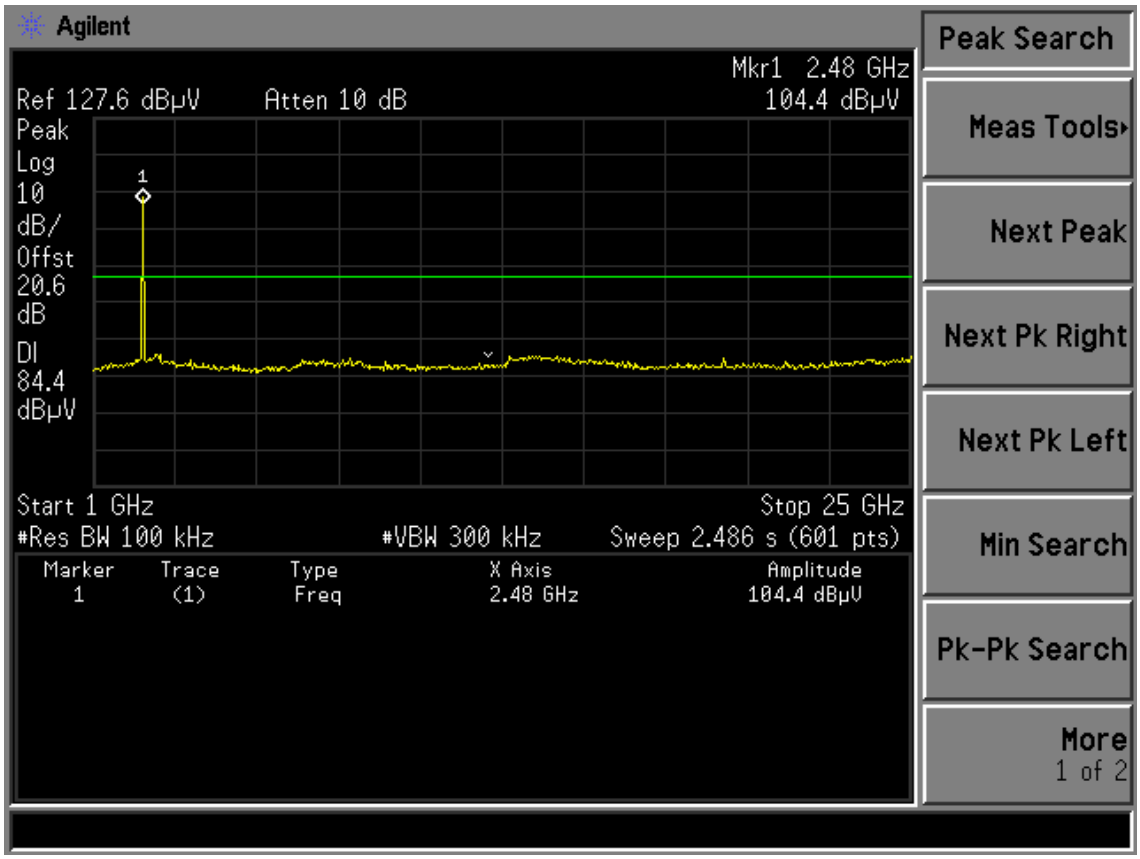
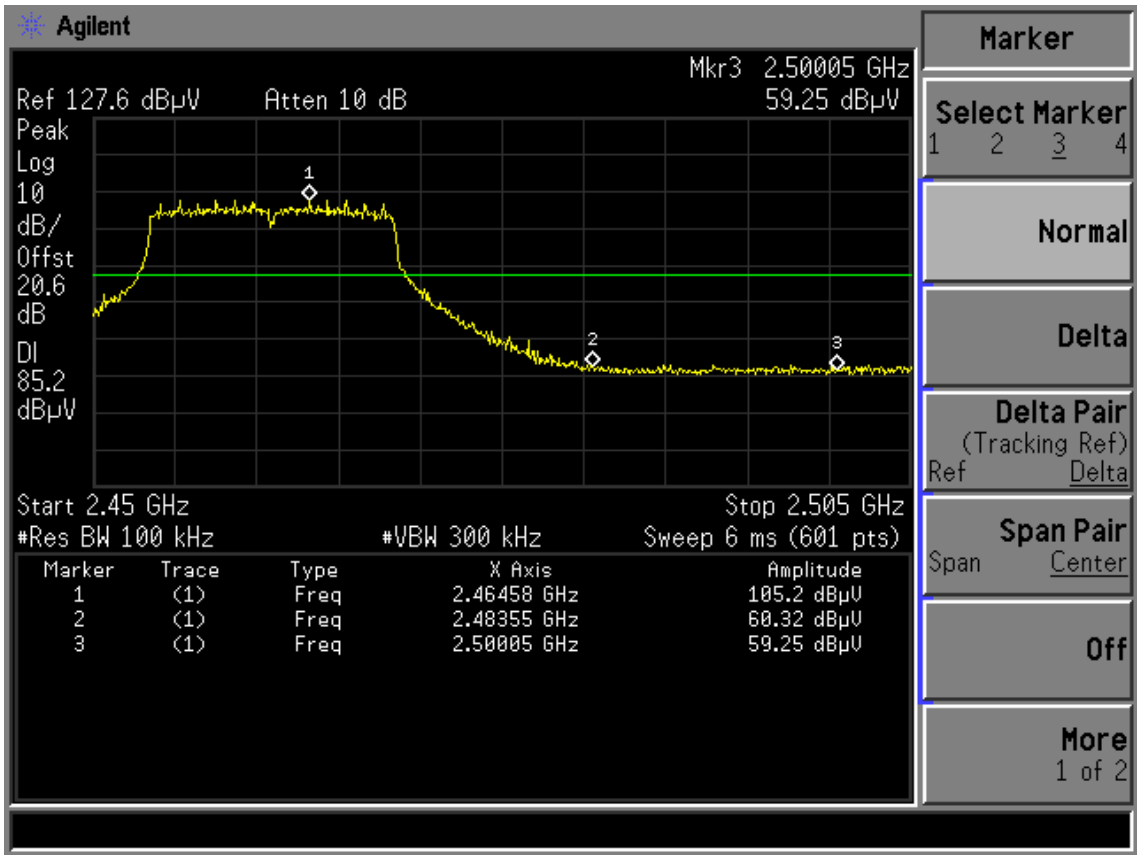
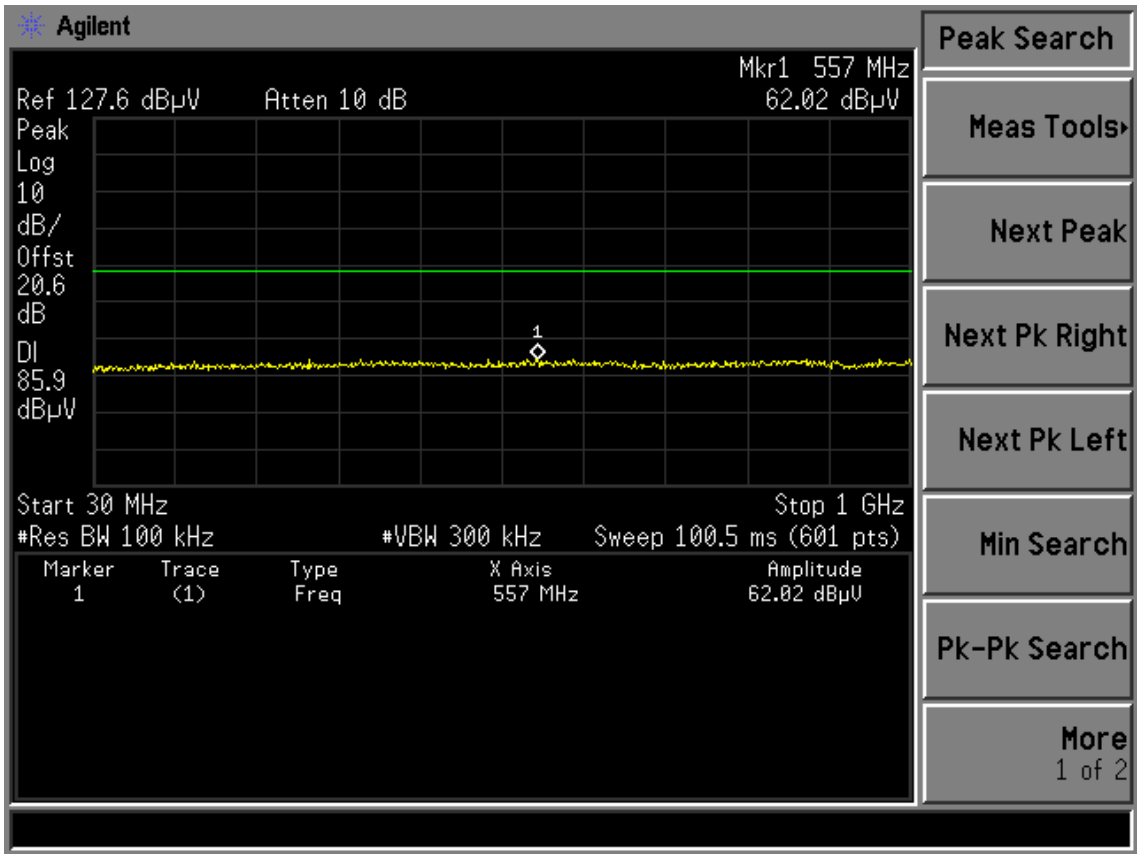
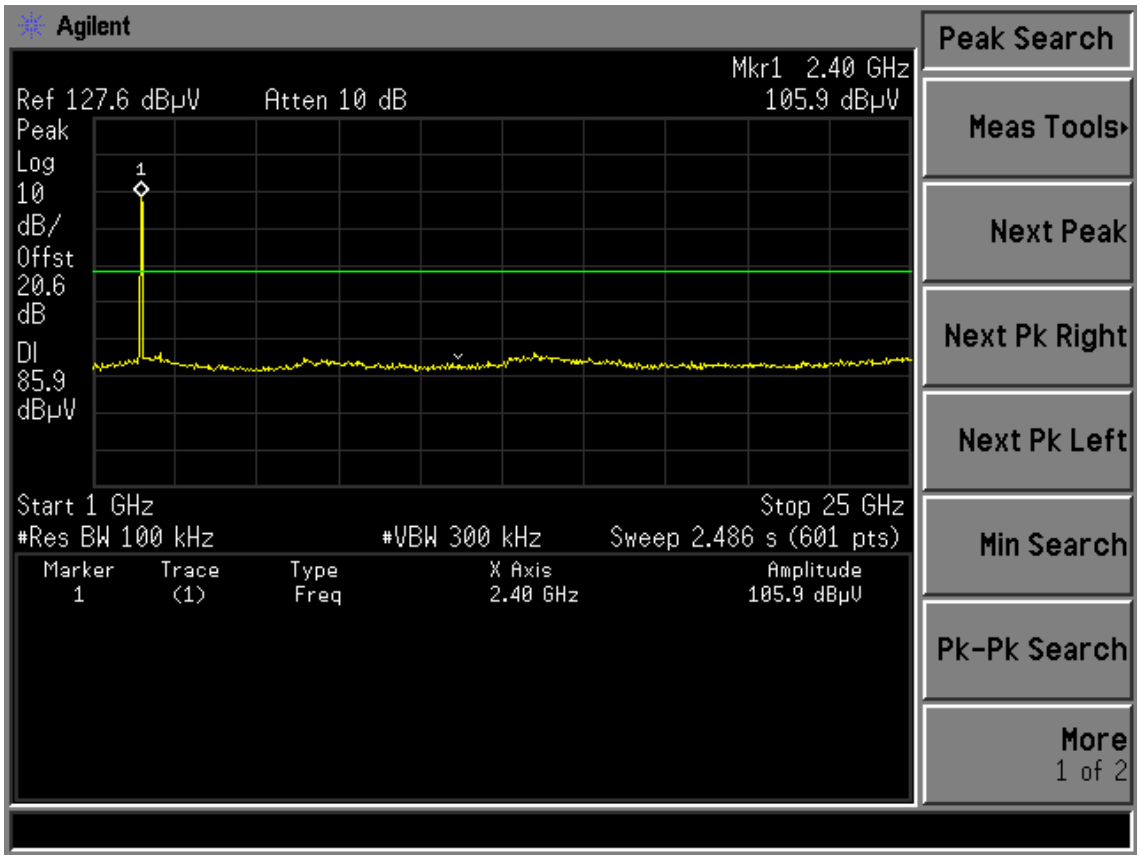
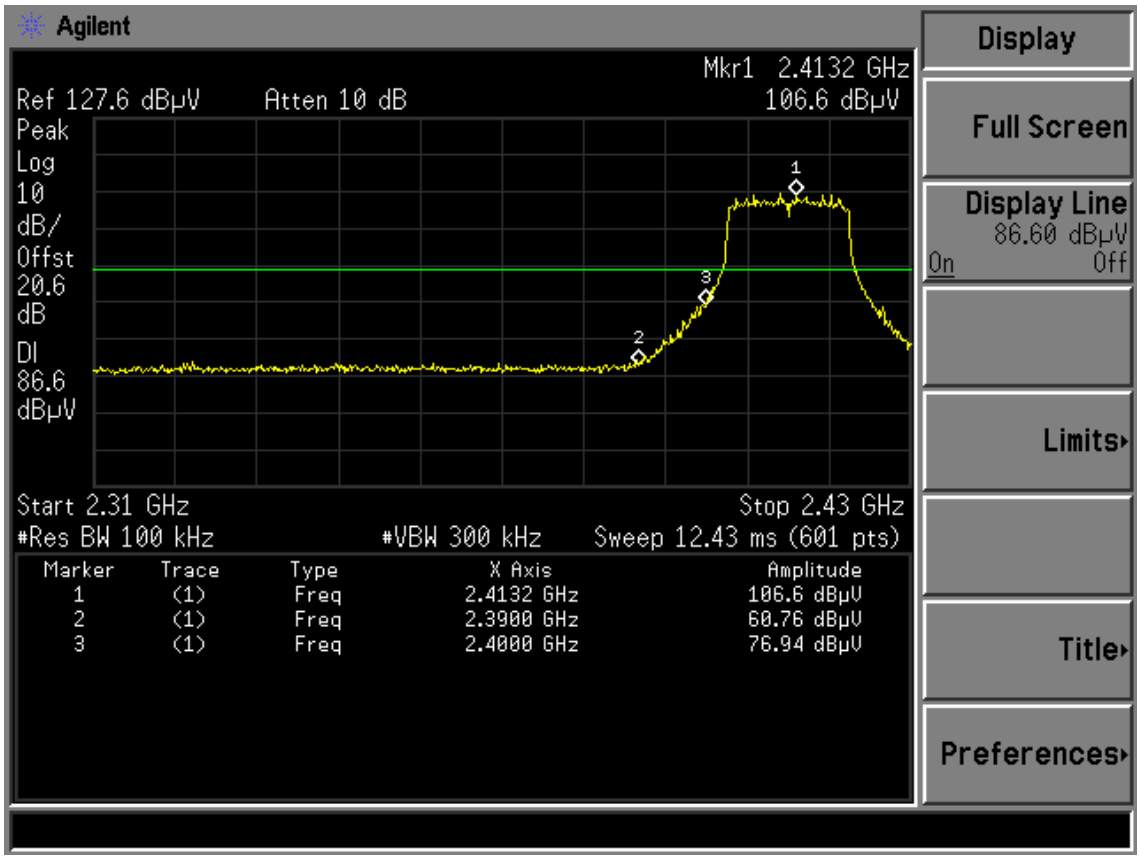

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
104.4 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
84.4
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 104.4 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.50005 GHz
Ref 127.6 dBµV
Atten 10 dB
59.25 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
85.2
dBµV
Start 2.45 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.46458 GHz 105.2 dBµV
2 (1) Freq 2.48355 GHz 60.32 dBµV
3 (1) Freq 2.50005 GHz 59.25 dBµV
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

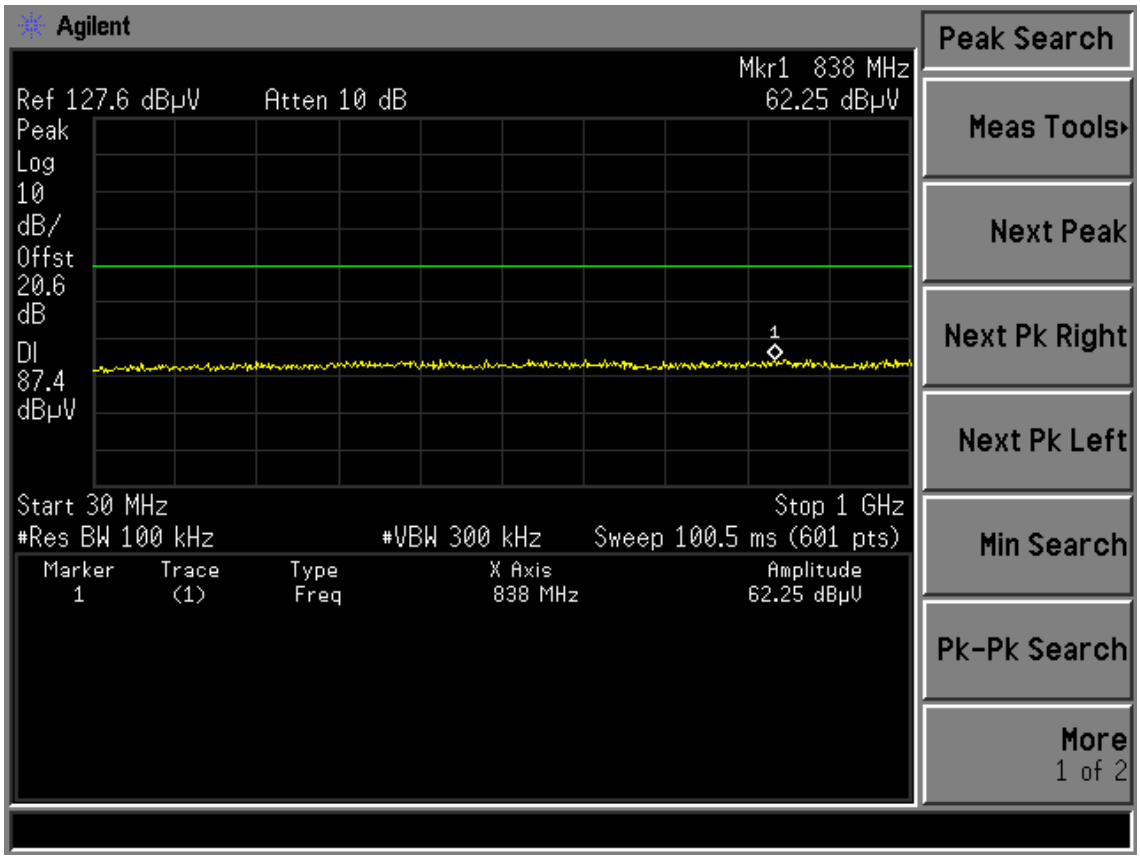
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

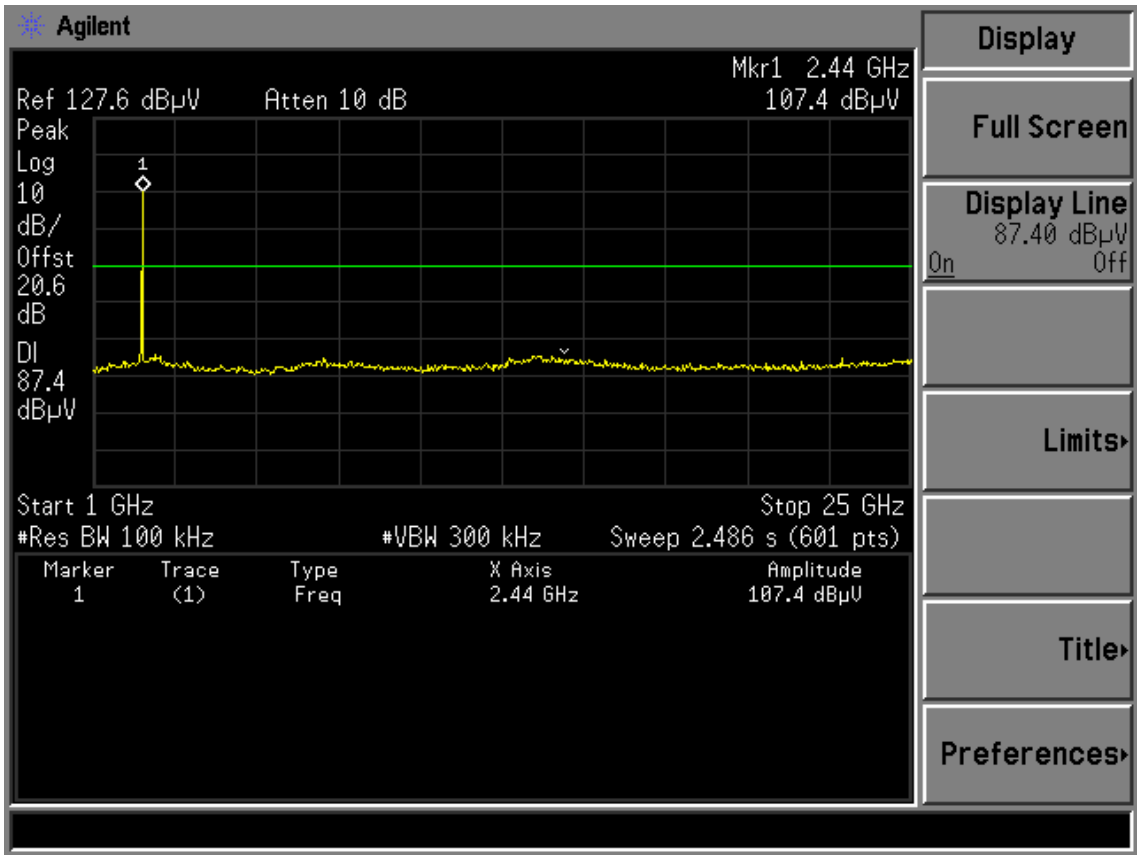




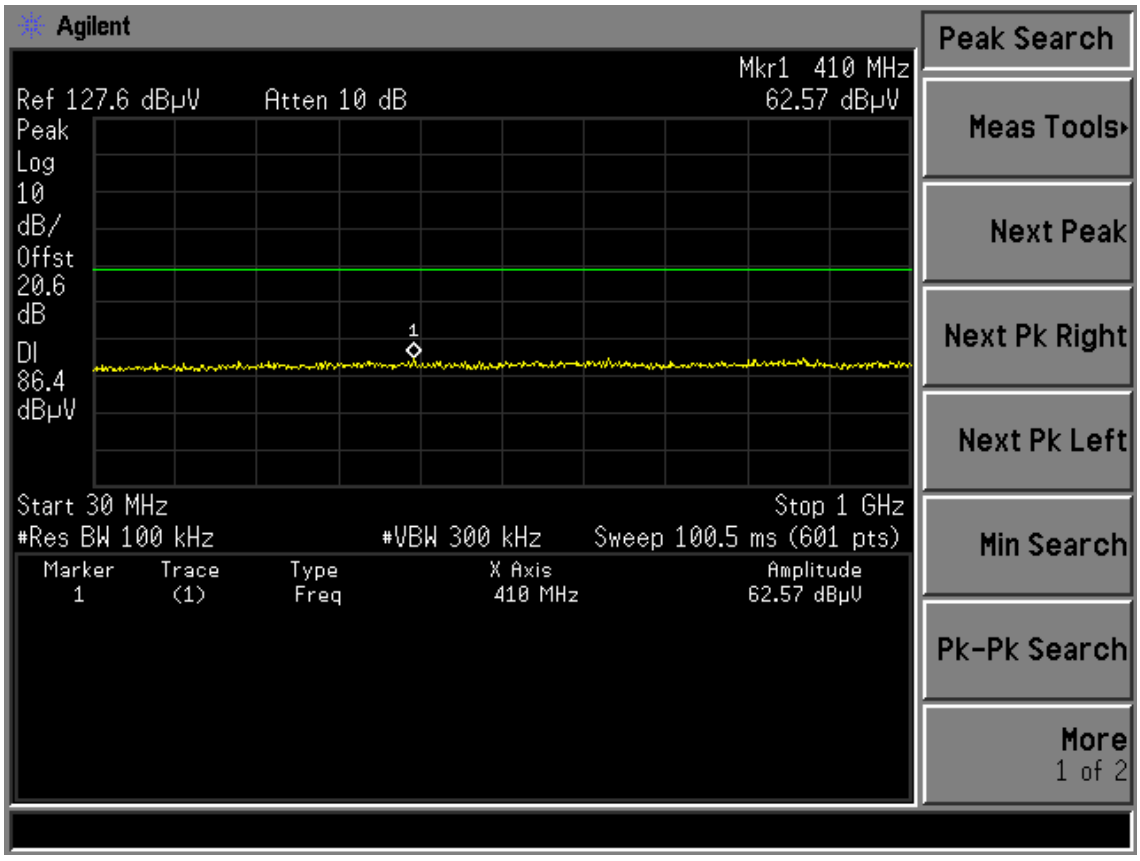


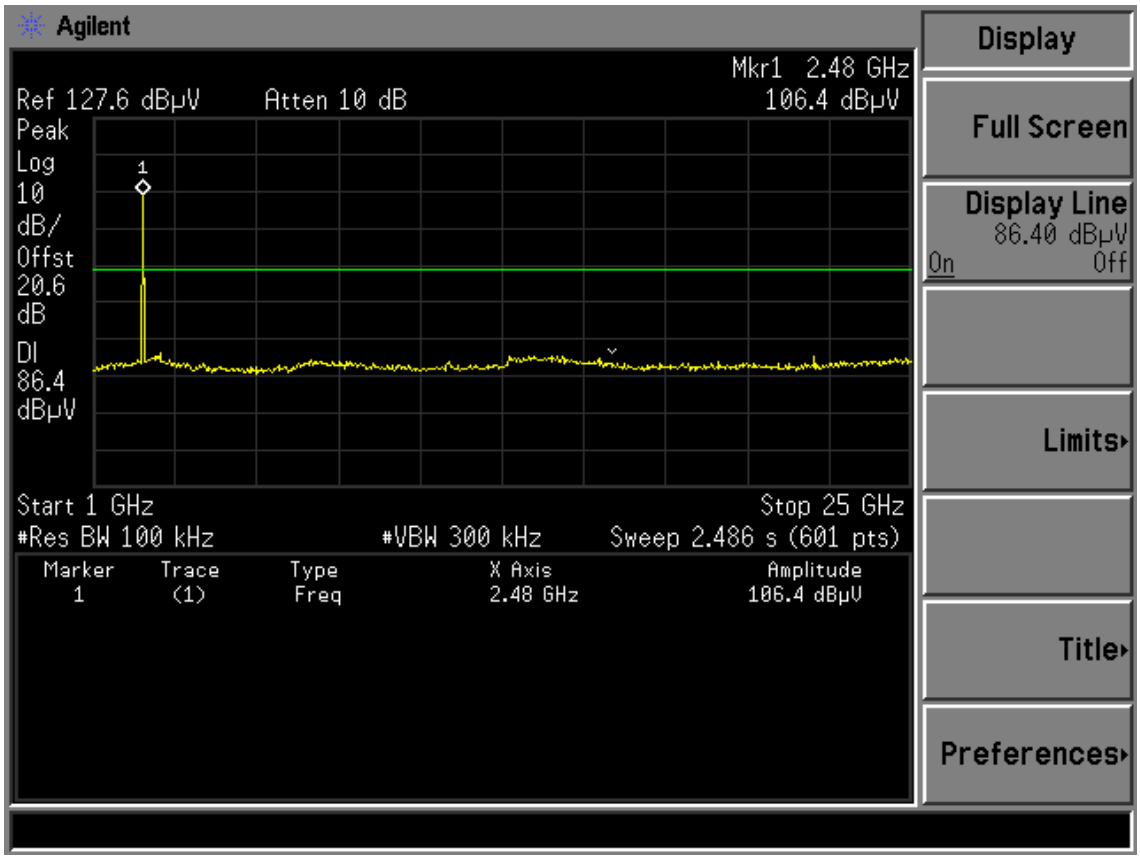
Test CH6: 2437MHz

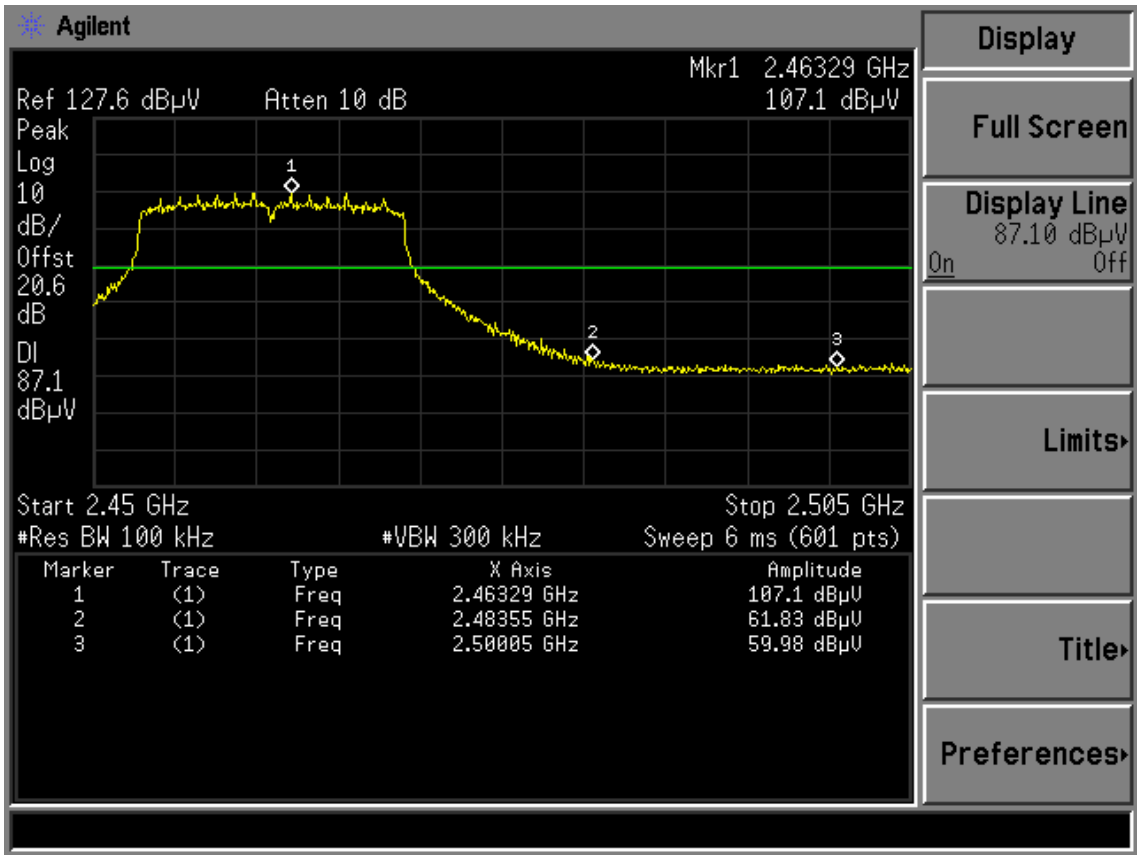




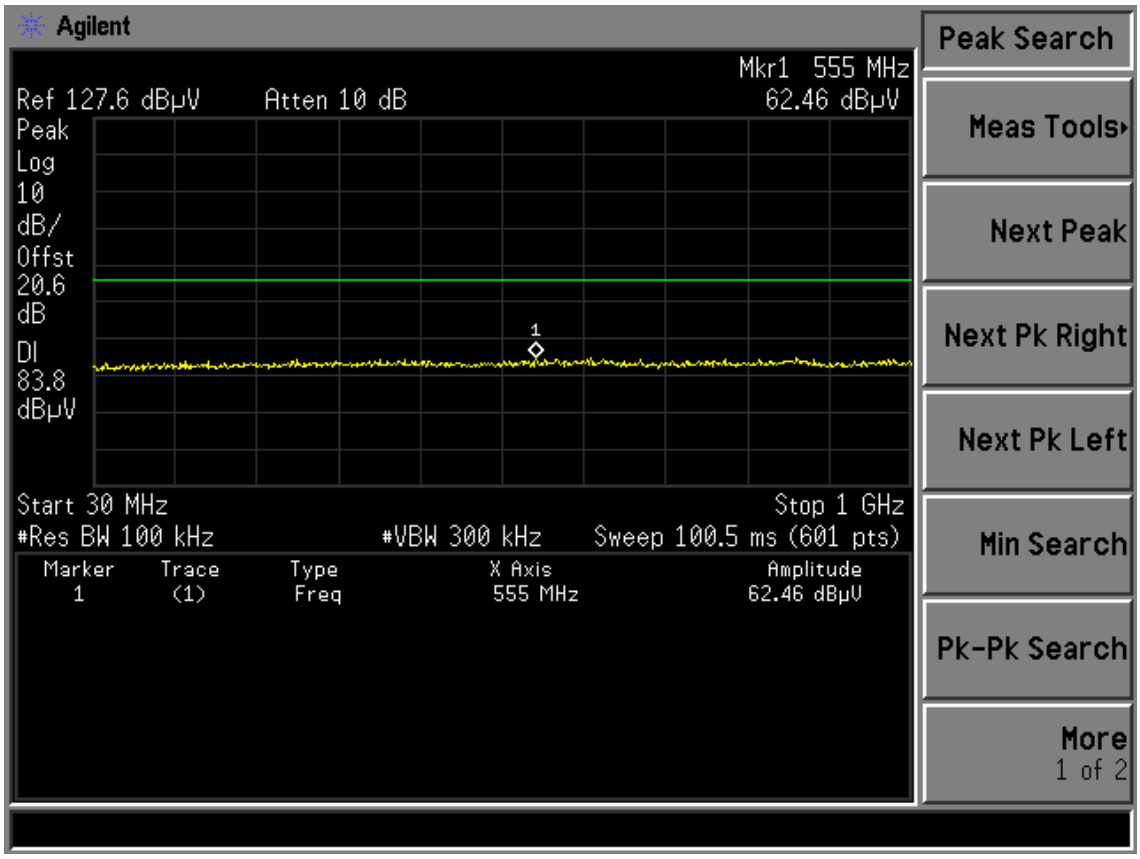
Test CH11: 2462MHz

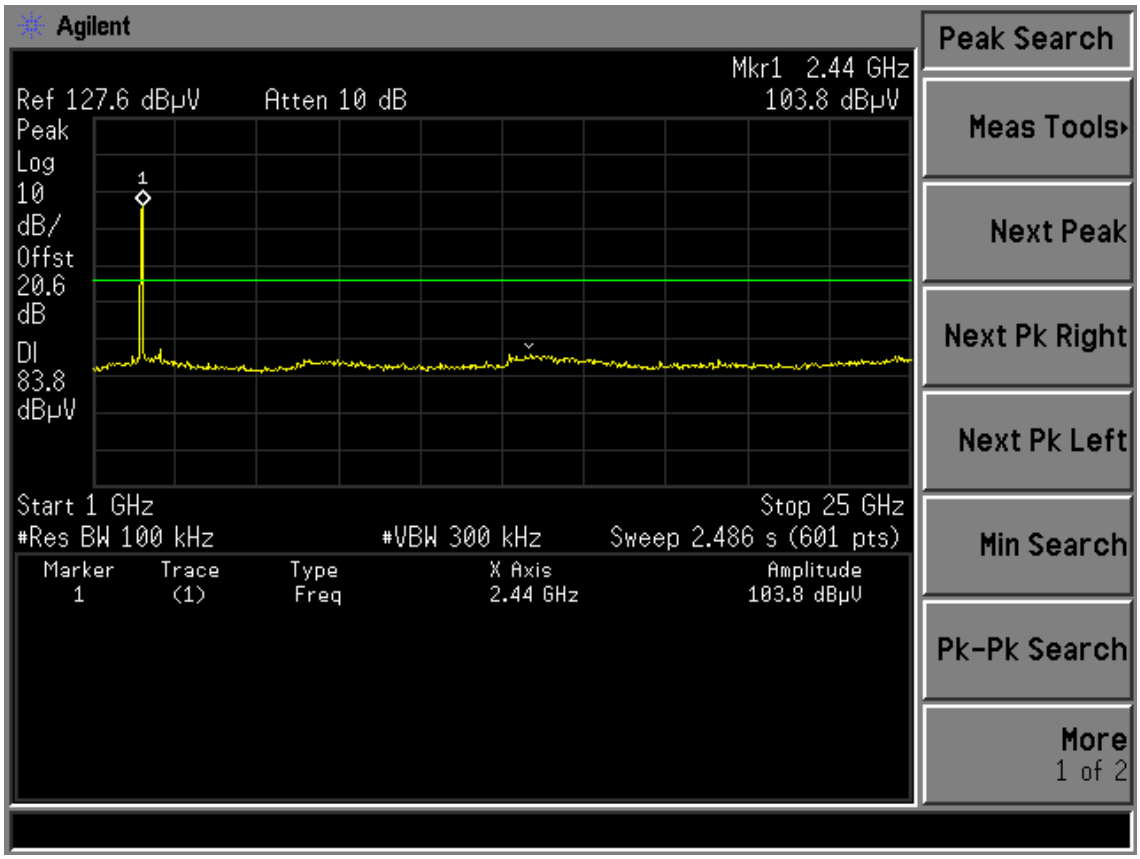


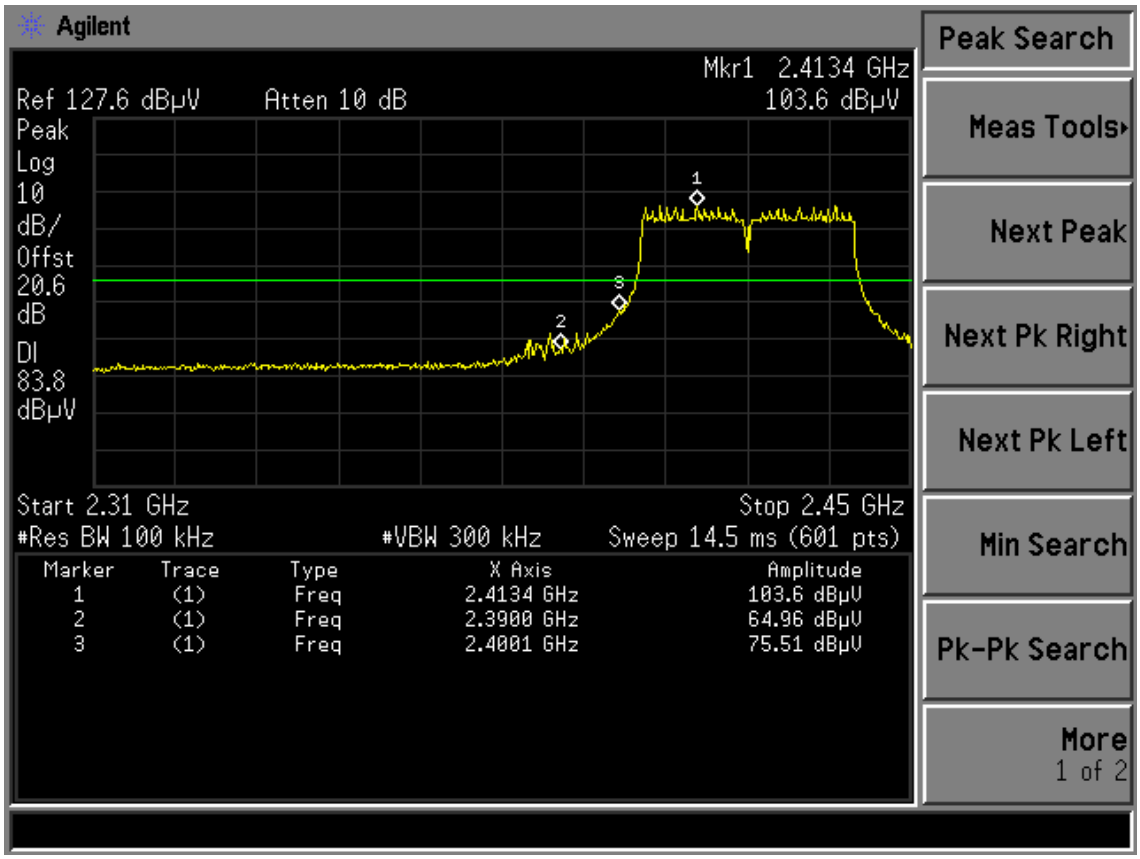

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
106.4 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
86.4
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 106.4 dBµV
Display
Full Screen
Display Line
86.40 dBµV
On Off
Limits
Title
Preferences


Agilent
Mkr1 2.46329 GHz
Ref 127.6 dBµV
Atten 10 dB
107.1 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
87.1
dBµV
Start 2.45 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.46329 GHz 107.1 dBµV
2 (1) Freq 2.48355 GHz 61.83 dBµV
3 (1) Freq 2.50005 GHz 59.98 dBµV
Display
Full Screen
Display Line
87.10 dBµV
On Off
Limits
Title
Preferences

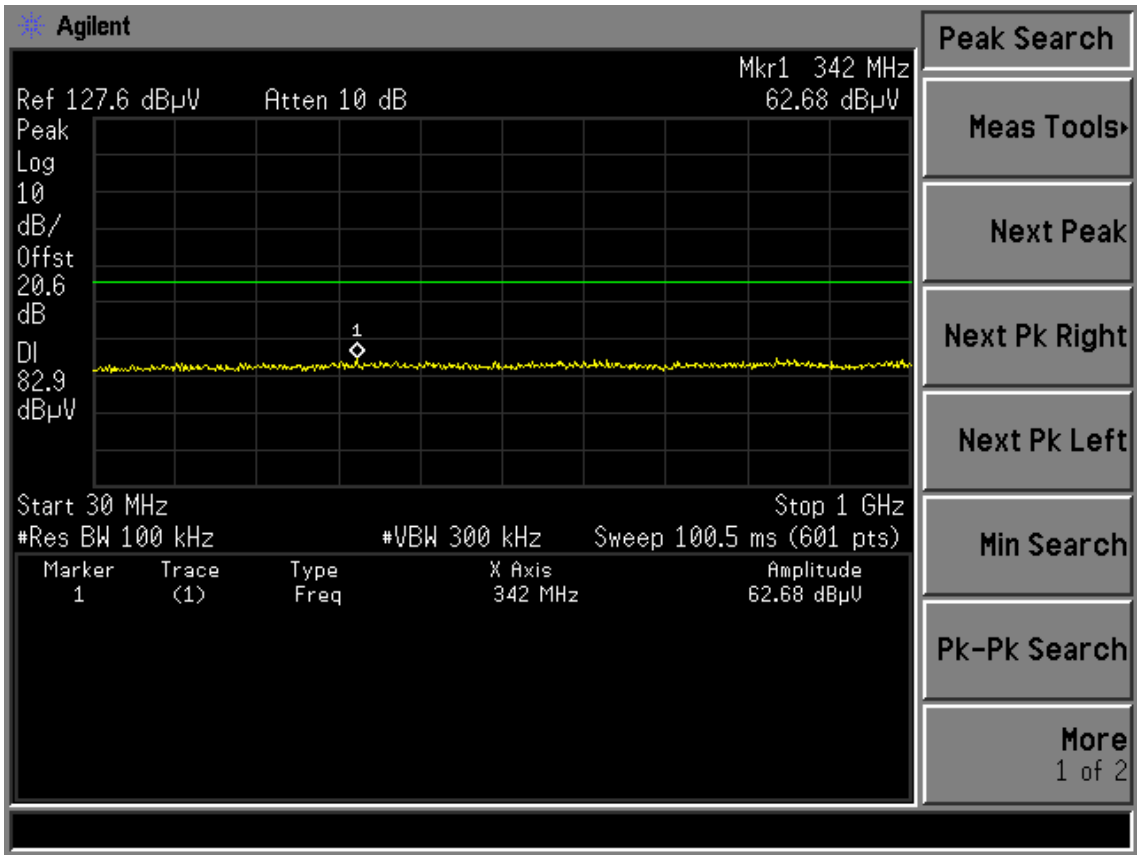
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

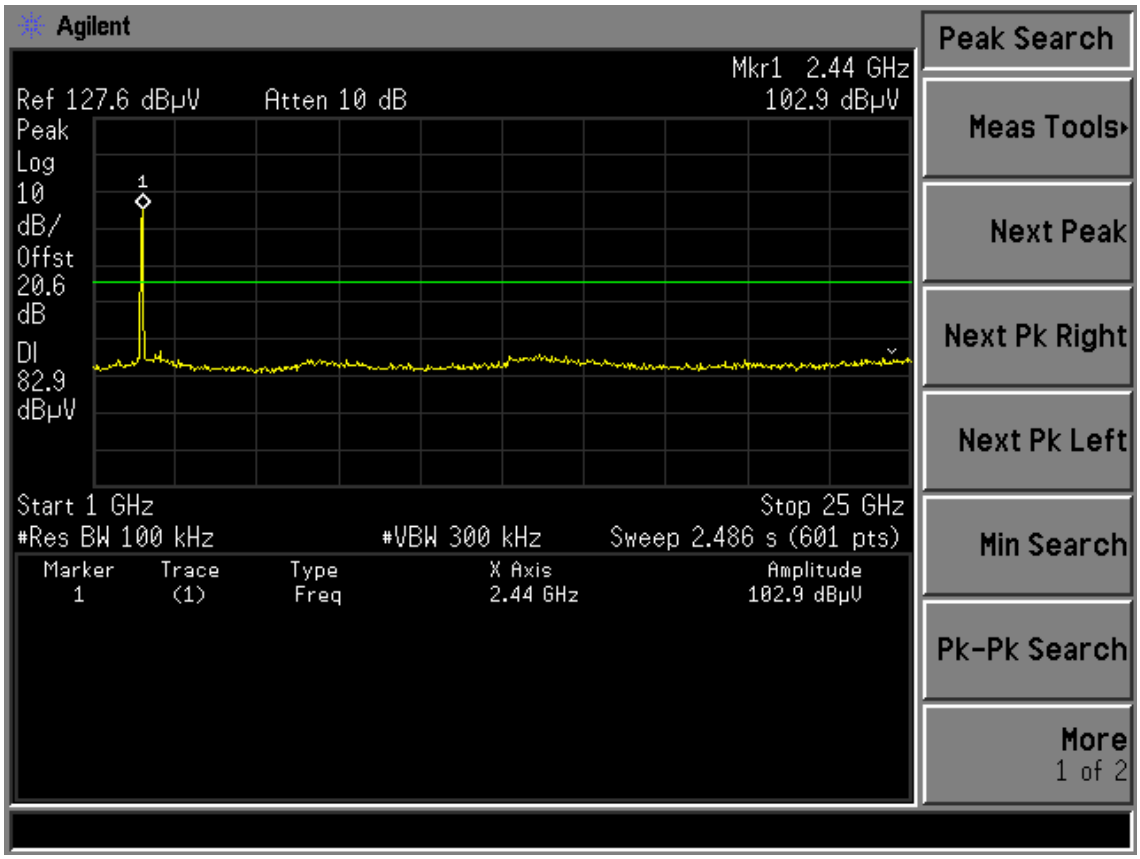




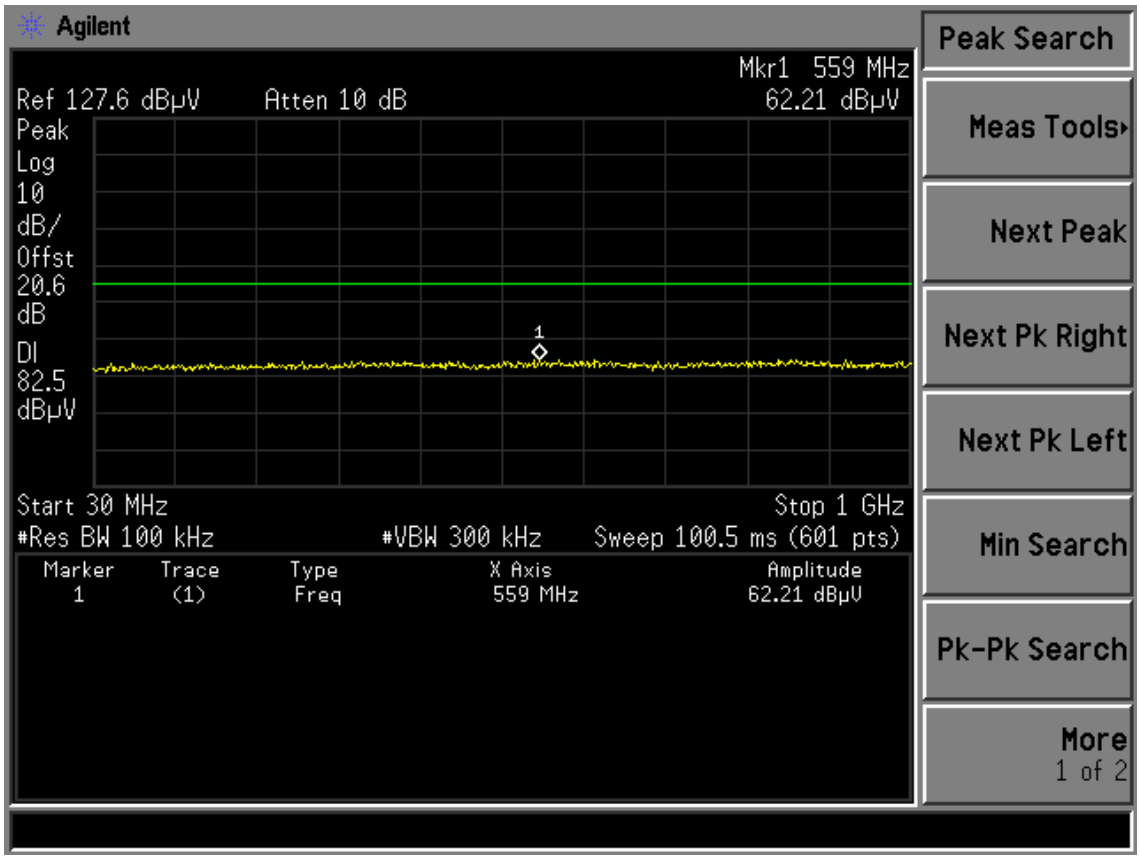


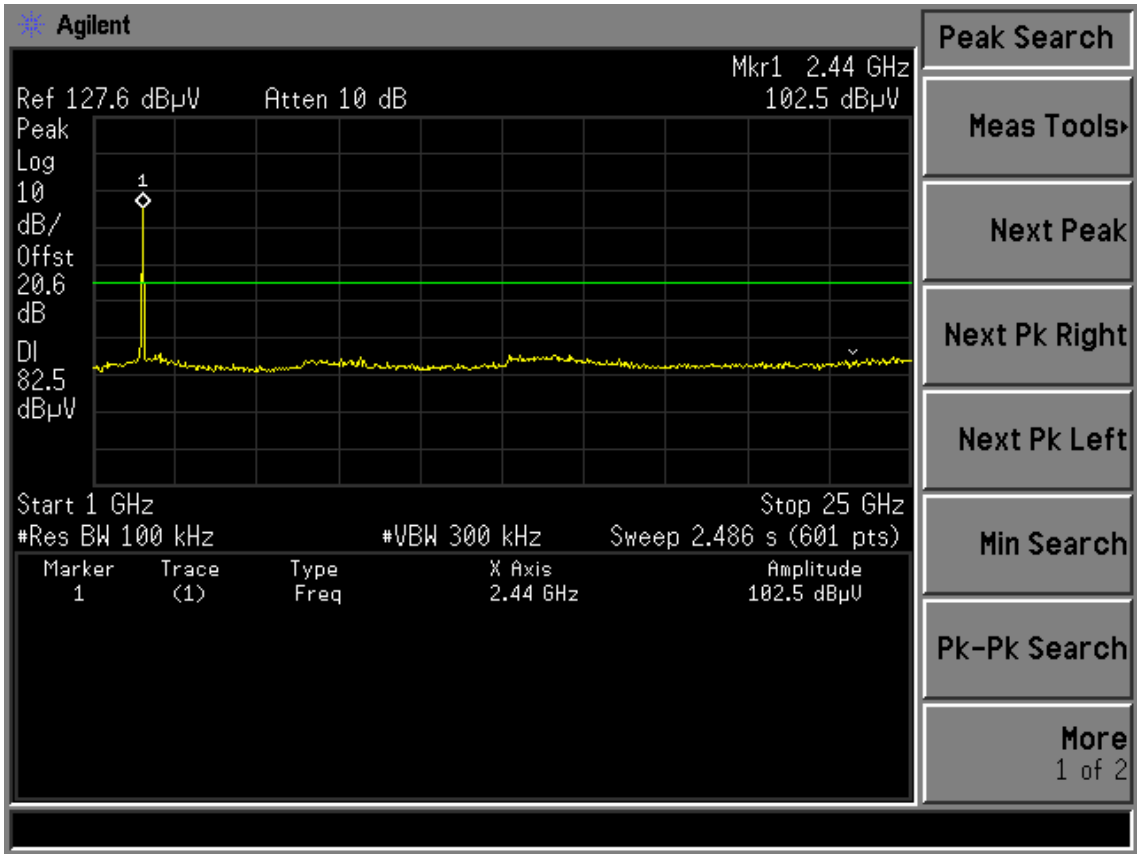
Test CH4: 2437MHz

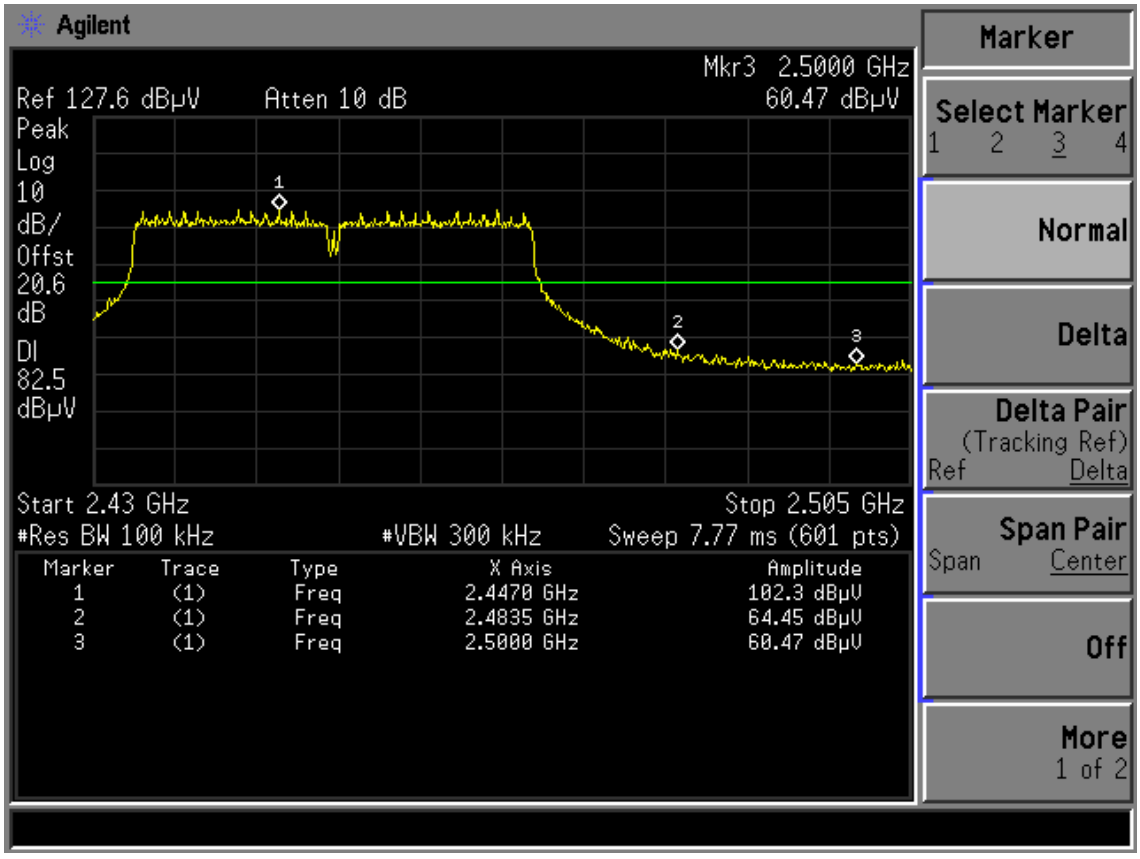




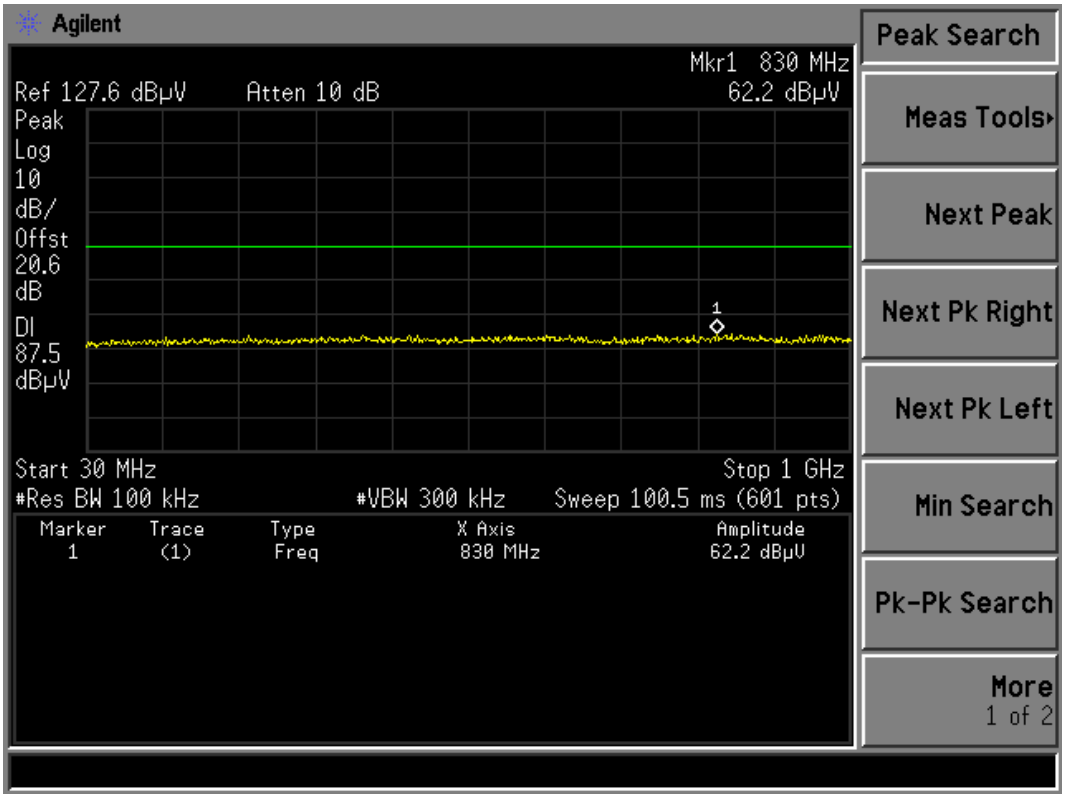
Test CH7: 2452MHz

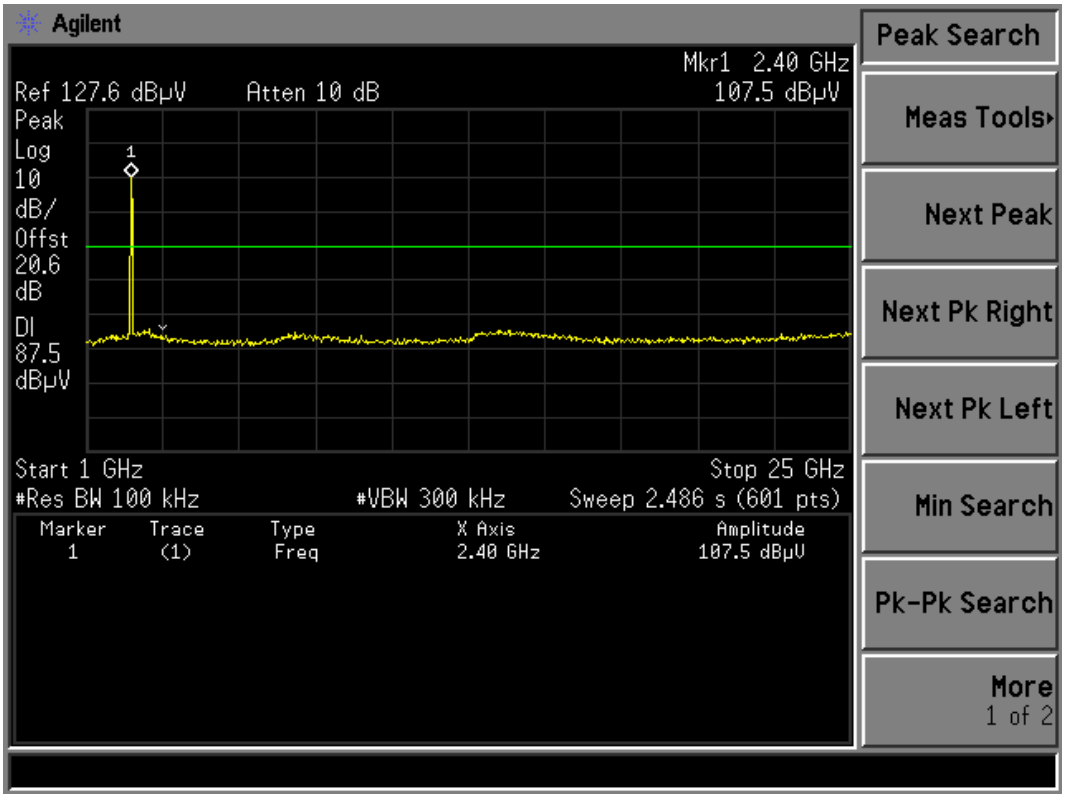


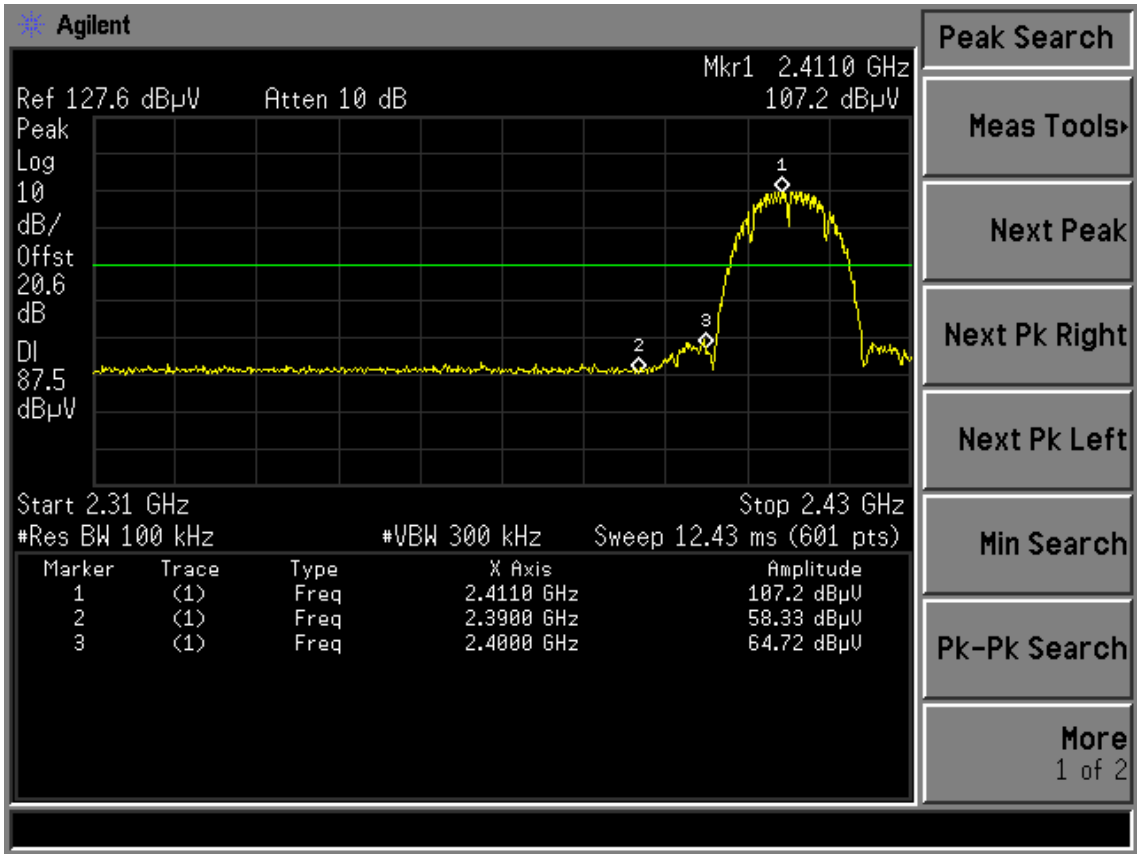

Agilent
Mkr1 2.44 GHz
Ref 127.6 dBµV
Atten 10 dB
102.5 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.5
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 102.5 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.5000 GHz
Ref 127.6 dBµV
Atten 10 dB
60.47 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.5
dBµV
Start 2.43 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 7.77 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4470 GHz 102.3 dBµV
2 (1) Freq 2.4835 GHz 64.45 dBµV
3 (1) Freq 2.5000 GHz 60.47 dBµV
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

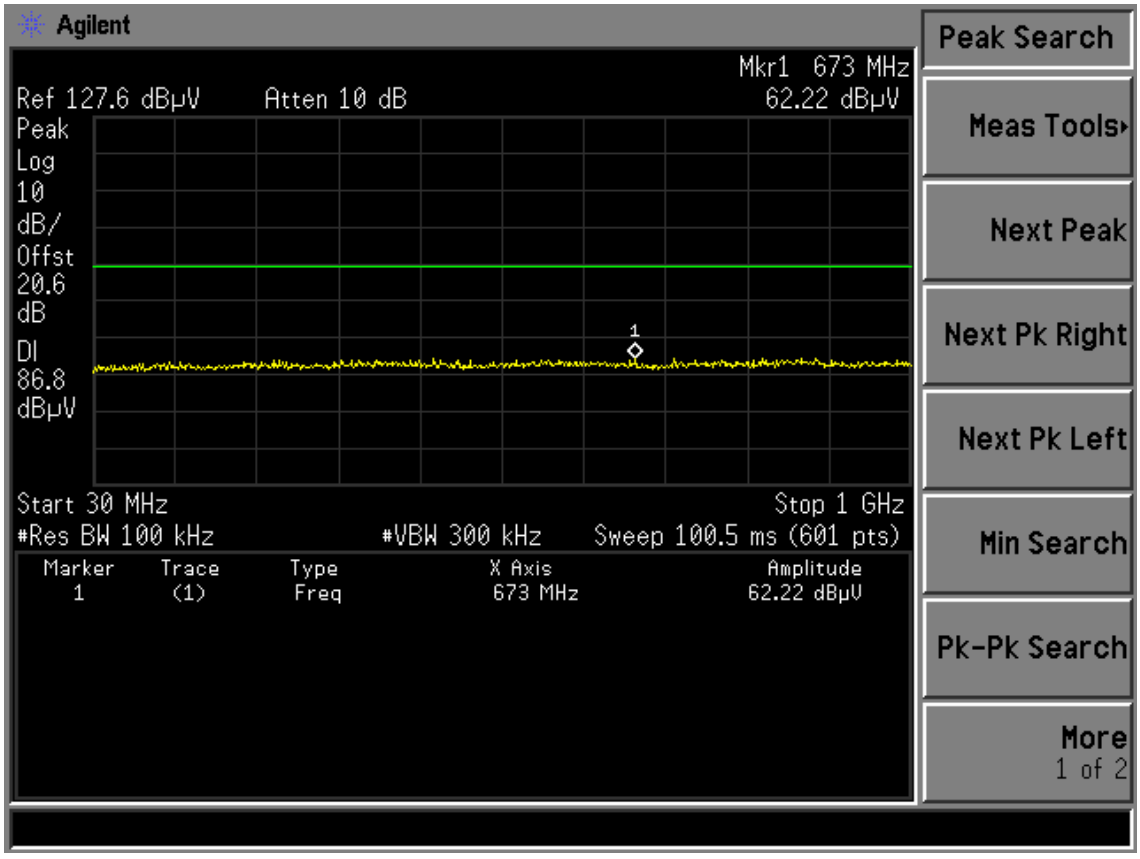
Chain 2:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz

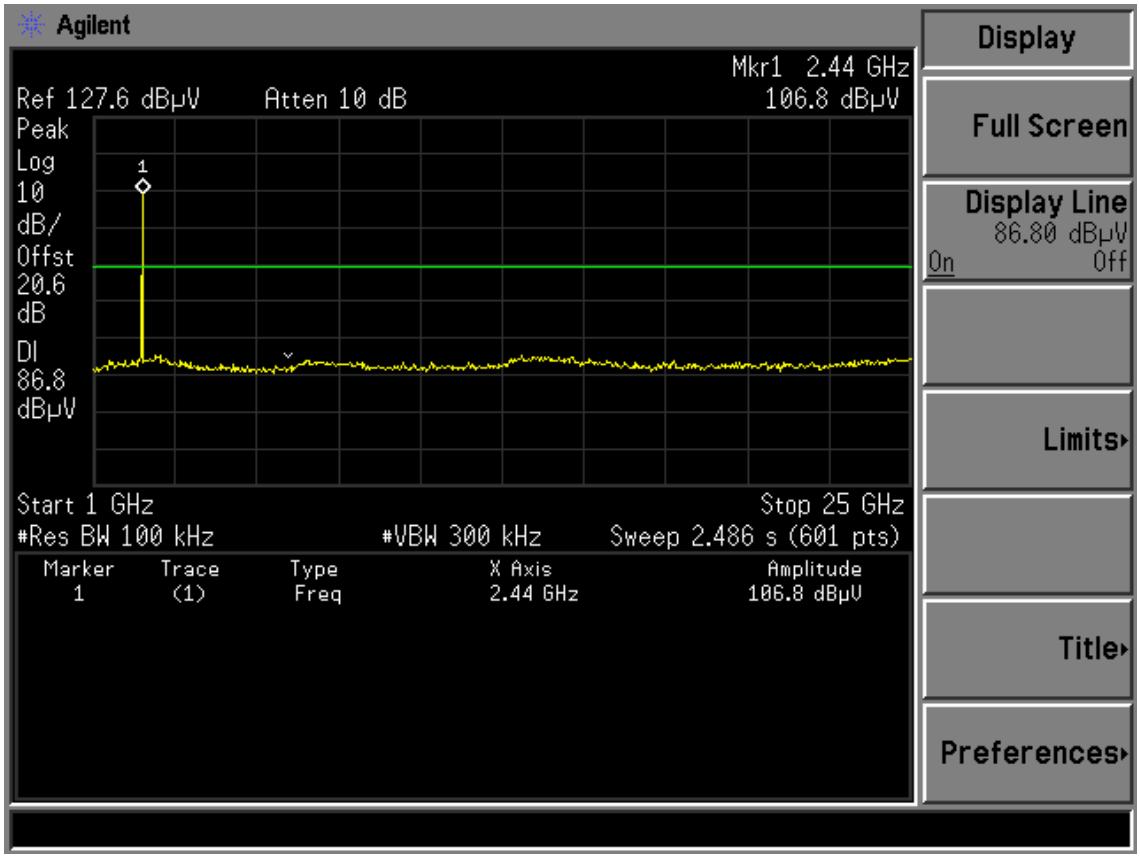




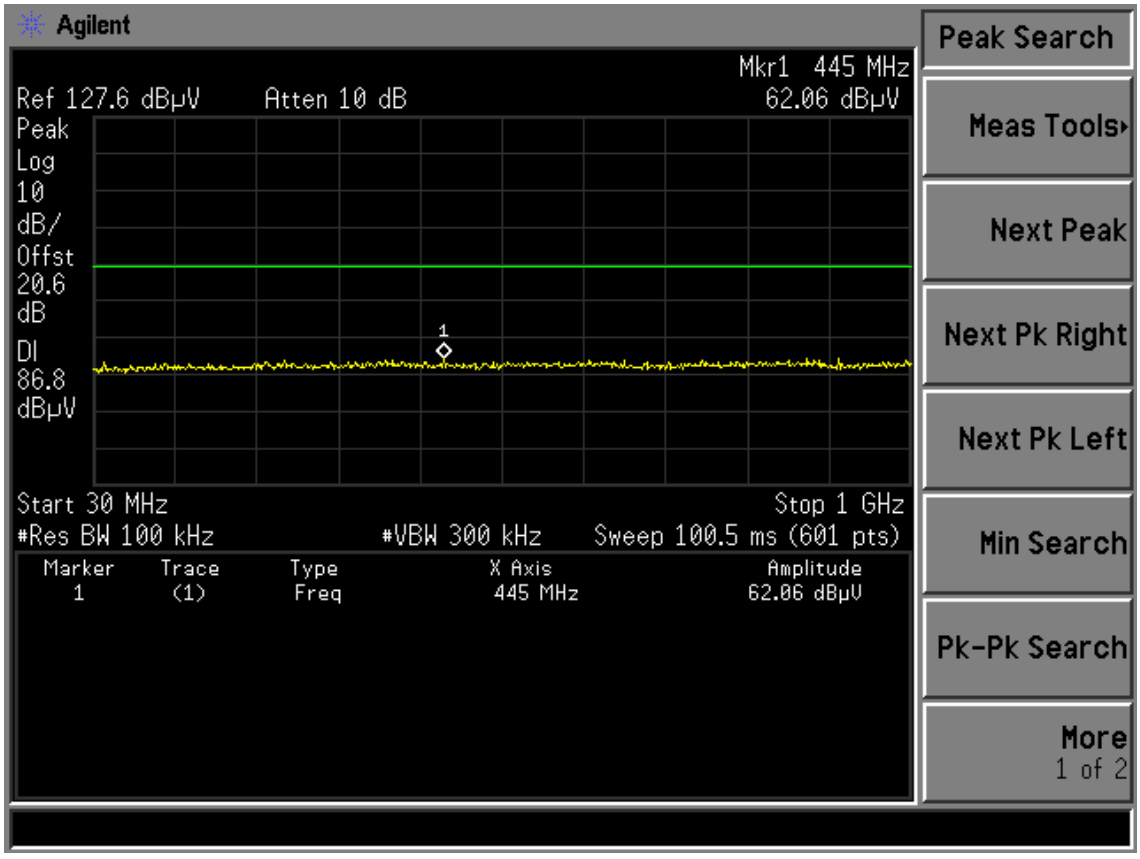


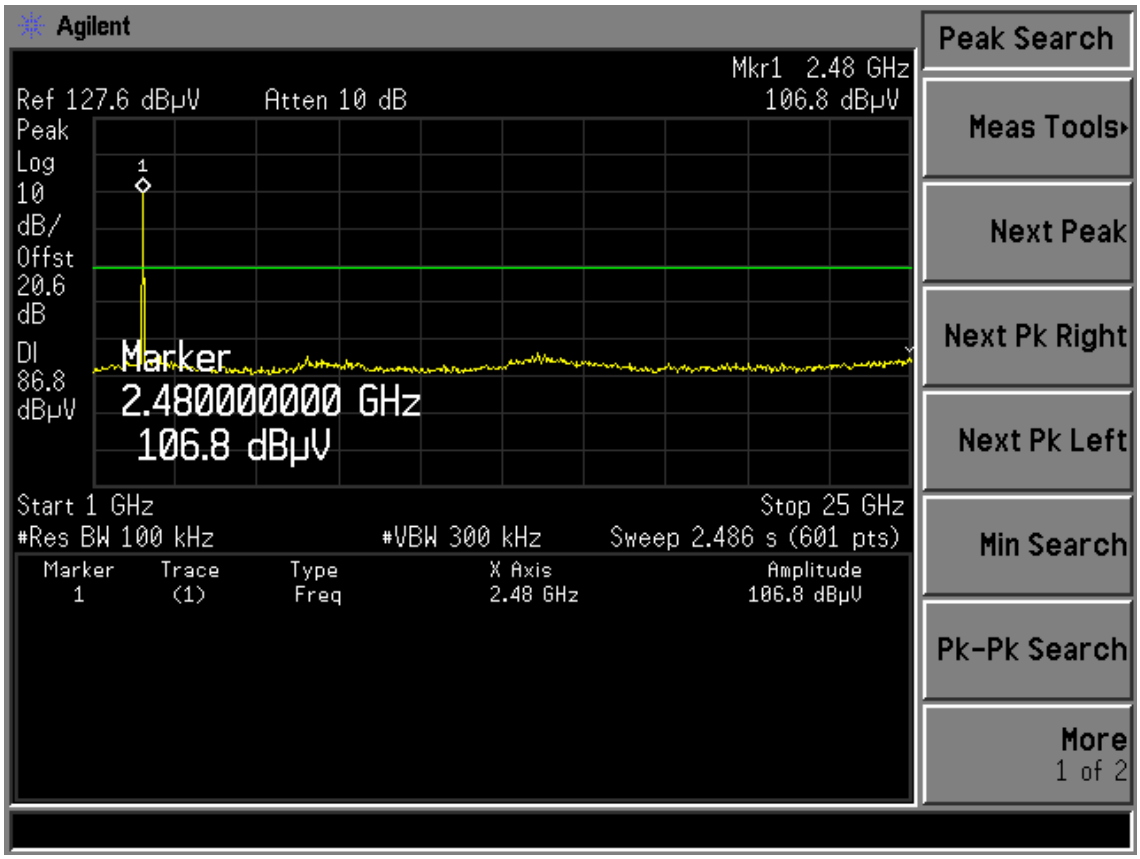
Test CH6: 2437MHz

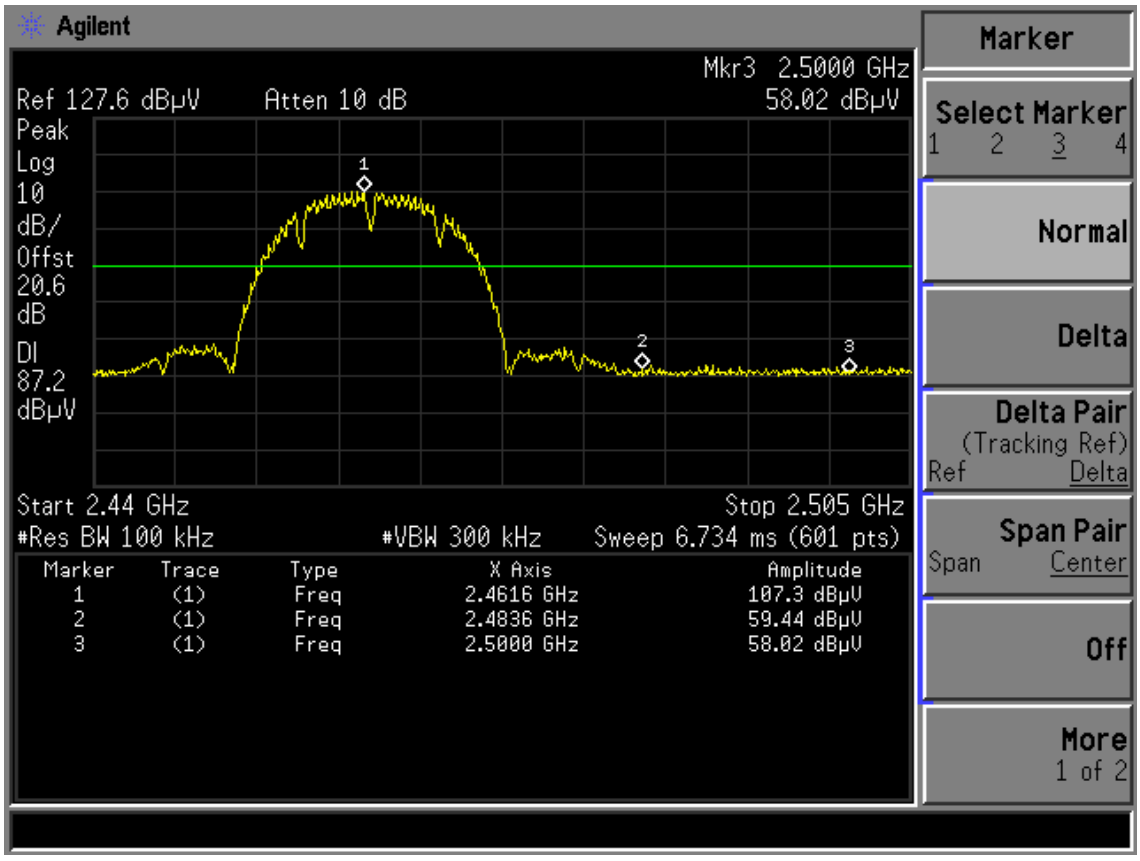




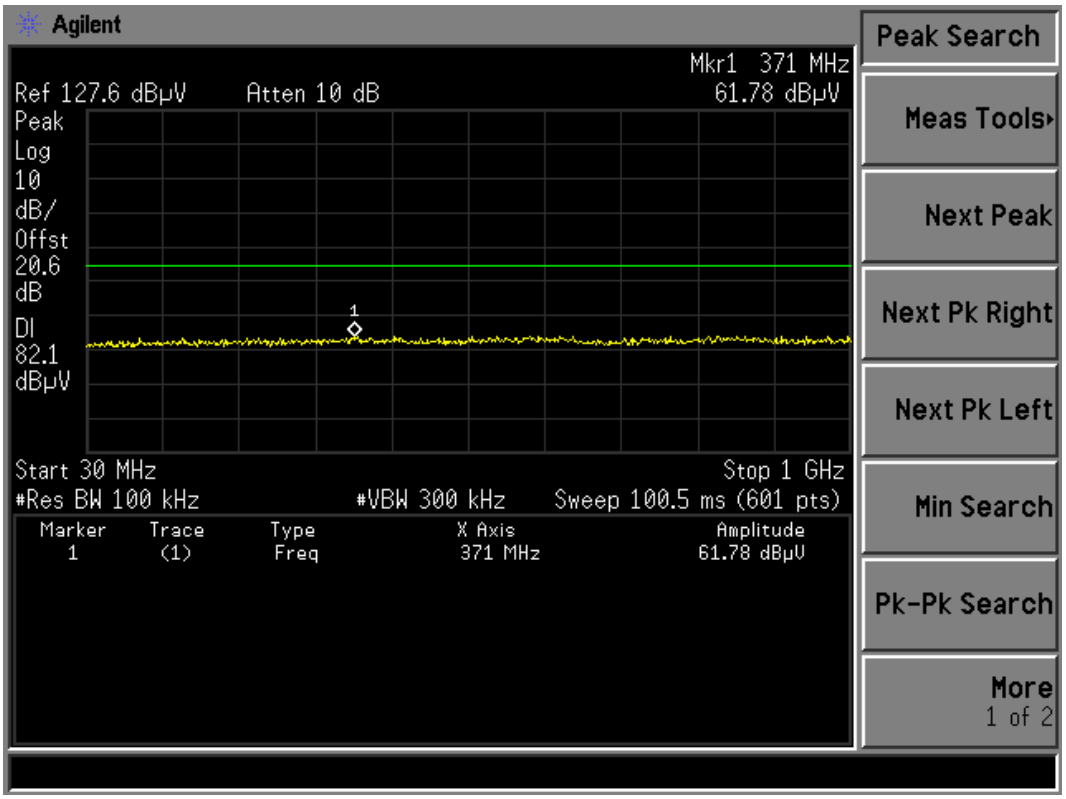
Test CH11: 2462MHz

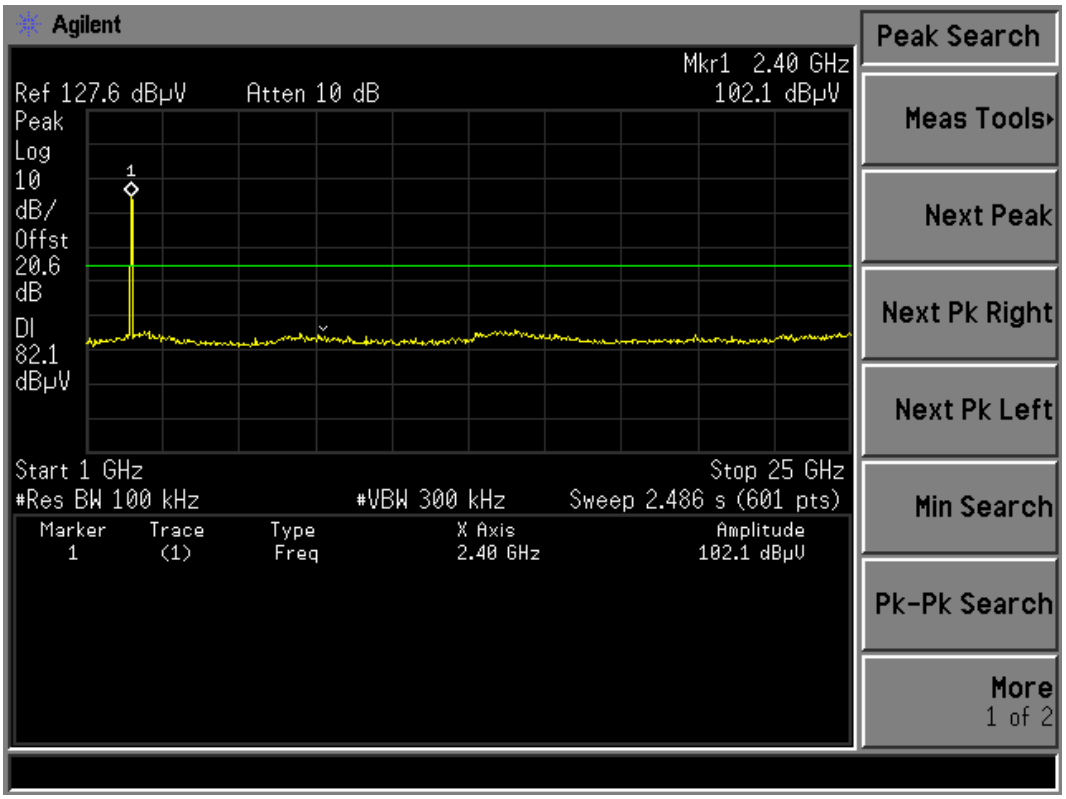


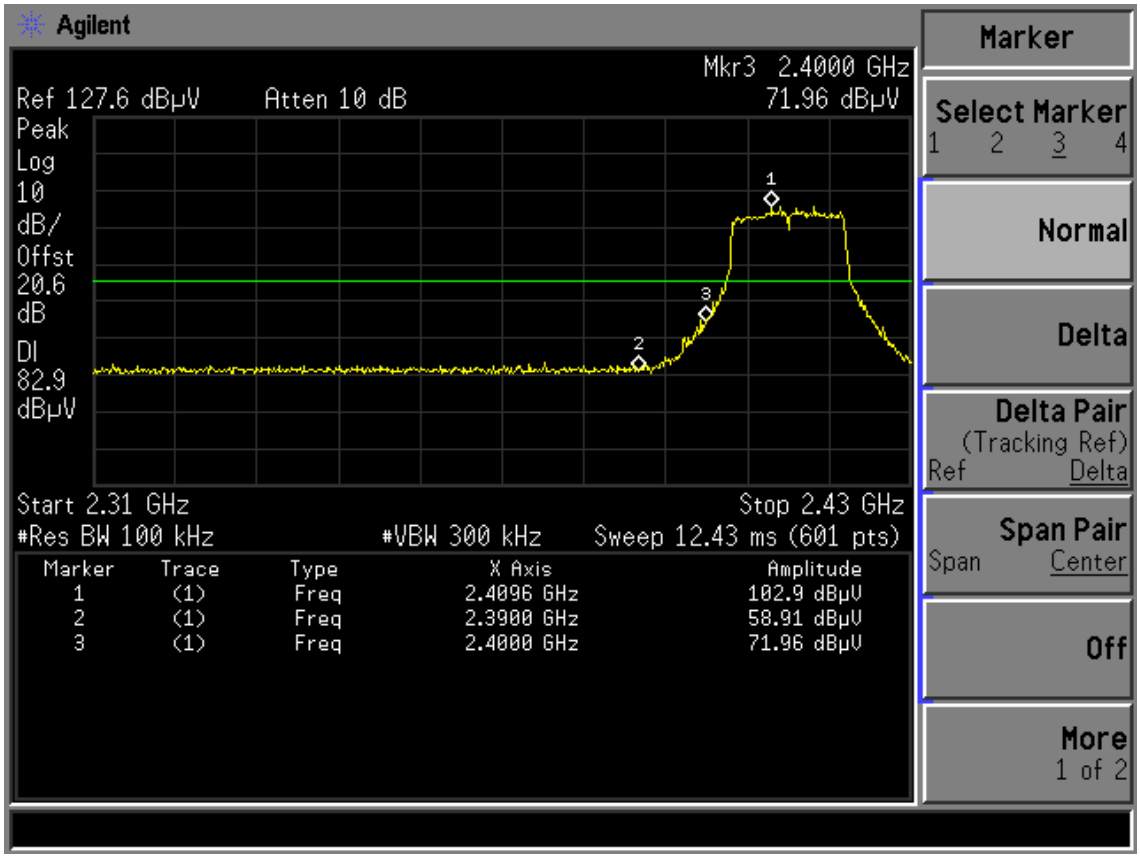

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
106.8 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
86.8
dBµV
Marker
2.480000000 GHz
106.8 dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 106.8 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.5000 GHz
Ref 127.6 dBµV
Atten 10 dB
58.02 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
87.2
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4616 GHz 107.3 dBµV
2 (1) Freq 2.4836 GHz 59.44 dBµV
3 (1) Freq 2.5000 GHz 58.02 dBµV
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

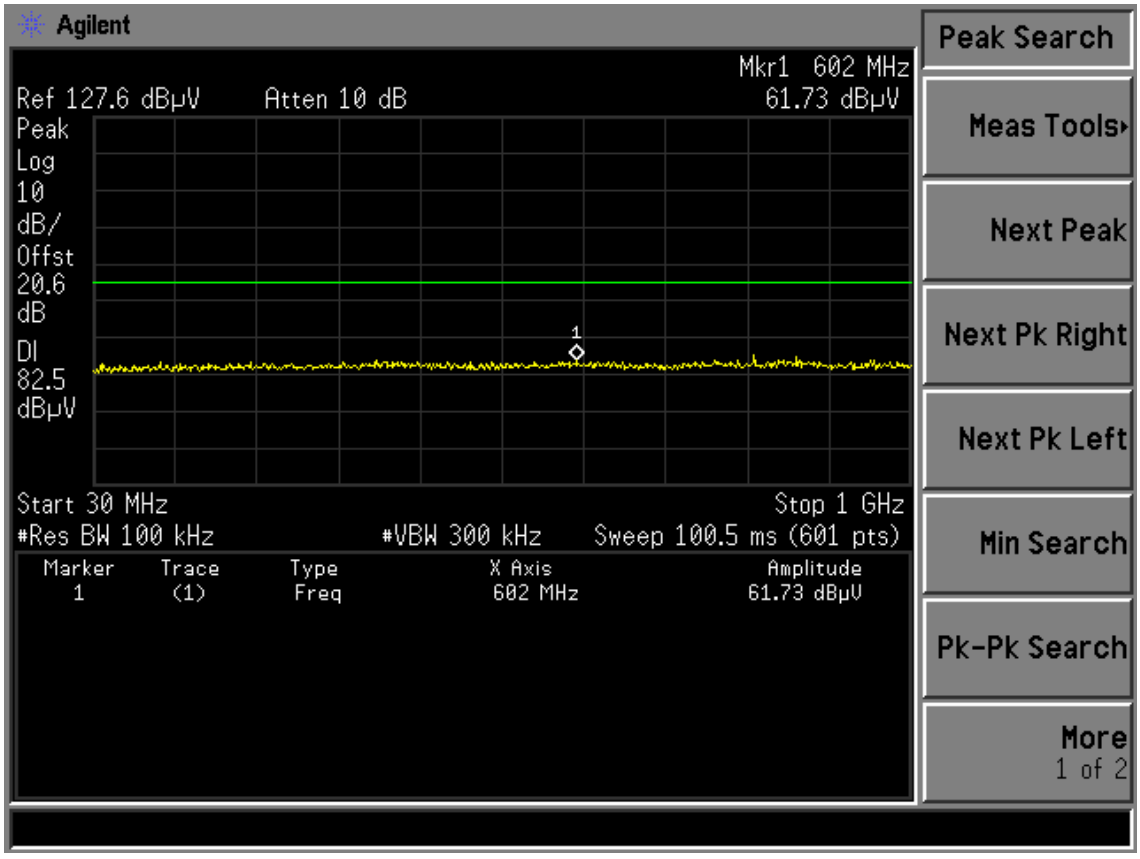
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

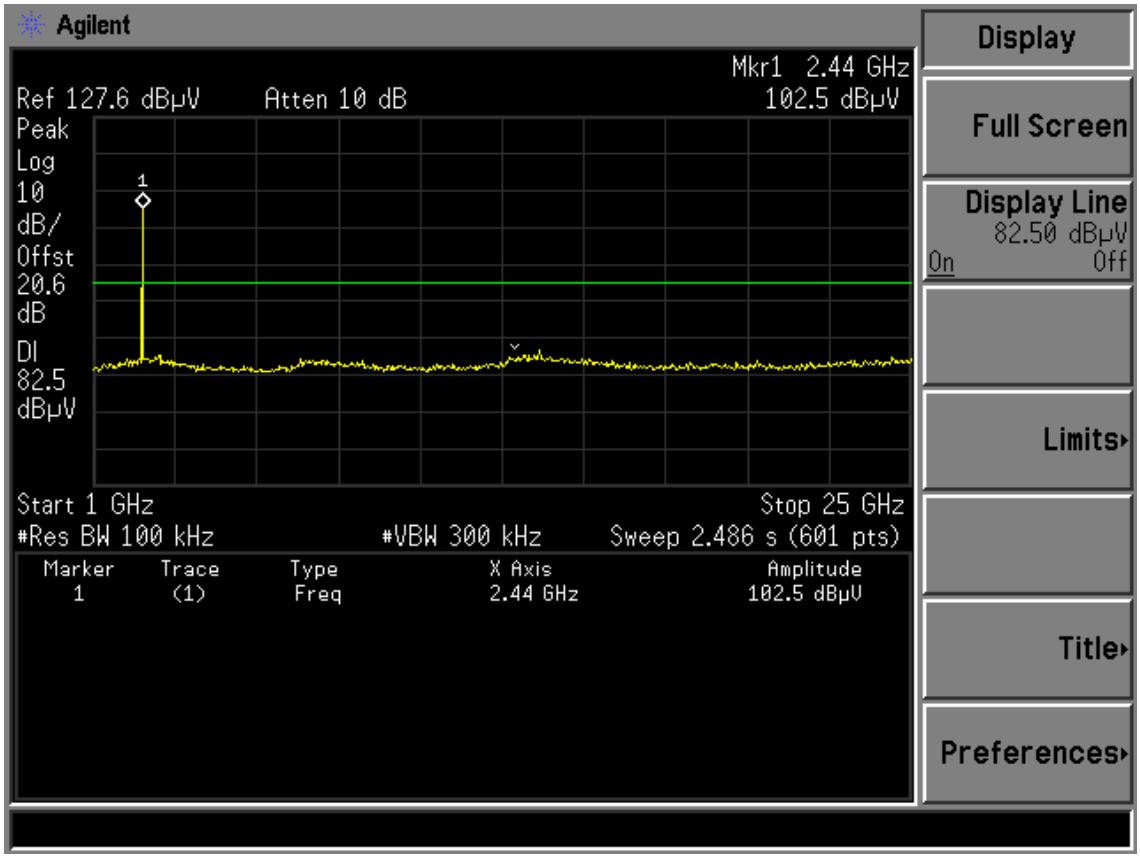




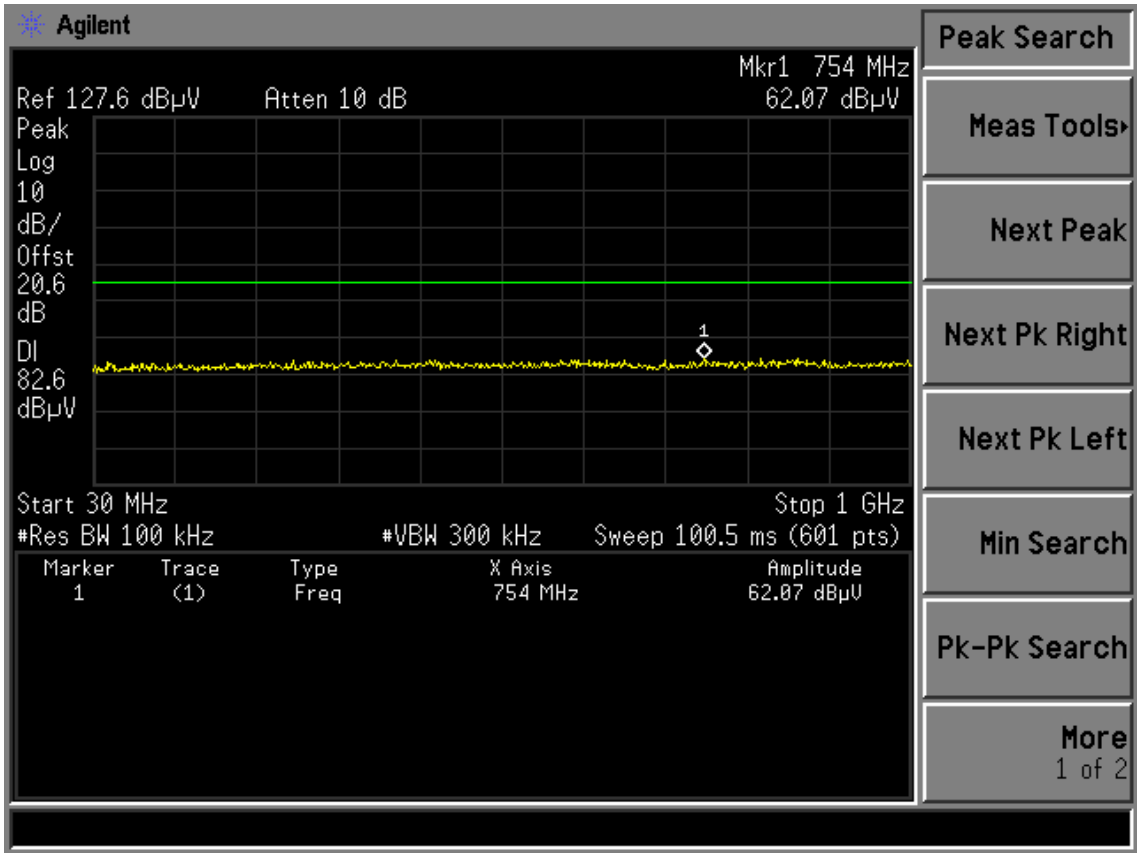


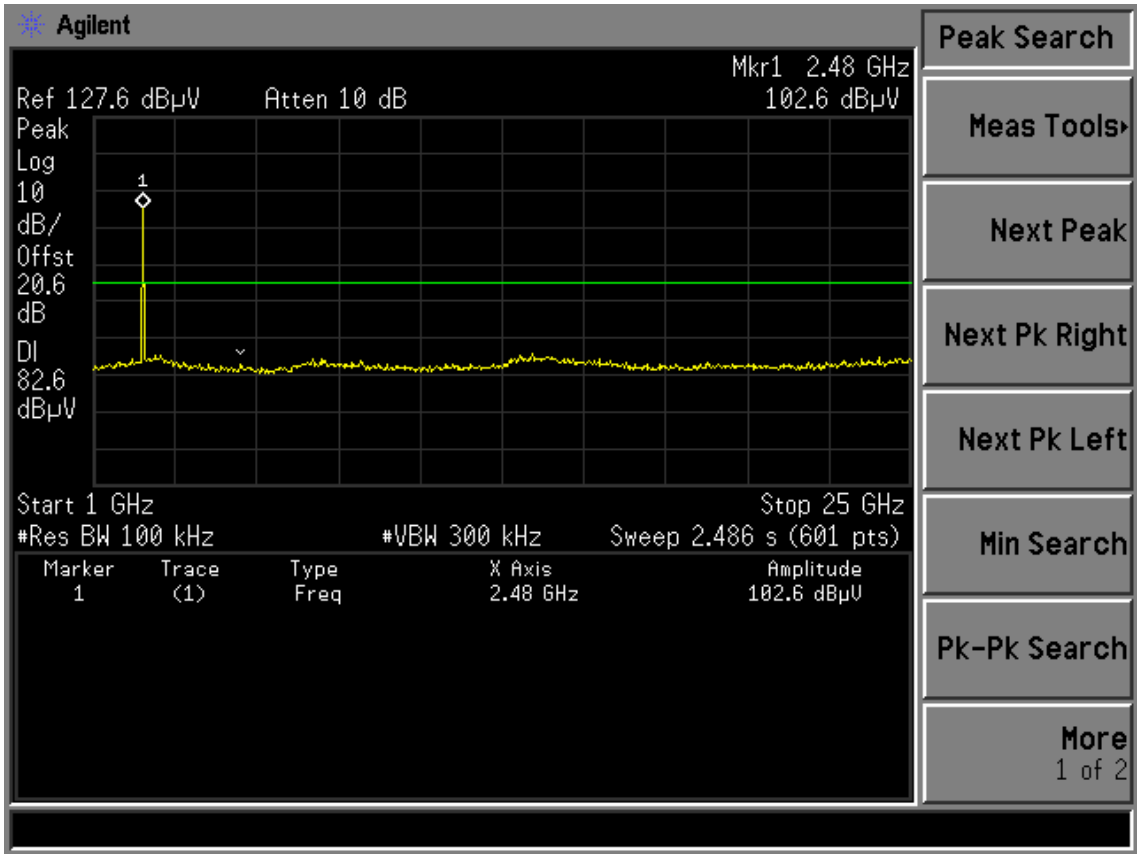
Test CH6: 2437MHz

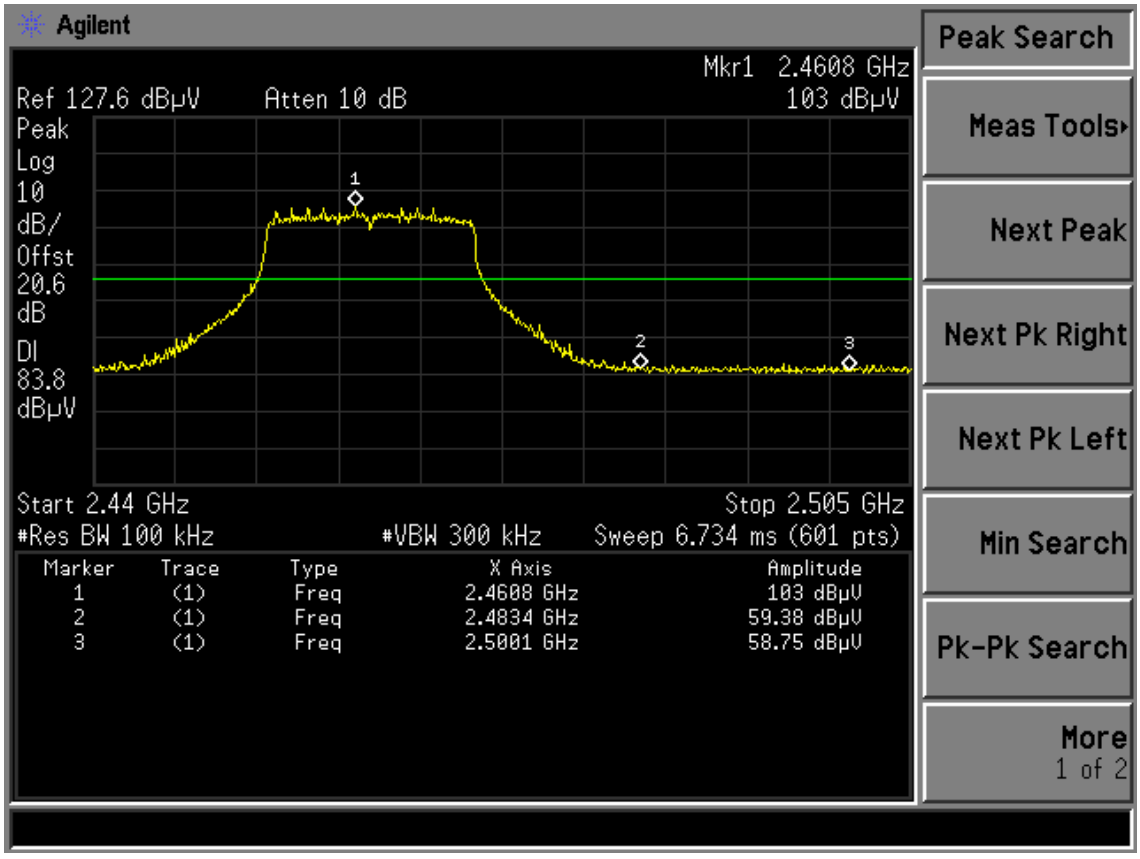




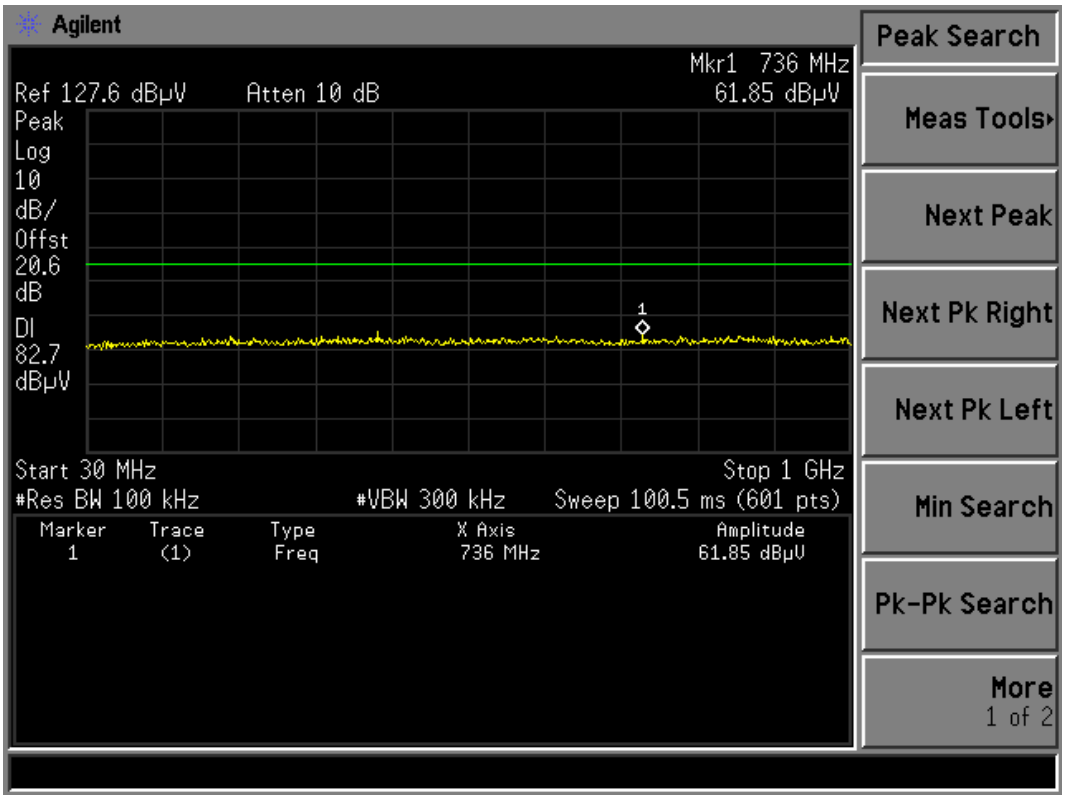
Test CH11: 2462MHz

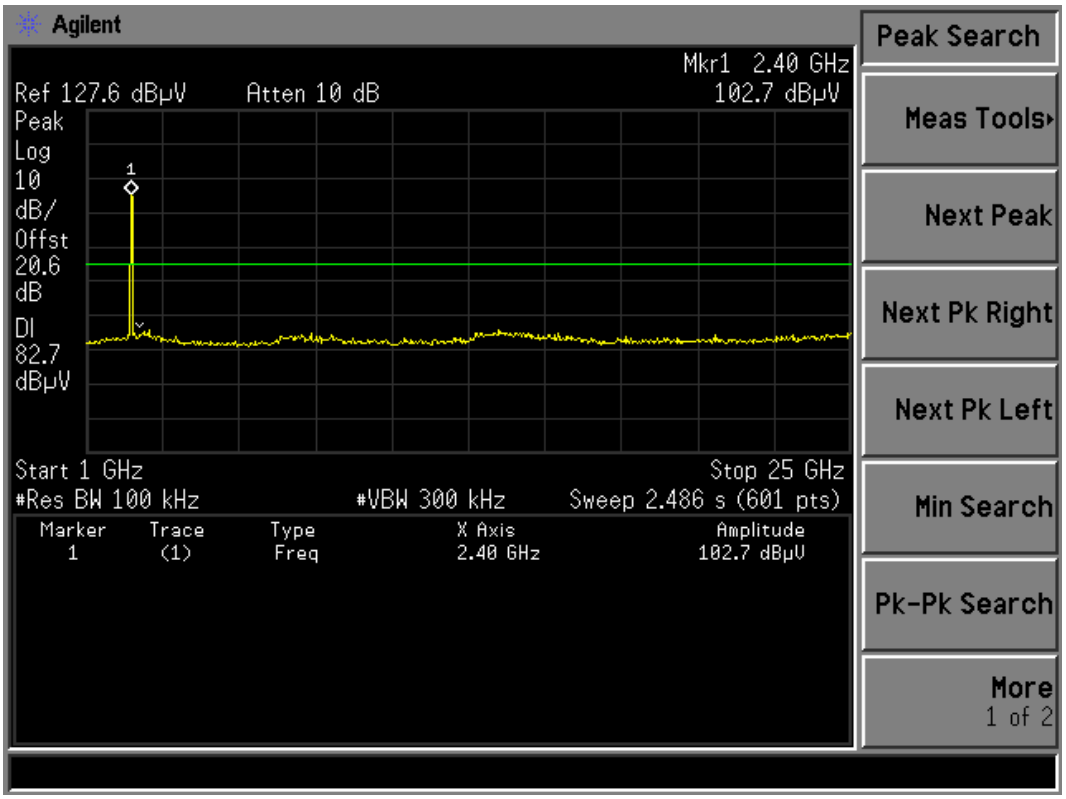


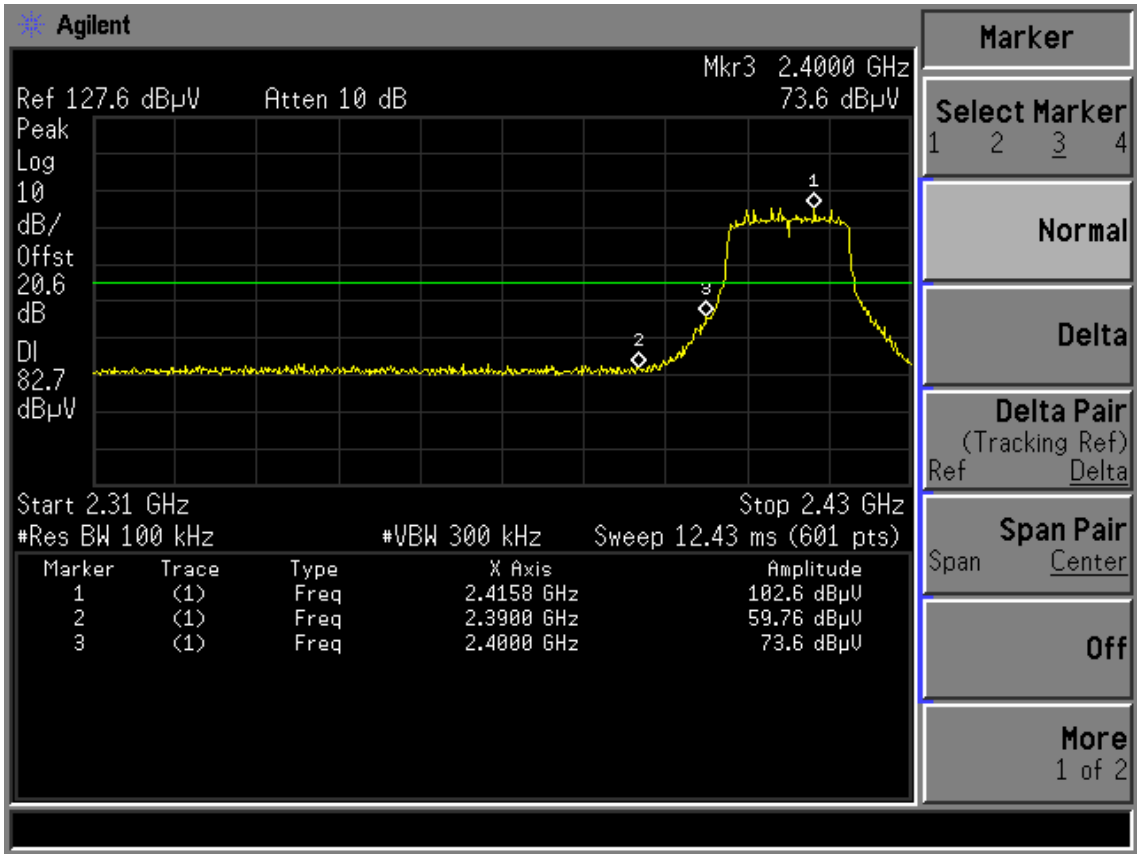

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
102.6 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.6
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 102.6 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.4608 GHz
Ref 127.6 dBµV
Atten 10 dB
103 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
83.8
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4608 GHz 103 dBµV
2 (1) Freq 2.4834 GHz 59.38 dBµV
3 (1) Freq 2.5001 GHz 58.75 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

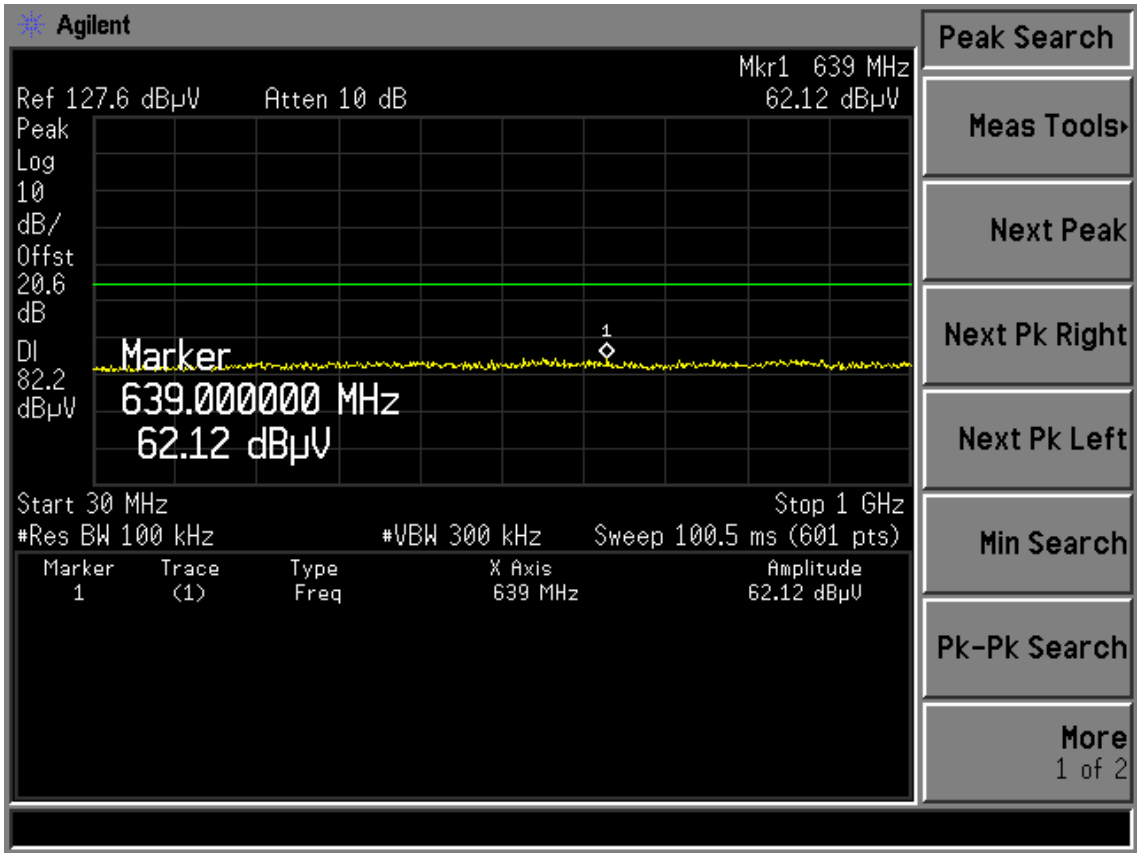
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

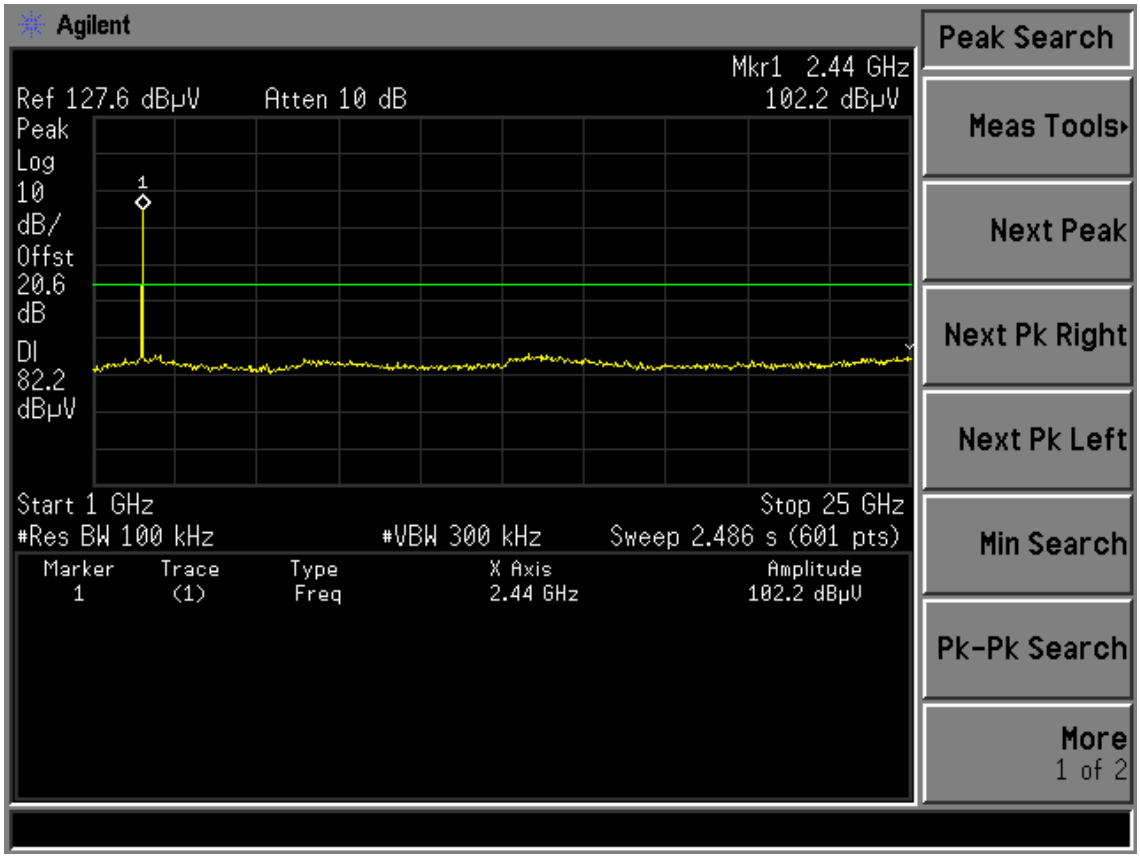




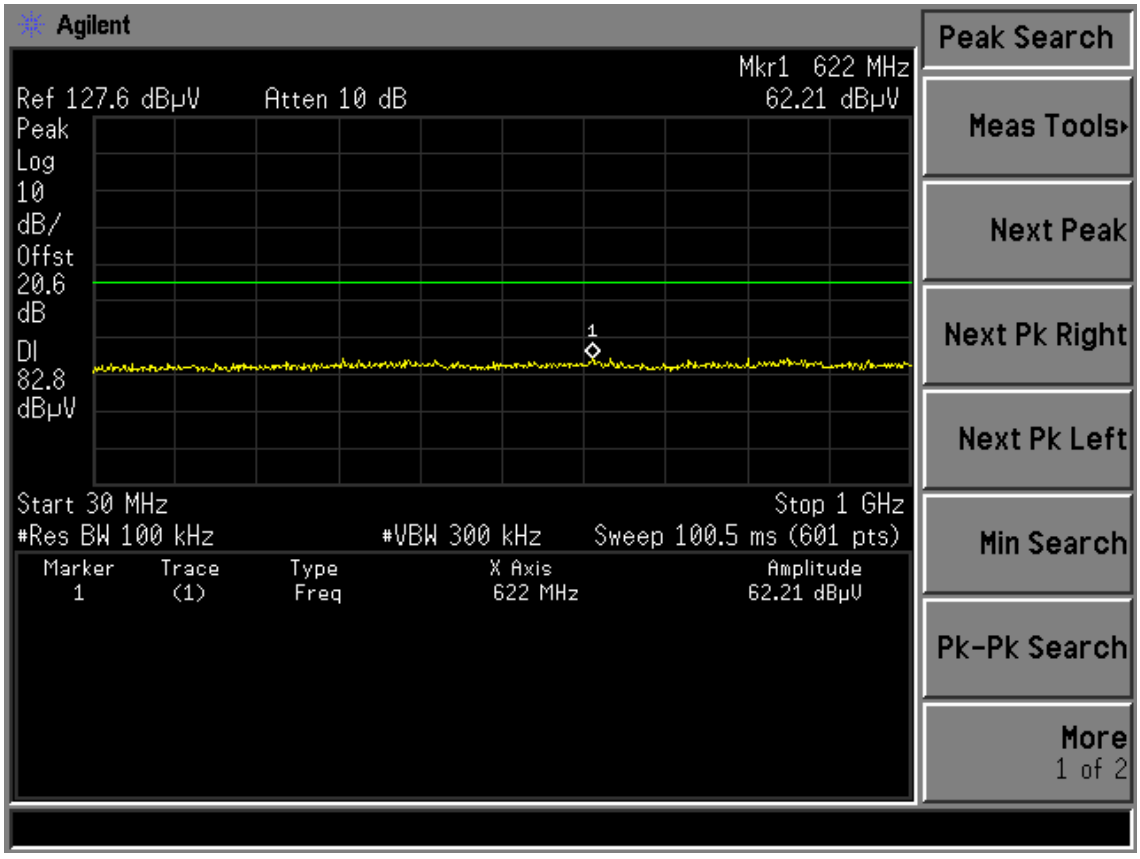


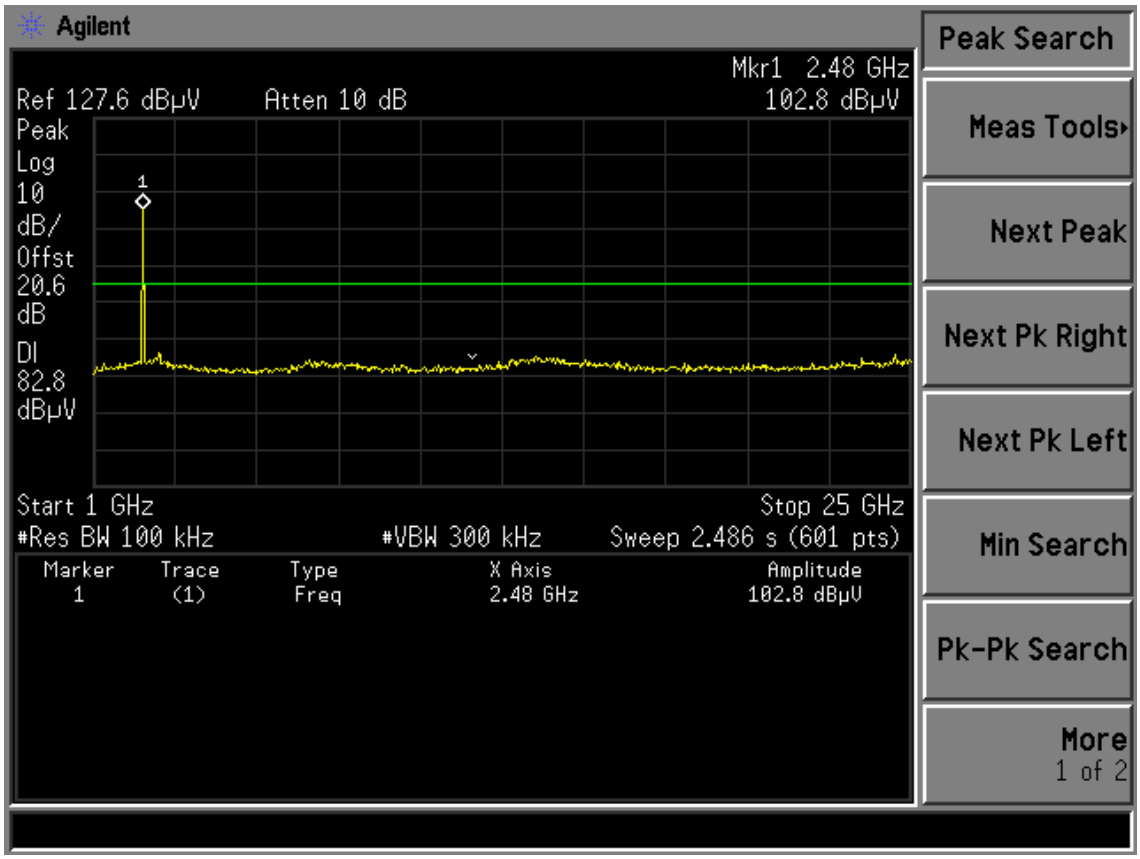
Test CH6: 2437MHz

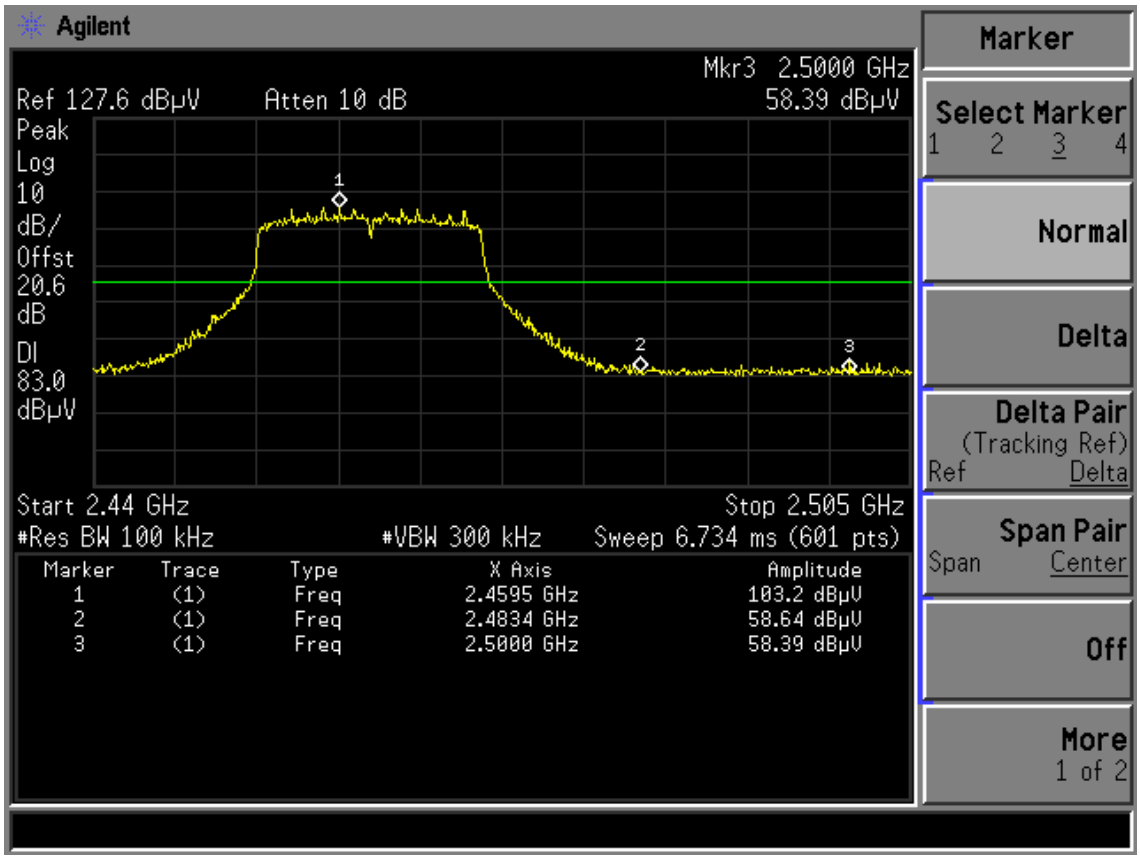




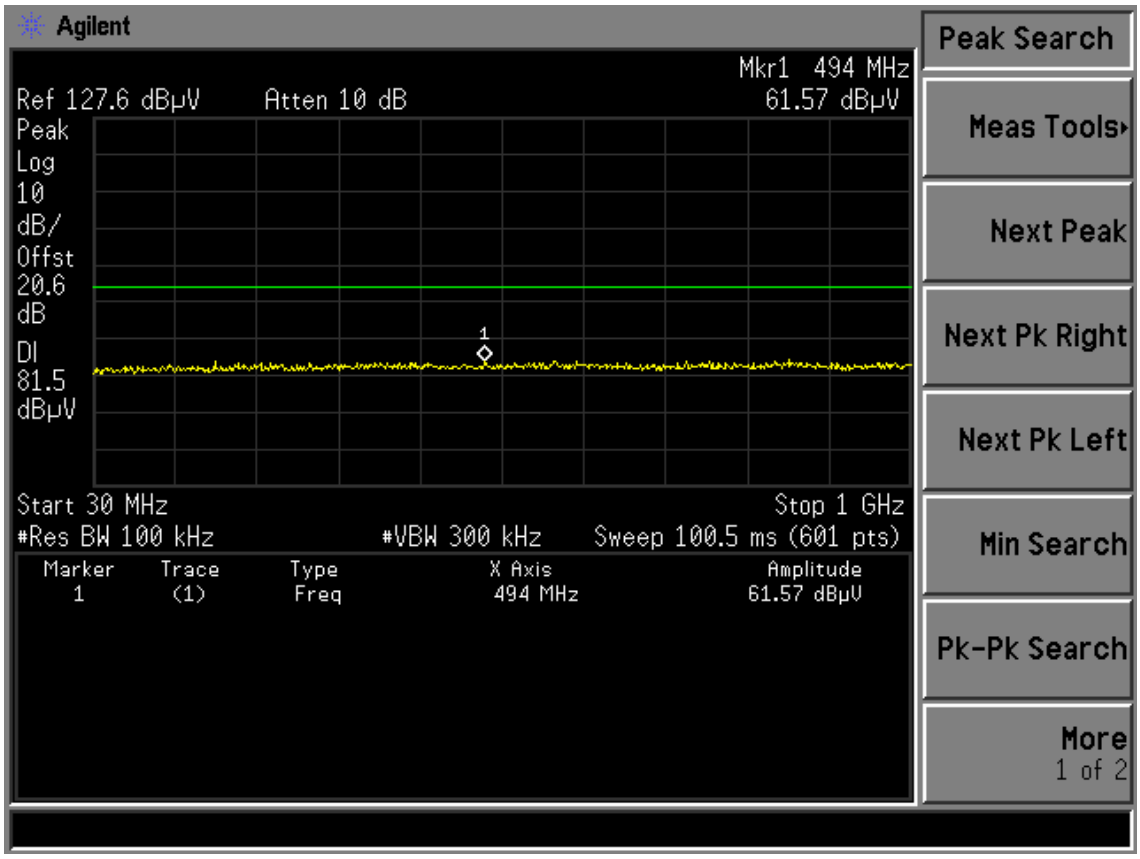
Test CH11: 2462MHz

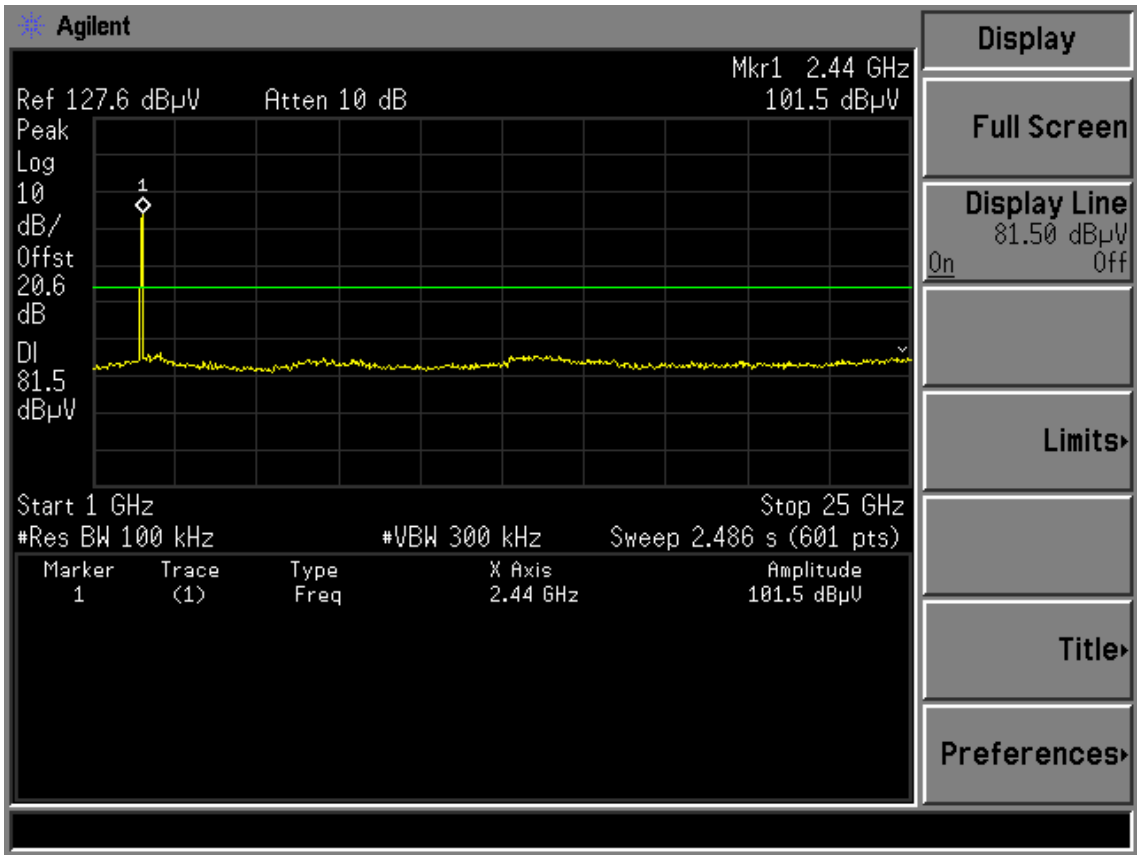


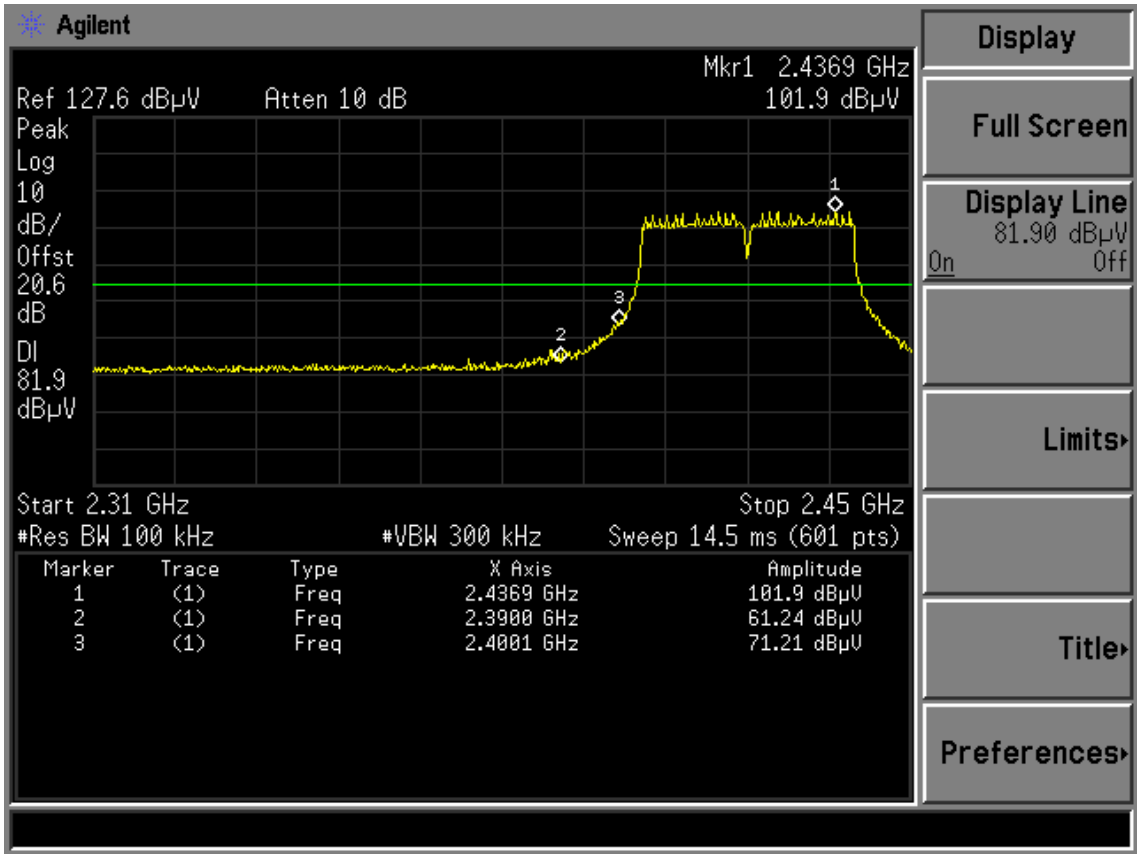

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
102.8 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.8
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 102.8 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.5000 GHz
Ref 127.6 dBµV
Atten 10 dB
58.39 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
83.0
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4595 GHz 103.2 dBµV
2 (1) Freq 2.4834 GHz 58.64 dBµV
3 (1) Freq 2.5000 GHz 58.39 dBµV
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

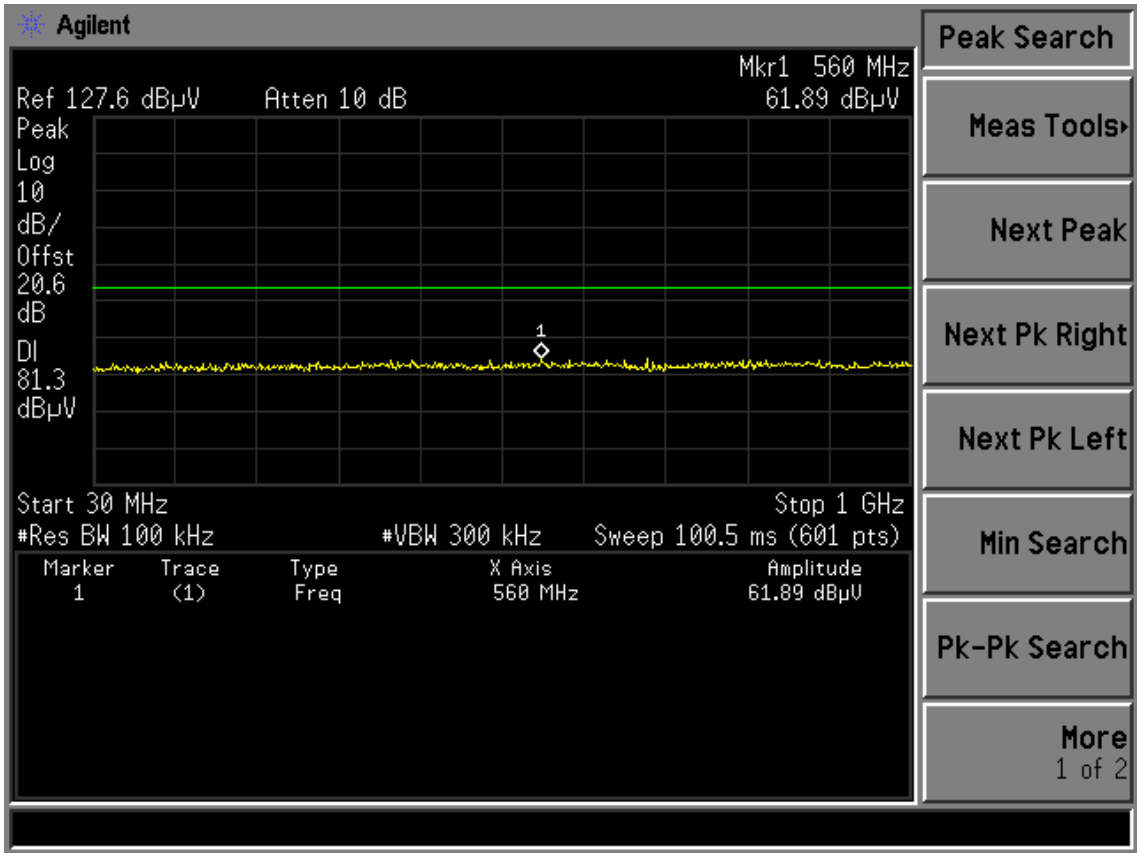
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

