



Appendix for Testreport

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.

1.1 Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[MHz]	Verdict
TM1 _Ch0	L	2402	0.70	pass
TM1 _Ch19	M	2440	0.68	pass
TM1 _Ch39	H	2480	0.72	pass

1.2Part II - Test Plots

1.2.1 TM1_Ch0_L





1.2.2 TM1_Ch19_M





1.2.3 TM1_Ch39_H



2 Appendix B: Occupied Bandwidth

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.

2.1Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Occupied Bandwidth [MHz]	Verdict
TM1 _Ch0	L	2402	1.06	pass
TM1 _Ch19	M	2440	1.06	pass
TM1 _Ch39	H	2480	1.06	pass

2.2Part II - Test Plots

2.2.1 TM1_Ch0_L





2.2.2 TM1_Ch19_M



2.2.3 TM1_Ch39_H





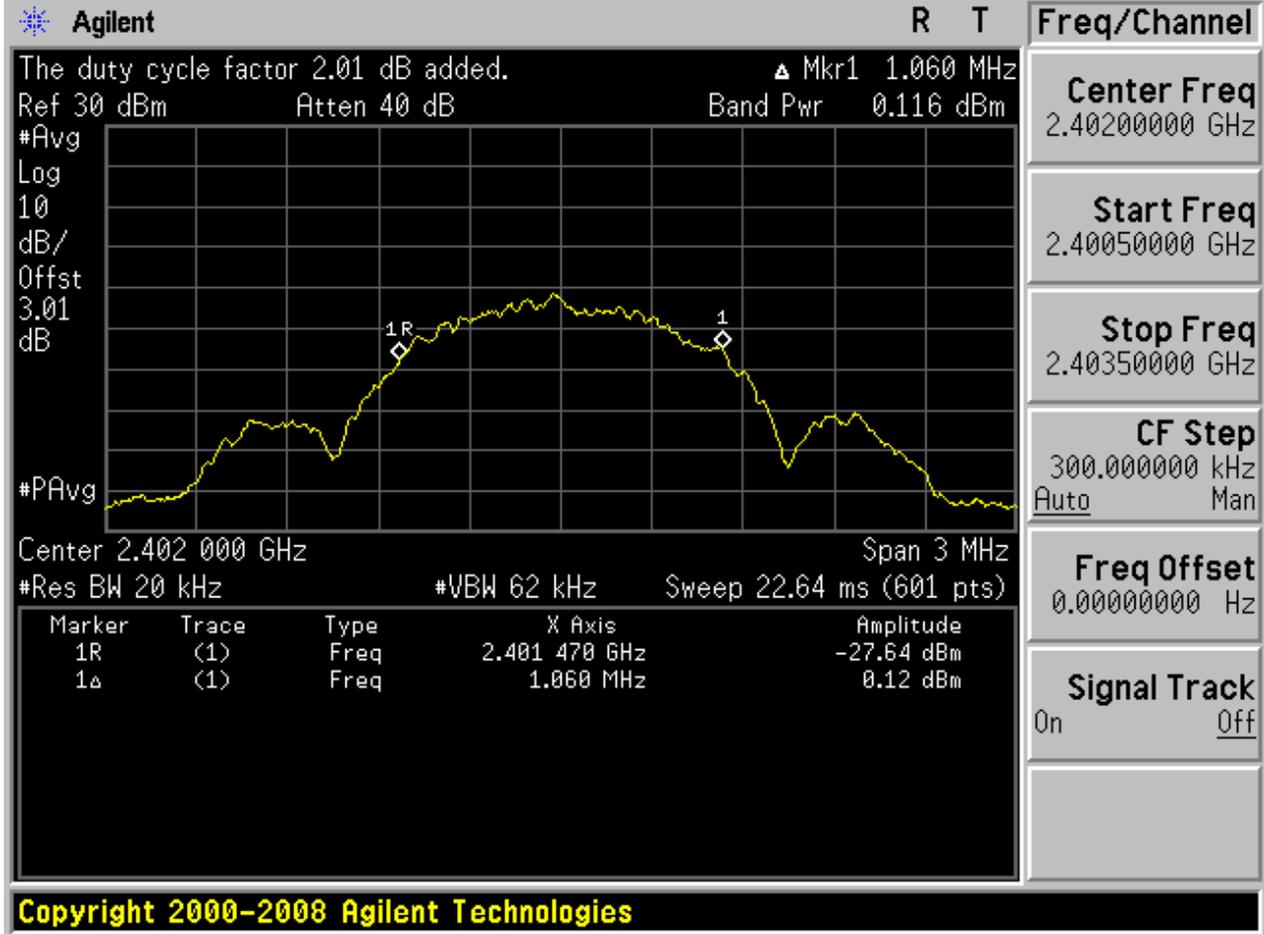
3 Appendix C: Maximum Conducted Average Output Power

