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.

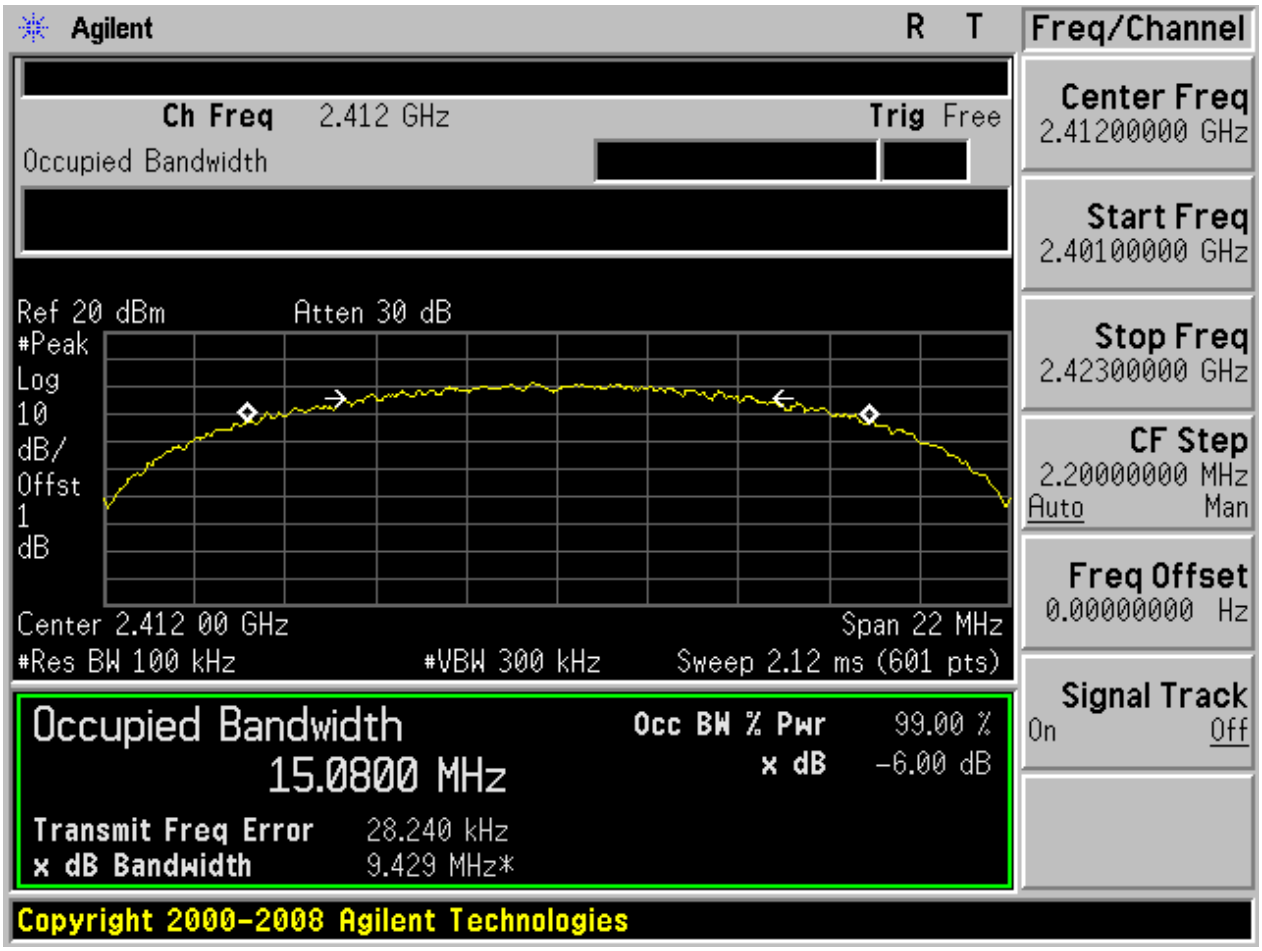
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

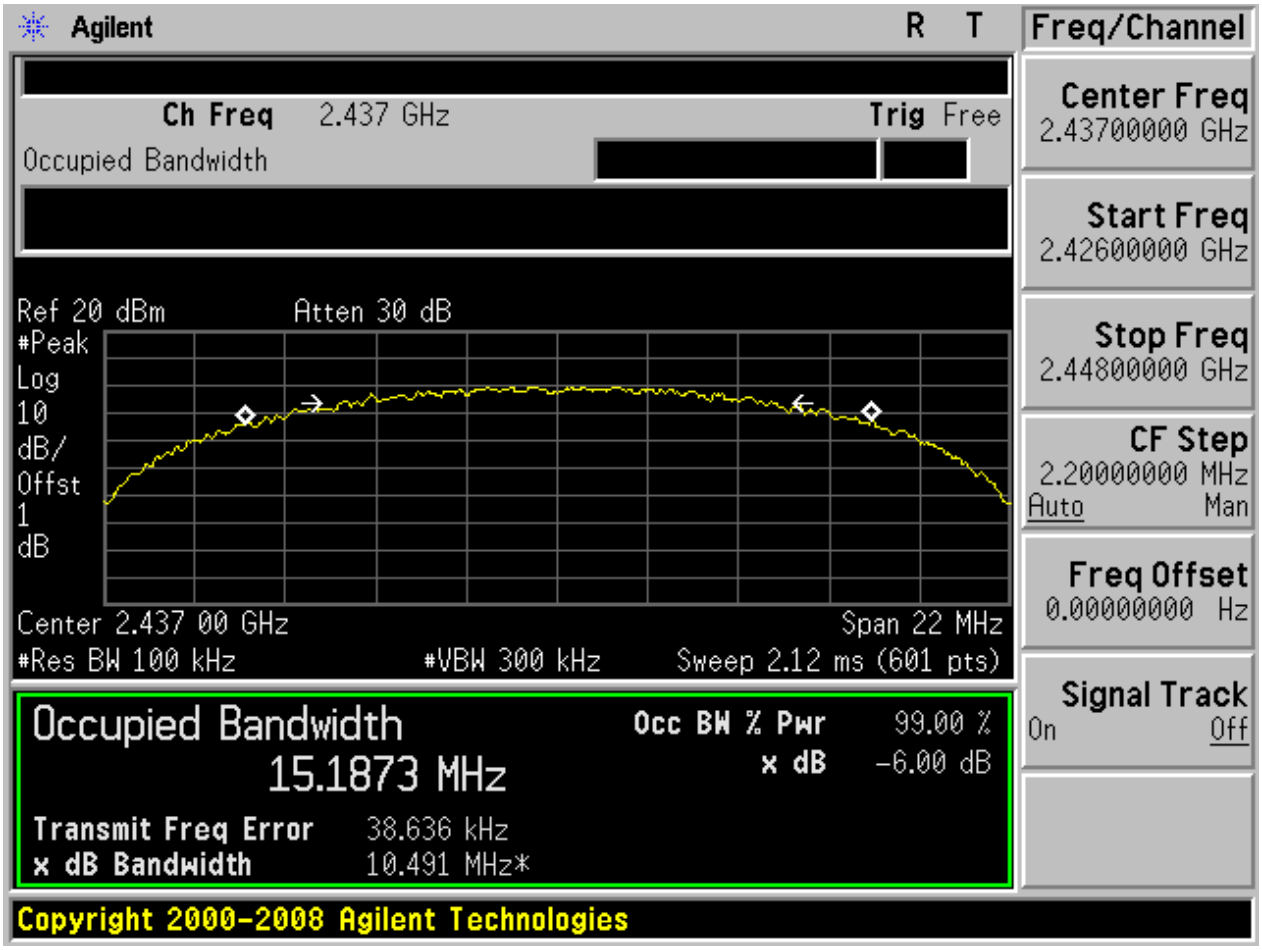
Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11B	L	2412	Ant 1	9.43	pass
11B	M	2437	Ant 1	10.49	pass
11B	H	2462	Ant 1	10.23	pass
11G	L	2412	Ant 1	16.54	pass
11G	M	2437	Ant 1	16.54	pass
11G	H	2462	Ant 1	16.52	pass
11N20	L	2412	Ant 1	17.74	pass
11N20	M	2437	Ant 1	17.81	pass
11N20	H	2462	Ant 1	17.72	pass

Part II - Test Plots

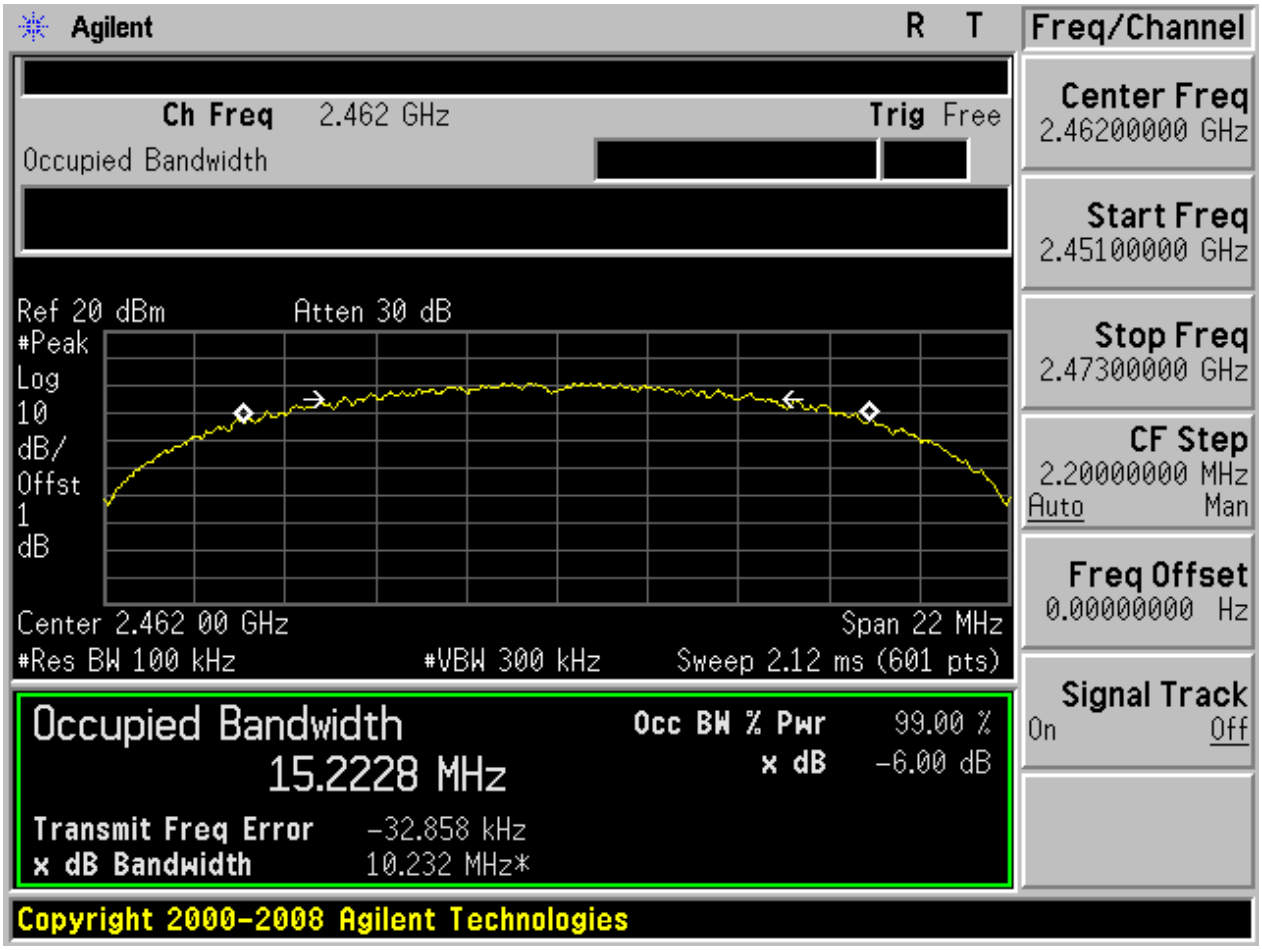
2.1 11B_L



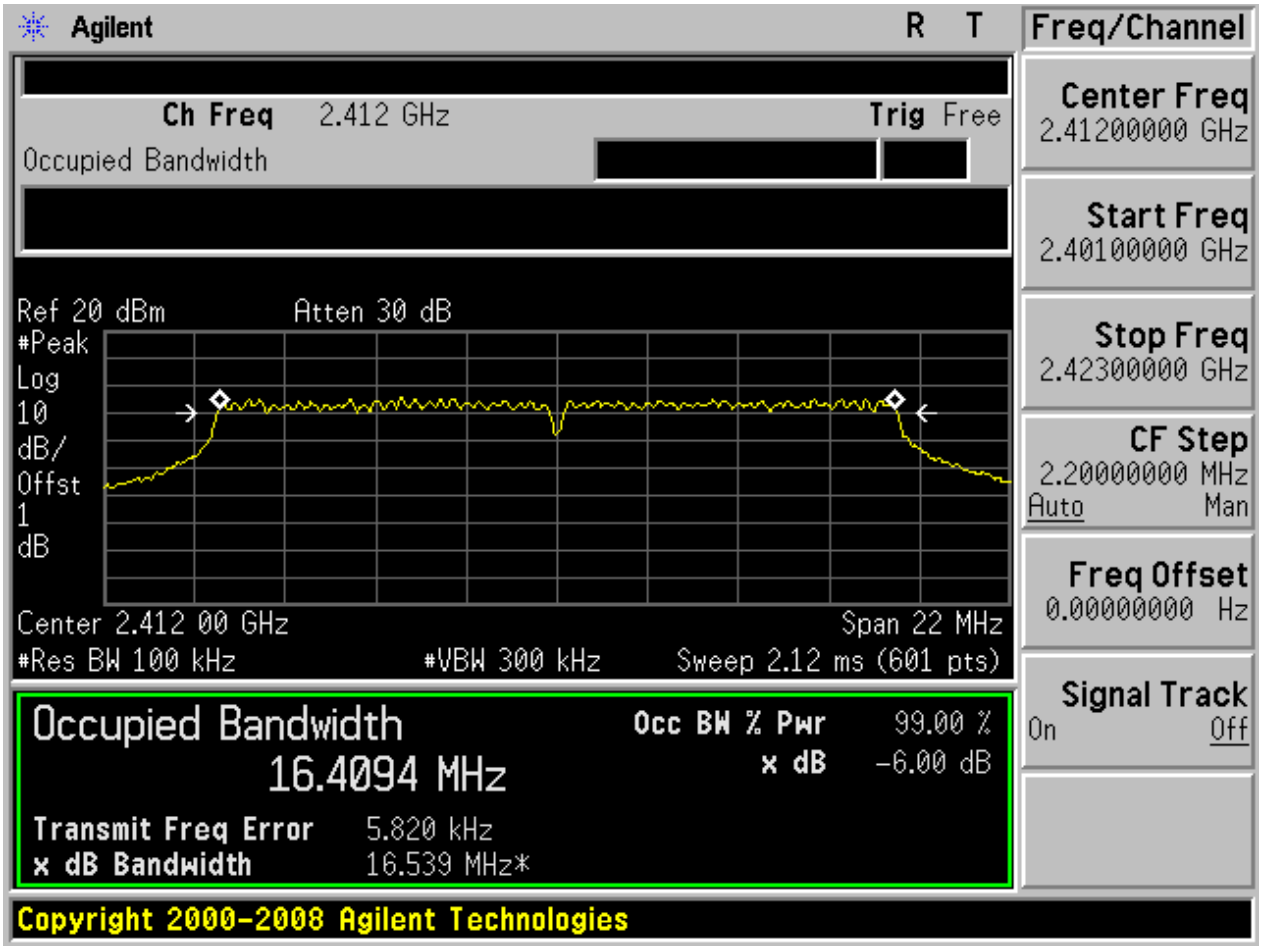
2.2 11B_M



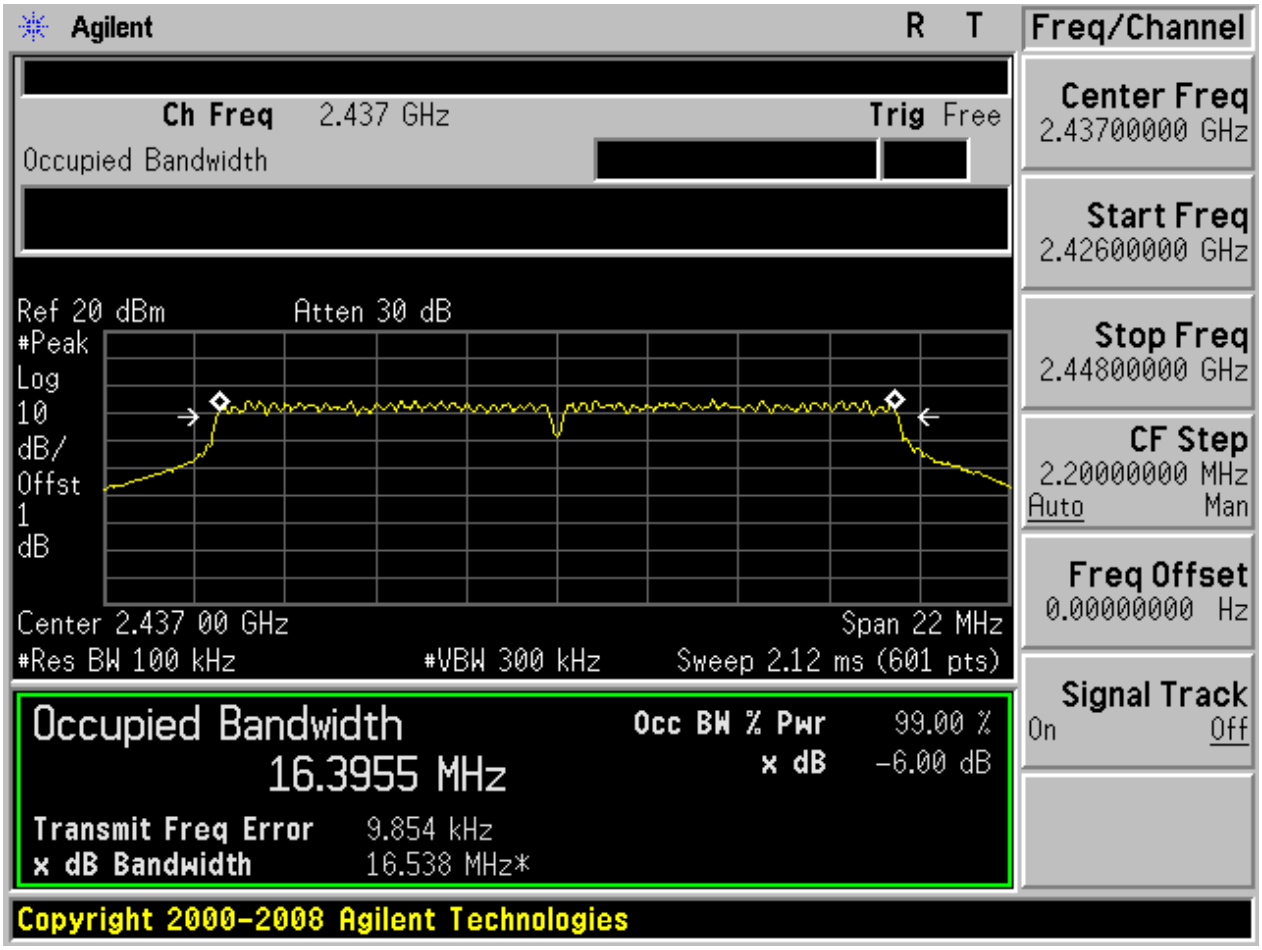
2.3 11B_H



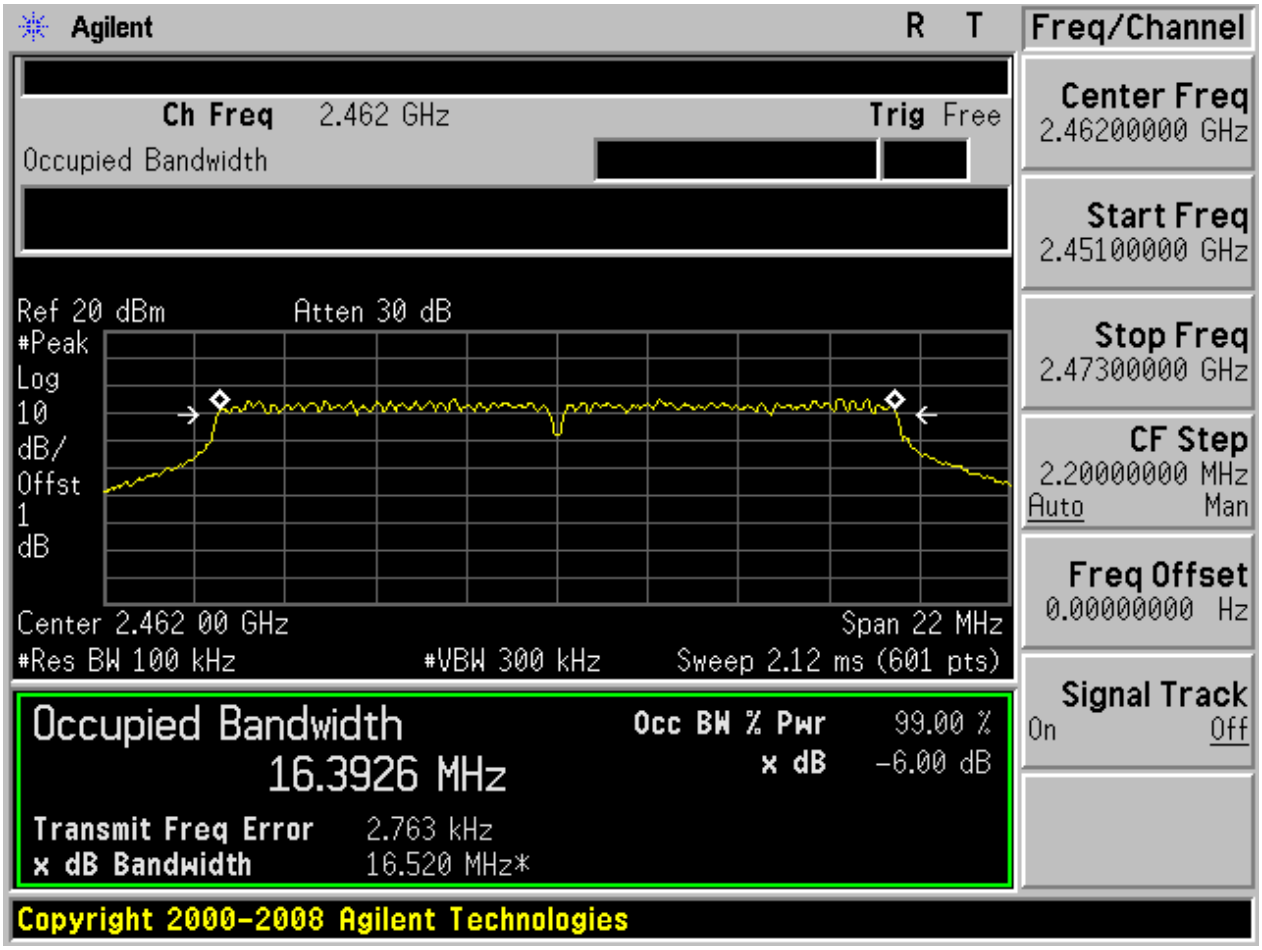
2.4 11G_L



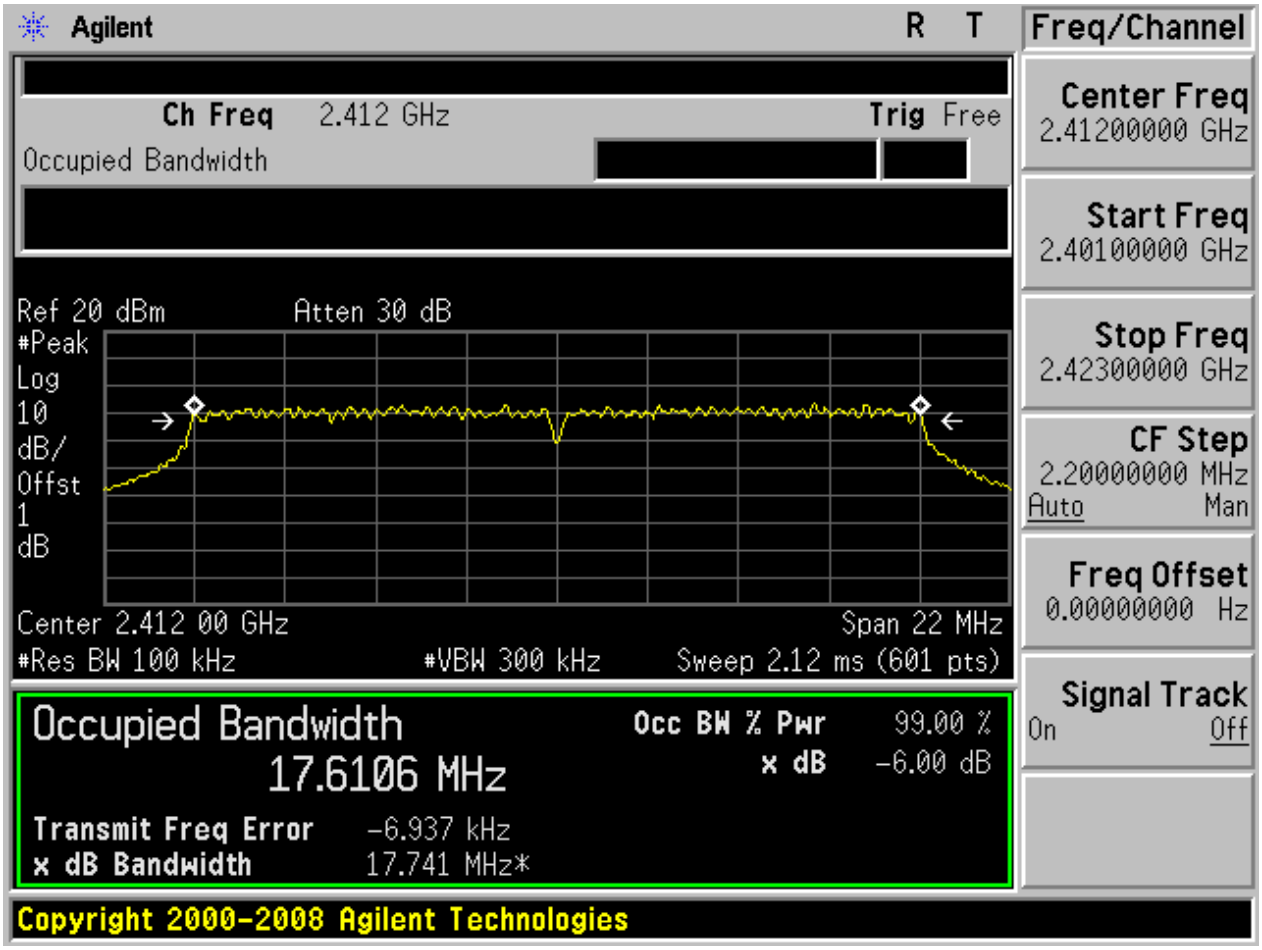
2.5 11G_M



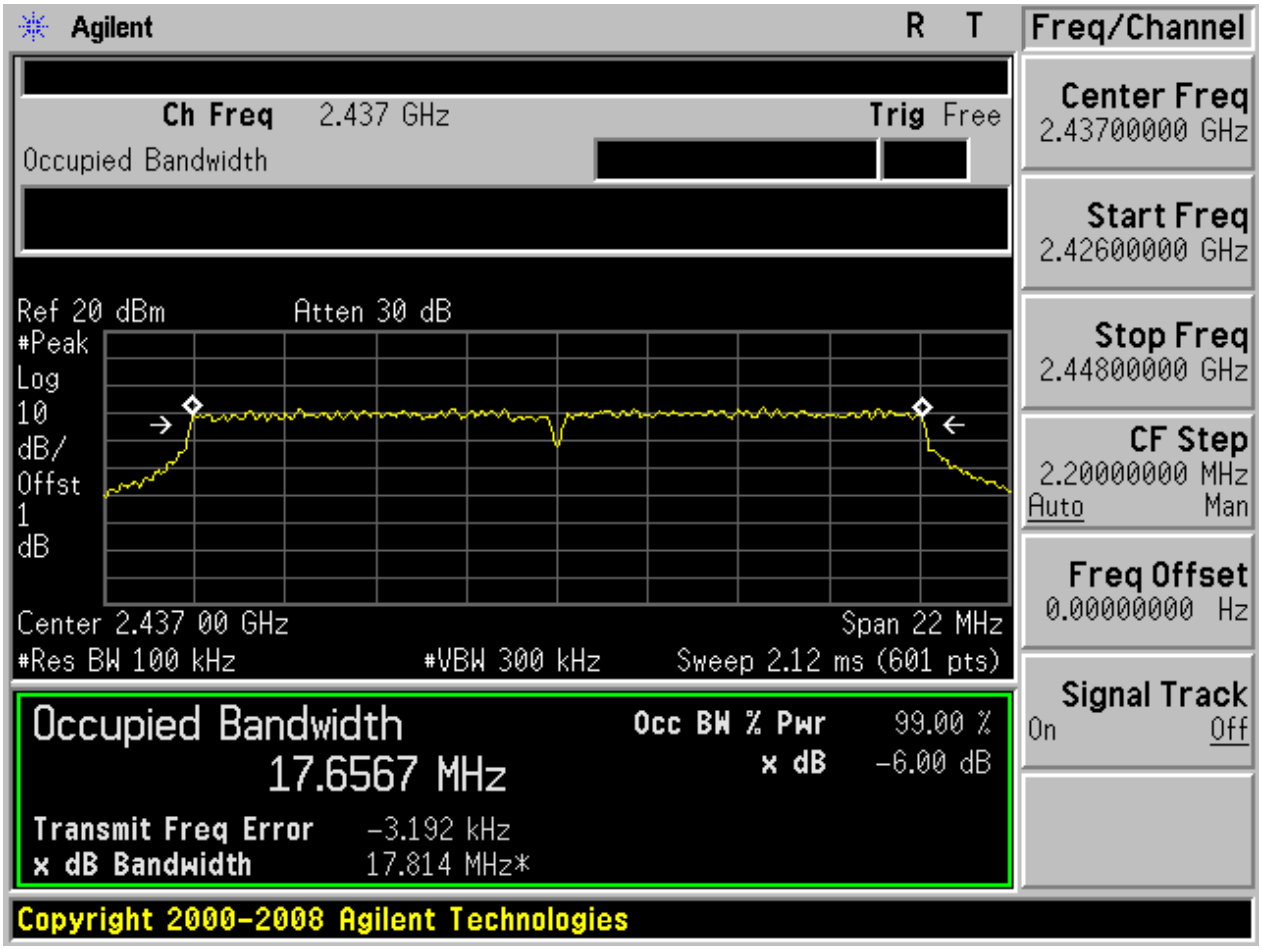
2.6 11G_H



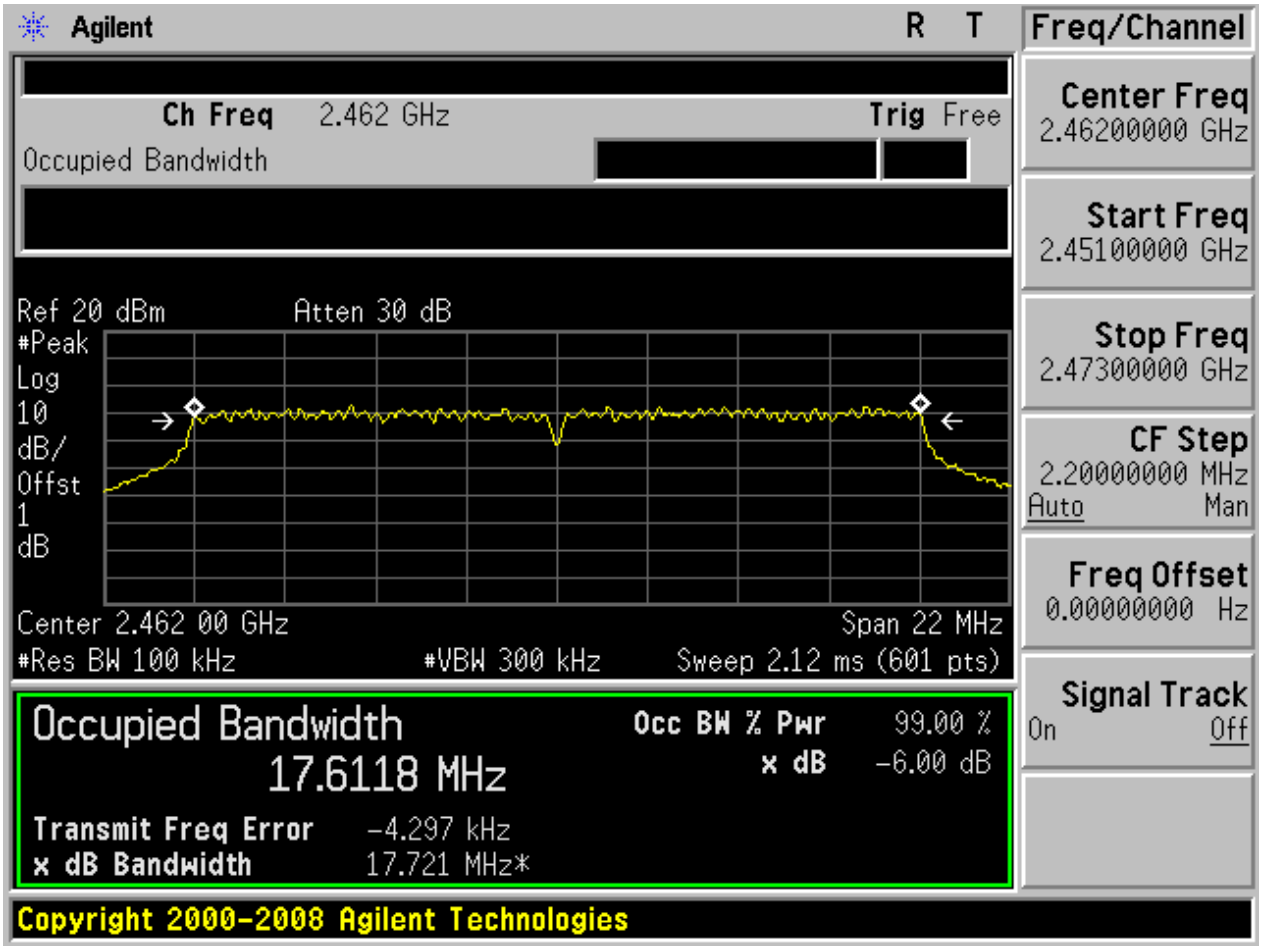
2.7 11N20_L



2.8 11N20_M



2.9 11N20_H



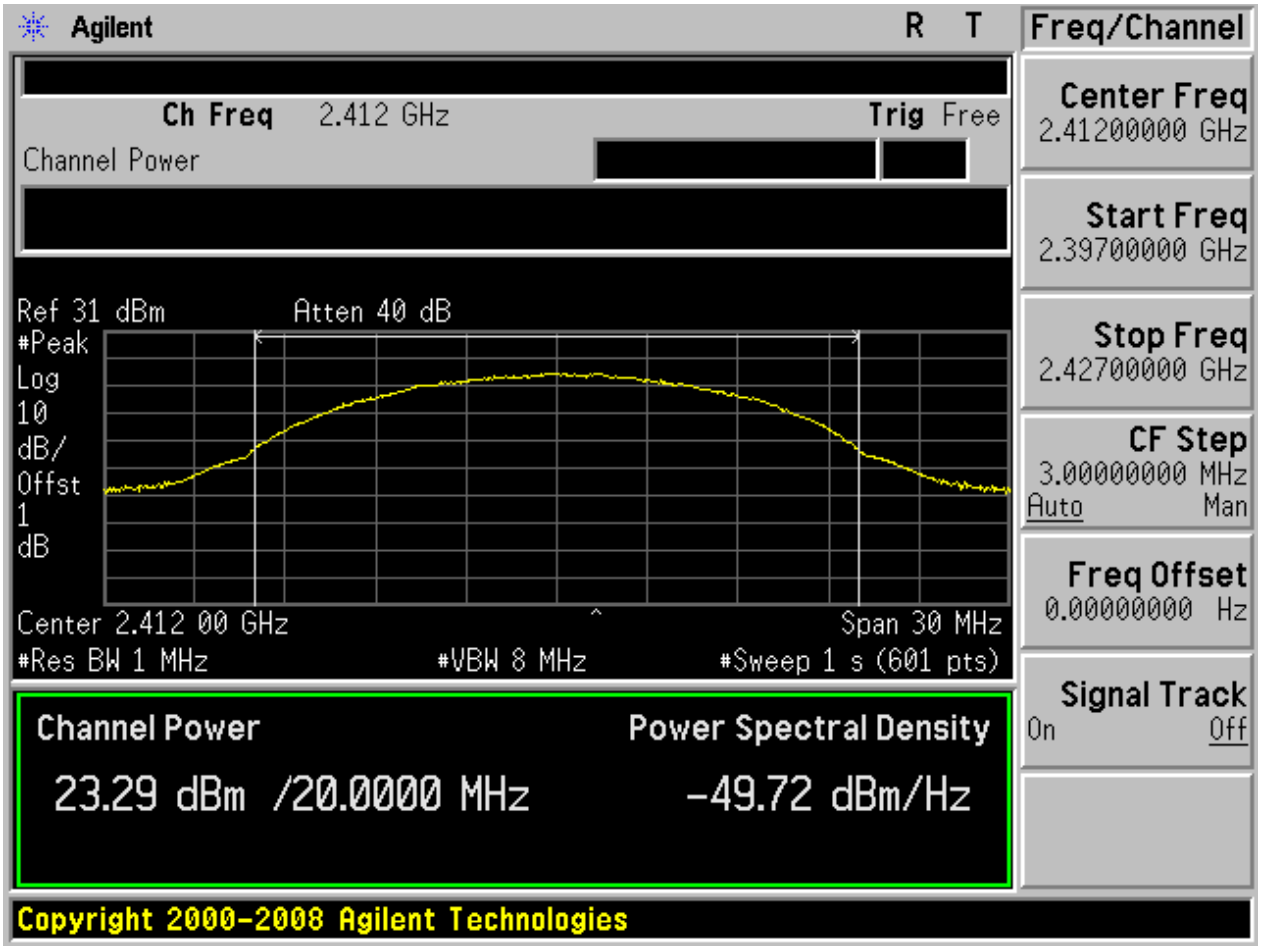
Appendix B: Maximum Peak Power

Part I - Test Results

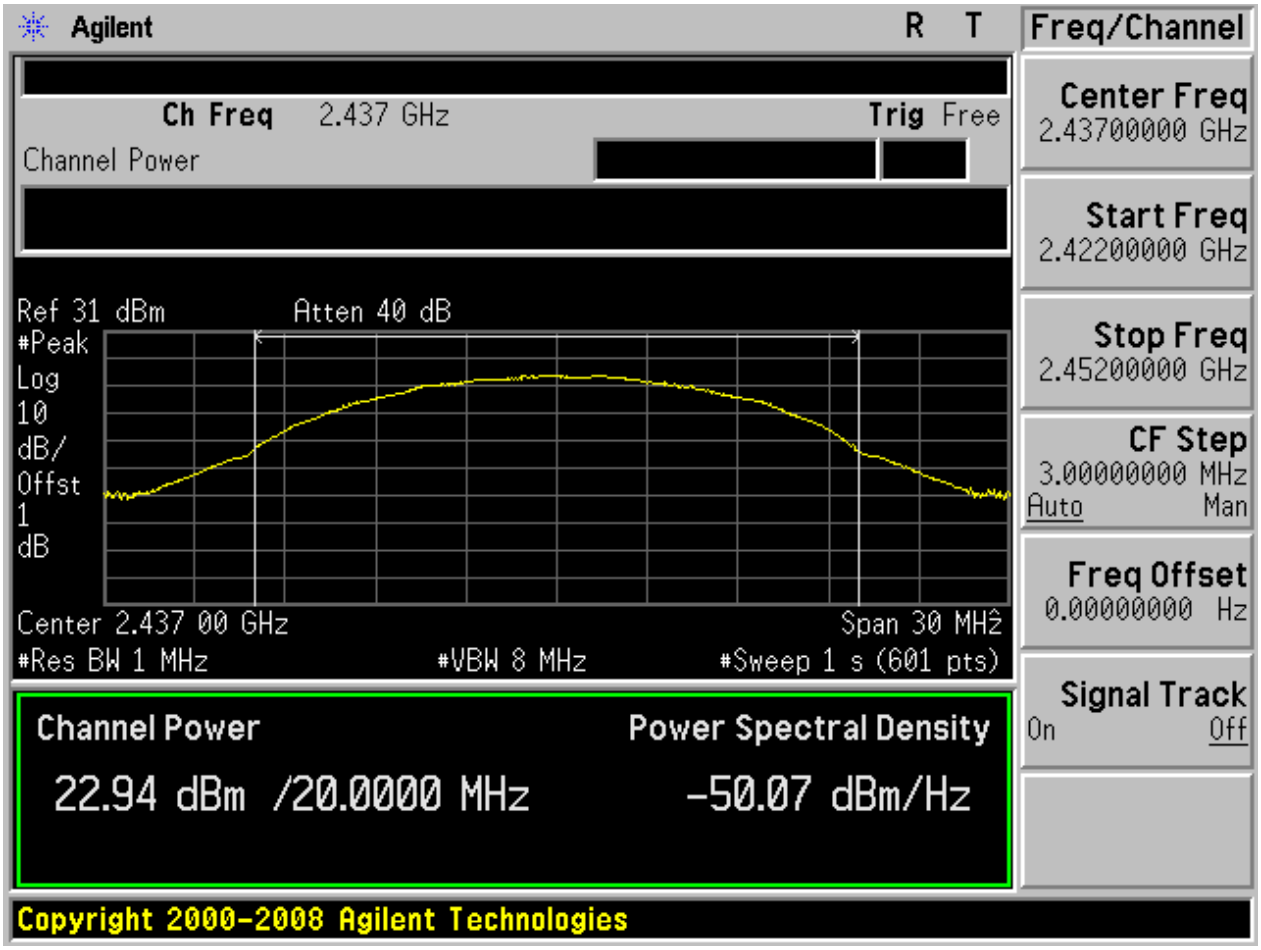
Test Mode	Test Channel	Frequency[MHz]	POWER[dBm]	Verdict
11B	L	2412	23.29	pass
11B	M	2437	22.94	pass
11B	H	2462	22.55	pass
11G	L	2412	18.09	pass
11G	M	2437	16.88	pass
11G	H	2462	17.45	pass
11N20	L	2412	15.41	pass
11N20	M	2437	13.36	pass
11N20	H	2462	14.92	pass

