Appendix for Test report

Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

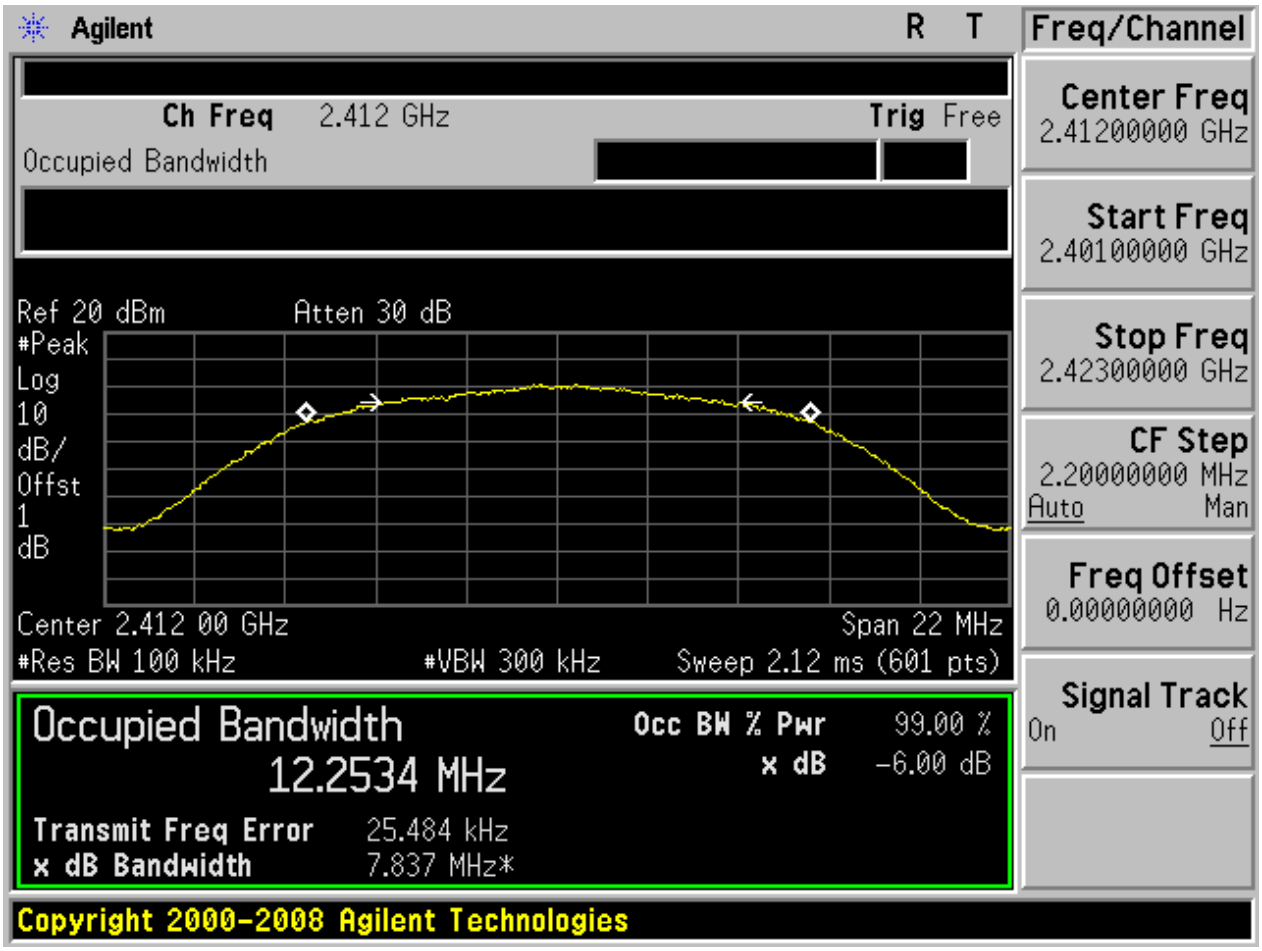
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

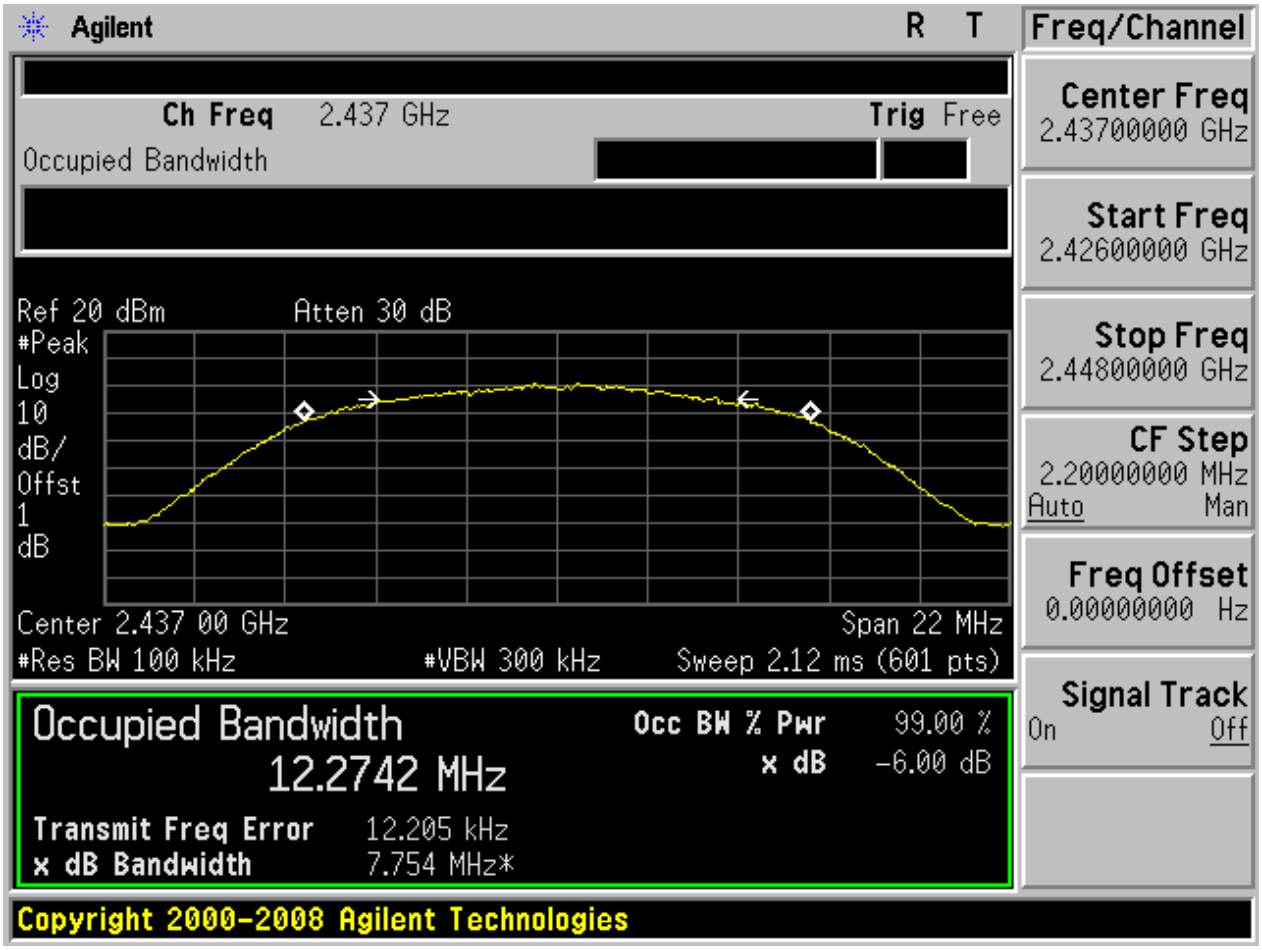
Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11B	L	2412	Ant 1	7.84	pass
11B	M	2437	Ant 1	7.75	pass
11B	H	2462	Ant 1	7.94	pass
11G	L	2412	Ant 1	16.56	pass
11G	M	2437	Ant 1	16.57	pass
11G	H	2462	Ant 1	16.55	pass
11N20	L	2412	Ant 1	17.78	pass
11N20	M	2437	Ant 1	17.75	pass
11N20	H	2462	Ant 1	17.73	pass
11N40	L	2422	Ant 1	36.53	pass
11N40	M	2437	Ant 1	36.54	pass
11N40	H	2452	Ant 1	36.50	pass

Part II - Test Plots

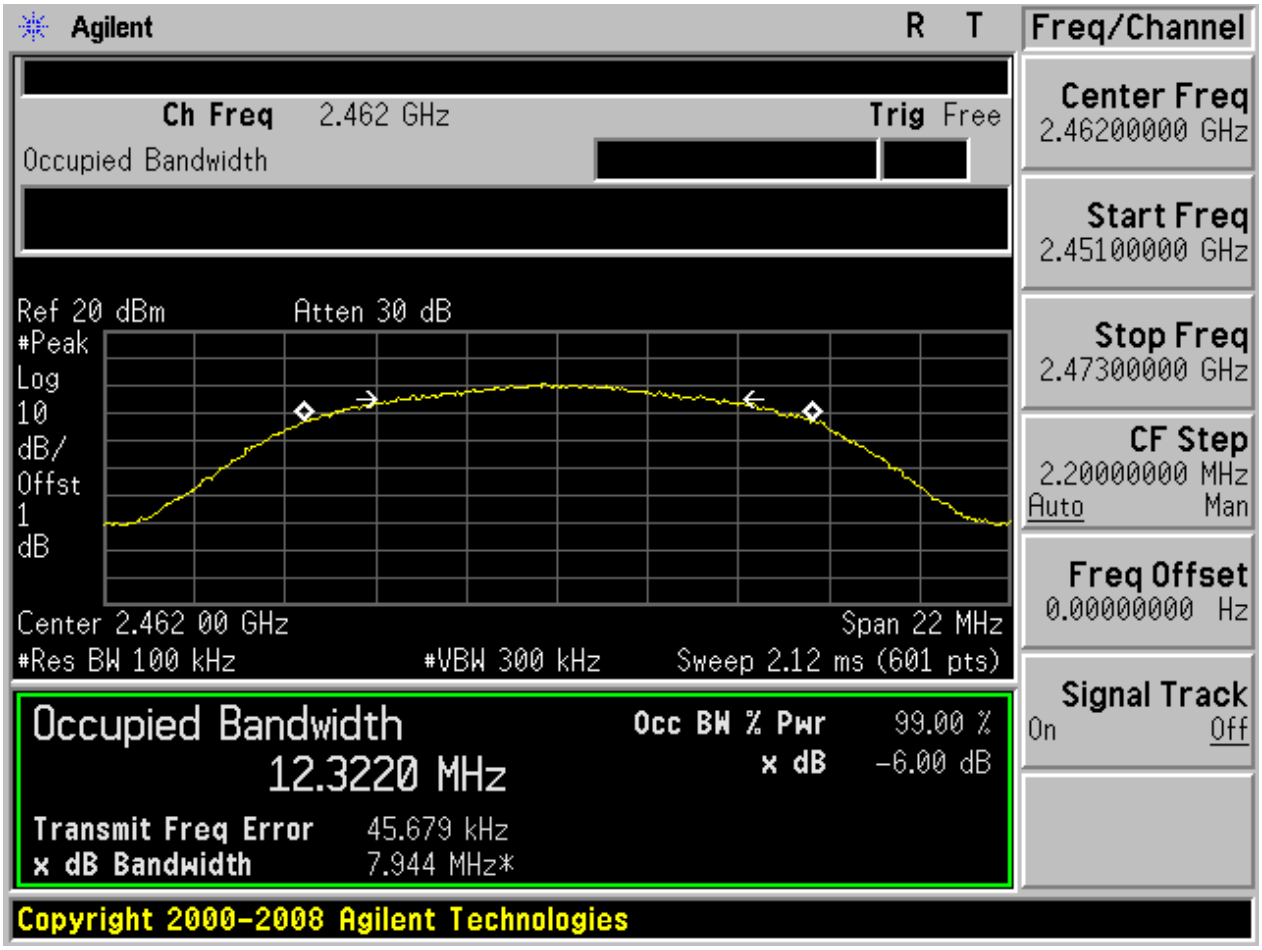
2.1 11B_L



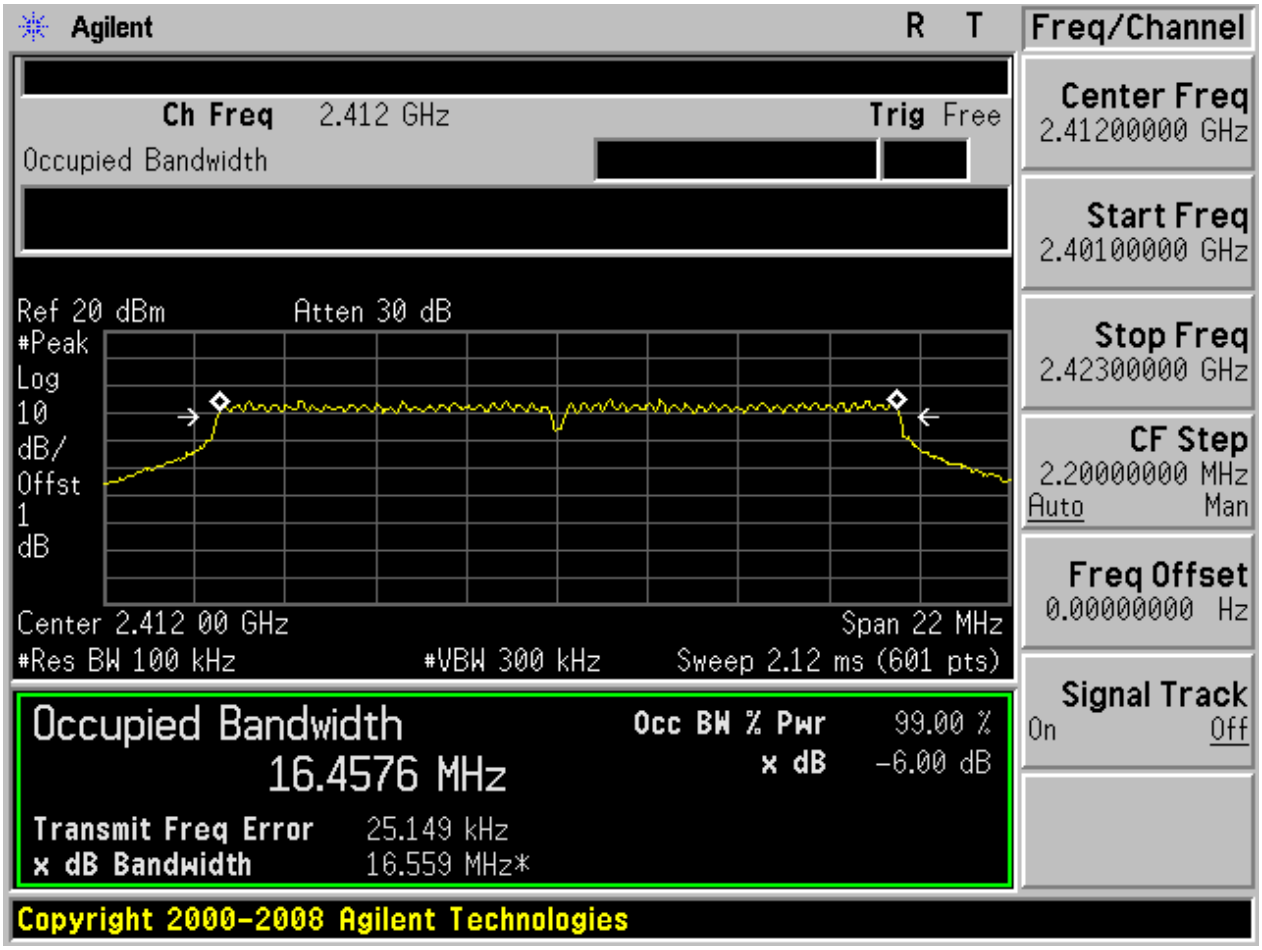
2.3 11B_M



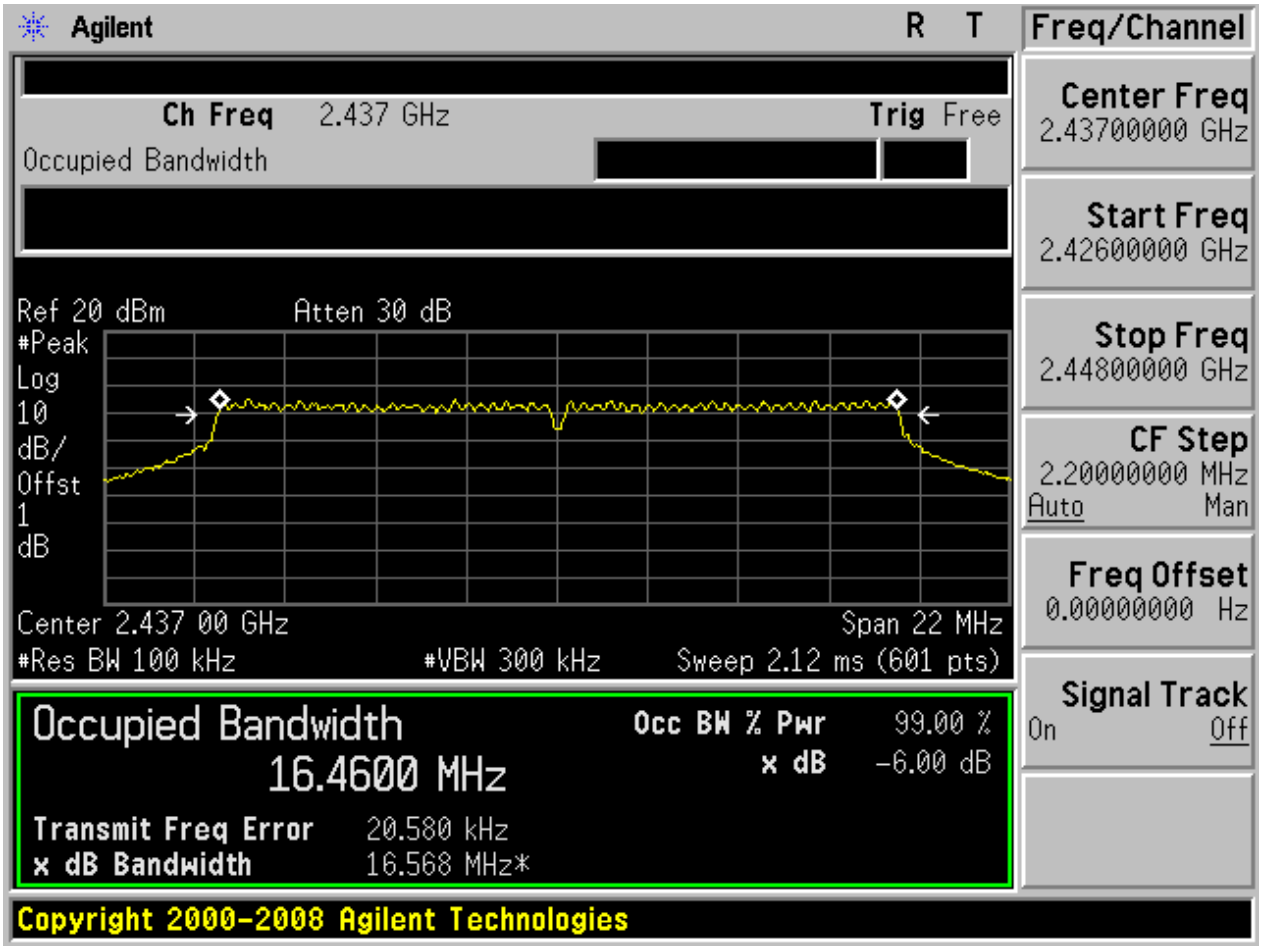
2.5 11B_H



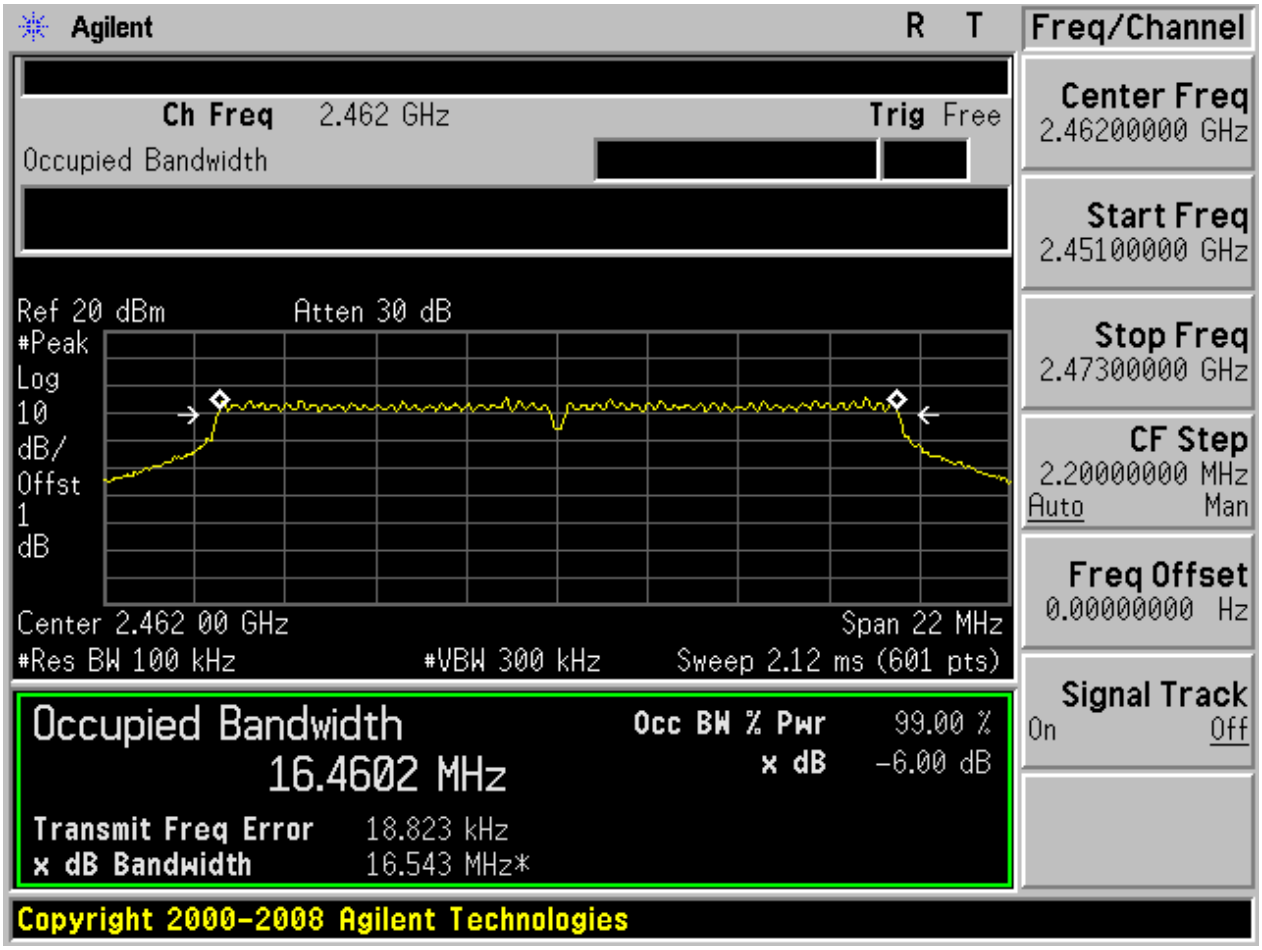
2.7 11G_L



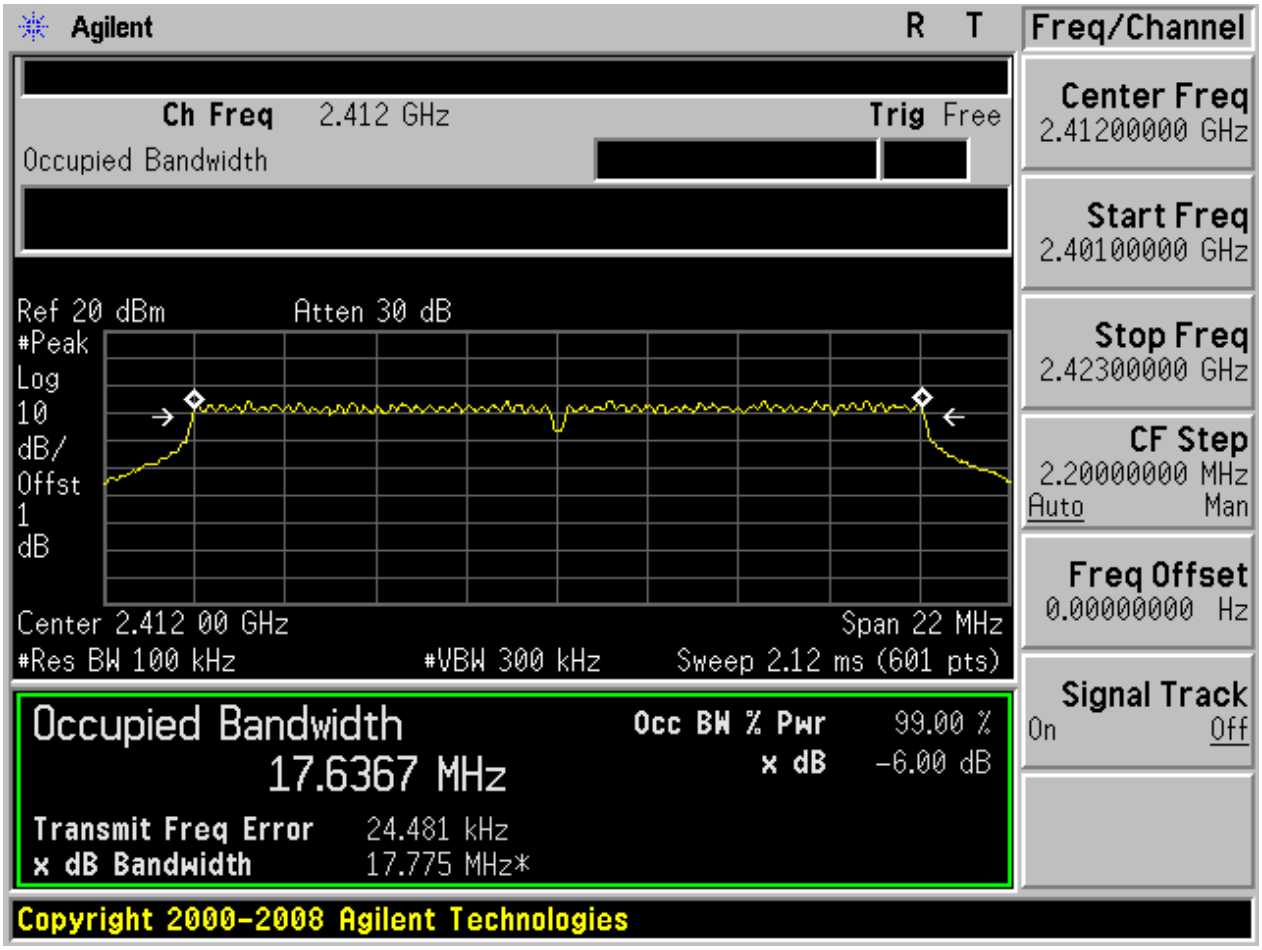
2.9 11G_M



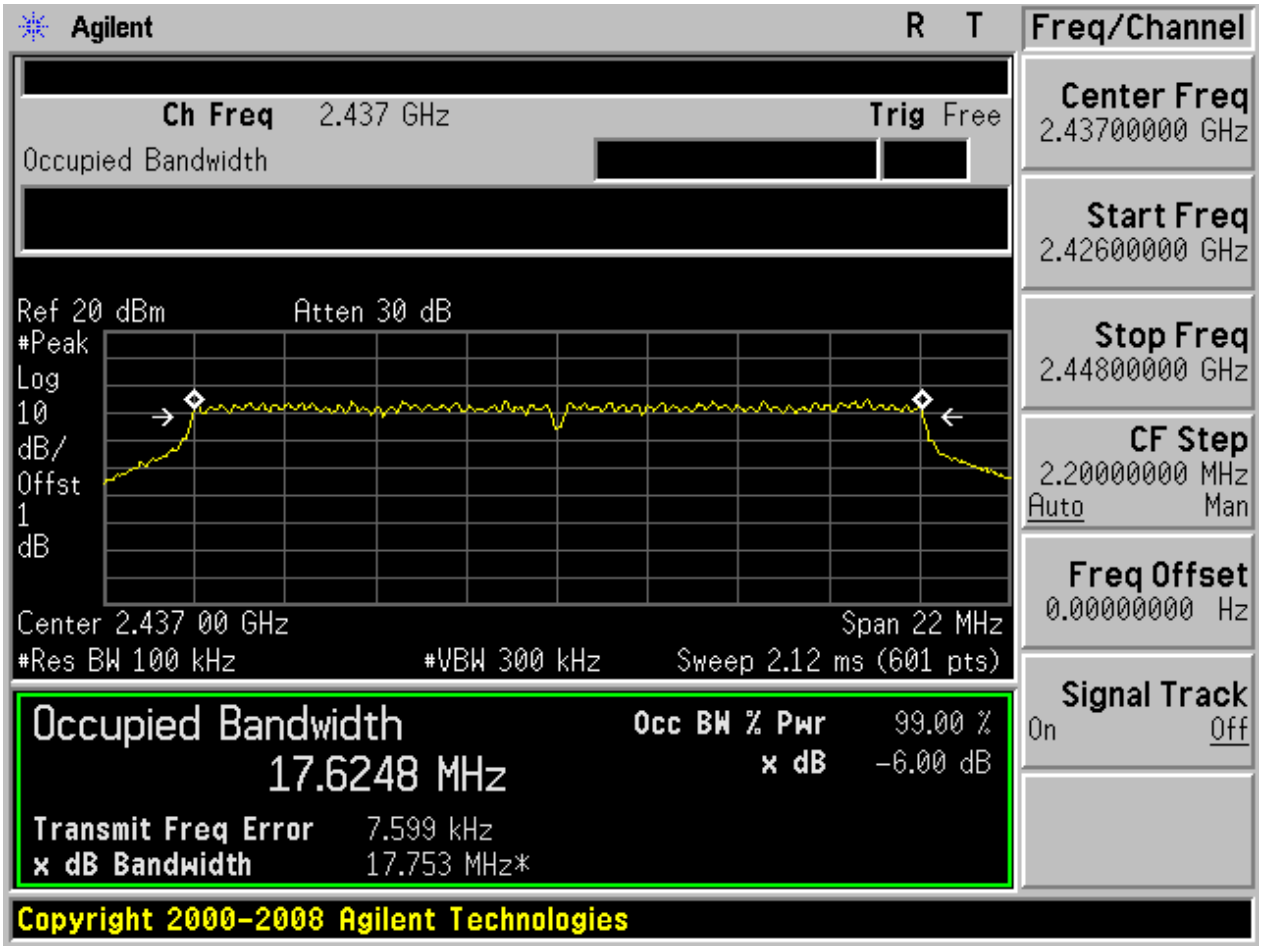
2.11 11G_H



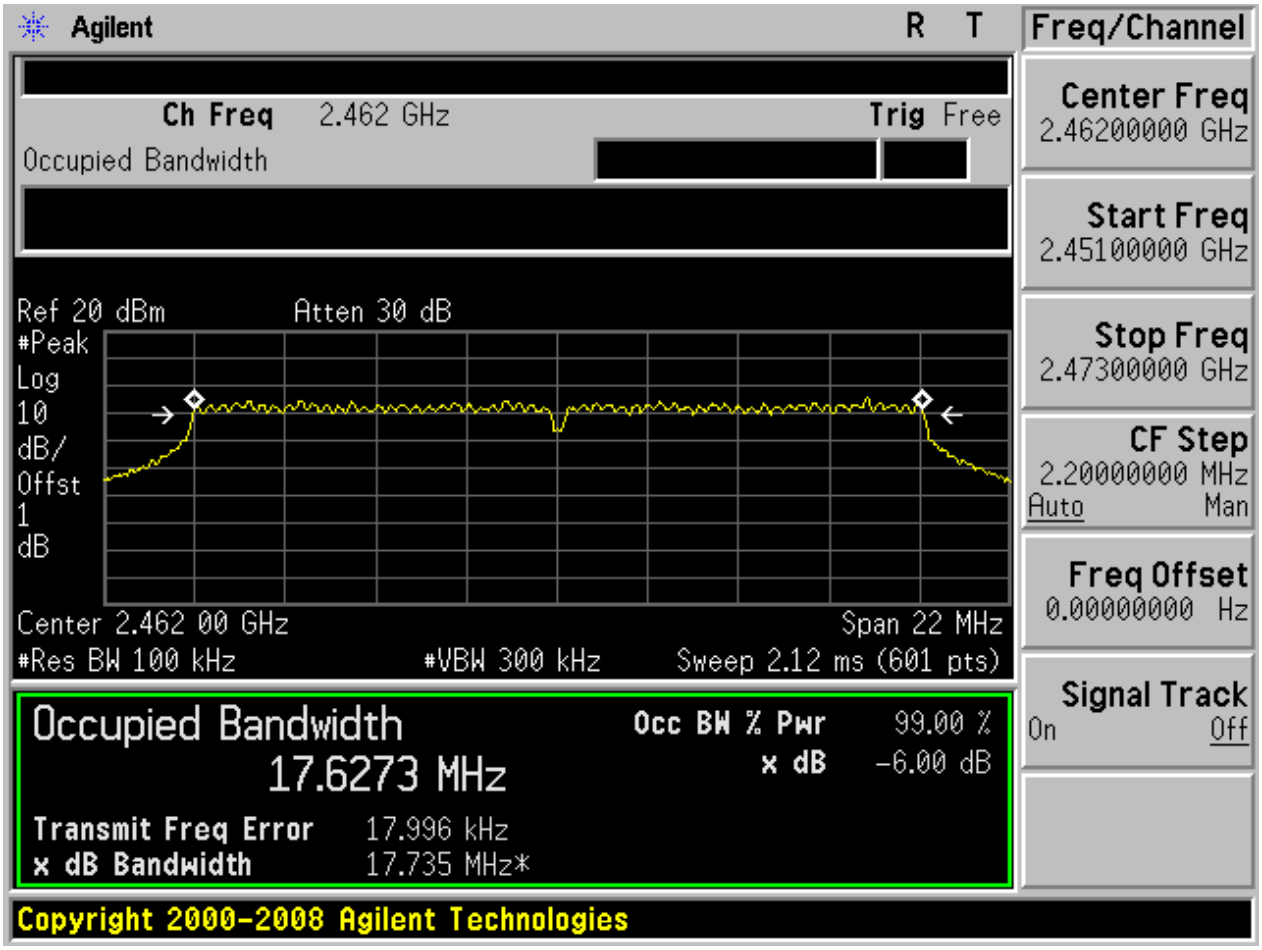
2.13 11N20_L



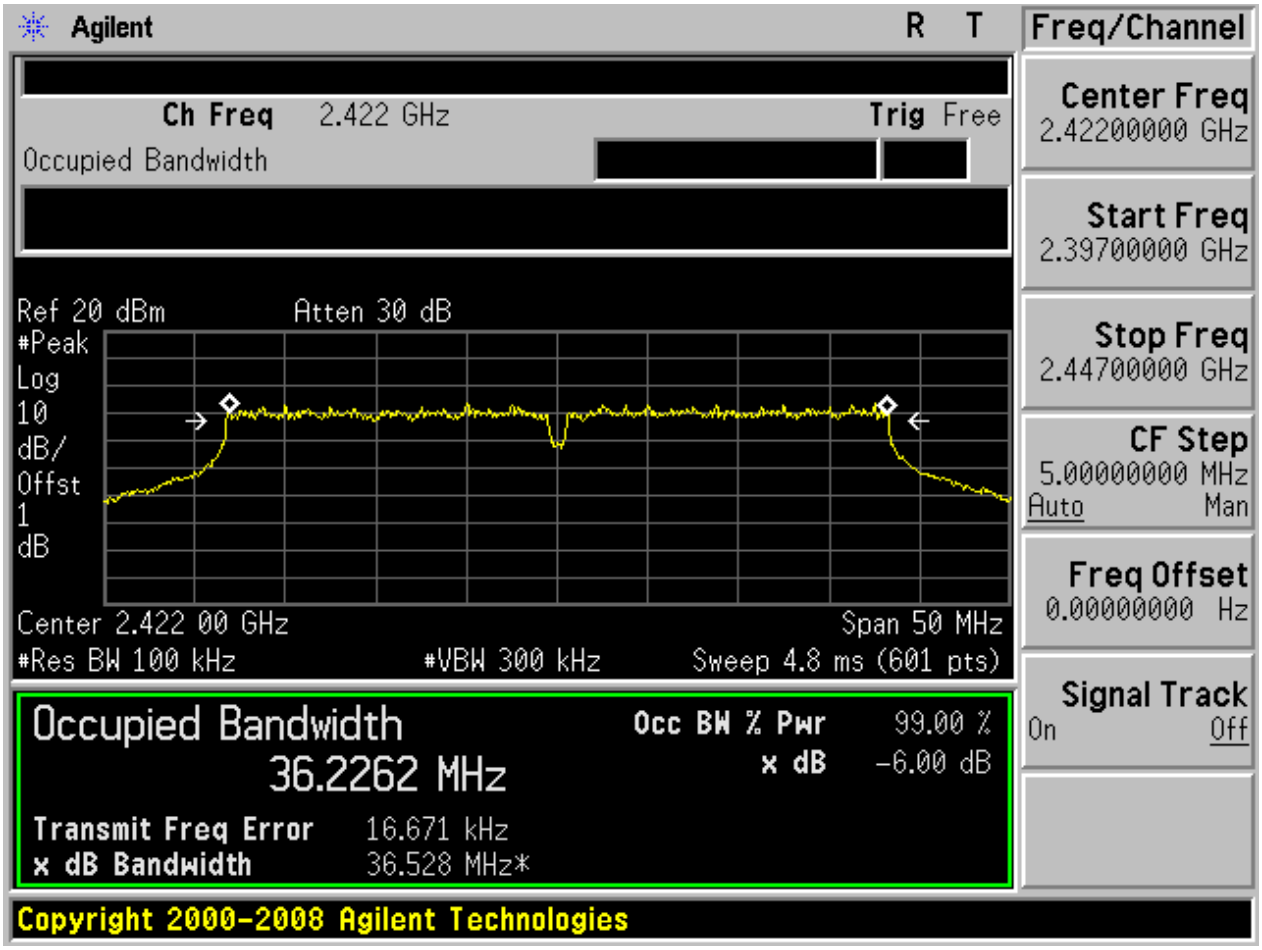
2.15 11N20_M



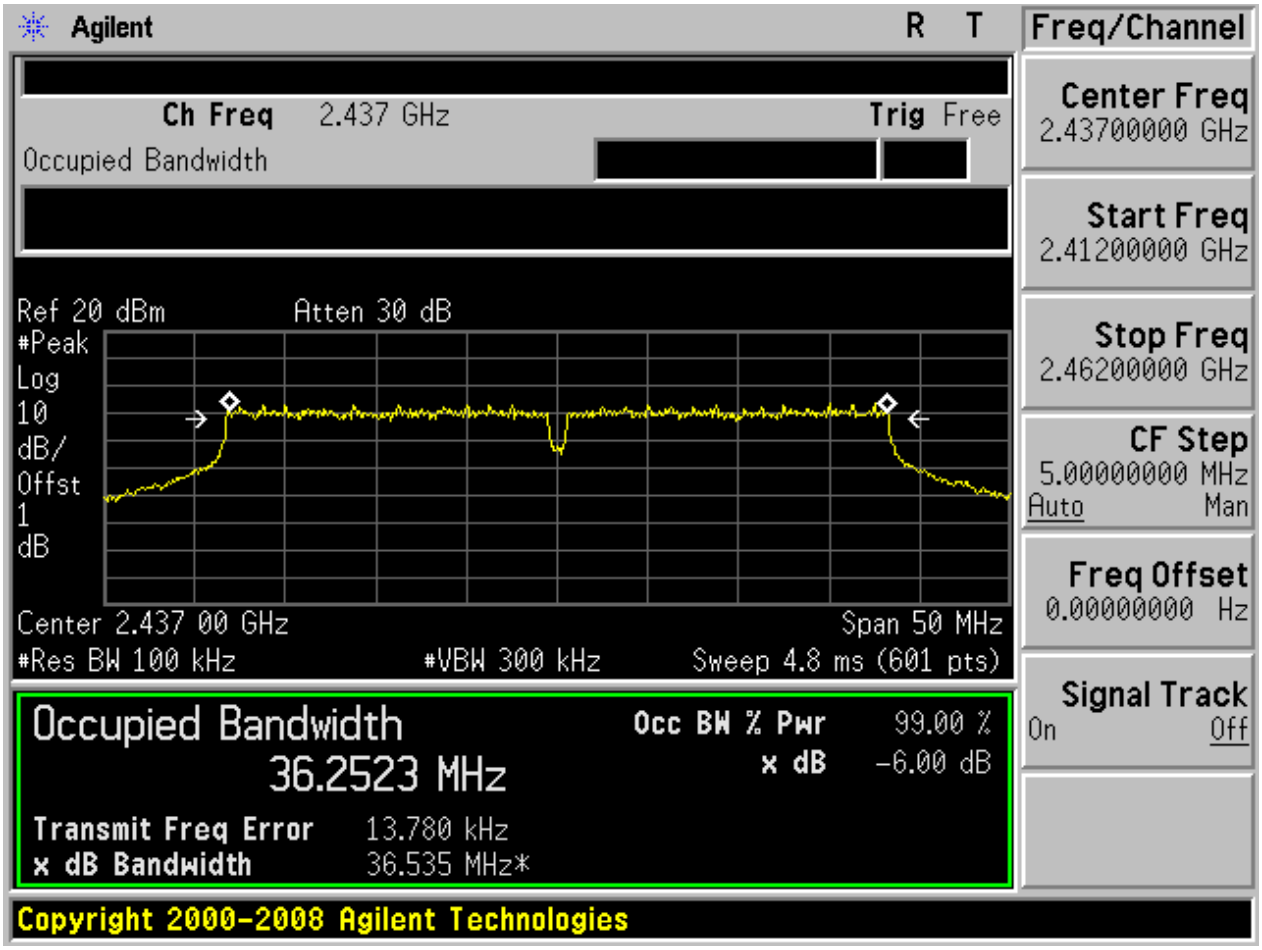
2.17 11N20_H



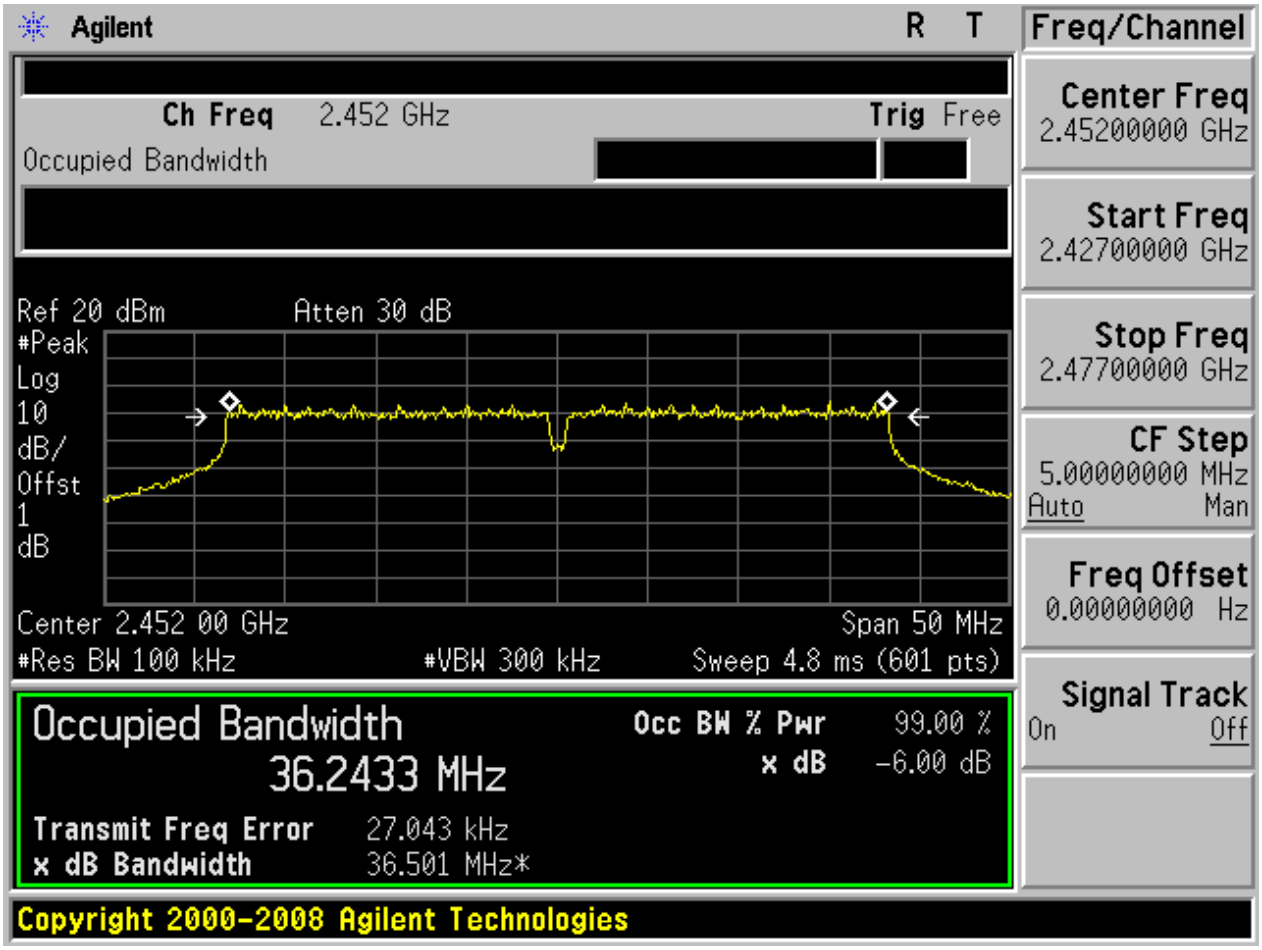
2.25 11N40_L



2.27 11N40_M



2.29 11N40_H



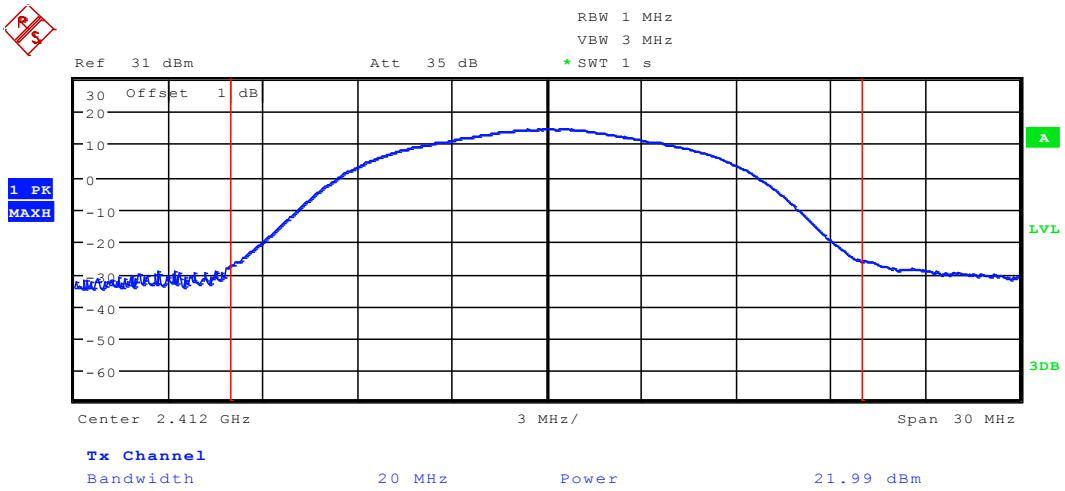
Appendix B: Maximum Peak Conducted Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Meas. Level (Cond.) [dBm]	Verdict
11B	L	2412	21.99	pass
11B	M	2437	22.03	pass
11B	H	2462	22.05	pass
11G	L	2412	23.00	pass
11G	M	2437	23.12	pass
11G	H	2462	23.18	pass
11N20	L	2412	22.56	pass
11N20	M	2437	22.74	pass
11N20	H	2462	22.71	pass
11N40	L	2422	23.74	pass
11N40	M	2437	23.82	pass
11N40	H	2452	23.79	pass

Part II - Test Plots

2.1 11B_L



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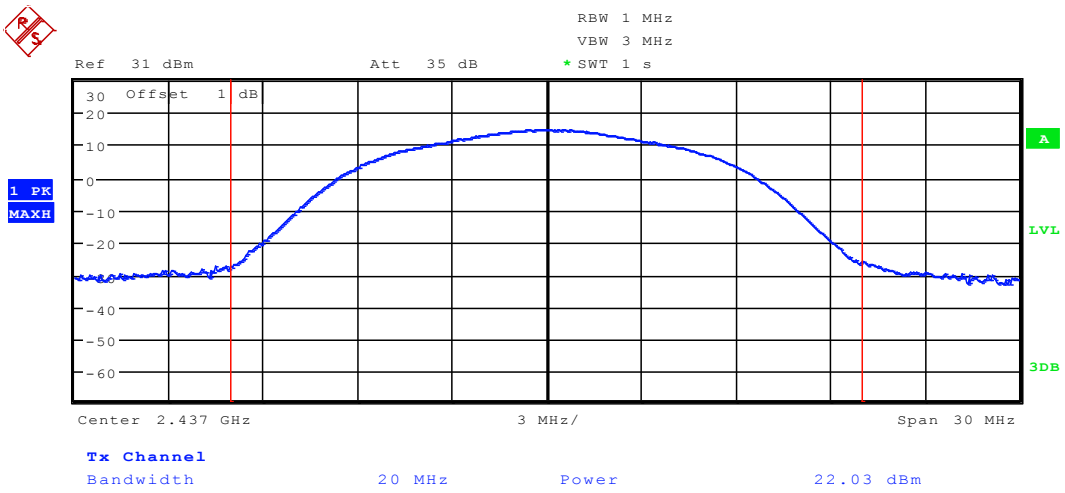
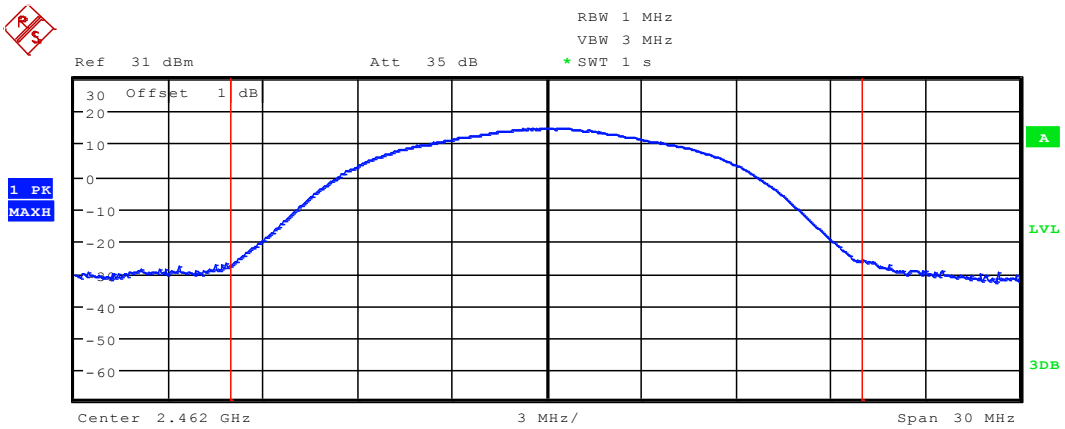
2.2 11B_M



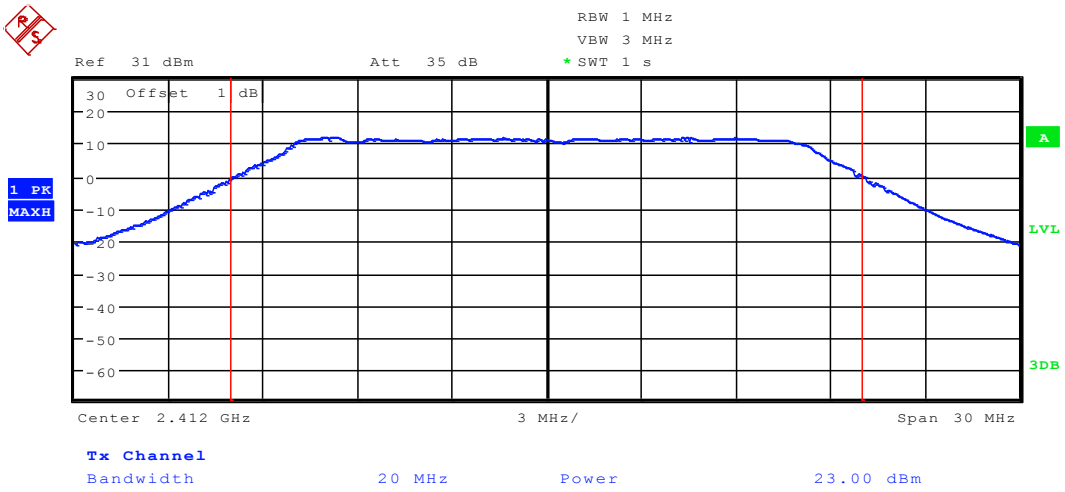
Date: 26.FEB.2014 12:17:56

2.3 11B_H



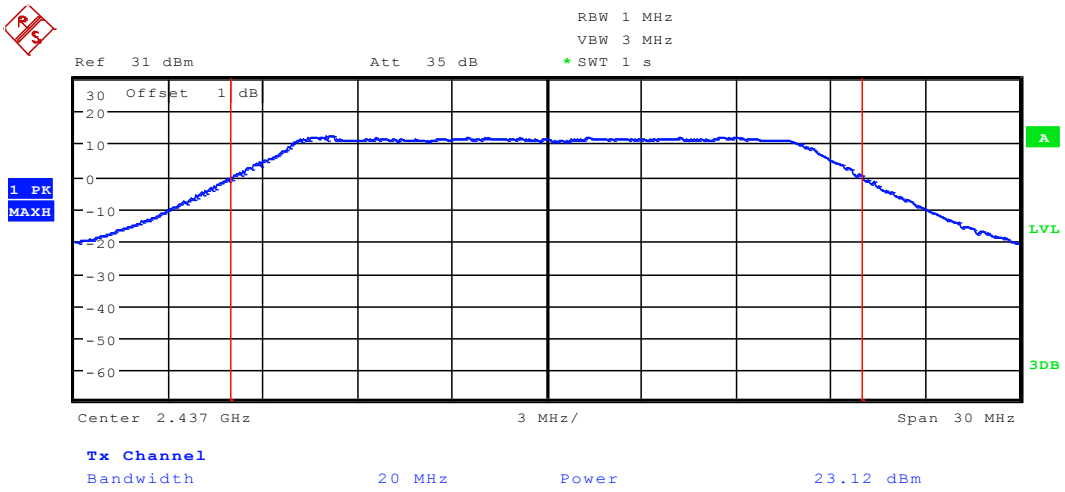
Date: 26.FEB.2014 12:18:32

2.4 11G_L



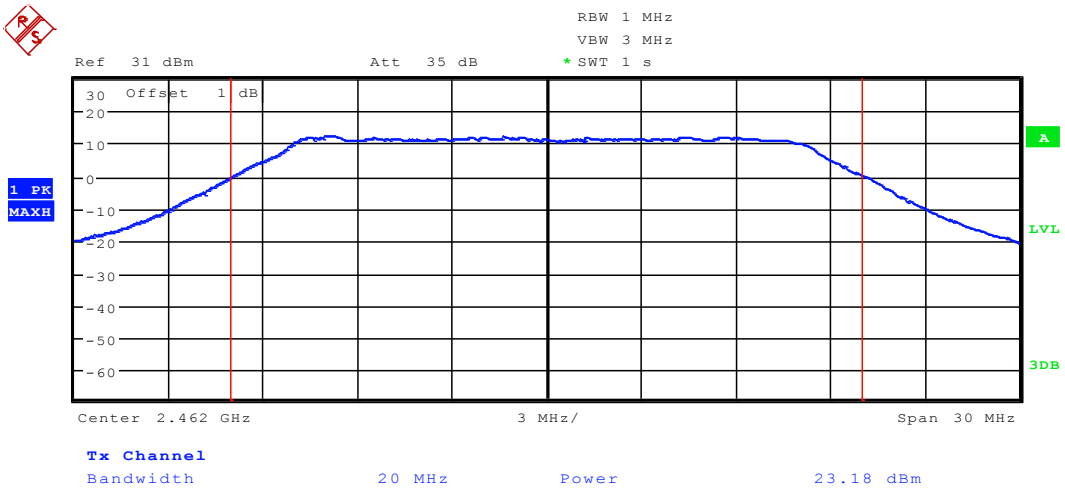
Date: 26.FEB.2014 12:25:18

2.5 11G_M



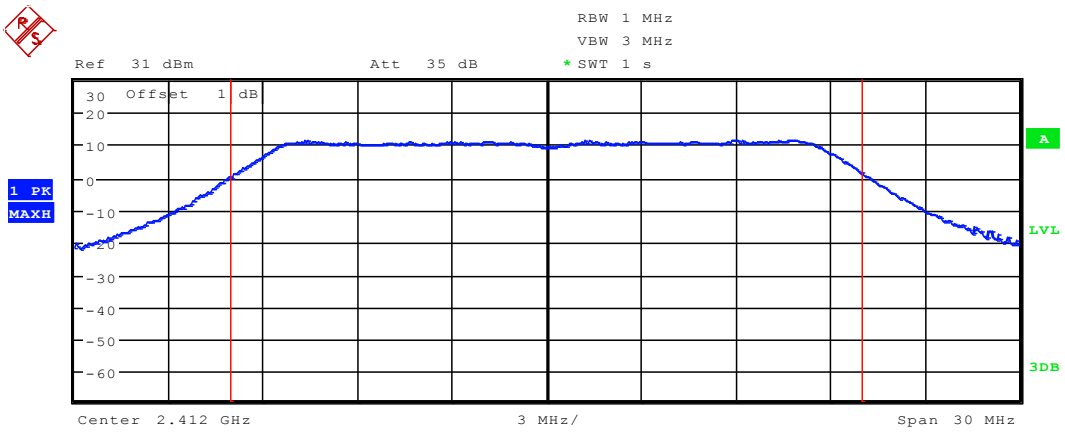
Date: 26.FEB.2014 12:22:18

2.6 11G_H



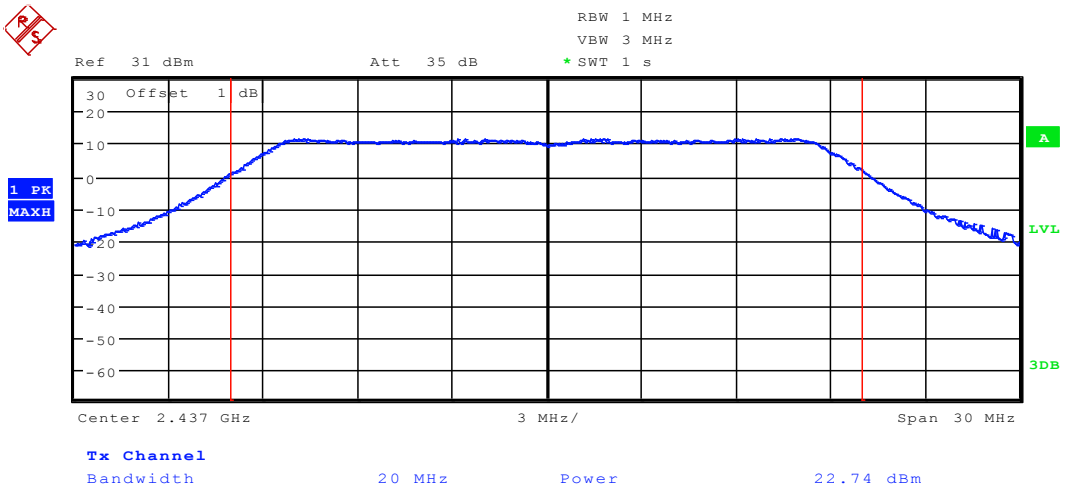
Date: 26.FEB.2014 12:23:53

2.7 11N20_L



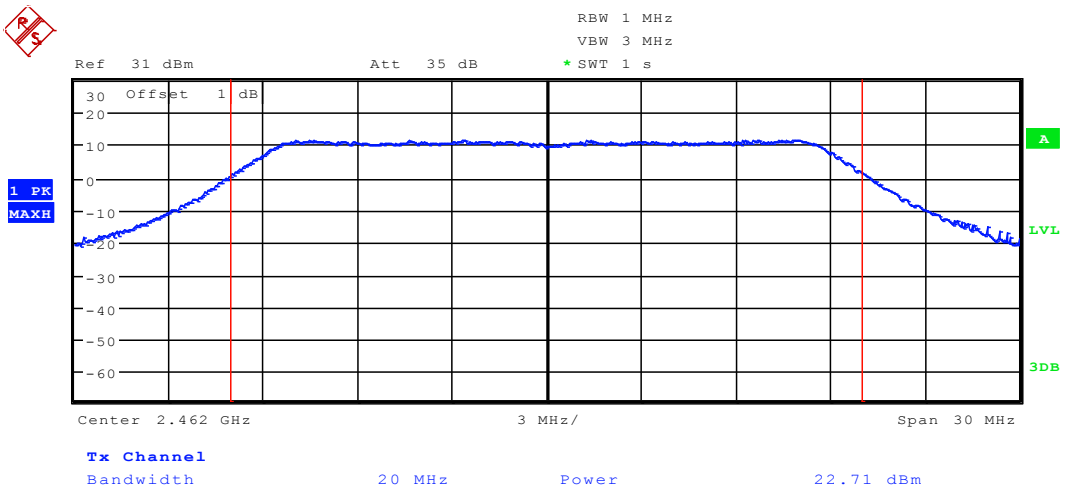
Date: 26.FEB.2014 14:18:13

2.8 11N20_M



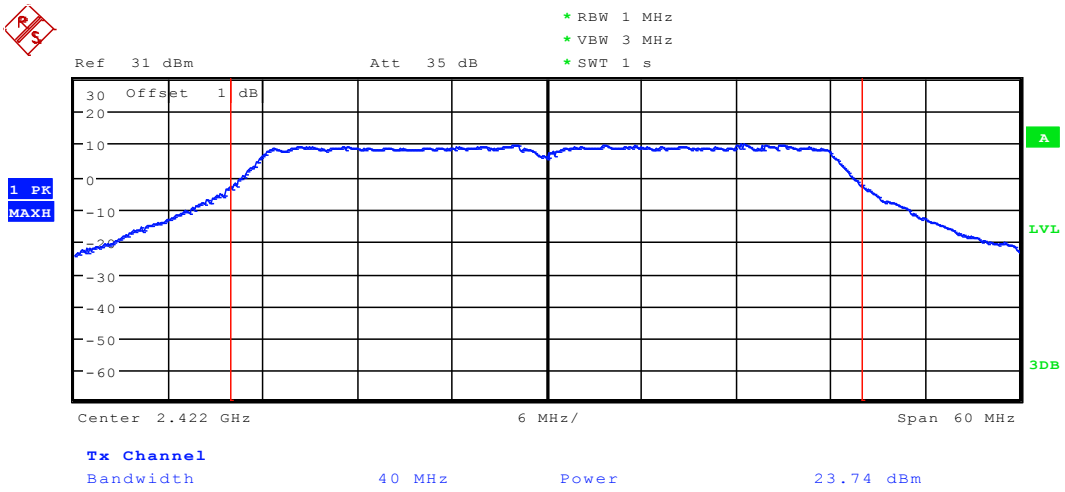
Date: 26.FEB.2014 14:18:42

2.9 11N20_H



Date: 26.FEB.2014 14:19:12

2.10 11N40_L



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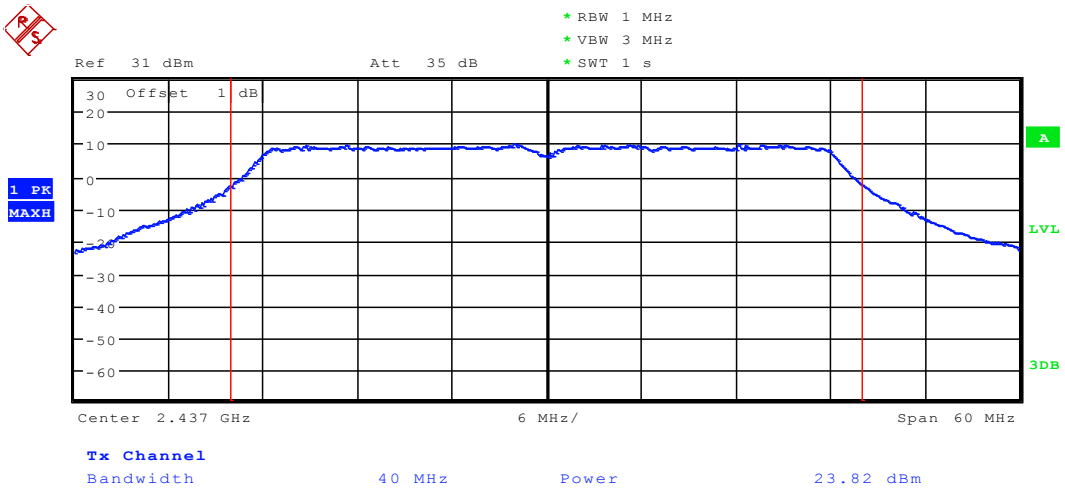
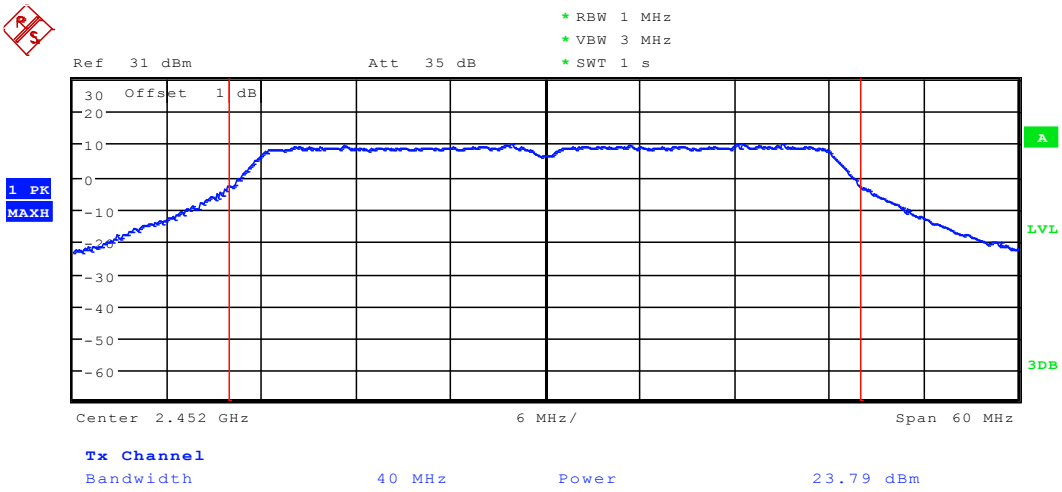
2.11 11N40_M