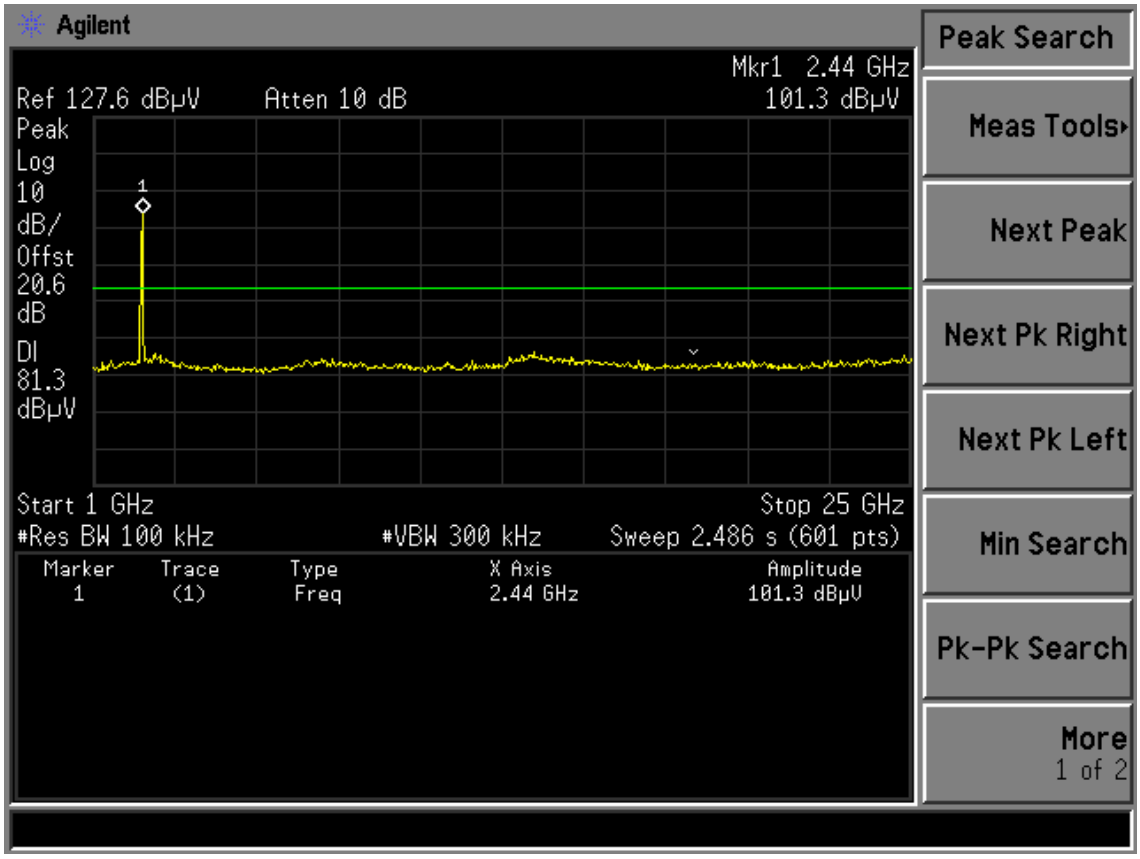




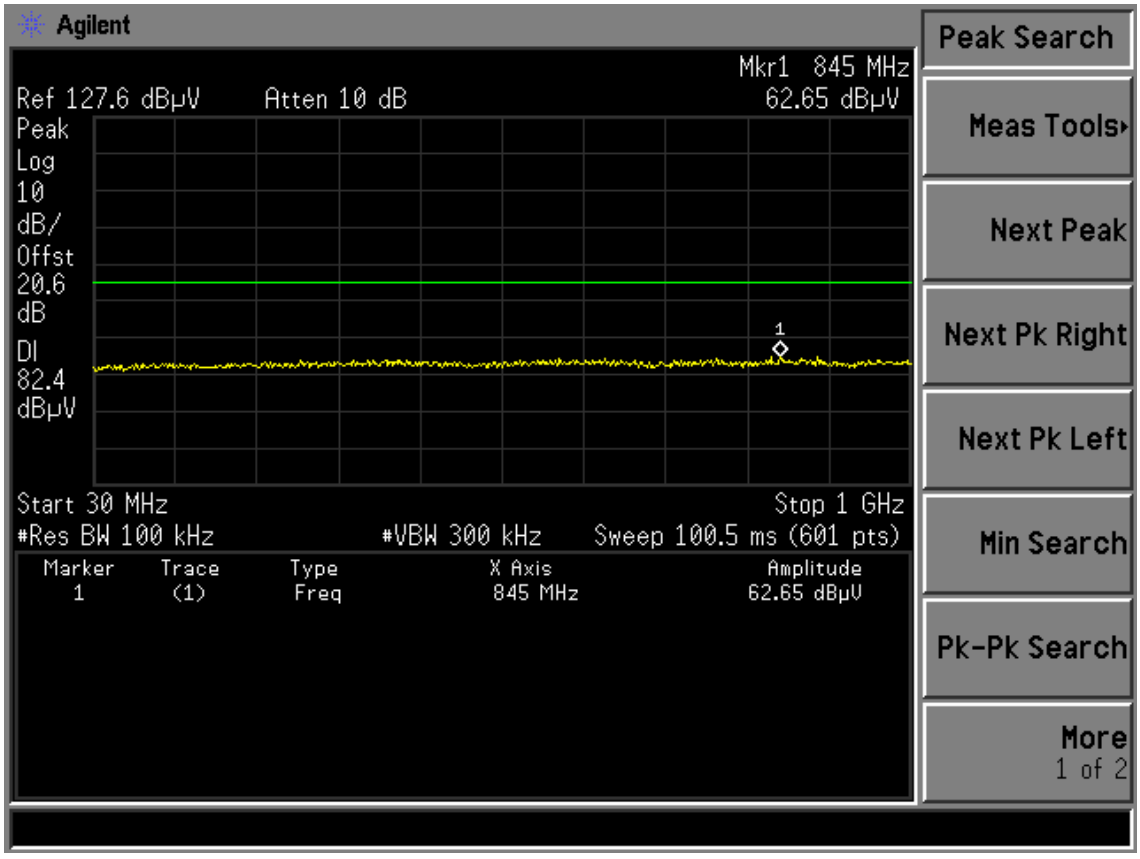


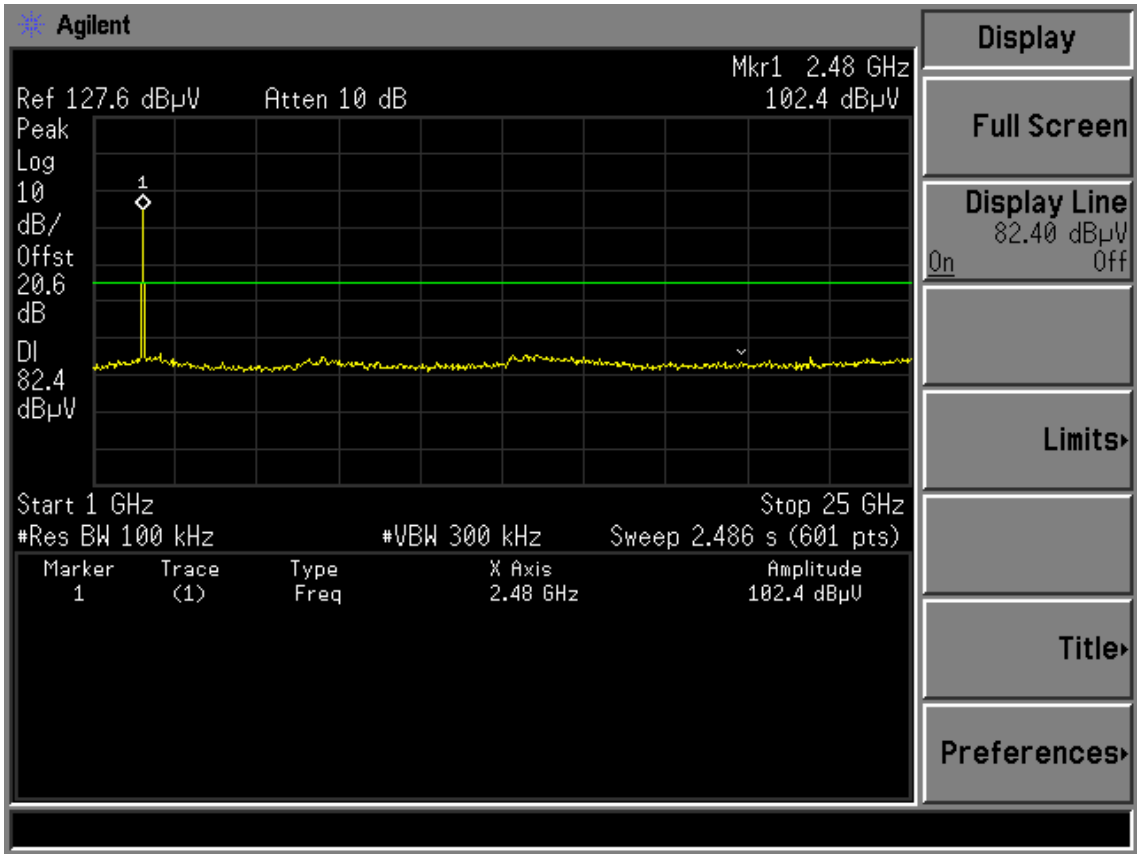
Test CH4: 2437MHz

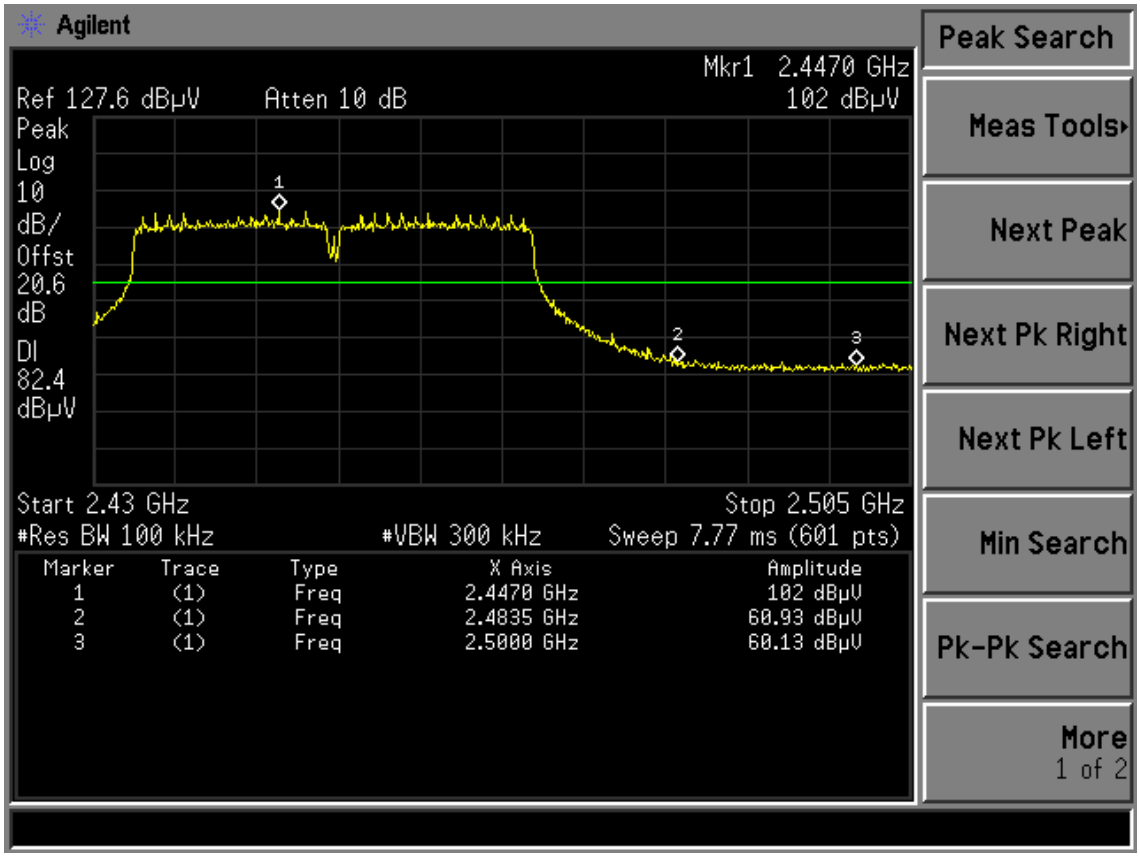




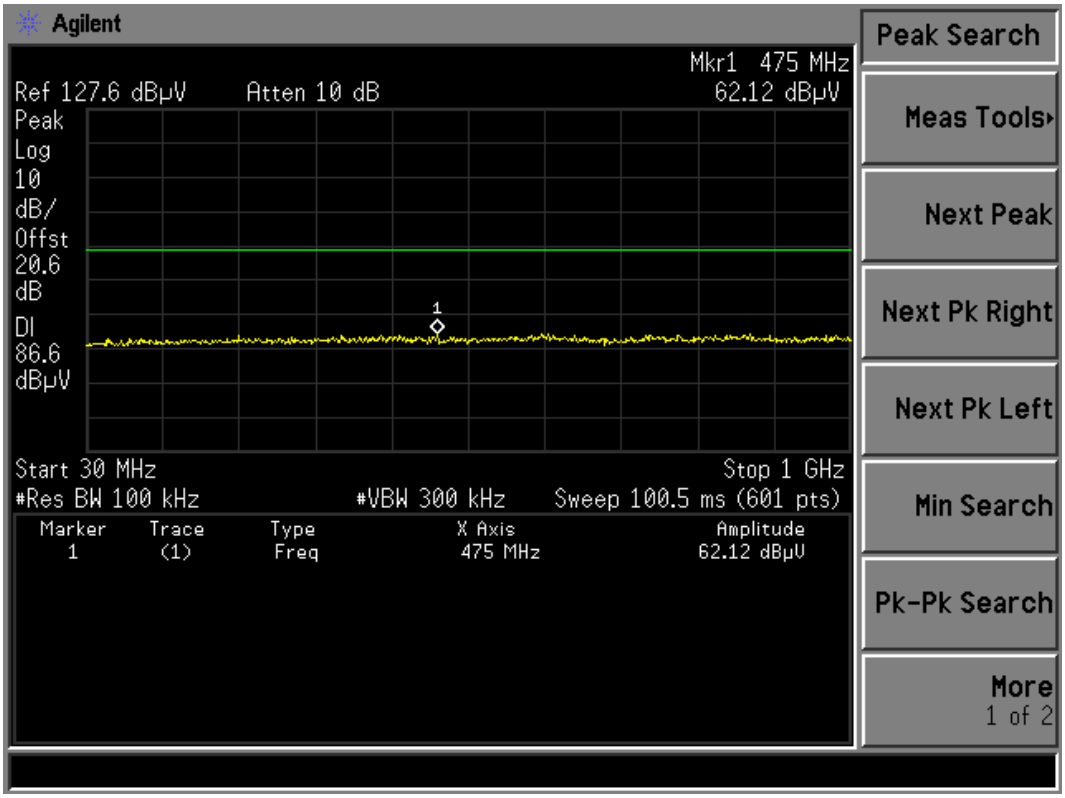
Test CH7: 2452MHz

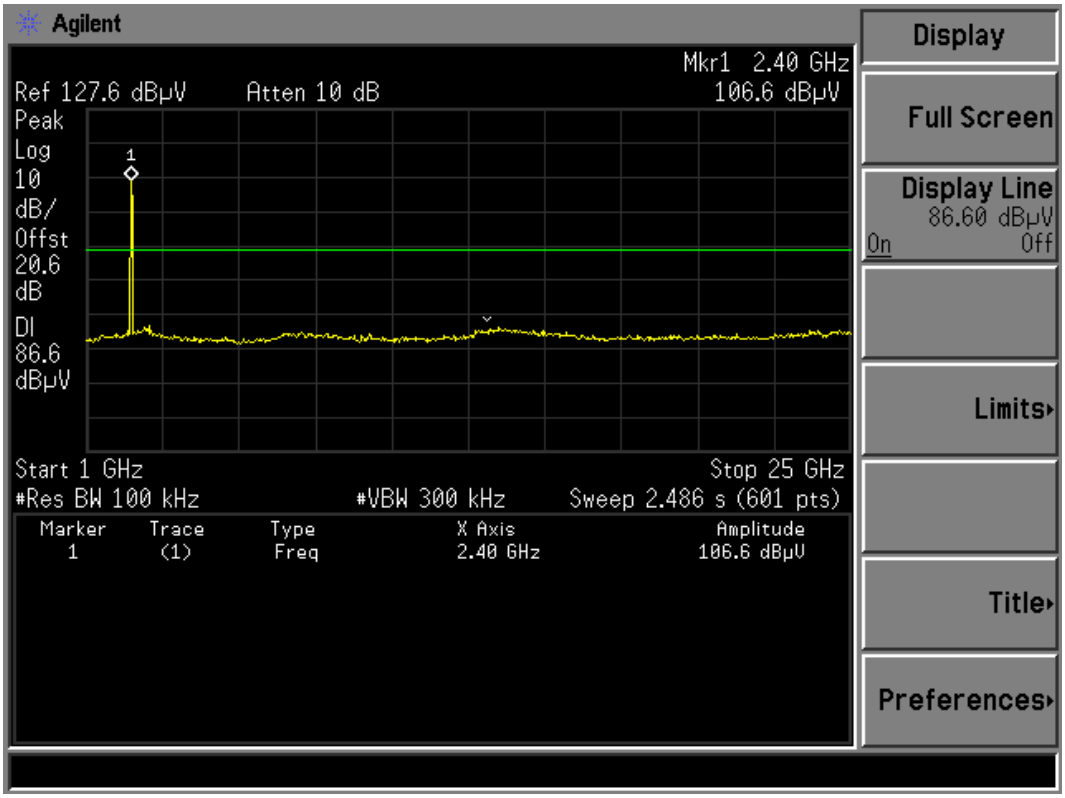


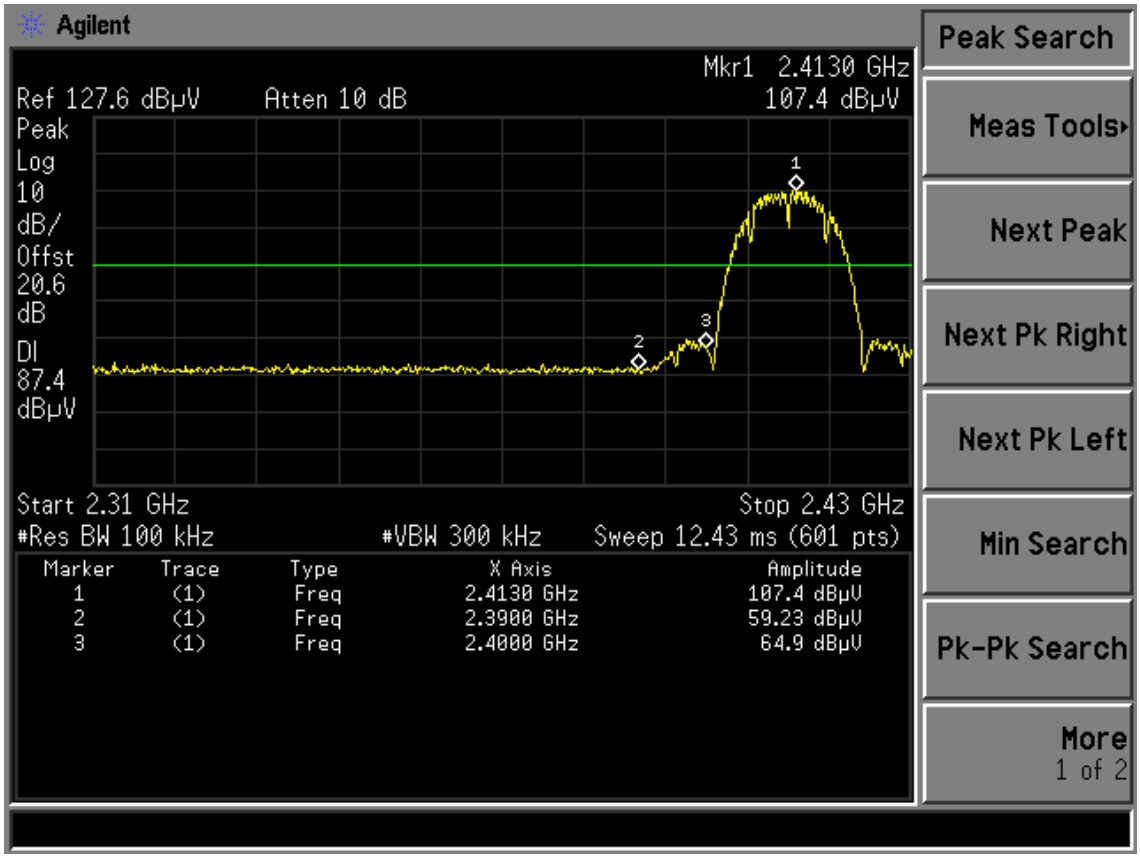

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
102.4 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.4
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 102.4 dBµV
Display
Full Screen
Display Line
82.40 dBµV
On Off
Limits
Title
Preferences


Agilent
Mkr1 2.4470 GHz
Ref 127.6 dBµV
Atten 10 dB
102 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.4
dBµV
Start 2.43 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 7.77 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4470 GHz 102 dBµV
2 (1) Freq 2.4835 GHz 60.93 dBµV
3 (1) Freq 2.5000 GHz 60.13 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

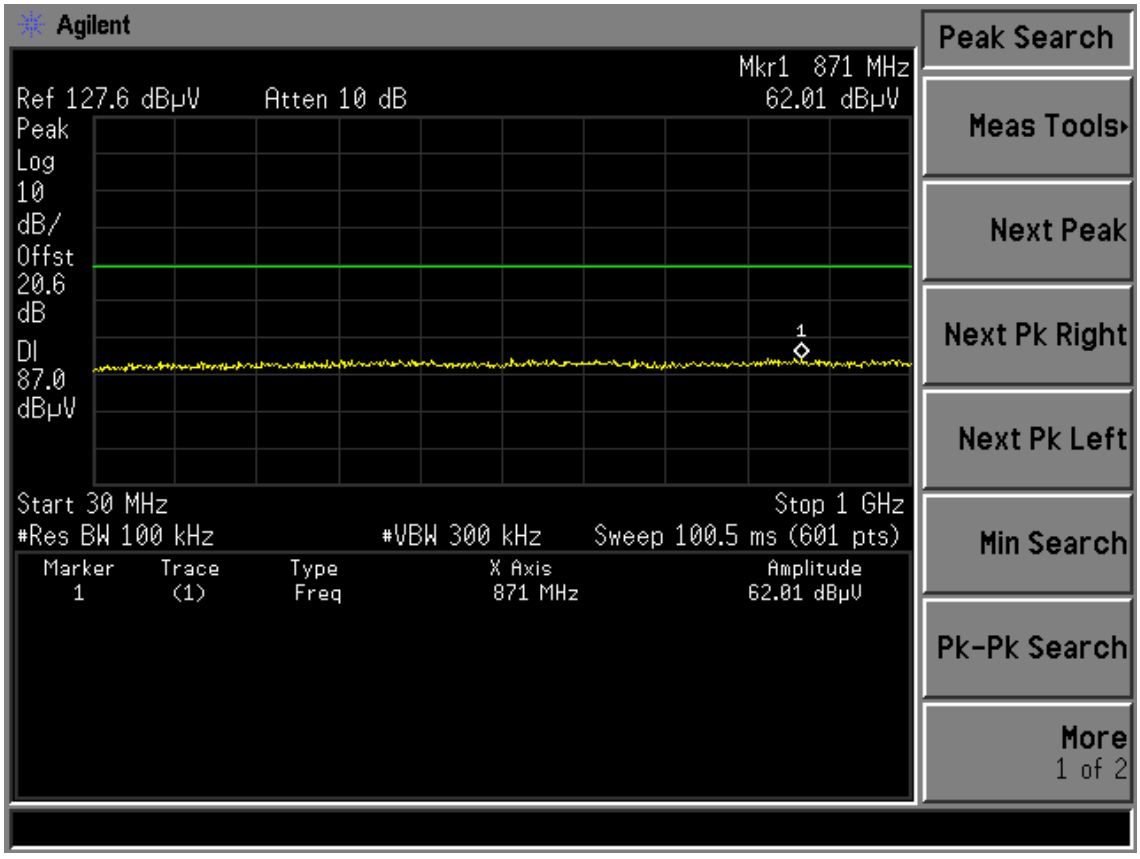
Chain 3:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz

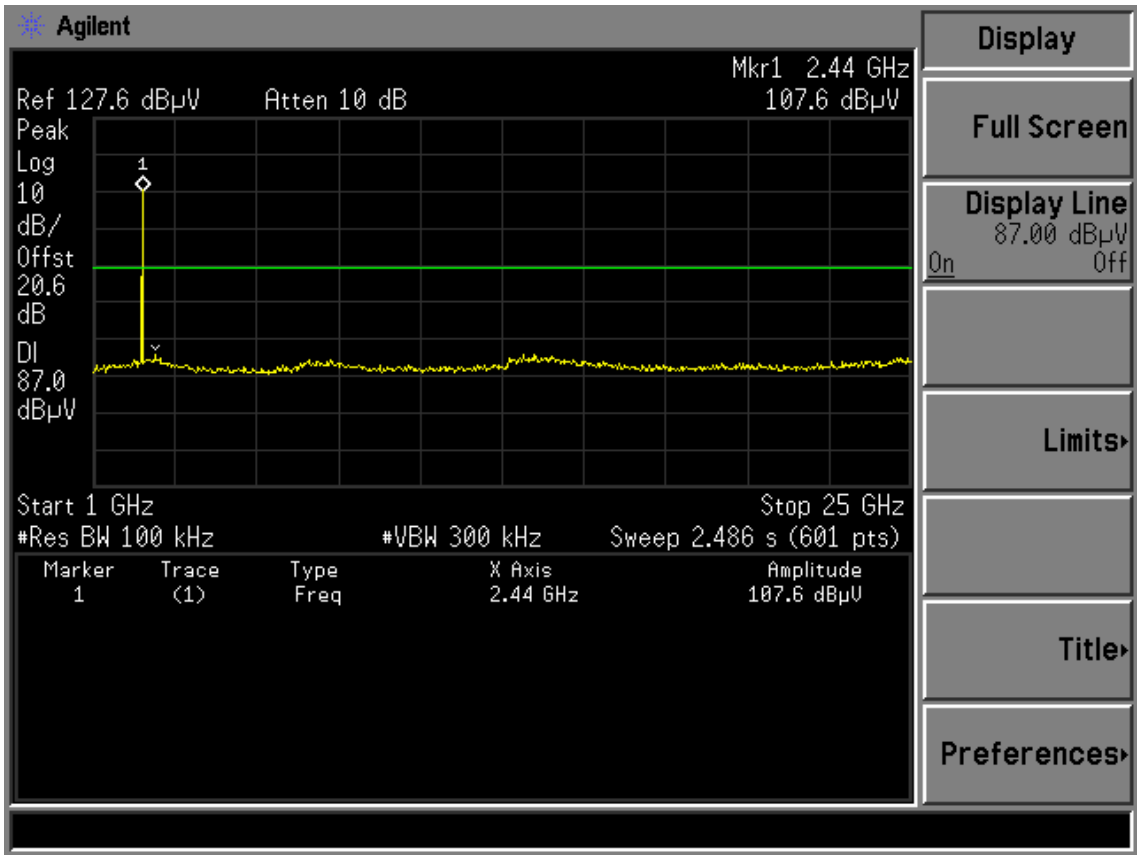




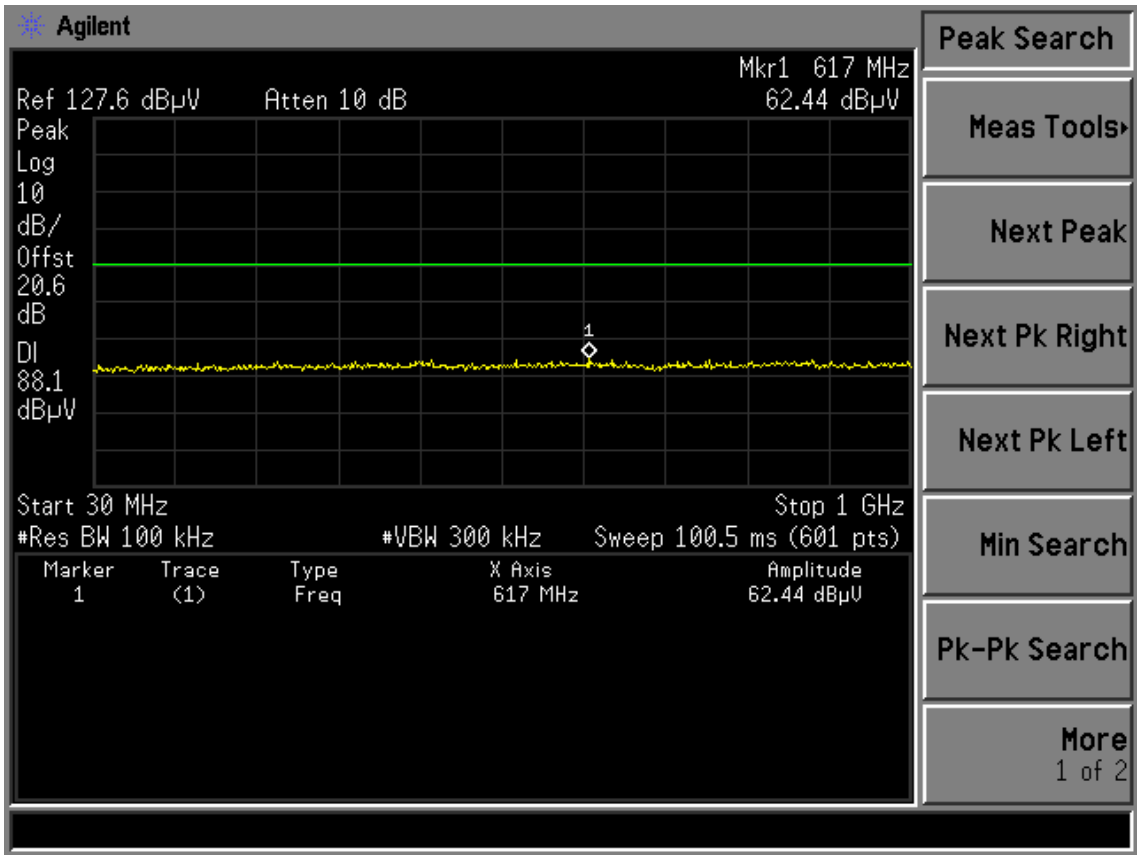


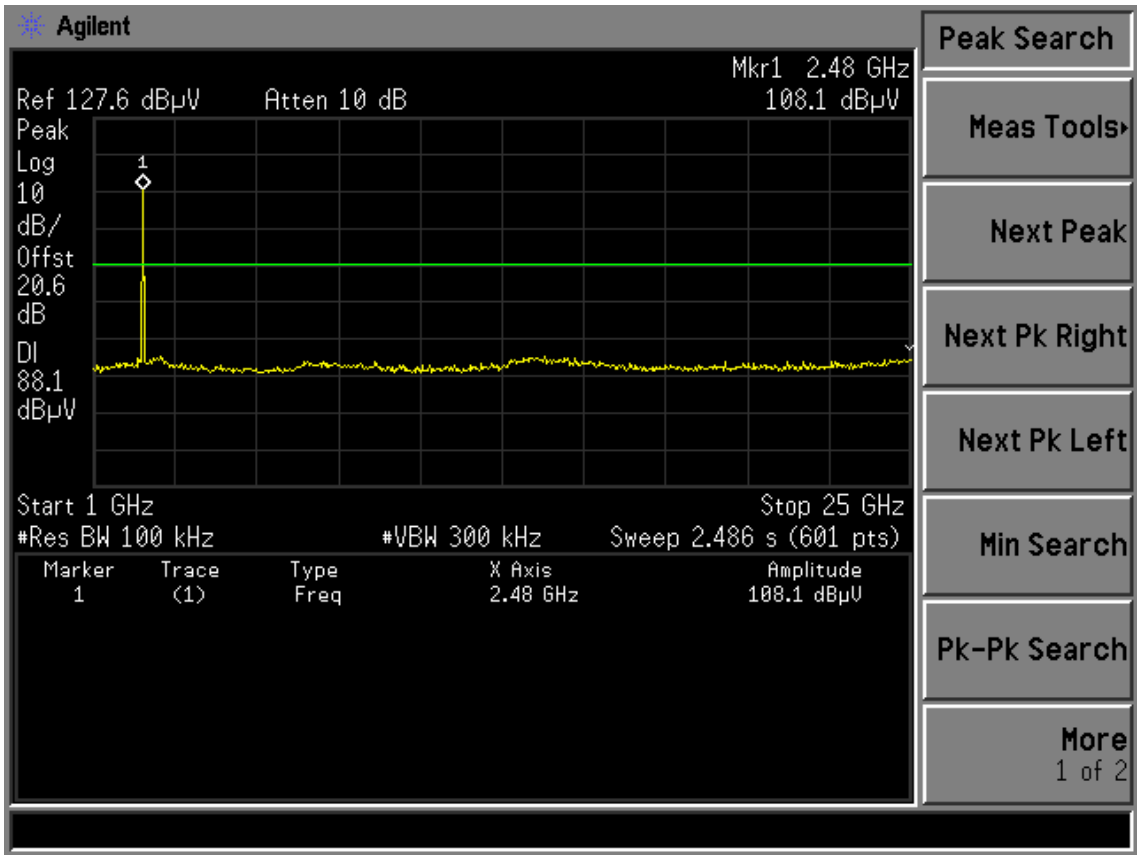
Test CH6: 2437MHz

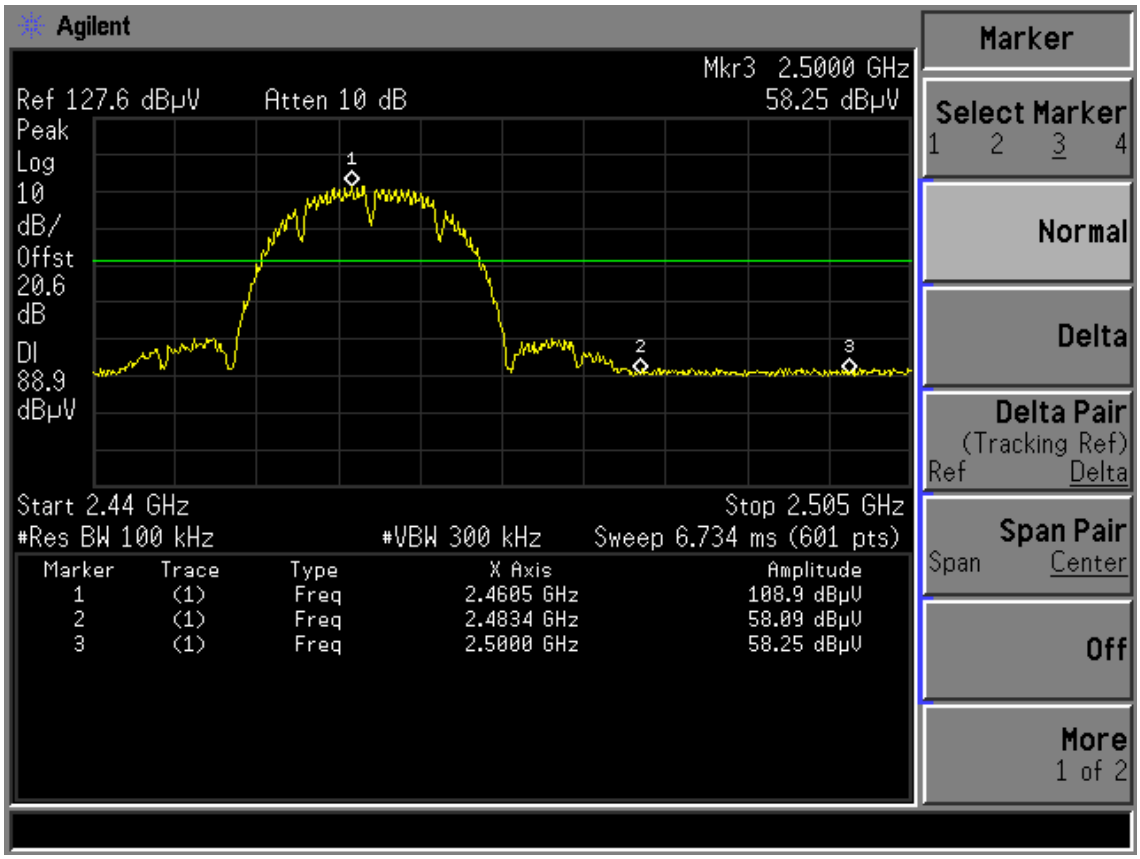




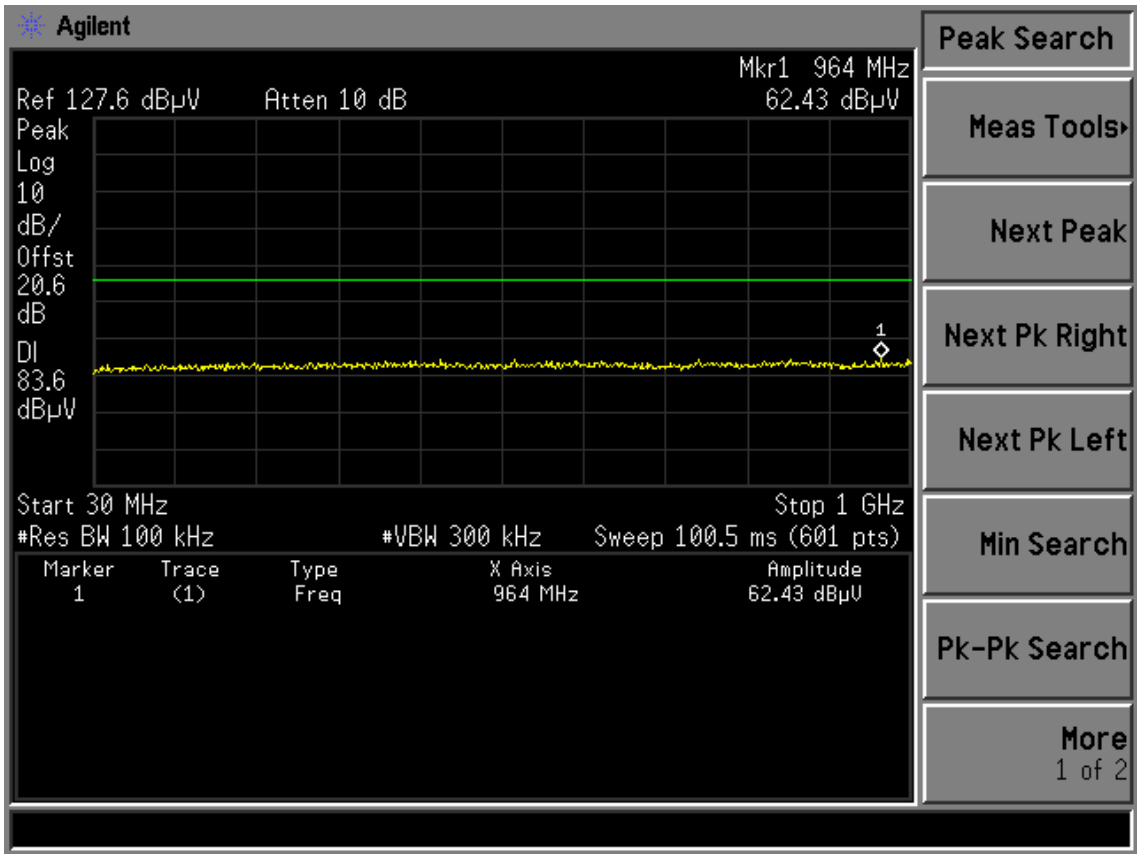
Test CH11: 2462MHz

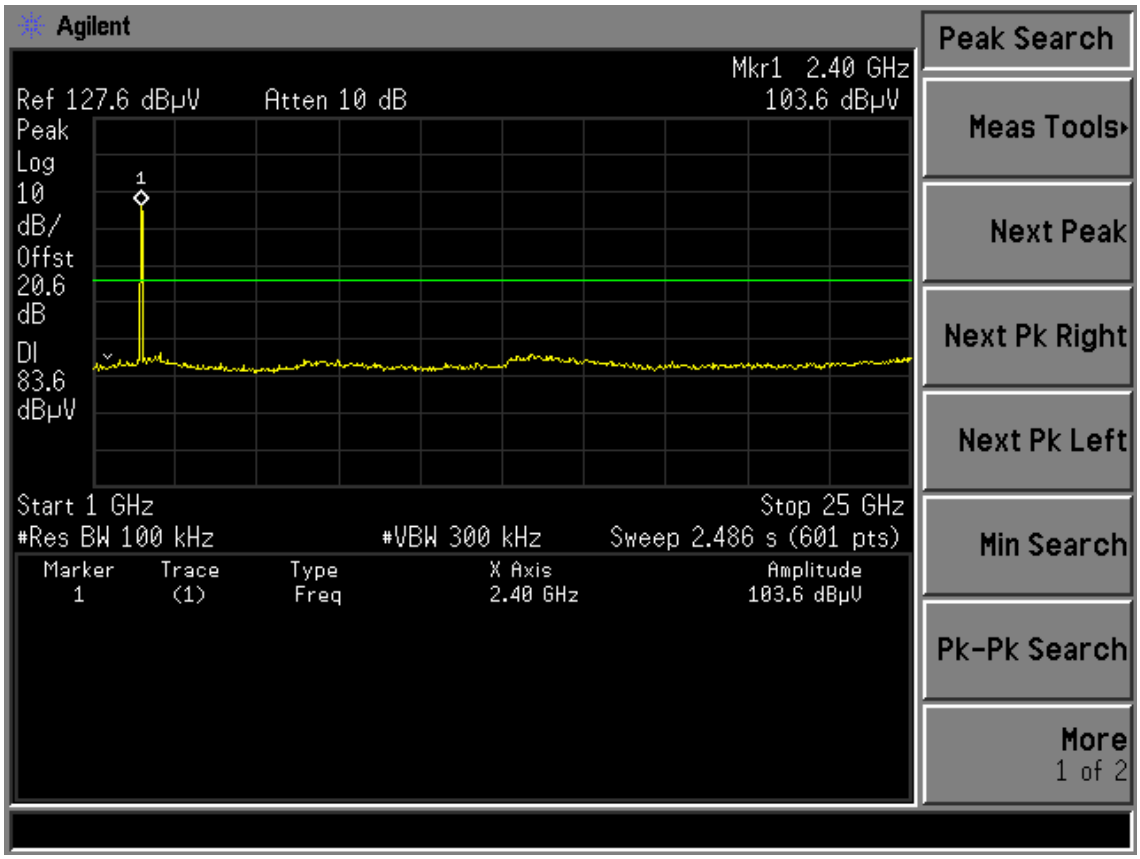


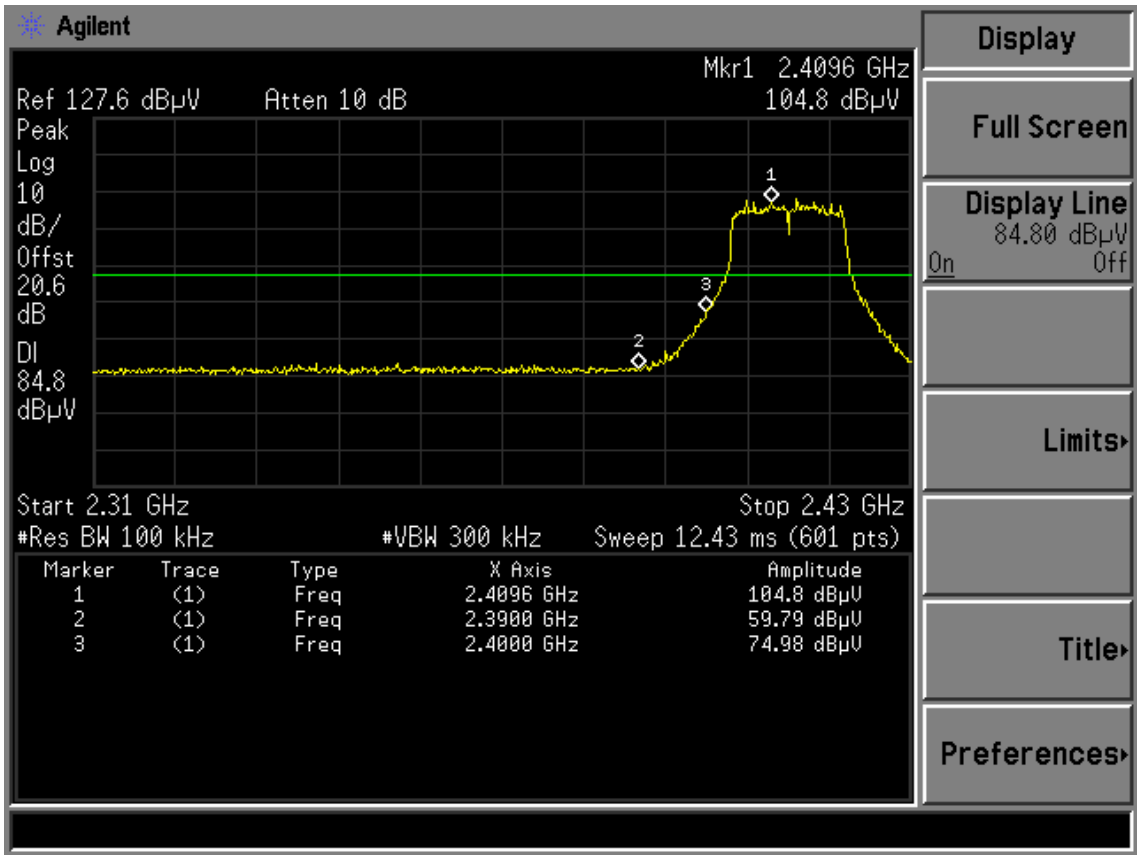

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
108.1 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
88.1
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 108.1 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.5000 GHz
Ref 127.6 dBµV
Atten 10 dB
58.25 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
88.9
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4605 GHz 108.9 dBµV
2 (1) Freq 2.4834 GHz 58.09 dBµV
3 (1) Freq 2.5000 GHz 58.25 dBµV
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

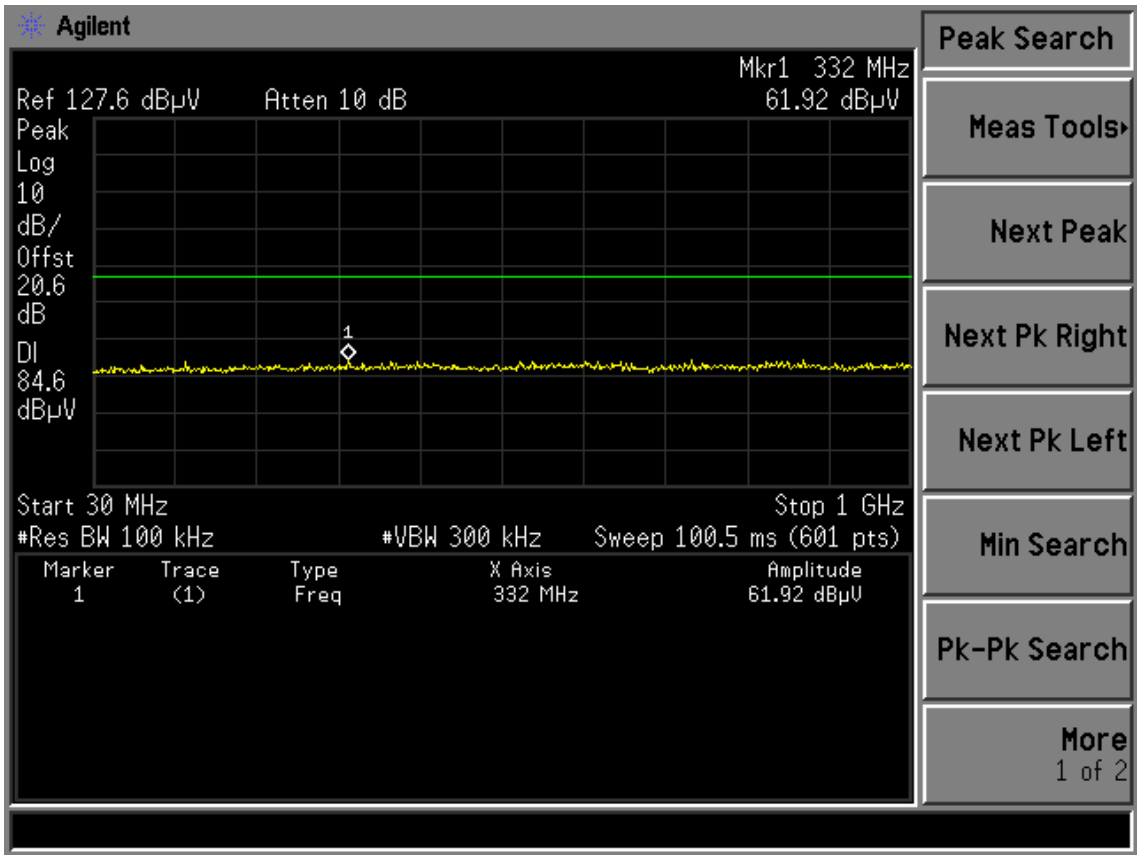
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

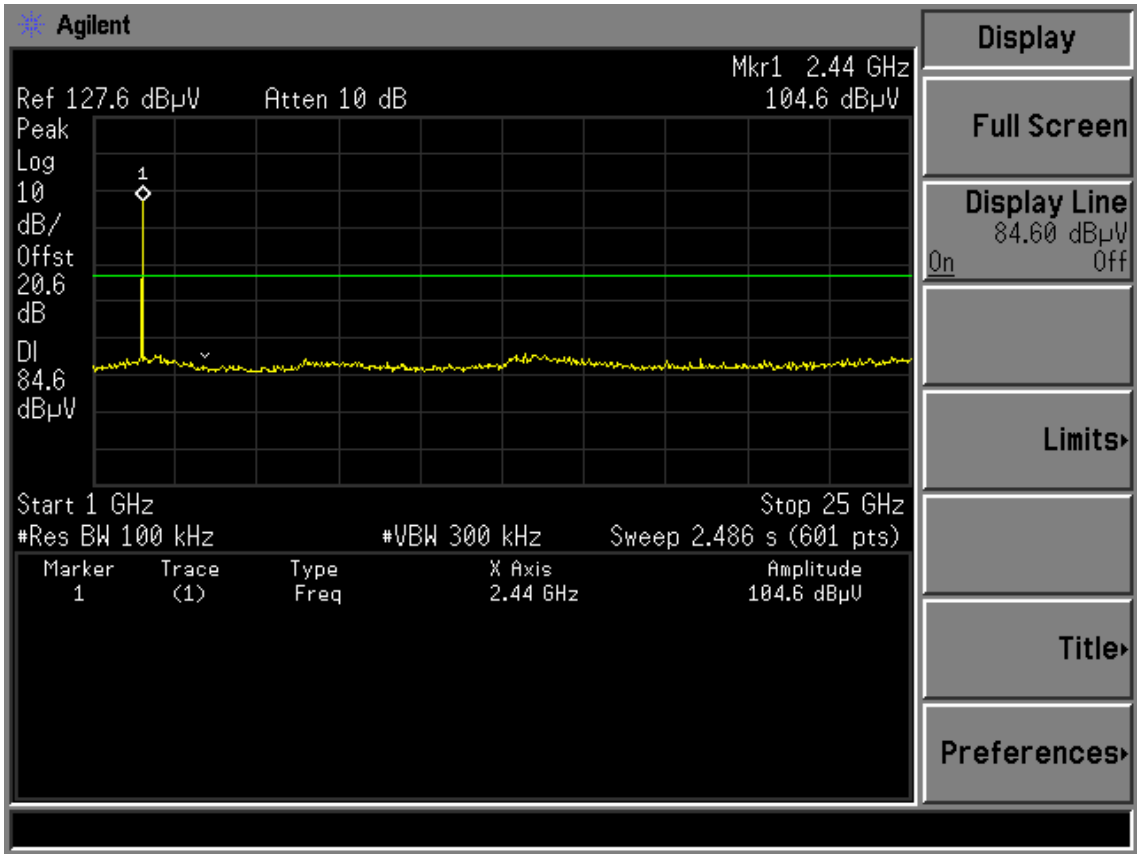




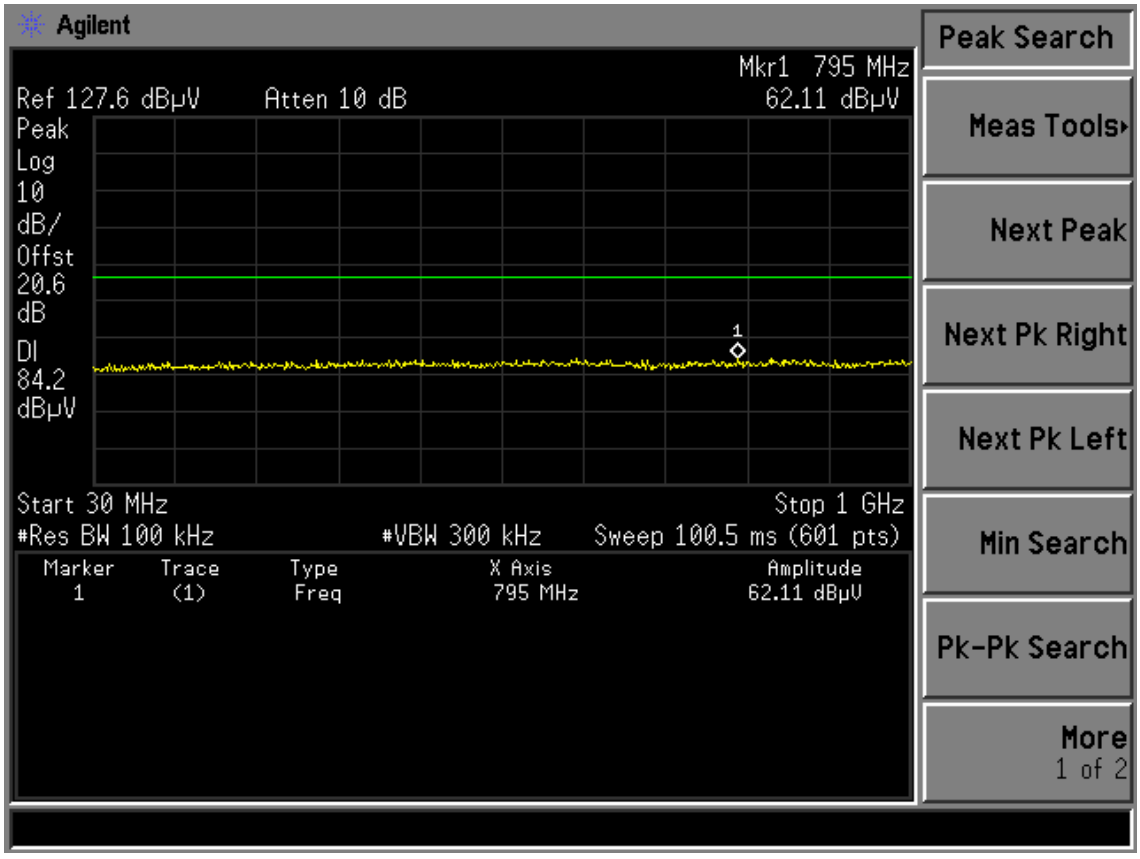


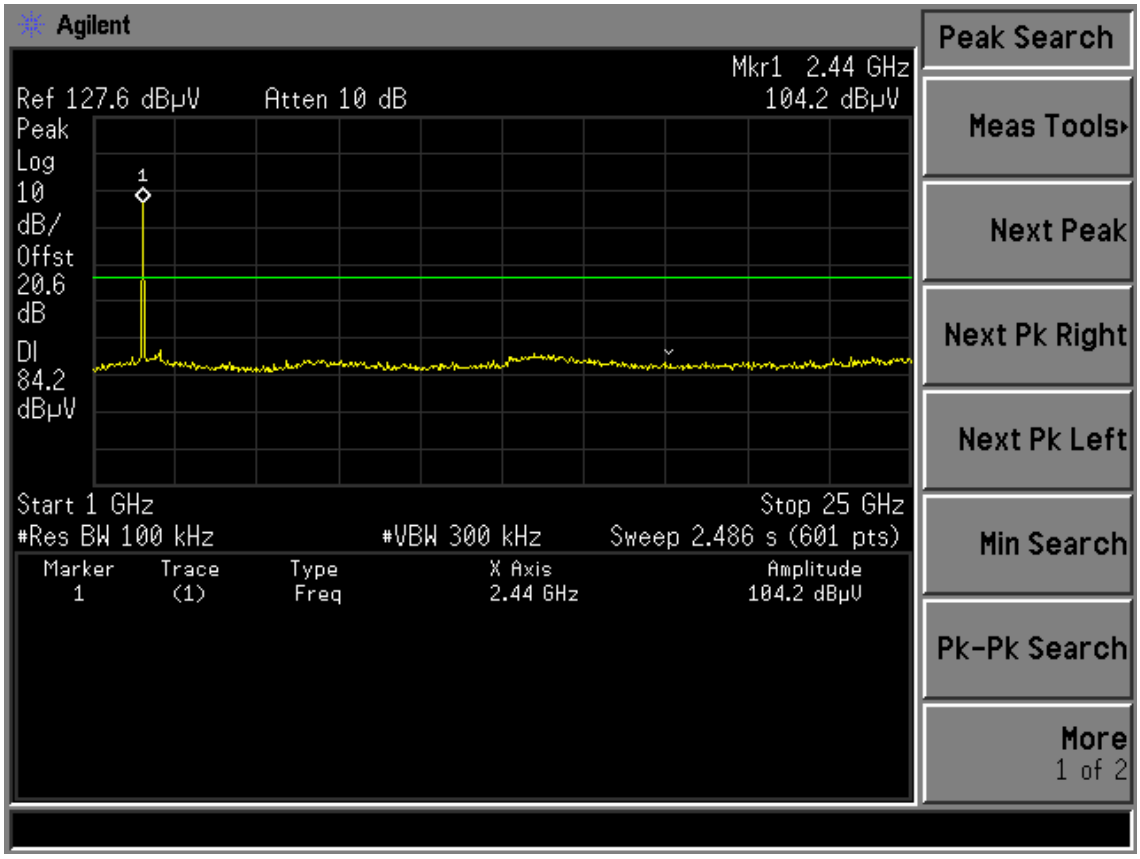
Test CH6: 2437MHz

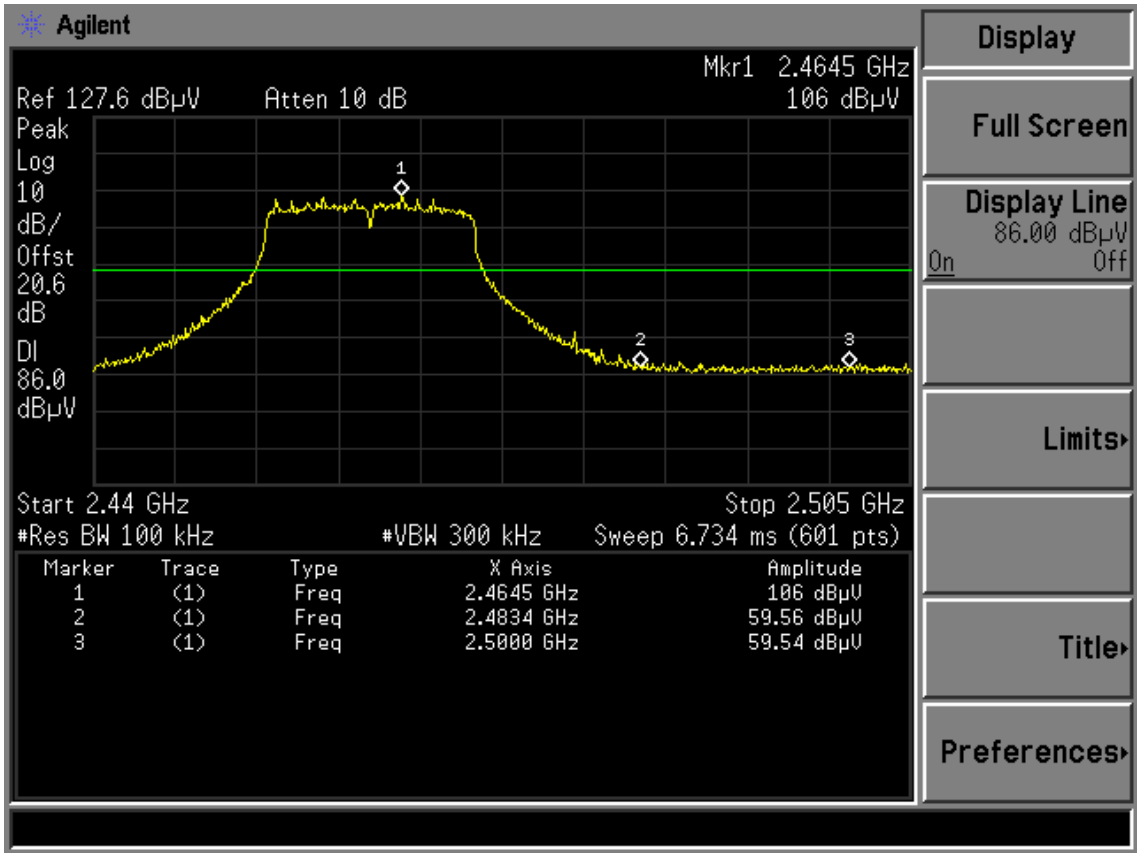




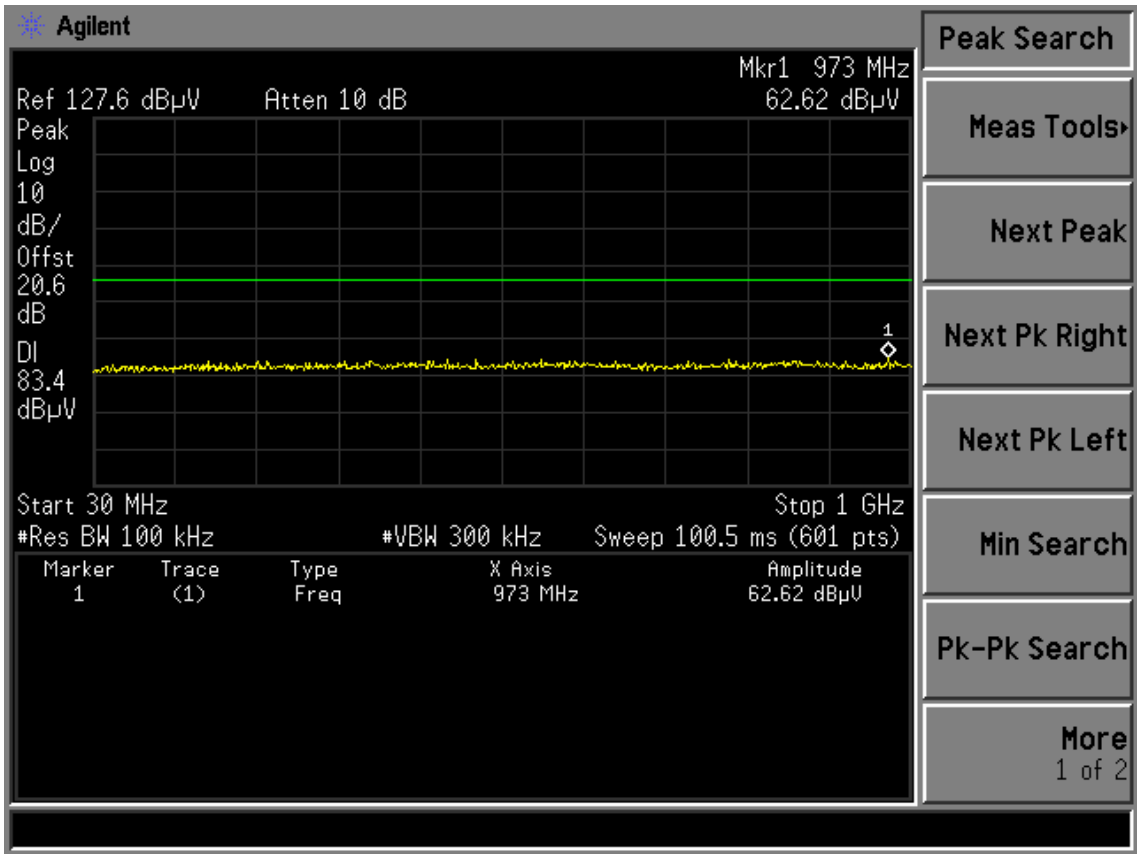
Test CH11: 2462MHz

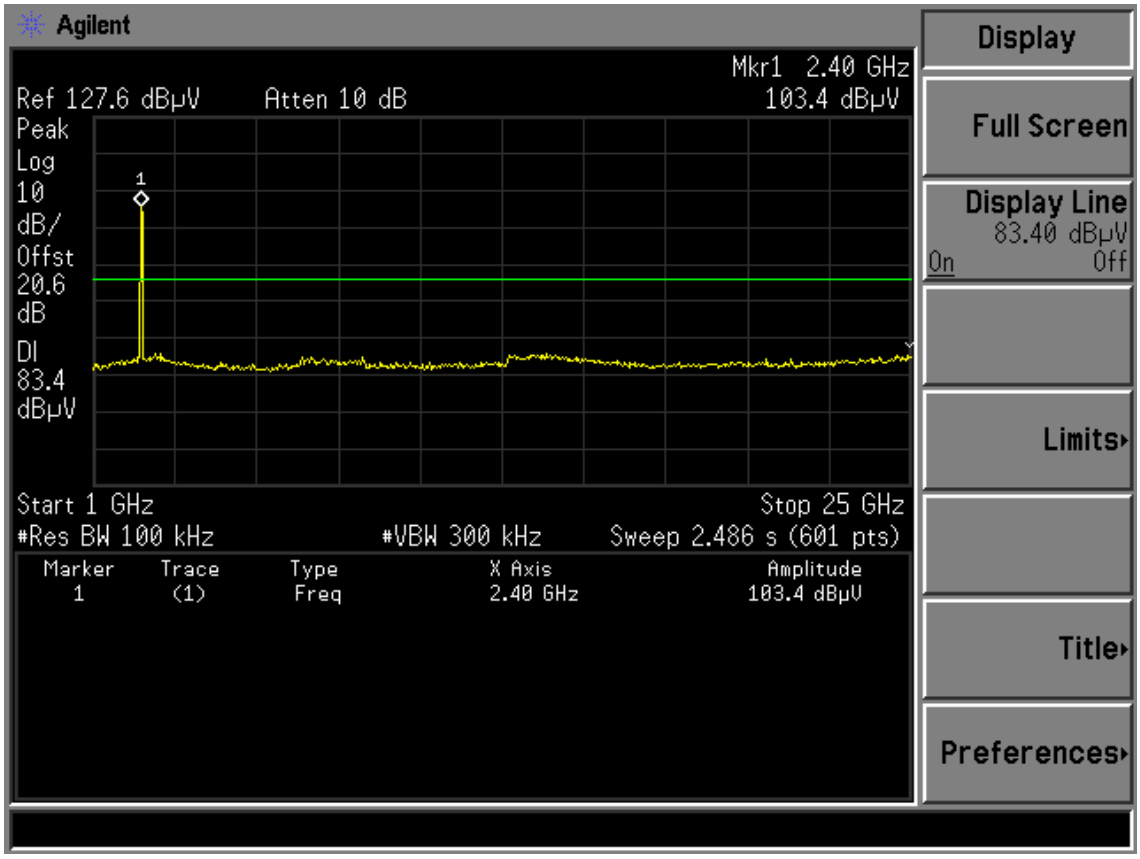


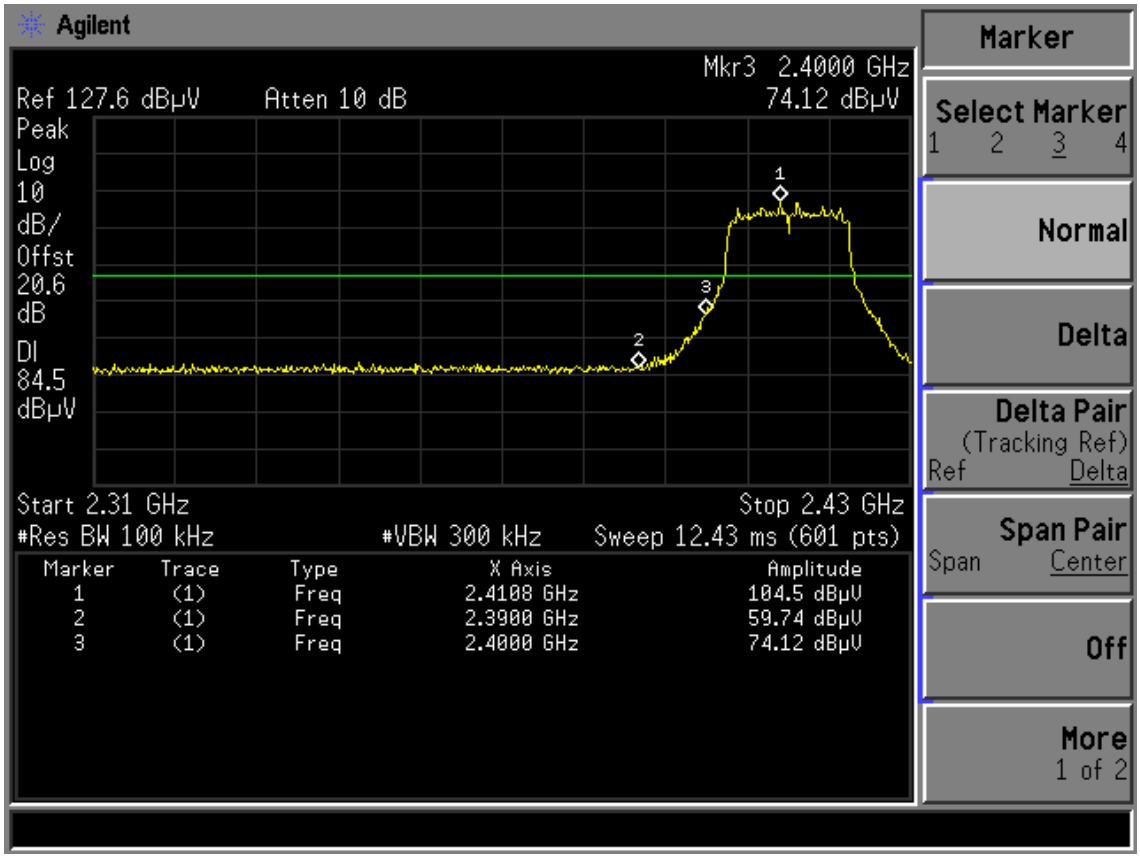

Agilent
Mkr1 2.44 GHz
Ref 127.6 dBµV
Atten 10 dB
104.2 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
84.2
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 104.2 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.4645 GHz
Ref 127.6 dBµV
Atten 10 dB
106 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
86.0
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4645 GHz 106 dBµV
2 (1) Freq 2.4834 GHz 59.56 dBµV
3 (1) Freq 2.5000 GHz 59.54 dBµV
Display
Full Screen
Display Line
86.00 dBµV
On Off
Limits
Title
Preferences

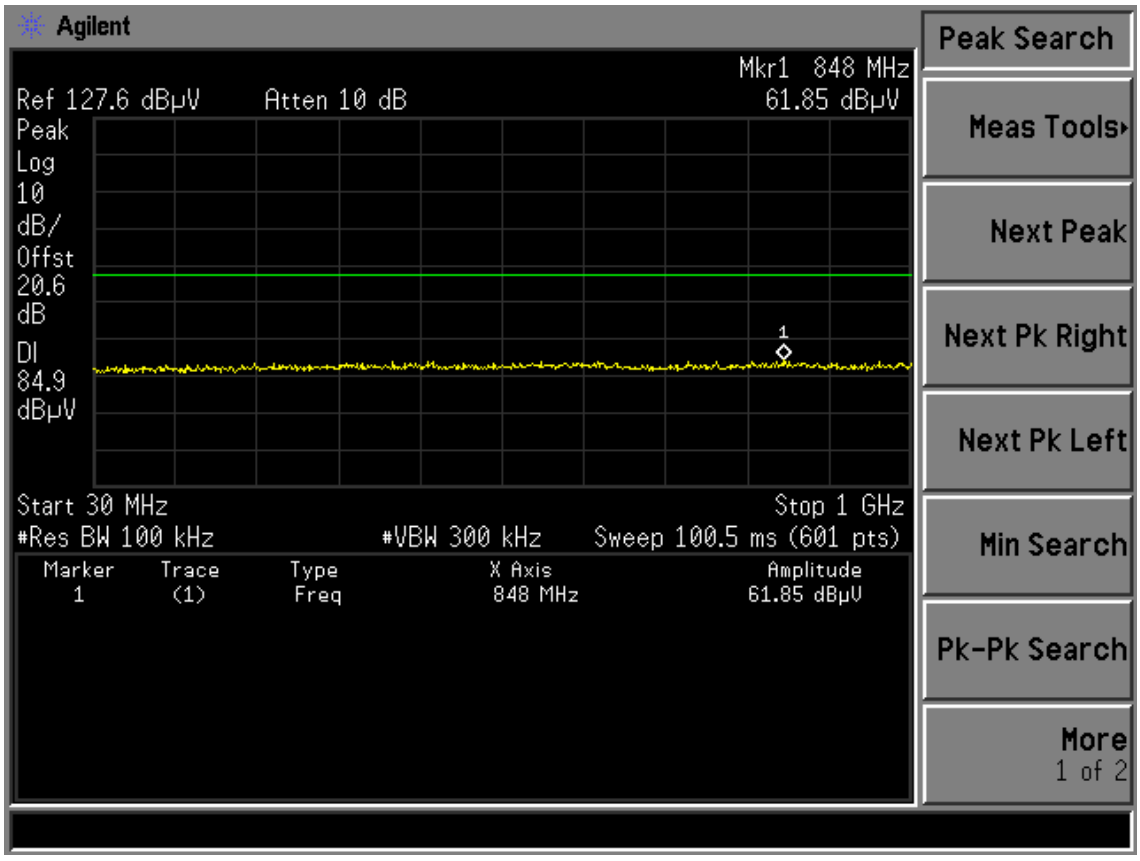
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

