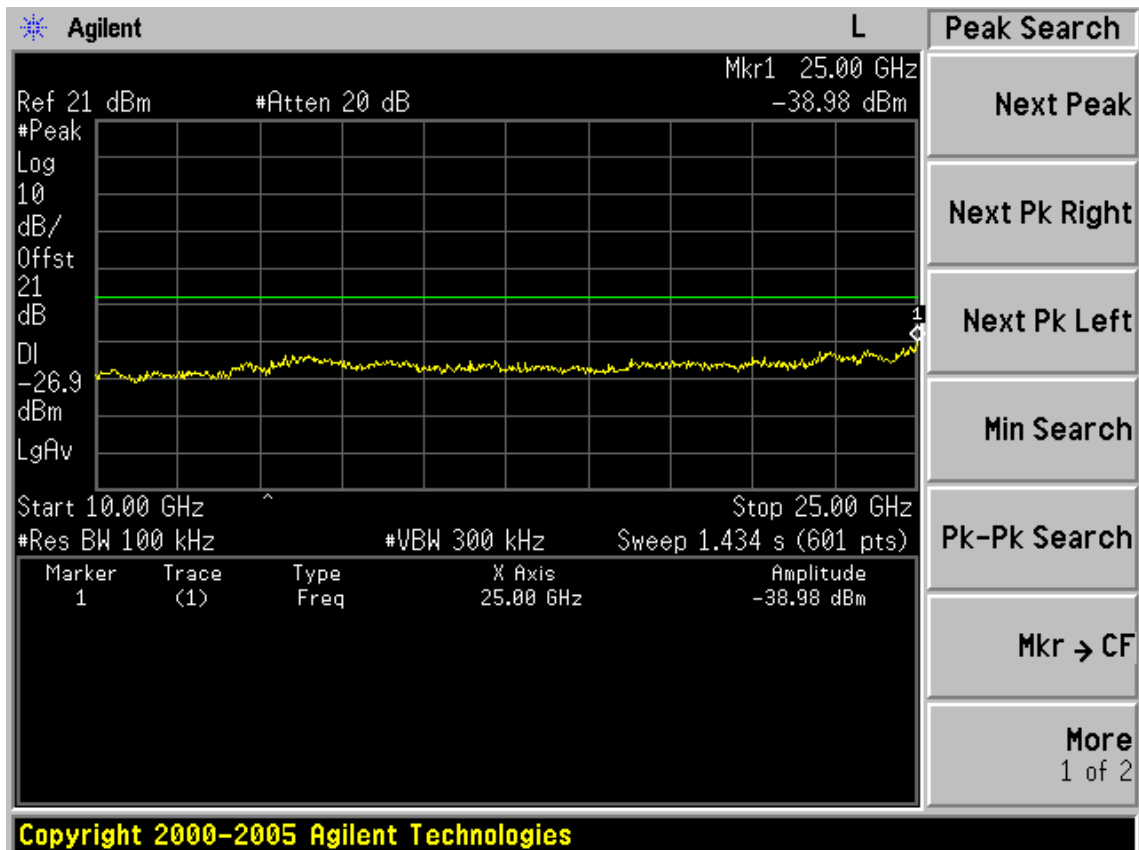
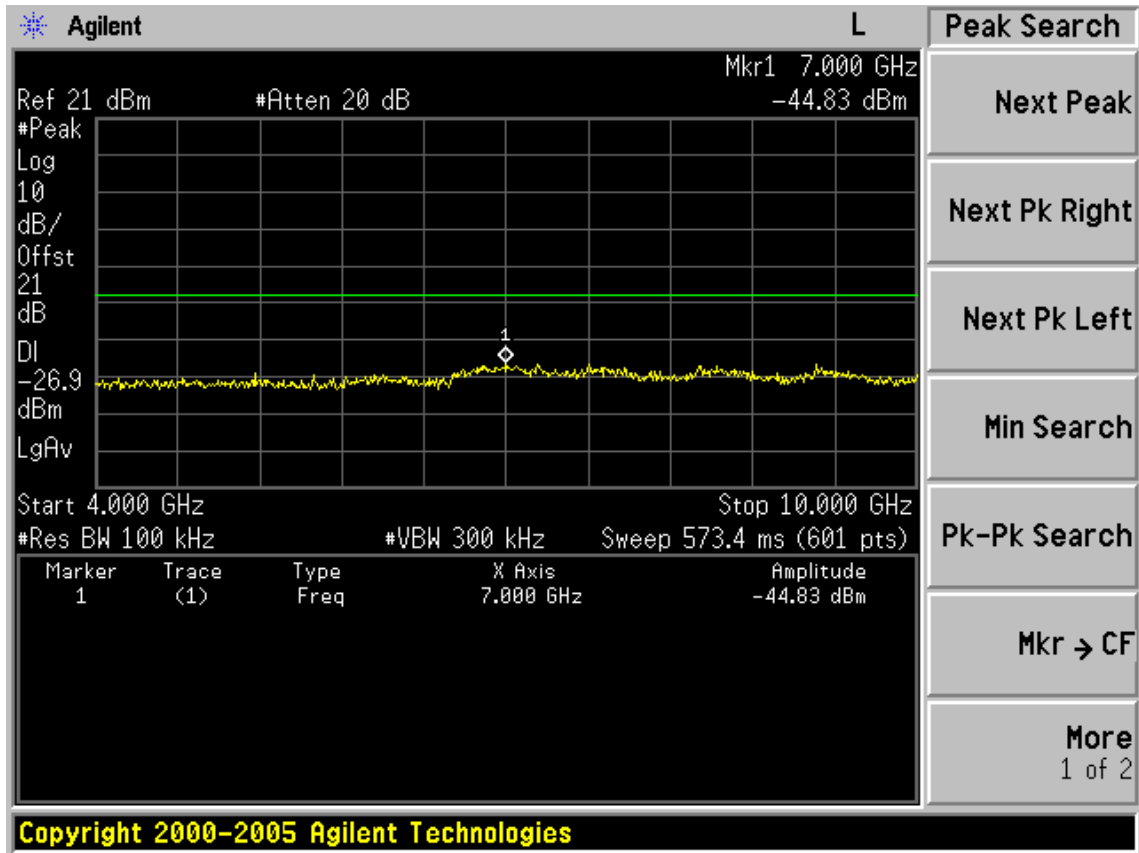


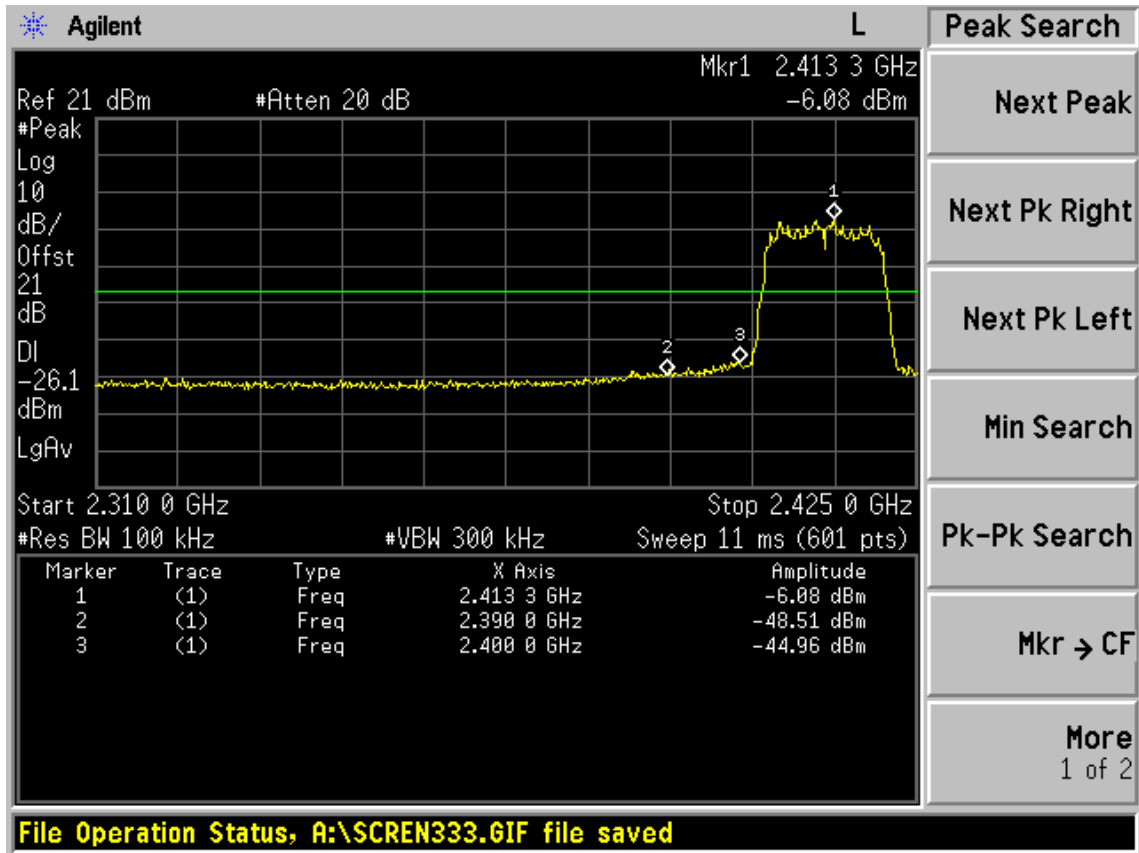




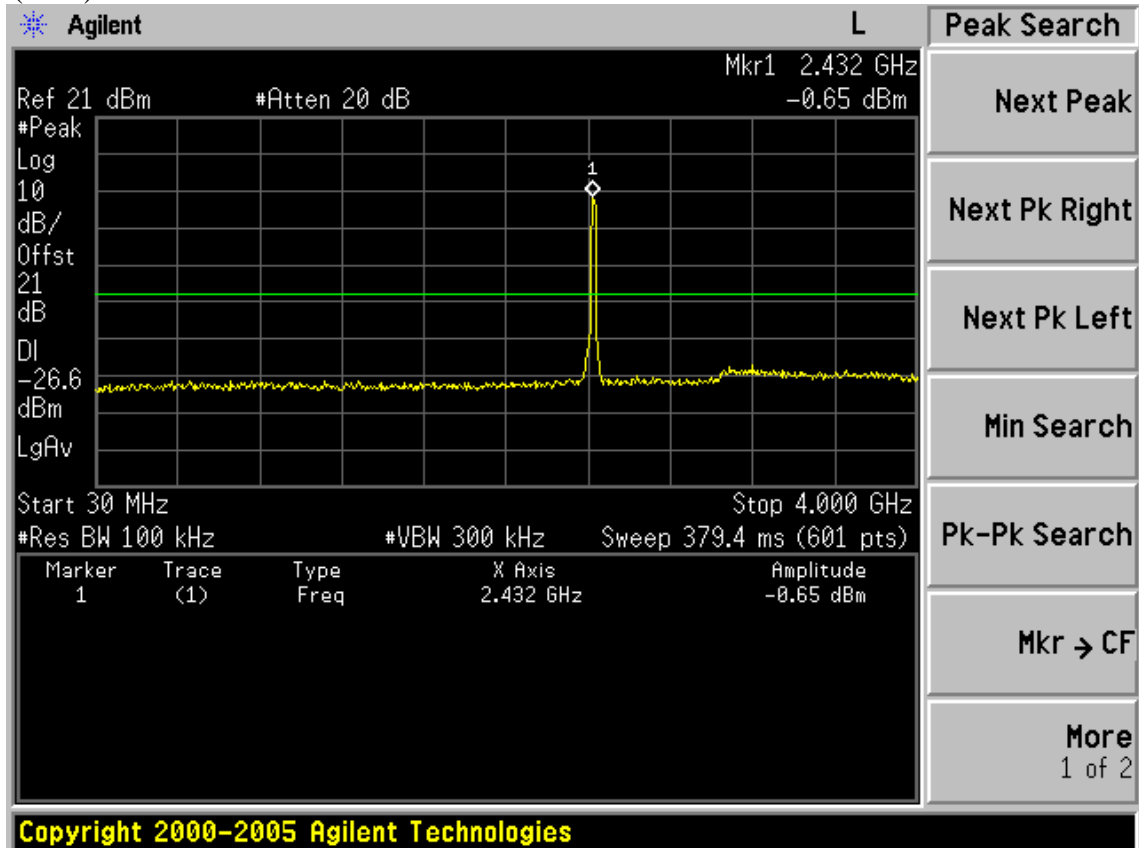
Test Mode: IEEE 802.11g TX (CH1)

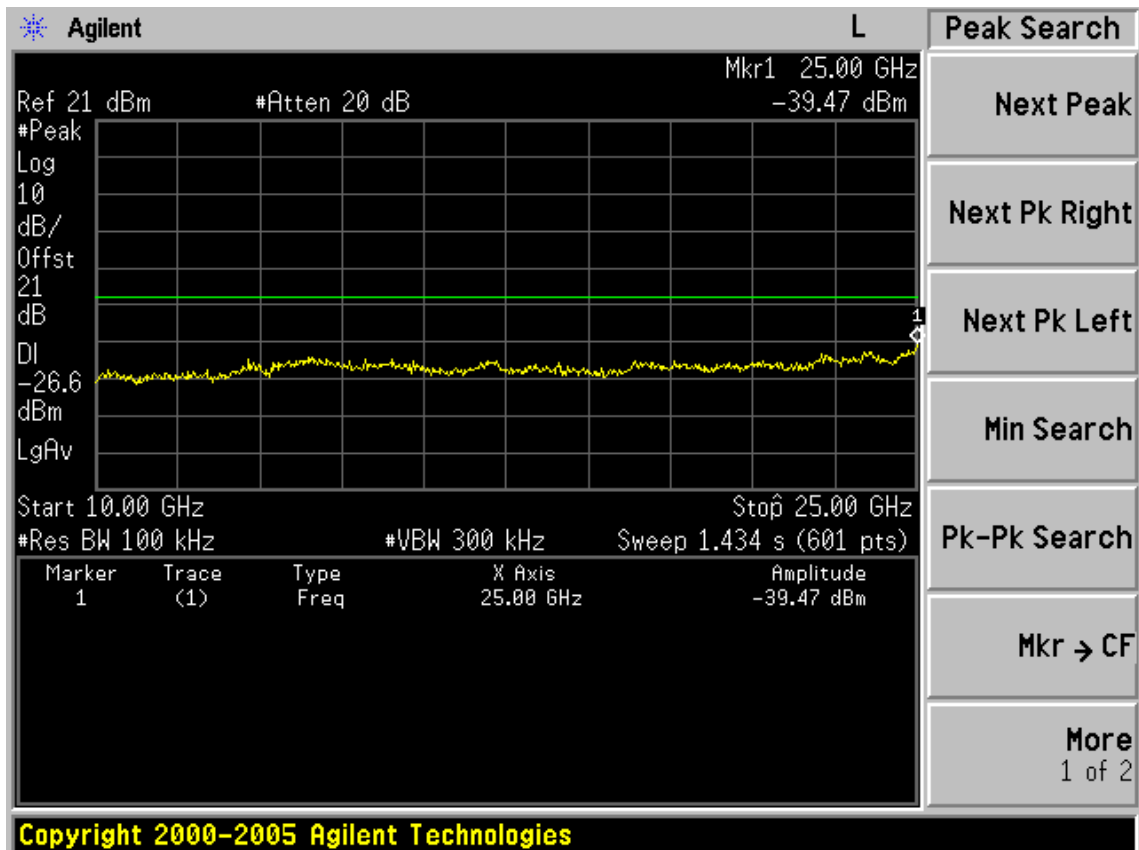
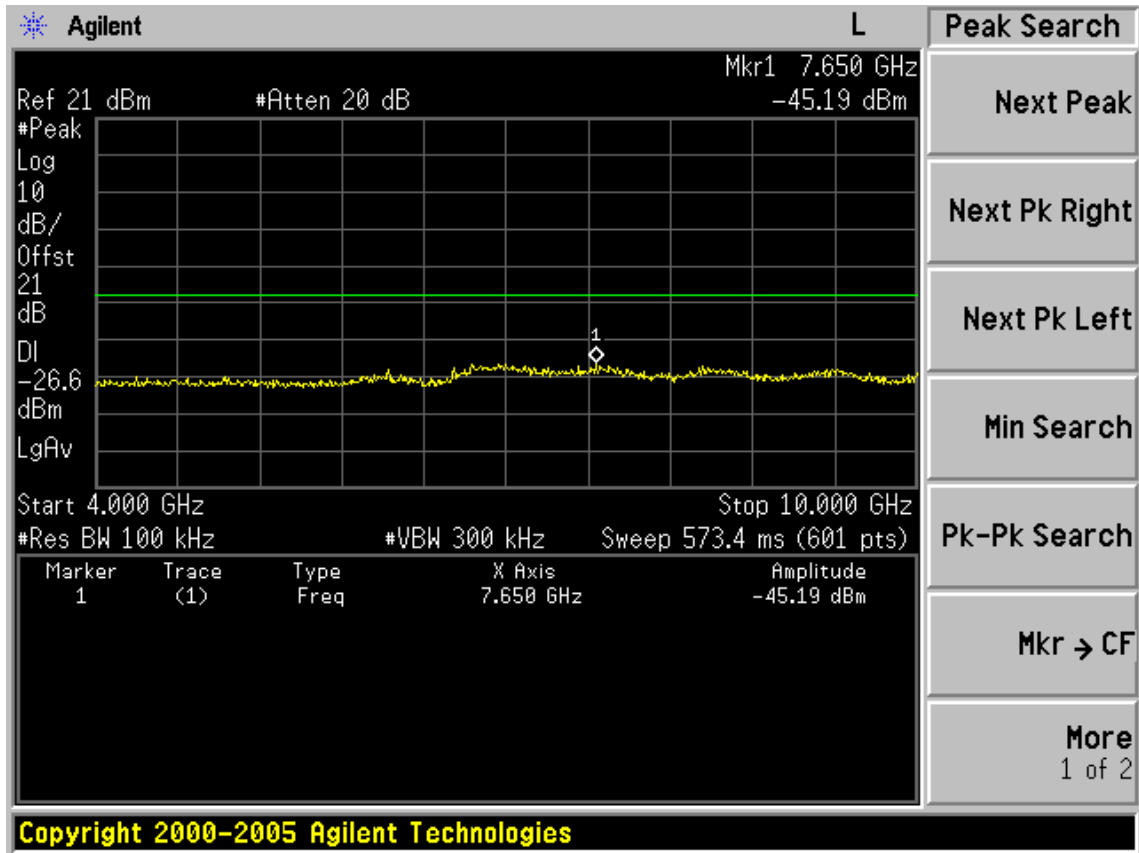




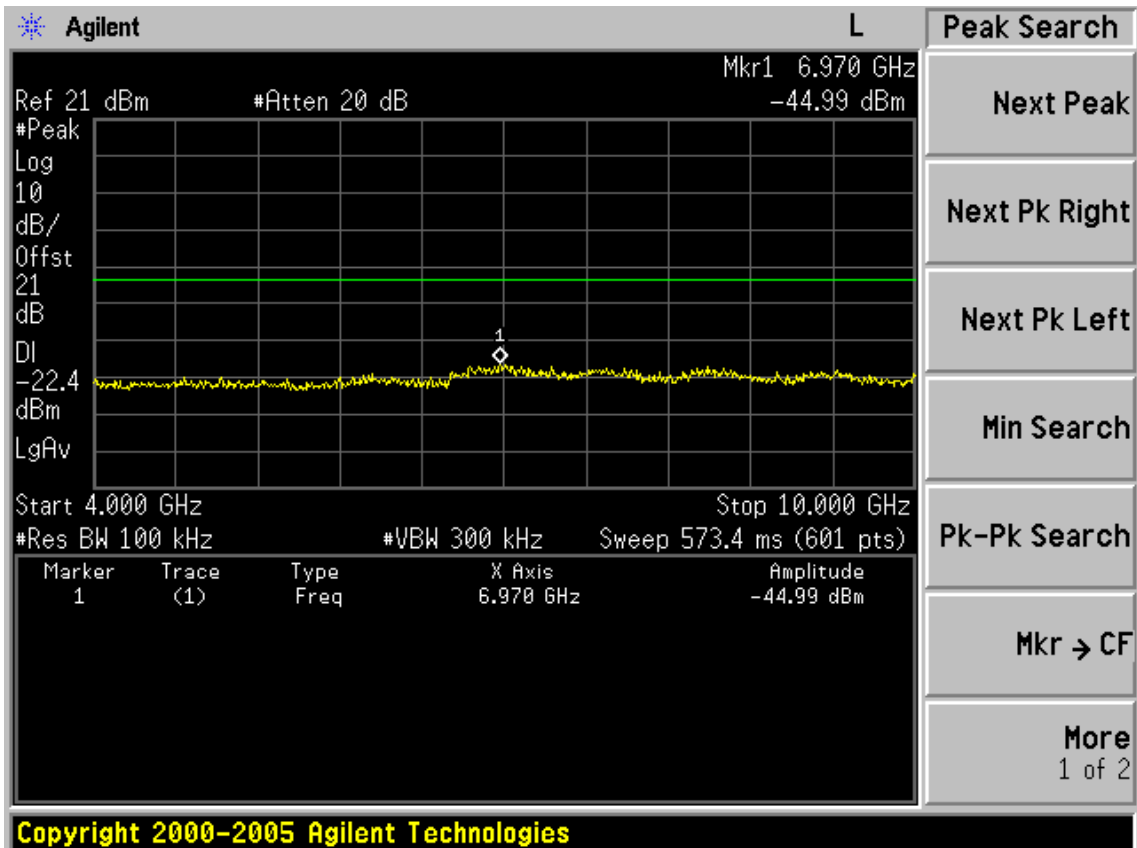
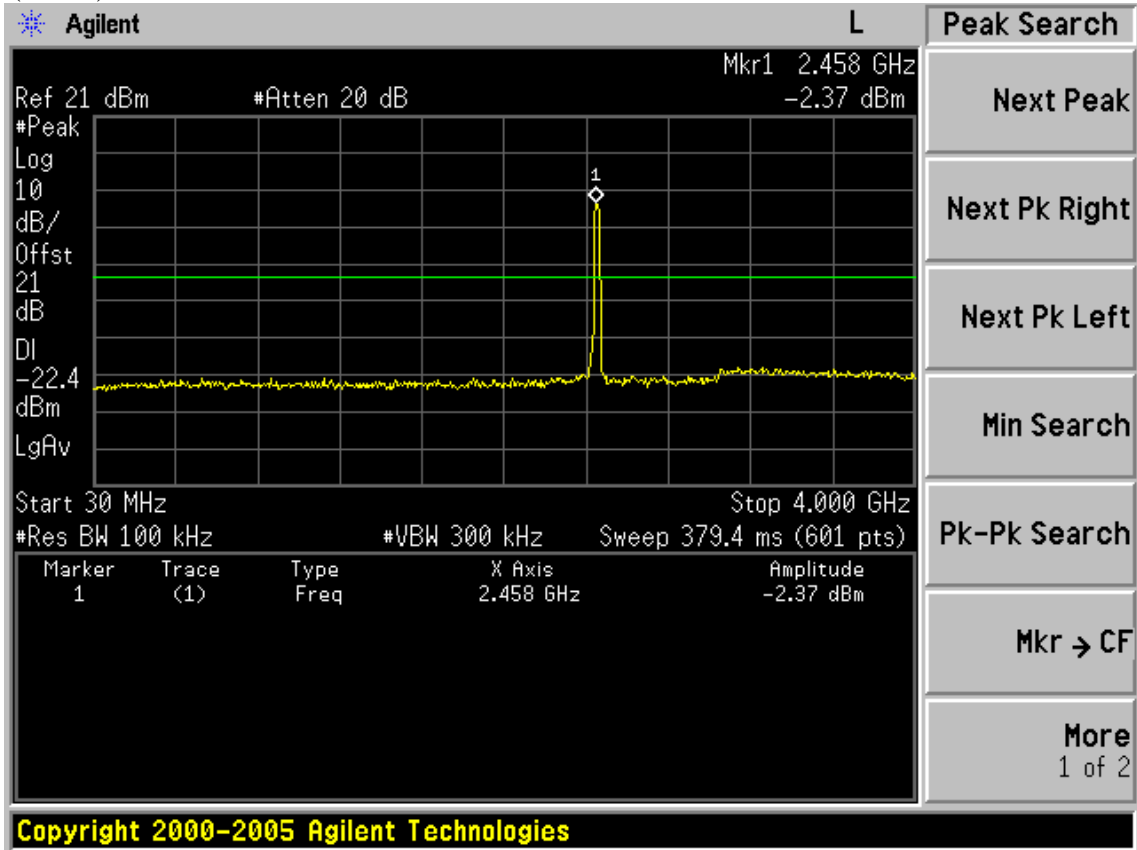


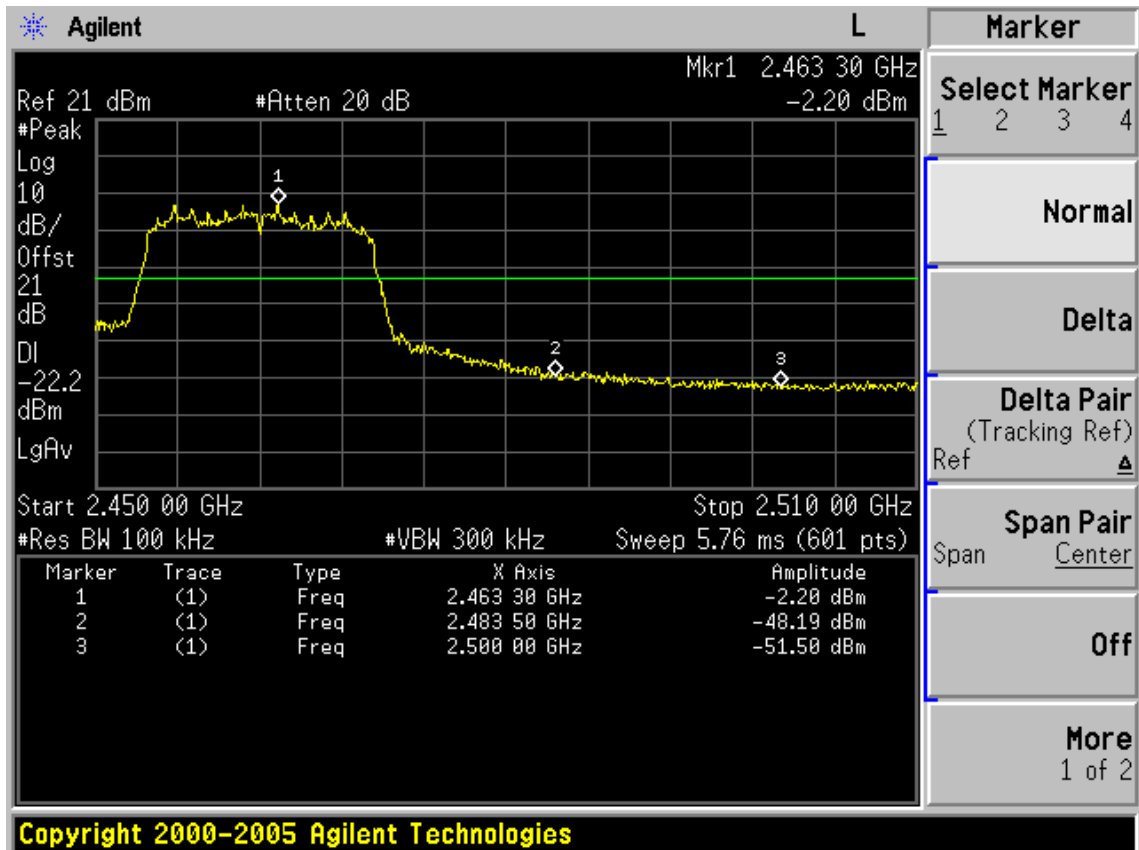
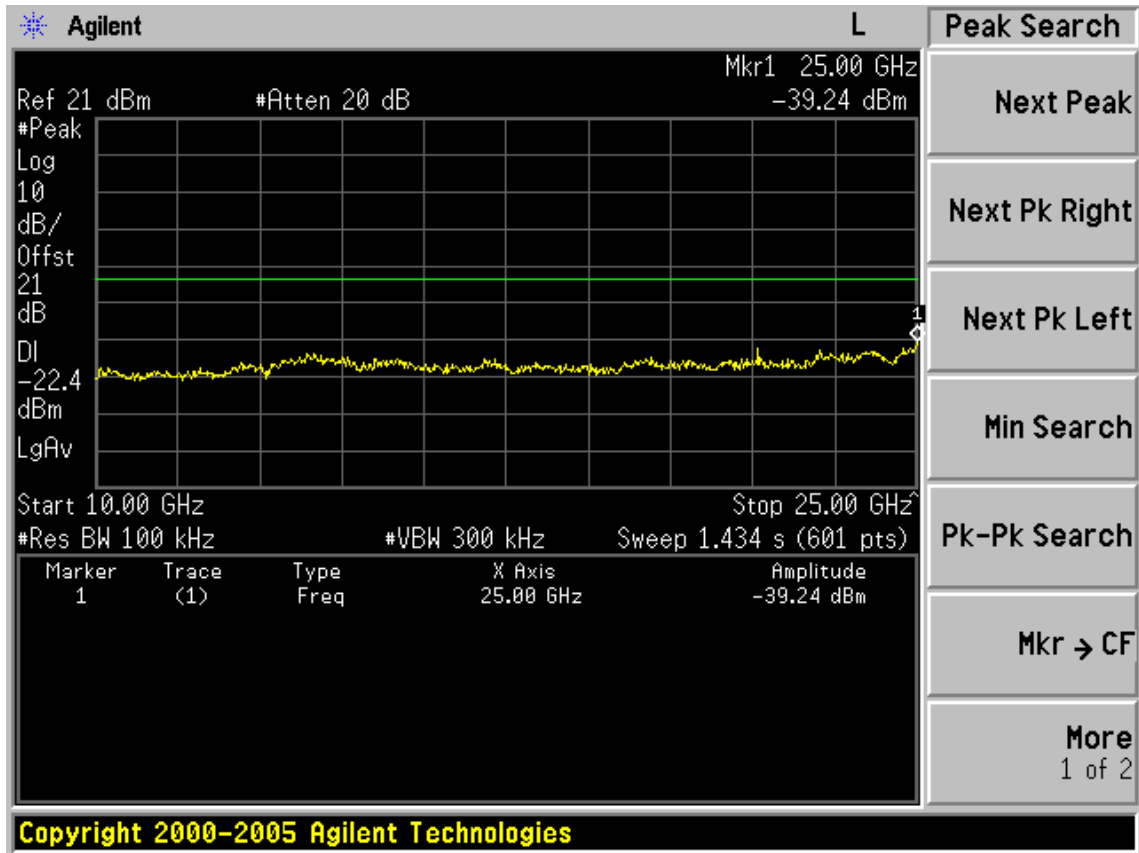
(CH6)



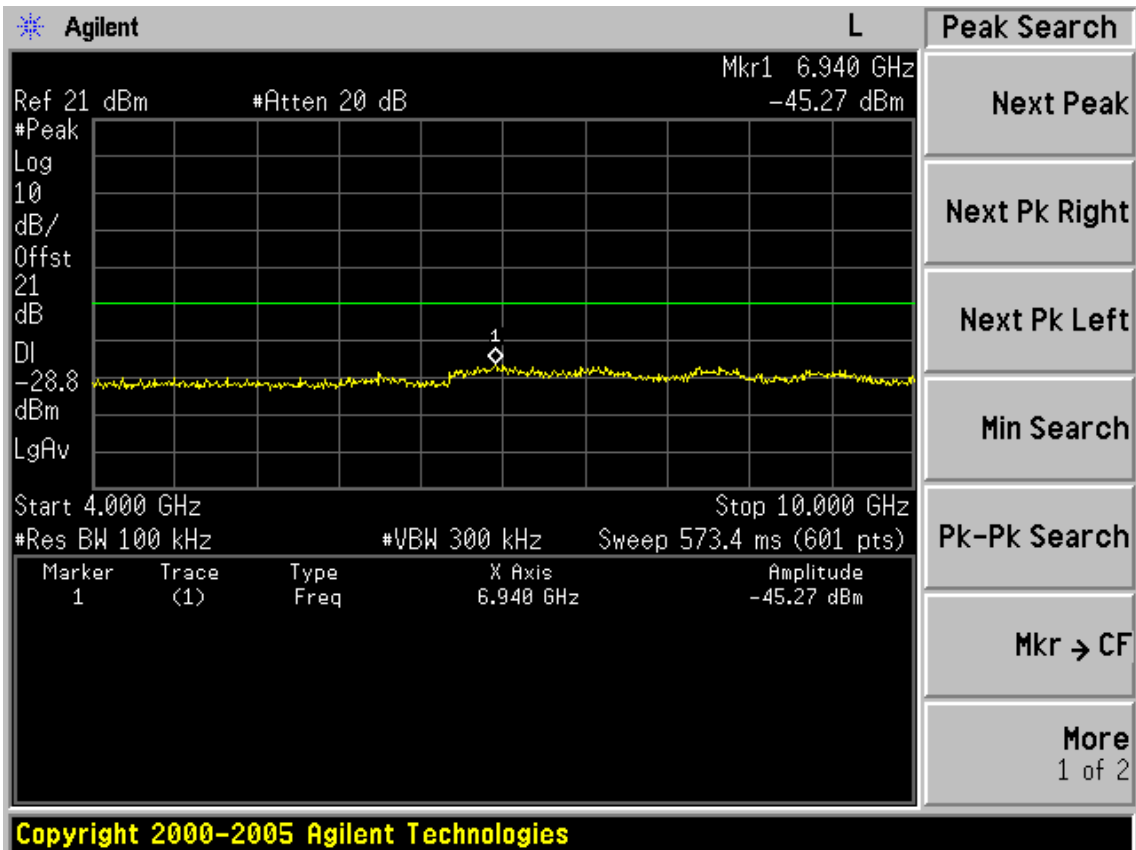
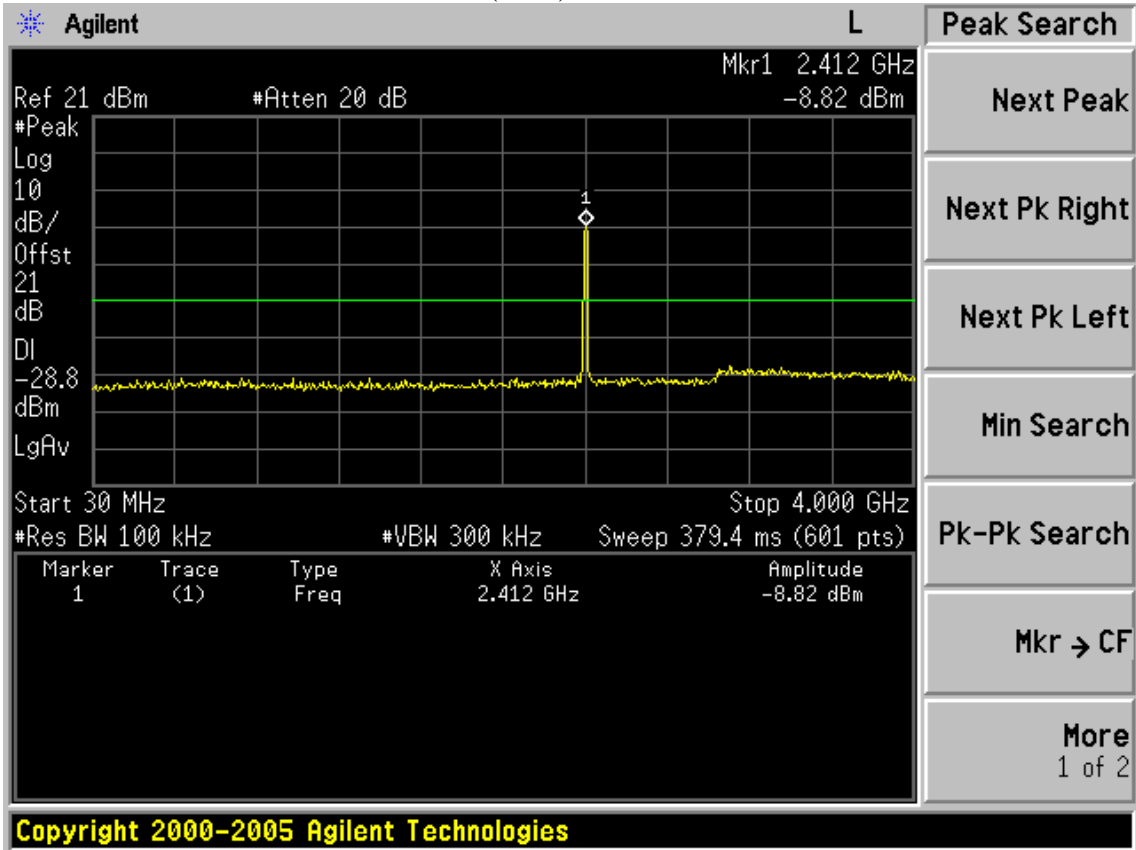


(CH11)

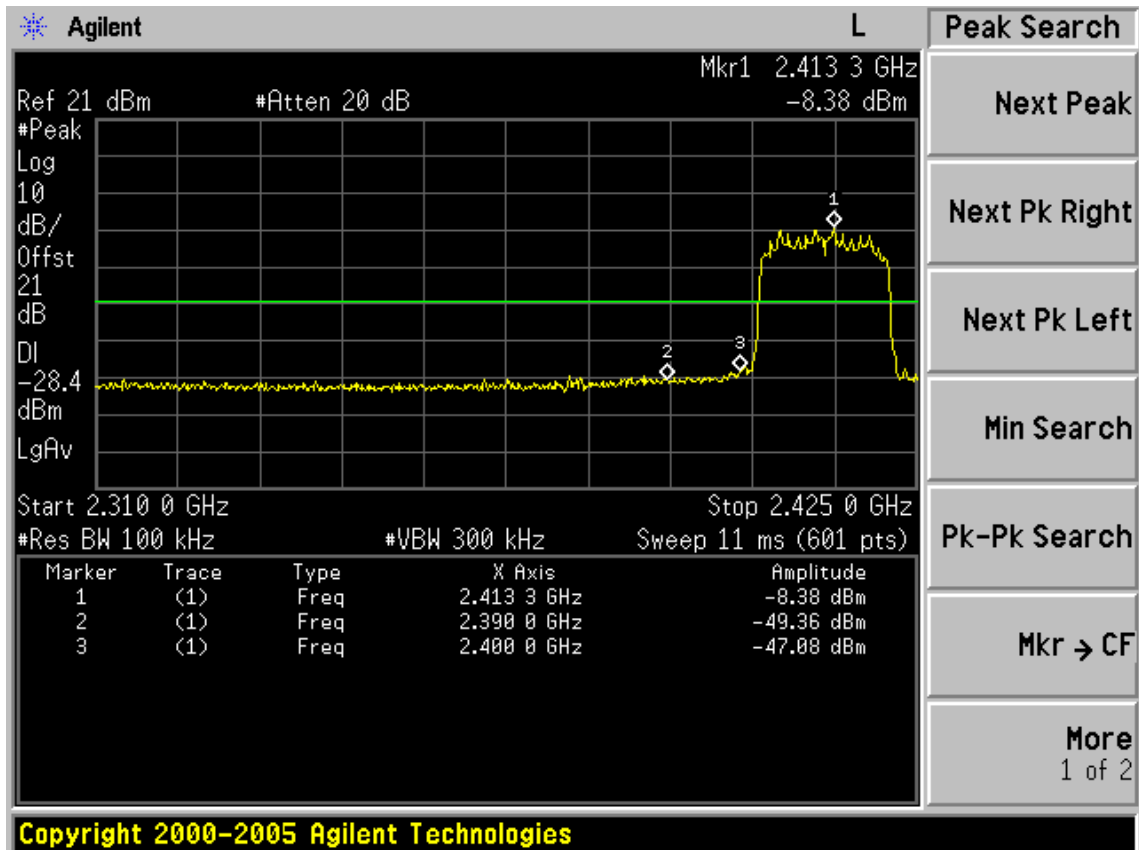
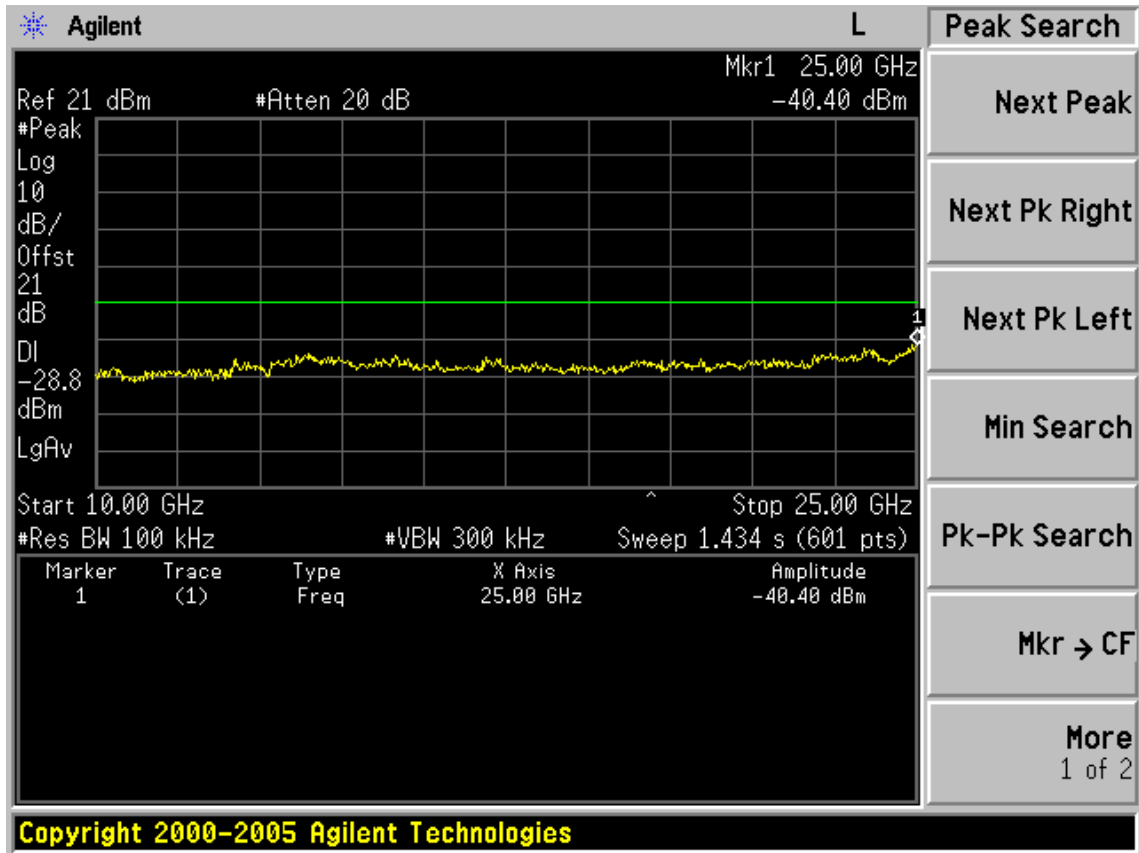


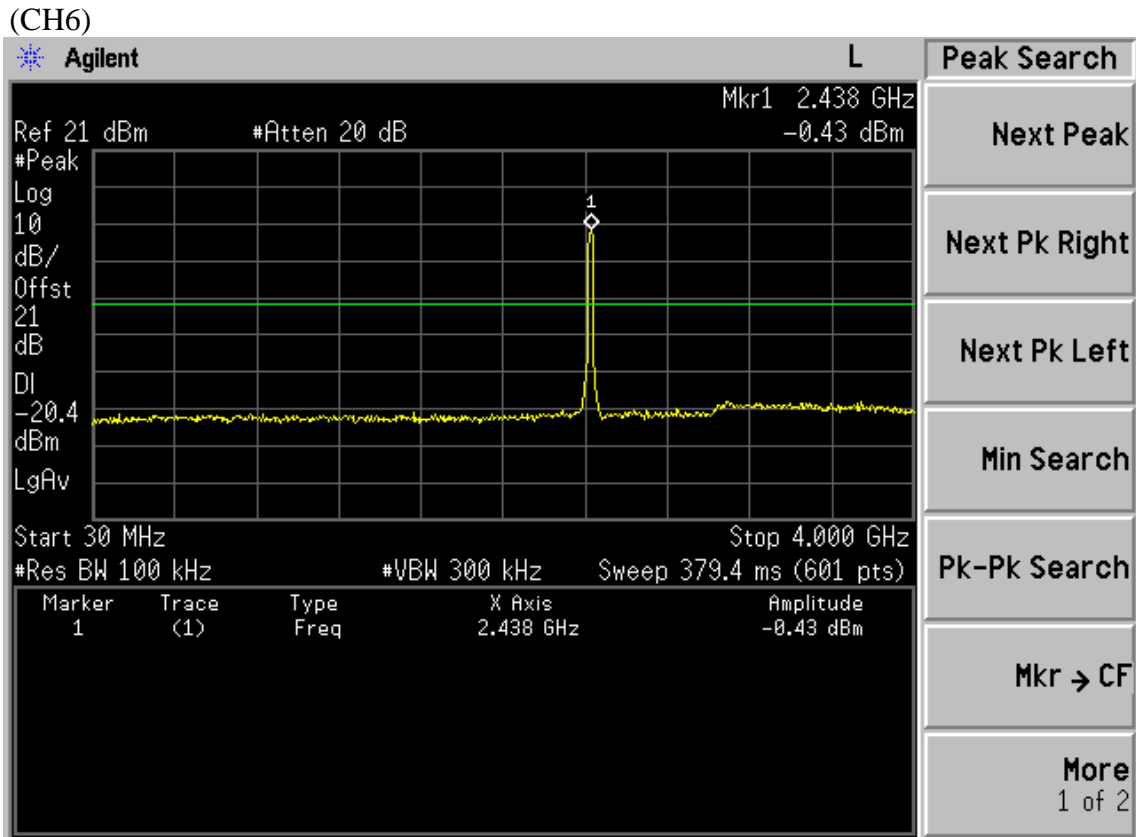


Test Mode: IEEE 802.11n HT20 TX (CH1)

