



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.

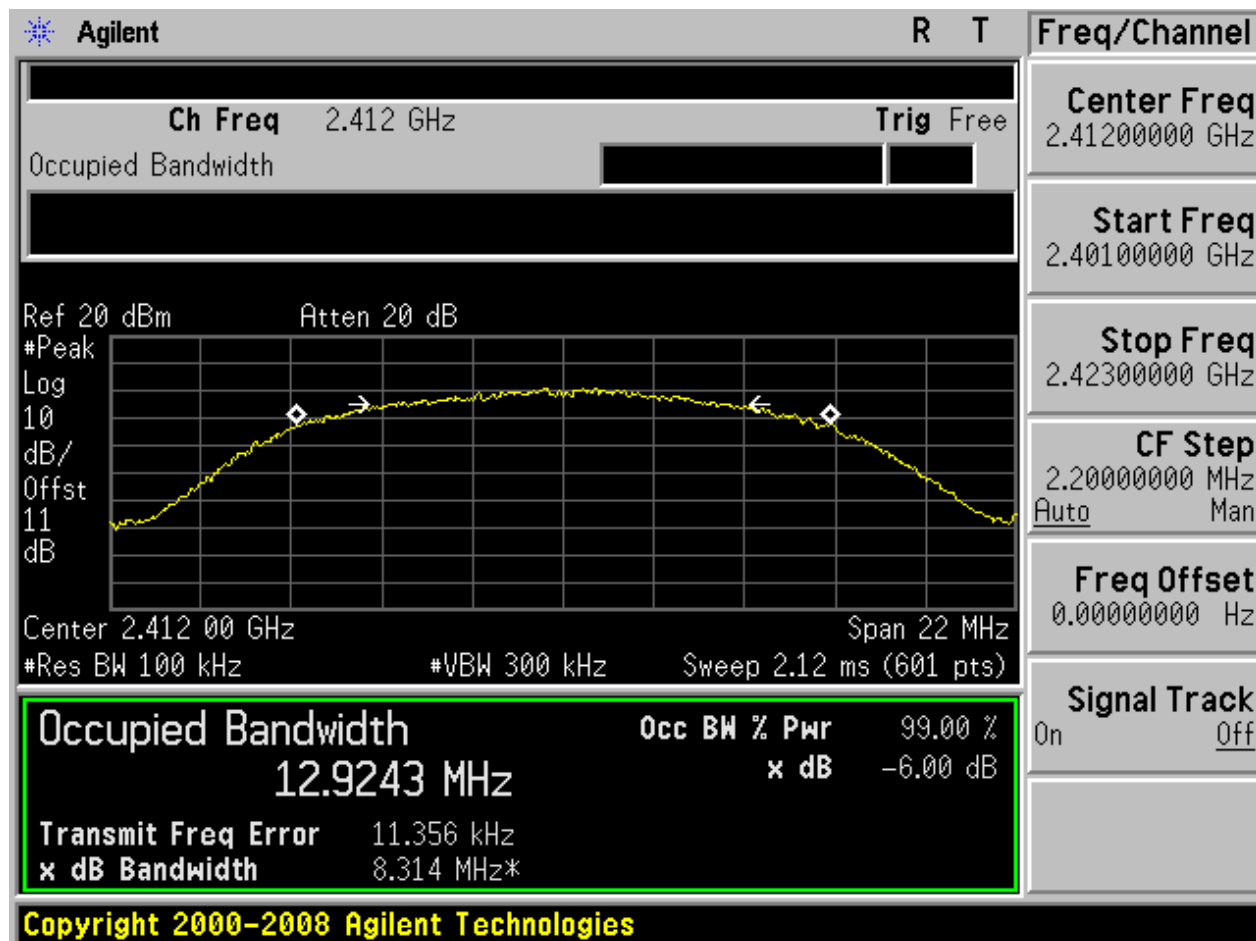
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

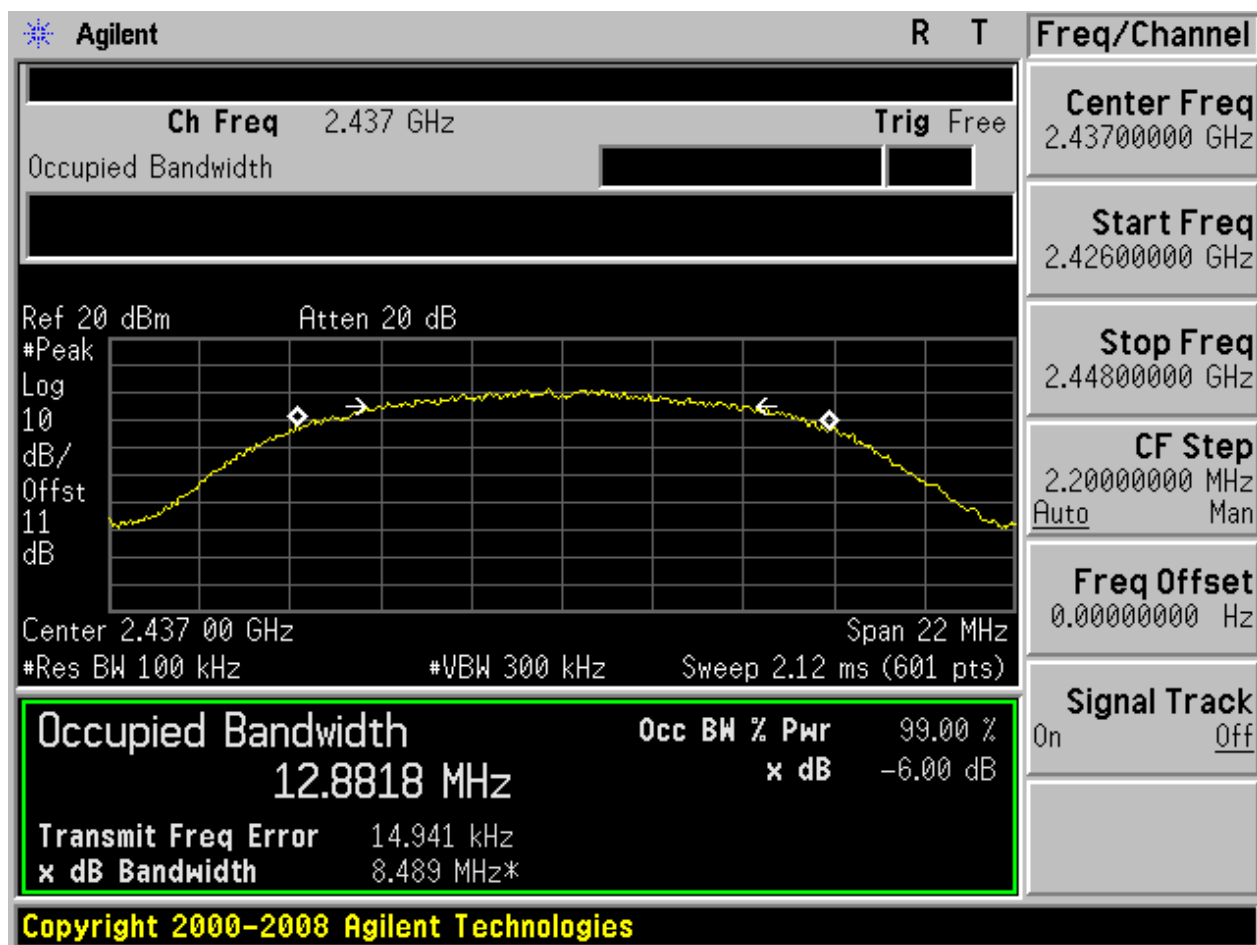
Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11B	L	2412	Ant 1	8.31	pass
11B	M	2437	Ant 1	8.49	pass
11B	H	2462	Ant 1	8.49	pass
11G	L	2412	Ant 1	16.52	pass
11G	M	2437	Ant 1	16.50	pass
11G	H	2462	Ant 1	16.55	pass
11N20	L	2412	Ant 1	17.75	pass
11N20	M	2437	Ant 1	17.61	pass
11N20	H	2462	Ant 1	17.35	pass

Part II - Test Plots

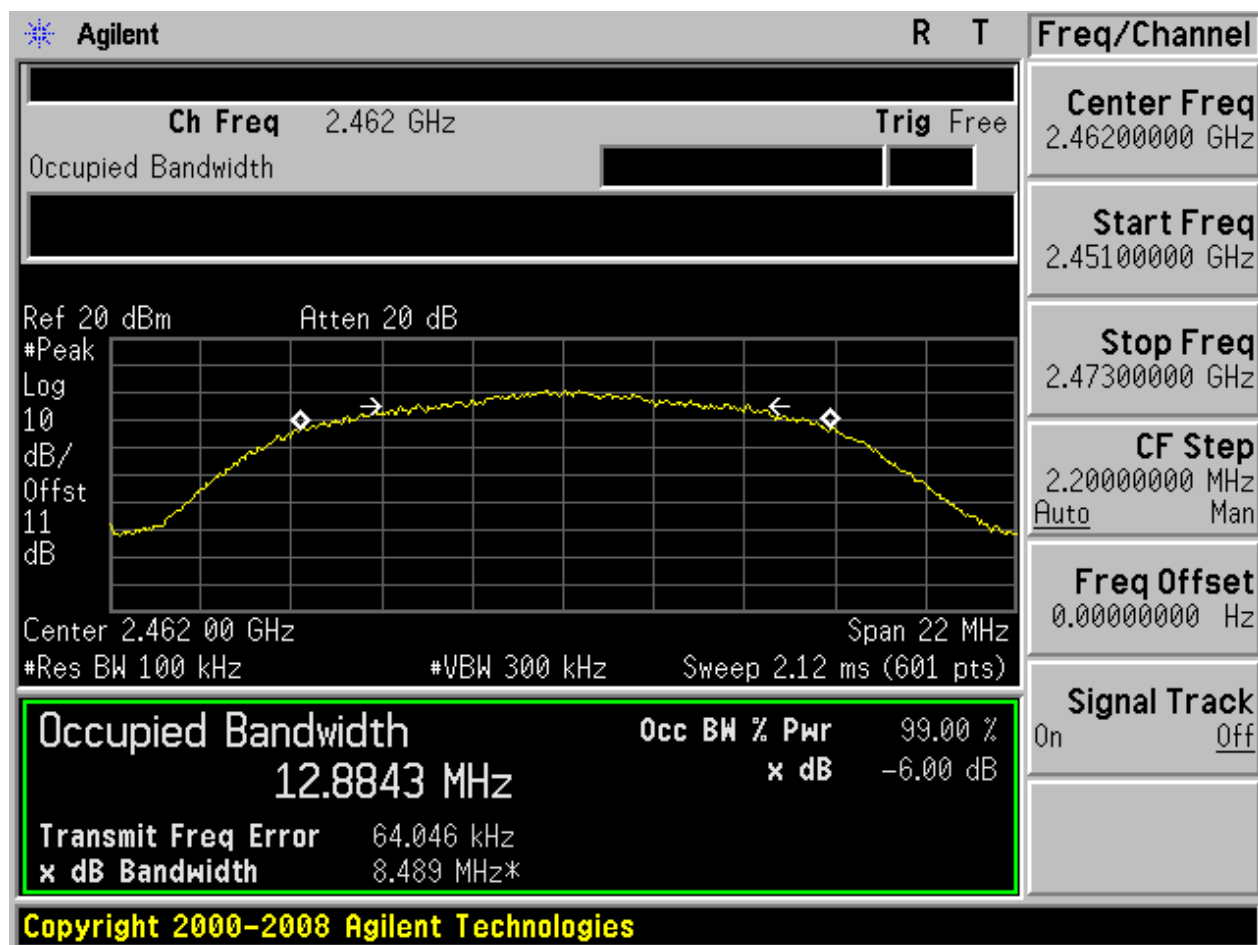
2.1 11B_L



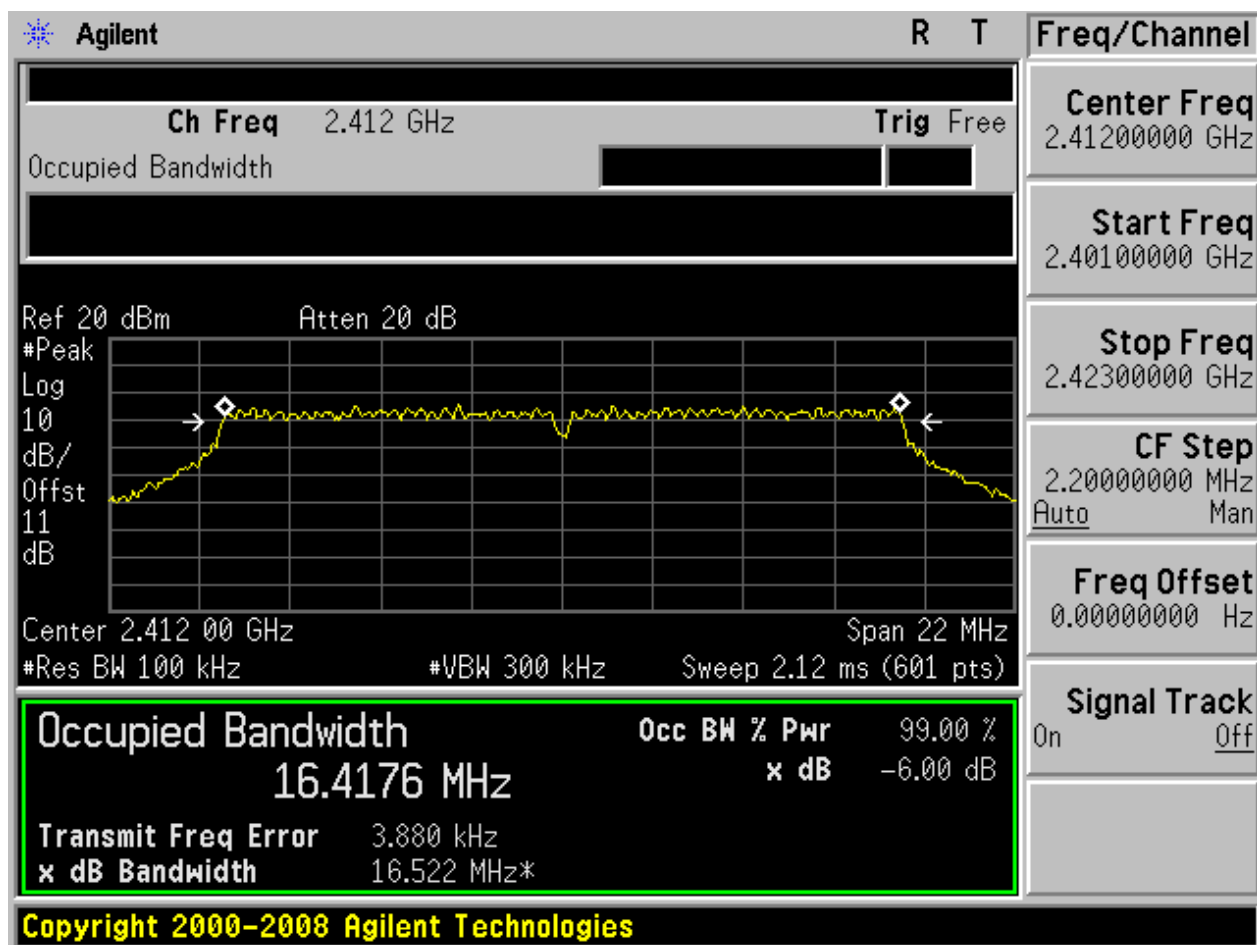
2.2 11B_M



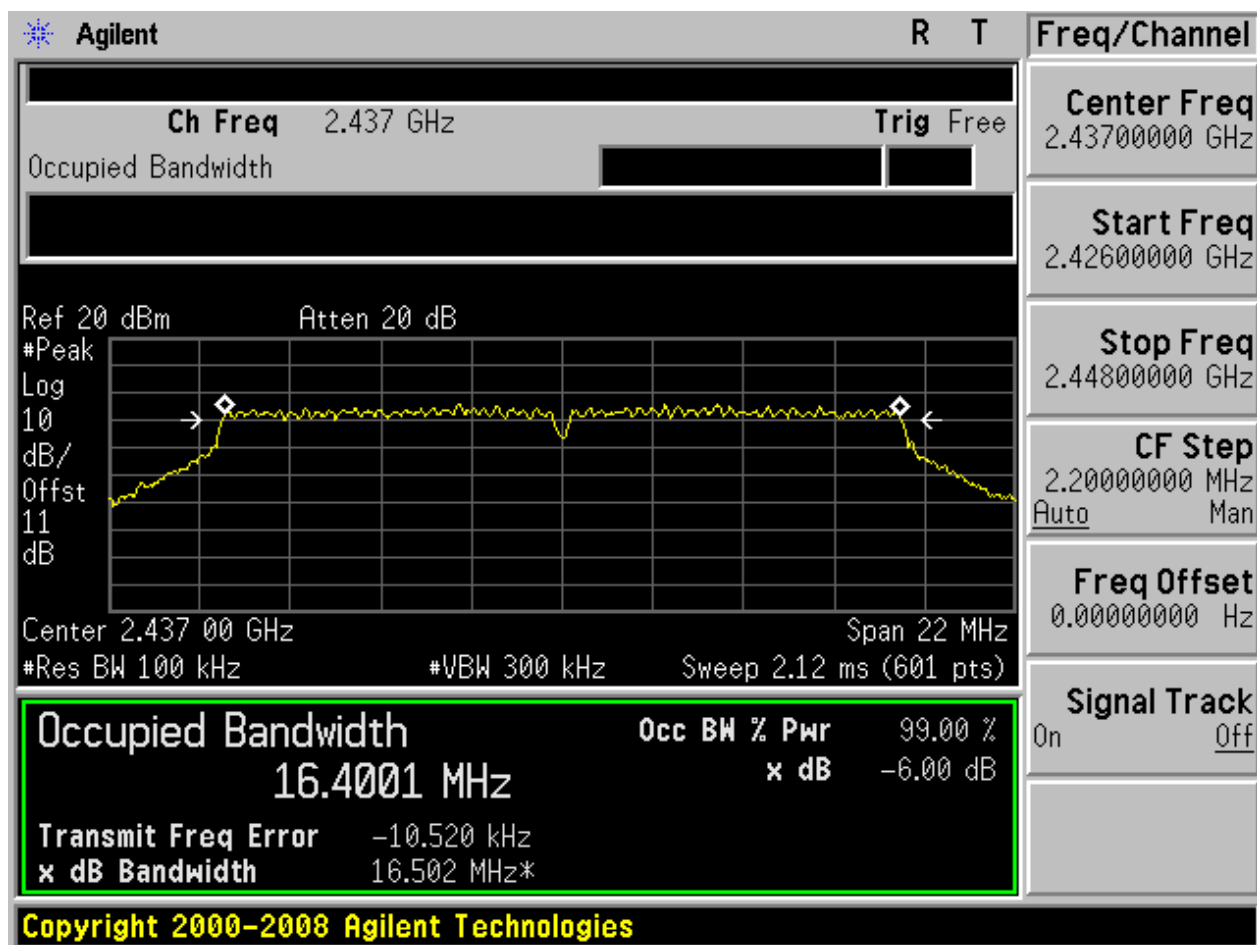
2.3 11B_H



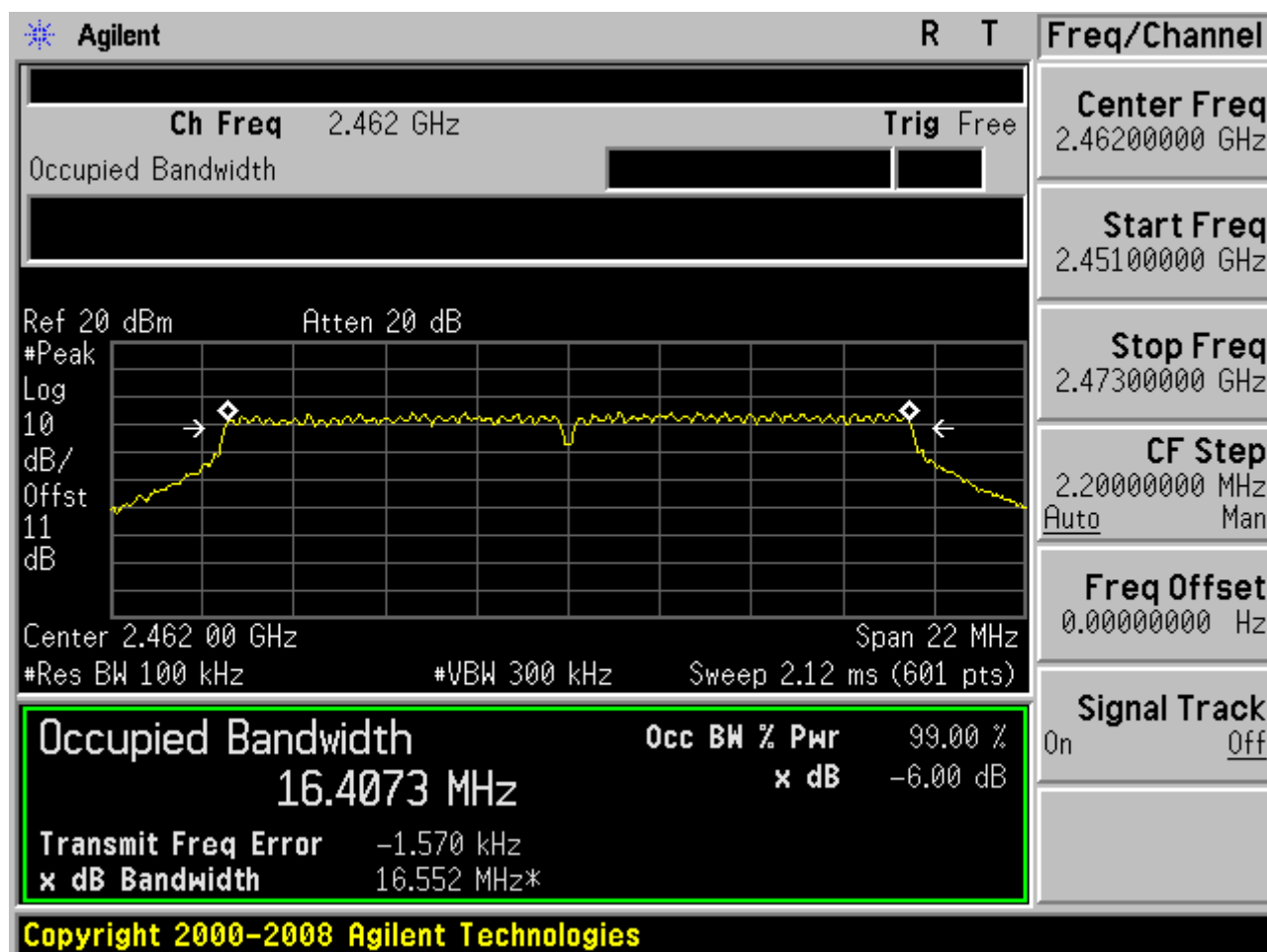
2.4 11G_L



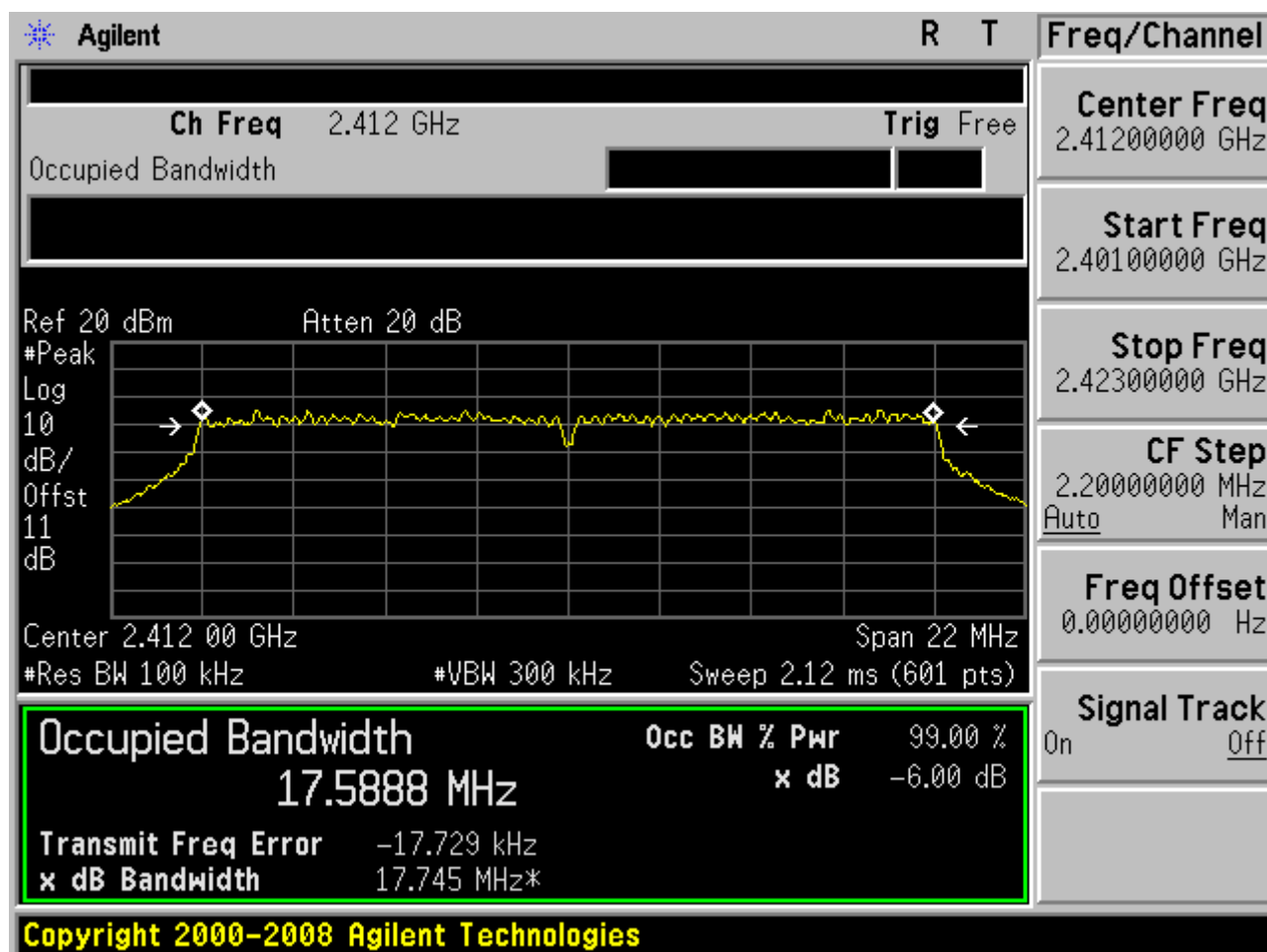
2.5 11G_M



2.6 11G_H

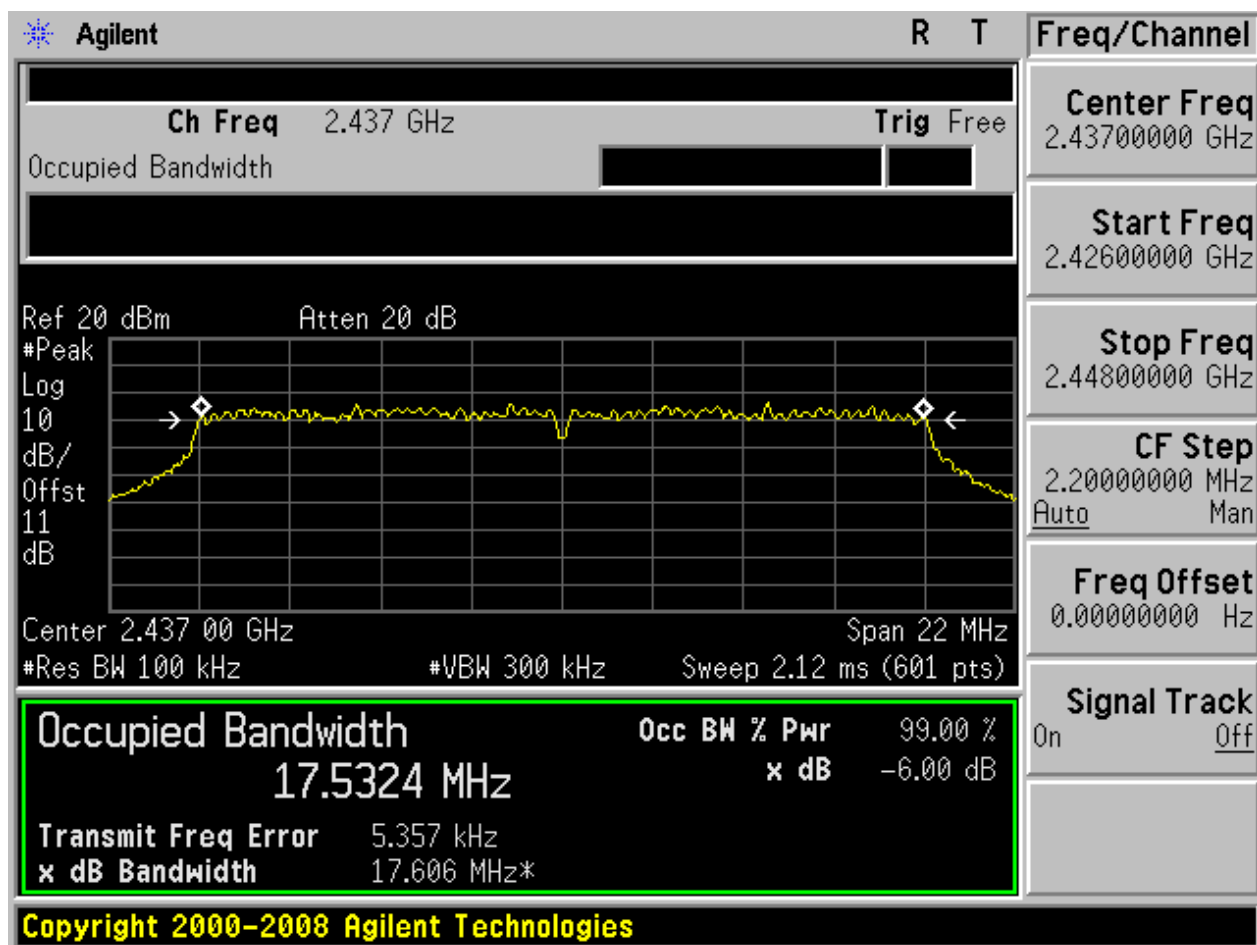


2.7 11N20_L

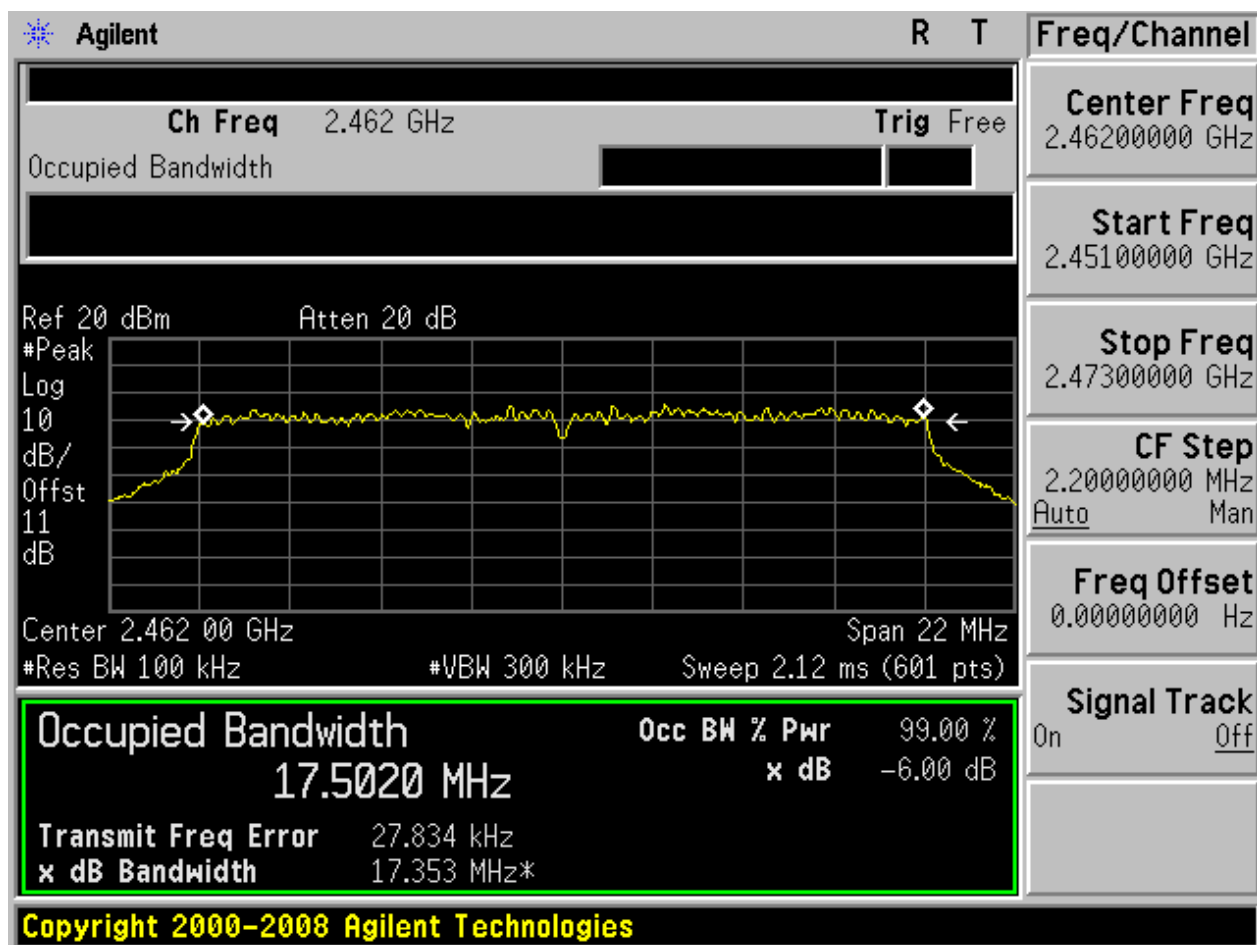




2.8 11N20_M



2.9 11N20_H



Appendix B: Maximum Peak Conducted Output Power

Test Mode	Test Channel	Frequency[MHz]	Ant	Meas. Level (Cond.) [dBm]	Verdict
11B	L	2412	Ant 1	20.01	pass
11B	M	2437	Ant 1	20.09	pass
11B	H	2462	Ant 1	19.30	pass
11G	L	2412	Ant 1	20.93	pass
11G	M	2437	Ant 1	21.06	pass
11G	H	2462	Ant 1	20.46	pass
11N20	L	2412	Ant 1	20.90	pass
11N20	M	2437	Ant 1	20.94	pass
11N20	H	2462	Ant 1	20.34	pass

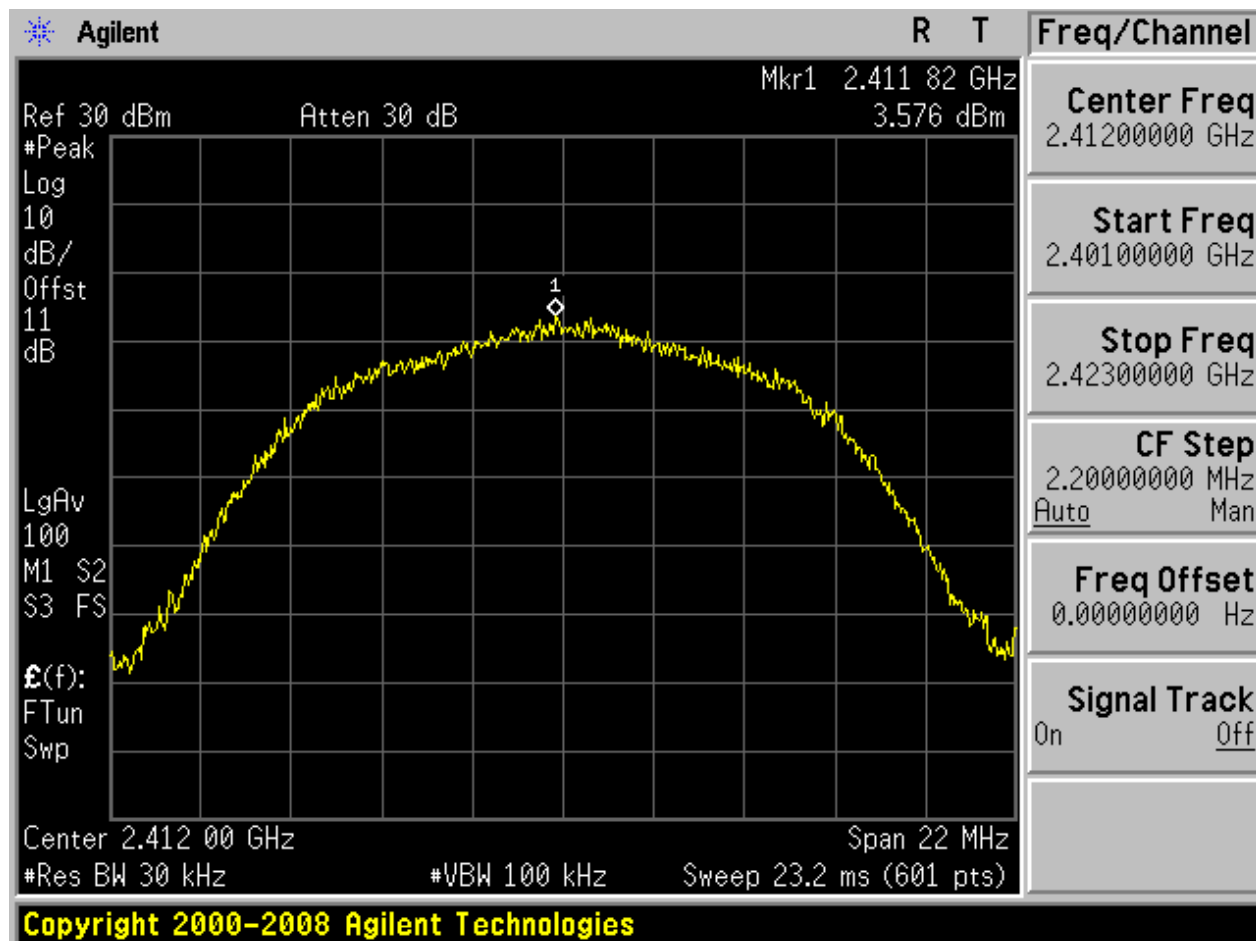
Appendix C: Maximum Power Spectral Density Level

Part I - Test Results

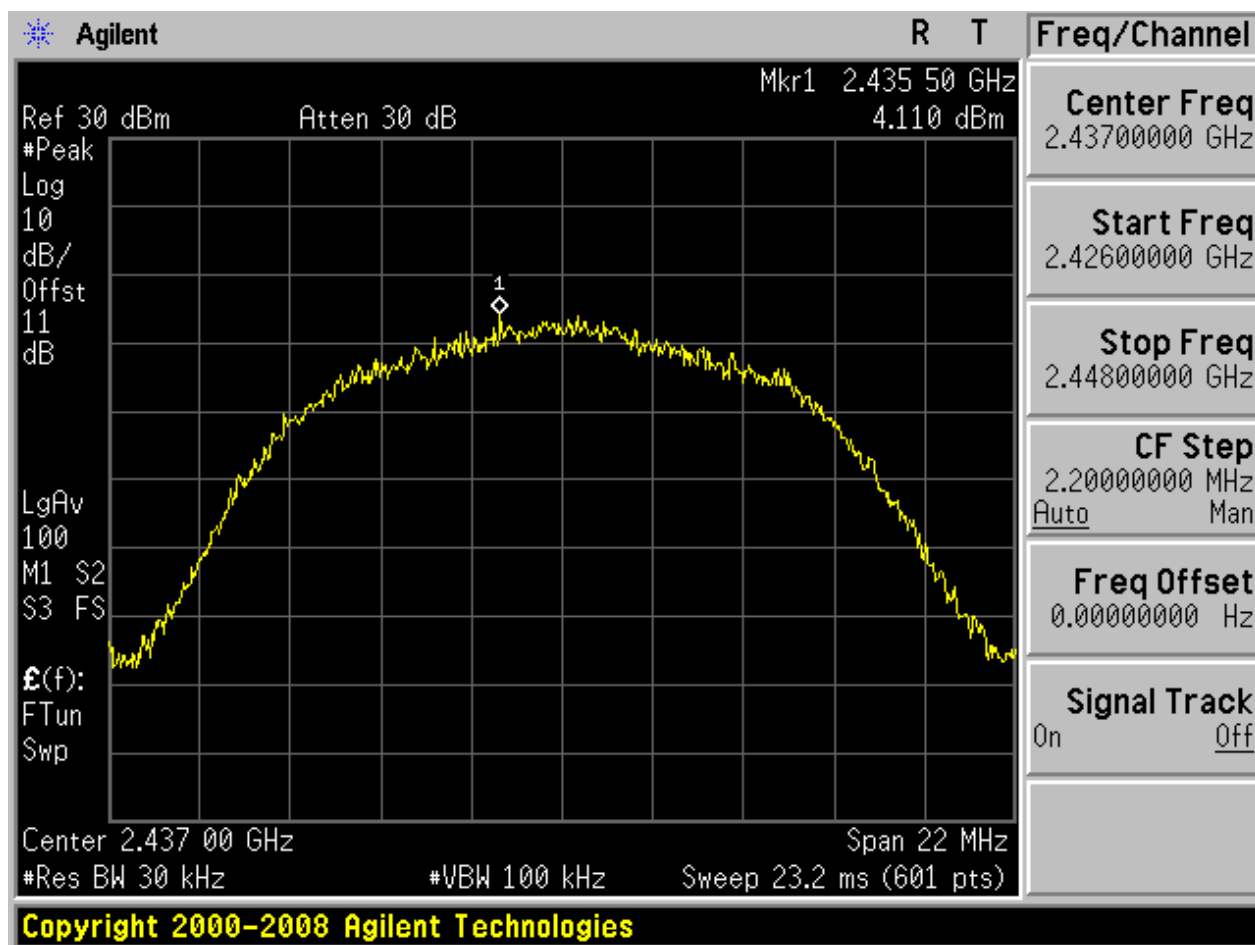
Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11B	L	2412	Ant 1	3.58	pass
11B	M	2437	Ant 1	4.11	pass
11B	H	2462	Ant 1	2.78	pass
11G	L	2412	Ant 1	-1.54	pass
11G	M	2437	Ant 1	-0.91	pass
11G	H	2462	Ant 1	-1.32	pass
11N20	L	2412	Ant 1	-0.99	pass
11N20	M	2437	Ant 1	-0.77	pass
11N20	H	2462	Ant 1	-1.18	pass