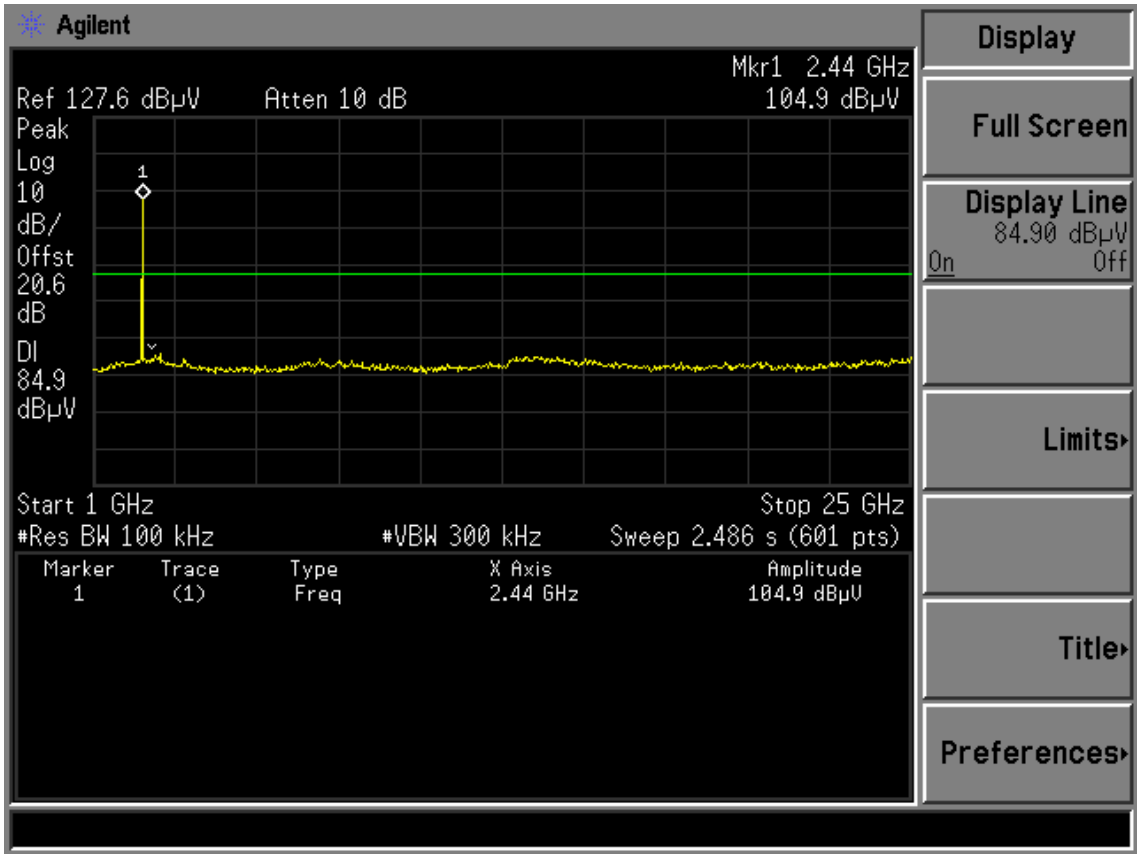




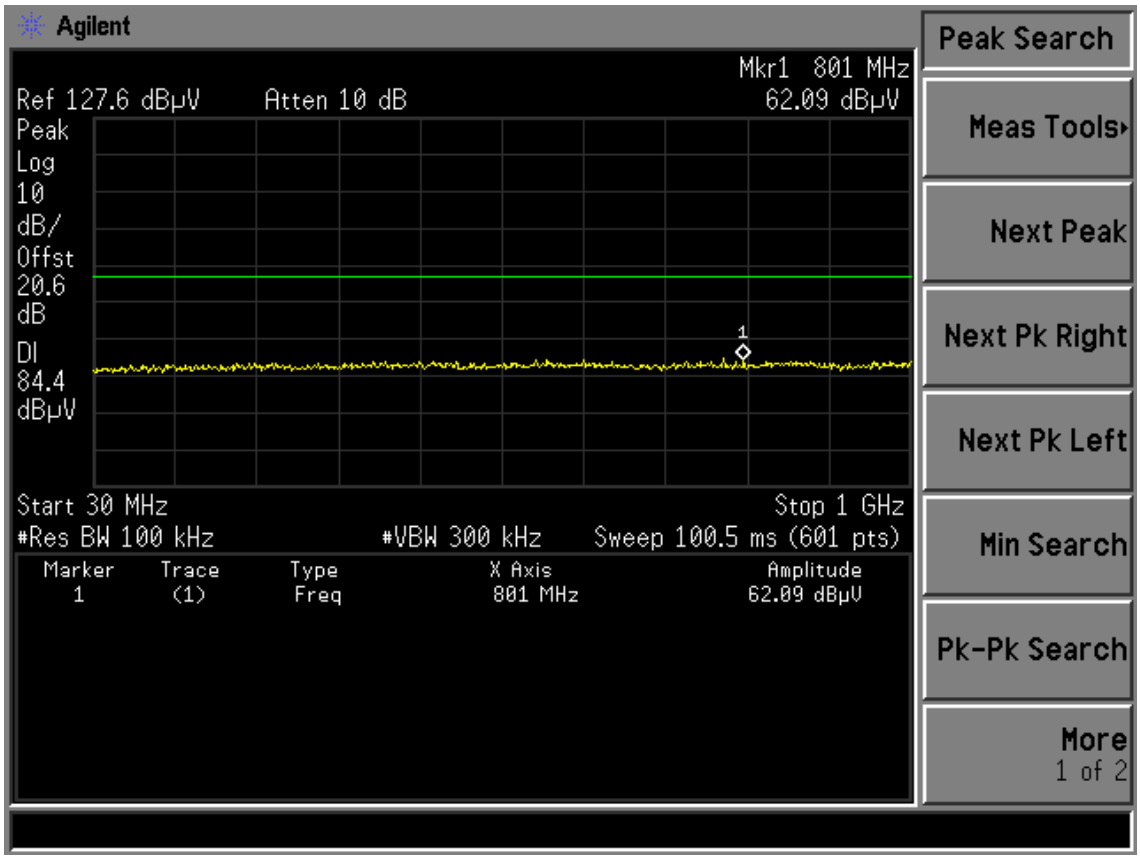


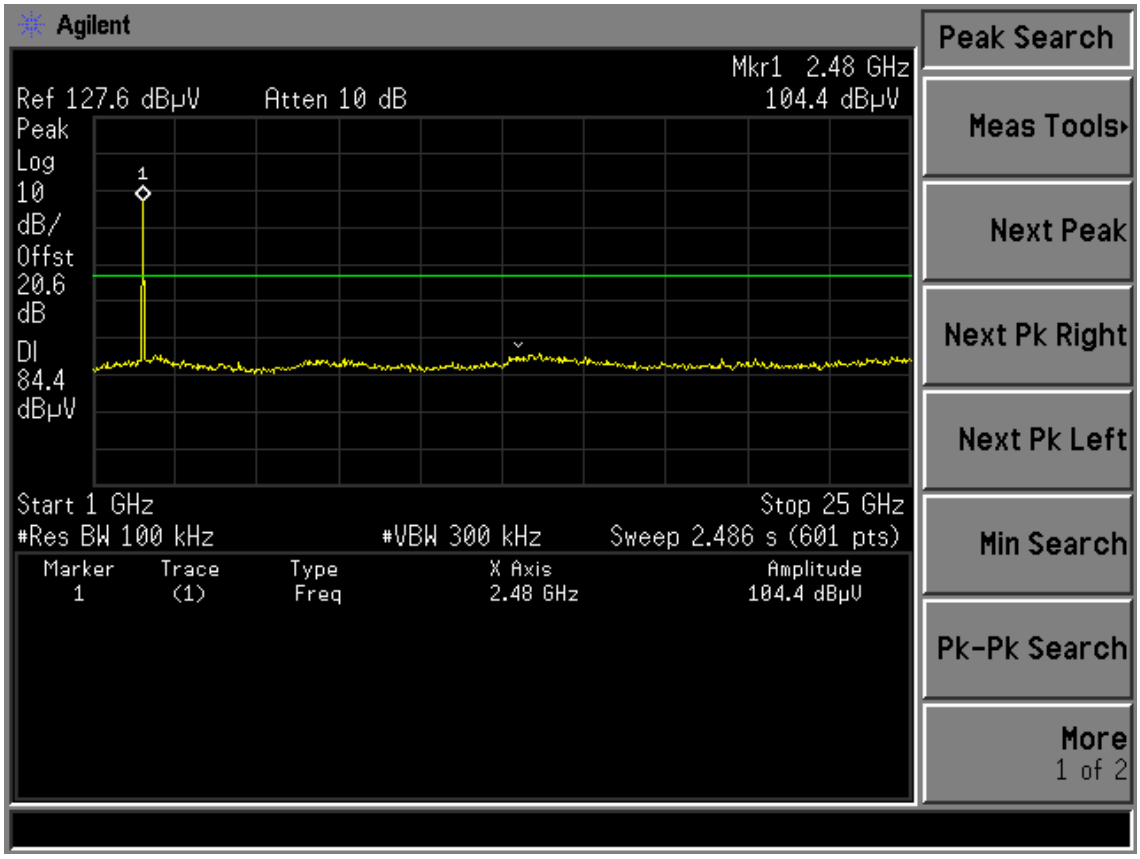
Test CH6: 2437MHz

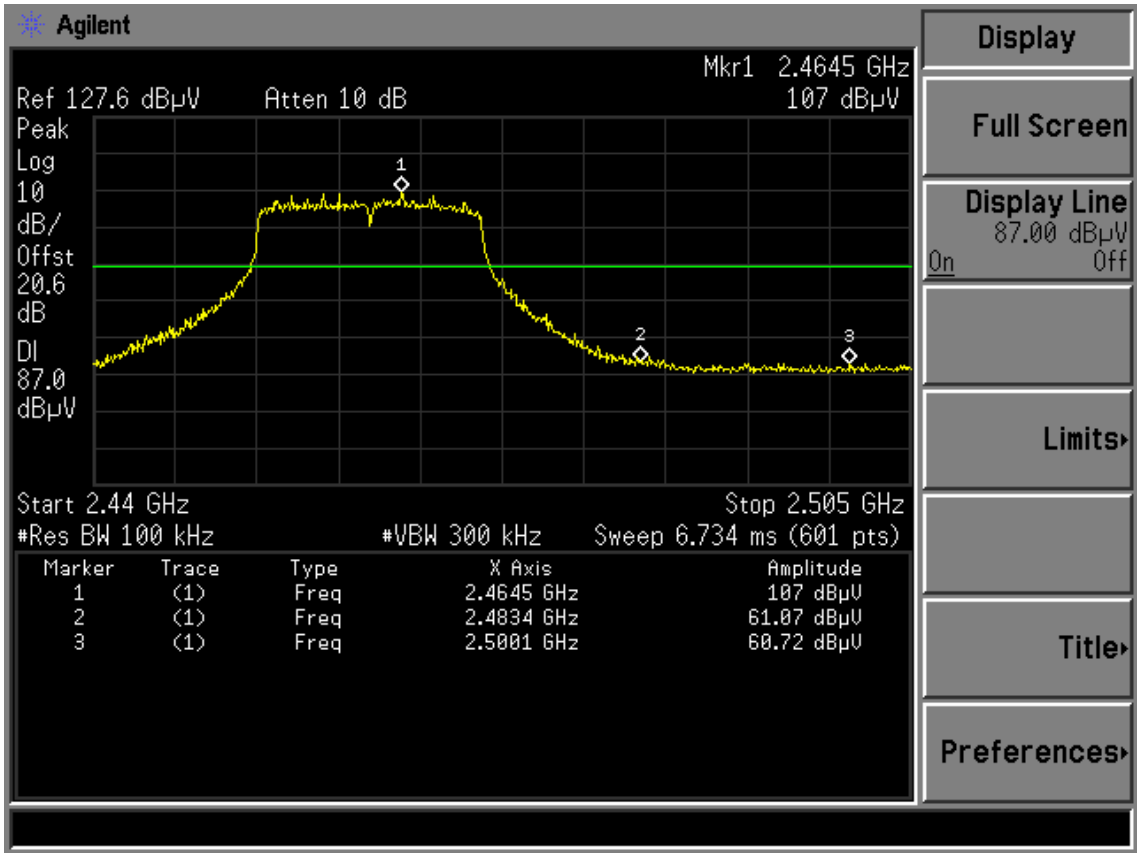




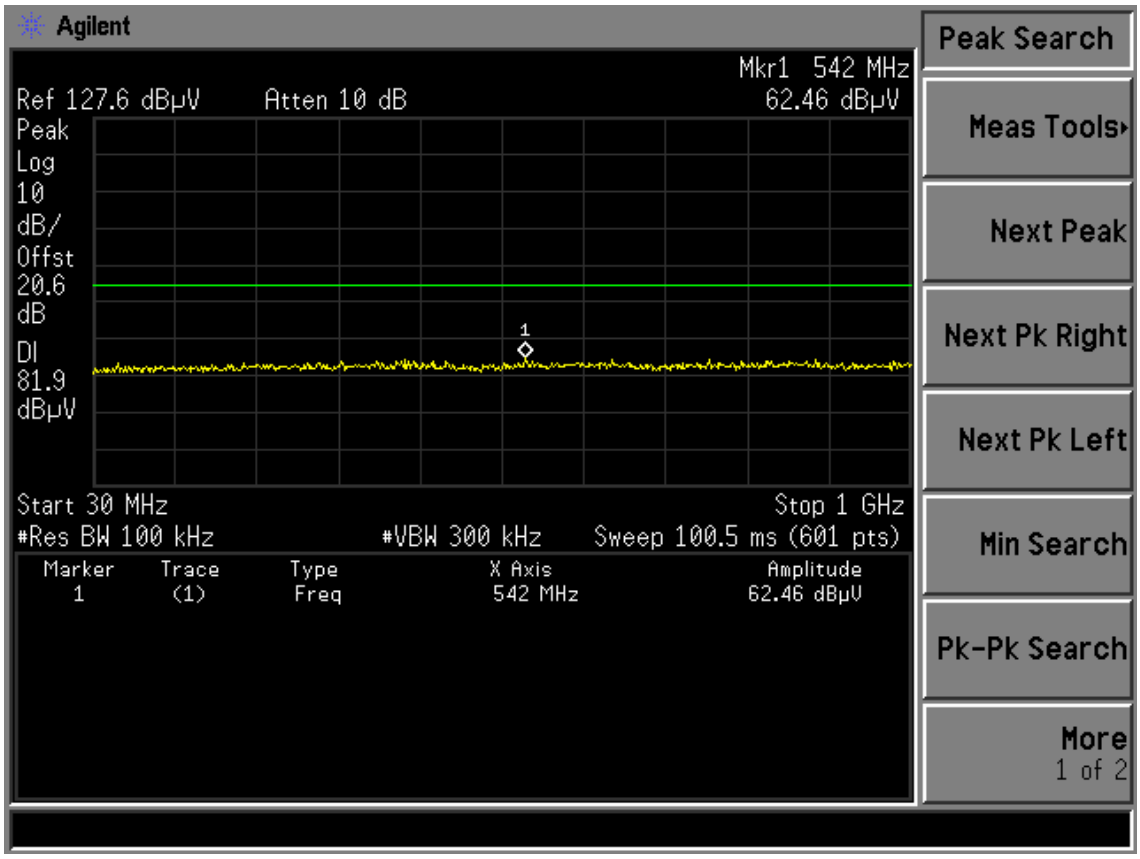
Test CH11: 2462MHz

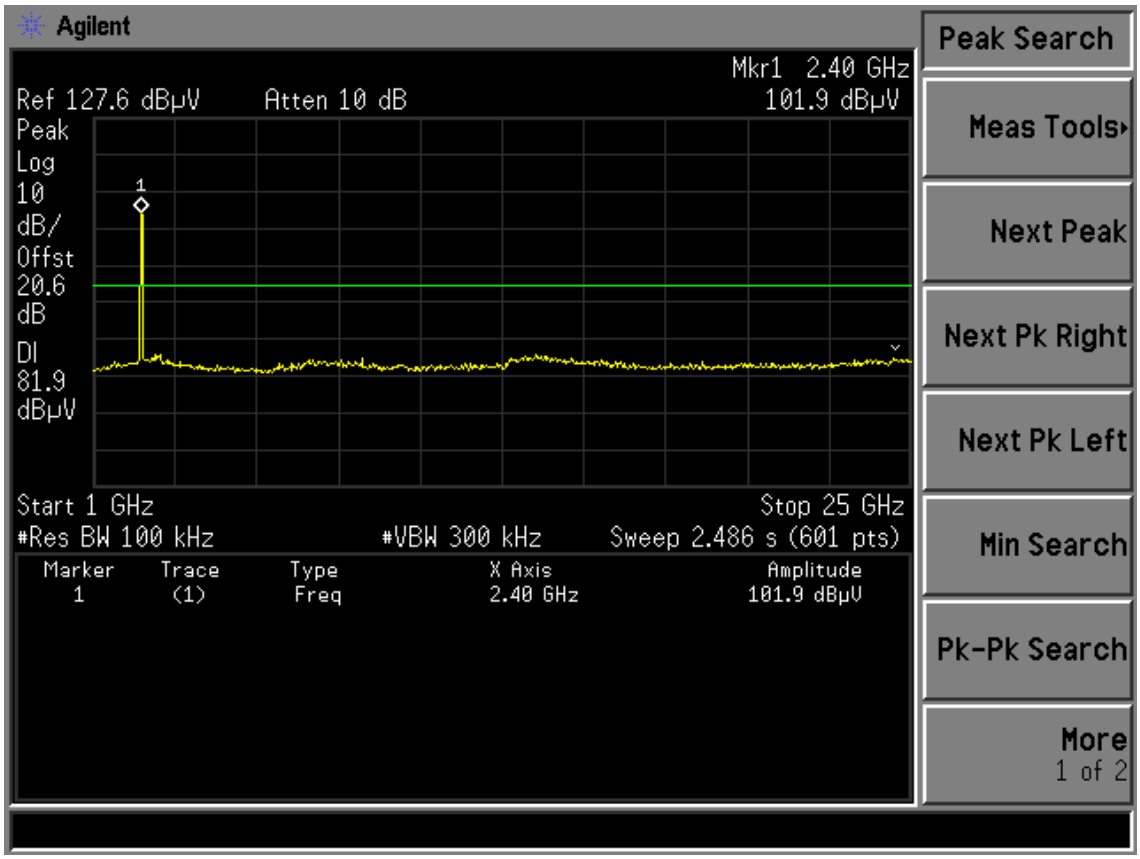


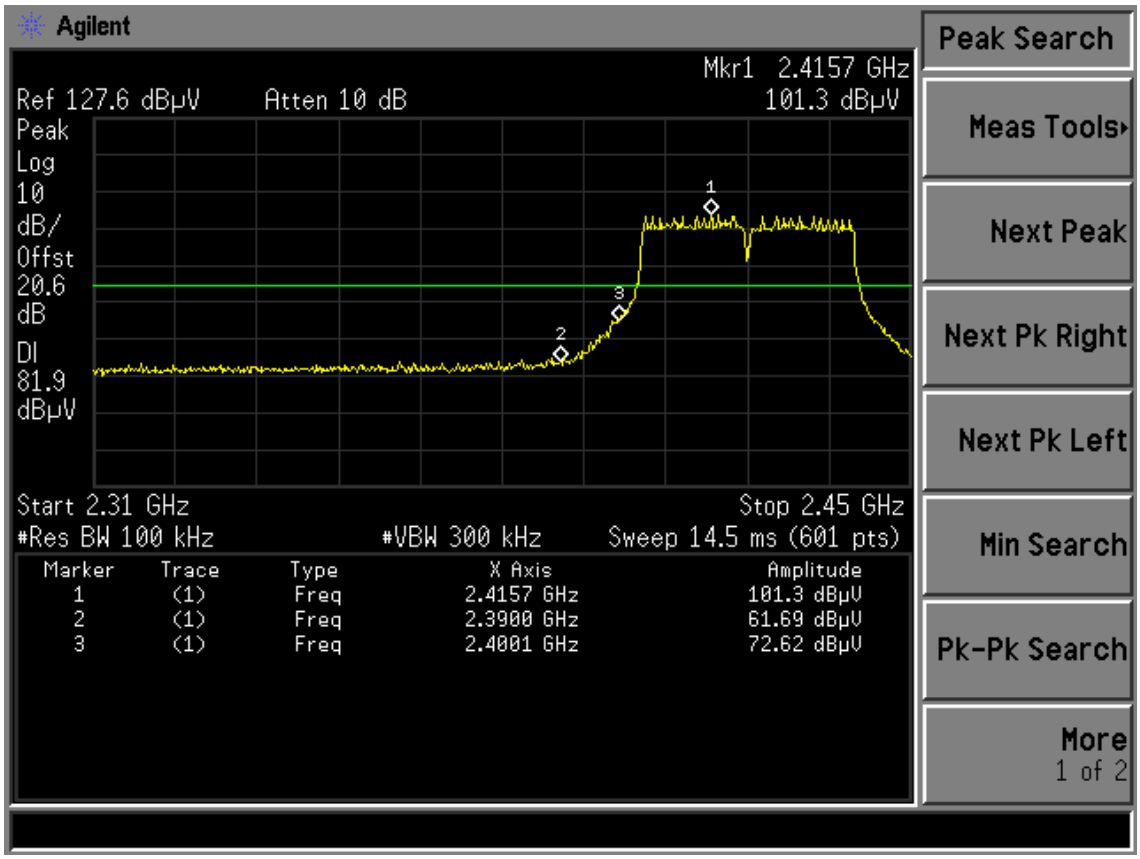

Agilent
Mkr1 2.48 GHz
Ref 127.6 dBµV
Atten 10 dB
104.4 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
84.4
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.48 GHz 104.4 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.4645 GHz
Ref 127.6 dBµV
Atten 10 dB
107 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
87.0
dBµV
Start 2.44 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 6.734 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4645 GHz 107 dBµV
2 (1) Freq 2.4834 GHz 61.07 dBµV
3 (1) Freq 2.5001 GHz 60.72 dBµV
Display
Full Screen
Display Line
87.00 dBµV
On Off
Limits
Title
Preferences

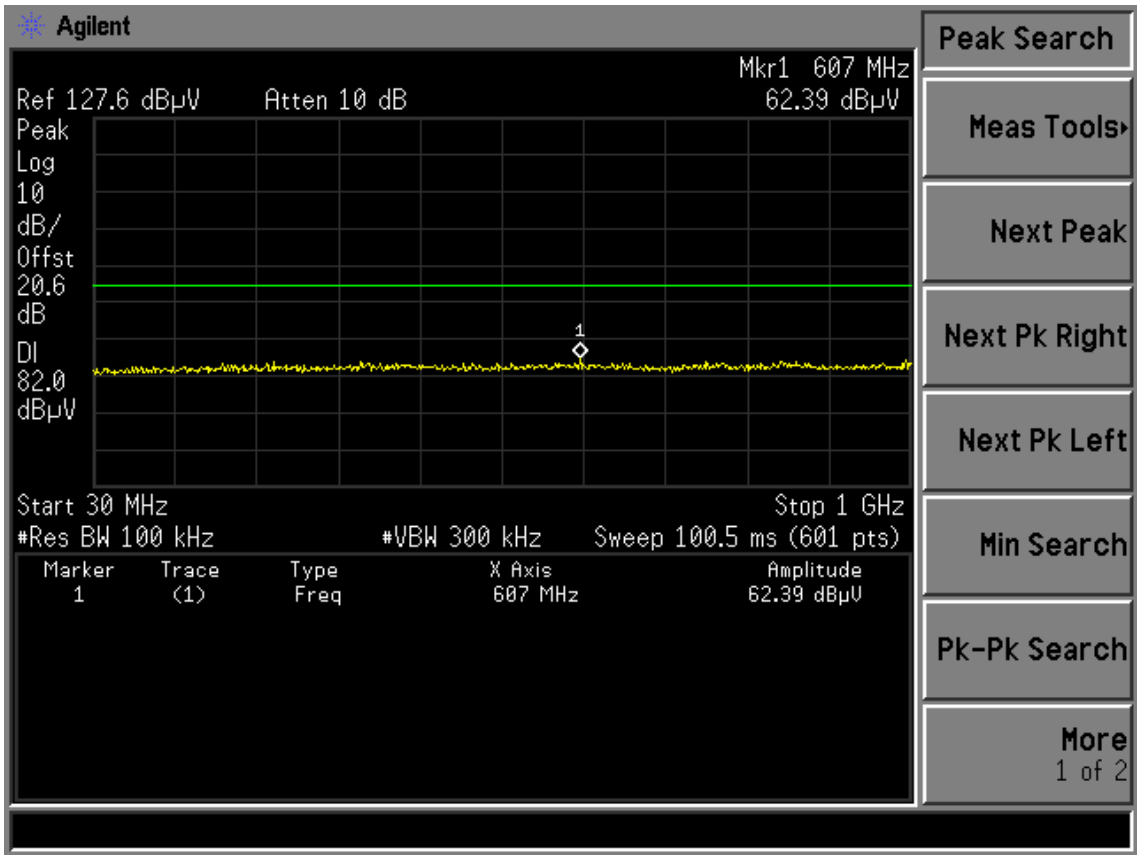
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

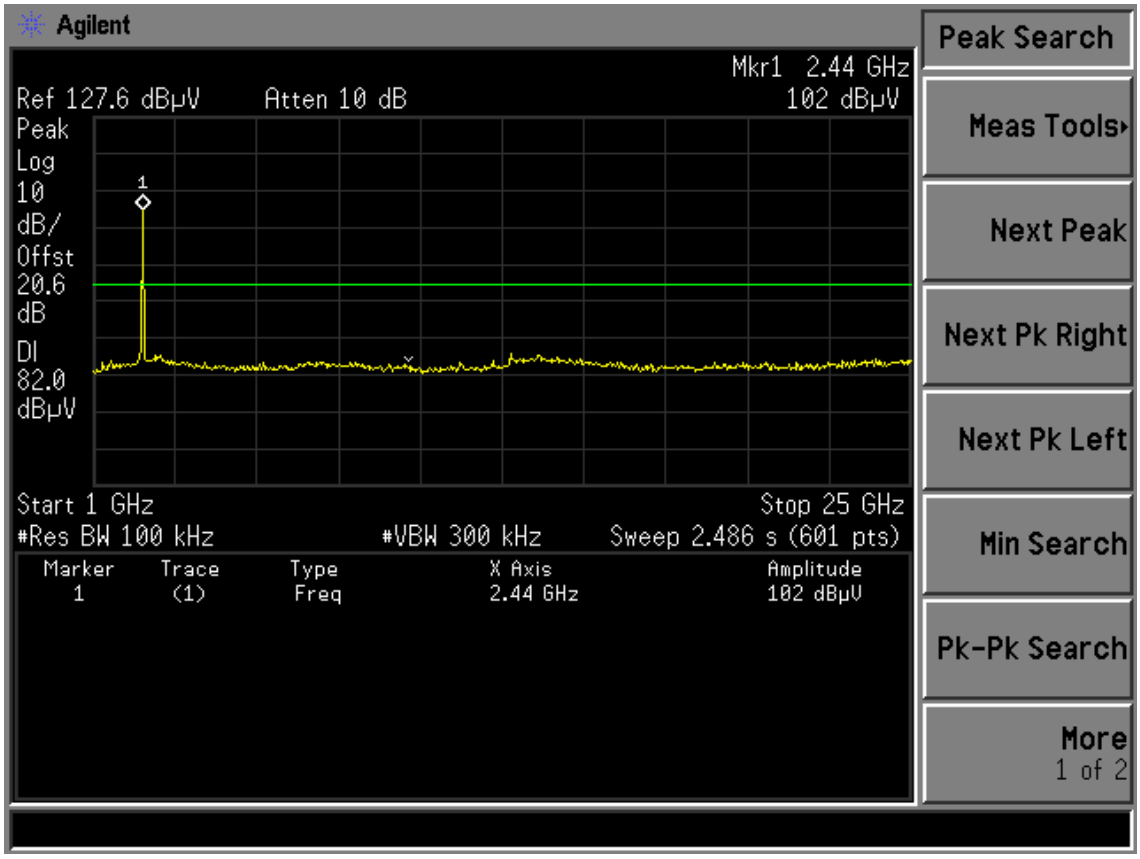




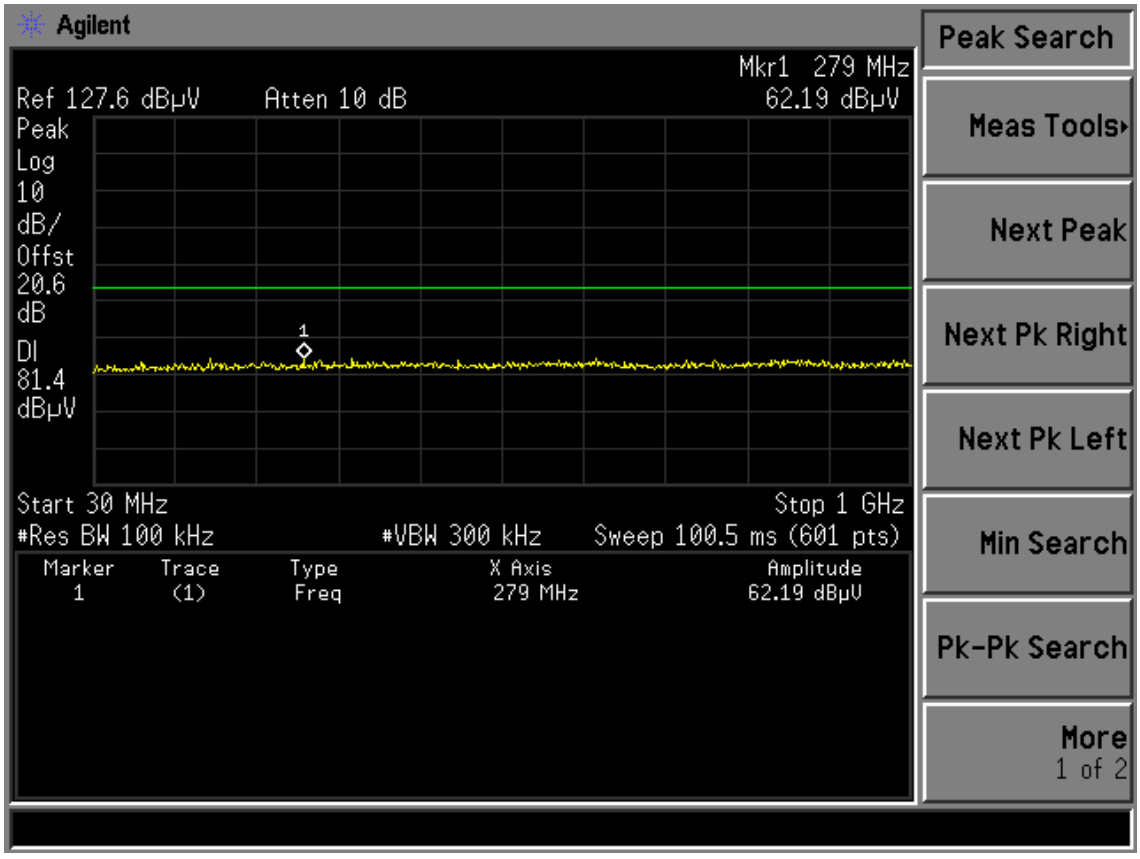


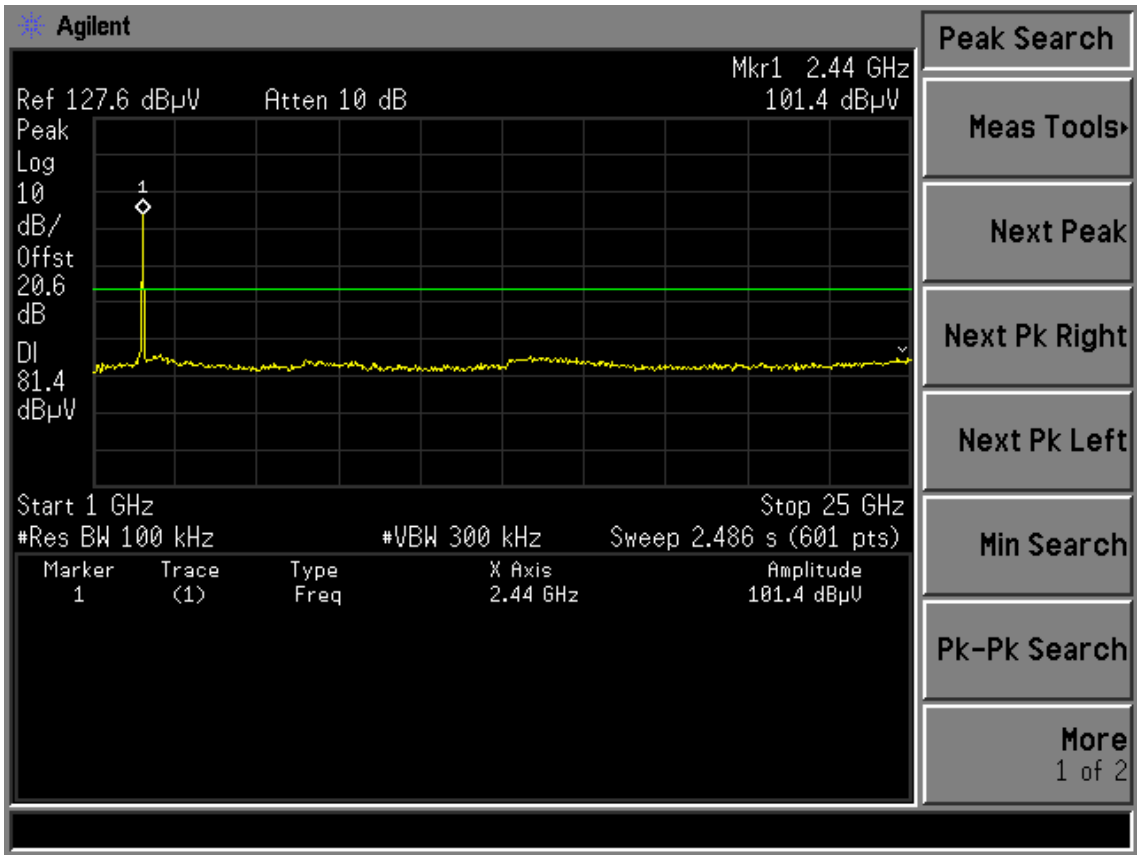
Test CH4: 2437MHz

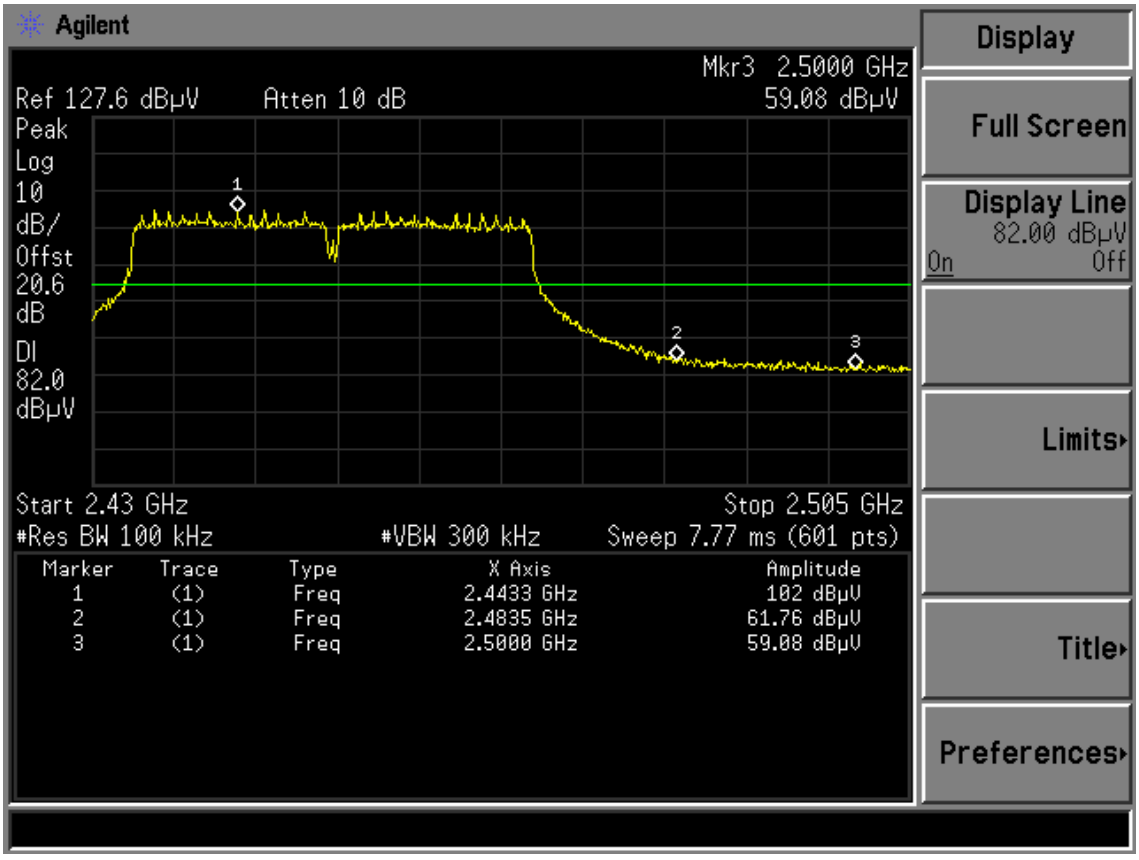




Test CH7: 2452MHz




Agilent
Mkr1 2.44 GHz
Ref 127.6 dBµV
Atten 10 dB
101.4 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
81.4
dBµV
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 101.4 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr3 2.5000 GHz
Ref 127.6 dBµV
Atten 10 dB
59.08 dBµV
Peak
Log
10
dB/
Offst
20.6
dB
Dl
82.0
dBµV
Start 2.43 GHz
Stop 2.505 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 7.77 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4433 GHz 102 dBµV
2 (1) Freq 2.4835 GHz 61.76 dBµV
3 (1) Freq 2.5000 GHz 59.08 dBµV
Display
Full Screen
Display Line
82.00 dBµV
On Off
Limits
Title
Preferences

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,12	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	May 08, 12	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 12	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,12	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,12	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,12	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.

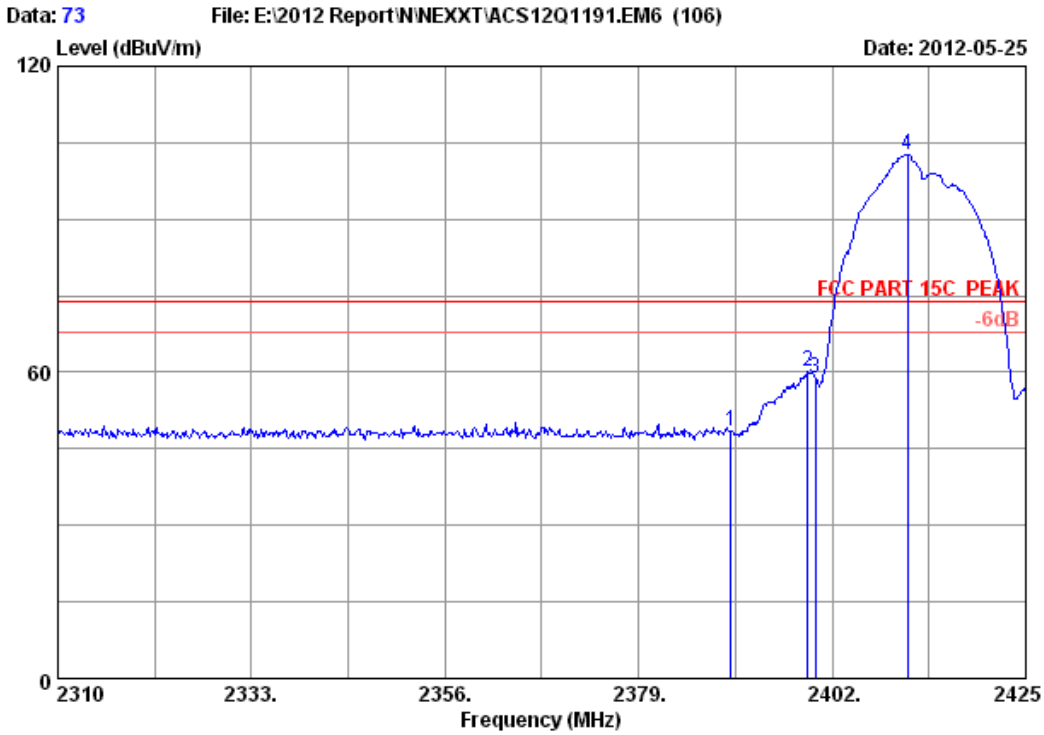
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

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

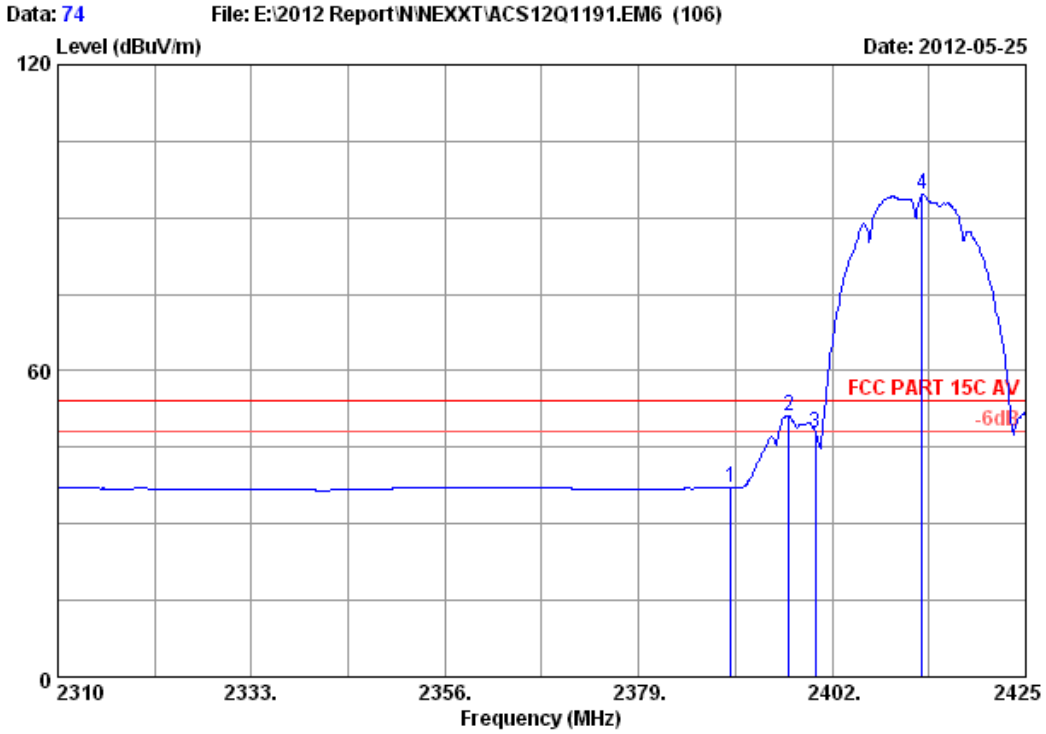
Pass (The testing data was attached in the next pages.)




```
Site no.      : 3m Chamber                Data no.   : 73
Dis. / Ant.   : 3m   3115(0905)           Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Gigabit Router
Power supply  : DC 12V From Adapter input AC 120V/60Hz
Test mode     : IEEE802.11b CH1 2412MHz  Tx
              : ARN03304U1
```

	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	28.46	8.41	36.09	47.67	48.45	74.00	25.55	Peak
2	2399.125	28.46	8.60	36.09	59.17	60.14	74.00	13.86	Peak
3	2400.000	28.46	8.60	36.09	57.94	58.91	74.00	15.09	Peak
4	2410.970	28.48	8.60	35.95	101.54	102.67	74.00	-28.67	Peak

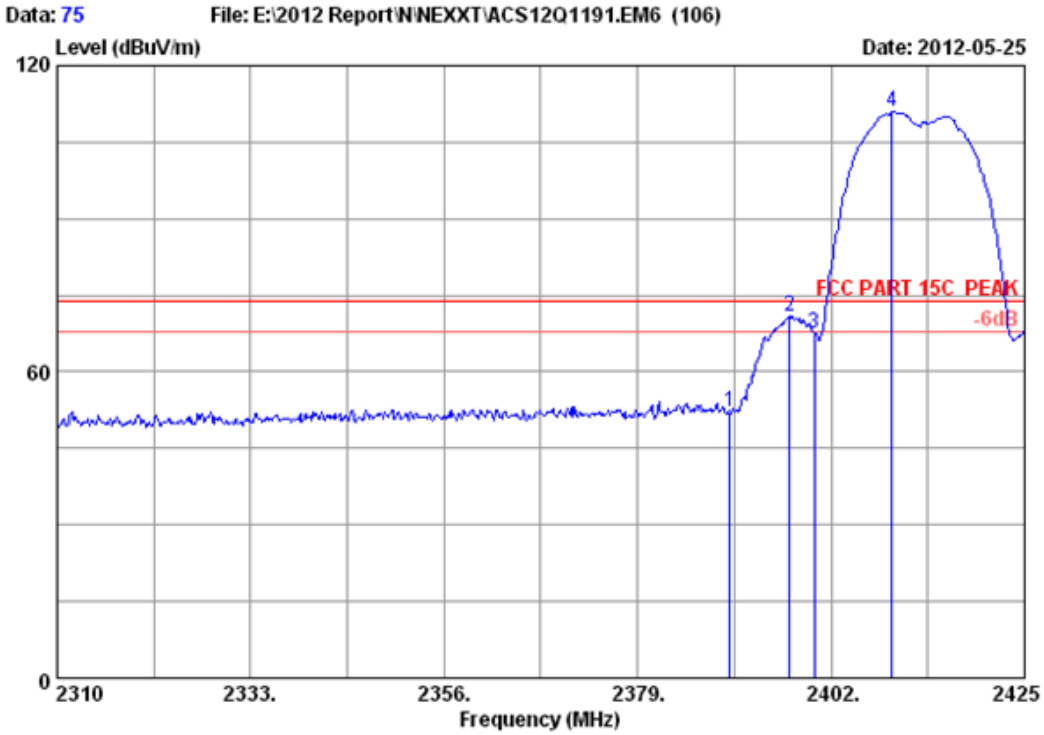
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	36.26	37.04	54.00	16.96	Average
2	2396.825	28.46	8.41	36.09	50.41	51.19	54.00	2.81	Average
3	2400.000	28.46	8.60	36.09	46.87	47.84	54.00	6.16	Average
4	2412.695	28.48	8.60	35.95	93.43	94.56	54.00	-40.56	Average

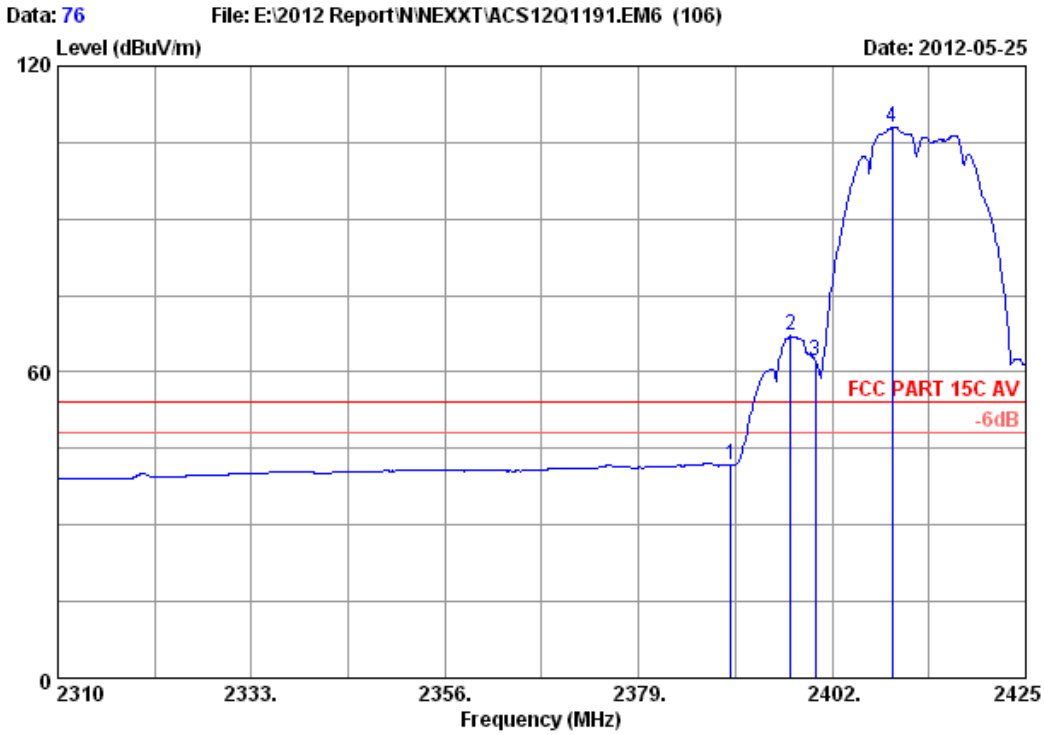
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	51.33	52.11	74.00	21.89	Peak
2	2397.055	28.46	8.41	36.09	70.15	70.93	74.00	3.07	Peak
3	2400.000	28.46	8.60	36.09	66.44	67.41	74.00	6.59	Peak
4	2409.245	28.48	8.60	35.95	109.91	111.04	74.00	-37.04	Peak

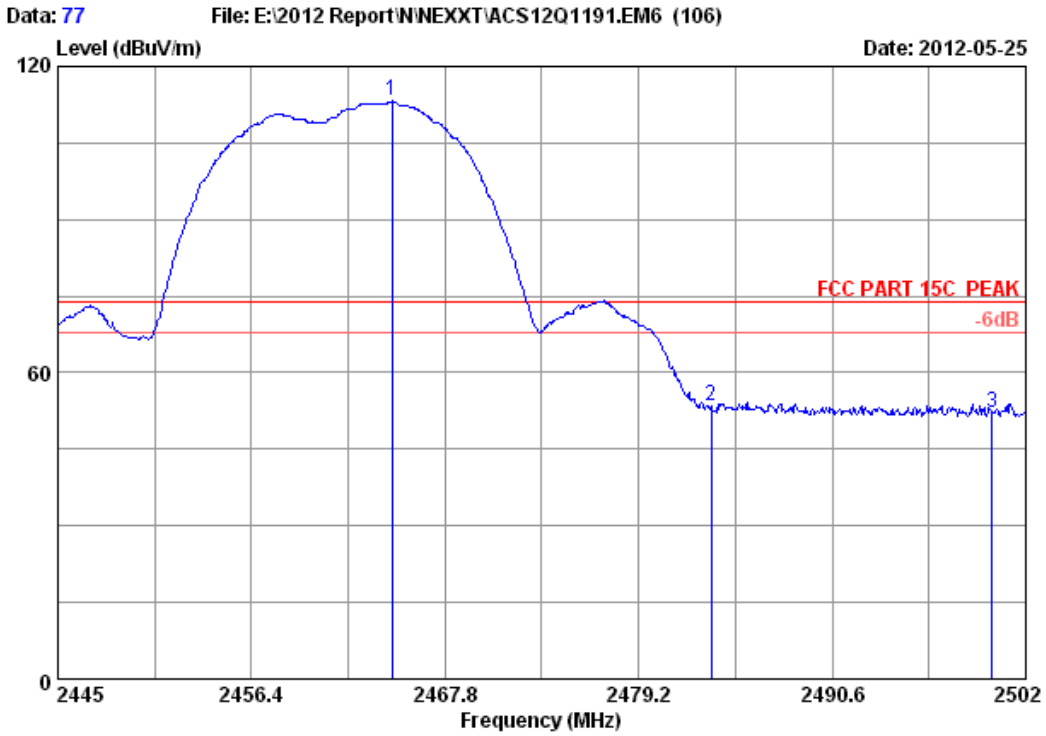
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	41.07	41.85	54.00	12.15	Average
2	2397.055	28.46	8.41	36.09	66.32	67.10	54.00	-13.10	Average
3	2400.000	28.46	8.60	36.09	61.22	62.19	54.00	-8.19	Average
4	2409.130	28.48	8.60	35.95	106.95	108.08	54.00	-54.08	Average

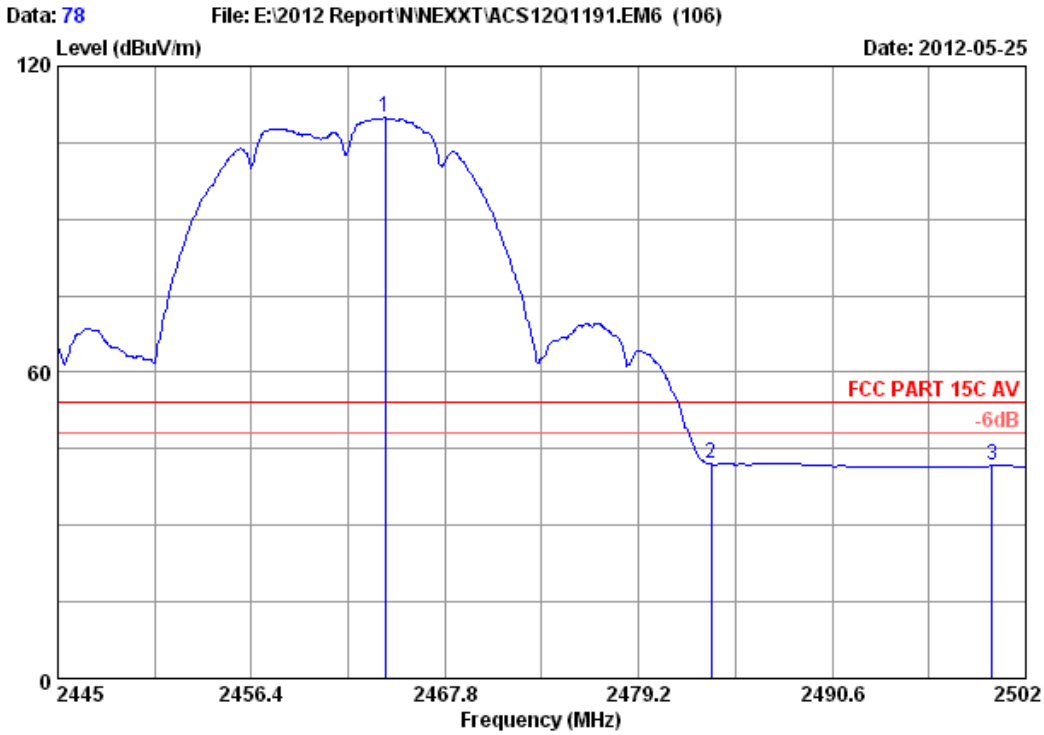
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 77
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
: ARN03304U1

	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	2464.665	28.55	8.76	36.02	111.90	113.19	74.00	-39.19	Peak
2	2483.500	28.58	8.94	35.97	51.91	53.46	74.00	20.54	Peak
3	2500.000	28.60	8.89	36.00	50.53	52.02	74.00	21.98	Peak

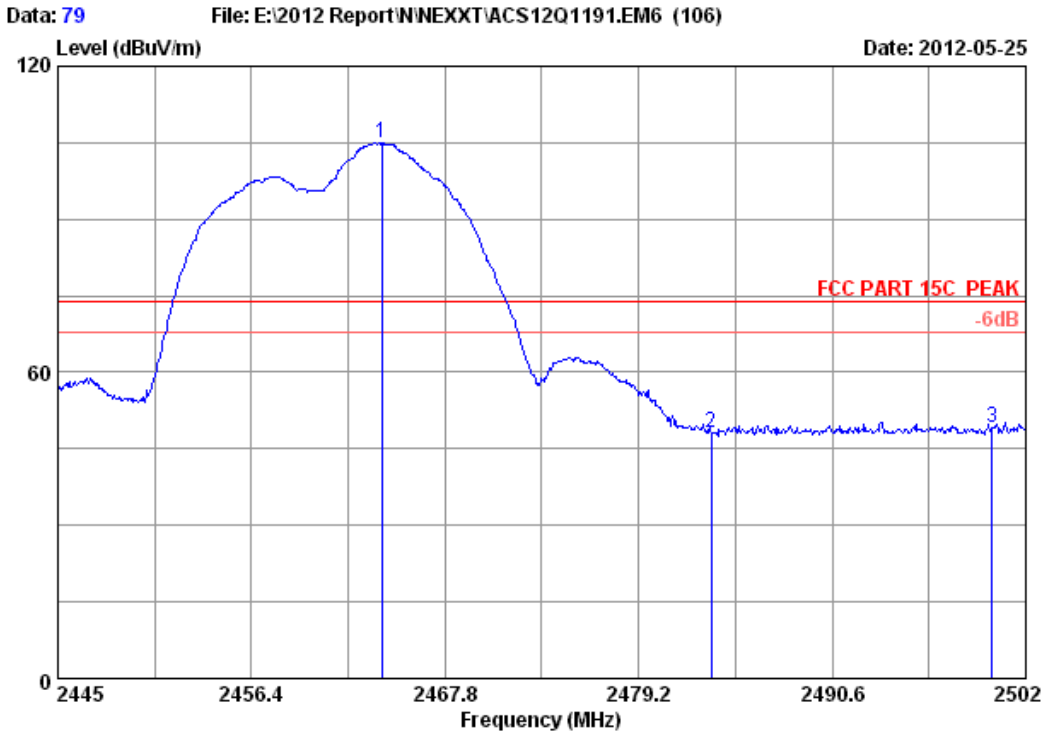
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 78
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
: ARN03304U1

	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	2464.266	28.55	8.76	36.02	108.58	109.87	54.00	-55.87	Average
2	2483.500	28.58	8.94	35.97	40.45	42.00	54.00	12.00	Average
3	2500.000	28.60	8.89	36.00	40.20	41.69	54.00	12.31	Average

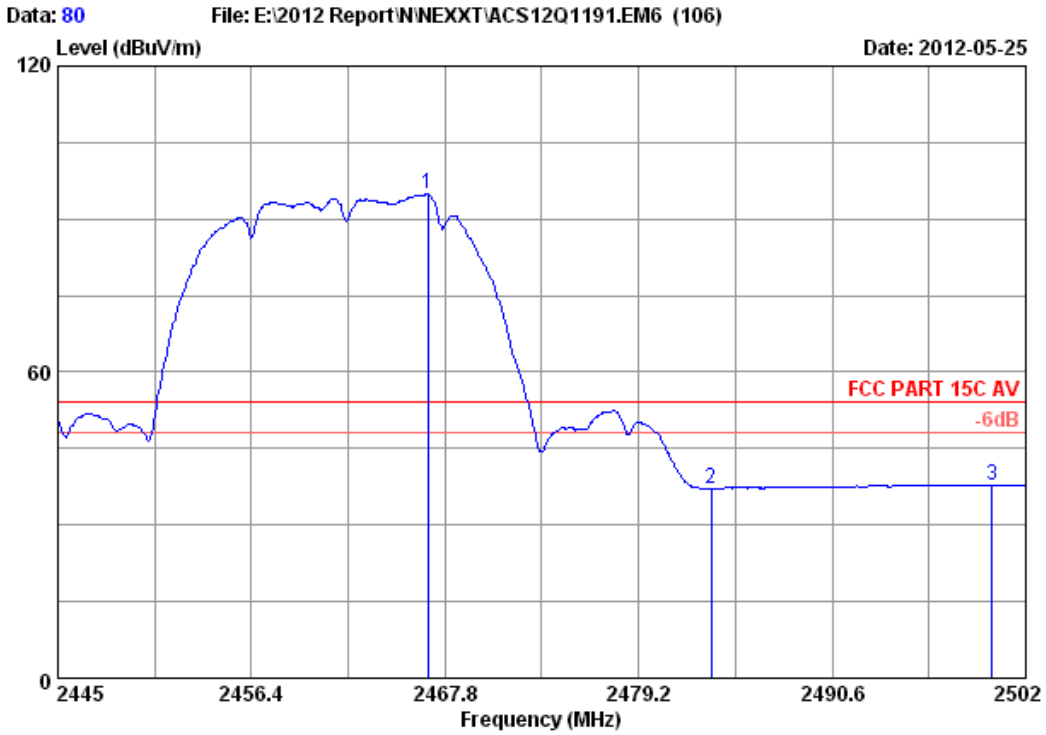
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 79
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
: ARN03304U1

	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	2464.095	28.55	8.76	36.02	103.62	104.91	74.00	-30.91	Peak
2	2483.500	28.58	8.94	35.97	46.71	48.26	74.00	25.74	Peak
3	2500.000	28.60	8.89	36.00	47.64	49.13	74.00	24.87	Peak

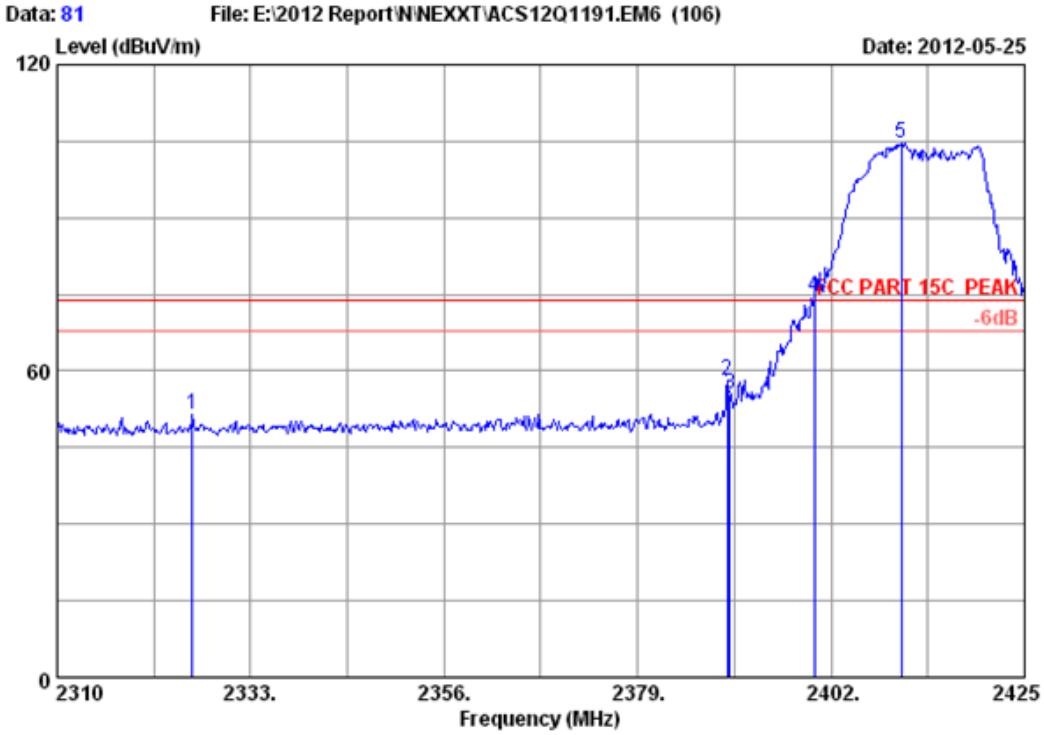
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 80
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz Tx
: ARN03304U1

	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	2466.774	28.55	8.76	36.02	93.49	94.78	54.00	-40.78	Average
2	2483.500	28.58	8.94	35.97	35.68	37.23	54.00	16.77	Average
3	2500.000	28.60	8.89	36.00	36.35	37.84	54.00	16.16	Average

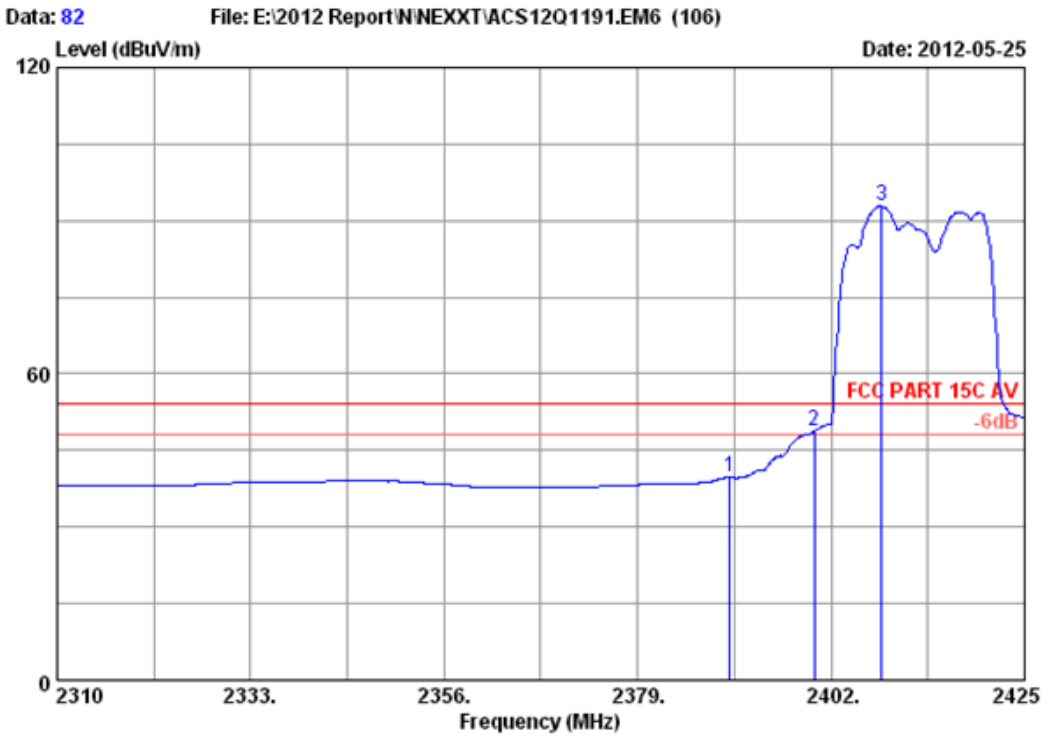
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 81
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
: ARN03304U1

	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	2326.100	28.36	8.64	36.06	50.50	51.44	74.00	22.56	Peak
2	2389.695	28.46	8.41	36.09	57.29	58.07	74.00	15.93	Peak
3	2390.000	28.46	8.41	36.09	54.81	55.59	74.00	18.41	Peak
4	2400.000	28.46	8.60	36.09	73.71	74.68	74.00	-0.68	Peak
5	2410.395	28.48	8.60	35.95	103.51	104.64	74.00	-30.64	Peak

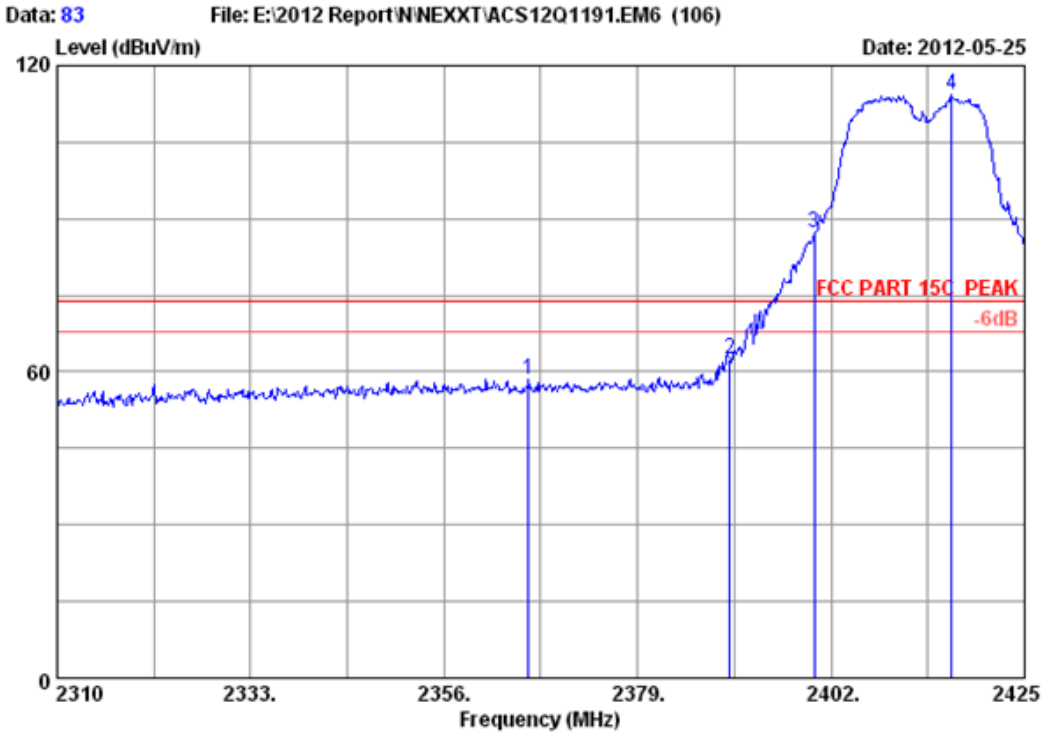
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 82
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	38.94	39.72	54.00	14.28	Average
2	2400.000	28.46	8.60	36.09	47.95	48.92	54.00	5.08	Average
3	2407.980	28.48	8.60	35.95	91.68	92.81	54.00	-38.81	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.

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Site no.      : 3m Chamber                Data no.   : 83
Dis. / Ant.   : 3m   3115(0905)           Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Gigabit Router
Power supply  : DC 12V From Adapter input AC 120V/60Hz
Test mode     : IEEE802.11g CH1 2412MHz  Tx
              : ARN03304U1
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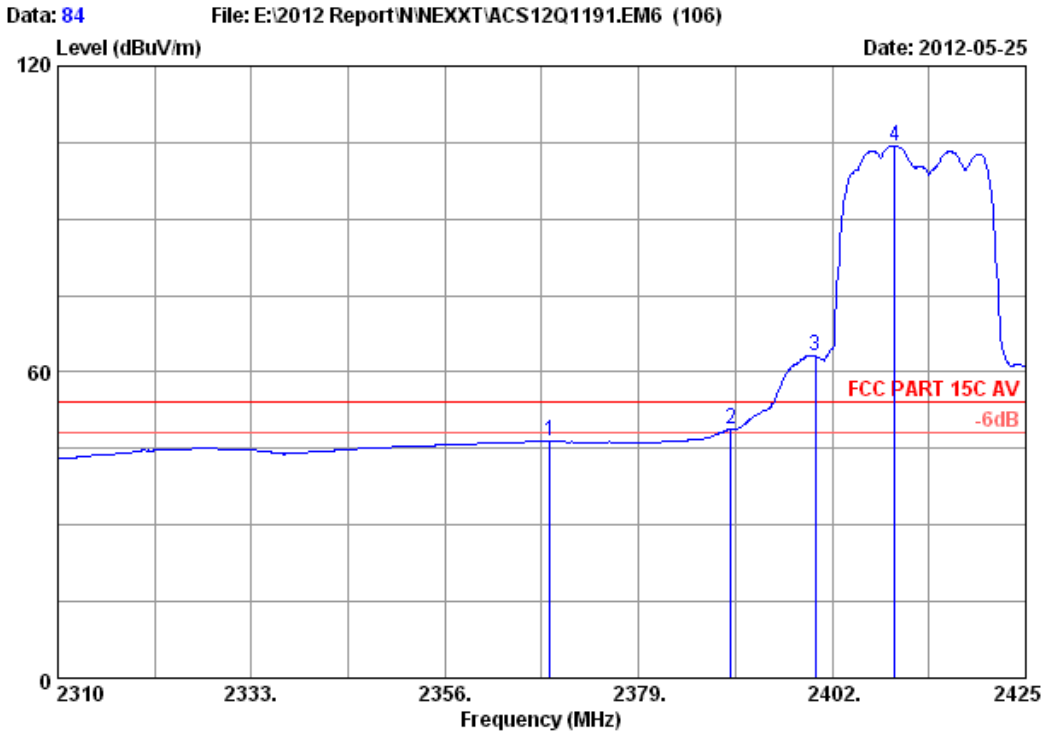
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2366.005	28.41	8.44	35.91	57.69	58.63	74.00	15.37	Peak
2	2390.000	28.46	8.41	36.09	61.63	62.41	74.00	11.59	Peak
3	2400.000	28.46	8.60	36.09	86.20	87.17	74.00	-13.17	Peak
4	2416.375	28.48	8.60	35.95	113.07	114.20	74.00	-40.20	Peak

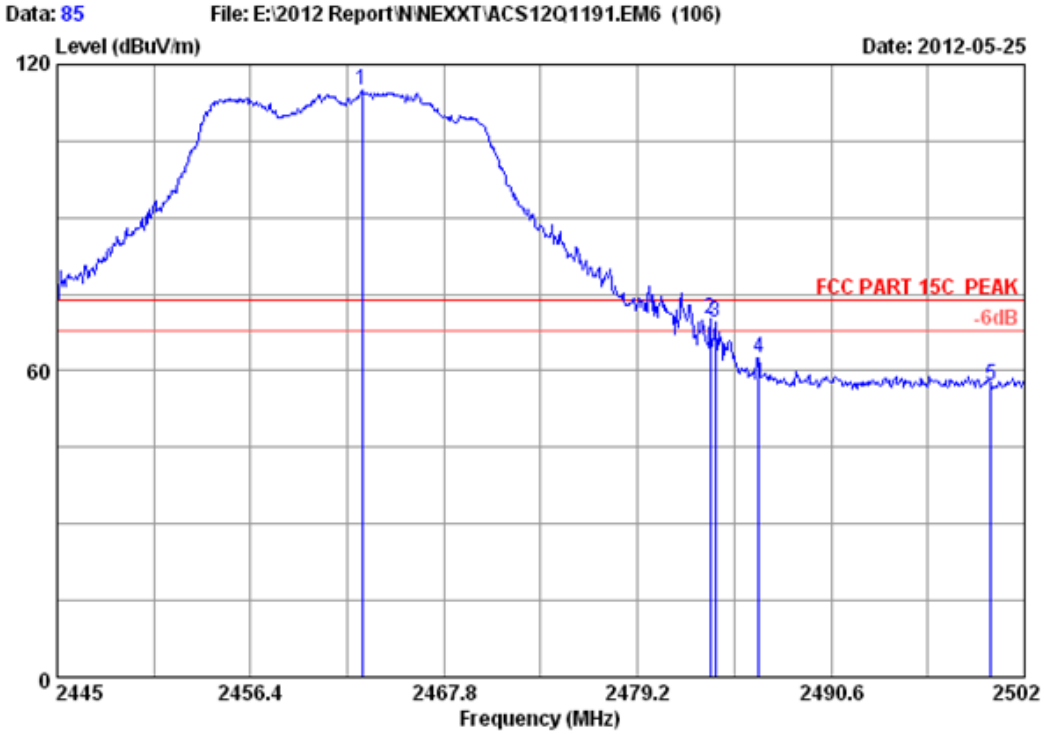
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz Tx
: ARN03304U1

	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	2368.420	28.41	8.44	35.91	45.53	46.47	54.00	7.53	Average
2	2390.000	28.46	8.41	36.09	47.98	48.76	54.00	5.24	Average
3	2400.000	28.46	8.60	36.09	62.07	63.04	54.00	-9.04	Average
4	2409.475	28.48	8.60	35.95	103.25	104.38	54.00	-50.38	Average

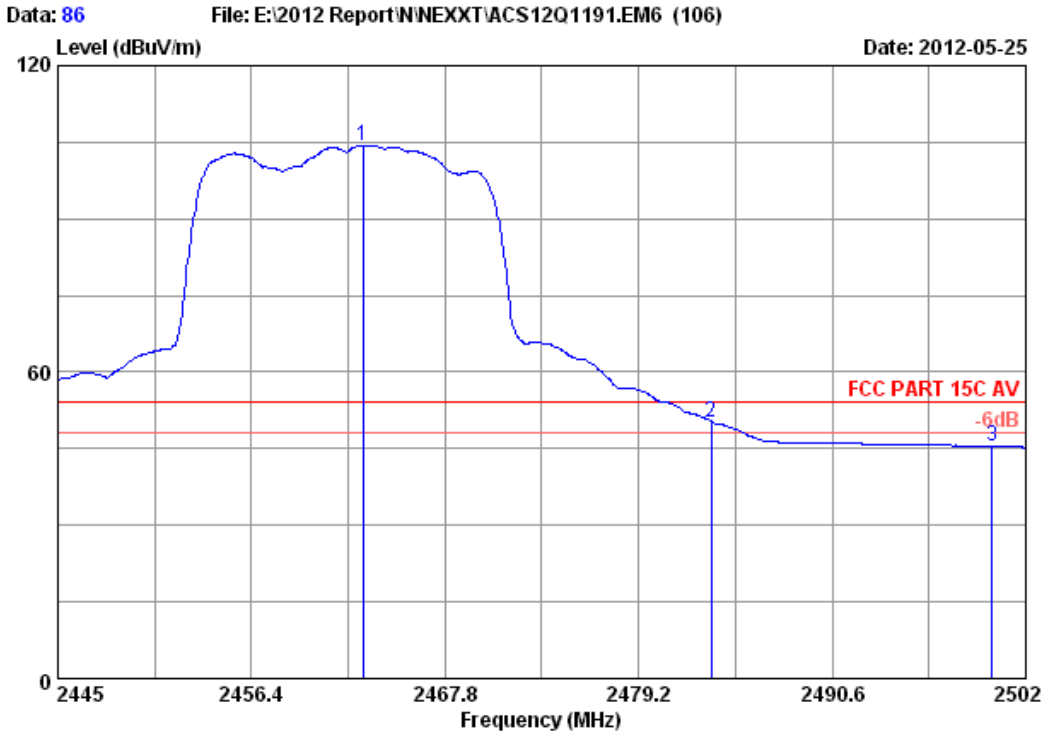
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
: ARN03304U1

	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	2462.955	28.55	8.76	36.02	113.57	114.86	74.00	-40.86	Peak
2	2483.500	28.58	8.94	35.97	68.62	70.17	74.00	3.83	Peak
3	2483.760	28.58	8.94	35.97	67.99	69.54	74.00	4.46	Peak
4	2486.325	28.58	8.94	35.97	60.89	62.44	74.00	11.56	Peak
5	2500.000	28.60	8.89	36.00	55.68	57.17	74.00	16.83	Peak

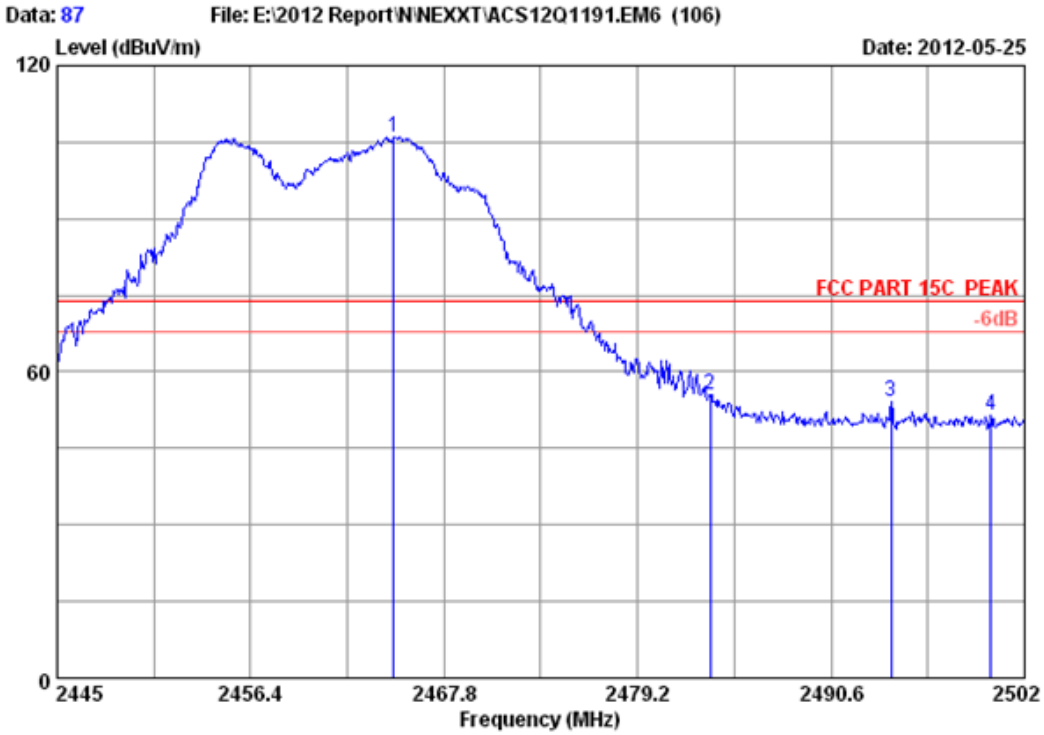
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz Tx
: ARN03304U1

	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	2462.955	28.55	8.76	36.02	103.04	104.33	54.00	-50.33	Average
2	2483.500	28.58	8.94	35.97	48.65	50.20	54.00	3.80	Average
3	2500.000	28.60	8.89	36.00	43.97	45.46	54.00	8.54	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.

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Site no.      : 3m Chamber                Data no.   : 87
Dis. / Ant.   : 3m   3115(0905)           Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Gigabit Router
Power supply  : DC 12V From Adapter input AC 120V/60Hz
Test mode     : IEEE802.11g CH11 2462MHz  Tx
              : ARN03304U1
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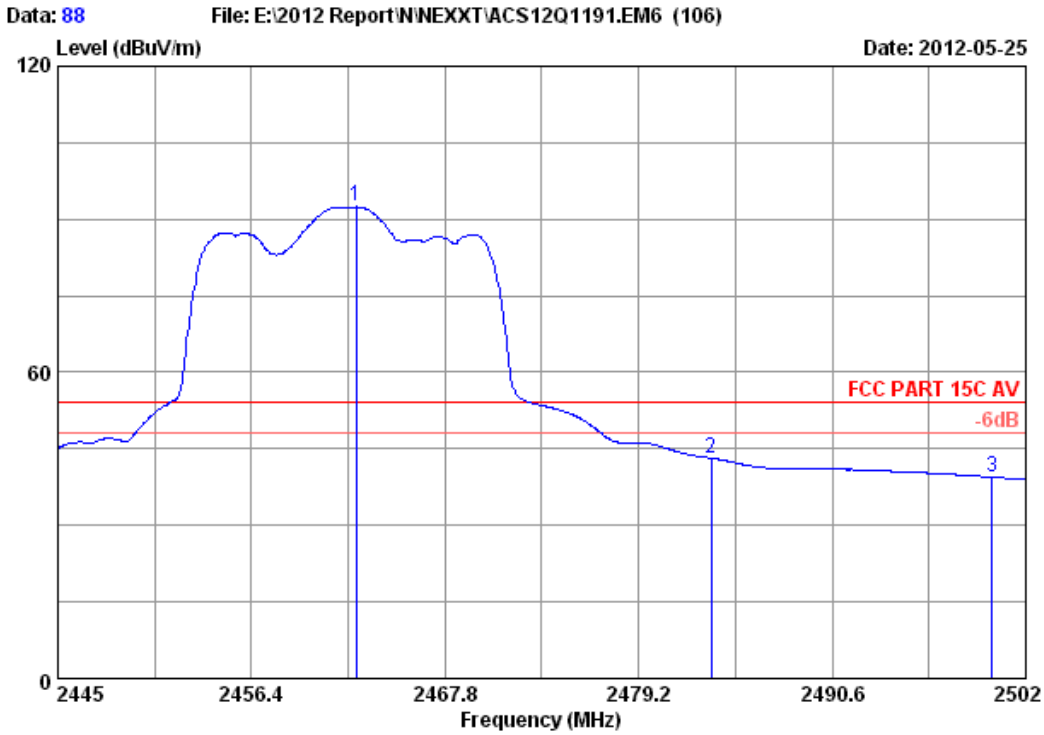
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.836	28.55	8.76	36.02	104.80	106.09	74.00	-32.09	Peak
2	2483.500	28.58	8.94	35.97	53.99	55.54	74.00	18.46	Peak
3	2494.134	28.60	8.94	36.00	52.56	54.10	74.00	19.90	Peak
4	2500.000	28.60	8.89	36.00	50.09	51.58	74.00	22.42	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.

