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.

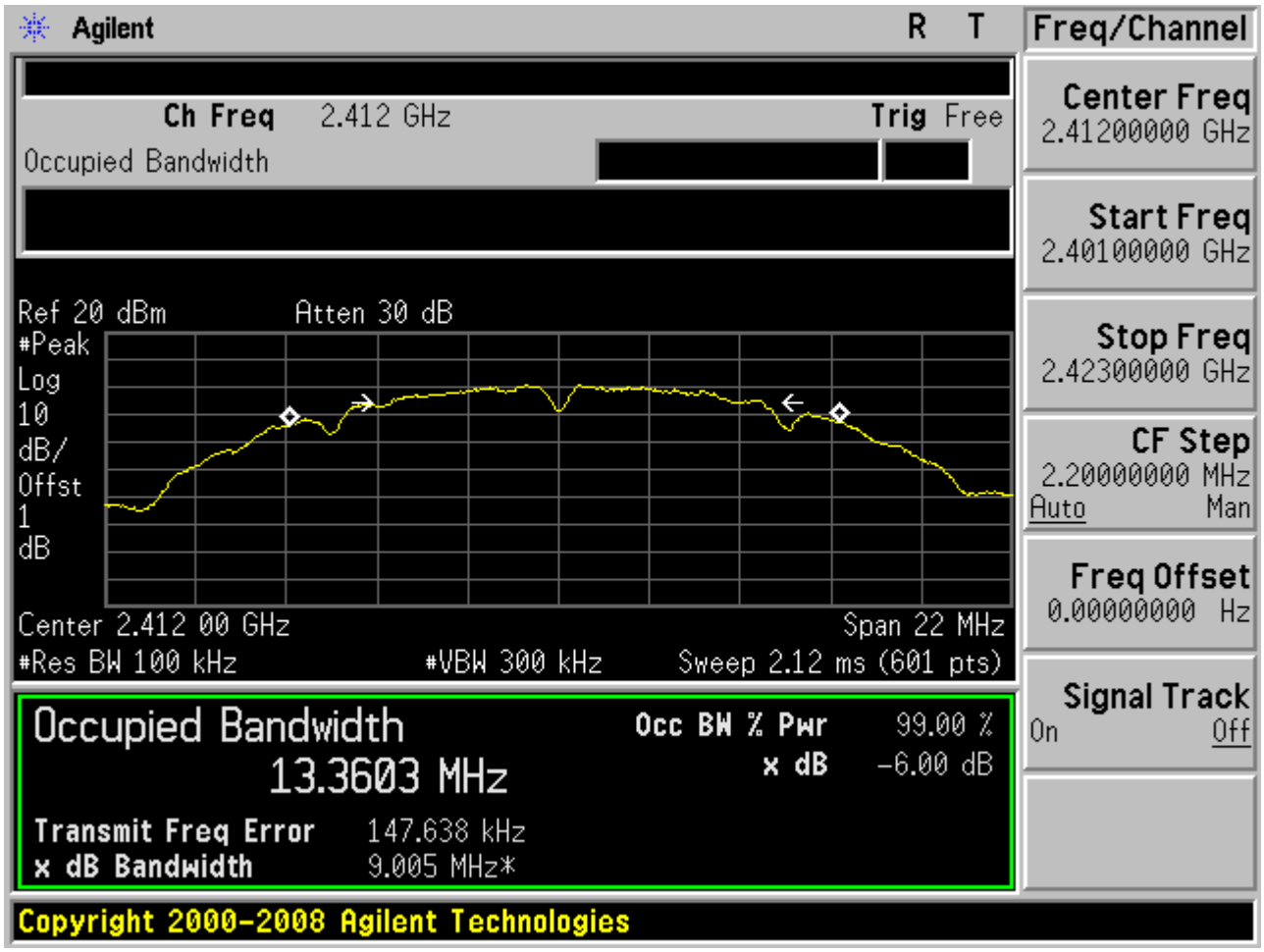
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

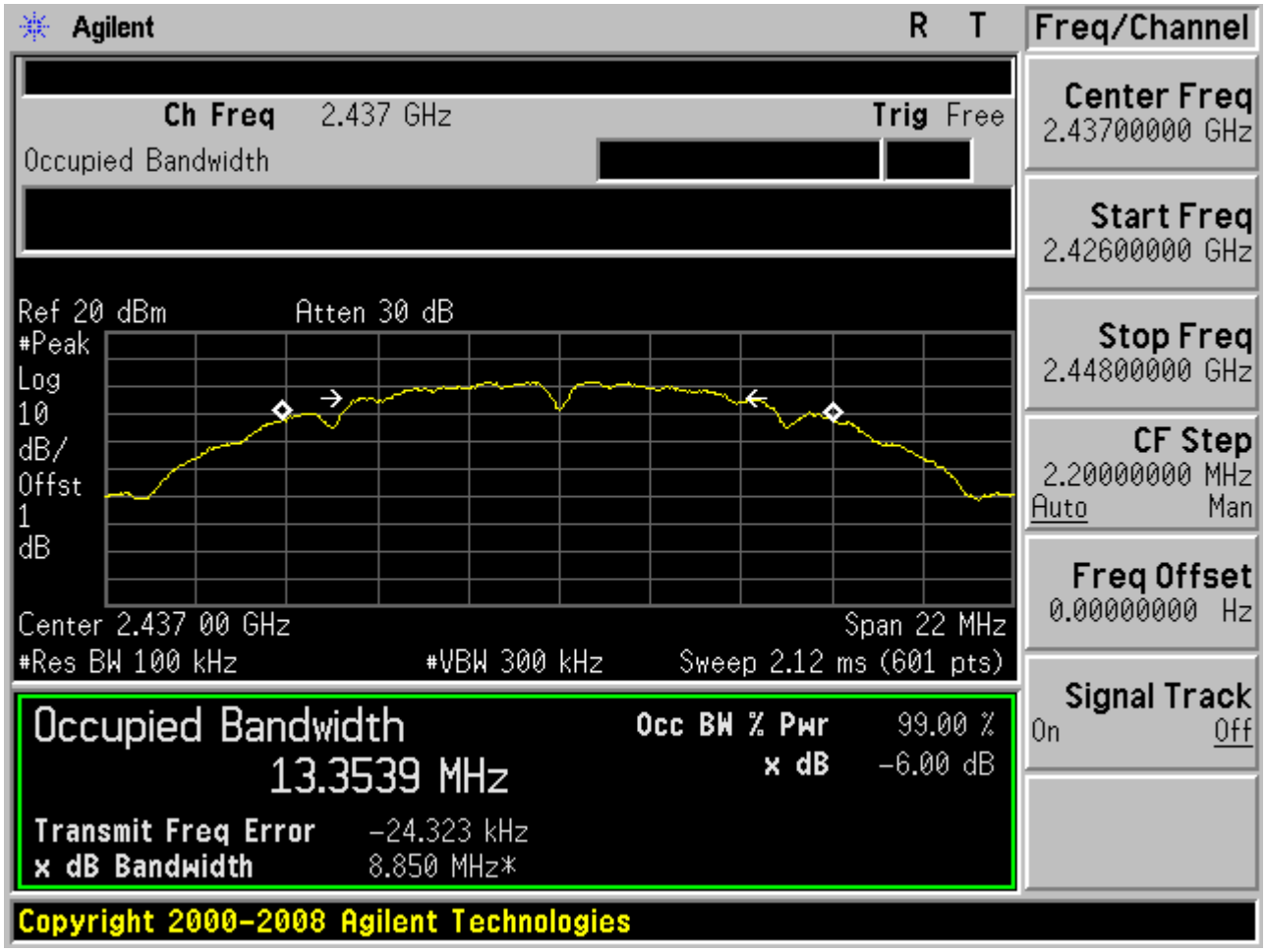
Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[MHz]	Verdict
11B	L	2412	9.00	pass
11B	M	2437	8.85	pass
11B	H	2462	8.85	pass
11G	L	2412	16.52	pass
11G	M	2437	16.56	pass
11G	H	2462	16.60	pass
11N20	L	2412	17.78	pass
11N20	M	2437	17.80	pass
11N20	H	2462	17.82	pass

Part II - Test Plots

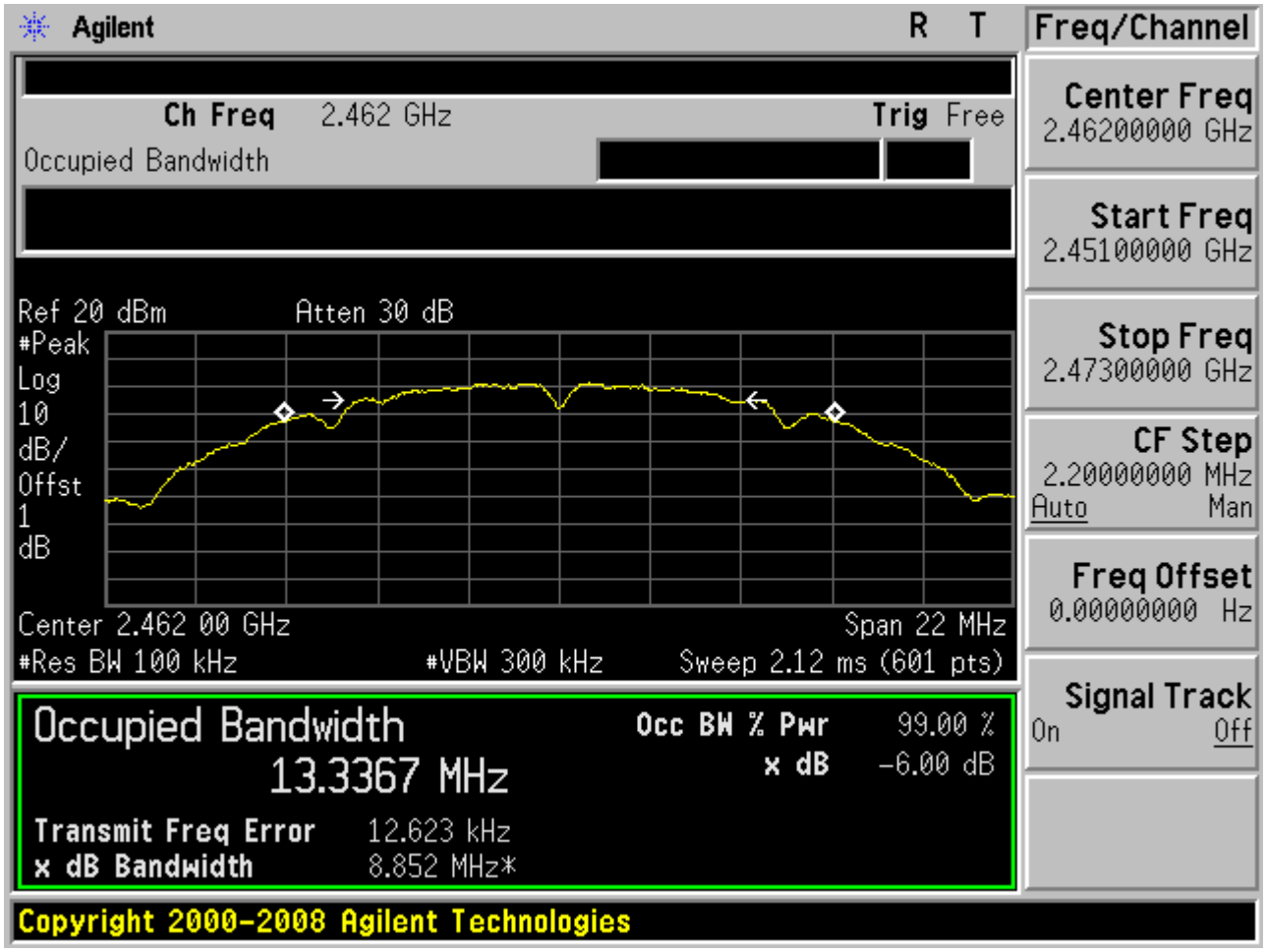
2.1 11B_L



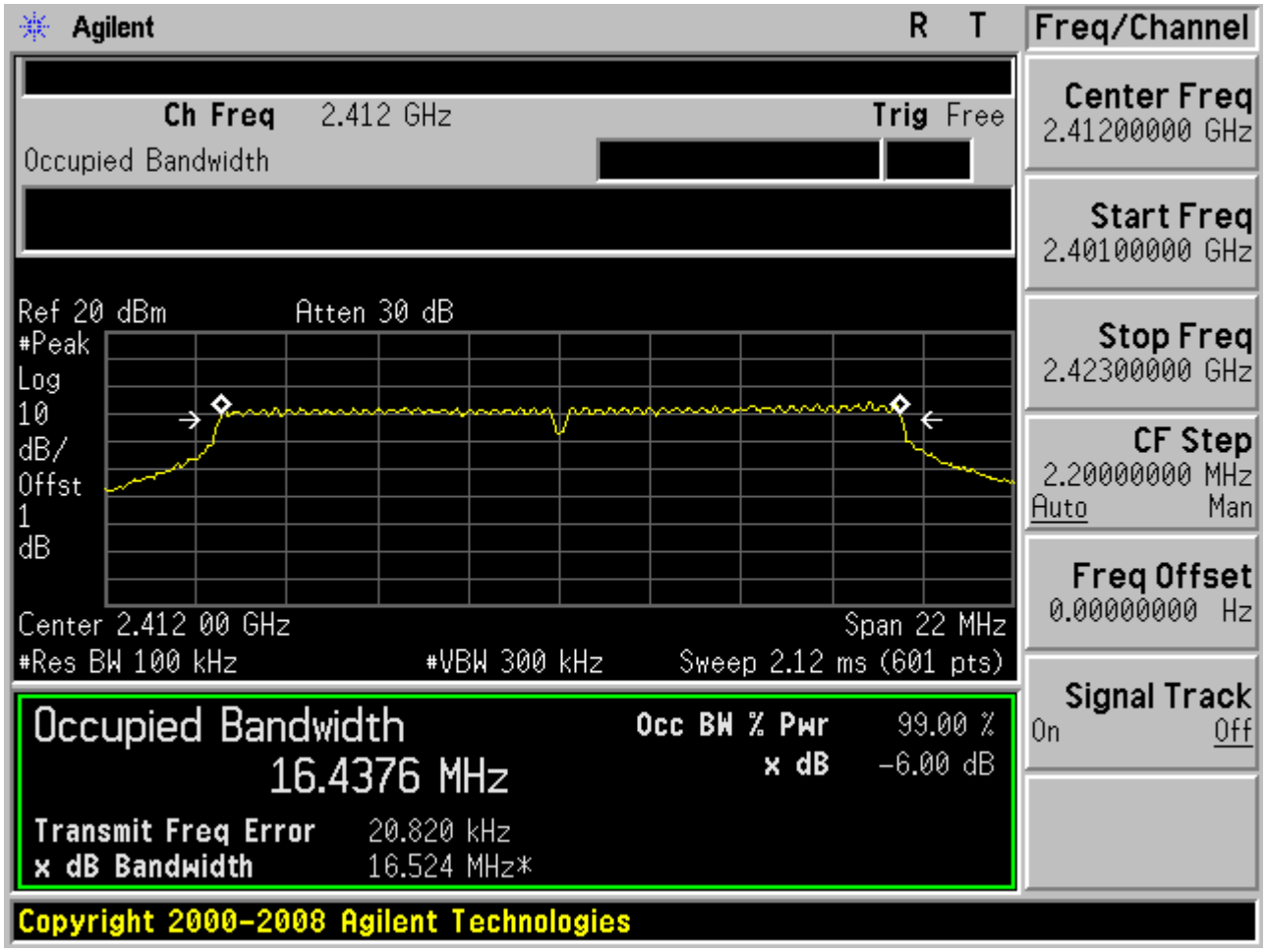
2.2 11B_M



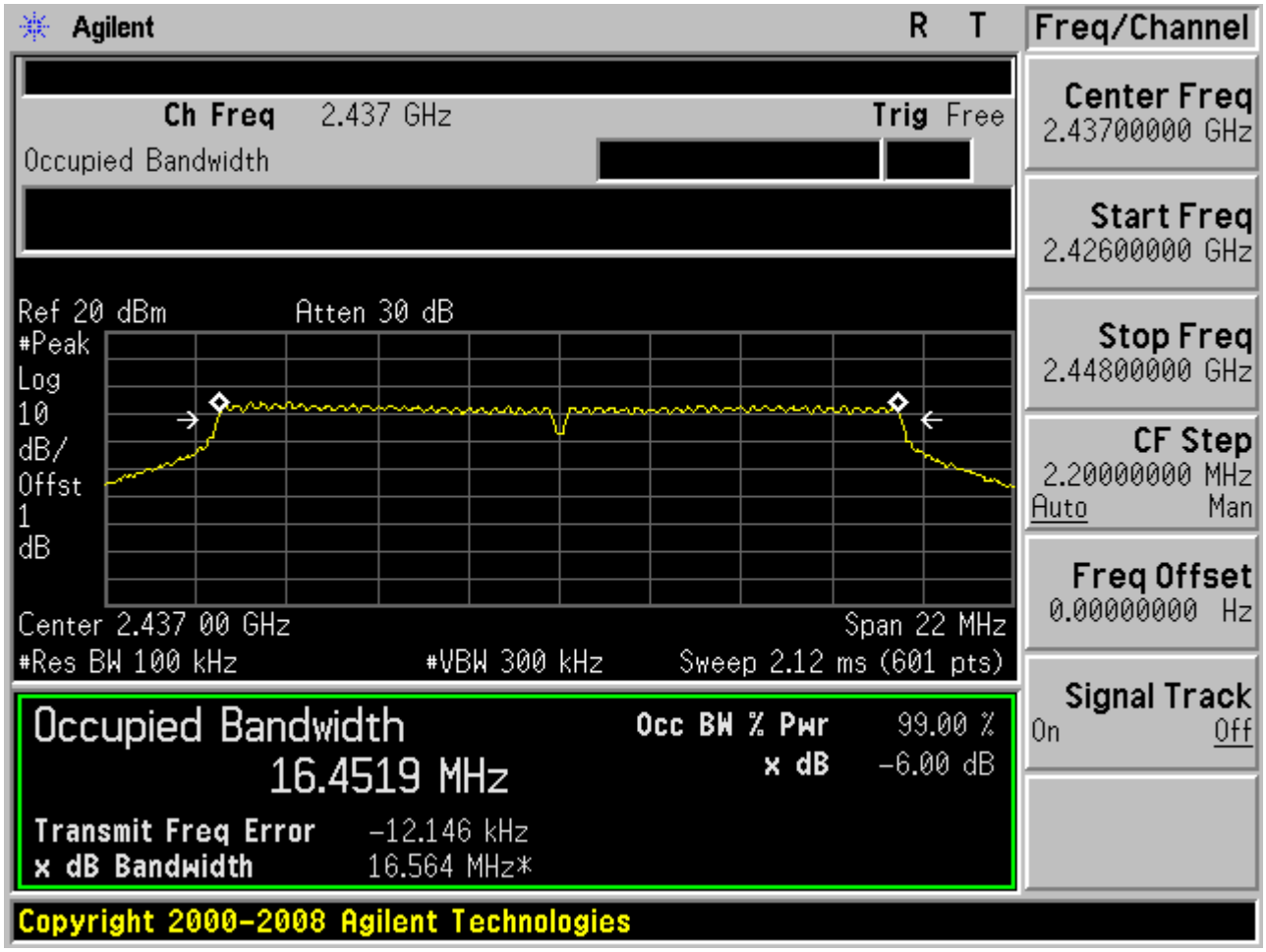
2.3 11B_H



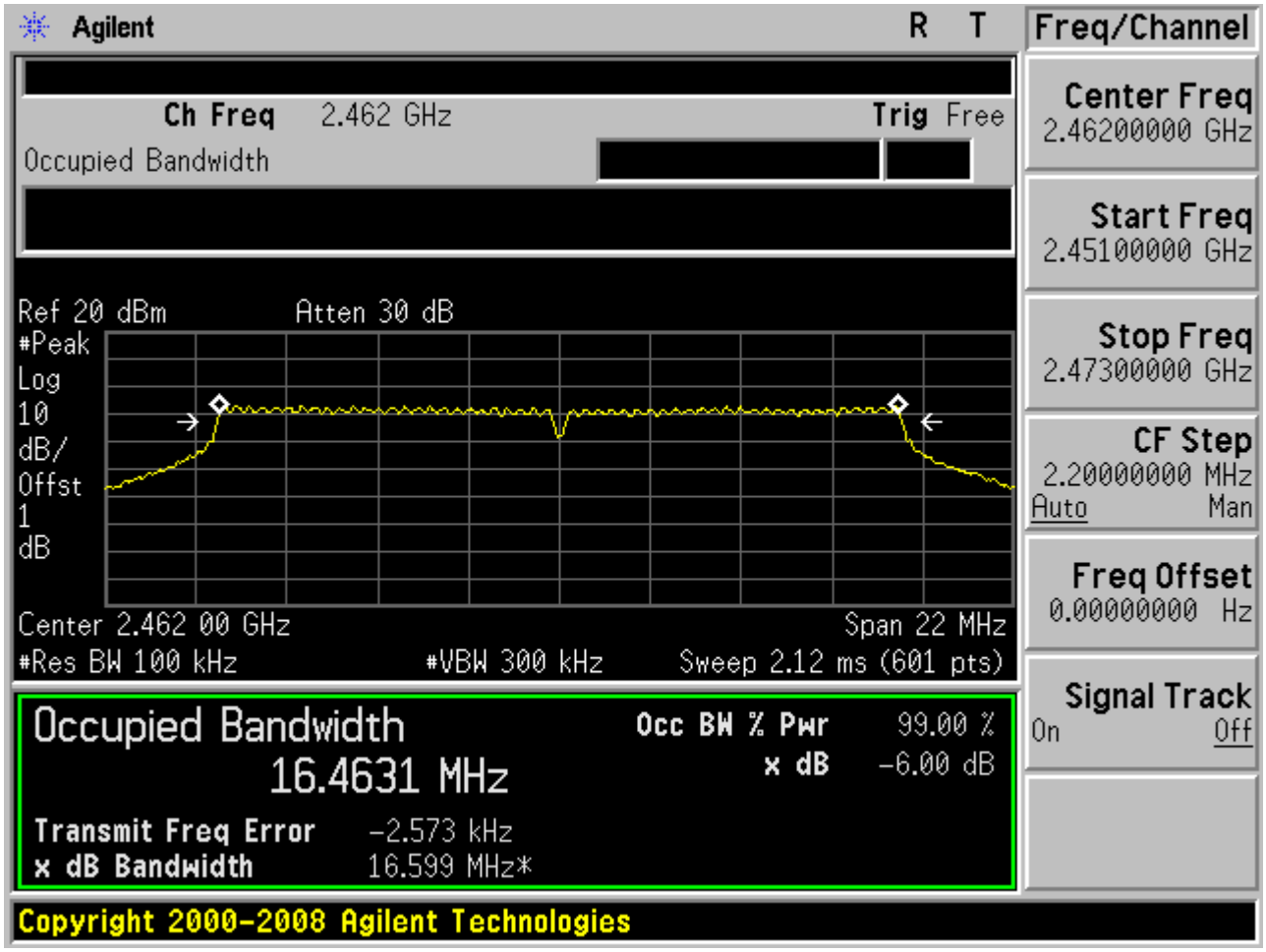
2.4 11G_L



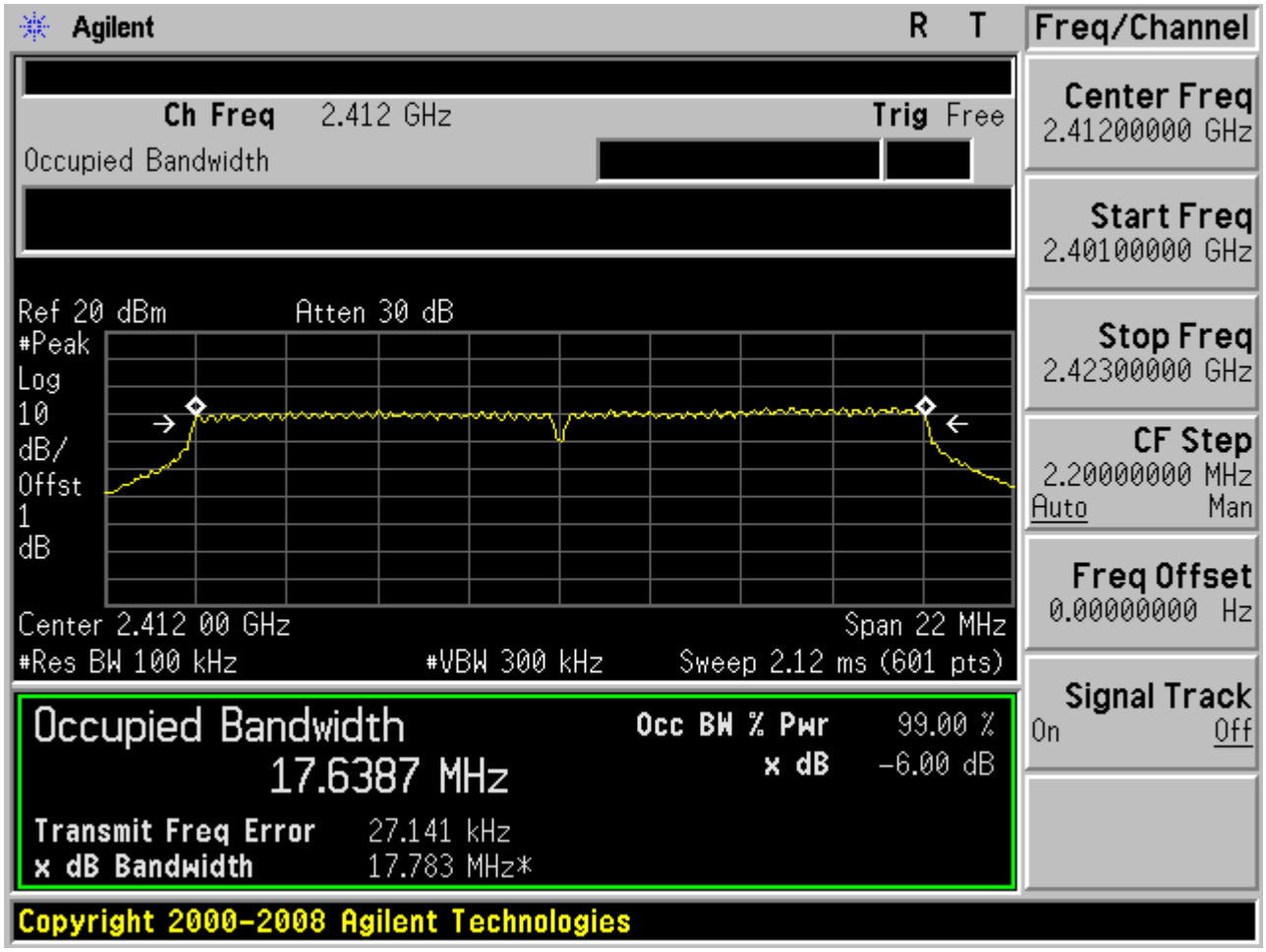
2.5 11G_M



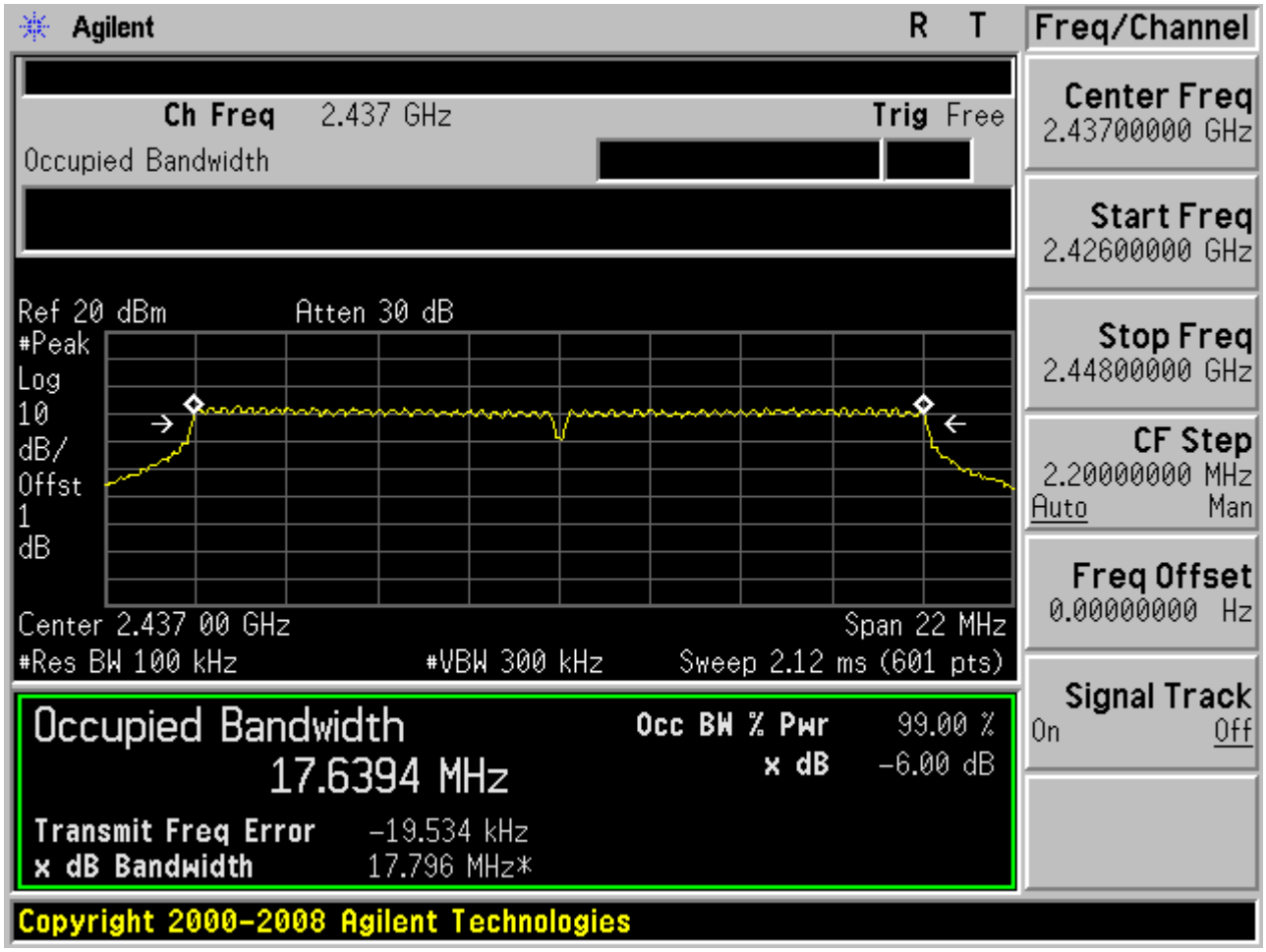
2.6 11G_H



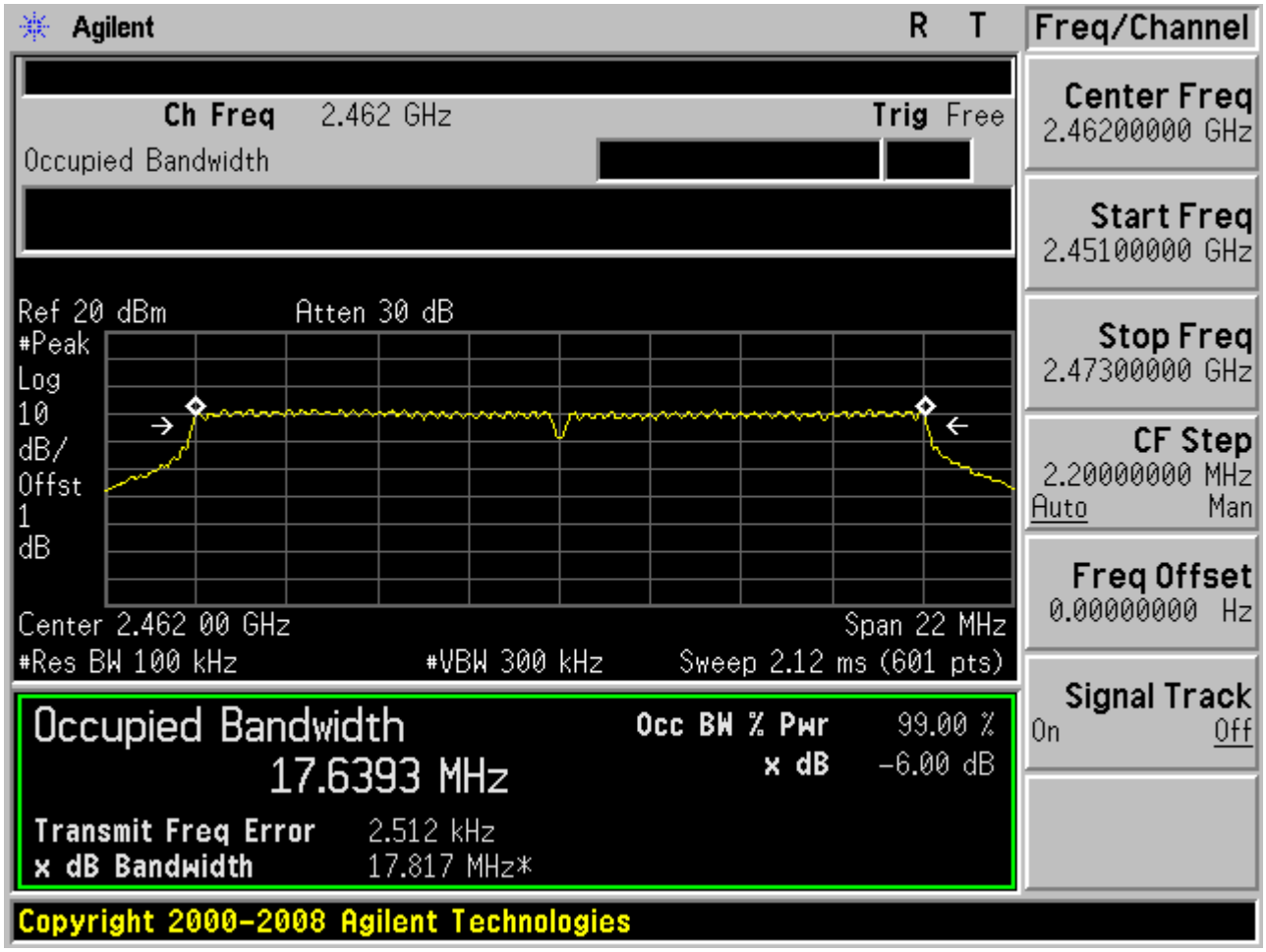
2.7 11N20_L



2.8 11N20_M



2.9 11N20_H



Appendix B: Maximum Conducted Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Meas. Level (Cond.) [dBm]	Verdict
11B	L	2412	16.666	pass
11B	M	2437	17.238	pass
11B	H	2462	17.530	pass
11G	L	2412	12.129	pass
11G	M	2437	12.746	pass
11G	H	2462	12.764	pass
11N20	L	2412	11.373	pass
11N20	M	2437	11.836	pass
11N20	H	2462	11.557	pass

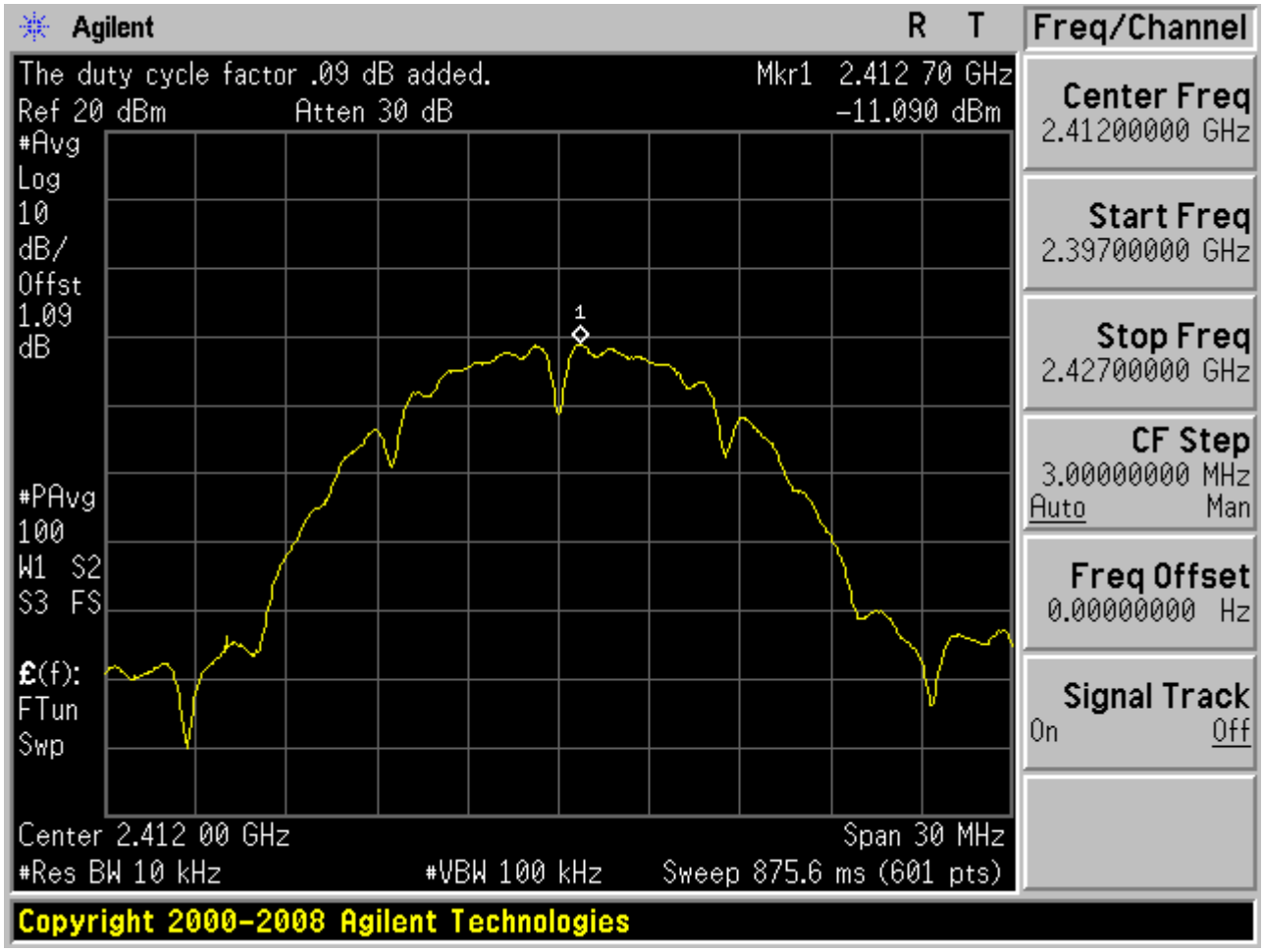
Appendix C: Maximum Power Spectral Density Level

Part I - Test Results

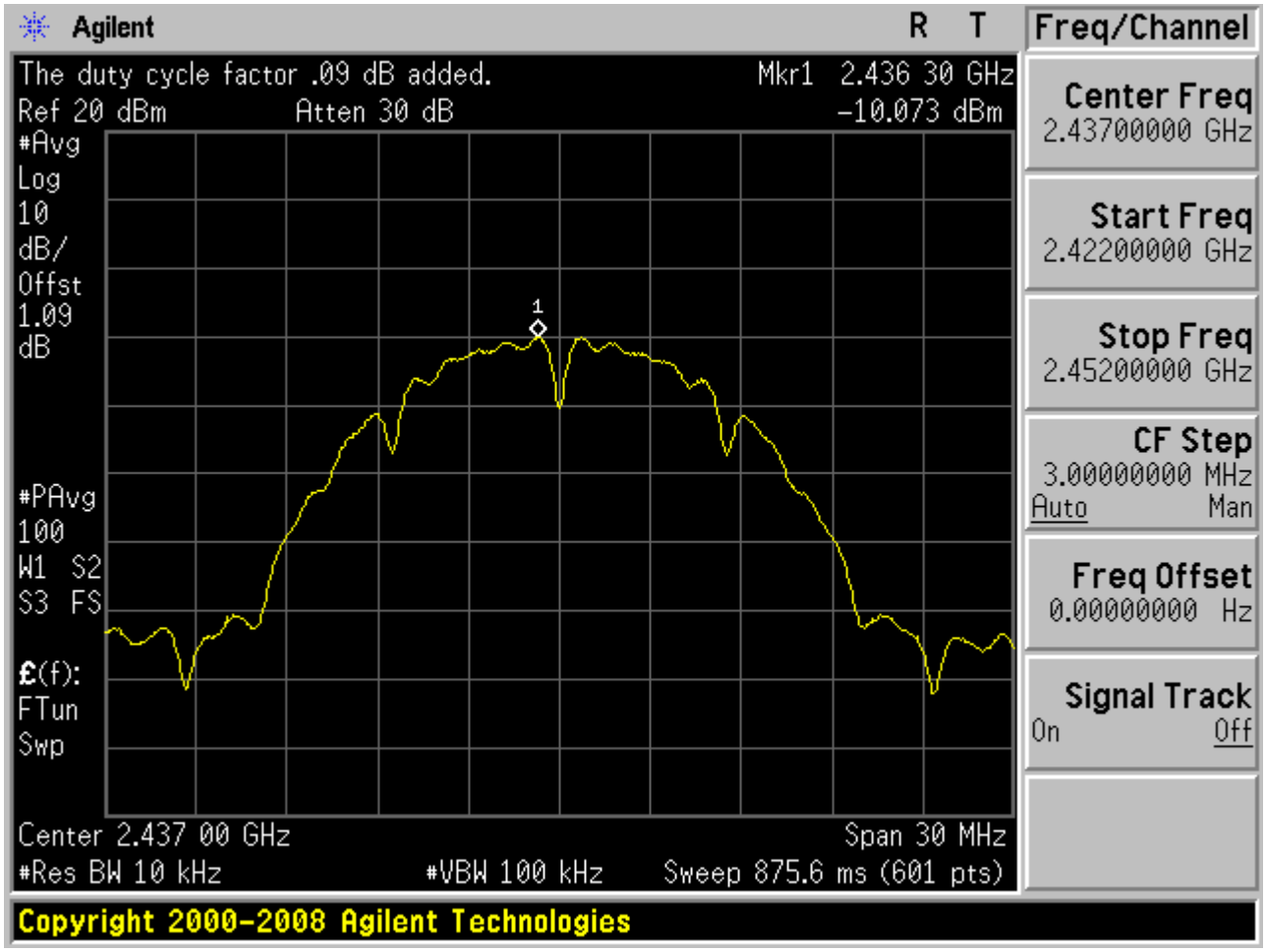
Test Mode	Test Channel	Frequency[MHz]	PD[MHz]	Verdict
11B	L	2412	-11.090	pass
11B	M	2437	-10.073	pass
11B	H	2462	-10.240	pass
11G	L	2412	-16.528	pass
11G	M	2437	-16.154	pass
11G	H	2462	-16.856	pass
11N20	L	2412	-17.466	pass
11N20	M	2437	-17.340	pass
11N20	H	2462	-18.380	pass