Date: 26.FEB.2014 14:26:41

2.12 11N40_H



Date: 26.FEB.2014 14:27:20

Appendix C: Average Power

Test Mode	Test Channel	Frequency[MHz]	Average Power
11B	L	2412	14.91
11B	M	2437	15.08
11B	H	2462	15.08
11G	L	2412	12.83
11G	M	2437	12.96
11G	H	2462	12.94
11N20	L	2412	12.84
11N20	M	2437	12.97
11N20	H	2462	12.93
11N40	L	2422	13.62
11N40	M	2437	13.69
11N40	H	2452	13.65

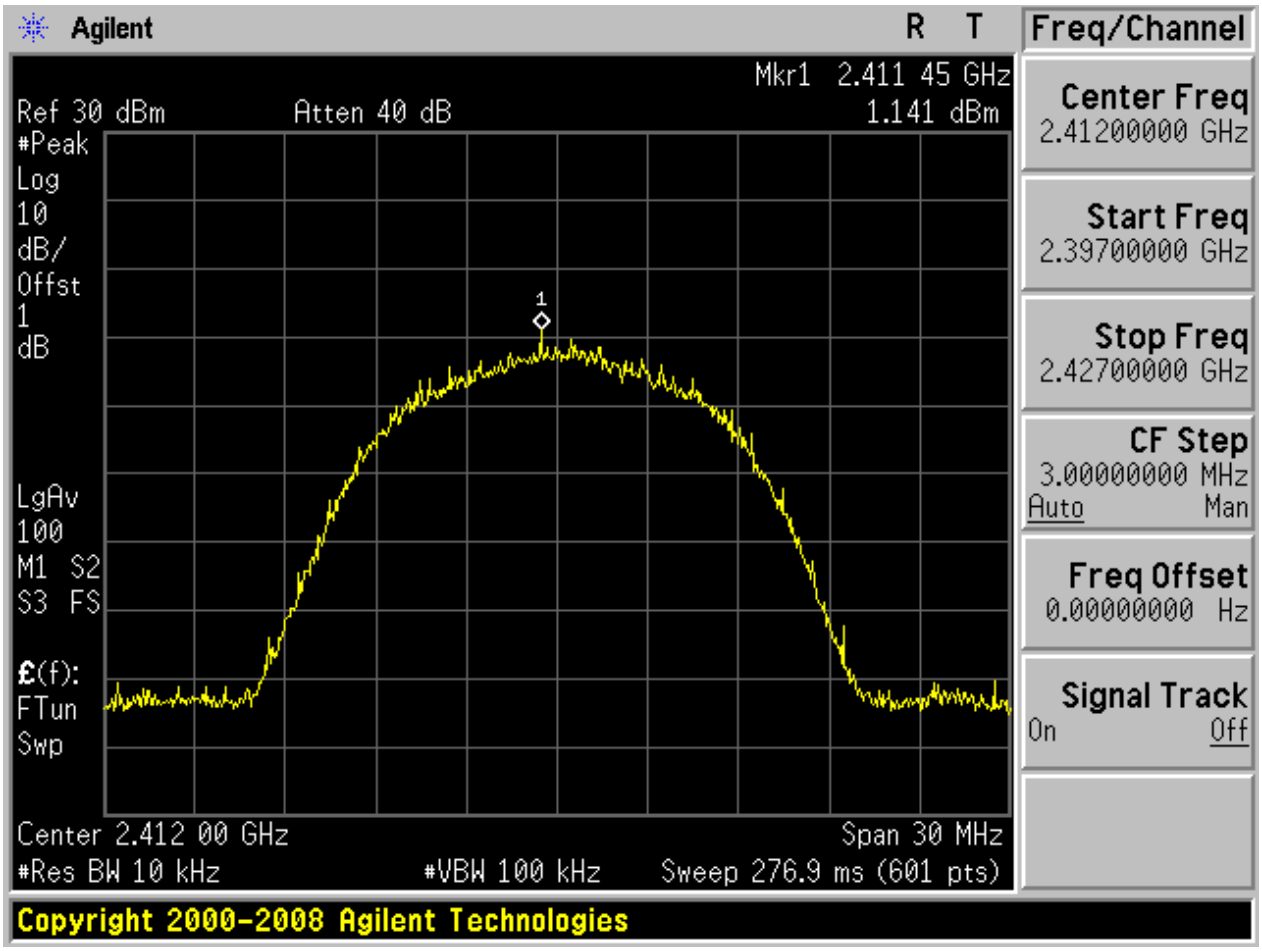
Appendix D: Maximum Power Spectral Density Level

Part I - Test Results

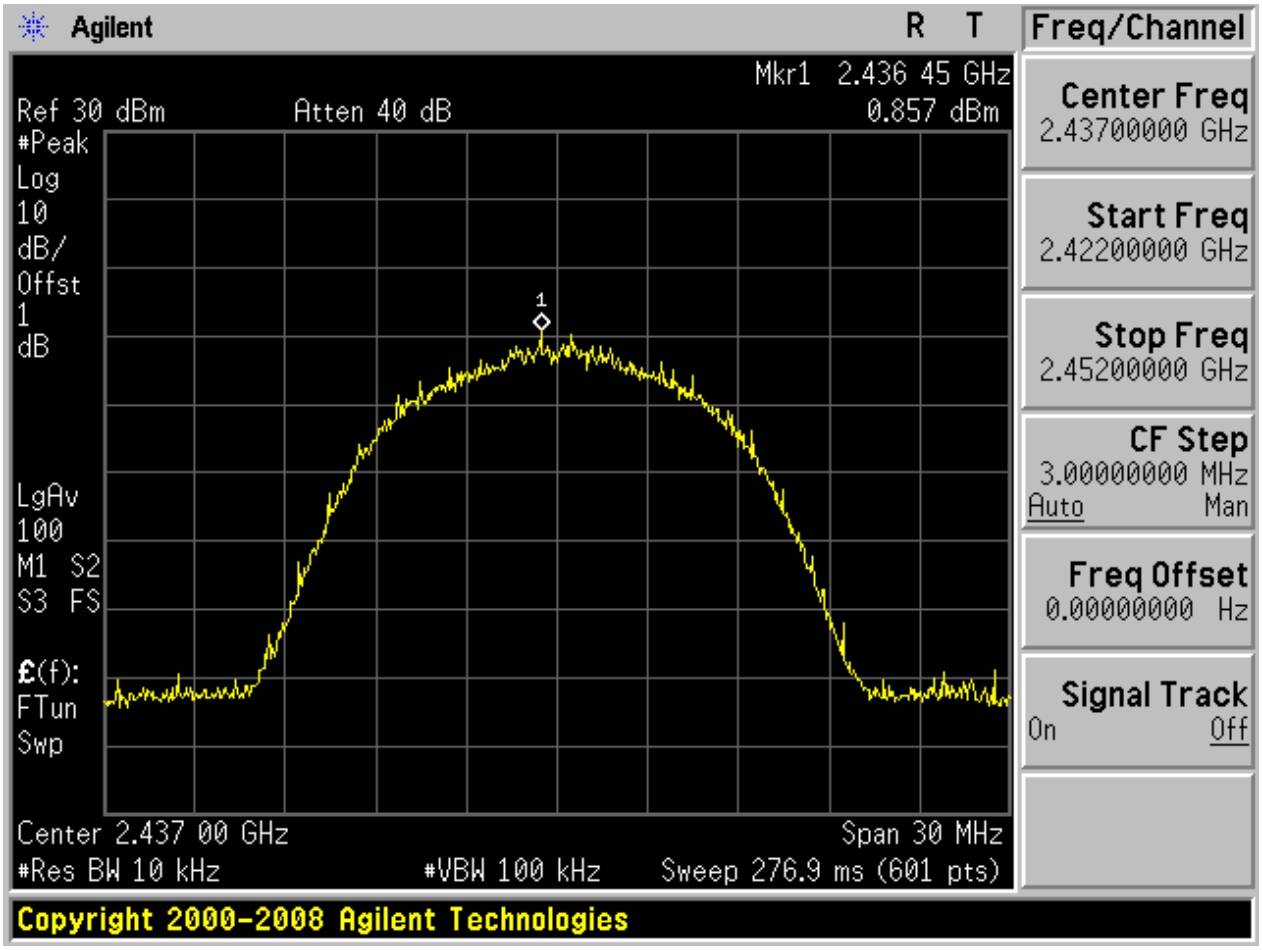
Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11B	L	2412	Ant 1	1.14	pass
11B	M	2437	Ant 1	0.86	pass
11B	H	2462	Ant 1	1.08	pass
11G	L	2412	Ant 1	-5.88	pass
11G	M	2437	Ant 1	-5.98	pass
11G	H	2462	Ant 1	-5.93	pass
11G	H	2462	Ant 1	-5.77	pass
11N20	L	2412	Ant 1	-5.92	pass
11N20	M	2437	Ant 1	-4.73	pass
11N20	H	2462	Ant 1	-5.18	pass
11N40	L	2422	Ant 1	-6.59	pass
11N40	M	2437	Ant 1	-7.16	pass
11N40	H	2452	Ant 1	-6.59	pass

Part II - Test Plots

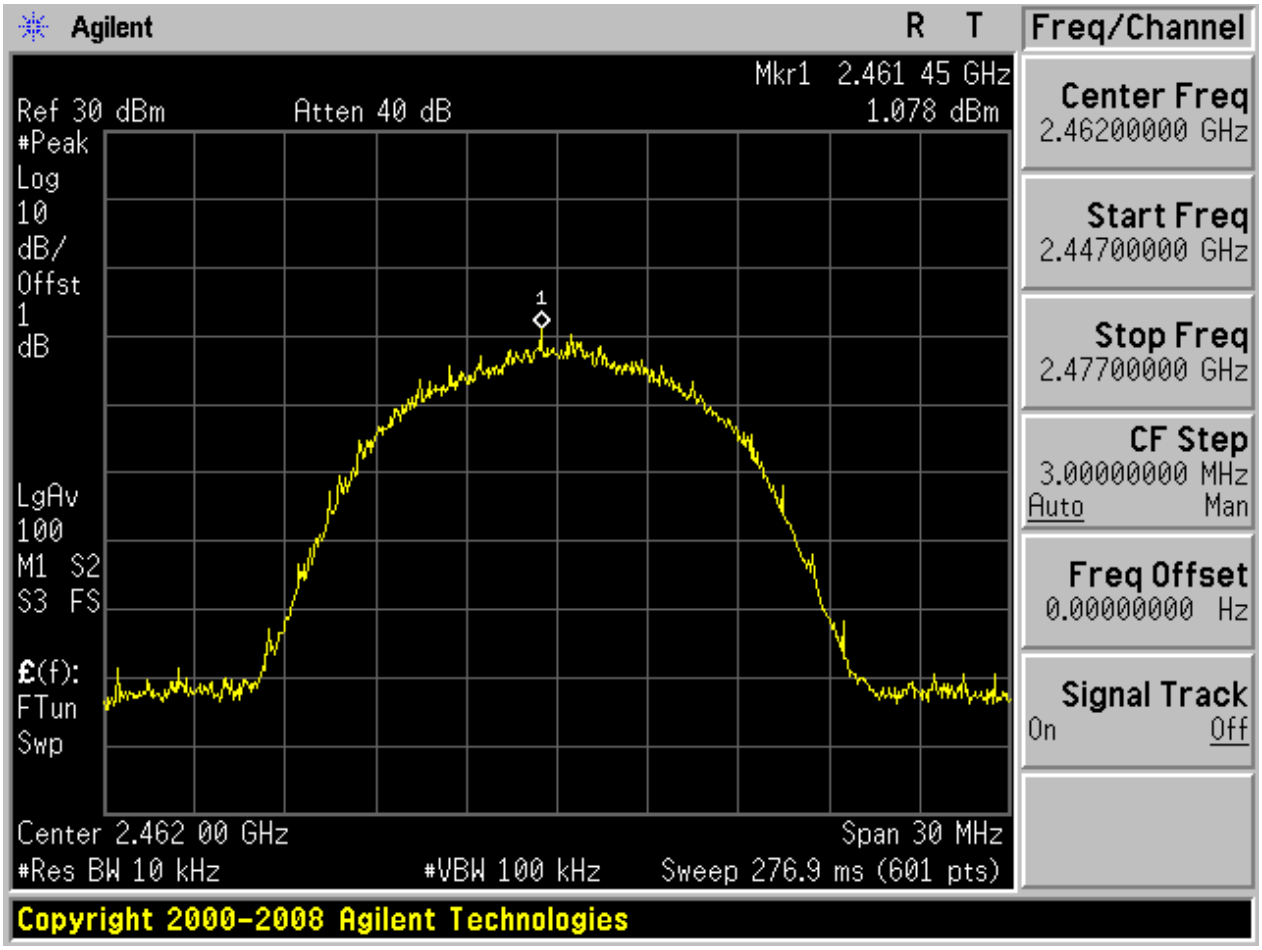
2.1 11B_L



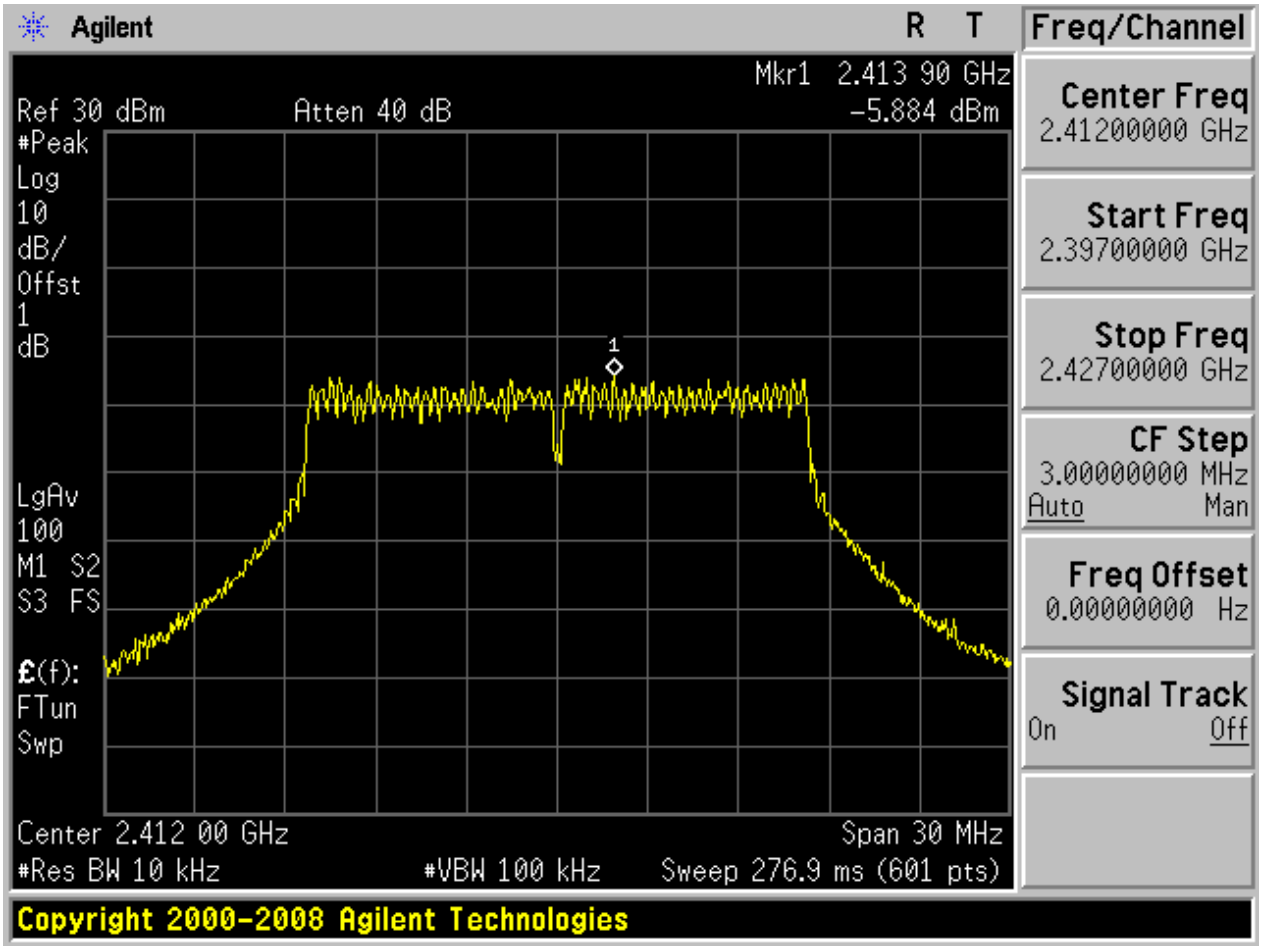
2.3 11B_M



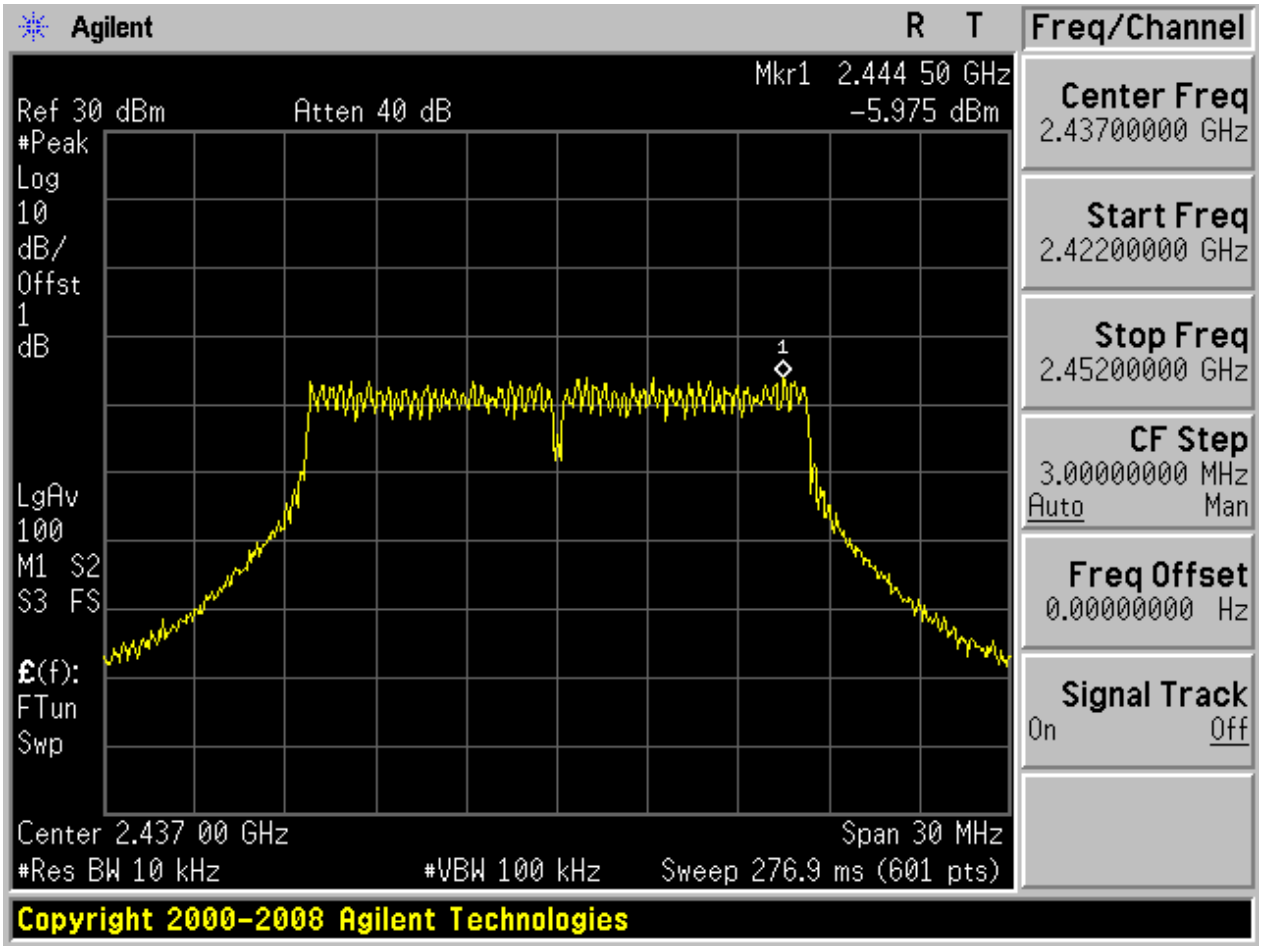
2.5 11B_H



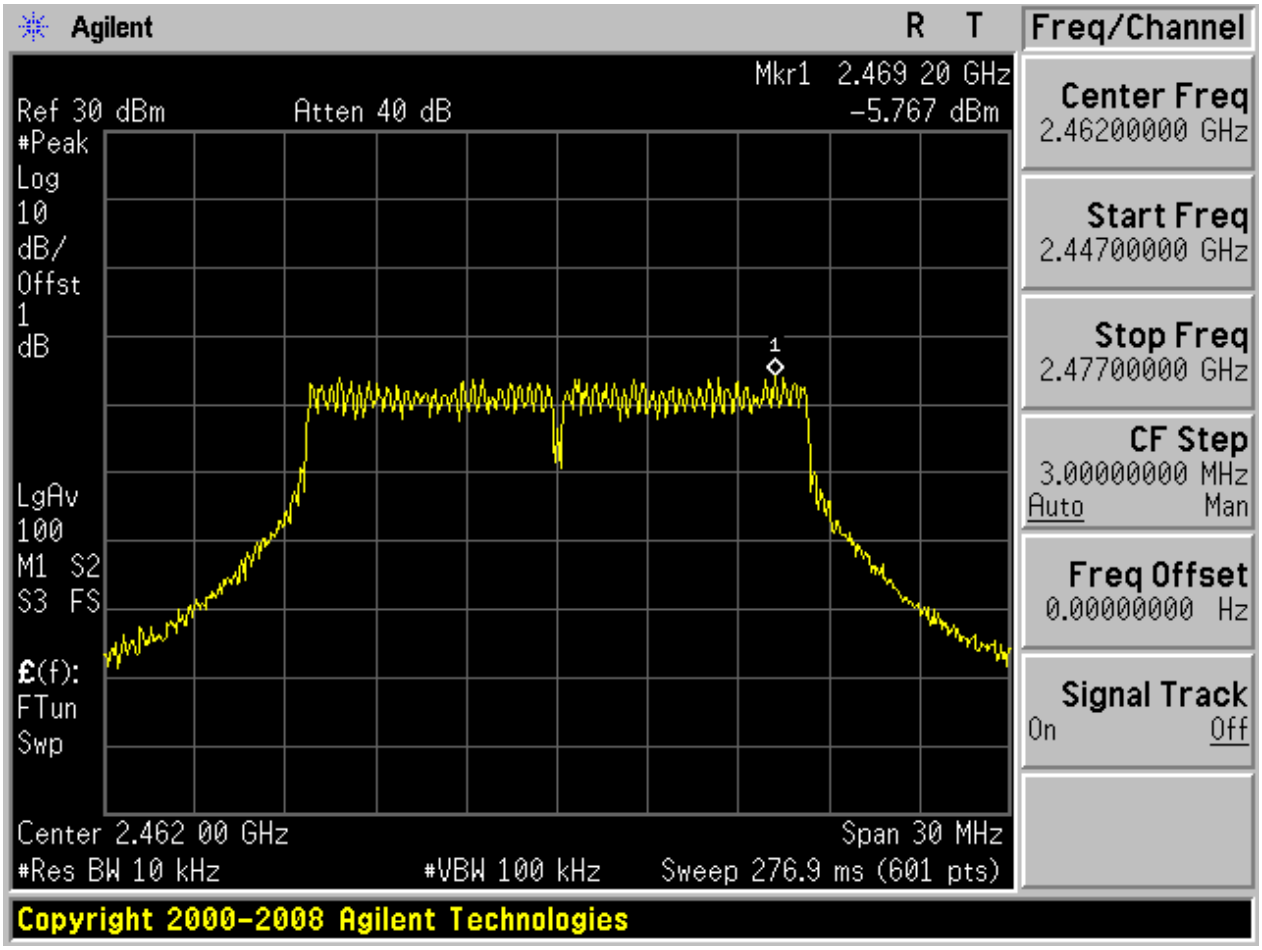
2.7 11G_L



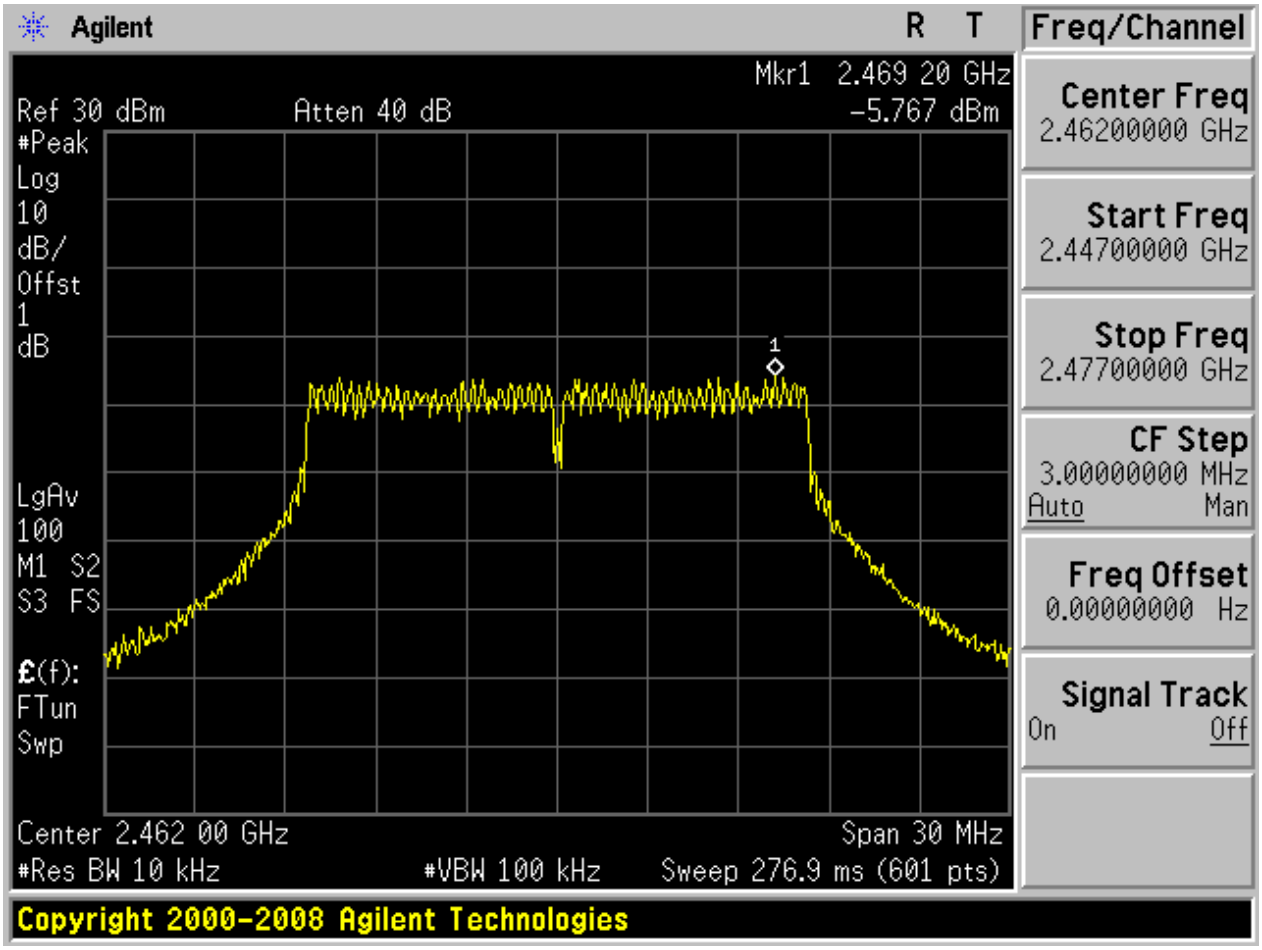
2.9 11G_M



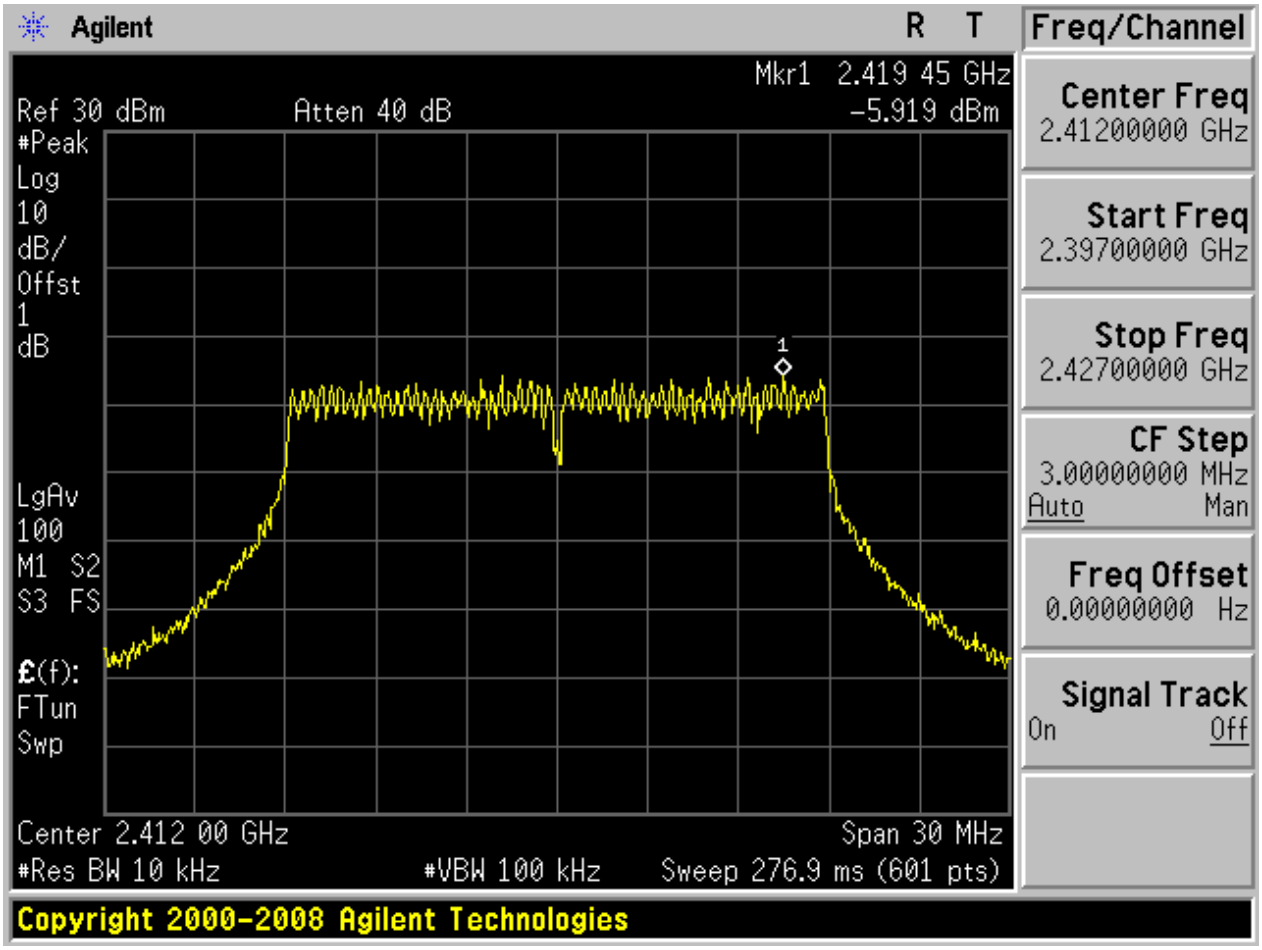
2.11 11G_H



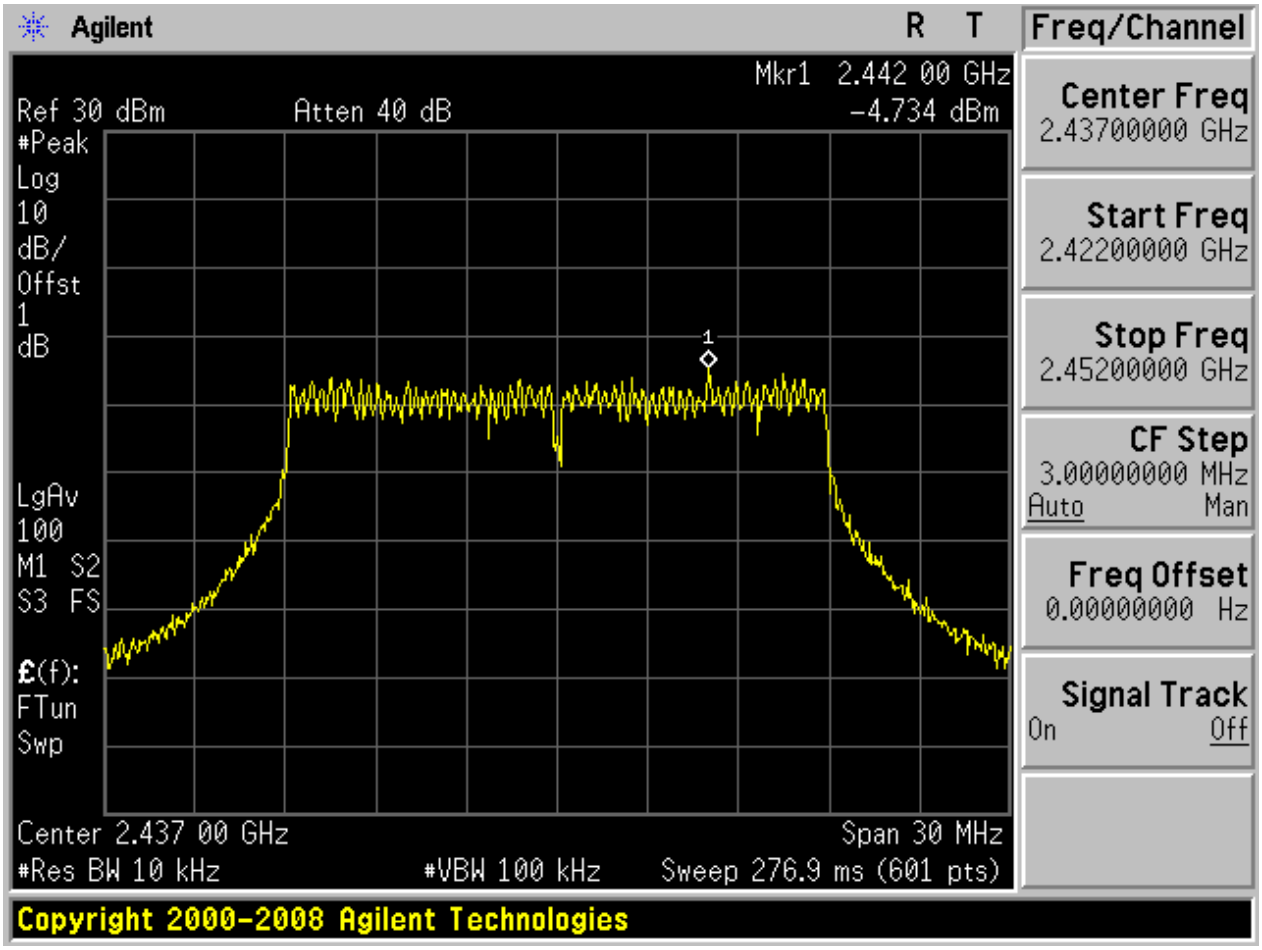
2.11 11G_H



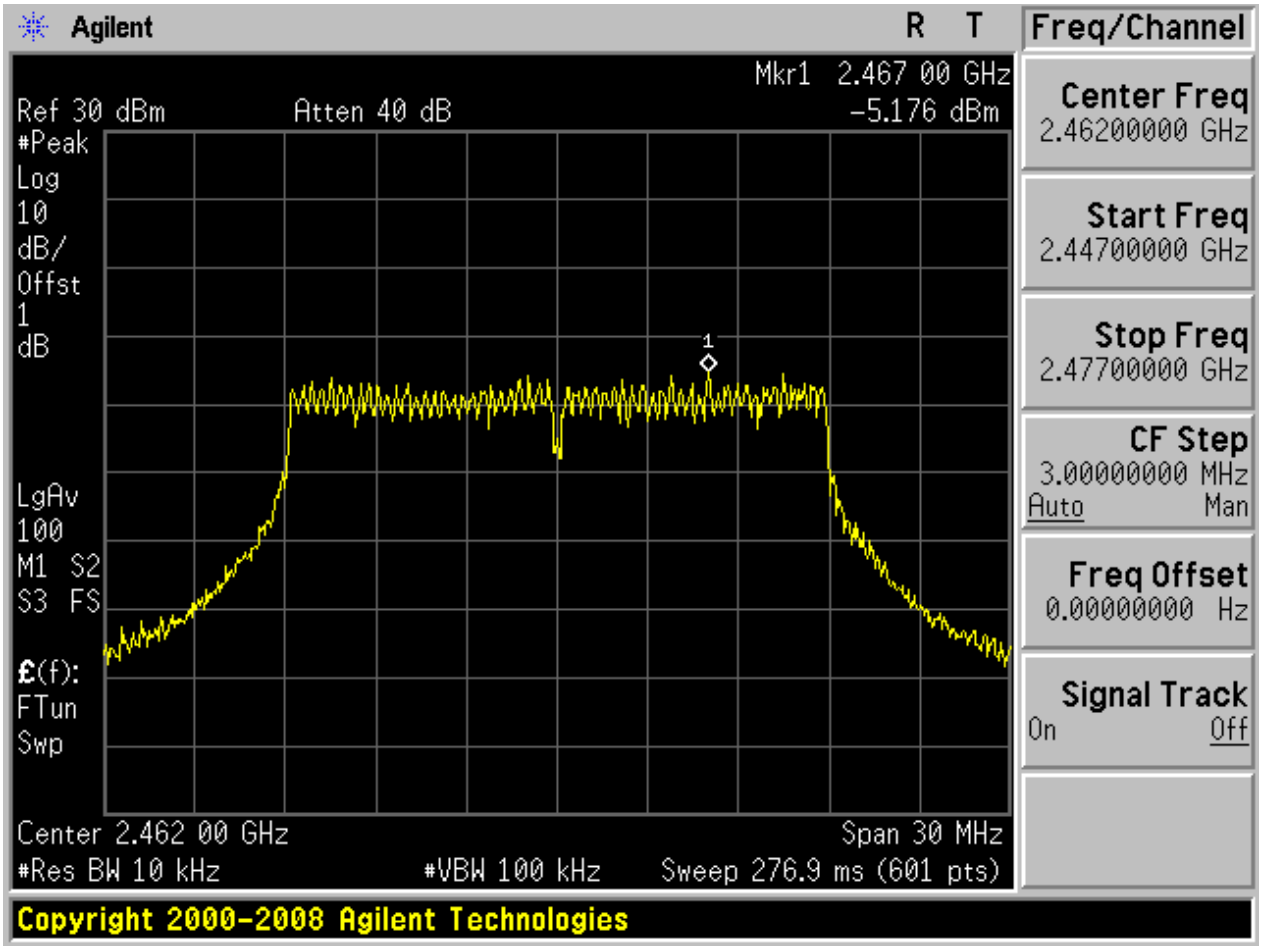
2.13 11N20_L



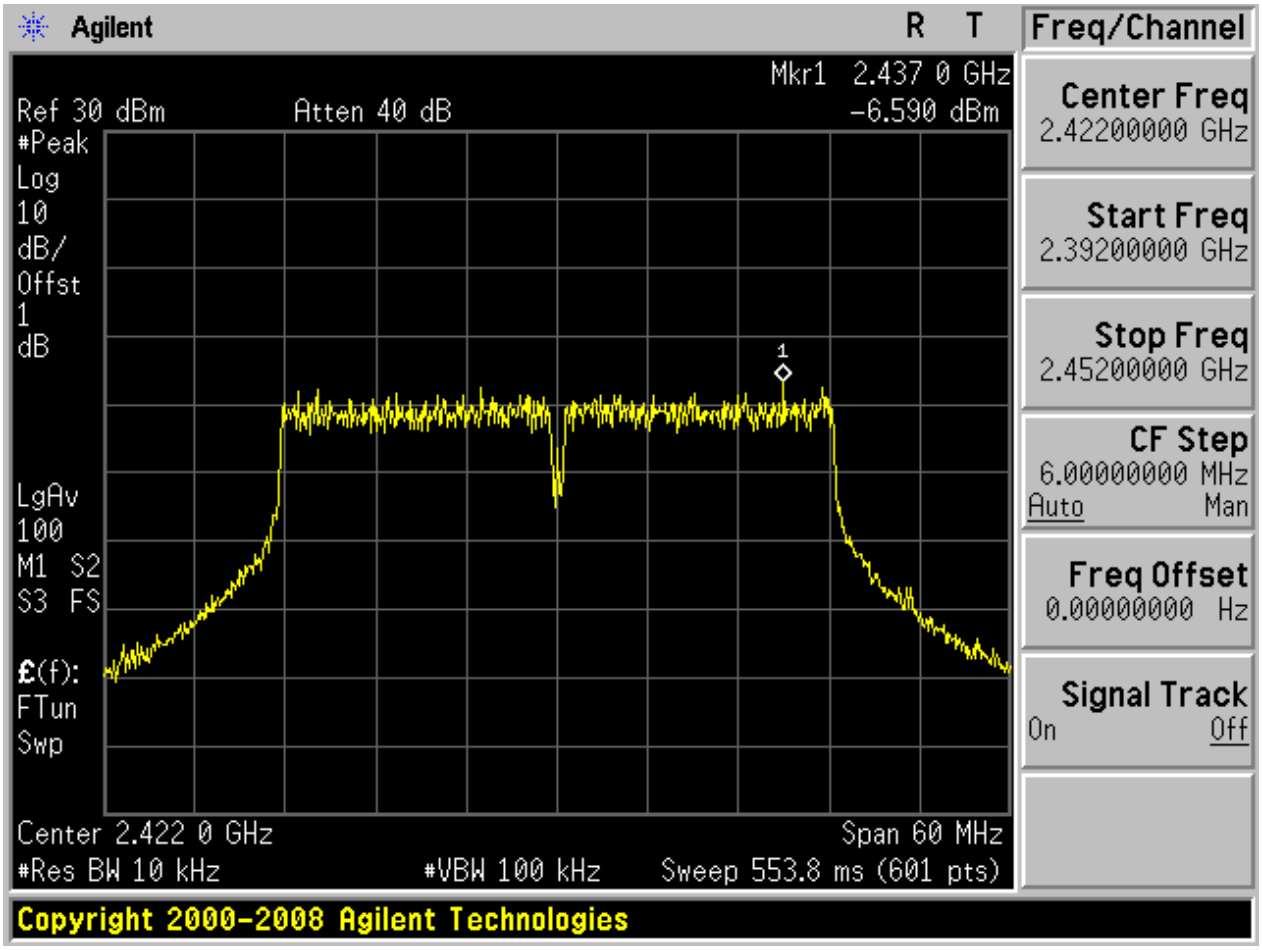
2.15 11N20_M



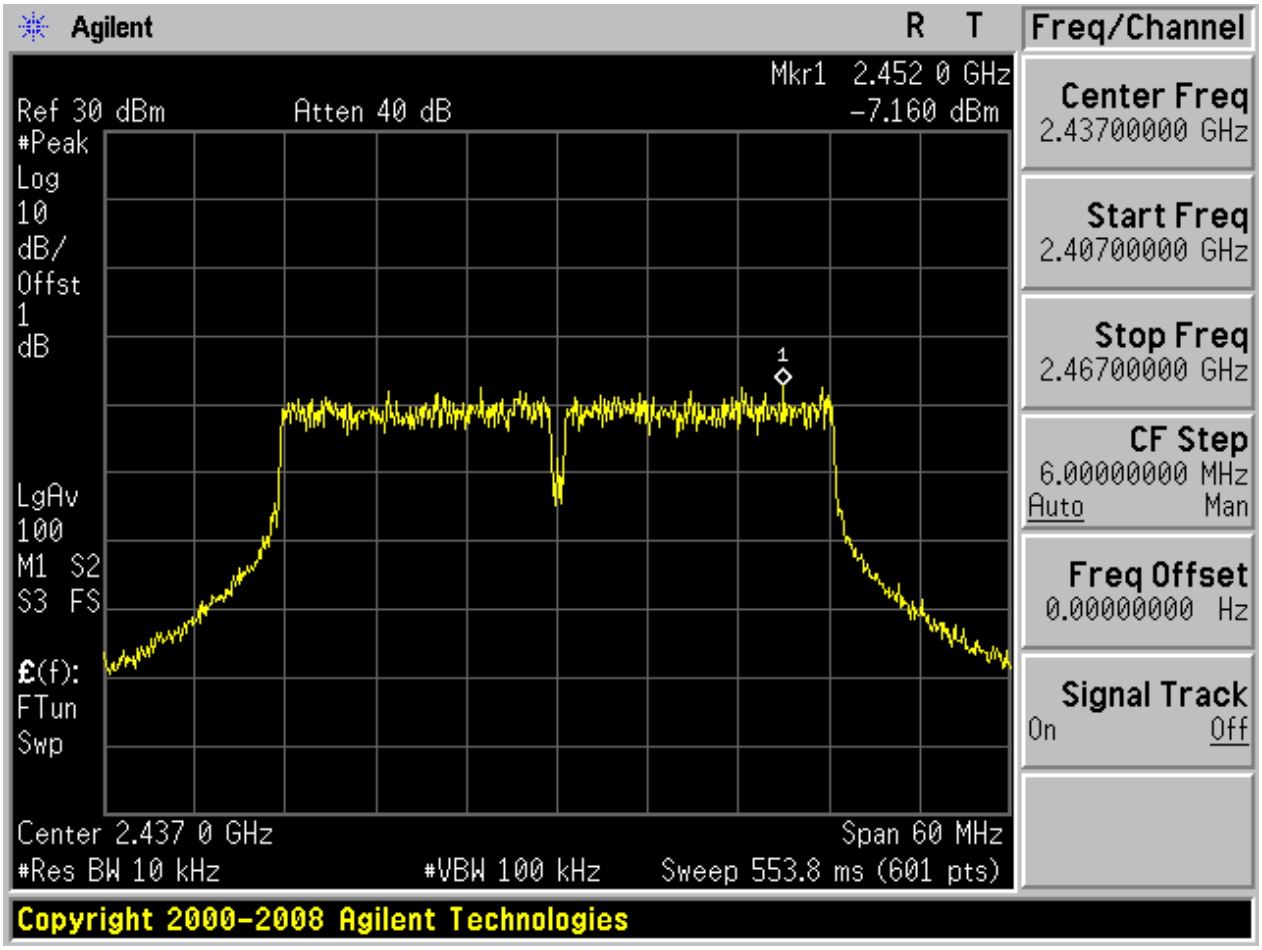
2.17 11N20_H



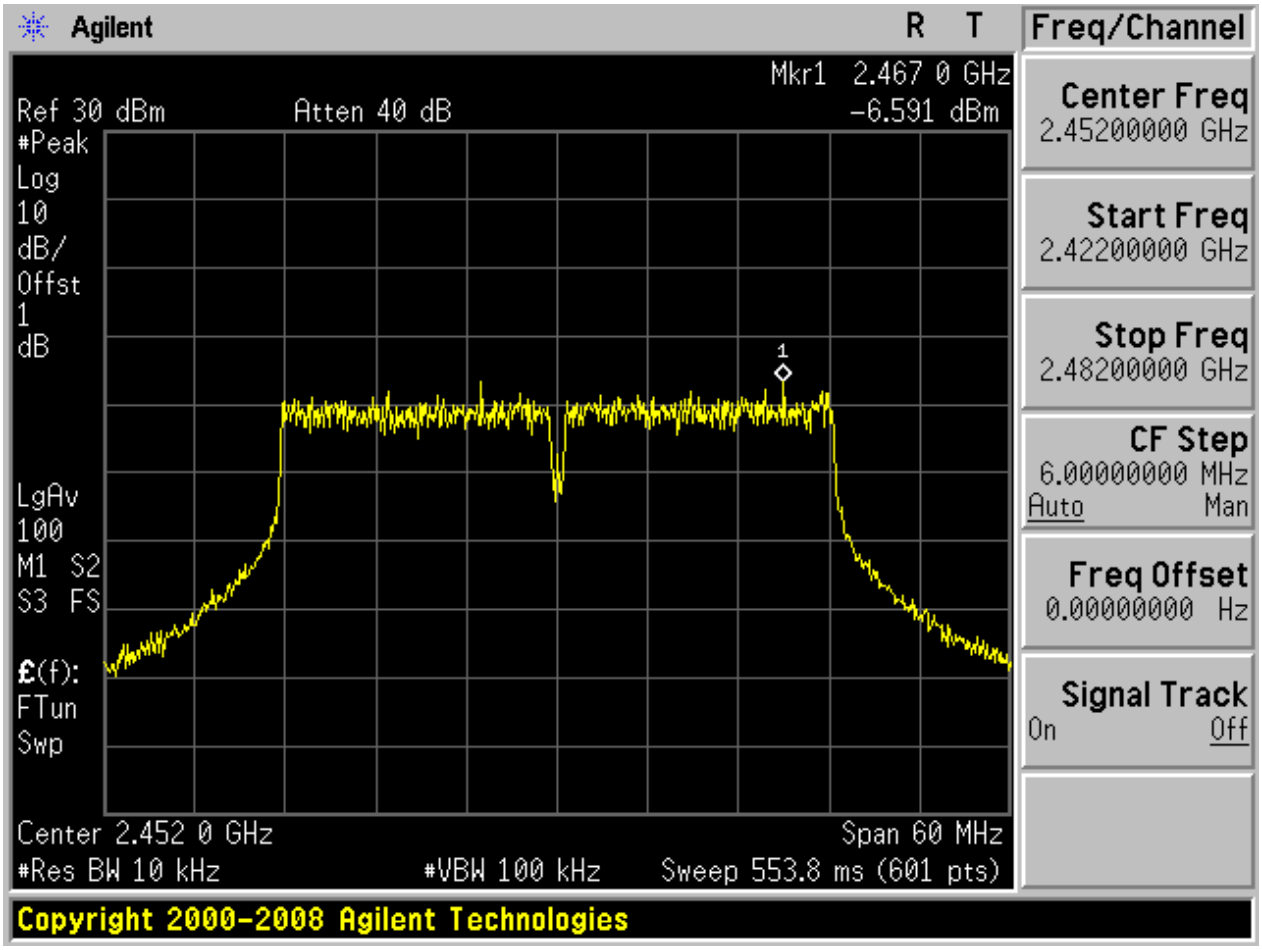
2.25 11N40_L



2.27 11N40_M



2.29 11N40_H



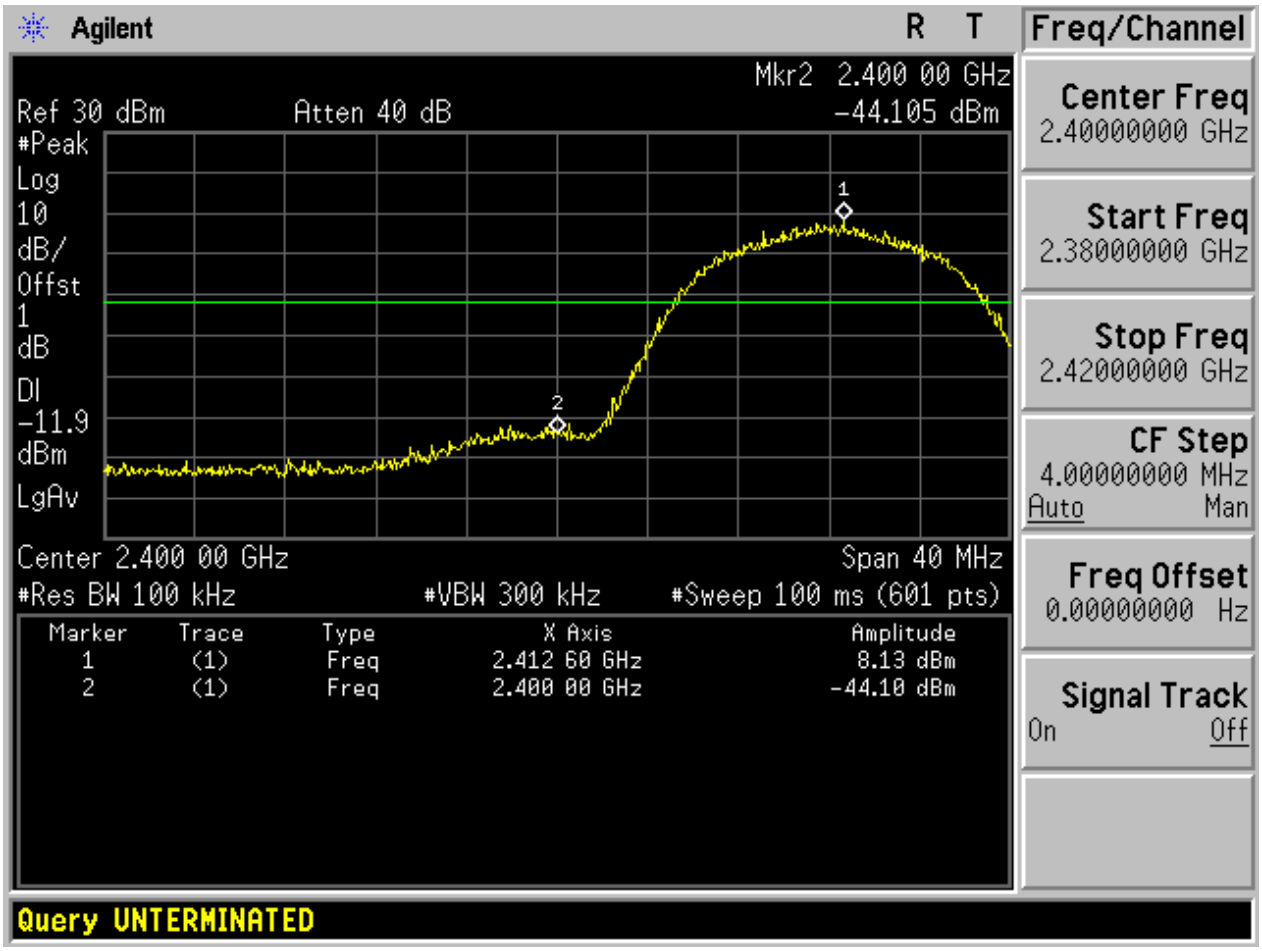
Appendix E: Band Edges Compliance

Part I - Test Results

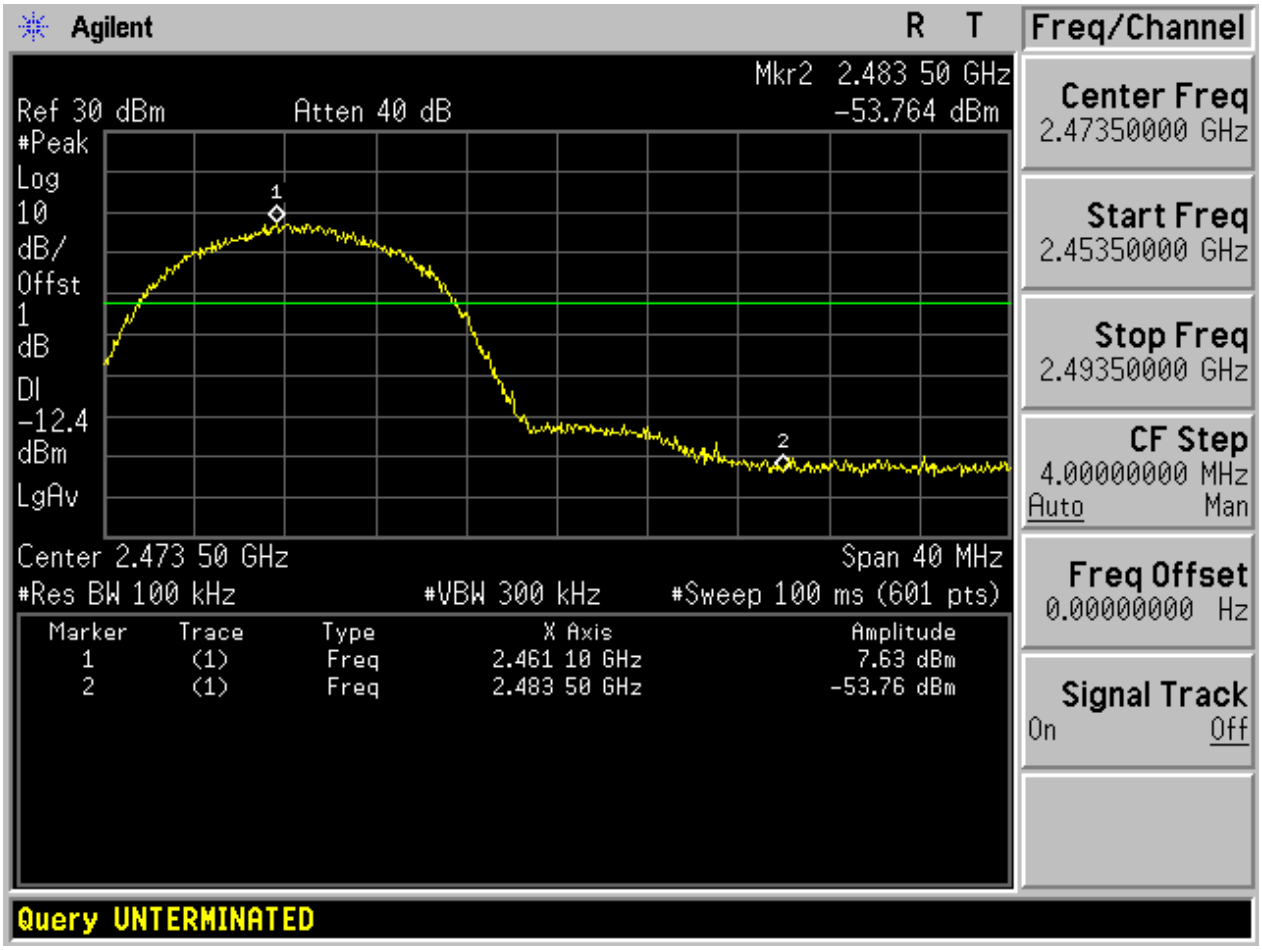
Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	Ant 1	8.13	-44.10	pass
11B	H	2462	Ant 1	7.63	-53.76	pass
11G	L	2412	Ant 1	2.71	-30.72	pass
11G	H	2462	Ant 1	2.72	-46.63	pass
11N20	L	2412	Ant 1	2.87	-31.48	pass
11N20	H	2462	Ant 1	2.72	-44.98	pass
11N40	L	2422	Ant 1	.32	-38.55	pass
11N40	H	2452	Ant 1	.67	-41.42	pass