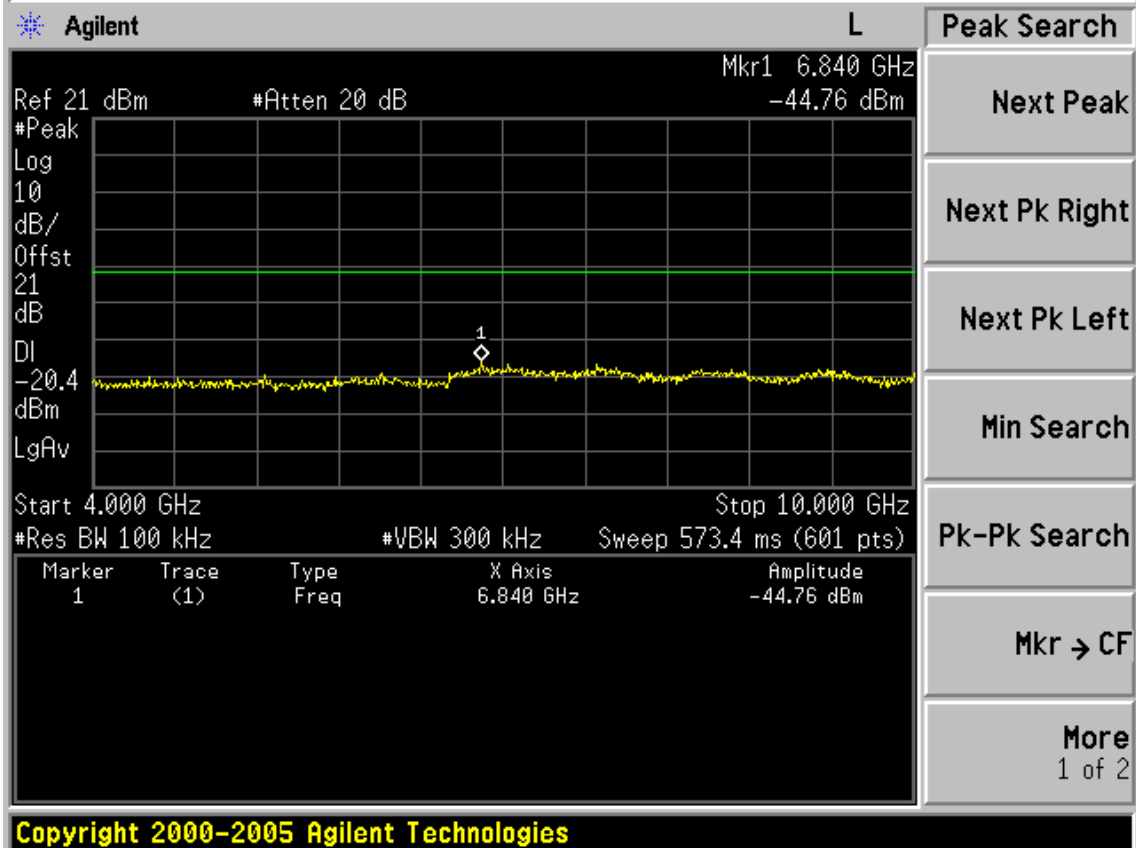




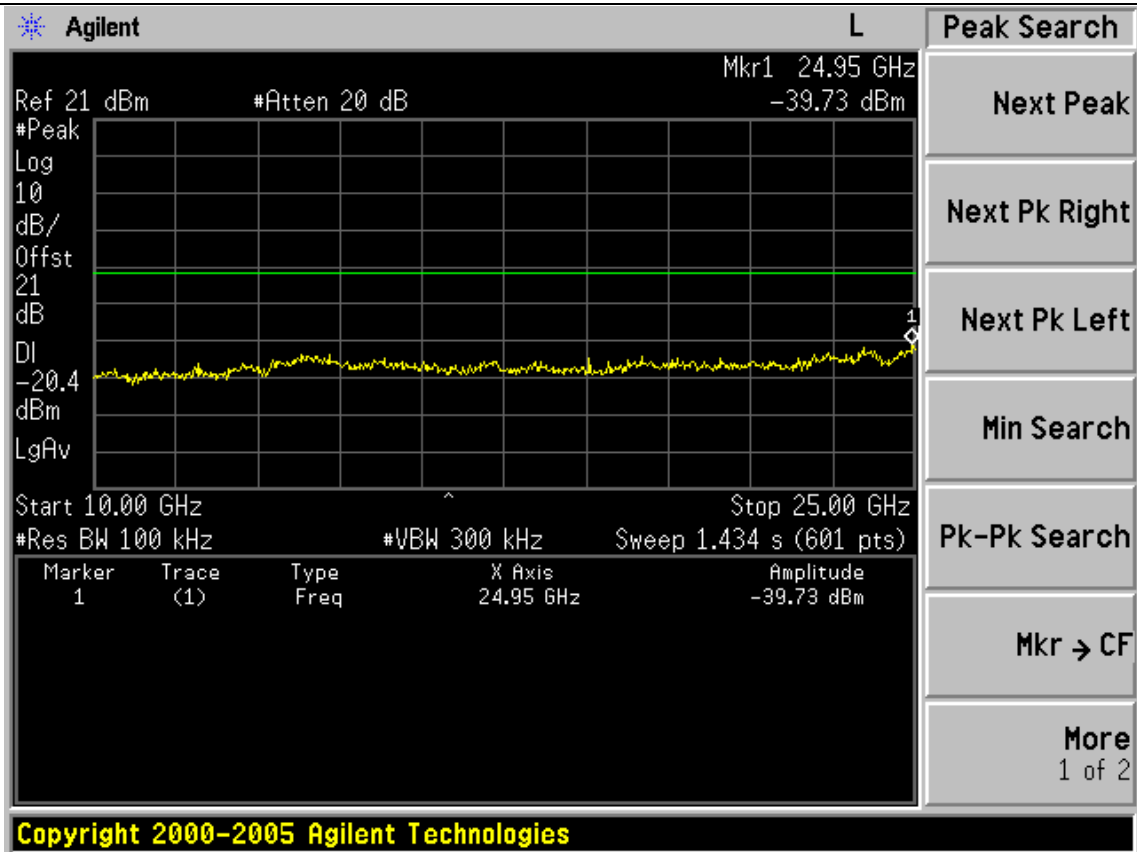




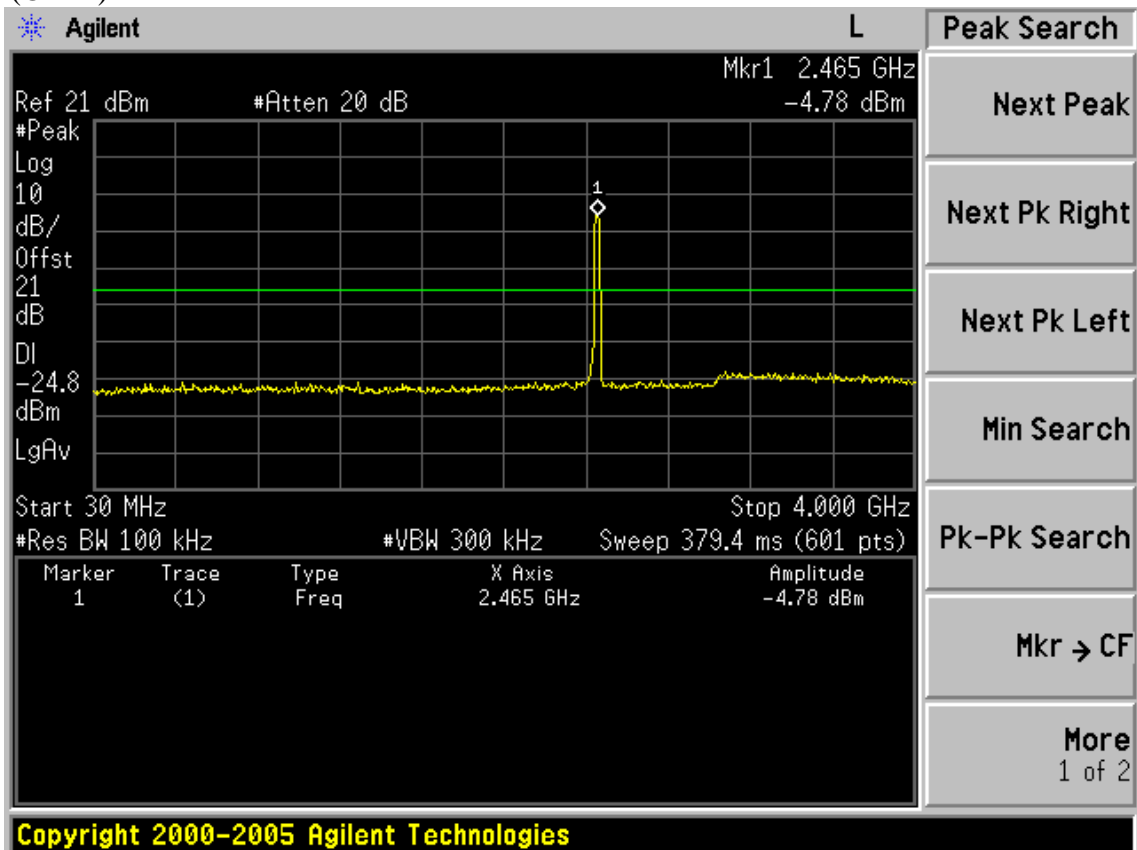
Copyright 2000-2005 Agilent Technologies

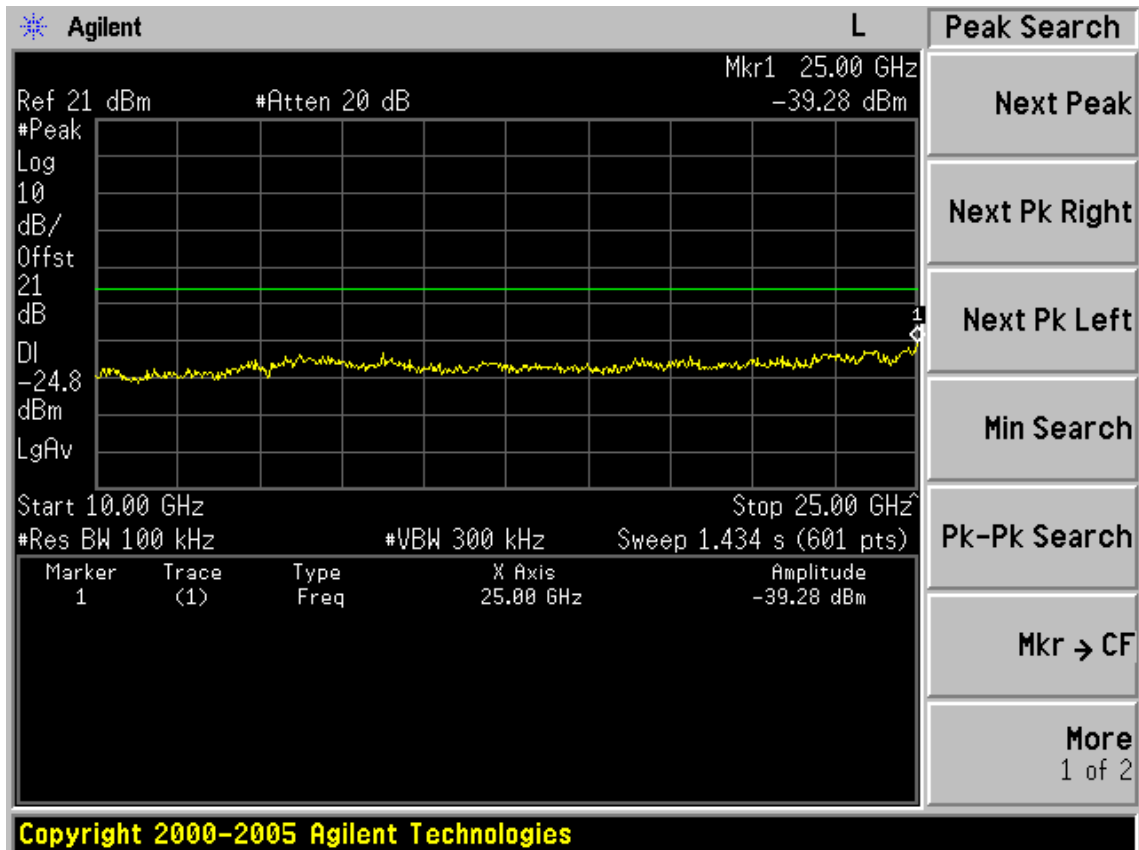
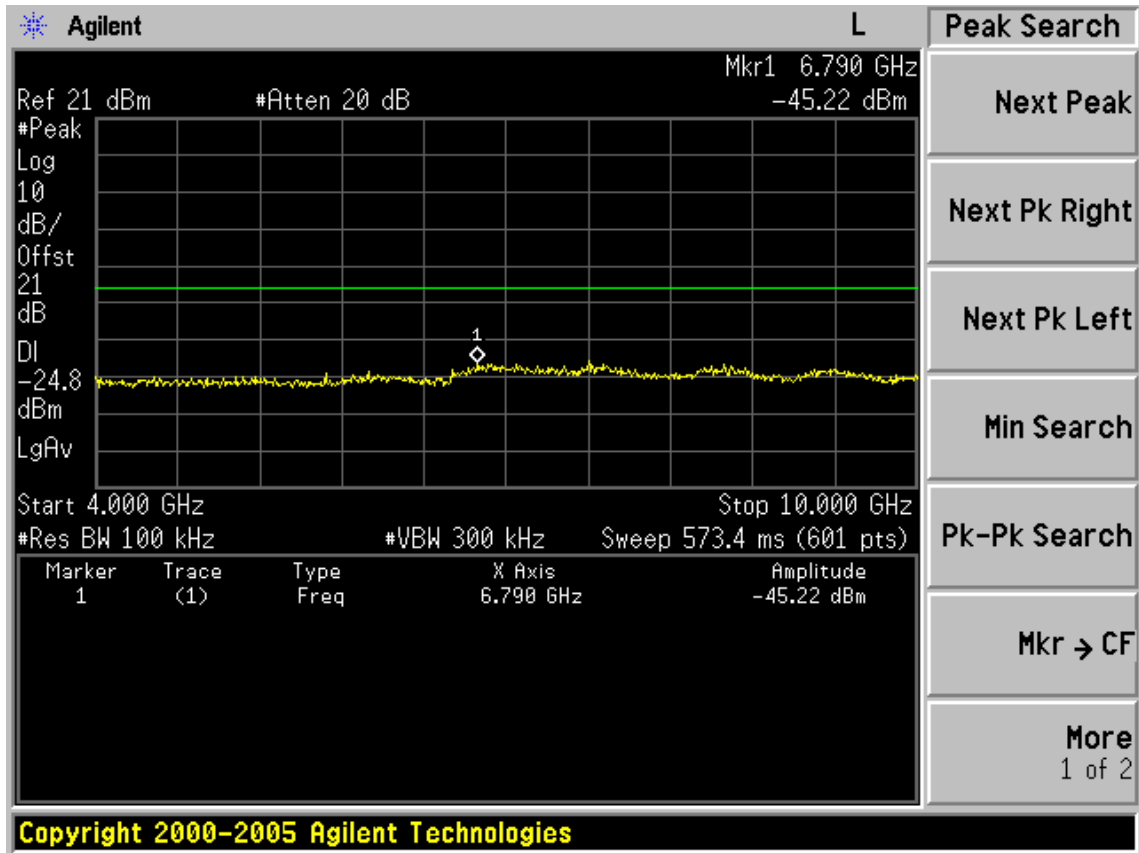


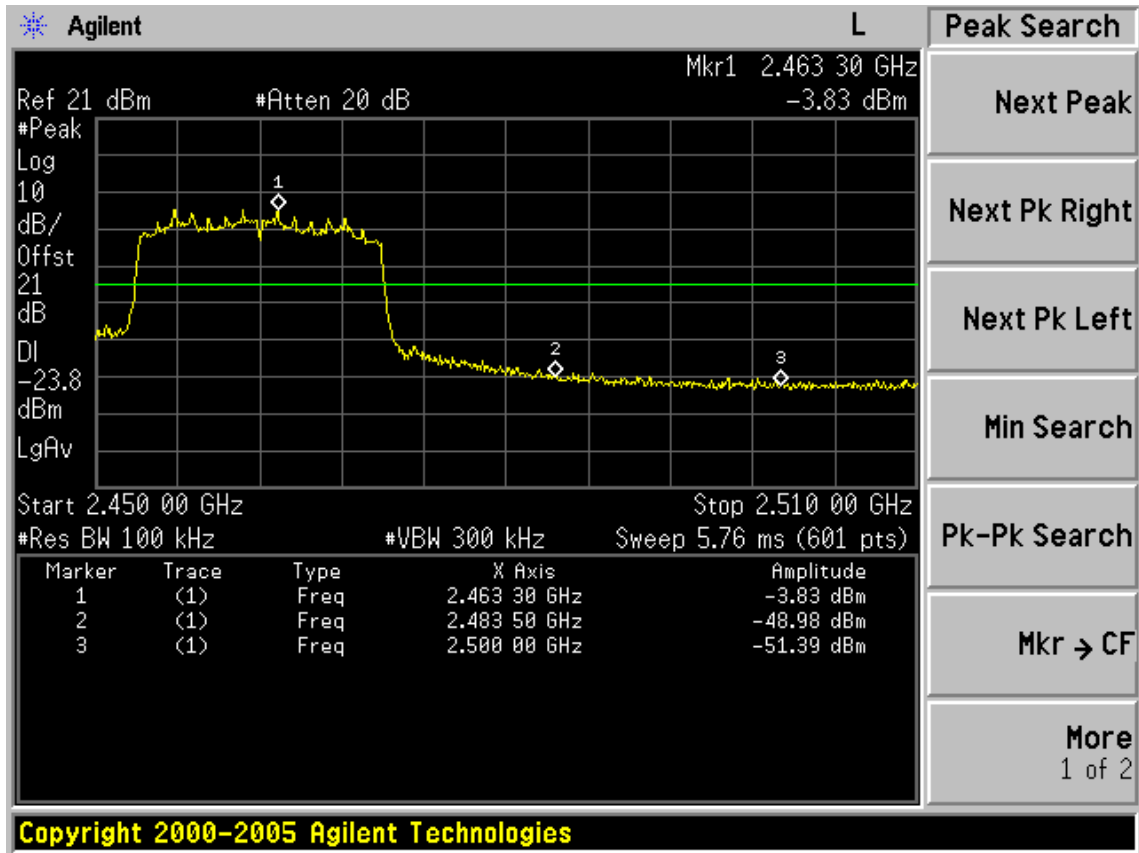
Copyright 2000-2005 Agilent Technologies



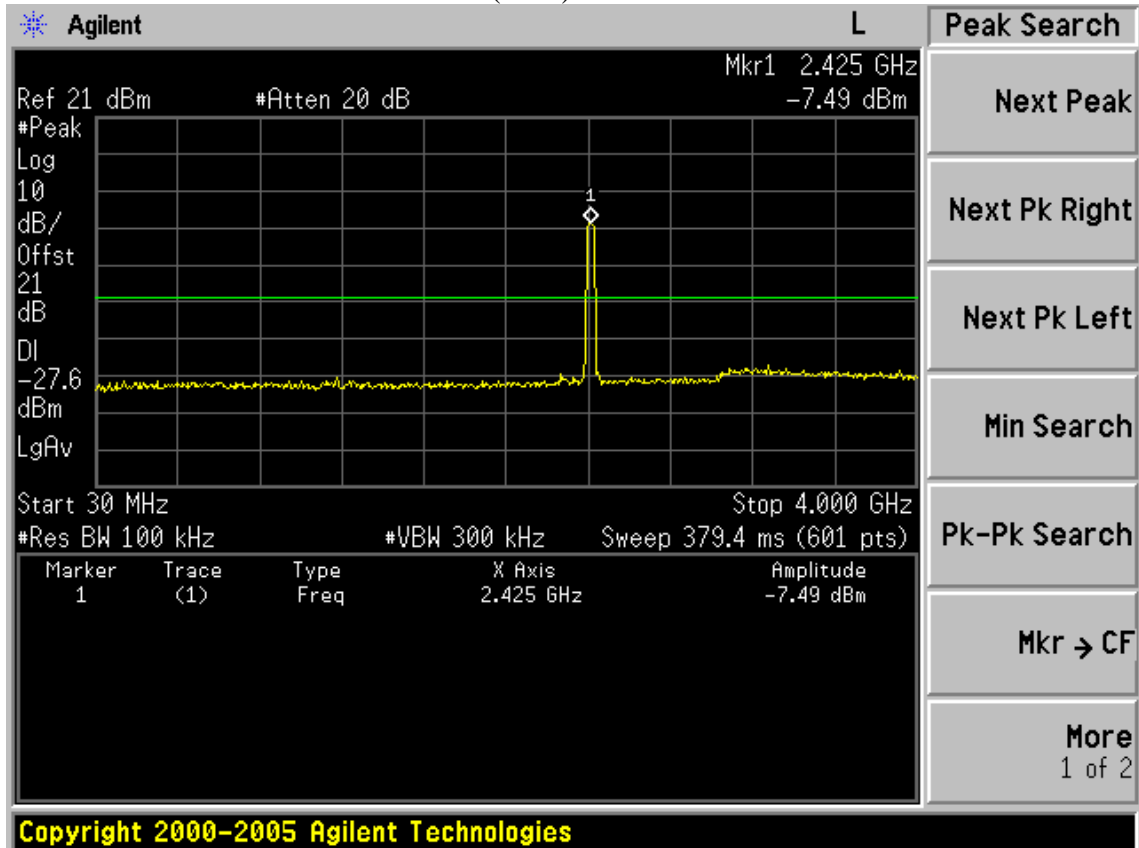
(CH11)

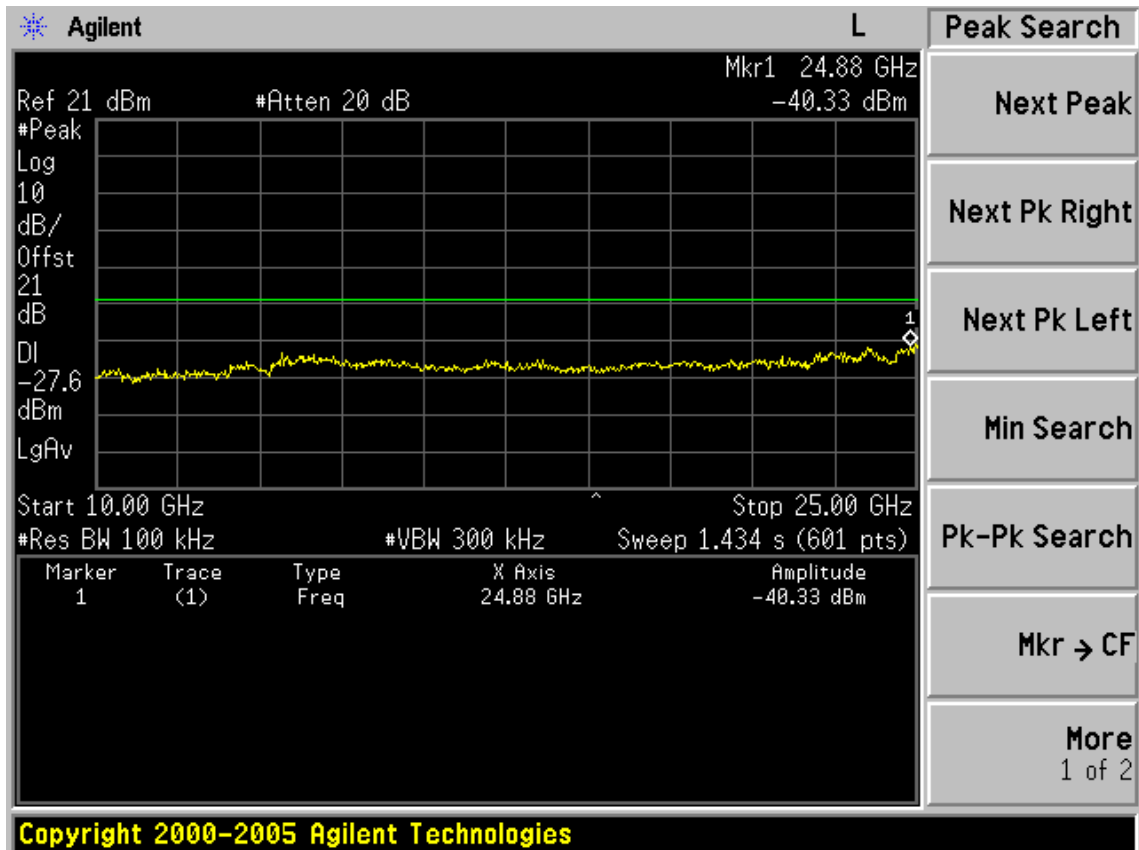
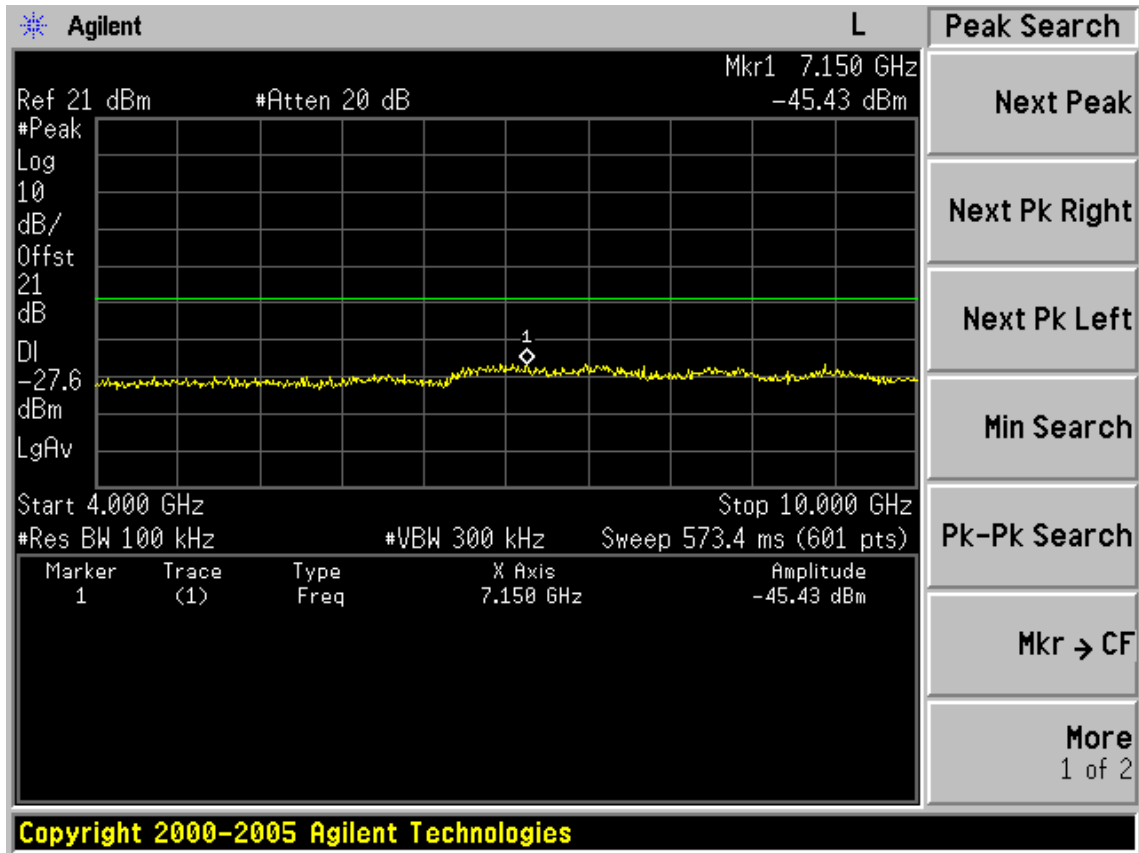


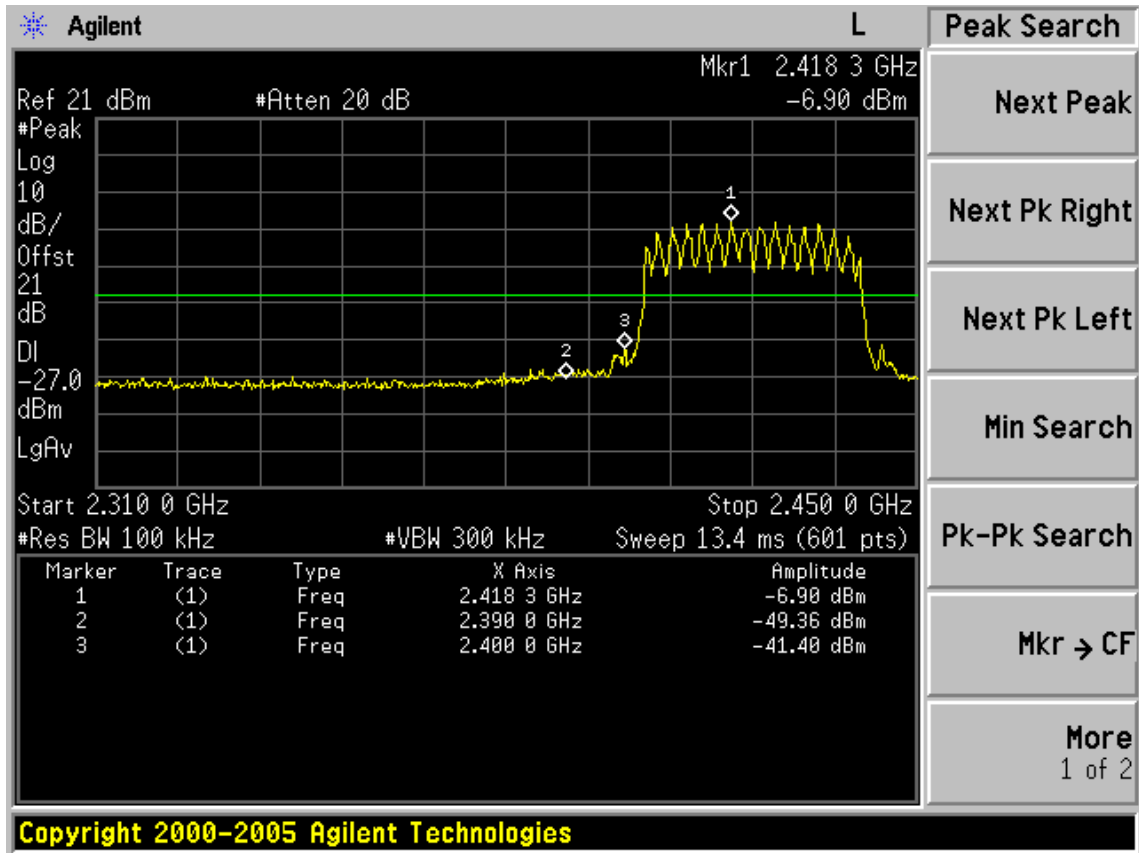




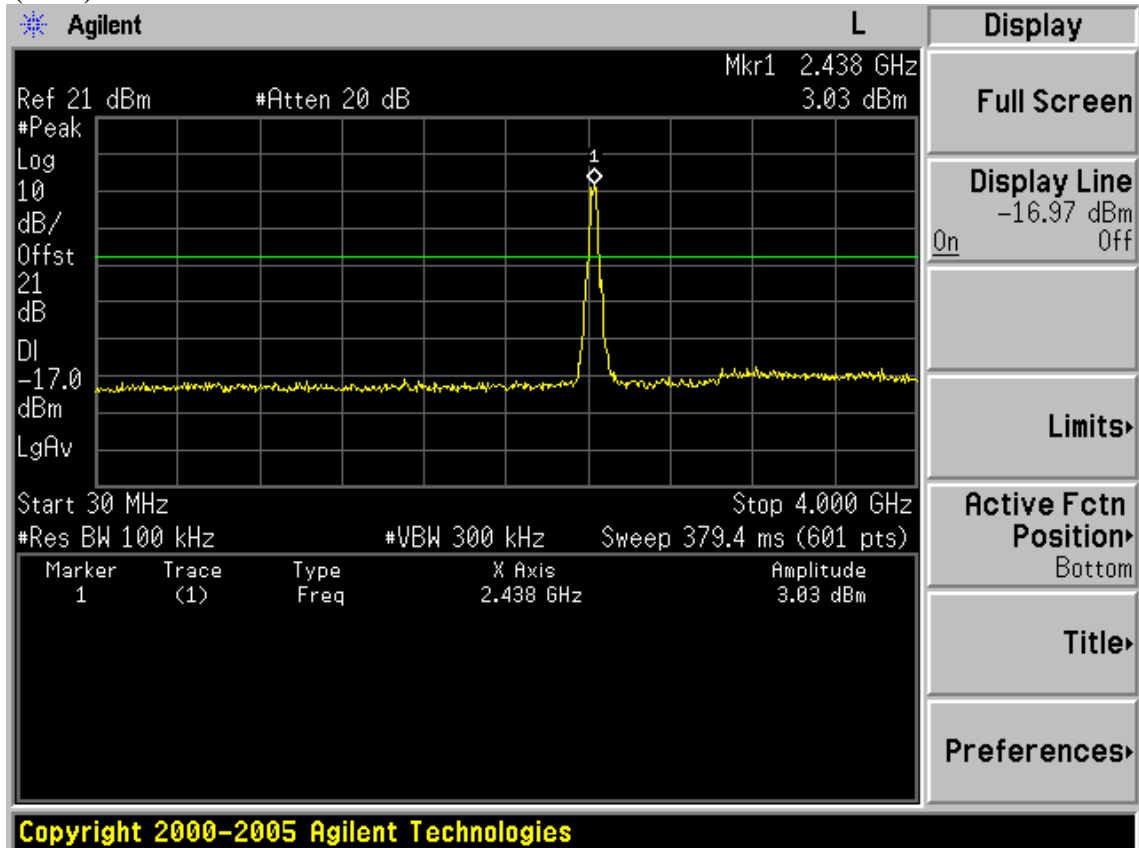
Test Mode: IEEE 802.11n HT40 TX (CH3)

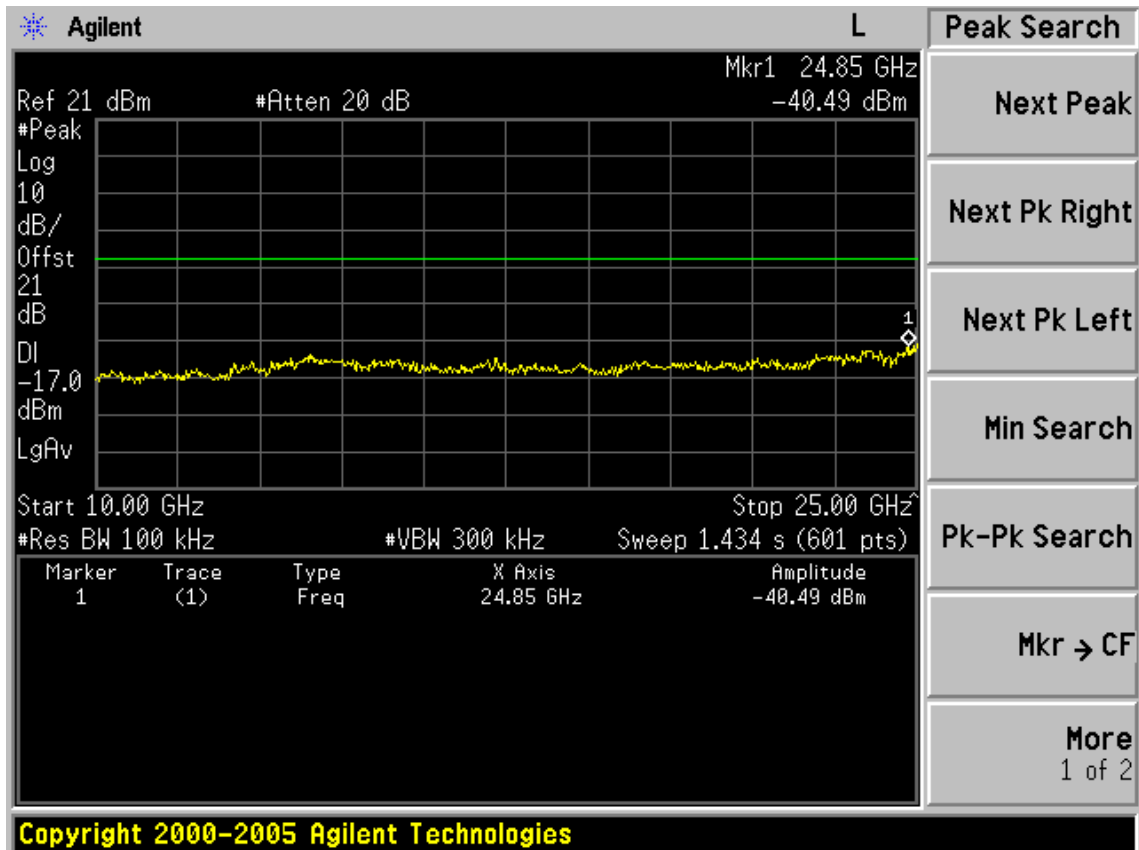
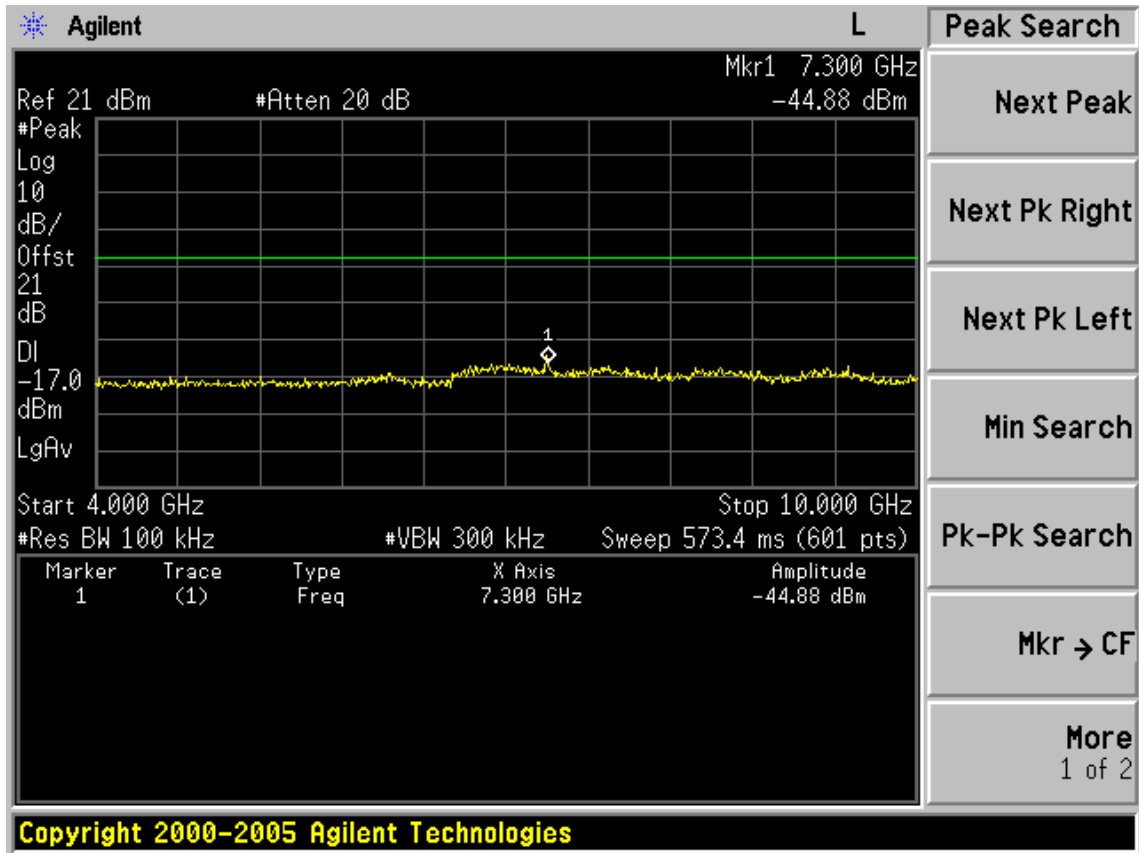




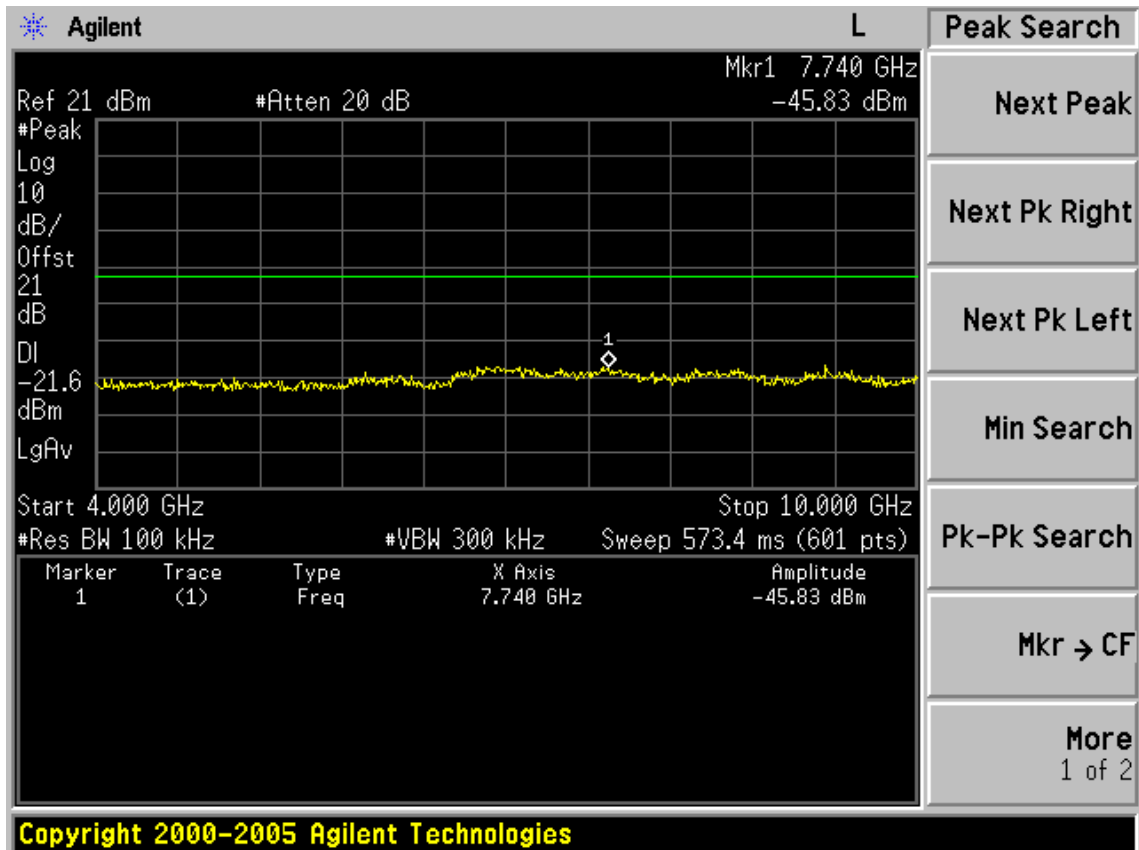
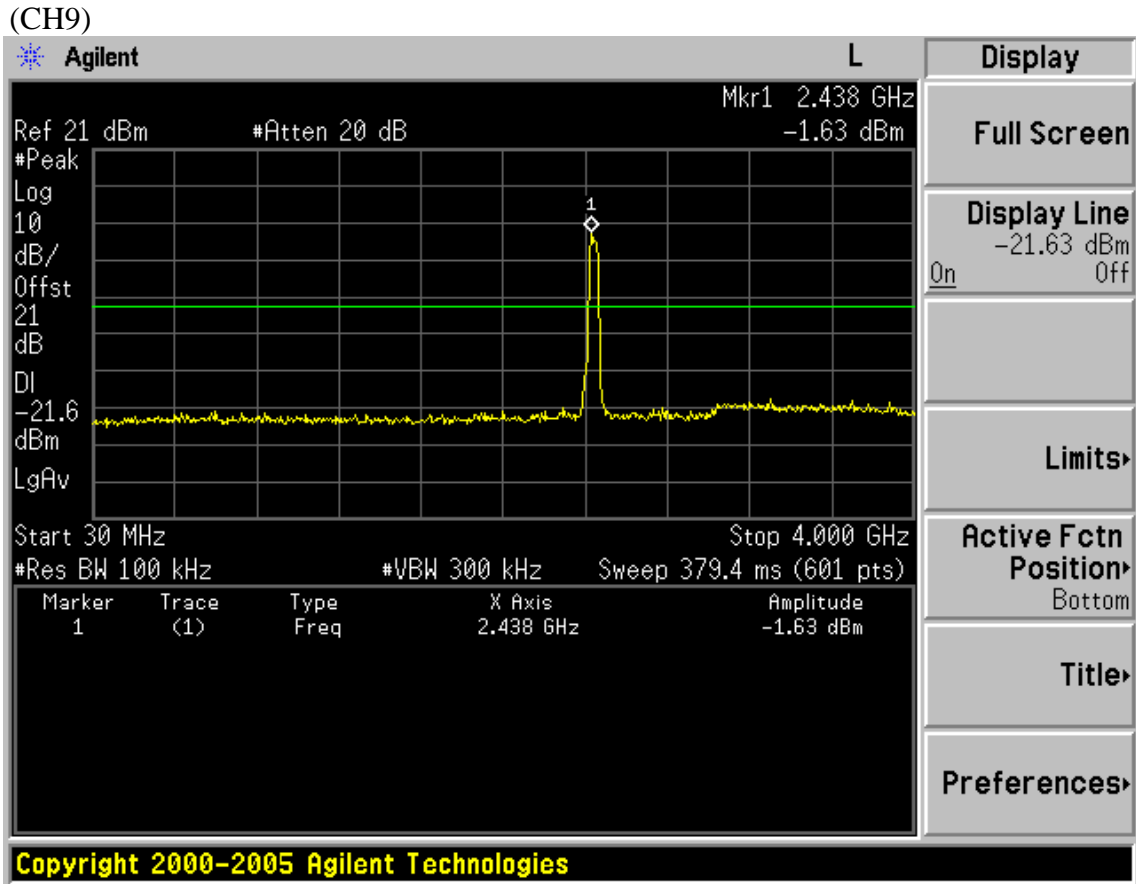