Part II - Test Plots

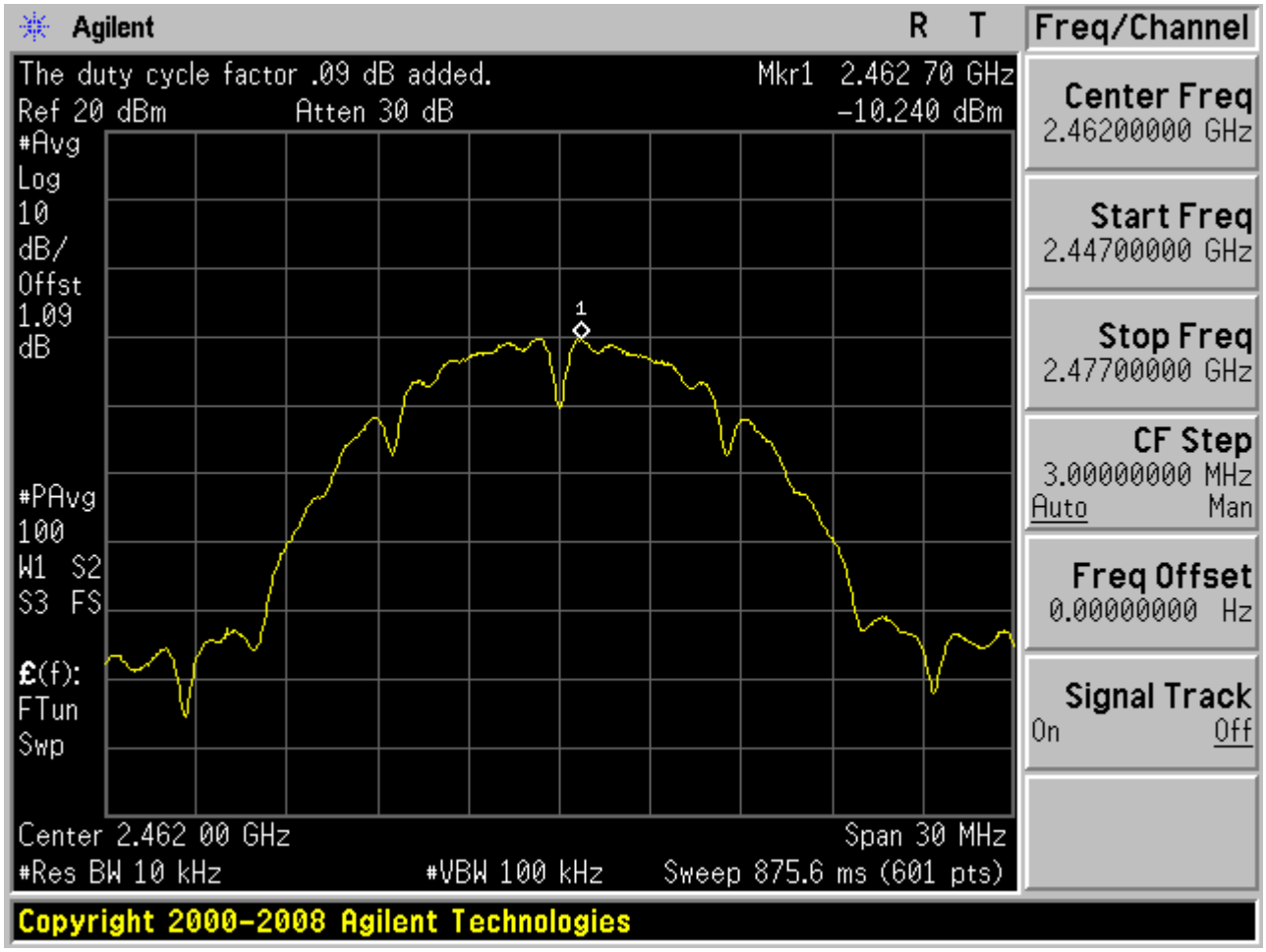
2.1 11B_L



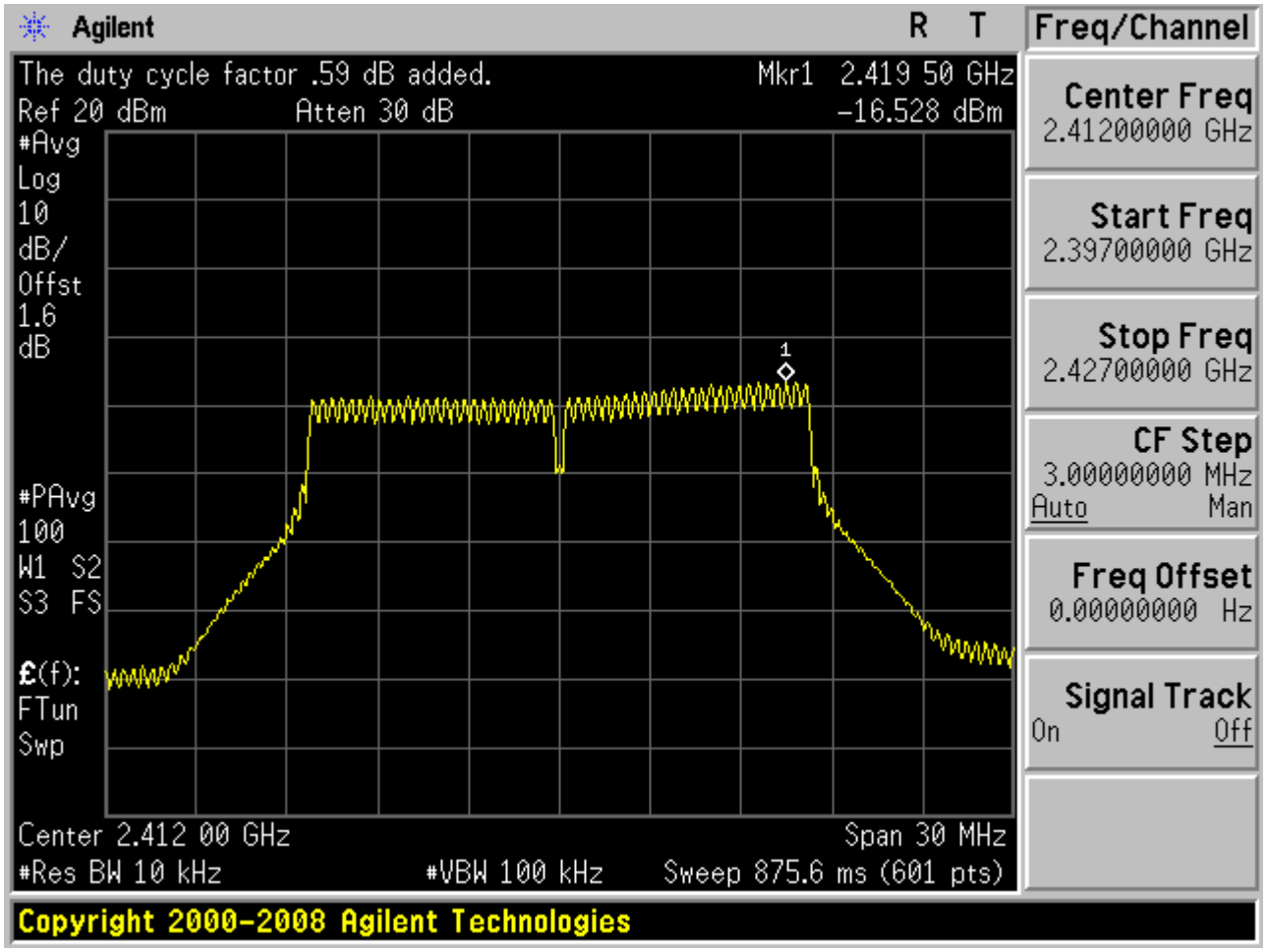
2.2 11B_M



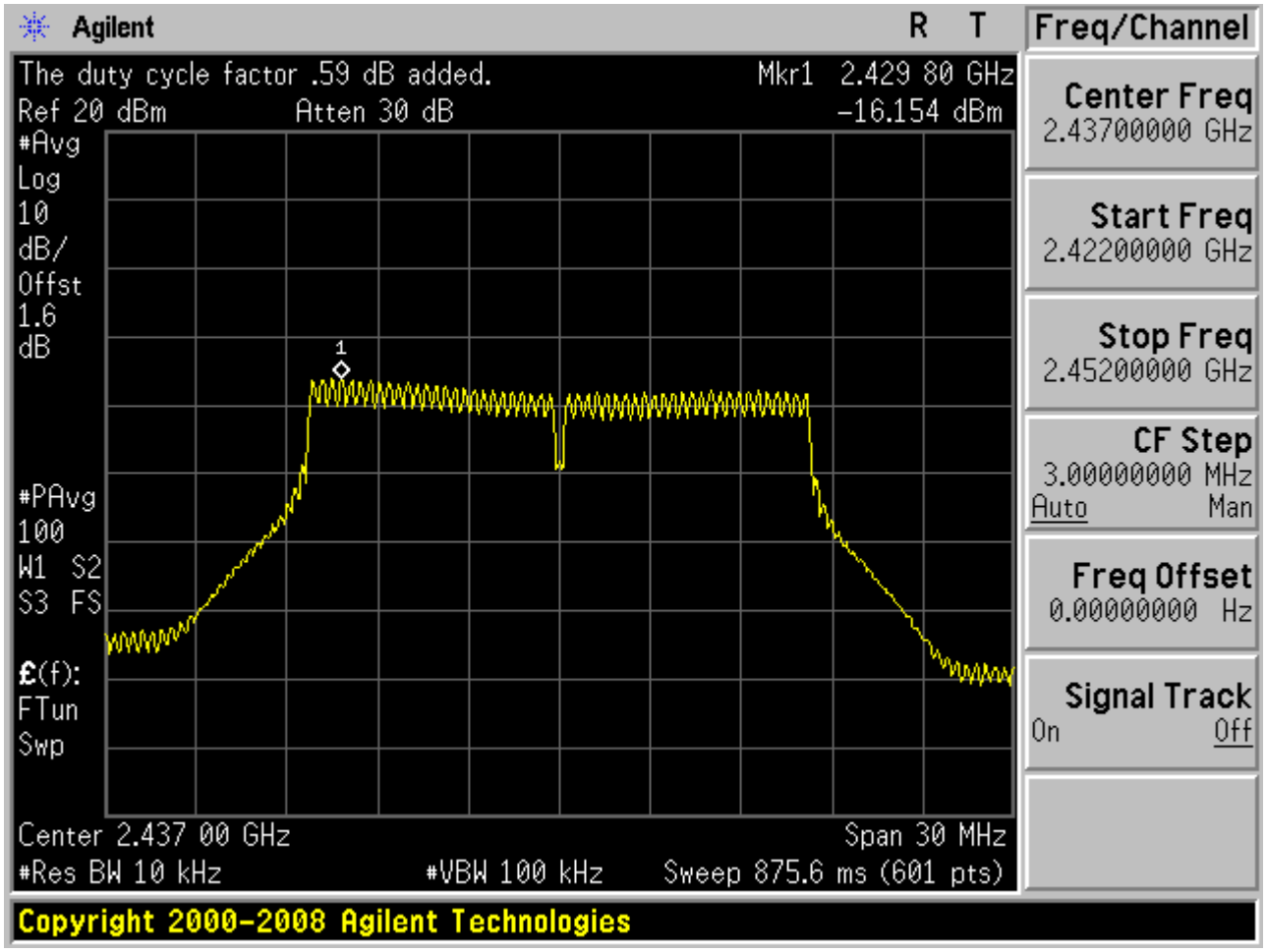
2.3 11B_H



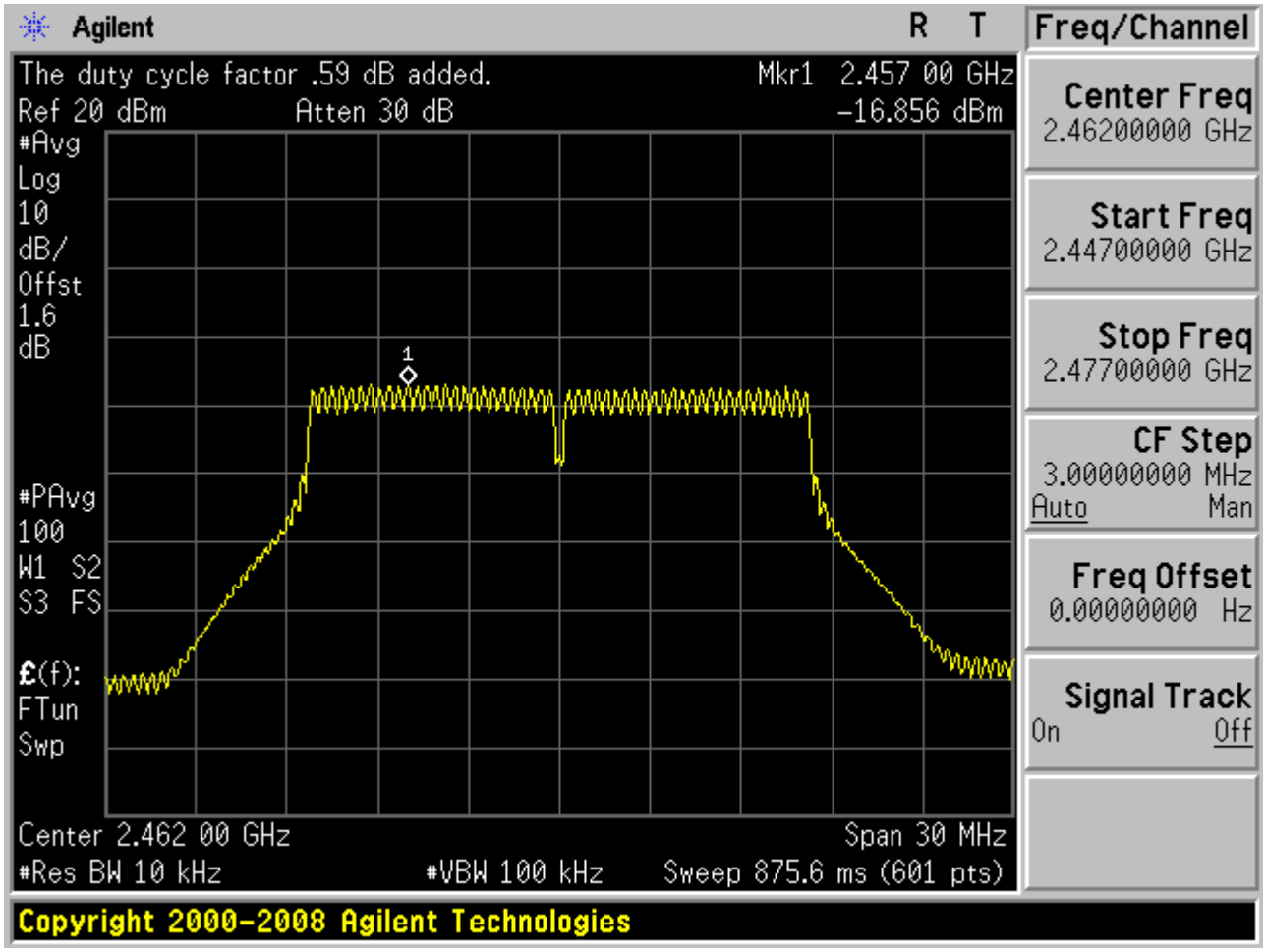
2.4 11G_L

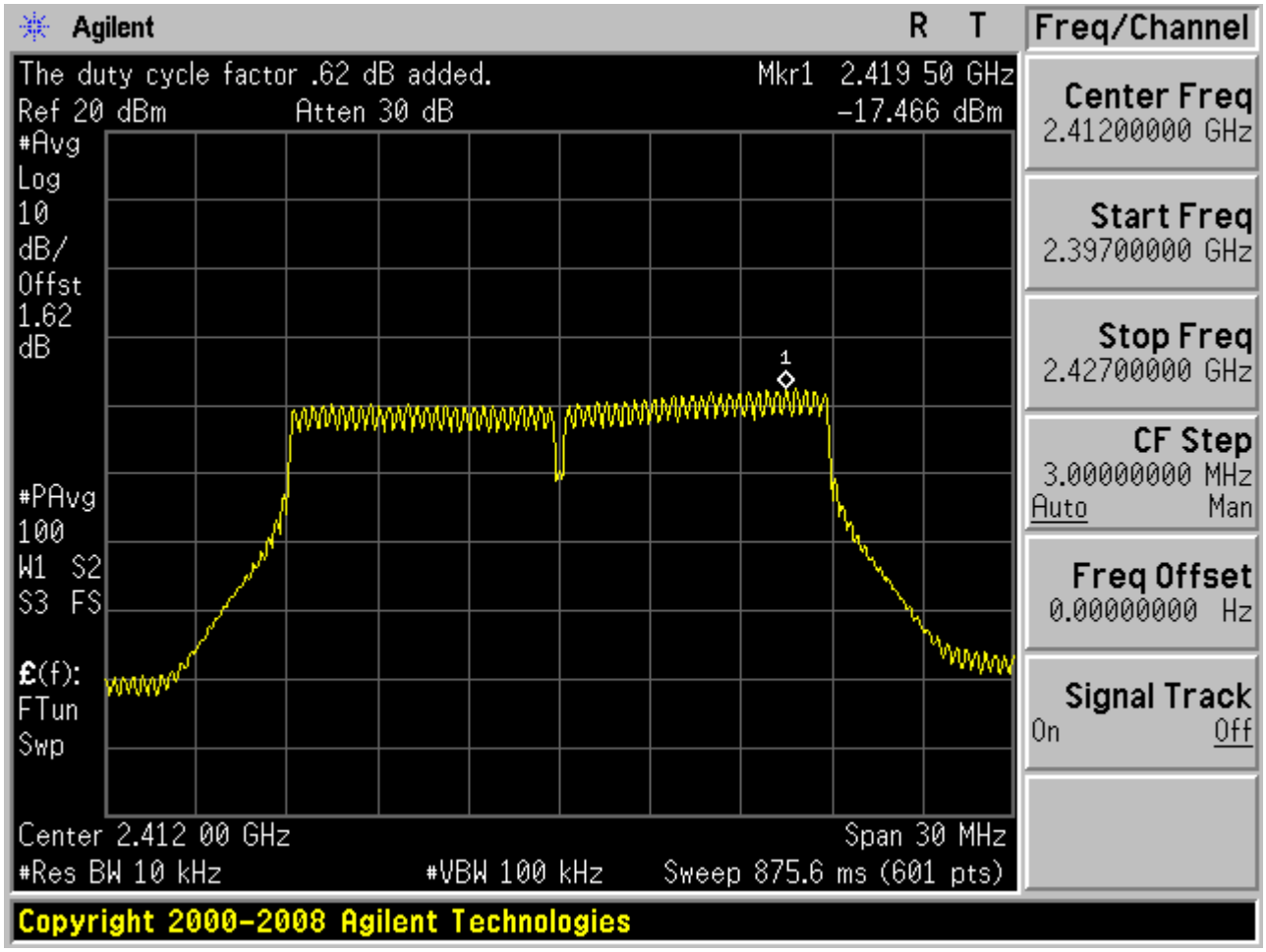


2.5 11G_M

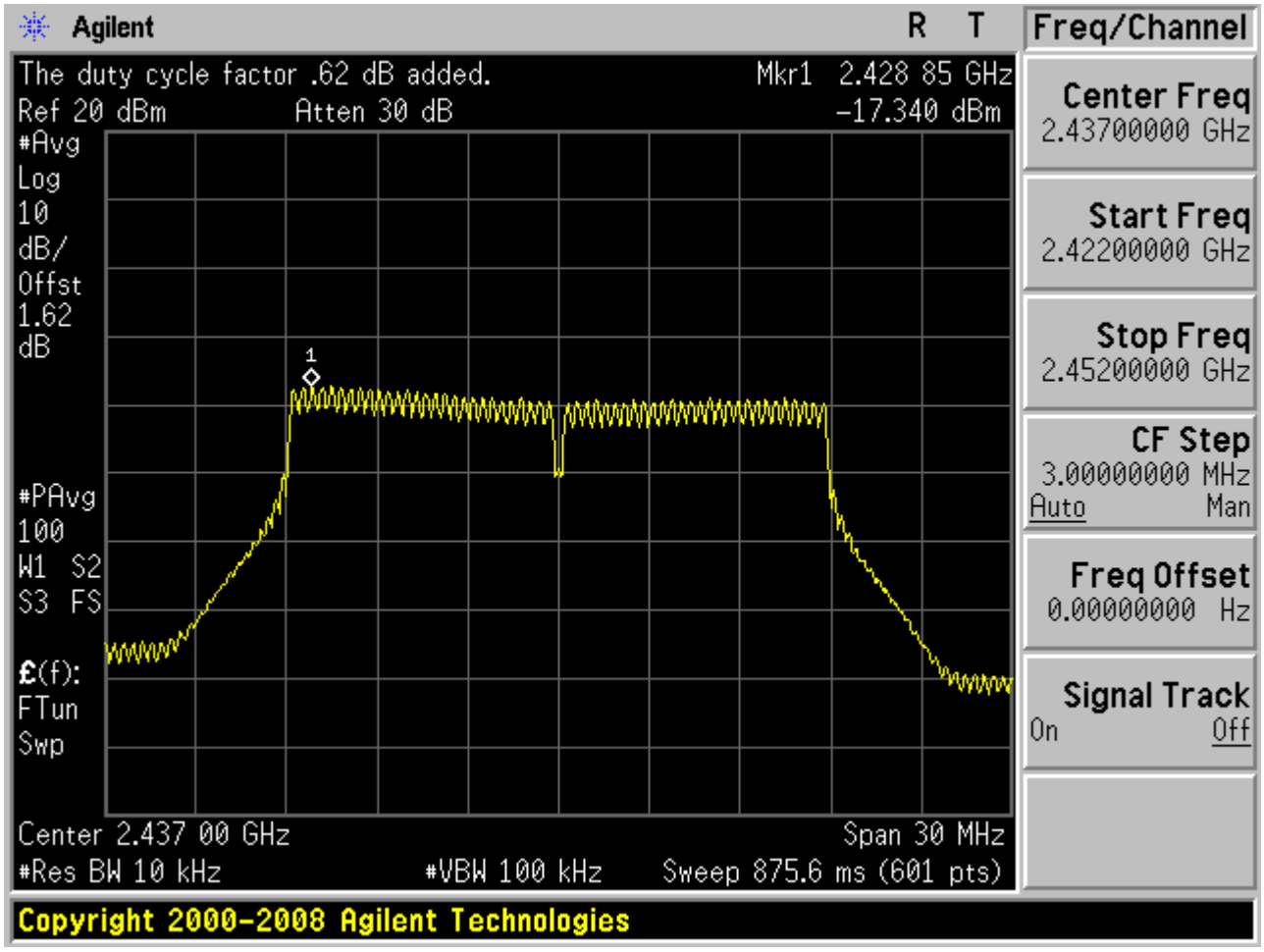


2.6 11G_H

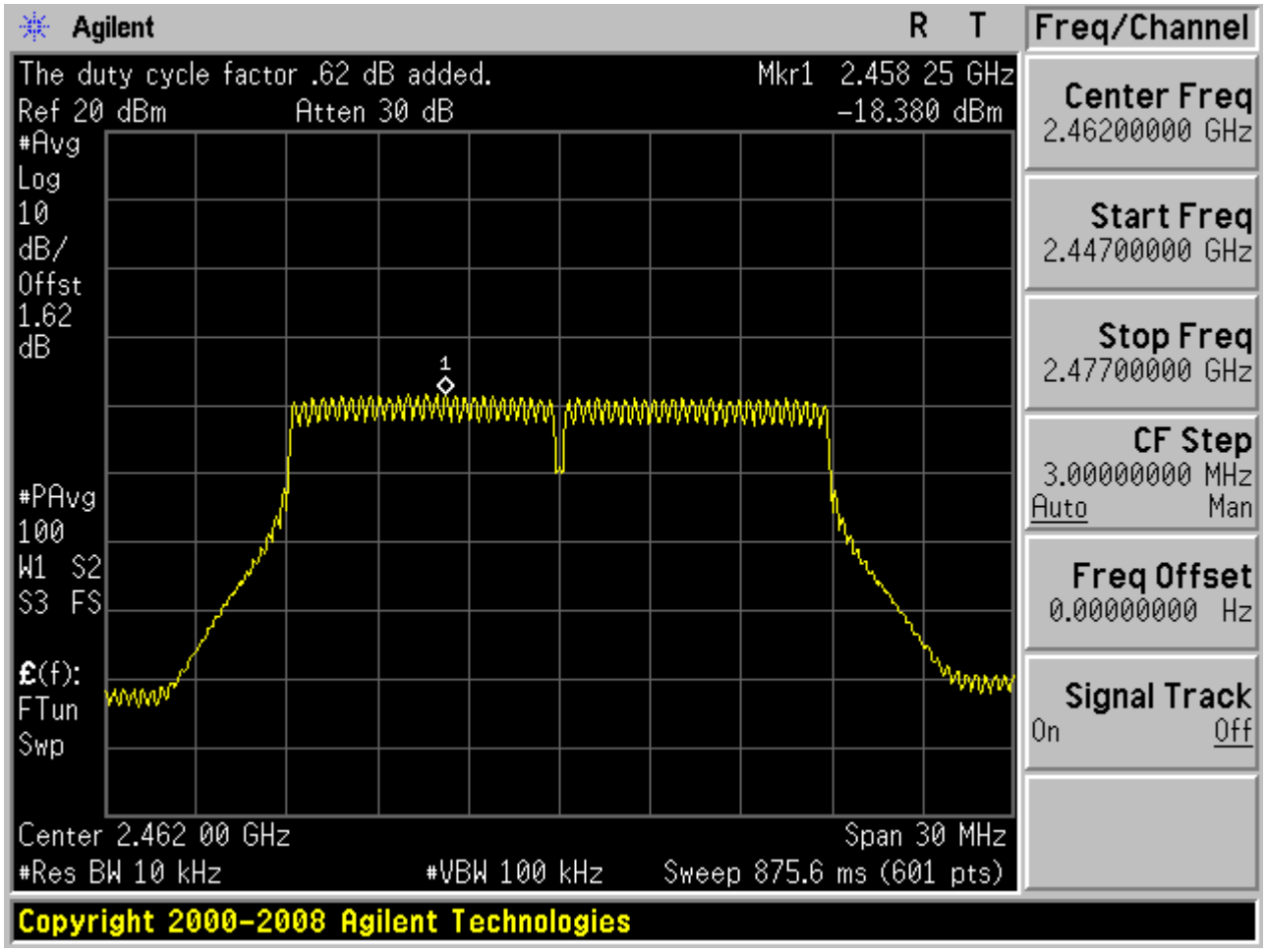




2.7 11N20_L



2.8 11N20_M



2.9 11N20_H

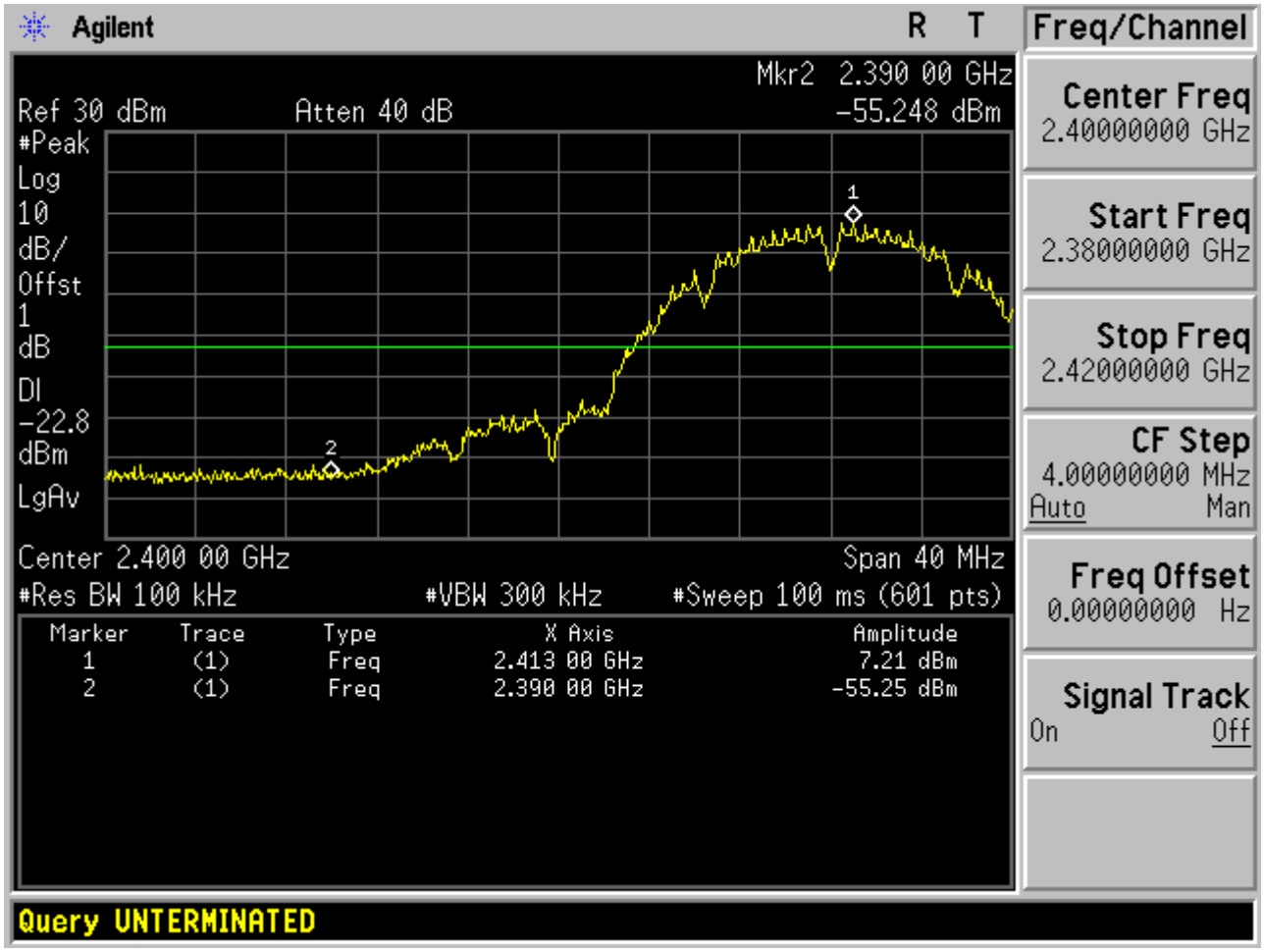
Appendix D: Band Edges Compliance

Part I - Test Results

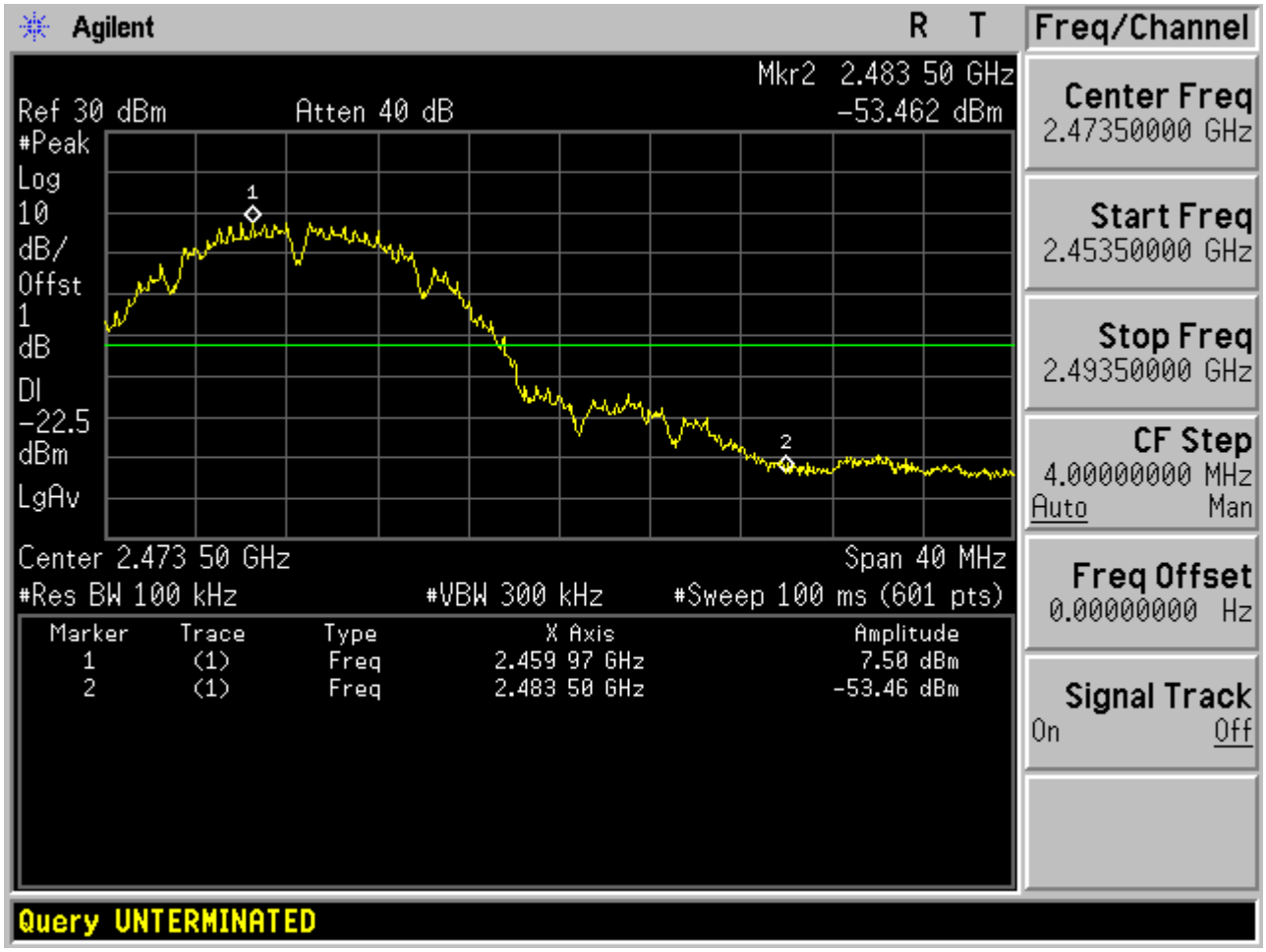
Test Mode	Test Channel	Frequency[MHz]	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	7.21	-55.25	pass
11B	H	2462	7.50	-53.46	pass
11G	L	2412	1.07	-52.15	pass
11G	H	2462	0.30	-50.32	pass
11N20	L	2412	0.10	-53.64	pass
11N20	H	2462	-0.30	-51.46	pass

Part II - Test Plots

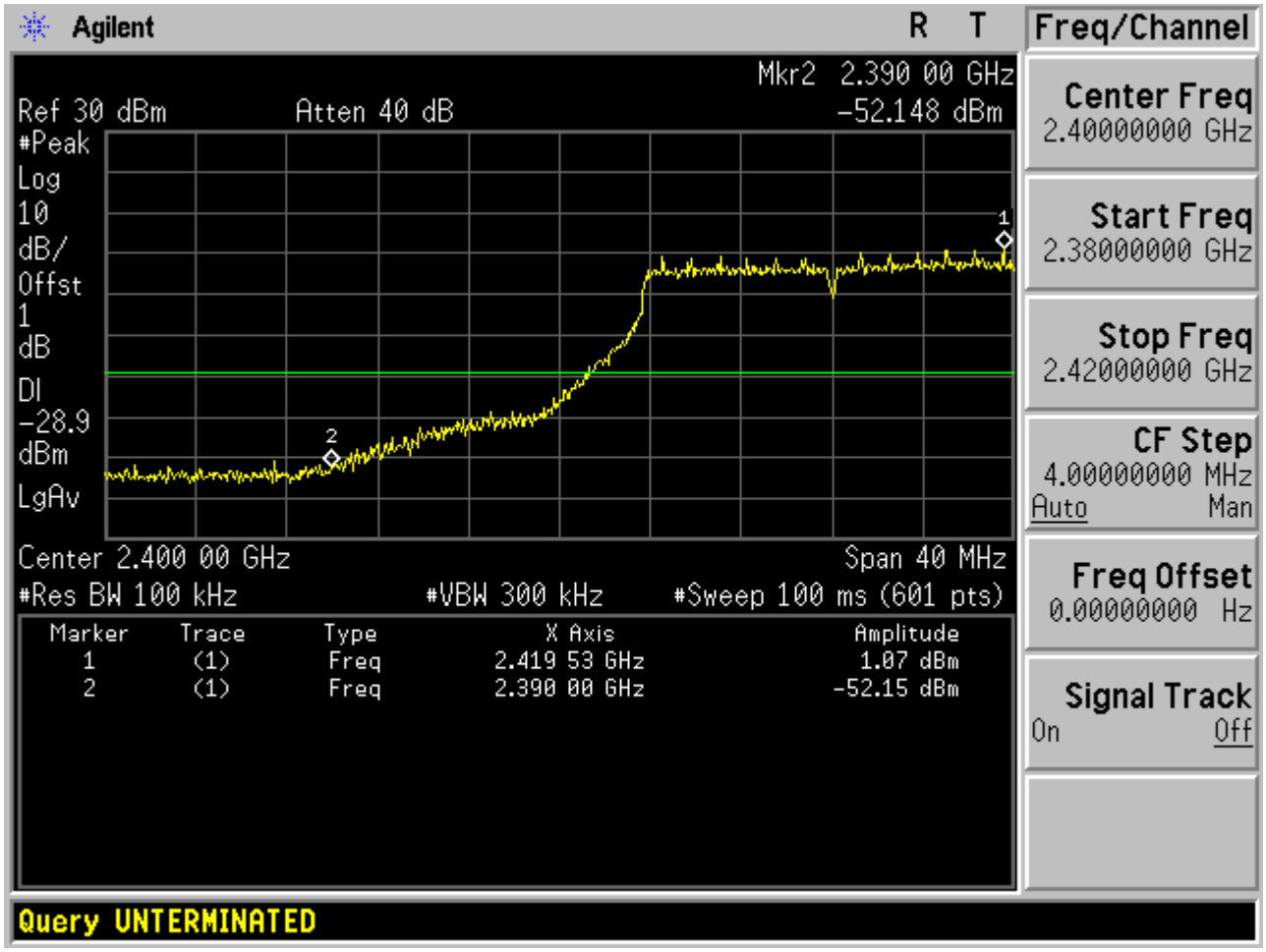
2.1 11B_L



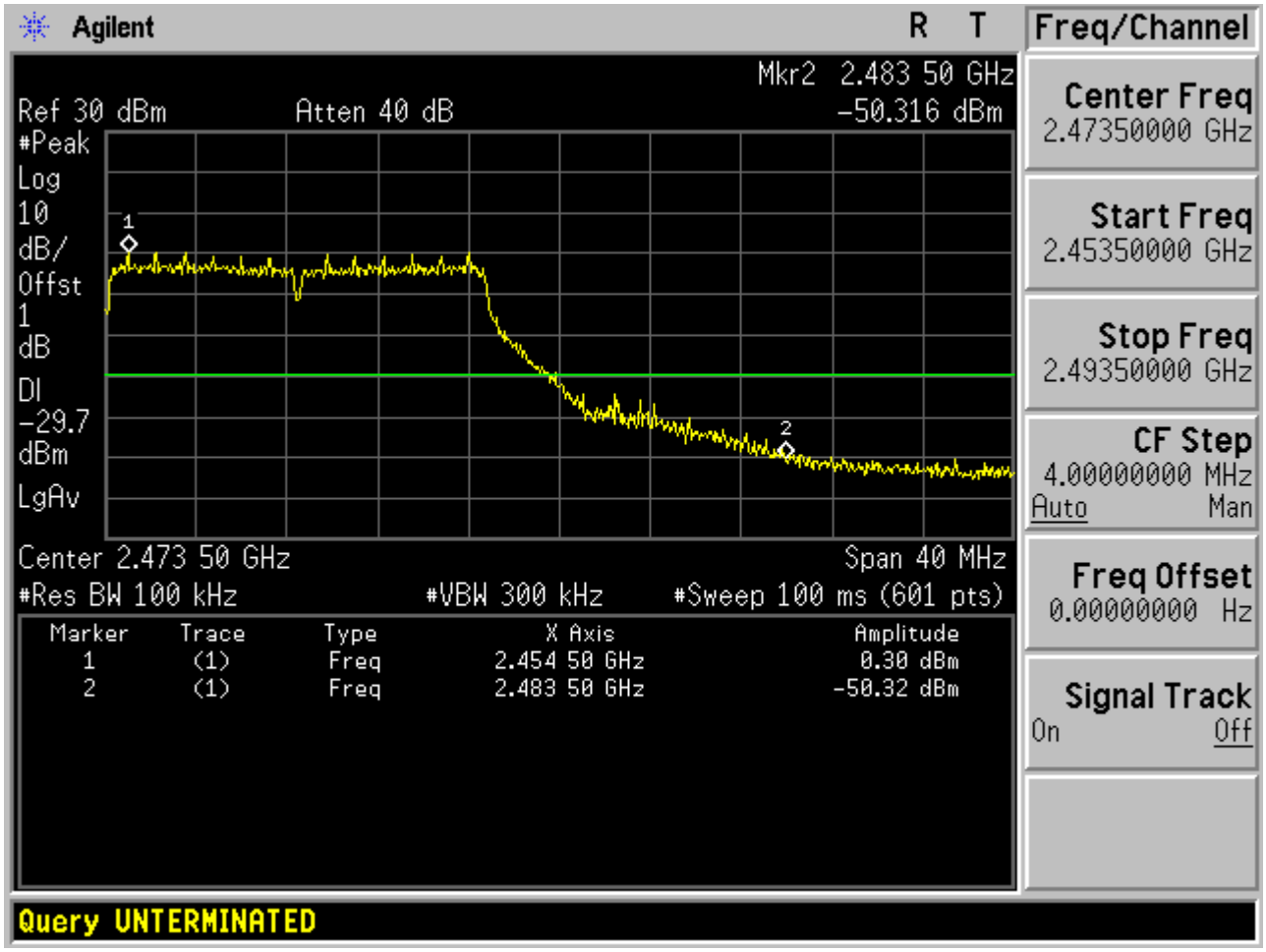
2.2 11B_H



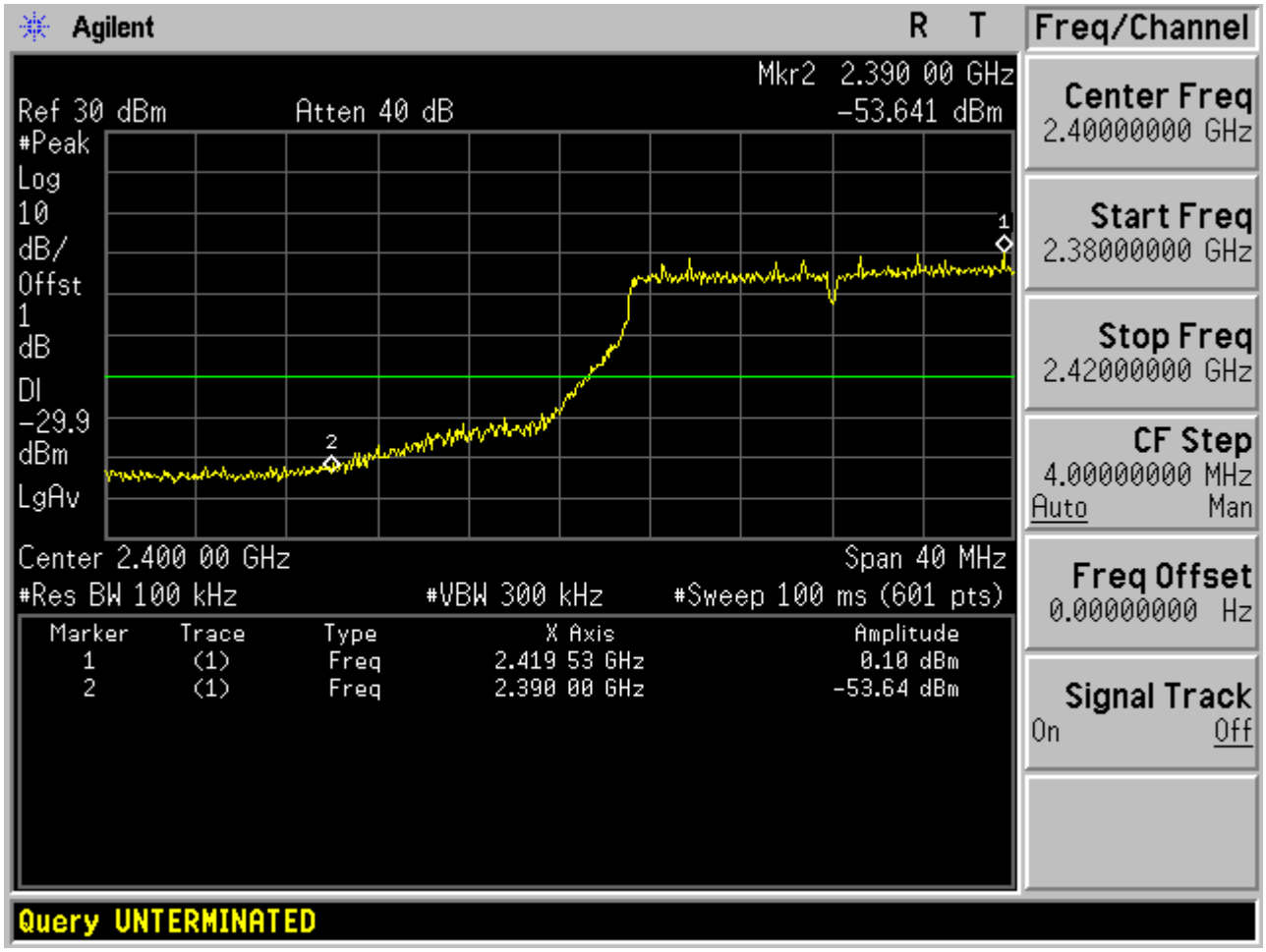
2.3 11G_L



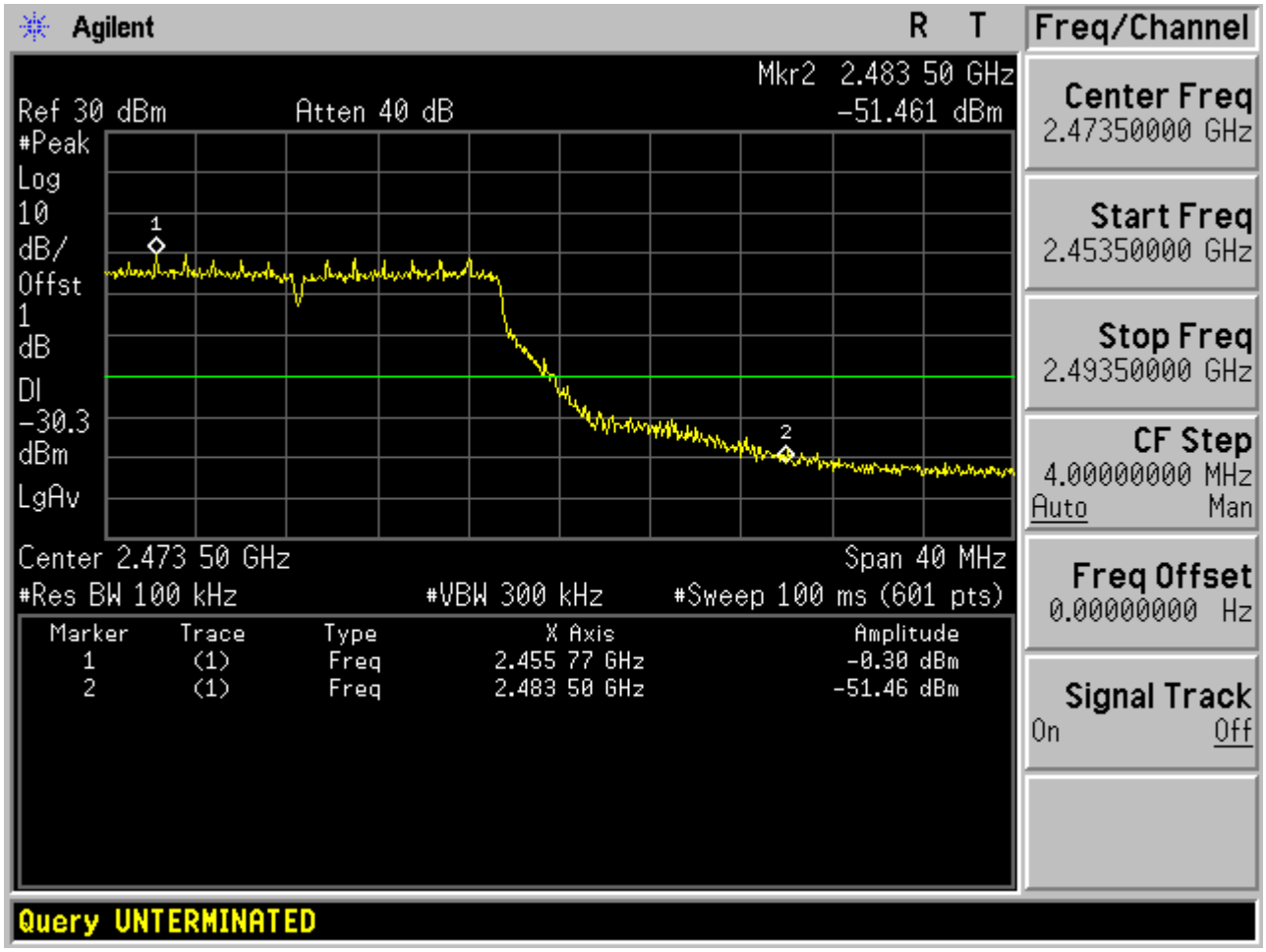
2.4 11G_H



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".