Part II - Test Plots

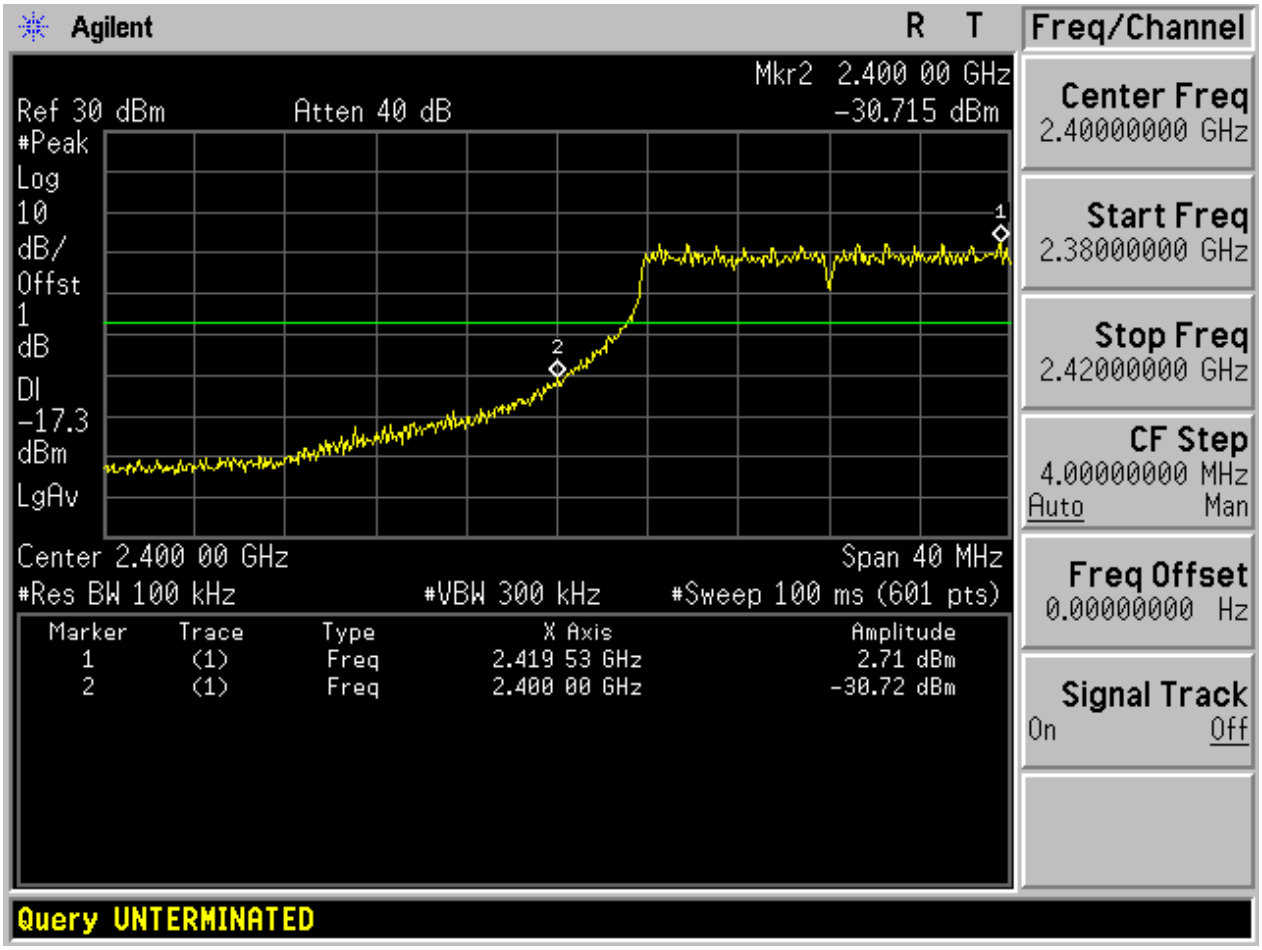
2.1 11B_L



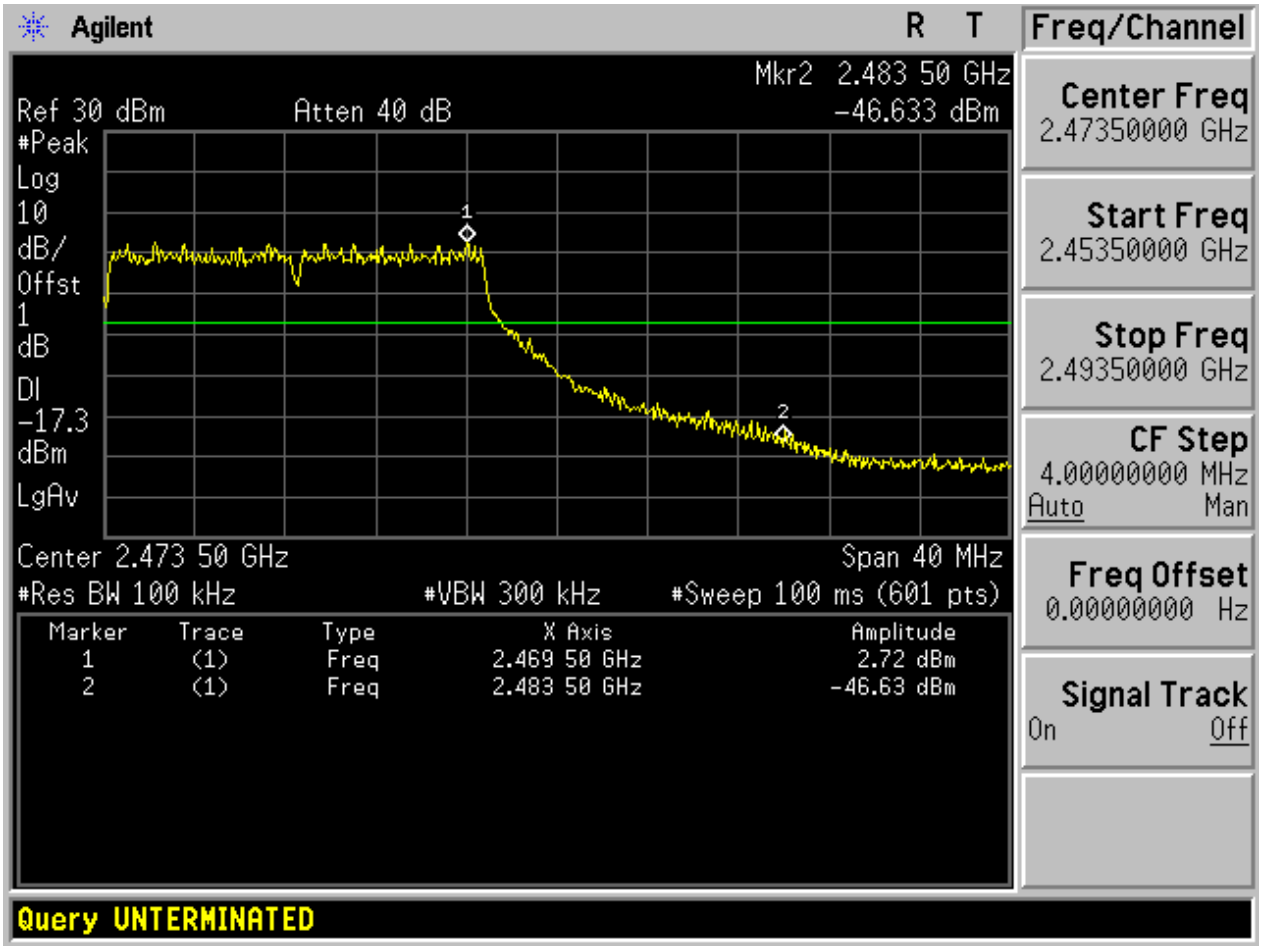
2.3 11B_H



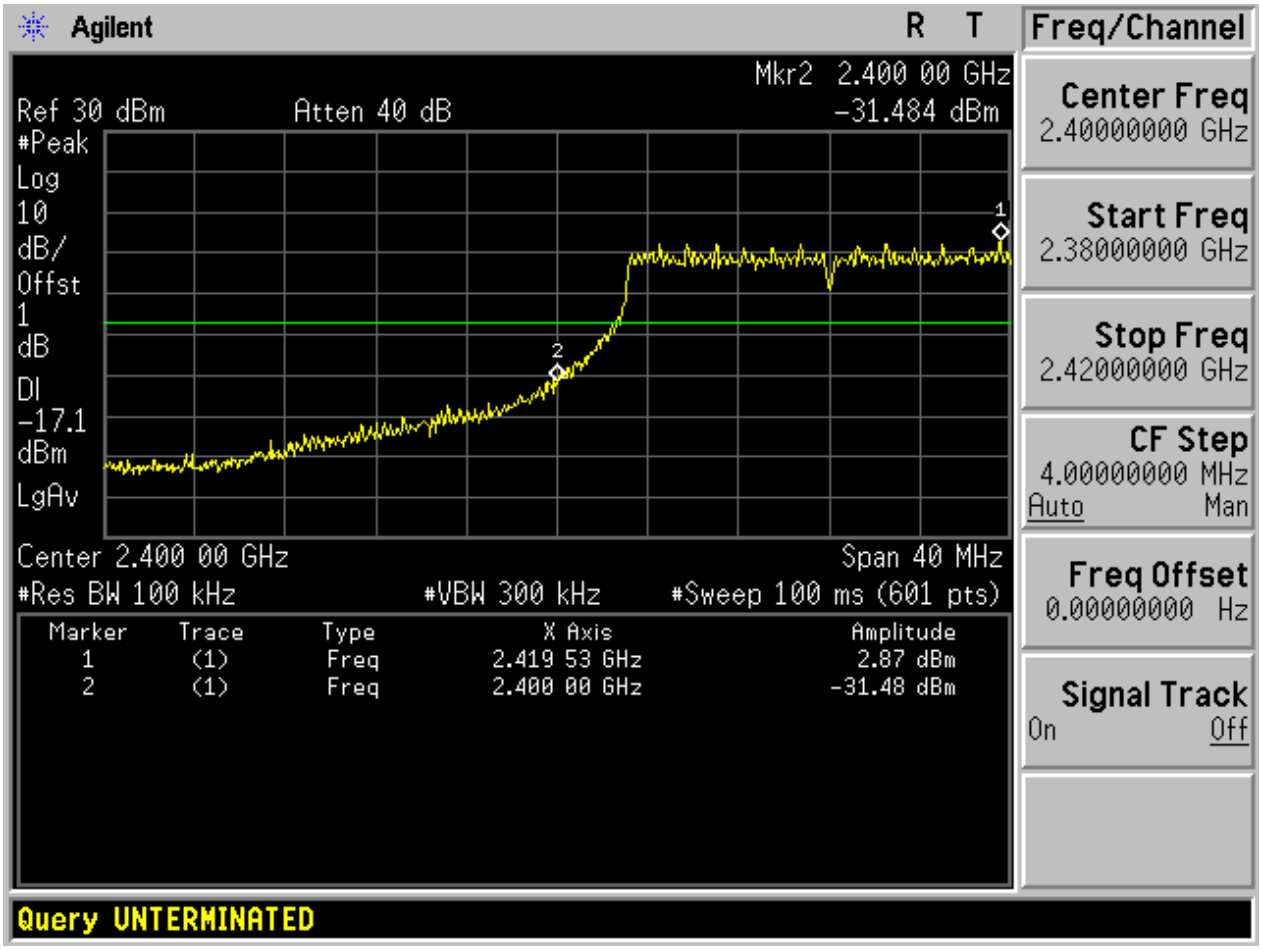
2.5 11G_L



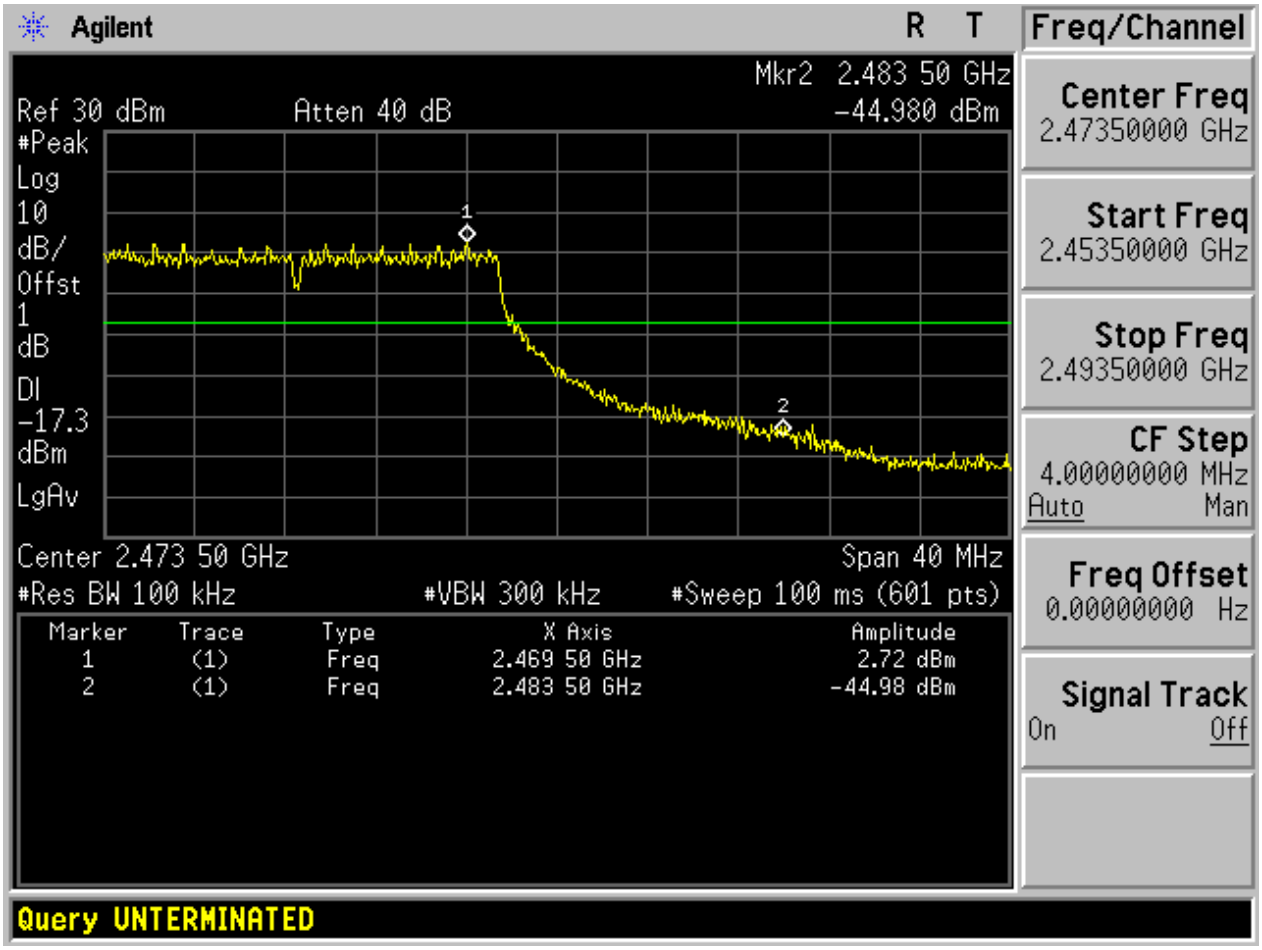
2.7 11G_H



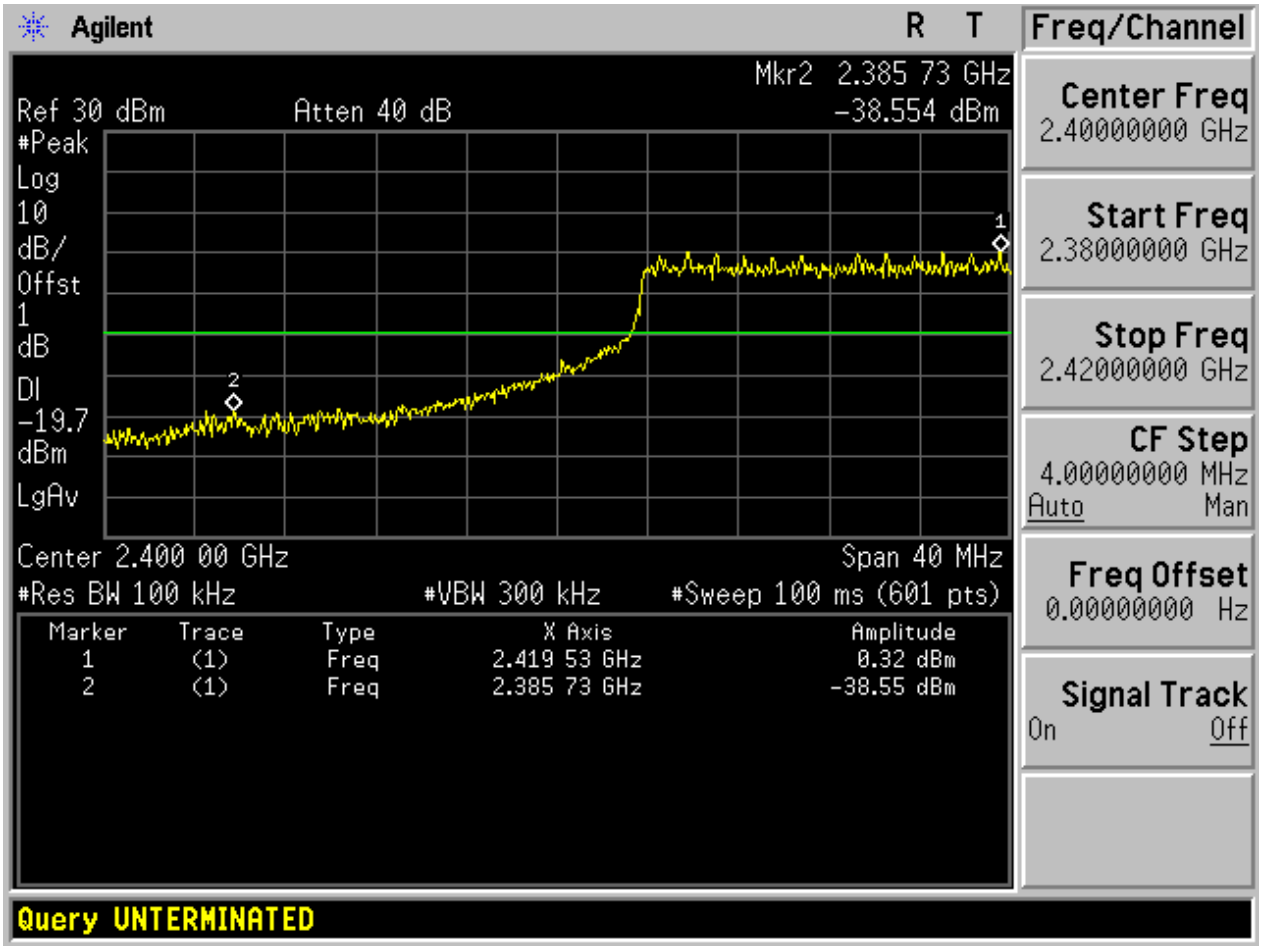
2.9 11N20_L



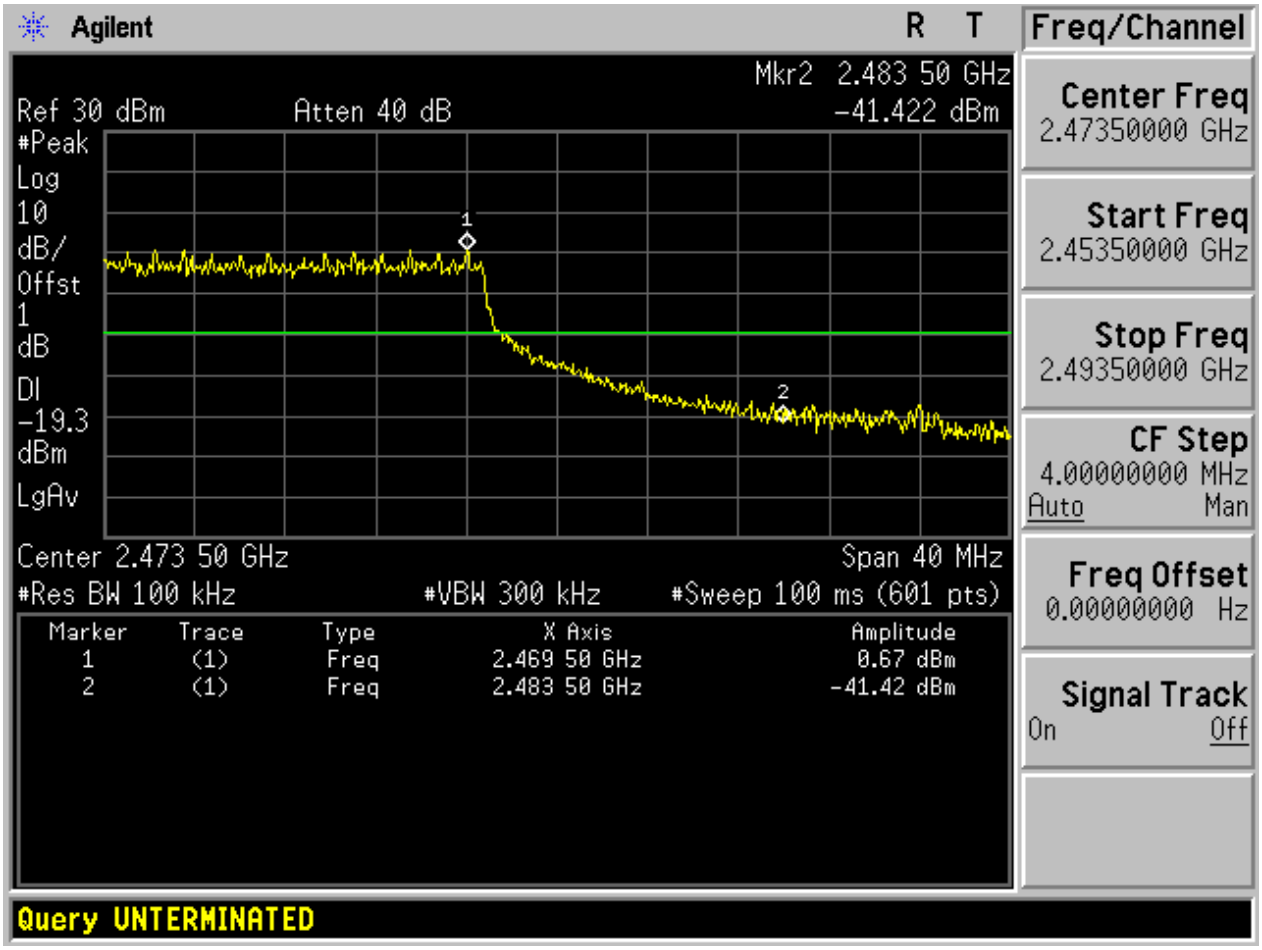
2.11 11N20_H



2.17 11N40_L



2.19 11N40_H



Appendix F: Unwanted Emissions into Non-Restricted Frequency Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated,a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = 10 x lg(100 [kHz]/narrower RBW [kHz]). As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-20[dBm],see test plots for detailed".

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	Ant 1	8.89	<limit	pass
11B	M	2437	Ant 1	8.87	<limit	pass
11B	H	2462	Ant 1	8.95	<limit	pass
11G	L	2412	Ant 1	2.86	<limit	pass
11G	M	2437	Ant 1	2.89	<limit	pass
11G	H	2462	Ant 1	2.93	<limit	pass
11N20	L	2412	Ant 1	3.06	<limit	pass
11N20	M	2437	Ant 1	2.93	<limit	pass
11N20	H	2462	Ant 1	2.92	<limit	pass
11N40	L	2422	Ant 1	.66	<limit	pass
11N40	M	2437	Ant 1	.69	<limit	pass
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Part II - Test Plots

2.1 11B_L

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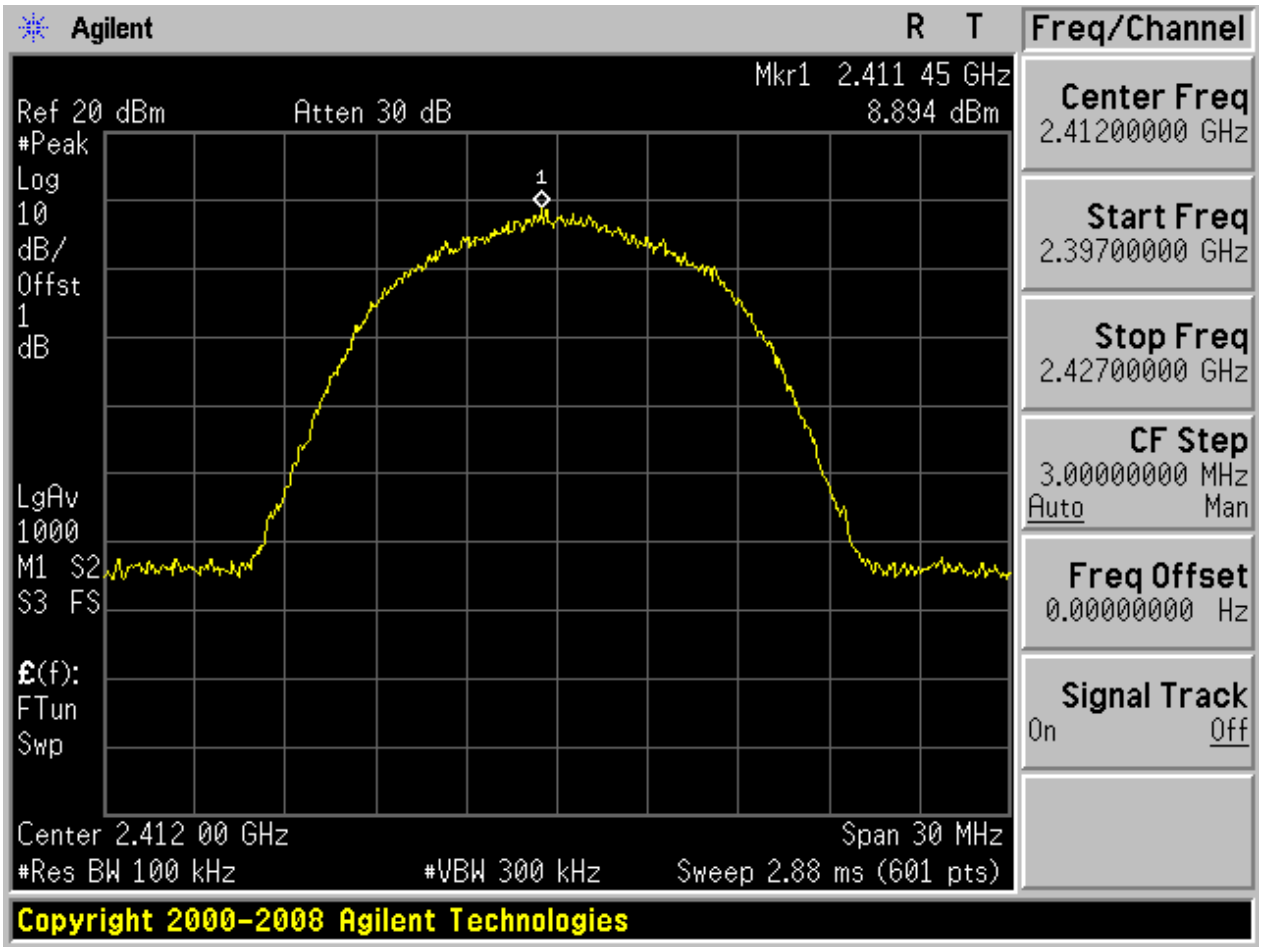

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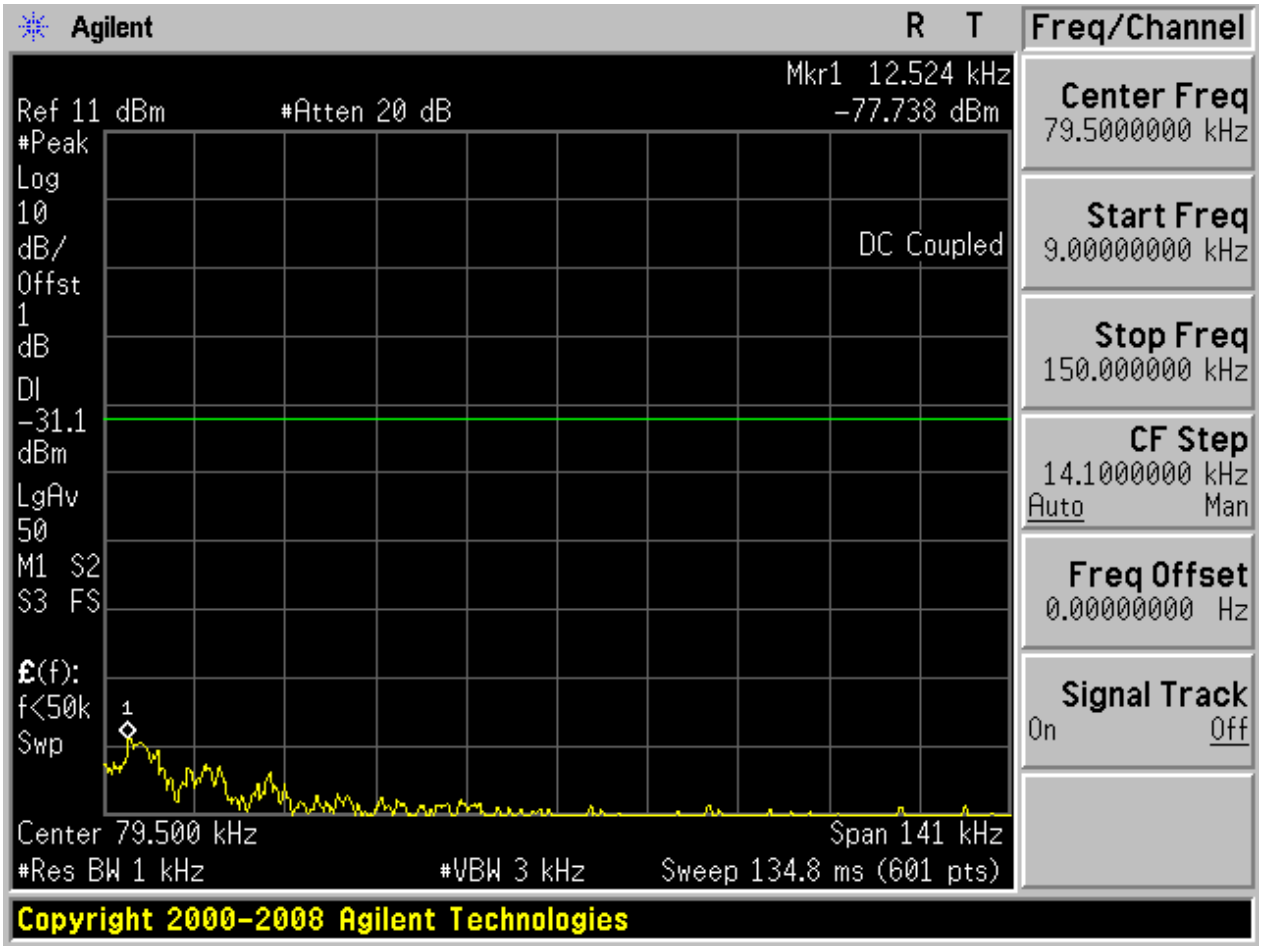

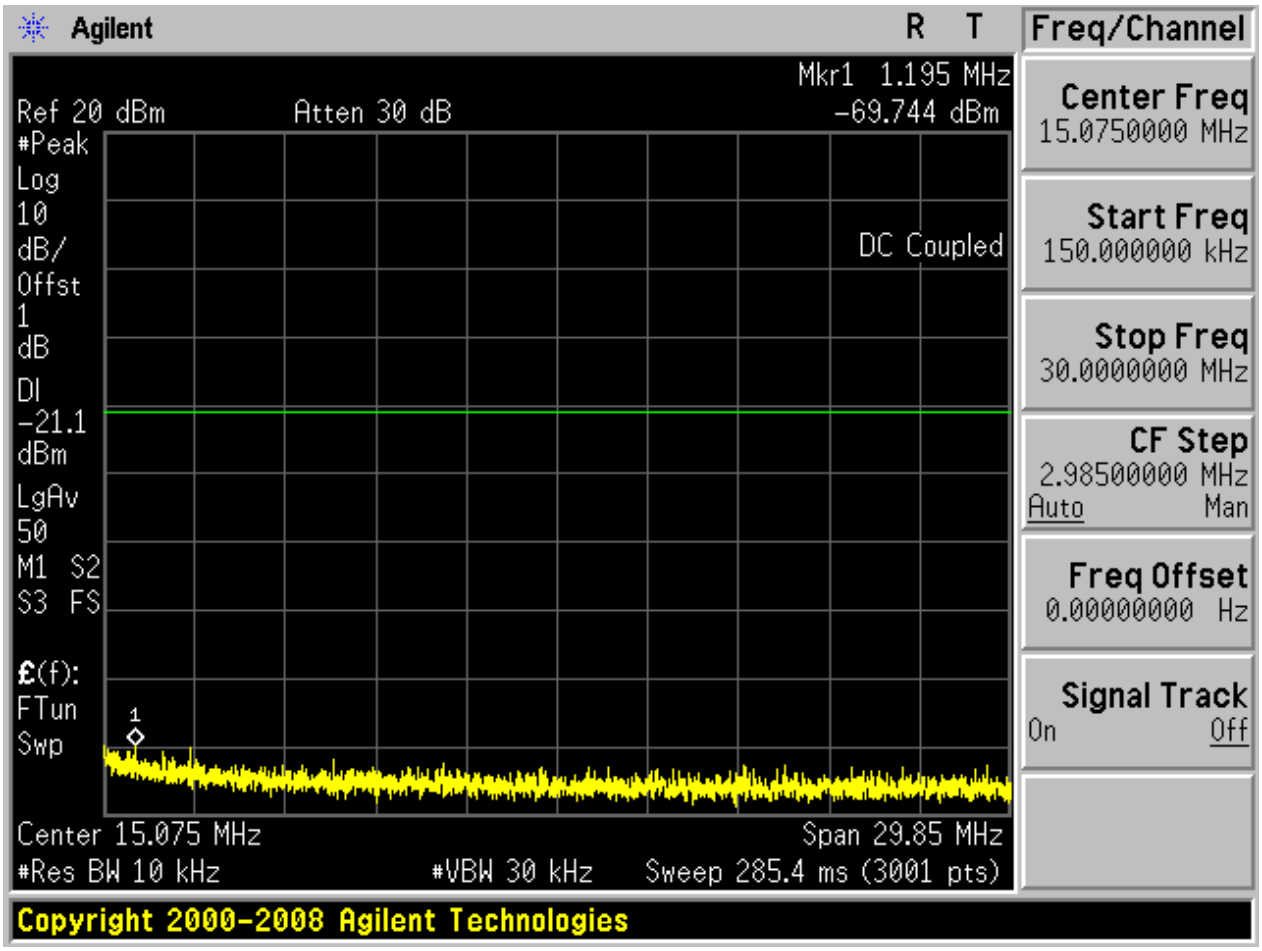

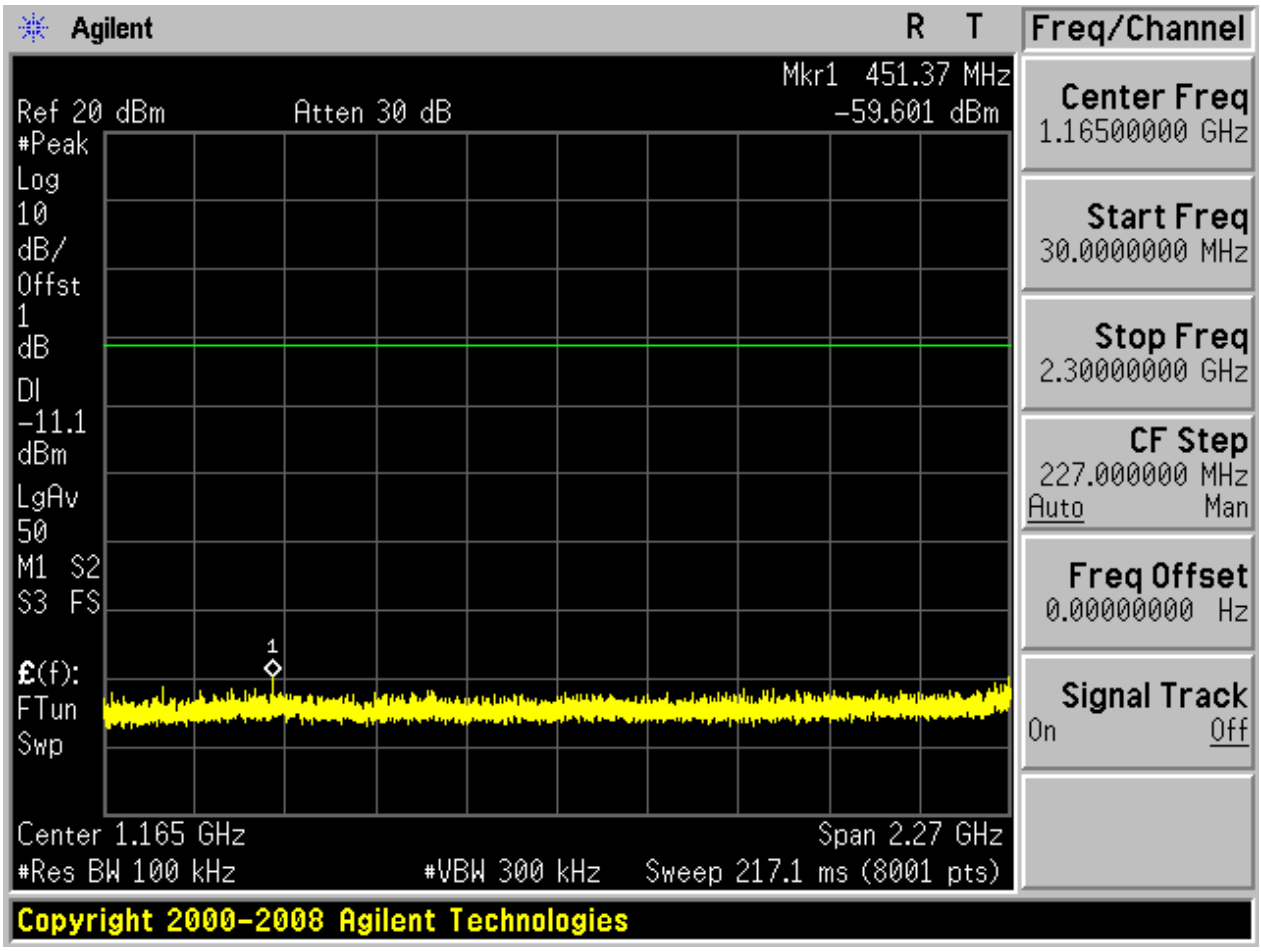

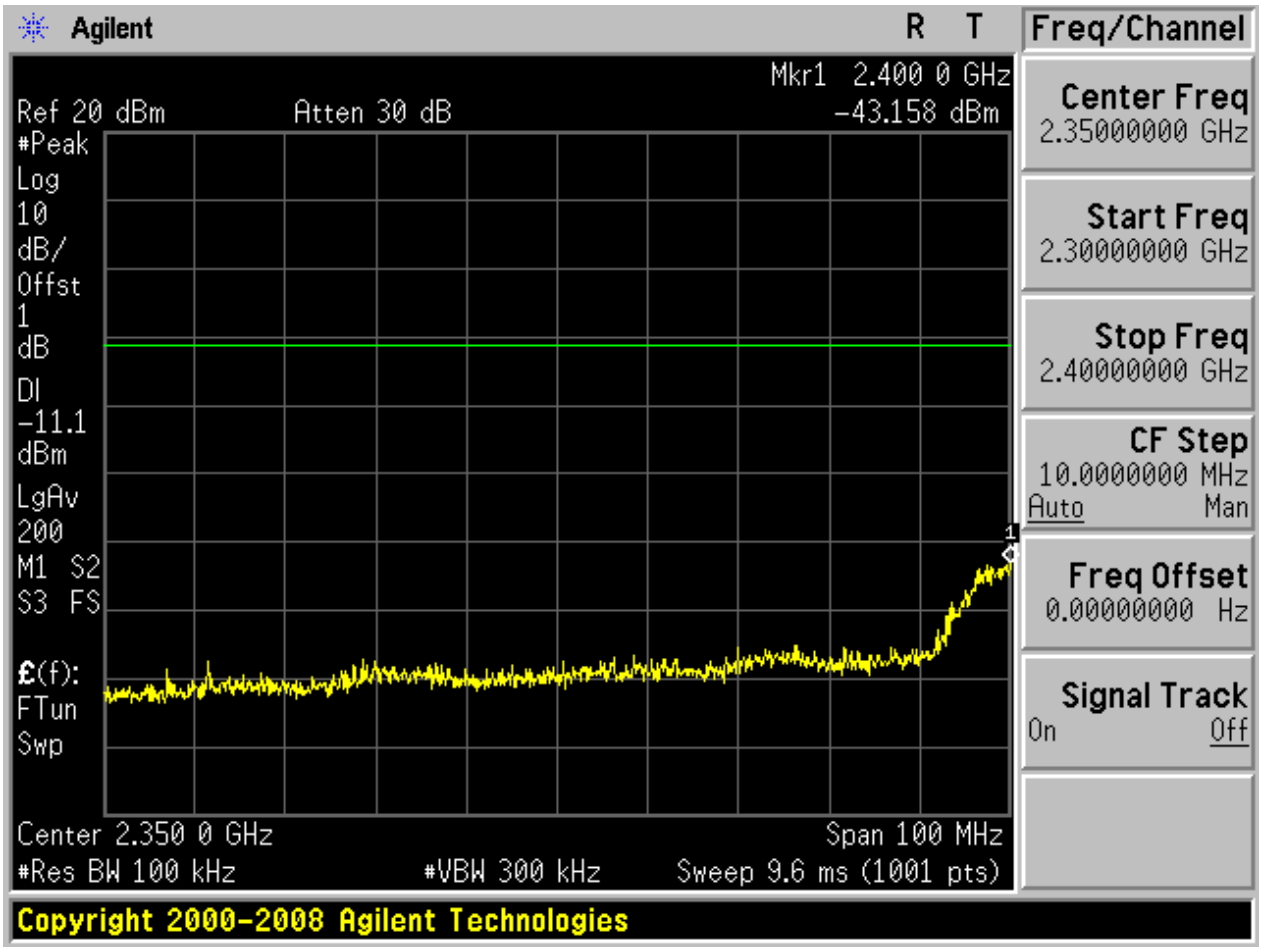

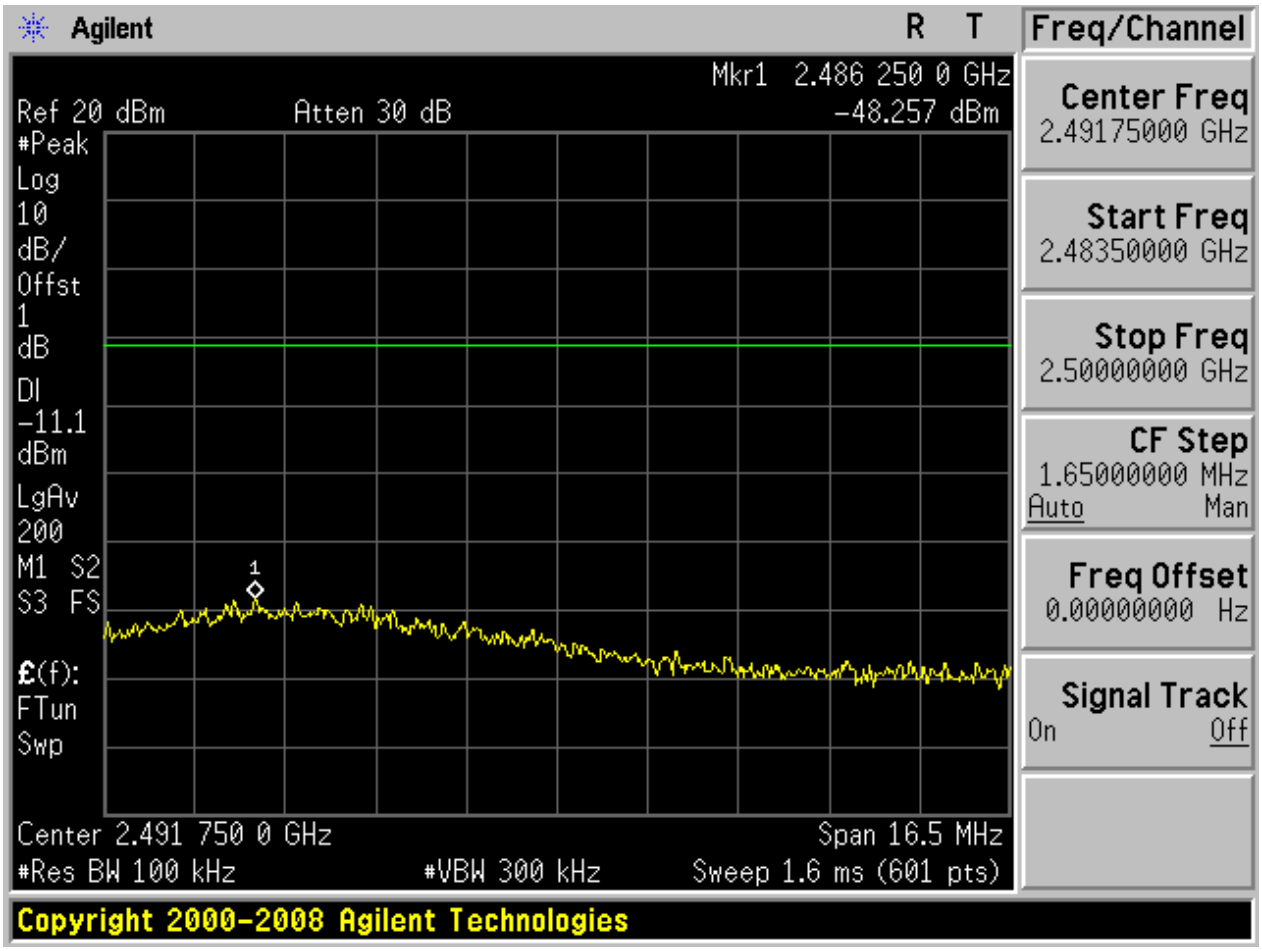

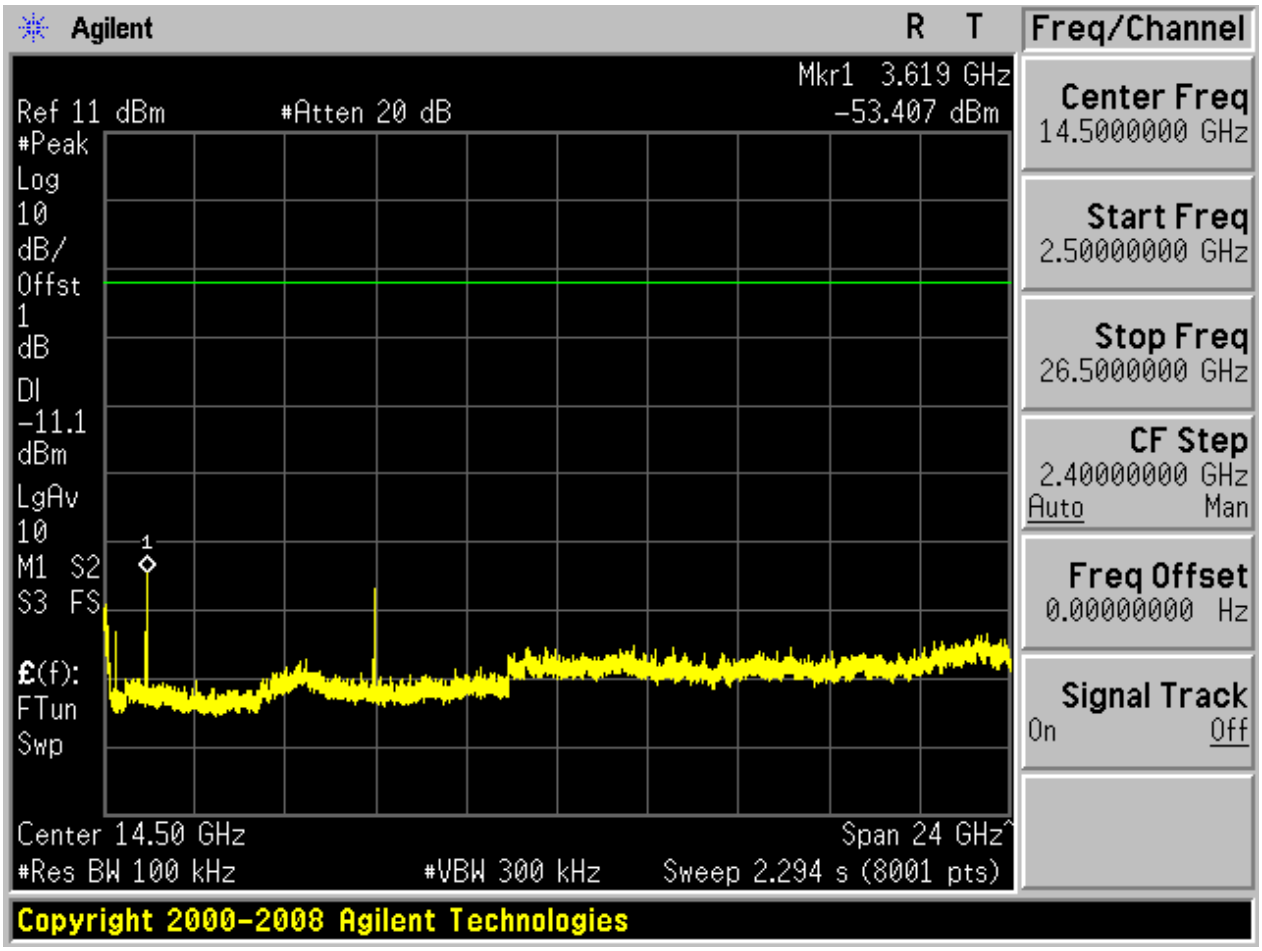

2.3 11B_M

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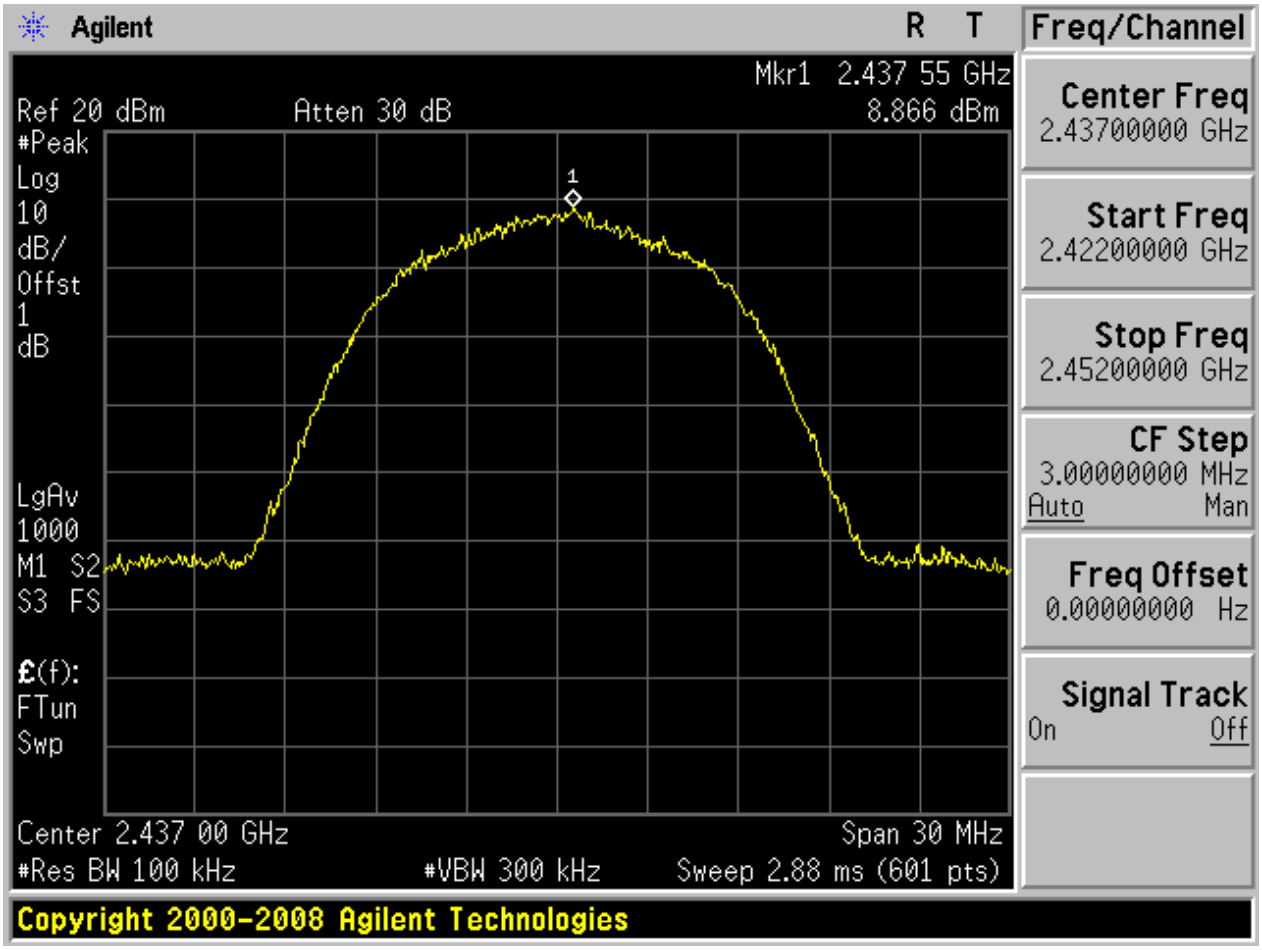

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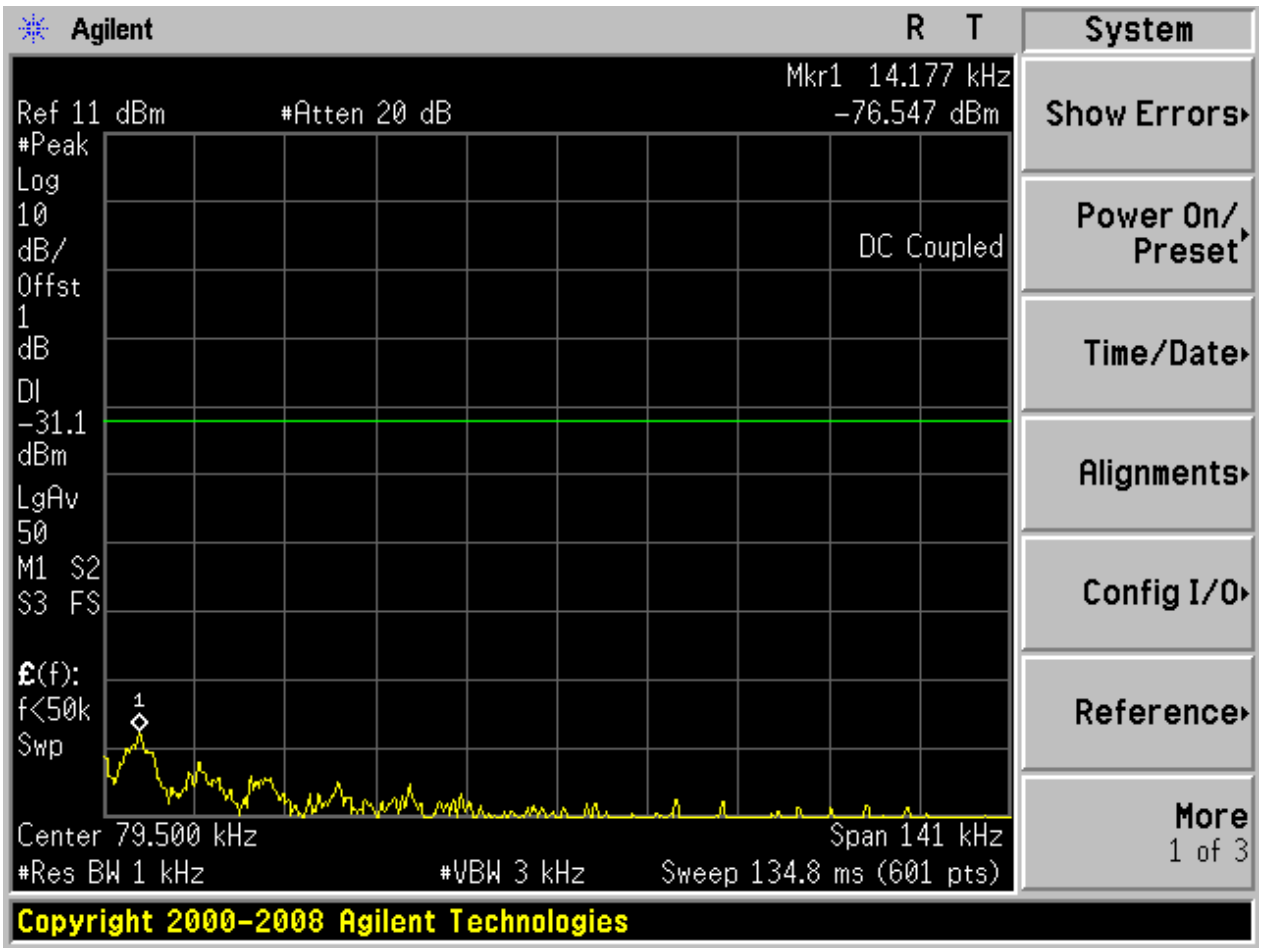