3.1 Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Power[dBm]	Verdict
TM1 _Ch0	L	2402	0.12	pass
TM1 _Ch19	M	2440	1.19	pass
TM1 _Ch39	H	2480	1.51	pass

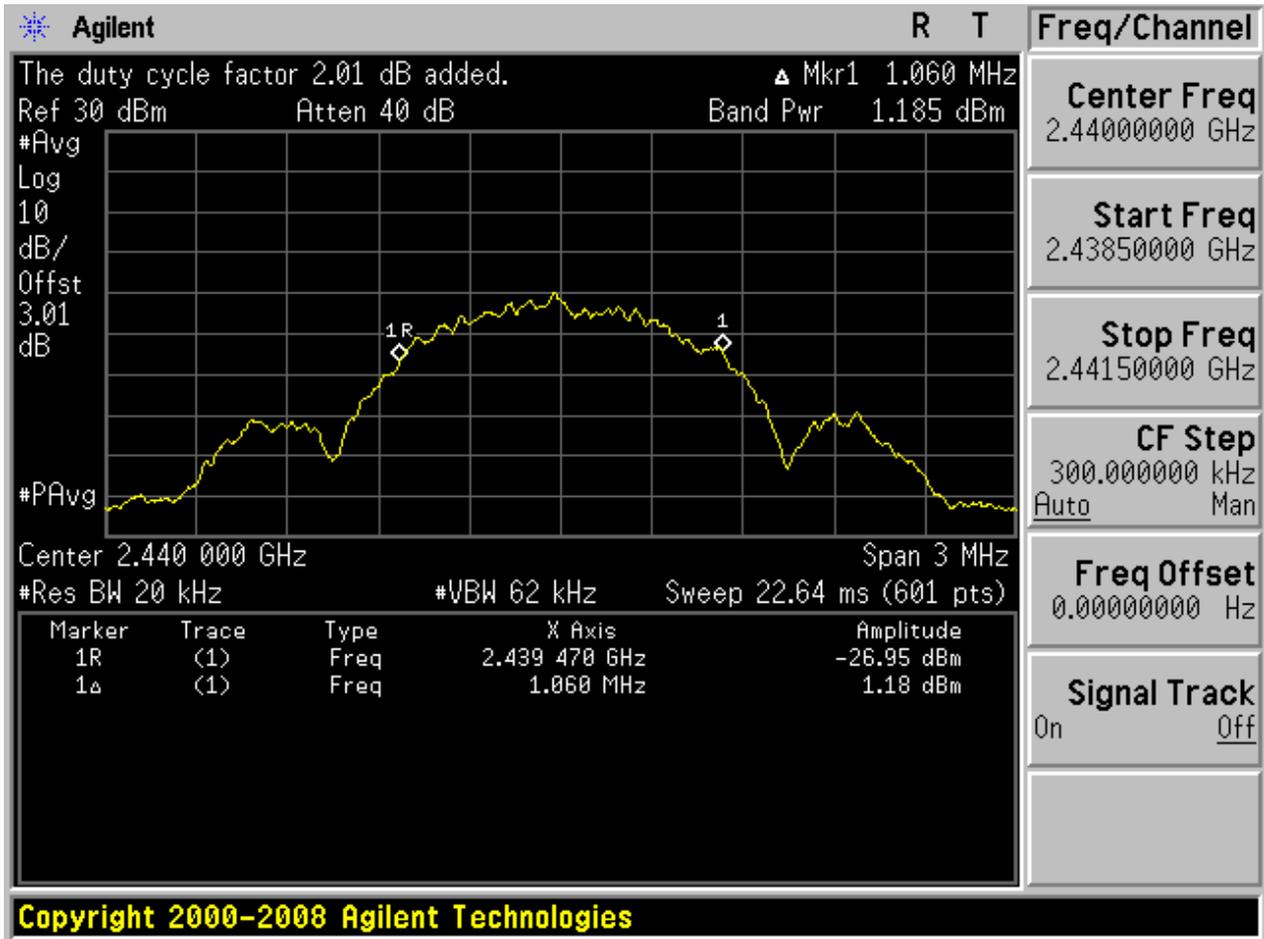
3.2Part II - Test Plots

3.2.1 TM1_Ch0_L



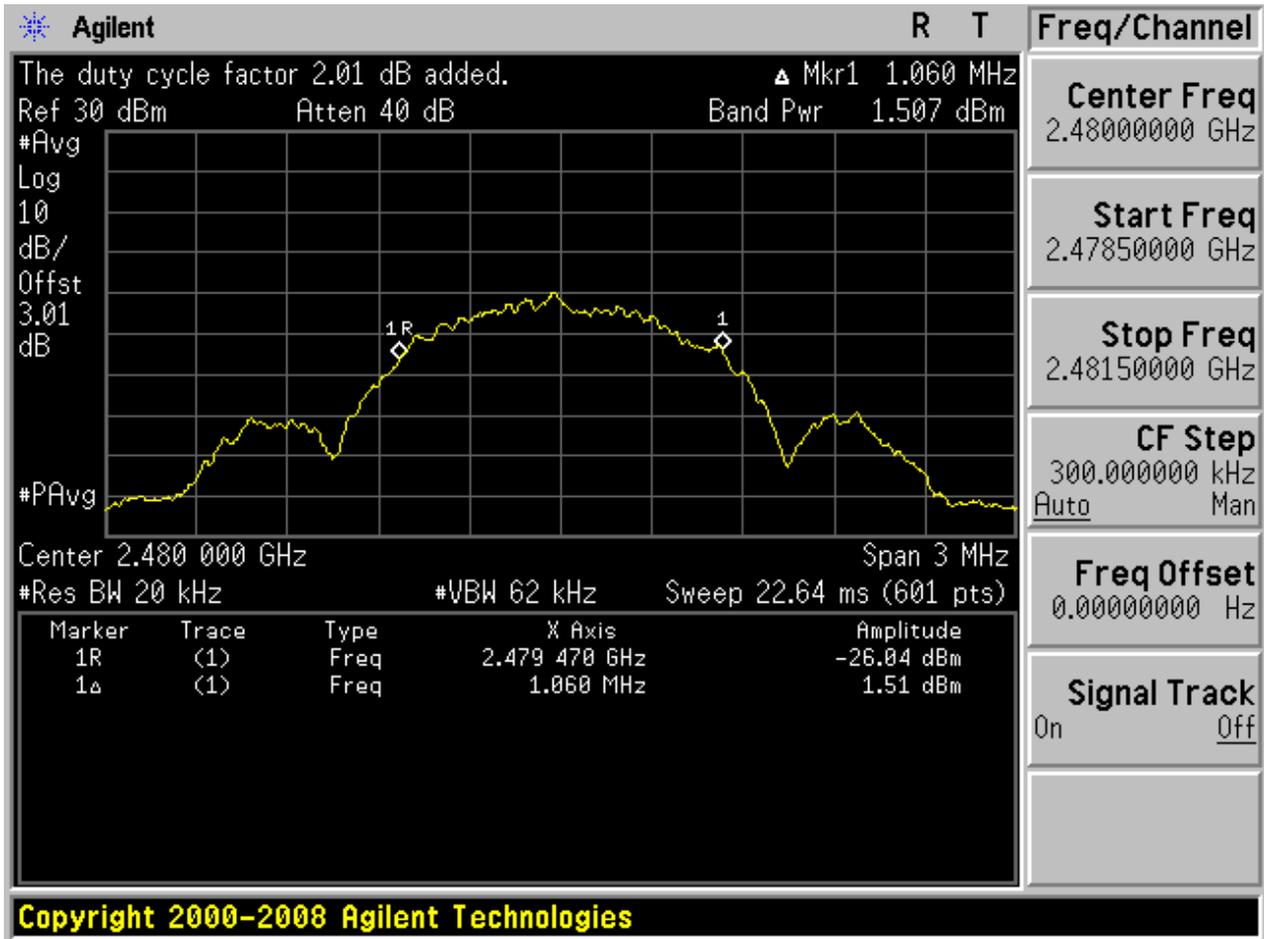


3.2.2 TM1_Ch19_M



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3.2.3 