Part II - Test Plots

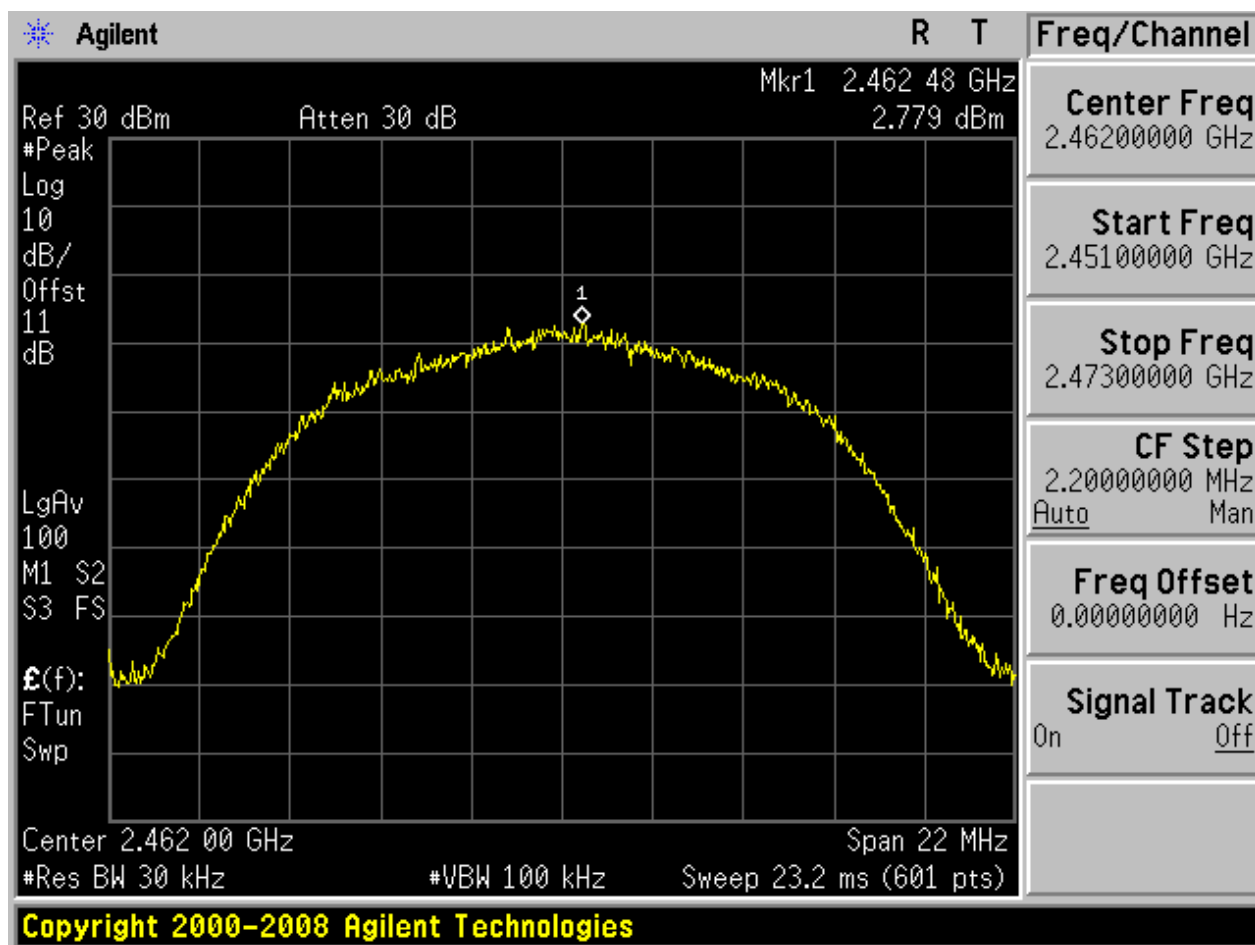
2.1 11B_L



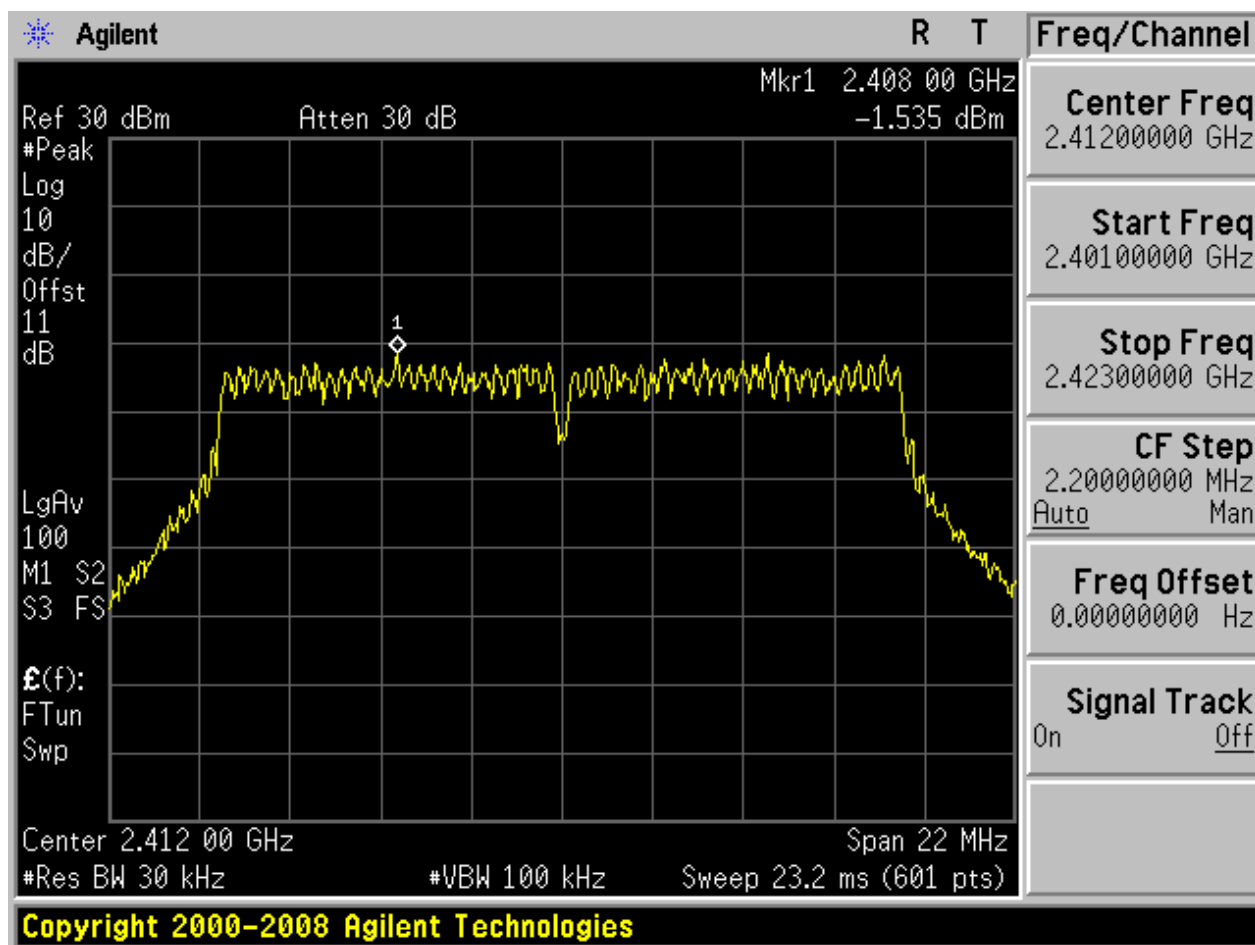
2.2 11B_M



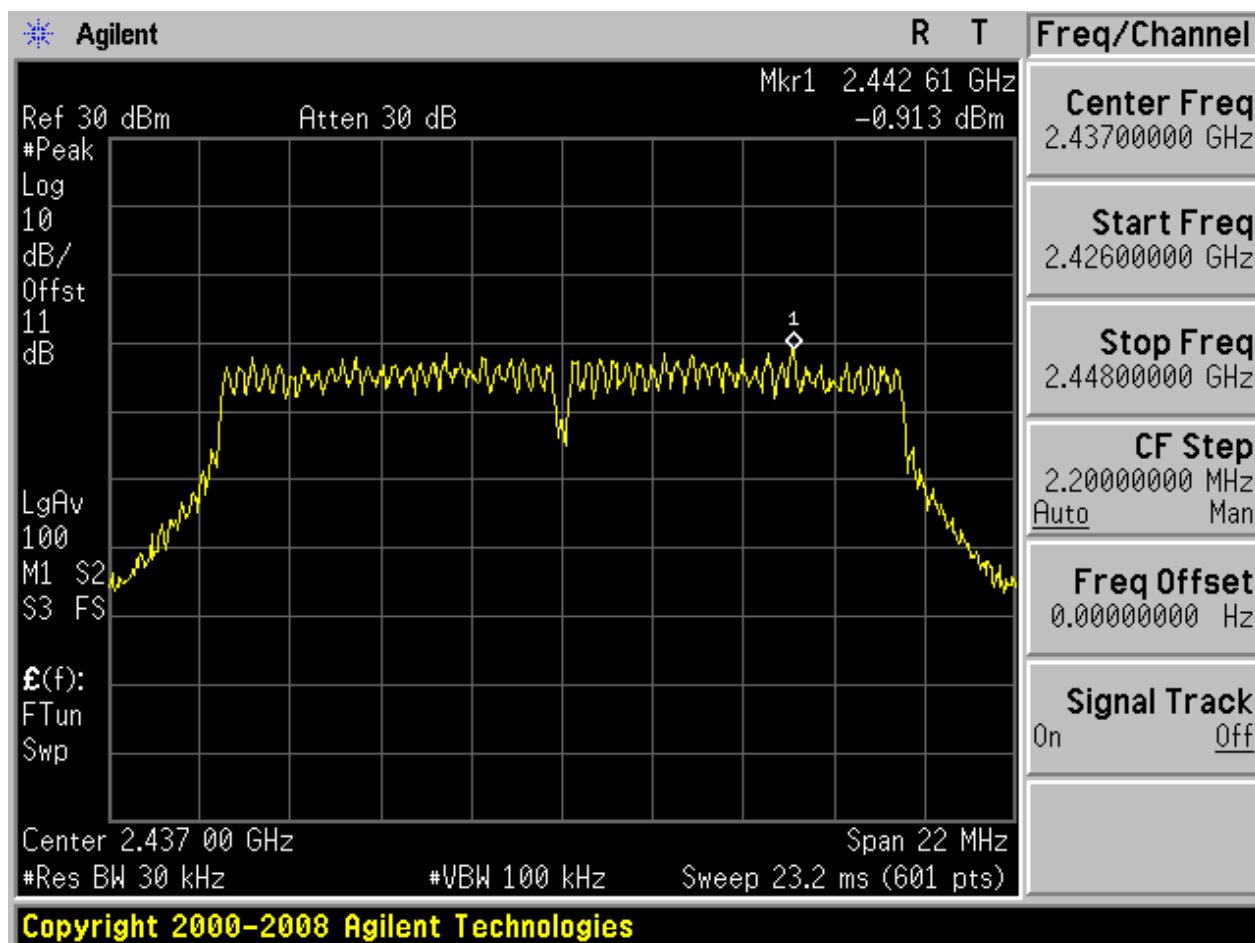
2.3 11B_H



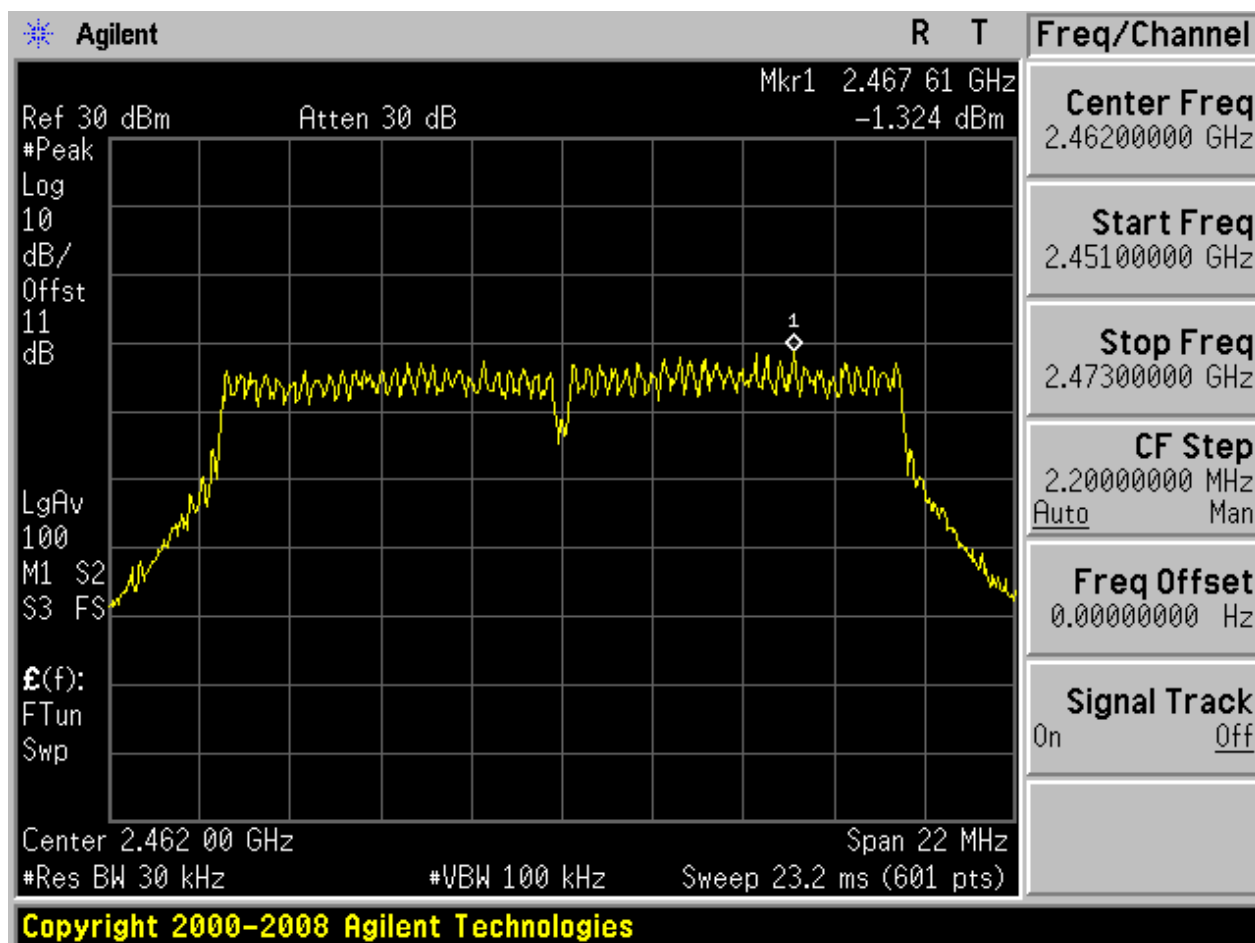
2.4 11G_L



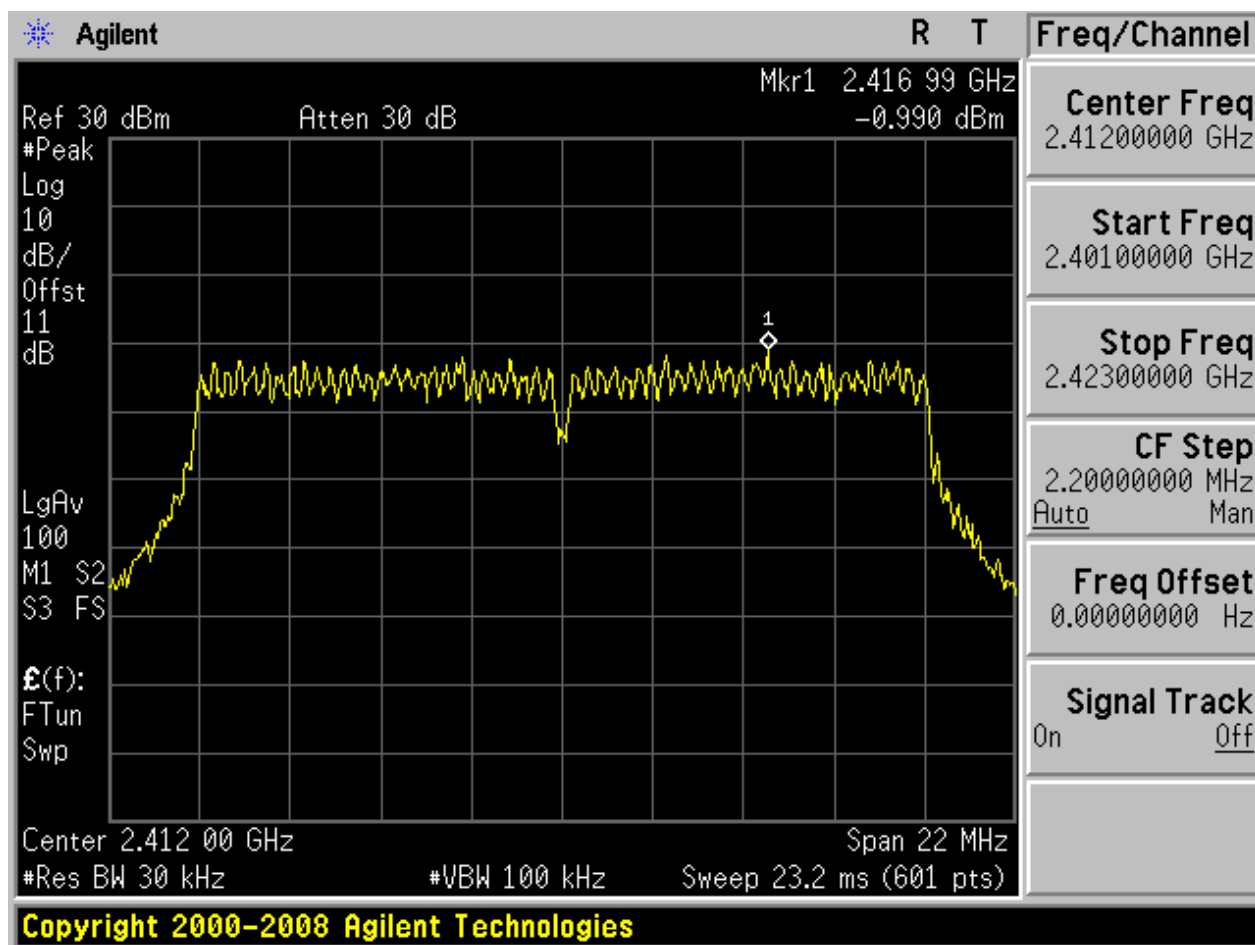
2.5 11G_M



2.6 11G_H

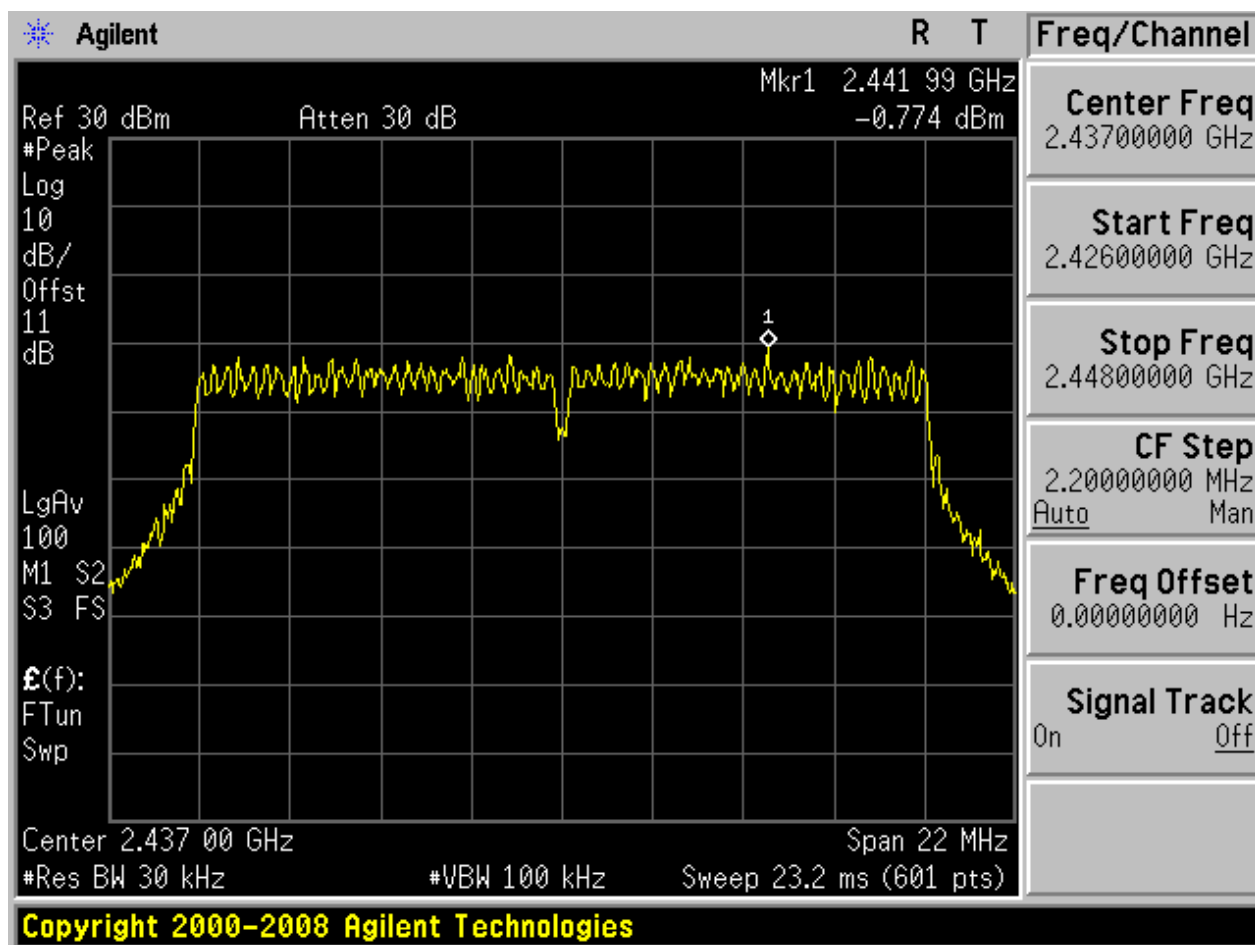


2.7 11N20_L

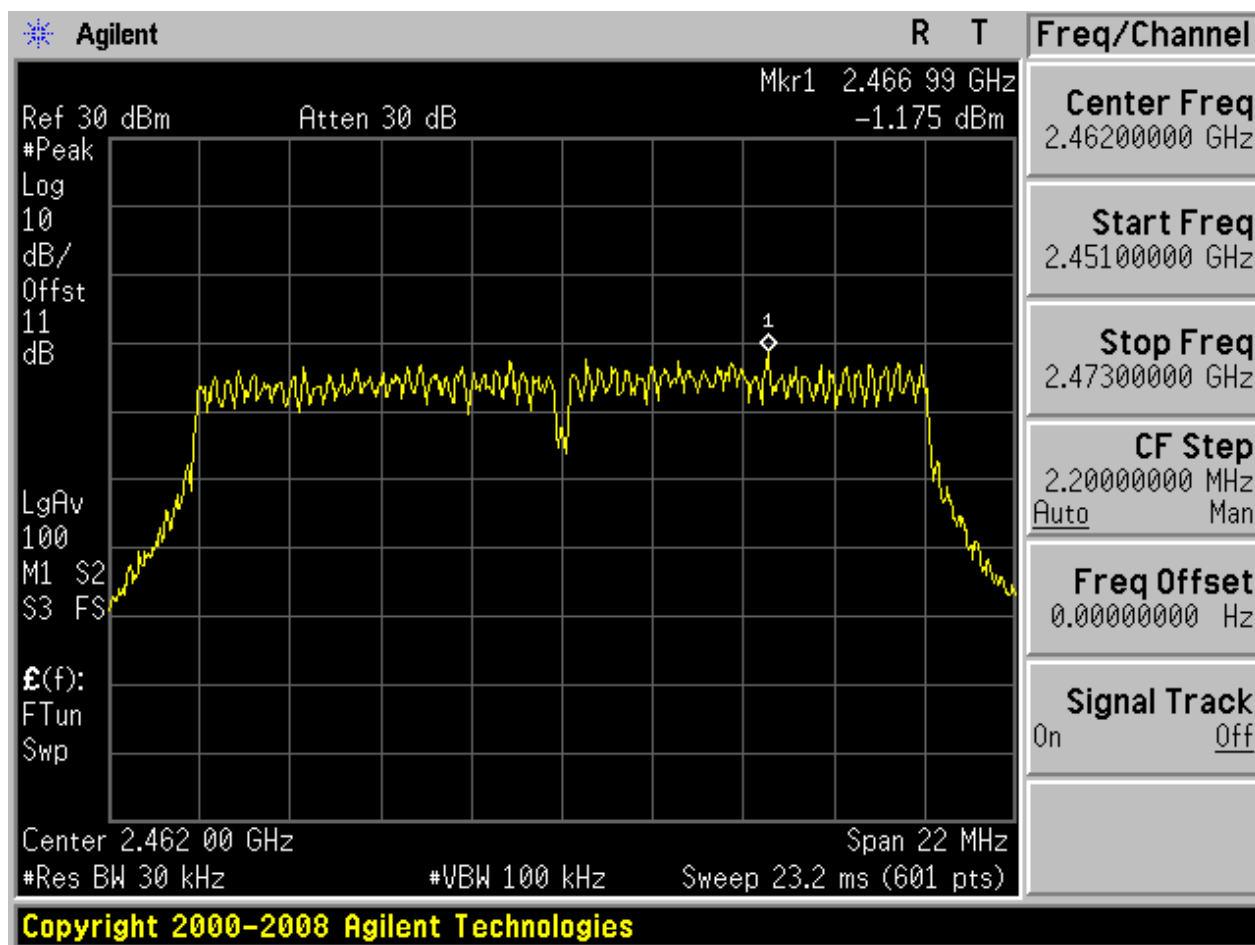




2.8 11N20_M



2.9 11N20_H



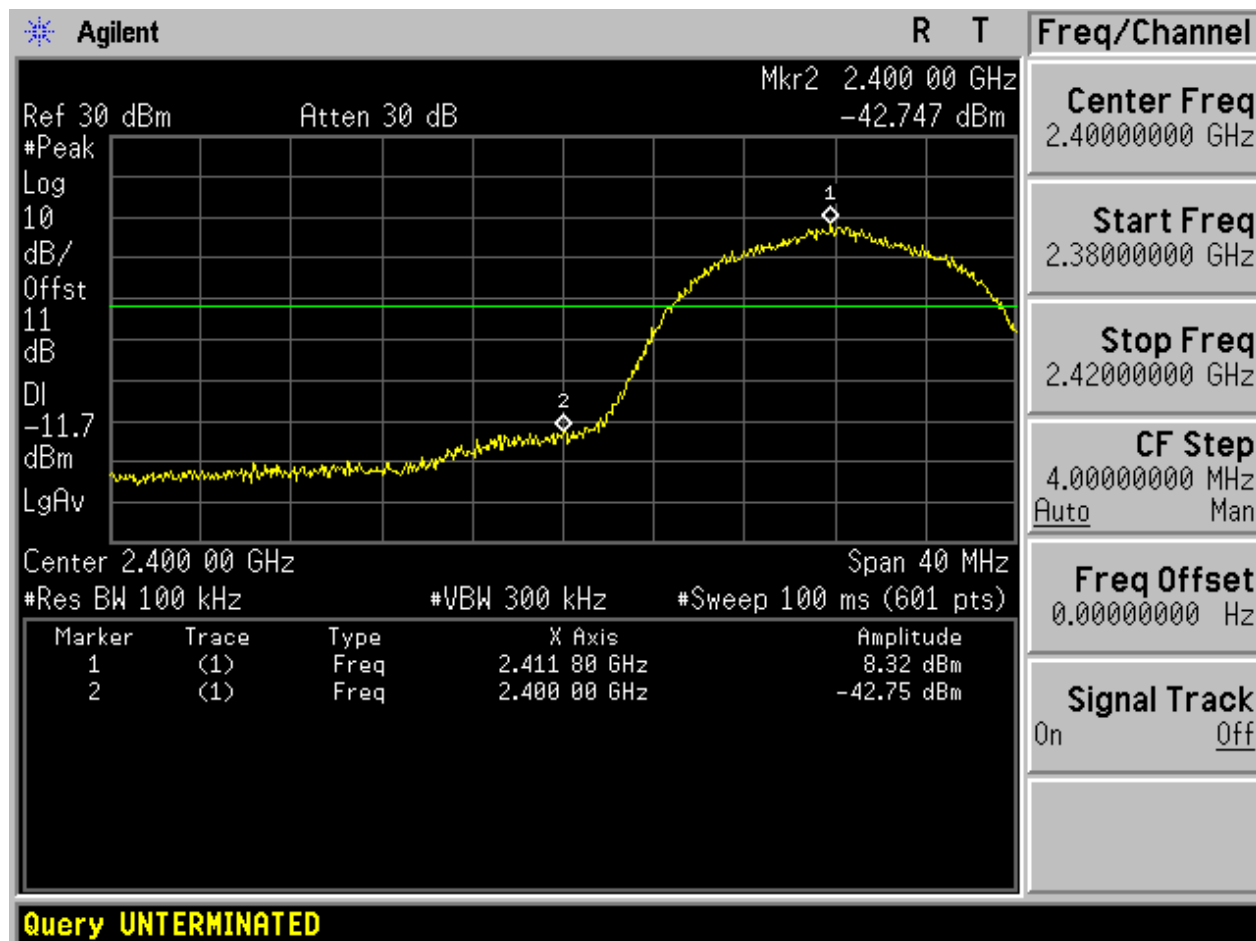
Appendix D: Band Edges Compliance

Part I - Test Results

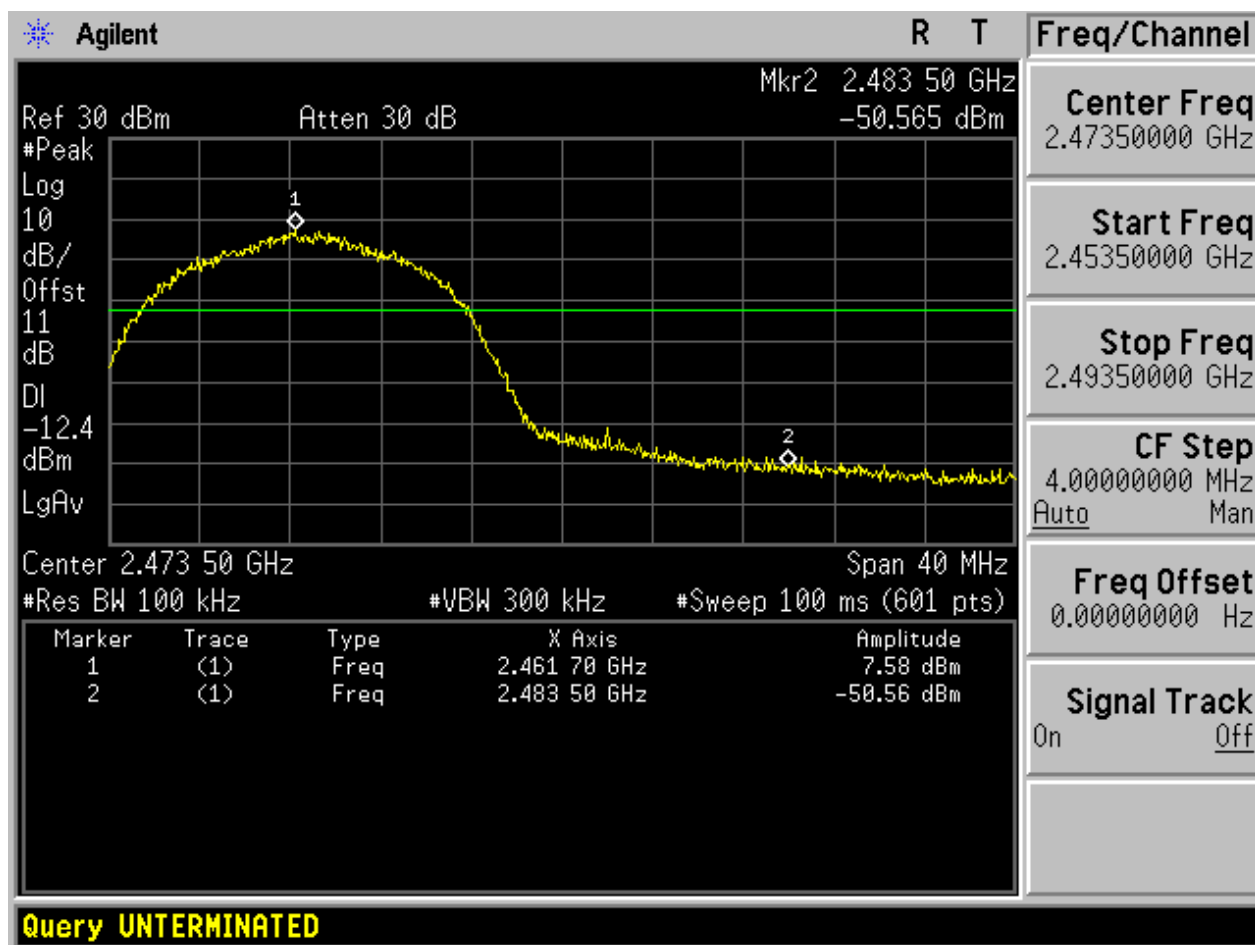
Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	Ant 1	8.32	-42.75	pass
11B	H	2462	Ant 1	7.58	-50.56	pass
11G	L	2412	Ant 1	2.45	-38.51	pass
11G	H	2462	Ant 1	2.41	-44.02	pass
11N20	L	2412	Ant 1	2.55	-34.49	pass
11N20	H	2462	Ant 1	2.38	-45.26	pass

Part II - Test Plots

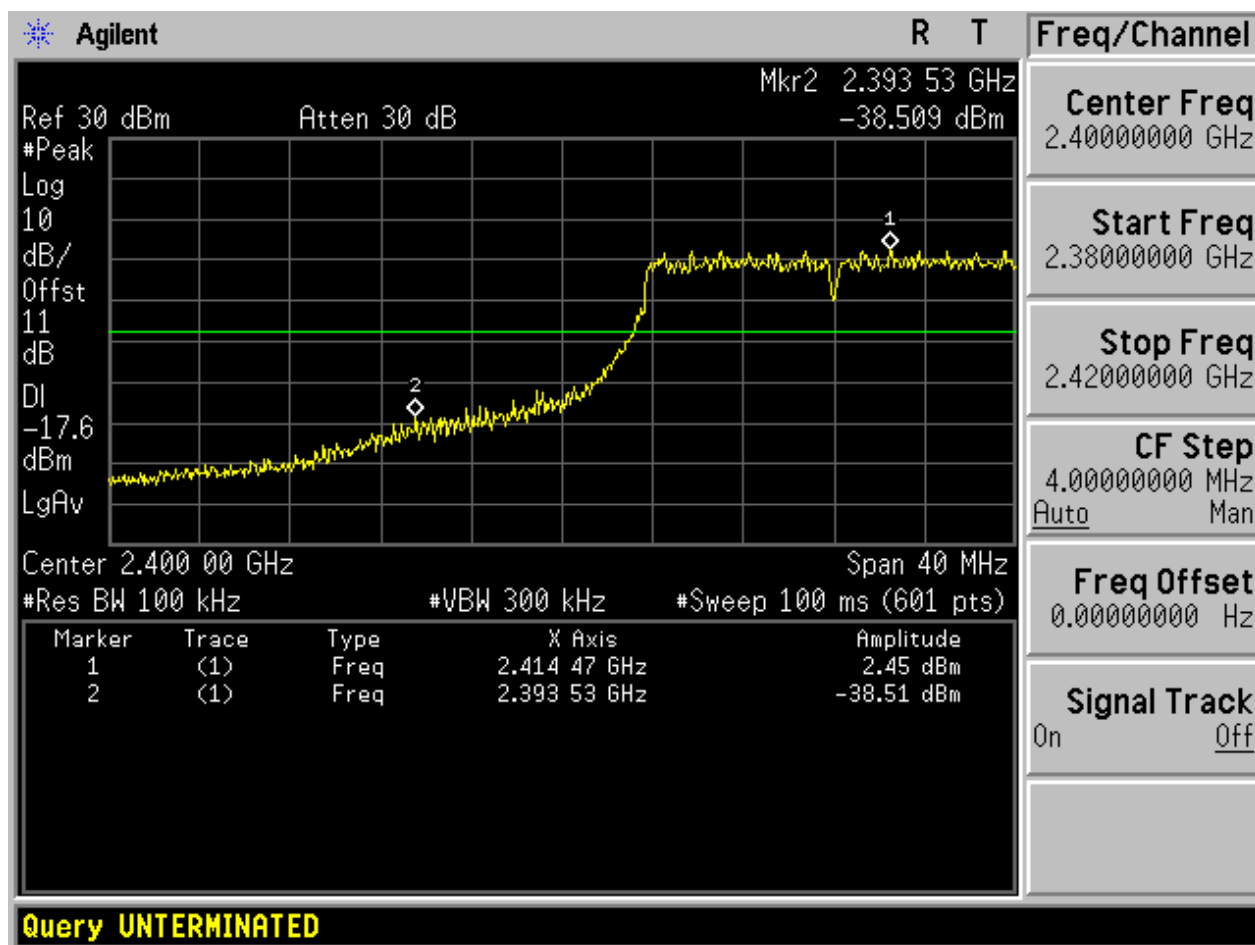
2.1 11B_L



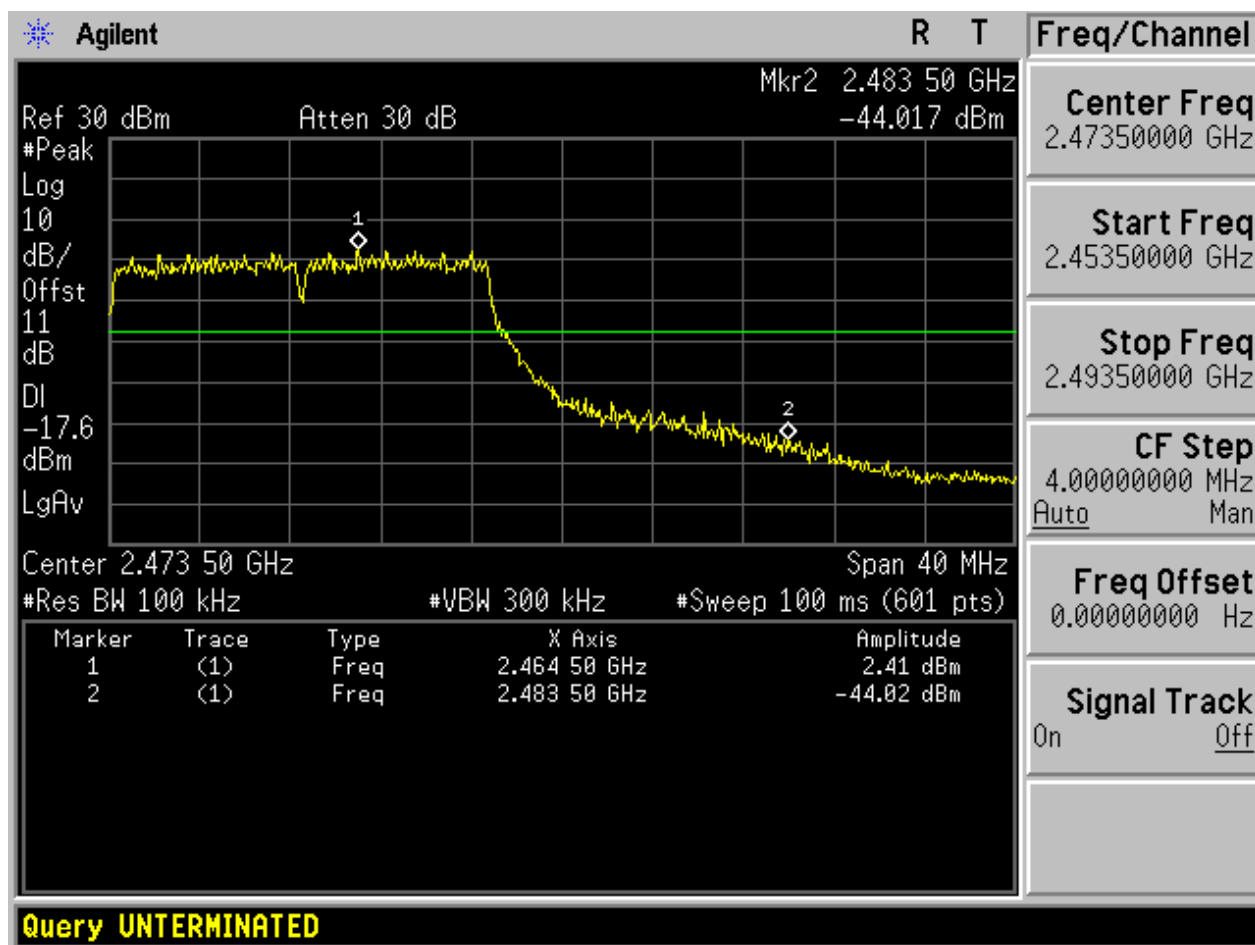
2.2 11B_H



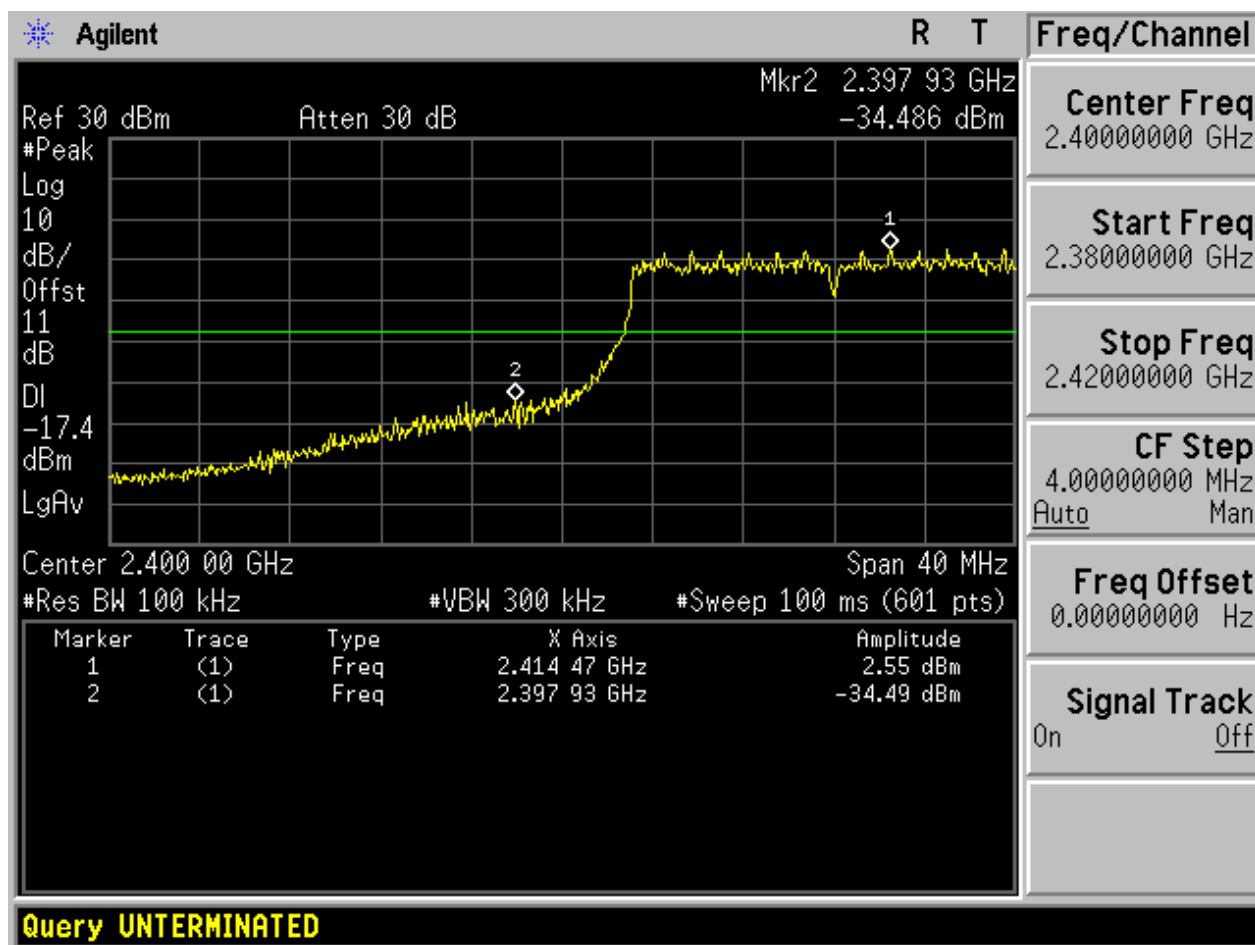
2.3 11G_L



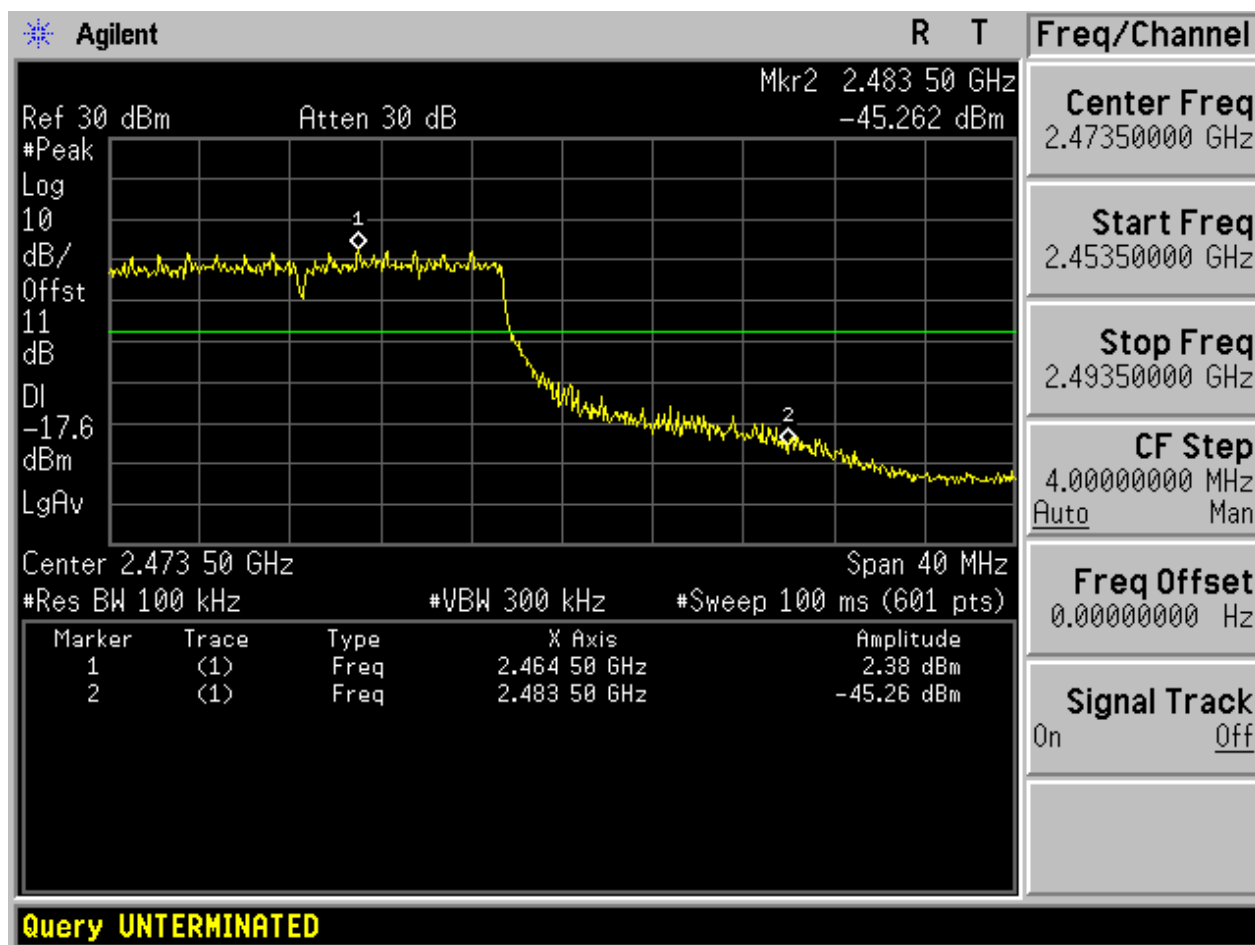
2.4 11G_H



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" refers 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 $RBWCF [dB] = 10 \times \lg(100 [kHz]/\text{narrower RBW} [kHz])$. 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".

