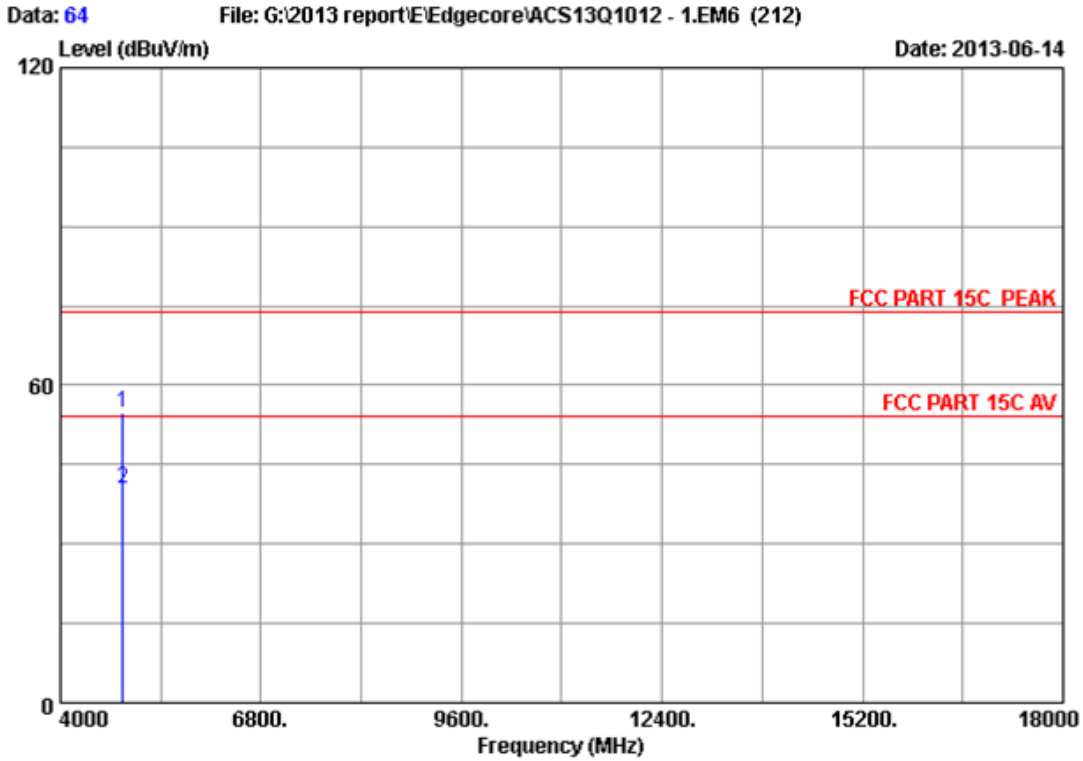
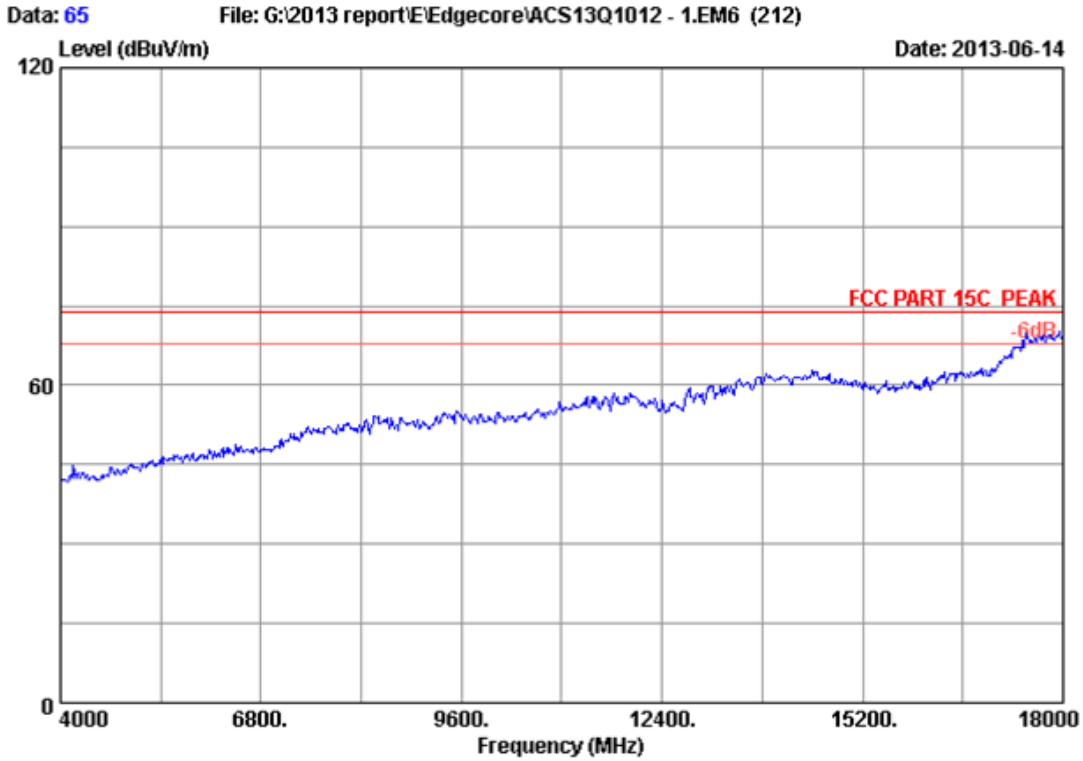


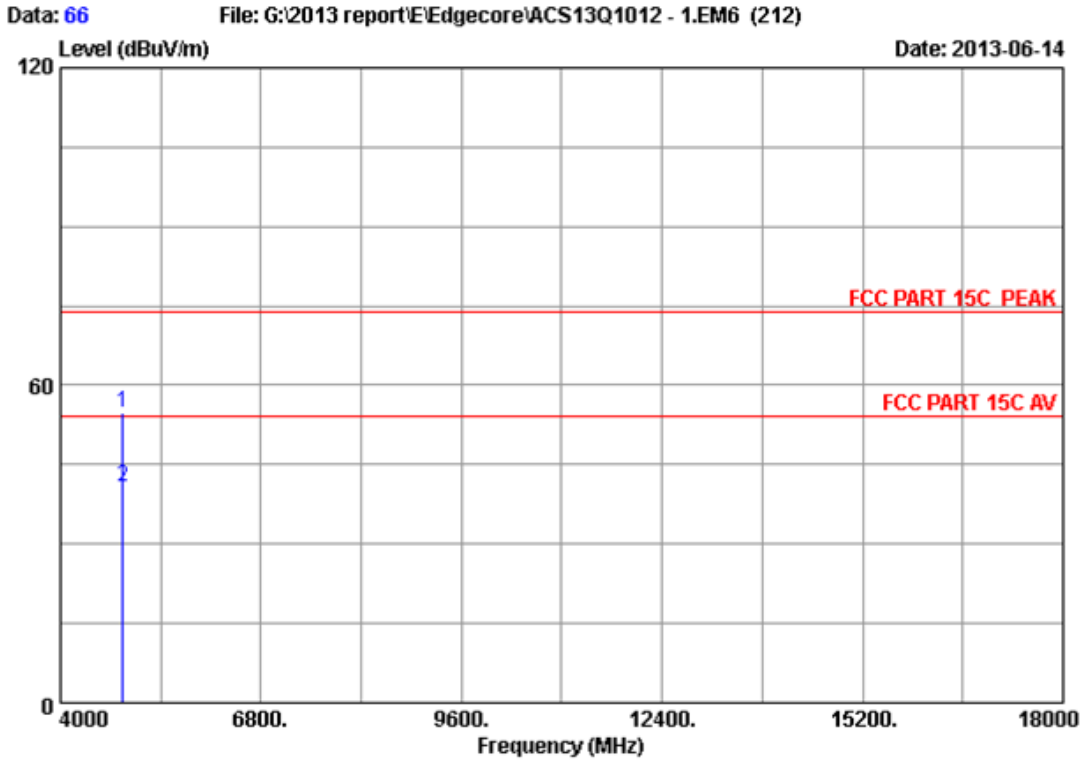
Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	4874.000	34.41	10.69	35.03	44.77	54.84	74.00	19.16	Peak
2	4874.000	34.41	10.69	35.03	30.48	40.55	54.00	13.45	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.



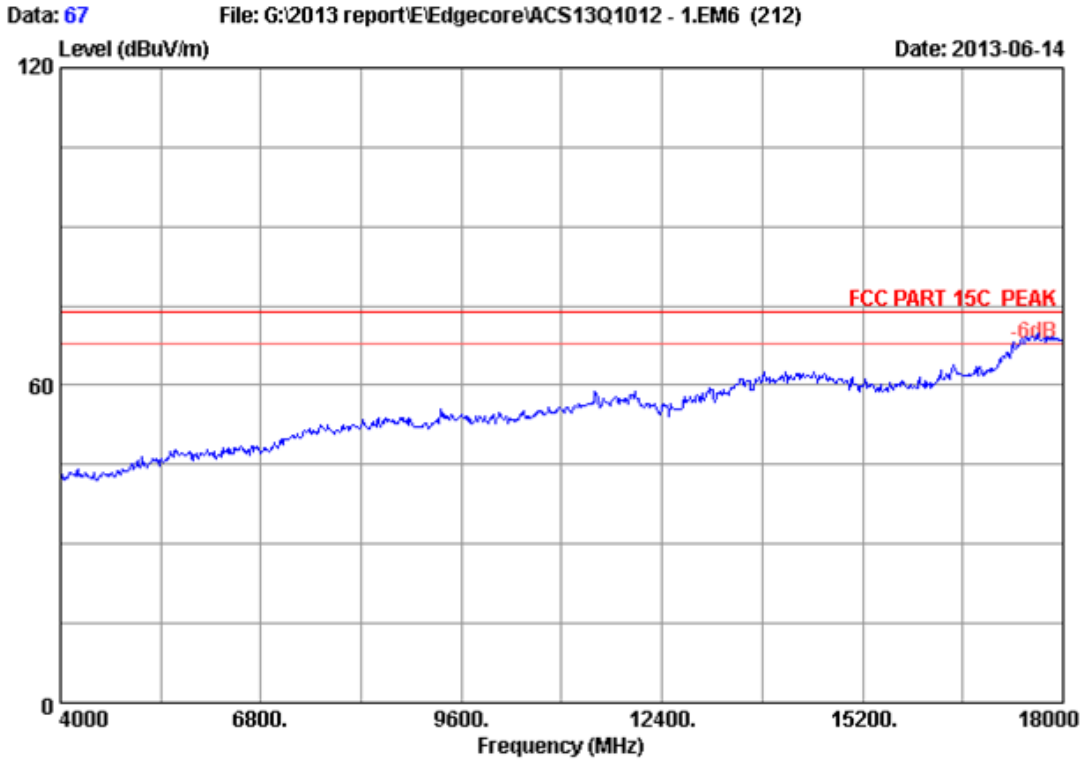
Site no.	: 3m Chamber	Data no.	: 65
Dis. / Ant.	: 3m 3115(0911)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 2.4GHz 300Mbps Wireless PCI Adapter		
Power supply	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11n HT40 CH6 2437MHz Tx		
M/N	: SMCWPCI-N5		
	:		



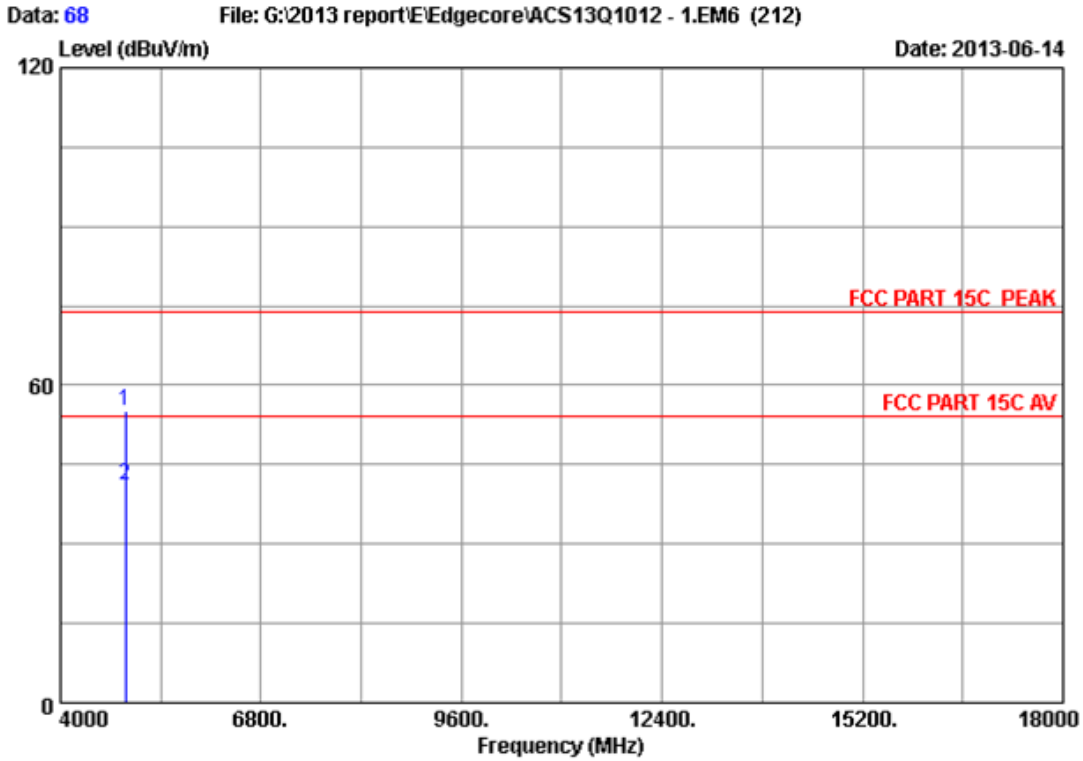
Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	4874.000	34.41	10.69	35.03	44.60	54.67	74.00	19.33	Peak
2	4874.000	34.41	10.69	35.03	30.81	40.88	54.00	13.12	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.



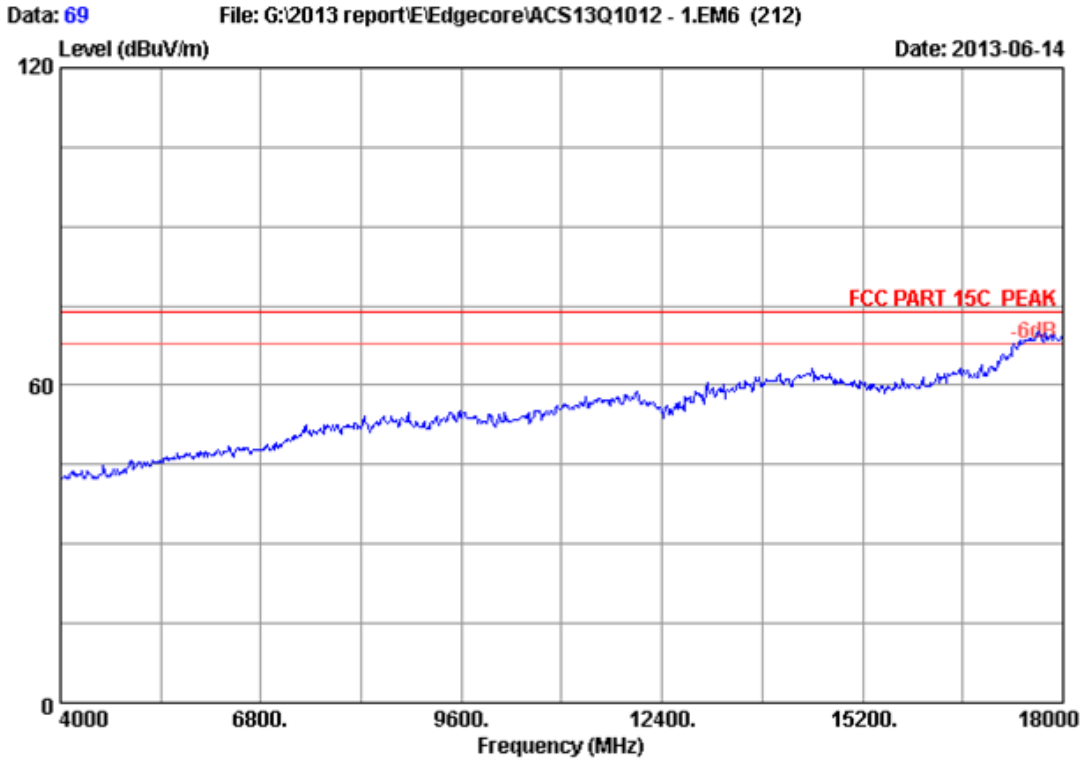
Site no.	: 3m Chamber	Data no.	: 67
Dis. / Ant.	: 3m 3115(0911)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 2.4GHz 300Mbps Wireless PCI Adapter		
Power supply	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11n HT40 CH9 2452MHz Tx		
M/N	: SMCWPCI-N5		
	:		



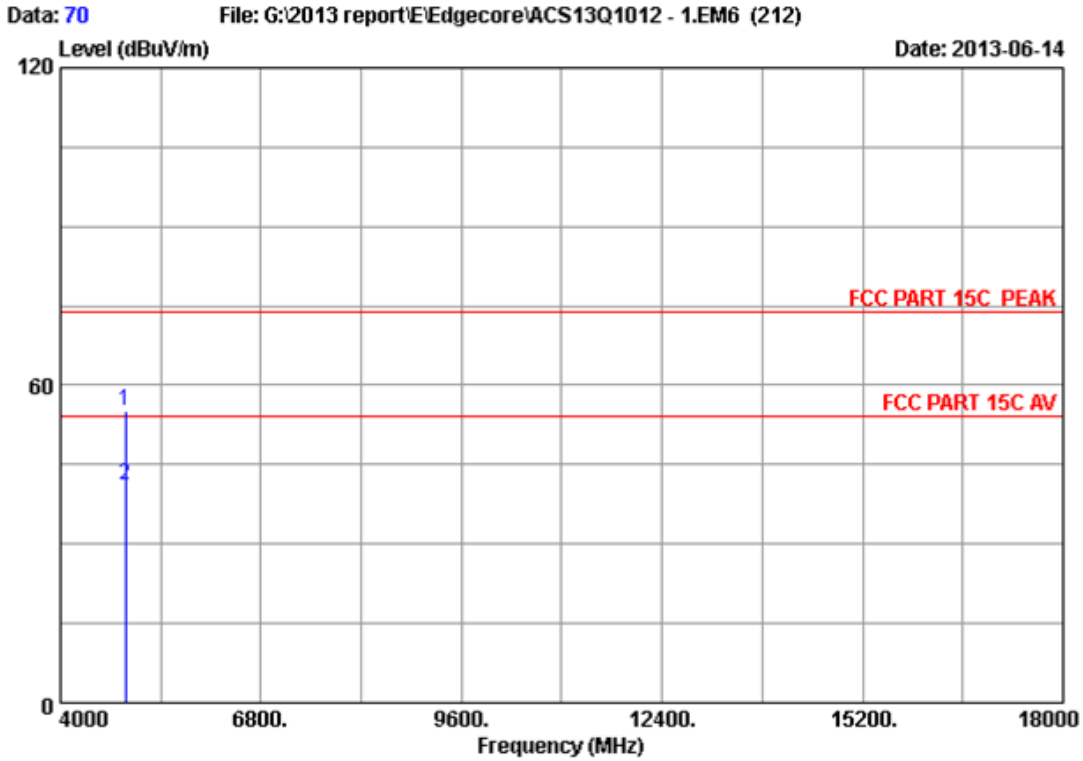
Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	4904.000	34.46	10.74	35.00	44.83	55.03	74.00	18.97	Peak
2	4904.000	34.46	10.74	35.00	30.84	41.04	54.00	12.96	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.



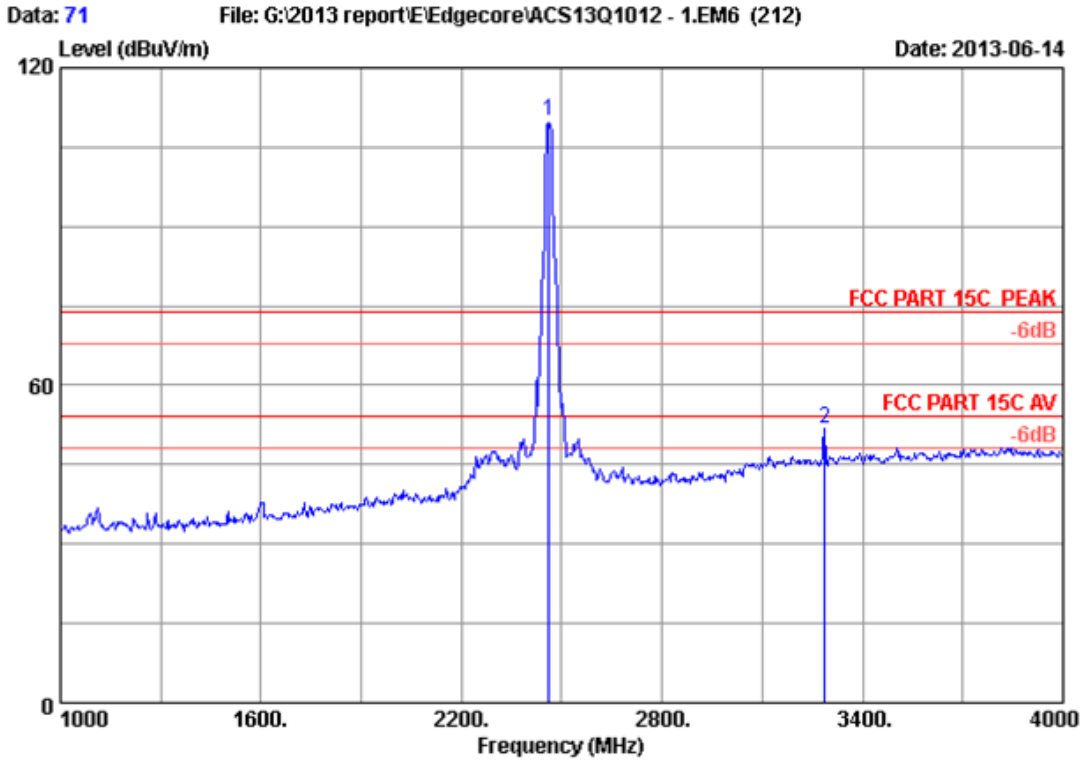
Site no.	: 3m Chamber	Data no.	: 69
Dis. / Ant.	: 3m 3115(0911)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: 2.4GHz 300Mbps Wireless PCI Adapter		
Power supply	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11n HT40 CH9 2452MHz Tx		
M/N	: SMCWPCI-N5		
	:		



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 : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	4904.000	34.46	10.74	35.00	44.90	55.10	74.00	18.90	Peak
2	4904.000	34.46	10.74	35.00	30.99	41.19	54.00	12.81	Average

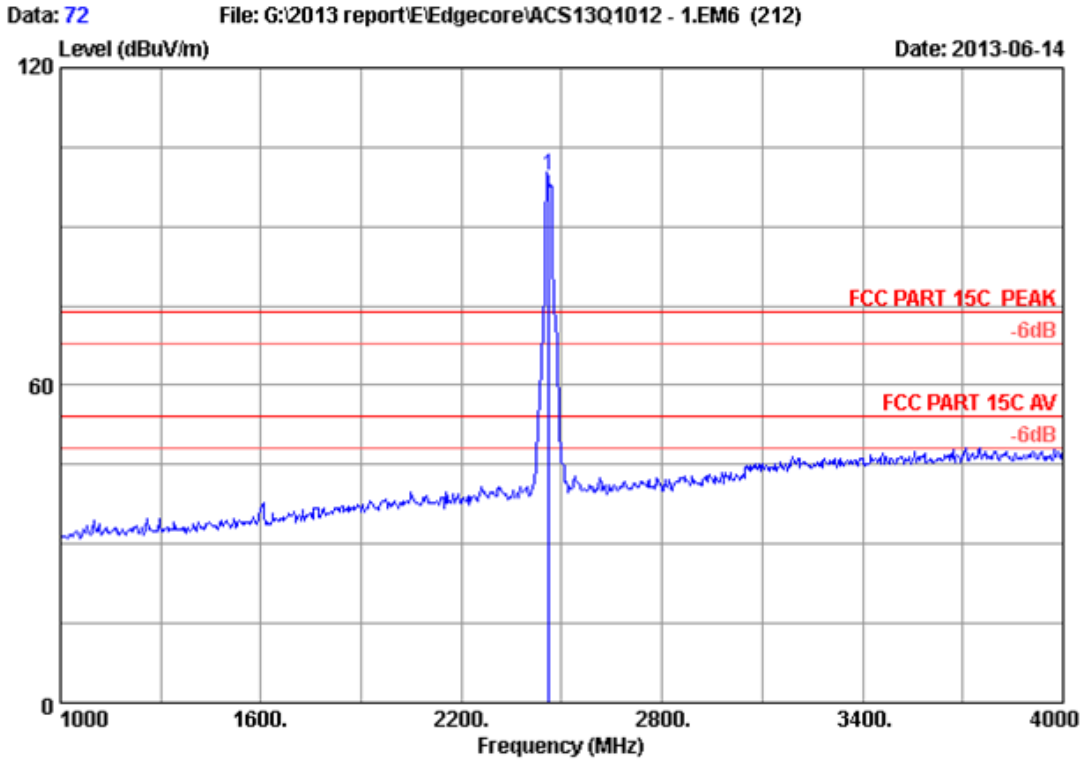
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	109.44	109.85	74.00	-35.85	Peak
2	3286.000	32.72	8.88	36.20	46.26	51.66	74.00	22.34	Peak

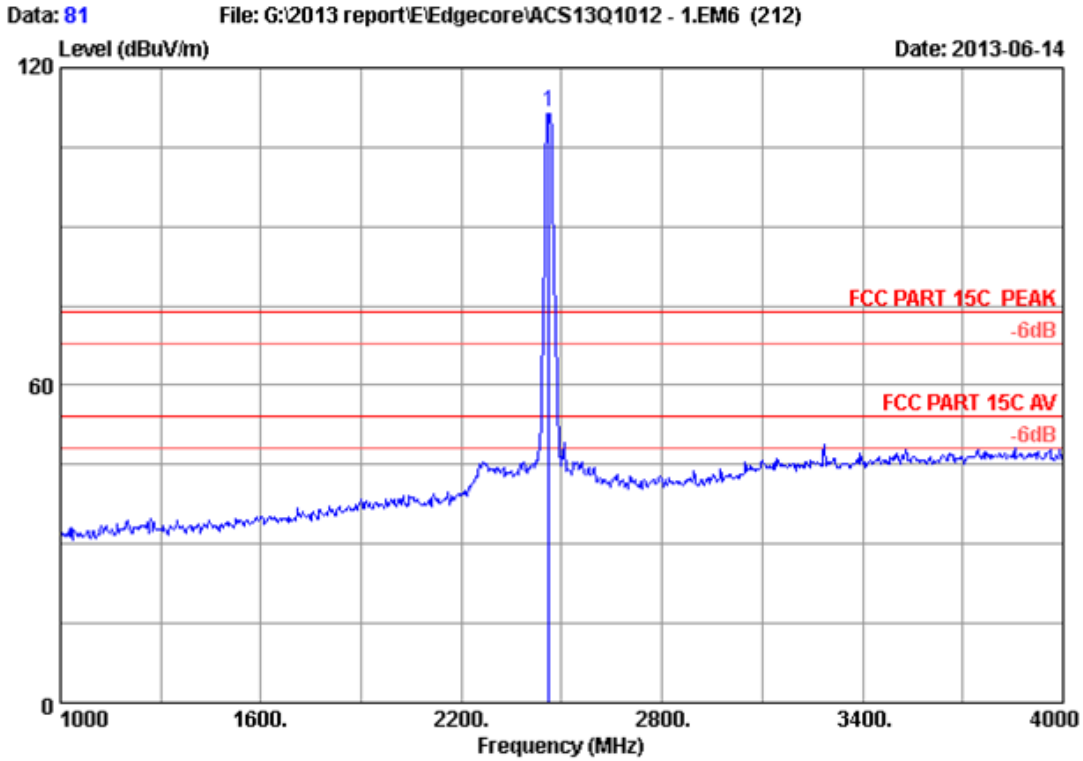
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	99.28	99.69	74.00	-25.69	Peak

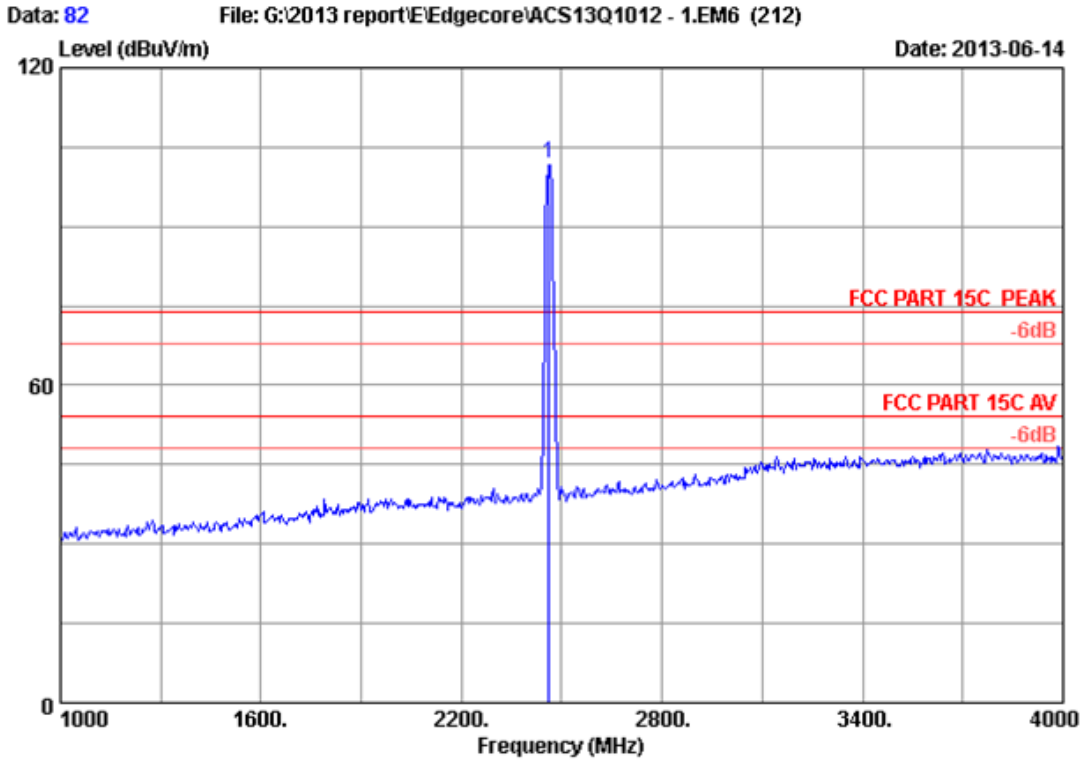
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 81
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	111.12	111.53	74.00	-37.53	Peak

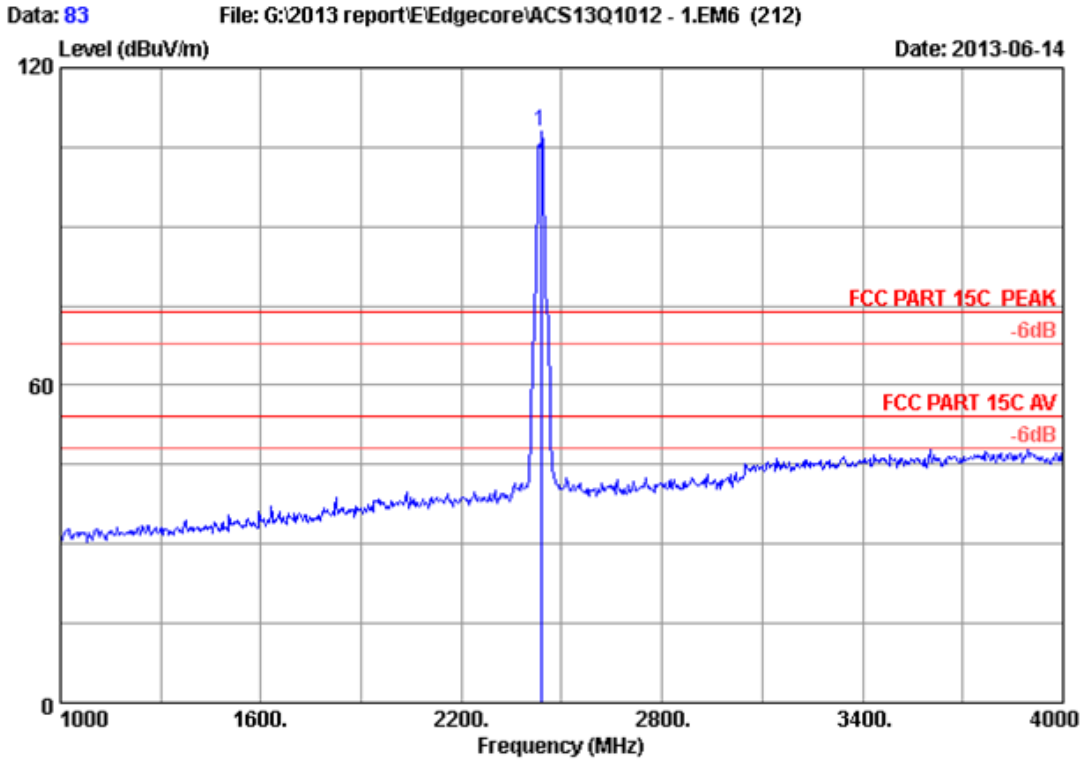
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 82
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	101.48	101.89	74.00	-27.89	Peak

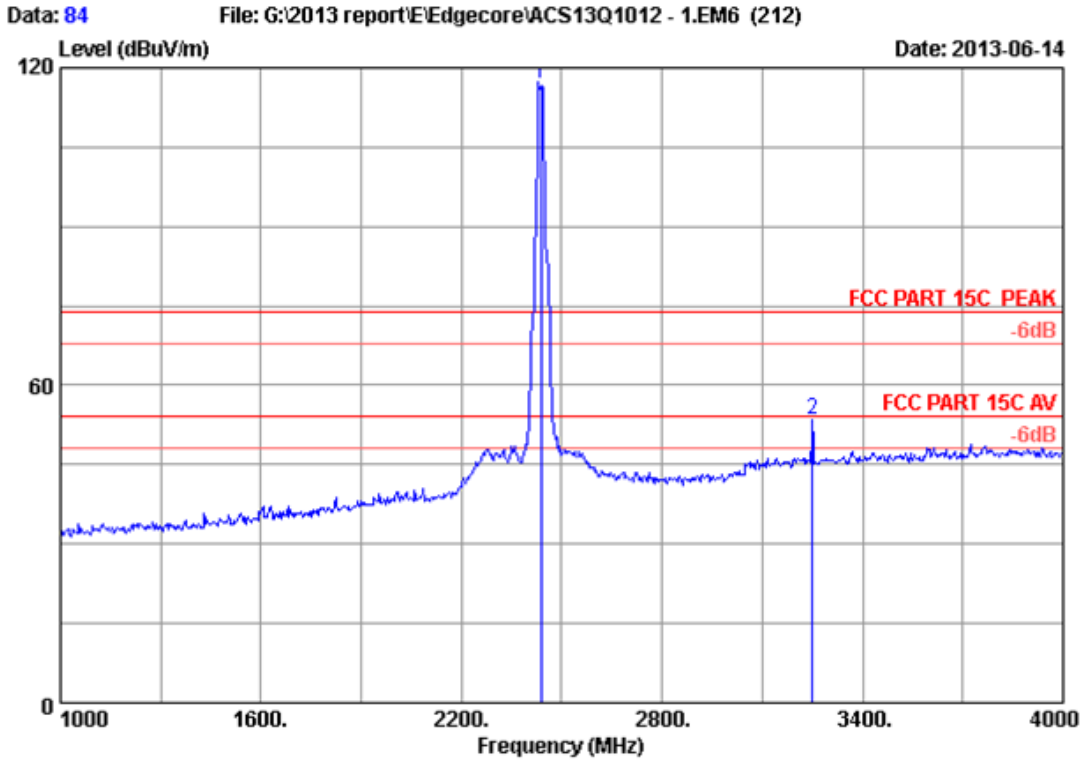
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 83
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	2437.000	29.47	7.46	36.61	107.58	107.90	74.00	-33.90	Peak

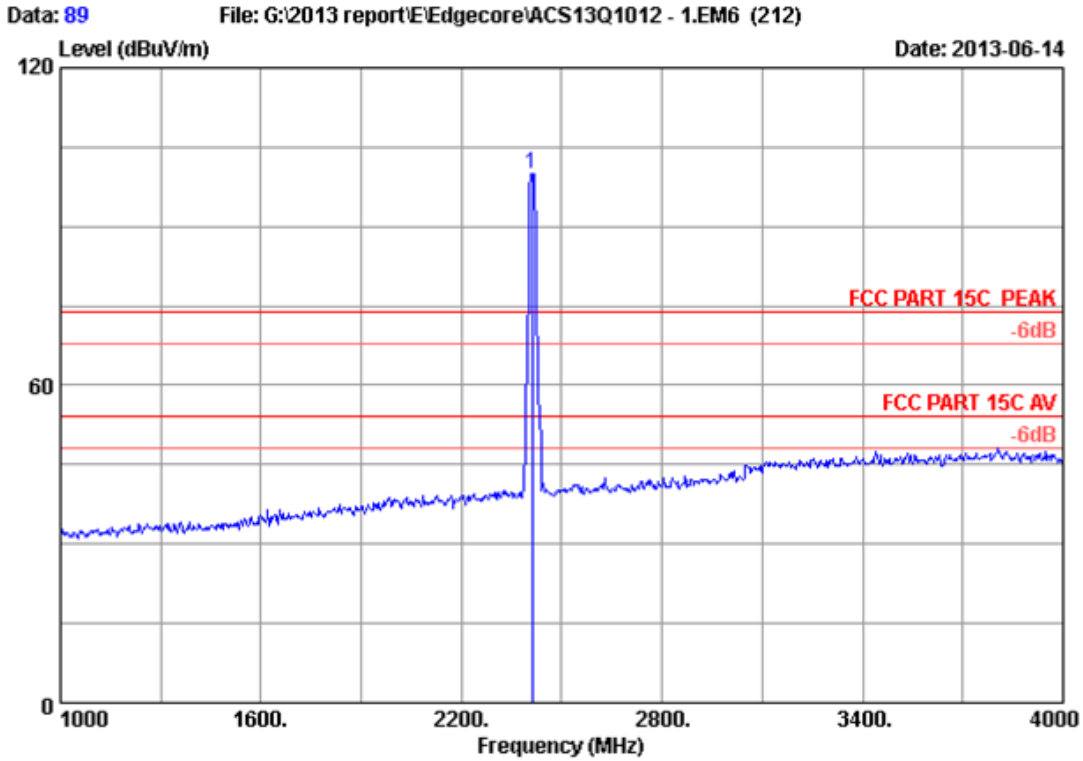
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	2437.000	29.47	7.46	36.61	116.55	116.87	74.00	-42.87	Peak
2	3250.000	32.63	8.83	36.25	48.36	53.57	74.00	20.43	Peak

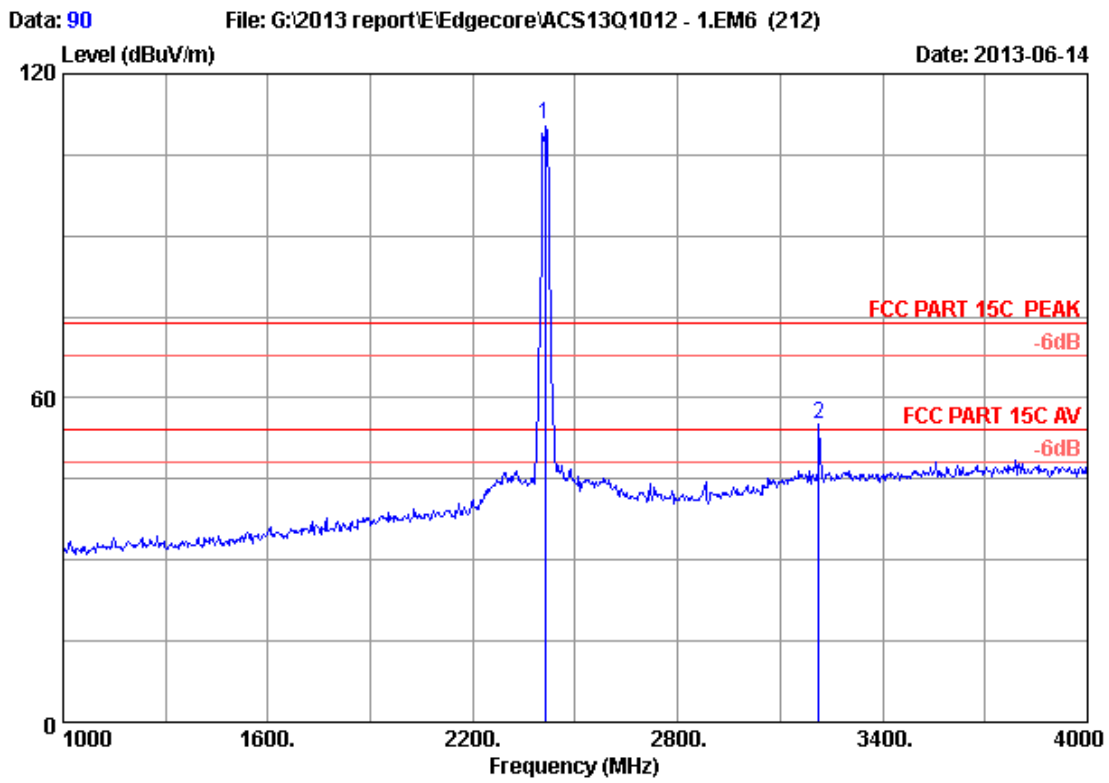
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2412.000	29.45	7.43	36.62	99.56	99.82	74.00	-25.82	Peak

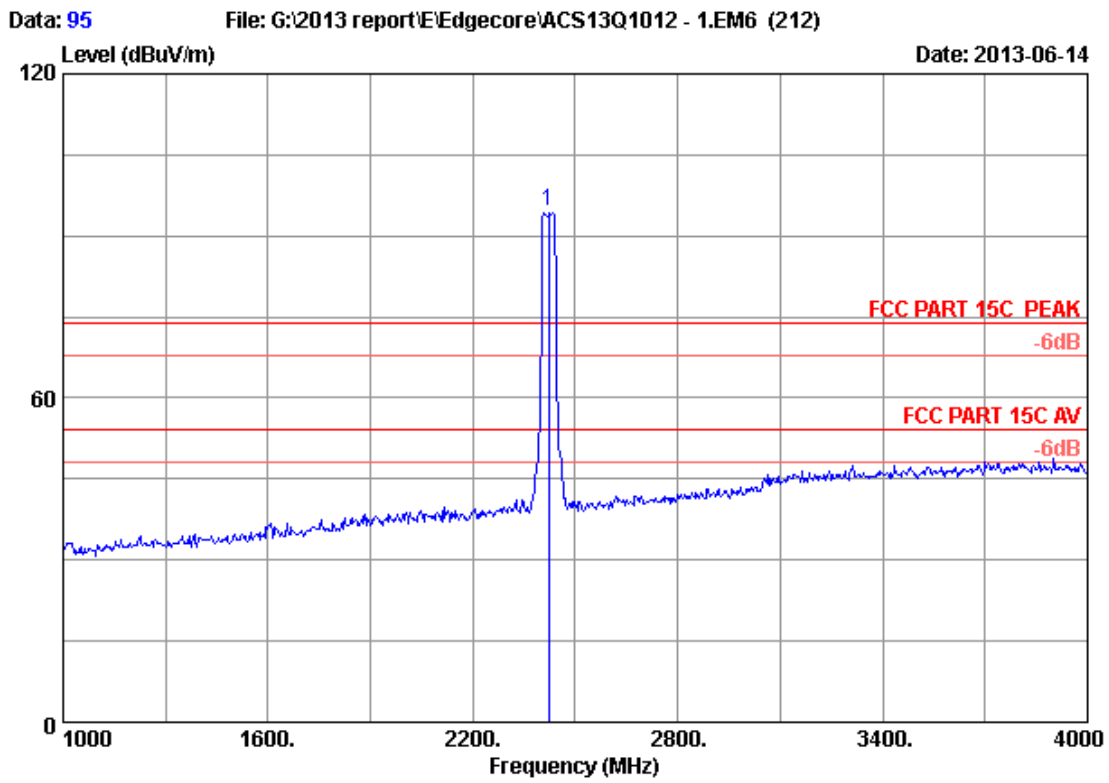
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2412.000	29.45	7.43	36.62	110.31	110.57	74.00	-36.57	Peak
2	3214.000	32.54	8.79	36.28	49.96	55.01	74.00	18.99	Peak

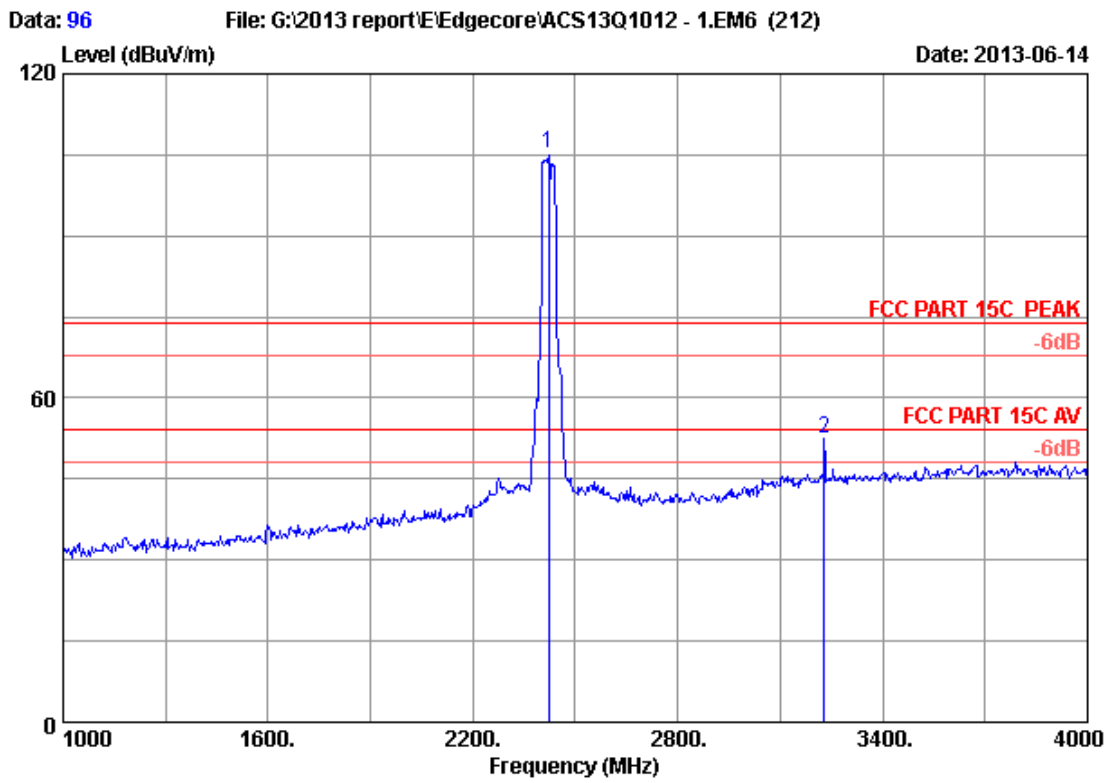
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 95
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	2422.000	29.46	7.46	36.61	94.42	94.73	74.00	-20.73	Peak

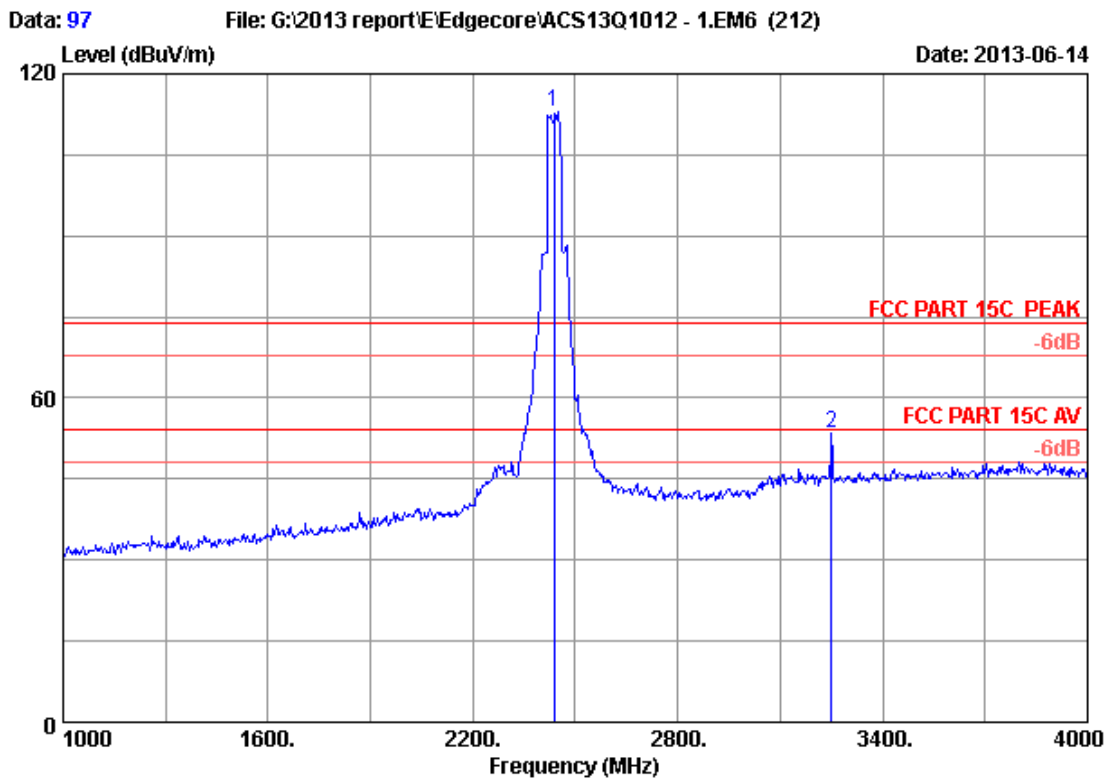
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	2422.000	29.46	7.46	36.61	104.95	105.26	74.00	-31.26	Peak
2	3229.000	32.58	8.81	36.28	47.24	52.35	74.00	21.65	Peak

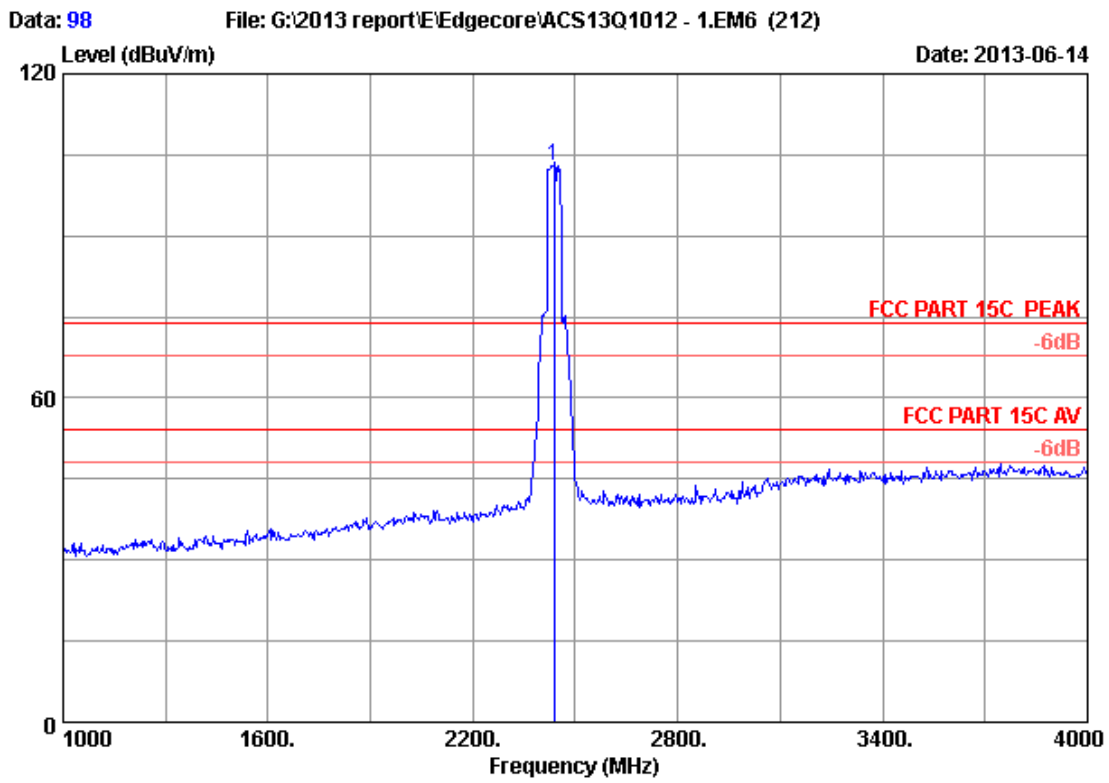
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



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 : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	2437.000	29.47	7.46	36.61	112.68	113.00	74.00	-39.00	Peak
2	3250.000	32.63	8.83	36.25	48.16	53.37	74.00	20.63	Peak

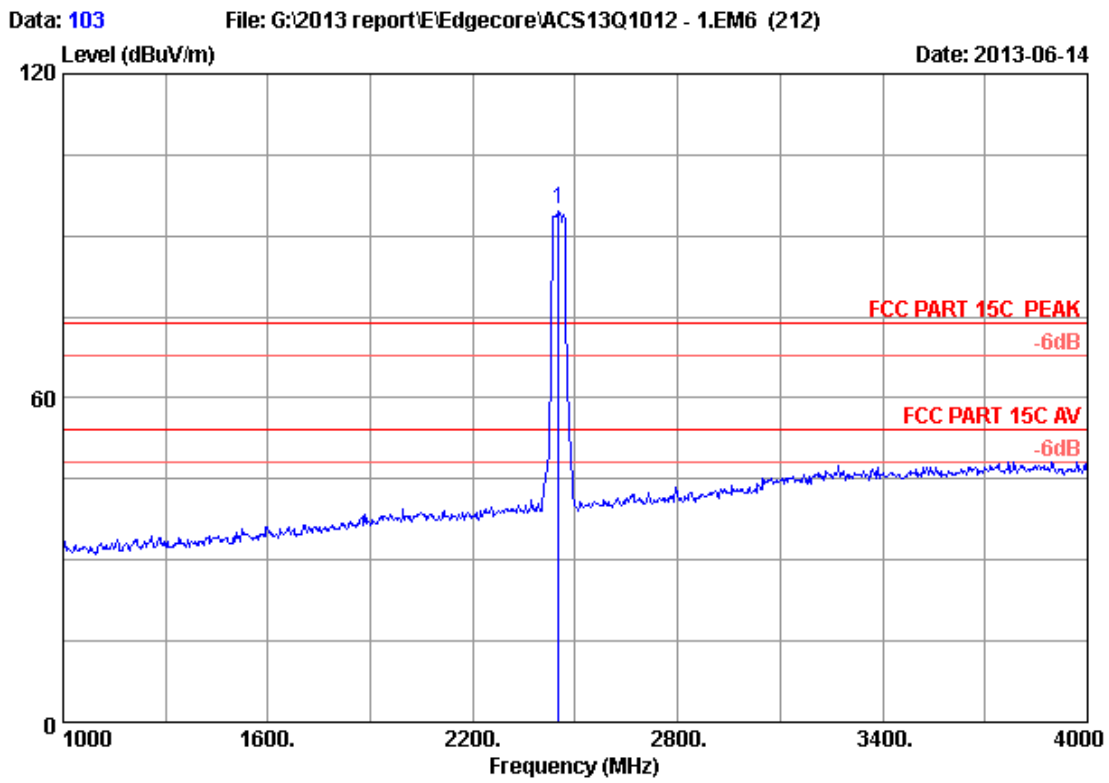
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx
M/N : SMCWPCI-N5
:

	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	2437.000	29.47	7.46	36.61	102.68	103.00	74.00	-29.00	Peak

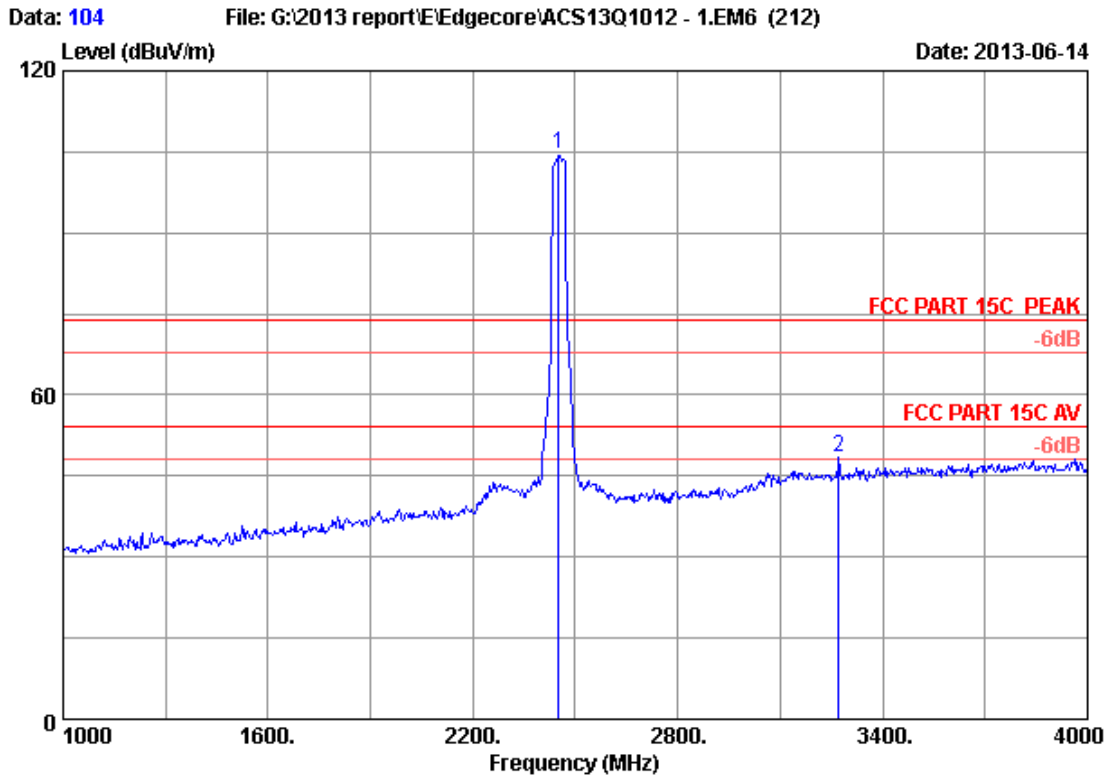
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2452.000	29.47	7.50	36.61	94.67	95.03	74.00	-21.03	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. : 104
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2452.000	29.47	7.50	36.61	104.18	104.54	74.00	-30.54	Peak
2	3271.000	32.72	8.86	36.22	43.14	48.50	74.00	25.50	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.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,13	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,13	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,13	1Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

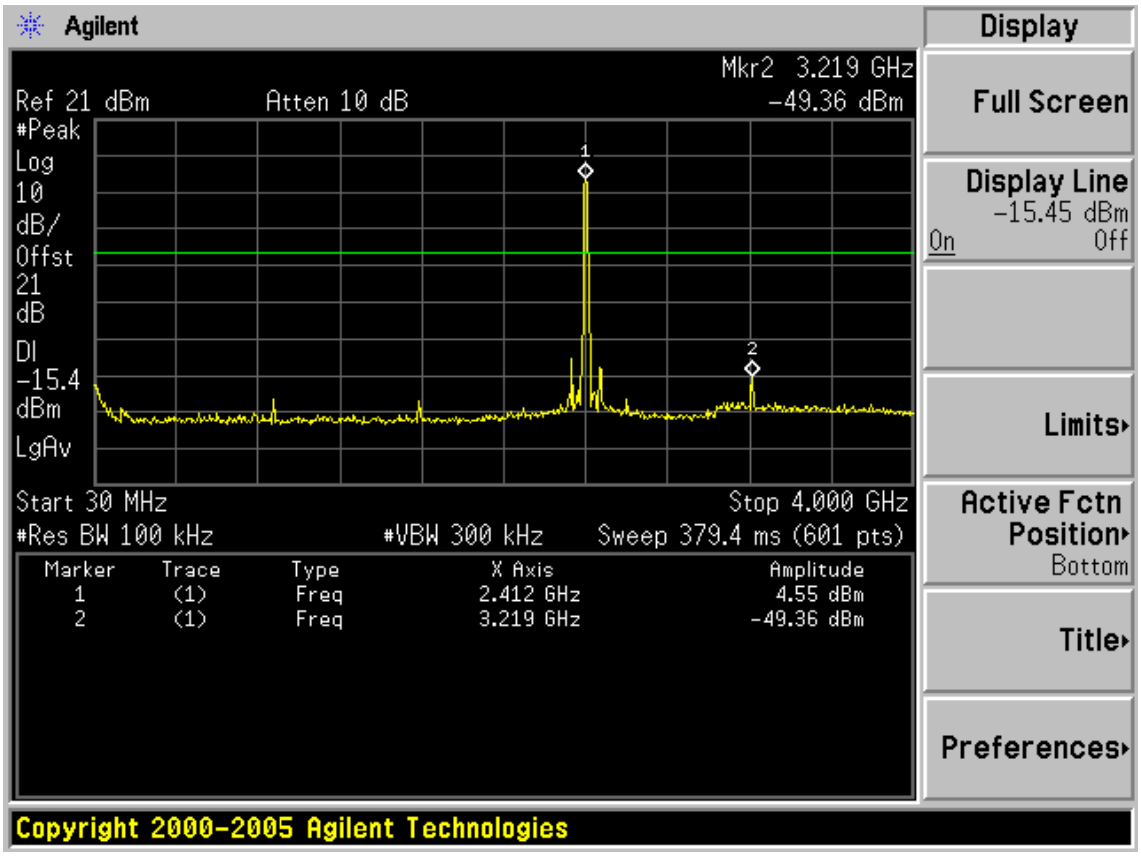
5.4.Test result

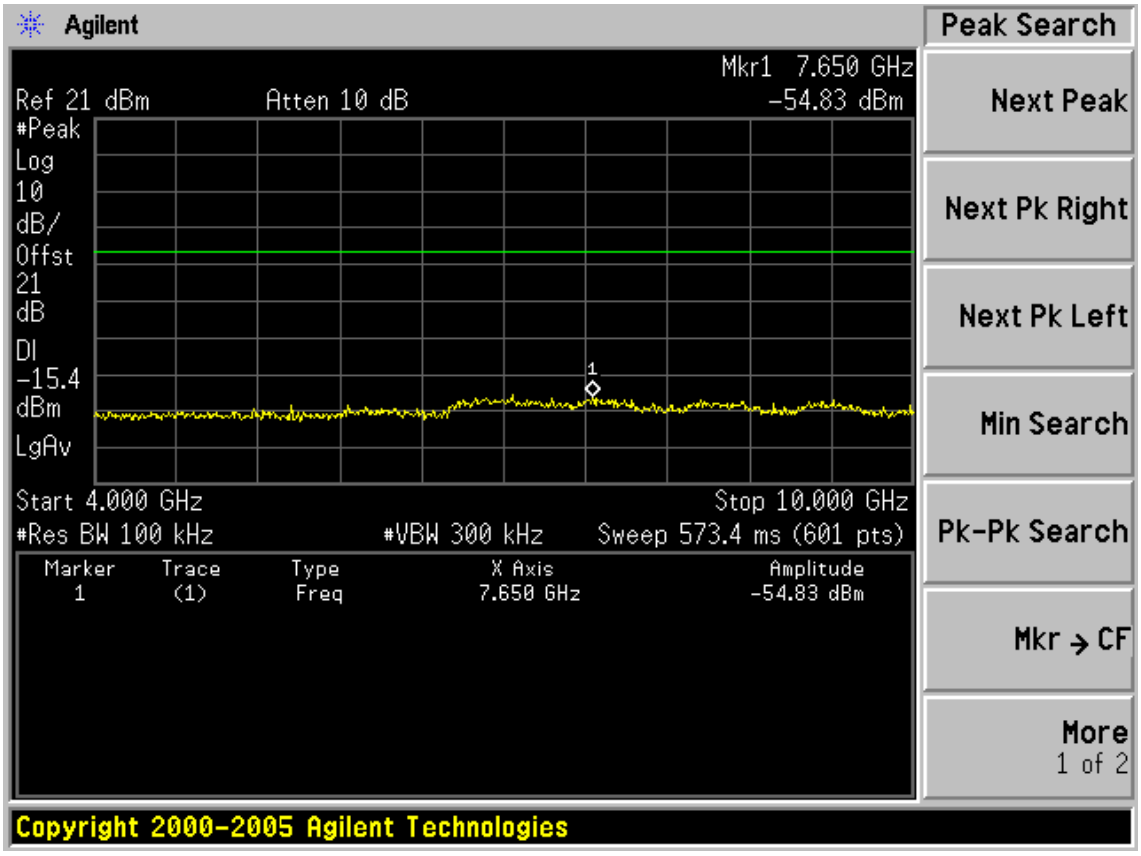
PASS (The testing data was attached in the next pages.)

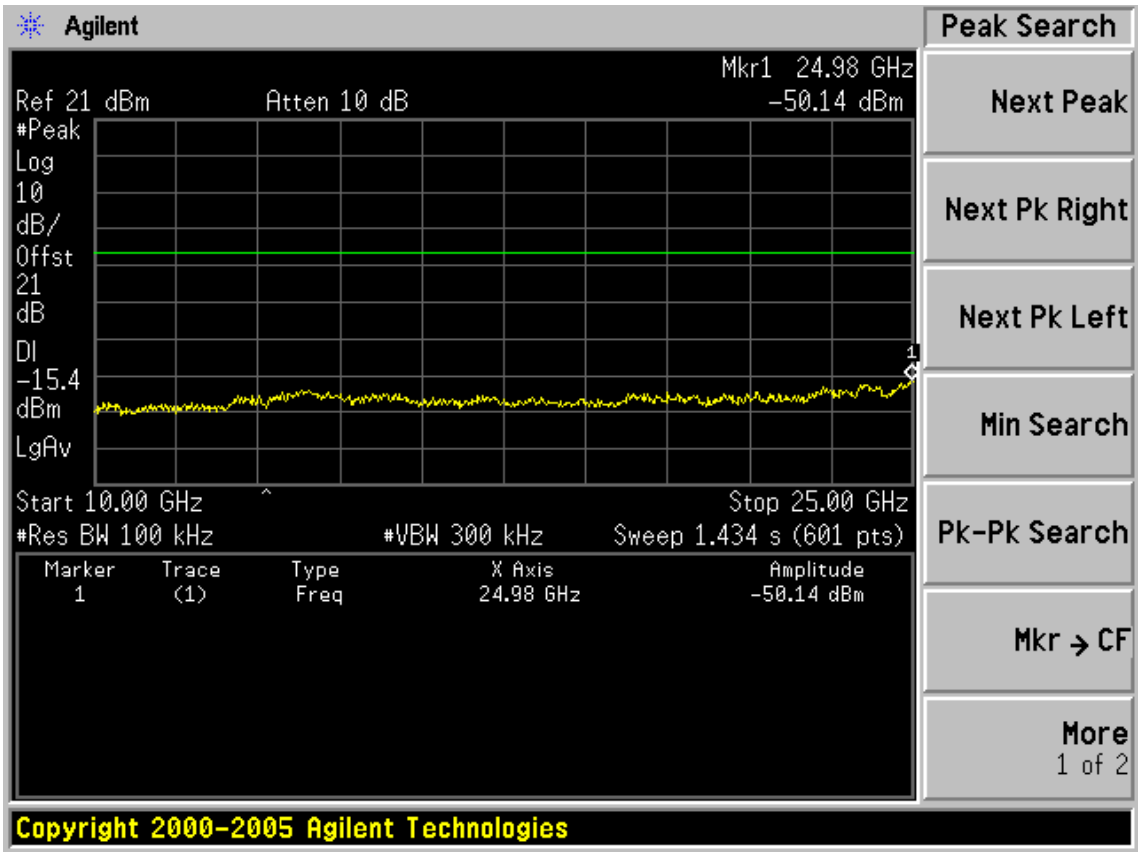
Chain 0:

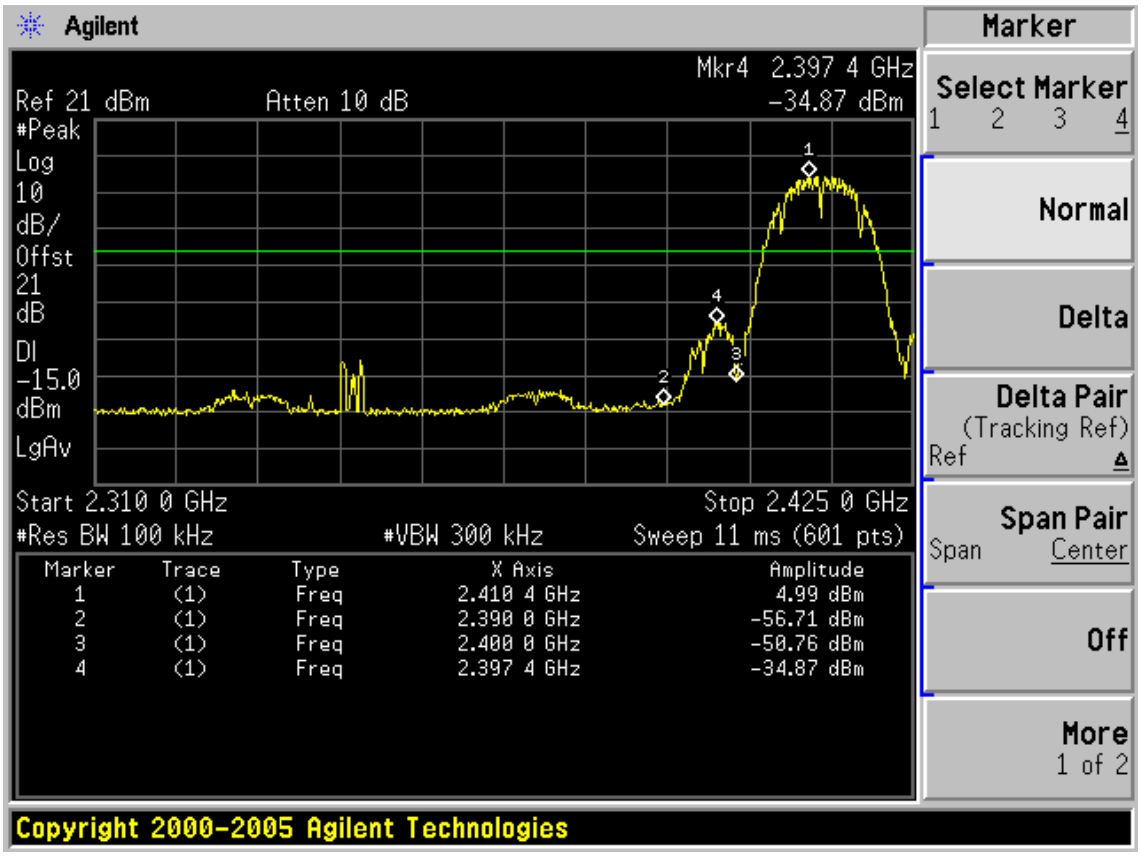
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

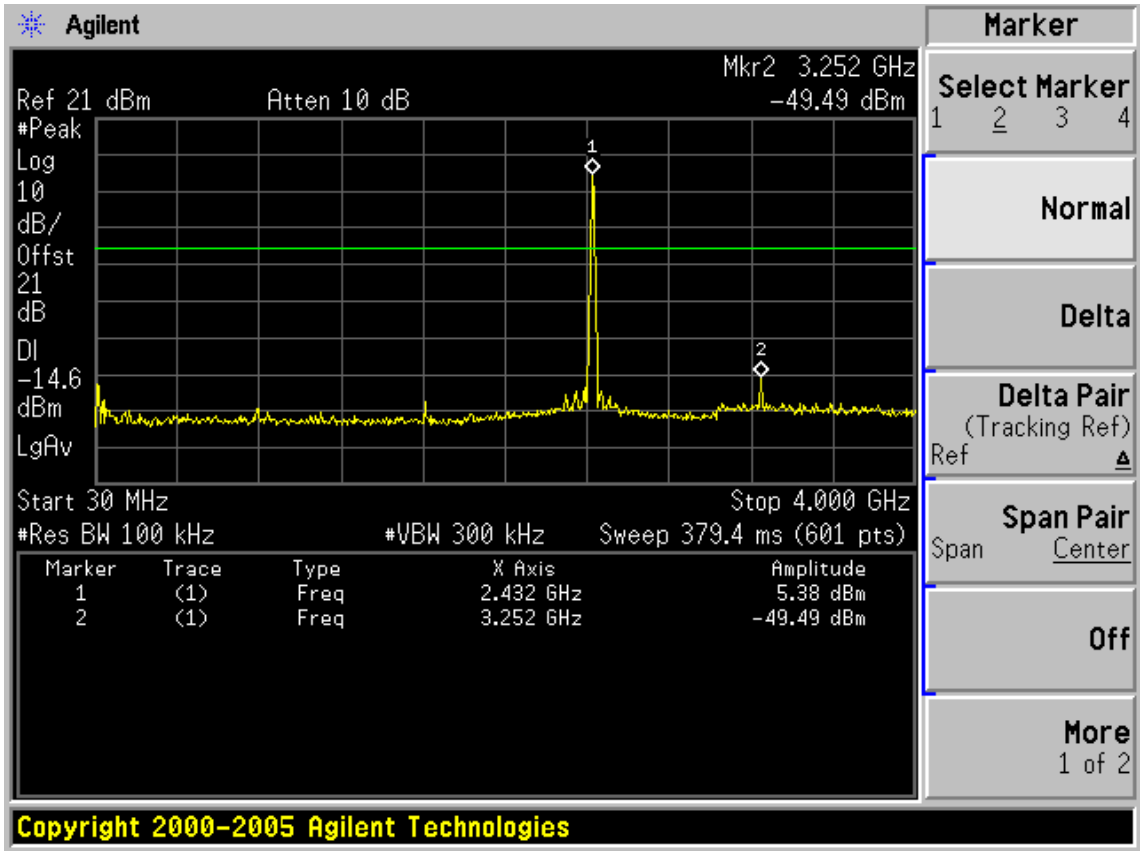


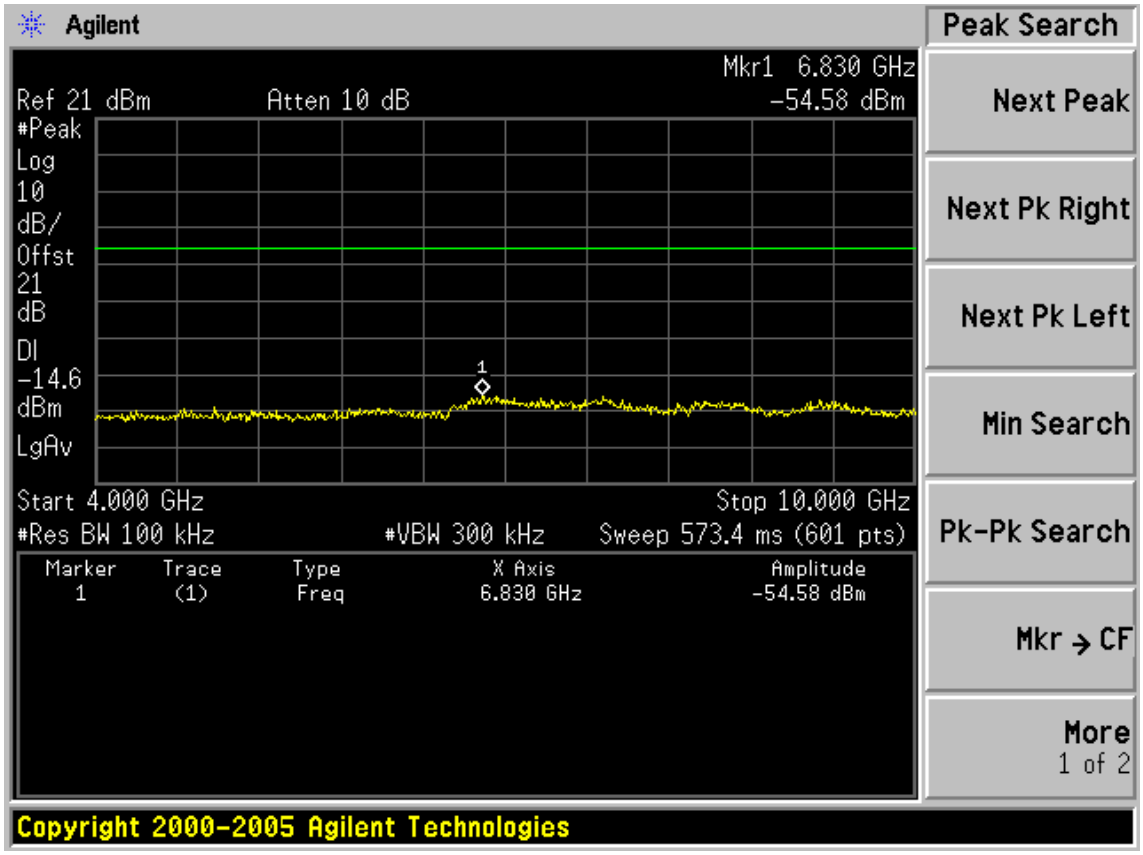


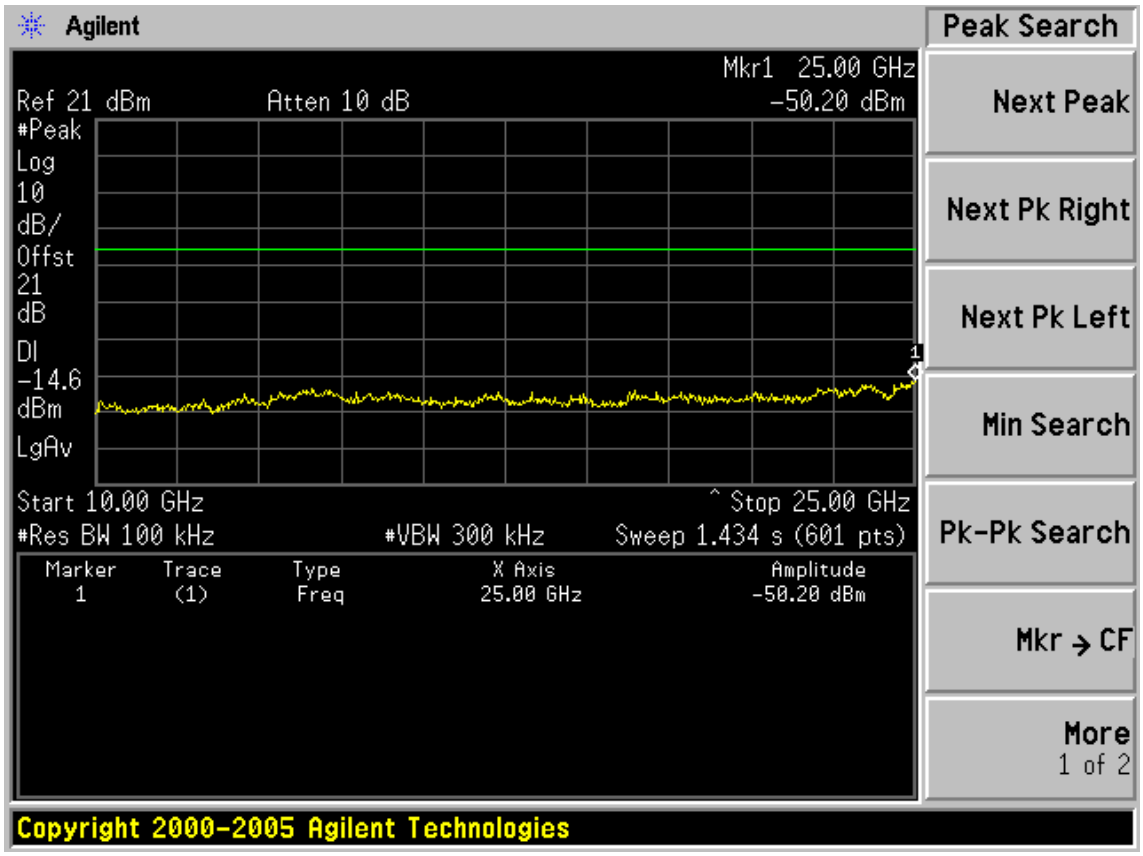

Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.14 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.14 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr4 2.397 4 GHz
Ref 21 dBm
Atten 10 dB
-34.87 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.0
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.310 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.425 0 GHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.410 4 GHz 4.99 dBm
2 (1) Freq 2.390 0 GHz -56.71 dBm
3 (1) Freq 2.400 0 GHz -50.76 dBm
4 (1) Freq 2.397 4 GHz -34.87 dBm
Copyright 2000-2005 Agilent Technologies