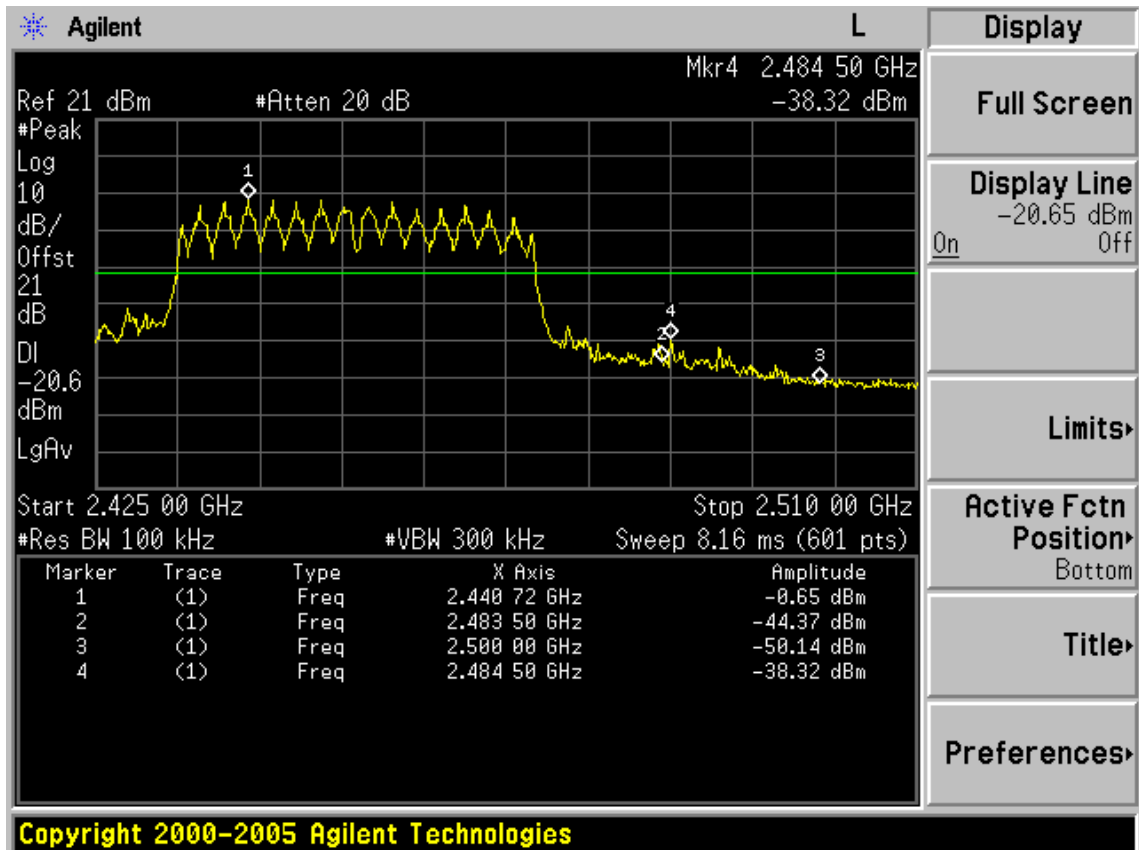
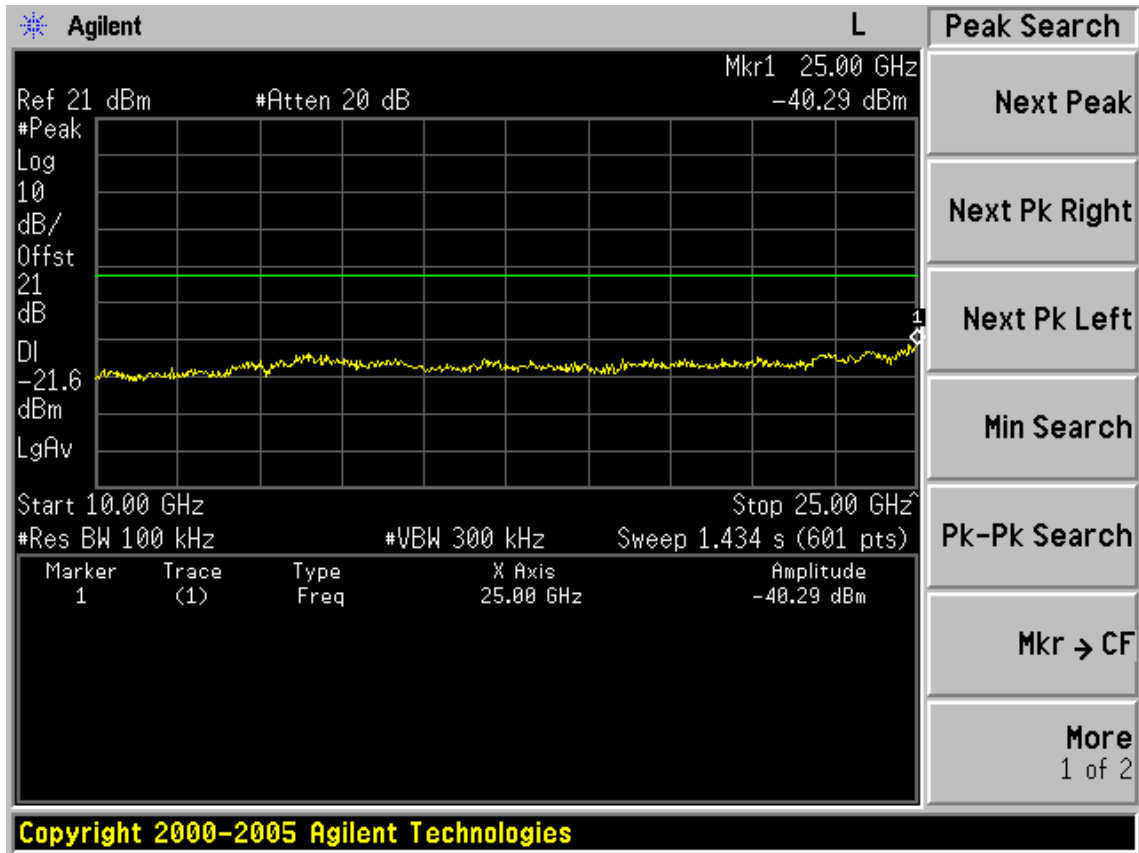
(CH6)











## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 10	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May.08, 10	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May.08, 10	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May.08, 10	1 Year

### 6.2. Limit

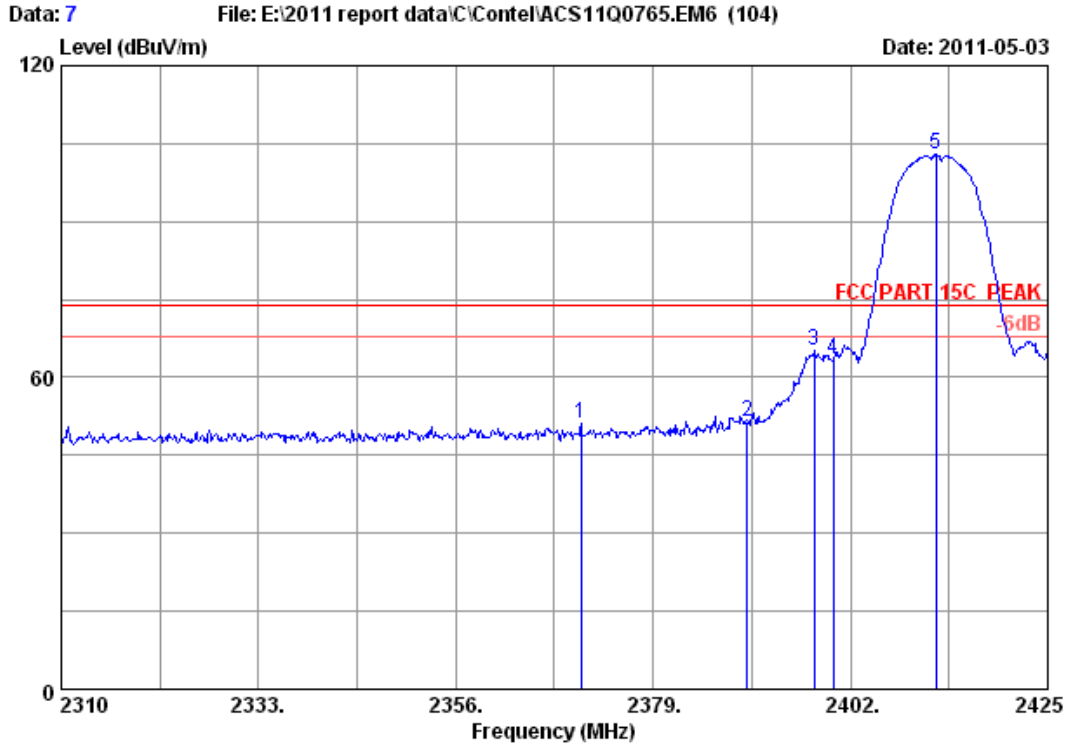
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

### 6.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
  - (a) PEAK: RBW=1MHz; VBW=3MHz ;Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz ;VBW=10Hz ; Sweep=AUTO

### 6.4. Test Results

Pass (The testing data was attached in the next pages.)

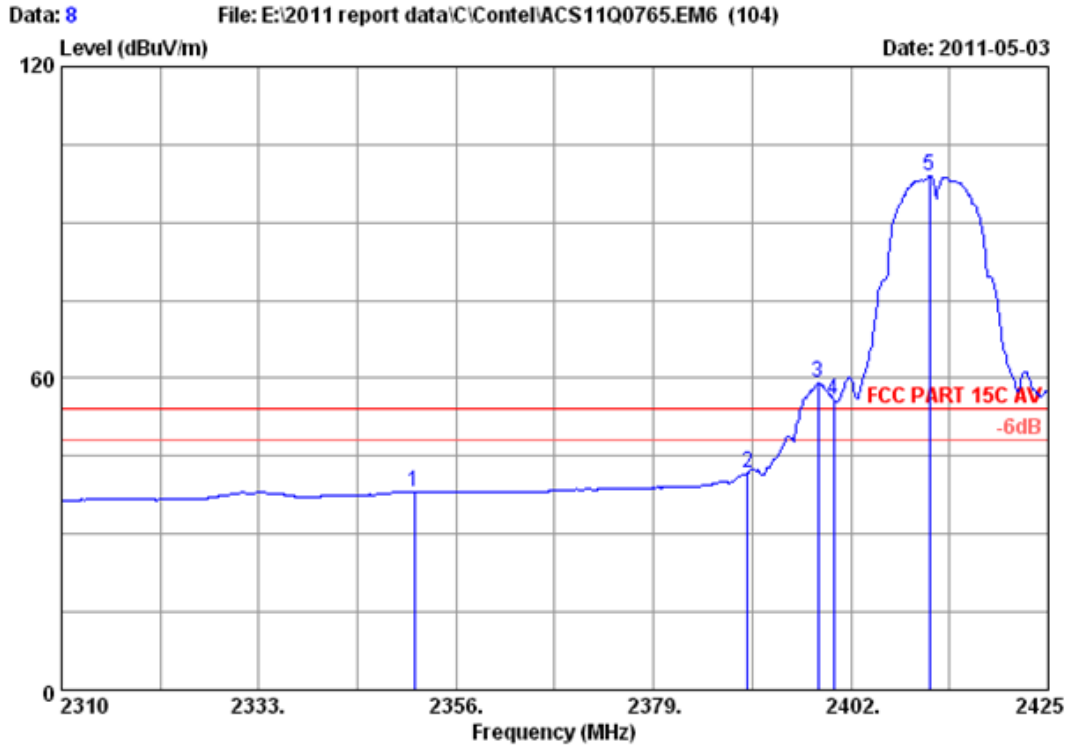


Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 3115(O911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2370.605	29.43	7.35	36.62	51.00	51.16	74.00	22.84	Peak
2	2390.000	29.44	7.39	36.62	51.25	51.46	74.00	22.54	Peak
3	2397.745	29.44	7.39	36.62	64.88	65.09	74.00	8.91	Peak
4	2400.000	29.44	7.43	36.62	63.27	63.52	74.00	10.48	Peak
5	2412.005	29.45	7.43	36.62	102.69	102.95	74.00	-28.95	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

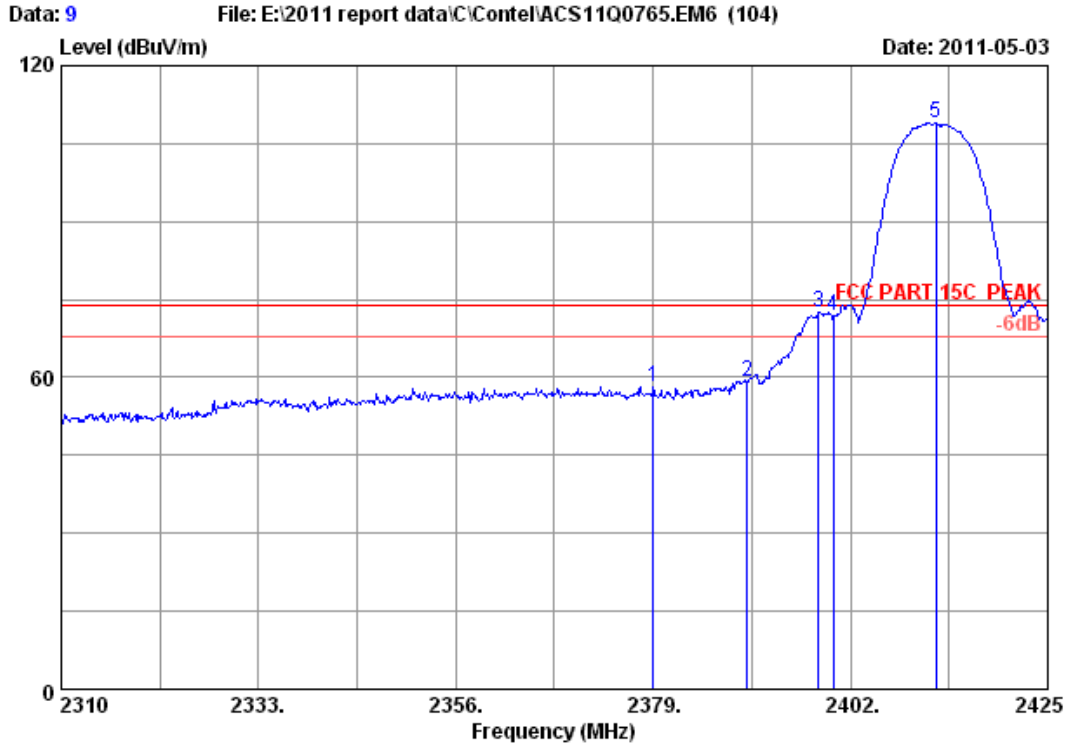


Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2351.170	29.41	7.31	36.63	38.14	38.23	54.00	15.77	Average
2	2390.000	29.44	7.39	36.62	41.58	41.79	54.00	12.21	Average
3	2398.205	29.44	7.39	36.62	58.94	59.15	54.00	-5.15	Average
4	2400.000	29.44	7.43	36.62	55.52	55.77	54.00	-1.77	Average
5	2411.200	29.45	7.43	36.62	98.76	99.02	54.00	-45.02	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

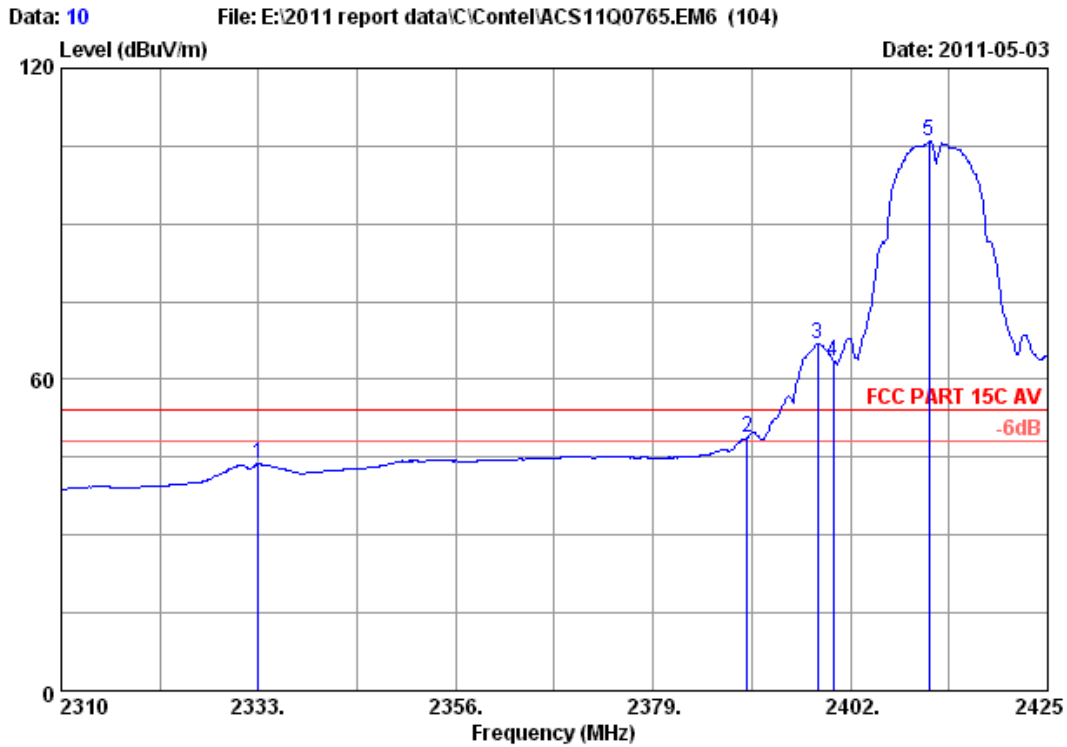


Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2379.000	29.43	7.39	36.62	58.10	58.30	74.00	15.70	Peak
2	2390.000	29.44	7.39	36.62	58.84	59.05	74.00	14.95	Peak
3	2398.320	29.44	7.39	36.62	72.47	72.68	74.00	1.32	Peak
4	2400.000	29.44	7.43	36.62	71.73	71.98	74.00	2.02	Peak
5	2412.005	29.45	7.43	36.62	108.62	108.88	74.00	-34.88	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

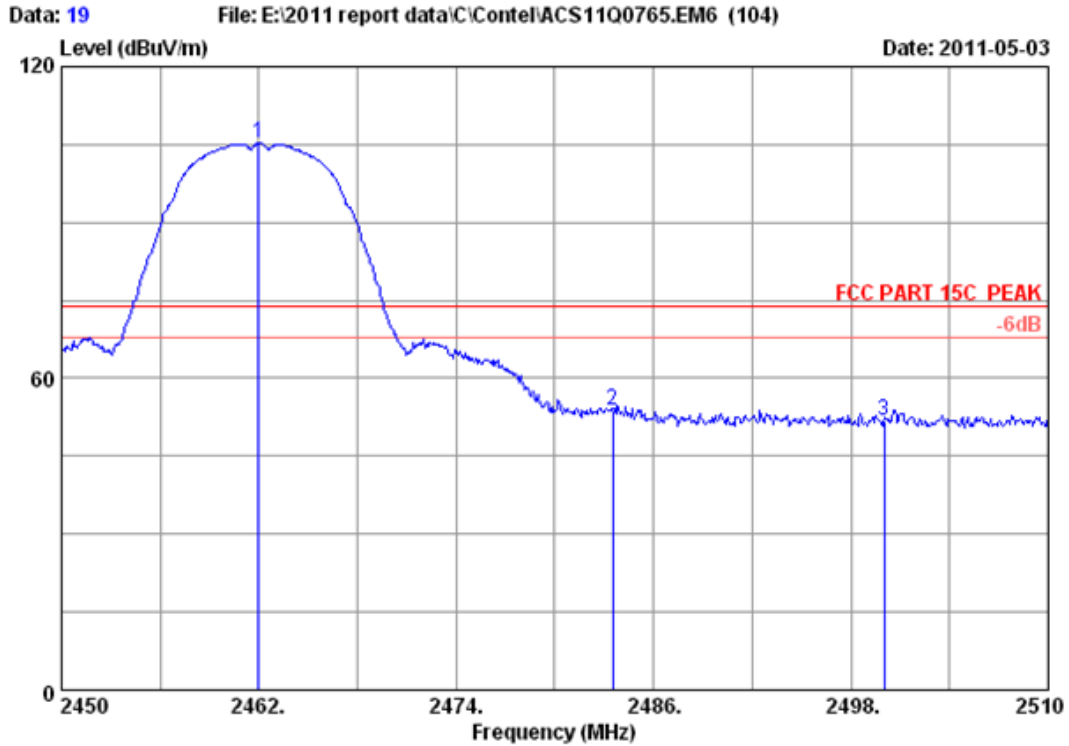


Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.000	29.40	7.27	36.63	43.64	43.68	54.00	10.32	Average
2	2390.000	29.44	7.39	36.62	48.64	48.85	54.00	5.15	Average
3	2398.205	29.44	7.39	36.62	66.78	66.99	54.00	-12.99	Average
4	2400.000	29.44	7.43	36.62	63.30	63.55	54.00	-9.55	Average
5	2411.200	29.45	7.43	36.62	105.57	105.83	54.00	-51.83	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



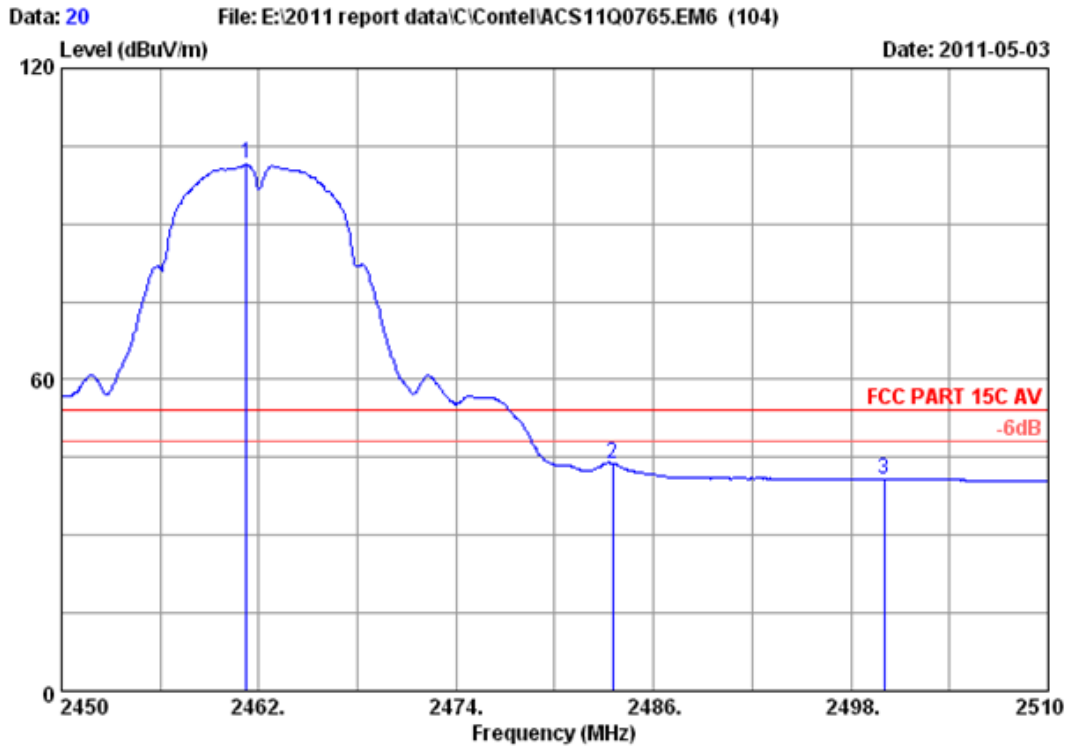
Site no. : 3m Chamber Data no. : 19  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	29.48	7.54	36.61	104.92	105.33	74.00	-31.33	Peak
2	2483.500	29.49	7.58	36.60	53.50	53.97	74.00	20.03	Peak
3	2500.000	29.50	7.62	36.60	51.19	51.71	74.00	22.29	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



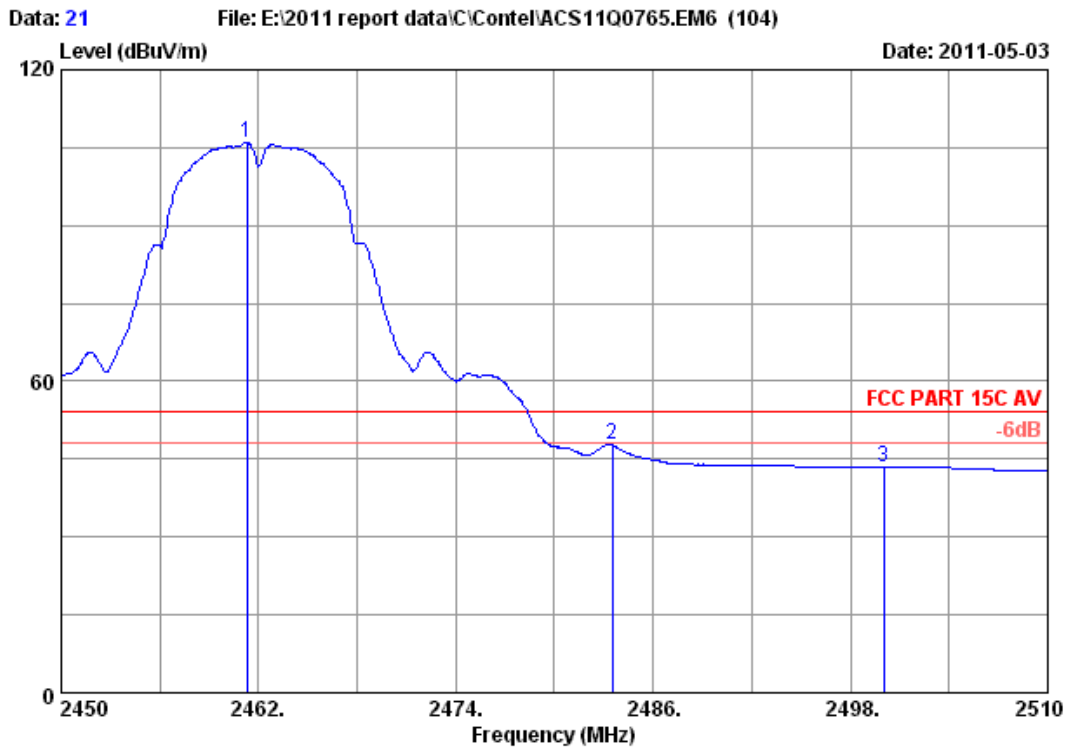


Site no. : 3m Chamber Data no. : 20  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2461.220	29.48	7.54	36.61	101.05	101.46	54.00	-47.46	Average
2	2483.500	29.49	7.58	36.60	43.33	43.80	54.00	10.20	Average
3	2500.000	29.50	7.62	36.60	40.31	40.83	54.00	13.17	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

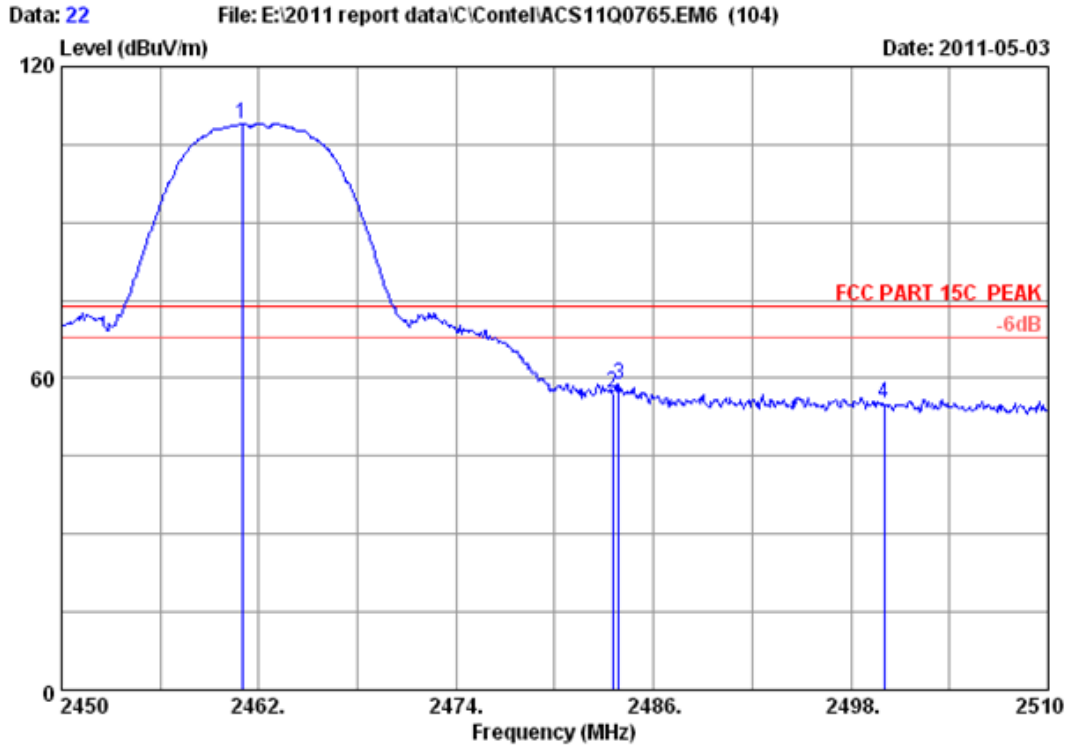


Site no. : 3m Chamber Data no. : 21  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.280	29.48	7.54	36.61	105.56	105.97	54.00	-51.97	Average
2	2483.500	29.49	7.58	36.60	47.26	47.73	54.00	6.27	Average
3	2500.000	29.50	7.62	36.60	43.07	43.59	54.00	10.41	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

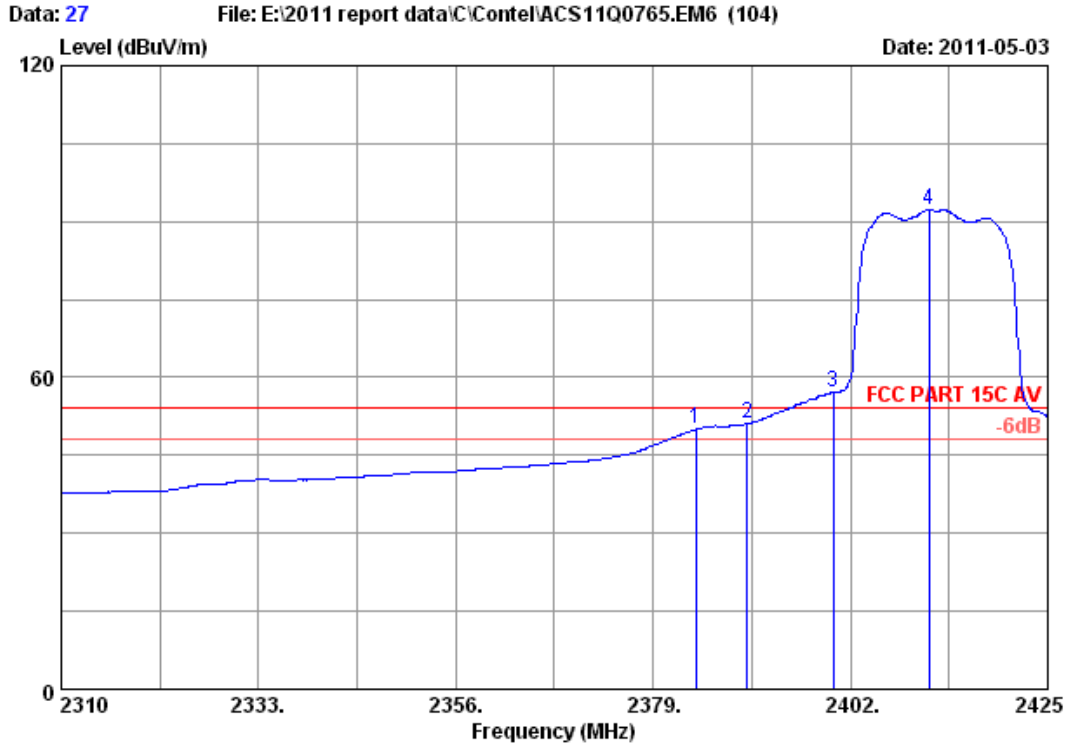


Site no. : 3m Chamber Data no. : 22  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.980	29.48	7.54	36.61	108.63	109.04	74.00	-35.04	Peak
2	2483.500	29.49	7.58	36.60	56.80	57.27	74.00	16.73	Peak
3	2483.900	29.49	7.58	36.60	58.40	58.87	74.00	15.13	Peak
4	2500.000	29.50	7.62	36.60	54.48	55.00	74.00	19.00	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

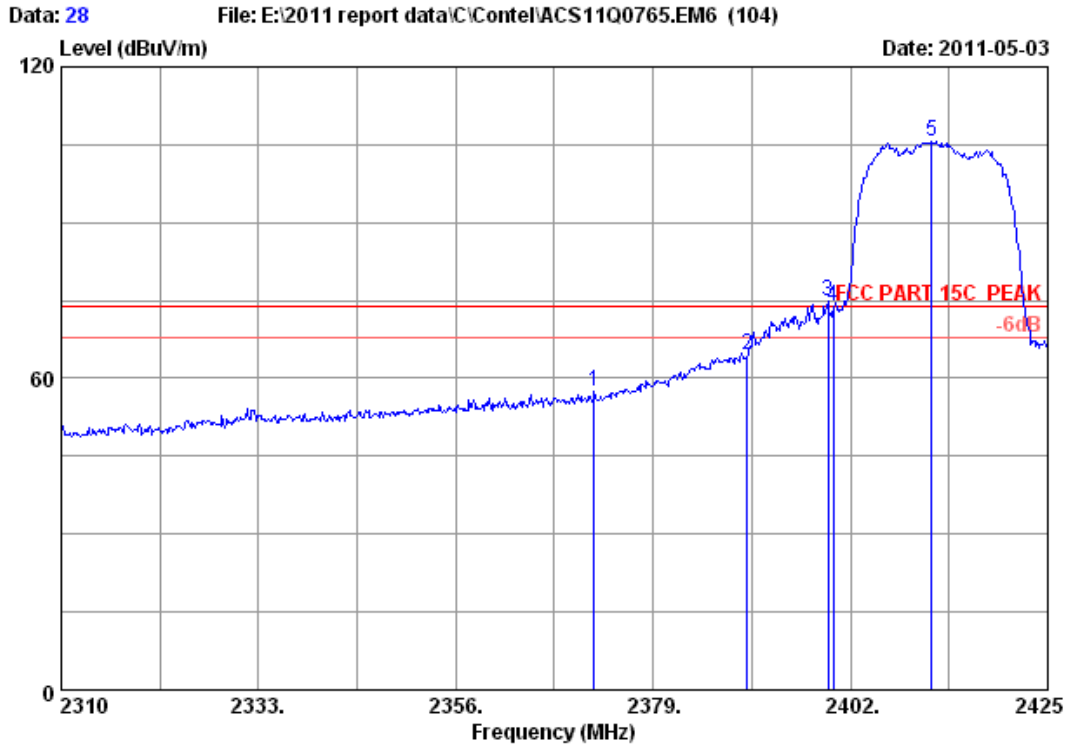


Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2383.945	29.43	7.39	36.62	49.87	50.07	54.00	3.93	Average
2	2390.000	29.44	7.39	36.62	50.89	51.10	54.00	2.90	Average
3	2400.000	29.44	7.43	36.62	56.98	57.23	54.00	-3.23	Average
4	2411.200	29.45	7.43	36.62	92.09	92.35	54.00	-38.35	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

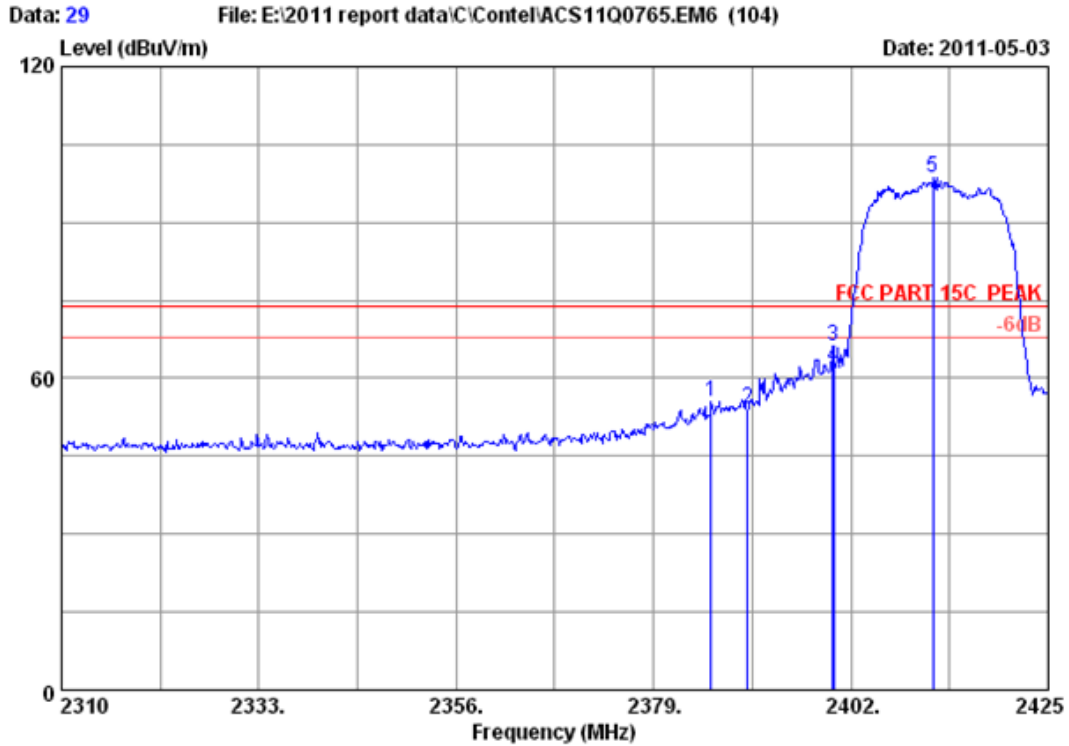


Site no. : 3m Chamber Data no. : 28  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Factor	Cable loss	Amp. Factor	Reading	Emission Level	Limits	Margin	Remark
Freq. (MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	29.43	7.35	36.62	57.32	57.48	74.00	16.52	Peak
2	29.44	7.39	36.62	64.21	64.42	74.00	9.58	Peak
3	29.44	7.43	36.62	74.65	74.90	74.00	-0.90	Peak
4	29.44	7.43	36.62	73.58	73.83	74.00	0.17	Peak
5	29.45	7.43	36.62	105.25	105.51	74.00	-31.51	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

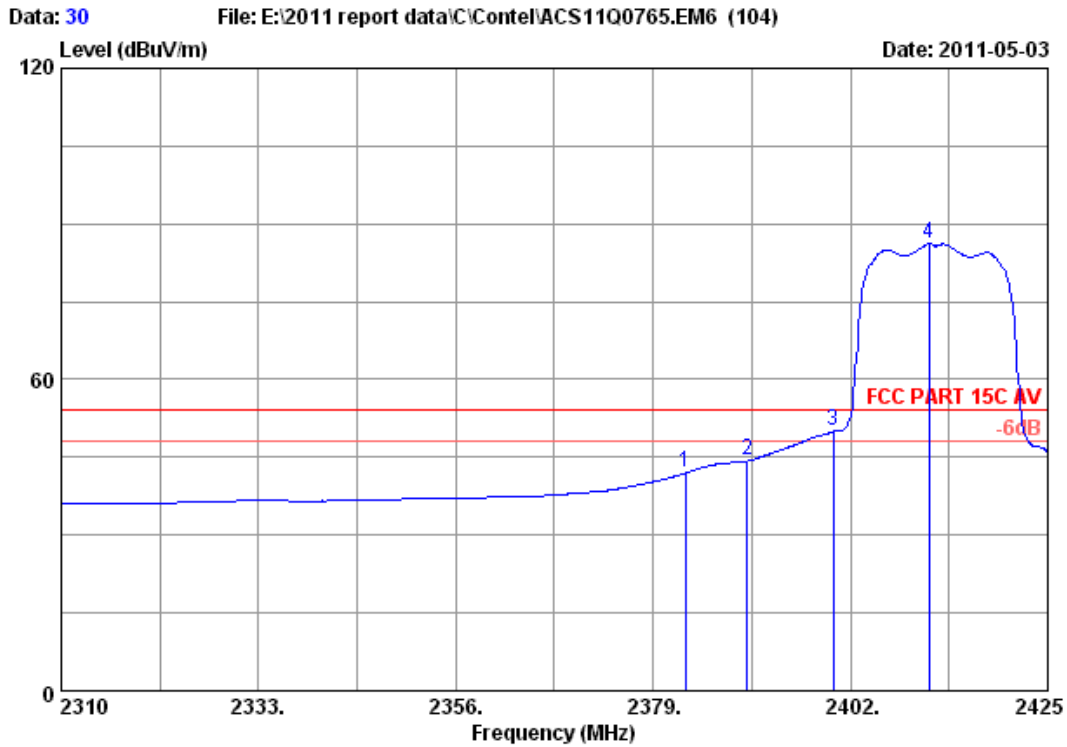


Site no. : 3m Chamber Data no. : 29  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2385.670	29.44	7.39	36.62	55.42	55.63	74.00	18.37	Peak
2	2390.000	29.44	7.39	36.62	53.92	54.13	74.00	19.87	Peak
3	2399.930	29.44	7.43	36.62	65.96	66.21	74.00	7.79	Peak
4	2400.000	29.44	7.43	36.62	62.01	62.26	74.00	11.74	Peak
5	2411.545	29.45	7.43	36.62	98.33	98.59	74.00	-24.59	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