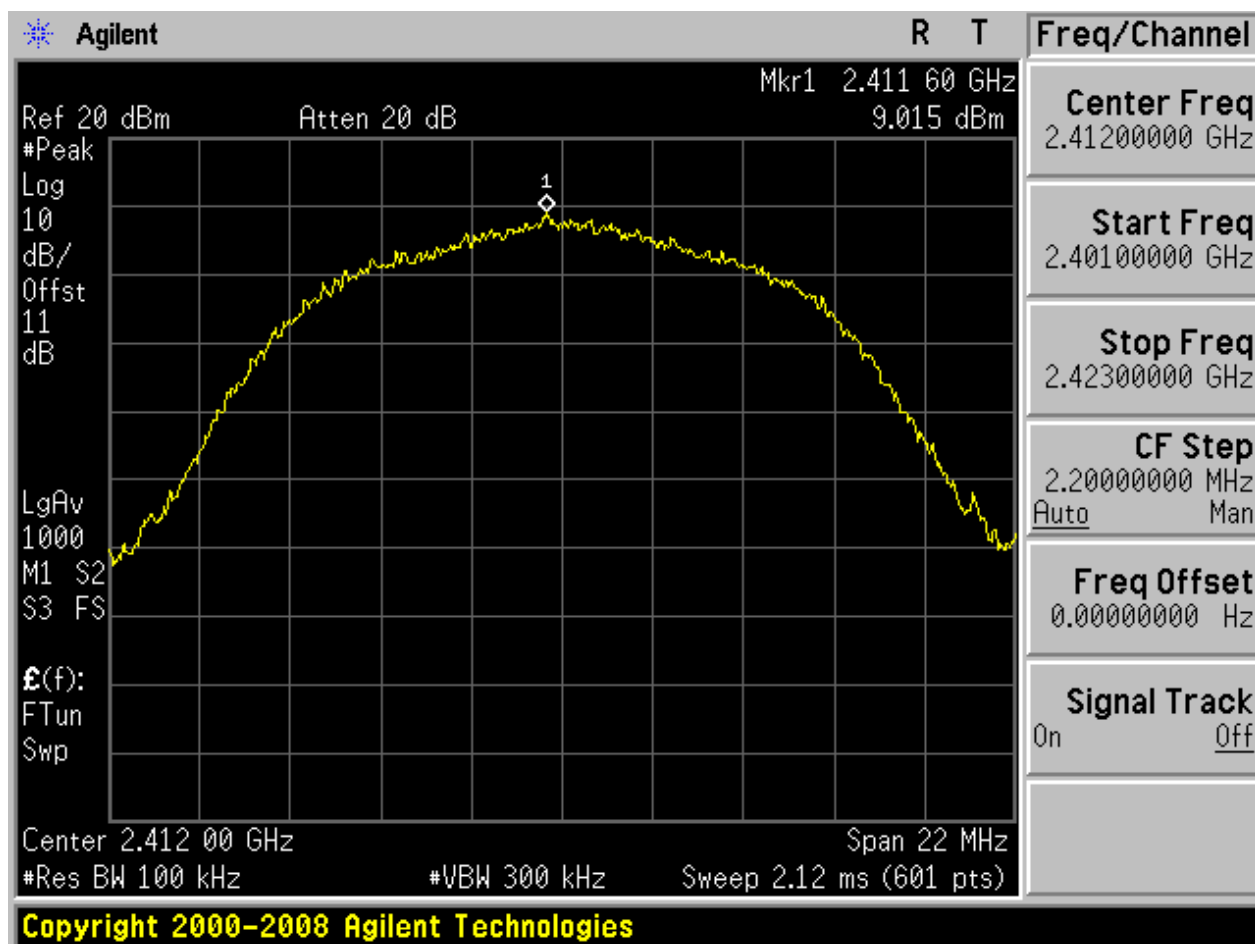
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	Ant 1	9.02	<limit	pass
11B	M	2437	Ant 1	9.36	<limit	pass
11B	H	2462	Ant 1	8.28	<limit	pass
11G	L	2412	Ant 1	2.74	<limit	pass
11G	M	2437	Ant 1	3.19	<limit	pass
11G	H	2462	Ant 1	2.60	<limit	pass
11N20	L	2412	Ant 1	2.78	<limit	pass
11N20	M	2437	Ant 1	3.29	<limit	pass
11N20	H	2462	Ant 1	2.55	<limit	pass

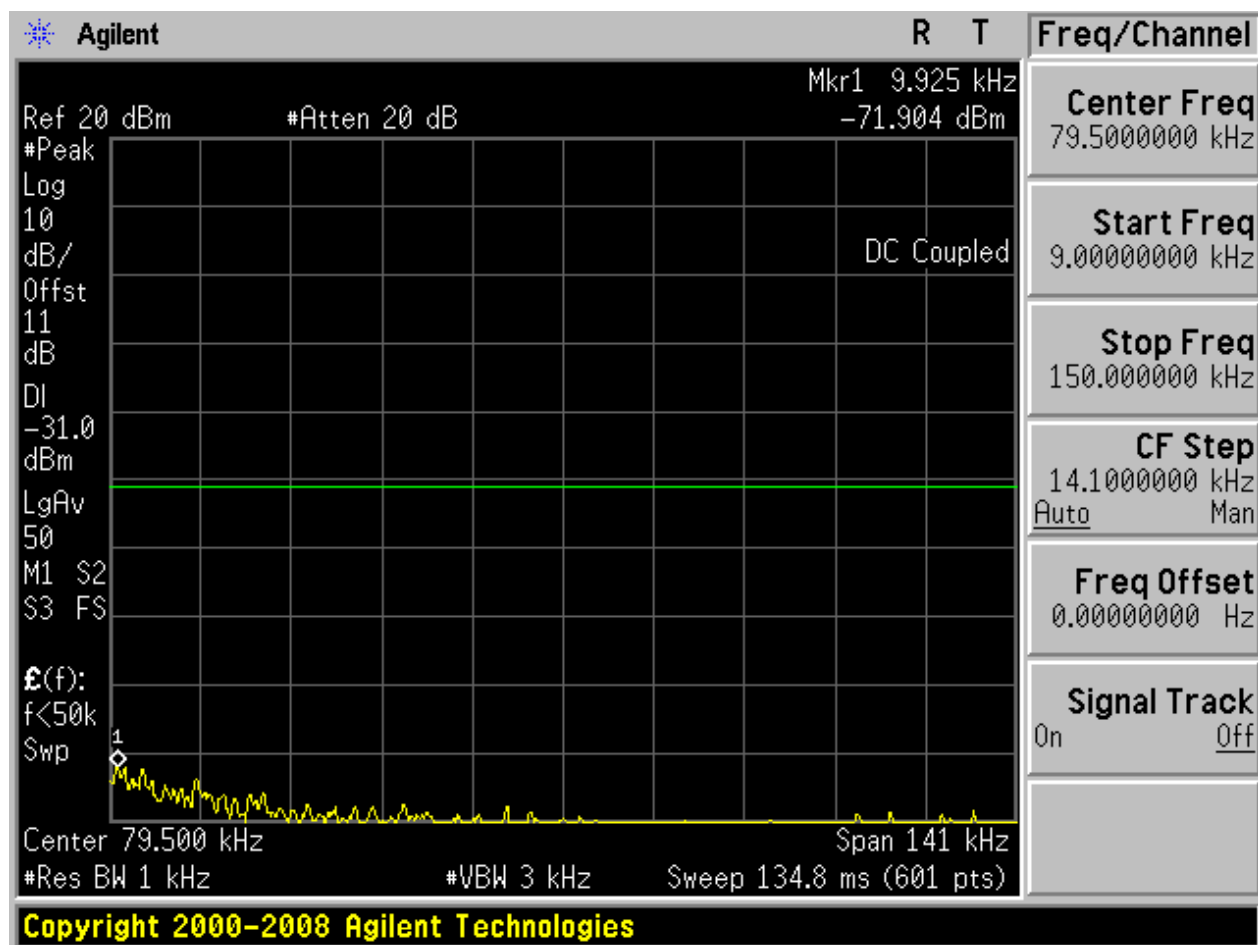
Part II - Test Plots

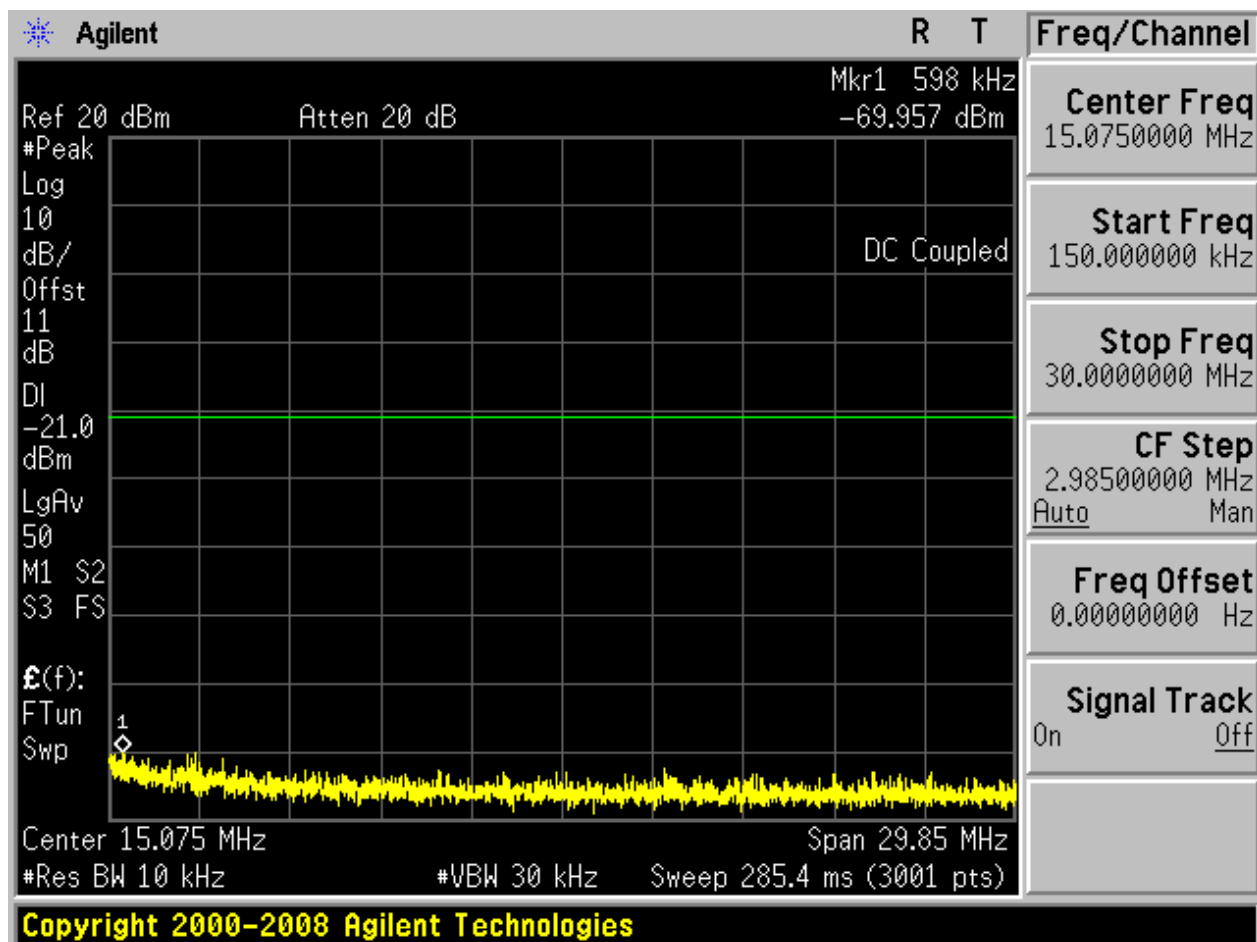
2.1 11B_L

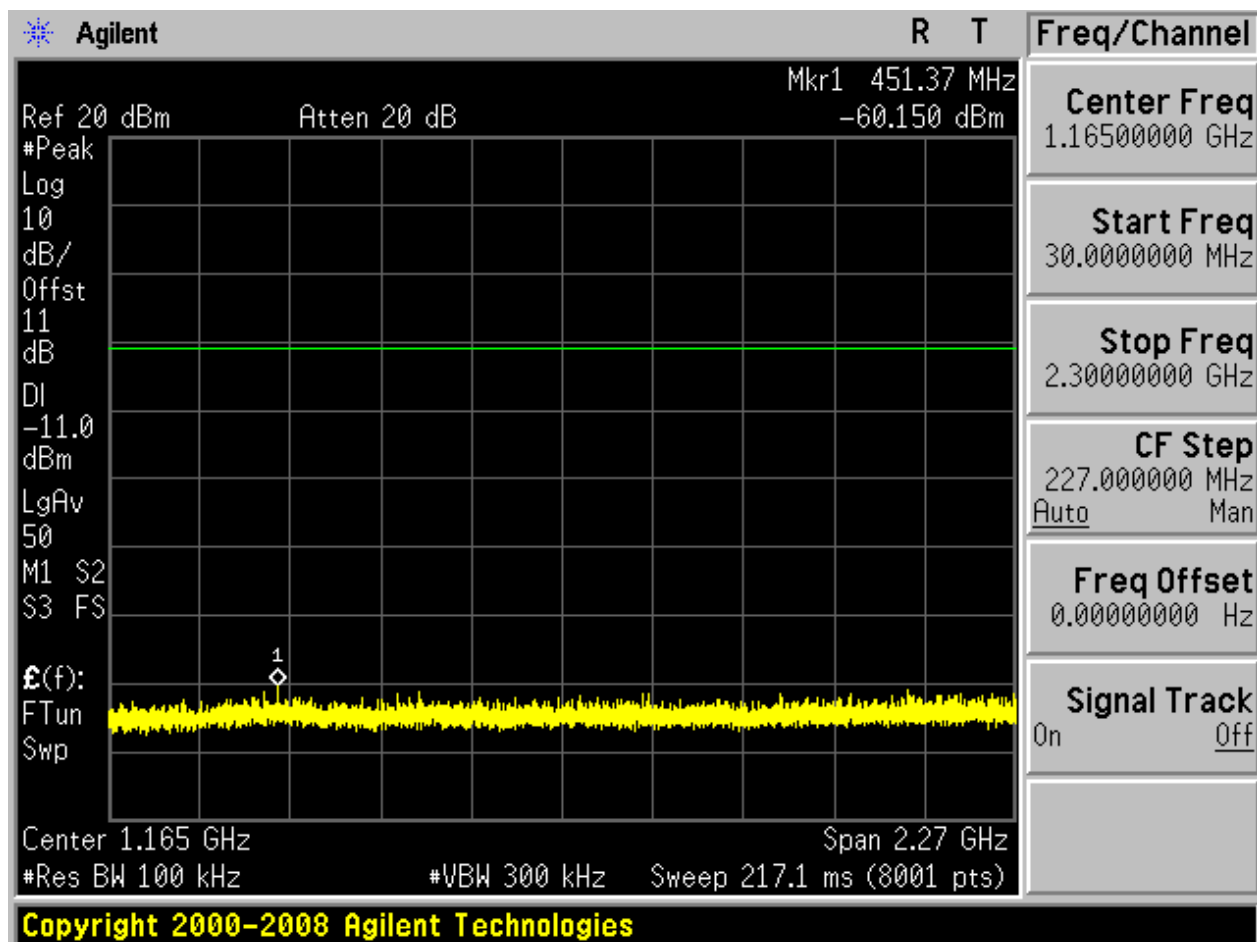
Pref:

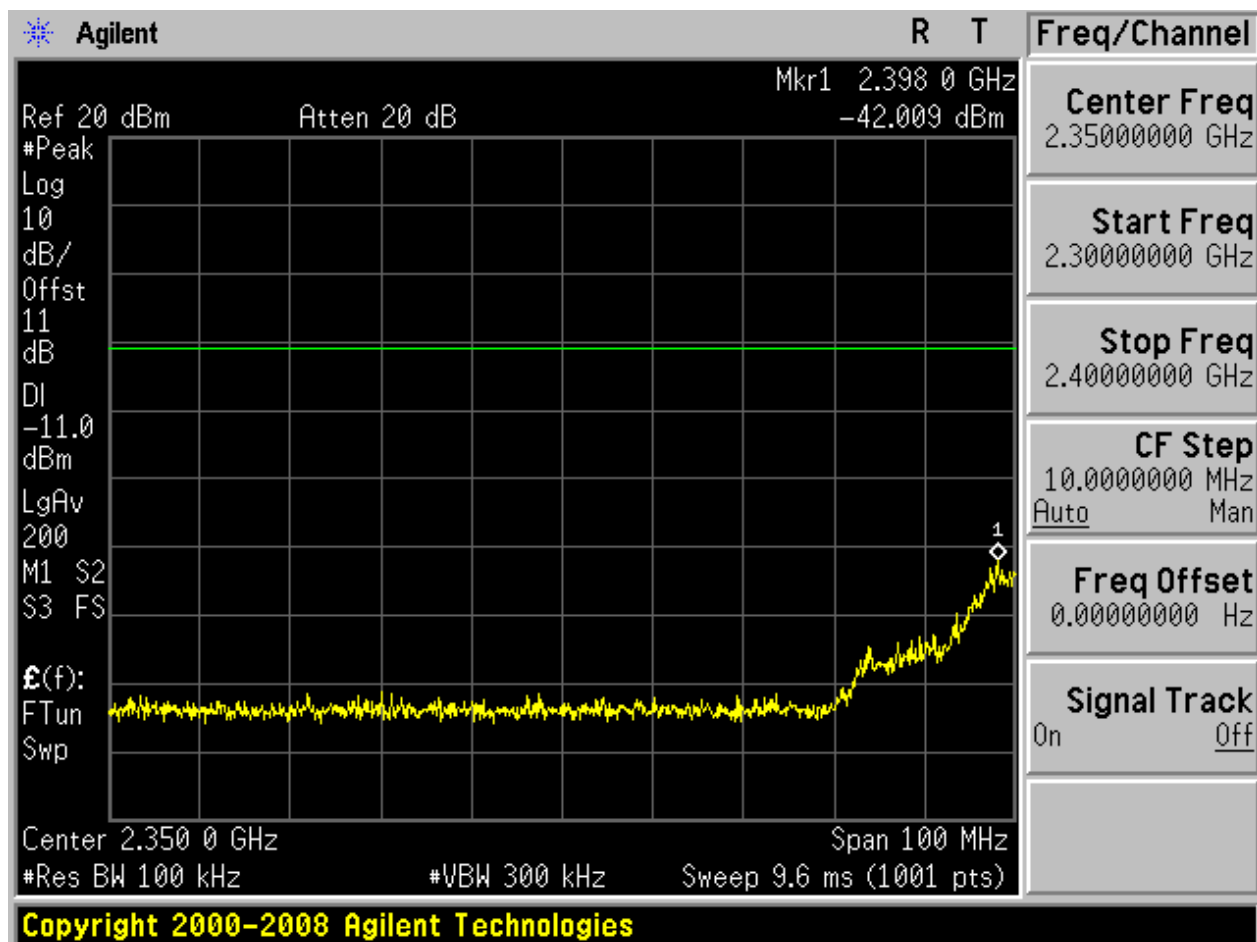


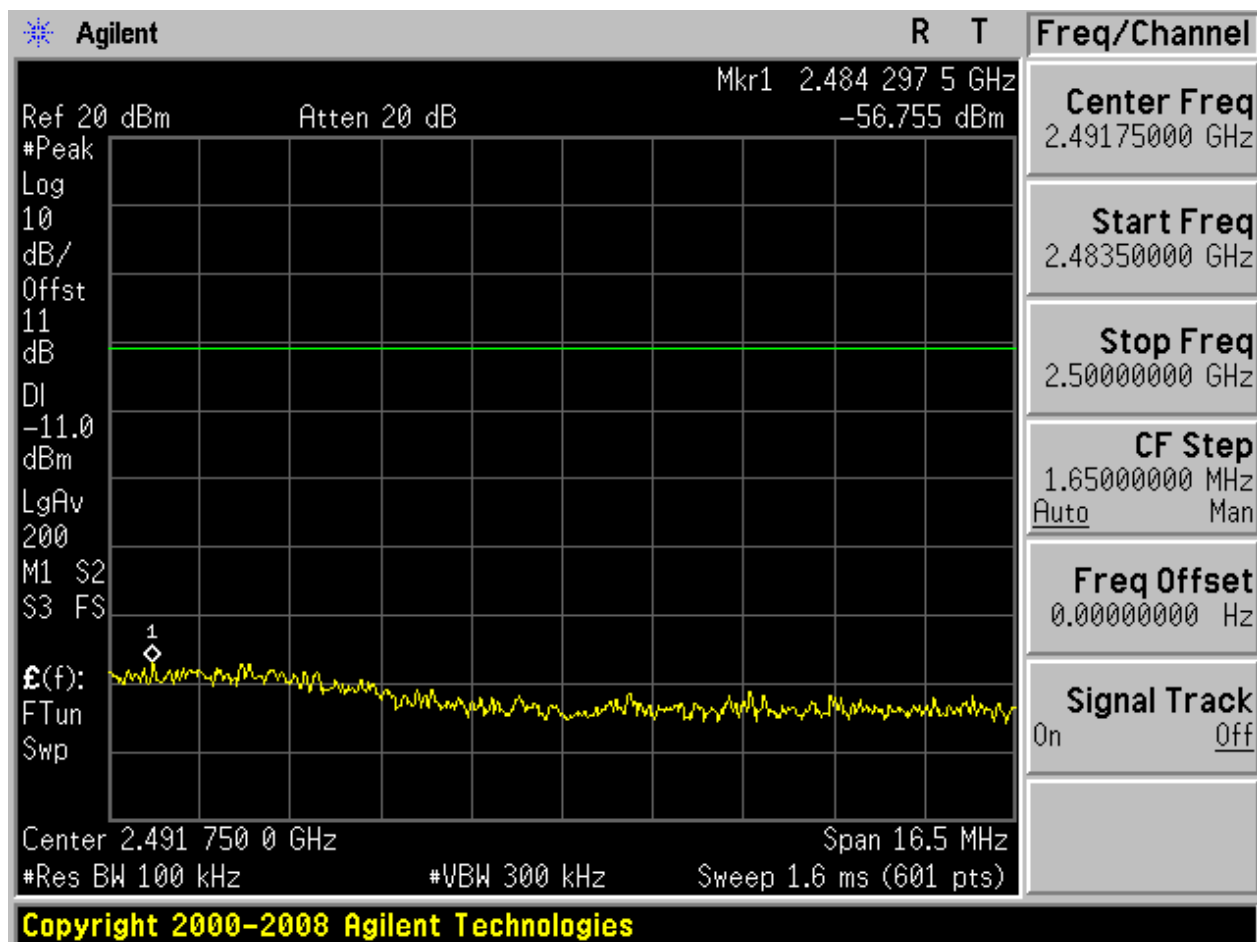
Puw:

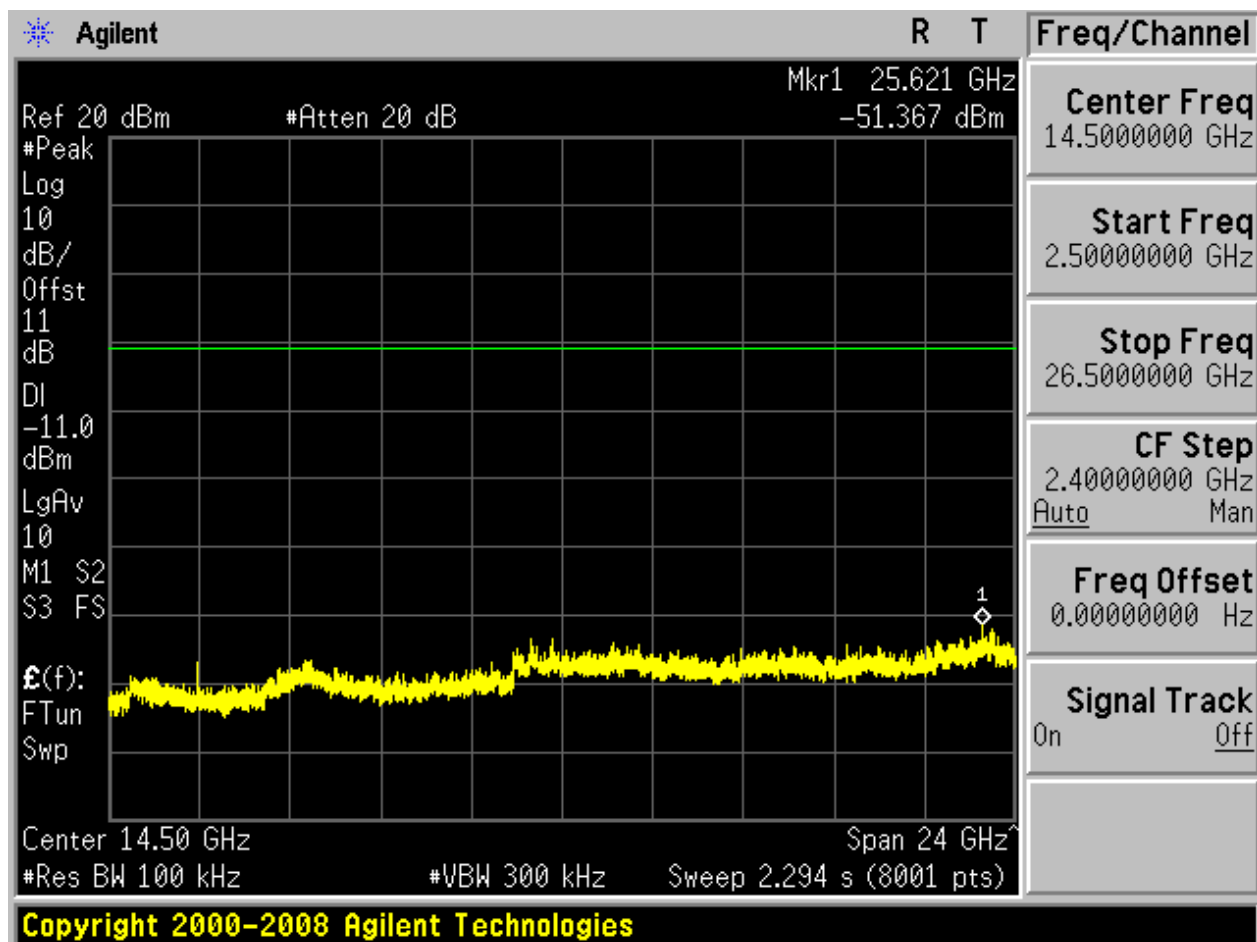






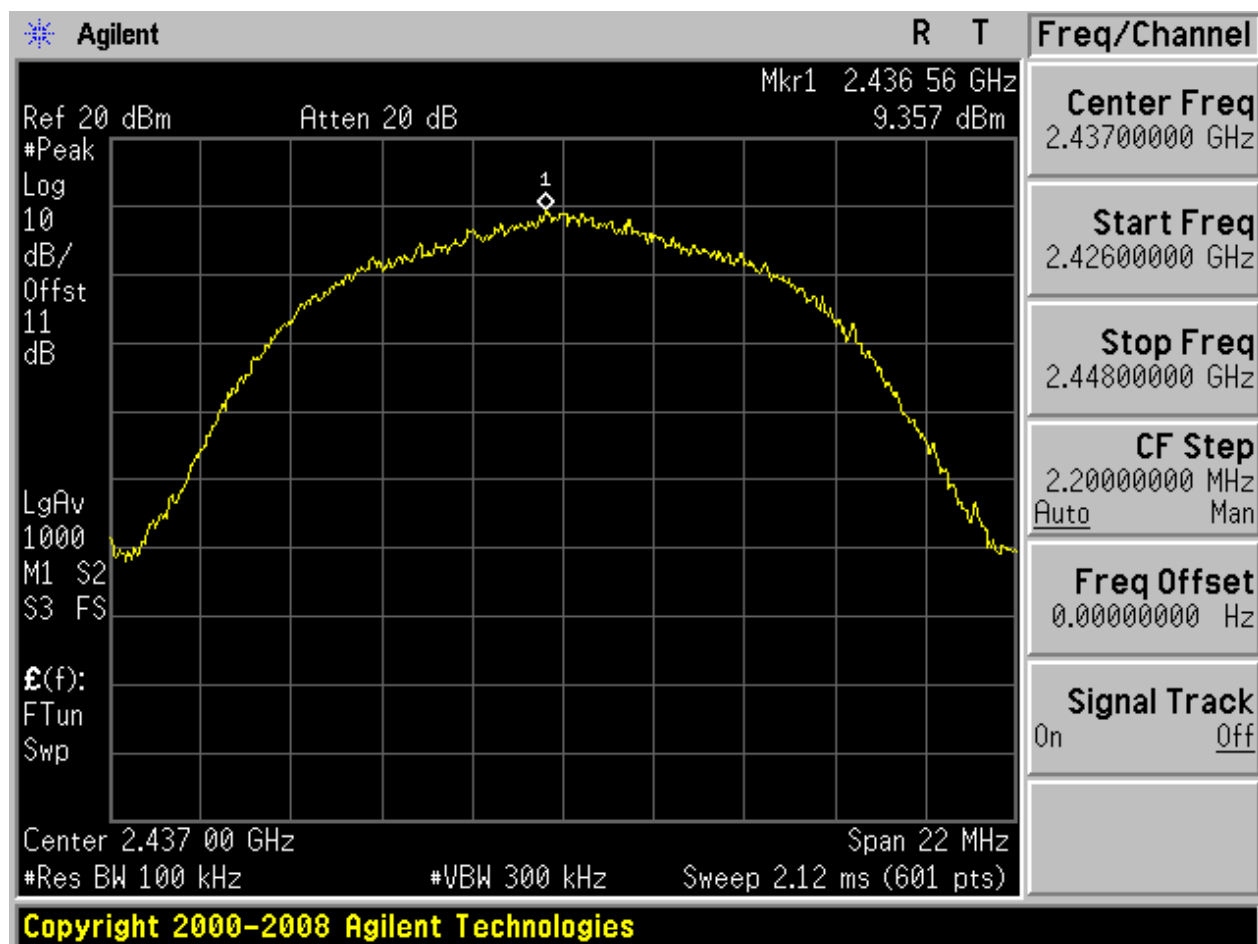




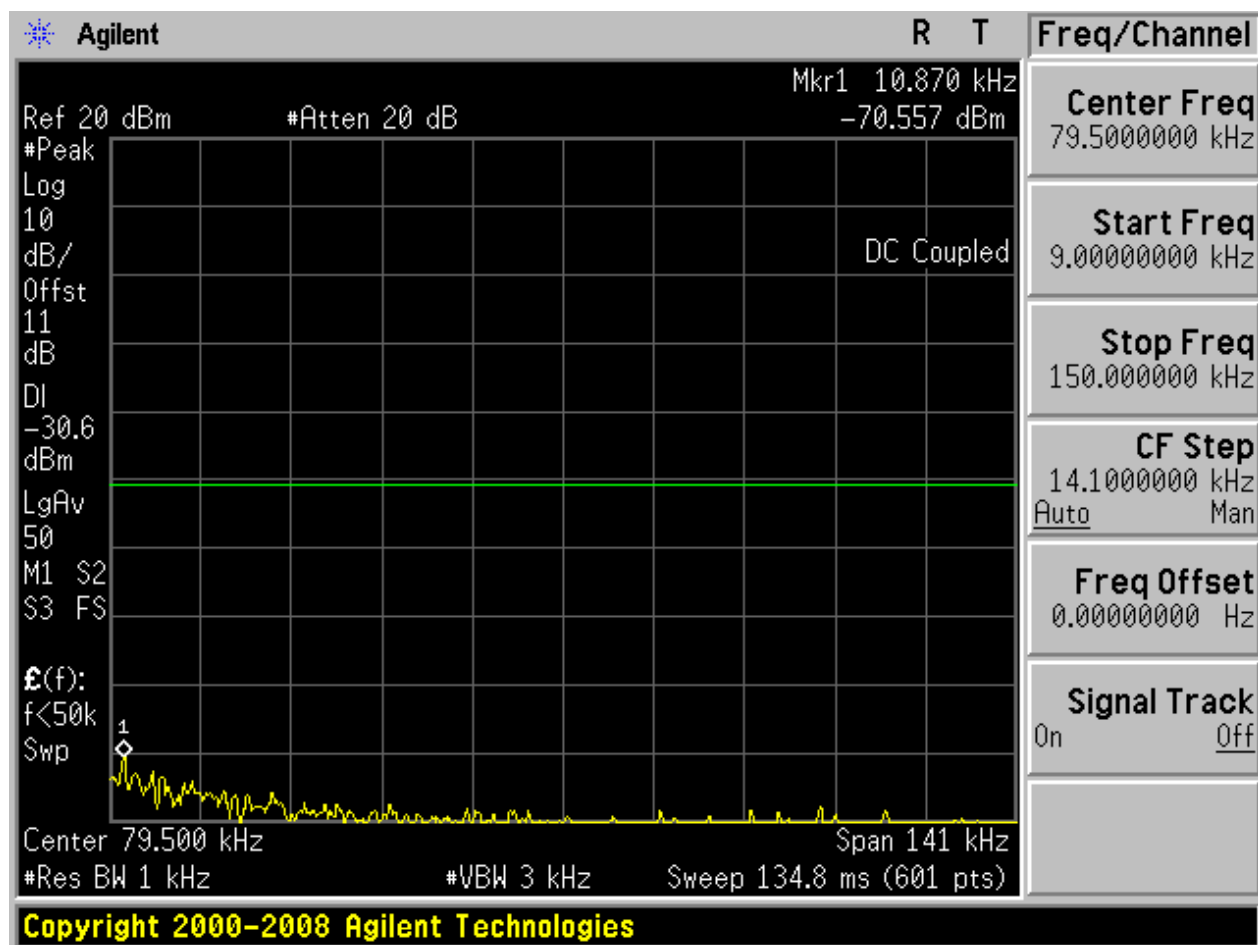


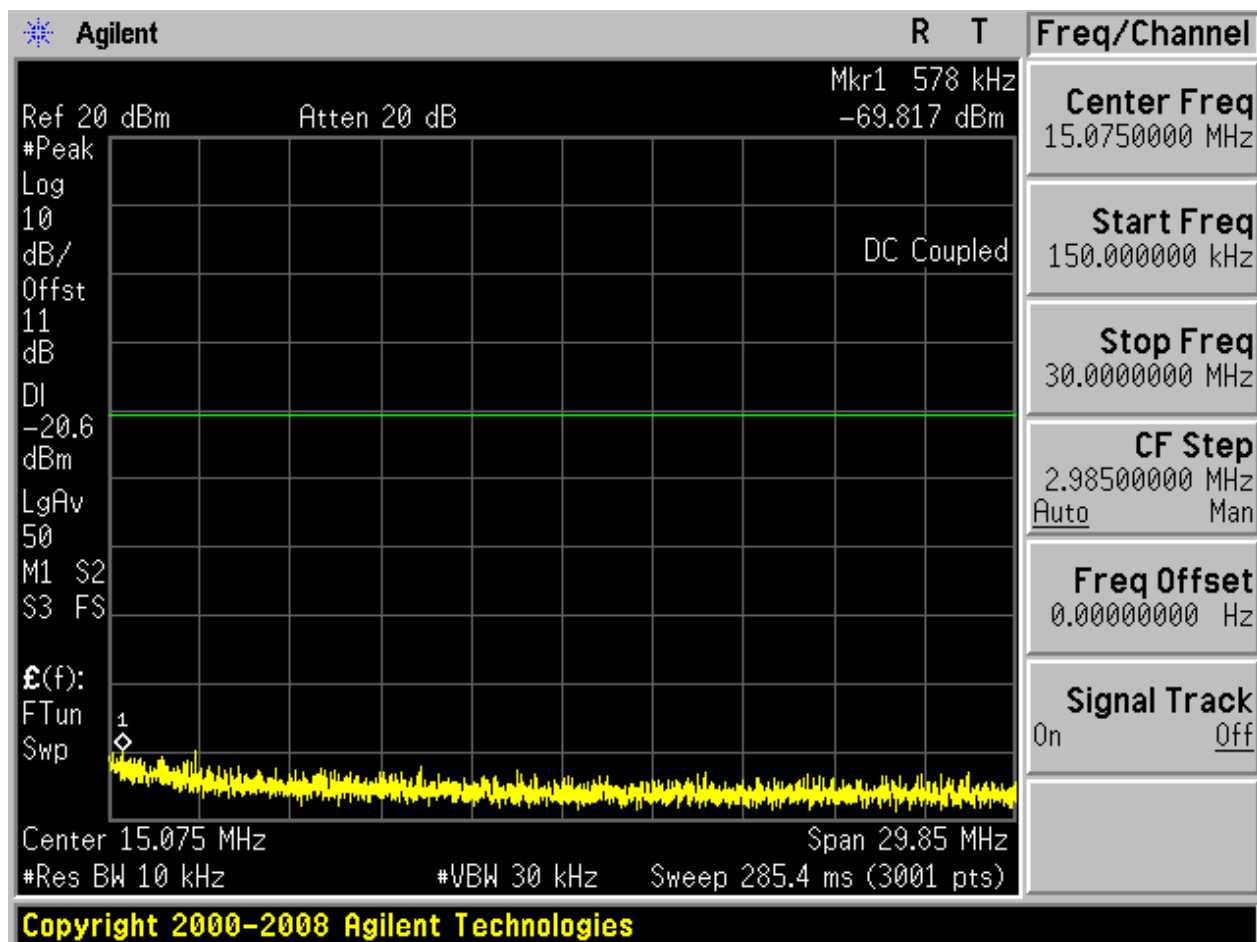
2.2 11B_M

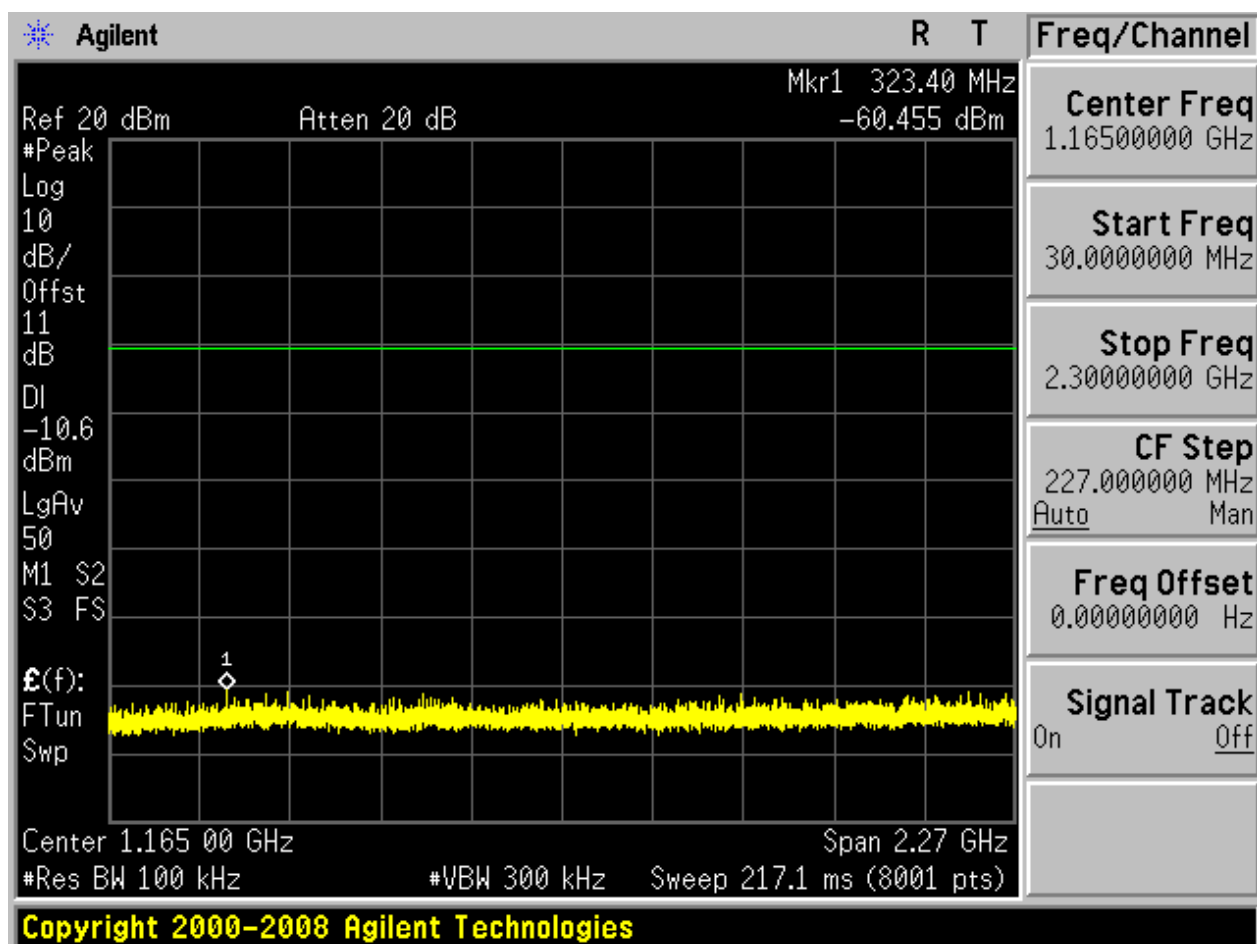
Pref:

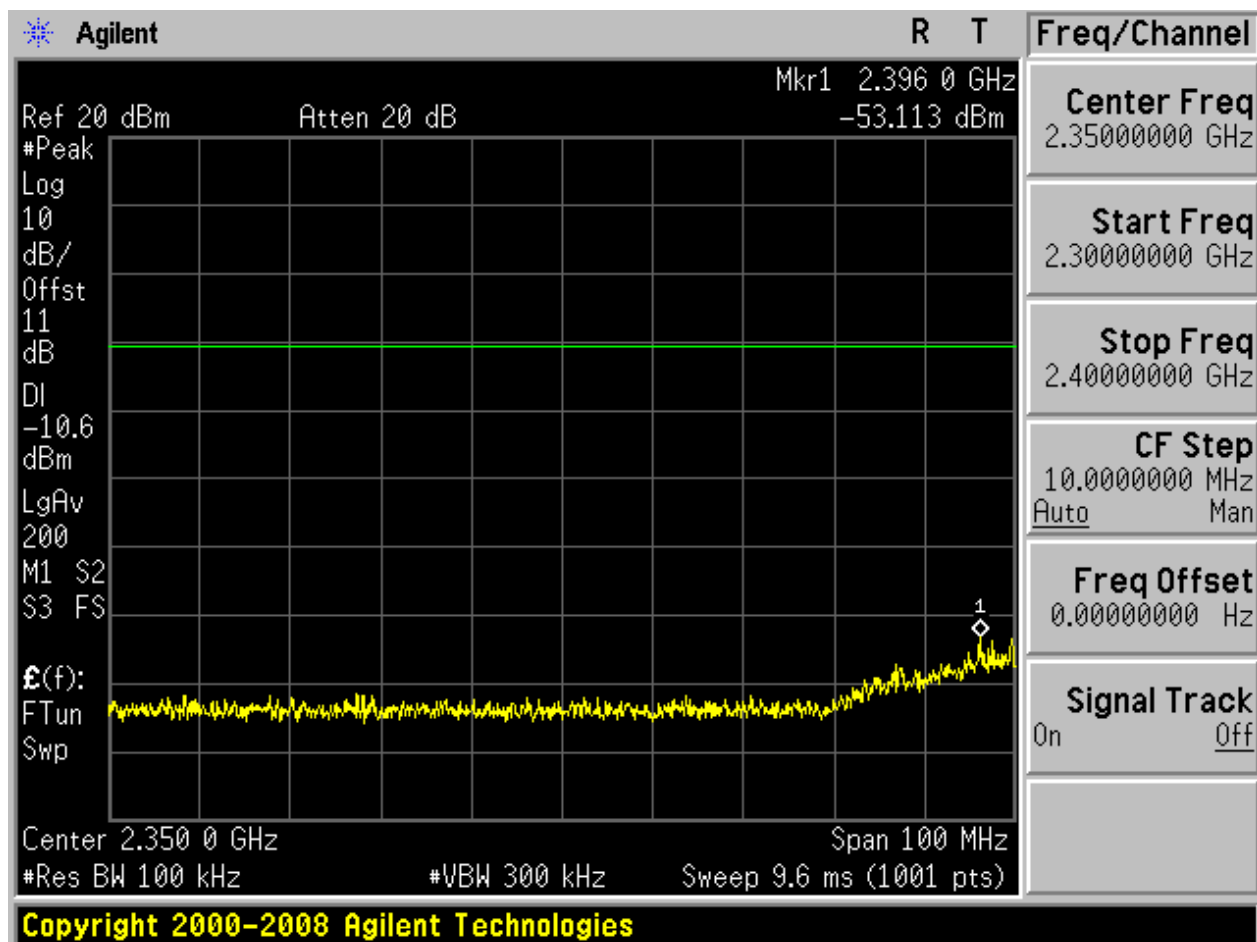


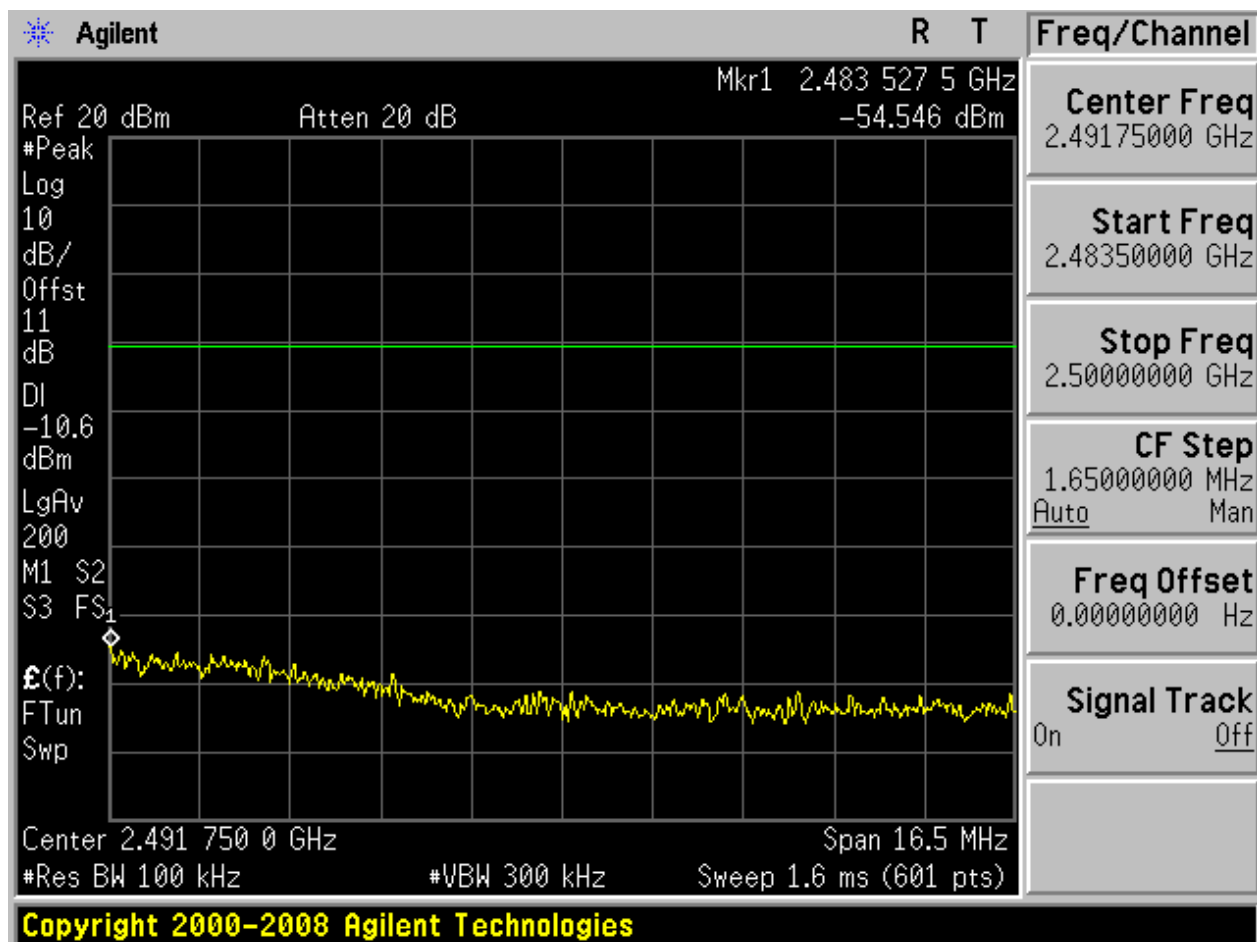
Puw:

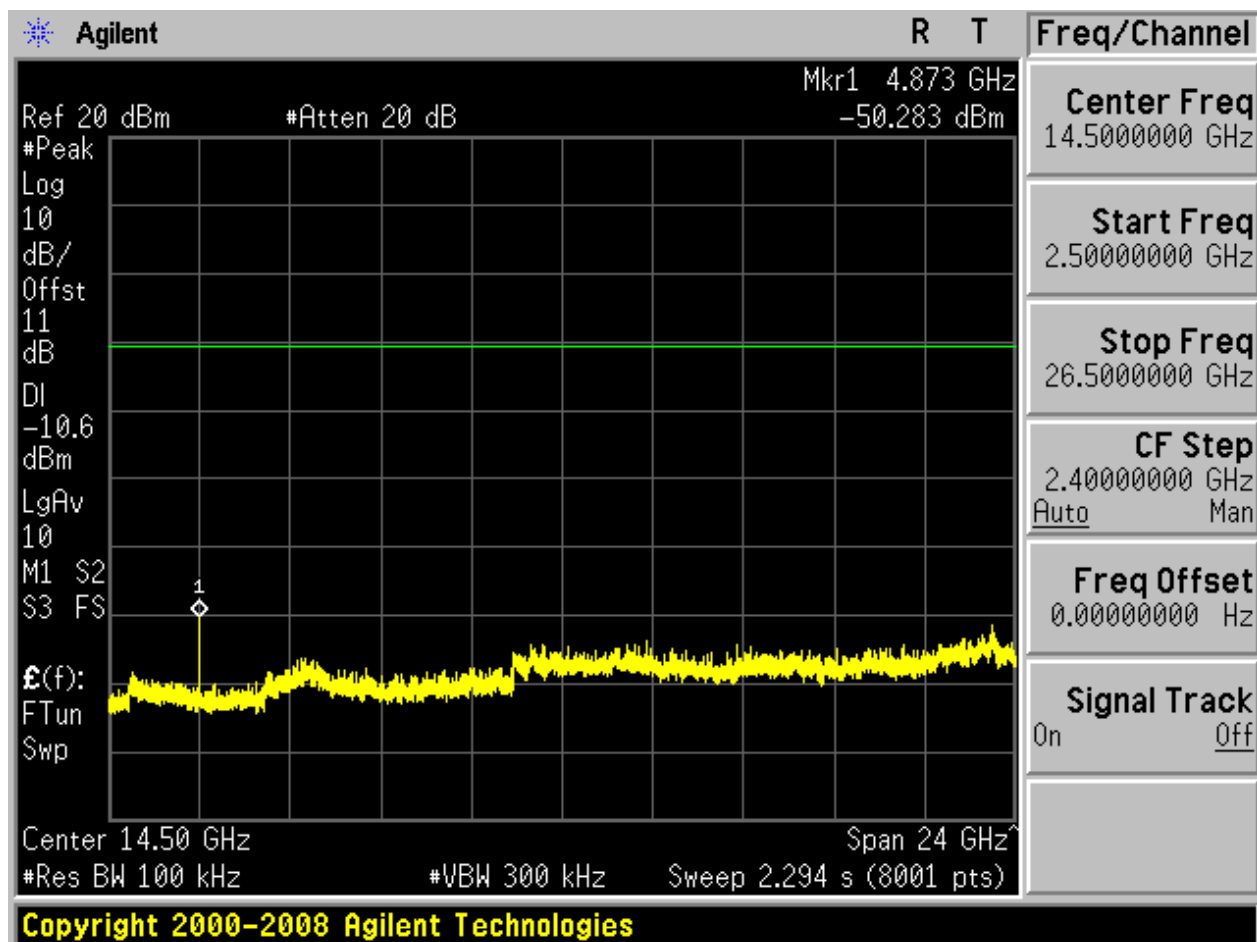






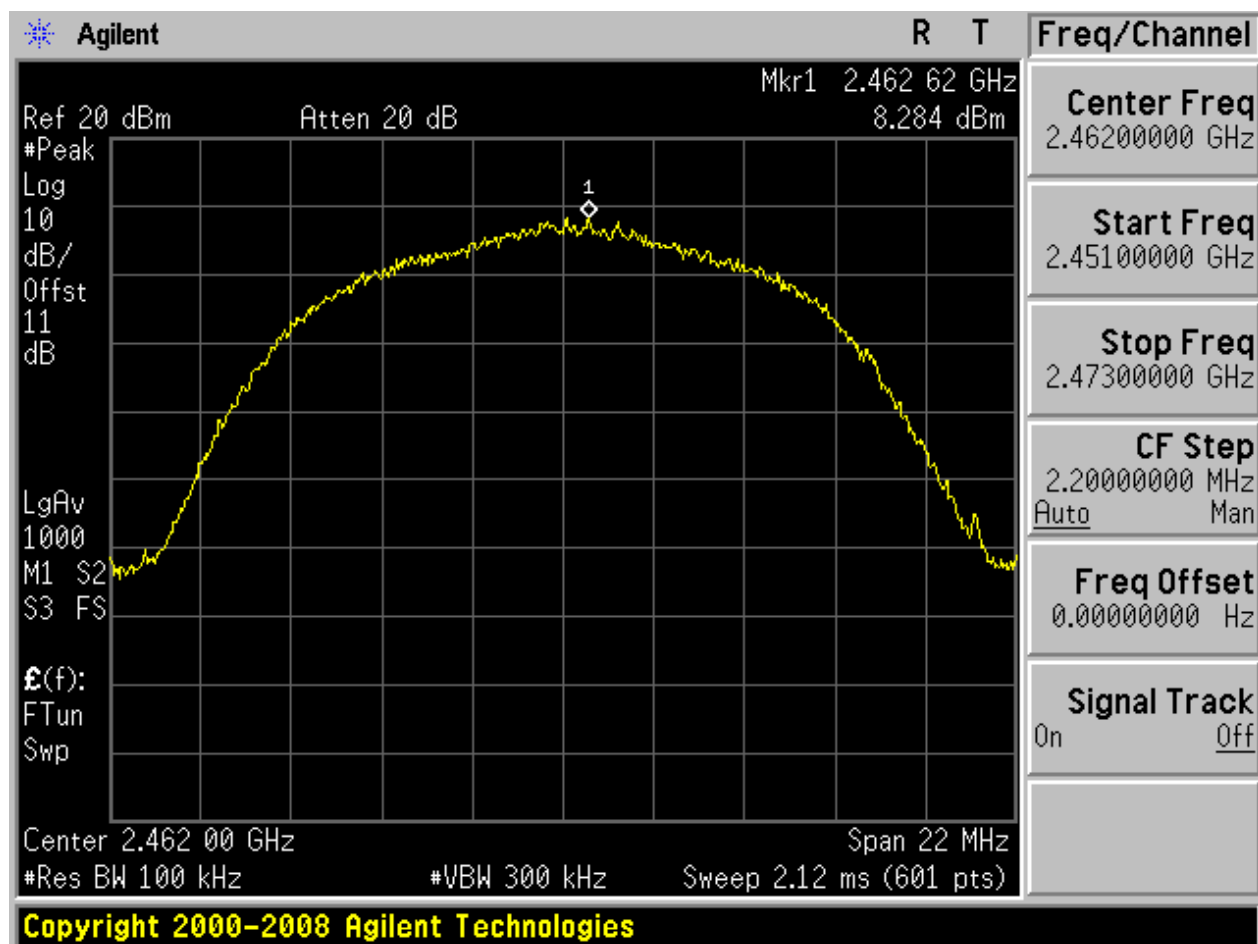




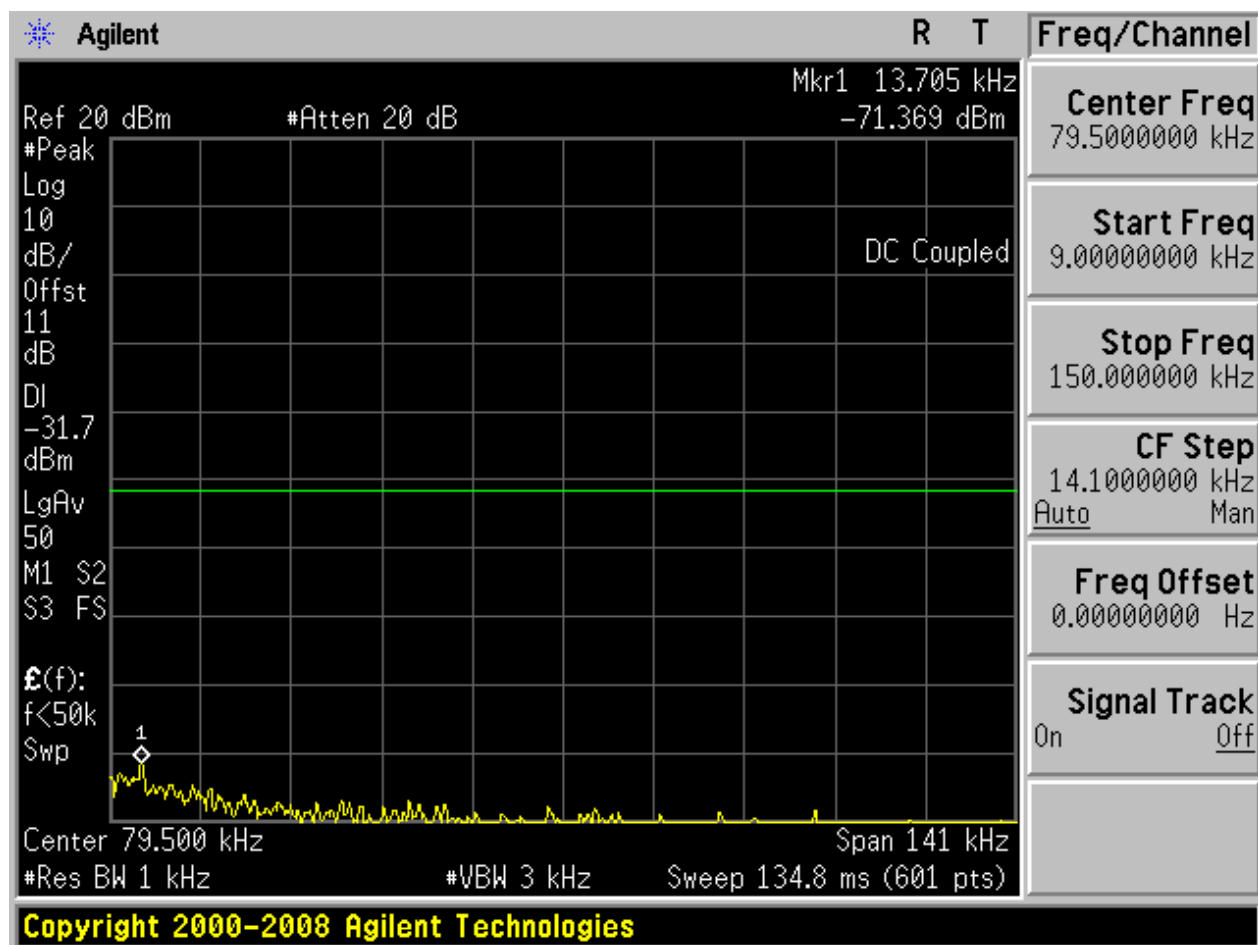


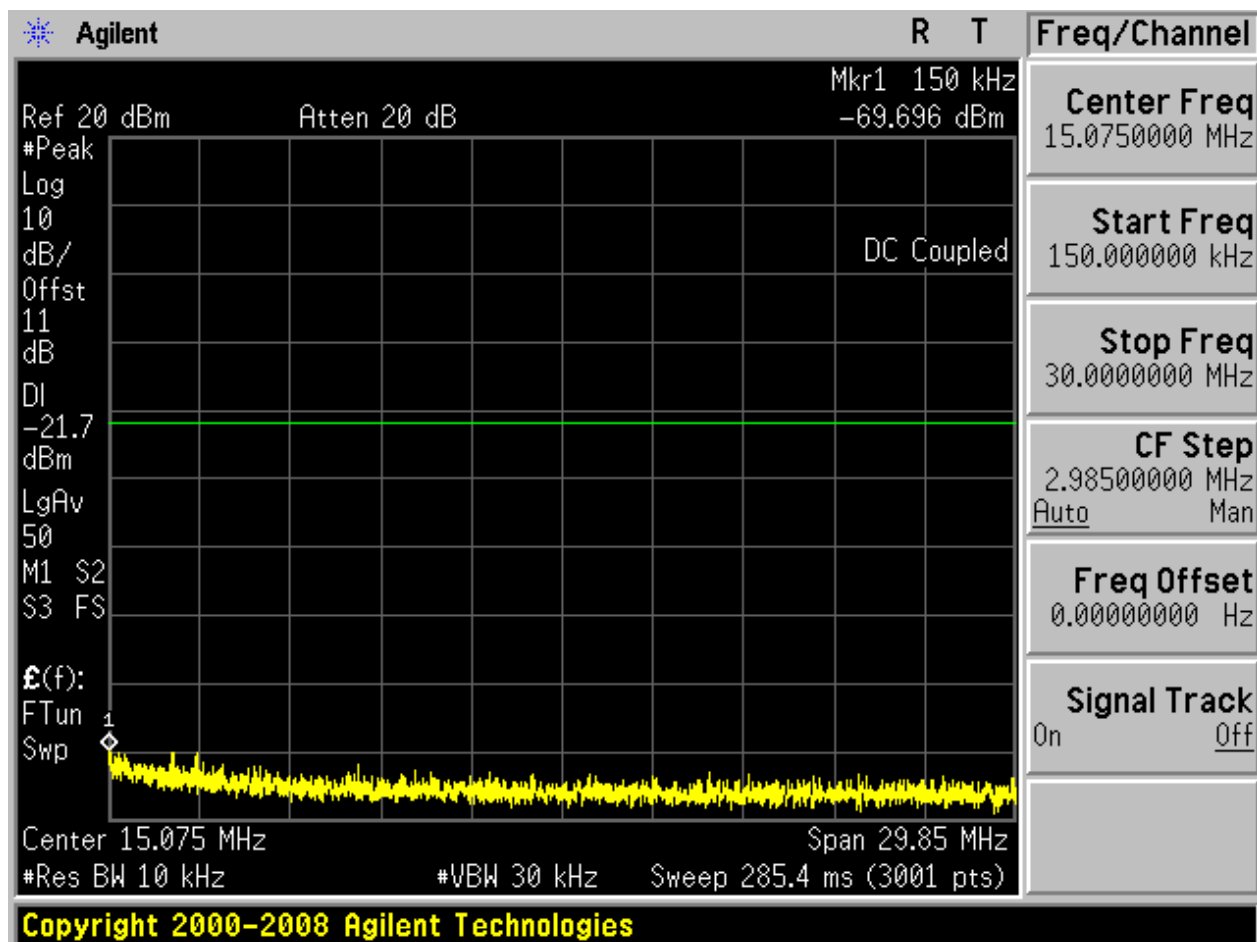
2.3 11B_H

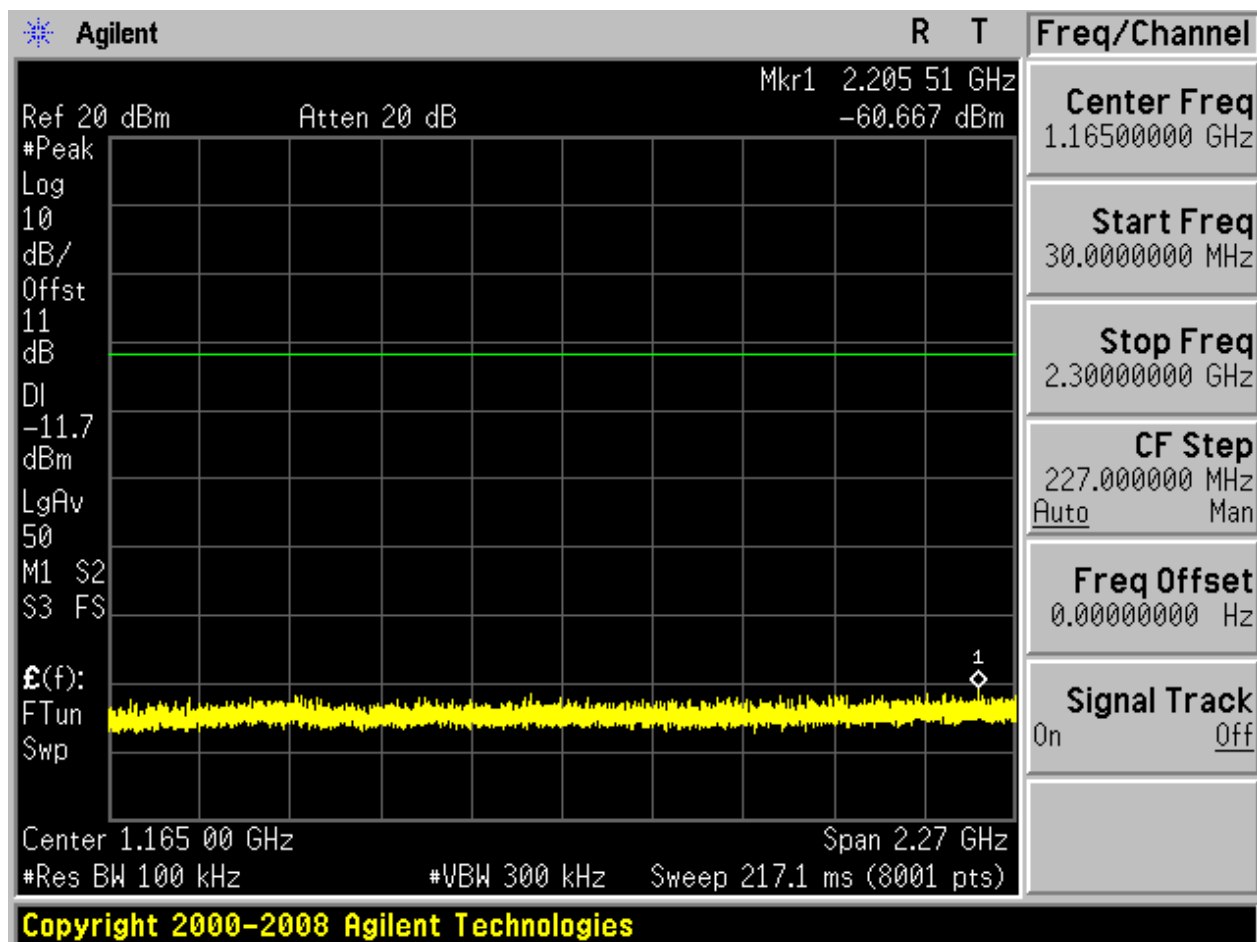
Pref:

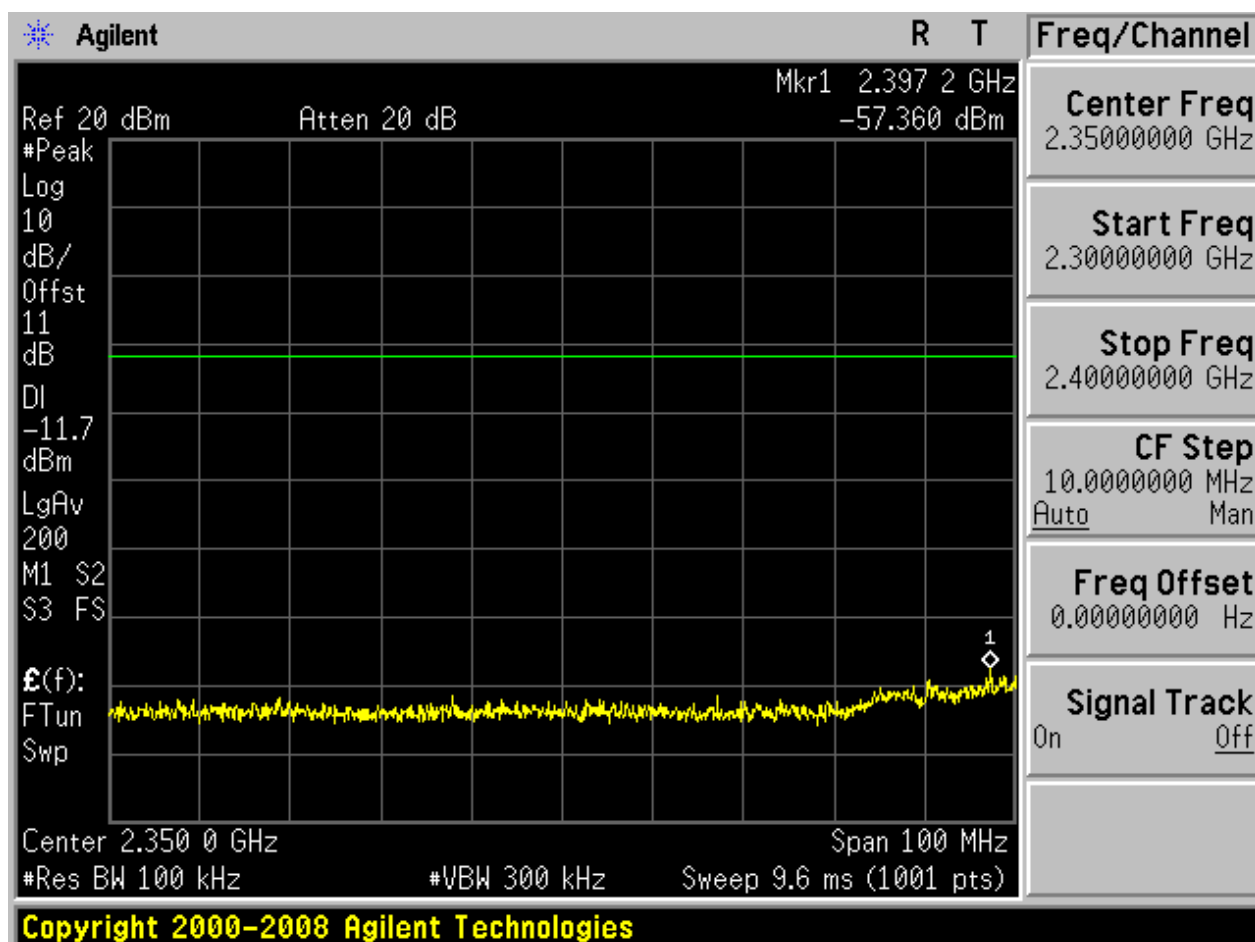


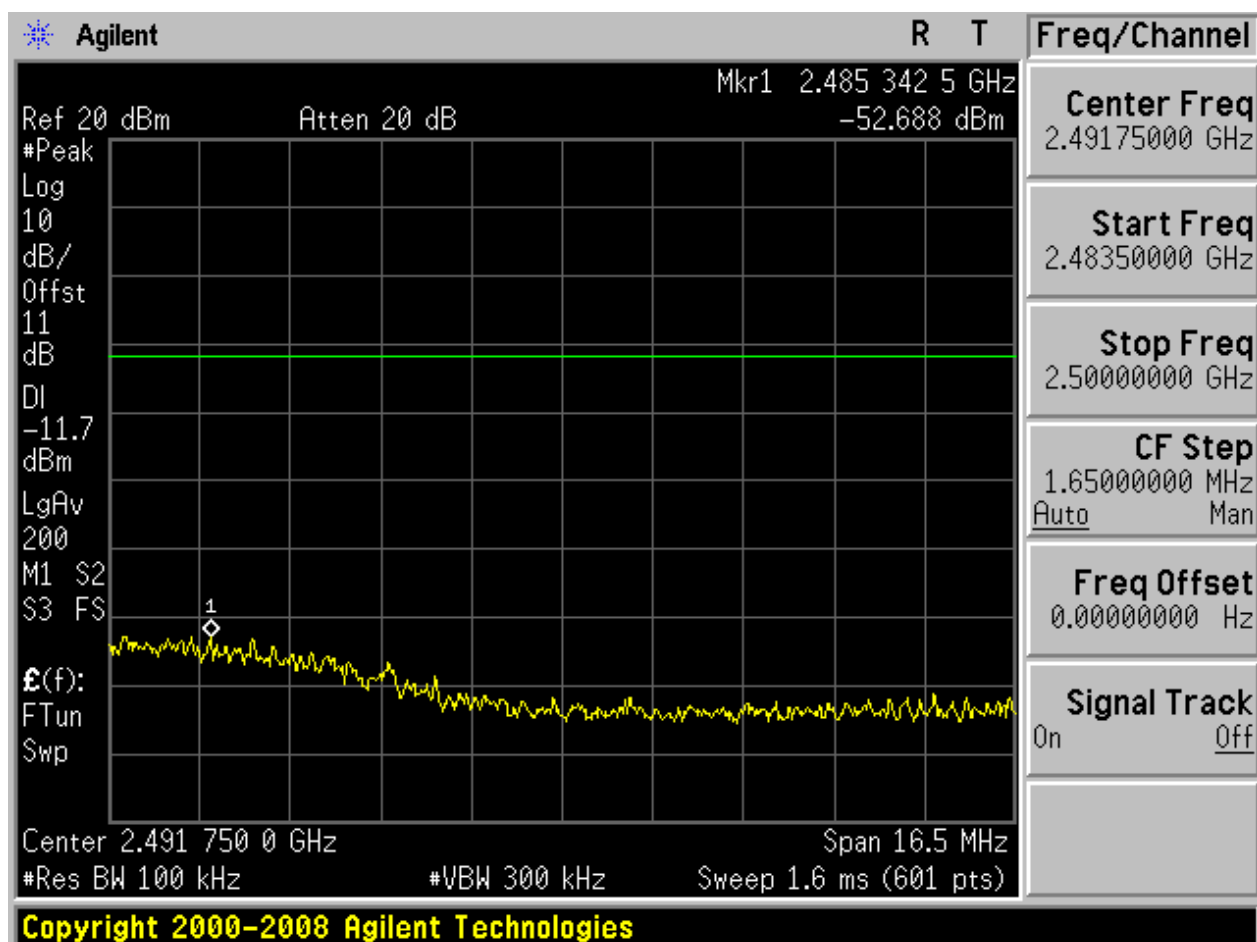
Puw:

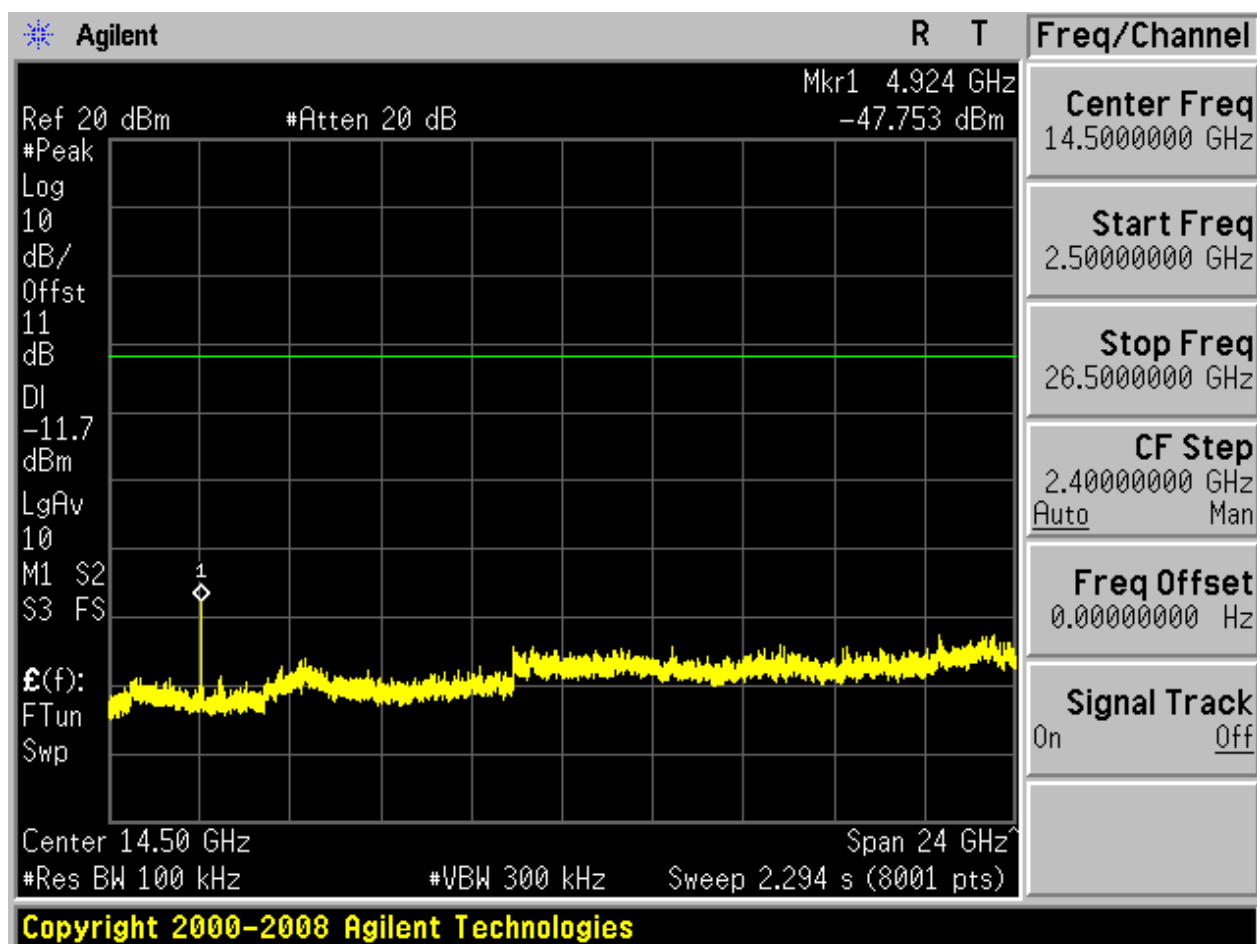






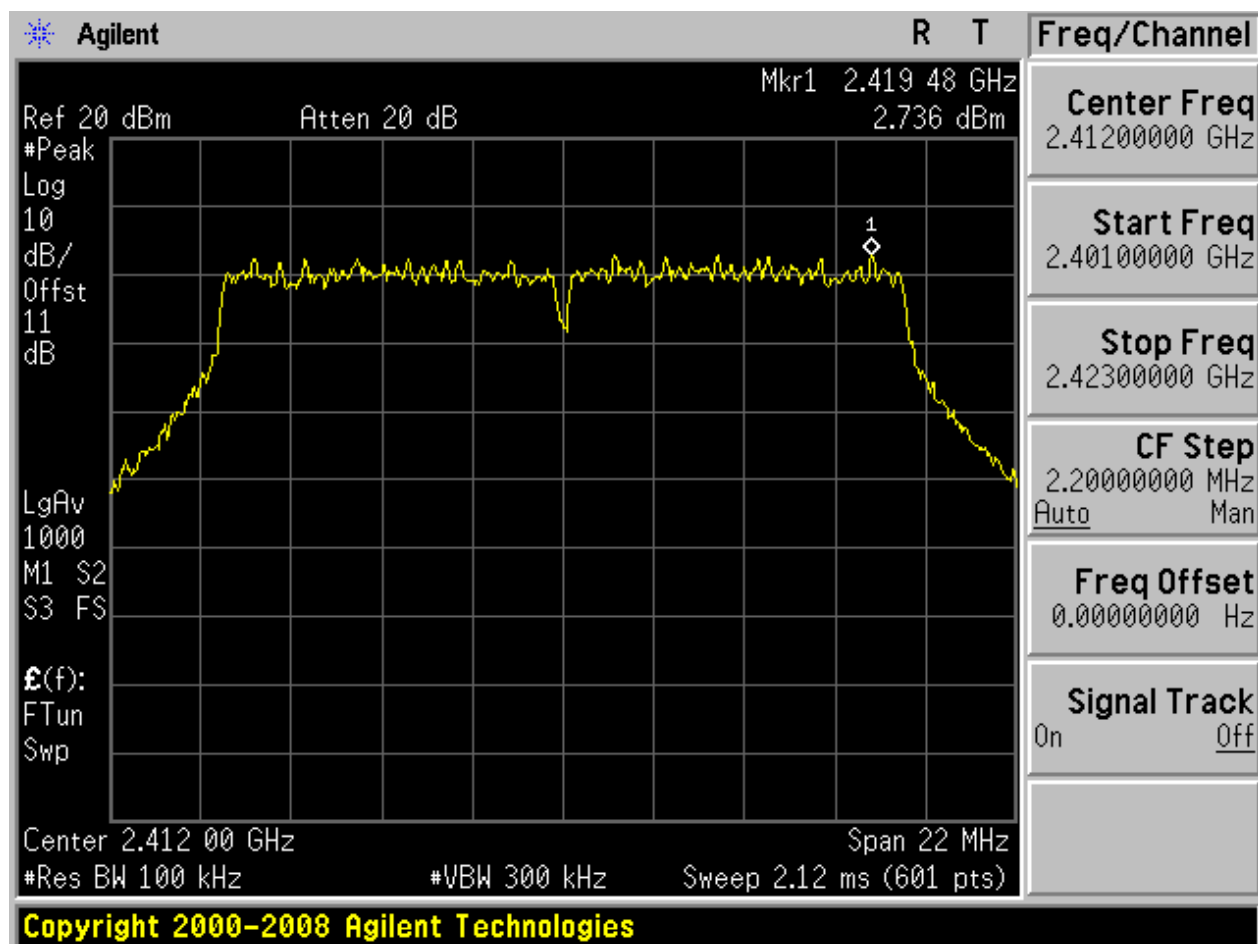




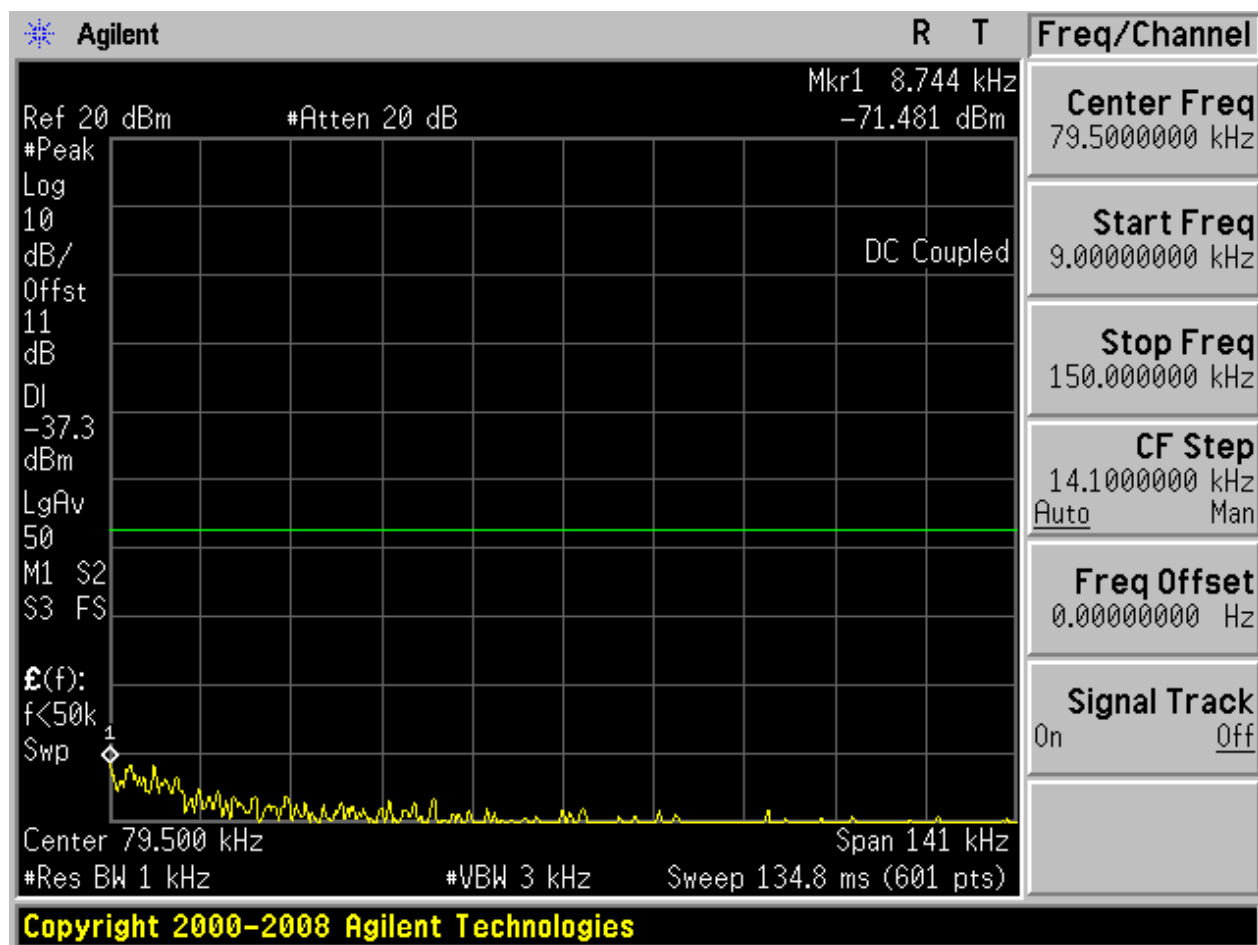


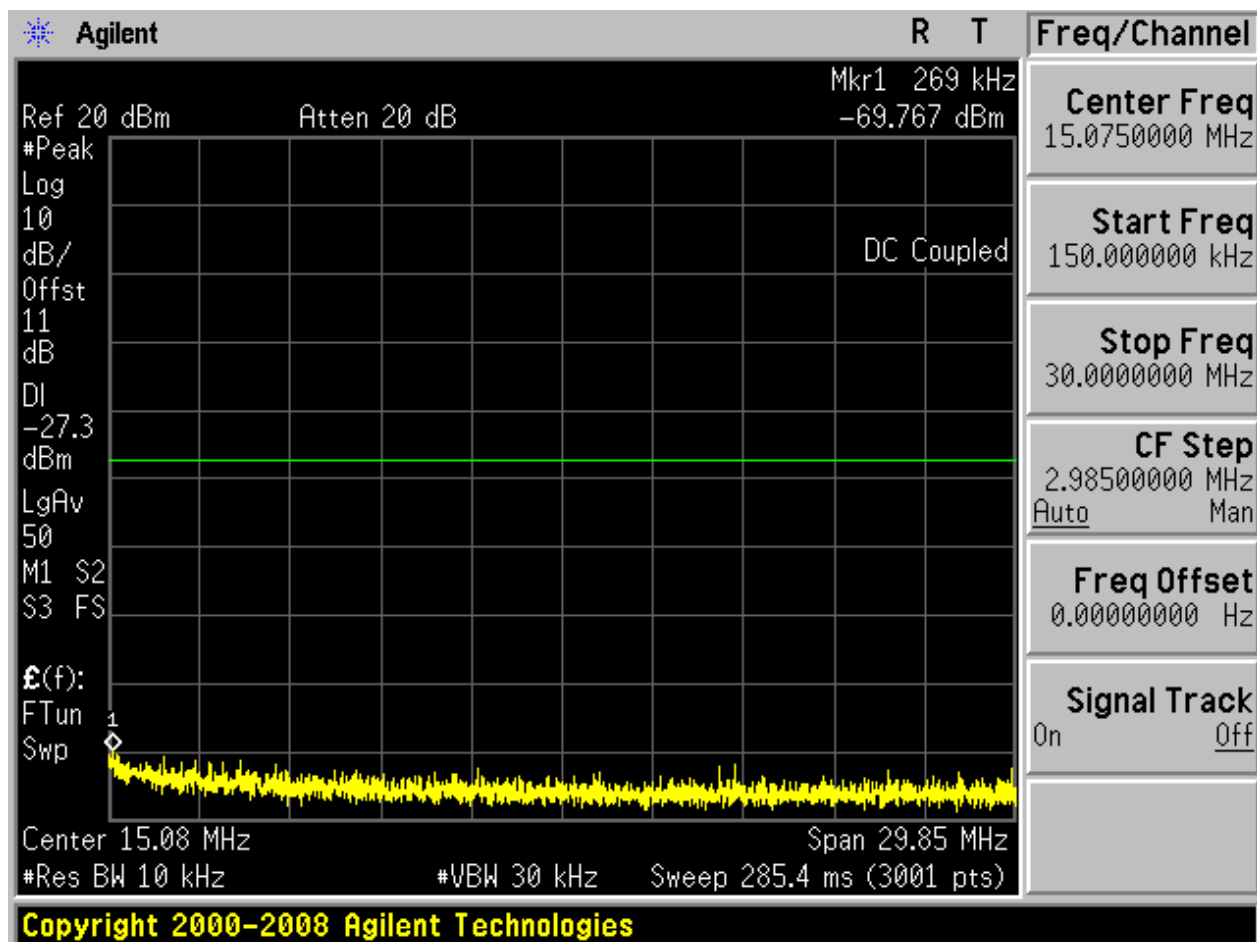
2.4 11G_L

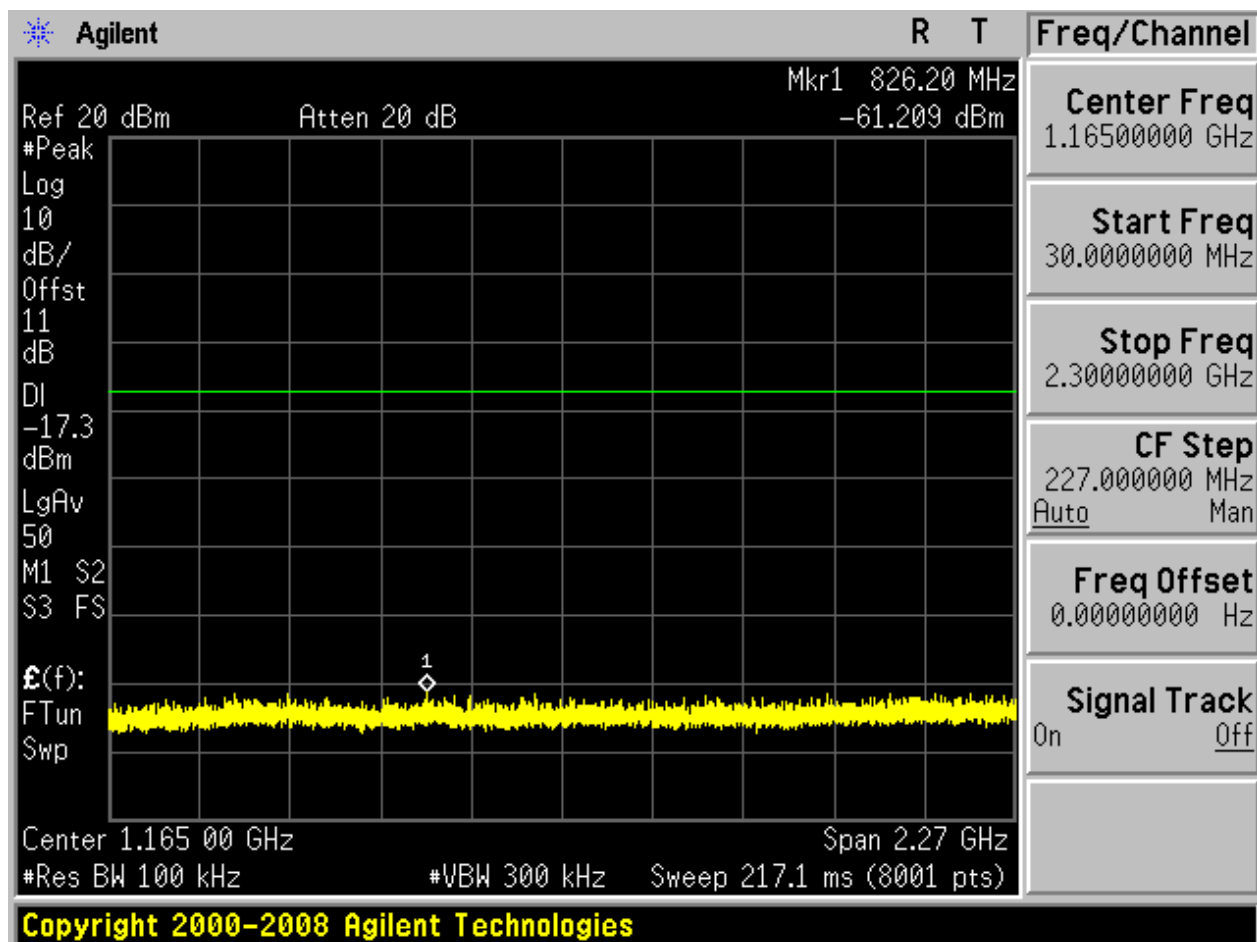
Pref:

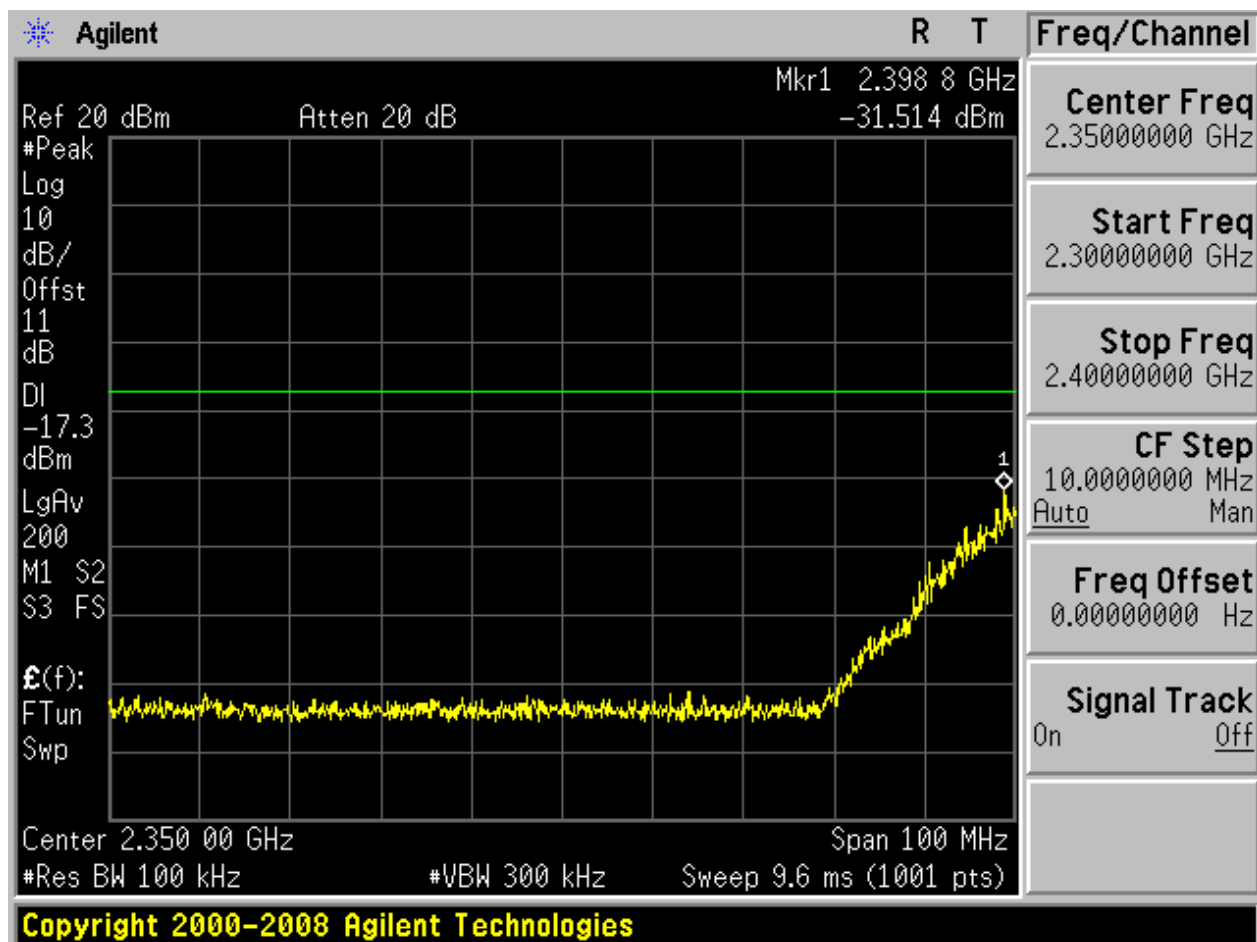


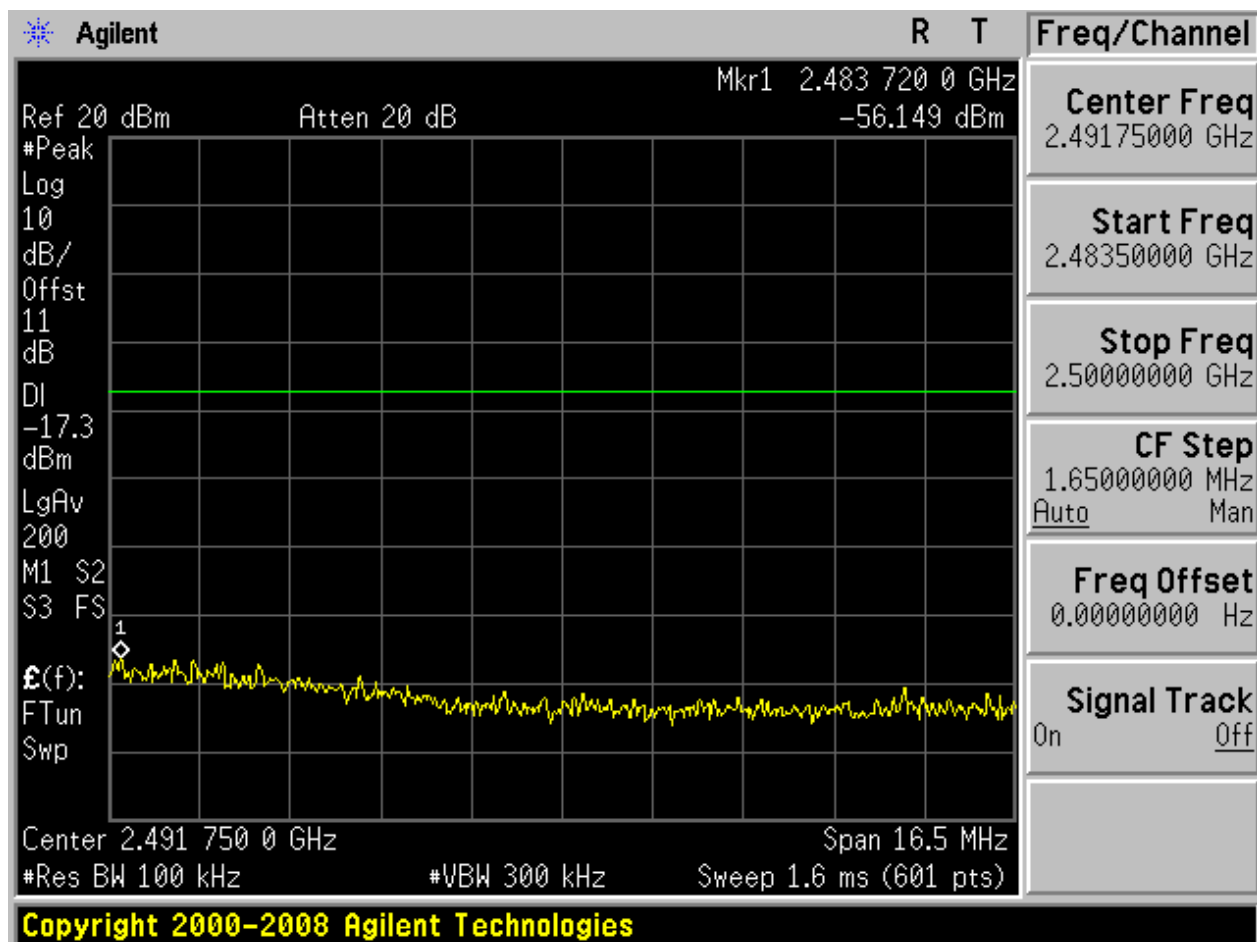
Puw:

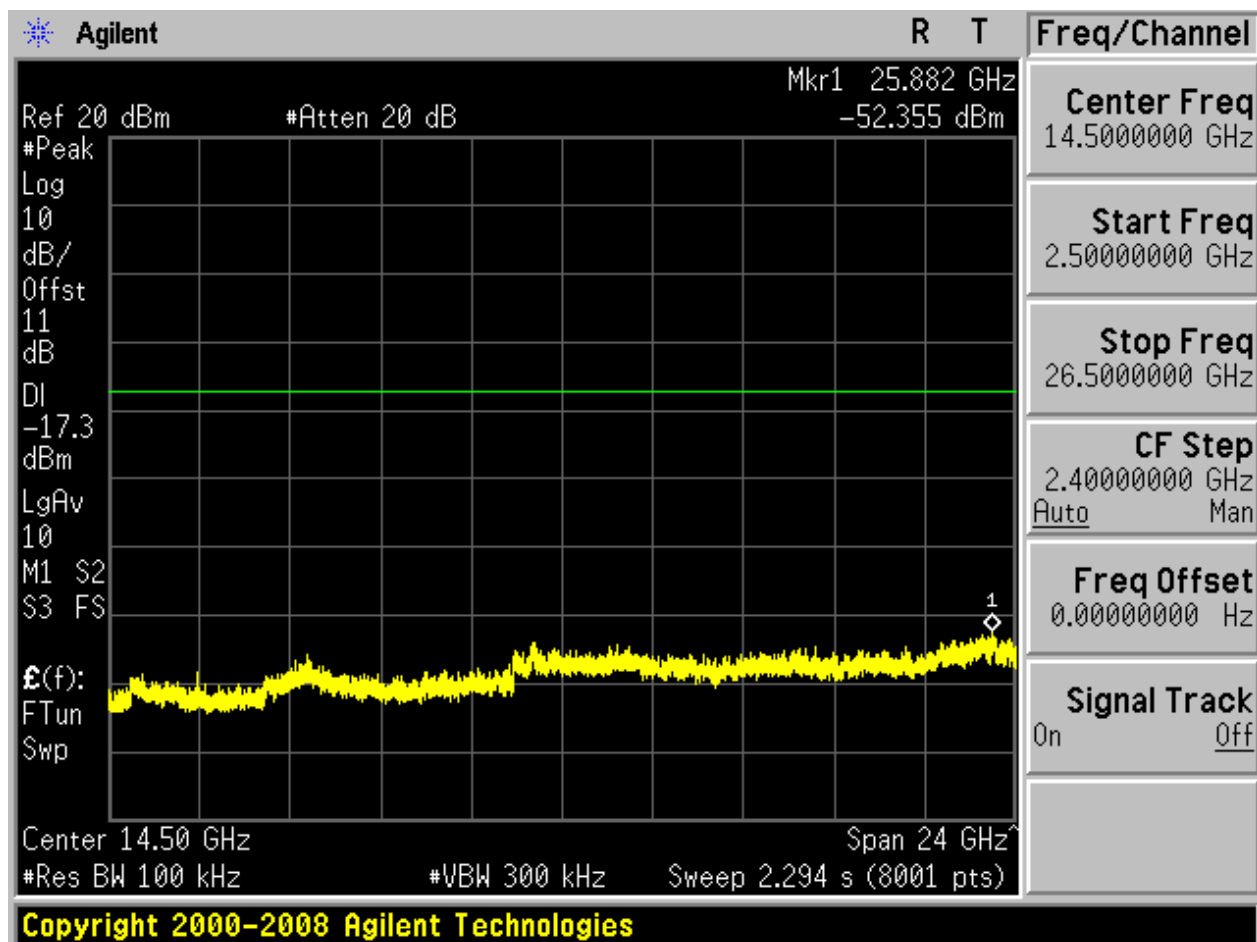






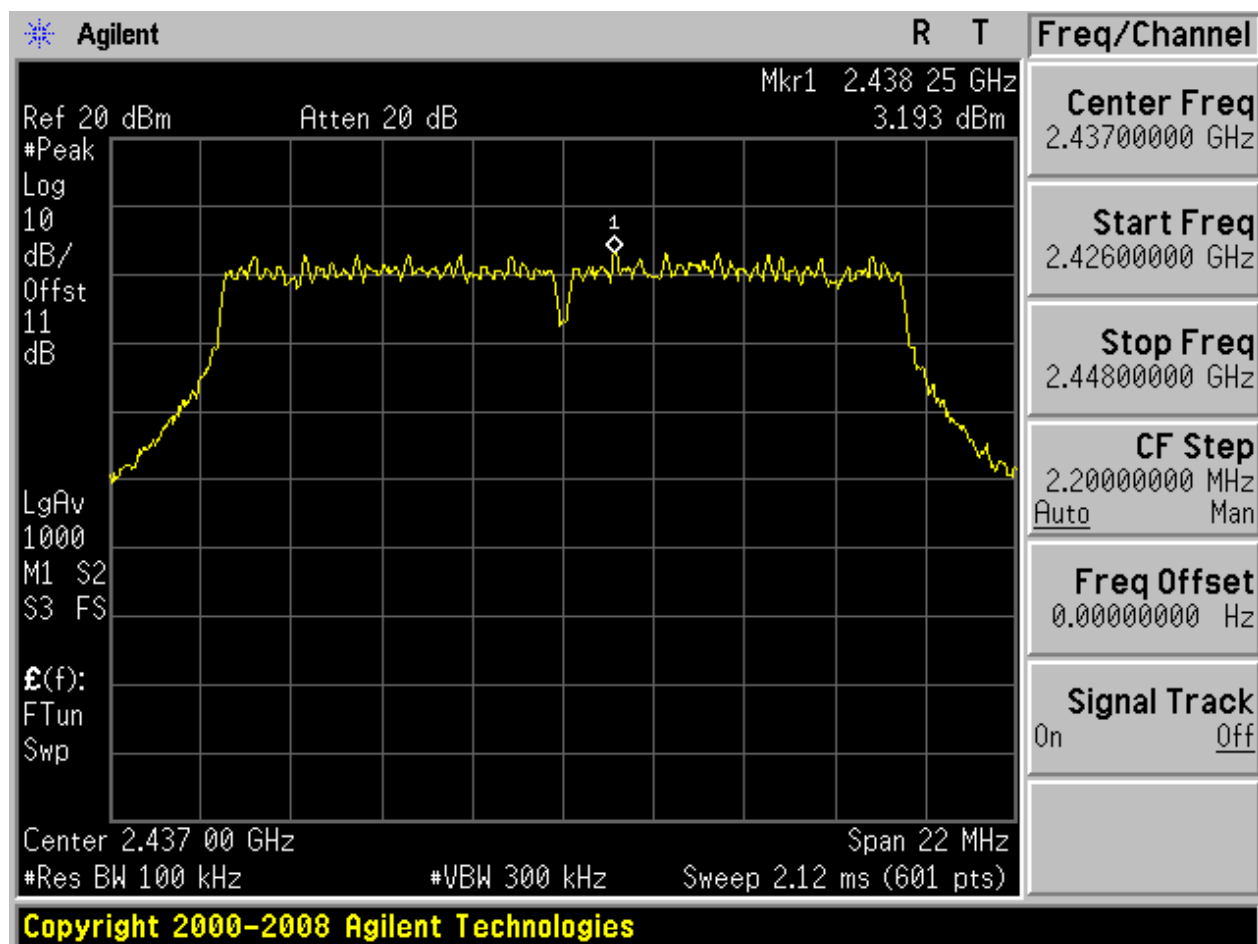




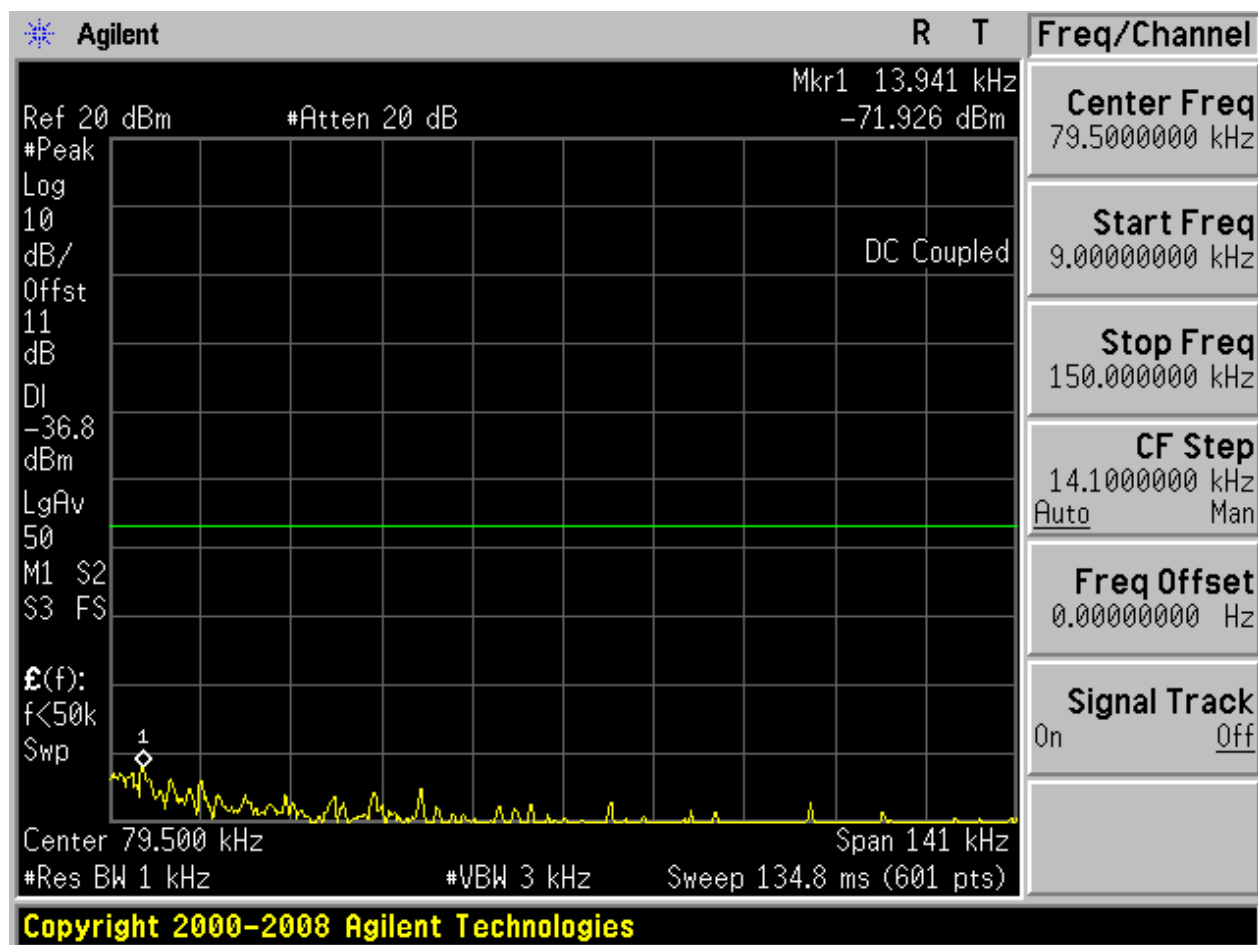


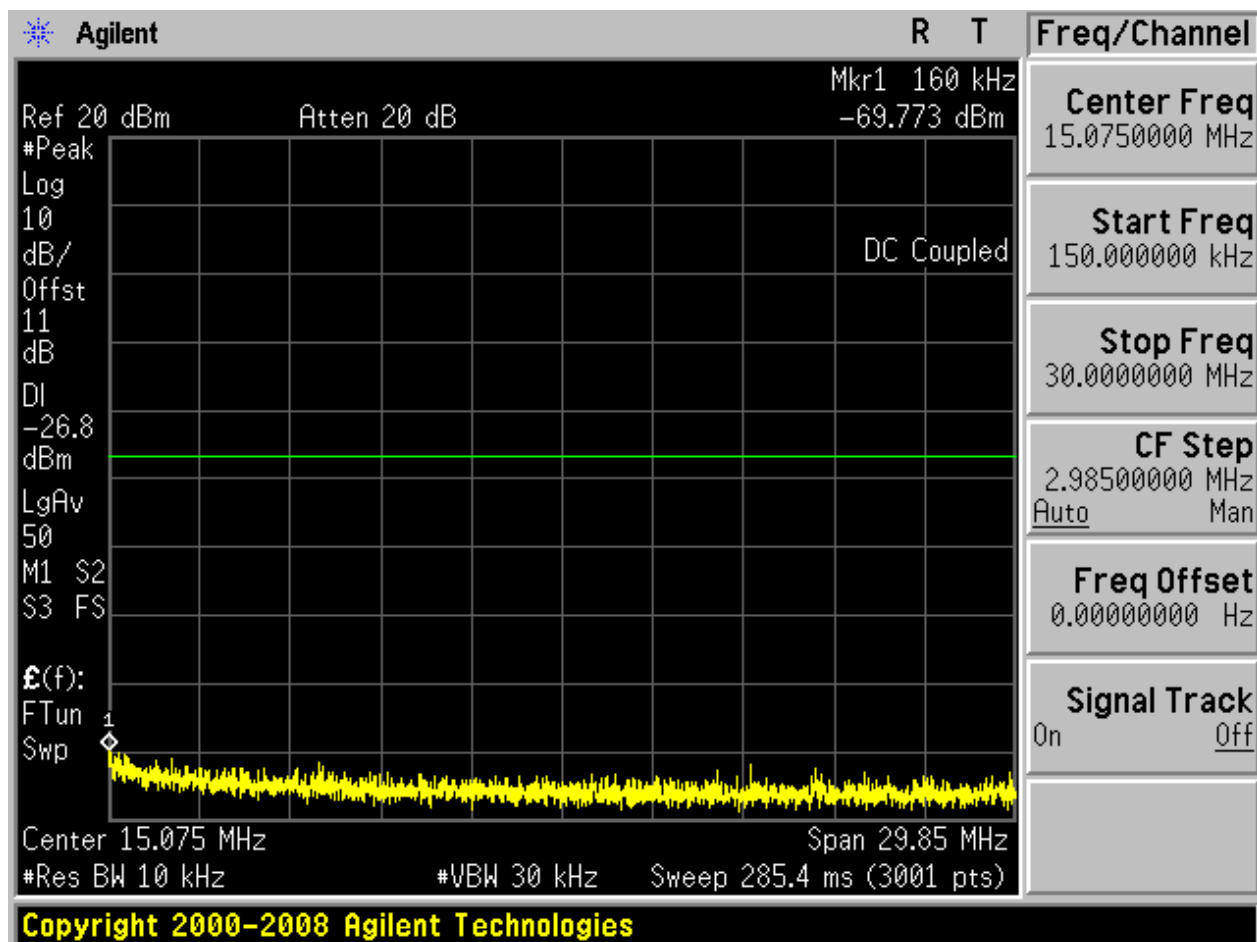
2.5 11G_M

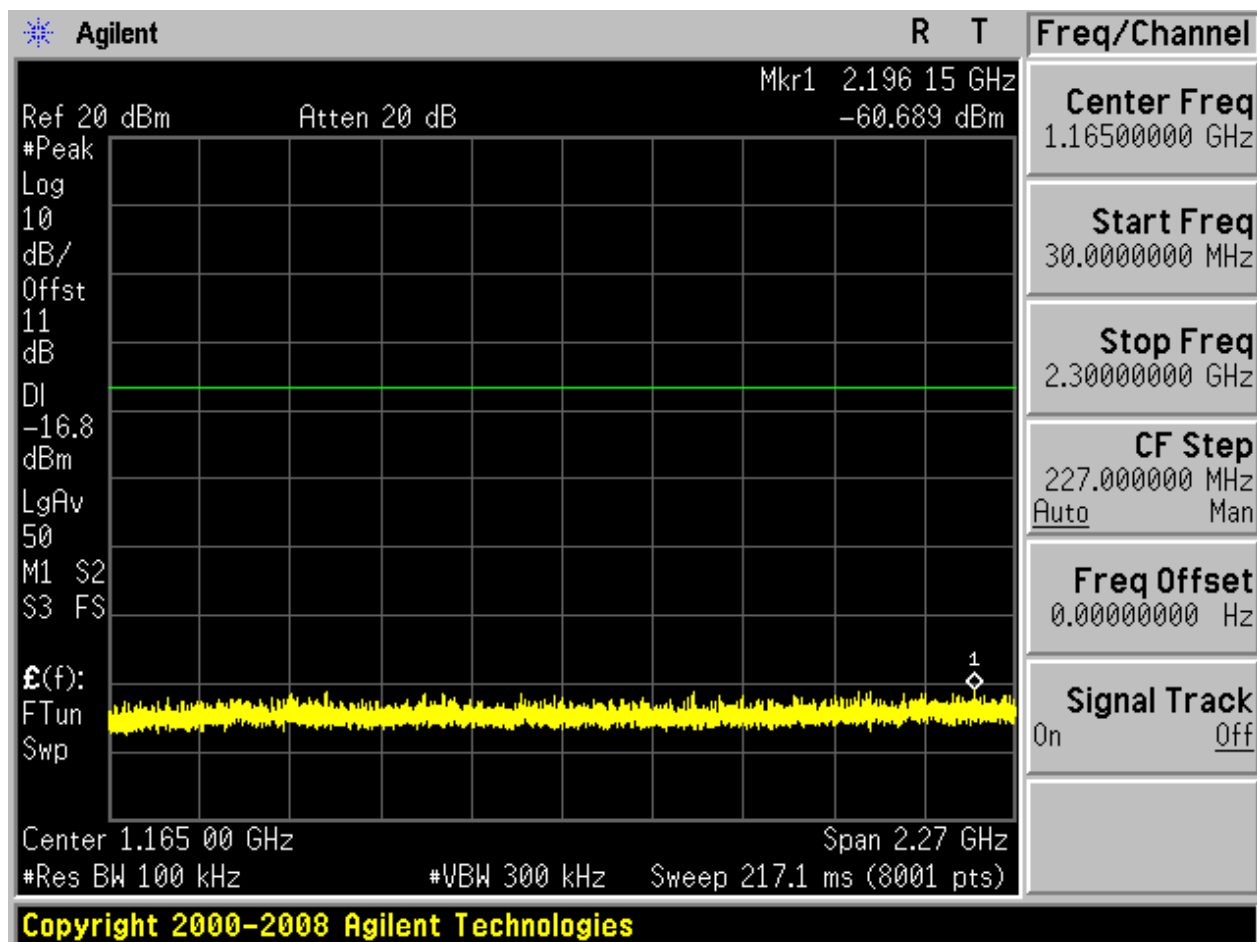
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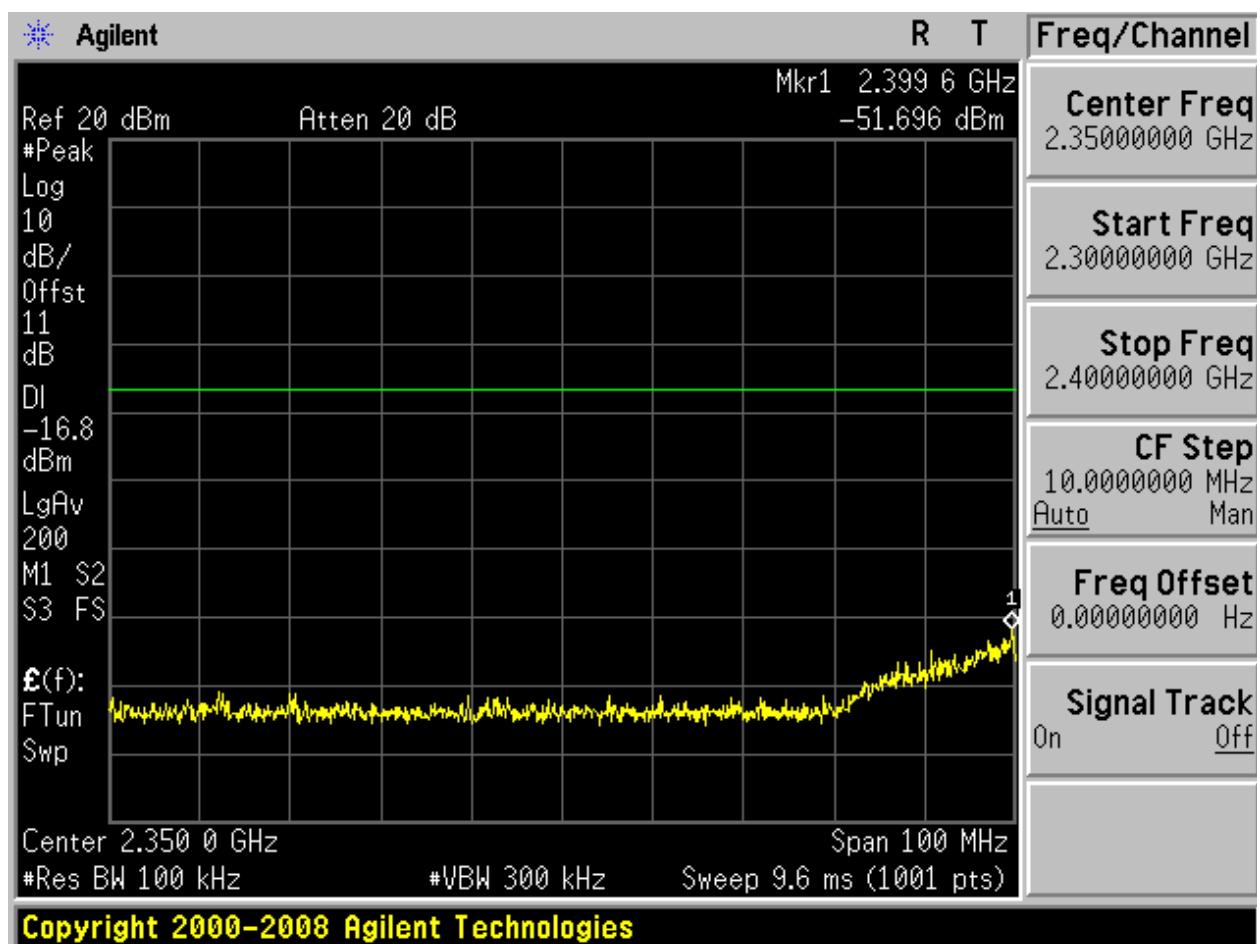


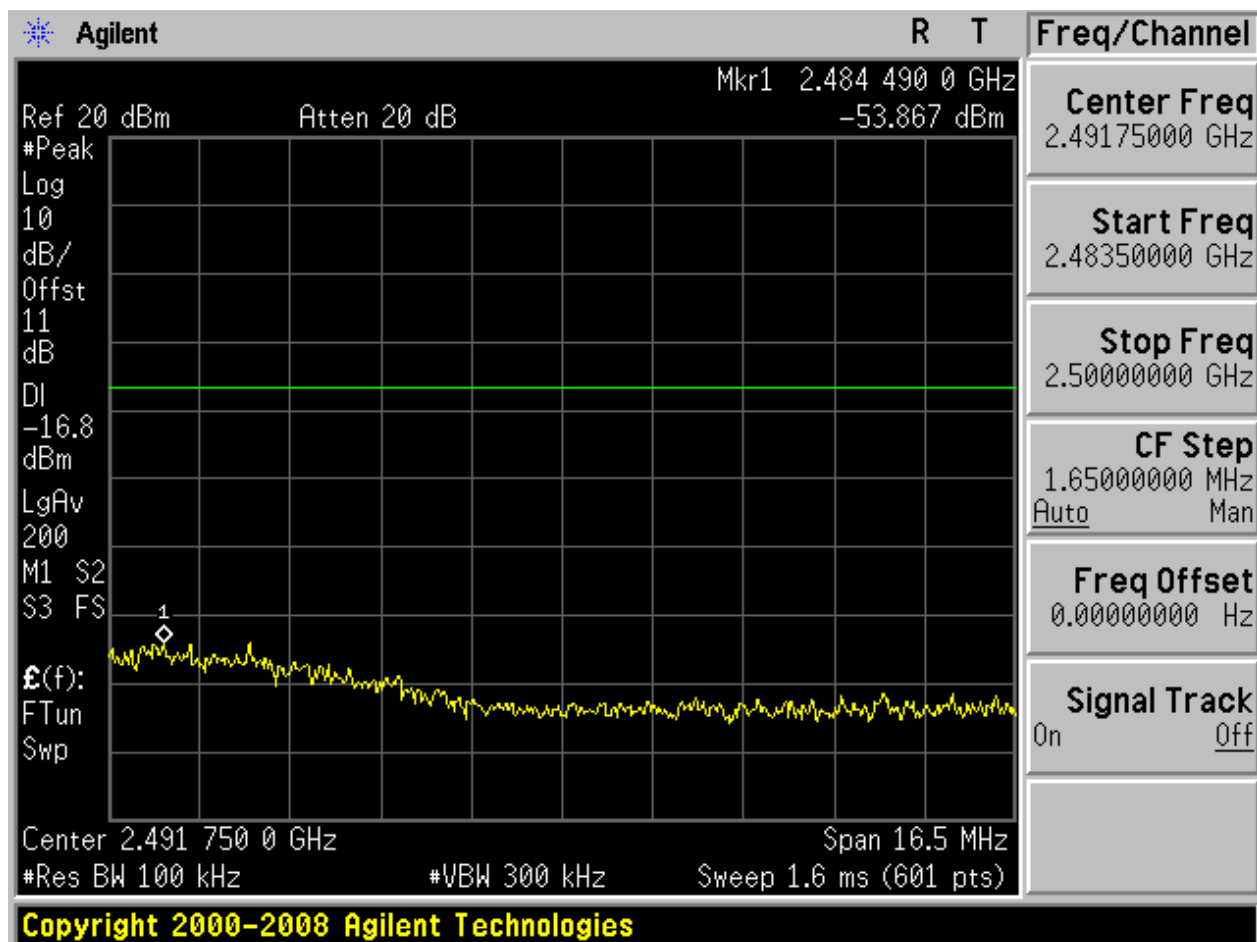
Puw:

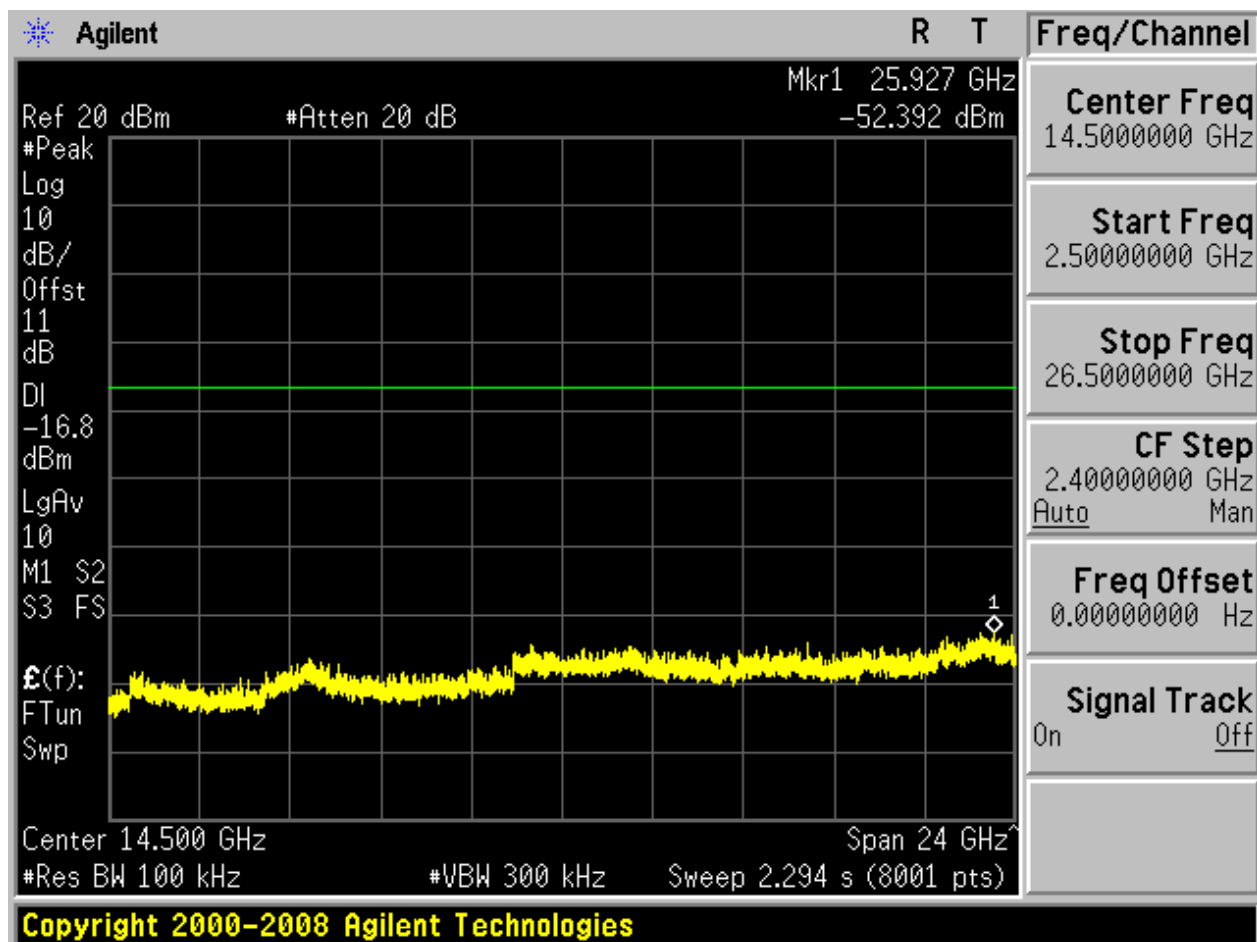






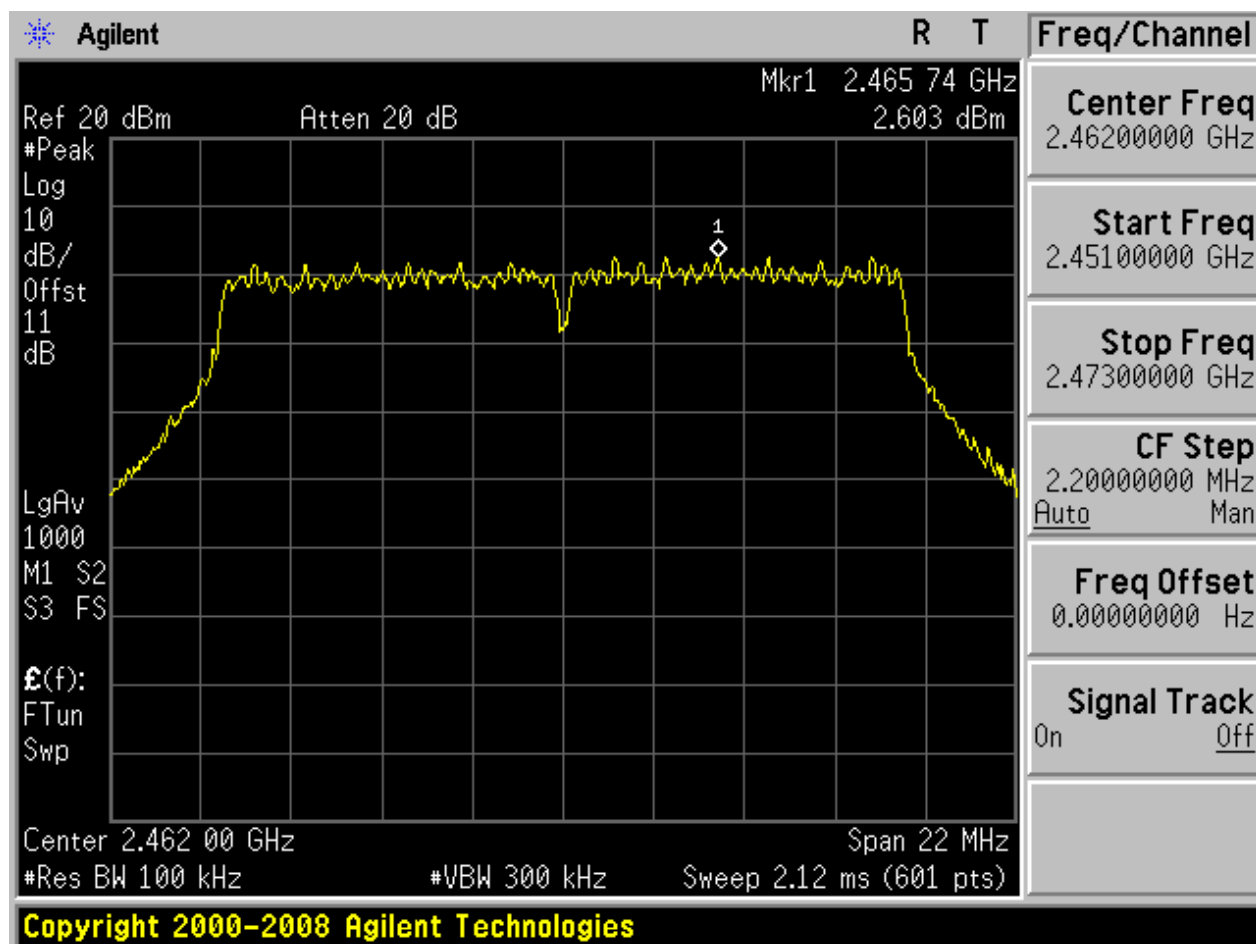




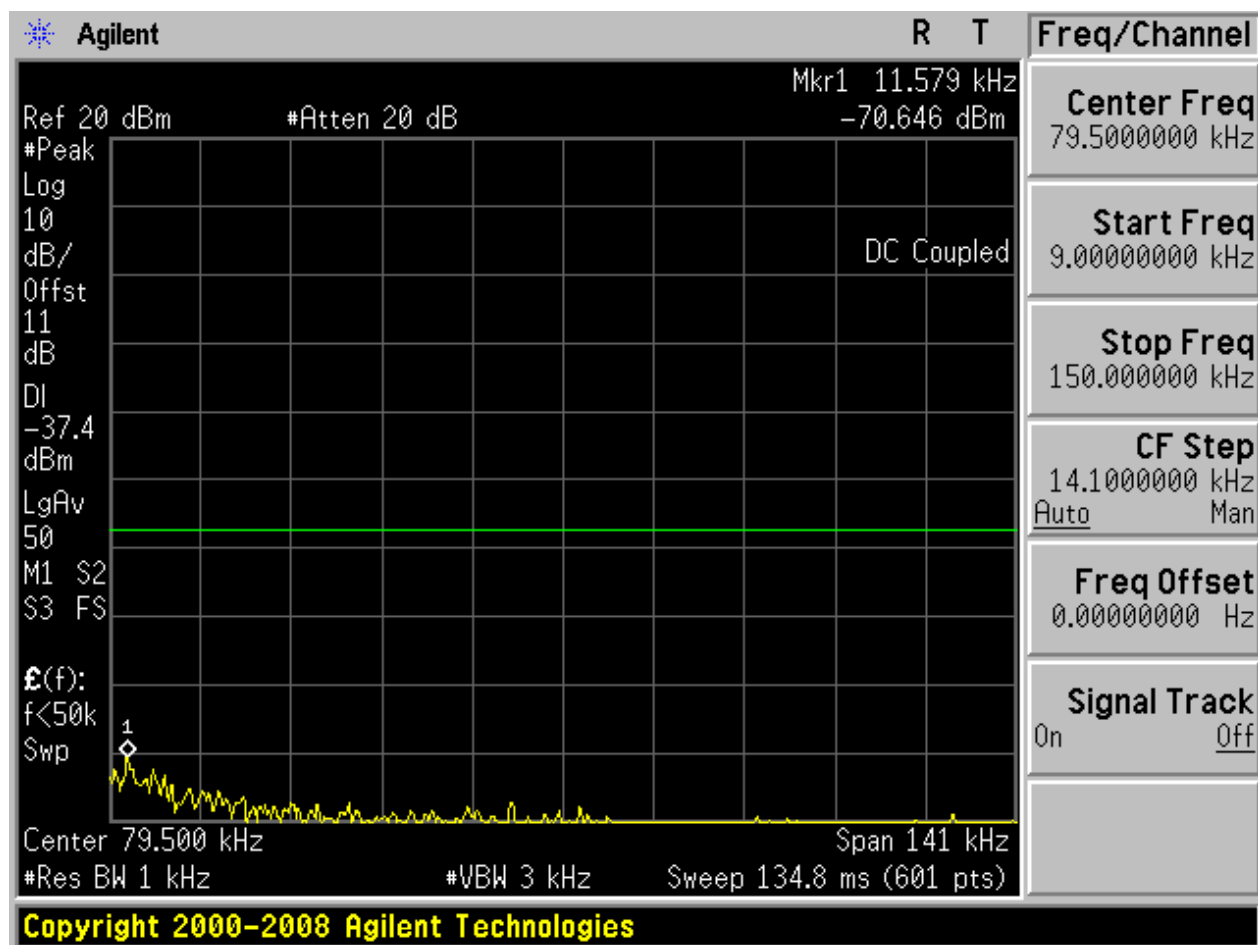


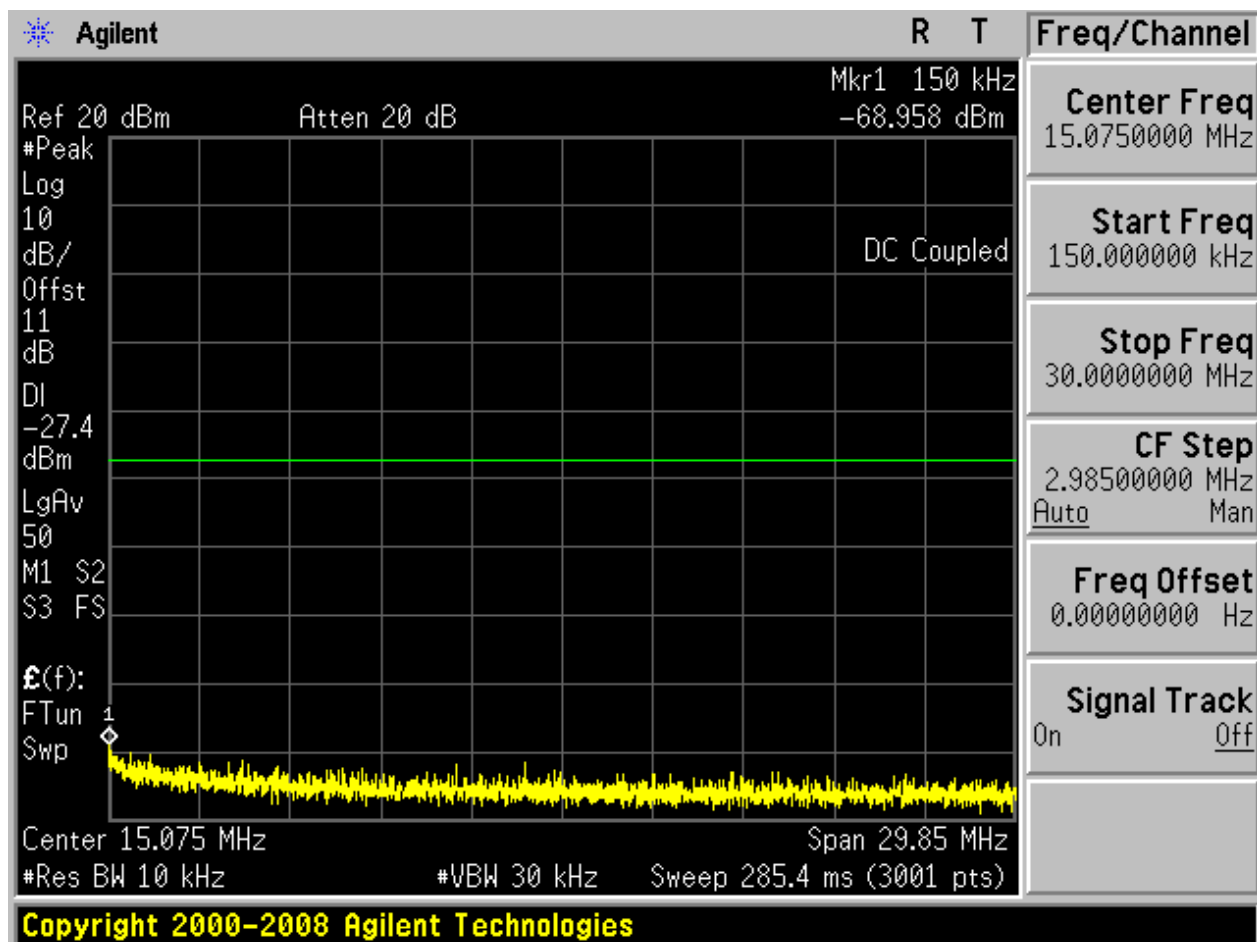
2.6 11G_H

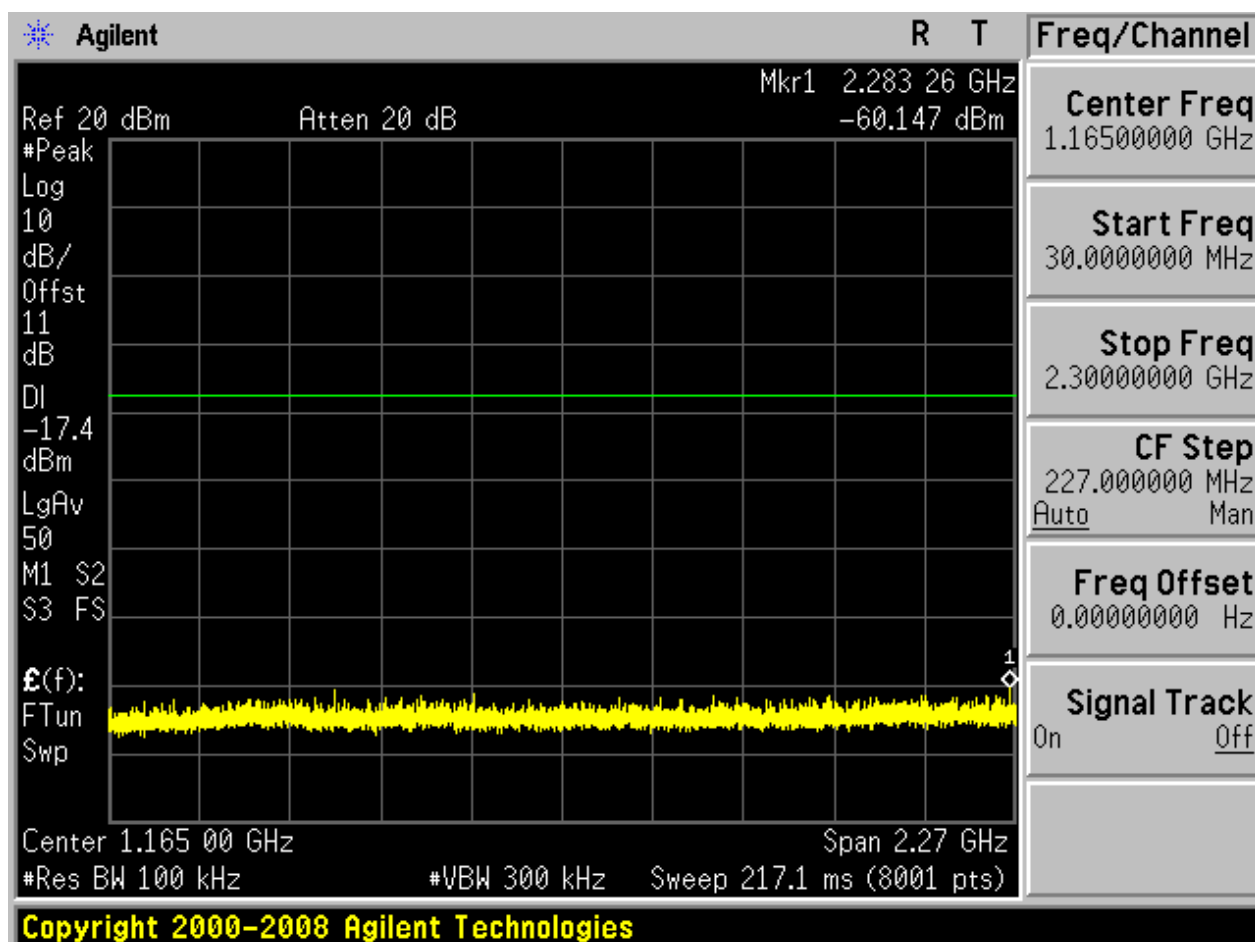
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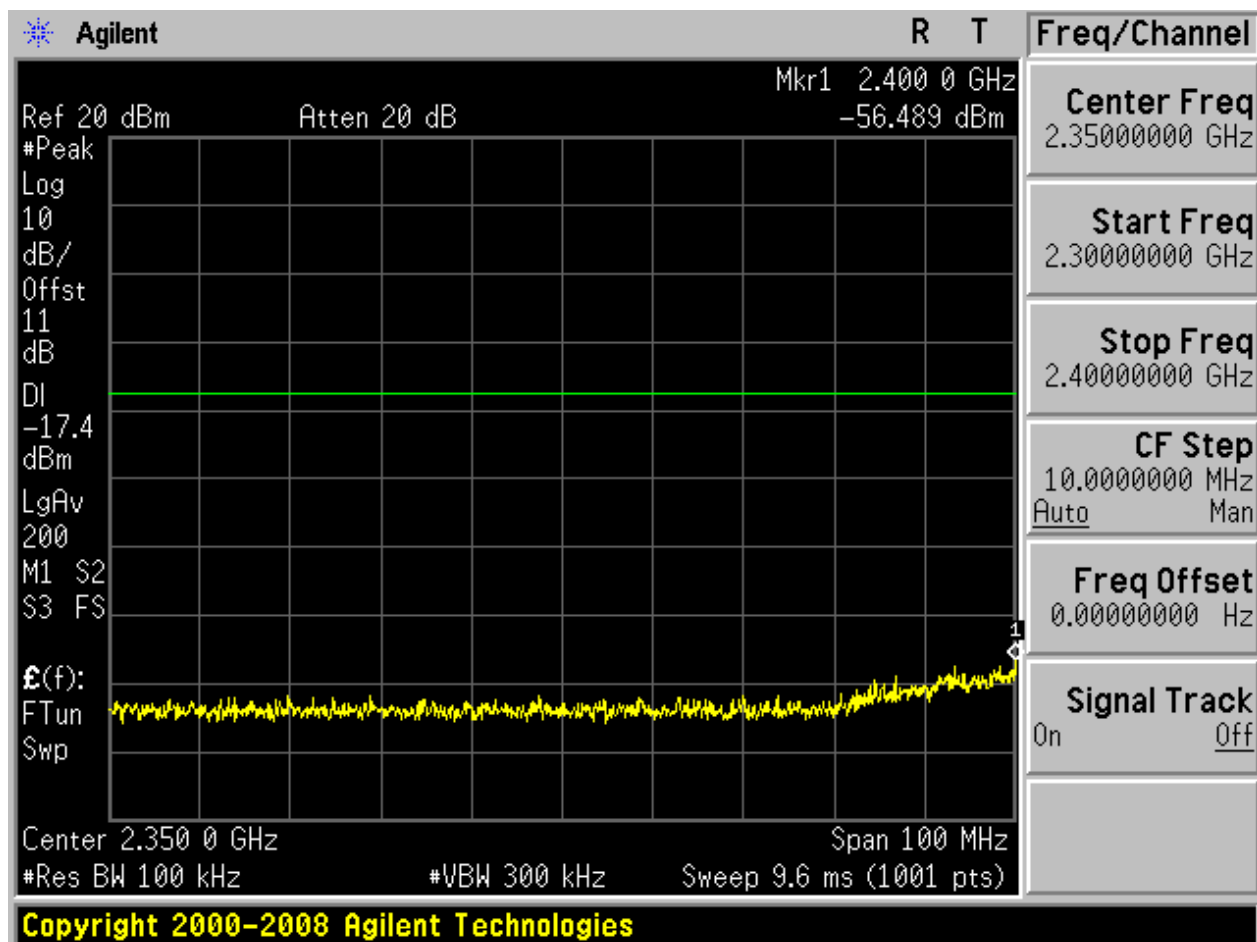


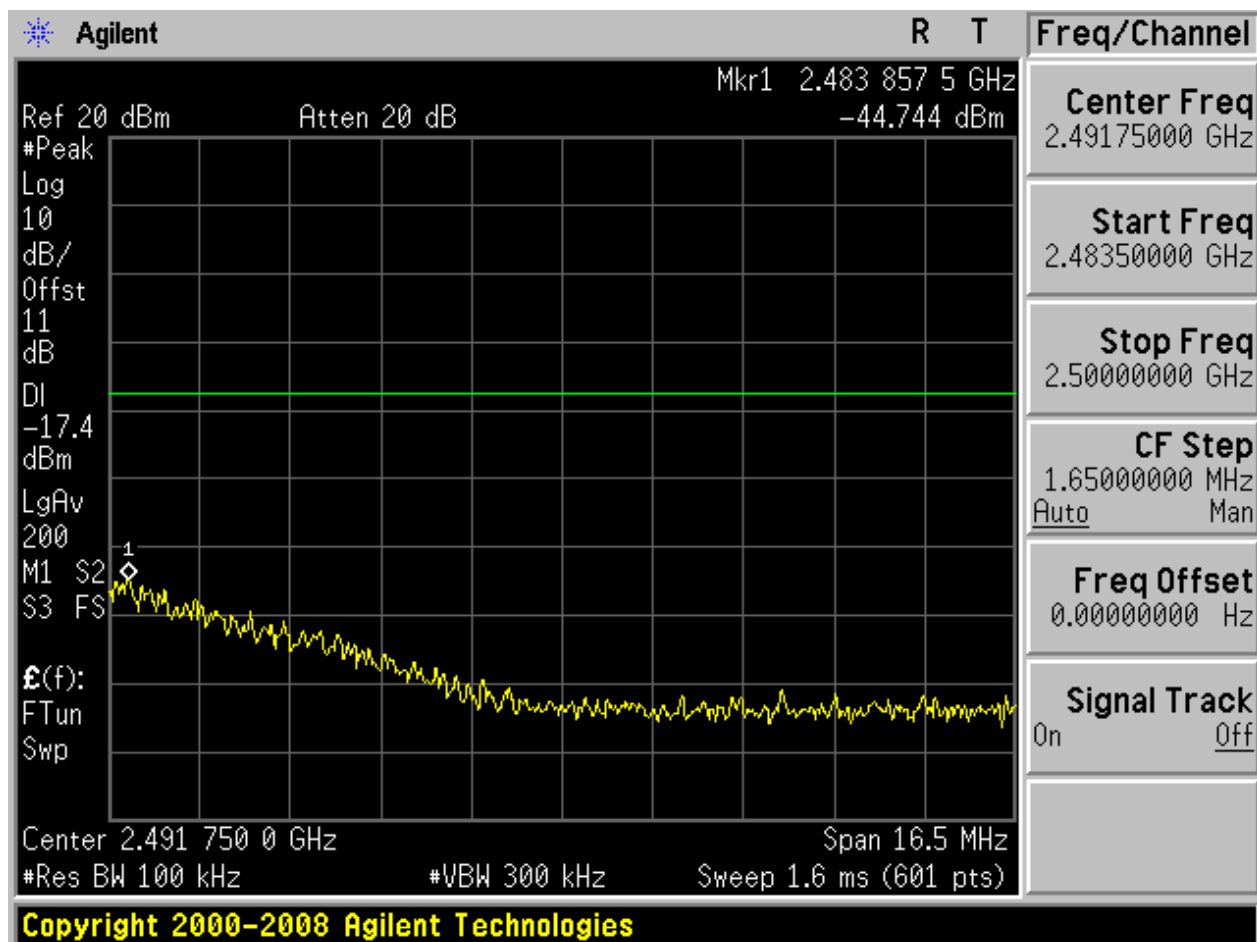
Puw:

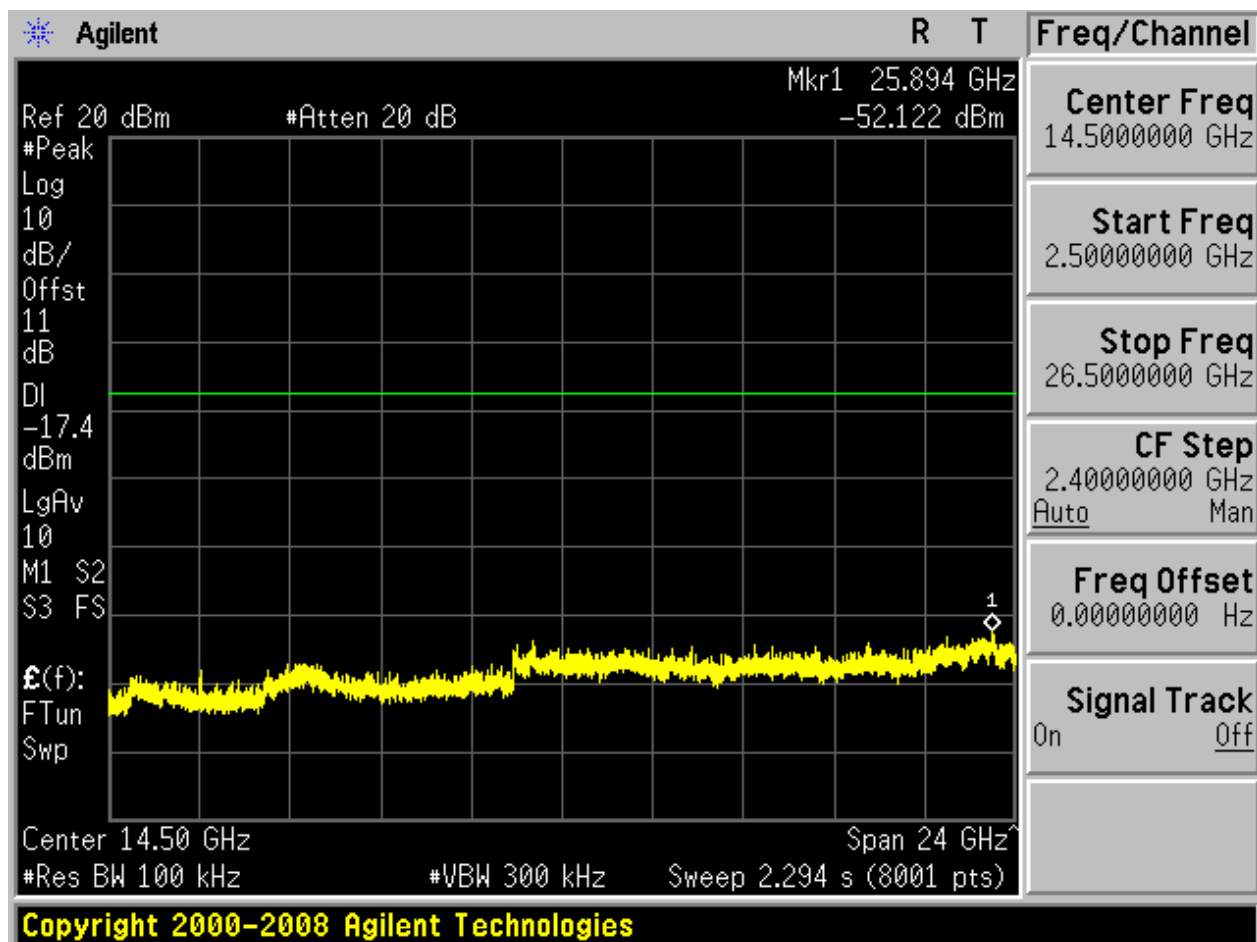






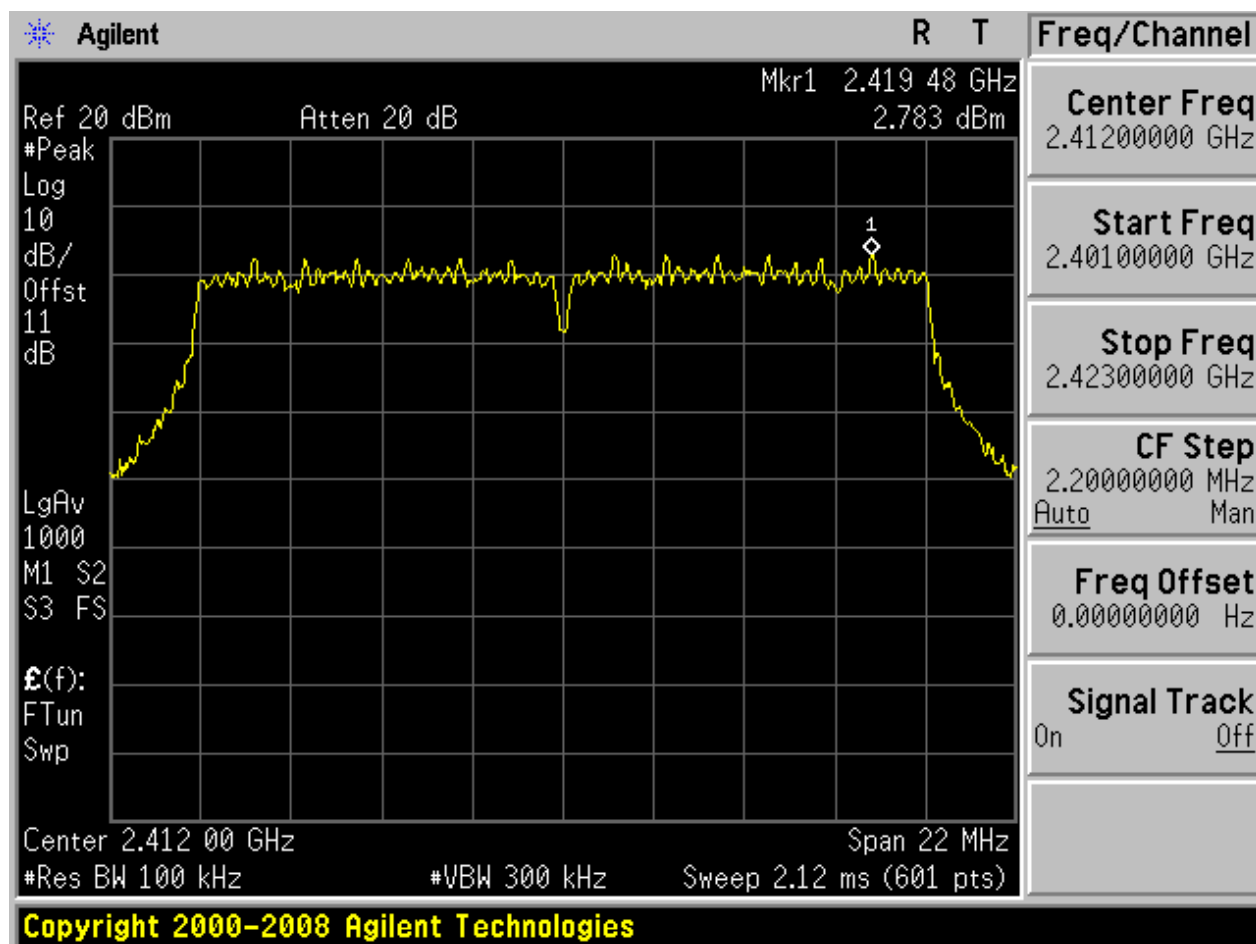




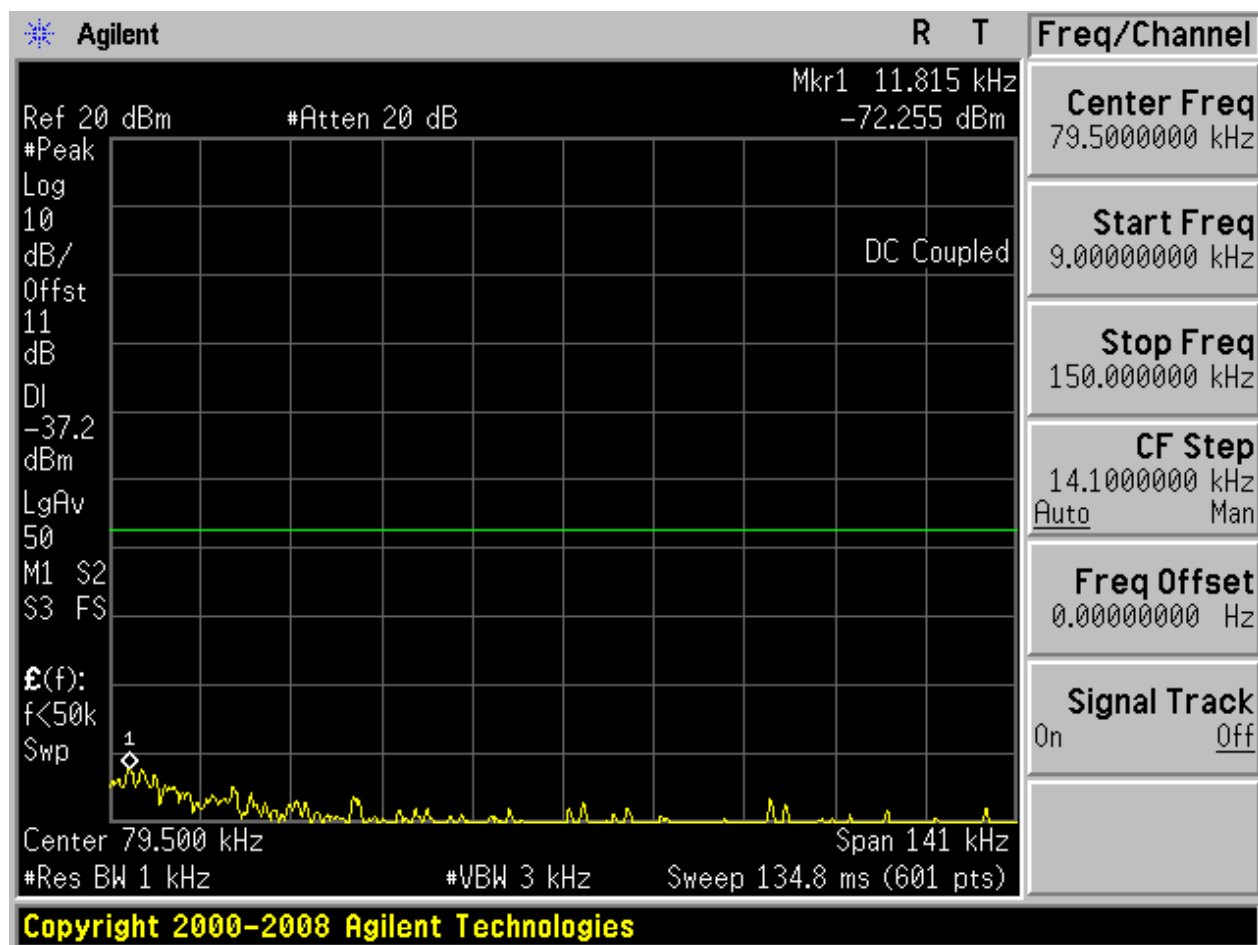


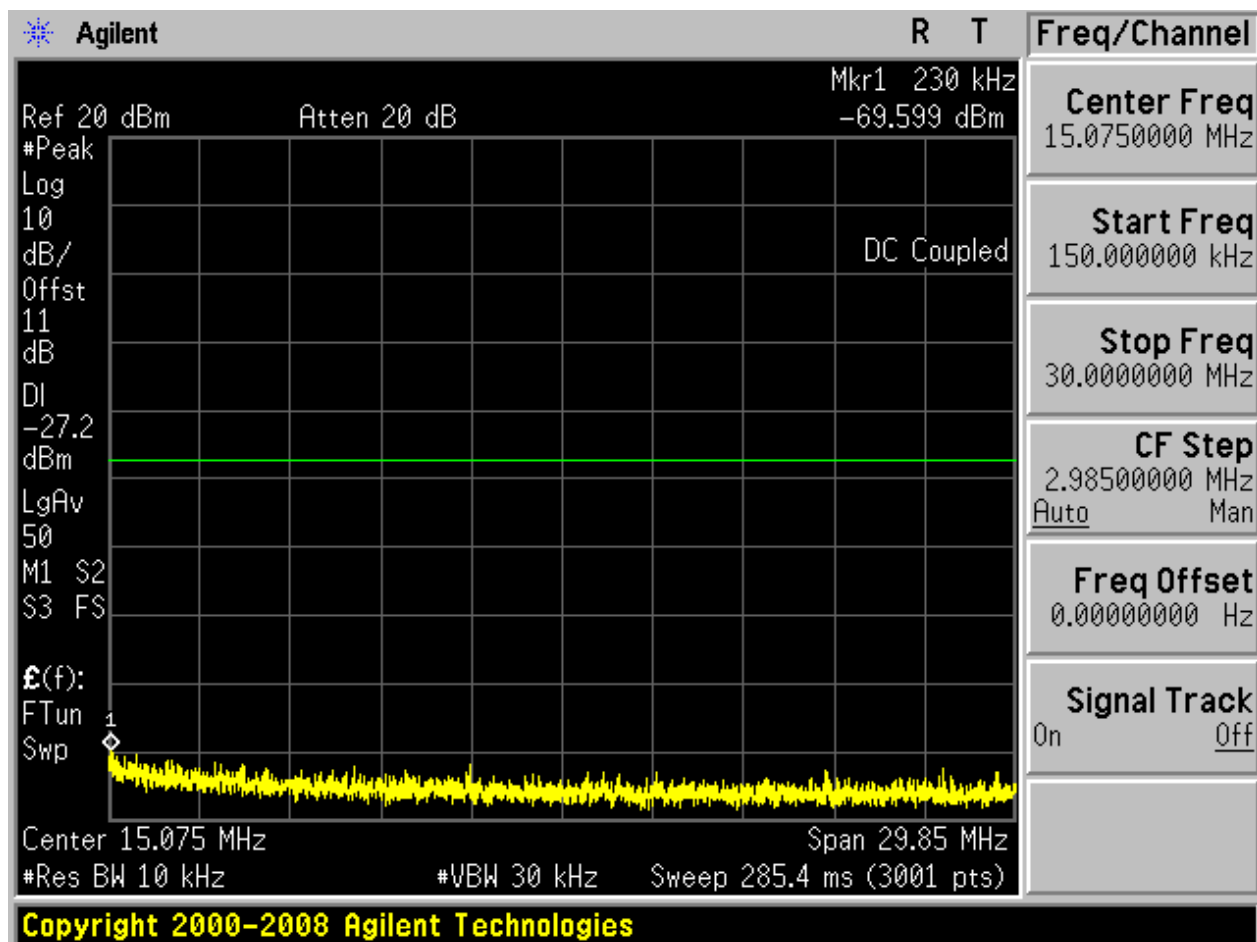
2.7 11N20_L

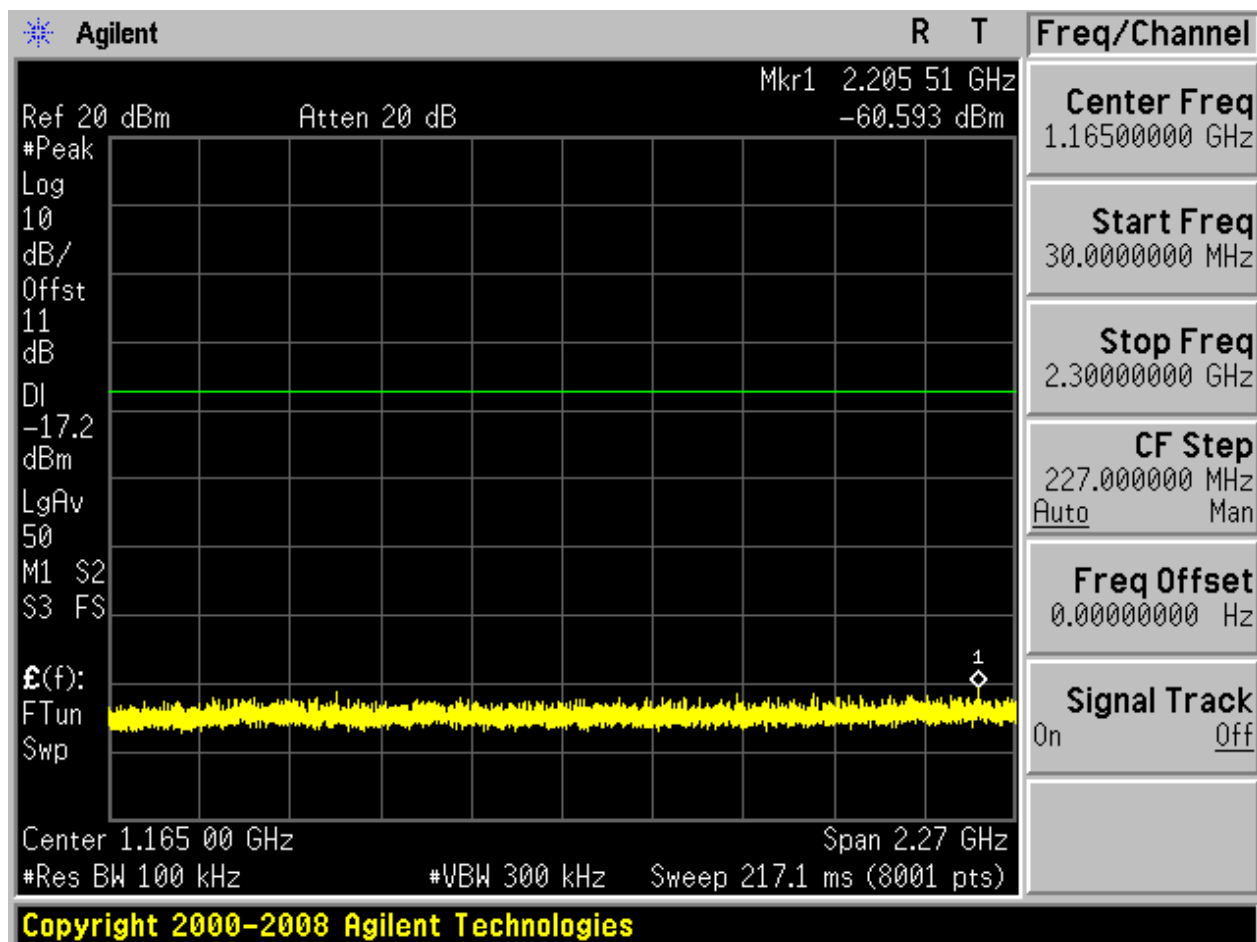
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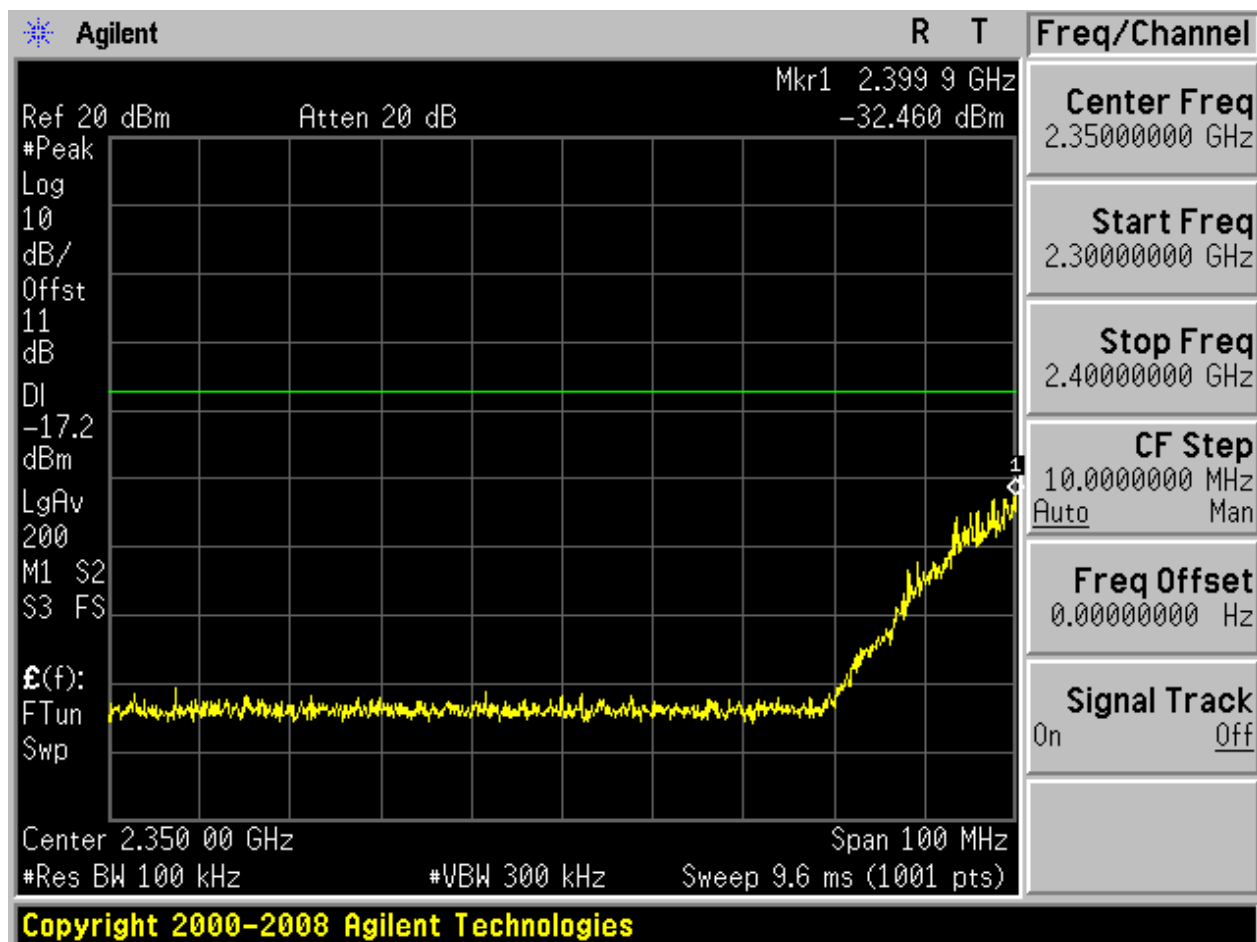