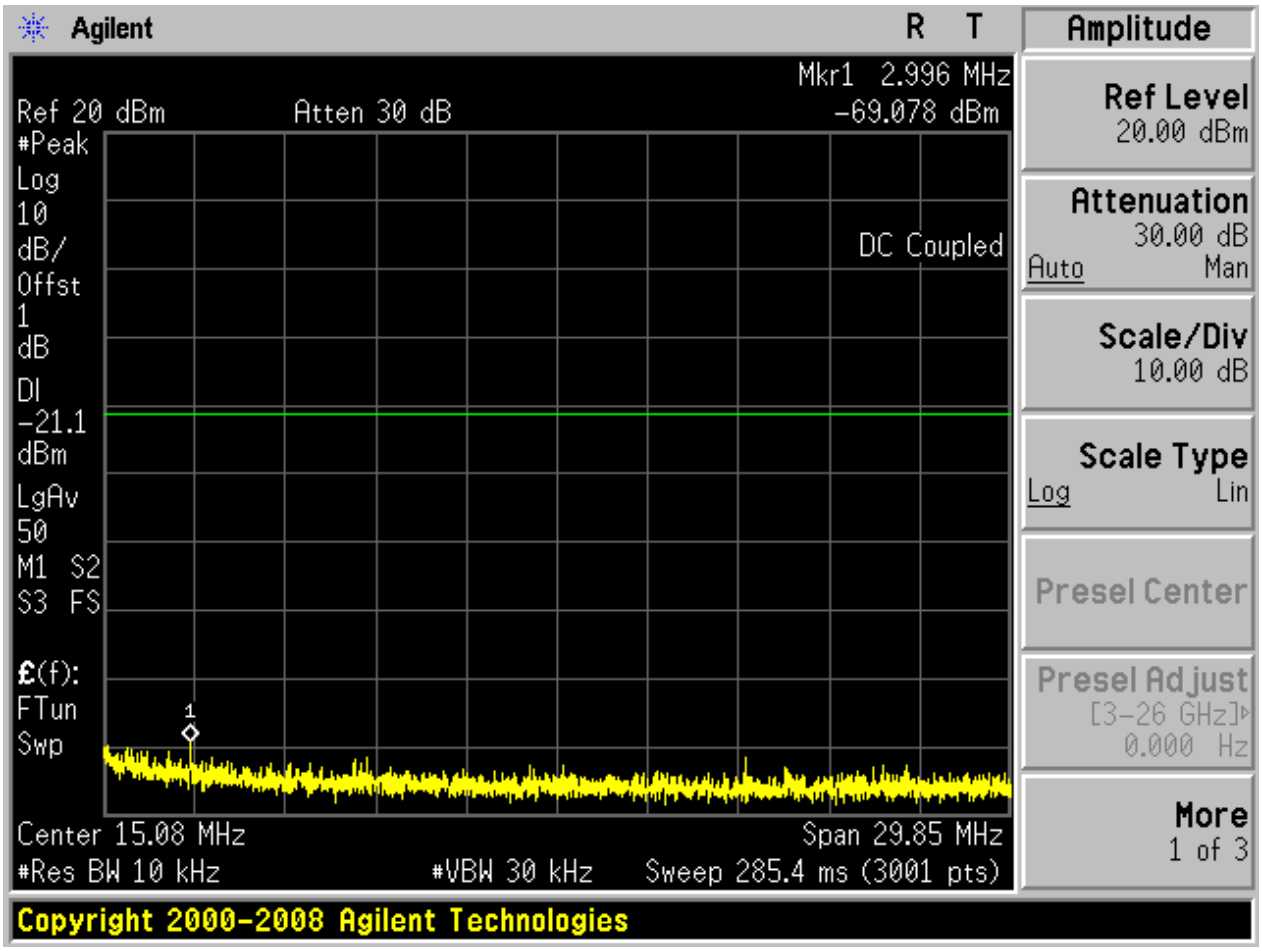

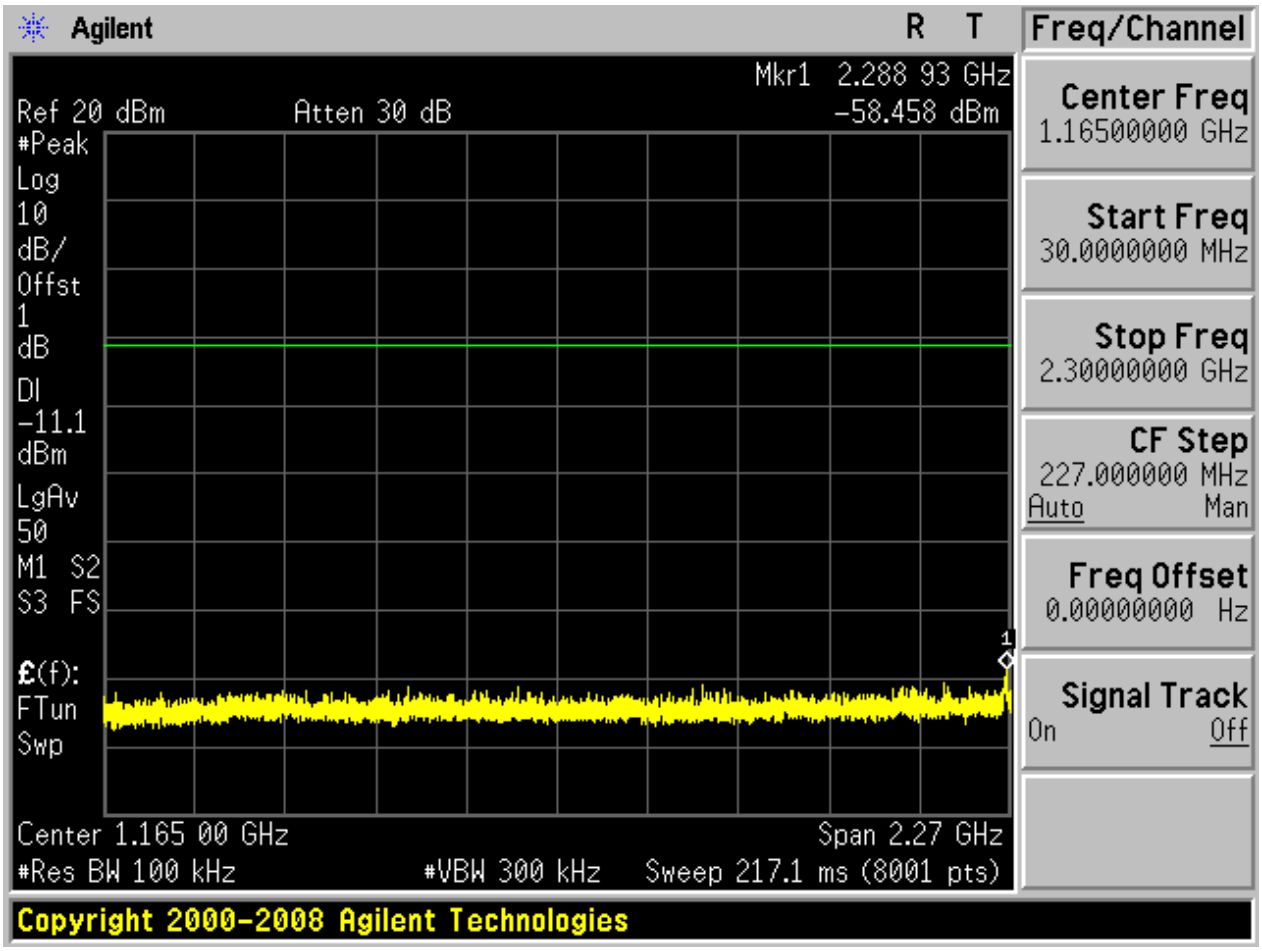

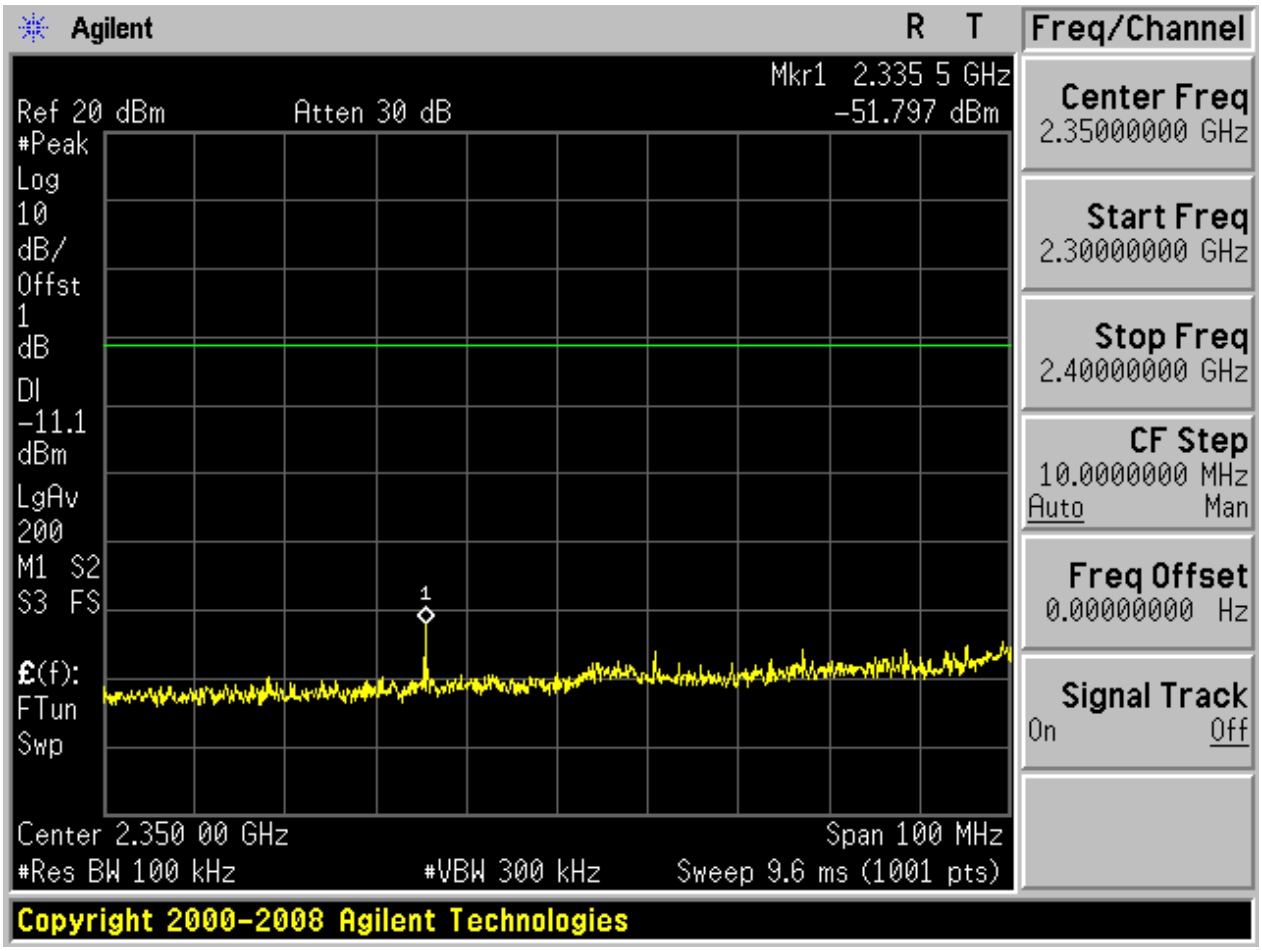

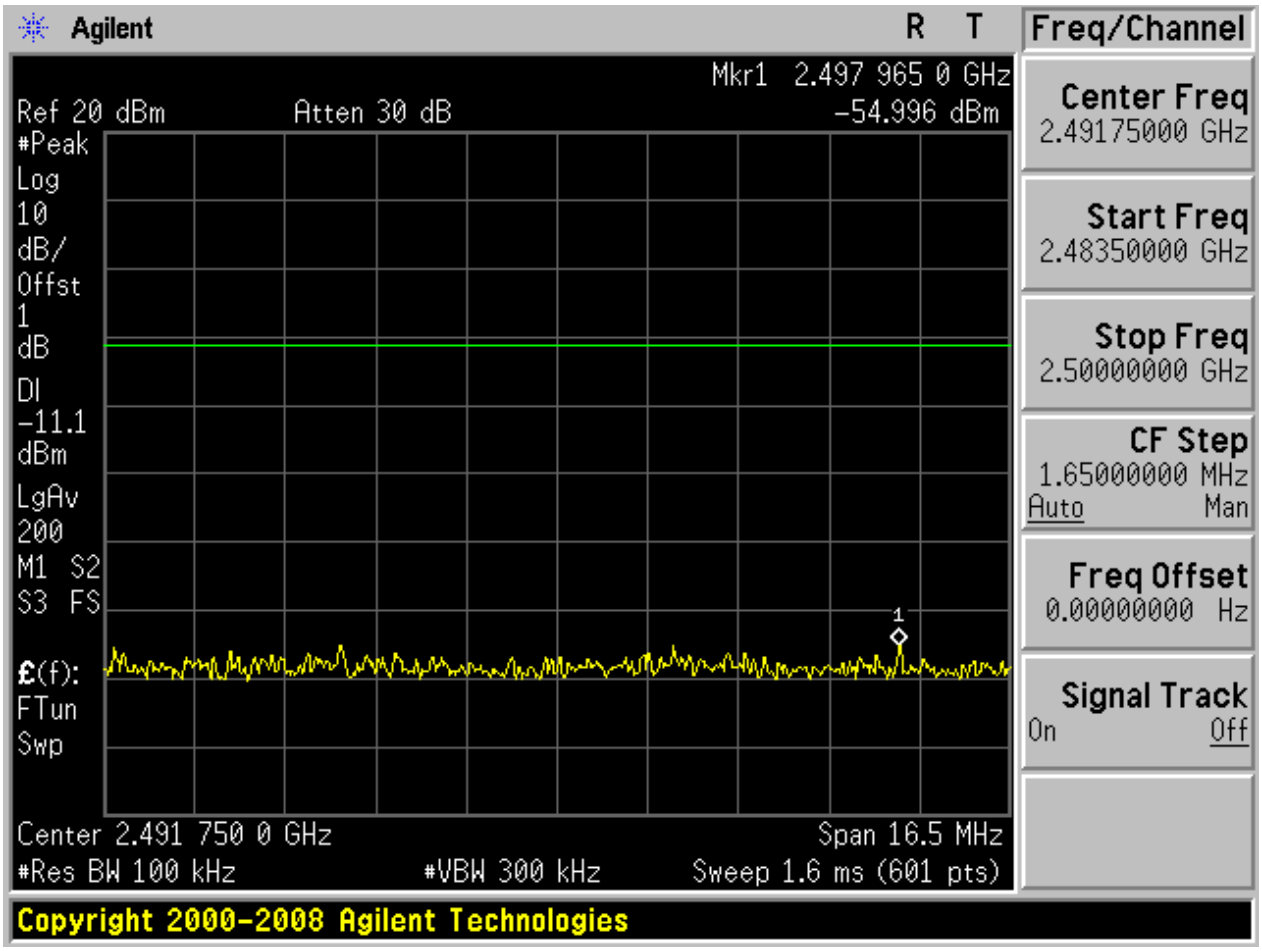

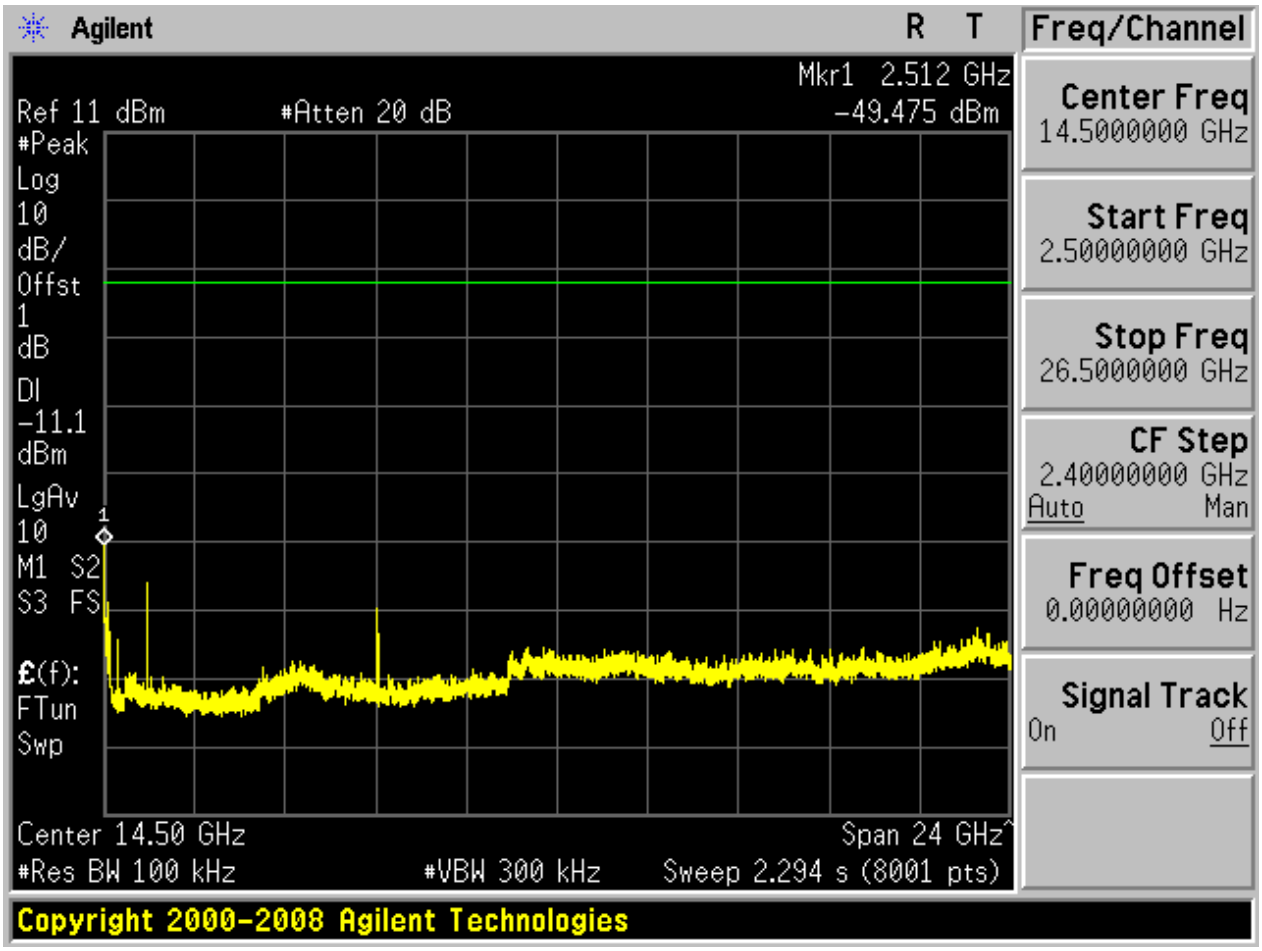

2.5 11B_H

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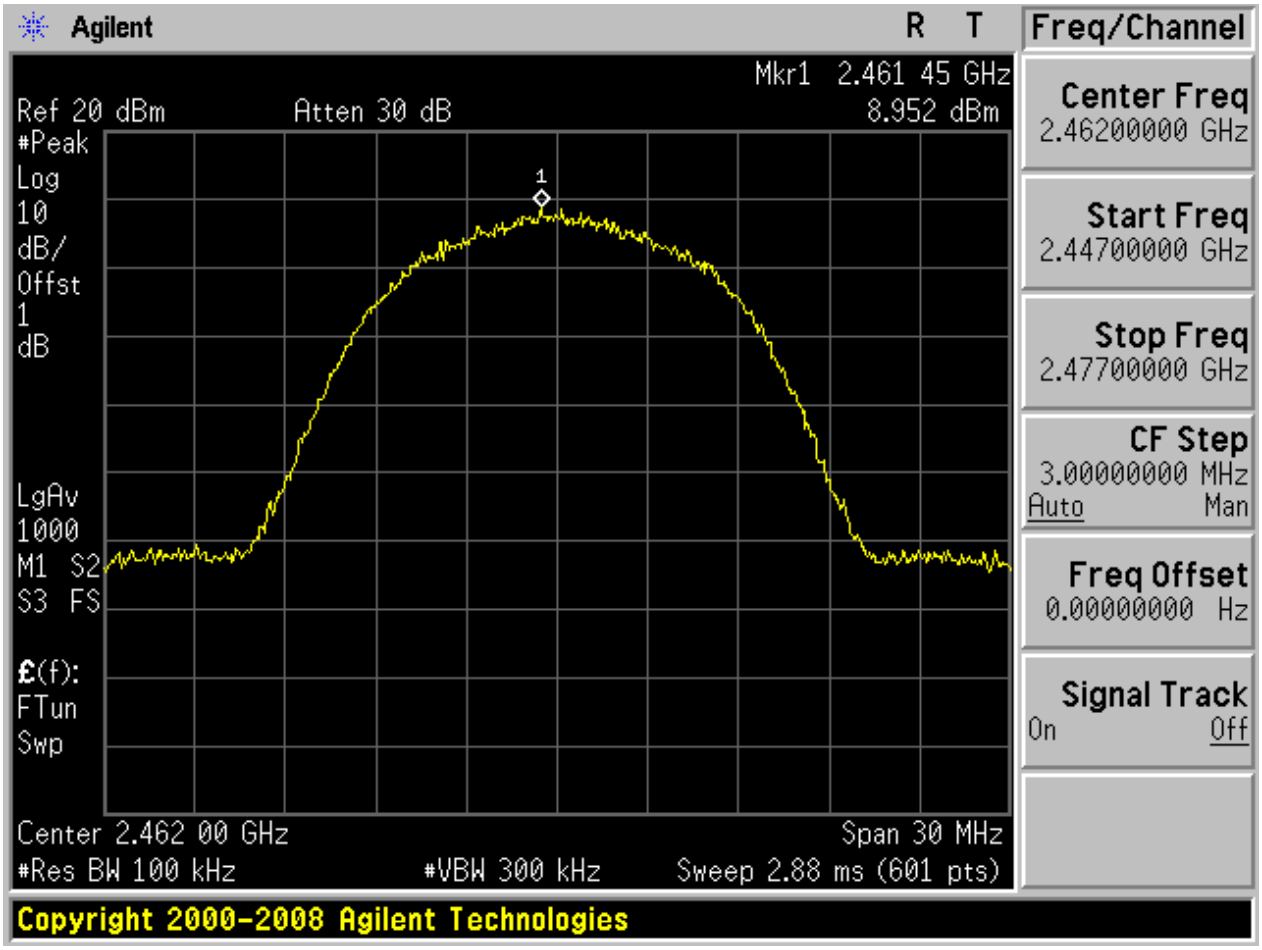

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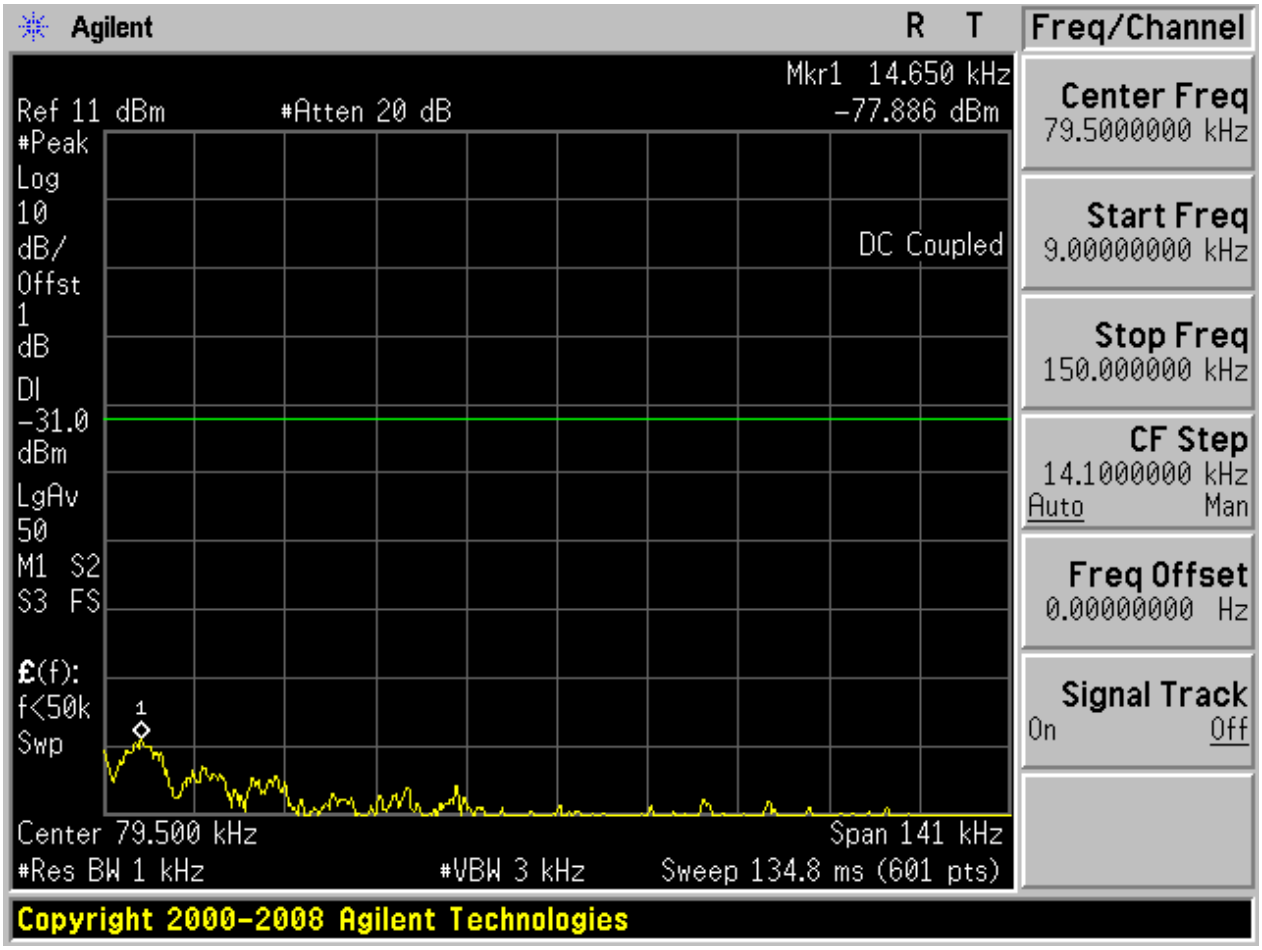
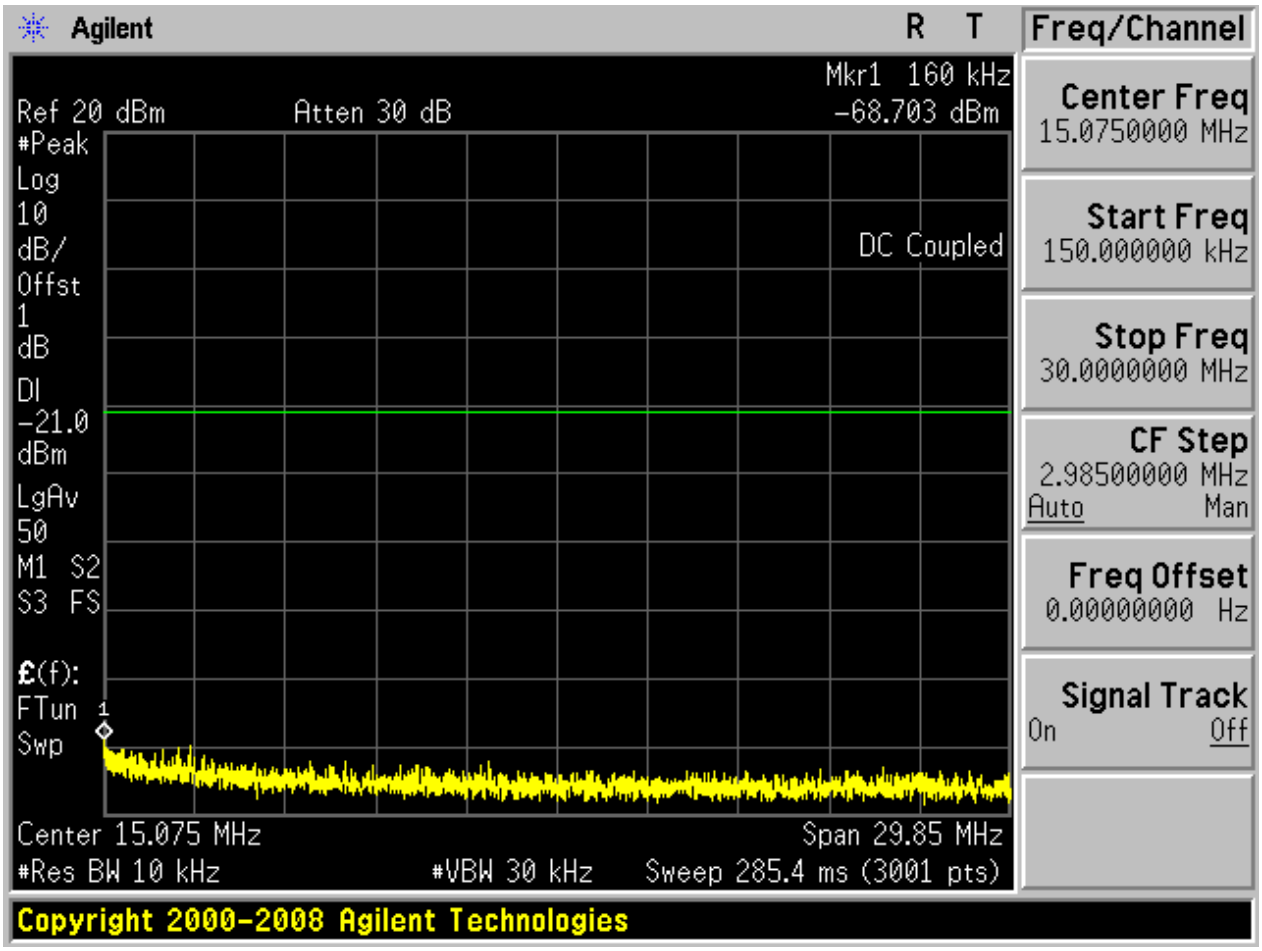
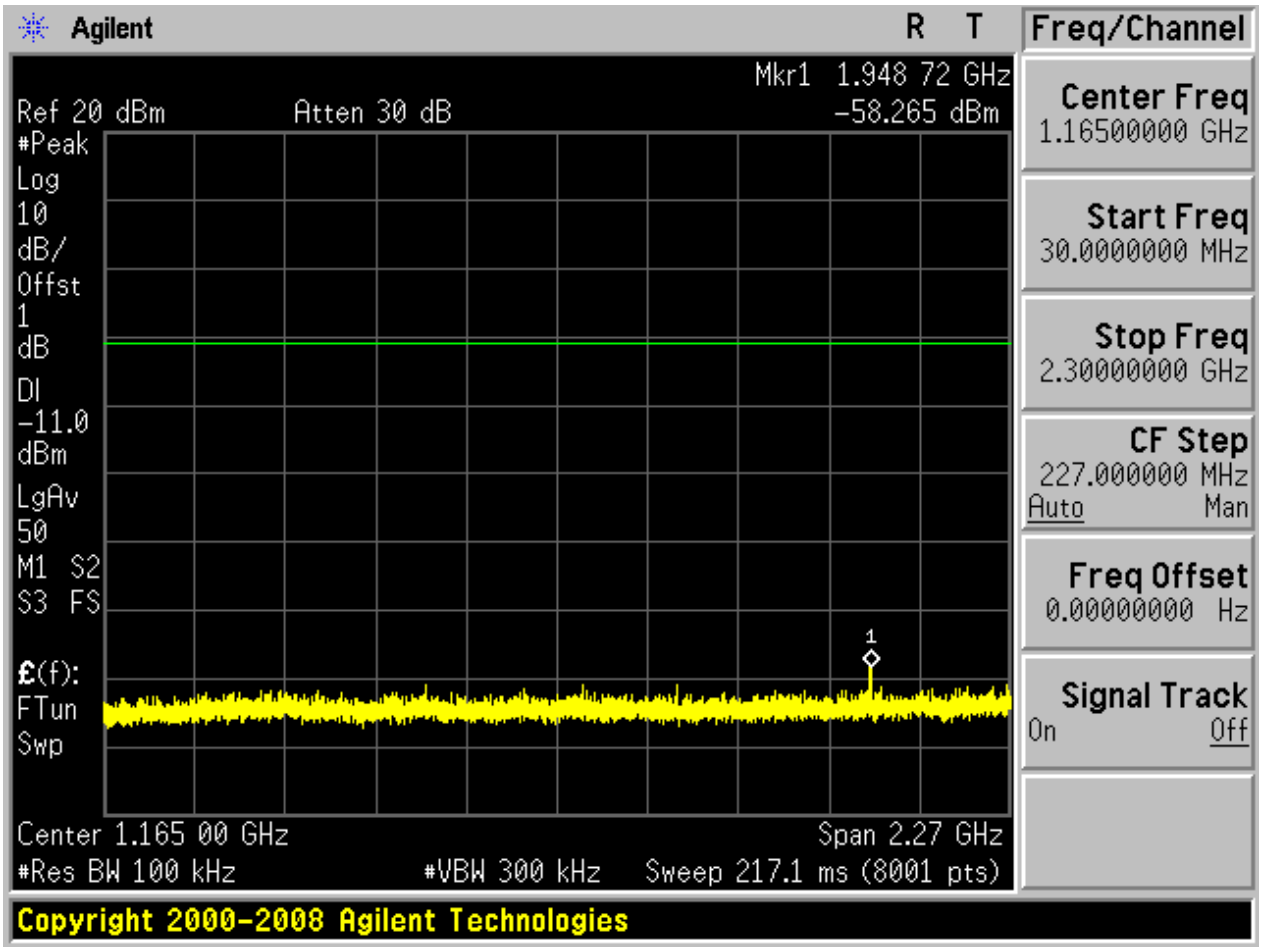
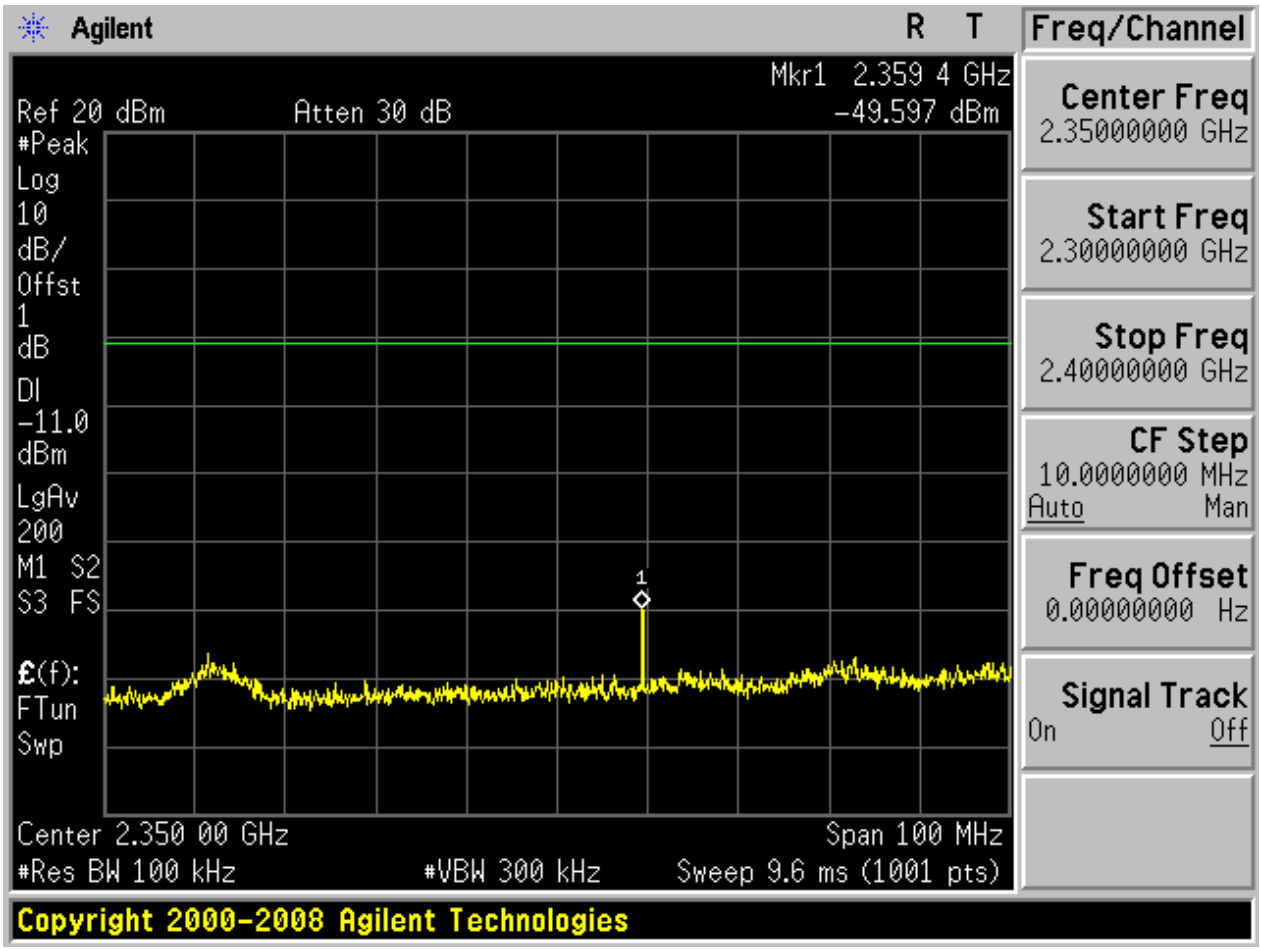
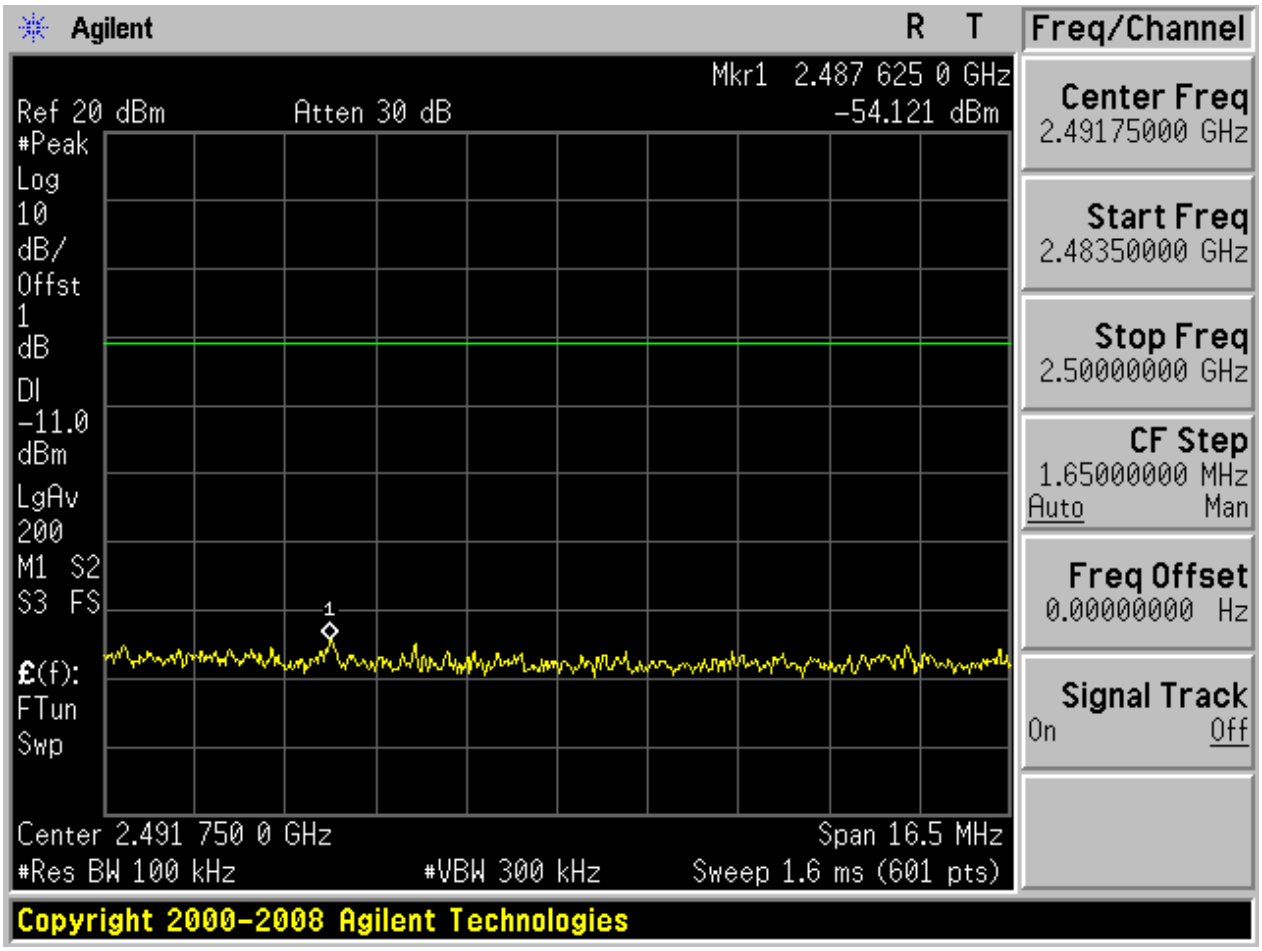
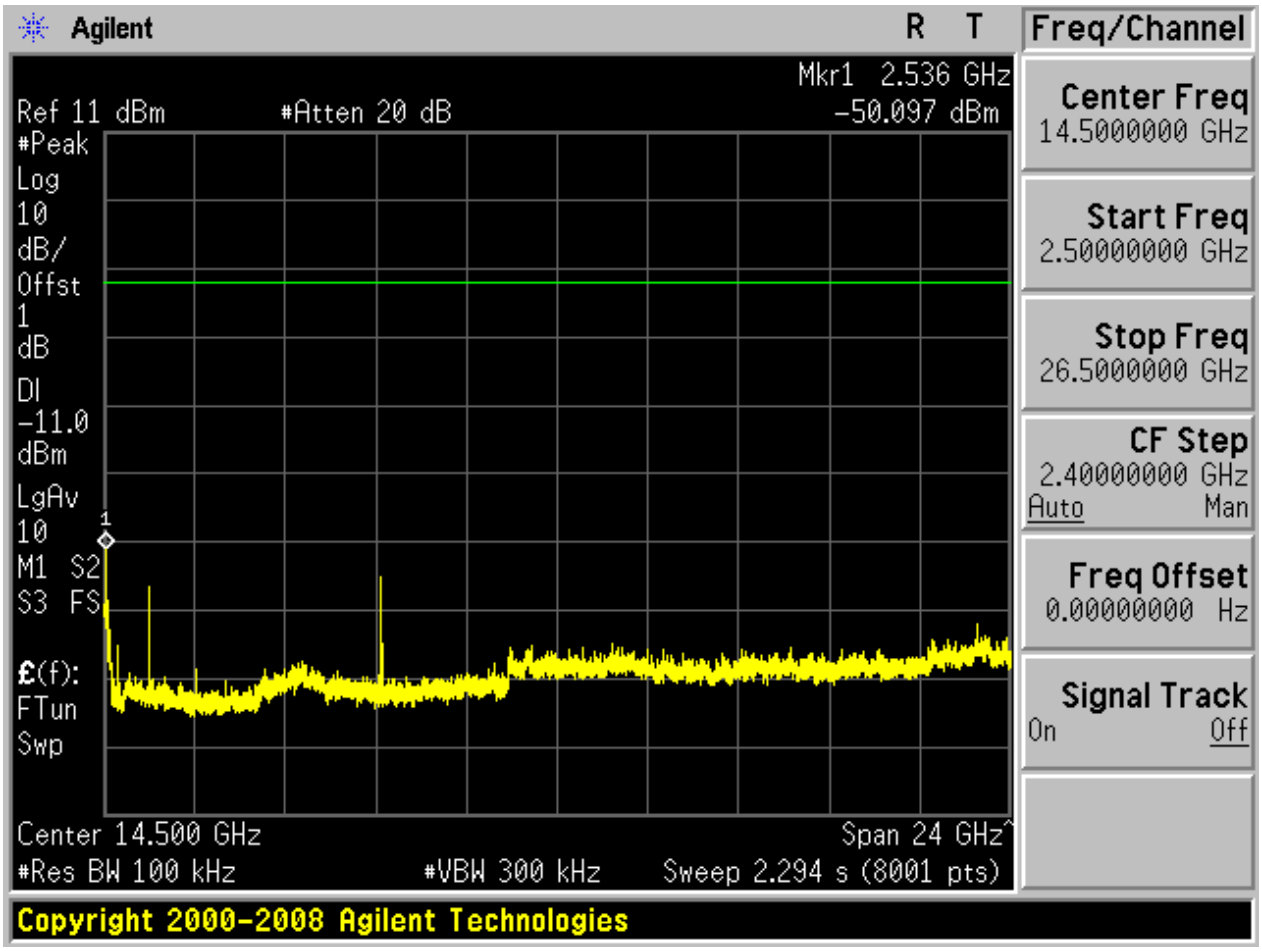

Agilent
R T
Freq/Channel
Mkr1 14.650 kHz
-77.886 dBm
Ref 11 dBm
#Atten 20 dB
#Peak
Log
10
dB/
Offst
1
dB
Dl
-31.0
dBm
LgAv
50
M1 S2
S3 FS
£(f):
f<50k
Swp
DC Coupled
Center Freq
79.5000000 kHz
Start Freq
9.00000000 kHz
Stop Freq
150.000000 kHz
CF Step
14.1000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 79.500 kHz
Span 141 kHz
#Res BW 1 kHz
#VBW 3 kHz
Sweep 134.8 ms (601 pts)
Copyright 2000-2008 Agilent Technologies











2.7 11G_L

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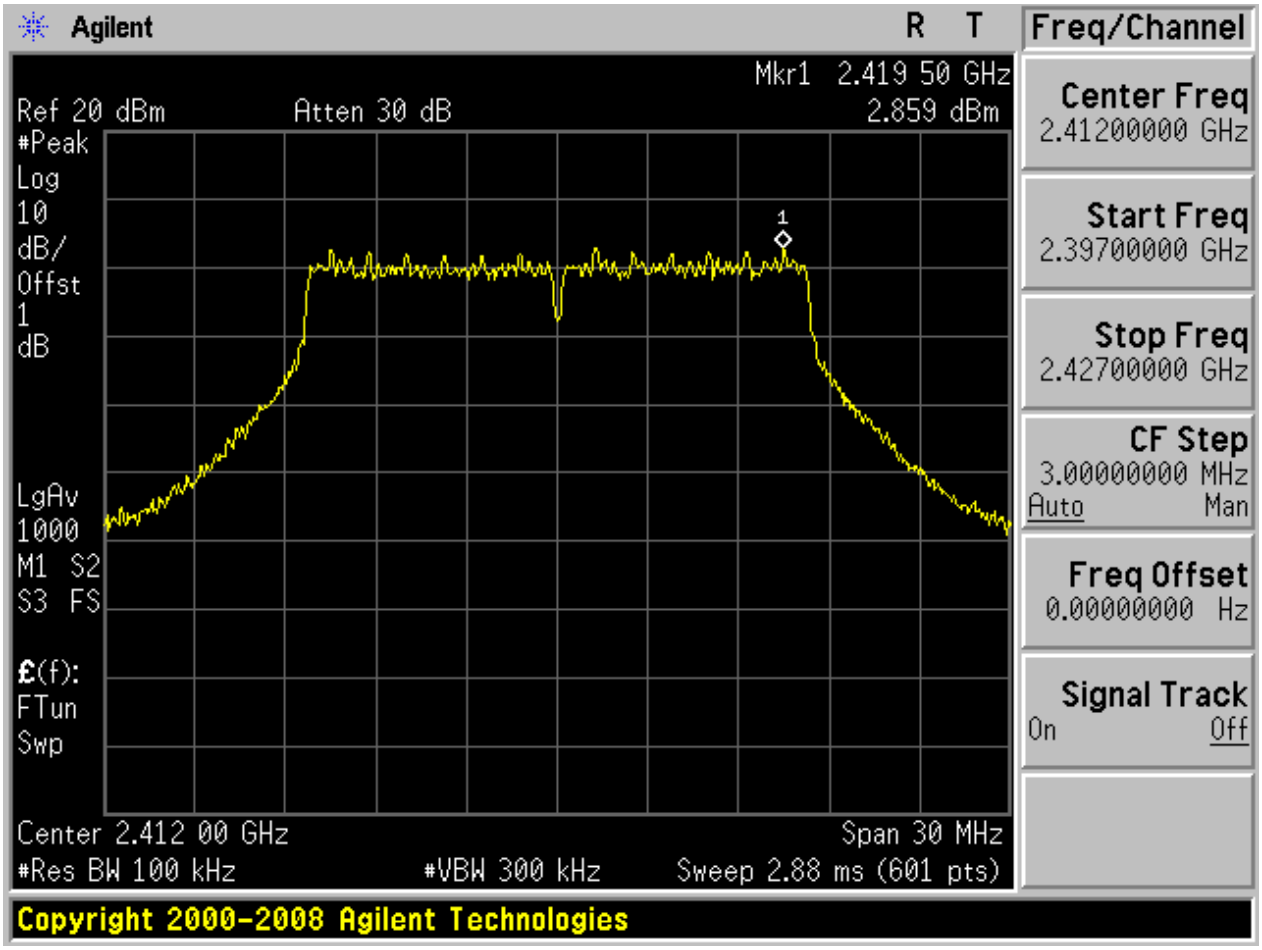

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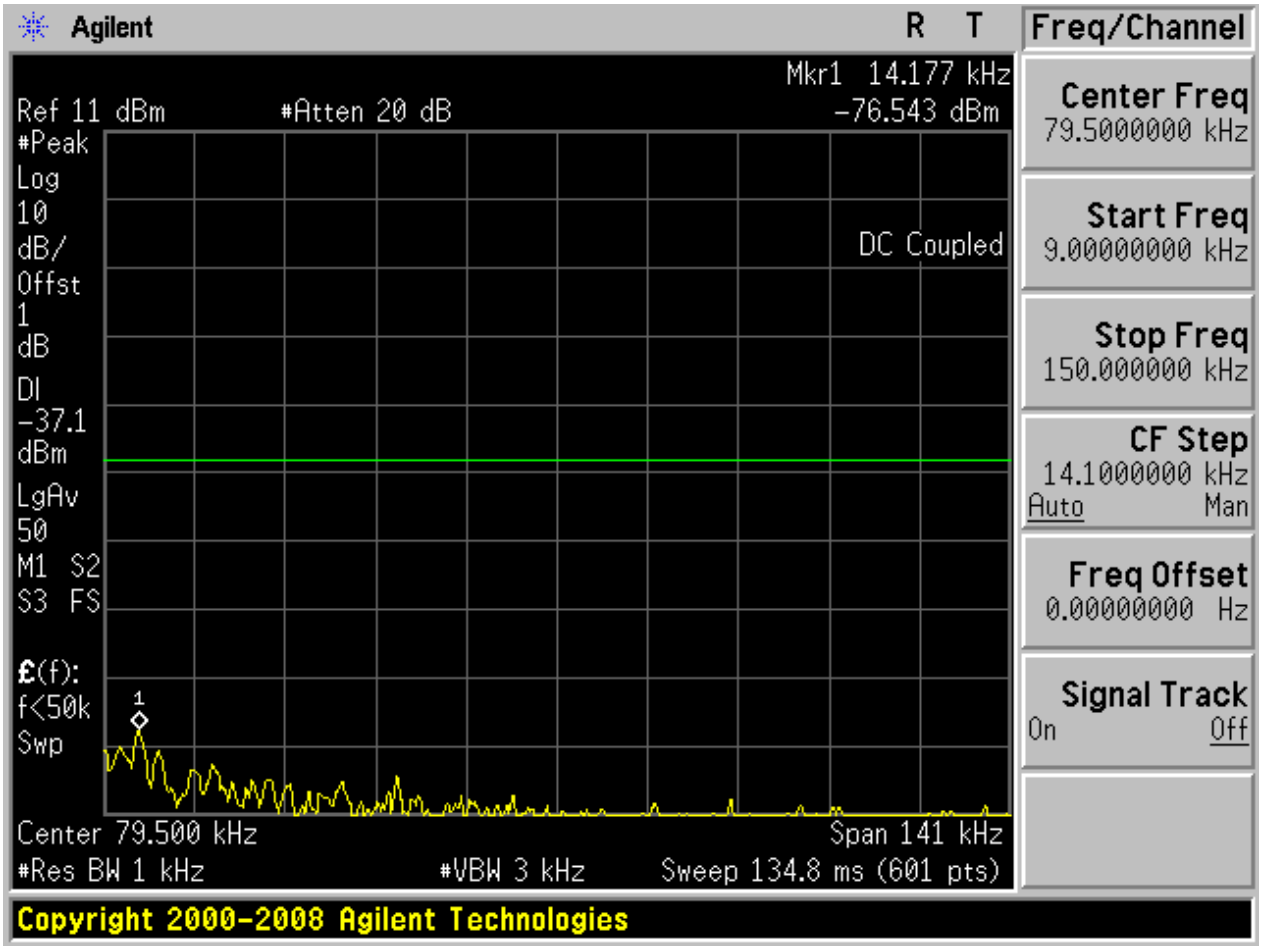