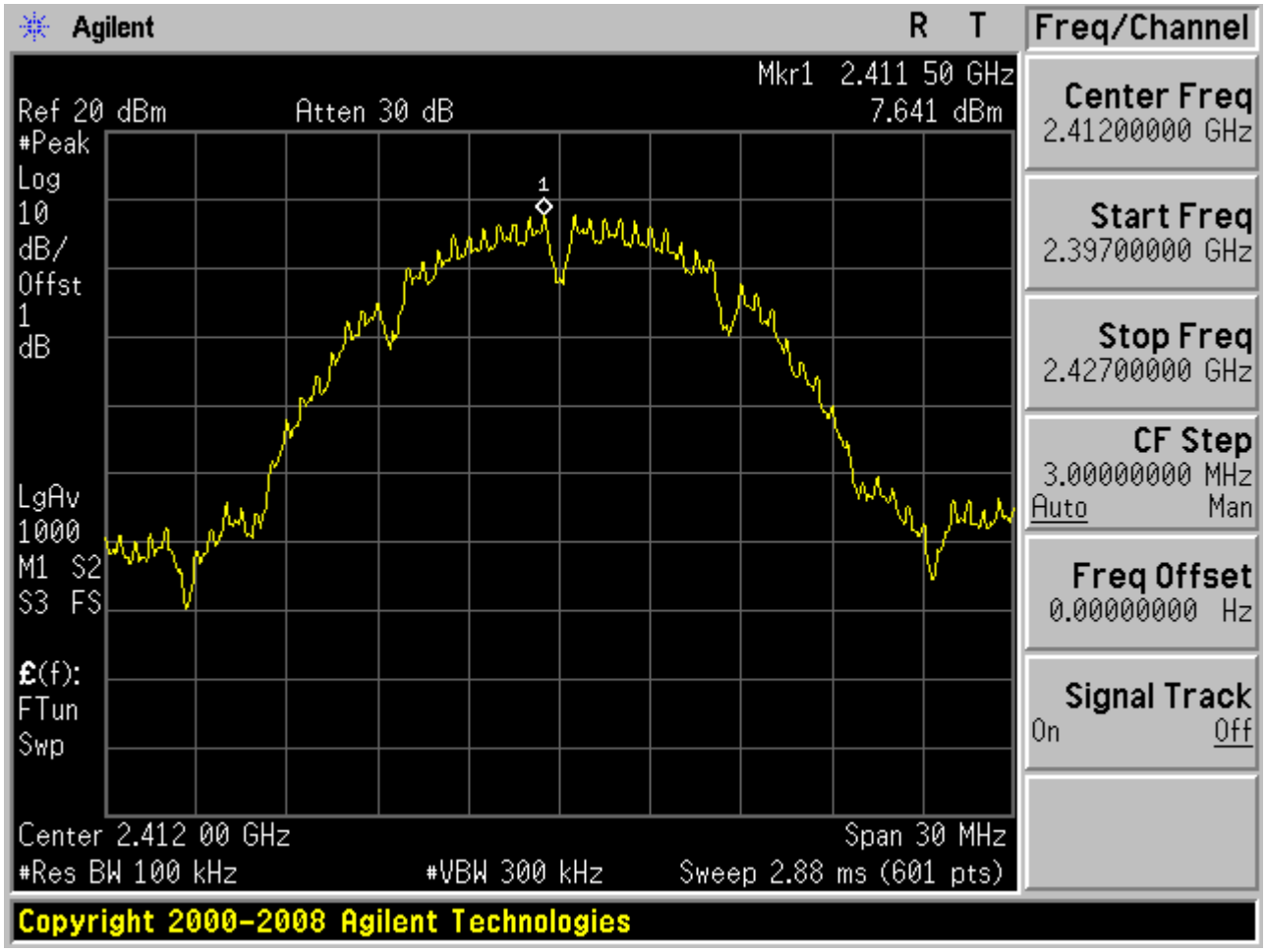
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	7.641	<limit	pass
11B	M	2437	8.679	<limit	pass
11B	H	2462	8.709	<limit	pass
11G	L	2412	1.662	<limit	pass
11G	M	2437	1.774	<limit	pass
11G	H	2462	0.777	<limit	pass
11N20	L	2412	0.305	<limit	pass
11N20	M	2437	0.841	<limit	pass
11N20	H	2462	-0.334	<limit	pass

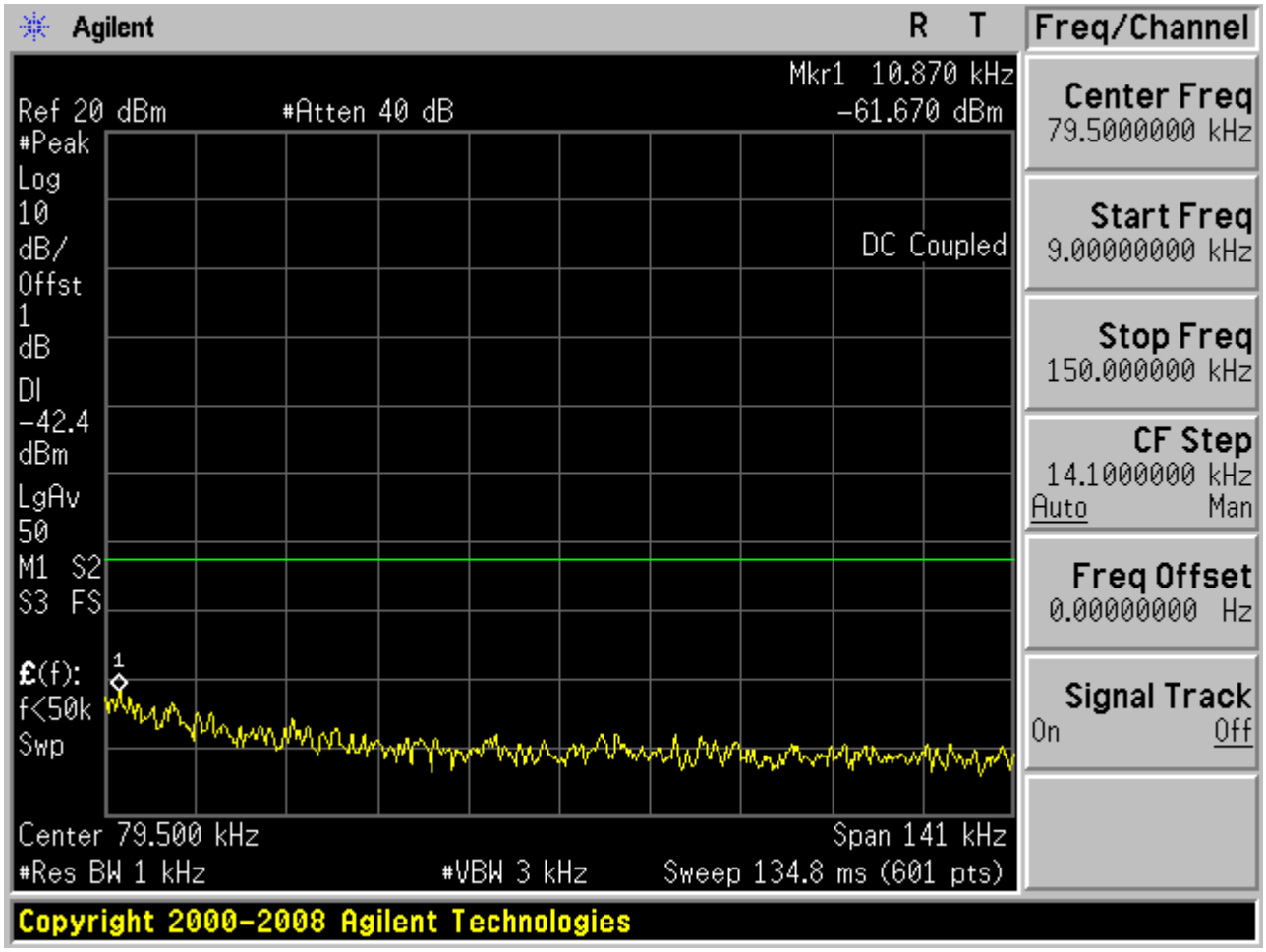
Part II - Test Plots

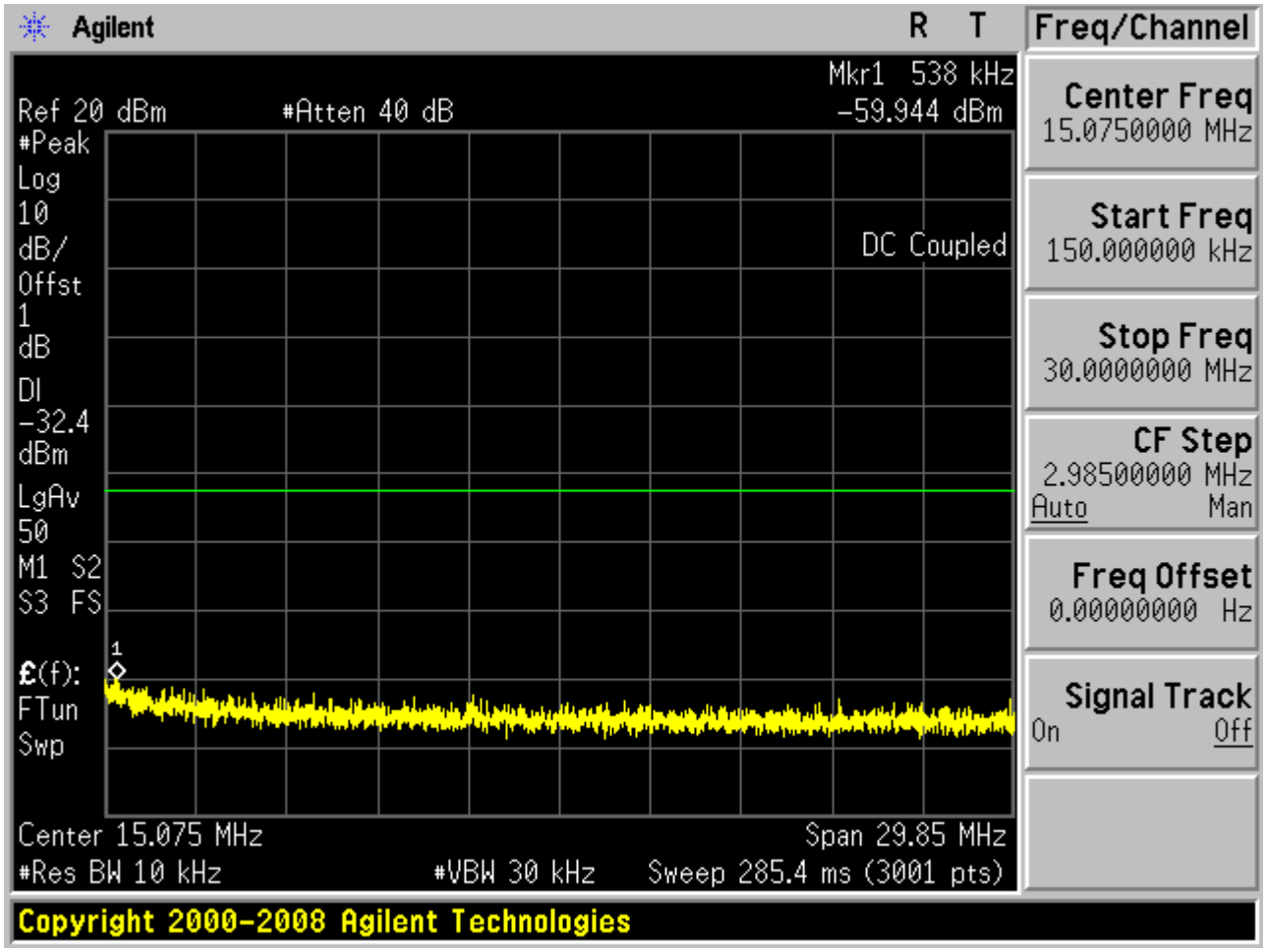
2.1 11B_L

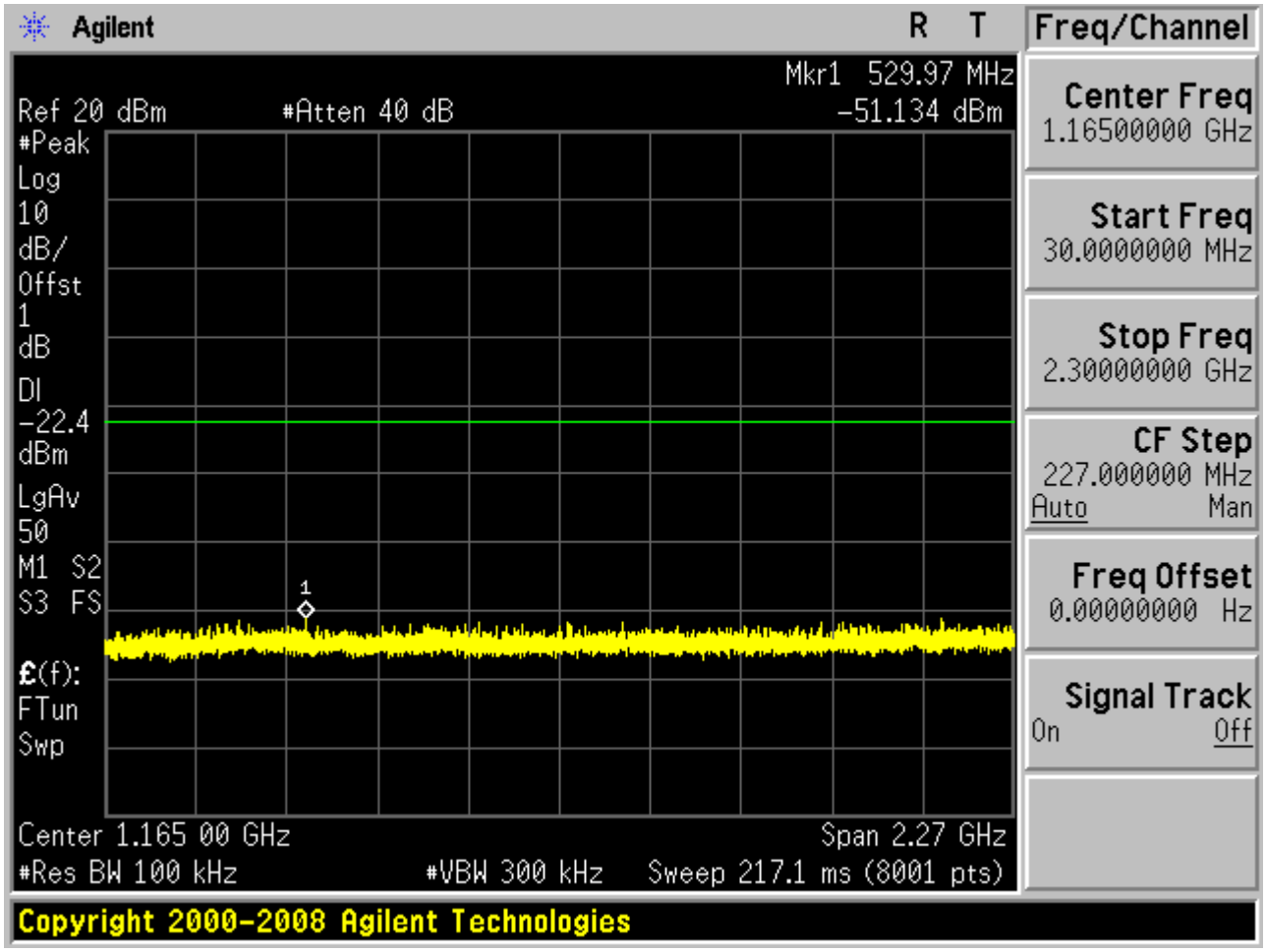
Pref:

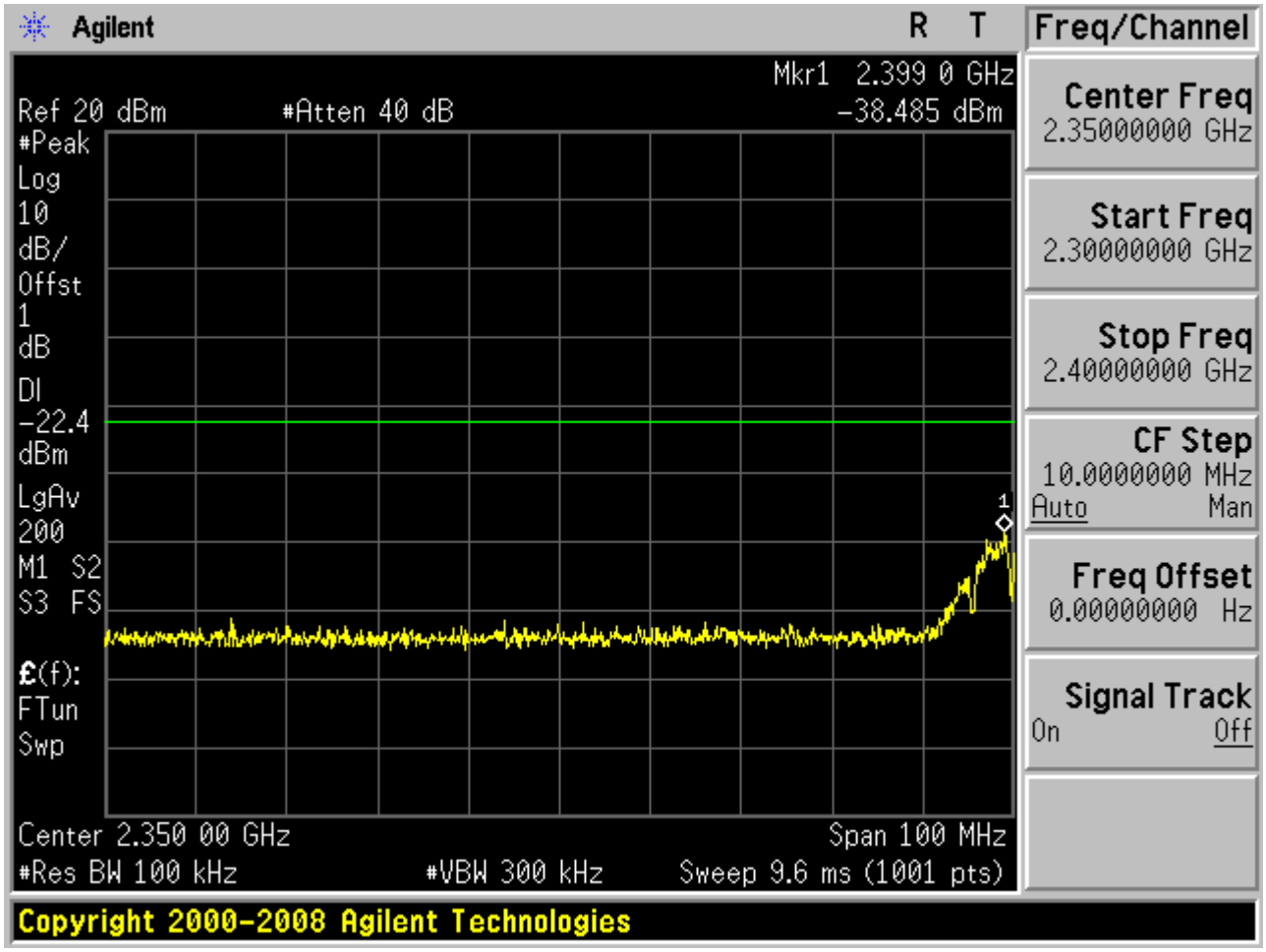


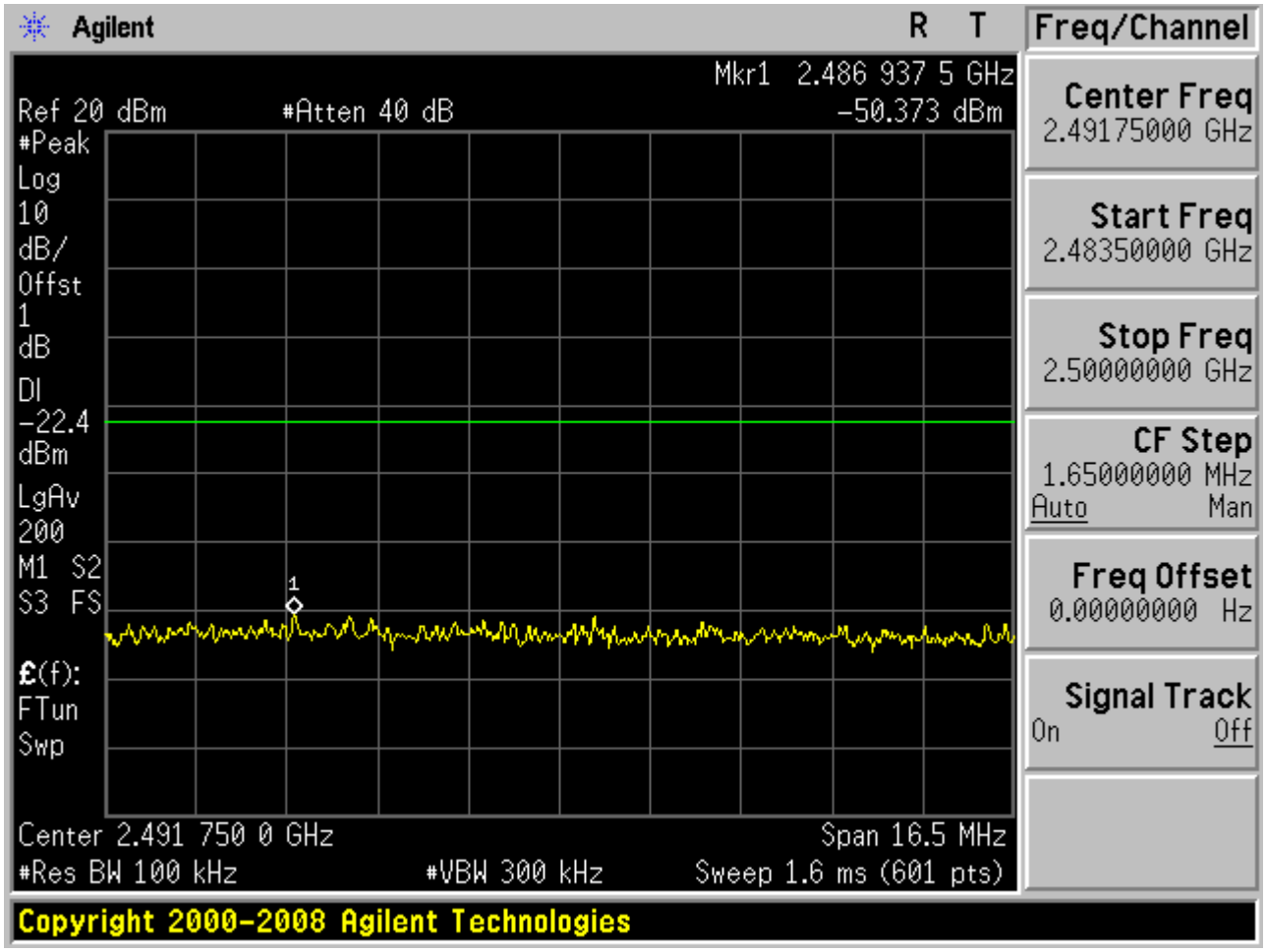
Puw:

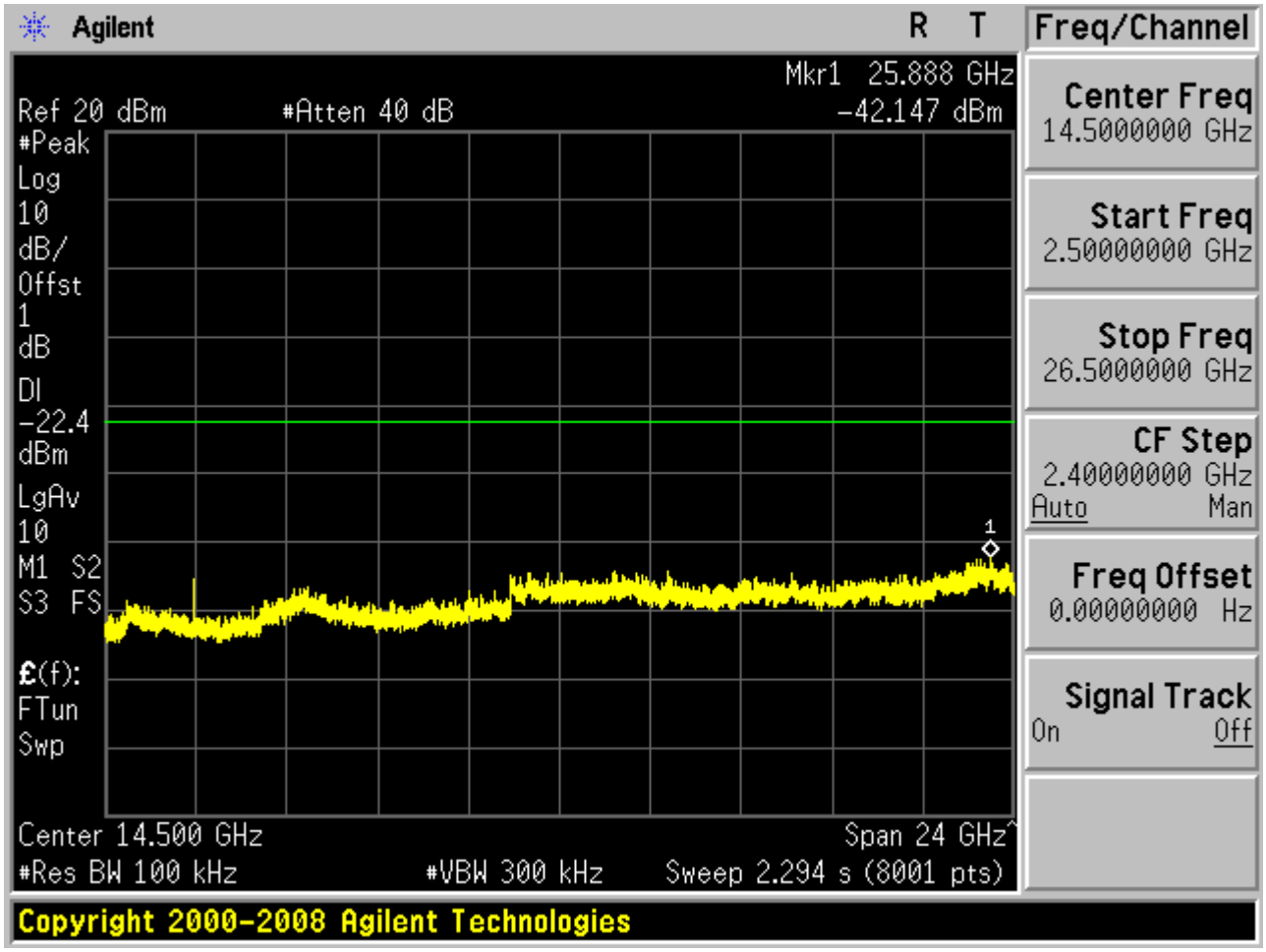






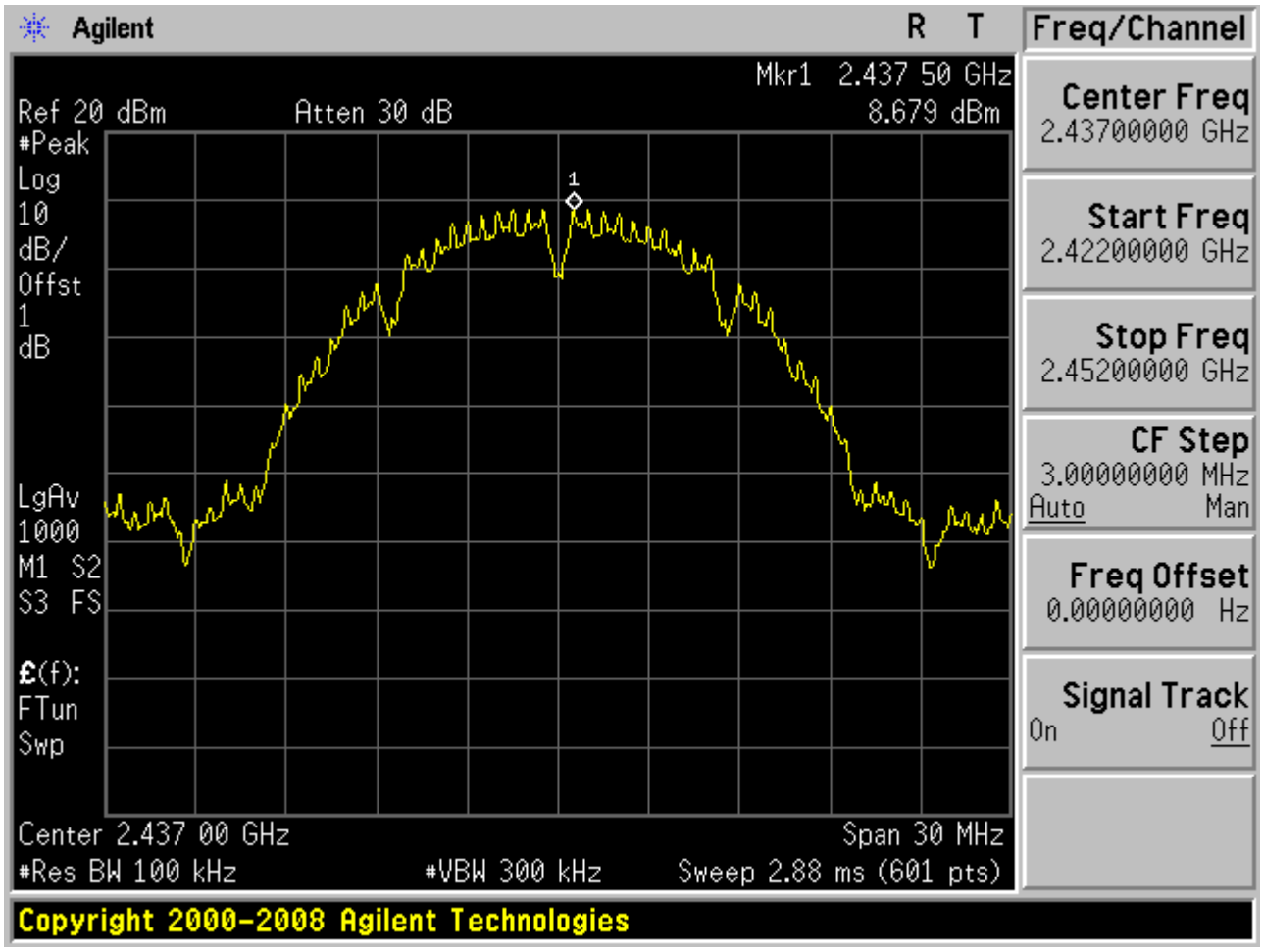




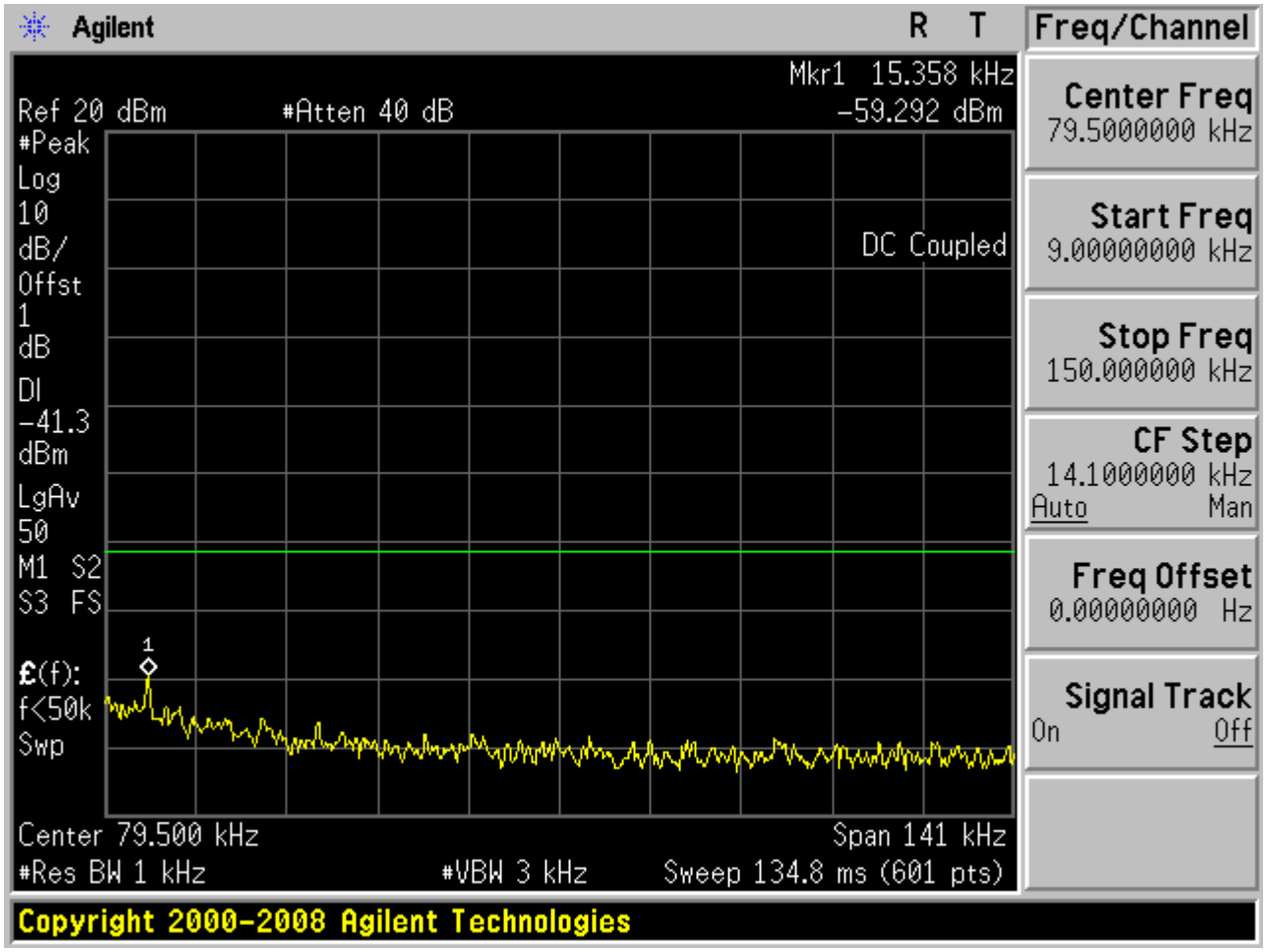


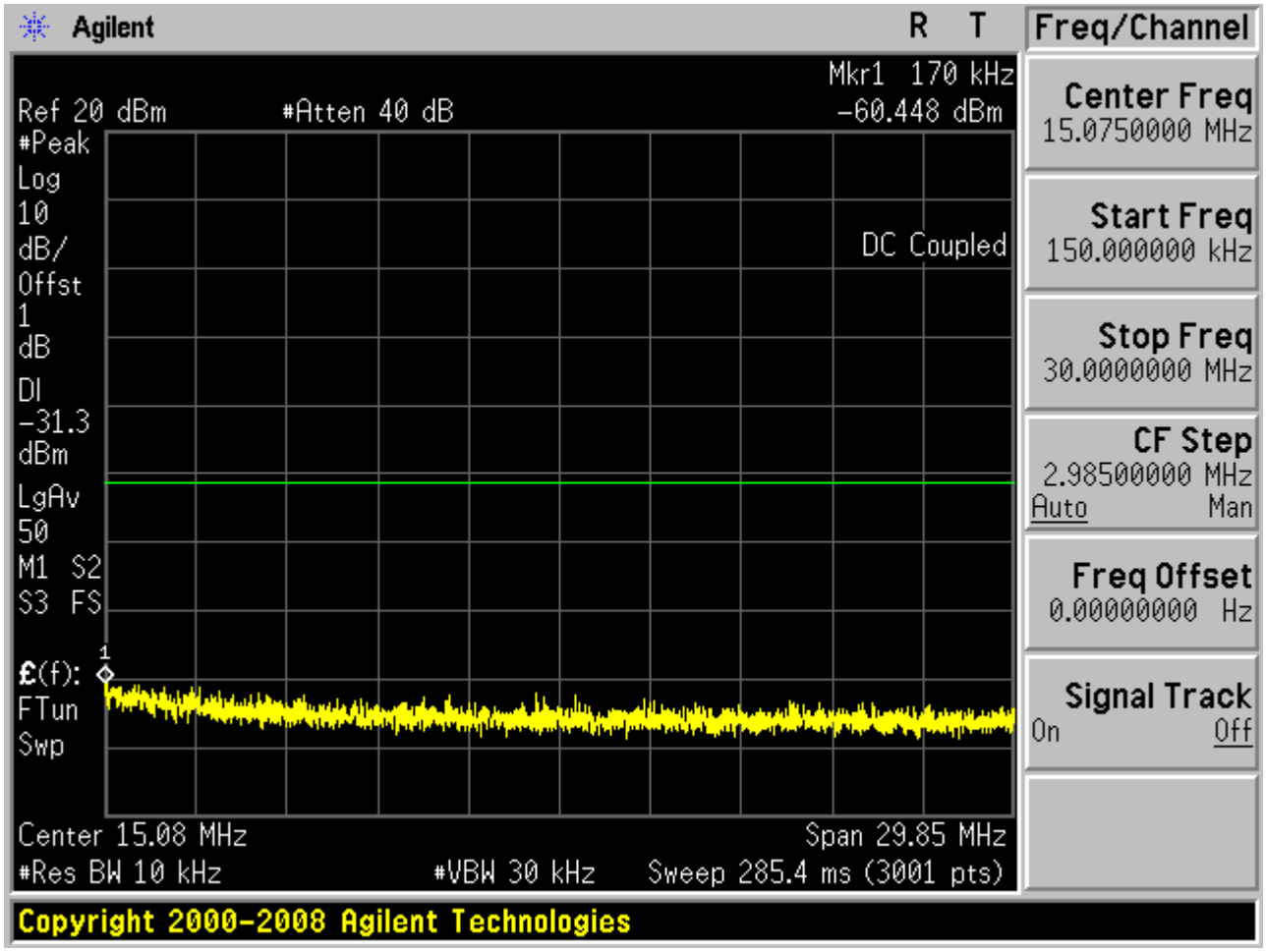
2.1 11B_M

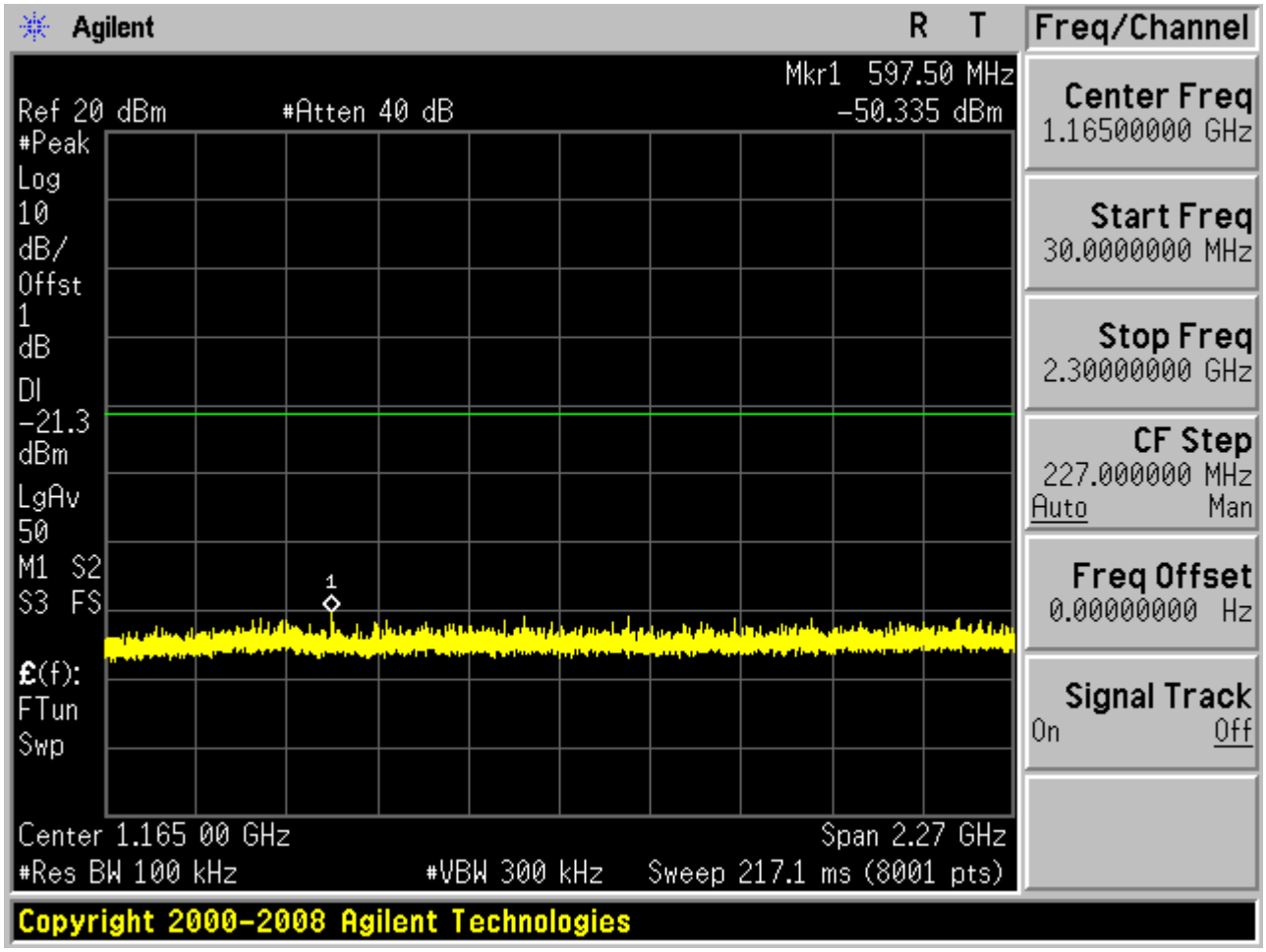
Pref:

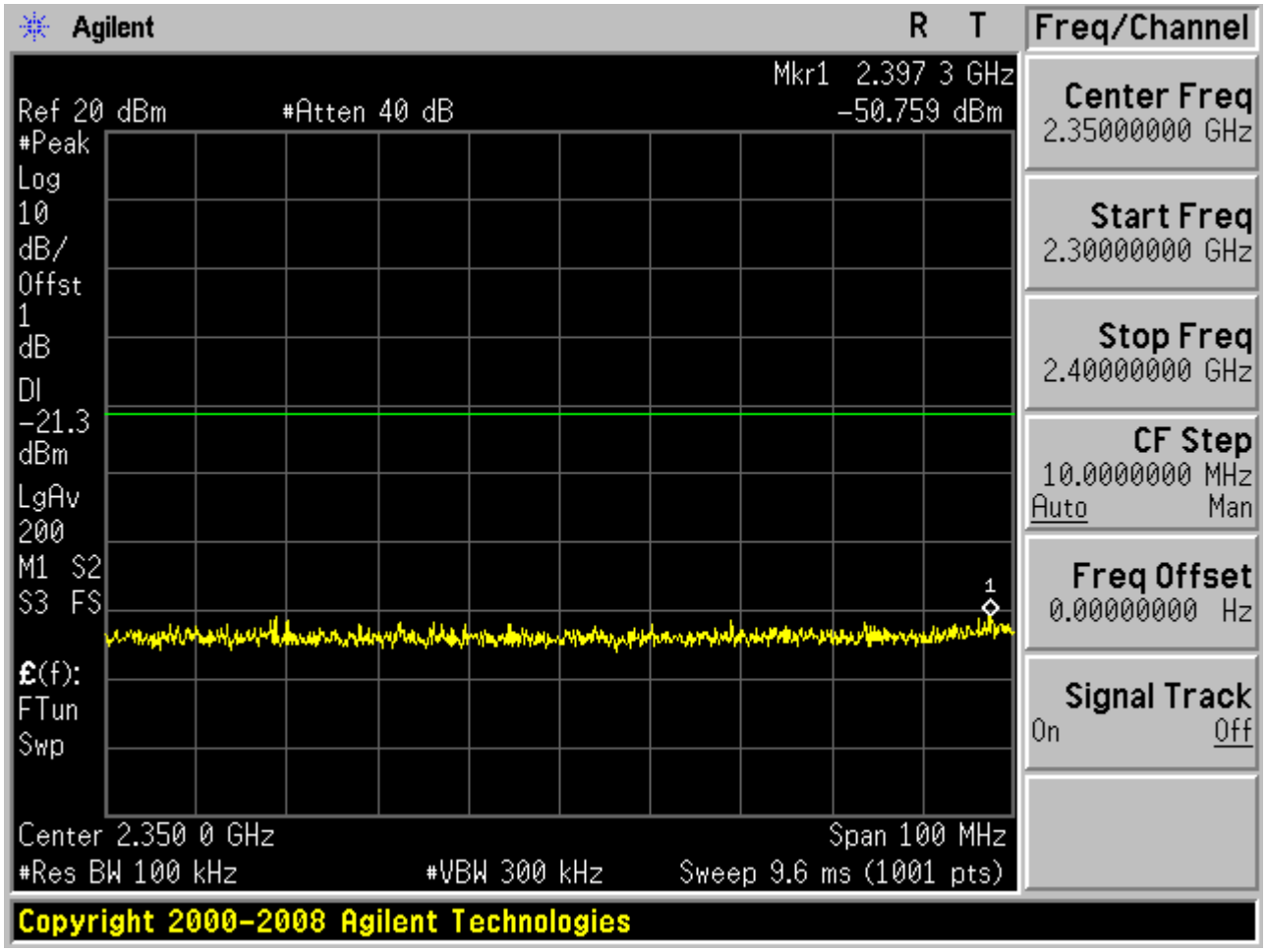


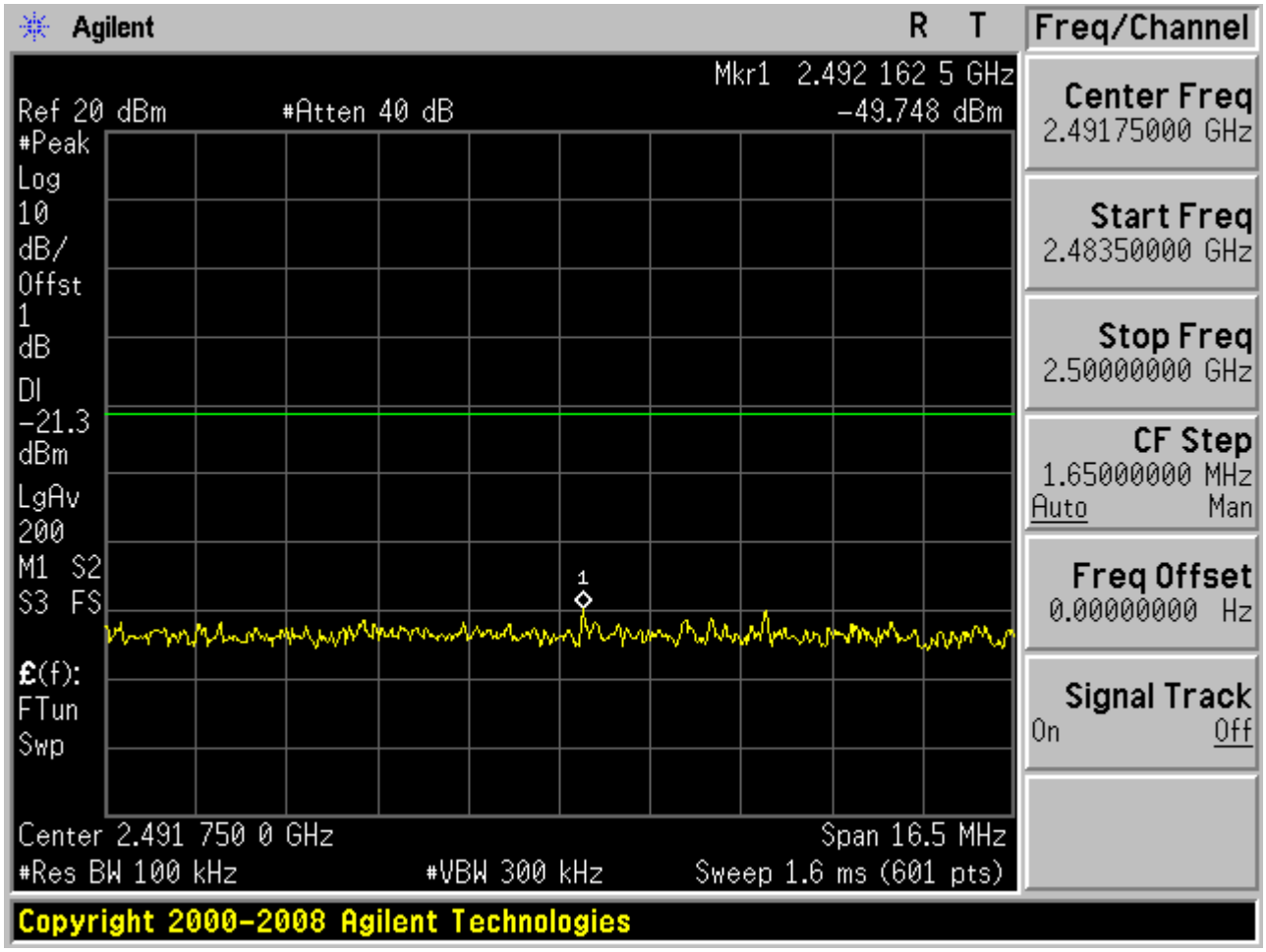
Puw:

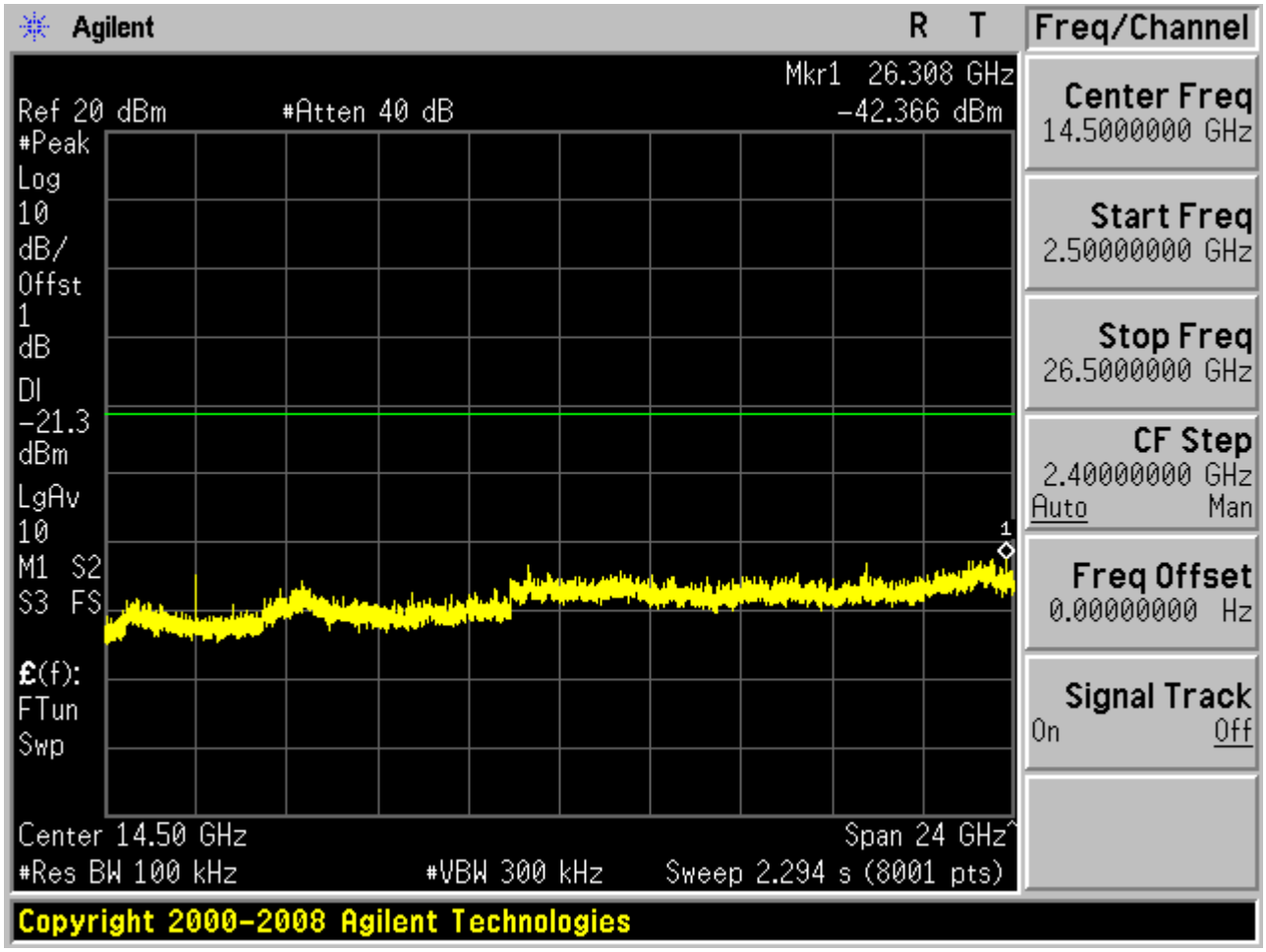






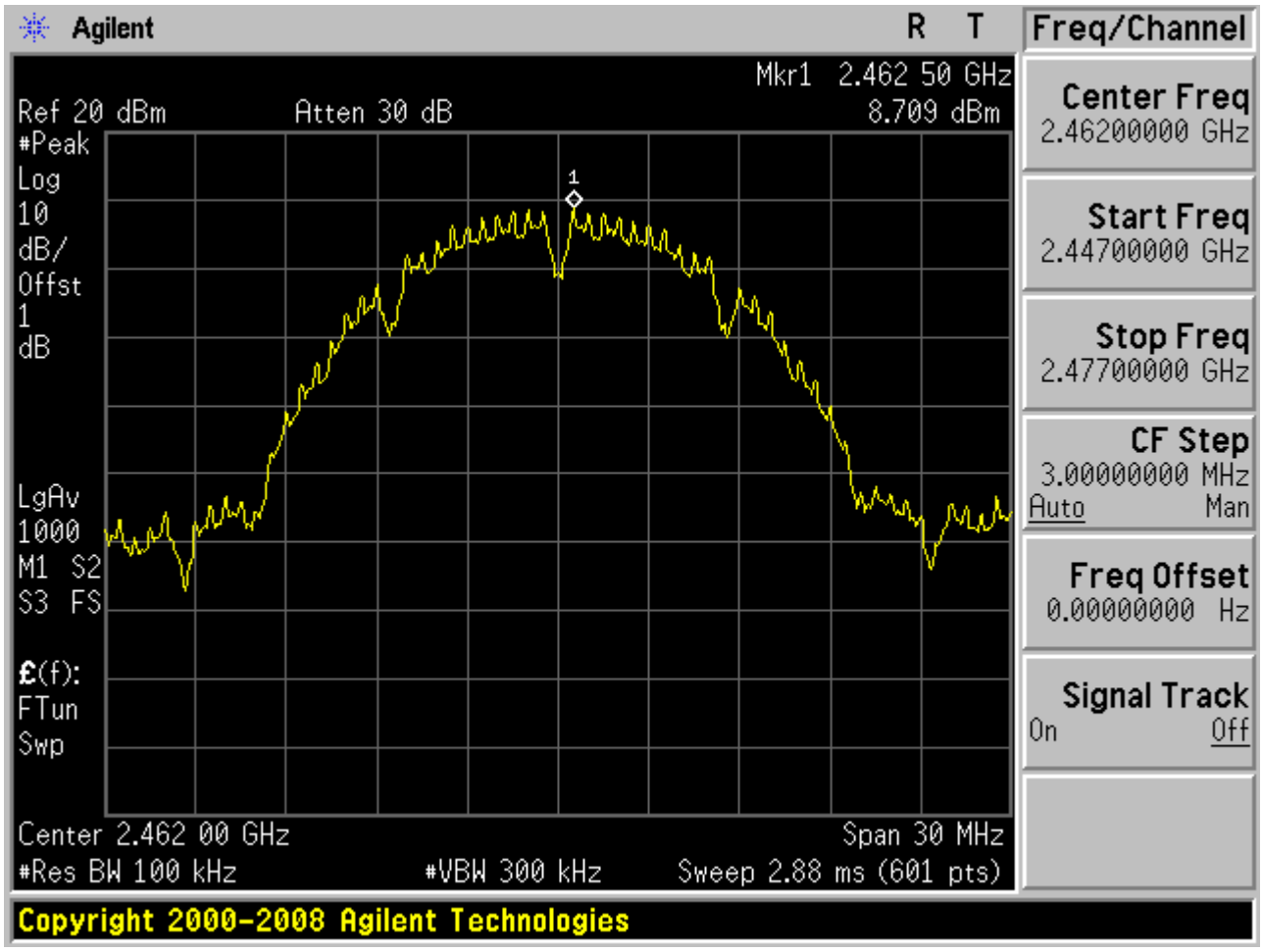




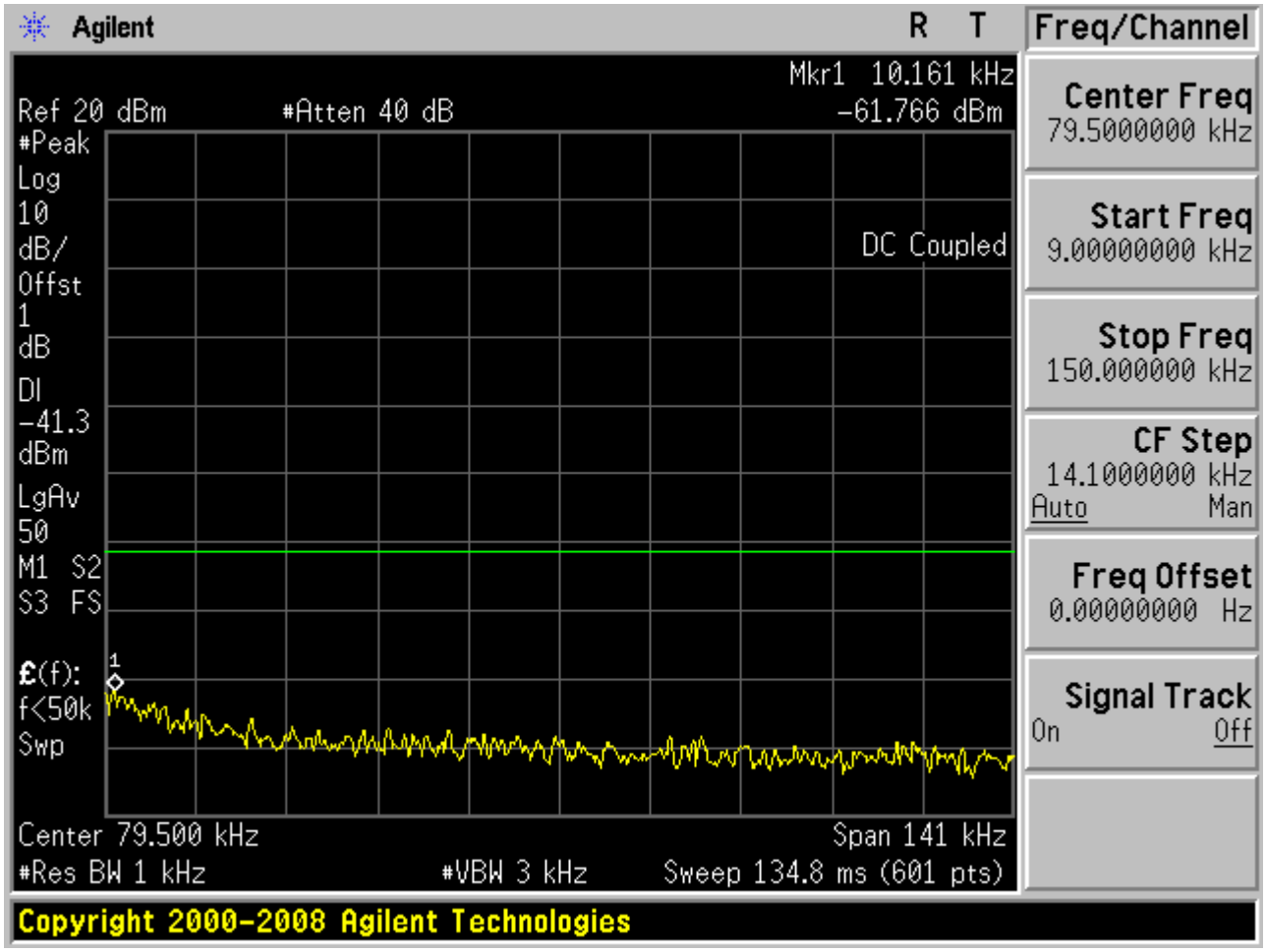


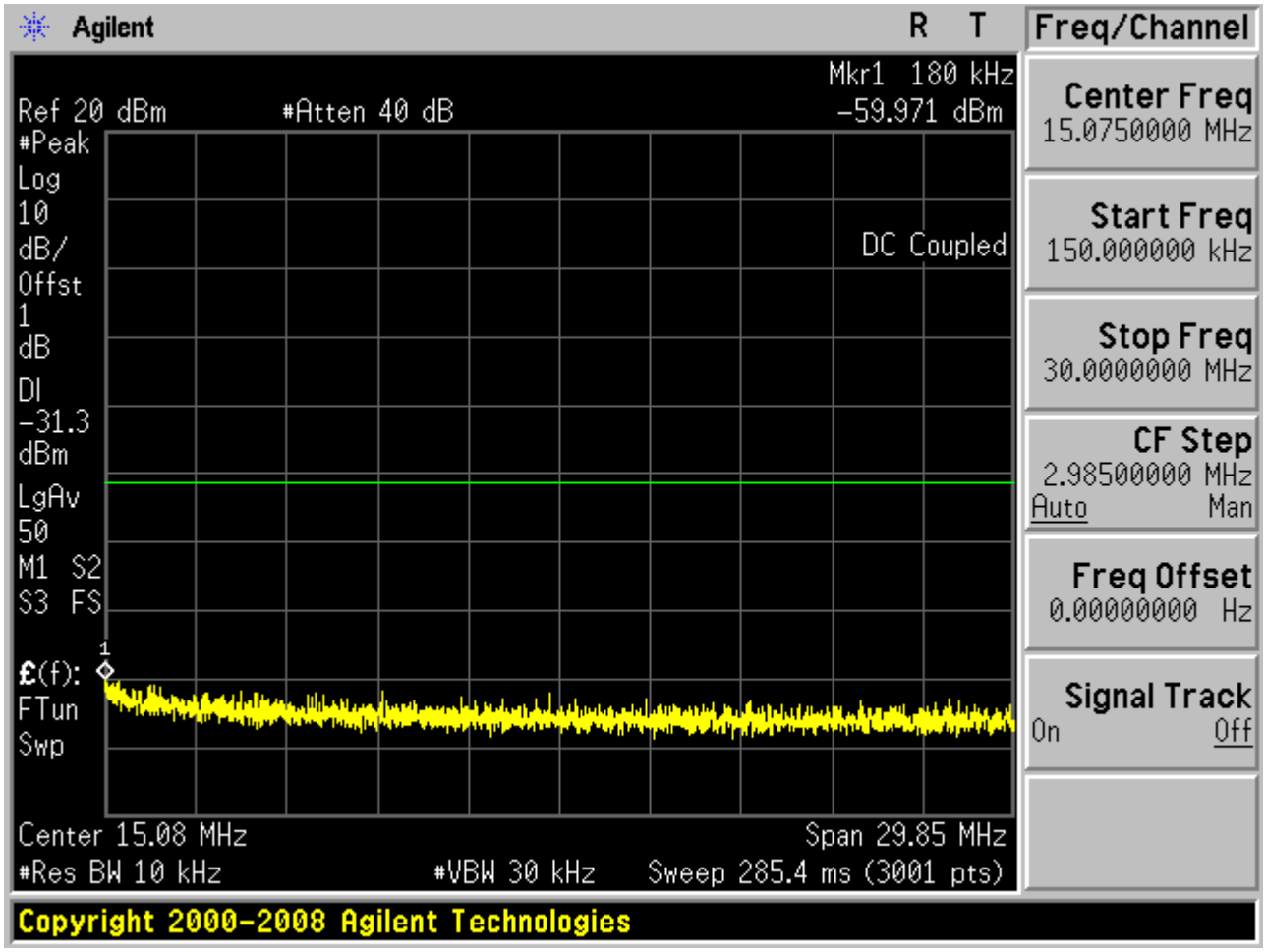
2.1 11B_H

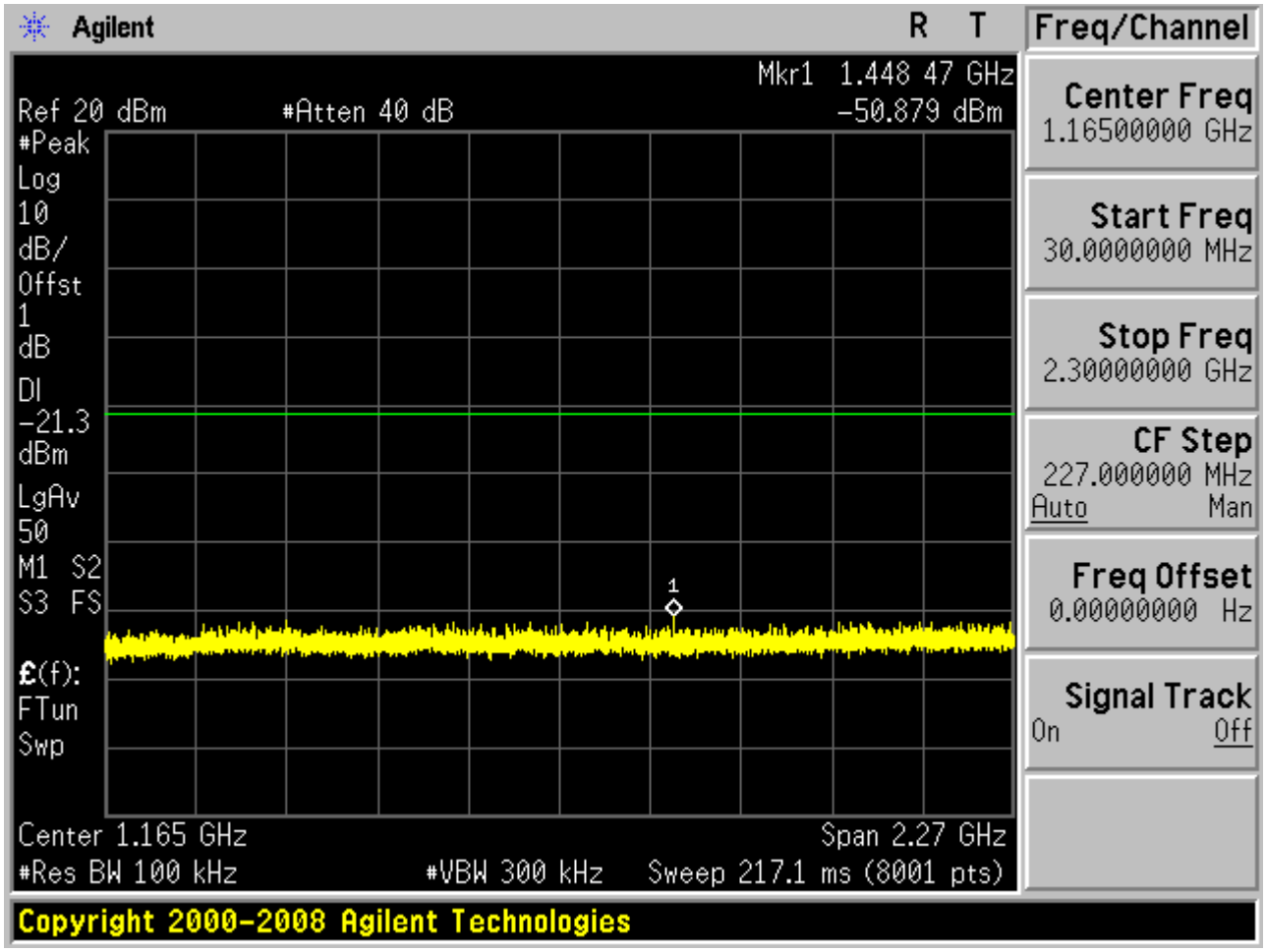
Pref:

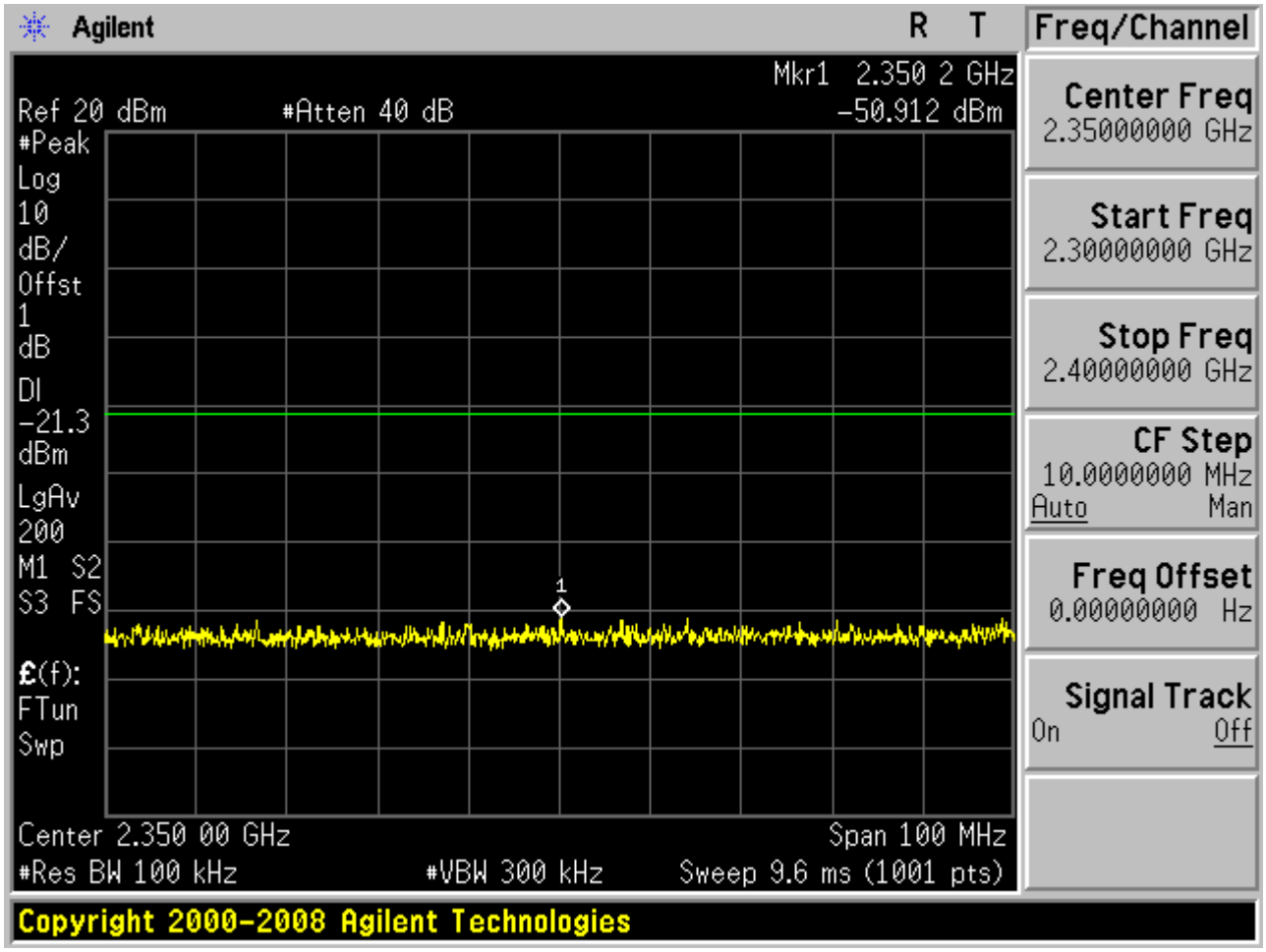


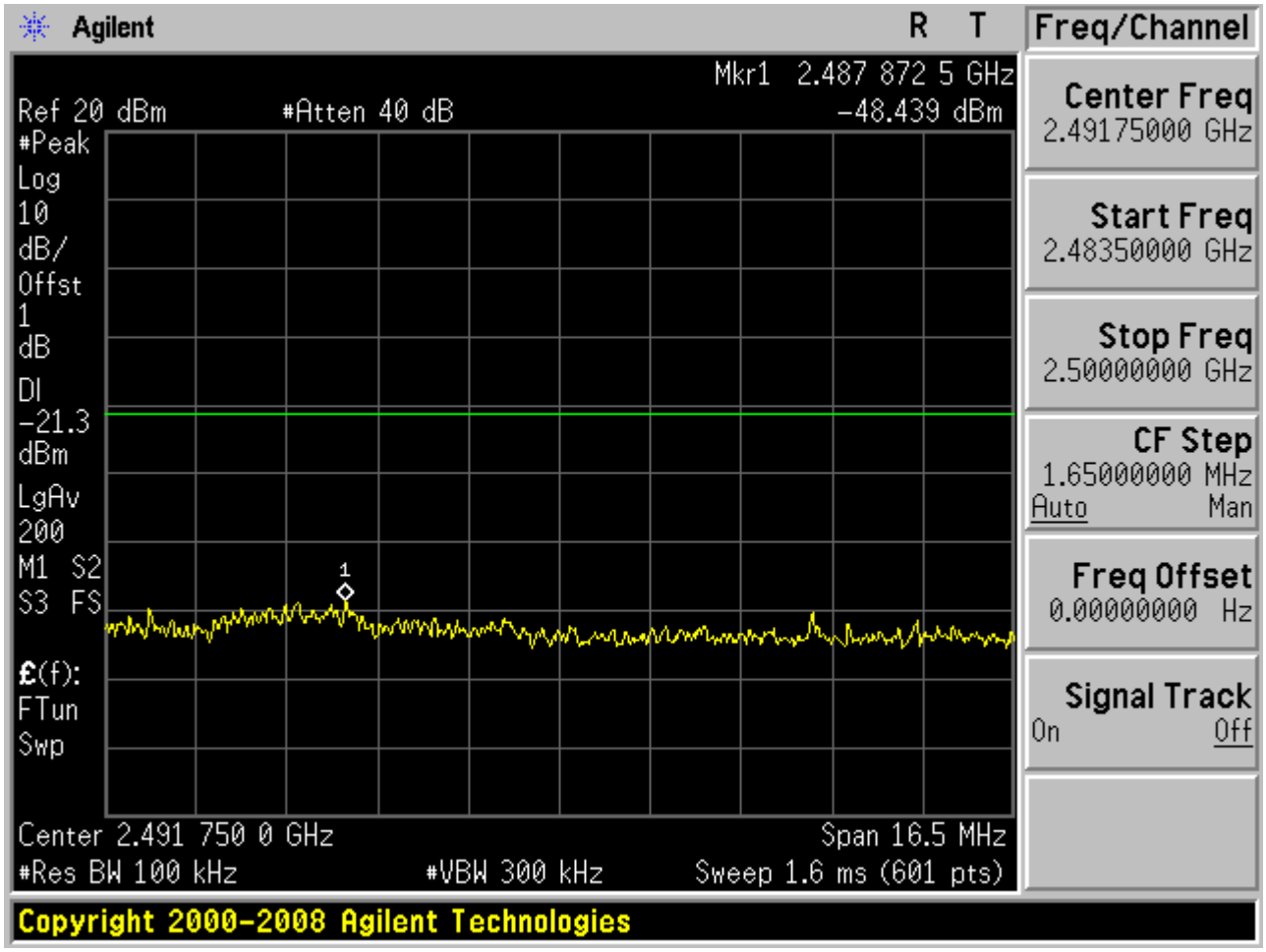
Puw:

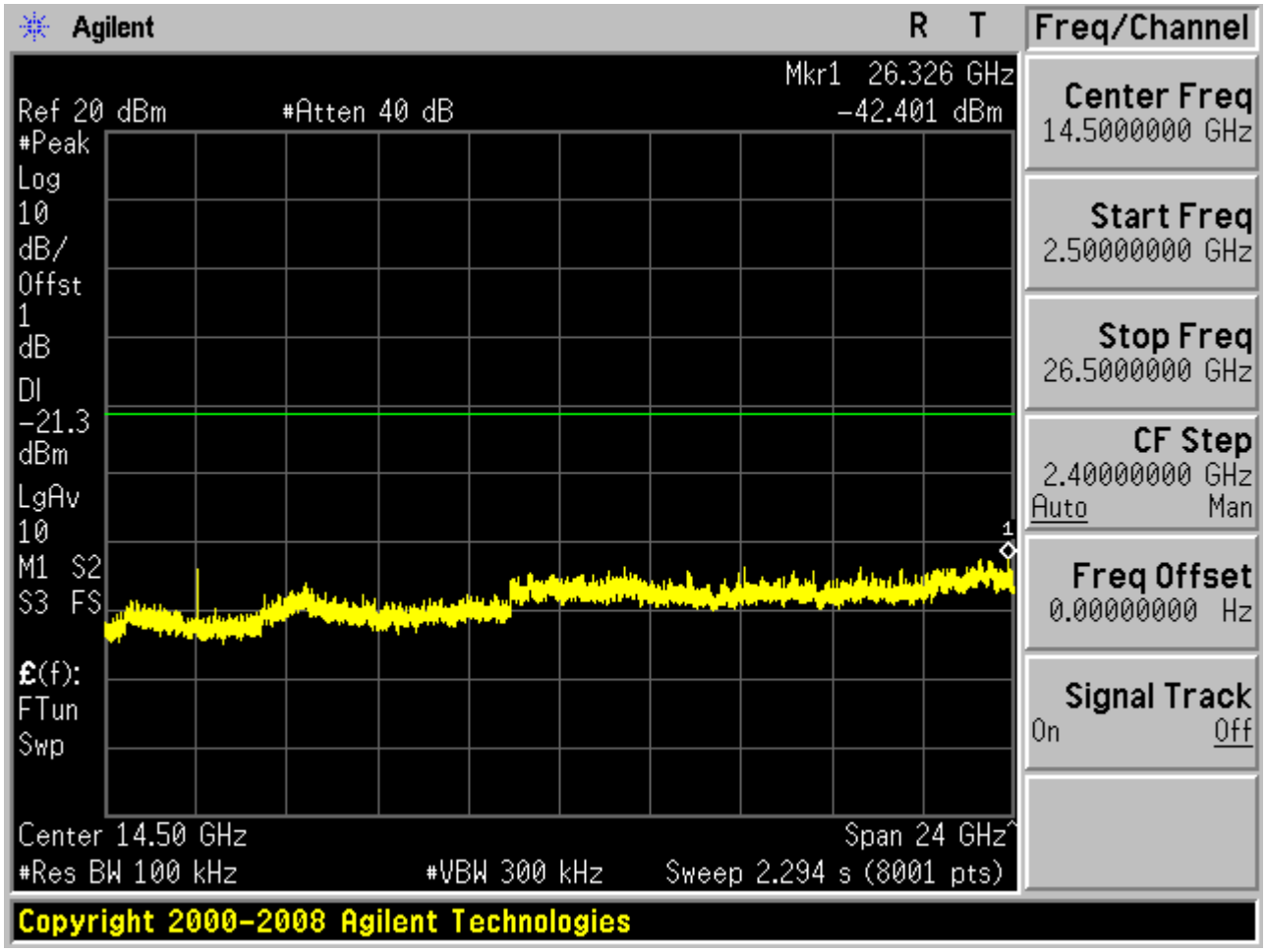






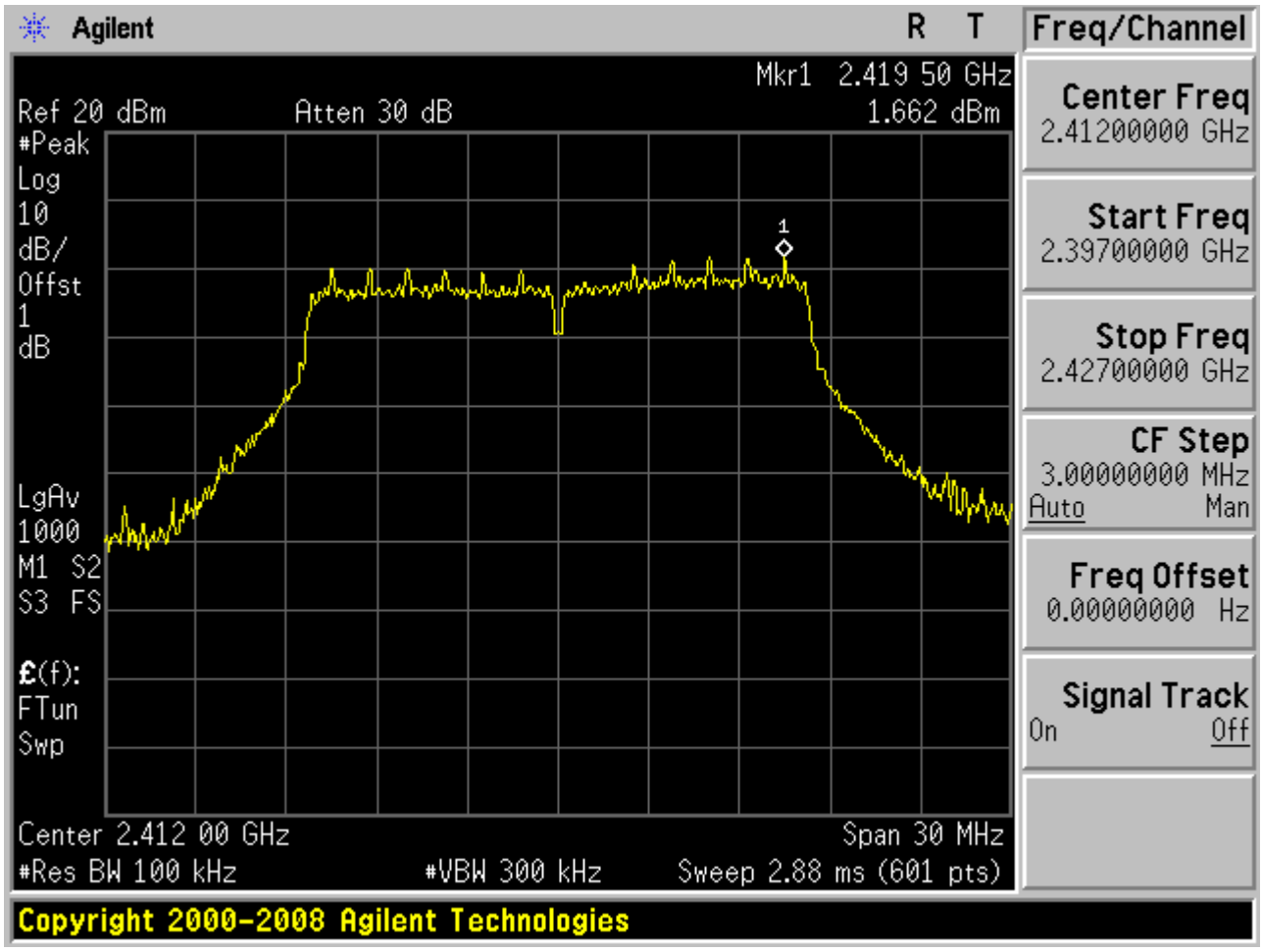




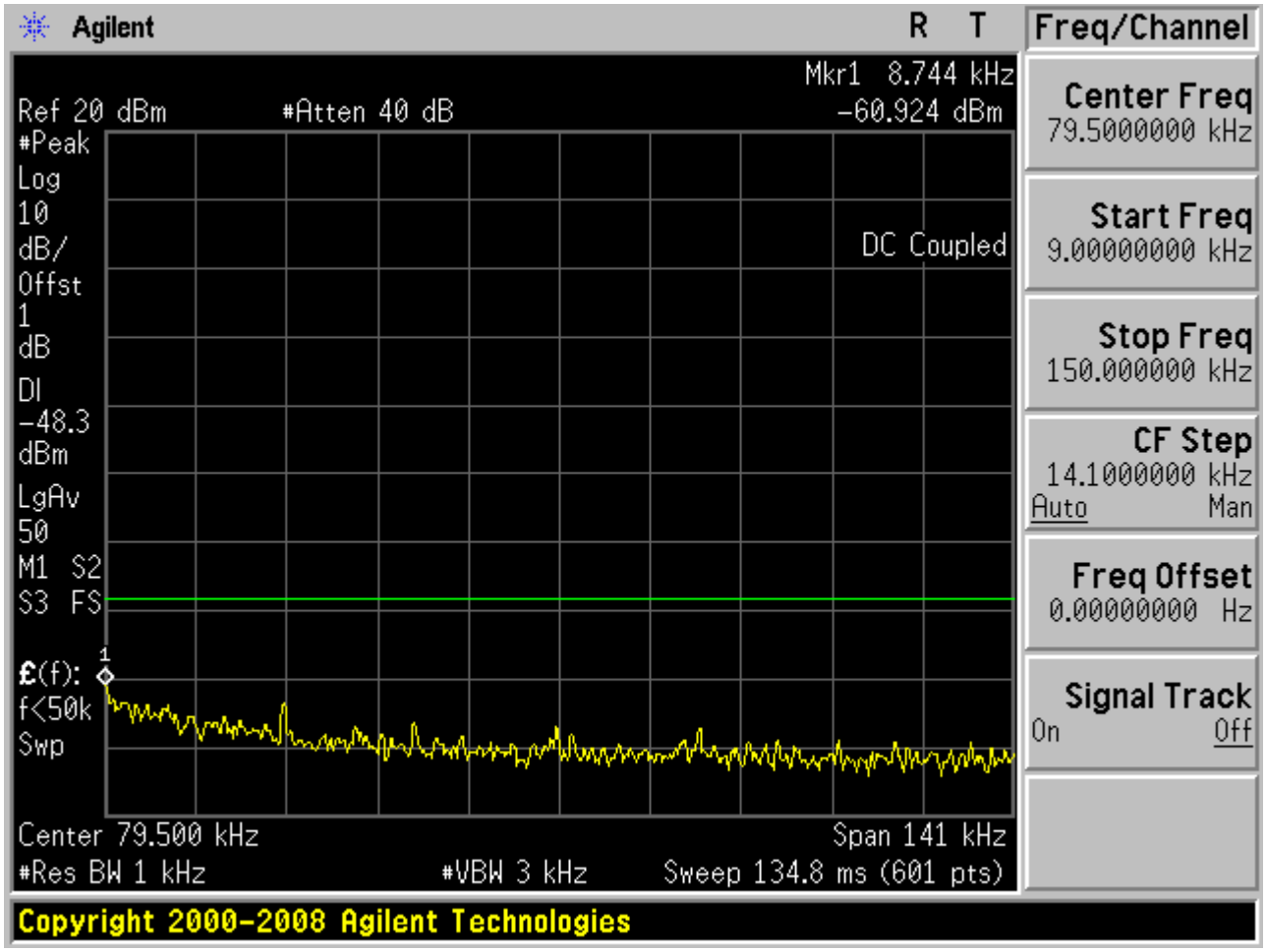


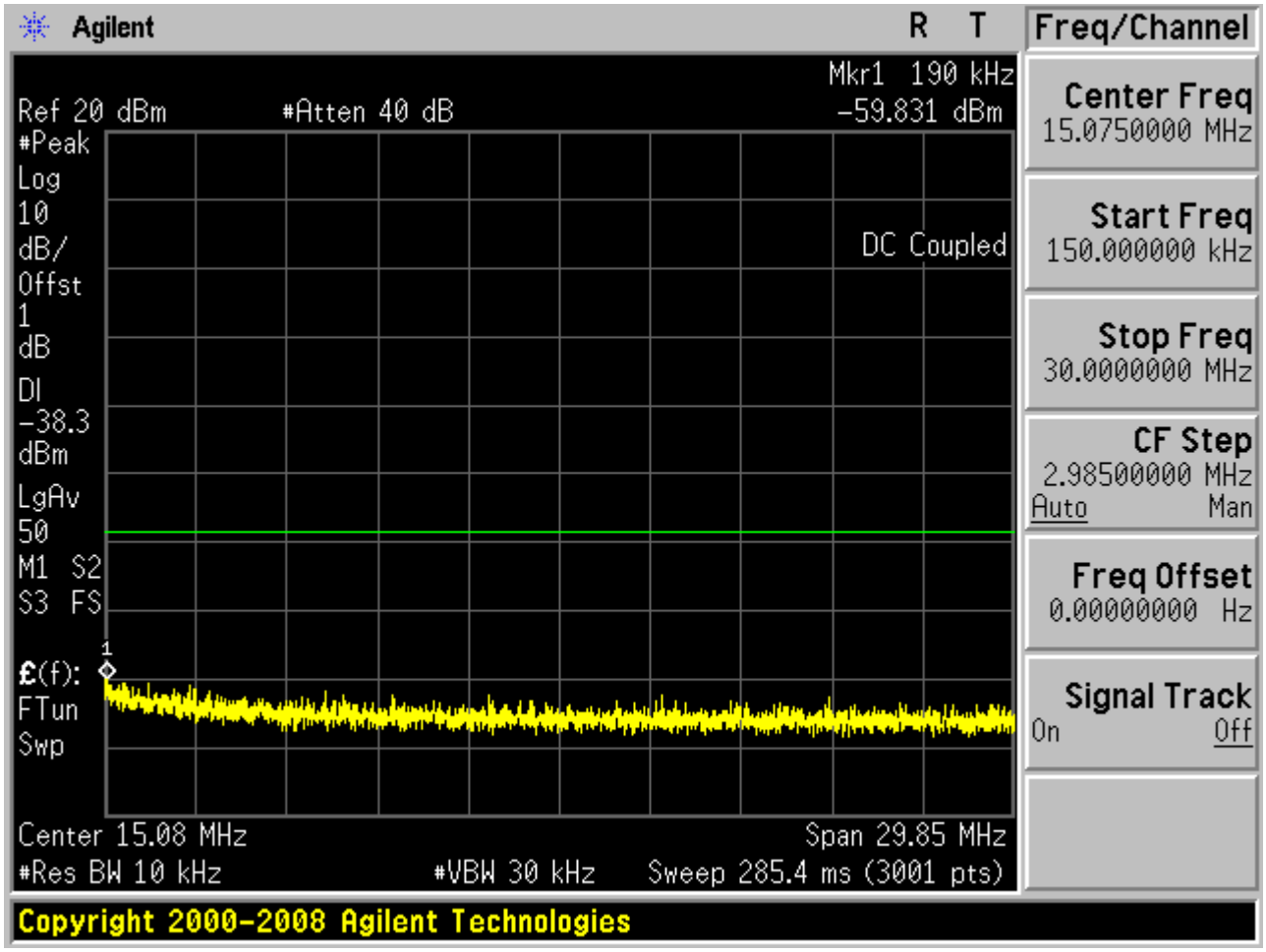
2.1 11G_L

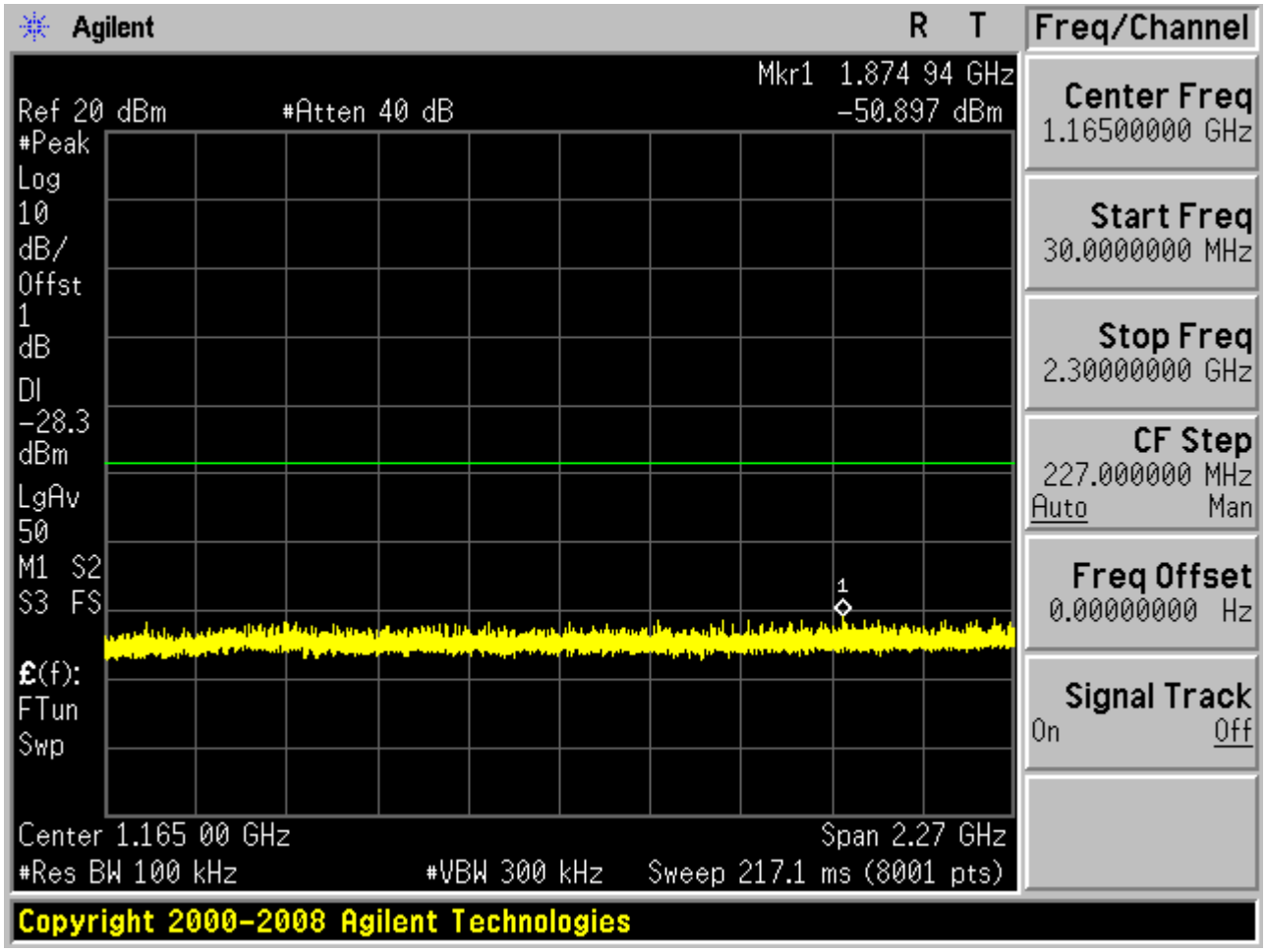
Pref:

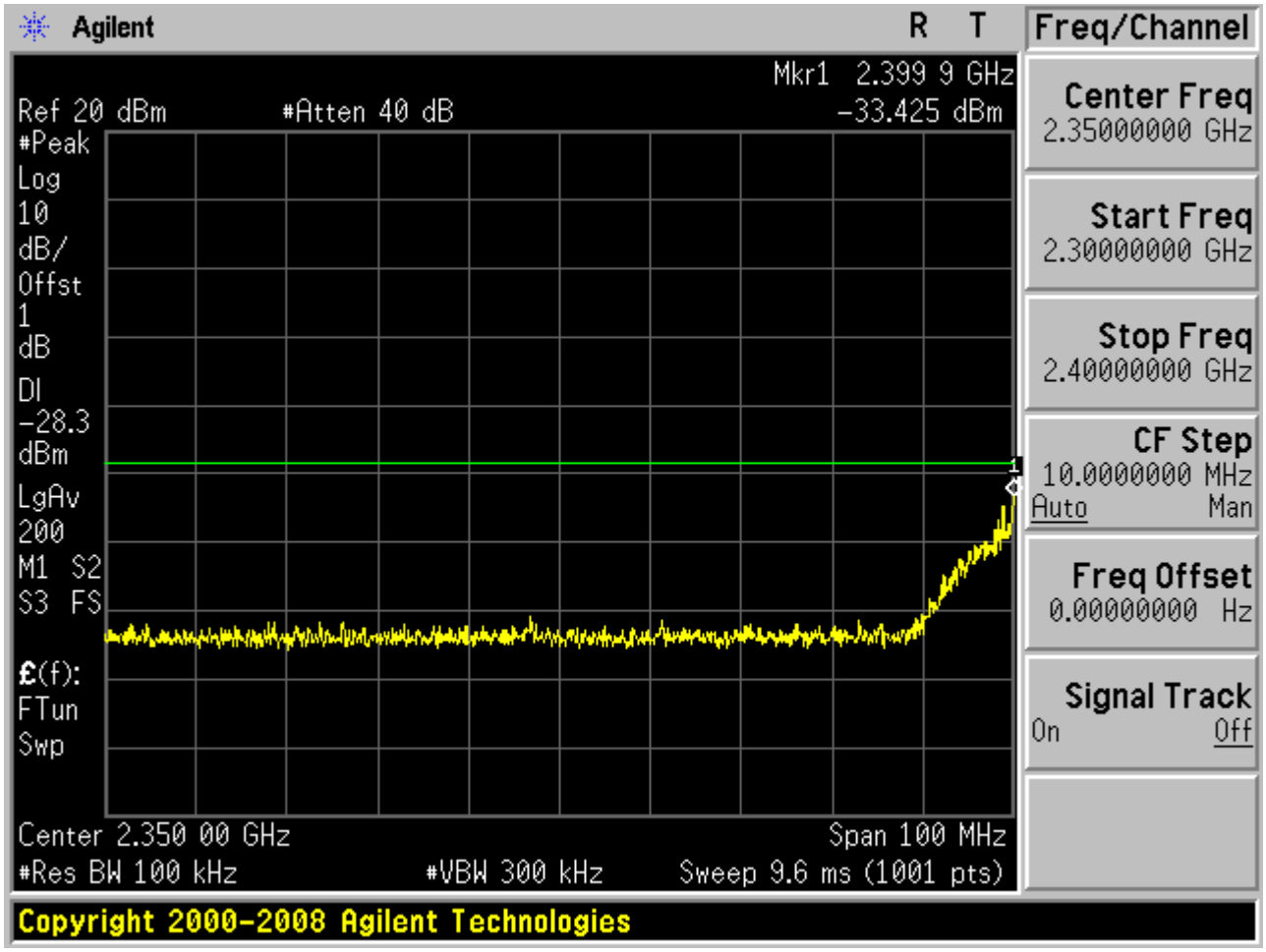


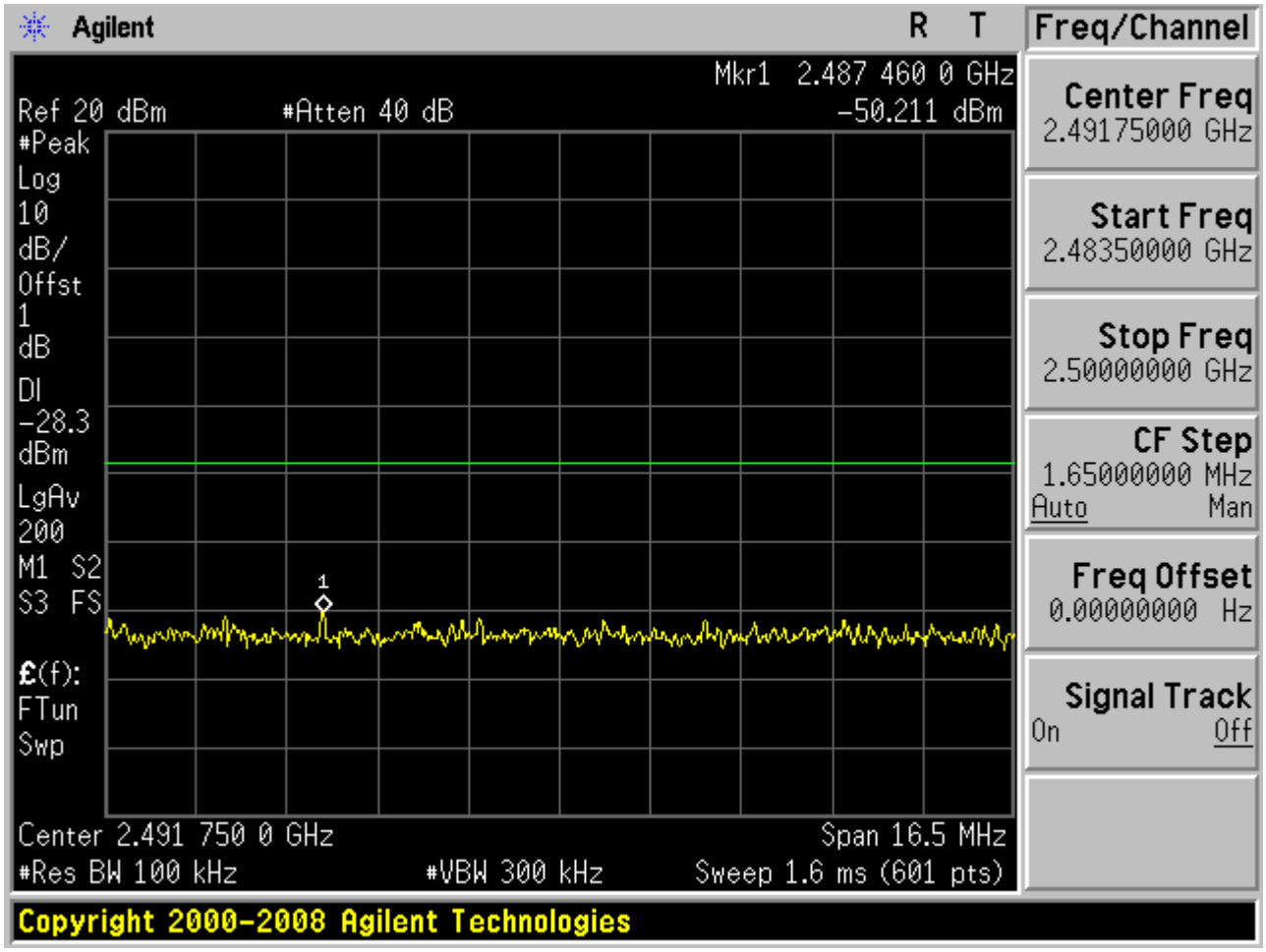
Puw:

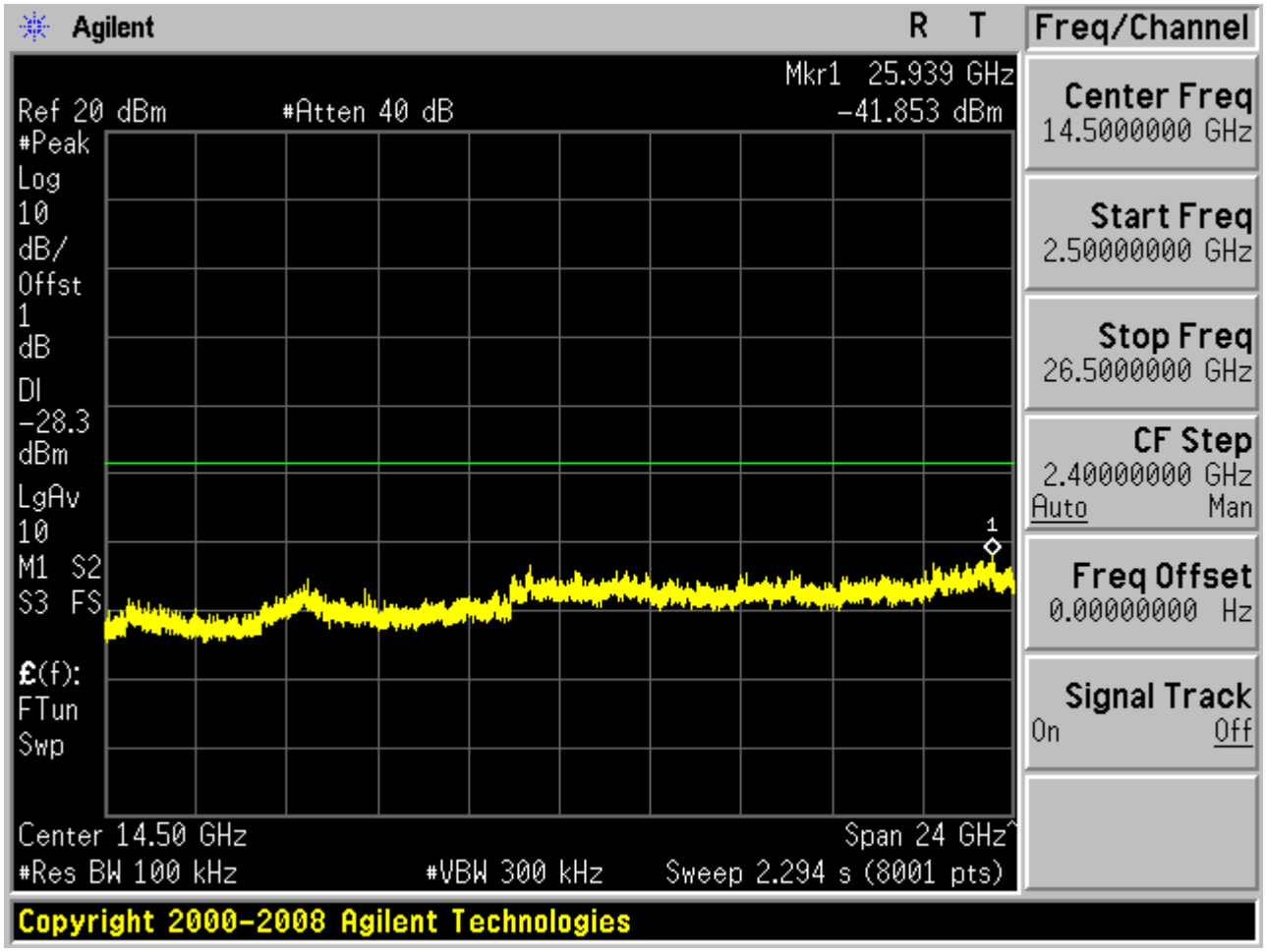






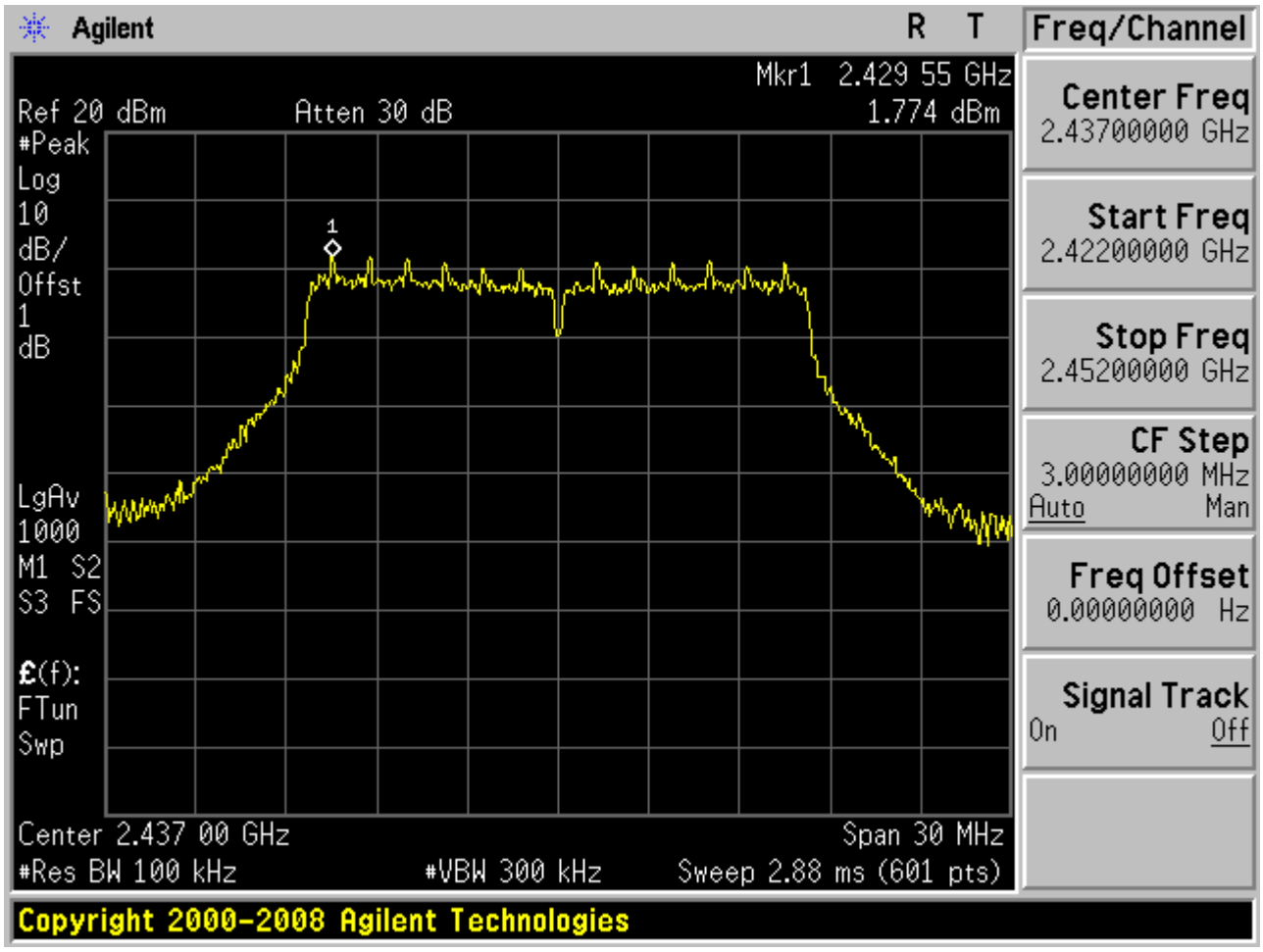






2.1 11G_M

Pref:



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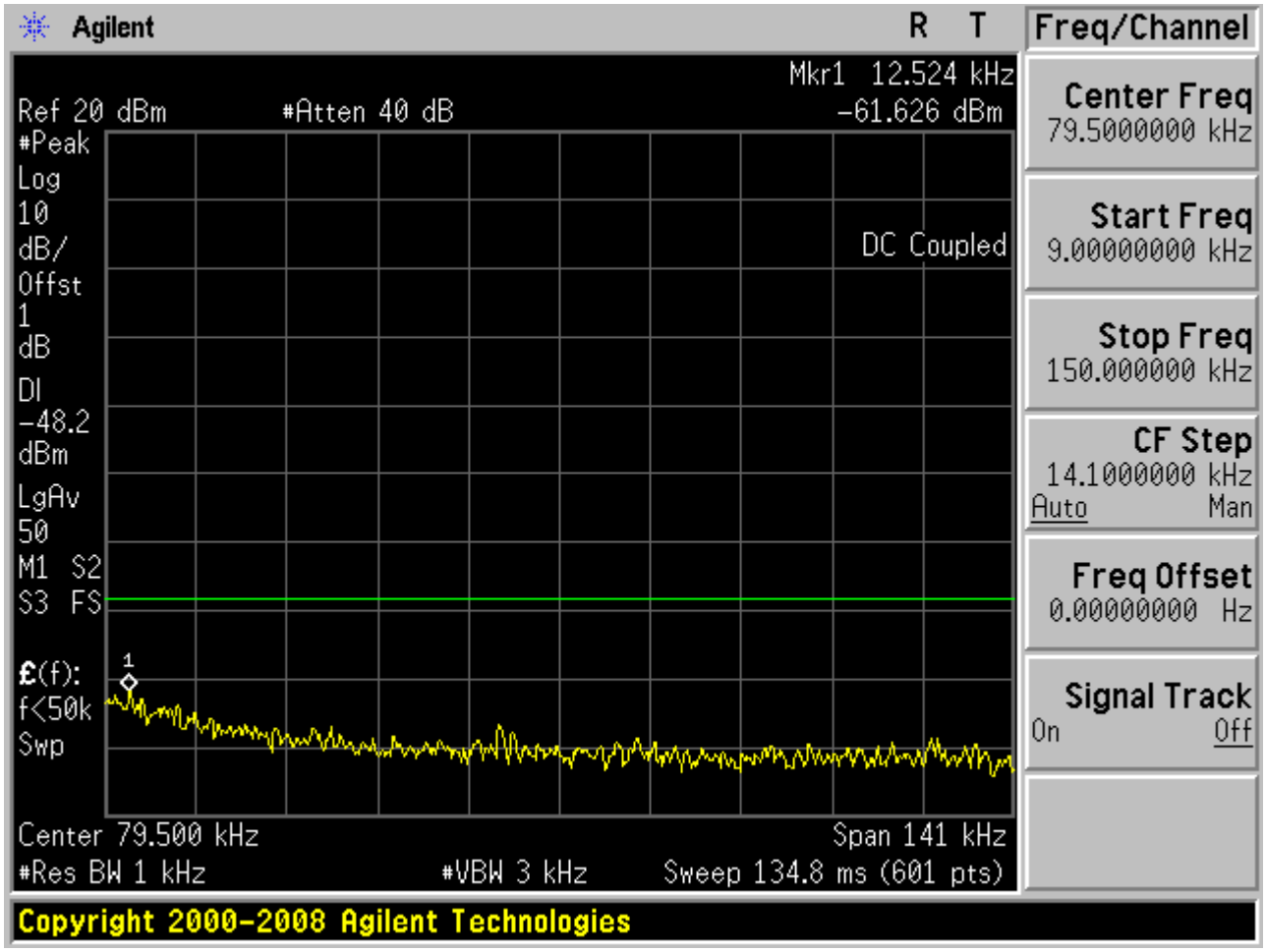
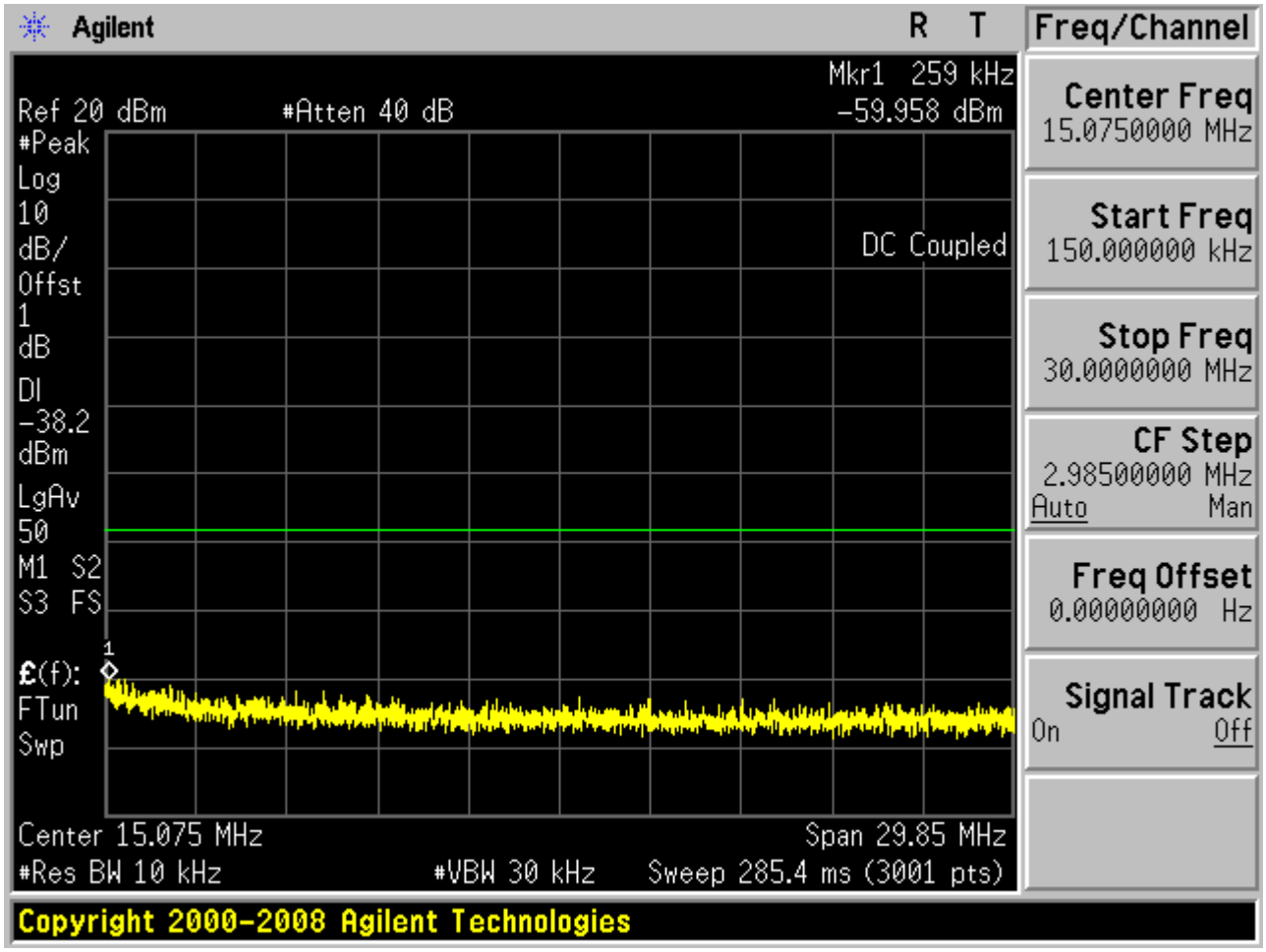
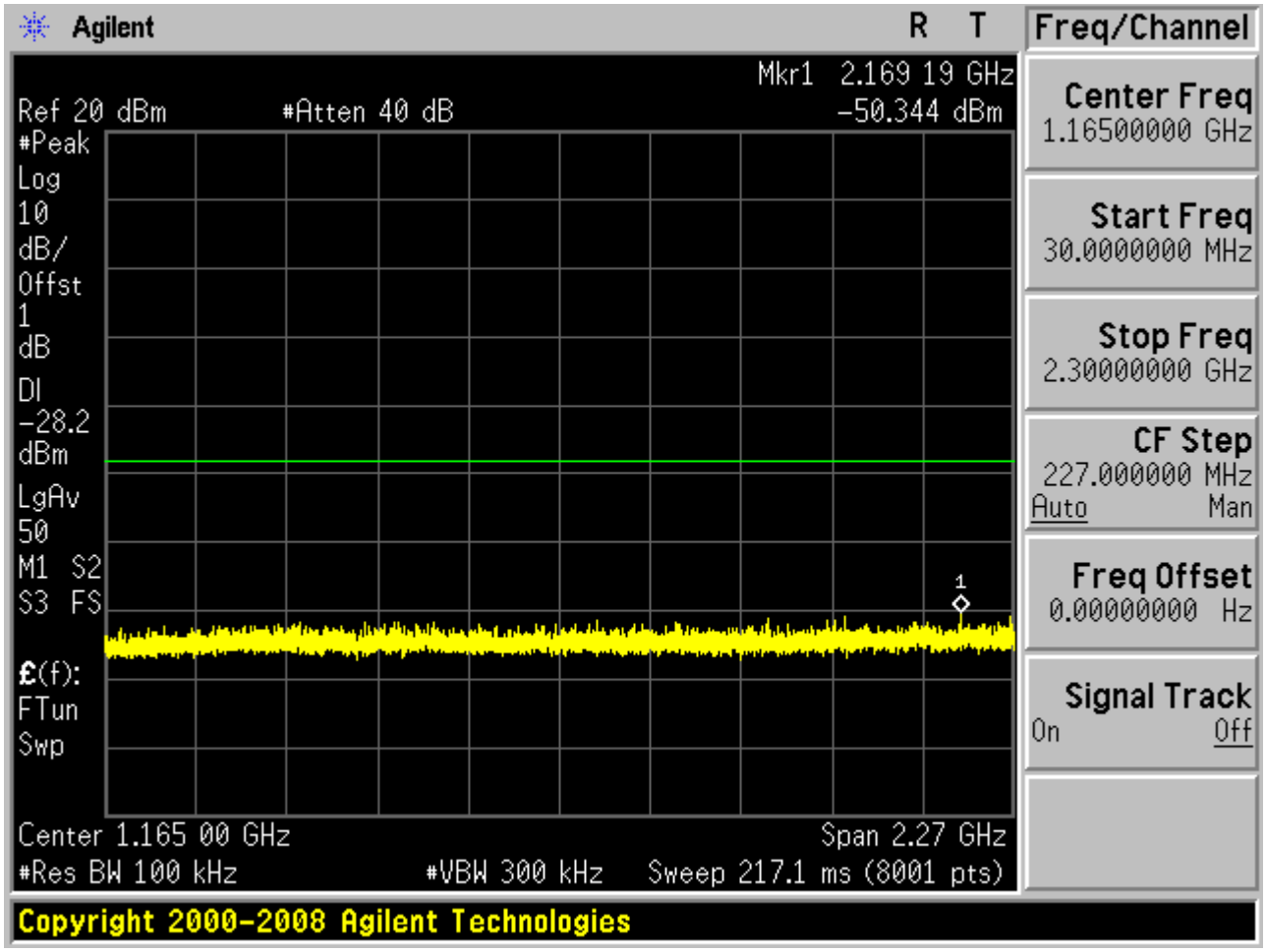
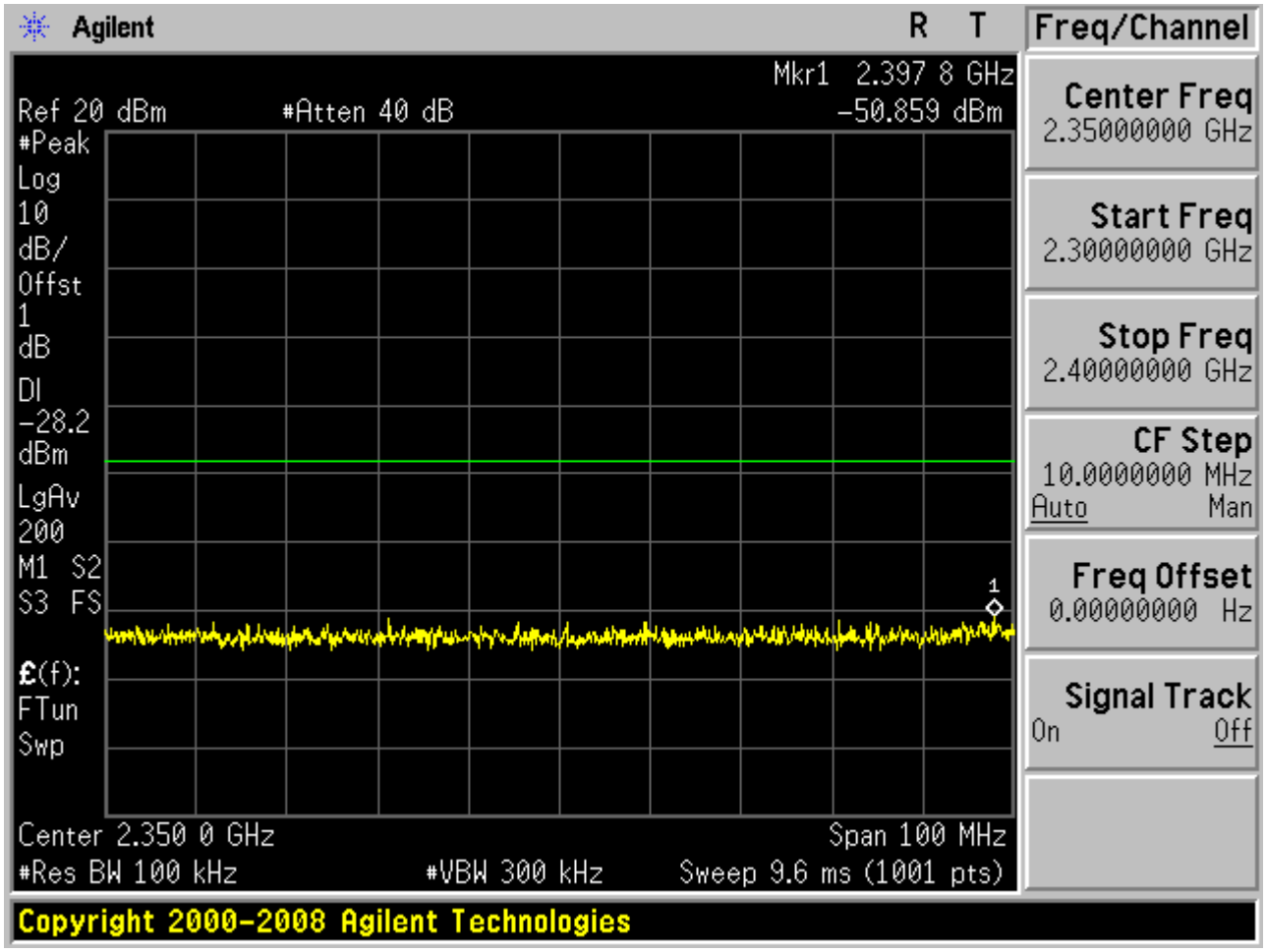
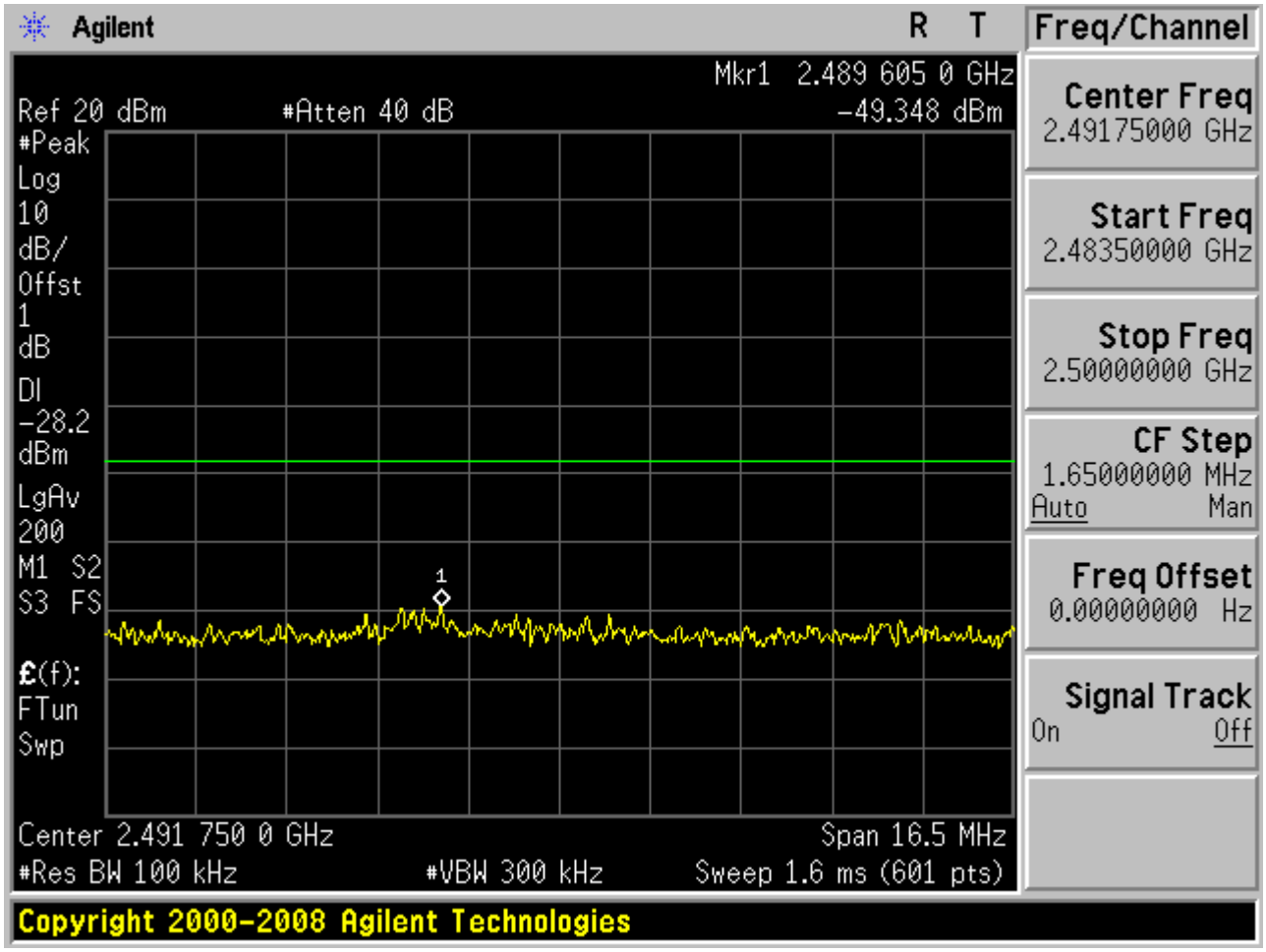
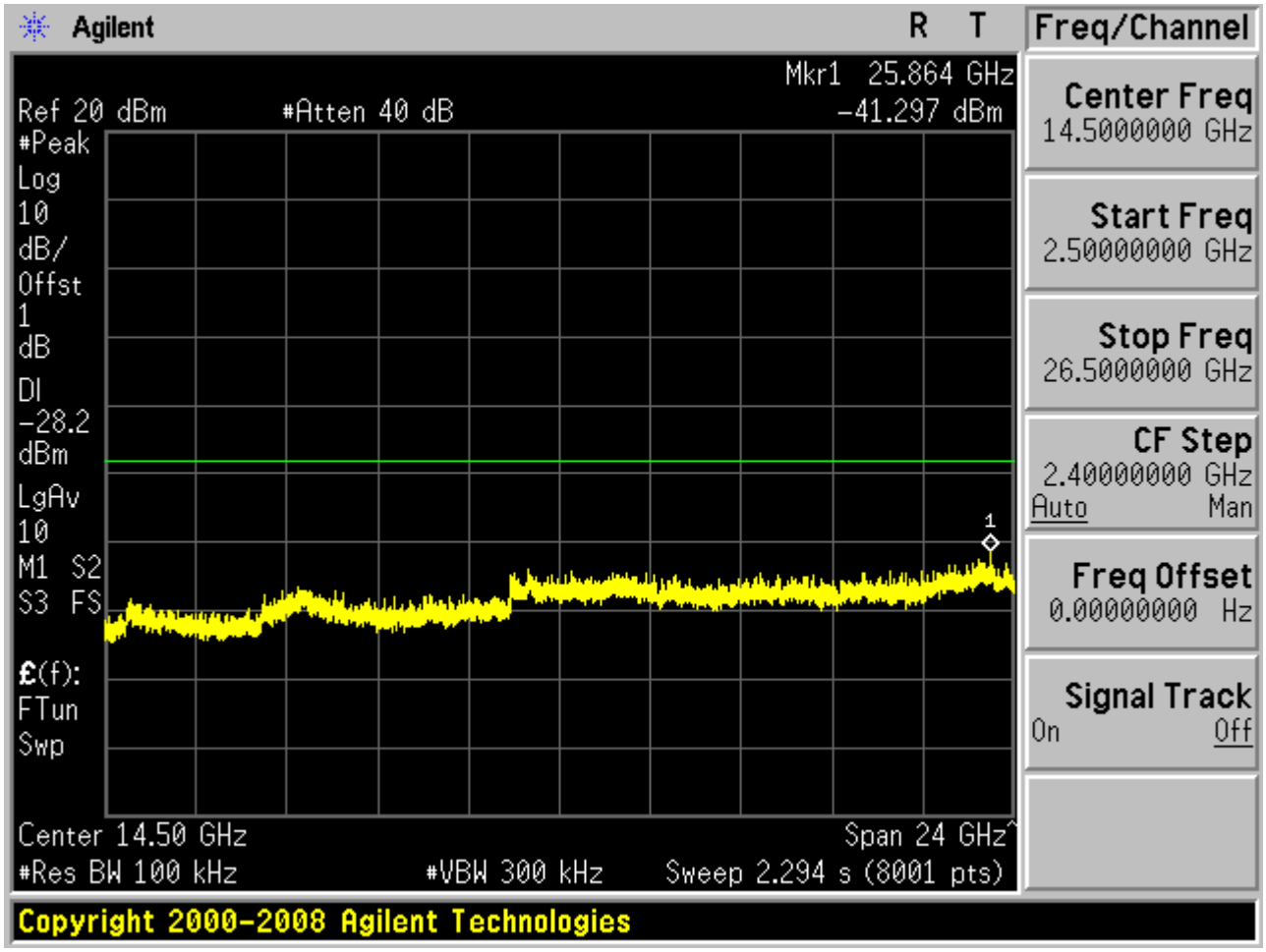






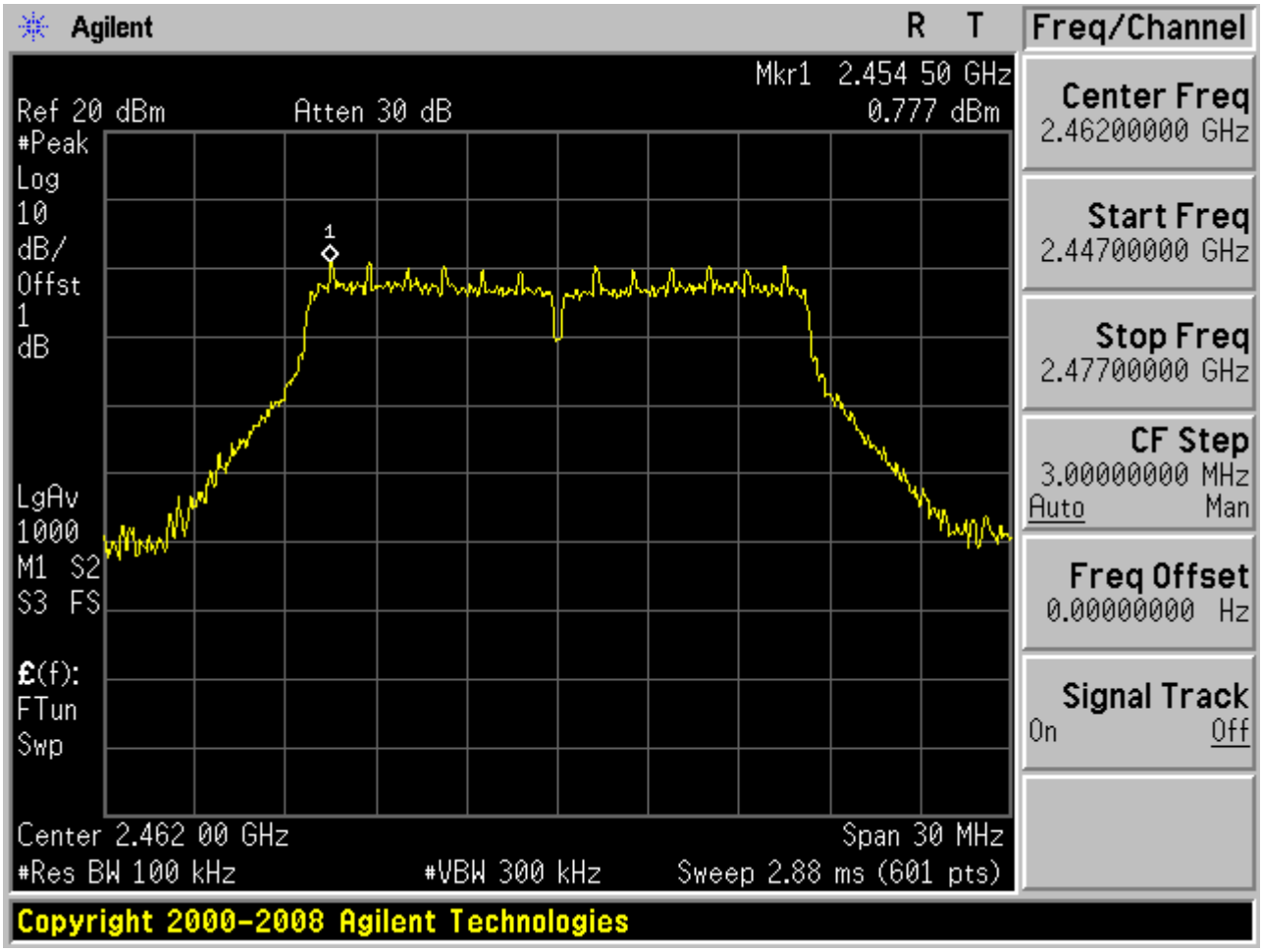






2.1 11G_H

Pref:



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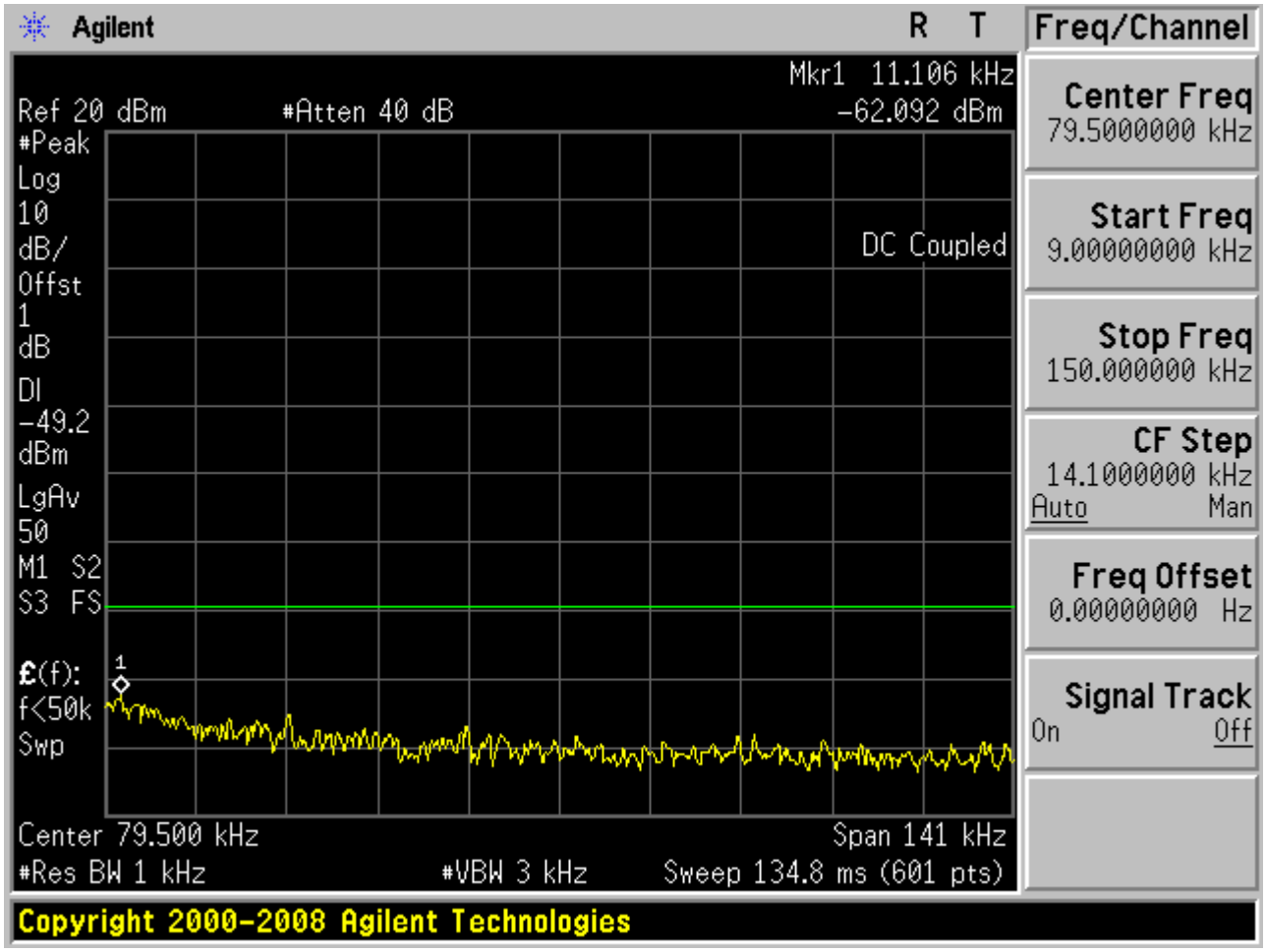
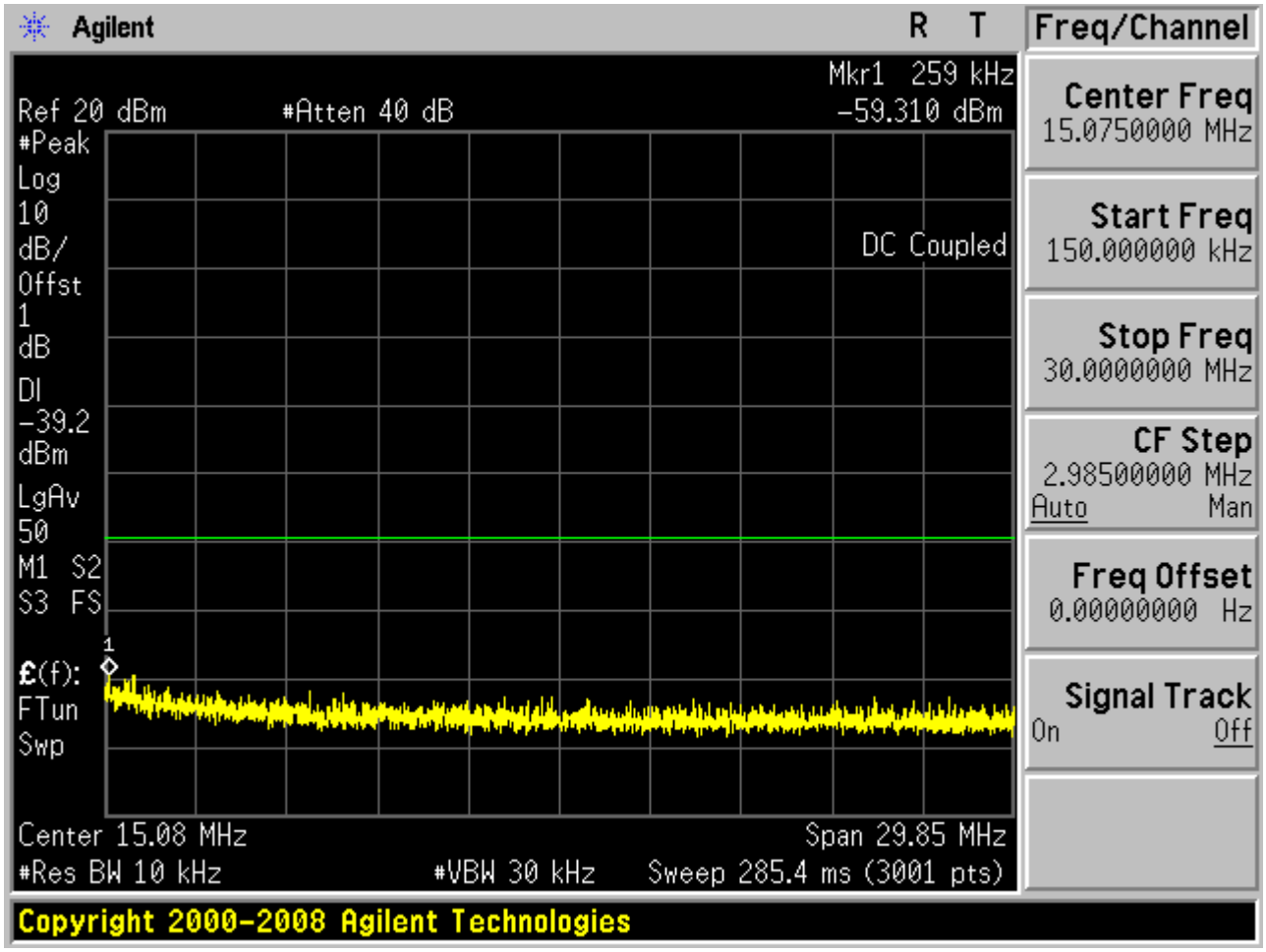
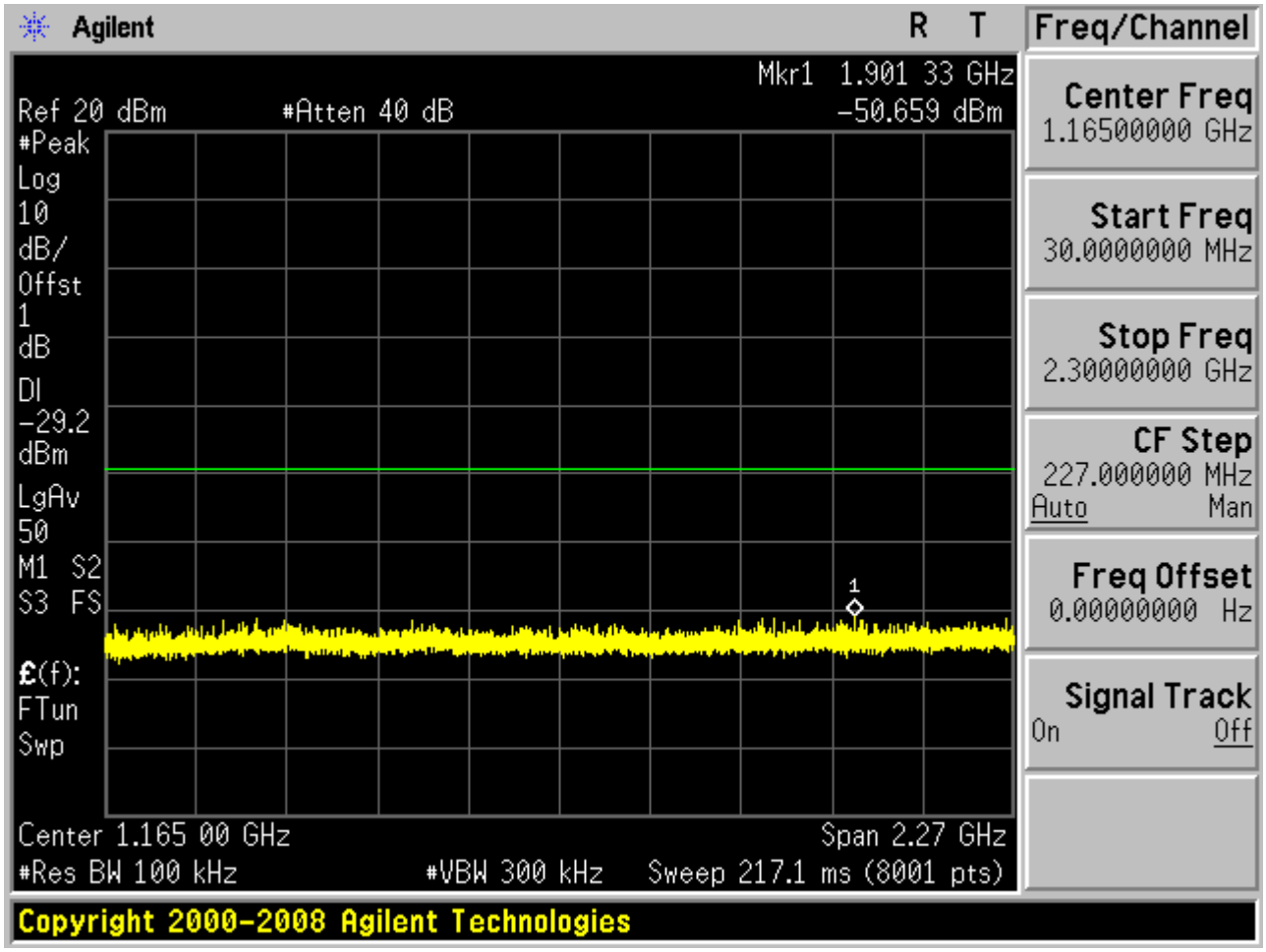
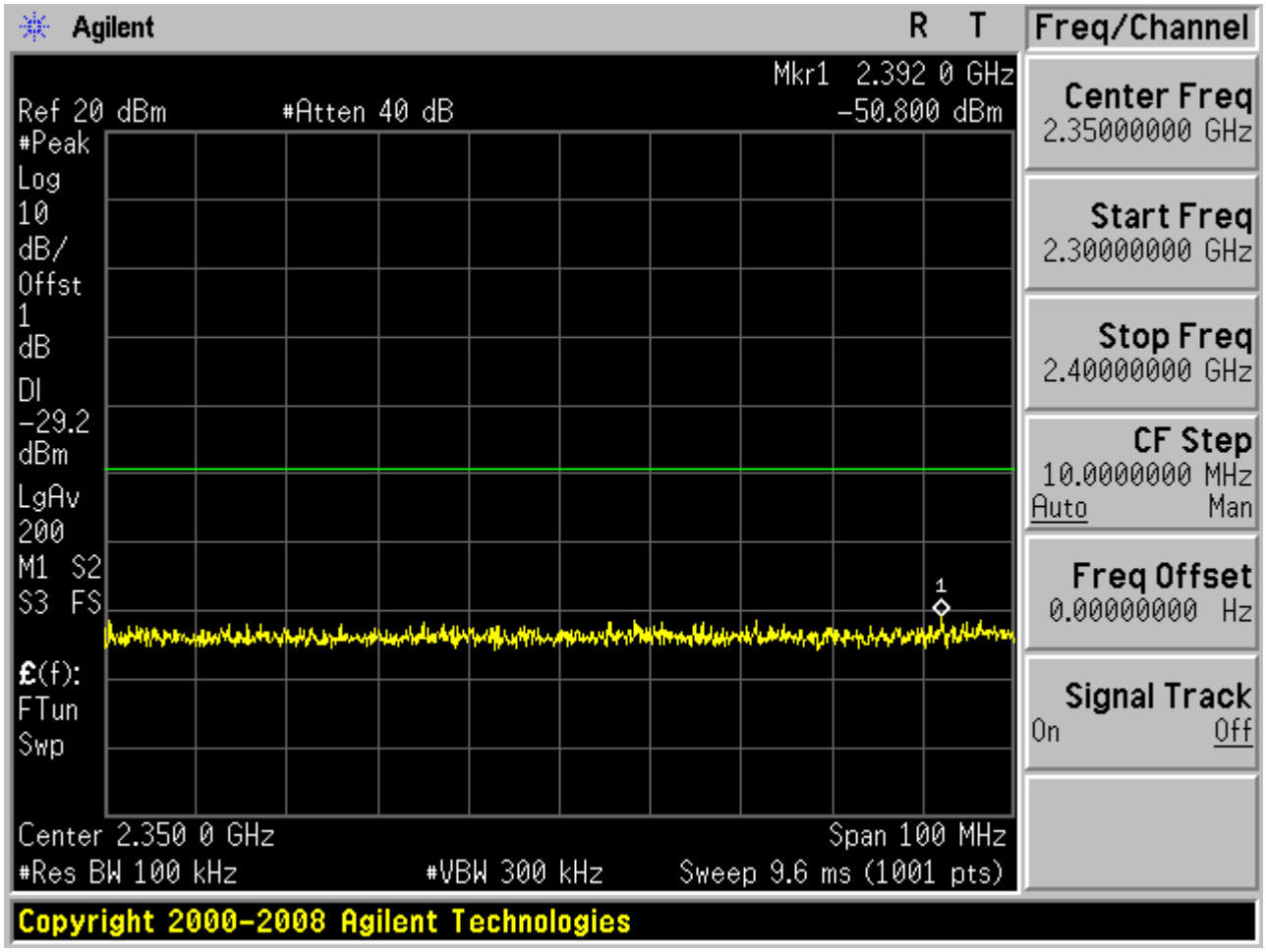
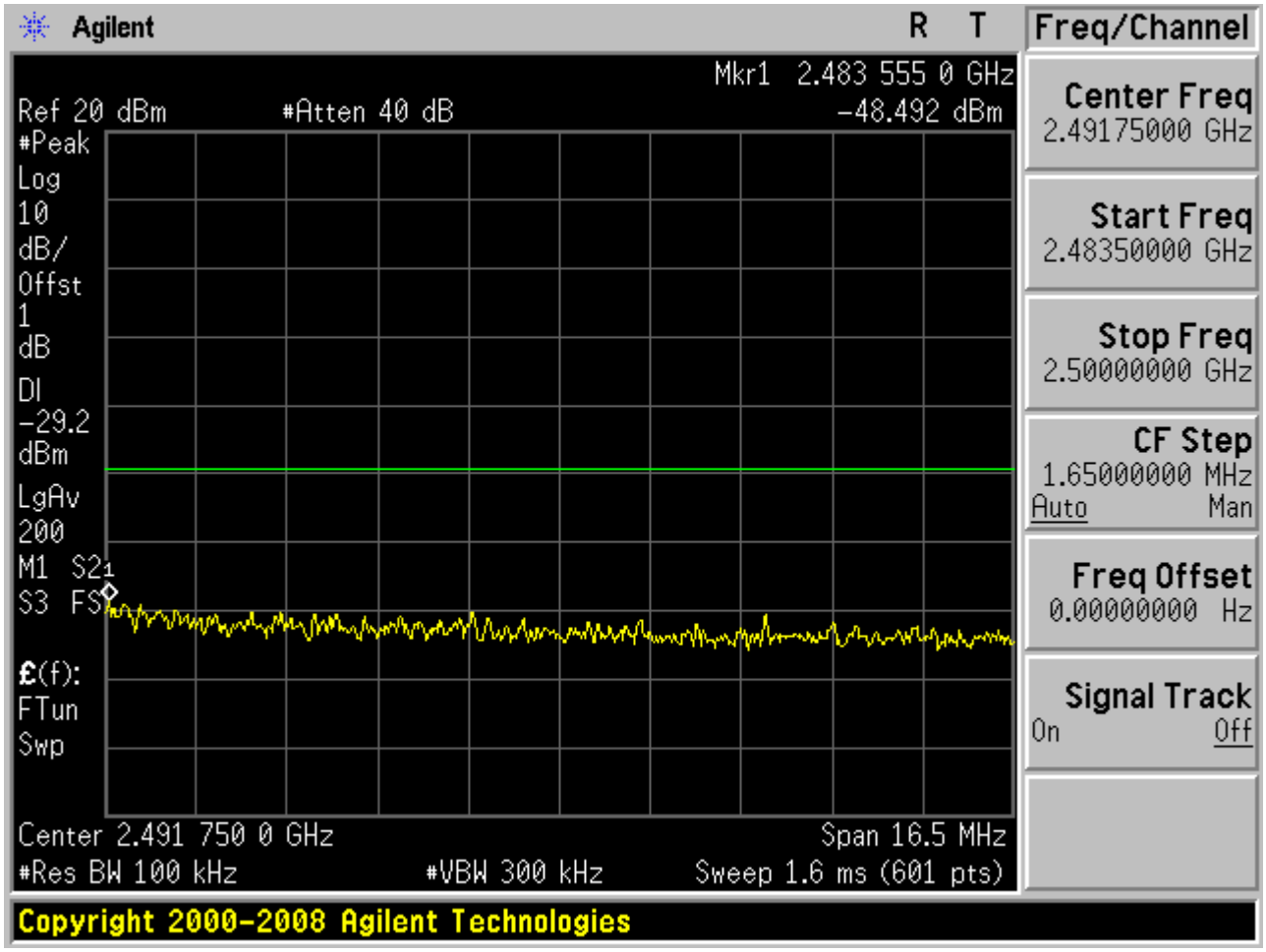
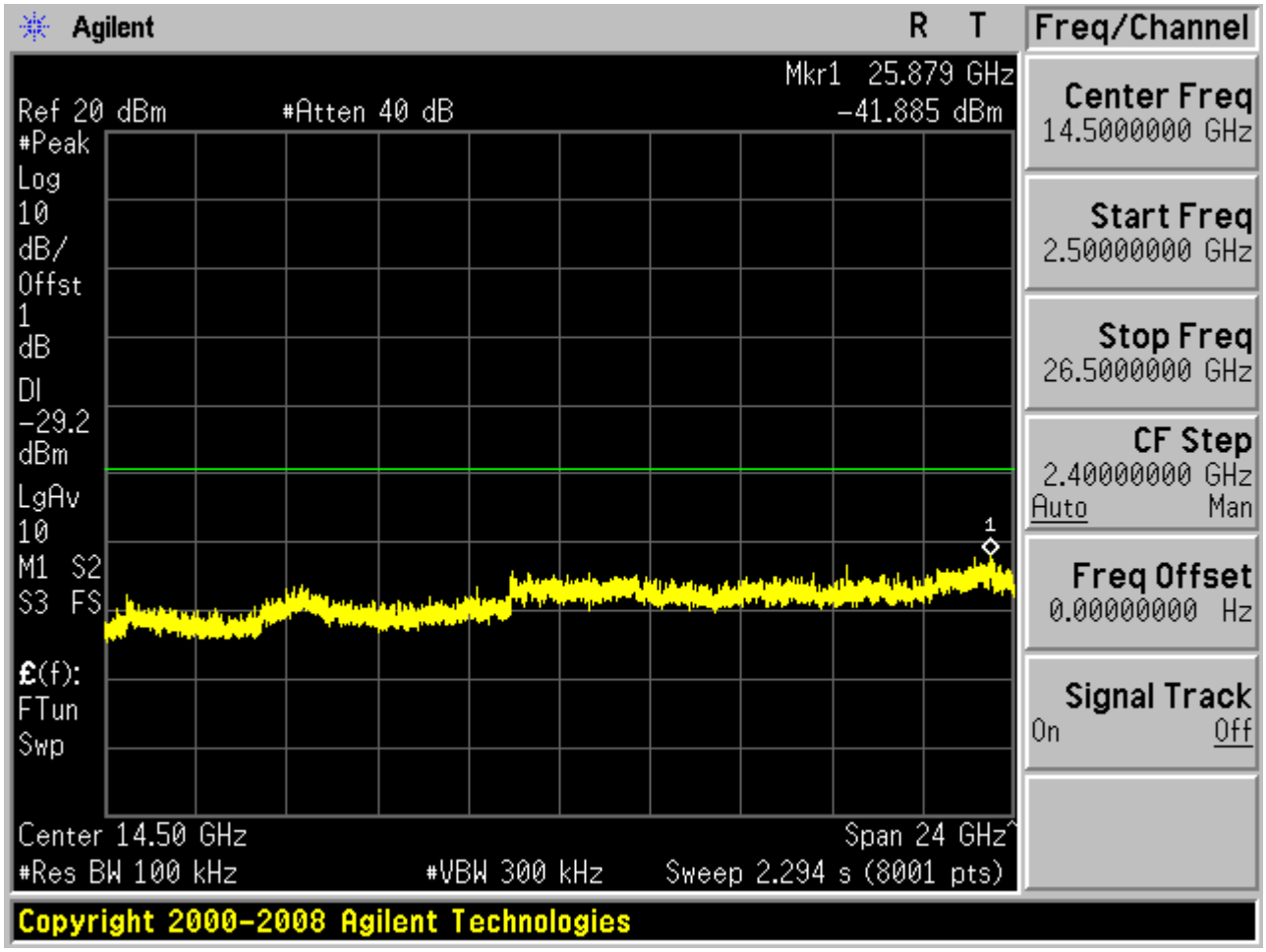






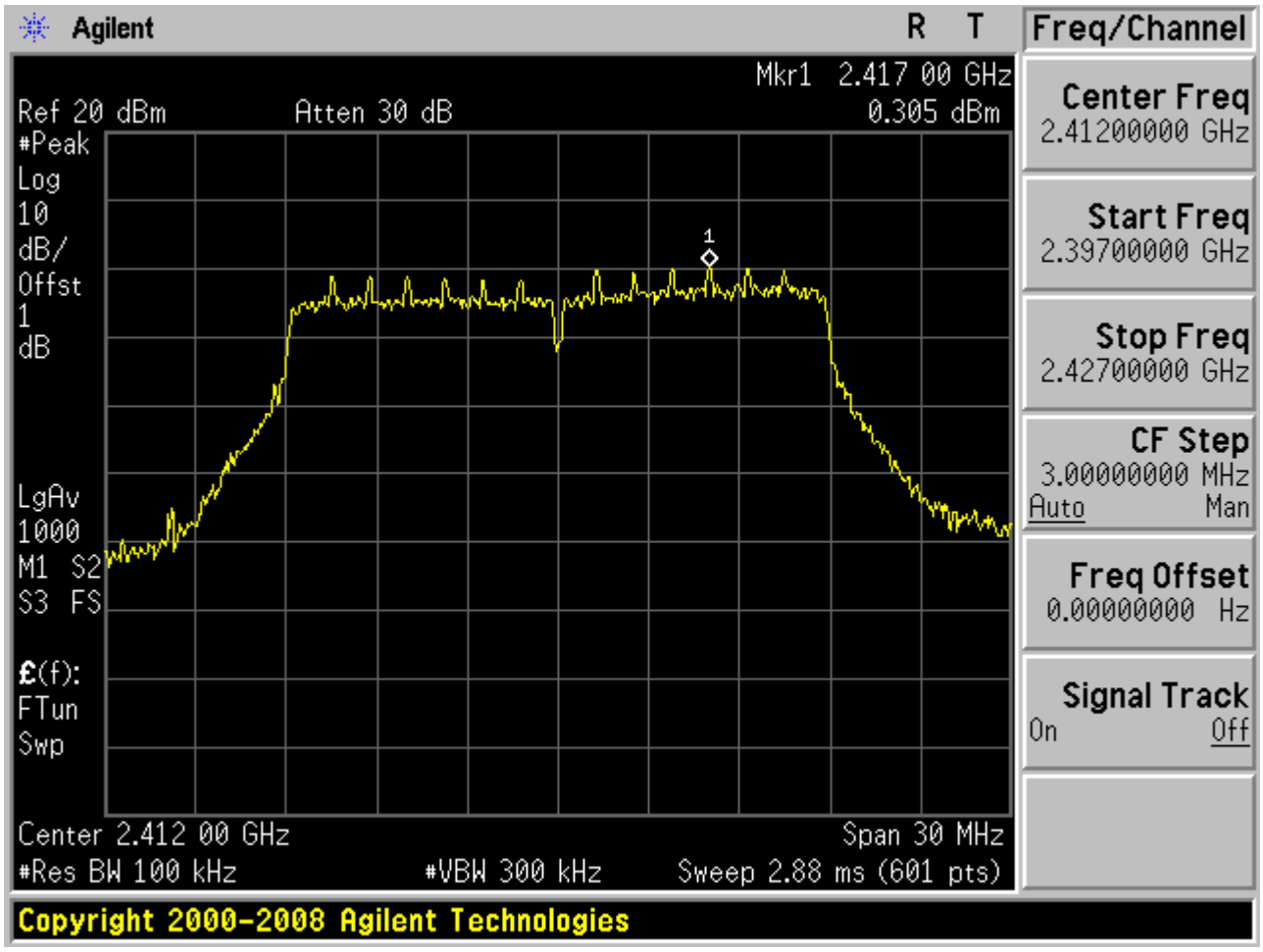






2.1 11N_L

Pref:



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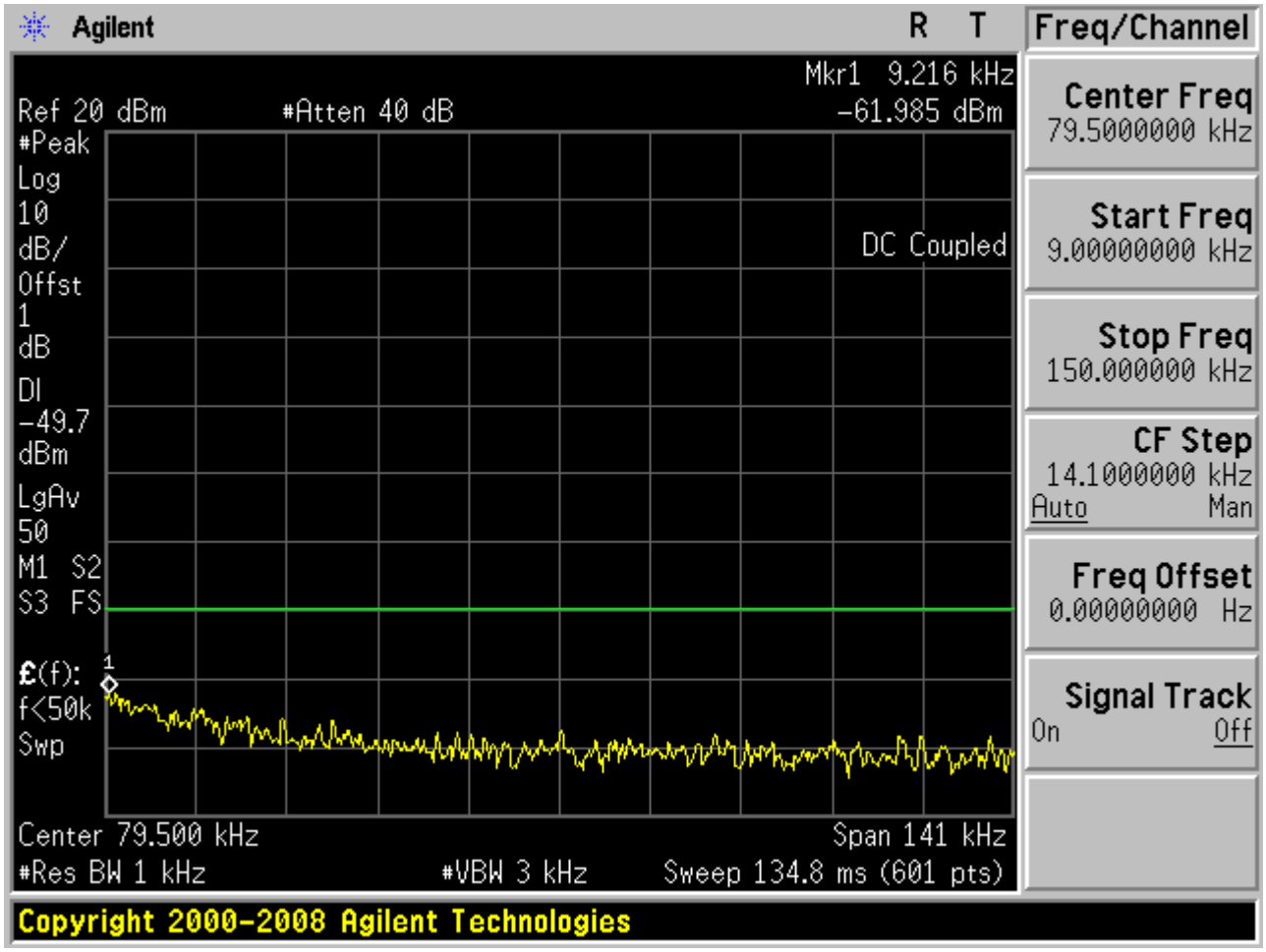
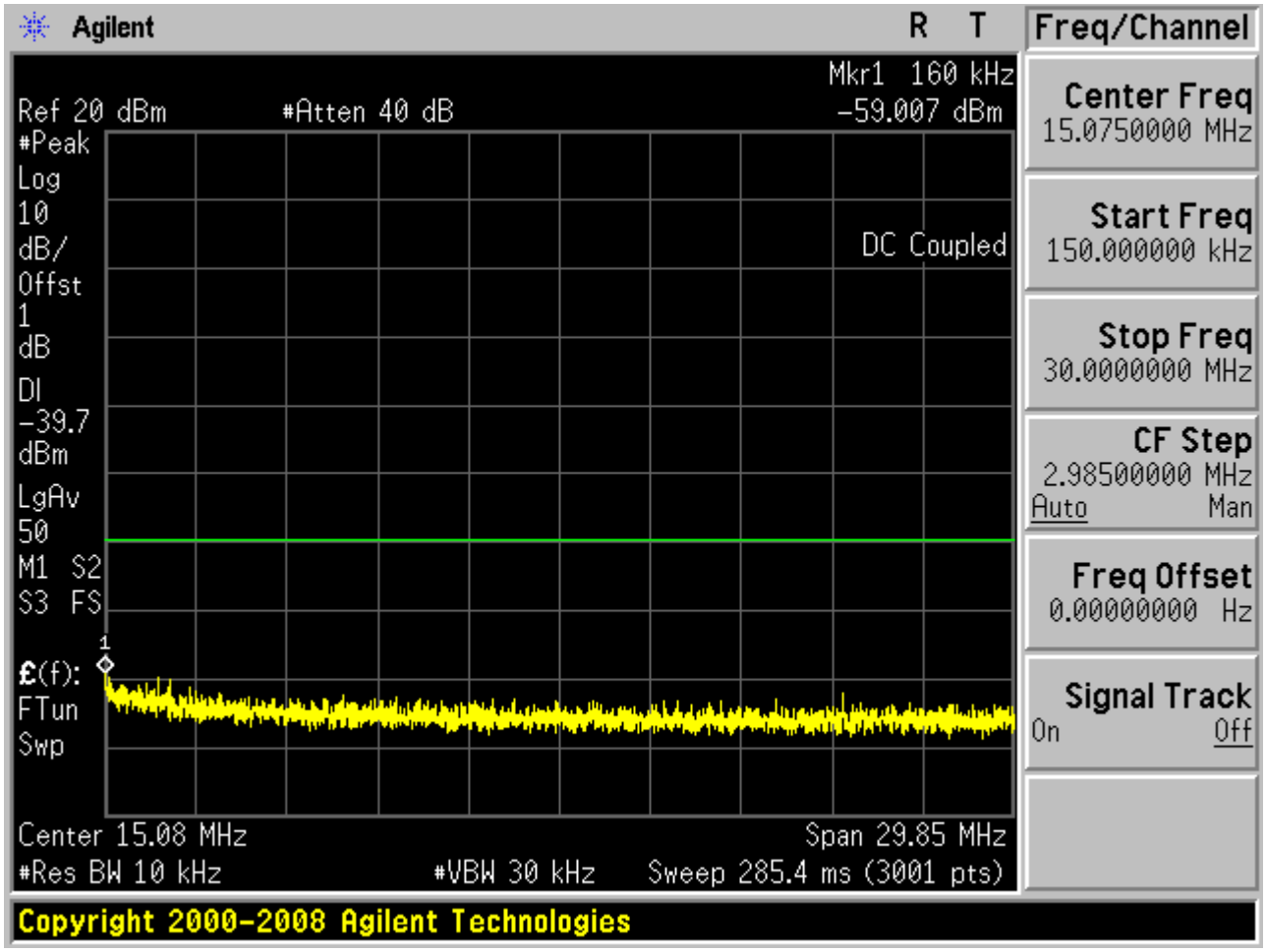
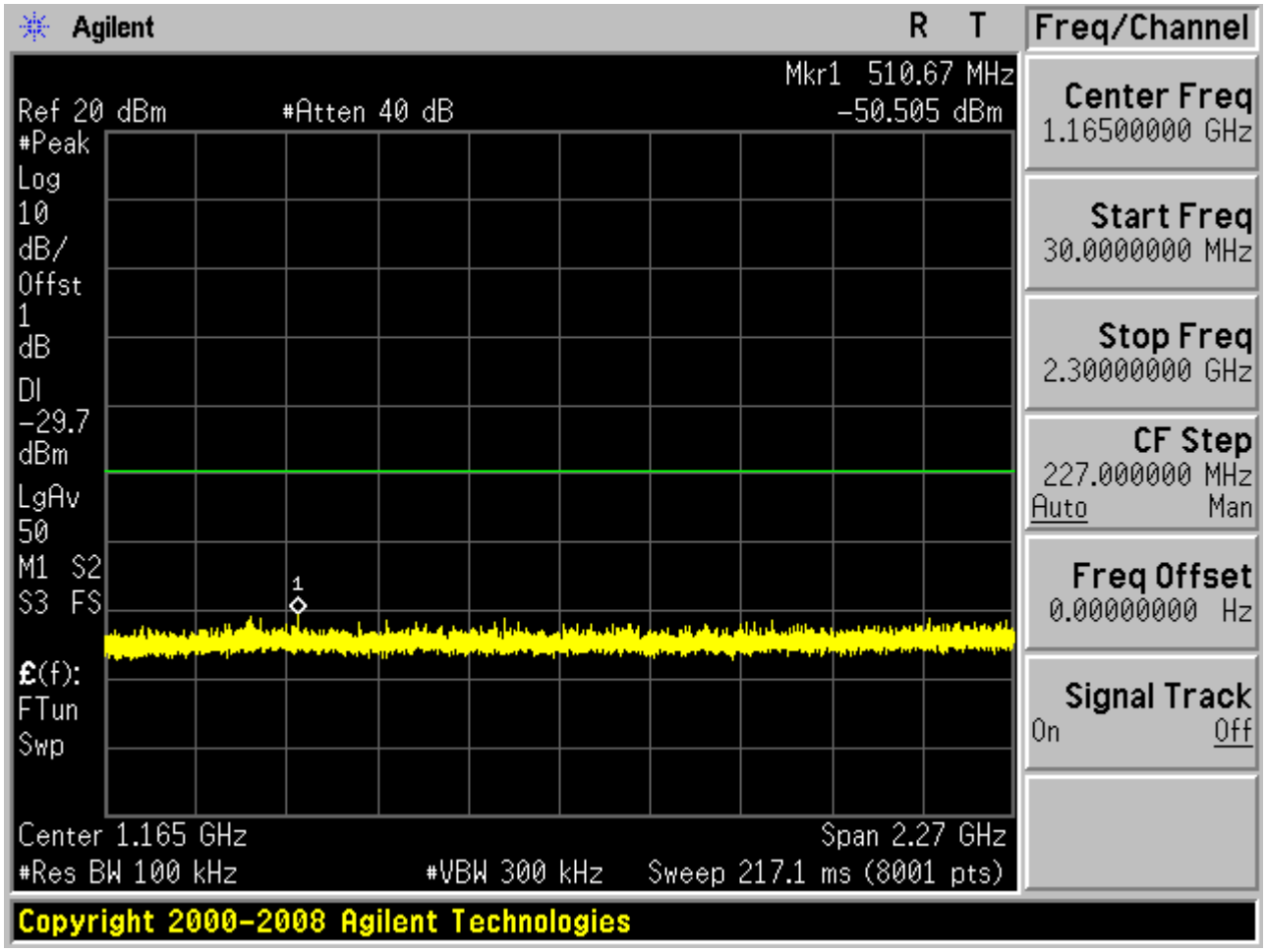
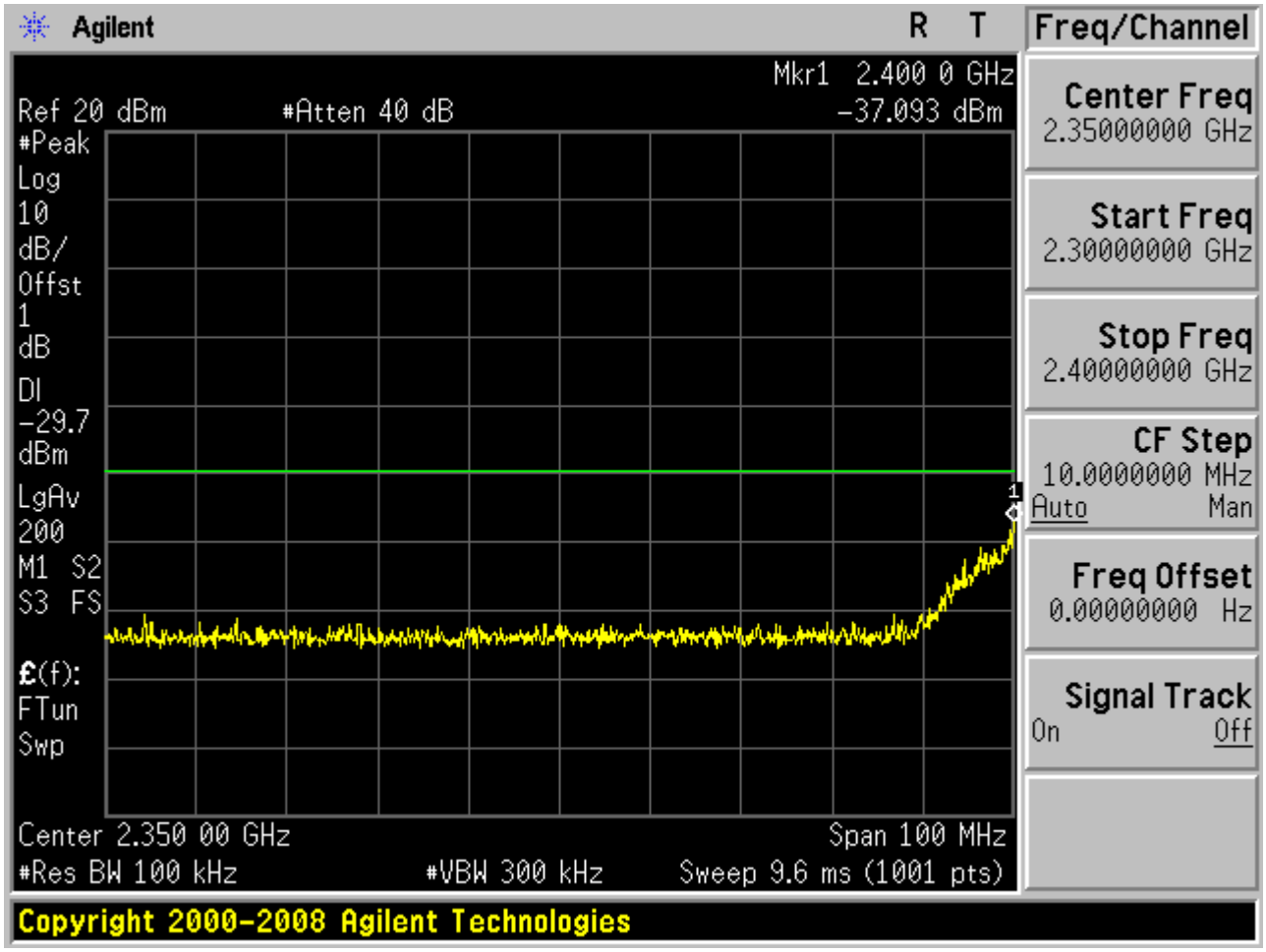
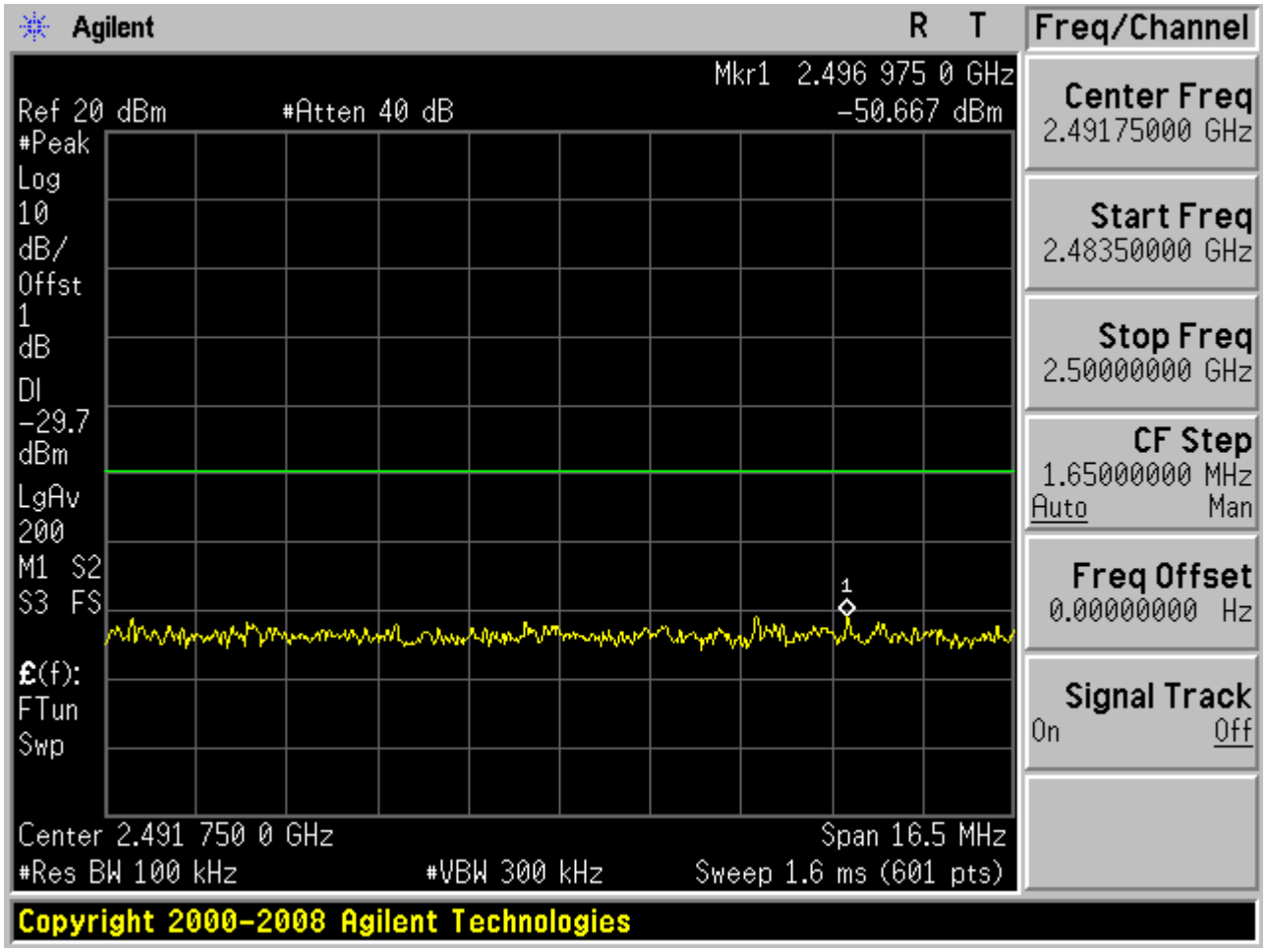
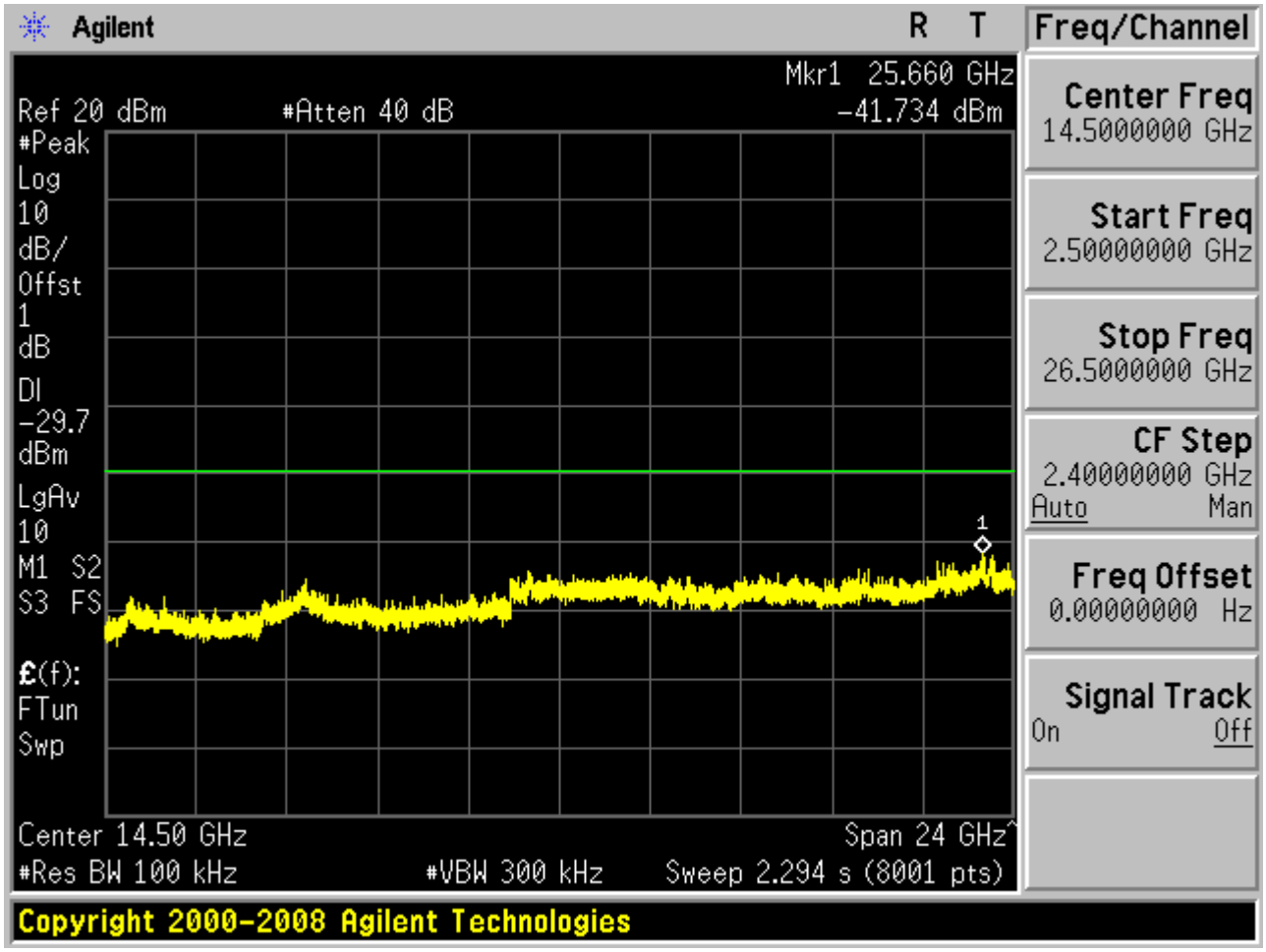