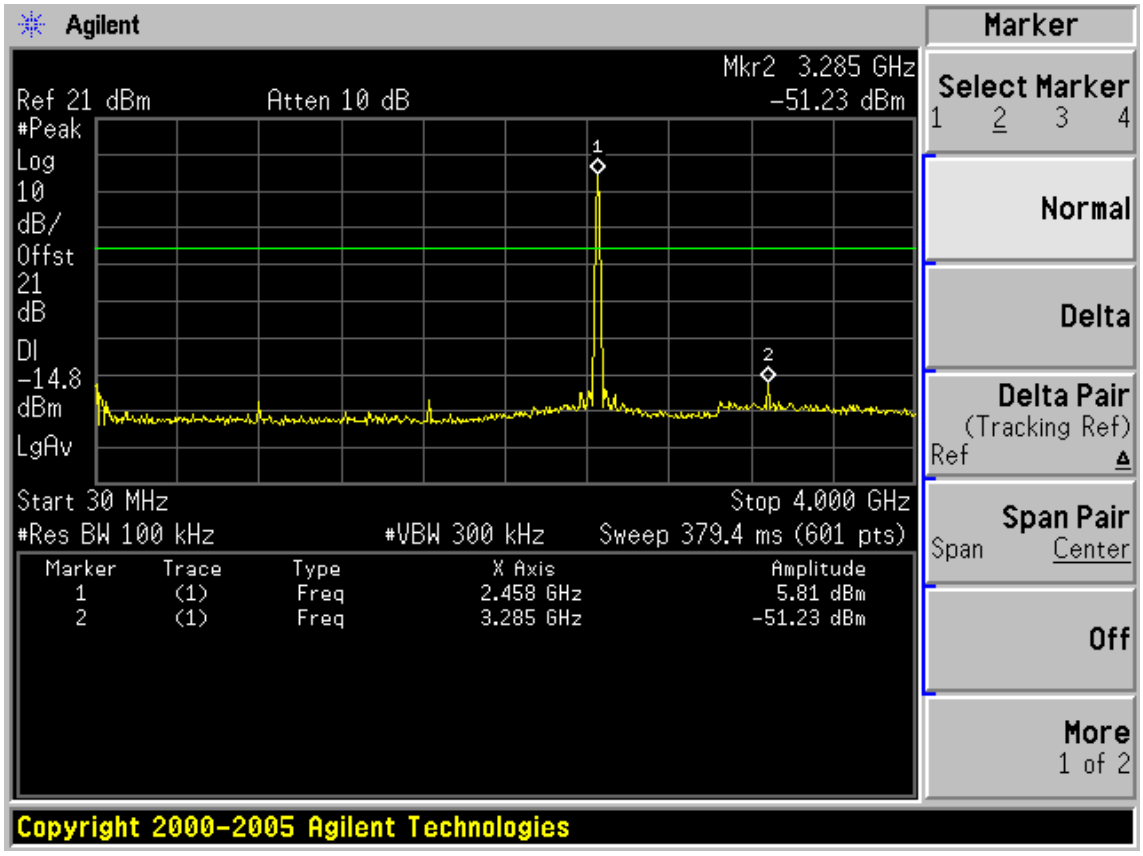
Test CH6: 2437MHz

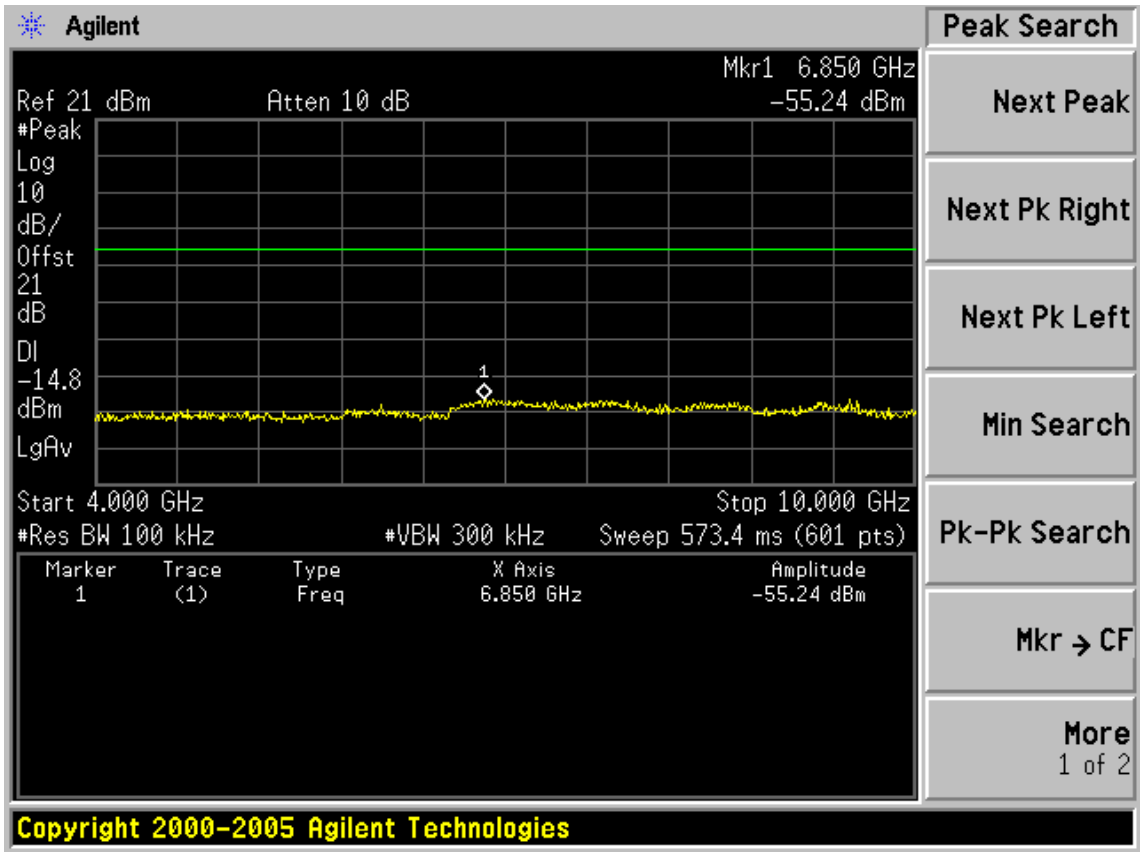


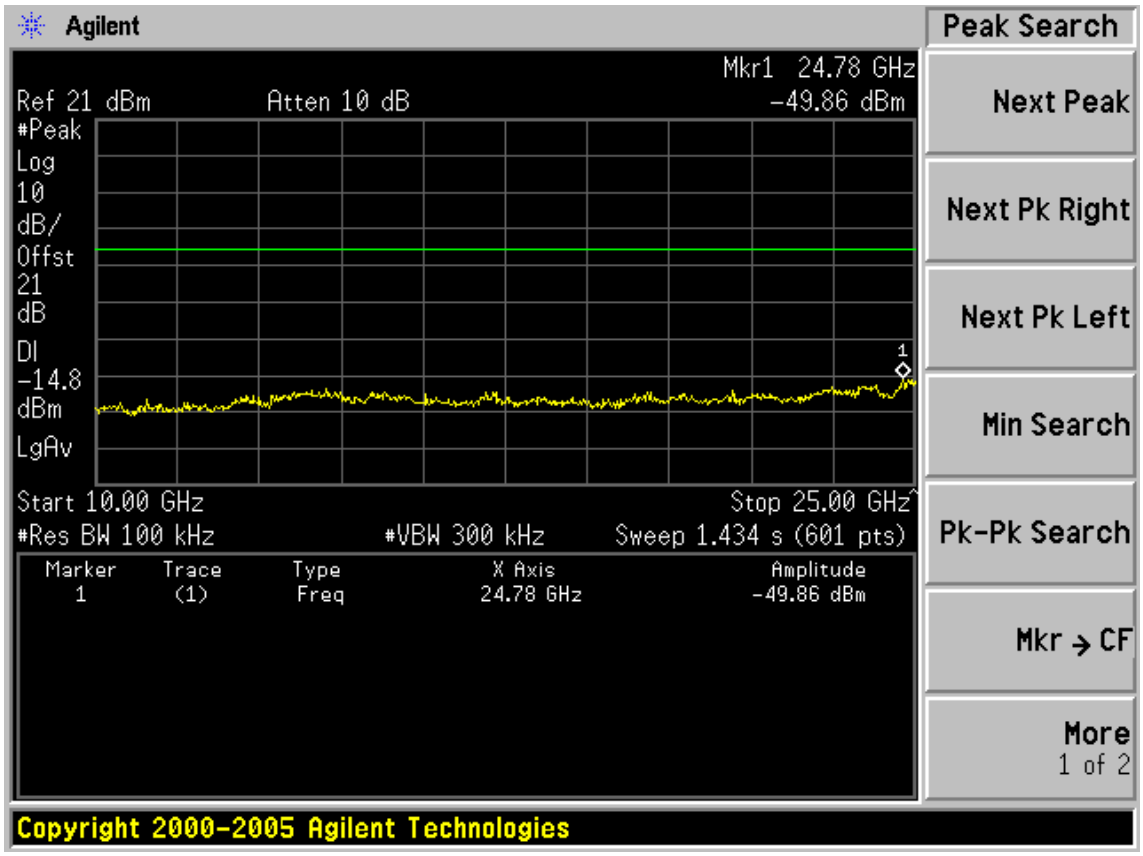


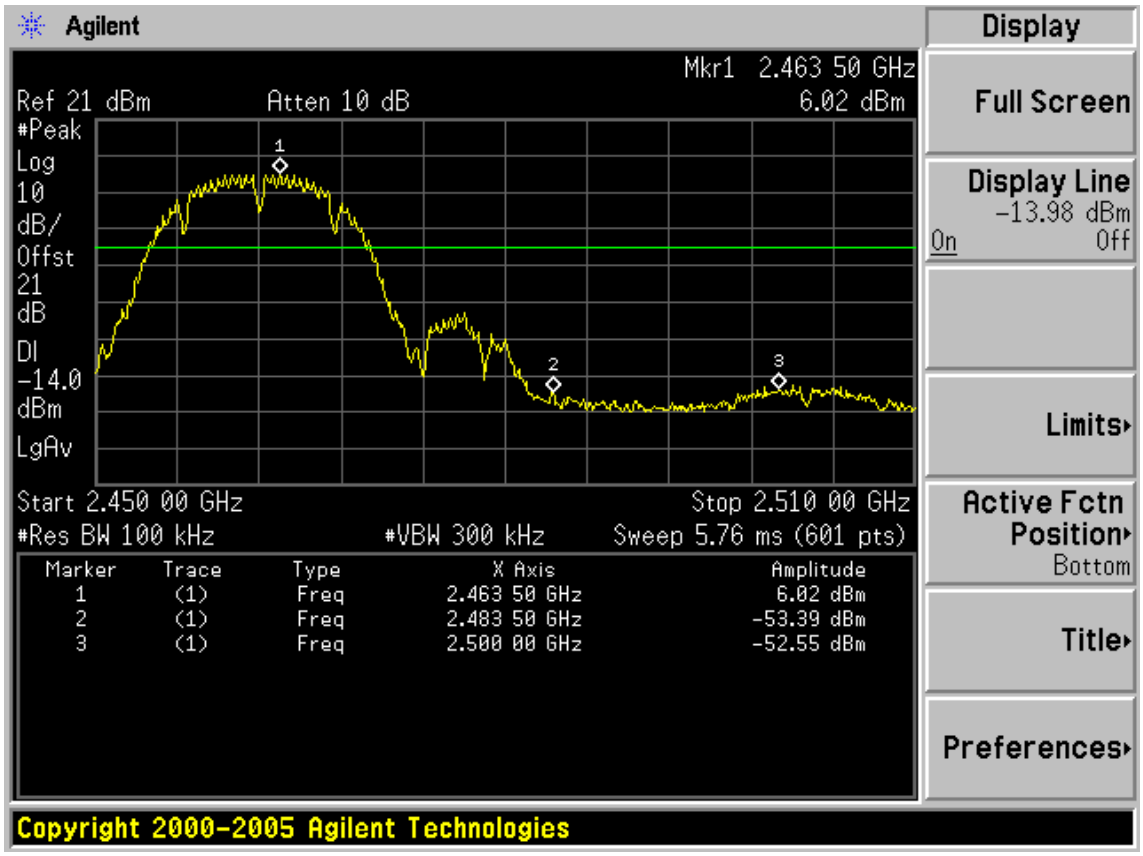


Test CH11: 2462MHz

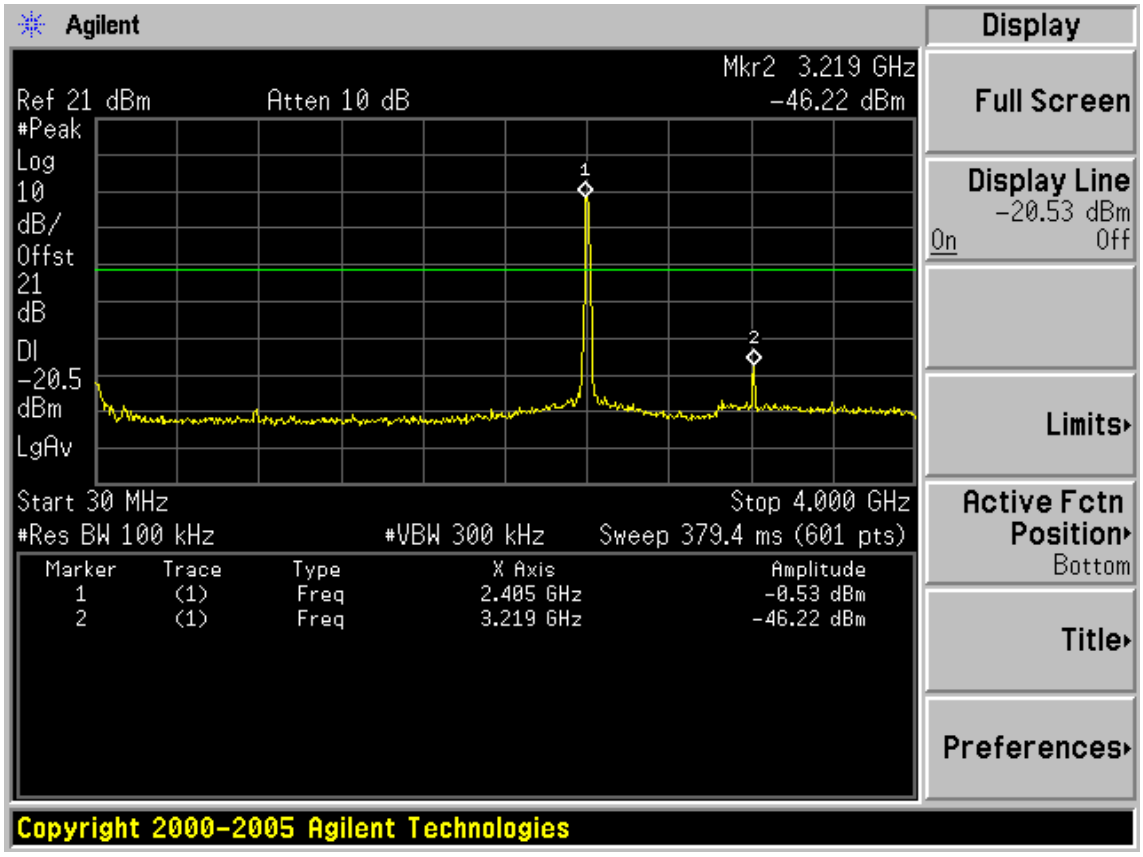


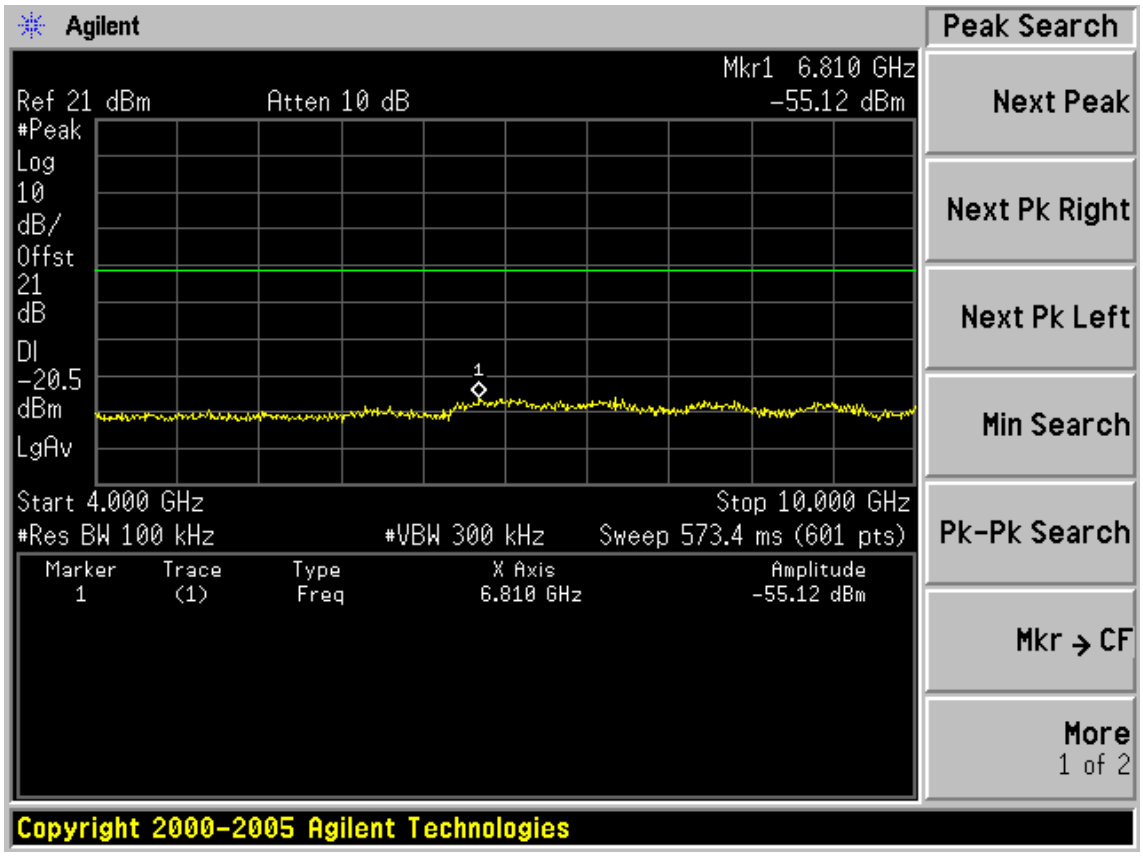

Agilent
Peak Search
Mkr1 6.850 GHz
Ref 21 dBm
Atten 10 dB
-55.24 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.8
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.850 GHz -55.24 dBm
Copyright 2000-2005 Agilent Technologies

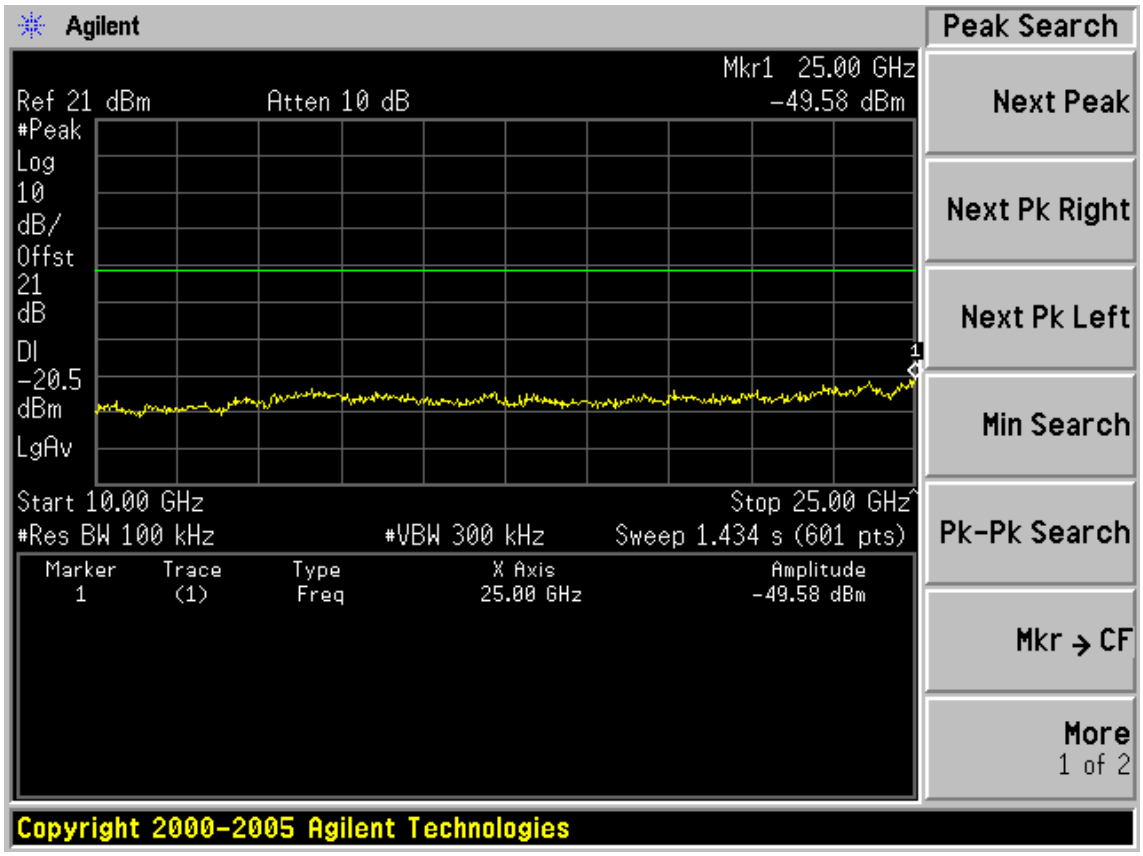

Agilent
Peak Search
Mkr1 24.78 GHz
Ref 21 dBm
Atten 10 dB
-49.86 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.8
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.78 GHz -49.86 dBm
Copyright 2000-2005 Agilent Technologies

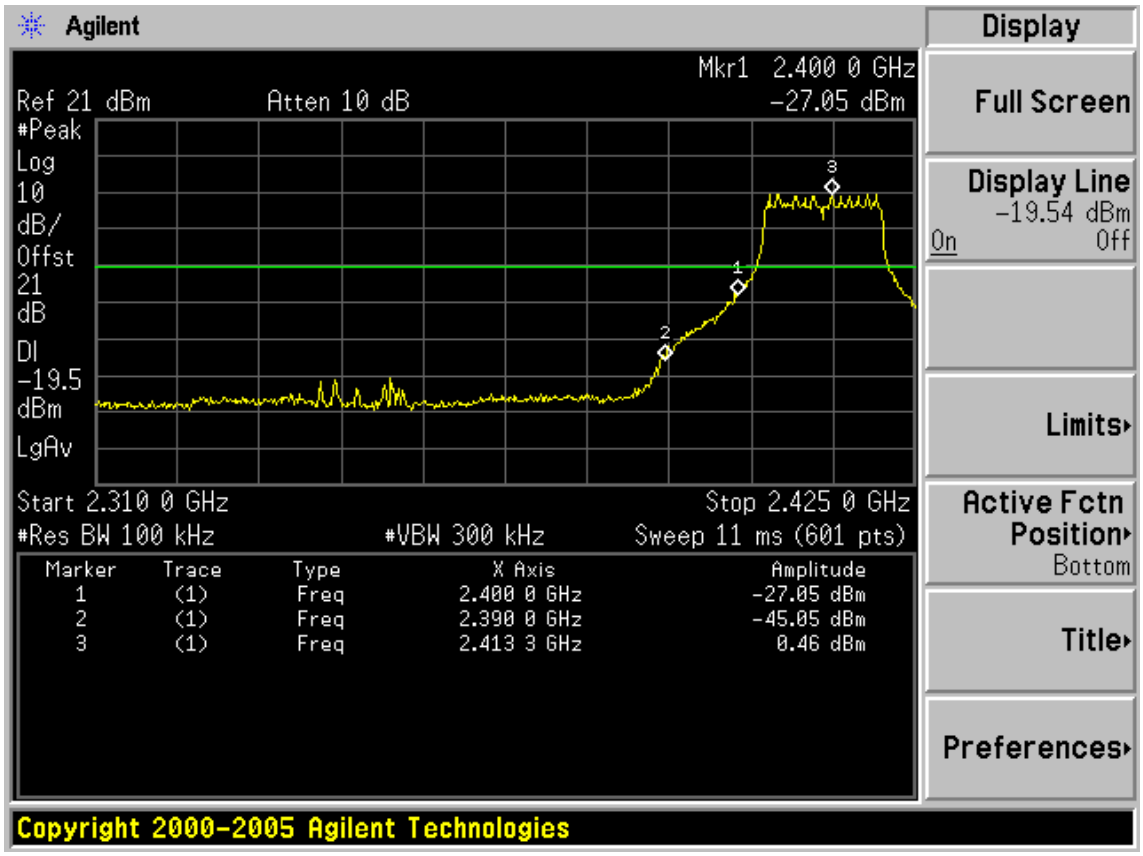


Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

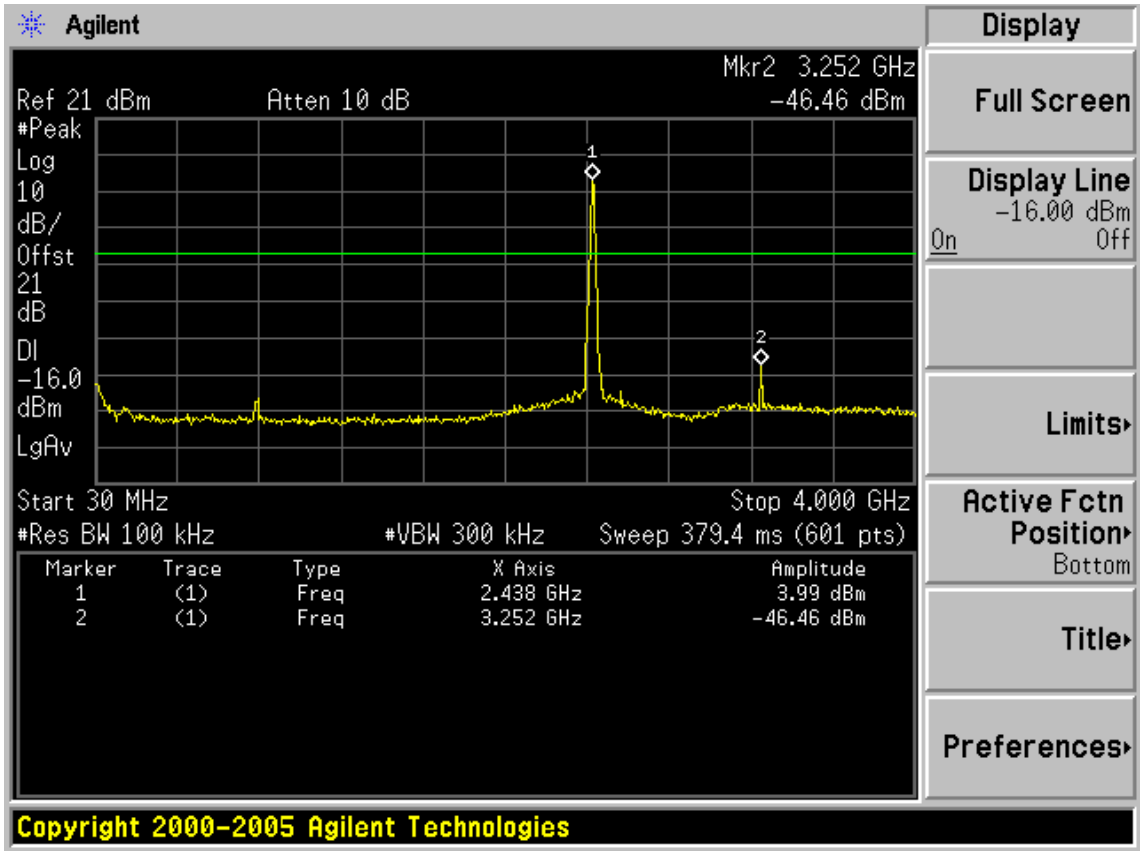


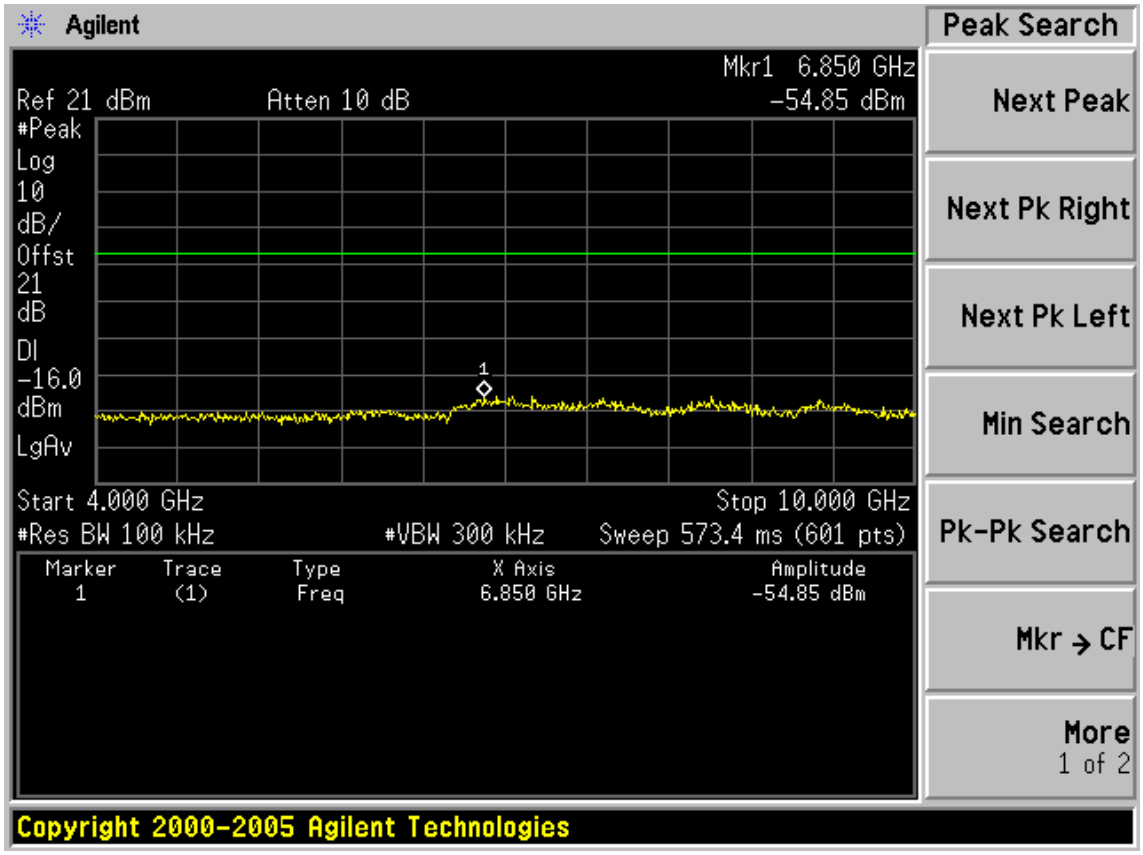

Agilent
Peak Search
Mkr1 6.810 GHz
Ref 21 dBm
Atten 10 dB
-55.12 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-20.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.810 GHz -55.12 dBm
Copyright 2000-2005 Agilent Technologies

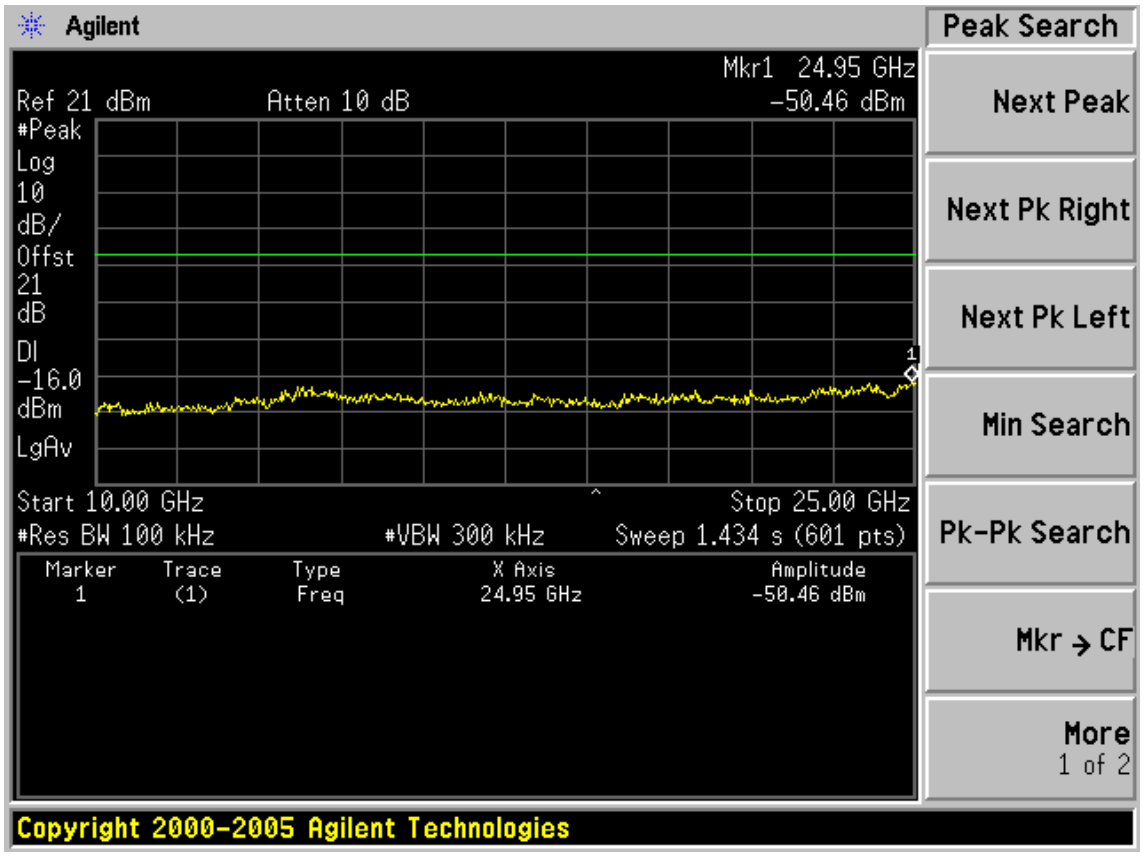

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.58 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-20.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.58 dBm
Copyright 2000-2005 Agilent Technologies



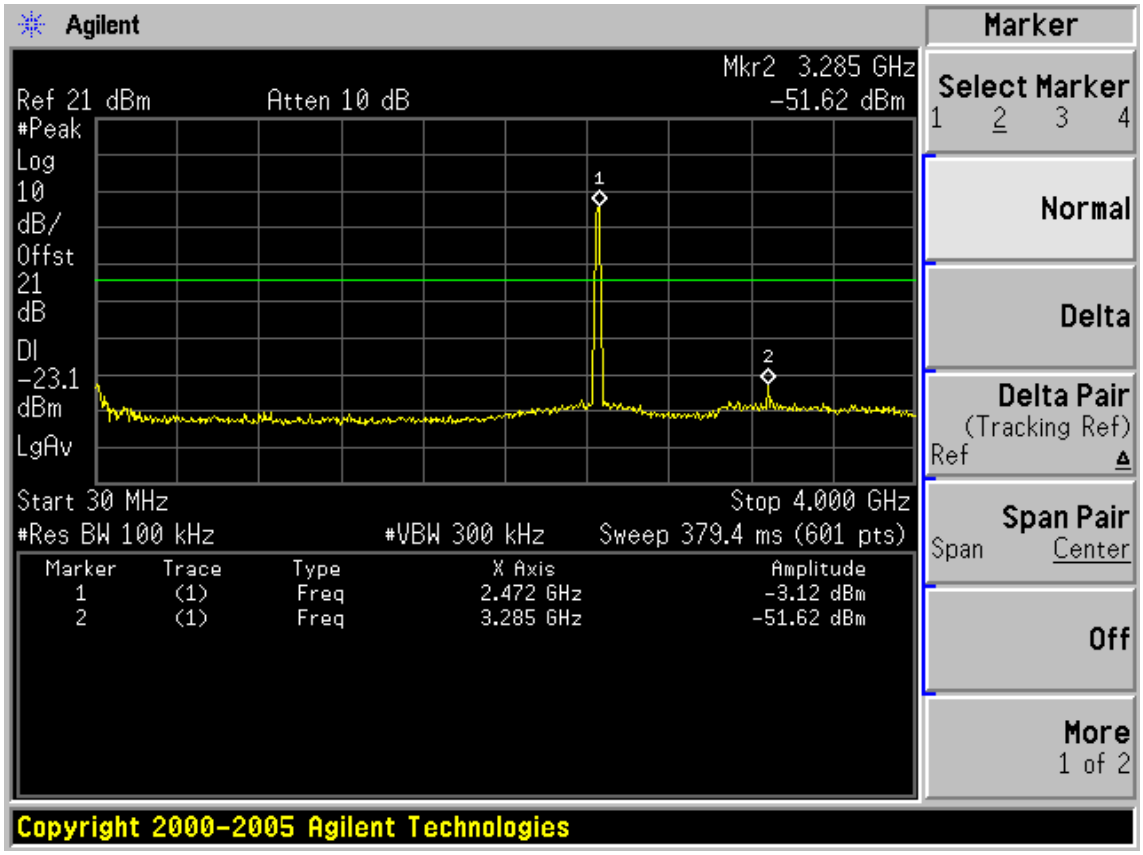
Test CH6: 2437MHz

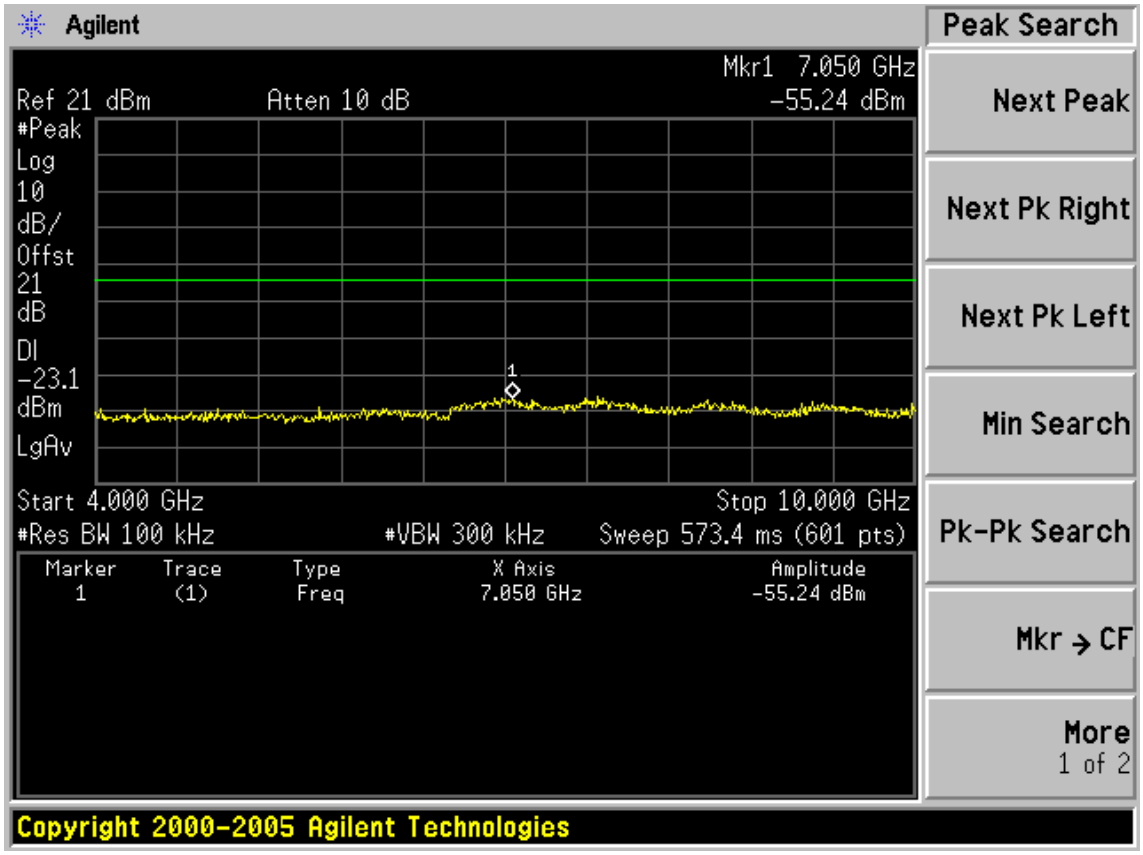


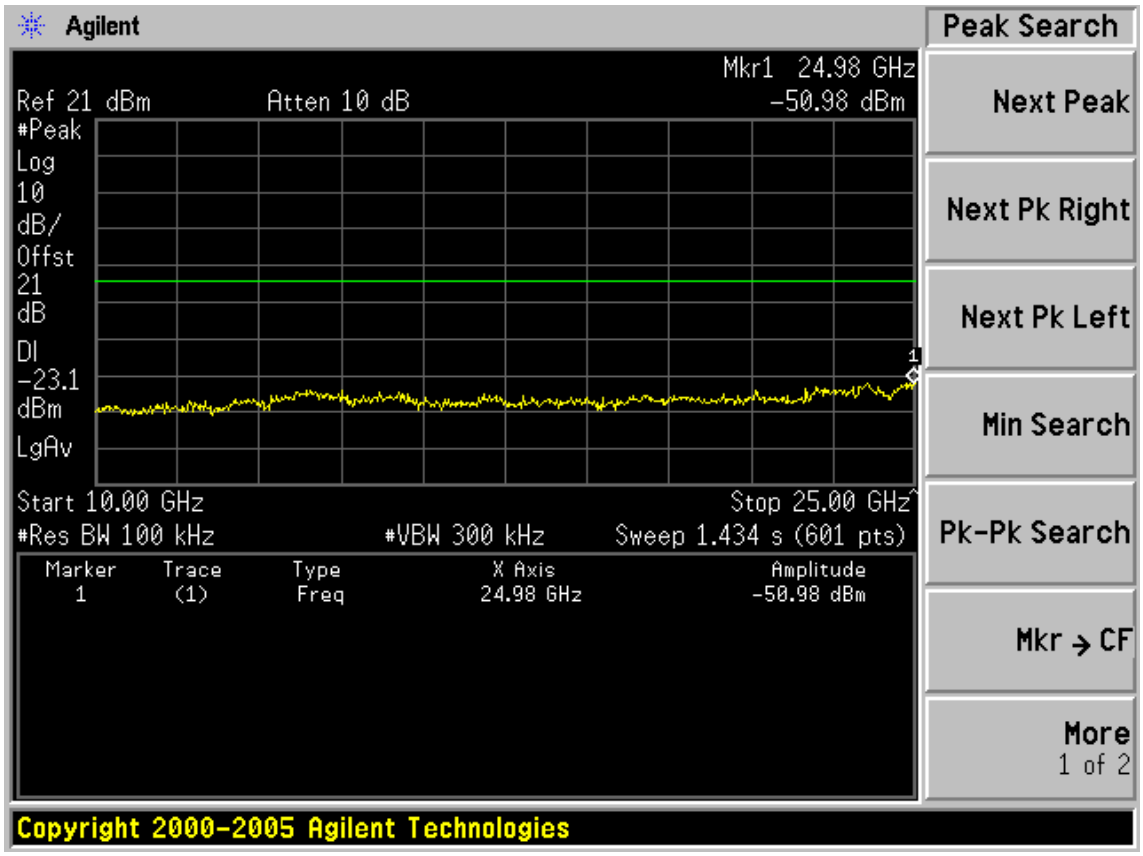

Agilent
Peak Search
Mkr1 6.850 GHz
Ref 21 dBm
Atten 10 dB
-54.85 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-16.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.850 GHz -54.85 dBm
Copyright 2000-2005 Agilent Technologies

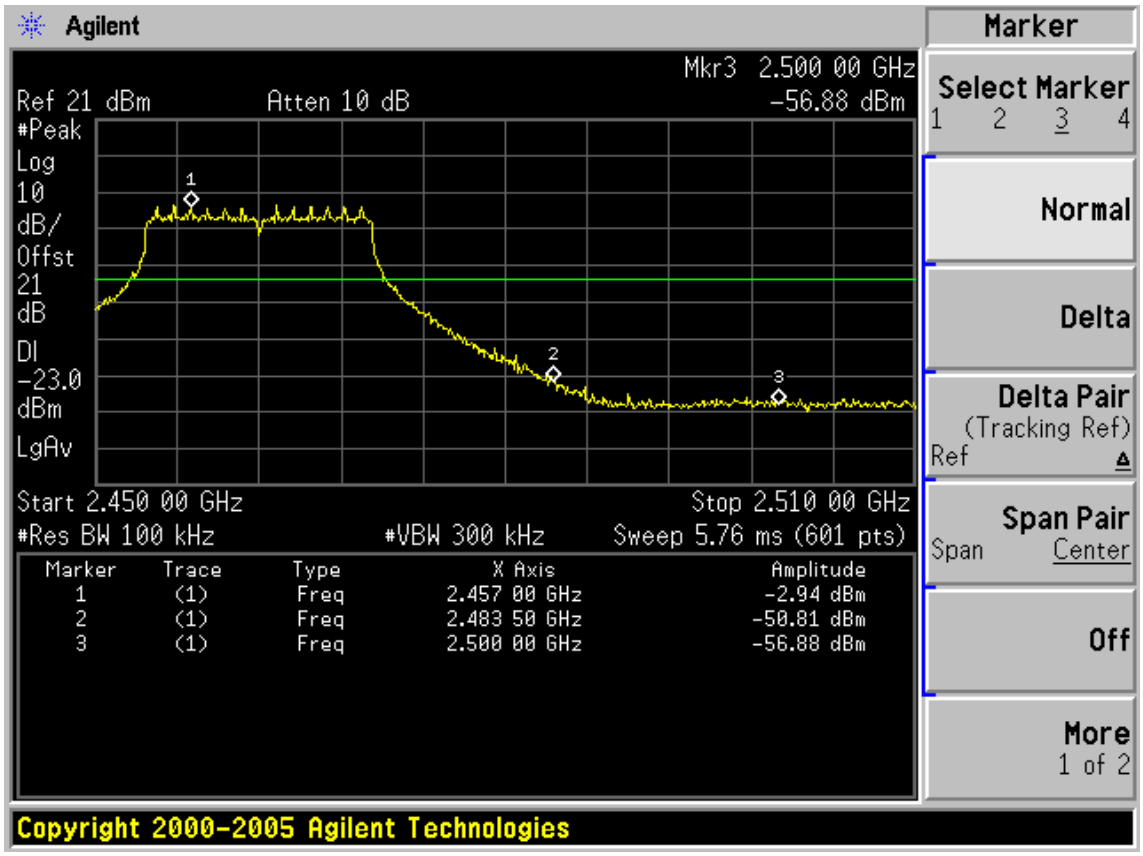

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.46 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-16.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.46 dBm
Copyright 2000-2005 Agilent Technologies

Test CH11: 2462MHz

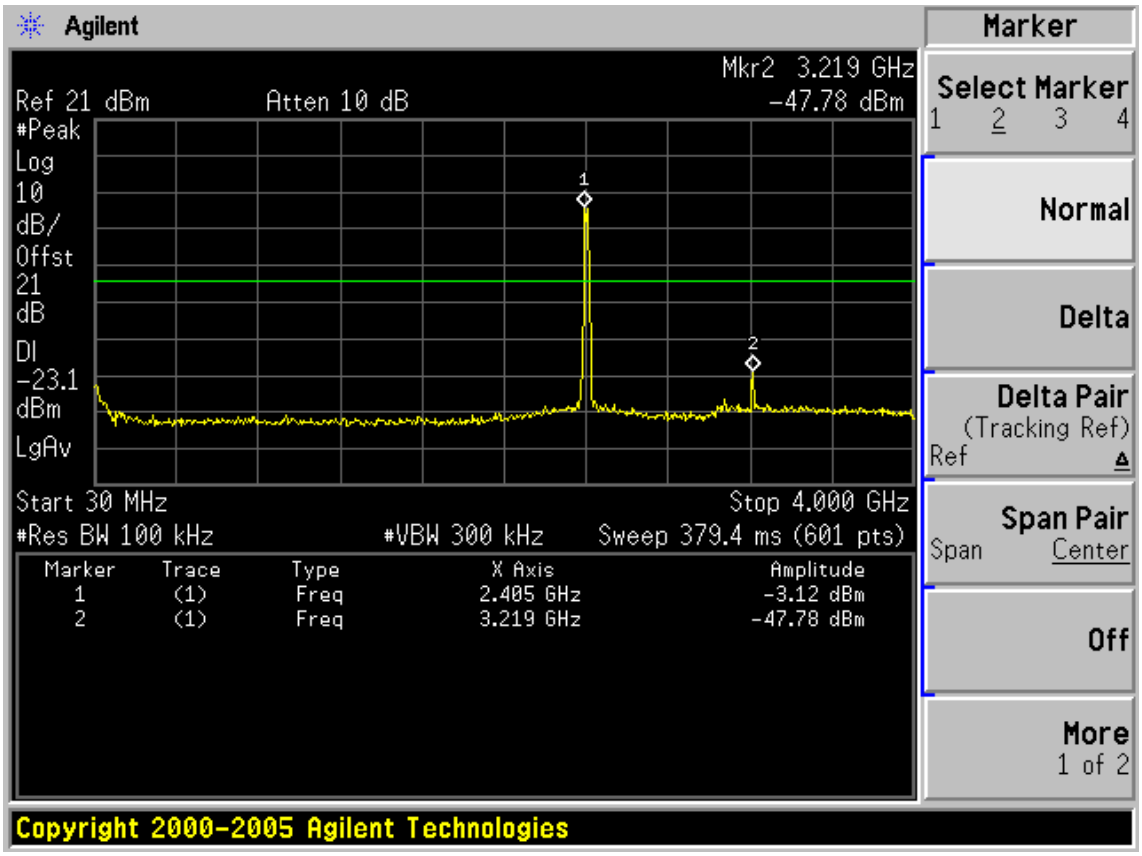


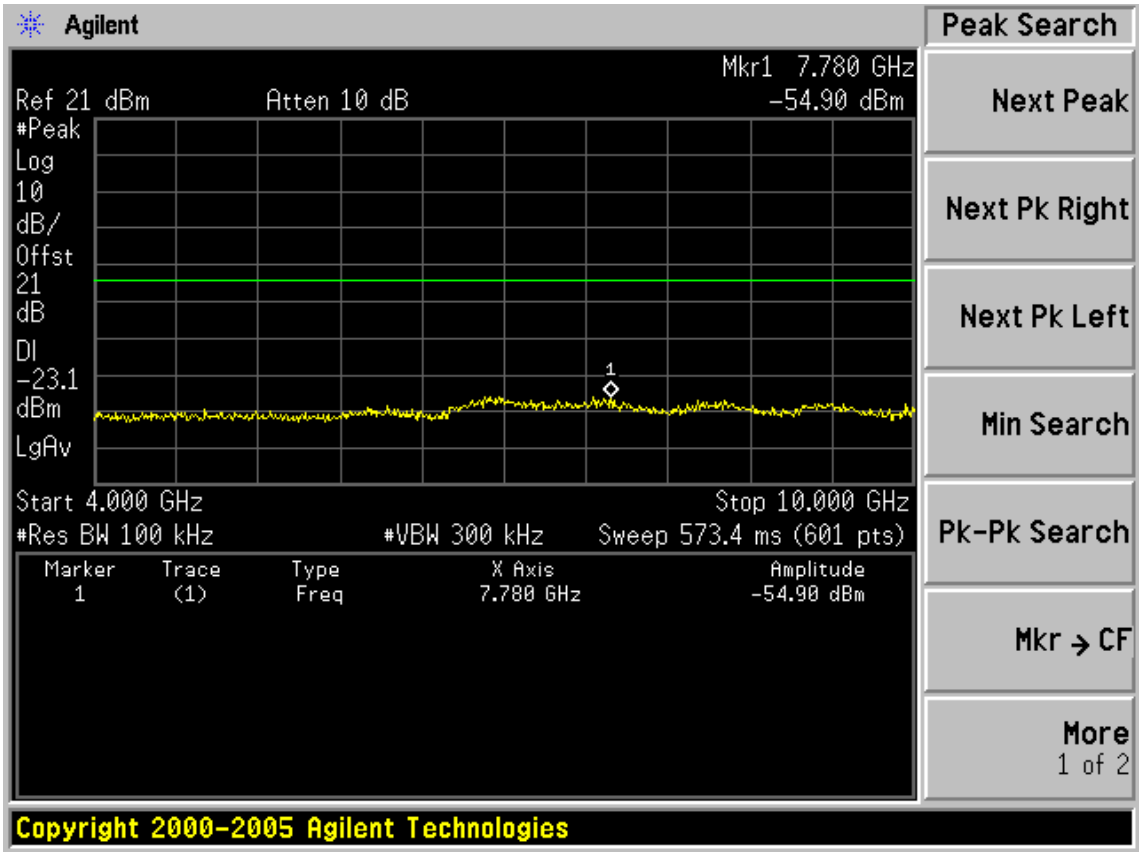


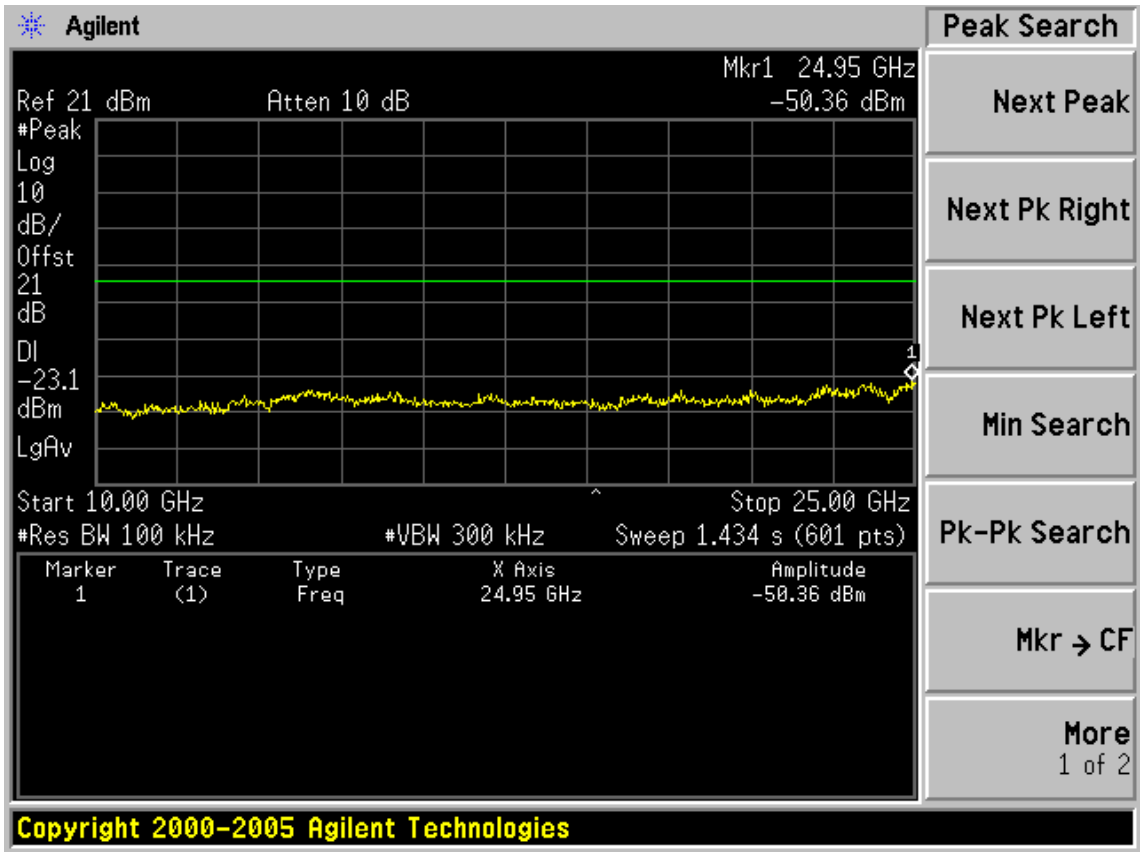

Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.98 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.98 dBm
Copyright 2000-2005 Agilent Technologies

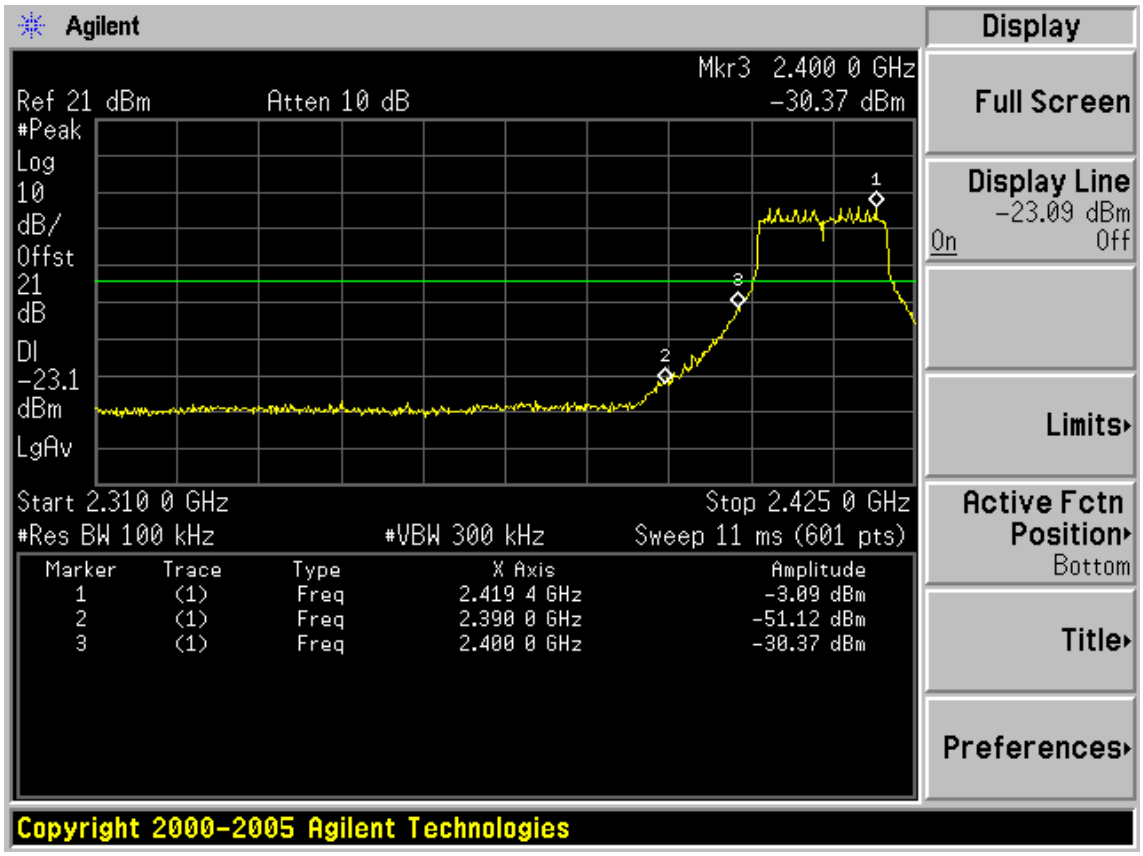

Agilent
Marker
Mkr3 2.500 00 GHz
Ref 21 dBm
Atten 10 dB
-56.88 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.450 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.76 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.457 00 GHz -2.94 dBm
2 (1) Freq 2.483 50 GHz -50.81 dBm
3 (1) Freq 2.500 00 GHz -56.88 dBm
Copyright 2000-2005 Agilent Technologies

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

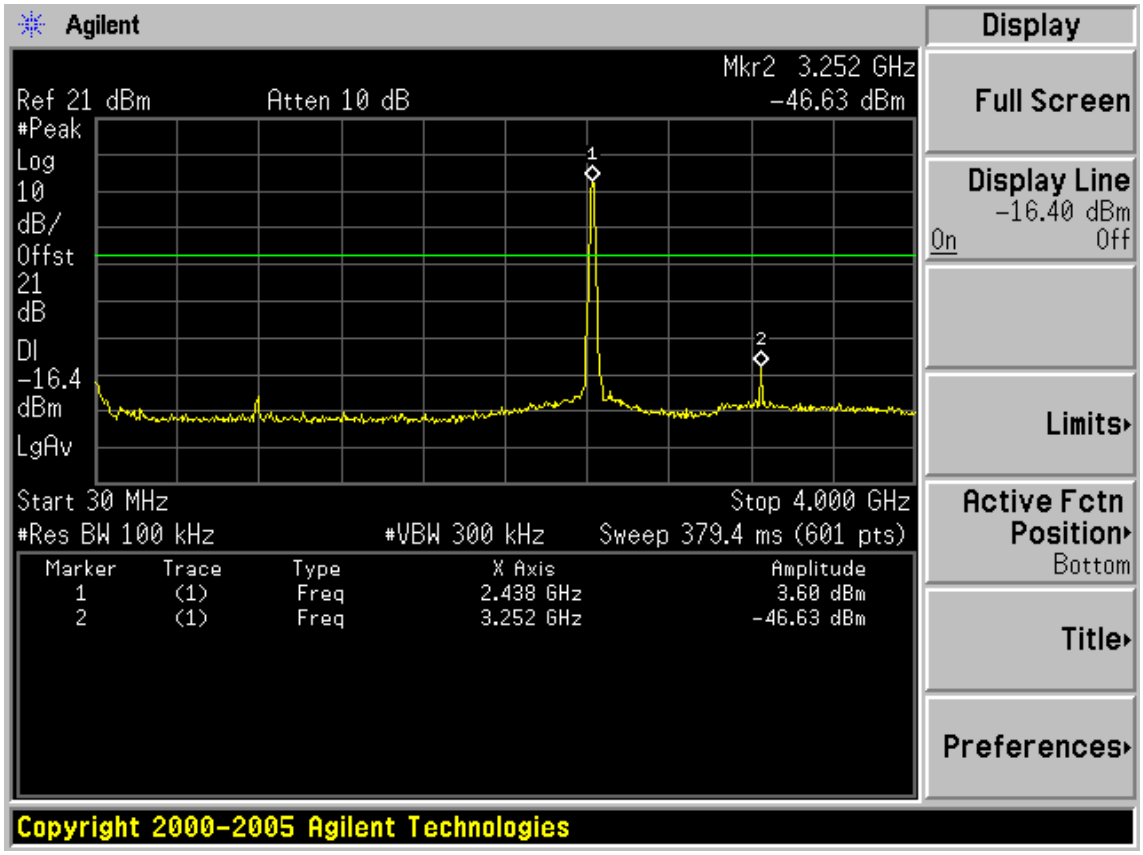


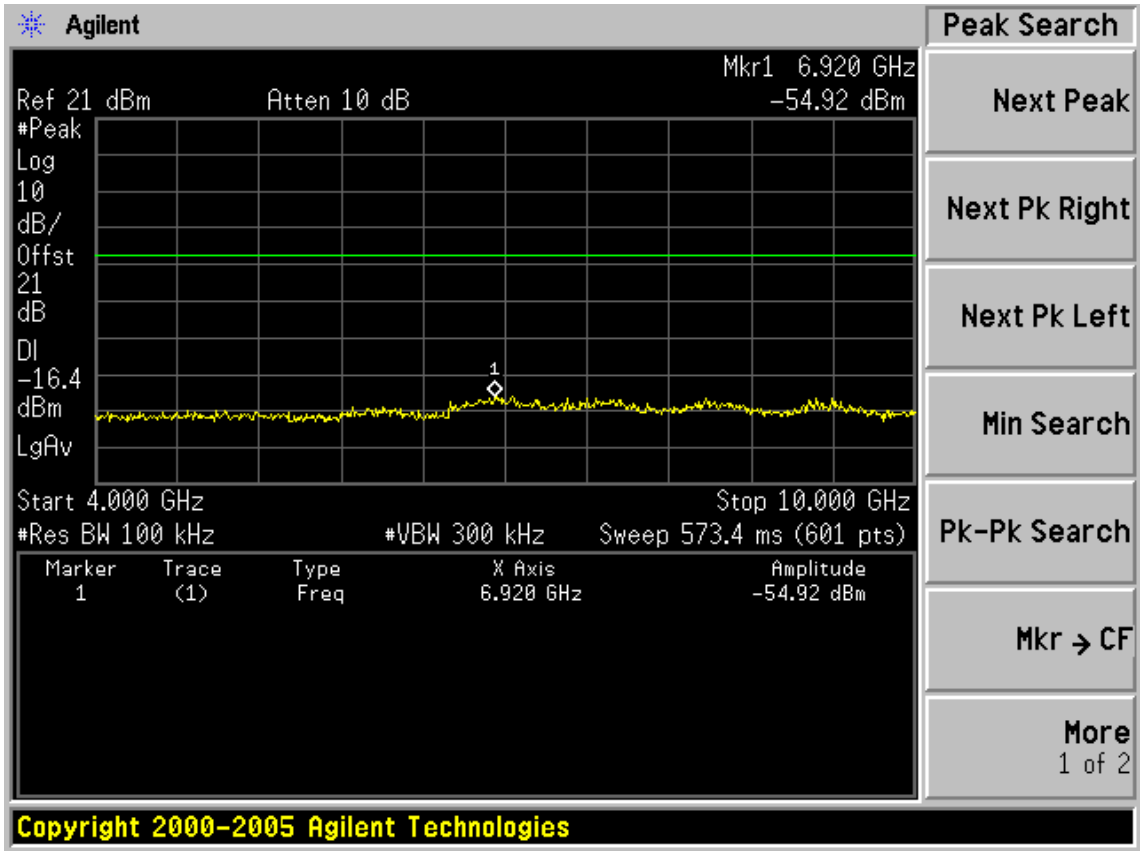


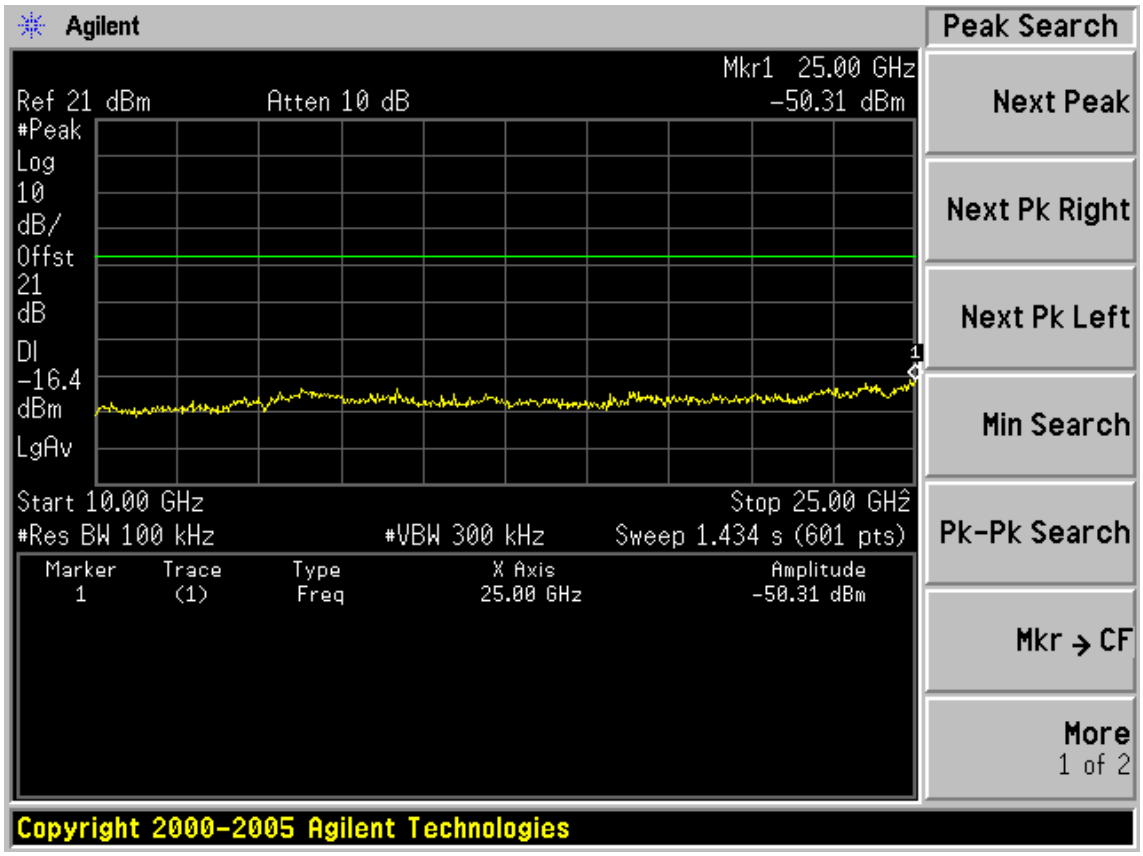

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.36 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.36 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Display
Mkr3 2.400 0 GHz
Ref 21 dBm
Atten 10 dB
-30.37 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Full Screen
Display Line
-23.09 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.310 0 GHz
Stop 2.425 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.419 4 GHz -3.09 dBm
2 (1) Freq 2.390 0 GHz -51.12 dBm
3 (1) Freq 2.400 0 GHz -30.37 dBm
Copyright 2000-2005 Agilent Technologies