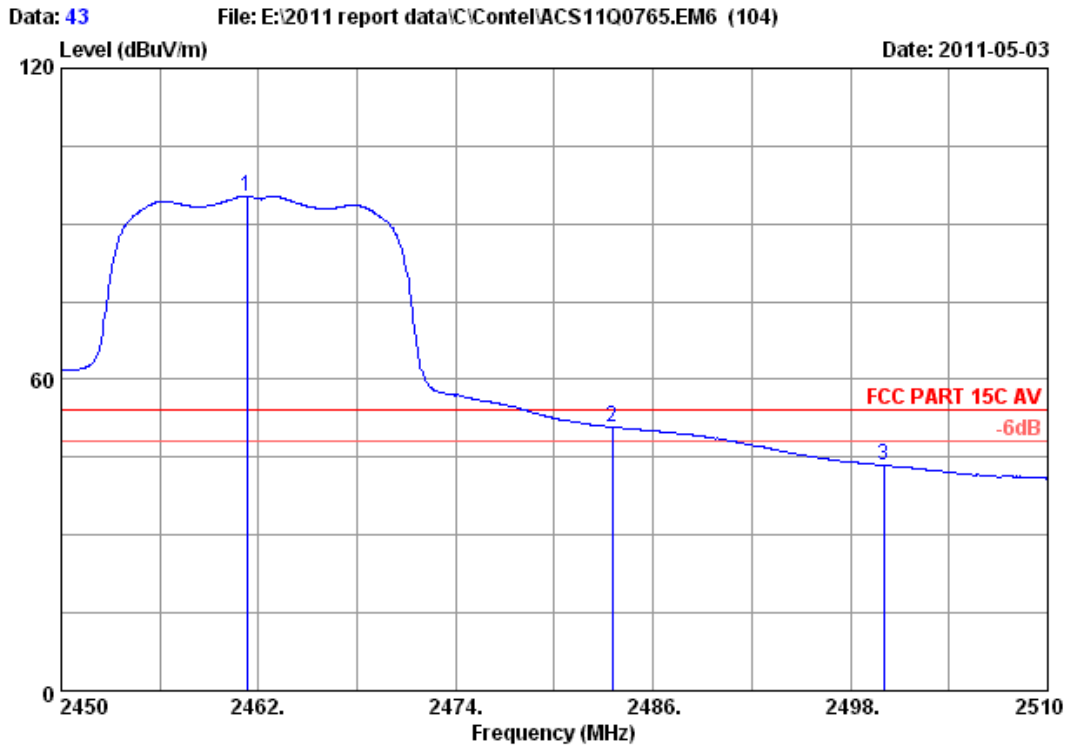


Site no. : 3m Chamber Data no. : 30  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2382.795	29.43	7.39	36.62	41.85	42.05	54.00	11.95	Average
2	2390.000	29.44	7.39	36.62	44.11	44.32	54.00	9.68	Average
3	2400.000	29.44	7.43	36.62	49.83	50.08	54.00	3.92	Average
4	2411.200	29.45	7.43	36.62	85.87	86.13	54.00	-32.13	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



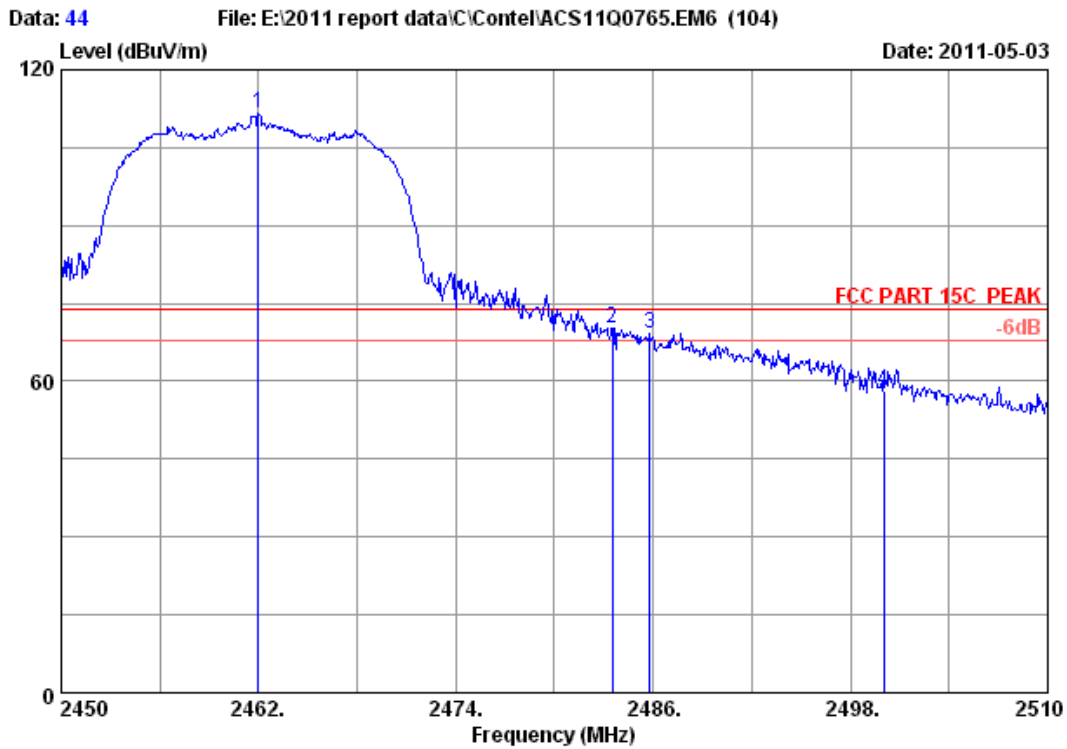
Site no. : 3m Chamber Data no. : 43  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.280	29.48	7.54	36.61	94.92	95.33	54.00	-41.33	Average
2	2483.500	29.49	7.58	36.60	50.37	50.84	54.00	3.16	Average
3	2500.000	29.50	7.62	36.60	42.95	43.47	54.00	10.53	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



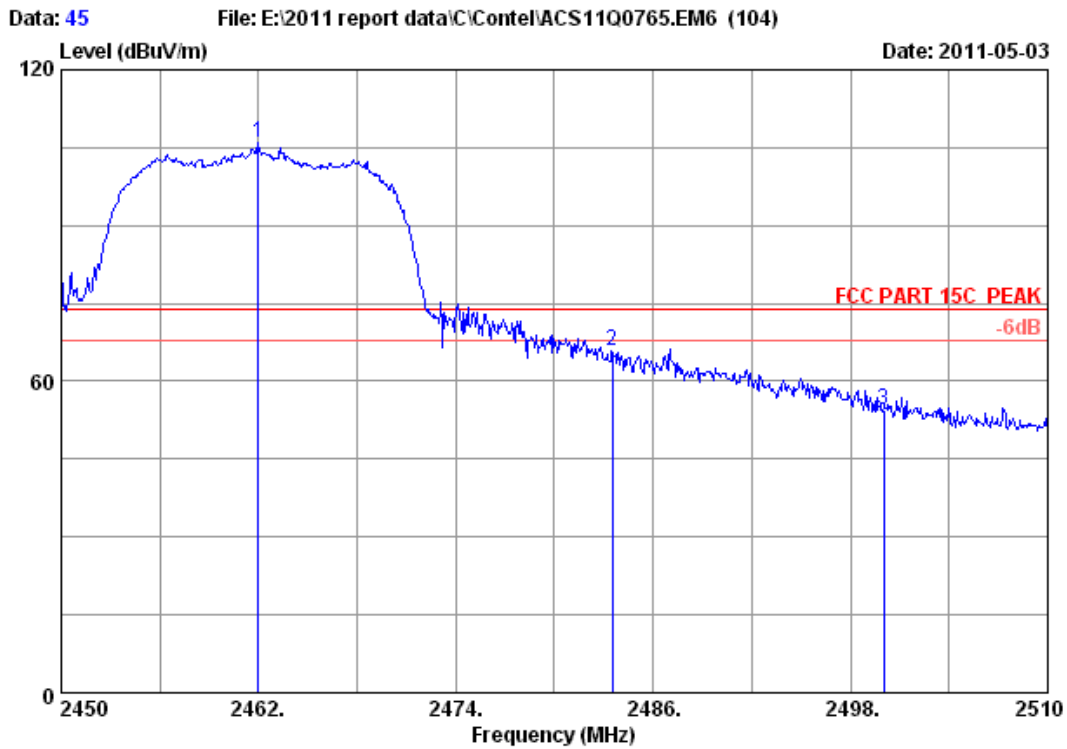


Site no. : 3m Chamber Data no. : 44  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	29.48	7.54	36.61	111.16	111.57	74.00	-37.57	Peak
2	2483.500	29.49	7.58	36.60	69.63	70.10	74.00	3.90	Peak
3	2485.820	29.49	7.58	36.60	68.77	69.24	74.00	4.76	Peak
4	2500.000	29.50	7.62	36.60	57.48	58.00	74.00	16.00	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

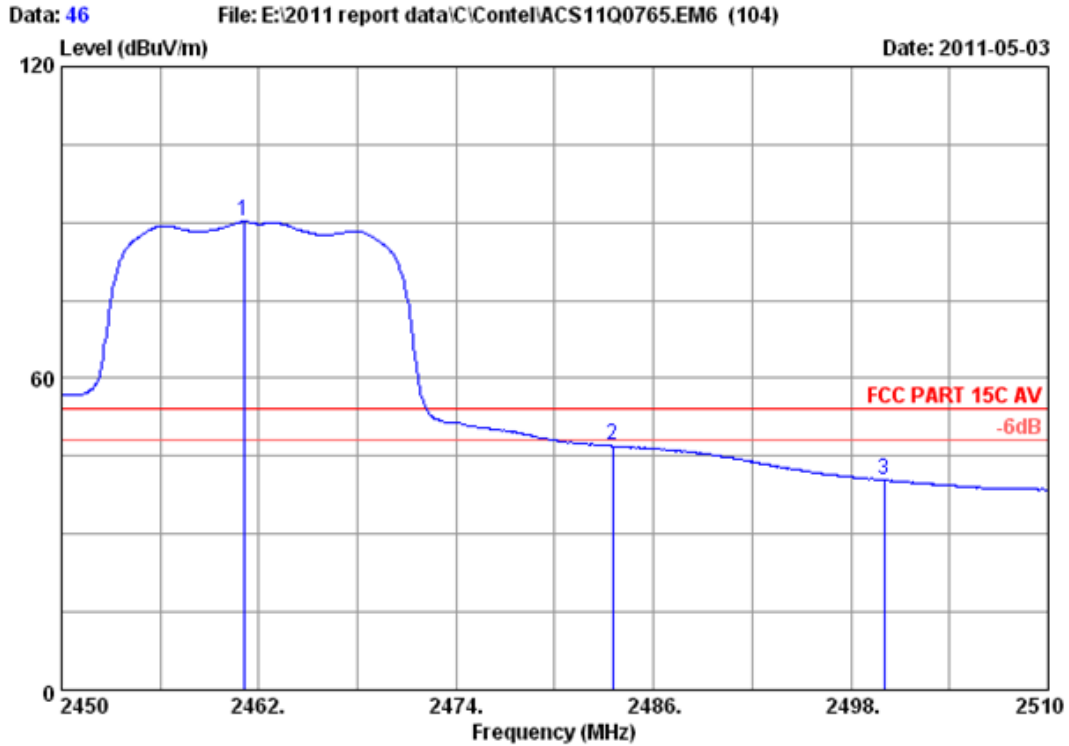


Site no. : 3m Chamber Data no. : 45  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	29.48	7.54	36.61	105.46	105.87	74.00	-31.87	Peak
2	2483.500	29.49	7.58	36.60	65.36	65.83	74.00	8.17	Peak
3	2500.000	29.50	7.62	36.60	53.80	54.32	74.00	19.68	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

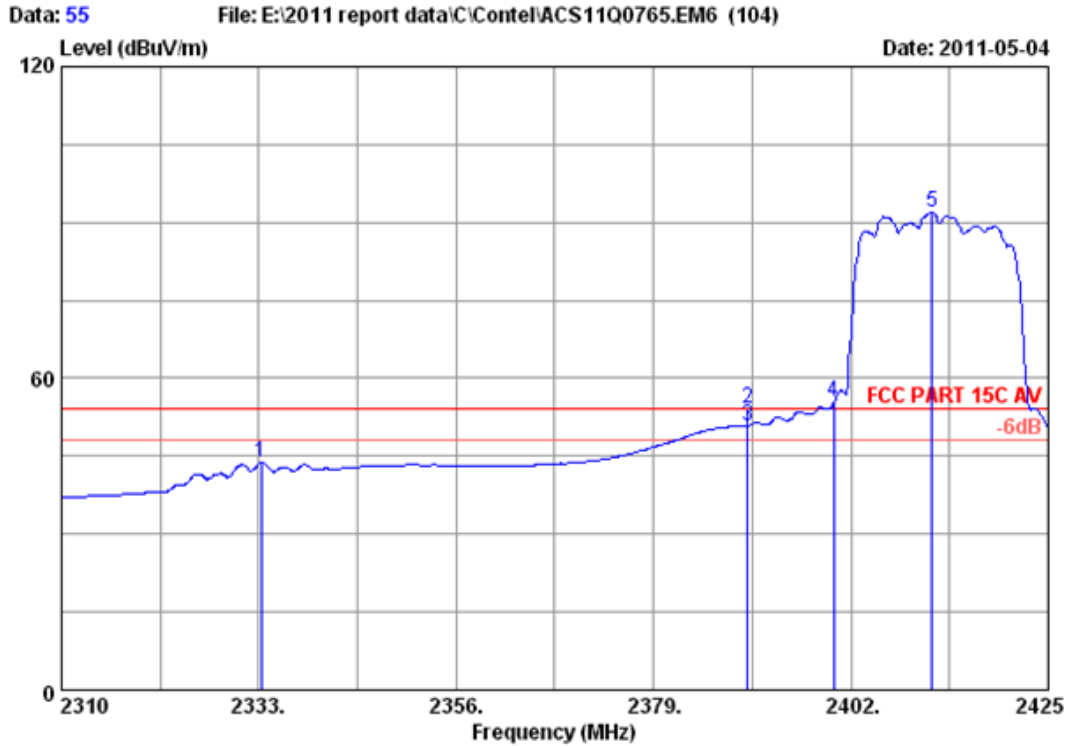


Site no. : 3m Chamber Data no. : 46  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.100	29.48	7.54	36.61	89.73	90.14	54.00	-36.14	Average
2	2483.500	29.49	7.58	36.60	46.56	47.03	54.00	6.97	Average
3	2500.000	29.50	7.62	36.60	39.84	40.36	54.00	13.64	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

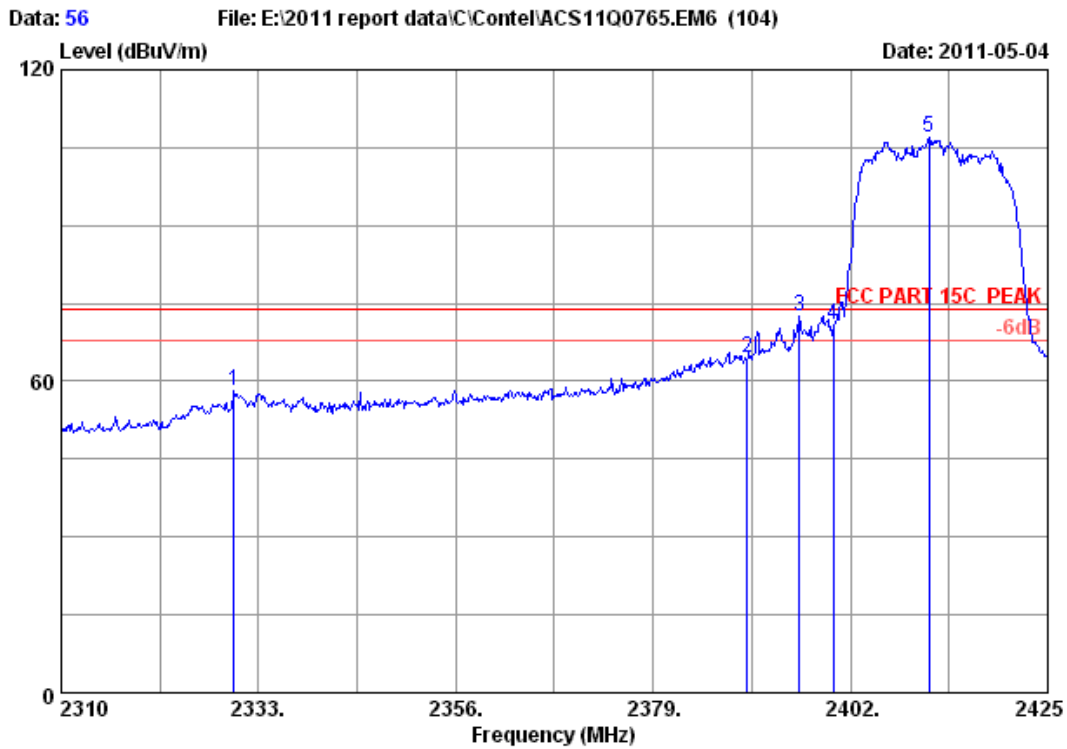


Site no. : 3m Chamber Data no. : 55  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.230	29.40	7.27	36.63	43.67	43.71	54.00	10.29	Average
2	2389.925	29.44	7.39	36.62	53.89	54.10	54.00	-0.10	Average
3	2390.000	29.44	7.39	36.62	50.59	50.80	54.00	3.20	Average
4	2400.000	29.44	7.43	36.62	55.08	55.33	54.00	-1.33	Average
5	2411.430	29.45	7.43	36.62	91.68	91.94	54.00	-37.94	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

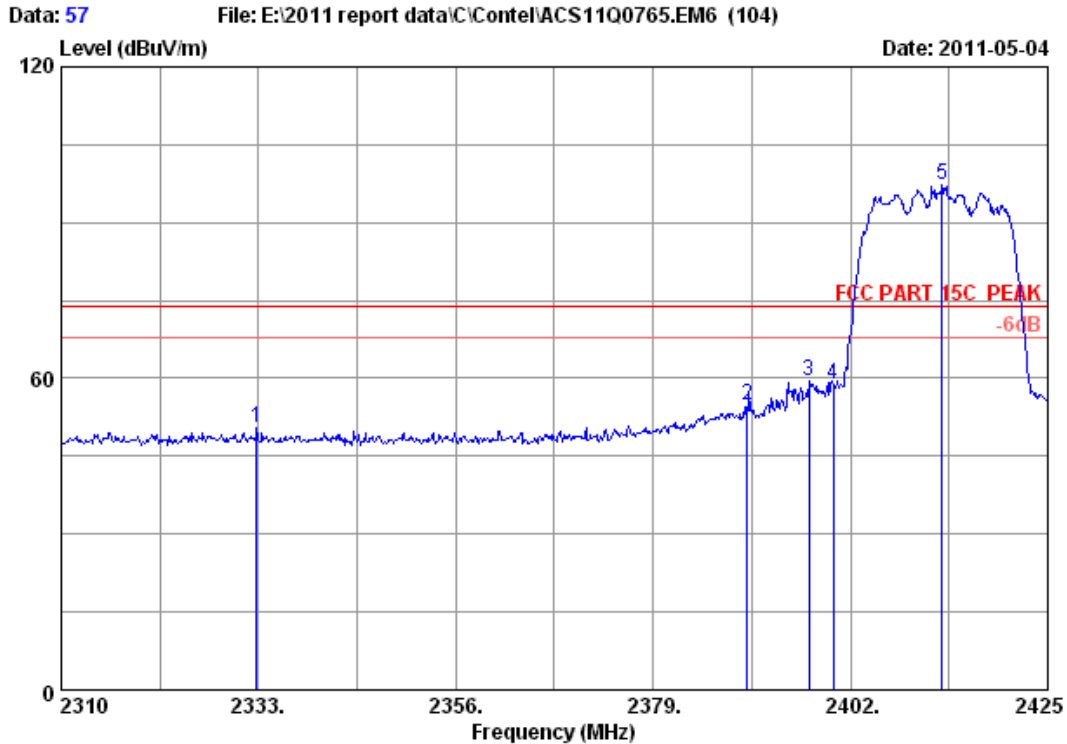


Site no. : 3m Chamber Data no. : 56  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2330.125	29.40	7.27	36.63	58.02	58.06	74.00	15.94	Peak
2	2390.000	29.44	7.39	36.62	64.43	64.64	74.00	9.36	Peak
3	2396.020	29.44	7.39	36.62	72.37	72.58	74.00	1.42	Peak
4	2400.000	29.44	7.43	36.62	70.72	70.97	74.00	3.03	Peak
5	2411.200	29.45	7.43	36.62	106.84	107.10	74.00	-33.10	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

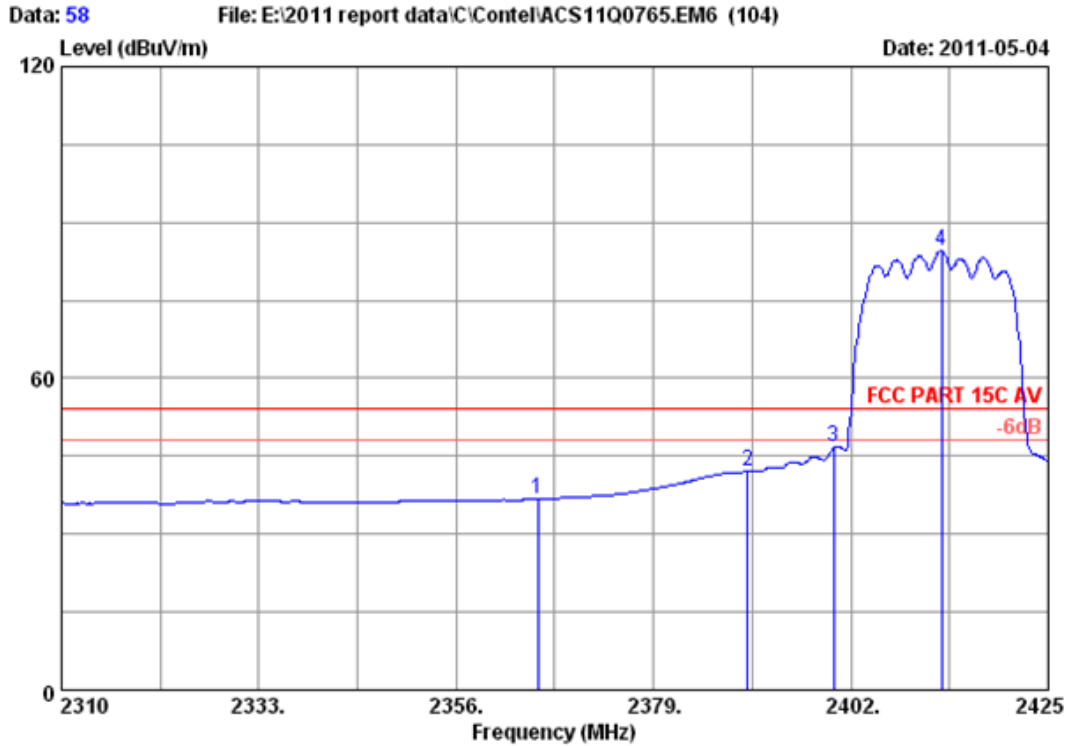


Site no. : 3m Chamber Data no. : 57  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Factor	Cable loss	Amp. Factor	Reading	Emission Level	Limits	Margin	Remark	
Freq. (MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	2332.770	29.40	7.27	36.63	50.41	50.45	74.00	23.55	Peak
2	2390.000	29.44	7.39	36.62	54.45	54.66	74.00	19.34	Peak
3	2397.170	29.44	7.39	36.62	59.27	59.48	74.00	14.52	Peak
4	2400.000	29.44	7.43	36.62	58.63	58.88	74.00	15.12	Peak
5	2412.695	29.45	7.43	36.62	96.90	97.16	74.00	-23.16	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

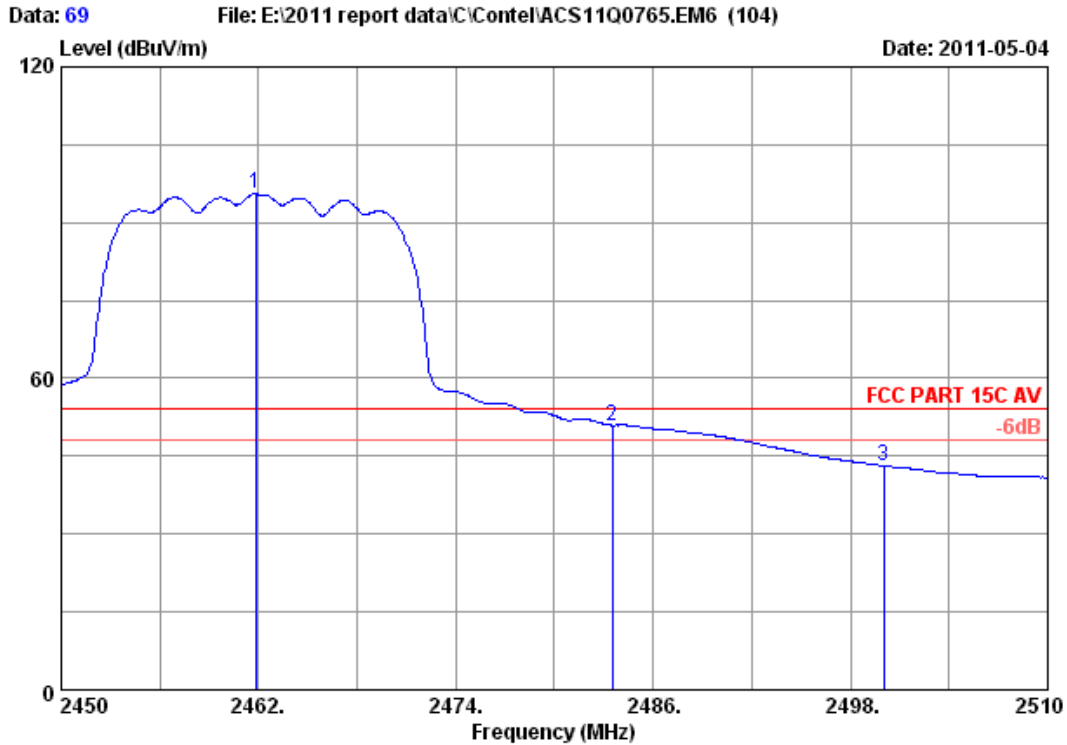


Site no. : 3m Chamber Data no. : 58  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2365.545	29.42	7.35	36.62	36.56	36.71	54.00	17.29	Average
2	2390.000	29.44	7.39	36.62	41.88	42.09	54.00	11.91	Average
3	2400.000	29.44	7.43	36.62	46.42	46.67	54.00	7.33	Average
4	2412.580	29.45	7.43	36.62	84.31	84.57	54.00	-30.57	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



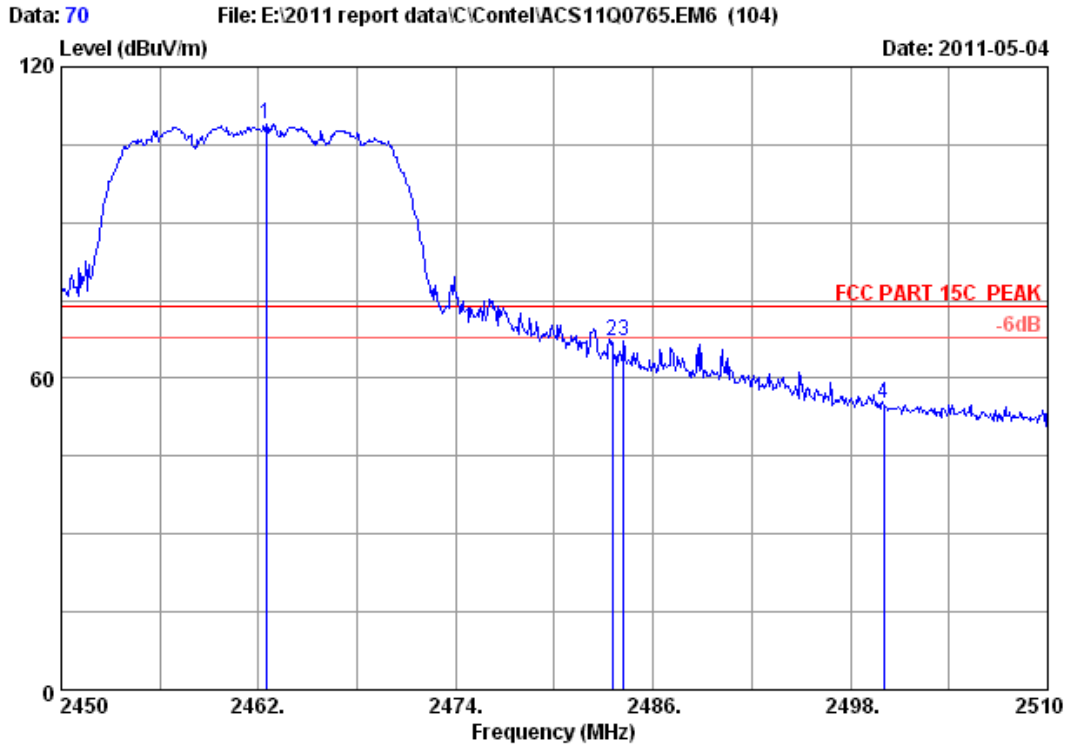
Site no. : 3m Chamber Data no. : 69  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.820	29.48	7.54	36.61	95.12	95.53	54.00	-41.53	Average
2	2483.500	29.49	7.58	36.60	50.50	50.97	54.00	3.03	Average
3	2500.000	29.50	7.62	36.60	42.67	43.19	54.00	10.81	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



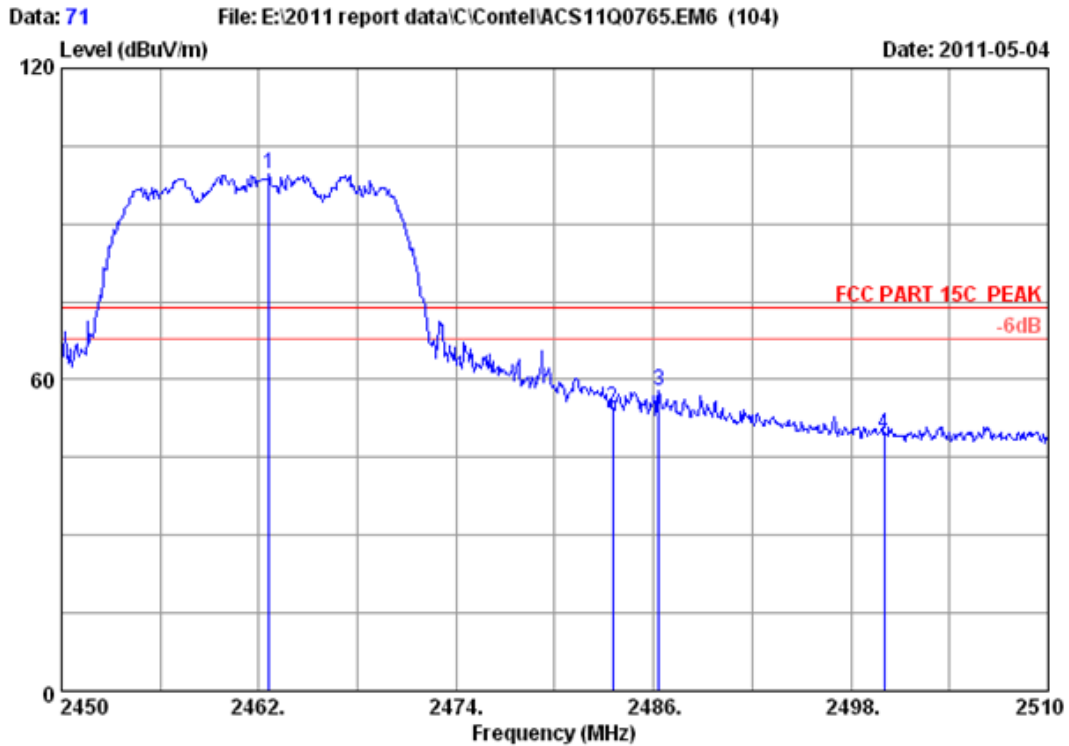


Site no. : 3m Chamber Data no. : 70  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.480	29.48	7.54	36.61	108.69	109.10	74.00	-35.10	Peak
2	2483.500	29.49	7.58	36.60	66.87	67.34	74.00	6.66	Peak
3	2484.200	29.49	7.58	36.60	66.79	67.26	74.00	6.74	Peak
4	2500.000	29.50	7.62	36.60	54.79	55.31	74.00	18.69	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

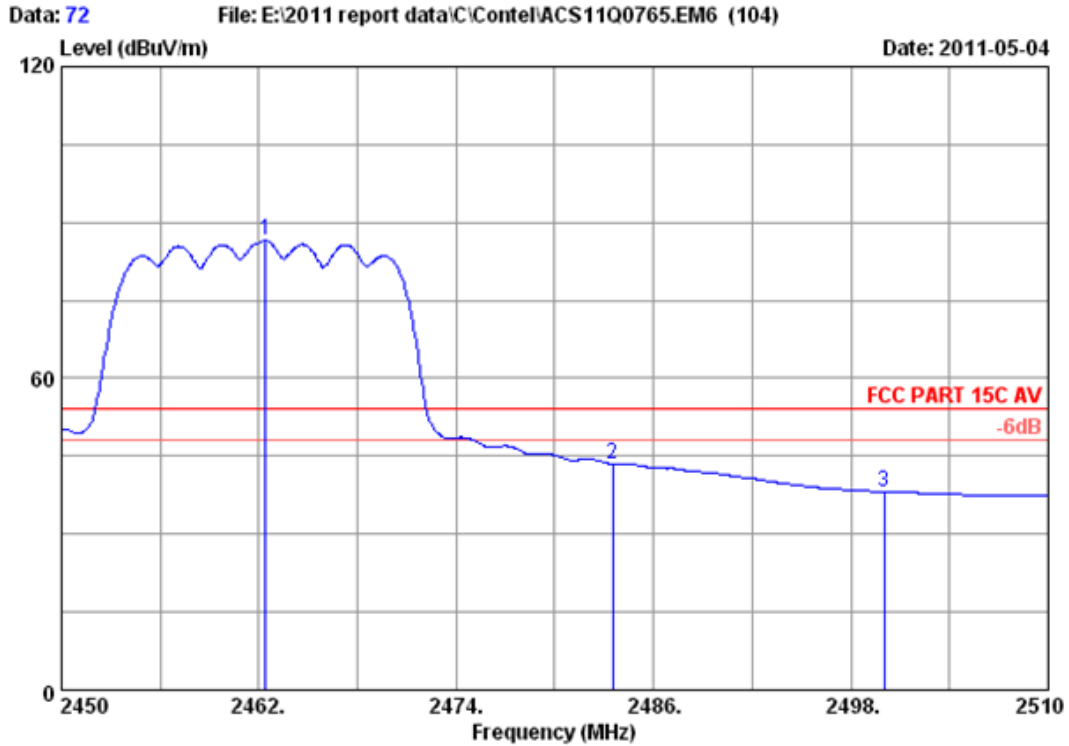


Site no. : 3m Chamber Data no. : 71  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.600	29.48	7.54	36.61	99.12	99.53	74.00	-25.53	Peak
2	2483.500	29.49	7.58	36.60	54.10	54.57	74.00	19.43	Peak
3	2486.300	29.49	7.58	36.60	57.51	57.98	74.00	16.02	Peak
4	2500.000	29.50	7.62	36.60	48.81	49.33	74.00	24.67	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

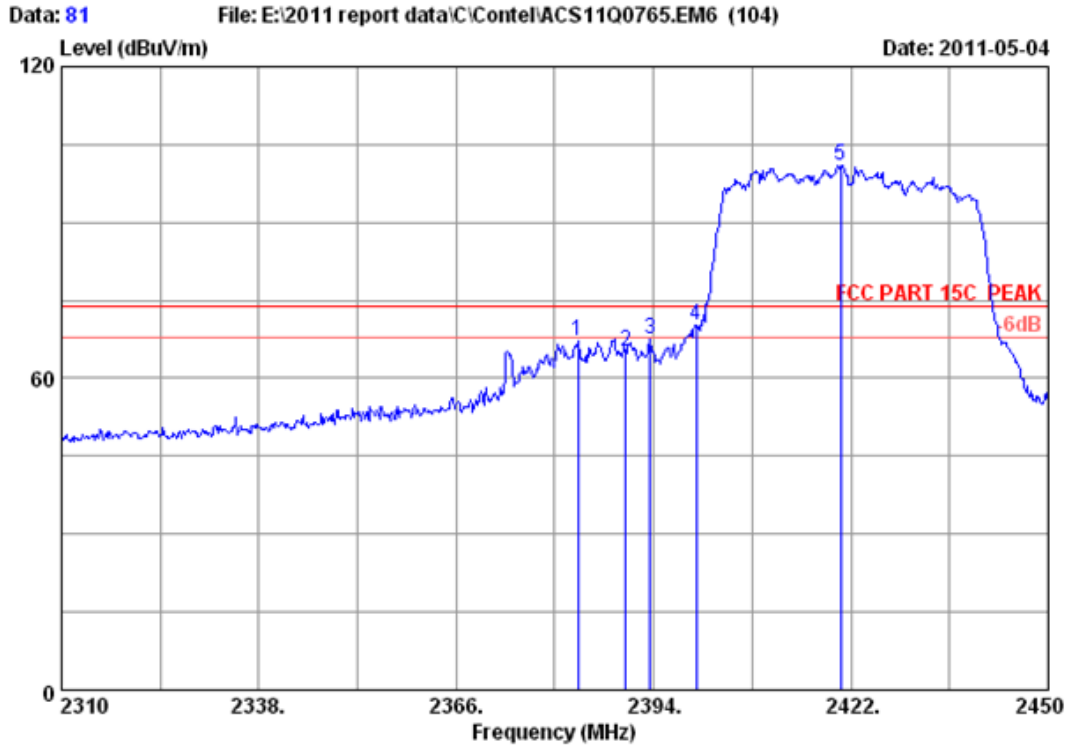


Site no. : 3m Chamber Data no. : 72  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.420	29.48	7.54	36.61	86.06	86.47	54.00	-32.47	Average
2	2483.500	29.49	7.58	36.60	42.97	43.44	54.00	10.56	Average
3	2500.000	29.50	7.62	36.60	37.67	38.19	54.00	15.81	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

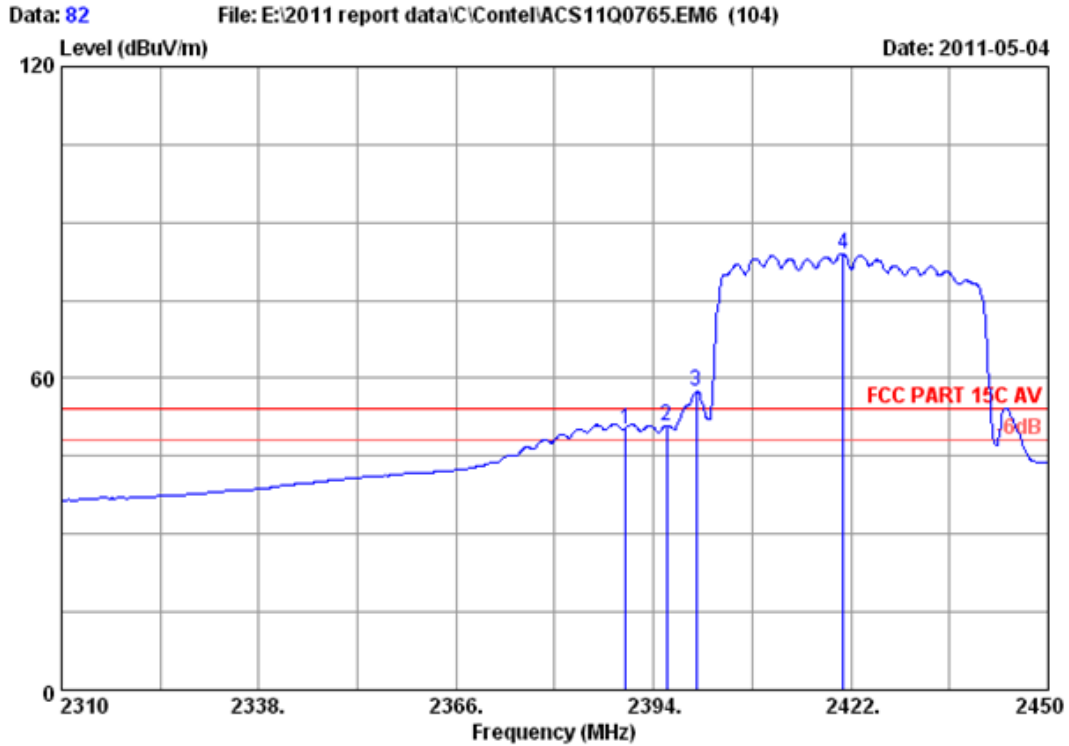


Site no. : 3m Chamber Data no. : 81  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2383.220	29.43	7.39	36.62	66.82	67.02	74.00	6.98	Peak
2	2390.000	29.44	7.39	36.62	64.96	65.17	74.00	8.83	Peak
3	2393.580	29.44	7.39	36.62	67.18	67.39	74.00	6.61	Peak
4	2400.000	29.44	7.43	36.62	70.06	70.31	74.00	3.69	Peak
5	2420.600	29.46	7.46	36.61	100.64	100.95	74.00	-26.95	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

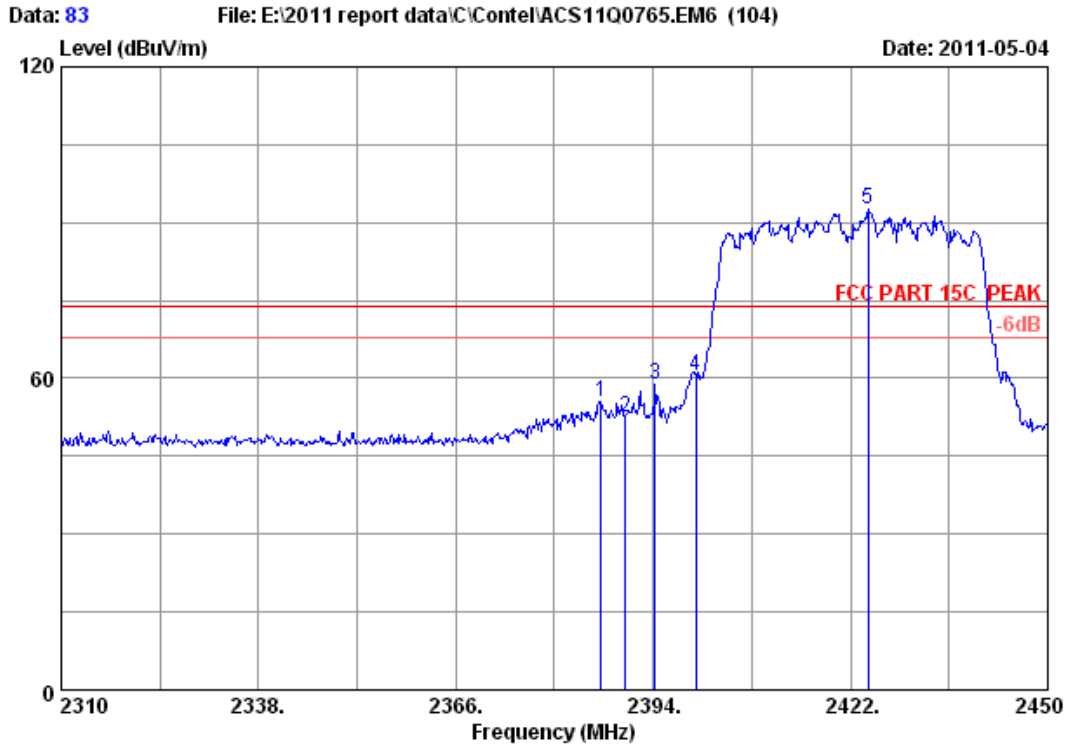


Site no. : 3m Chamber Data no. : 82  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	49.99	50.20	54.00	3.80	Average
2	2395.820	29.44	7.39	36.62	50.71	50.92	54.00	3.08	Average
3	2400.000	29.44	7.43	36.62	57.20	57.45	54.00	-3.45	Average
4	2420.880	29.46	7.46	36.61	83.68	83.99	54.00	-29.99	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

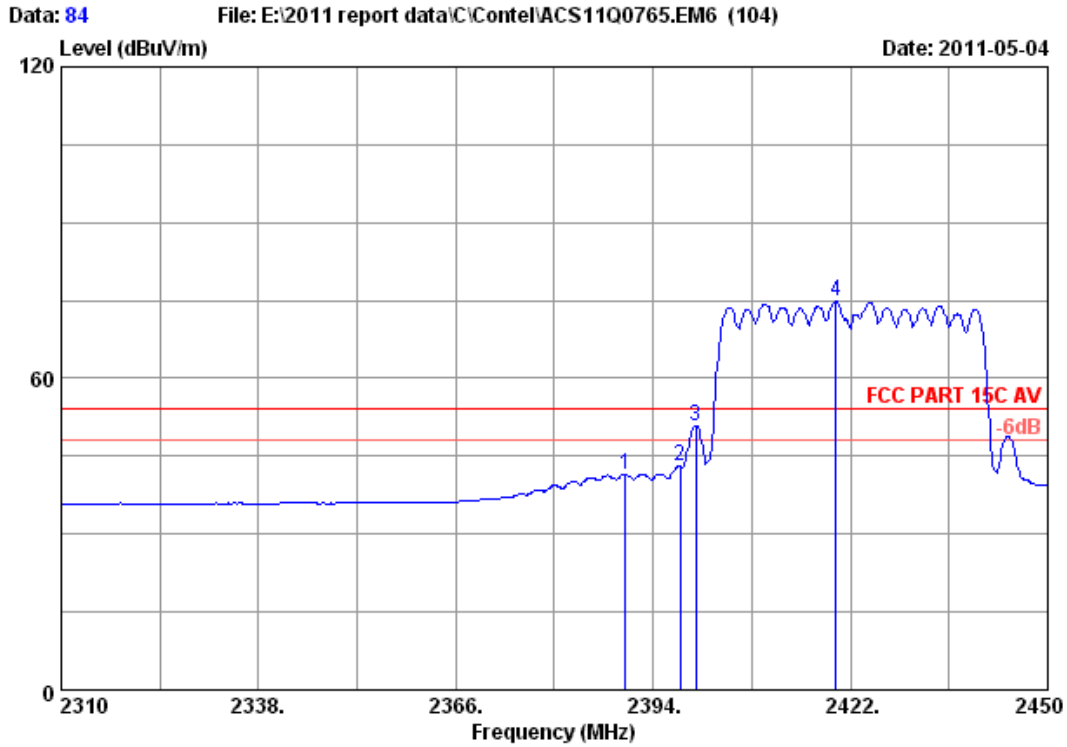


Site no. : 3m Chamber Data no. : 83  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx  
 M/N : WN7122G-CN