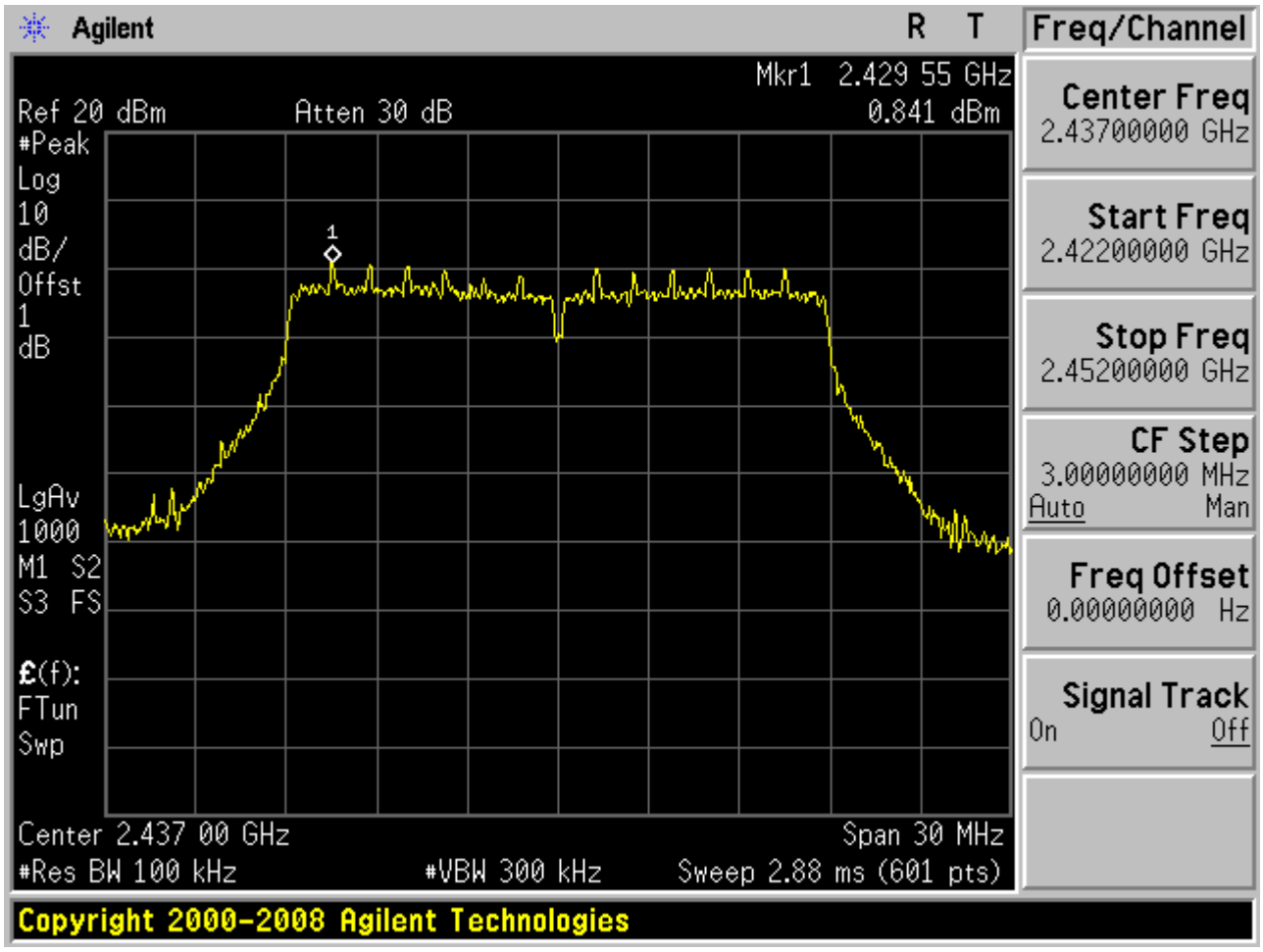






2.1 11N_M

Pref:



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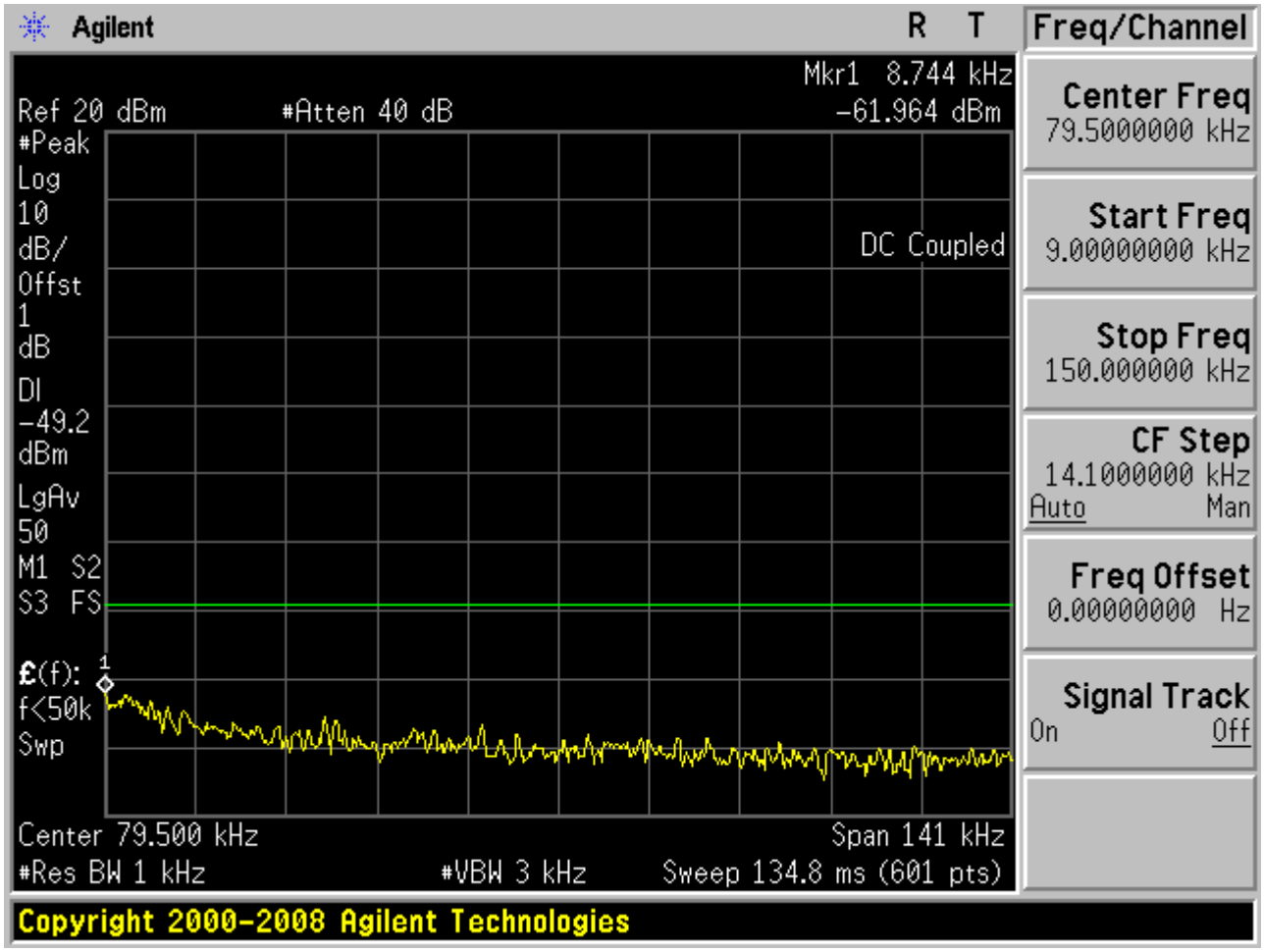
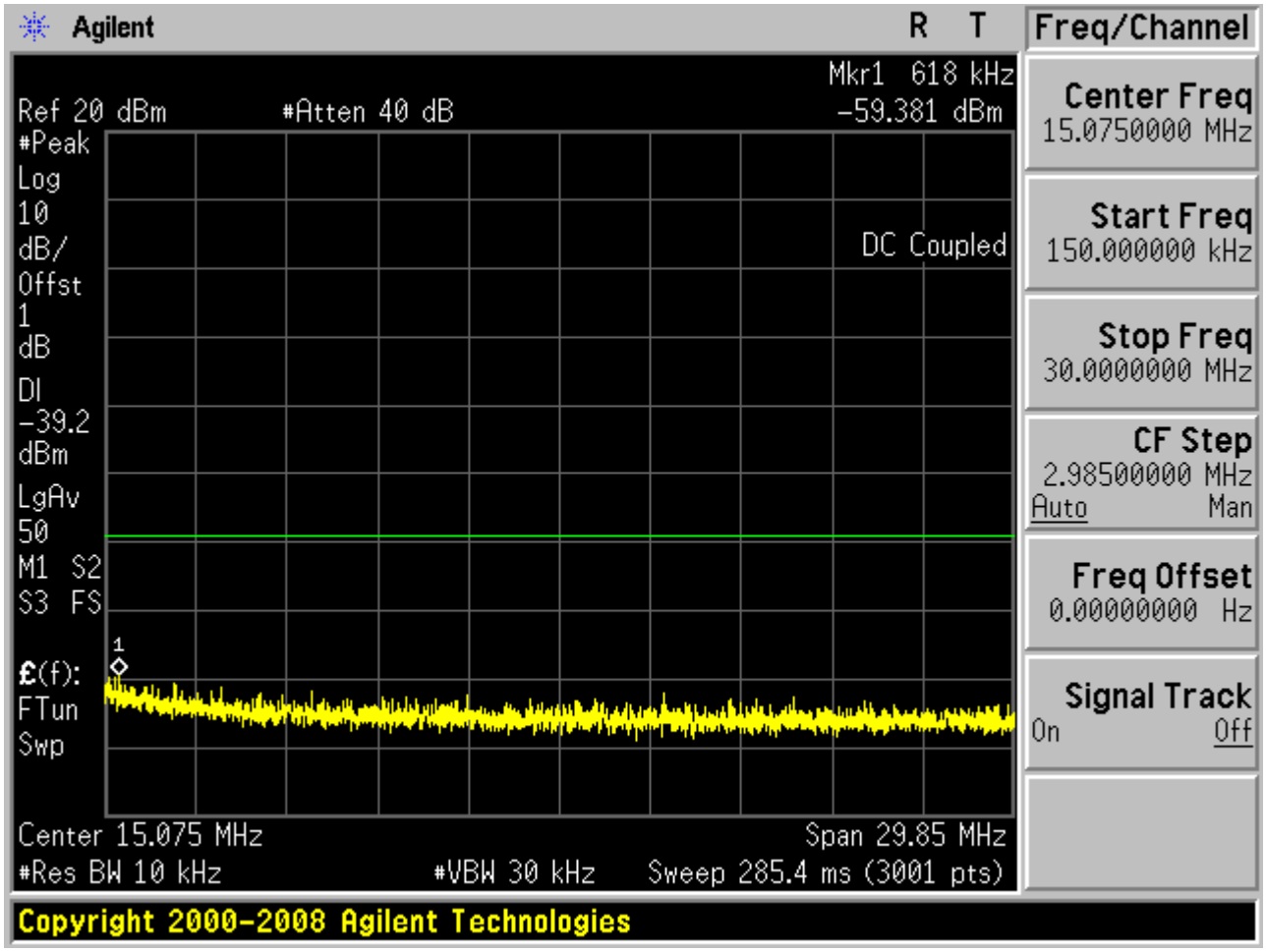
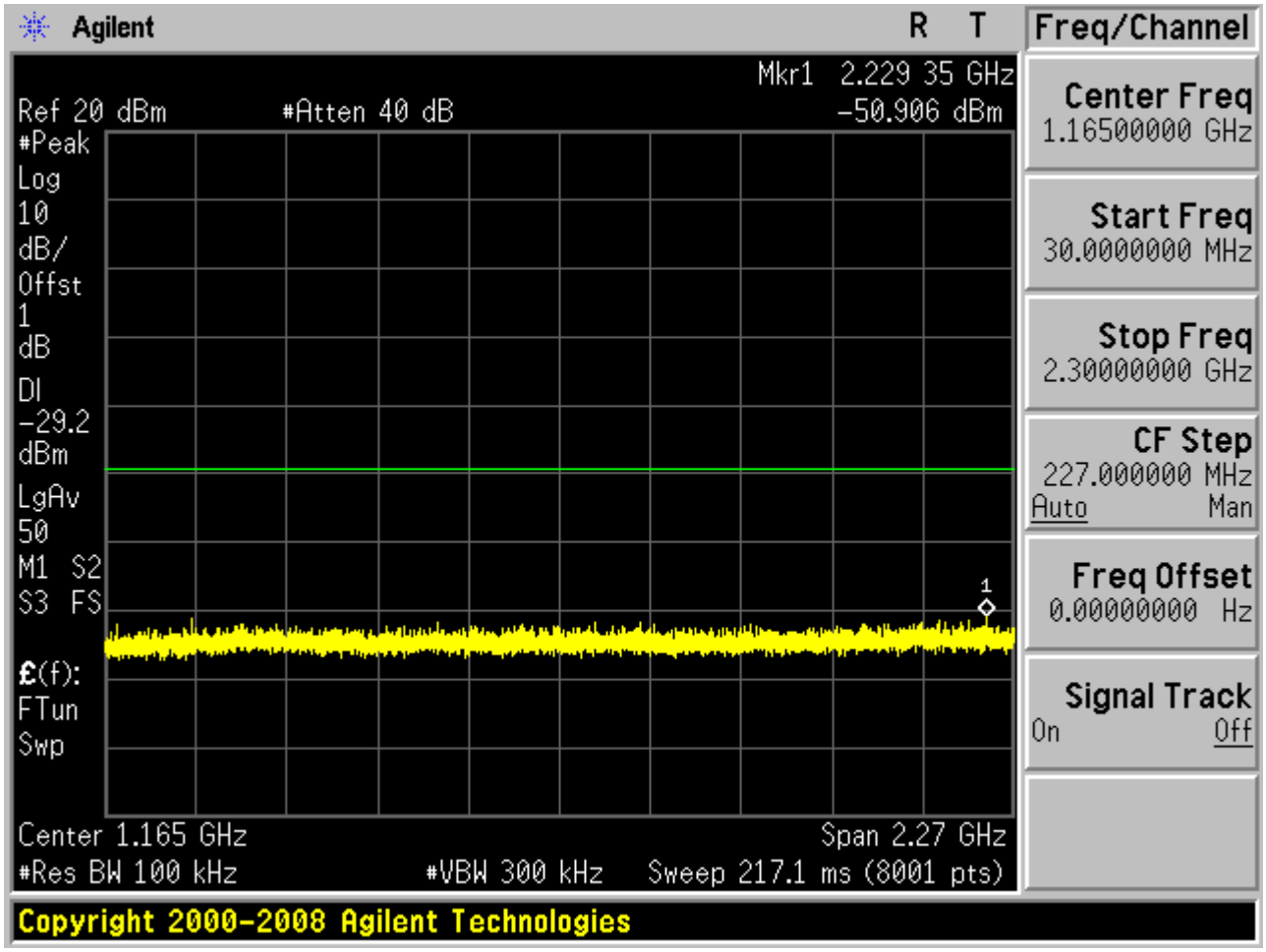
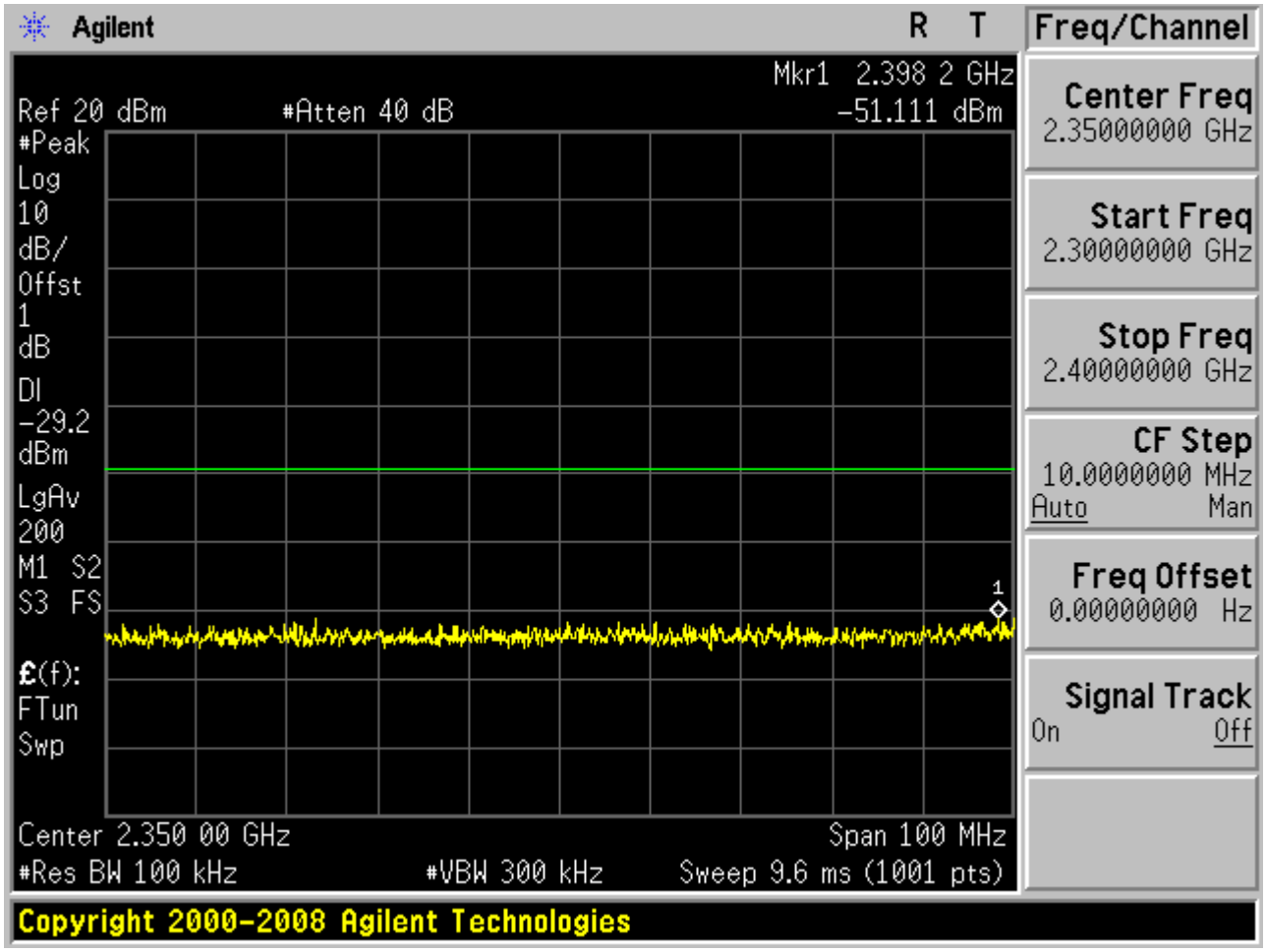
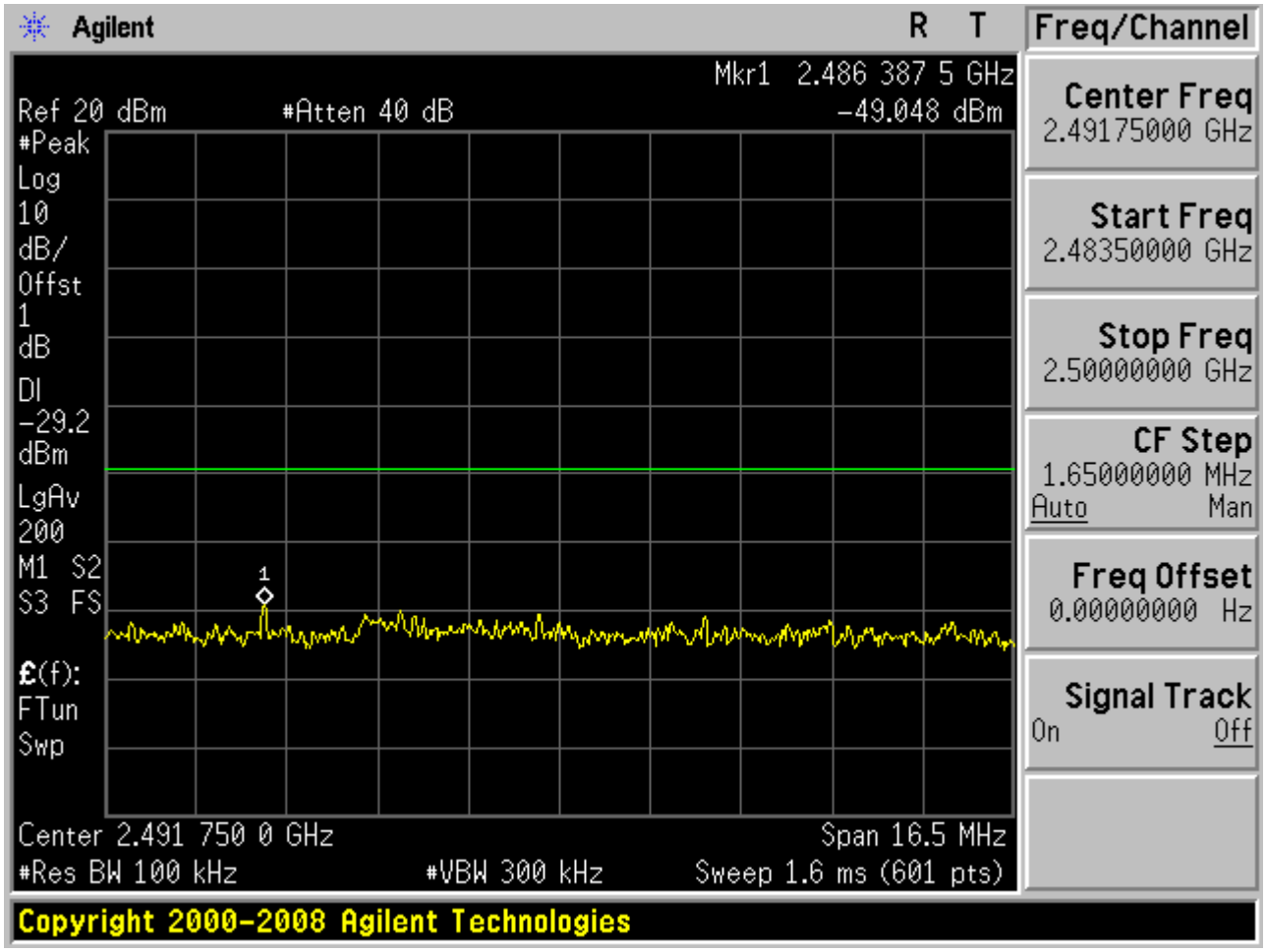
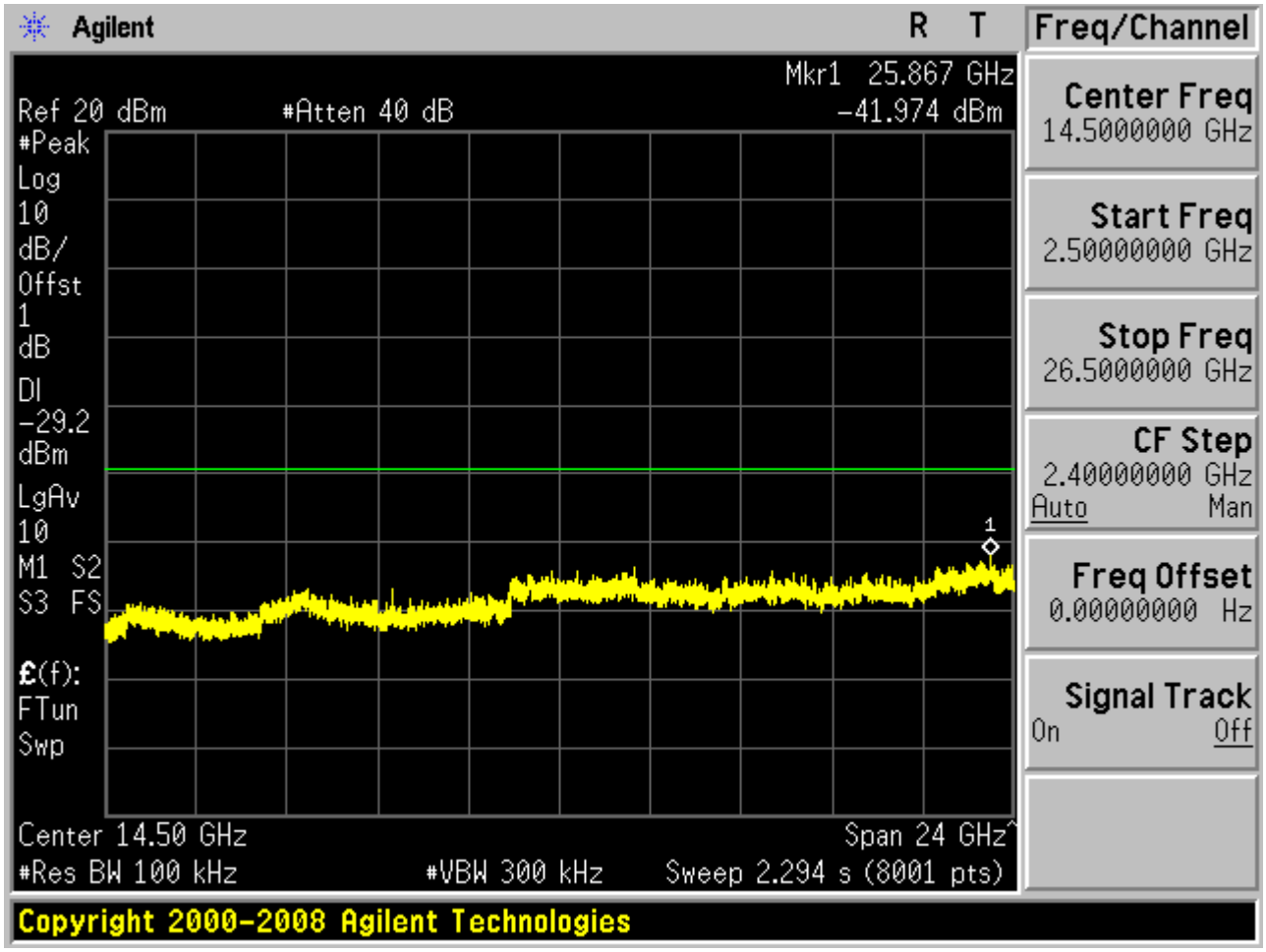






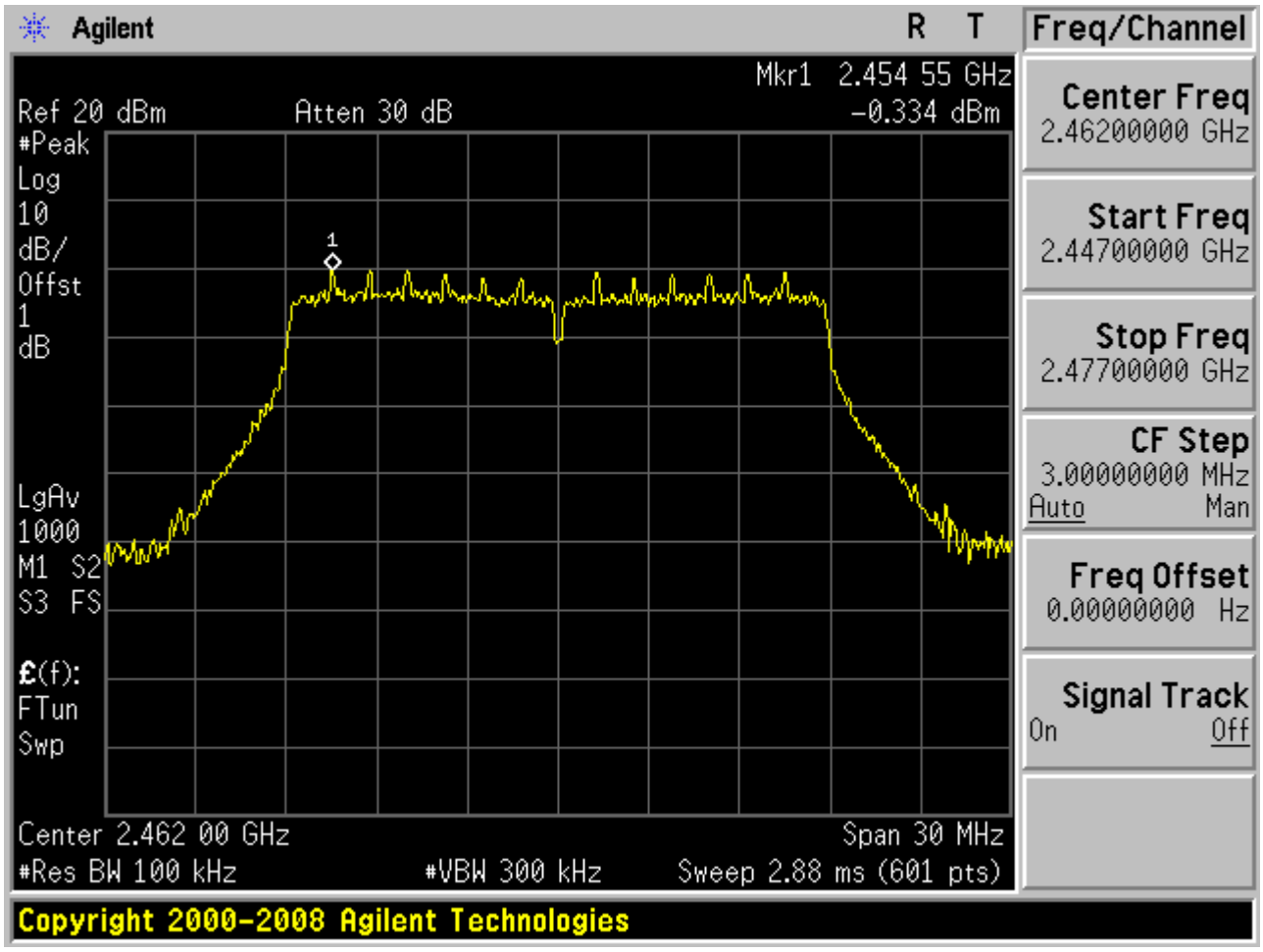




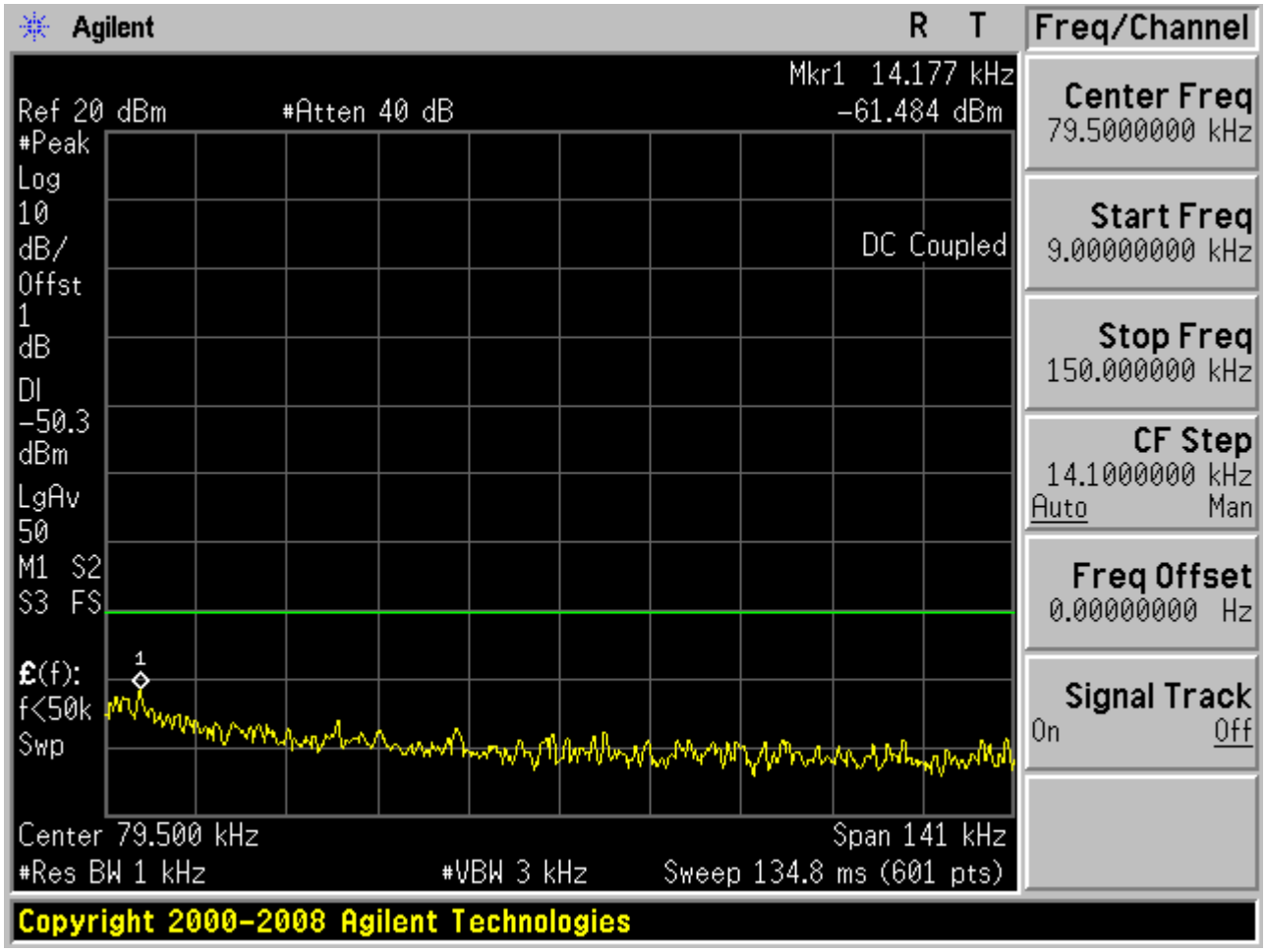


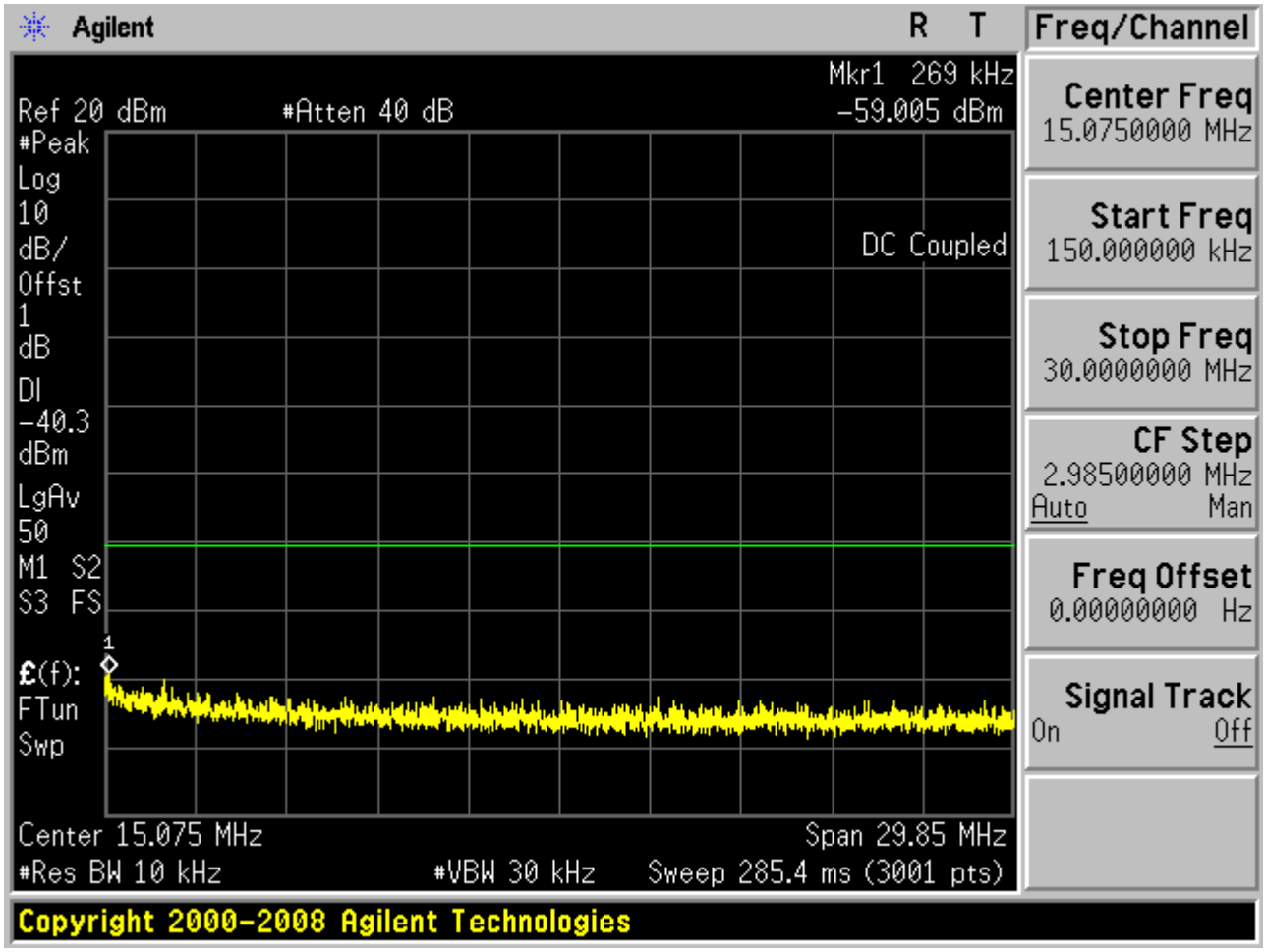
2.1 11N_H

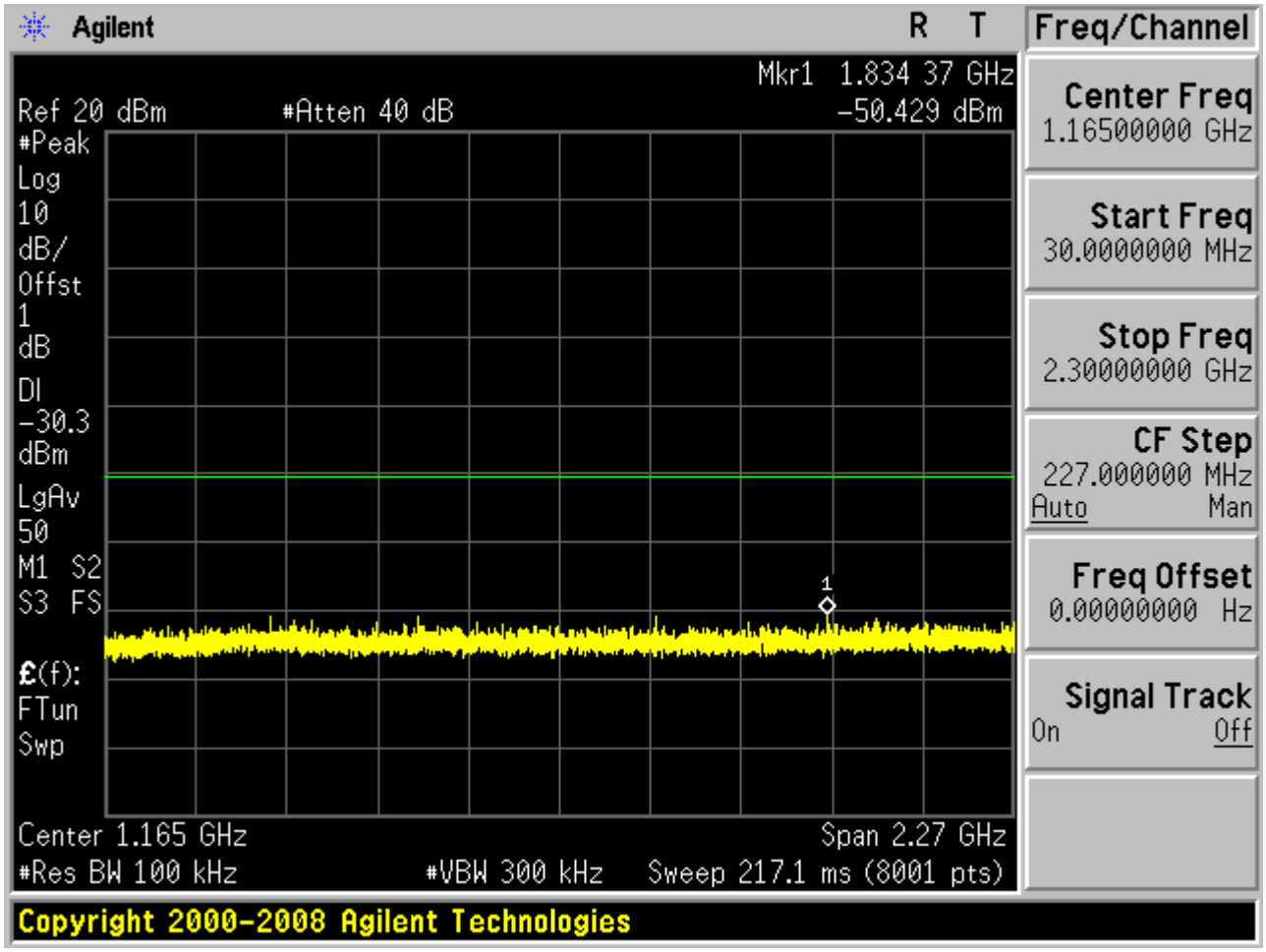
Pref:

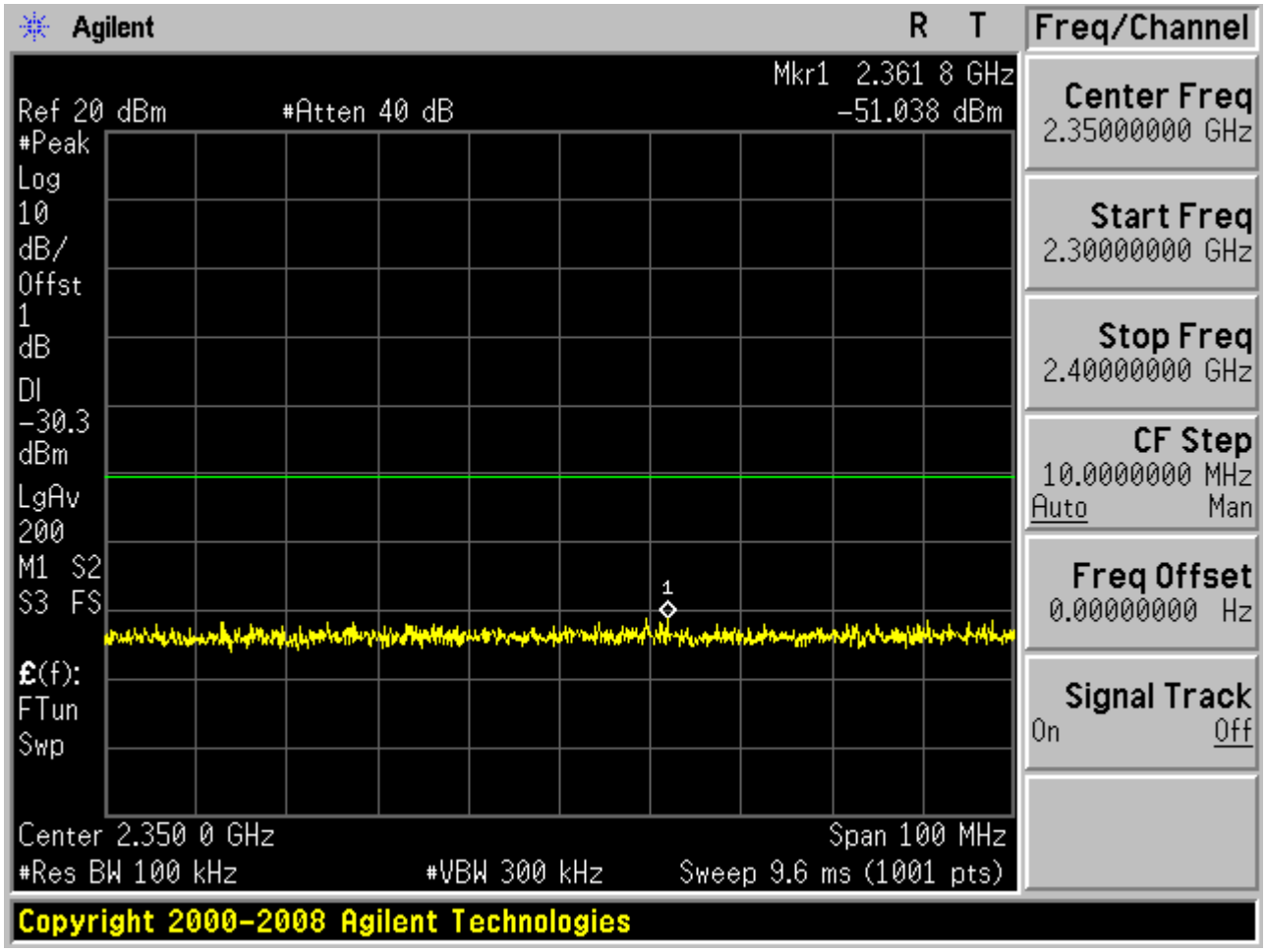


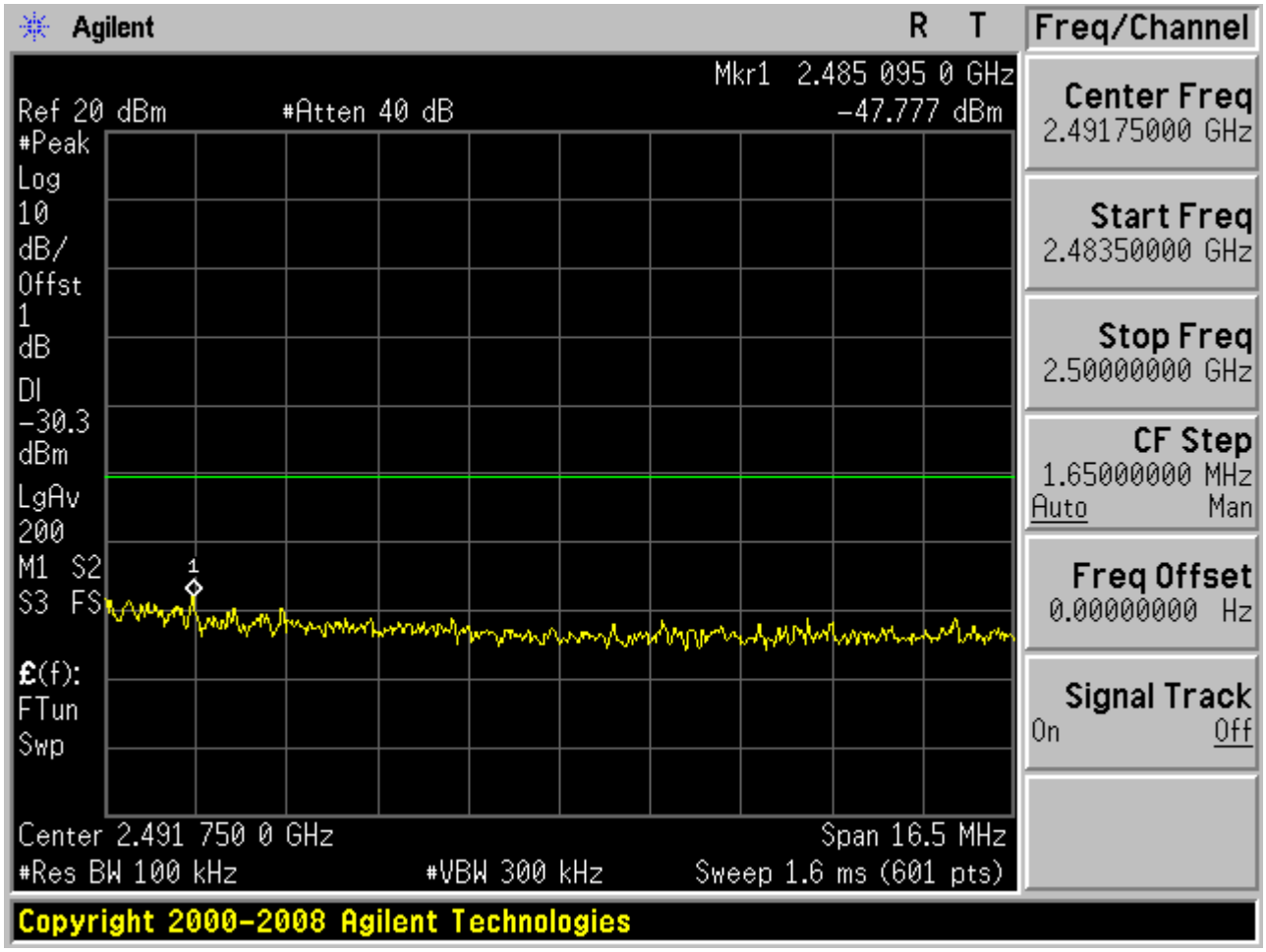
Puw:

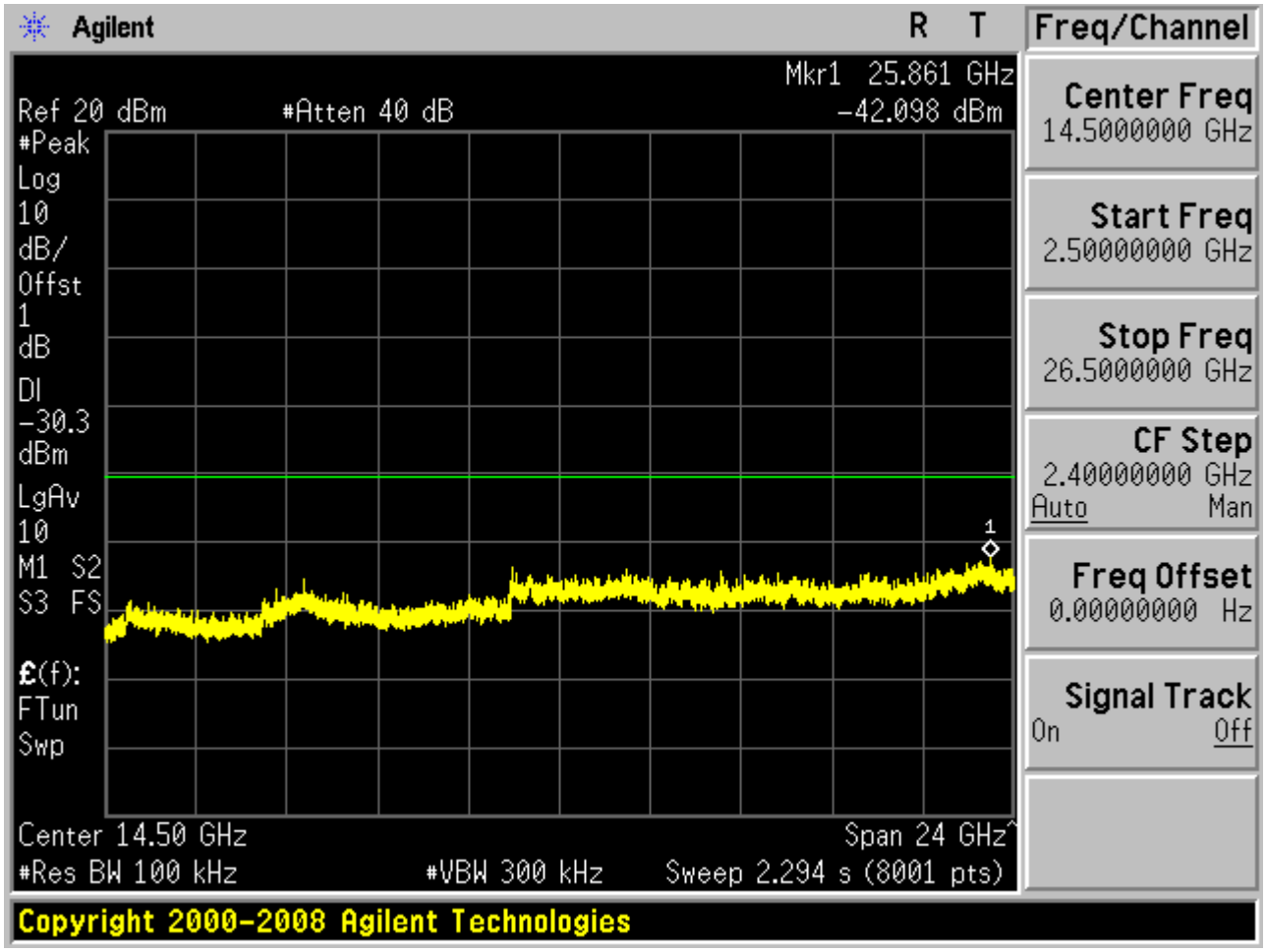












Appendix F: Radiated Spurious Emission & Spurious in Restricted Band

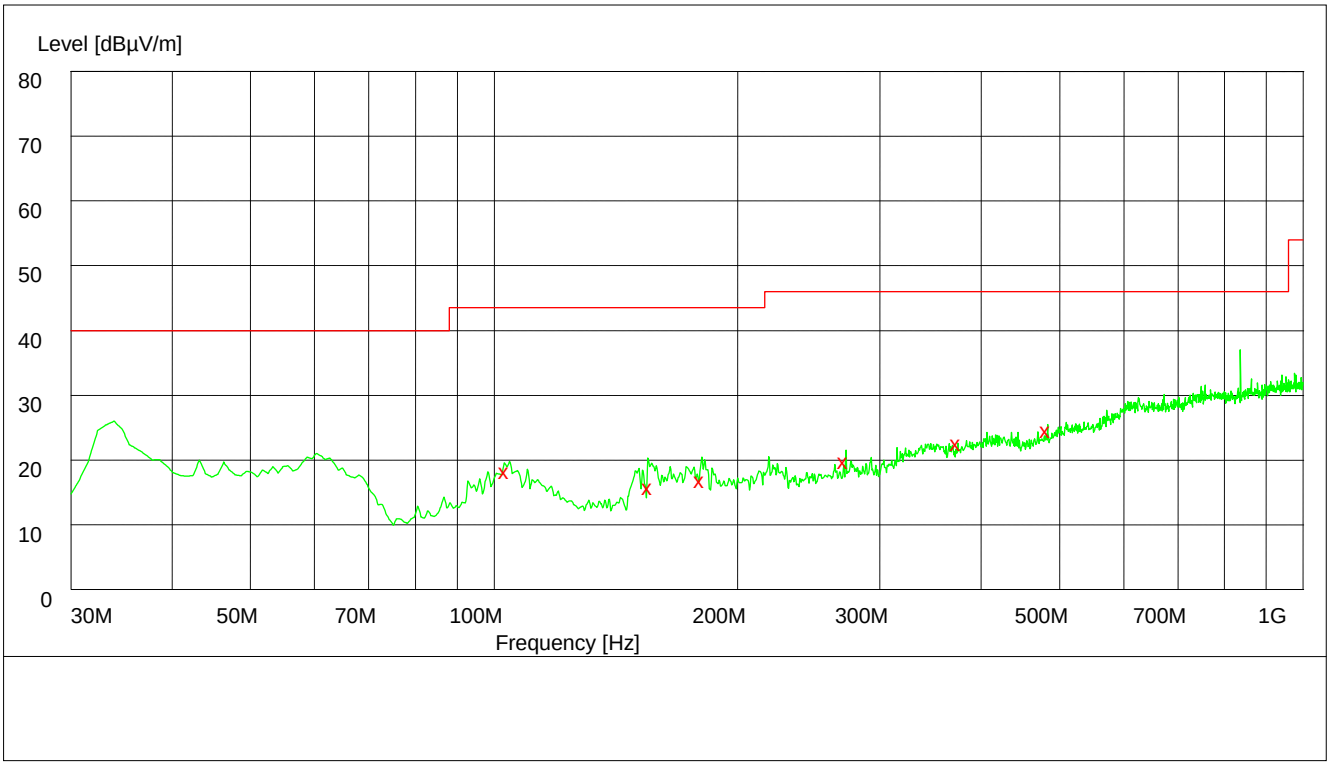
Note: Below 1GHz, RBW = 100 kHz, VBW = 300 kHz.

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz.

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.

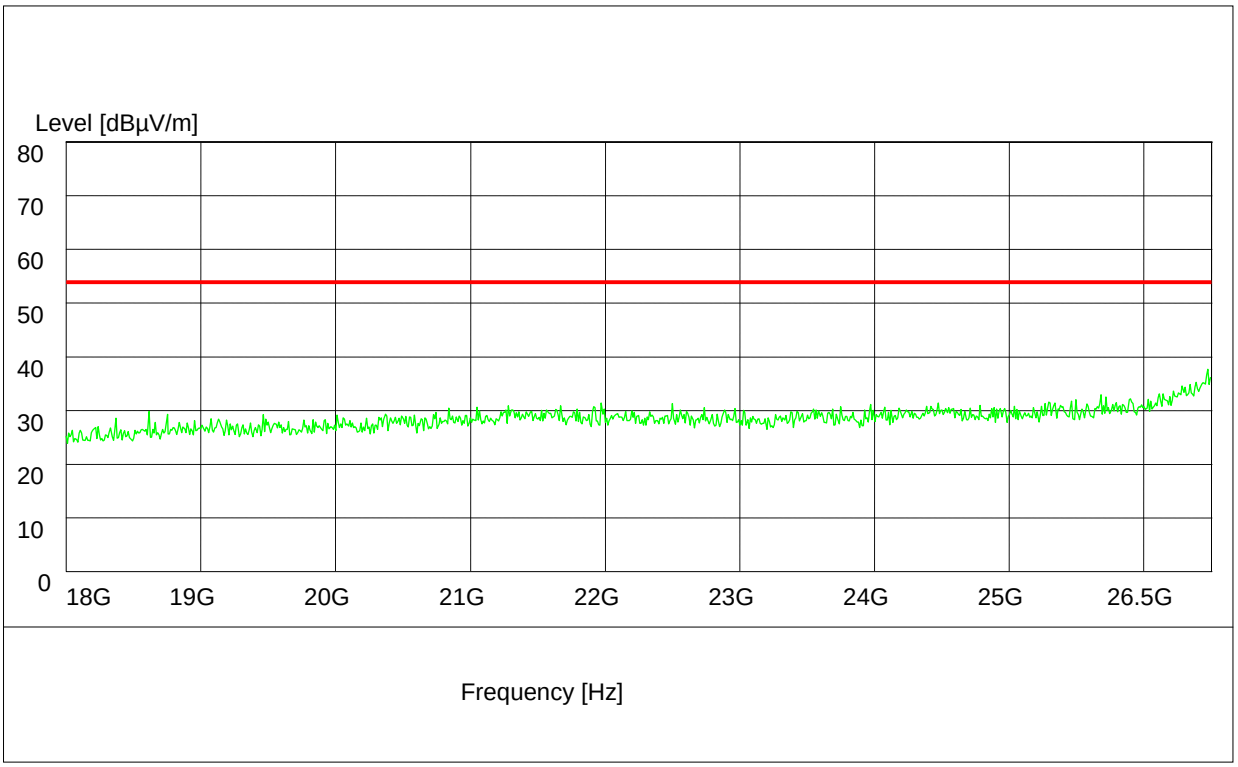
Note 2: **The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).**



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
103.596000	19.70	13.2	43.5	23.8	128.0	360.00	VERTICAL
155.776000	17.30	10.1	43.5	26.2	100.0	96.00	VERTICAL
180.784000	18.30	11.4	43.5	25.2	118.0	127.00	VERTICAL
271.632000	21.20	14.5	46.0	24.8	147.0	78.00	HORIZONTAL
374.124000	24.00	16.9	46.0	22.0	100.0	27.00	HORIZONTAL
483.484000	26.00	18.9	46.0	20.0	100.0	165.00	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"

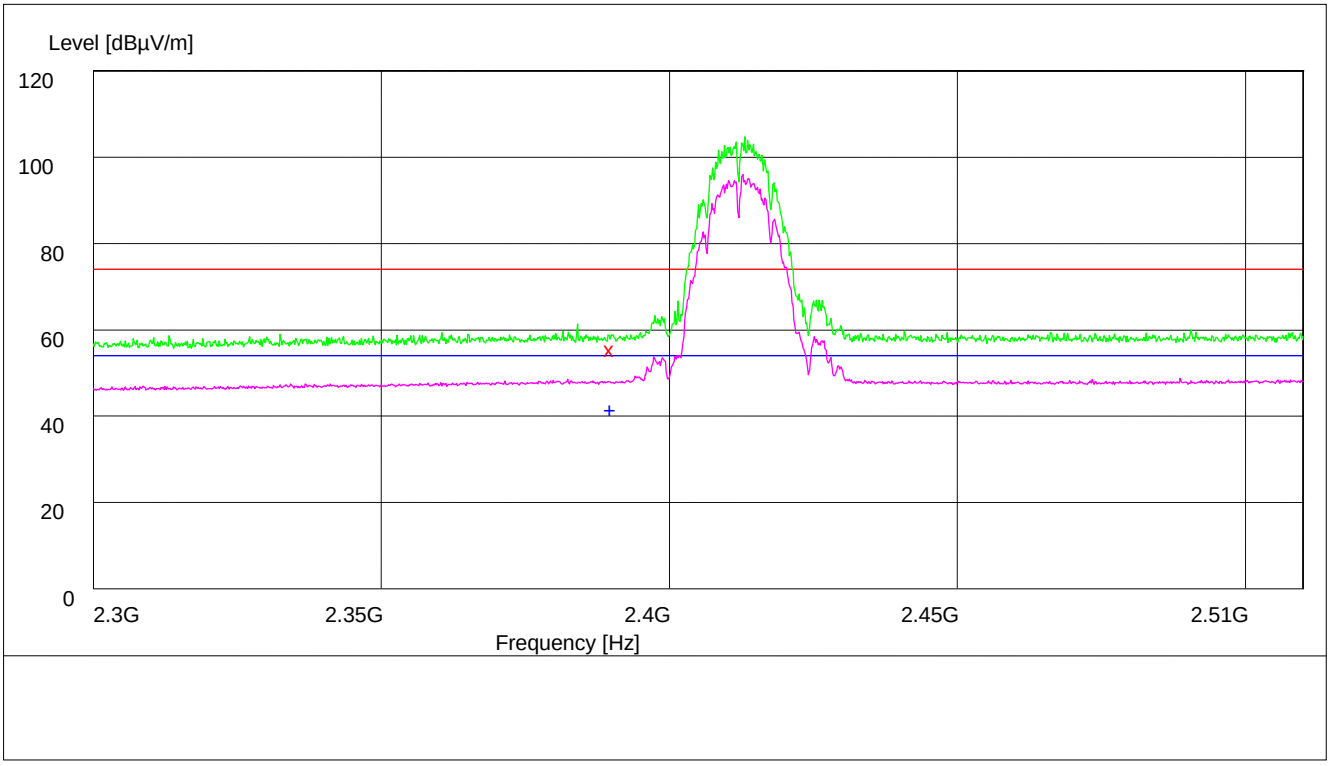
Note 1: The testing range of "2.3 GHz to 2.5 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

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.

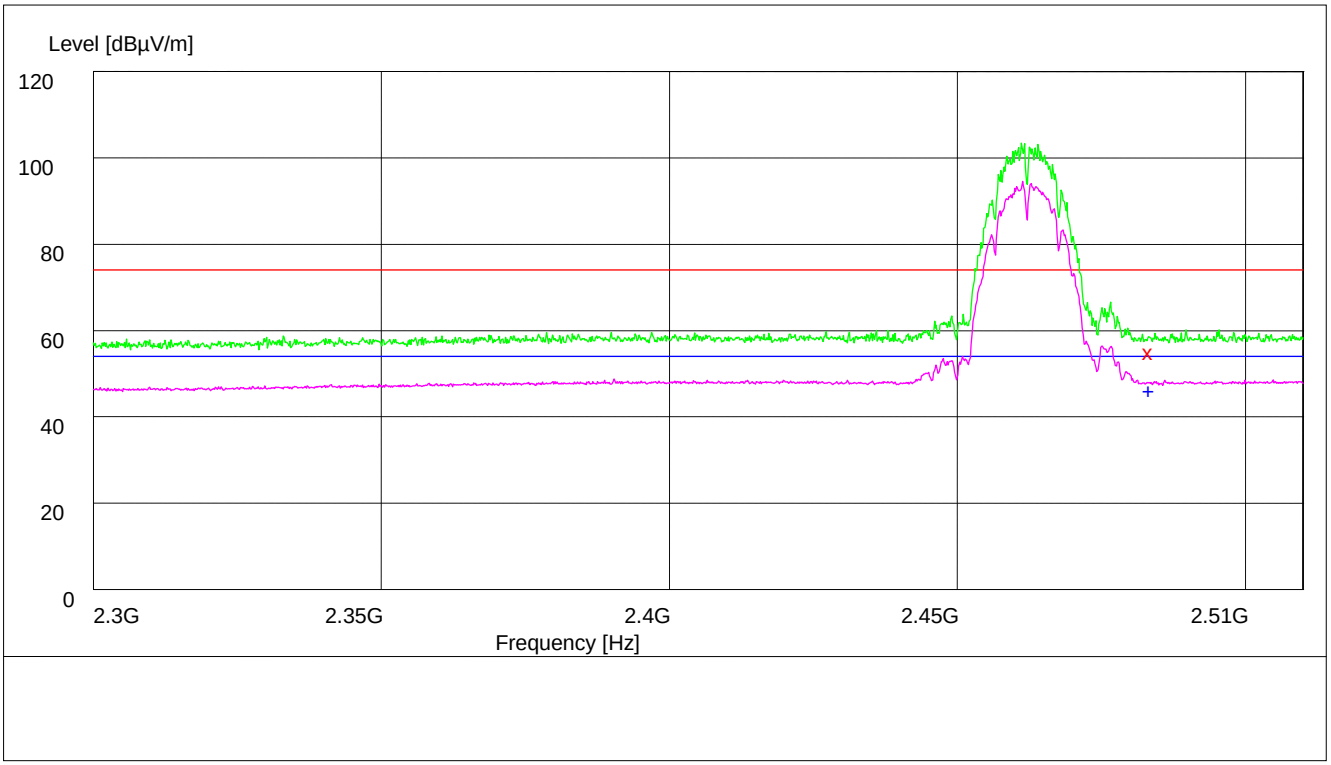
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	57.50	34.8	74.0	16.5	197.0	283.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	43.60	34.8	54.0	10.4	200.0	18.00	VERTICAL

Channel 11



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

MEASUREMENT RESULT: PK Detector

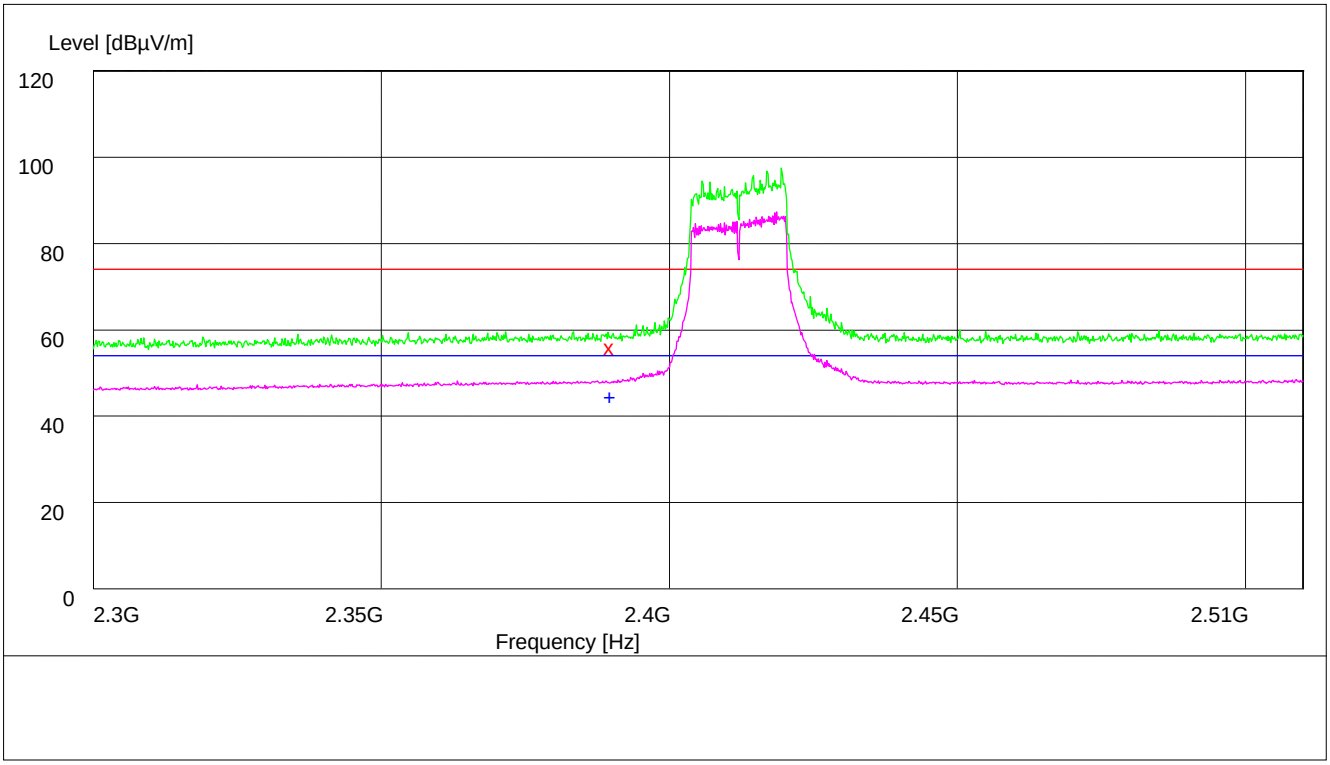
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2483.500000	57.00	35.1	74.0	17.0	197.0	127.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2483.500000	48.00	35.1	54.0	6.0	100.0	218.00	HORIZONTAL

Test Mode: 11g

Channel 01



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

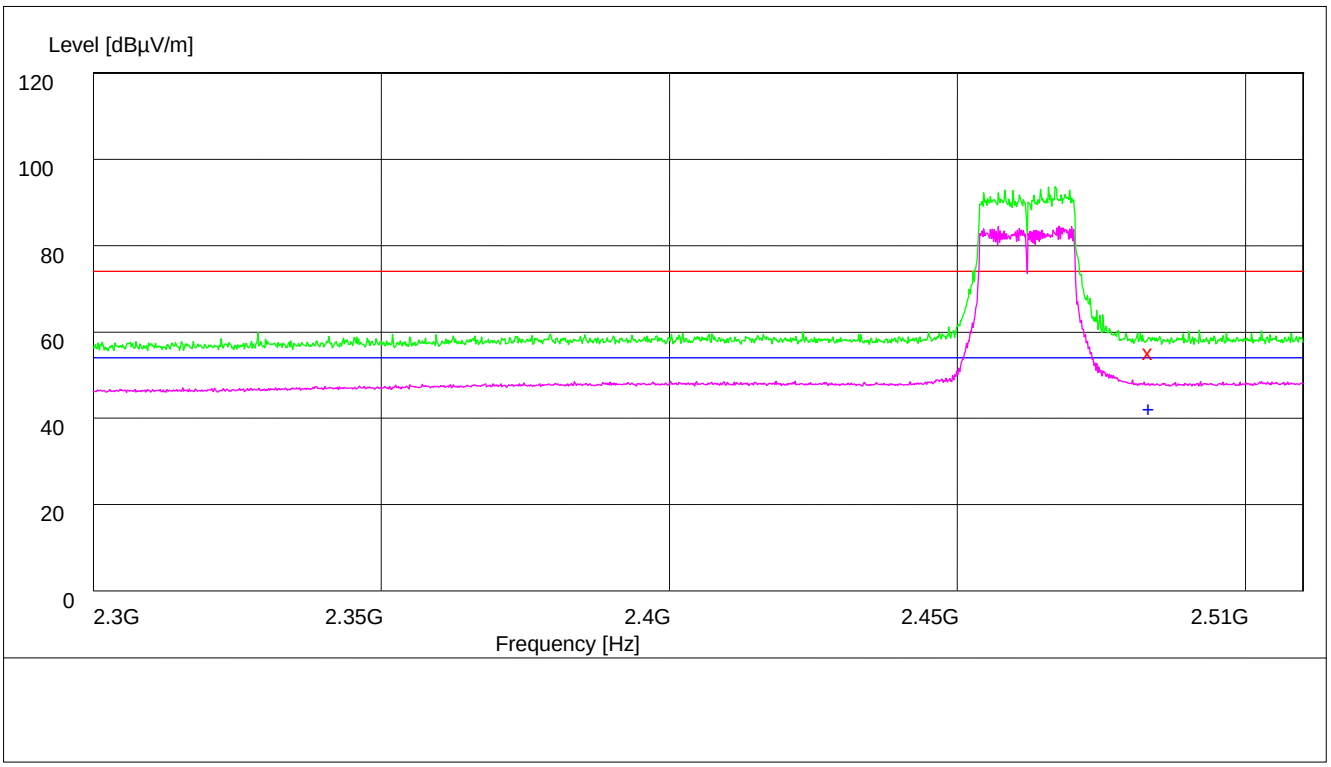
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.10	34.8	74.0	15.9	135.0	130.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.60	34.8	54.0	7.4	100.0	249.00	VERTICAL

Channel 11



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

MEASUREMENT RESULT: PK Detector

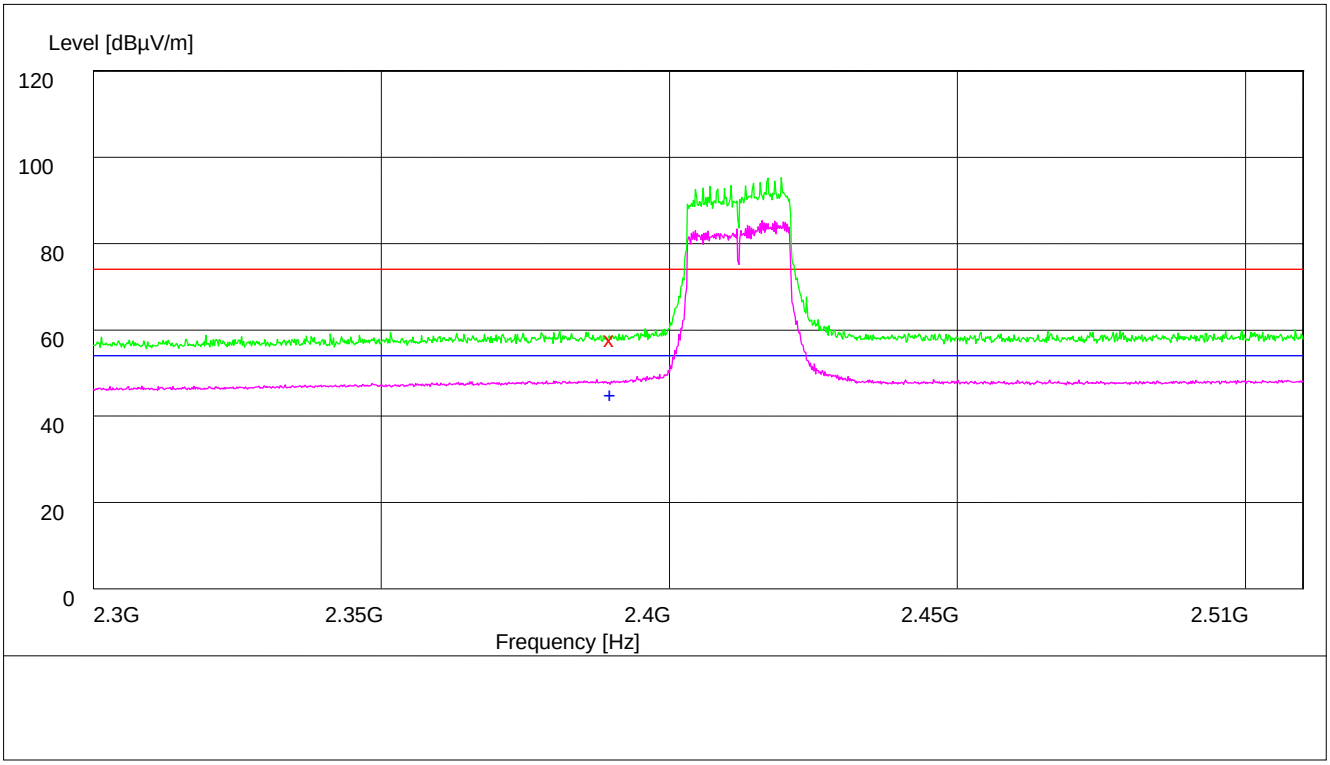
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2483.500000	57.30	35.1	74.0	16.7	165.0	171.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2483.500000	44.20	35.1	54.0	9.8	100.0	232.00	HORIZONTAL

Test Mode: 11n

Channel 01



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

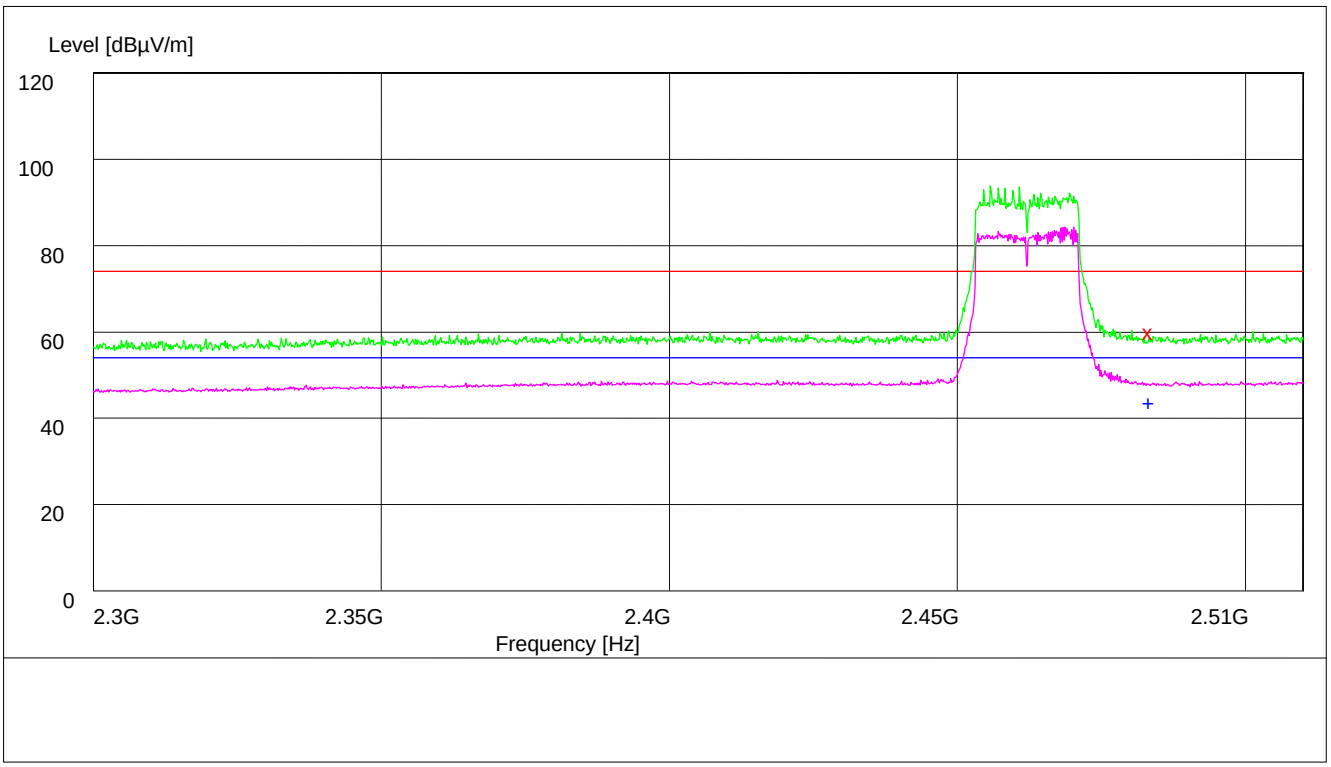
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	60.00	34.8	74.0	14.0	100.0	162.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	47.20	34.8	54.0	6.8	100.0	321.00	VERTICAL

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
2483.500000	62.10	35.1	74.0	11.9	100.0	226.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

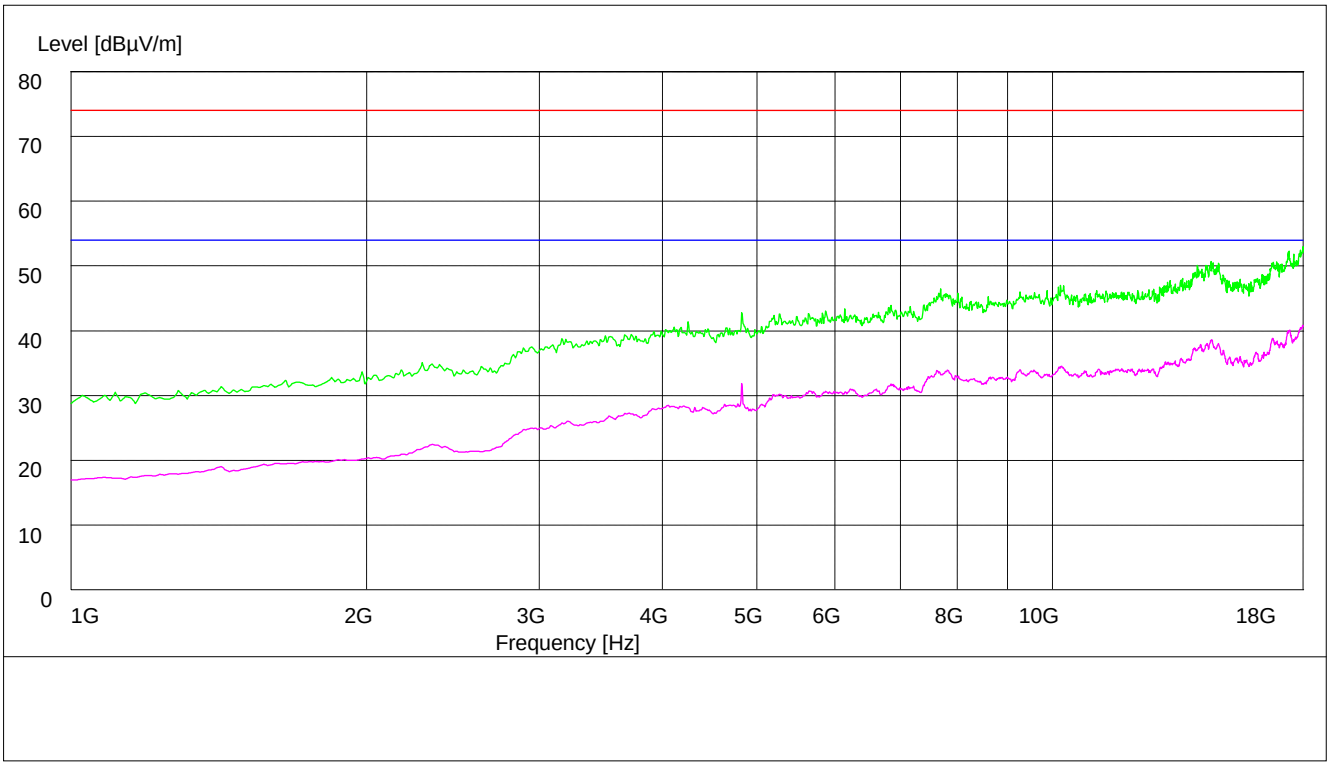
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2483.500000	45.70	35.1	54.0	8.3	100.0	15.00	VERTICAL

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.

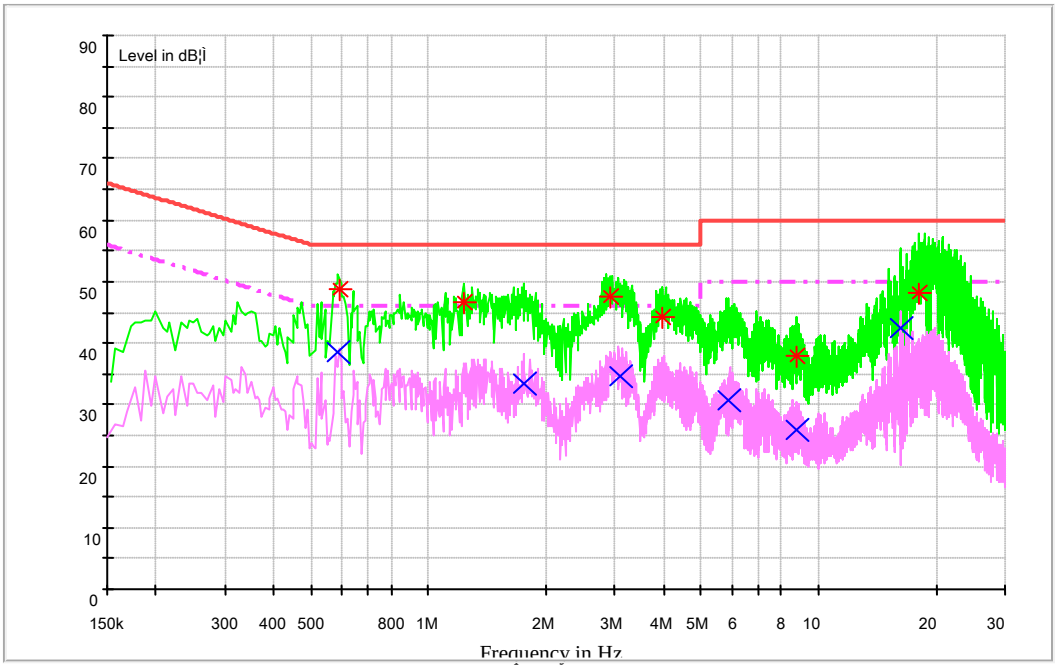
Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).



Appendix G: Conducted Emission at Power Port

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
0.588626	48.8	N	9.7	7.2	56.0	FLO
1.234602	46.5	N	9.7	9.5	56.0	FLO
2.922676	47.7	N	9.7	8.3	56.0	FLO
3.972106	44.4	N	9.8	11.6	56.0	FLO
8.764336	37.8	N	9.9	22.2	60.0	FLO
18.097732	48.1	N	10.1	11.9	60.0	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.586036	38.4	N	9.7	7.6	46.0	FLO
1.762253	33.3	N	9.7	12.7	46.0	FLO
3.101534	34.6	N	9.7	11.4	46.0	FLO
5.850548	30.8	N	9.8	19.2	50.0	FLO
8.802990	25.9	N	9.9	24.1	50.0	FLO
16.309590	42.6	N	10.1	7.4	50.0	FLO