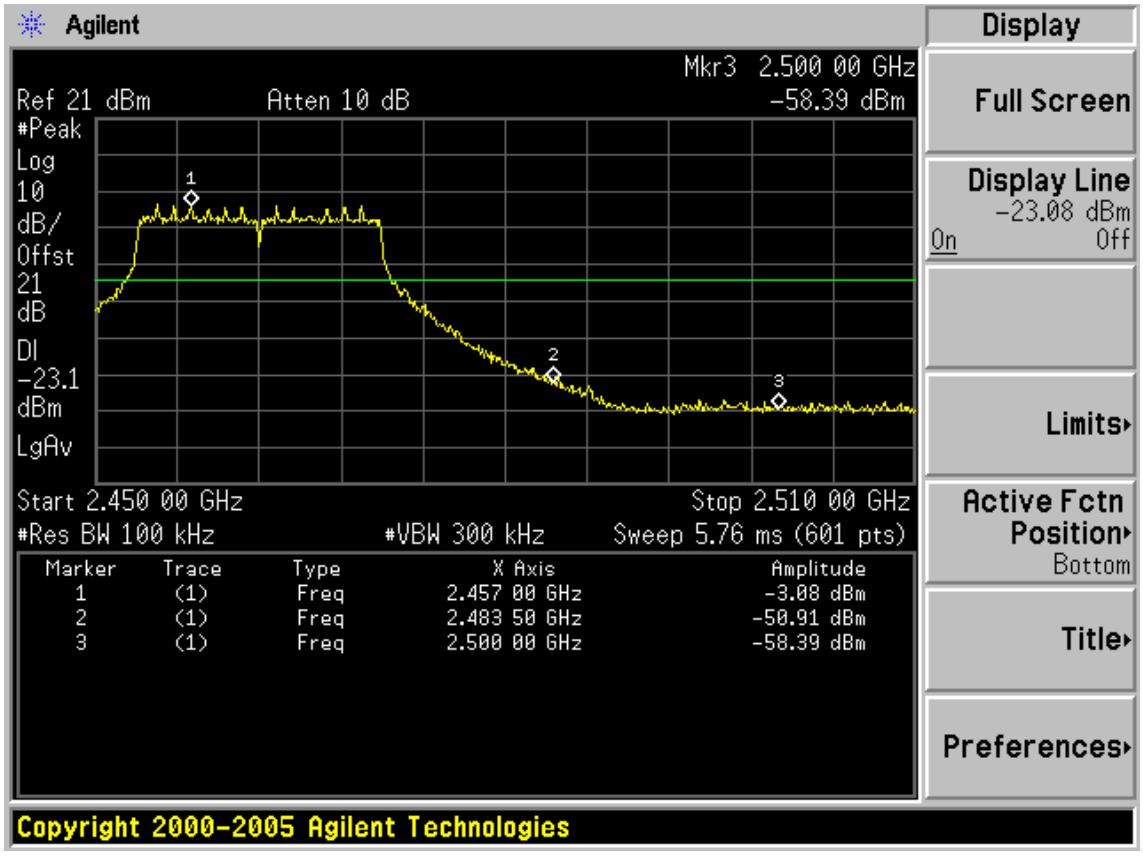
Test CH6: 2437MHz

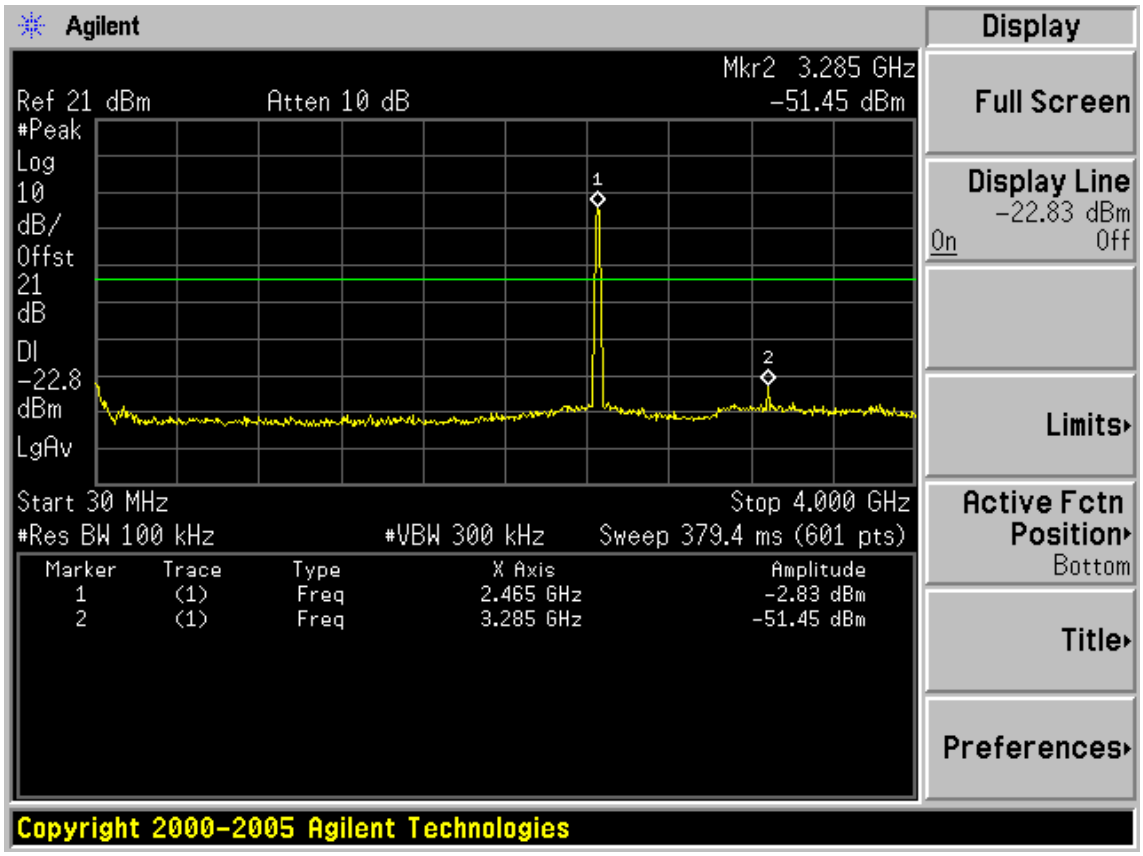


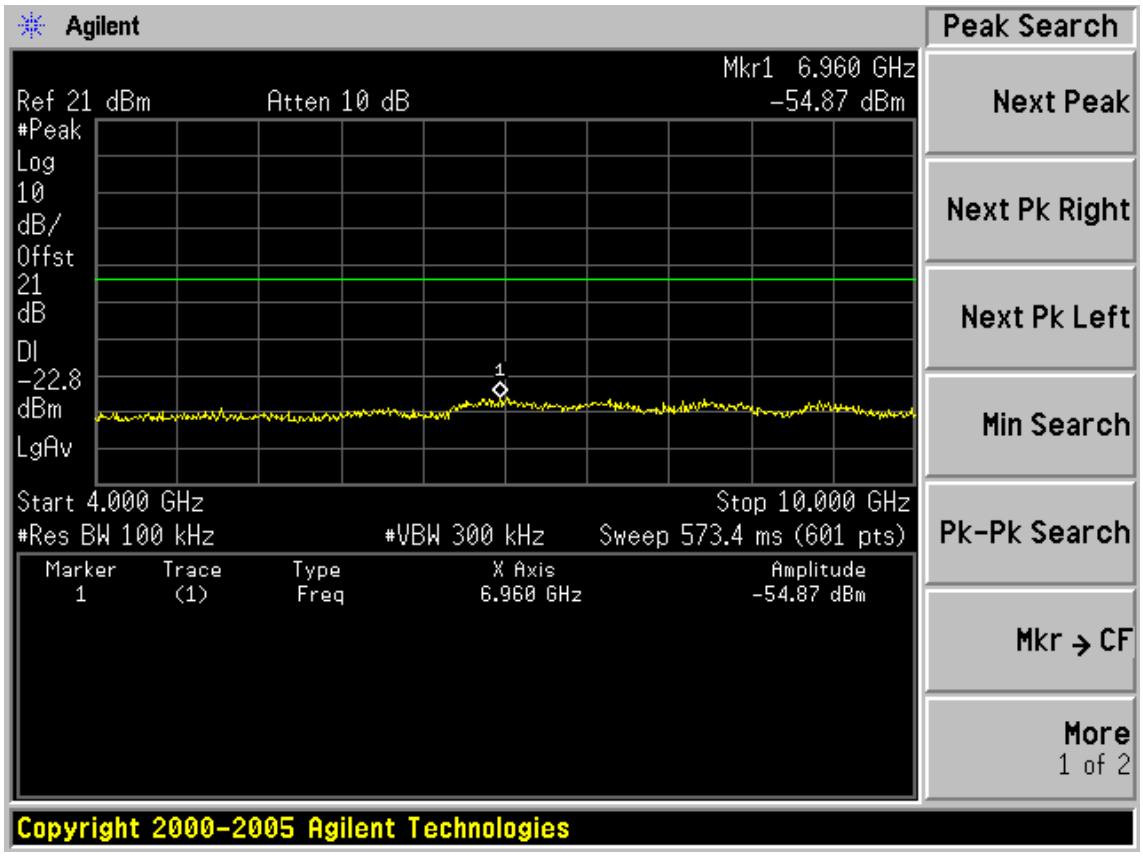


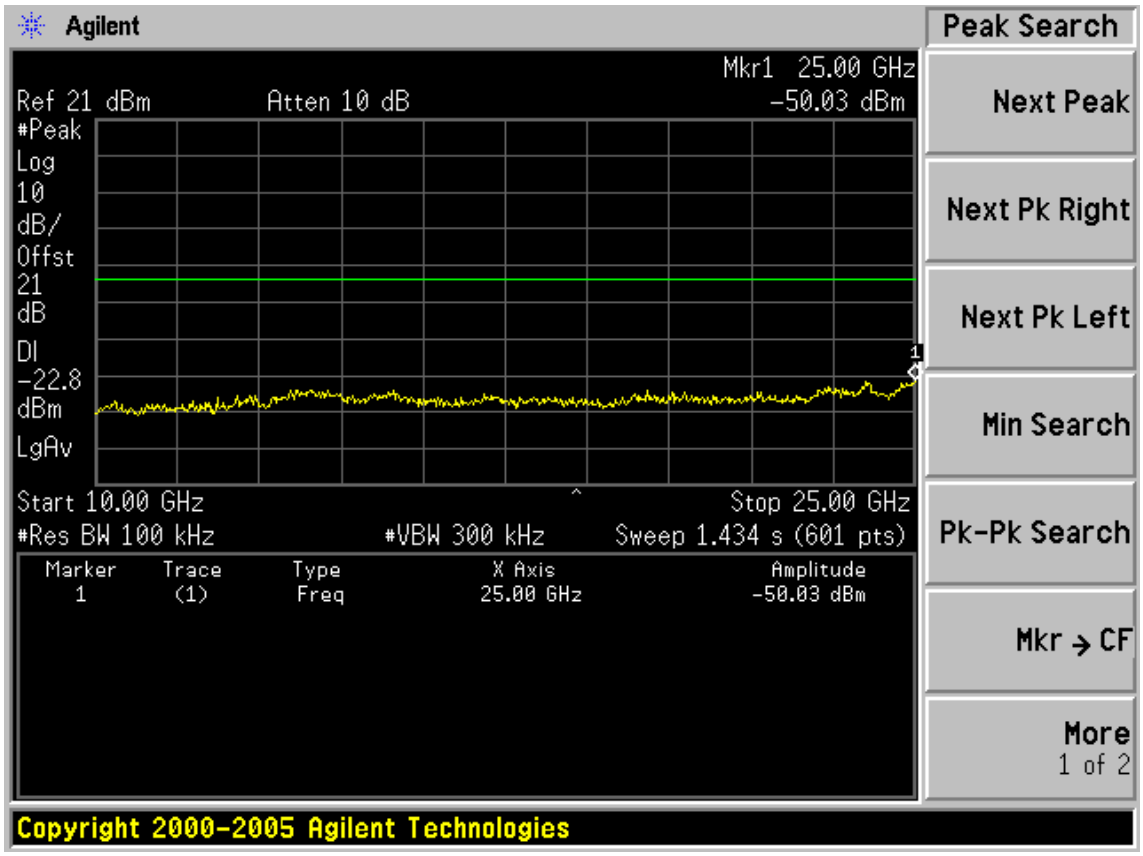


Test CH11: 2462MHz

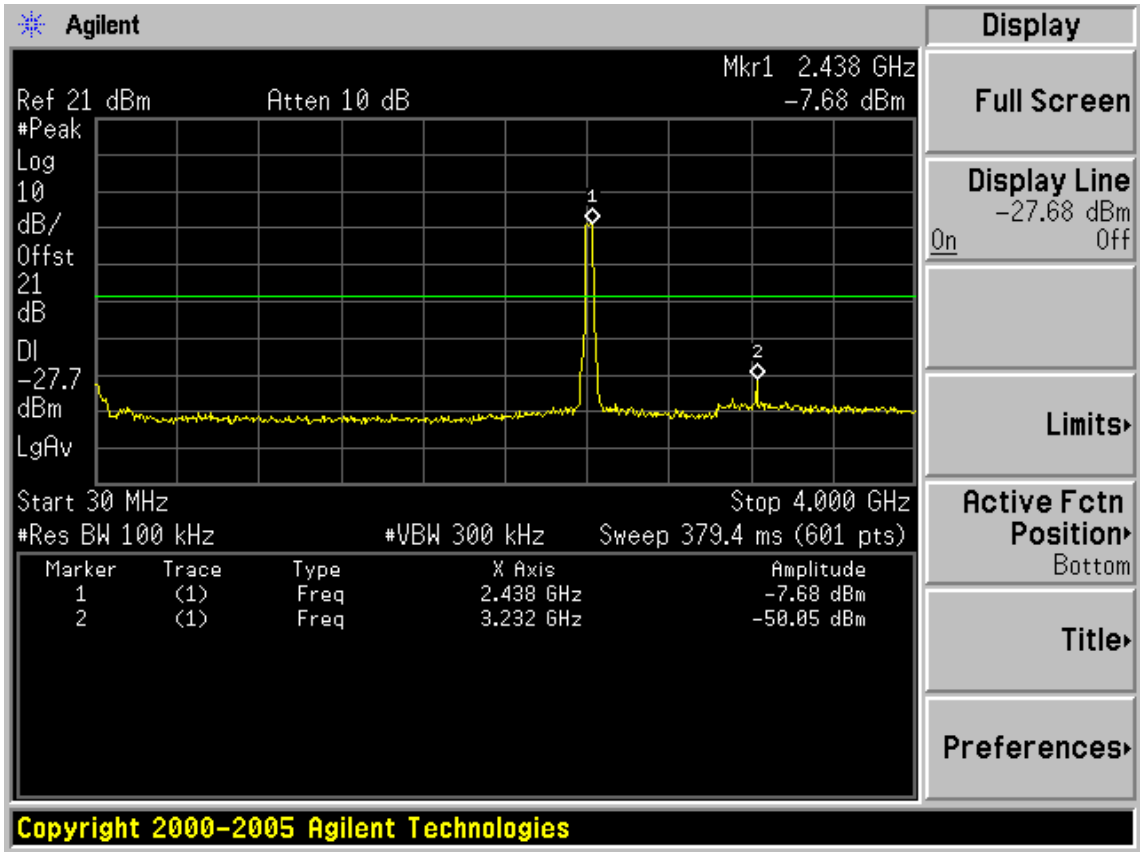


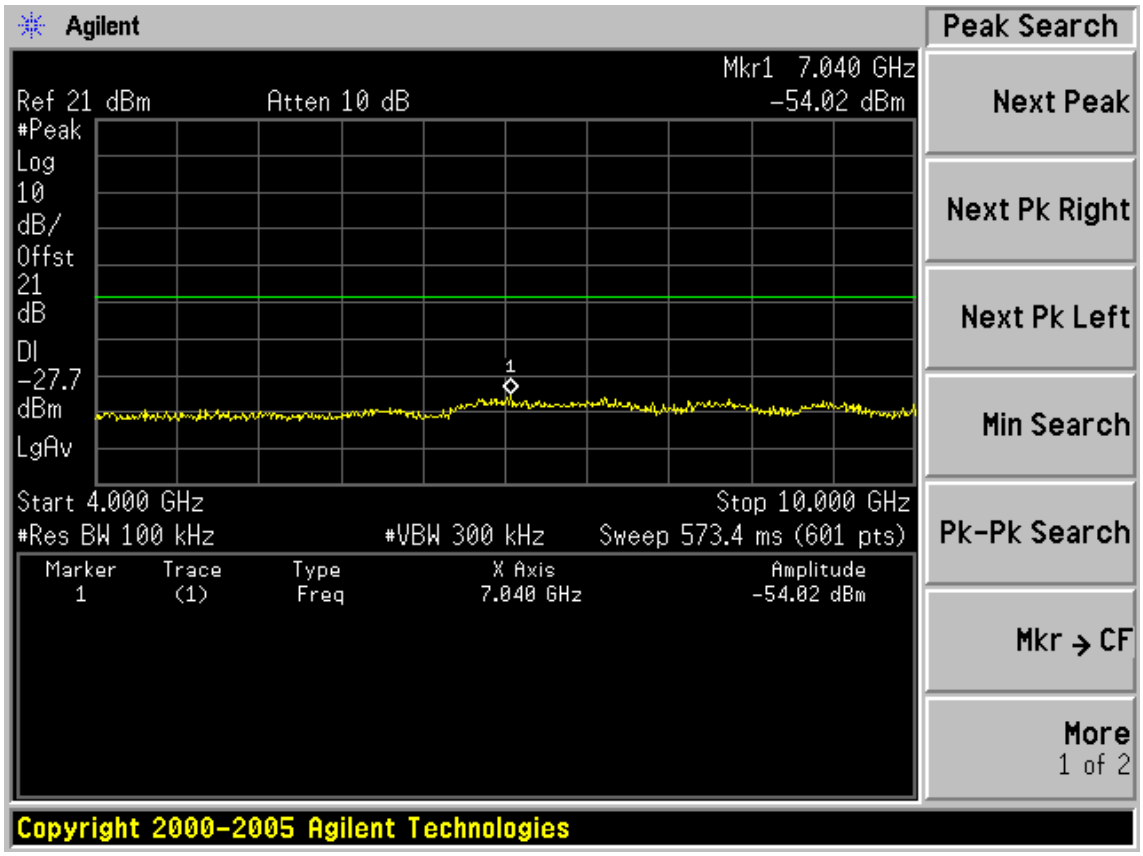

Agilent
Display
Mkr2 3.285 GHz
Ref 21 dBm
Atten 10 dB
-51.45 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-22.8
dBm
LgAv
1
2
Full Screen
Display Line
-22.83 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.465 GHz -2.83 dBm
2 (1) Freq 3.285 GHz -51.45 dBm
Copyright 2000-2005 Agilent Technologies

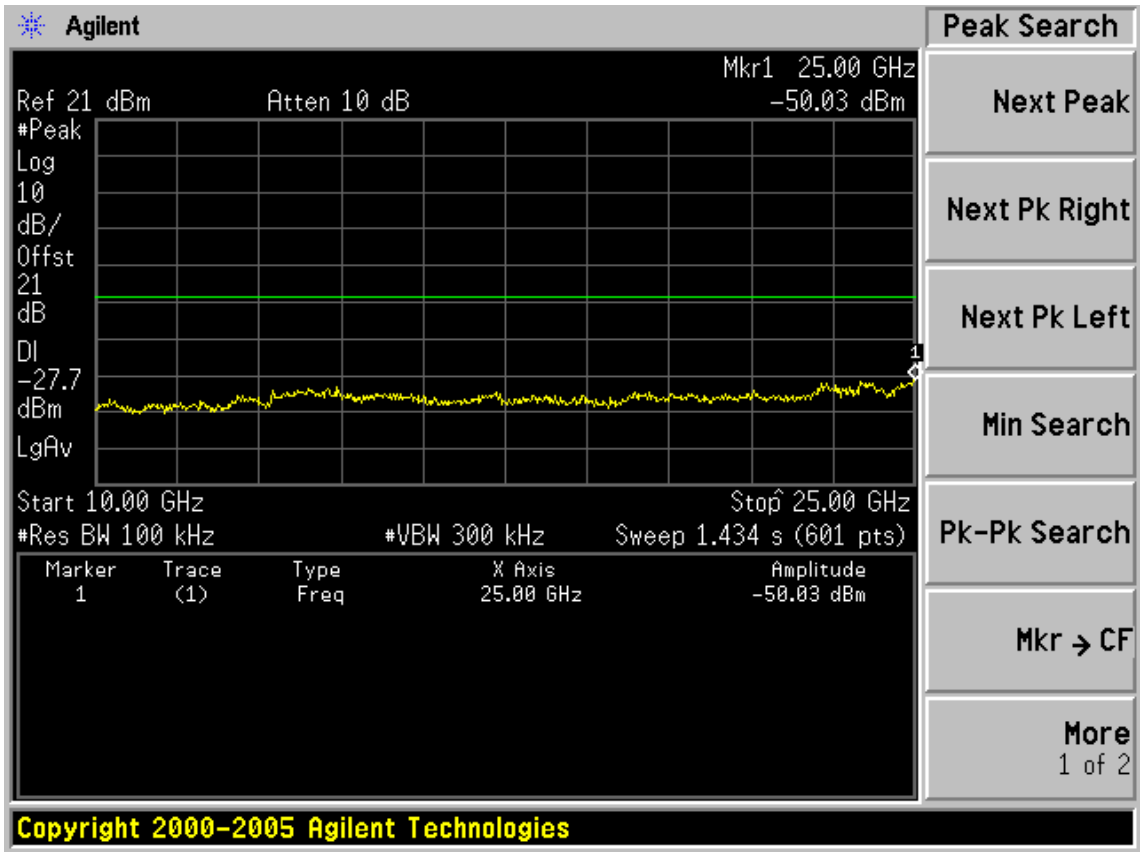

Agilent
Peak Search
Mkr1 6.960 GHz
Ref 21 dBm
Atten 10 dB
-54.87 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-22.8
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.960 GHz -54.87 dBm
Copyright 2000-2005 Agilent Technologies

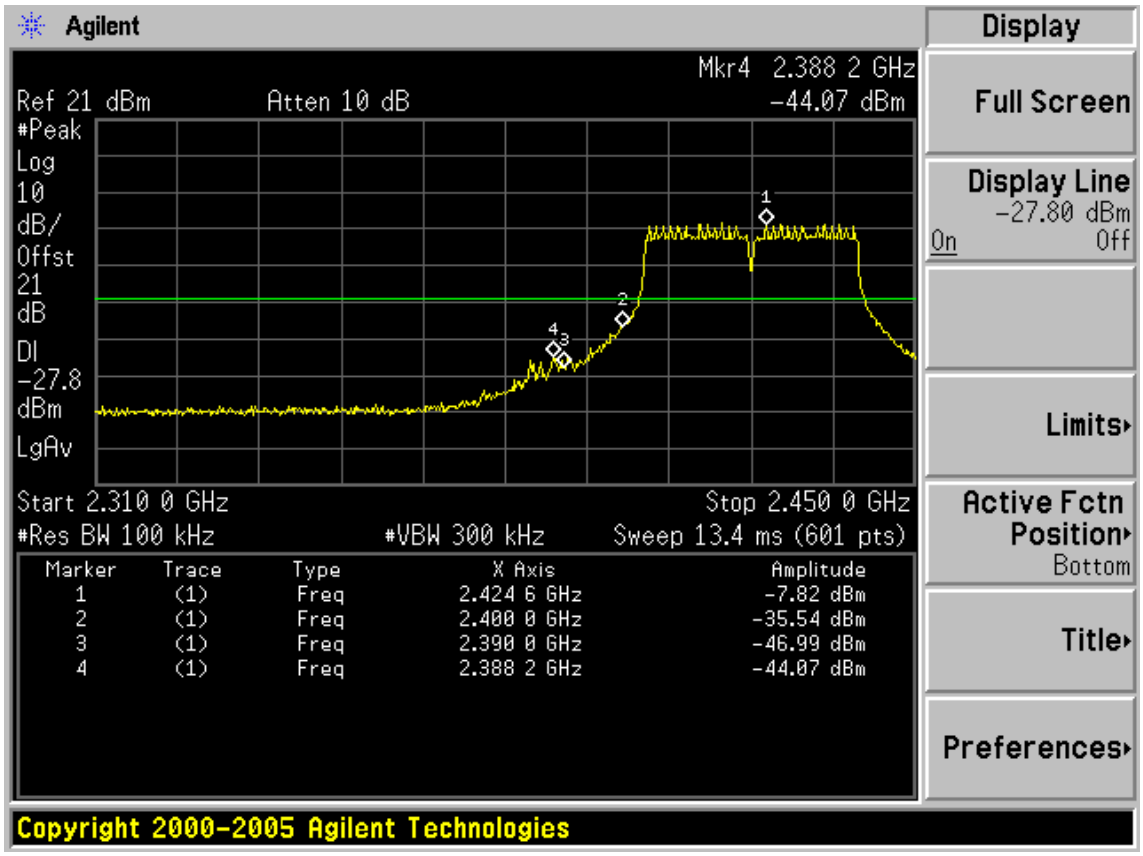


Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

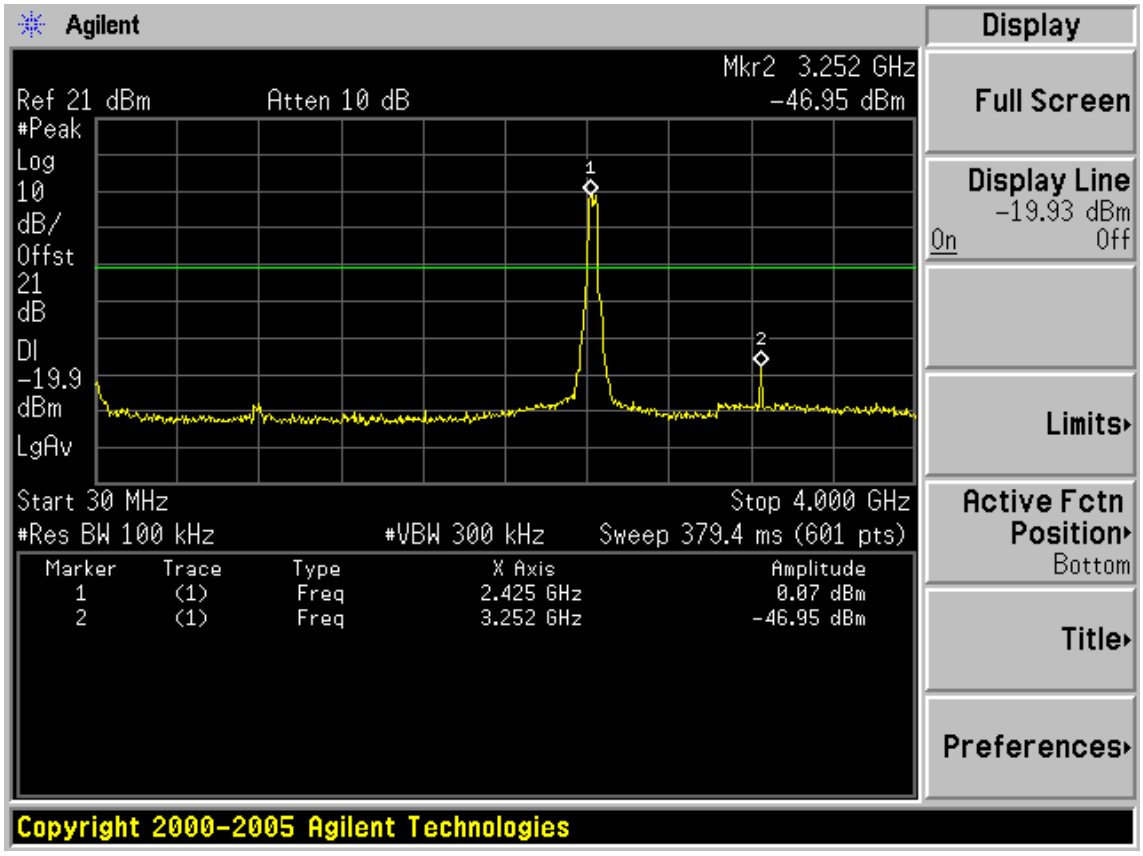


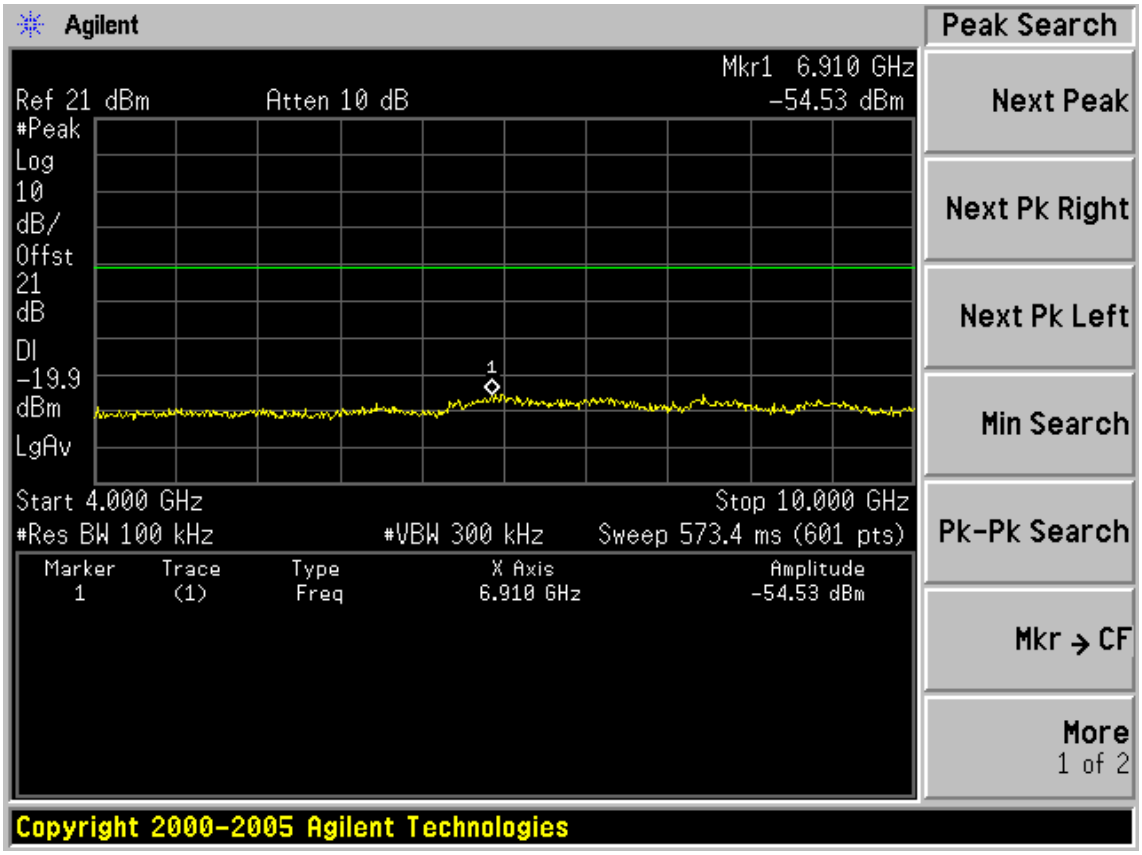

Agilent
Peak Search
Mkr1 7.040 GHz
Ref 21 dBm
Atten 10 dB
-54.02 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-27.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.040 GHz -54.02 dBm
Copyright 2000-2005 Agilent Technologies

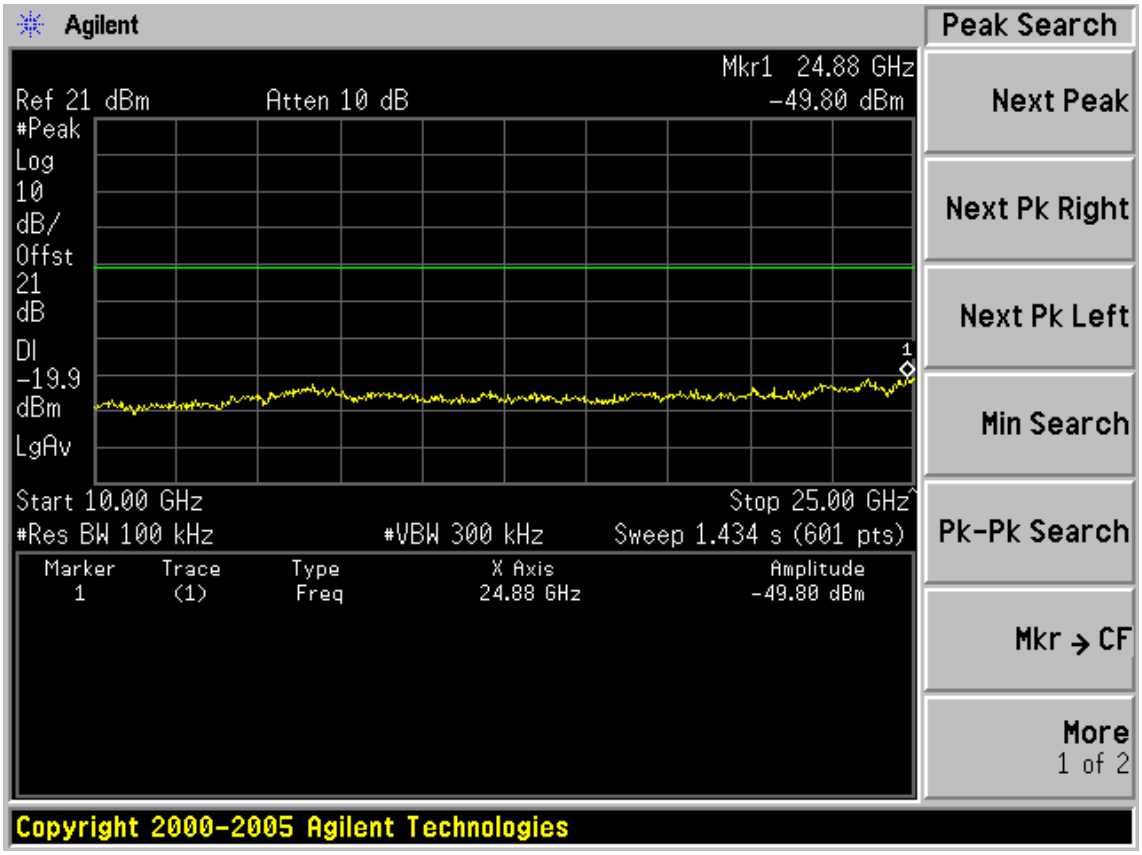

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-50.03 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-27.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -50.03 dBm
Copyright 2000-2005 Agilent Technologies



Test CH4: 2437MHz




Agilent
Peak Search
Mkr1 6.910 GHz
Ref 21 dBm
Atten 10 dB
-54.53 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.9
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.910 GHz -54.53 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Peak Search
Mkr1 24.88 GHz
Ref 21 dBm
Atten 10 dB
-49.80 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.9
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.88 GHz -49.80 dBm
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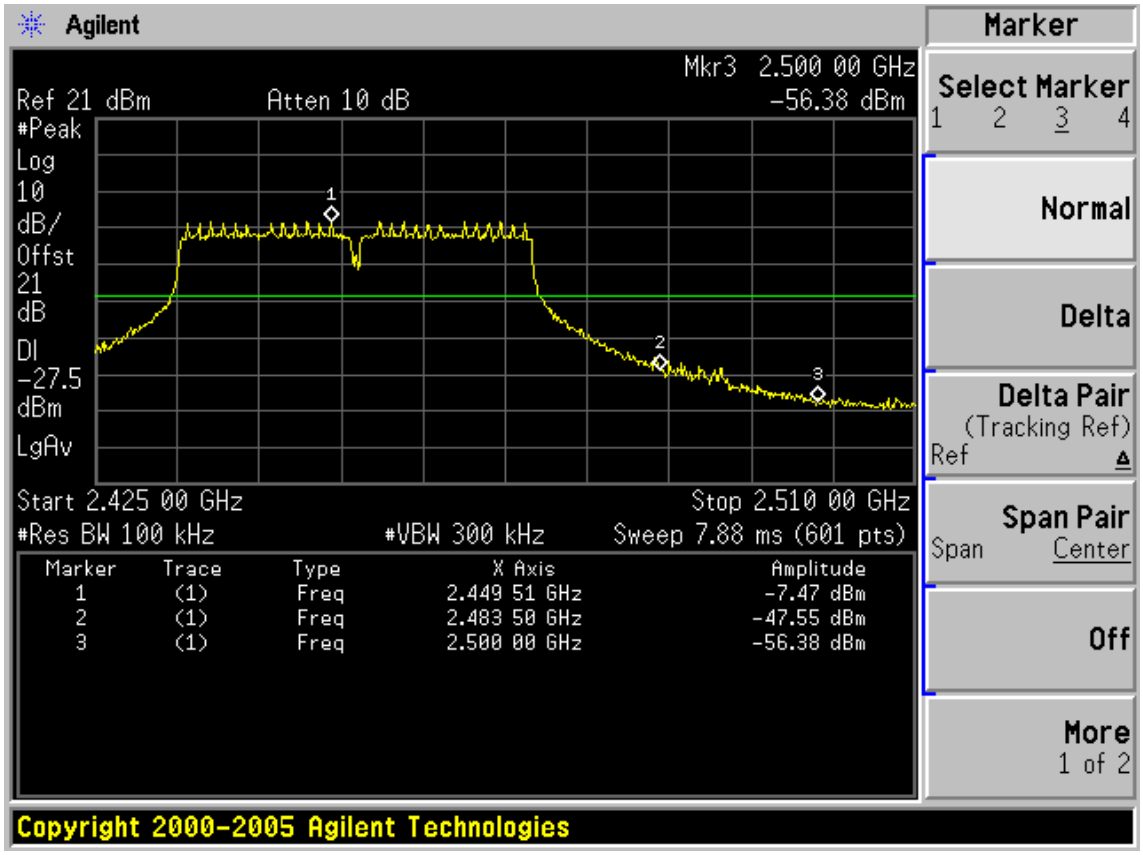
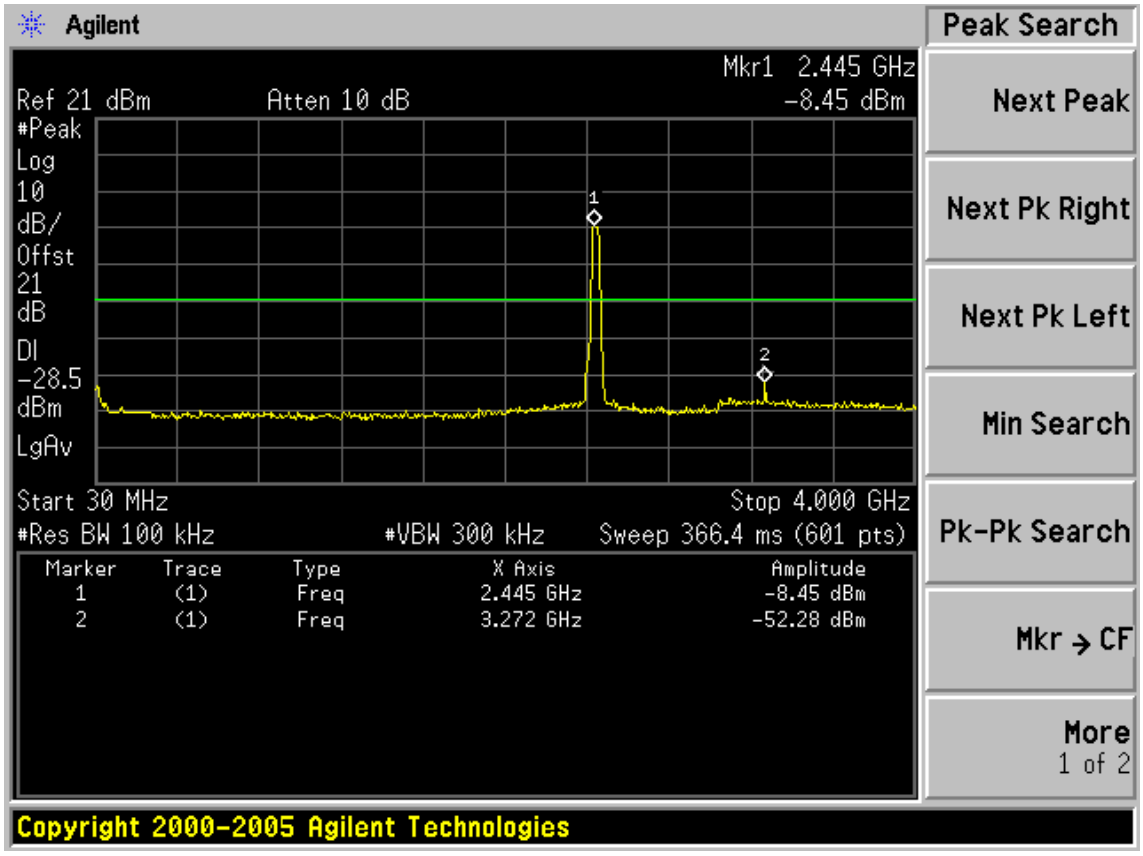
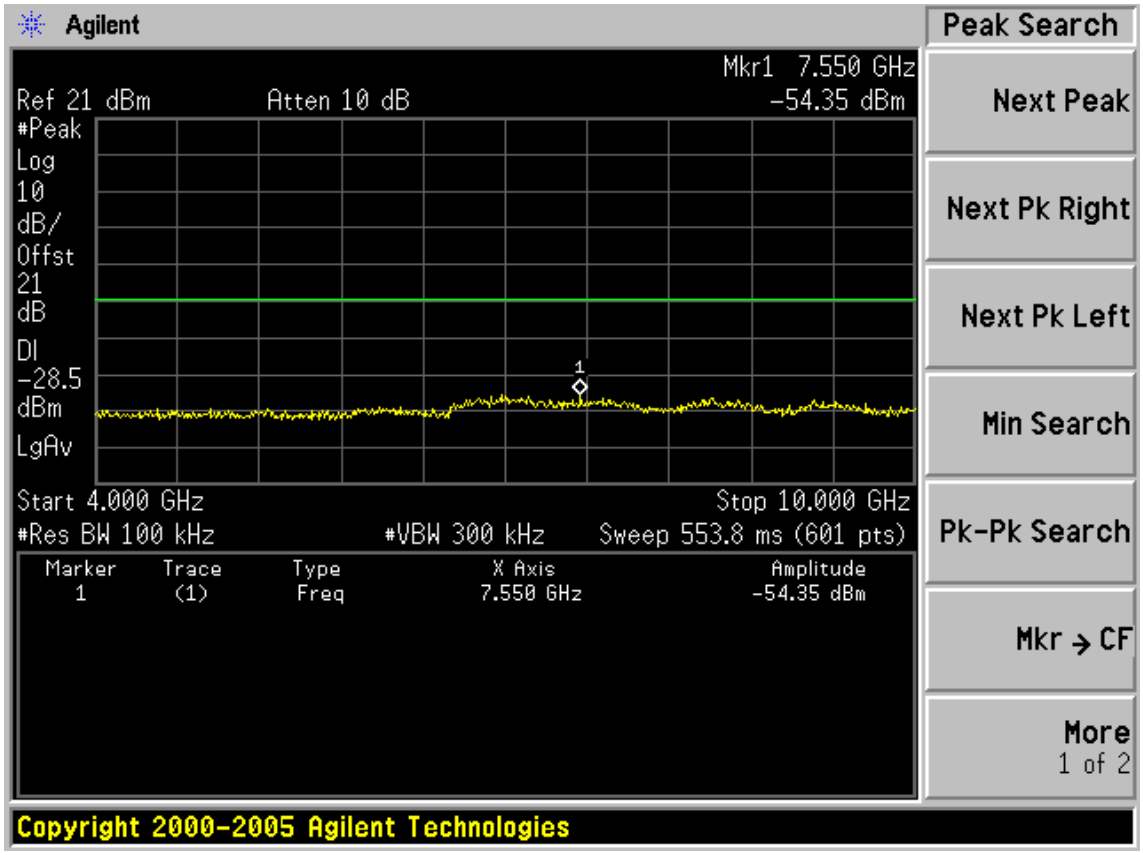
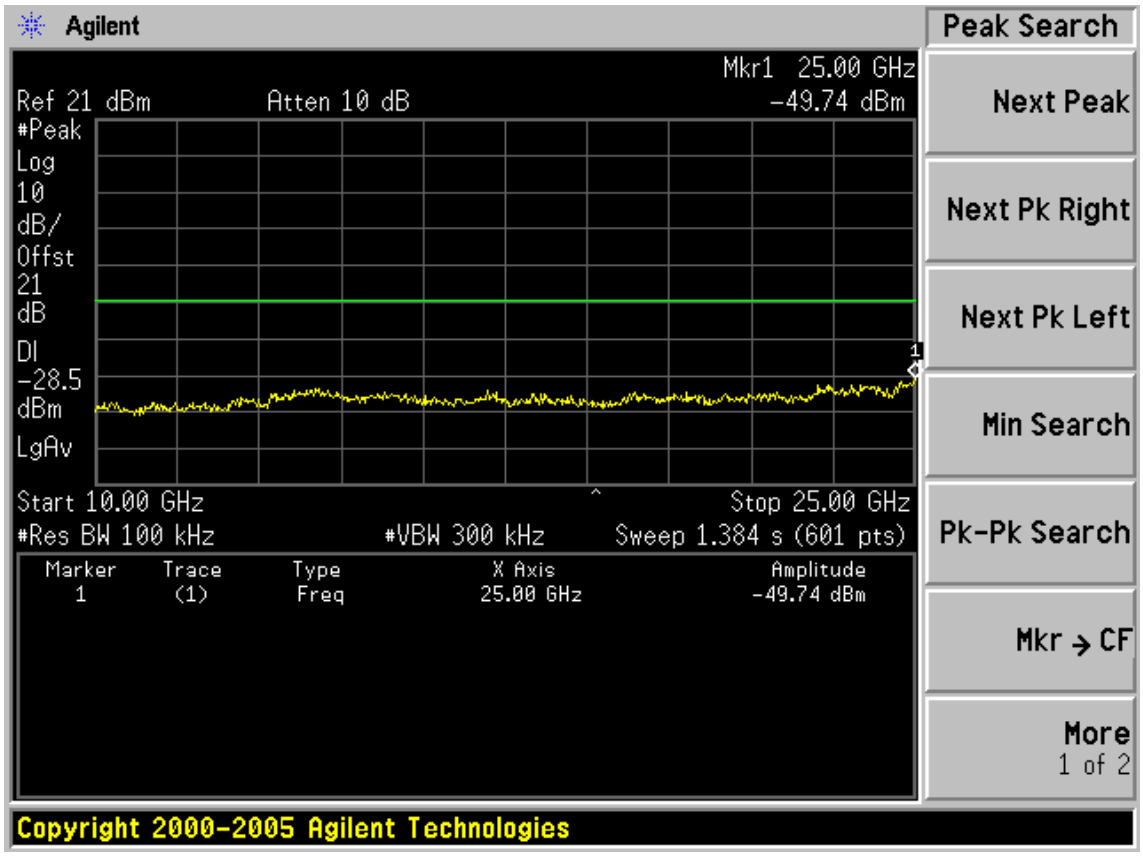
Test CH7: 2452MHz






Agilent
Peak Search
Mkr1 7.550 GHz
Ref 21 dBm
Atten 10 dB
-54.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 553.8 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.550 GHz -54.35 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.74 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.384 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.74 dBm
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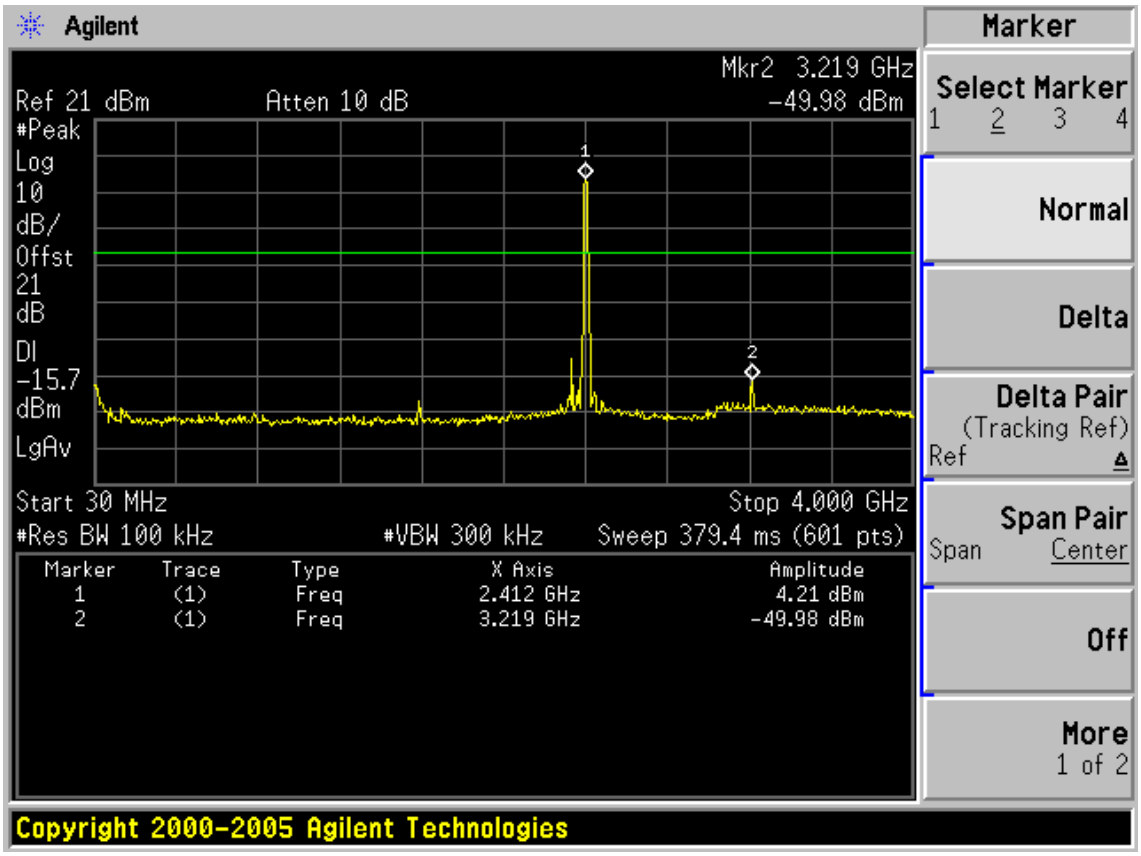
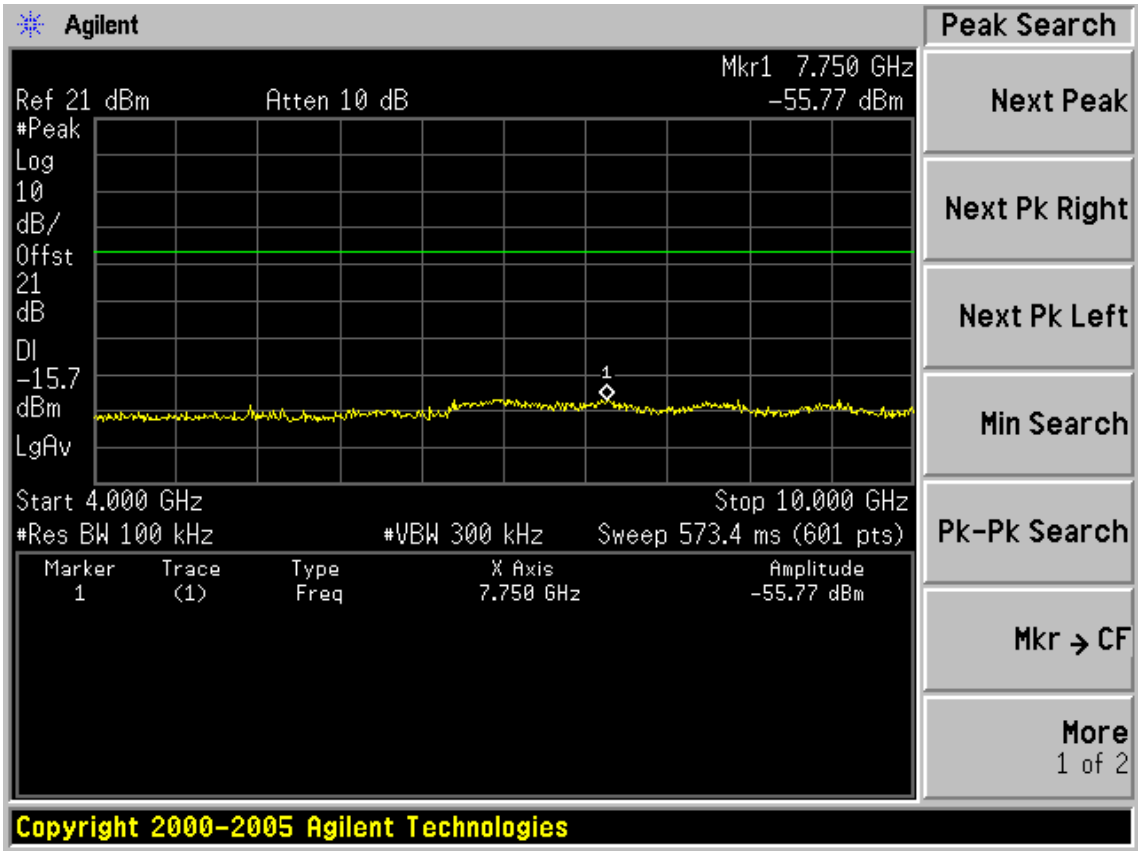
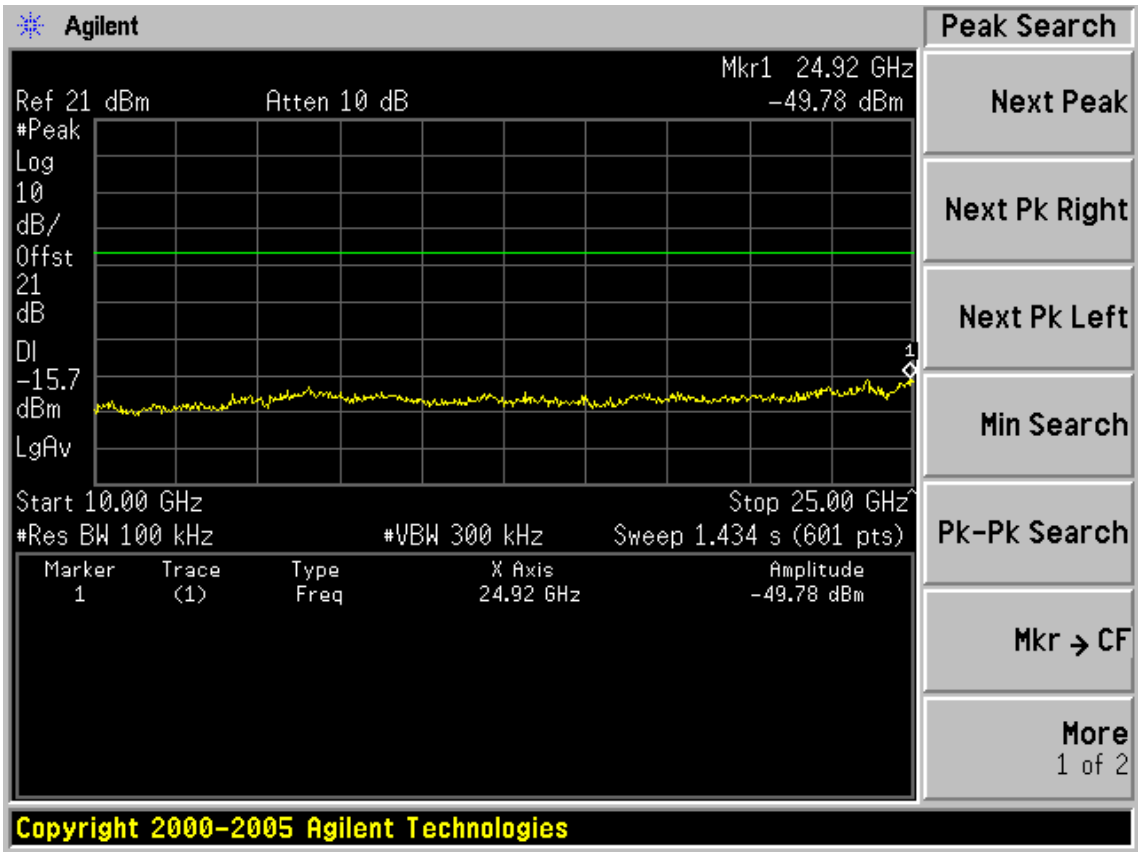
Chain 1:

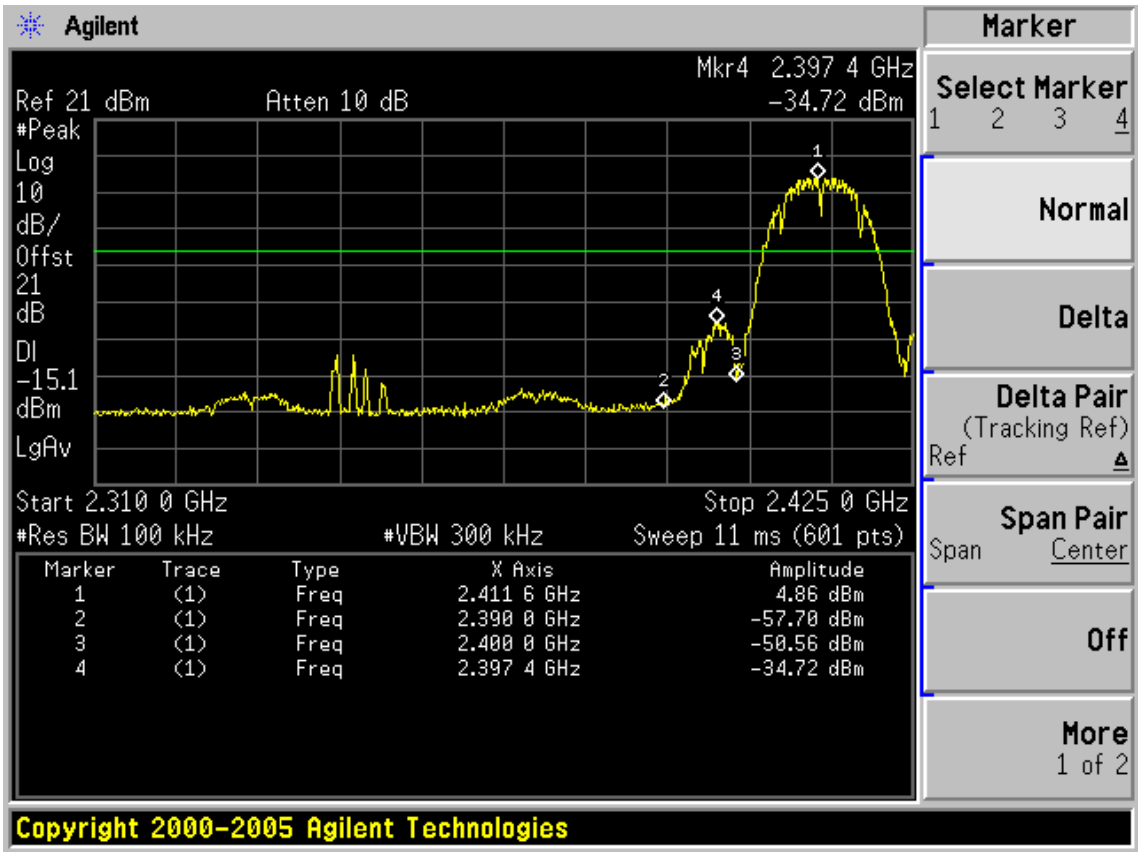
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz






Agilent
Peak Search
Mkr1 24.92 GHz
Ref 21 dBm
Atten 10 dB
-49.78 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.92 GHz -49.78 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr4 2.397 4 GHz
Ref 21 dBm
Atten 10 dB
-34.72 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.1
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.310 0 GHz
Stop 2.425 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.411 6 GHz 4.86 dBm
2 (1) Freq 2.390 0 GHz -57.70 dBm
3 (1) Freq 2.400 0 GHz -50.56 dBm
4 (1) Freq 2.397 4 GHz -34.72 dBm
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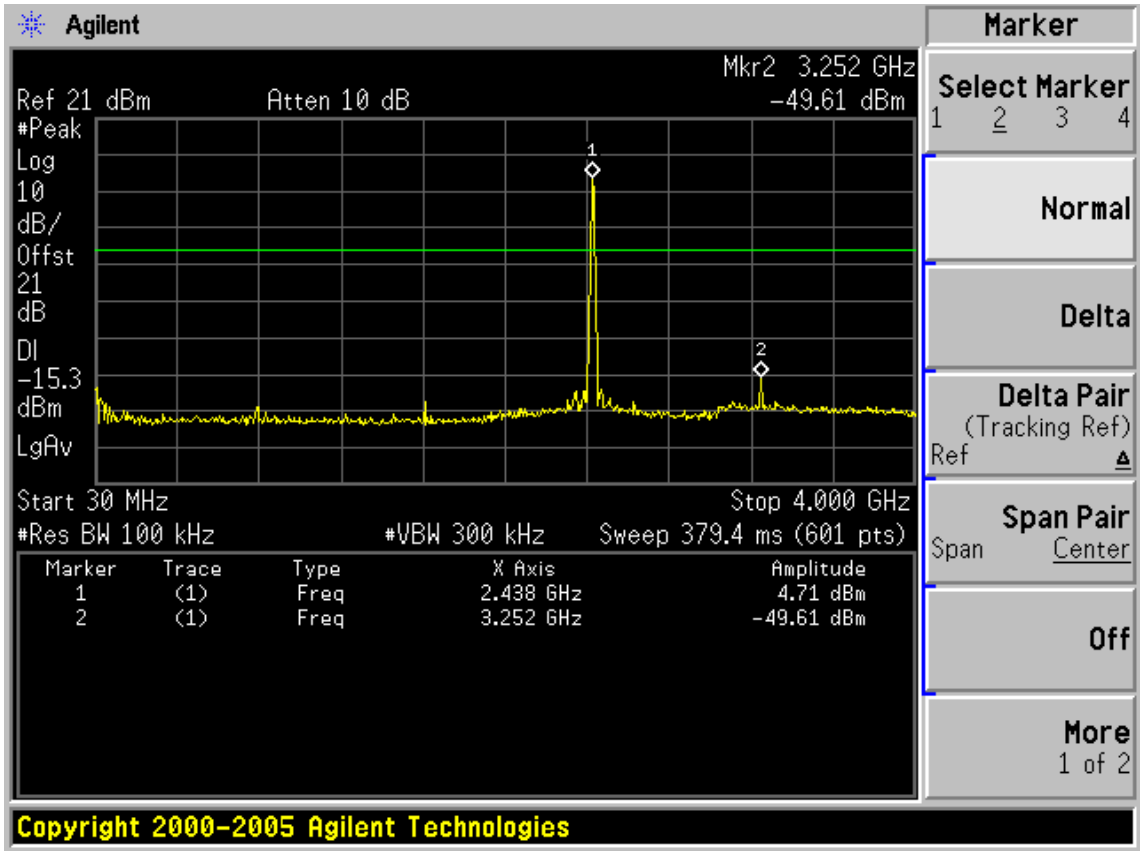
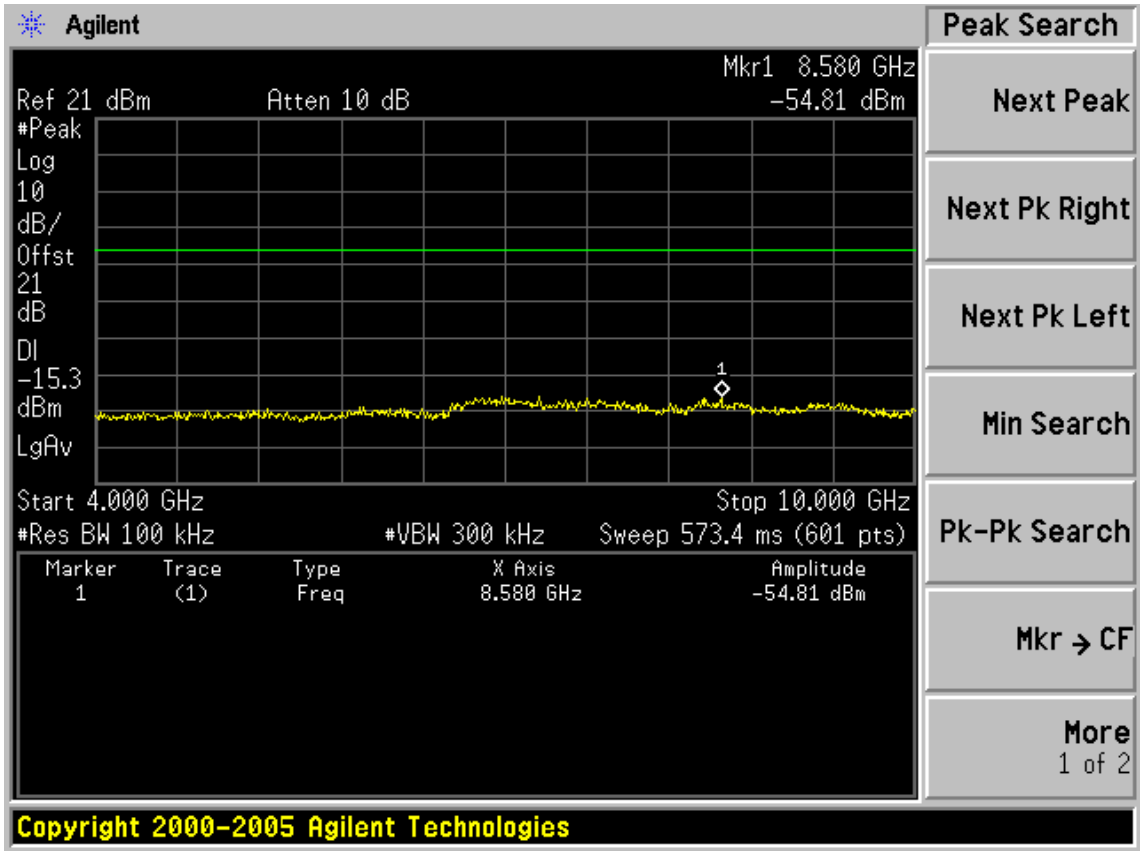
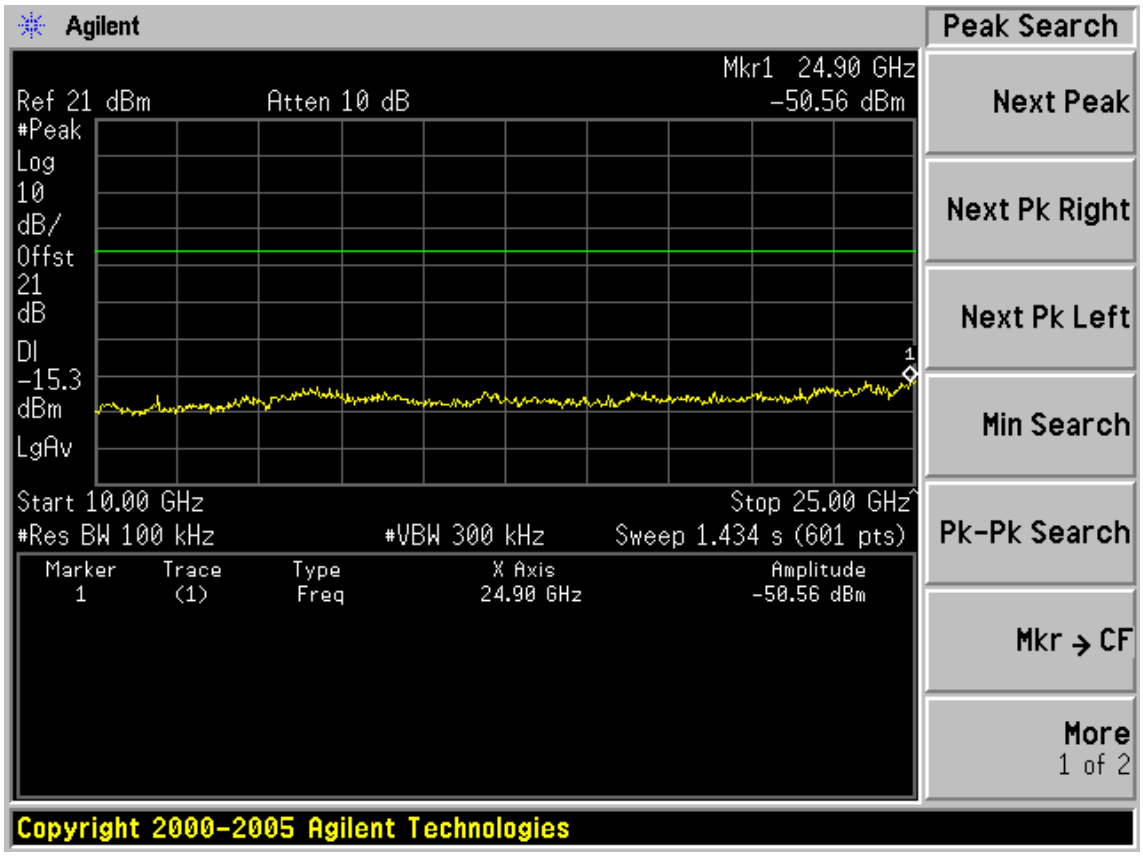
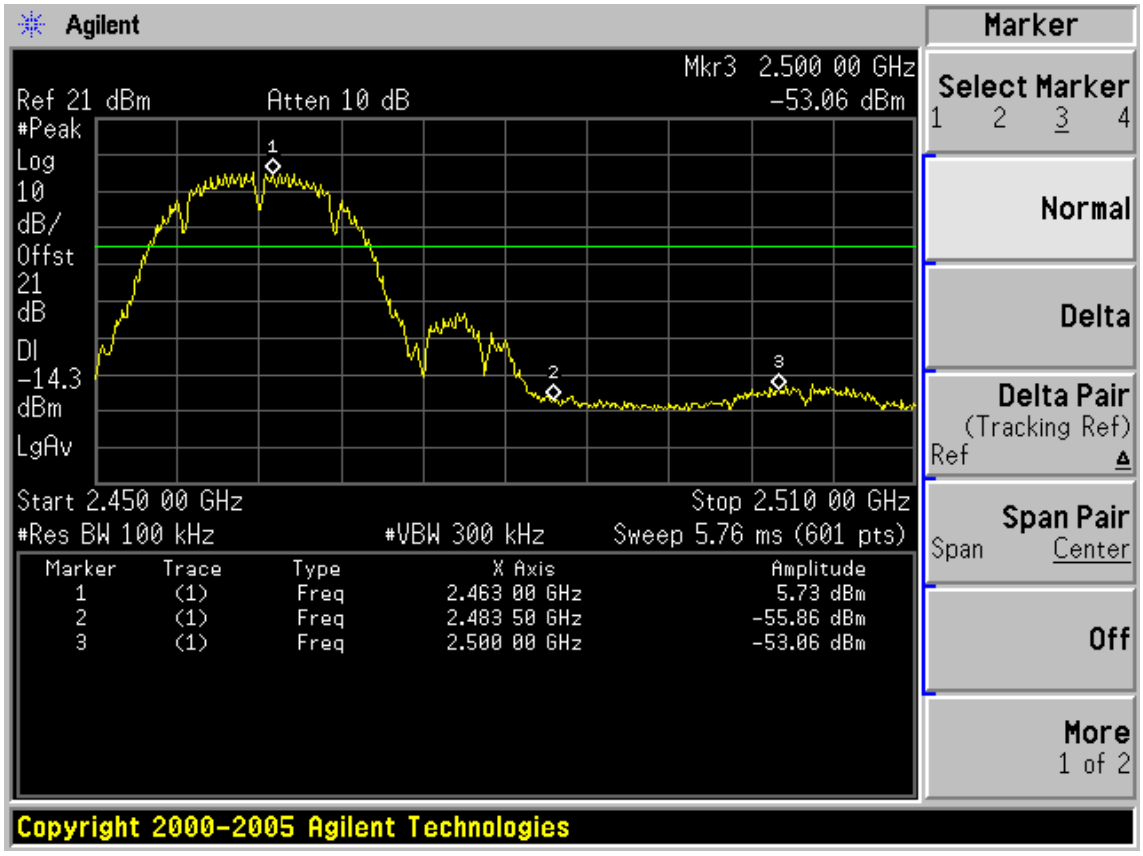
Test CH6: 2437MHz

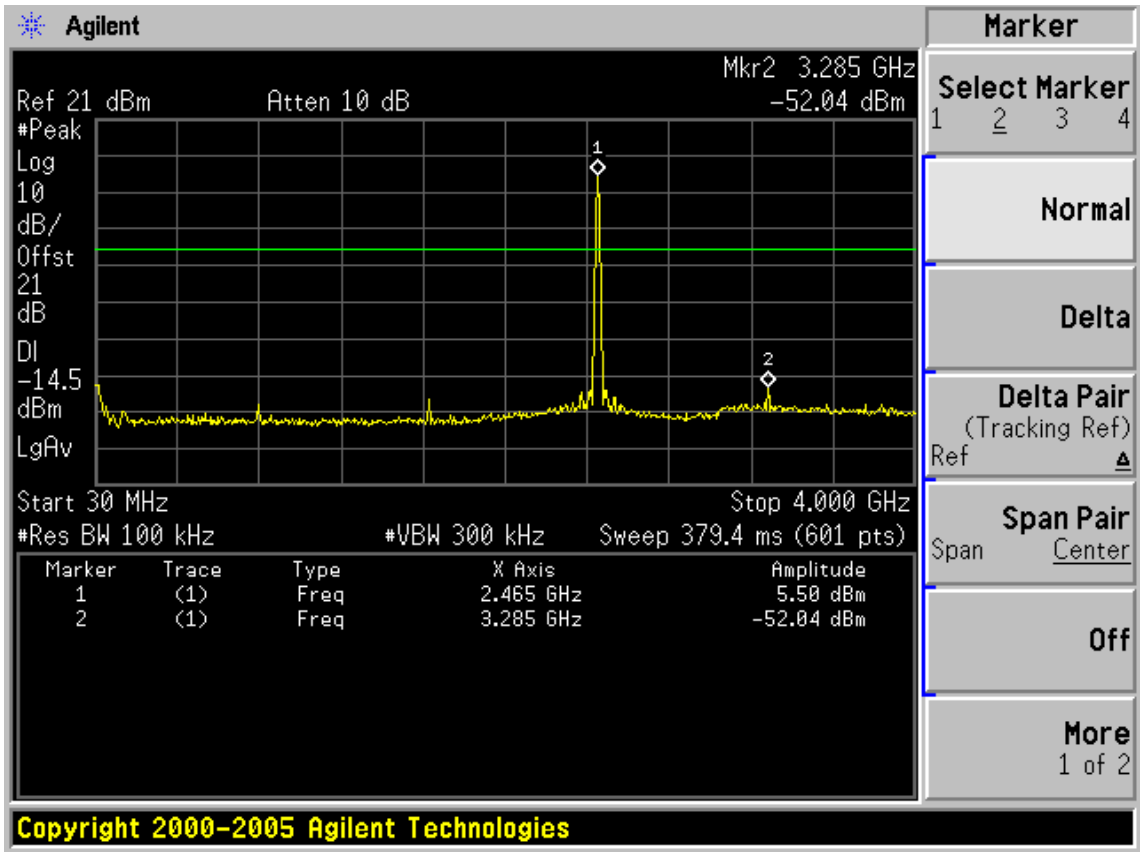


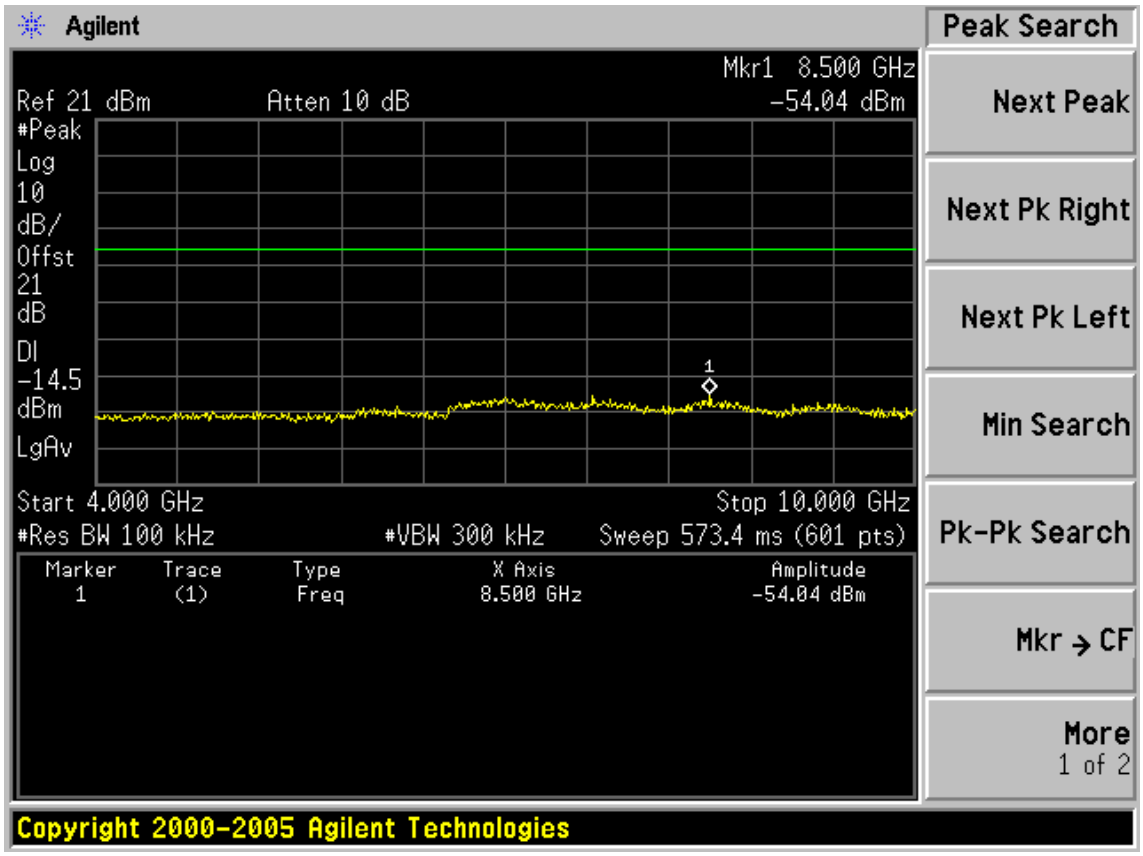


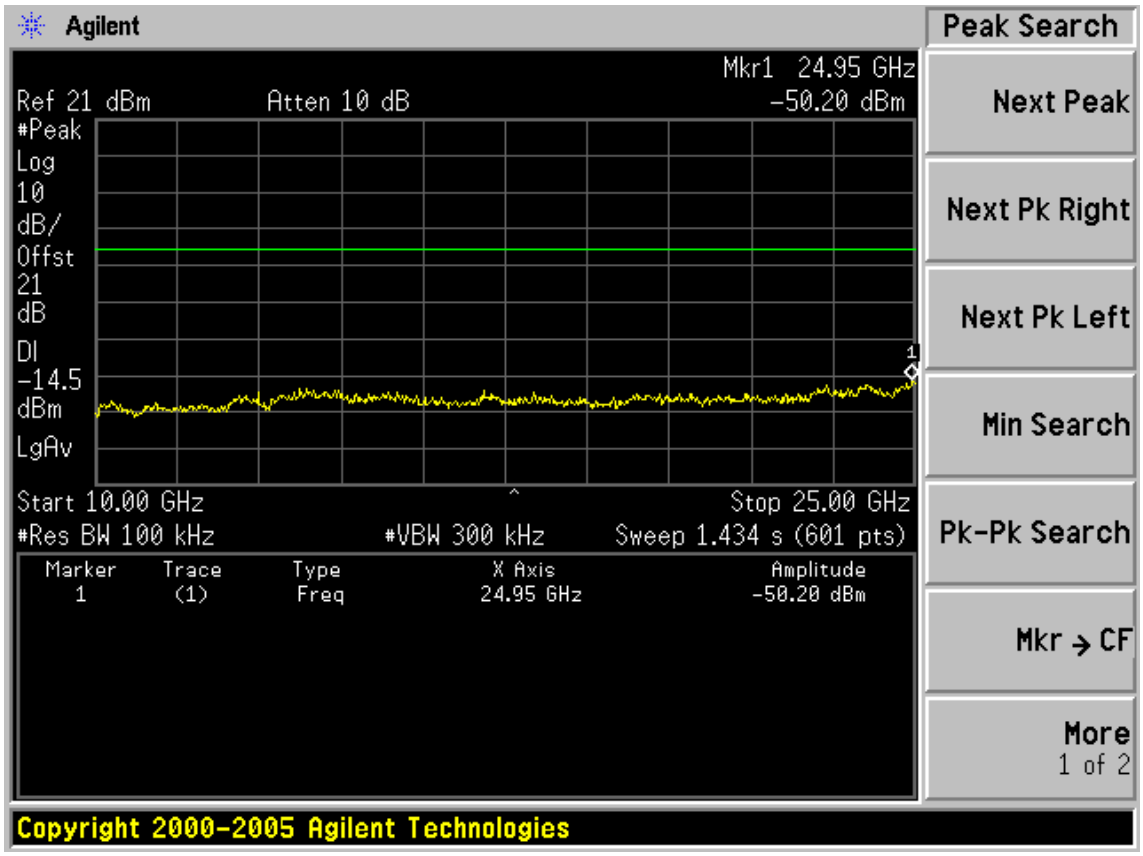


Test CH11: 2462MHz

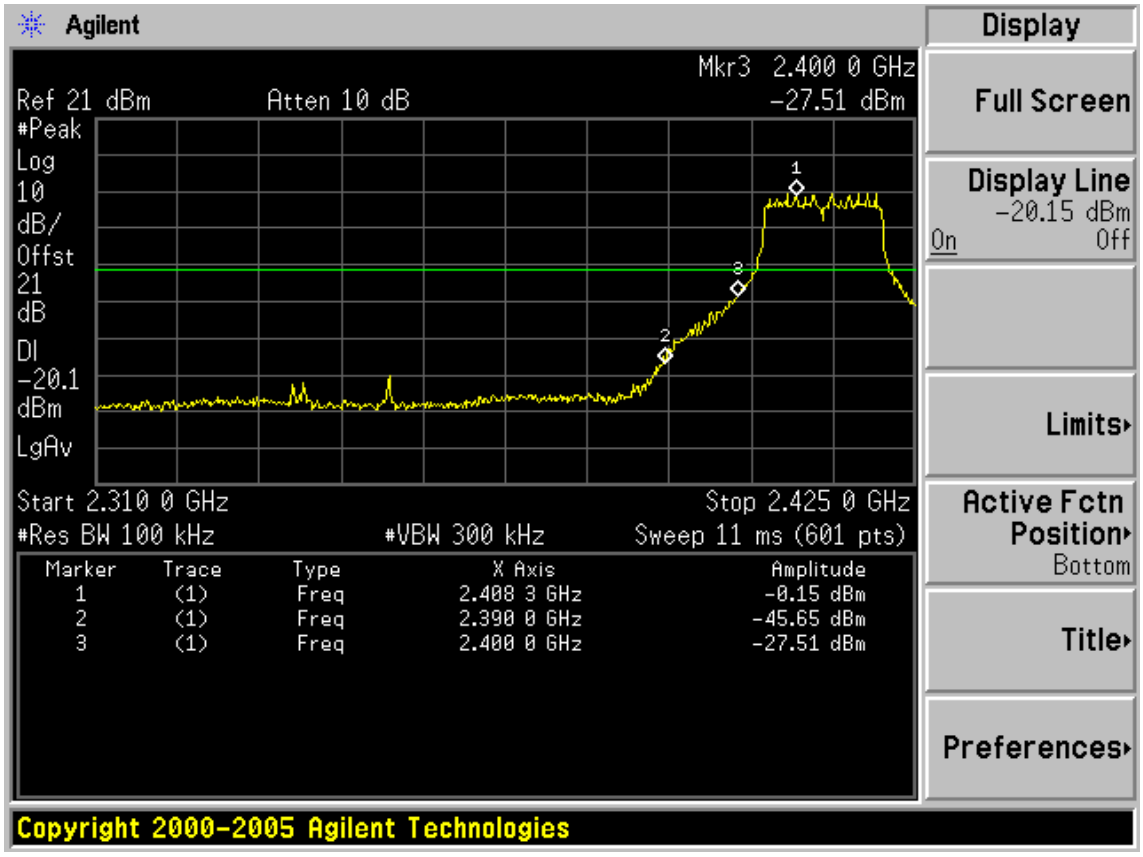


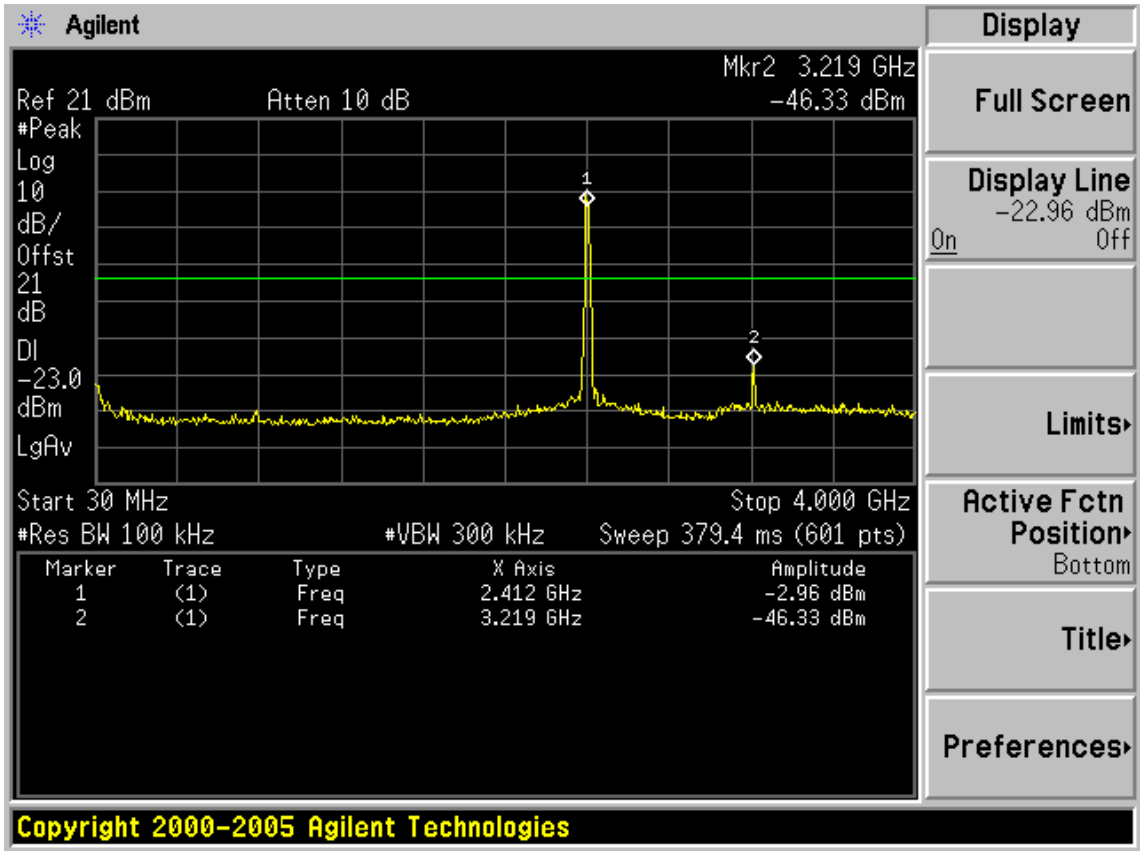

Agilent
Marker
Mkr2 3.285 GHz
Ref 21 dBm
Atten 10 dB
-52.04 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.5
dBm
LgAv
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.465 GHz 5.50 dBm
2 (1) Freq 3.285 GHz -52.04 dBm
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