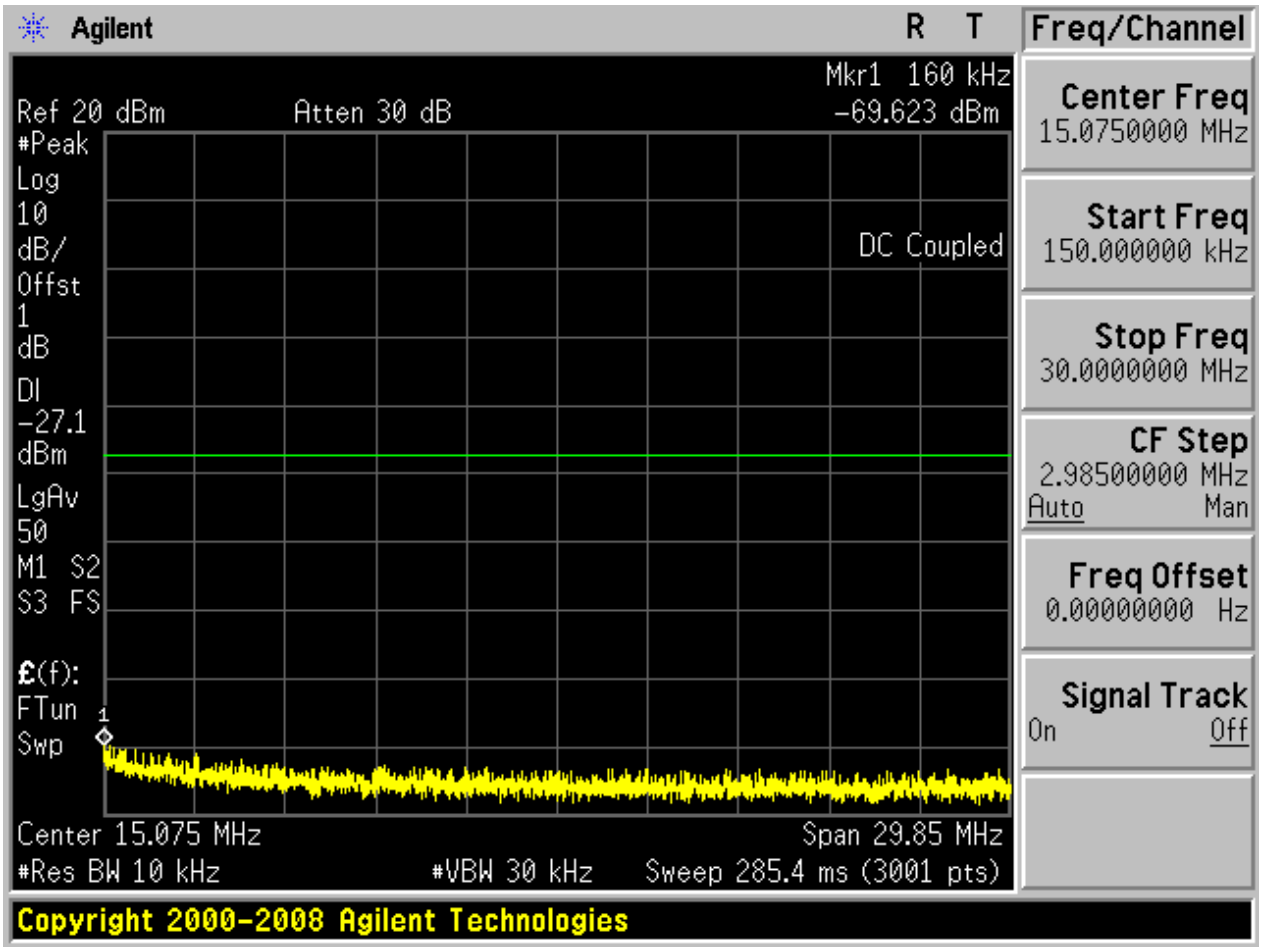

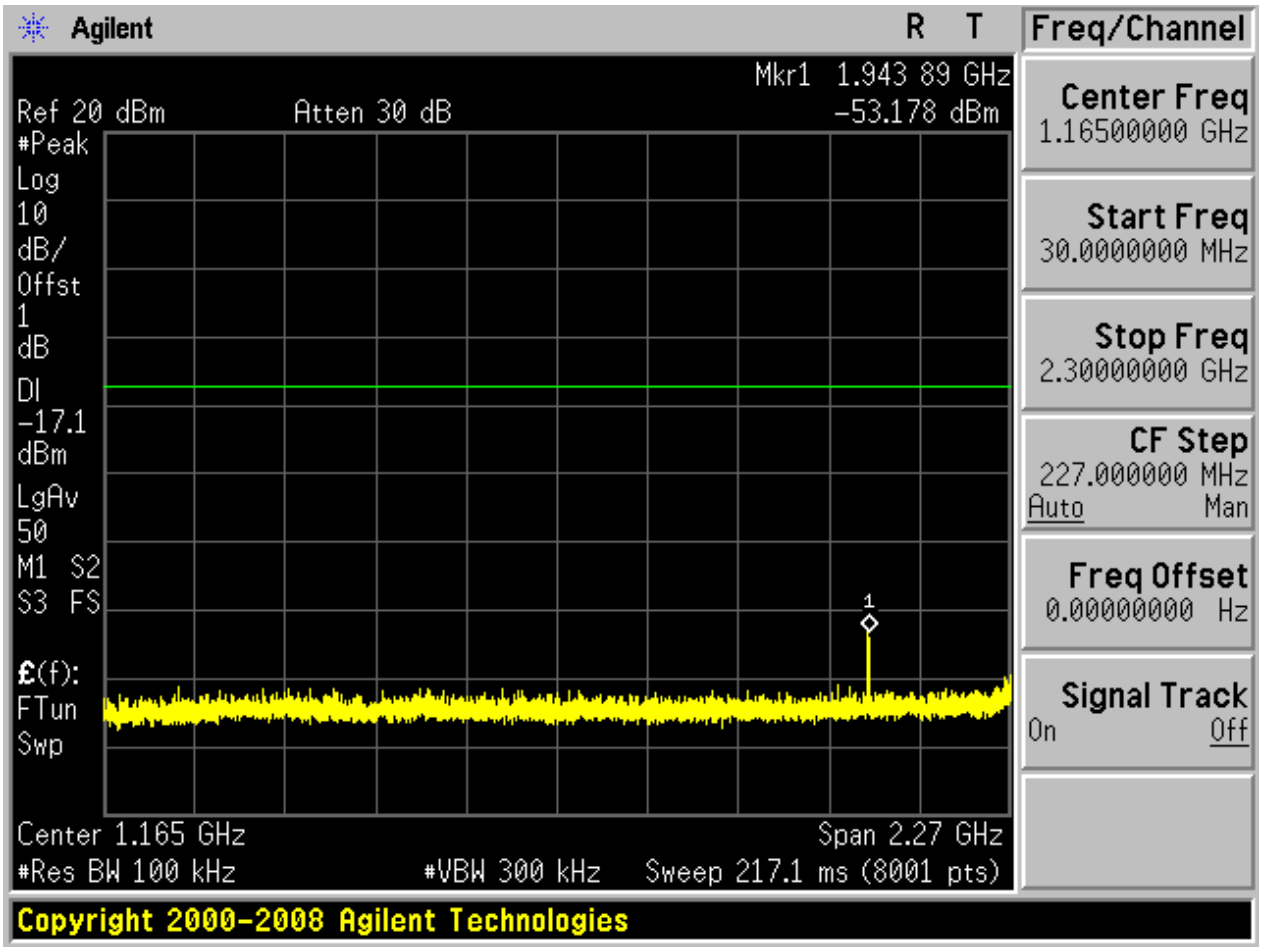

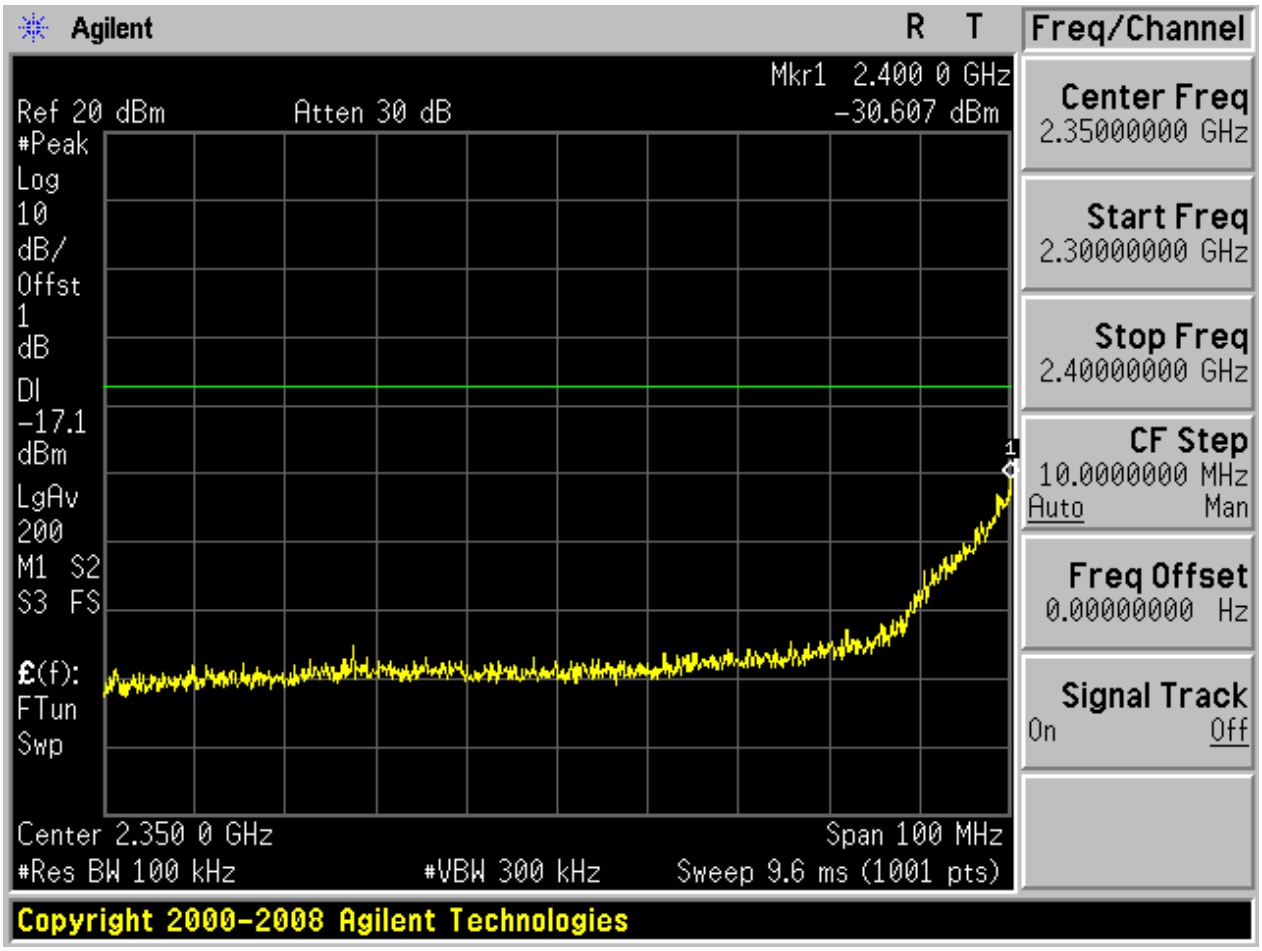

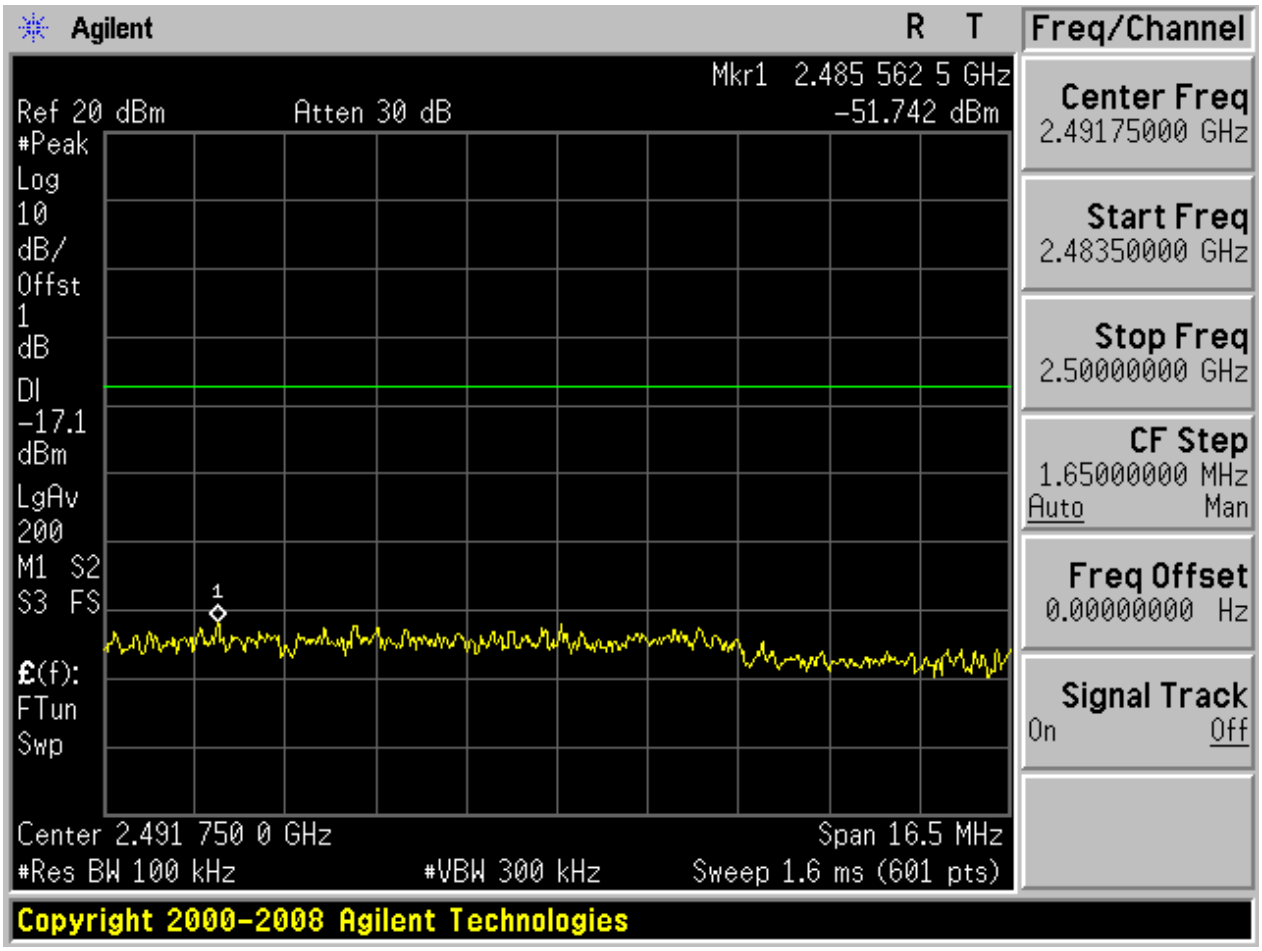

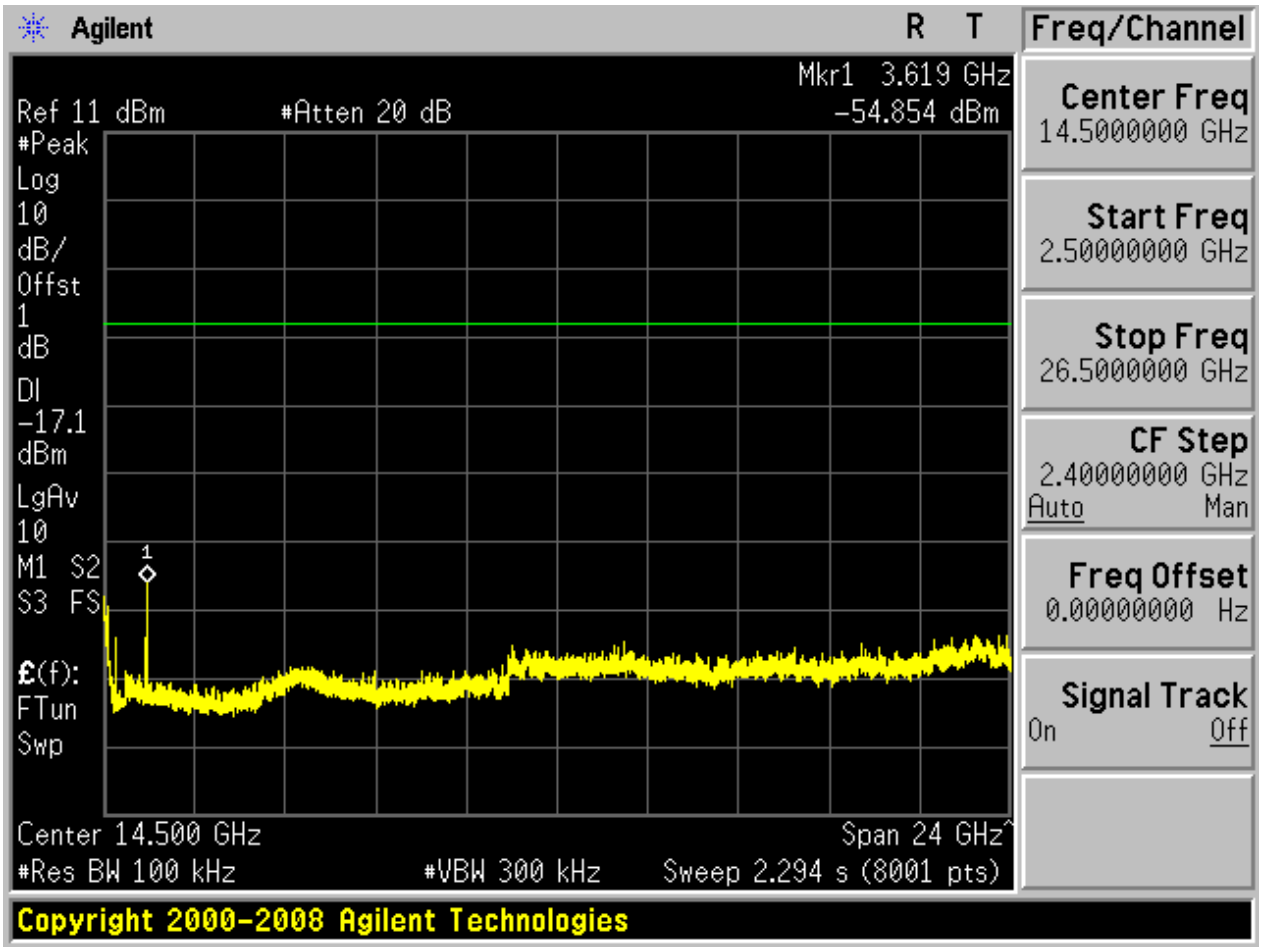

2.9 11G_M

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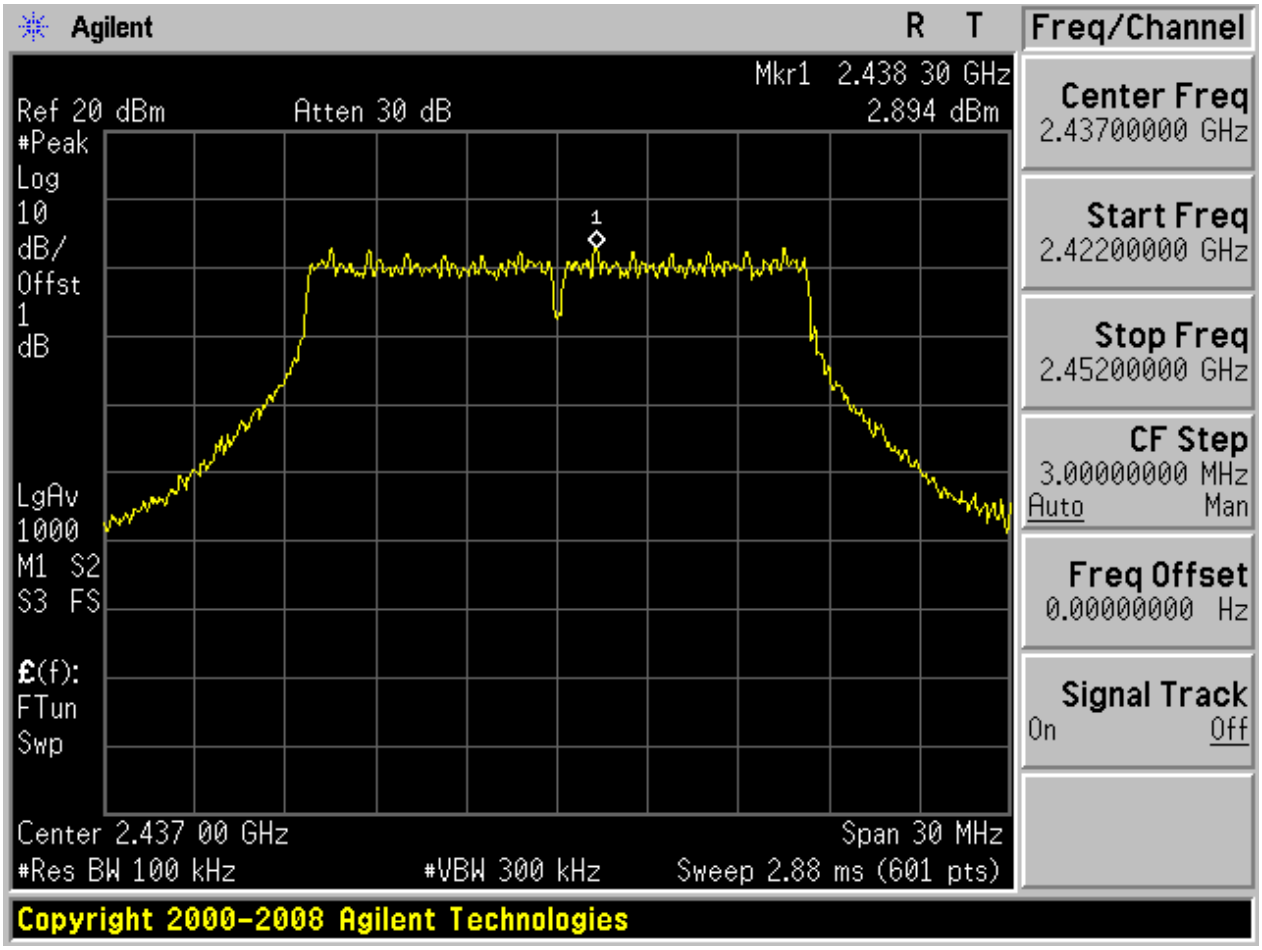

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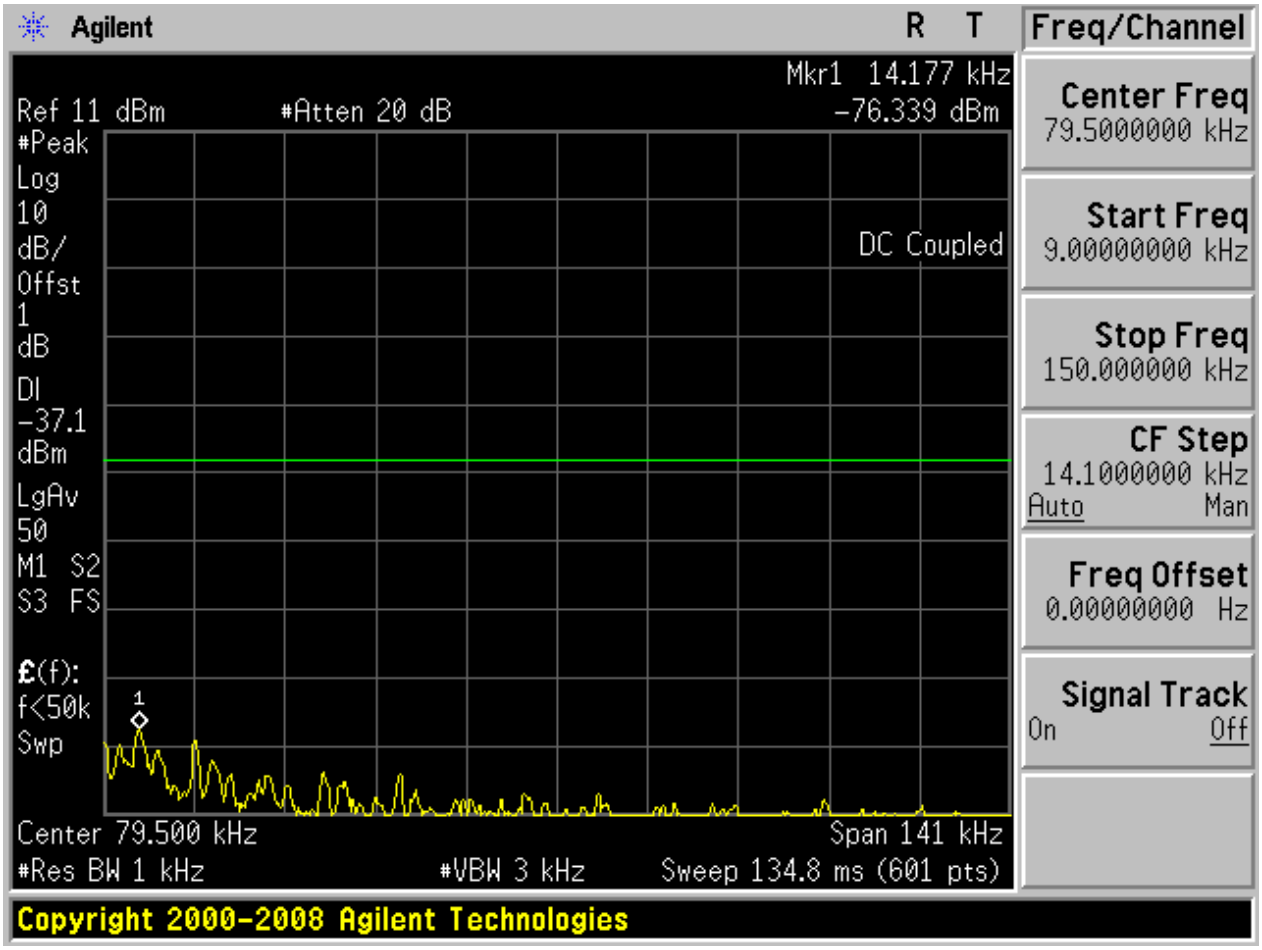

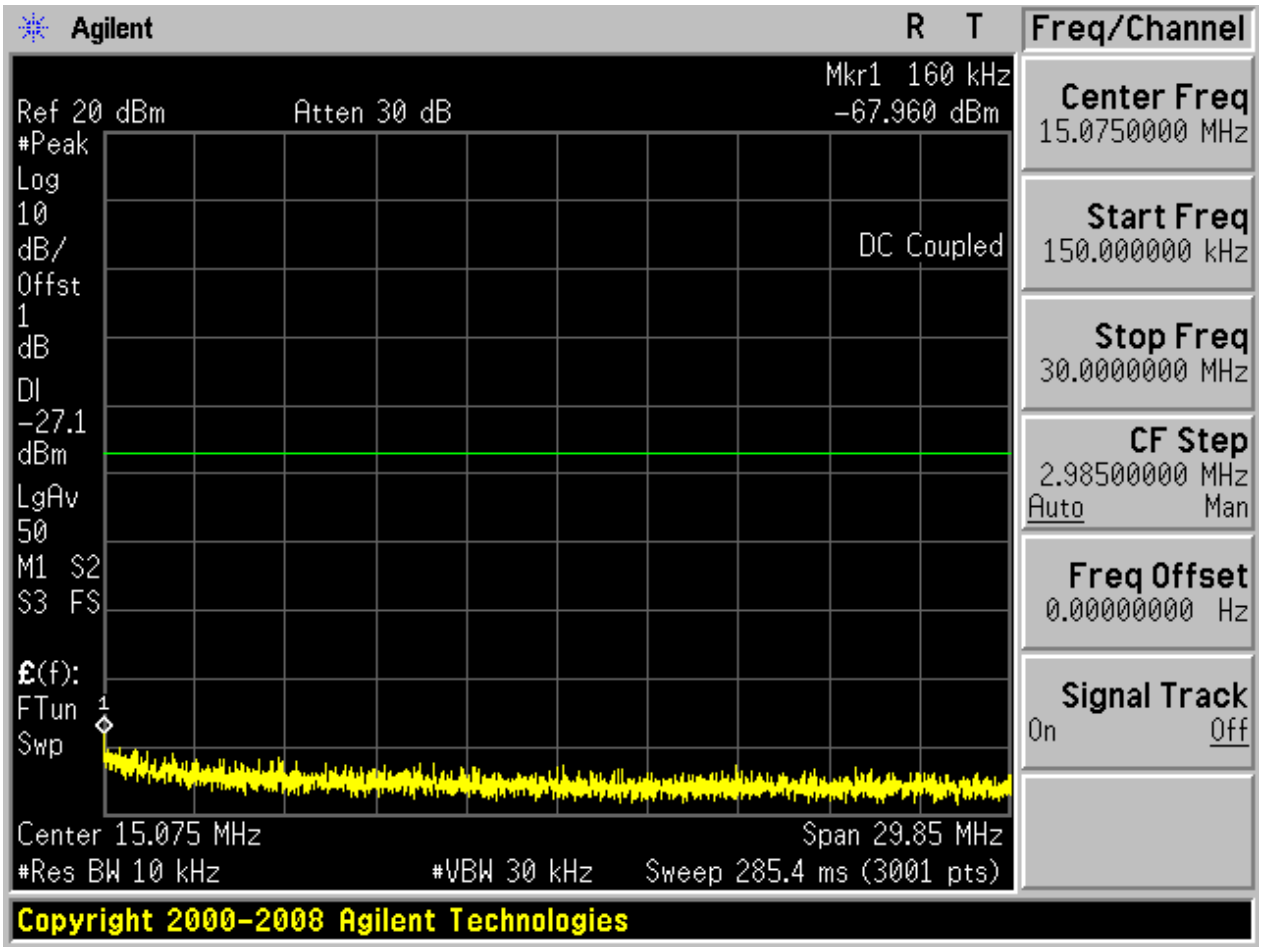

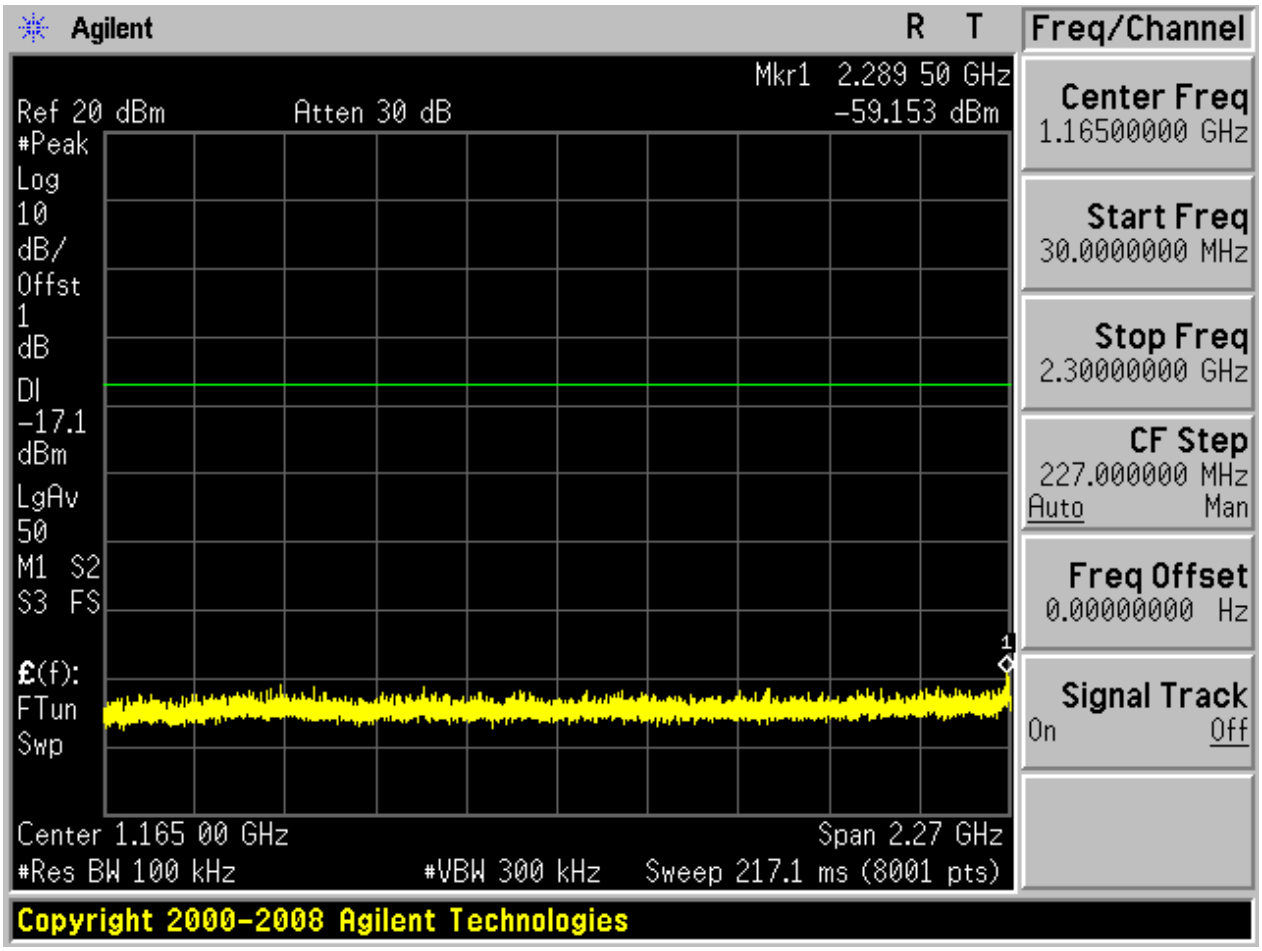

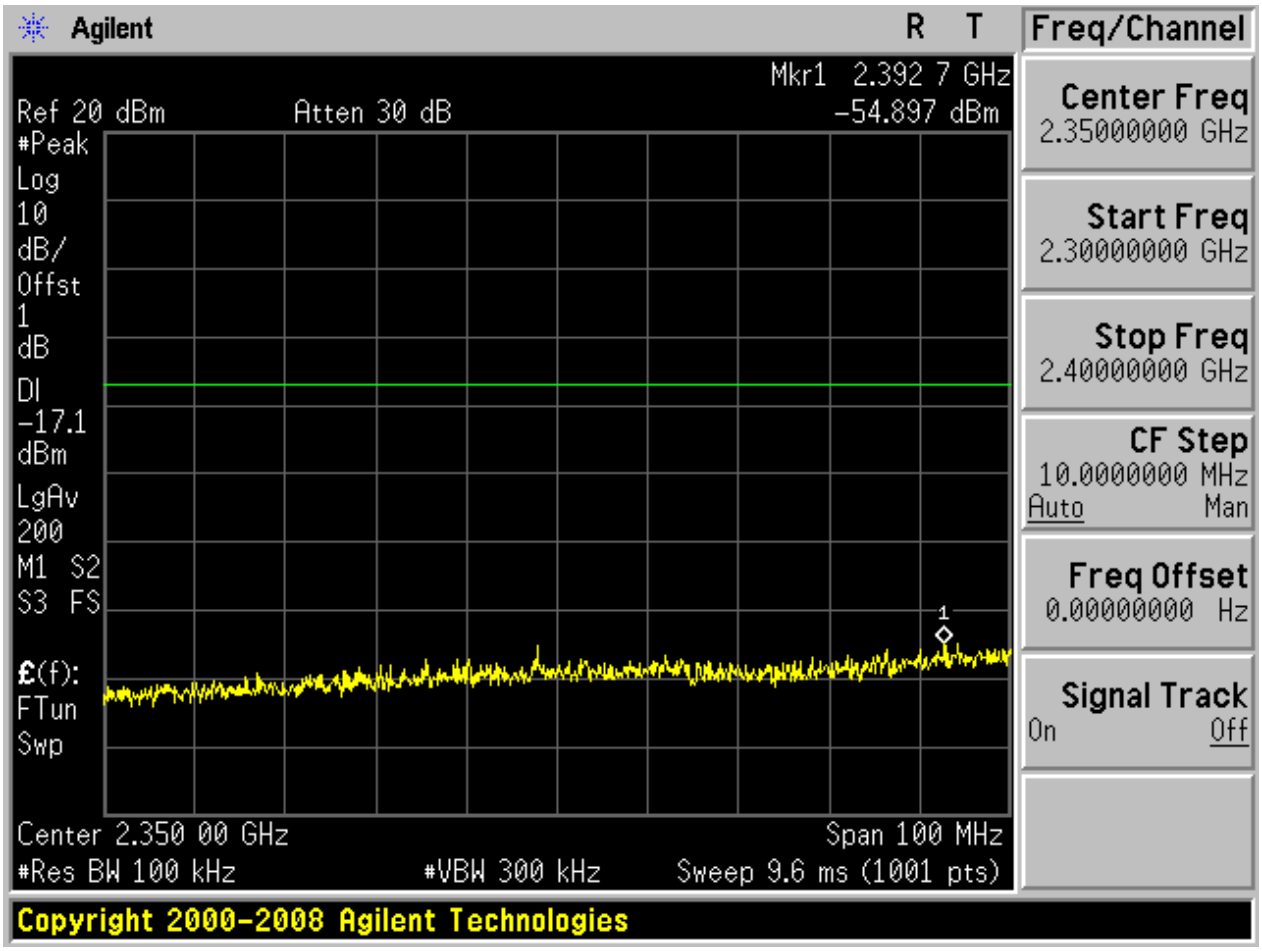

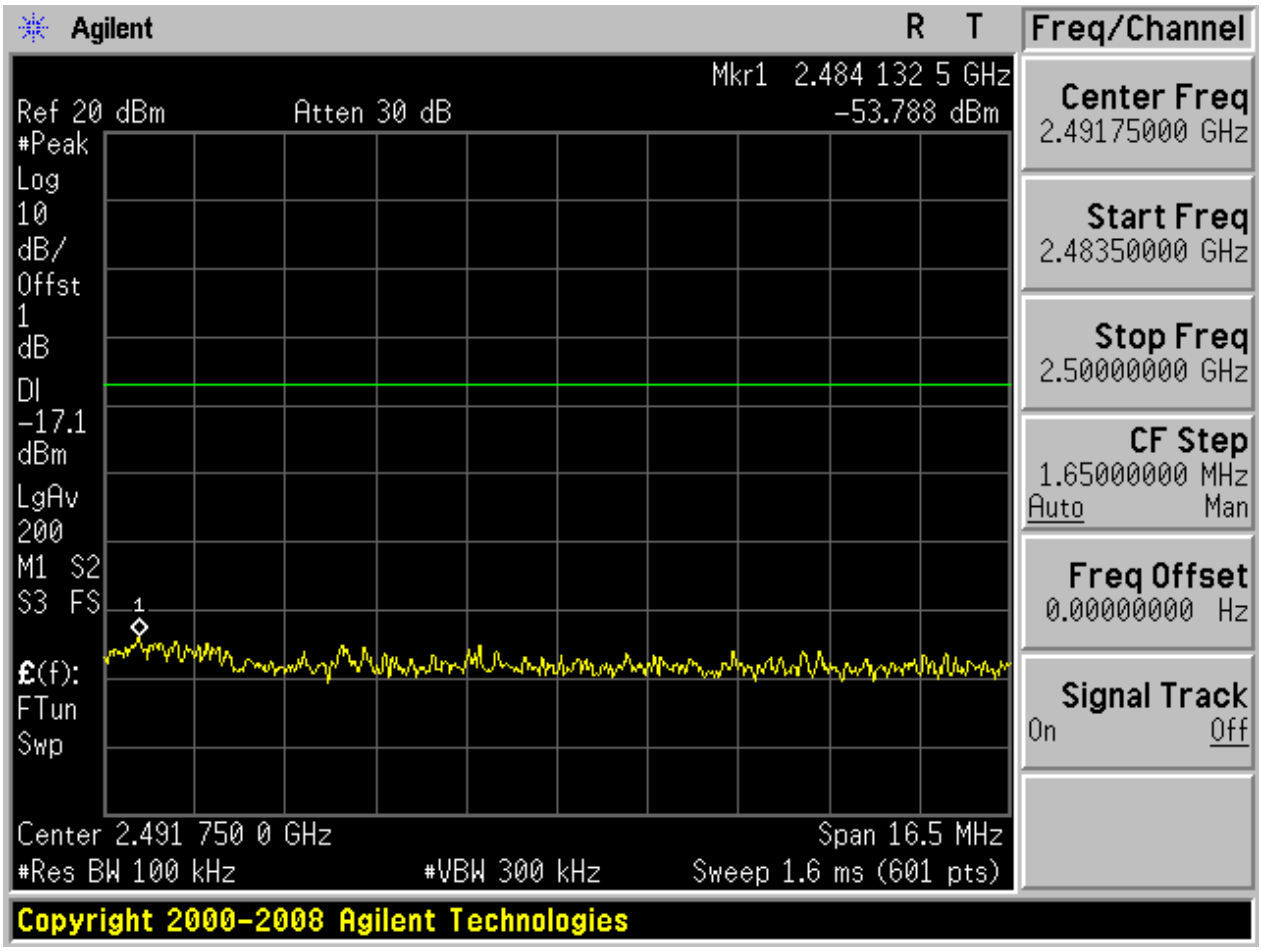

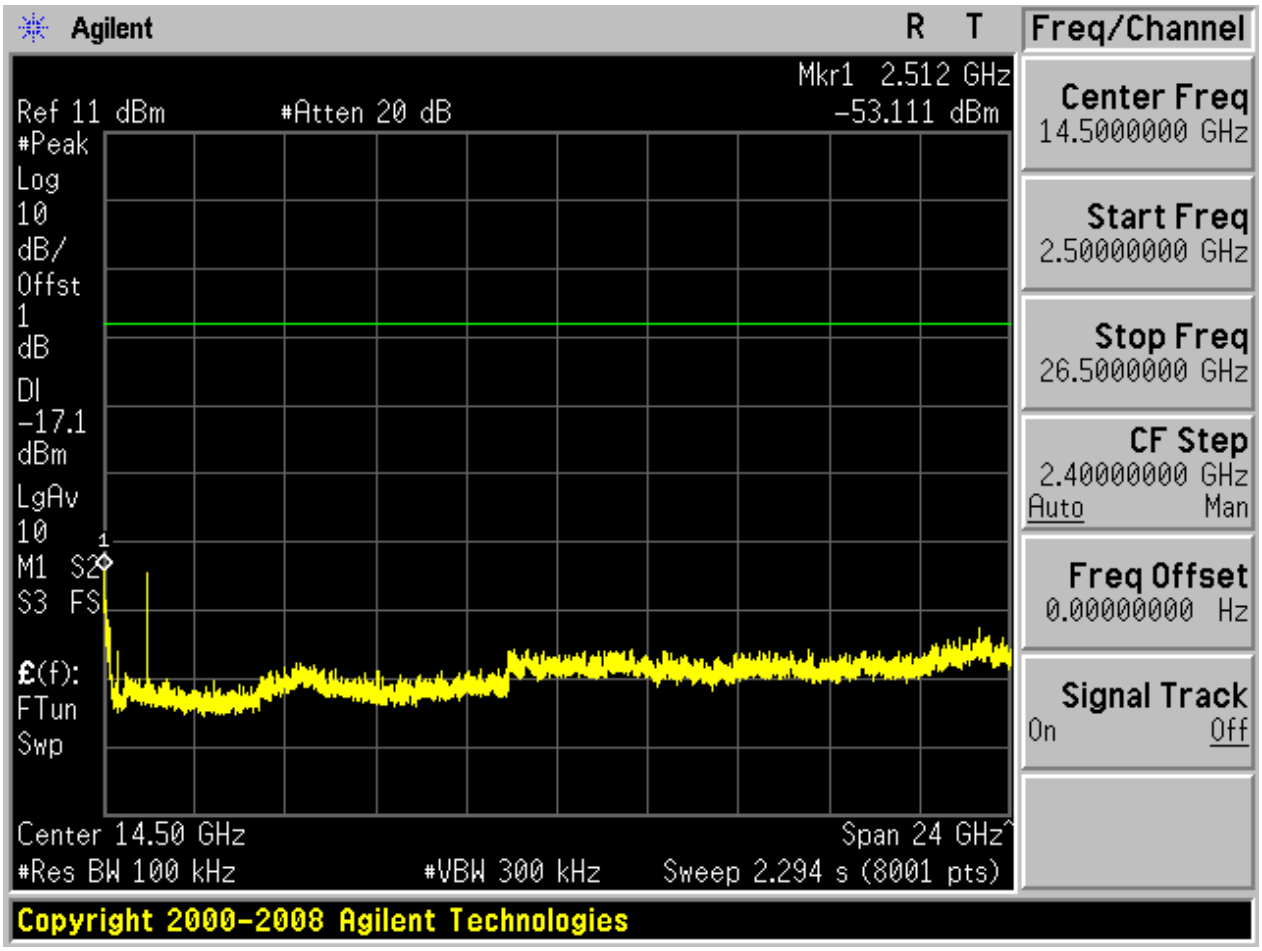

2.11 11G_H

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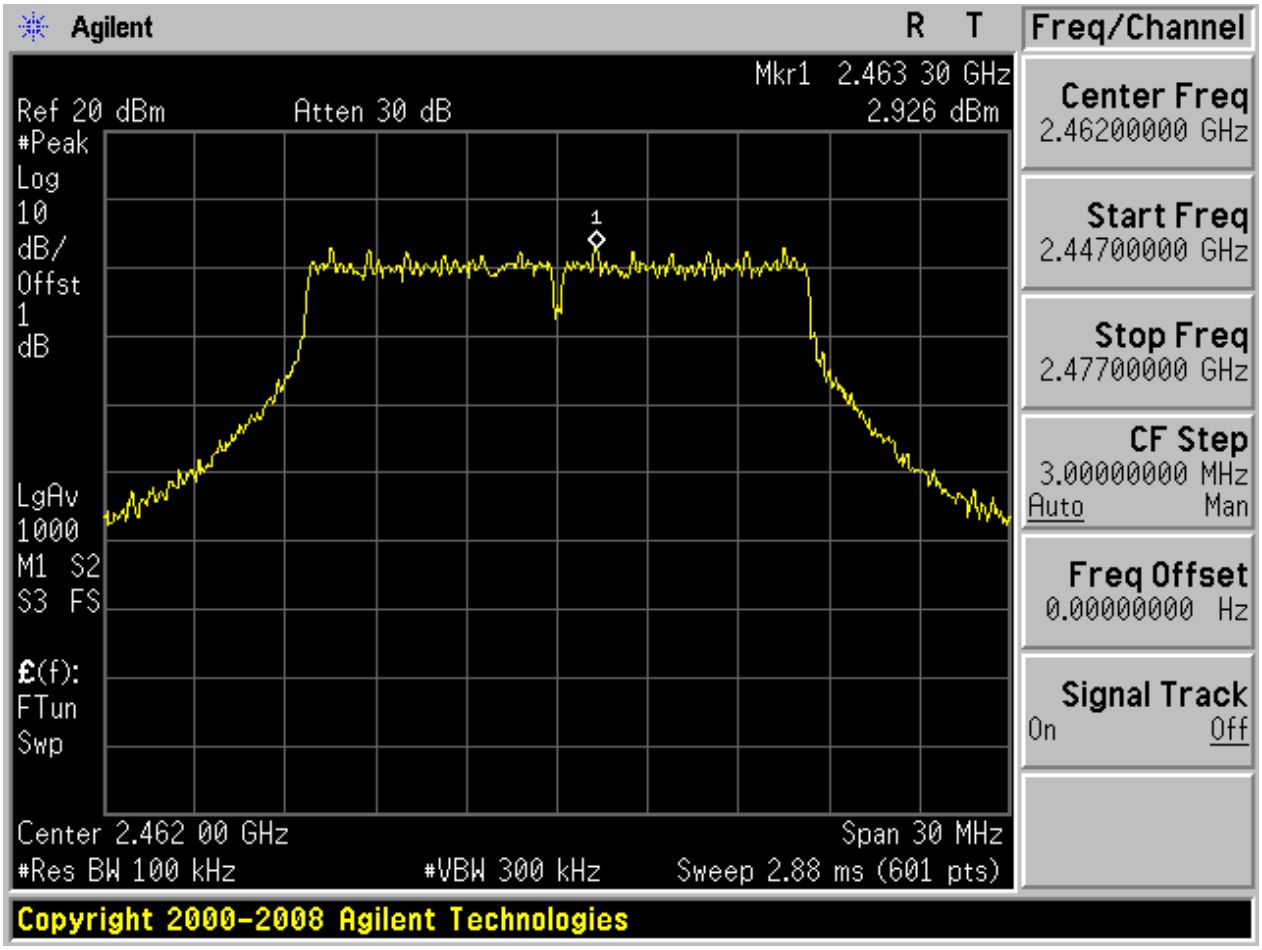

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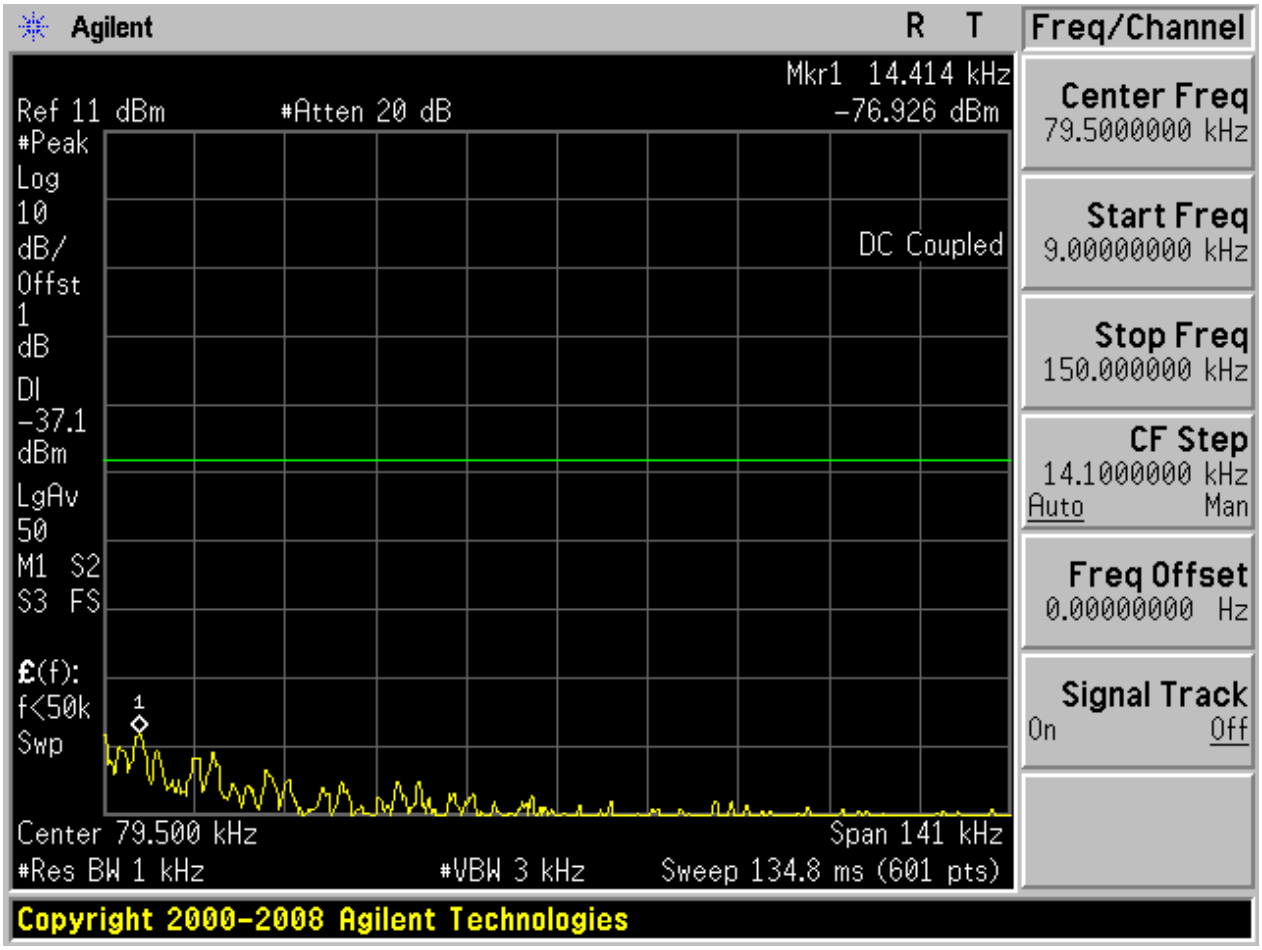

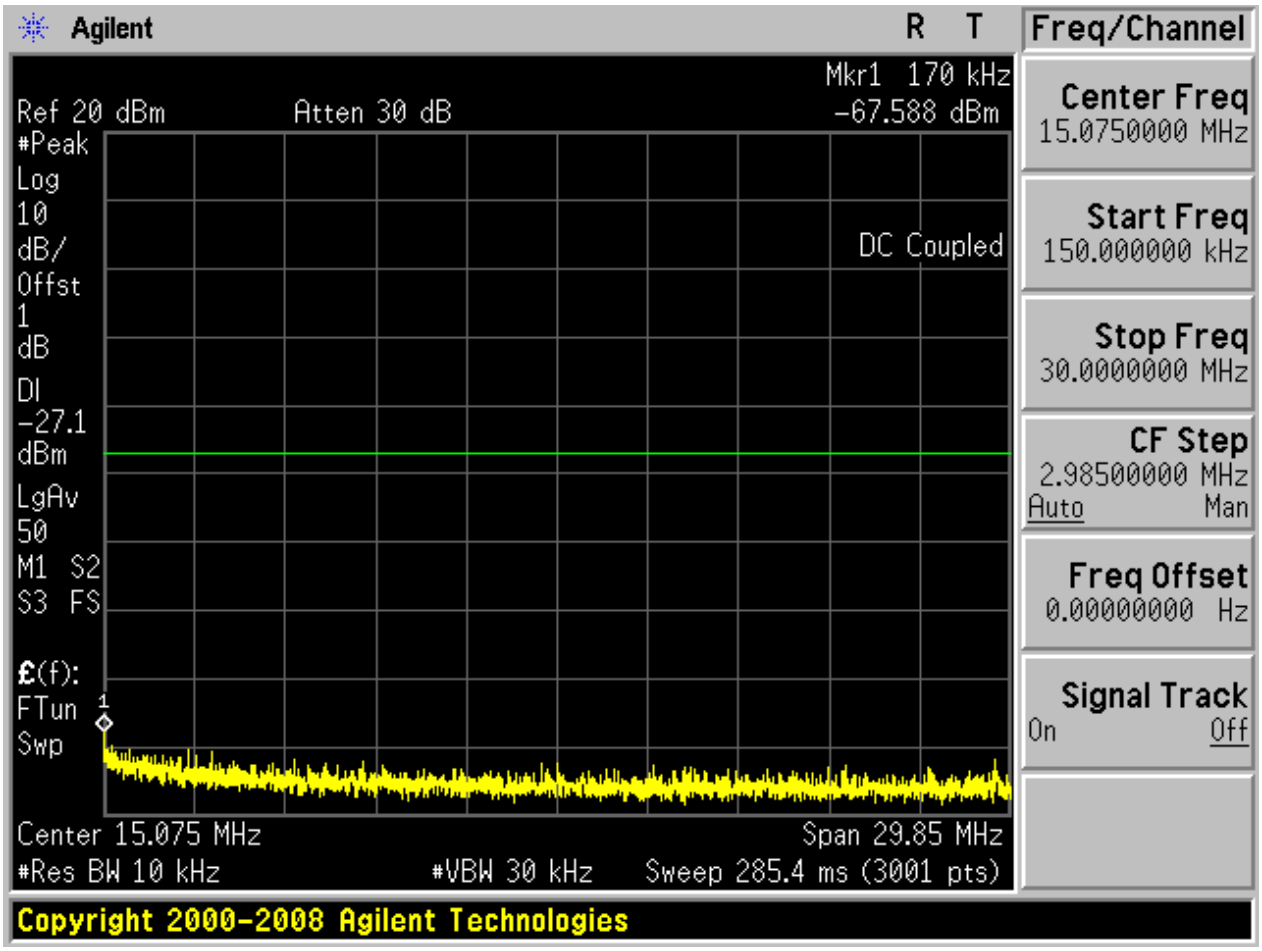

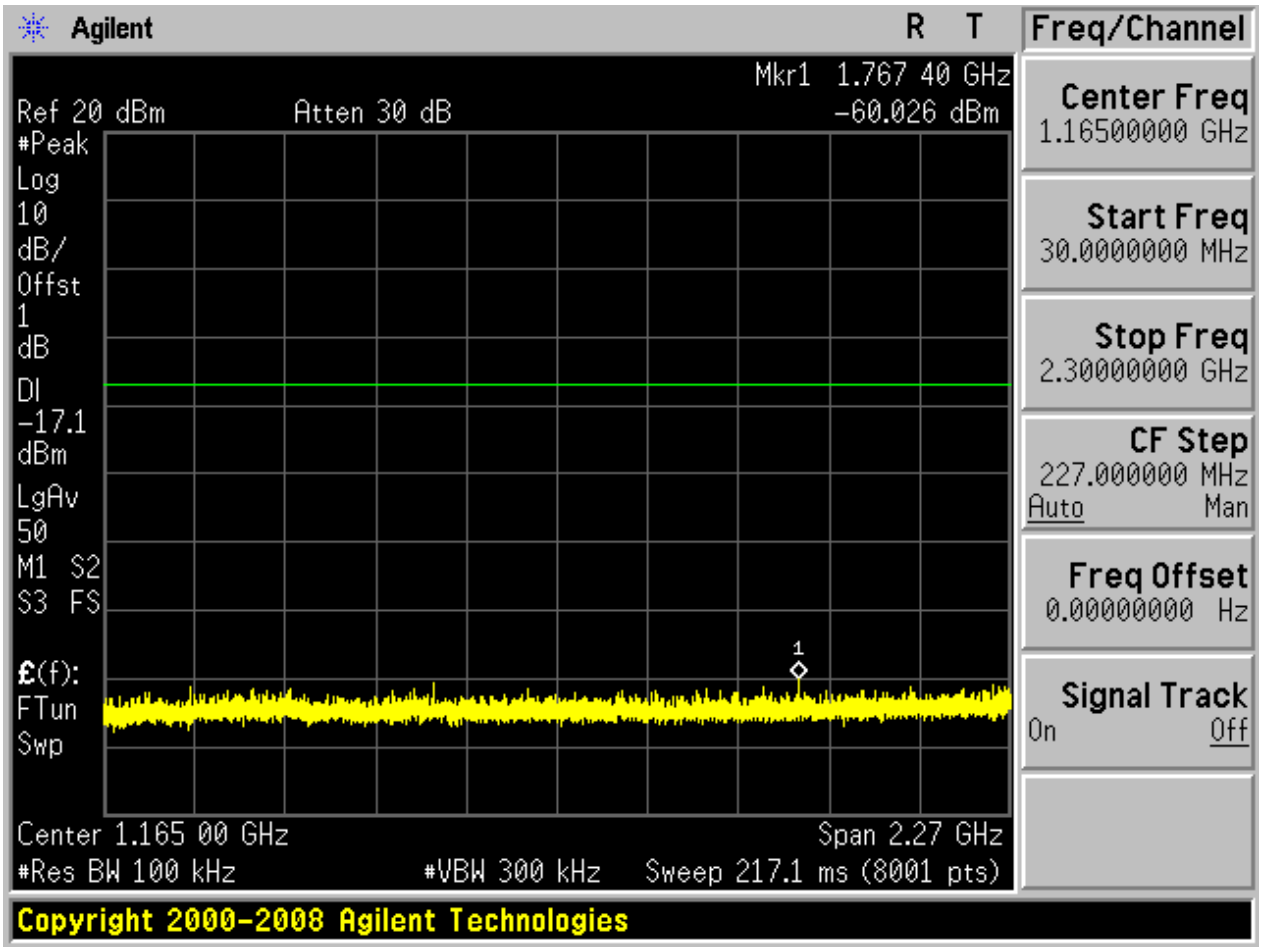

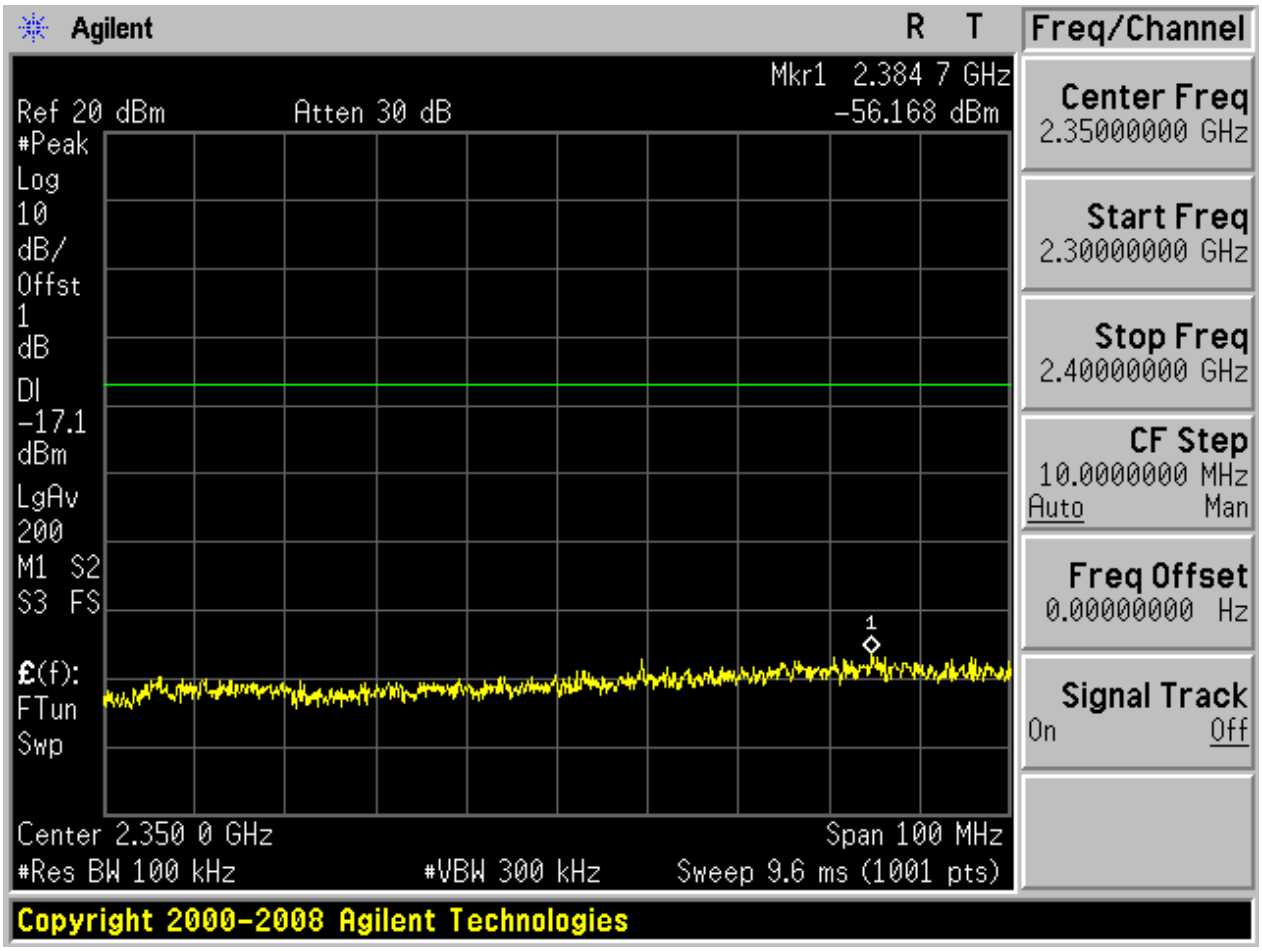

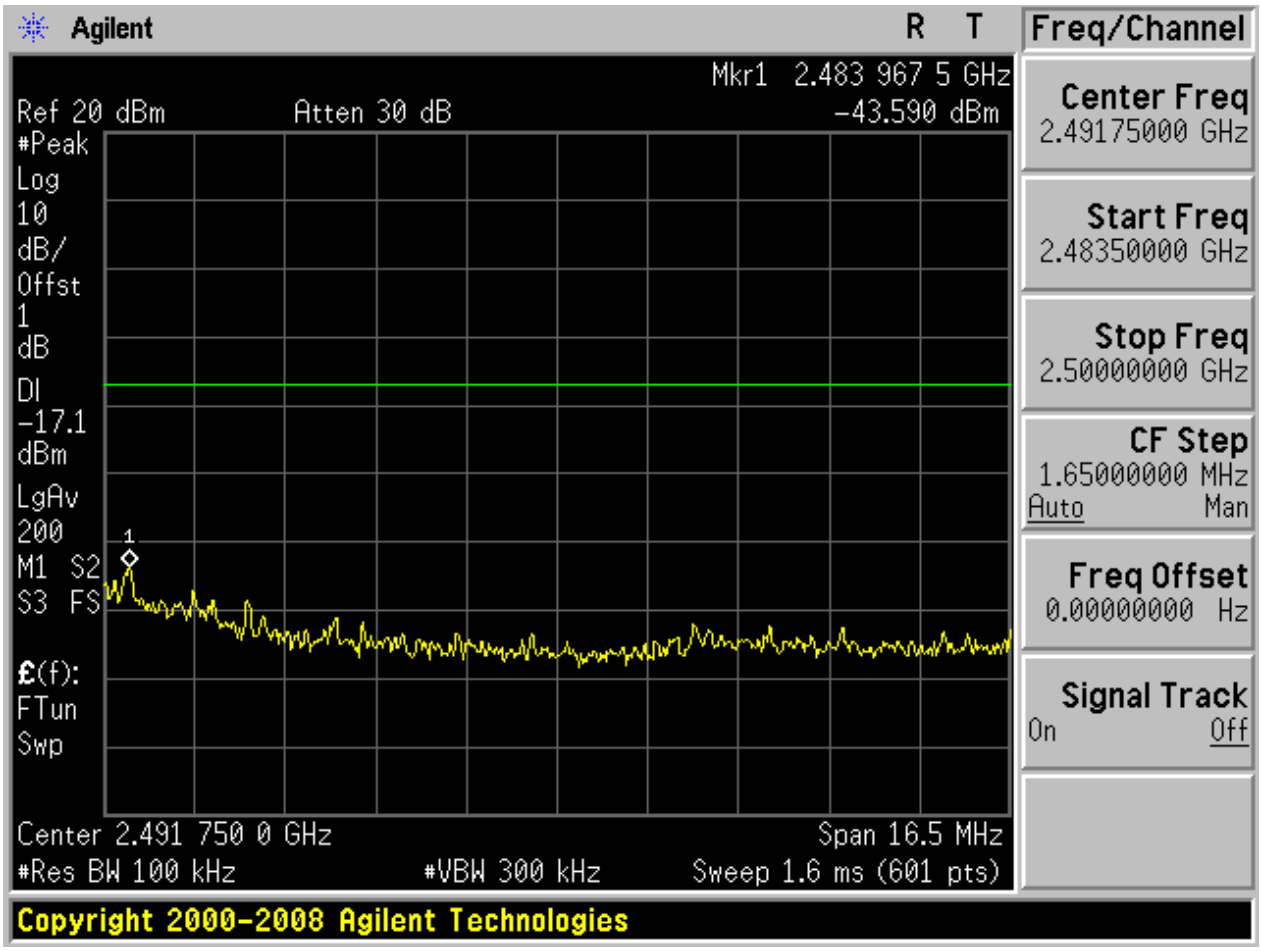

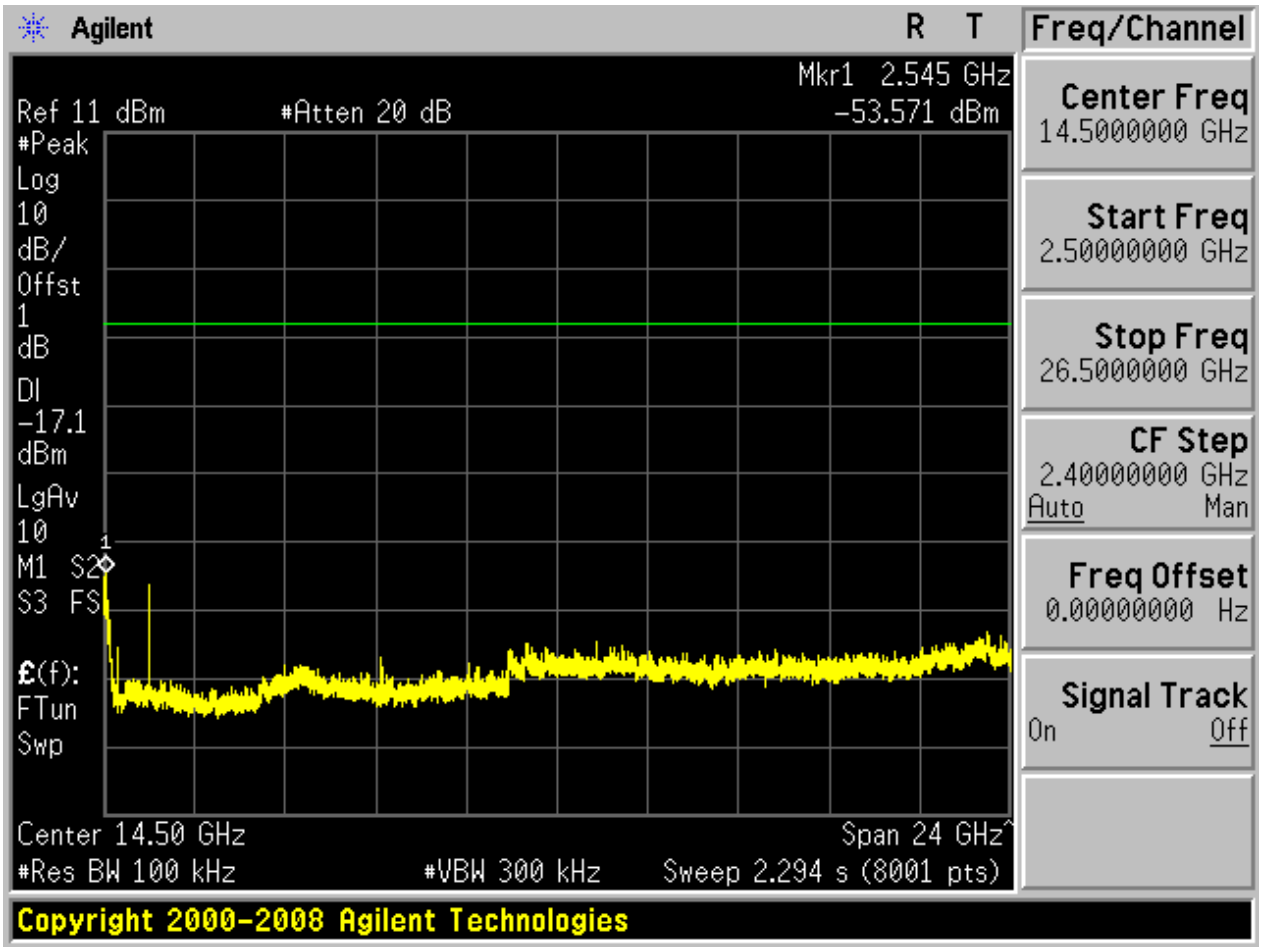

2.13 11N20_L

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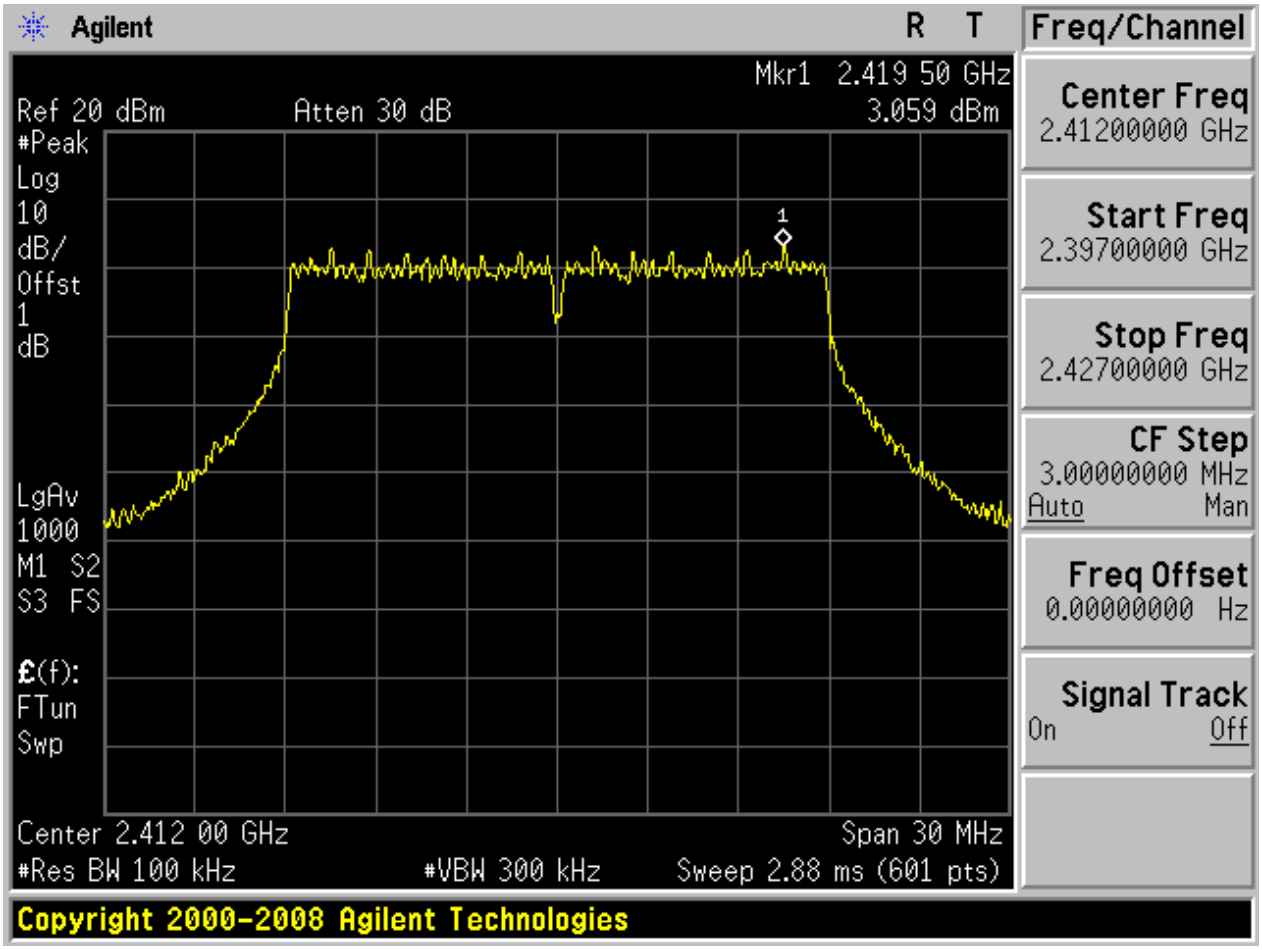