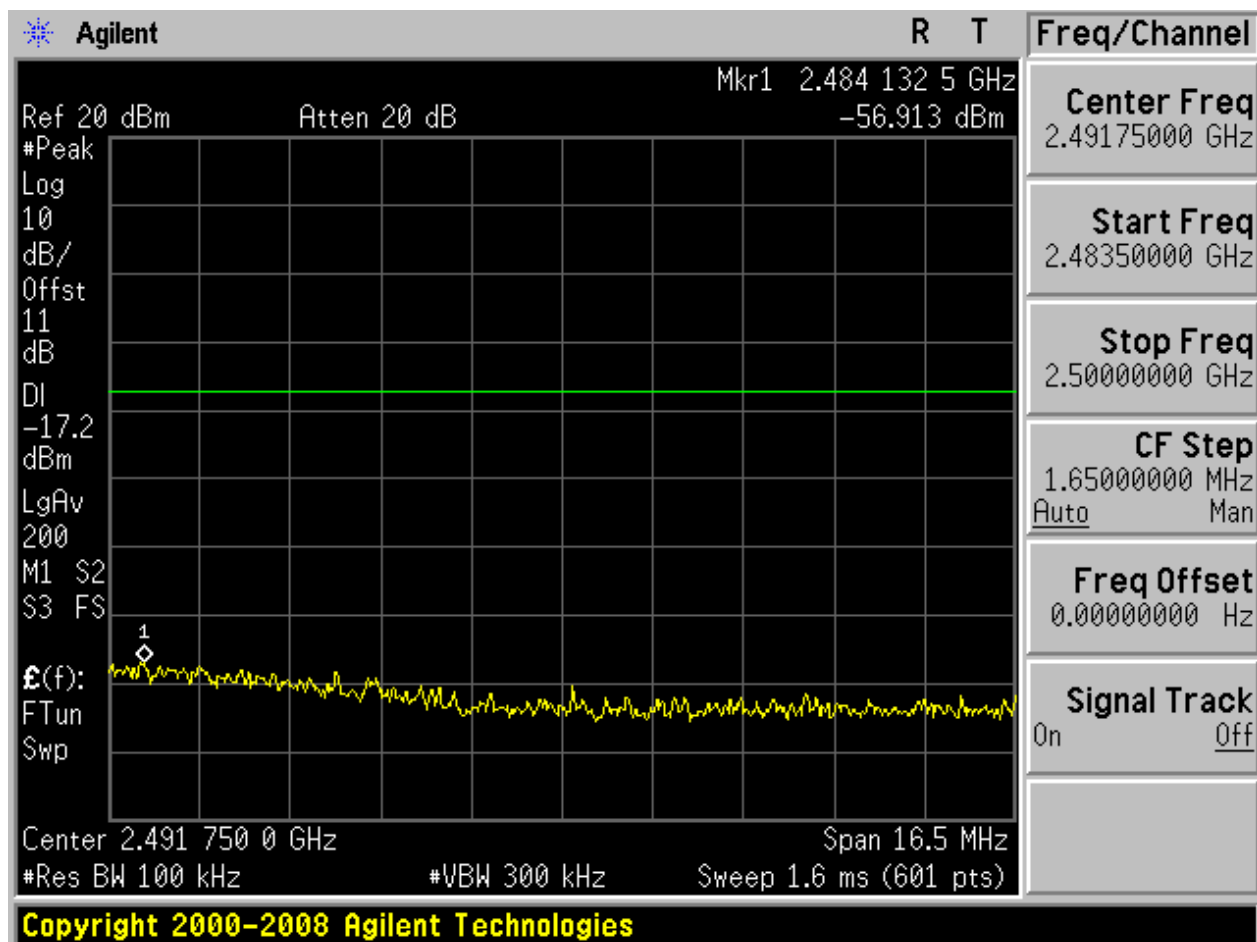
Puw:

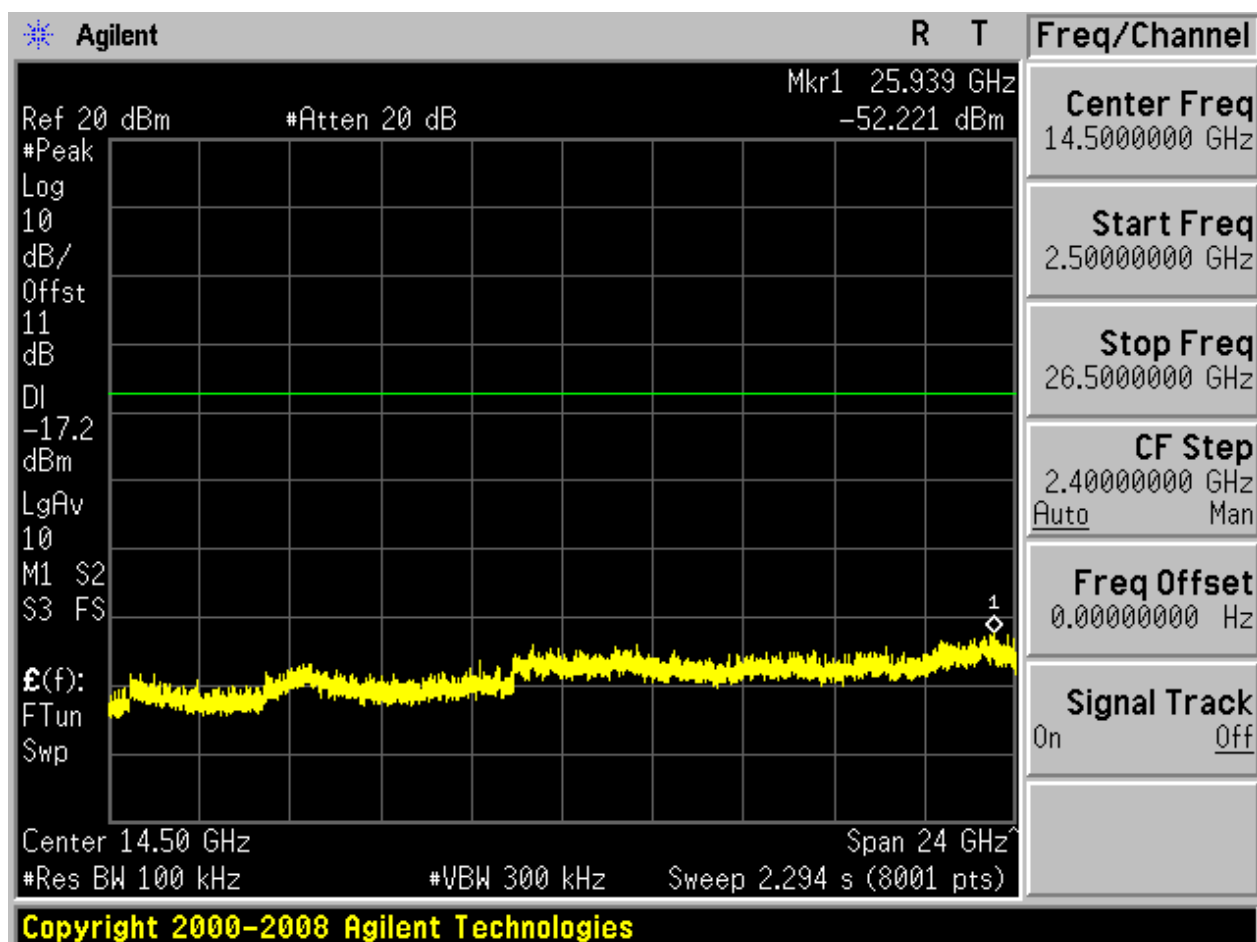






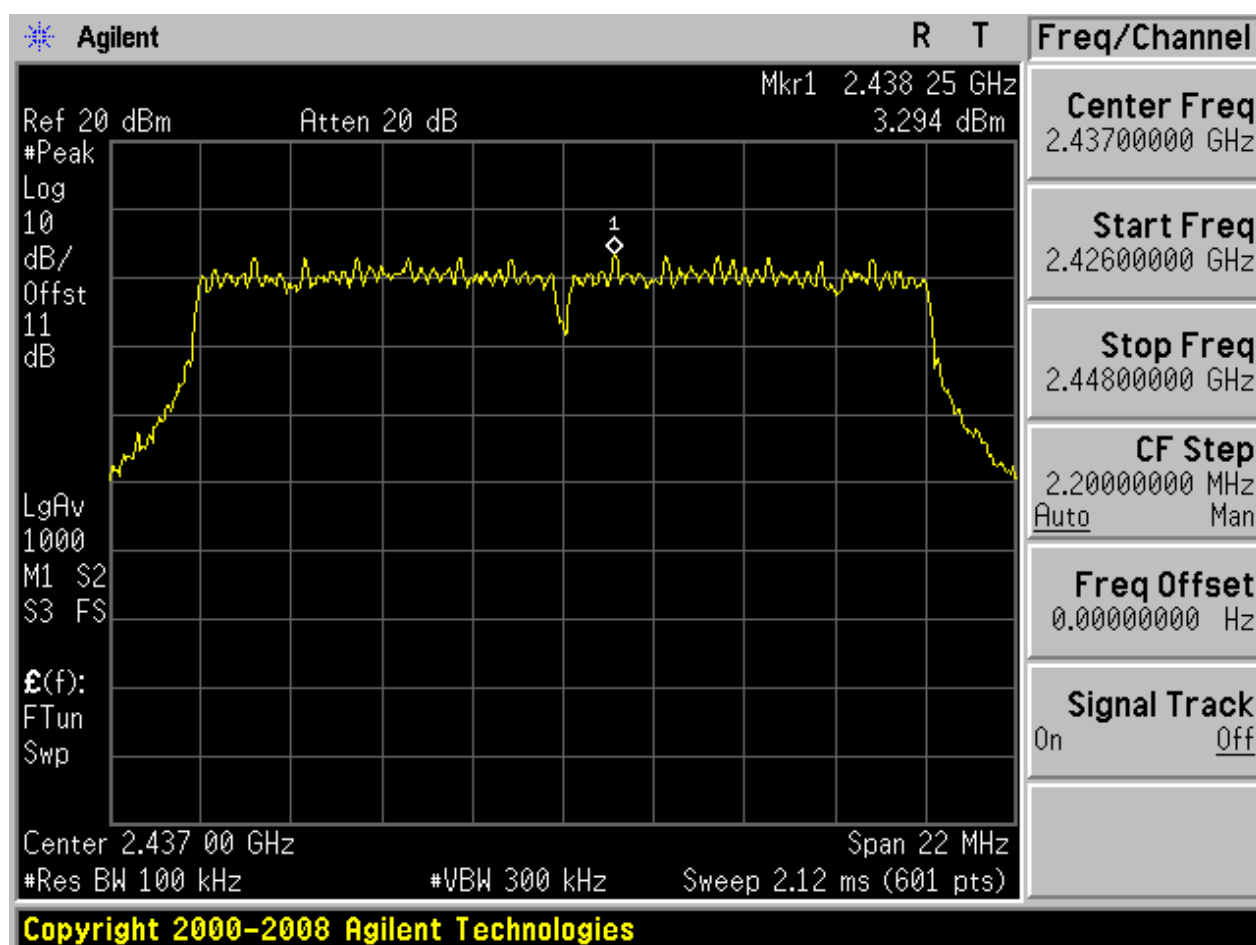




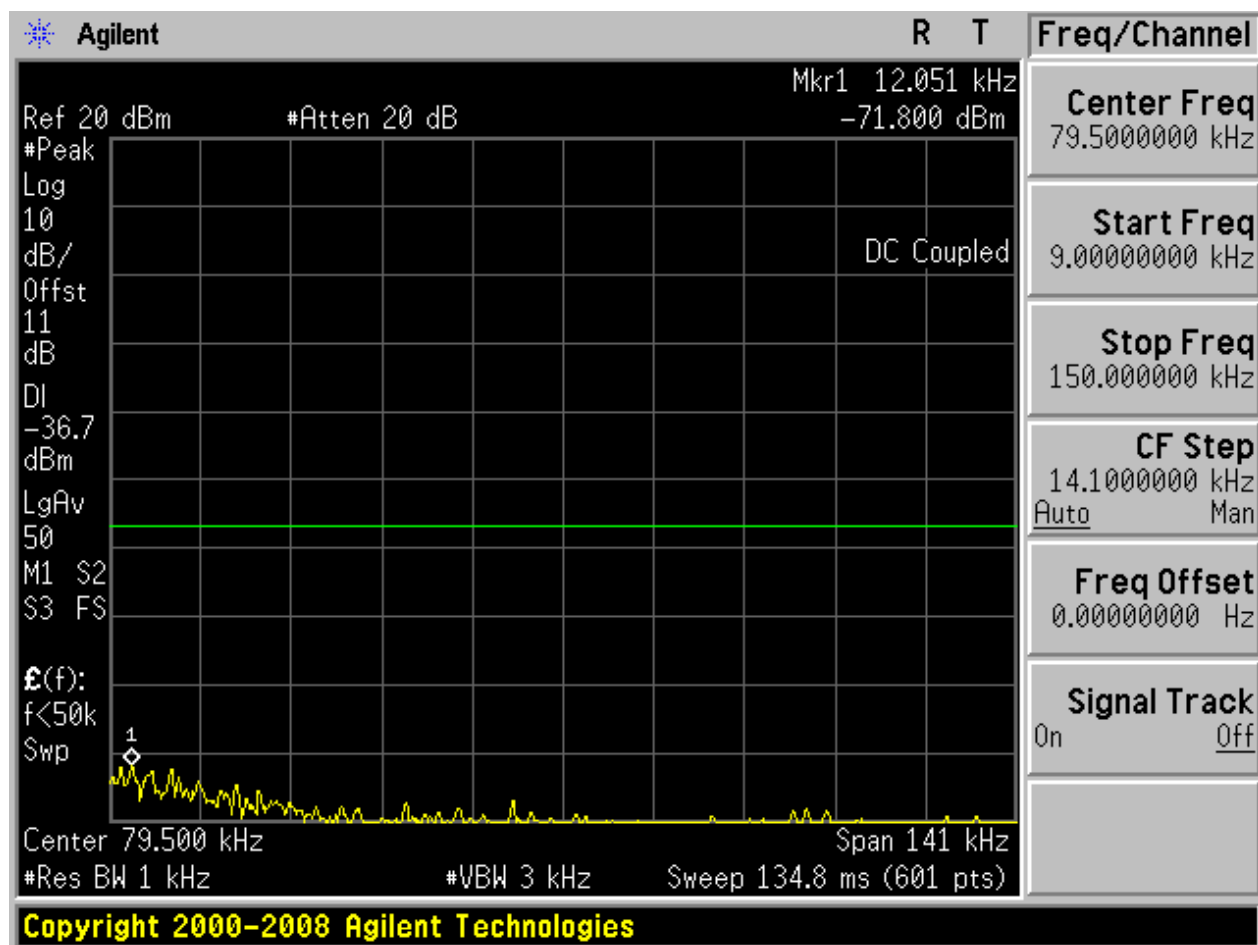


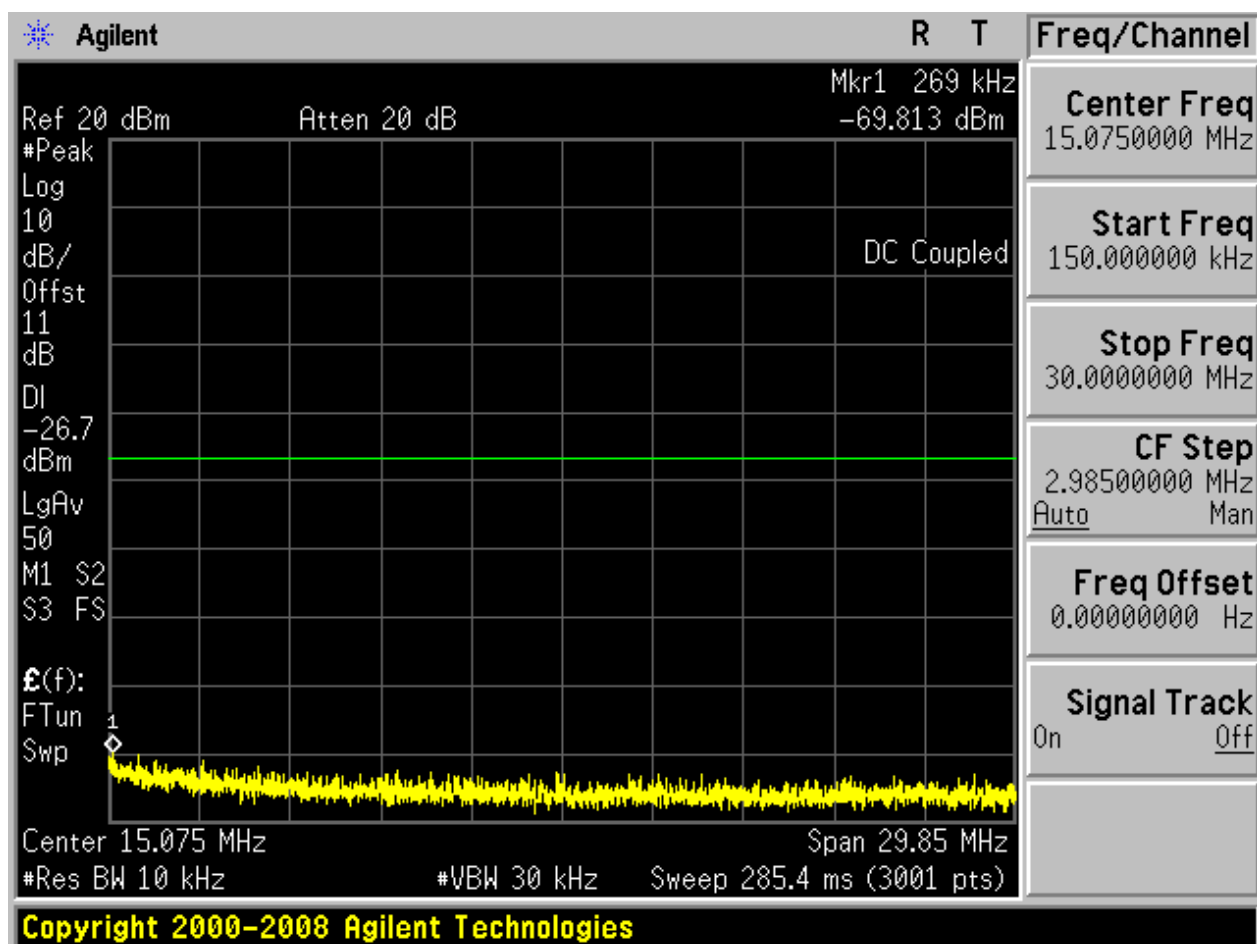
2.8 11N20_M

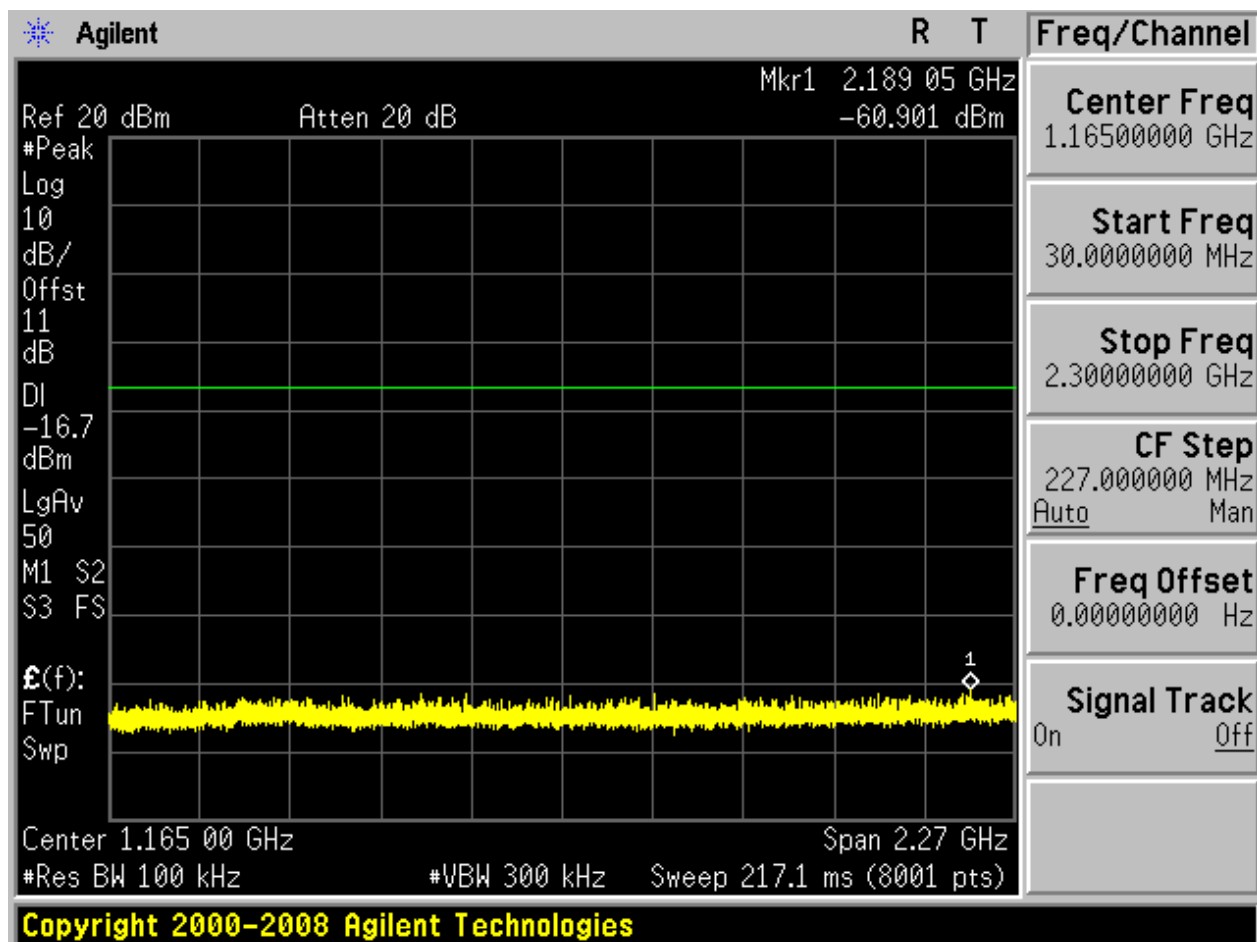
Pref:

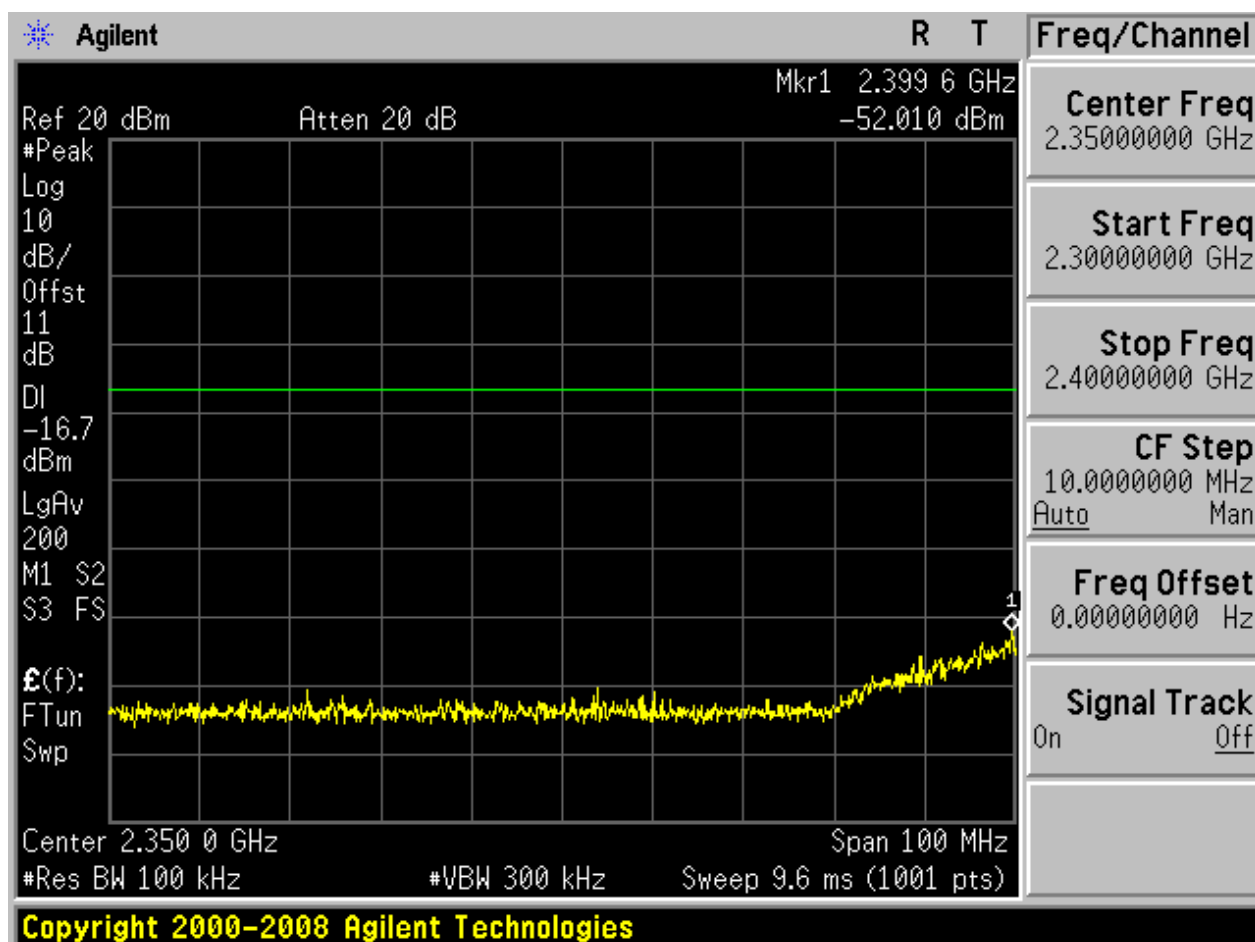


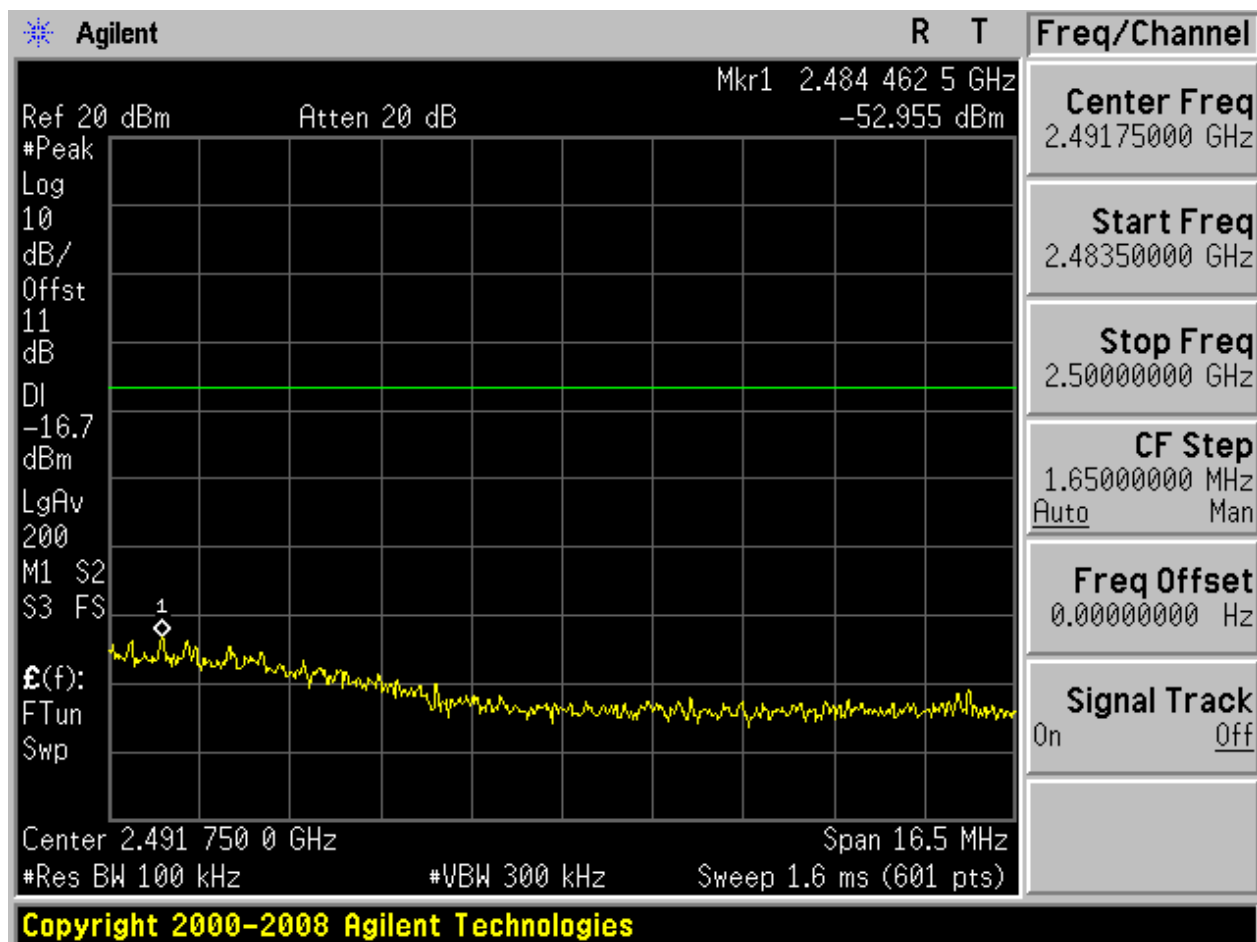
Puw:

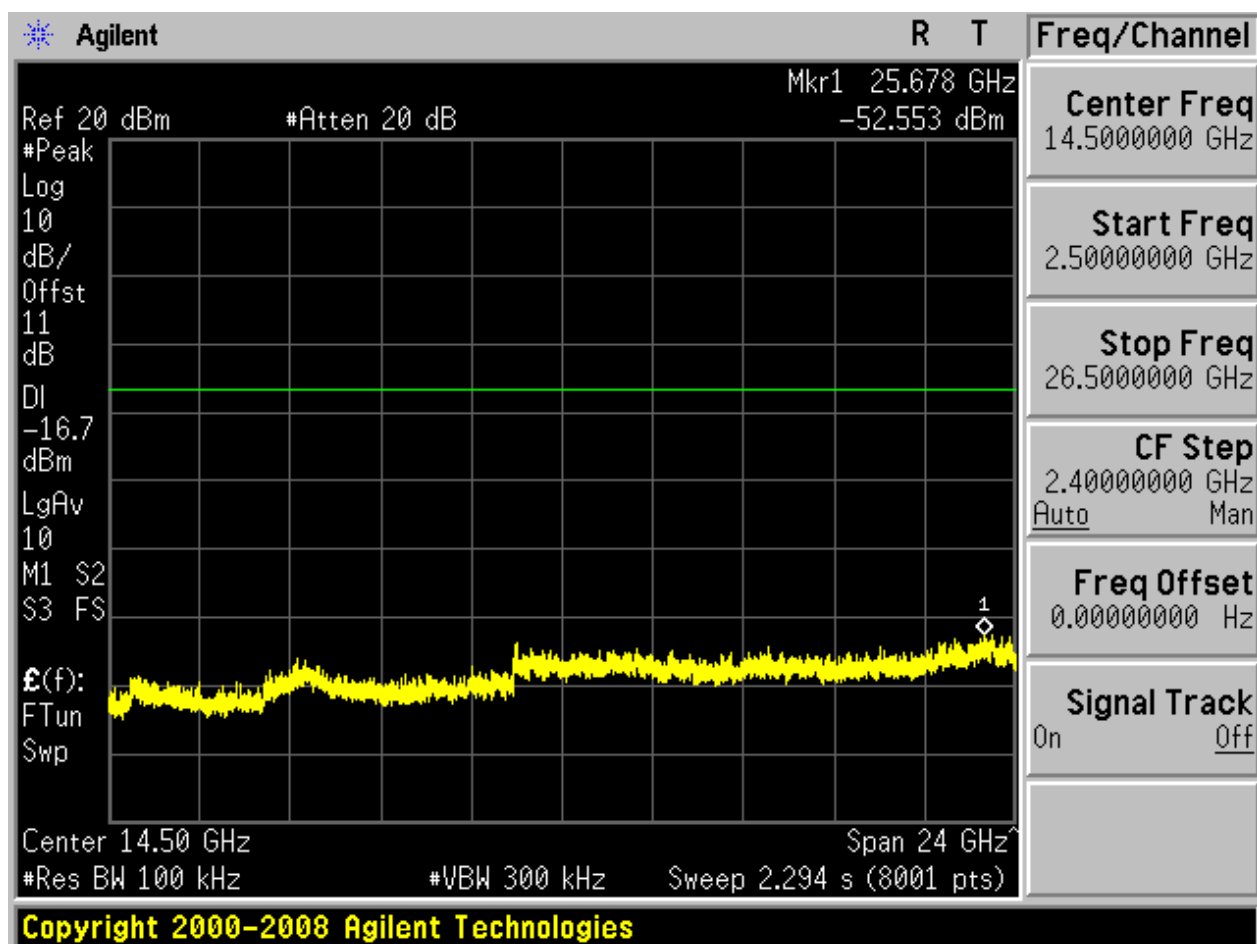






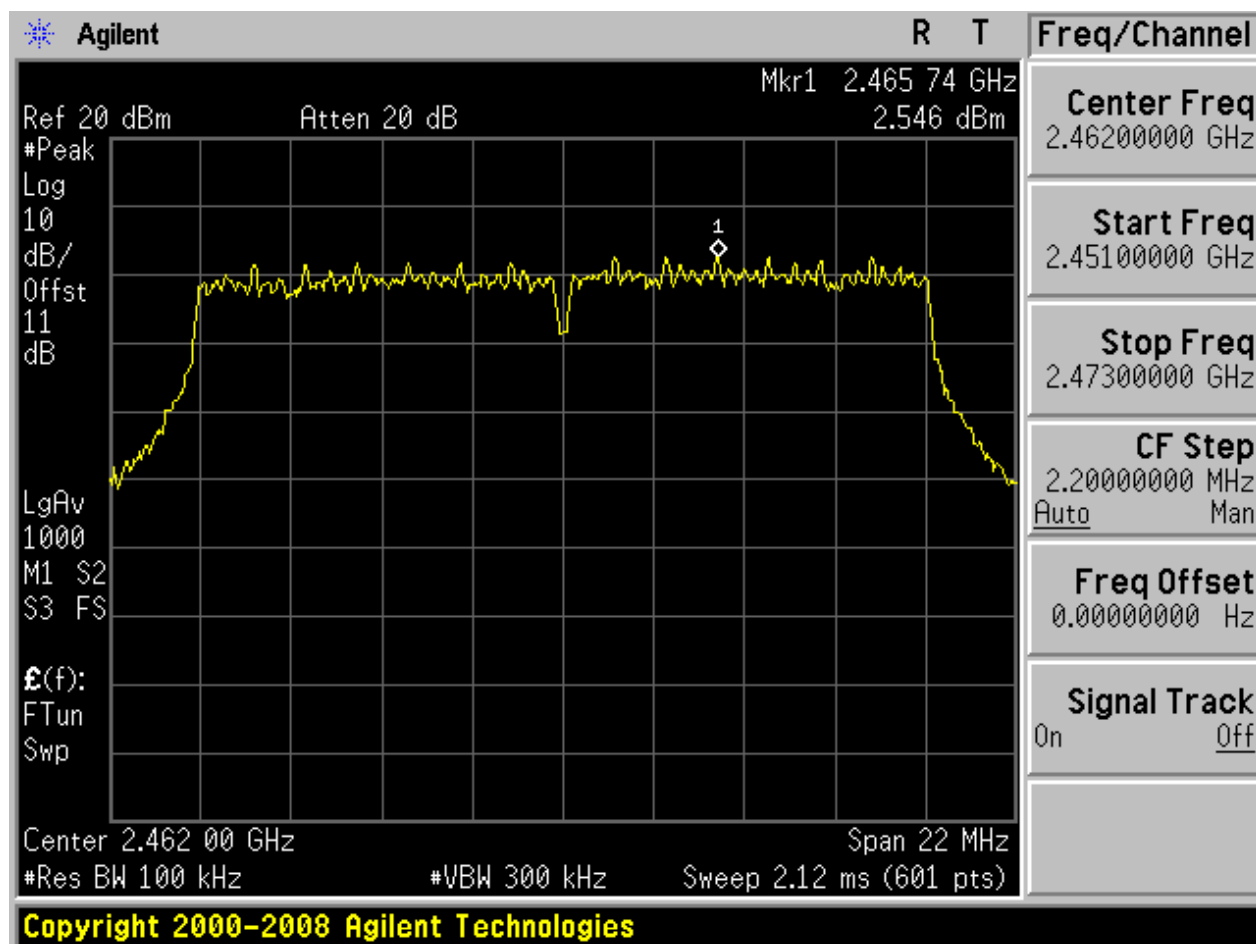




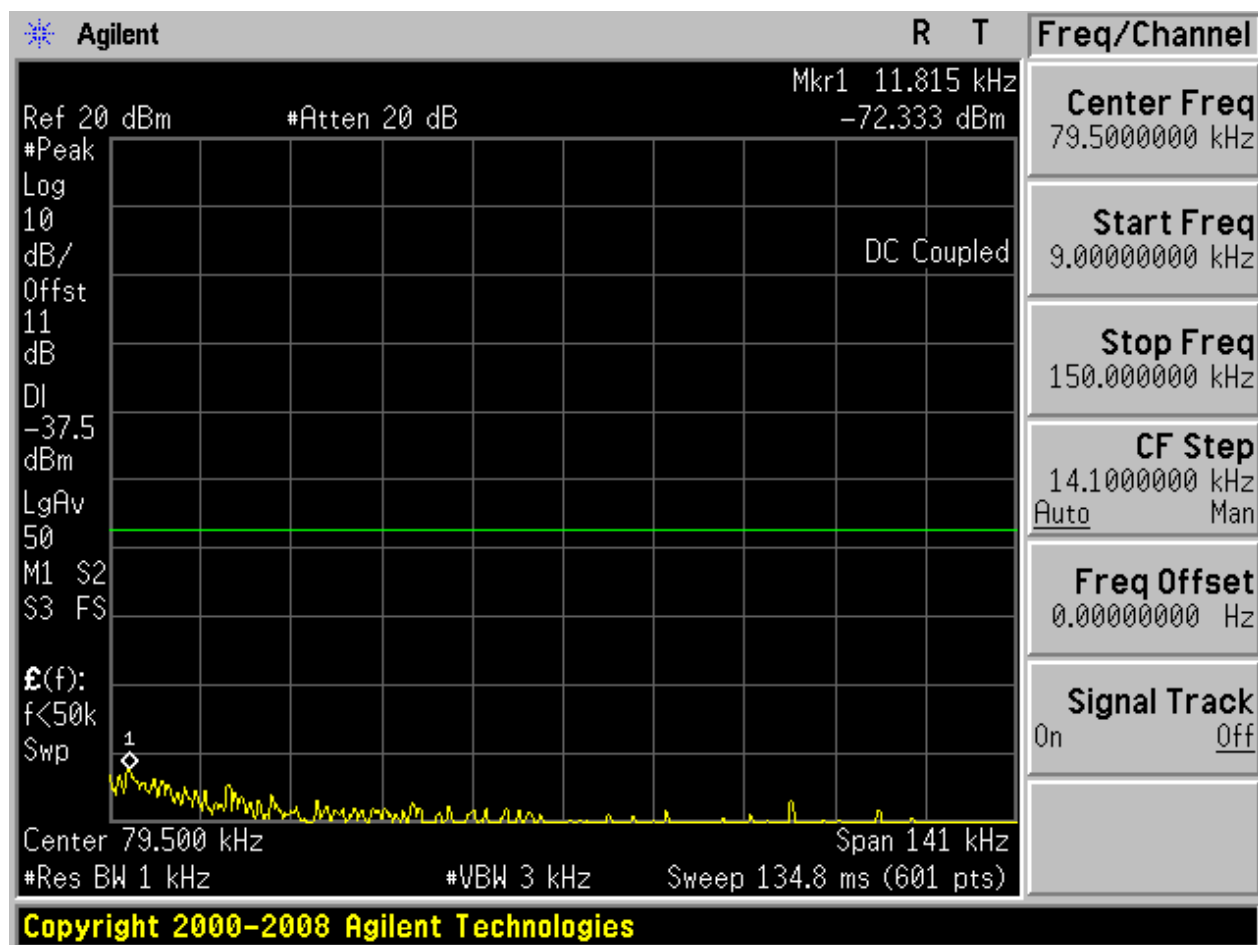


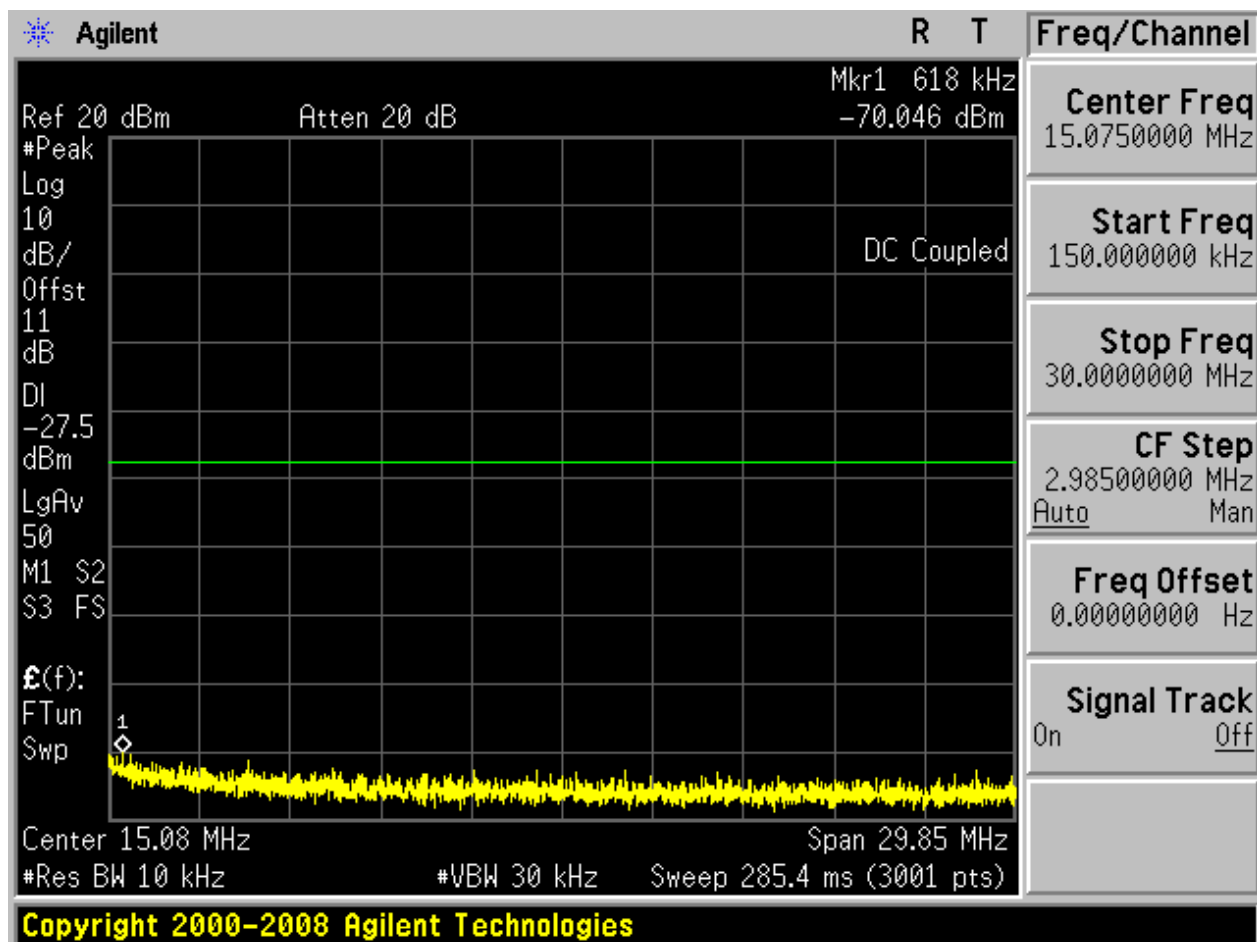
2.9 11N20_H

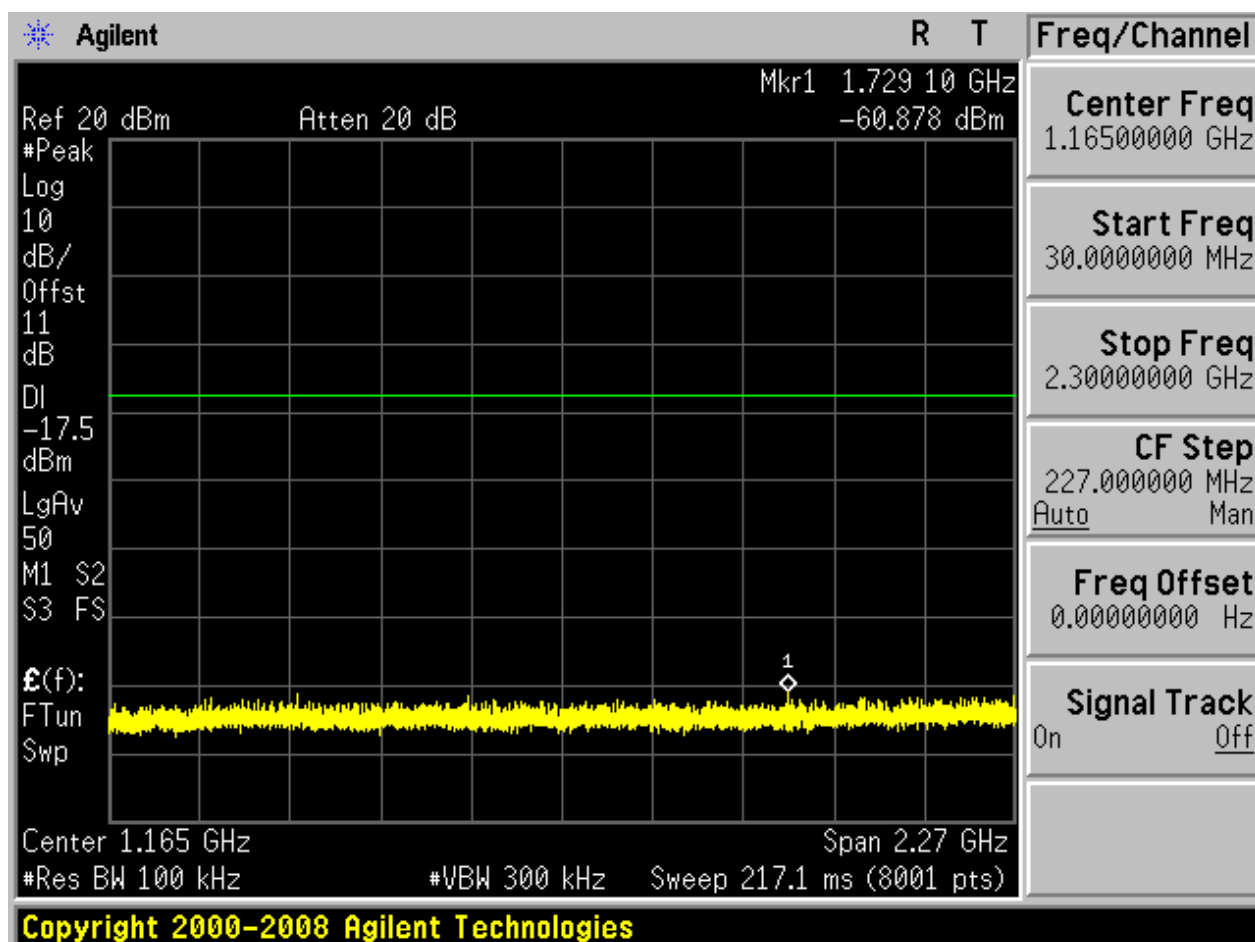
Pref:

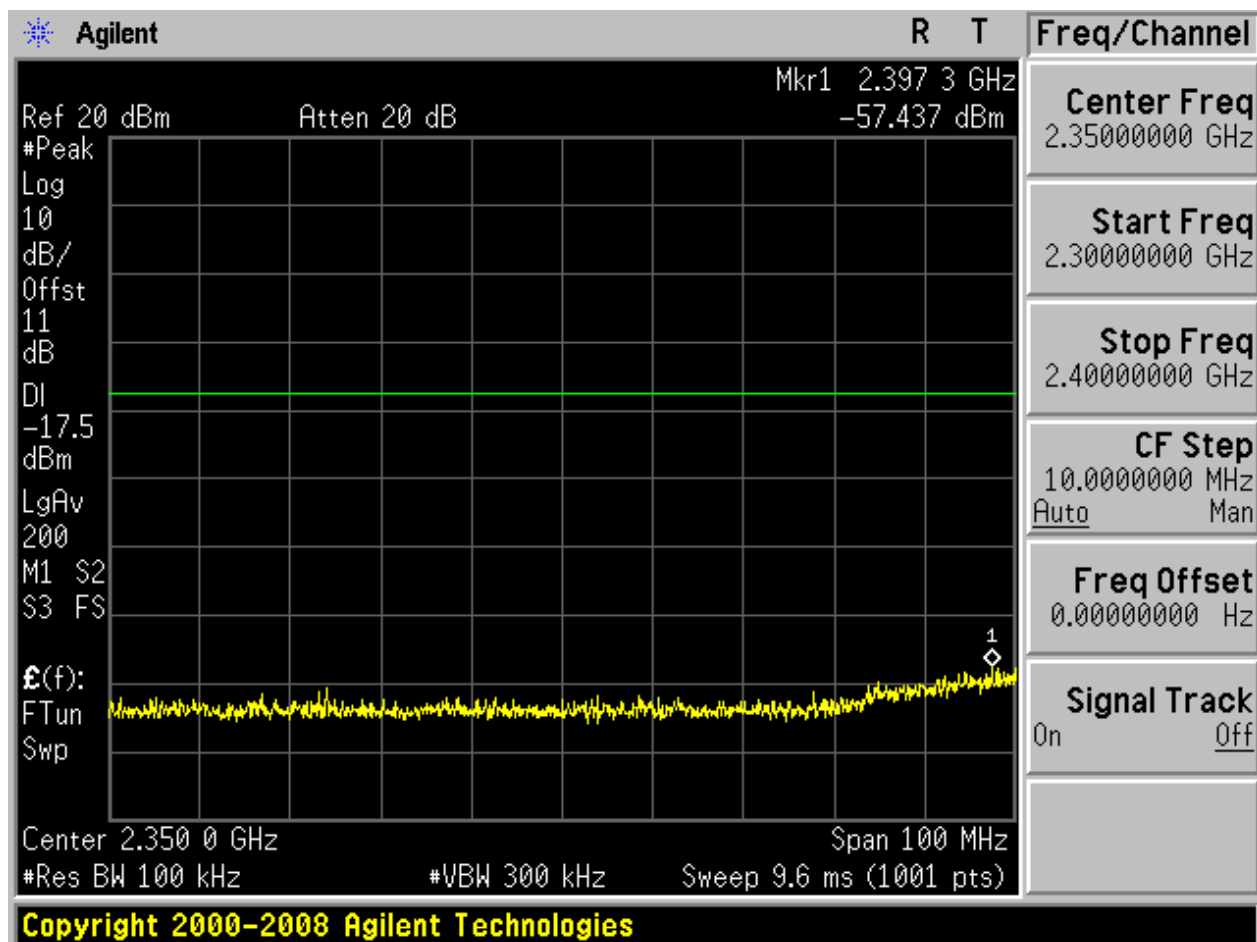


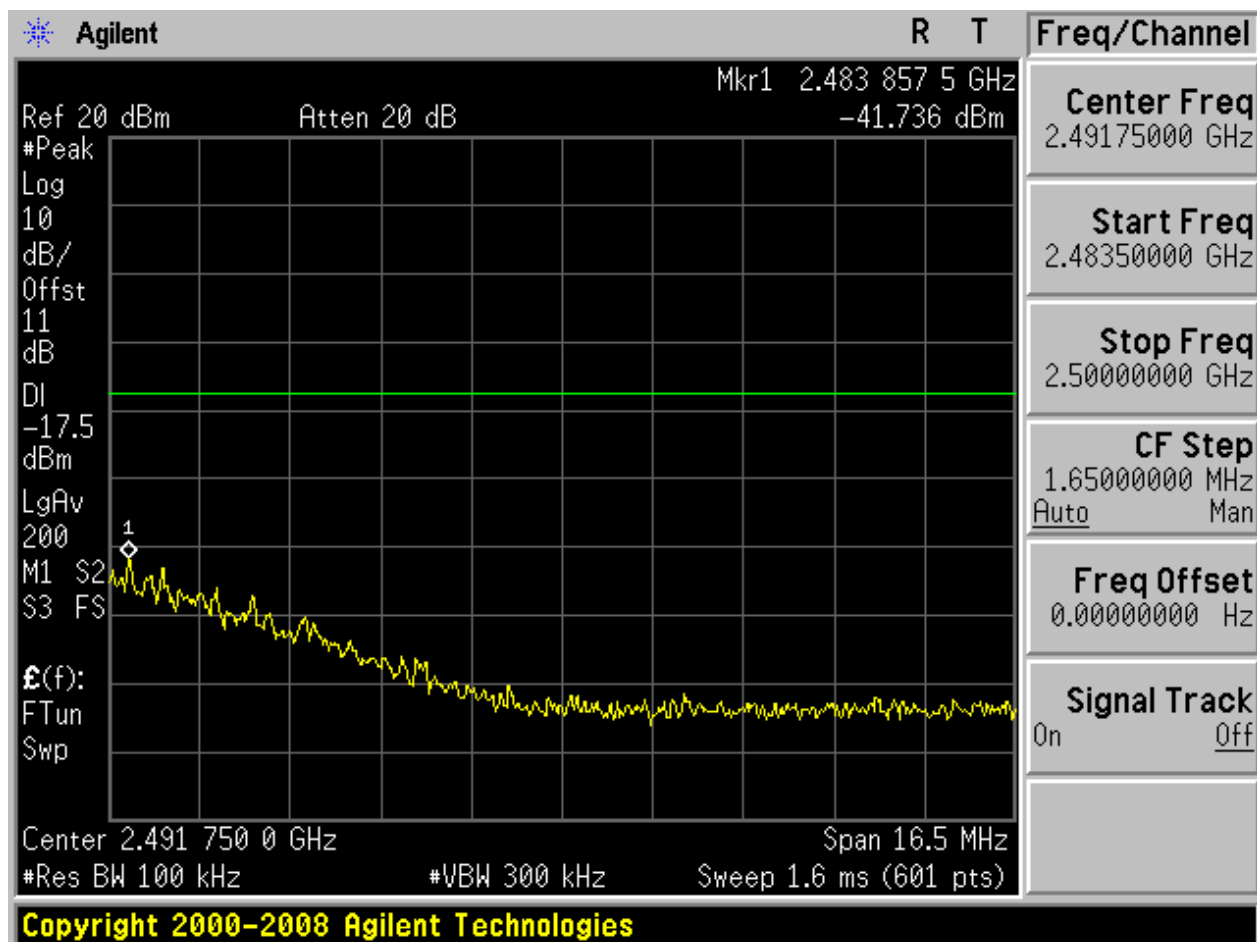
Puw:

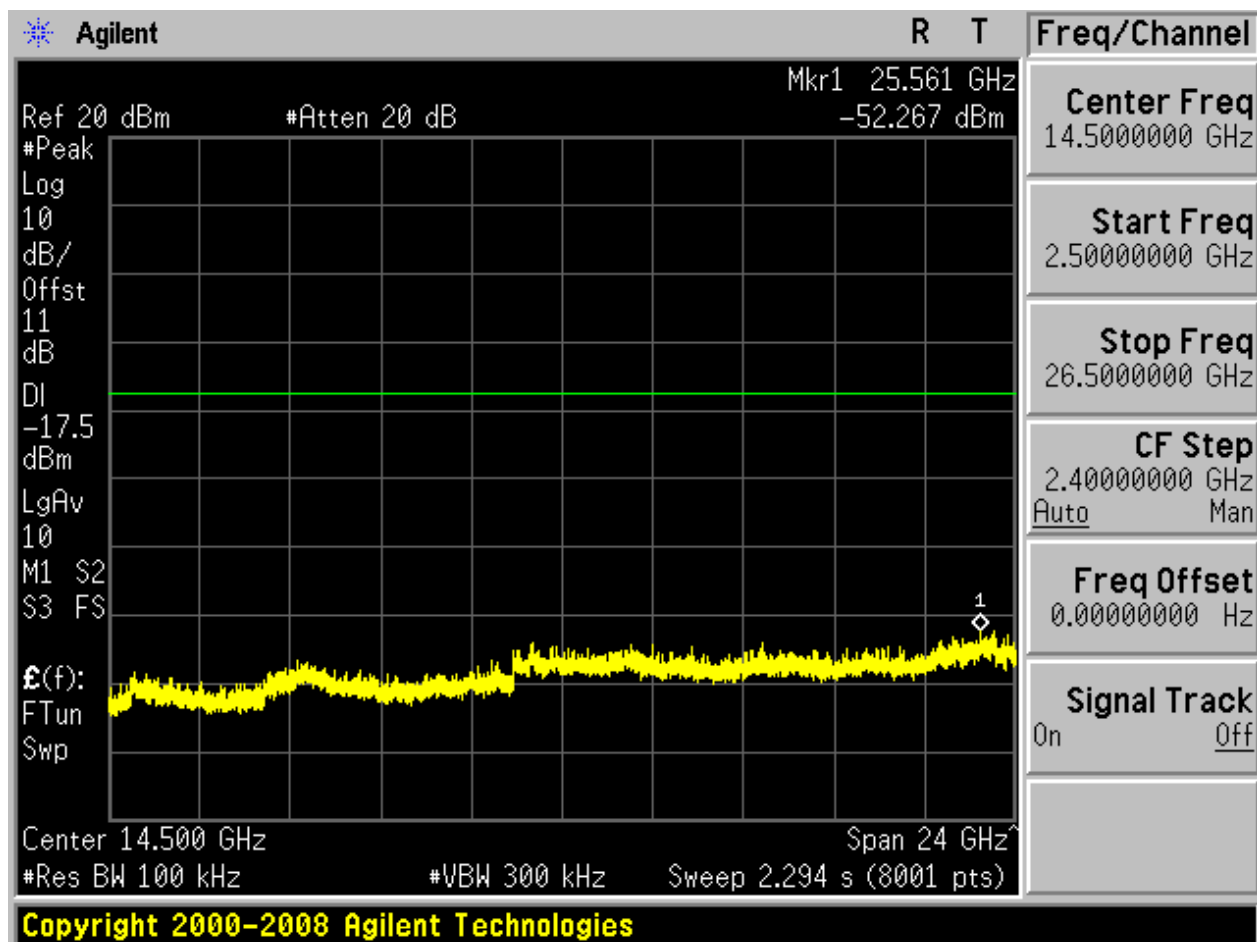










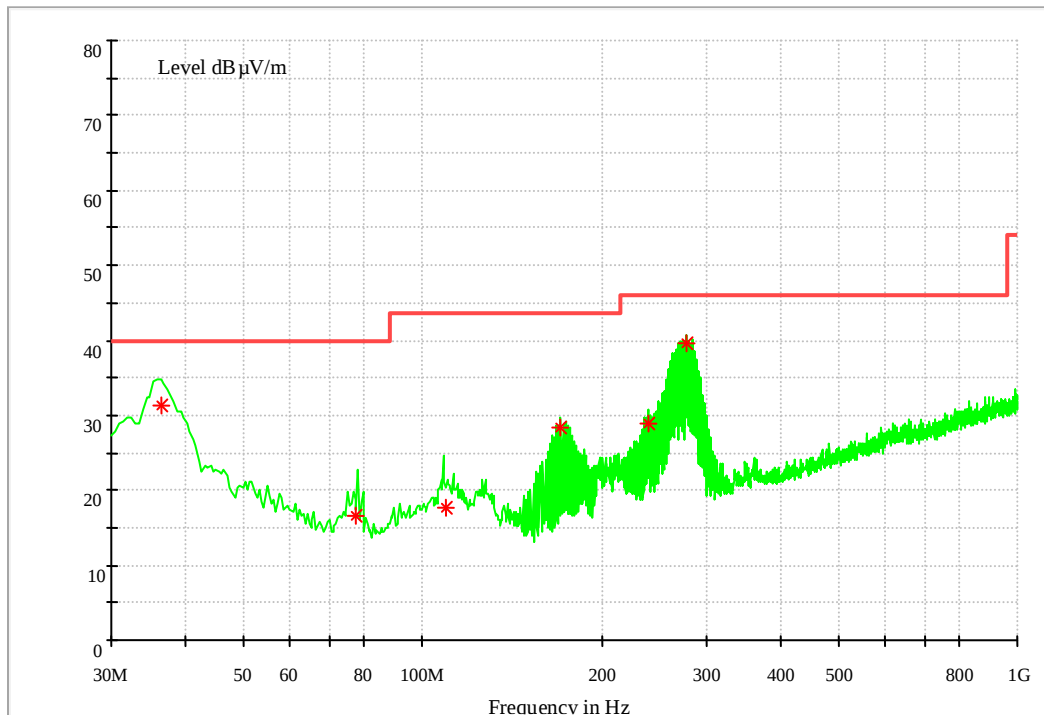




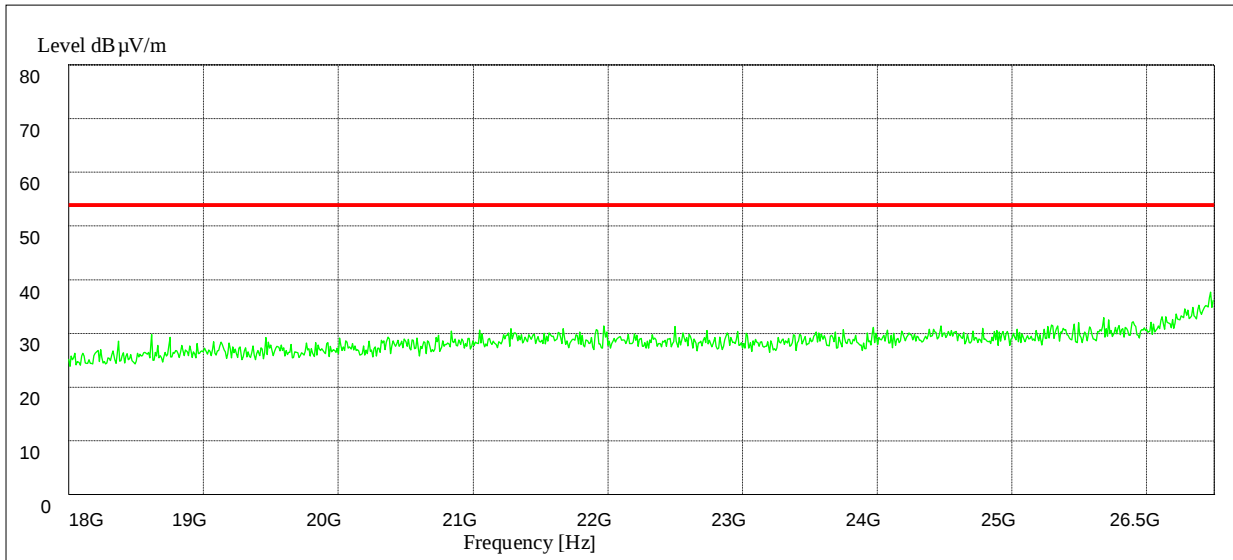
Appendix F: Radiated Spurious Emission & Spurious in Restricted Band

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
36.314600	31.2	12.4	40.0	8.8	100.0	324.0	VERTICAL
77.009400	16.5	8.7	40.0	23.5	240.0	125.0	HORIZONTAL
109.375200	17.8	12.7	43.5	25.7	100.0	89.0	VERTICAL
171.061800	28.4	10.6	43.5	15.1	189.0	99.0	HORIZONTAL
239.243800	28.9	14.2	46.0	17.1	100.0	247.0	HORIZONTAL
278.354800	39.7	15.4	46.0	6.3	100.0	58.0	HORIZONTAL

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

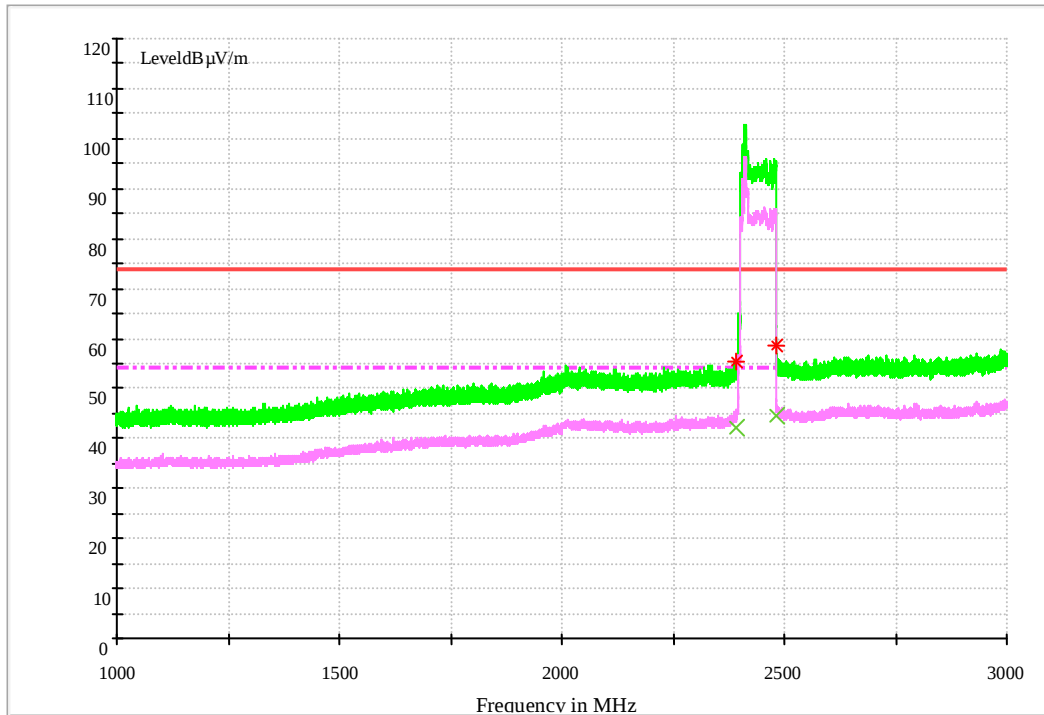
Note: No peak found in pre- test.

Part 3: Testing Range of “1GHz to3GHz”

- Note 1: The testing range of “1GHz to 3 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 L



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

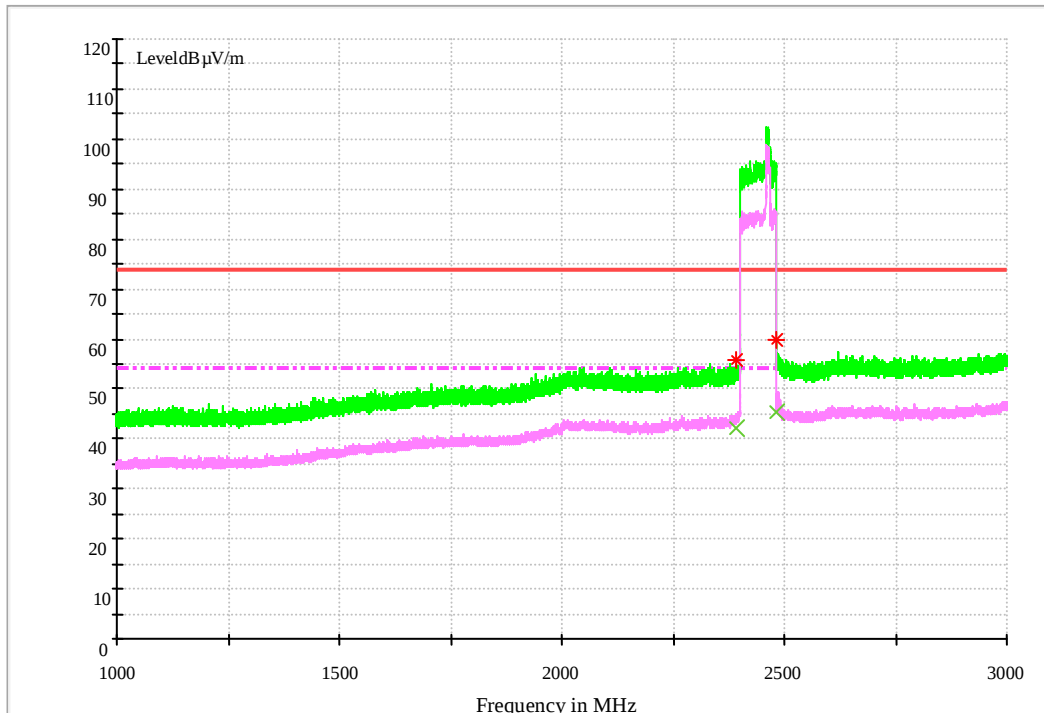
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	55.5	38.3	74.0	18.5	153.0	58.0	HORIZONTAL
2483.500000	58.8	40.7	74.0	15.2	100.0	9.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	42.3	38.3	54.0	11.7	100.0	174.0	VERTICAL
2483.500000	44.7	40.7	54.0	9.3	100.0	324.0	HORIZONTAL

Channel H



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

MEASUREMENT RESULT: PK Detector

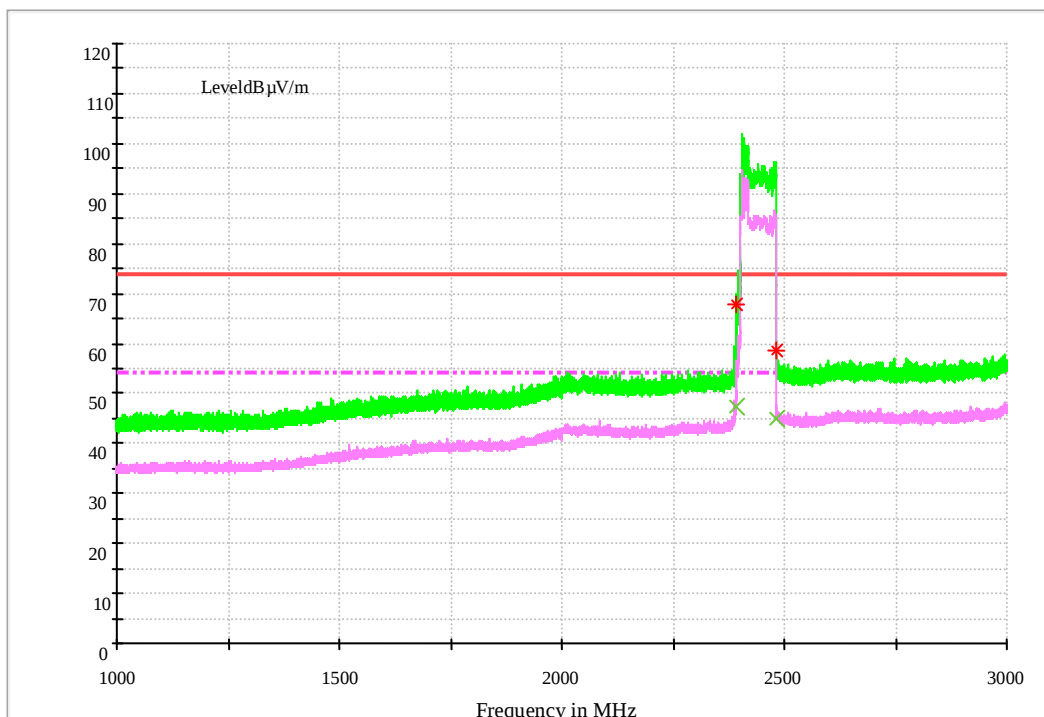
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	55.9	38.3	74.0	18.1	100.0	0.0	HORIZONTAL
2483.500000	58.6	40.7	74.0	15.4	100.0	130.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	42.1	38.3	54.0	11.9	100.0	269.0	HORIZONTAL
2483.500000	44.7	40.7	54.0	9.3	100.0	320.0	VERTICAL

Test Mode: 11G

Channel L



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

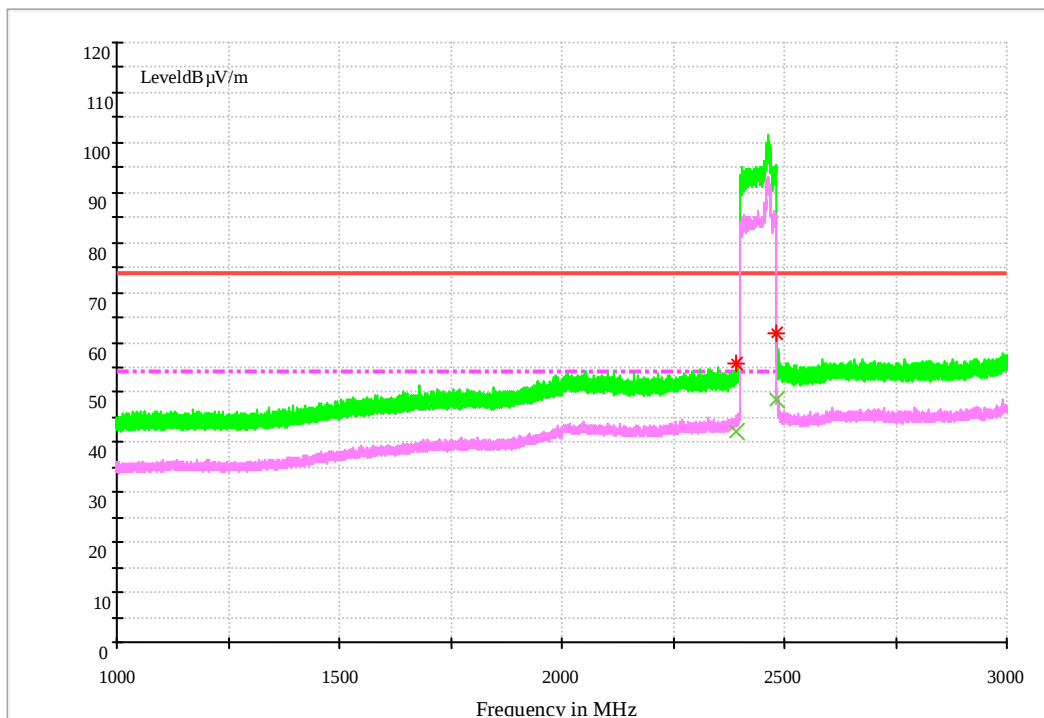
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	67.9	38.3	74.0	6.1	100.0	230.0	HORIZONTAL
2483.500000	58.7	40.7	74.0	15.3	113.0	131.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	47.5	38.3	54.0	6.5	100.0	218.0	HORIZONTAL
2483.500000	44.8	40.7	54.0	9.2	100.0	118.0	HORIZONTAL

Channel H



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

MEASUREMENT RESULT: PK Detector

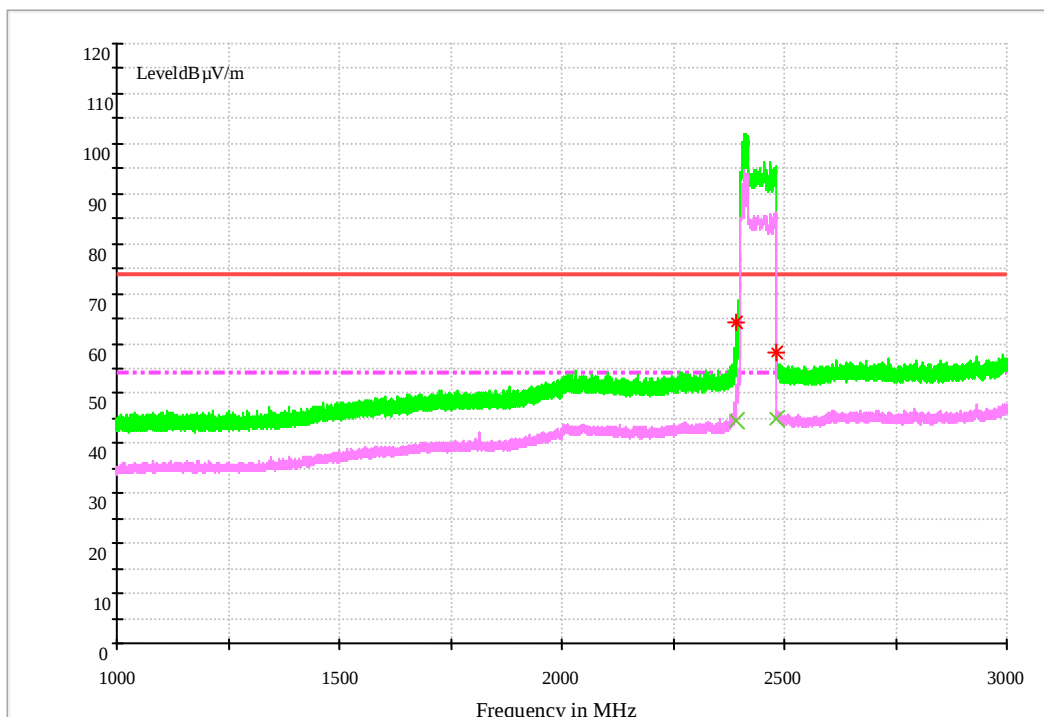
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	55.6	38.3	74.0	18.4	121.0	24.0	HORIZONTAL
2483.500000	61.9	40.7	74.0	12.1	100.0	201.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	42.1	38.3	54.0	11.9	100.0	91.0	VERTICAL
2483.500000	48.5	40.7	54.0	5.5	100.0	201.0	HORIZONTAL

Test Mode: 11N

Channel L



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

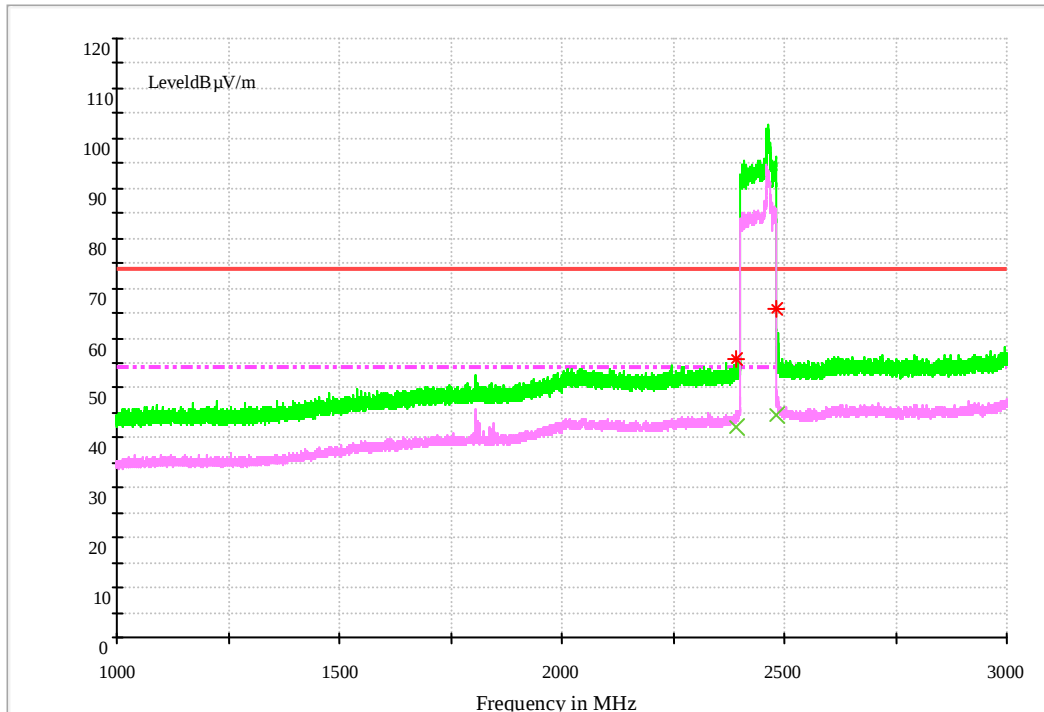
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	64.3	38.3	74.0	9.7	100.0	166.0	HORIZONTAL
2483.500000	58.3	40.7	74.0	15.7	100.0	0.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	44.4	38.3	54.0	9.6	100.0	185.0	HORIZONTAL
2483.500000	44.9	40.7	54.0	9.1	100.0	89.0	VERTICAL

Channel H



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

MEASUREMENT RESULT: PK Detector

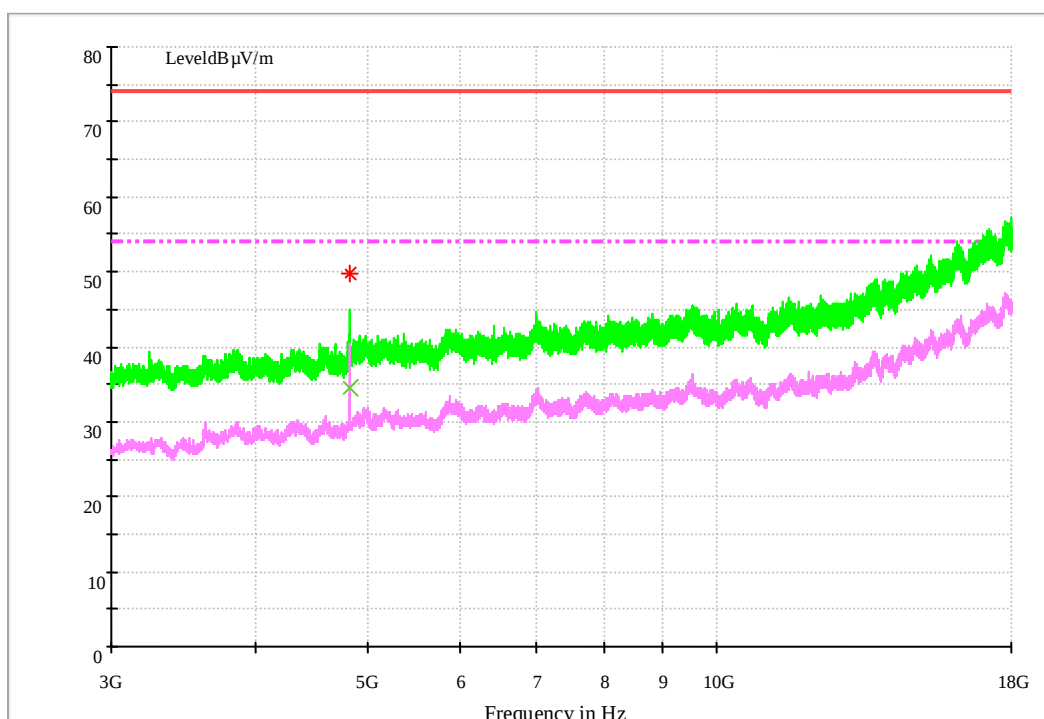
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	56.0	38.3	74.0	18.0	100.0	54.0	HORIZONTAL
2483.500000	65.7	40.7	74.0	8.3	100.0	250.0	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	42.1	38.3	54.0	11.9	100.0	306.0	VERTICAL
2483.500000	44.7	40.7	54.0	9.3	100.0	354.0	VERTICAL

Part 4: Testing Range of “3GHz to 18 GHz”

- Note 1: The test results and plot for testing range of “3GHz 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 “3GHz to 18 GHz” is for checking radiated emissions located in restricted bands far away from the EUT operating bands.
- Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).



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

MEASUREMENT RESULT: PK Detector

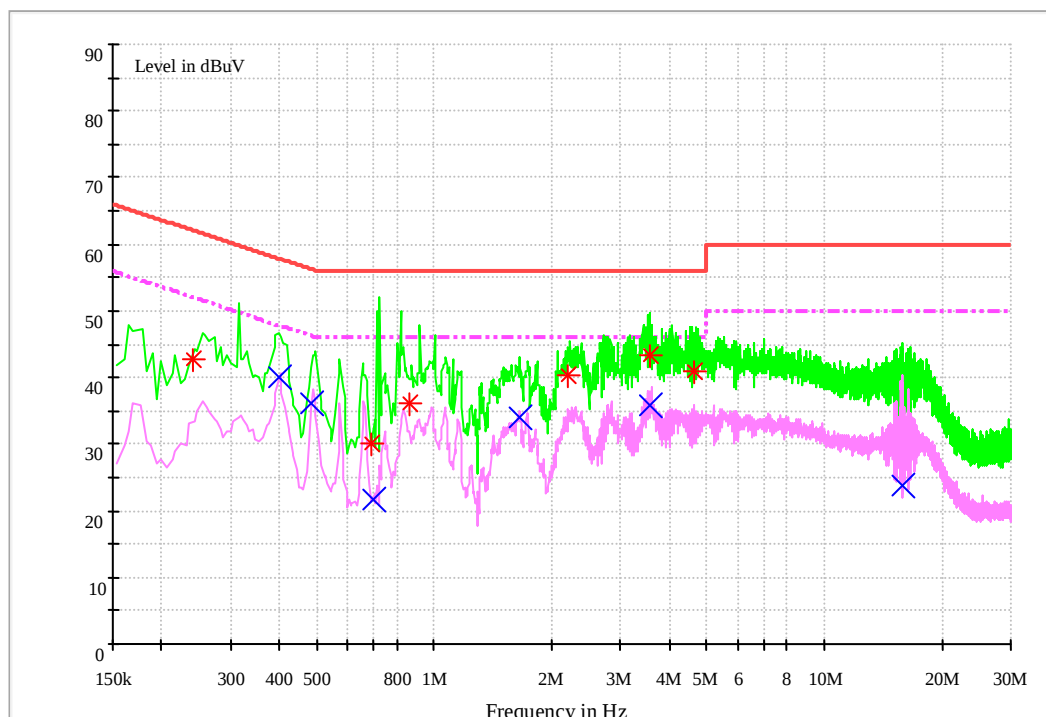
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height cm	Azimuth deg	Polarization
4824.045333	49.9	0.9	74.0	24.1	100.0	197.0	VERTICAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height cm	Azimuth deg	Polarization
4823.900667	34.5	0.9	54.0	19.5	100.0	242.0	VERTICAL

Appendix G: Conducted Emission at Power Port

Channel 6



MEASUREMENT RESULT: QP Detector

Frequency	Level	Transducer	Limit	Margin	Line	PE
MHz	dBμV	dB	dBμV	dB		
0.239385	42.7	9.7	62.1	19.4	L1	FLO
0.693067	30.0	9.7	56.0	26.0	N	FLO
0.868312	36.2	9.7	56.0	19.8	N	FLO
2.208972	40.4	9.7	56.0	15.6	N	FLO
3.563633	43.3	9.7	56.0	12.7	N	FLO
4.645552	41.0	9.8	56.0	15.0	L1	FLO

MEASUREMENT RESULT: AV Detector

Frequency	Level	Transducer	Limit	Margin	Line	PE
MHz	dBμV	dB	dBμV	dB		
0.400444	40.1	9.7	47.8	7.7	N	FLO
0.484860	36.0	9.7	46.3	10.3	N	FLO
0.699386	21.7	9.7	46.0	24.3	N	FLO
1.653360	34.0	9.7	46.0	12.0	N	FLO
3.561630	35.8	9.7	46.0	10.2	N	FLO
15.81354	23.9	10.1	50.0	26.1	N	FLO

END