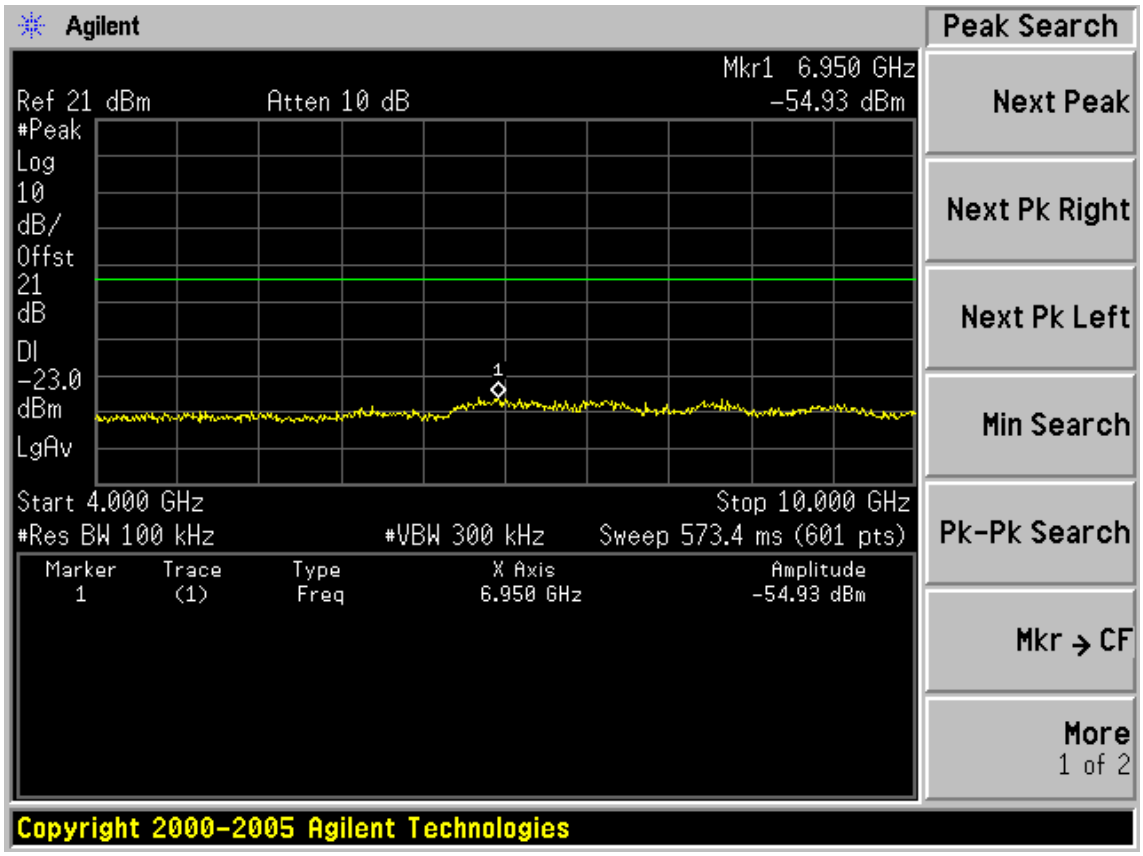

Agilent
Peak Search
Mkr1 8.500 GHz
Ref 21 dBm
Atten 10 dB
-54.04 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.5
dBm
LgAv
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 8.500 GHz -54.04 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

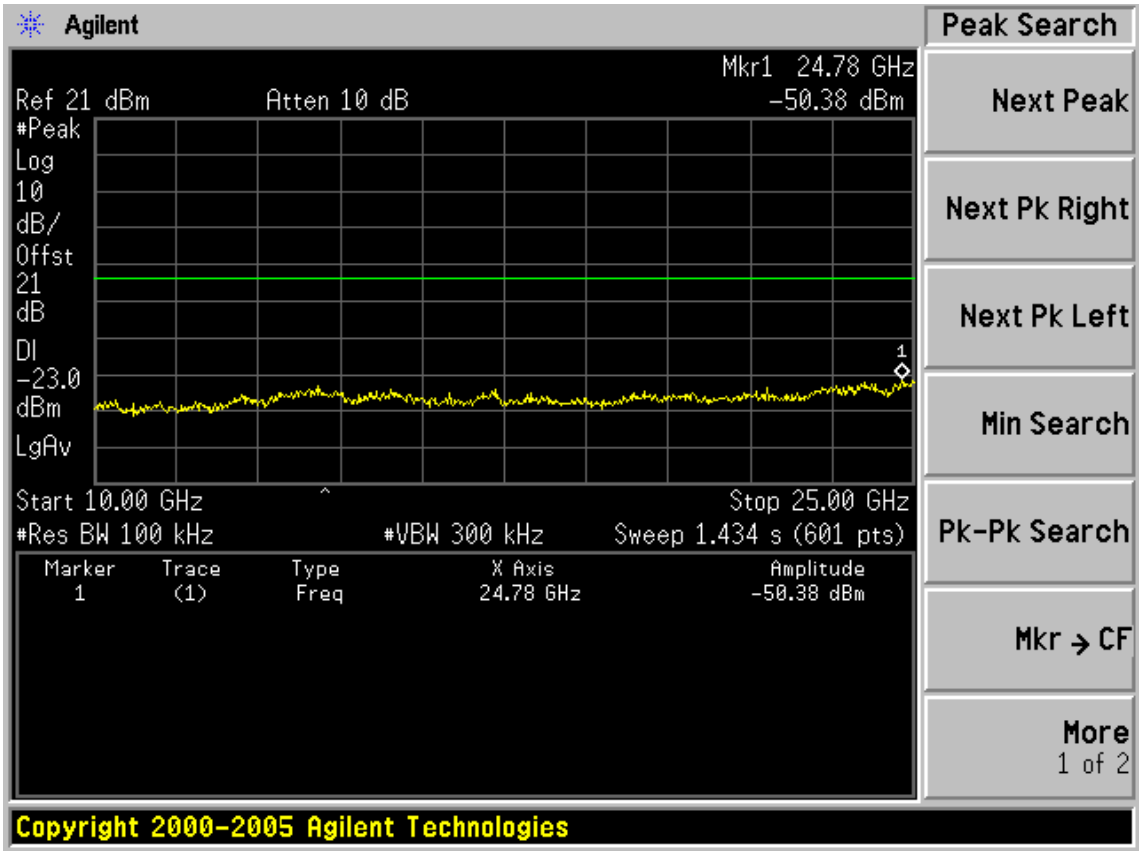


Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

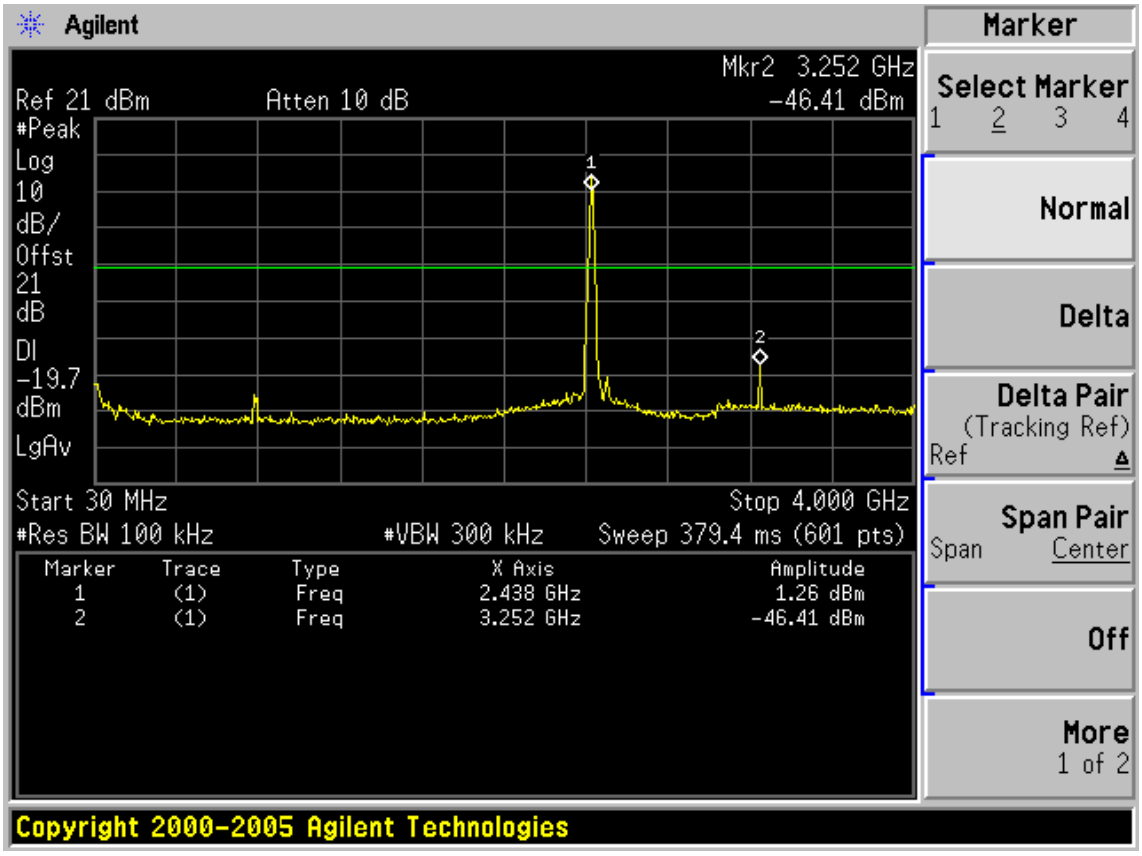


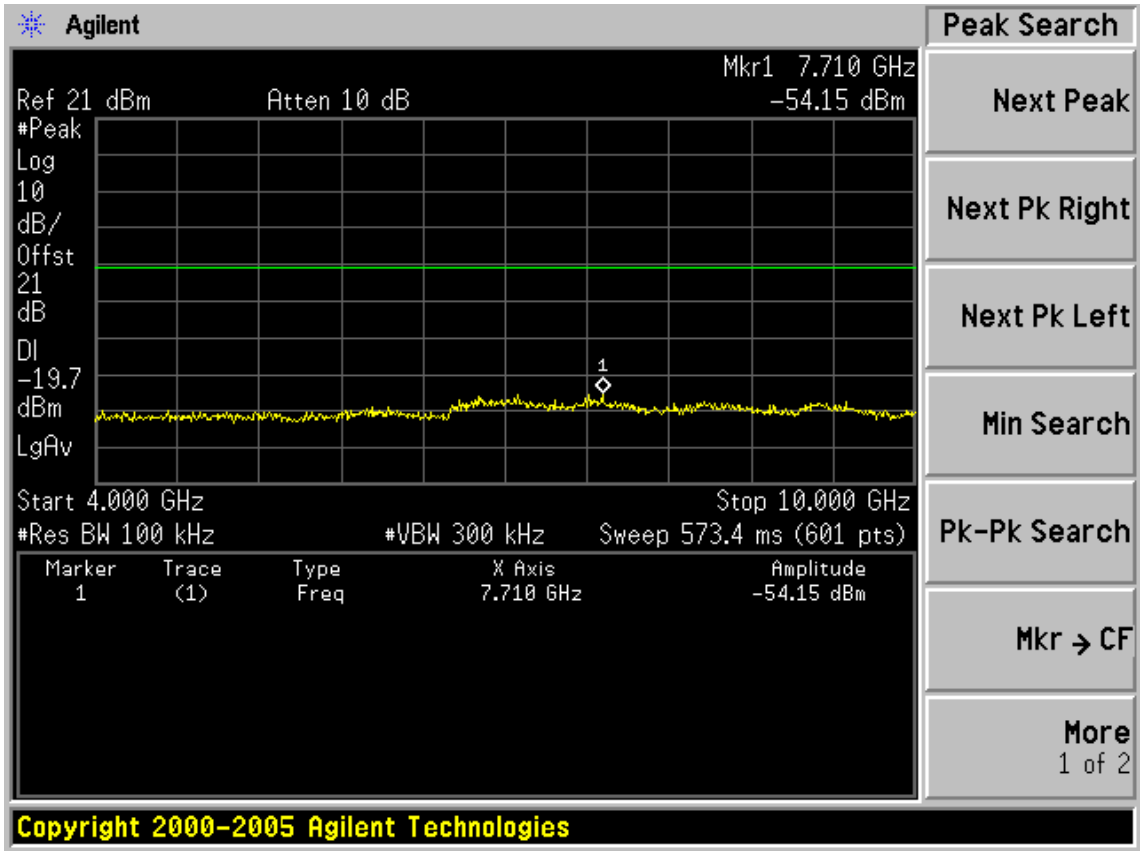

Agilent
Display
Mkr2 3.219 GHz
Ref 21 dBm
Atten 10 dB
-46.33 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
Full Screen
Display Line
-22.96 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.412 GHz -2.96 dBm
2 (1) Freq 3.219 GHz -46.33 dBm
Copyright 2000-2005 Agilent Technologies

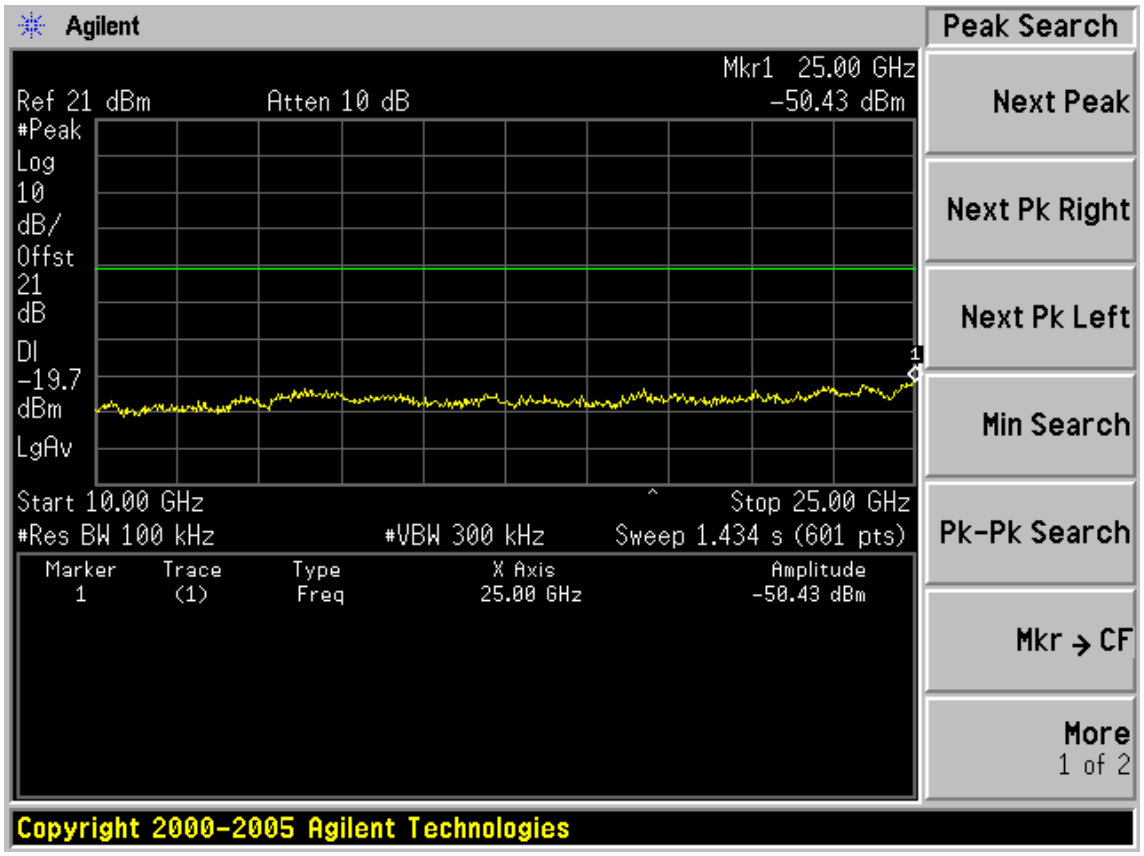

Agilent
Peak Search
Mkr1 6.950 GHz
Ref 21 dBm
Atten 10 dB
-54.93 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.950 GHz -54.93 dBm
Copyright 2000-2005 Agilent Technologies



Test CH6: 2437MHz




Agilent
Peak Search
Mkr1 7.710 GHz
Ref 21 dBm
Atten 10 dB
-54.15 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.710 GHz -54.15 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-50.43 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -50.43 dBm
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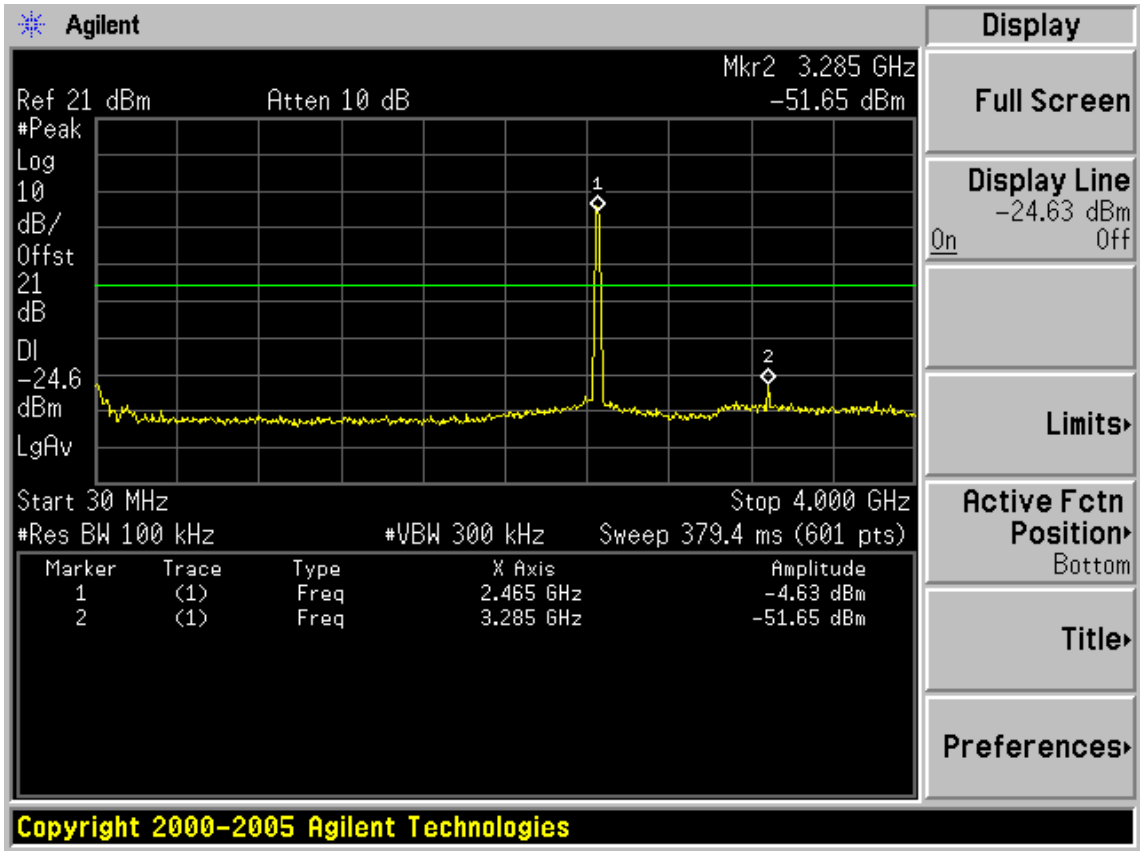
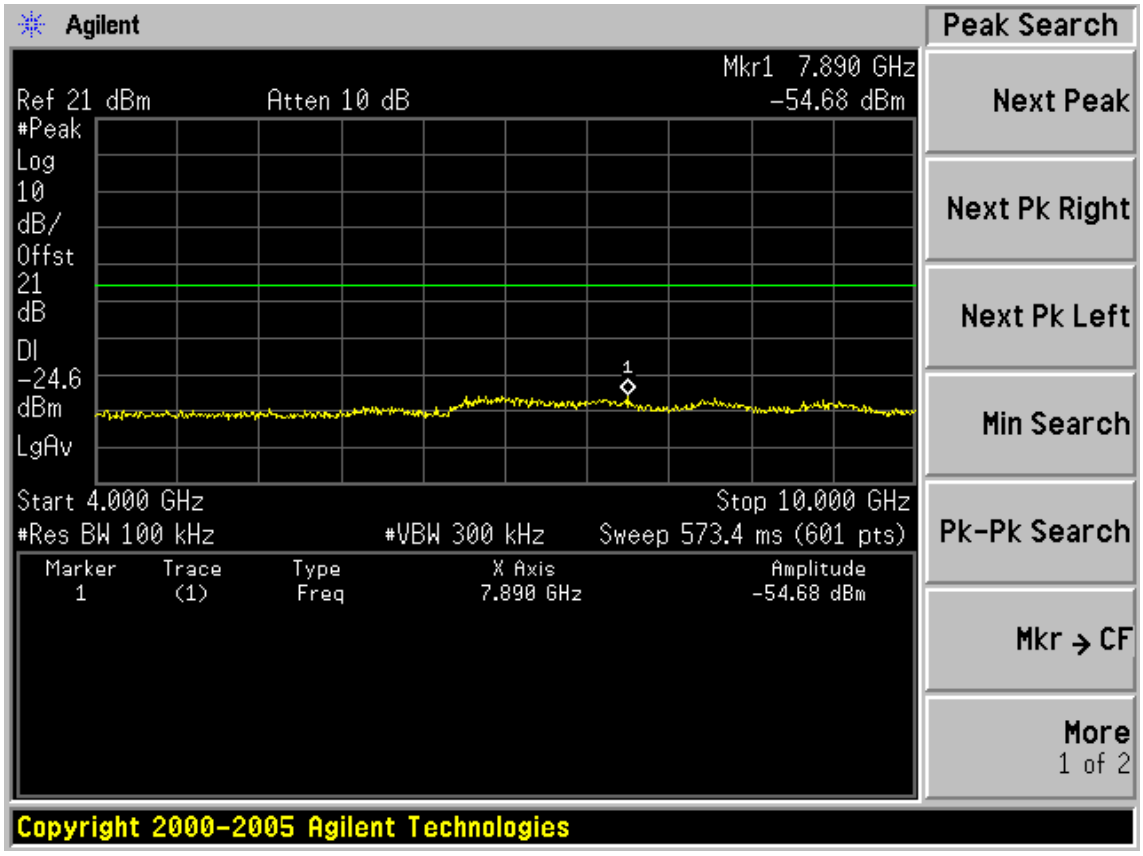
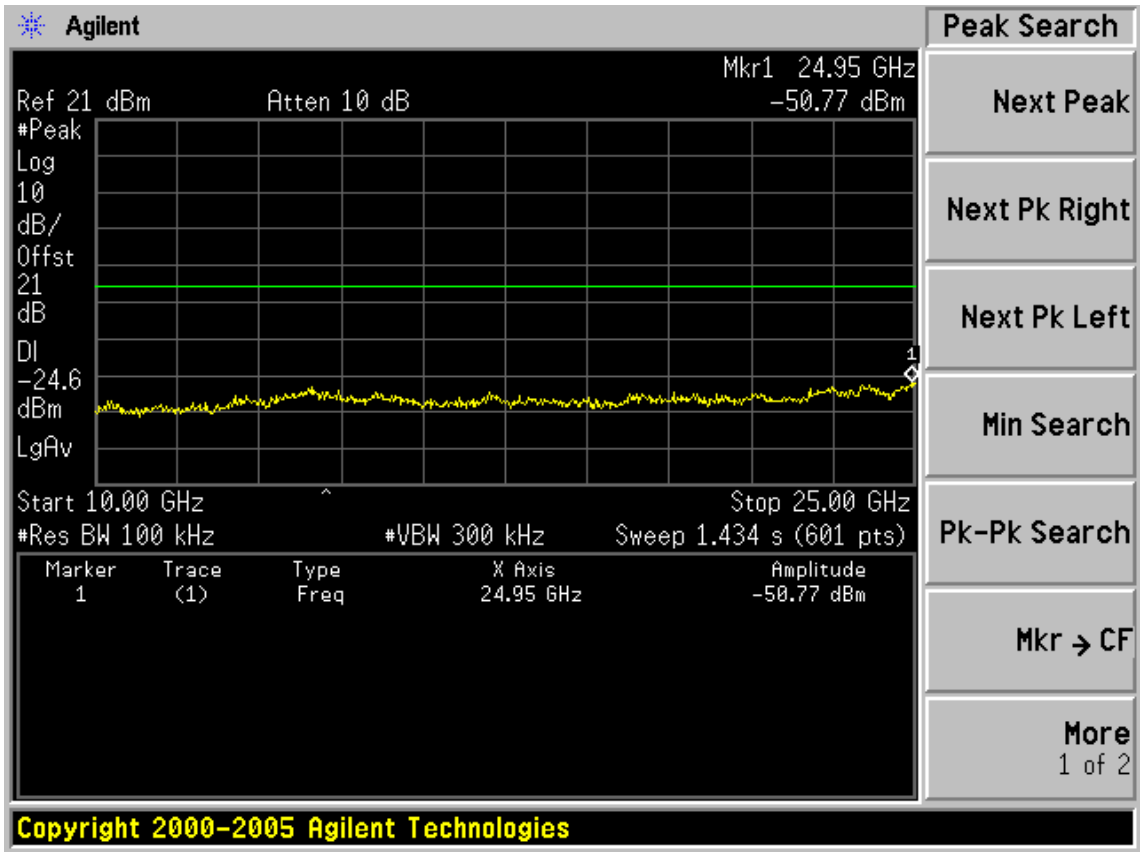
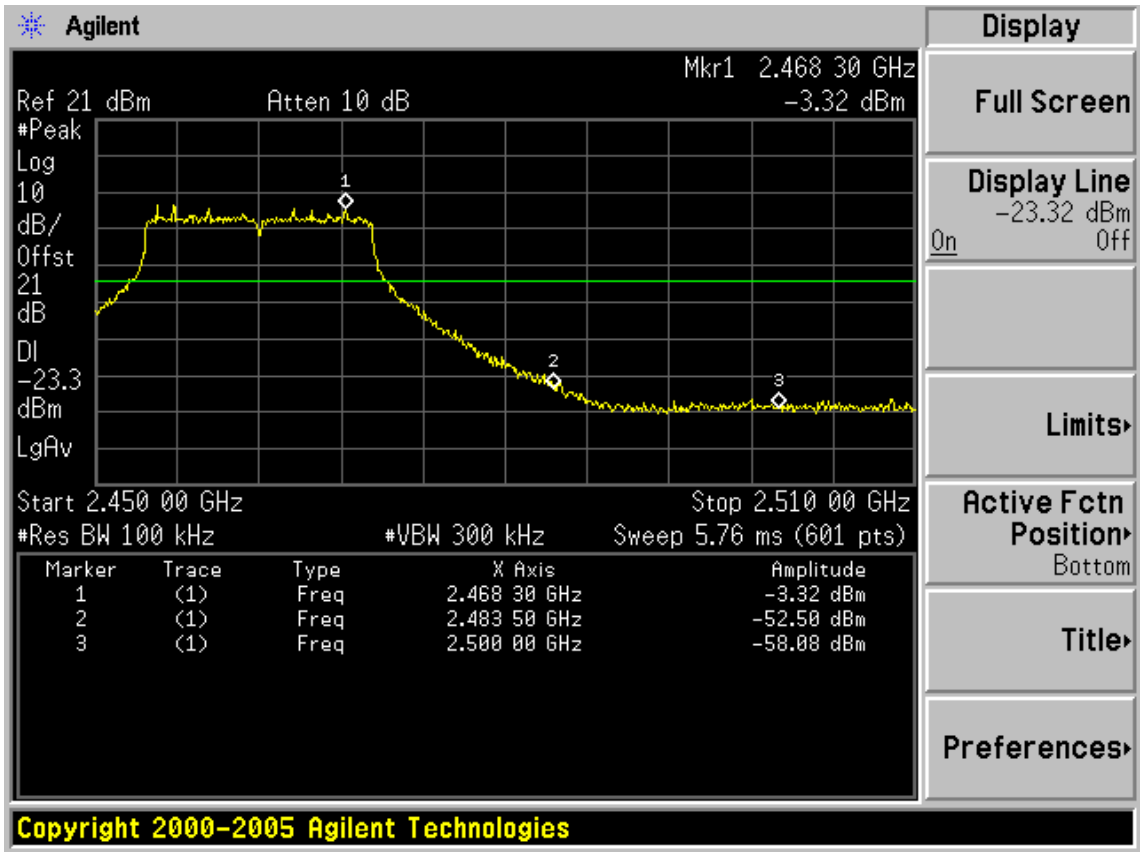
Test CH11: 2462MHz

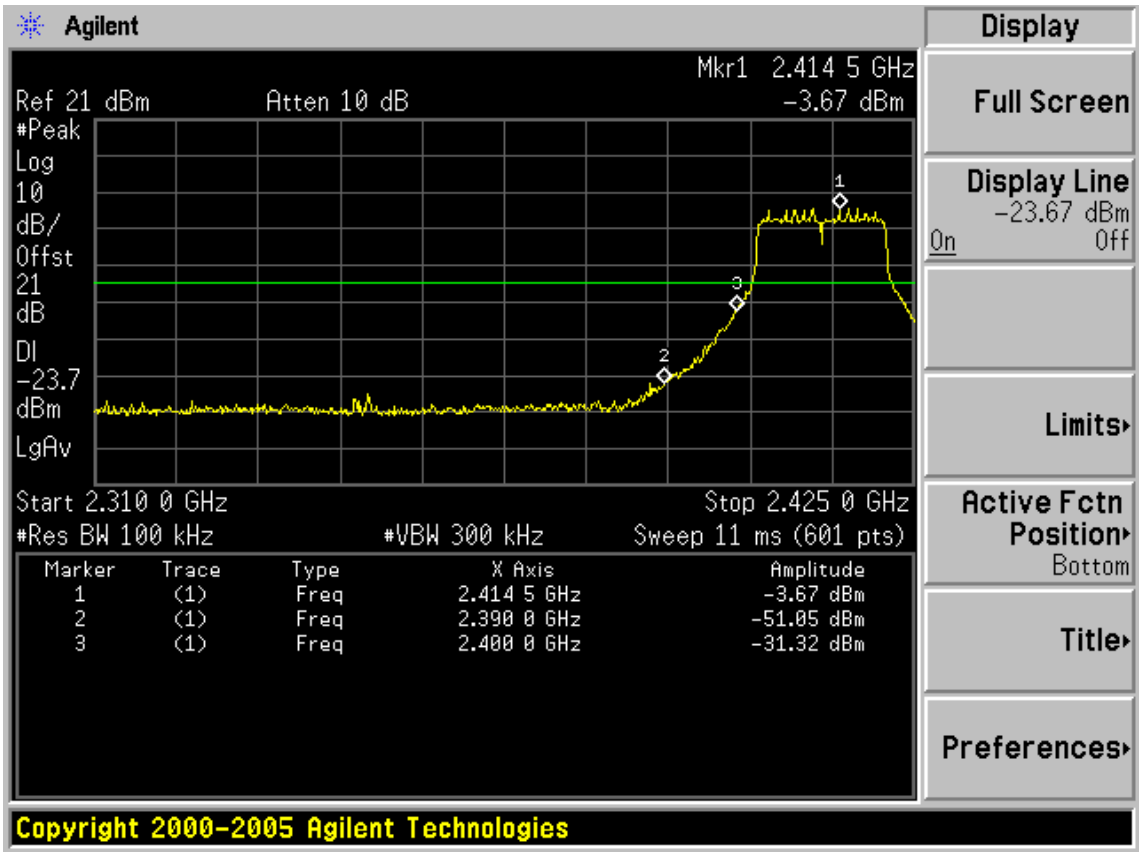


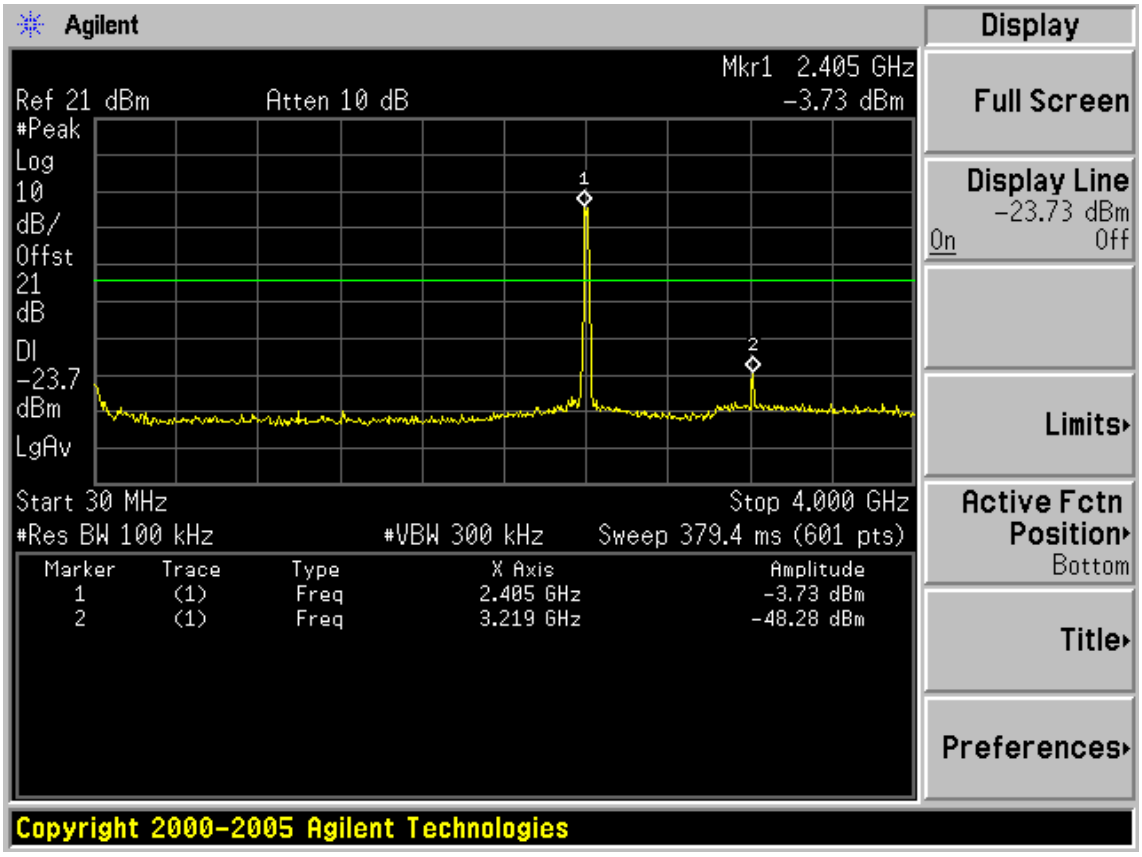


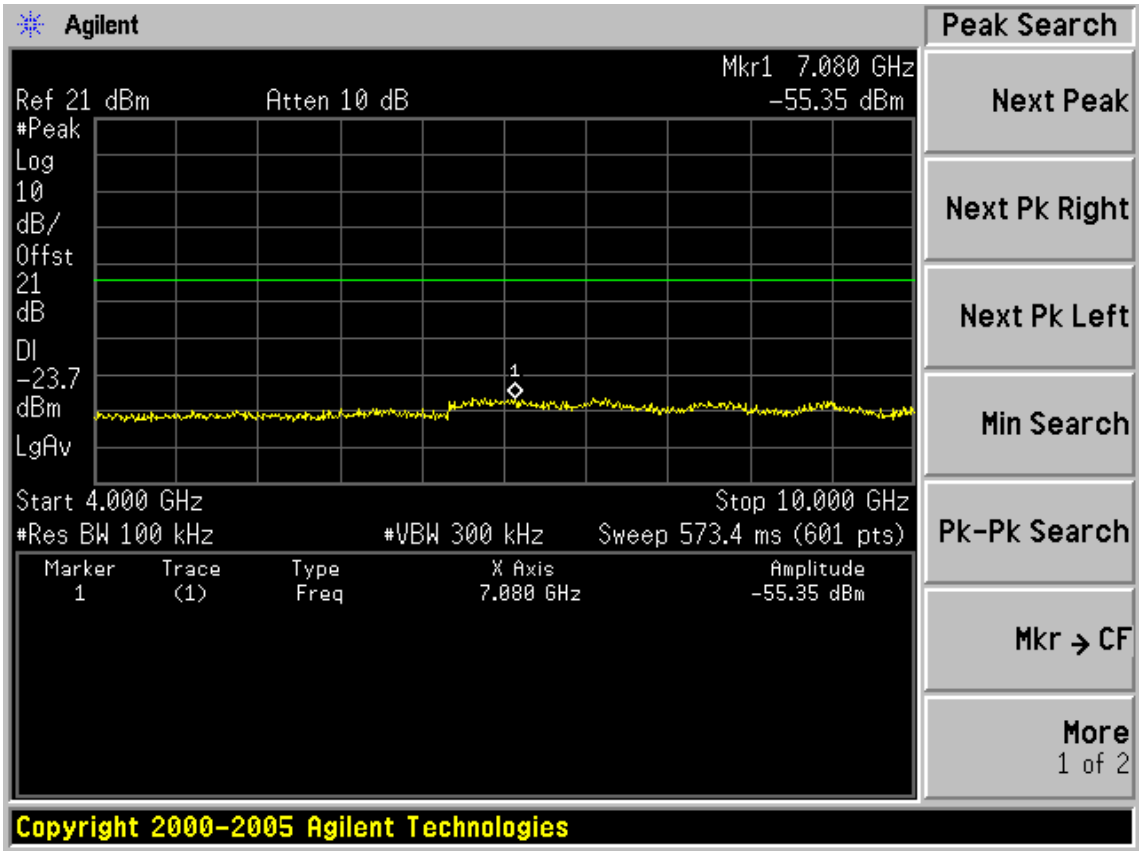

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.77 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-24.6
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.77 dBm
Copyright 2000-2005 Agilent Technologies

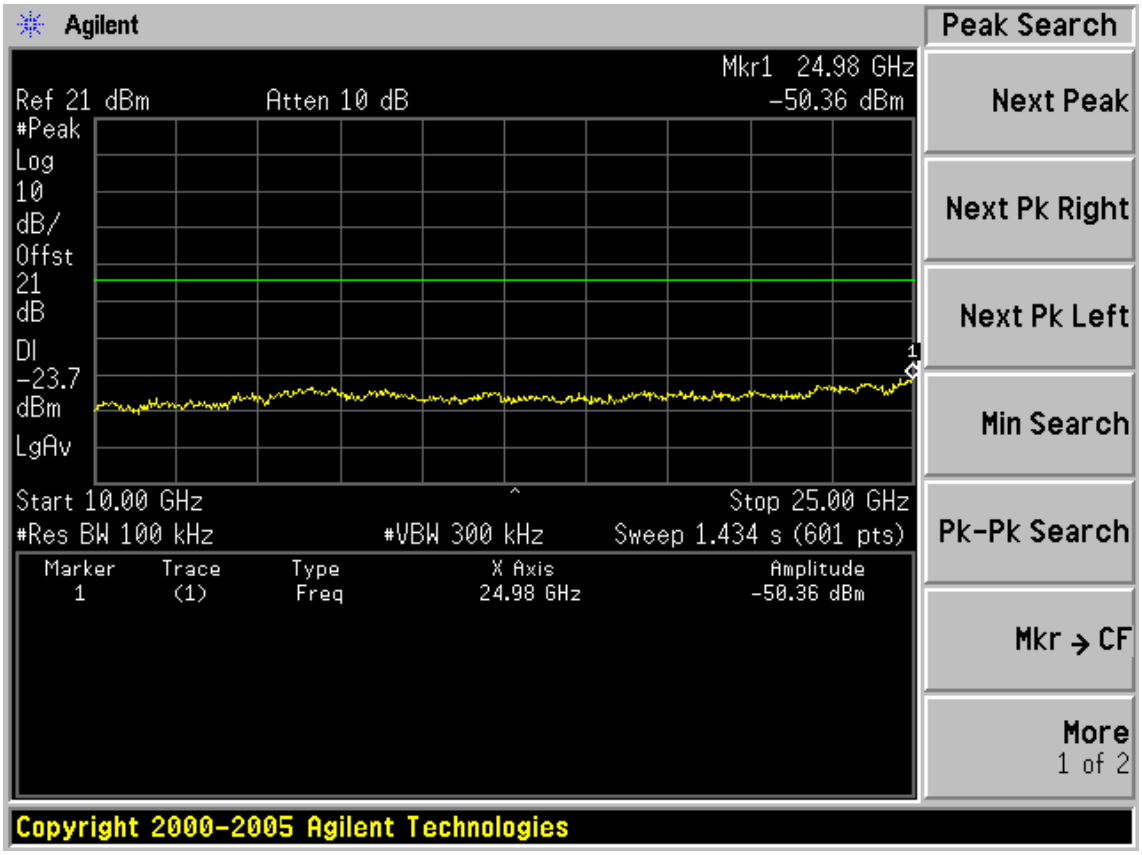

Agilent
Display
Mkr1 2.468 30 GHz
Ref 21 dBm
Atten 10 dB
-3.32 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.3
dBm
LgAv
1
2
3
Full Screen
Display Line
-23.32 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.450 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.76 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.468 30 GHz -3.32 dBm
2 (1) Freq 2.483 50 GHz -52.50 dBm
3 (1) Freq 2.500 00 GHz -58.08 dBm
Copyright 2000-2005 Agilent Technologies

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

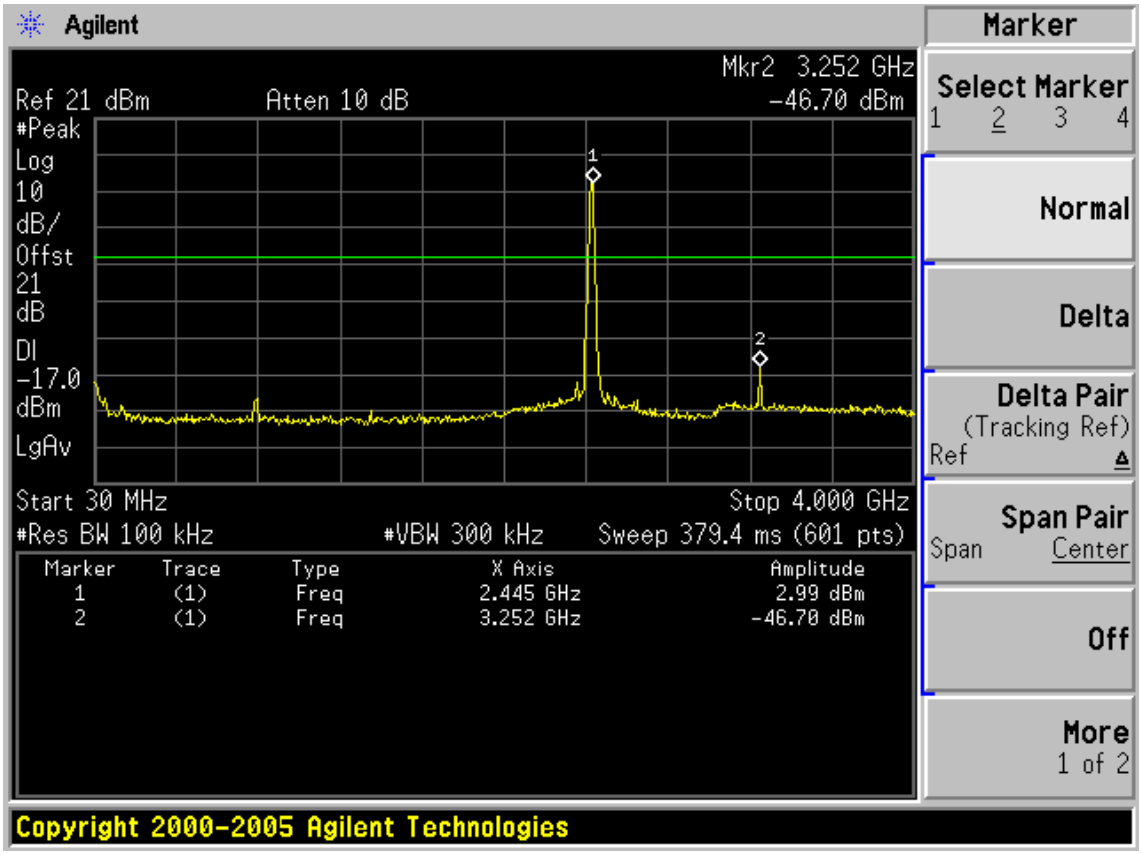


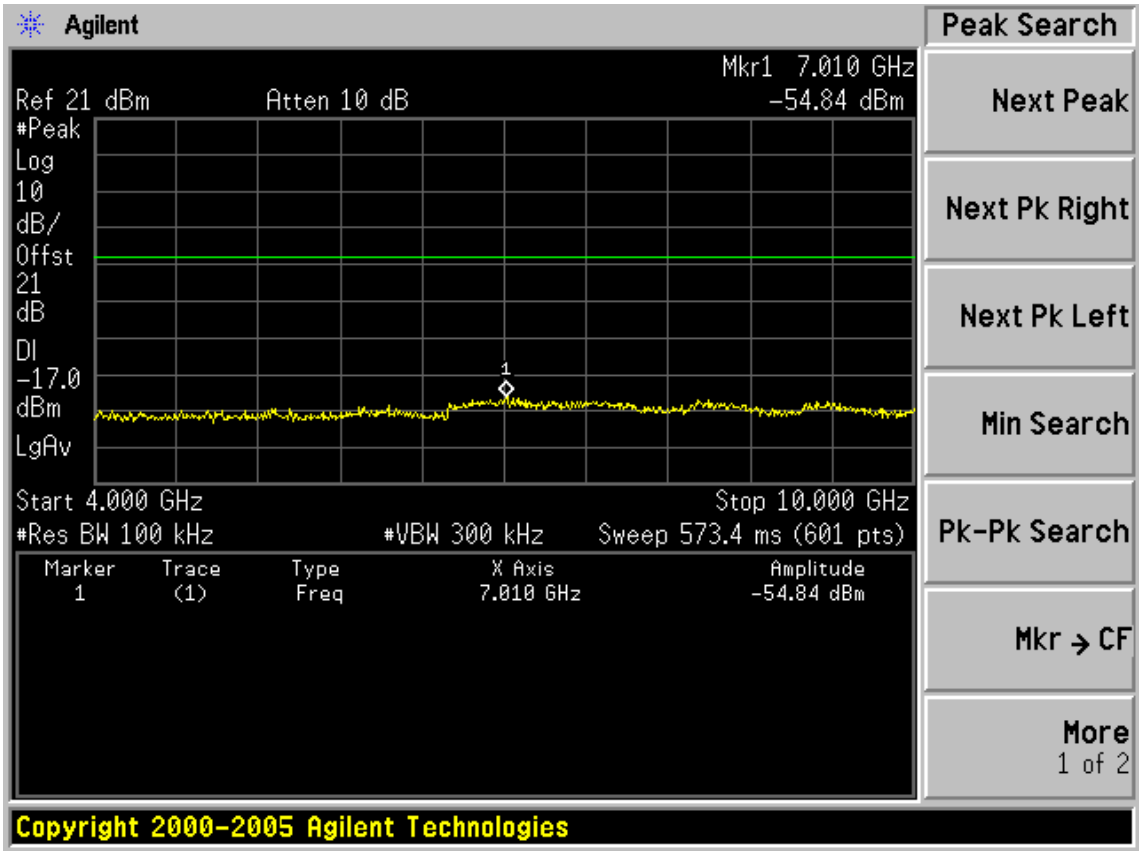


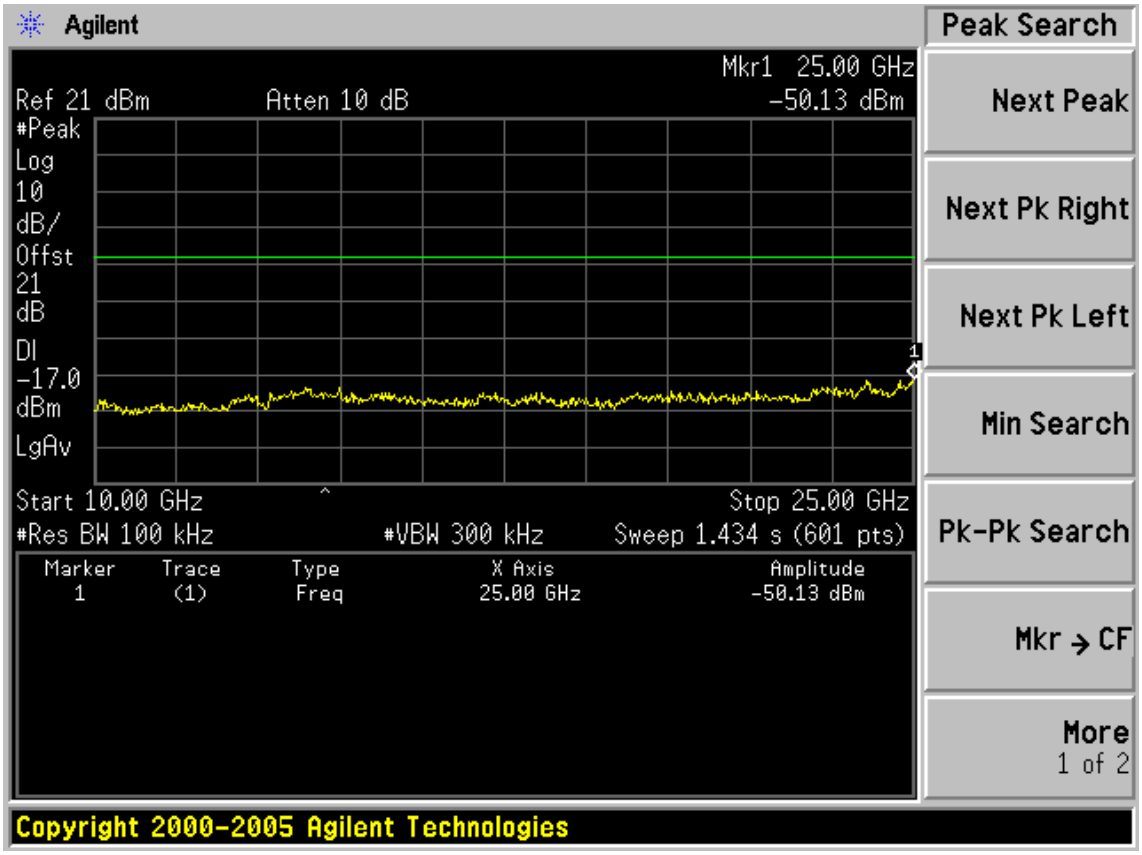

Agilent
Peak Search
Mkr1 7.080 GHz
Ref 21 dBm
Atten 10 dB
-55.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.080 GHz -55.35 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.36 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.36 dBm
Copyright 2000-2005 Agilent Technologies

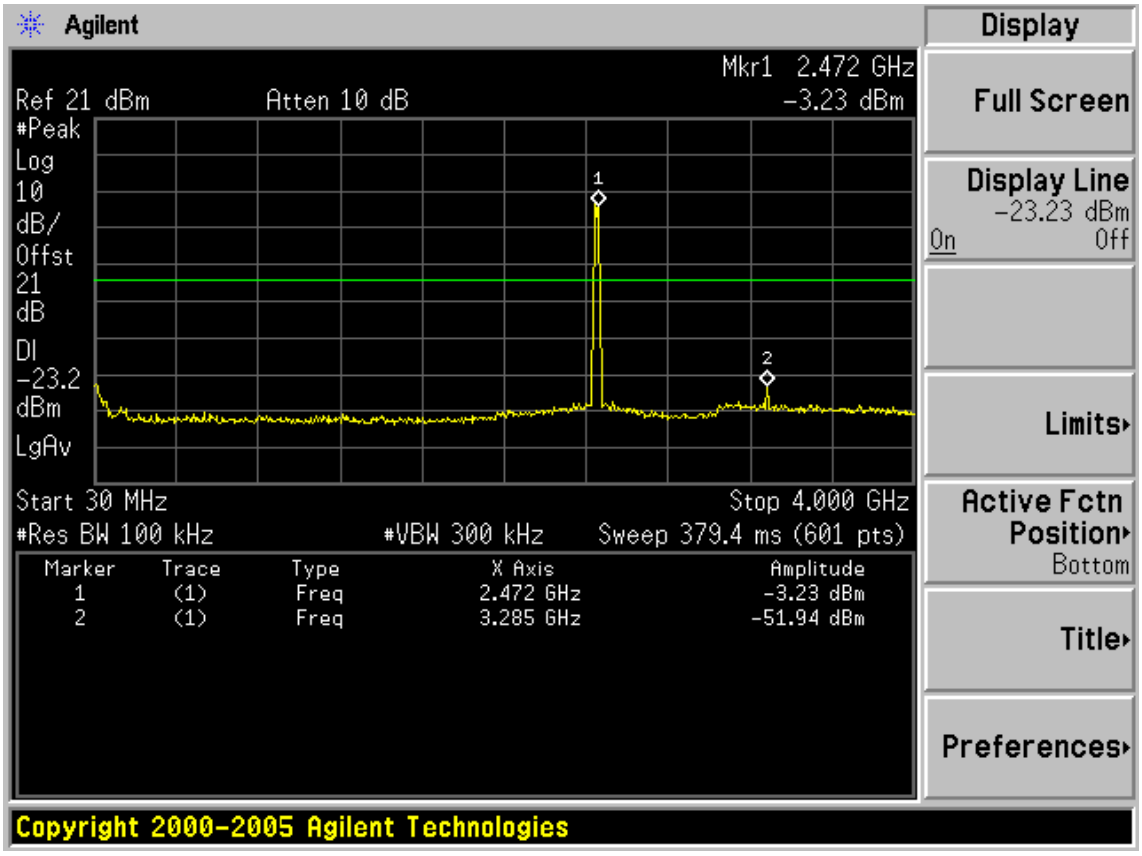
Test CH6: 2437MHz

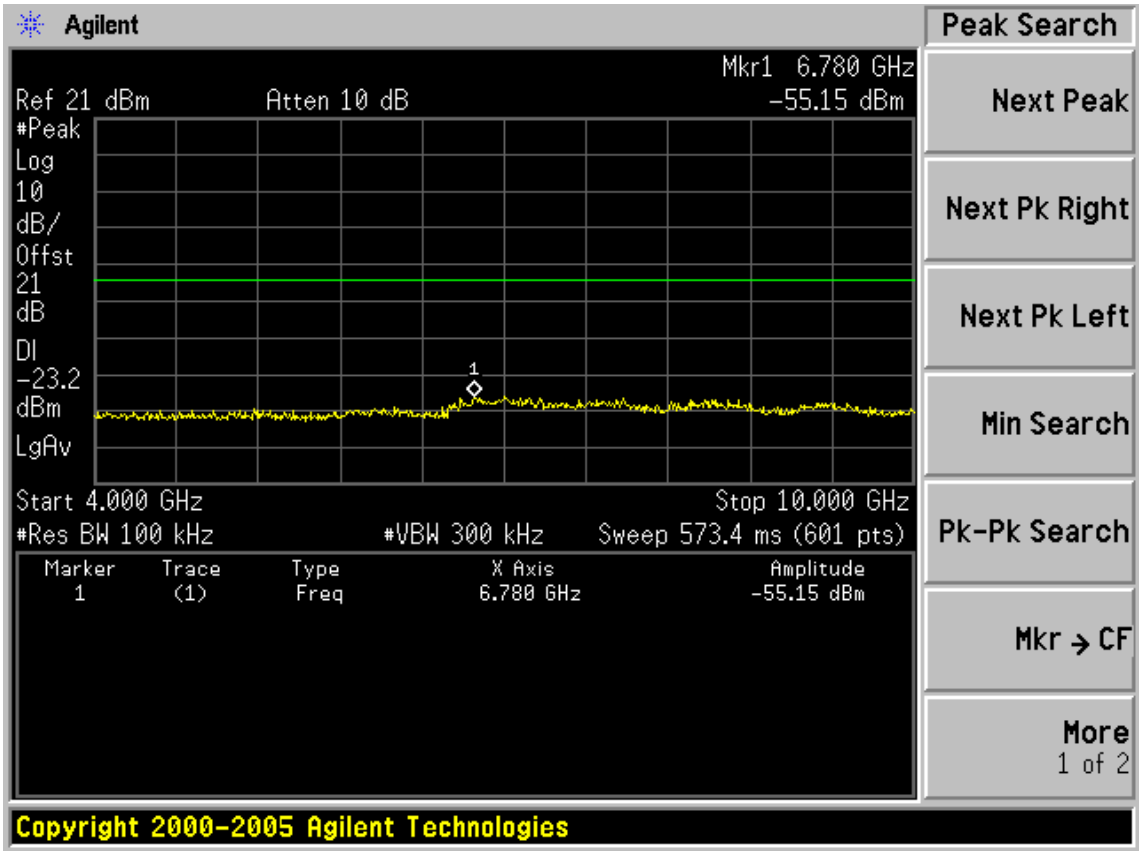


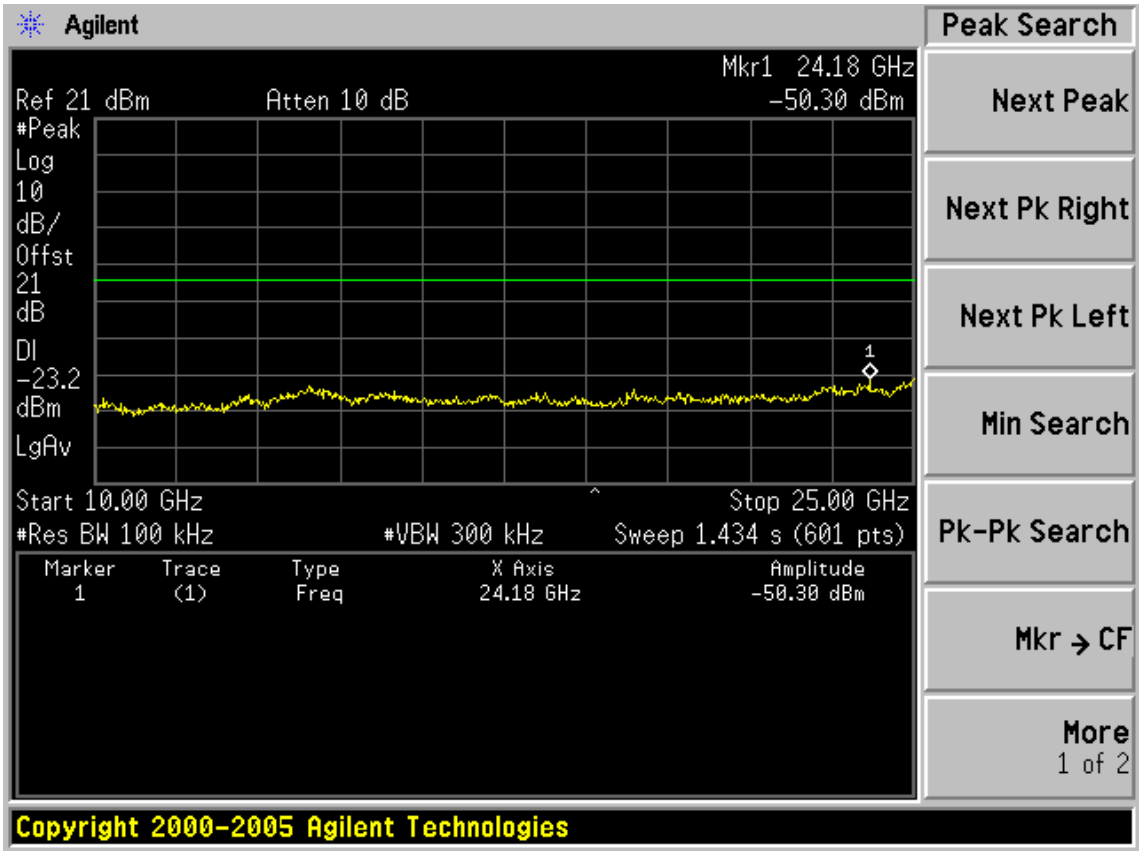


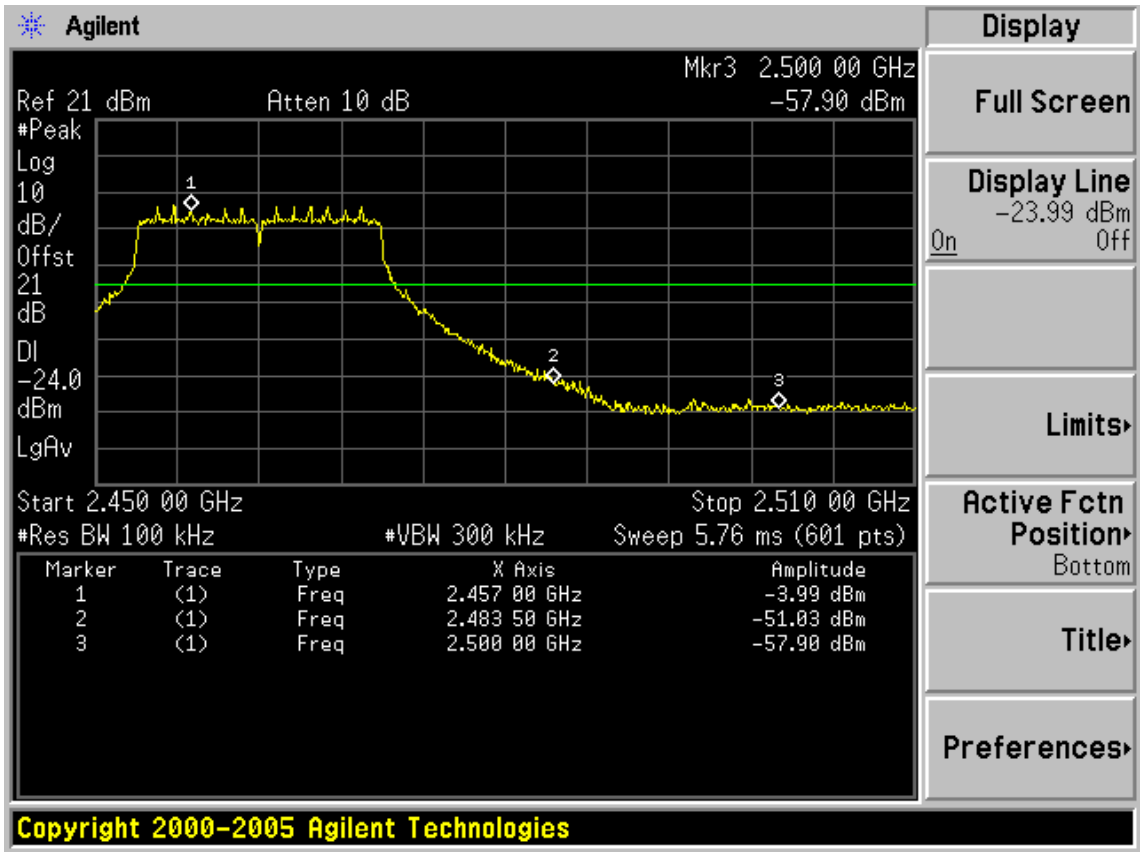


Test CH11: 2462MHz

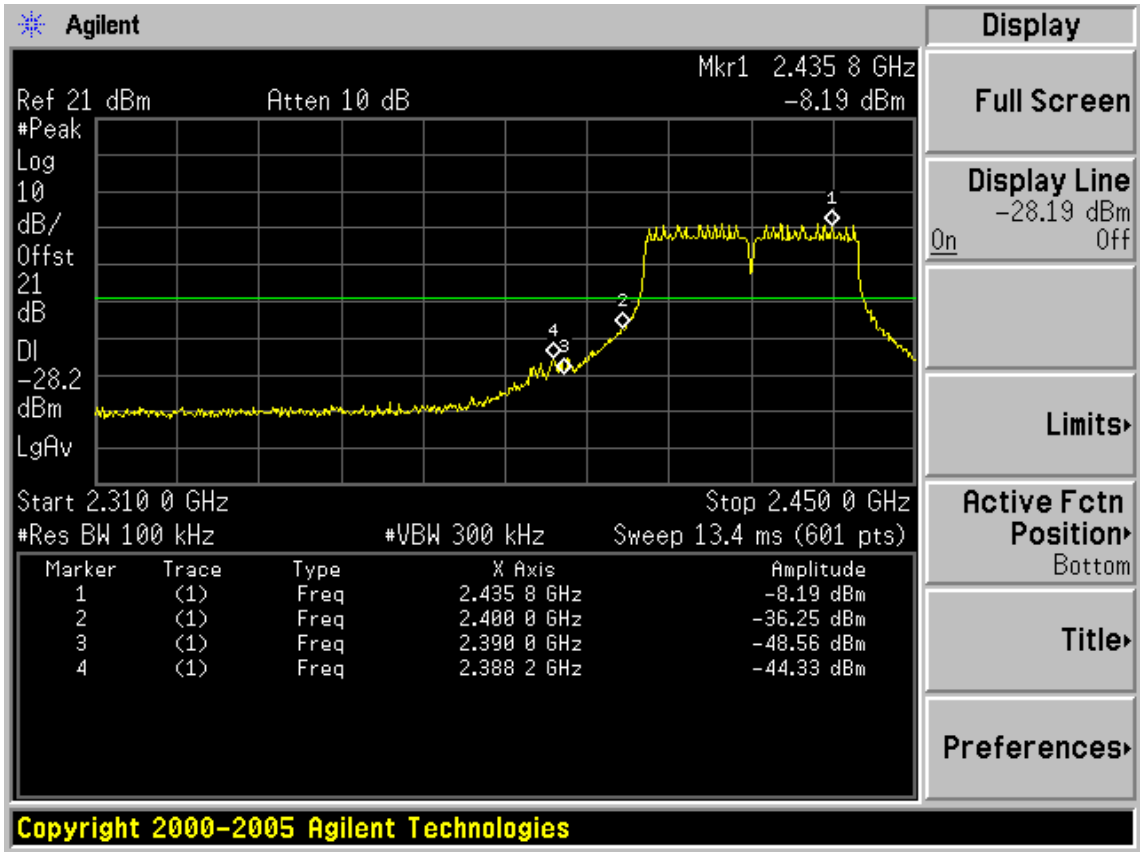


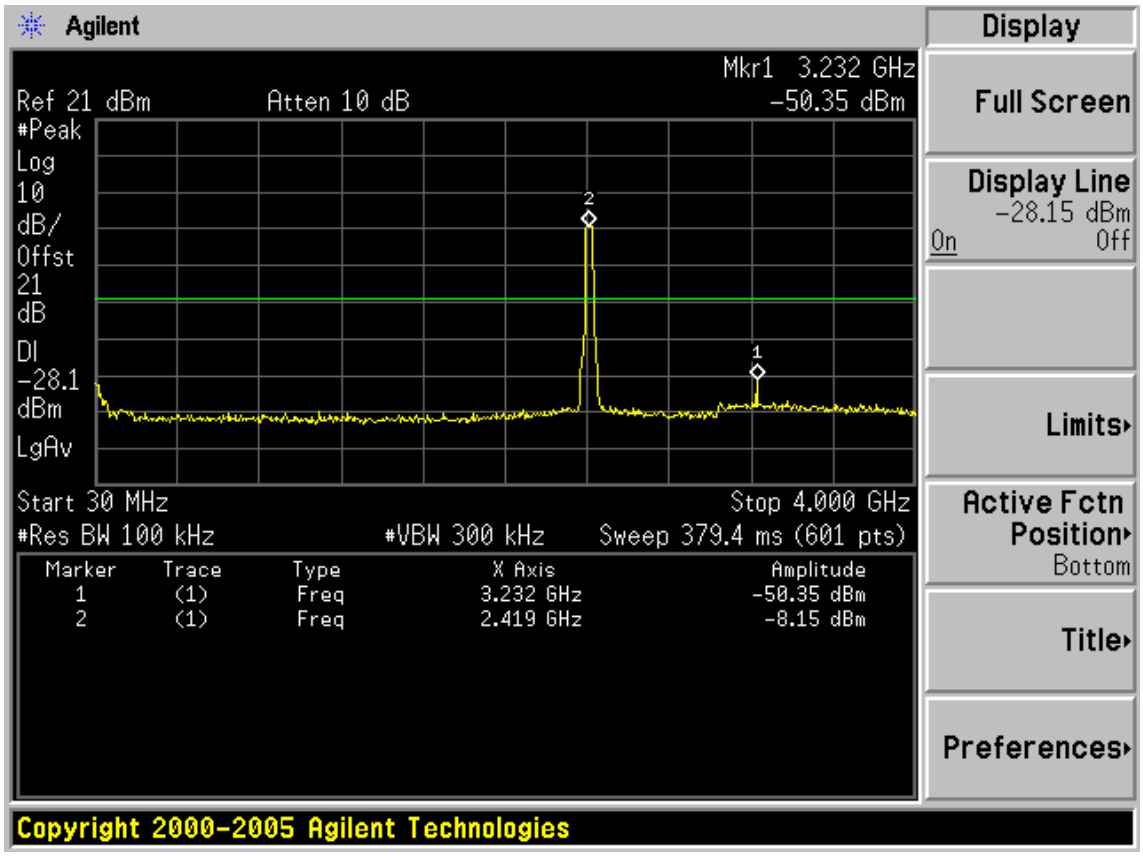

Agilent
Peak Search
Mkr1 6.780 GHz
Ref 21 dBm
Atten 10 dB
-55.15 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.2
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.780 GHz -55.15 dBm
Copyright 2000-2005 Agilent Technologies

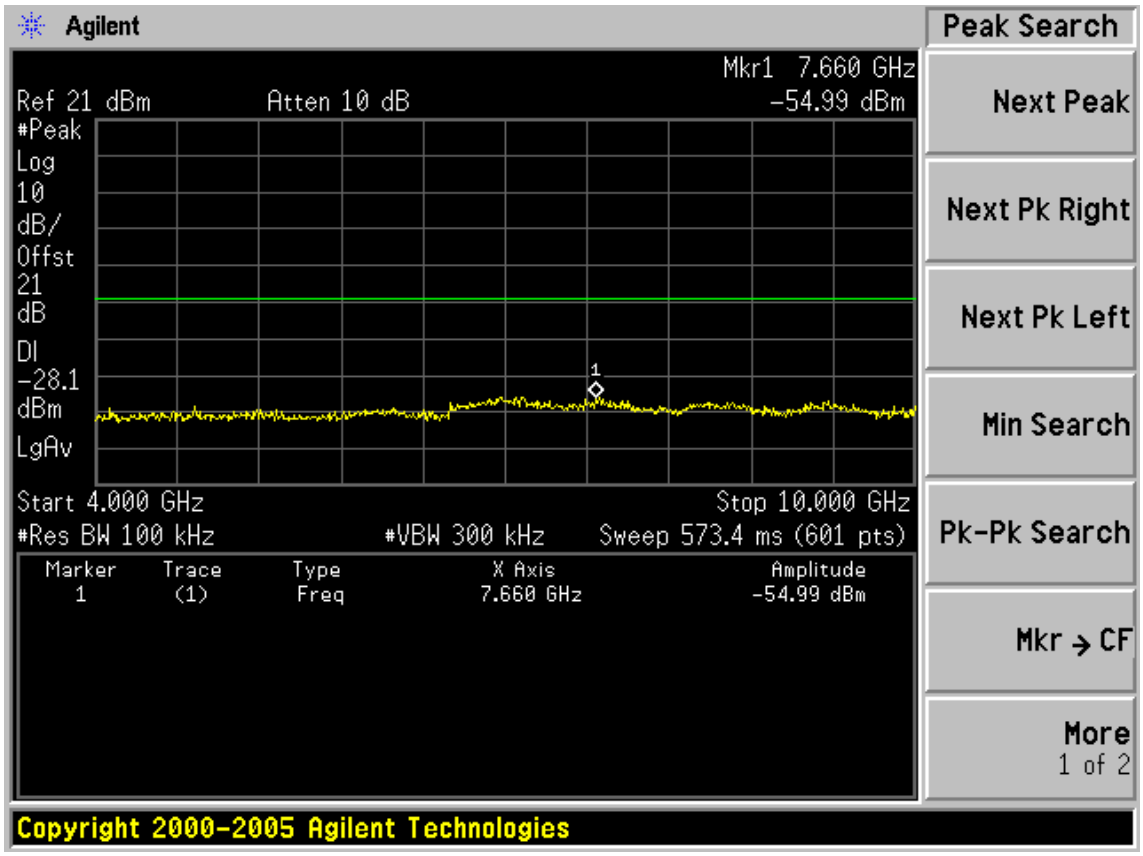

Agilent
Peak Search
Mkr1 24.18 GHz
Ref 21 dBm
Atten 10 dB
-50.30 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.2
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.18 GHz -50.30 dBm
Copyright 2000-2005 Agilent Technologies