Part II - Test Plots

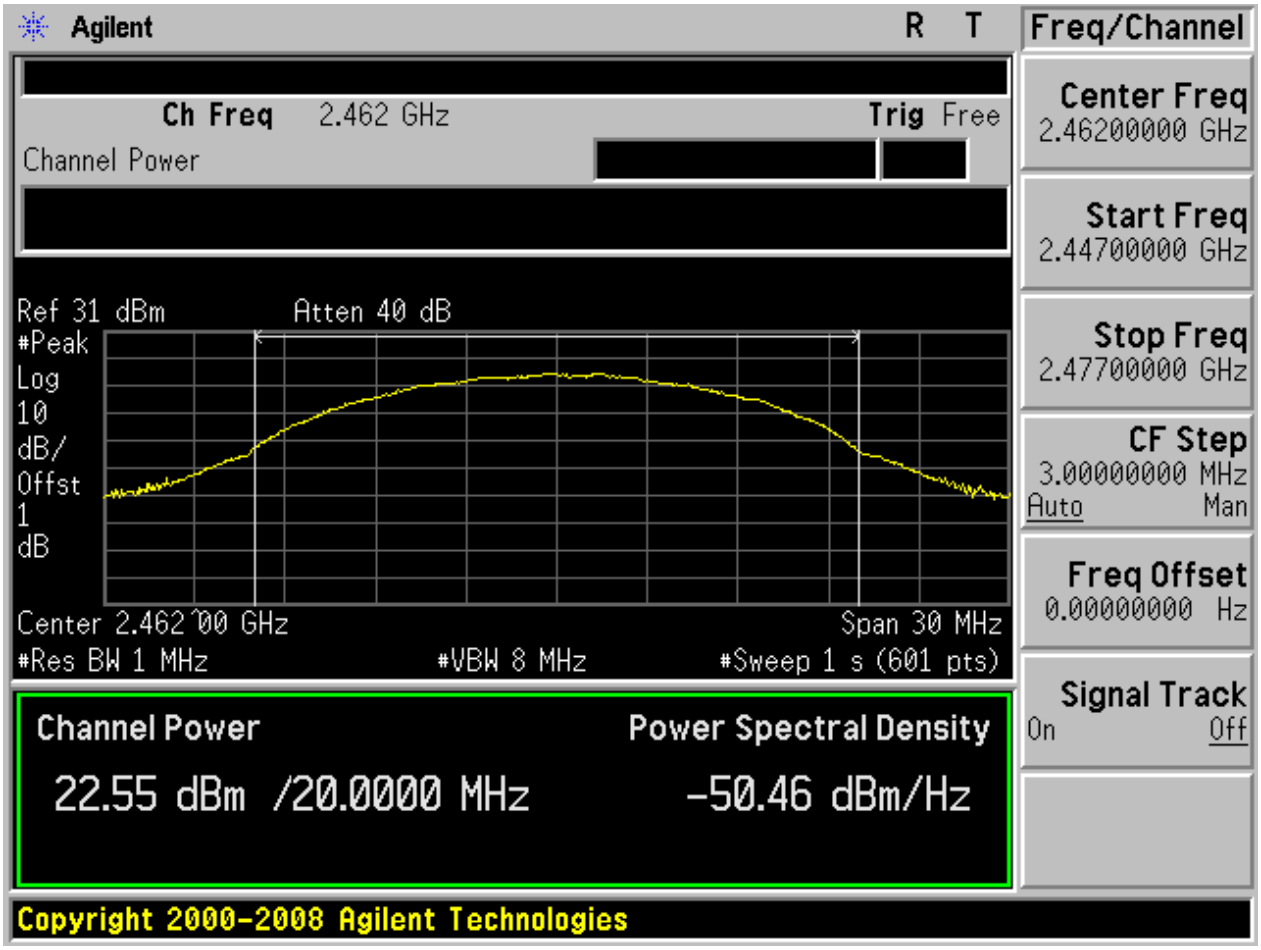
2.1 11B_L



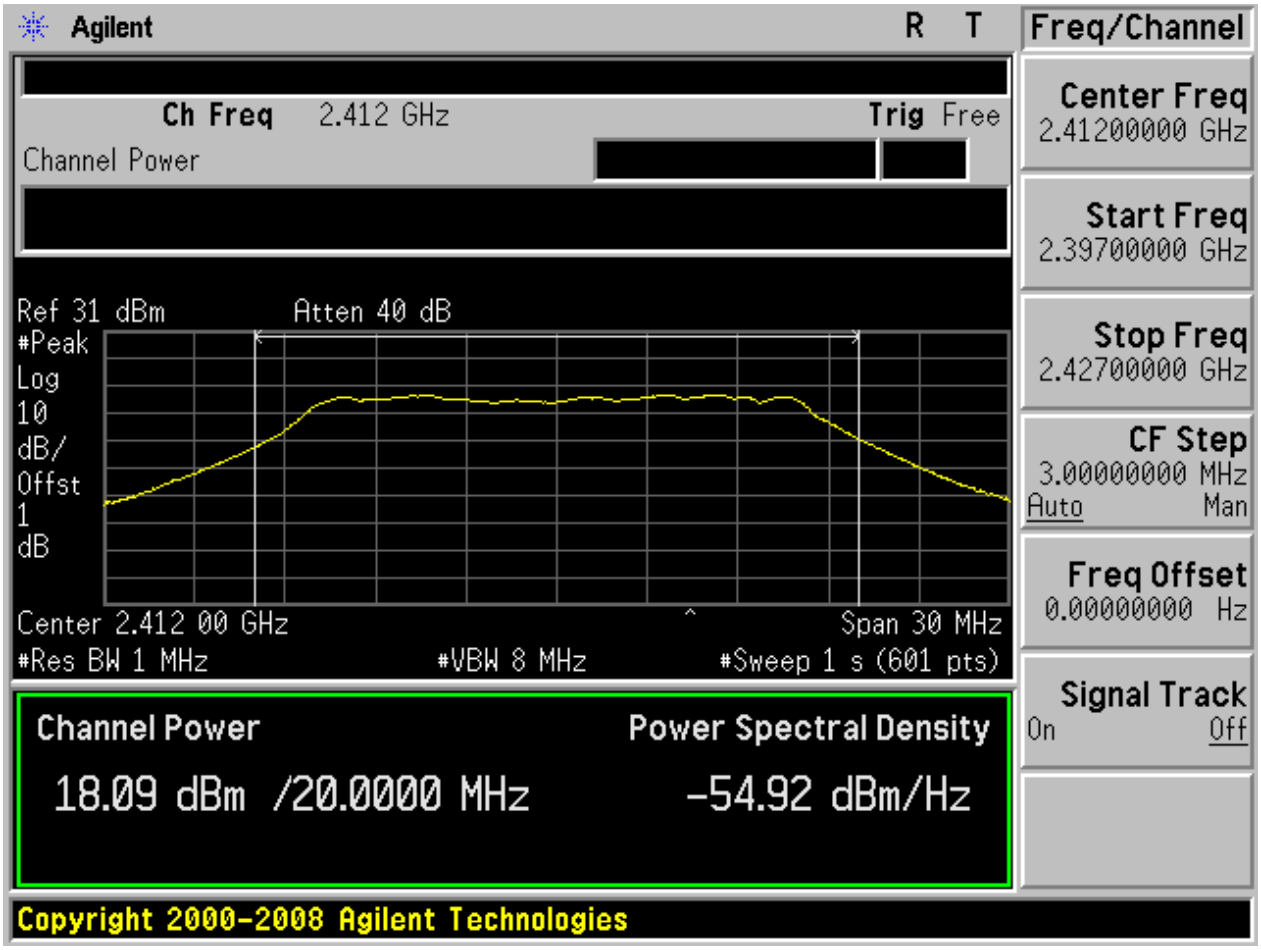
2.2 11B_M



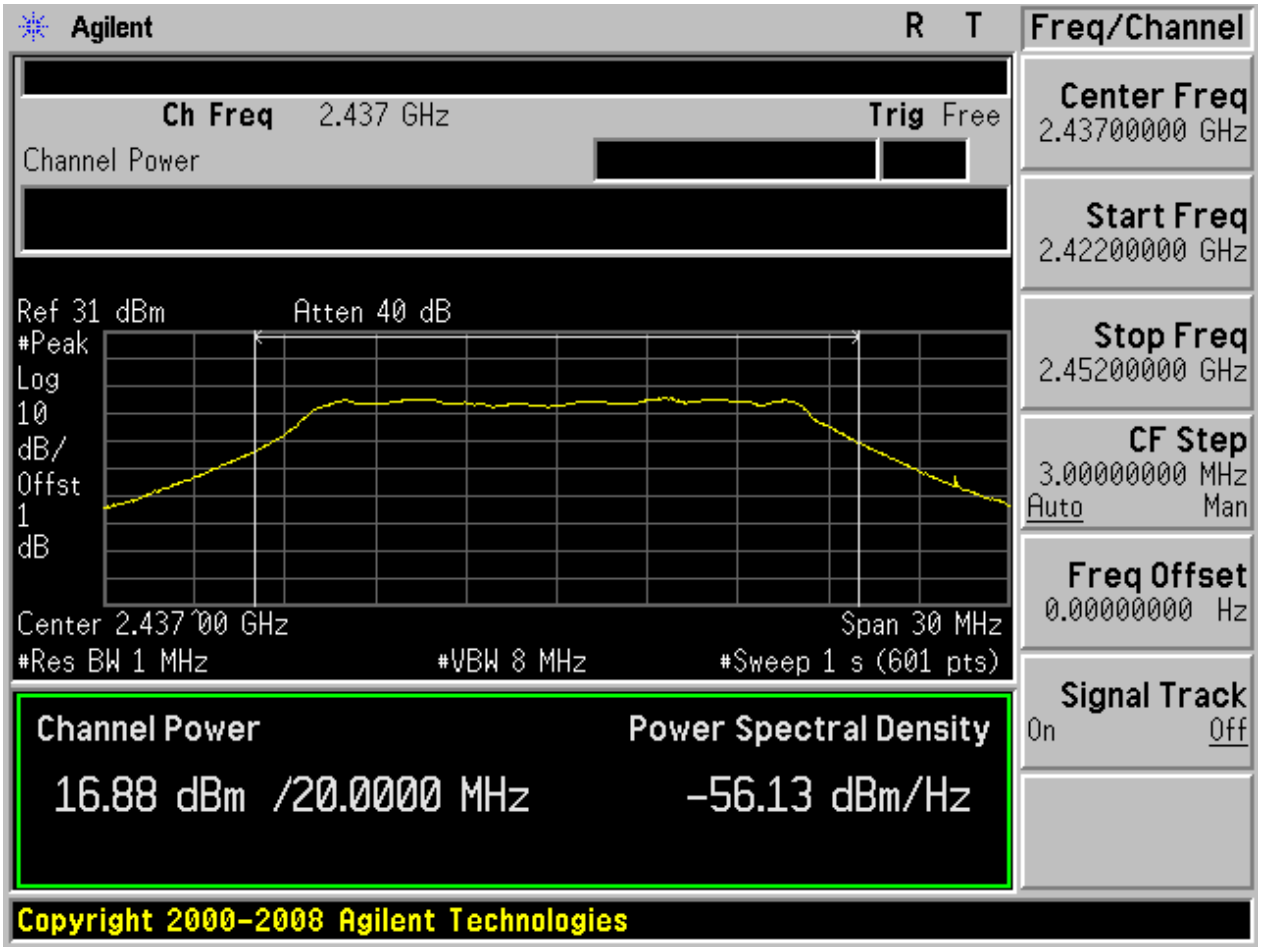
2.3 11B_H



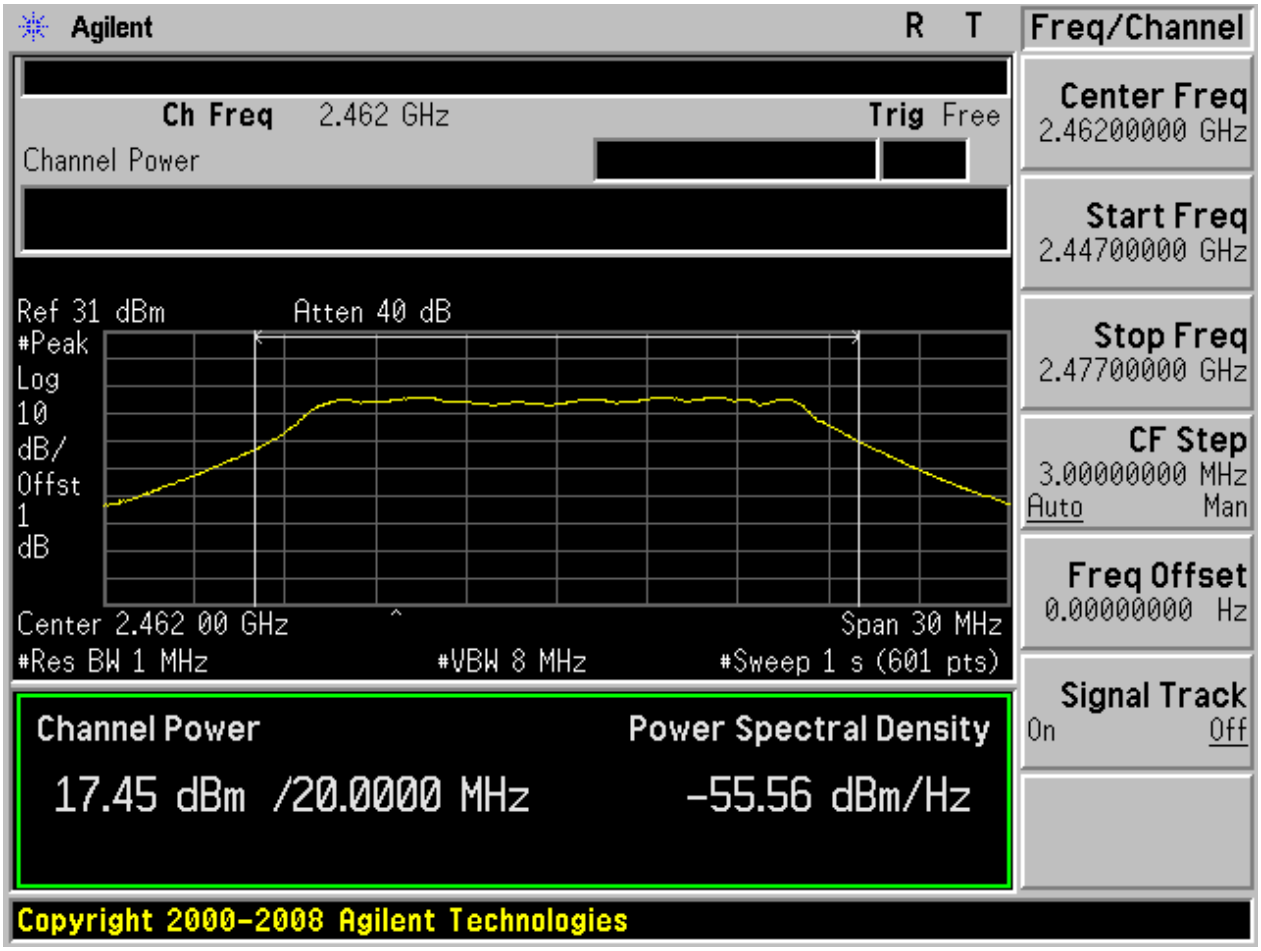
2.4 11G_L



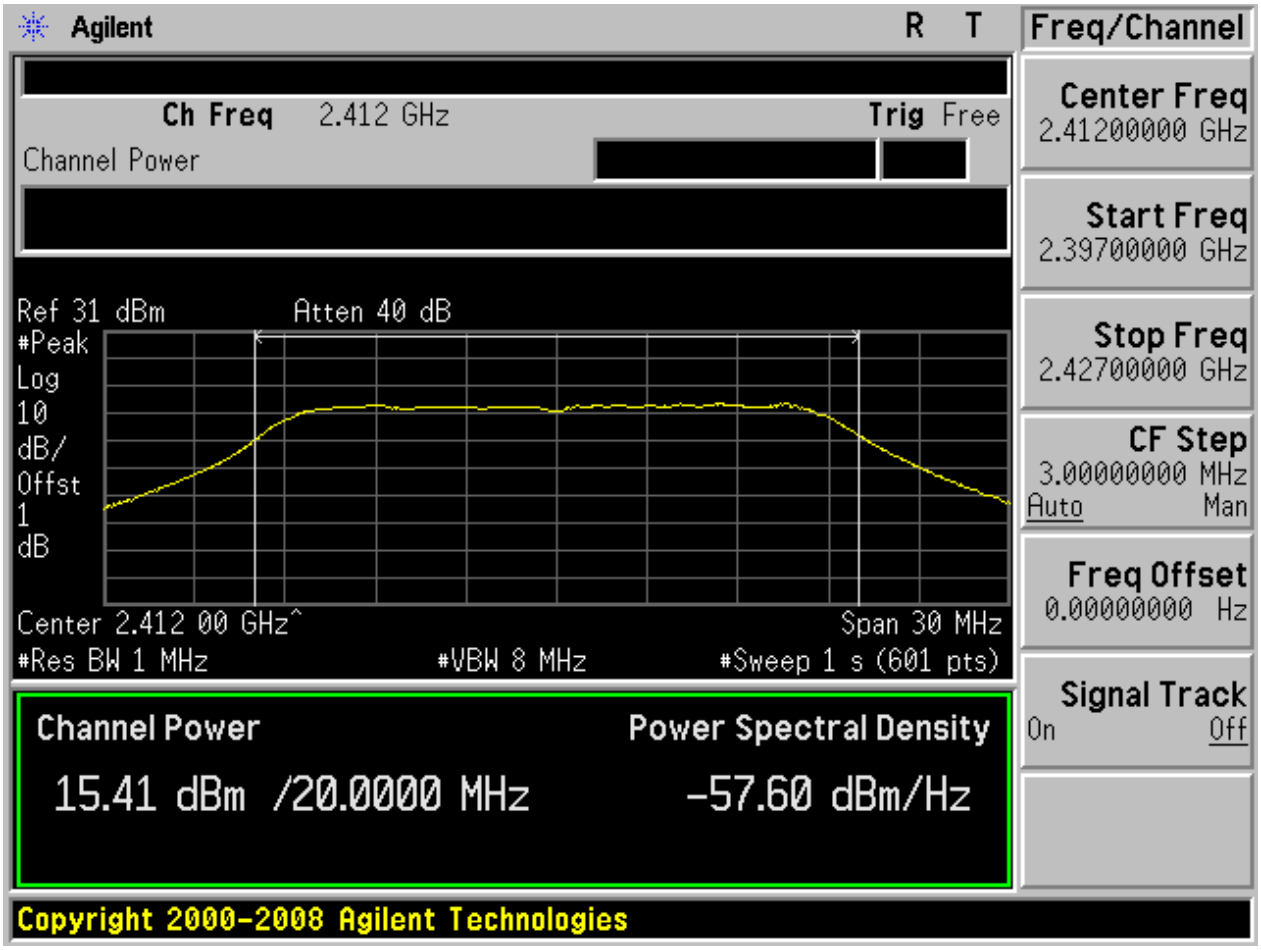
2.5 11G_M



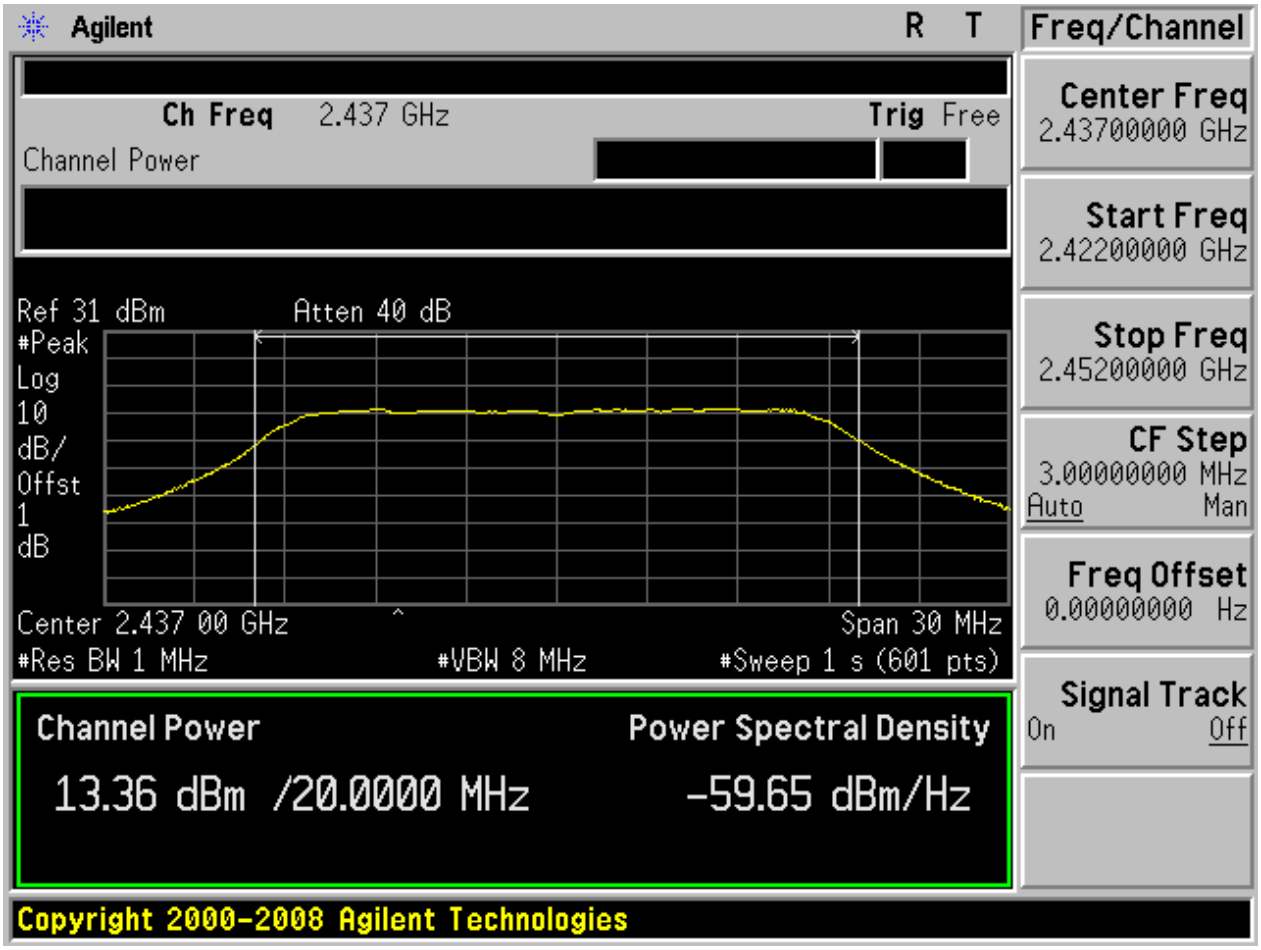
2.6 11G_H



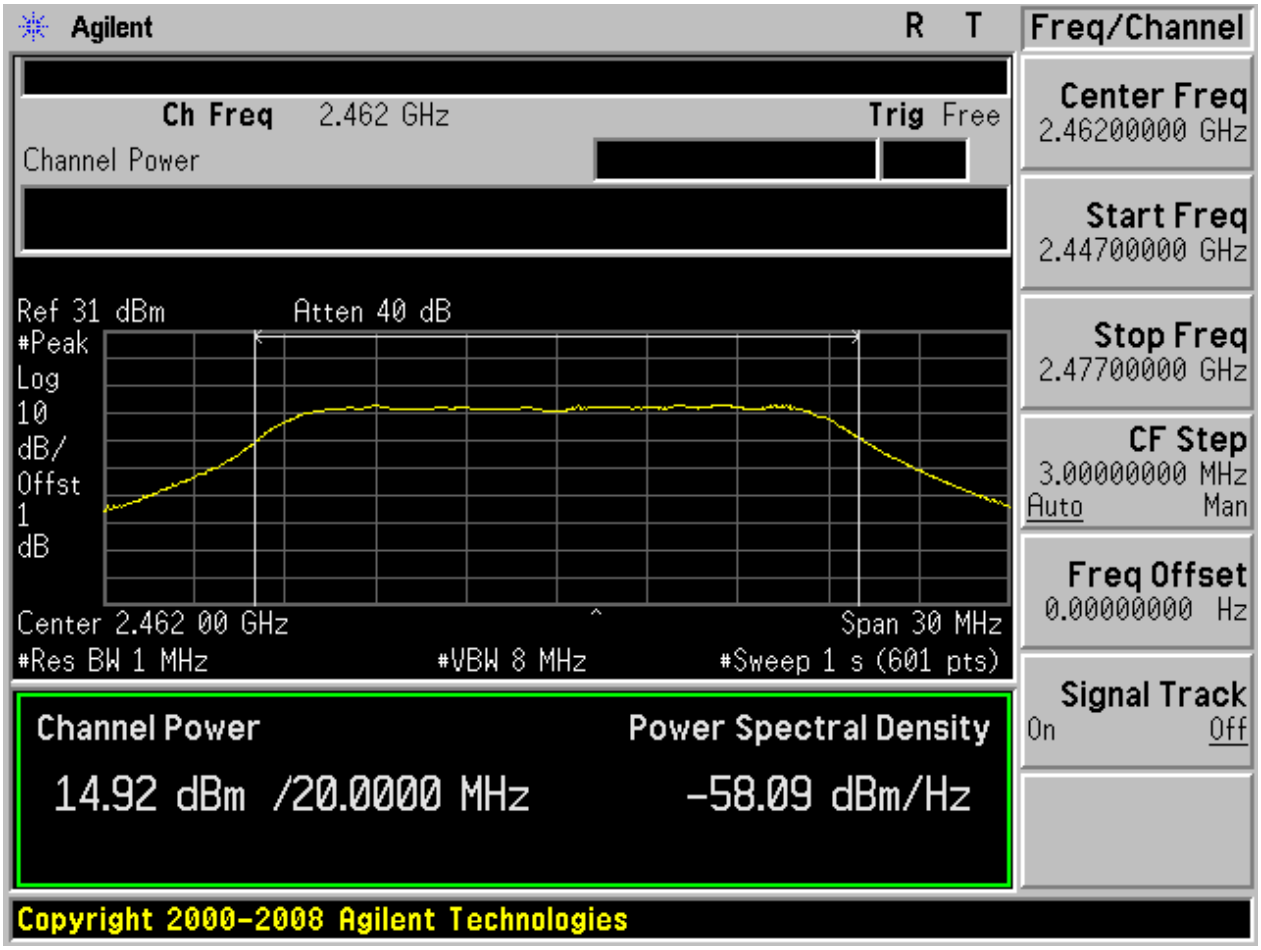
2.7 11N20_L



2.8 11N20_M



2.9 11N20_H



Appendix C: Maximum Power Spectral Density Level

In this Appendix, the "PD" refers to the measured "Maximum Power Spectral Density" value with 100 kHz RBW. The final result "PD" within 3 kHz bandwidth, which is used to compare with the limit requirements, should be adjusted according to: PD[dBm/3 kHz]=PD*[dBm/100kHz]-15.2[dB].

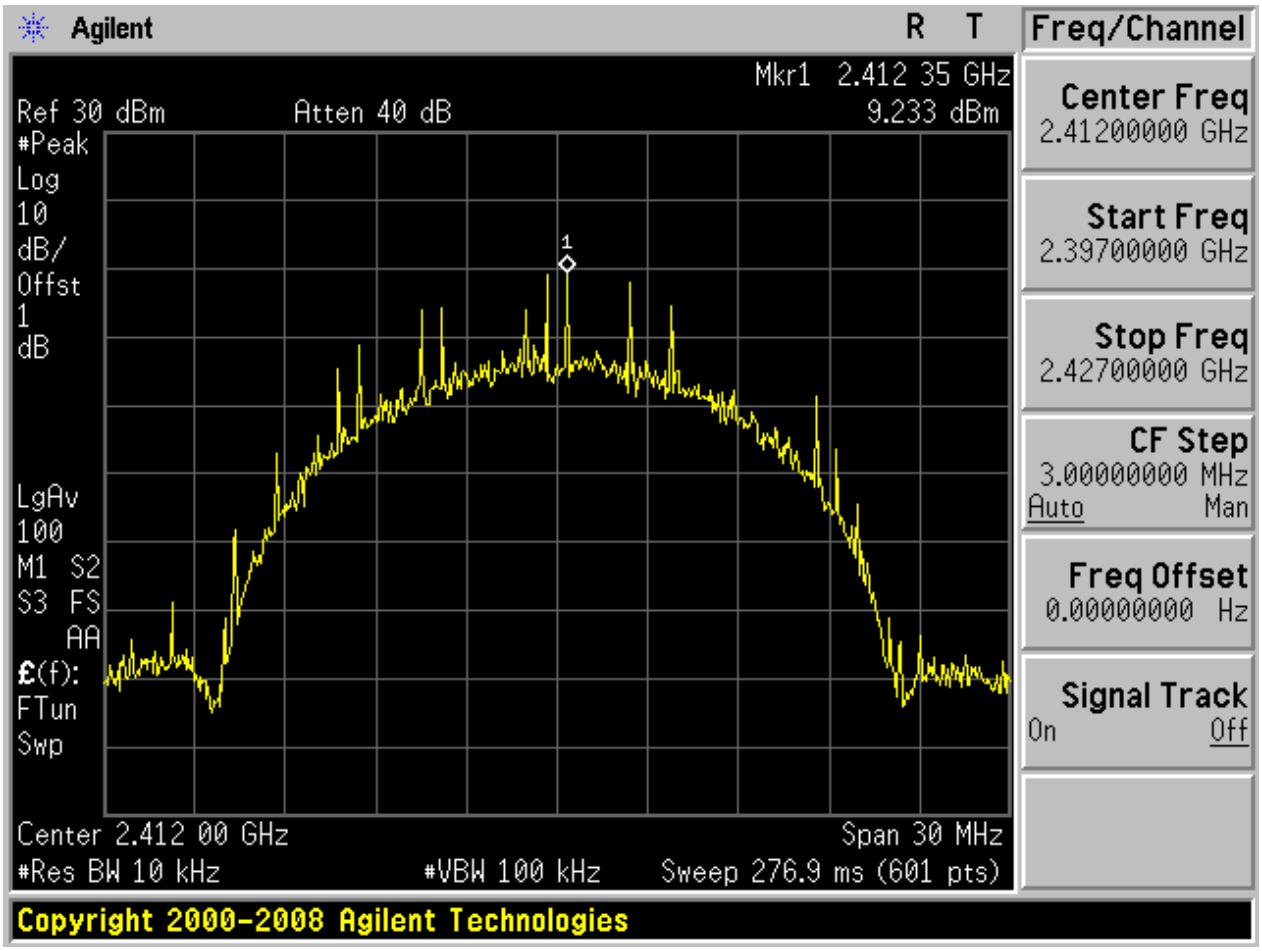
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain as "PD@i [dBm]", and then combined into the final result "PD [dBm]" to compare with the limit according to: PD [dBm]=10 x lg(10 ^ (PD@1 [dBm] / 10) + ... + 10 ^ (PD@N [dBm] / 10)) (the N denotes the antenna chains used by smart antenna systems). NOTE that the method is a stringent but convenient consideration, because each "PD@i [dBm]" may be located at different frequency occurrence. For the final judgment, the combination of the final result "PD [dBm]" (Trace#sum) should be performed frequency-by-frequency on the measured spectrum trace for each antenna chain (Trace#i). Unless otherwise specified, the method for final judgment will not be used.

Part I - Test Results

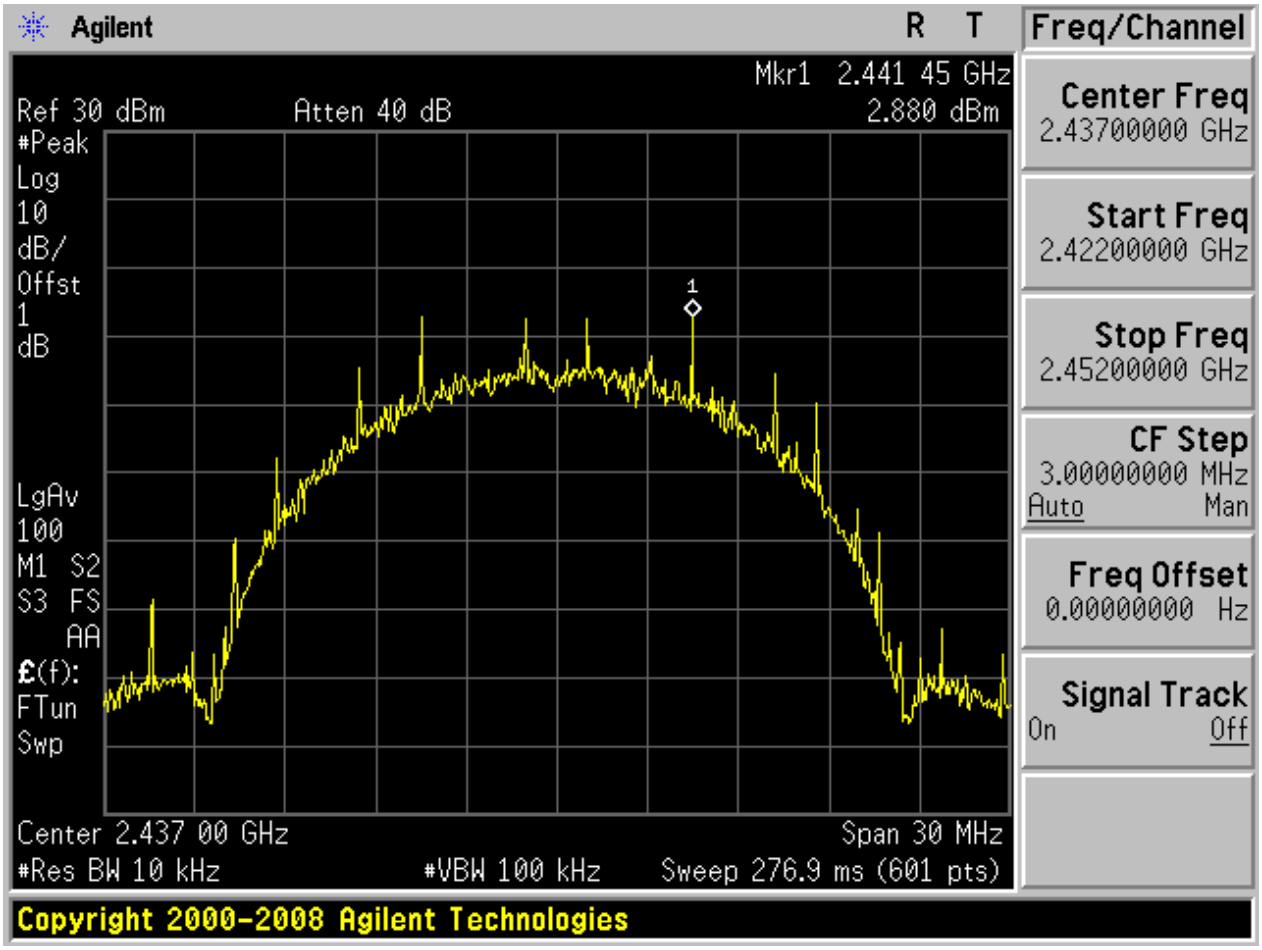
Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11B	L	2412	Ant 1	9.23	pass
11B	M	2437	Ant 1	2.88	pass
11B	H	2462	Ant 1	8.28	pass
11G	L	2412	Ant 1	-6.52	pass
11G	M	2437	Ant 1	-7.21	pass
11G	H	2462	Ant 1	-7.69	pass
11N20	L	2412	Ant 1	-7.76	pass
11N20	M	2437	Ant 1	-10.03	pass
11N20	H	2462	Ant 1	-8.38	pass