	Ant.	Cable	Amp.	Emission					
Freq. (MHz)	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	2386.580	29.44	7.39	36.62	55.42	55.63	74.00	18.37	Peak
2	2390.000	29.44	7.39	36.62	52.43	52.64	74.00	21.36	Peak
3	2394.280	29.44	7.39	36.62	58.70	58.91	74.00	15.09	Peak
4	2400.000	29.44	7.43	36.62	60.13	60.38	74.00	13.62	Peak
5	2424.520	29.46	7.46	36.61	92.36	92.67	74.00	-18.67	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

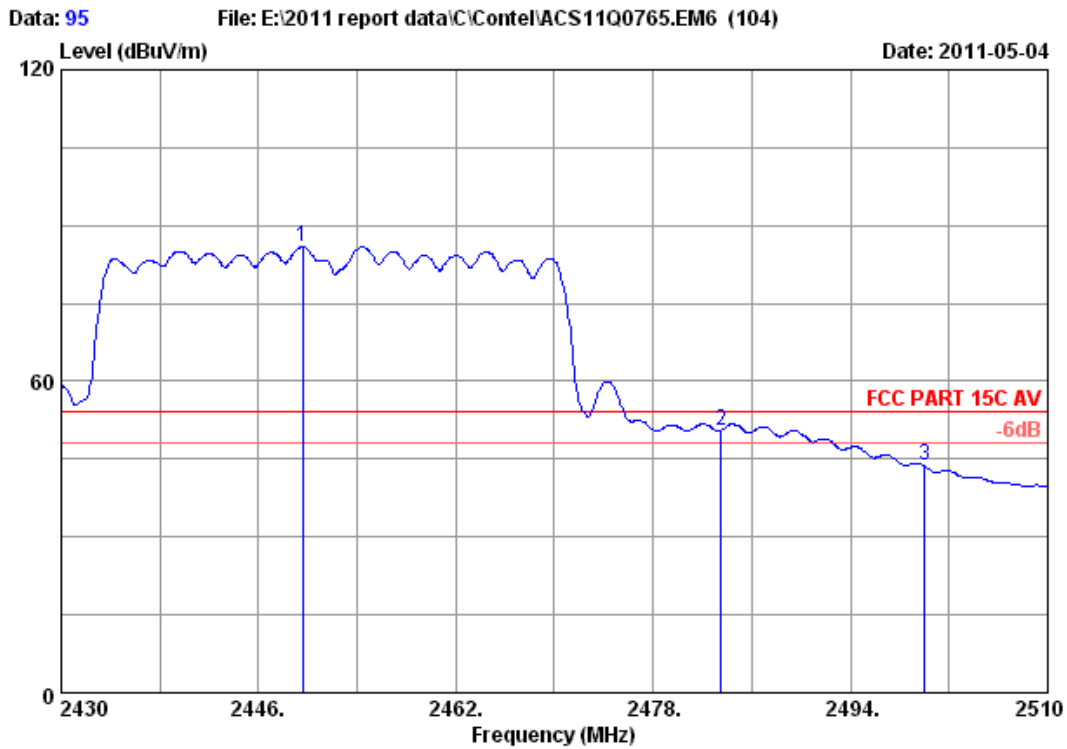


Site no. : 3m Chamber Data no. : 84  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx  
 M/N : WN7122G-CN

	Ant.	Cable	Amp.	Emission					
Freq. (MHz)	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	2390.000	29.44	7.39	36.62	41.33	41.54	54.00	12.46	Peak
2	2397.780	29.44	7.39	36.62	42.80	43.01	54.00	10.99	Peak
3	2400.000	29.44	7.43	36.62	50.59	50.84	54.00	3.16	Peak
4	2419.900	29.46	7.46	36.61	74.47	74.78	54.00	-20.78	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



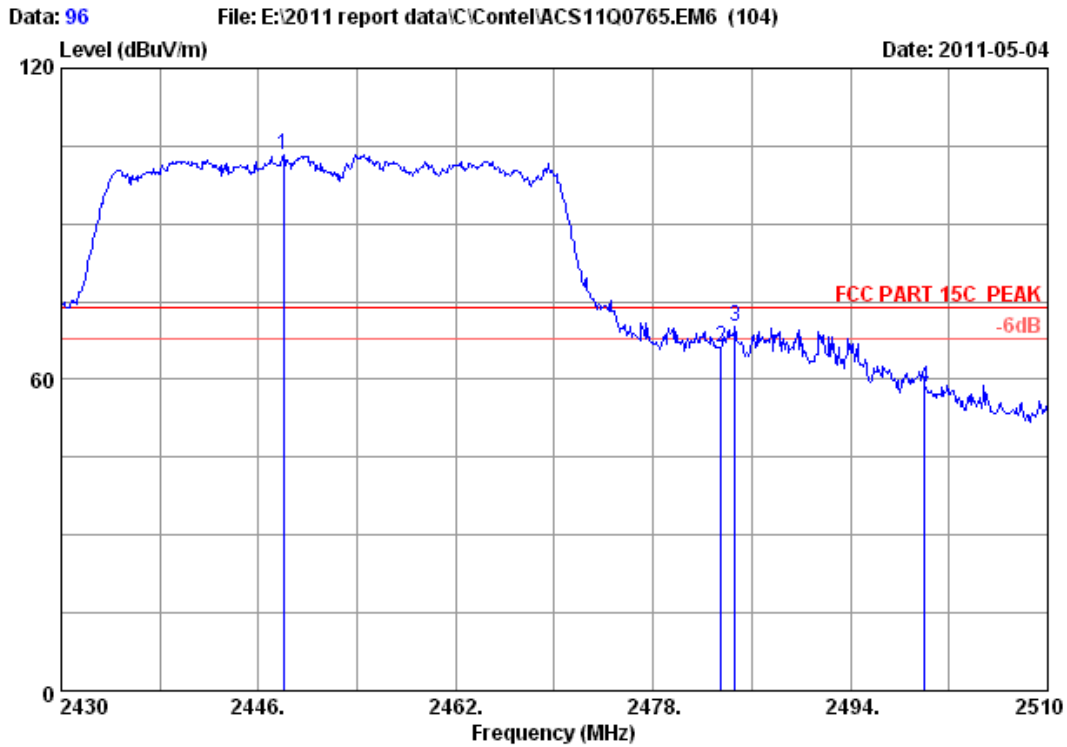
Site no. : 3m Chamber Data no. : 95  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.600	29.47	7.50	36.61	85.50	85.86	54.00	-31.86	Average
2	2483.500	29.49	7.58	36.60	50.16	50.63	54.00	3.37	Average
3	2500.000	29.50	7.62	36.60	43.14	43.66	54.00	10.34	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



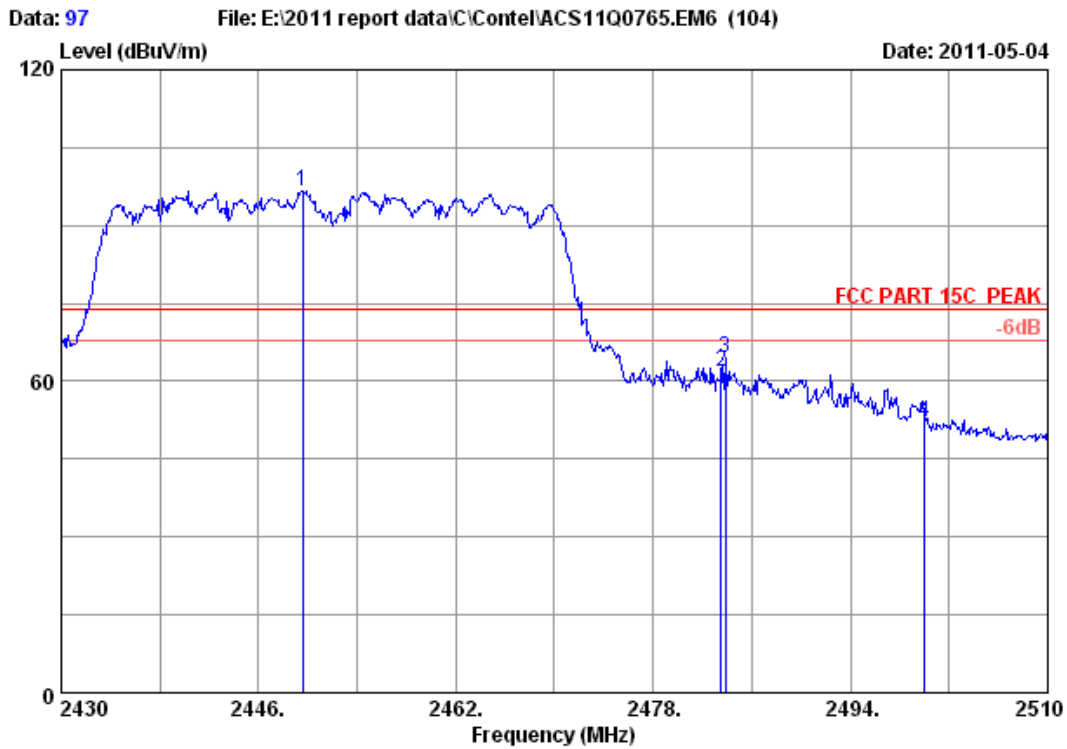


Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2448.000	29.47	7.50	36.61	103.07	103.43	74.00	-29.43	Peak
2	2483.500	29.49	7.58	36.60	65.73	66.20	74.00	7.80	Peak
3	2484.640	29.49	7.58	36.60	69.74	70.21	74.00	3.79	Peak
4	2500.000	29.50	7.62	36.60	57.85	58.37	74.00	15.63	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

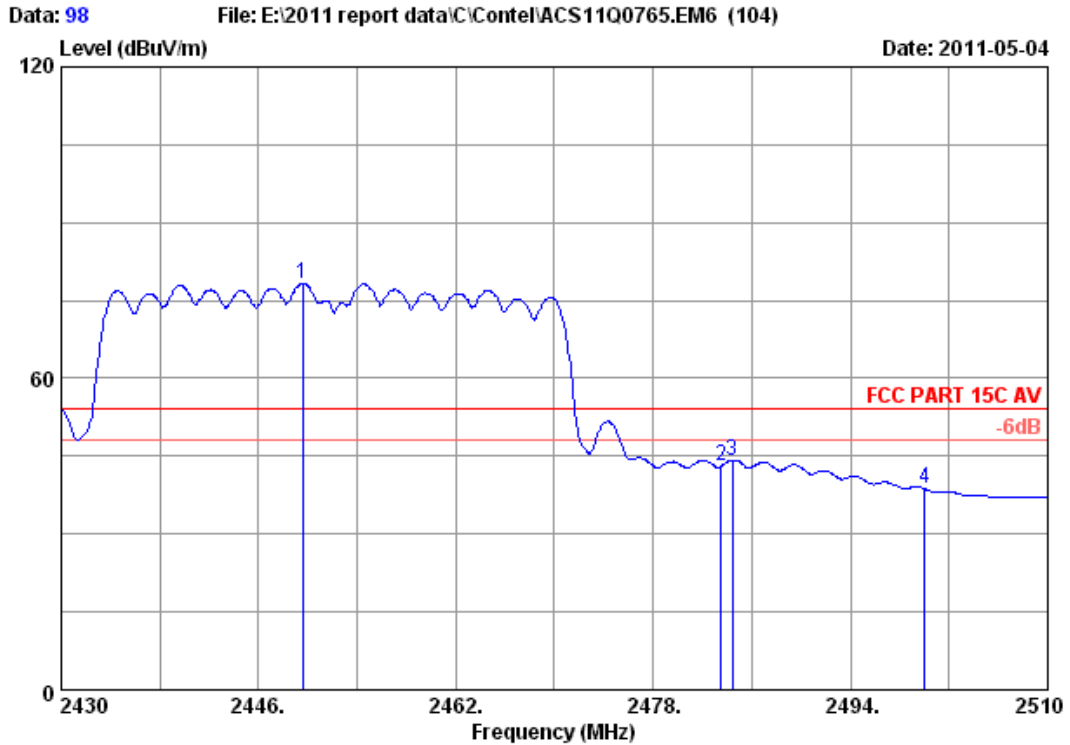


Site no. : 3m Chamber Data no. : 97  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.600	29.47	7.50	36.61	96.35	96.71	74.00	-22.71	Peak
2	2483.500	29.49	7.58	36.60	61.20	61.67	74.00	12.33	Peak
3	2483.840	29.49	7.58	36.60	63.94	64.41	74.00	9.59	Peak
4	2500.000	29.50	7.62	36.60	51.61	52.13	74.00	21.87	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 98  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : RF Module  
 Power : DC 5V From DVD Player input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx  
 M/N : WN7122G-CN

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.600	29.47	7.50	36.61	77.92	78.28	54.00	-24.28	Average
2	2483.500	29.49	7.58	36.60	42.68	43.15	54.00	10.85	Average
3	2484.400	29.49	7.58	36.60	43.77	44.24	54.00	9.76	Average
4	2500.000	29.50	7.62	36.60	38.21	38.73	54.00	15.27	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

## 7. 6dB Bandwidth Test

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 11	1Year

### 7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 7.4. Test Results

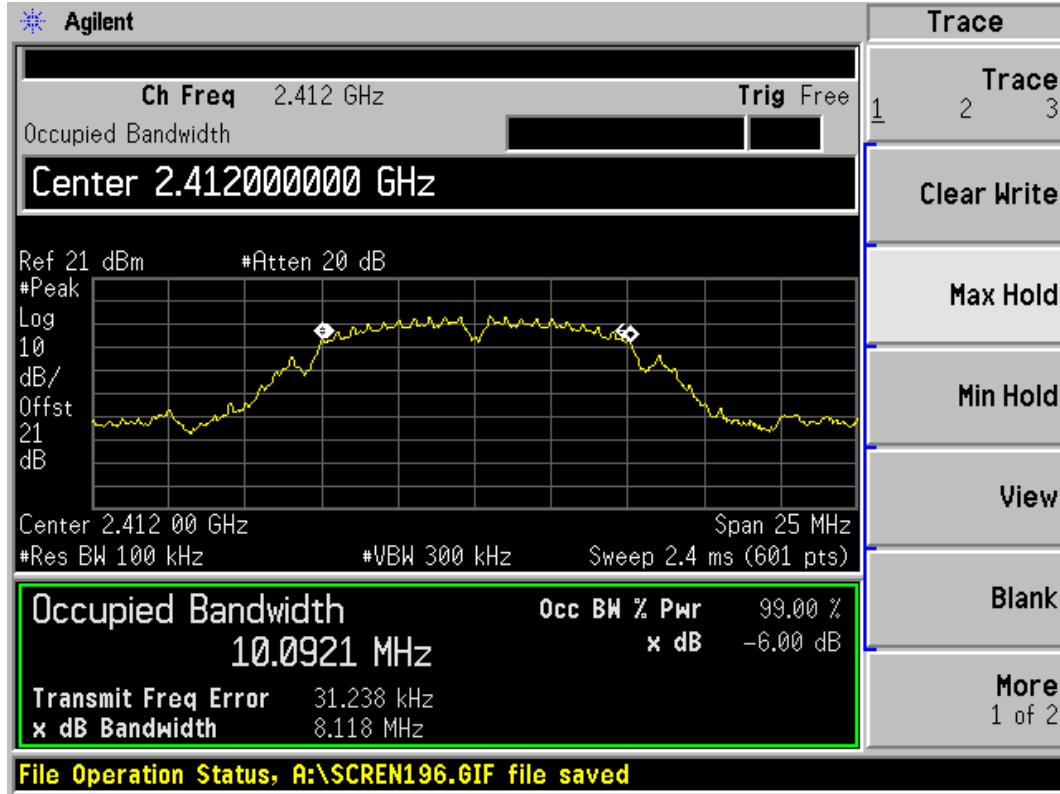
EUT: RF Module		
M/N: WN7122G-CN		
Test date:2011-05-09	Pressure: 100.6 kpa	Humidity: 45%
Tested by: Leo-Li	Test site: RF Site	Temperature : 25 °C

Cable loss: 1 dB		Attenuator loss: 20 dB		Antenna Gain: 1.53 dBi
Test Mode	CH	6dB bandwidth (MHz)		Limit (KHz)
		Chain0	Chain1	
11b	CH1	8.118	8.131	>500
	CH6	8.113	8.121	>500
	CH11	8.577	8.120	>500
11g	CH1	15.100	15.119	>500
	CH6	15.133	15.121	>500
	CH11	15.119	15.108	>500
11n HT20	CH1	15.122	15.109	>500
	CH6	16.952	16.066	>500
	CH11	15.109	15.120	>500
11n HT40	CH1	33.379	33.301	>500
	CH4	33.392	33.527	>500
	CH7	33.394	33.187	>500
Conclusion : PASS				

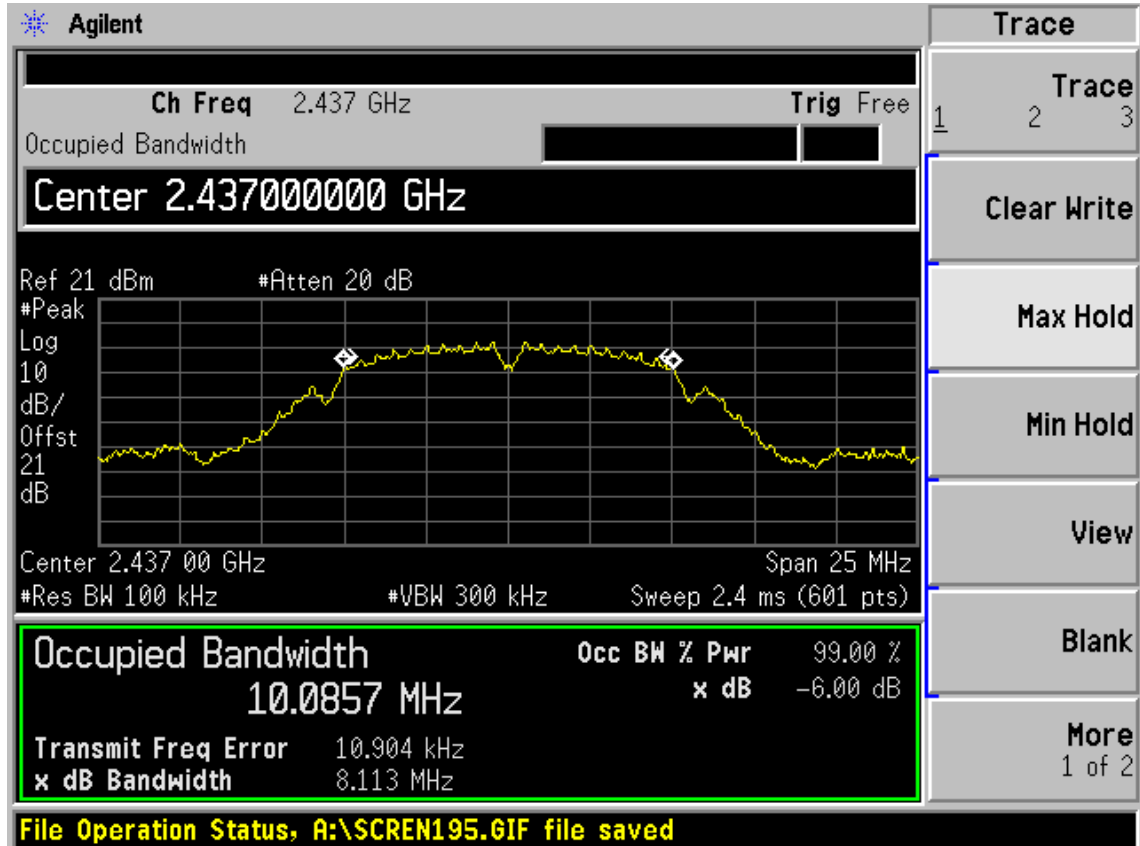
**Chain 0:**

Test Mode: IEEE 802.11b TX

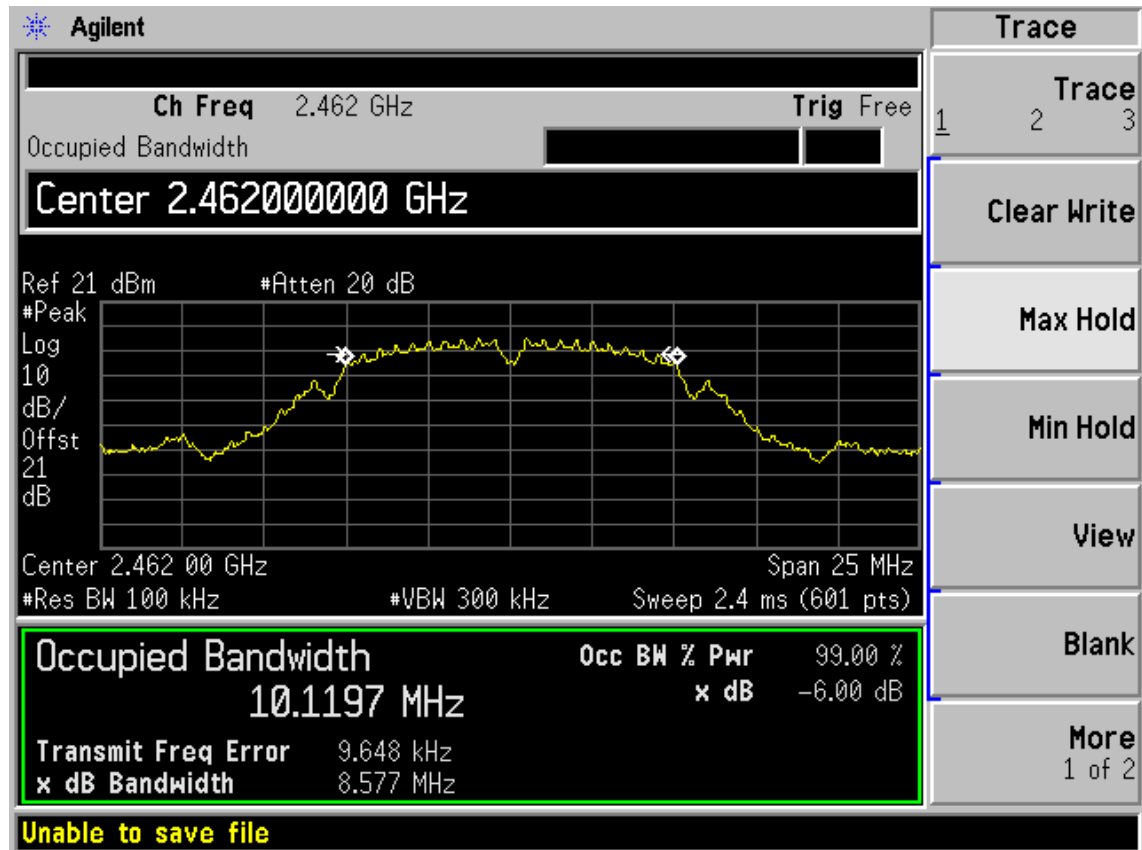
Test CH1: 2412MHz



Test CH6: 2437MHz

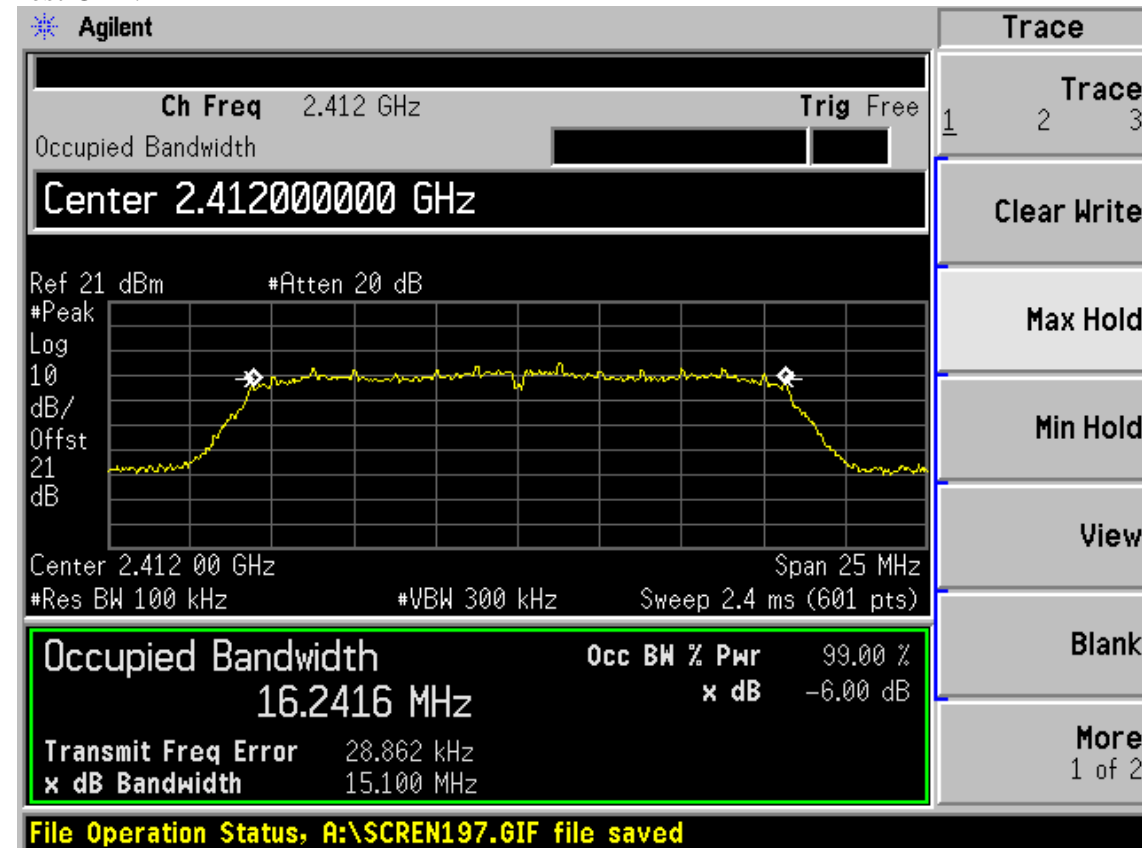


Test CH1: 2462MHz



Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz



Test CH6: 2437MHz

Agilent

Ch Freq 2.437 GHz
Trig Free

Occupied Bandwidth

Center 2.437000000 GHz

Ref 21 dBm #Atten 20 dB

#Peak

Log 10

dB/Offst 21 dB

Trace

Trace 1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More 1 of 2

Center 2.437 00 GHz Span 25 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 2.4 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
	<b>x dB</b>	-6.00 dB
<b>Transmit Freq Error</b>	10.455 kHz	
<b>x dB Bandwidth</b>	15.133 MHz	

**File Operation Status, A:\SCREN198.GIF file saved**

Test CH11: 2462MHz

Agilent

Ch Freq 2.462 GHz
Trig Free

Occupied Bandwidth

Sweep Time 2.400 ms

Ref 21 dBm #Atten 20 dB

#Peak

Log 10

dB/Offst 21 dB

Sweep

Sweep Time 2.400 ms

Auto Man

Sweep Cont

Single

Auto Sweep Time

Norm Accy

Gate

On Off

Gate Setup

Points 601

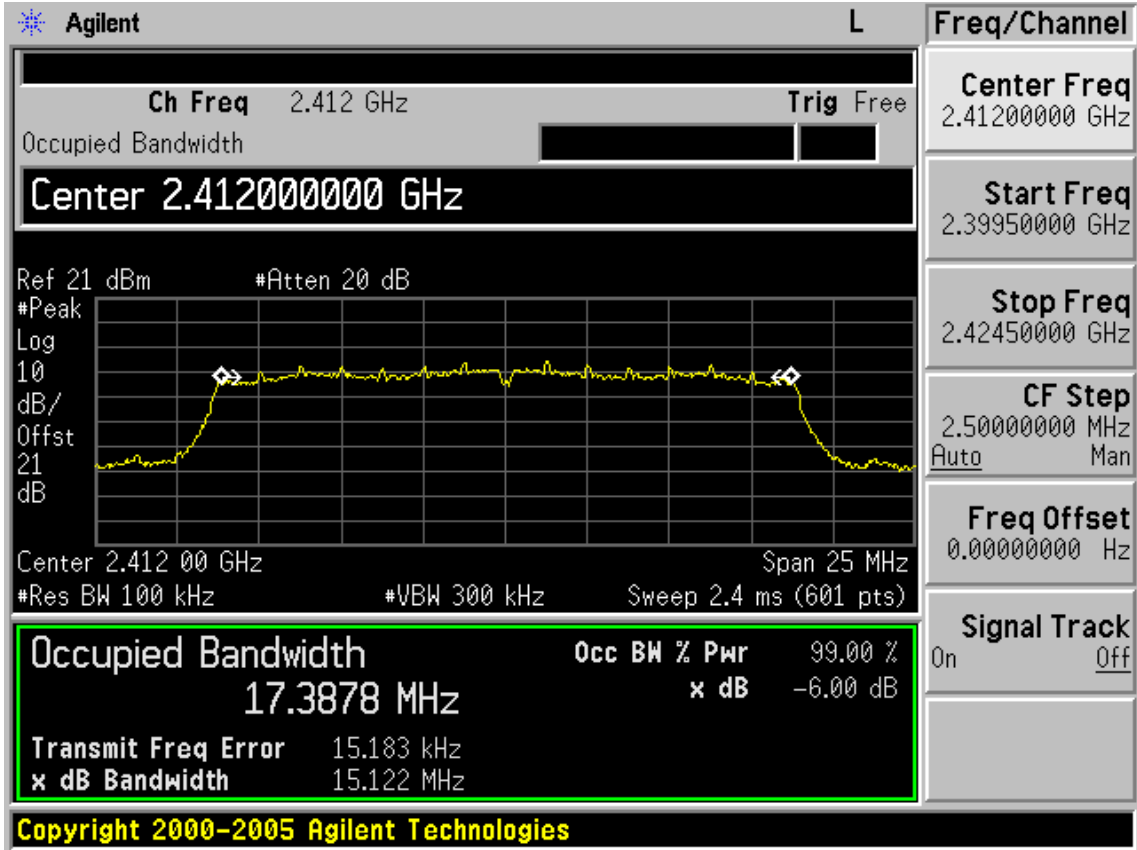
Center 2.462 00 GHz Span 25 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 2.4 ms (601 pts)

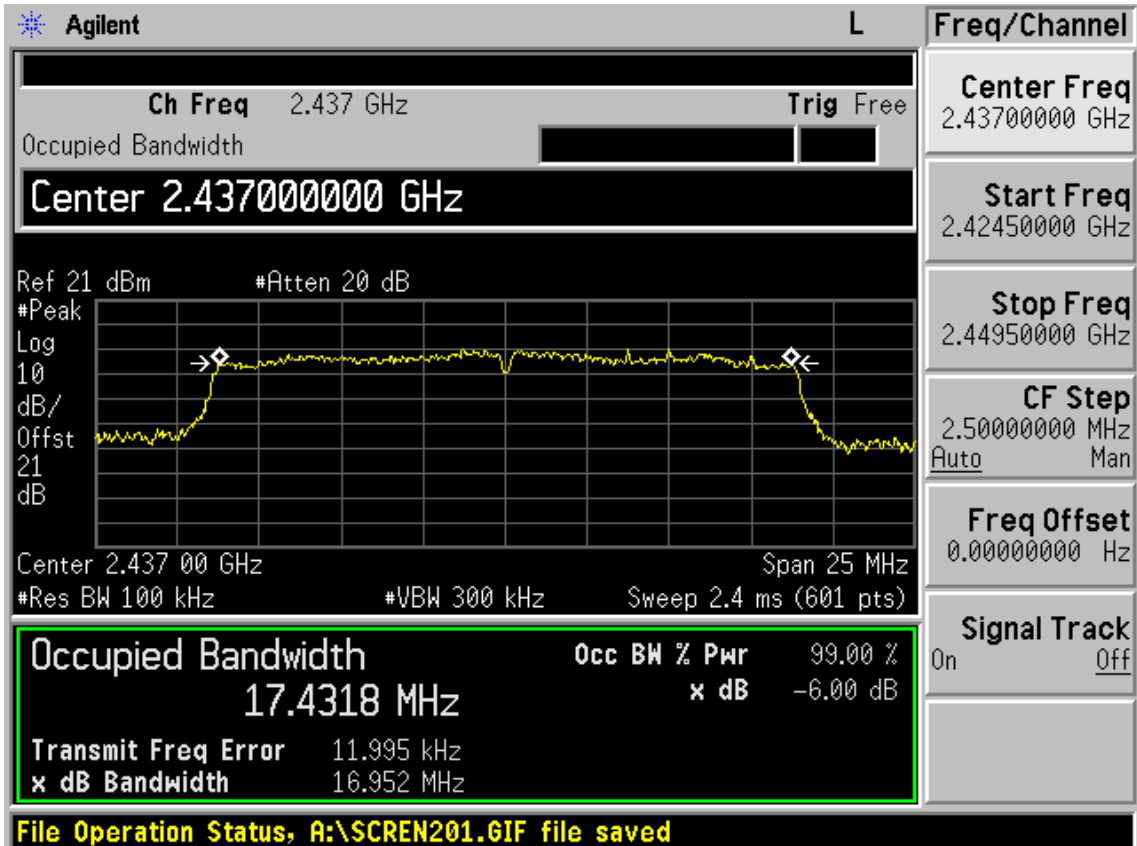
<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
	<b>x dB</b>	-6.00 dB
<b>Transmit Freq Error</b>	-6.201 kHz	
<b>x dB Bandwidth</b>	15.119 MHz	