TM1_Ch39_H



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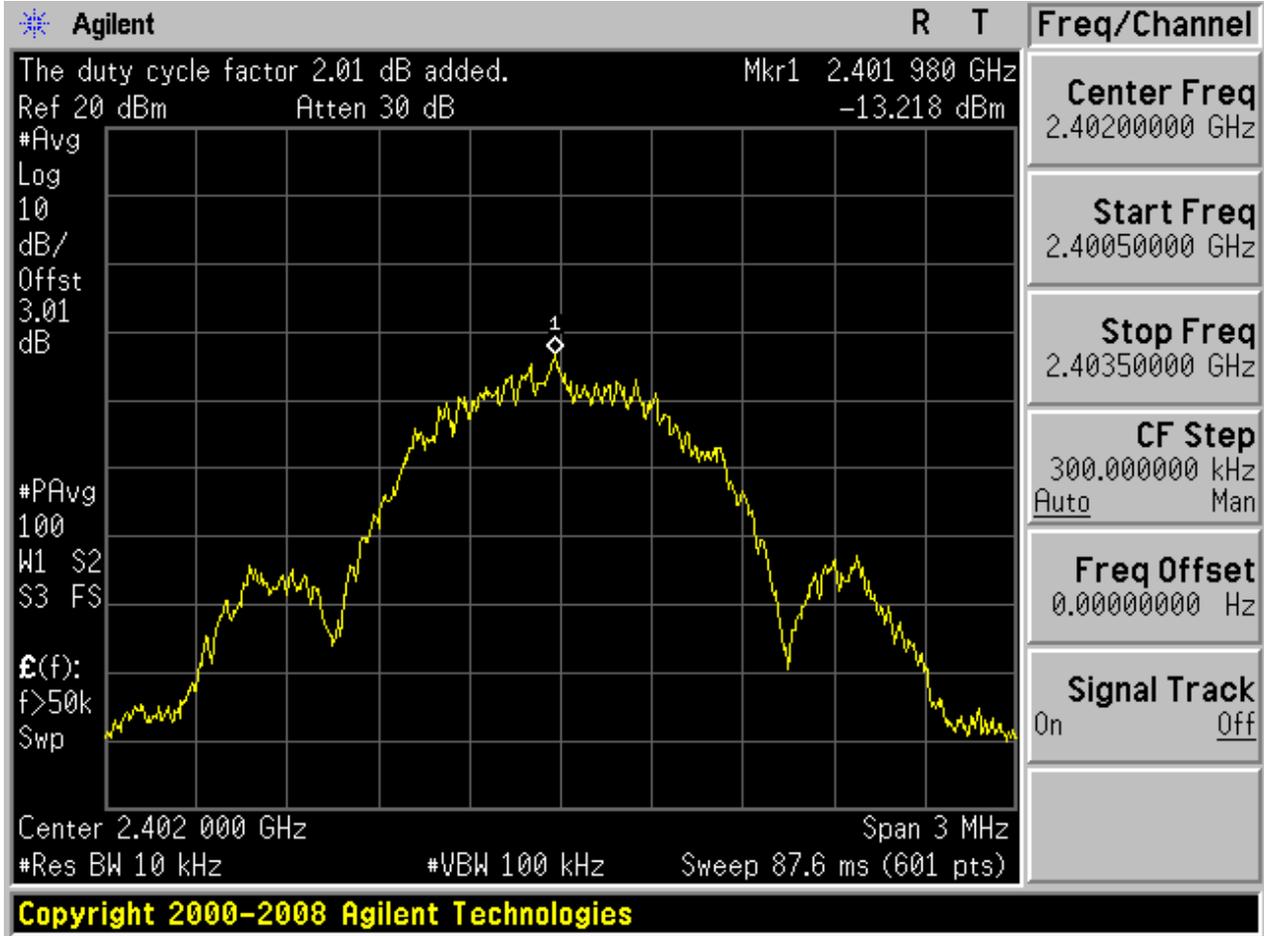
4Appendix D: Maximum Power Spectral Density Level