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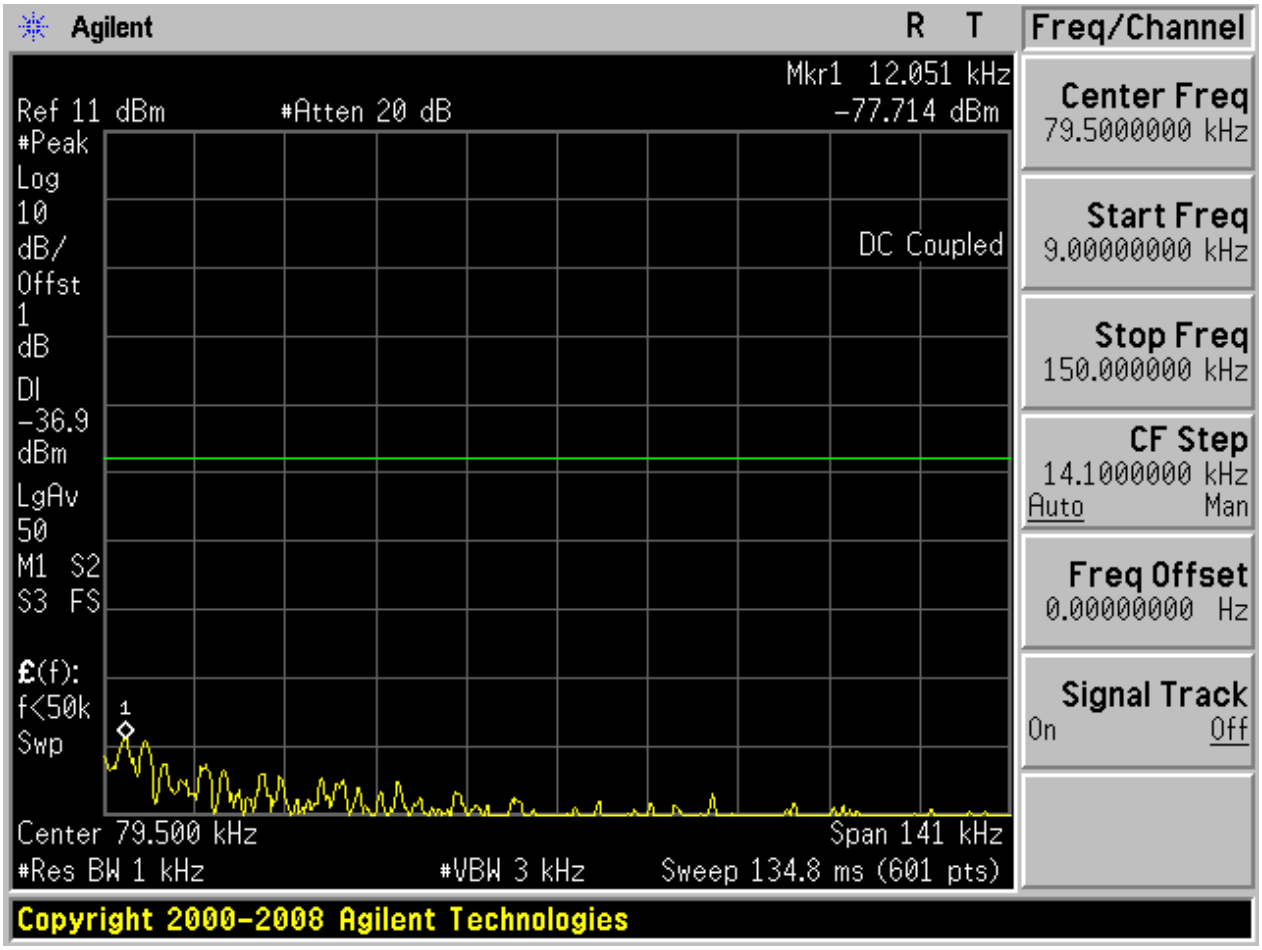

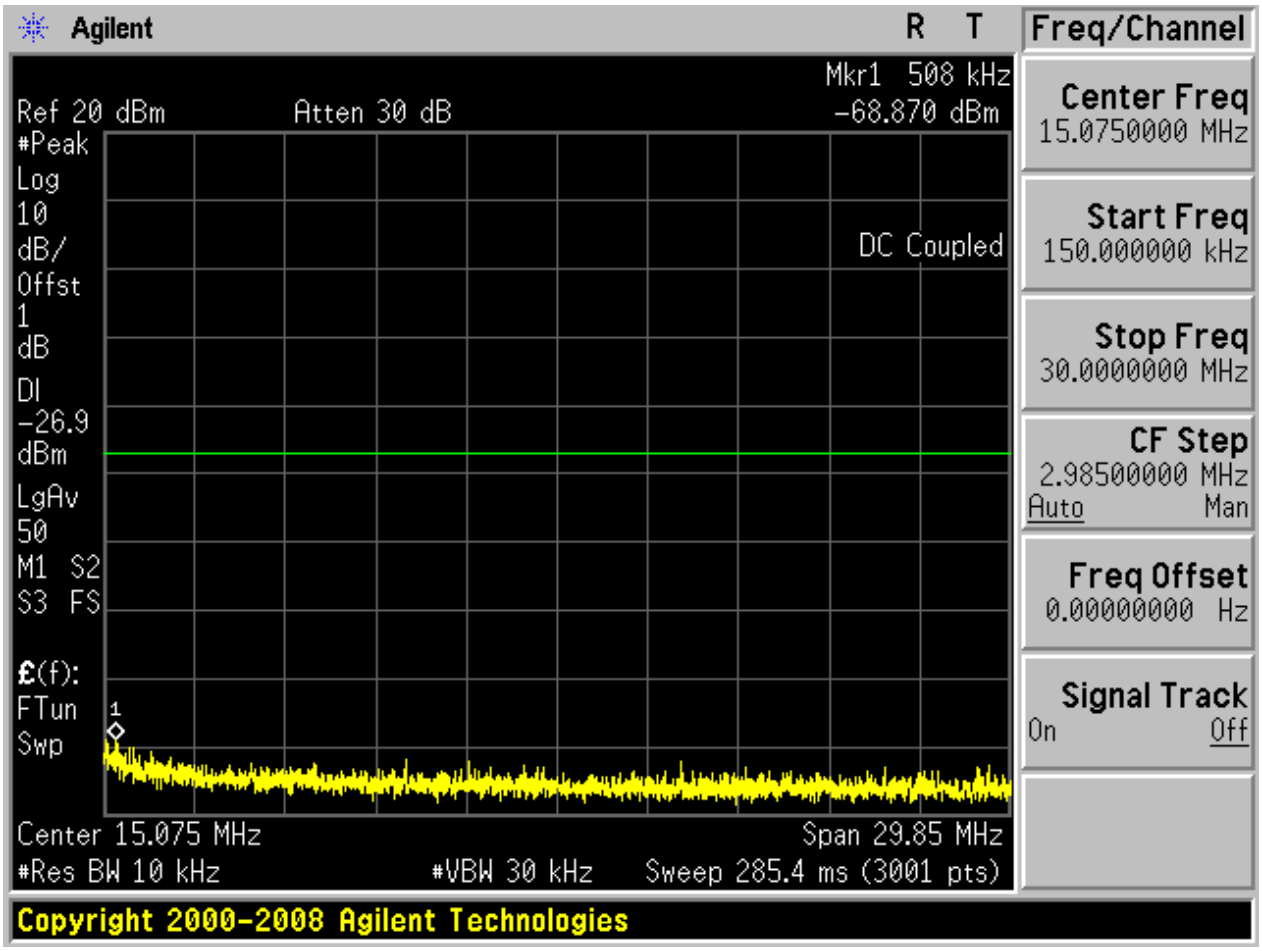

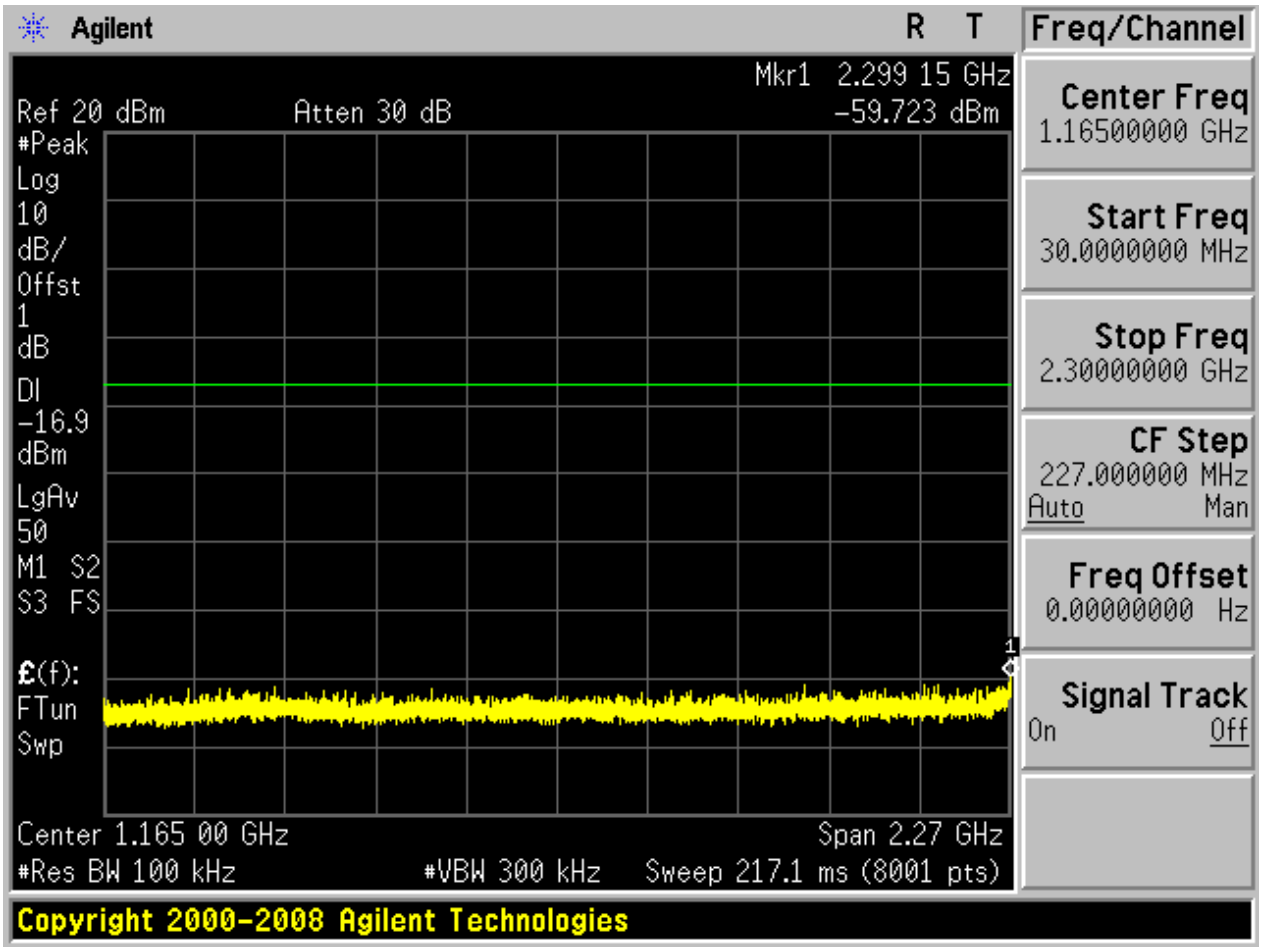

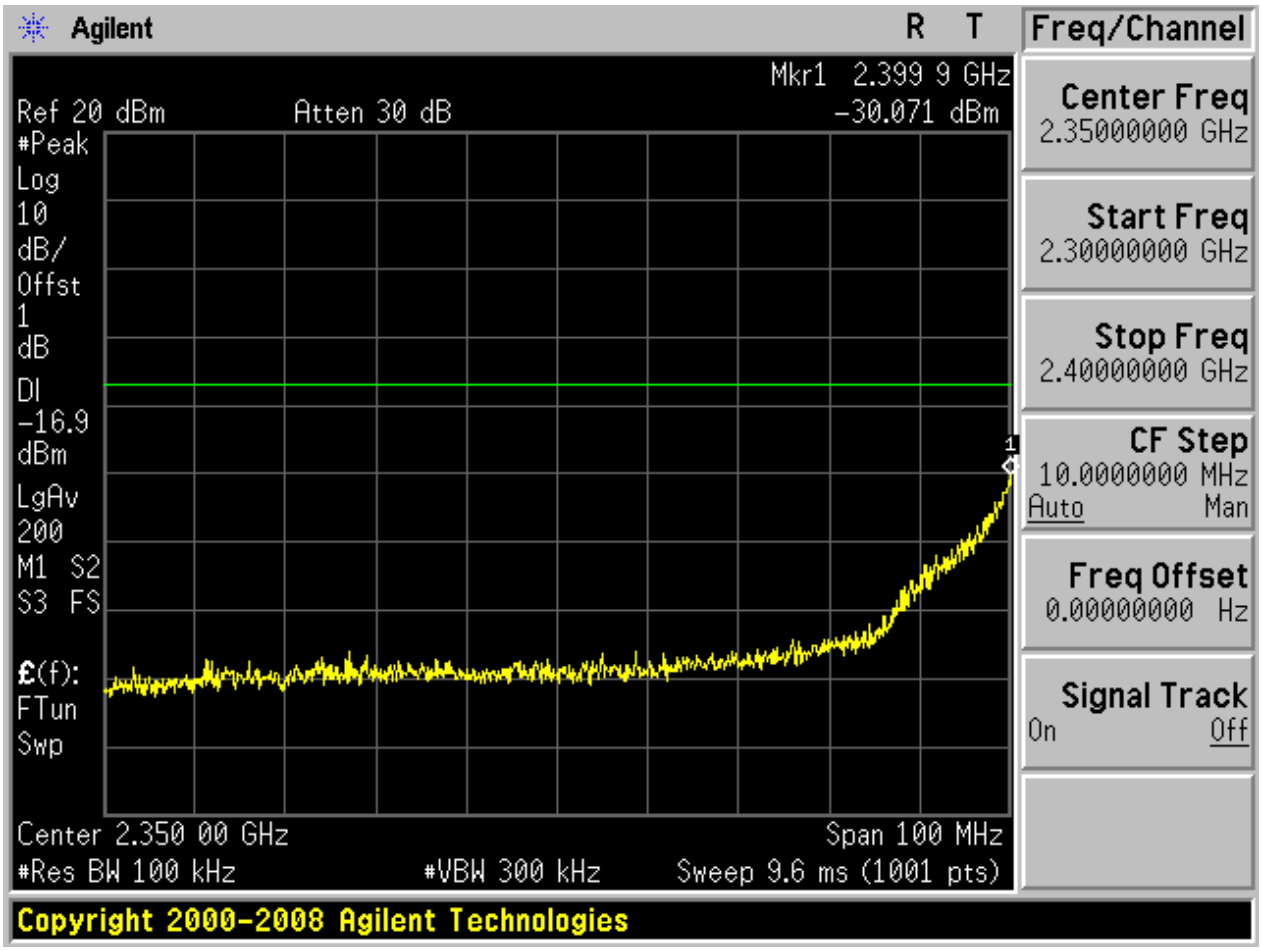

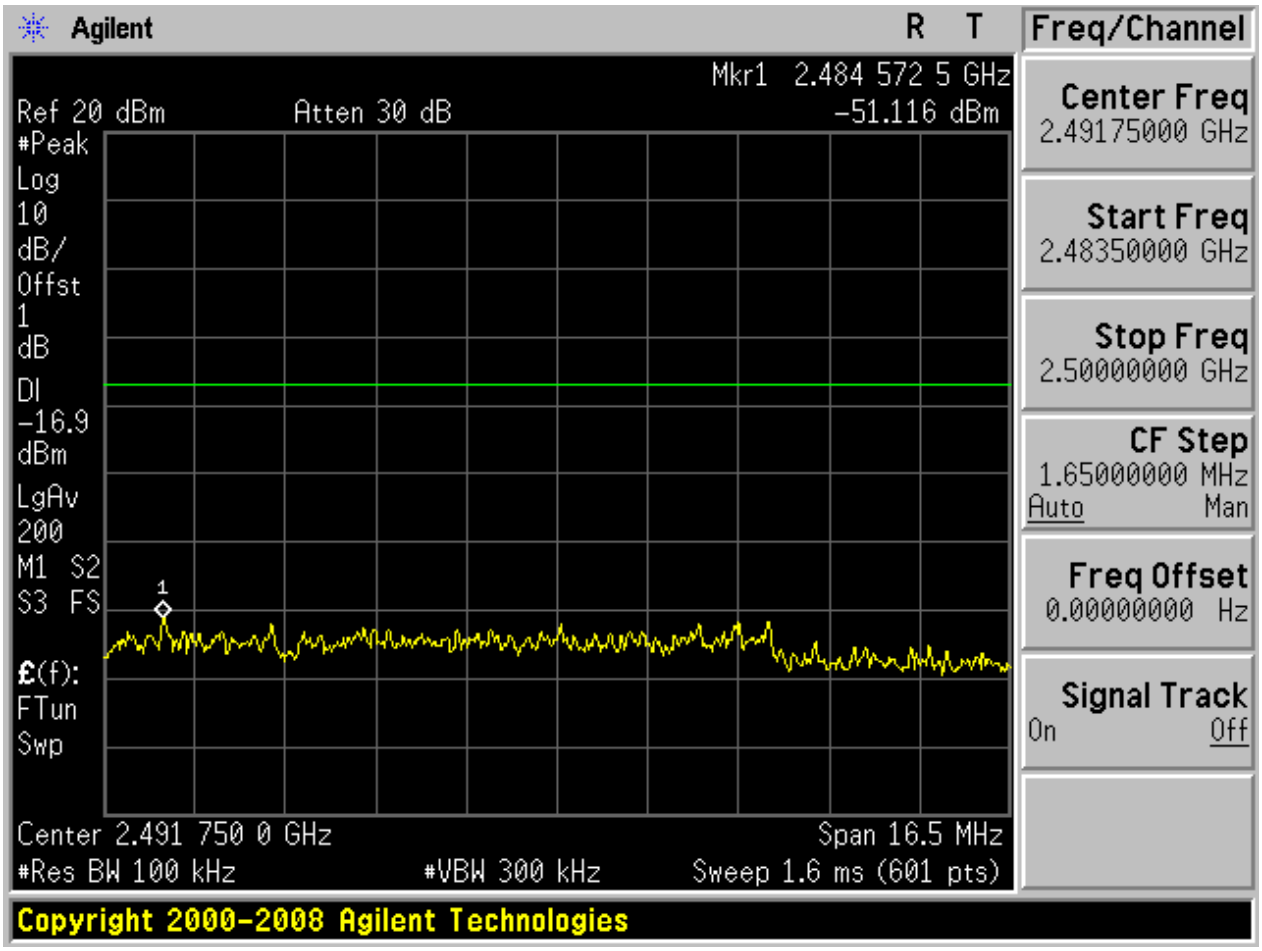

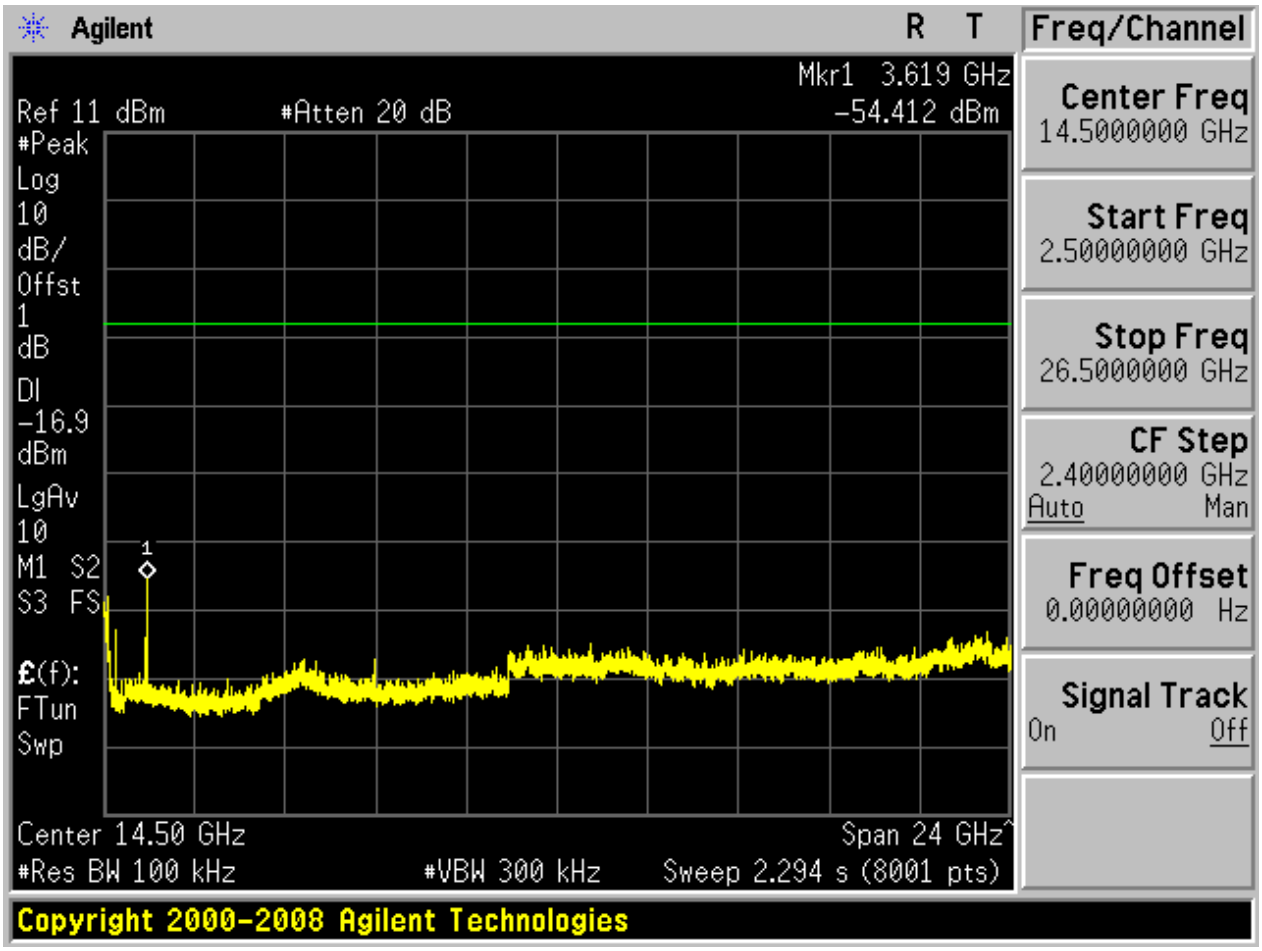

2.15 11N20_M

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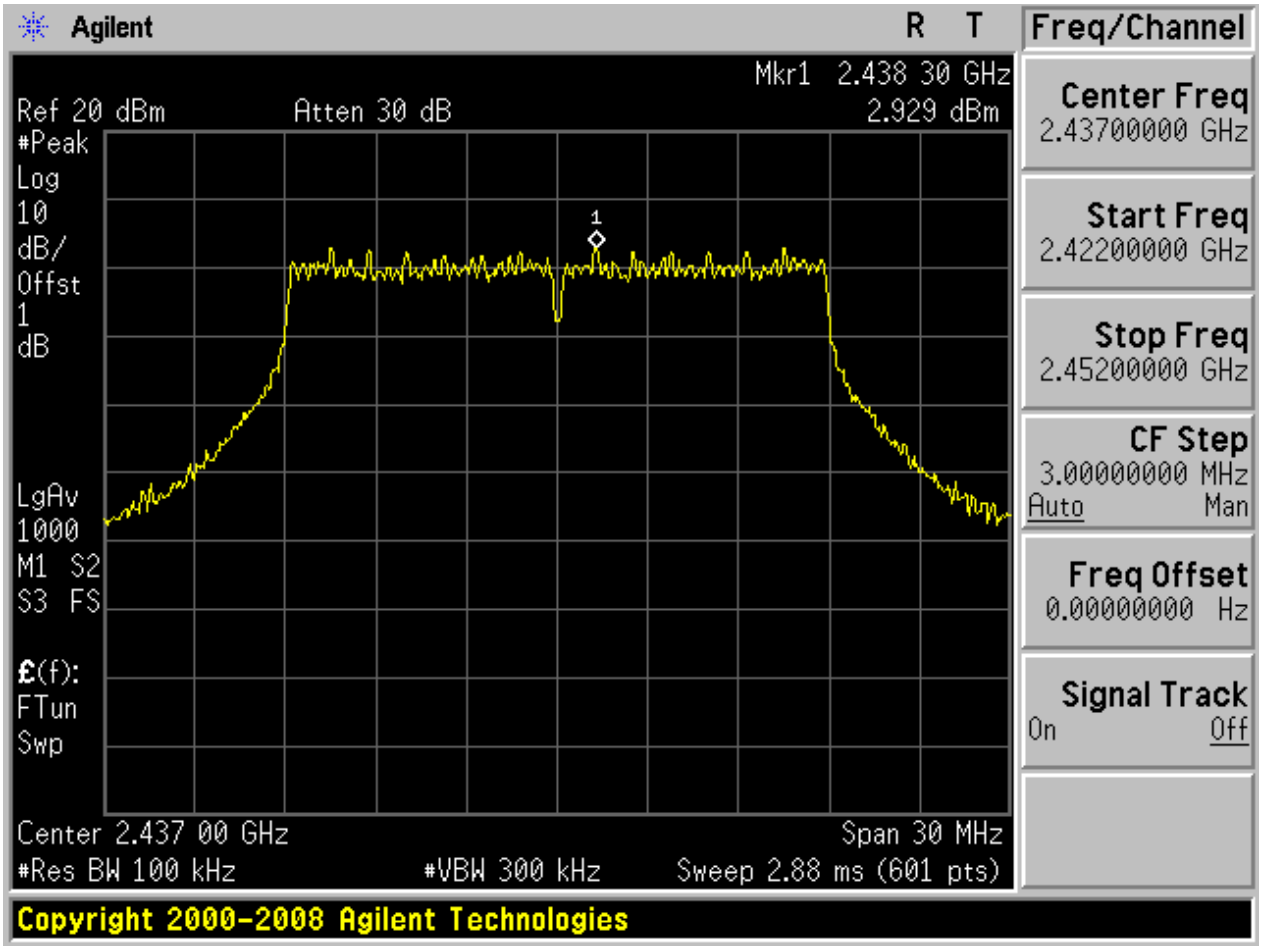

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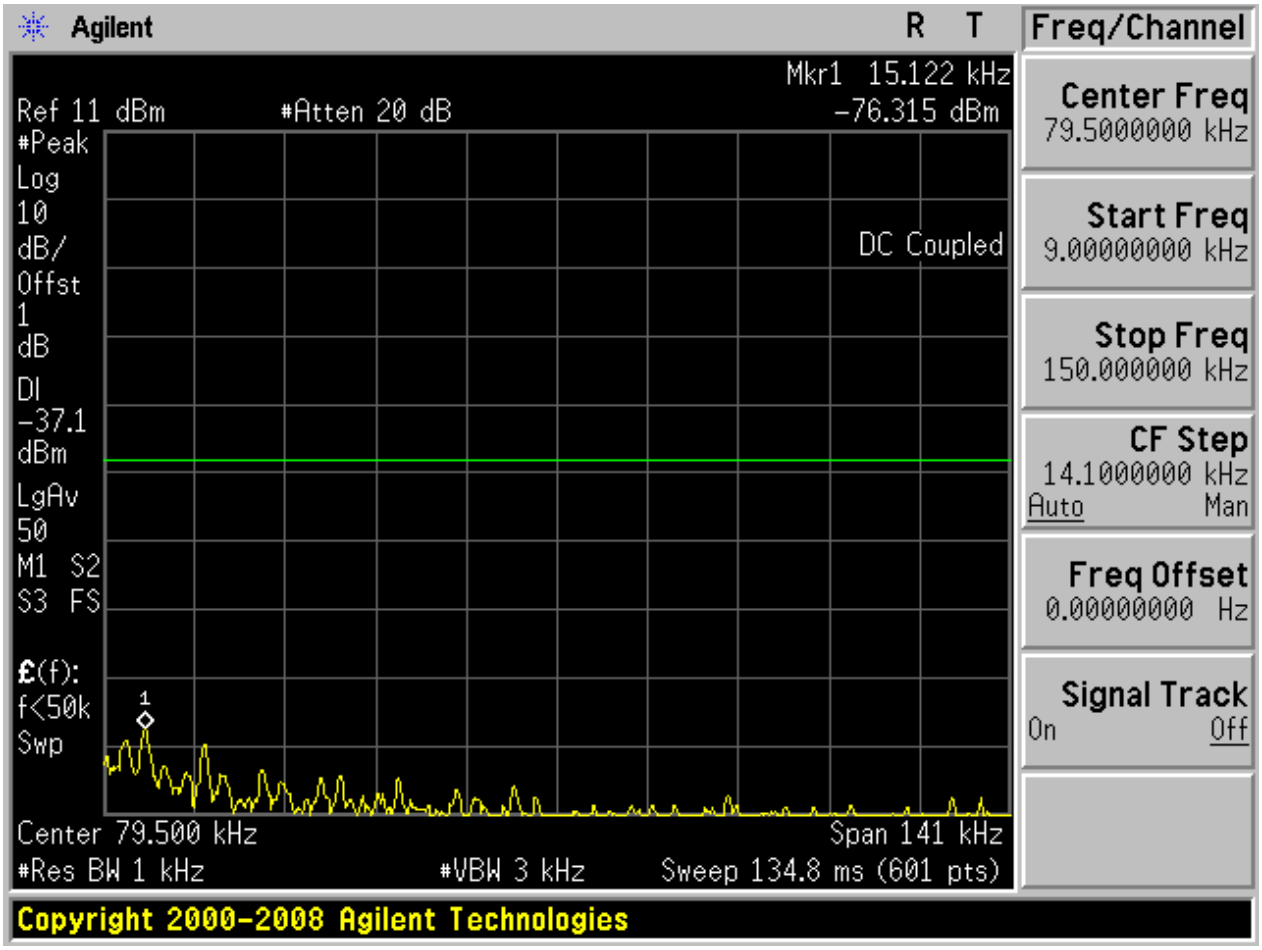

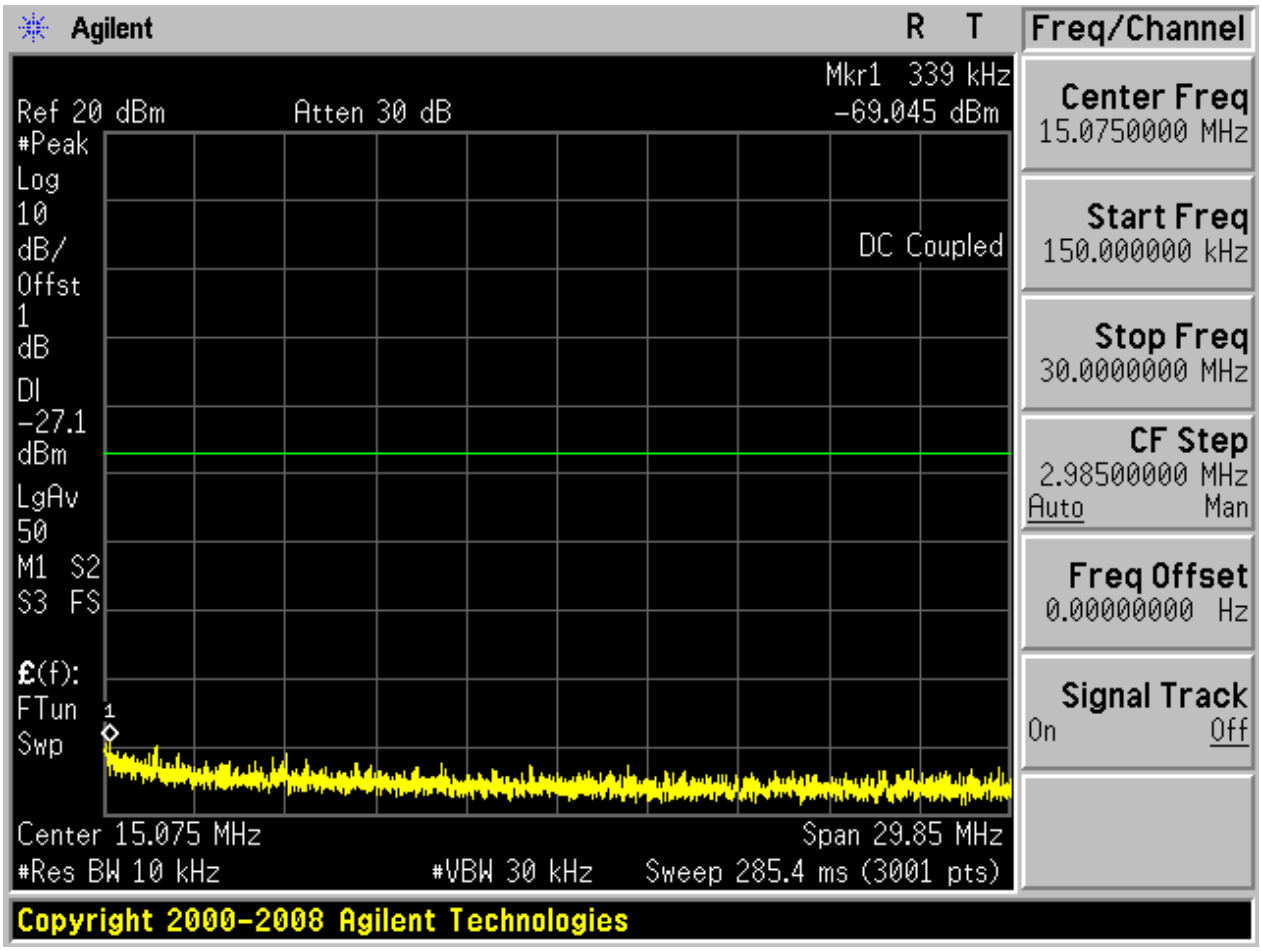

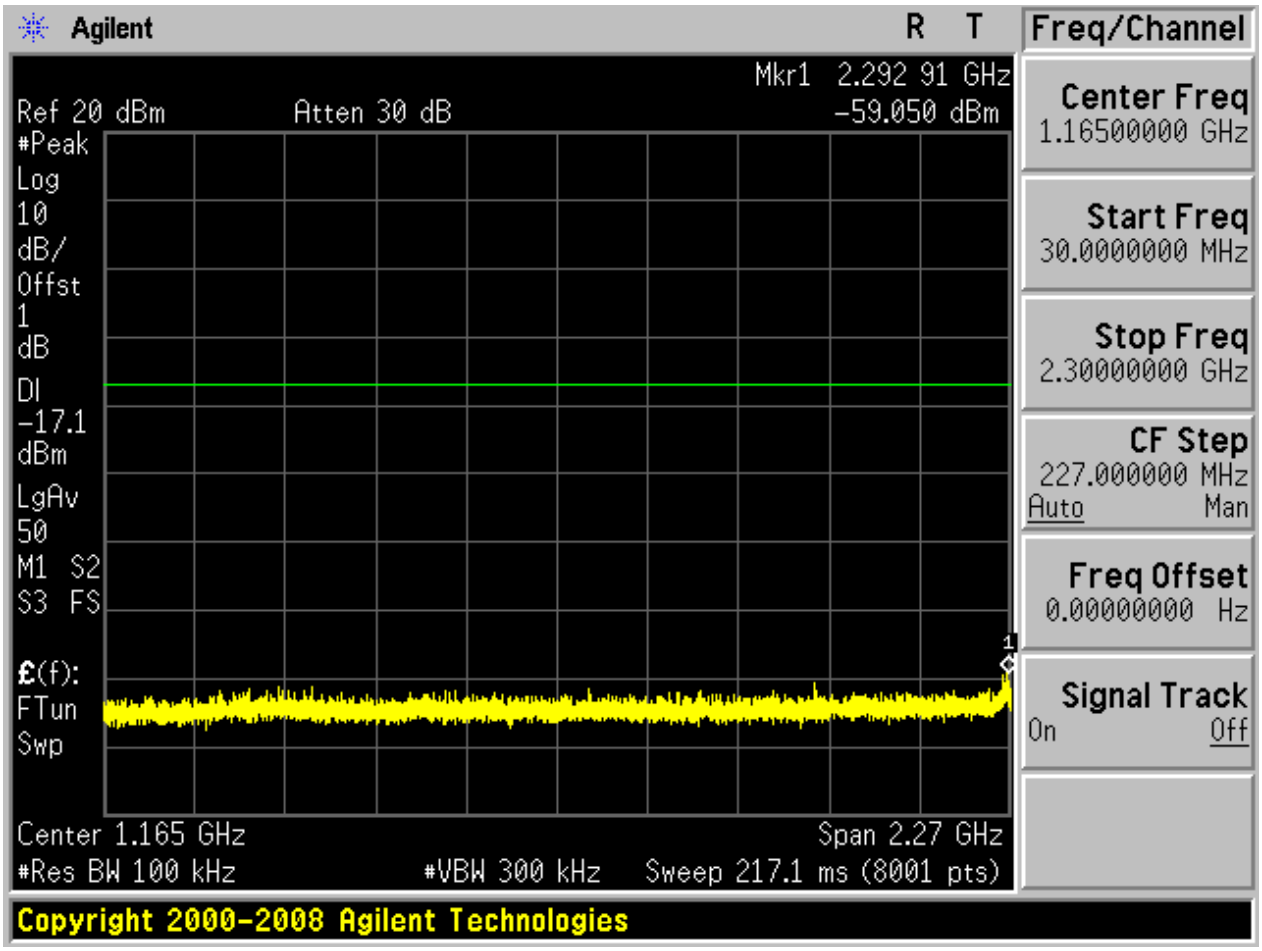

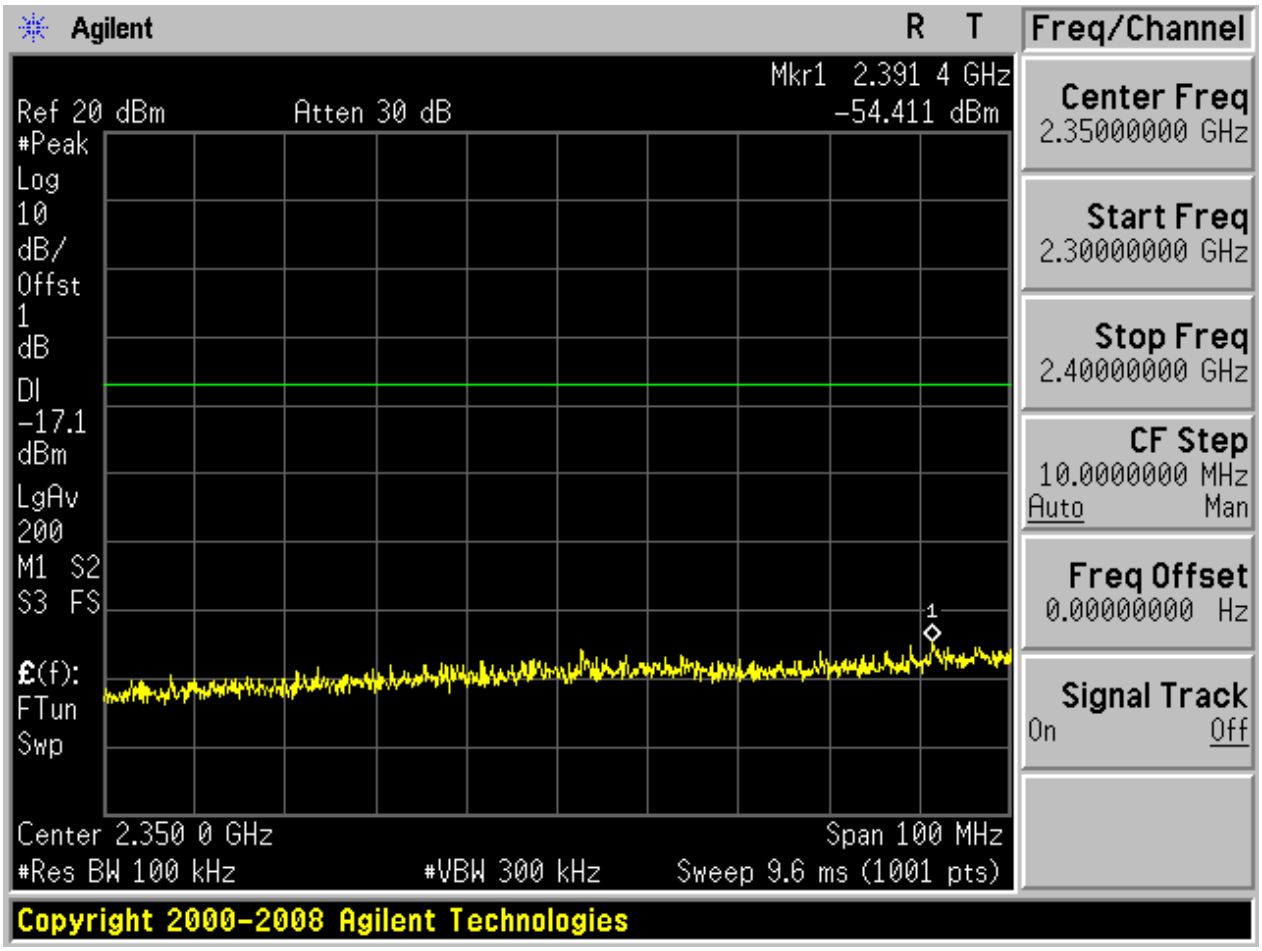

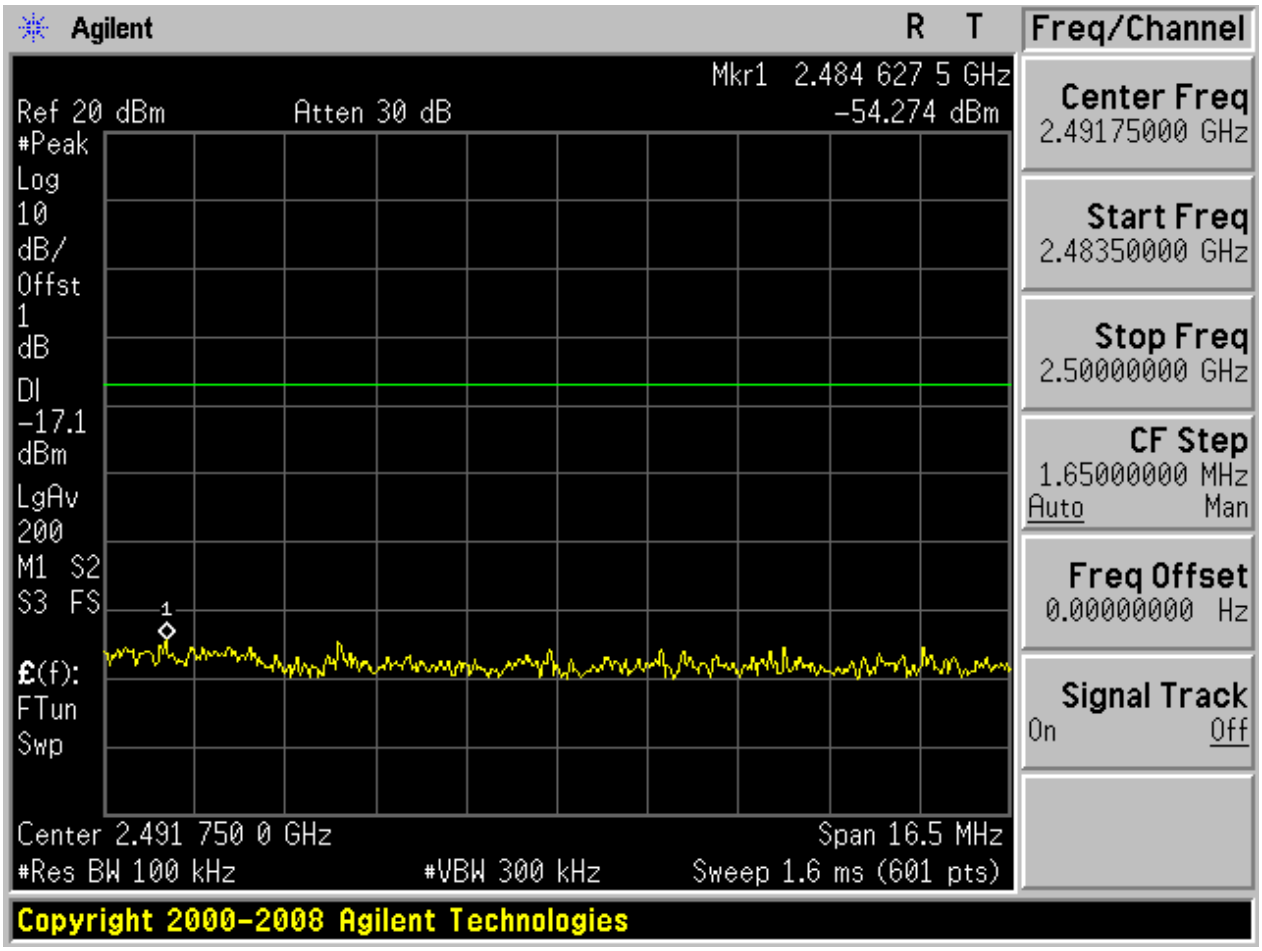

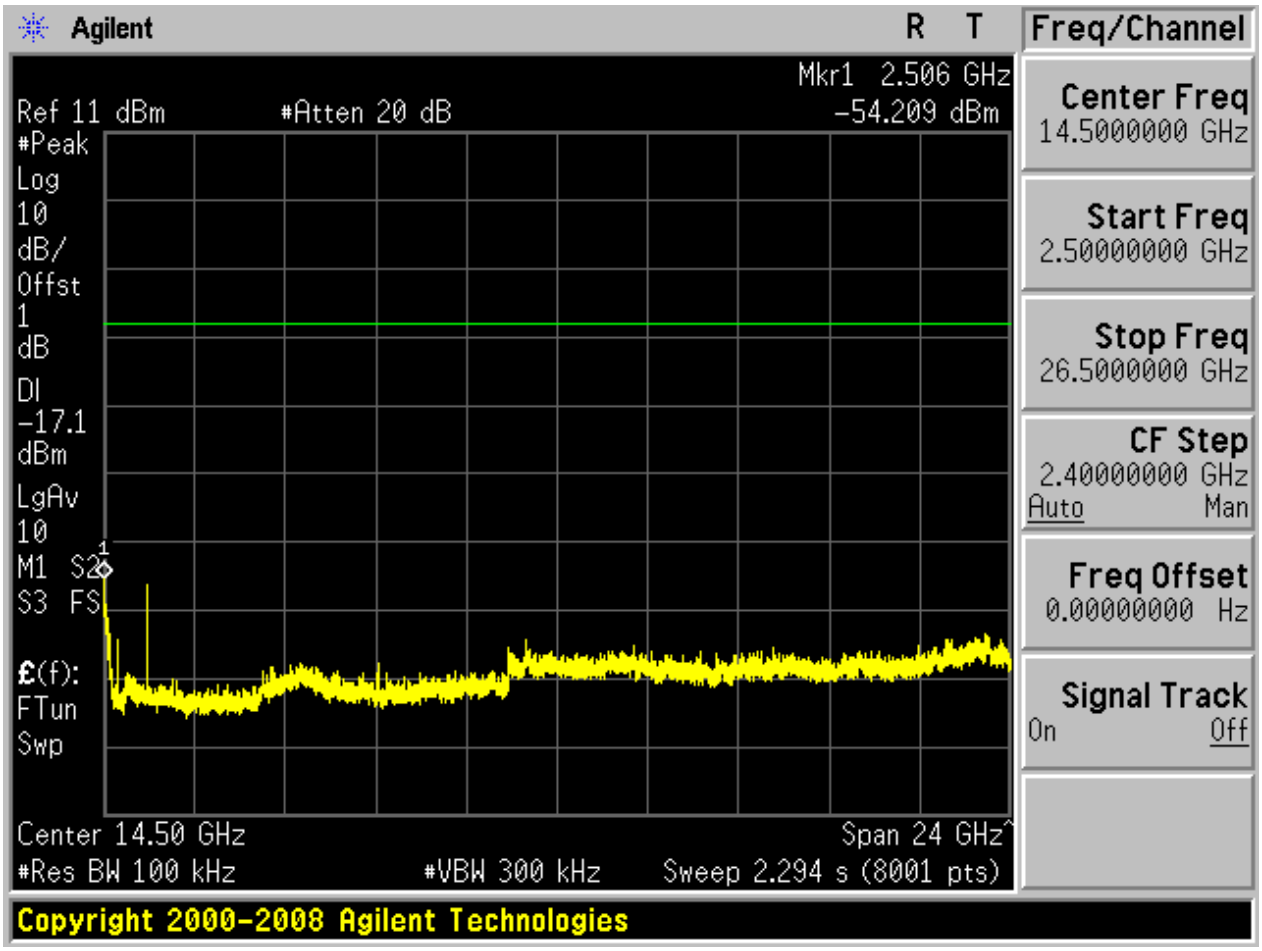

2.17 11N20_H

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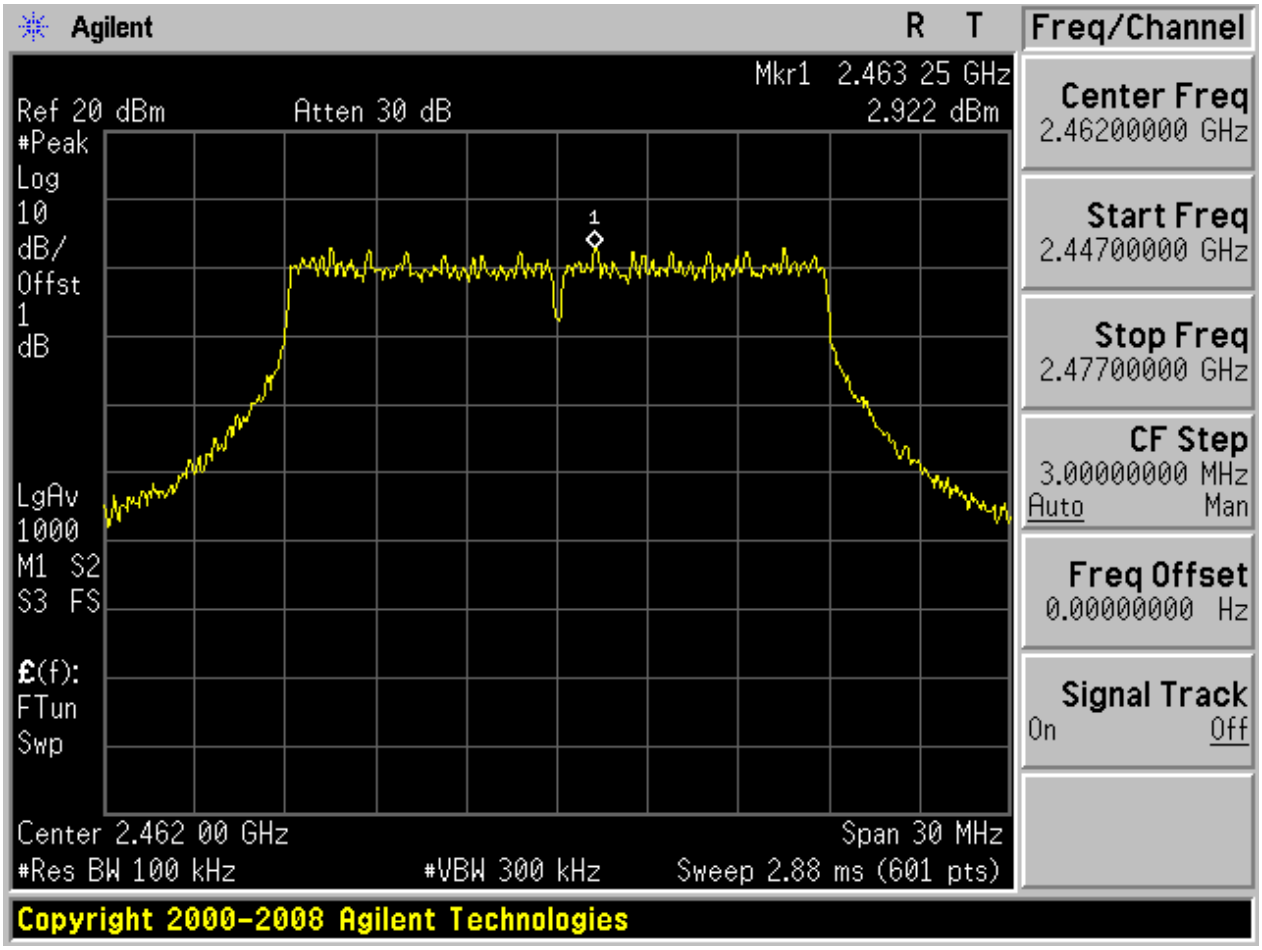

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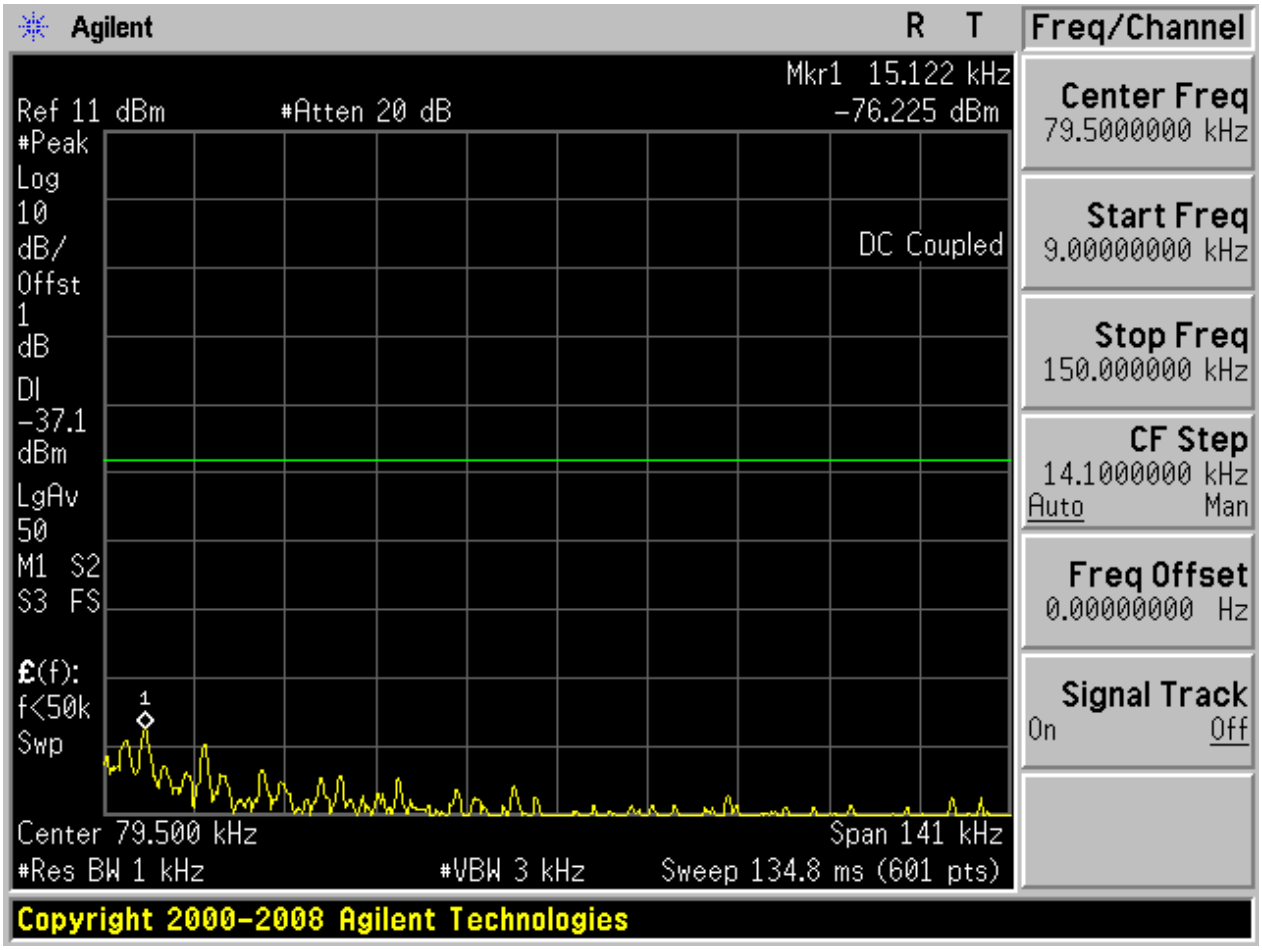