**File Operation Status, A:\SCREN199.GIF file saved**

Test Mode: IEEE 802.11n HT20 TX  
 Test CH1: 2412MHz

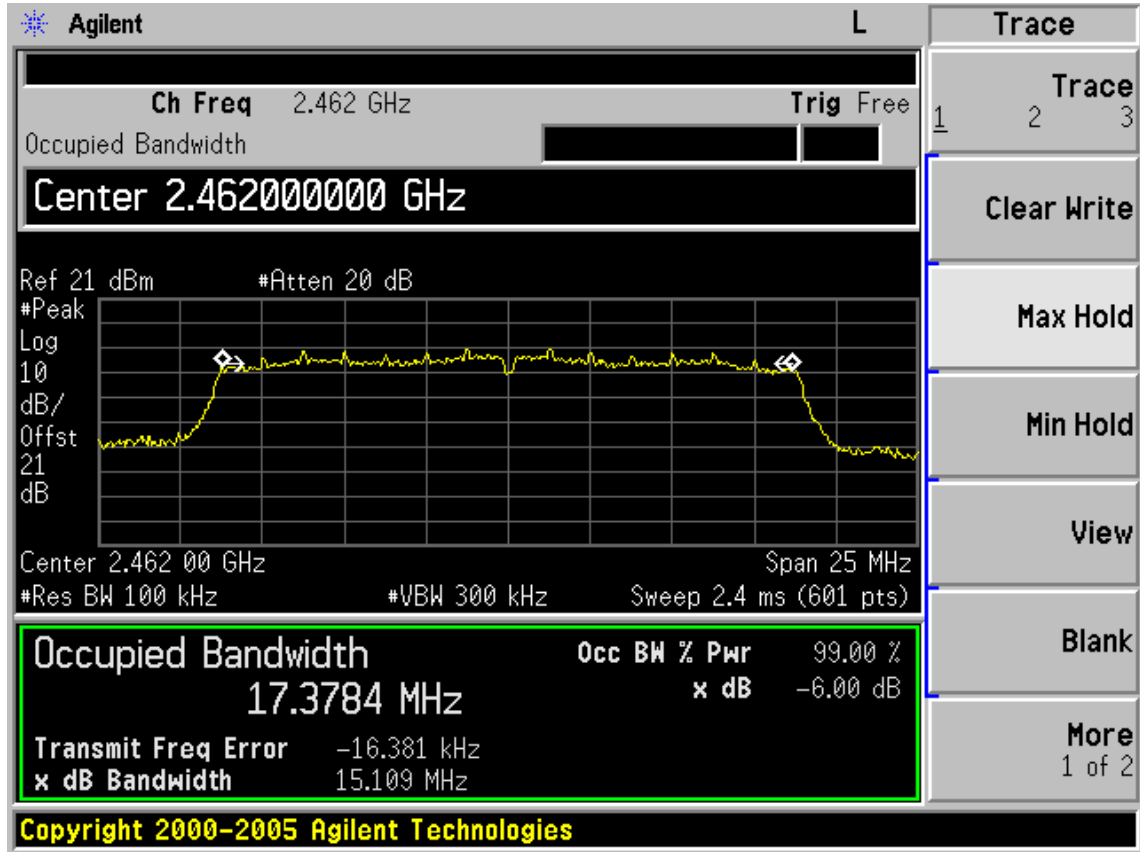


Test CH6: 2437MHz



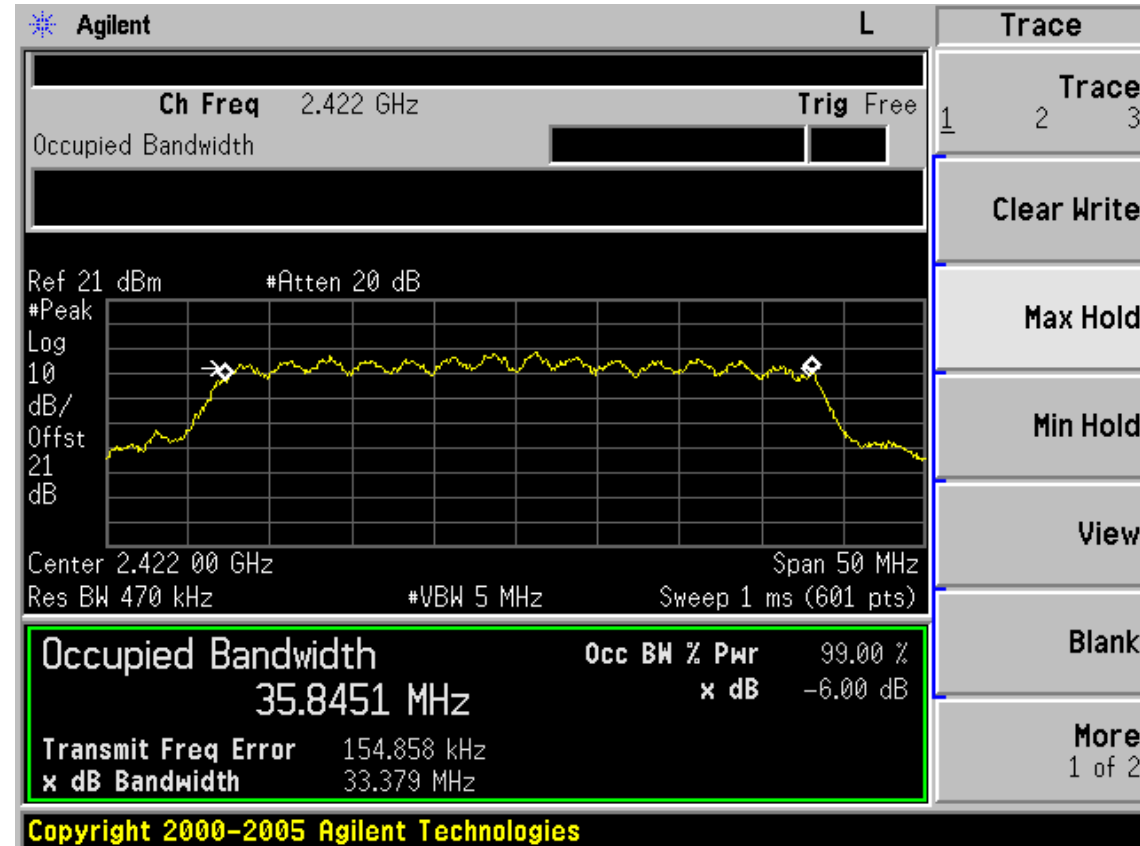


Test CH11: 2462MHz

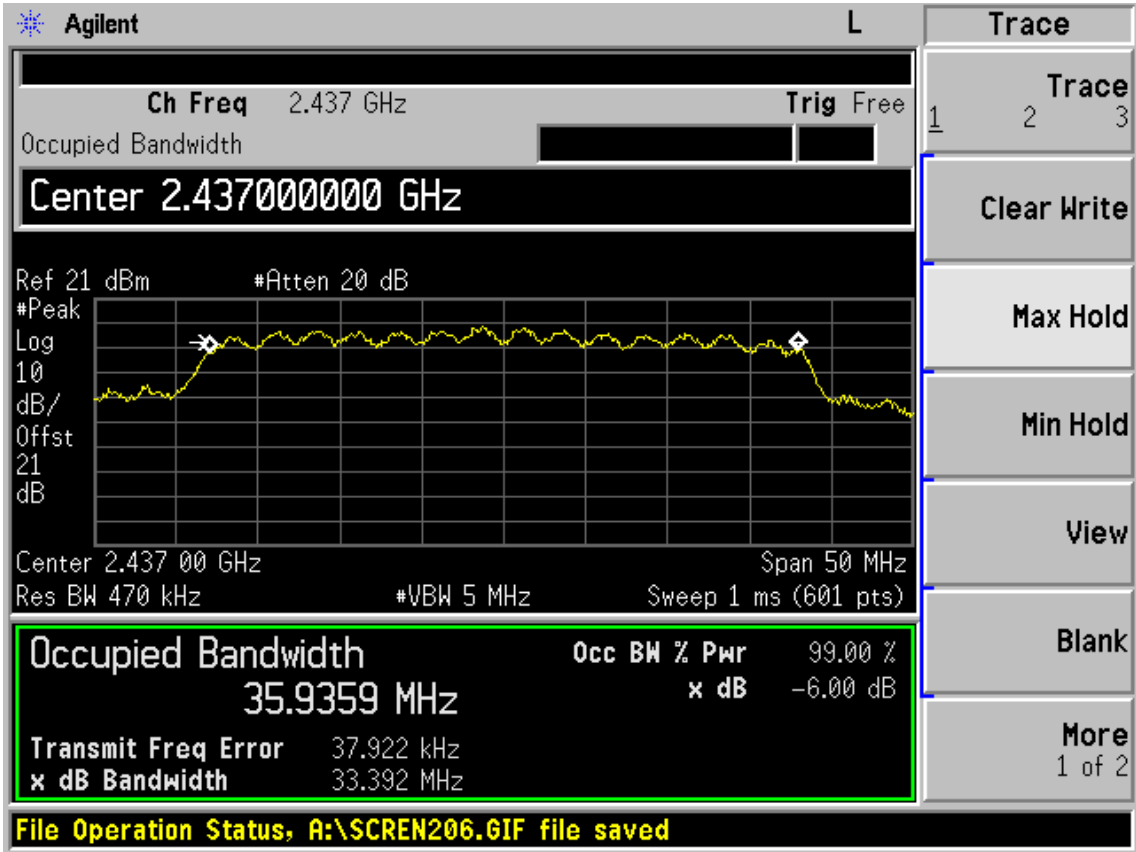


Test Mode: IEEE 802.11n HT40 TX

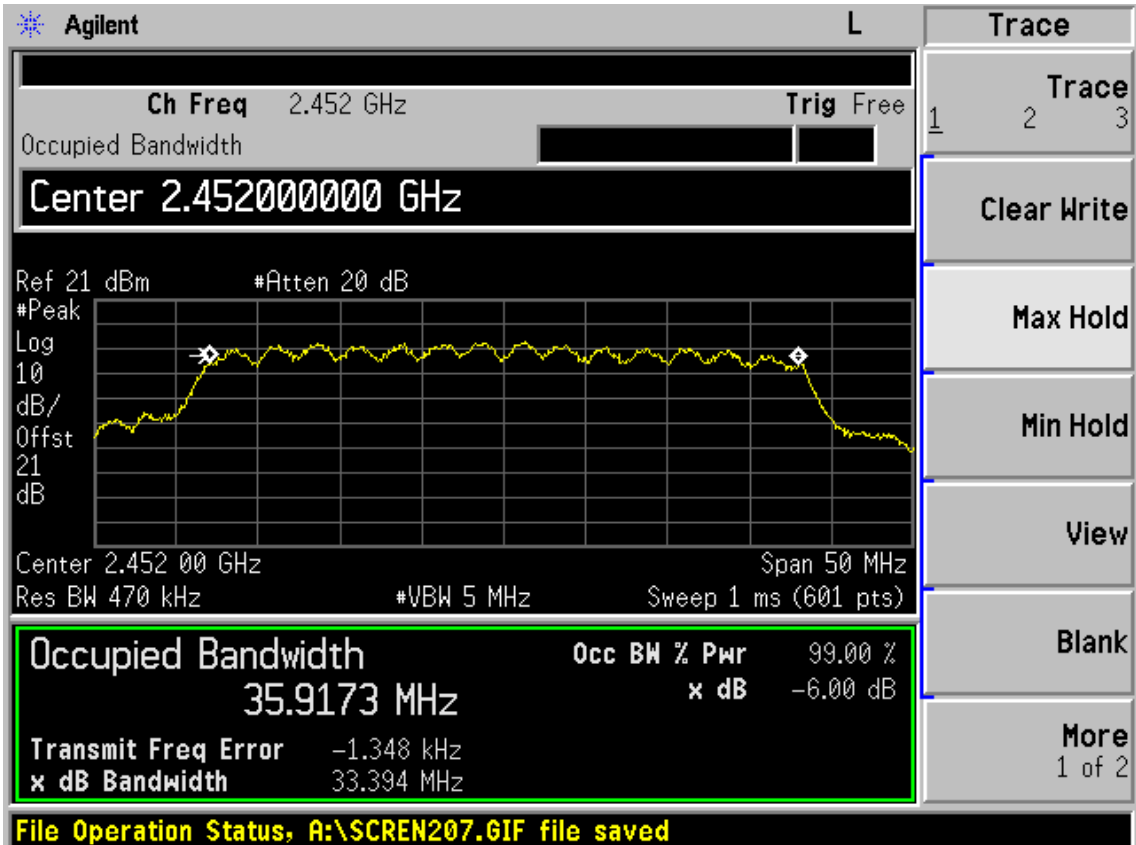
Test CH1: 2422MHz



Test CH4: 2437MHz



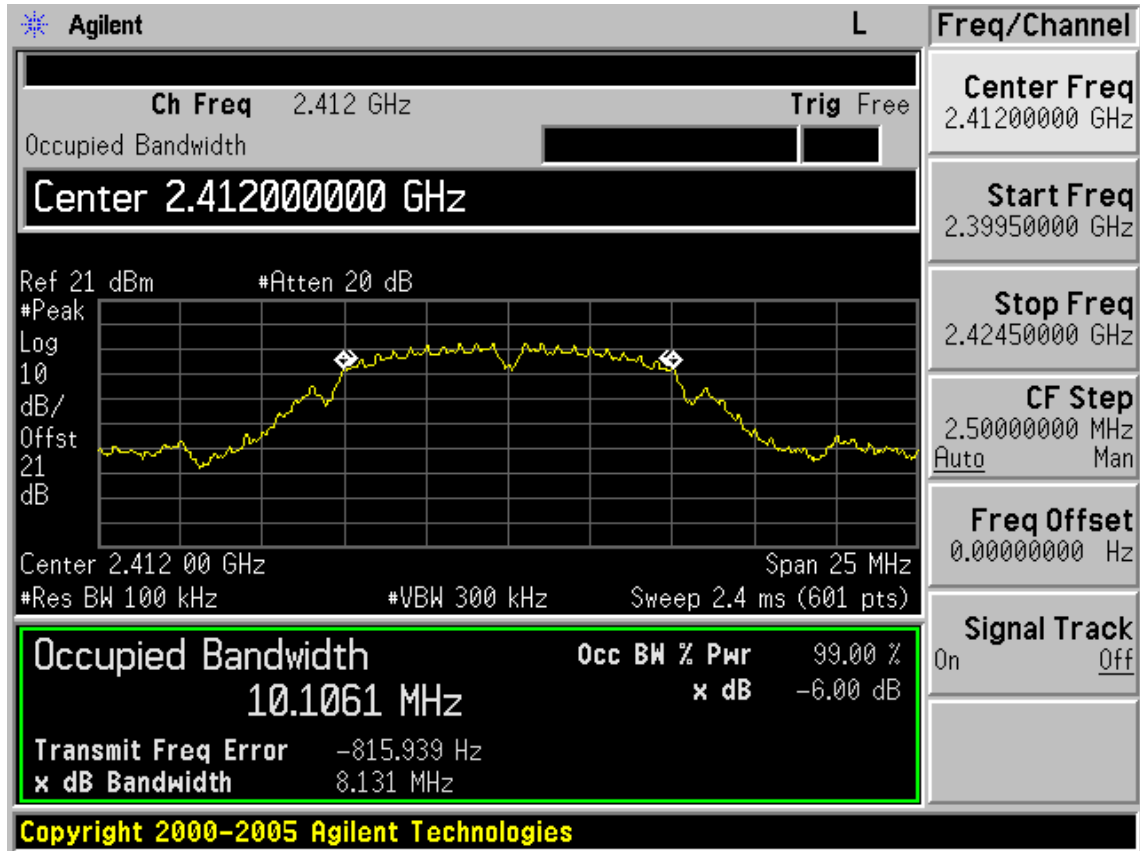
Test CH7: 2452MHz



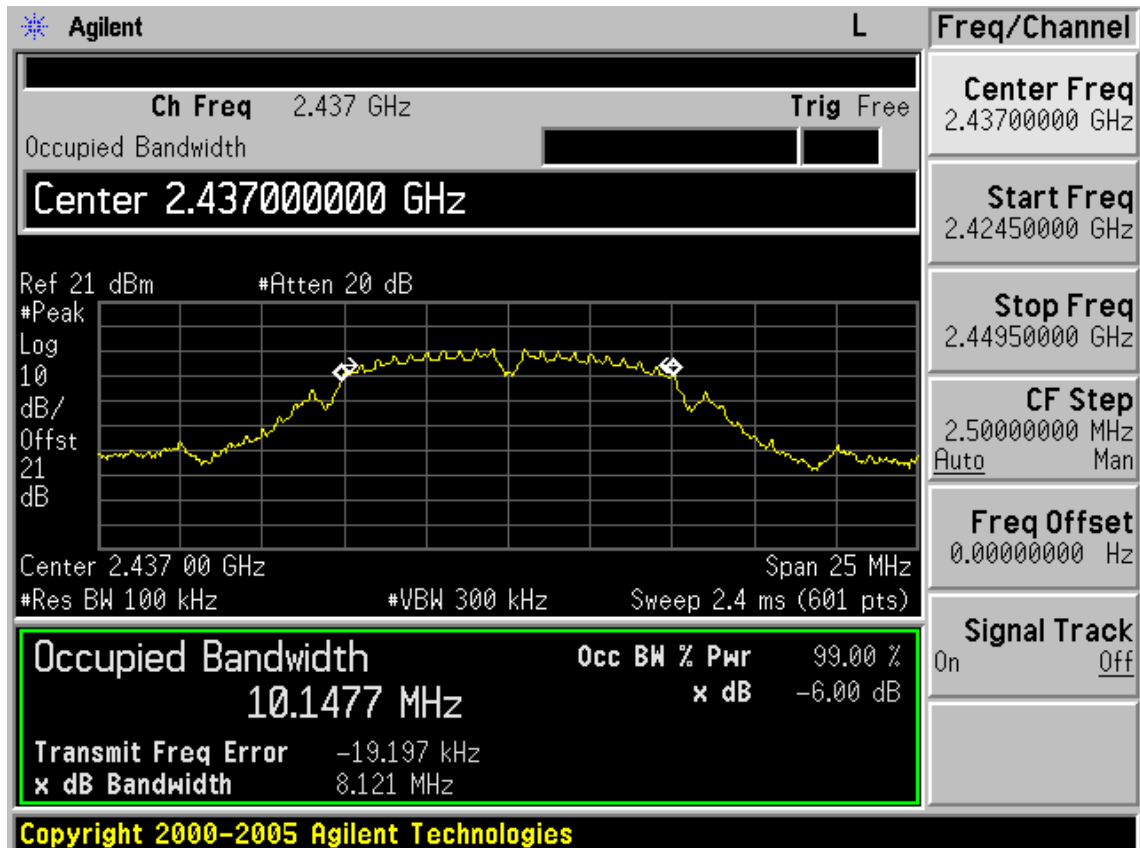
**Chain 1:**

Test Mode: IEEE 802.11b TX

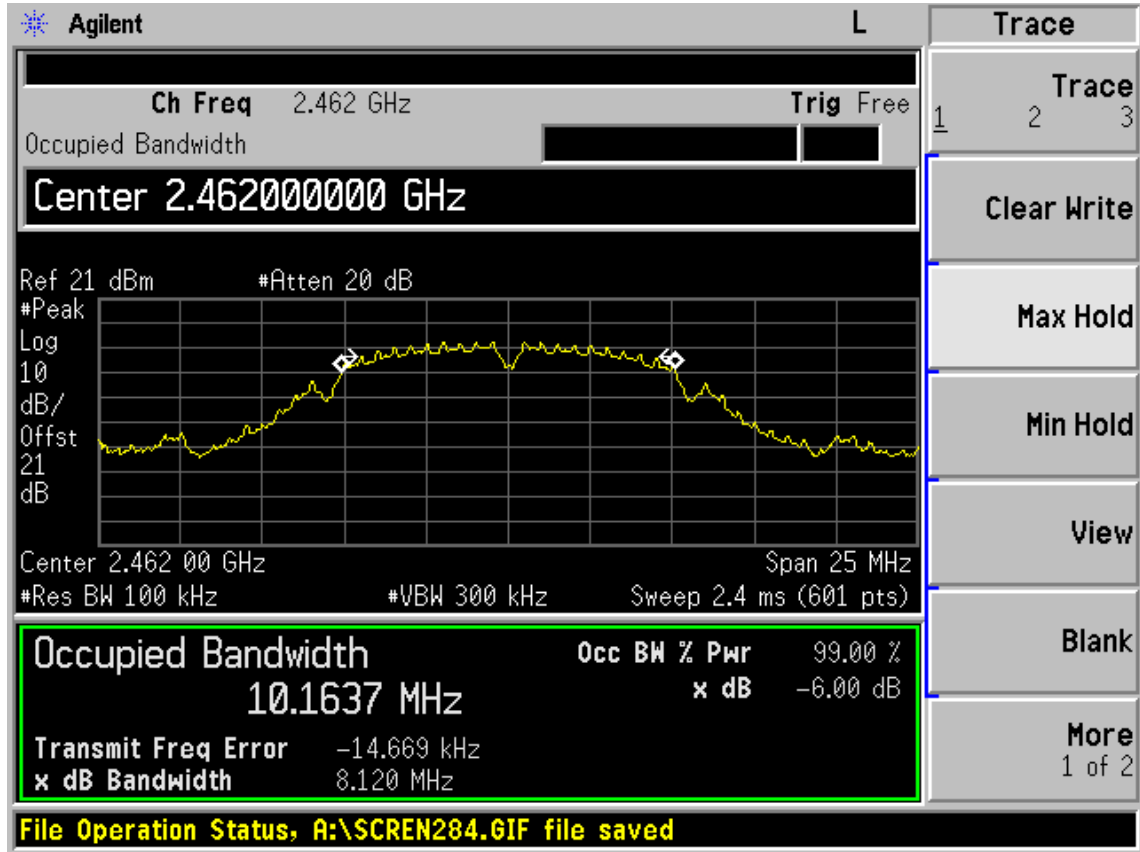
Test CH1: 2412MHz



Test CH6: 2437MHz

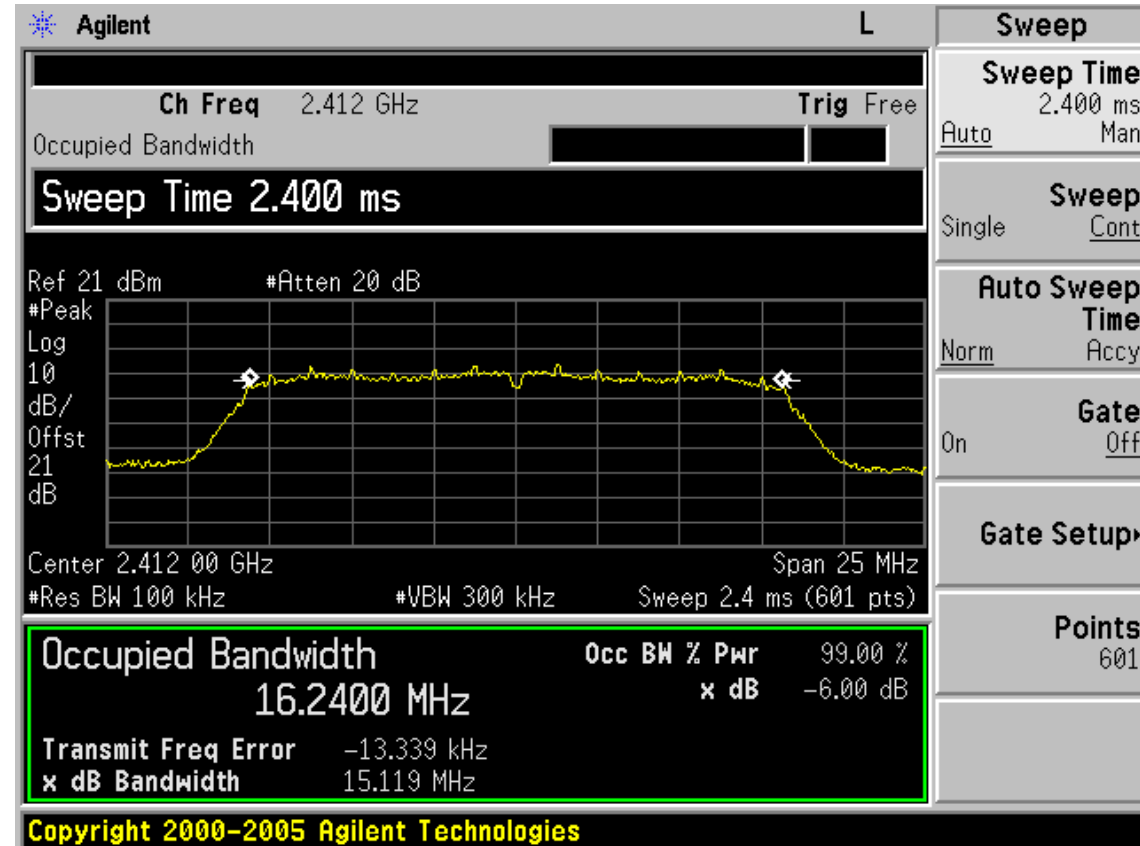


Test CH11: 2462MHz

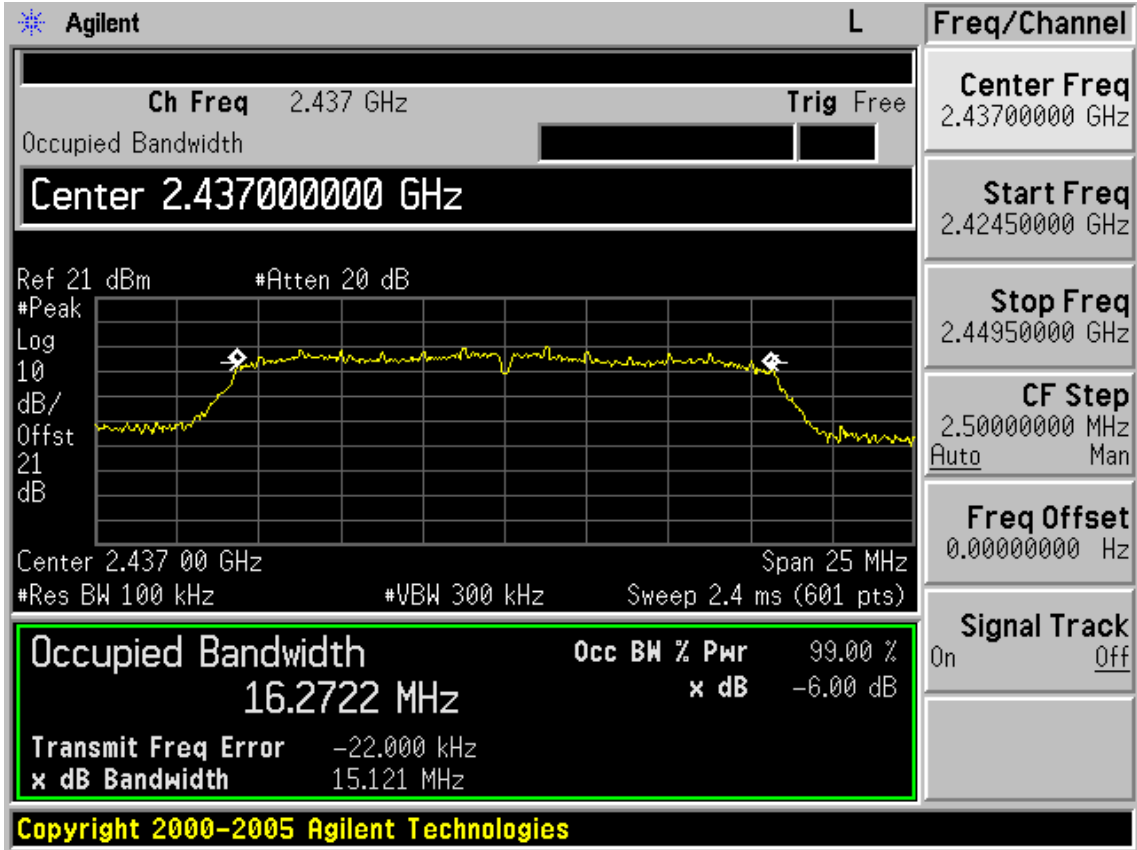


Test Mode: IEEE 802.11g TX

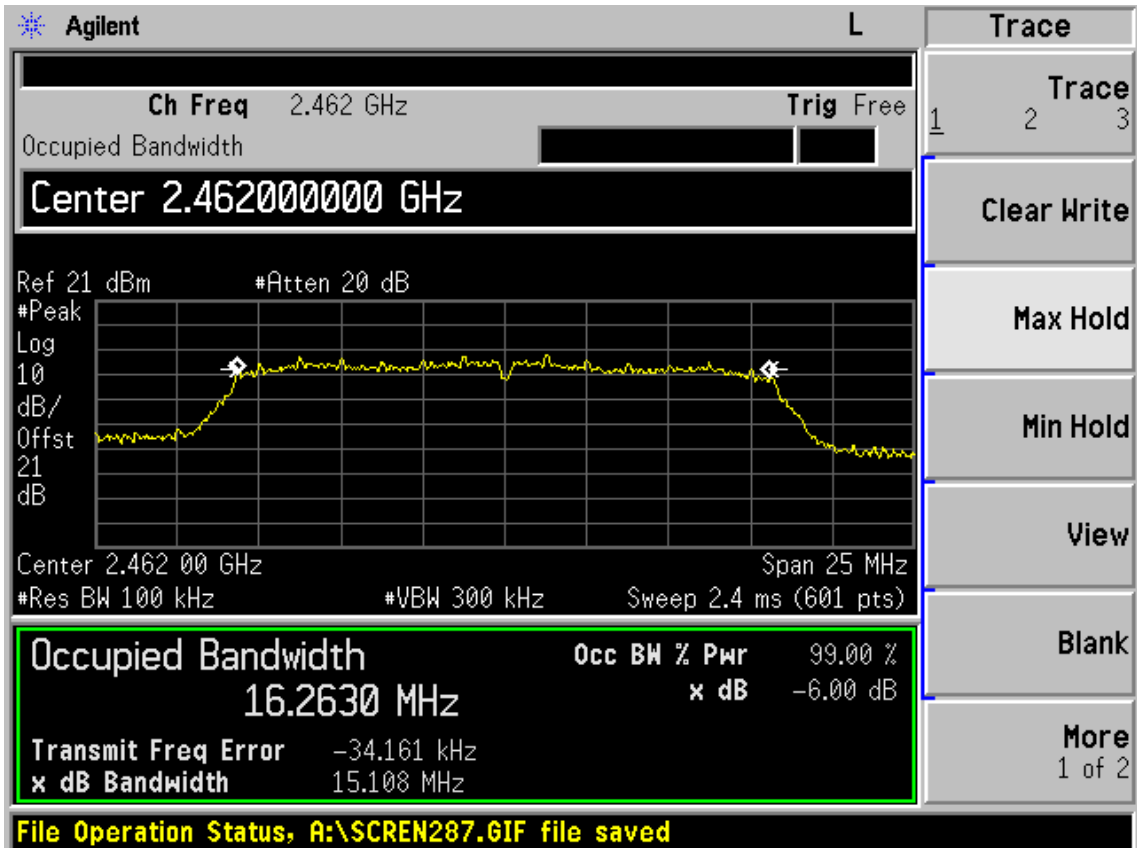
Test CH1: 2412MHz



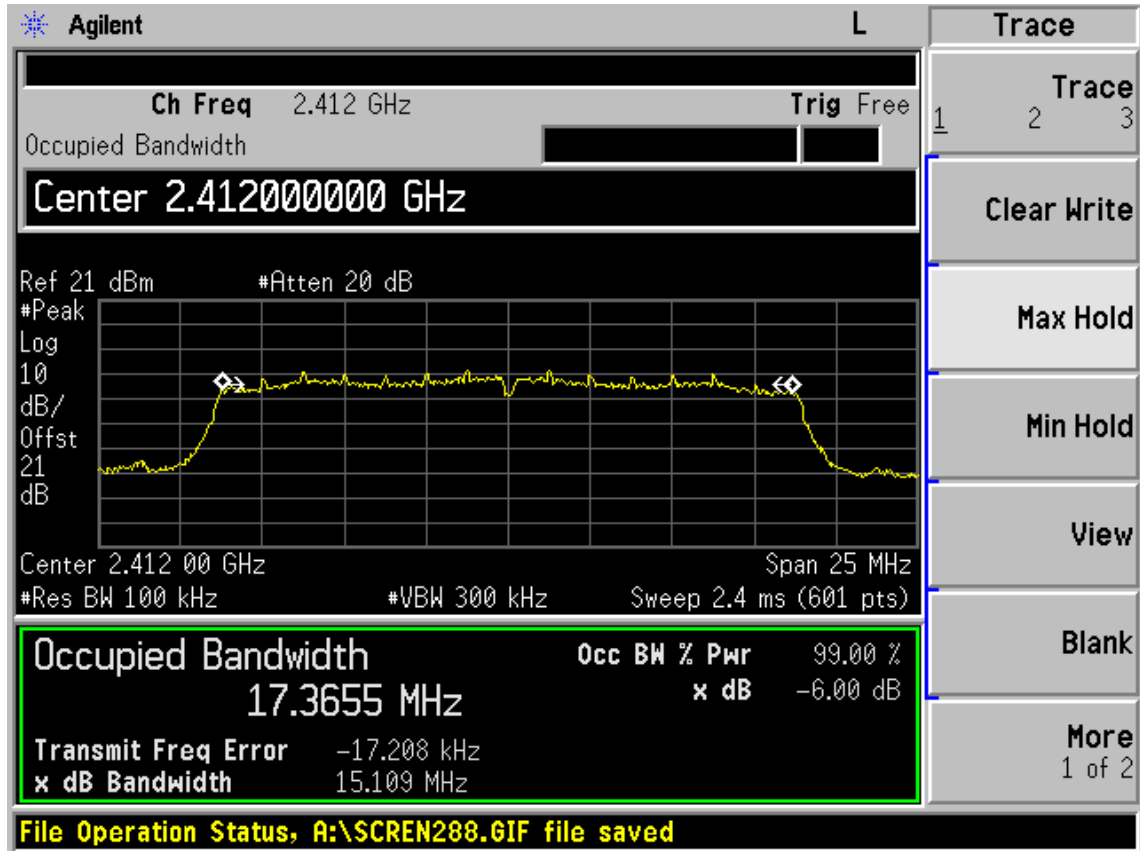
Test CH6: 2437MHz



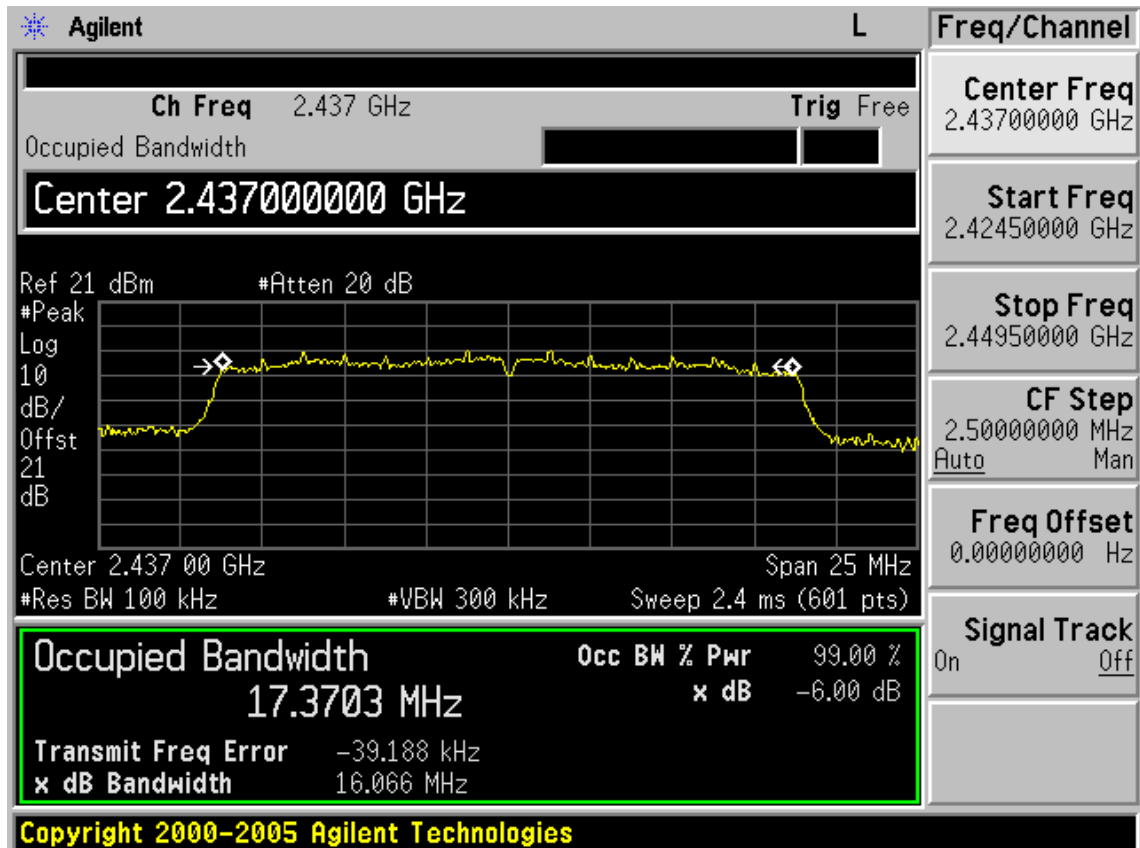
Test CH11: 2462MHz



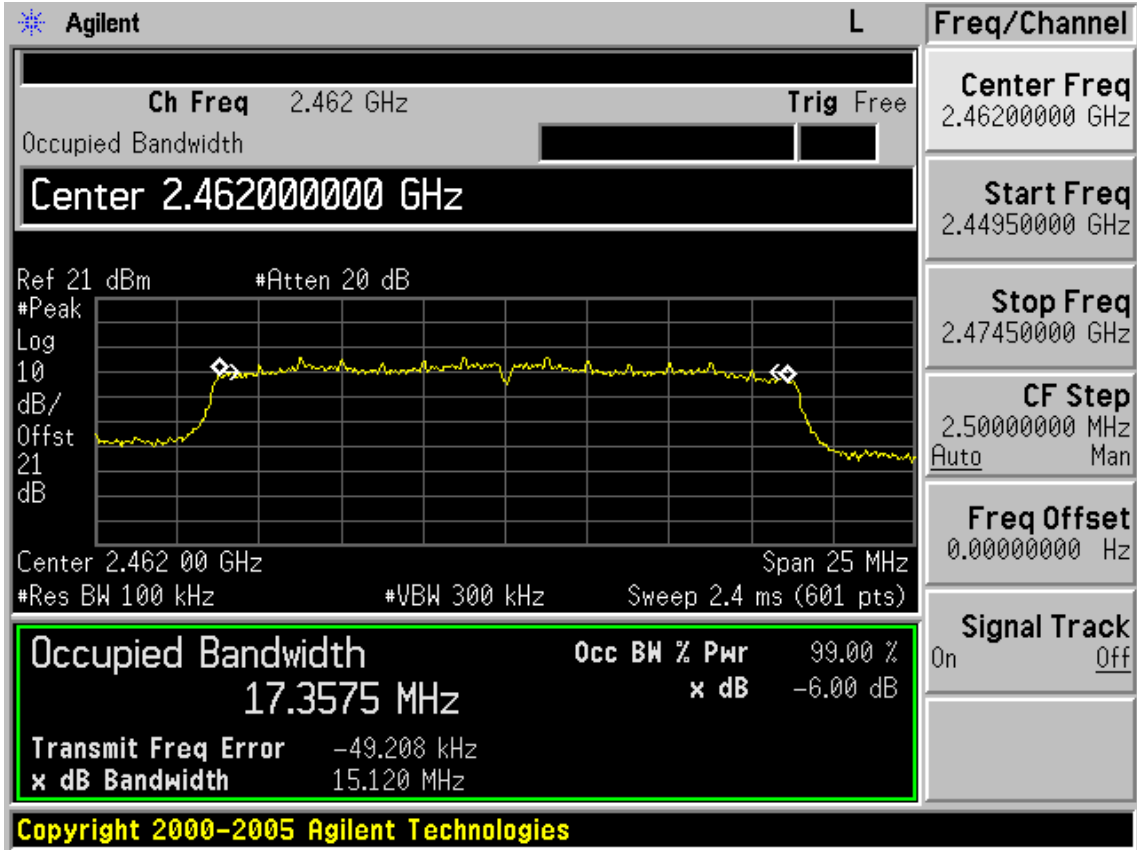
Test Mode: IEEE 802.11n HT20 TX  
 Test CH1: 2412MHz



Test CH6: 2437MHz

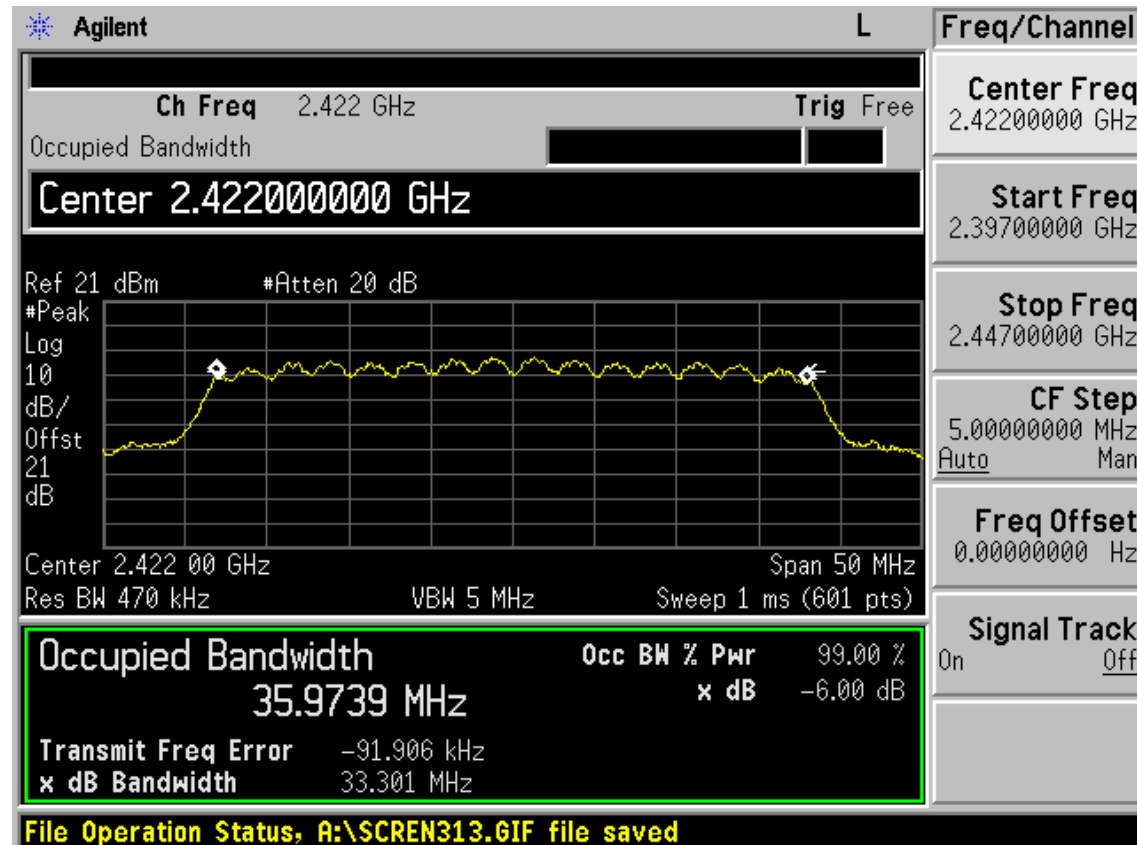


Test CH1: 2462MHz

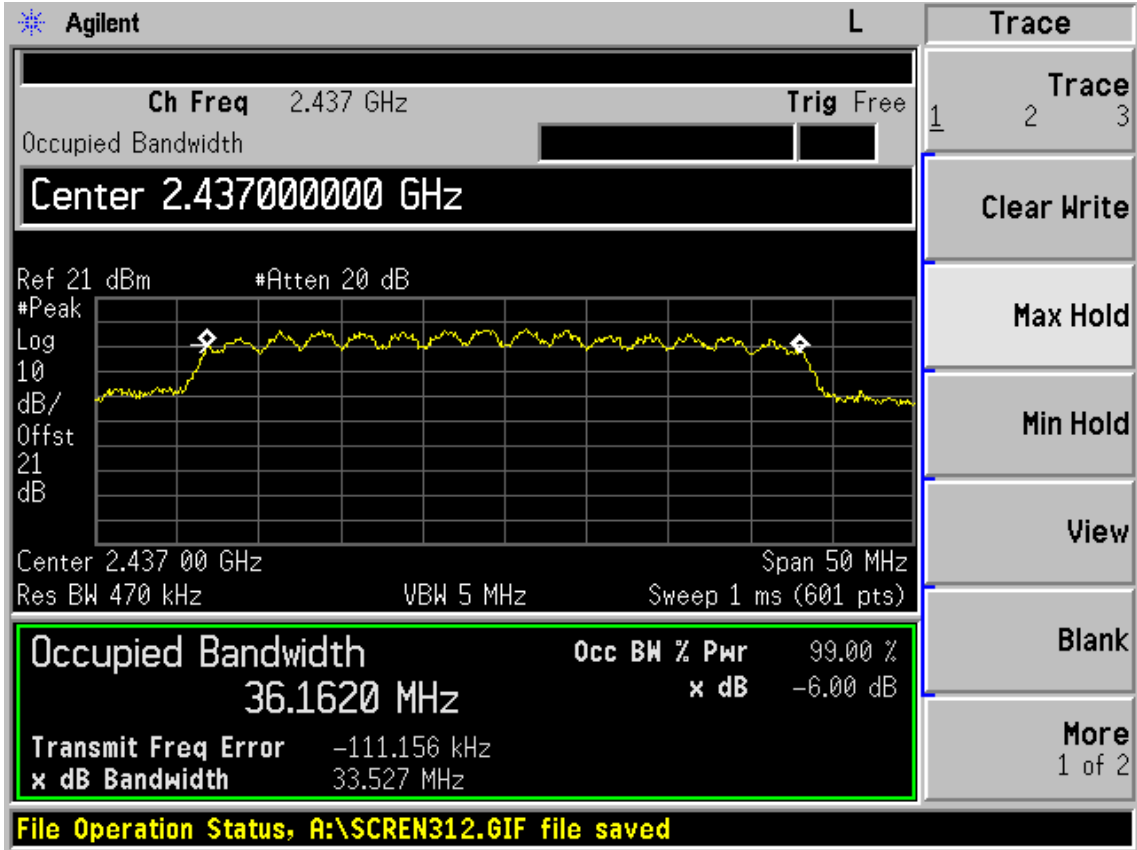


Test Mode: IEEE 802.11n HT40 TX

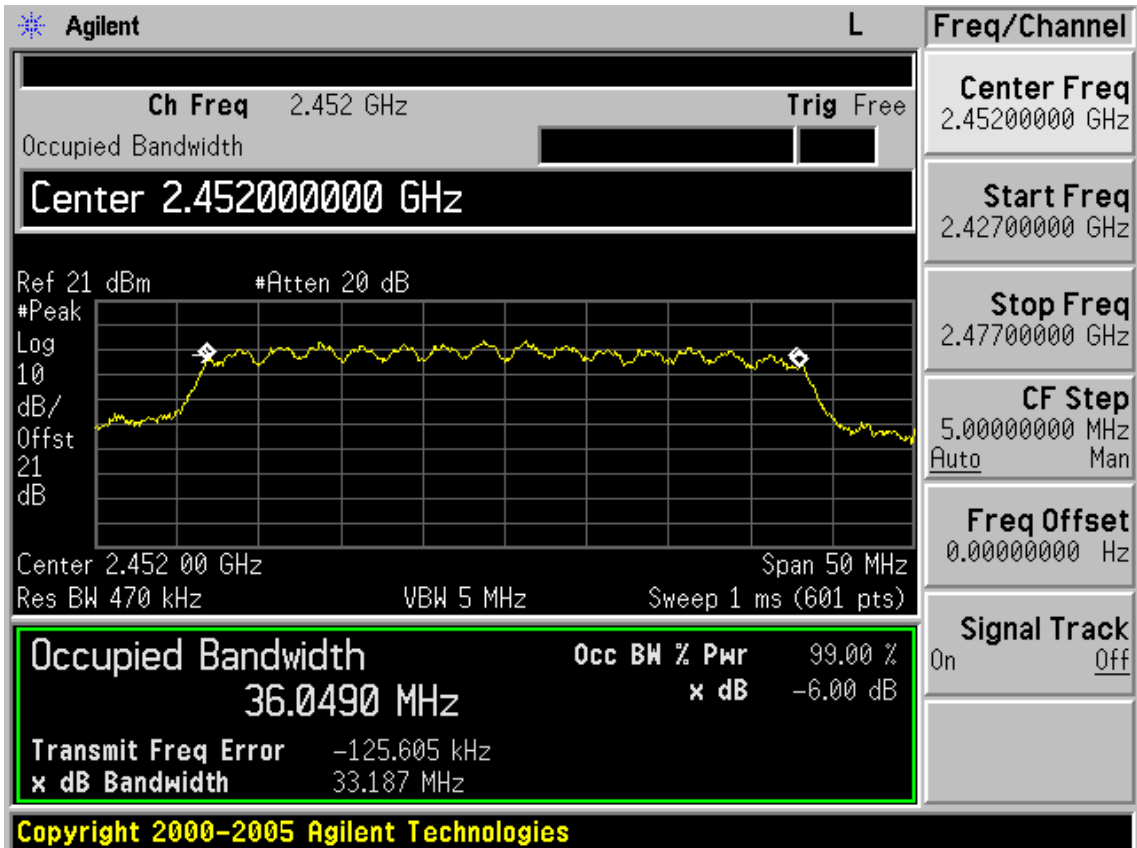
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz





## 8. OUTPUT POWER TEST

### 8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Power meter	Anritsu	ML2487A	6K00002472	May.08,11	1Year
2	Power sensor	Anritsu	MA2491A	0033005	May.08,11	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May.08,11	1Year

### 8.2. Limit

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

### 8.3. Test Procedure

- 1, Connected the EUT’s antenna port to measure device by 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which’s bandwidth is above 6dB bandwidth of signal to measure out each test modes and chain’s PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal’s bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
  - 1) Set the RBW=3MHz and VBW =8MHz
  - 2) Turn averaging off
  - 3) Set sweep to automatic
  - 4) Set the span just large enough to capture the emission
  - 5) Use a peak detector on max hold
  - 6) Record the measured power
  - 7) Calculate Output power of EUT use the formula:

Peak output power =measured power+ 10log[(6dB bandwidth of emission)/(analyzer RBW)]

- 4, For IEEE802.11n mode, it’s MIMO technology, so account total PK output power by add each chain’s PK output power.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

**8.4. Test Results**

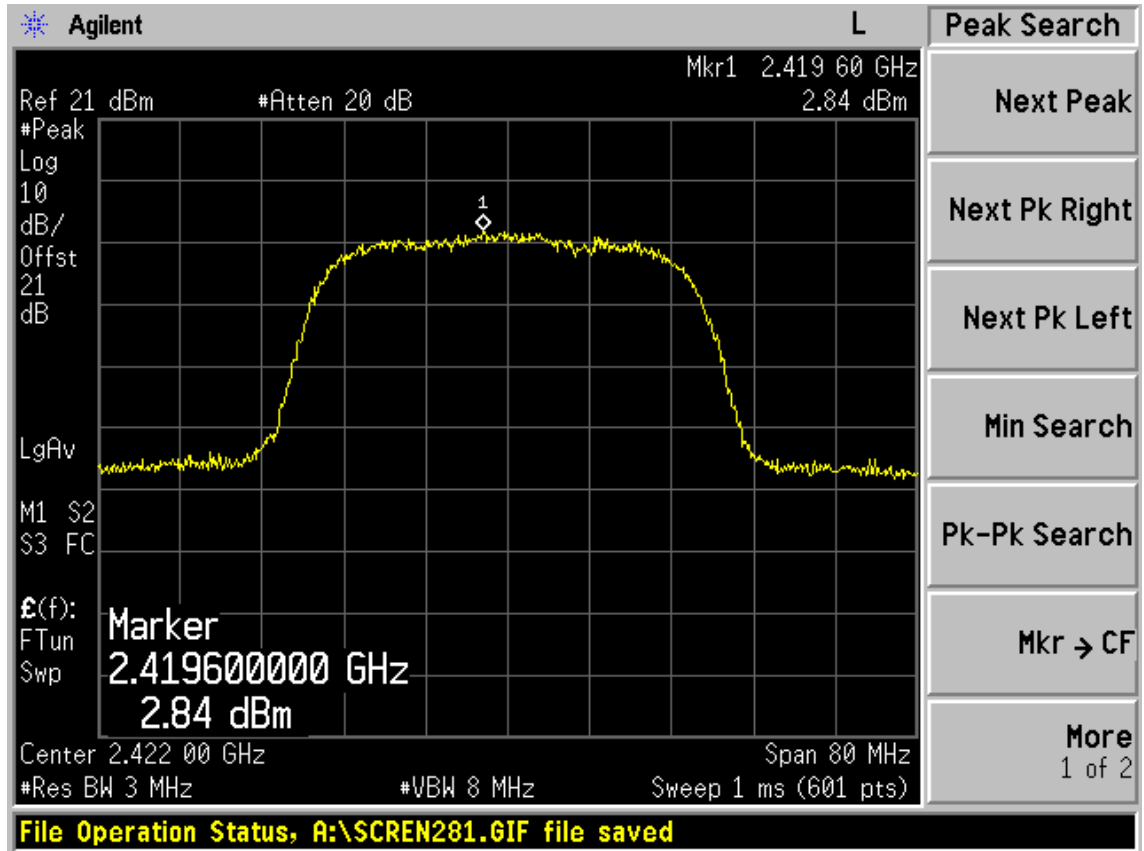
EUT: RF Module					
M/N: WN7122G-CN					
Test date: 2011-05-09		Pressure: 101.6 kpa			Humidity: 57 %
Tested by: Leo-Li		Test site: RF site			Temperature: 25 °C
Cable loss: 1 dB		Attenuator loss: 20 dB			Antenna Gain: 1.53 dBi
Test Mode	CH (MHz)	Peak output Power (dBm)			Limit (dBm)
		Chain0	Chain1	Total	
11b	CH1	20.15	20.38	N/A	30
	CH6	18.30	19.13	N/A	30
	CH11	20.79	21.09	N/A	30
11g	CH1	18.42	18.81	N/A	30
	CH6	24.39	25.08	N/A	30
	CH11	22.87	23.57	N/A	30
11n HT20	CH1	15.76	16.63	19.28	30
	CH6	24.74	25.02	27.90	30
	CH11	21.58	21.37	24.50	30

Test Mode	CH	Result					Limit (dBm)
		Measured power(dBm)/3MHz		PK Output power (dBm)			
		Chain0	Chain1	Chain0	Chain1	Total	
11n HT40	CH3	4.82	5.54	15.29	16.02	18.74	30
	CH6	13.59	15.56	24.06	26.04	28.18	30
	CH9	8.79	10.44	19.26	20.92	23.20	30
Chain 0		6dB Bandwidth for 11n HT40: 33.4MHz					
Chain 1		6dB Bandwidth for 11n HT40: 32.7MHz					
Chain 0		BW correction factor = $10\log[(33.4\text{MHz})/(3\text{MHz})] = 10.47\text{dB}$					
Chain 1		BW correction factor = $10\log[(33.5\text{MHz})/(3\text{MHz})] = 10.48\text{dB}$					
Conclusion: PASS							