Part II - Test Plots

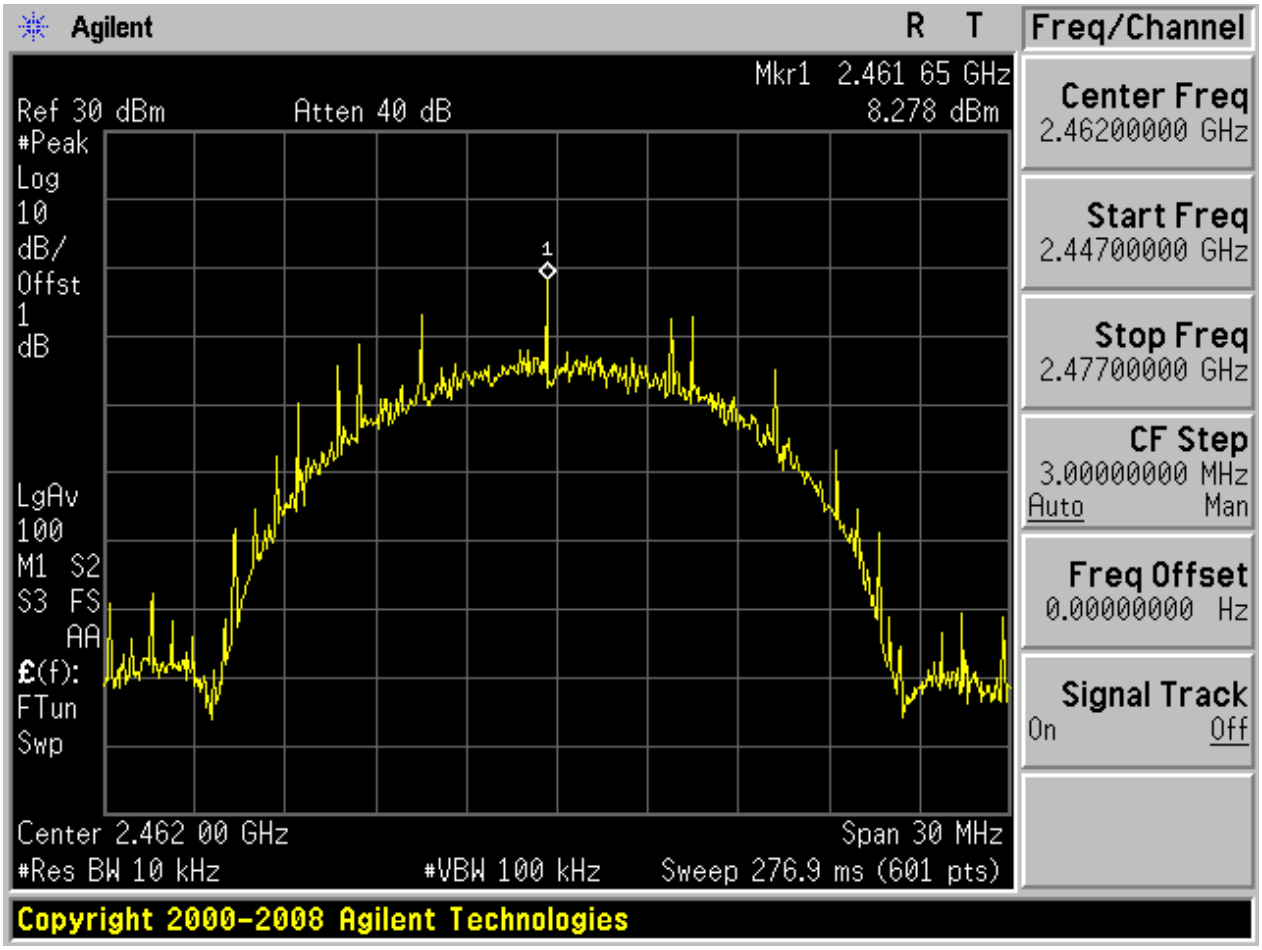
2.1 11B_L



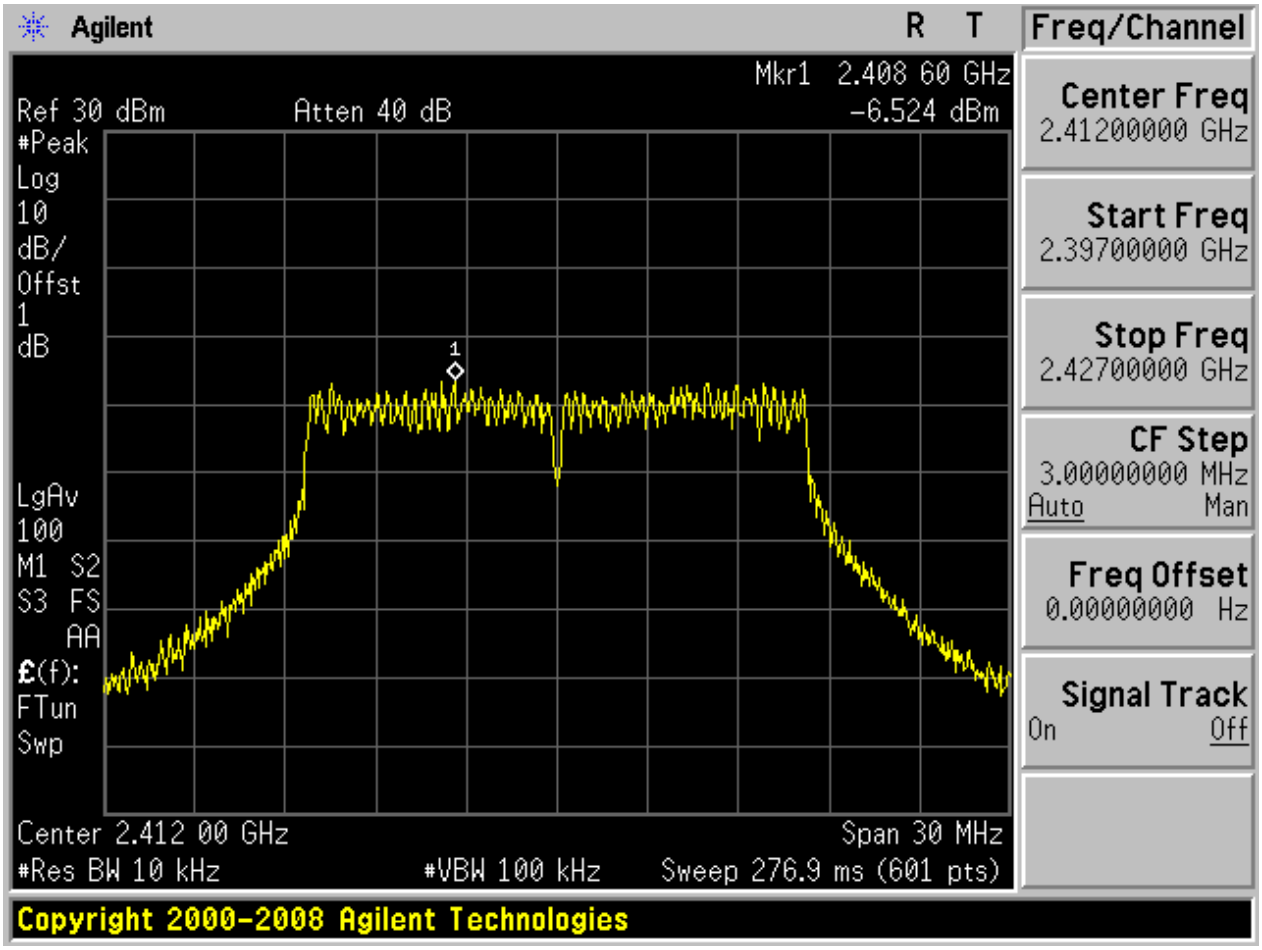
2.2 11B_M



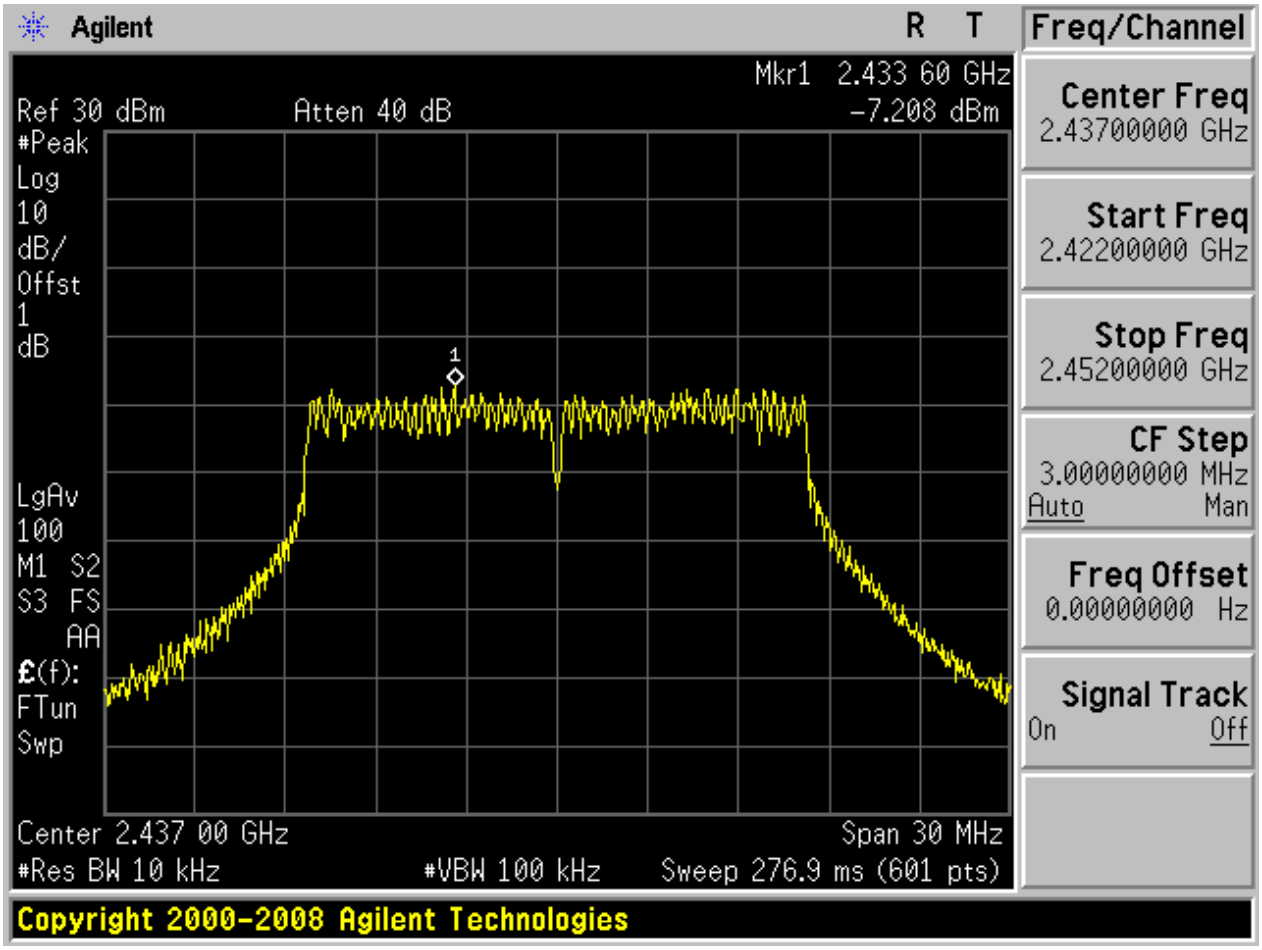
2.3 11B_H



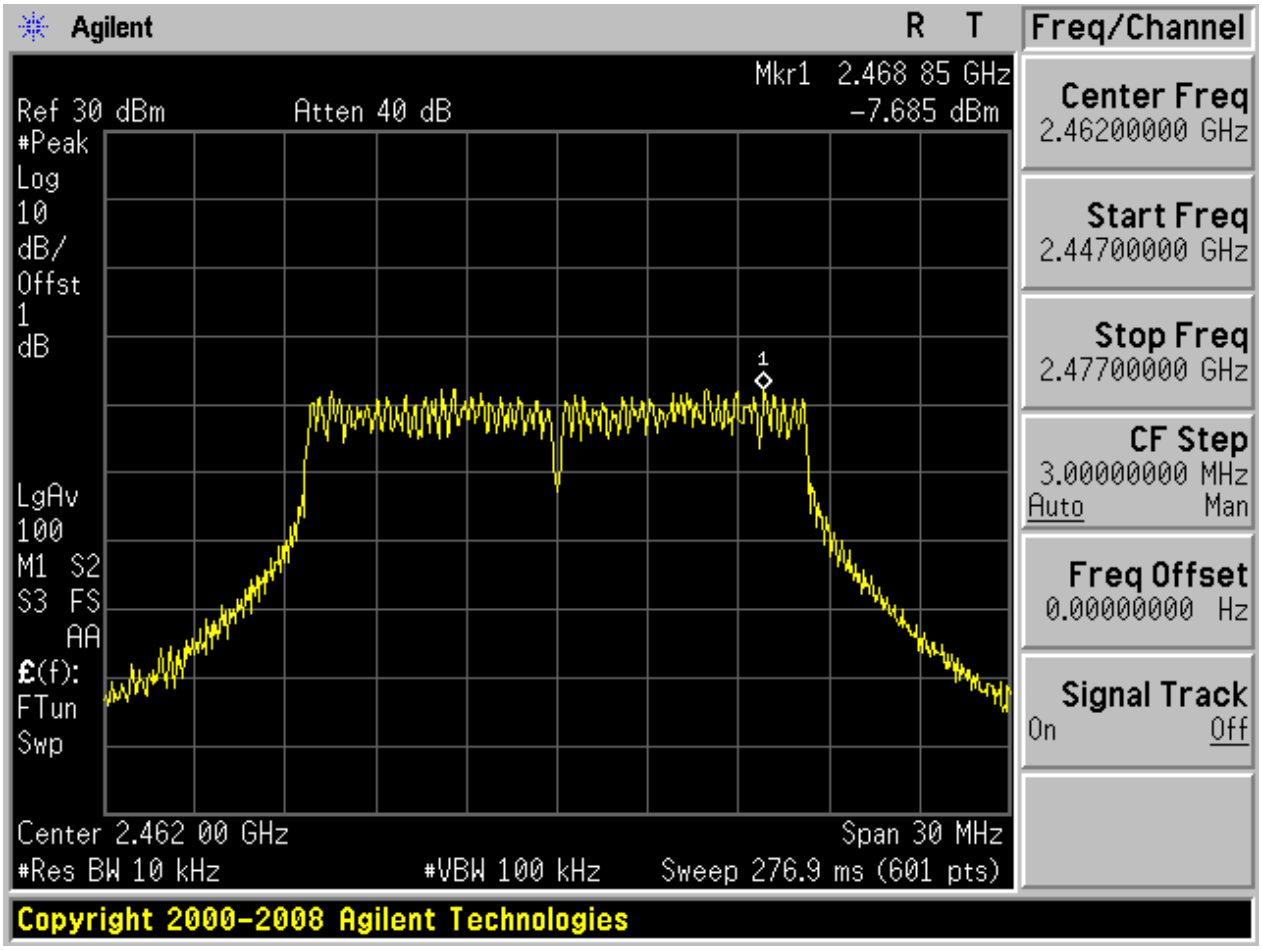
2.4 11G_L



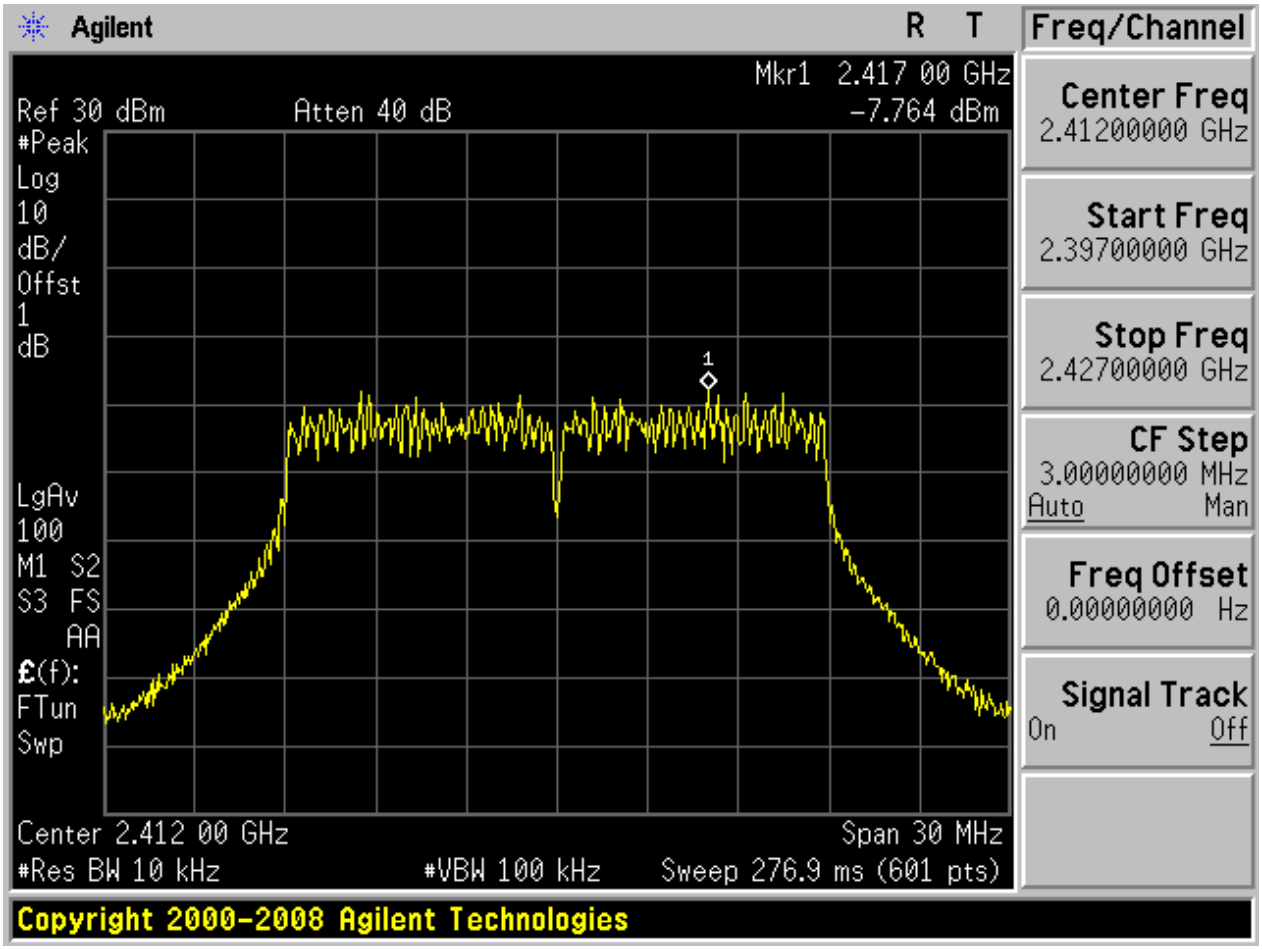
2.5 11G_M



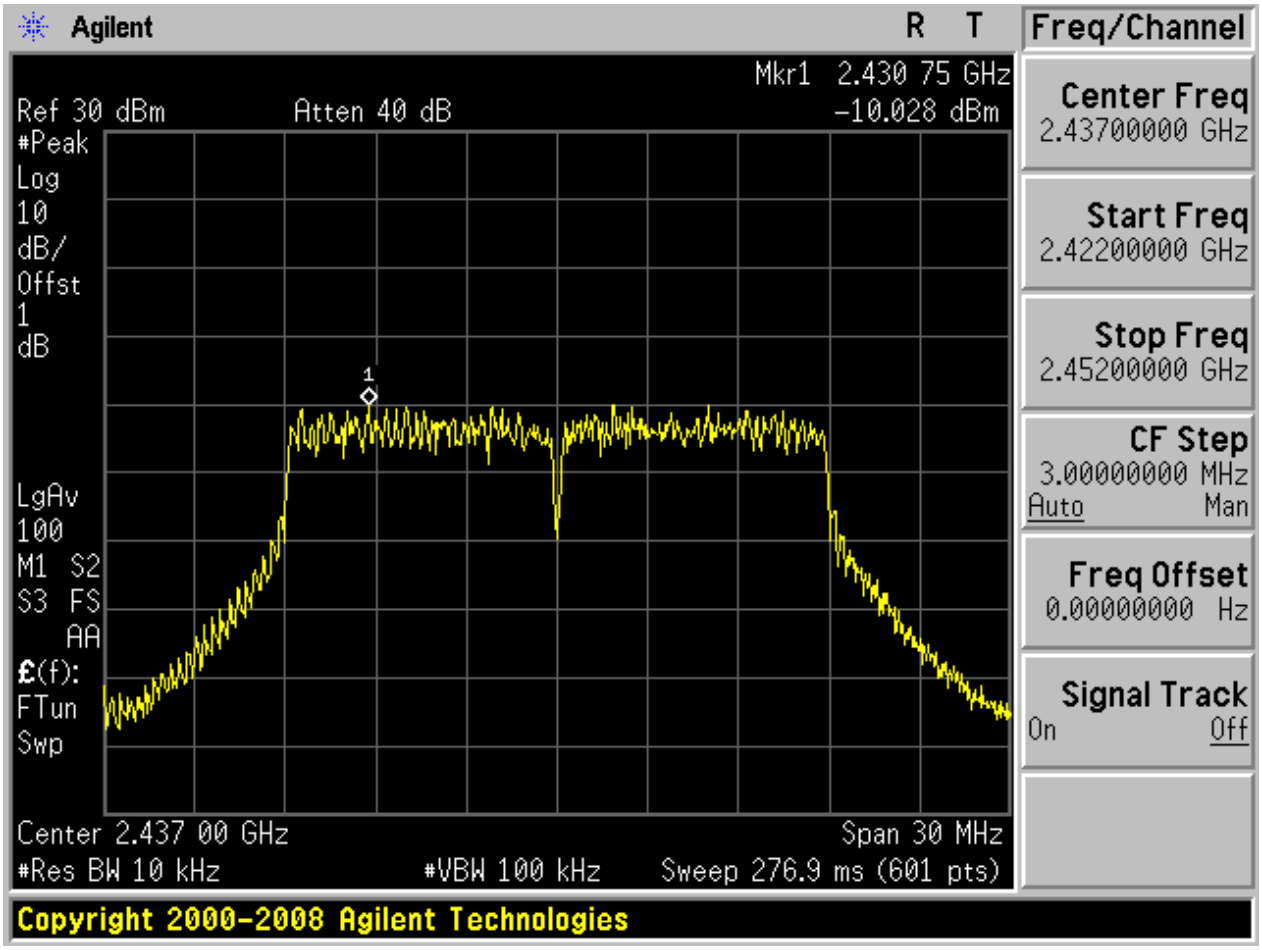
2.6 11G_H



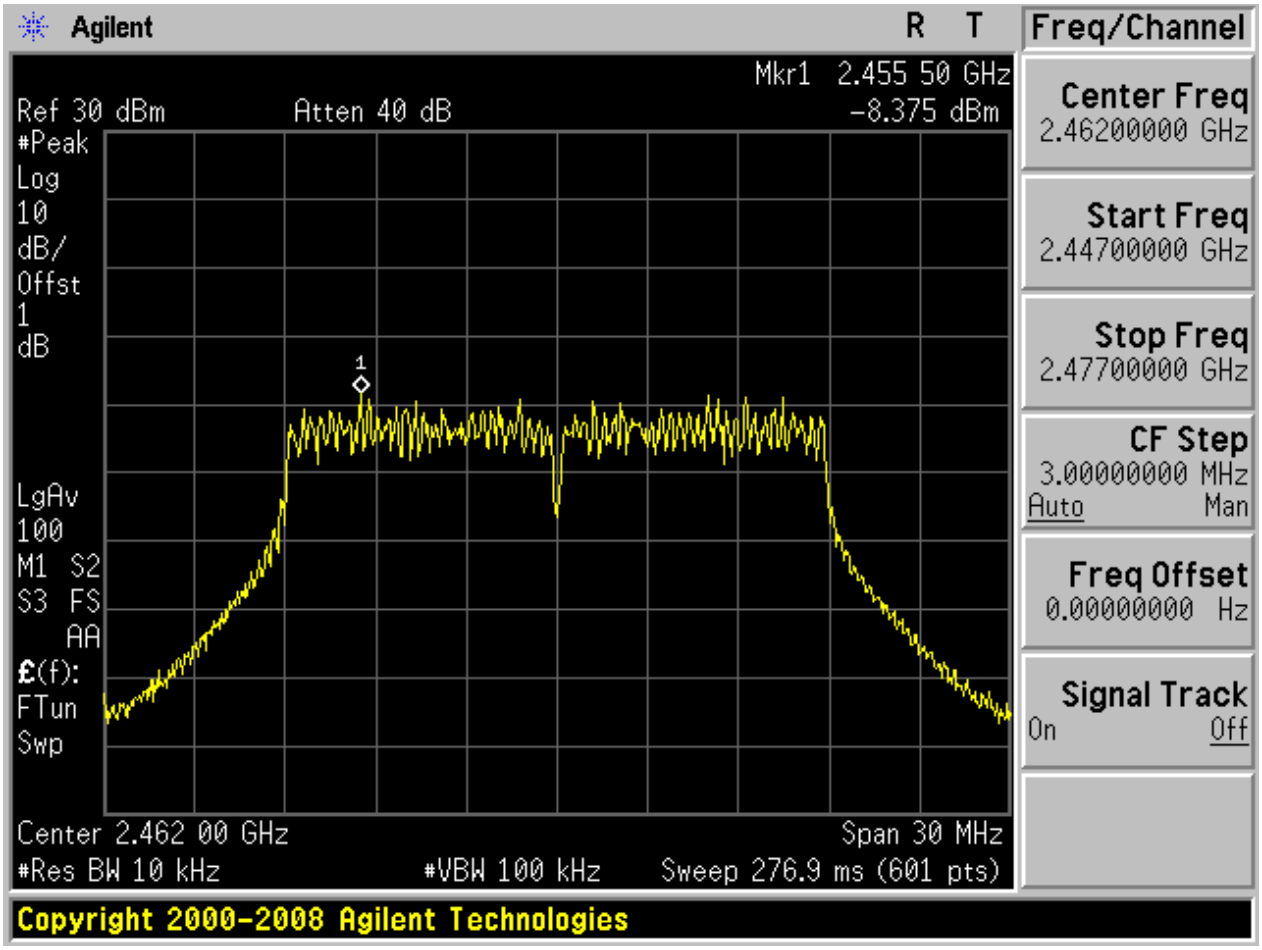
2.7 11N20_L



2.8 11N20_M



2.9 11N20_H



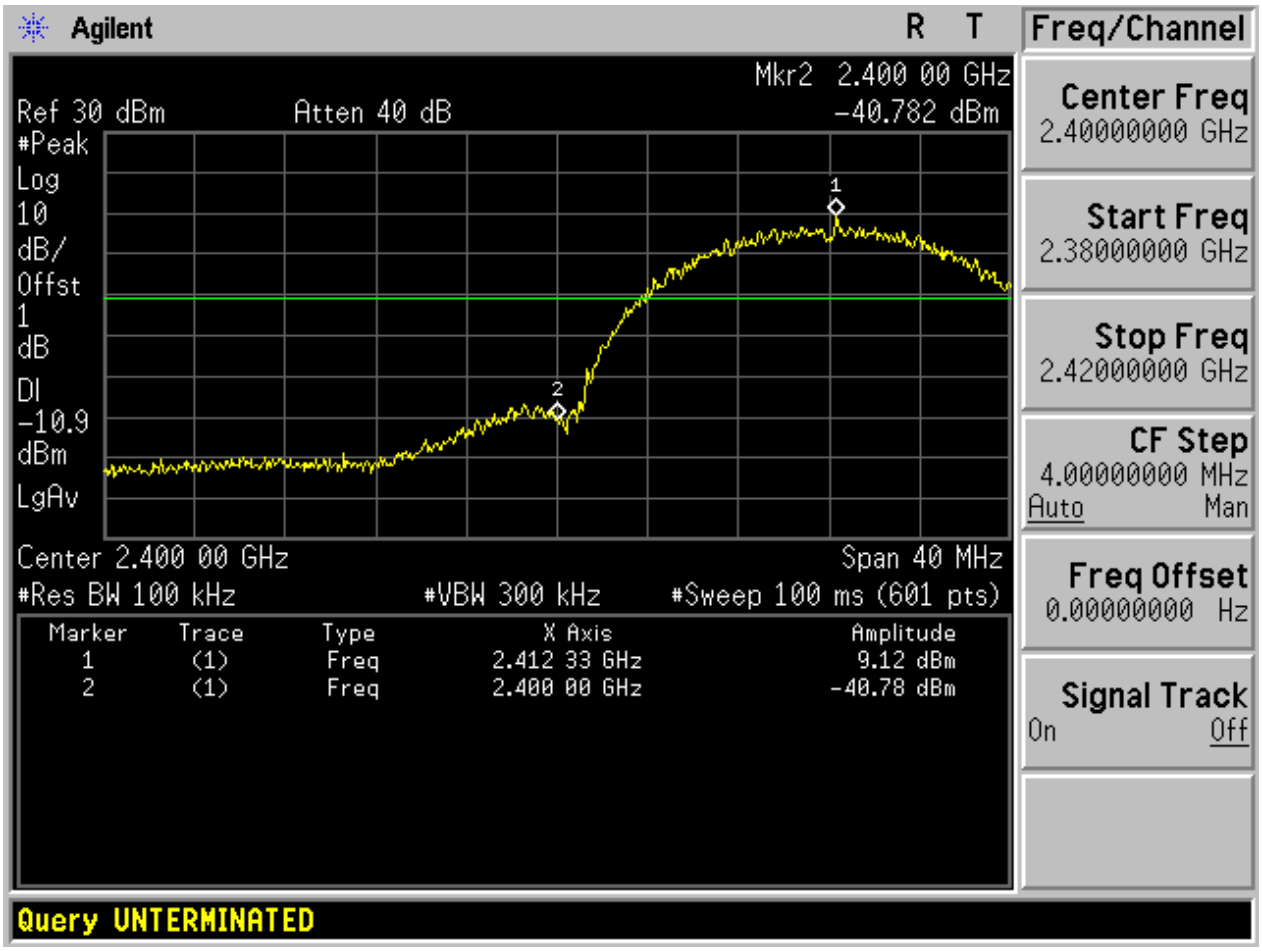
Appendix D: Band Edges Compliance

Part I - Test Results

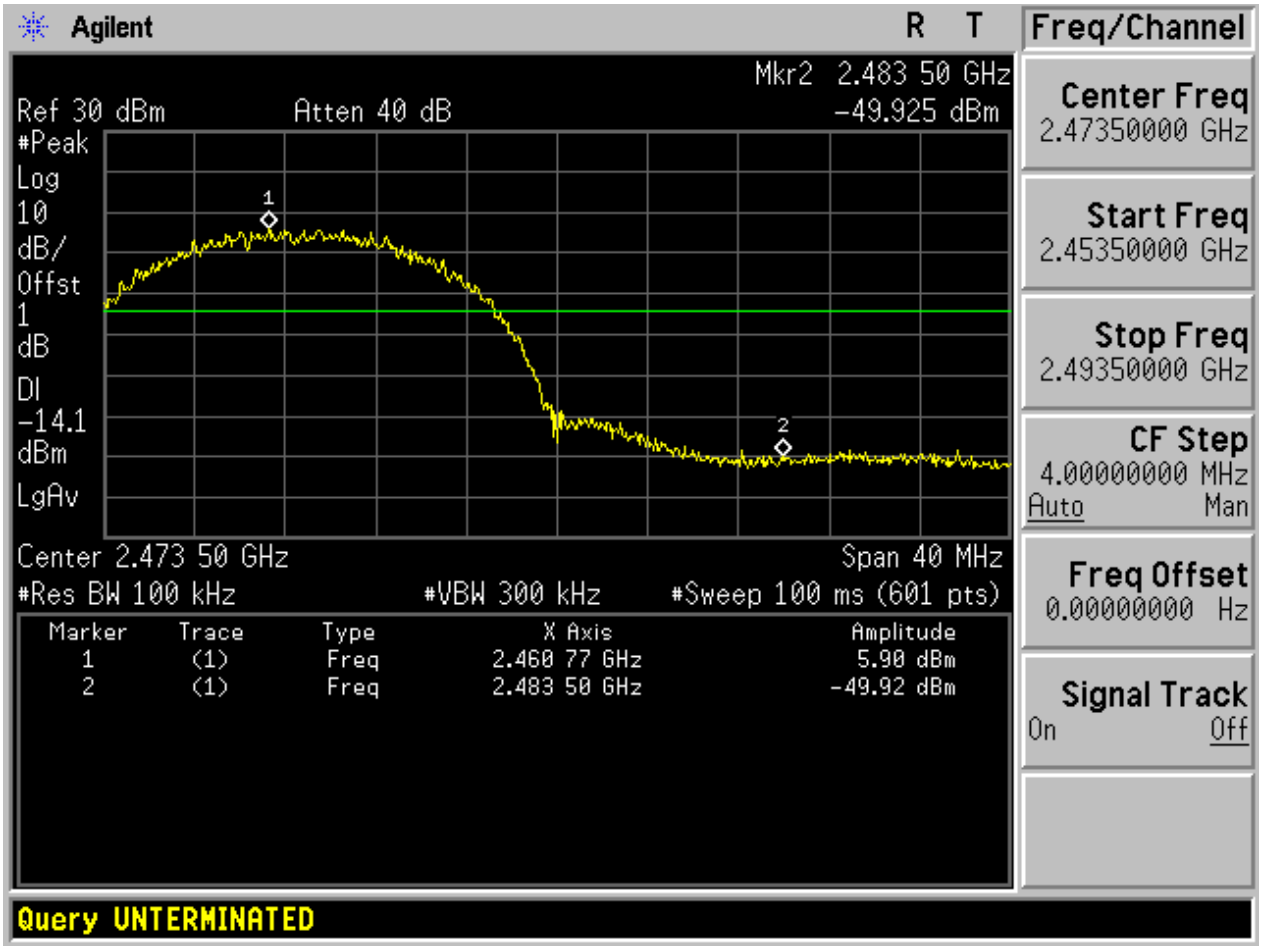
Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	Ant 1	9.12	-40.78	pass
11B	H	2462	Ant 1	5.90	-49.92	pass
11G	L	2412	Ant 1	3.46	-47.68	pass
11G	H	2462	Ant 1	2.44	-51.02	pass
11N20	L	2412	Ant 1	.69	-36.58	pass
11N20	H	2462	Ant 1	.31	-51.49	pass

Part II - Test Plots

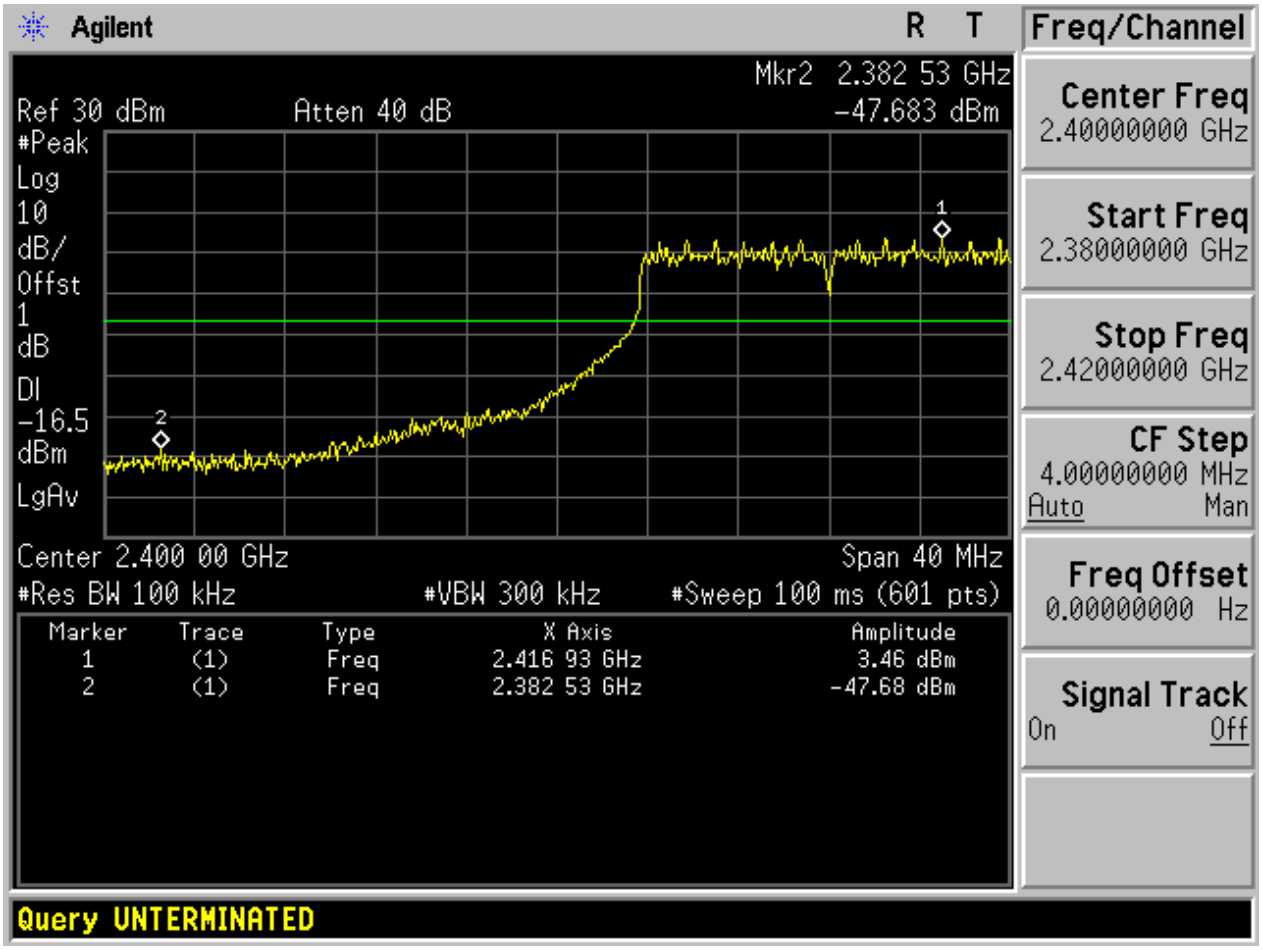
2.1 11B_L



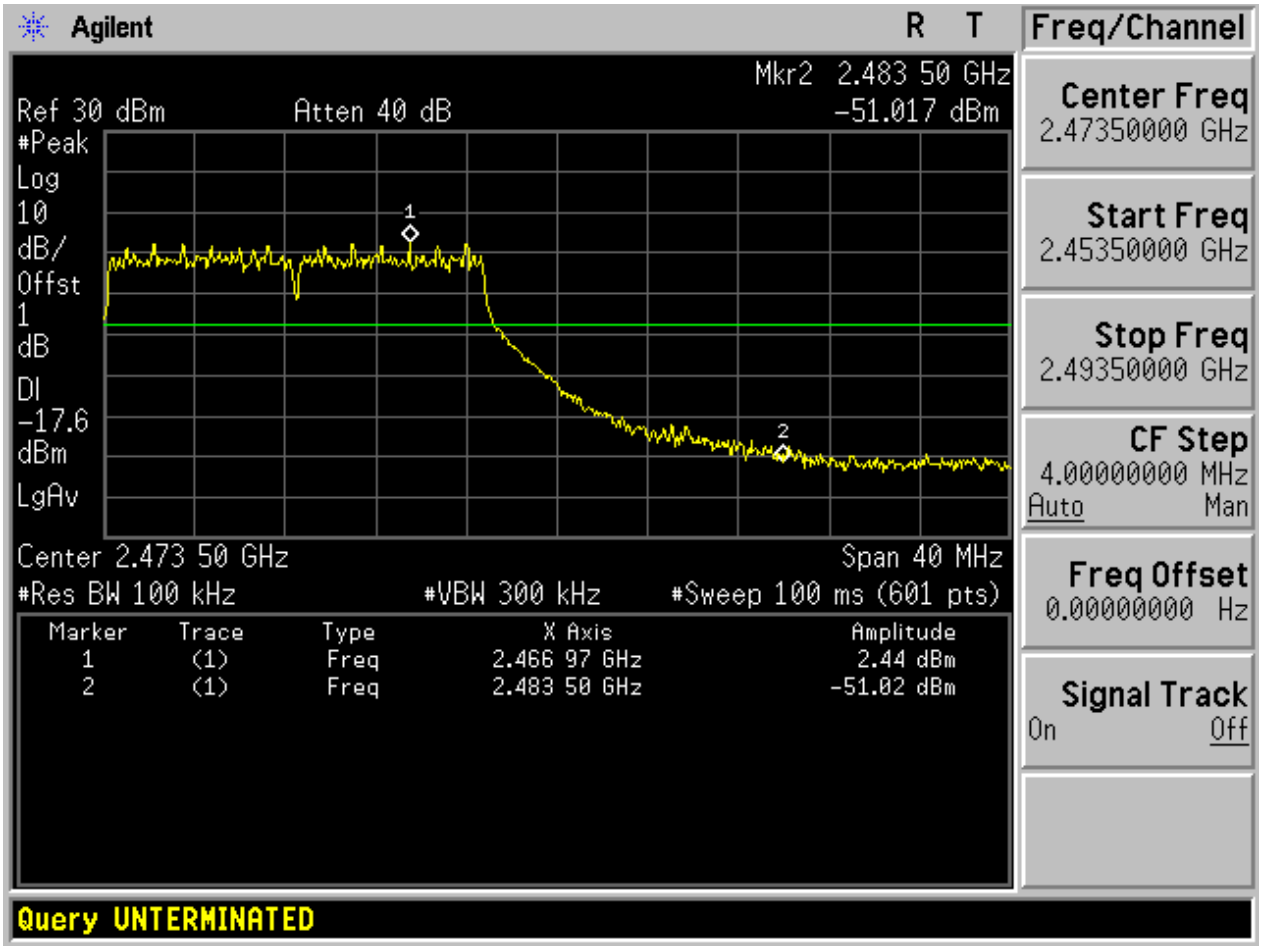
2.2 11B_H



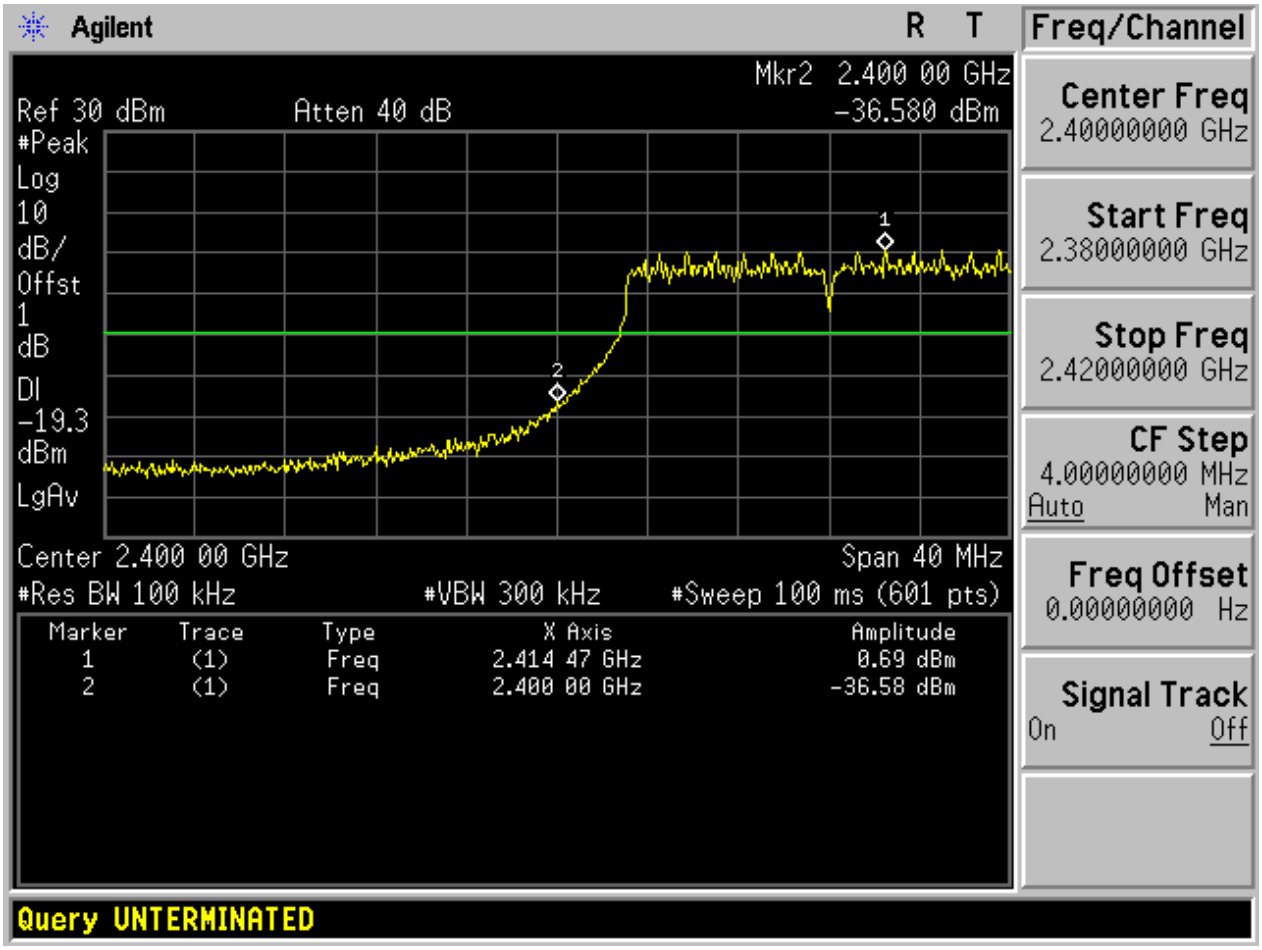
2.3 11G_L



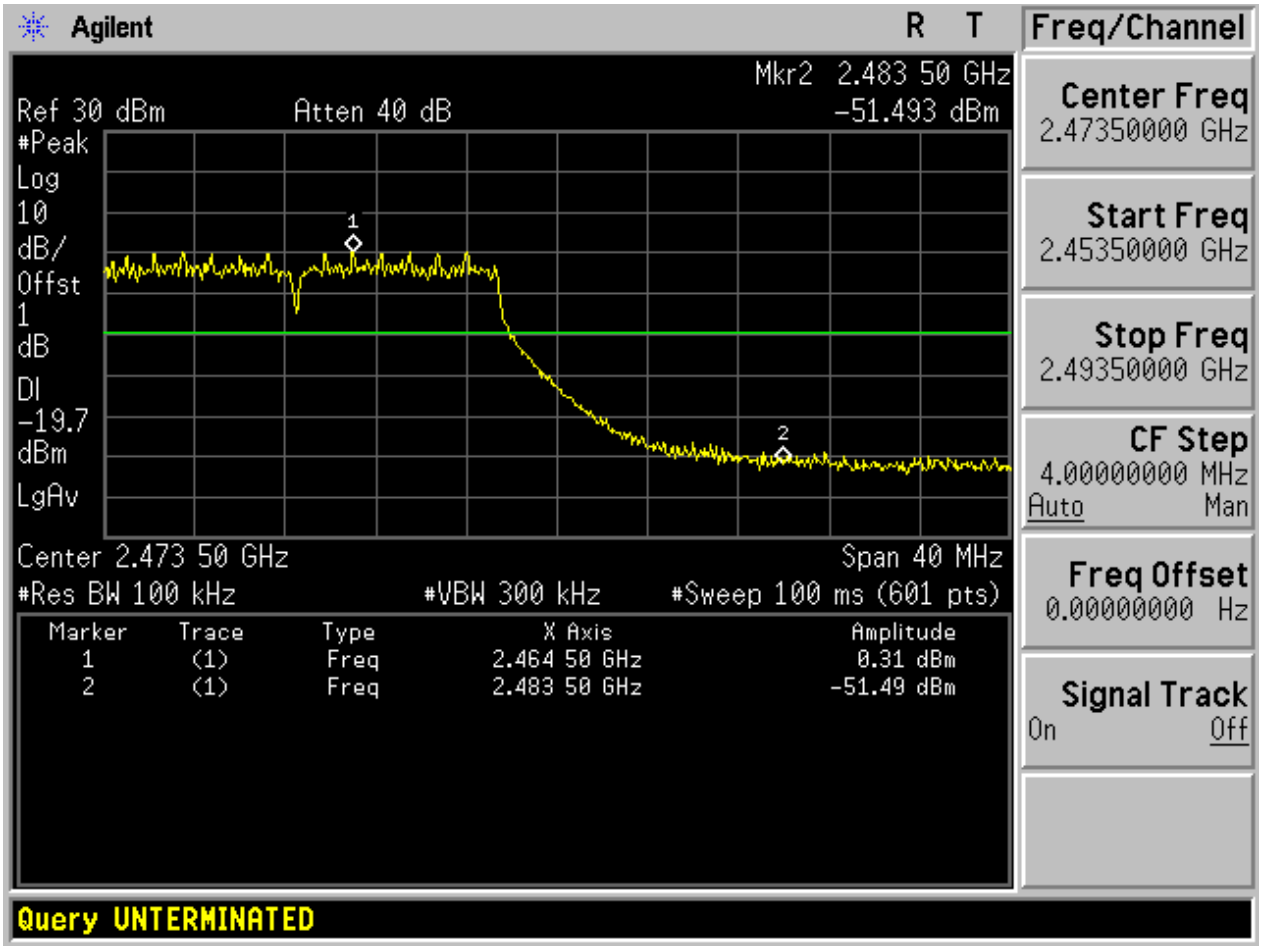
2.4 11G_H



2.5 11N20_L



2.6 11N20_H



Appendix E: 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".

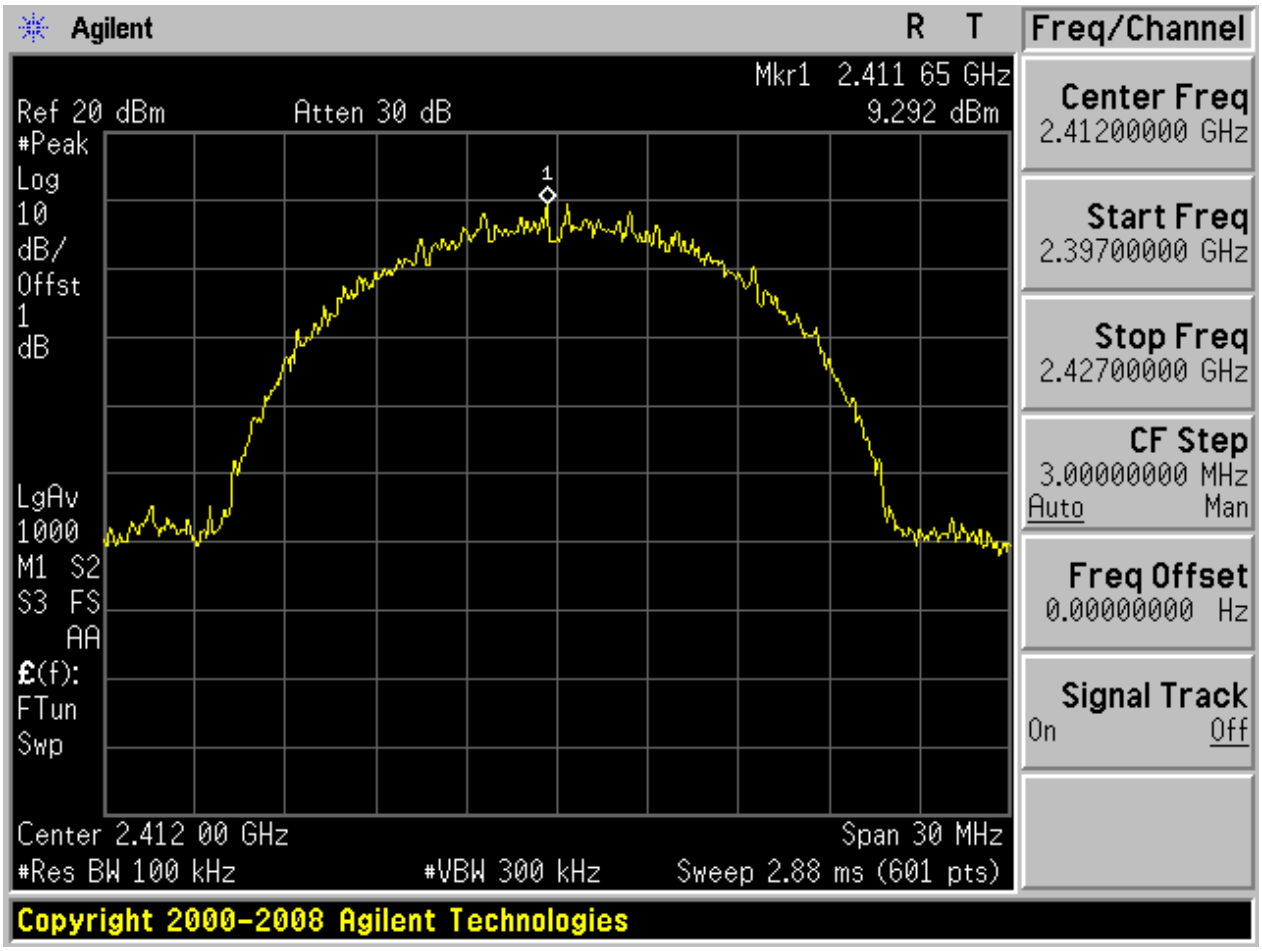
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	Ant 1	9.29	<limit	pass
11B	M	2437	Ant 1	7.85	<limit	pass
11B	H	2462	Ant 1	8.34	<limit	pass
11G	L	2412	Ant 1	3.74	<limit	pass
11G	M	2437	Ant 1	3.00	<limit	pass
11G	H	2462	Ant 1	2.58	<limit	pass
11N20	L	2412	Ant 1	0.91	<limit	pass
11N20	M	2437	Ant 1	0.58	<limit	pass
11N20	H	2462	Ant 1	0.69	<limit	pass

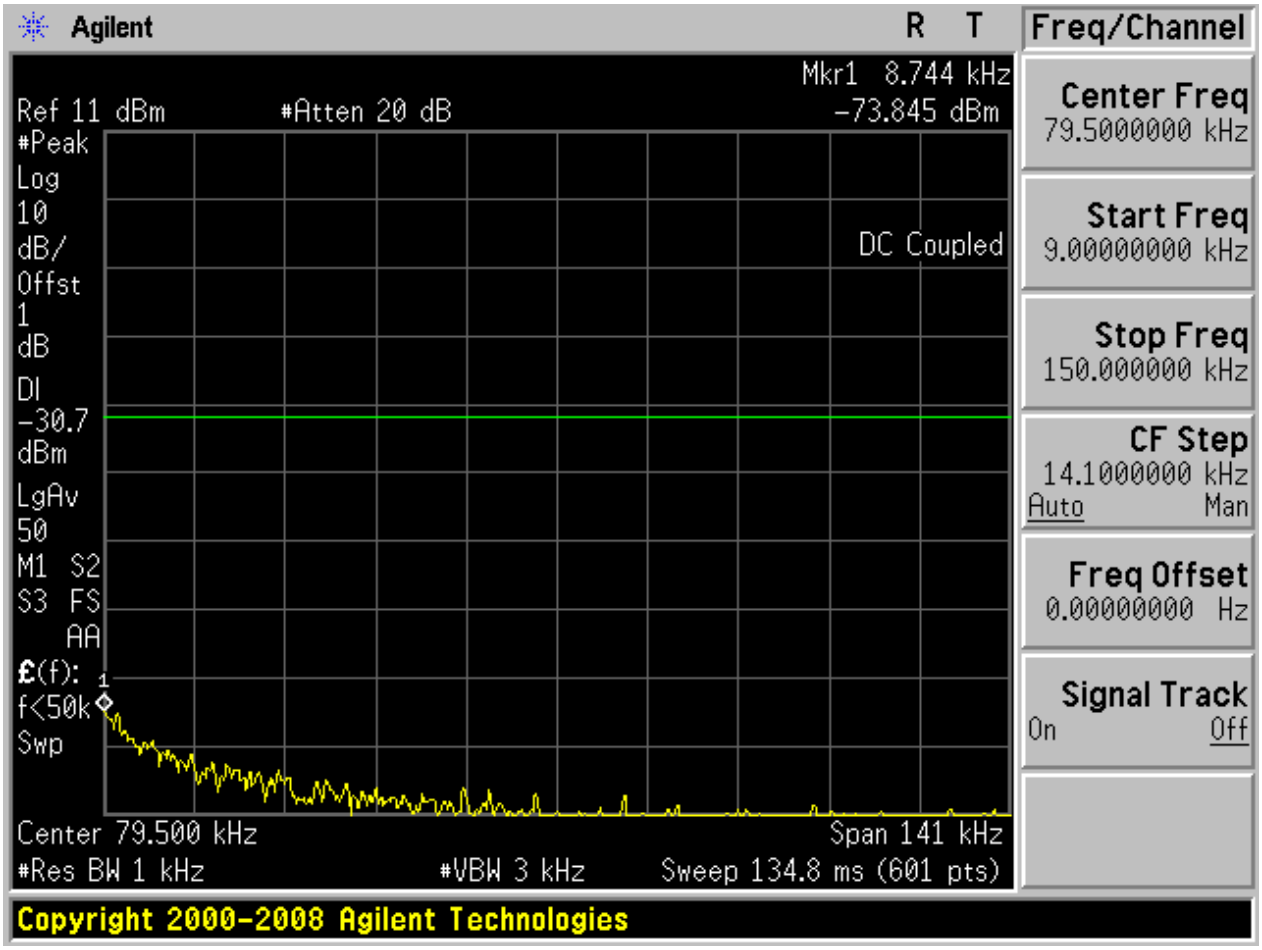
Part II - Test Plots

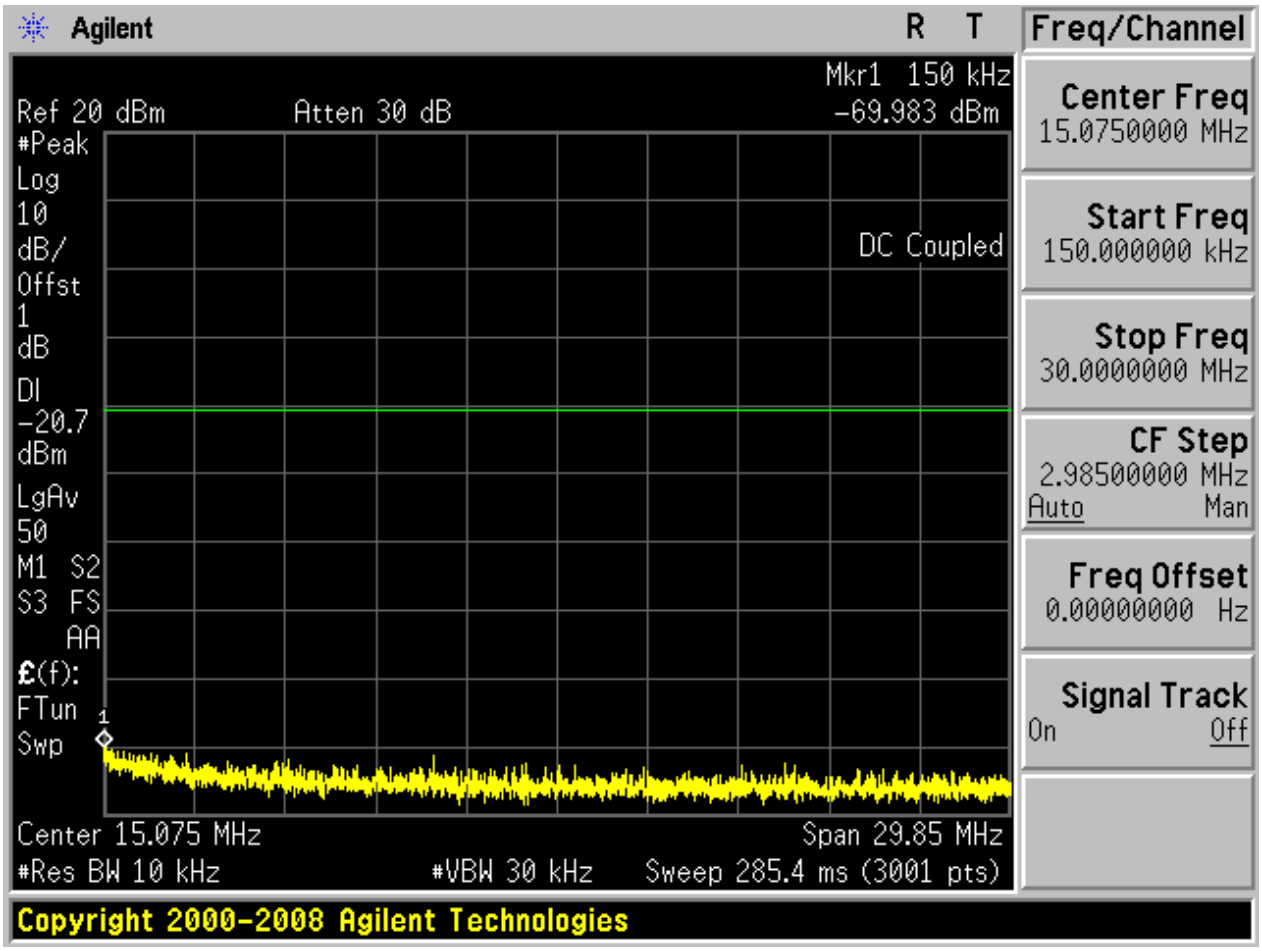
2.1 11B_L

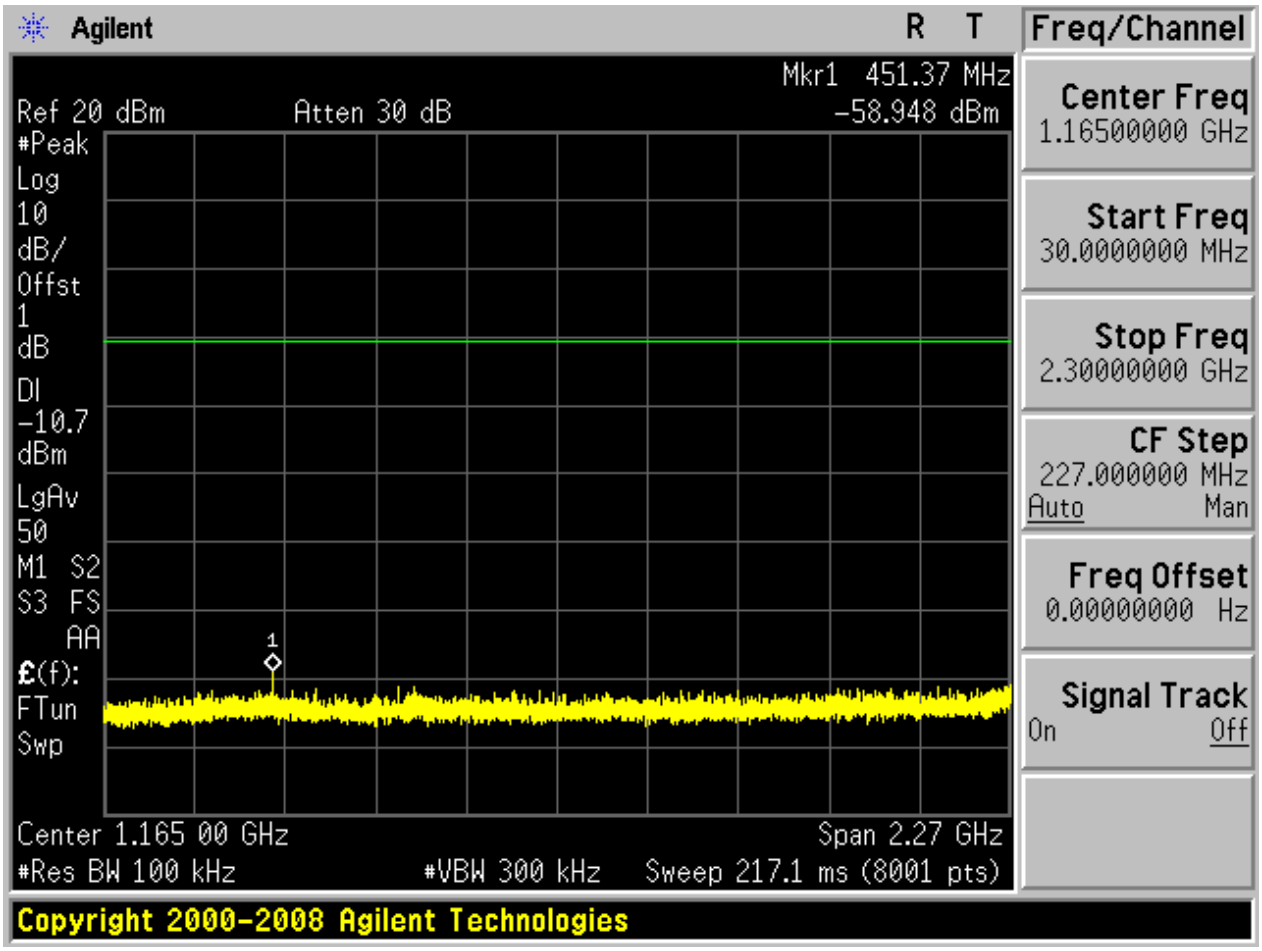
Pref:

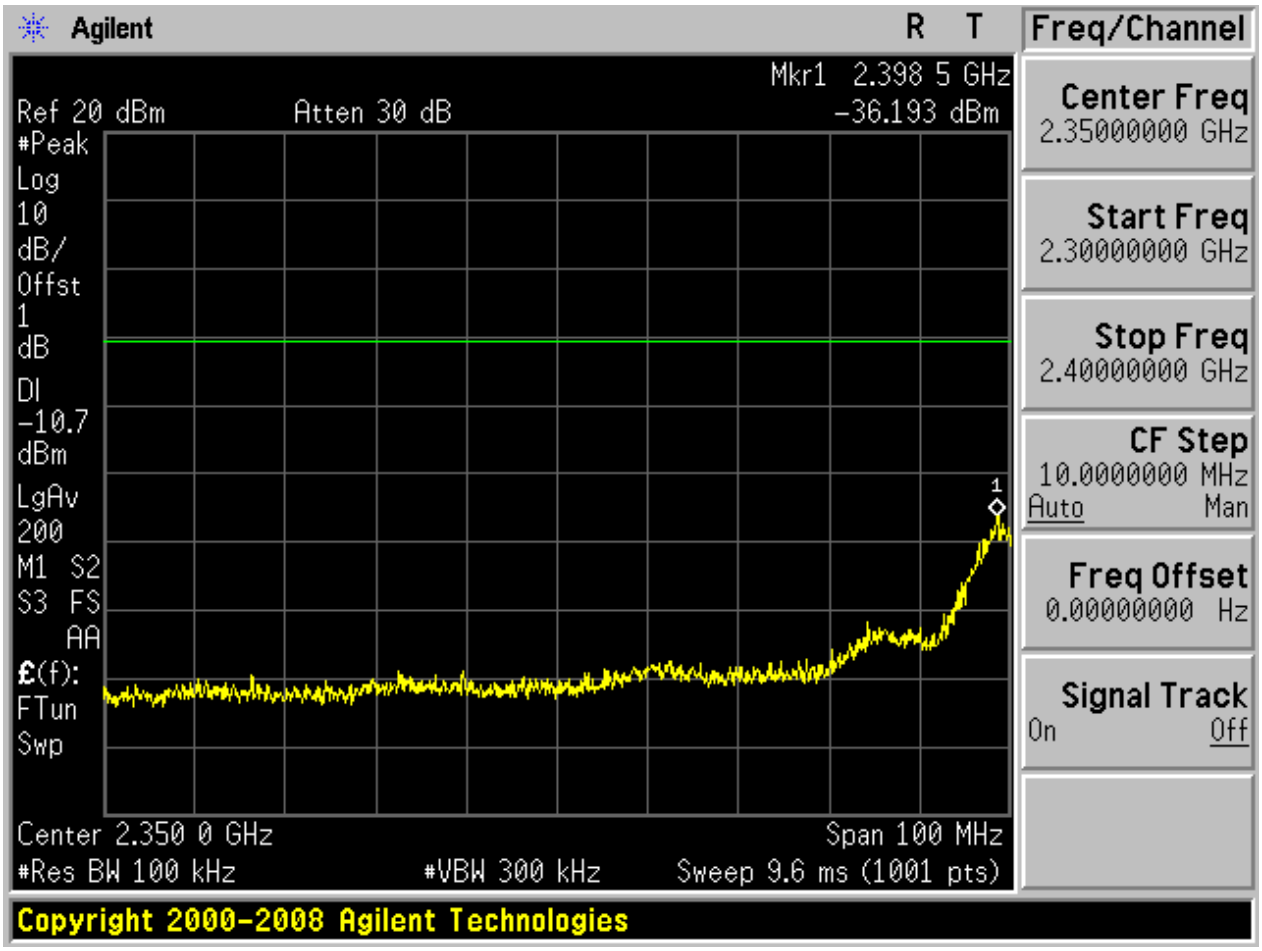


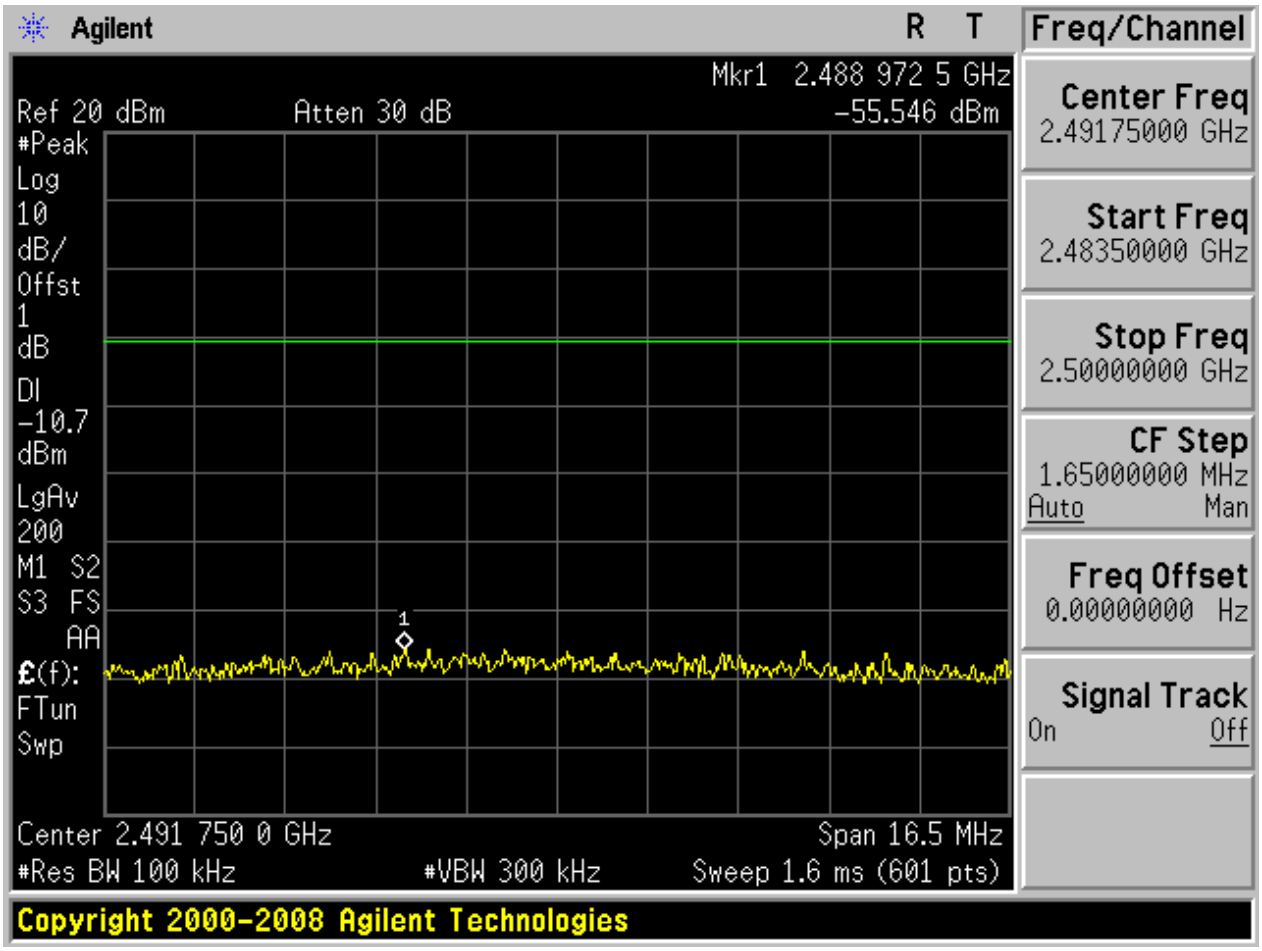
Puw:

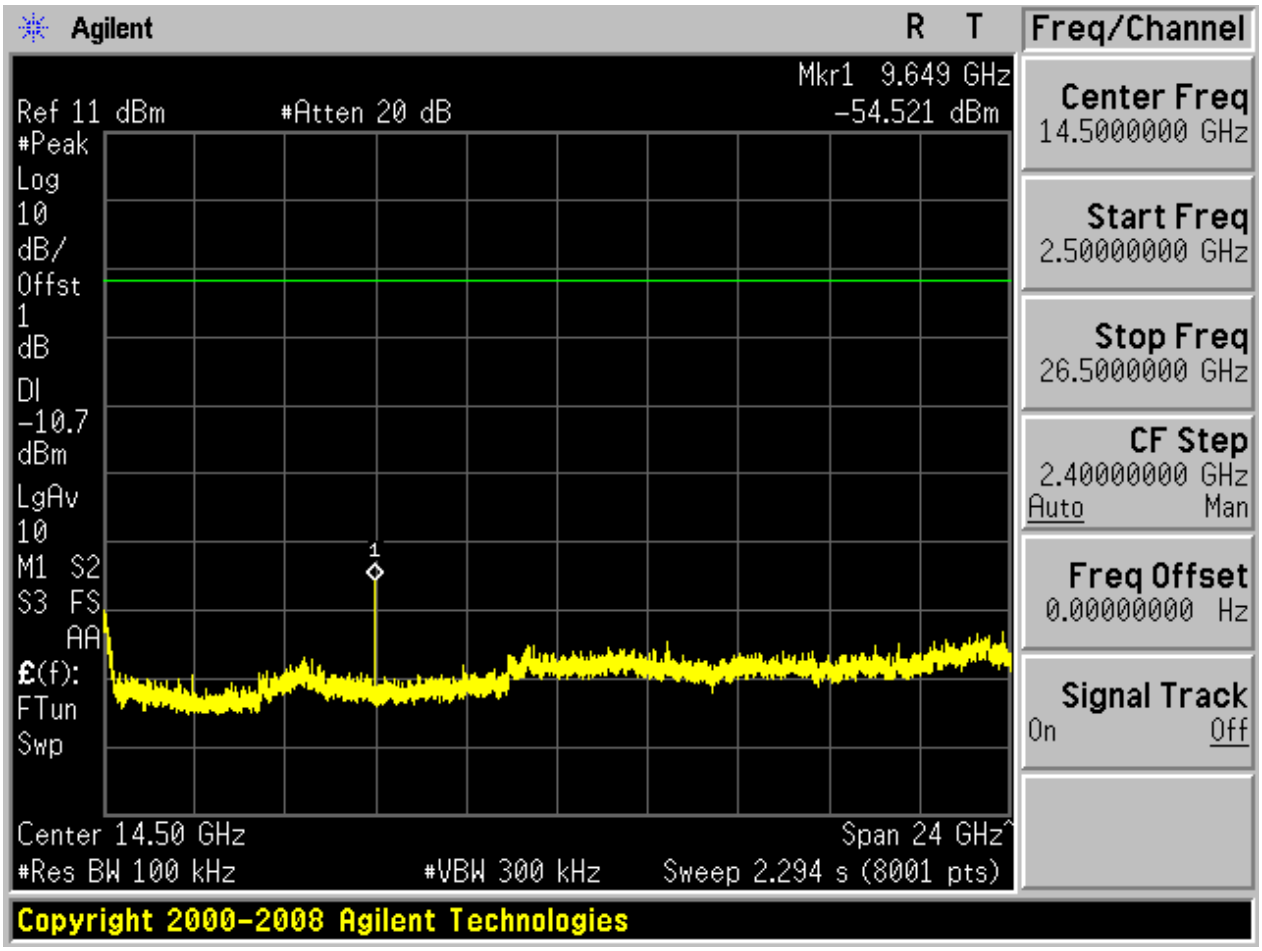






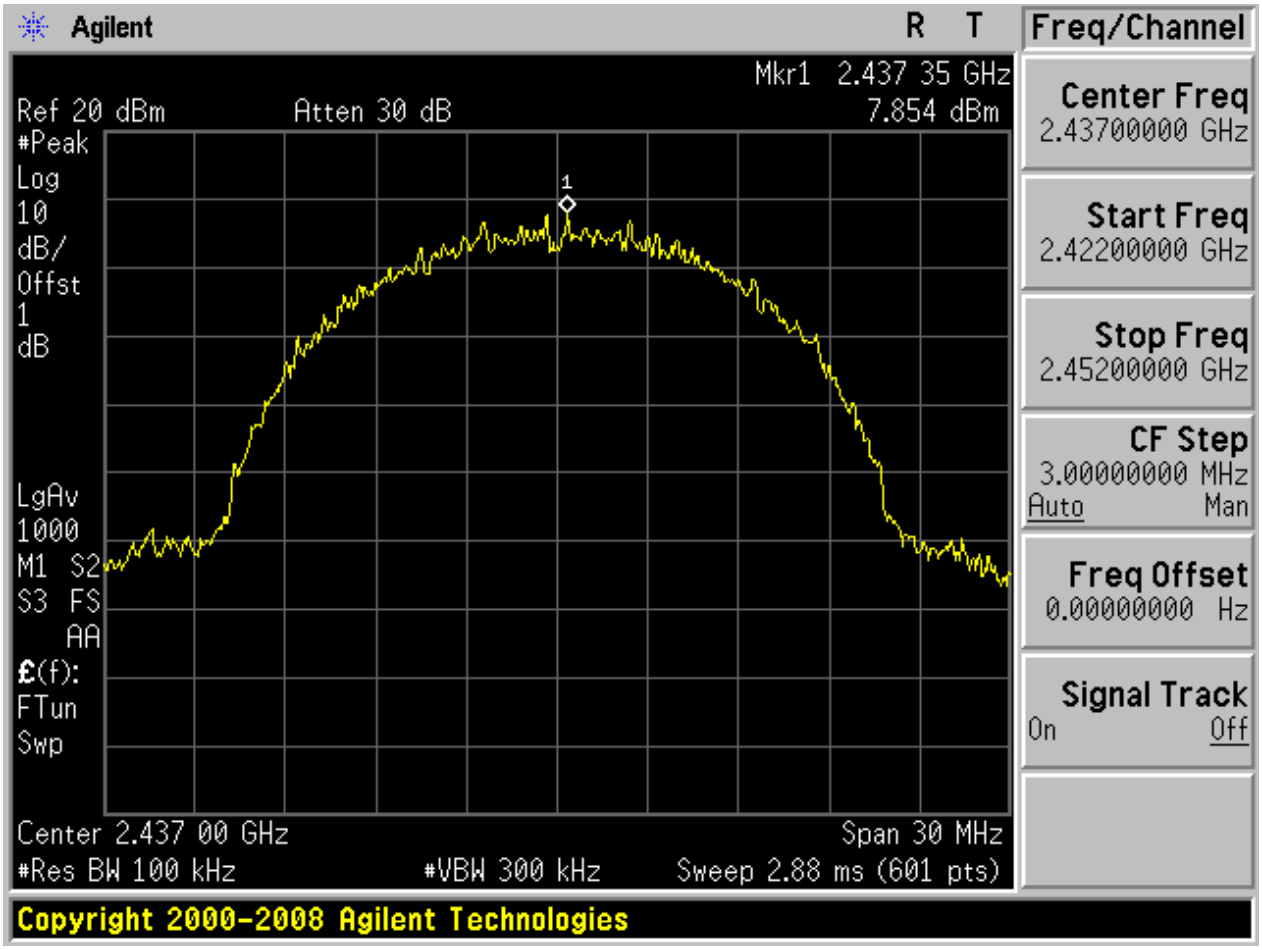




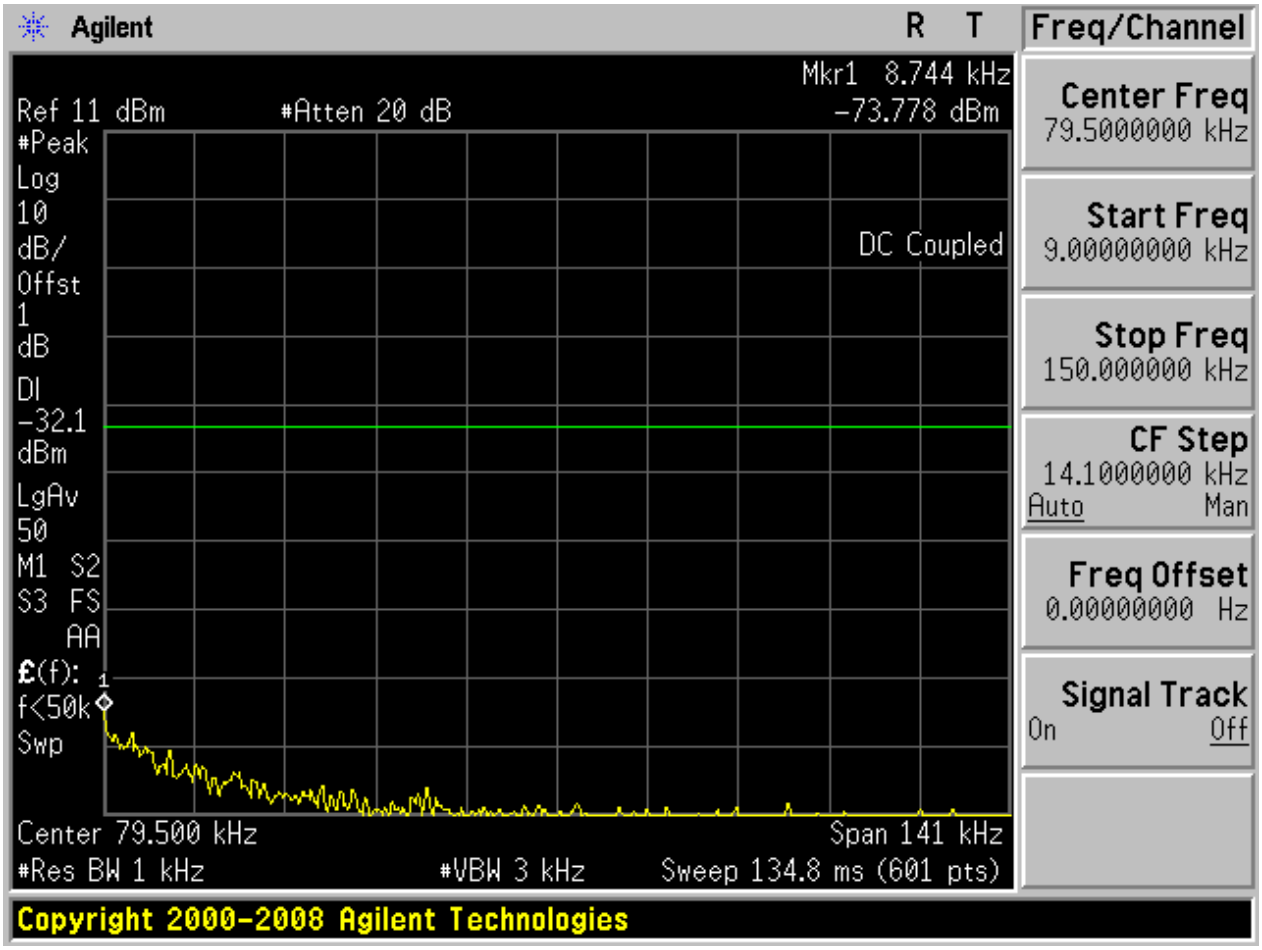


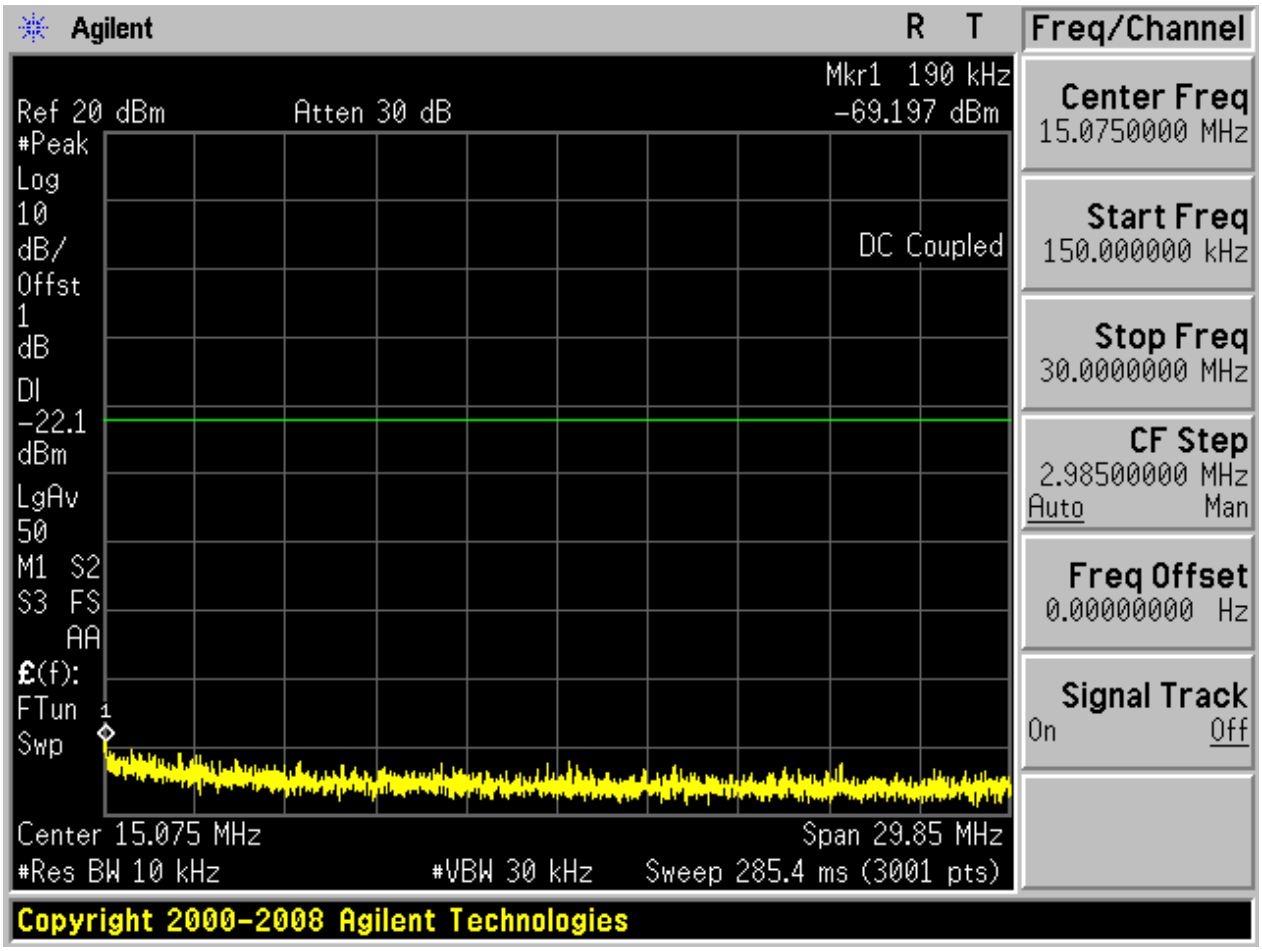
2.2 11B_M

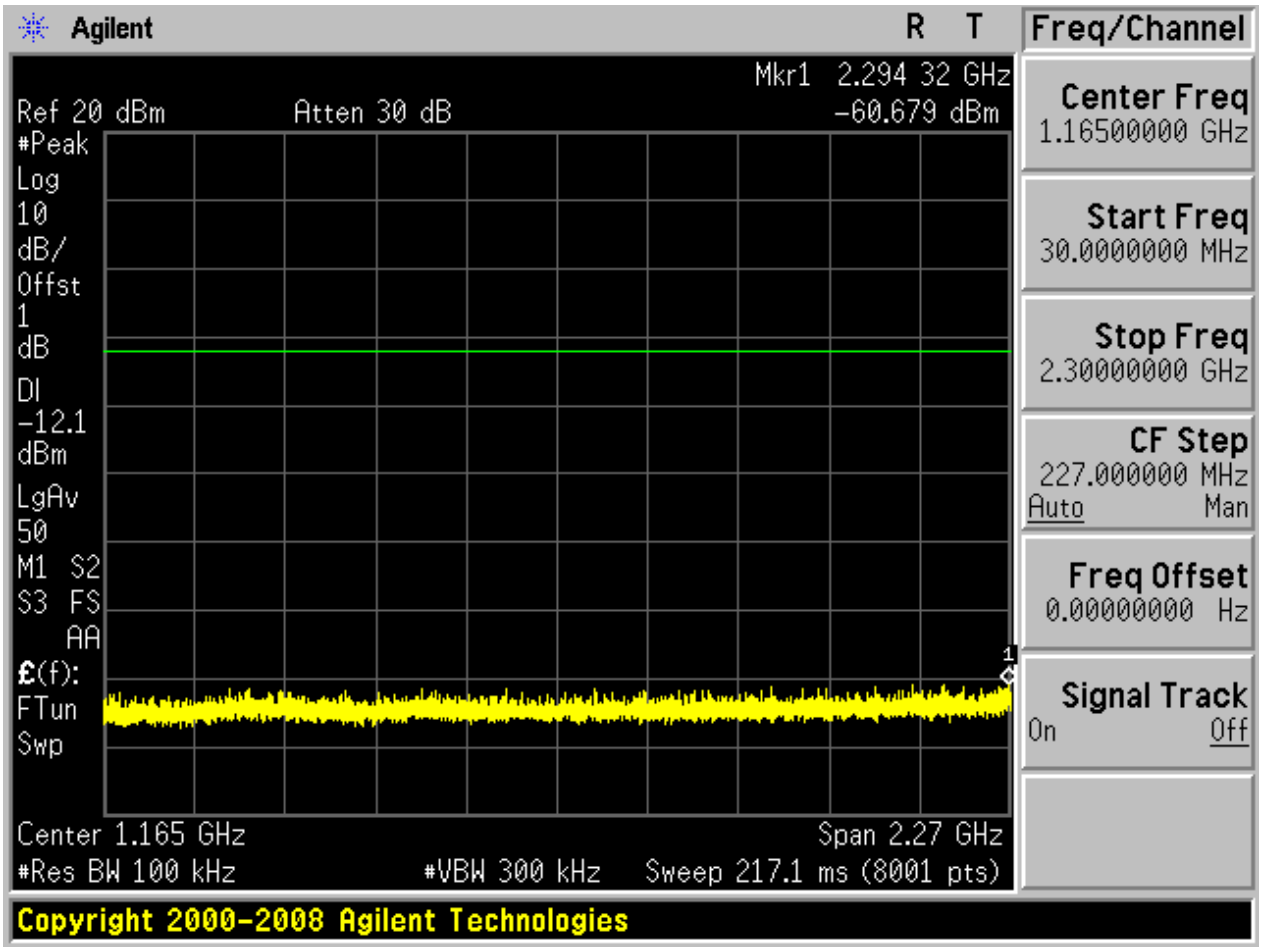
Pref:

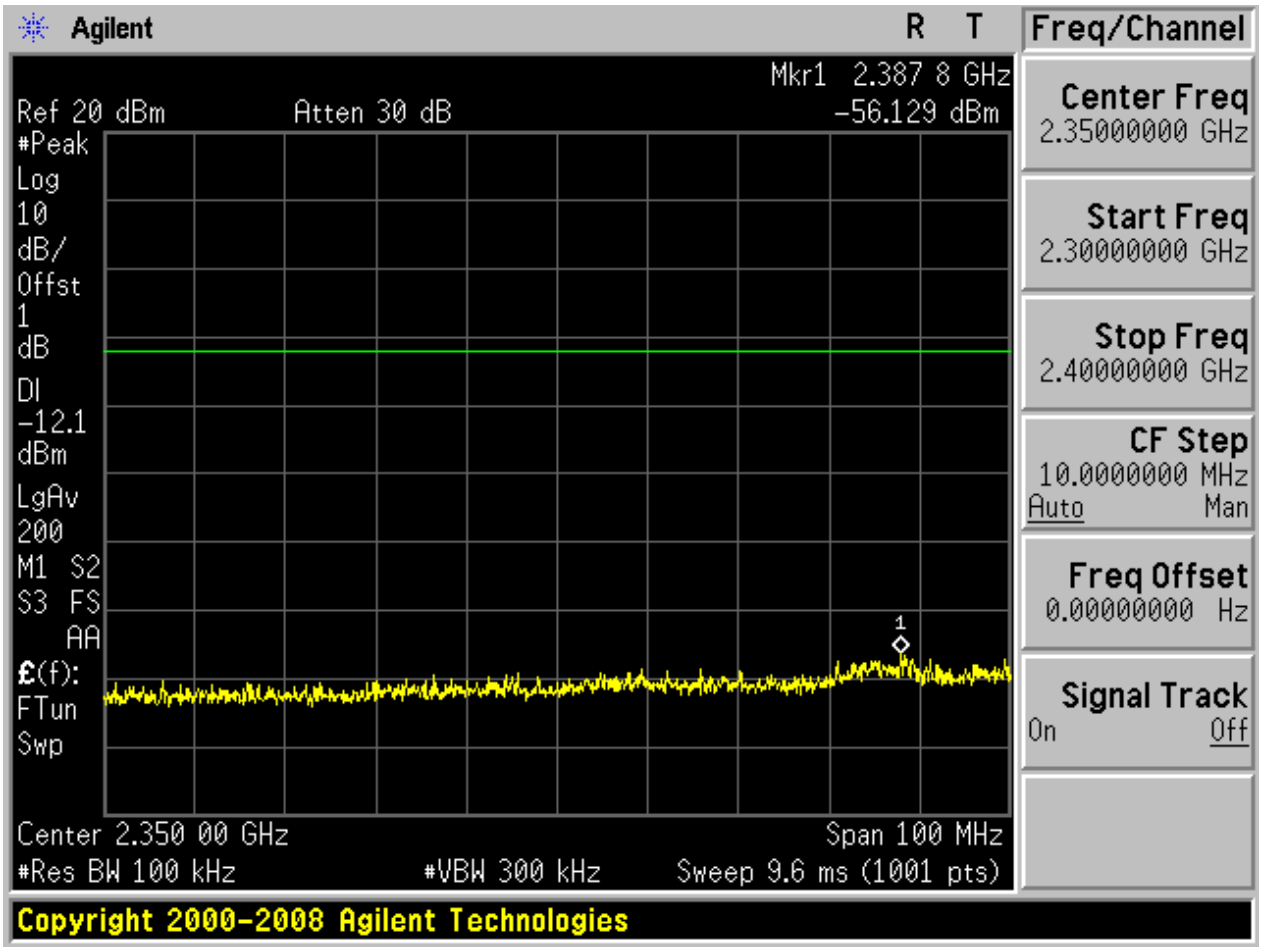


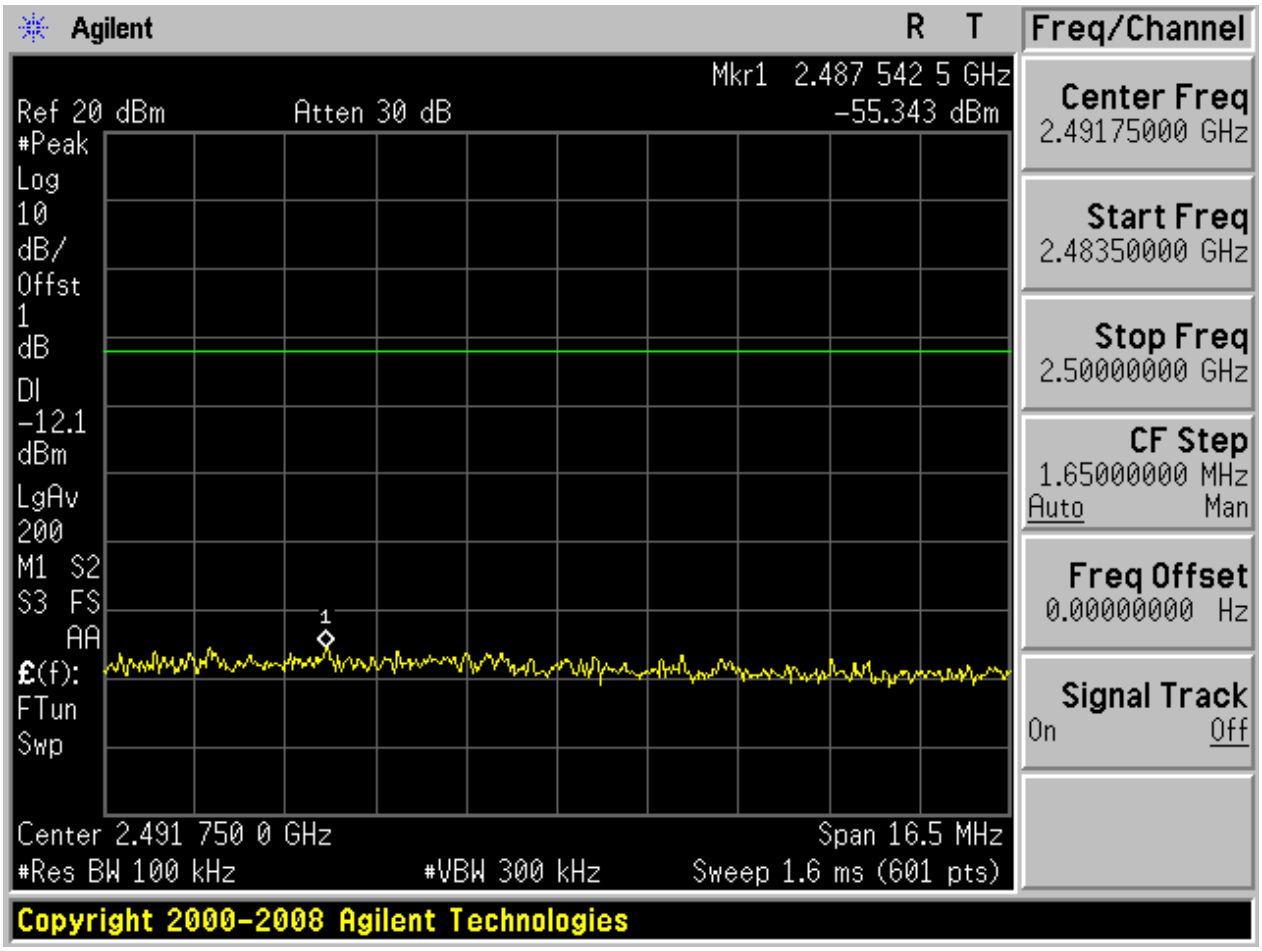
Puw:

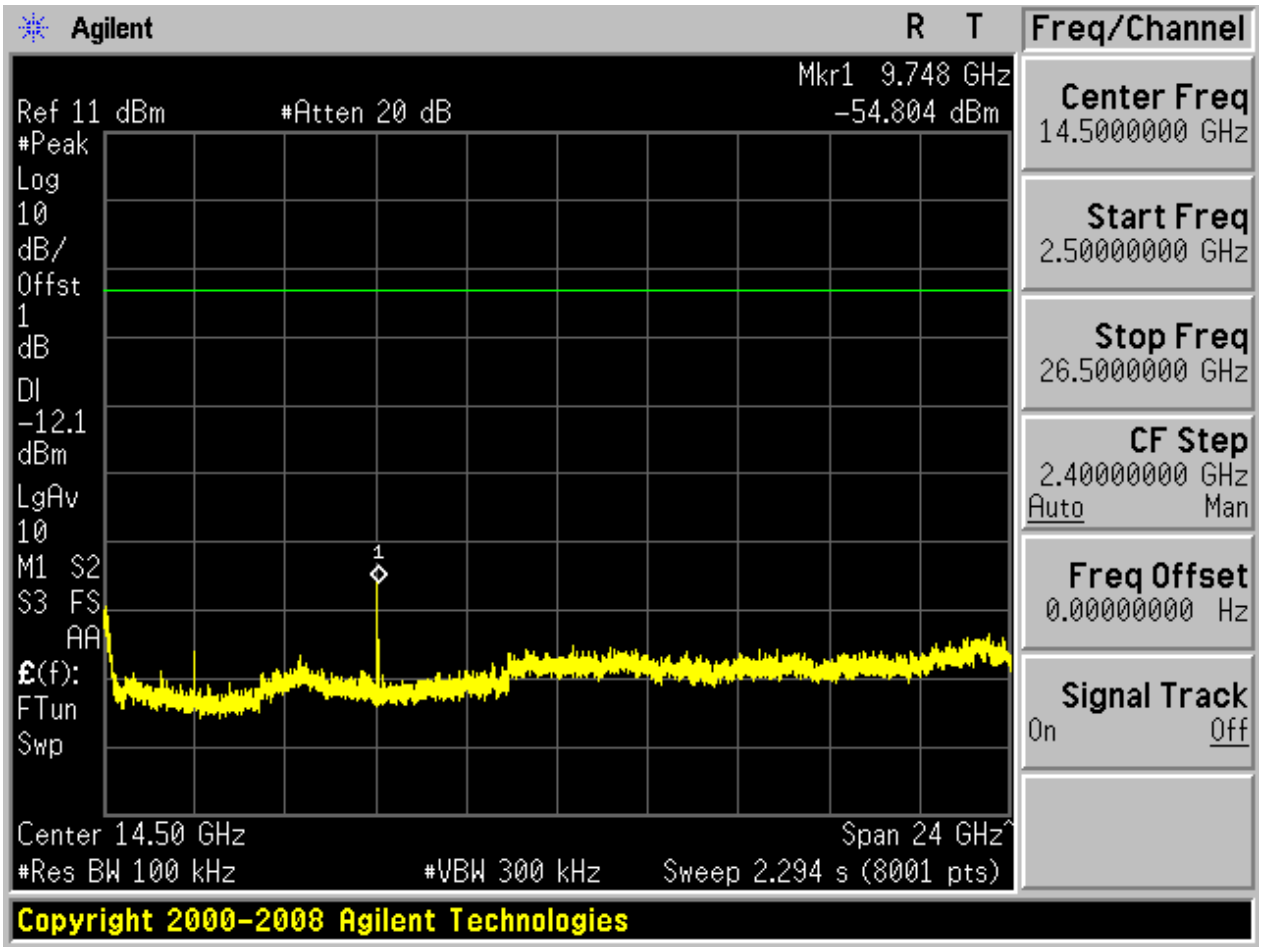






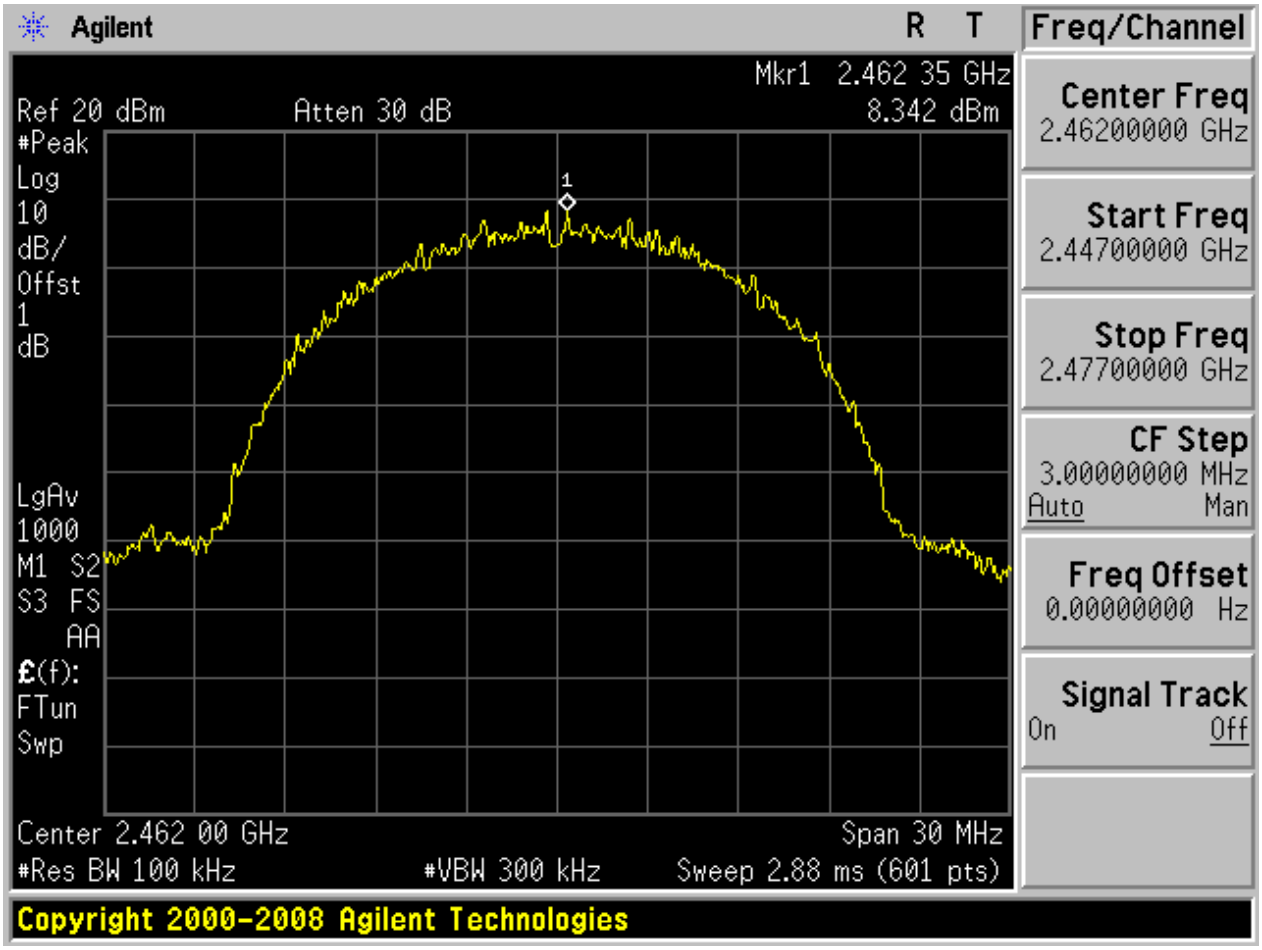






2.3 11B_H

Pref:



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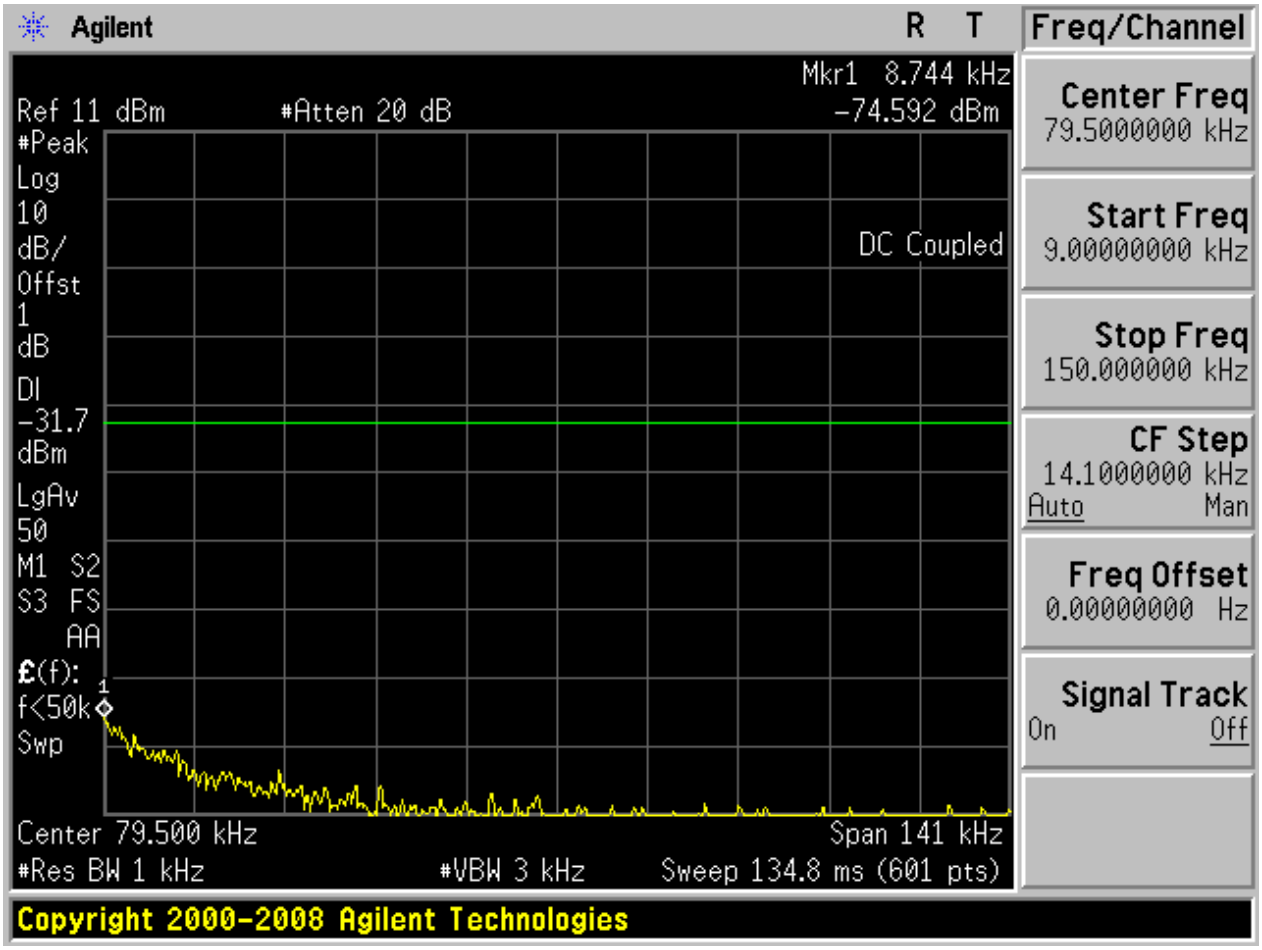