4.1 Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Duty Cycle [%]	PD[MHz]	Verdict
TM1 _Ch0	L	2402	64	-13.22	pass
TM1 _Ch19	M	2440	64	-13.14	pass
TM1 _Ch39	H	2480	64	-11.35	pass

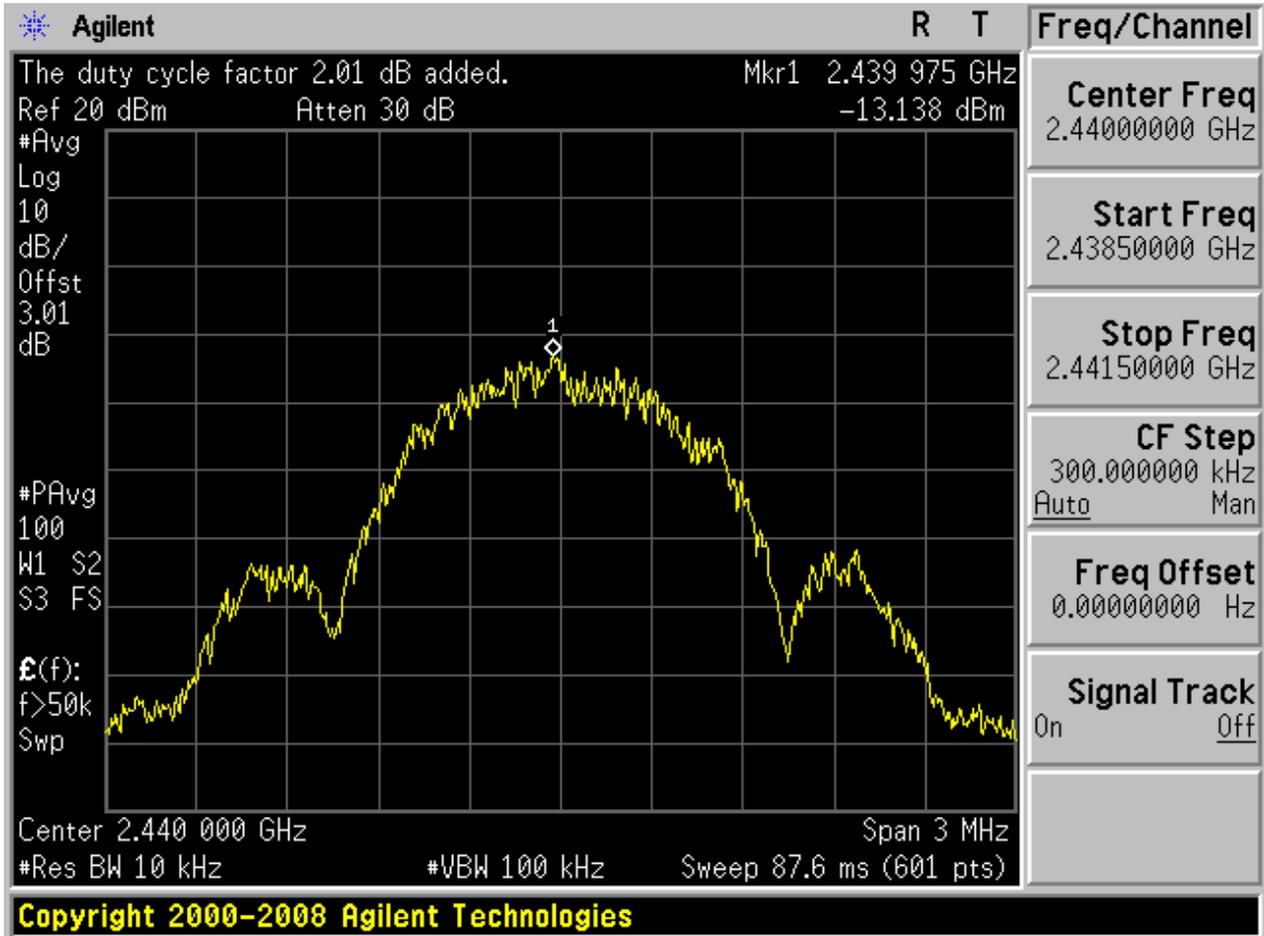
4.2Part II - Test Plots

4.2.1 TM1_Ch0_L



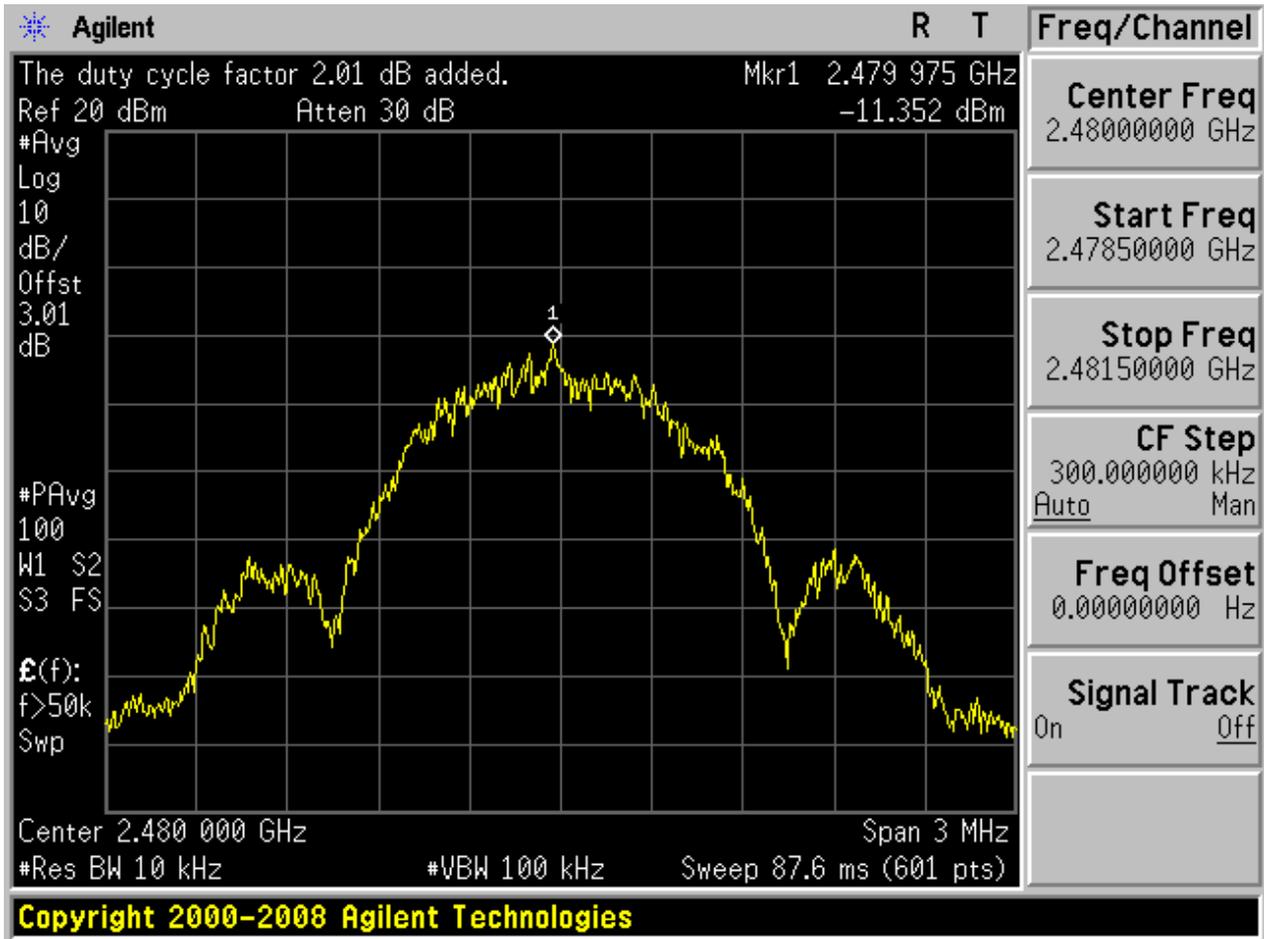


