



Appendix for Test report

1. 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.

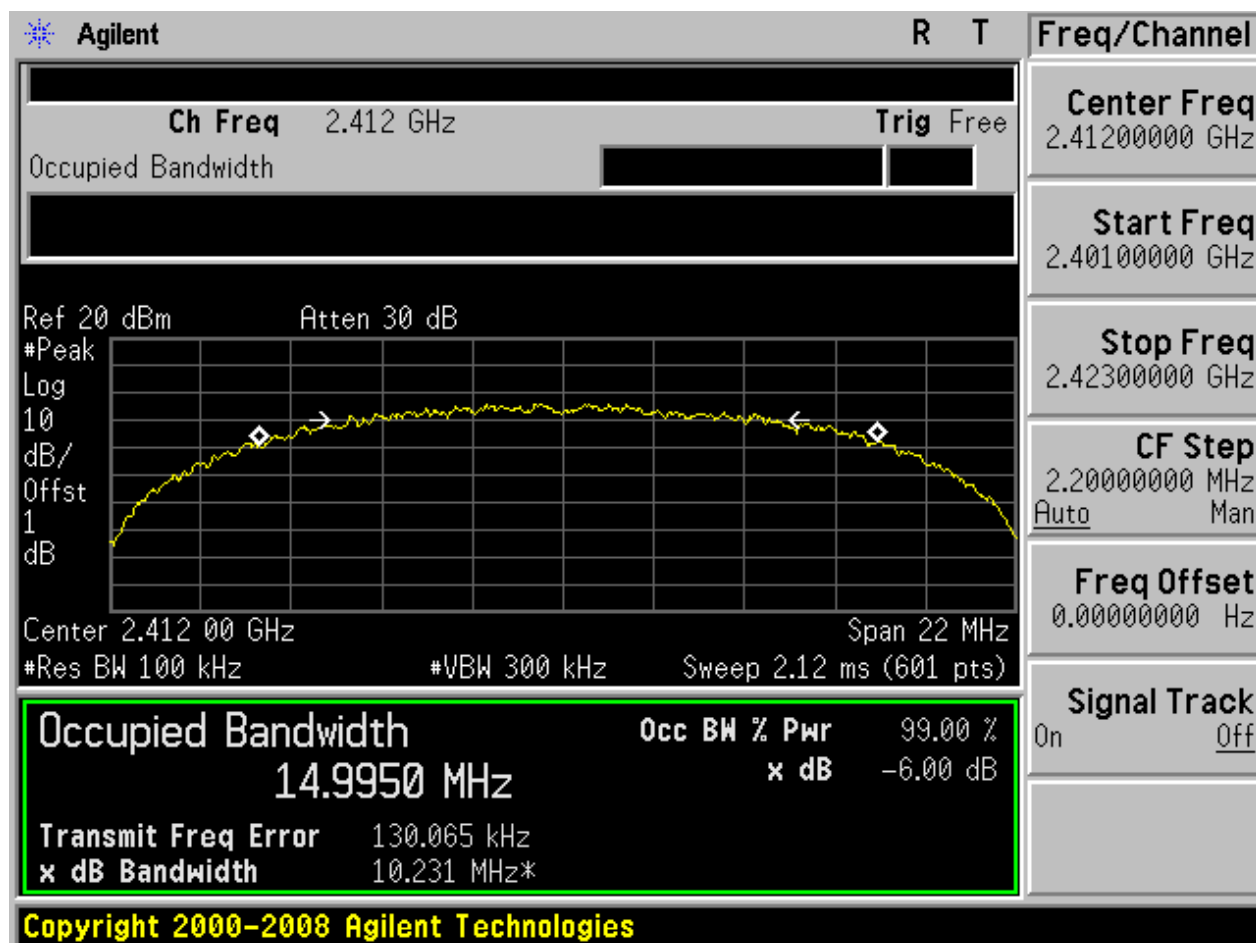
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

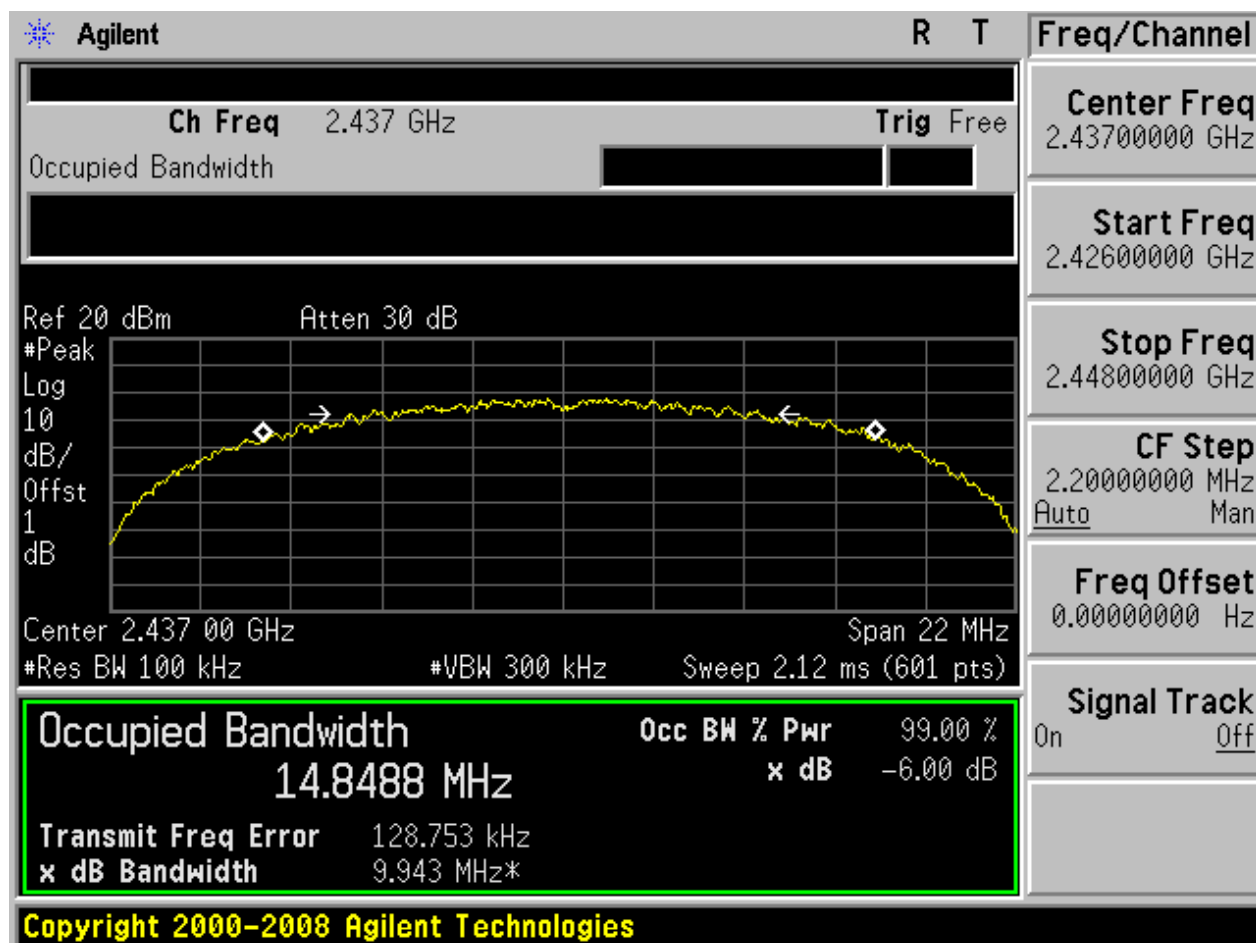
Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[MHz]	Verdict
11B	L	2412	10.23	pass
11B	M	2437	9.94	pass
11B	H	2462	10.03	pass
11G	L	2412	16.40	pass
11G	M	2437	16.46	pass
11G	H	2462	16.42	pass
11N20	L	2412	17.52	pass
11N20	M	2437	16.62	pass
11N20	H	2462	17.55	pass
11N40	L	2422	35.81	pass
11N40	M	2437	34.38	pass
11N40	H	2452	35.73	pass

Part II - Test Plots

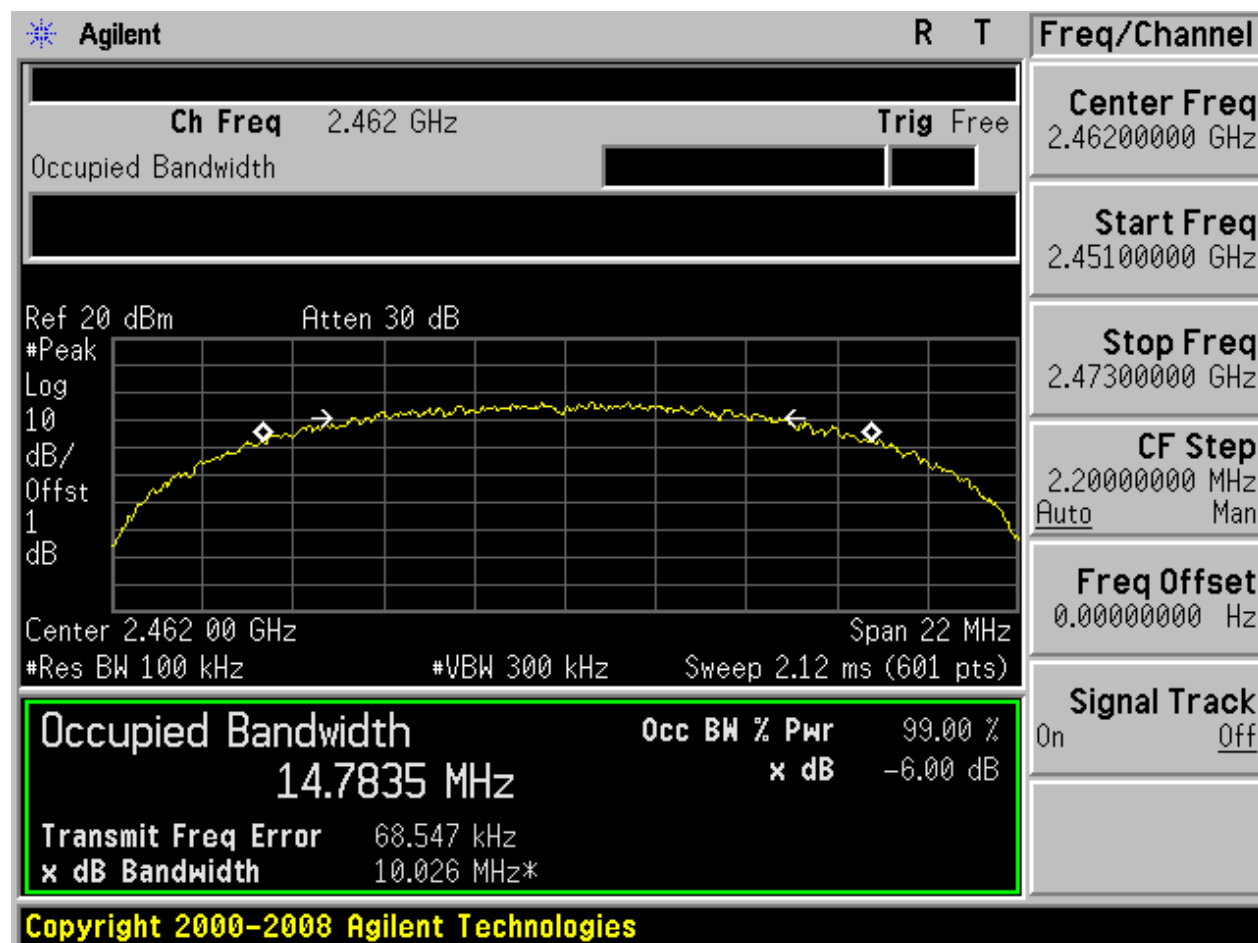
1.1 11B_L



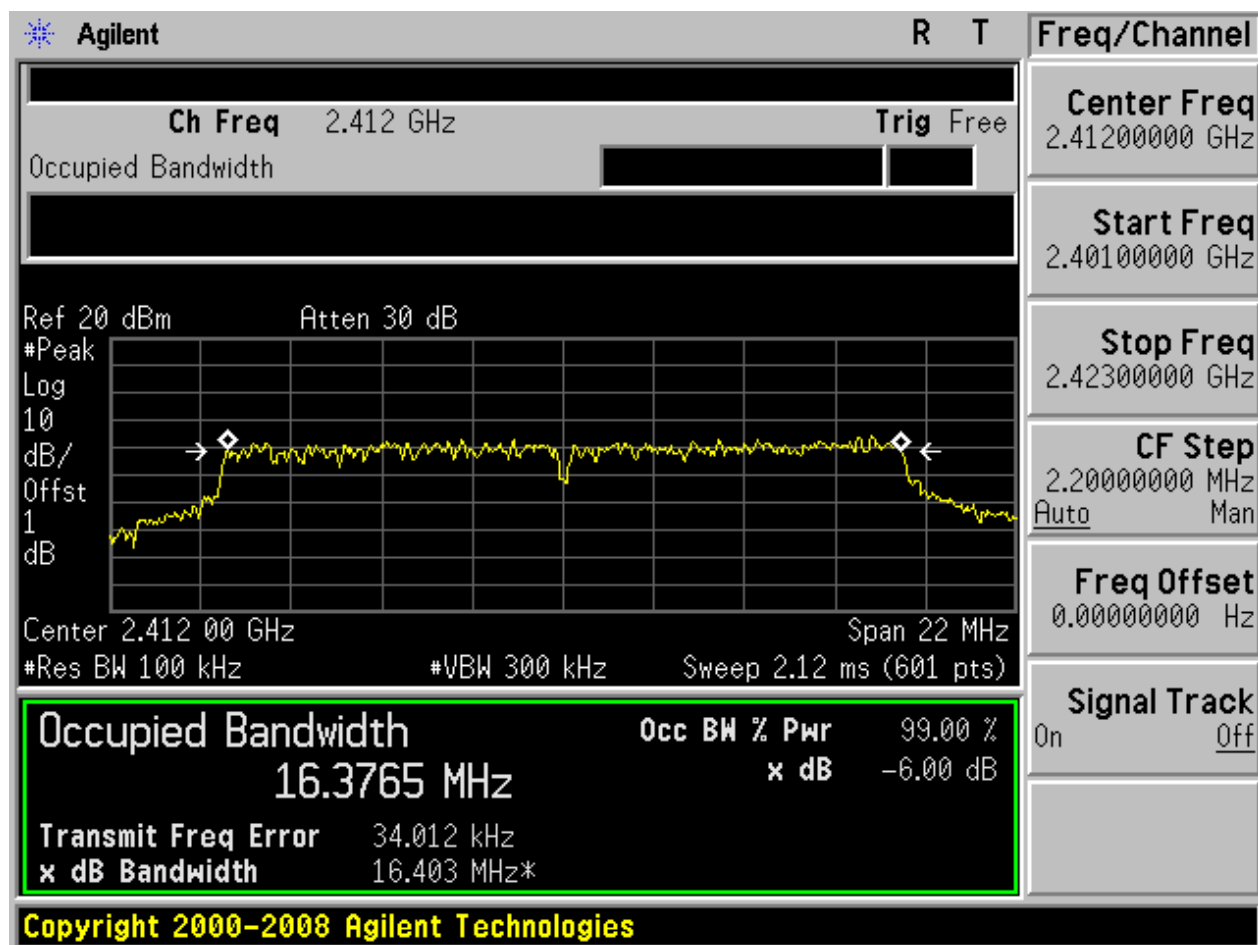
1.2 11B_M



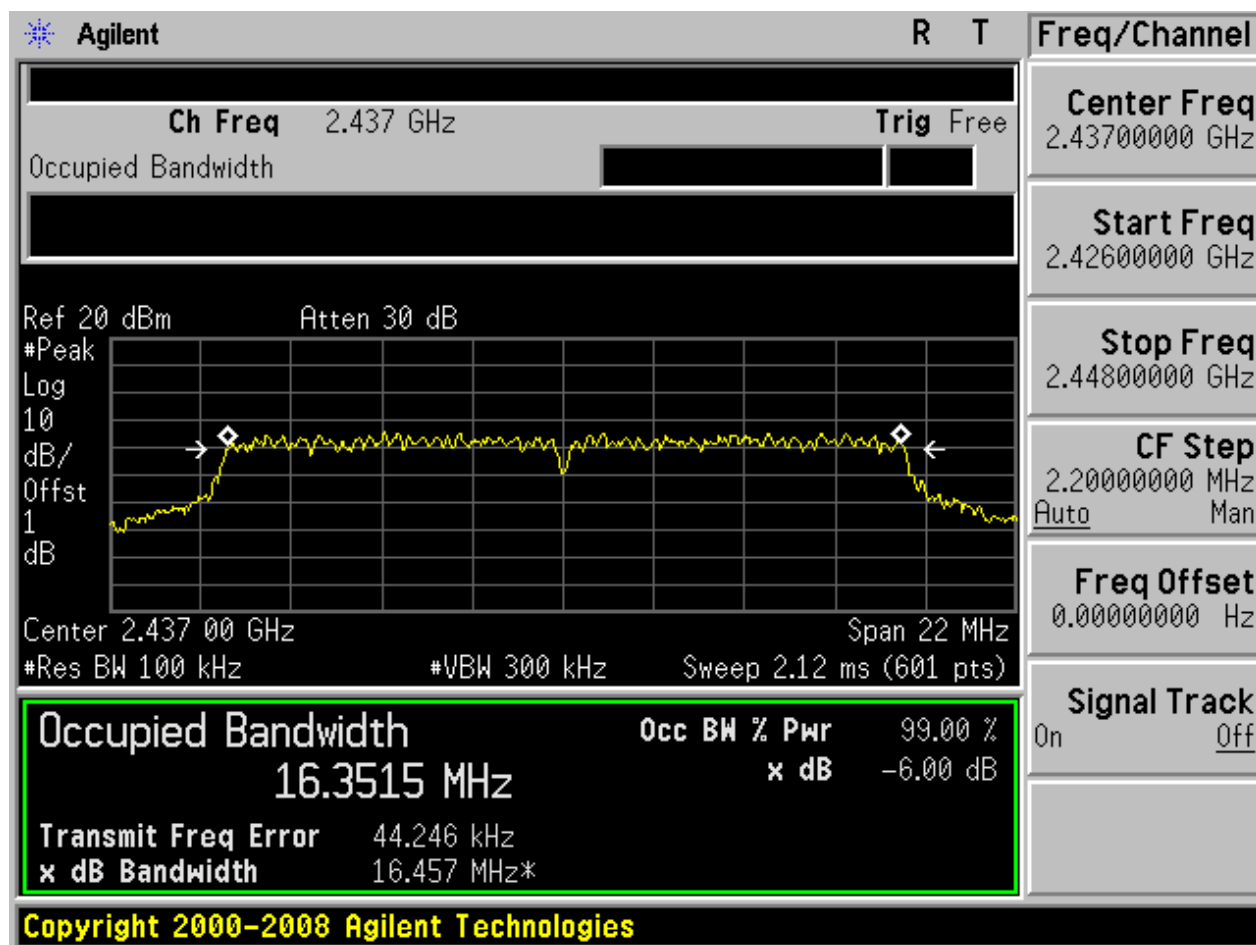
1.3 11B_H



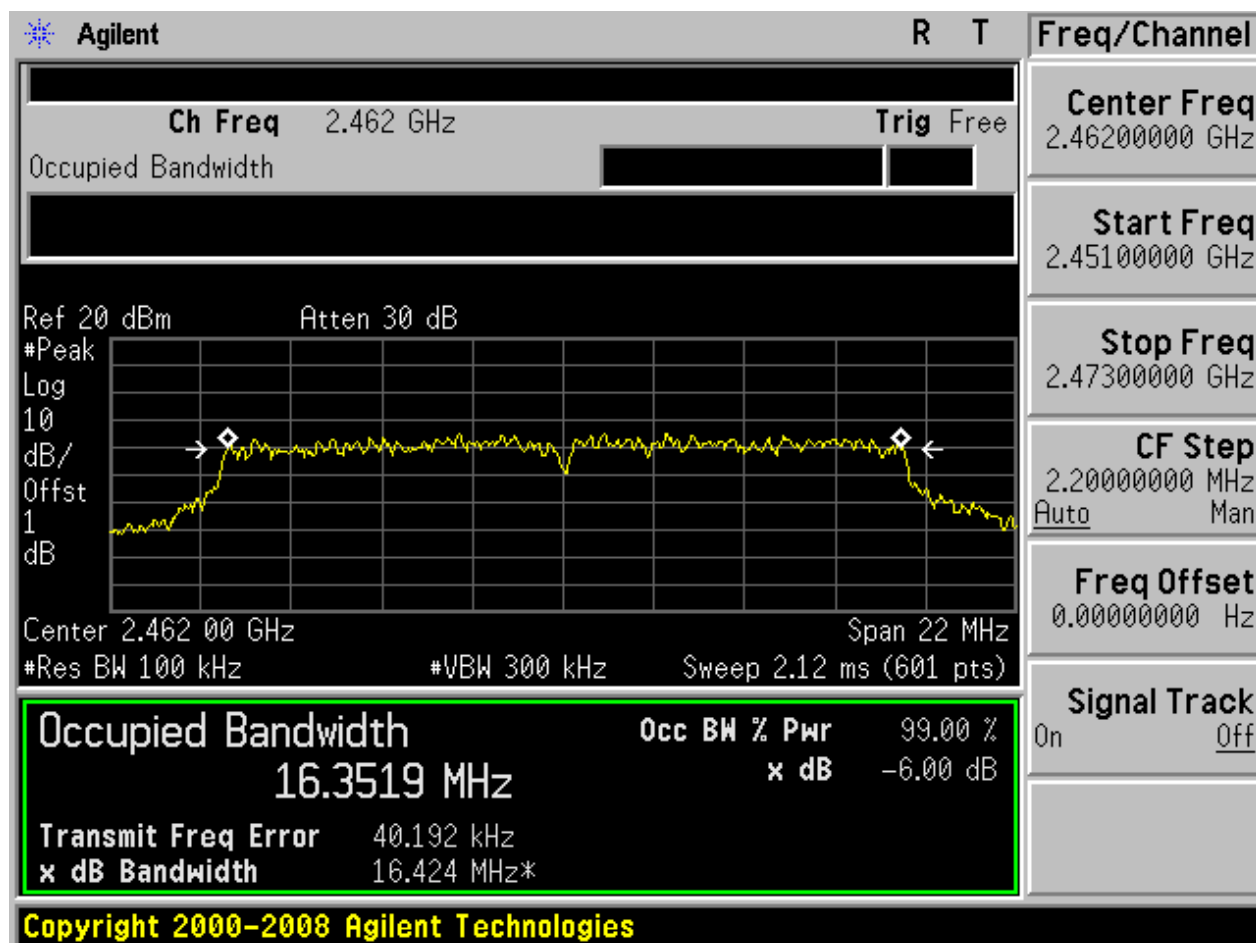
1.4 11G_L



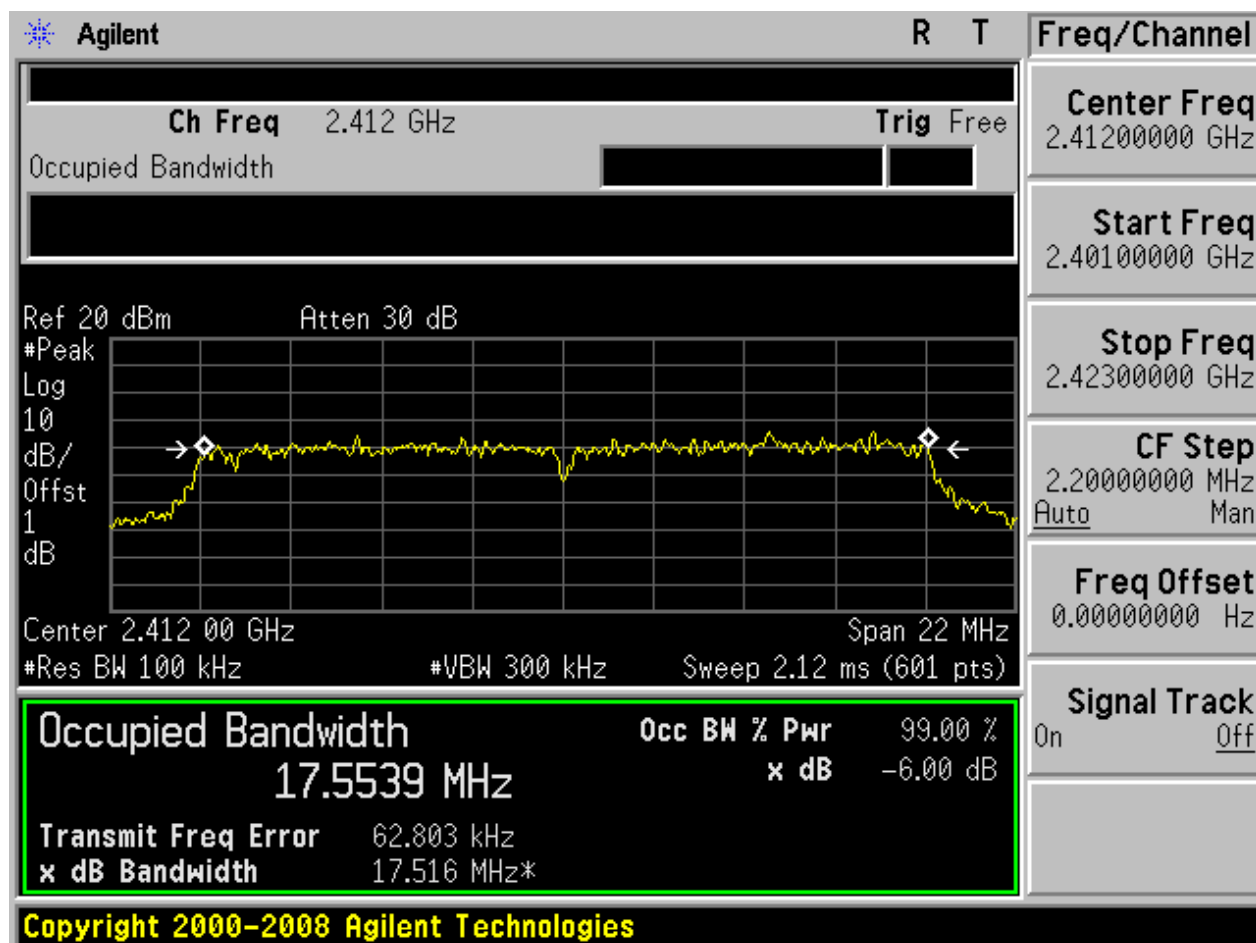
1.5 11G_M



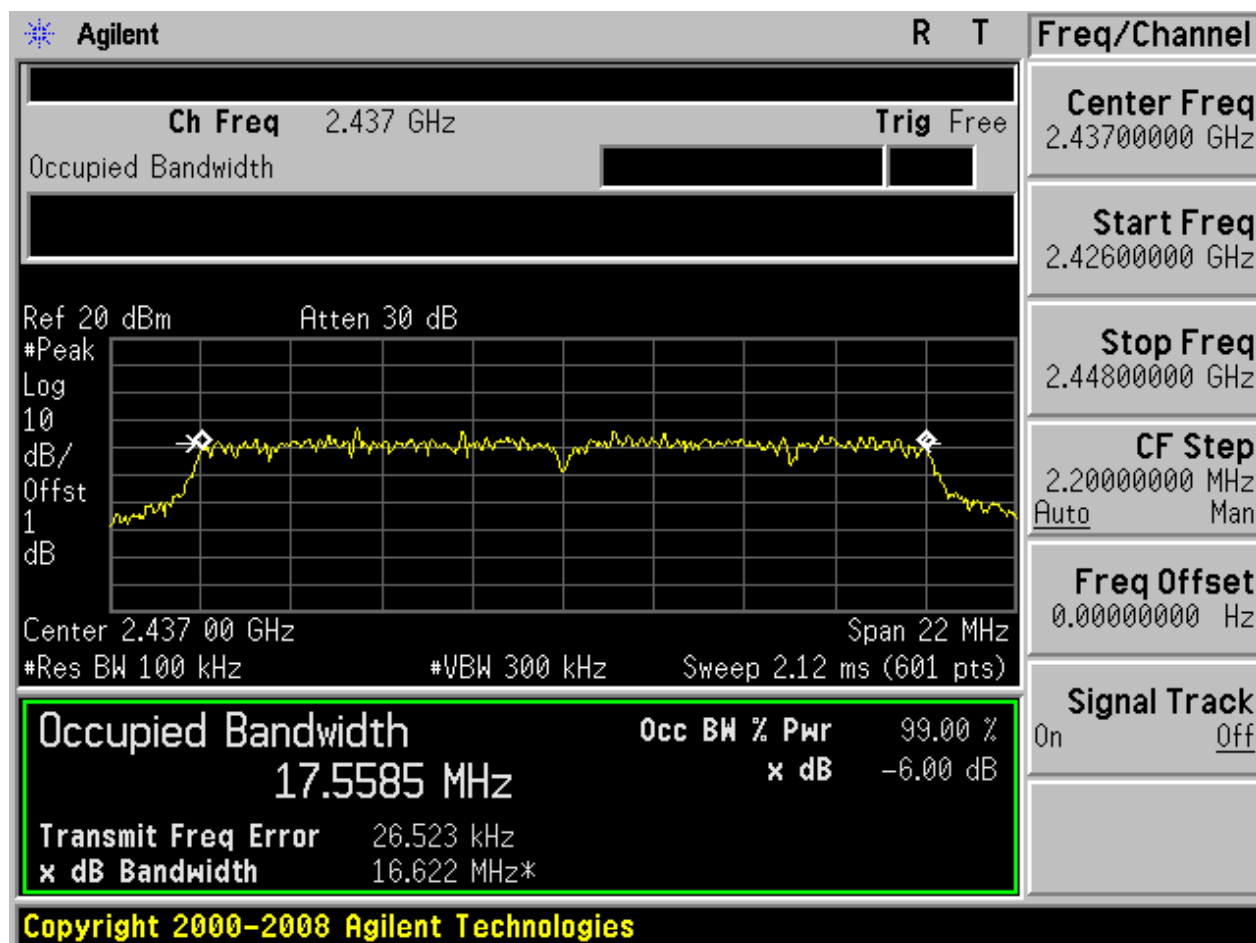
1.6 11G_H



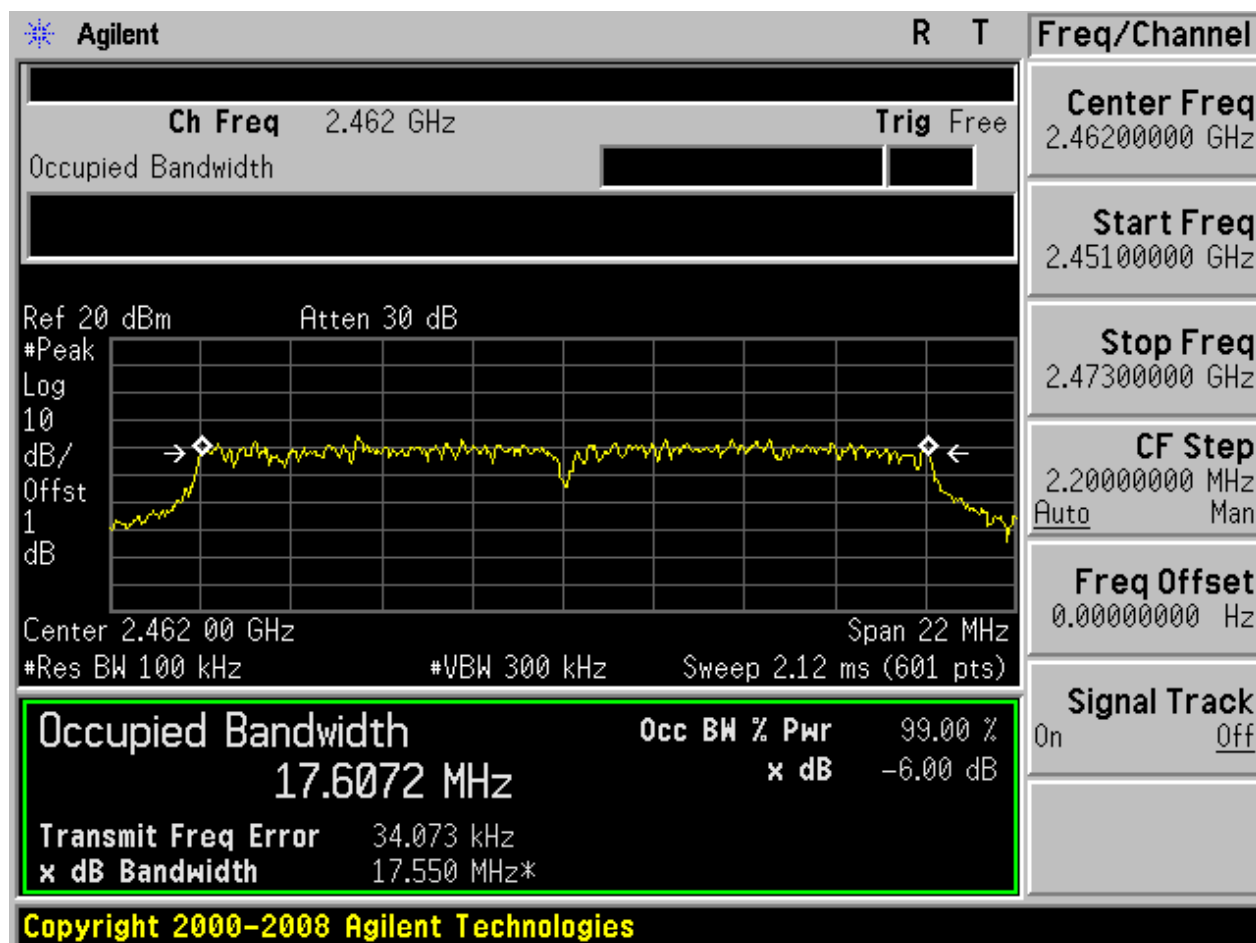
1.7 11N20_L



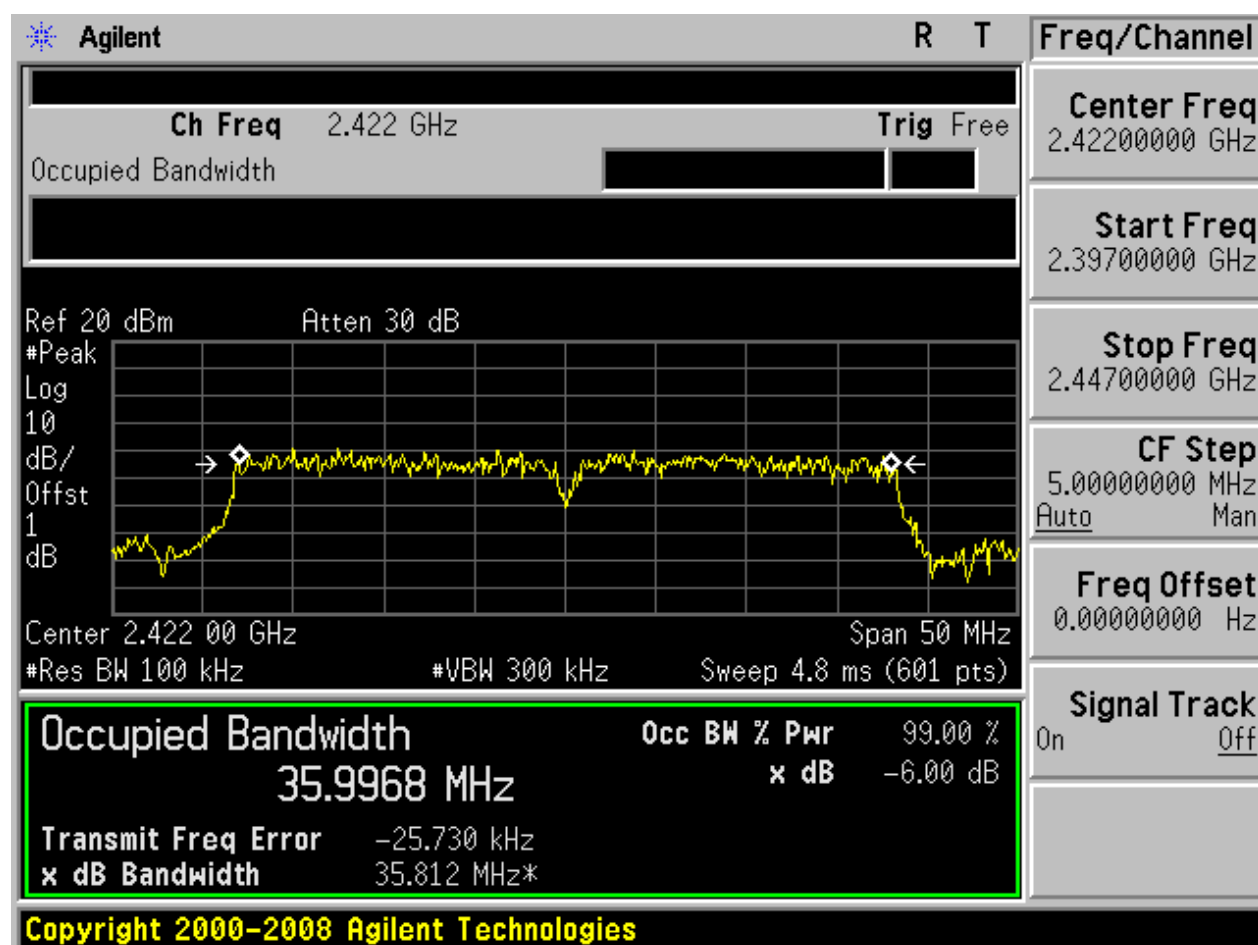
1.8 11N20_M



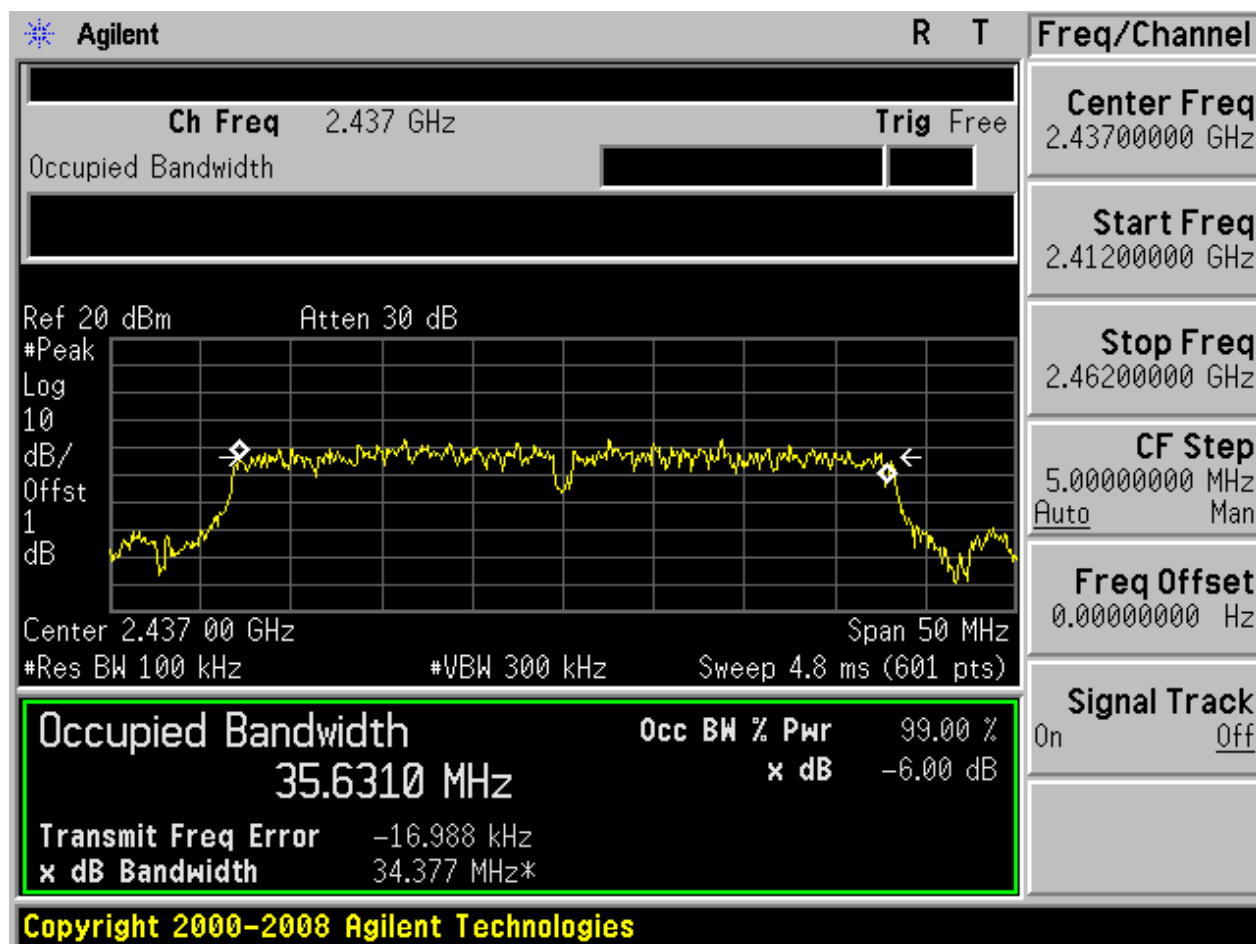
1.9 11N20_H



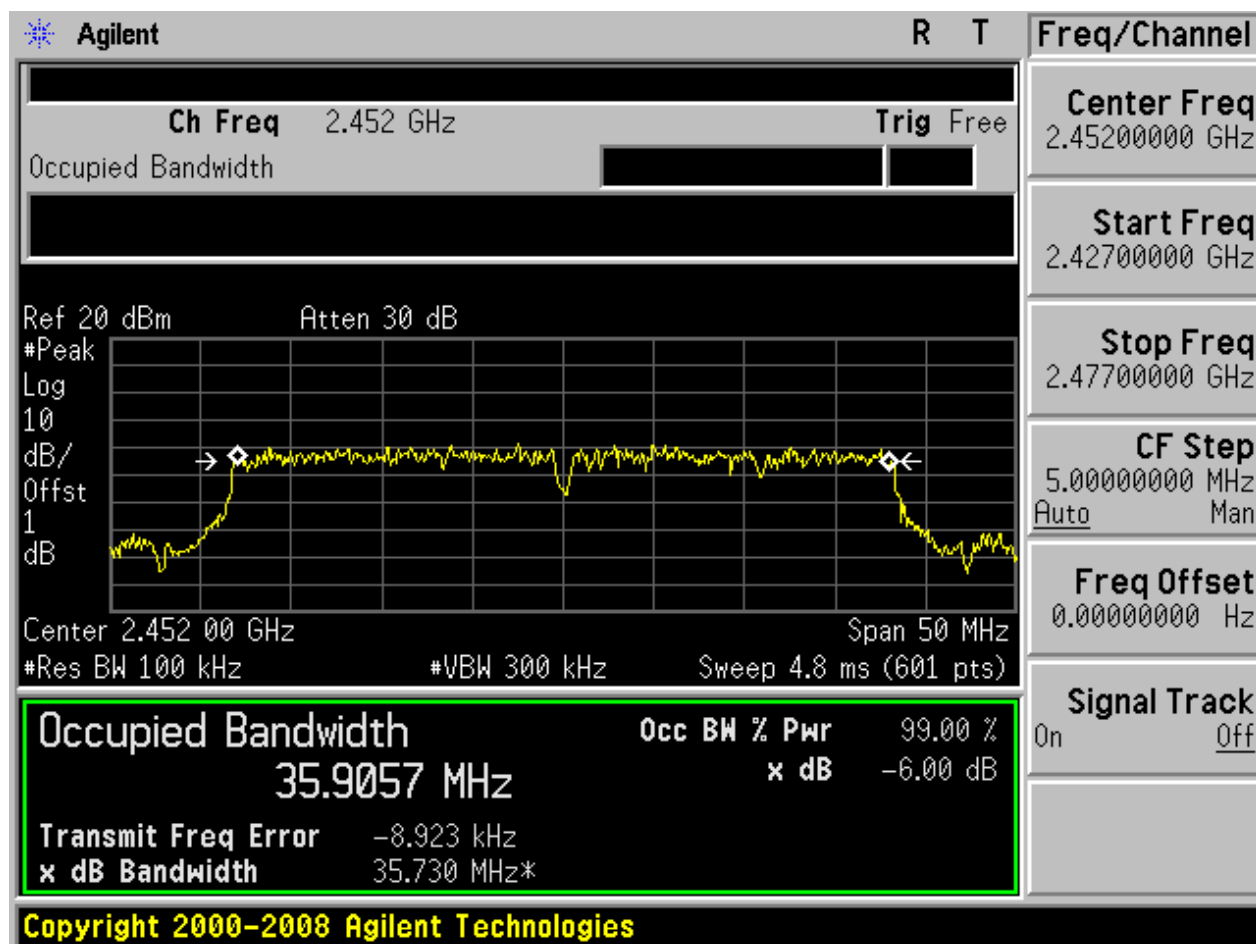
1.10 11N40_L



1.11 11N40_M



1.12 11N40_H



2. Appendix B: Maximum Peak Conducted Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Meas. Level (Cond.) [dBm]	Verdict
11B	L	2412	21.92	pass
11B	M	2437	23.12	pass
11B	H	2462	22.23	pass
11G	L	2412	18.51	pass
11G	M	2437	20.01	pass
11G	H	2462	19.51	pass
11N20	L	2412	17.91	pass
11N20	M	2437	19.42	pass
11N20	H	2462	19.03	pass
11N40	L	2422	18.32	pass
11N40	M	2437	19.24	pass
11N40	H	2452	18.71	pass

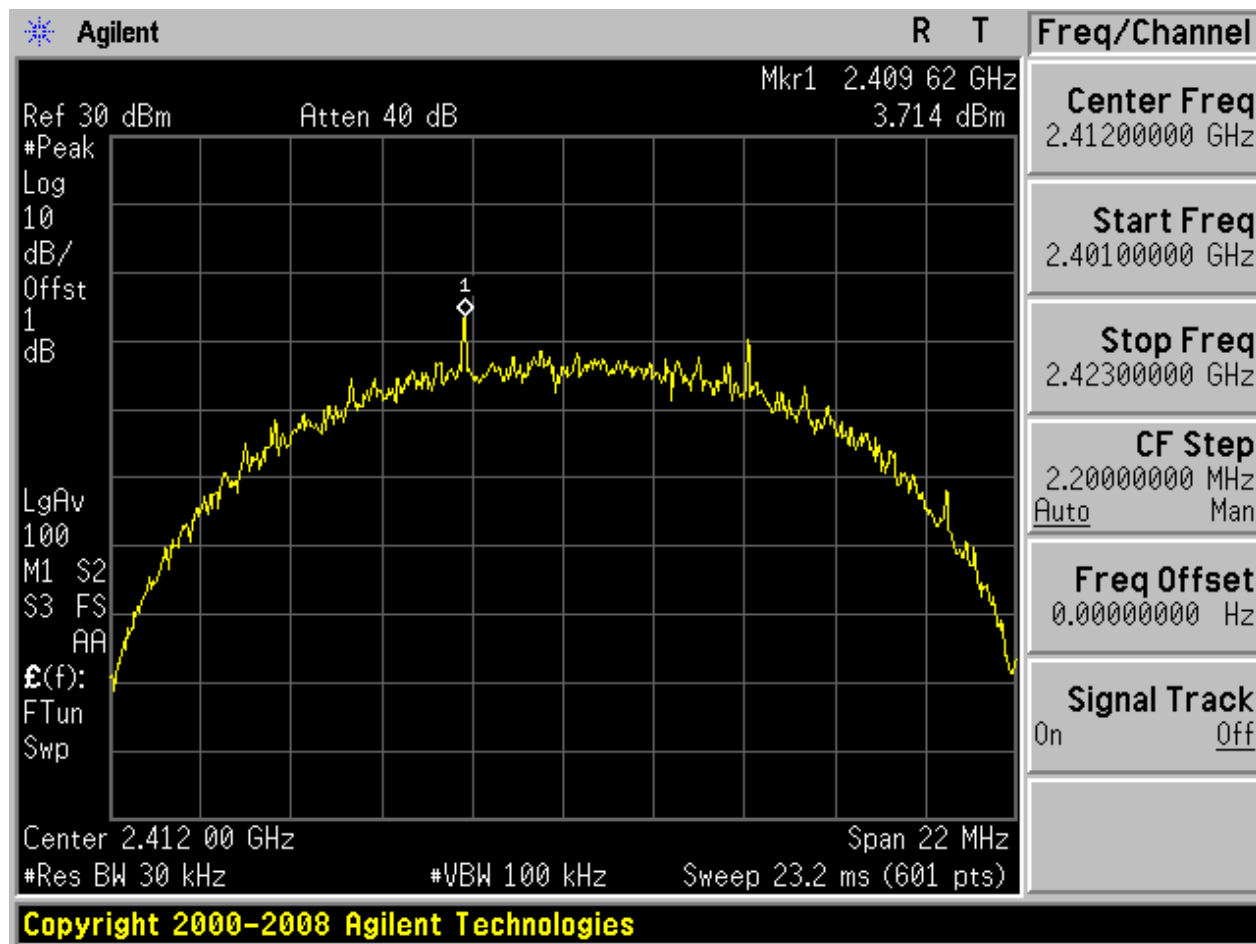
3. Appendix C: Maximum Power Spectral Density Level

Part I - Test Results

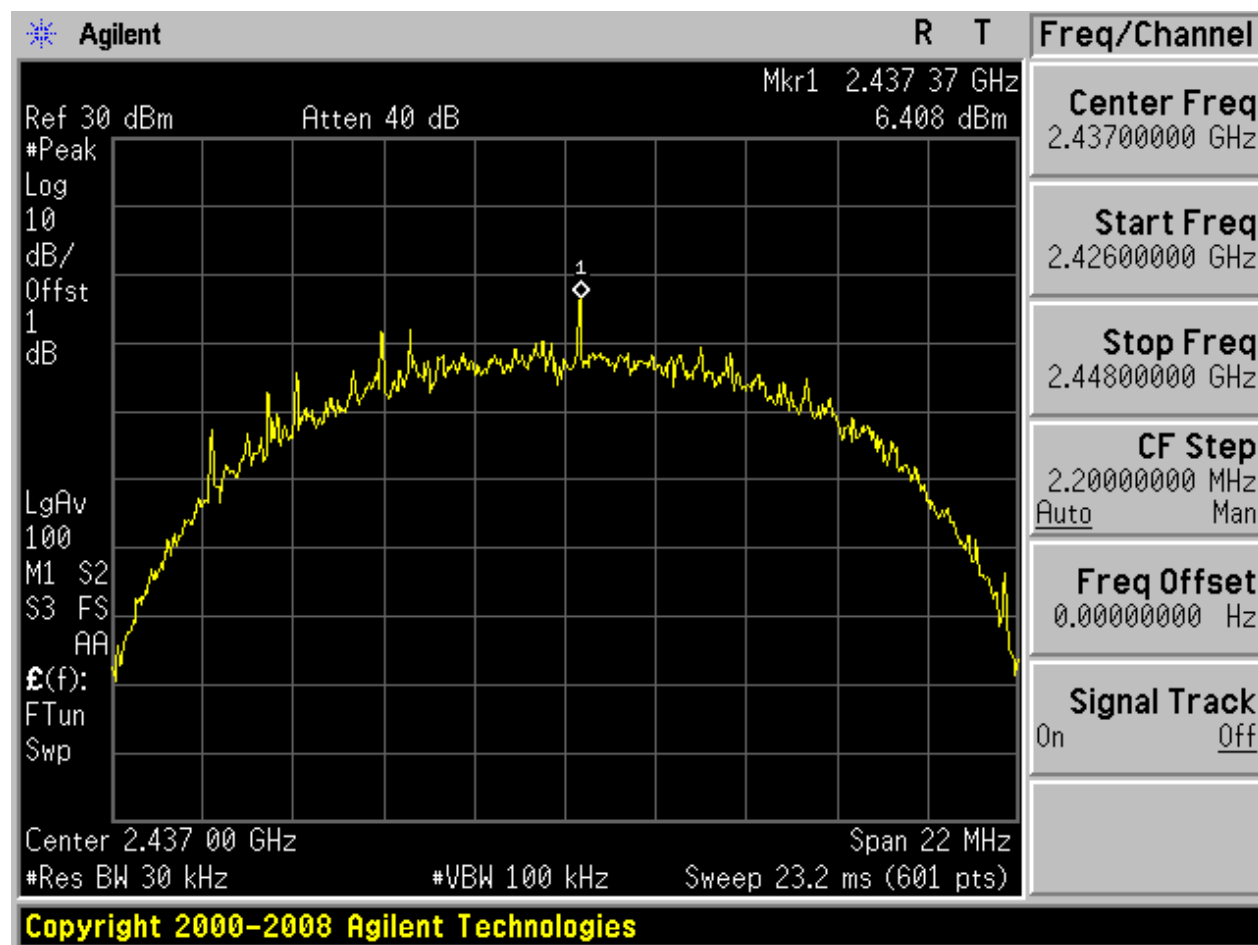
Test Mode	Test Channel	Frequency[MHz]	PD[MHz]	Verdict
11B	L	2412	3.71	pass
11B	M	2437	6.41	pass
11B	H	2462	5.34	pass
11G	L	2412	-6.86	pass
11G	M	2437	-5.42	pass
11G	H	2462	-5.93	pass
11N20	L	2412	-7.57	pass
11N20	M	2437	-6.90	pass
11N20	H	2462	-7.52	pass
11N40	L	2422	-9.87	pass
11N40	M	2437	-8.88	pass
11N40	H	2452	-9.49	pass