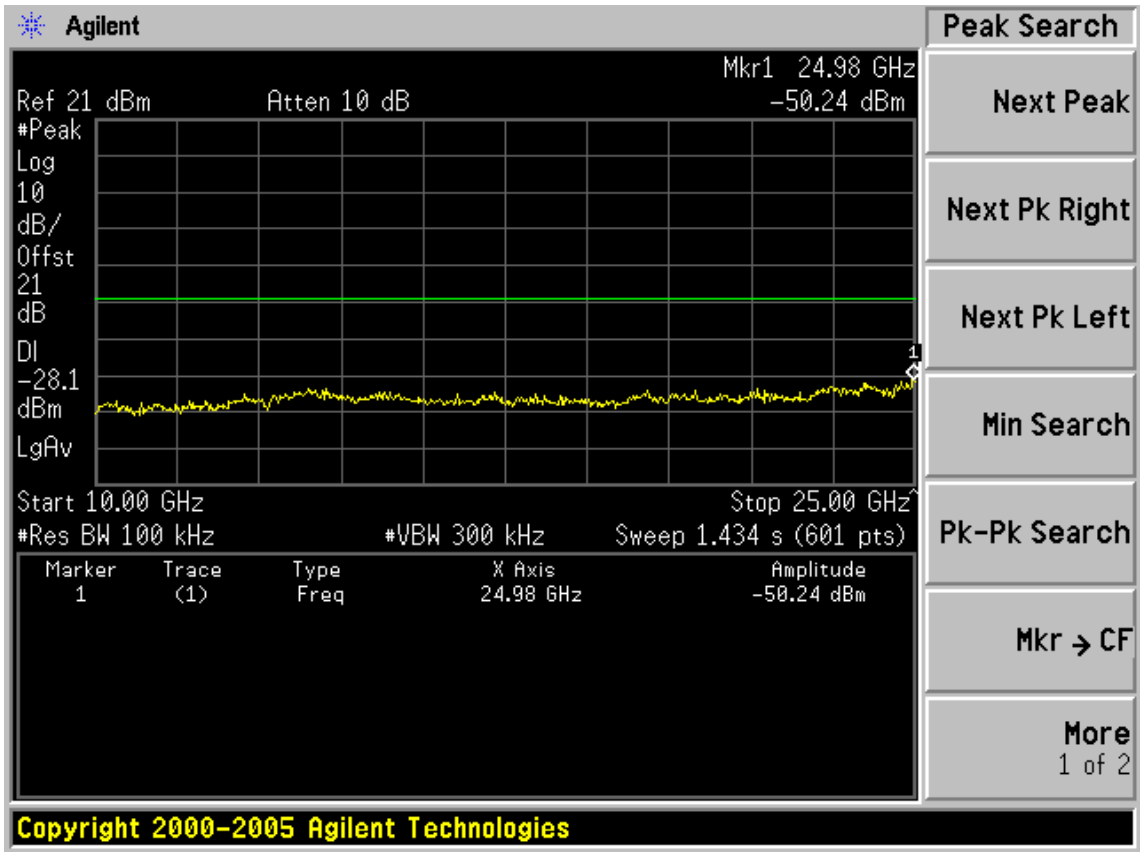


Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

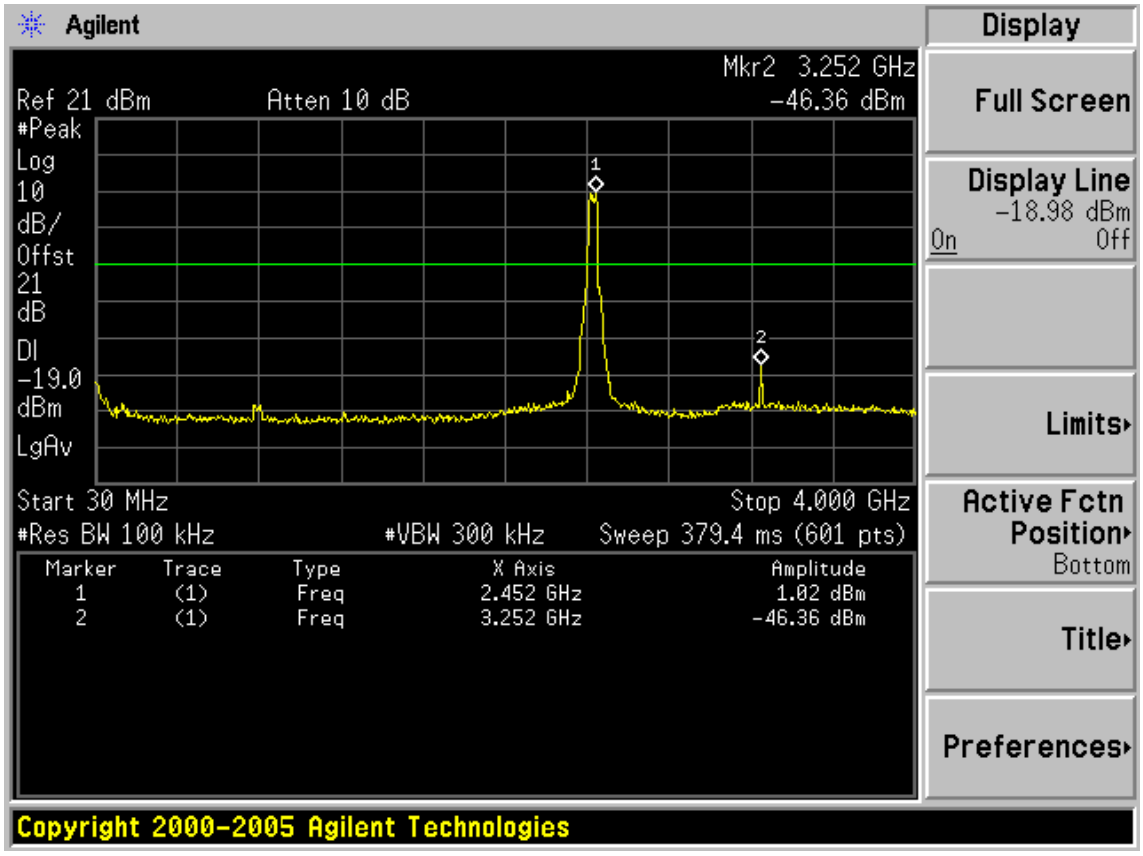


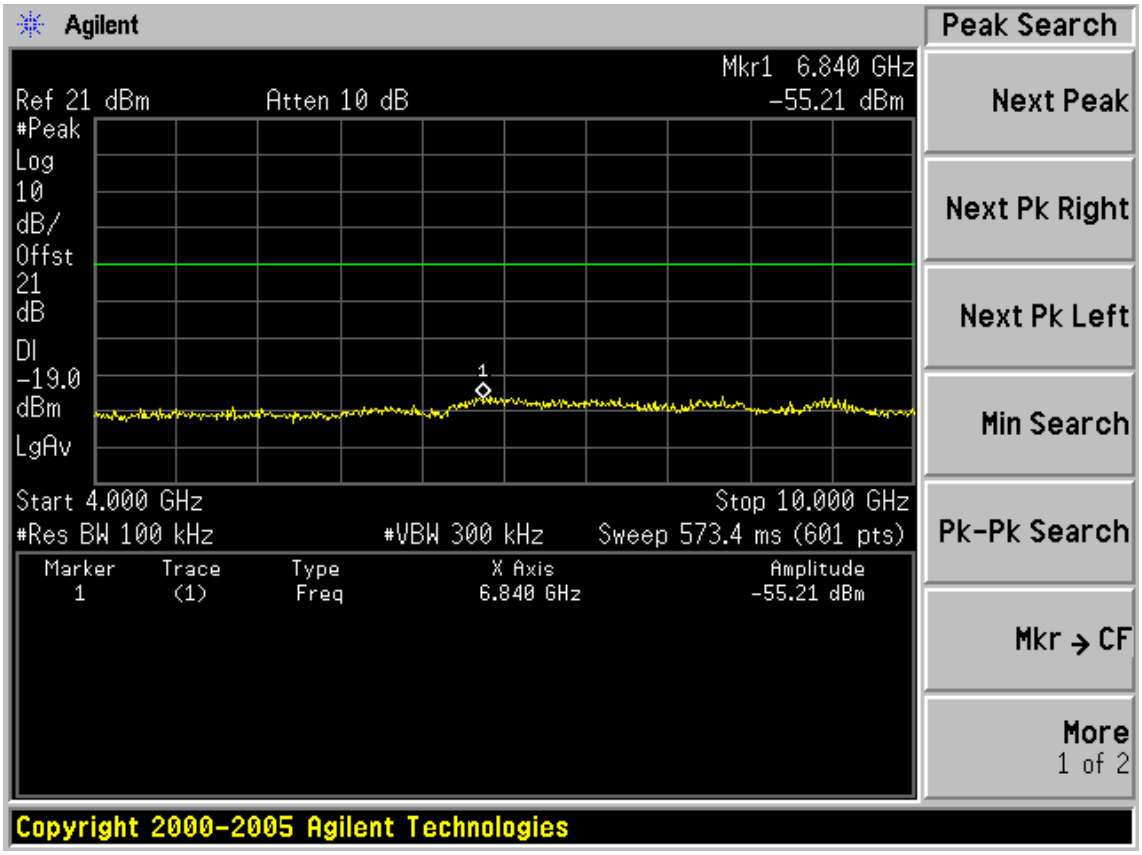

Agilent
Display
Mkr1 3.232 GHz
Ref 21 dBm
Atten 10 dB
-50.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.1
dBm
LgAv
Full Screen
Display Line
-28.15 dBm
On
Off
Limits
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Active Fctn
Position
Bottom
Marker Trace Type X Axis Amplitude
1 (1) Freq 3.232 GHz -50.35 dBm
2 (1) Freq 2.419 GHz -8.15 dBm
Title
Preferences
Copyright 2000-2005 Agilent Technologies

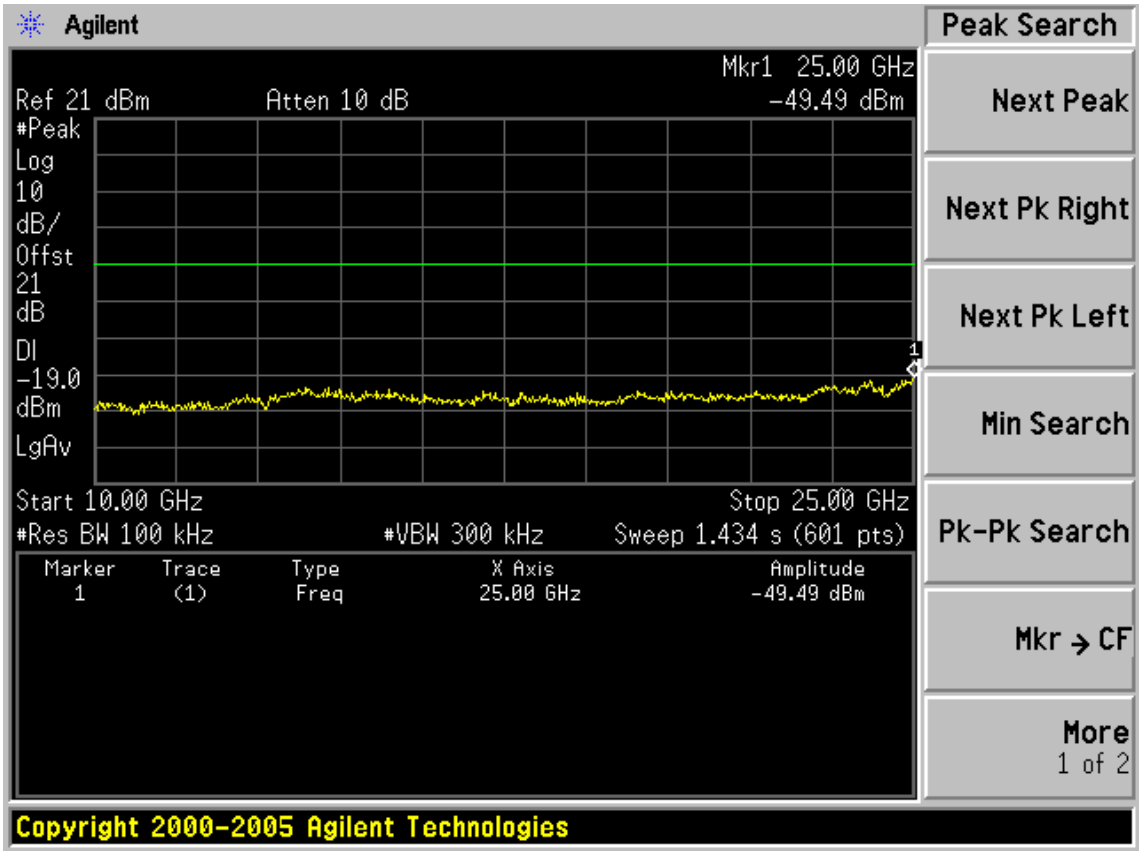

Agilent
Peak Search
Mkr1 7.660 GHz
Ref 21 dBm
Atten 10 dB
-54.99 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.660 GHz -54.99 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies



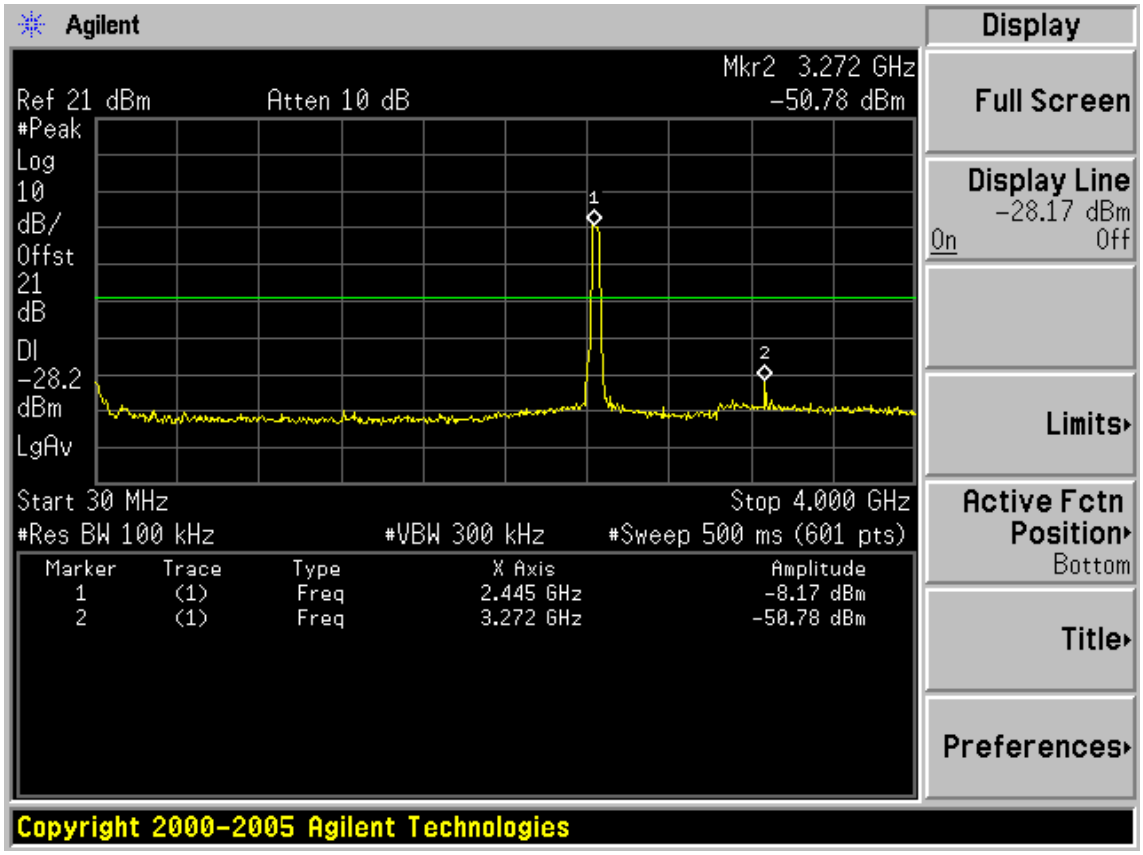
Test CH4: 2437MHz

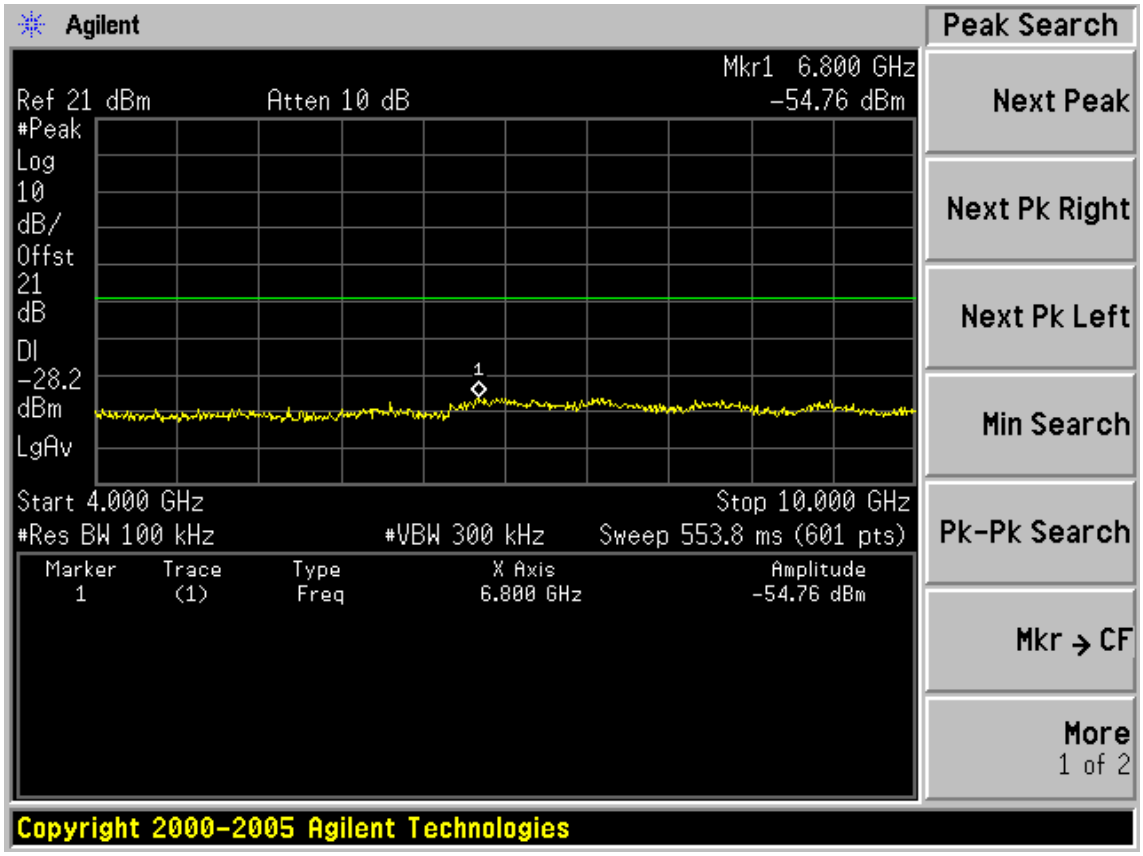


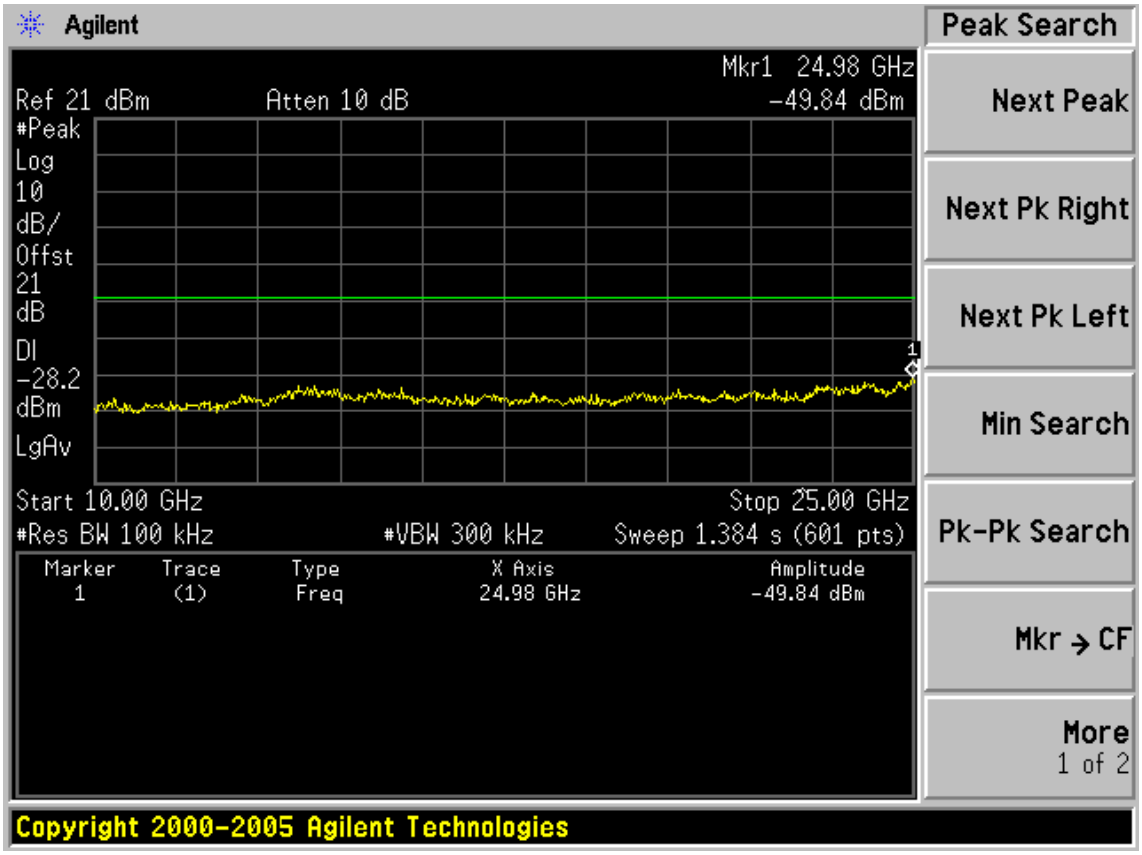

Agilent
Peak Search
Mkr1 6.840 GHz
Ref 21 dBm
Atten 10 dB
-55.21 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.840 GHz -55.21 dBm
Copyright 2000-2005 Agilent Technologies

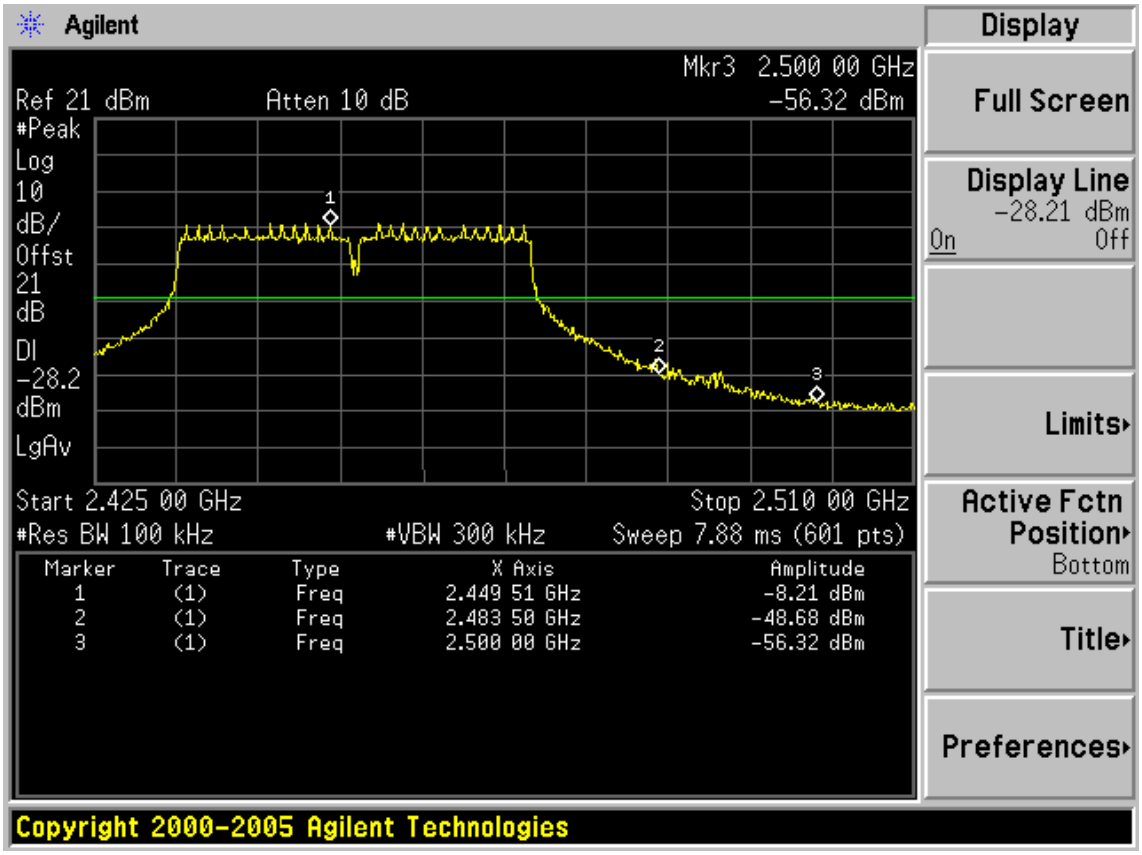

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.49 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.49 dBm
Copyright 2000-2005 Agilent Technologies

Test CH7: 2452MHz






Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-49.84 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.2
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.384 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -49.84 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Display
Mkr3 2.500 00 GHz
Ref 21 dBm
Atten 10 dB
-56.32 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.2
dBm
LgAv
1
2
3
Full Screen
Display Line
-28.21 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.425 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 7.88 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.449 51 GHz -8.21 dBm
2 (1) Freq 2.483 50 GHz -48.68 dBm
3 (1) Freq 2.500 00 GHz -56.32 dBm
Copyright 2000-2005 Agilent Technologies

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9607-4877	May.08, 13	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	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.

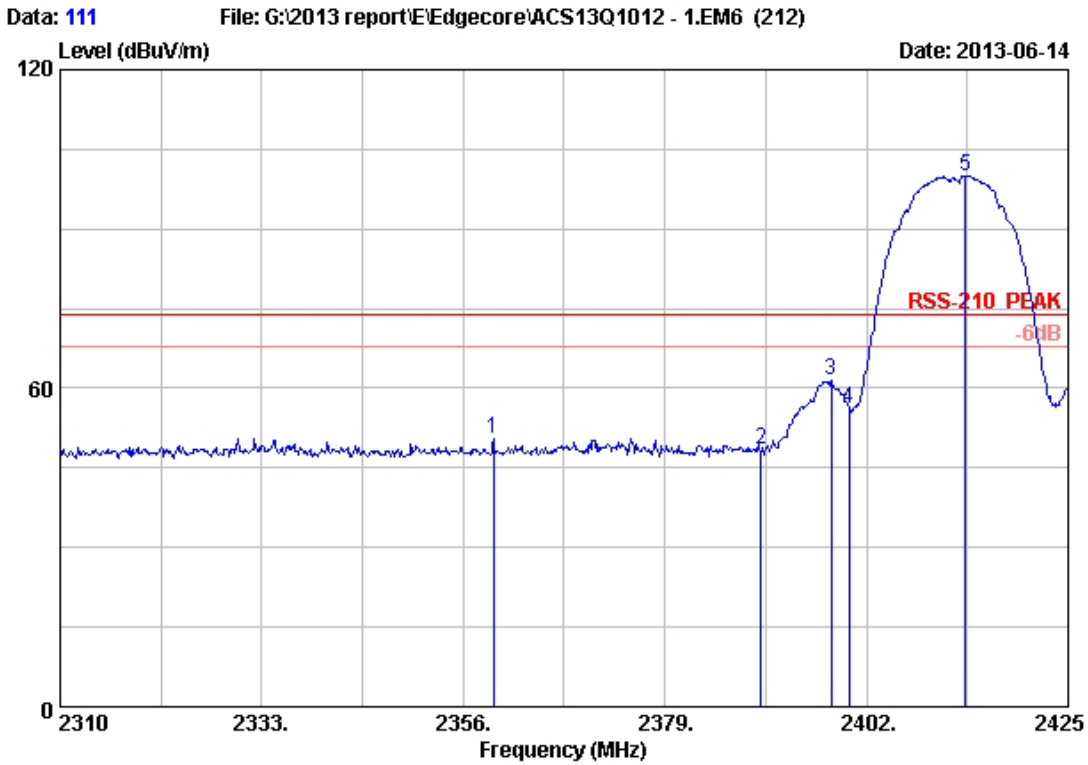
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
(b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

6.4.Test Results

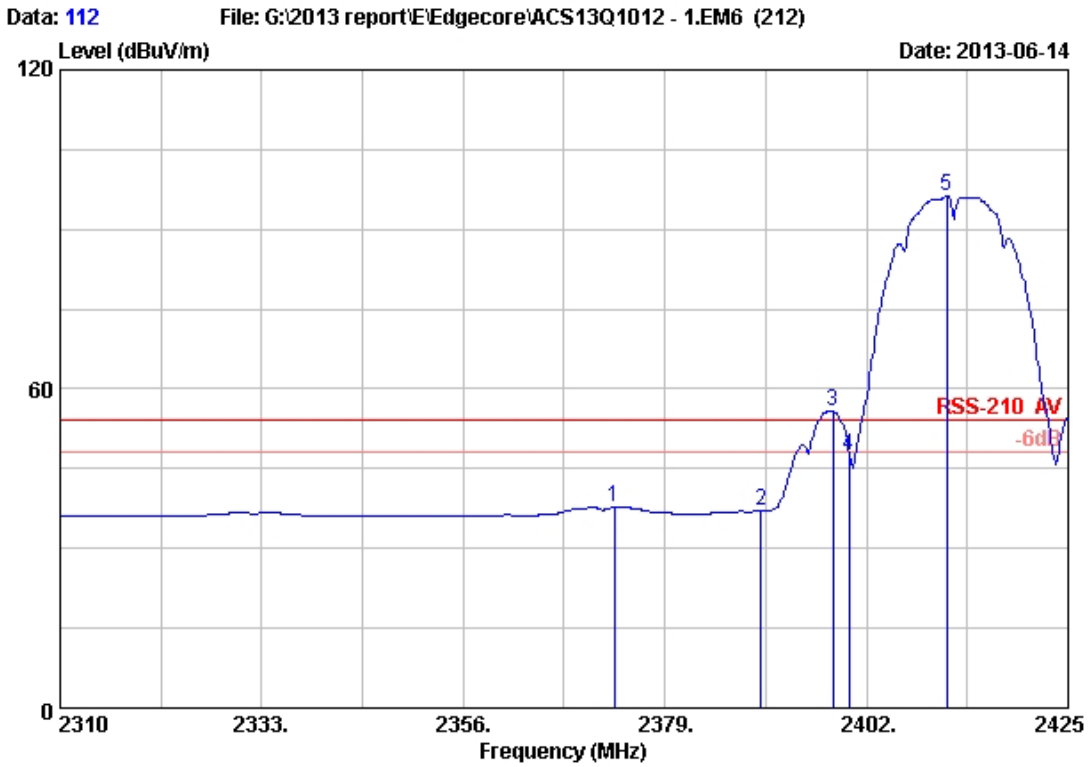
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 111
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2359.450	29.42	7.35	36.63	50.27	50.41	74.00	23.59	Peak
2	2390.000	29.44	7.39	36.62	48.24	48.45	74.00	25.55	Peak
3	2397.975	29.44	7.39	36.62	61.40	61.61	74.00	12.39	Peak
4	2400.000	29.44	7.43	36.62	55.78	56.03	74.00	17.97	Peak
5	2413.270	29.45	7.43	36.62	99.76	100.02	74.00	-26.02	Peak

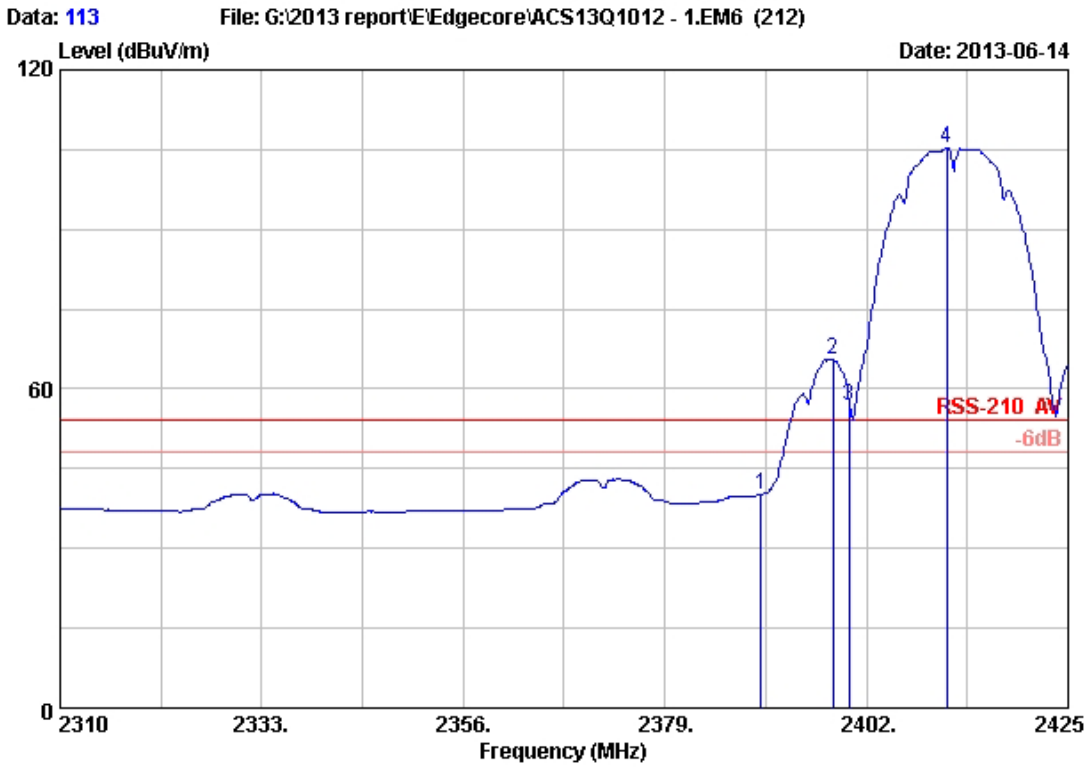
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 112
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2373.250	29.43	7.35	36.62	37.64	37.80	54.00	16.20	Average
2	2390.000	29.44	7.39	36.62	36.76	36.97	54.00	17.03	Average
3	2398.205	29.44	7.39	36.62	55.69	55.90	54.00	-1.90	Average
4	2400.000	29.44	7.43	36.62	47.12	47.37	54.00	6.63	Average
5	2411.200	29.45	7.43	36.62	95.92	96.18	54.00	-42.18	Average

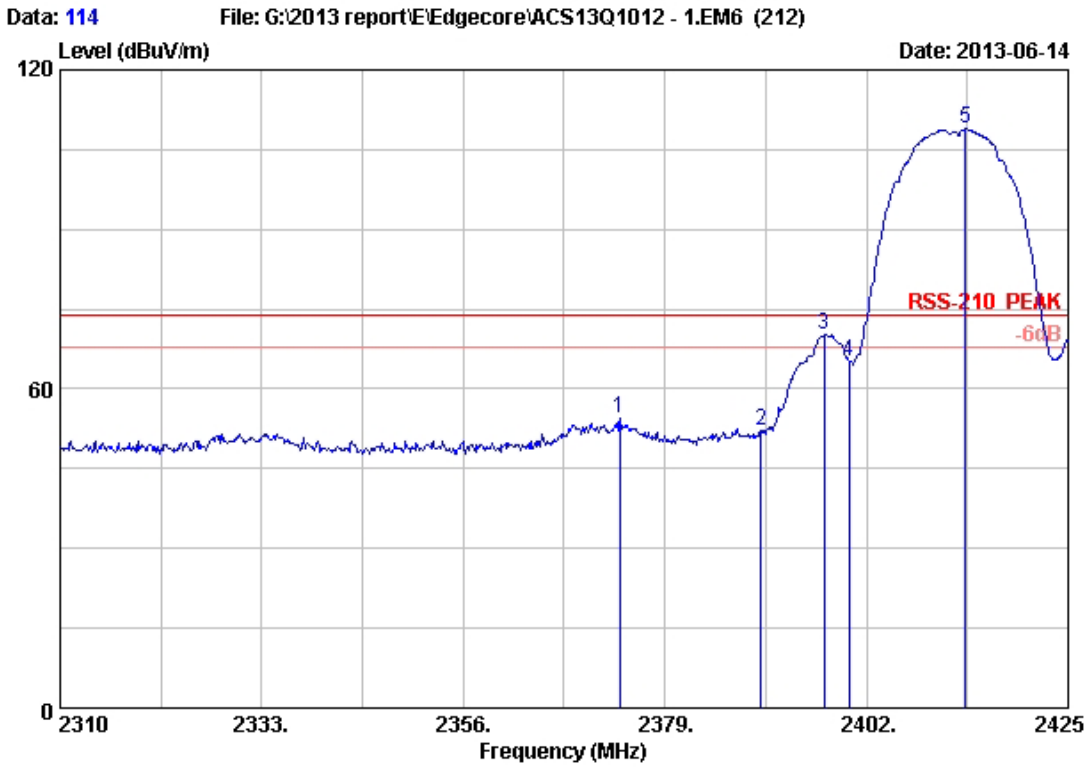
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 113
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	39.97	40.18	54.00	13.82	Average
2	2398.205	29.44	7.39	36.62	65.39	65.60	54.00	-11.60	Average
3	2400.000	29.44	7.43	36.62	56.46	56.71	54.00	-2.71	Average
4	2411.200	29.45	7.43	36.62	104.98	105.24	54.00	-51.24	Average

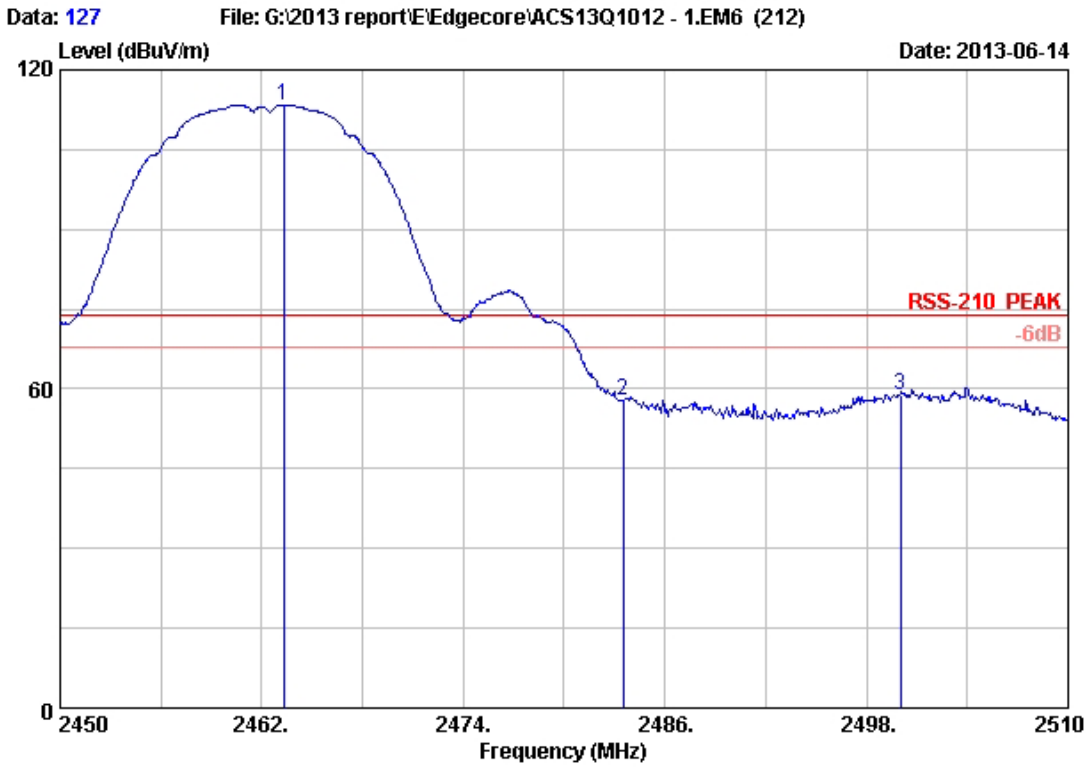
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 114
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2373.825	29.43	7.35	36.62	54.29	54.45	74.00	19.55	Peak
2	2390.000	29.44	7.39	36.62	51.87	52.08	74.00	21.92	Peak
3	2397.170	29.44	7.39	36.62	70.11	70.32	74.00	3.68	Peak
4	2400.000	29.44	7.43	36.62	64.97	65.22	74.00	8.78	Peak
5	2413.270	29.45	7.43	36.62	108.58	108.84	74.00	-34.84	Peak

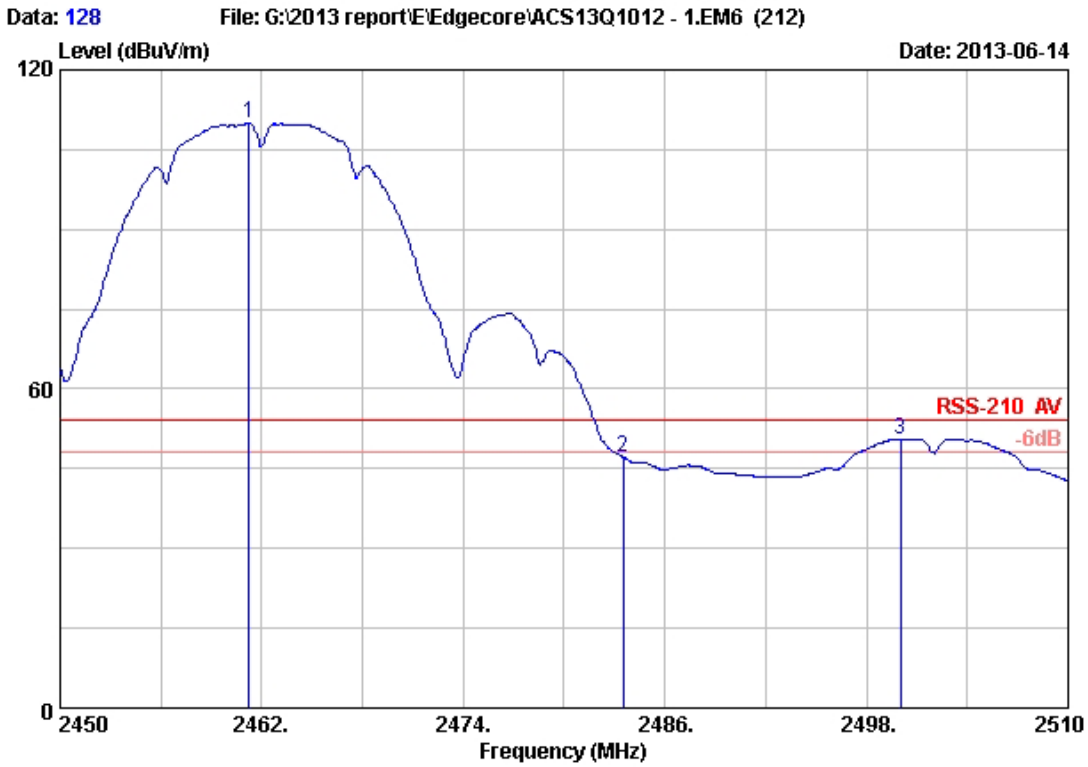
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 127
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2463.320	29.48	7.54	36.61	113.06	113.47	74.00	-39.47	Peak
2	2483.500	29.49	7.58	36.60	57.21	57.68	74.00	16.32	Peak
3	2500.000	29.50	7.62	36.60	58.37	58.89	74.00	15.11	Peak

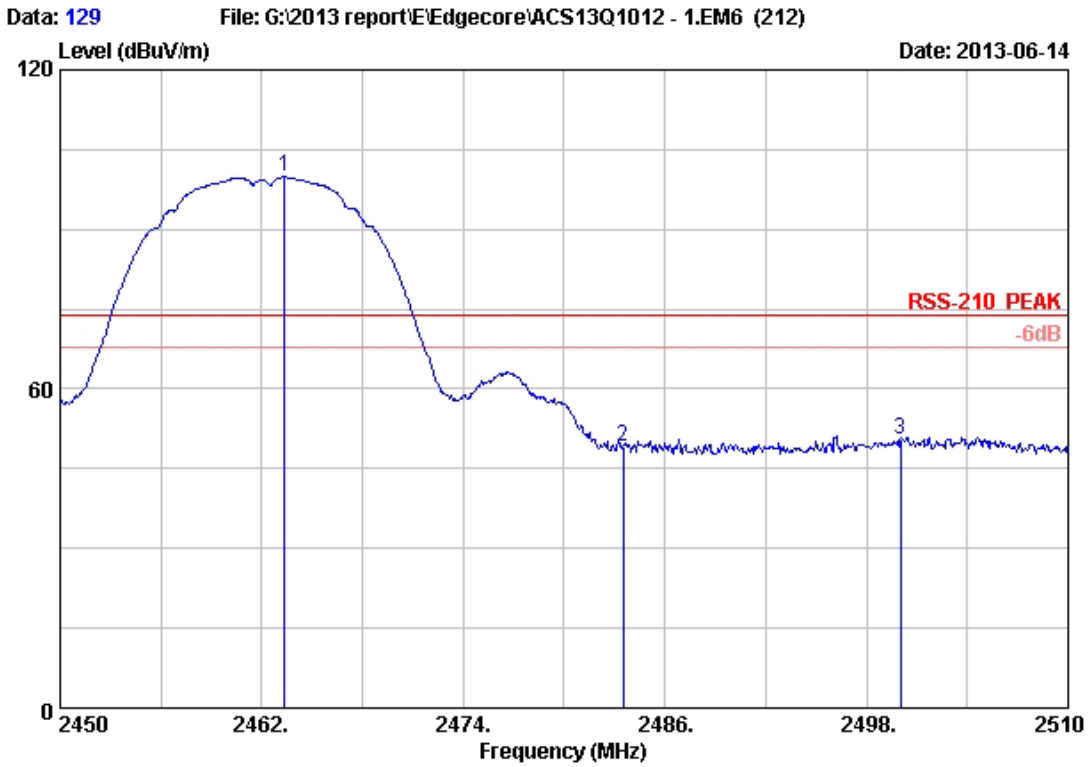
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 128
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	109.54	109.95	54.00	-55.95	Average
2	2483.500	29.49	7.58	36.60	46.76	47.23	54.00	6.77	Average
3	2500.000	29.50	7.62	36.60	49.91	50.43	54.00	3.57	Average

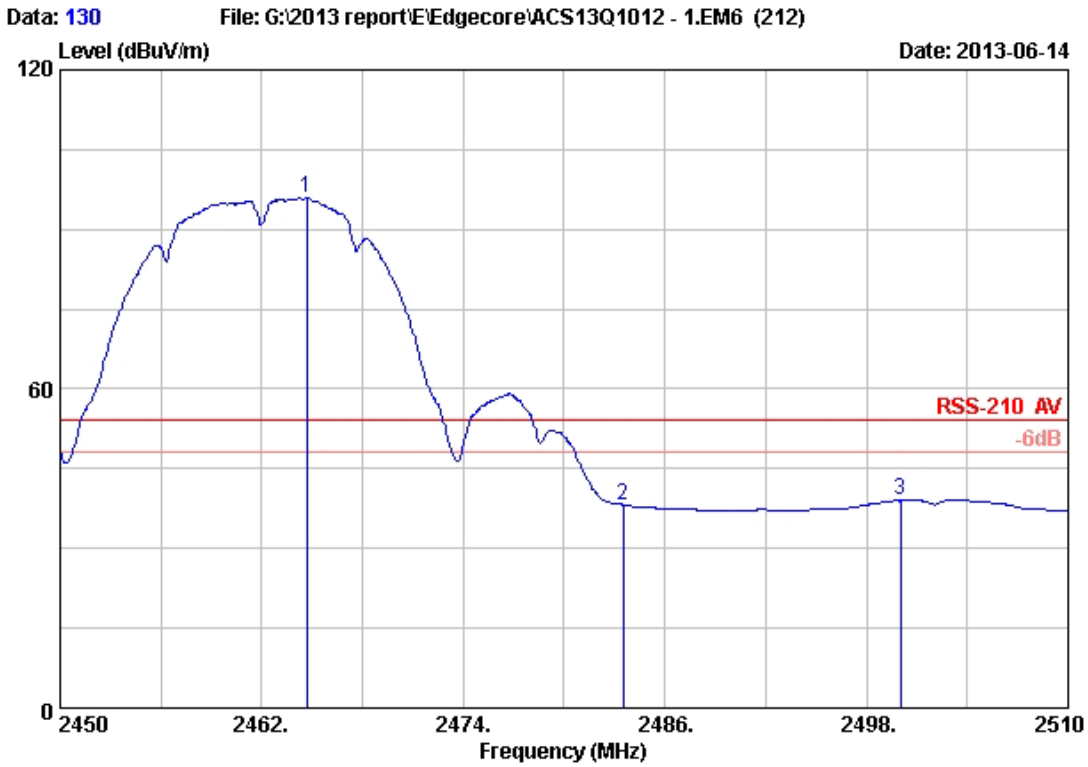
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 129
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2463.380	29.48	7.54	36.61	99.38	99.79	74.00	-25.79	Peak
2	2483.500	29.49	7.58	36.60	48.80	49.27	74.00	24.73	Peak
3	2500.000	29.50	7.62	36.60	50.05	50.57	74.00	23.43	Peak

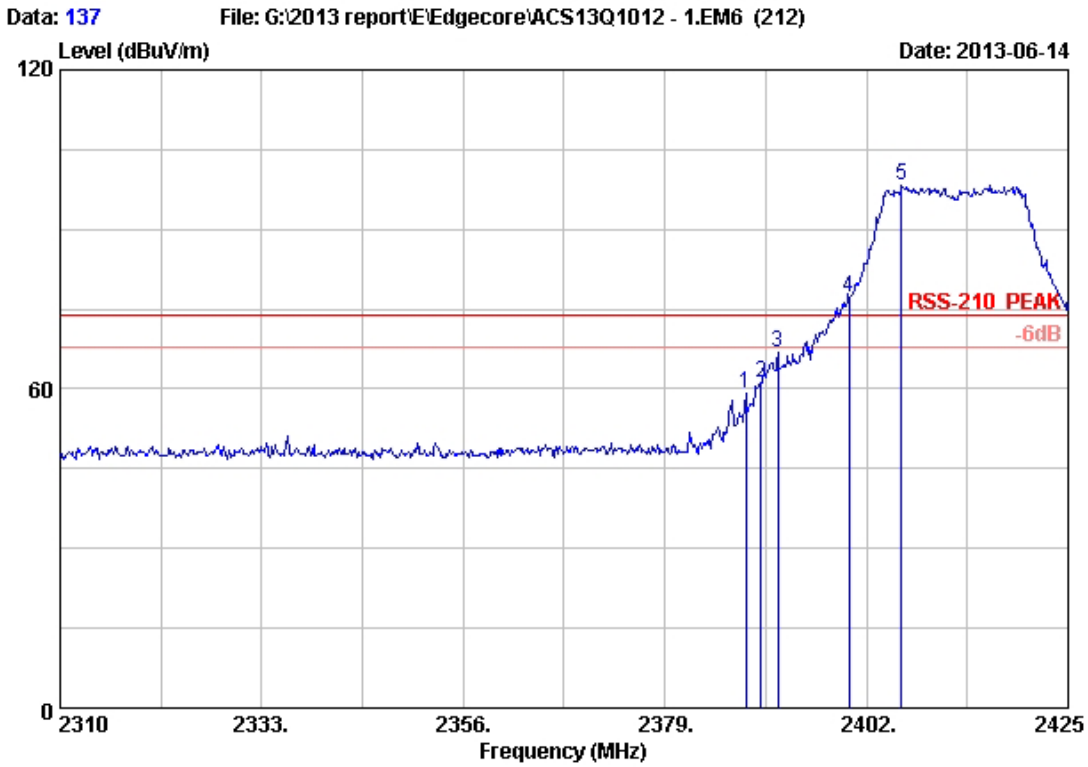
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 130
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2464.700	29.48	7.54	36.61	95.41	95.82	54.00	-41.82	Average
2	2483.500	29.49	7.58	36.60	37.78	38.25	54.00	15.75	Average
3	2500.000	29.50	7.62	36.60	38.44	38.96	54.00	15.04	Average

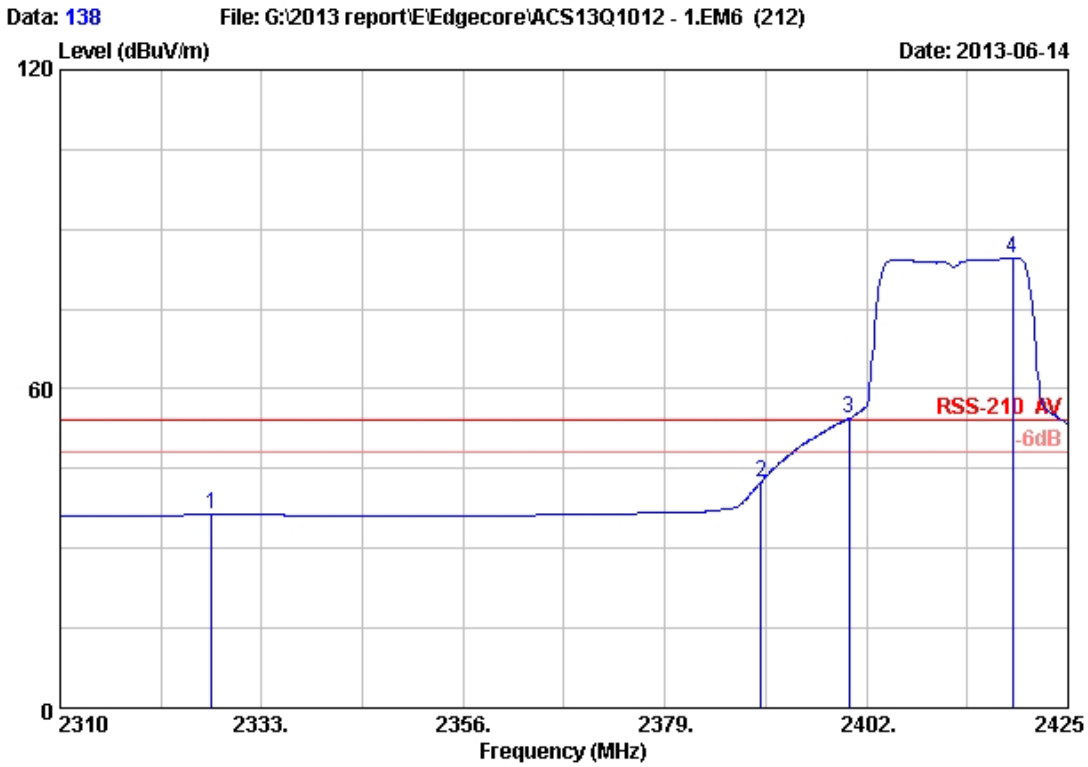
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 137
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2388.200	29.44	7.39	36.62	58.94	59.15	74.00	14.85	Peak
2	2390.000	29.44	7.39	36.62	61.01	61.22	74.00	12.78	Peak
3	2391.880	29.44	7.39	36.62	66.50	66.71	74.00	7.29	Peak
4	2400.000	29.44	7.43	36.62	77.06	77.31	74.00	-3.31	Peak
5	2406.025	29.45	7.43	36.62	98.17	98.43	74.00	-24.43	Peak

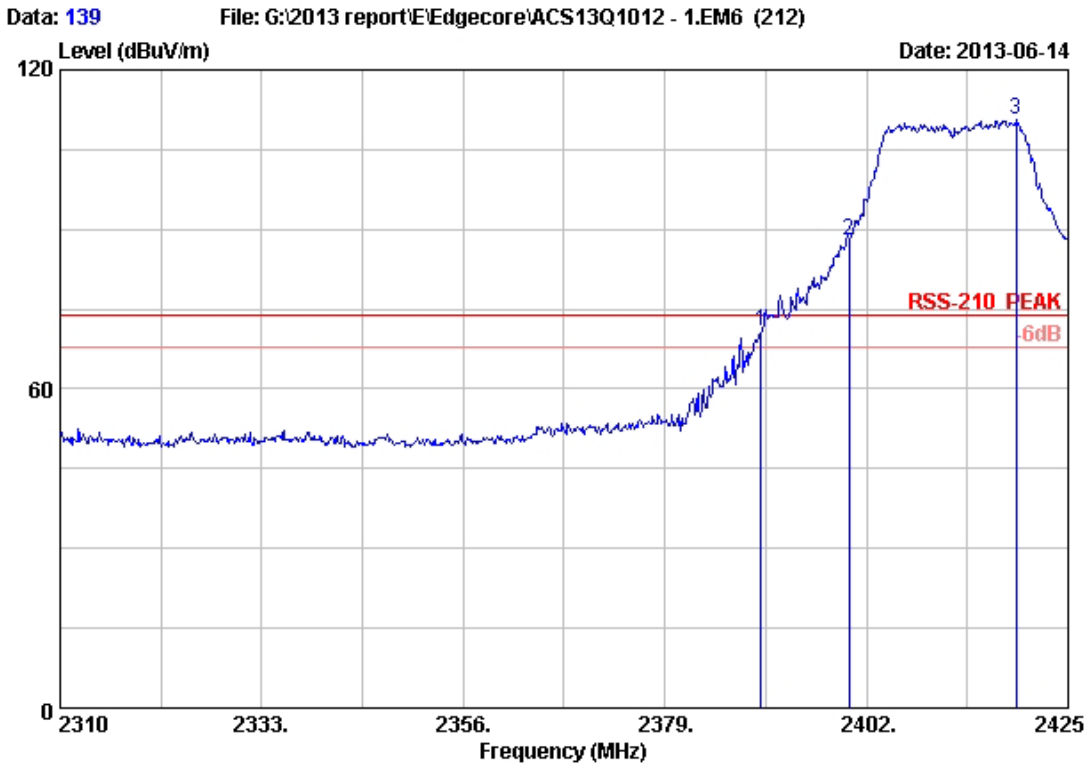
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 138
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	2327.250	29.40	7.27	36.63	36.52	36.56	54.00	17.44	Average
2	2390.000	29.44	7.39	36.62	42.40	42.61	54.00	11.39	Average
3	2400.000	29.44	7.43	36.62	54.29	54.54	54.00	-0.54	Average
4	2418.675	29.45	7.43	36.61	84.30	84.57	54.00	-30.57	Average

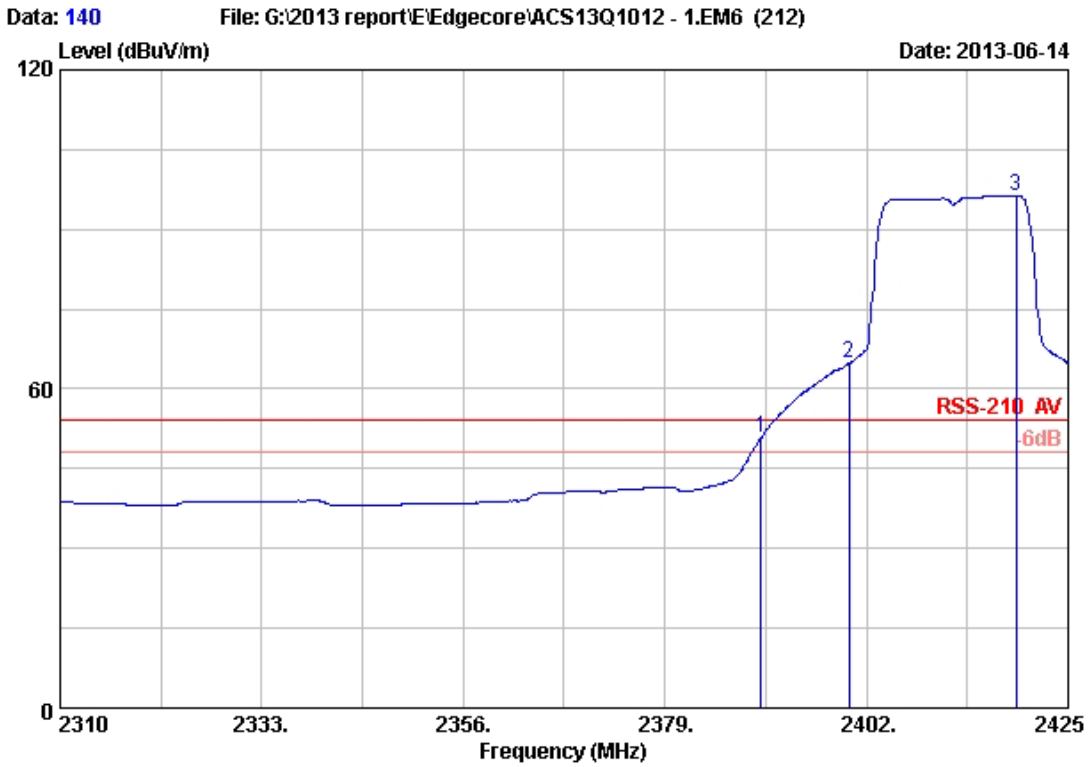
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 139
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	70.76	70.97	74.00	3.03	Peak
2	2400.000	29.44	7.43	36.62	87.72	87.97	74.00	-13.97	Peak
3	2419.020	29.45	7.46	36.61	110.19	110.49	74.00	-36.49	Peak

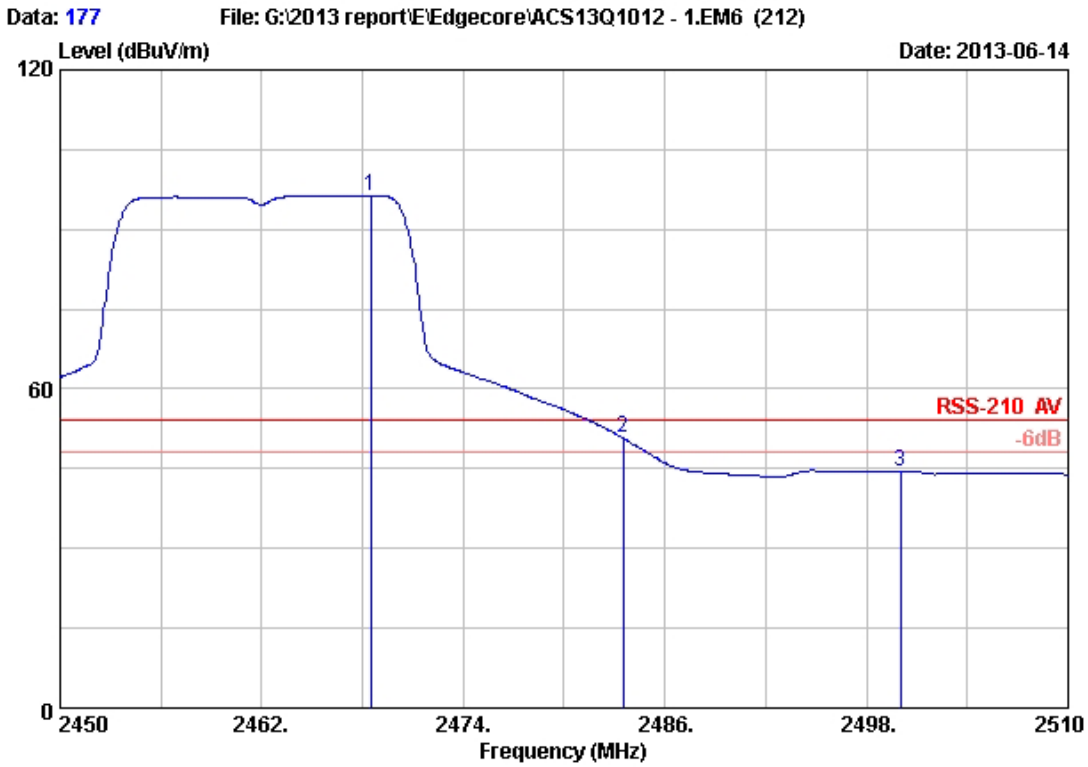
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 140
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	50.69	50.90	54.00	3.10	Average
2	2400.000	29.44	7.43	36.62	64.63	64.88	54.00	-10.88	Average
3	2419.020	29.45	7.46	36.61	96.10	96.40	54.00	-42.40	Average

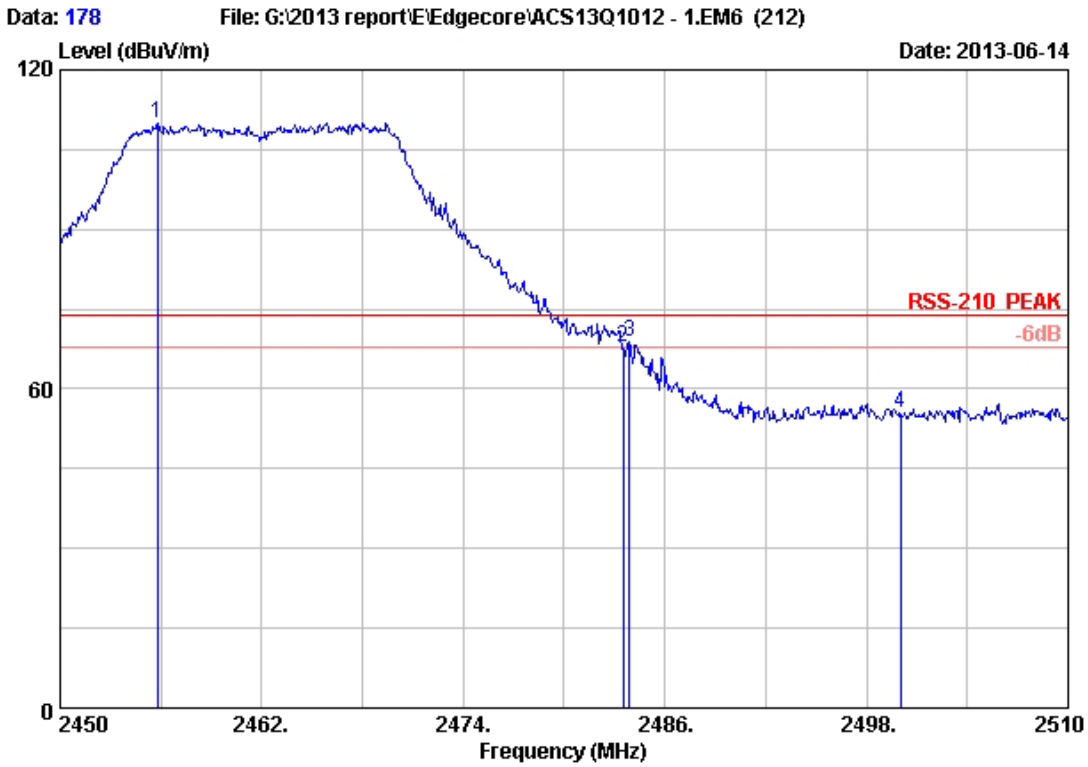
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 177
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2468.480	29.48	7.54	36.60	95.94	96.36	54.00	-42.36	Average
2	2483.500	29.49	7.58	36.60	50.29	50.76	54.00	3.24	Average
3	2500.000	29.50	7.62	36.60	43.97	44.49	54.00	9.51	Average

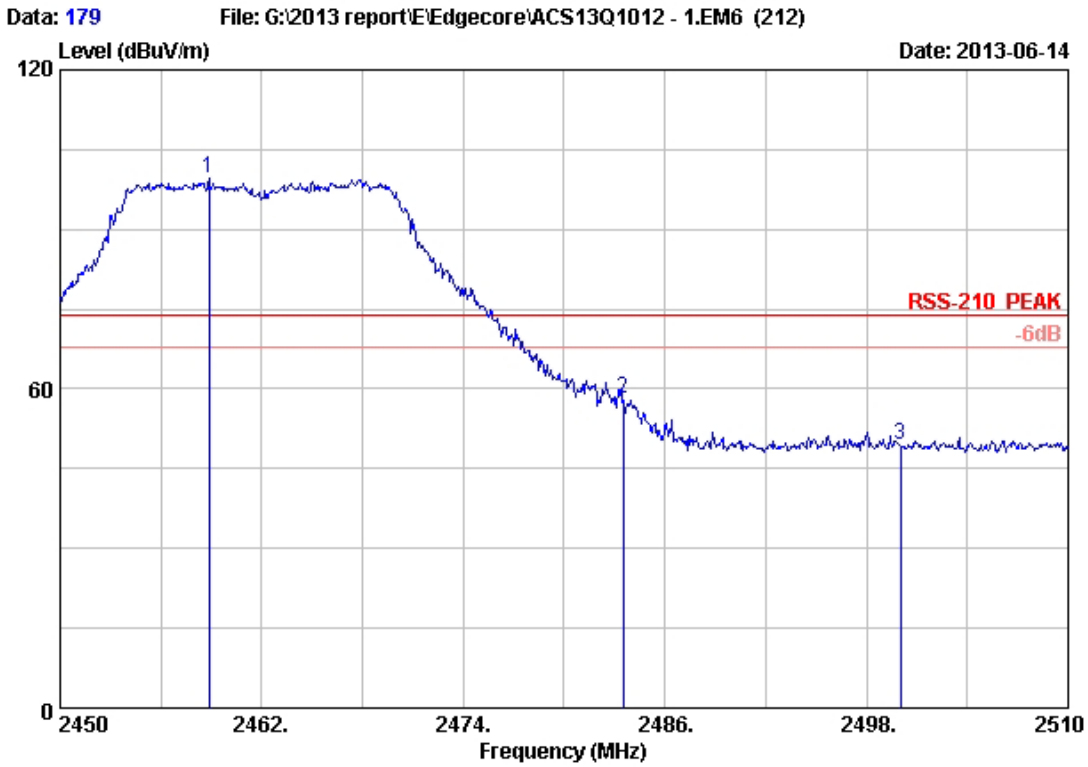
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 178
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2455.820	29.48	7.50	36.61	109.73	110.10	74.00	-36.10	Peak
2	2483.500	29.49	7.58	36.60	67.48	67.95	74.00	6.05	Peak
3	2483.900	29.49	7.58	36.60	68.27	68.74	74.00	5.26	Peak
4	2500.000	29.50	7.62	36.60	55.01	55.53	74.00	18.47	Peak

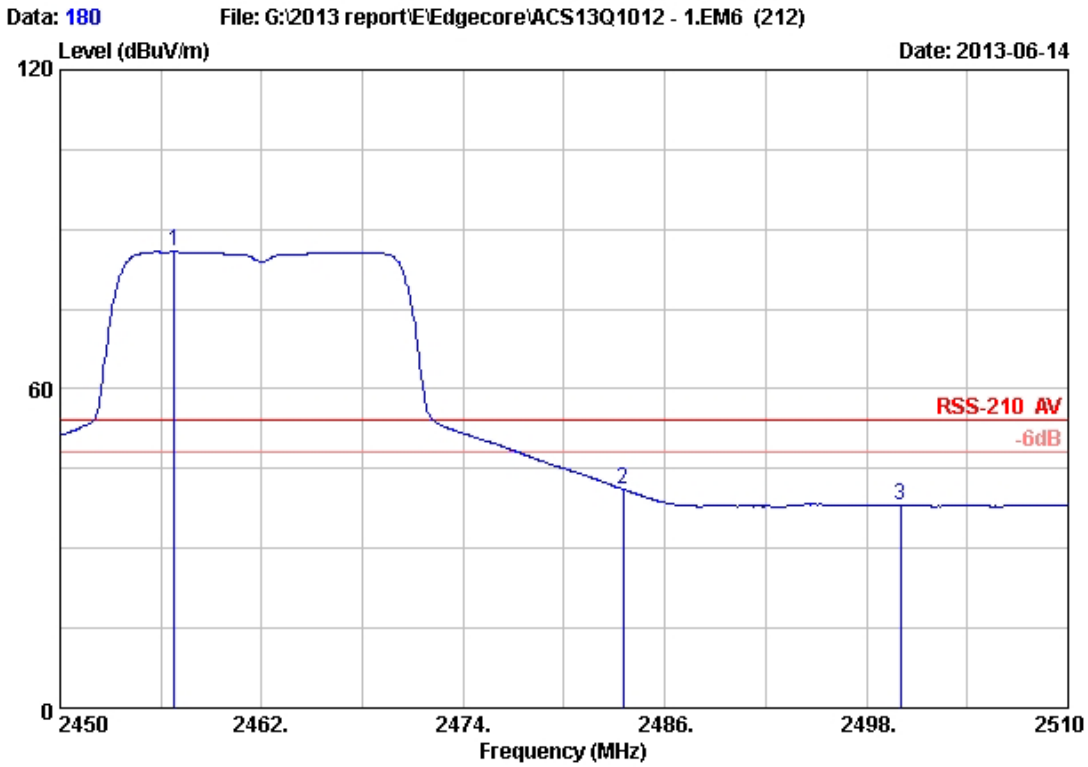
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 179
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2458.880	29.48	7.54	36.61	99.33	99.74	74.00	-25.74	Peak
2	2483.500	29.49	7.58	36.60	57.59	58.06	74.00	15.94	Peak
3	2500.000	29.50	7.62	36.60	48.80	49.32	74.00	24.68	Peak

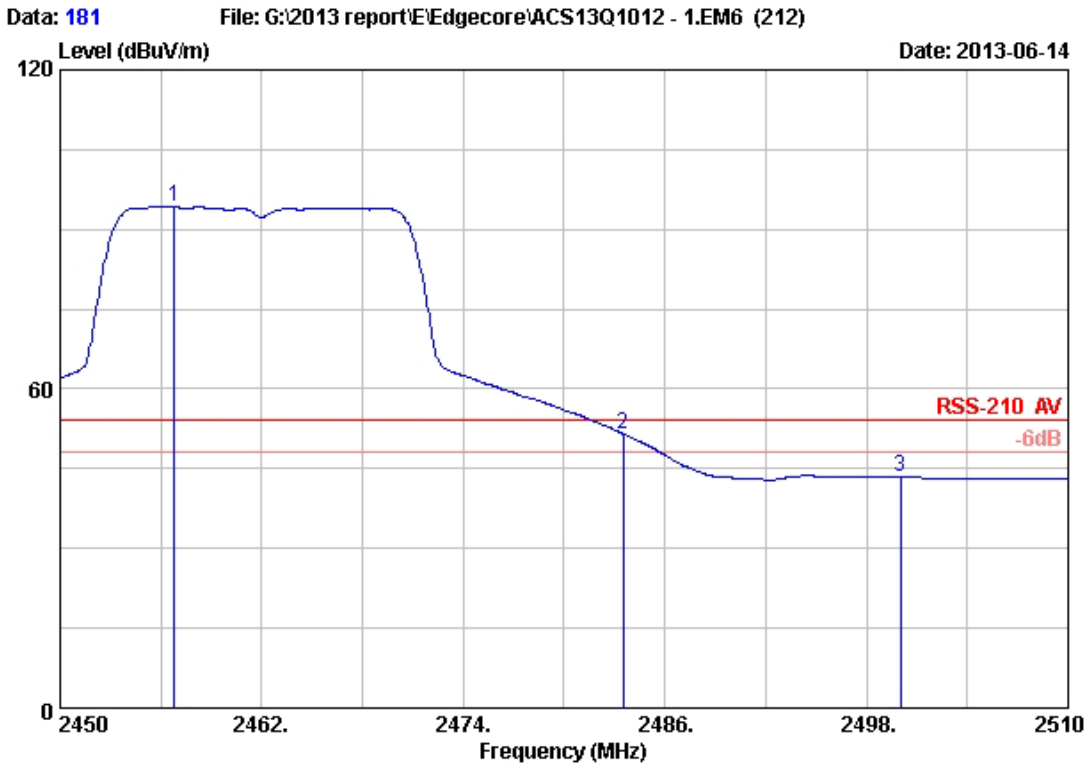
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 180
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2456.780	29.48	7.50	36.61	85.40	85.77	54.00	-31.77	Average
2	2483.500	29.49	7.58	36.60	40.63	41.10	54.00	12.90	Average
3	2500.000	29.50	7.62	36.60	37.58	38.10	54.00	15.90	Average

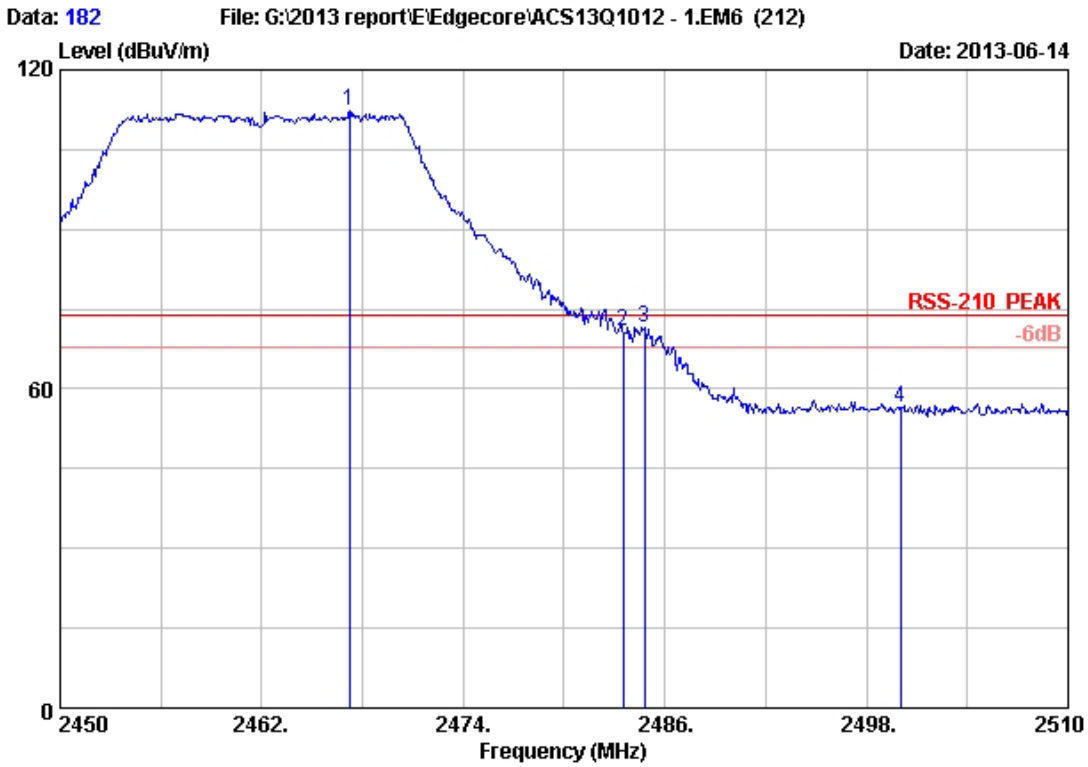
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 181
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2456.780	29.48	7.50	36.61	93.91	94.28	54.00	-40.28	Average
2	2483.500	29.49	7.58	36.60	51.09	51.56	54.00	2.44	Average
3	2500.000	29.50	7.62	36.60	42.91	43.43	54.00	10.57	Average