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Site no.      : 3m Chamber                Data no.   : 88
Dis. / Ant.   : 3m   3115(0905)           Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C AV
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Gigabit Router
Power supply  : DC 12V From Adapter input AC 120V/60Hz
Test mode     : IEEE802.11g CH11 2462MHz  Tx
              : ARN03304U1
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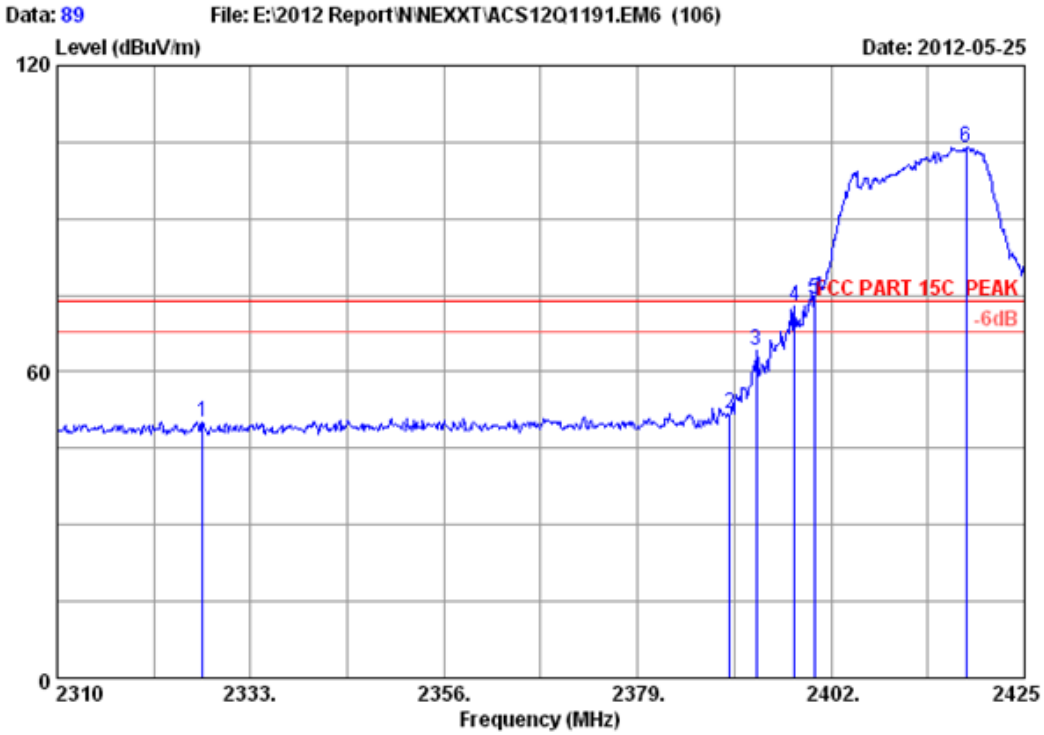
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.556	28.55	8.76	36.02	91.13	92.42	54.00	-38.42	Average
2	2483.500	28.58	8.94	35.97	41.62	43.17	54.00	10.83	Average
3	2500.000	28.60	8.89	36.00	37.92	39.41	54.00	14.59	Average

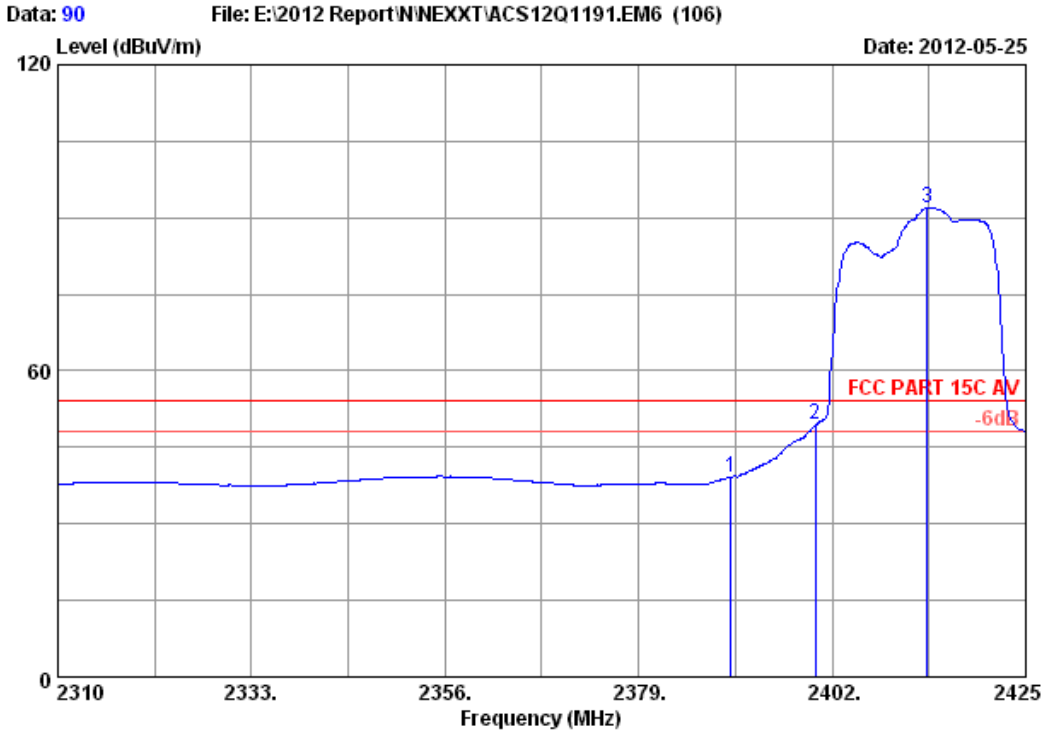
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
: ARN03304U1

	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	28.36	8.64	36.06	49.27	50.21	74.00	23.79	Peak
2	2390.000	28.46	8.41	36.09	51.04	51.82	74.00	22.18	Peak
3	2393.145	28.46	8.41	36.09	63.44	64.22	74.00	9.78	Peak
4	2397.630	28.46	8.41	36.09	72.18	72.96	74.00	1.04	Peak
5	2400.000	28.46	8.60	36.09	73.29	74.26	74.00	-0.26	Peak
6	2418.100	28.48	8.60	35.95	102.84	103.97	74.00	-29.97	Peak

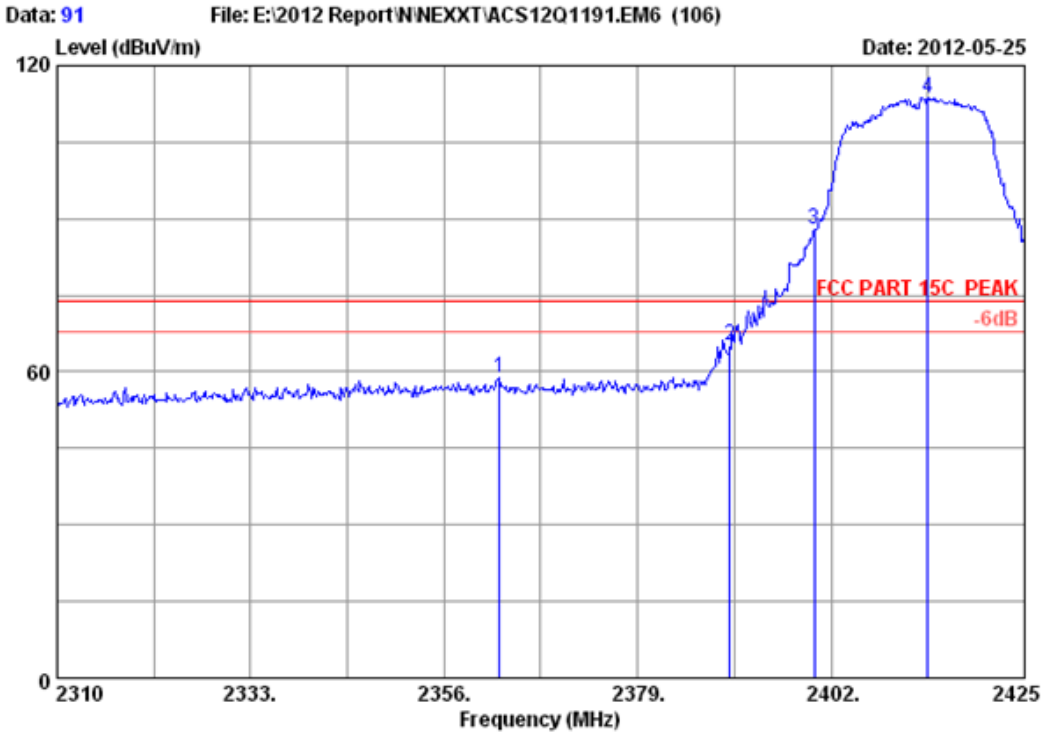
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	38.40	39.18	54.00	14.82	Average
2	2400.000	28.46	8.60	36.09	48.43	49.40	54.00	4.60	Average
3	2413.270	28.48	8.60	35.95	90.78	91.91	54.00	-37.91	Average

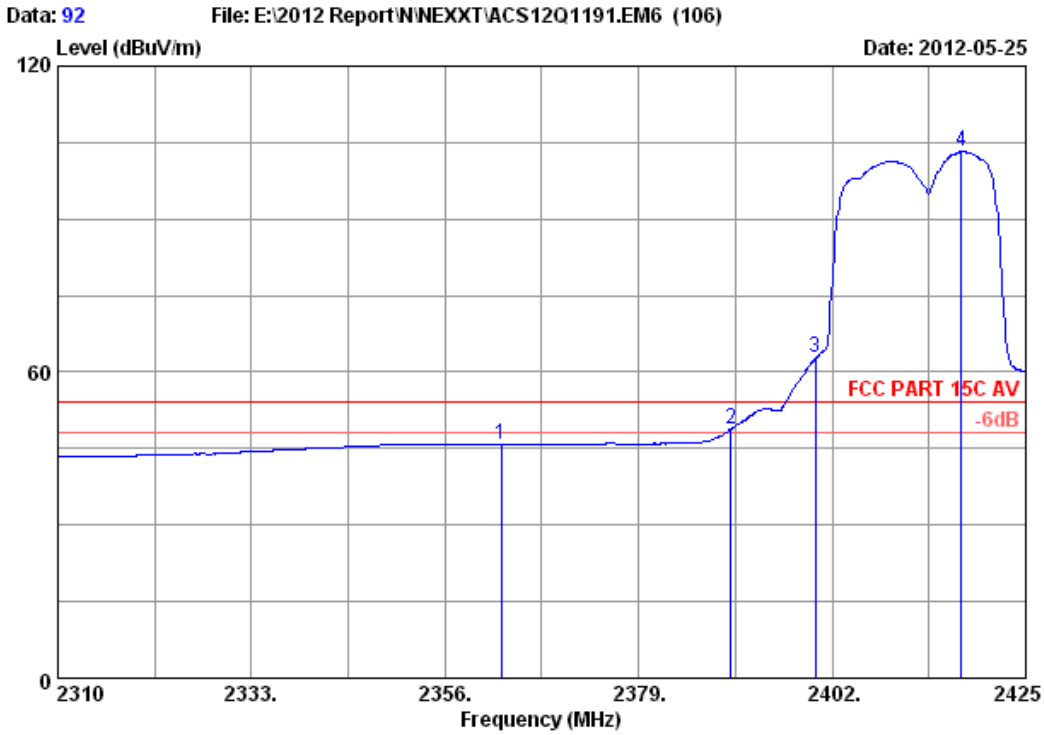
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 91
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
: ARN03304U1

	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	2362.555	28.41	8.44	35.91	57.73	58.67	74.00	15.33	Peak
2	2390.000	28.46	8.41	36.09	64.36	65.14	74.00	8.86	Peak
3	2400.000	28.46	8.60	36.09	86.84	87.81	74.00	-13.81	Peak
4	2413.500	28.48	8.60	35.95	112.57	113.70	74.00	-39.70	Peak

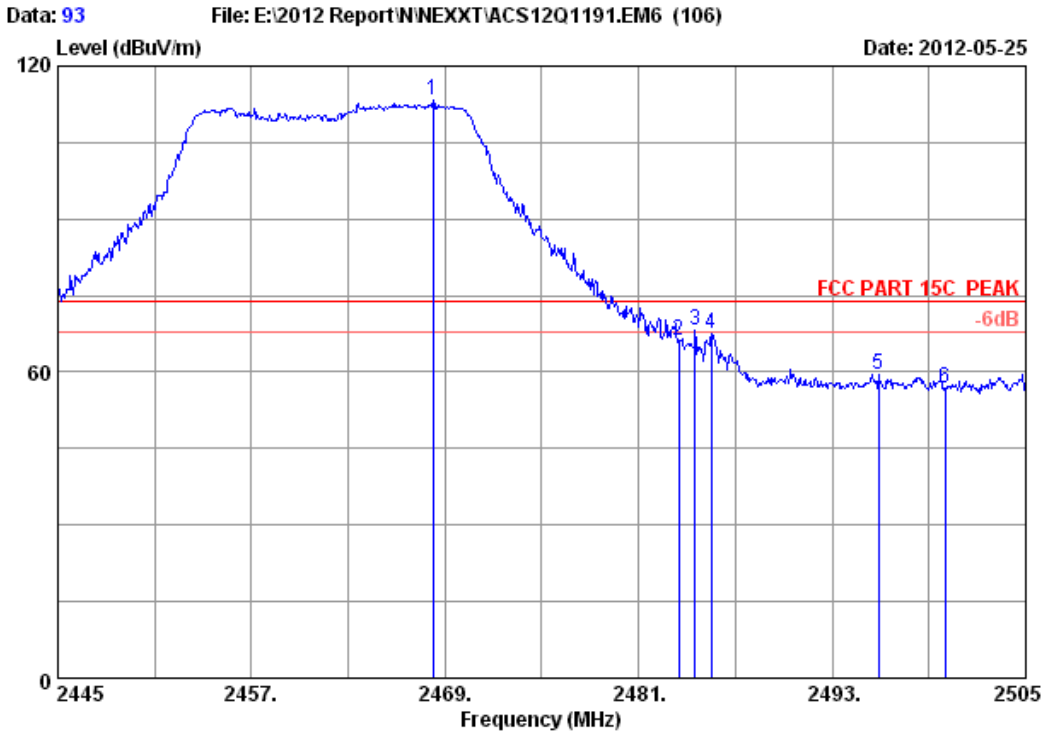
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
: ARN03304U1

	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	2362.670	28.41	8.44	35.91	45.01	45.95	54.00	8.05	Average
2	2390.000	28.46	8.41	36.09	48.10	48.88	54.00	5.12	Average
3	2400.000	28.46	8.60	36.09	61.79	62.76	54.00	-8.76	Average
4	2417.295	28.48	8.60	35.95	102.08	103.21	54.00	-49.21	Average

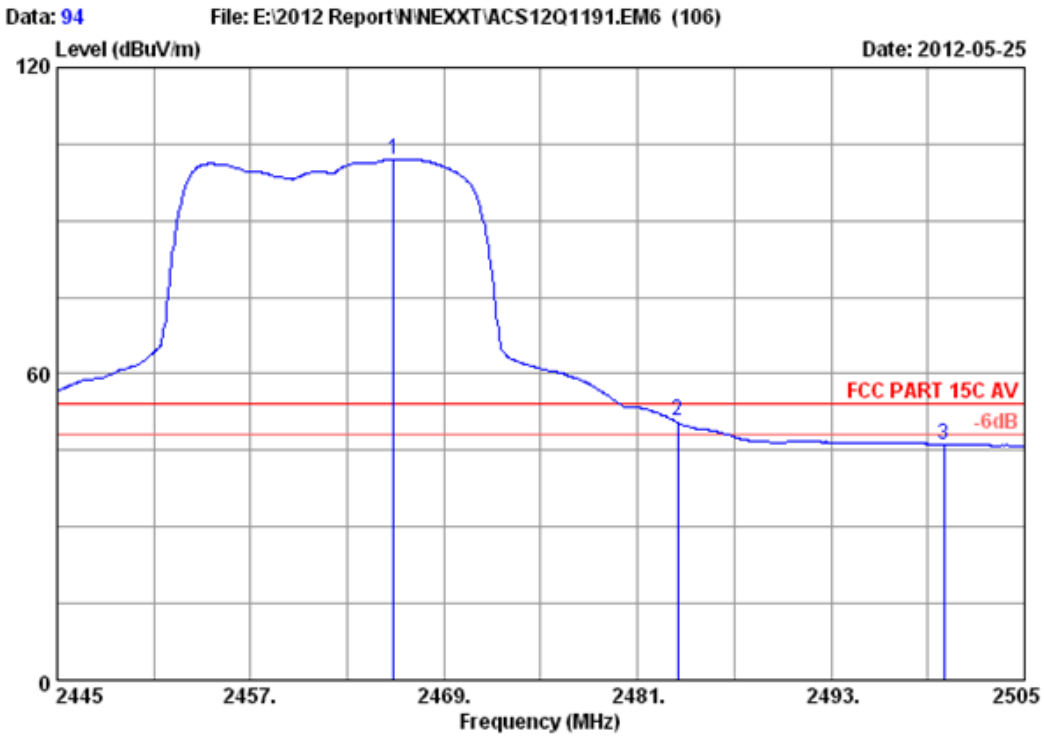
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 93
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
: ARN03304U1

	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	2468.280	28.55	8.76	36.02	112.00	113.29	74.00	-39.29	Peak
2	2483.500	28.58	8.94	35.97	64.74	66.29	74.00	7.71	Peak
3	2484.480	28.58	8.94	35.97	66.76	68.31	74.00	5.69	Peak
4	2485.500	28.58	8.94	35.97	65.98	67.53	74.00	6.47	Peak
5	2495.880	28.60	8.94	36.00	58.05	59.59	74.00	14.41	Peak
6	2500.000	28.60	8.89	36.00	55.37	56.86	74.00	17.14	Peak

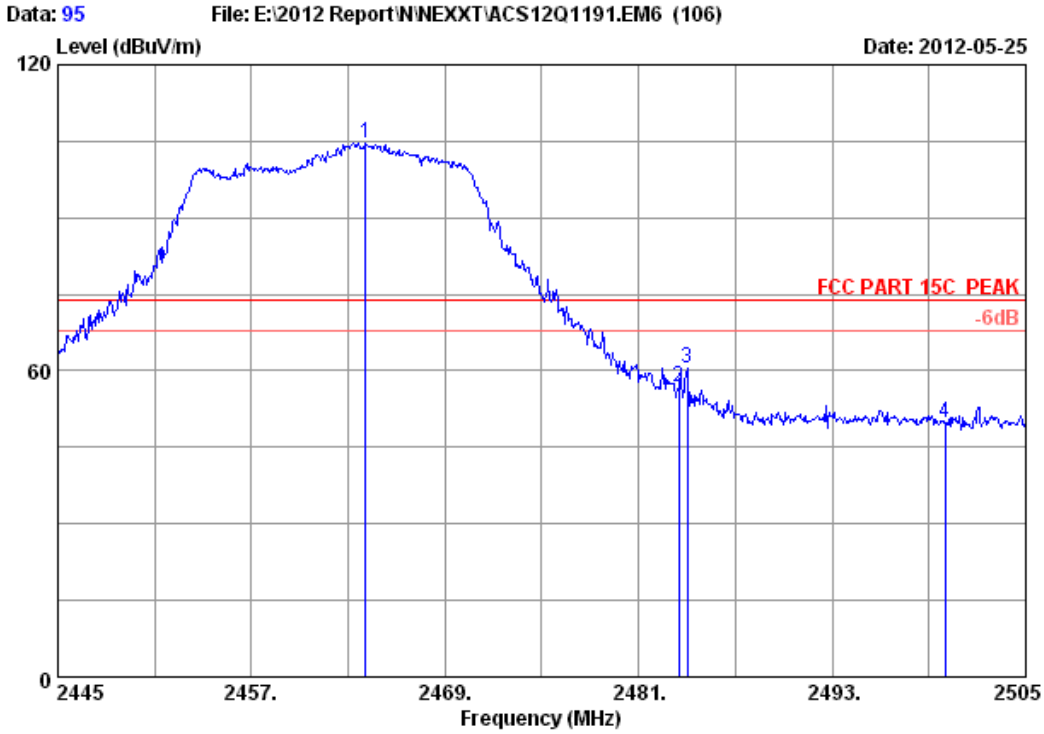
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
: ARN03304U1

	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	2465.880	28.55	8.76	36.02	100.80	102.09	54.00	-48.09	Average
2	2483.500	28.58	8.94	35.97	49.23	50.78	54.00	3.22	Average
3	2500.000	28.60	8.89	36.00	44.72	46.21	54.00	7.79	Average

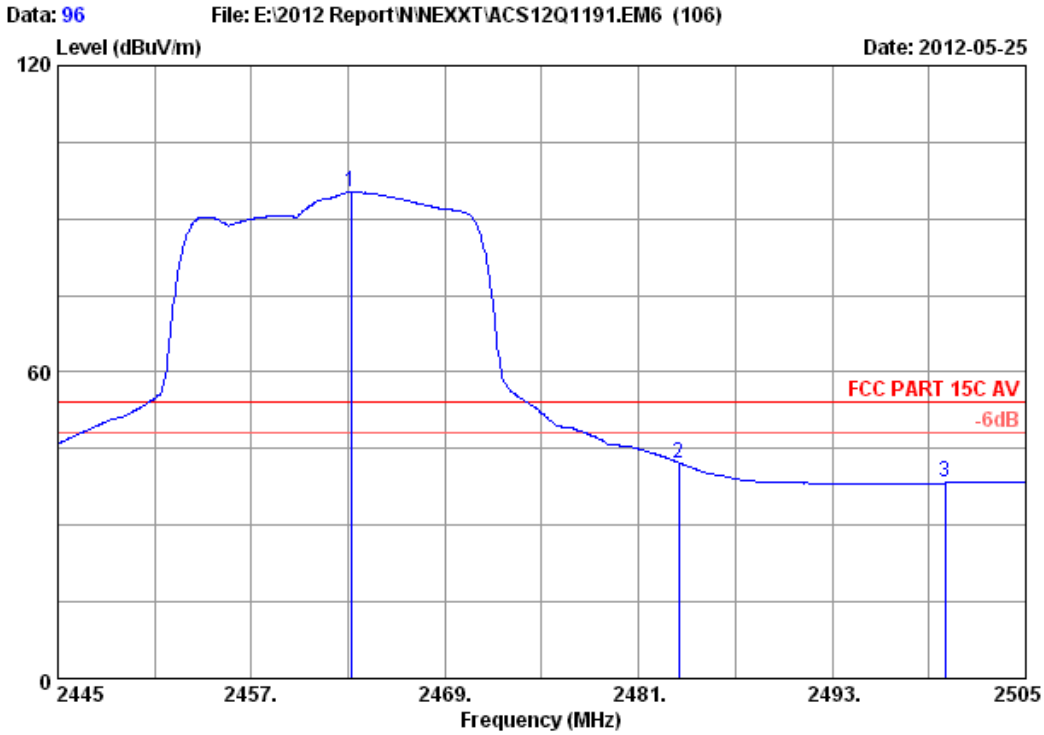
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 95
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
: ARN03304U1

	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	2464.080	28.55	8.76	36.02	103.21	104.50	74.00	-30.50	Peak
2	2483.500	28.58	8.94	35.97	55.20	56.75	74.00	17.25	Peak
3	2484.000	28.58	8.94	35.97	59.01	60.56	74.00	13.44	Peak
4	2500.000	28.60	8.89	36.00	48.38	49.87	74.00	24.13	Peak

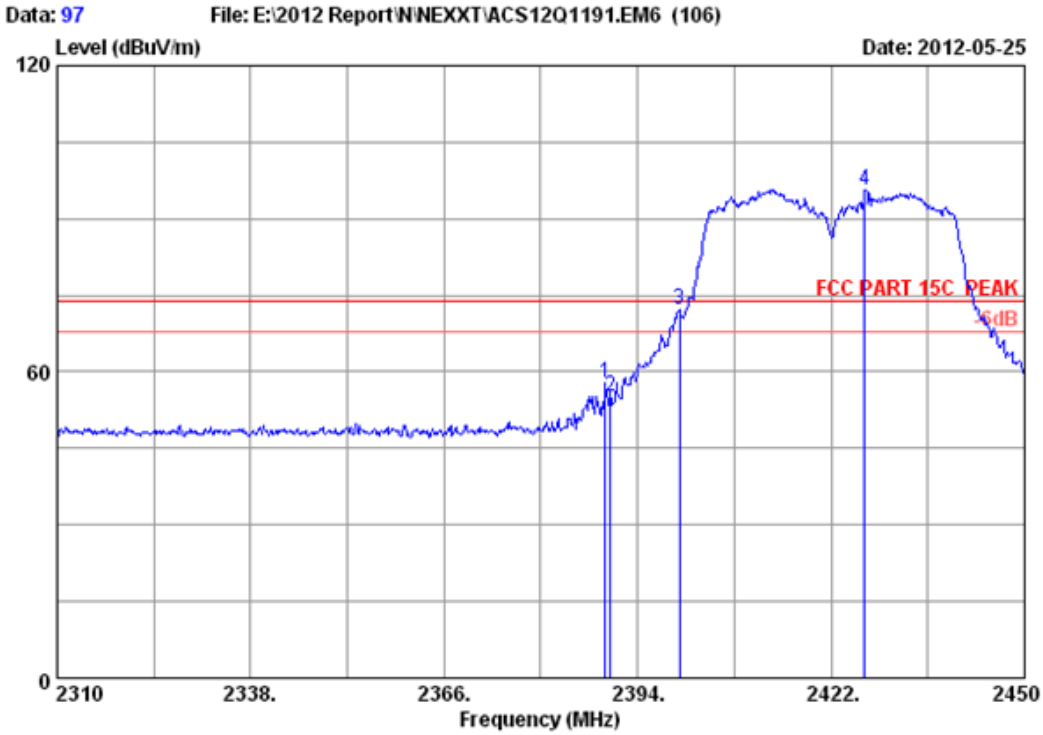
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
: ARN03304U1

	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	2463.180	28.55	8.76	36.02	93.94	95.23	54.00	-41.23	Average
2	2483.500	28.58	8.94	35.97	40.71	42.26	54.00	11.74	Average
3	2500.000	28.60	8.89	36.00	36.80	38.29	54.00	15.71	Average

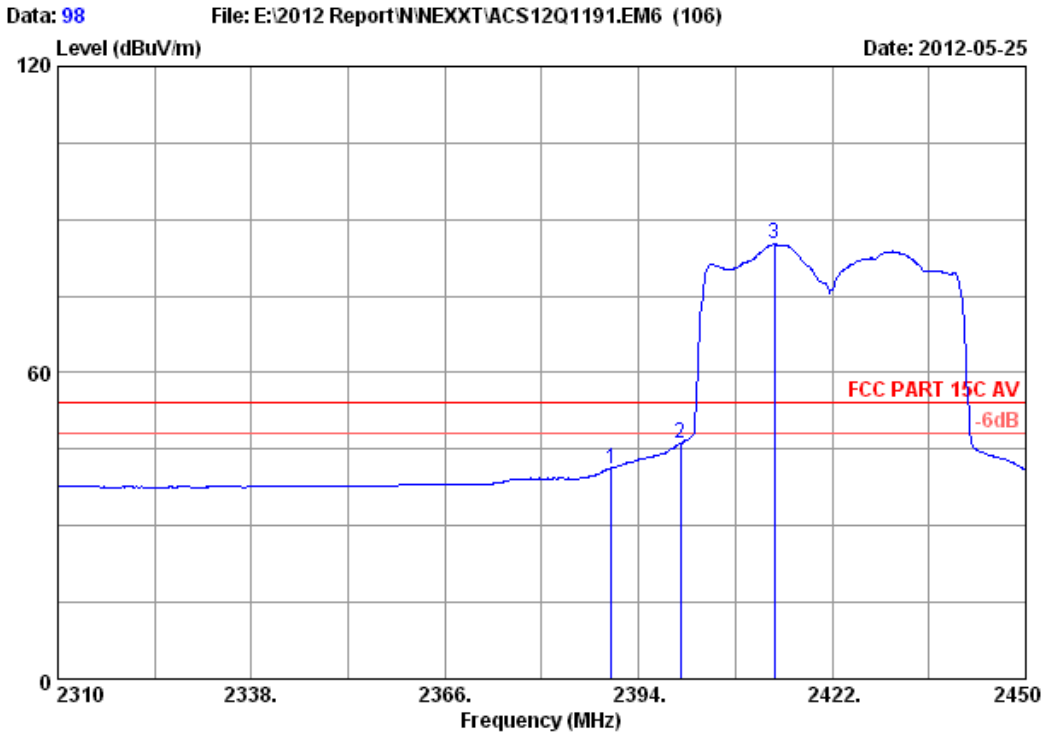
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 97
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
: ARN03304U1

	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	2389.380	28.46	8.41	36.09	57.04	57.82	74.00	16.18	Peak
2	2390.000	28.46	8.41	36.09	54.34	55.12	74.00	18.88	Peak
3	2400.000	28.46	8.60	36.09	71.13	72.10	74.00	1.90	Peak
4	2426.900	28.50	8.60	36.01	94.61	95.70	74.00	-21.70	Peak

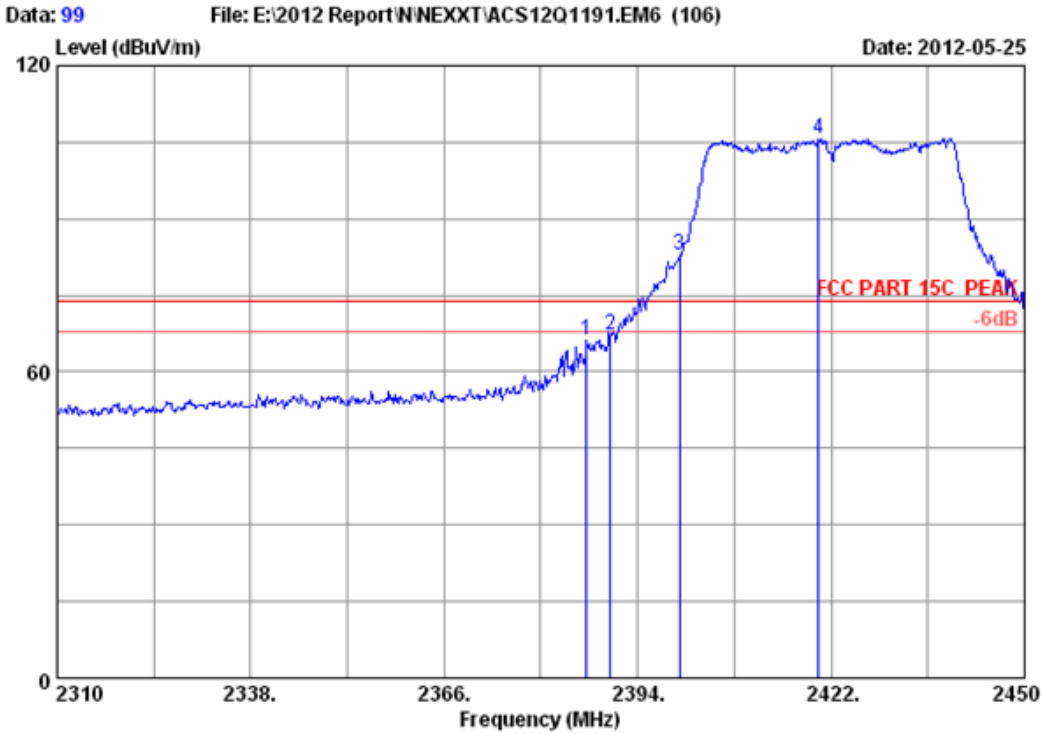
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	40.47	41.25	54.00	12.75	Average
2	2400.000	28.46	8.60	36.09	45.08	46.05	54.00	7.95	Average
3	2413.600	28.48	8.60	35.95	84.00	85.13	54.00	-31.13	Average

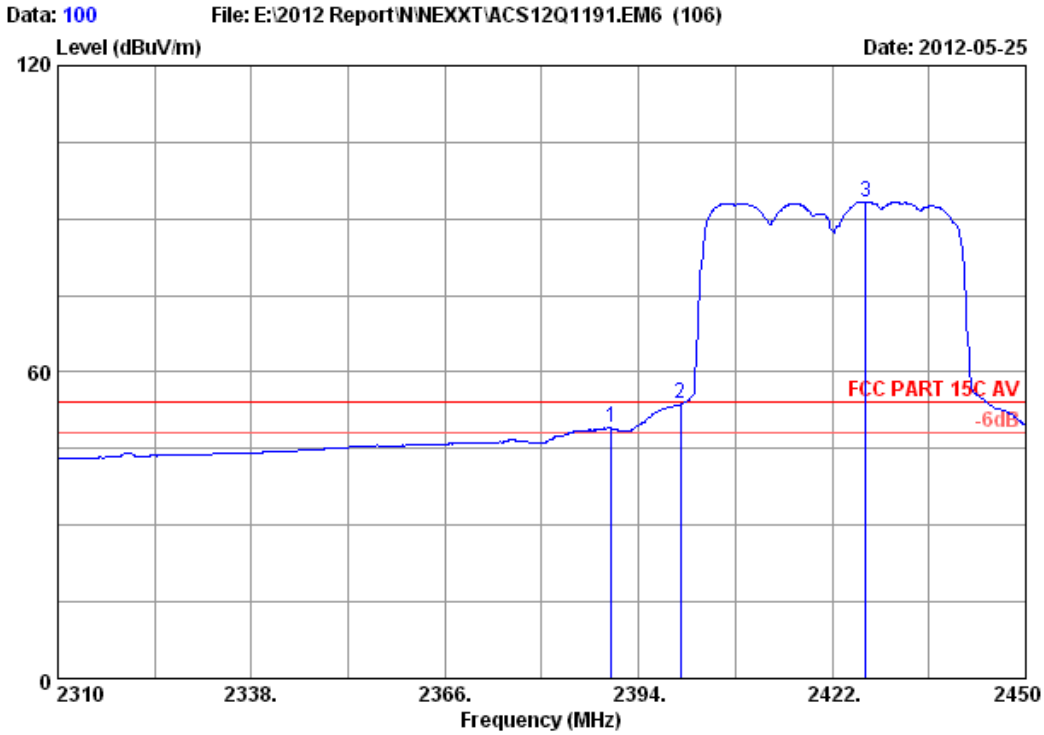
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
: ARN03304U1

	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	2386.580	28.46	8.41	36.09	65.52	66.30	74.00	7.70	Peak
2	2390.000	28.46	8.41	36.09	66.36	67.14	74.00	6.86	Peak
3	2400.000	28.46	8.60	36.09	81.95	82.92	74.00	-8.92	Peak
4	2420.180	28.50	8.60	36.01	104.69	105.78	74.00	-31.78	Peak

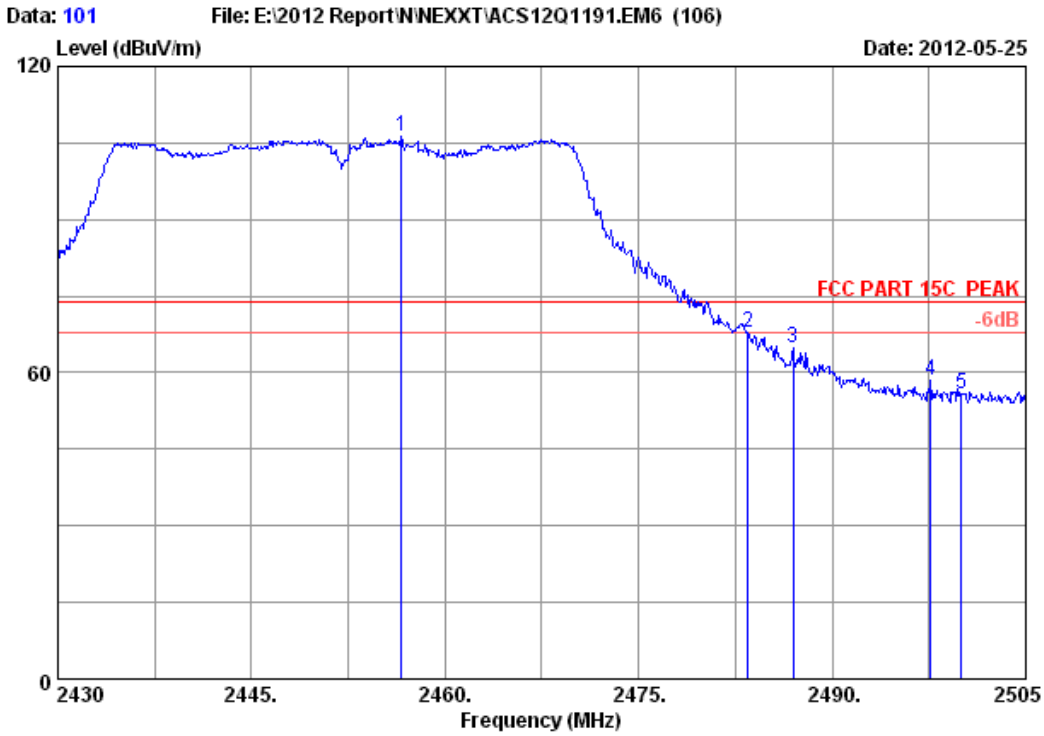
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
: ARN03304U1

	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	28.46	8.41	36.09	48.20	48.98	54.00	5.02	Average
2	2400.000	28.46	8.60	36.09	52.76	53.73	54.00	0.27	Average
3	2426.900	28.50	8.60	36.01	92.31	93.40	54.00	-39.40	Average

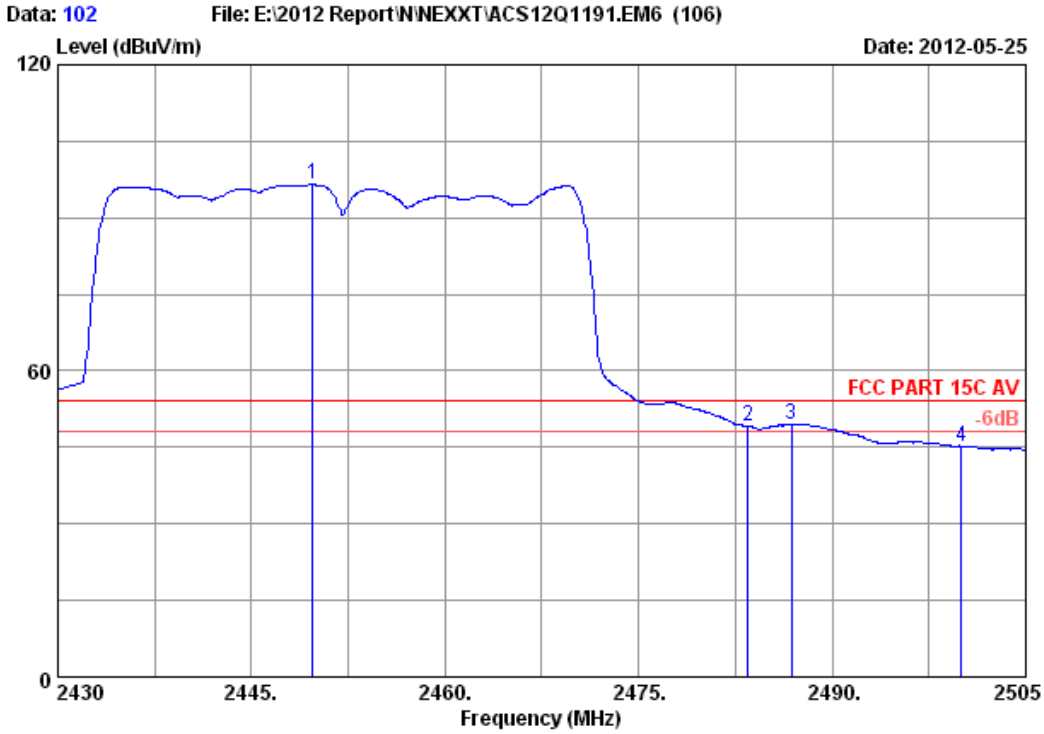
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 101
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
: ARN03304U1

	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	2456.625	28.55	8.48	36.02	105.17	106.18	74.00	-32.18	Peak
2	2483.500	28.58	8.94	35.97	66.30	67.85	74.00	6.15	Peak
3	2487.000	28.58	8.94	35.97	63.28	64.83	74.00	9.17	Peak
4	2497.650	28.60	8.94	36.00	57.02	58.56	74.00	15.44	Peak
5	2500.000	28.60	8.89	36.00	54.30	55.79	74.00	18.21	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.

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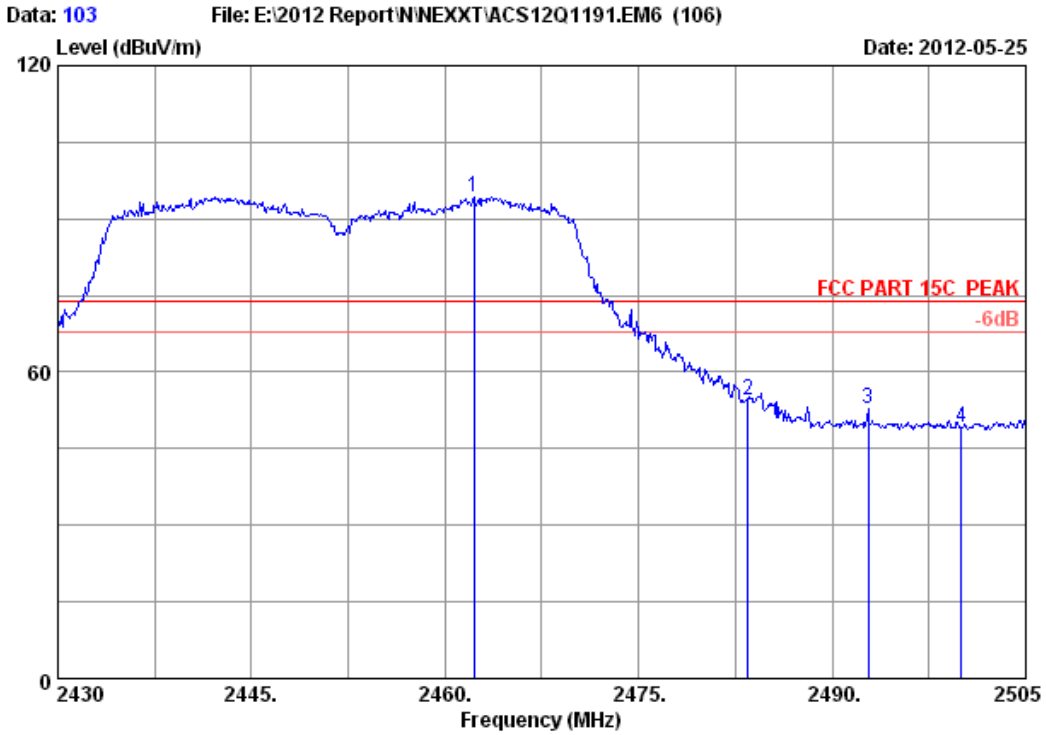
Site no.      : 3m Chamber                Data no.   : 102
Dis. / Ant.   : 3m   3115(0905)           Ant. pol.  : VERTICAL
Limit         : FCC PART 15C AV
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : 300Mbps Wireless N Gigabit Router
Power supply  : DC 12V From Adapter input AC 120V/60Hz
Test mode     : IEEE802.11n HT40 CH7 2452MHz  Tx
              : ARN03304U1
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.725	28.53	8.48	36.06	95.53	96.48	54.00	-42.48	Average
2	2483.500	28.58	8.94	35.97	47.61	49.16	54.00	4.84	Average
3	2486.850	28.58	8.94	35.97	47.91	49.46	54.00	4.54	Average
4	2500.000	28.60	8.89	36.00	43.75	45.24	54.00	8.76	Average

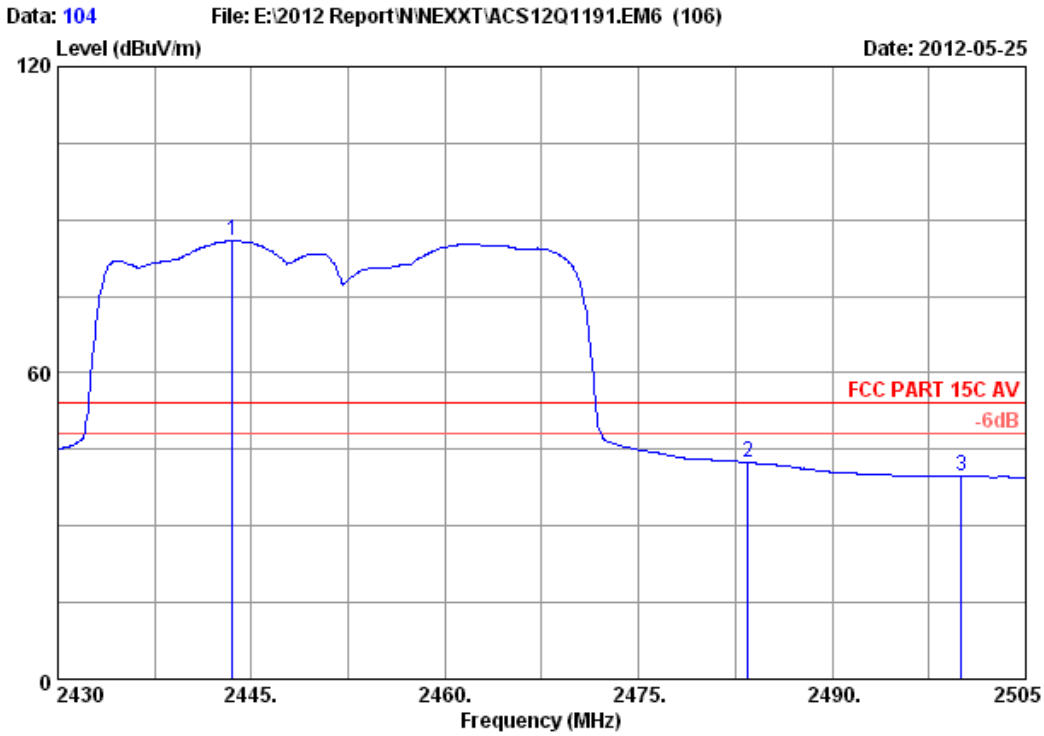
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
: ARN03304U1

	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	2462.250	28.55	8.76	36.02	93.13	94.42	74.00	-20.42	Peak
2	2483.500	28.58	8.94	35.97	52.88	54.43	74.00	19.57	Peak
3	2492.775	28.60	8.94	36.00	51.25	52.79	74.00	21.21	Peak
4	2500.000	28.60	8.89	36.00	47.59	49.08	74.00	24.92	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(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
: ARN03304U1

	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	2443.500	28.53	8.48	36.06	84.95	85.90	54.00	-31.90	Average
2	2483.500	28.58	8.94	35.97	40.87	42.42	54.00	11.58	Average
3	2500.000	28.60	8.89	36.00	38.32	39.81	54.00	14.19	Average

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

7. 6dB Bandwidth Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,12	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,12	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,12	1Year

7.2.Limit

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

7.3.Test Procedure

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

7.4.Test Results

Chain 1:

Test Mode: IEEE 802.11b TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	12.00	>500	**PASS**
6	12.08	>500	**PASS**
11	12.58	>500	**PASS**

Test Mode: IEEE 802.11g TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	16.50	>500	**PASS**
6	16.50	>500	**PASS**
11	16.33	>500	**PASS**

Test Mode: IEEE 802.11n HT20 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	17.67	>500	**PASS**
6	17.75	>500	**PASS**
11	17.67	>500	**PASS**

Test Mode: IEEE 802.11n HT40 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	36.50	>500	**PASS**
4	36.50	>500	**PASS**
7	36.33	>500	**PASS**

Chain 2:

Test Mode: IEEE 802.11b TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	12.00	>500	**PASS**
6	13.00	>500	**PASS**
11	12.17	>500	**PASS**

Test Mode: IEEE 802.11g TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	16.50	>500	**PASS**
6	16.33	>500	**PASS**
11	16.50	>500	**PASS**

Test Mode: IEEE 802.11n HT20 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	17.75	>500	**PASS**
6	17.50	>500	**PASS**
11	17.67	>500	**PASS**

Test Mode: IEEE 802.11n HT40 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	36.50	>500	**PASS**
4	36.50	>500	**PASS**
7	36.50	>500	**PASS**

Chain 3:

Test Mode: IEEE 802.11b TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	12.00	>500	**PASS**
6	12.00	>500	**PASS**
11	12.17	>500	**PASS**

Test Mode: IEEE 802.11g TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	16.42	>500	**PASS**
6	16.50	>500	**PASS**
11	16.50	>500	**PASS**

Test Mode: IEEE 802.11n HT20 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	17.75	>500	**PASS**
6	17.67	>500	**PASS**
11	17.67	>500	**PASS**

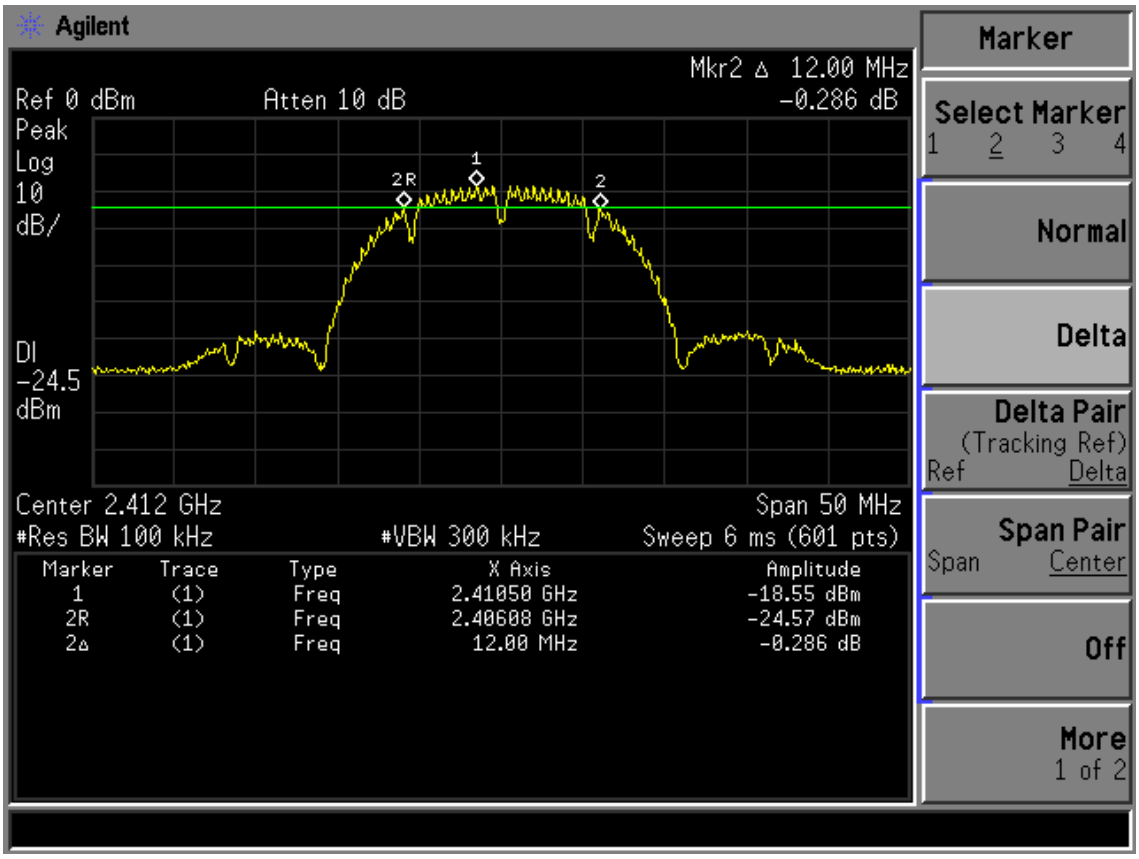
Test Mode: IEEE 802.11n HT40 TX

CH	6dB Bandwidth (MHz)	Limit	**Conclusion**
1	36.33	>500	**PASS**
4	36.50	>500	**PASS**
7	36.50	>500	**PASS**

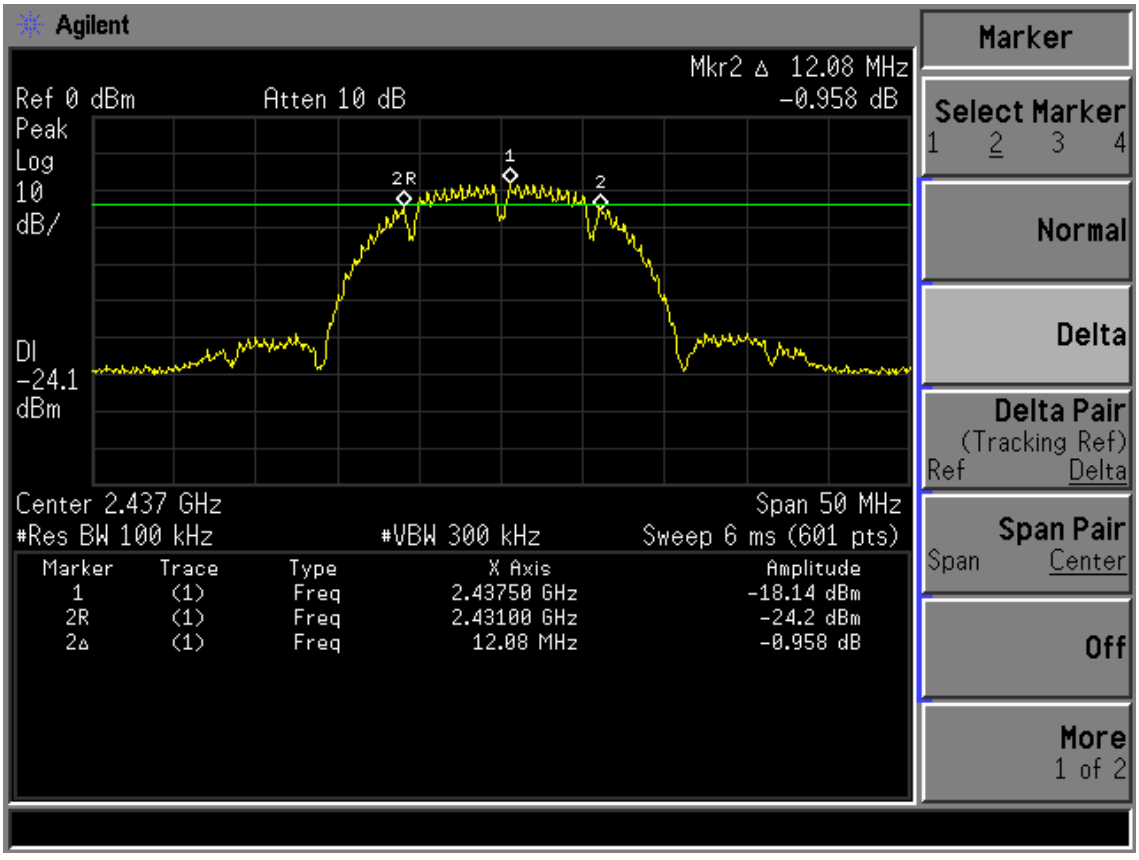
Chain 1:

Test Mode: IEEE 802.11b TX

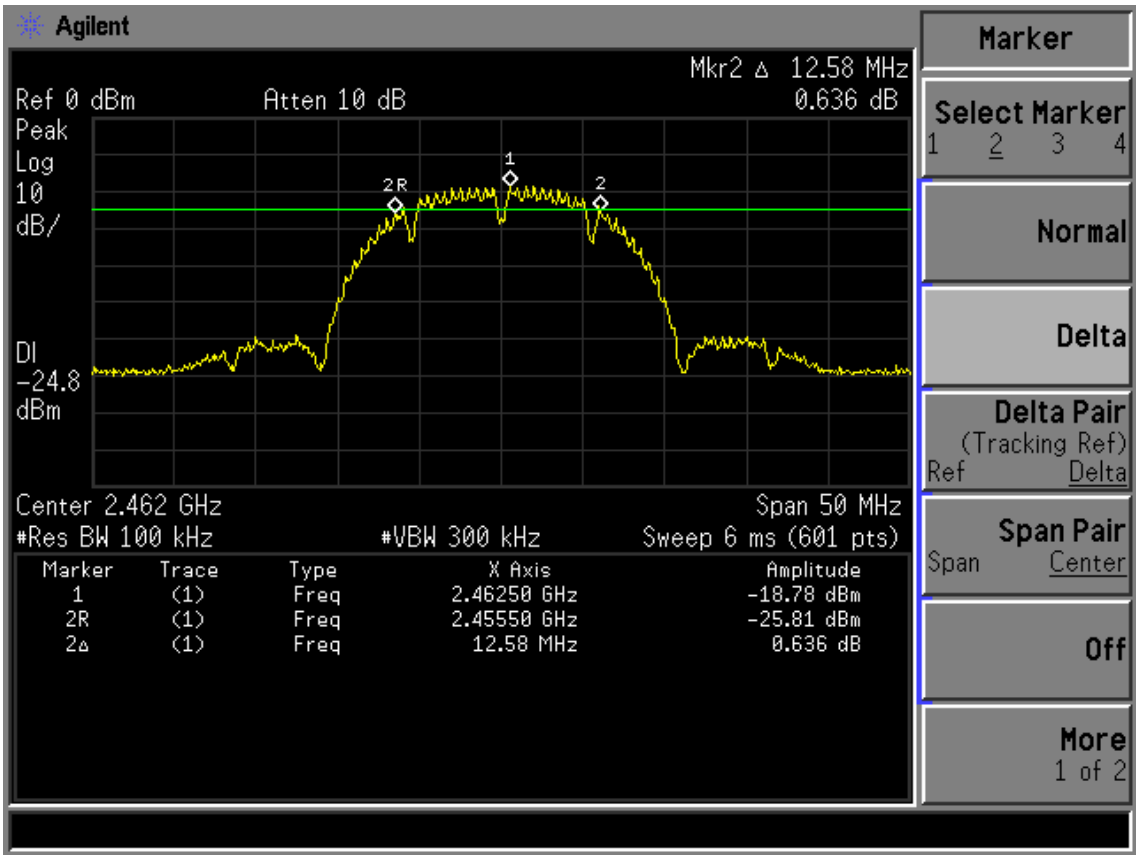
Test CH1: 2412MHz



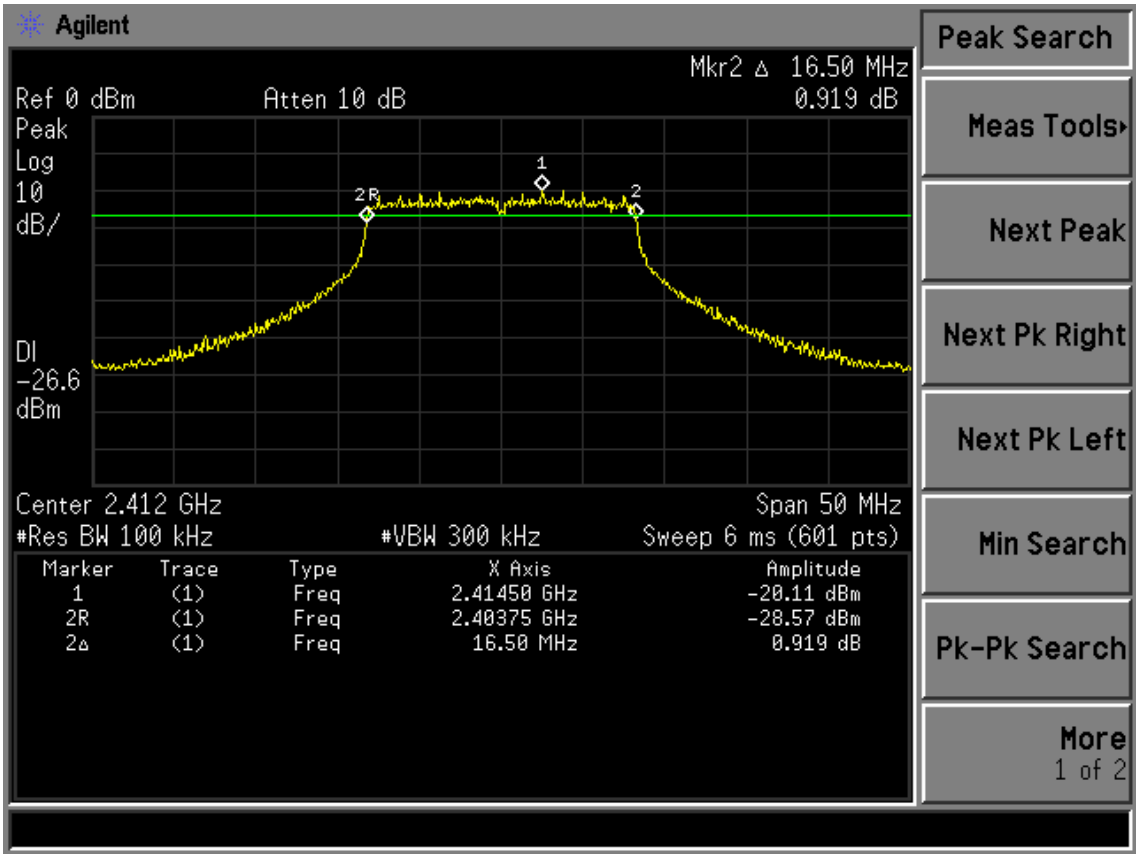
Test CH6: 2437MHz



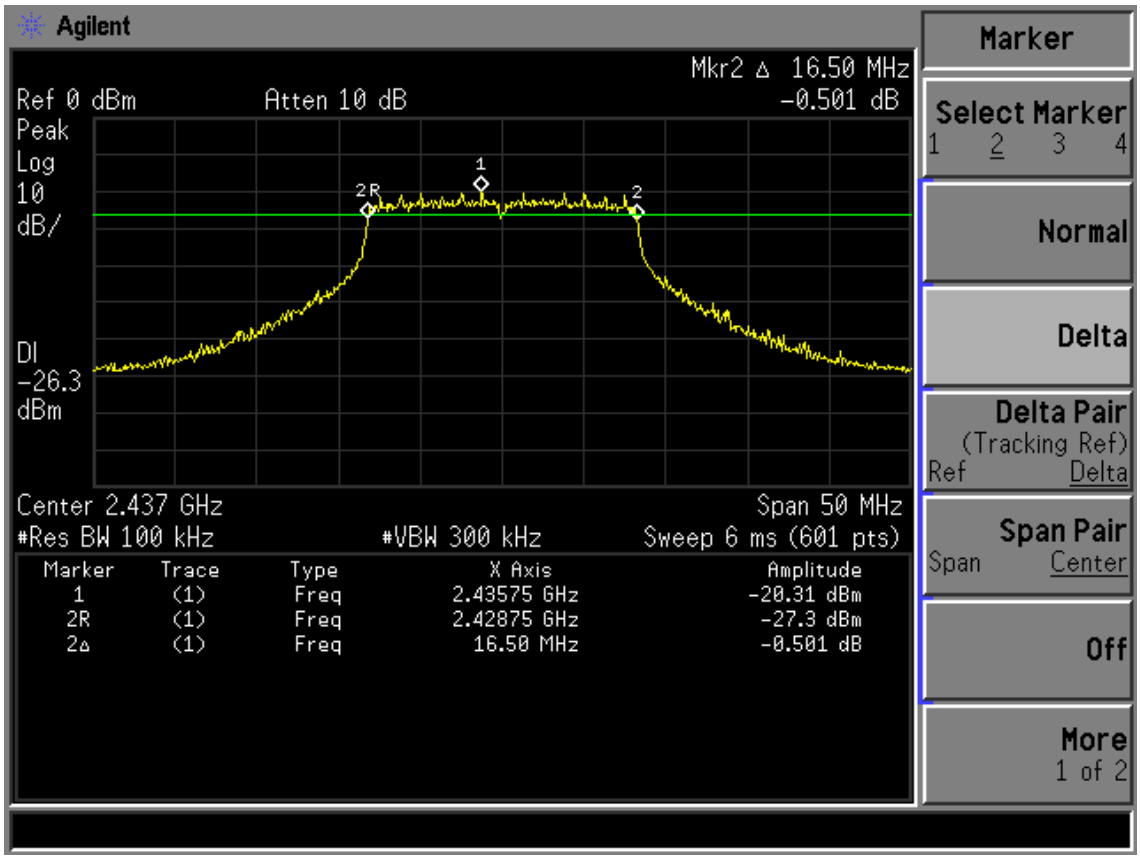
Test CH11: 2462MHz



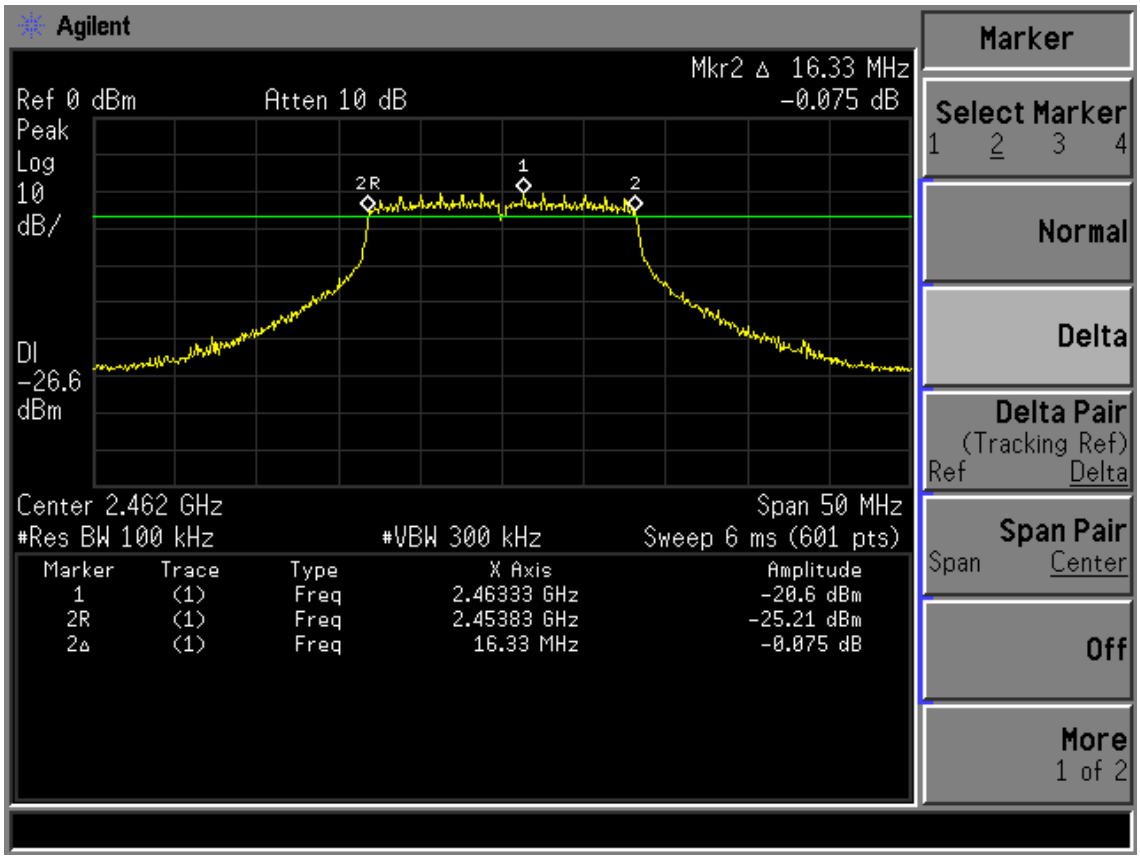
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



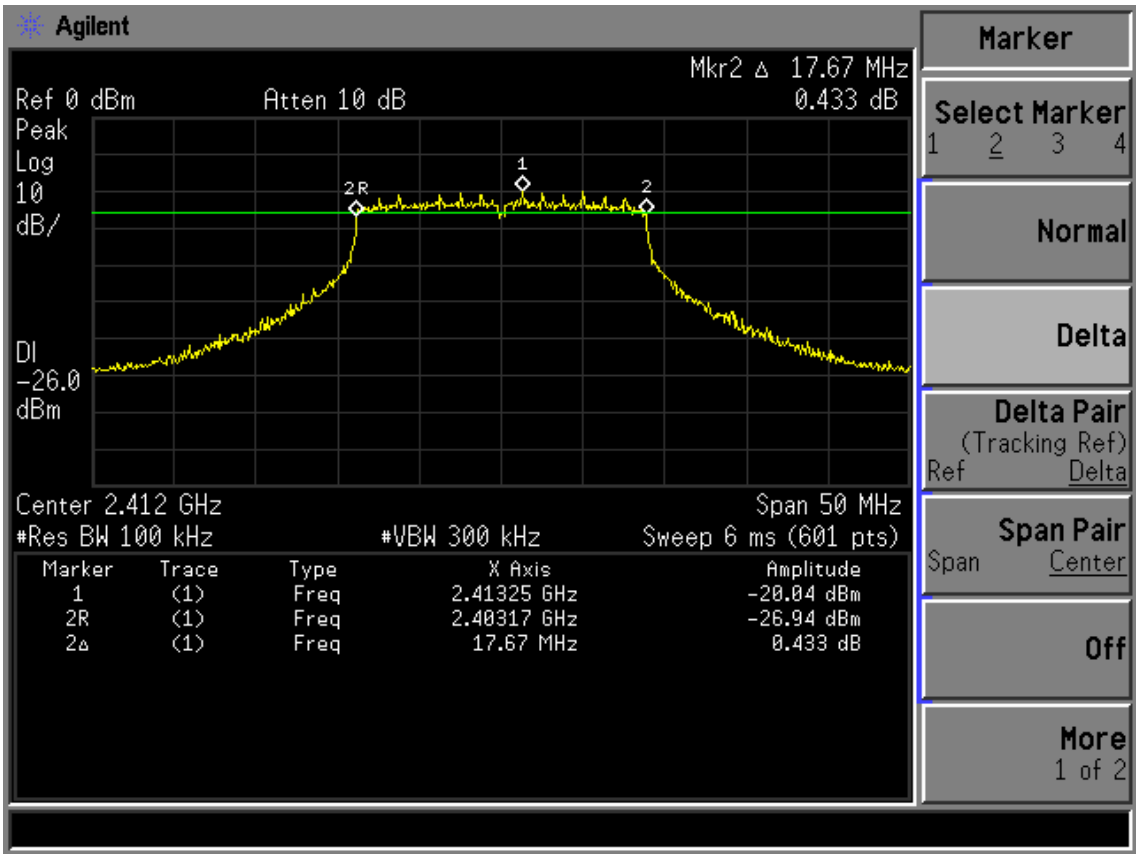
Test CH6: 2437MHz



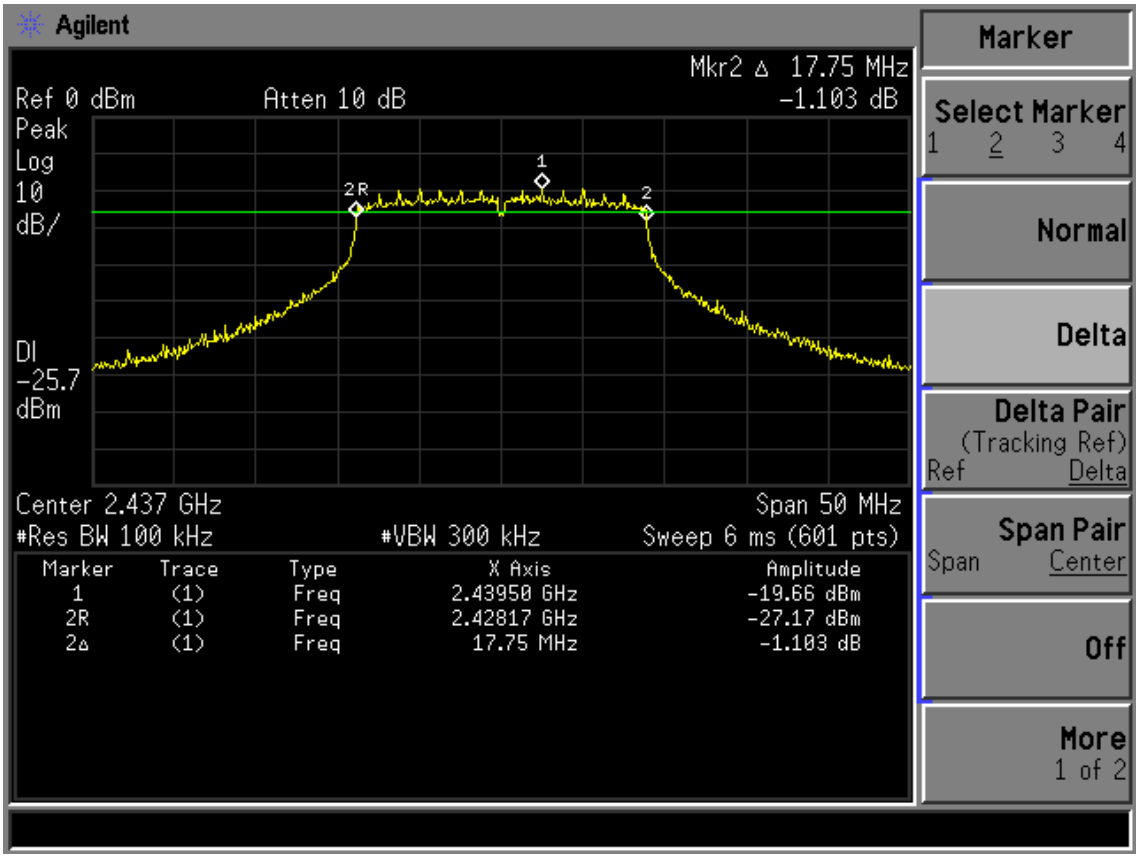
Test CH11: 2462MHz



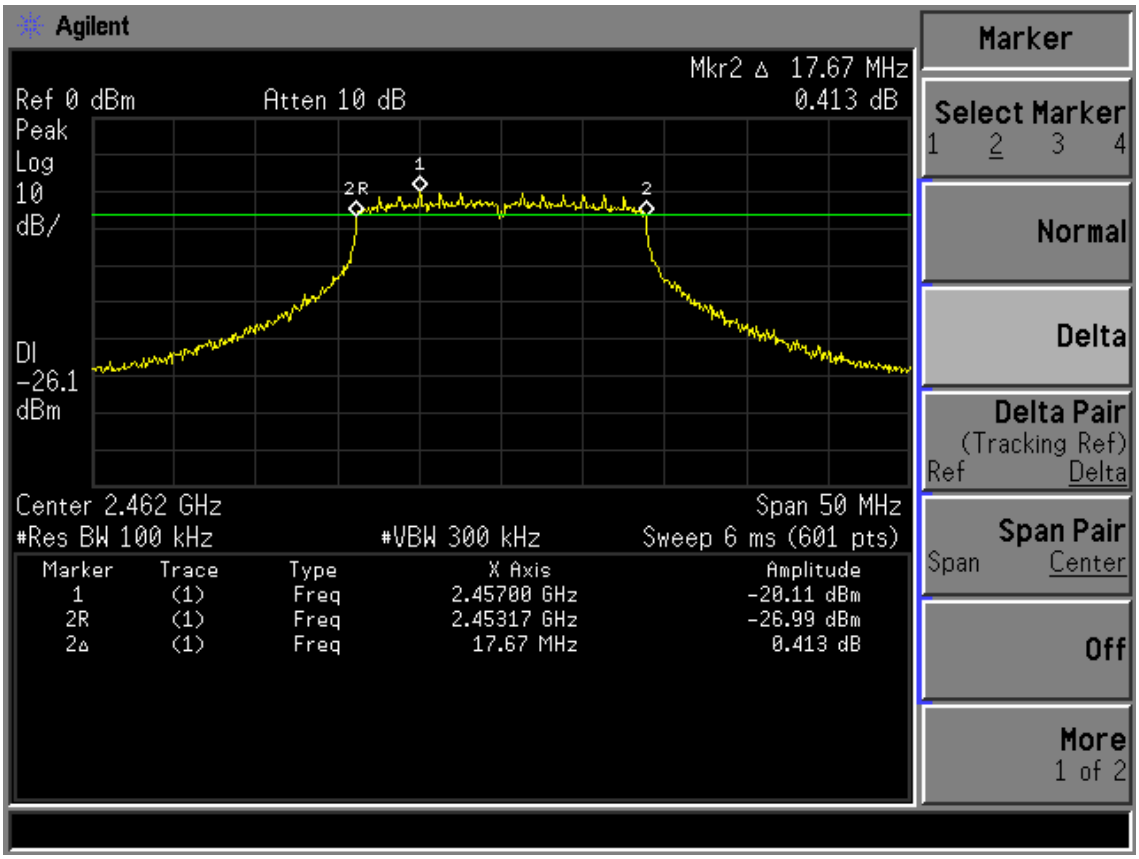
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