Part II - Test Plots

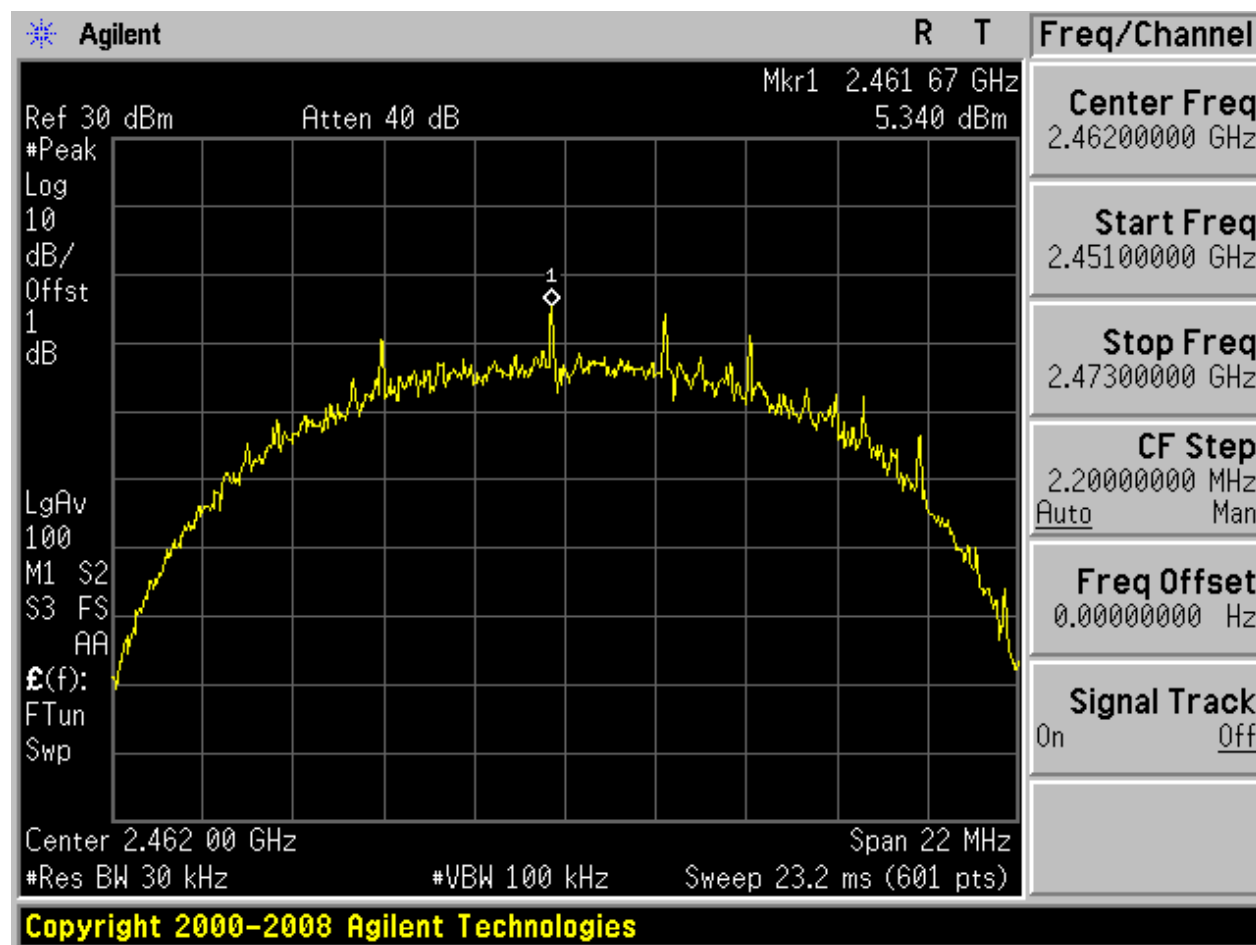
3.1 11B_L



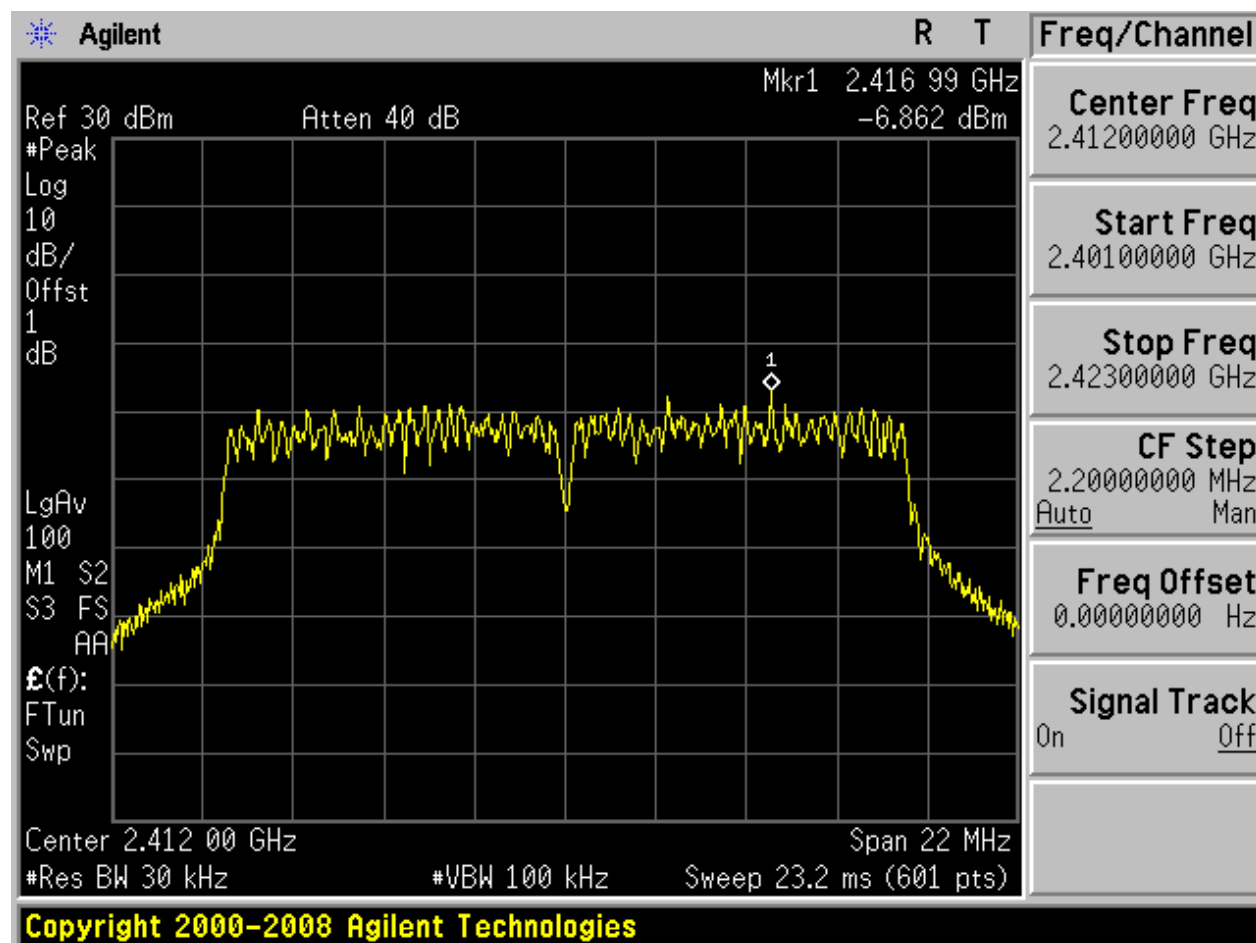
3.2 11B_M



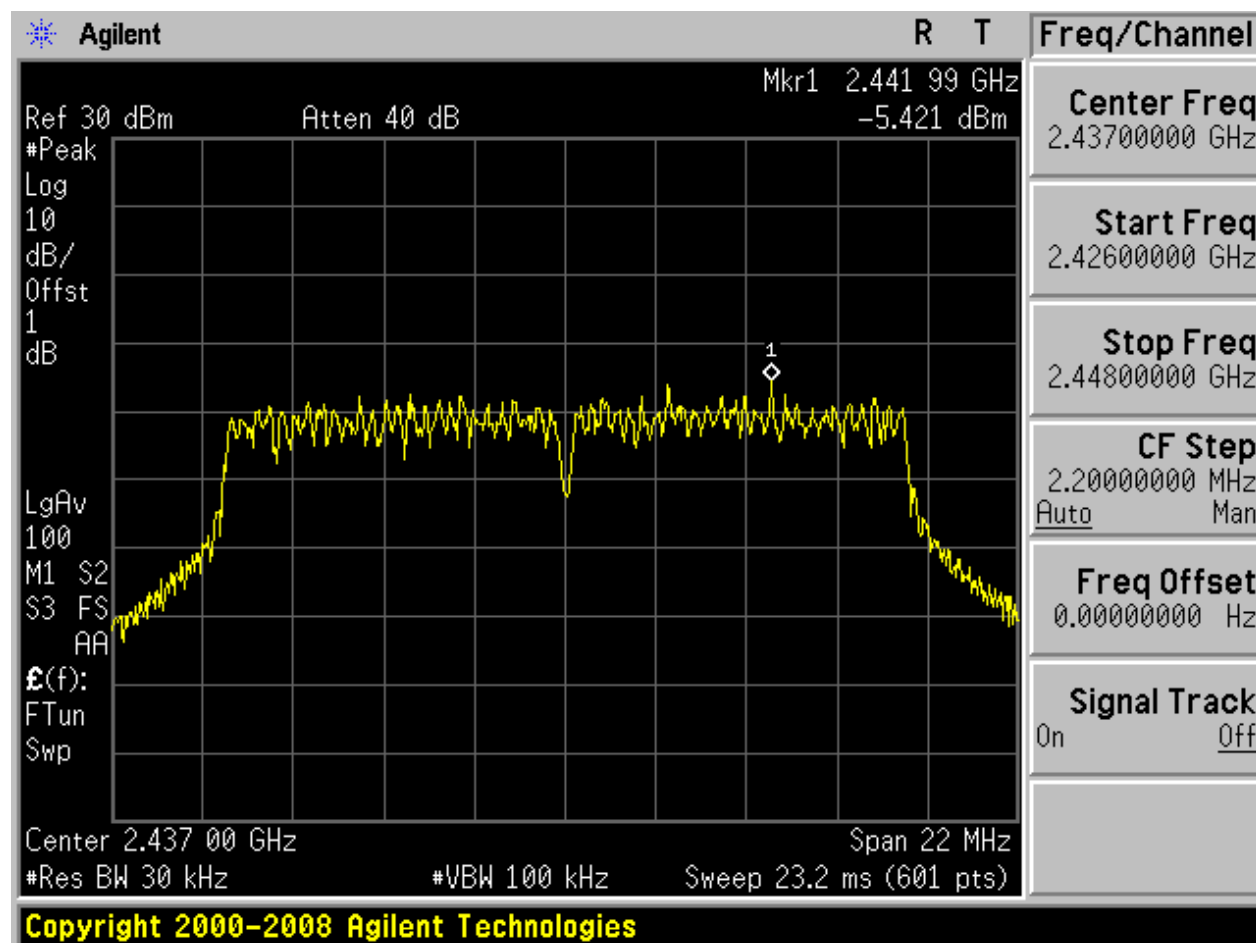
3.3 11B_H



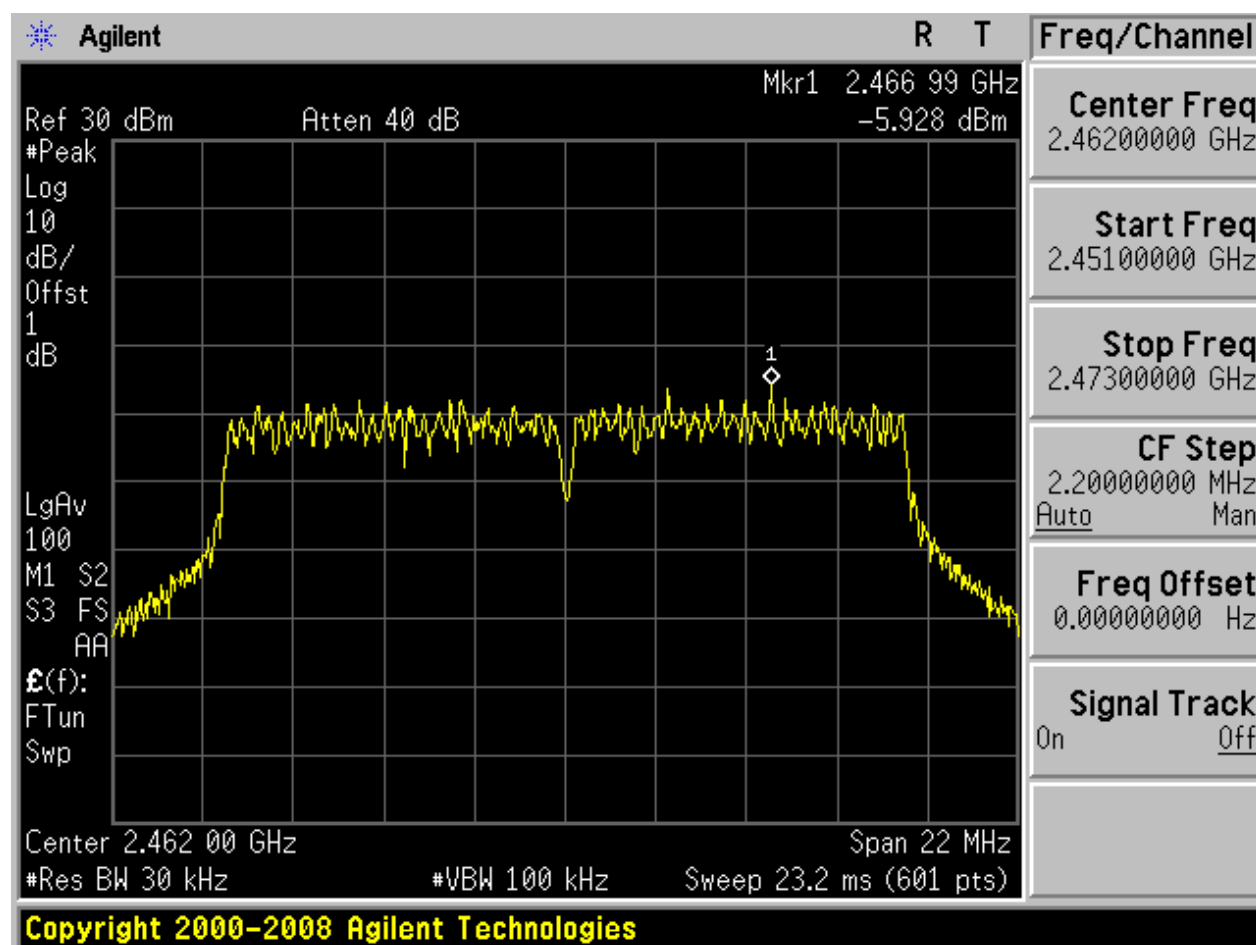
3.4 11G_L



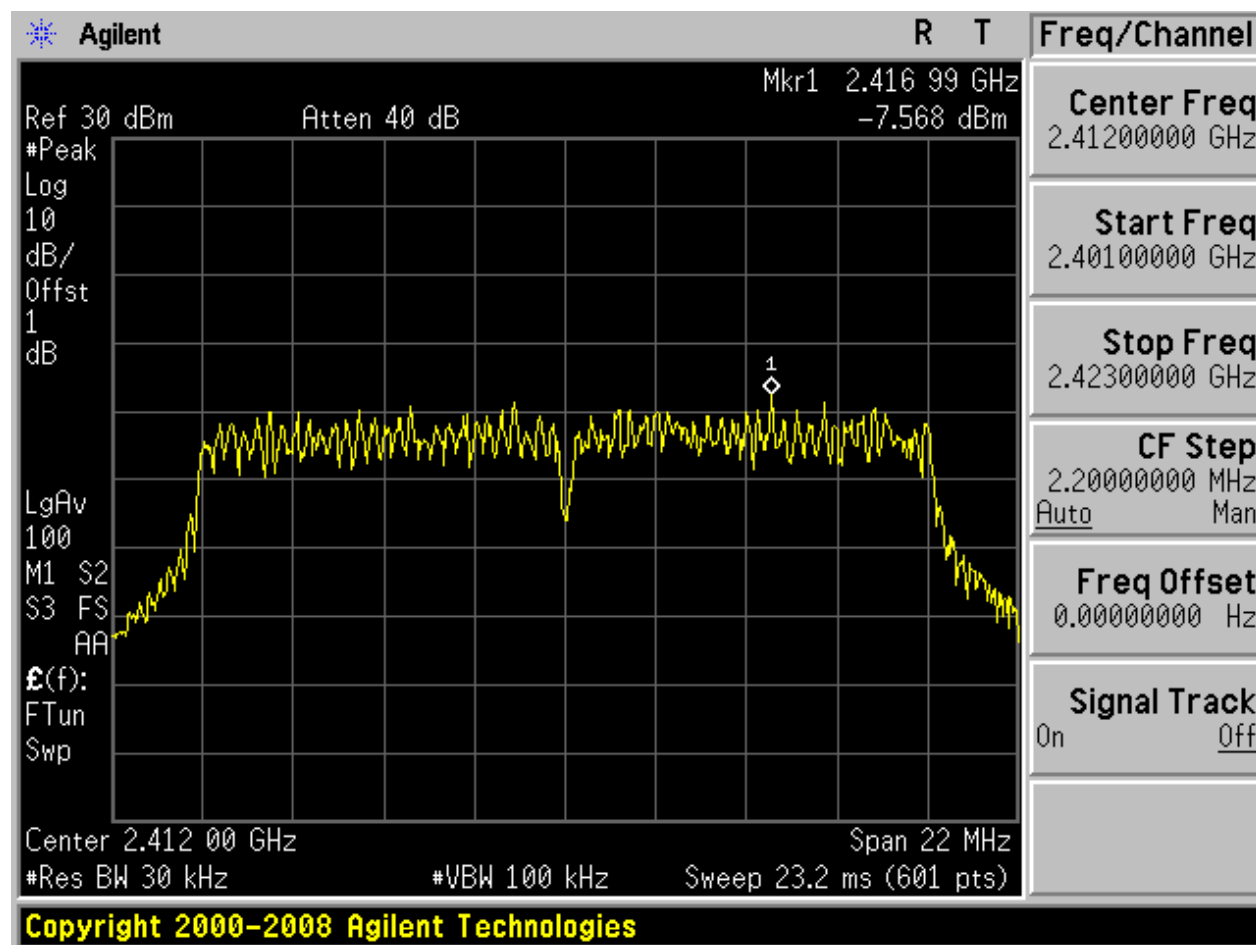
3.5 11G_M



3.6 11G_H

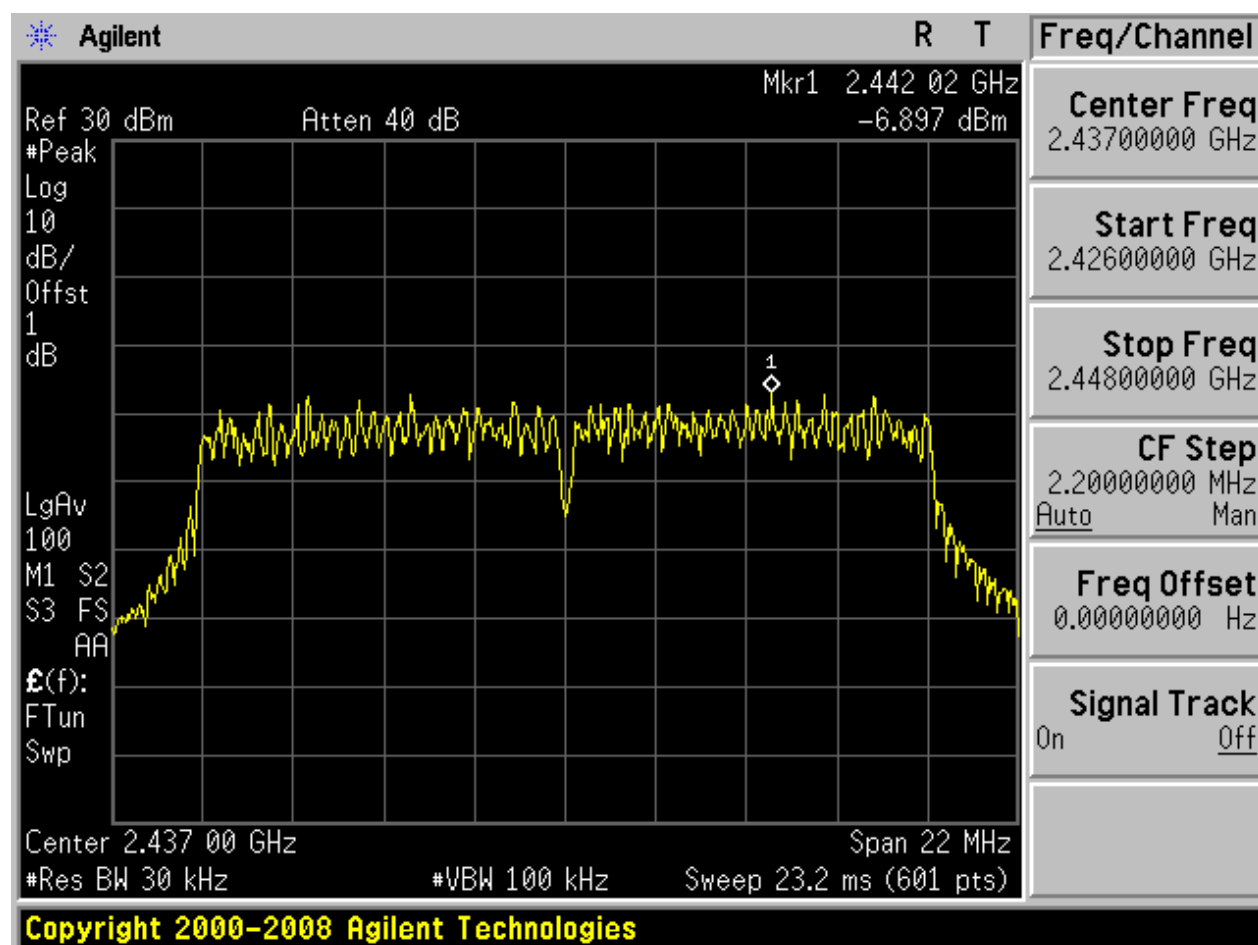


3.7 11N20_L

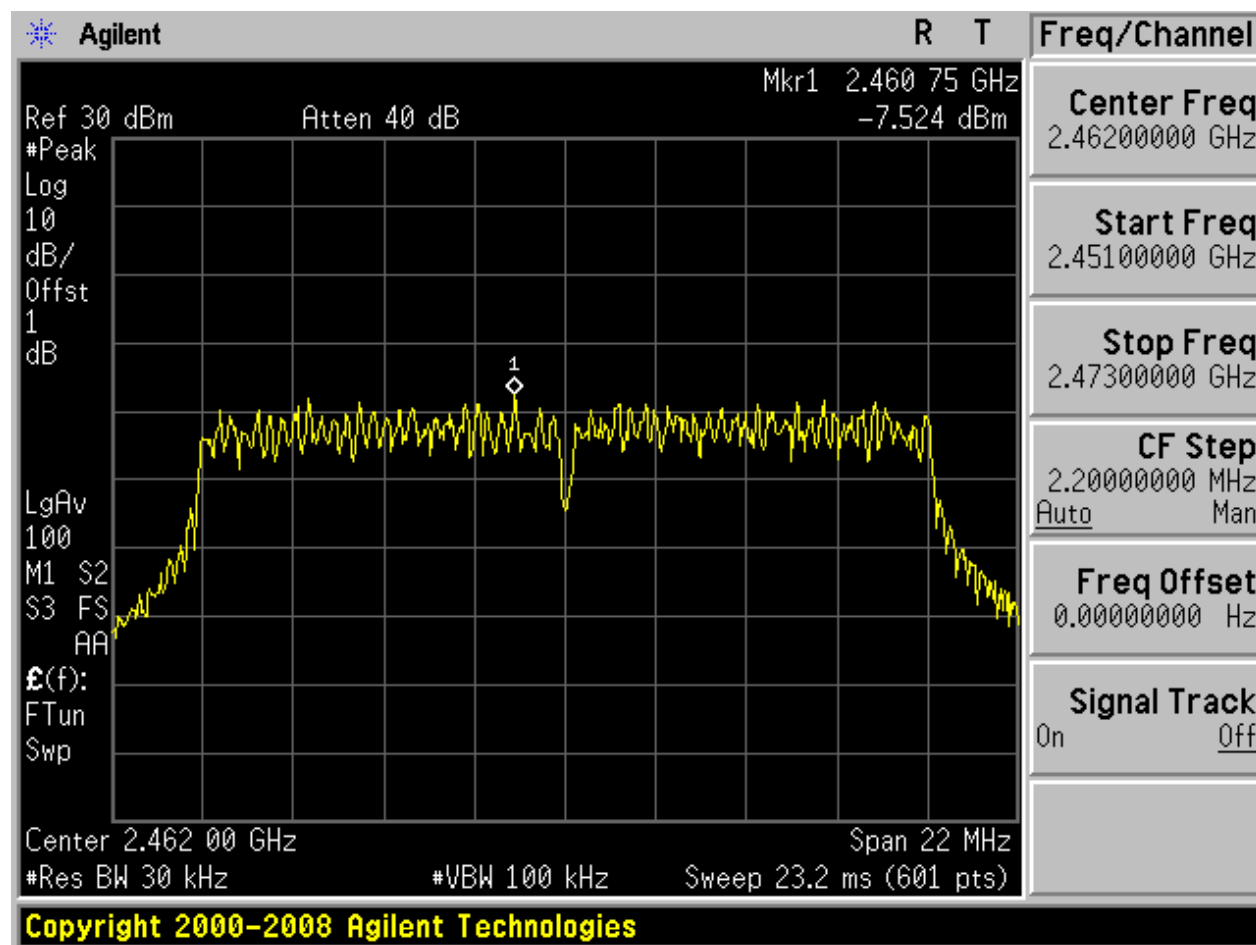




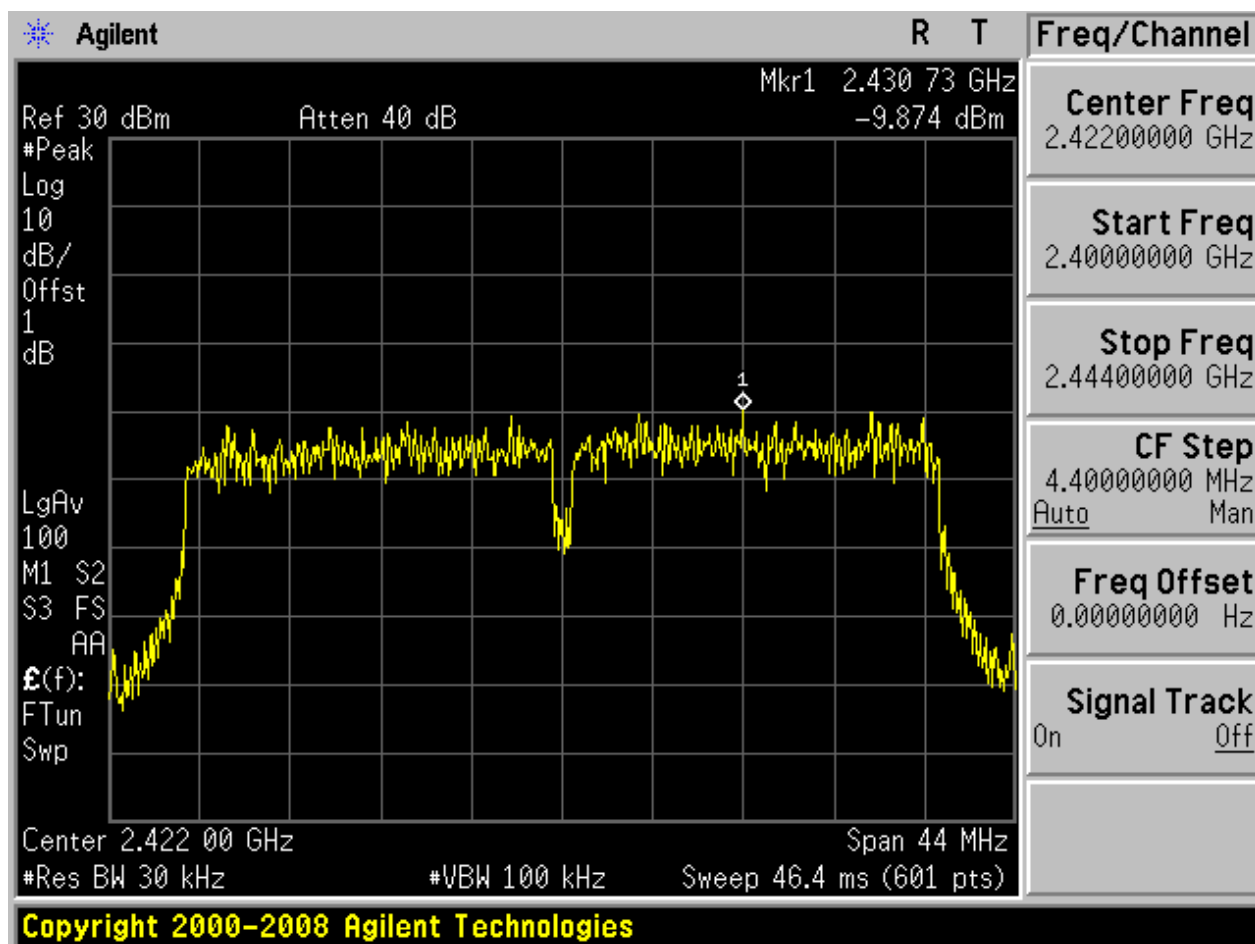
3.8 11N20_M



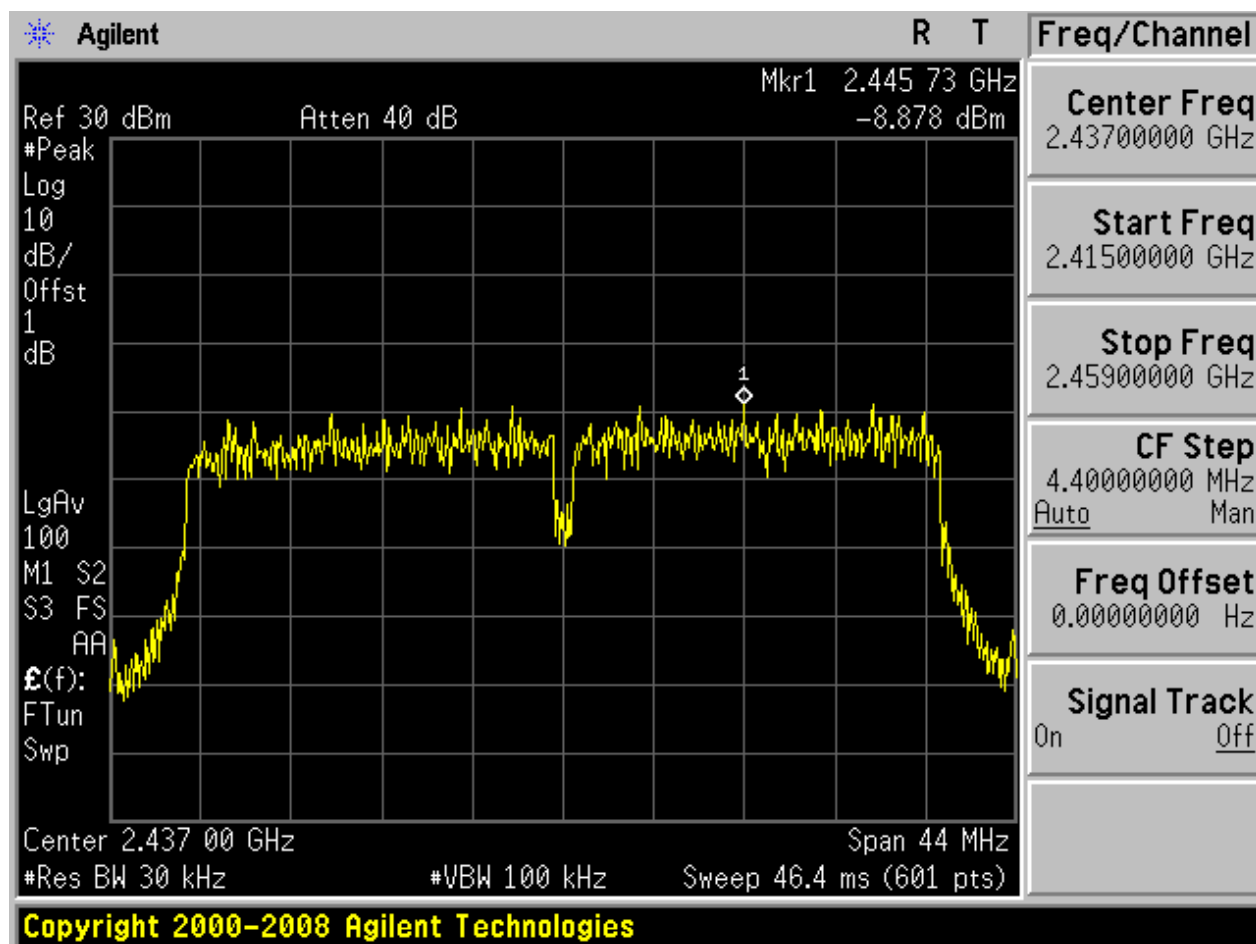
3.9 11N20_H



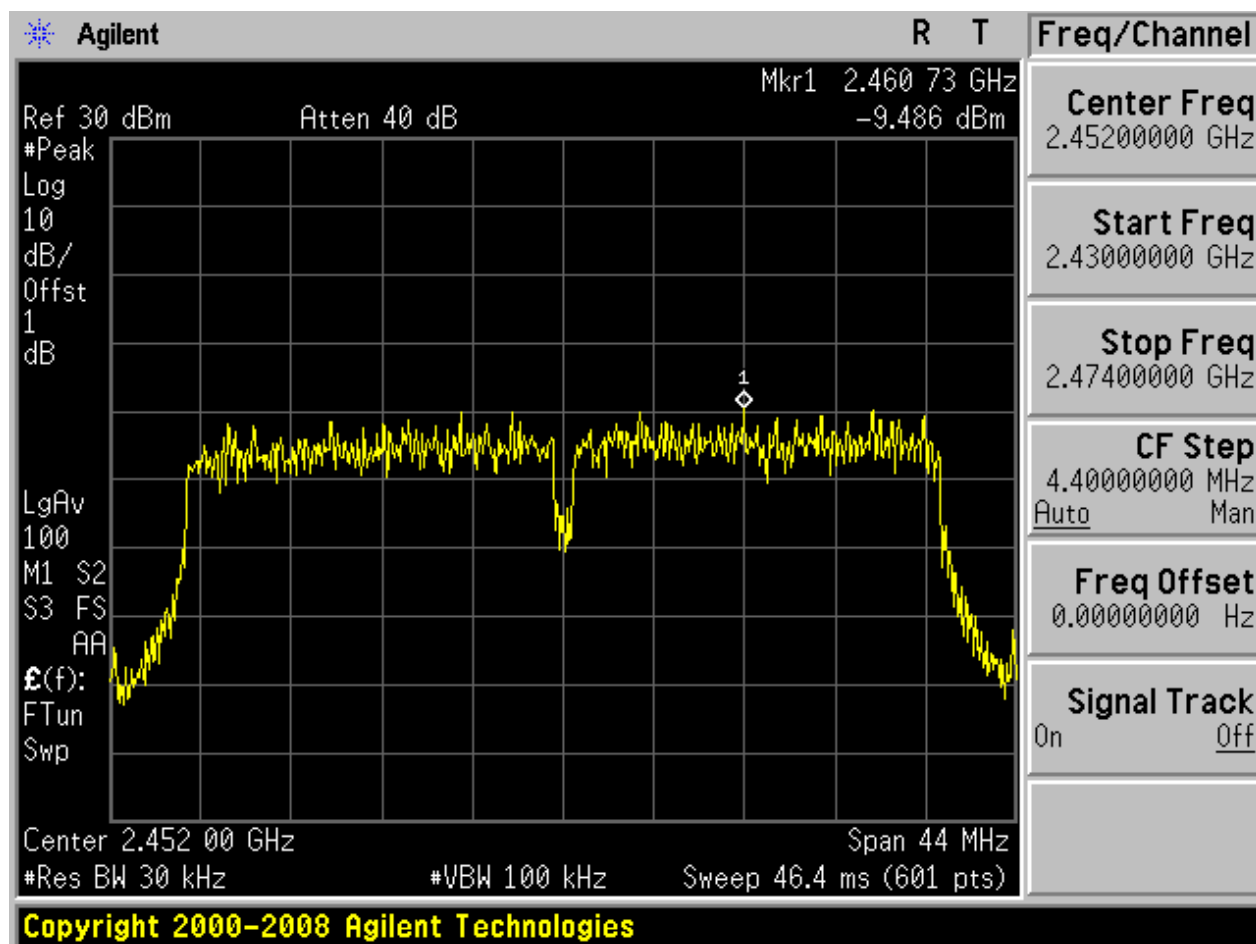
3.10 11N40 L



3.11 11N40_M



3.12 11N40_H



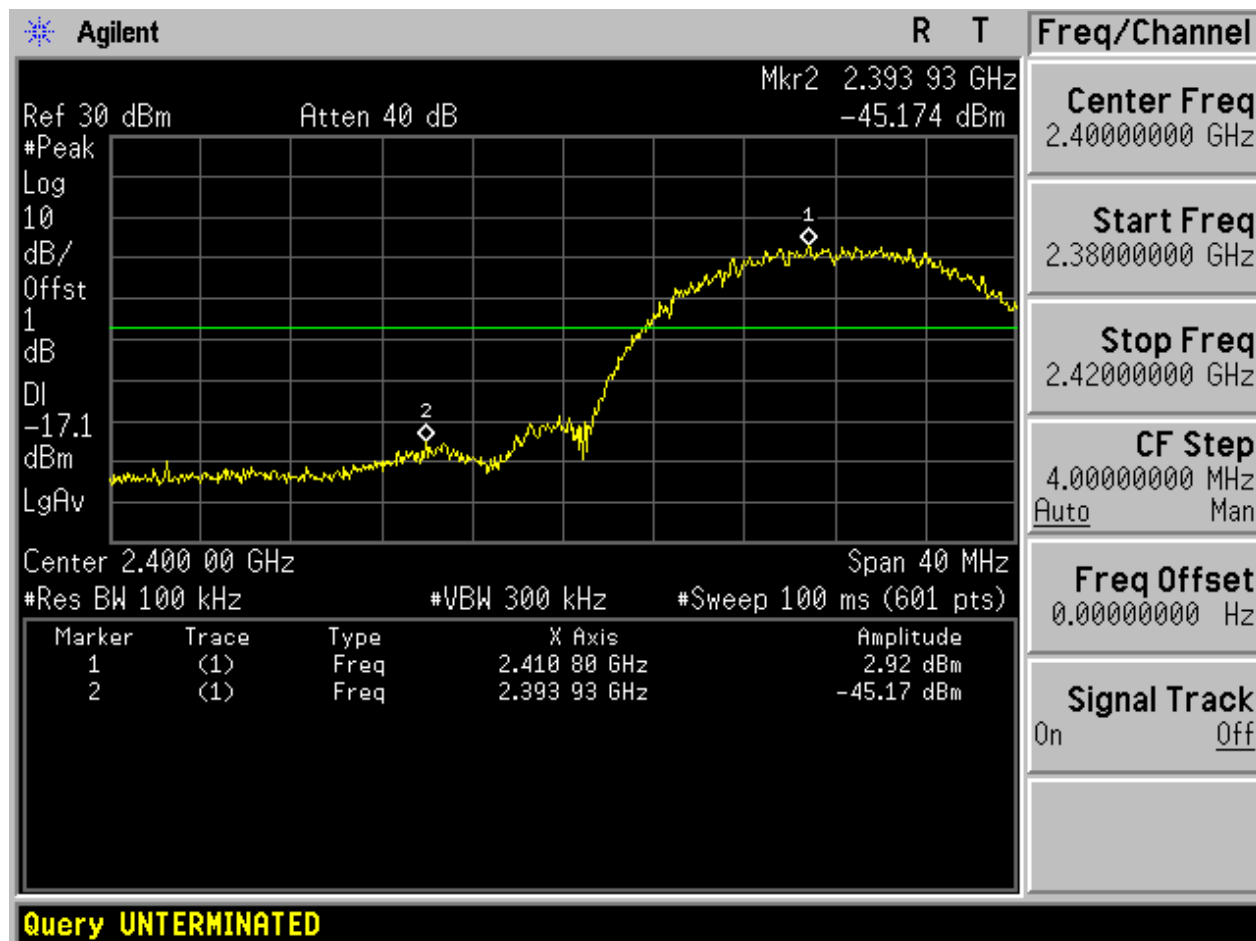
4. Appendix D: Band Edges Compliance

Part I - Test Results

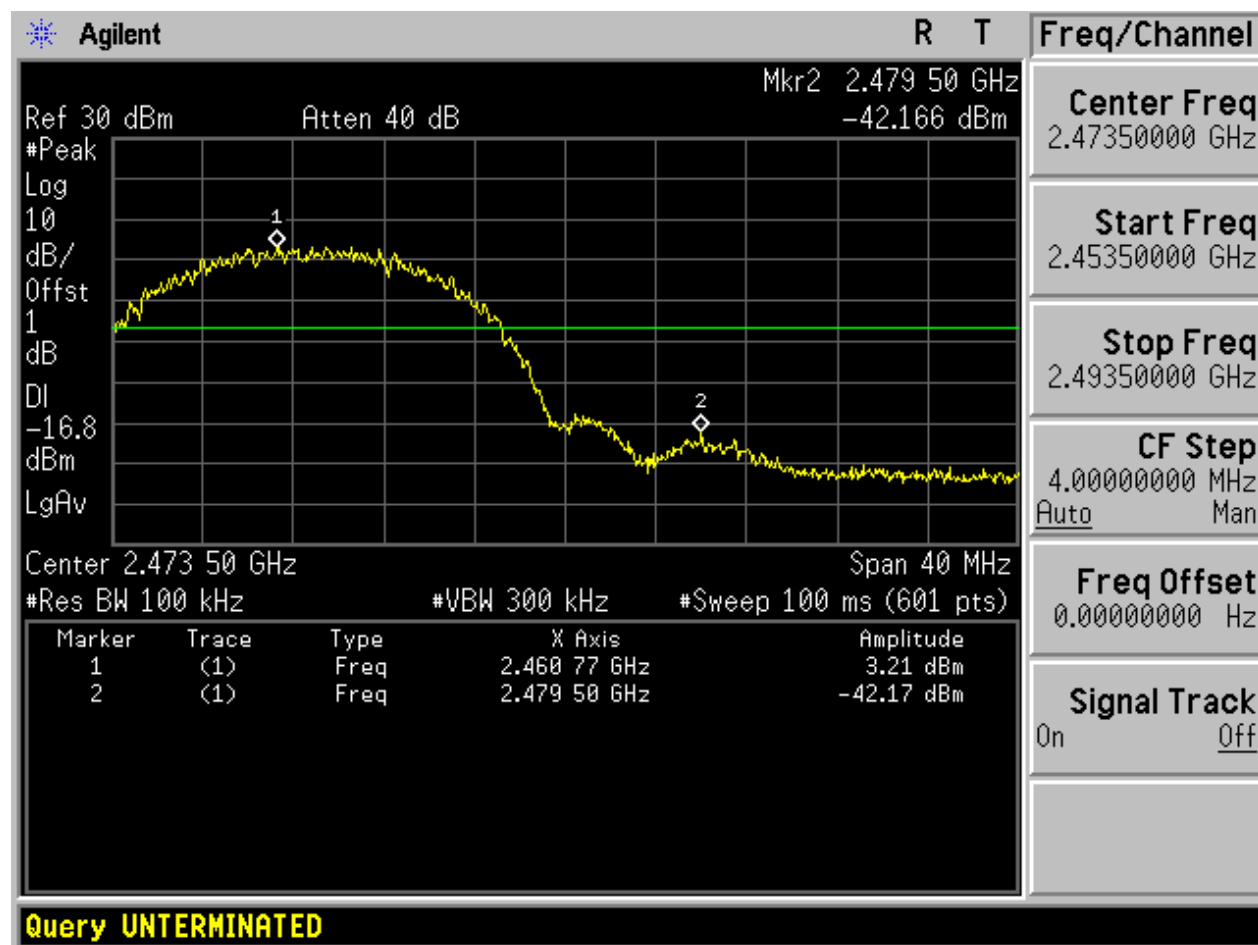
Test Mode	Test Channel	Frequency[MHz]	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	2.92	-45.17	pass
11B	H	2462	3.21	-42.17	pass
11G	L	2412	-3.25	-42.74	pass
11G	H	2462	-1.86	-36.02	pass
11N20	L	2412	-3.41	-40.18	pass
11N20	H	2462	-2.36	-45.72	pass
11N40	L	2422	-6.15	-40.08	pass
11N40	H	2452	-5.11	-38.00	pass

Part II - Test Plots

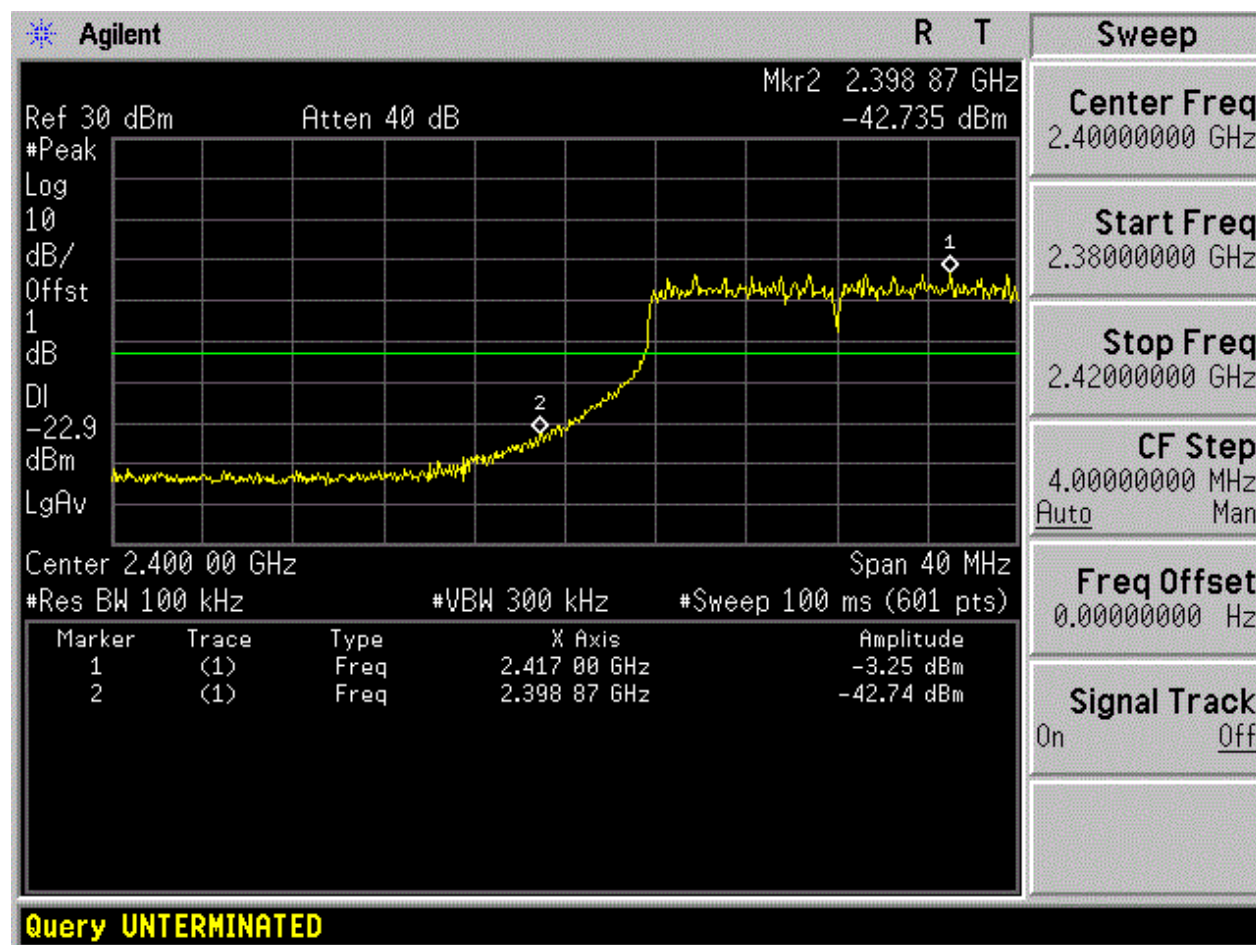
4.1 11B_L



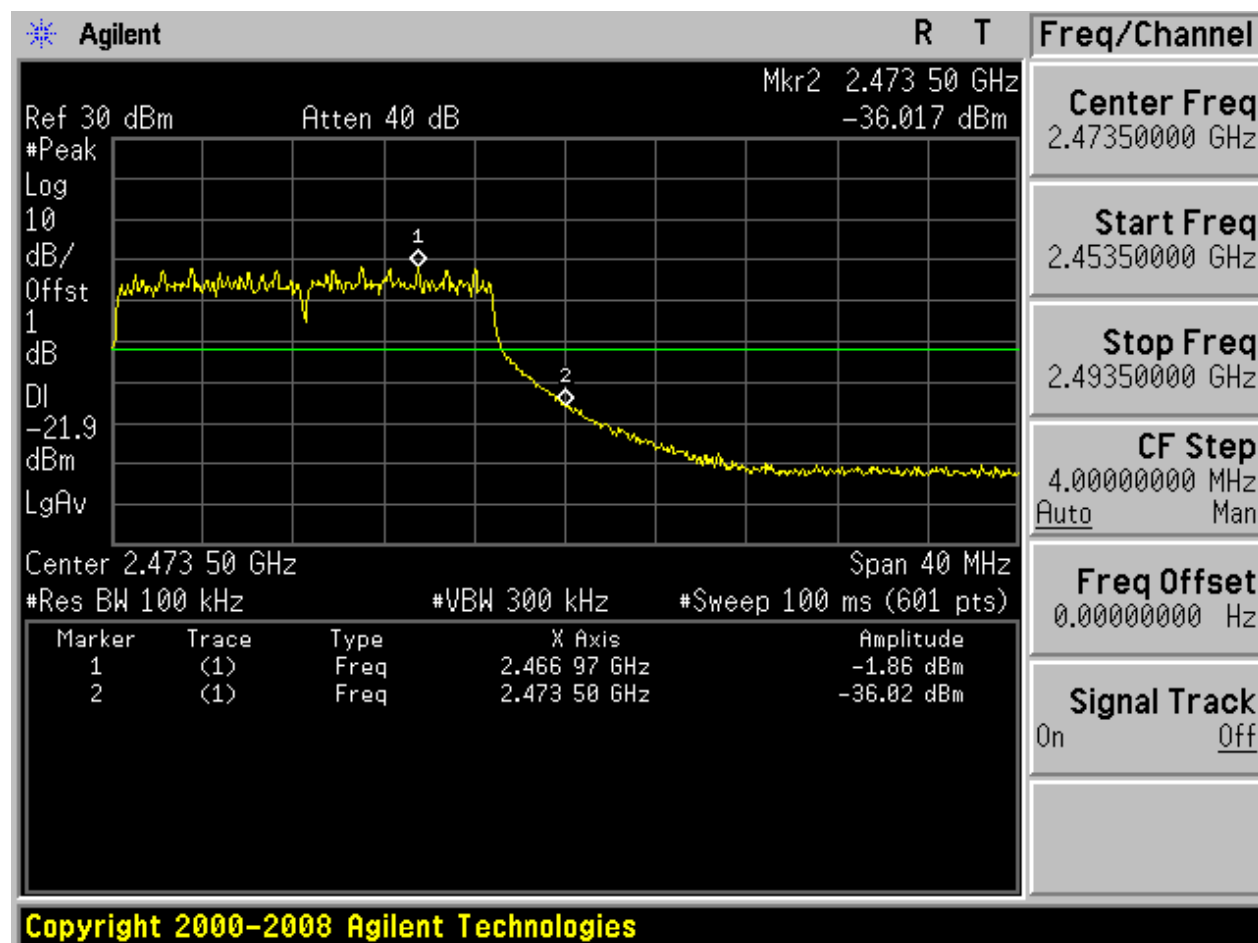
4.2 11B_H



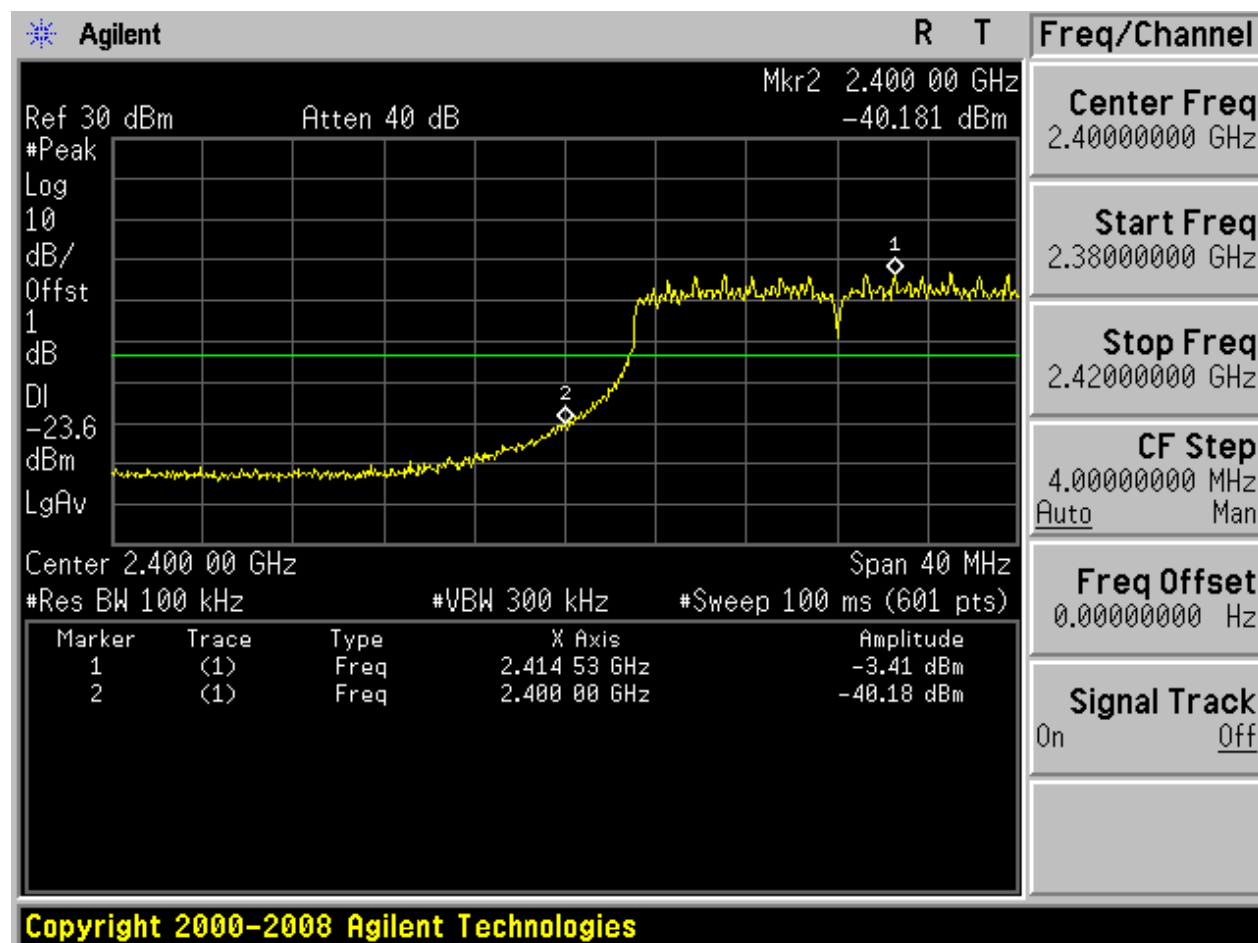
4.3 11G_L



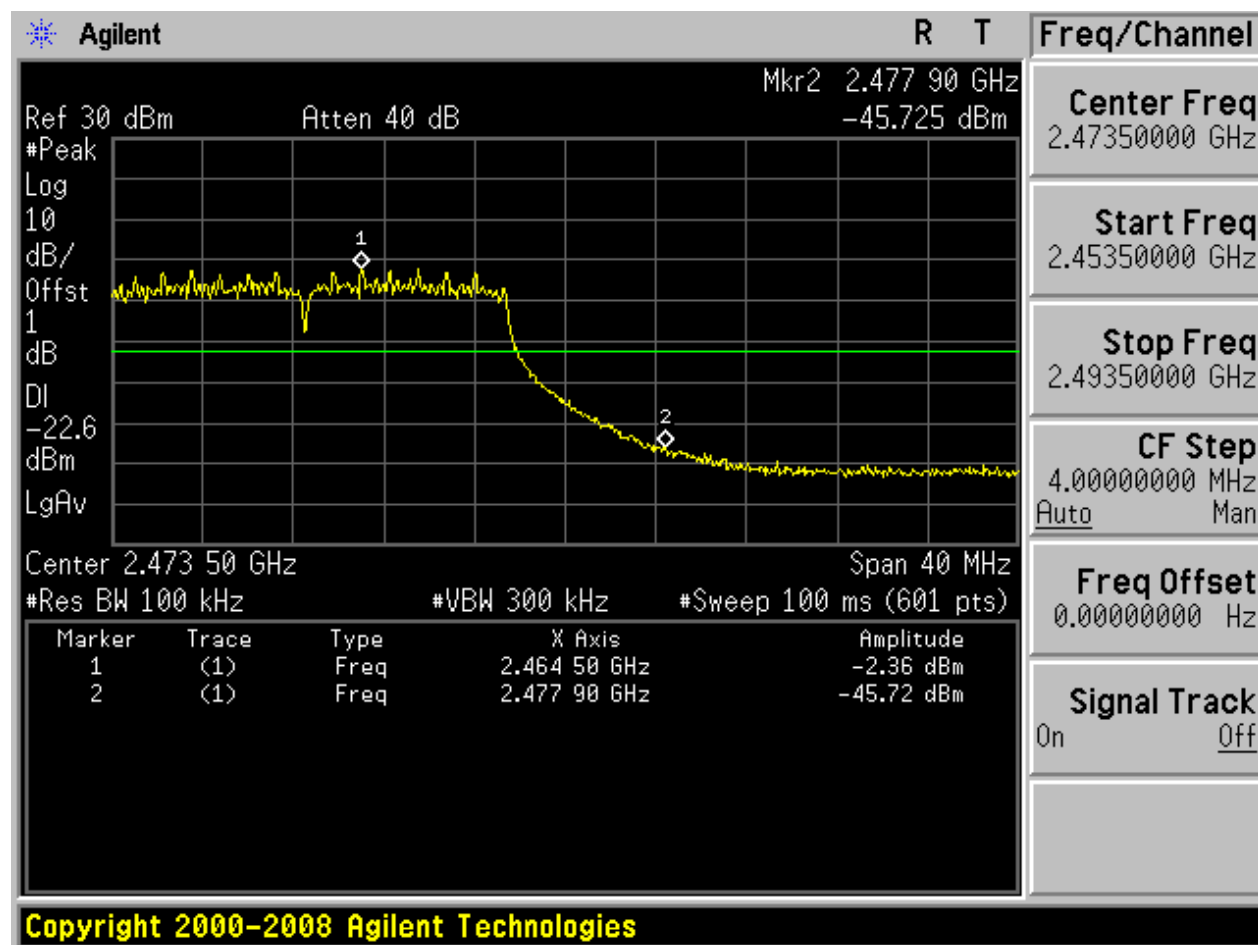
4.4 11G_H



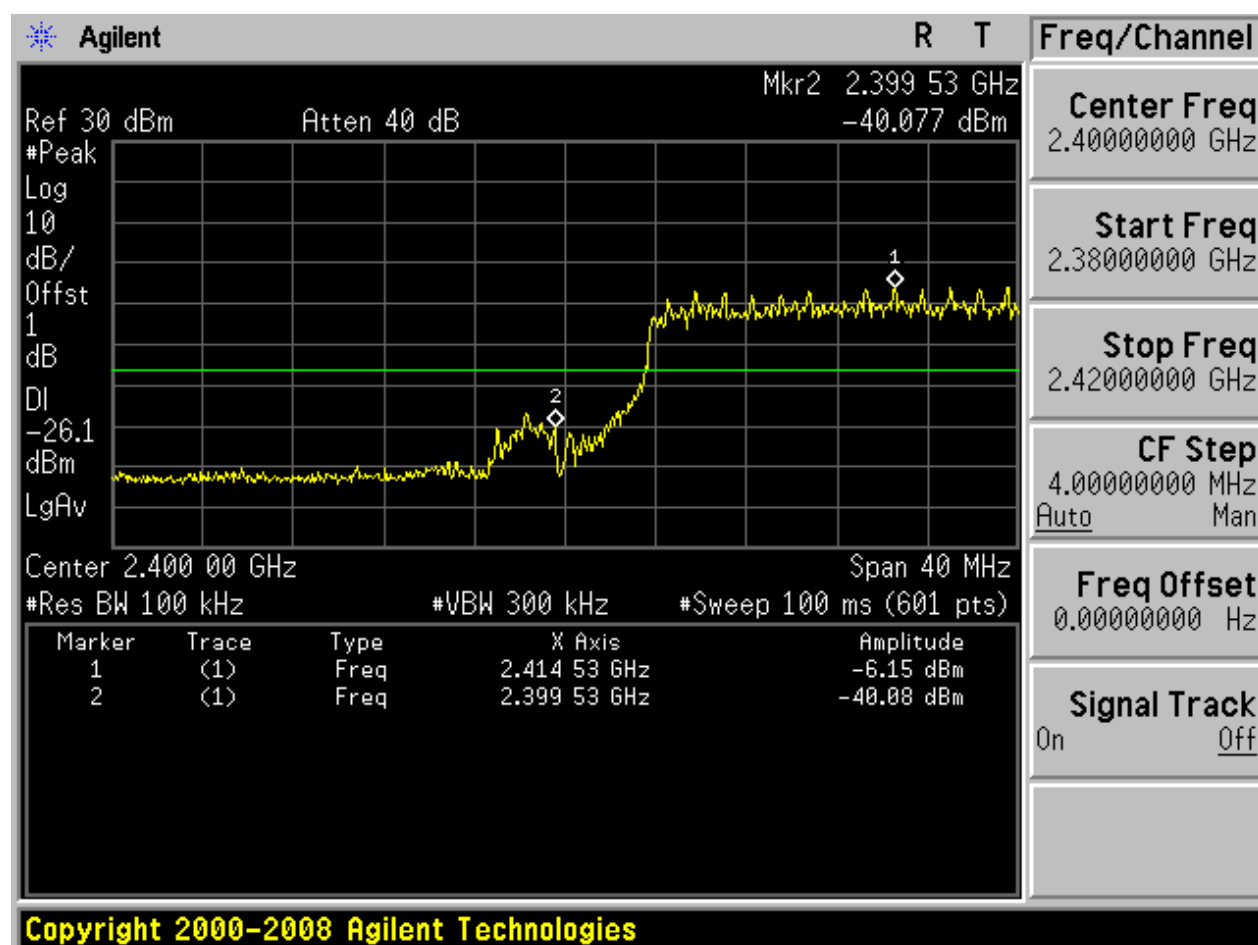
4.5 11N20_L



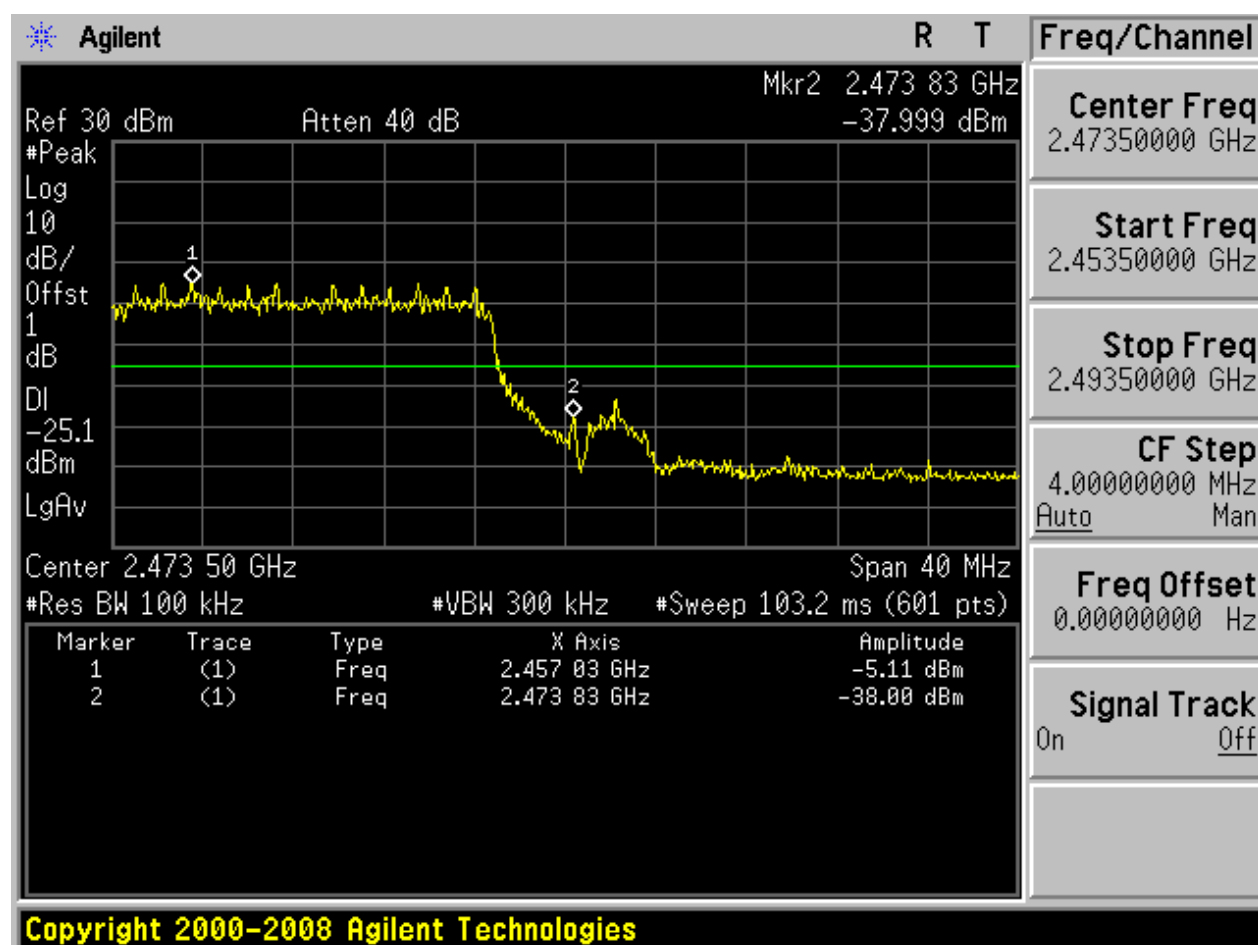
4.6 11N20_H



4.7 11N40_L



4.8 11N40_H



5. 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".