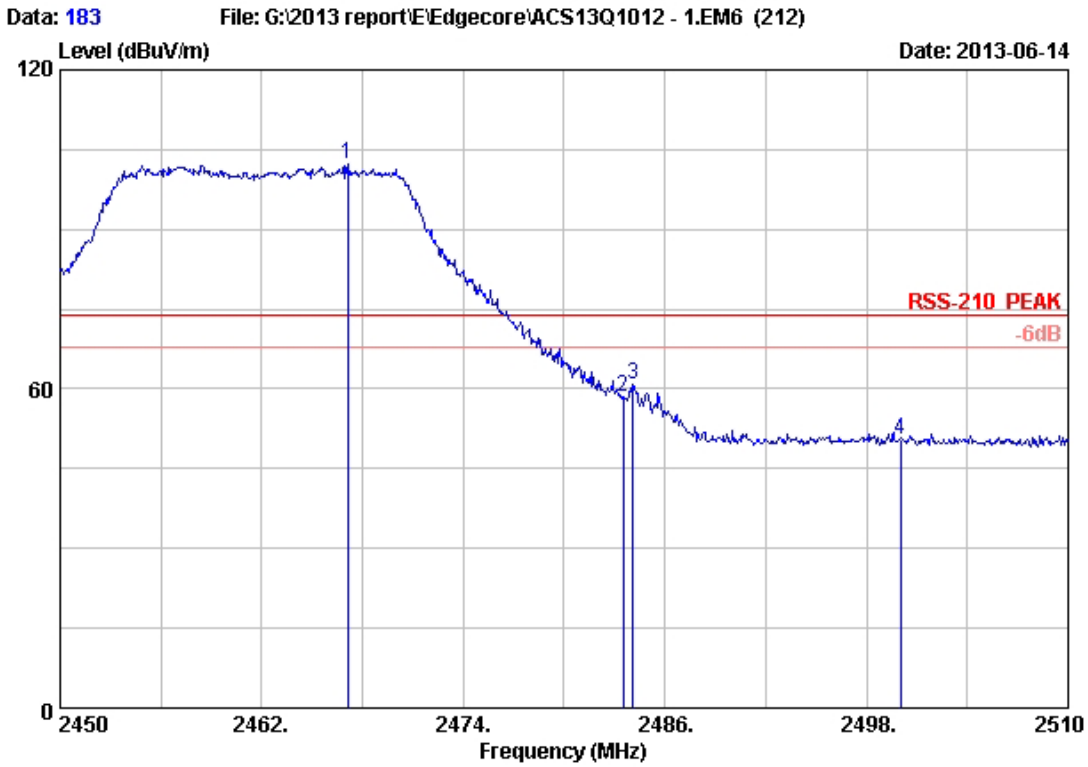
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 182
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2467.220	29.48	7.54	36.60	111.78	112.20	74.00	-38.20	Peak
2	2483.500	29.49	7.58	36.60	70.24	70.71	74.00	3.29	Peak
3	2484.800	29.49	7.58	36.60	71.06	71.53	74.00	2.47	Peak
4	2500.000	29.50	7.62	36.60	55.94	56.46	74.00	17.54	Peak

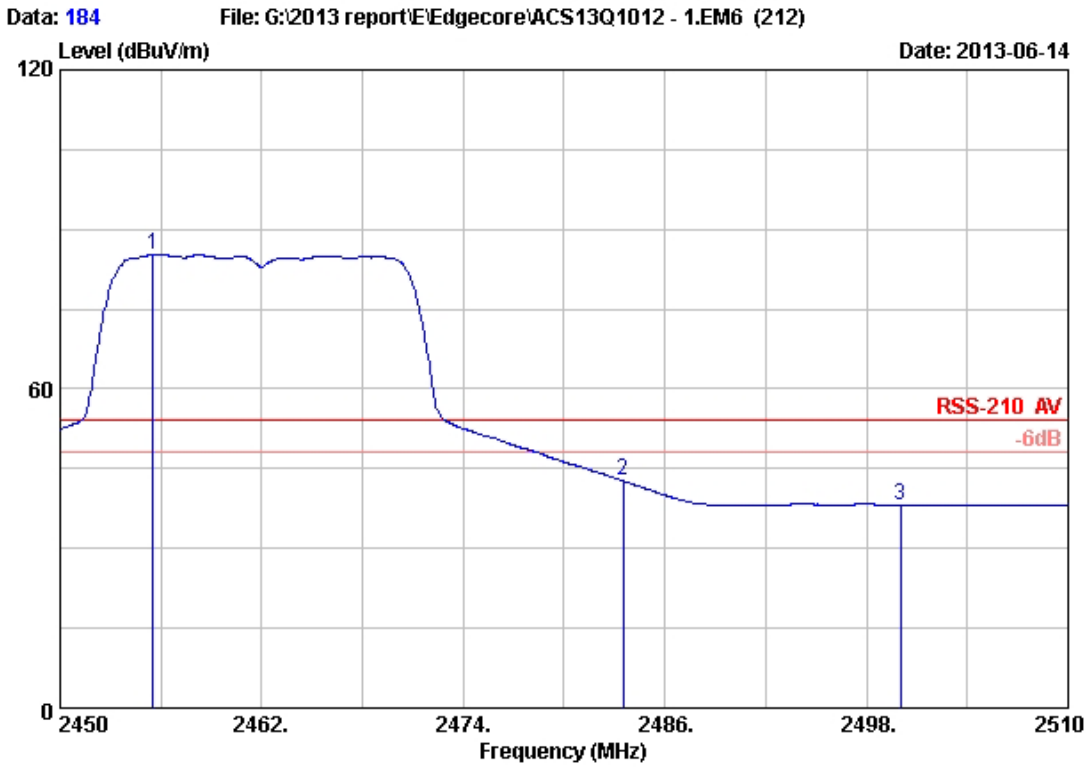
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 183
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2467.100	29.48	7.54	36.60	101.86	102.28	74.00	-28.28	Peak
2	2483.500	29.49	7.58	36.60	57.88	58.35	74.00	15.65	Peak
3	2484.080	29.49	7.58	36.60	60.52	60.99	74.00	13.01	Peak
4	2500.000	29.50	7.62	36.60	49.98	50.50	74.00	23.50	Peak

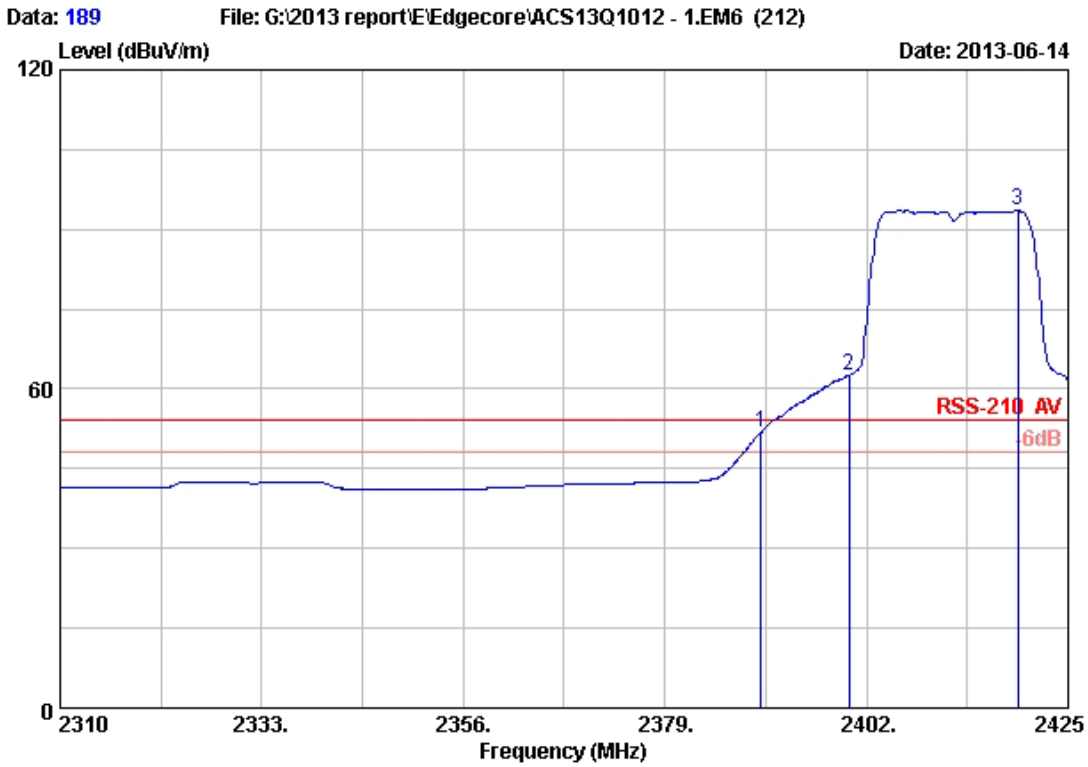
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 184
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
M/N : SMCWPCI-N5
:

	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	2455.520	29.48	7.50	36.61	84.87	85.24	54.00	-31.24	Average
2	2483.500	29.49	7.58	36.60	42.23	42.70	54.00	11.30	Average
3	2500.000	29.50	7.62	36.60	37.67	38.19	54.00	15.81	Average

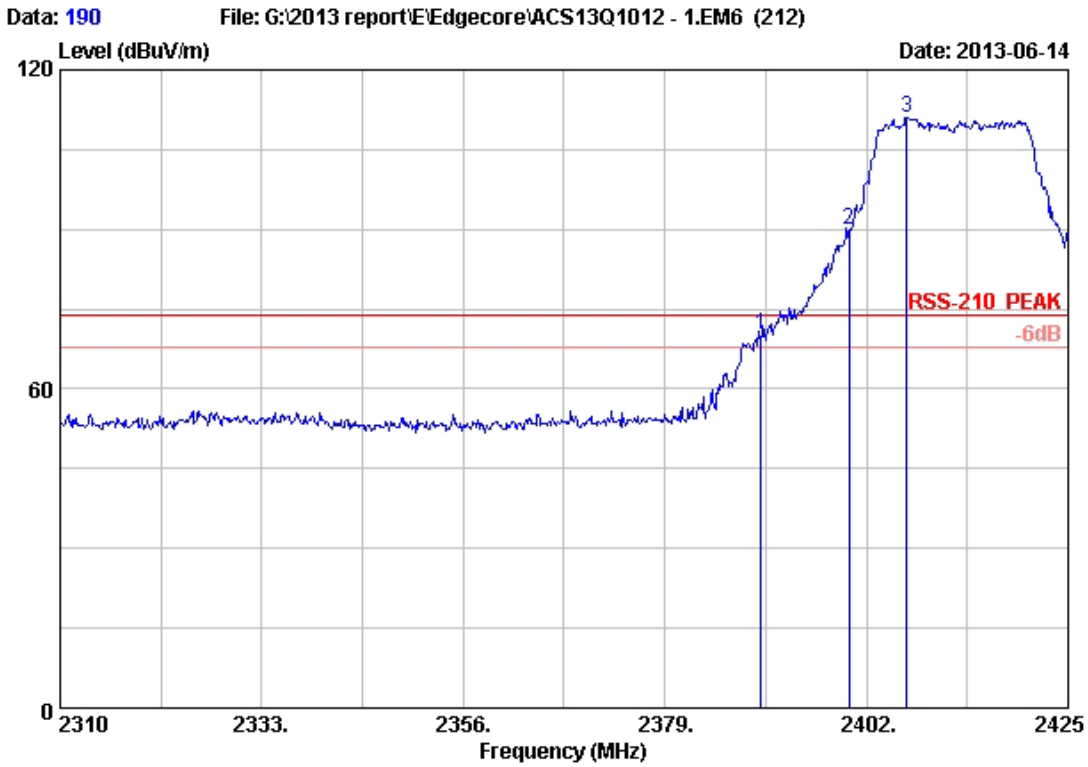
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 189
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	51.54	51.75	54.00	2.25	Average
2	2400.000	29.44	7.43	36.62	62.36	62.61	54.00	-8.61	Average
3	2419.250	29.45	7.46	36.61	93.30	93.60	54.00	-39.60	Average

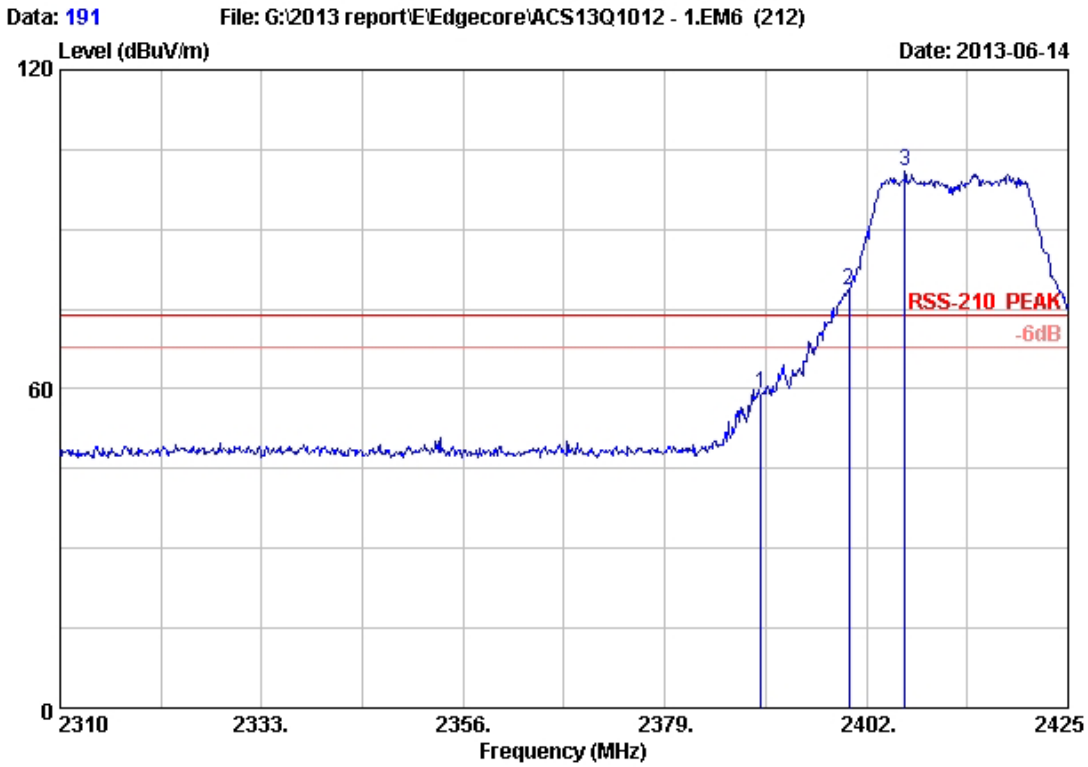
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 190
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	70.12	70.33	74.00	3.67	Peak
2	2400.000	29.44	7.43	36.62	89.59	89.84	74.00	-15.84	Peak
3	2406.600	29.45	7.43	36.62	110.82	111.08	74.00	-37.08	Peak

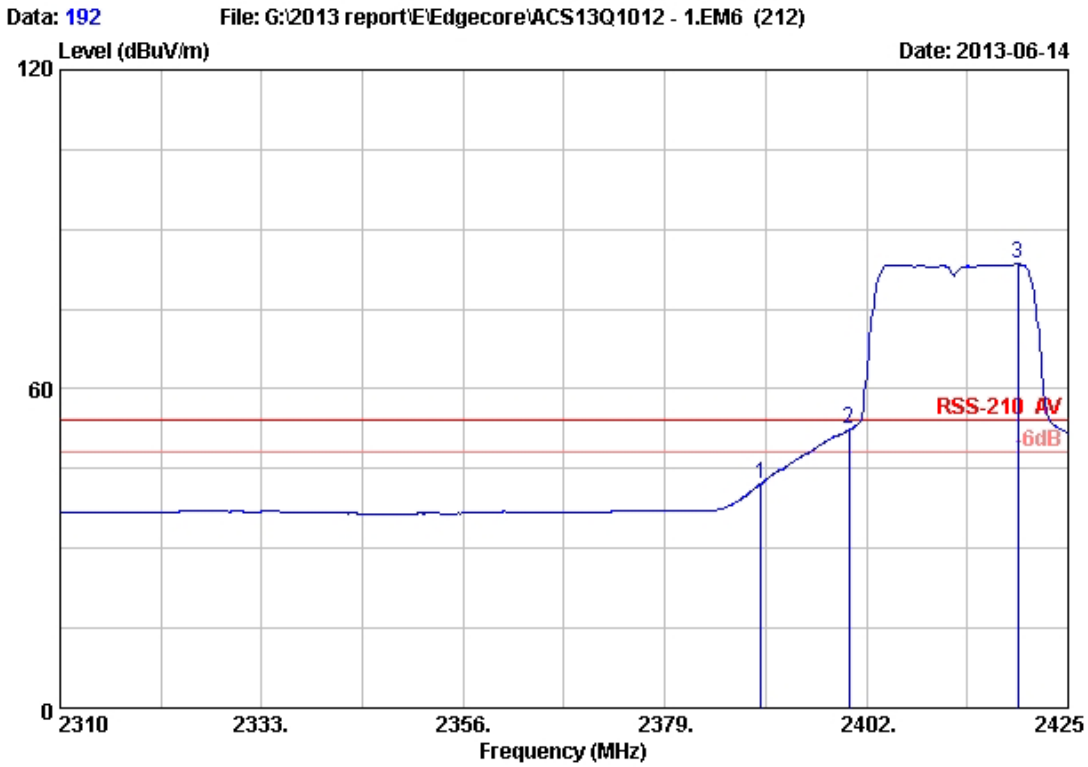
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 191
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	58.86	59.07	74.00	14.93	Peak
2	2400.000	29.44	7.43	36.62	78.35	78.60	74.00	-4.60	Peak
3	2406.370	29.45	7.43	36.62	100.61	100.87	74.00	-26.87	Peak

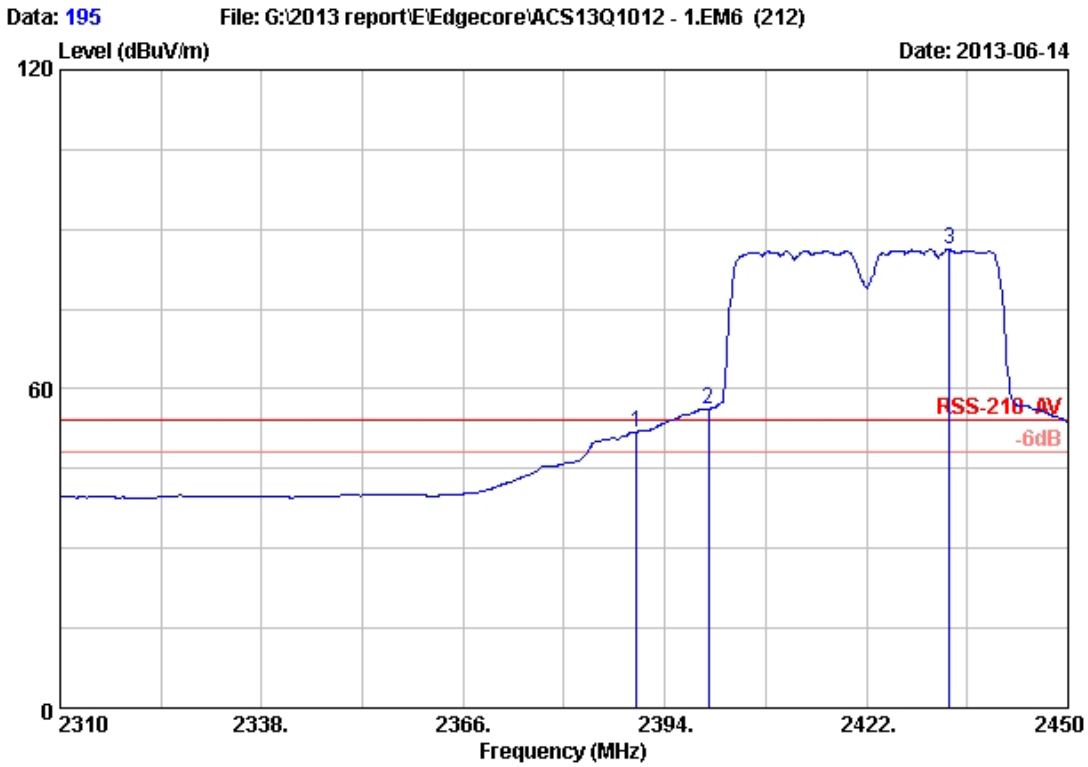
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 192
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
M/N : SMCWPCI-N5
:

	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	42.00	42.21	54.00	11.79	Average
2	2400.000	29.44	7.43	36.62	52.11	52.36	54.00	1.64	Average
3	2419.250	29.45	7.46	36.61	83.19	83.49	54.00	-29.49	Average

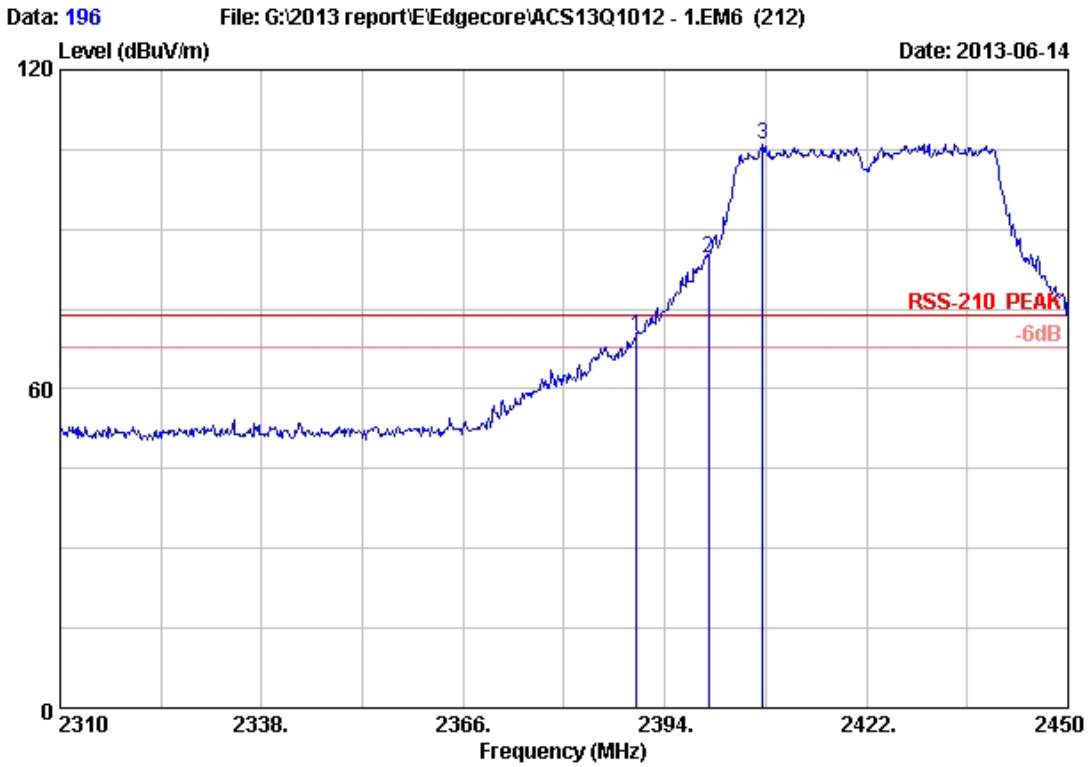
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 195
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	51.56	51.77	54.00	2.23	Average
2	2400.000	29.44	7.43	36.62	56.04	56.29	54.00	-2.29	Average
3	2433.480	29.46	7.46	36.61	85.92	86.23	54.00	-32.23	Average

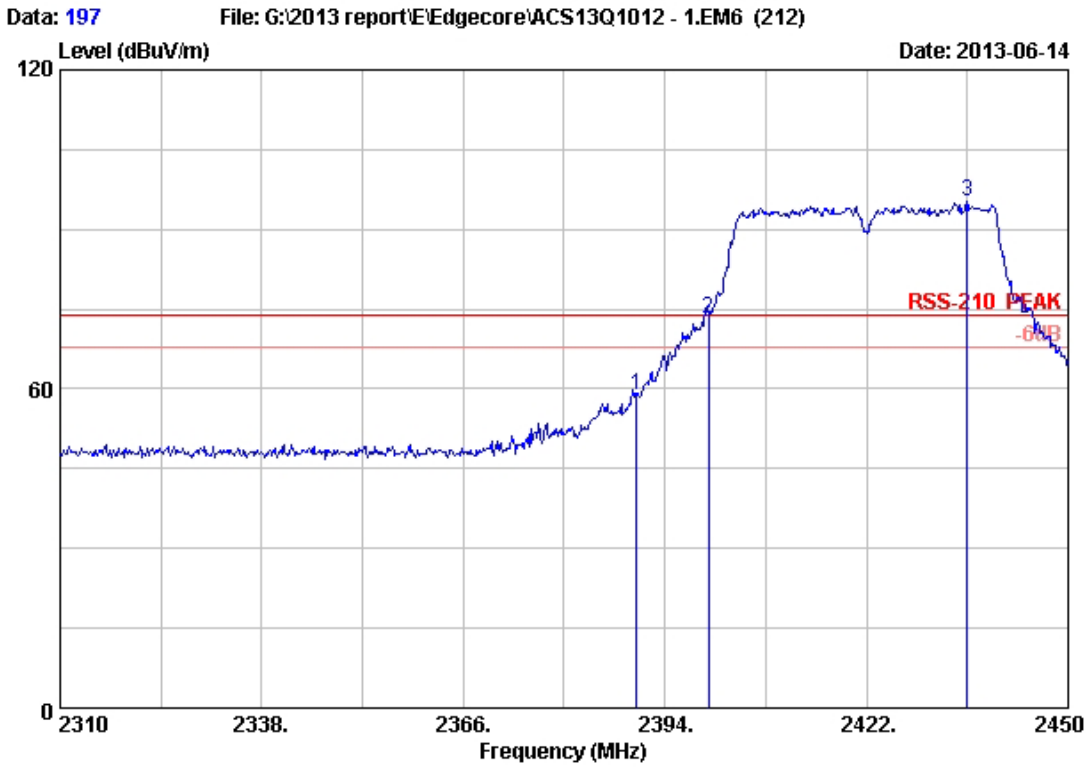
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 196
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	69.69	69.90	74.00	4.10	Peak
2	2400.000	29.44	7.43	36.62	84.31	84.56	74.00	-10.56	Peak
3	2407.580	29.45	7.43	36.62	105.68	105.94	74.00	-31.94	Peak

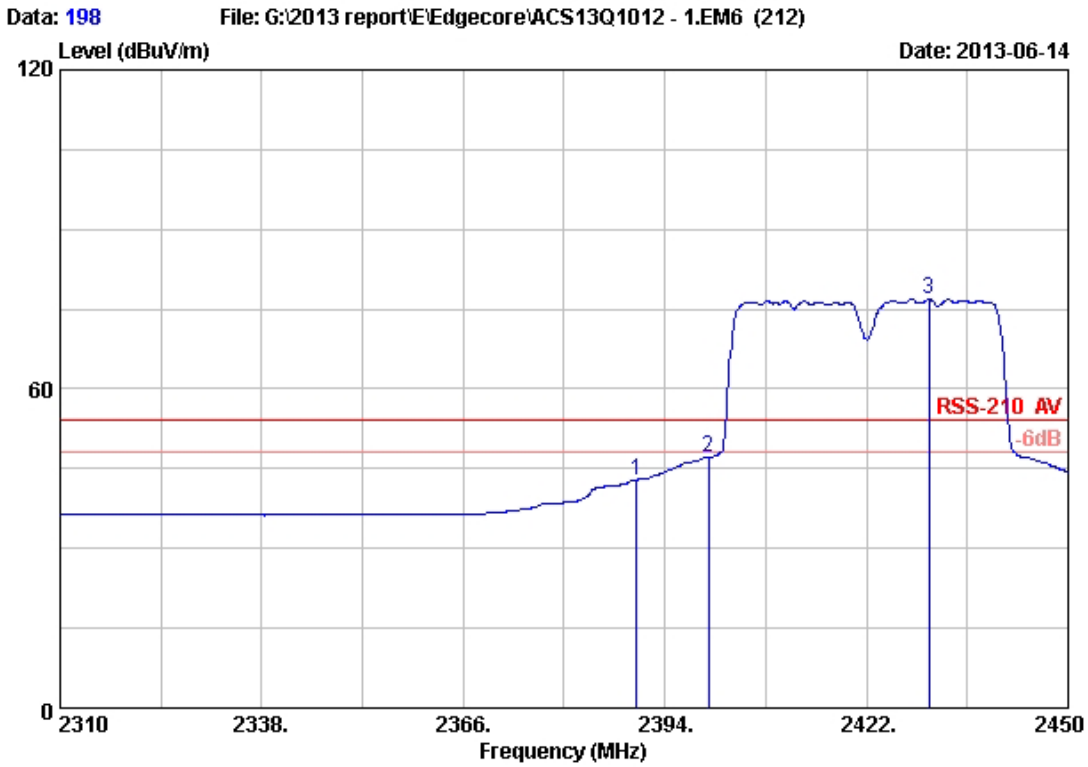
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 197
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	58.61	58.82	74.00	15.18	Peak
2	2400.000	29.44	7.43	36.62	73.09	73.34	74.00	0.66	Peak
3	2436.000	29.46	7.46	36.61	95.02	95.33	74.00	-21.33	Peak

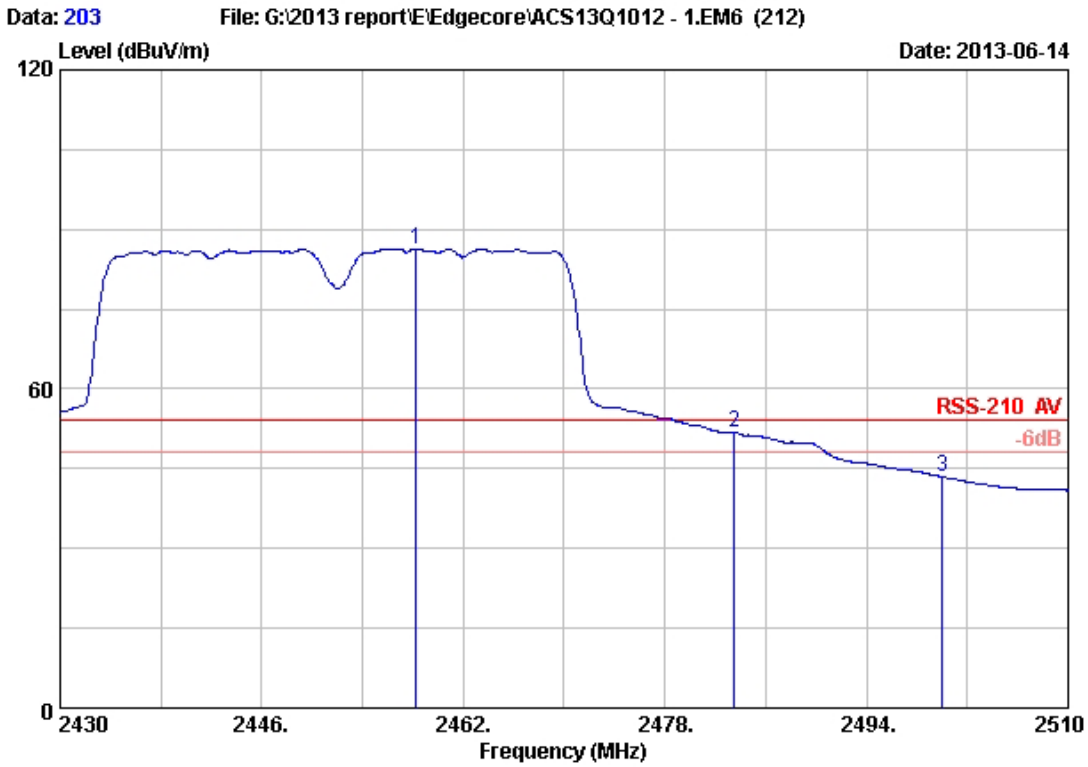
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 198
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH3 2422MHz Tx
M/N : SMCWPCI-N5
:

	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	42.63	42.84	54.00	11.16	Average
2	2400.000	29.44	7.43	36.62	46.84	47.09	54.00	6.91	Average
3	2430.680	29.46	7.46	36.61	76.59	76.90	54.00	-22.90	Average

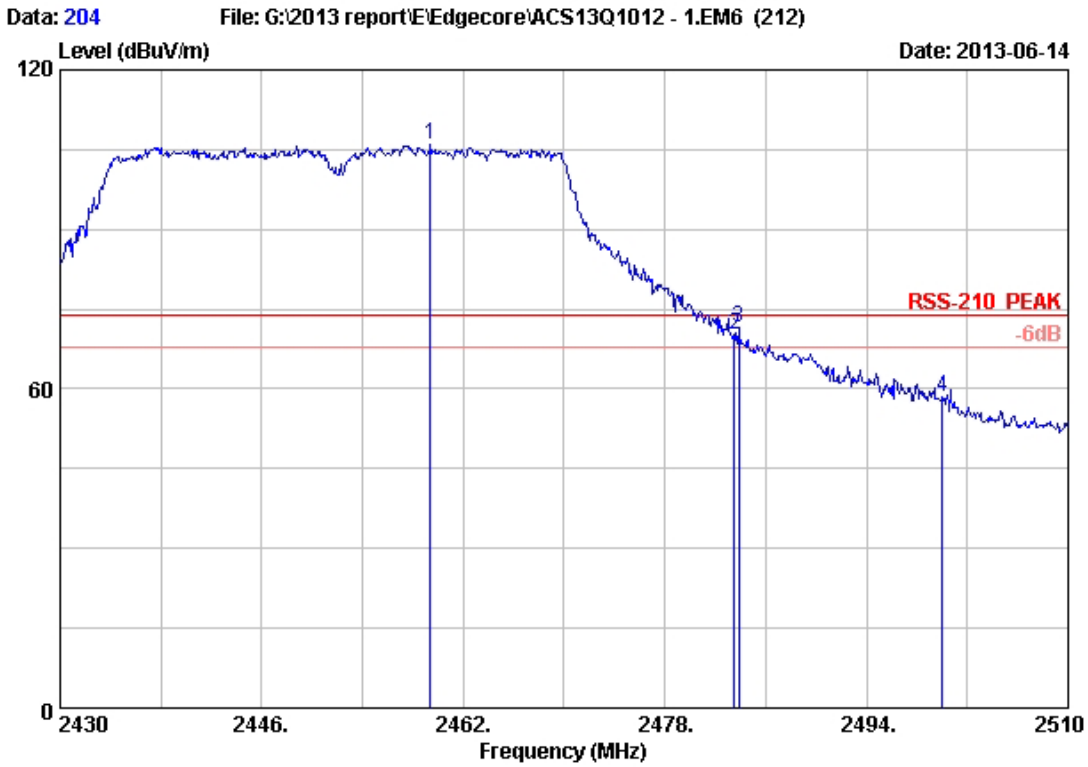
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 203
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2458.240	29.48	7.50	36.61	86.03	86.40	54.00	-32.40	Average
2	2483.500	29.49	7.58	36.60	51.32	51.79	54.00	2.21	Average
3	2500.000	29.50	7.62	36.60	42.93	43.45	54.00	10.55	Average

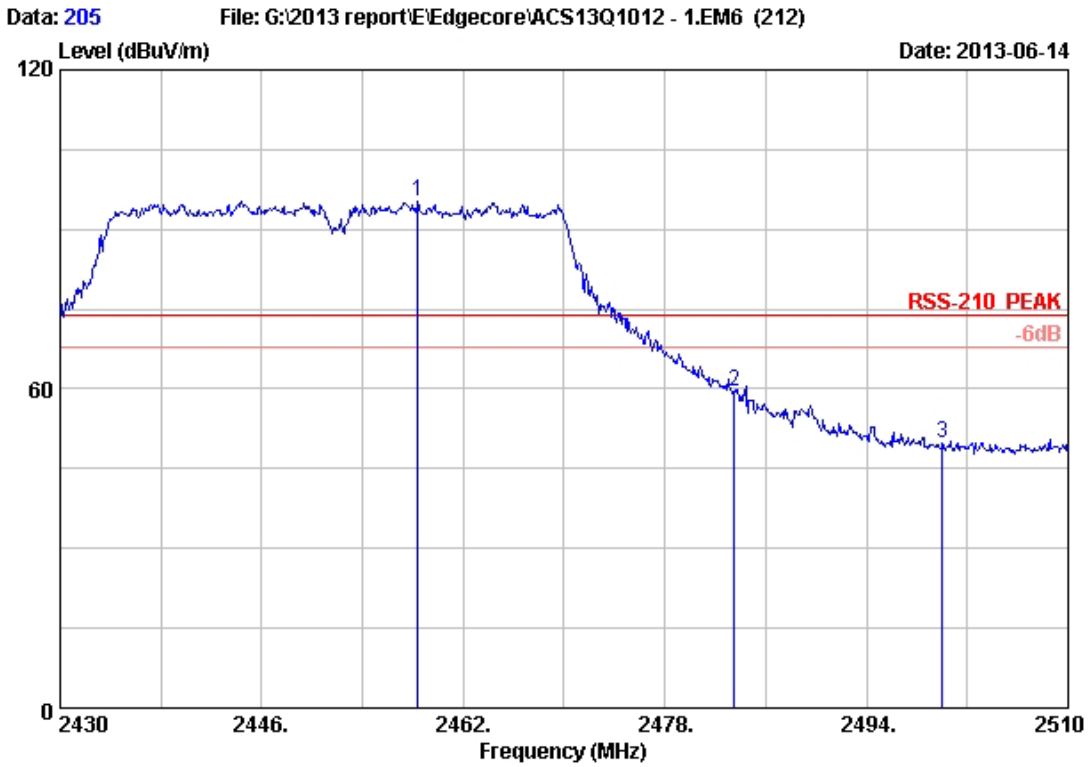
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 204
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2459.360	29.48	7.54	36.61	105.45	105.86	74.00	-31.86	Peak
2	2483.500	29.49	7.58	36.60	69.87	70.34	74.00	3.66	Peak
3	2483.840	29.49	7.58	36.60	70.98	71.45	74.00	2.55	Peak
4	2500.000	29.50	7.62	36.60	57.84	58.36	74.00	15.64	Peak

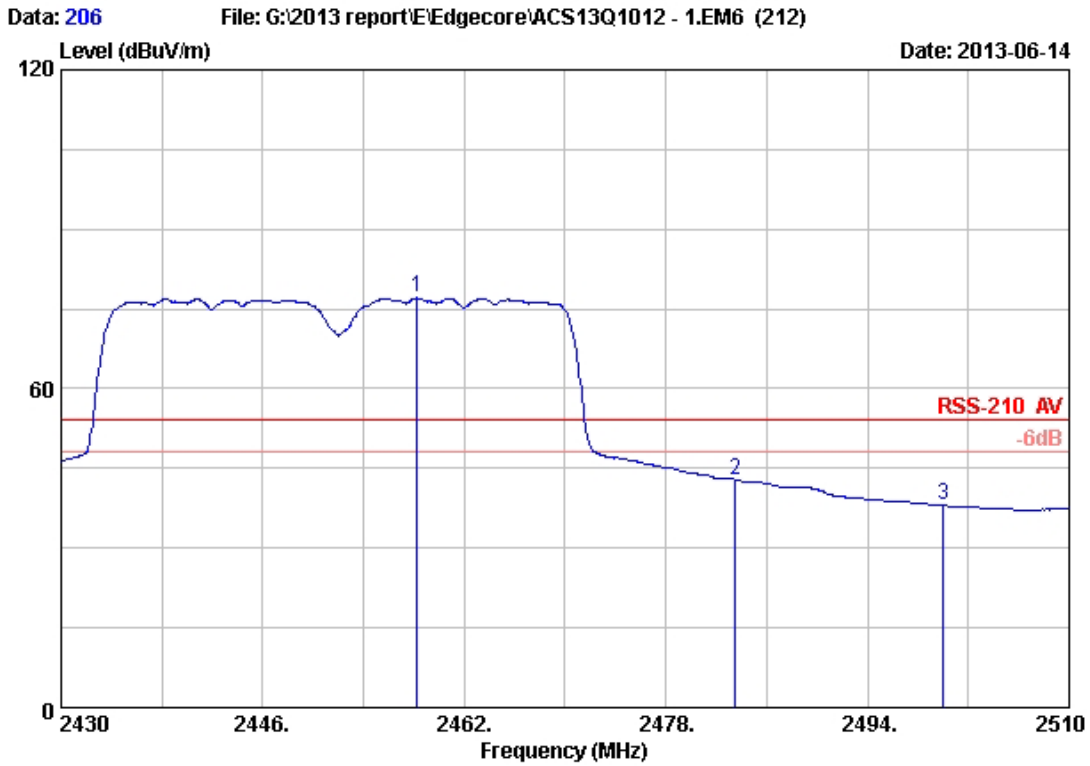
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 205
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2458.400	29.48	7.50	36.61	94.86	95.23	74.00	-21.23	Peak
2	2483.500	29.49	7.58	36.60	59.16	59.63	74.00	14.37	Peak
3	2500.000	29.50	7.62	36.60	49.12	49.64	74.00	24.36	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. : 206
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : RSS-210 AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 2.4GHz 300Mbps Wireless PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx
M/N : SMCWPCI-N5
:

	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	2458.240	29.48	7.50	36.61	76.68	77.05	54.00	-23.05	Average
2	2483.500	29.49	7.58	36.60	42.44	42.91	54.00	11.09	Average
3	2500.000	29.50	7.62	36.60	37.46	37.98	54.00	16.02	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.

7. 6dB Bandwidth Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Antenna	EMCO	3115	9607-4877	May.08, 13	1Year
3.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 13	1 Year

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

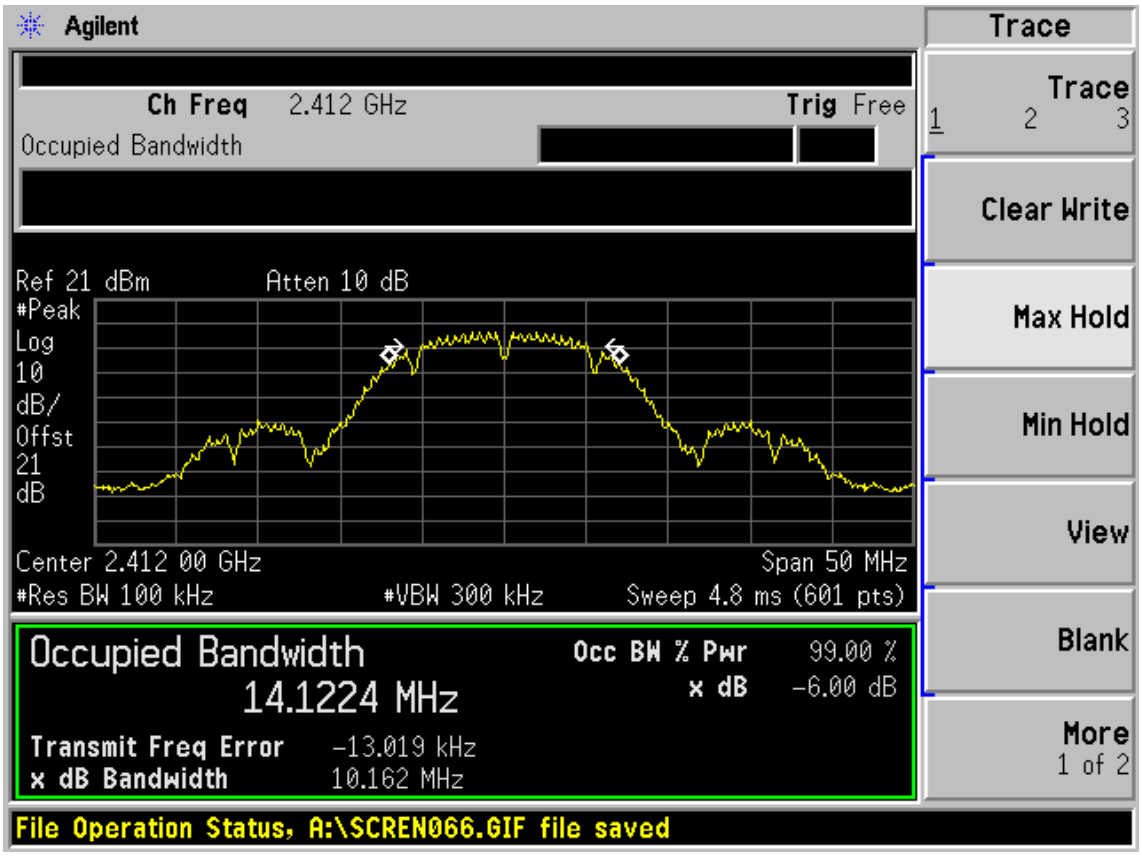
EUT:2.4GHz 300Mbps Wireless PCI Adapter		
M/N: SMCWPCI-N5		
Test date: 2013-06-12	Pressure: 101.1 kpa	Humidity: 53.2%
Tested by: Leo-Li	Test site: RF Site	Temperature：25.1 ℃

Cable loss: 1 dB		Attenuator loss: 20 dB		Antenna Gain: 2 dBi
Test Mode	CH	6dB bandwidth（MHz）		Limit (KHz)
		Chain0	Chain1	
11b	CH1	10.162	10.151	>500
	CH6	10.156	10.160	>500
	CH11	10.159	10.173	>500
11g	CH1	16.457	16.463	>500
	CH6	16.451	16.471	>500
	CH11	16.465	16.457	>500
11n HT20	CH1	17.658	17.644	>500
	CH6	17.652	17.634	>500
	CH11	17.673	17.669	>500
11n HT40	CH1	36.722	36.708	>500
	CH4	36.760	36.727	>500
	CH7	36.699	36.682	>500
Conclusion：PASS				

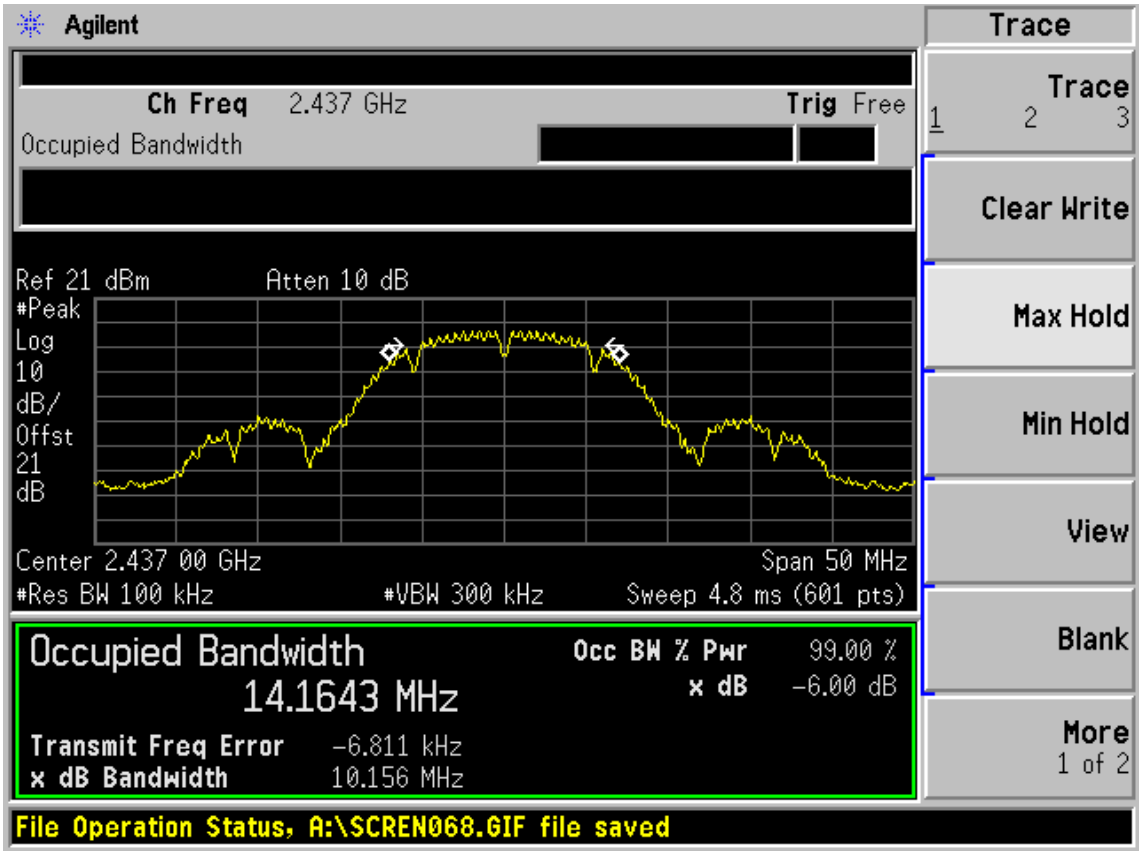
Chain 0:

Test Mode: IEEE 802.11b TX

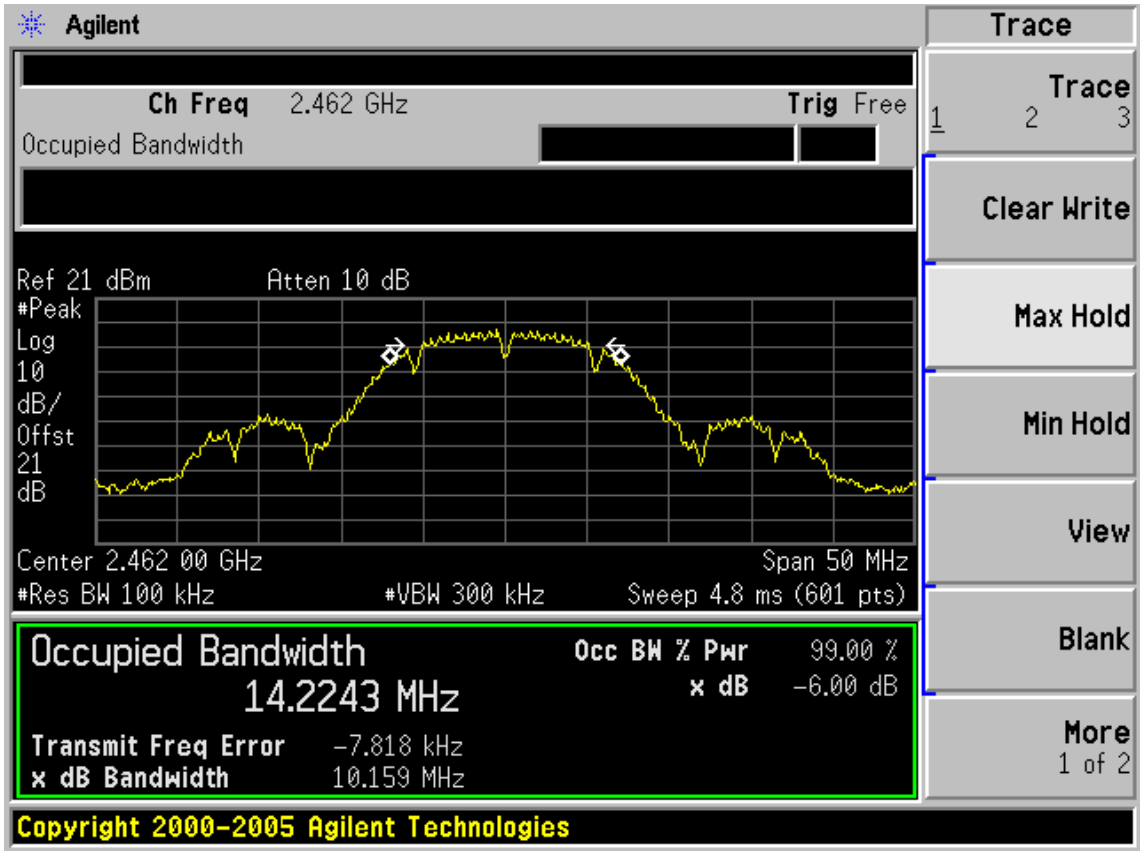
Test CH1: 2412MHz



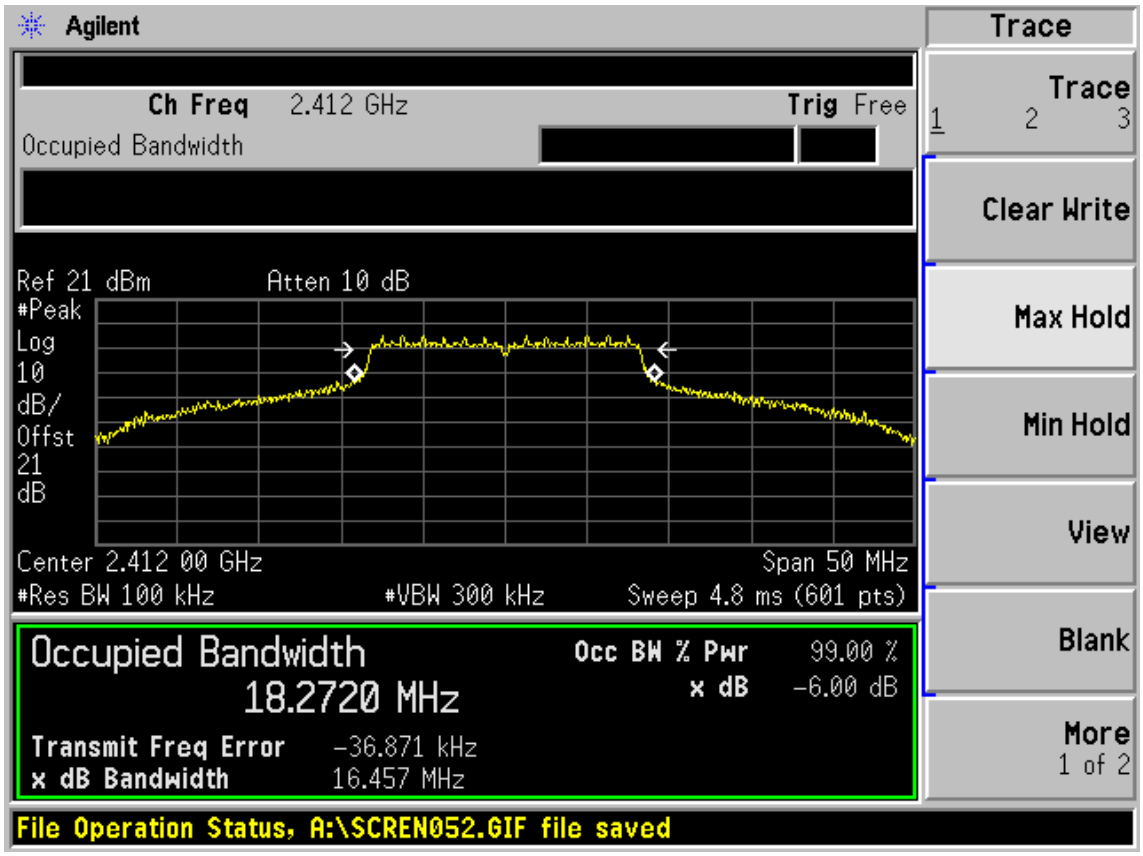
Test CH6: 2437MHz



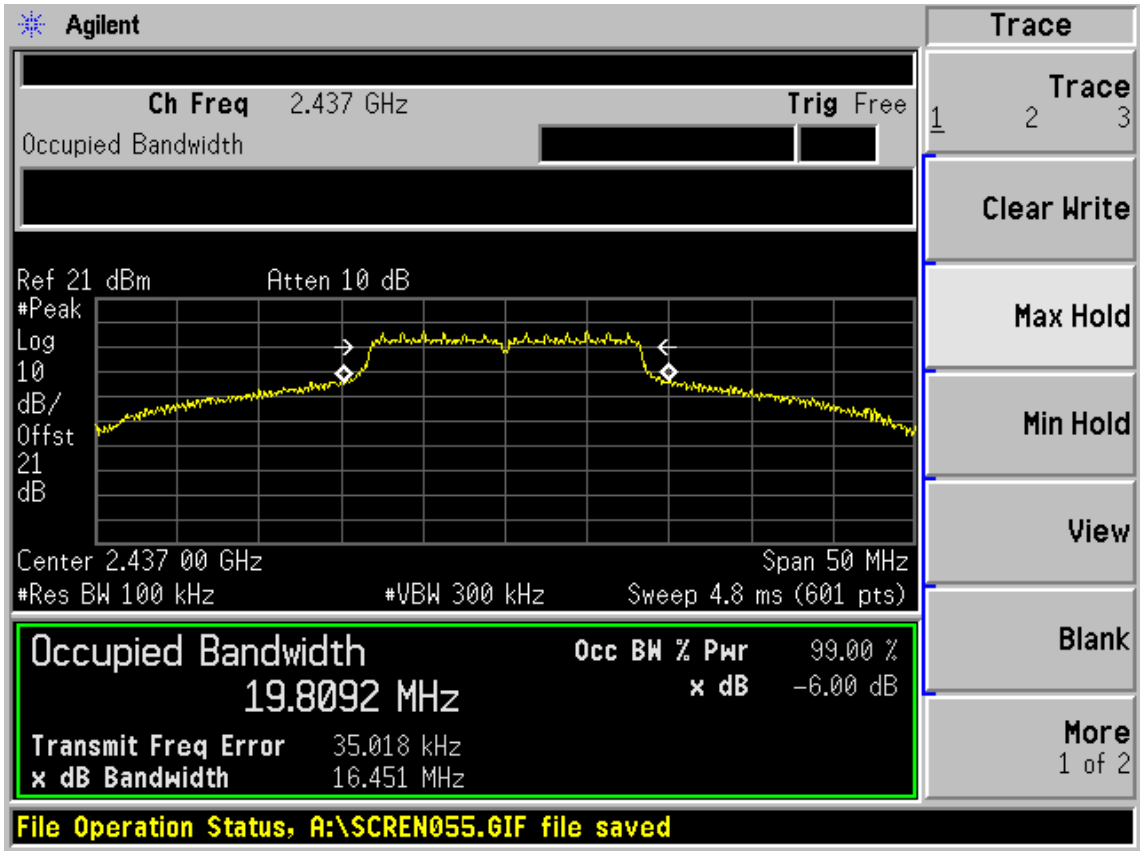
Test CH11: 2462MHz



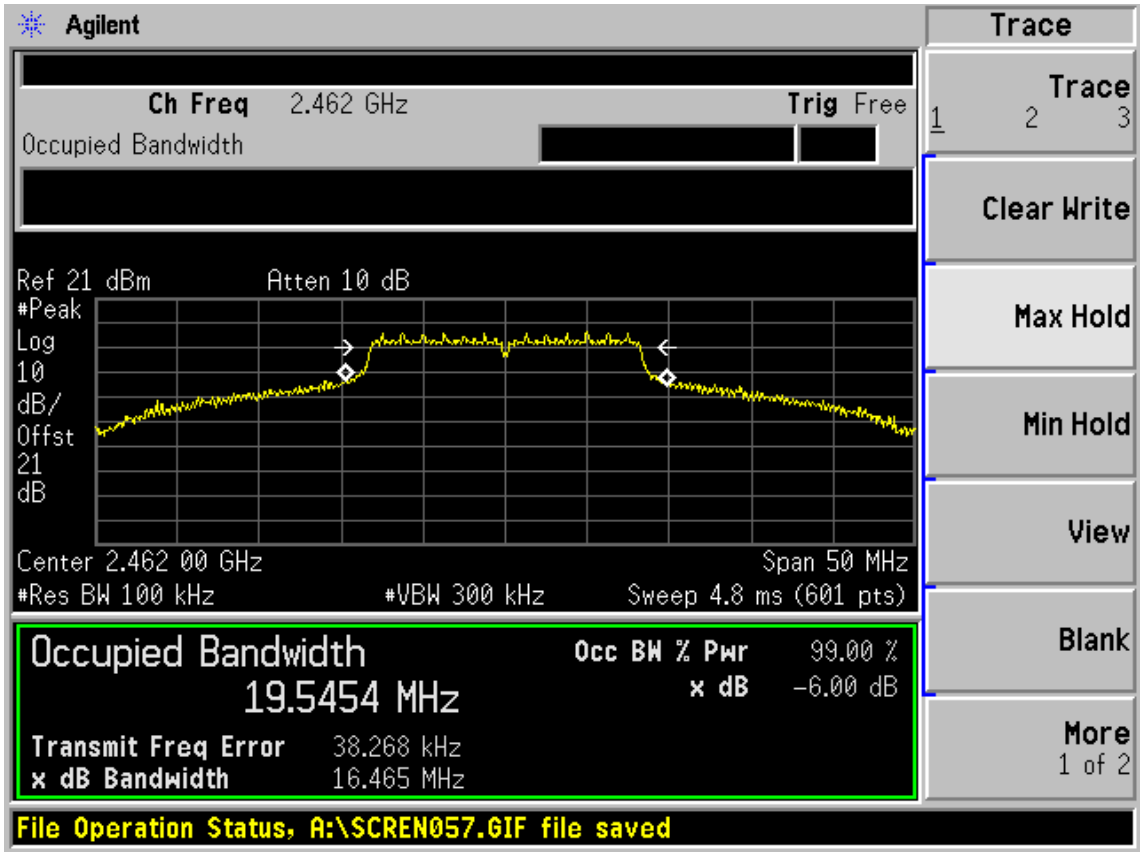
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



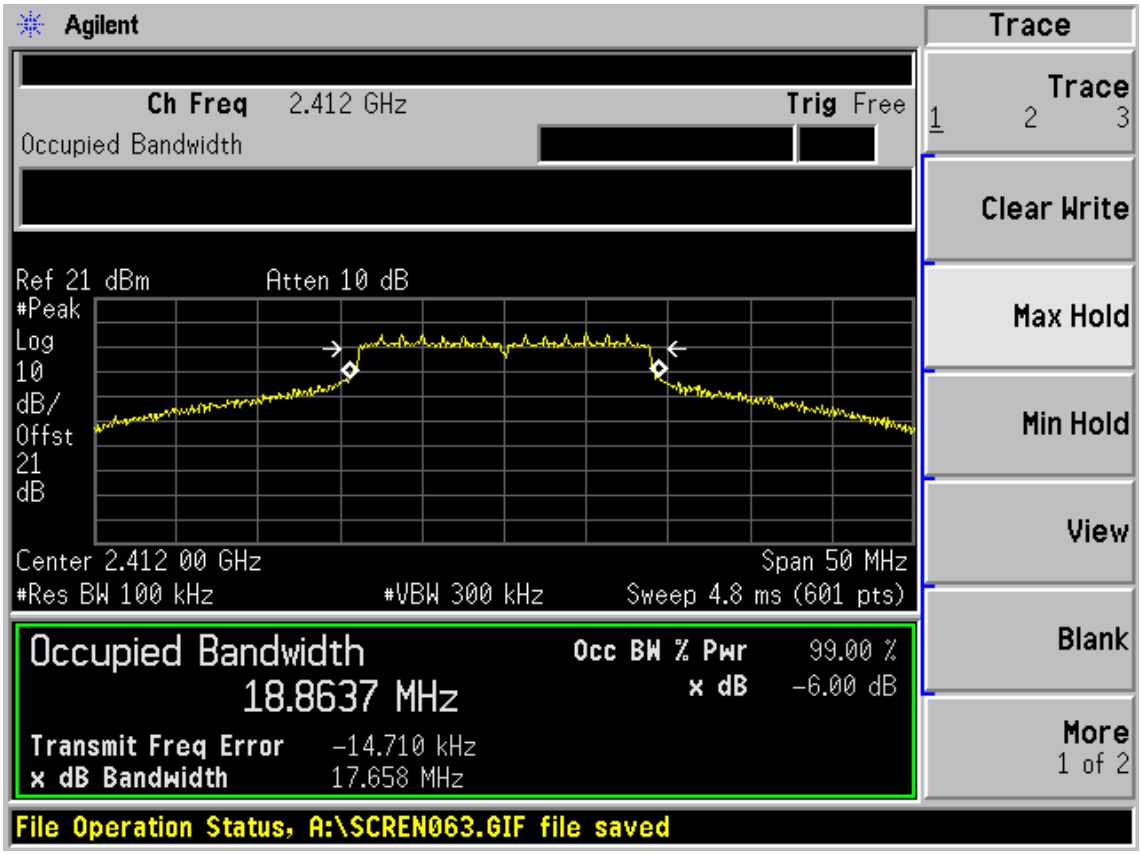
Test CH6: 2437MHz



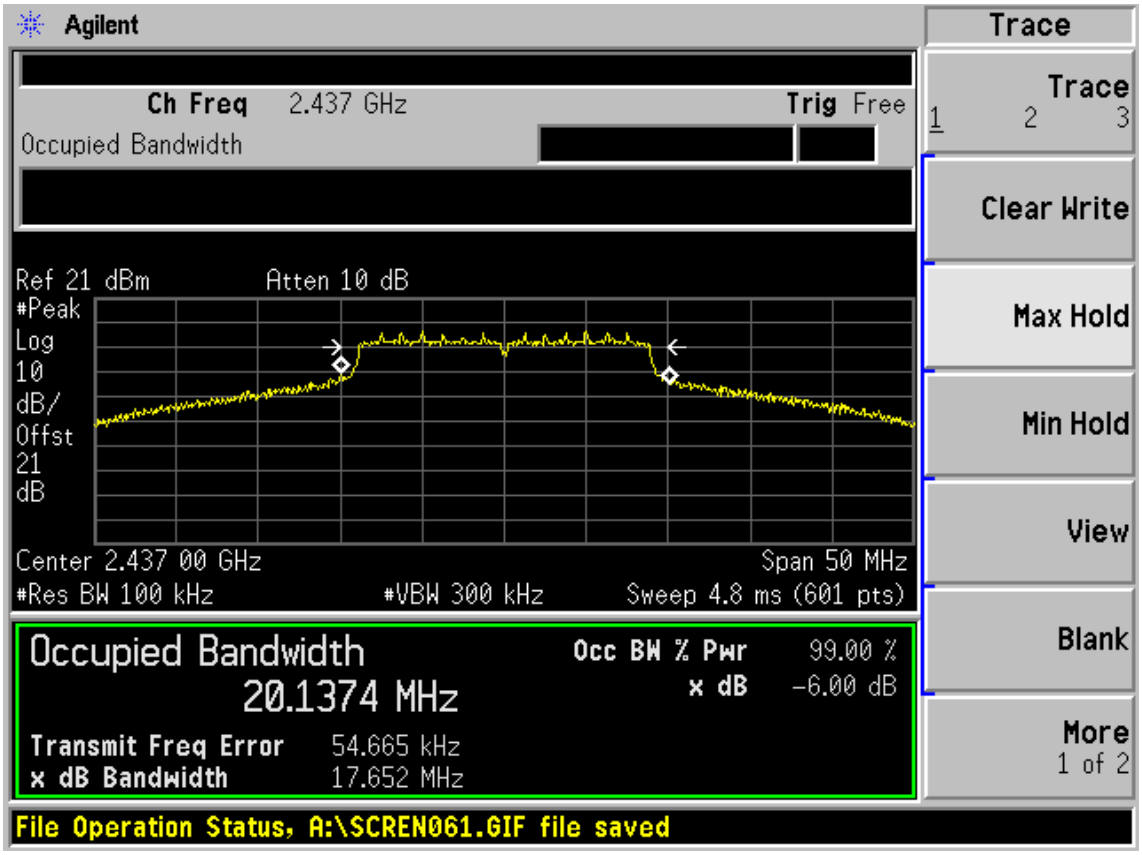
Test CH11: 2462MHz



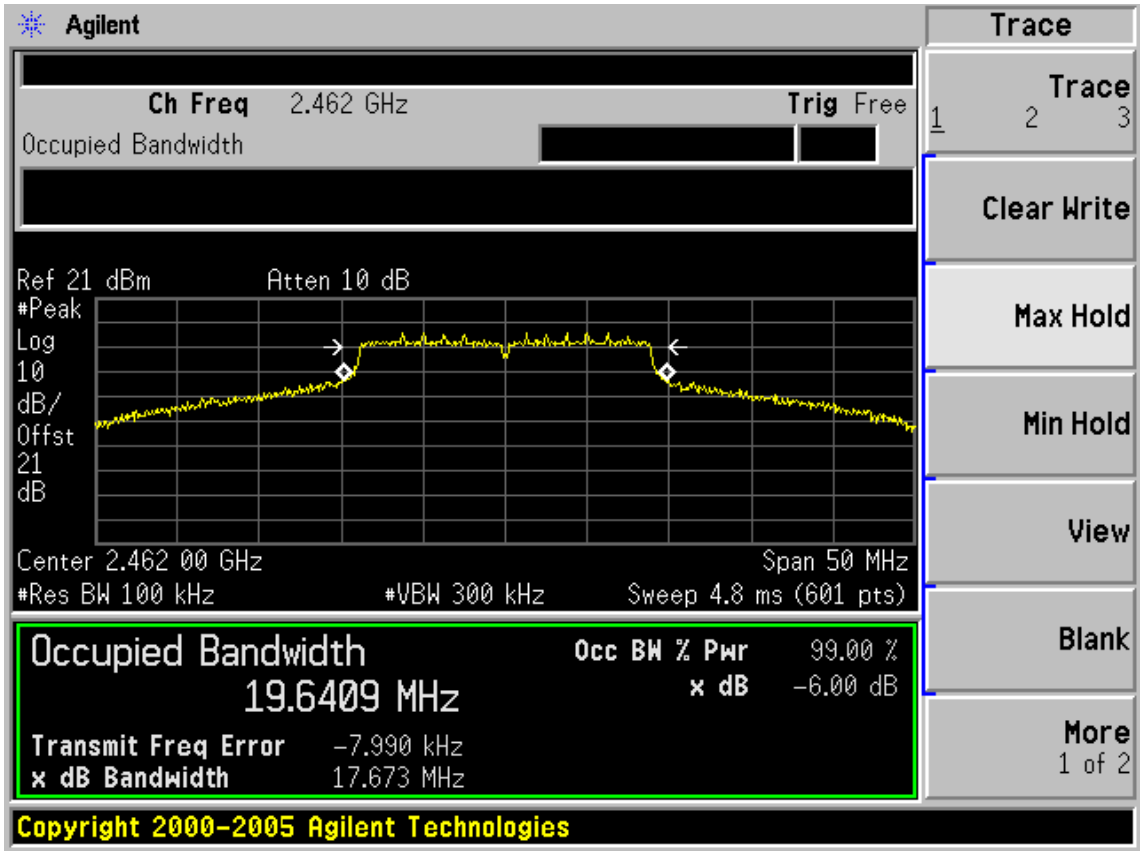
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



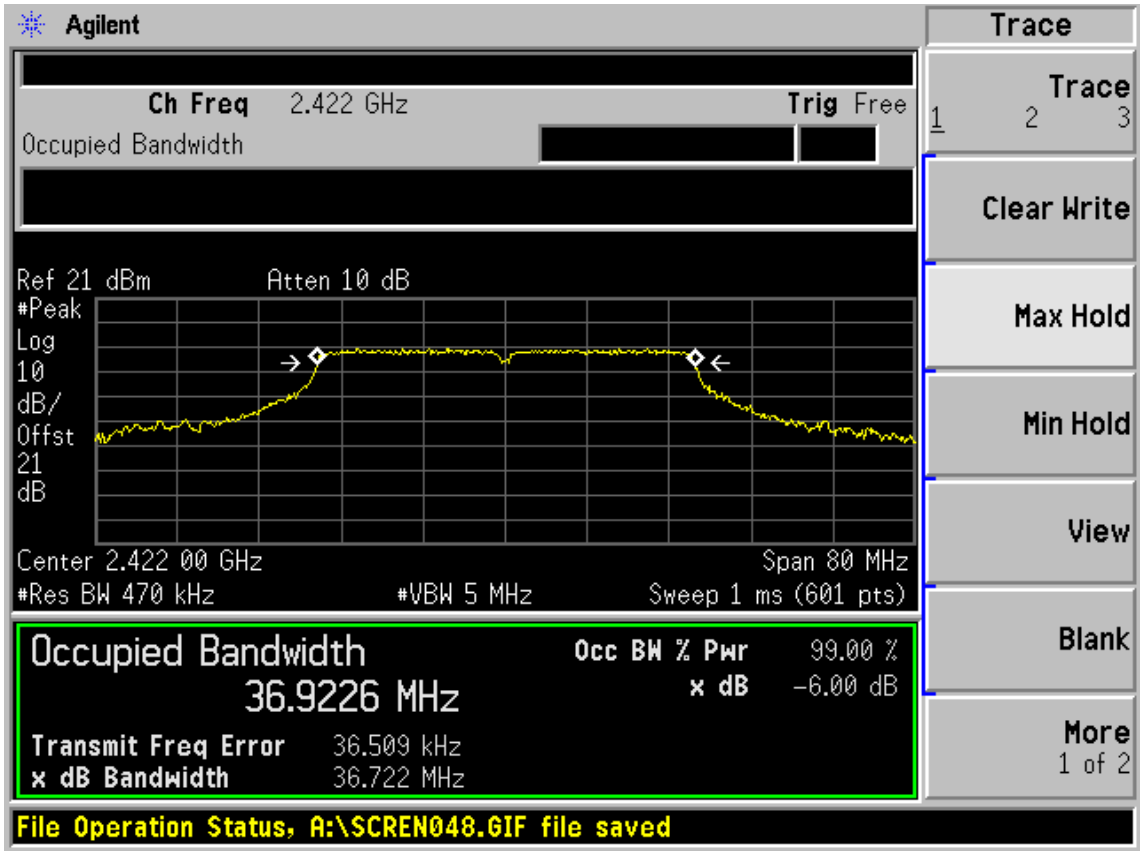
Test CH6: 2437MHz



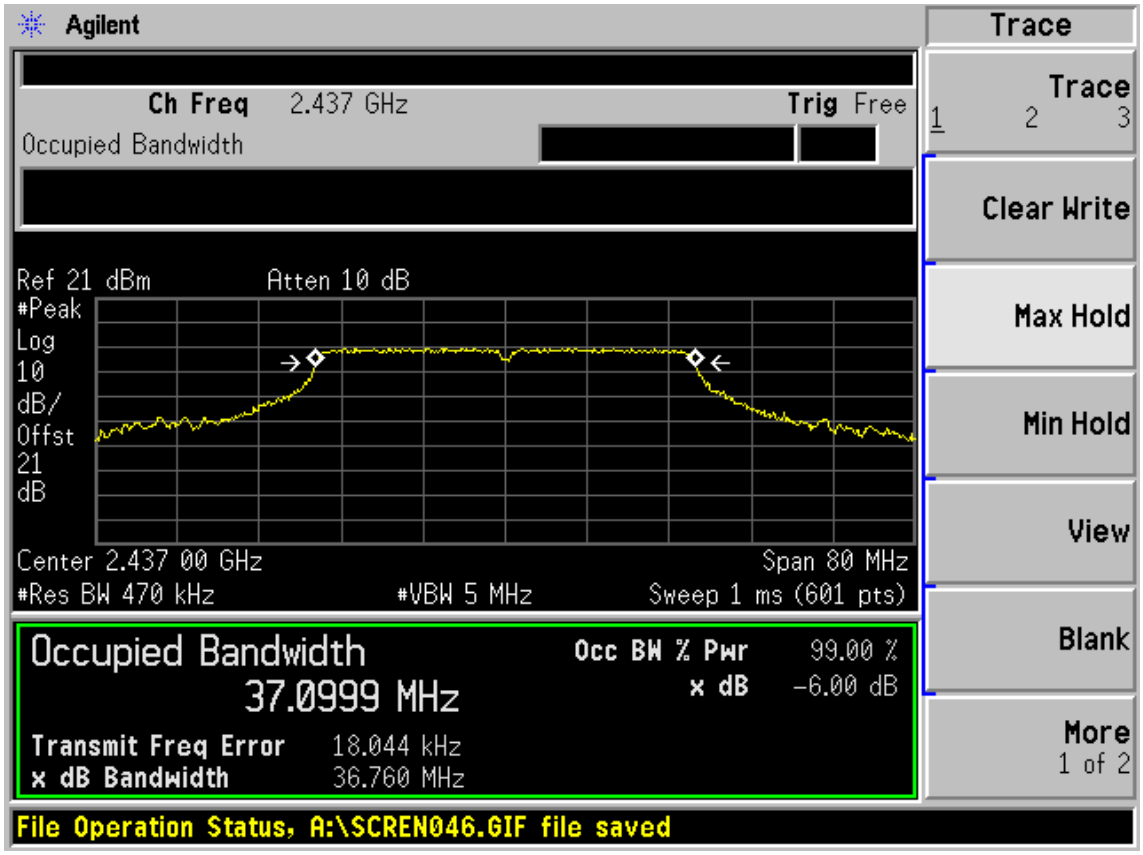
Test CH11: 2462MHz



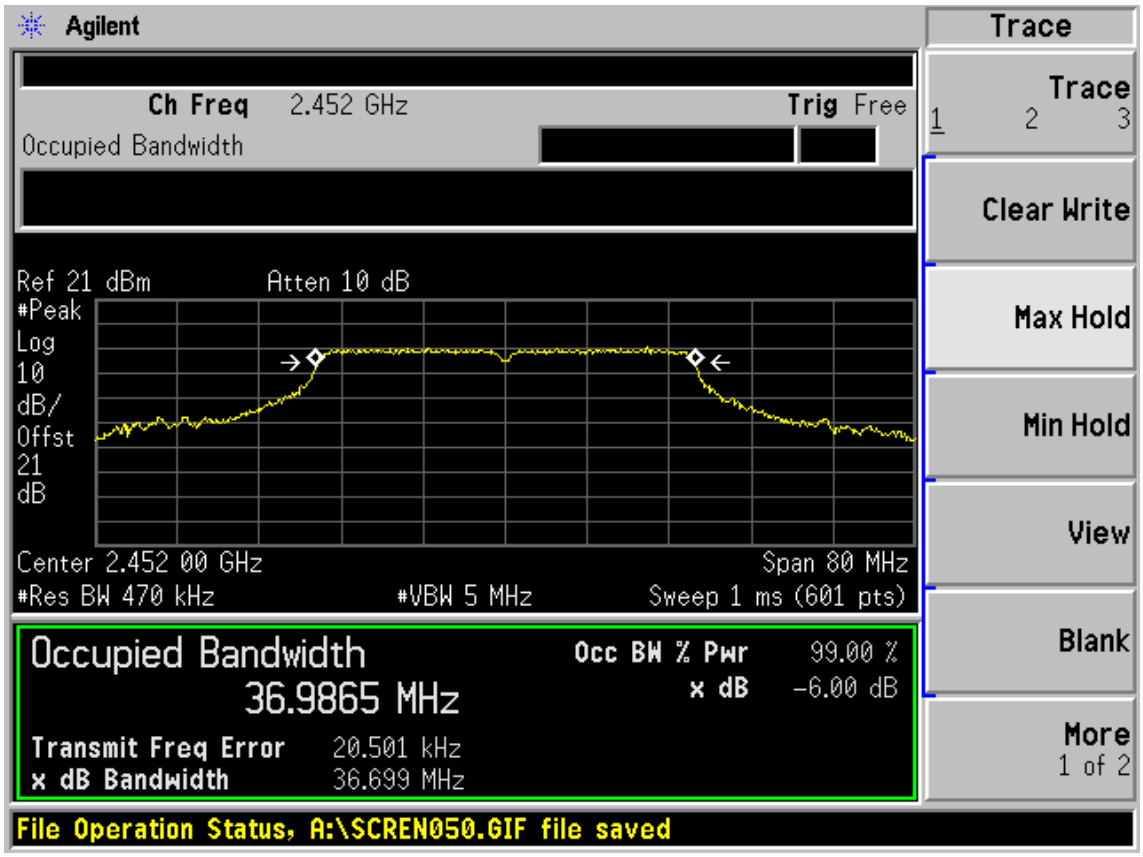
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