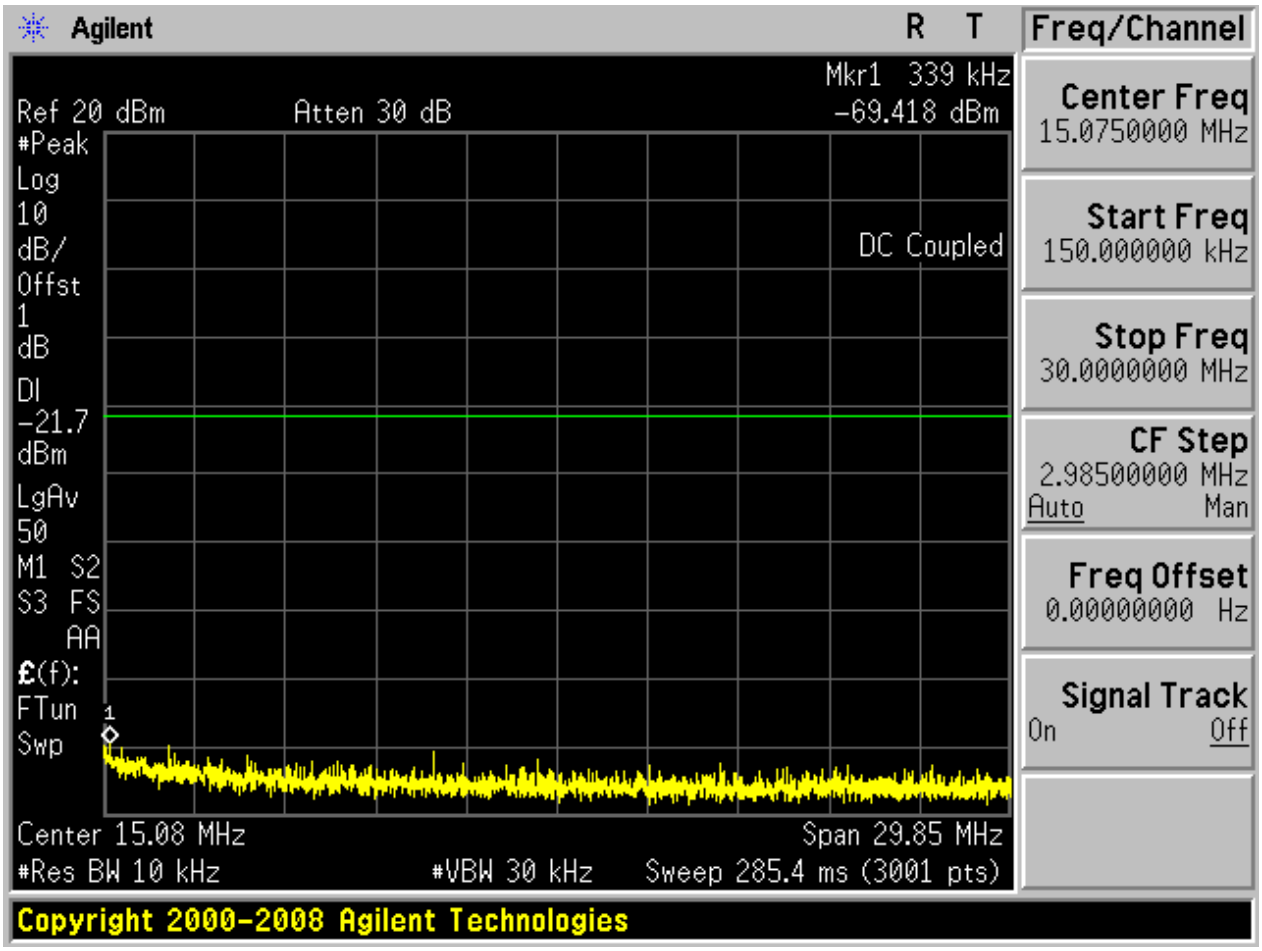

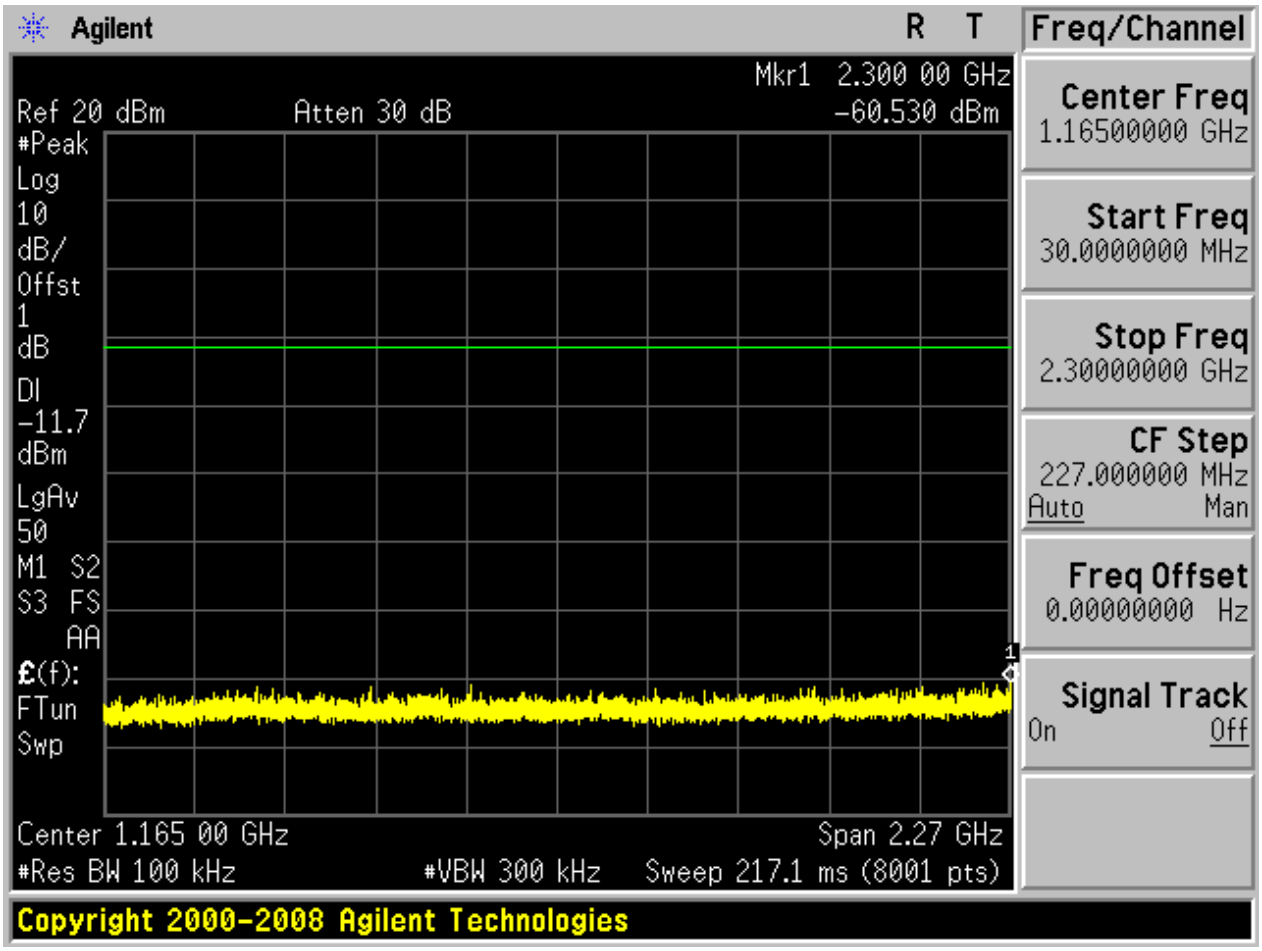

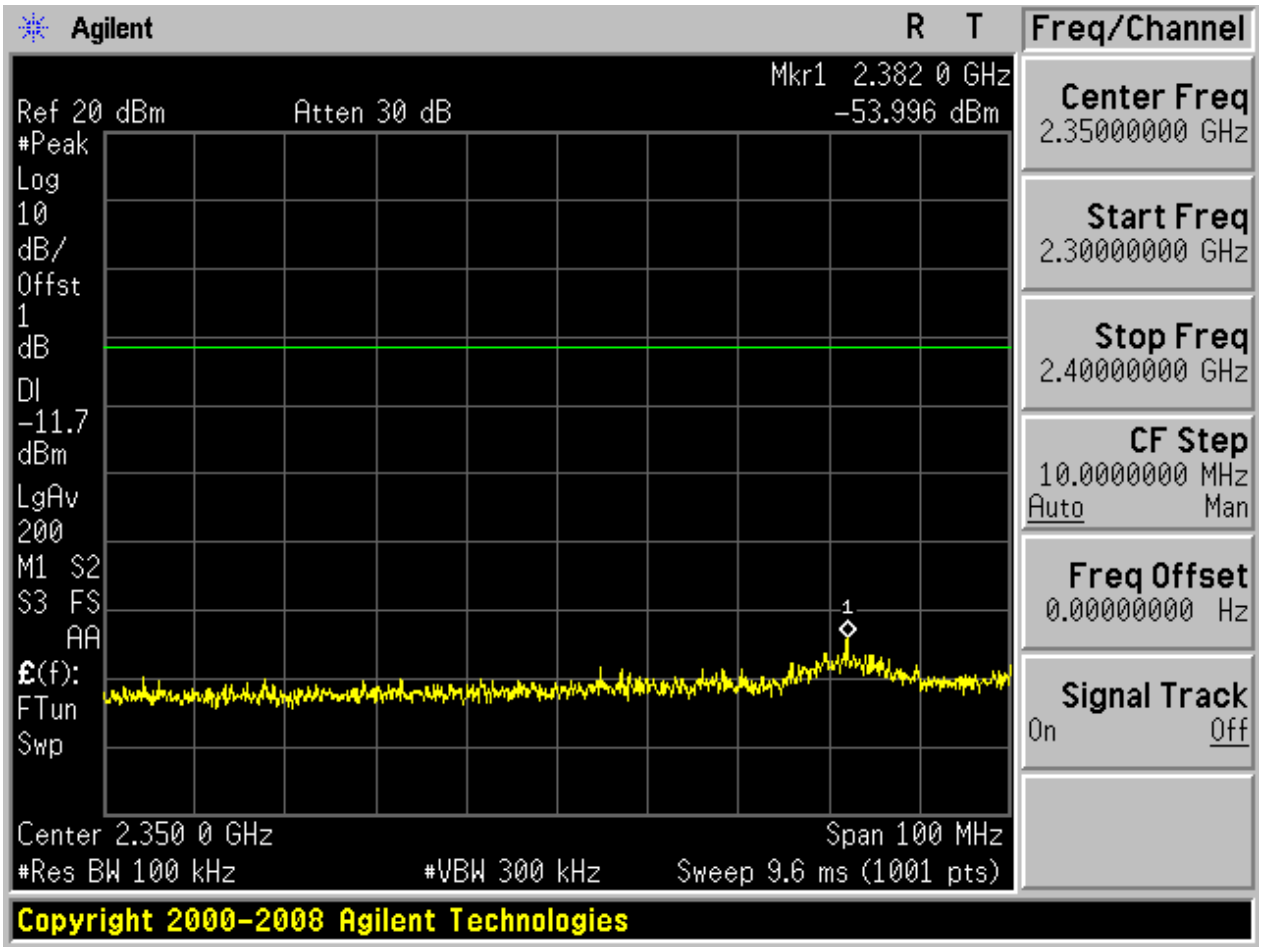

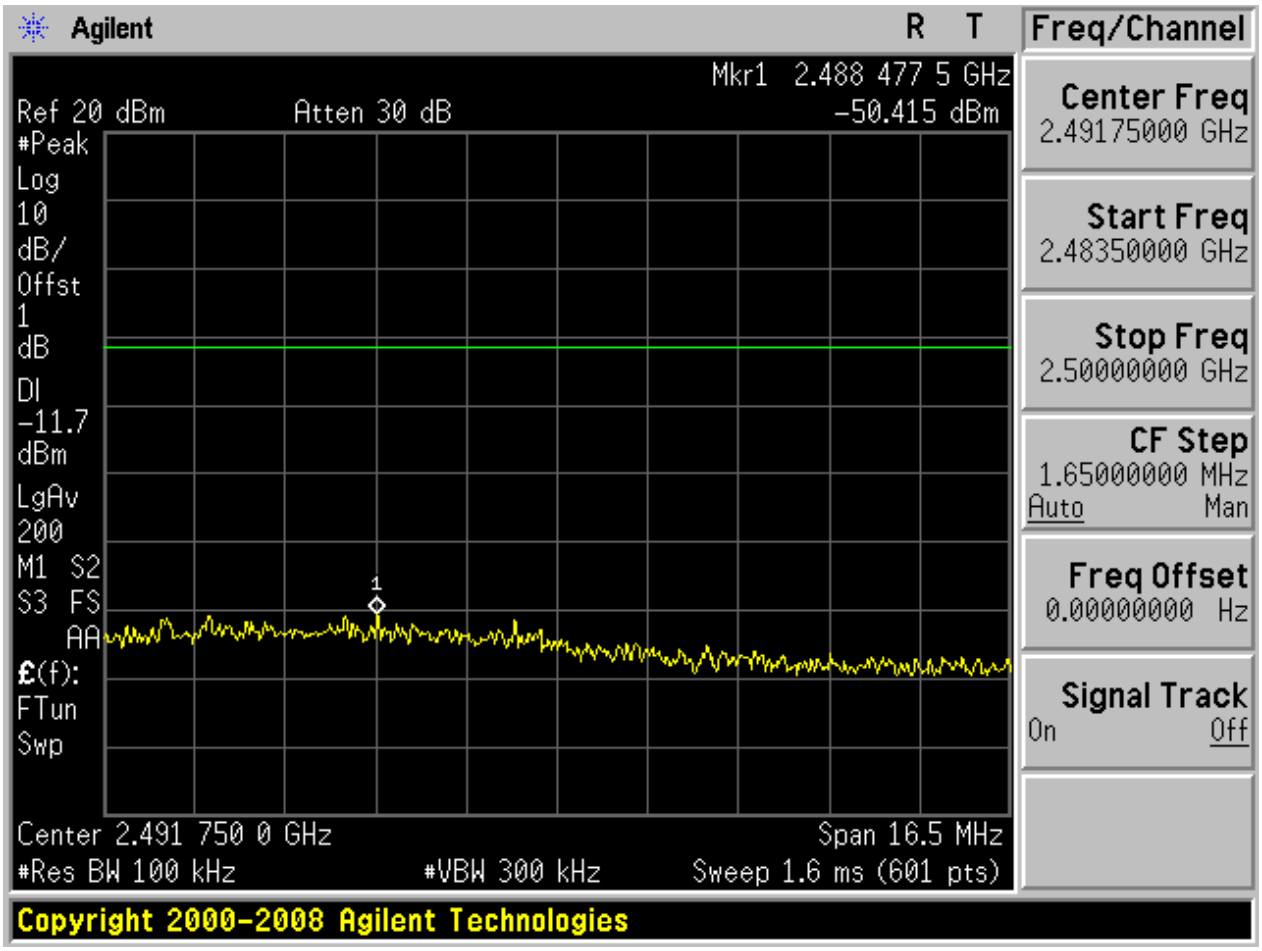

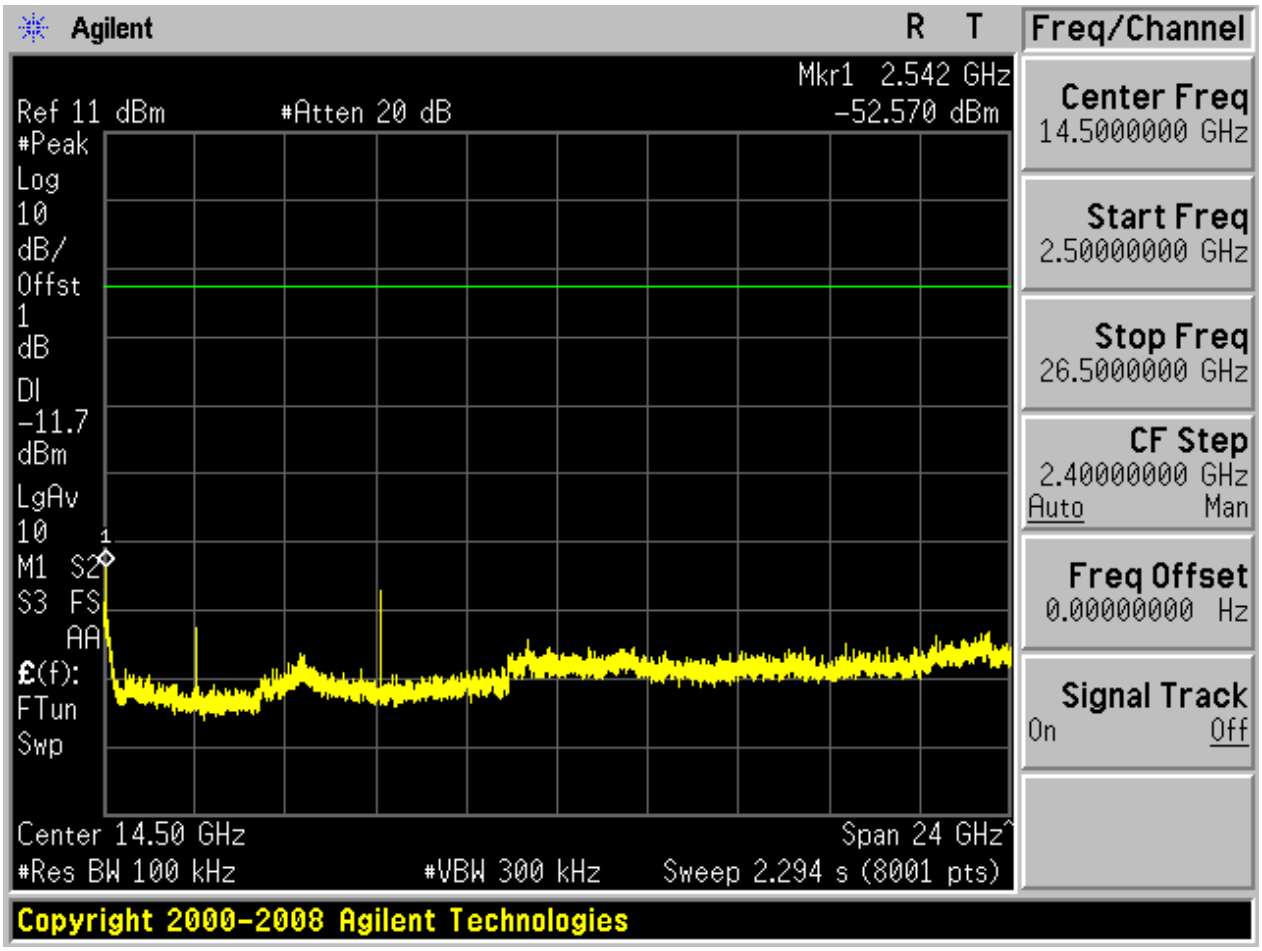

2.4 11G_L

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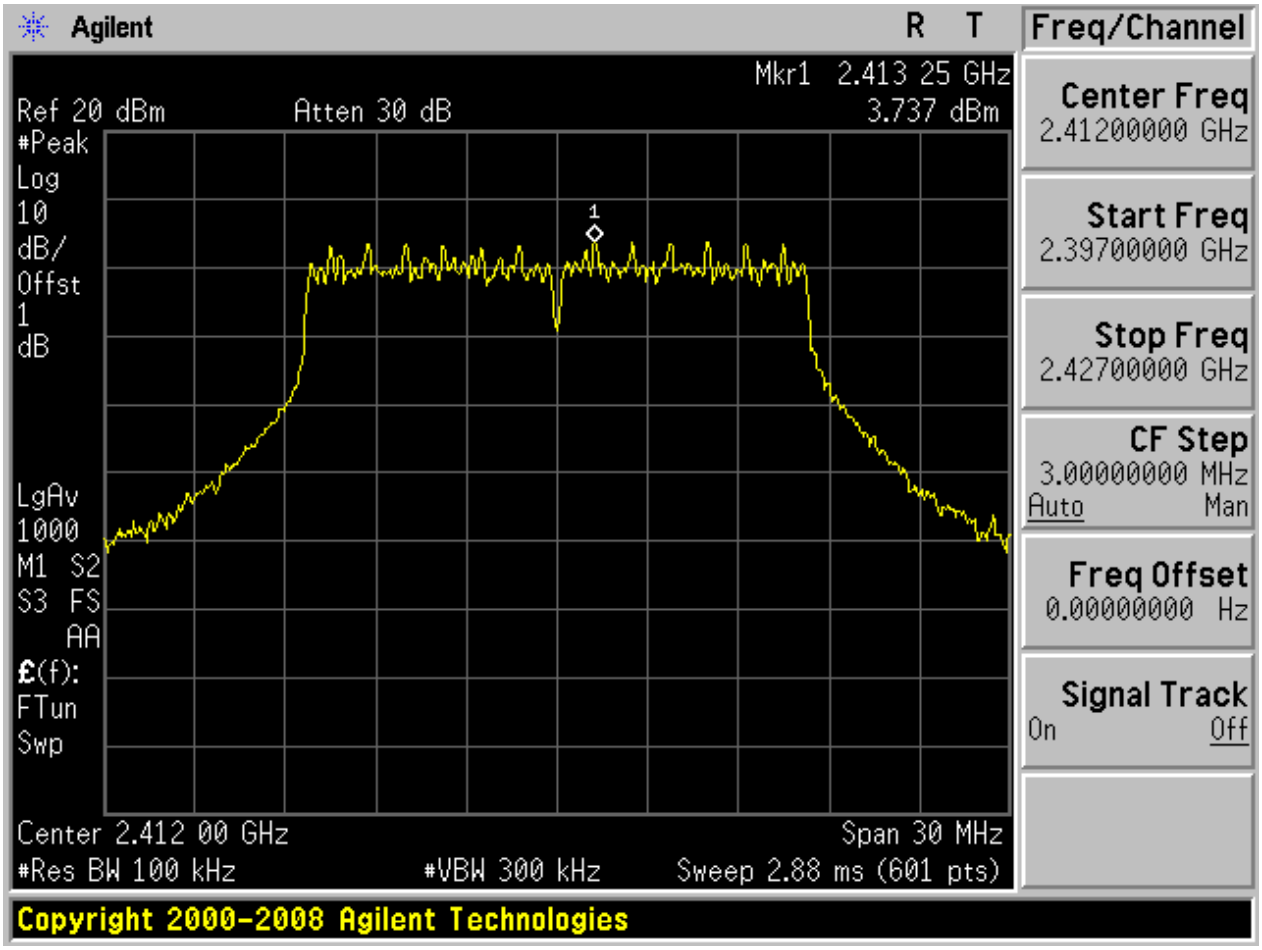

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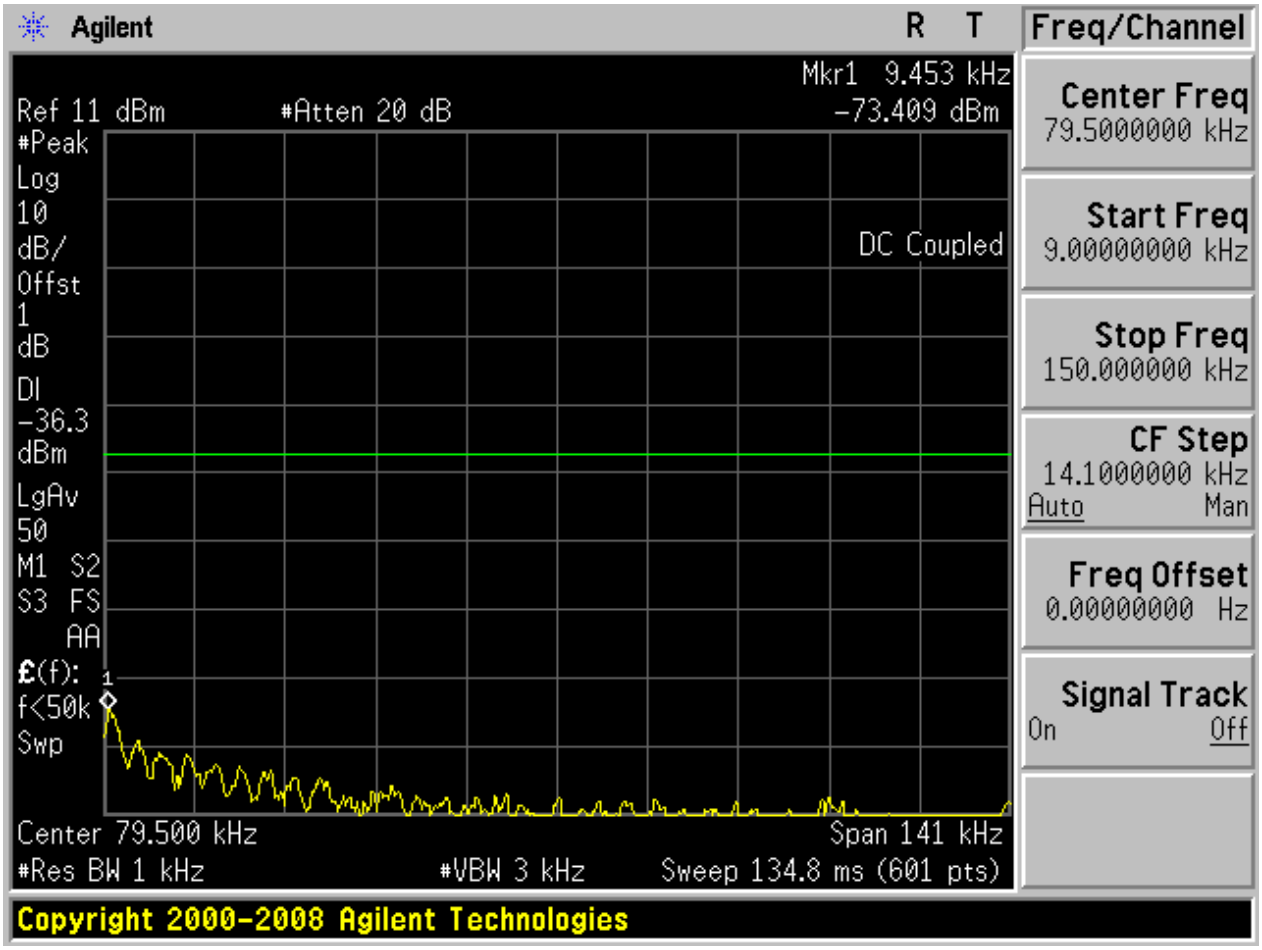

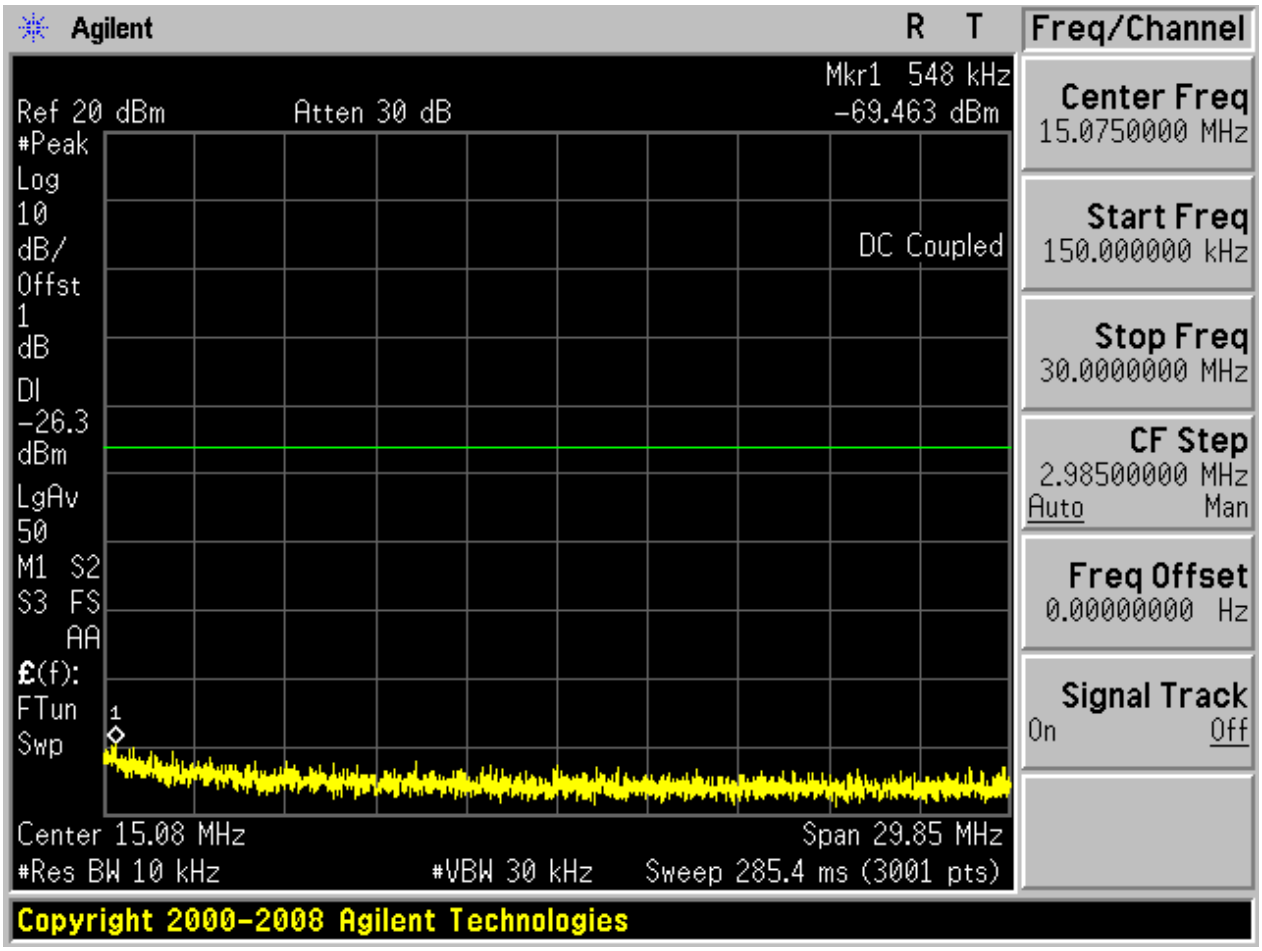

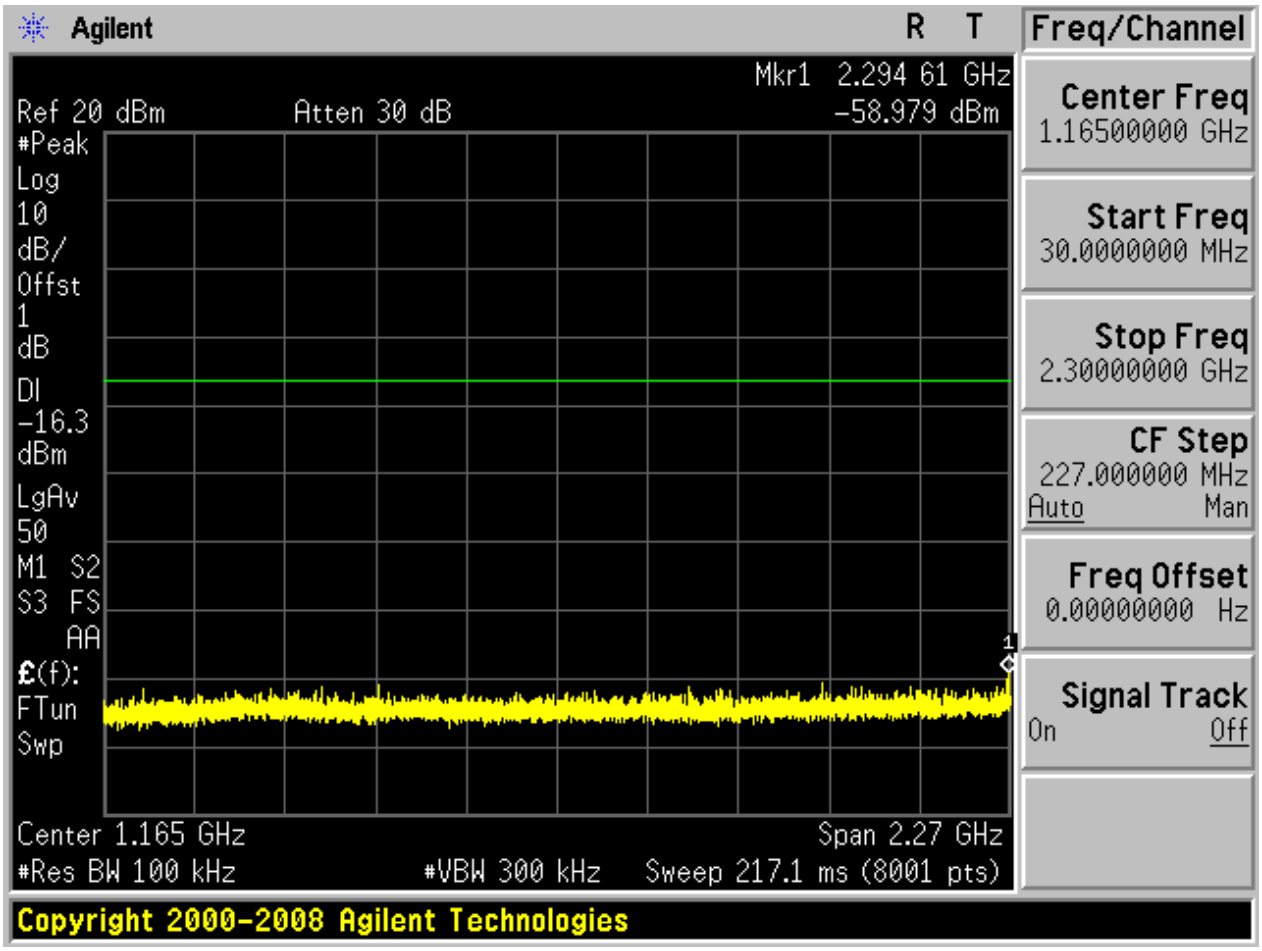

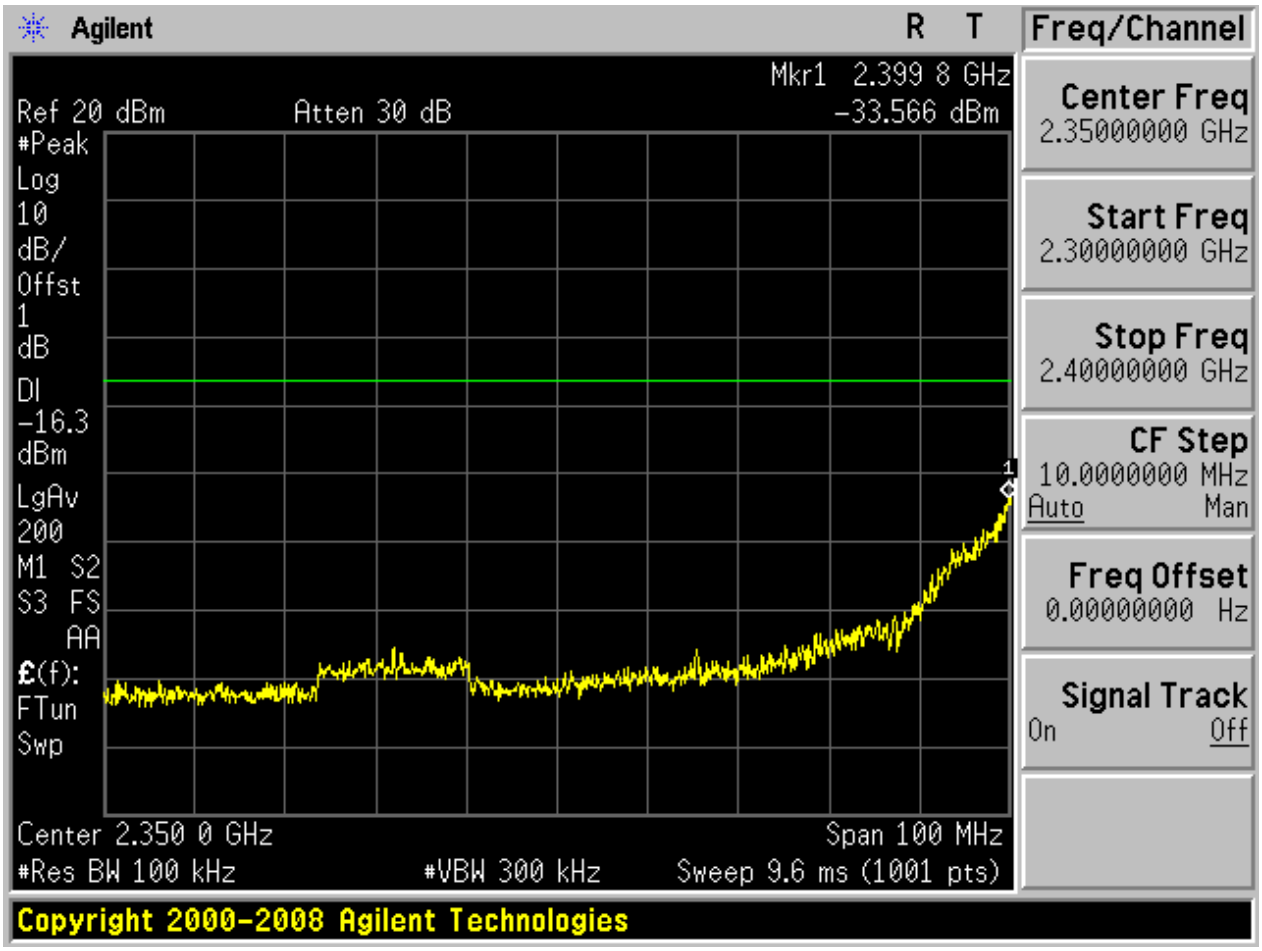

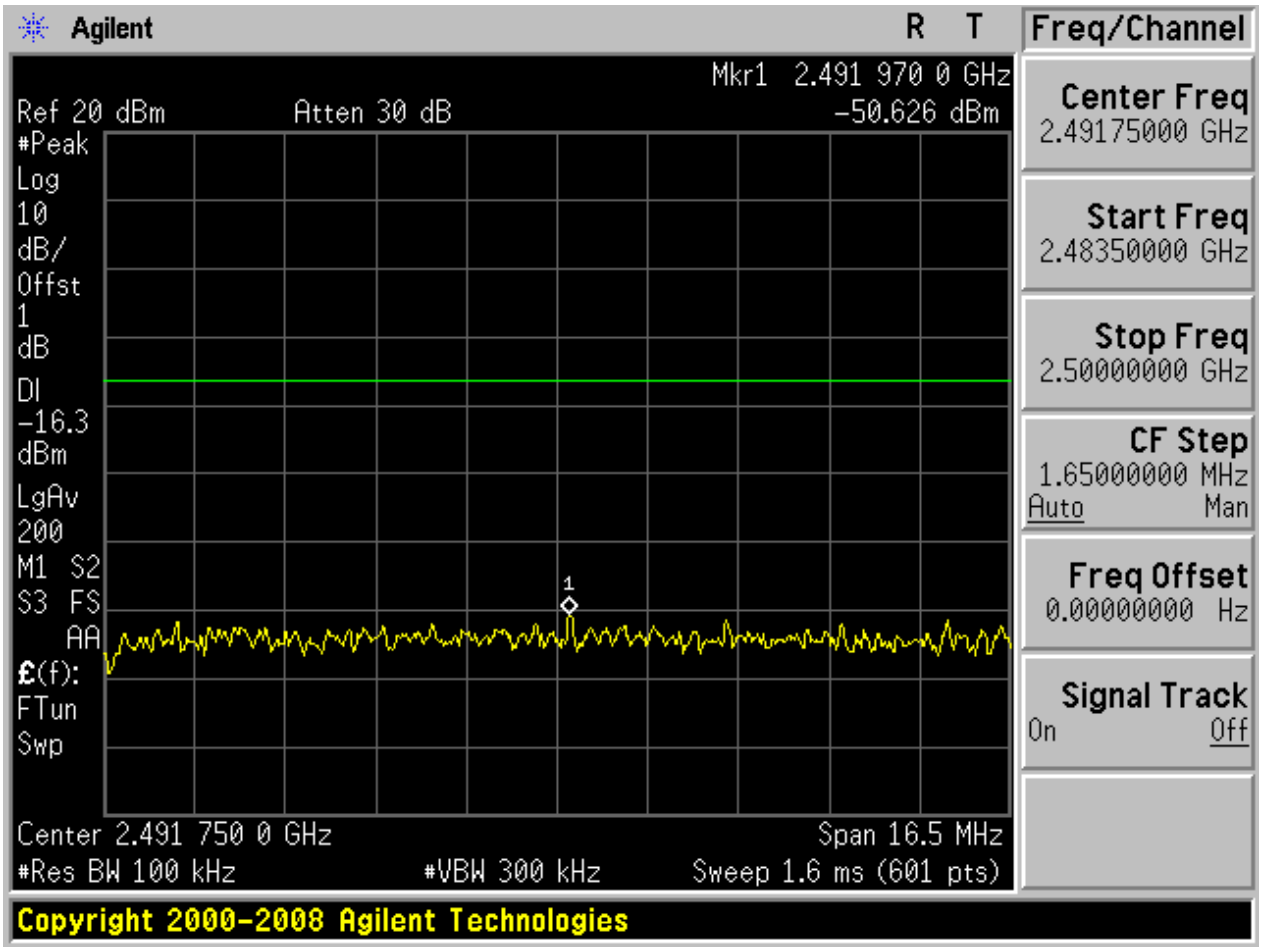

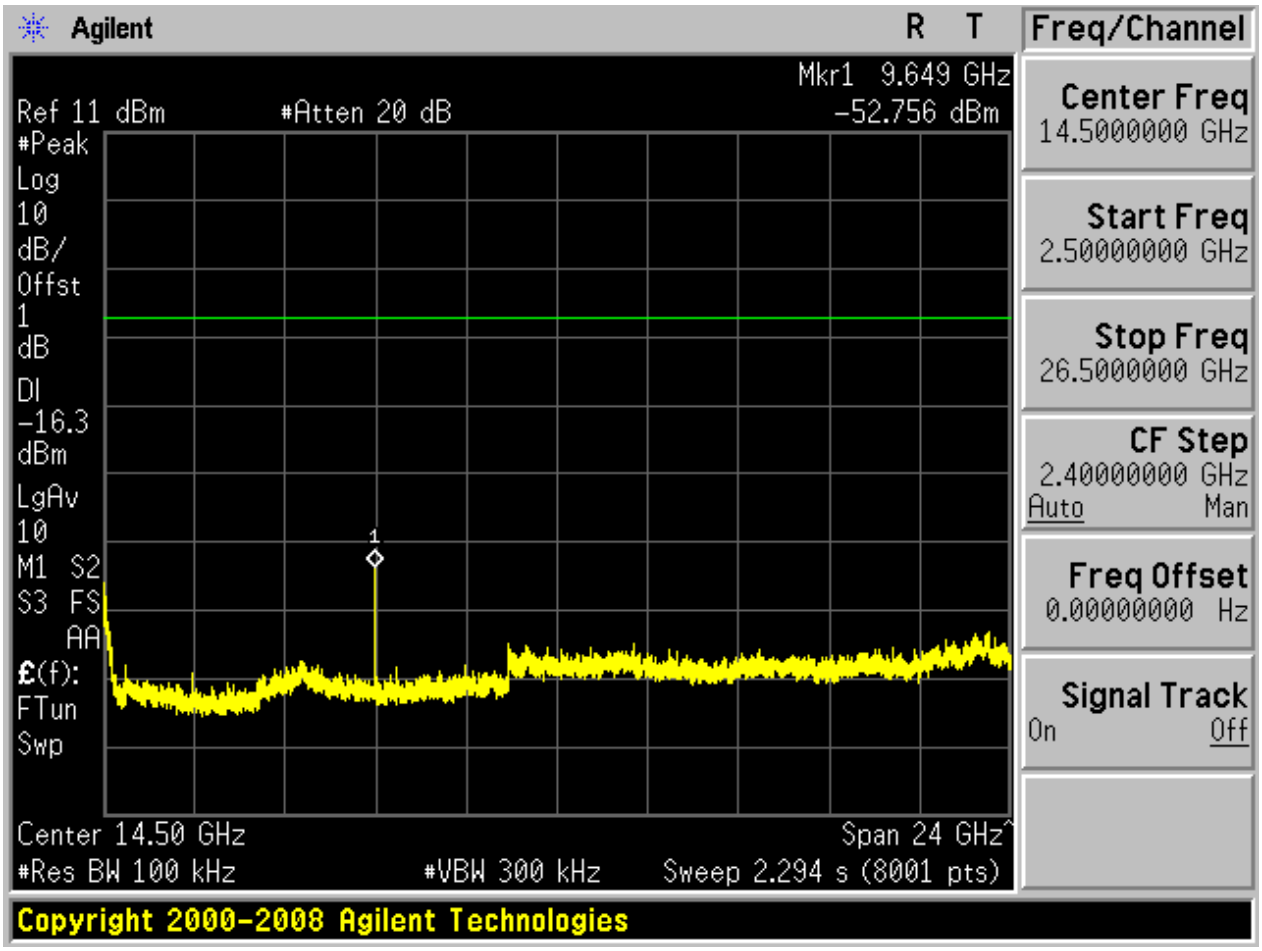

2.5 11G_M

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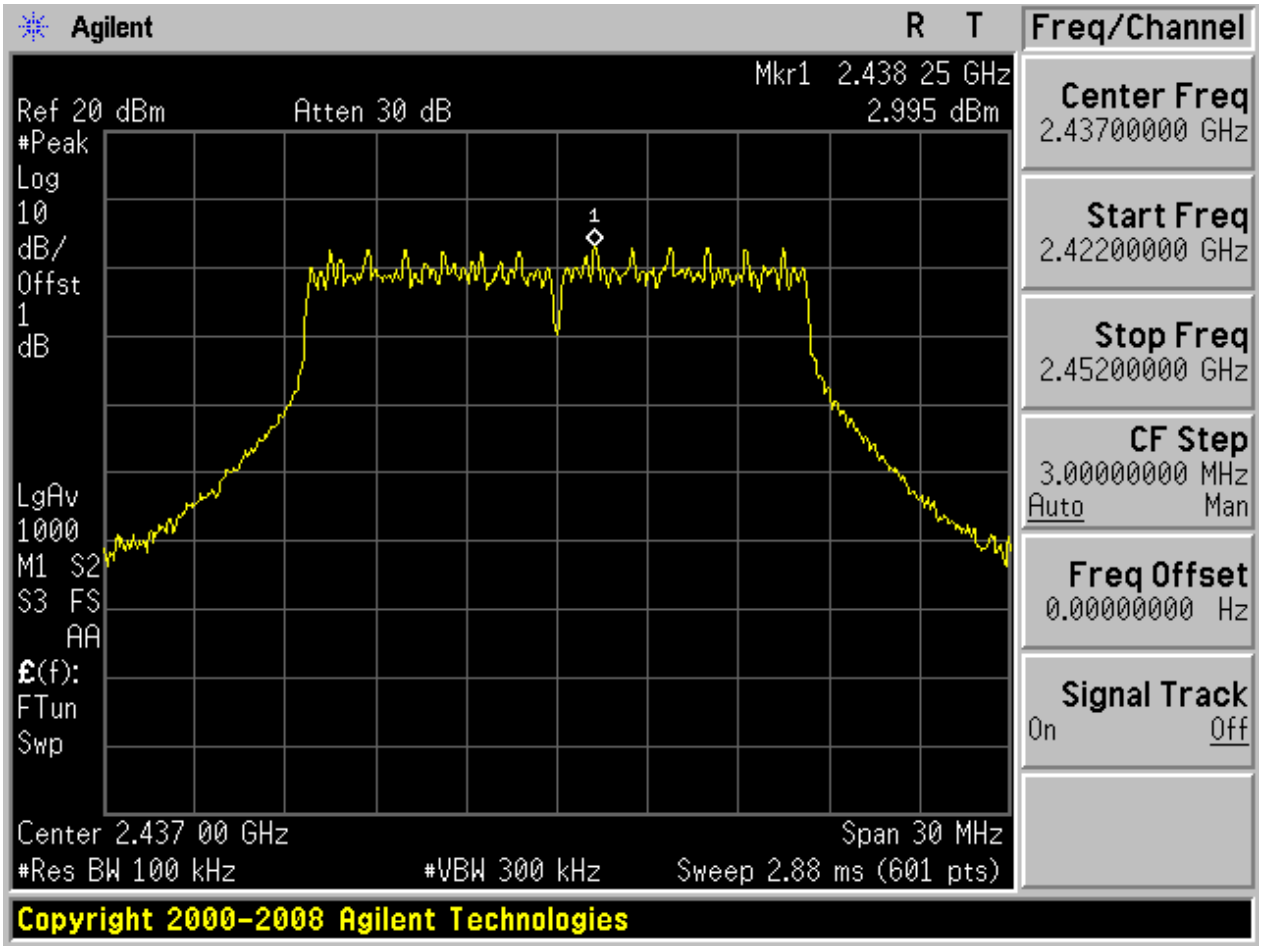

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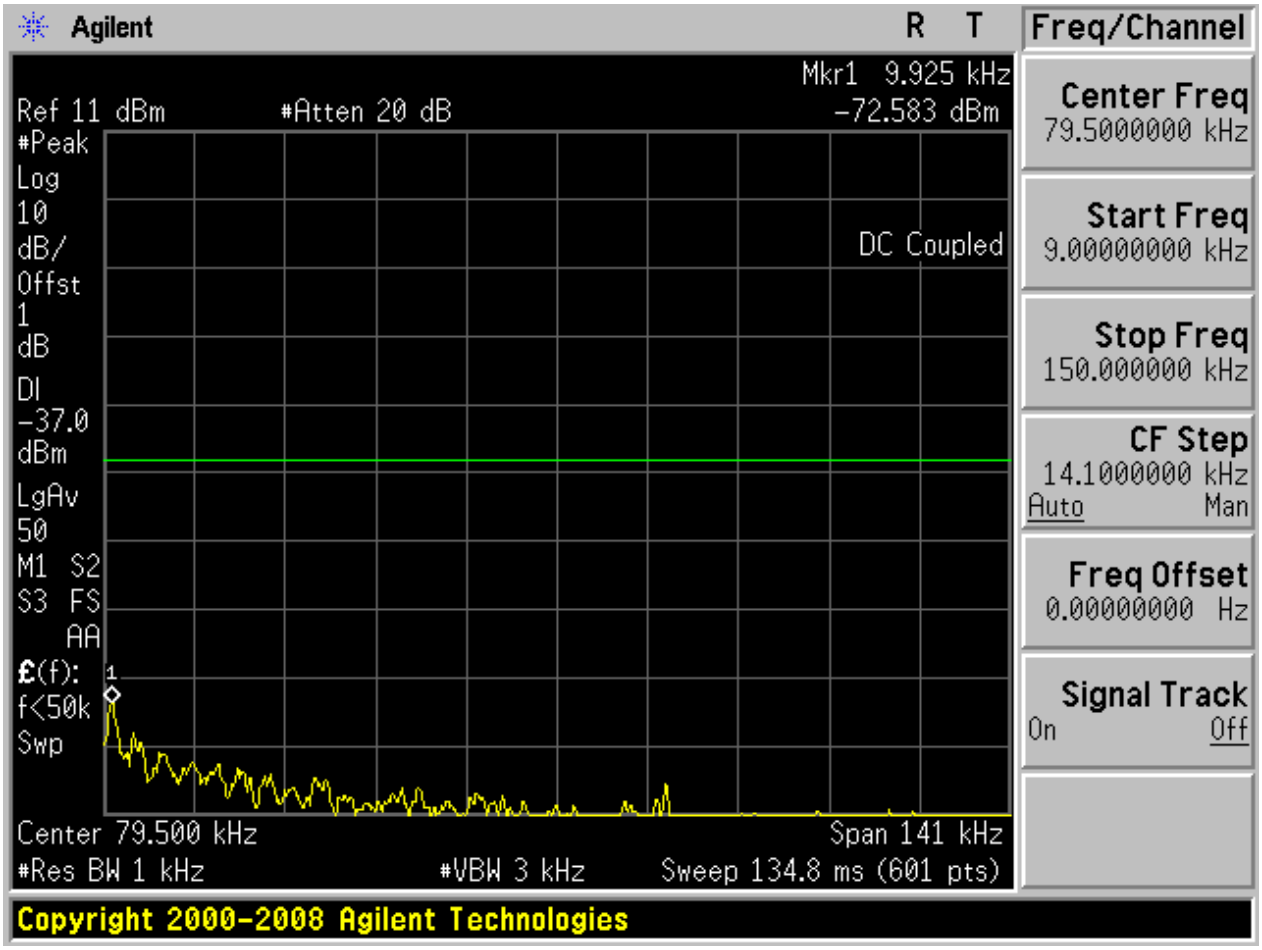