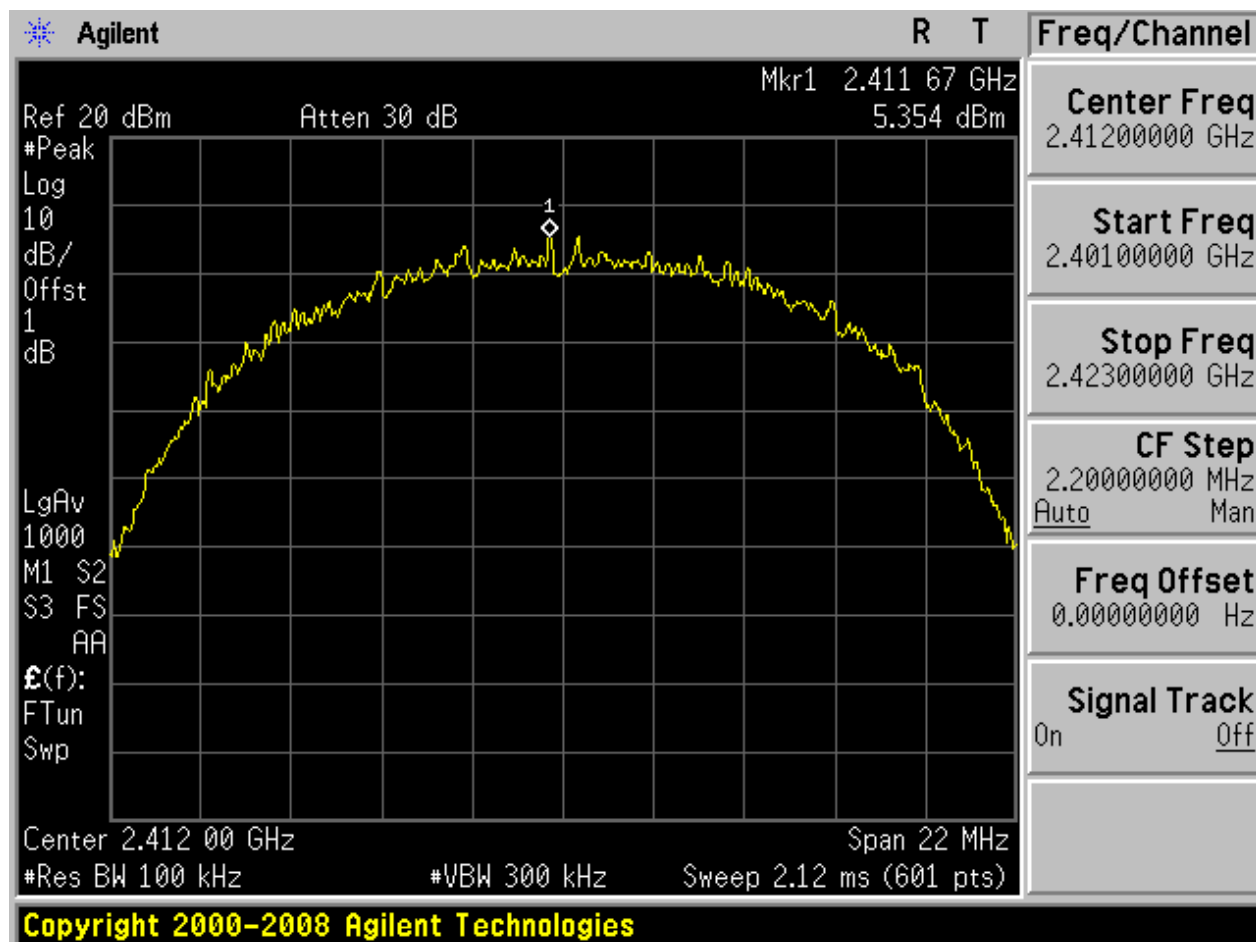
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	5.35	<limit	pass
11B	M	2437	7.02	<limit	pass
11B	H	2462	5.86	<limit	pass
11G	L	2412	-2.80	<limit	pass
11G	M	2437	-1.20	<limit	pass
11G	H	2462	-1.80	<limit	pass
11N20	L	2412	-3.22	<limit	pass
11N20	M	2437	-1.71	<limit	pass
11N20	H	2462	-2.19	<limit	pass
11N40	L	2422	-5.07	<limit	pass
11N40	M	2437	-3.94	<limit	pass
11N40	H	2452	-4.84	<limit	pass

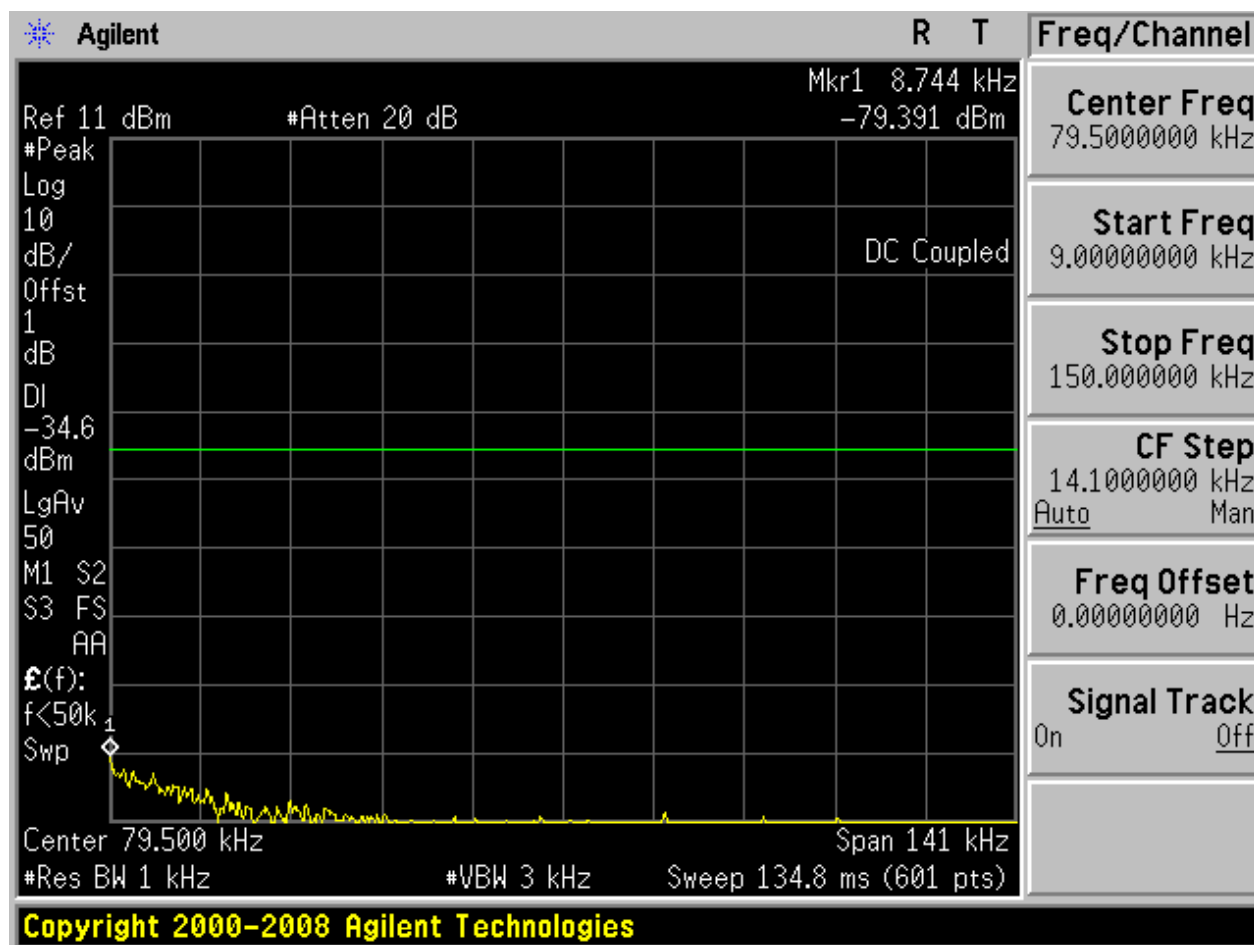
Part II - Test Plots

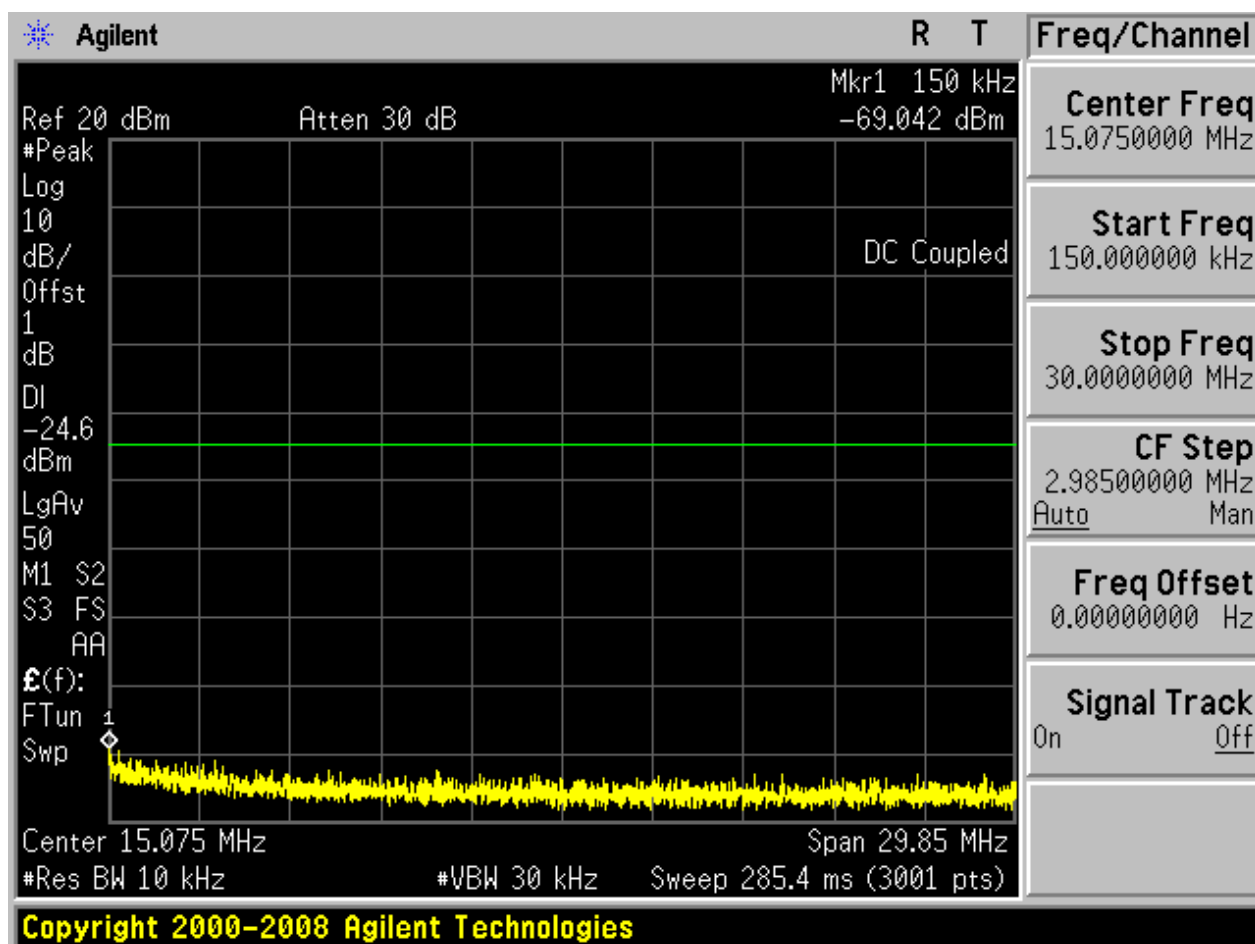
5.1 11B_L

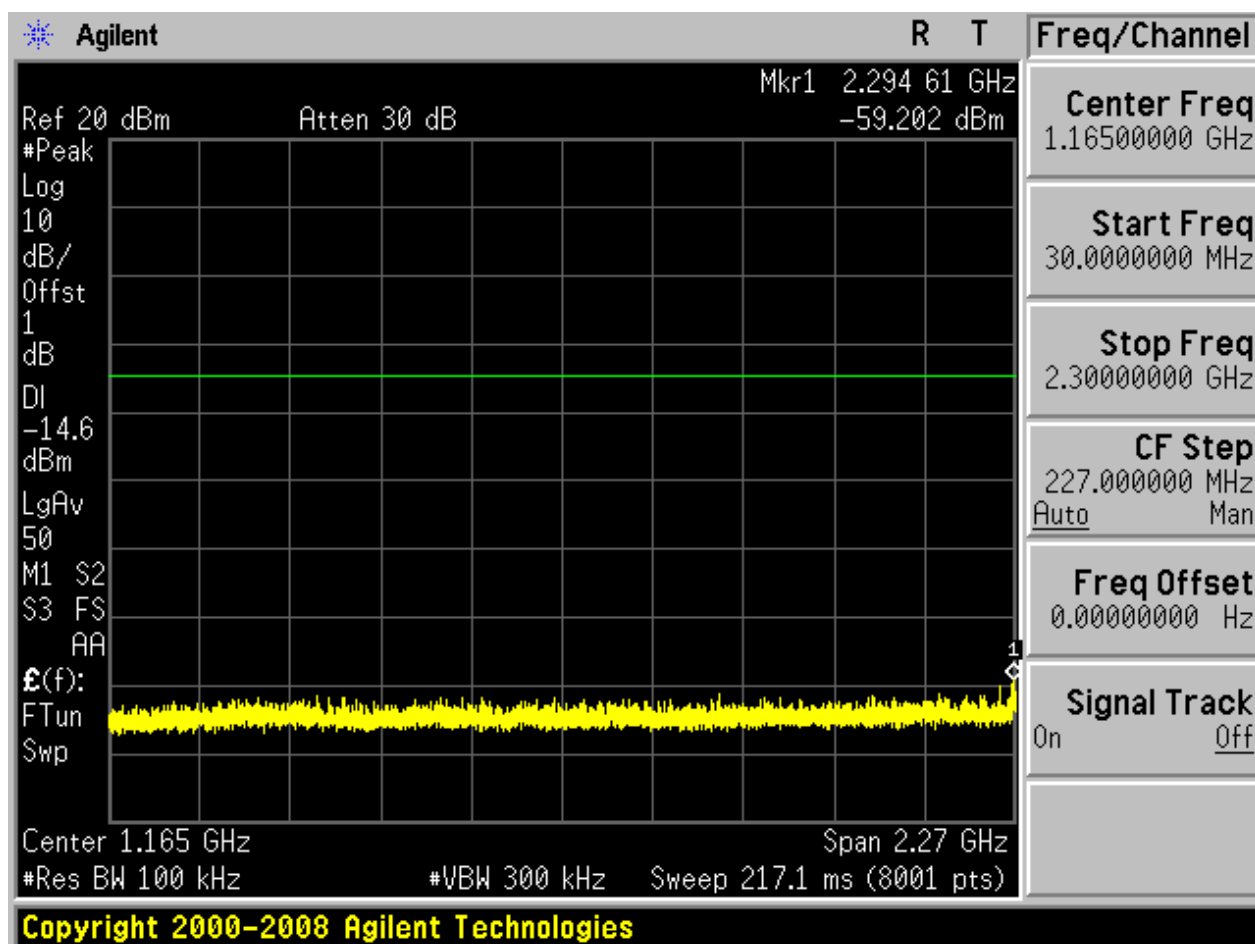
Pref:

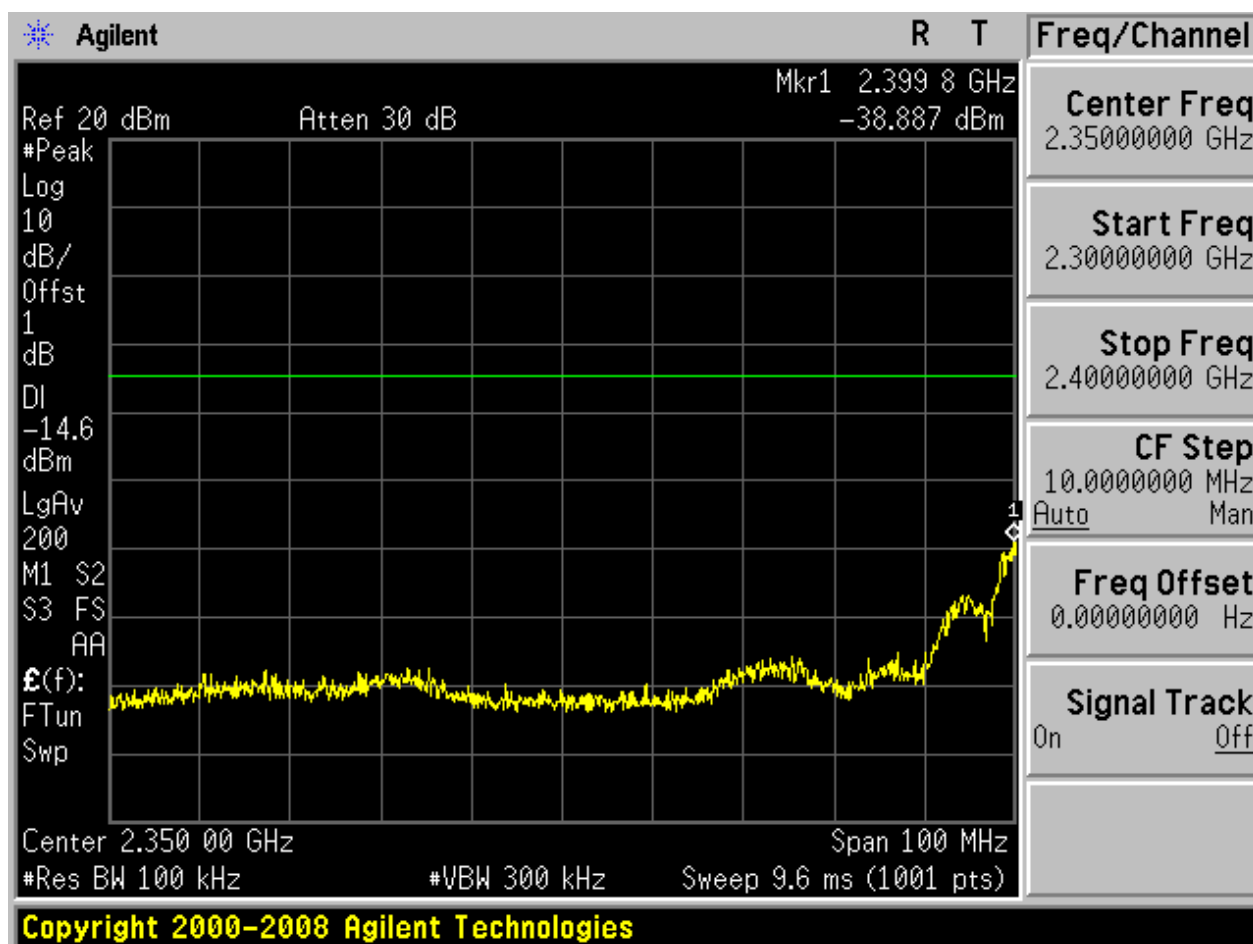


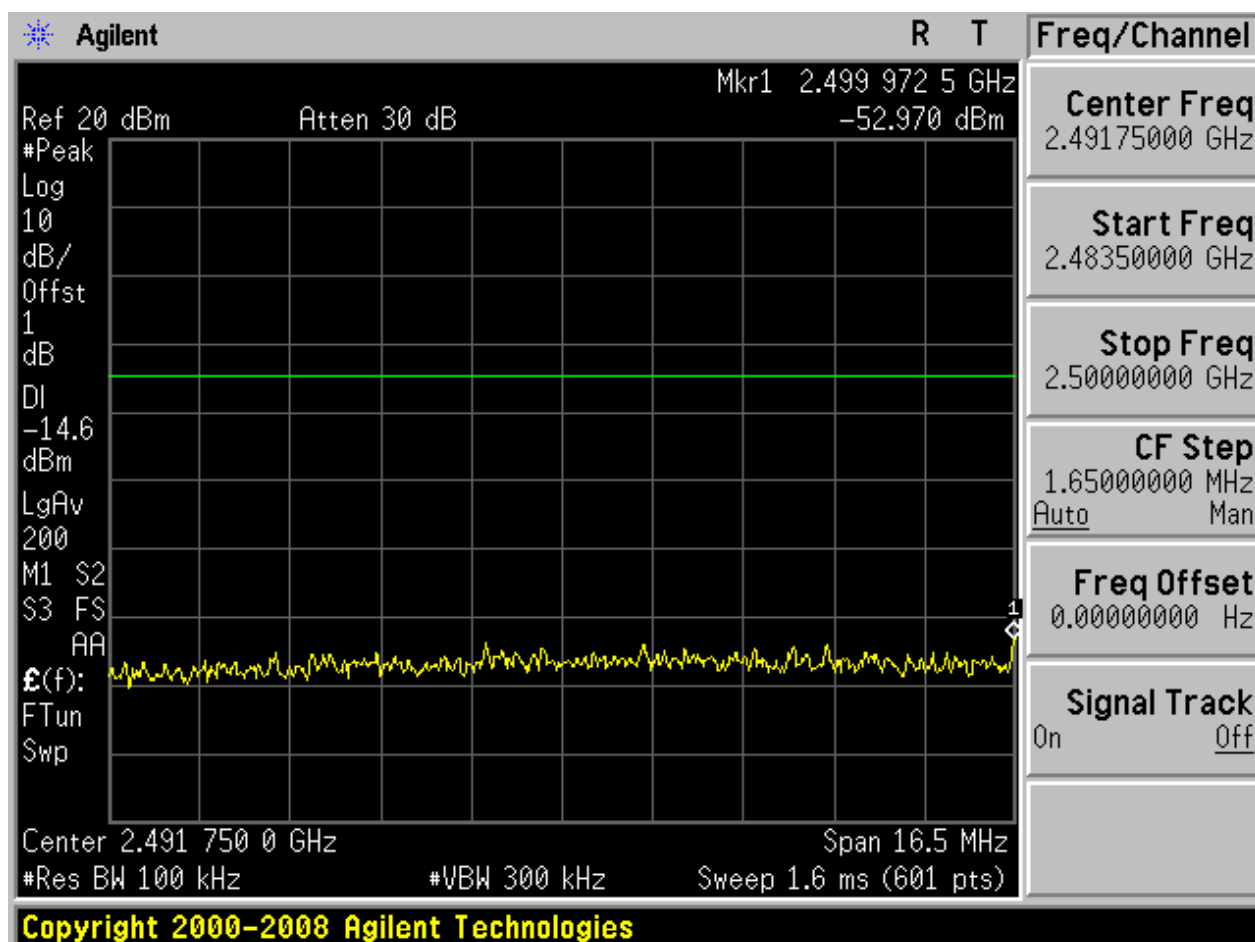
Puw:

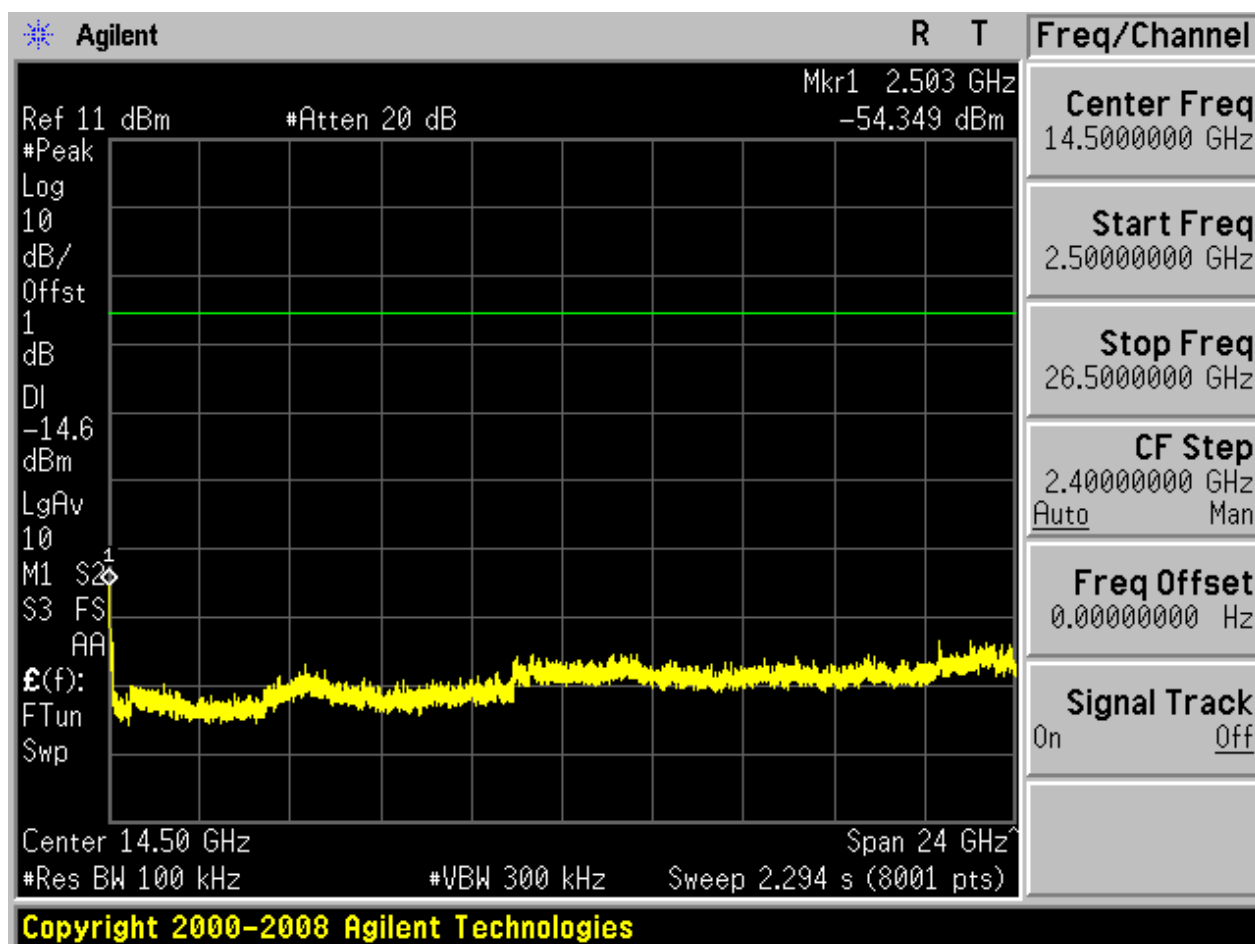






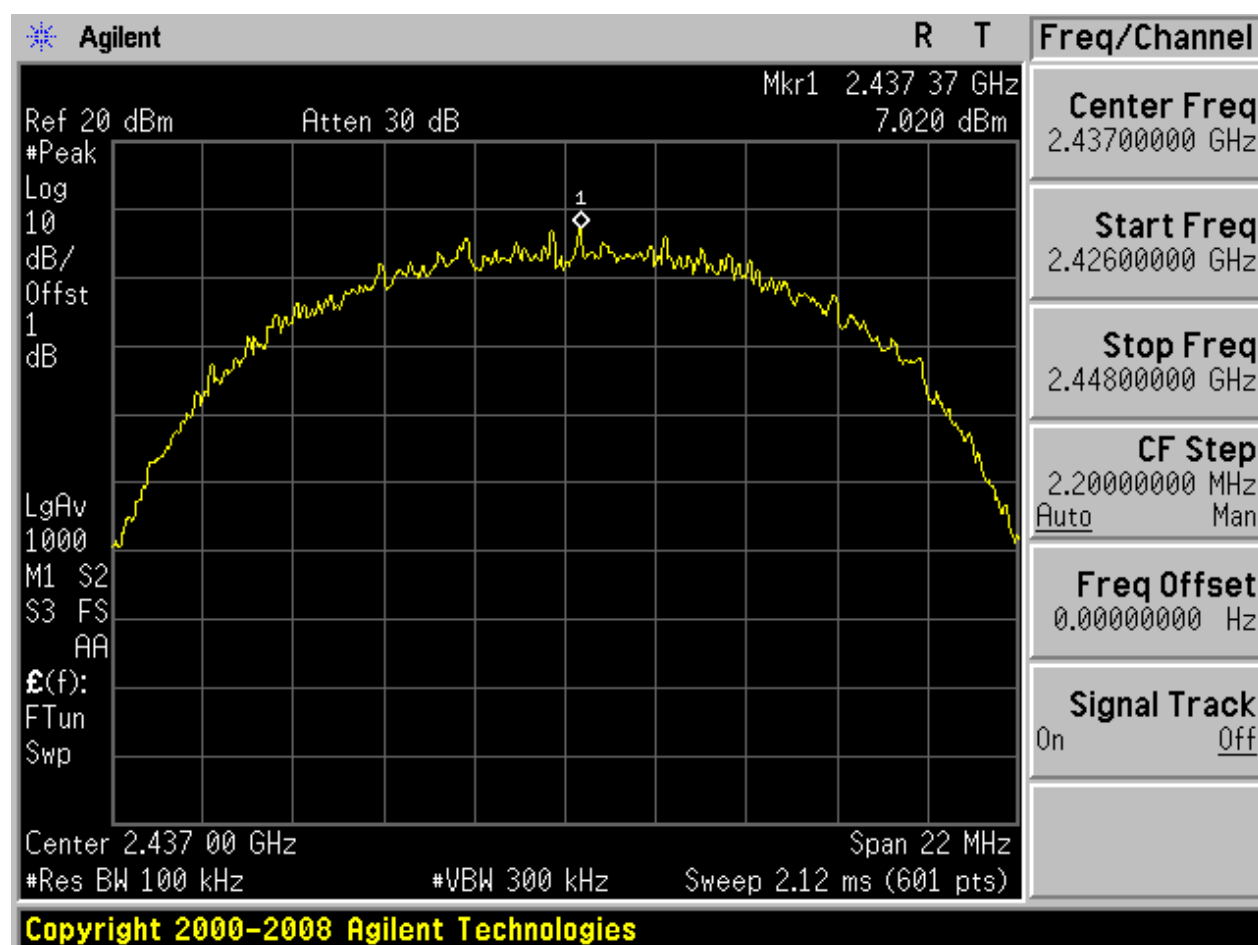




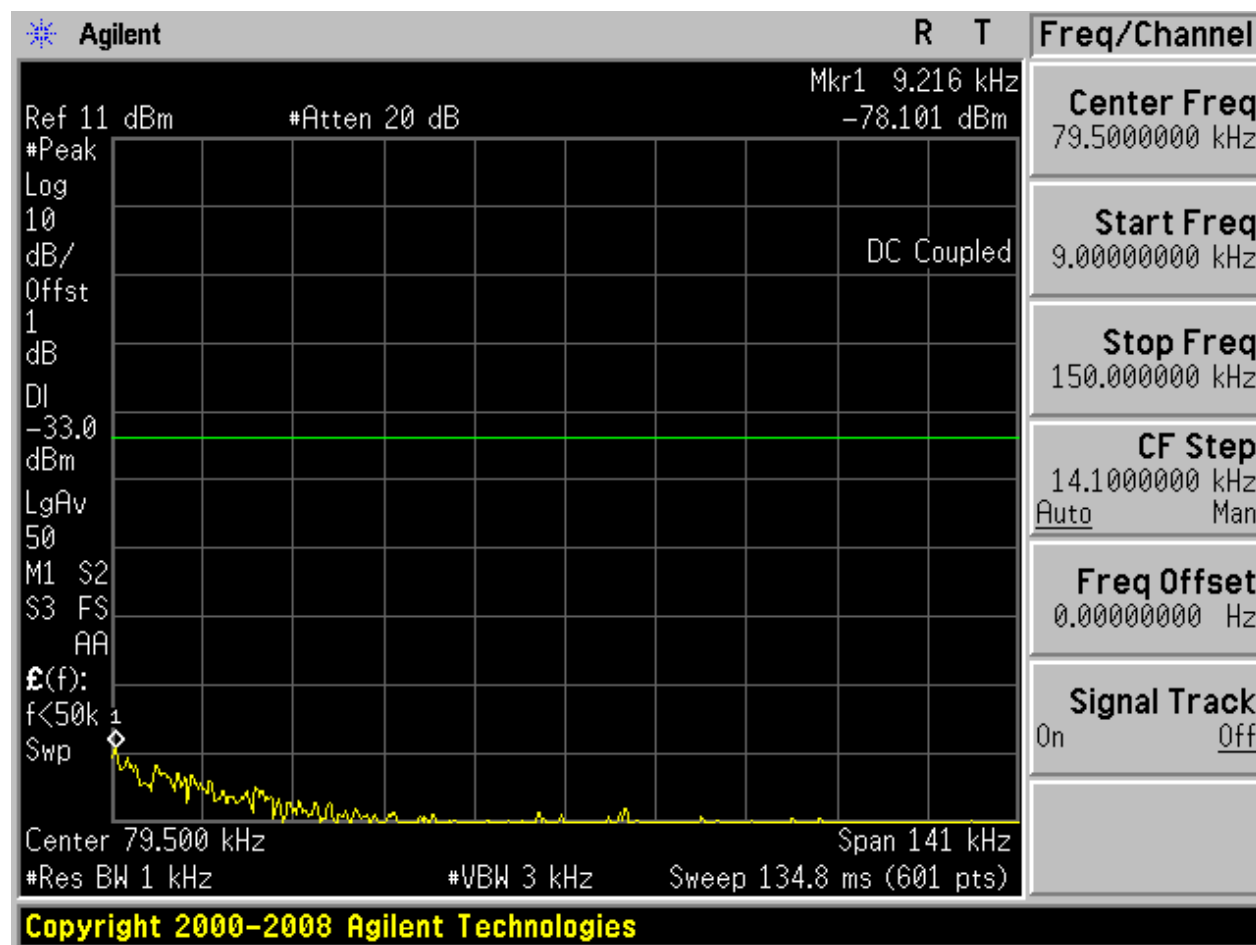


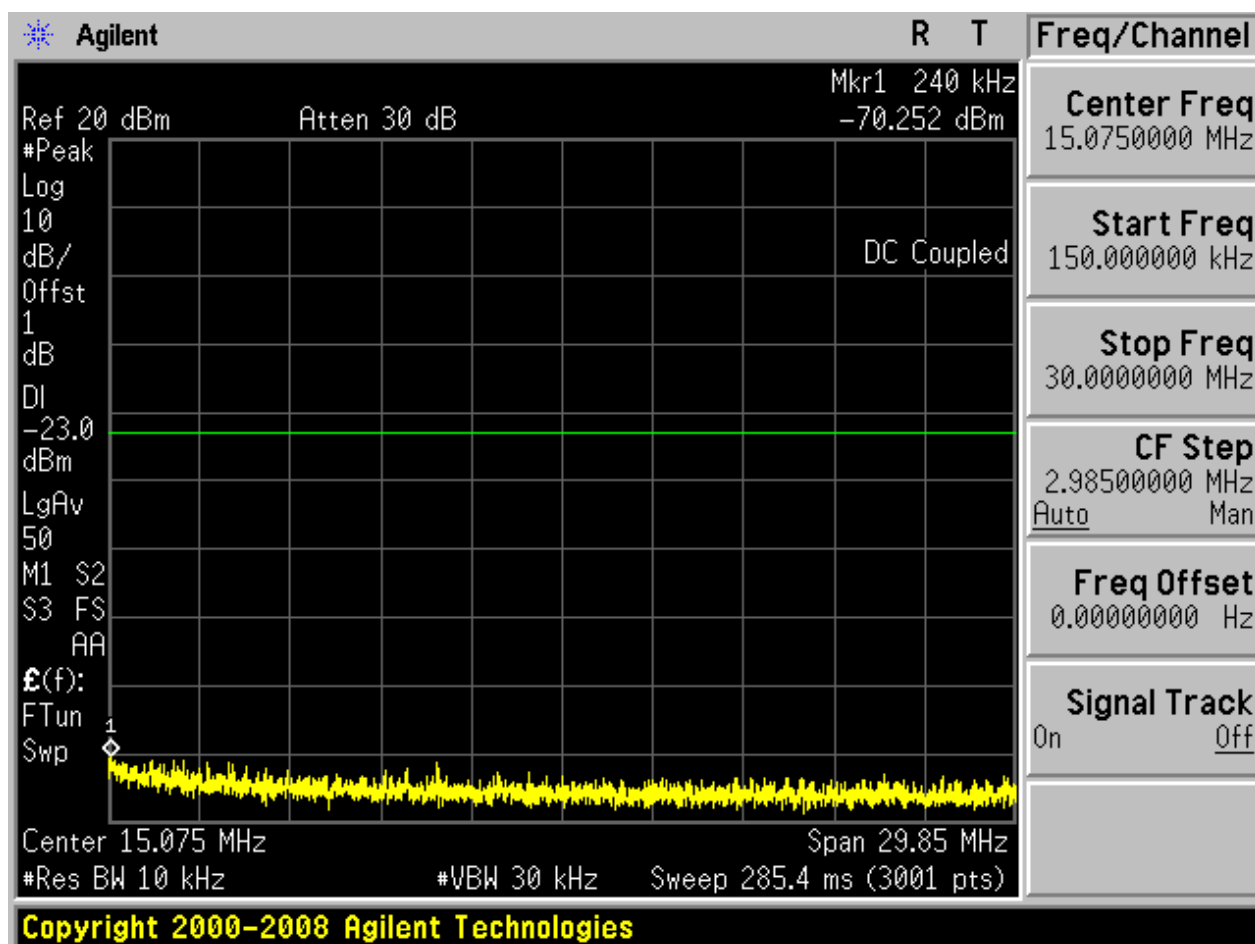
5.2 11B_M

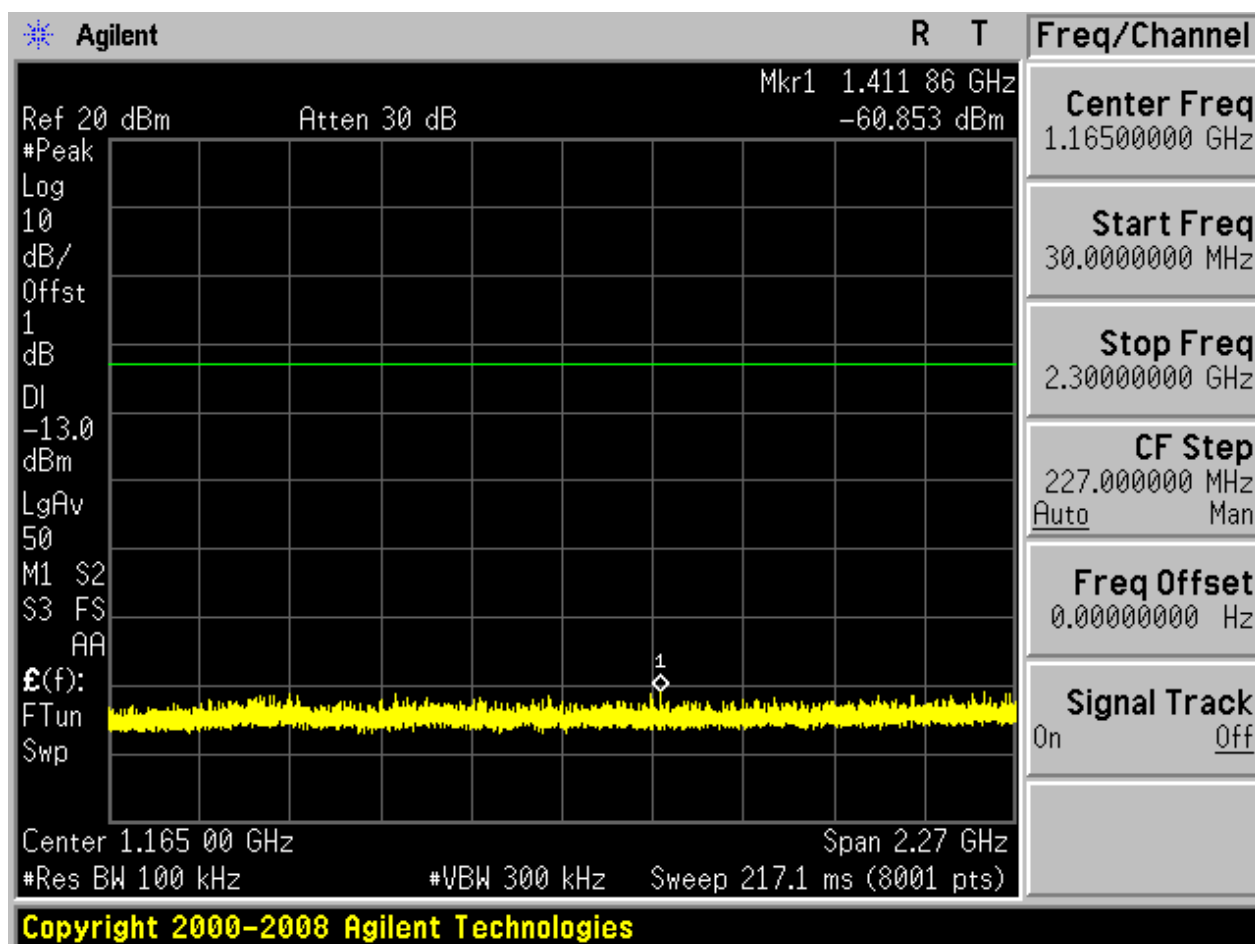
Pref:

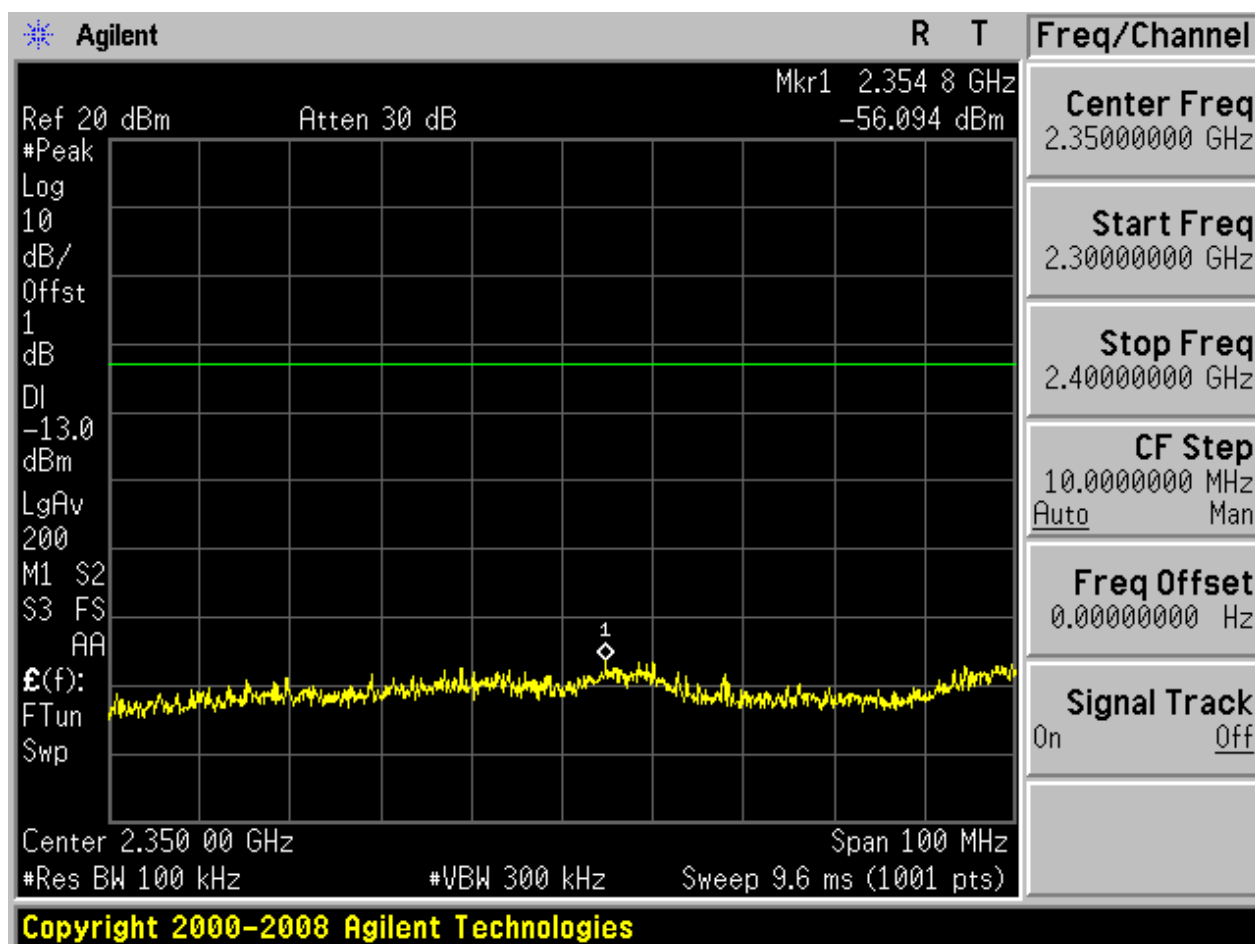


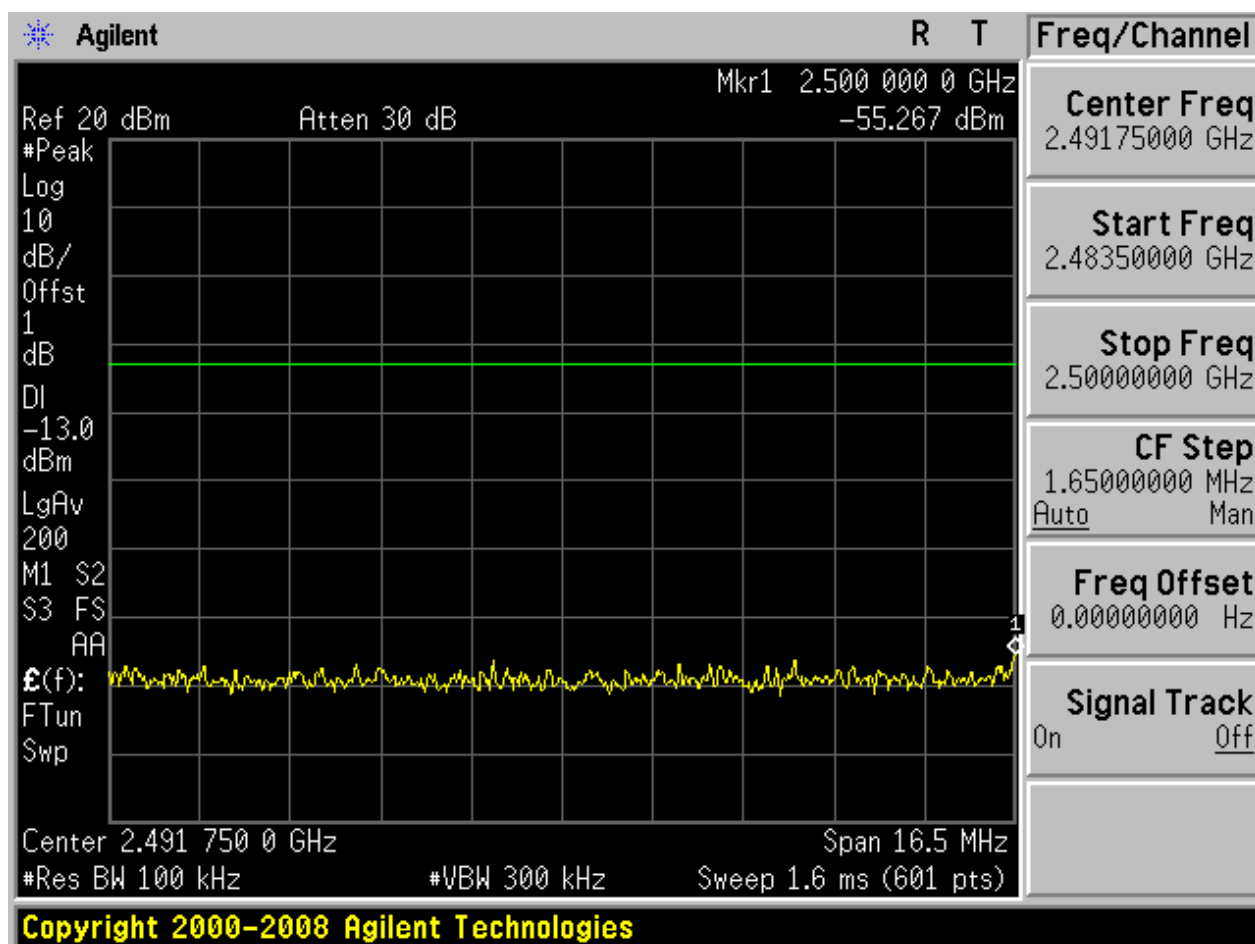
Puw:

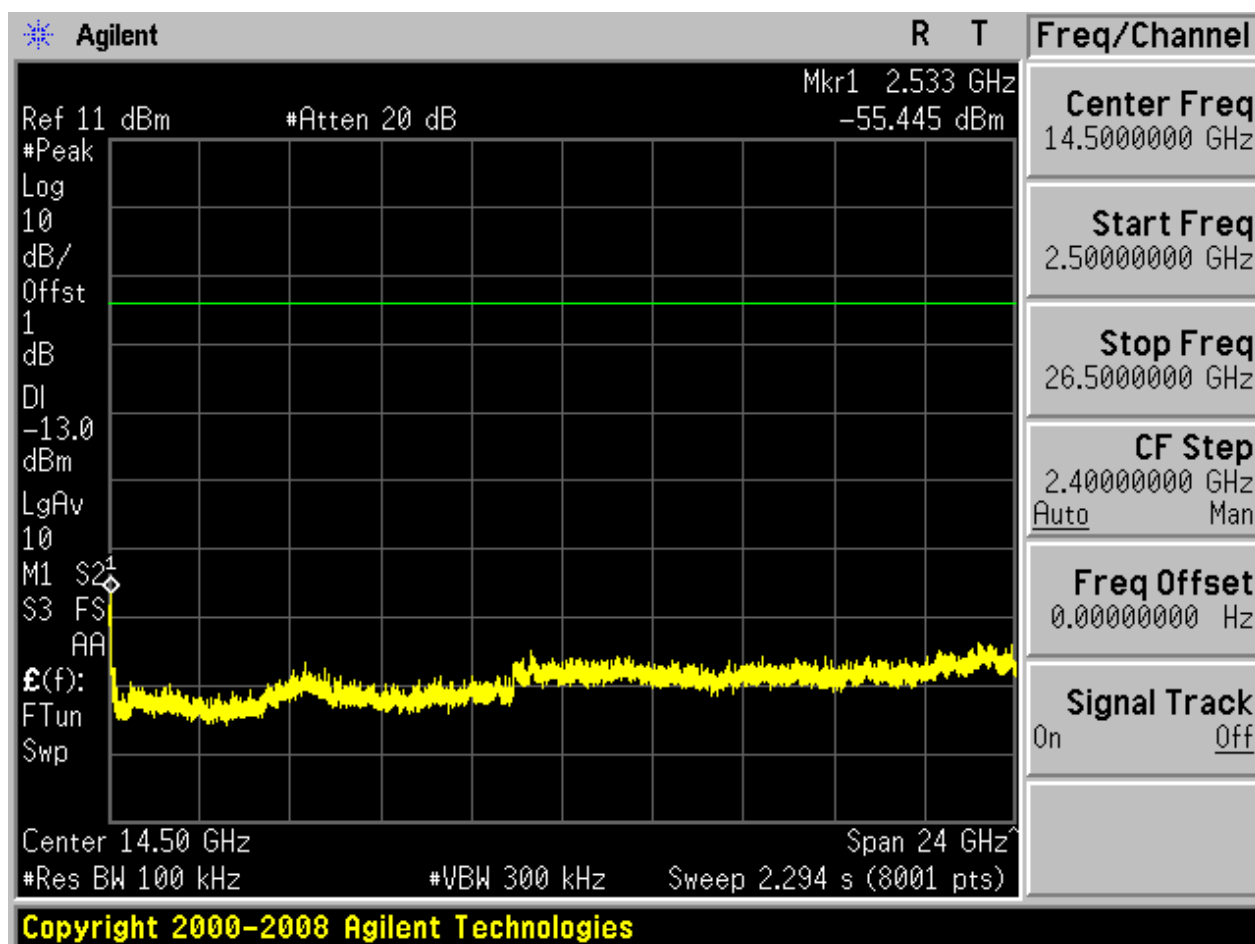






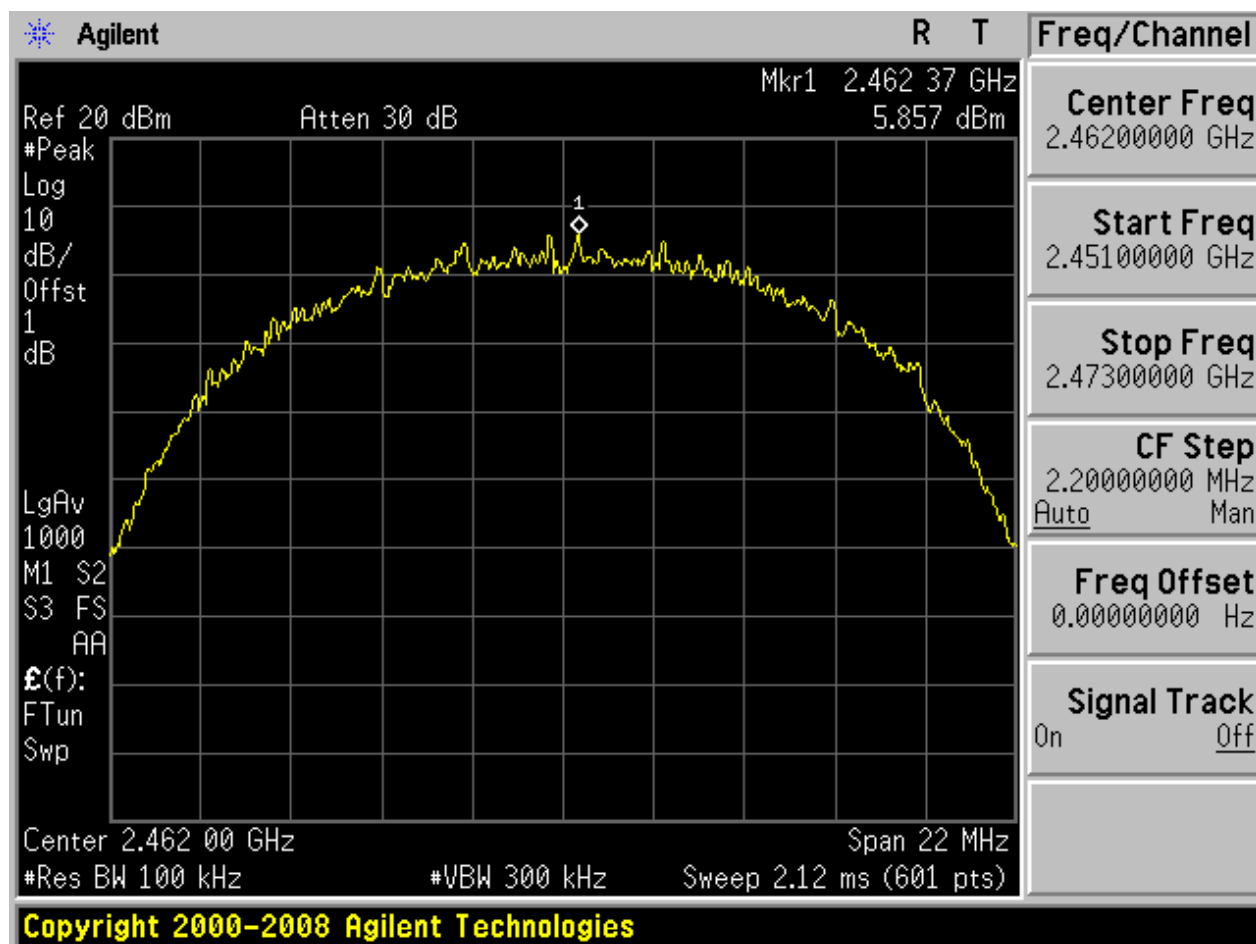




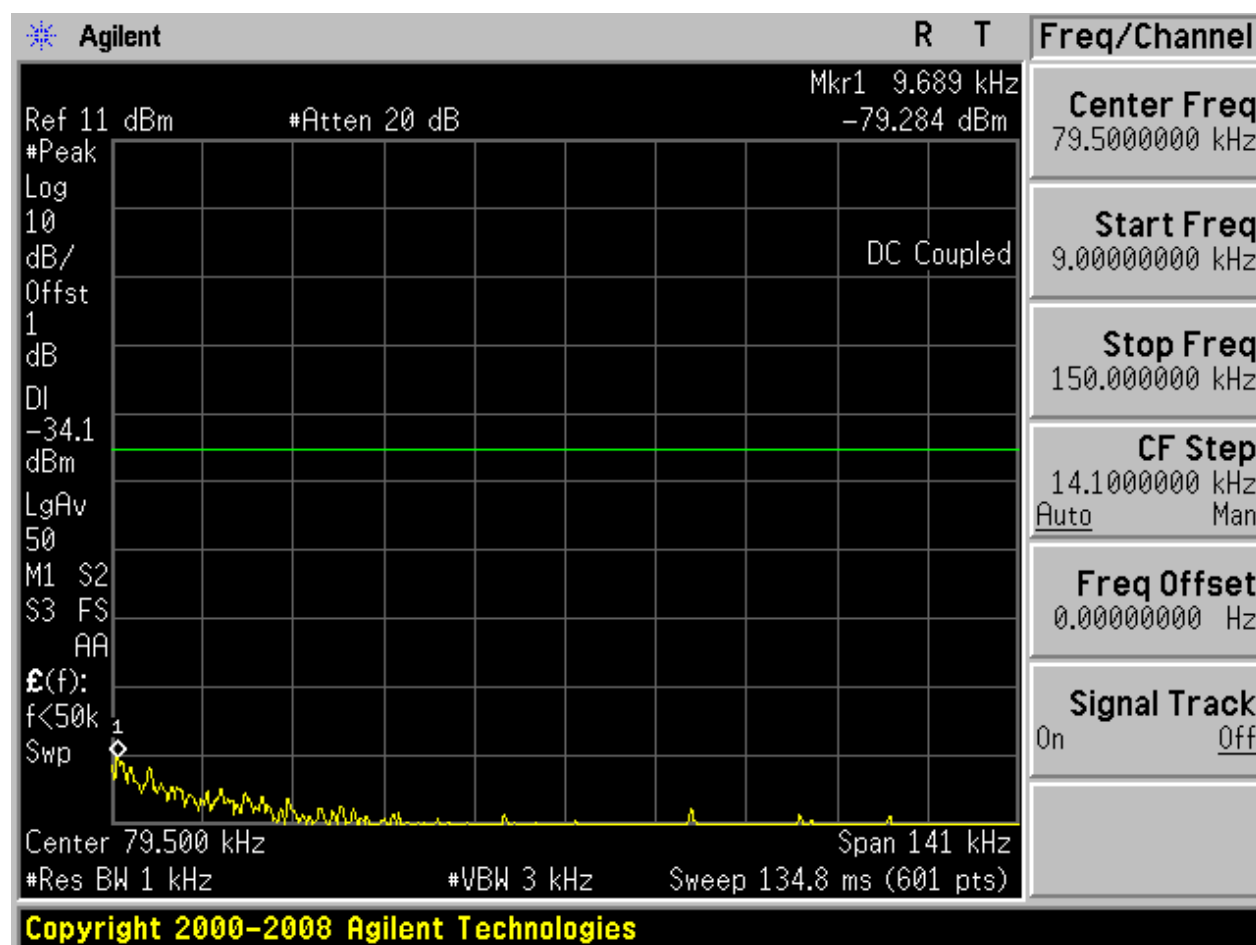


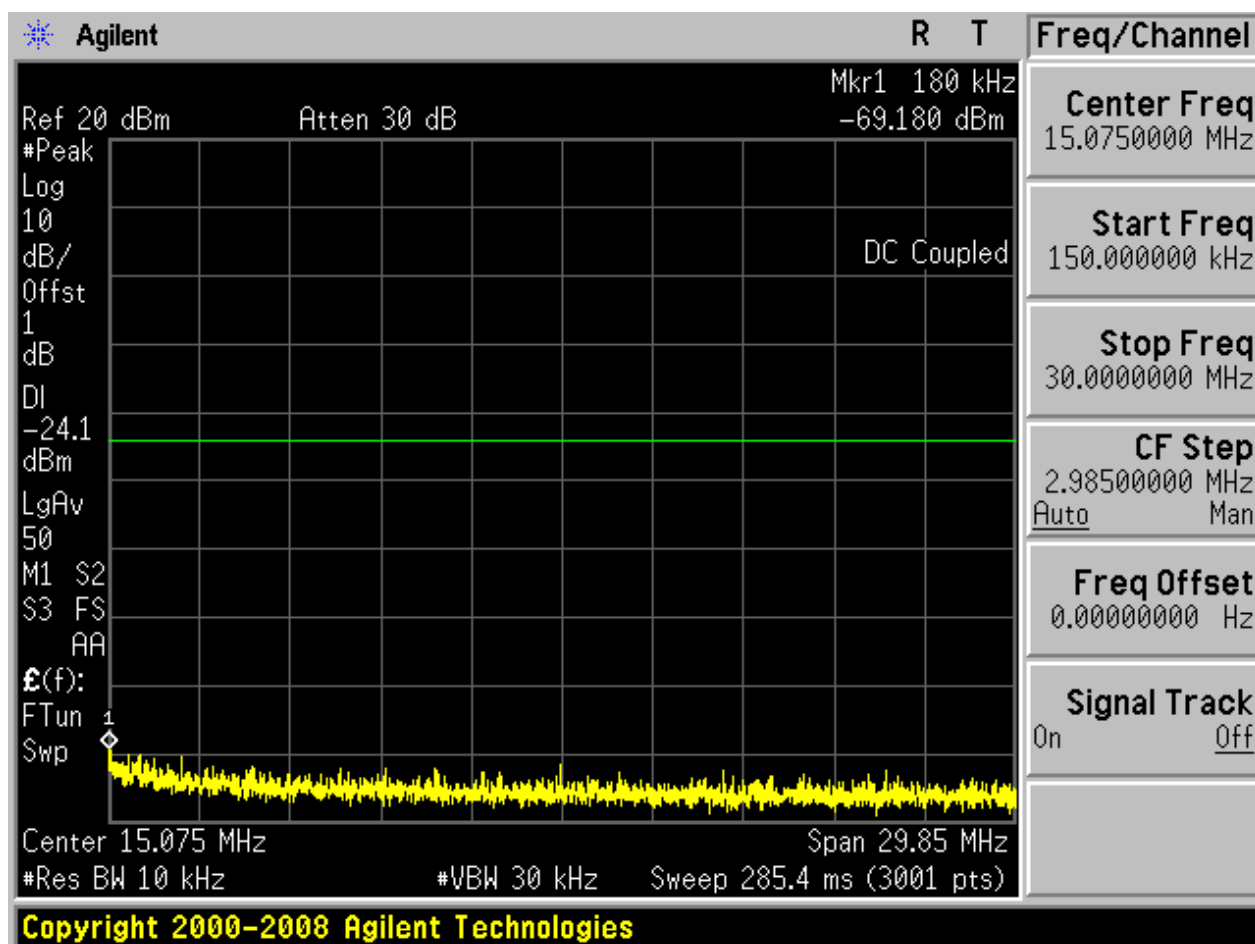
5.3 11B_H

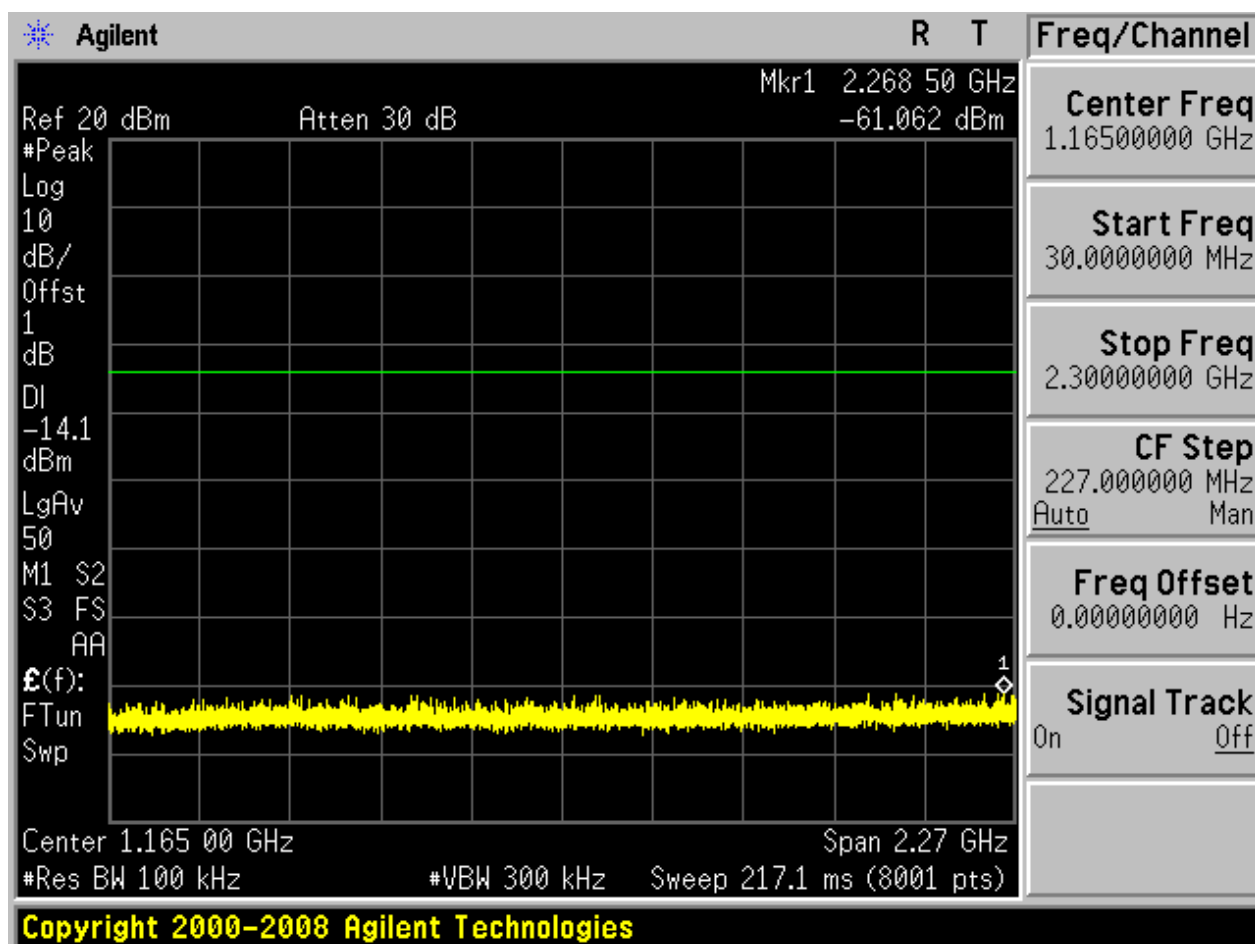
Pref:

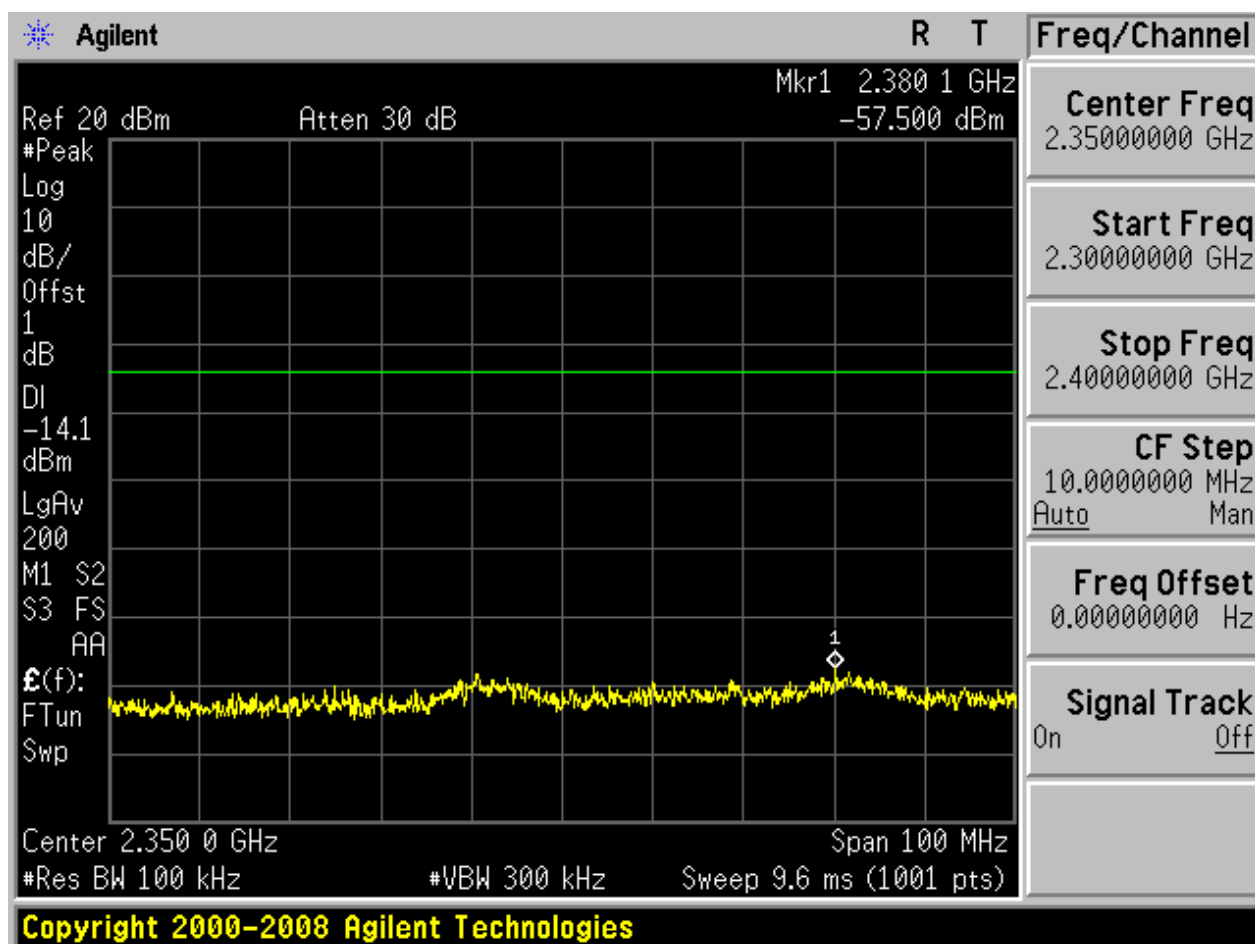


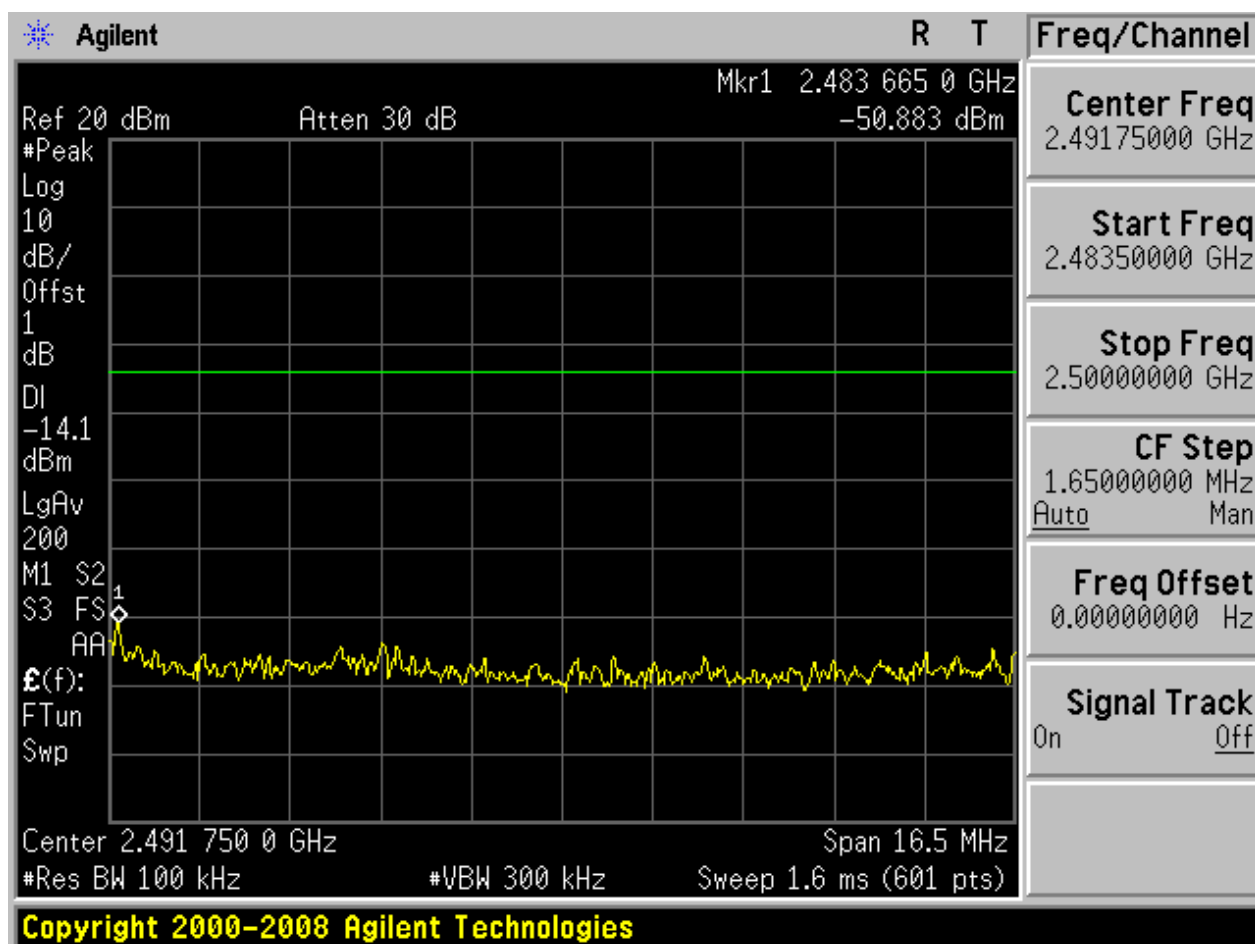
Puw:

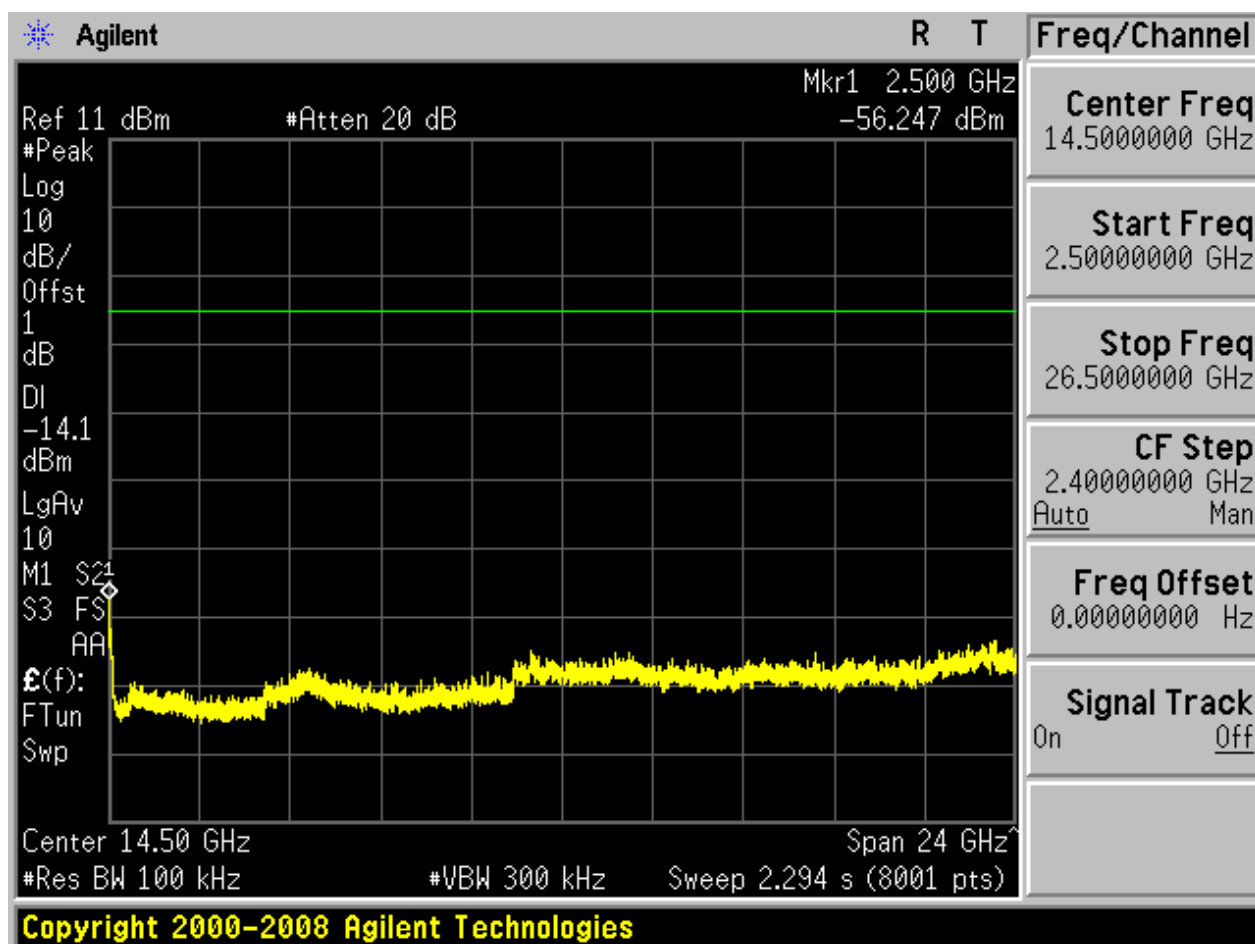






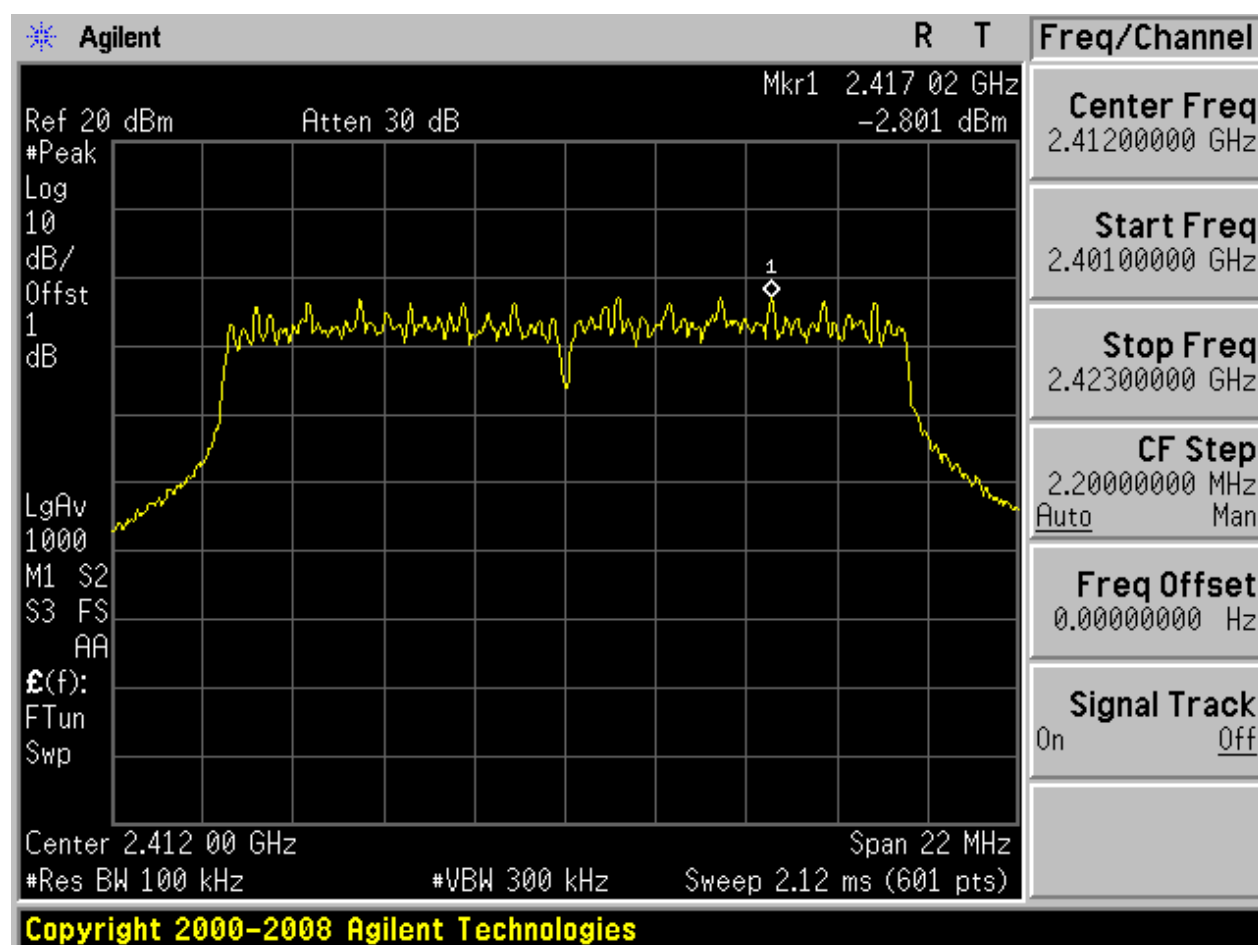




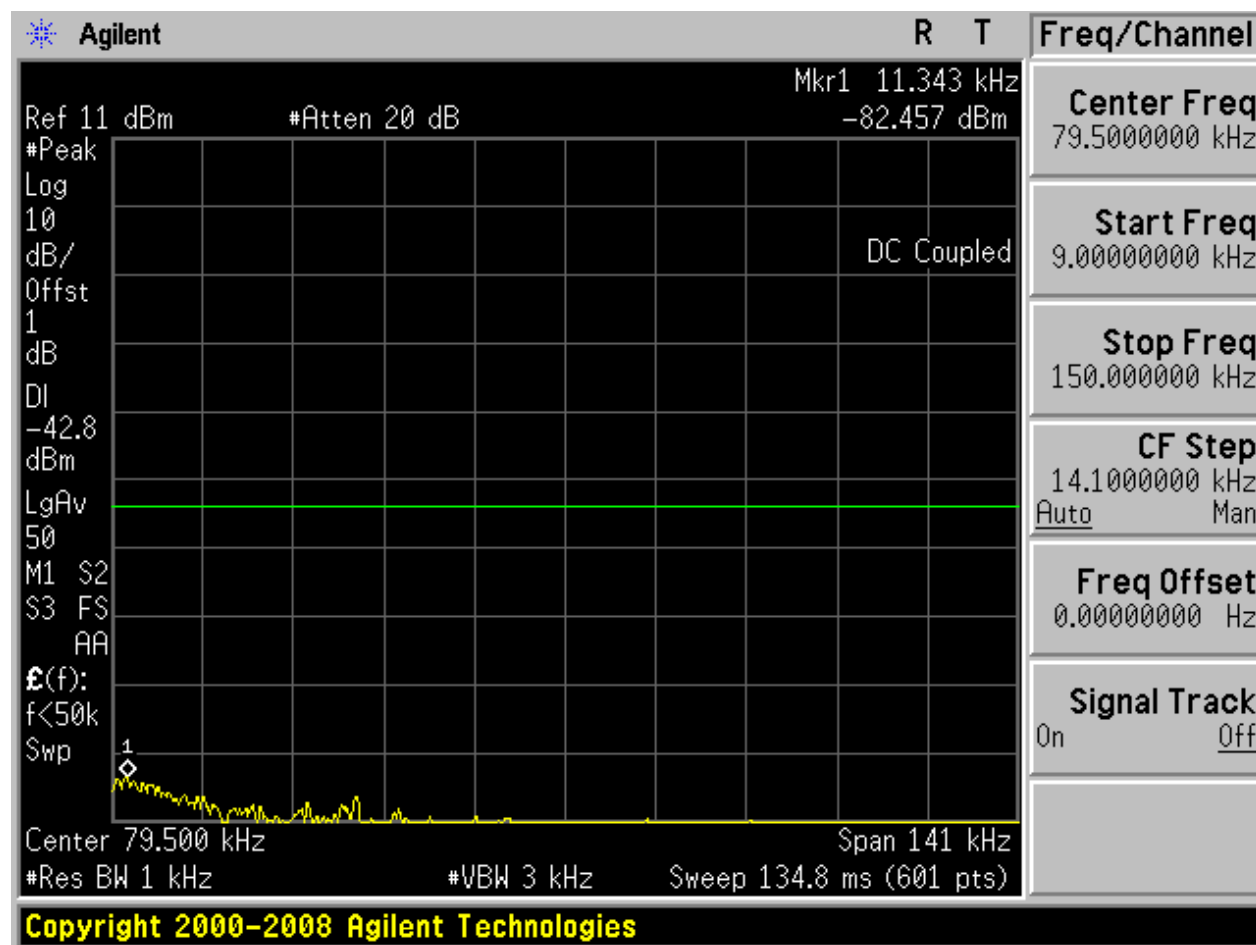


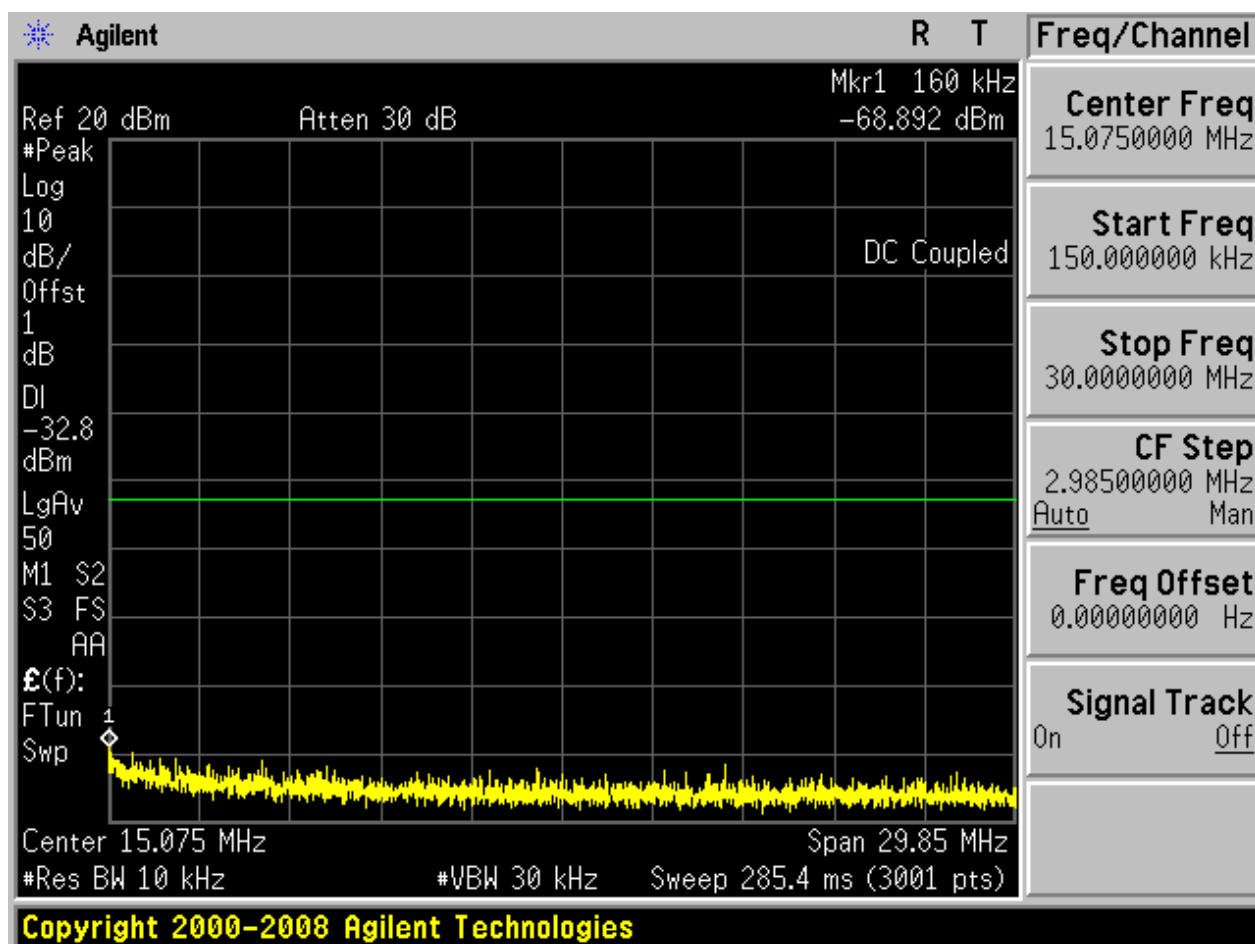
5.4 11G_L

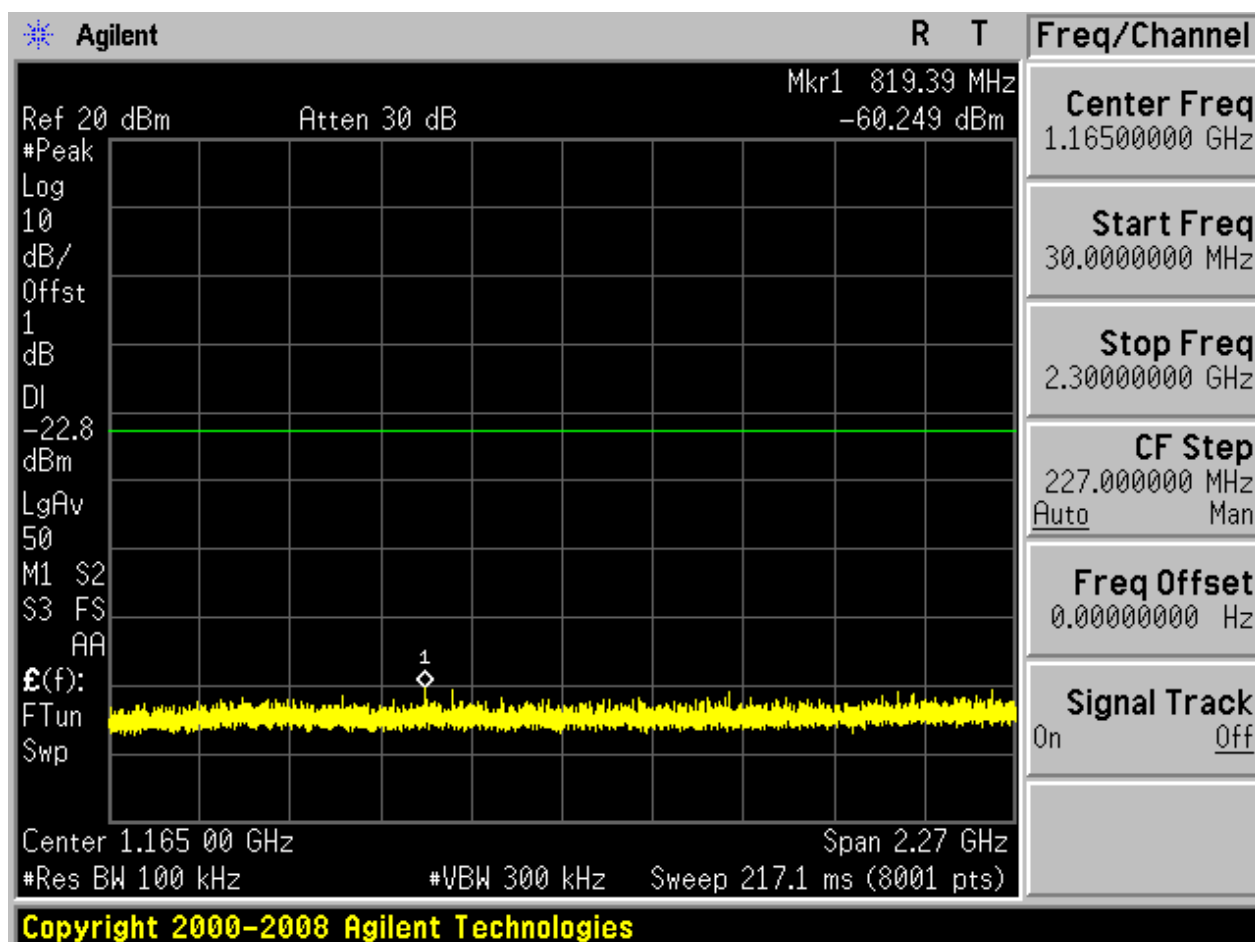
Pref:

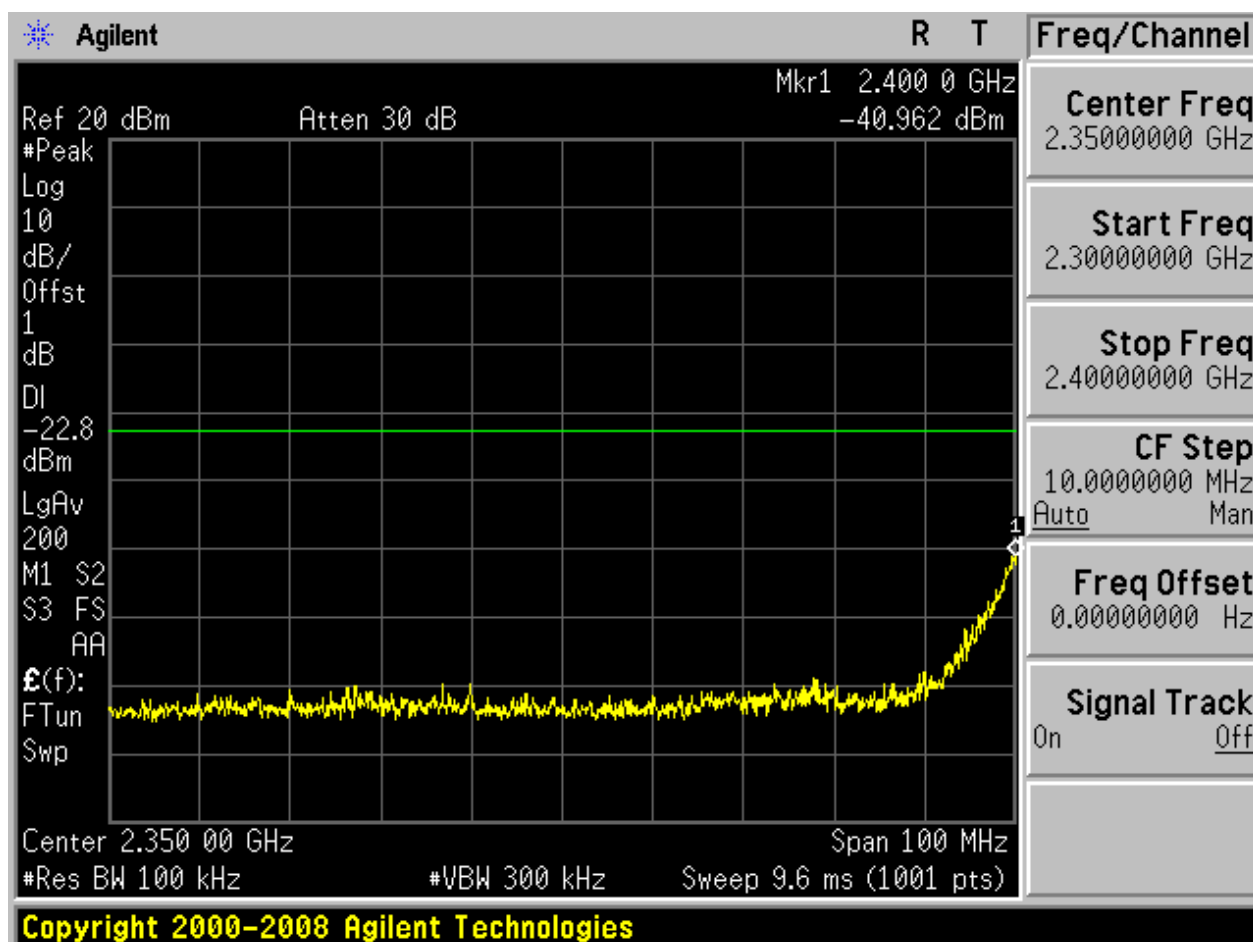


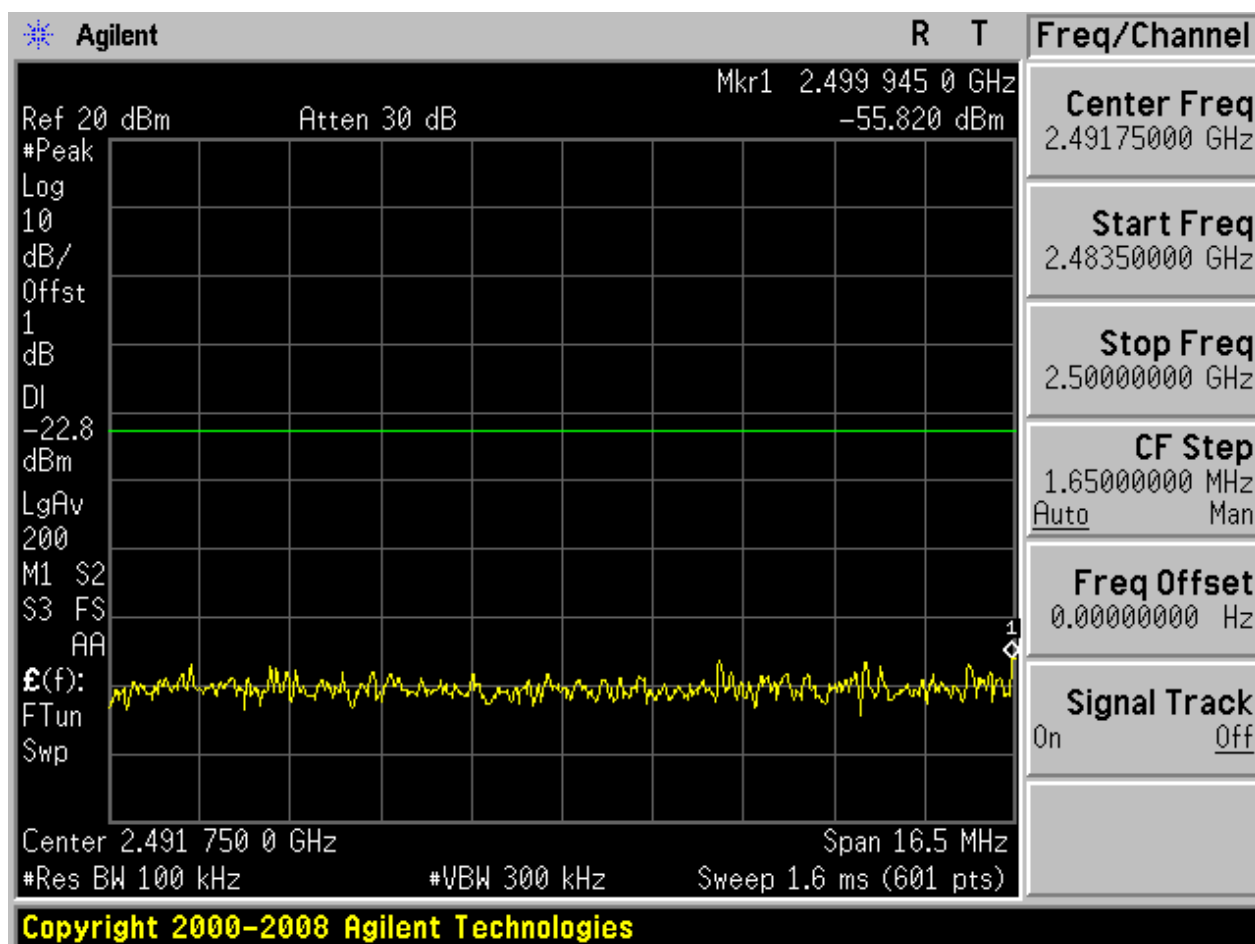
Puw:

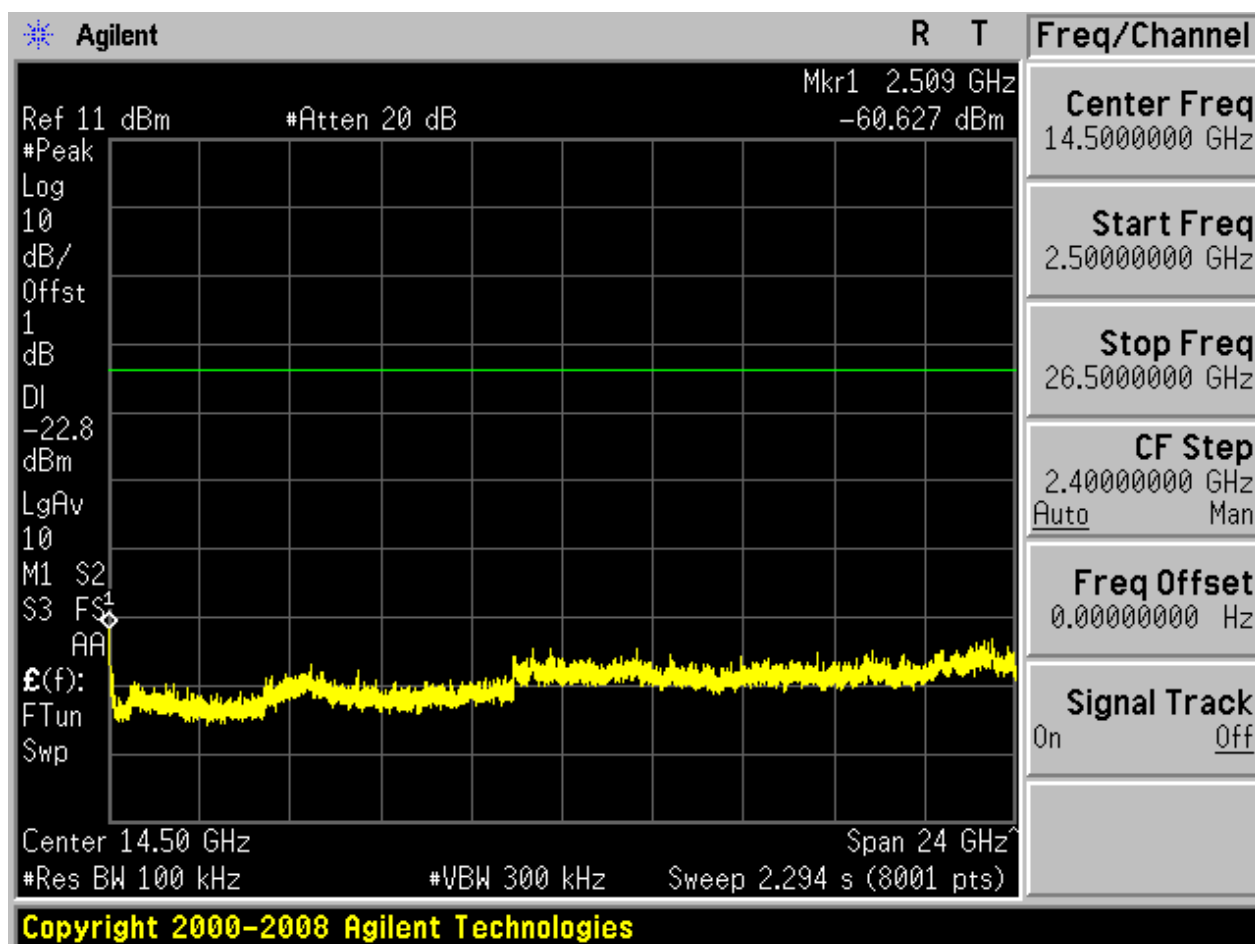






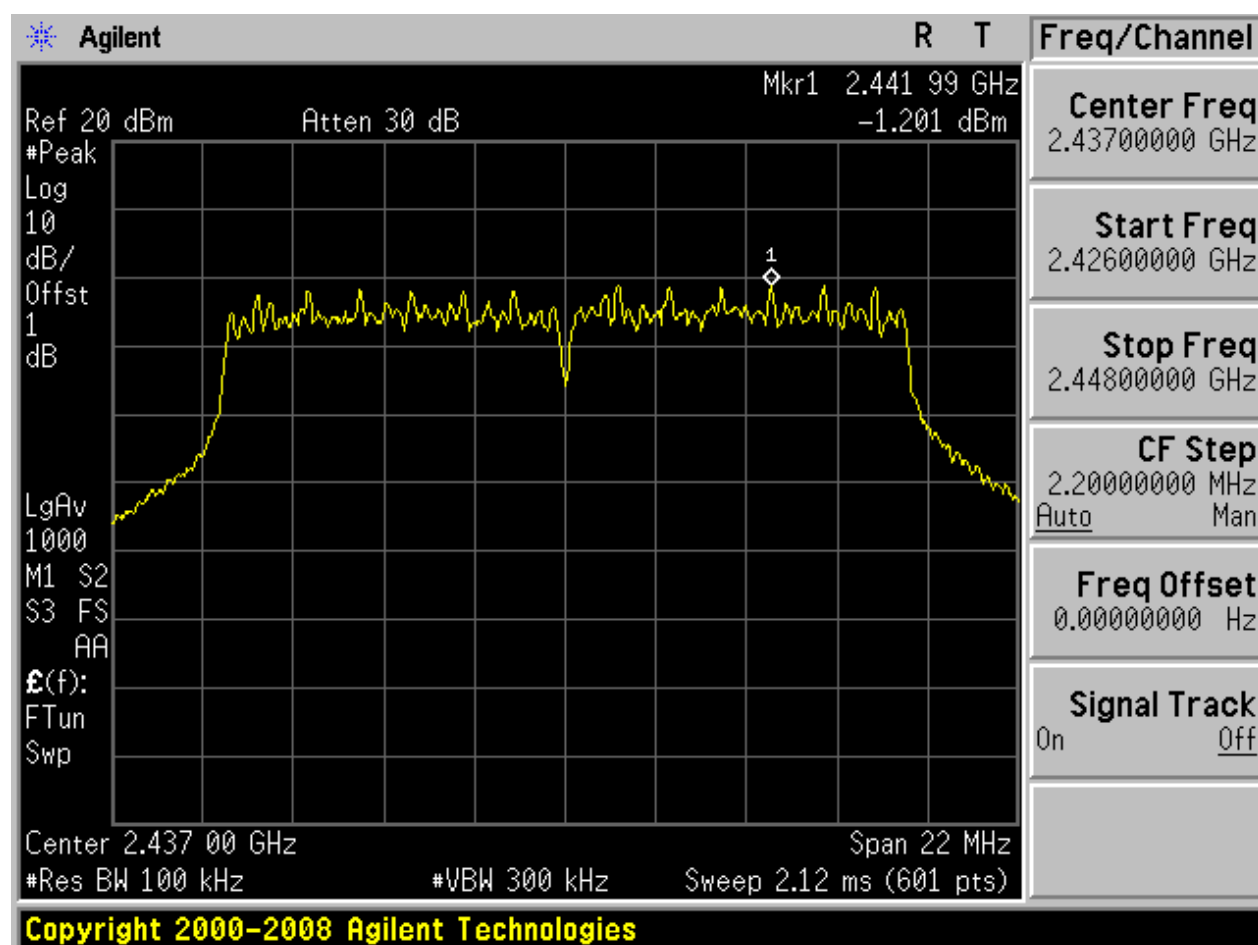




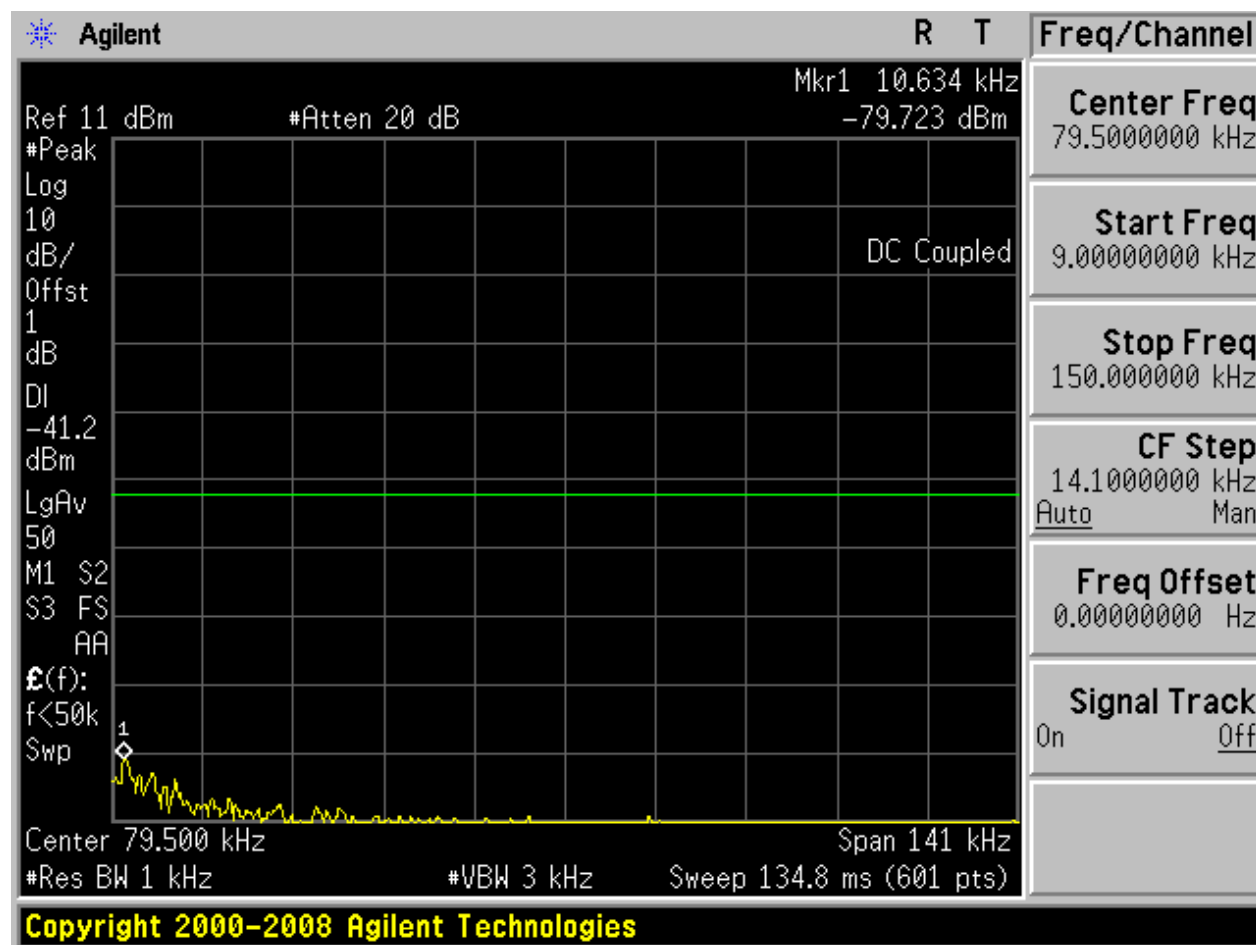


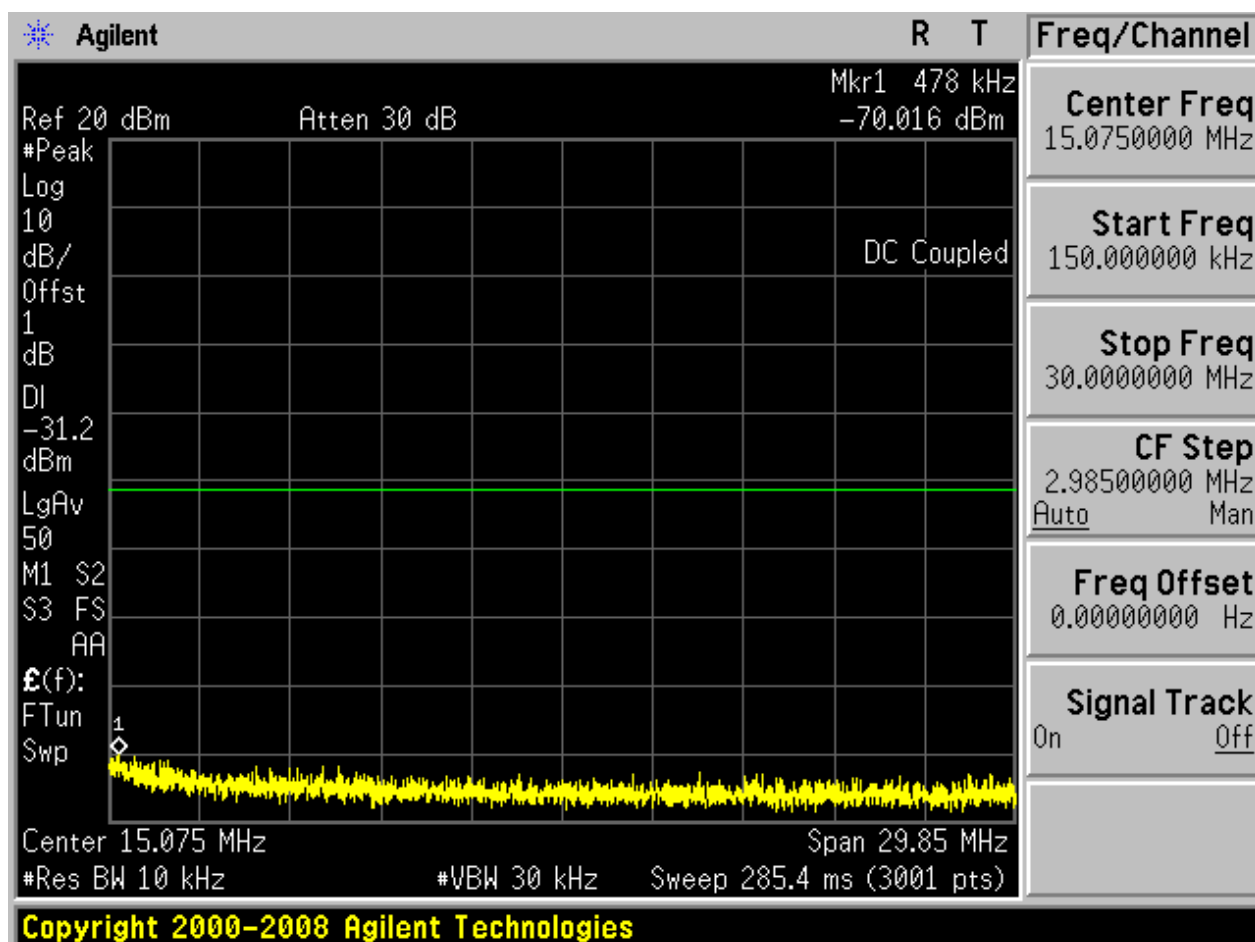
5.5 11G_M

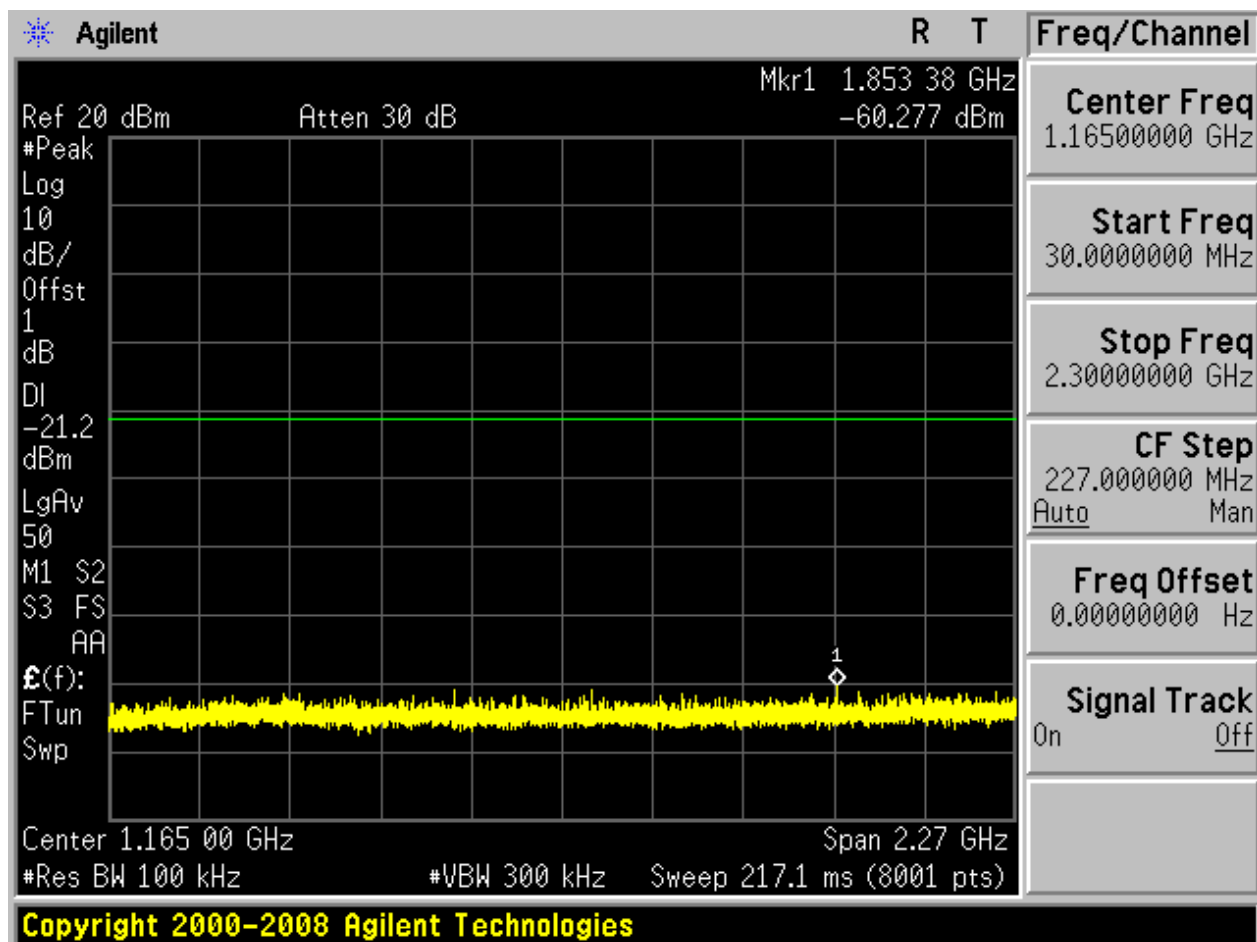
Pref:

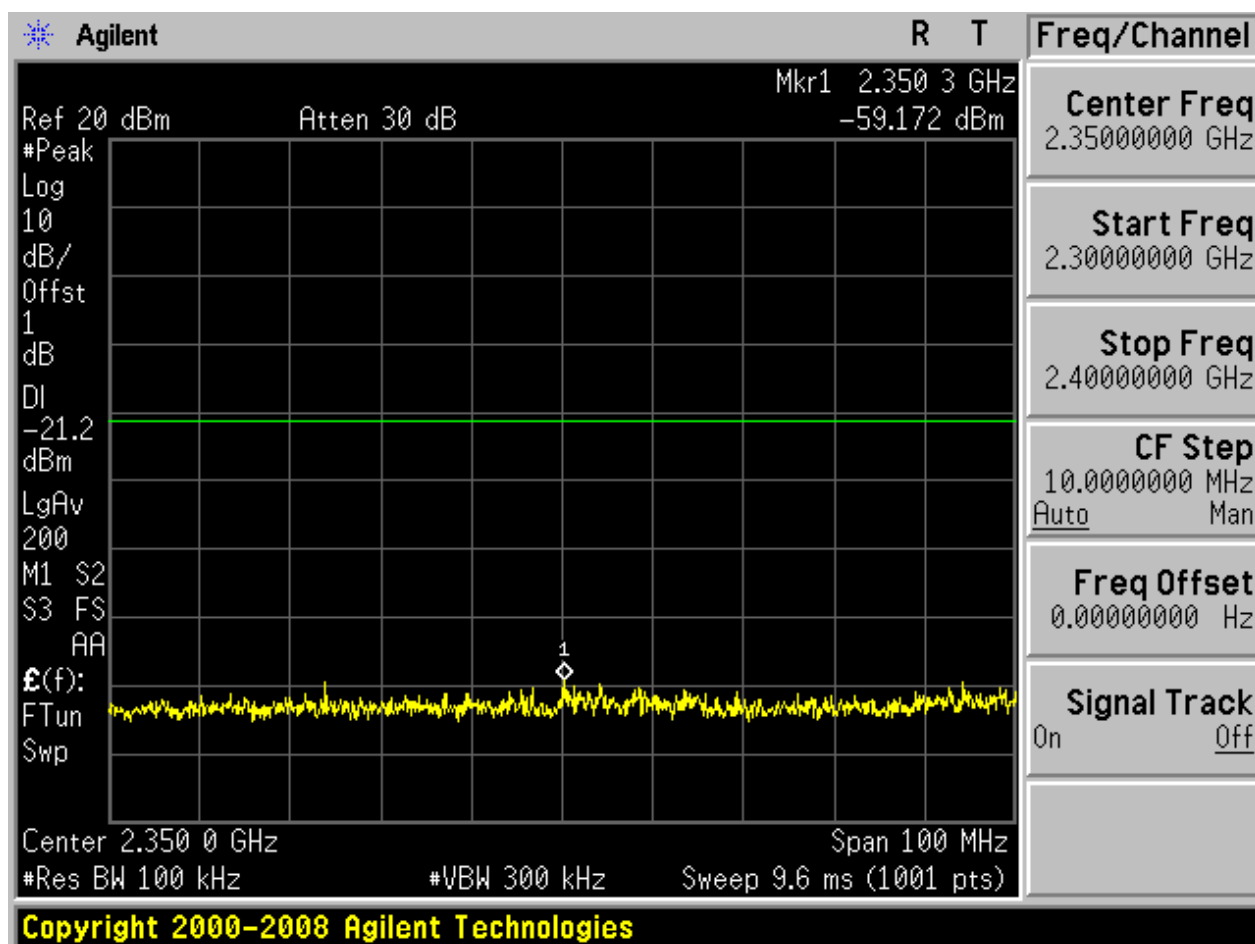


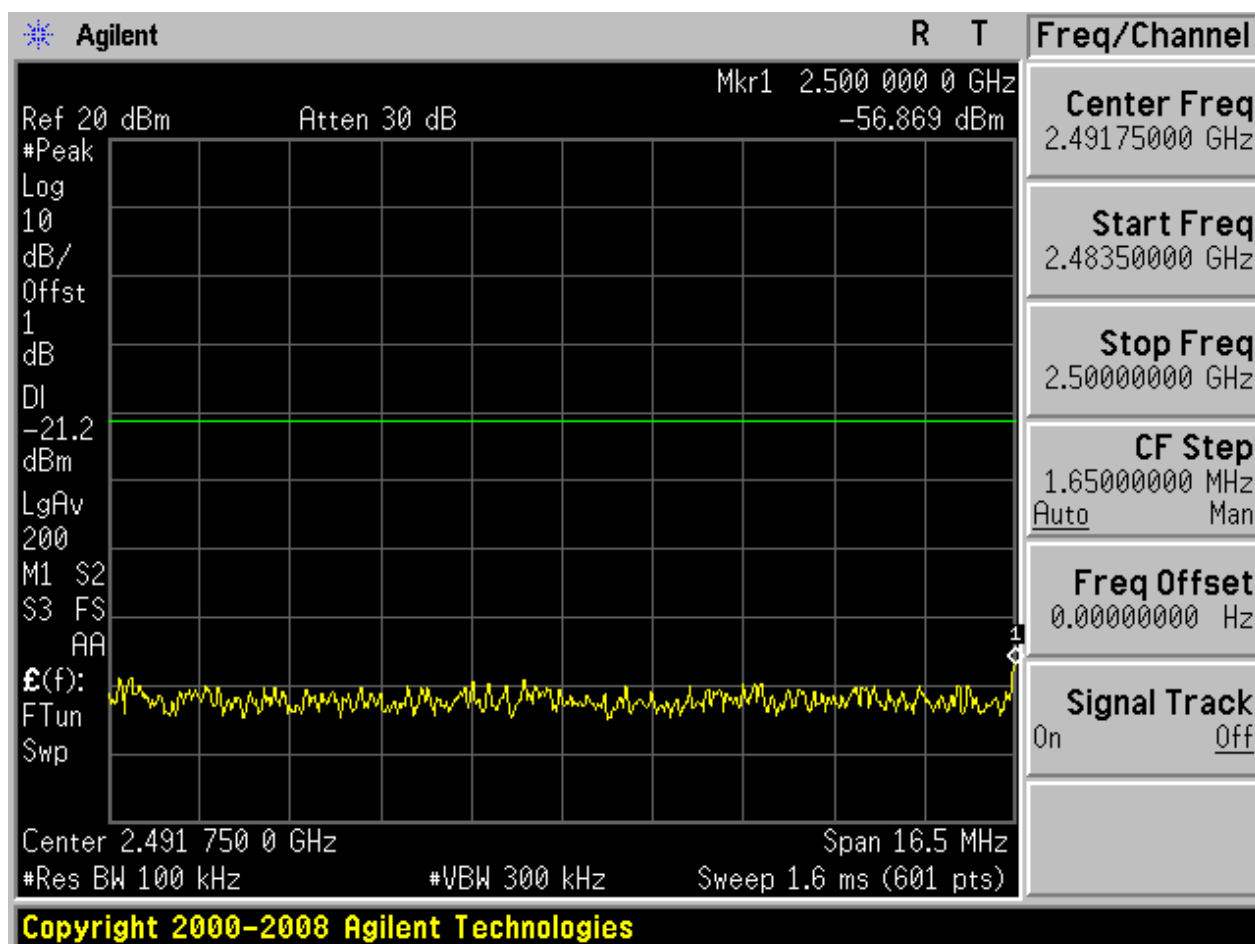
Puw:

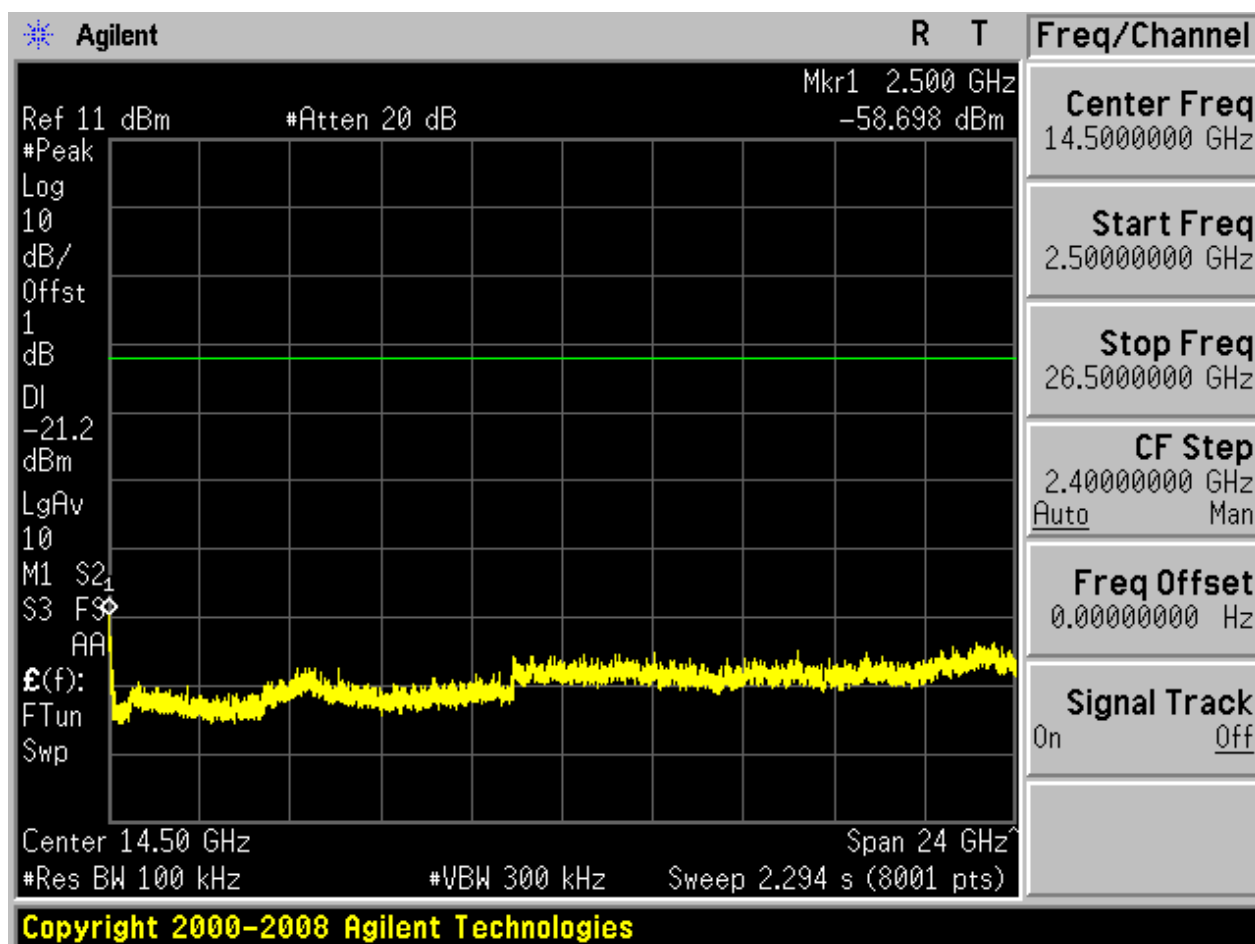






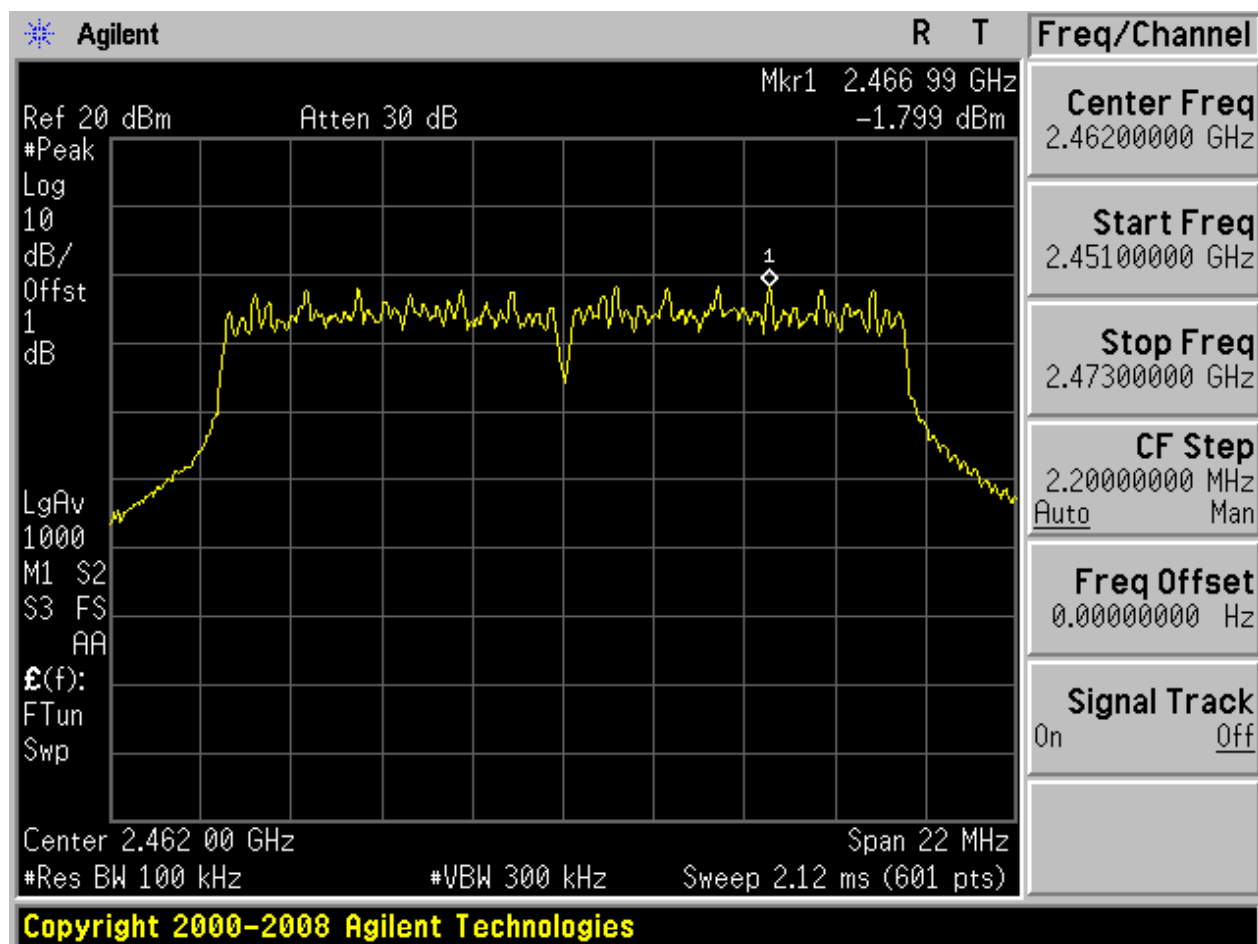




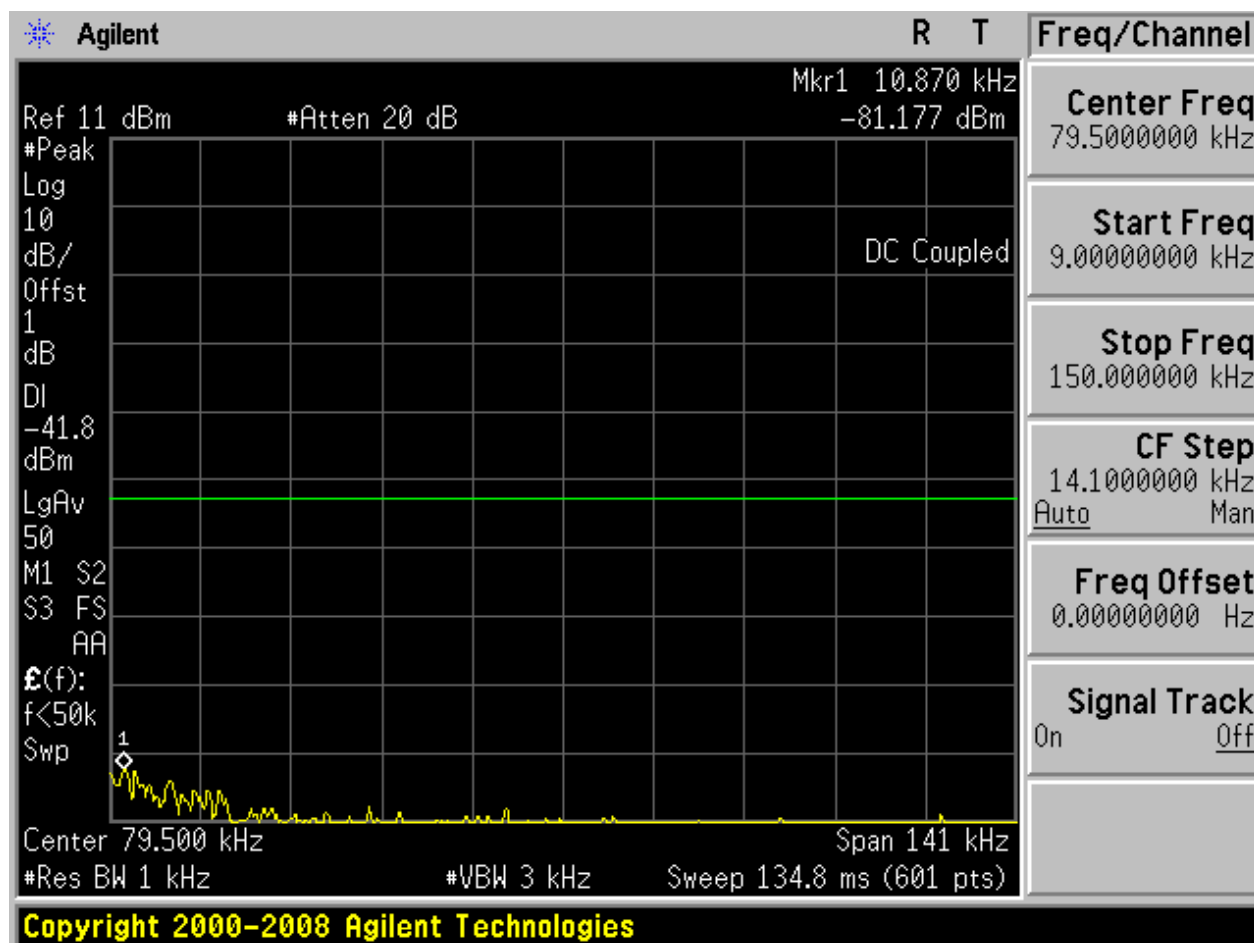


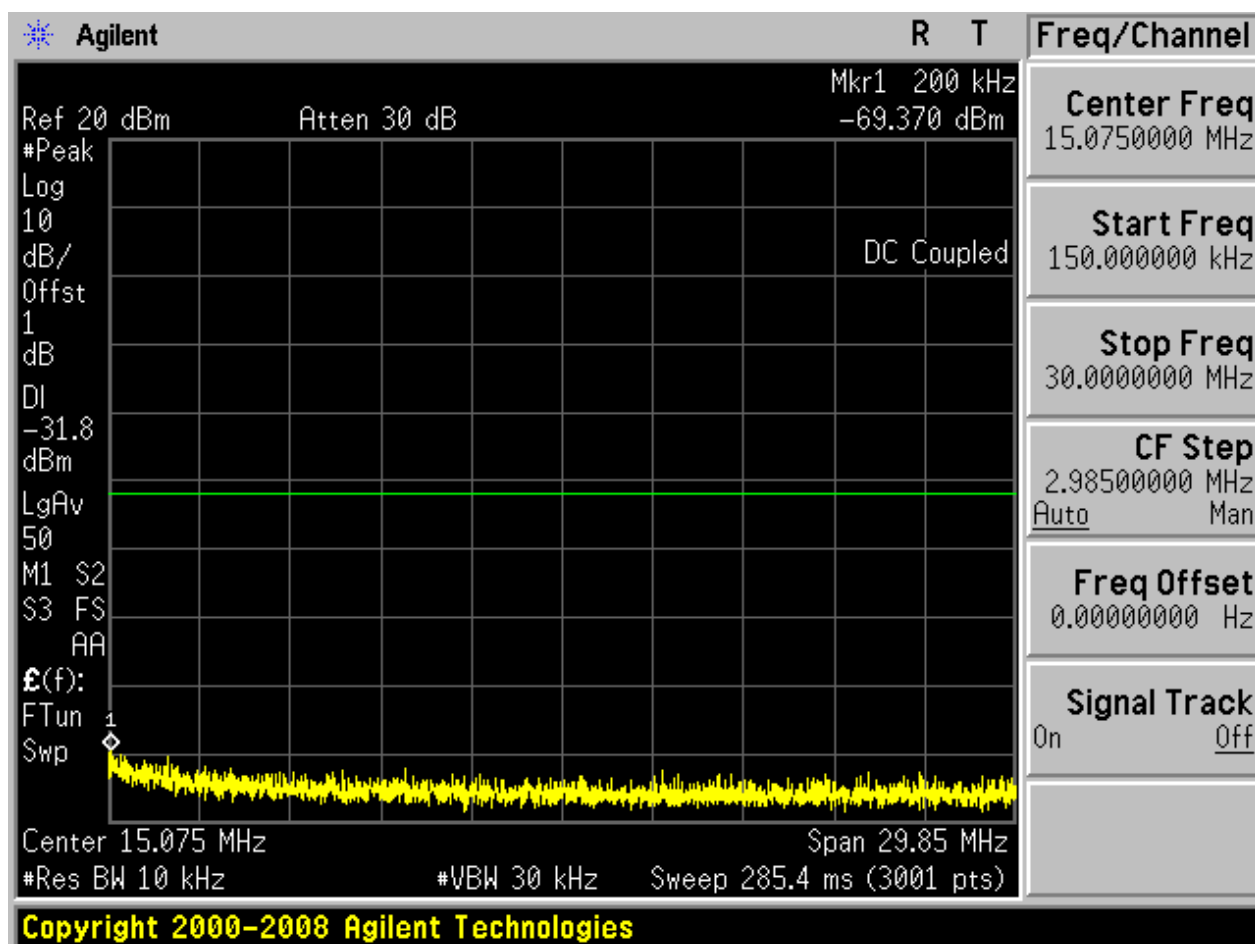
5.6 11G_H

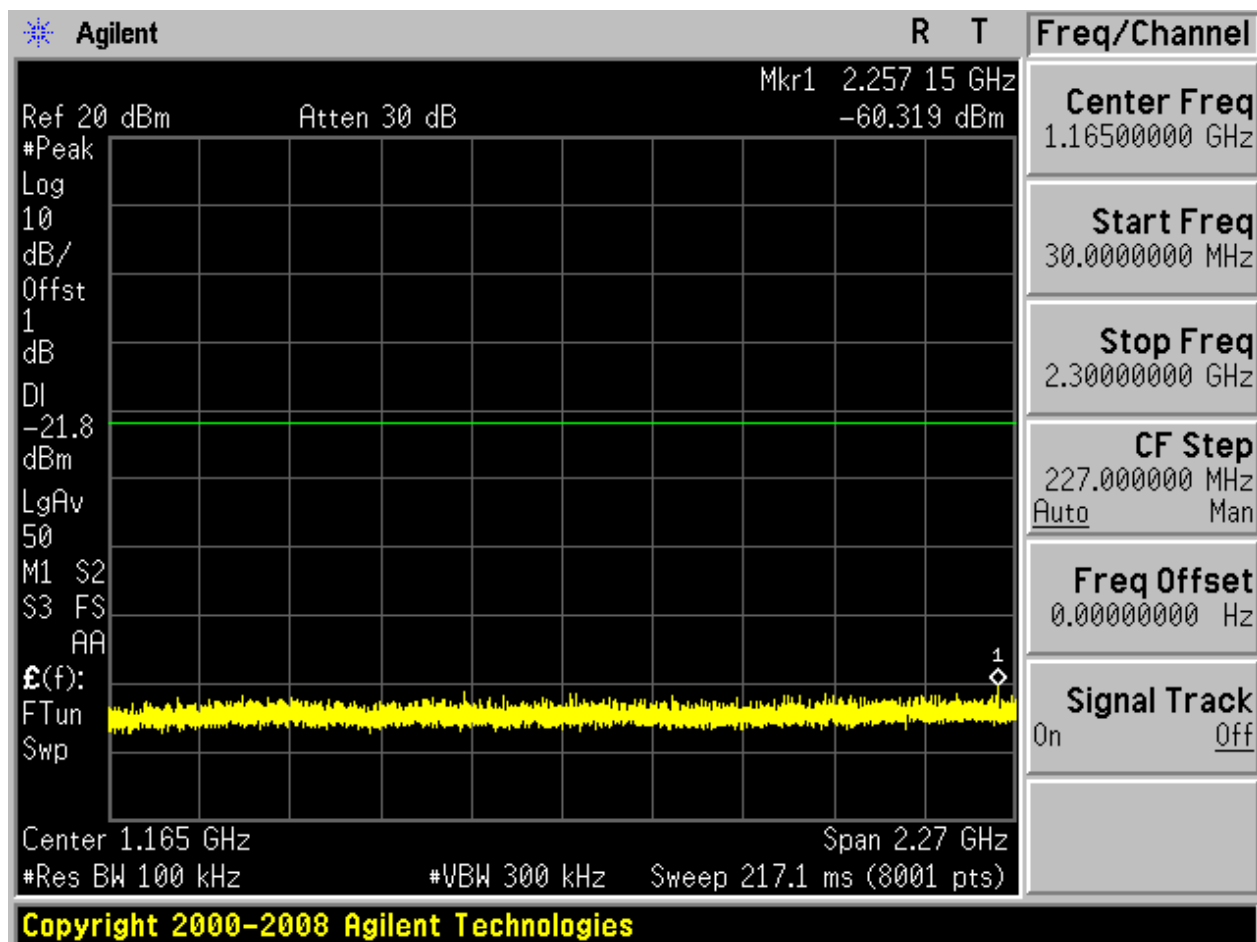
Pref:

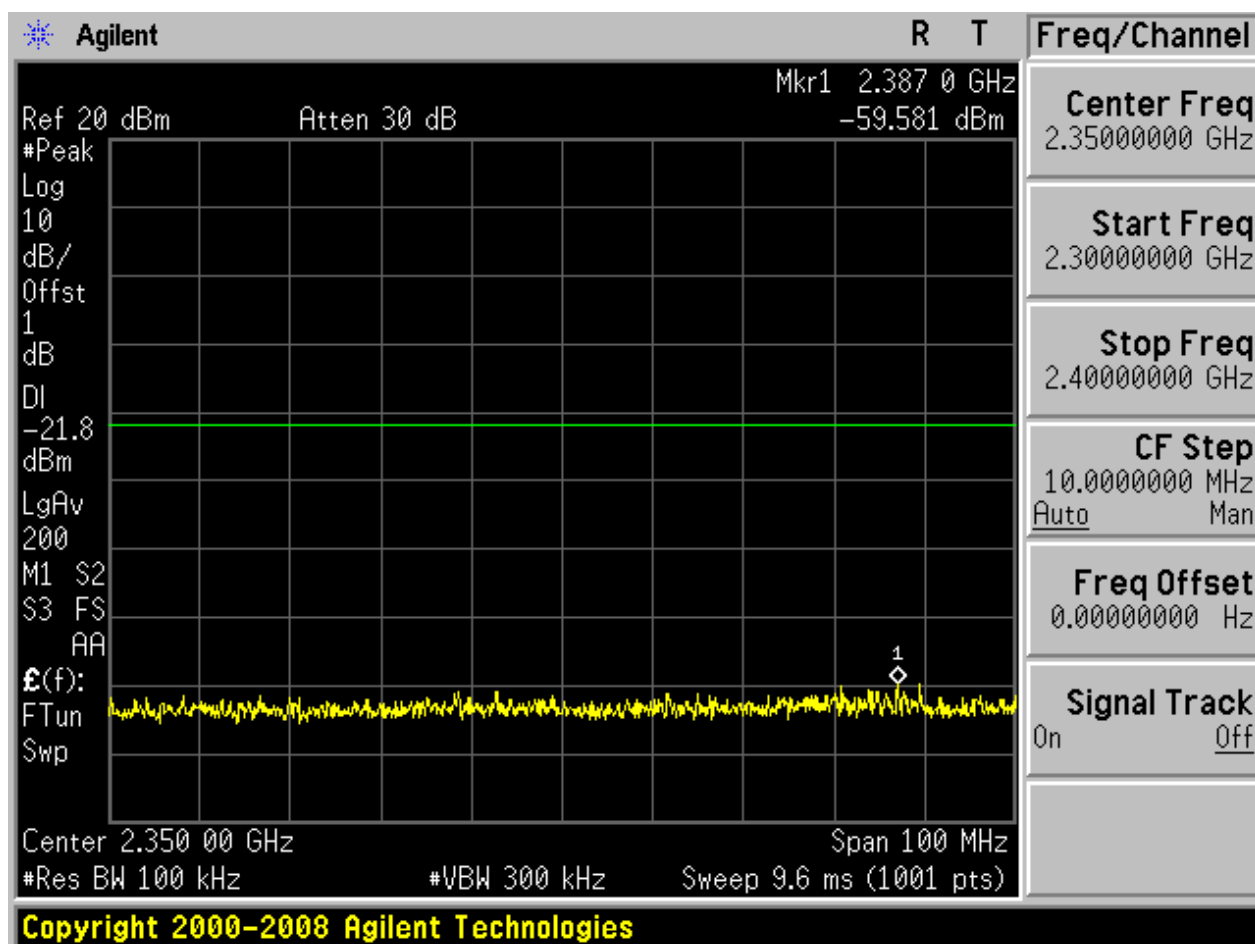


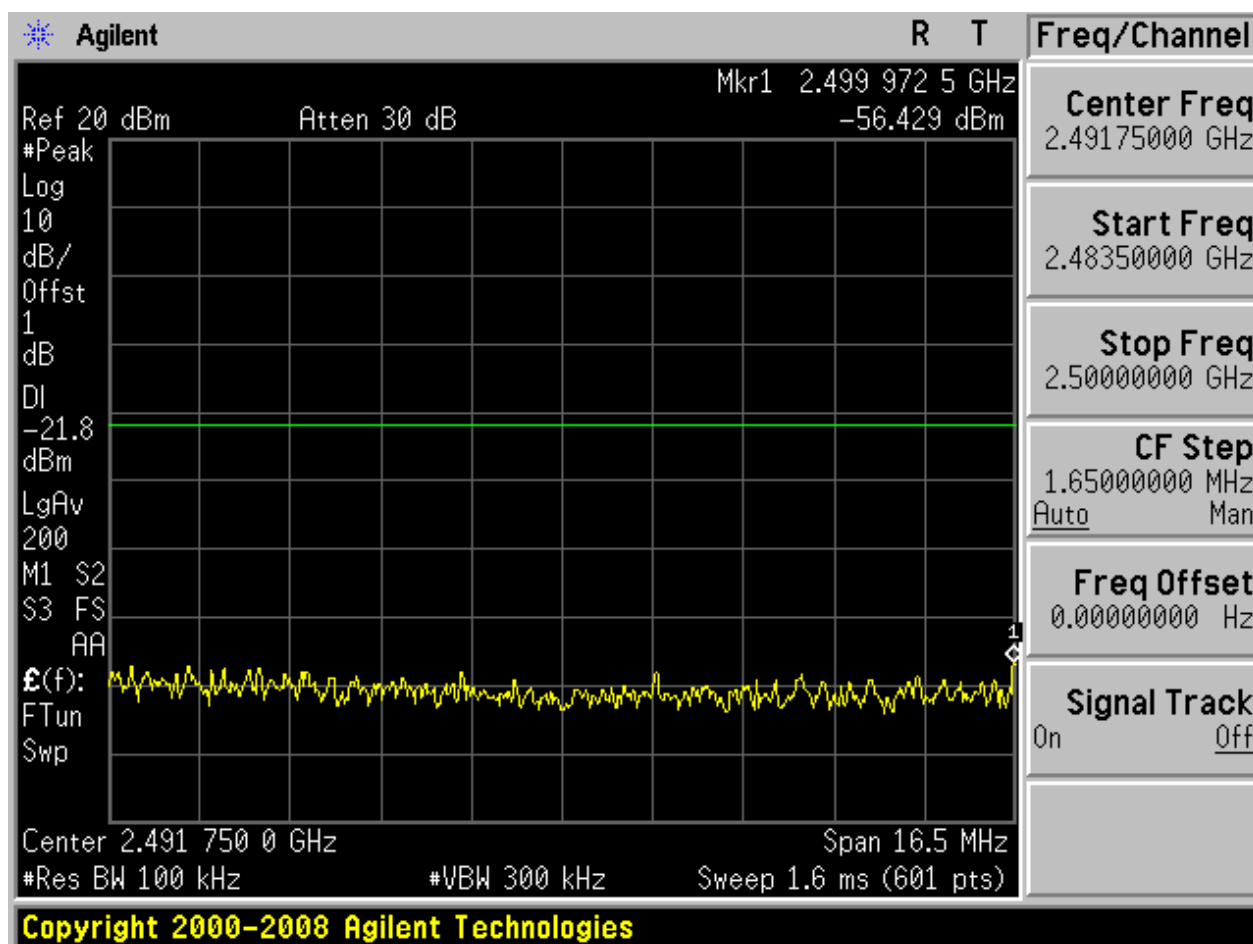
Puw:

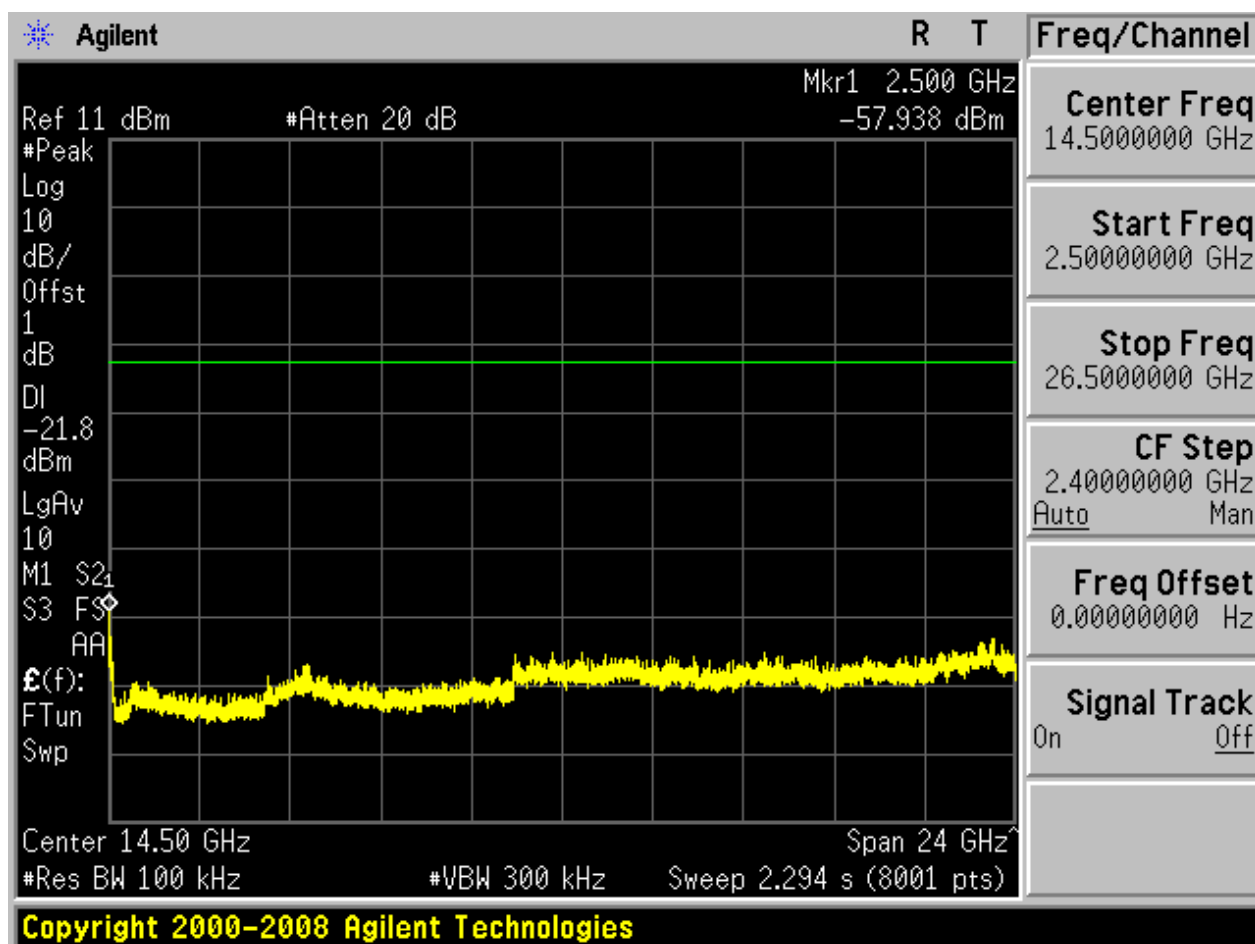






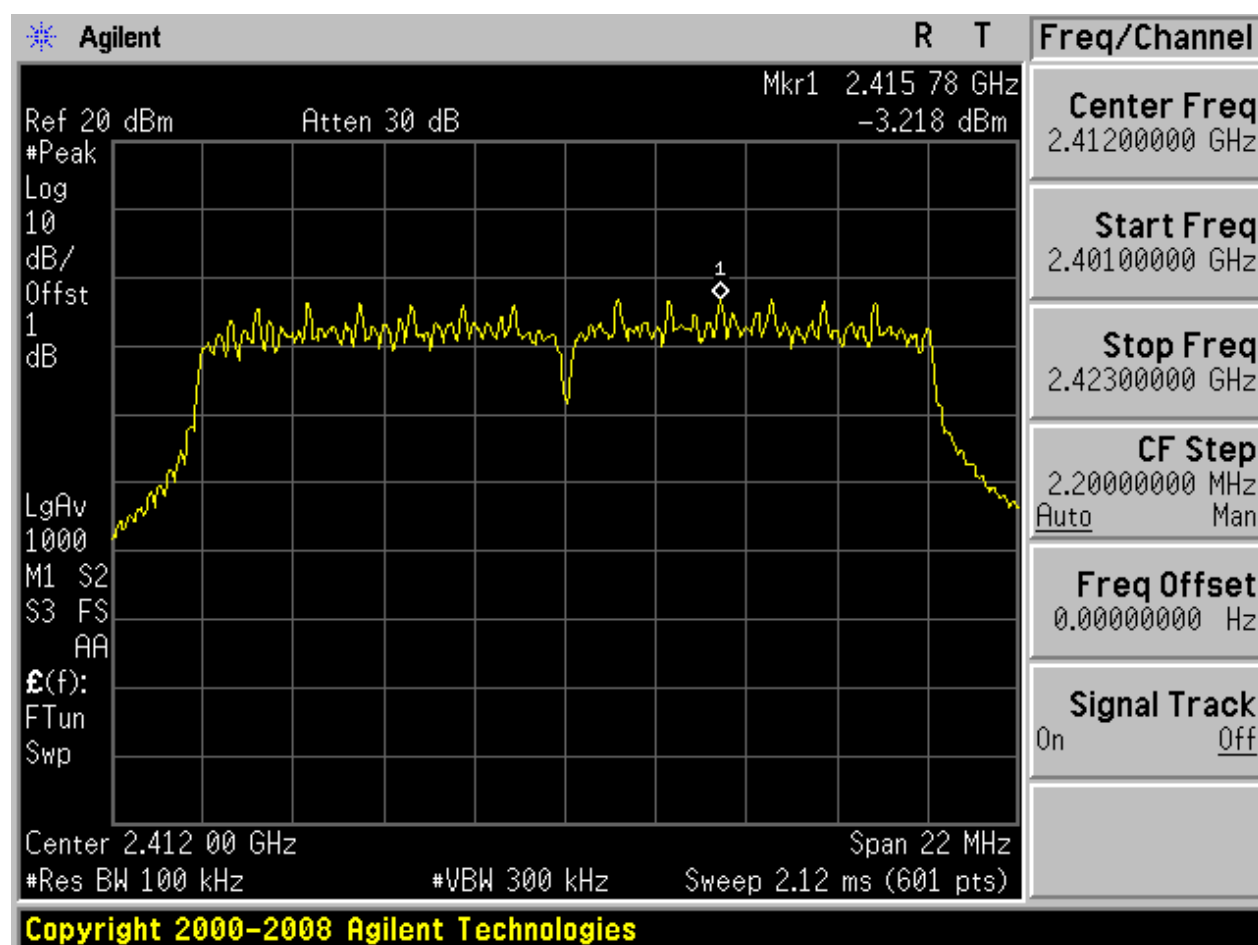




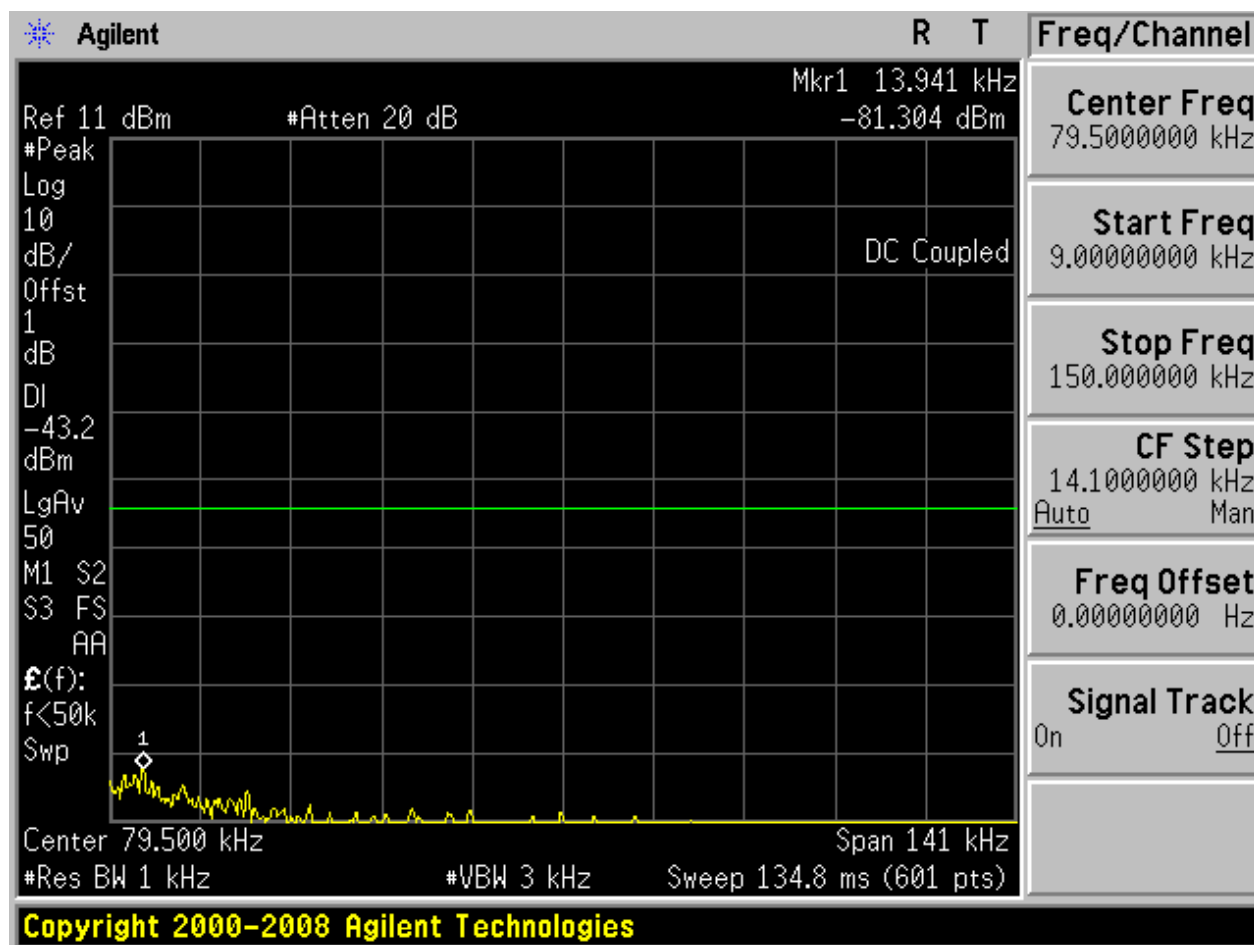


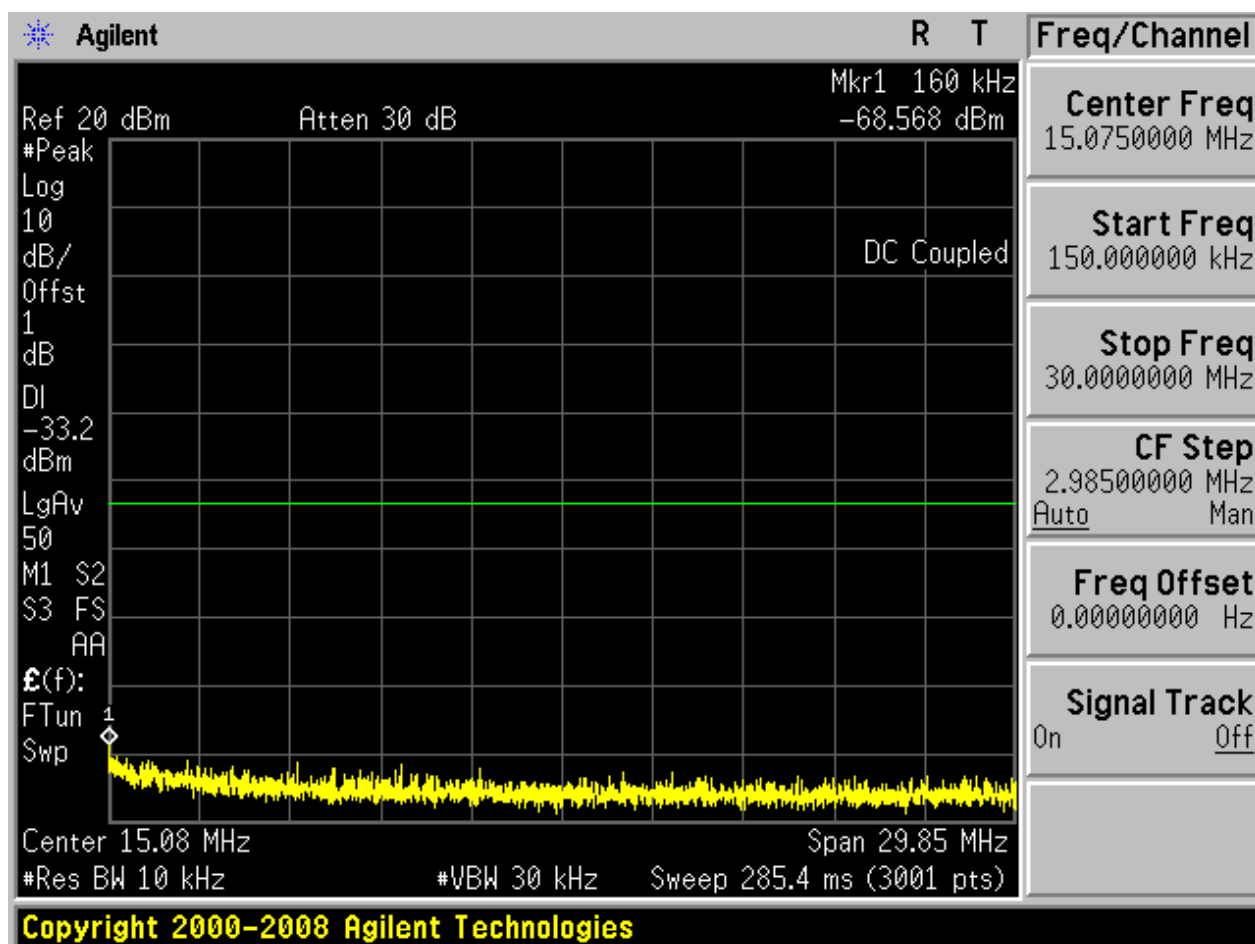
5.7 11N20_L

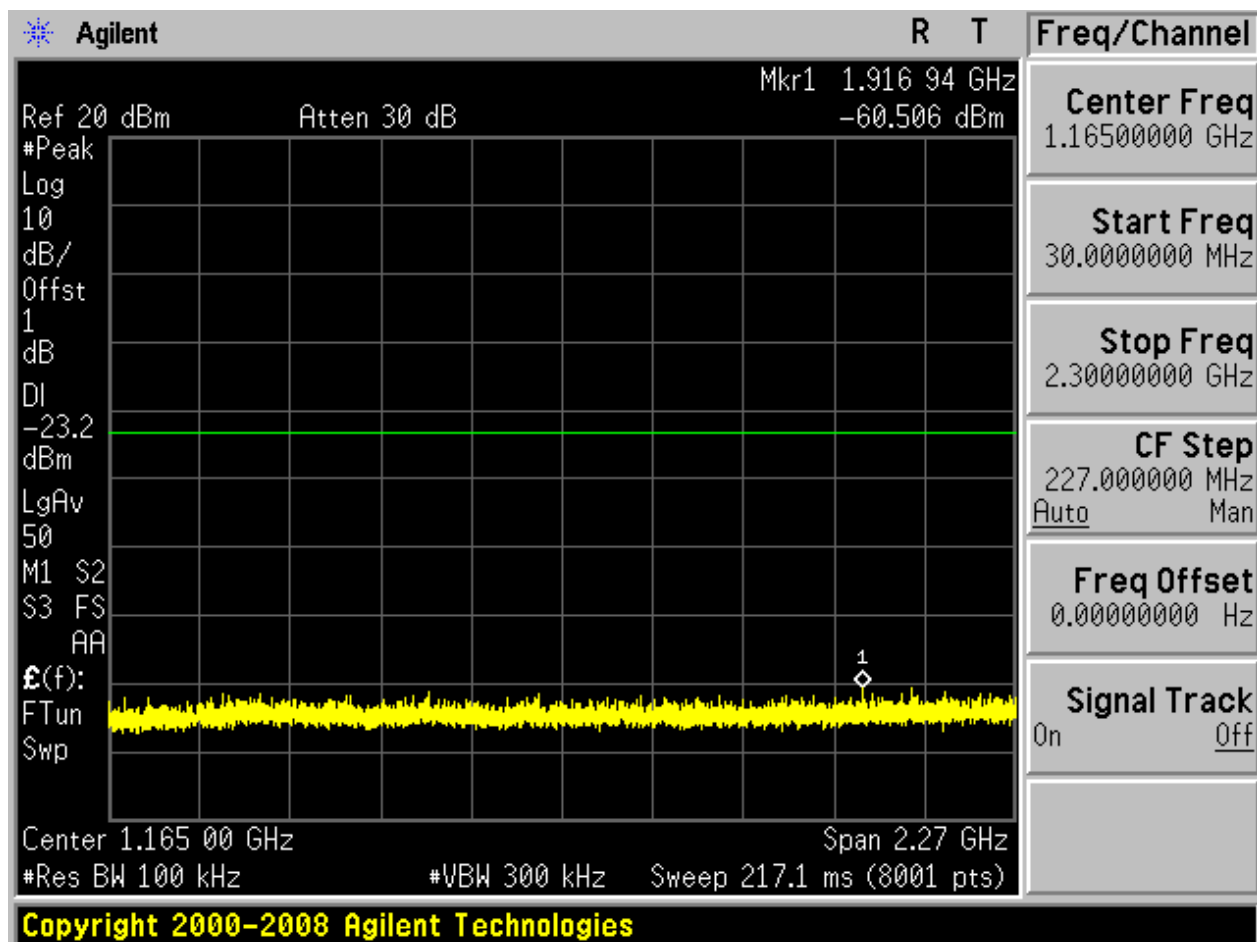
Pref:

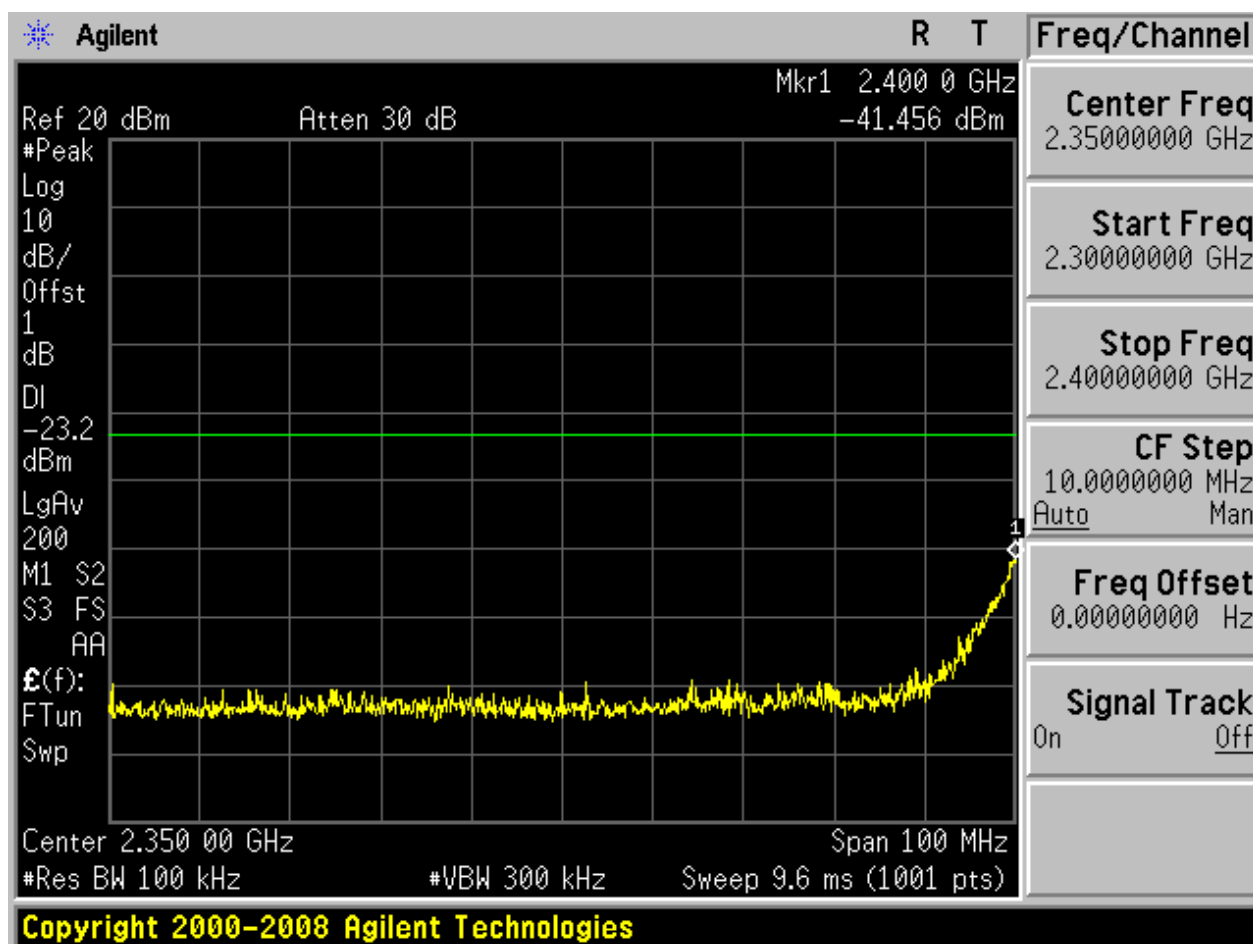


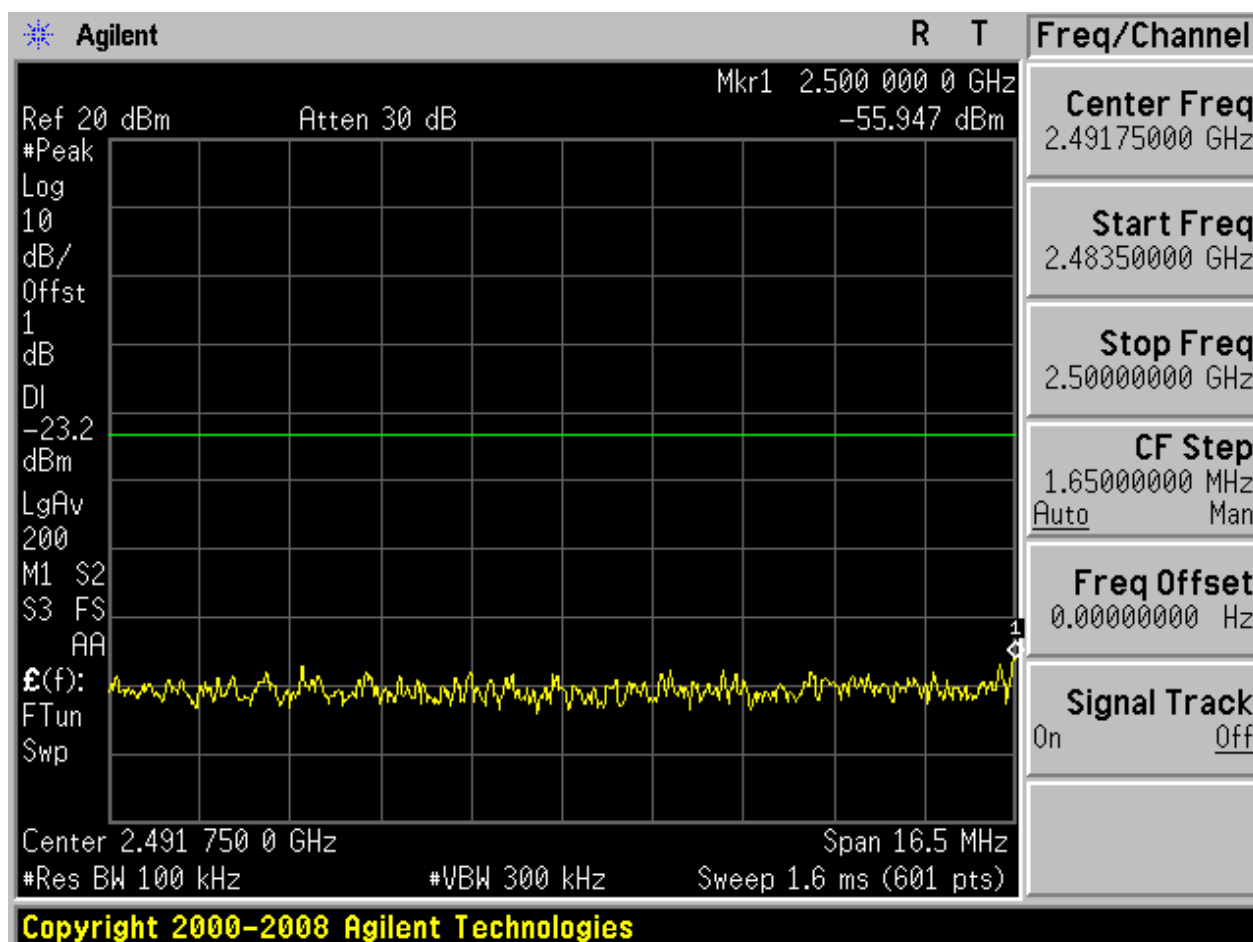
Puw:

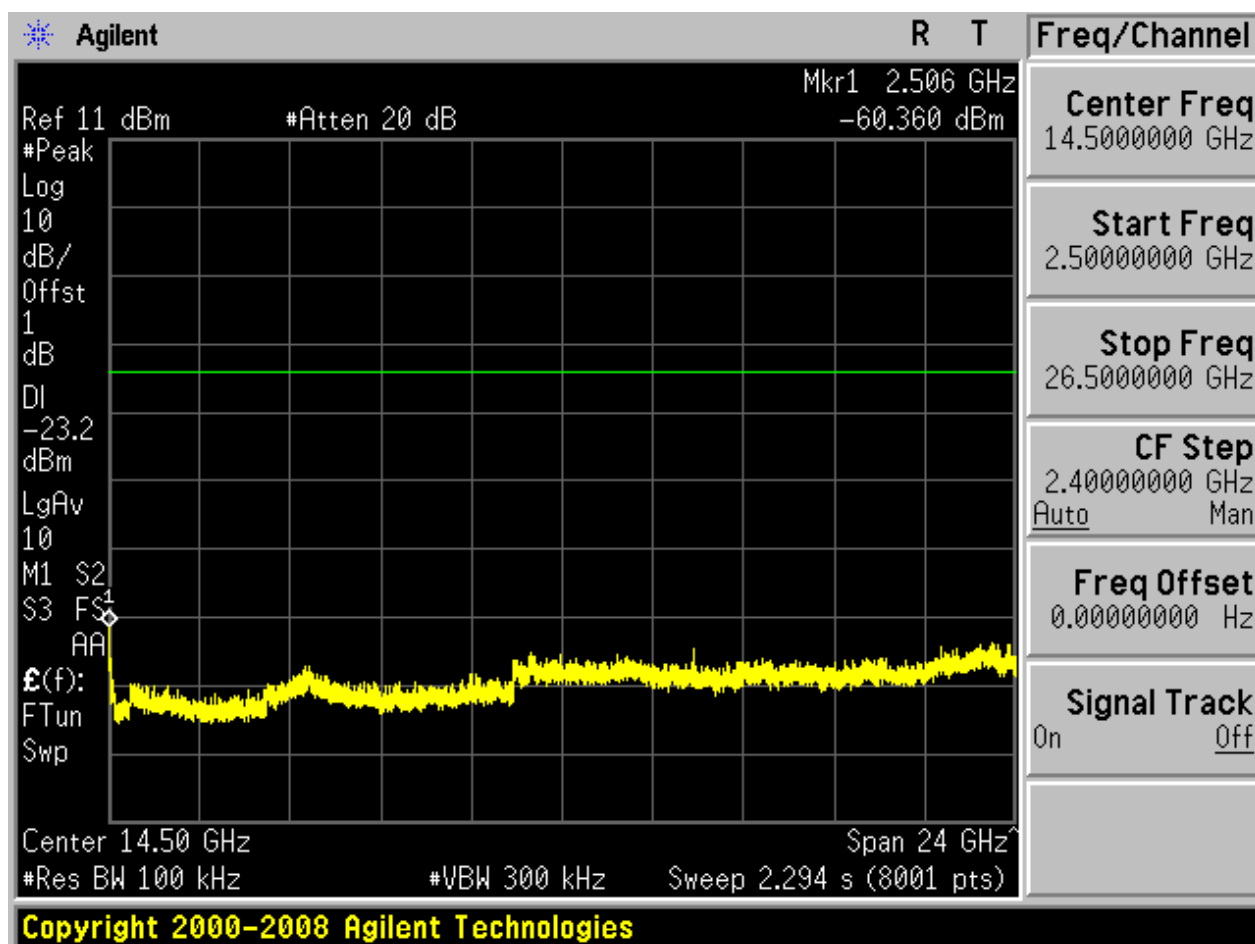






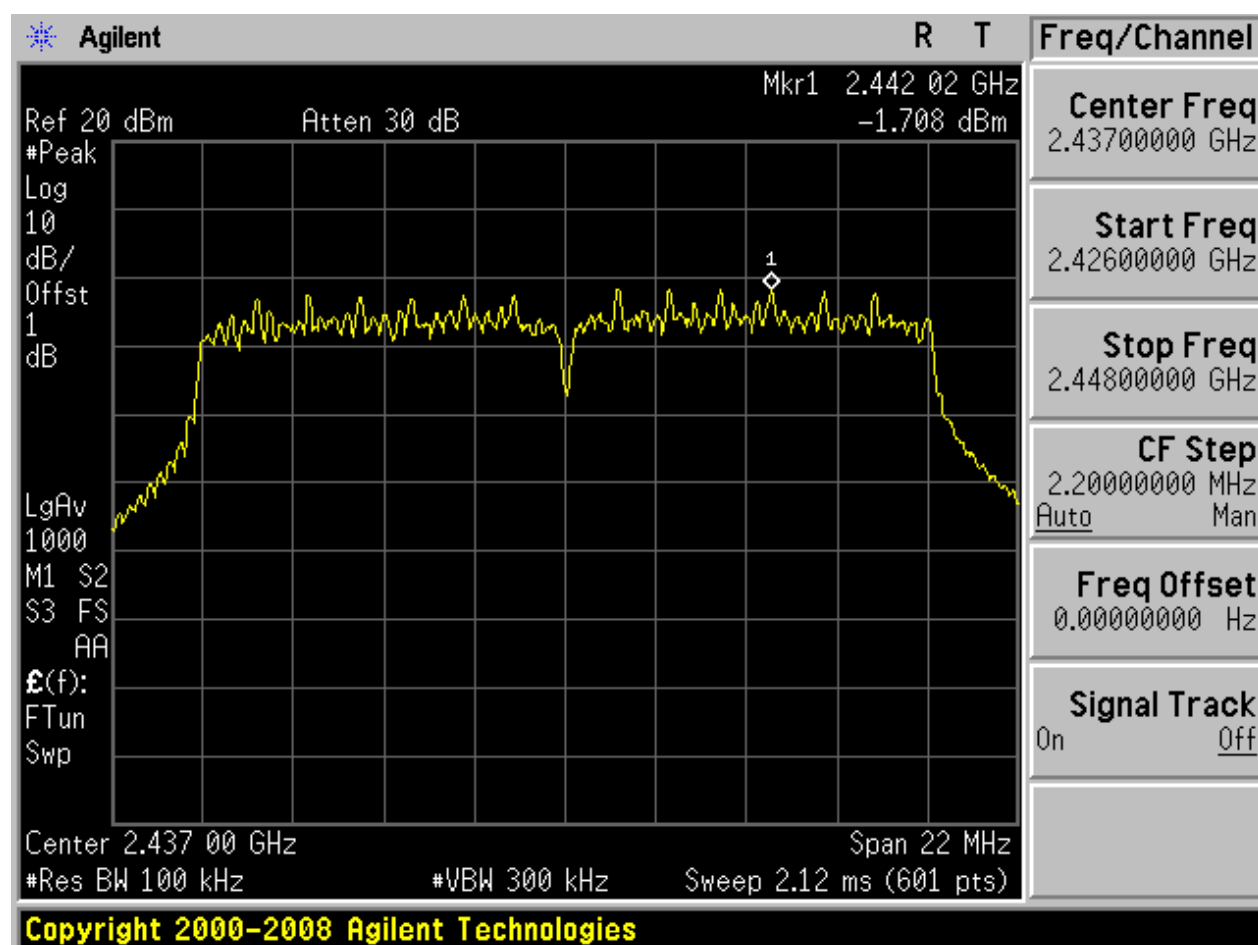




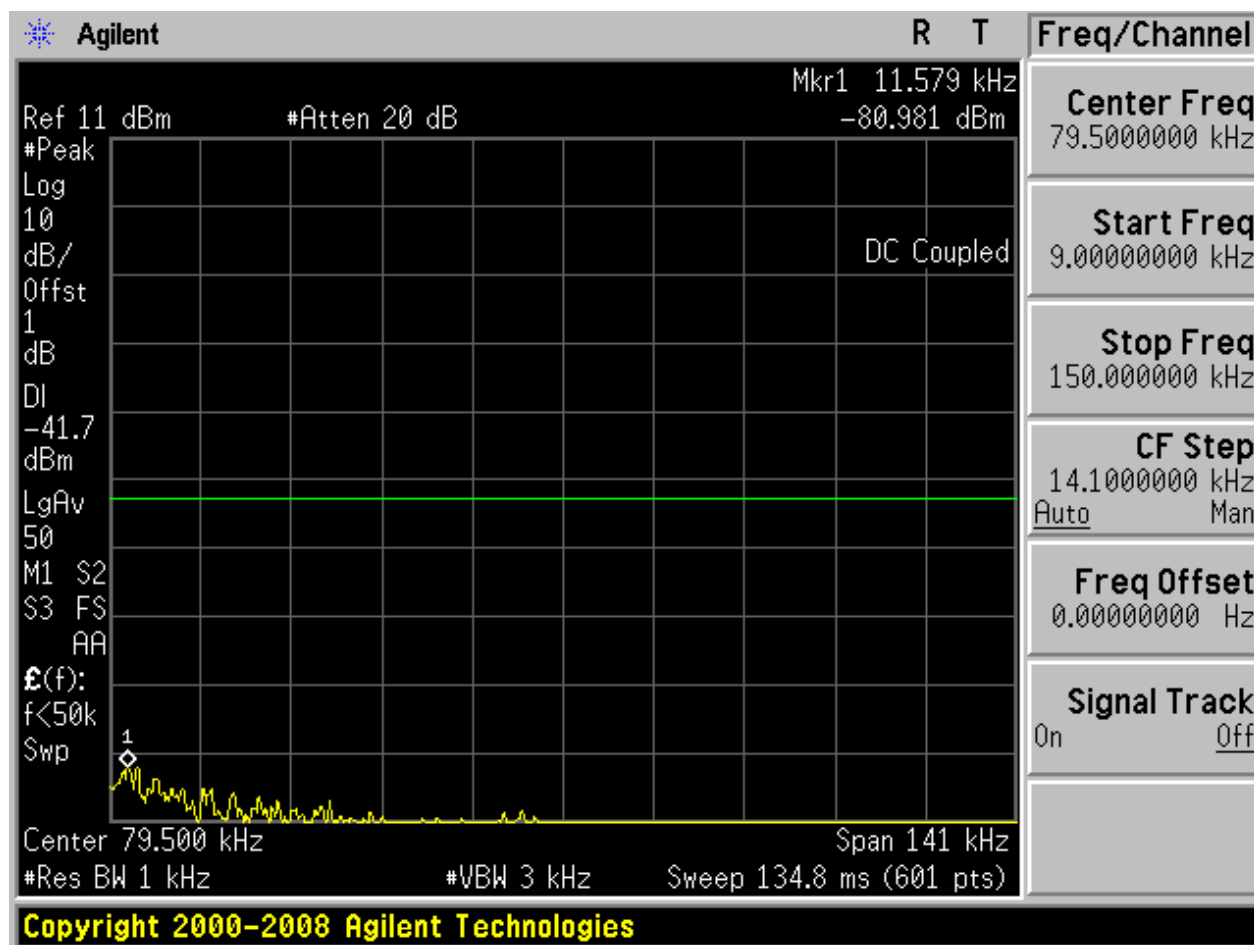


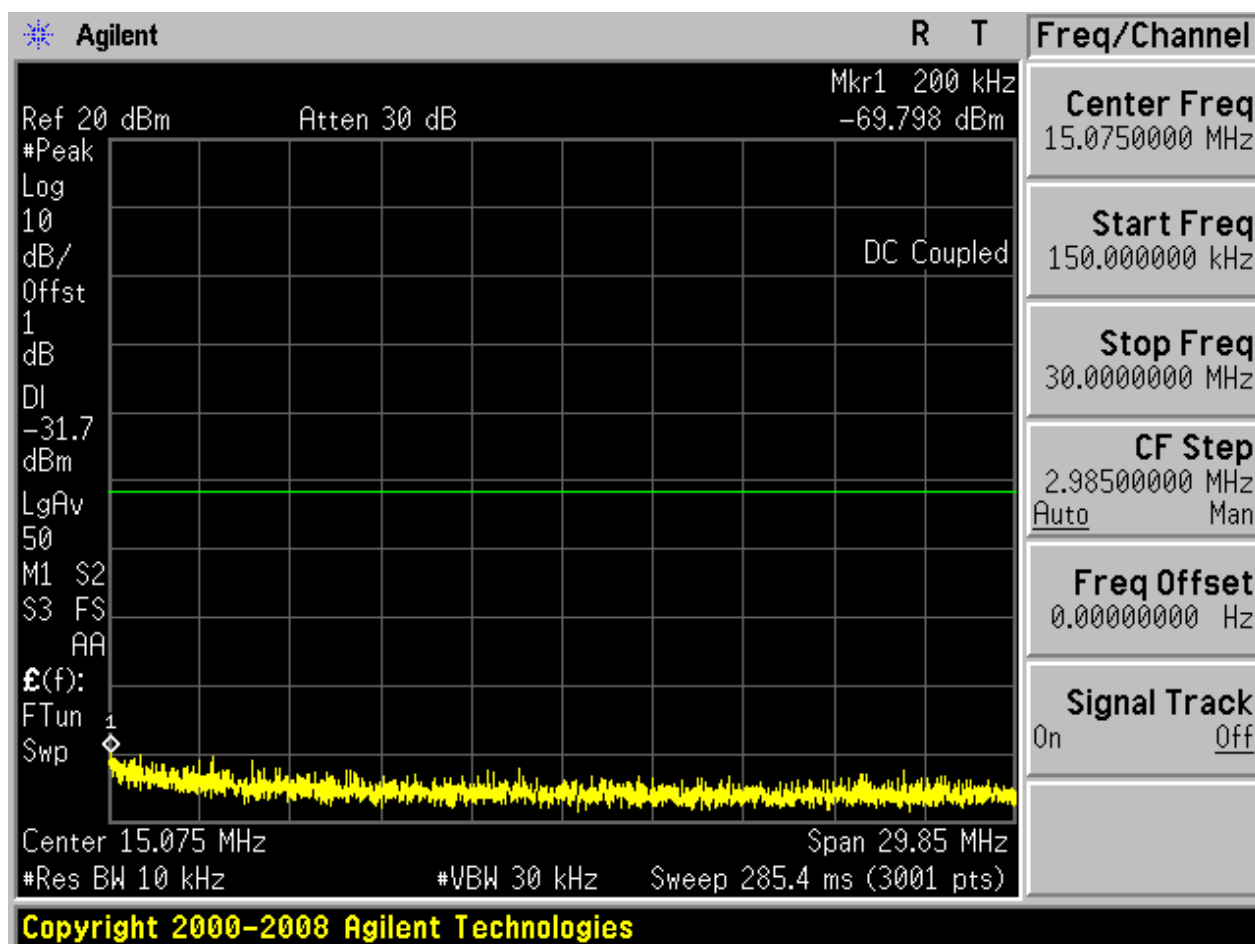
5.8 11N20_M

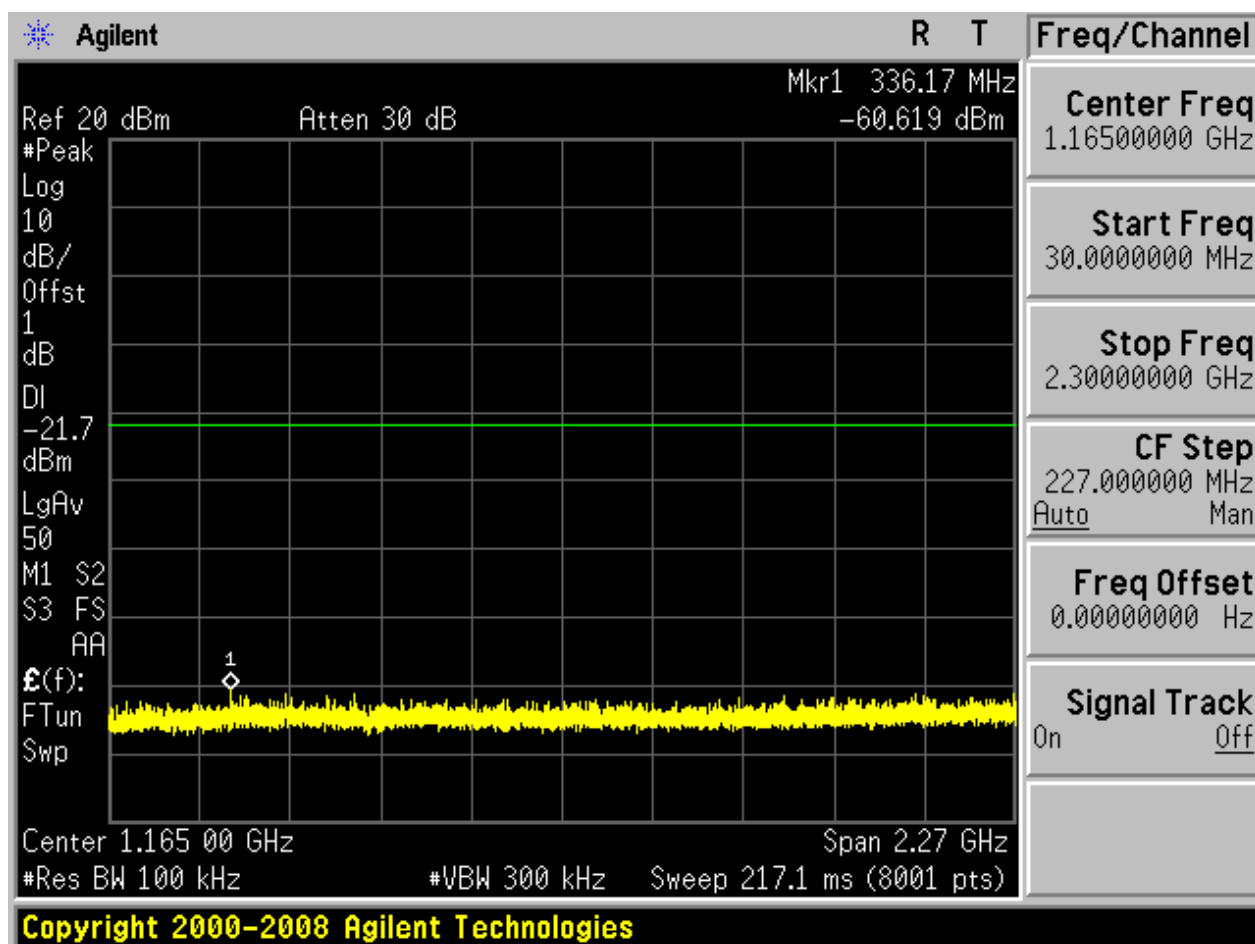
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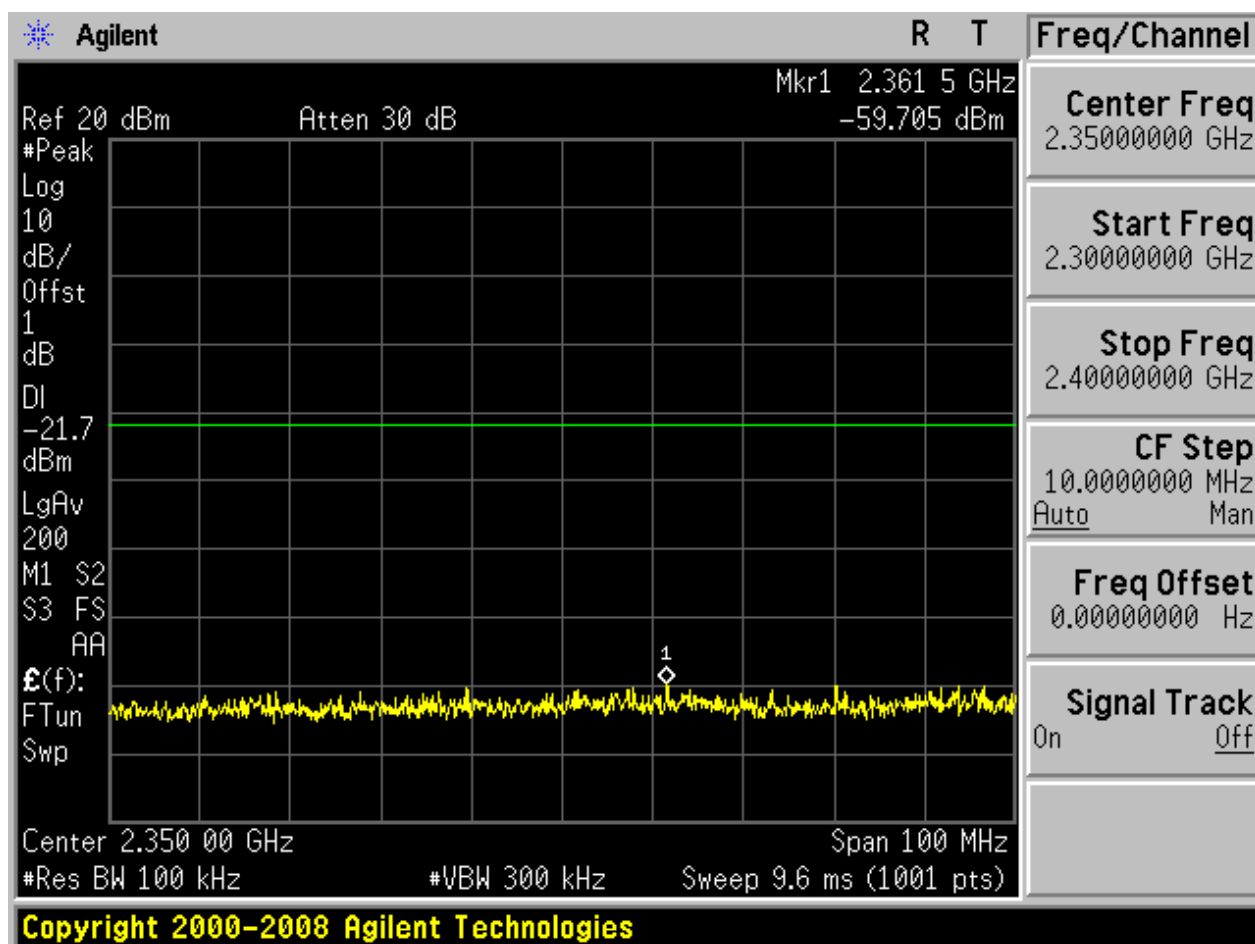


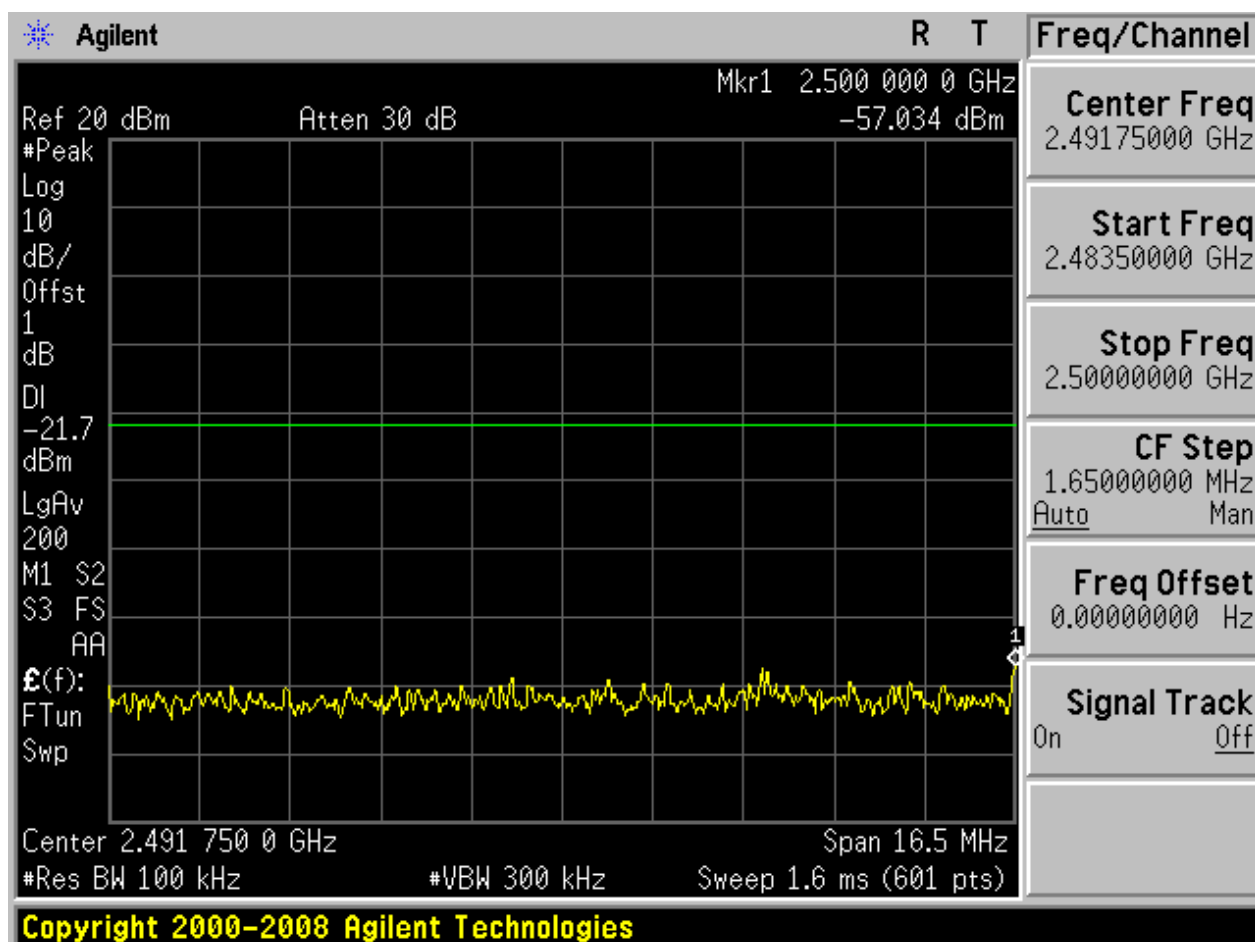
Puw:

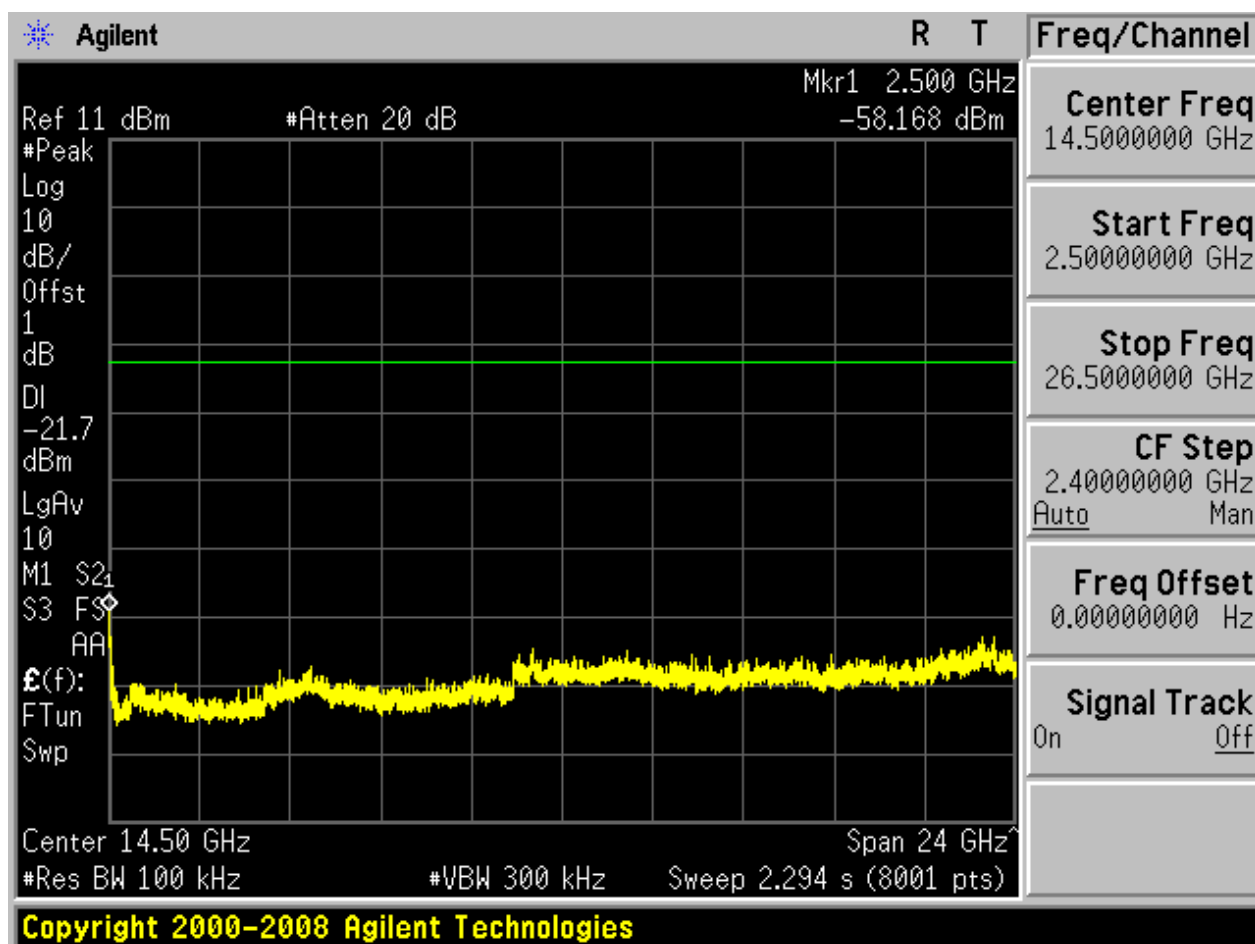






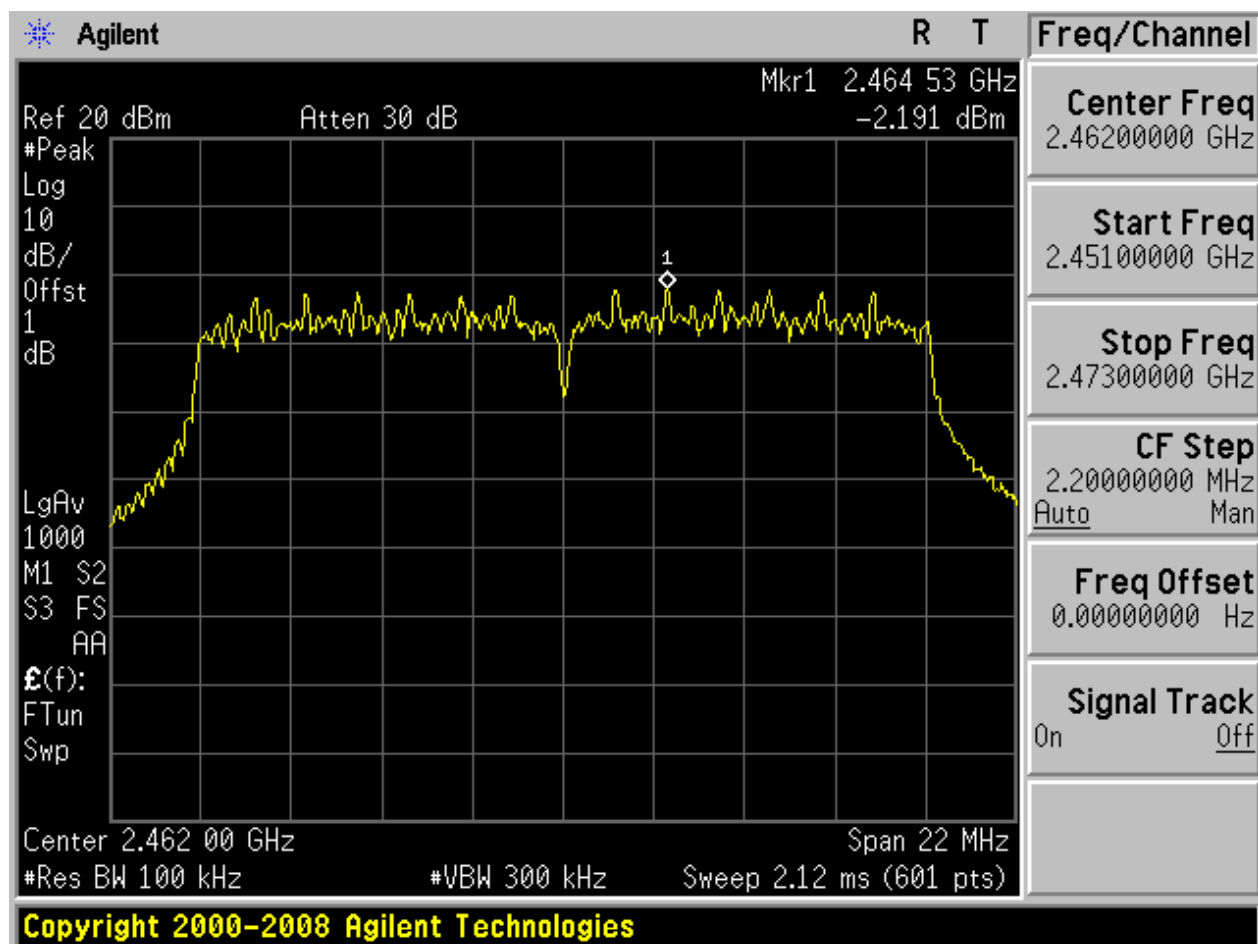




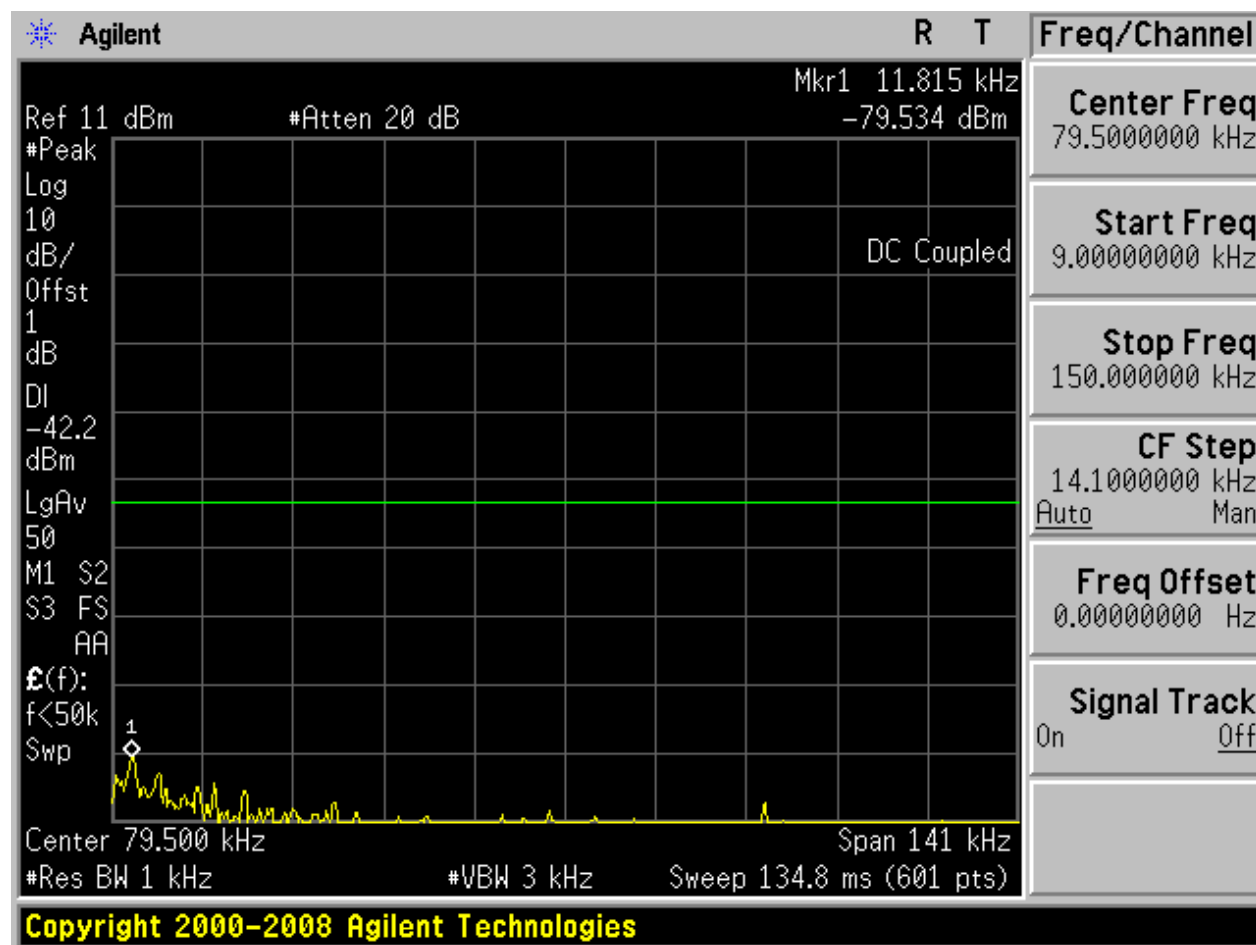


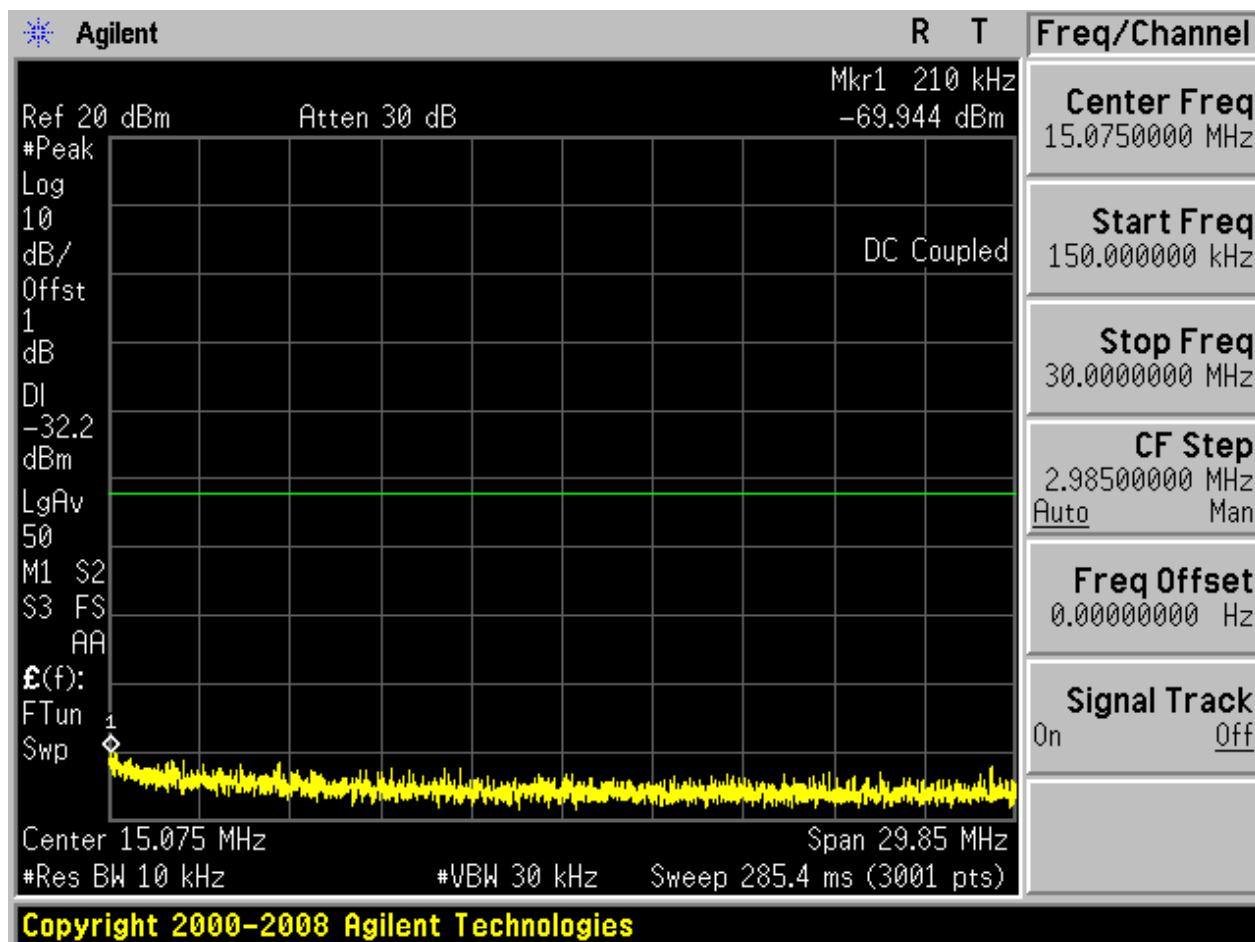
5.9 11N20_H

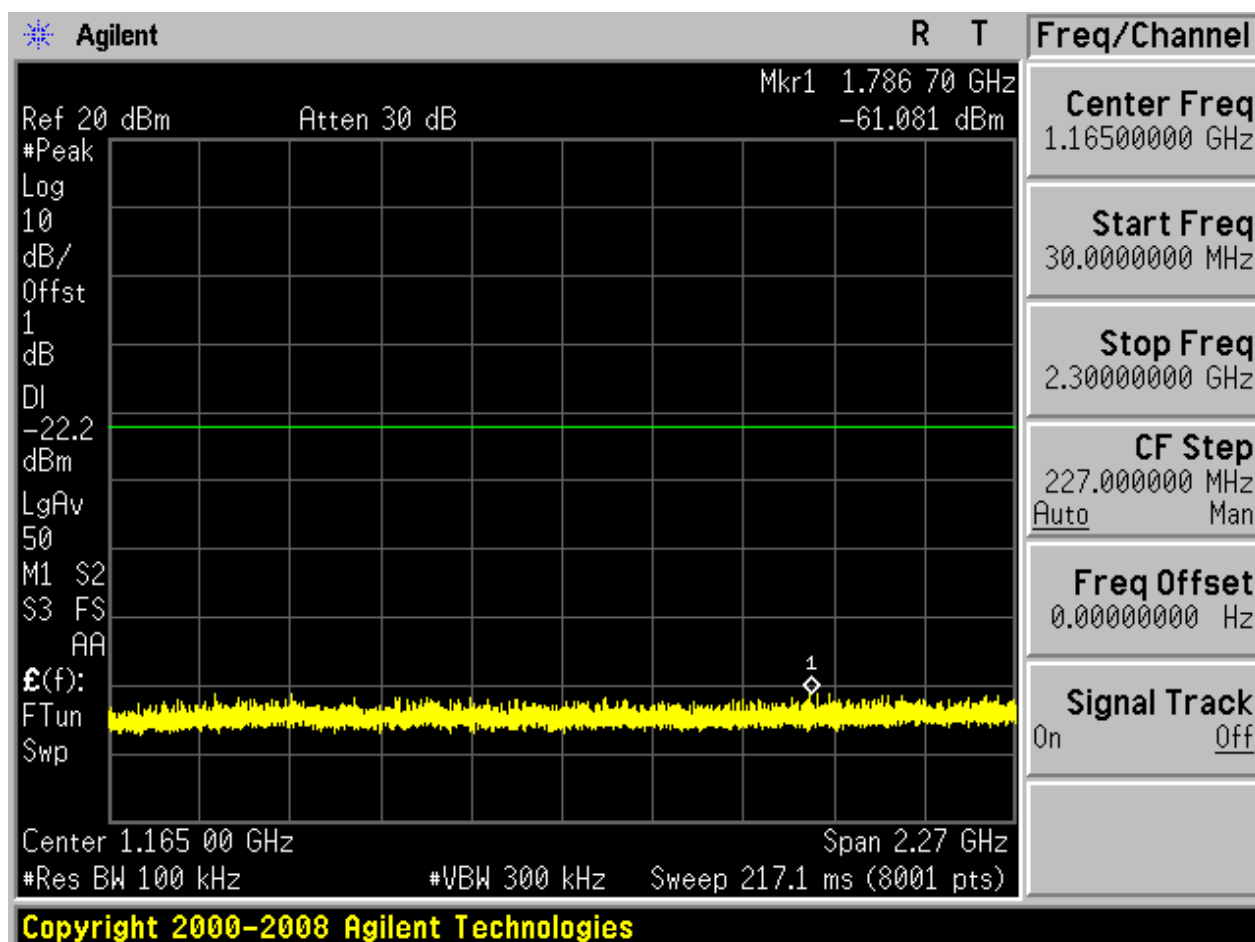
Pref:

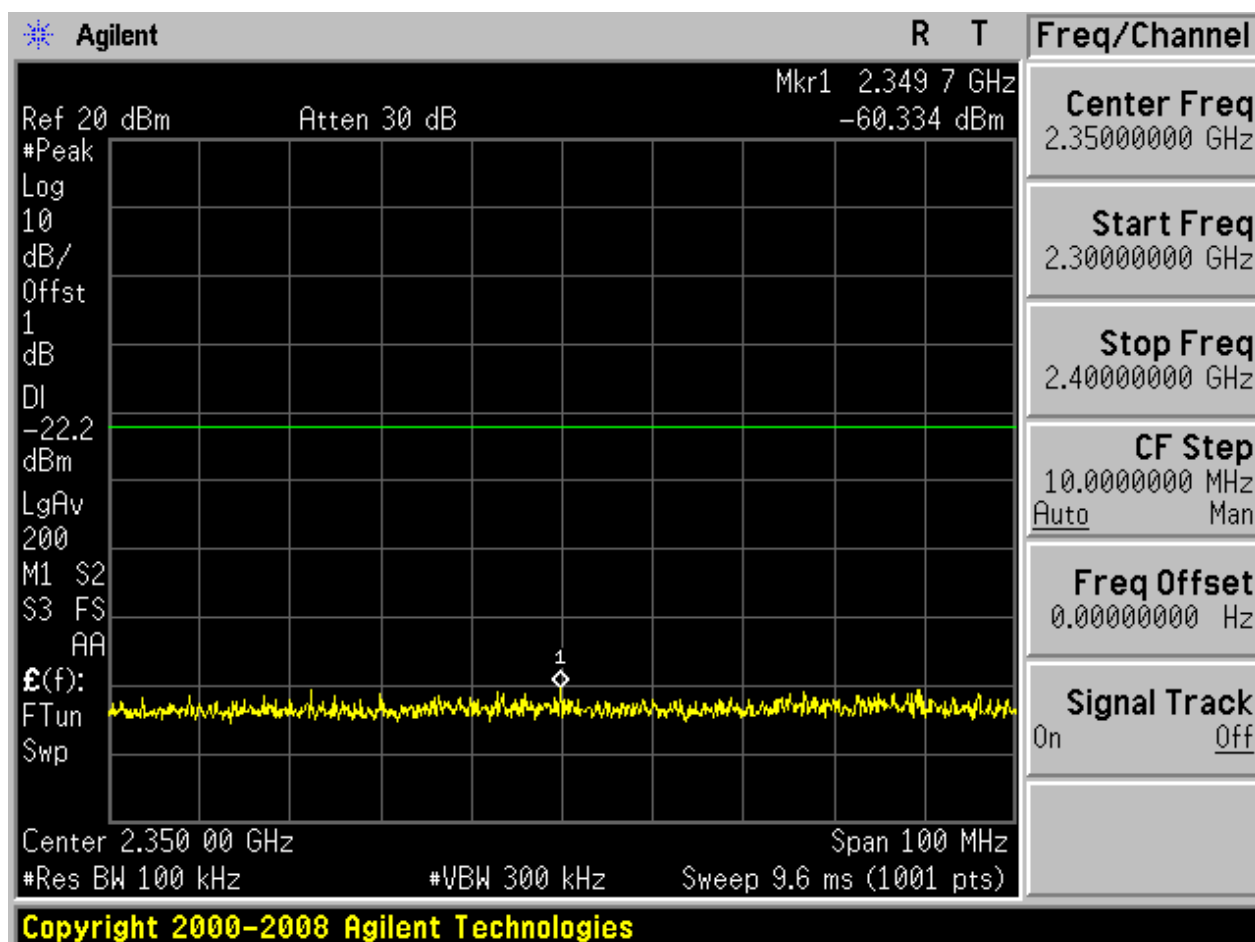


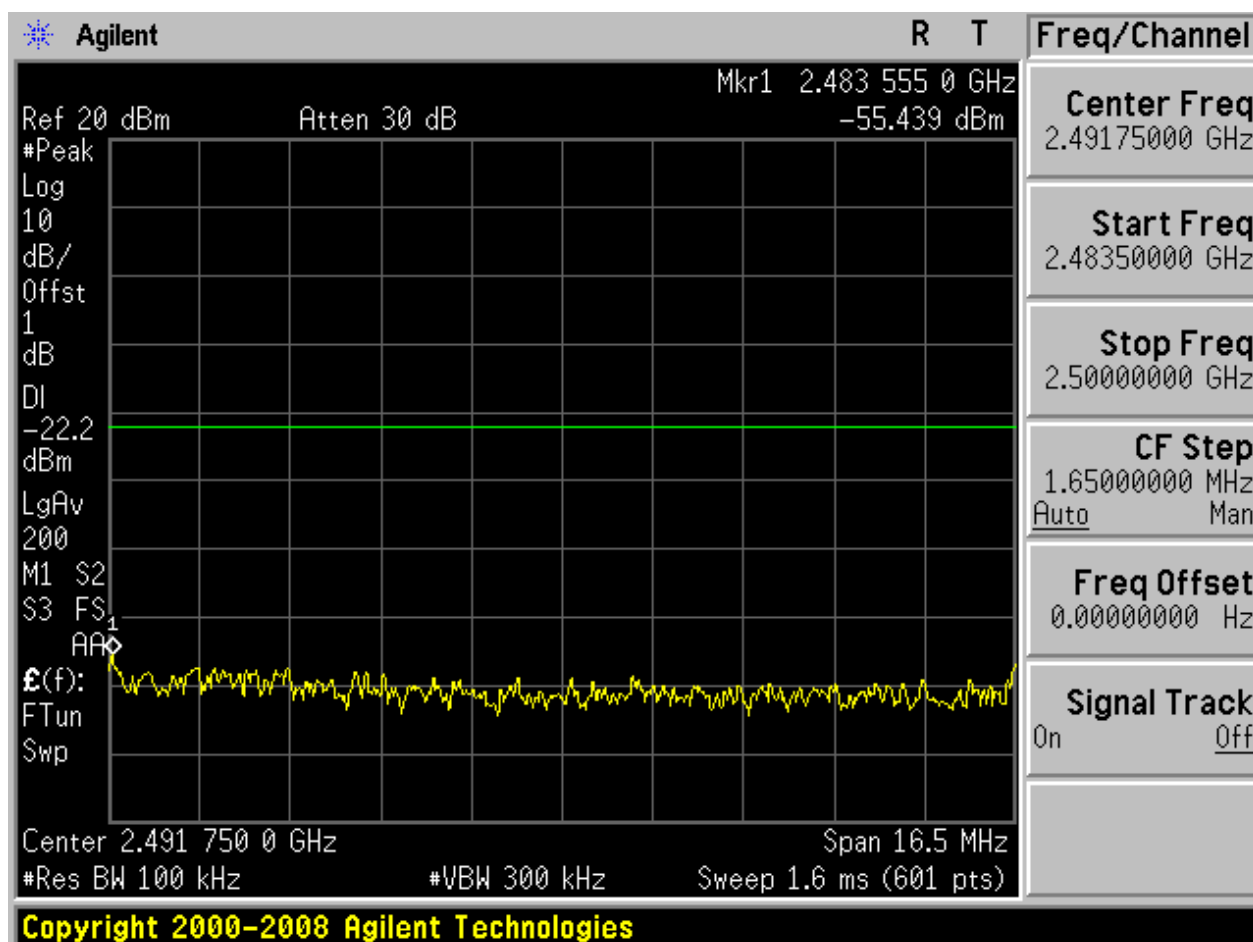
Puw:

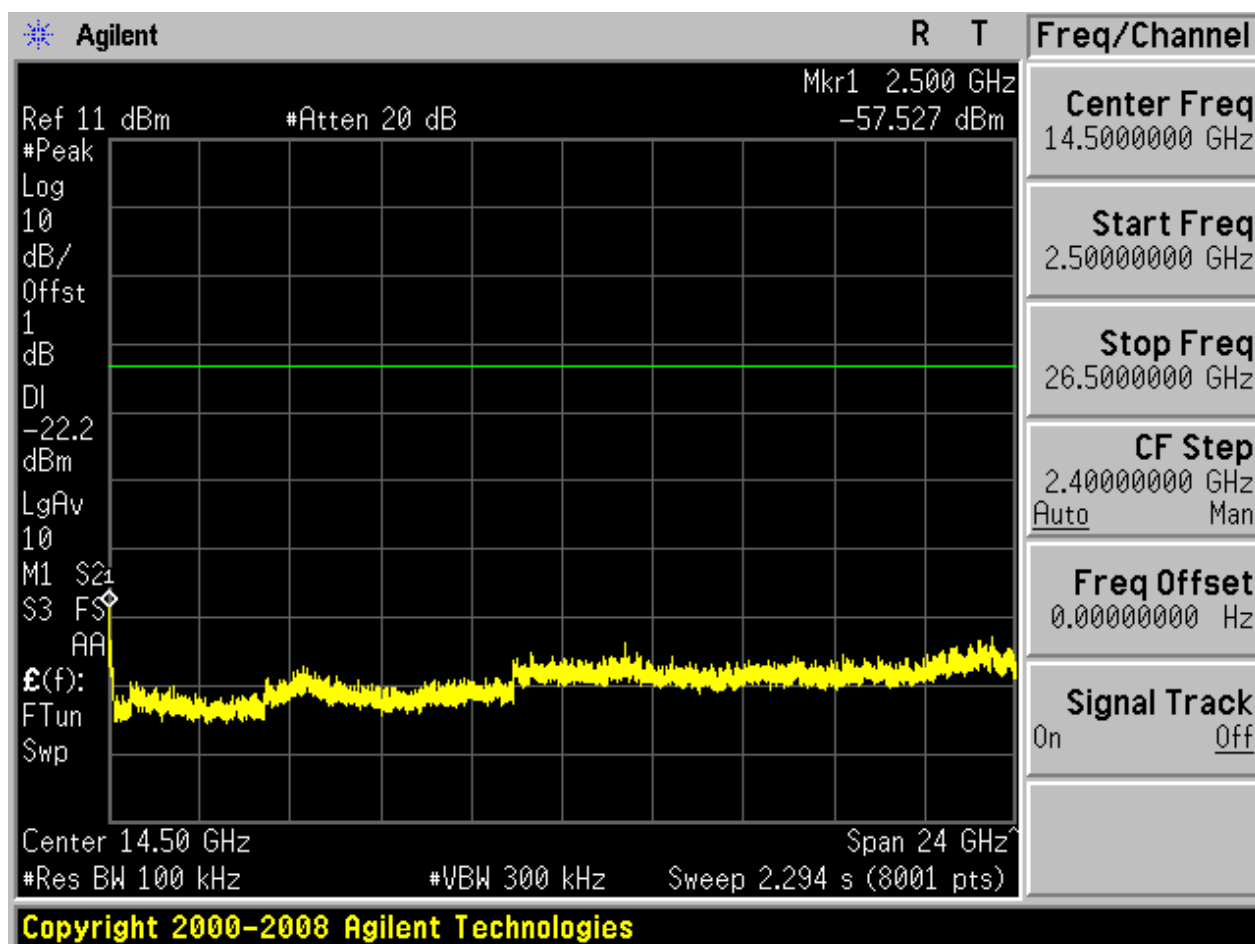






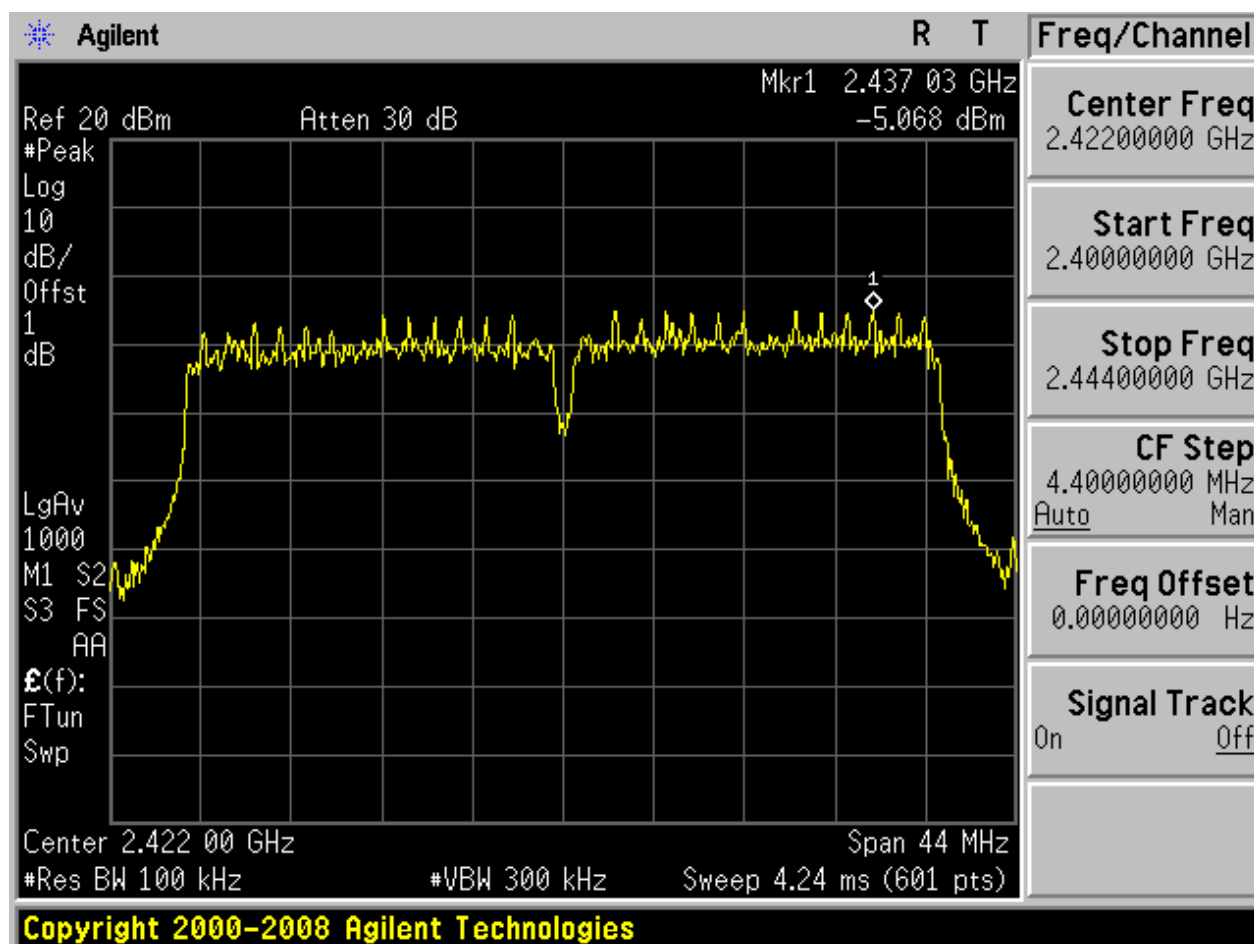




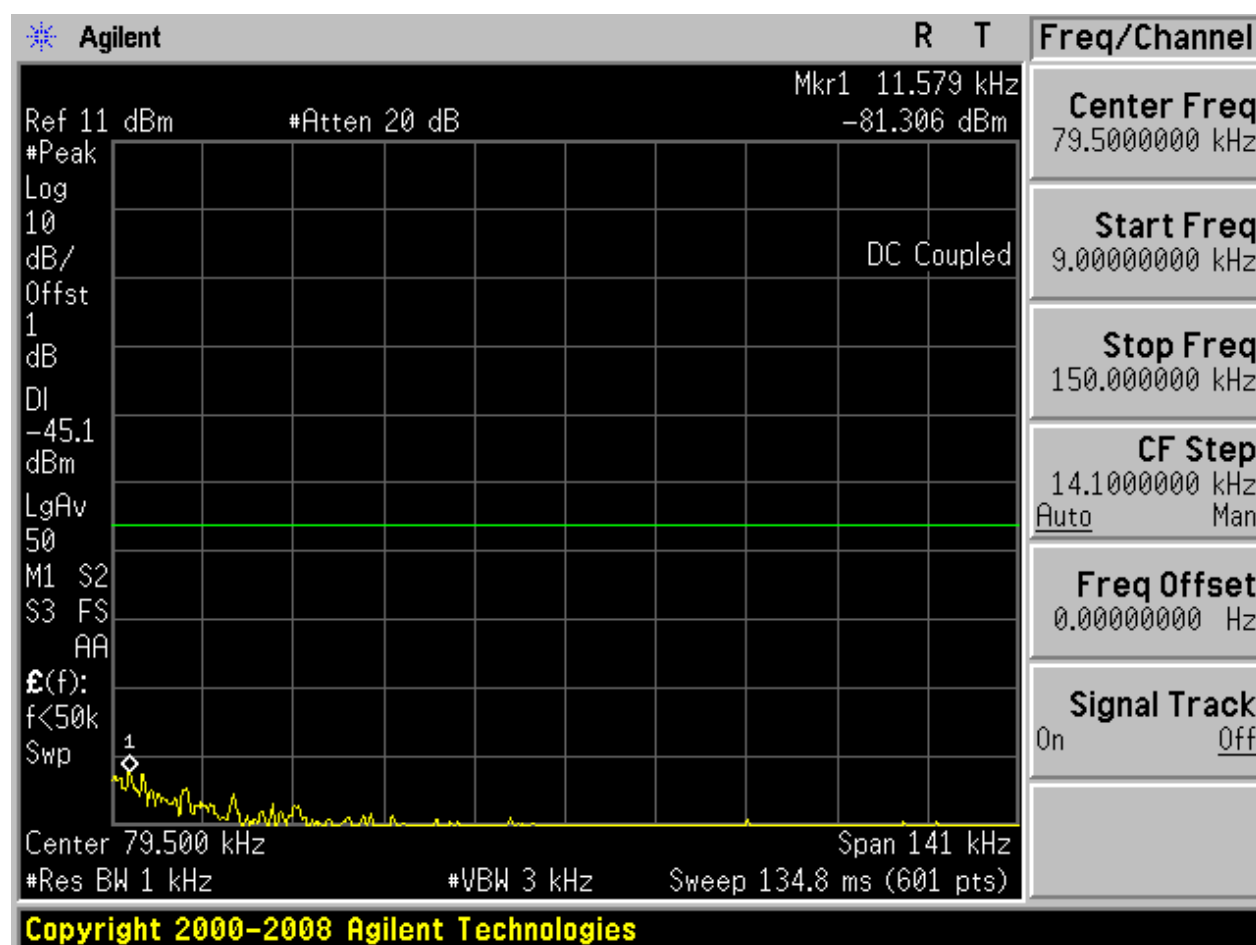


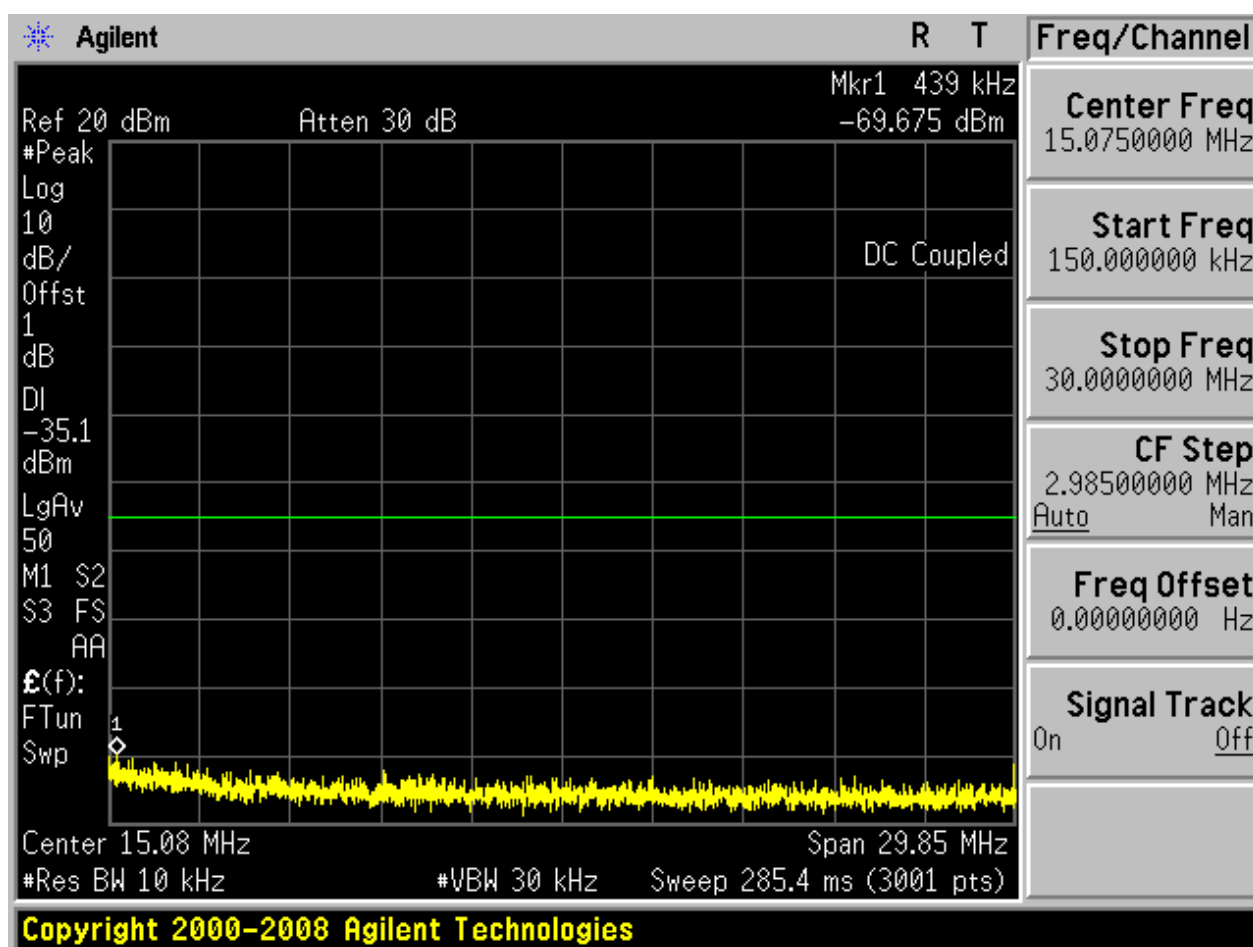
5.10 11N40_L

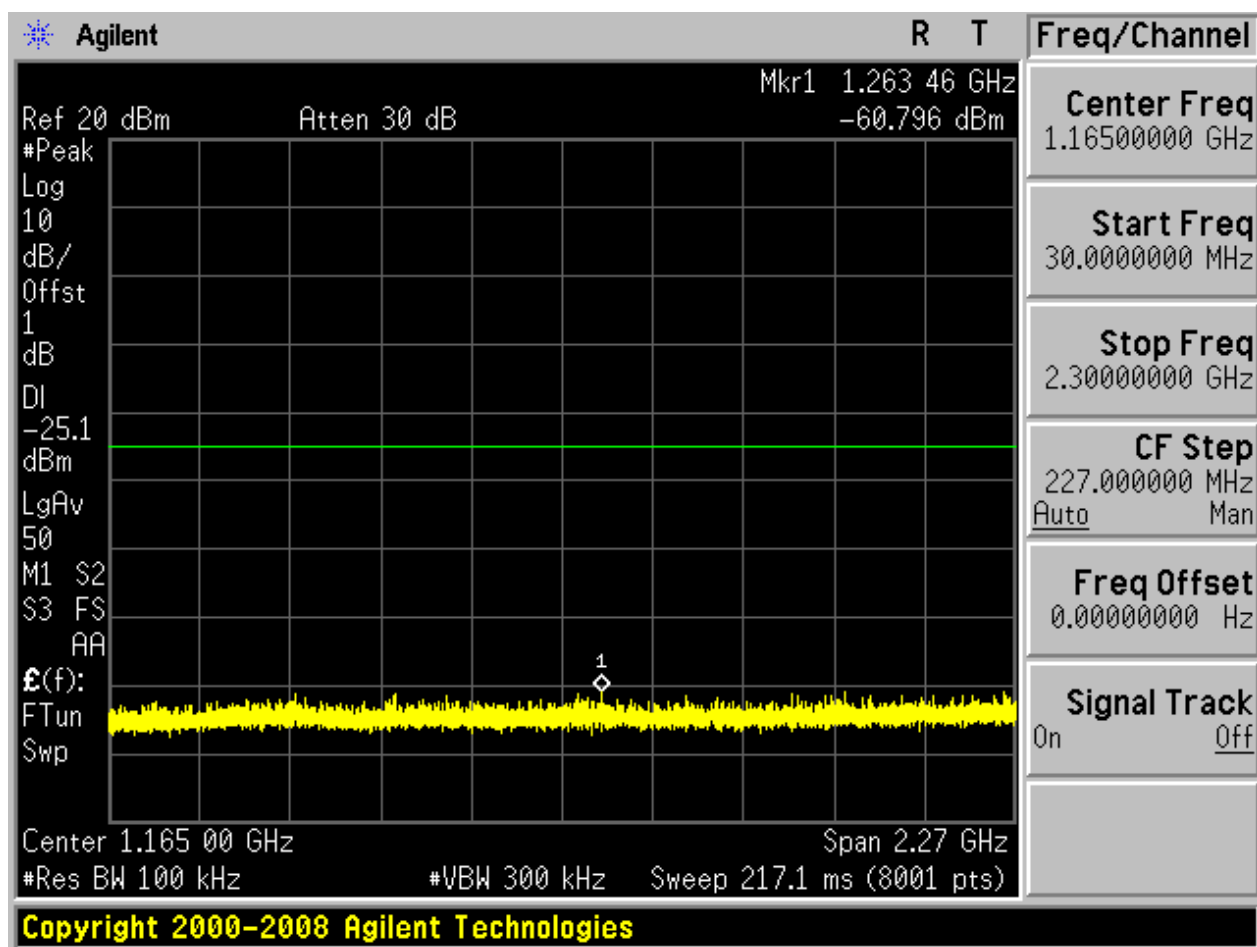
Pref:

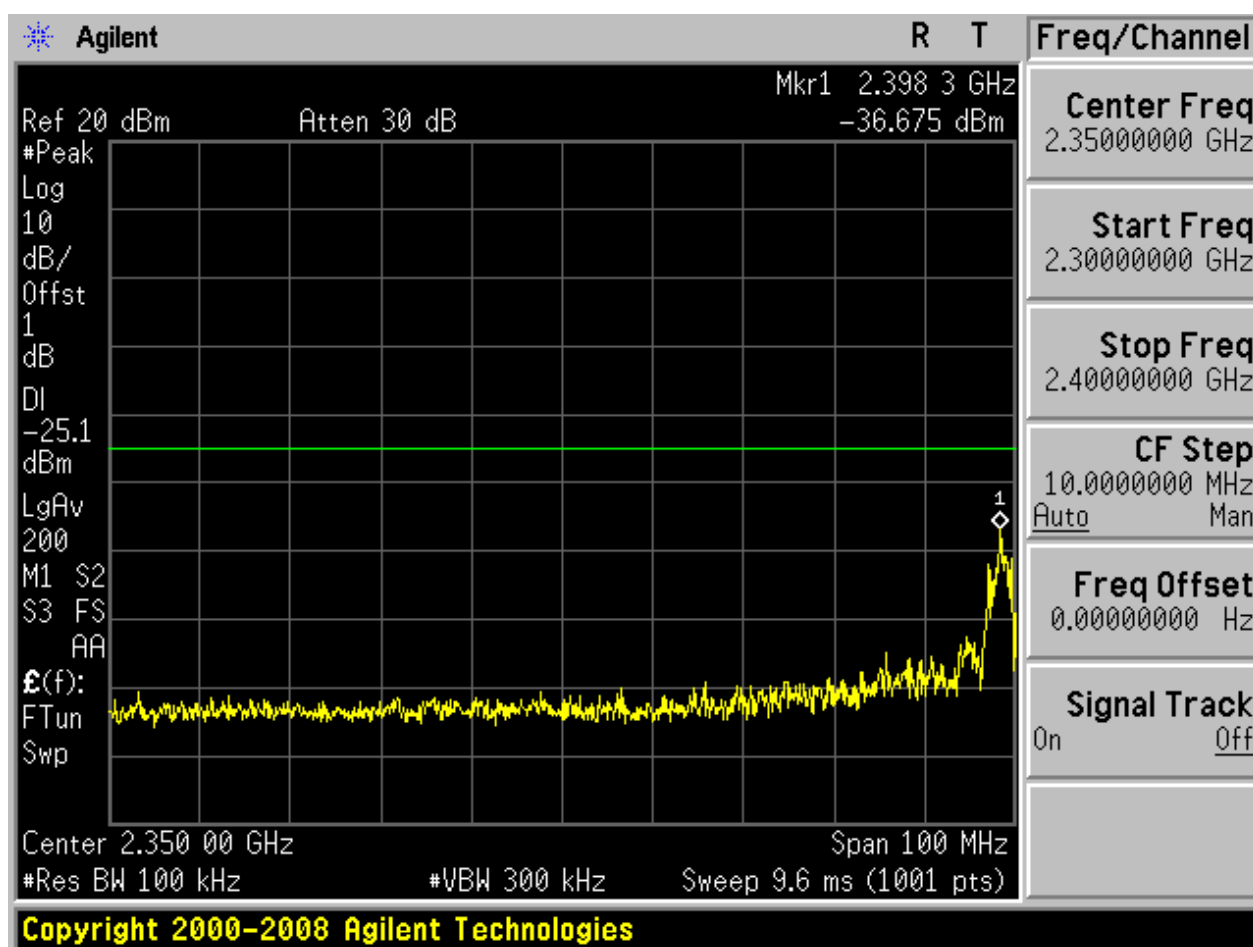


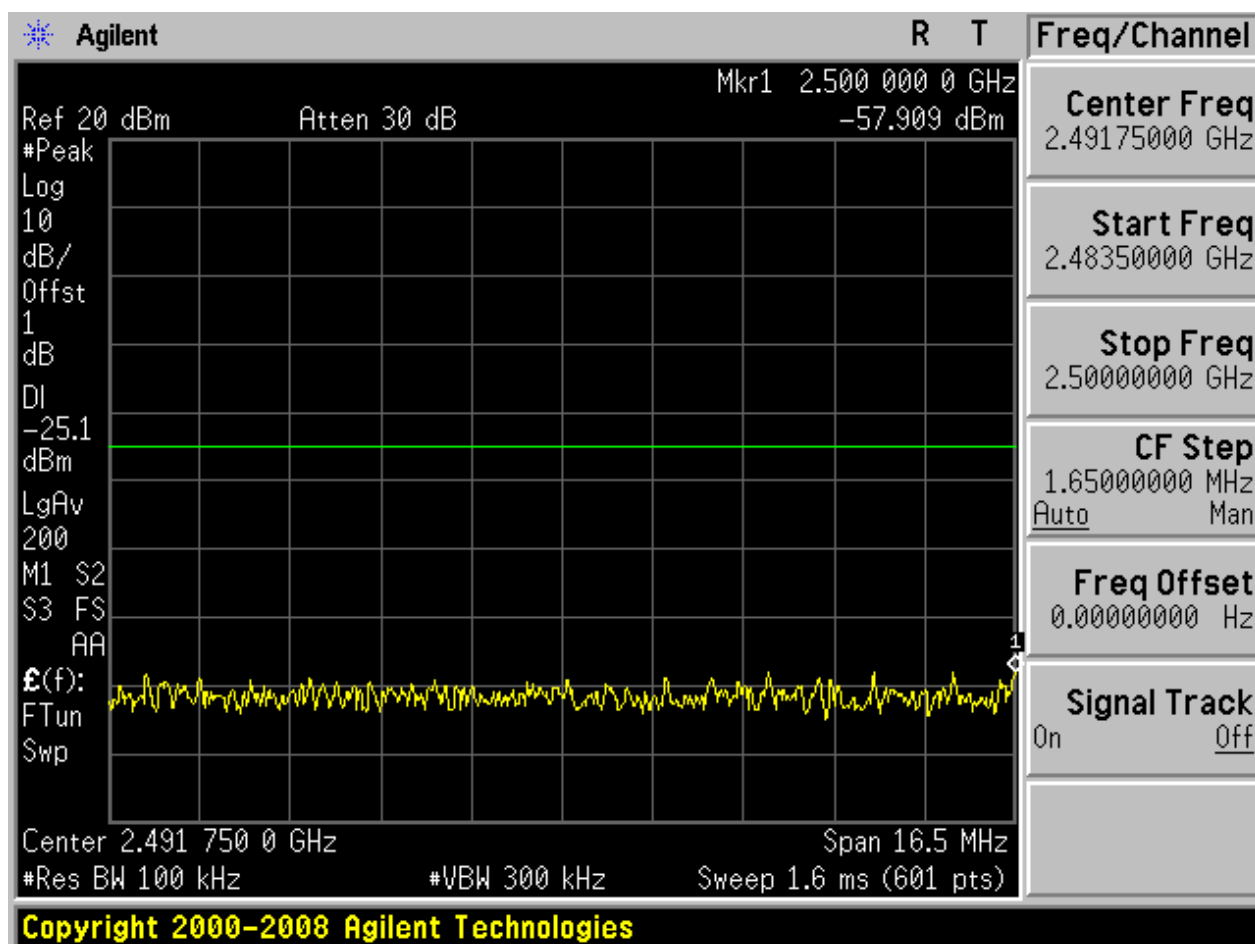
Puw:

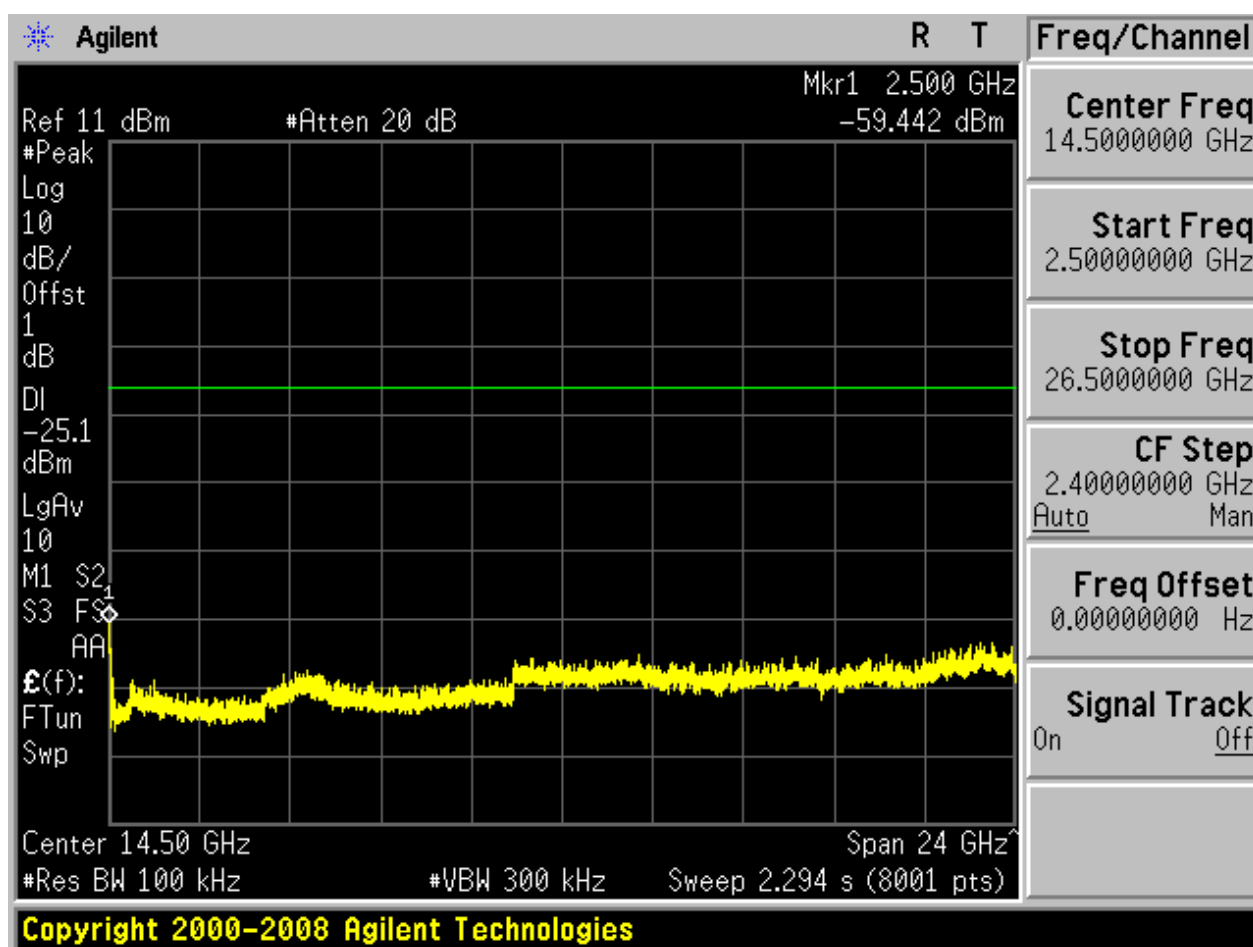






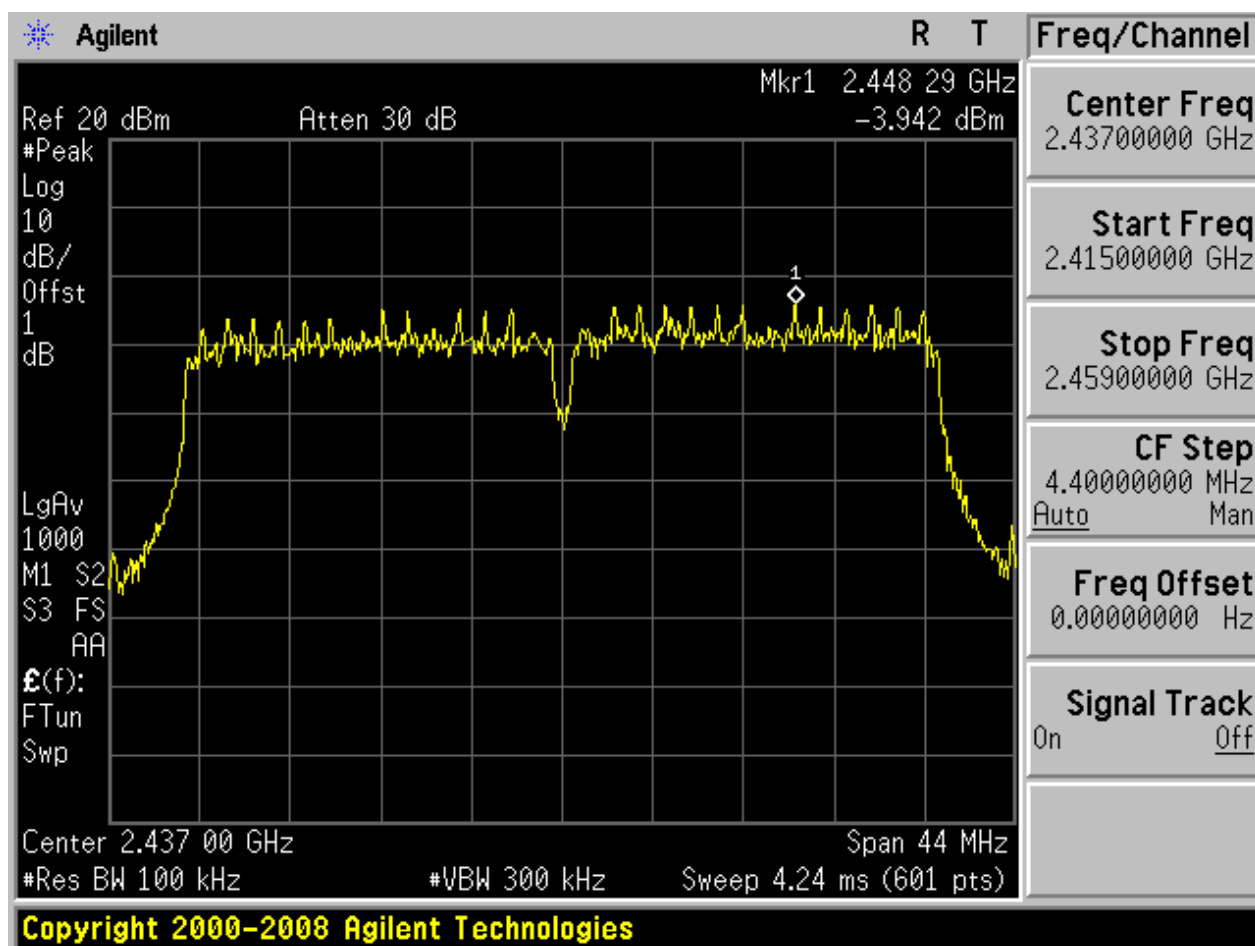




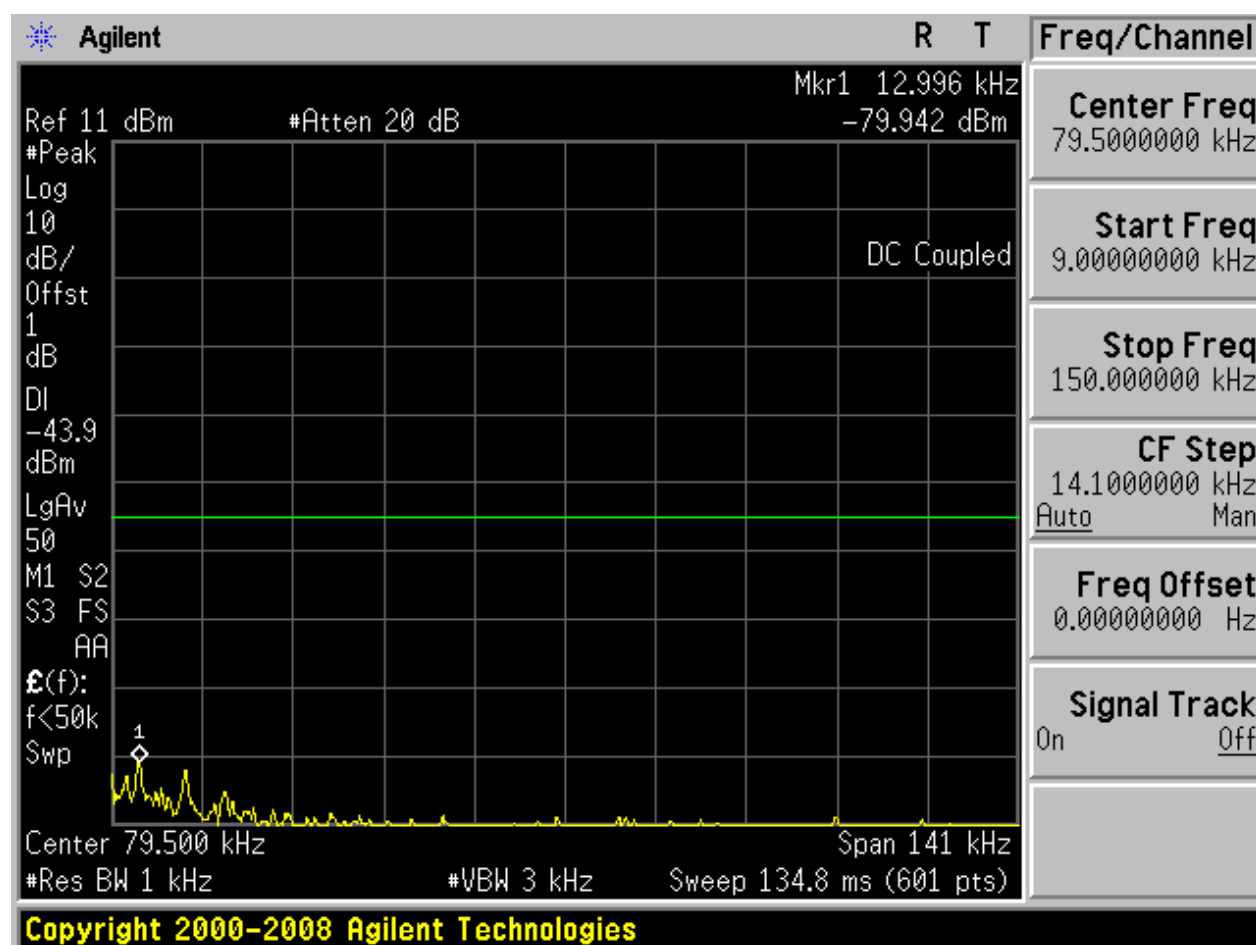


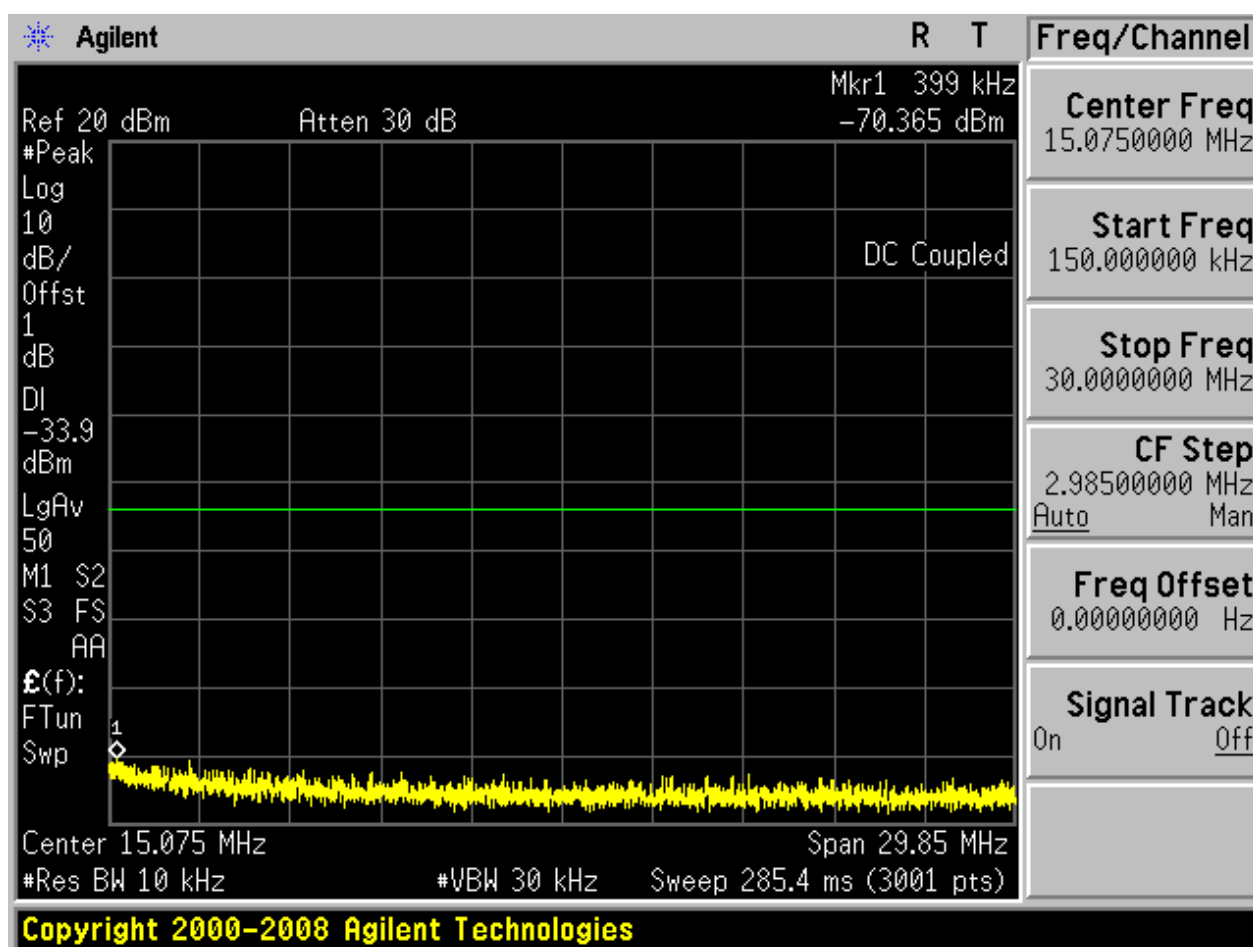
5.11 11N40 M

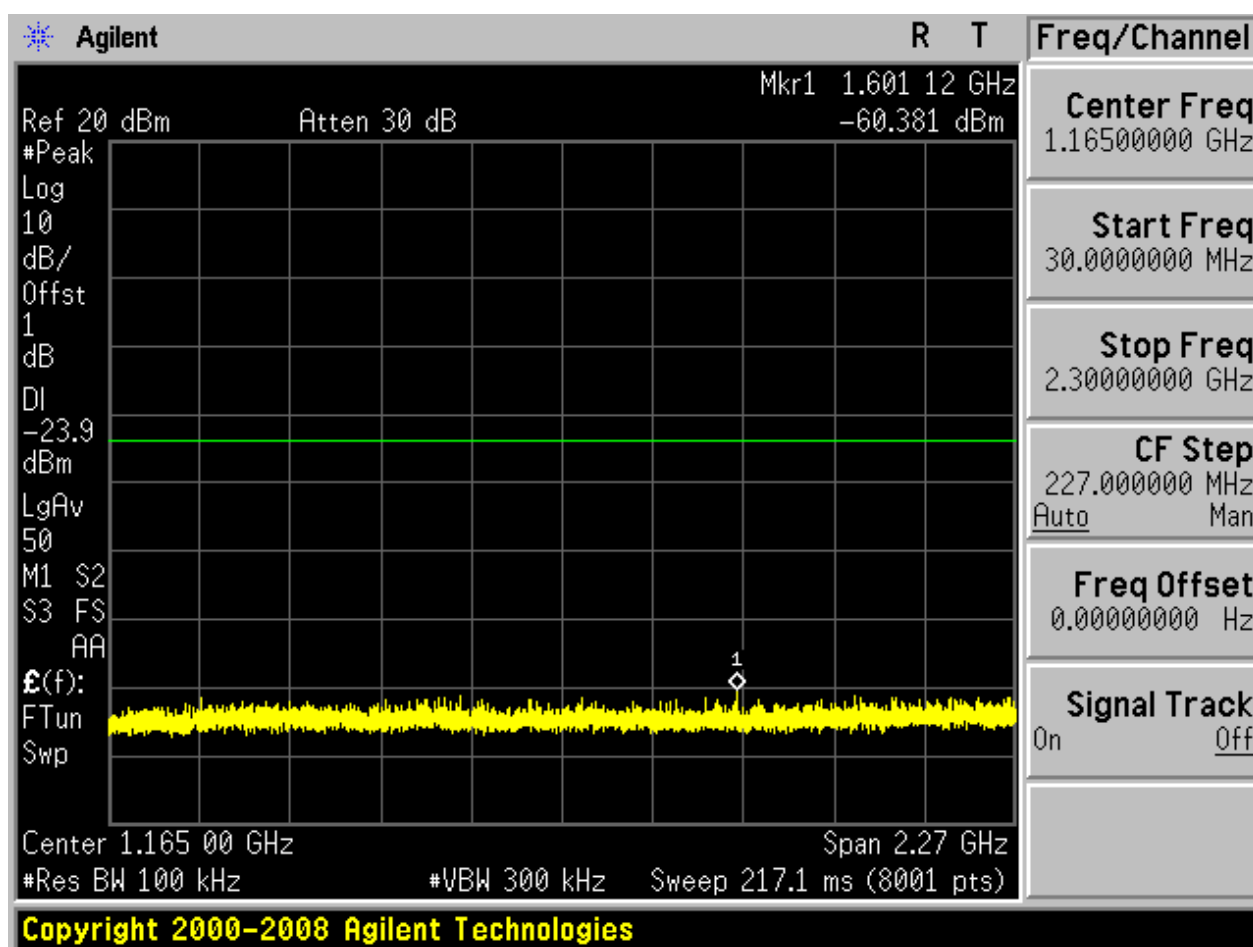
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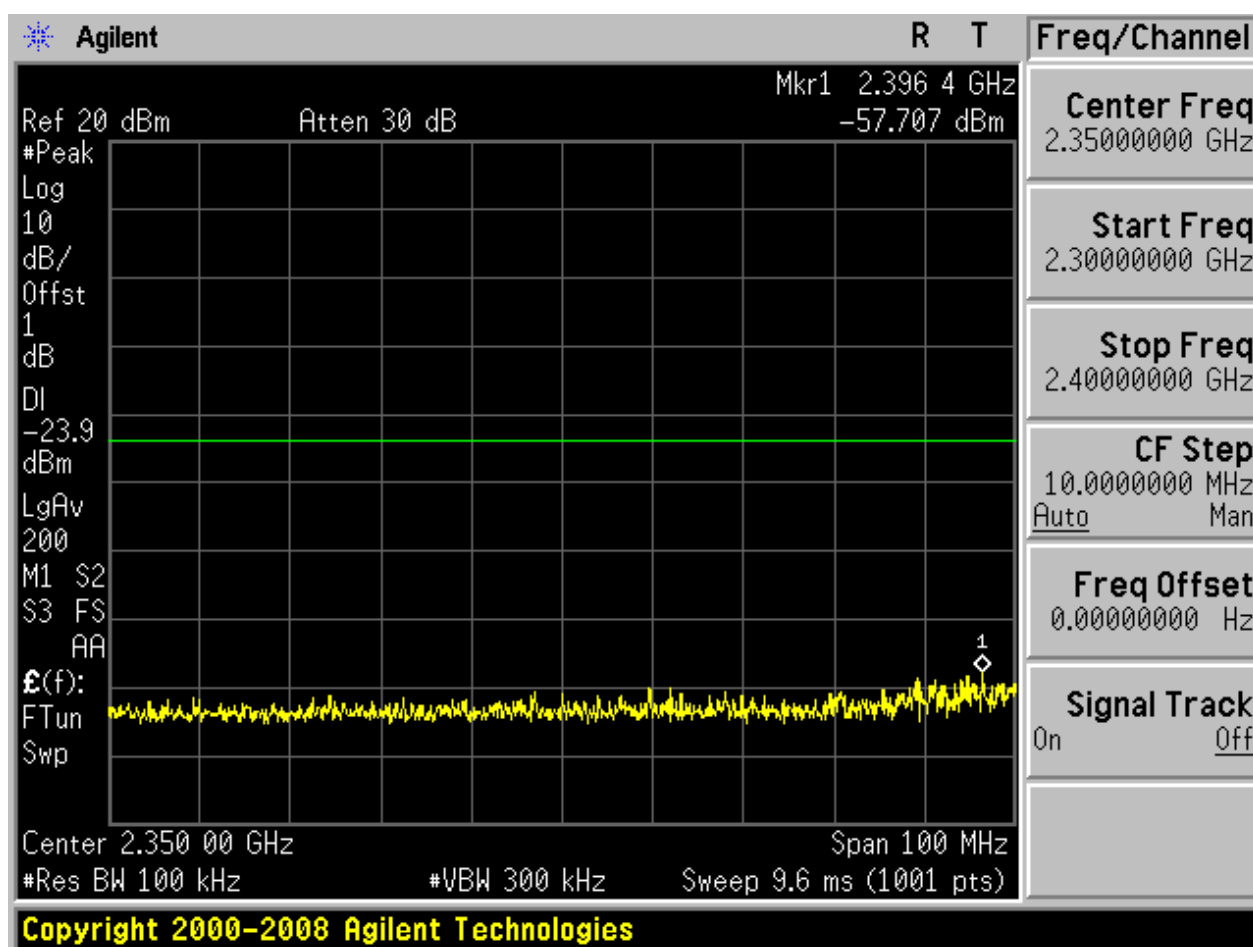


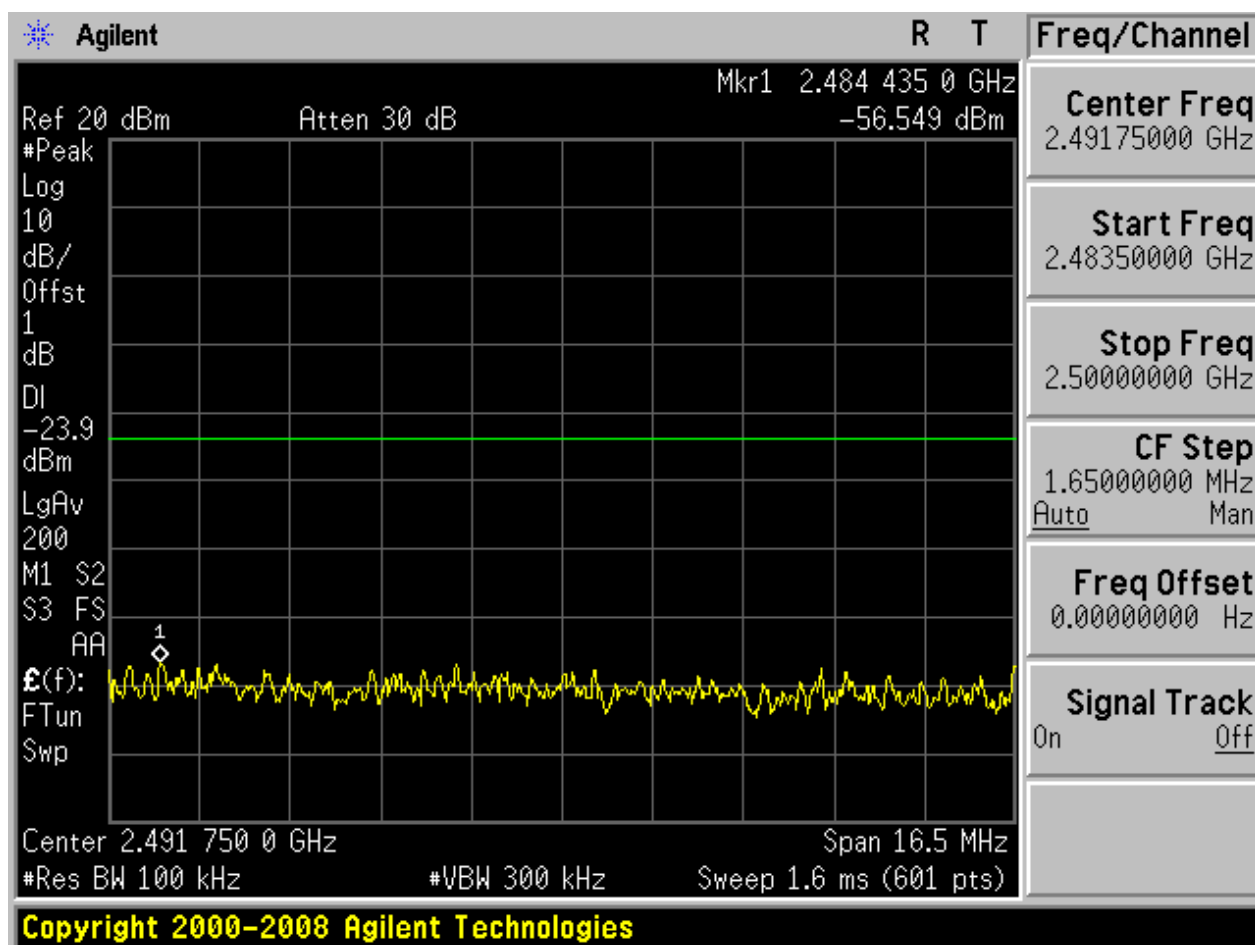
Puw:

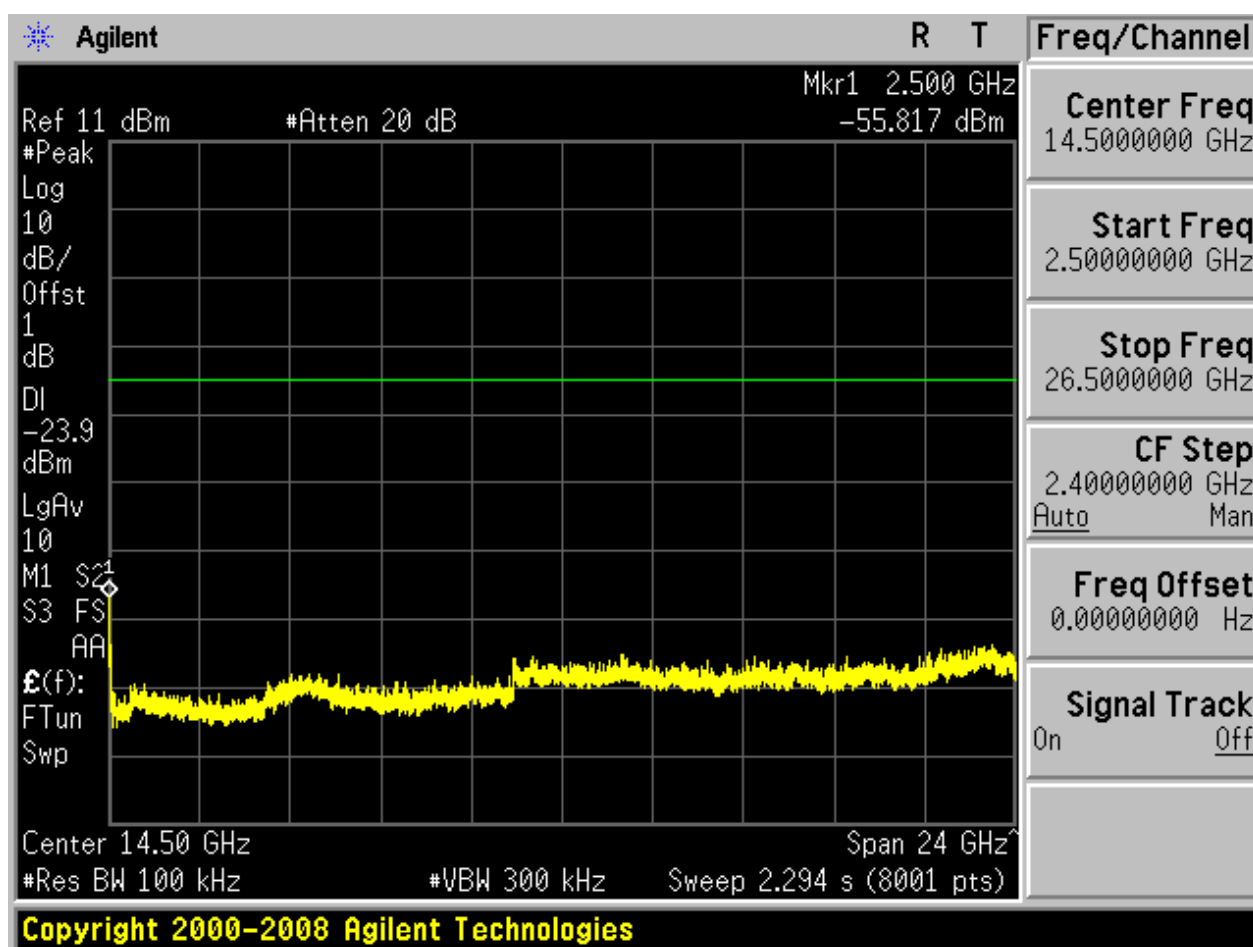






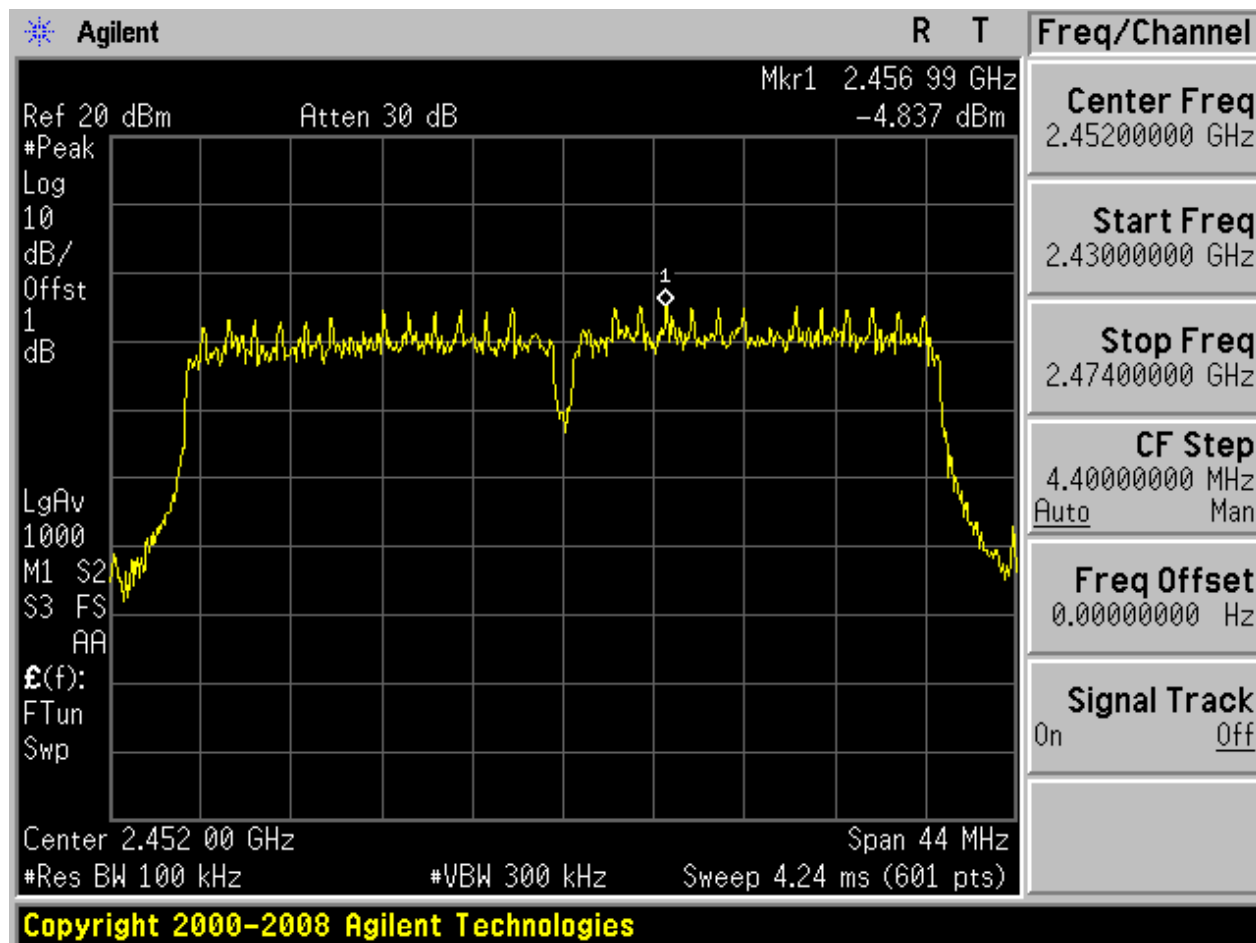




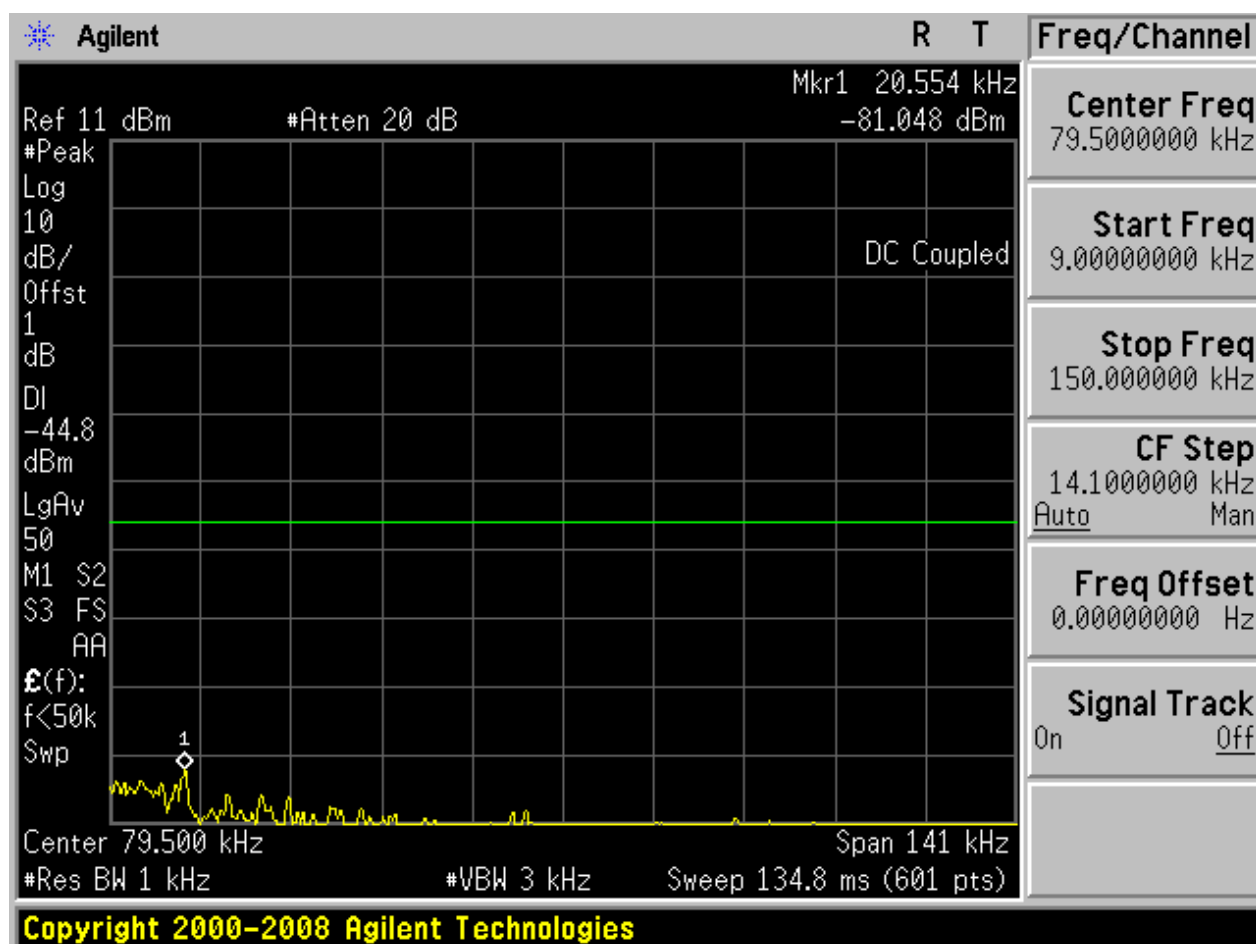


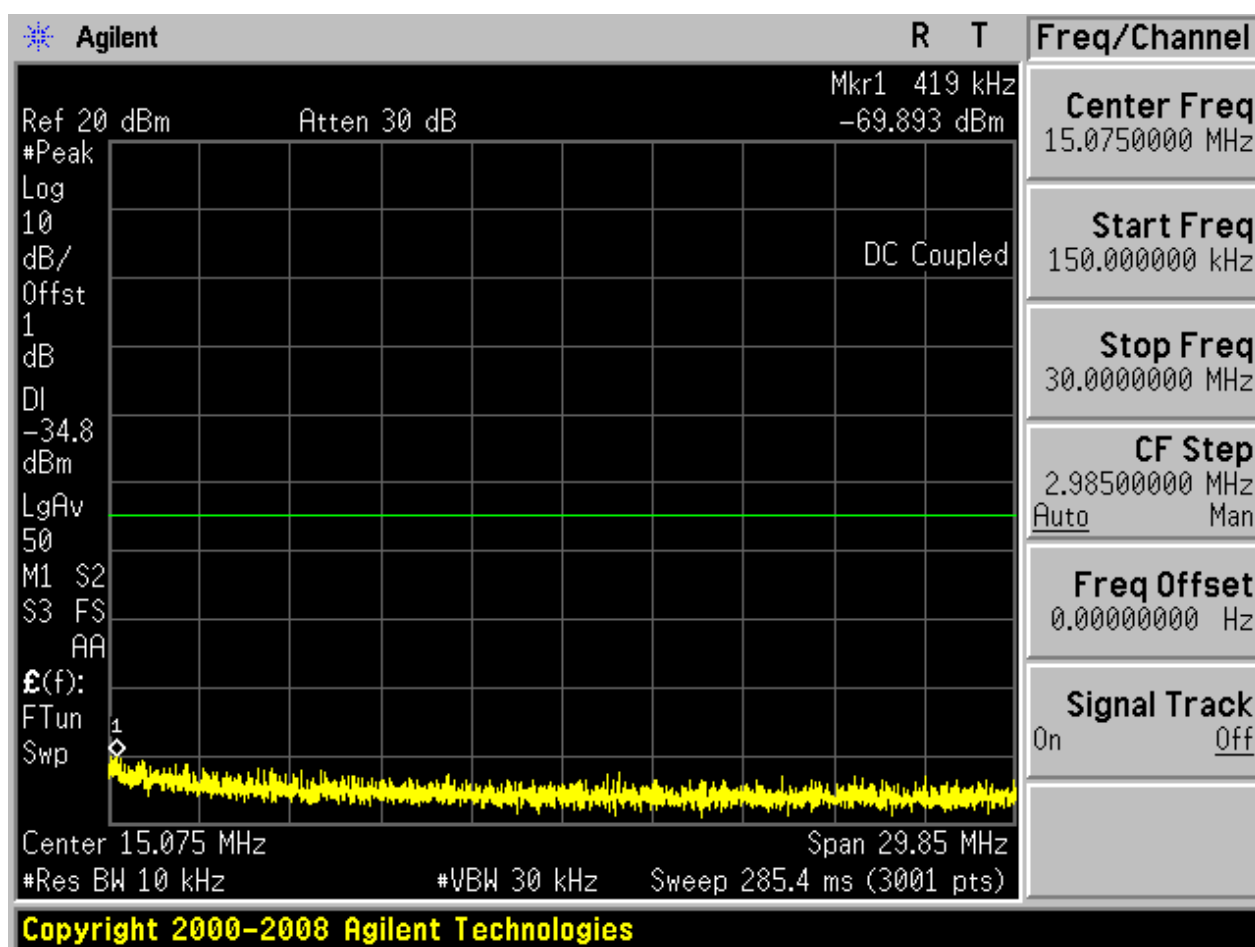
5.12 11N40_H

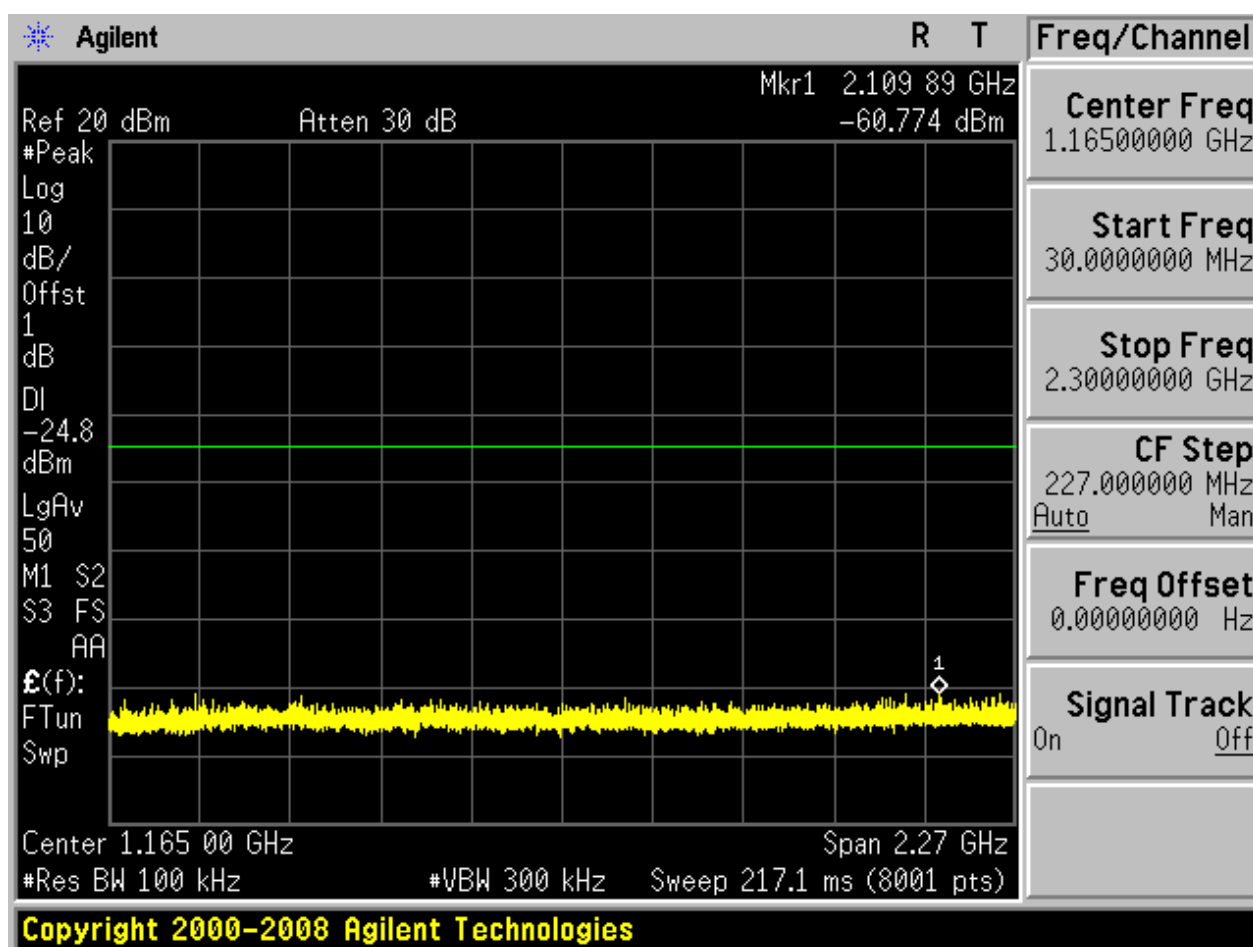
Pref:

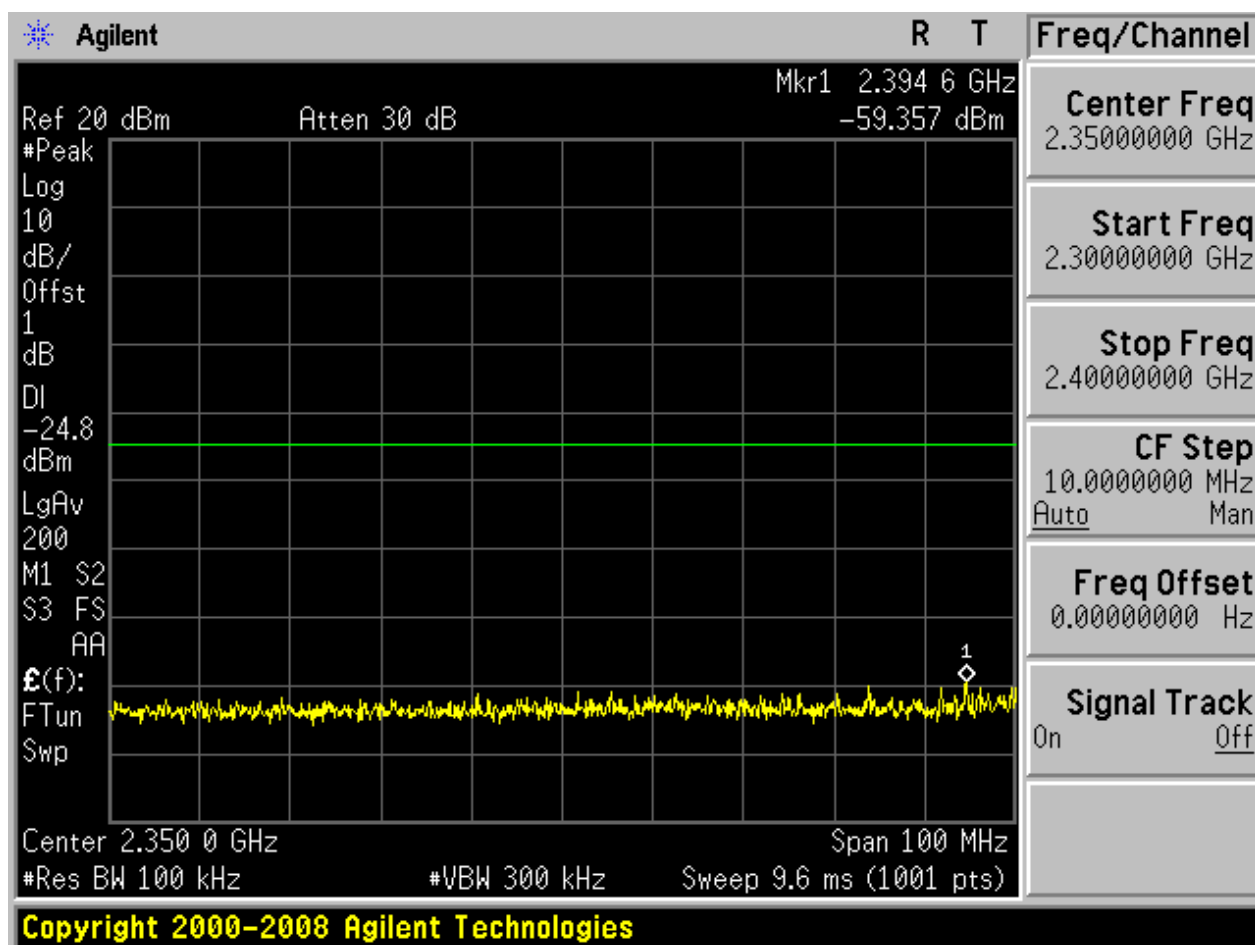


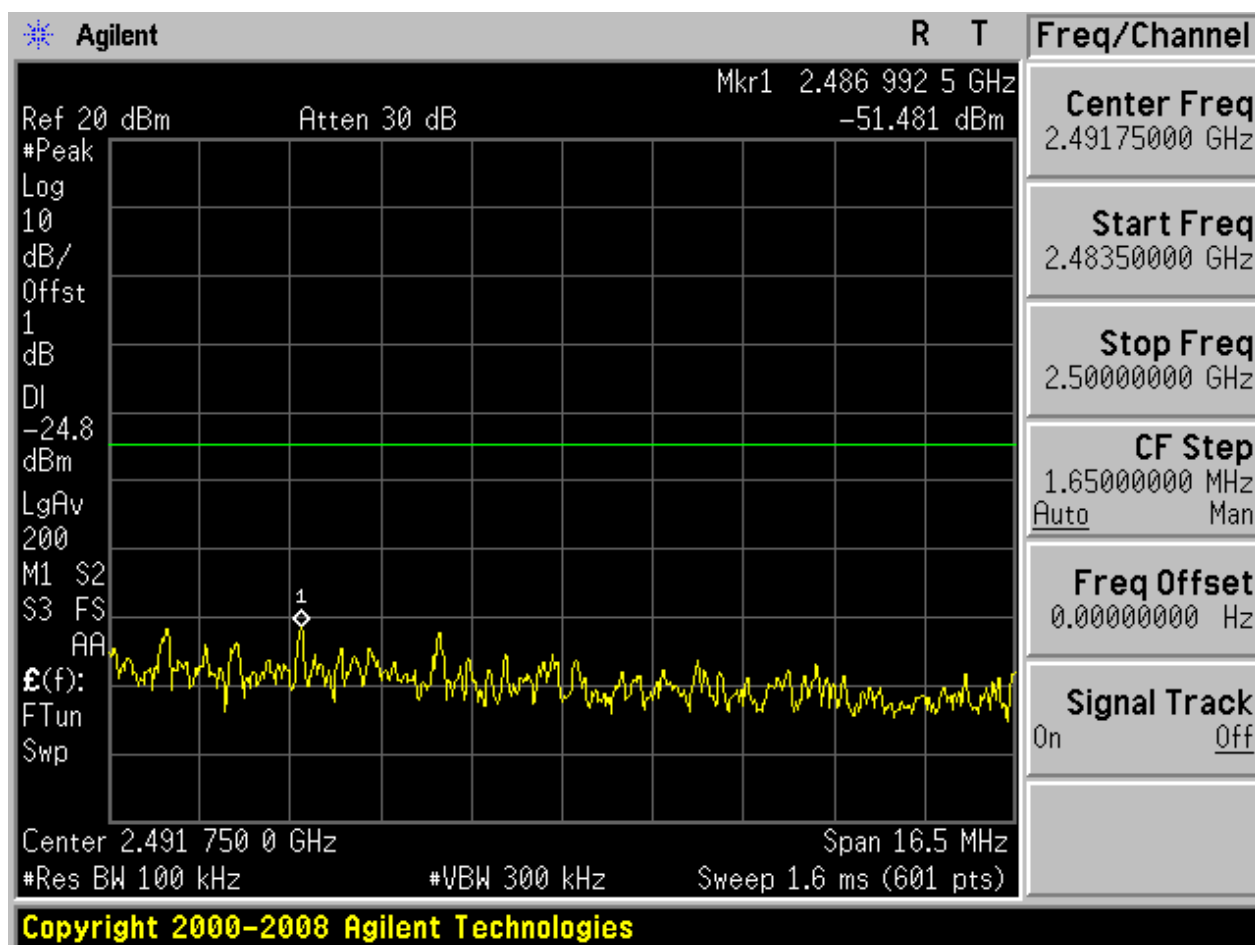
Puw:

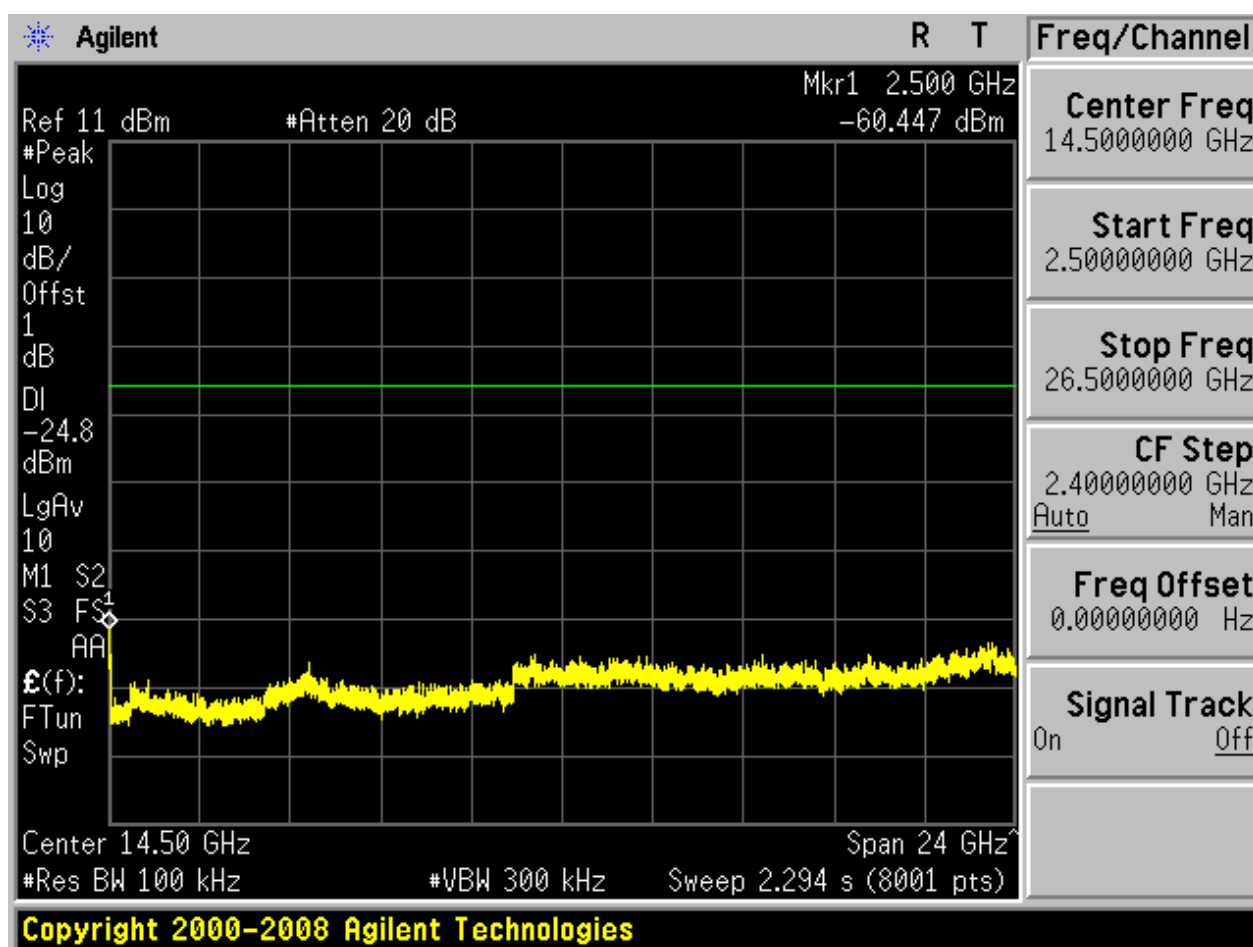








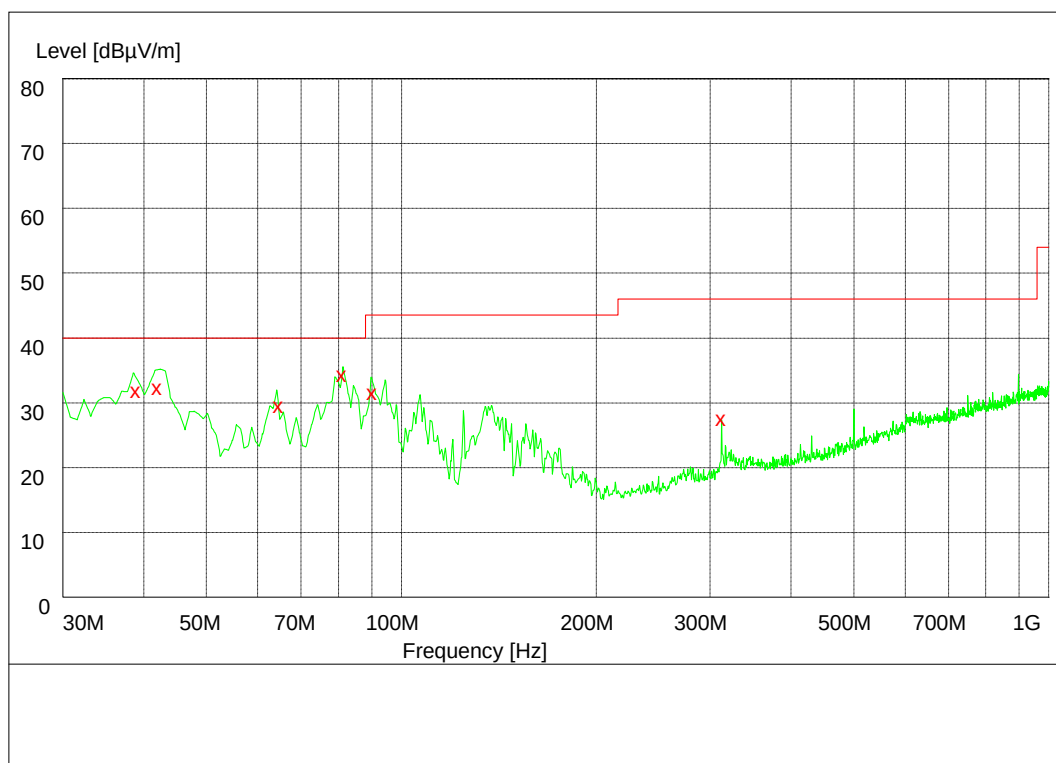




6. Appendix F: Unwanted Emissions into Restricted Frequency Bands (Radiated)

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

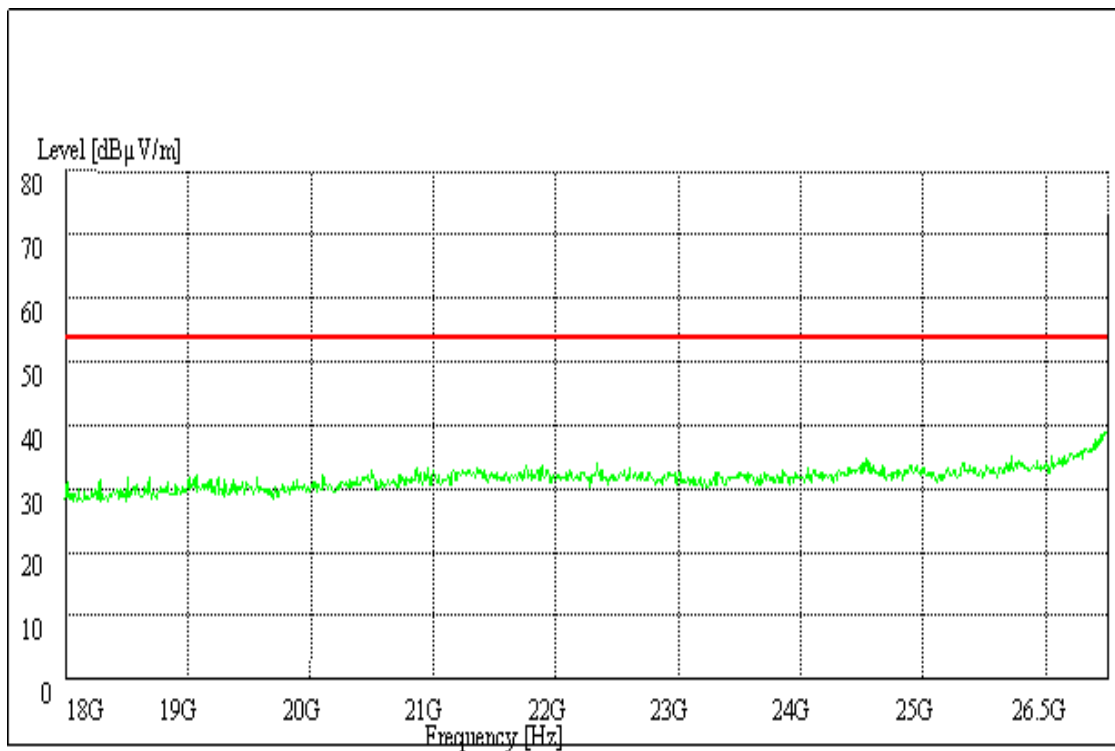
- Note 1: The test results and plot for testing range of “30 MHz to 1 GHz” showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.
- Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
38.940000	33.30	12.9	40.0	6.7	100.0	123.00	VERTICAL
42.060000	33.80	13.1	40.0	6.2	100.0	359.00	VERTICAL
64.800000	31.00	10.5	40.0	9.0	100.0	0.00	VERTICAL
81.180000	35.80	8.8	40.0	4.2	145.0	69.00	VERTICAL
90.360000	33.10	11.9	43.5	10.4	123.0	44.00	VERTICAL
312.480000	29.10	15.9	46.0	16.9	100.0	322.00	HORIZONTAL

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



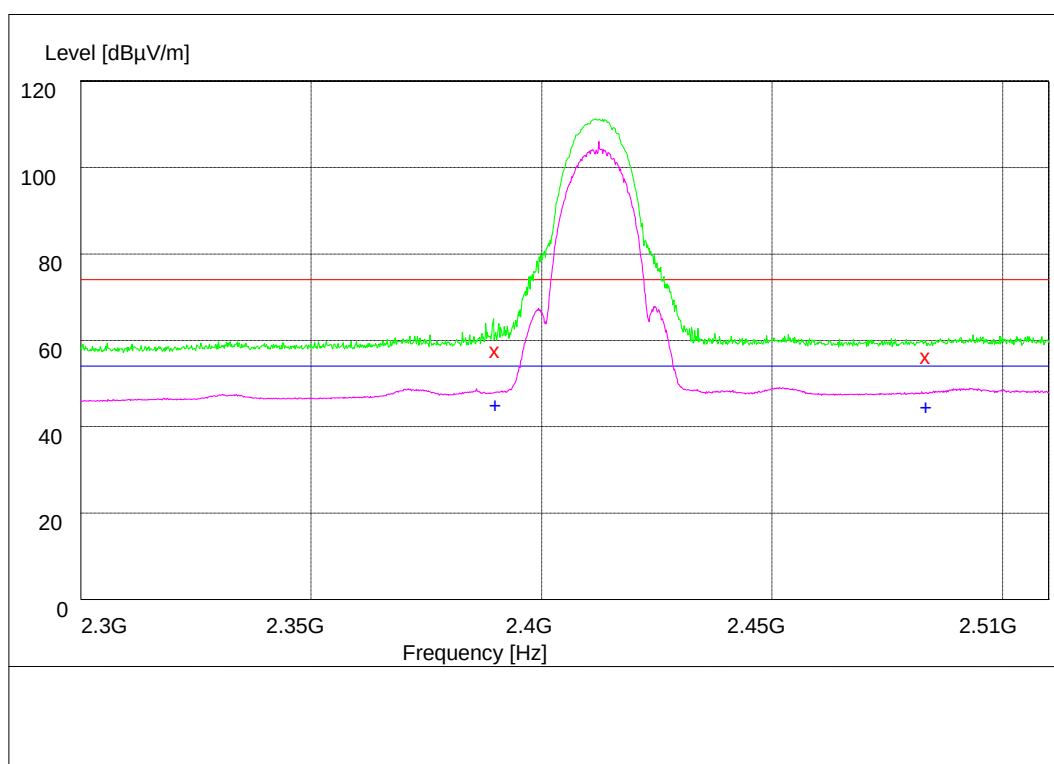
Note: No peak found in pre- test.

Part 3: Testing Range of “2.3GHz to 2.51GHz”

- Note 1: The testing range of “2.3 GHz to 2.51 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 dB μ V/m) and Average Limit (54 dB μ V/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

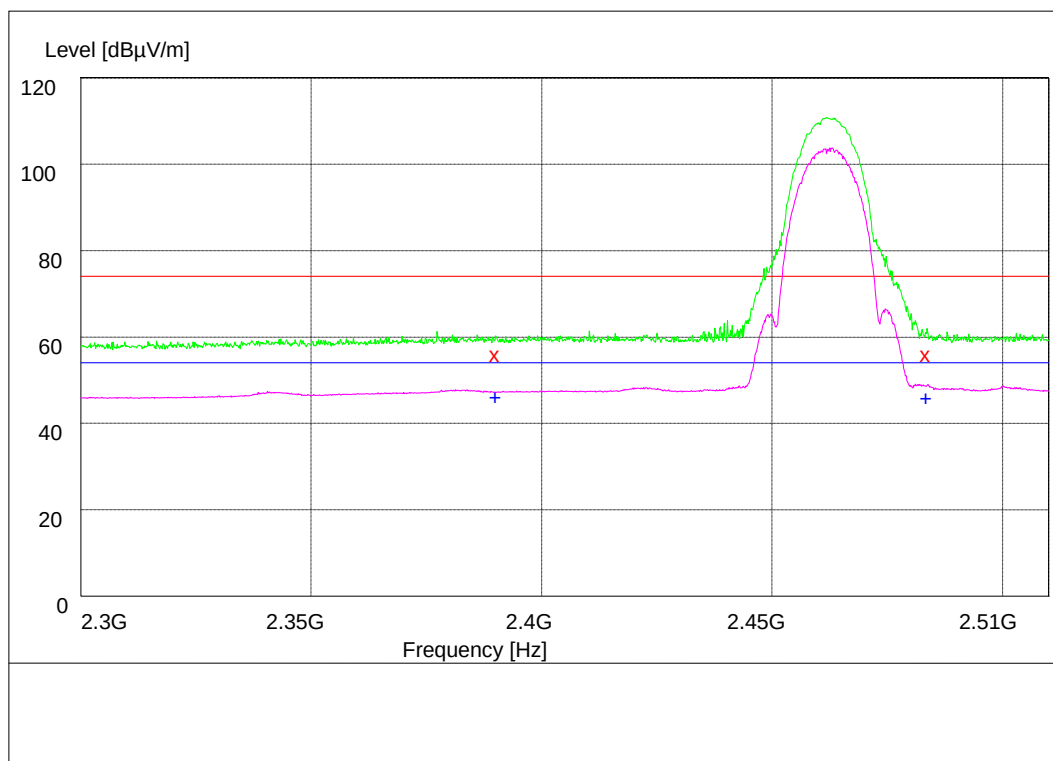
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	59.90	34.8	74.0	14.1	102.0	271.00	HORIZONTAL
2483.500000	58.50	35.1	74.0	15.5	102.0	199.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	47.10	34.8	54.0	6.9	102.0	223.00	HORIZONTAL

2483.500000	46.80	35.1	54.0	7.2	102.0	225.00	HORIZONTAL
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Channel H



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

MEASUREMENT RESULT: PK Detector

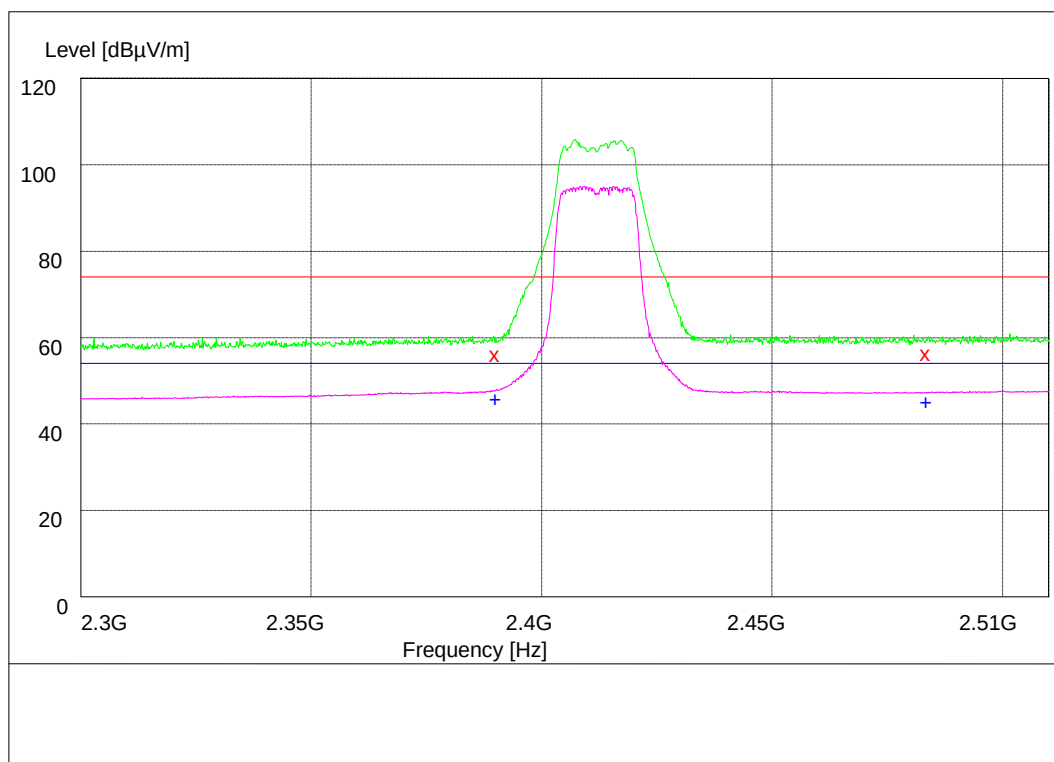
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	58.20	34.8	74.0	15.8	145.0	314.00	HORIZONTAL
2483.500000	58.20	35.1	74.0	15.8	102.0	188.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	48.20	34.8	54.0	5.8	112.0	119.00	HORIZONTAL
2483.500000	48.10	35.1	54.0	5.9	122.0	178.00	HORIZONTAL

Test Mode: 11G

Channel L



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

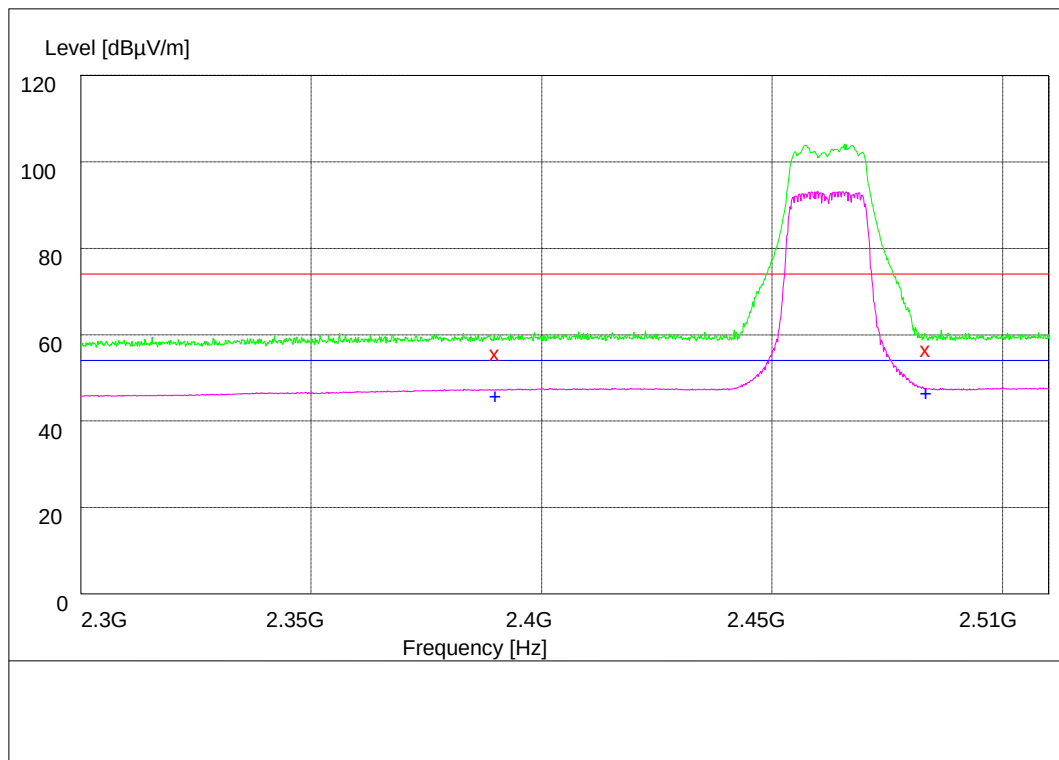
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	58.30	34.8	74.0	15.7	138.0	222.00	HORIZONTAL
2483.500000	58.50	35.1	74.0	15.5	146.0	42.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	47.90	34.8	54.0	6.1	102.0	224.00	HORIZONTAL
2483.500000	47.20	35.1	54.0	5.8	102.0	225.00	HORIZONTAL

Channel H



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

MEASUREMENT RESULT: PK Detector

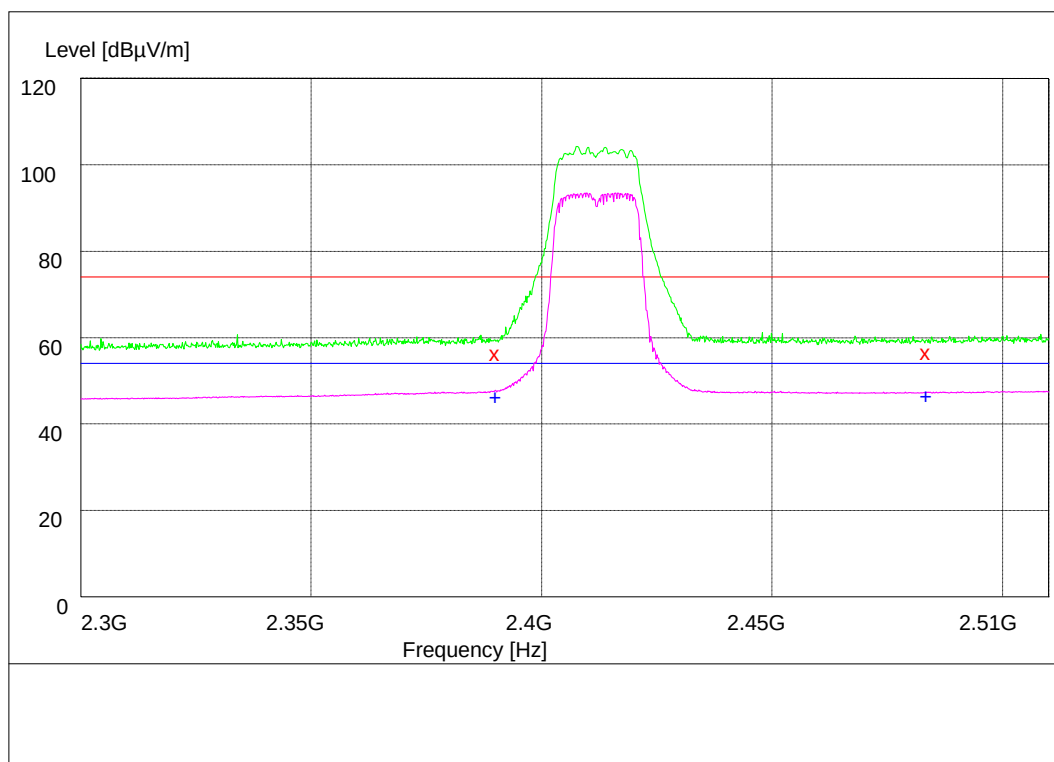
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	57.90	34.8	74.0	16.1	148.0	176.00	HORIZONTAL
2483.500000	58.70	35.1	74.0	15.3	100.0	231.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	48.00	34.8	54.0	6.0	103.0	166.00	HORIZONTAL
2483.500000	48.60	35.1	54.0	5.4	103.0	227.00	HORIZONTAL

Test Mode: 11N

Channel L



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

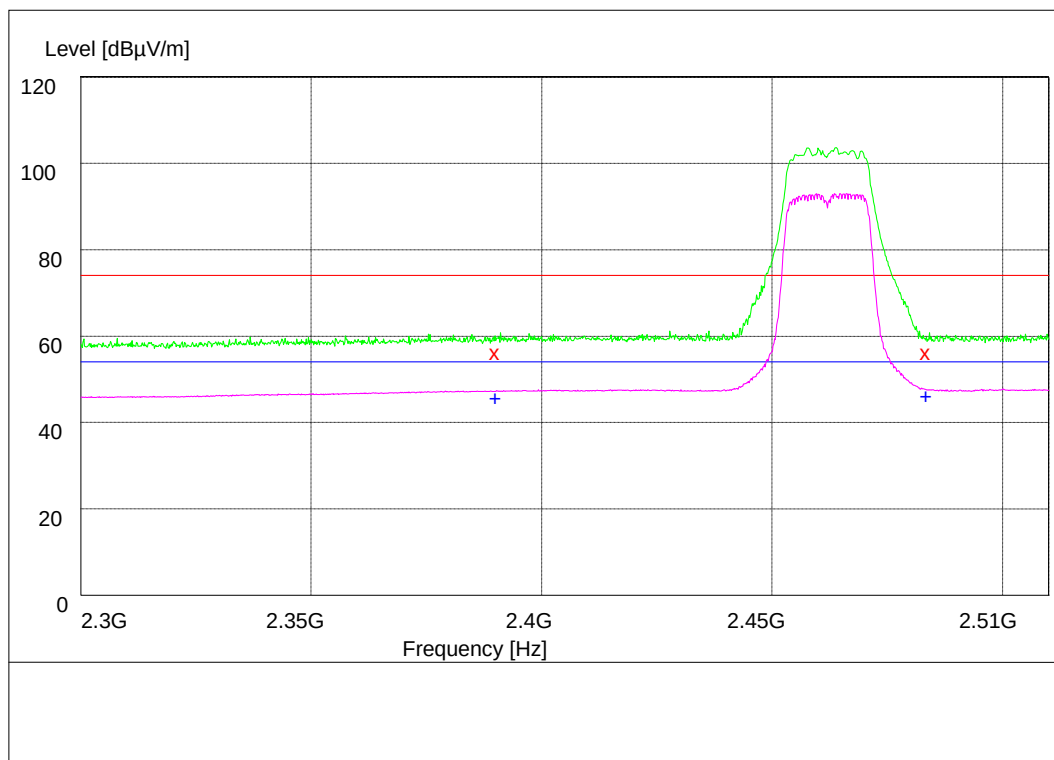
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	58.60	34.8	74.0	15.4	103.0	359.00	HORIZONTAL
2483.500000	58.70	35.1	74.0	15.3	103.0	5.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	48.50	34.8	54.0	5.5	103.0	221.00	HORIZONTAL
2483.500000	48.70	35.1	54.0	5.3	103.0	226.00	HORIZONTAL

Channel H



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

MEASUREMENT RESULT: PK Detector

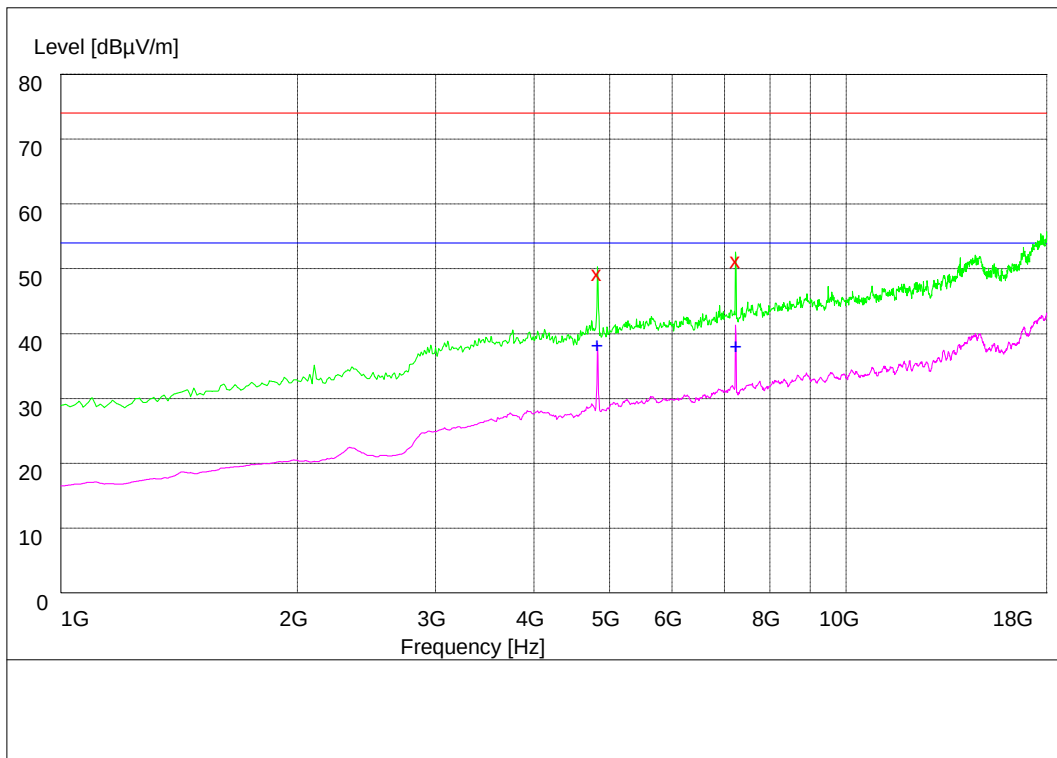
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	58.30	34.8	74.0	15.7	103.0	207.00	VERTICAL
2483.500000	58.30	35.1	74.0	15.7	115.0	216.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height deg	Azimuth	Polarization
2390.000000	47.80	34.8	54.0	6.2	150.0	90.00	VERTICAL
2483.500000	48.30	35.1	54.0	5.7	100.0	228.00	HORIZONTAL

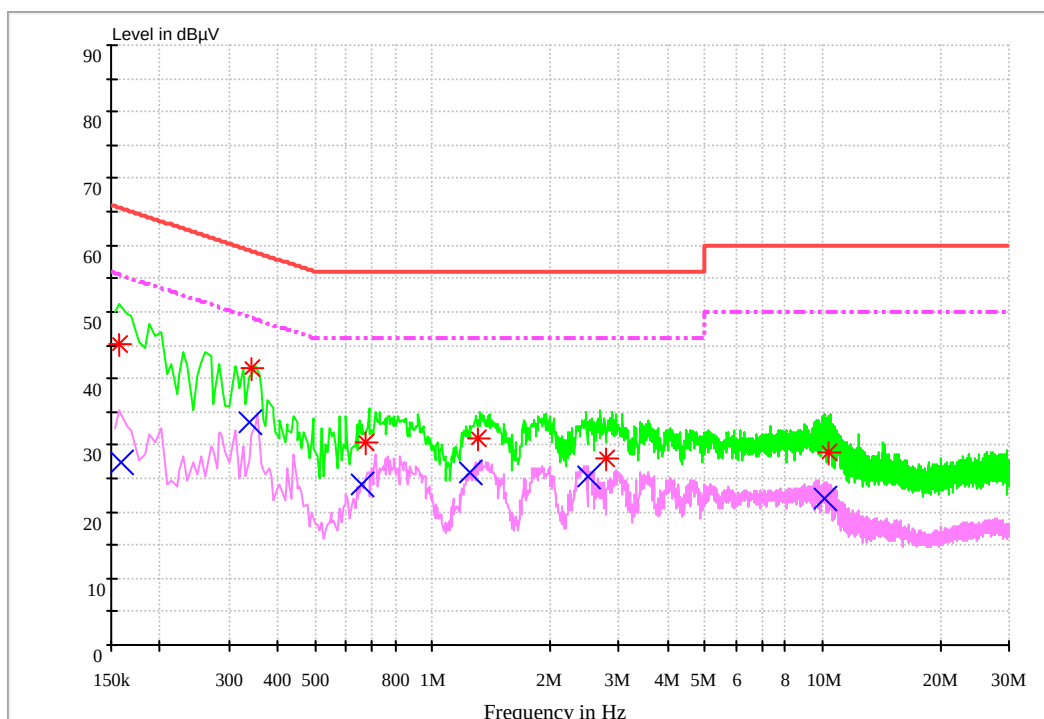
Part 4: Testing Range of “1 GHz to 18 GHz”

- 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 dB μ V/m) and Average Limit (54 dB μ V/m).



7. Appendix G: AC Power Line Conducted Emissions

Channel 6



MEASUREMENT RESULT: QP Detector

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	PE
0.157712	45.1	9.7	65.6	20.5	L1	FLO
0.342106	41.4	9.7	59.2	17.8	L1	FLO
0.669682	30.4	9.7	56	25.6	L1	FLO
1.313808	31.1	9.7	56	24.9	L1	FLO
2.781465	28	9.7	56	28	N	FLO
10.370122	29	9.9	60	31	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency (MHz)	CAverage (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	PE
0.158455	27.5	9.7	55.5	28	L1	FLO



0.339019	33.5	9.7	49.2	15.7	L1	FLO
0.658065	24.1	9.7	46	21.9	L1	FLO
1.241831	25.8	9.7	46	20.2	L1	FLO
2.501328	25.3	9.8	46	20.7	L1	FLO
10.12923	21.9	9.9	50	28.1	N	FLO

END