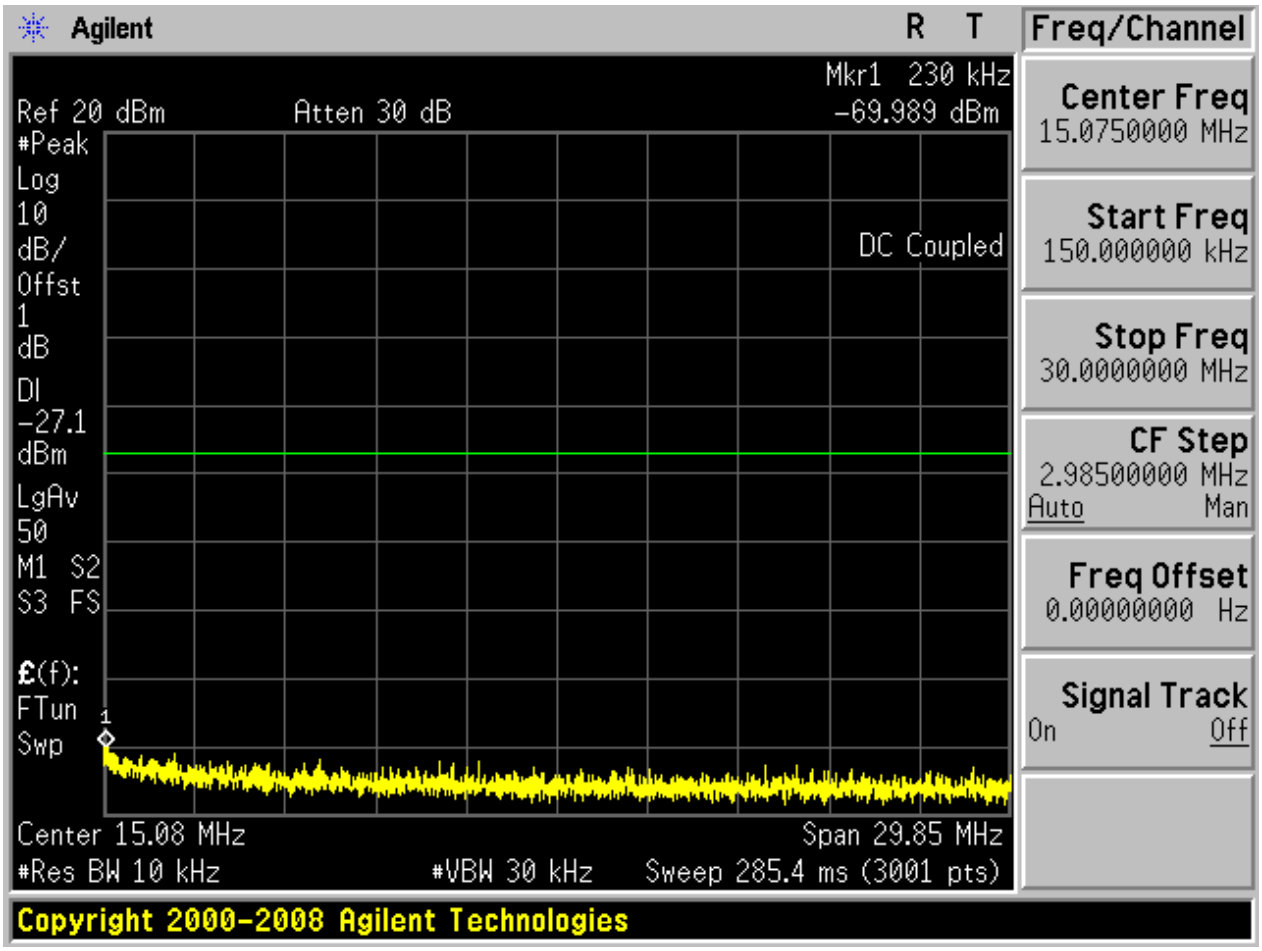

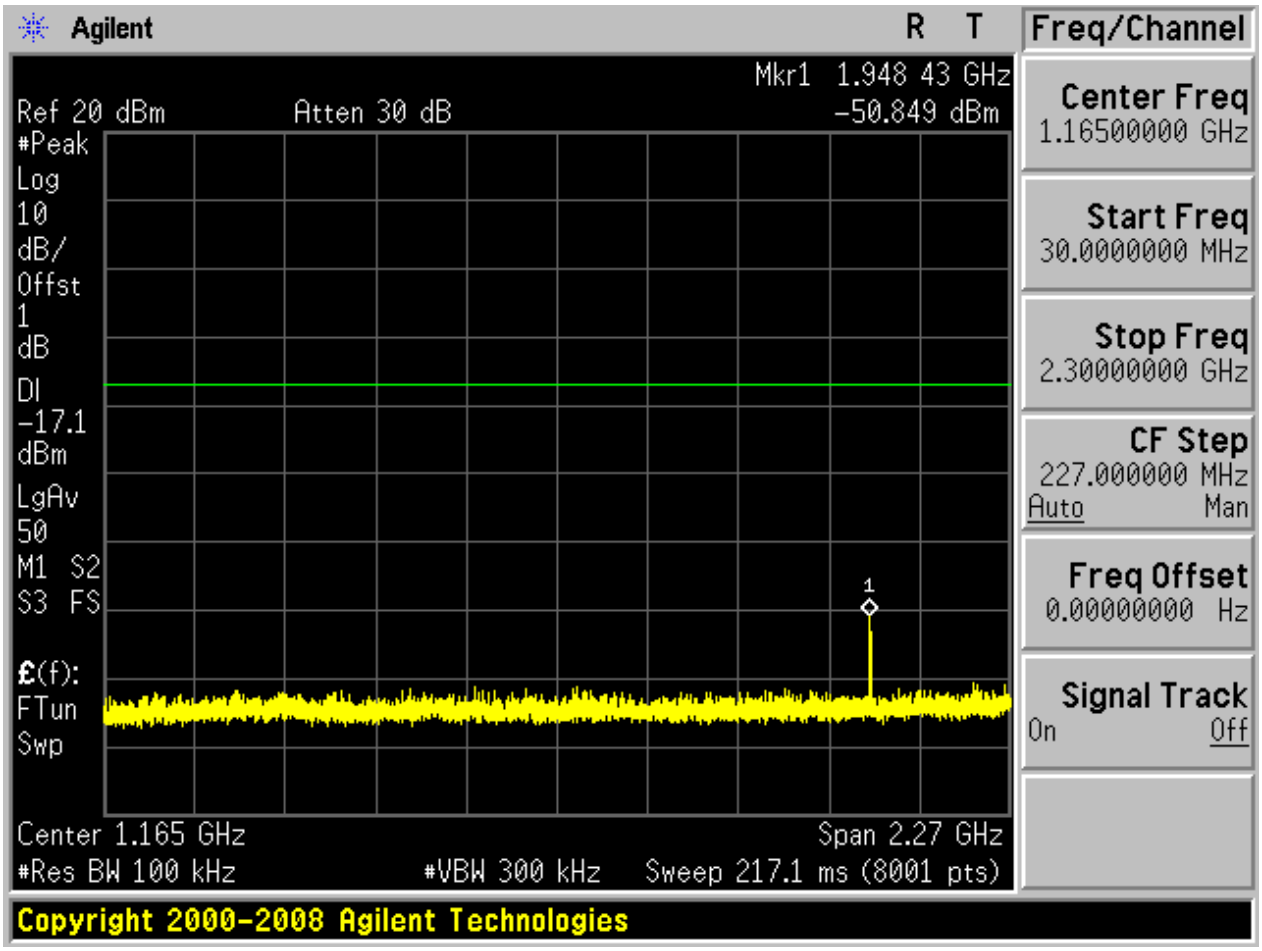

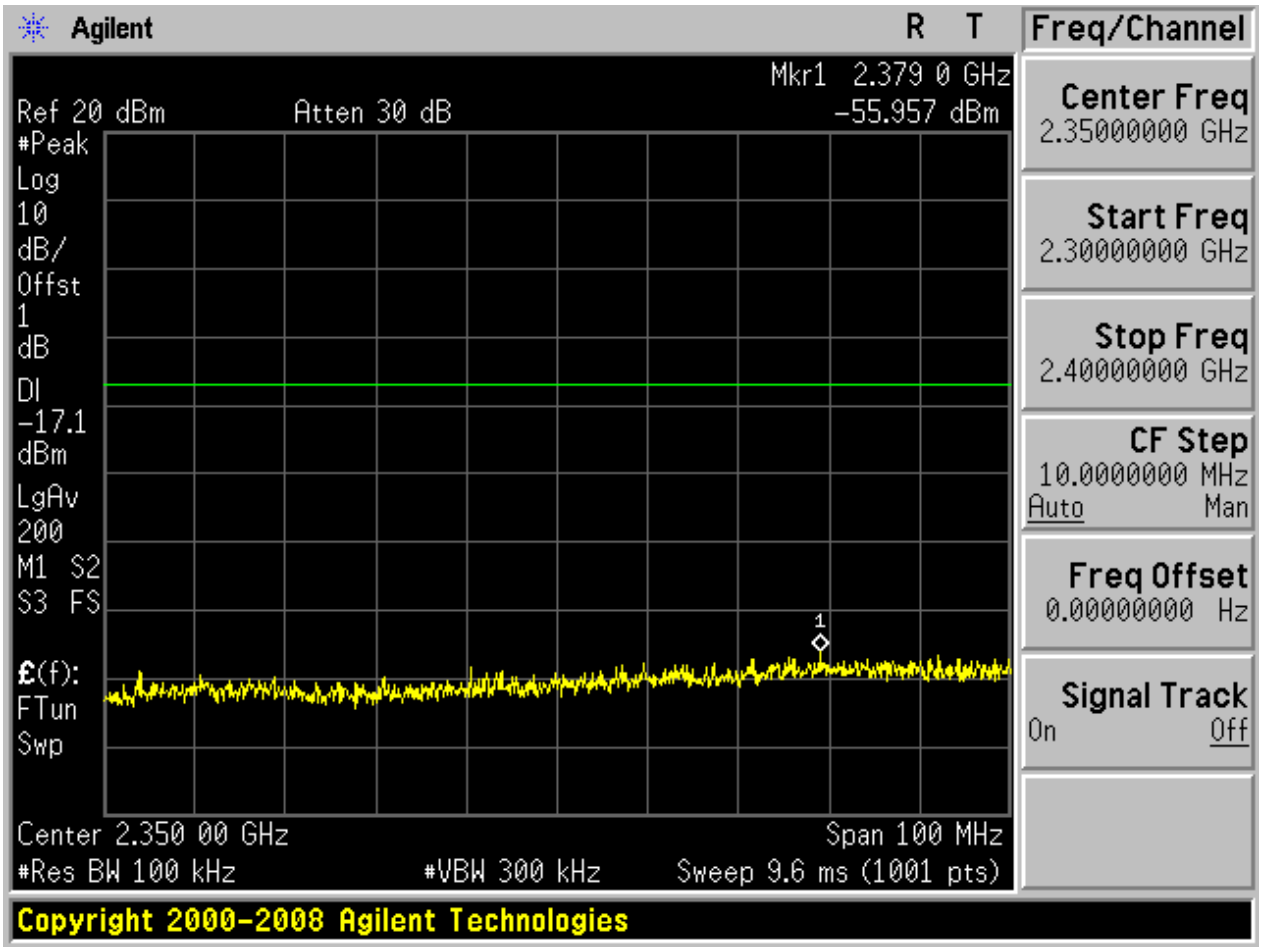

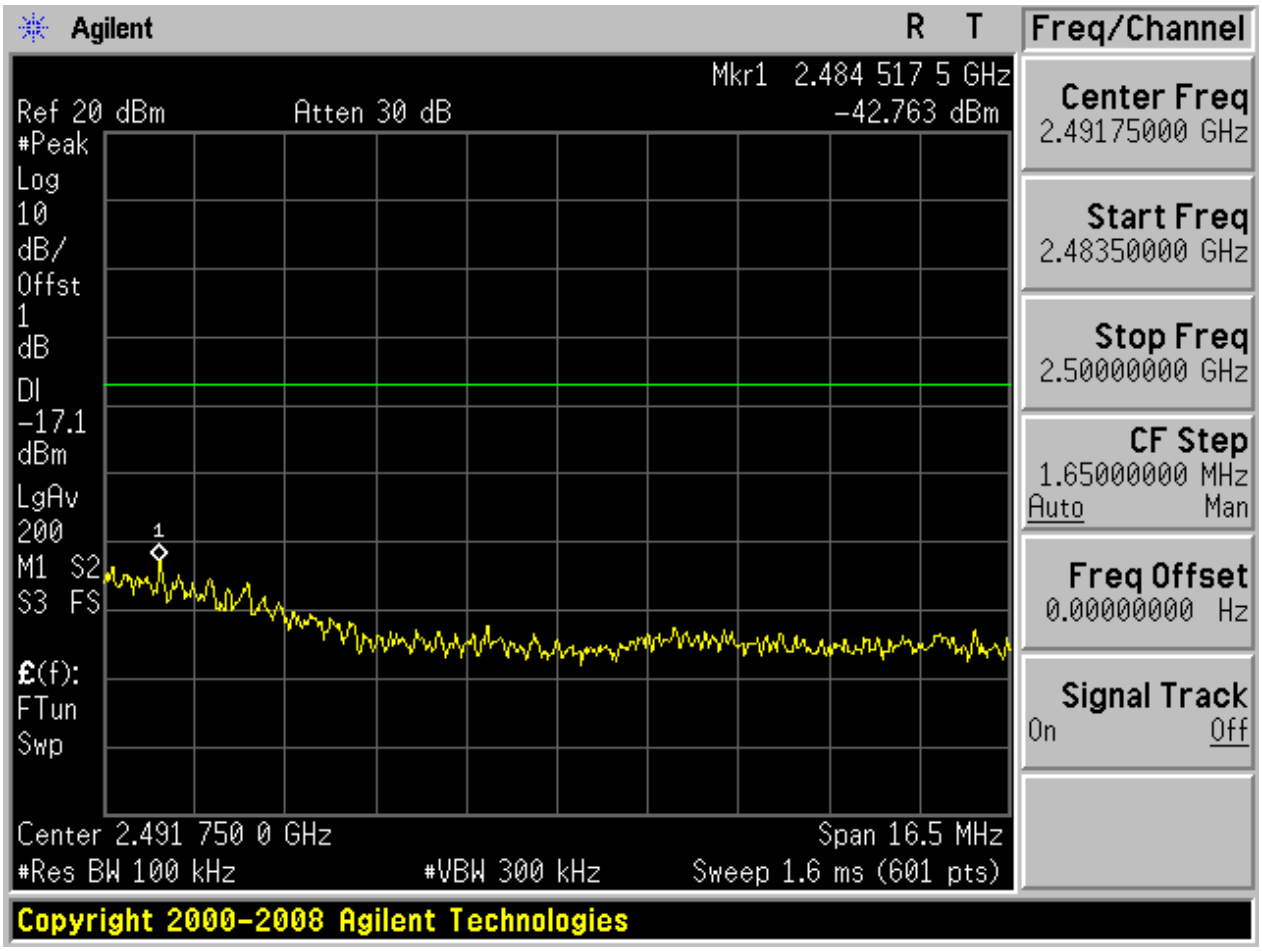

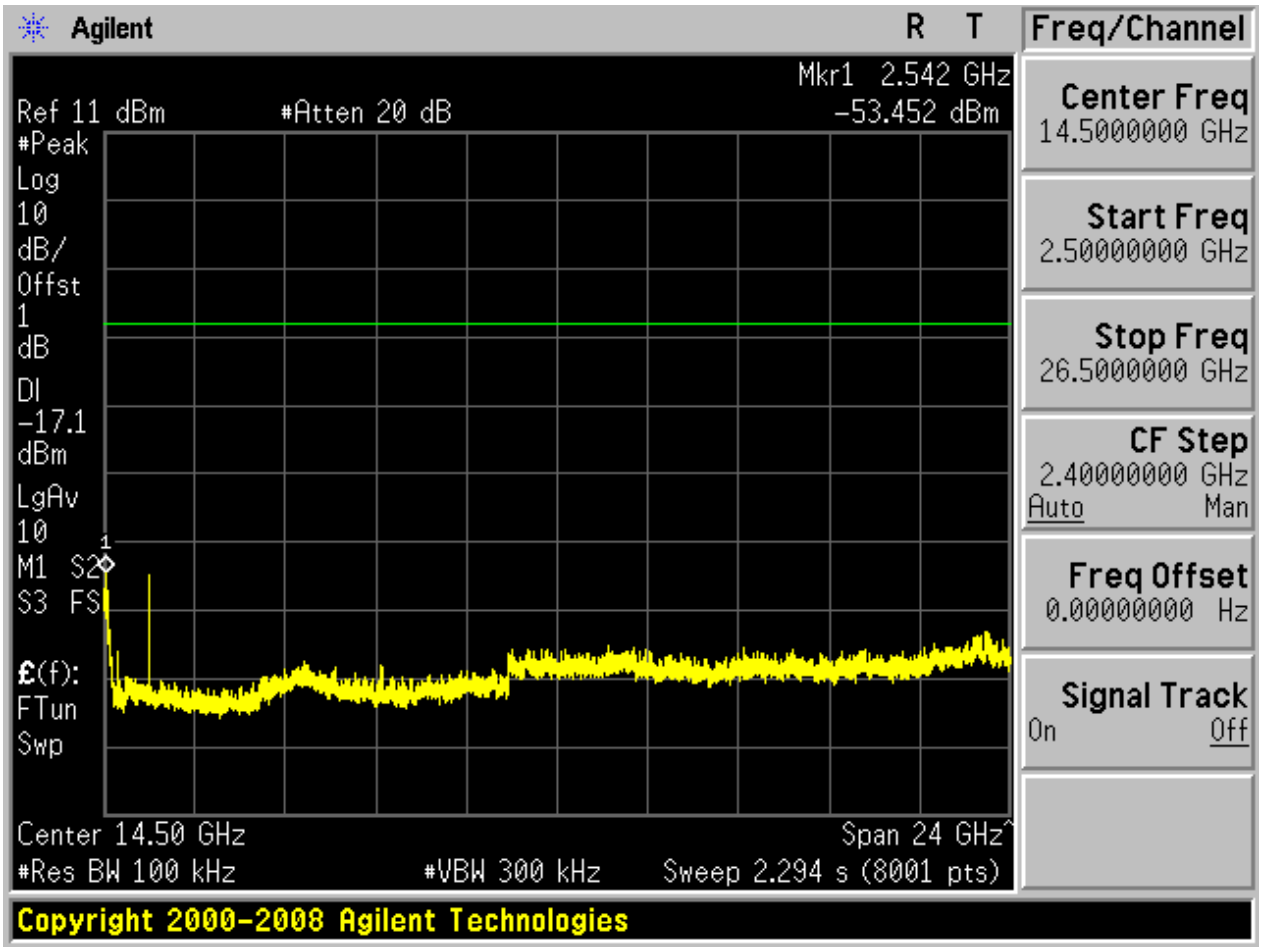

2.25 11N40_L

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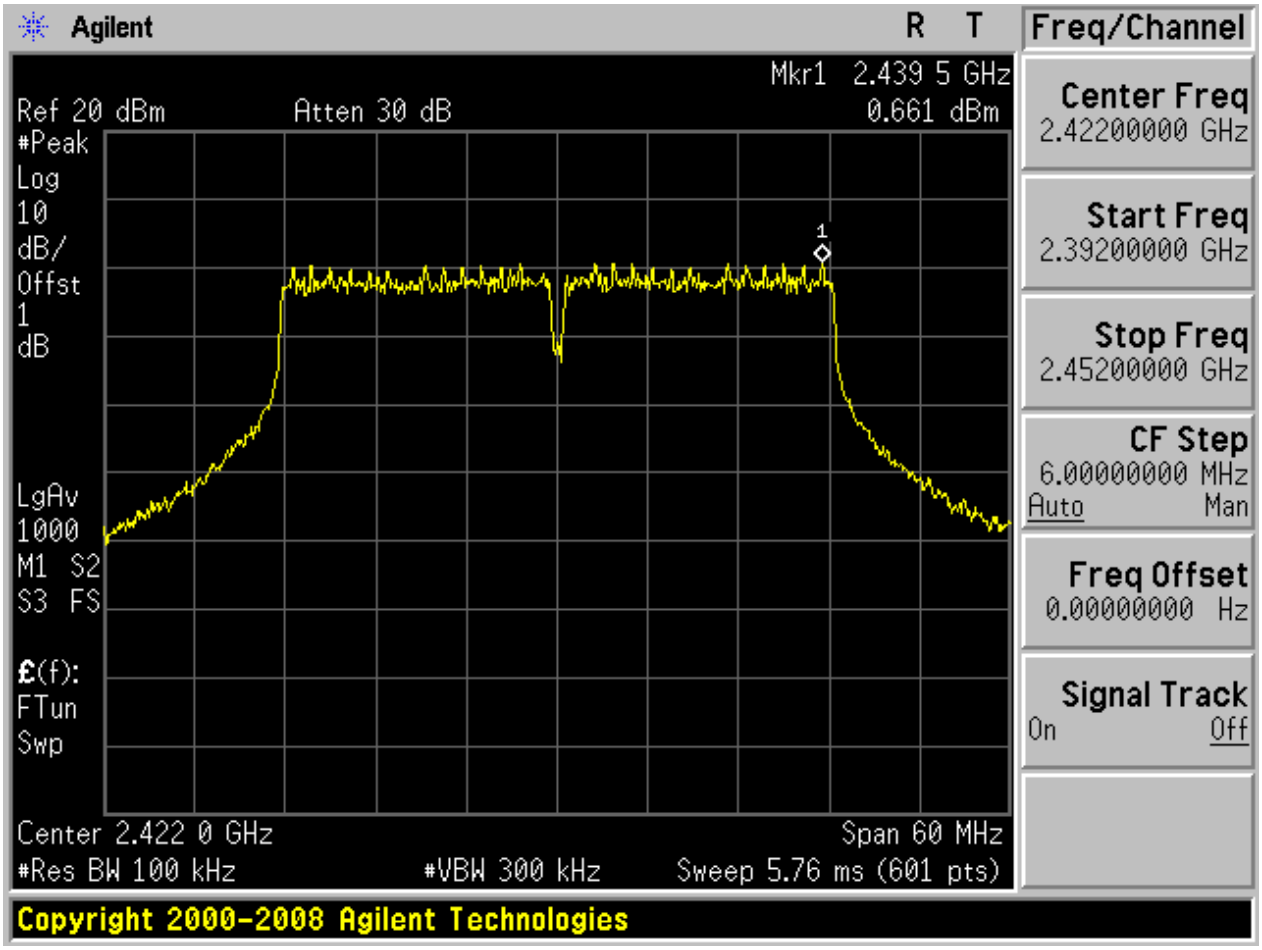

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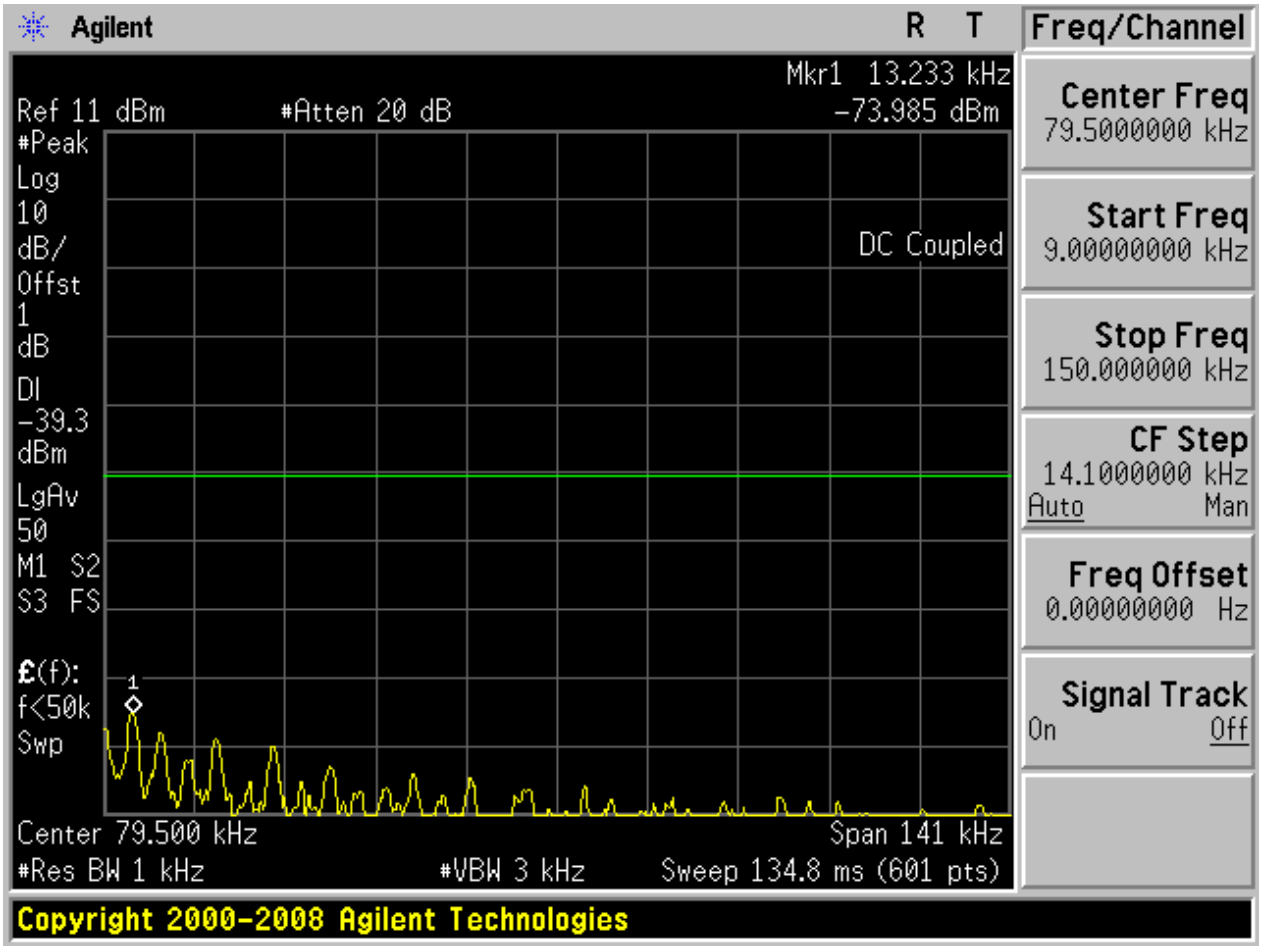

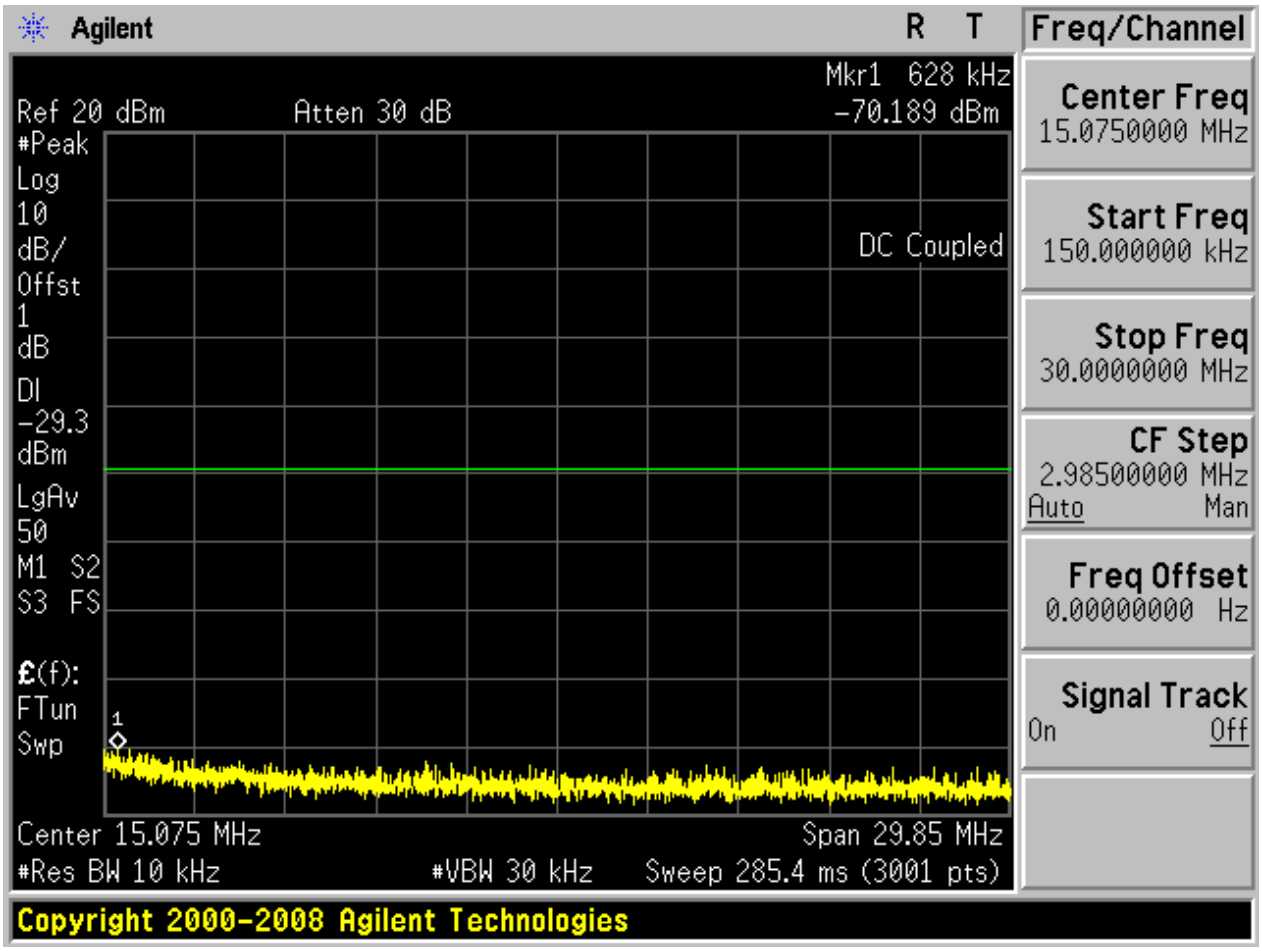

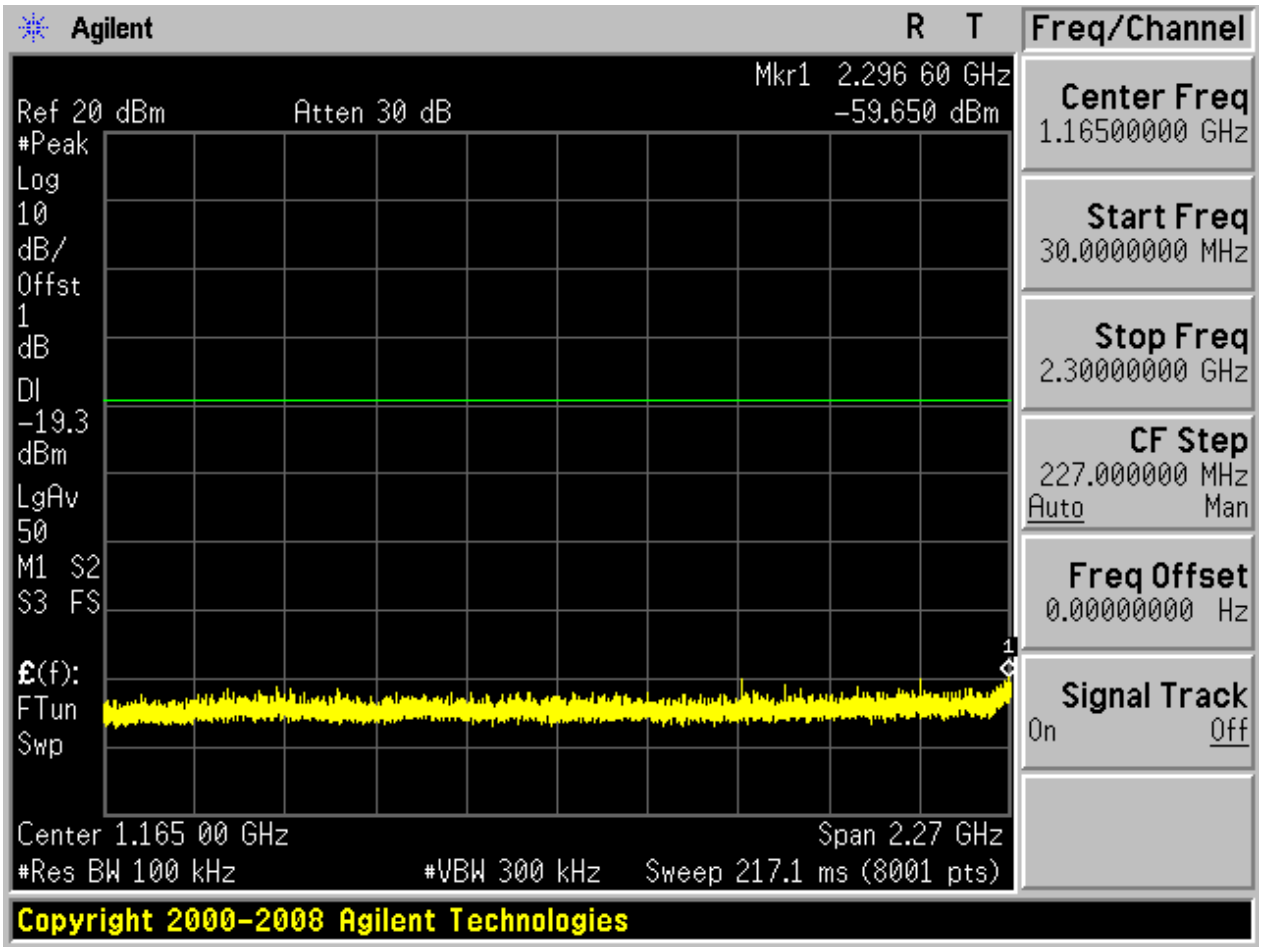

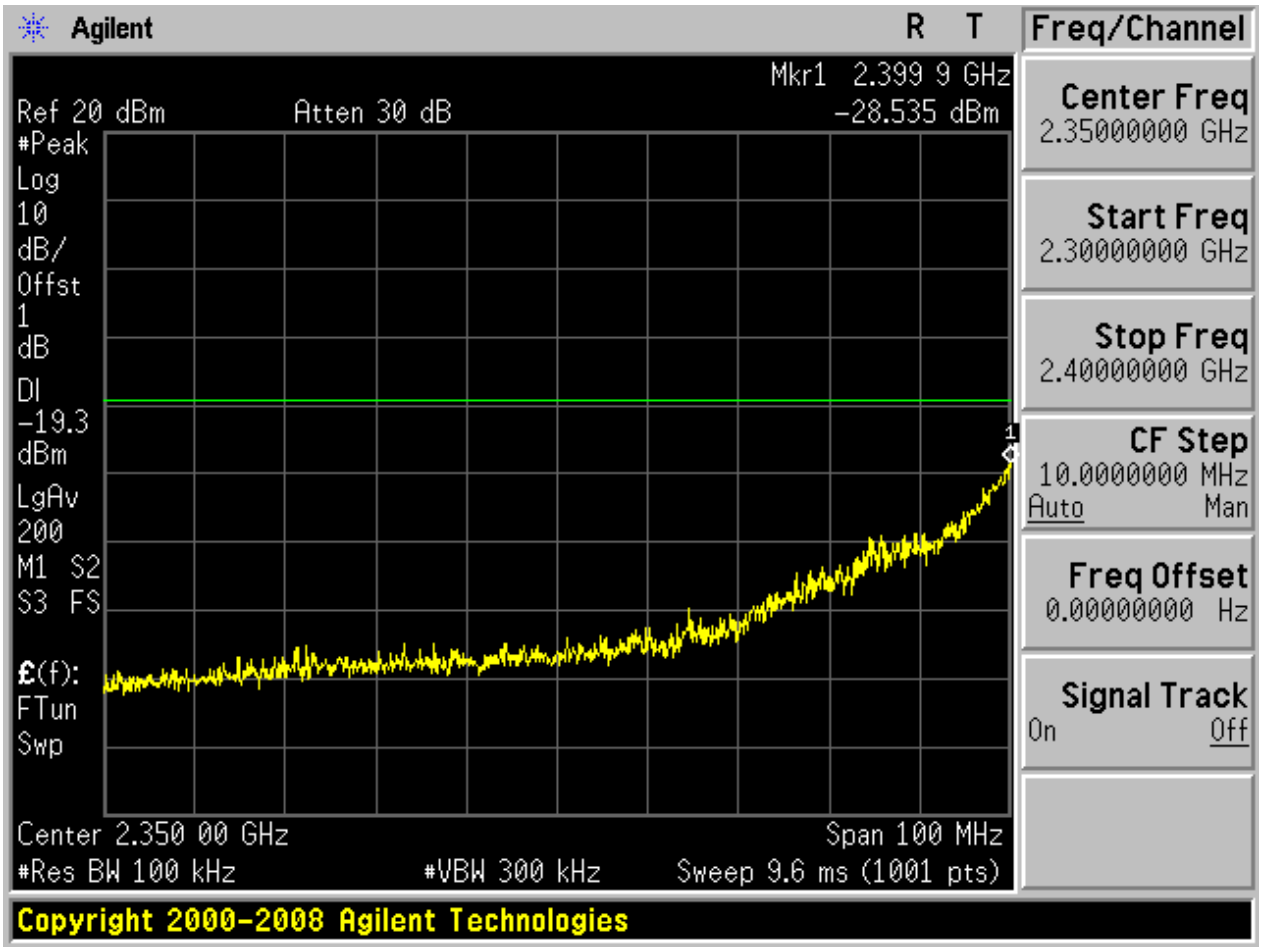

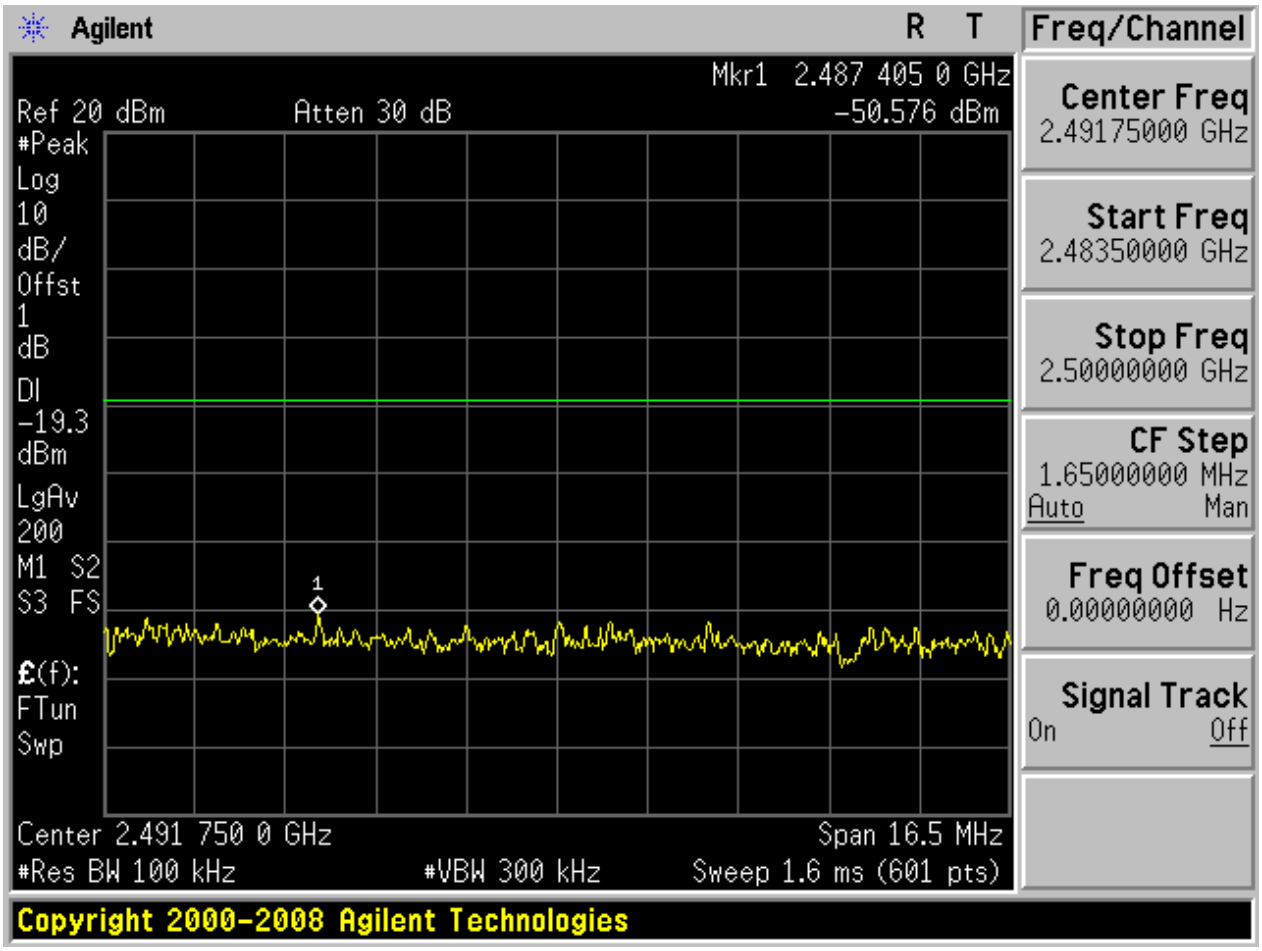

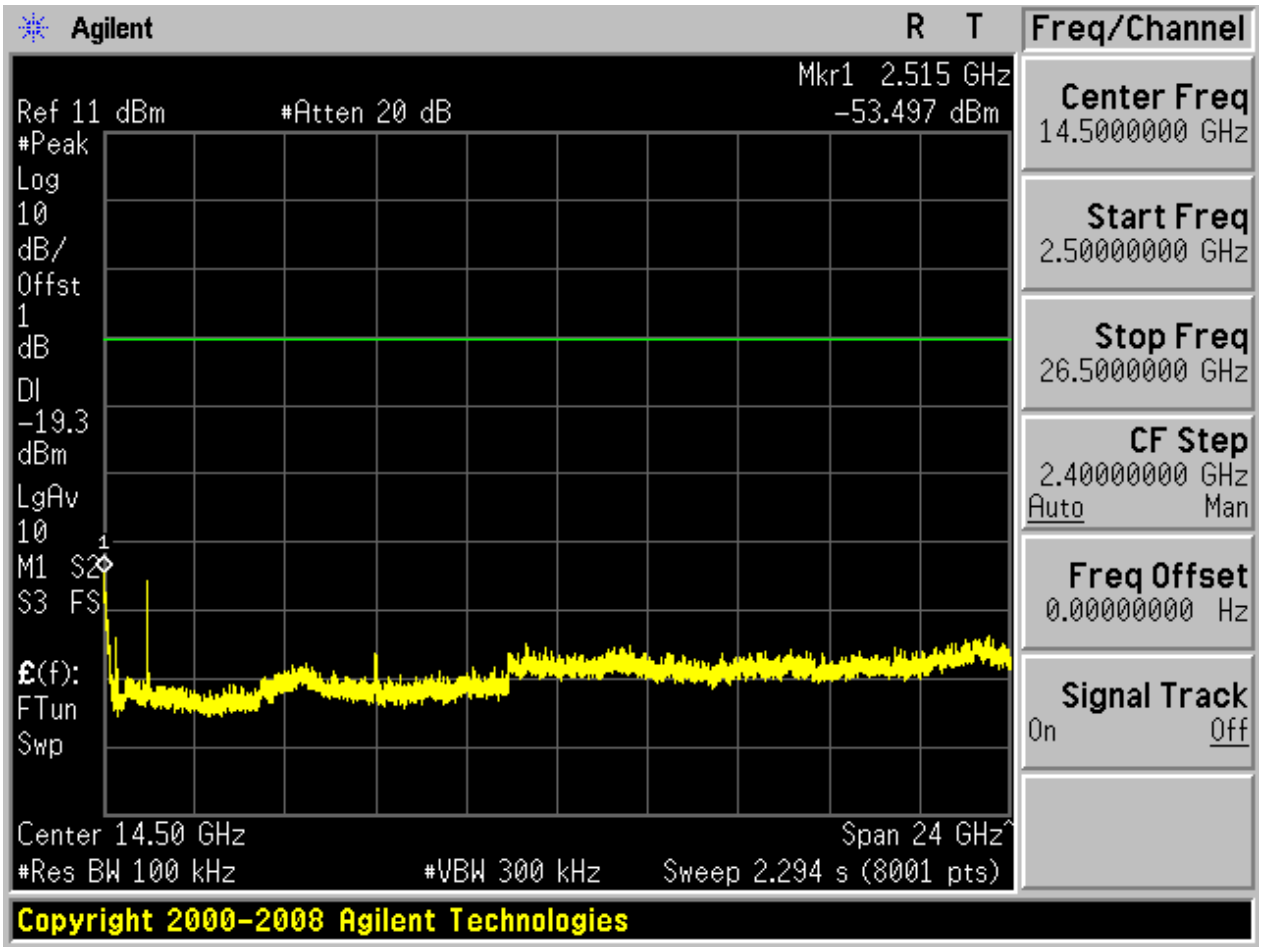

2.27 11N40_M

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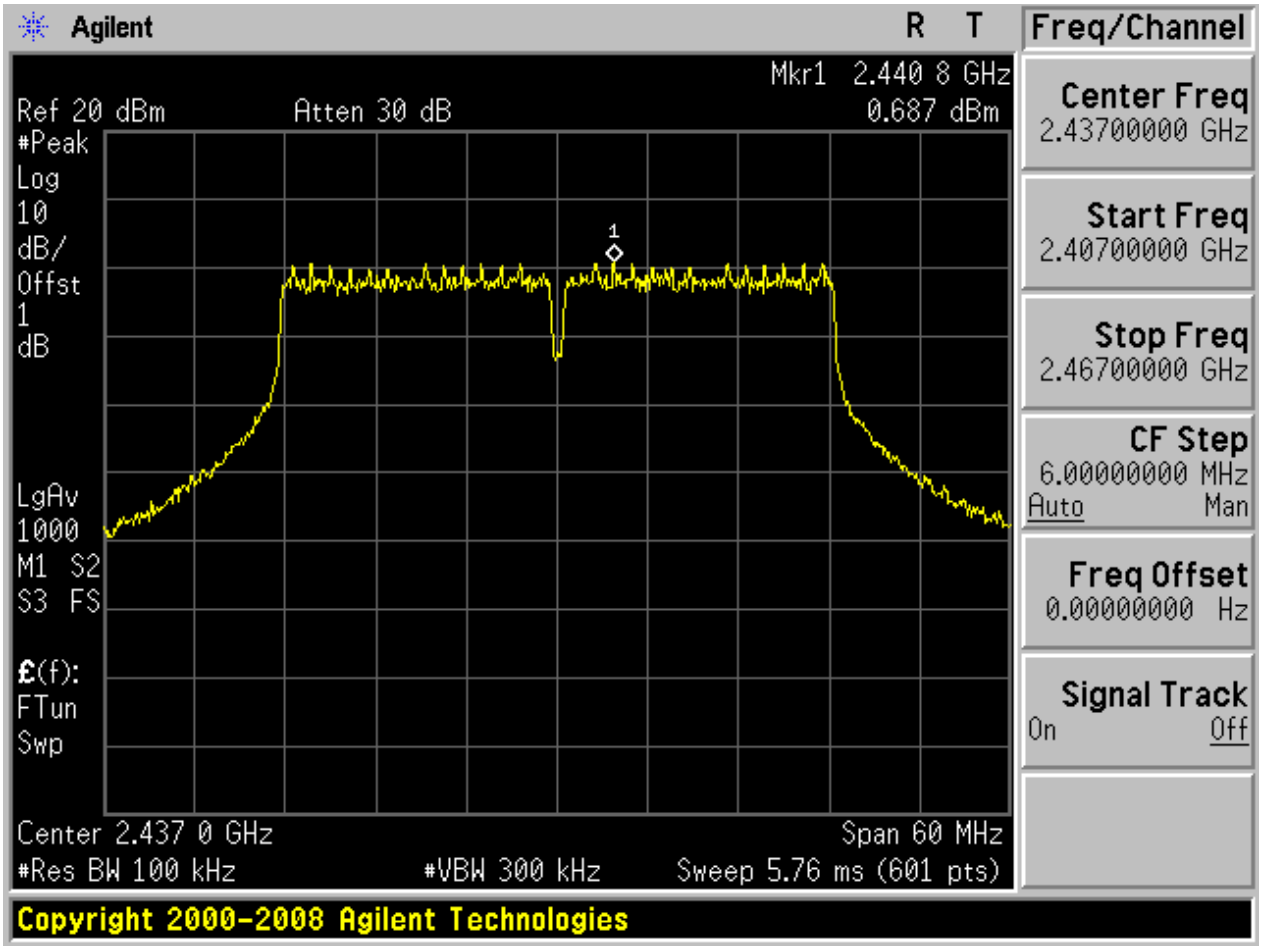

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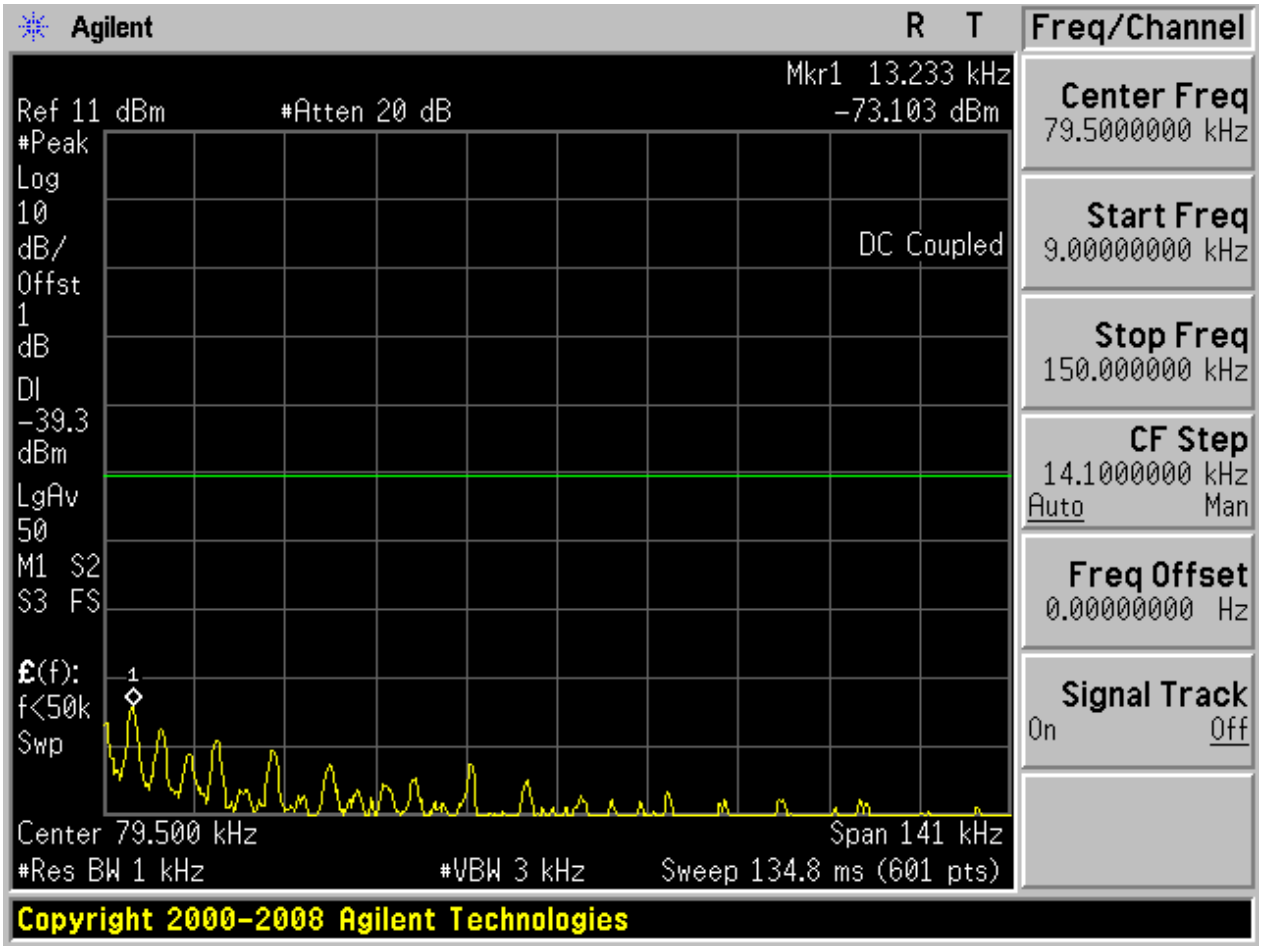
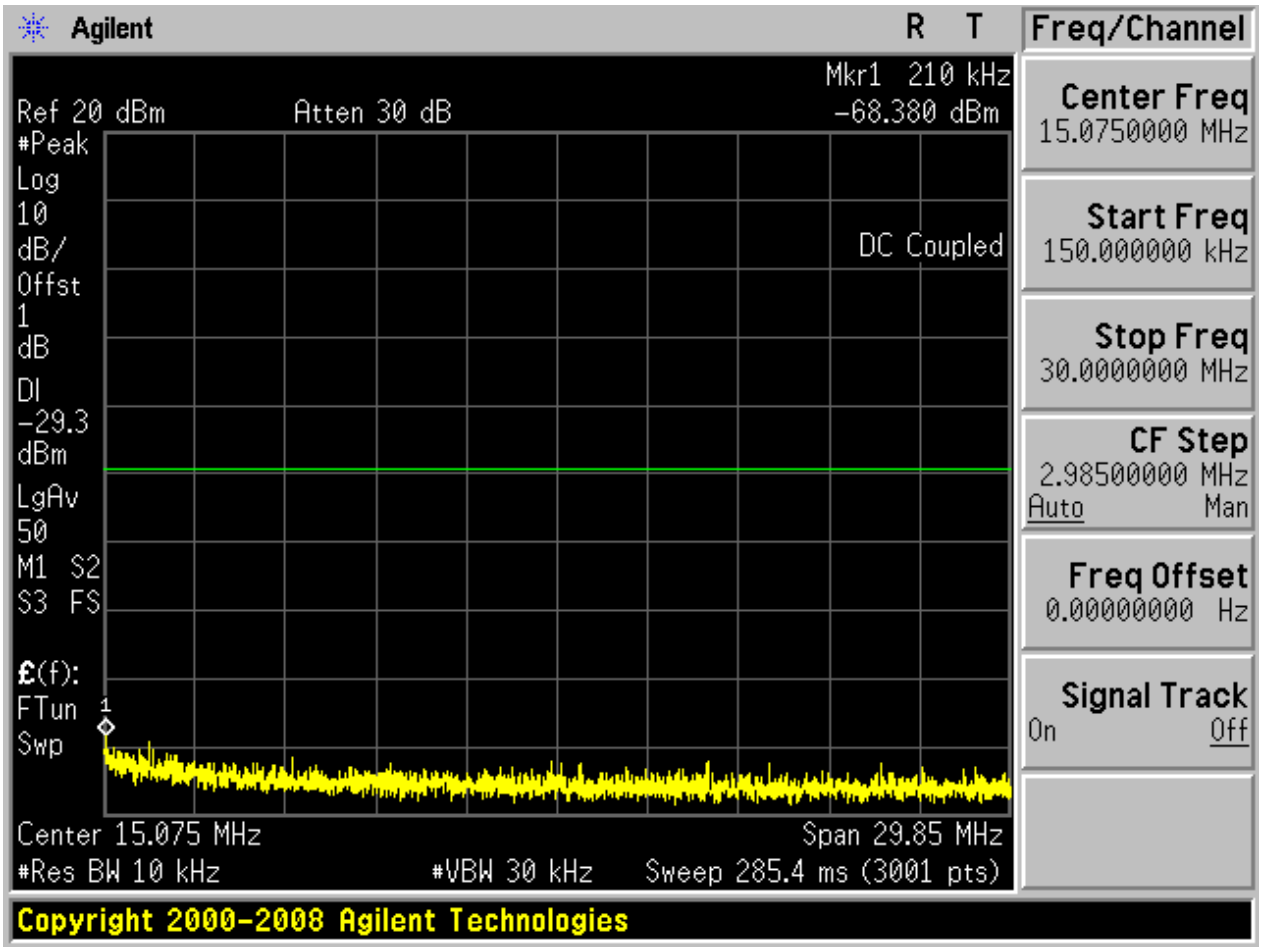
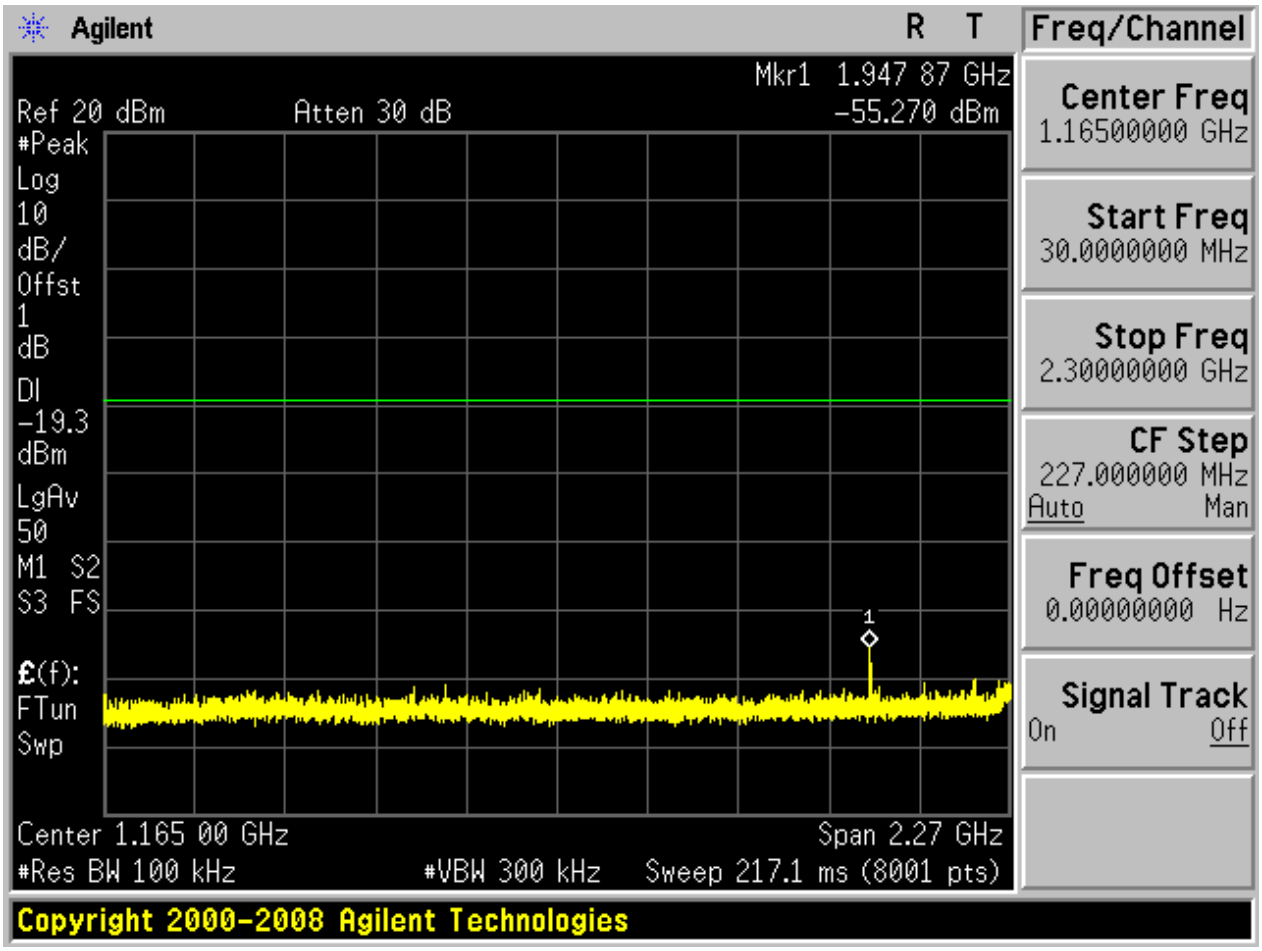
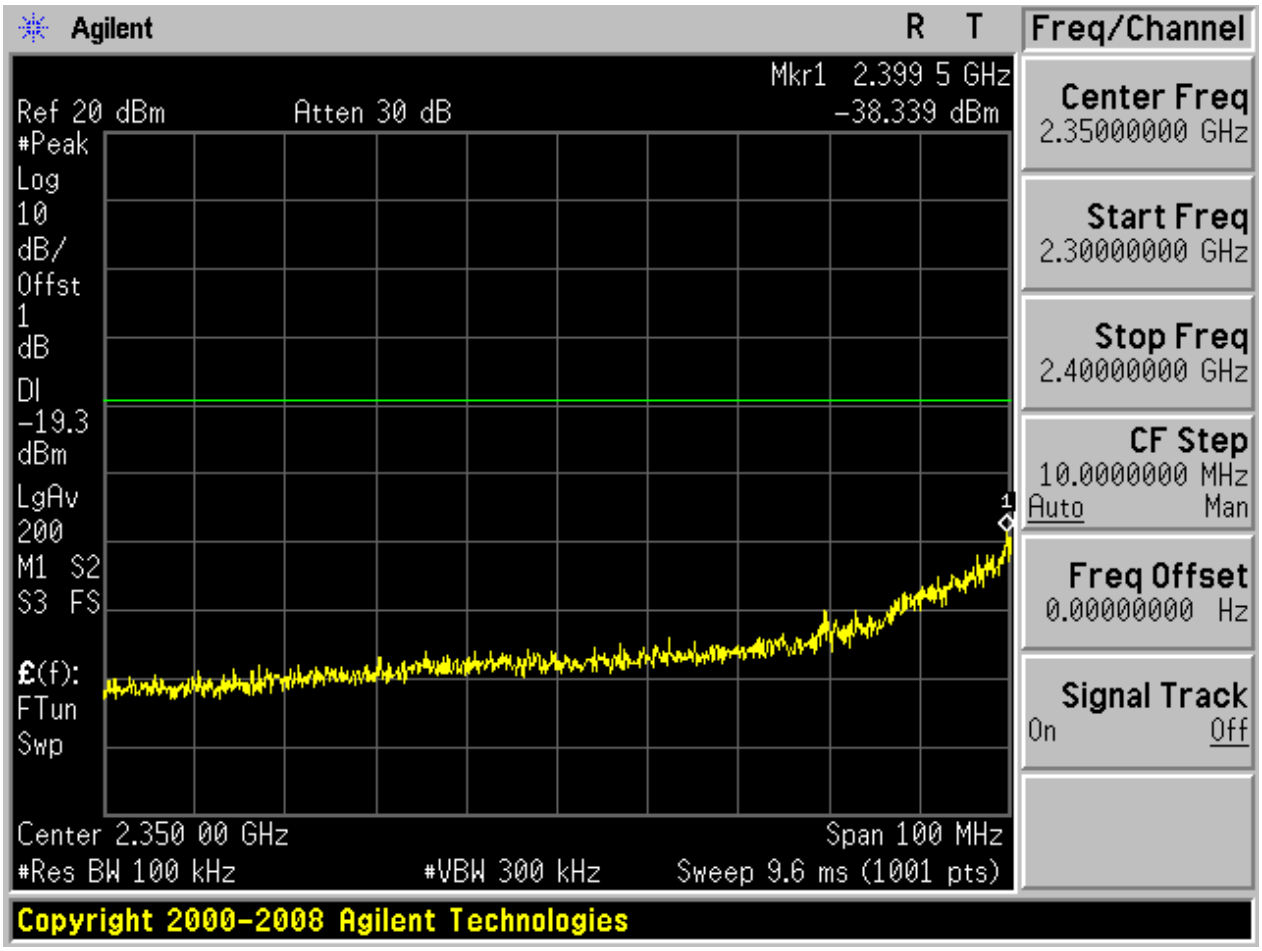
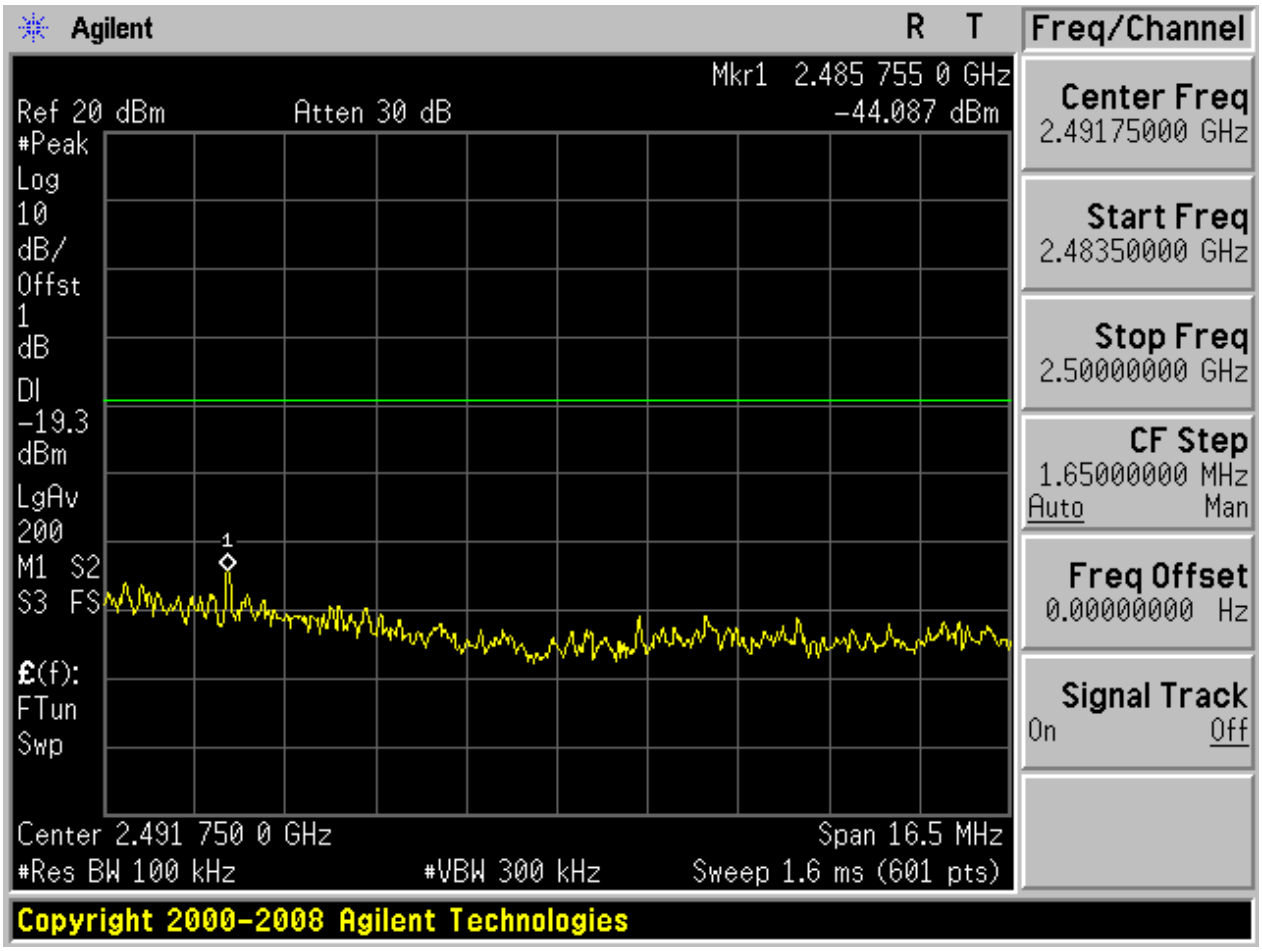
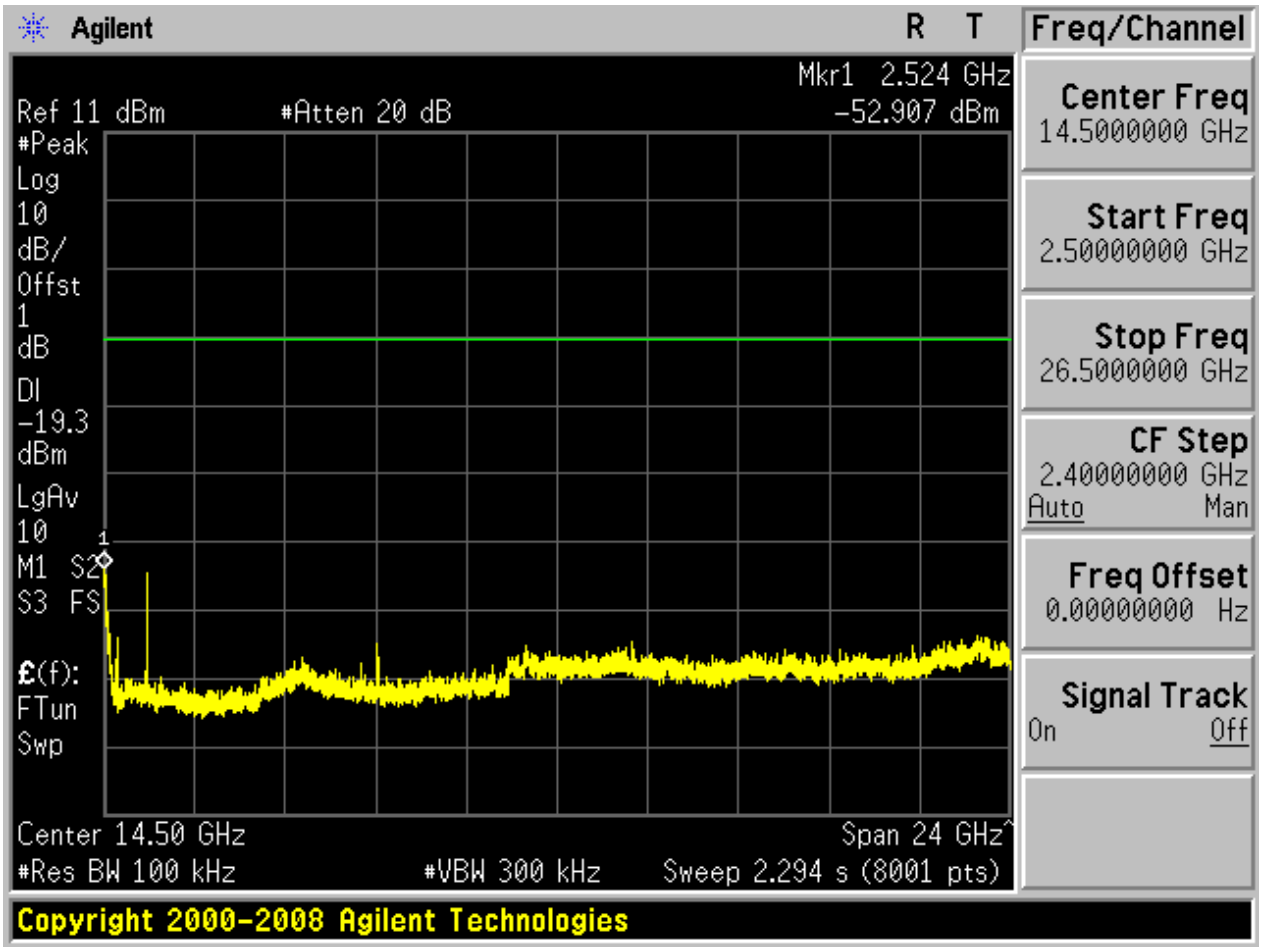