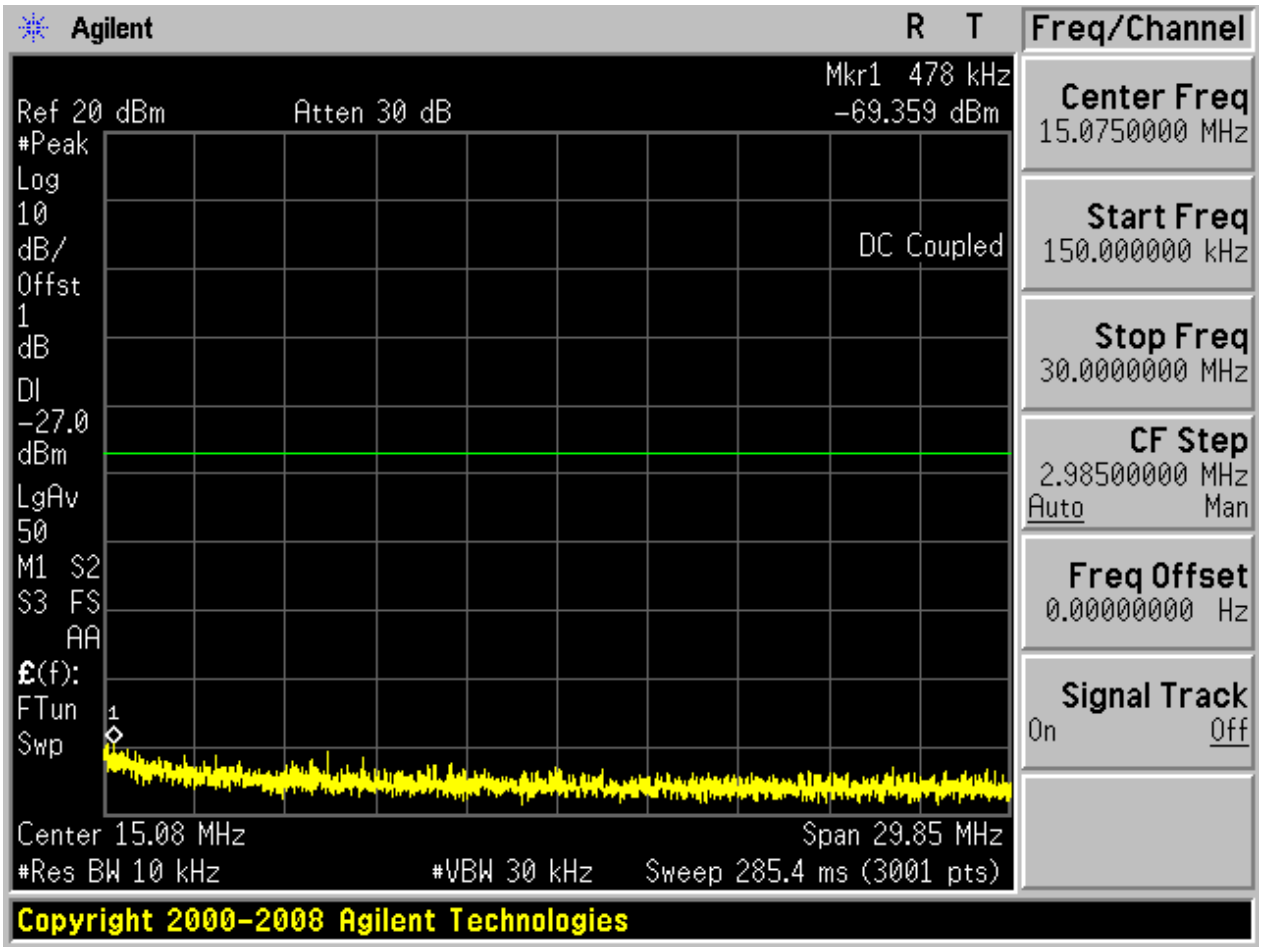

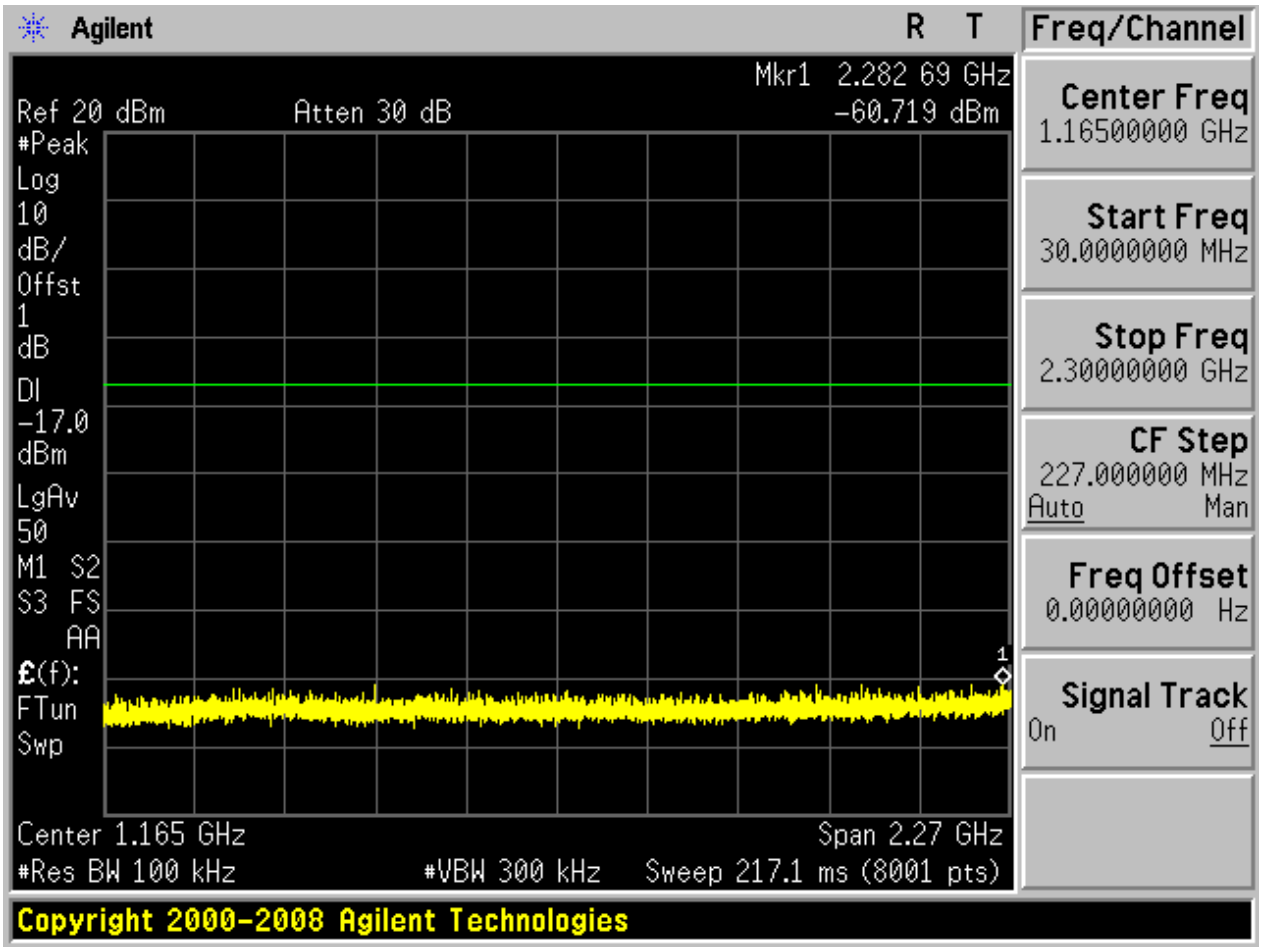

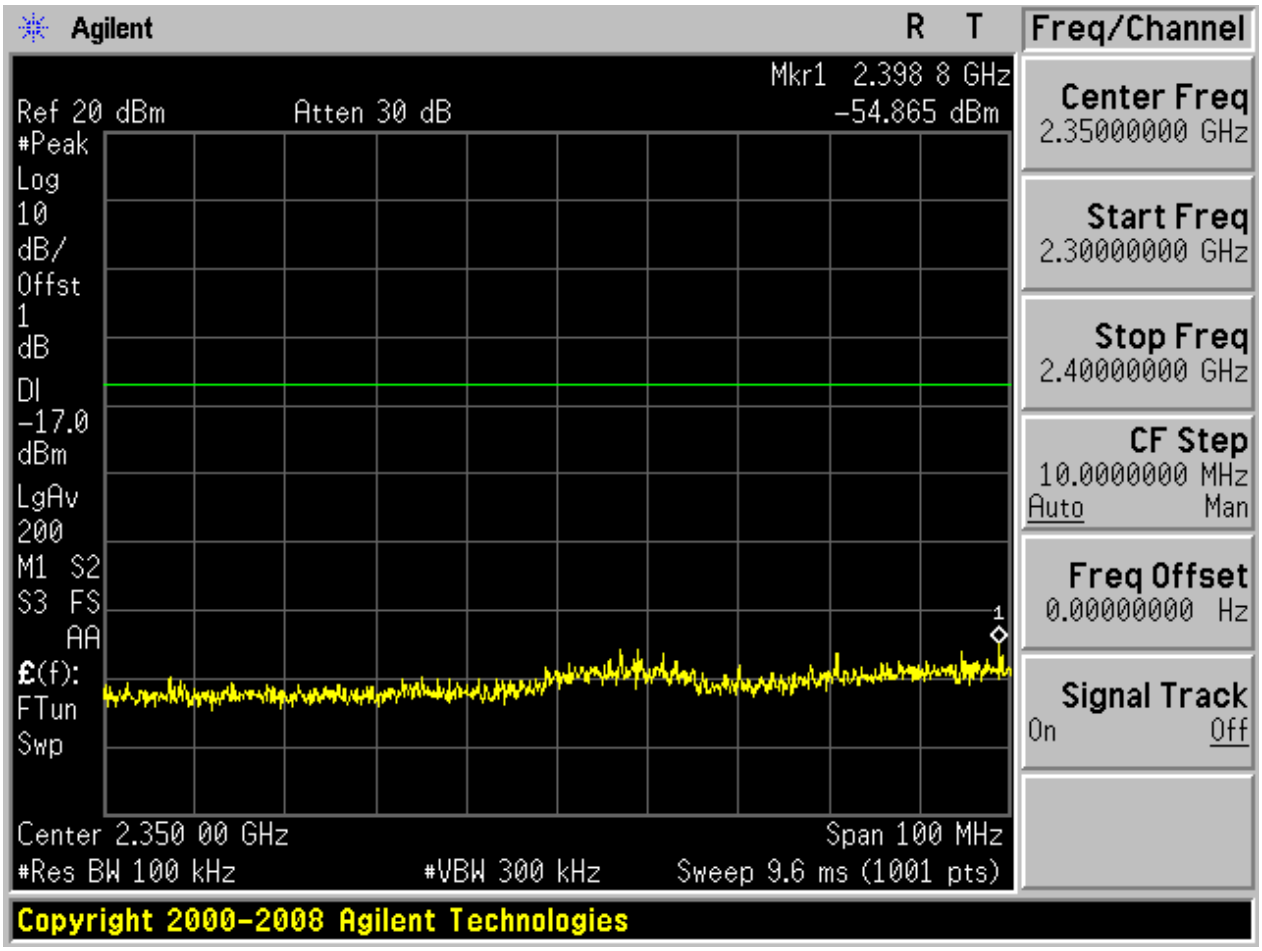

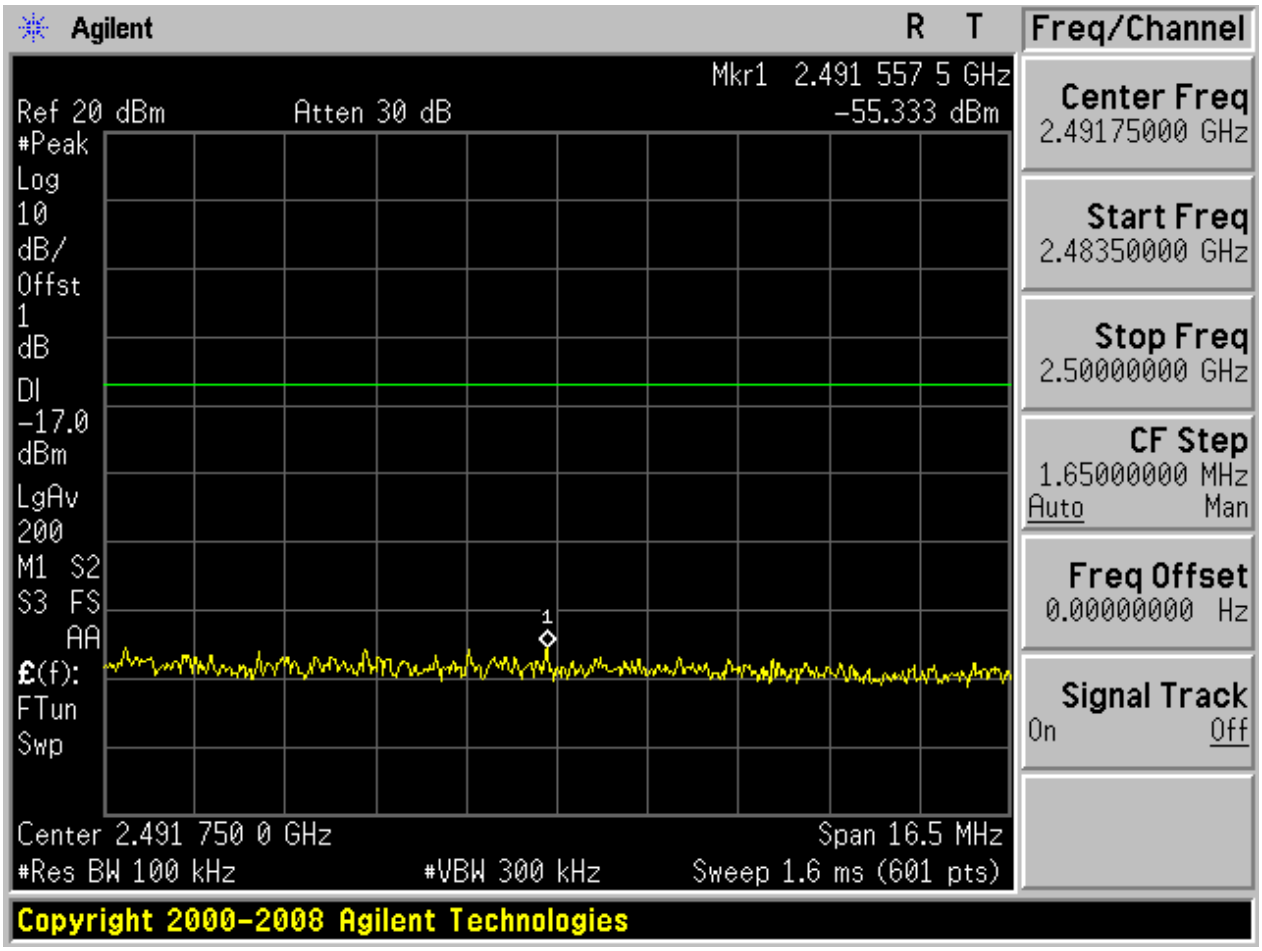

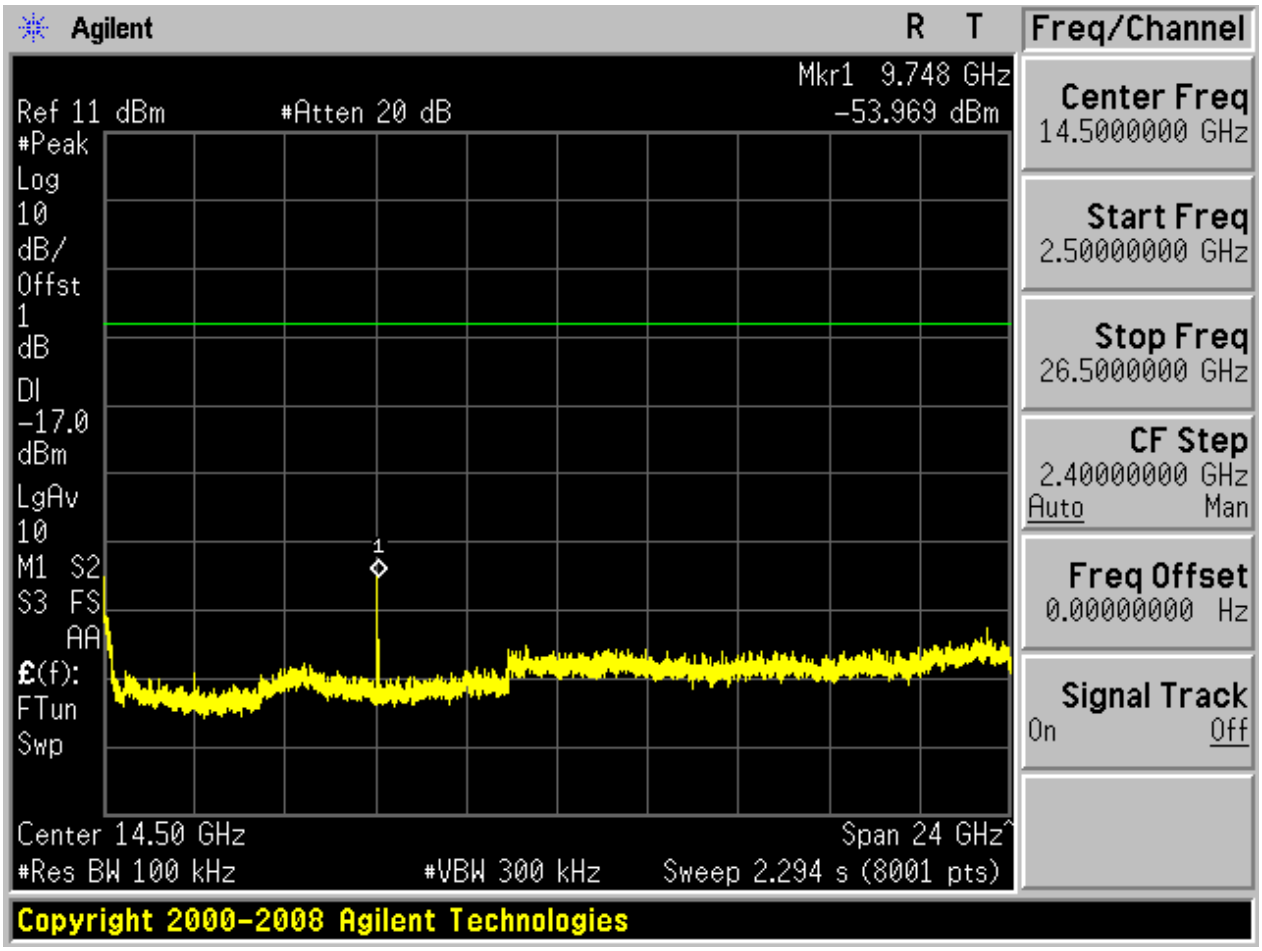

2.6 11G_H

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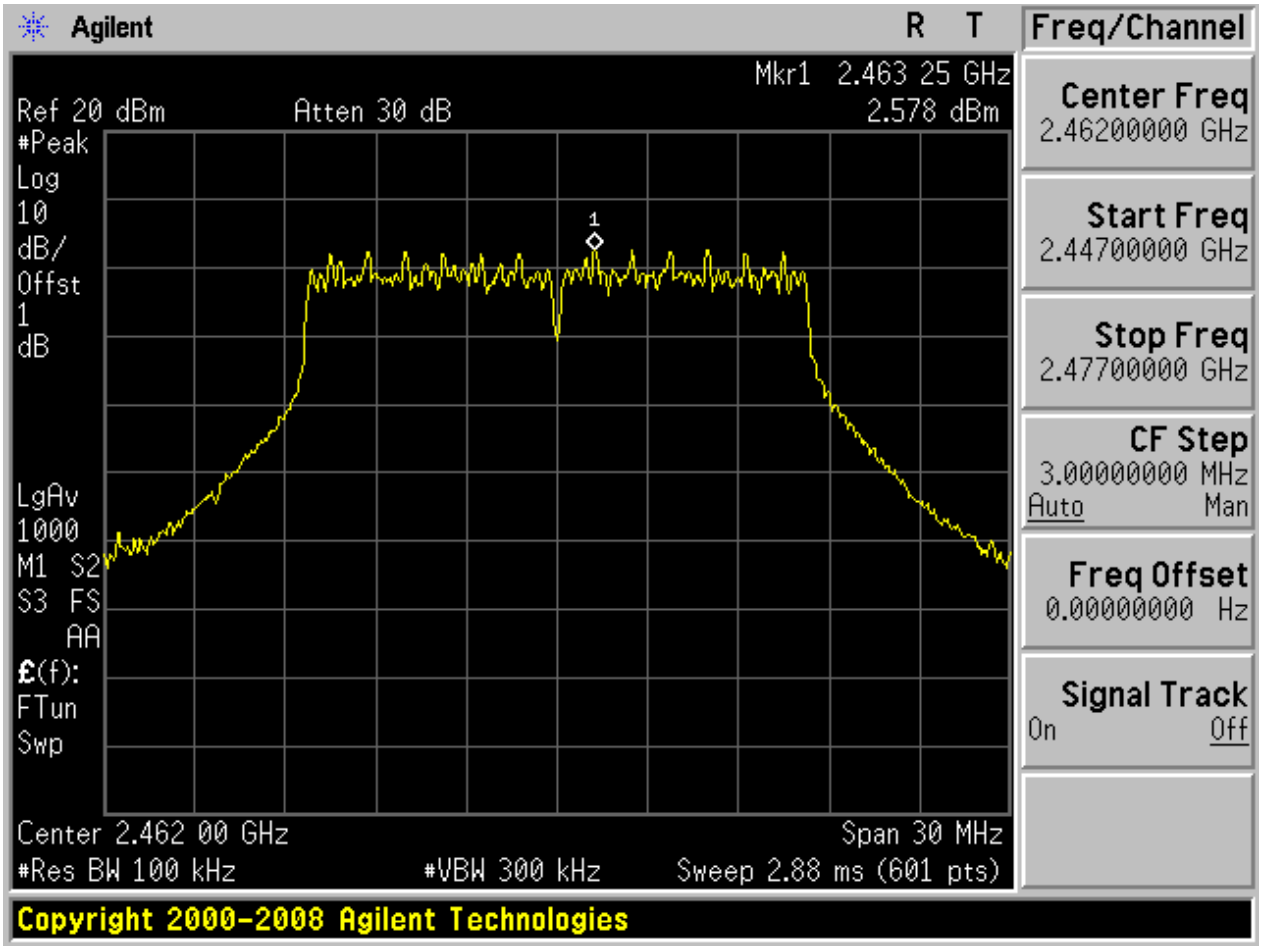

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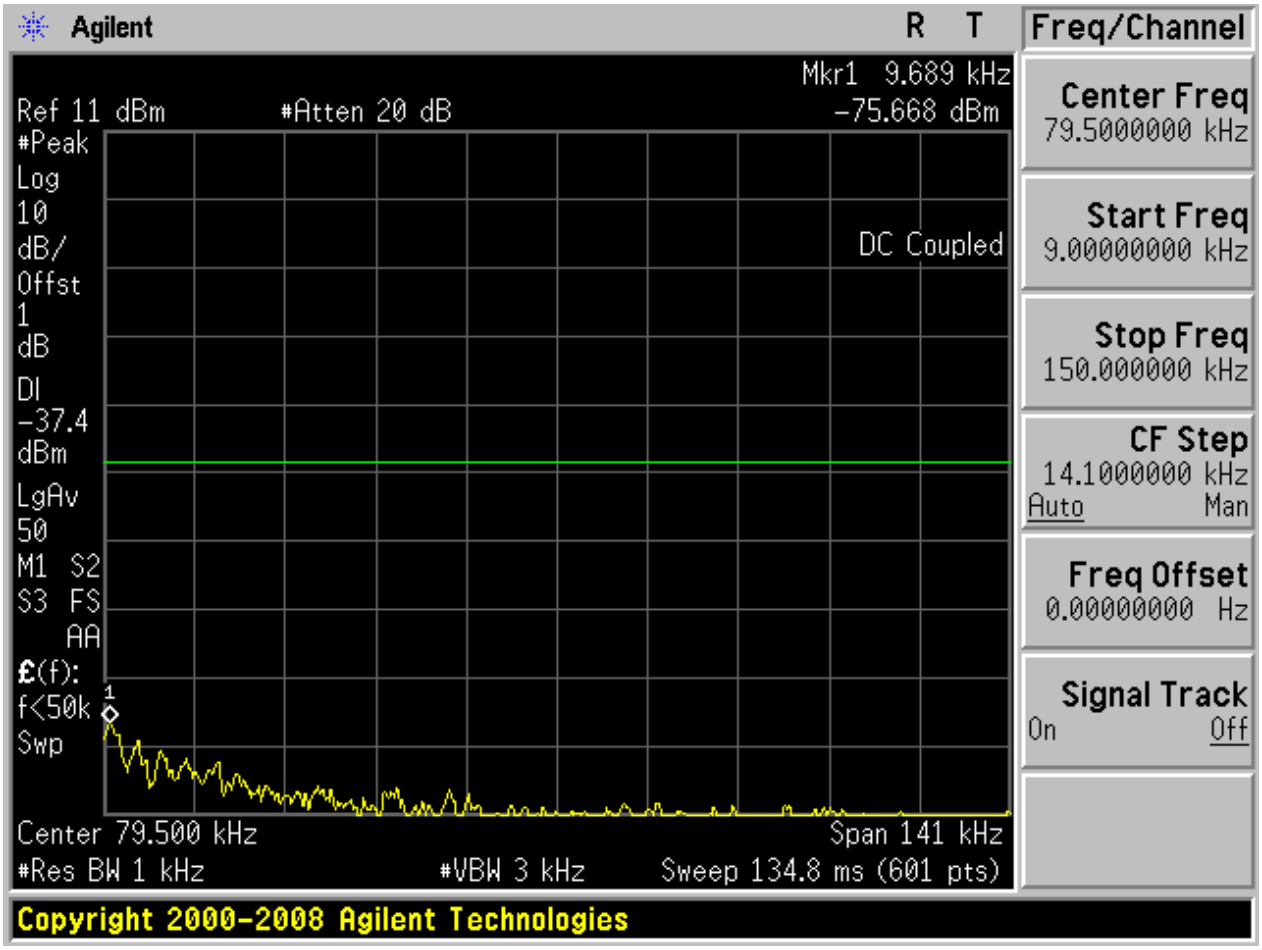
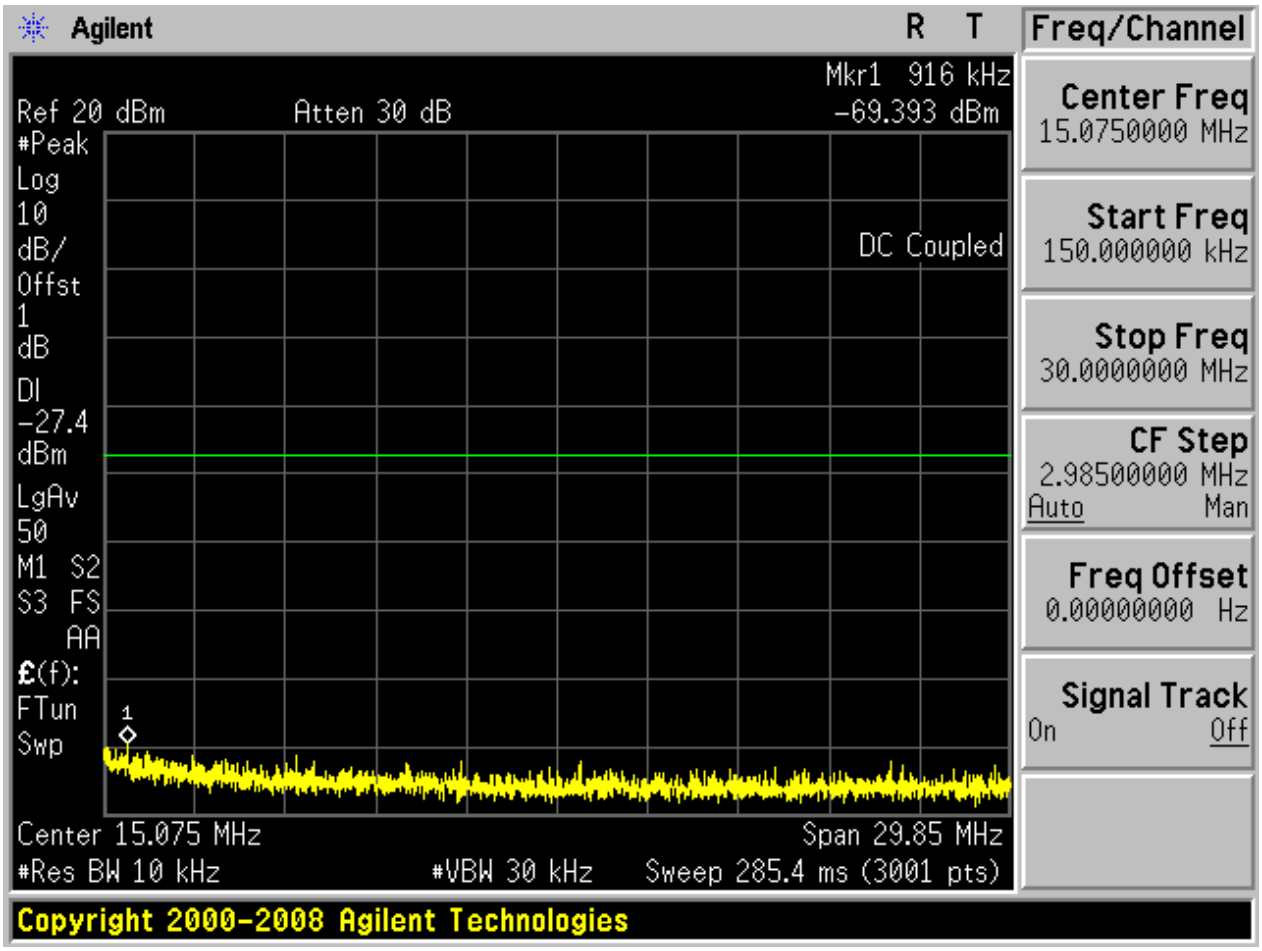
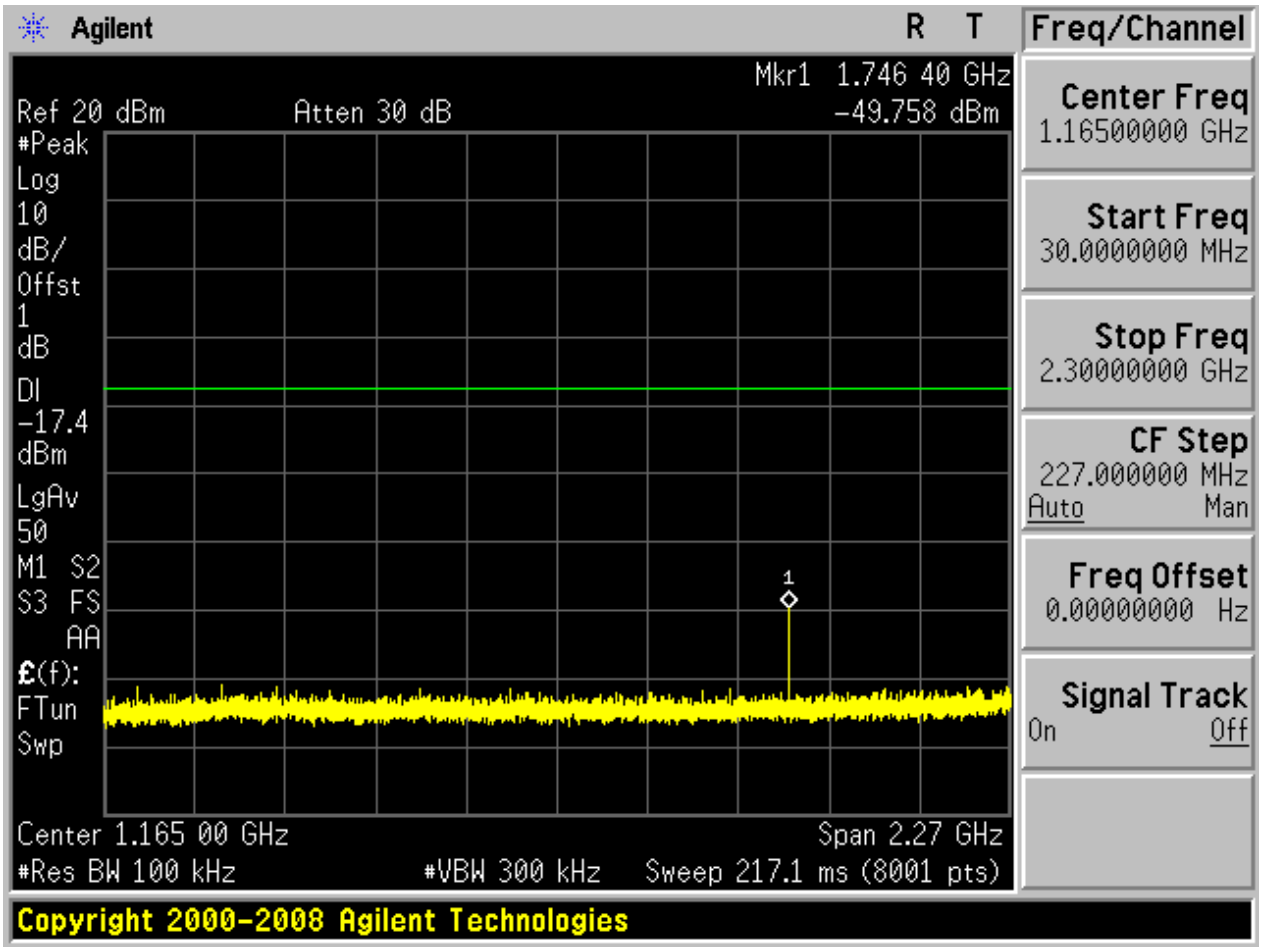
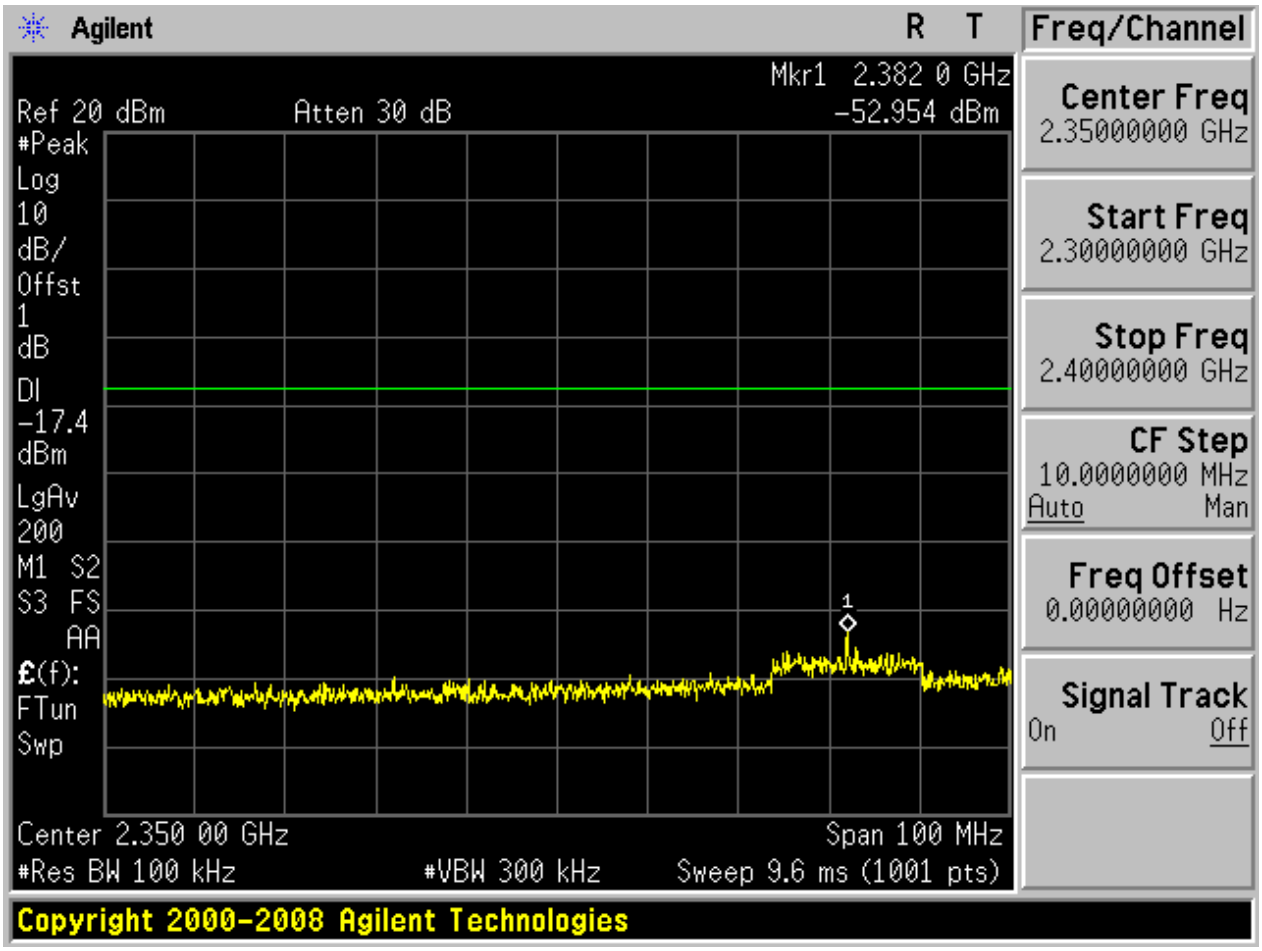
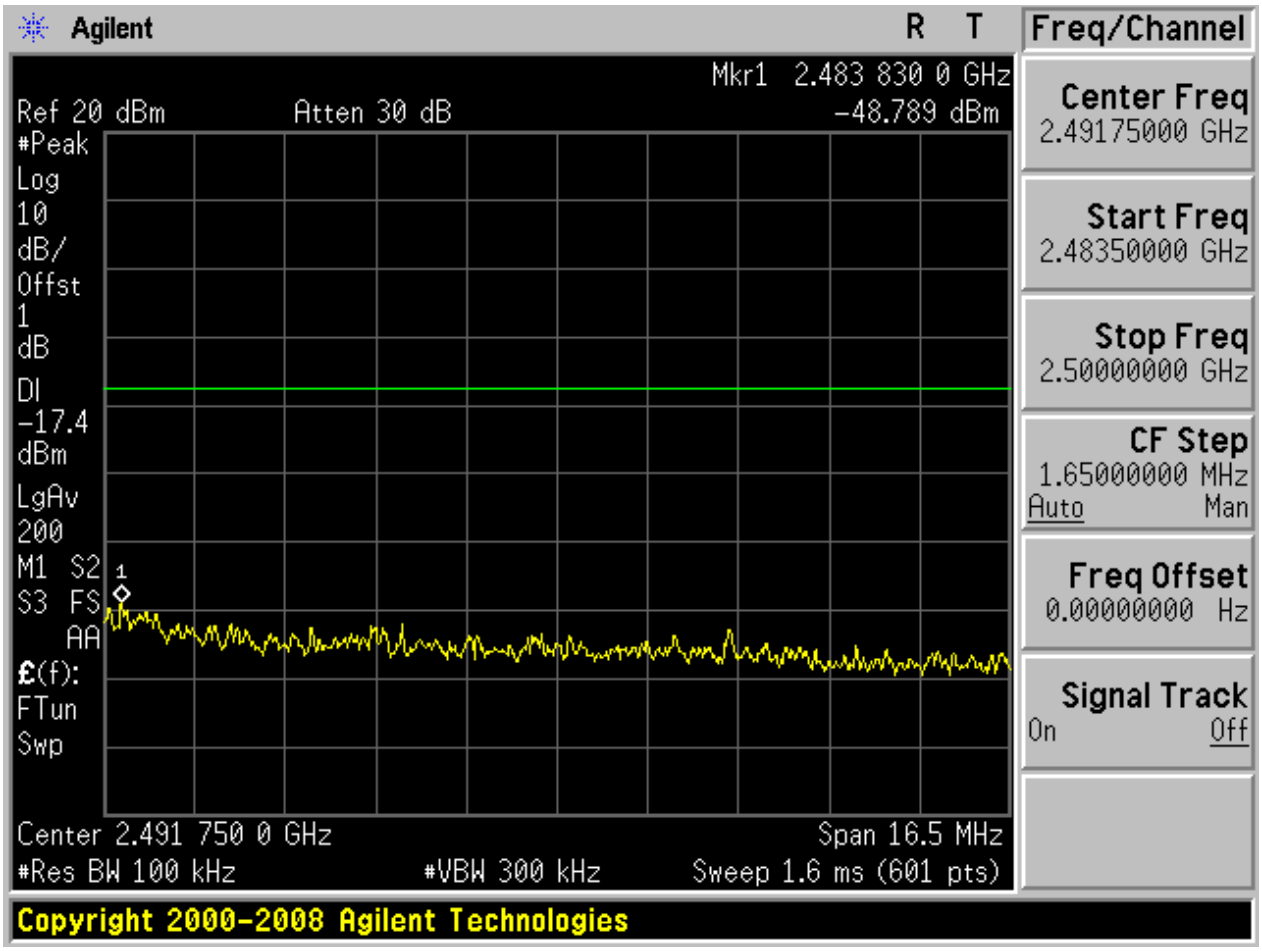
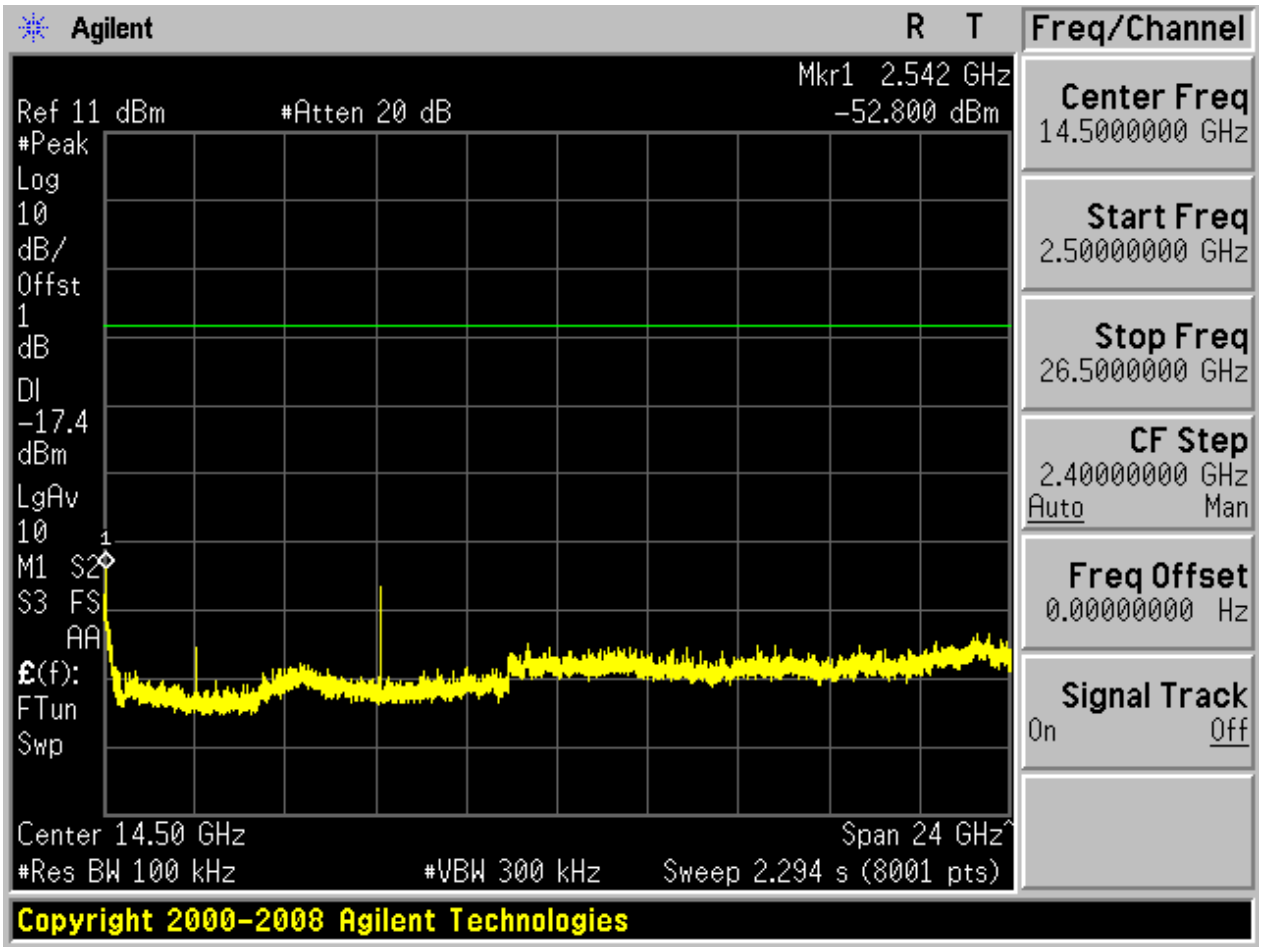






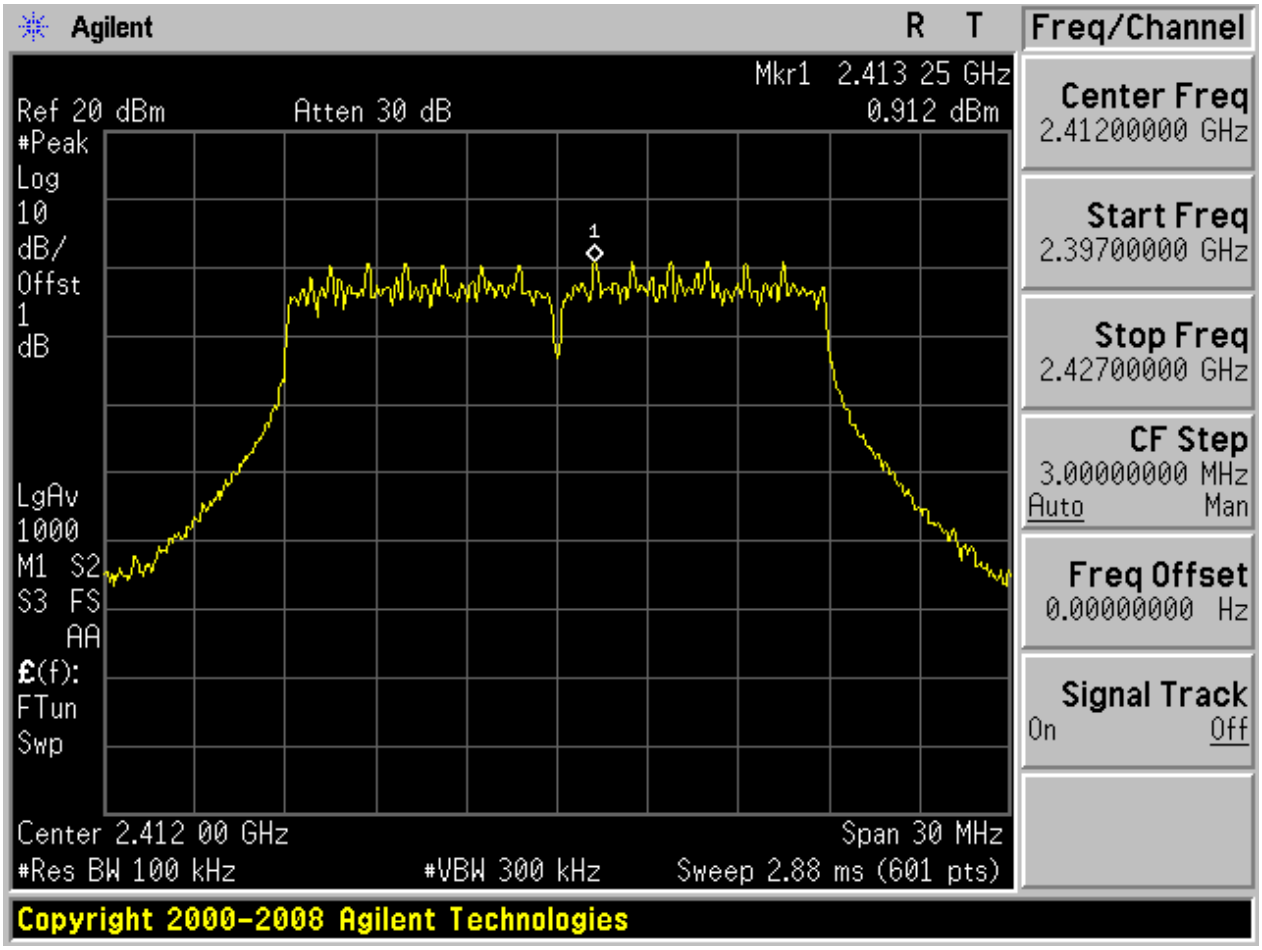





Agilent
R T
Freq/Channel
Mkr1 2.542 GHz
Ref 11 dBm
#Atten 20 dB
-52.800 dBm
#Peak
Log
10
dB/
Offst
1
dB
Dl
-17.4
dBm
LgAv
10
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 14.50 GHz
Span 24 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.294 s (8001 pts)
Center Freq
14.5000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
26.5000000 GHz
CF Step
2.40000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2008 Agilent Technologies

2.7 11N20_L

Pref:



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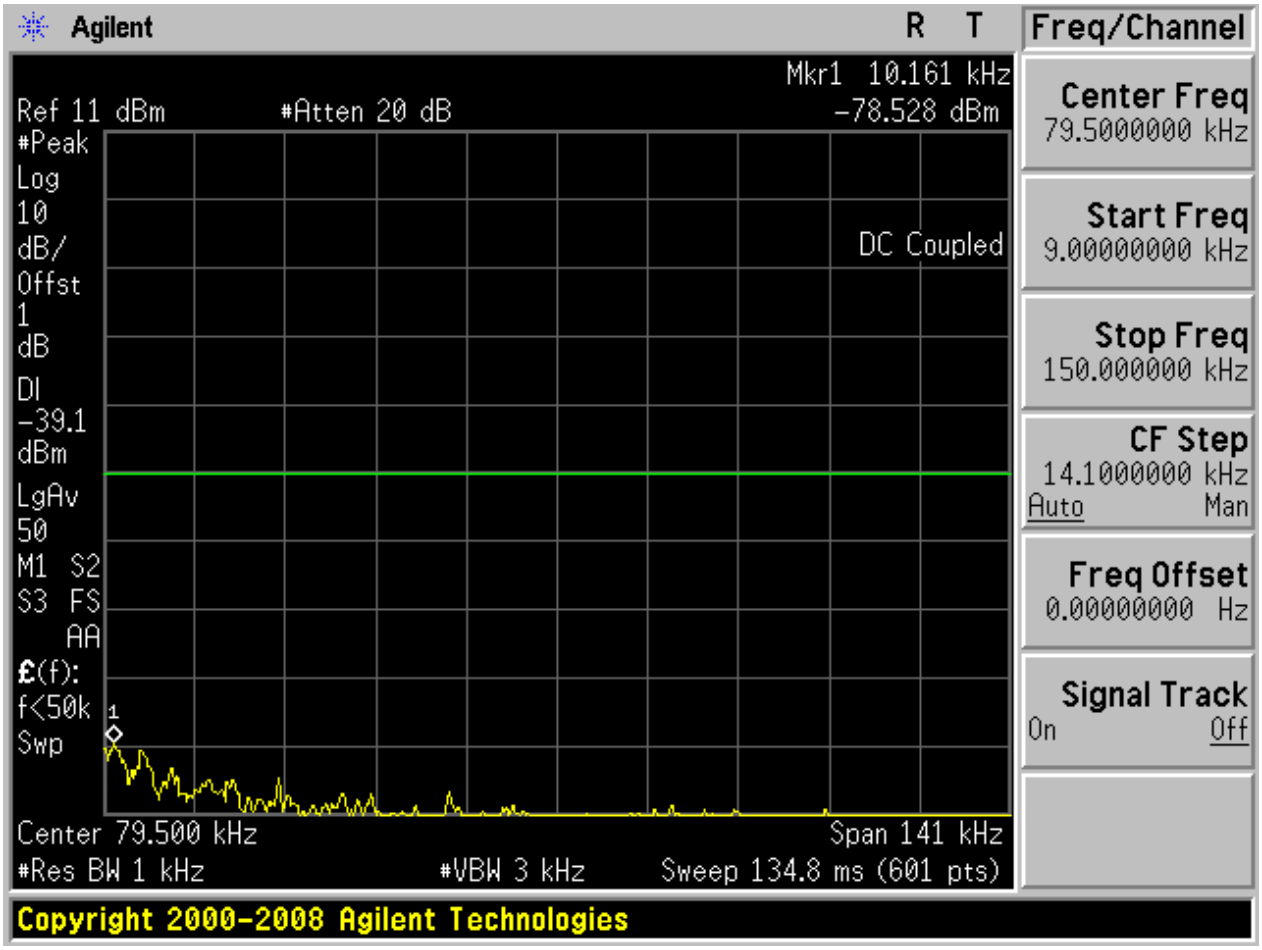