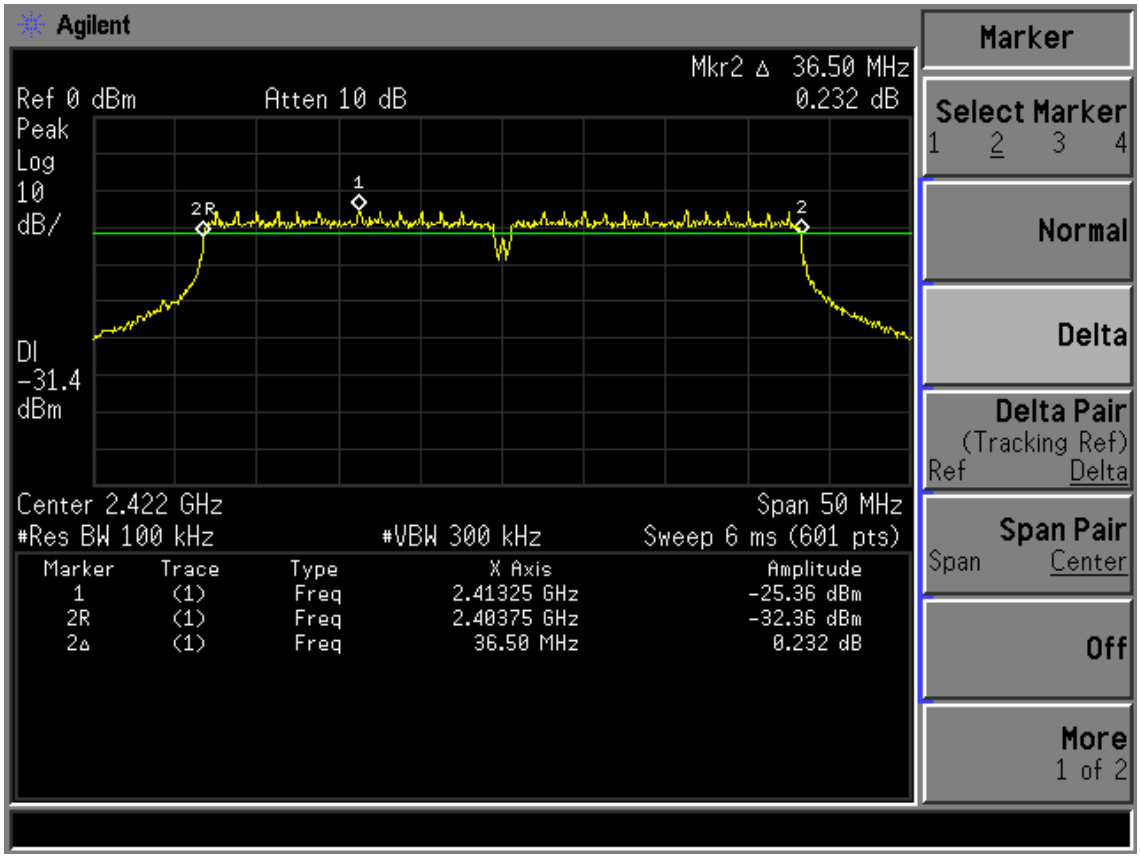
Test CH6: 2437MHz



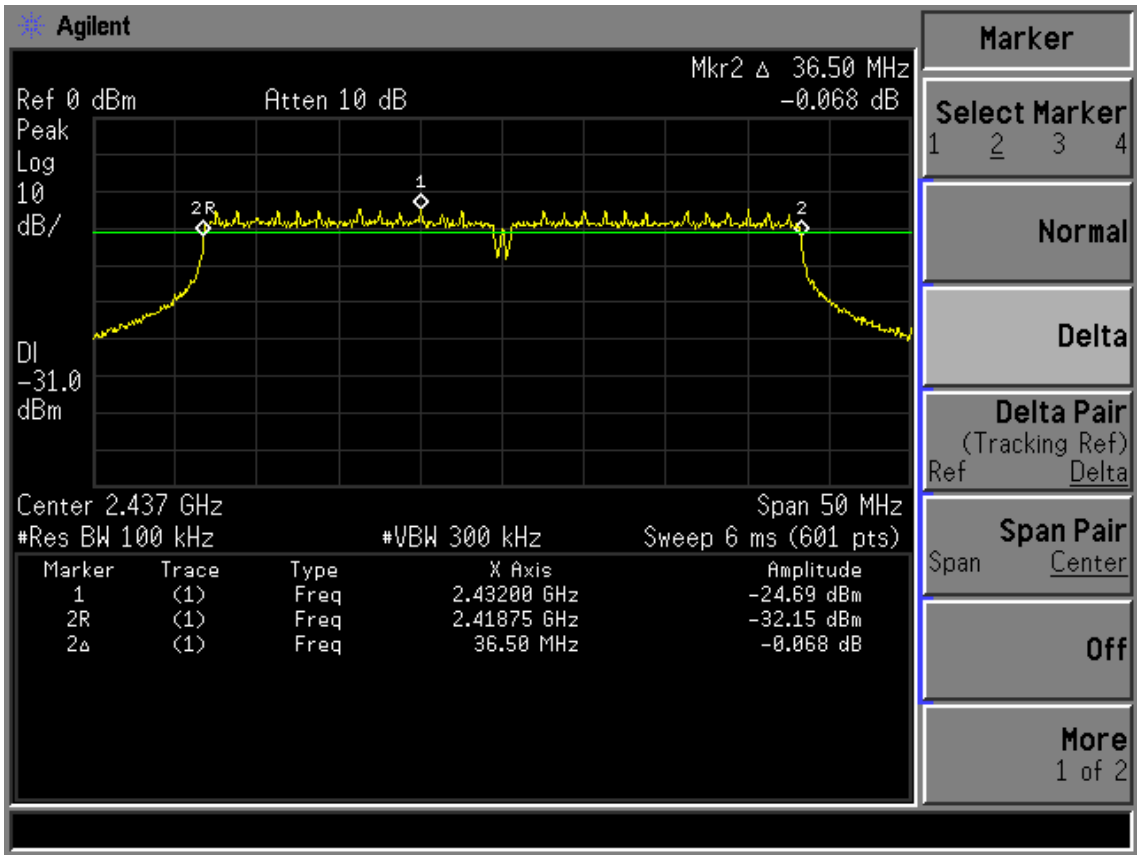
Test CH11: 2462MHz



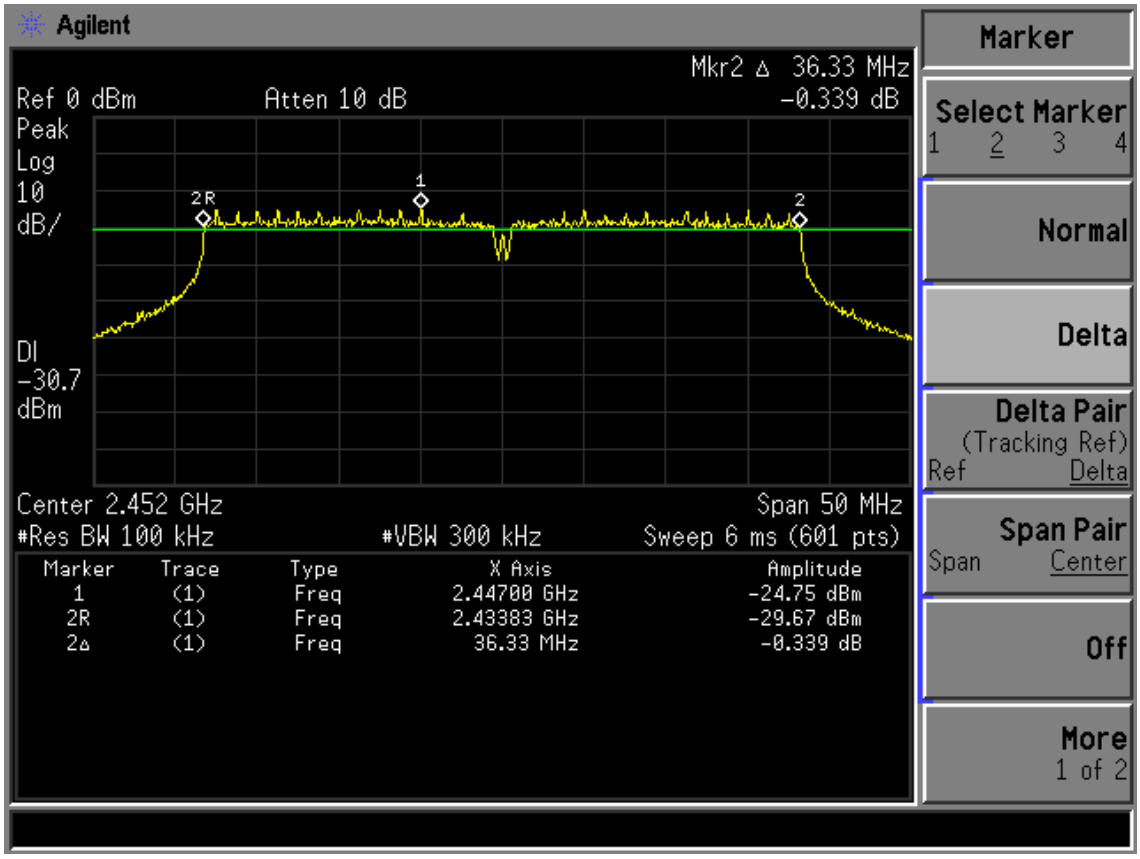
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



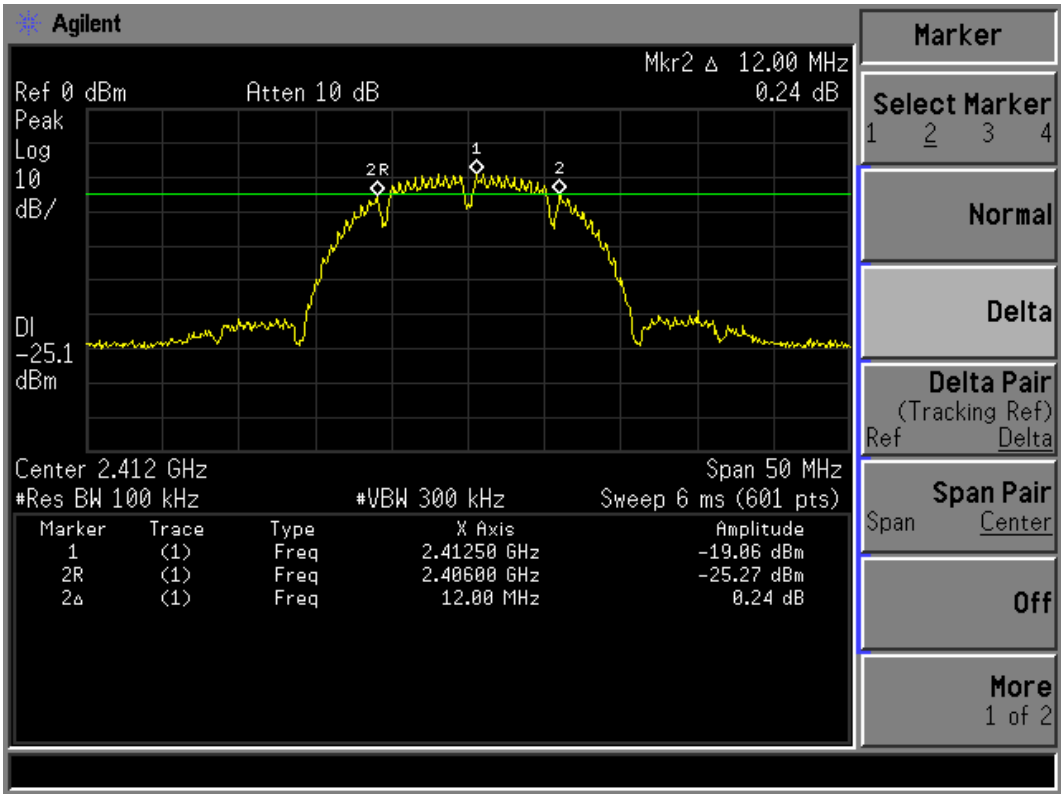
Test CH4: 2437MHz



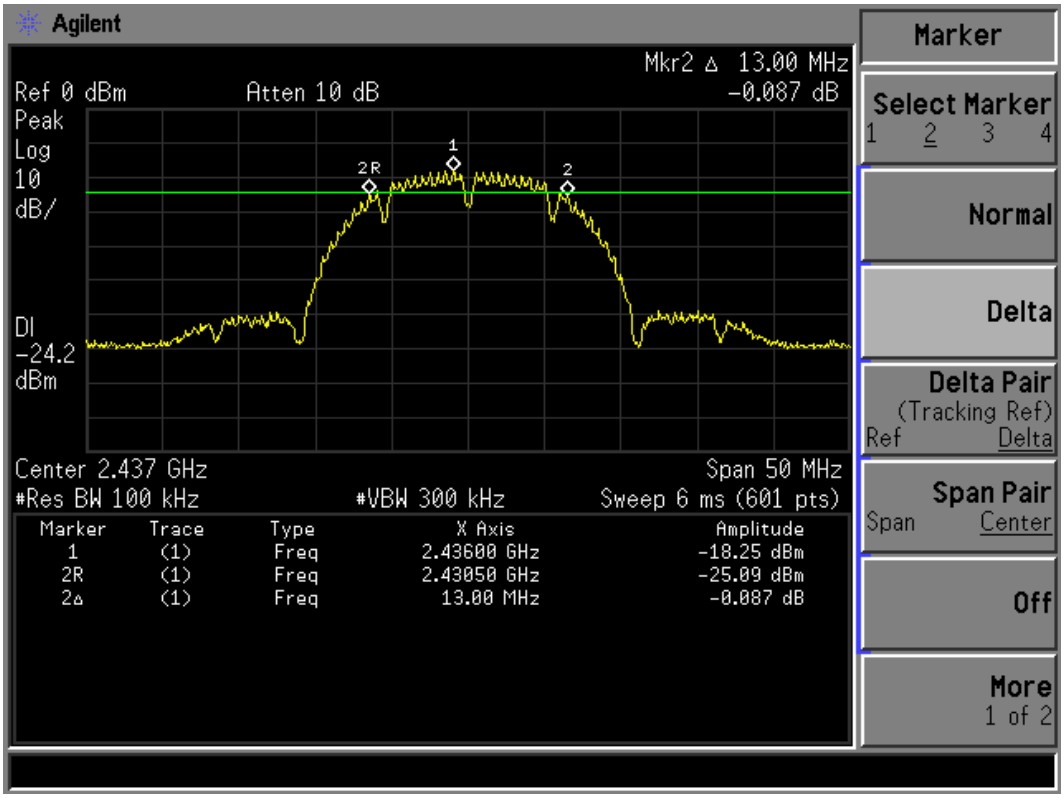
Test CH7: 2452MHz



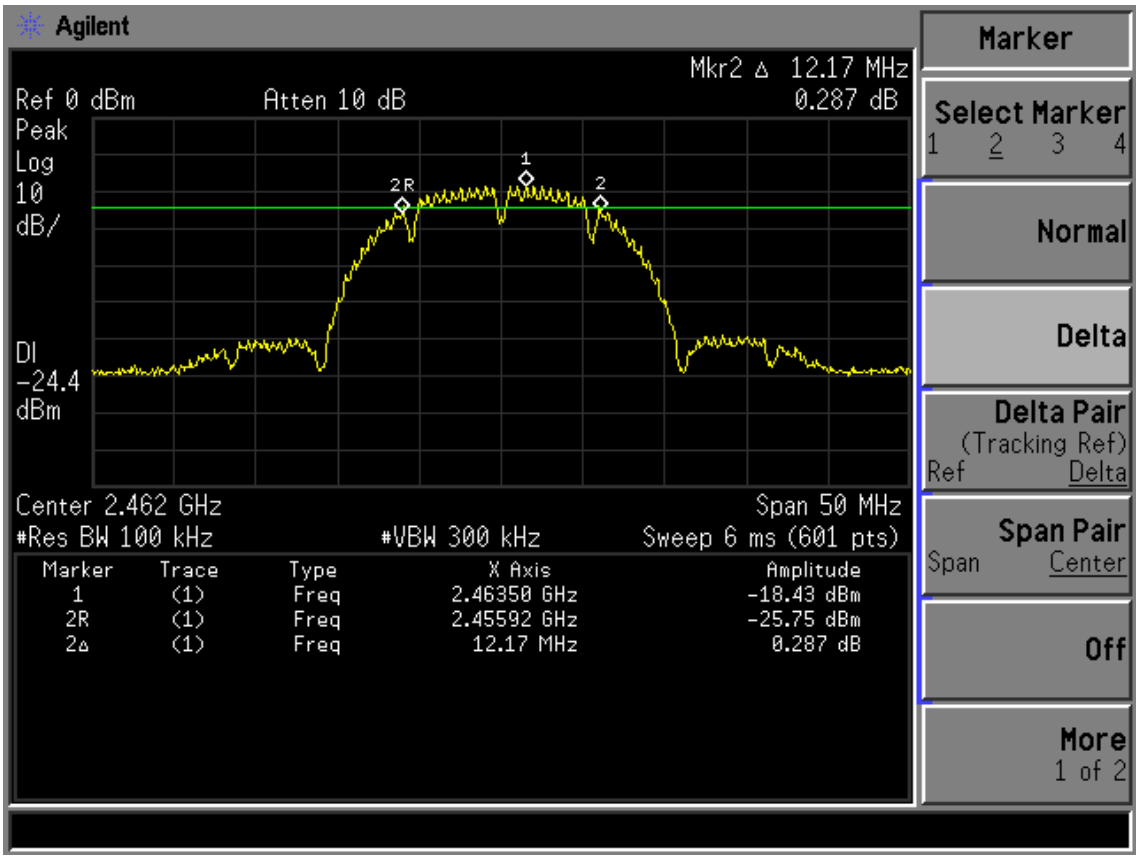
Chain 2:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



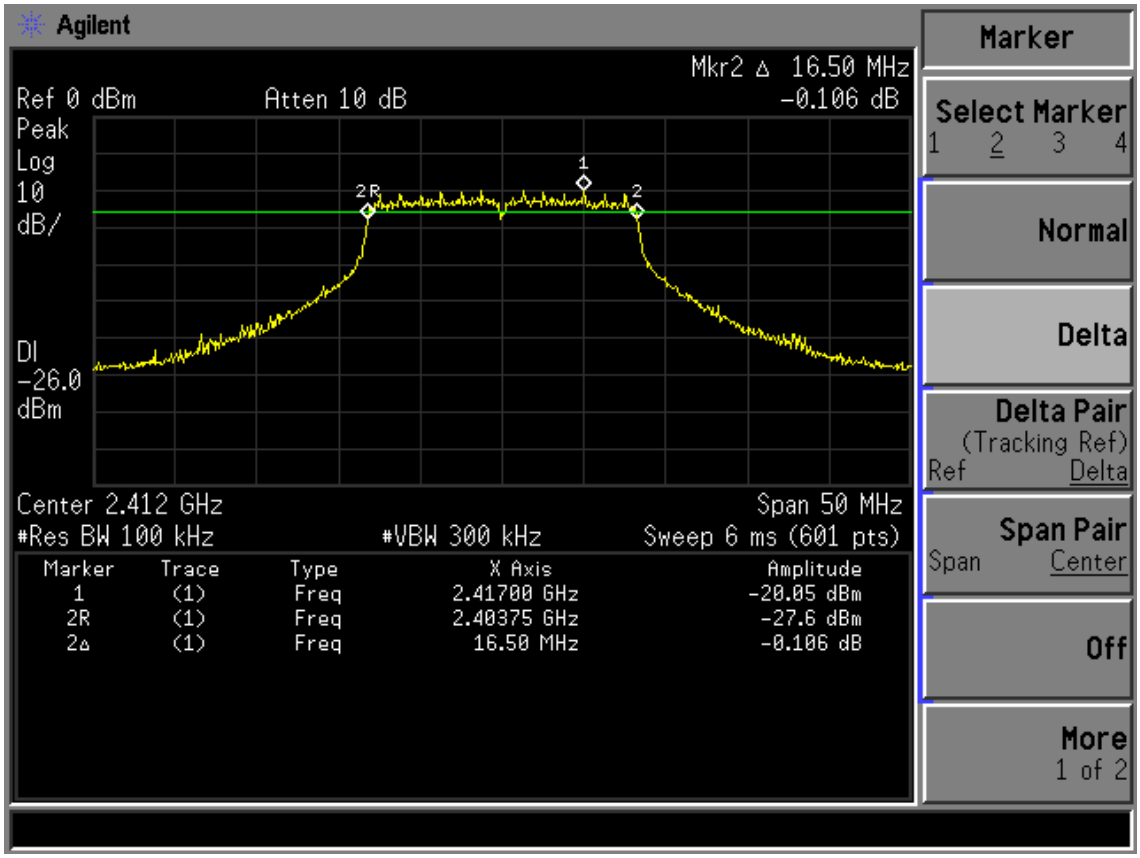
Test CH6: 2437MHz



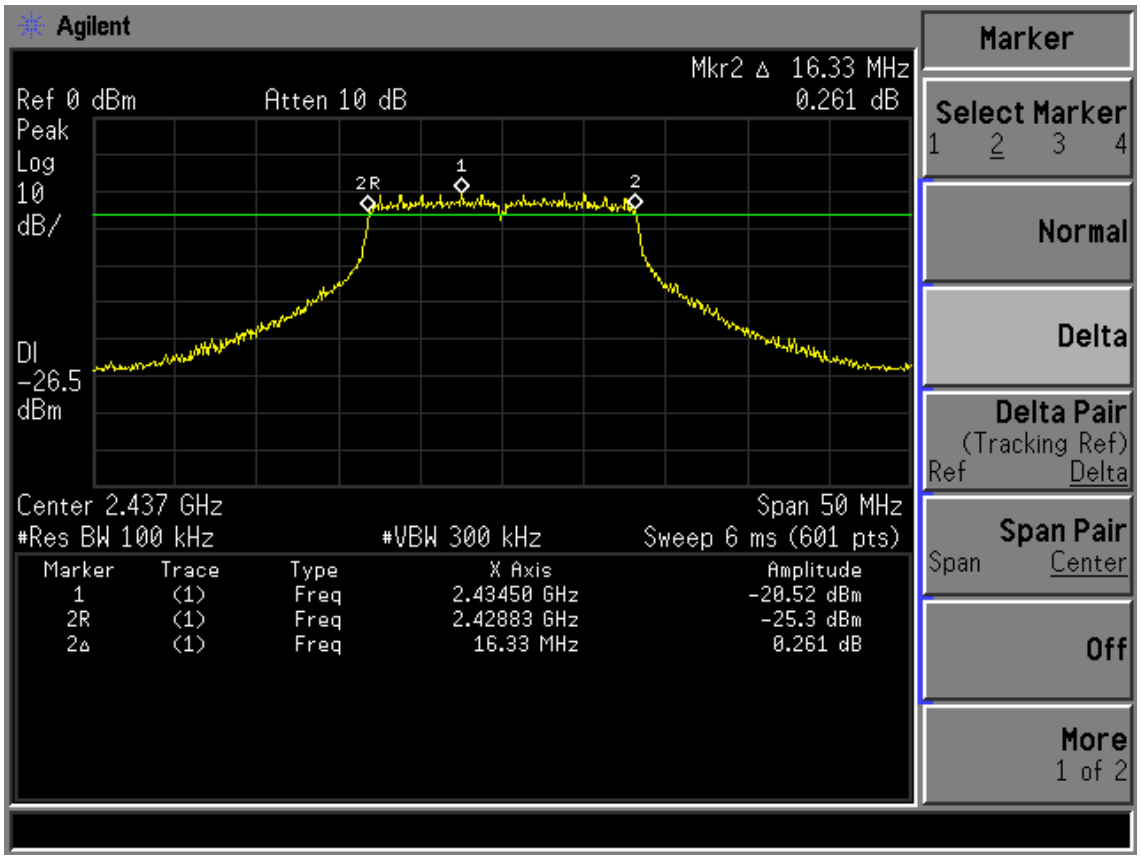
Test CH11: 2462MHz



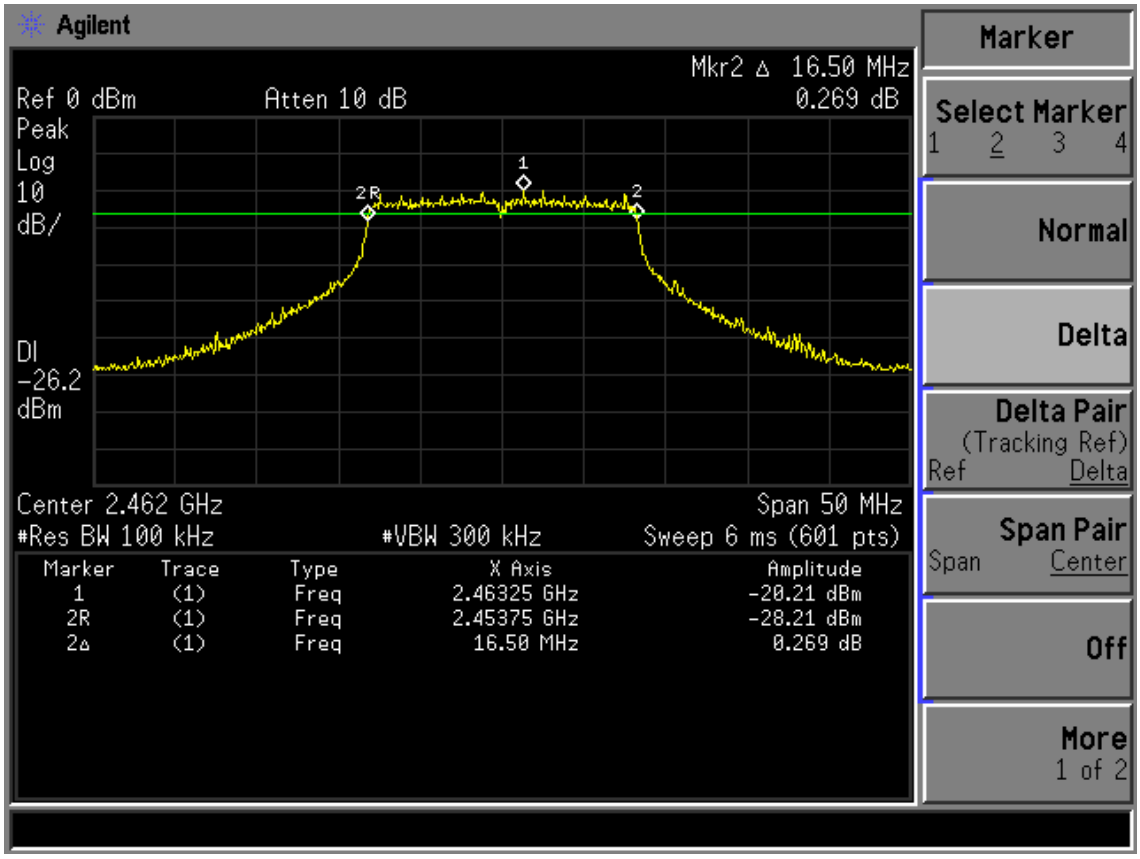
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



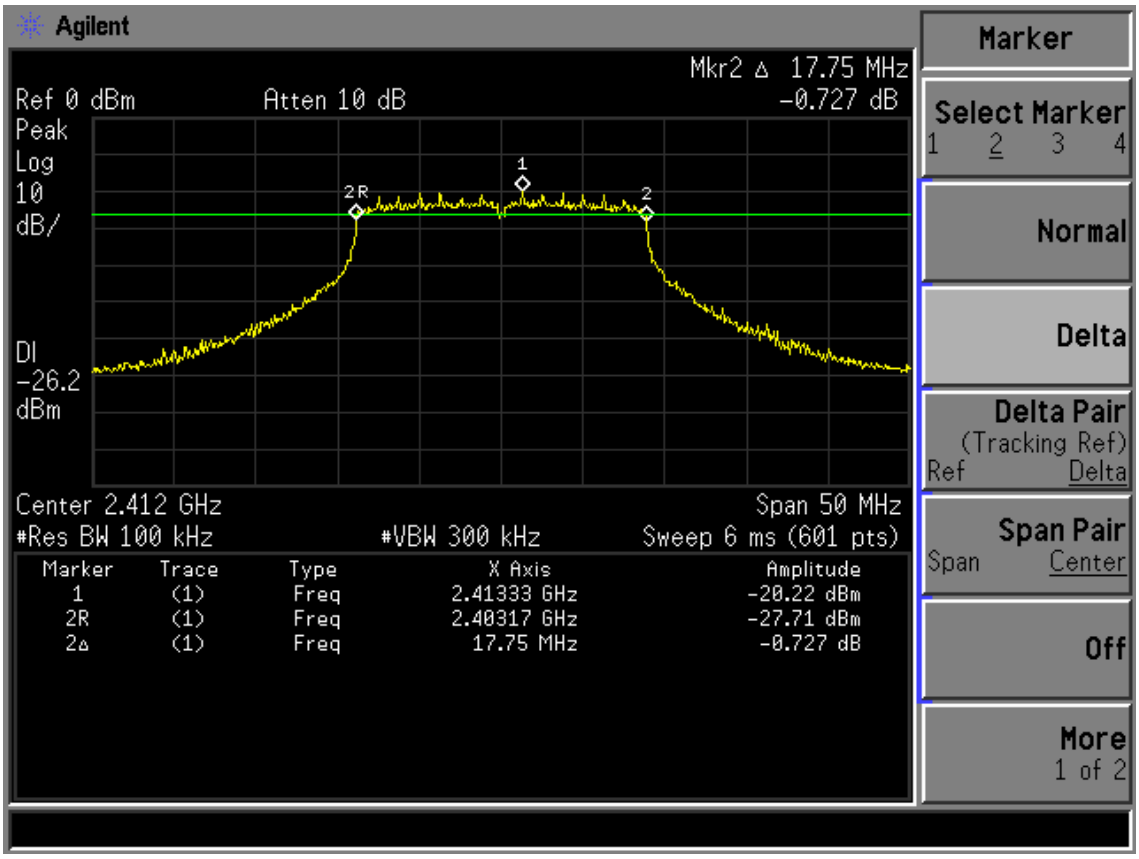
Test CH6: 2437MHz



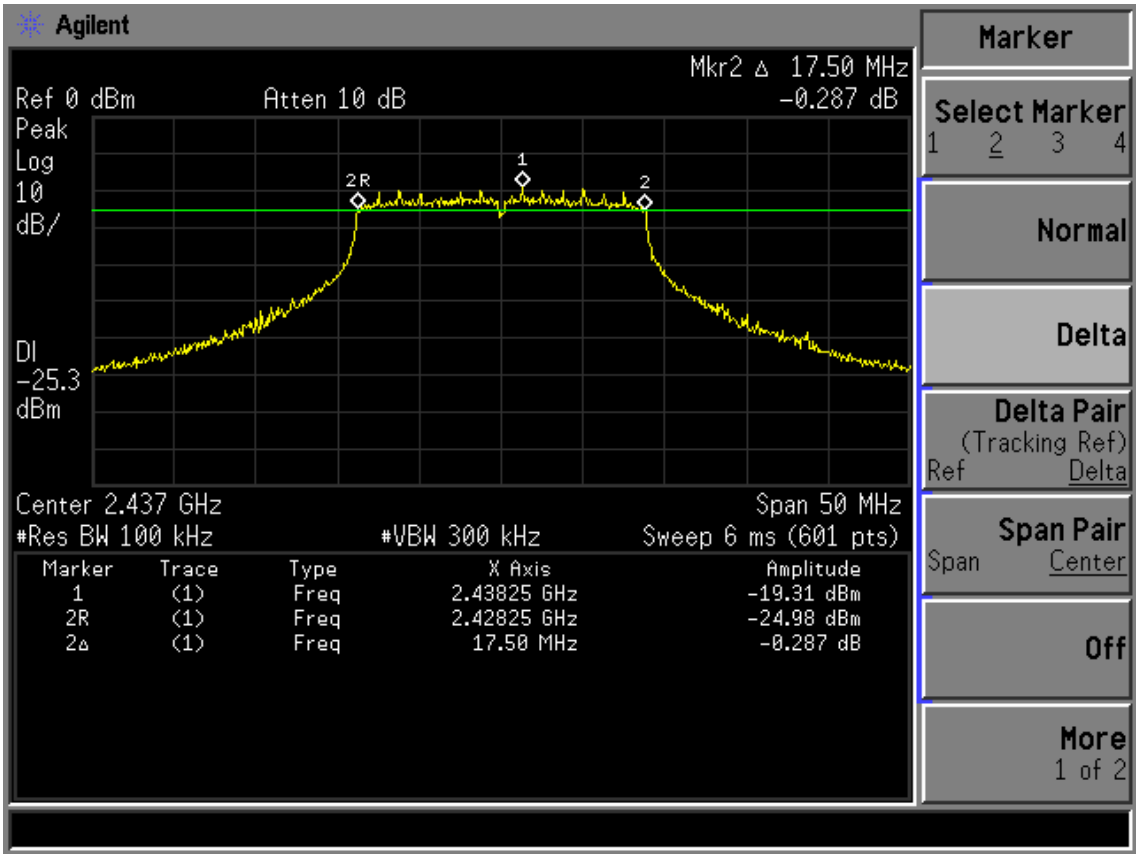
Test CH11: 2462MHz



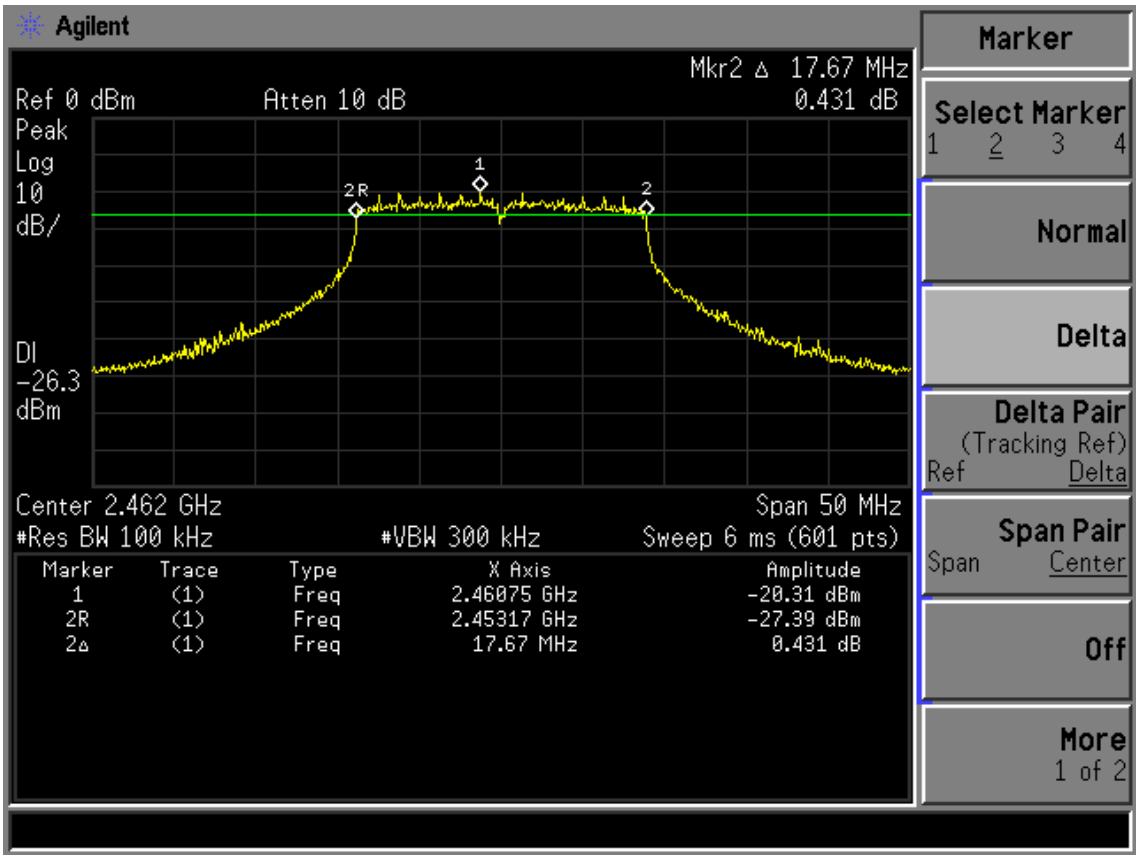
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



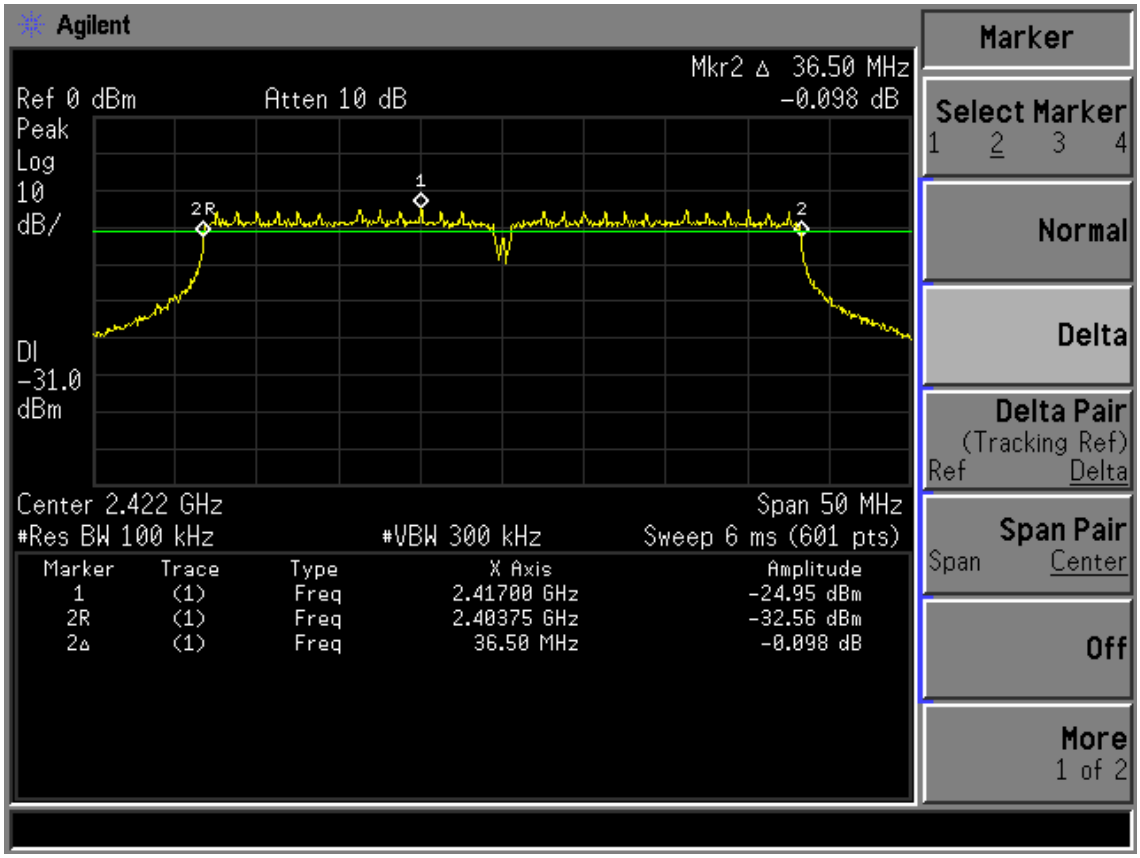
Test CH6: 2437MHz



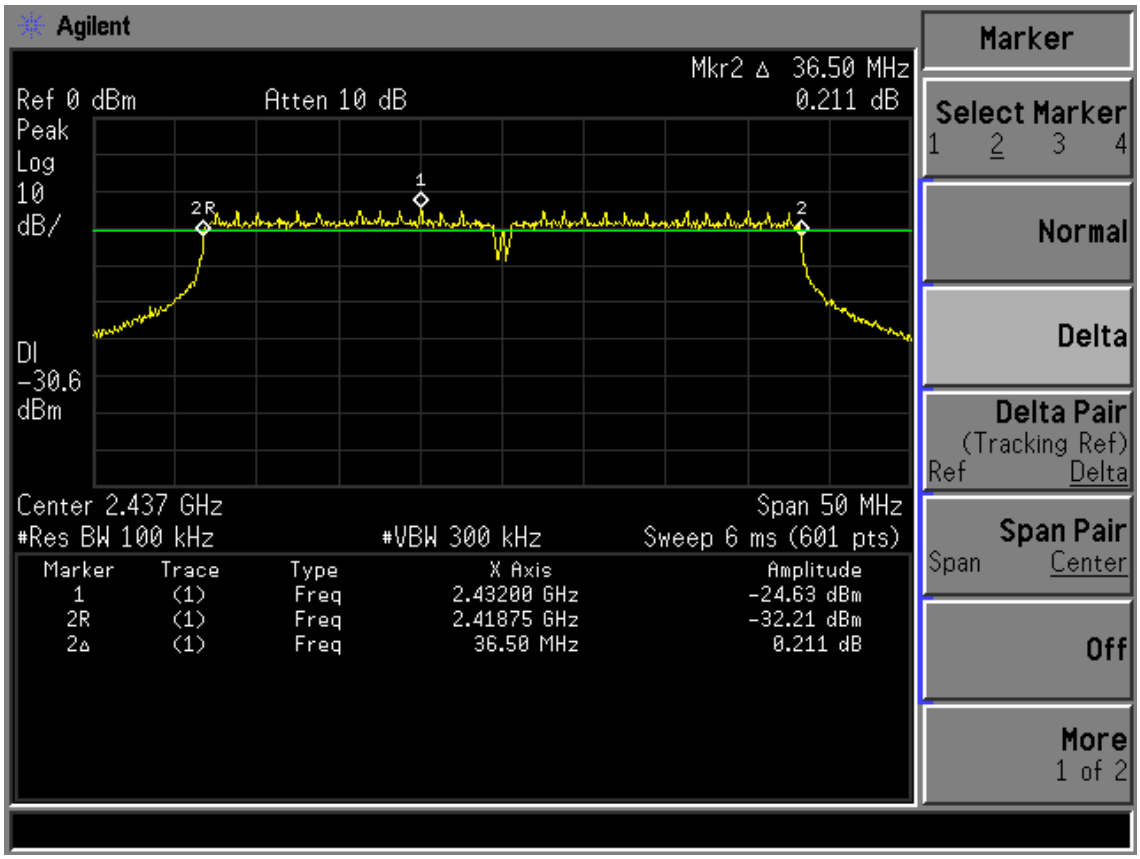
Test CH11: 2462MHz



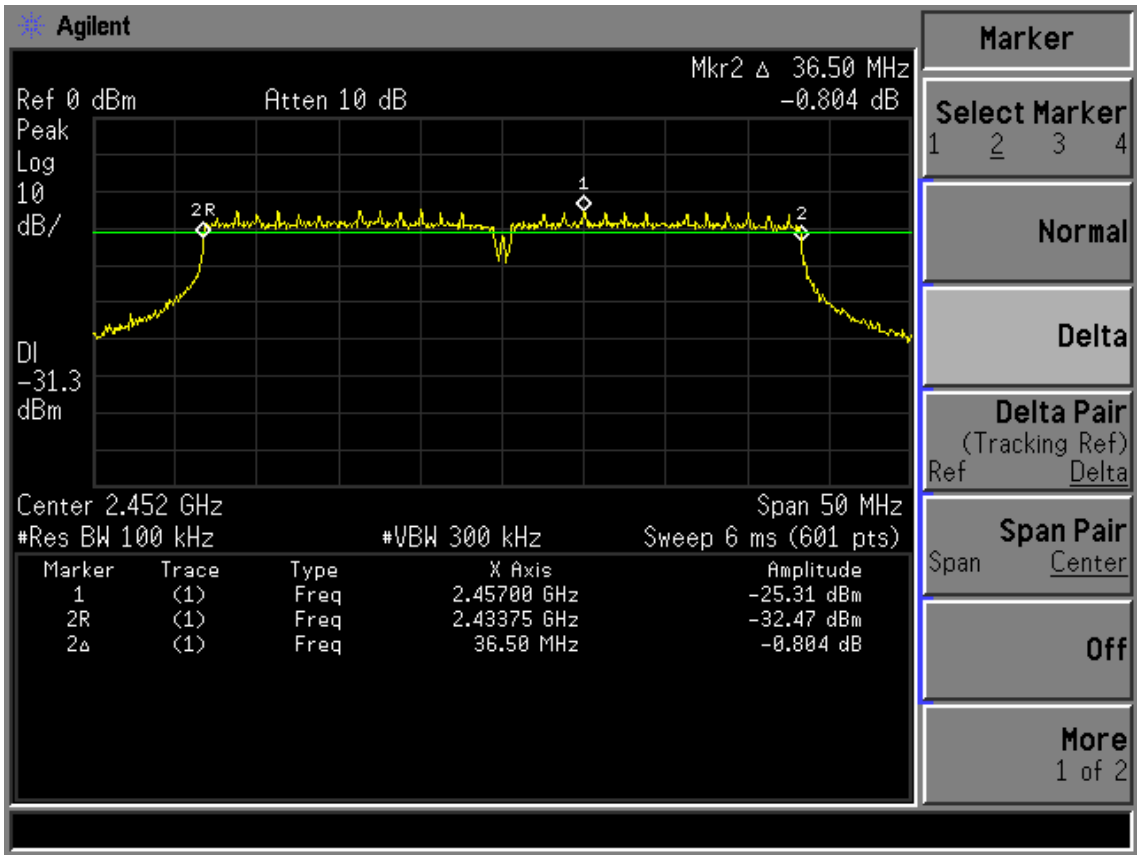
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



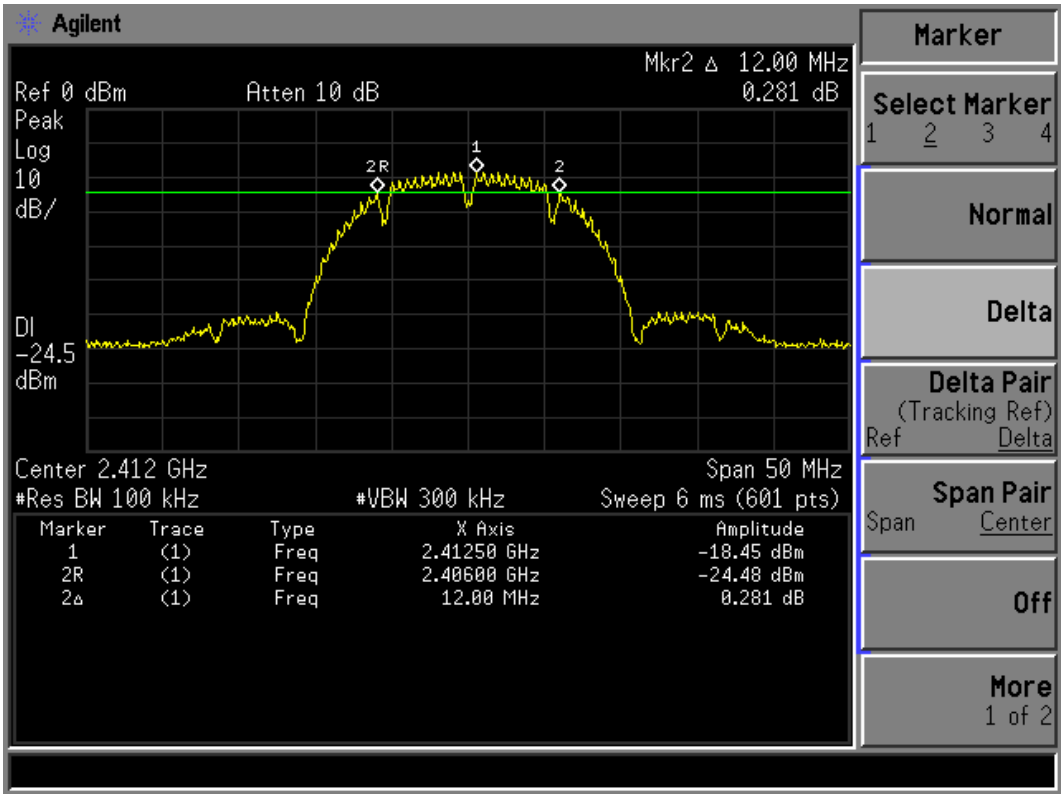
Test CH4: 2437MHz



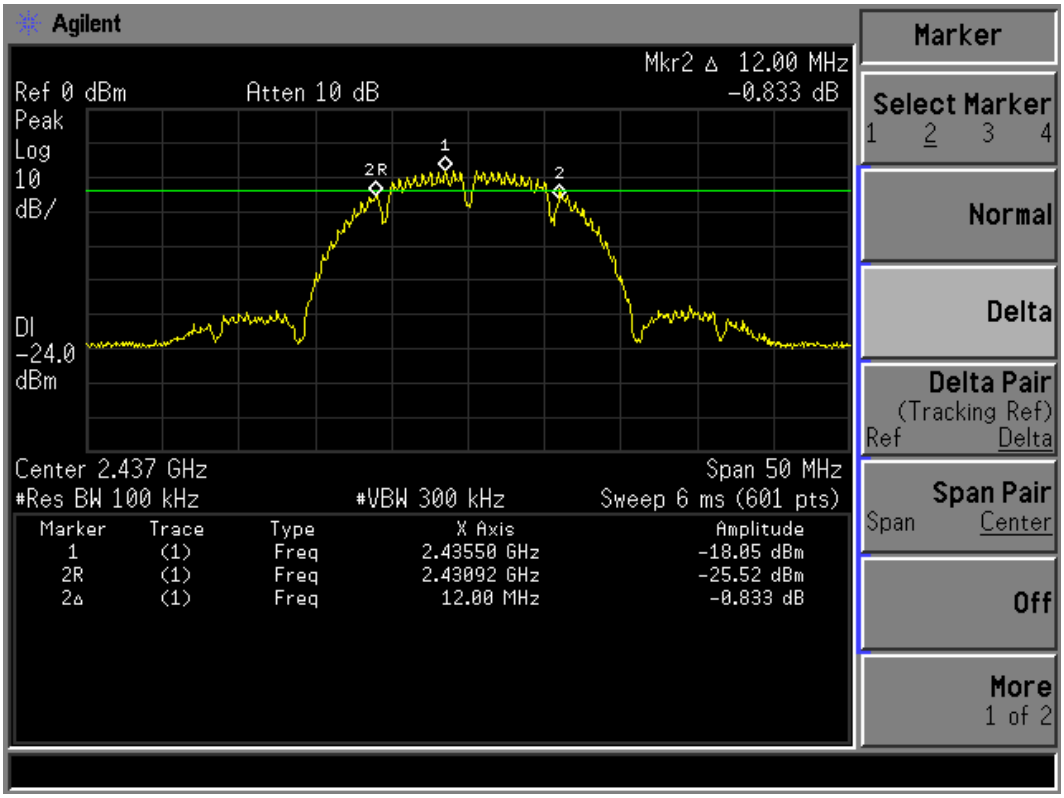
Test CH7: 2452MHz



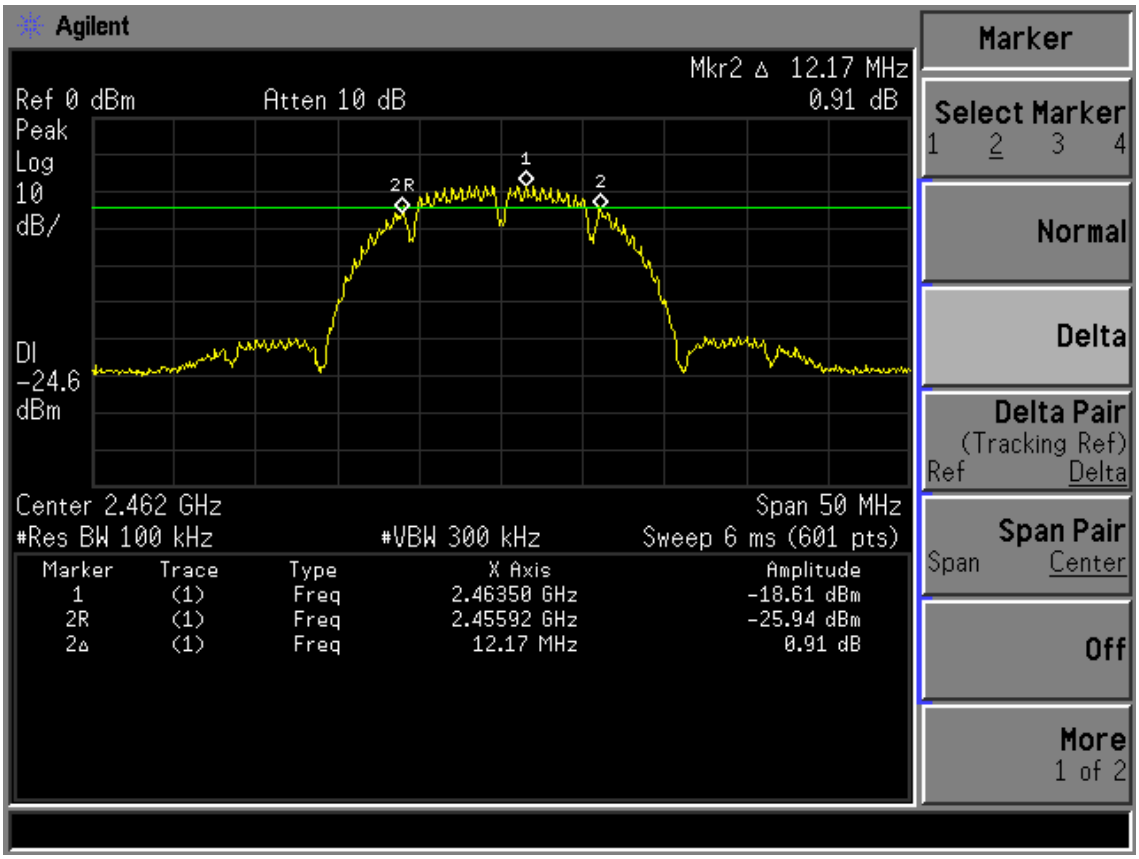
Chain 3:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



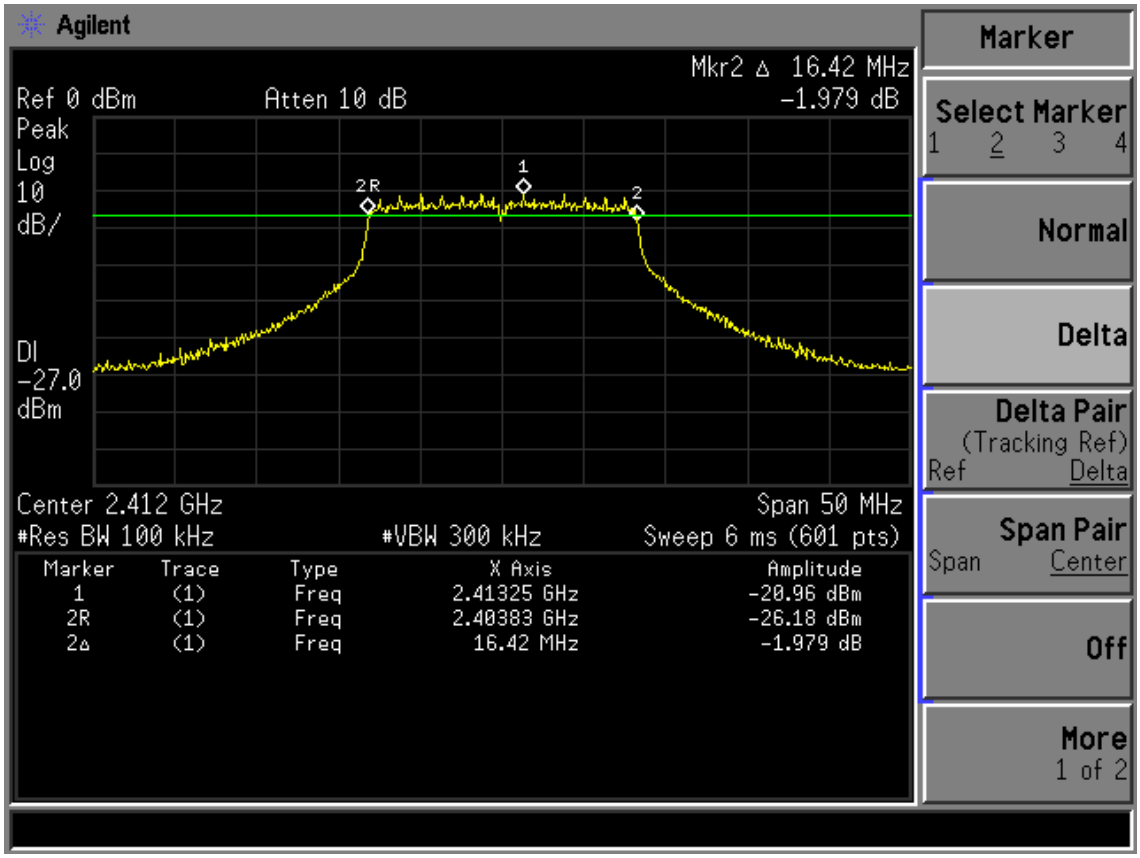
Test CH6: 2437MHz



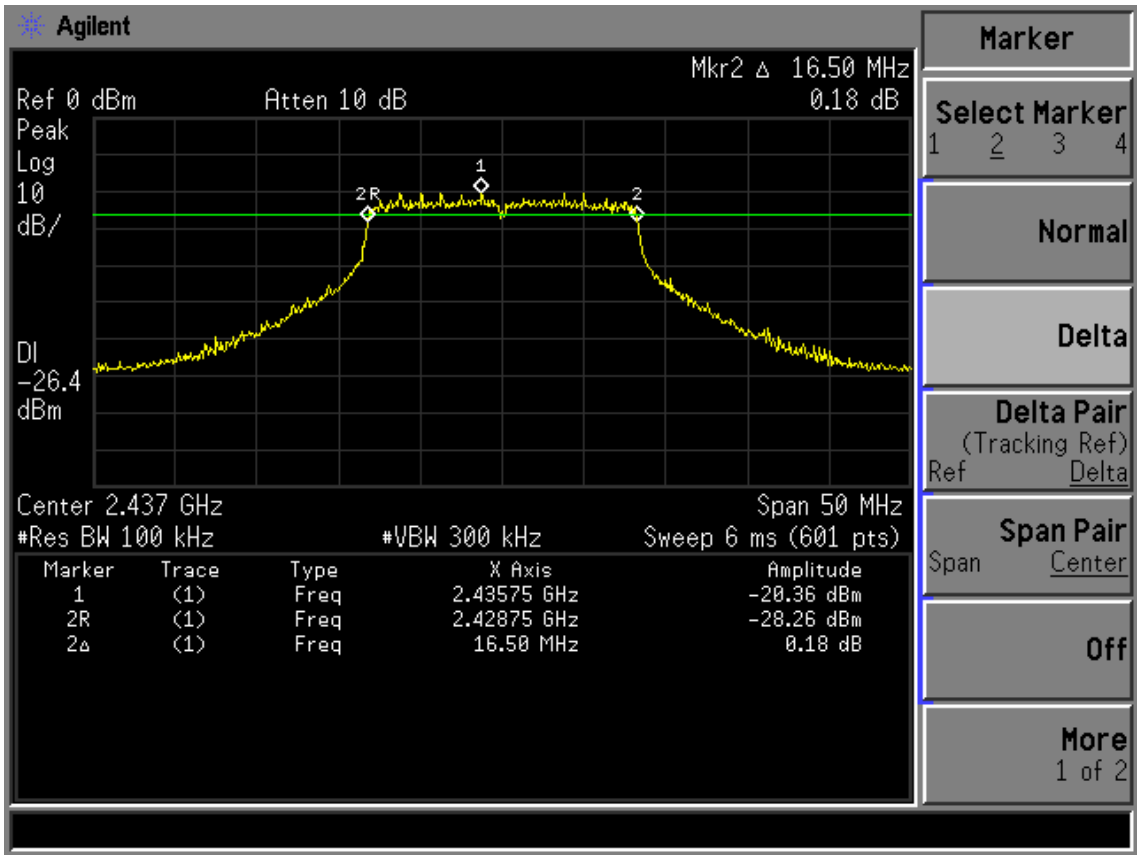
Test CH11: 2462MHz



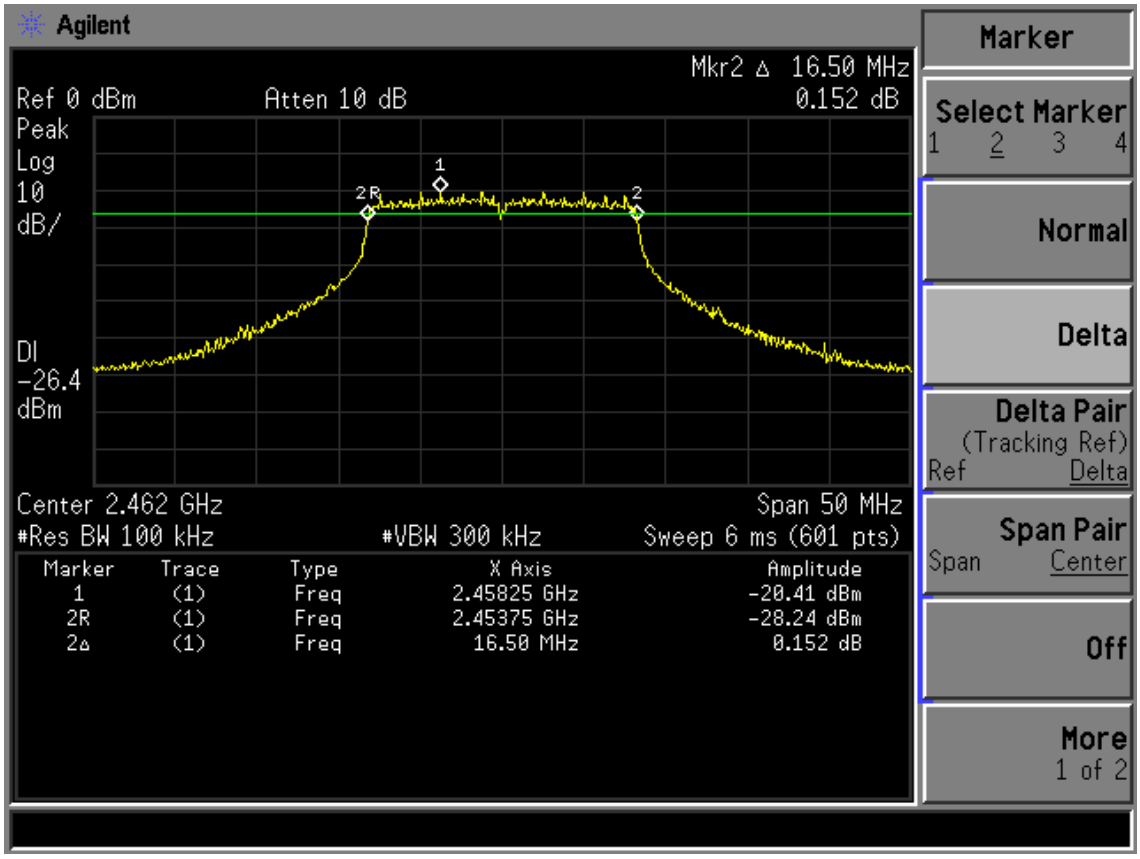
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



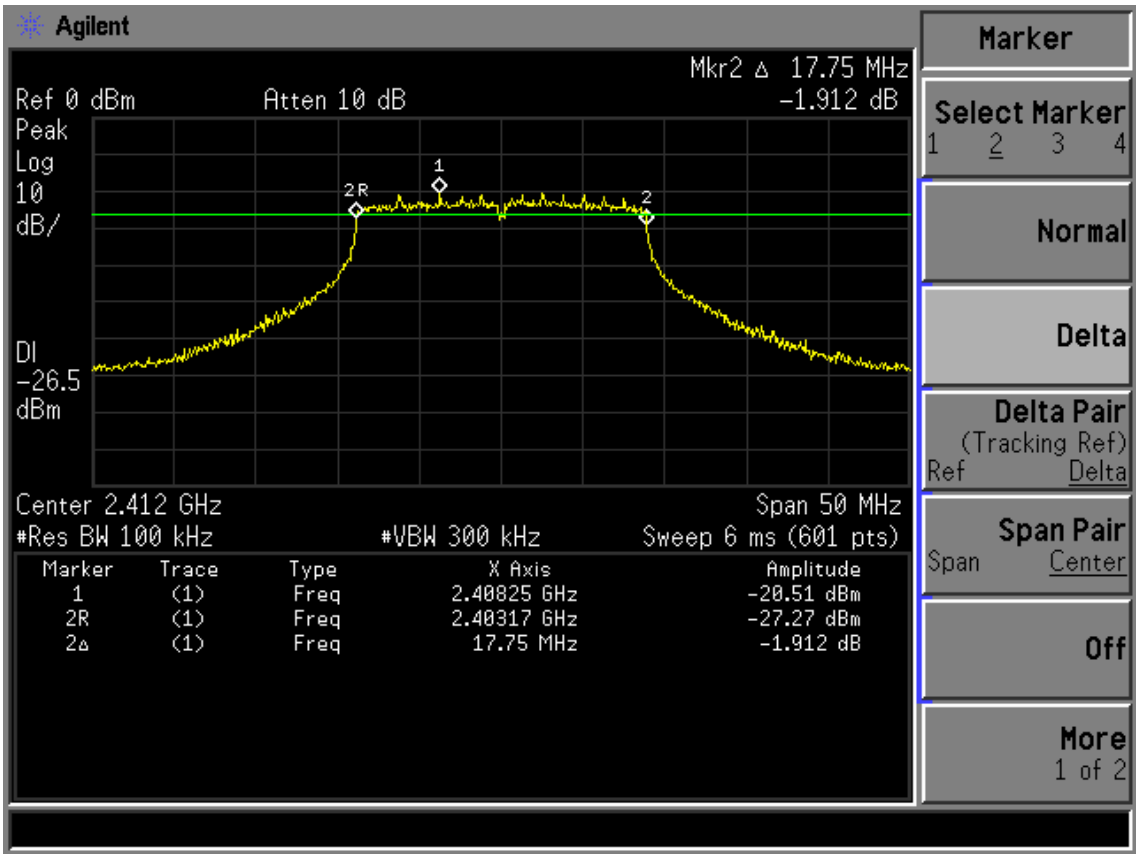
Test CH6: 2437MHz



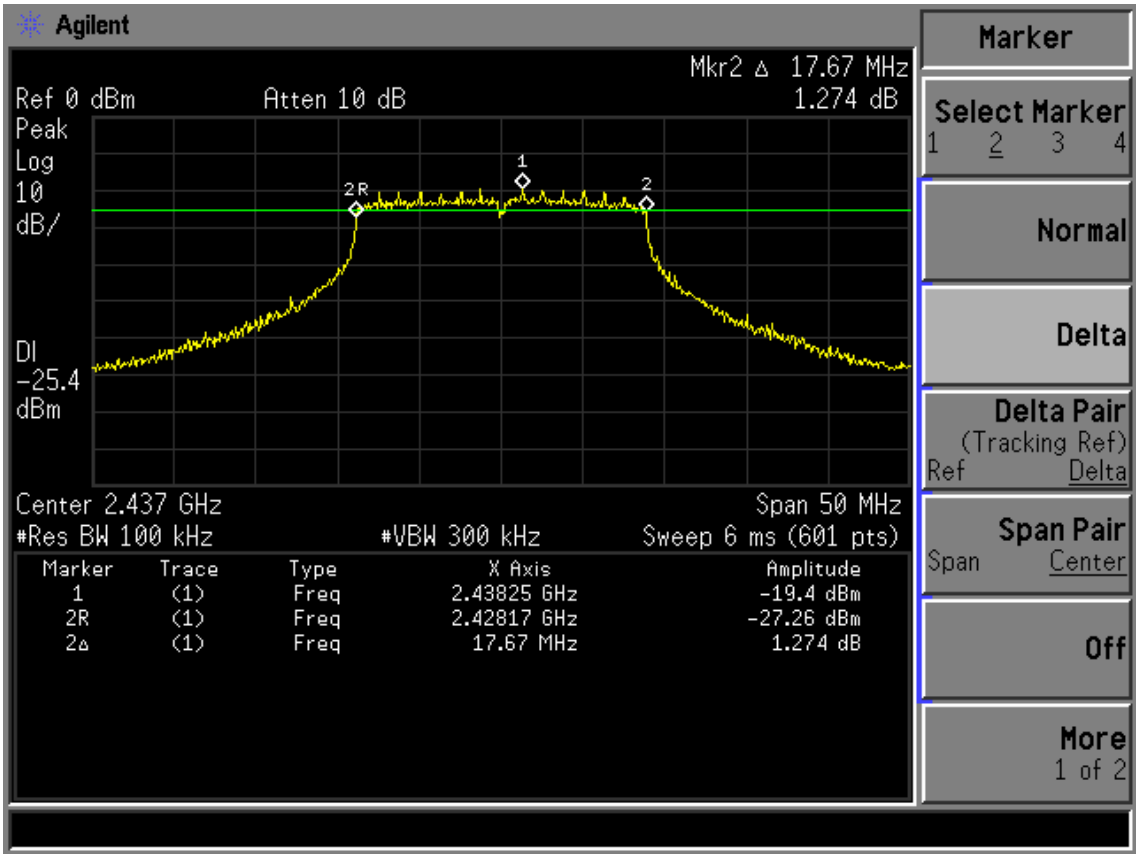
Test CH11: 2462MHz



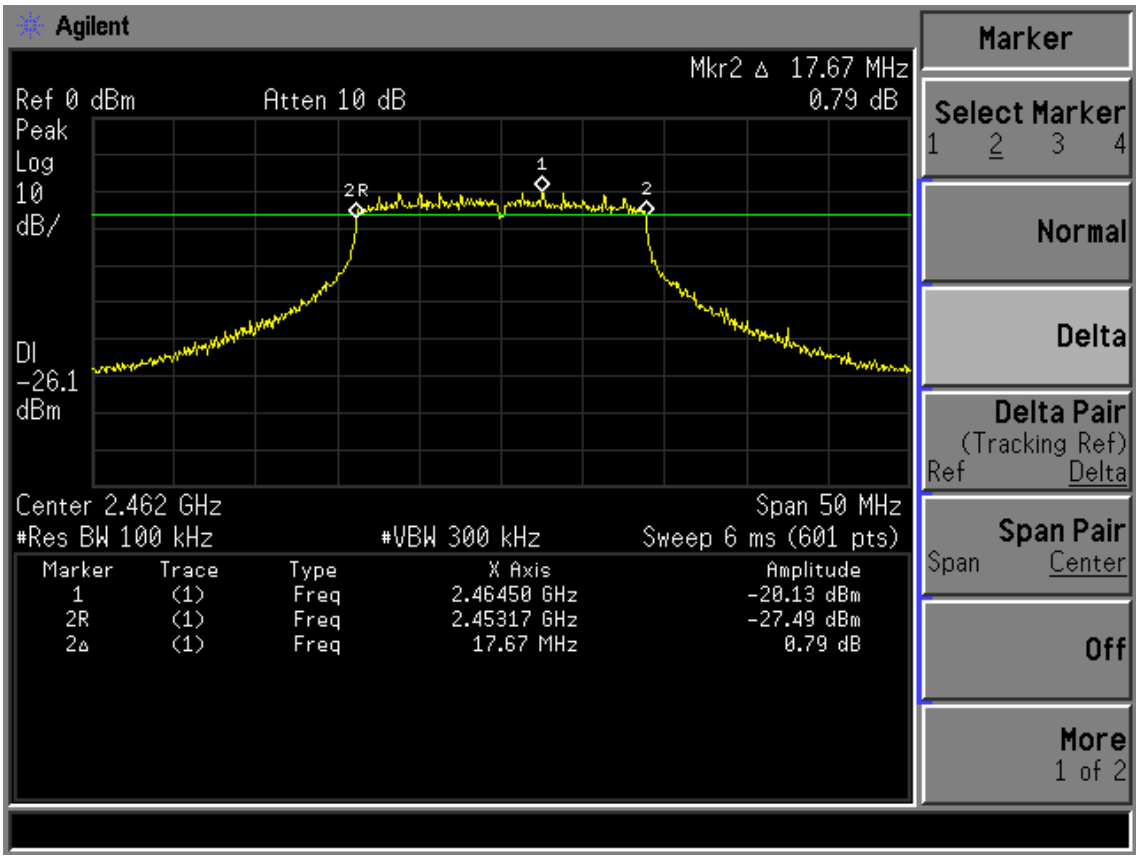
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



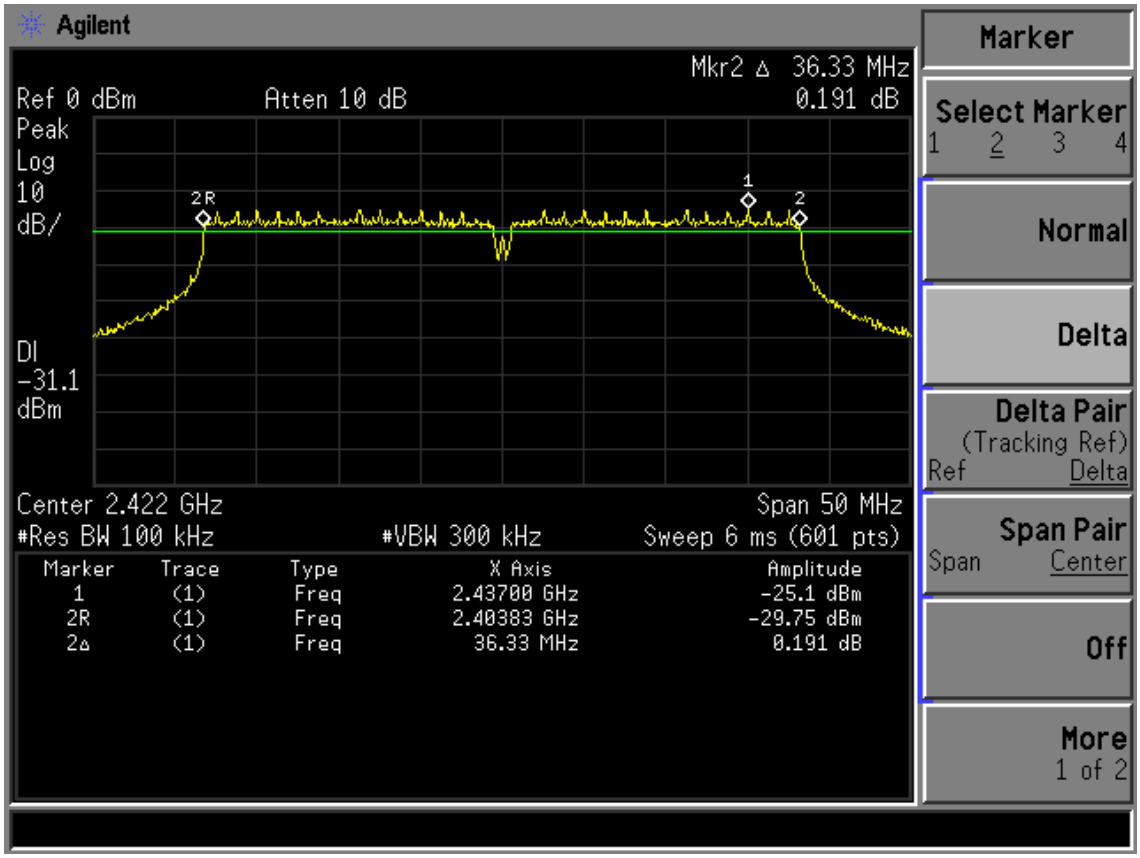
Test CH6: 2437MHz



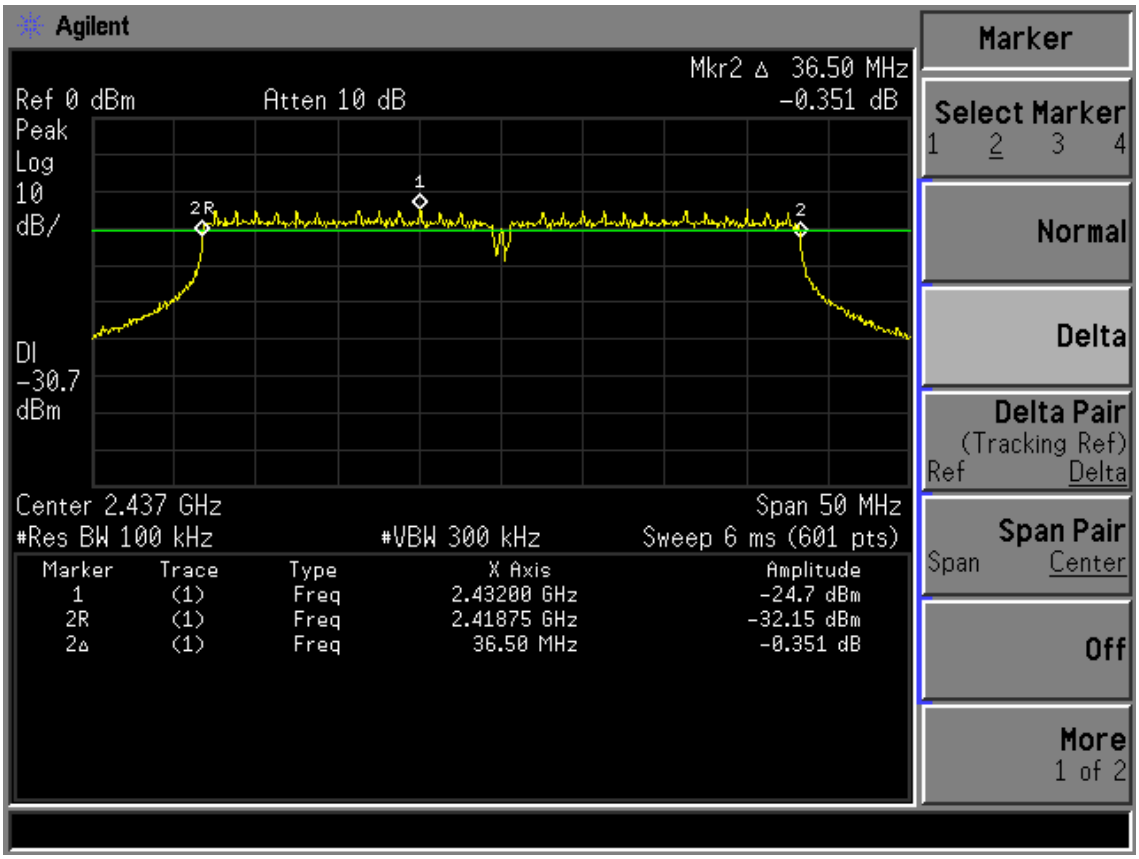
Test CH11: 2462MHz



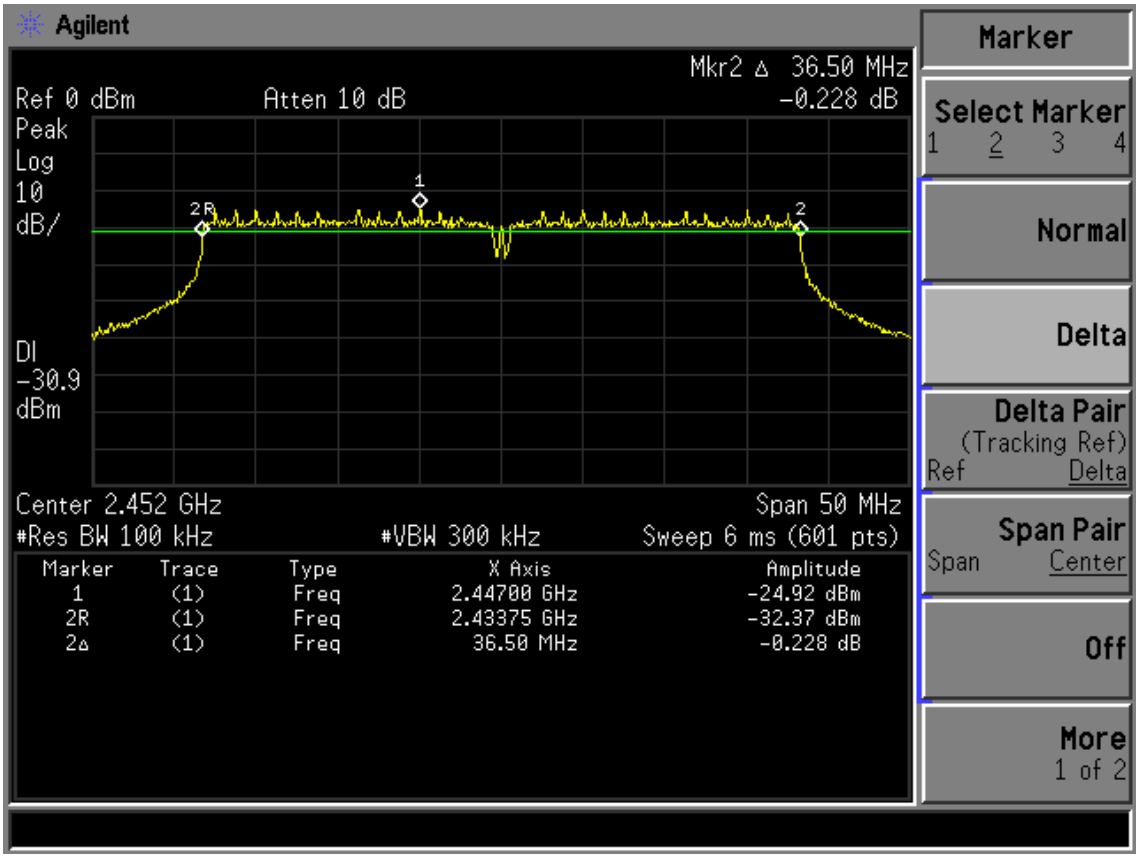
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



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.	Power meter	Anritsu	ML2487A	6K00002472	May.08,12	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,12	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,12	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 12	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,12	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 20dB attenuator.