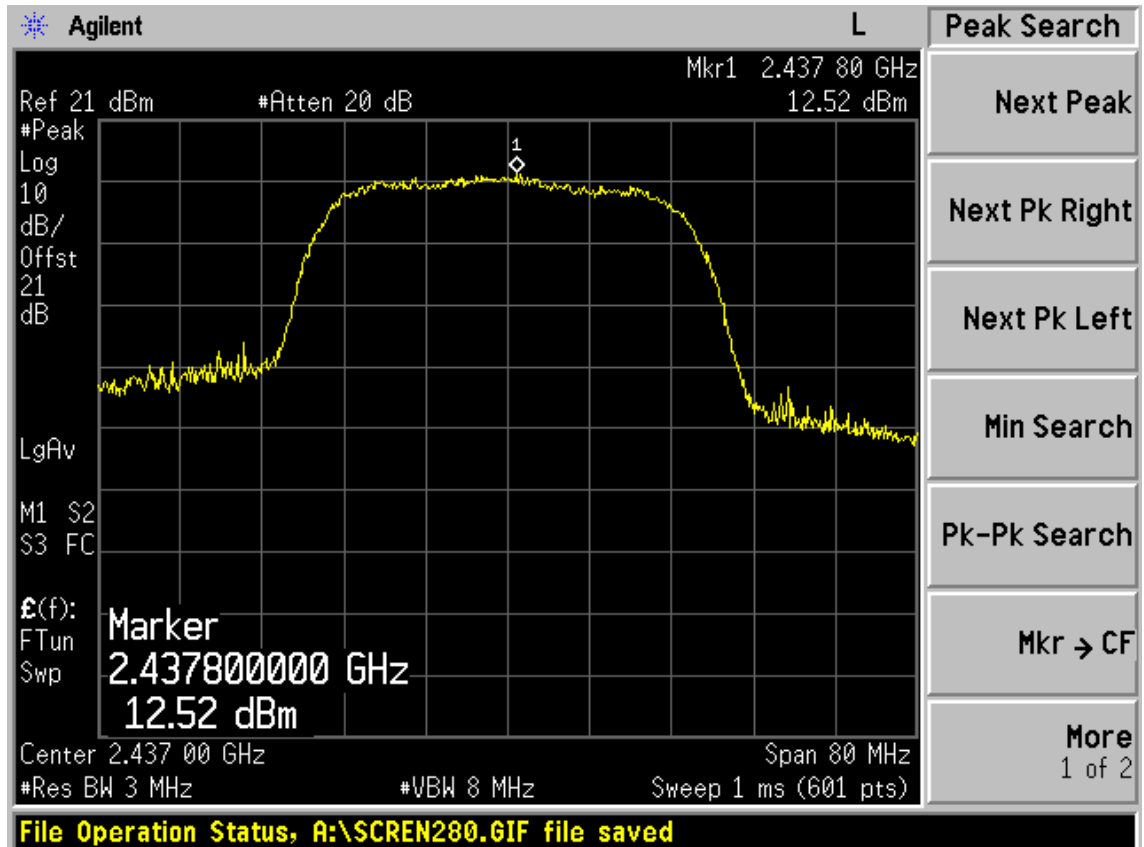
Test Mode: IEEE 802.11n HT40

Chain 0:

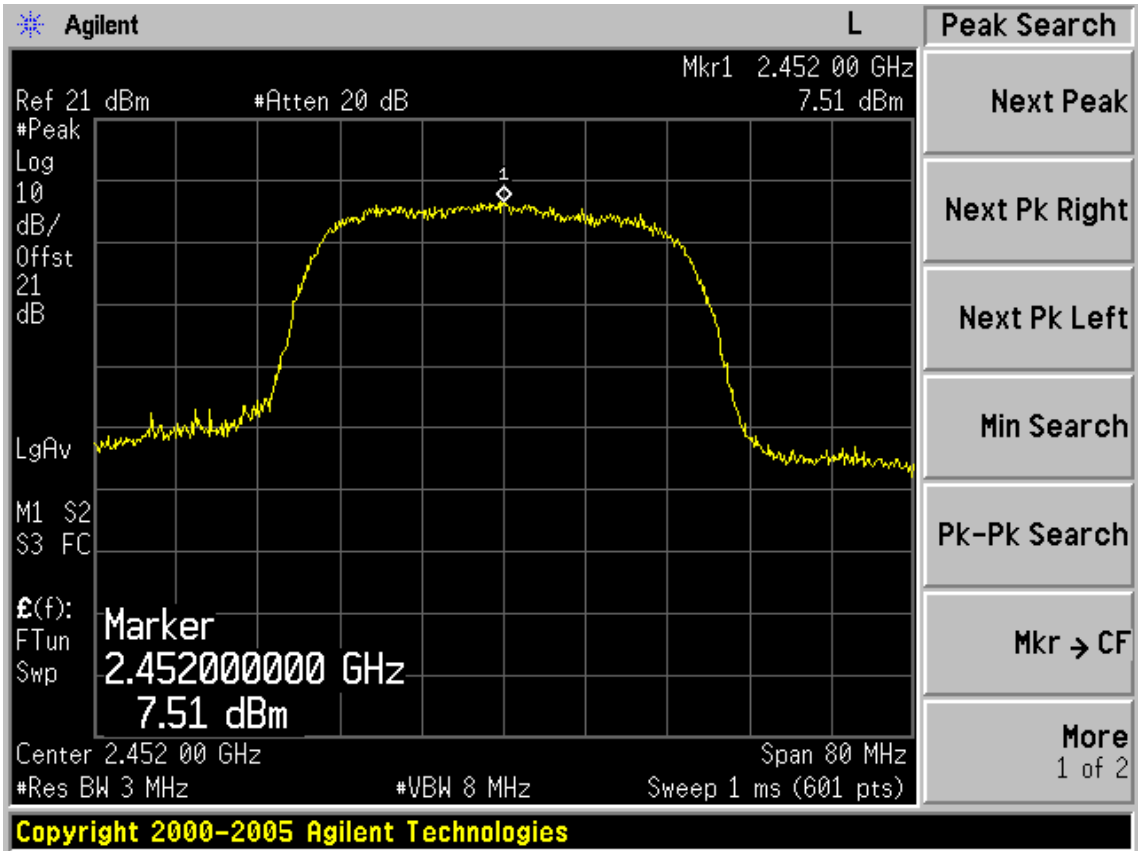
Test CH1: 2422MHz



Test CH1: 2437MHz

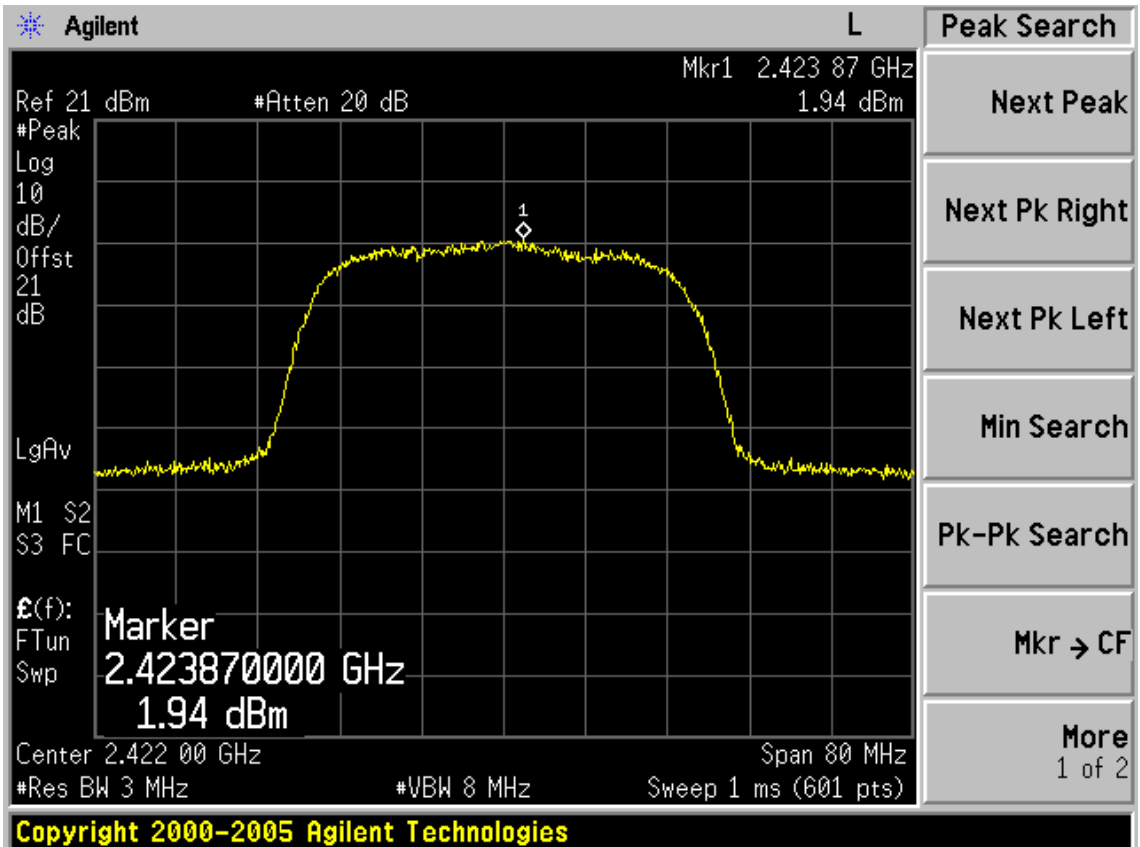


Test CH1: 2452MHz

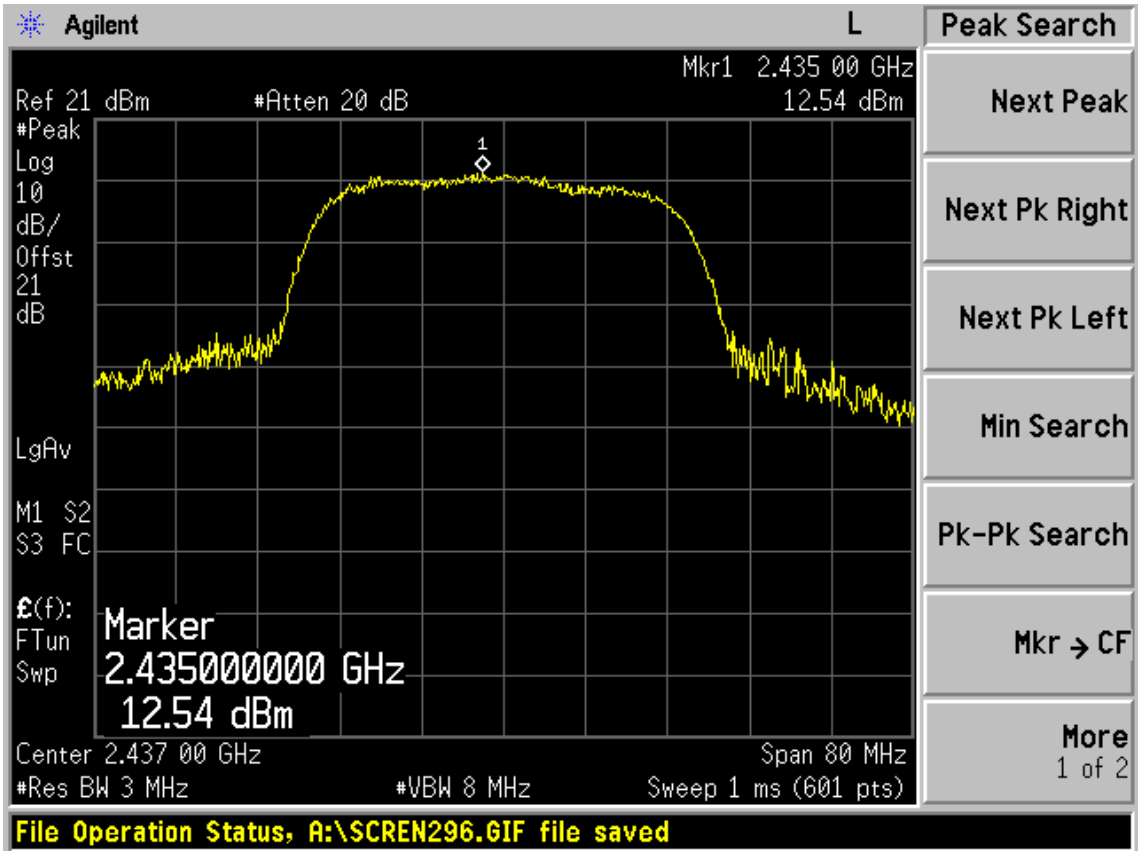


Chain 1:

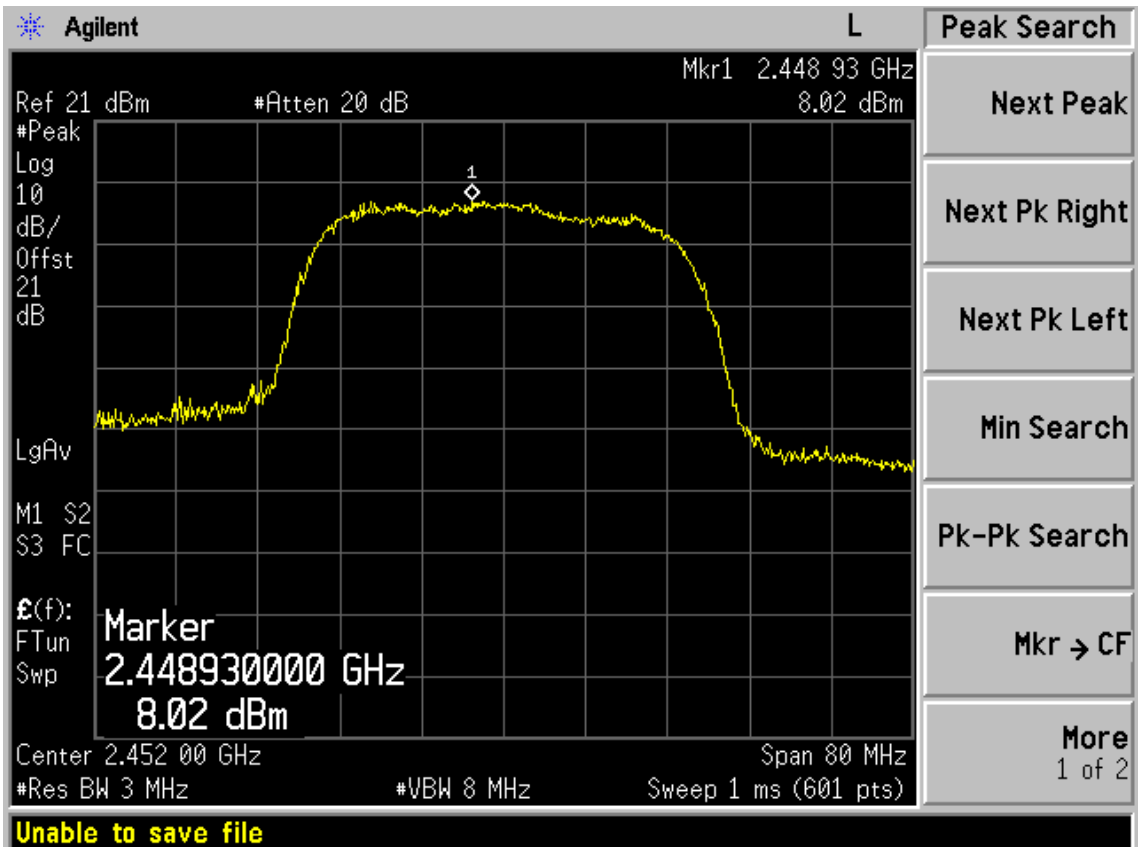
Test CH1: 2422MHz



Test CH1: 2437MHz



Test CH1: 2452MHz



## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May.08, 11	1Year

### 9.2. Limit

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

### 9.3. Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
- 2, Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.
- 3, For IEEE802.11n mode, it's MIMO technology, so account total power density by add each chain's power density.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

### 9.4. Test Results

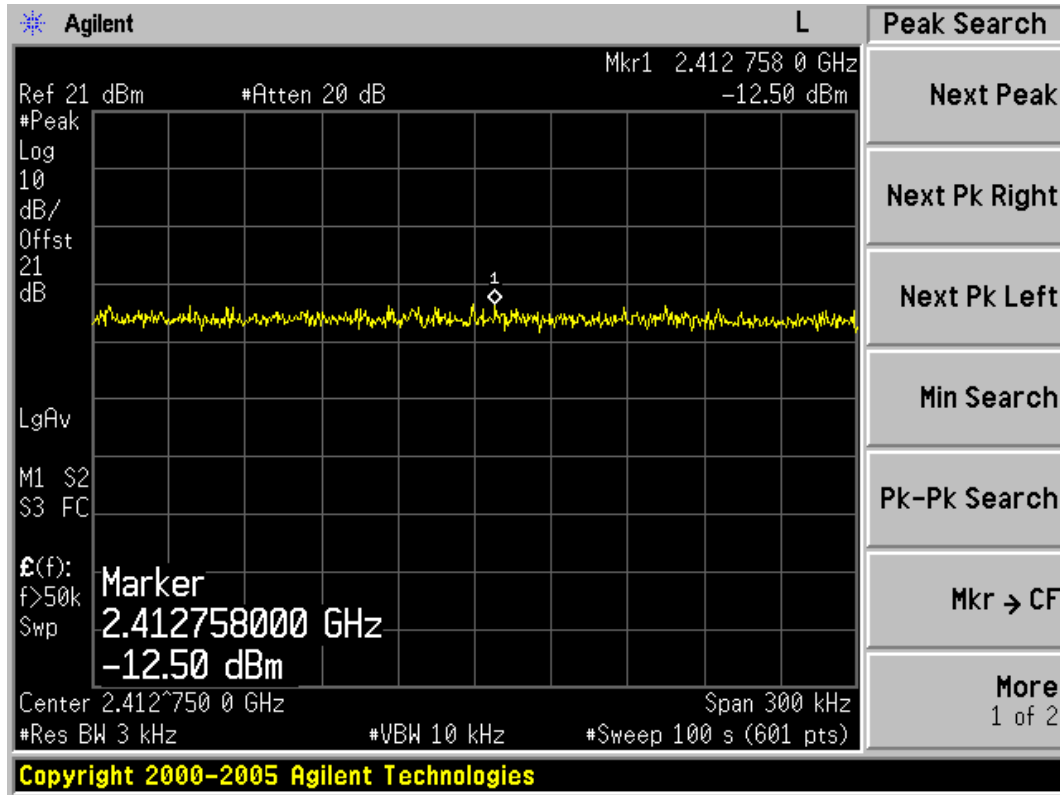
EUT: RF Module		
M/N: WN7122G-CN		
Test date:2011-05-09	Pressure: 100.6 kpa	Humidity: 45 %
Tested by: Leo-Li	Test site: RF Site	Temperature : 25°C

Cable loss: 1 dB		Attenuator loss: 20 dB			Antenna Gain: 1.53 dBi
Test Mode	CH	Power density ( dBm/3KHz )			Limit (dBm/3KHz)
		Chain0	Chain1	Total	
11b	CH1	-12.50	-10.20	N/A	8
	CH6	-12.46	-12.11	N/A	8
	CH11	-10.90	-11.25	N/A	8
11g	CH1	-20.96	-20.30	N/A	8
	CH6	-14.23	-13.62	N/A	8
	CH11	-15.50	-15.80	N/A	8
11n HT20	CH1	-22.90	-21.57	-19.17	8
	CH6	-13.48	-13.72	-10.59	8
	CH11	-17.02	-17.84	-14.40	8
11n HT40	CH1	-23.28	-19.70	-18.12	8
	CH4	-12.85	-10.64	-8.60	8
	CH7	-17.82	-12.55	-11.42	8
Conclusion : PASS					