Test CH4: 2437MHz



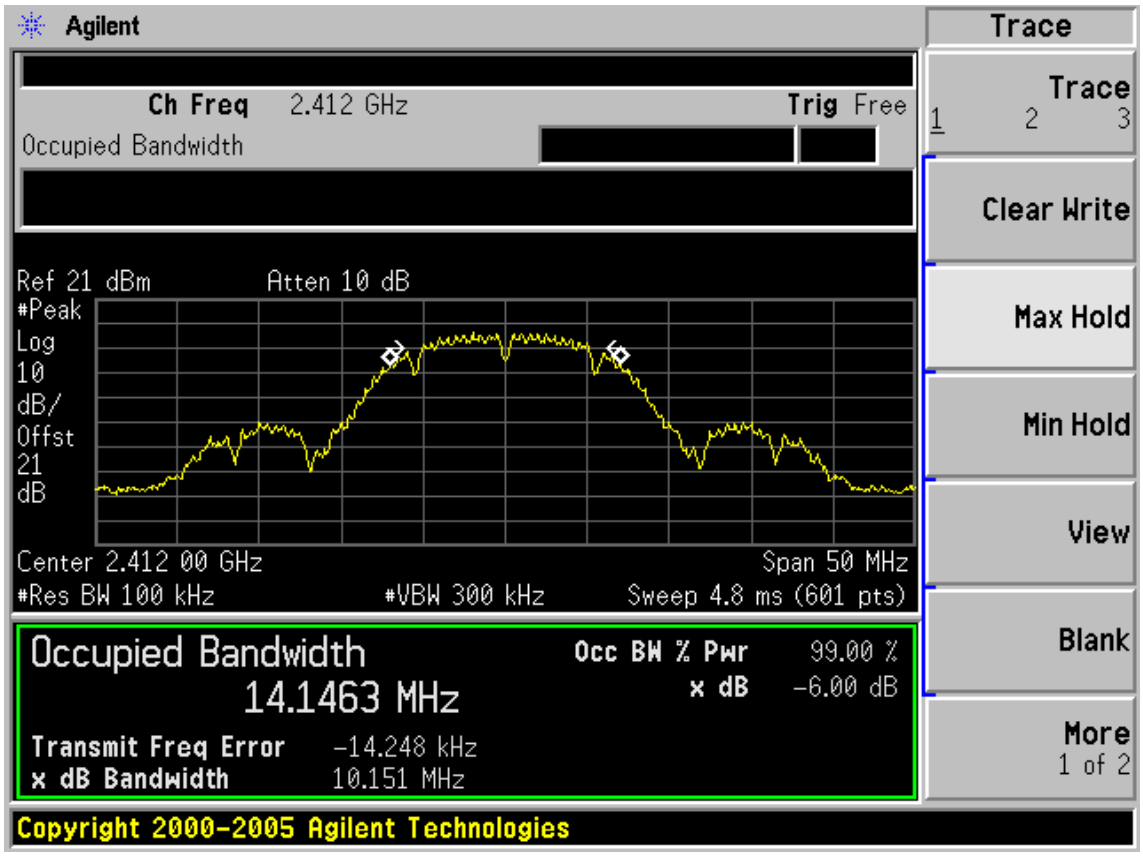
Test CH7: 2452MHz



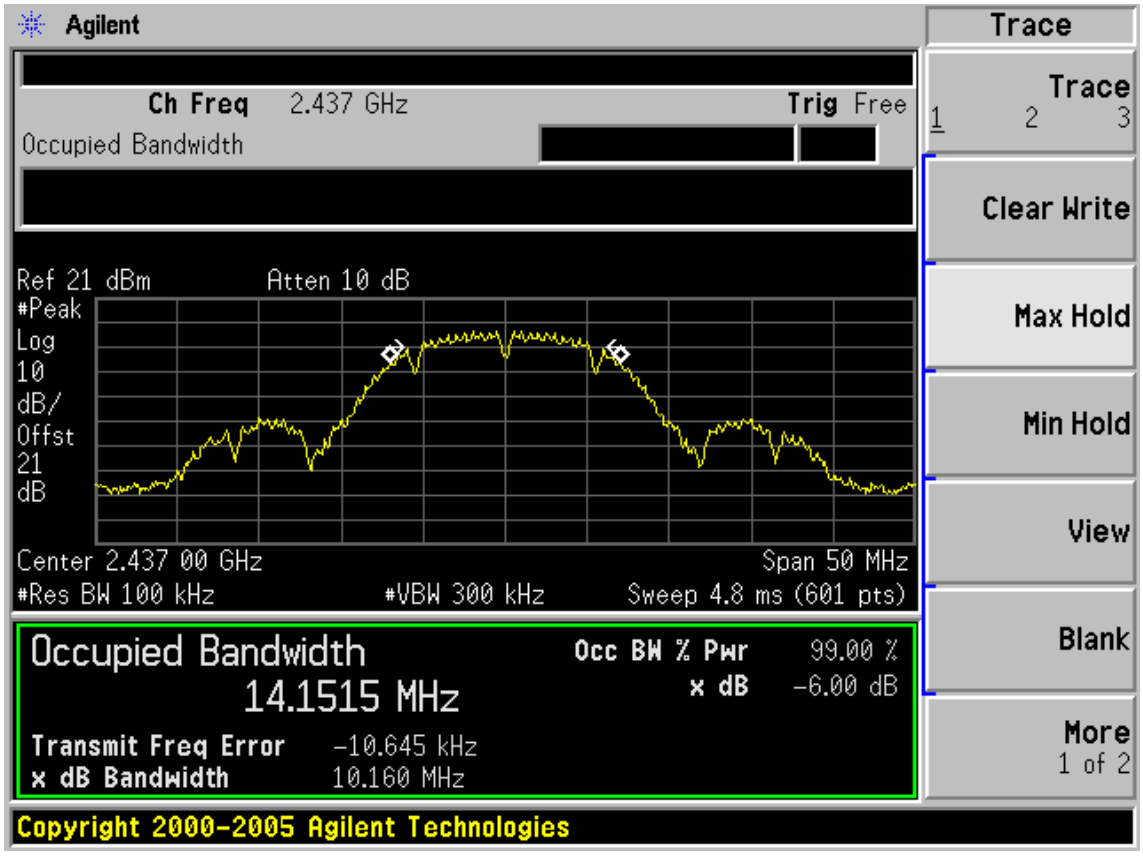
Chain 1:

Test Mode: IEEE 802.11b TX

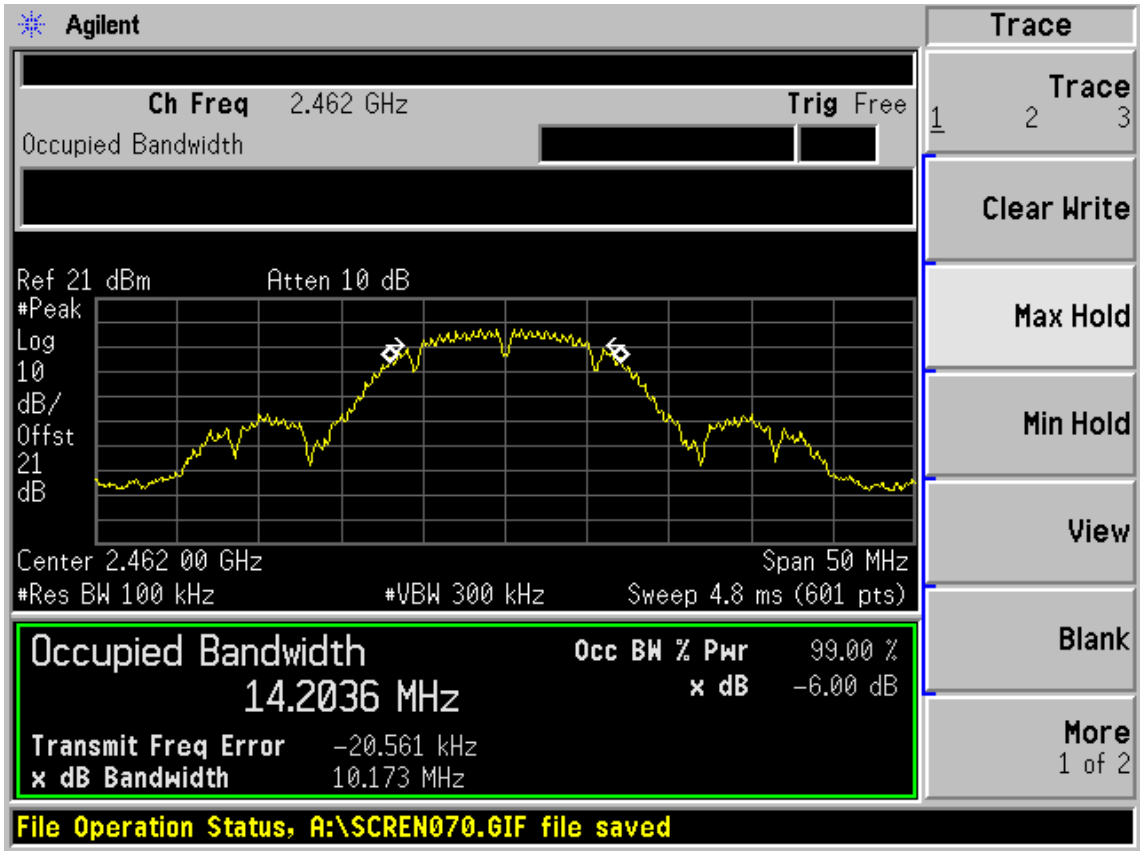
Test CH1: 2412MHz



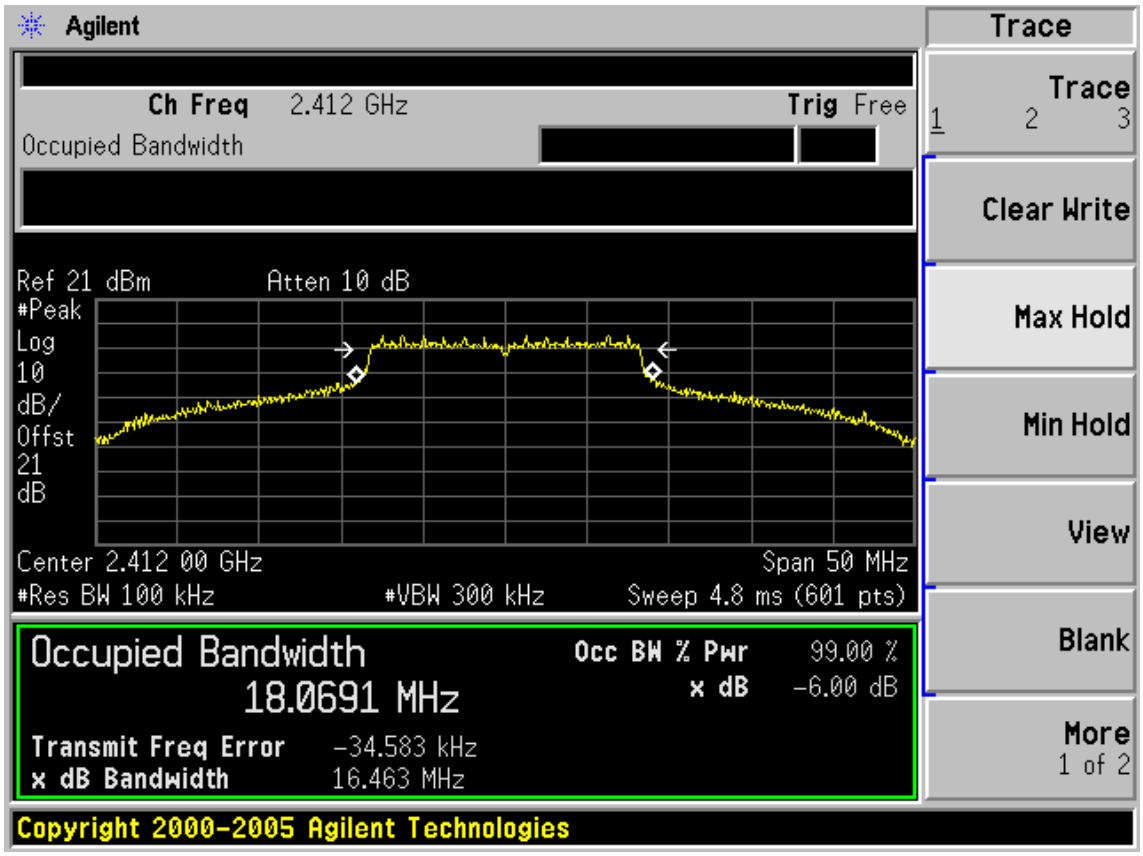
Test CH6: 2437MHz



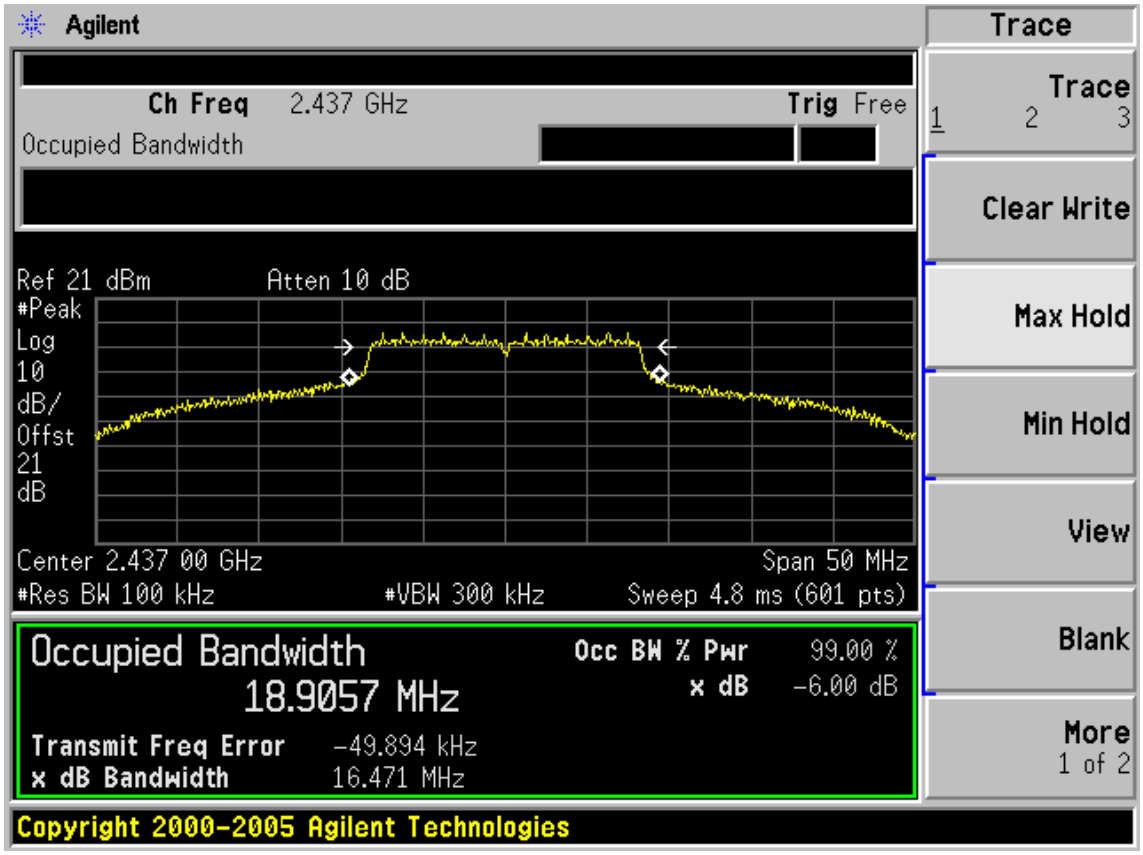
Test CH11: 2462MHz



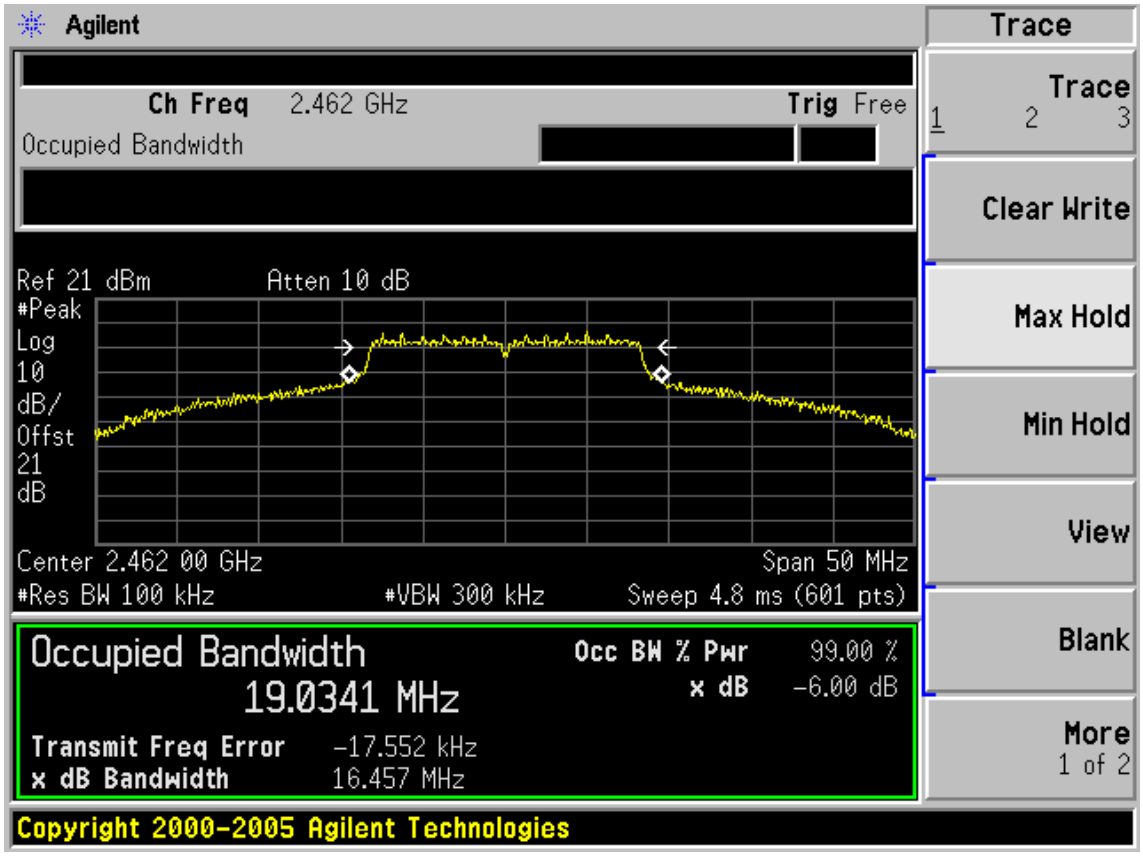
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



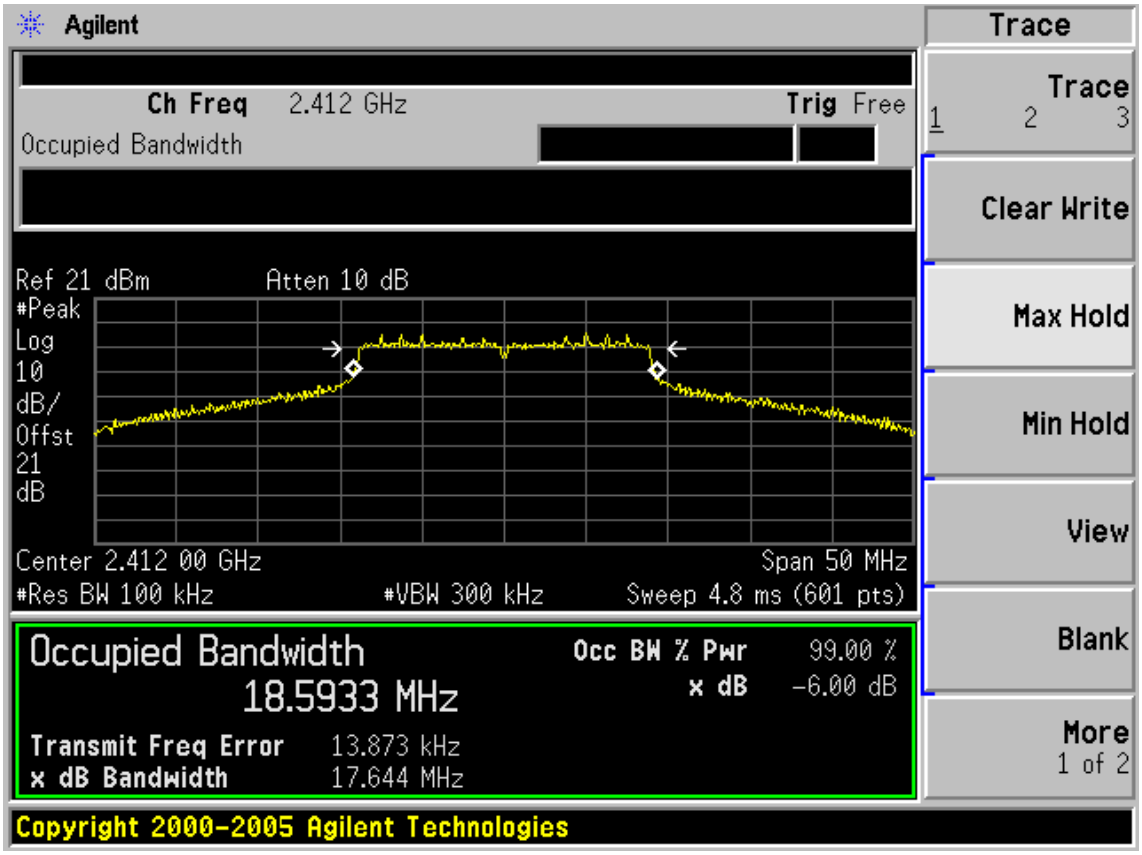
Test CH6: 2437MHz



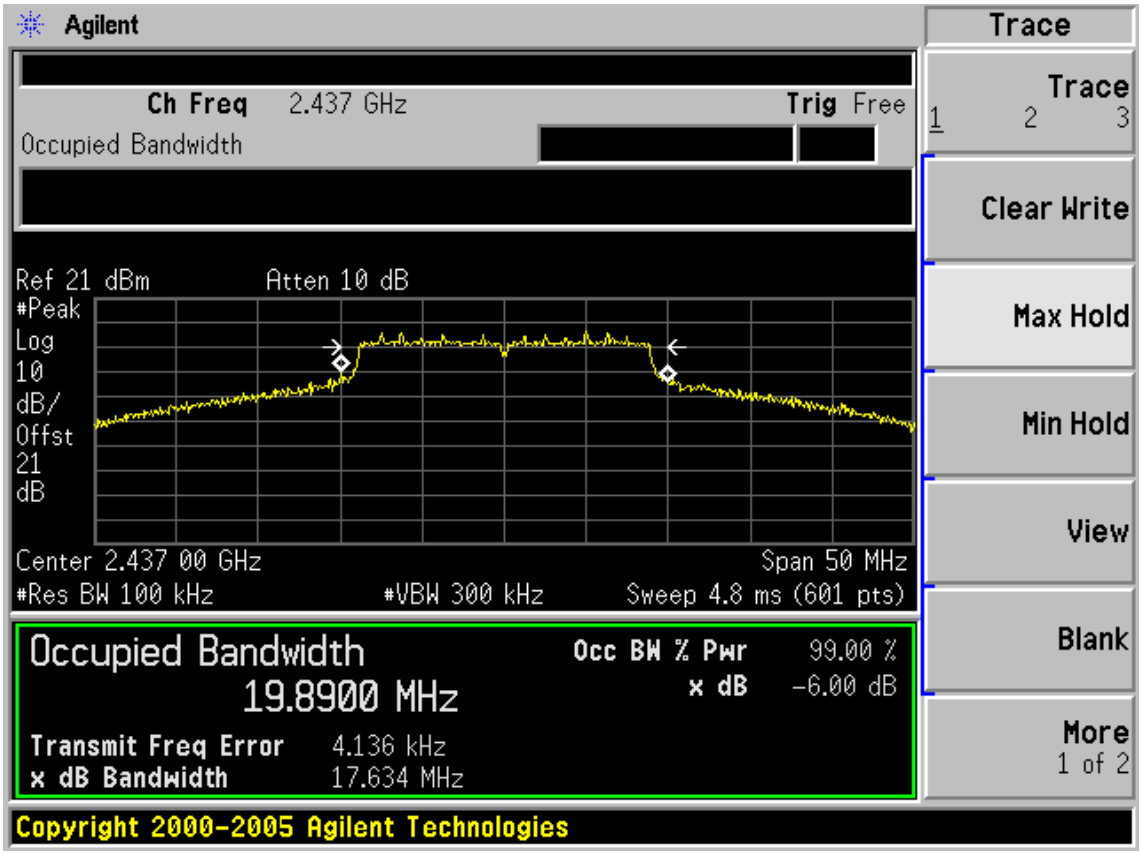
Test CH11: 2462MHz



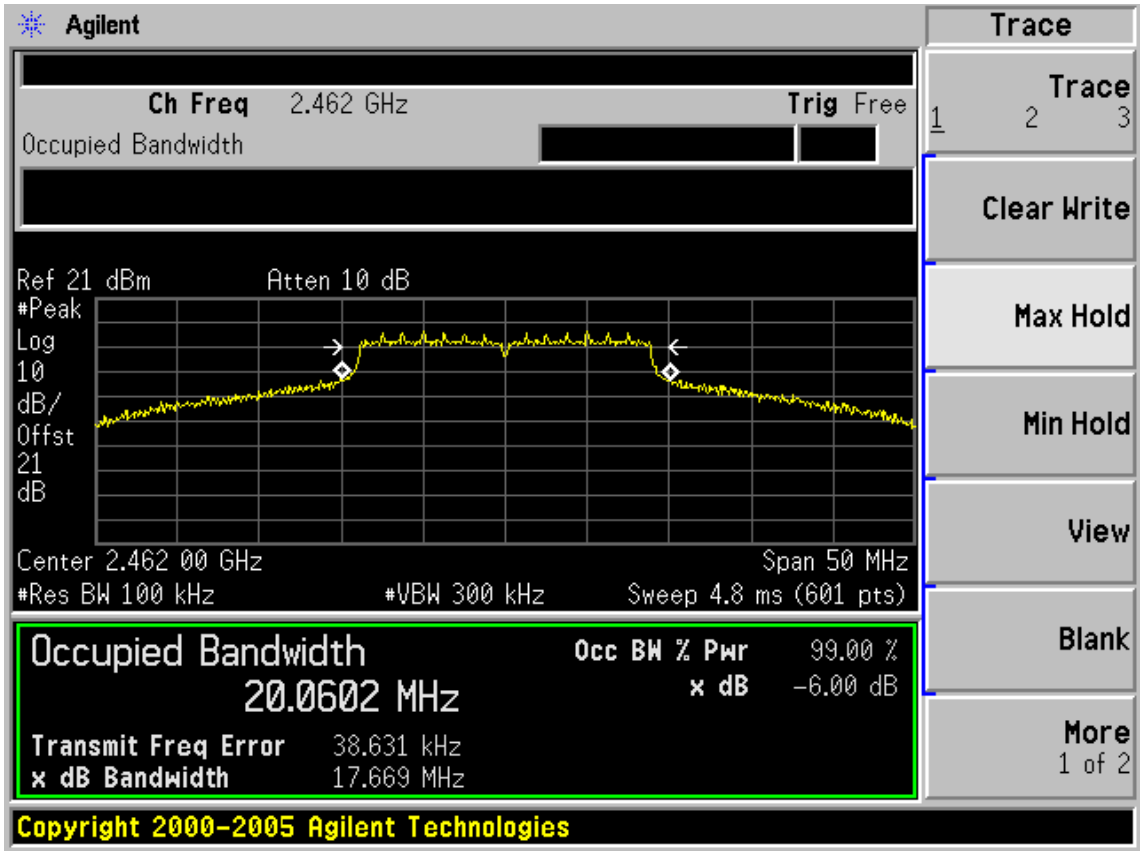
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



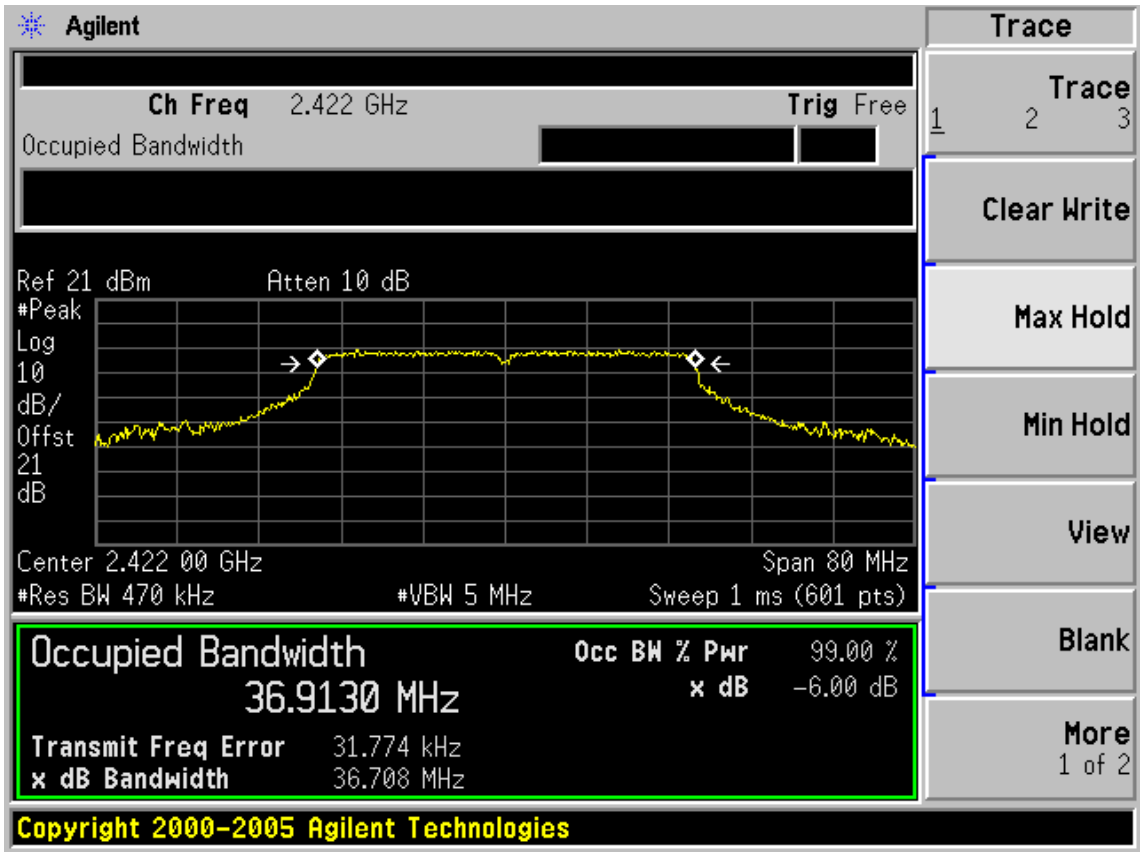
Test CH6: 2437MHz



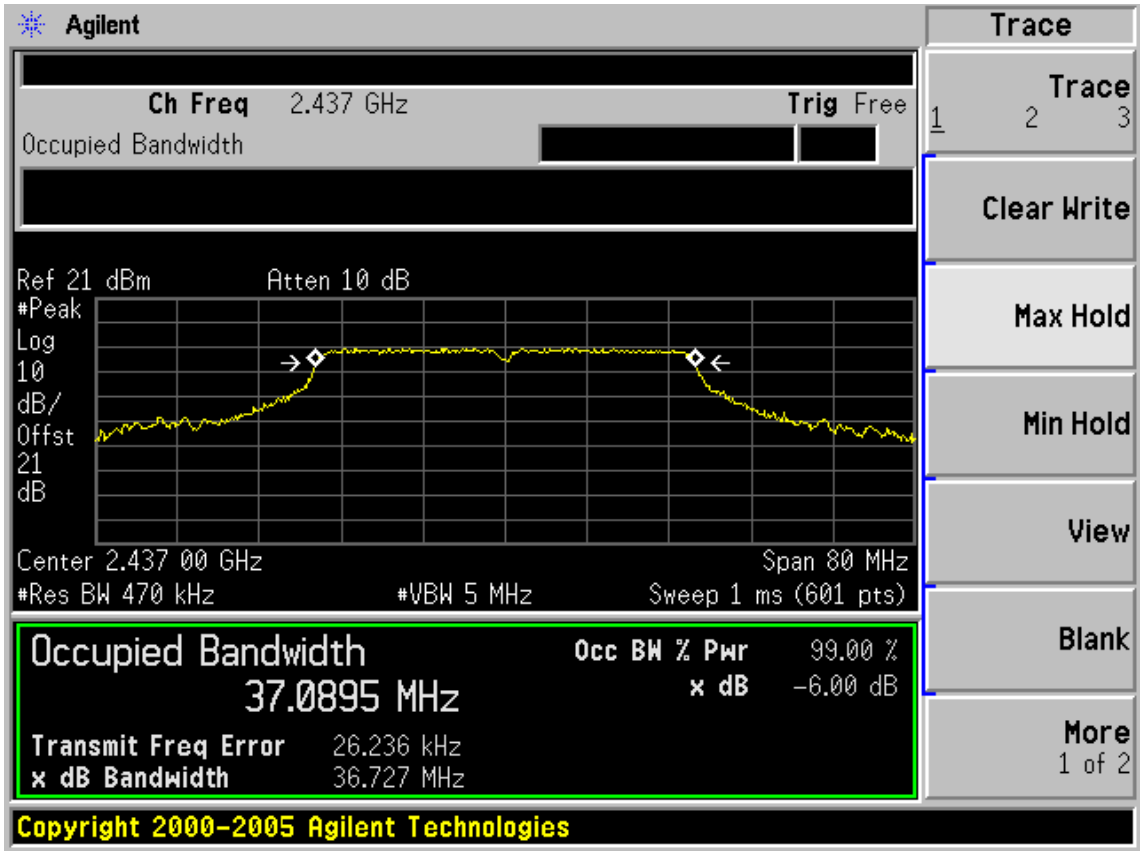
Test CH11: 2462MHz



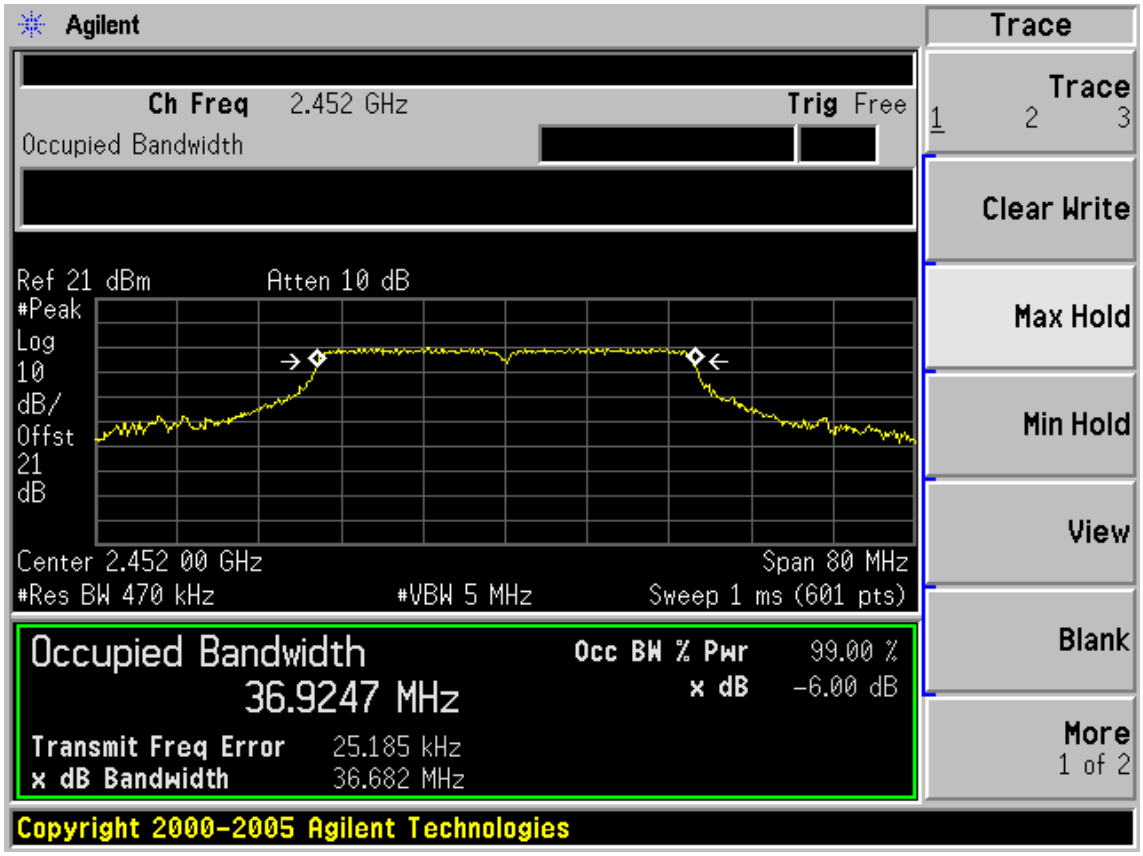
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



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.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9607-4877	May.08, 13	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year
4.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 13	1Year
5.	Power Sensor	Anritsu	MA2491A	033005	May.08, 13	1Year

8.2.Limit (FCC Part 15C 15.247 b(3))

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 26dB attenuator.

2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 26dB bandwidth of signal to measure out each test modes' 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[(26dB bandwidth of emission)/(analyzer RBW)]

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

8.4.Test Results

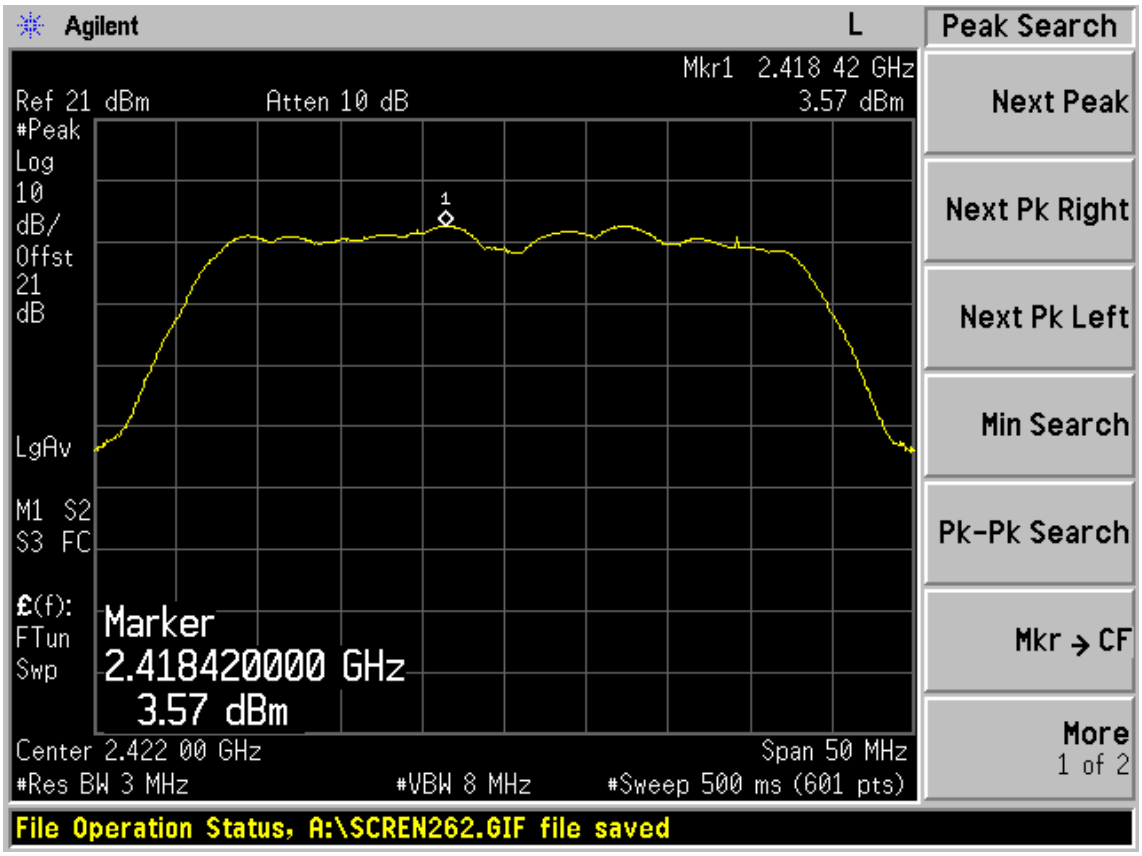
EUT: 2.4GHz 300Mbps Wireless PCI Adapter		
M/N: SMCWPCI-N5		
Test date: 2012-06-16	Pressure: 101.3 kpa	Humidity: 53 %
Tested by: Leo-Li	Test site: RF site	Temperature: 25 ℃

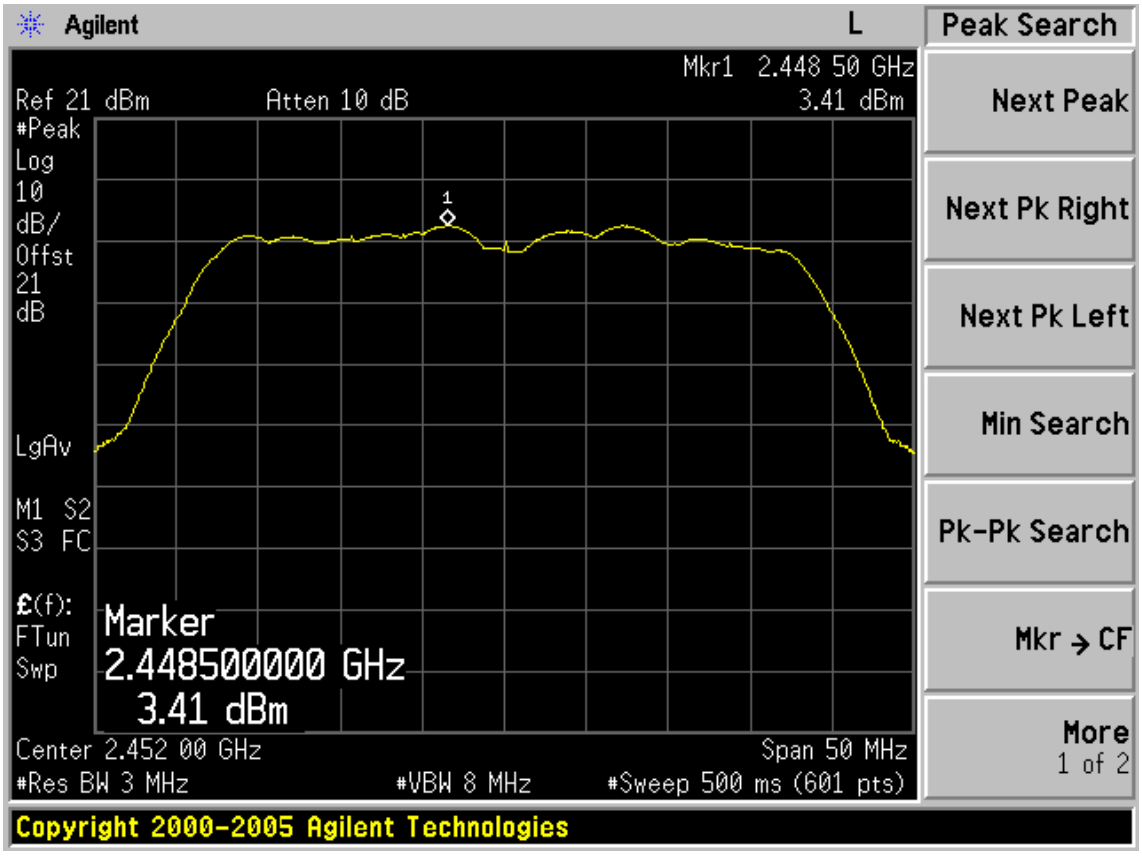
Cable loss: 1 dB		Attenuator loss: 20 dB			Antenna Gain: 2 dBi
Test Mode	CH (MHz)	Peak output Power（dBm）			Limit (dBm)
		Chain0	Chain1	Total	
11b	CH1	19.56	17.14	N/A	30
	CH6	18.67	17.79	N/A	30
	CH11	18.70	18.07	N/A	30
11g	CH1	22.54	19.44	N/A	30
	CH6	24.37	23.29	N/A	30
	CH11	16.87	16.35	N/A	30
11n HT20	CH1	17.49	15.93	19.84	30
	CH6	22.74	23.13	25.96	30
	CH11	15.65	16.13	18.96	30

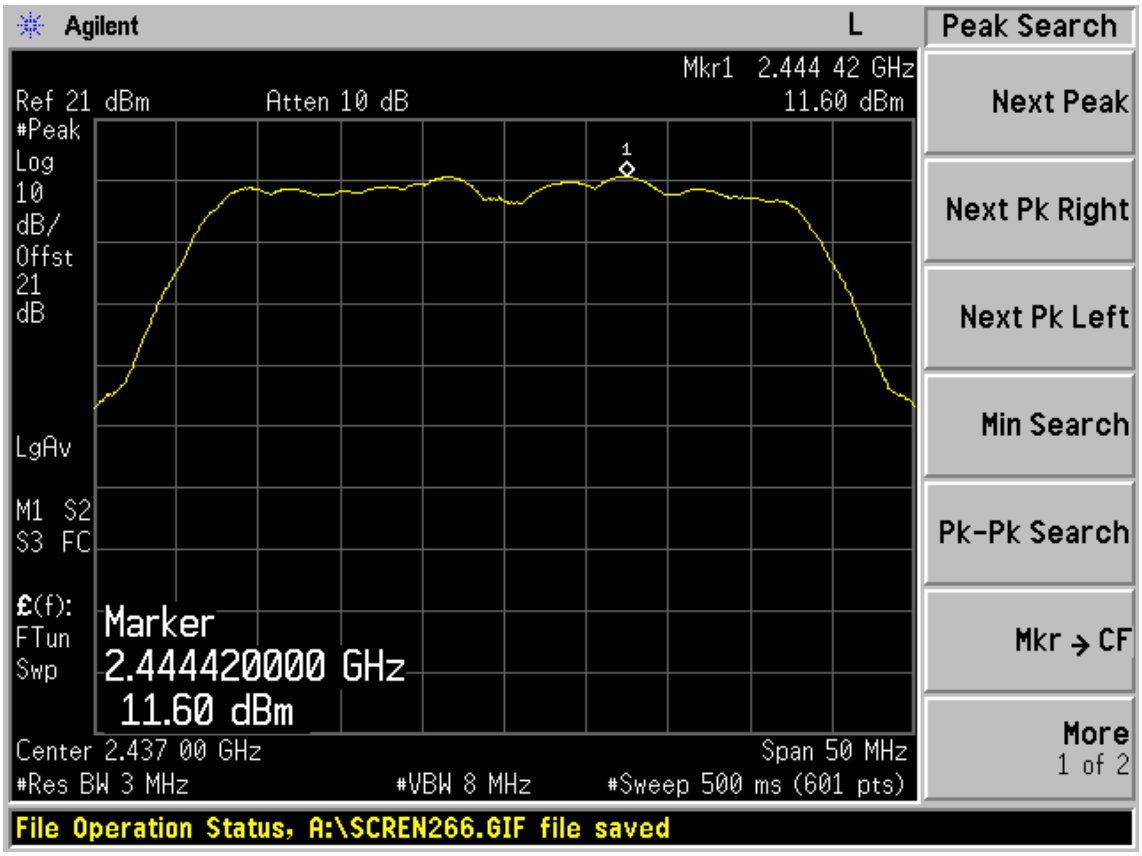
Test Mode	CH	Result					Limit
		Measured power(dBm)/3MHz		PK Output power (dBm)			(dBm)
		Chain0	Chain1	Chain0	Chain1	Total	
11n HT40	CH1	3.57	3.48	14.77	14.65	17.72	30
	CH4	11.60	12.00	22.80	23.17	26.00	30
	CH7	3.41	3.92	14.61	15.09	17.87	30
Chain 0 26dB Bandwidth for 11n HT40: 39.514MHz Chain 1 26dB Bandwidth for 11n HT40: 39.303MHz							
Chain 0 BW correction factor = 10log[(39.514MHz)/(3MHz)] = 11.20dB Chain 1 BW correction factor = 10log[(39.303MHz)/(3MHz)] = 11.17dB							
Conclusion: PASS							

Chain 0:

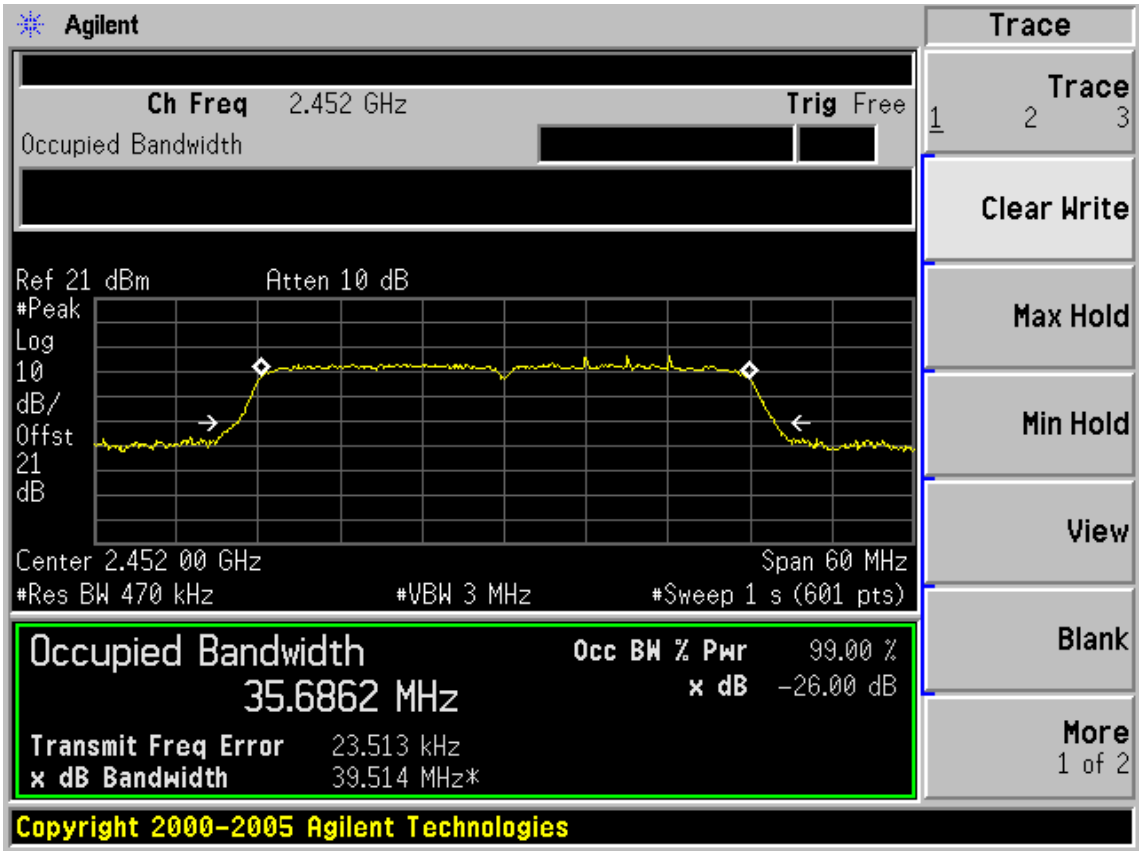
Test Mode: IEEE 802.11n HT40

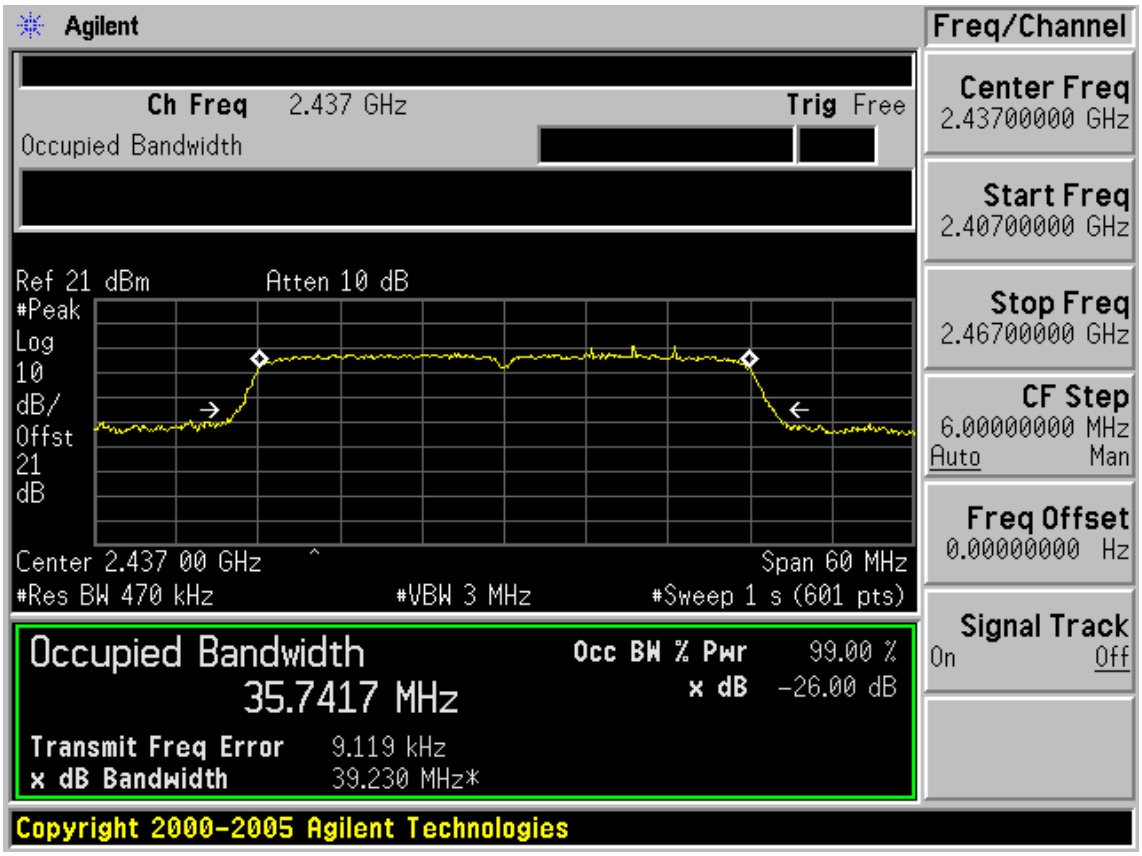


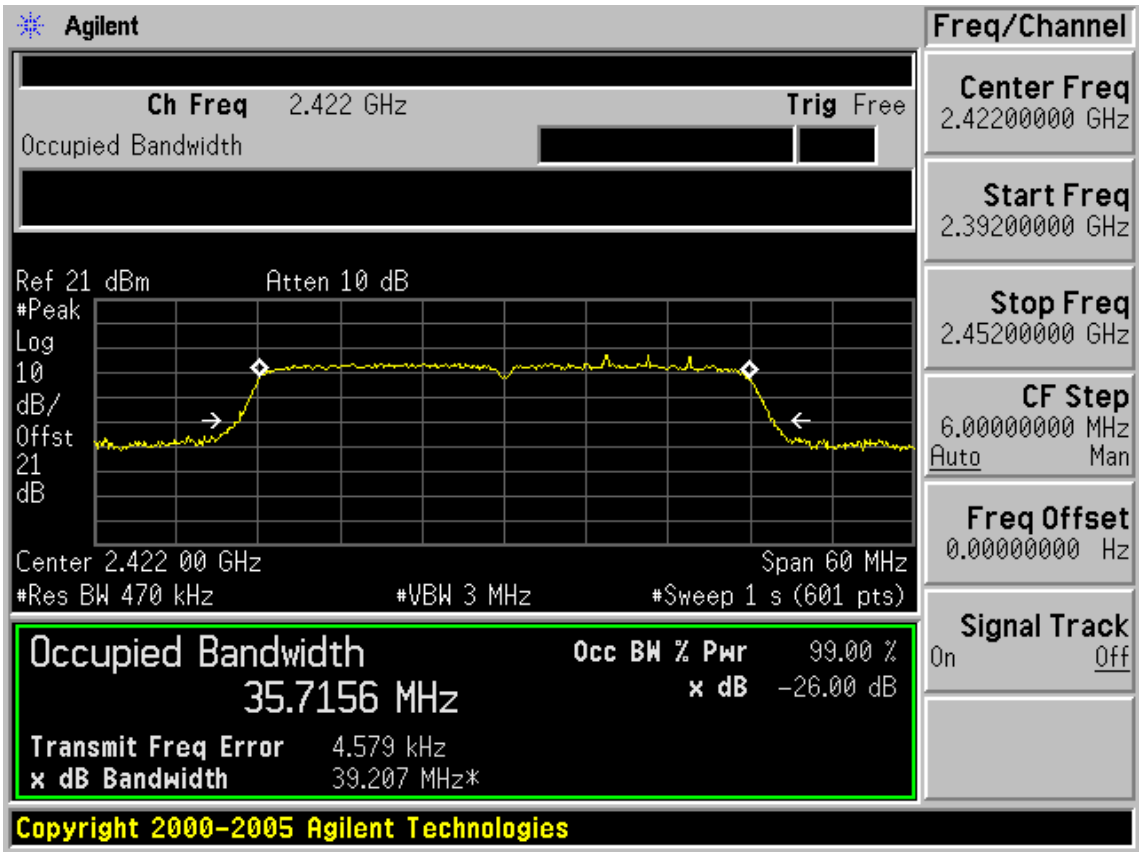




26dB Bandwidth

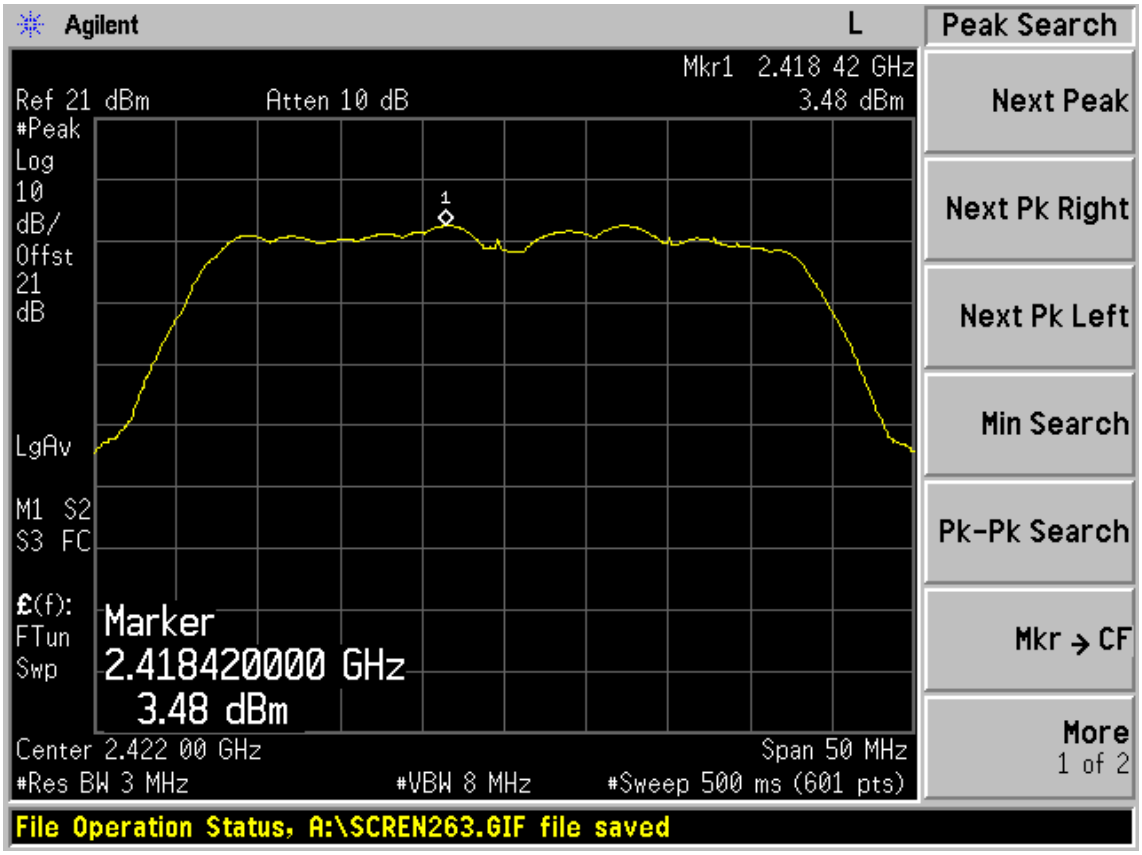


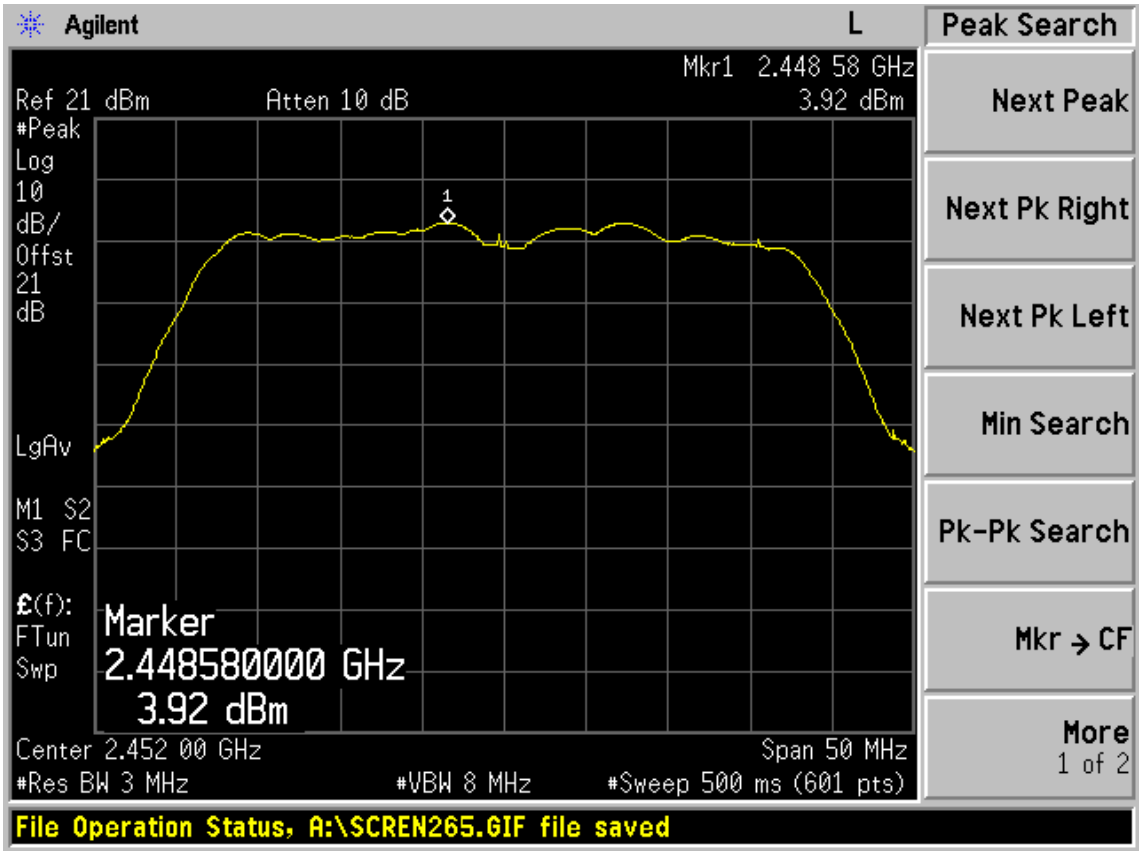

Agilent
Freq/Channel
Ch Freq 2.437 GHz
Trig Free
Occupied Bandwidth
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
Center 2.437 00 GHz
Span 60 MHz
#Res BW 470 kHz
#VBW 3 MHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
35.7417 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error 9.119 kHz
x dB Bandwidth 39.230 MHz*
Center Freq
2.43700000 GHz
Start Freq
2.40700000 GHz
Stop Freq
2.46700000 GHz
CF Step
6.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2005 Agilent Technologies

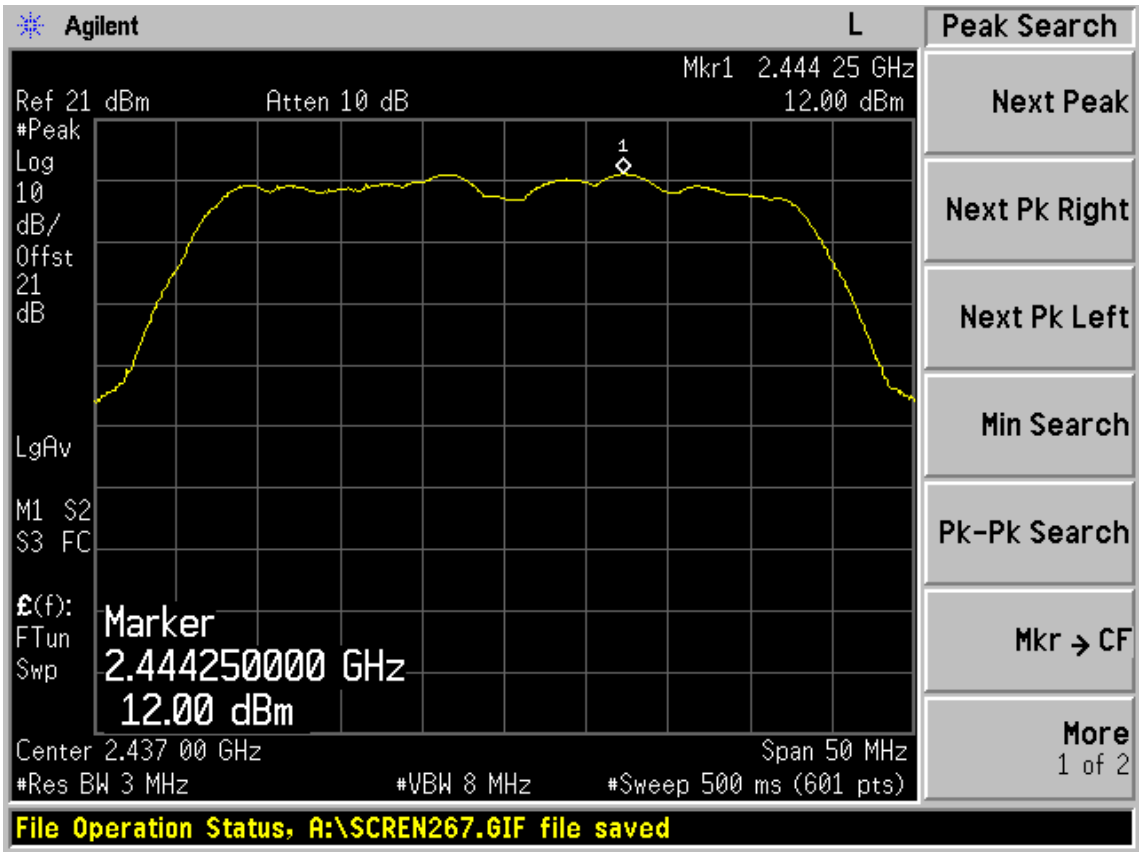

Agilent
Freq/Channel
Ch Freq 2.422 GHz
Trig Free
Occupied Bandwidth
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
Center 2.422 00 GHz
Span 60 MHz
#Res BW 470 kHz
#VBW 3 MHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
35.7156 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error 4.579 kHz
x dB Bandwidth 39.207 MHz*
Center Freq
2.42200000 GHz
Start Freq
2.39200000 GHz
Stop Freq
2.45200000 GHz
CF Step
6.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2005 Agilent Technologies

Chain 1:

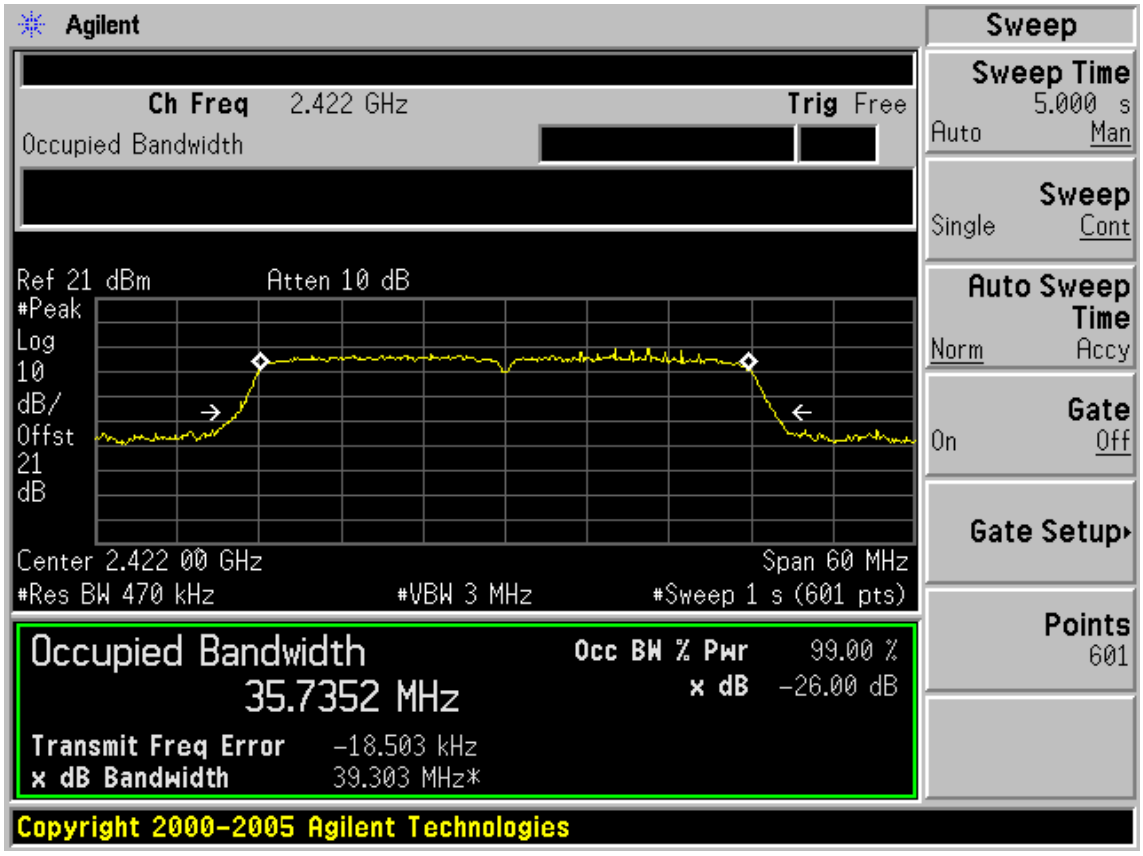
Test Mode: IEEE 802.11n HT40

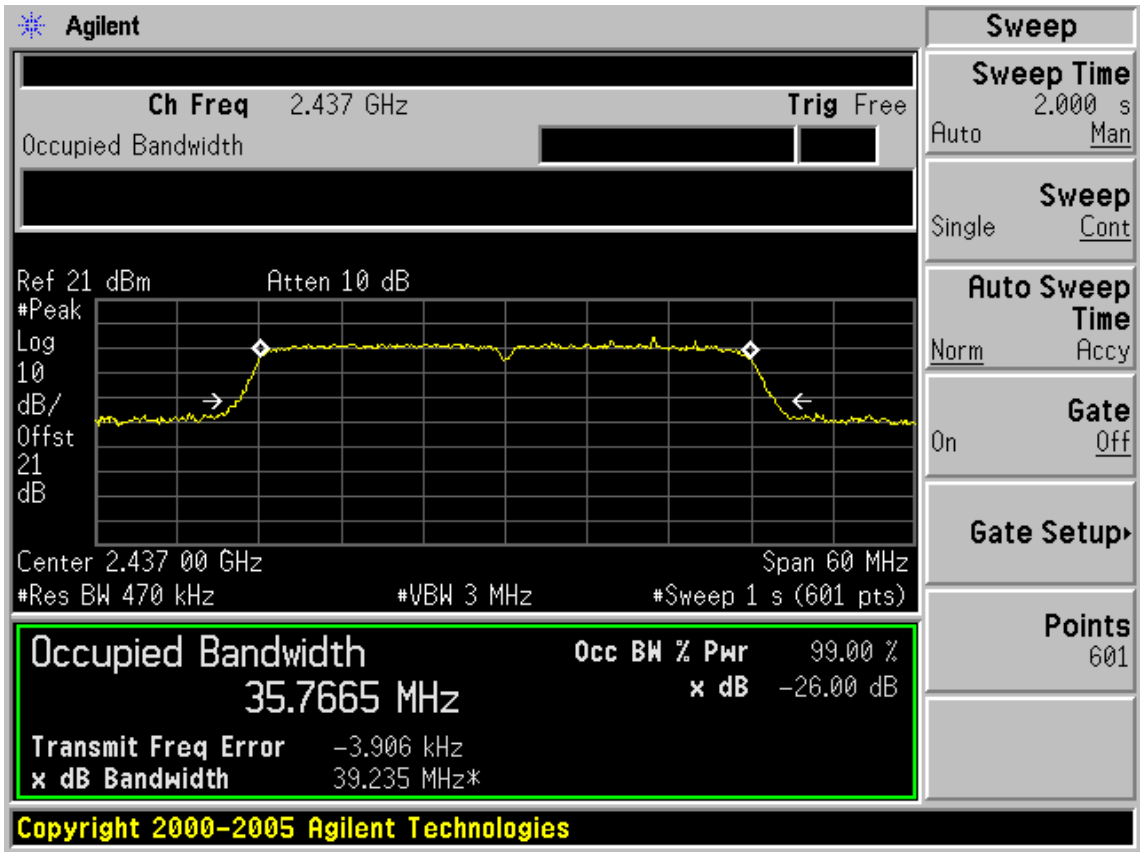


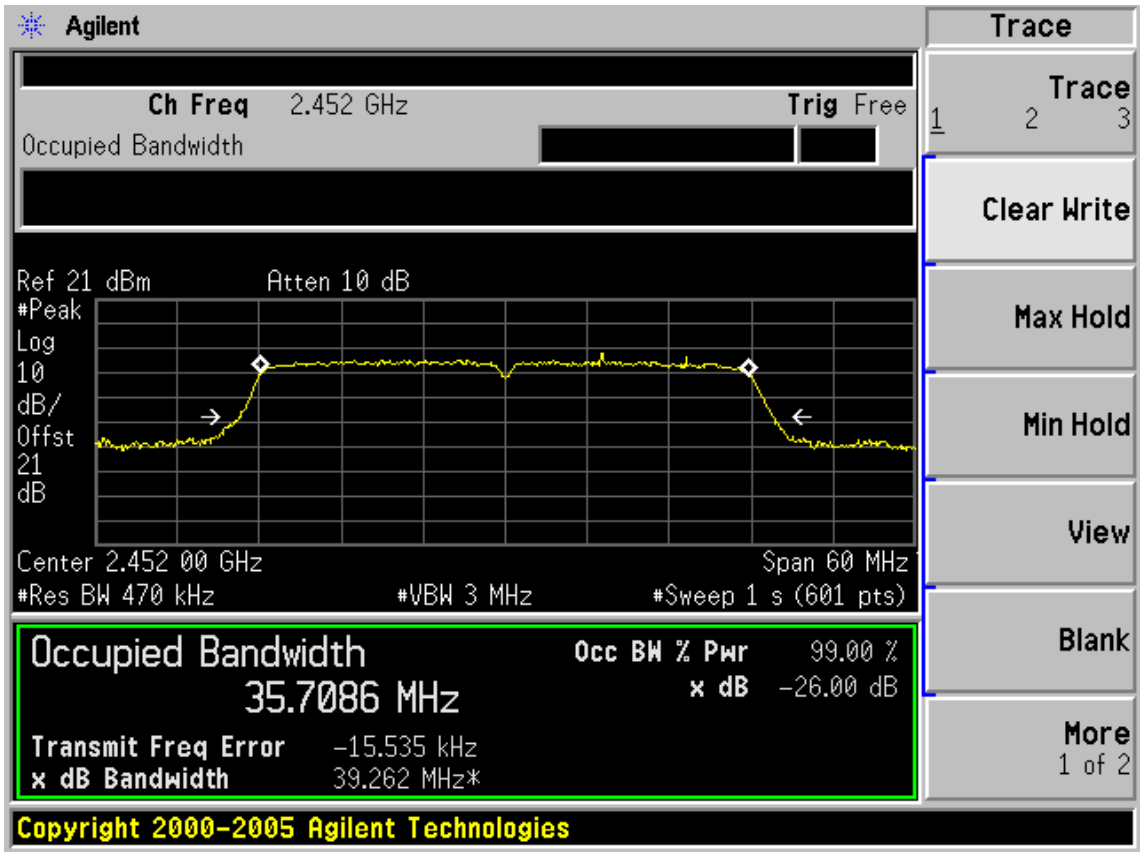




26dB Bandwidth




Agilent
Sweep
Ch Freq 2.437 GHz
Trig Free
Occupied Bandwidth
Sweep Time
2.000 s
Auto Man
Sweep
Single Cont
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
Auto Sweep Time
Norm Accy
Gate
On Off
Gate Setup
Center 2.437 00 GHz
Span 60 MHz
#Res BW 470 kHz
#VBW 3 MHz
#Sweep 1 s (601 pts)
Points
601
Occupied Bandwidth
35.7665 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -3.906 kHz
x dB Bandwidth 39.235 MHz*
Copyright 2000-2005 Agilent Technologies


Agilent
Trace
Ch Freq 2.452 GHz
Trig Free
Occupied Bandwidth
Trace
1 2 3
Clear Write
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
Max Hold
Min Hold
View
Center 2.452 00 GHz
Span 60 MHz
#Res BW 470 kHz
#VBW 3 MHz
#Sweep 1 s (601 pts)
Blank
More
1 of 2
Occupied Bandwidth
35.7086 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -15.535 kHz
x dB Bandwidth 39.262 MHz*
Copyright 2000-2005 Agilent Technologies

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9607-4877	Aug.28, 13	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year

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. Set the test frequency as center frequency,Set RBW=3KHz,VBW=10KHz,Span large enough capture the entire frequency,Read out maximum peak leval frequency

3. Set the frequency read from produce 2 as center frequency,then set the span= 300KHz, Sweep time=Span/RBW,Then Max hold,read out each mode and each chain's Power density.