2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 6dB 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)]

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

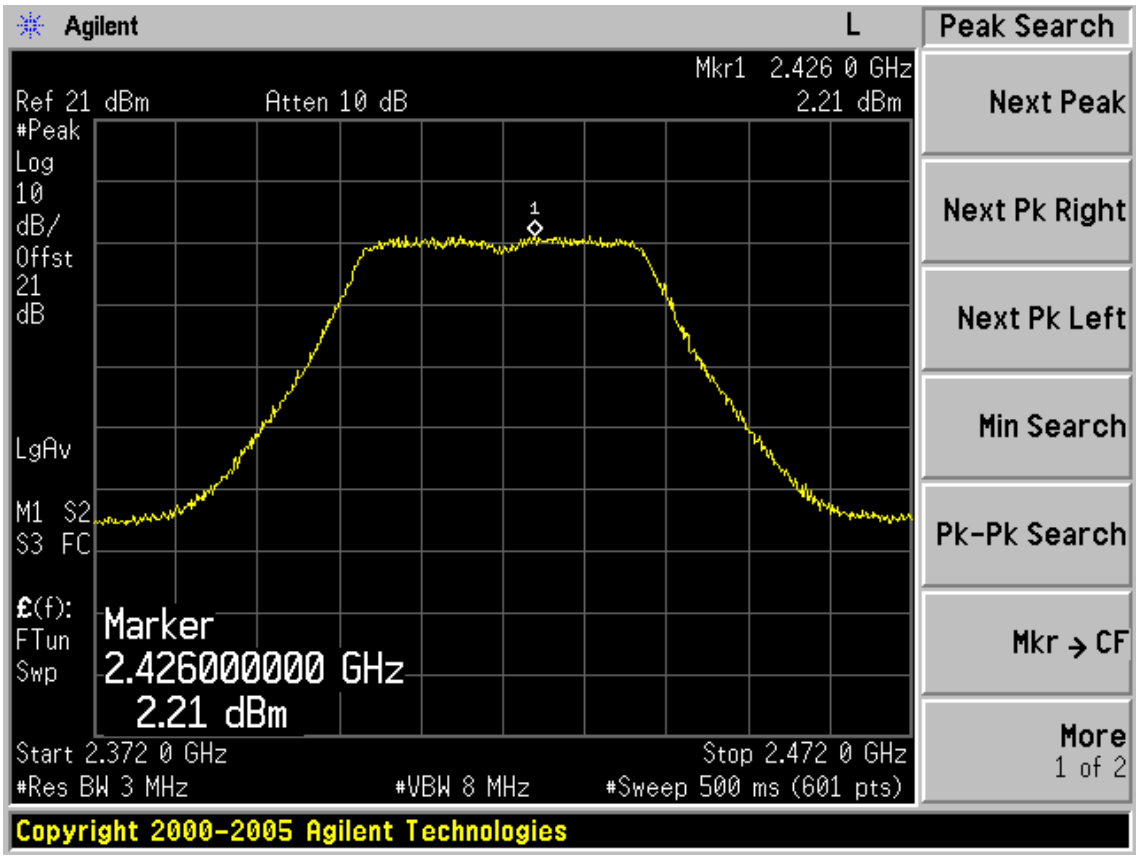
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

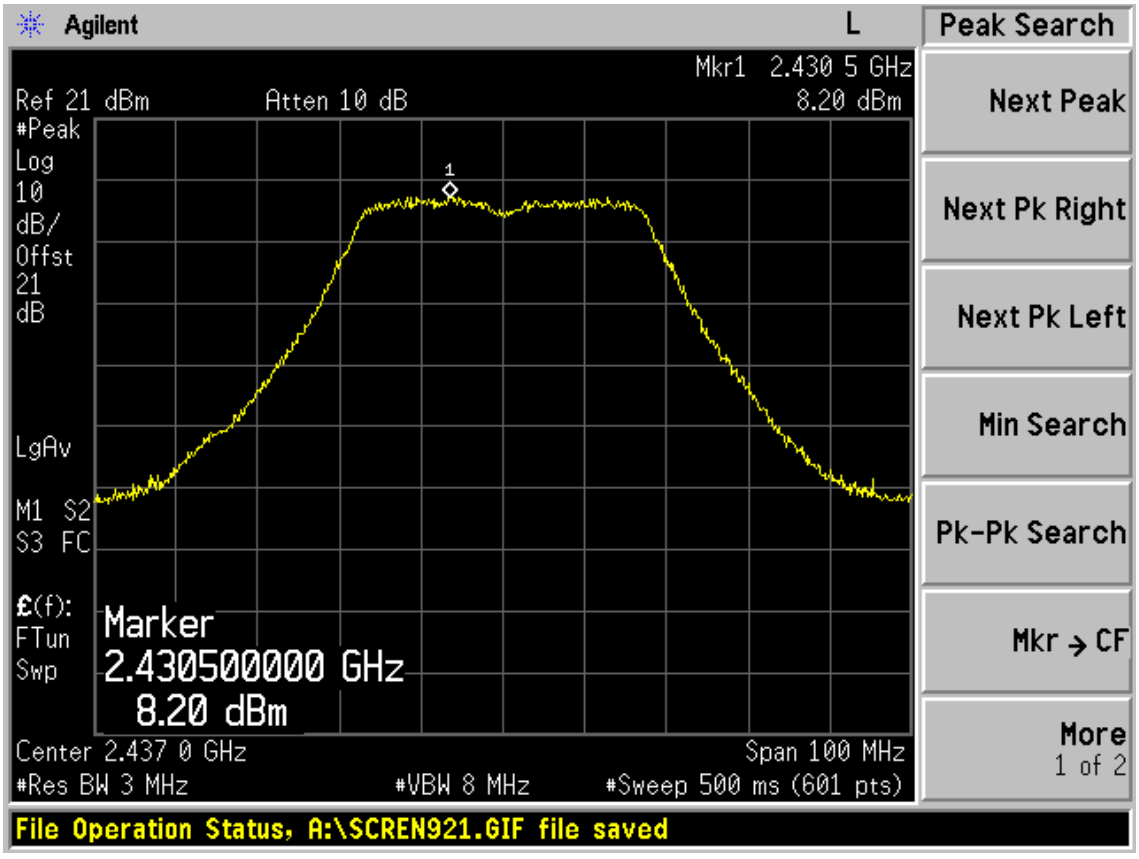
8.4.Test Results

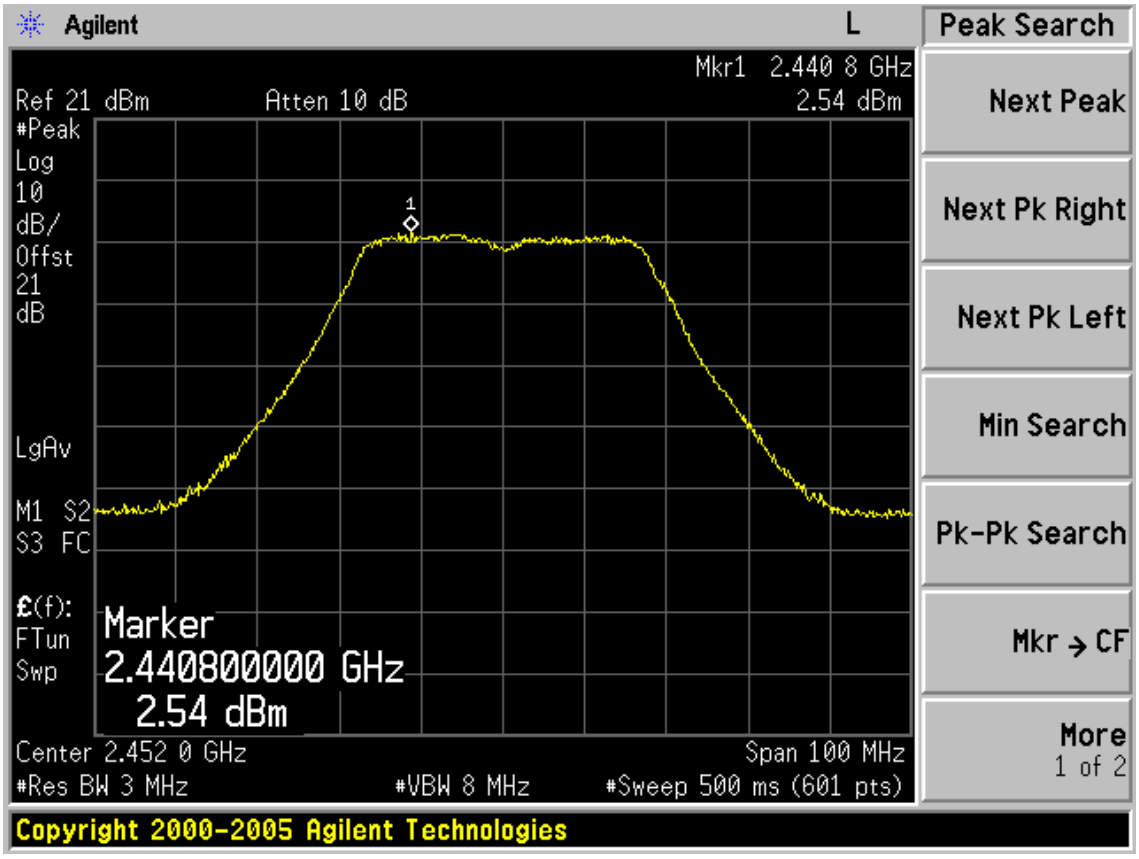
EUT: 300Mbps Wireless N Gigabit Router						
M/N: ARN03304U1						
Test date: 2012-05-25		Pressure: 101.2 kpa				Humidity: 56.1 %
Tested by: Leo-Li		Test site: RF site				Temperature: 25.2 ℃
Cable loss: 0.6 dB		Attenuator loss: 20 dB				Antenna Gain: 3 dBi
Test Mode	CH (MHz)	Peak output Power (dBm)				Limit (dBm)
		Chain0	Chain1	Chain2	Total	
11b	CH1	17.43	16.12	16.18	N/A	30
	CH6	18.32	17.19	18.21	N/A	30
	CH11	17.67	16.36	16.99	N/A	30
11g	CH1	20.43	19.88	19.82	N/A	30
	CH6	22.49	21.44	22.17	N/A	30
	CH11	20.65	20.17	20.96	N/A	30
11n HT20	CH1	20.33	19.93	20.47	25.02	30
	CH6	22.48	21.45	22.28	26.86	30
	CH11	20.57	20.23	20.98	25.38	30

Test Mode	CH	Result							Limit
		Measured power(dBm)/3MHz			PK Output power (dBm)				(dBm)
		Chain0	Chain 1	Chain 2	Chain0	Chain1	Chain2	Total	
11n HT40	CH1	2. 21	1. 78	2. 18	14. 31	13. 81	14. 23	18.89	30
	CH4	8. 20	6. 18	6. 92	20. 30	18. 21	18. 97	24.02	30
	CH7	2. 54	2. 17	1. 71	14. 64	14. 20	13. 76	18.99	30
Chain 0 26dB Bandwidth for 11n HT40: 36.50MHz Chain 1 26dB Bandwidth for 11n HT40: 36.50MHz Chain 2 26dB Bandwidth for 11n HT40: 36.50MHz									
Chain 0 BW correction factor = 10log[(36.50MHz)/(3MHz)] = 10.85dB Chain 1 BW correction factor = 10log[(36.50MHz)/(3MHz)] = 10.85dB Chain 2 BW correction factor = 10log[(36.50MHz)/(3MHz)] = 10.85dB									
Conclusion: PASS									

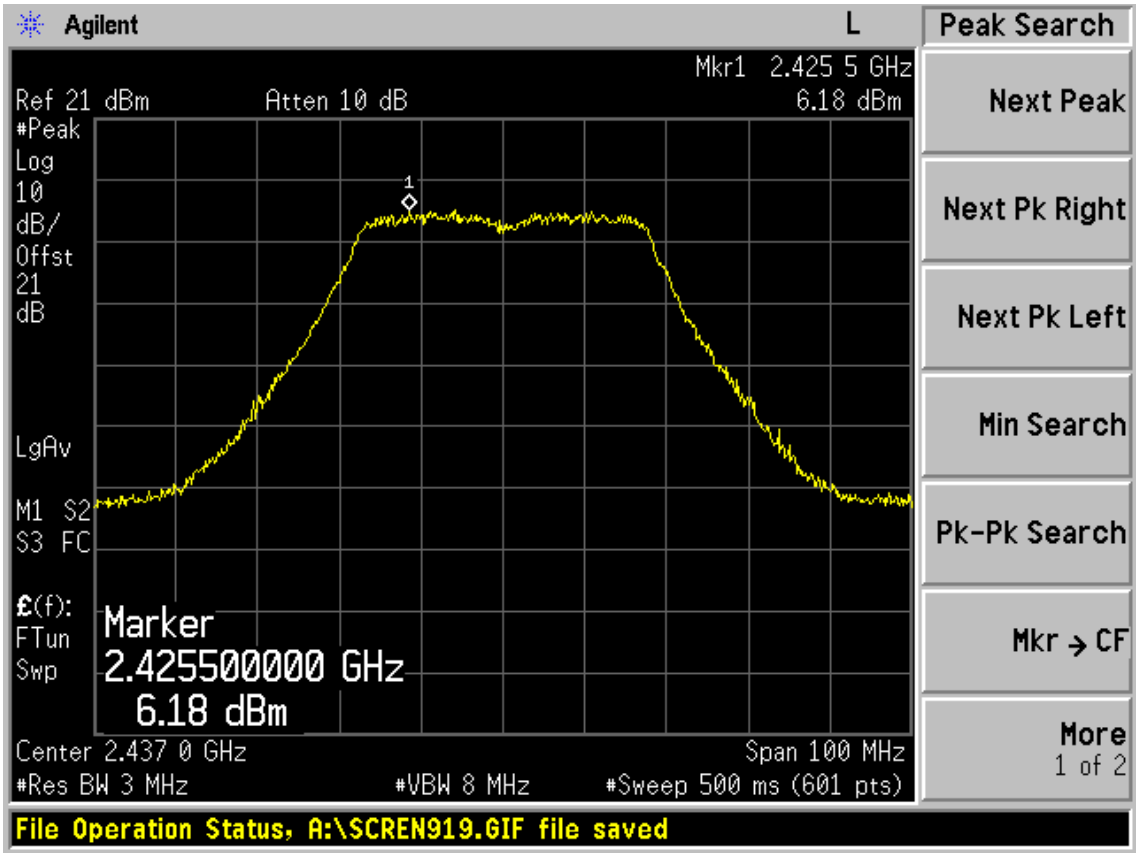
Chain 0

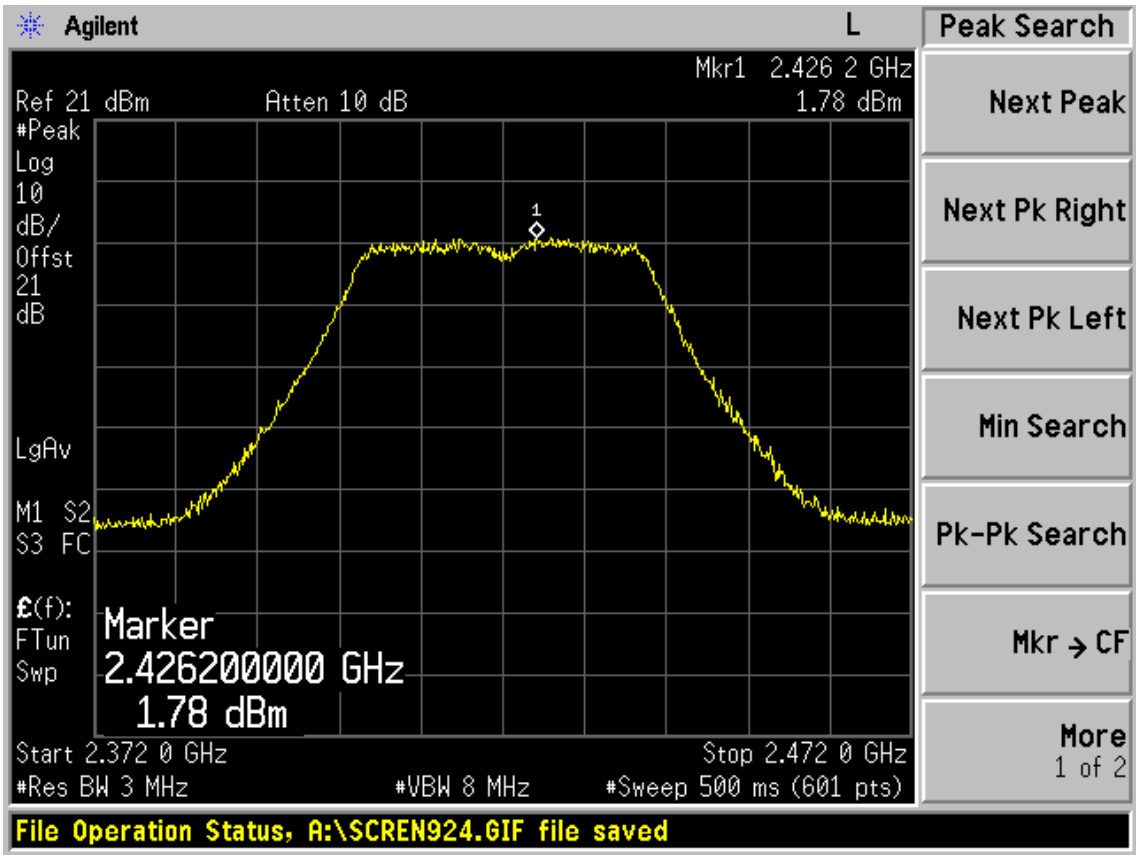

Agilent
L
Peak Search
Mkr1 2.426 0 GHz
Ref 21 dBm
Atten 10 dB
2.21 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.426000000 GHz
2.21 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.372 0 GHz
Stop 2.472 0 GHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

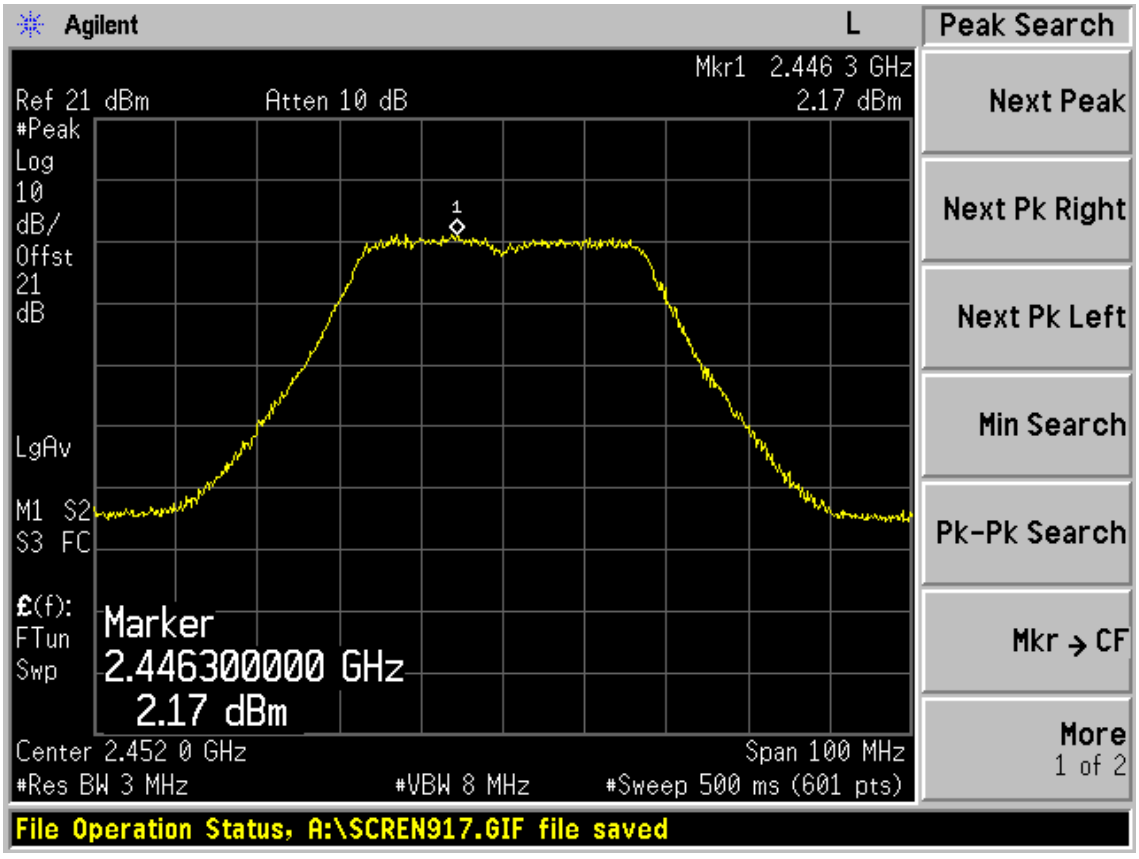

Agilent
L
Peak Search
Mkr1 2.430 5 GHz
Ref 21 dBm
Atten 10 dB
8.20 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.430500000 GHz
8.20 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.437 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
File Operation Status, A:\SCREN921.GIF file saved


Agilent
L
Peak Search
Mkr1 2.440 8 GHz
2.54 dBm
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.440800000 GHz
2.54 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.452 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

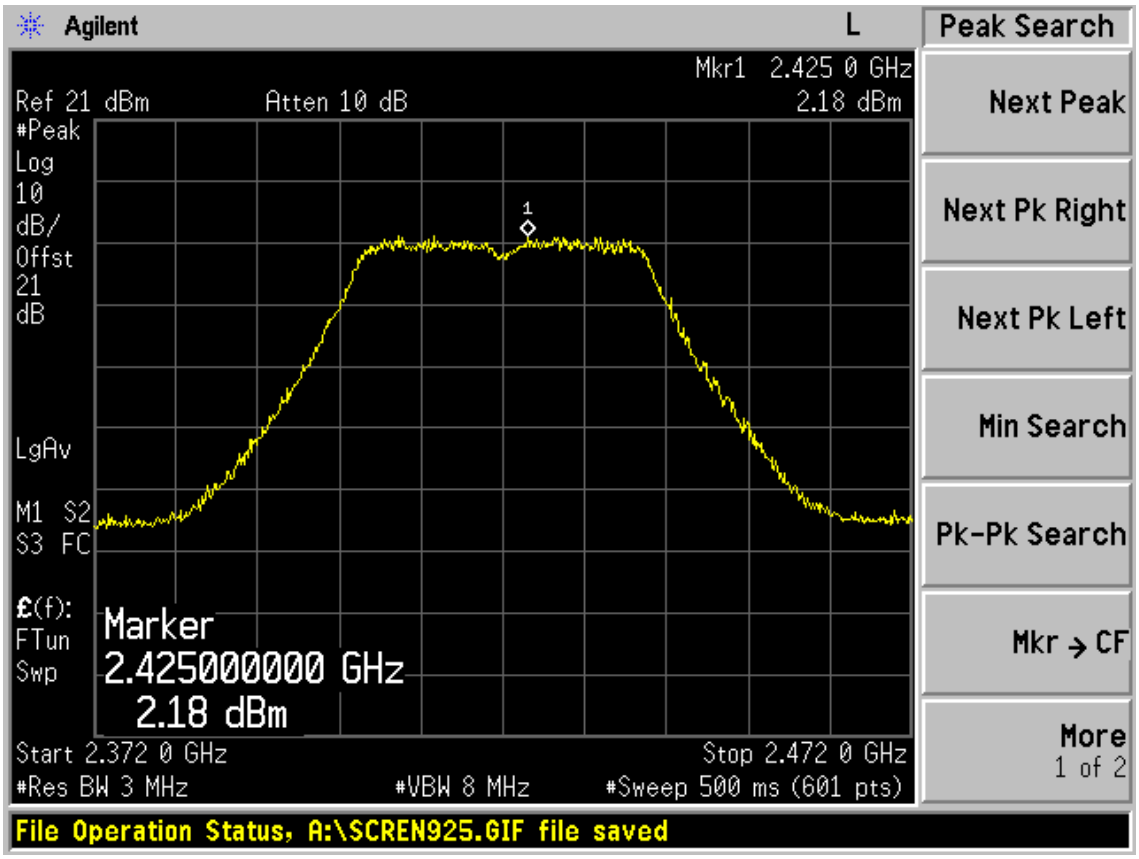
Chain 1

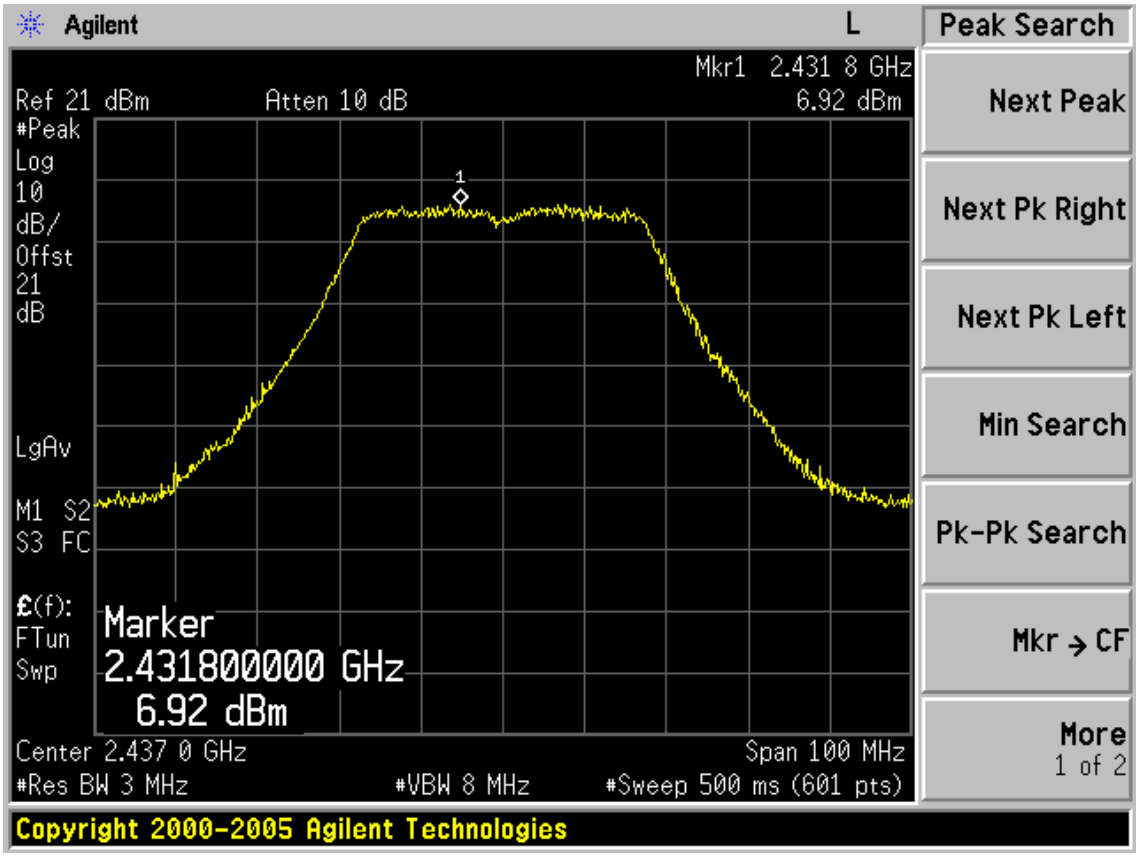

Agilent
L
Peak Search
Mkr1 2.425 5 GHz
6.18 dBm
Ref 21 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.425500000 GHz
6.18 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.437 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
File Operation Status, A:\SCREN919.GIF file saved

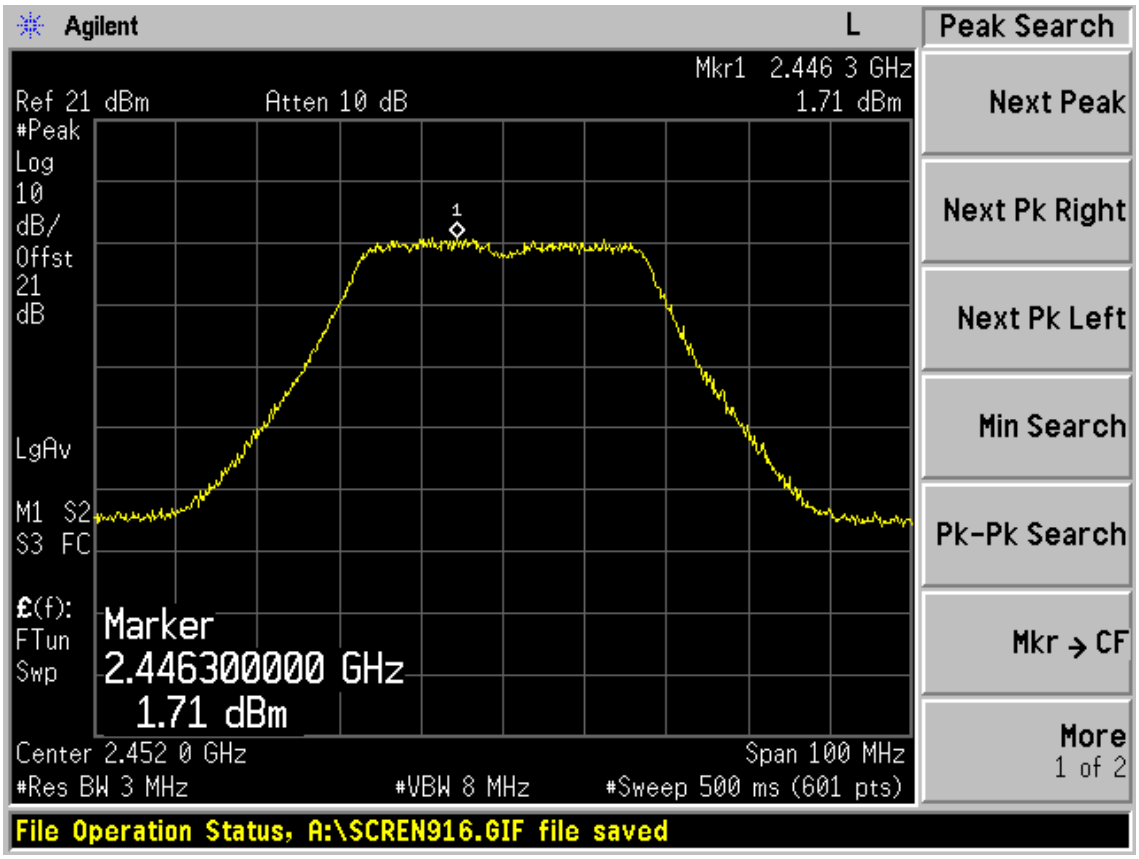

Agilent
L
Peak Search
Mkr1 2.426 2 GHz
Ref 21 dBm
Atten 10 dB
1.78 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.426200000 GHz
1.78 dBm
Start 2.372 0 GHz
Stop 2.472 0 GHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
File Operation Status, A:\SCREN924.GIF file saved


Agilent
L
Peak Search
Mkr1 2.446 3 GHz
Ref 21 dBm
Atten 10 dB
2.17 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.446300000 GHz
2.17 dBm
Center 2.452 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
File Operation Status, A:\SCREN917.GIF file saved

Chain 2


Agilent
L
Peak Search
Mkr1 2.425 0 GHz
Ref 21 dBm
Atten 10 dB
2.18 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.425000000 GHz
2.18 dBm
Start 2.372 0 GHz
Stop 2.472 0 GHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
File Operation Status, A:\SCREN925.GIF file saved


Agilent
L
Peak Search
Mkr1 2.431 8 GHz
Ref 21 dBm
Atten 10 dB
6.92 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.431800000 GHz
6.92 dBm
Center 2.437 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.446 3 GHz
Ref 21 dBm
Atten 10 dB
1.71 dBm
#Peak
Log
10
dB/
Offst
21
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.446300000 GHz
1.71 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.452 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
File Operation Status, A:\SCREN916.GIF file saved

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 12	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 12	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 12	1Year

9.2.Limit

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

9.3.Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.

2， 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

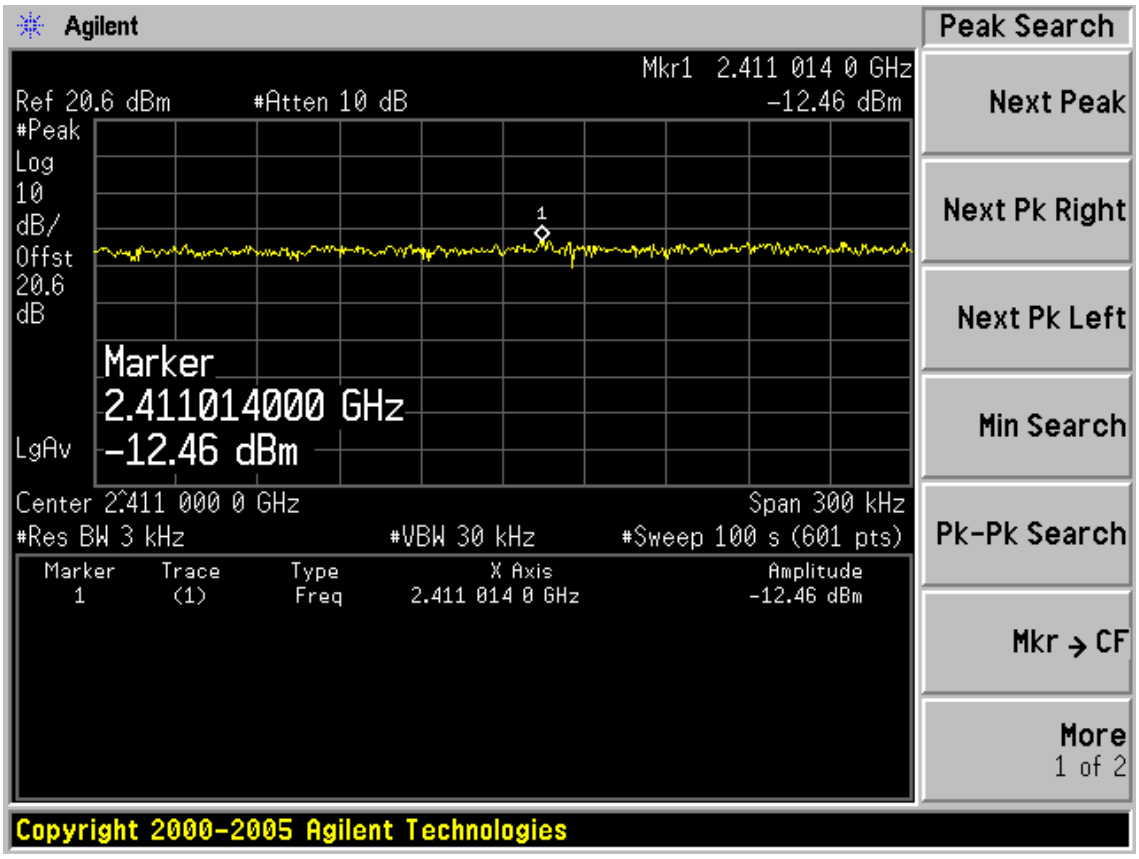
9.4.Test Results

EUT: 300Mbps Wireless N Gigabit Router r M/N:ARN03304U1							
Power: DC 12V From Adapter input AC 120V/60Hz							
Data Rate:11b 1Mbps；11g：6Mbps；11n HT20：6.5Mbps；11n HT40：13.5Mbps(Note 1)							
Ambient Temperature:25℃		Relative Humidity: 60%					
Test date:2012/05/25		Test site: RF site		Tested By: Sunny-Lu			
Cable Loss：0.6dB Attenuator ：20 dB Duty cycle：100%							
Test CH	11b,11g,11n HT20	CH1:2412MHz CH6:2437MHz CH11:2462MHz					
Test CH	11n HT40	CH1:2422MHz CH4:2437MHz CH7:2452MHz					
Mode	CH	Chain1	Chain2	Chain3	Result		
		Read Level(dBm)	Read Level(dBm)	Read Level（dBm）	Total Power (dBm)	Limit (dBm)	Conclusion
11b	CH1	-12.46	-12.16	-12.75	N/A	8	PASS
	CH6	-11.36	-11.49	-11.58	N/A	8	PASS
	CH11	-11.94	-12.45	-12.33	N/A	8	PASS
11g	CH1	-14.62	-15.14	-14.63	N/A	8	PASS
	CH6	-12.20	-12.64	-12.90	N/A	8	PASS
	CH11	-14.79	-15.38	-14.43	N/A	8	PASS
11n HT20	CH1	-13.09	-14.08	-14.27	-9.01	8	PASS
	CH6	-11.60	-12.24	-12.21	-7.24	8	PASS
	CH11	-14.47	-14.34	-15.19	-9.88	8	PASS
11n HT40	CH1	-17.76	-17.79	-17.95	-13.06	8	PASS
	CH4	-16.09	-16.60	-15.57	-11.30	8	PASS
	CH7	-16.70	-17.71	-18.81	-12.88	8	PASS
Note1:According Exploratory test, These data rate have the maximum output power							
Note2:cable loss and Attenuator were offset to the spectrum analyzer							
Note3:For 11n HT20 and 11n HT40，Total power=chain1 level+chain2 level+chain3 level (liner)							

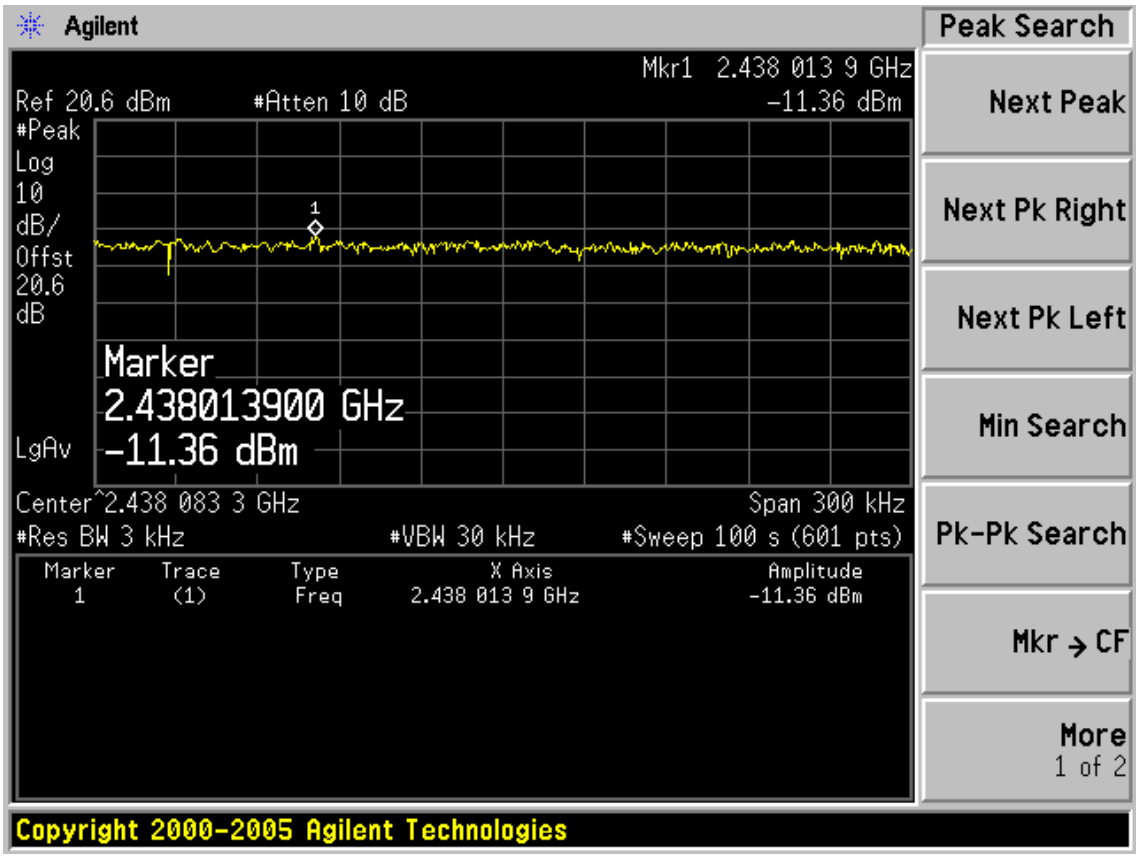
Chain 1:

Test Mode: IEEE 802.11b TX

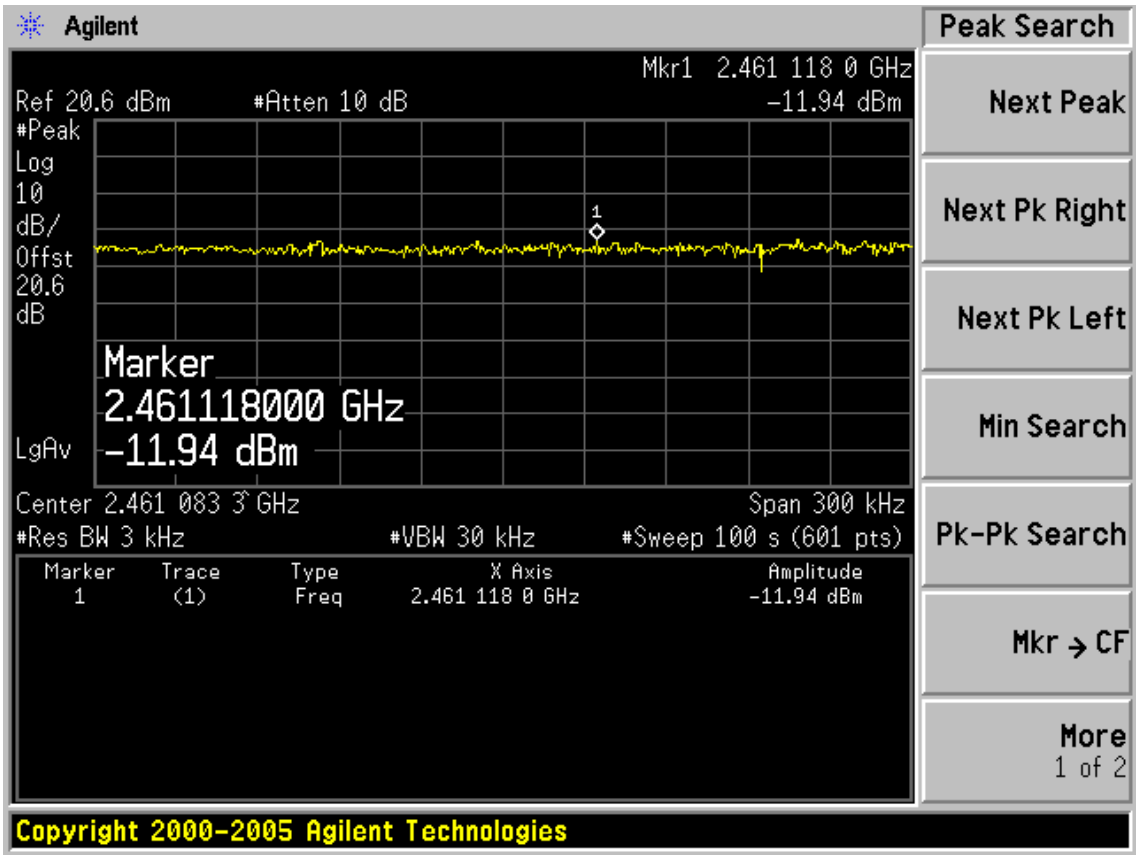
Test CH1: 2412MHz



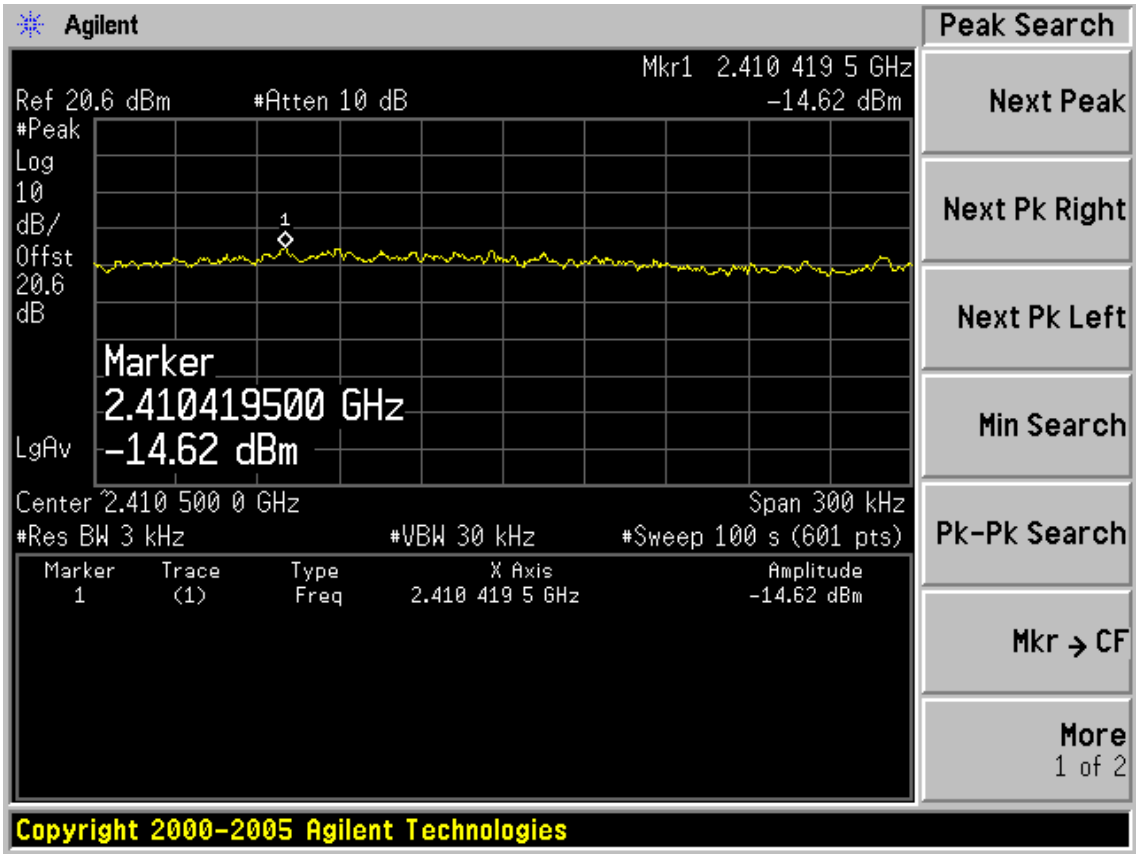
Test CH6: 2437MHz



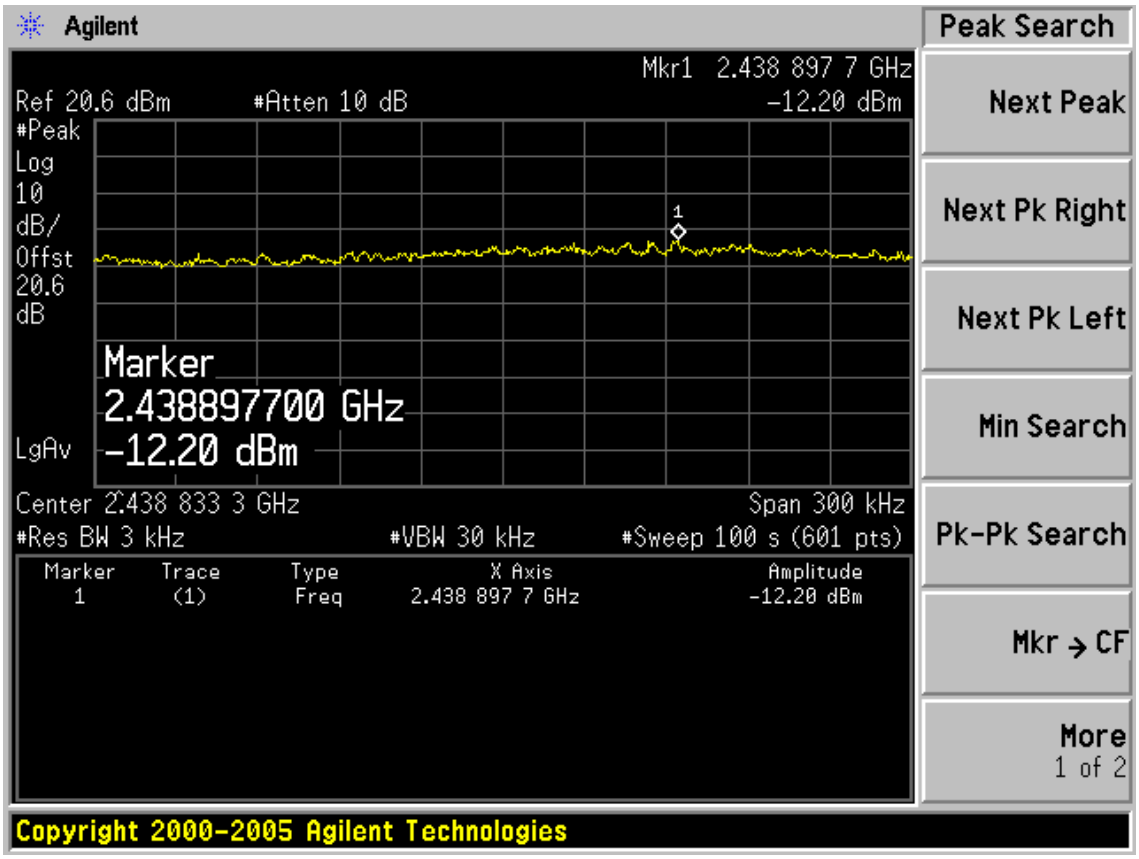
Test CH11: 2462MHz



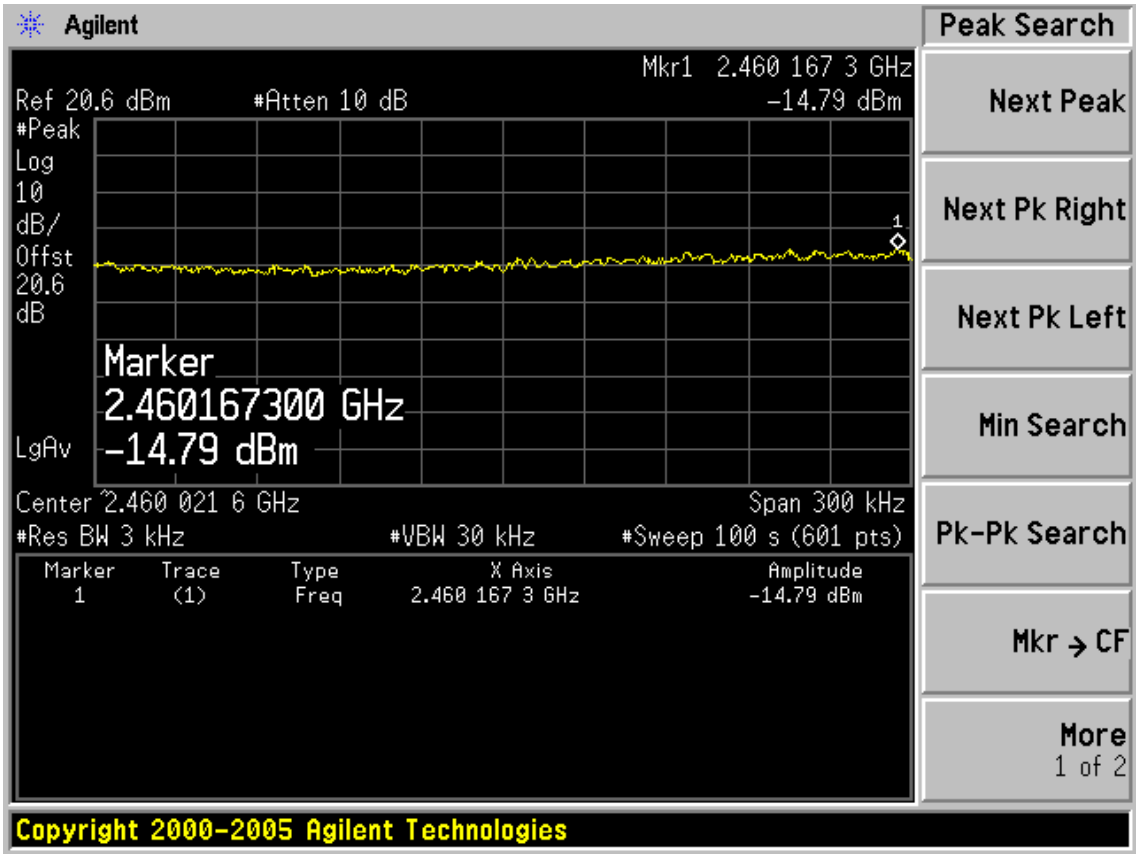
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



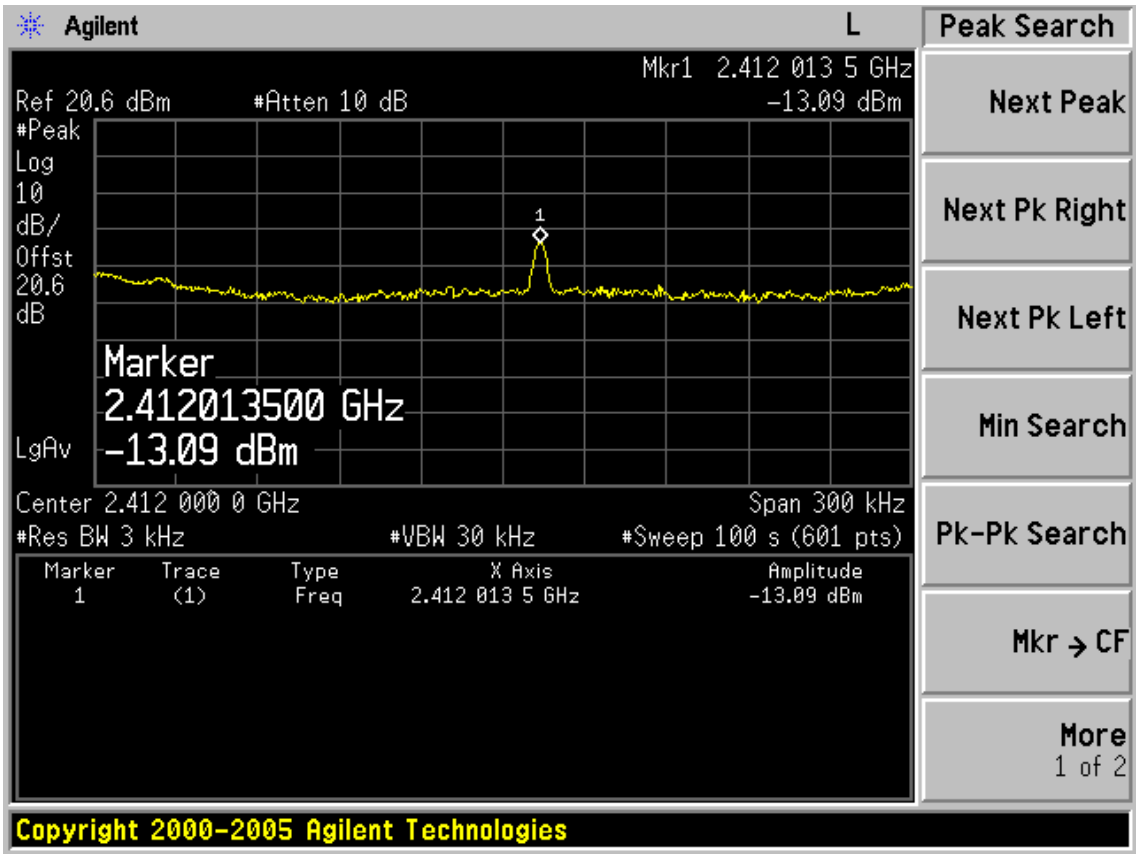
Test CH6: 2437MHz



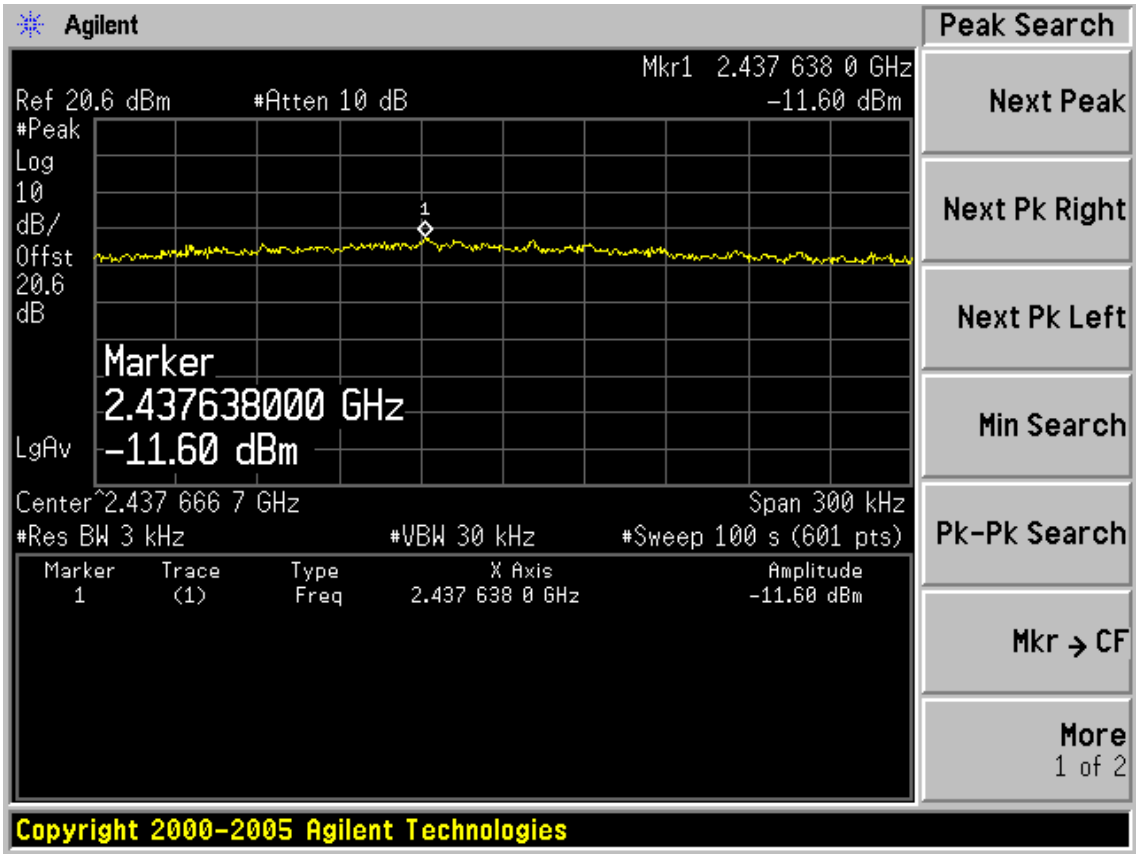
Test CH11: 2462MHz



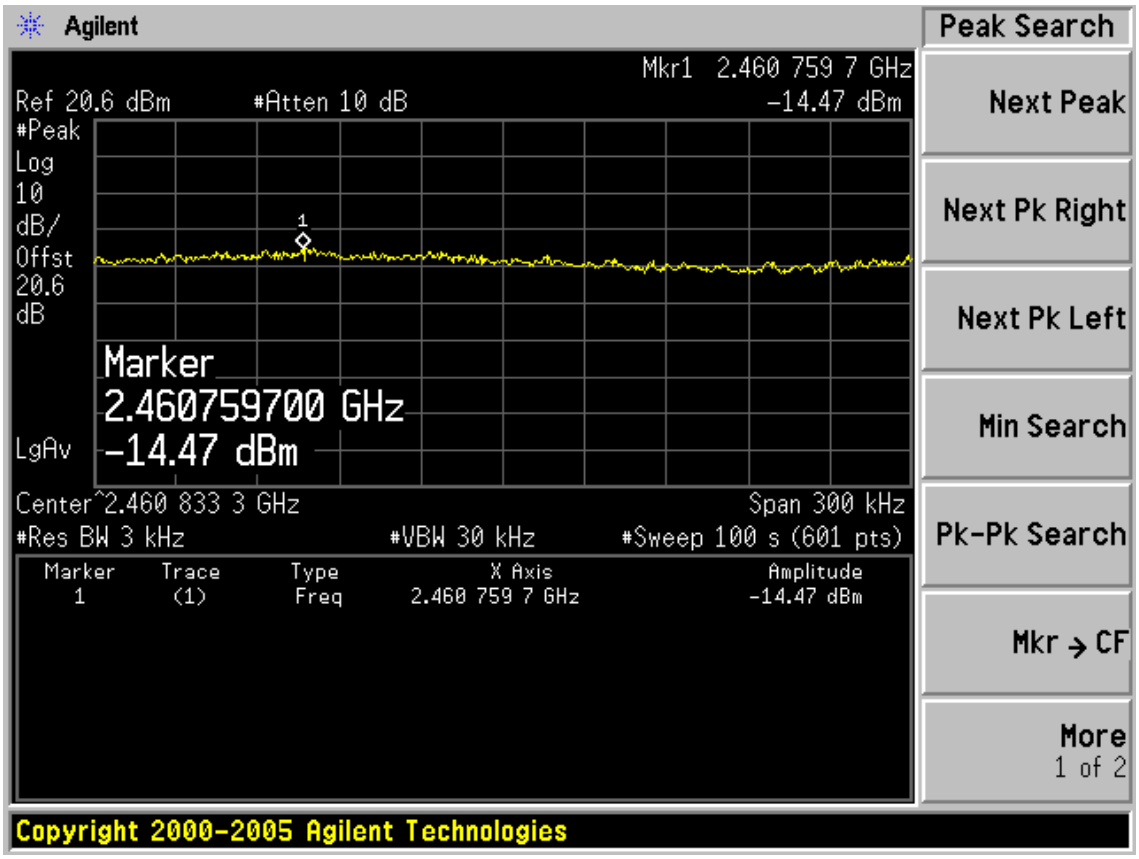
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