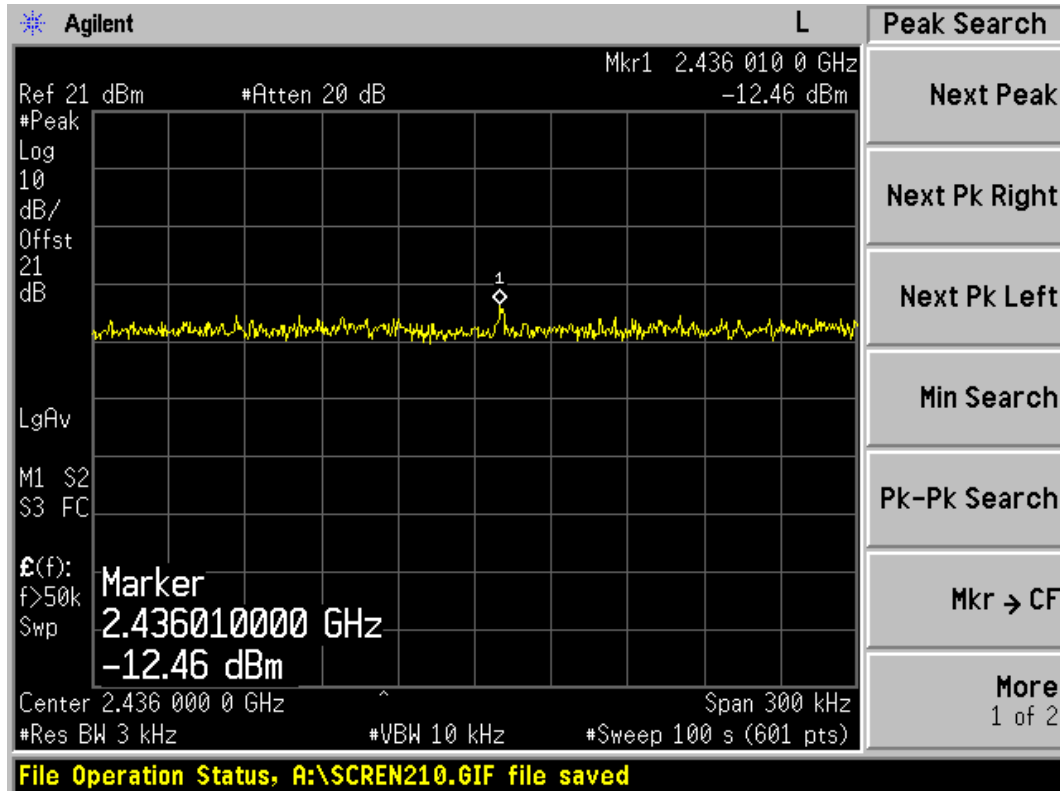
**Chain 0:**

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

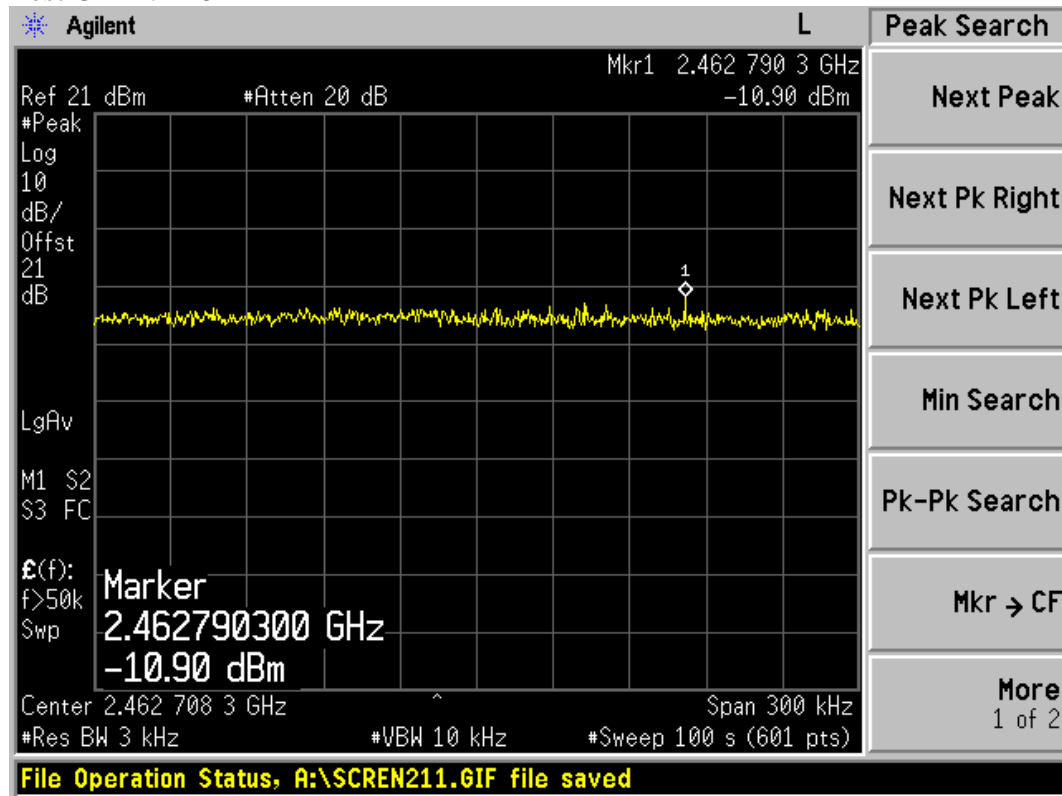


Test CH6: 2437MHz



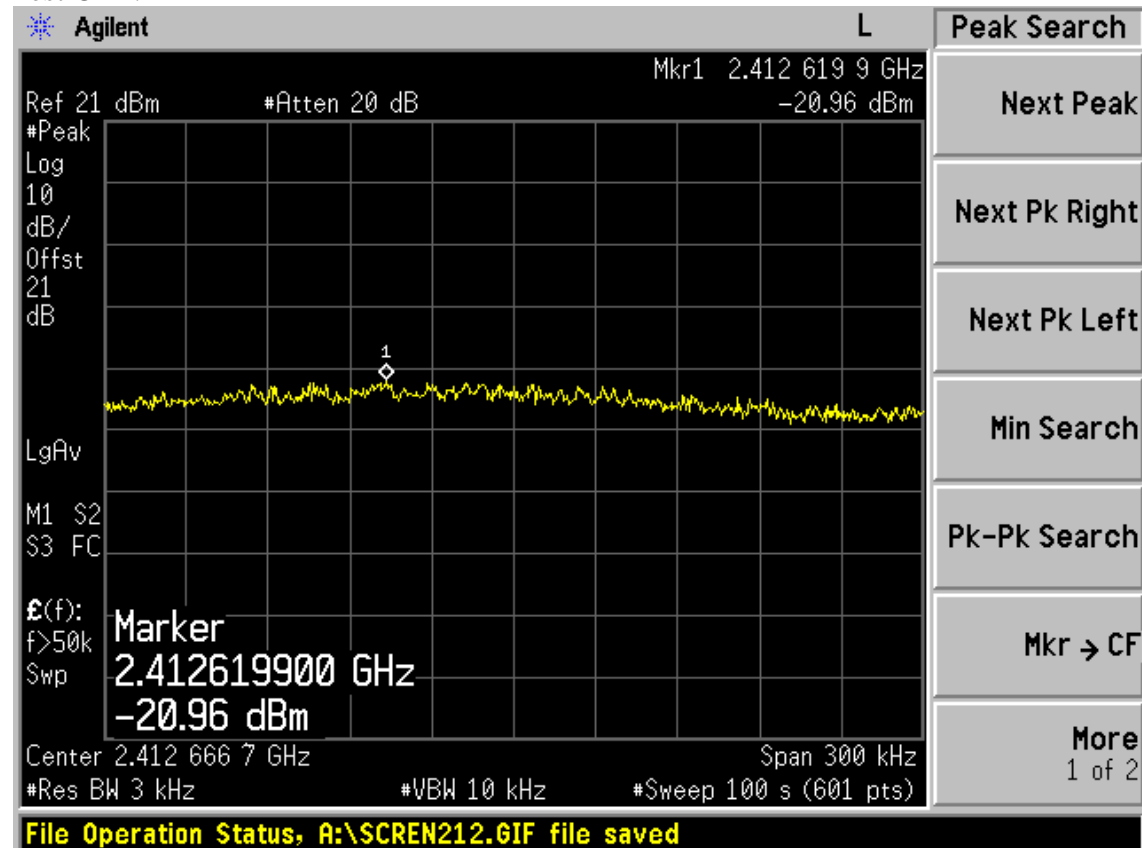


Test CH1: 2462MHz

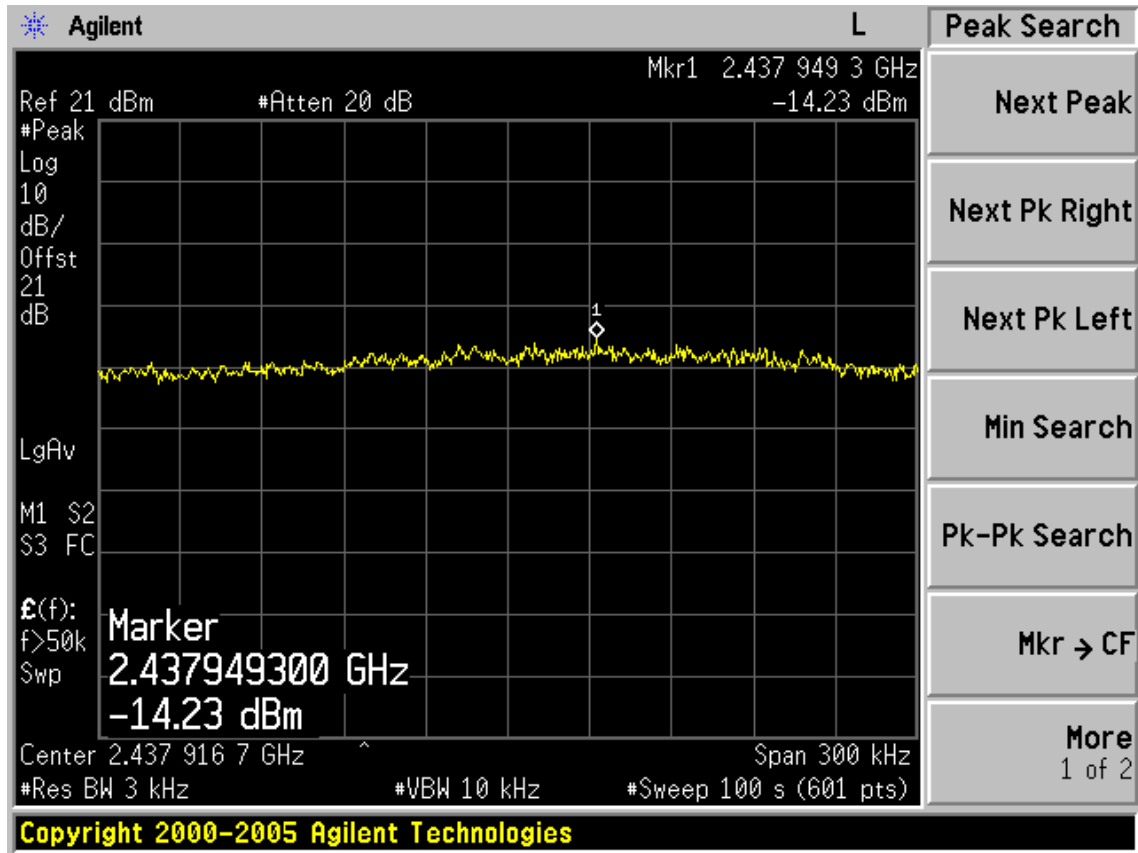


Test Mode: IEEE 802.11g TX

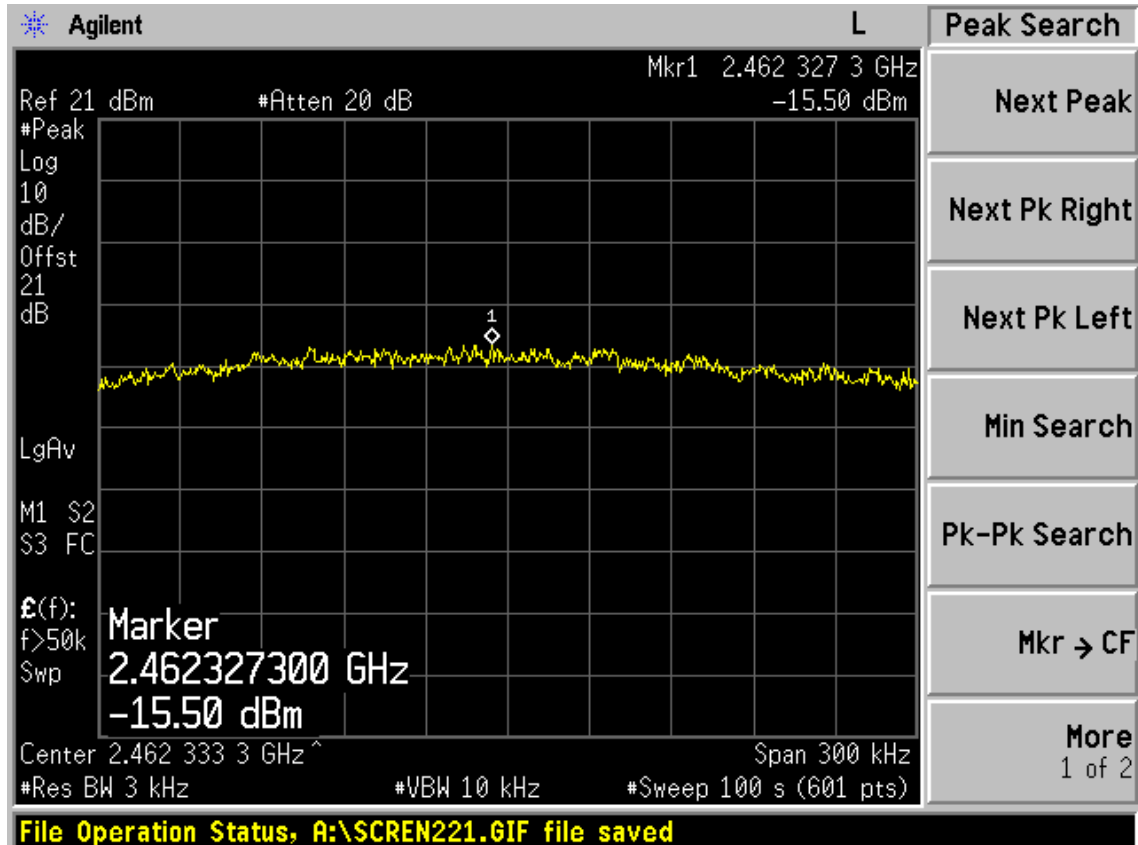
Test CH1: 2412MHz



Test CH6: 2437MHz

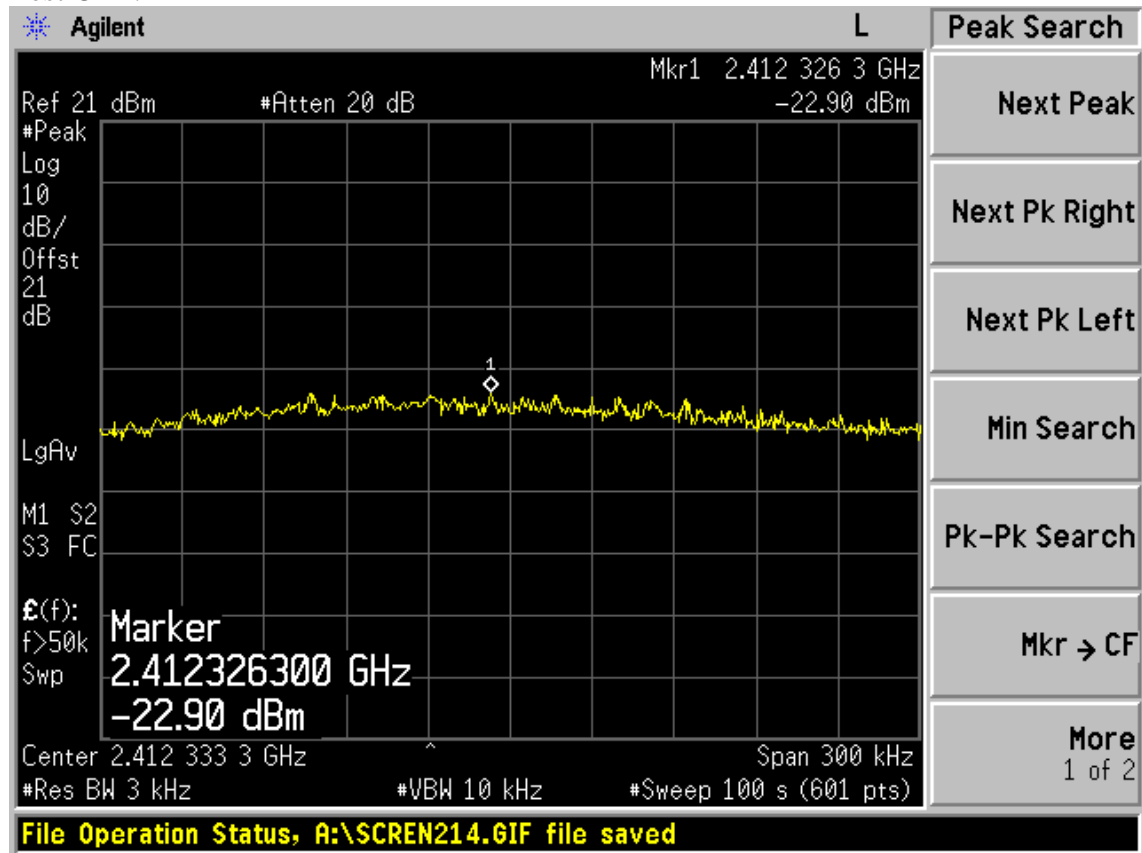


Test CH11: 2462MHz

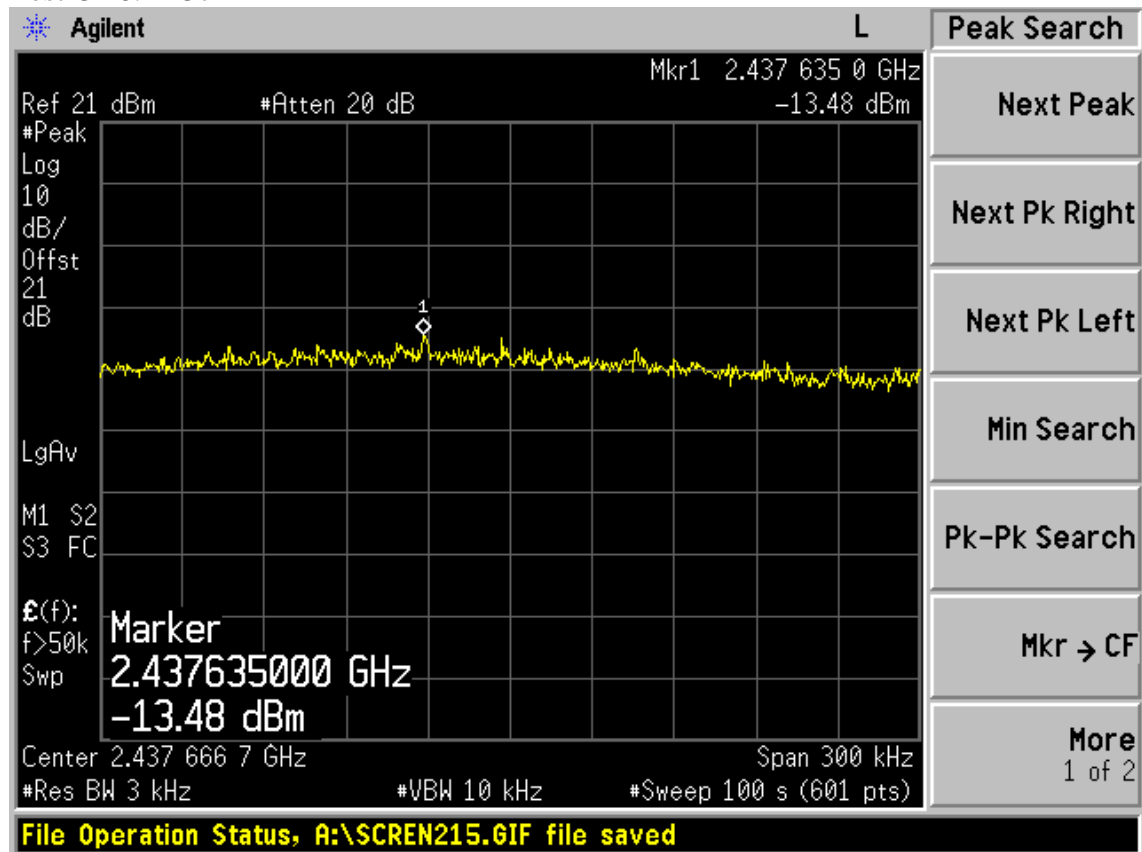


Test Mode: IEEE 802.11n HT20 TX

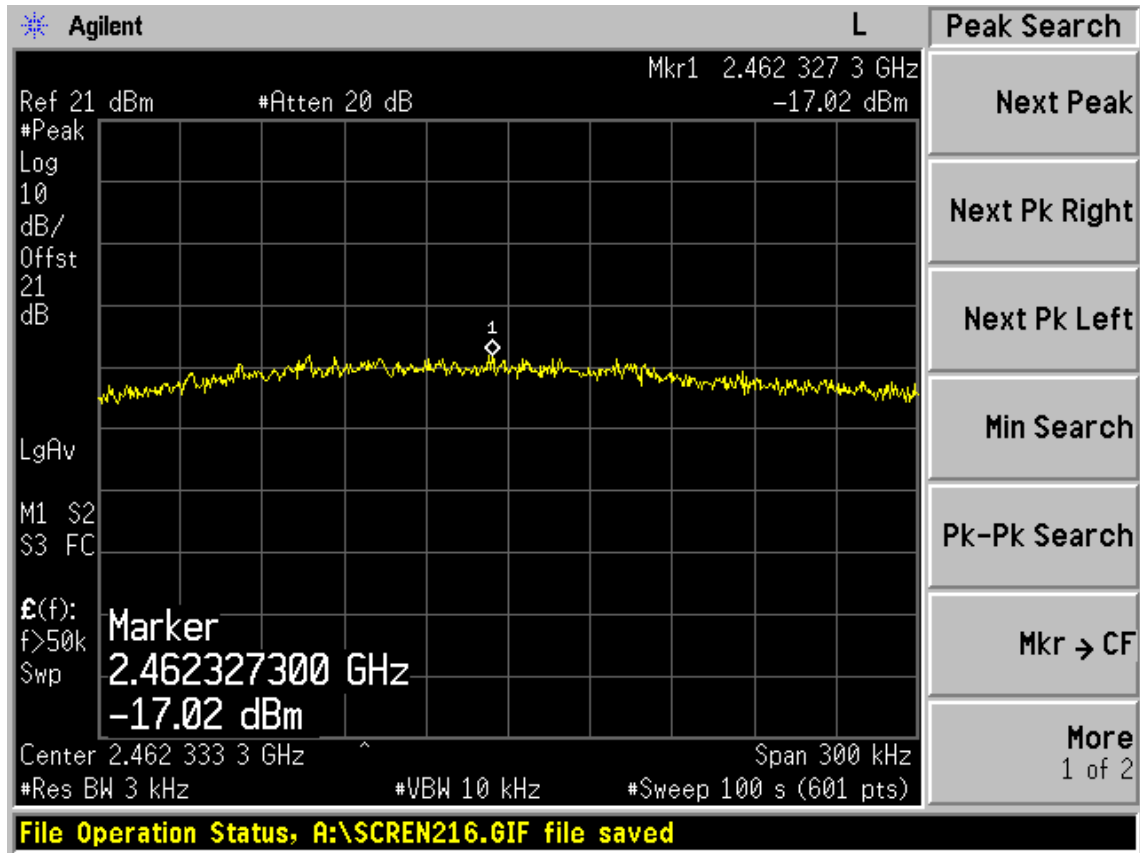
Test CH1: 2412MHz



Test CH6: 2437MHz

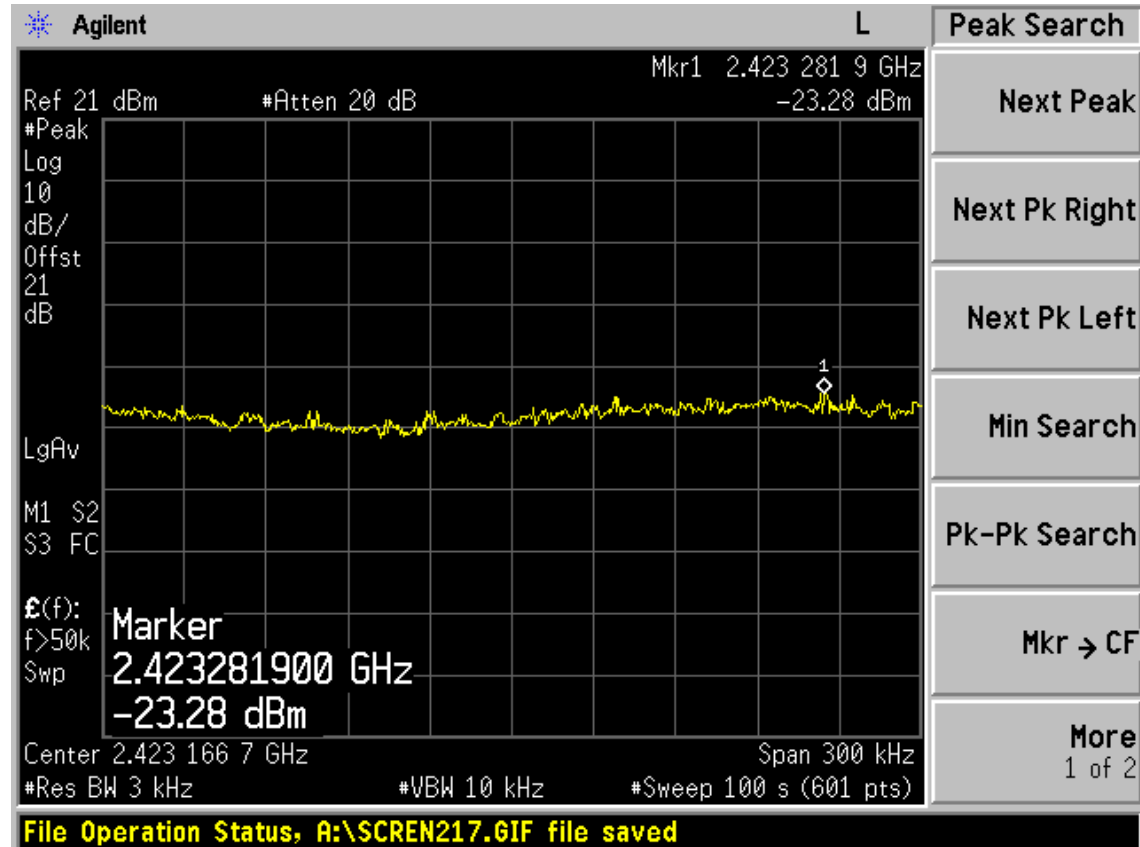


Test CH1: 2462MHz

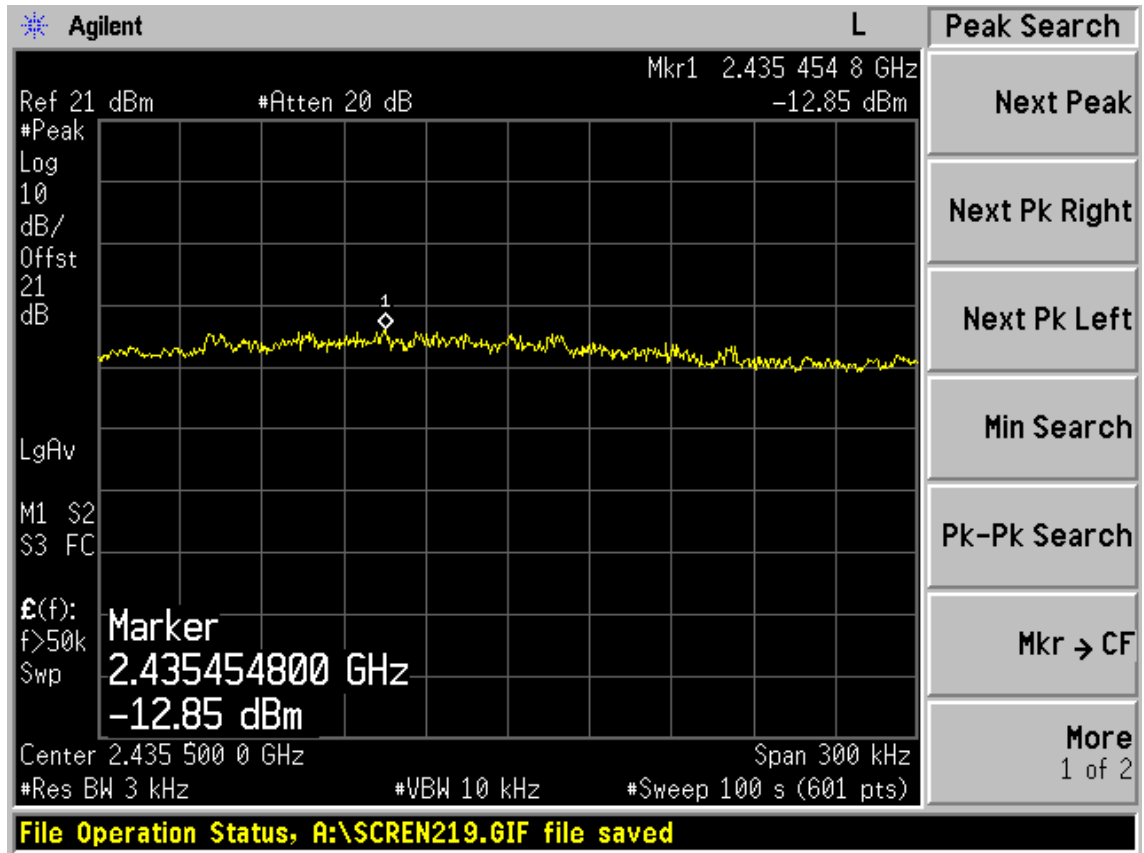


Test Mode: IEEE 802.11n HT40 TX

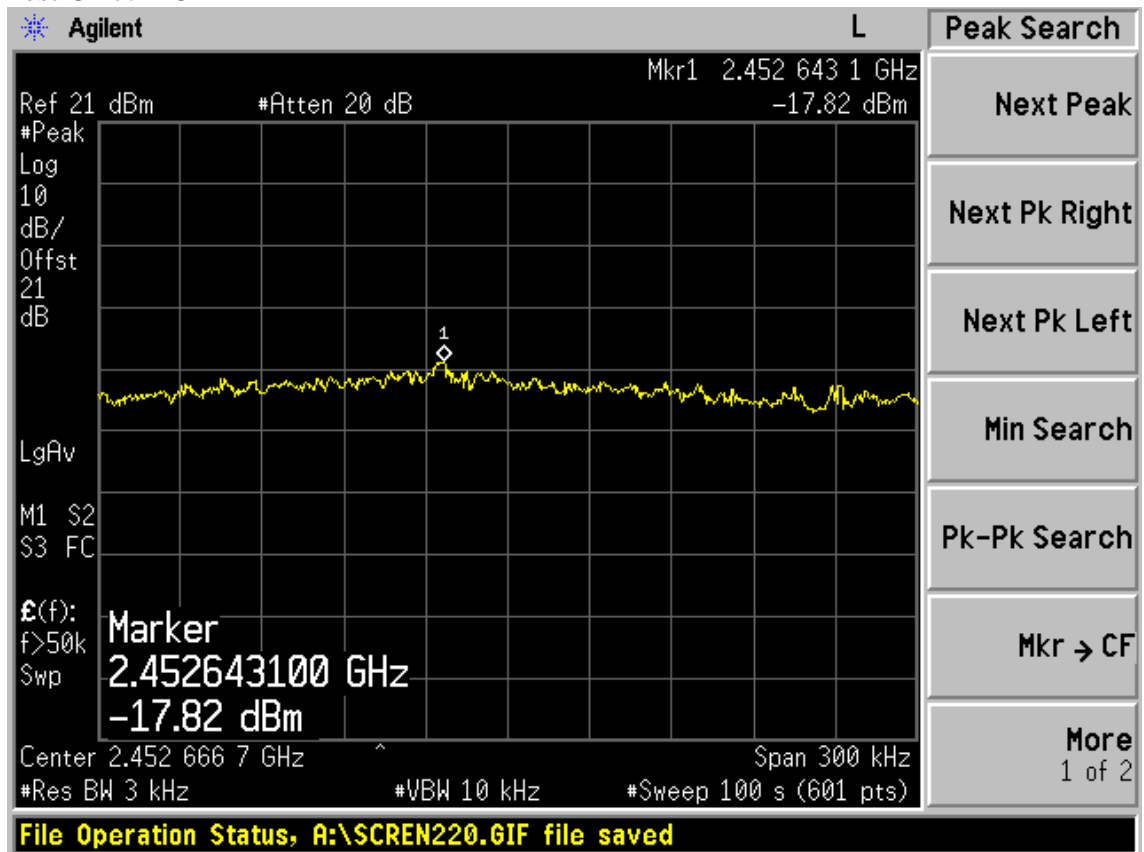
Test CH1: 2422MHz



Test CH4: 2437MHz



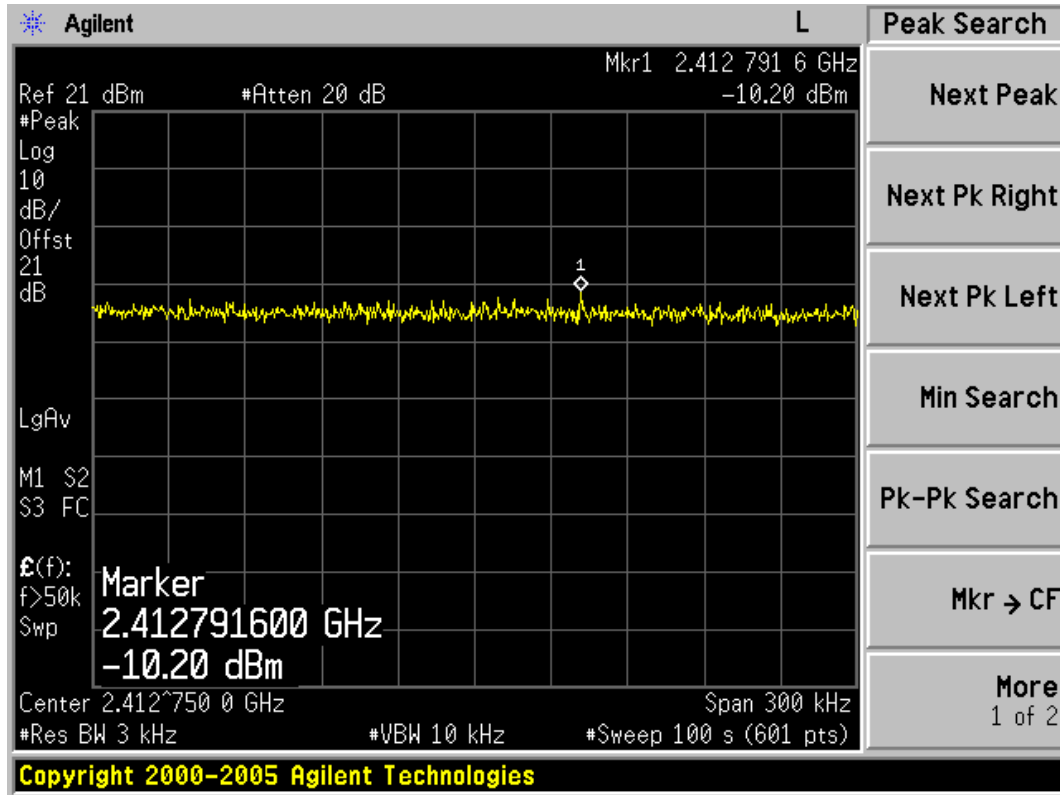
Test CH7: 2452MHz



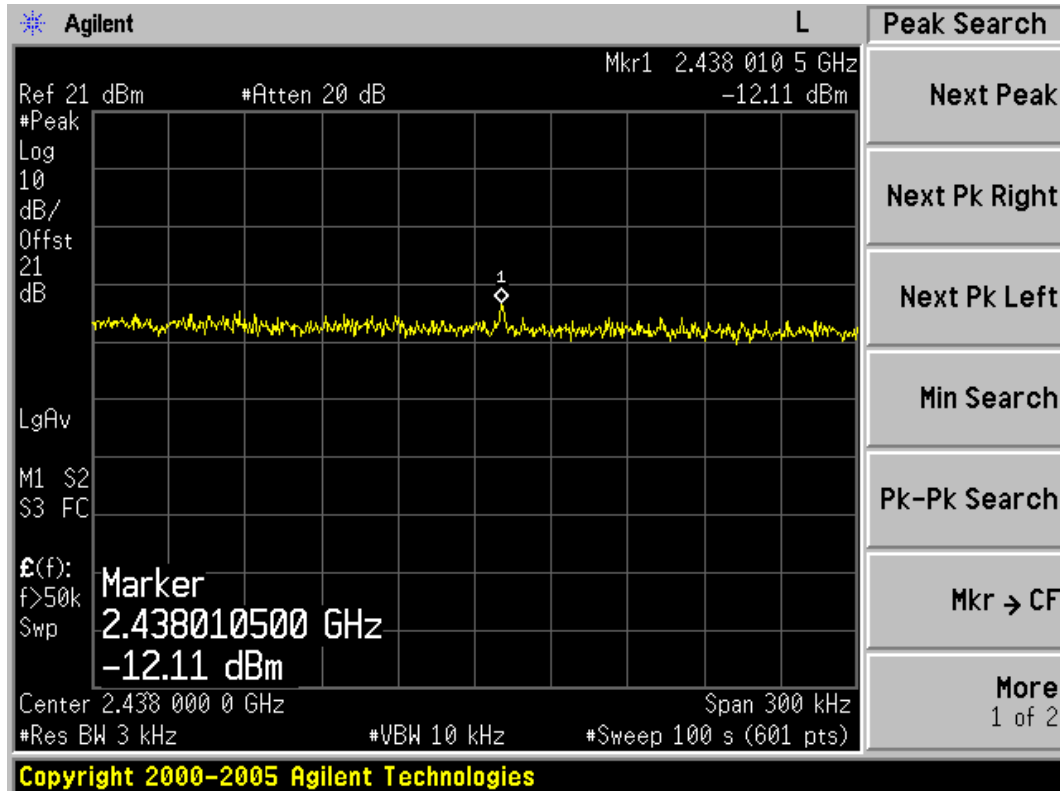
**Chain 1:**

Test Mode: IEEE 802.11b TX

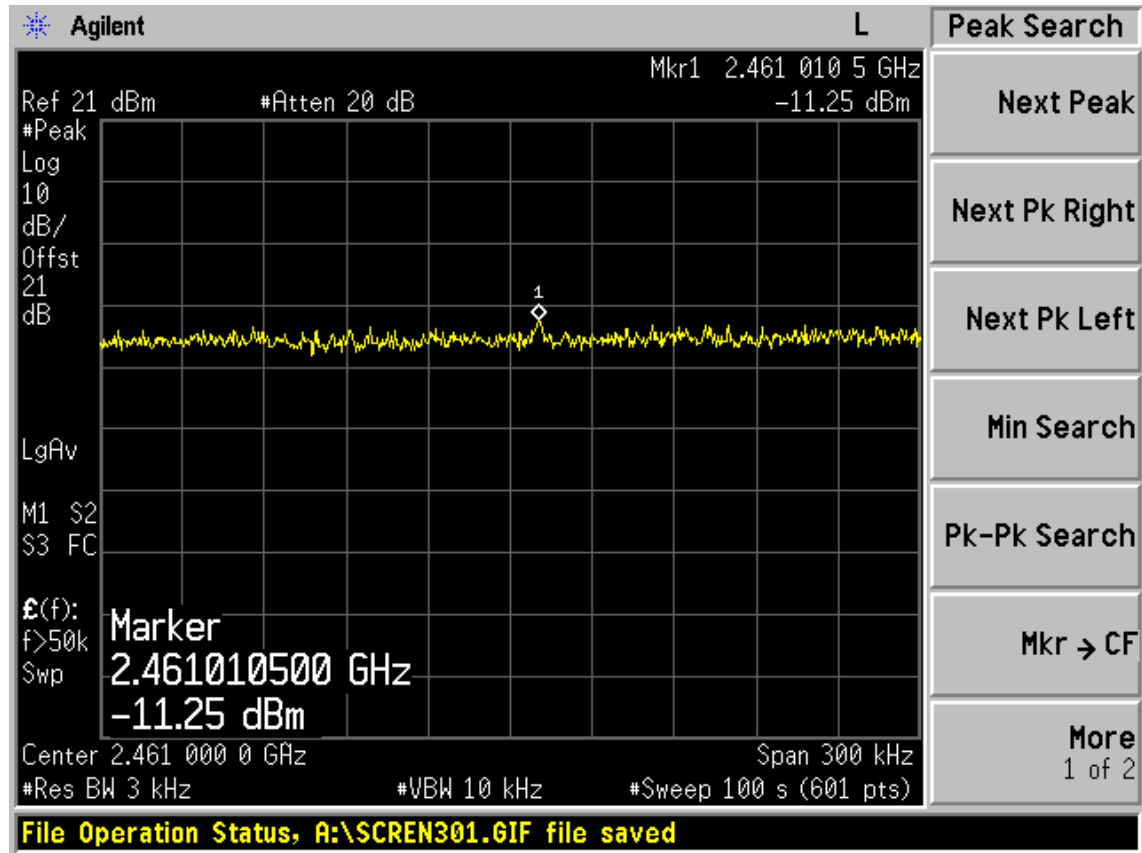
Test CH1: 2412MHz



Test CH6: 2437MHz

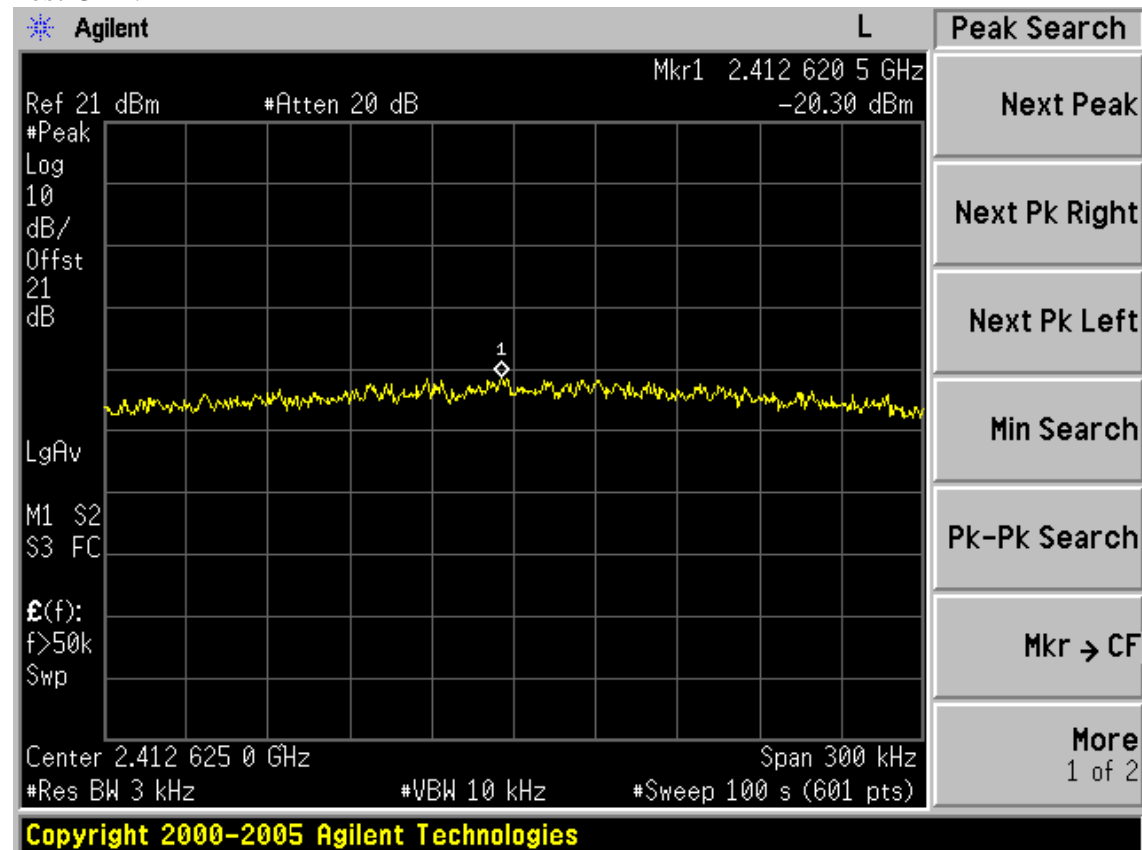


Test CH1: 2462MHz

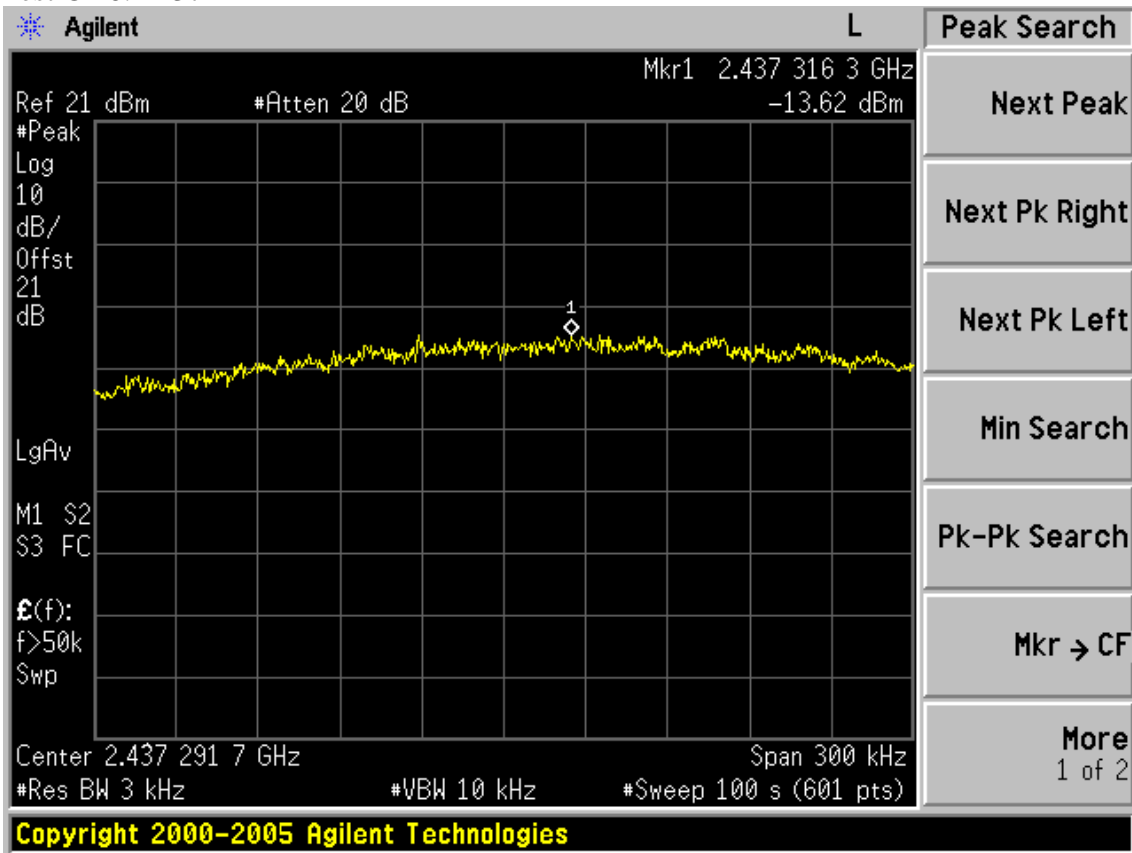


Test Mode: IEEE 802.11g TX

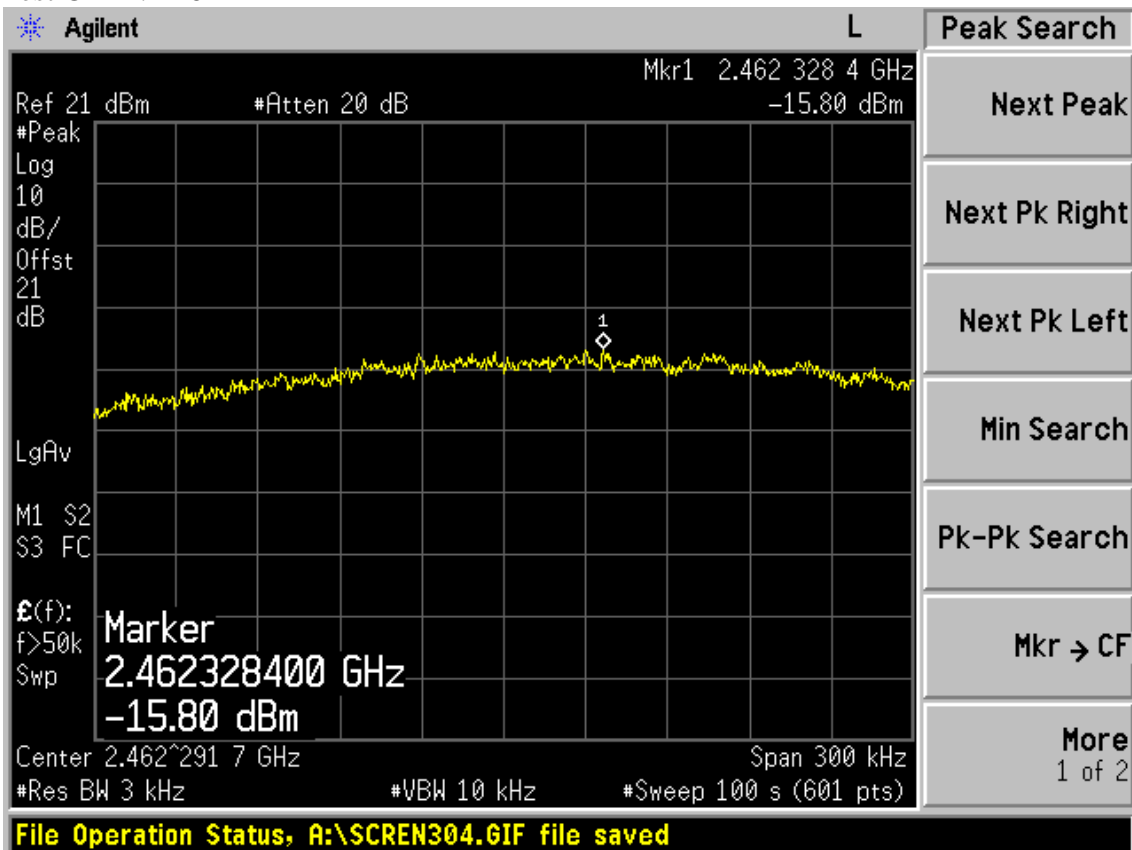
Test CH1: 2412MHz



Test CH6: 2437MHz



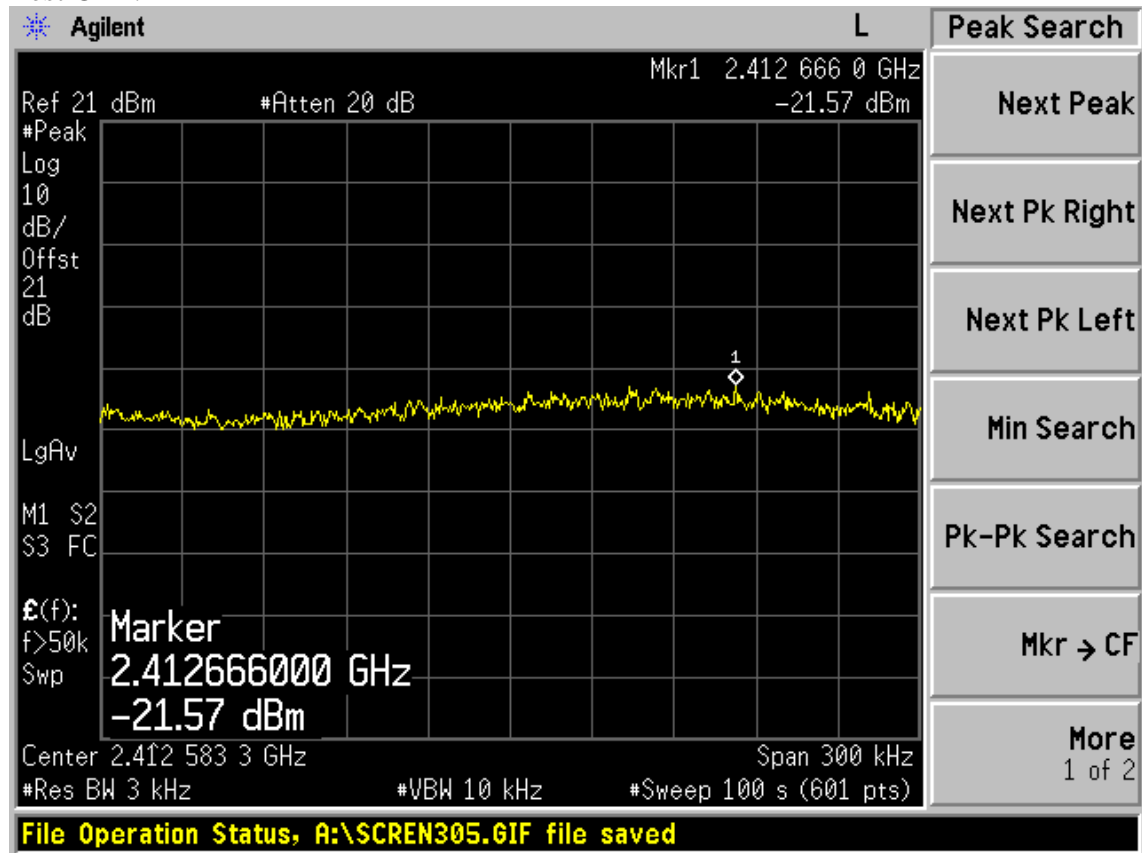
Test CH11: 2462MHz



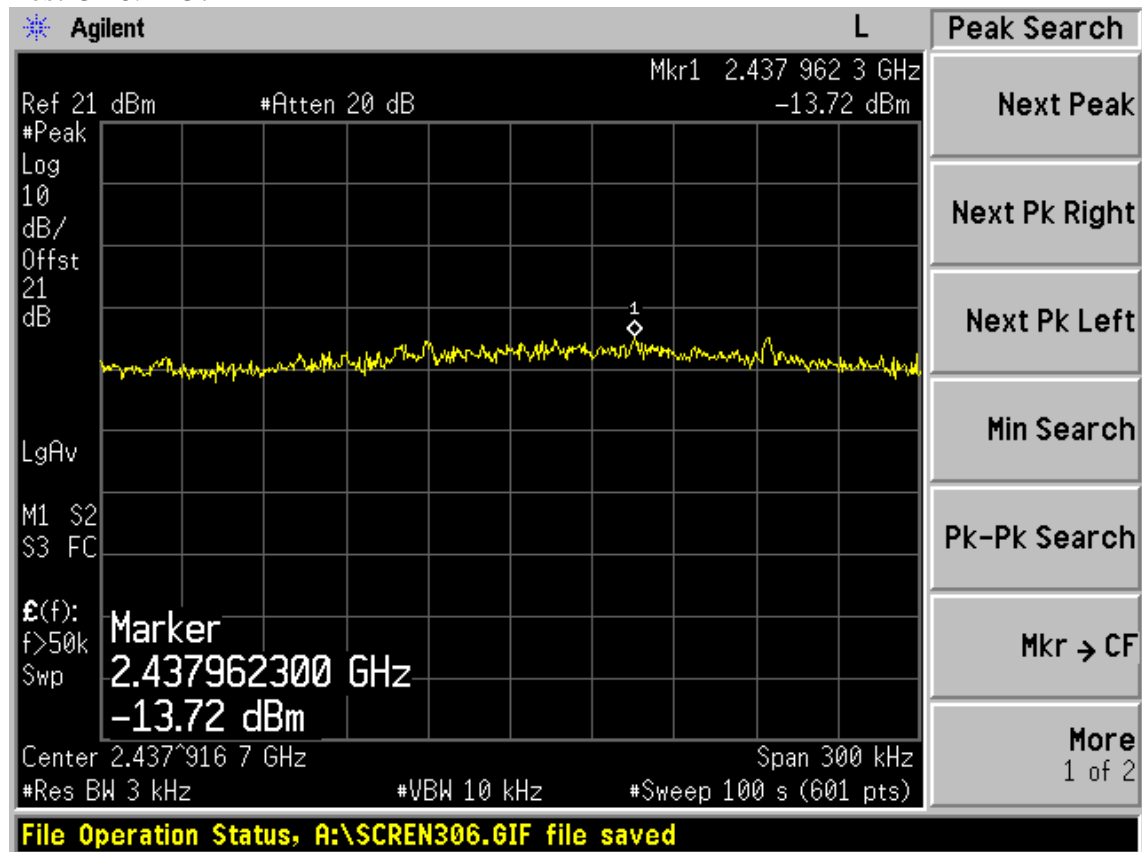


Test Mode: IEEE 802.11n HT20 TX

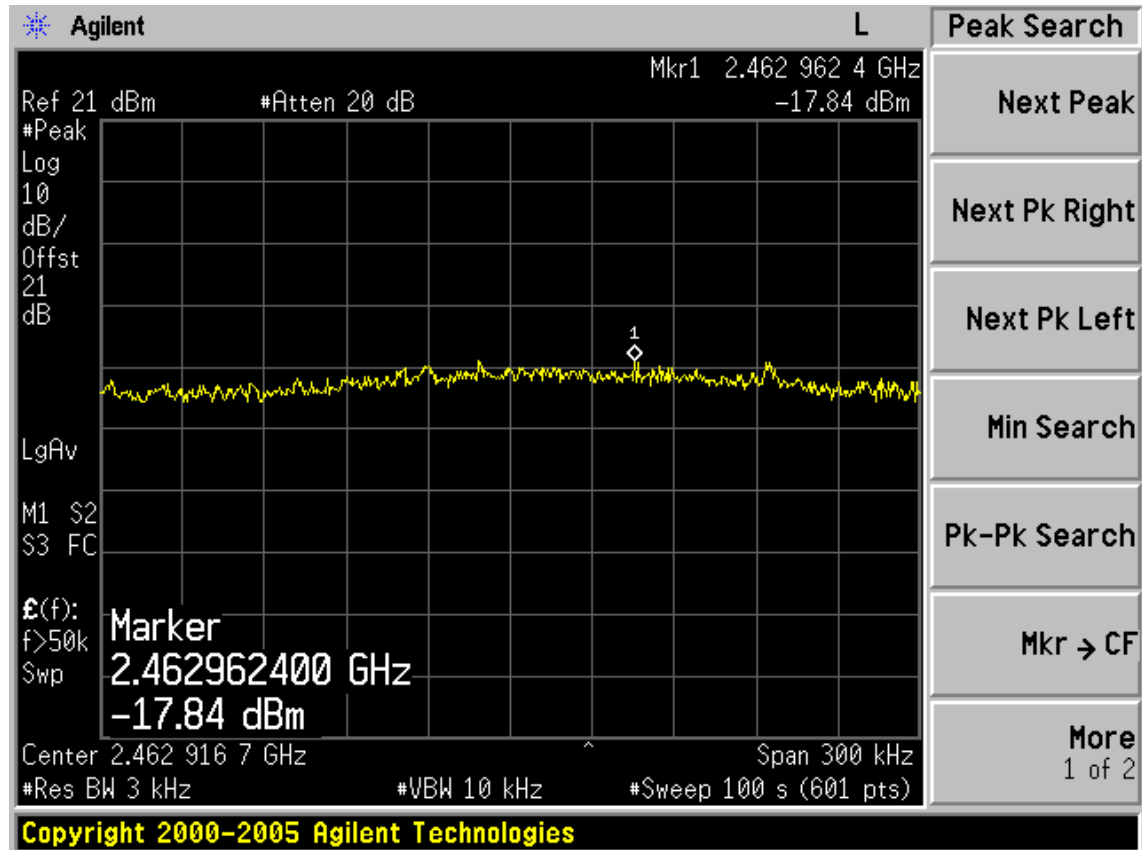
Test CH1: 2412MHz



Test CH6: 2437MHz

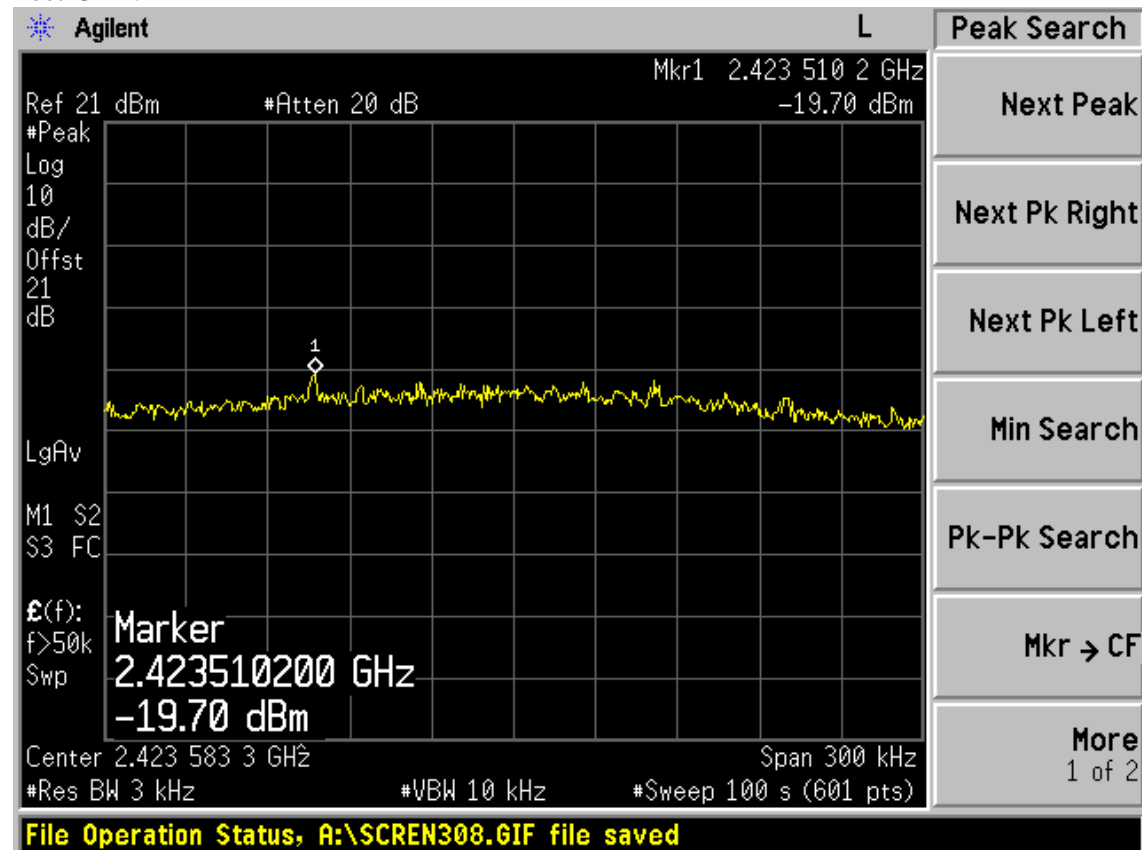


Test CH1: 2462MHz

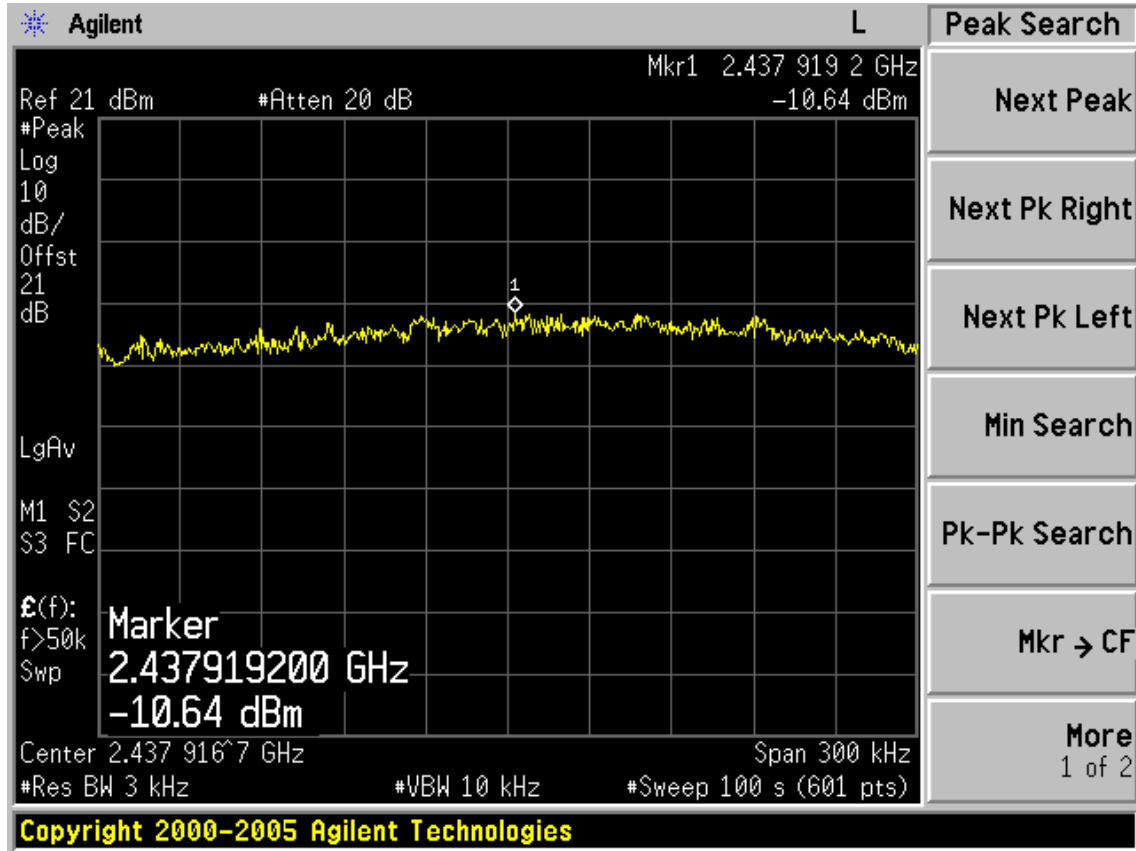


Test Mode: IEEE 802.11n HT40 TX

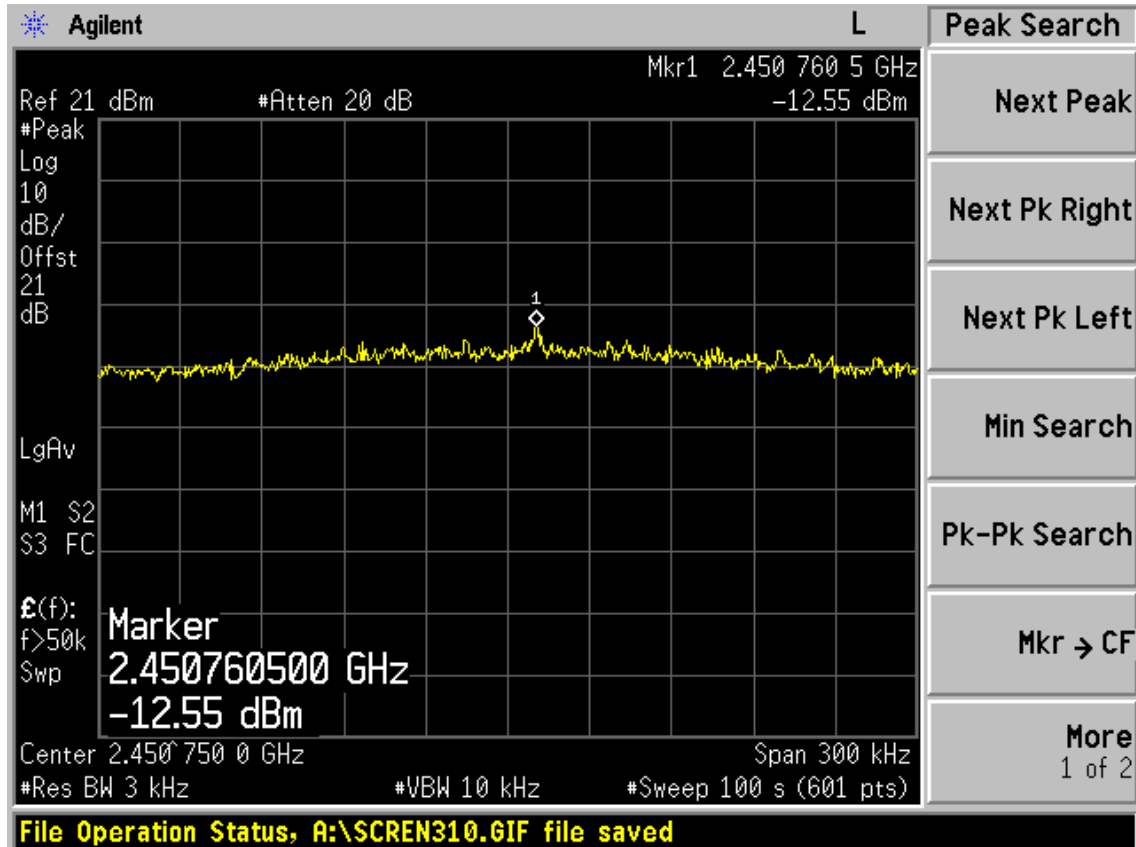
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



## **10. ANTENNA REQUIREMENT**

### **10.1 STANDARD APPLICABLE**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### **10.2 ANTENNA CONNECTED CONSTRUCTION**

The antennas used for this product are integrated MIMO 2X2 PCB antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 1.53dBi.

## 11.MPE ESTIMATION

### 11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency(MHz)	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

### 11.2.Estimation Result

EUT: RF Module		
M/N: WN7122G-CN		
Test date:2011-05-10	Pressure: 100.6 kpa	Humidity: 45 %
Tested by: Leo-Li	Test site: RF Site	Temperature : 25°C

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 1.53 dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	20.38	109.14	1.53	1.42	0.0309
	CH6	2437	19.13	81.85	1.53	1.42	0.0232
	CH11	2462	21.09	128.53	1.53	1.42	0.0364
11g	CH1	2412	18.81	76.03	1.53	1.42	0.0215
	CH6	2437	25.08	322.11	1.53	1.42	0.0912
	CH11	2462	23.57	227.51	1.53	1.42	0.0644
11n HT20	CH1	2412	19.28	84.72	1.53	1.42	0.0240
	CH6	2437	27.90	616.60	1.53	1.42	0.1746
	CH11	2462	24.50	281.84	1.53	1.42	0.0798
11n HT40	CH1	2412	18.74	74.82	1.53	1.42	0.0212
	CH4	2437	28.18	657.66	1.53	1.42	0.1862
	CH7	2462	23.20	208.93	1.53	1.42	0.0591

Note: The estimate distance is 20cm

## 12.DEVIATION TO TEST SPECIFICATIONS

[ NONE ]