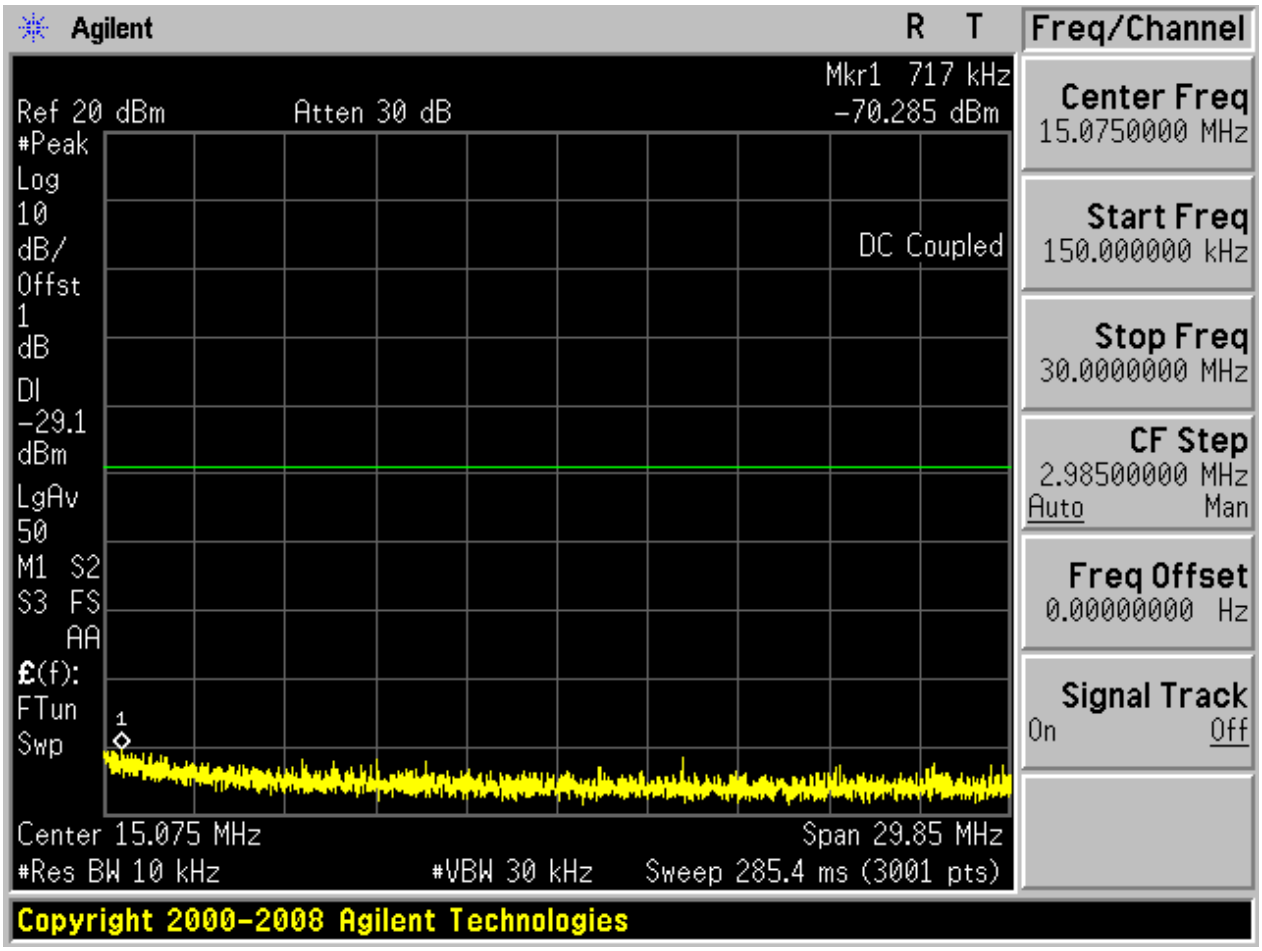

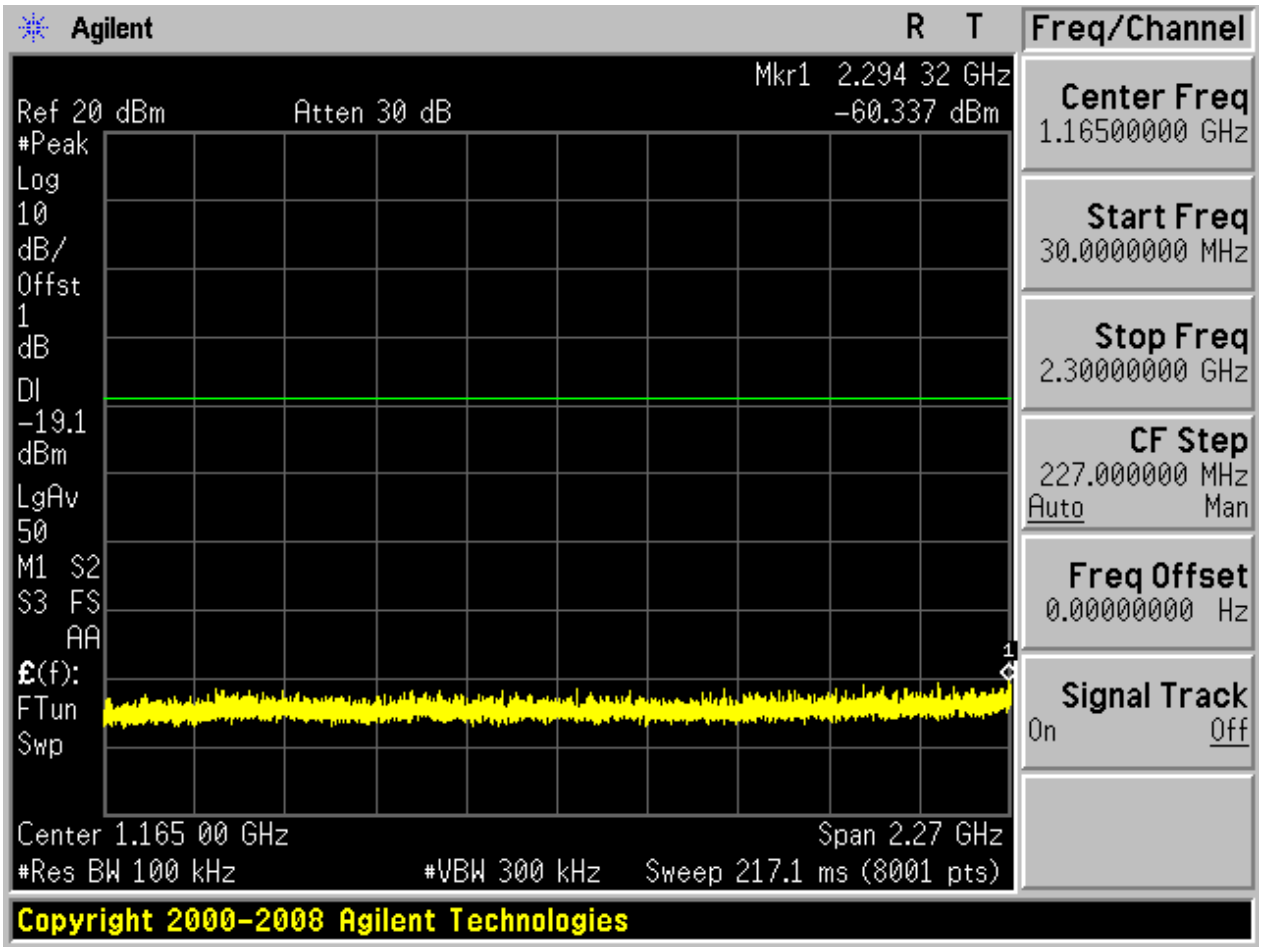

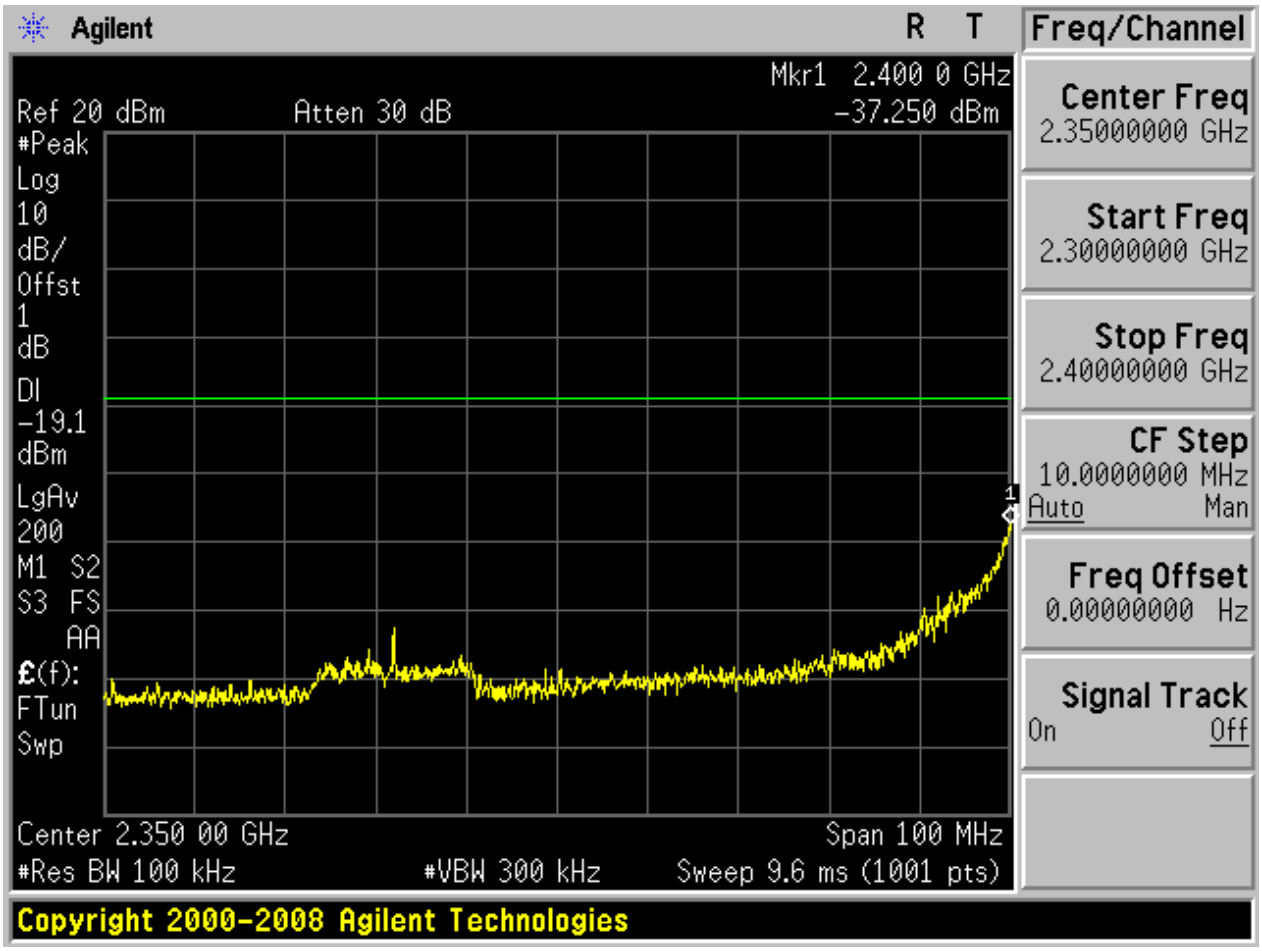

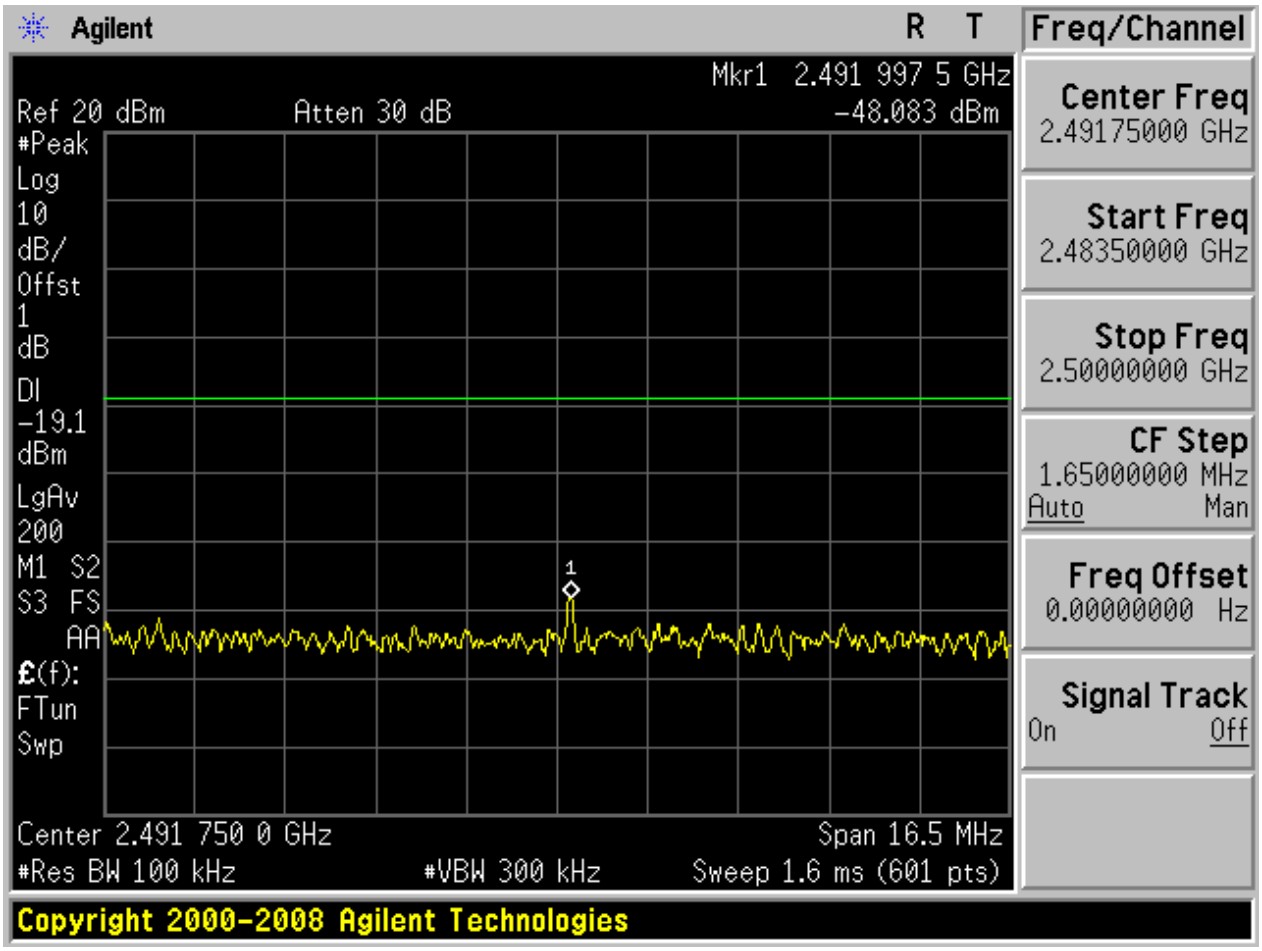

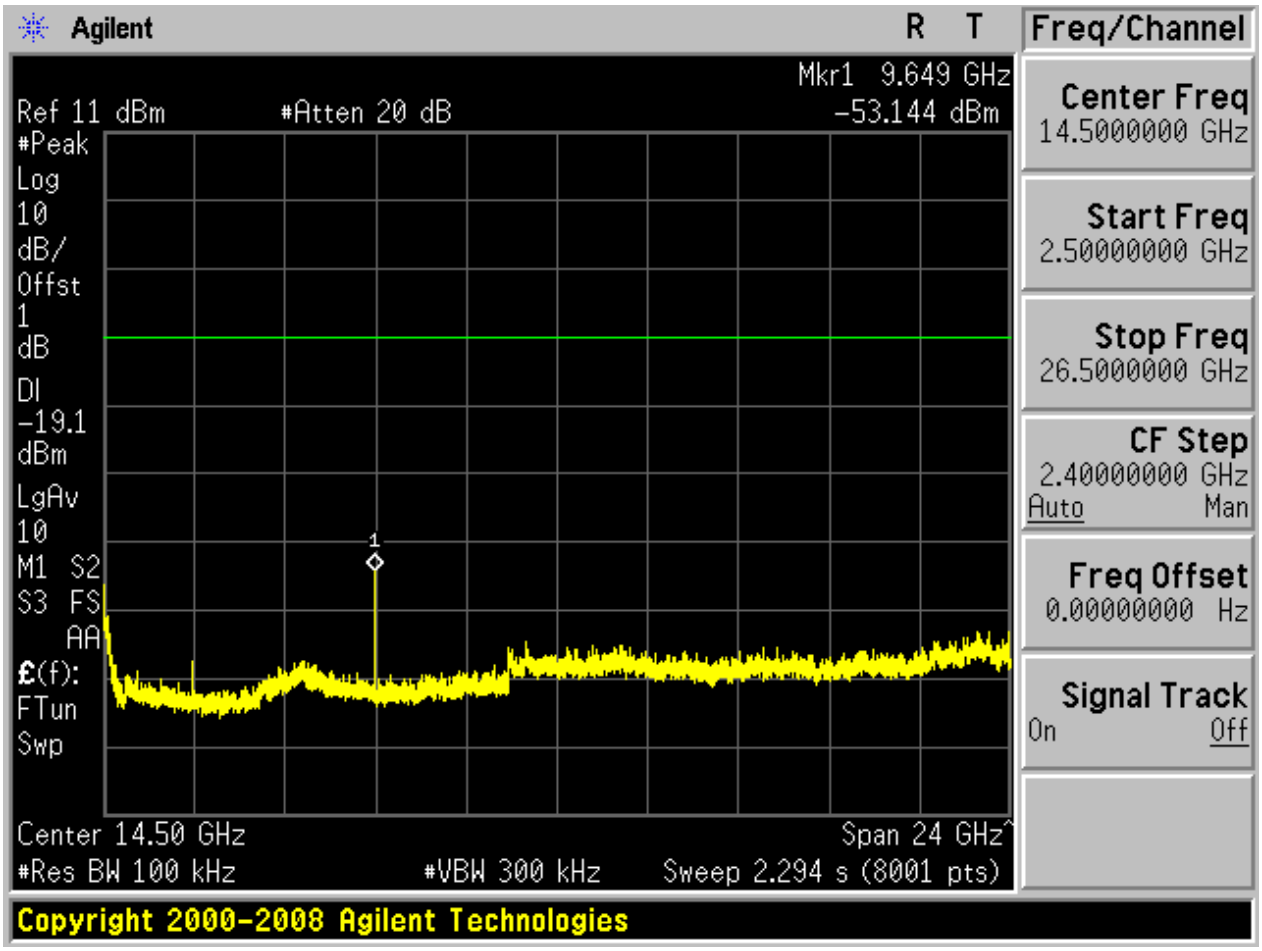

2.8 11N20_M

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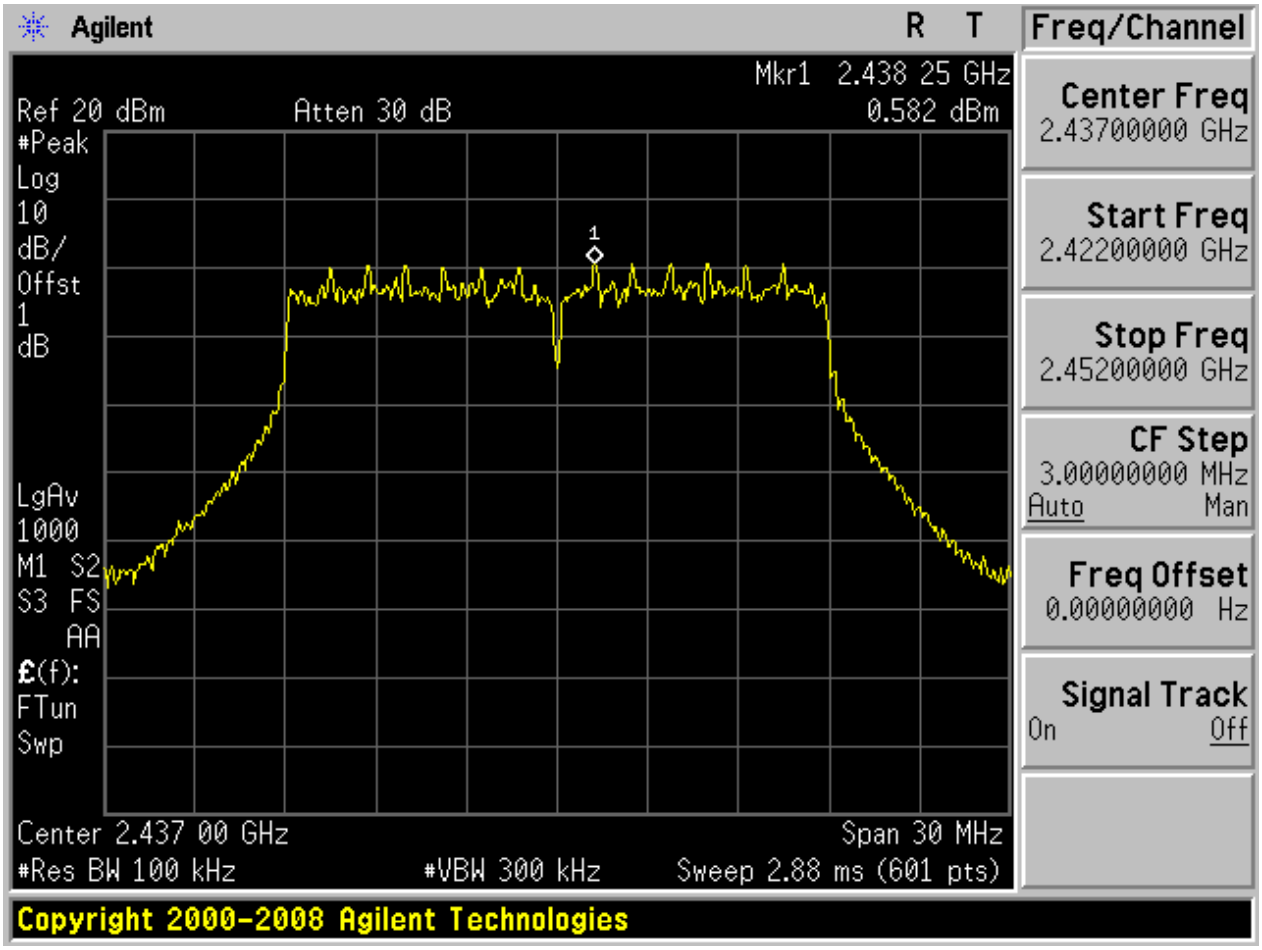
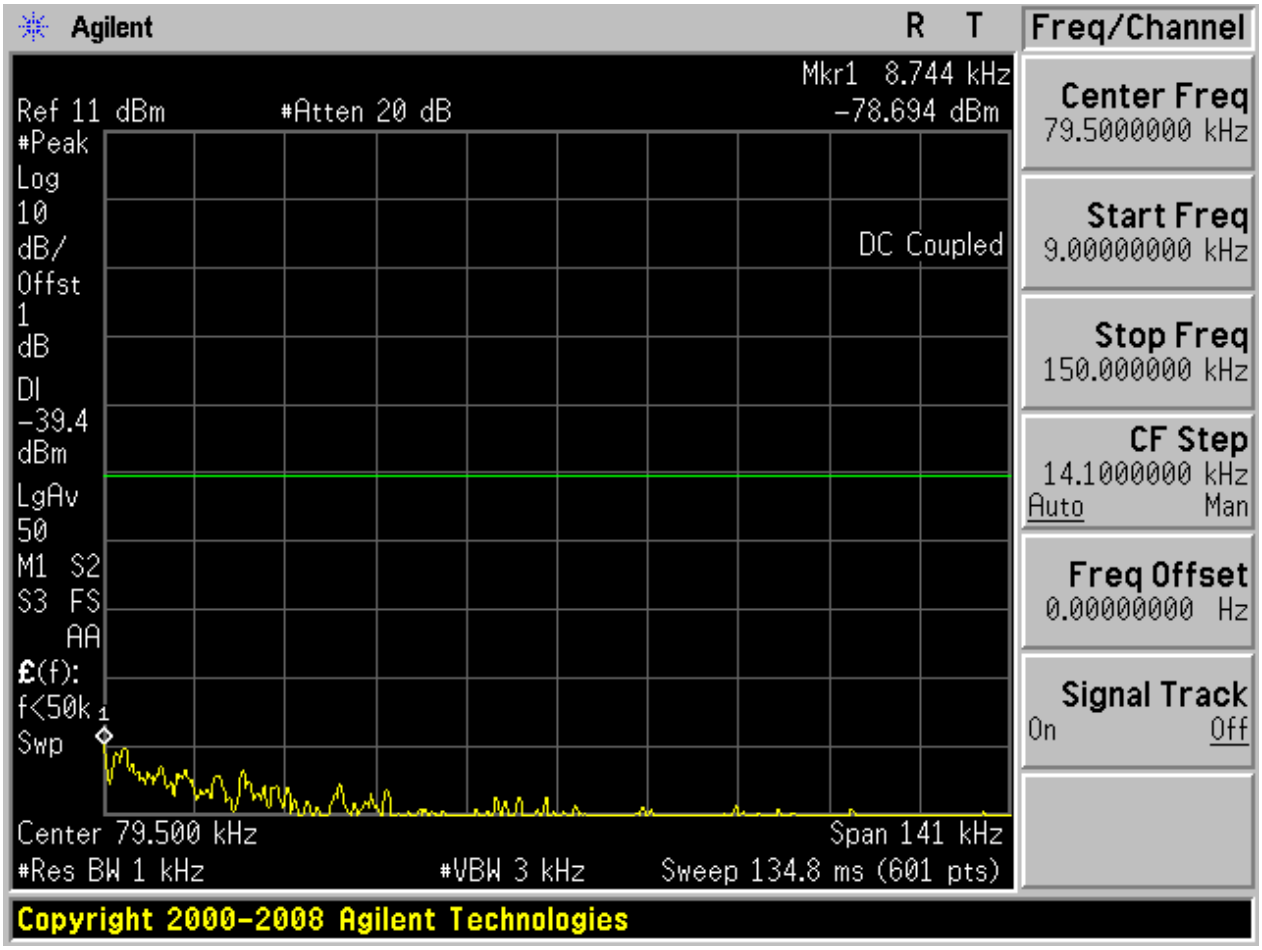
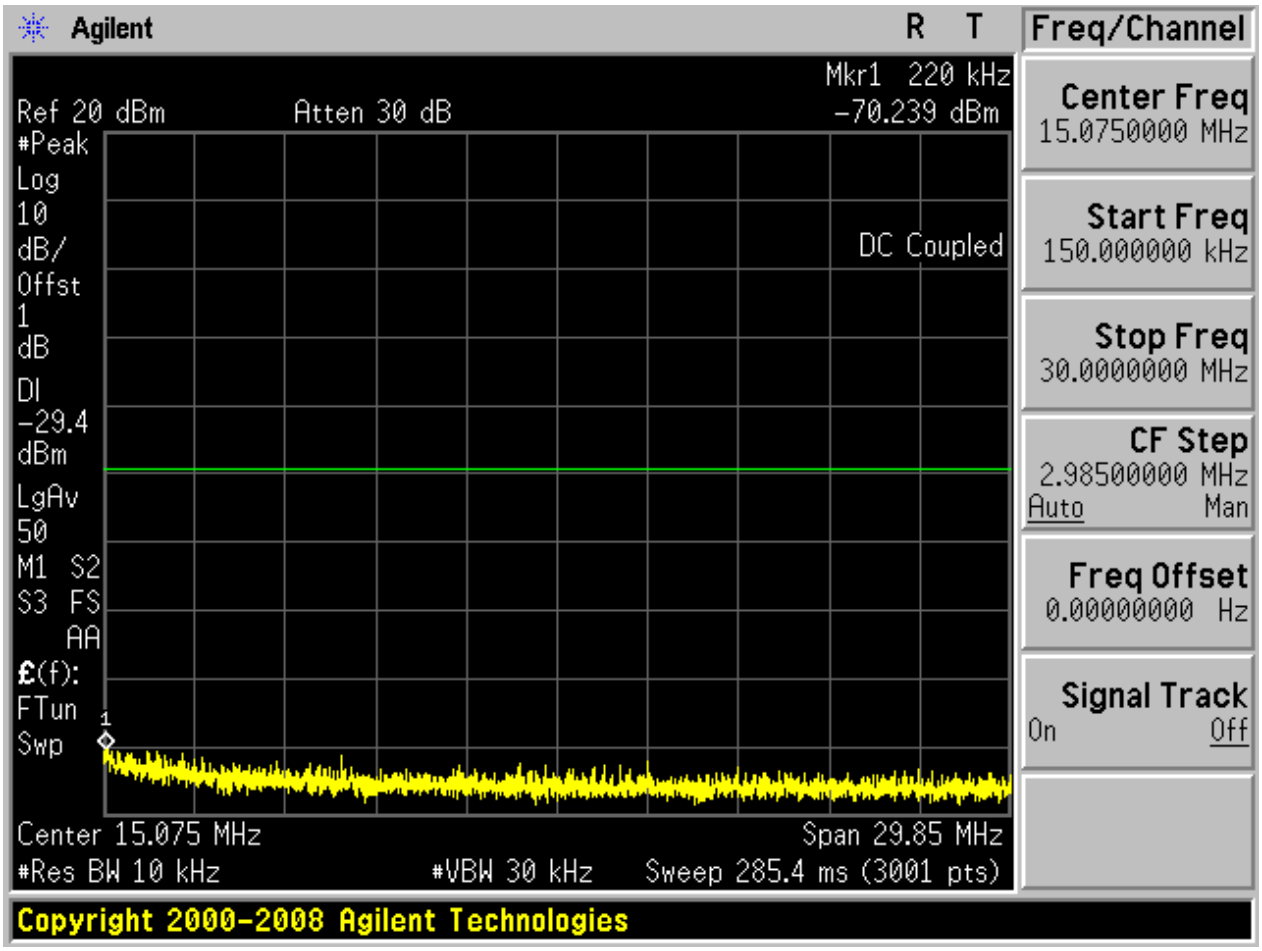
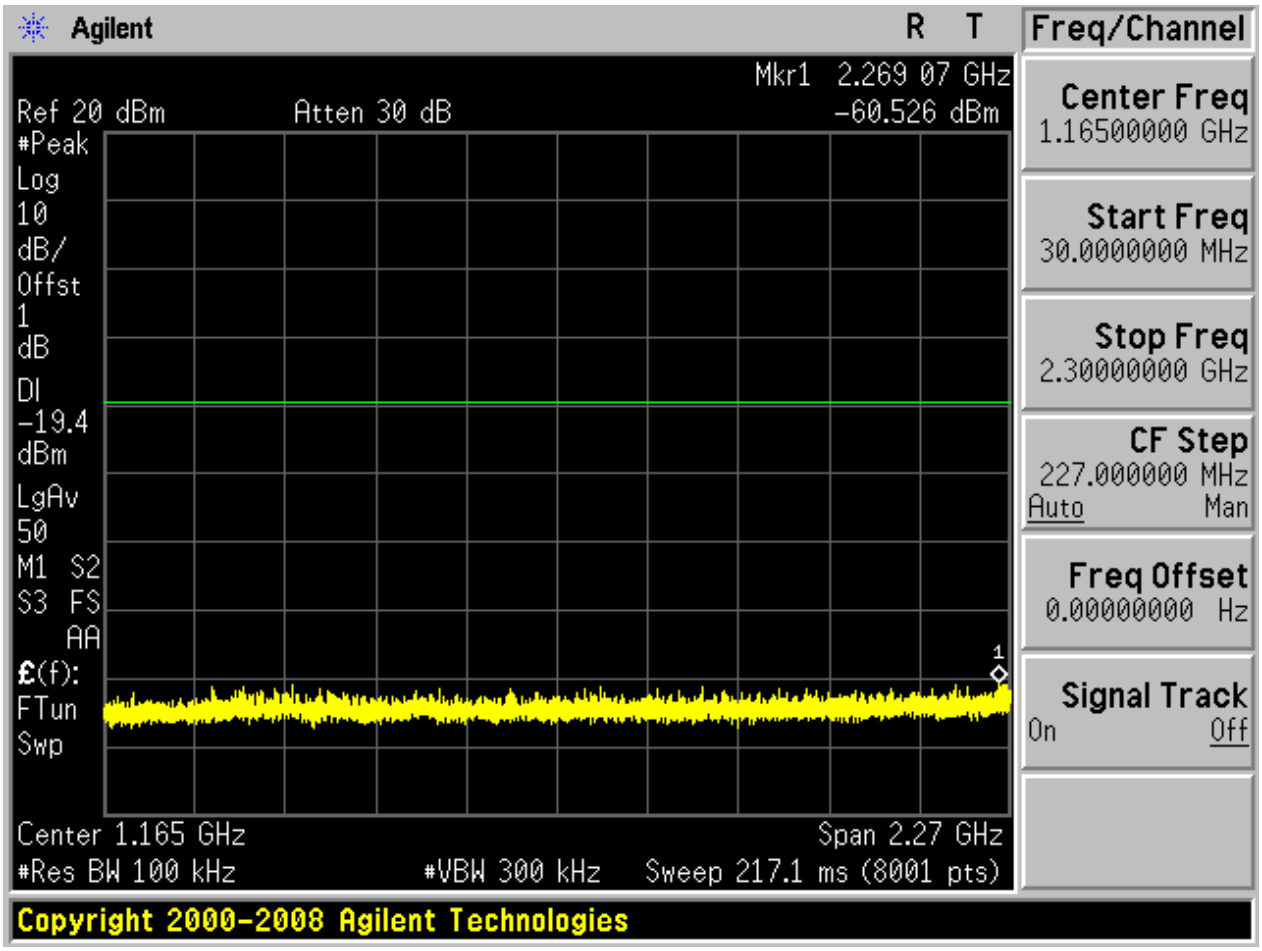
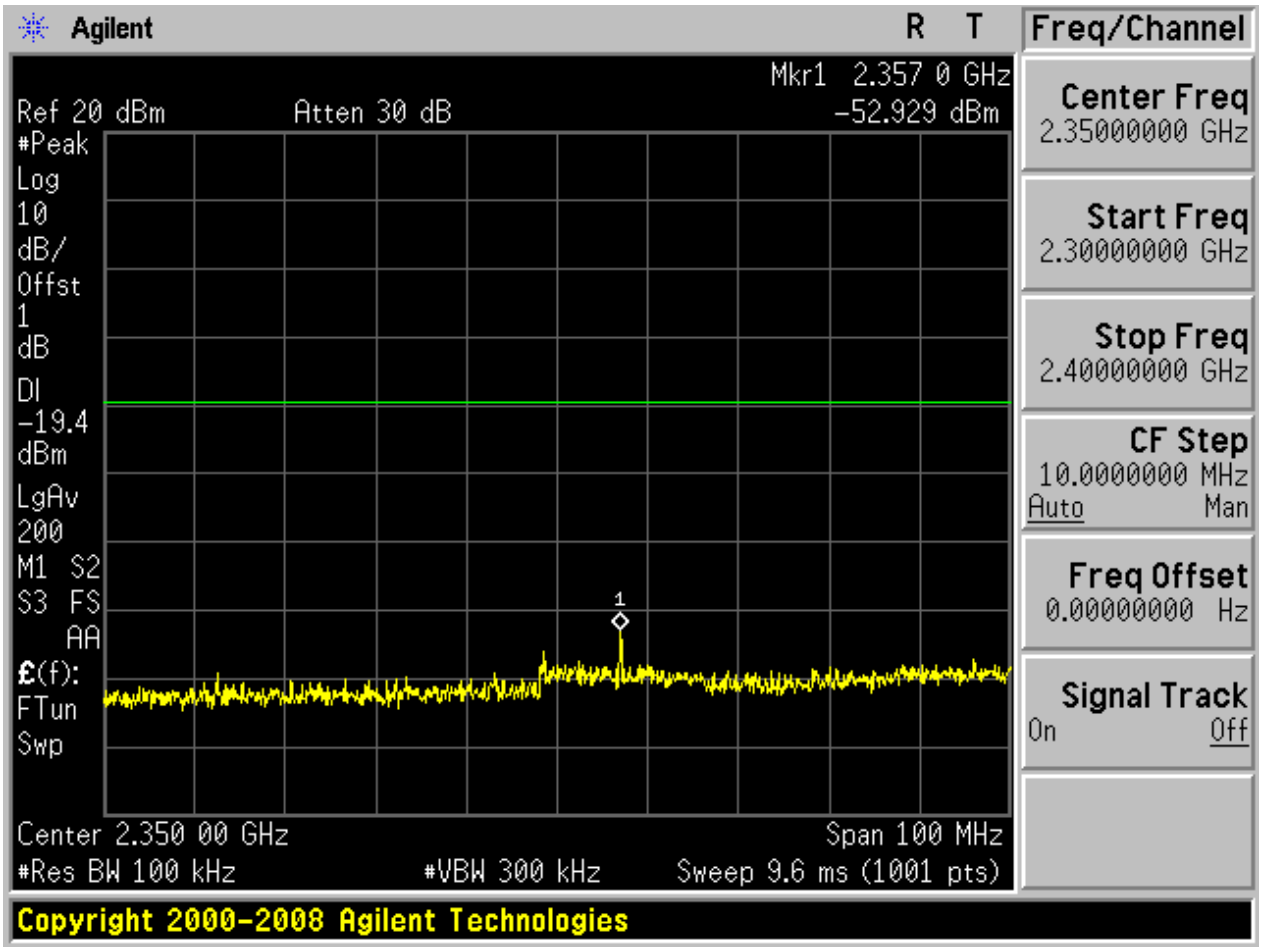


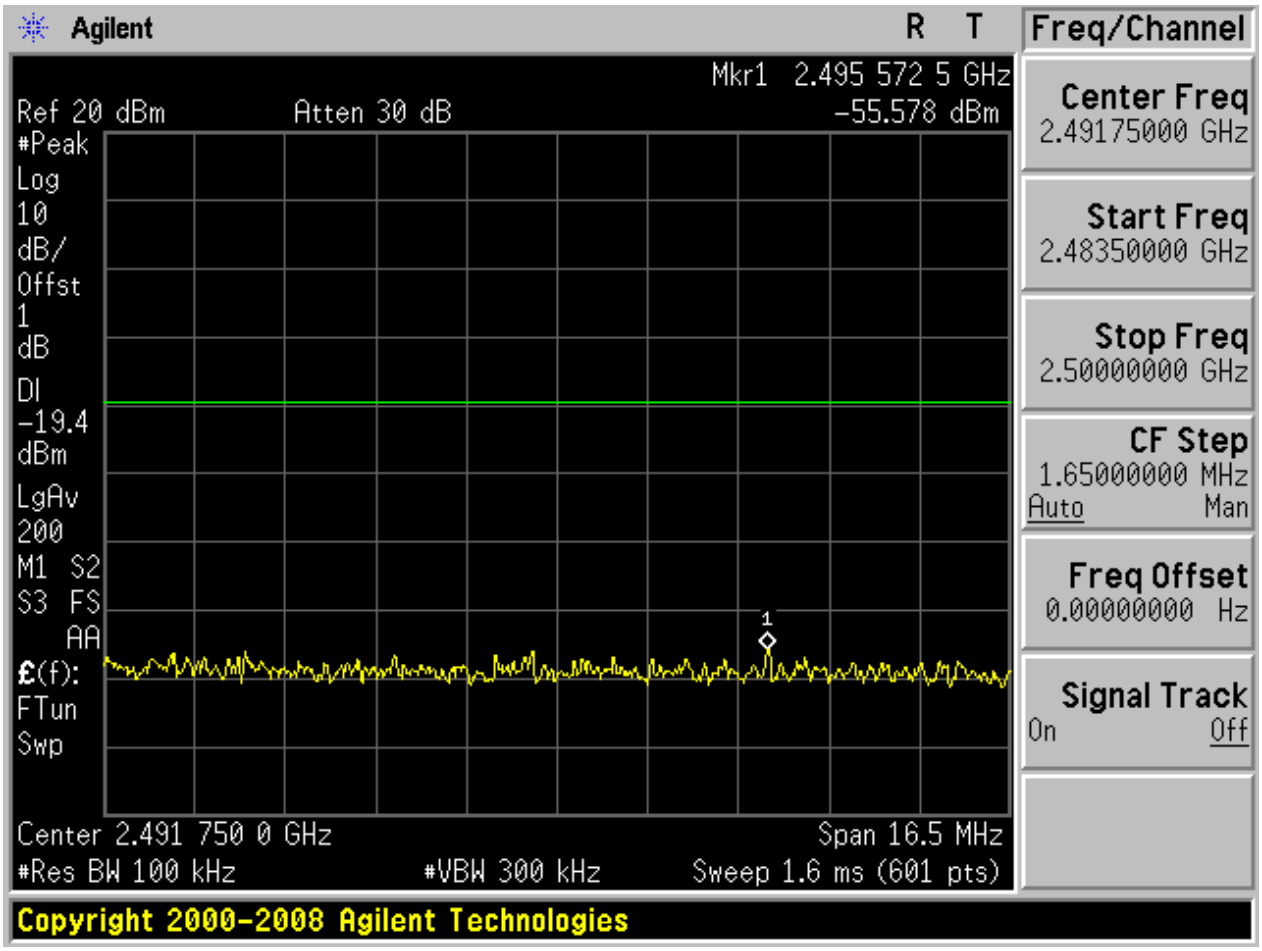
Puw:

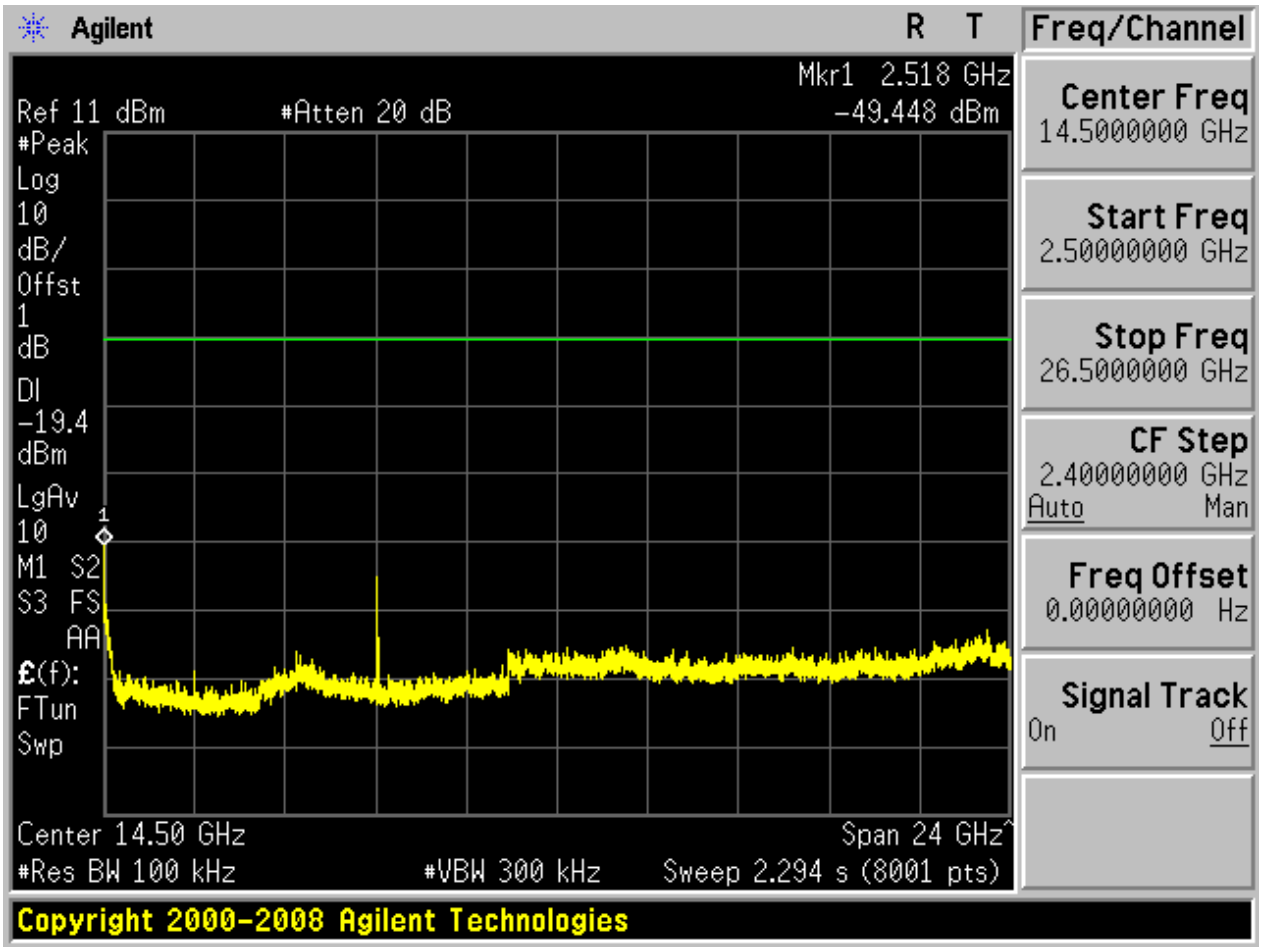






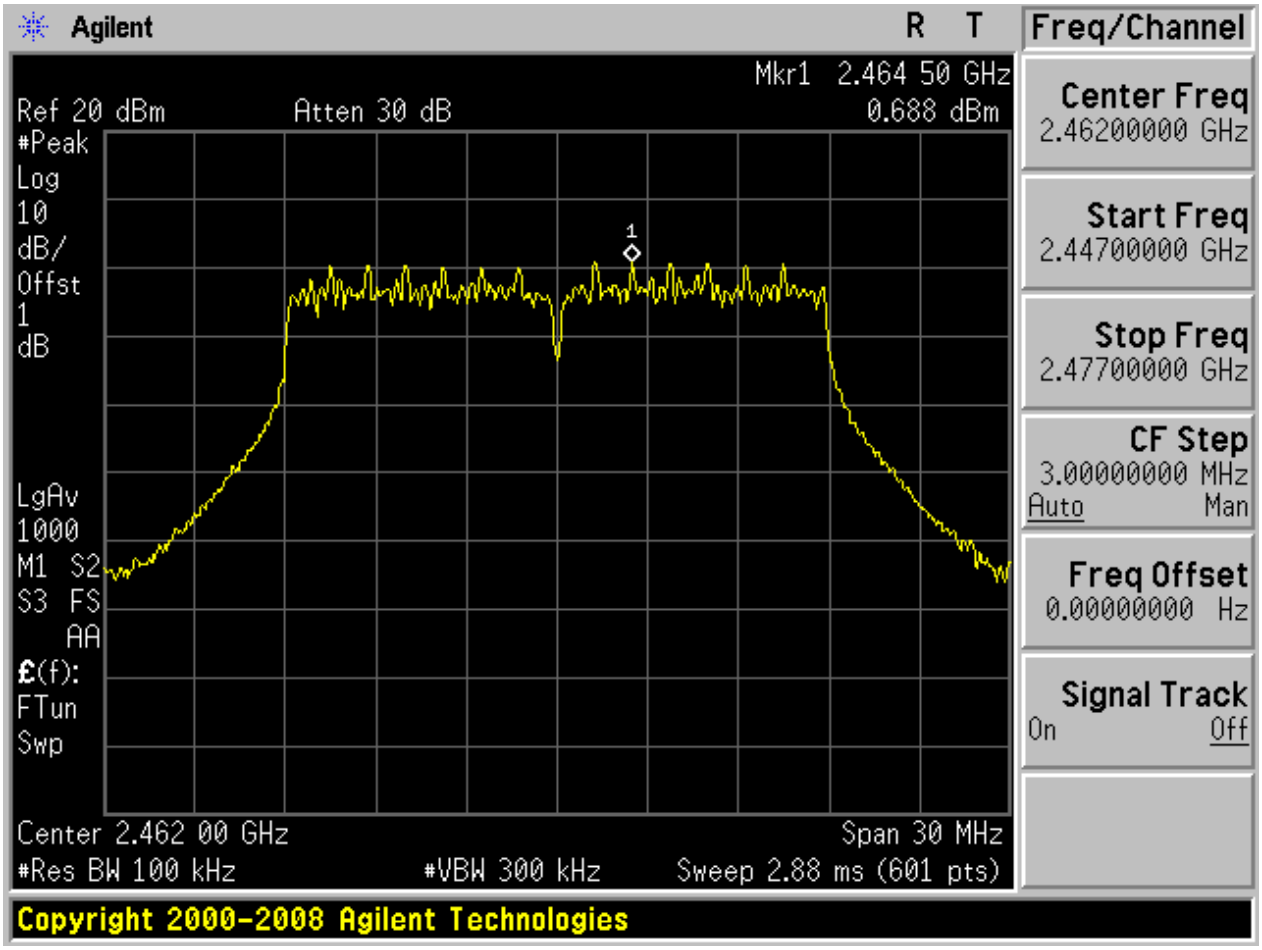




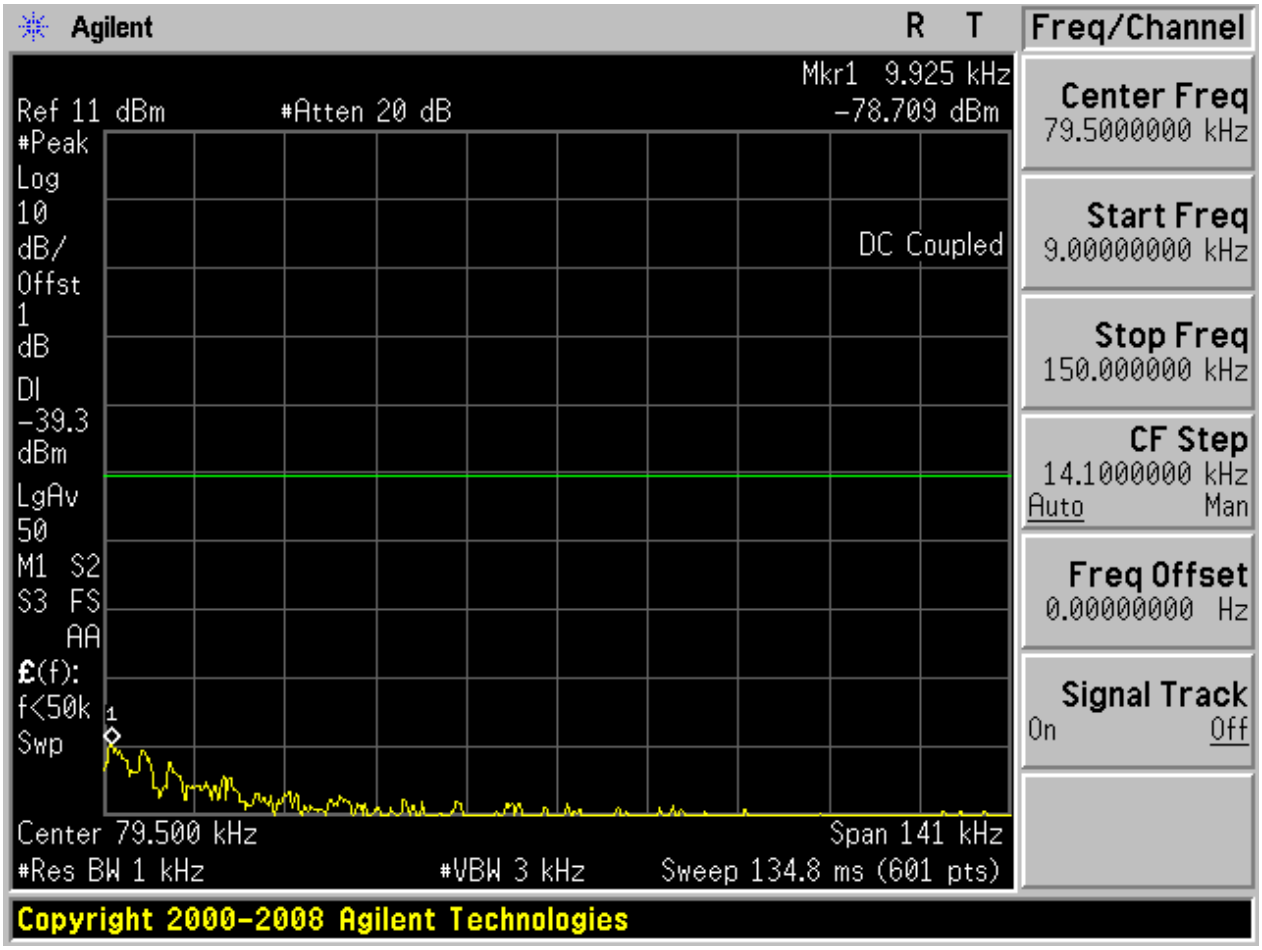


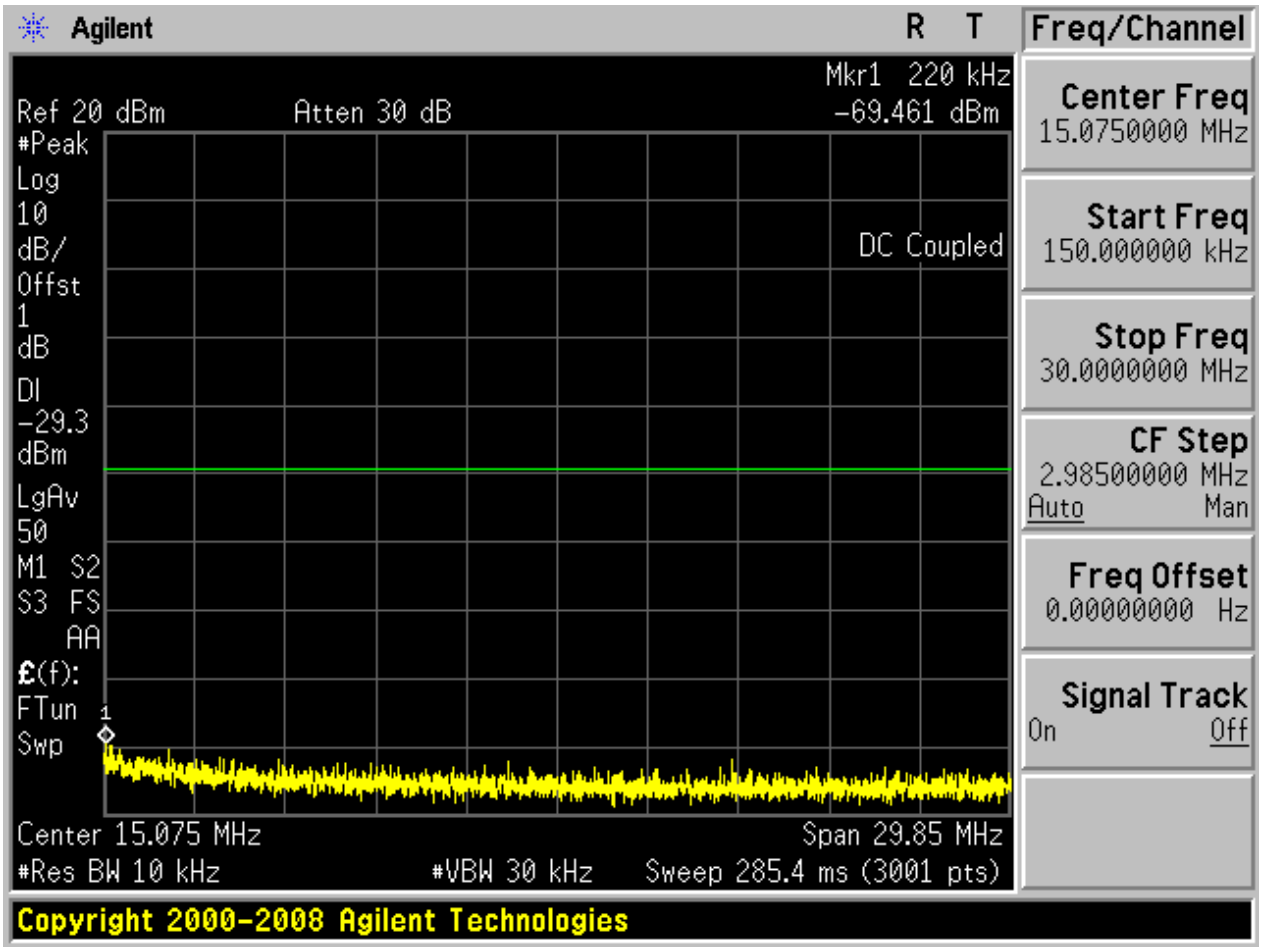
2.9 11N20_H

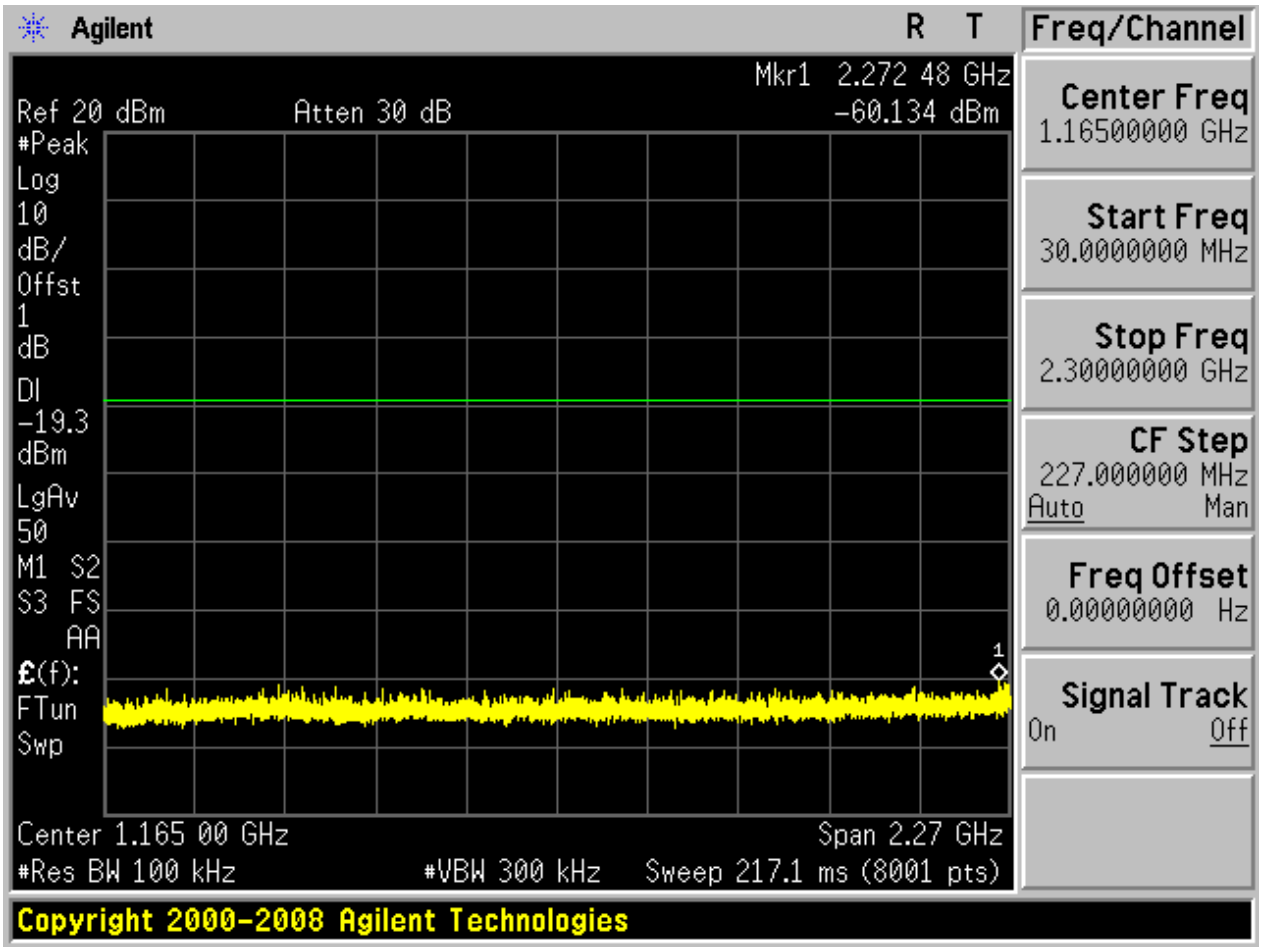
Pref:

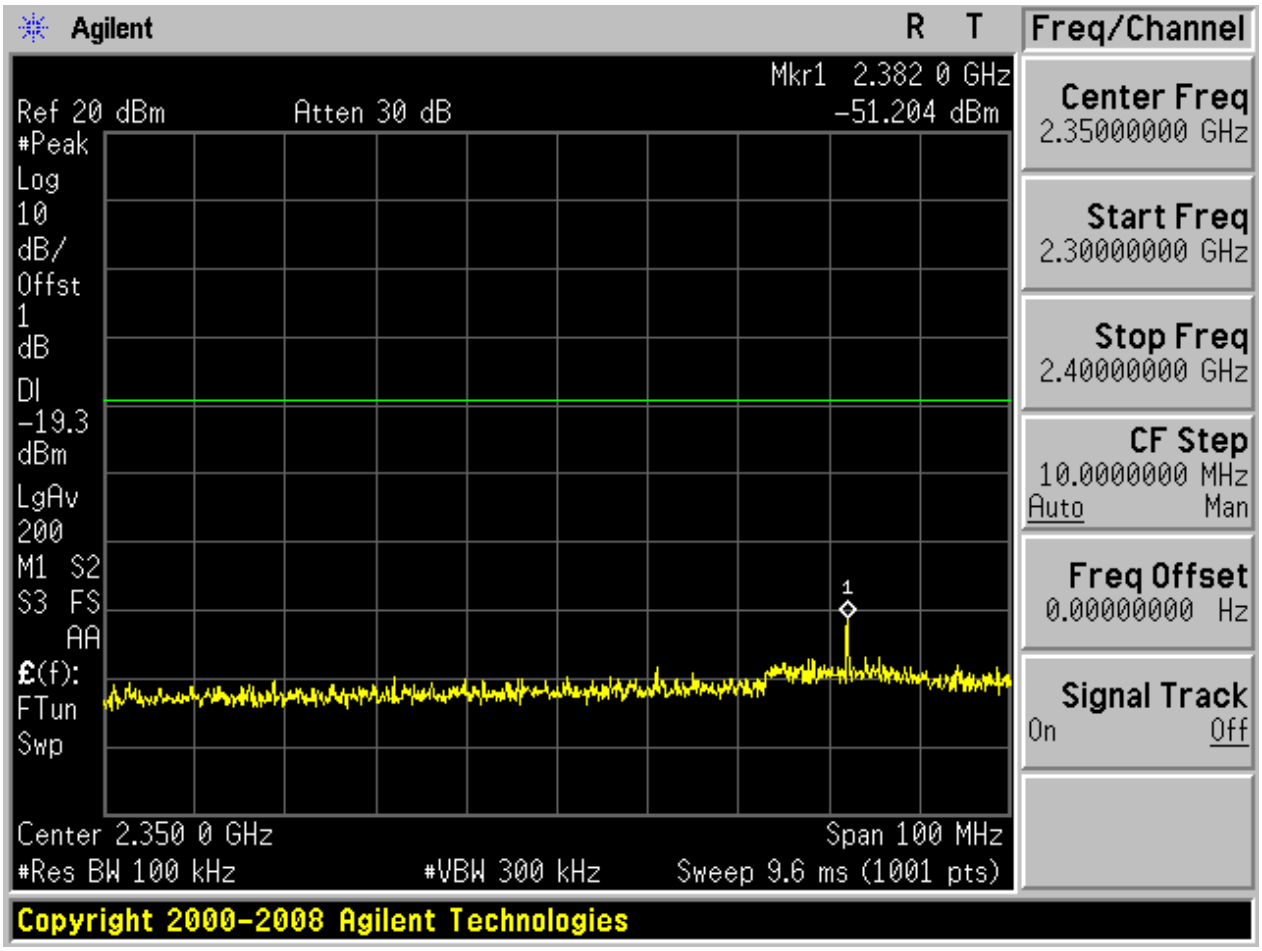


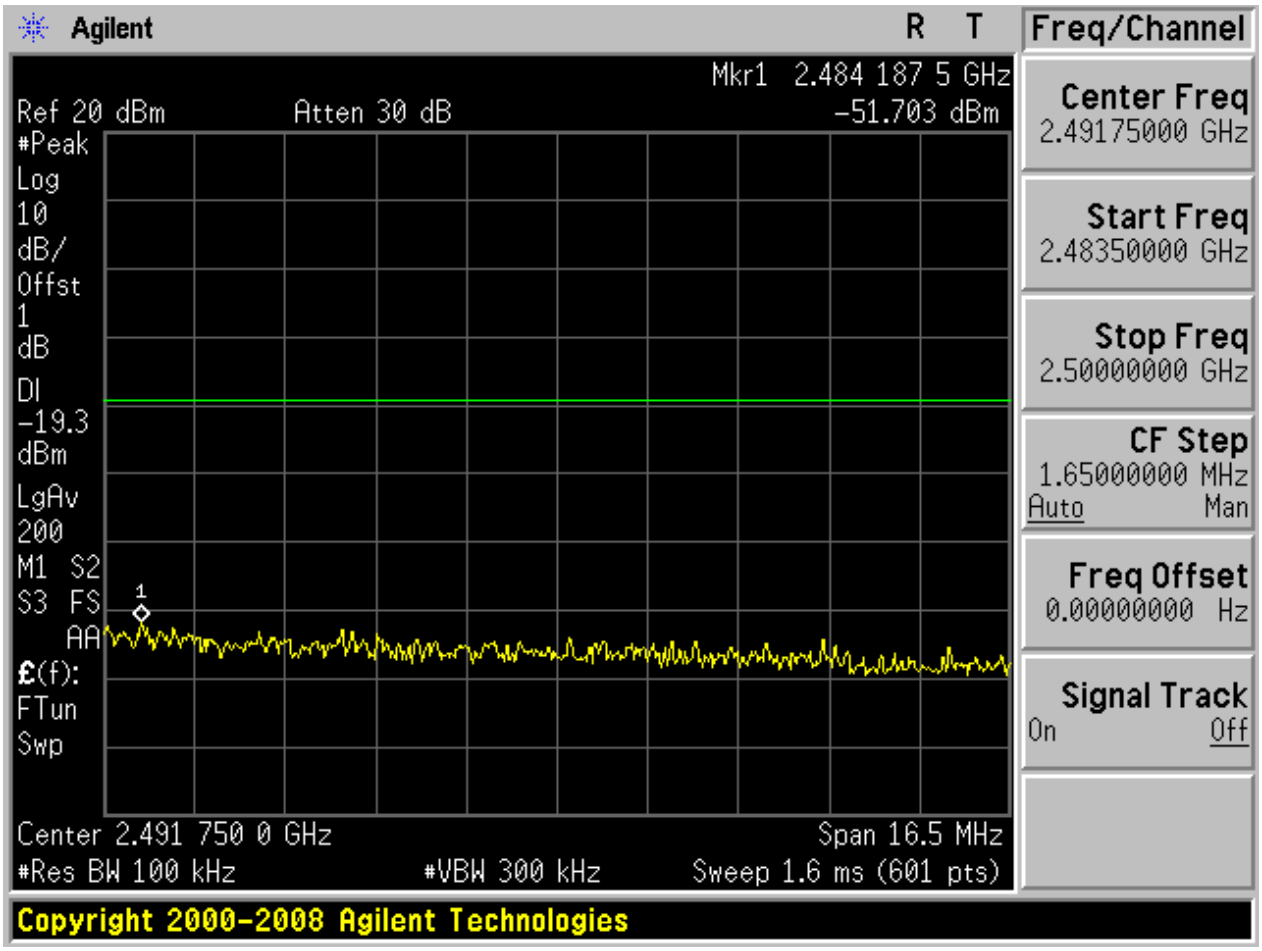
Puw:

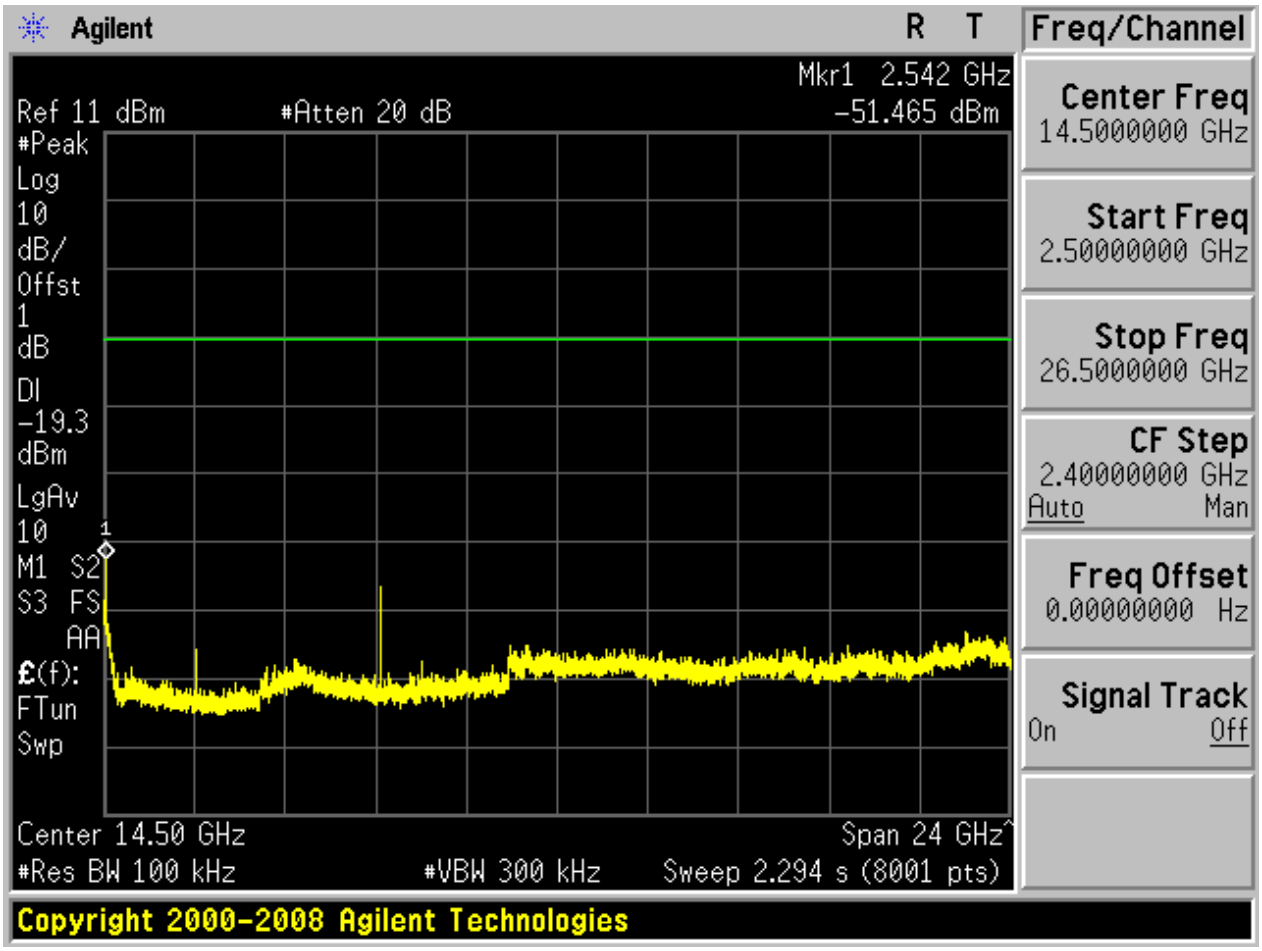











Agilent
R T
Freq/Channel
Mkr1 2.542 GHz
Ref 11 dBm
#Atten 20 dB
-51.465 dBm
#Peak
Log
10
dB/
Offst
1
dB
Dl
-19.3
dBm
LgAv
10
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 14.50 GHz
Span 24 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.294 s (8001 pts)
Center Freq
14.5000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
26.5000000 GHz
CF Step
2.40000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
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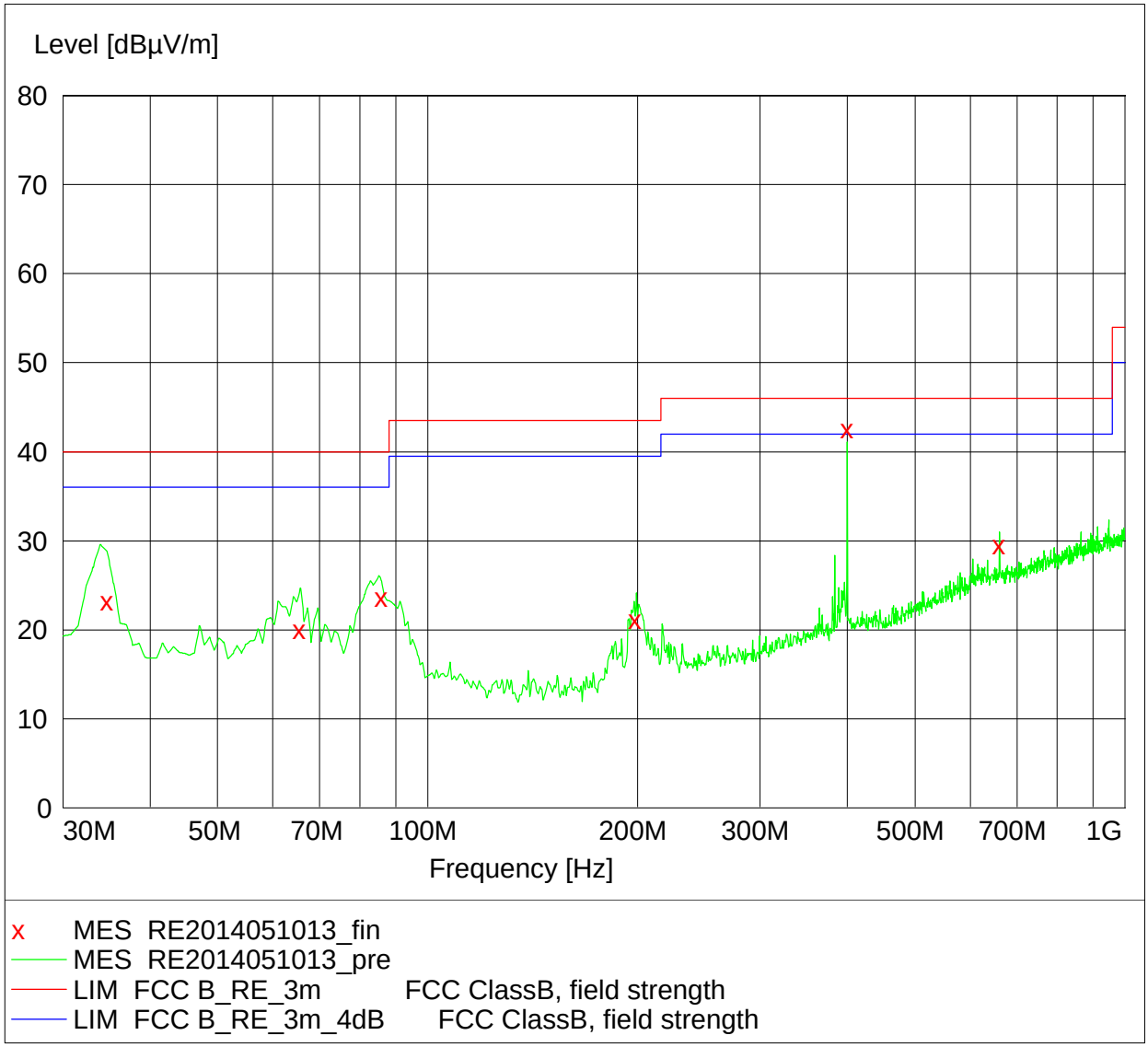
Appendix F: Radiated Spurious Emission & Spurious in Restricted Band

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.

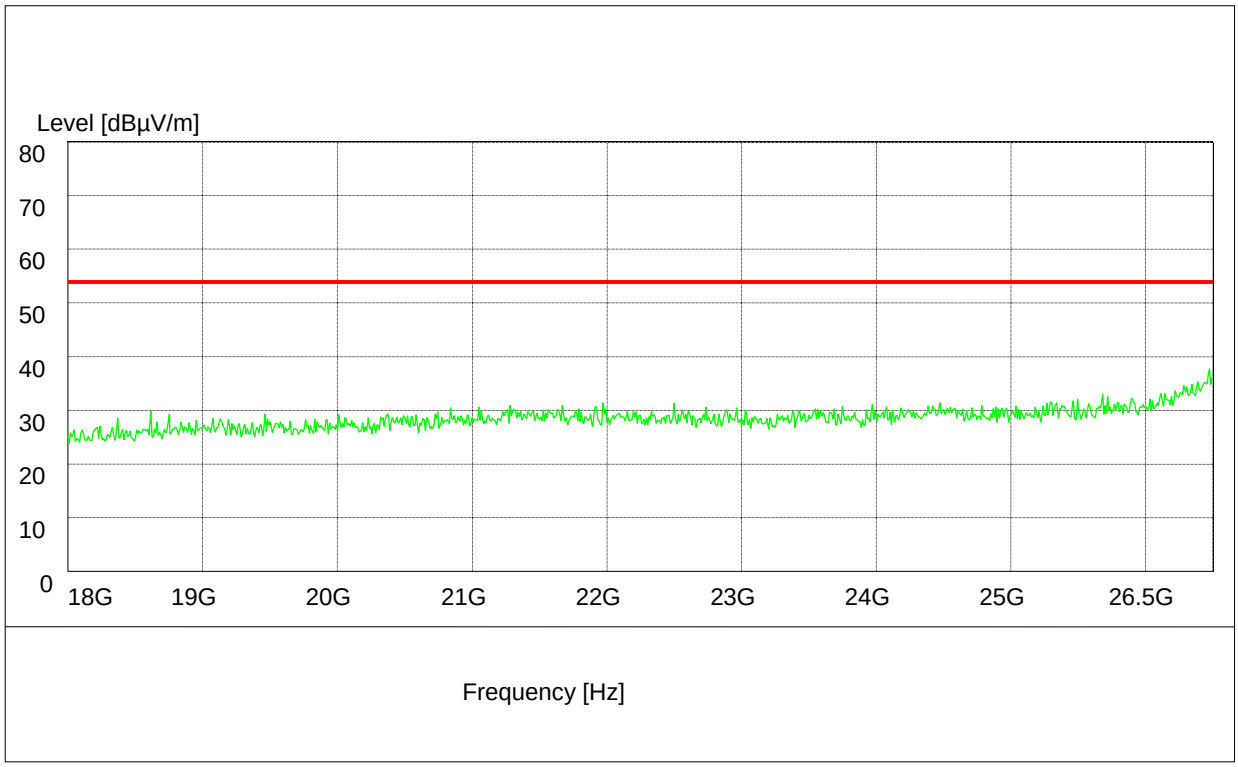
Note 2: **The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).**



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
34.740000	23.20	14.4	40.0	16.8	100.0	318.00	VERTICAL
65.460000	20.00	11.5	40.0	20.0	100.0	98.00	VERTICAL
85.920000	23.60	11.1	40.0	16.4	147.0	157.00	VERTICAL
198.360000	21.20	12.4	43.5	22.3	100.0	343.00	VERTICAL
400.020000	42.00	17.5	46.0	4.0	100.0	121.00	HORIZONTAL
660.420000	29.5	21.9	46.0	16.5	177.0	23.00	HORIZONTAL

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”

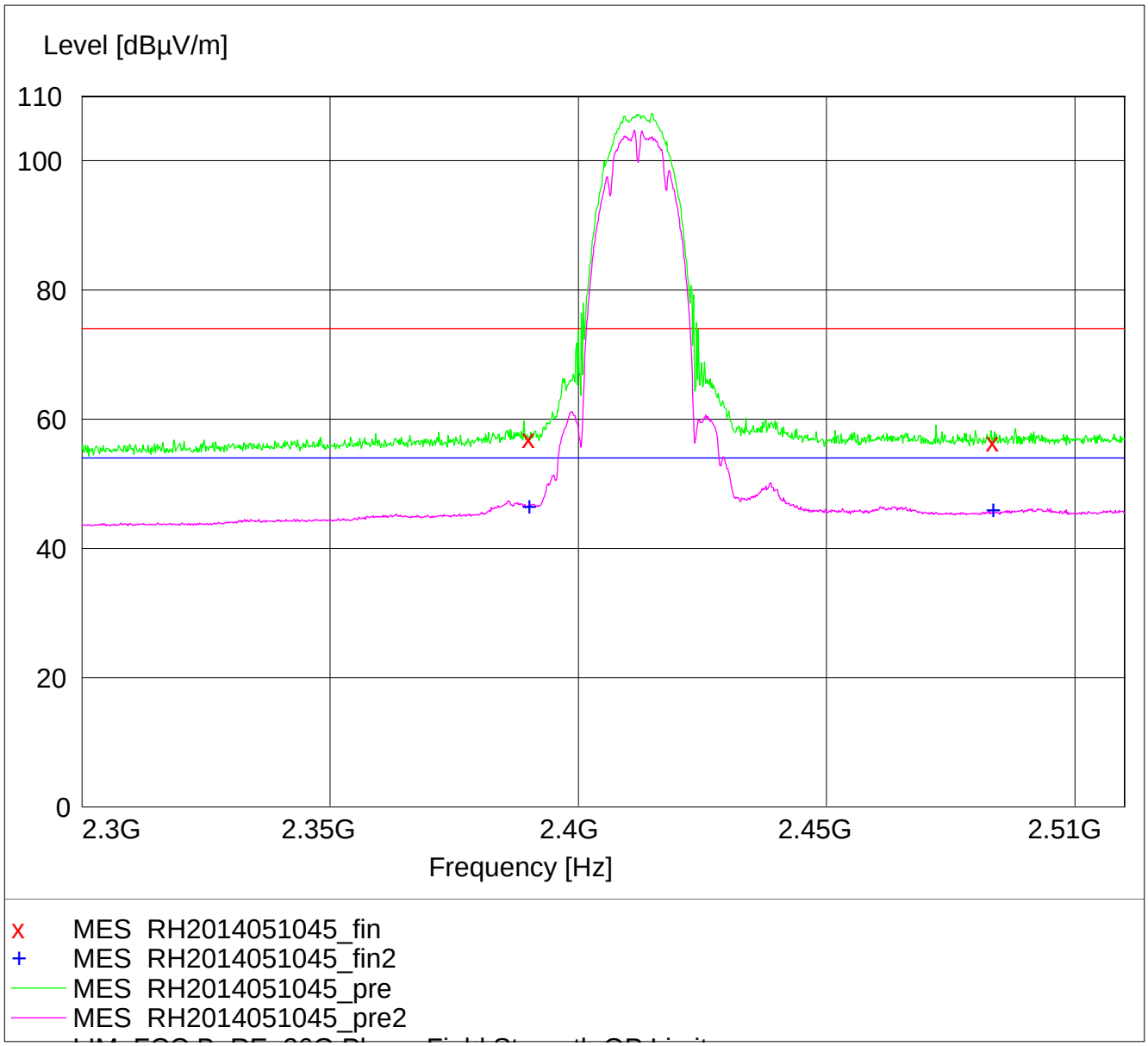
Note 1: The testing range of “2.3 GHz to 2.5 GHz” is for checking radiated emissions located in restricted bands near the EUT operating bands.

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



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

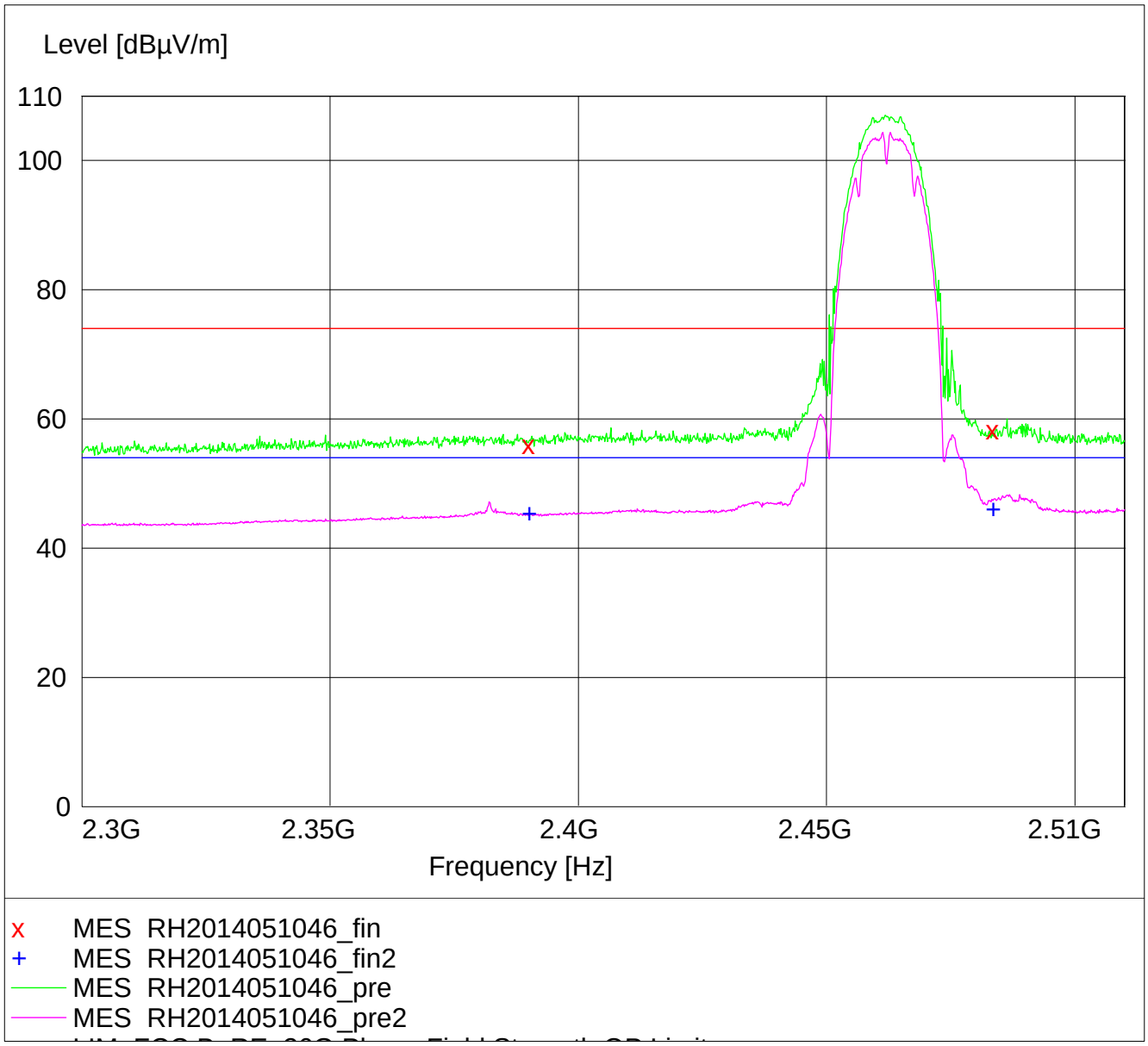
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.00	34.7	74.0	17.0	100.0	87.00	VERTICAL
2483.500000	56.50	35.0	74.0	13.6	100.0	186.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.50	34.7	54.0	7.5.0	100.0	193.00	HORIZONTAL
2483.500000	45.90	35.0	54.0	8.1	169.0	221.00	HORIZONTAL

Channel 11



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

MEASUREMENT RESULT: PK Detector

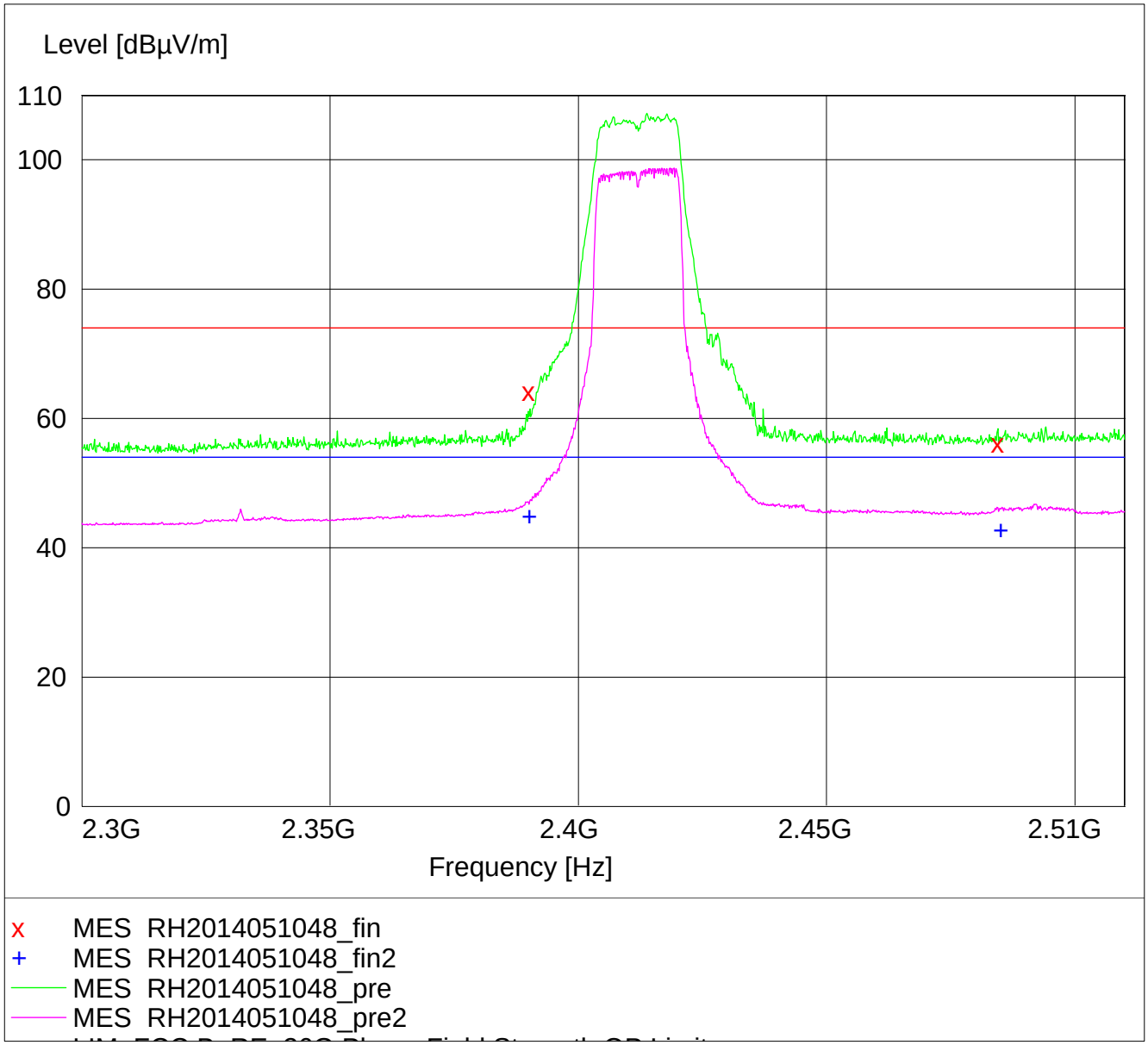
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	56.10	34.7	74.0	17.9	121.0	64.00	HORIZONTAL
2483.500000	58.40	35.0	74.0	15.6	100.0	224.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	45.50	34.7	54.0	8.5	102.0	216.00	VERTICAL
2483.500000	46.00	35.0	54.0	8.0	100.0	224.00	VERTICAL

Test Mode: 11g

Channel 01



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

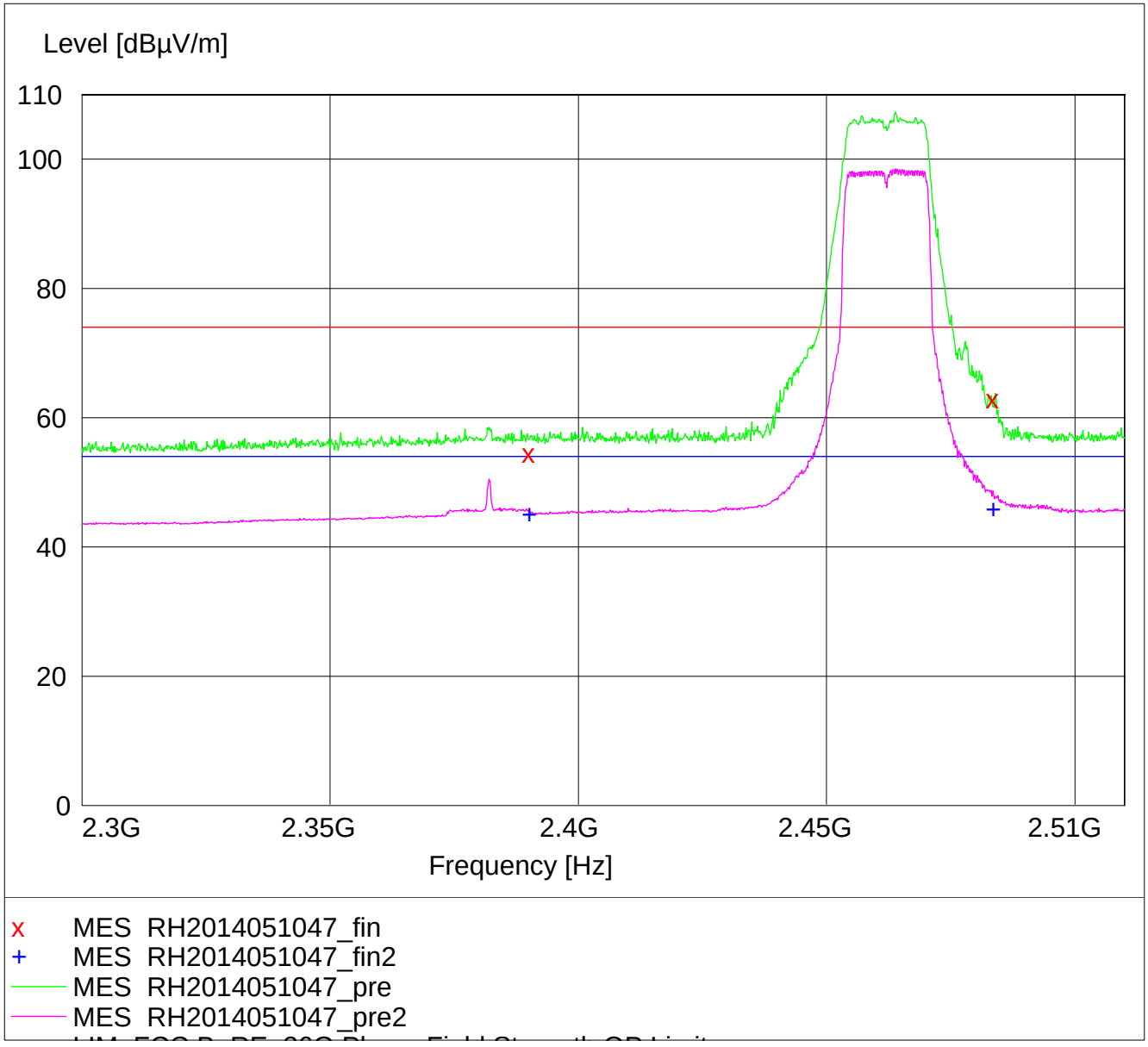
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	64.20	34.7	74.0	9.8	102.0	217.00	HORIZONTAL
2483.500000	56.20	35.0	74.0	17.8	102.0	224.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	44.80	34.7	54.0	9.2	102.0	189.00	HORIZONTAL
2483.500000	42.70	35.0	54.0	11.3	102.0	219.00	HORIZONTAL

Channel 11



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

MEASUREMENT RESULT: PK Detector

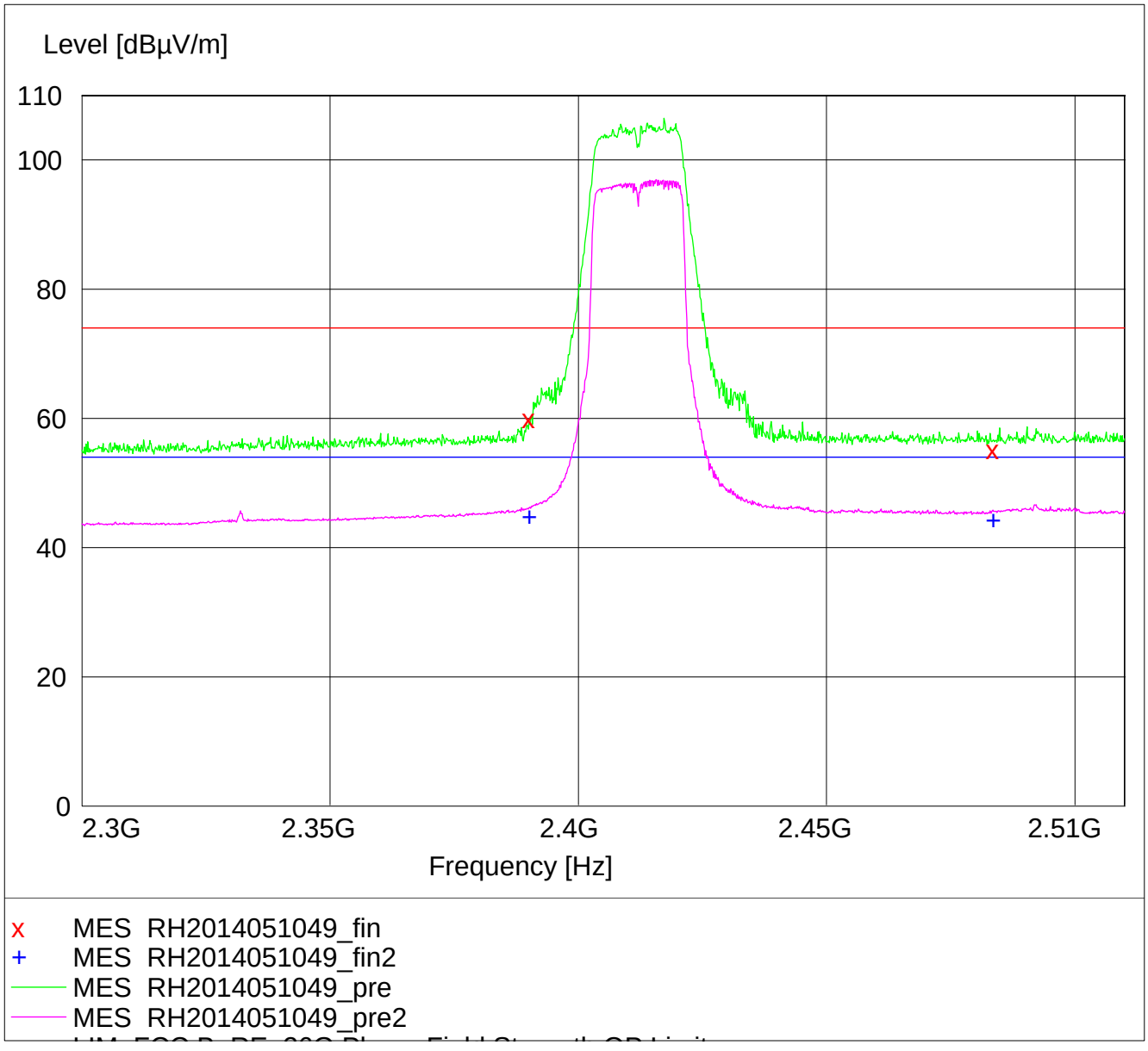
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	54.60	34.7	74.0	19.4	102.0	188.00	HORIZONTAL
2483.500000	62.90	35.0	74.0	11.1	102.0	216.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	45.10	34.7	54.0	11.9	102.0	189.00	HORIZONTAL
2483.500000	45.8	35.0	54.0	8.2	102.0	218.00	HORIZONTAL

Test Mode: 11n

Channel 01



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

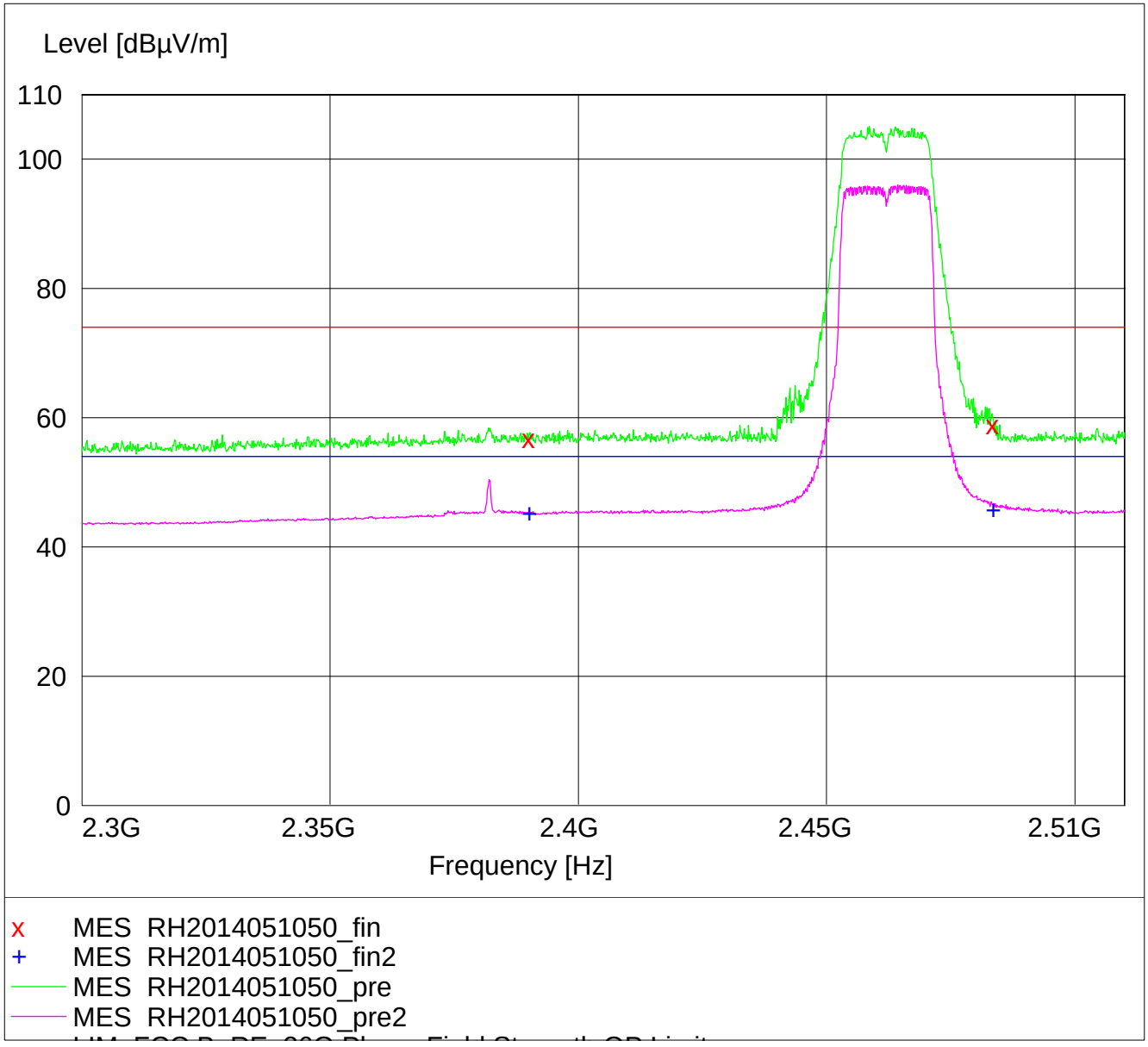
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	60.00	34.7	74.0	14.0	100.0	215.00	HORIZONTAL
2483.500000	55.10	35.0	74.0	18.9	134.0	105.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	44.80	34.7	54.0	9.2	100.0	215.00	HORIZONTAL
2483.500000	44.30	35.0	54.0	9.7	100.0	219.00	HORIZONTAL

Channel 11



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	56.80	34.7	74.0	17.2	197.0	309.00	VERTICAL
2483.500000	58.90	35.0	74.0	15.1	138.0	2.00	VERTICAL

MEASUREMENT RESULT: AV Detector

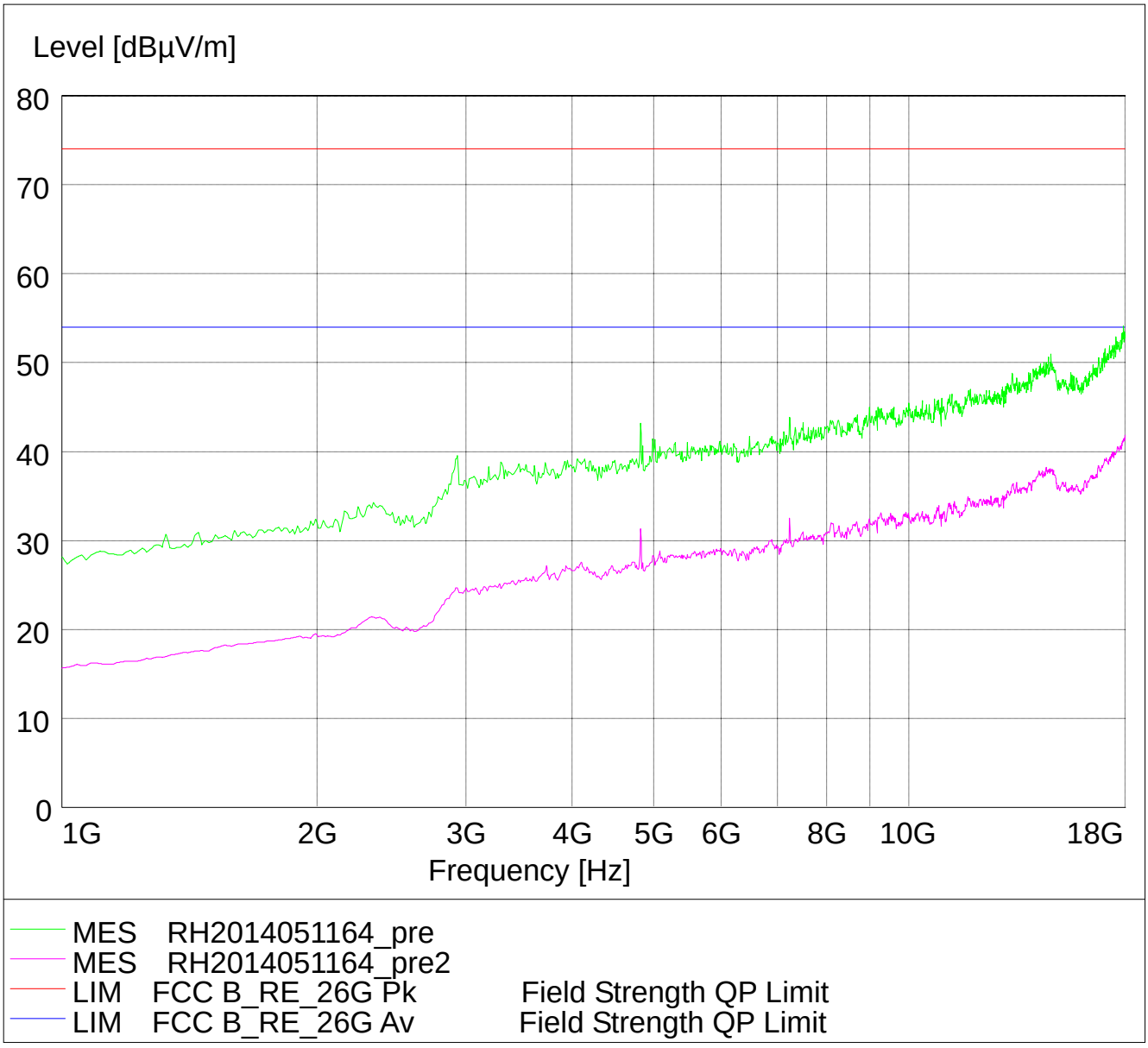
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	45.20	34.7	54.0	8.8	100.0	188.00	HORIZONTAL
2483.500000	45.70	35.0	54.0	8.3	101.0	221.00	HORIZONTAL

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.

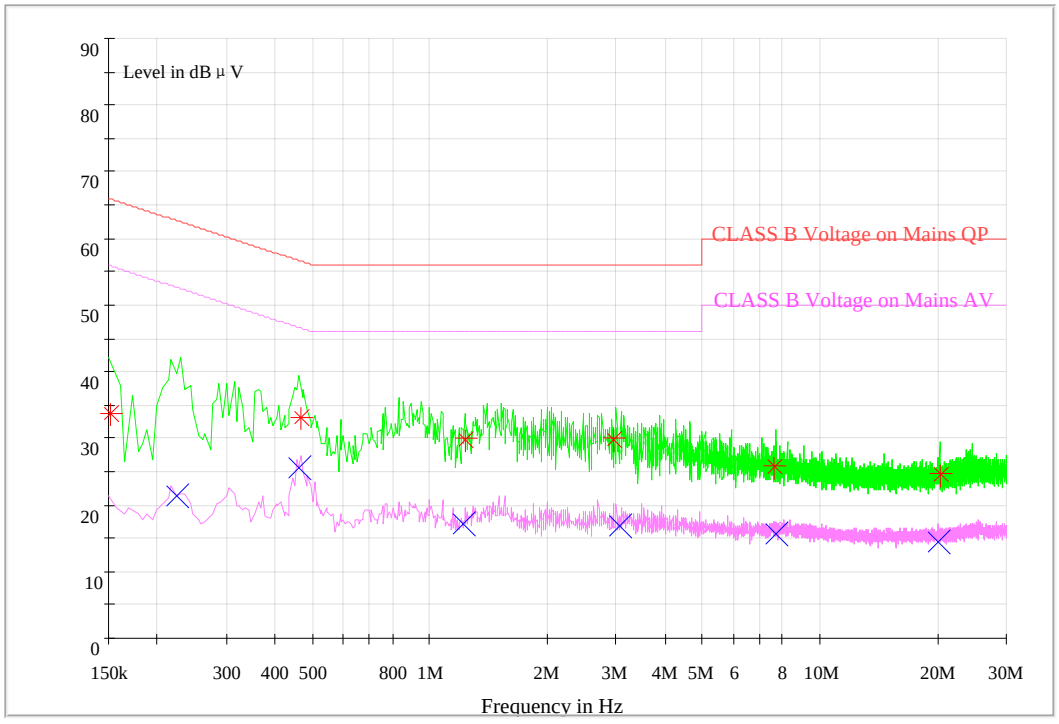
Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).



Appendix G: Conducted Emission at Power Port

Channel 6

CLASS B Voltage with ENV216



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.151705	33.7	9.7	65.9	32.2	L1	FLO
0.466462	33.1	9.7	56.6	23.5	N	FLO
1.231530	30.2	9.7	56.0	25.8	N	FLO
2.962376	30.1	9.7	56.0	25.9	N	FLO
7.627068	25.5	9.9	60.0	34.5	N	FLO
20.269204	24.5	10.1	60.0	35.5	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.223984	21.5	9.7	52.7	31.2	L1	FLO
0.461374	25.6	9.7	46.7	21.1	L1	FLO
1.219016	17.2	9.7	46.0	28.8	N	FLO
3.077284	16.8	9.7	46.0	29.2	N	FLO
7.654399	15.7	9.9	50.0	34.3	N	FLO
20.141314	14.5	10.1	50.0	35.5	N	FLO

END