Agilent
R T
Freq/Channel
Mkr1 13.233 kHz
Ref 11 dBm
#Atten 20 dB
-73.103 dBm
#Peak
Log
10
dB/
Offst
1
dB
Dl
-39.3
dBm
LgAv
50
M1 S2
S3 FS
£(f):
f<50k
Swp
DC Coupled
Center Freq
79.5000000 kHz
Start Freq
9.00000000 kHz
Stop Freq
150.000000 kHz
CF Step
14.1000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 79.500 kHz
Span 141 kHz
#Res BW 1 kHz
#VBW 3 kHz
Sweep 134.8 ms (601 pts)
Copyright 2000-2008 Agilent Technologies











2.29 11N40_H

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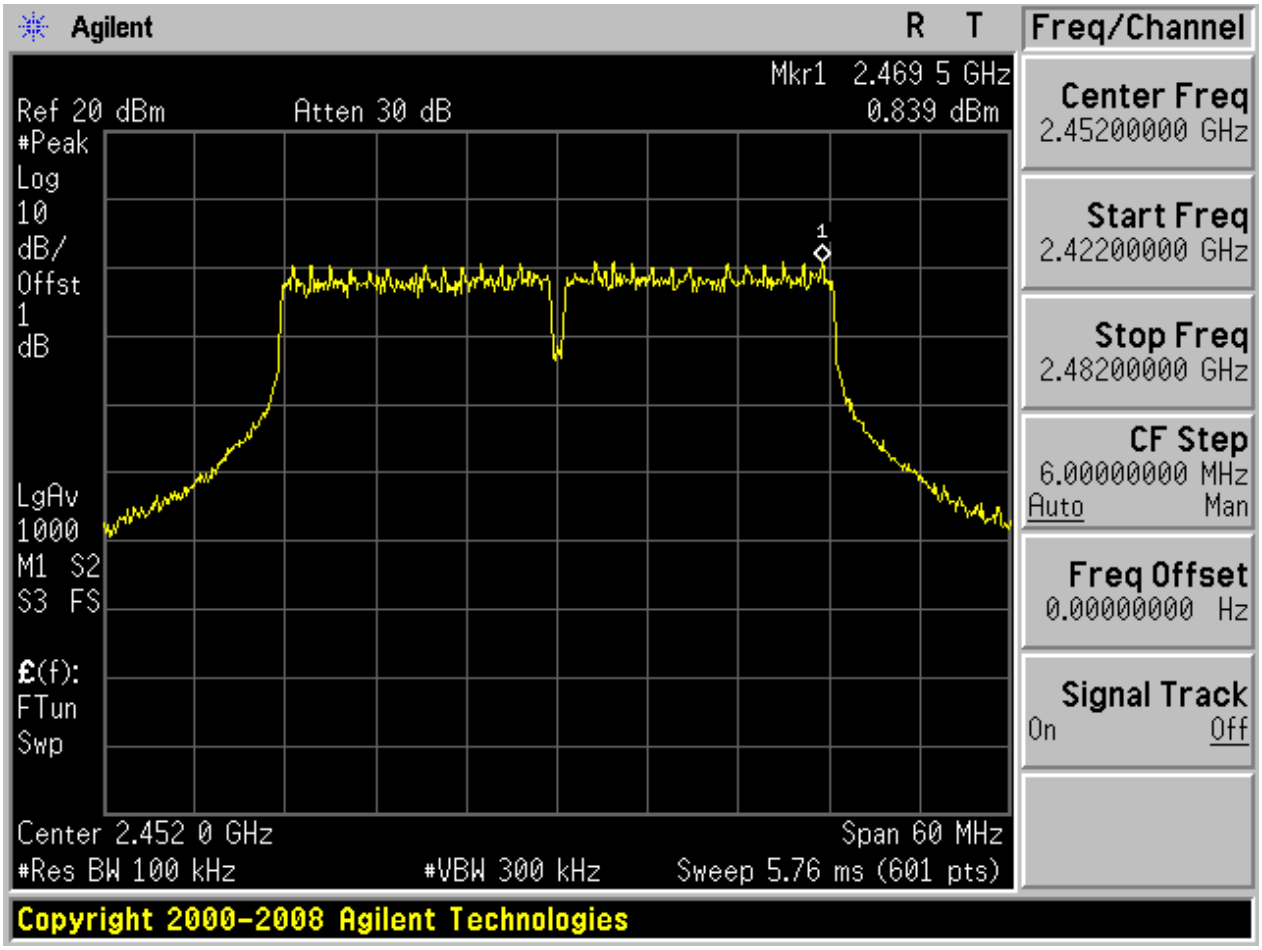
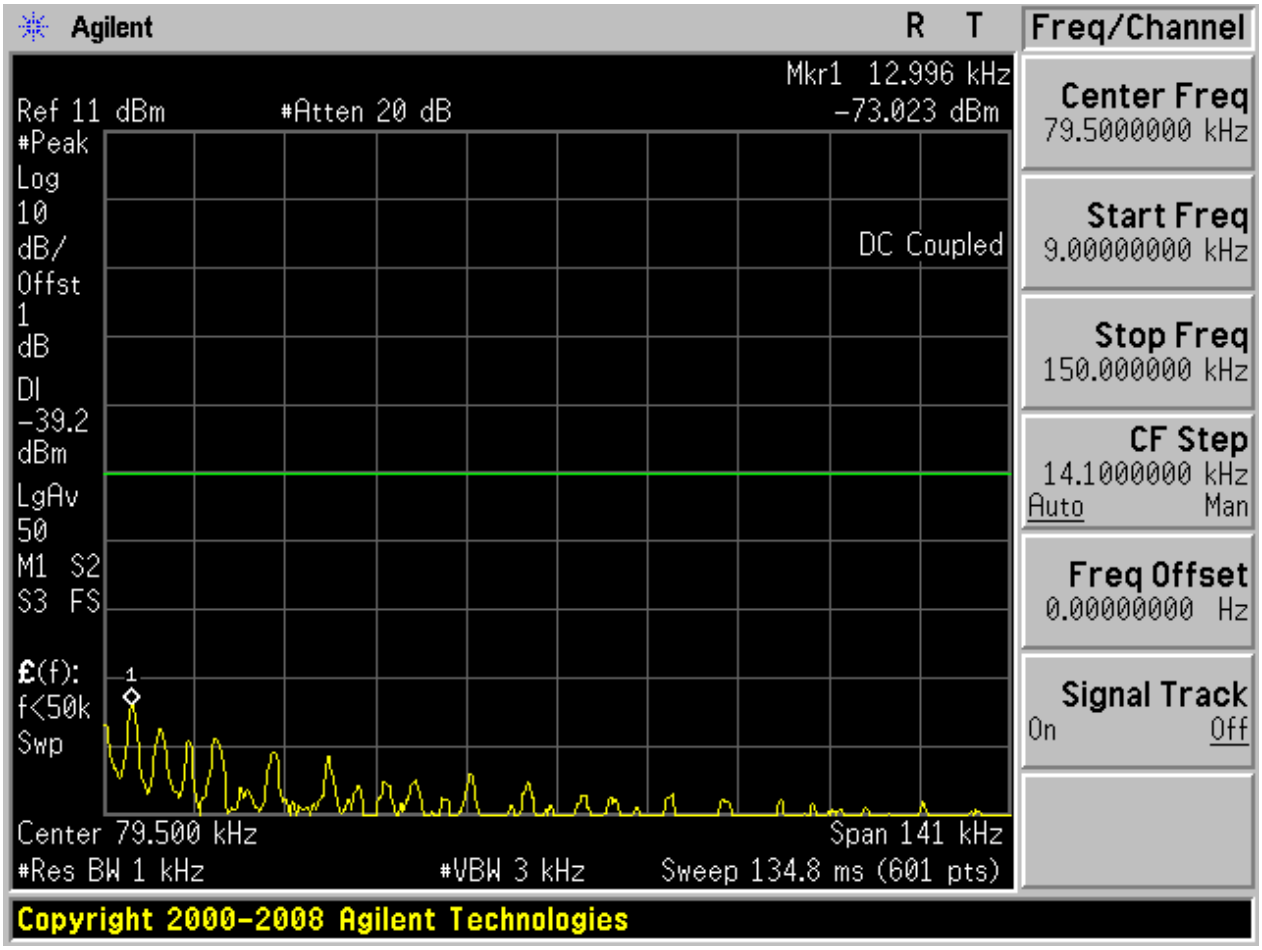
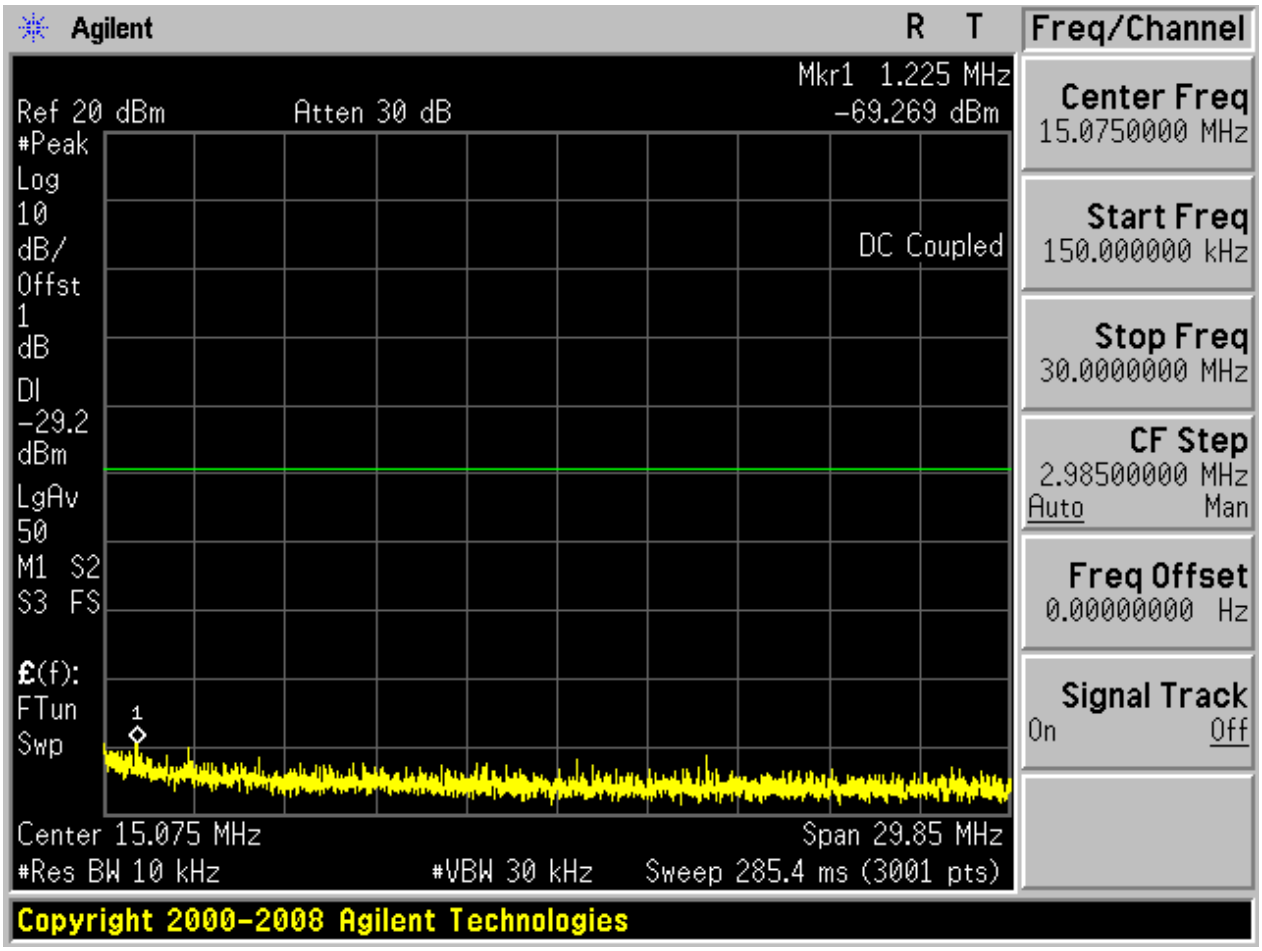
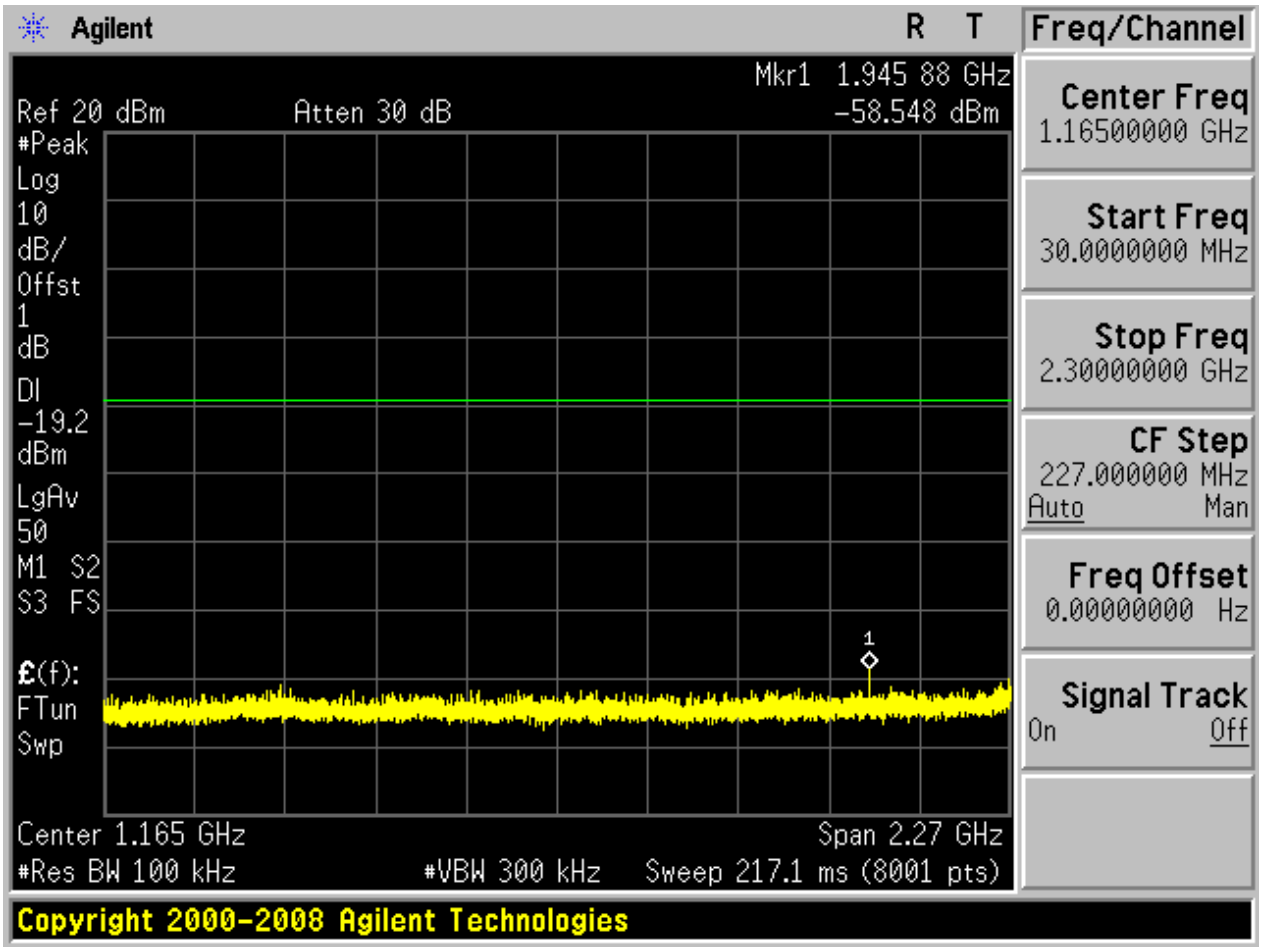
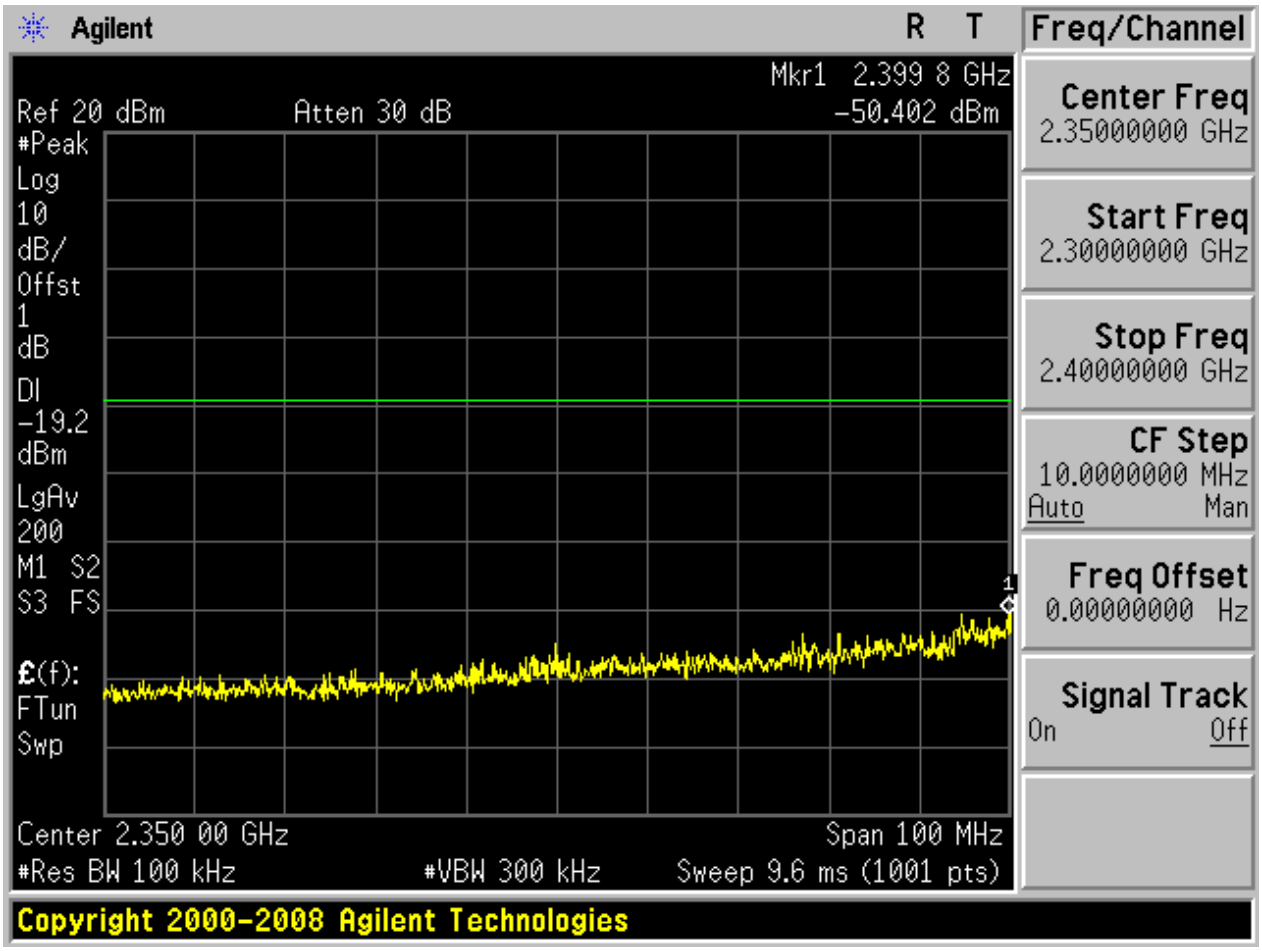


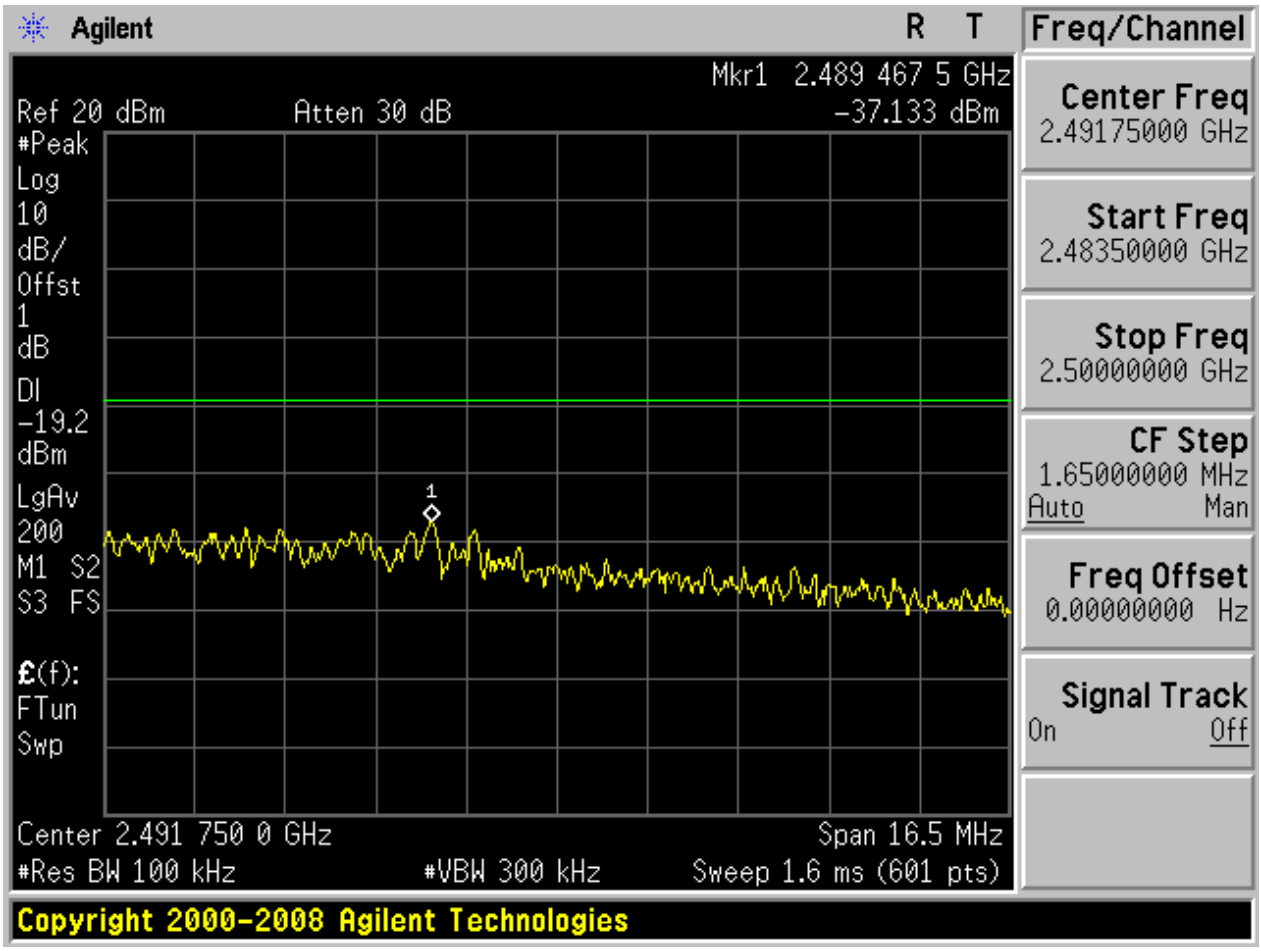
Puw:

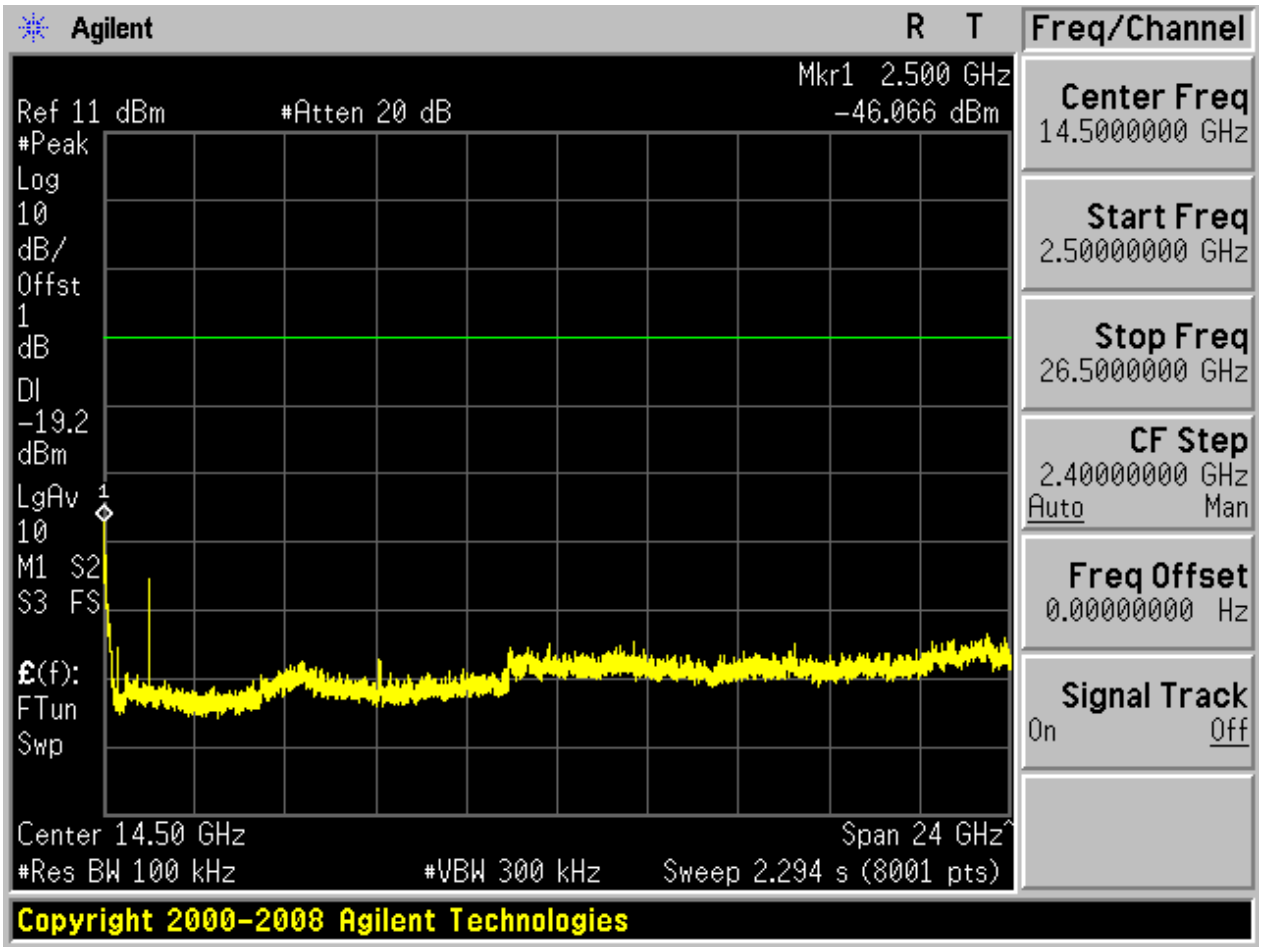












Appendix G

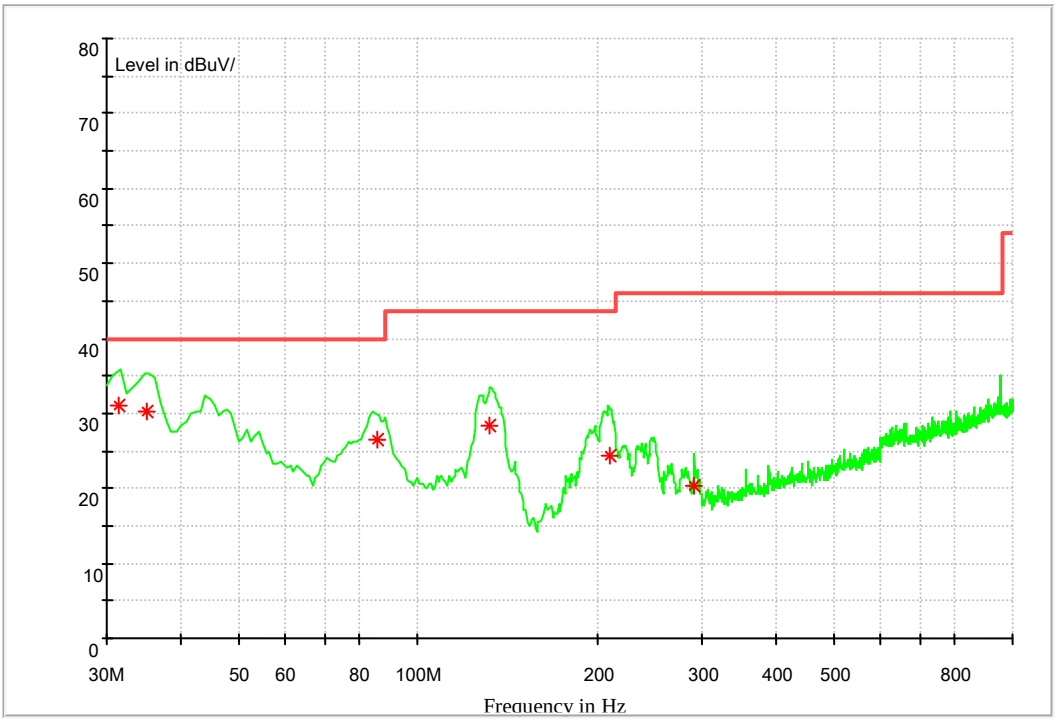
Radiated Spurious Emission & Spurious in Restricted Band (according to FCC Part 15.247(d) & 15.205 & 15.209)

Part 1: Testing Range of “30 MHz to 1 GHz”

Note 1: The test results and plot for testing range of “30 MHz to 1 GHz” showed as below is **the WORST case for all Test Modes and Channels**. This range will not be presented for each Test Mode and each Channel.

Note 2: **The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).**

FCC CLASS B RE 30MHz-1GHz



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV/m	Transducer dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
31.348480	31.1	13.8	40.0	8.9	100.0	170.0	VERTICAL
35.099840	30.2	14.1	40.0	9.8	100.0	161.0	VERTICAL
85.320320	26.5	11.3	40.0	13.5	122.0	193.0	VERTICAL
131.834880	28.4	10.8	43.5	15.1	100.0	-9.0	VERTICAL
210.075840	24.4	13.1	43.5	19.1	100.0	342.0	VERTICAL
291.936640	20.2	15.4	46.0	25.8	100.0	149.0	HORIZONTAL

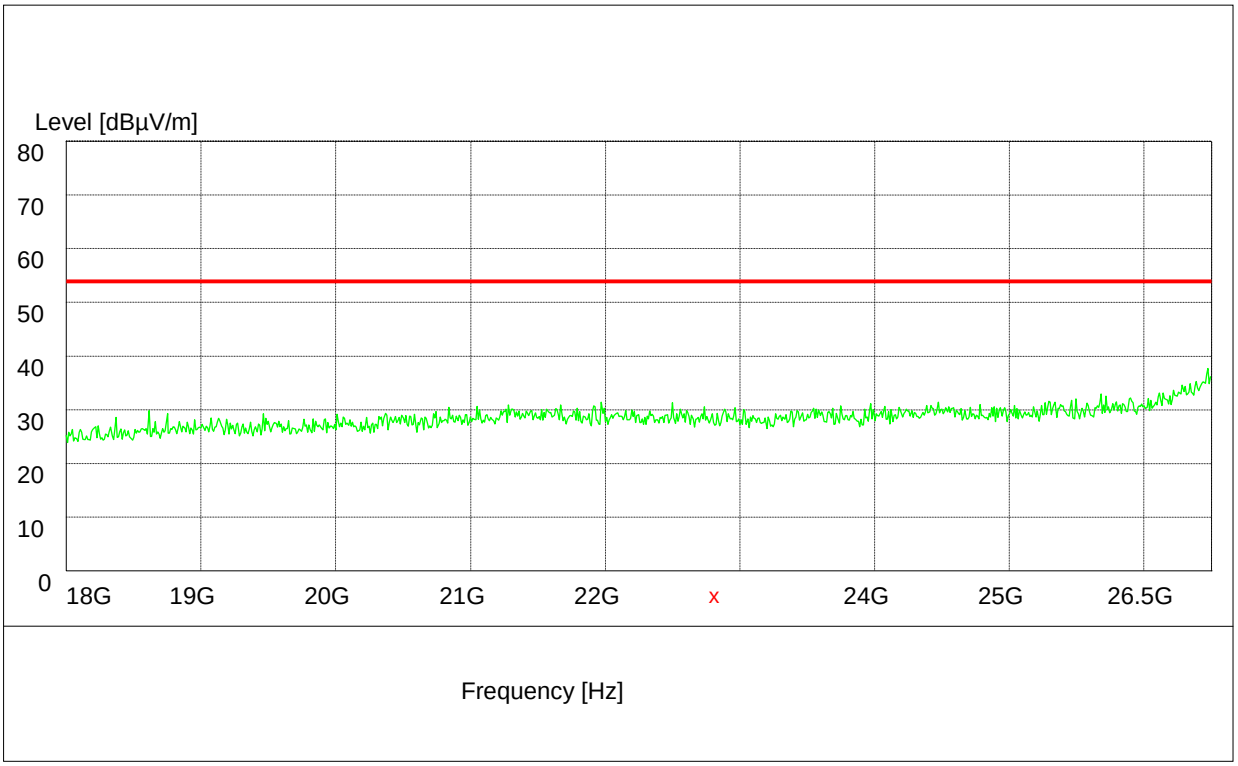
Note:

Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

Part 2: Testing Range of “18 GHz to 26.5 GHz”

Note: No peak found in pre- test.



Part 3: Testing Range of "2.3GHz to 2.5GHz"

Note 1: The testing range of "2.3 GHz to 2.5 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

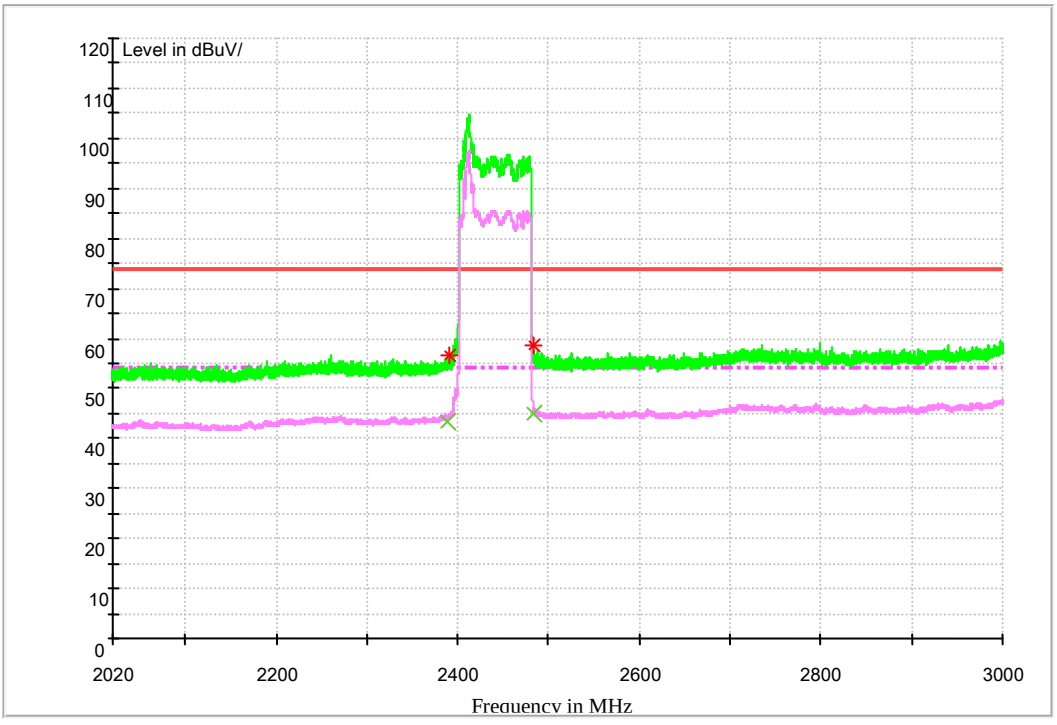
Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

Note 3: The peak spike exceeds the limit line is EUT's operating frequency.

Test Mode: 11b

Channel 01

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

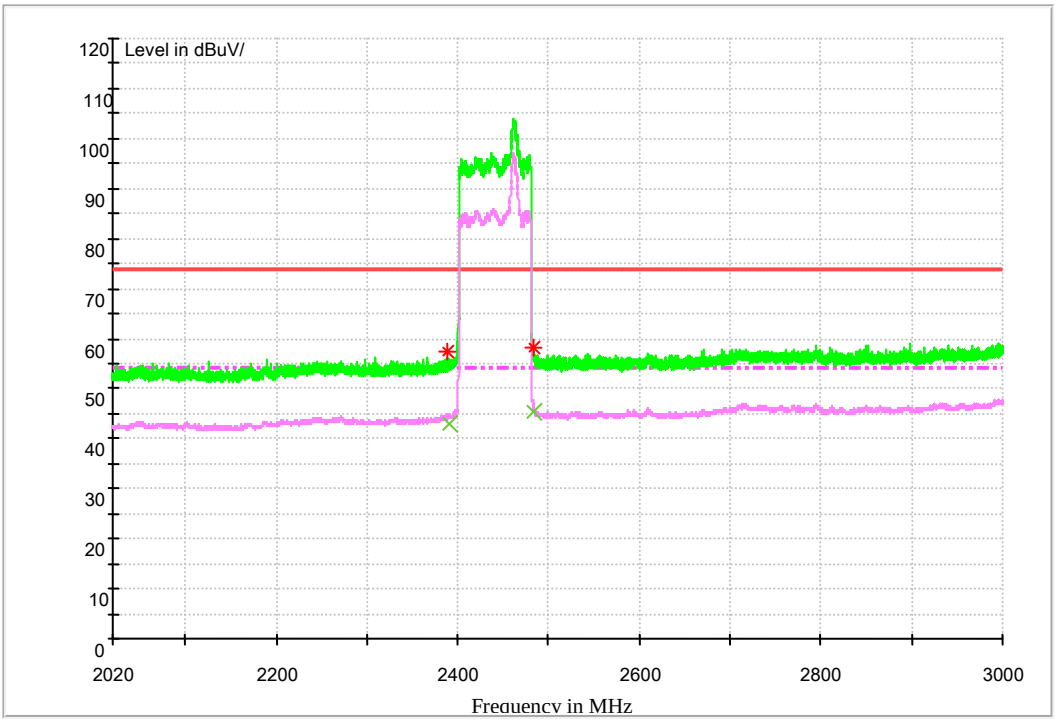
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	56.7	38.3	74.0	17.3	100.0	162.0	HORIZONTAL
2483.500000	58.6	40.5	74.0	15.4	116.0	172.0	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.2	38.3	54.0	10.8	100.0	10.8	HORIZONTAL
2483.500000	45.1	40.7	54.0	8.9	100.0	8.9	HORIZONTAL

Channel 11

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.3	38.3	74.0	16.7	100.0	31.0	HORIZONTAL
2483.500000	58.2	40.4	74.0	15.8	100.0	290.0	VERTICAL

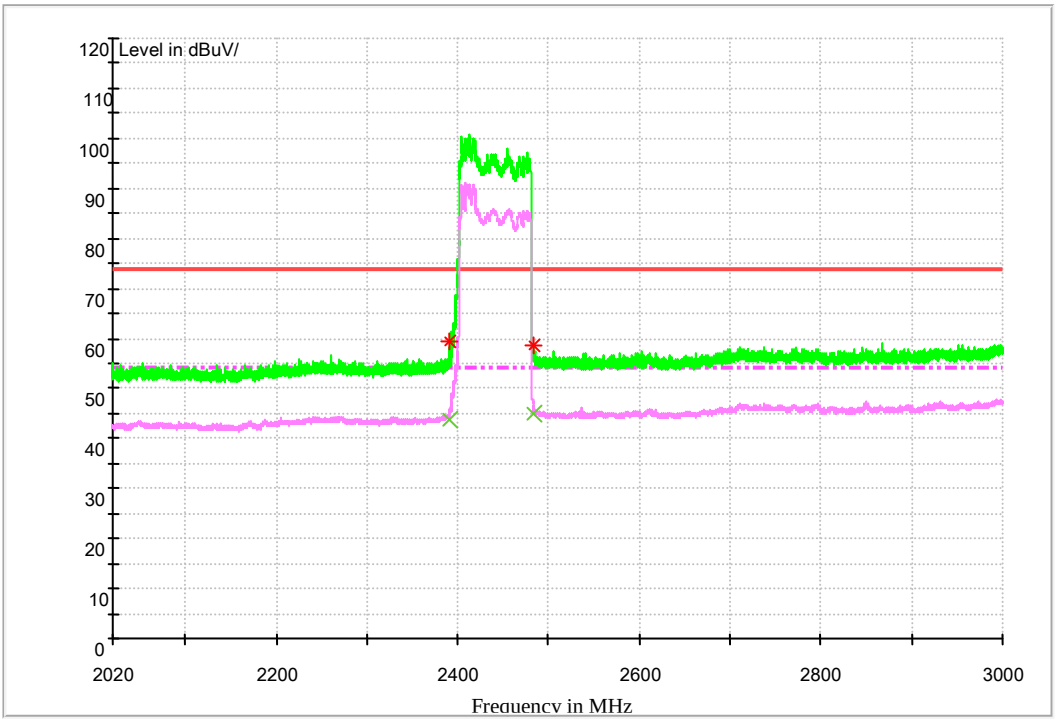
MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.1	38.3	54.0	10.9	100.0	31.0	HORIZONTAL
2483.500000	45.2	40.8	54.0	8.8	100.0	0.0	HORIZONTAL

Test Mode: 11g

Channel 01

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

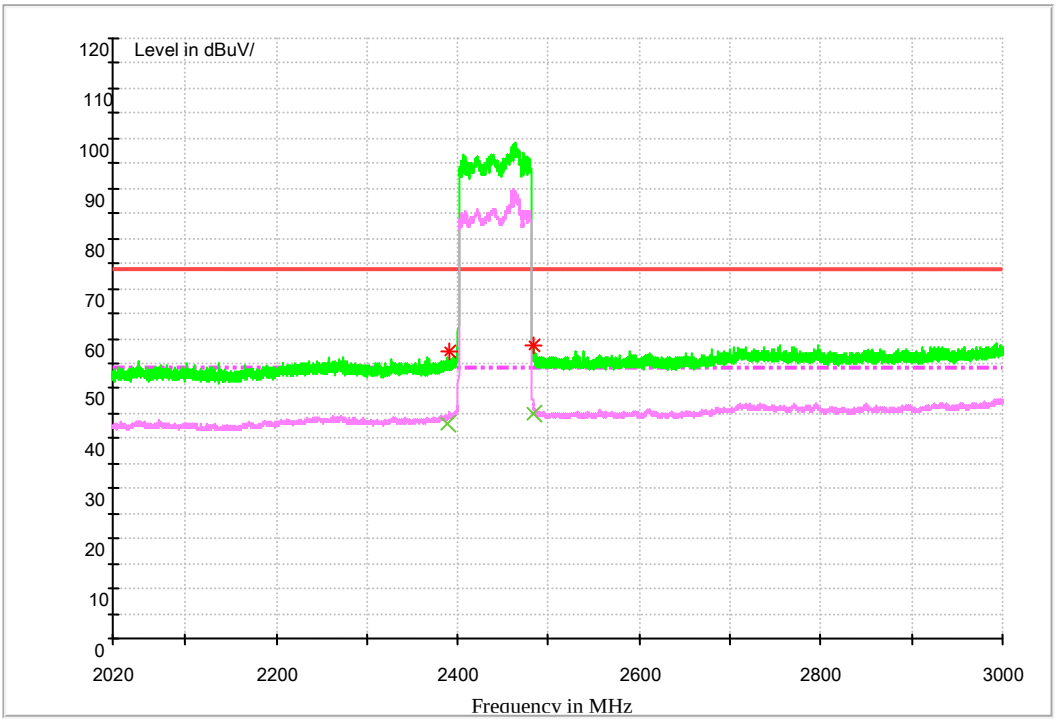
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	59.2	38.3	74.0	14.8	100.0	168.0	HORIZONTAL
2483.500000	58.5	40.5	74.0	15.5	114.0	66.0	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.7	38.3	54.0	10.3	100.0	170.0	VERTICAL
2483.500000	45.0	40.6	54.0	9.0	100.0	99.0	HORIZONTAL

Channel 11

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.3	38.3	74.0	16.7	175.0	0.0	HORIZONTAL
2483.500000	58.6	40.4	74.0	15.4	188.0	-45.0	VERTICAL

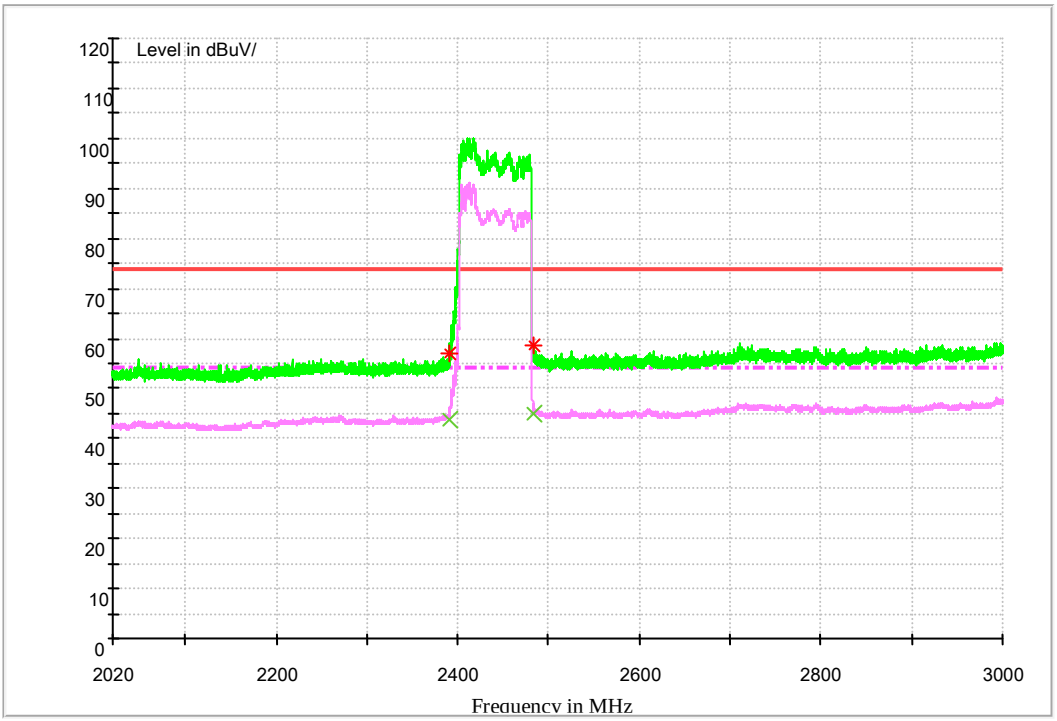
MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.1	38.3	54.0	10.9	100.0	0.0	HORIZONTAL
2483.500000	45.1	40.7	54.0	8.9	100.0	121.0	HORIZONTAL

Test Mode: 11n

Channel 01

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

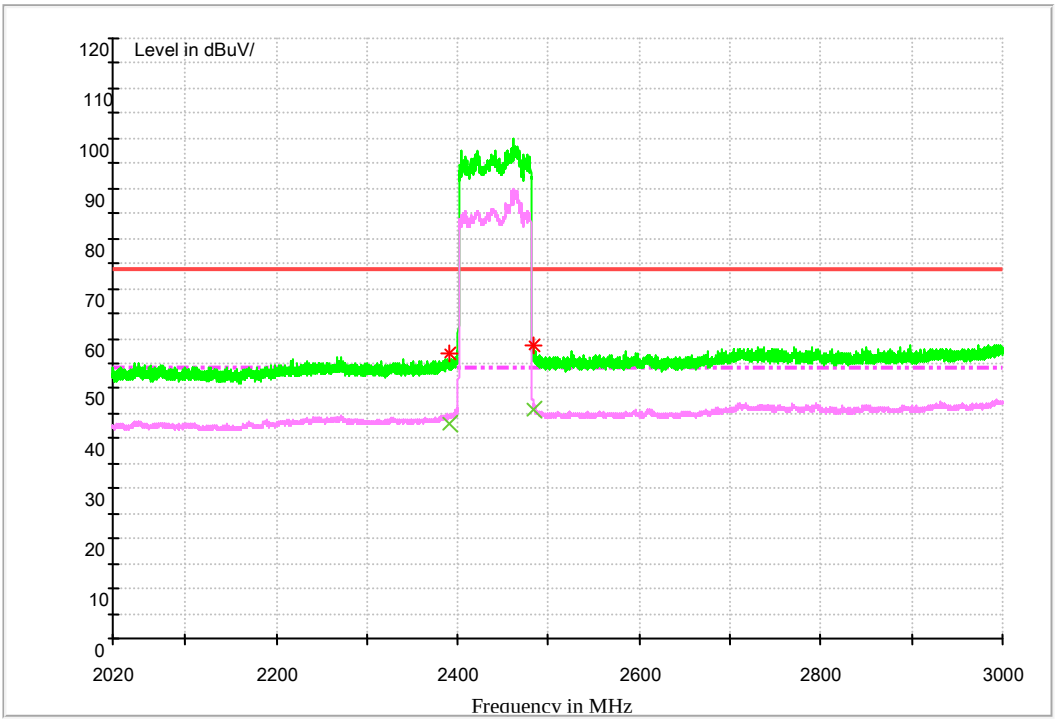
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.0	38.3	74.0	17.0	121.0	86.0	HORIZONTAL
2483.500000	58.7	40.4	74.0	15.3	100.0	171.0	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.6	38.3	54.0	10.4	100.0	153.0	HORIZONTAL
2483.500000	44.8	40.4	54.0	9.2	100.0	153.0	HORIZONTAL

Channel 11

FCC CLASS B WIFI 1GHz-3GHz



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.1	38.3	74.0	16.9	100.0	274.0	HORIZONTAL
2483.500000	58.6	40.6	74.0	15.4	114.0	-33.0	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.1	38.3	54.0	10.9	100.0	274.0	HORIZONTAL
2483.500000	45.9	40.8	54.0	8.1	100.0	160.0	HORIZONTAL

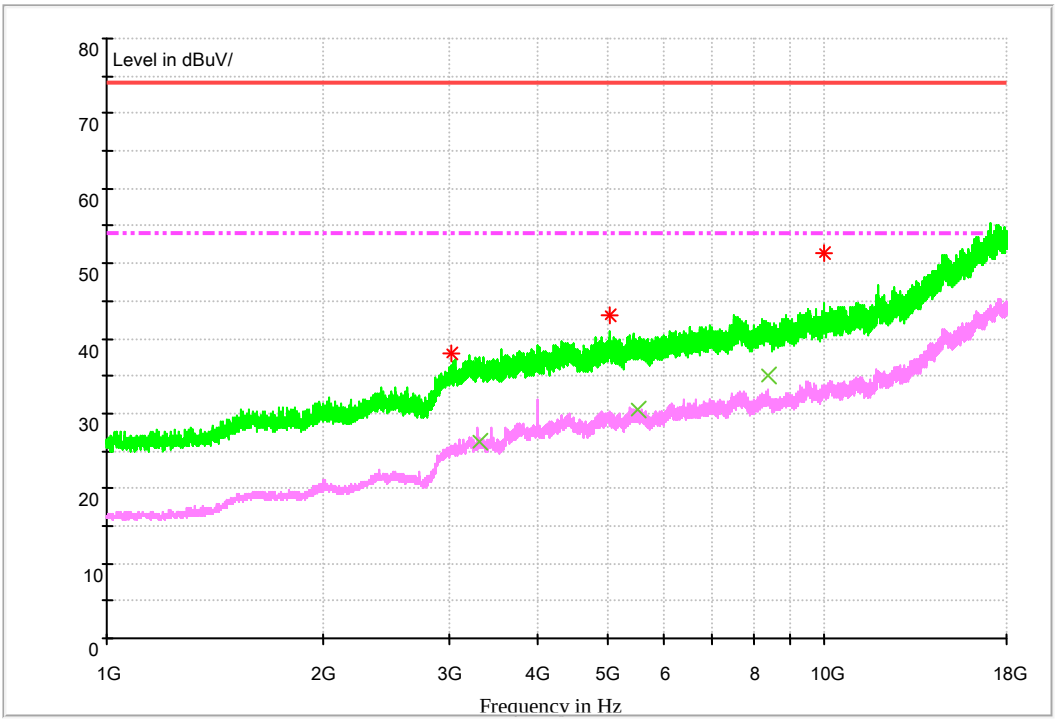
Part 4: Testing Range of “1 GHz to 18 GHz”

Note 1: The test results and plot for testing range of “1 GHz to 18 GHz” showed as below is **the WORST case for all Test Modes and Channels**. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of “1 GHz to 18 GHz” is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

FCC CLASS B RE 1GHz-18GHz

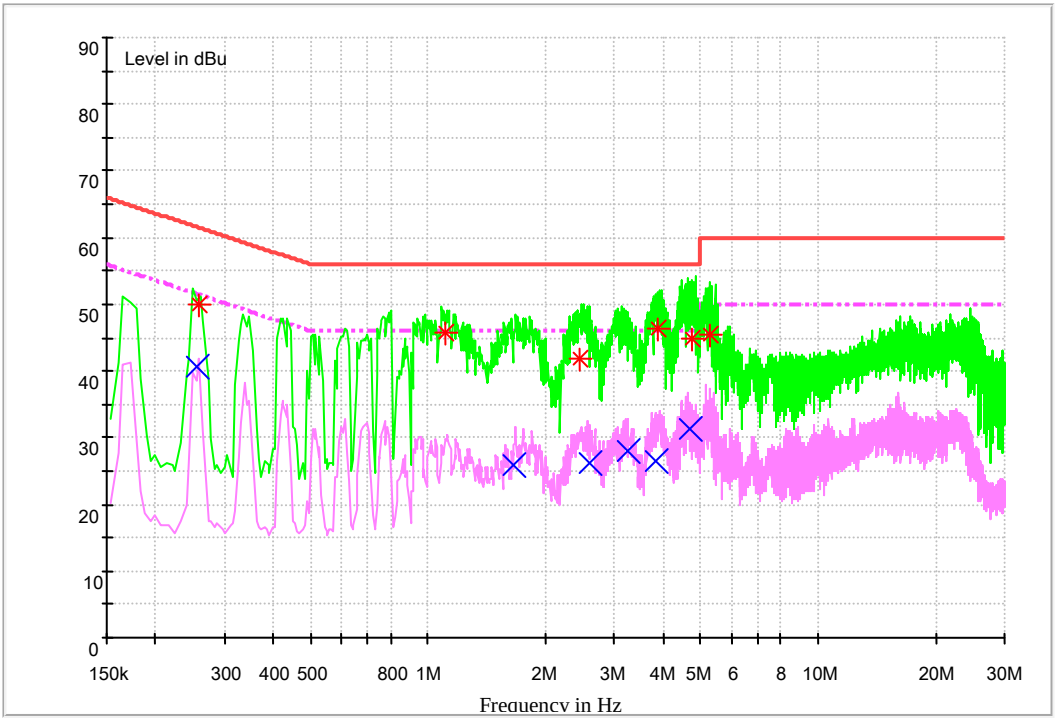


Appendix H

Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz

Channel 6



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.257674	50.1	9.7	61.5	11.4	N	FLO
1.108012	45.7	9.7	56.0	10.3	N	FLO
2.434620	41.7	9.7	56.0	14.3	N	FLO
3.900266	46.3	9.8	56.0	9.7	N	FLO
4.762758	44.9	9.8	56.0	11.1	N	FLO
5.249340	45.4	9.8	60.0	14.6	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.254111	40.5	9.7	51.6	11.1	N	FLO
1.660308	25.8	9.7	46.0	20.2	L1	FLO
2.590271	26.2	9.7	46.0	19.8	L1	FLO
3.252900	27.9	9.7	46.0	18.1	N	FLO
3.813566	26.4	9.8	46.0	19.6	L1	FLO
4.669103	31.3	9.8	46.0	14.7	N	FLO

END