Test CH6: 2437MHz

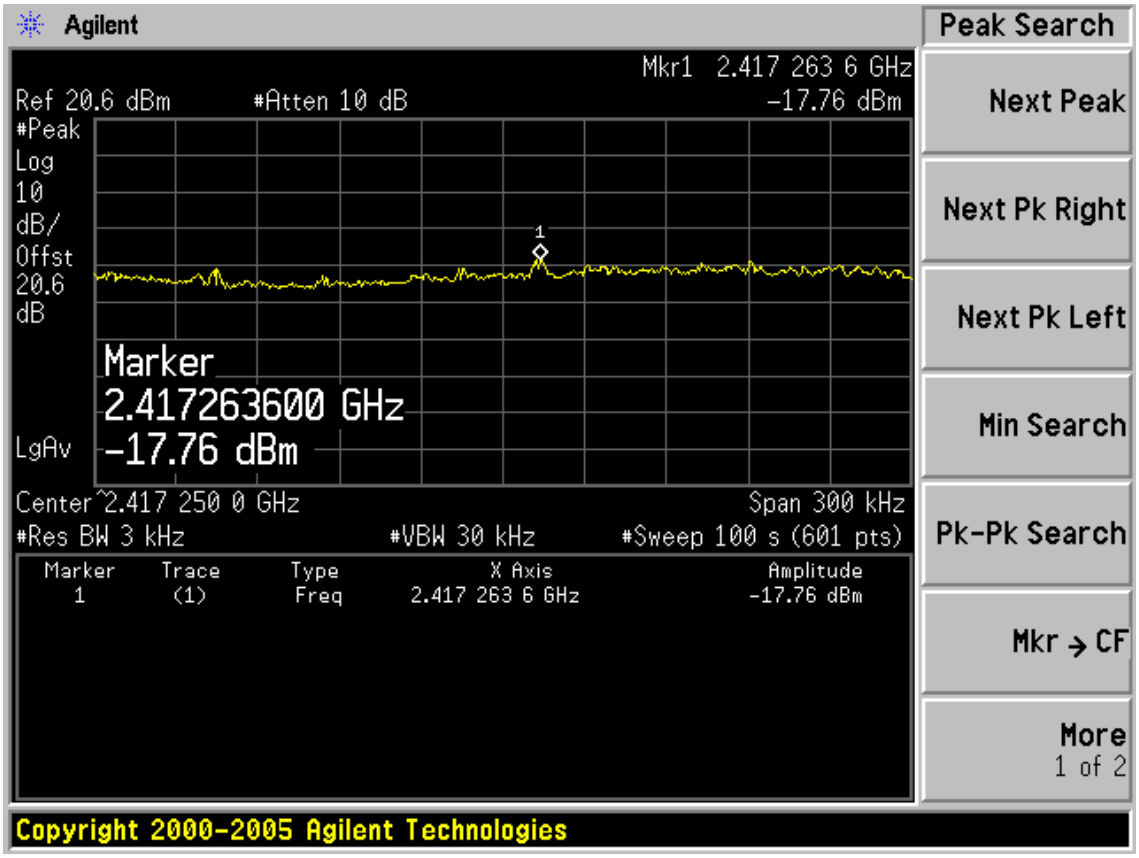


Test CH11: 2462MHz

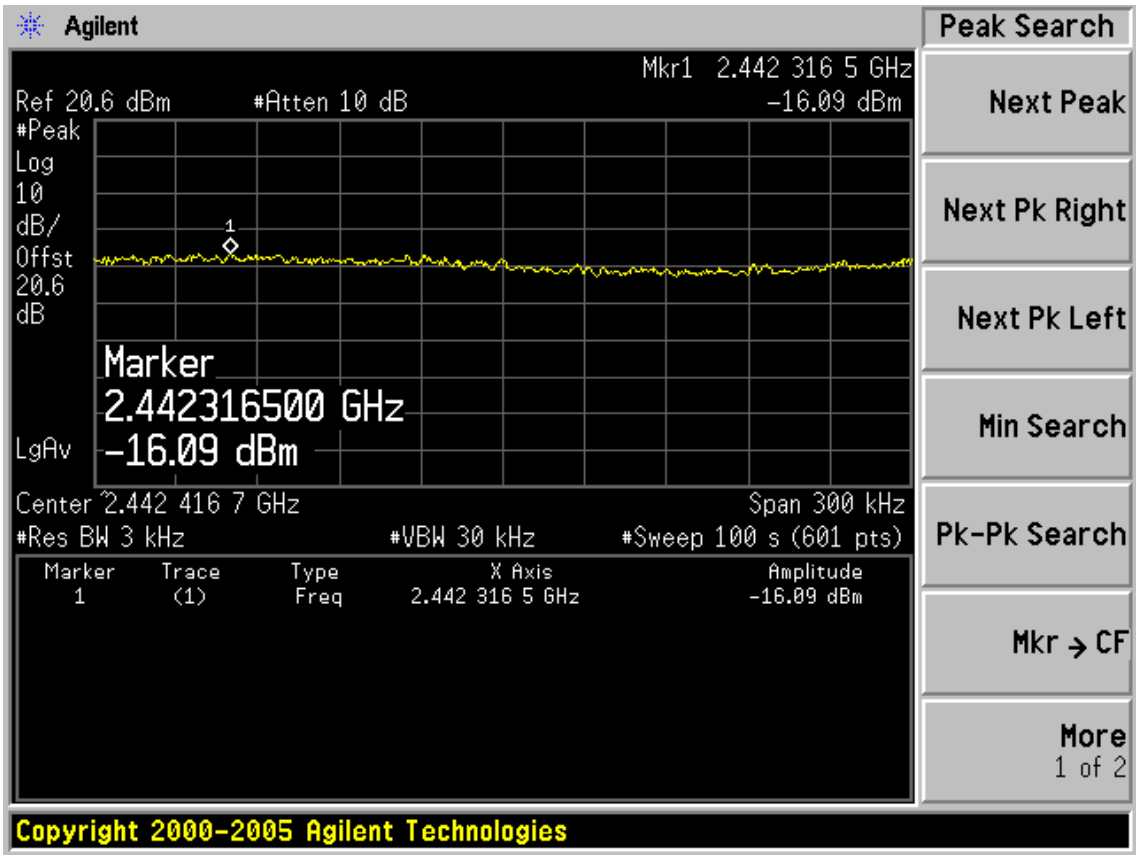


Test Mode: IEEE 802.11n HT40 TX

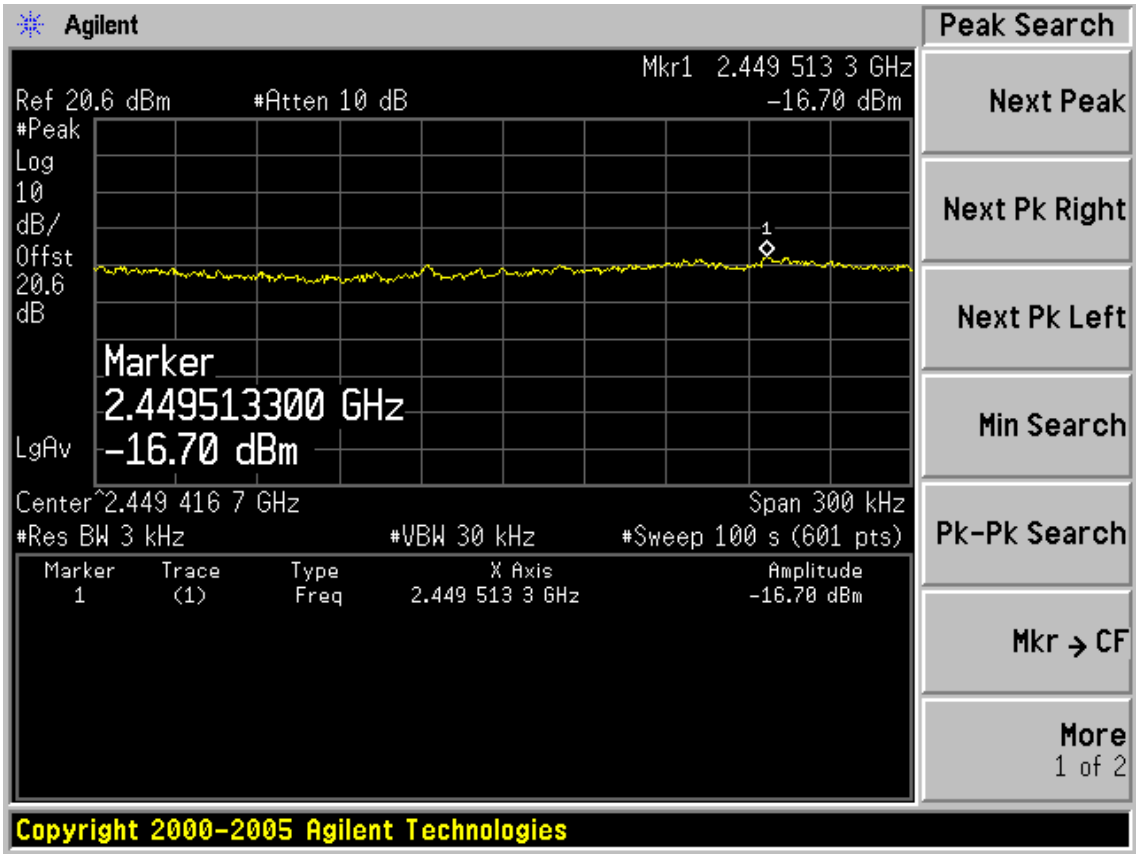
Test CH1: 2422MHz



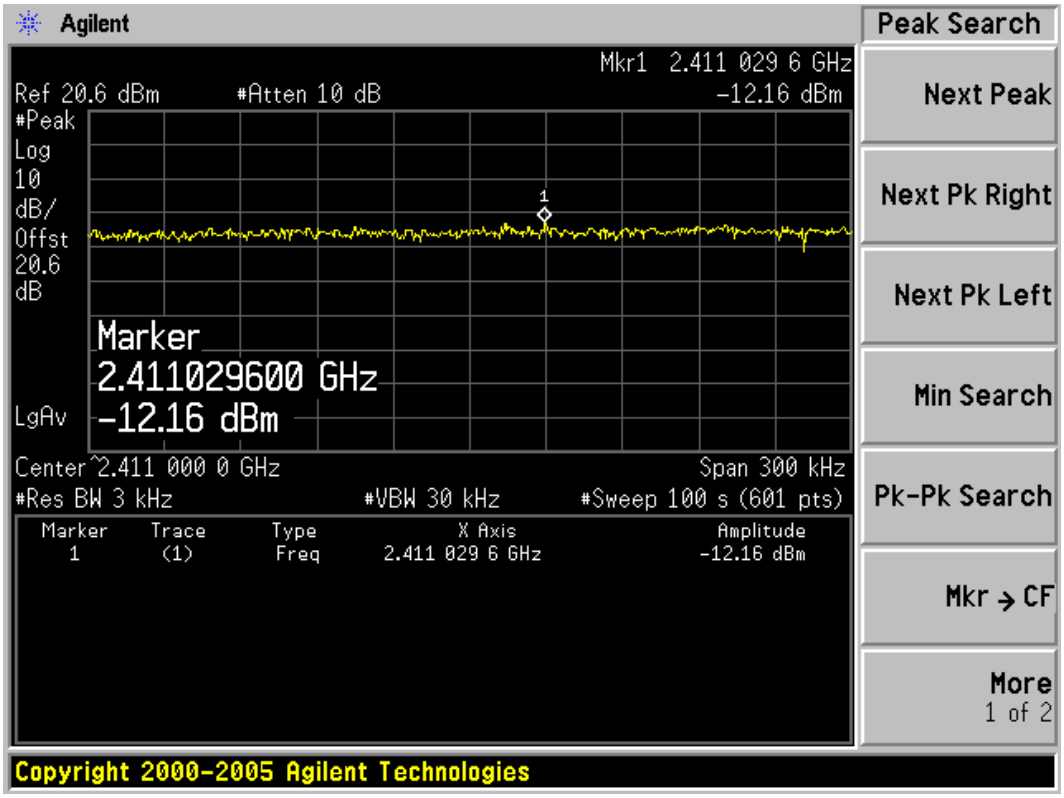
Test CH4: 2437MHz



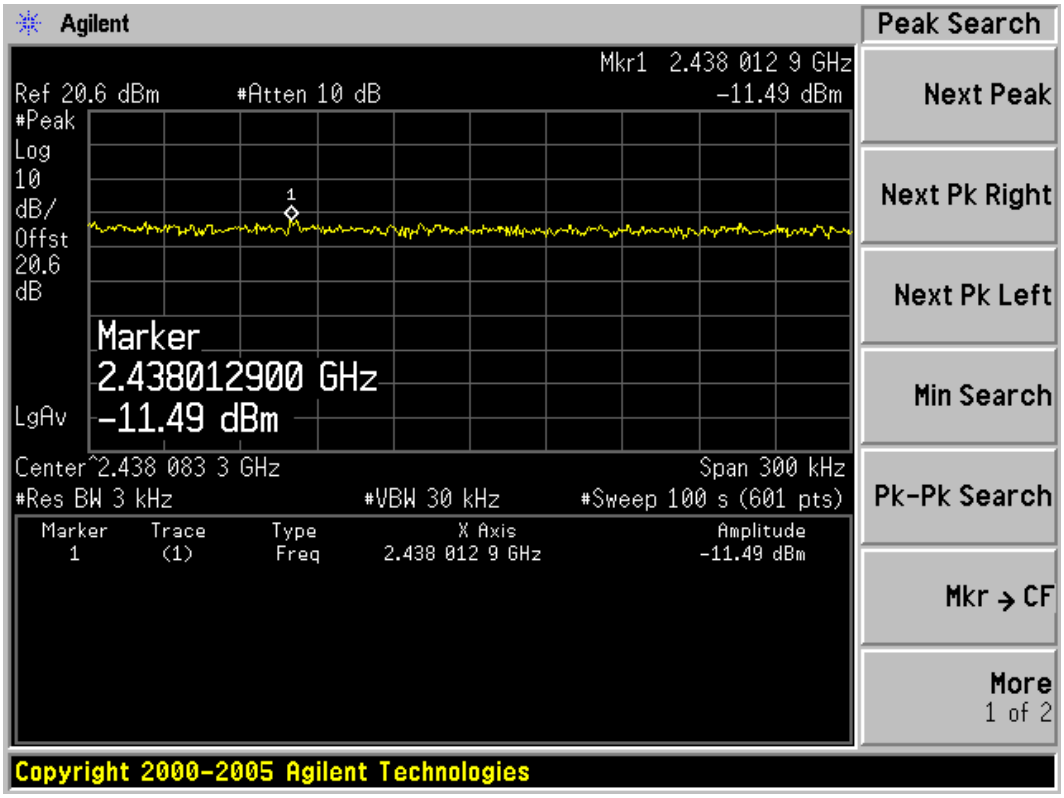
Test CH7: 2452MHz



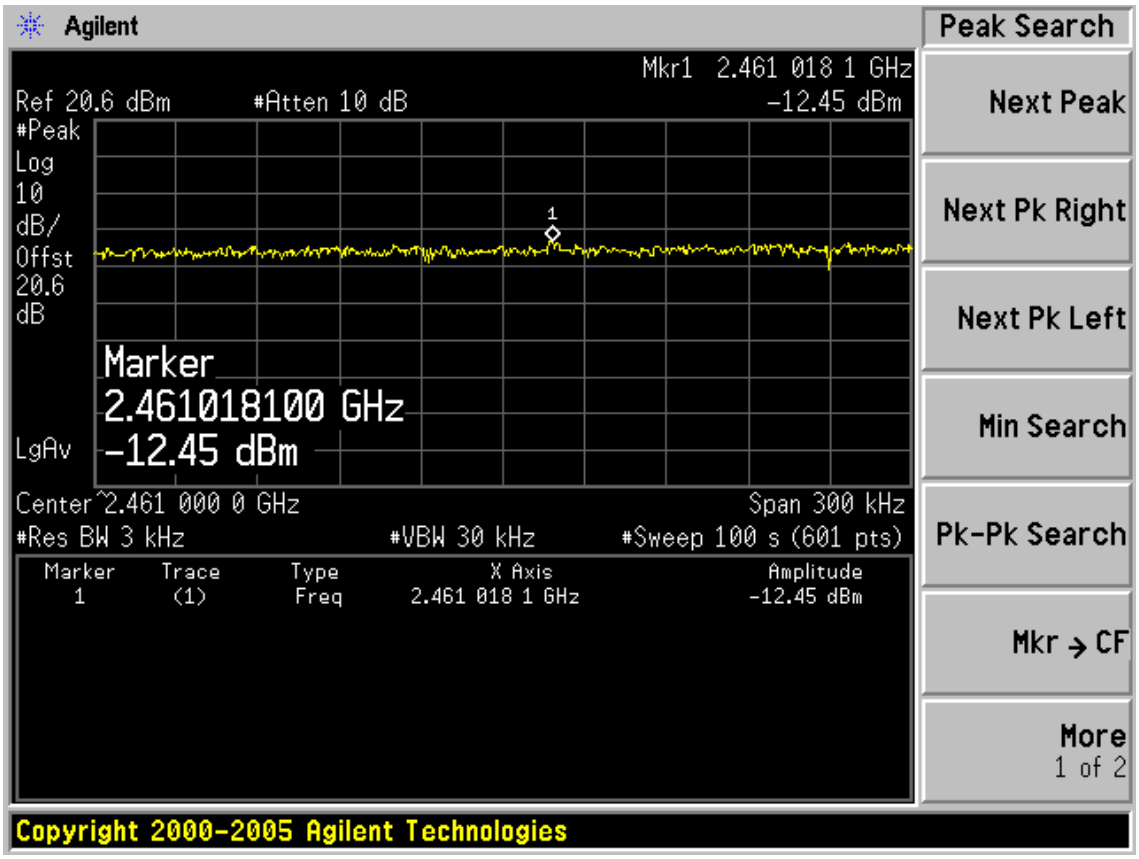
Chain 2:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



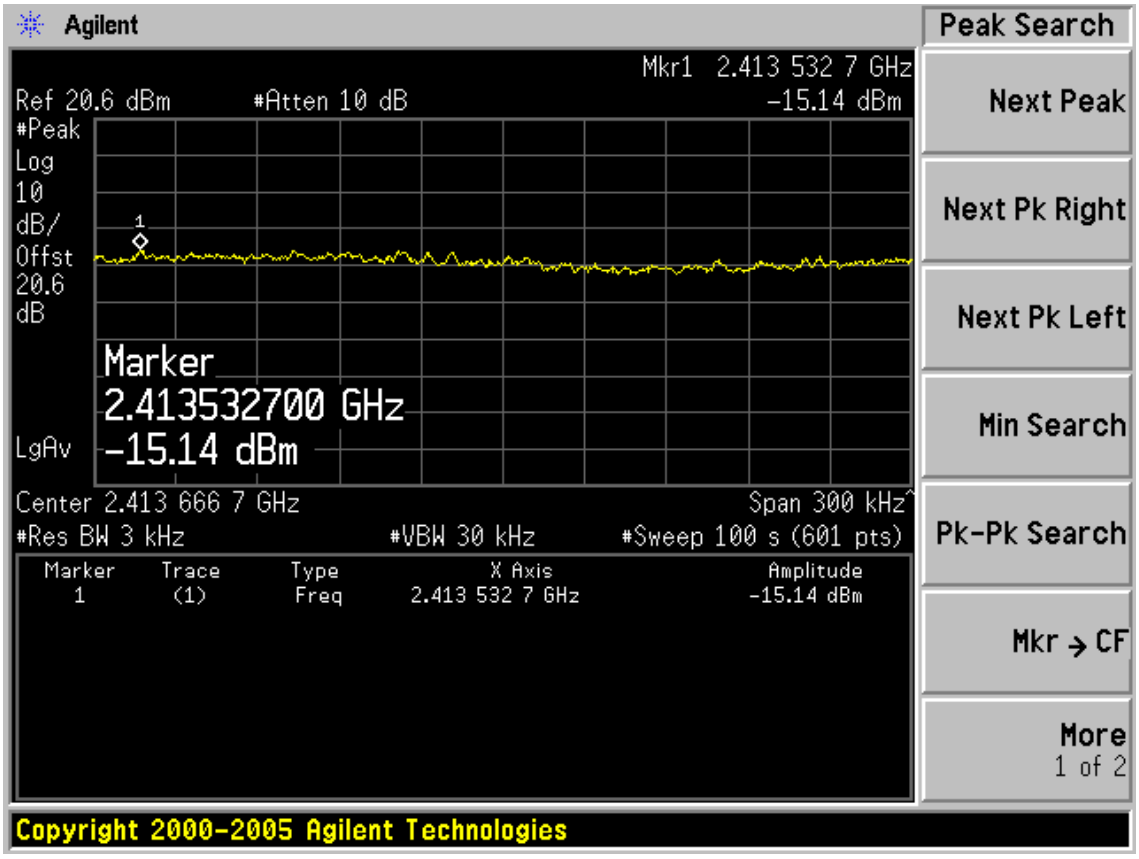
Test CH6: 2437MHz



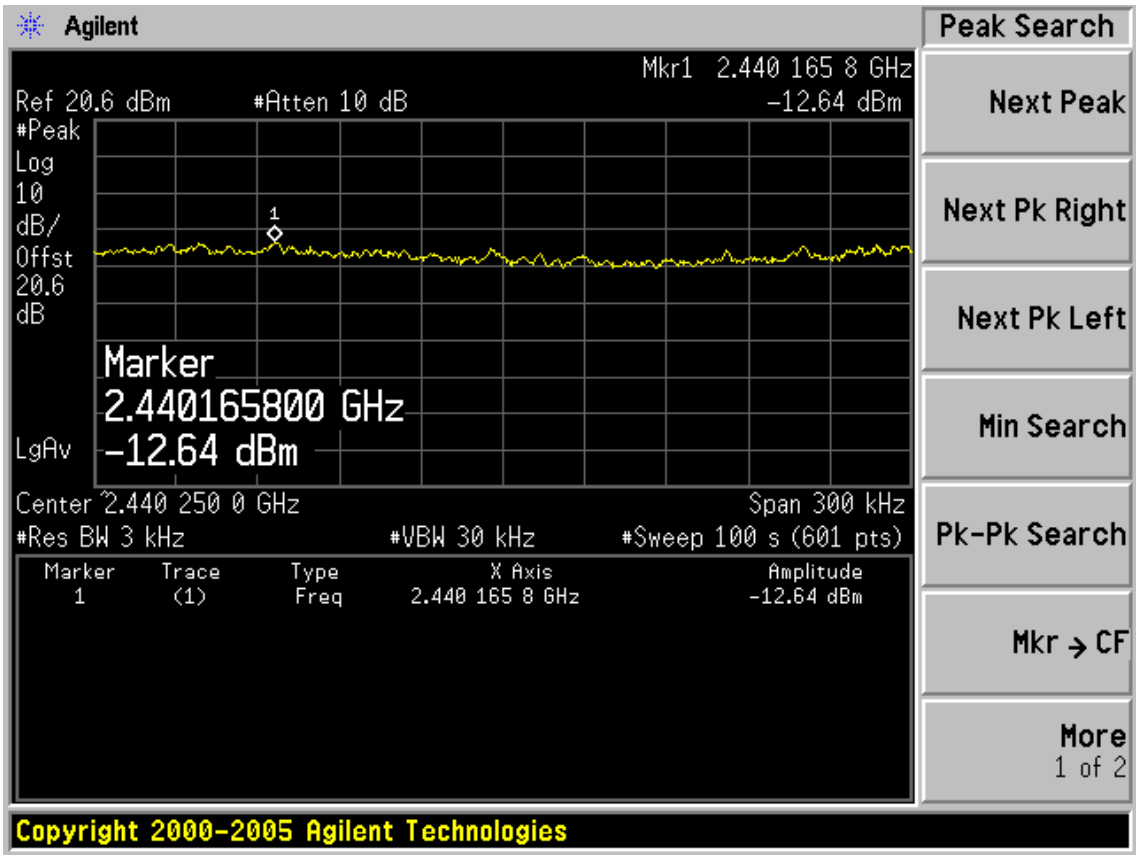
Test CH11: 2462MHz



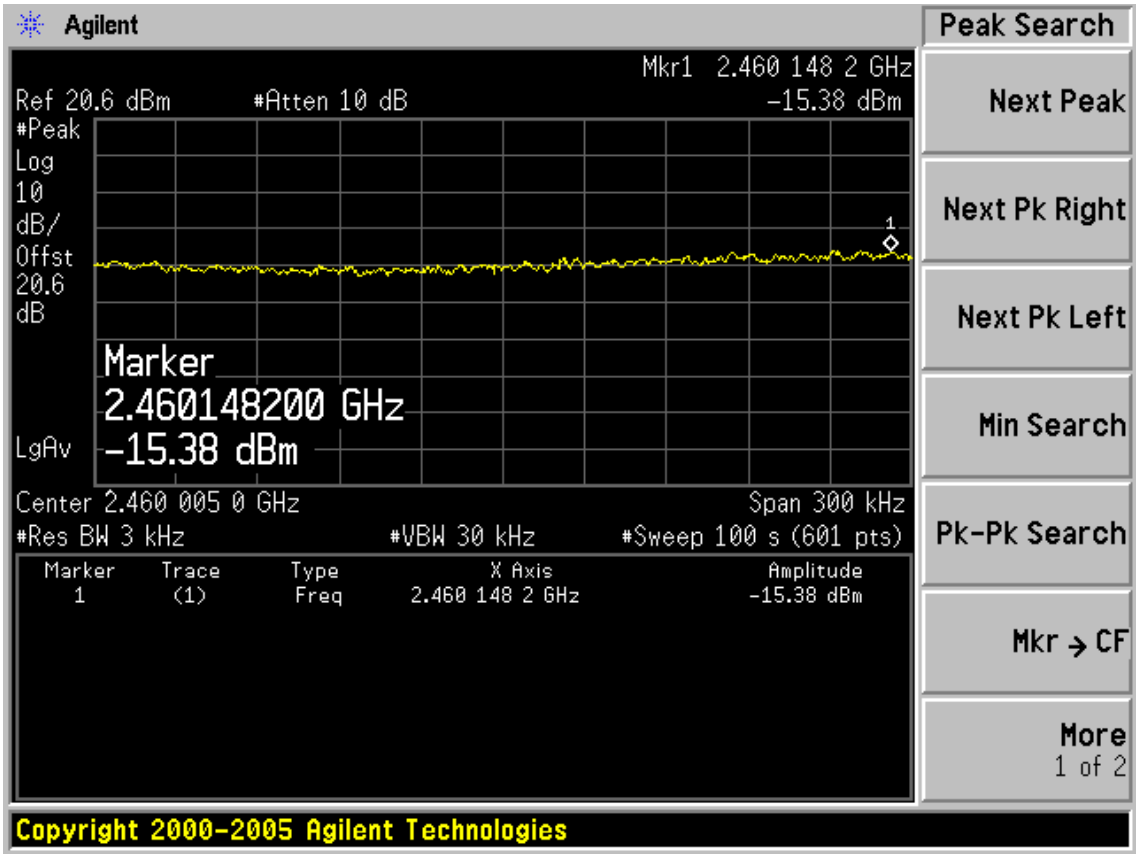
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



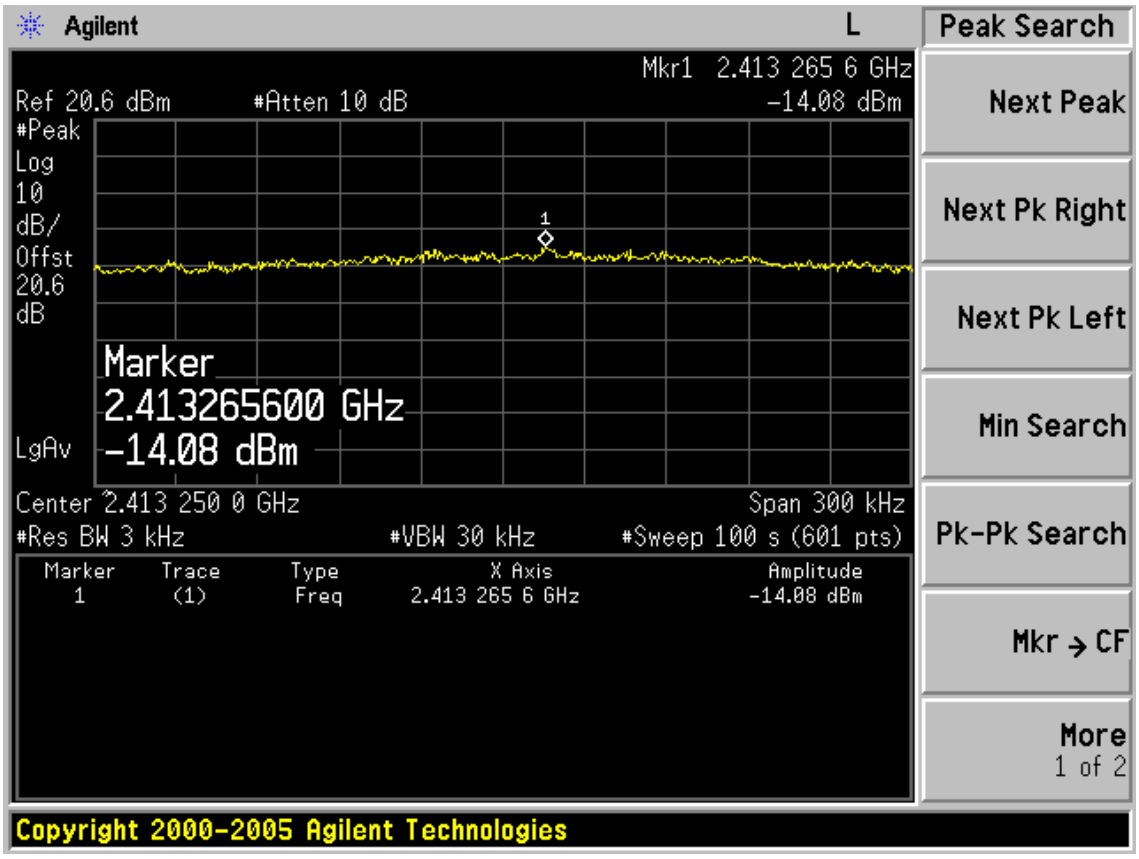
Test CH6: 2437MHz



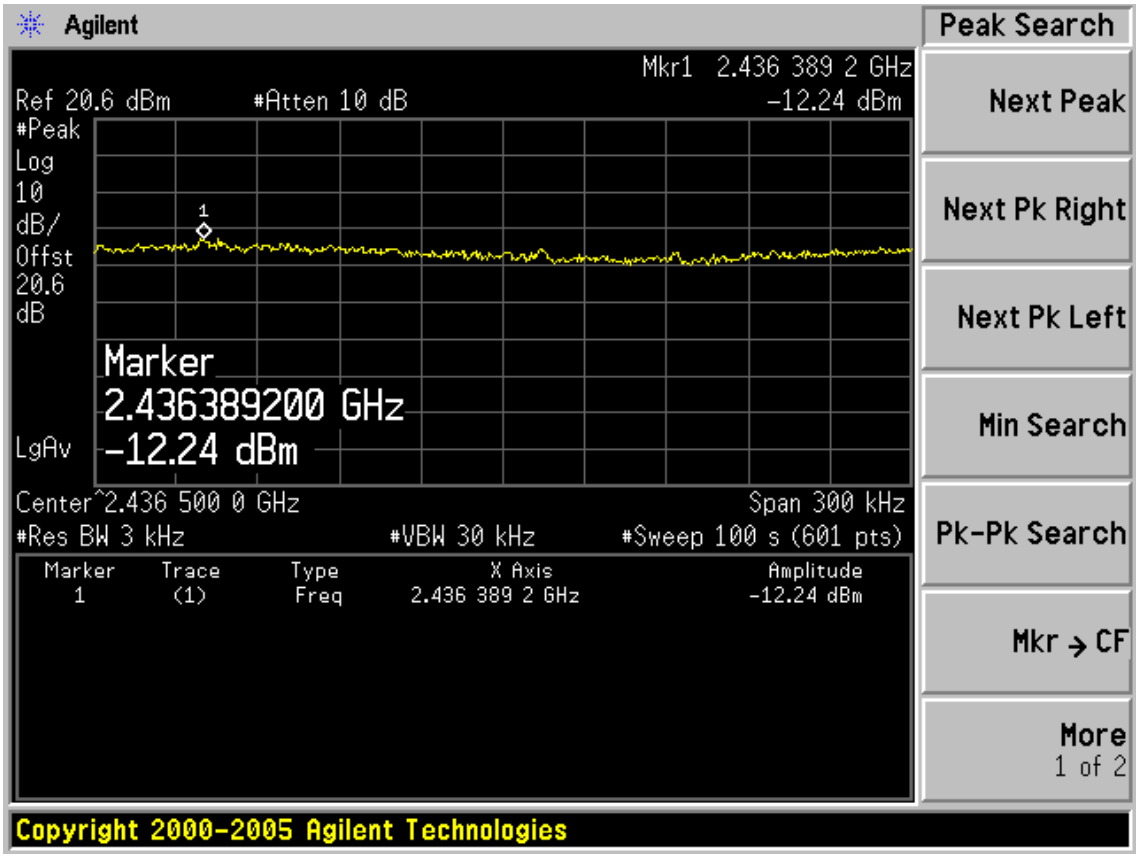
Test CH11: 2462MHz



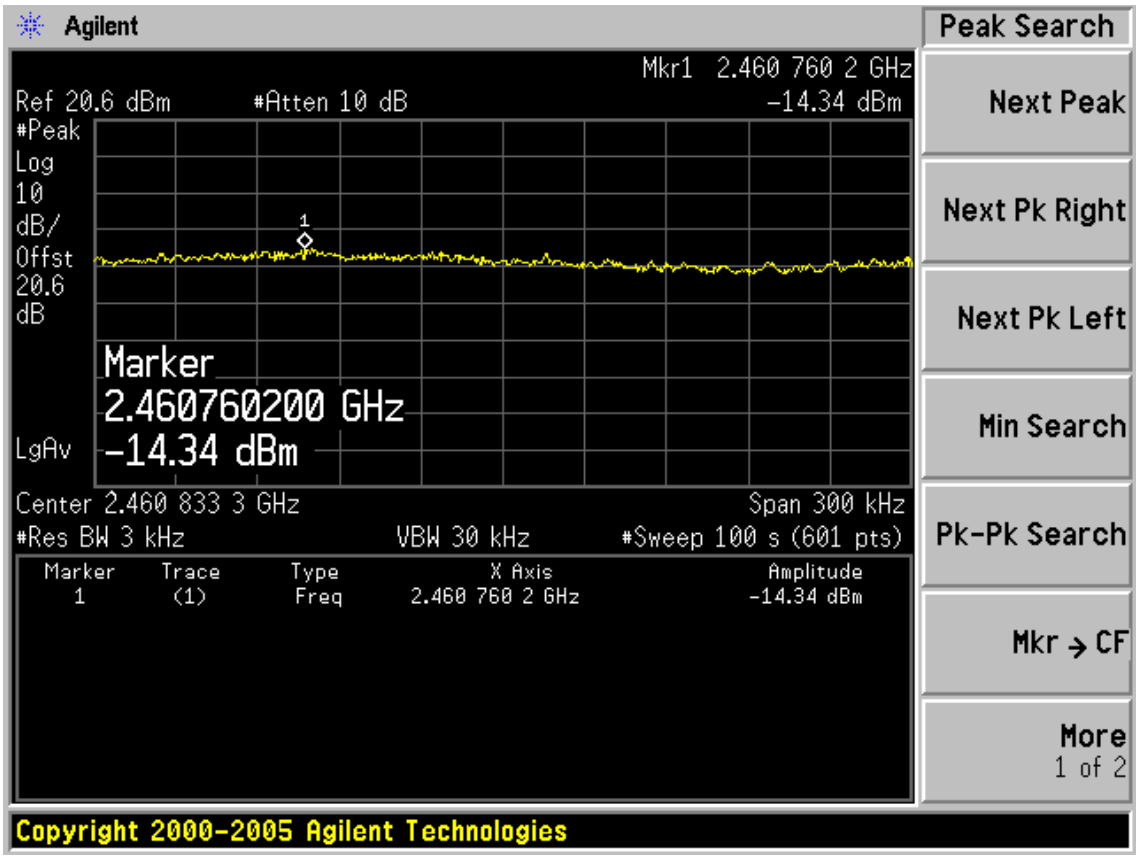
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



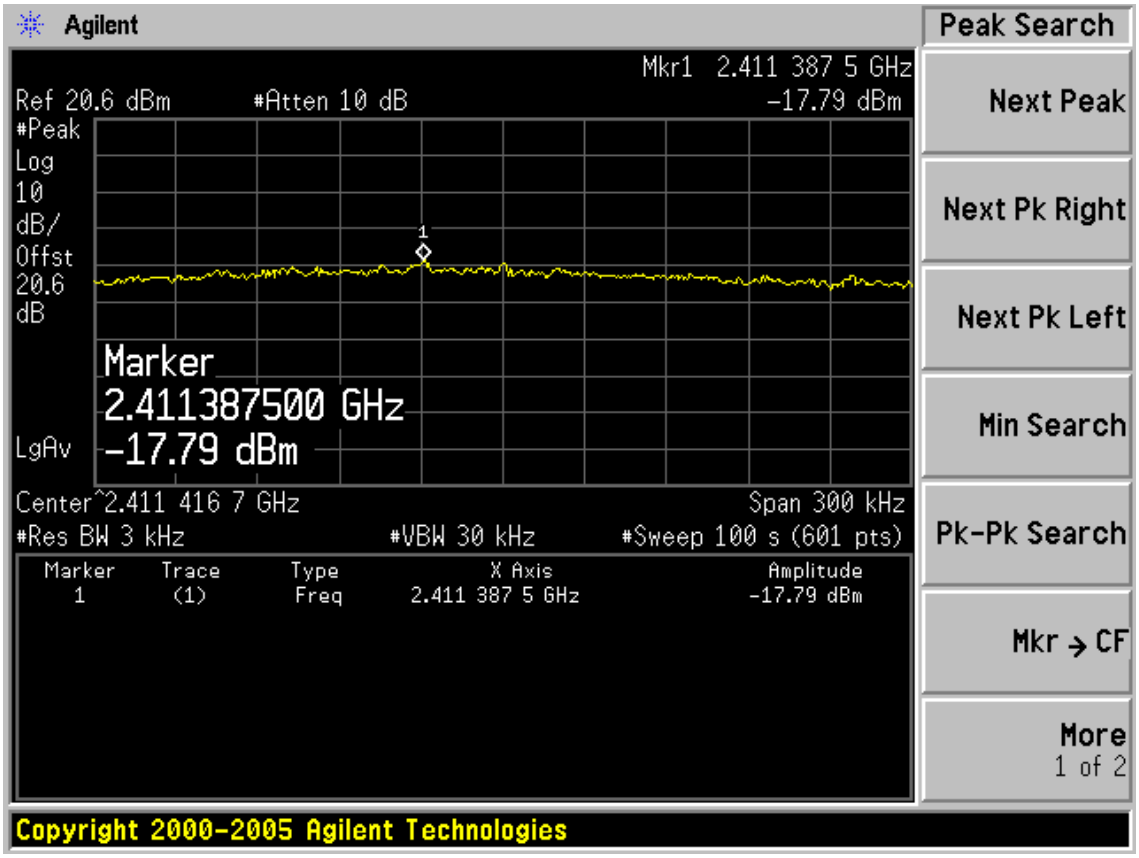
Test CH6: 2437MHz



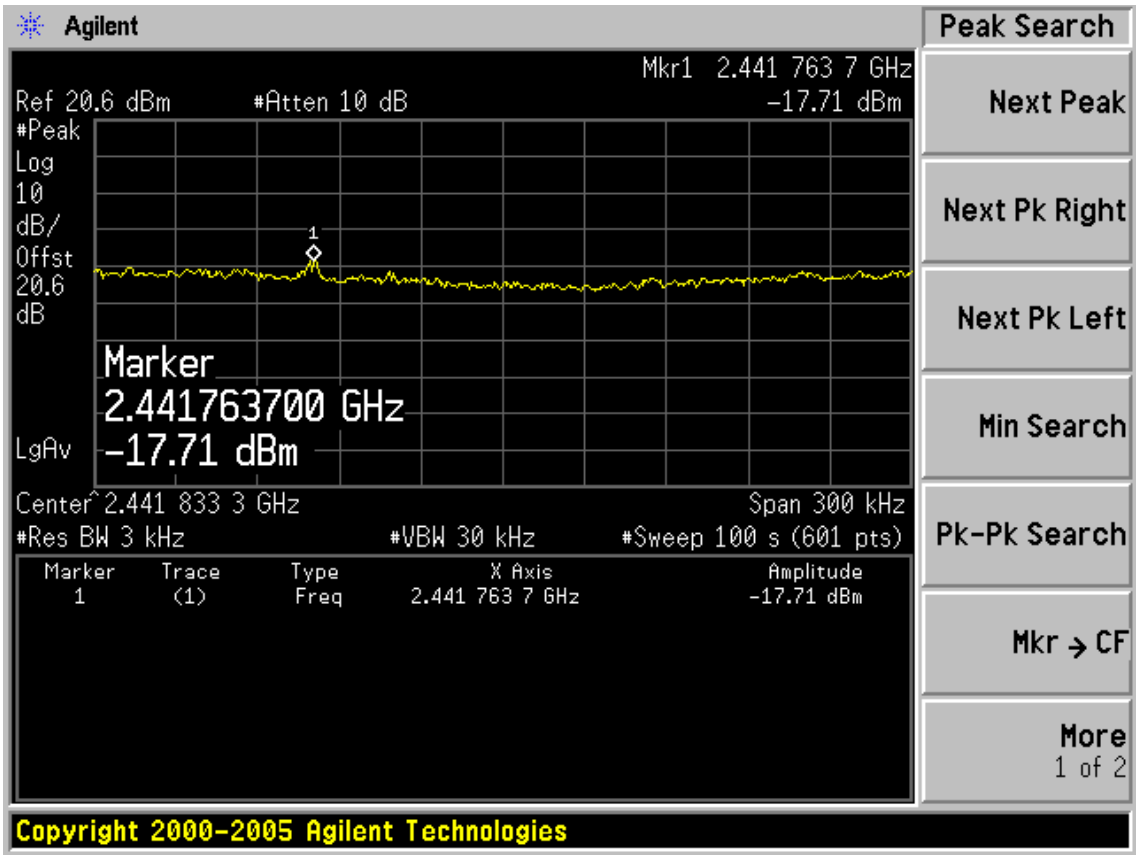
Test CH11: 2462MHz



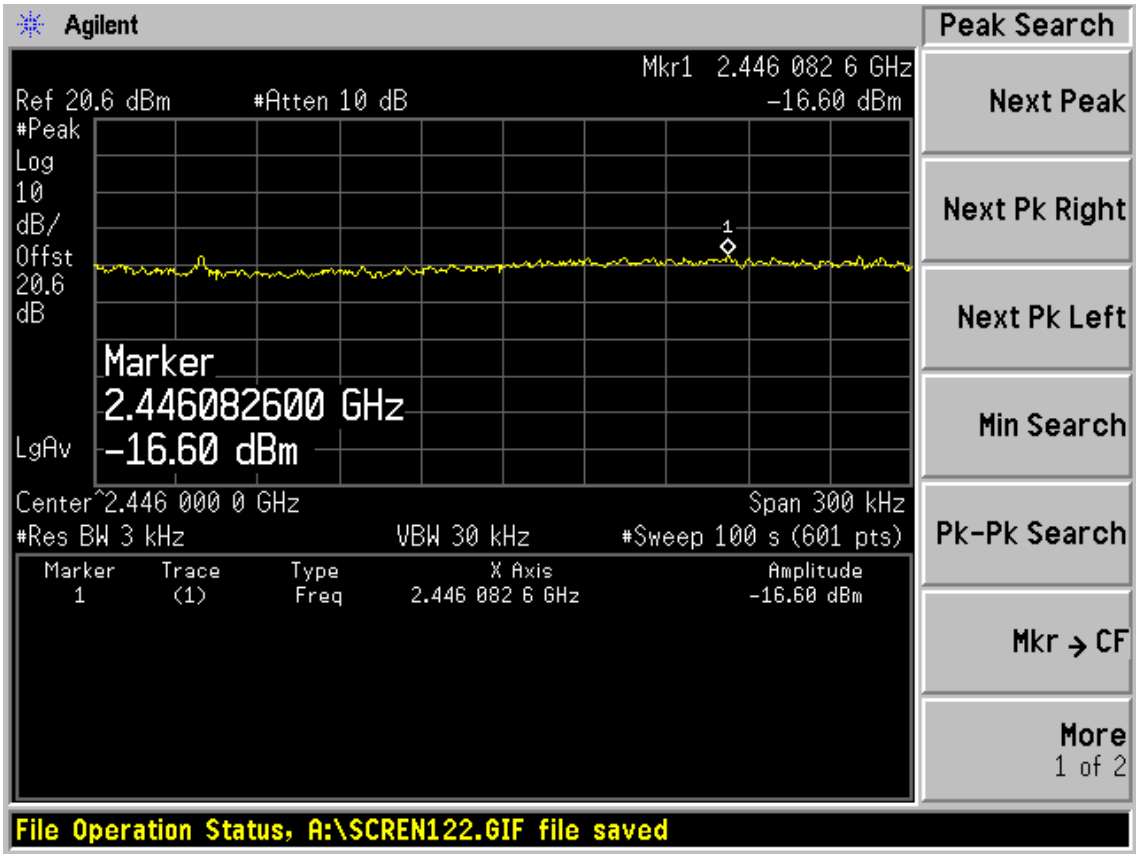
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



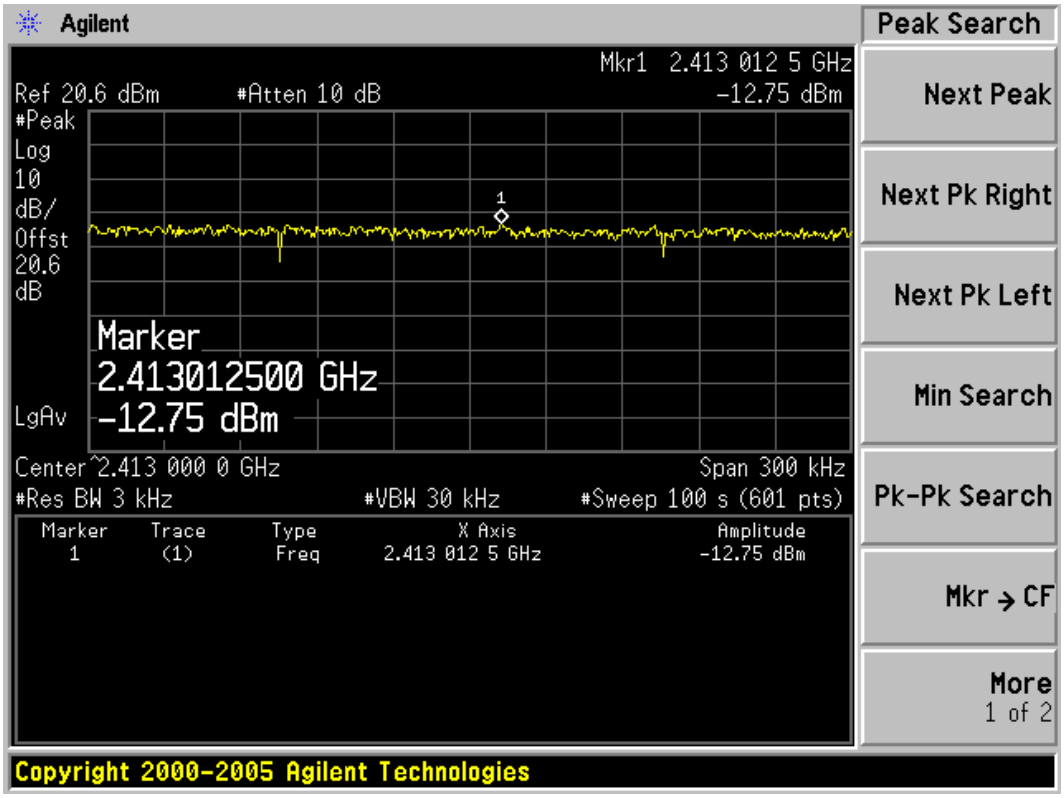
Test CH4: 2437MHz



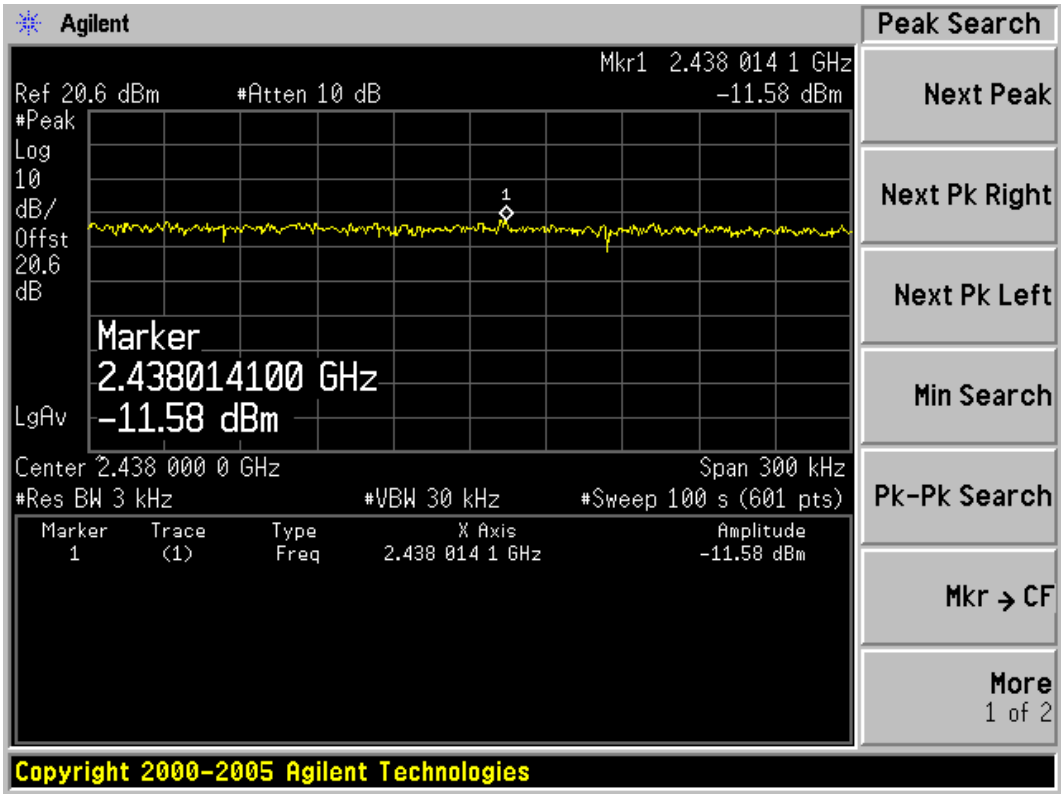
Test CH7: 2452MHz



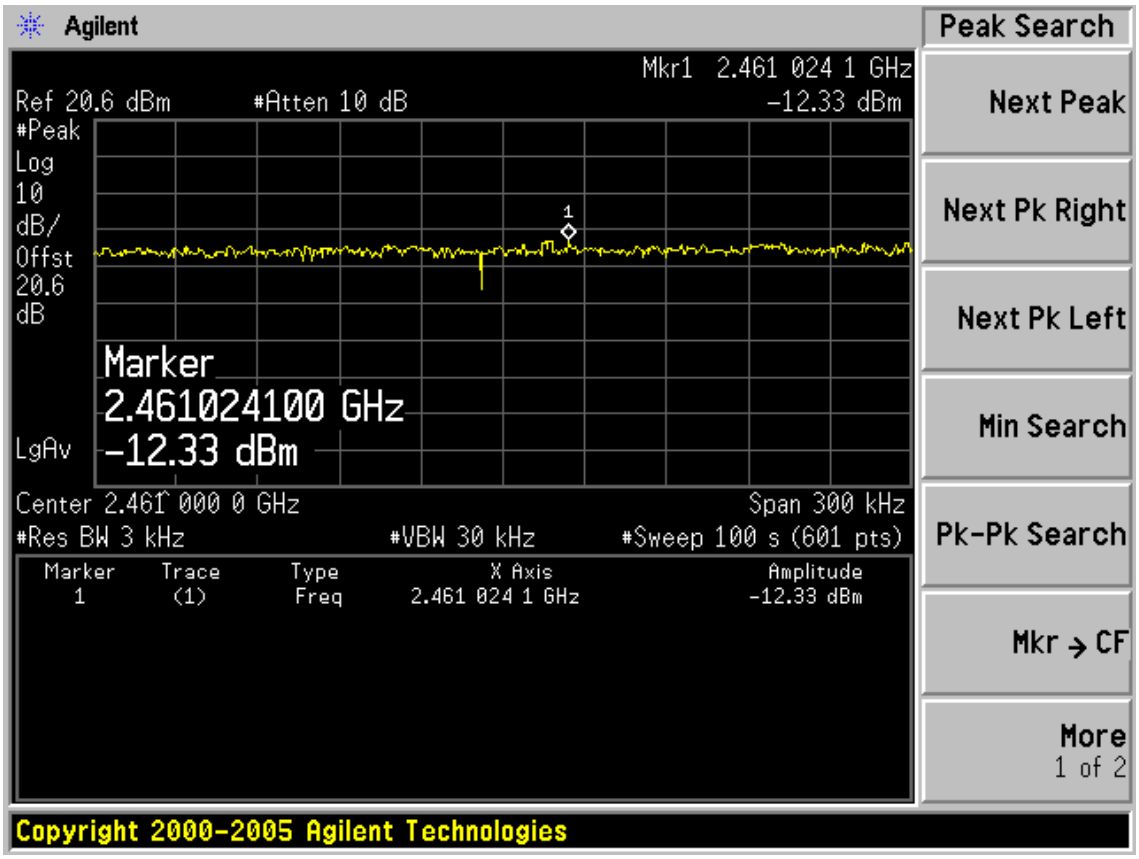
Chain 3:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



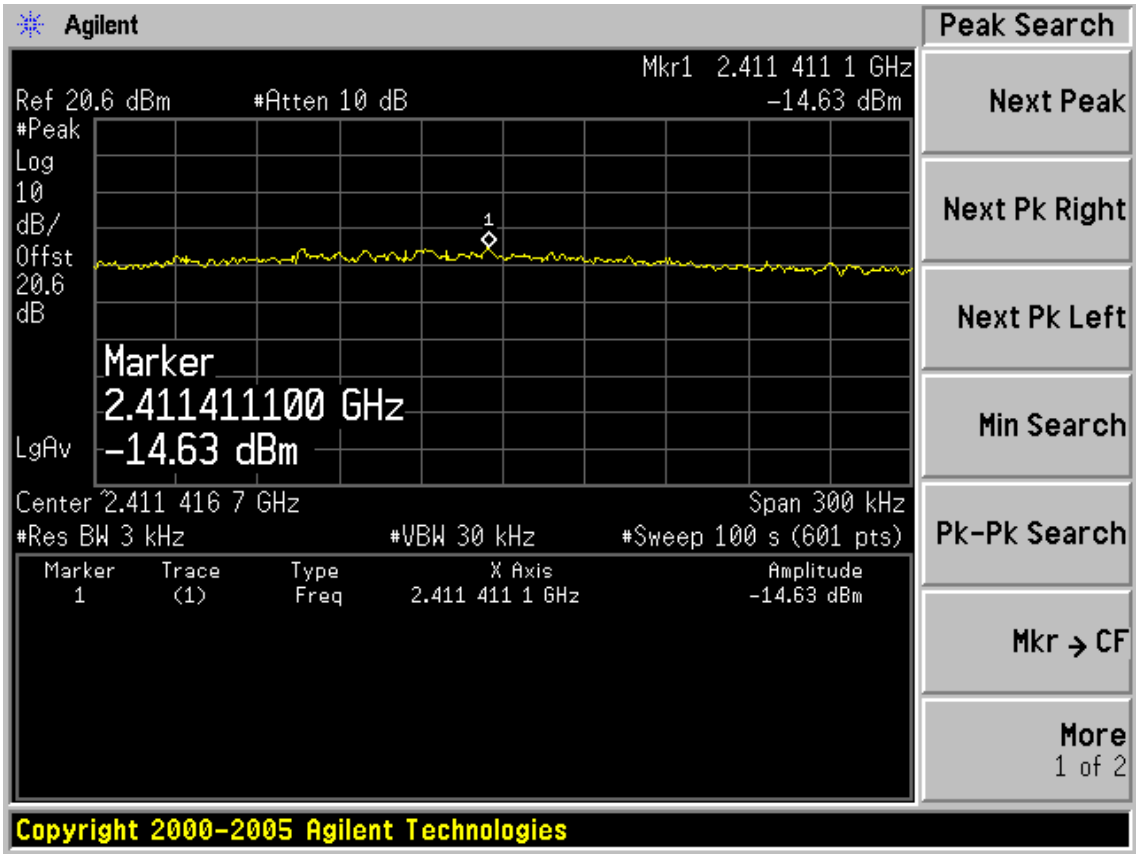
Test CH6: 2437MHz



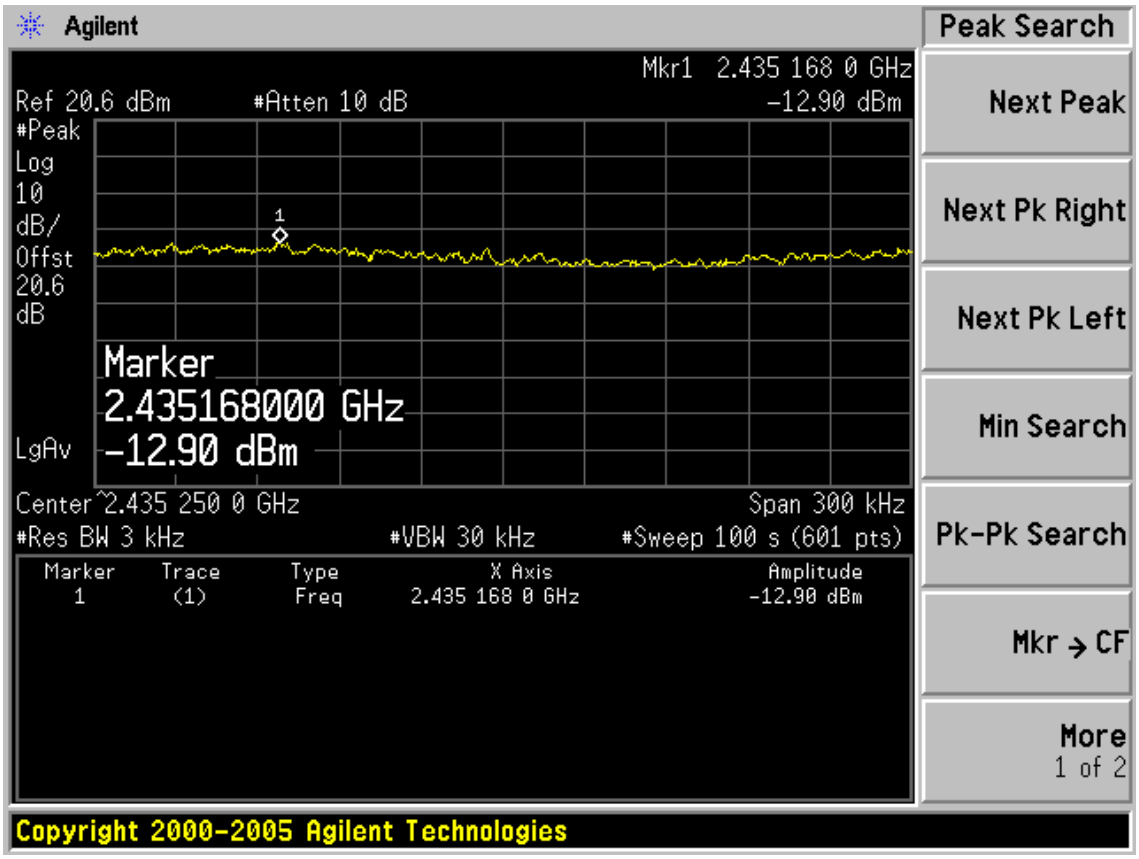
Test CH11: 2462MHz



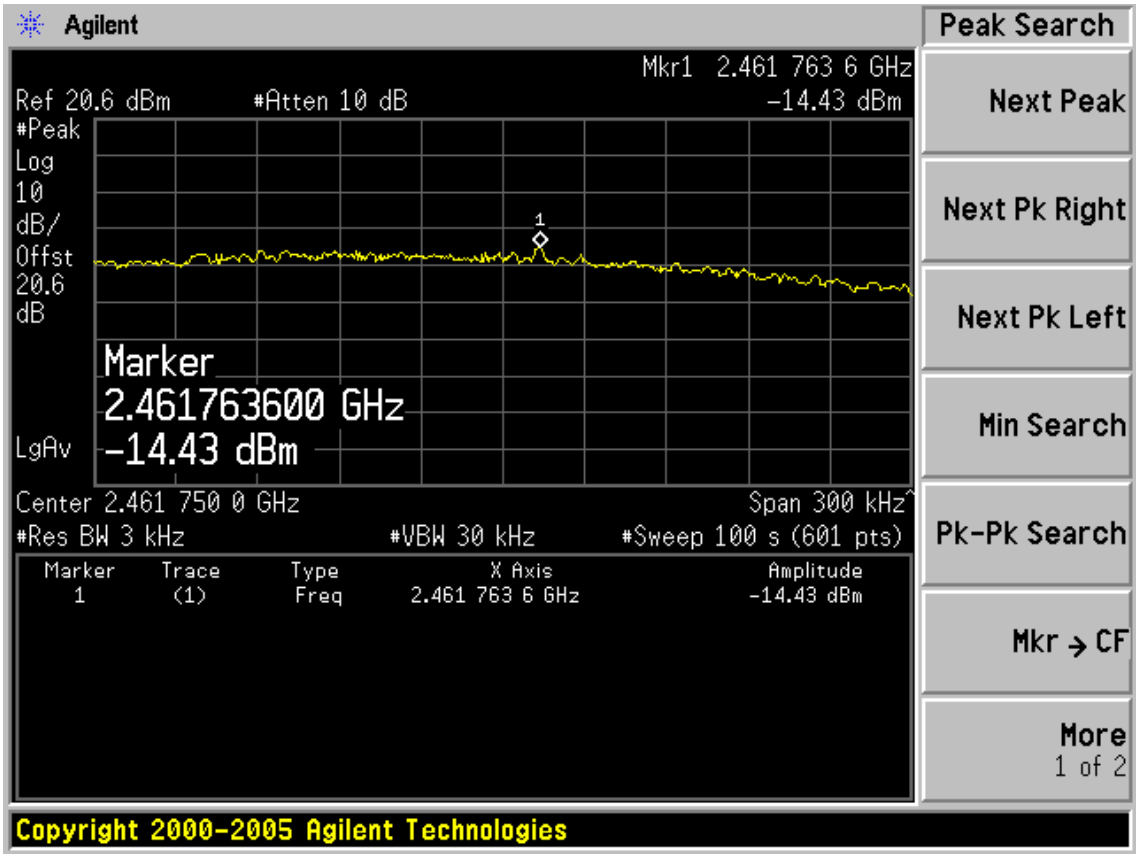
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



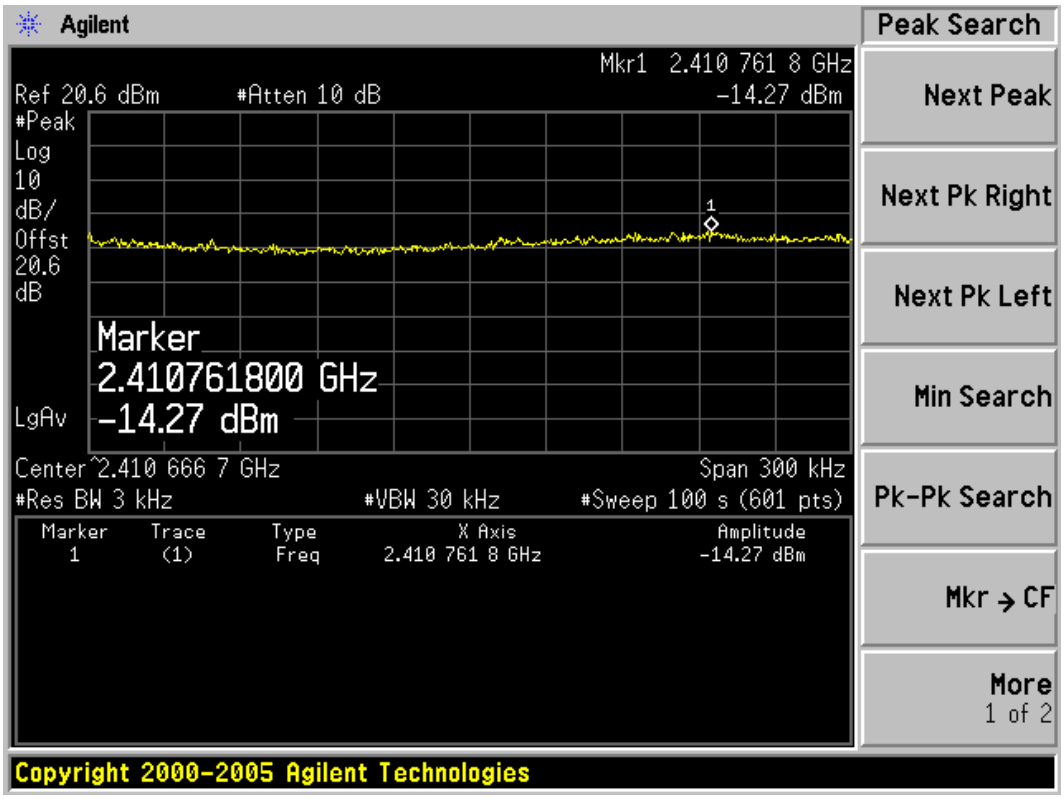
Test CH6: 2437MHz



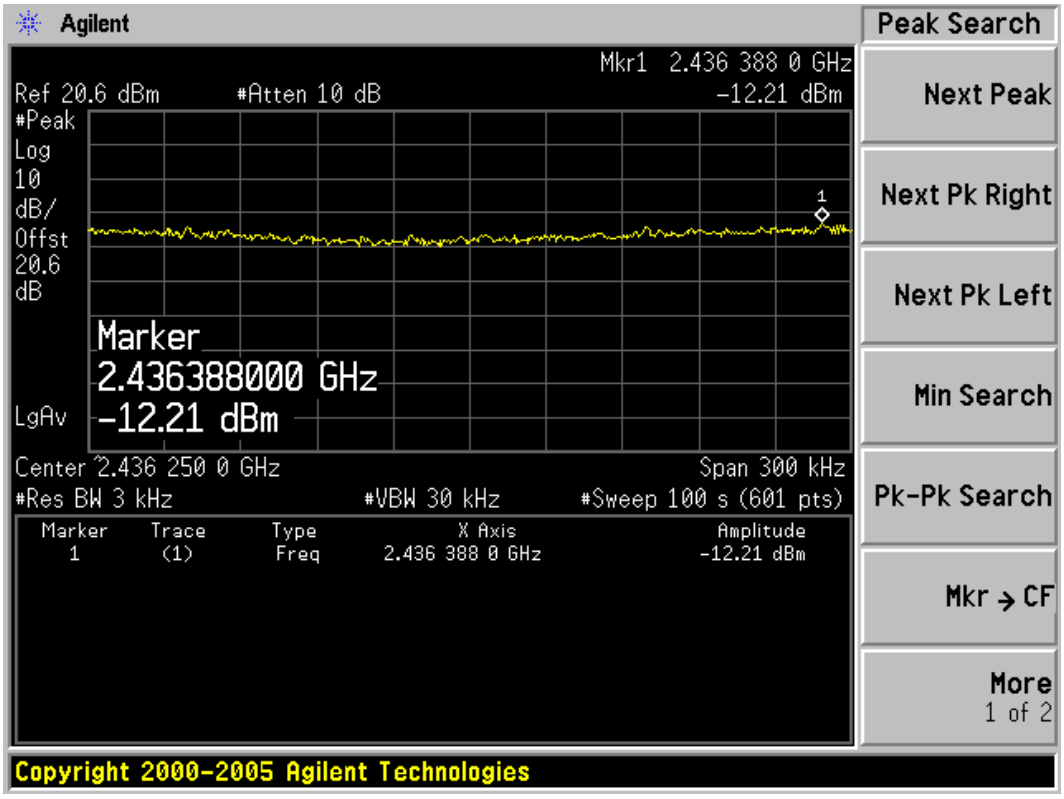
Test CH11: 2462MHz



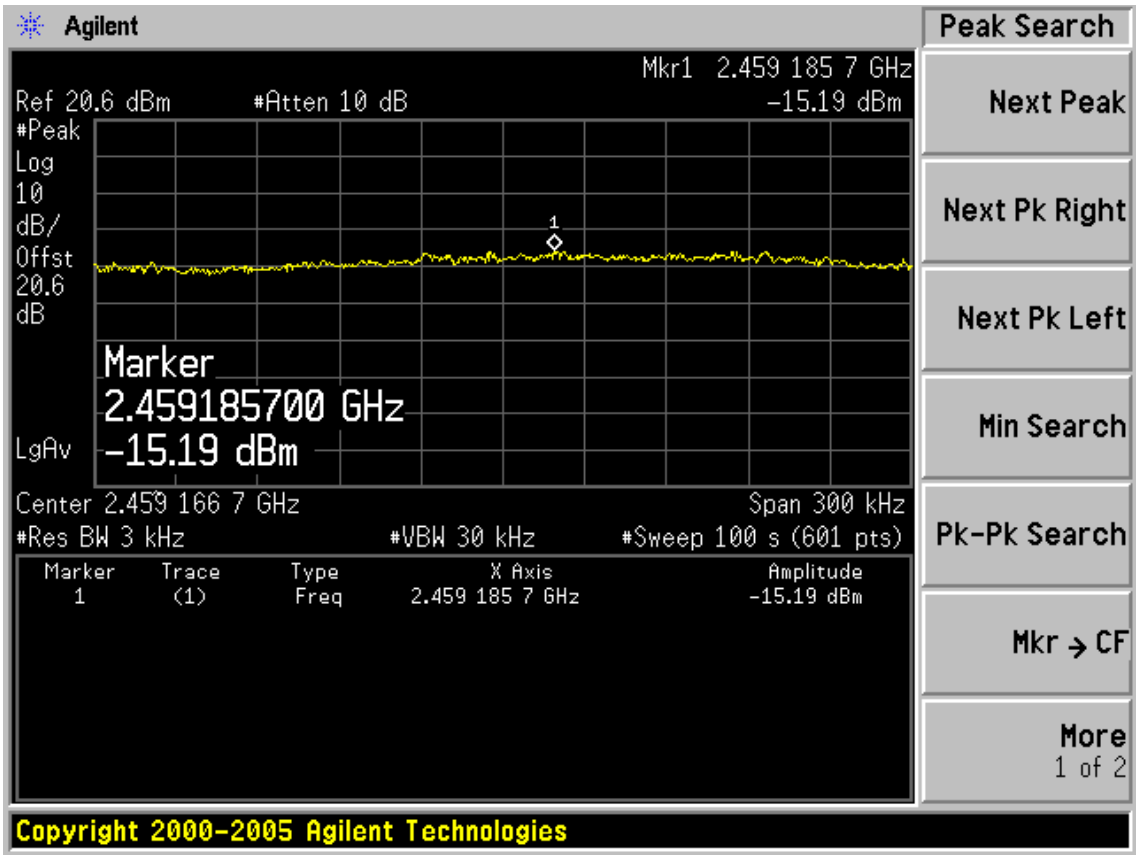
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



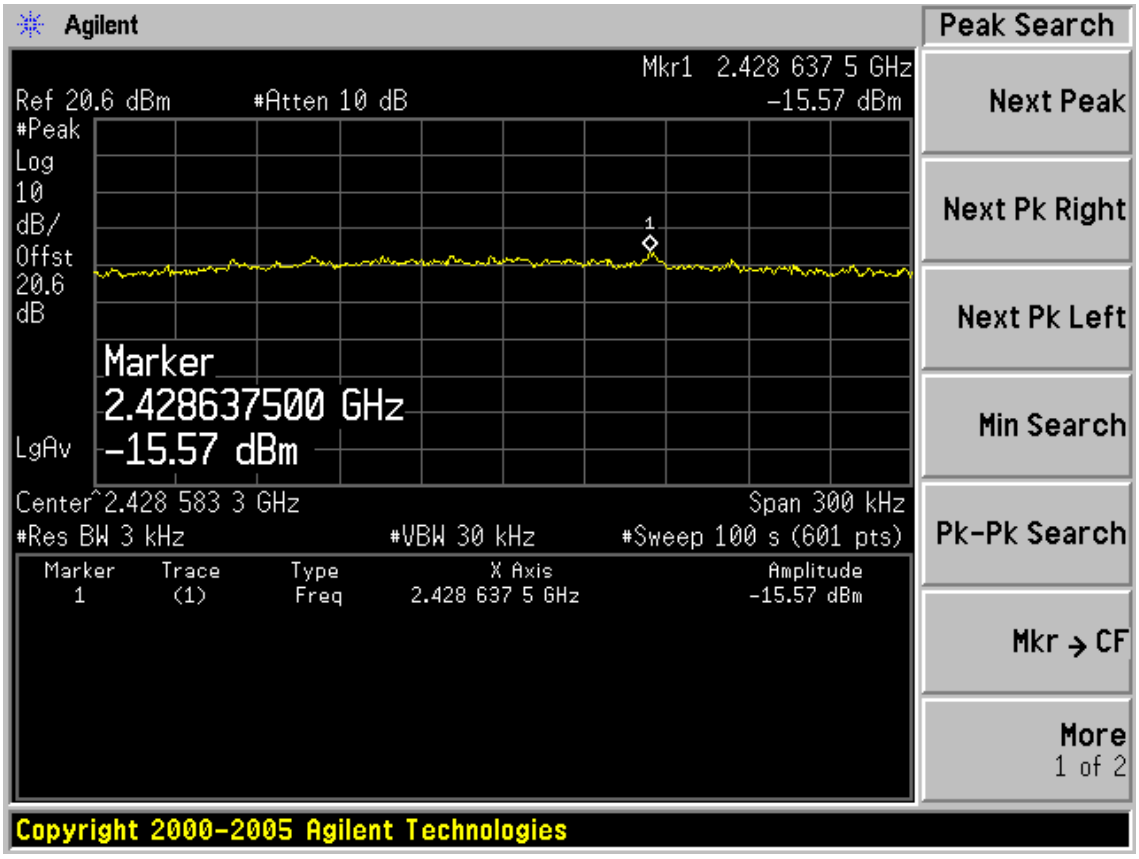
Test CH6: 2437MHz



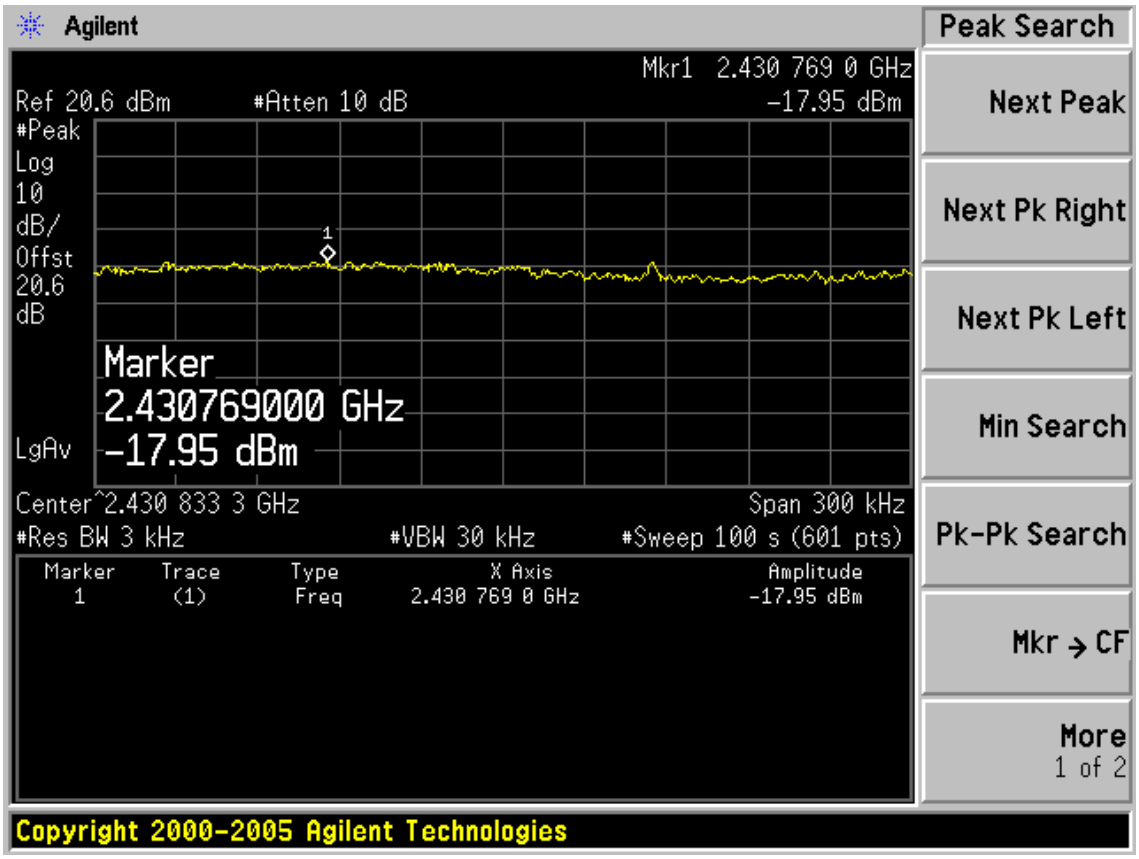
Test CH11: 2462MHz



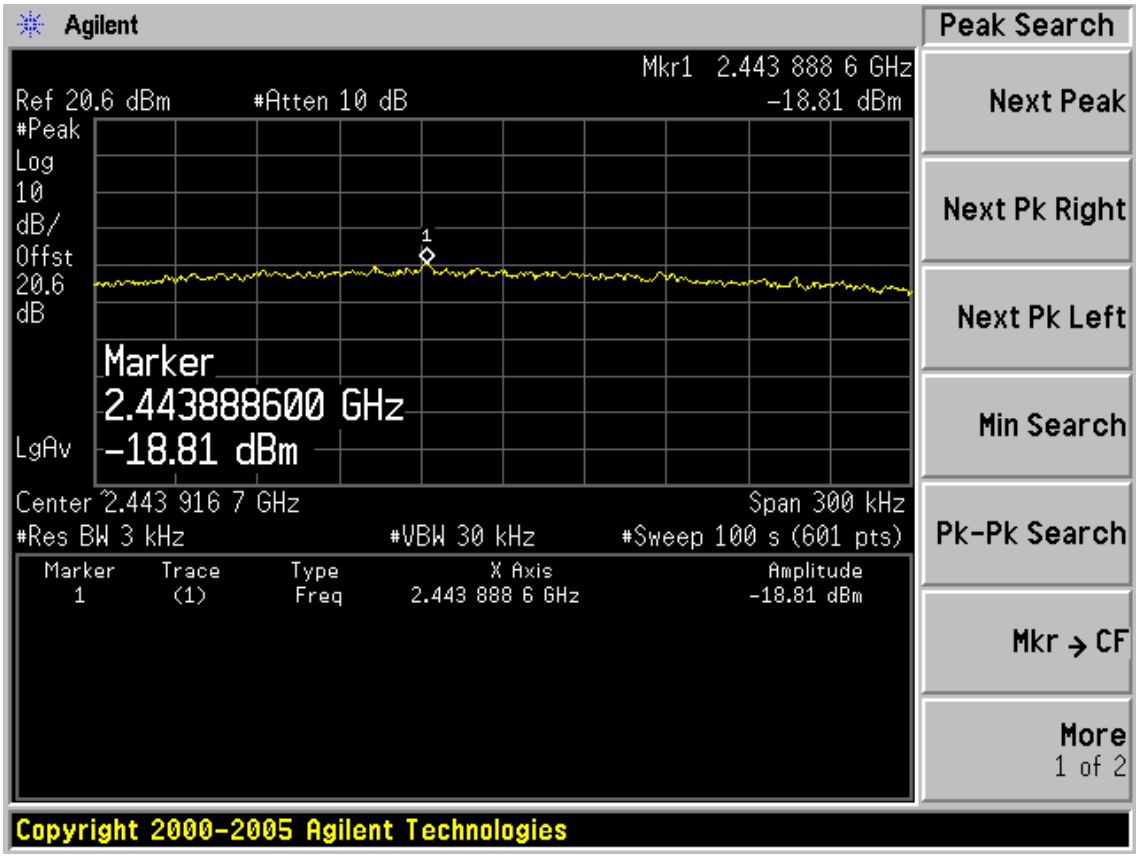
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz



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 MIMO 3X3 dipole antennas and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the antenna is 3dBi.

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

11.2.2, Estimation Result

Mode	CH	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	Antenna Gain (dBi)	Antenna Gain(linear)	MPE (mW/ cm2)
11b	1	2412	17.36	54.45	3	2.00	0.0216
	6	2437	18.38	68.87	3	2.00	0.0273
	11	2462	17.61	57.68	3	2.00	0.0229
11g	1	2412	20.36	108.64	3	2.00	0.0431
	6	2437	22.41	174.18	3	2.00	0.0692
	11	2462	20.56	113.76	3	2.00	0.0452
11n HT20	1	2412	24.84	304.79	3	2.00	0.1210
	6	2437	26.81	479.73	3	2.00	0.1905
	11	2462	25.28	337.29	3	2.00	0.1340
11n HT40	1	2422	18.89	77.45	3	2.00	0.0239
	4	2437	24.02	252.35	3	2.00	0.0959
	7	2452	18.99	79.25	3	2.00	0.0220

Note: The estimation distance is 20cm

12. DEVIATION TO TEST SPECIFICATIONS

[NONE]