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

9.4.Test Results

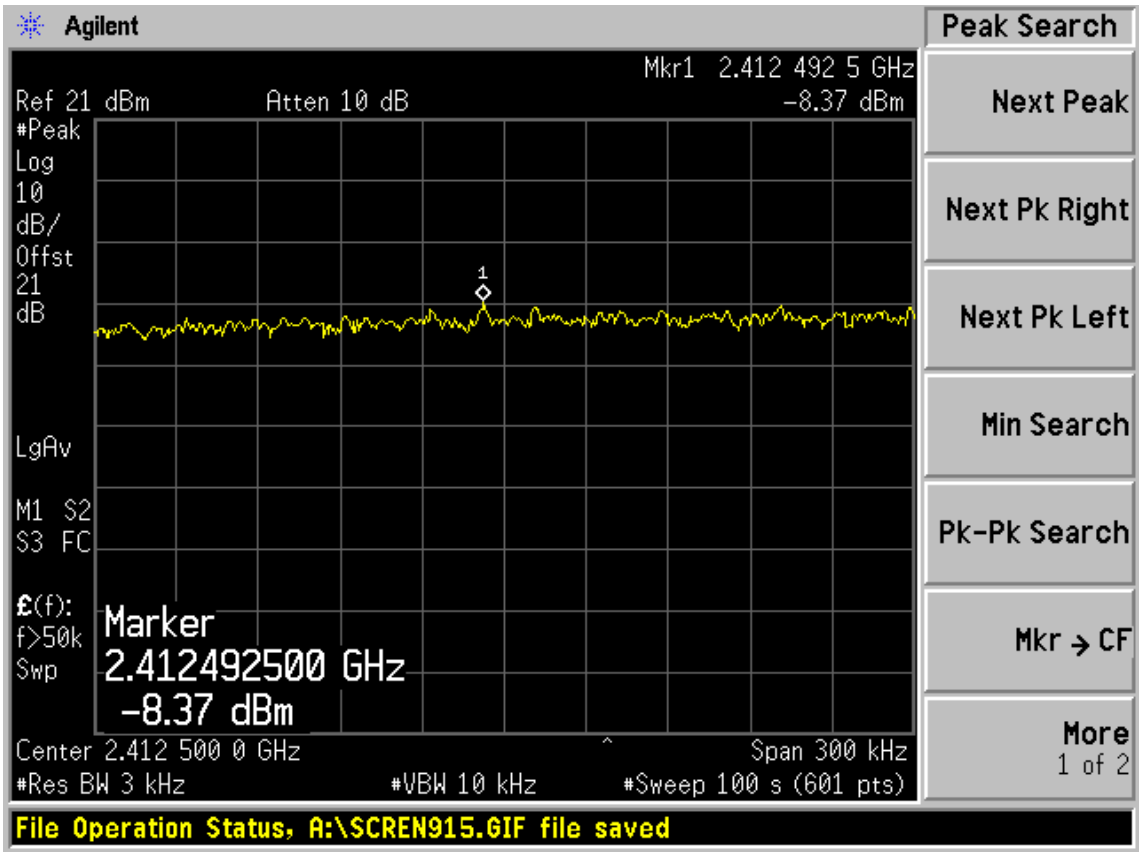
EUT: 2.4GHz 300Mbps Wireless PCI Adapter		
M/N: SMCWPCI-N5		
Test date: 2013-06-16	Pressure: 101.9 Kpa	Humidity: 53.6 %
Tested by: Leo-Li	Test site: RF Site	Temperature: 25.2℃

Cable loss: 1 dB		Attenuator loss: 20 dB			Antenna Gain: 2 dBi
Test Mode	CH	Power density（dBm/3KHz）			Limit (dBm/3KHz)
		Chain0	Chain1	Total	
11b	CH1	-8.37	-9.28	N/A	8
	CH6	-8.14	-9.41	N/A	8
	CH11	-9.30	-9.44	N/A	8
11g	CH1	-13.28	-13.53	N/A	8
	CH6	-9.81	-10.26	N/A	8
	CH11	-15.00	-15.70	N/A	8
11n HT20	CH1	-17.30	-17.79	-14.53	8
	CH6	-10.59	-10.66	-7.61	8
	CH11	-17.03	-17.16	-14.08	8
11n HT40	CH1	-21.57	-20.58	-18.04	8
	CH4	-13.40	-11.89	-9.57	8
	CH7	-21.71	-21.10	-18.38	8
Conclusion：PASS					

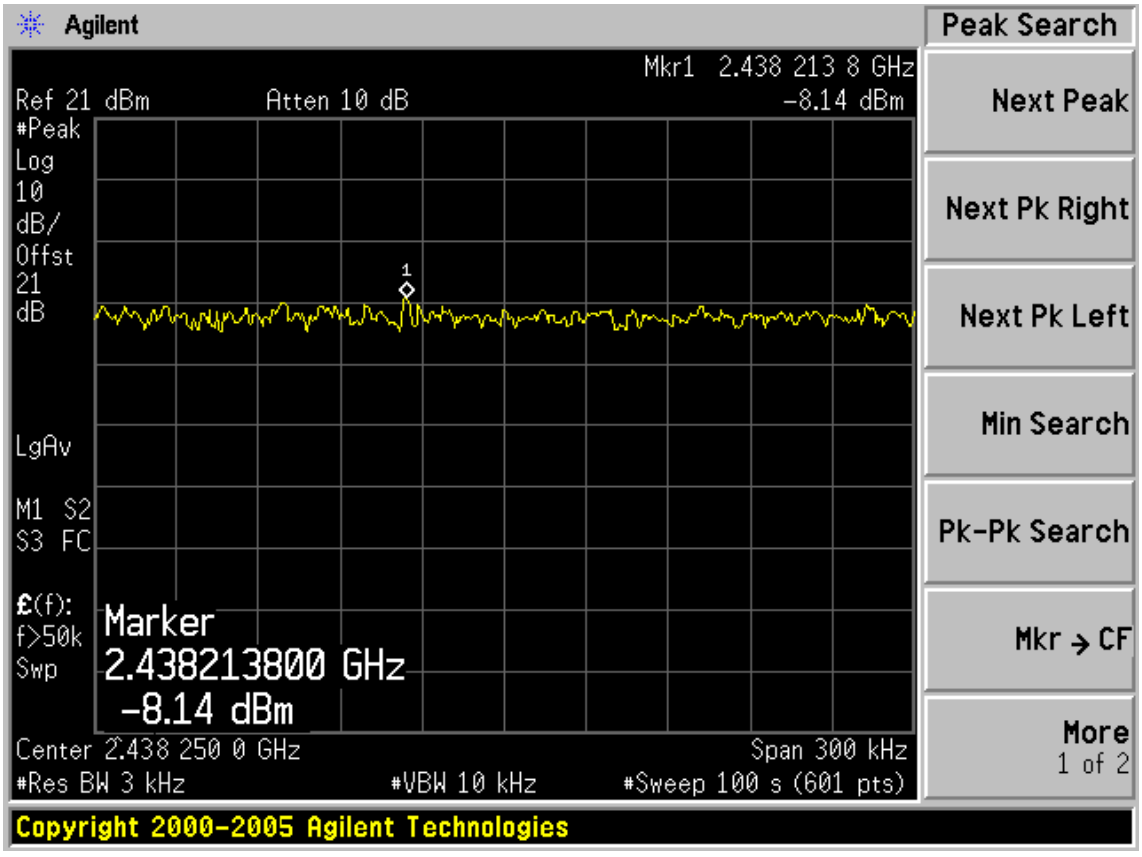
Chiain 0:

Test Mode: IEEE 802.11b TX

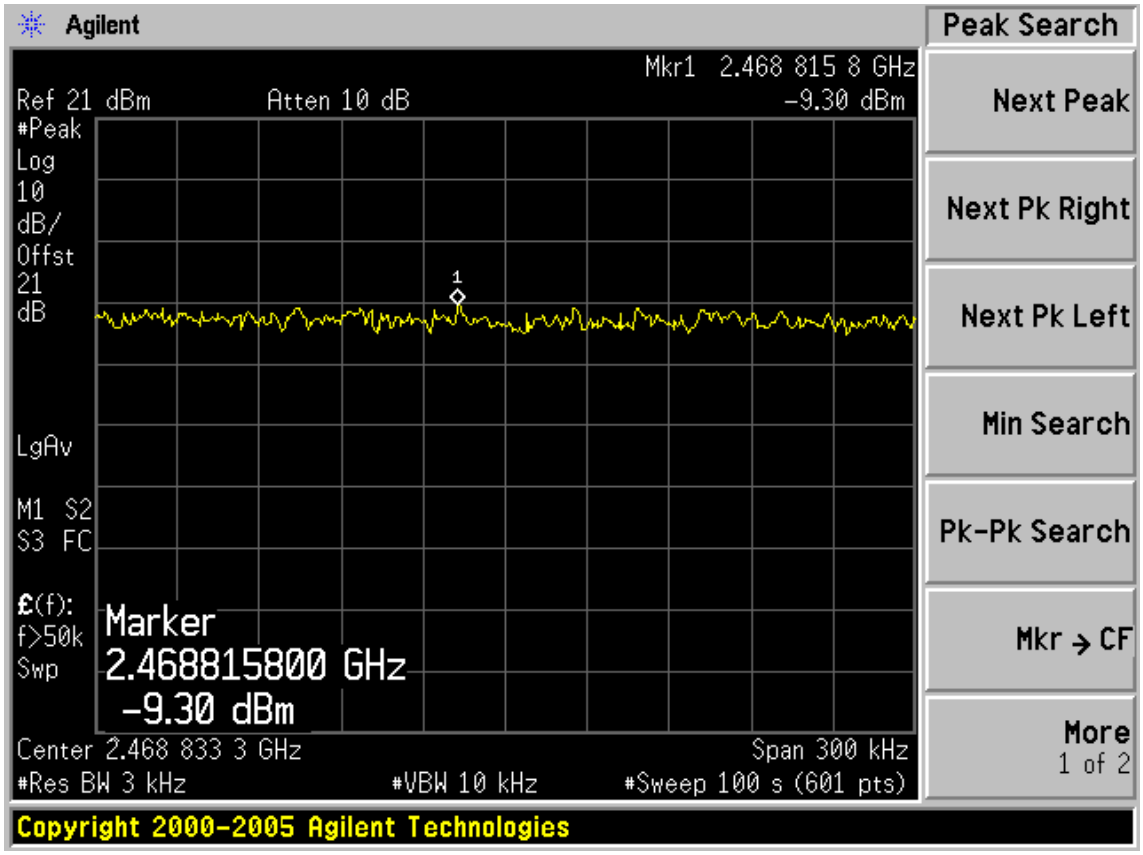
Test CH1: 2412MHz



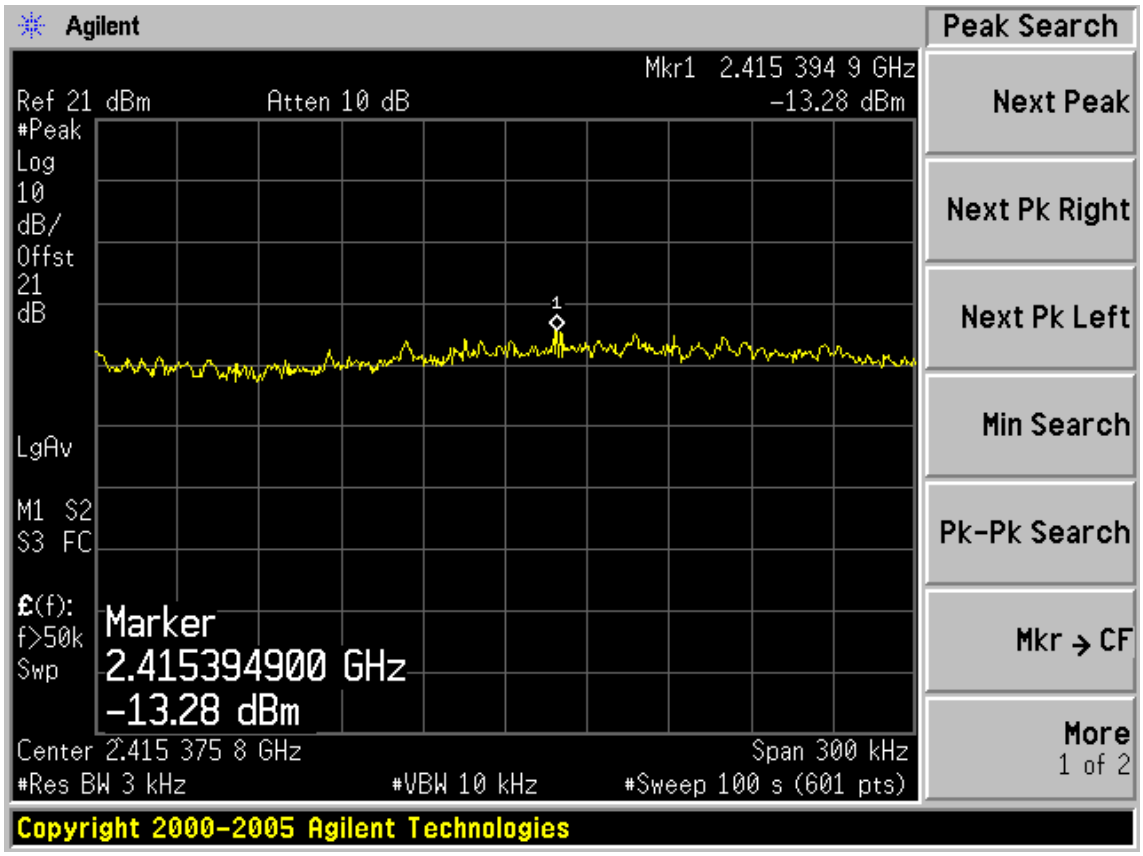
Test CH6: 2437MHz



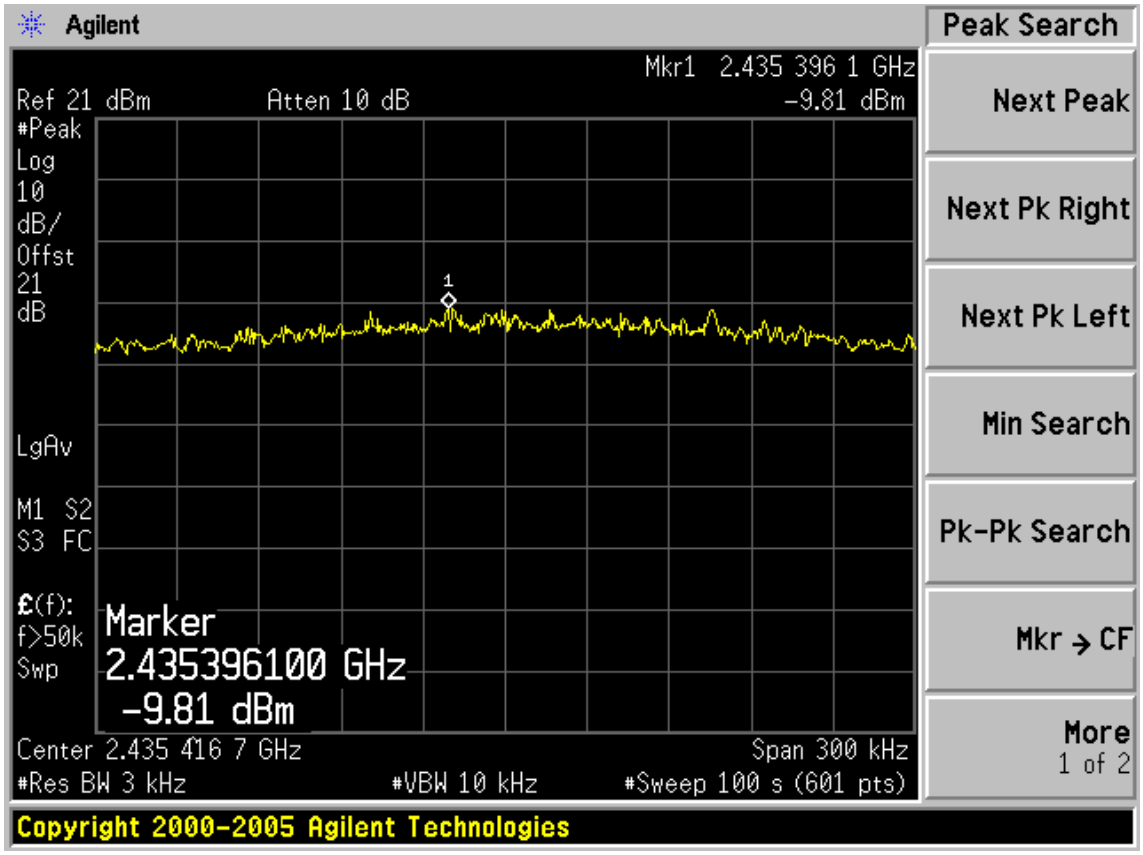
Test CH11: 2462MHz



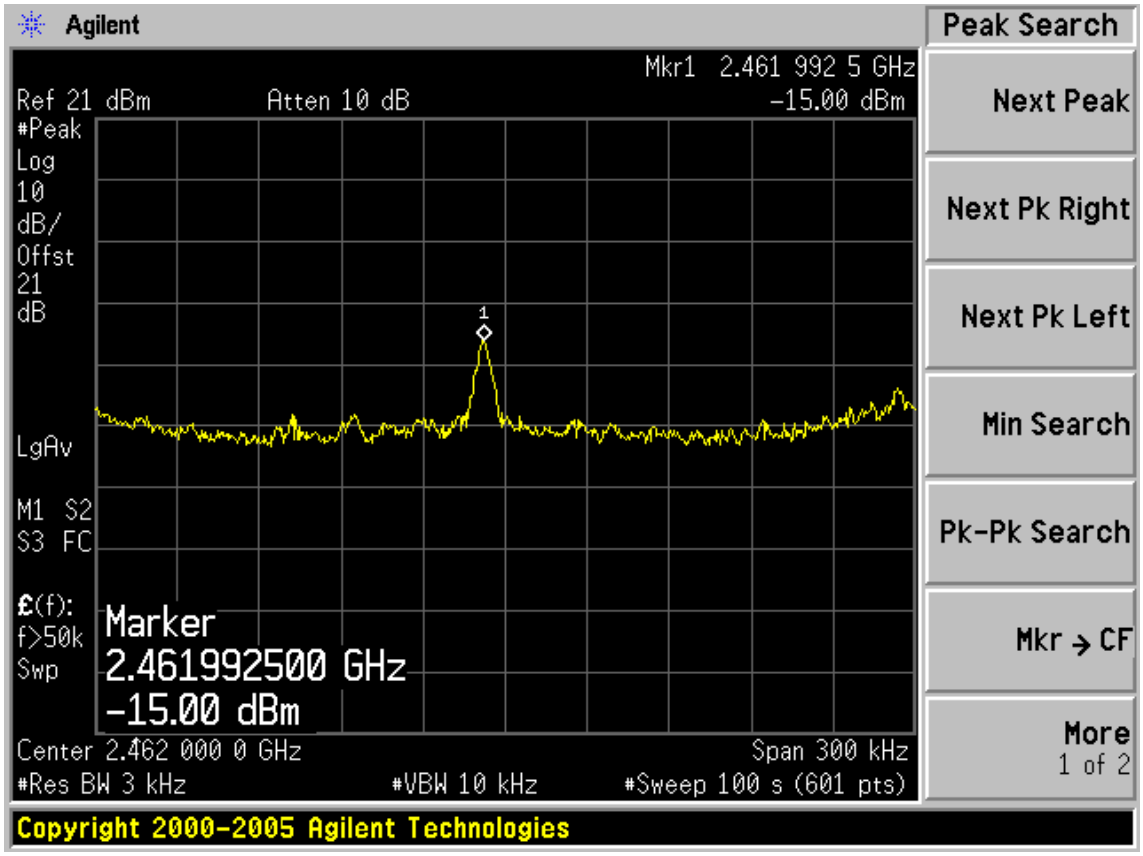
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



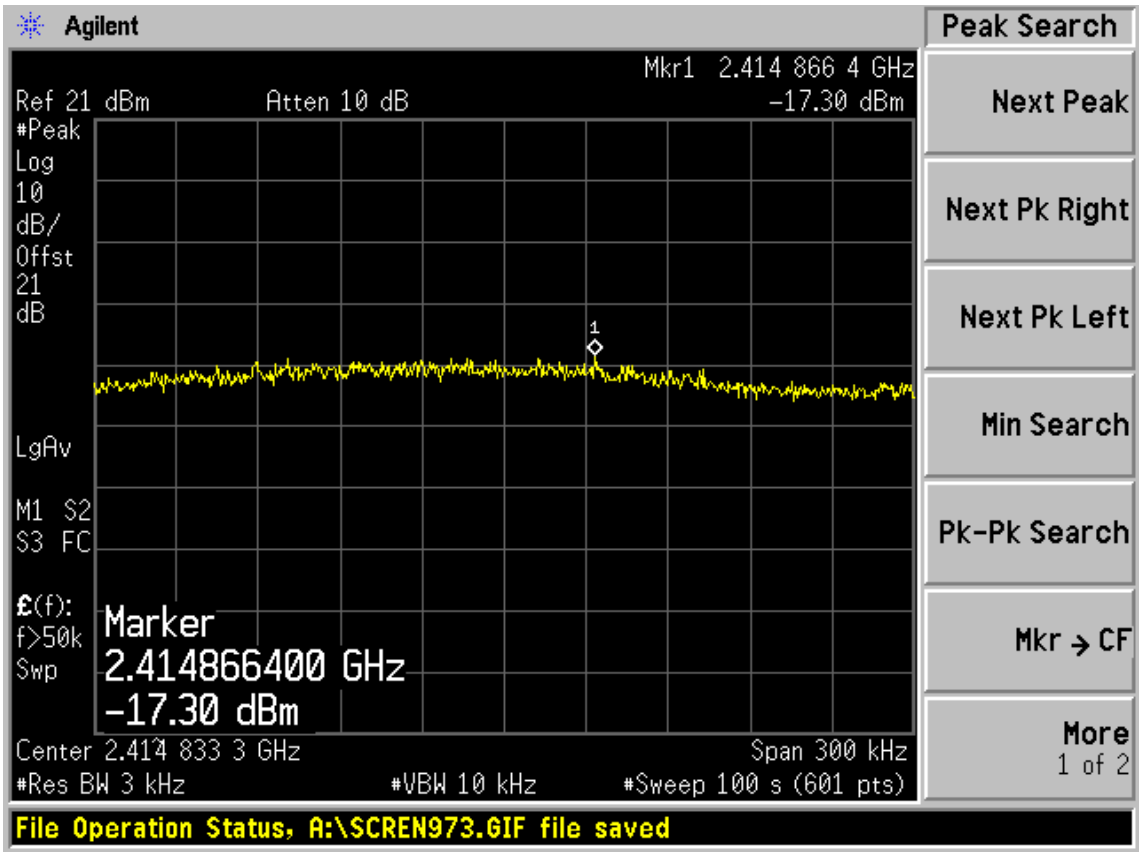
Test CH6: 2437MHz



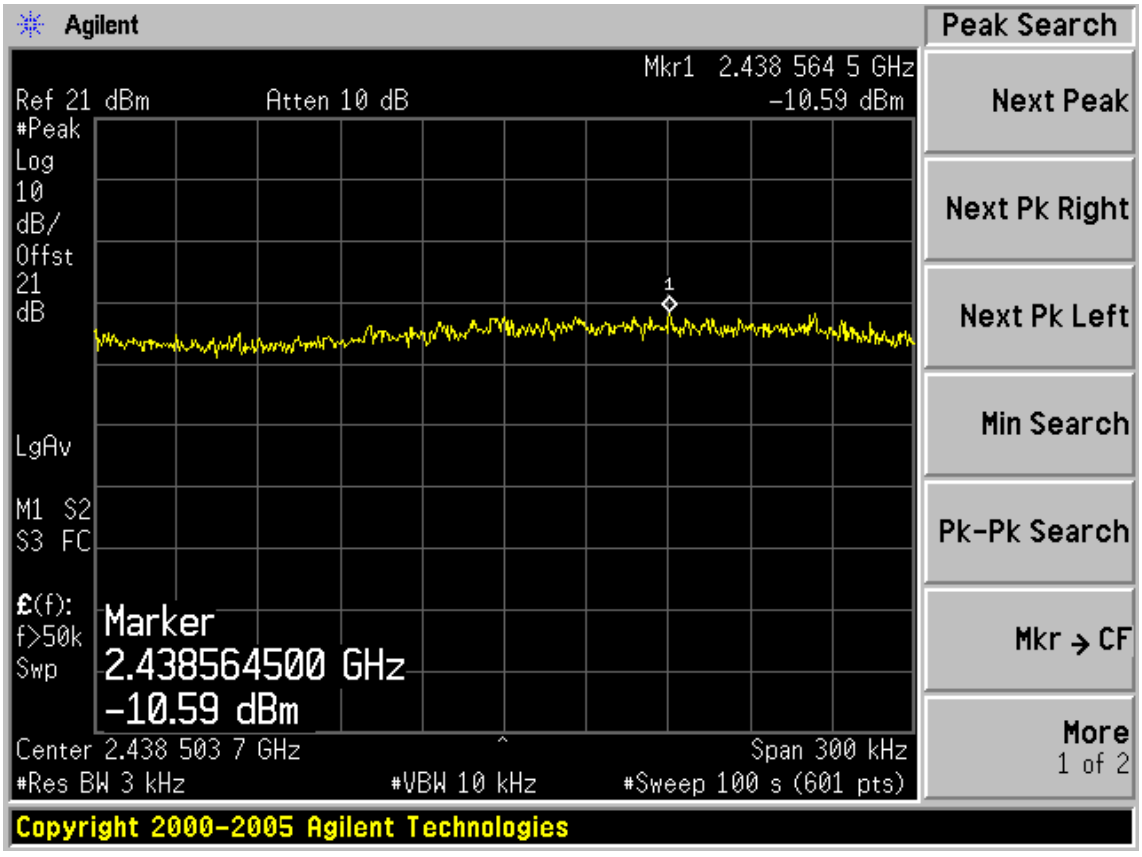
Test CH11: 2462MHz



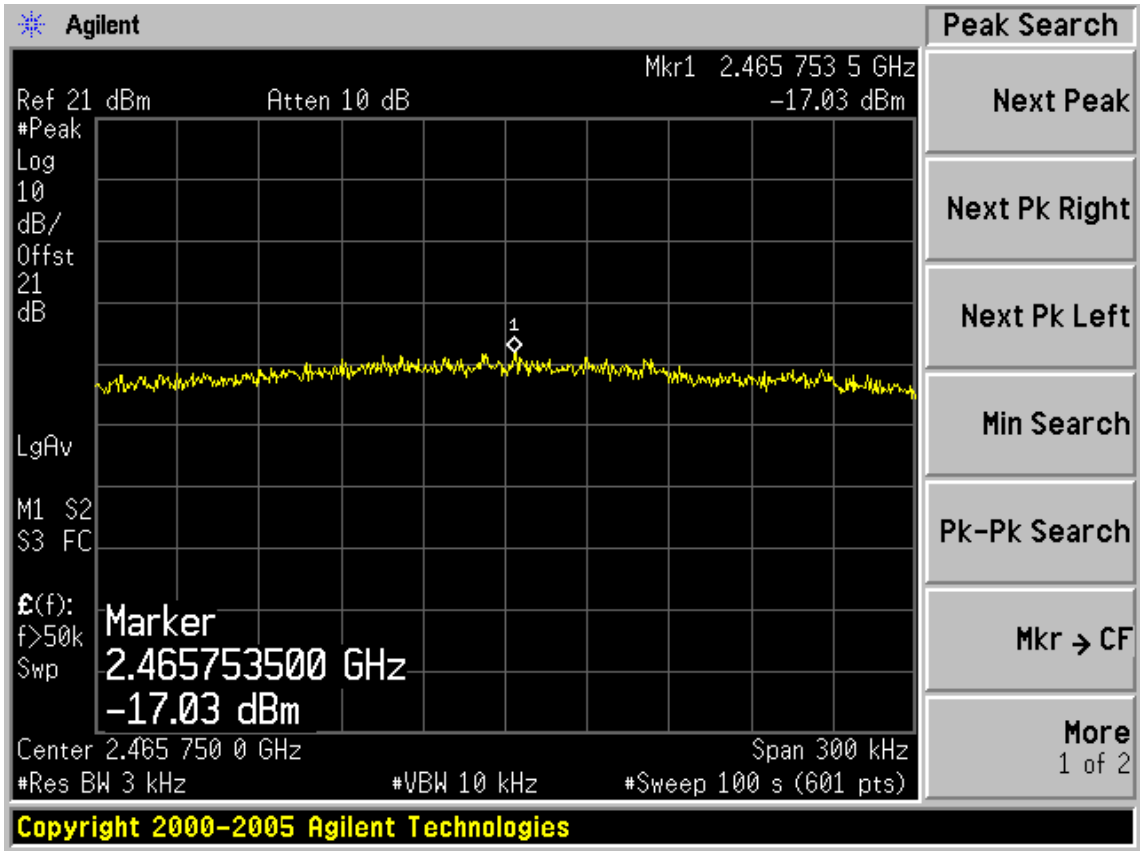
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



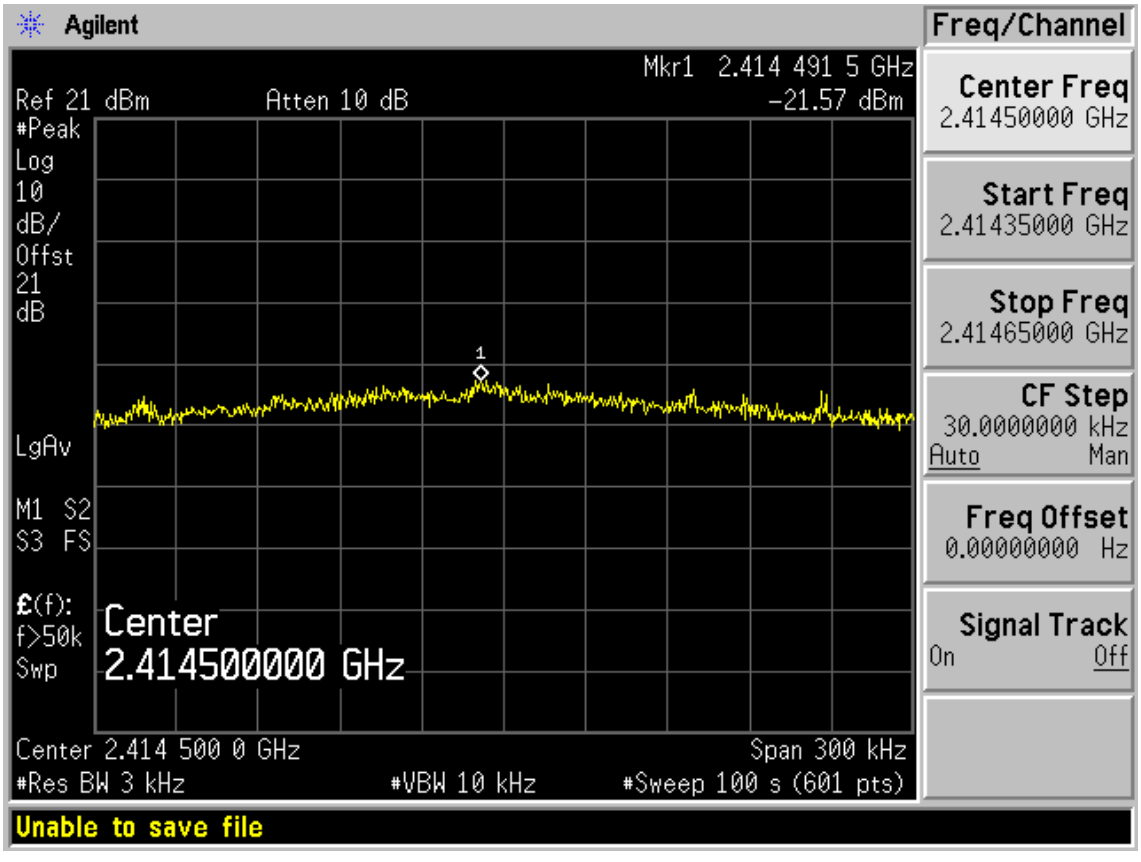
Test CH6: 2437MHz



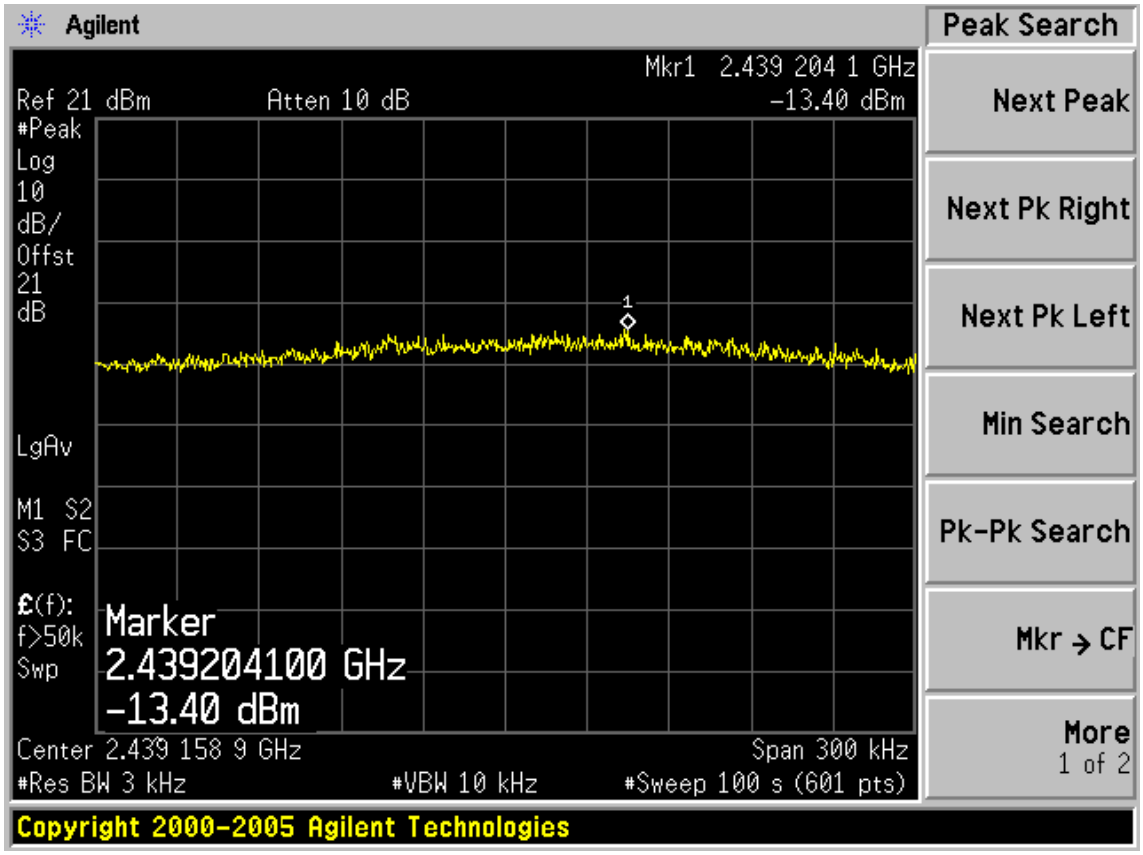
Test CH11: 2462MHz



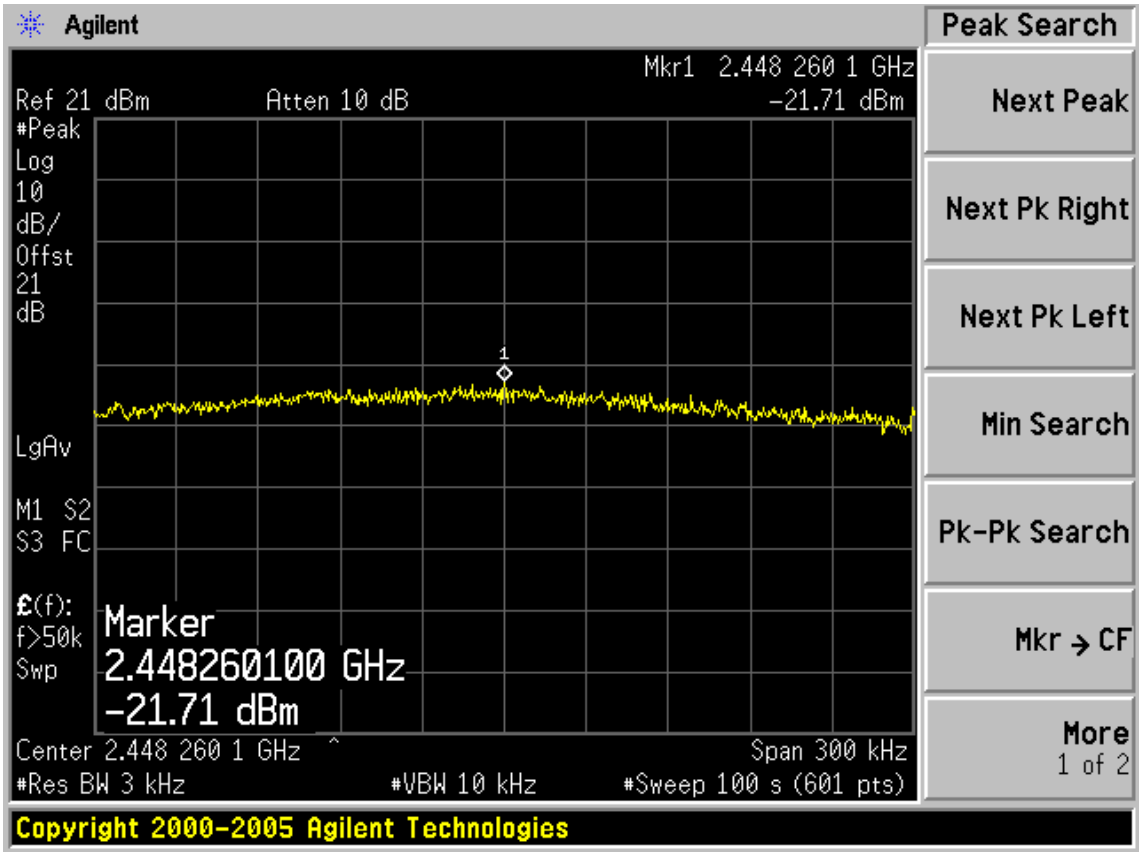
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



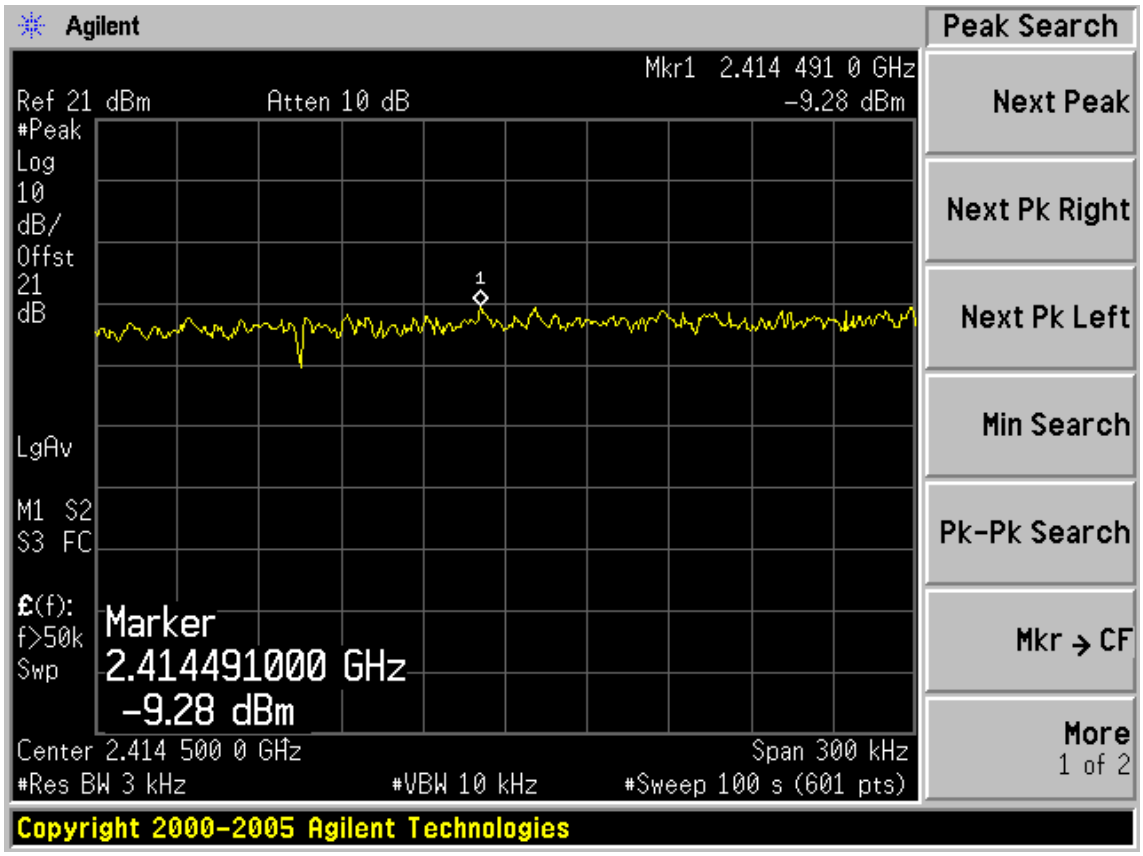
Test CH4: 2437MHz



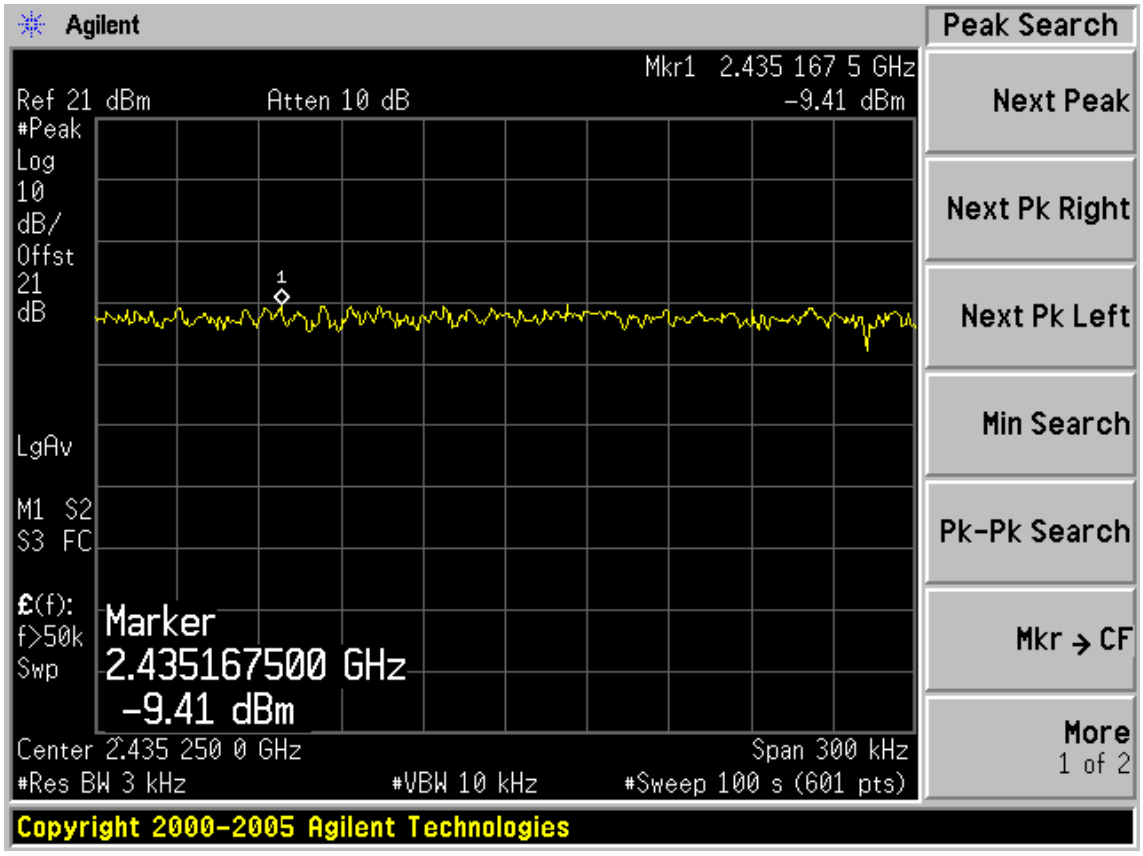
Test CH7: 2452MHz



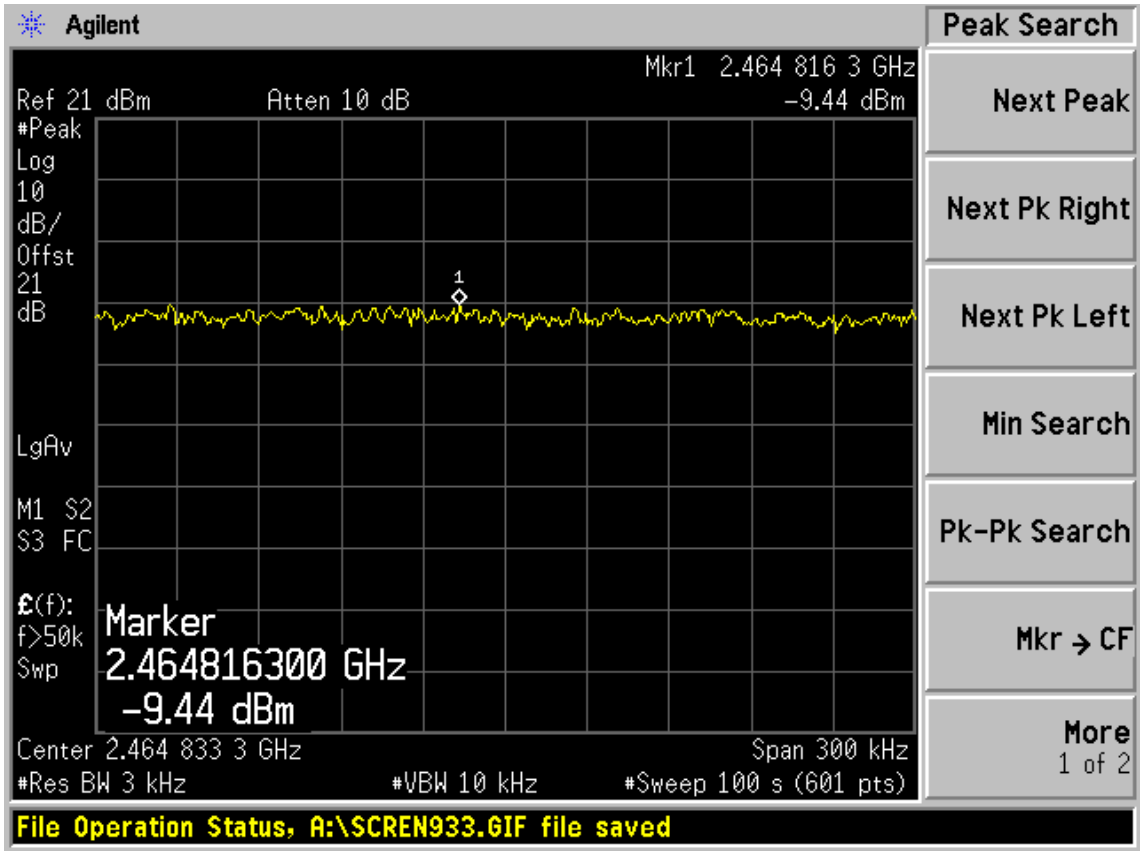
Chiain 1:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



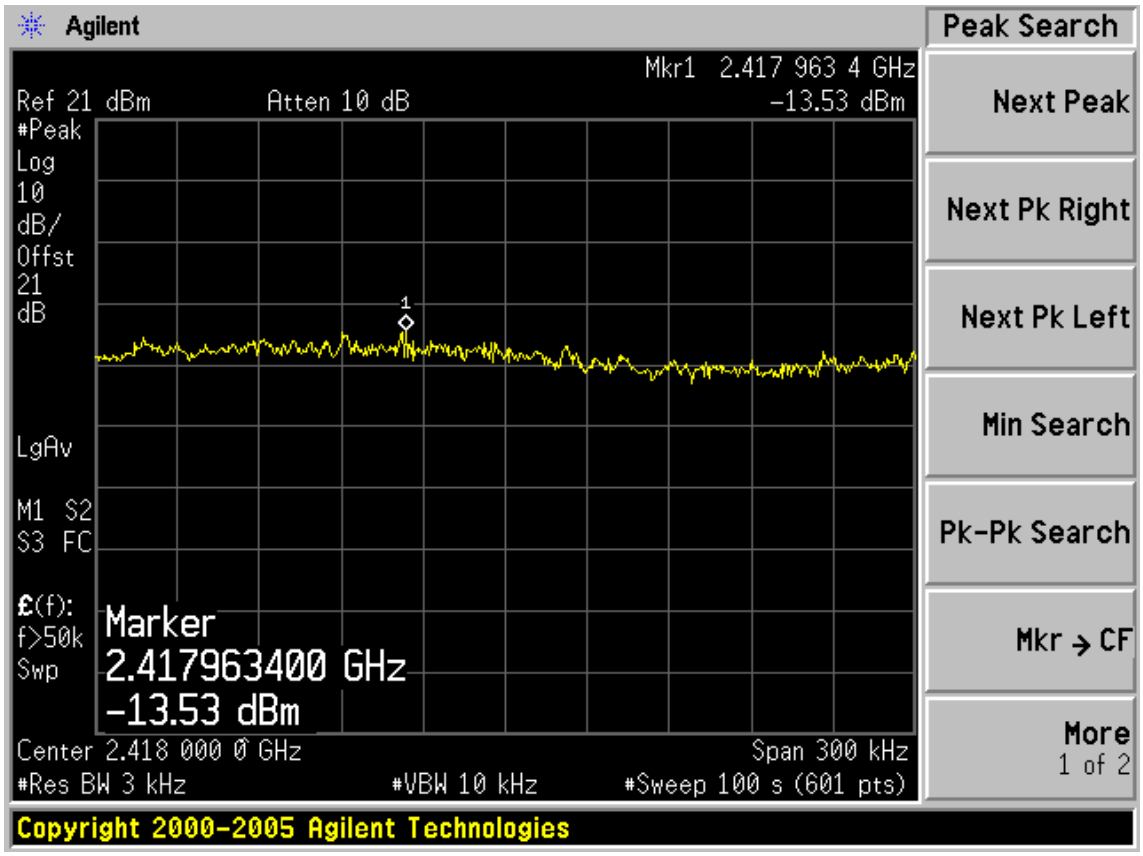
Test CH6: 2437MHz



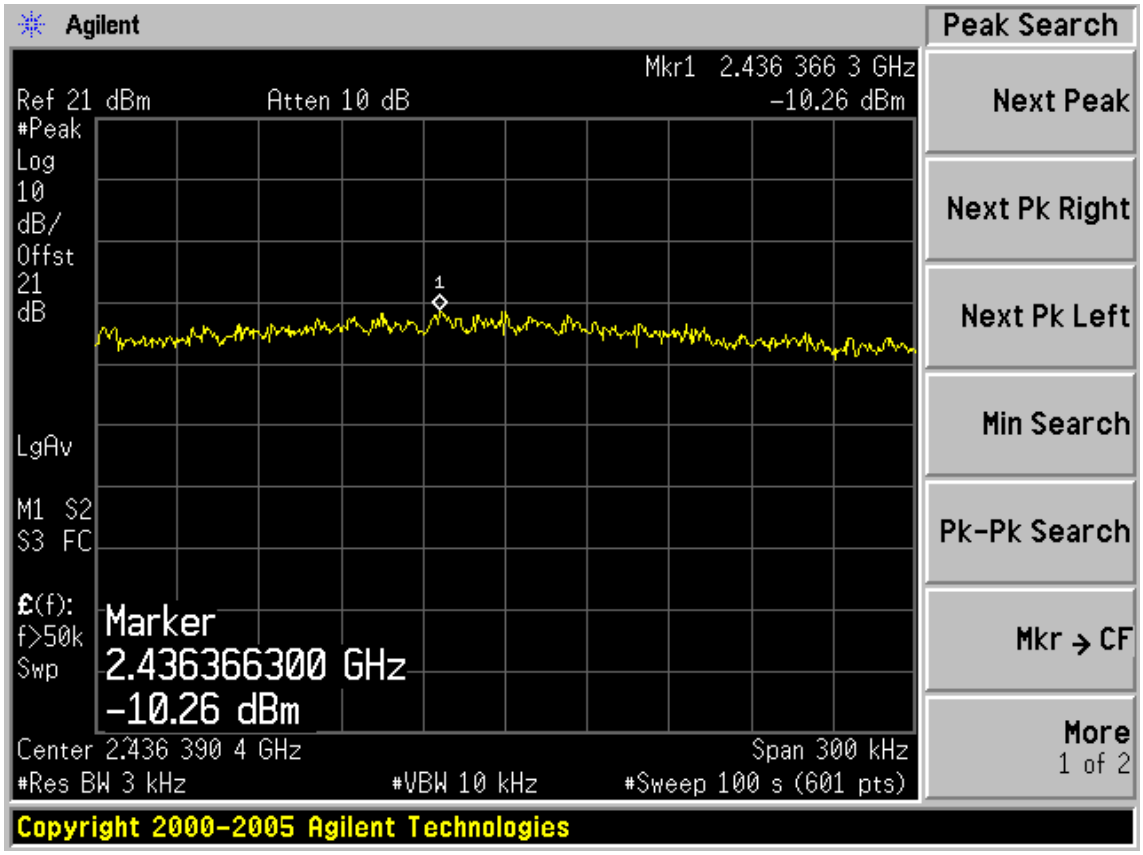
Test CH11: 2462MHz



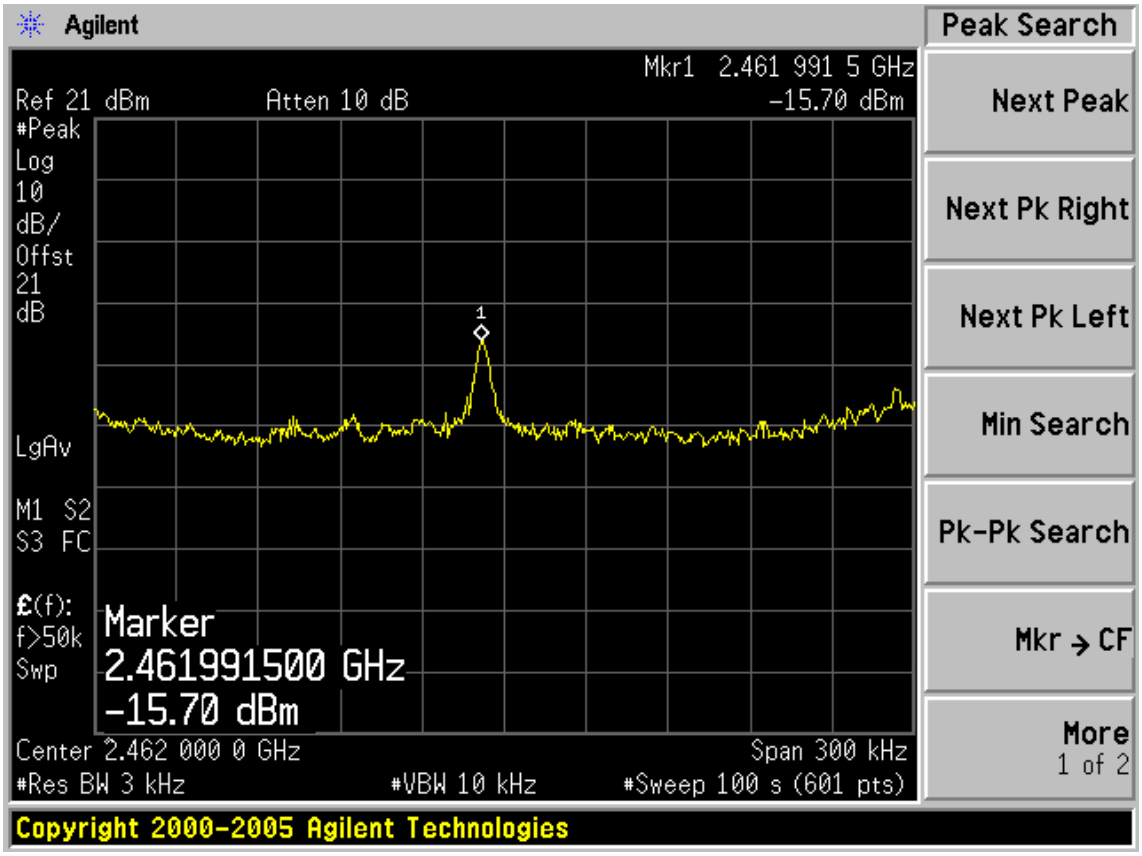
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



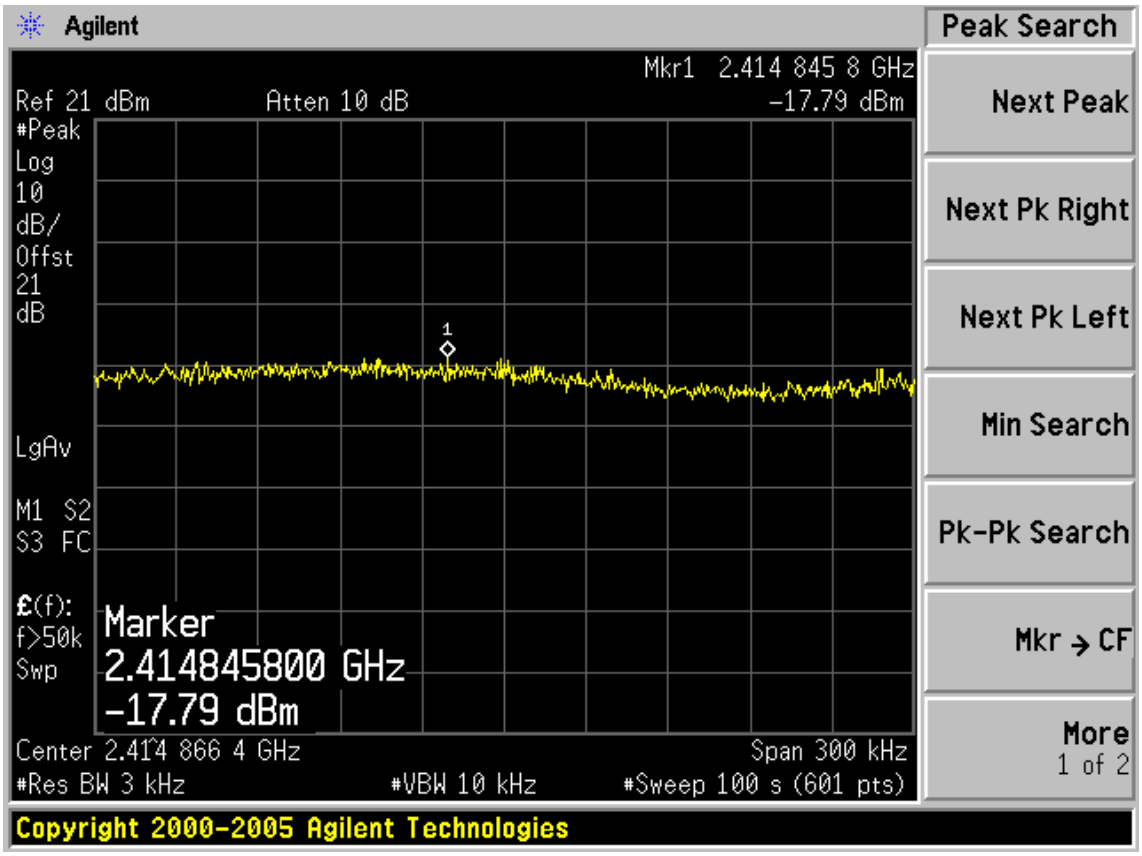
Test CH6: 2437MHz



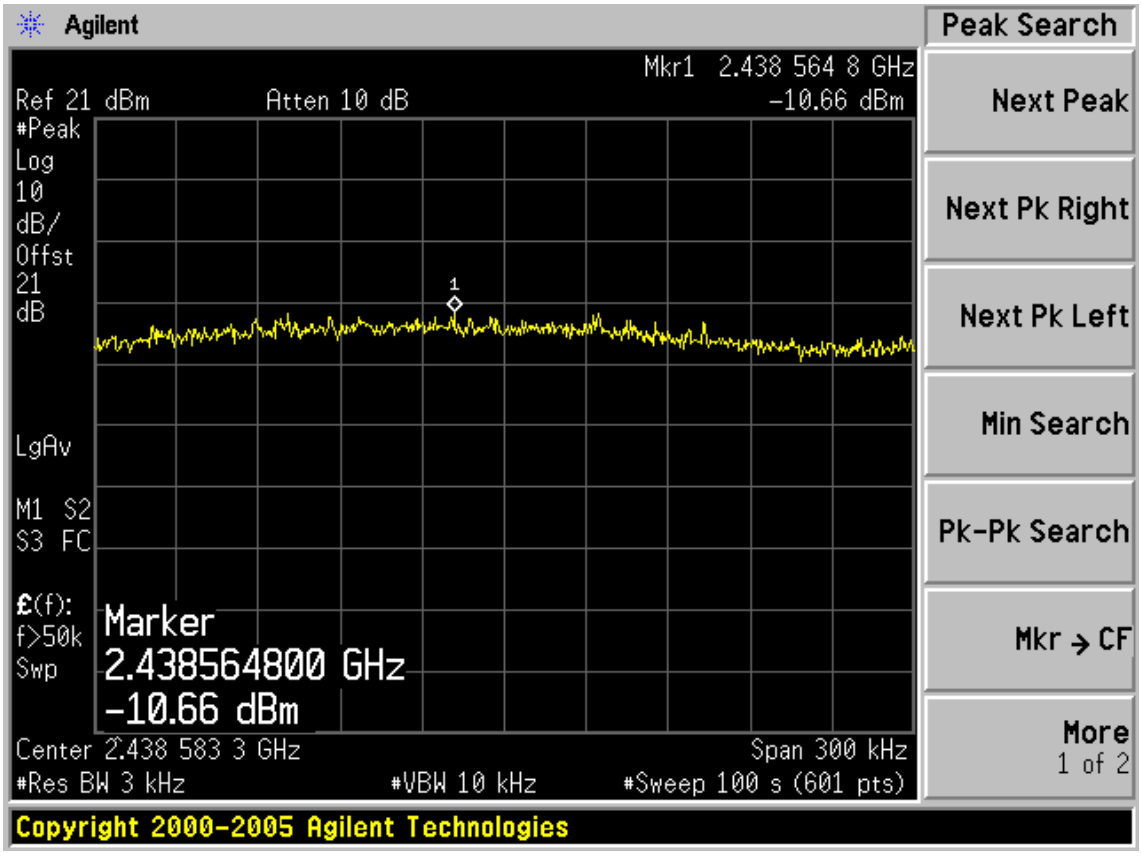
Test CH11: 2462MHz



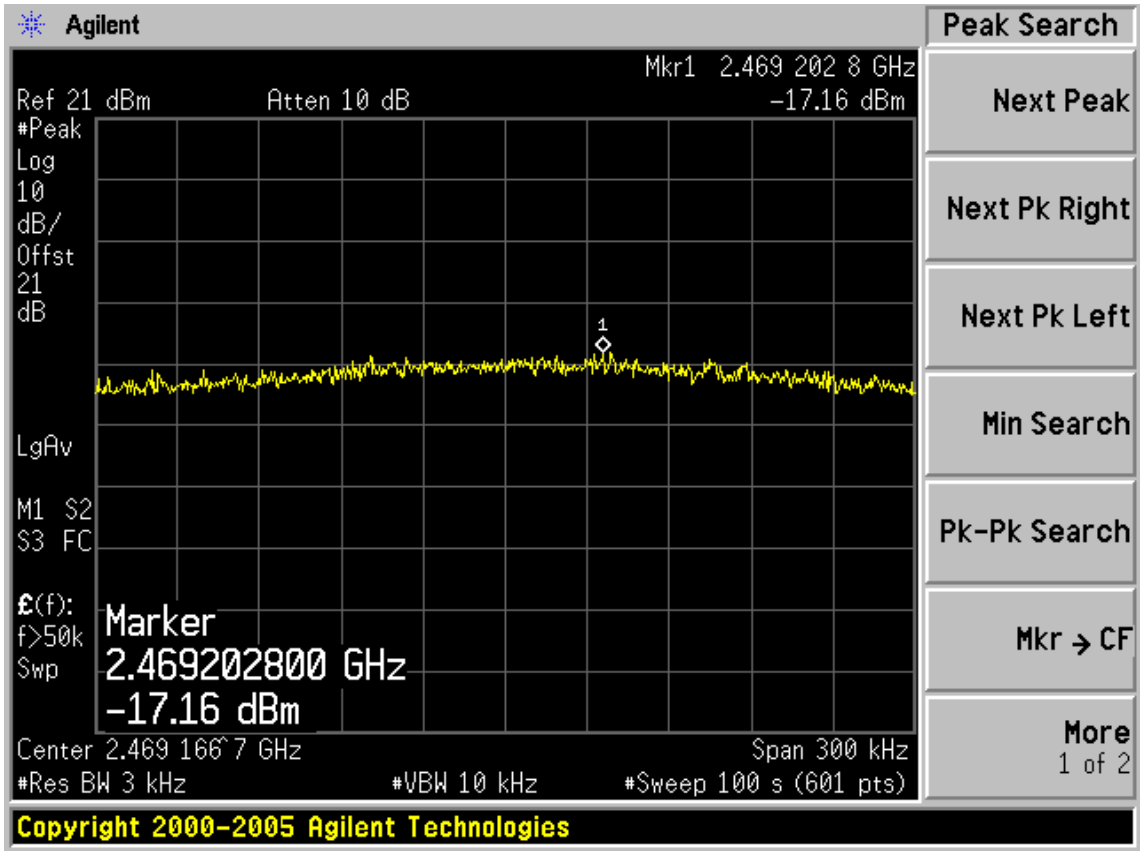
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



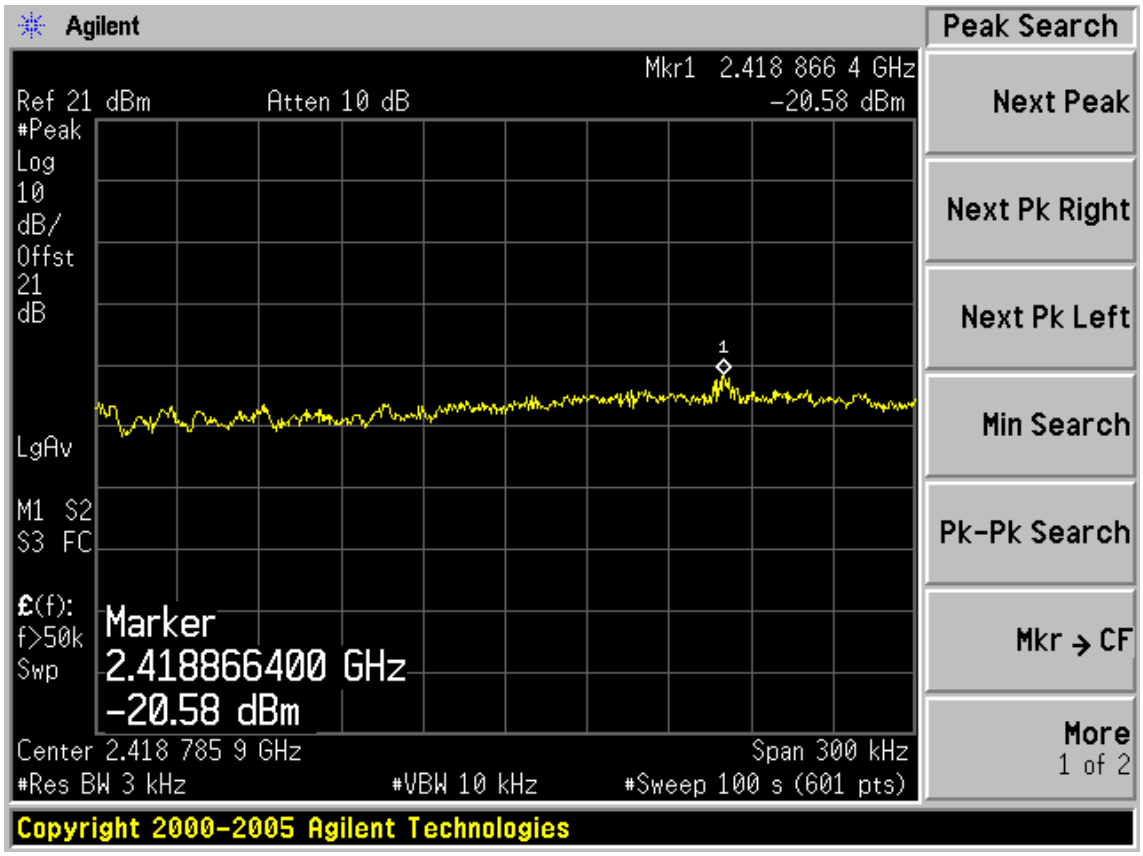
Test CH6: 2437MHz



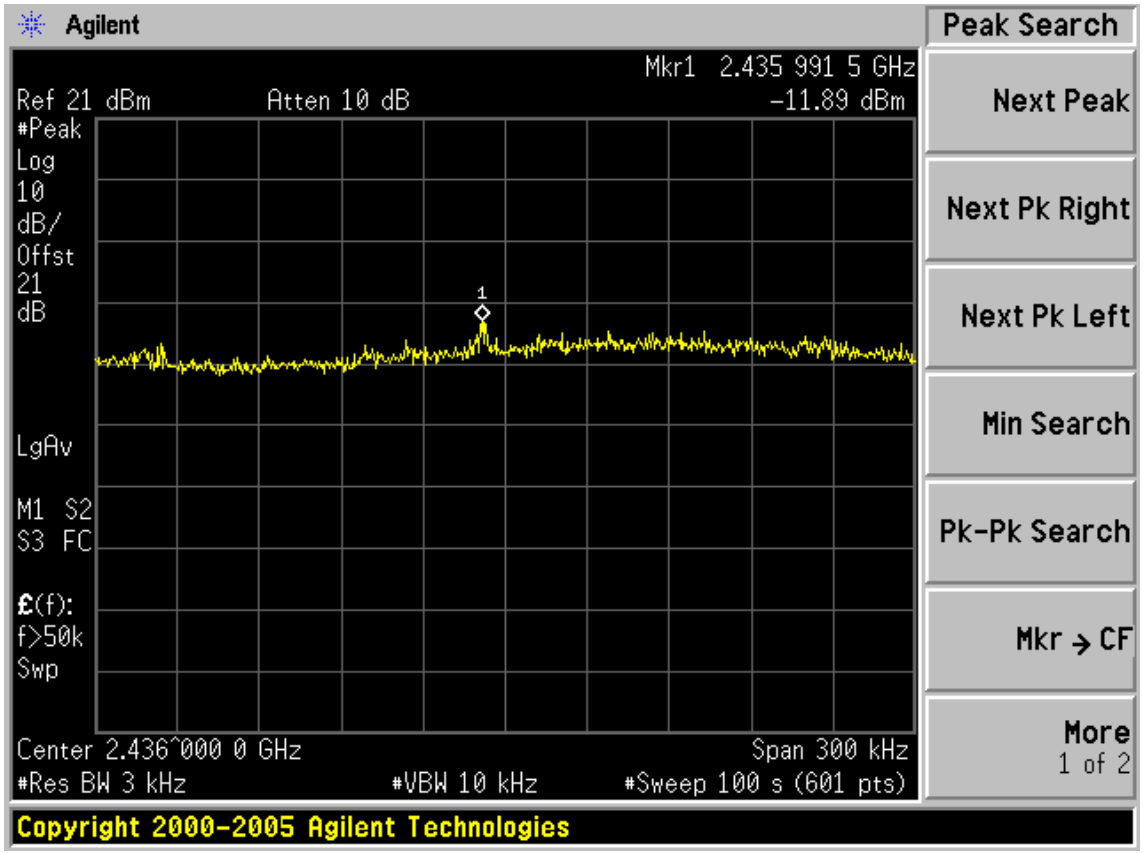
Test CH11: 2462MHz



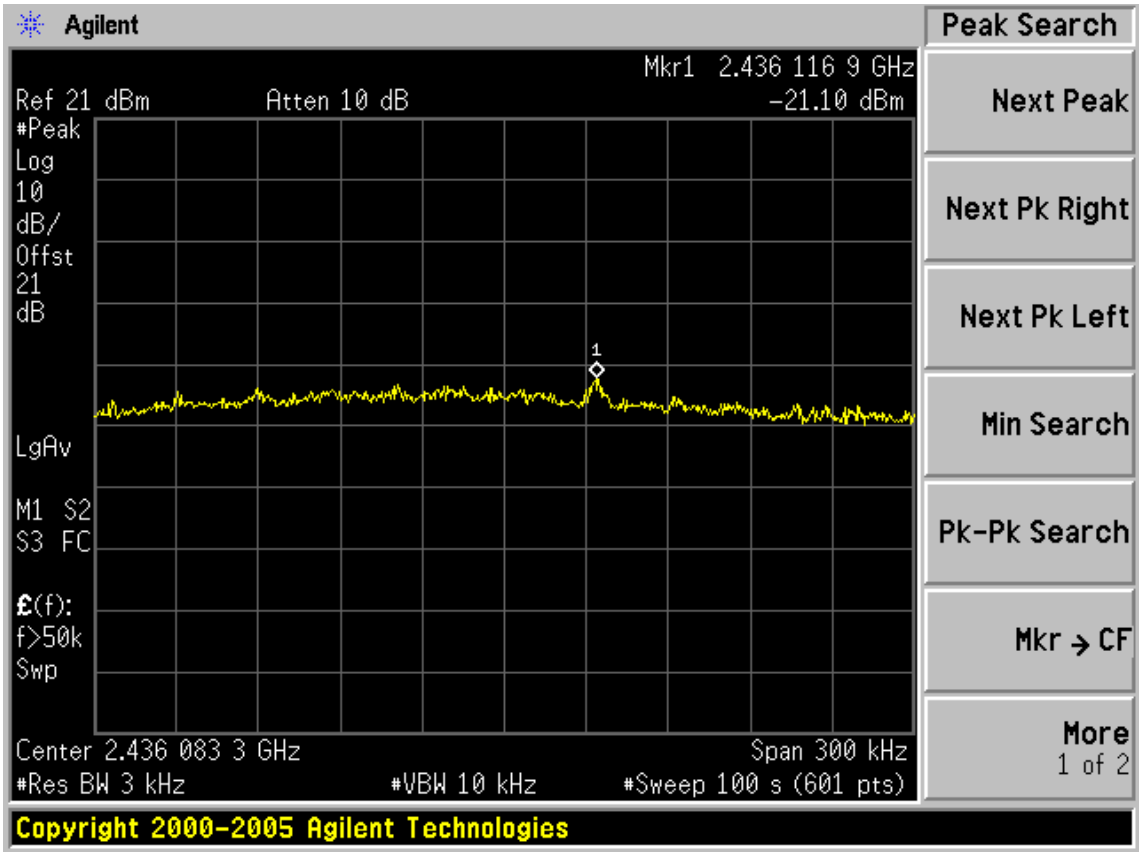
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



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 Dipole 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 2dBi.

11.MPE ESTIMATION

11.1.Limit for General Population/ Uncontrolled Exposures

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

Frequency(MHz)	**Power density (mW/ cm^2)**	**Averaging time(minutes)**
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

11.2. Estimation Result

EUT: 2.4GHz 300Mbps Wireless PCI Adapter		
M/N: SMCWPCI-N5		
Test date: 2013-06-16	Pressure: 100.6 kpa	Humidity: 47%
Tested by: Leo-Li	Test site: RF Site	Temperature: 25℃

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 2 dBi	
Test Mode	CH	Frequency（MHz）	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	19.56	90.36	2	1.58	0.0285
	CH6	2437	18.67	73.62	2	1.58	0.0232
	CH11	2462	18.7	74.13	2	1.58	0.0234
11g	CH1	2412	22.54	179.47	2	1.58	0.0566
	CH6	2437	24.37	273.53	2	1.58	0.0863
	CH11	2462	16.87	48.64	2	1.58	0.0153
11n HT20	CH1	2412	19.84	96.38	2	1.58	0.0304
	CH6	2437	25.96	394.46	2	1.58	0.1244
	CH11	2462	18.96	78.70	2	1.58	0.0248
11n HT40	CH1	2412	17.72	59.16	2	1.58	0.0187
	CH4	2437	26	398.11	2	1.58	0.1256
	CH7	2462	17.87	61.24	2	1.58	0.0193

12.DEVIATION TO TEST SPECIFICATIONS

[NONE]