4.2.2 TM1_Ch19_M





4.2.3 TM1_Ch39_H



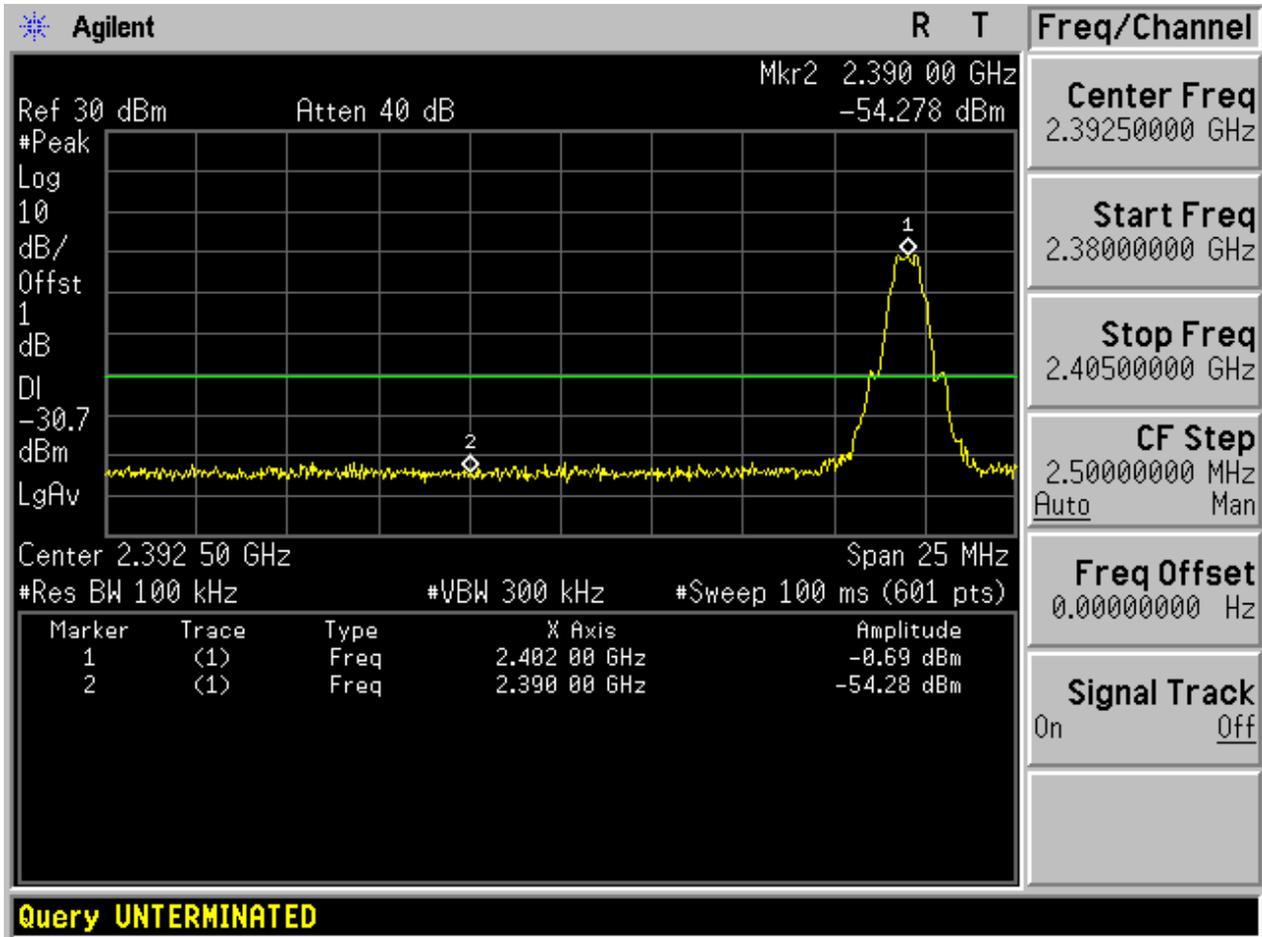
5 Appendix E: Band Edges Compliance

5.1 Part I - Test Results

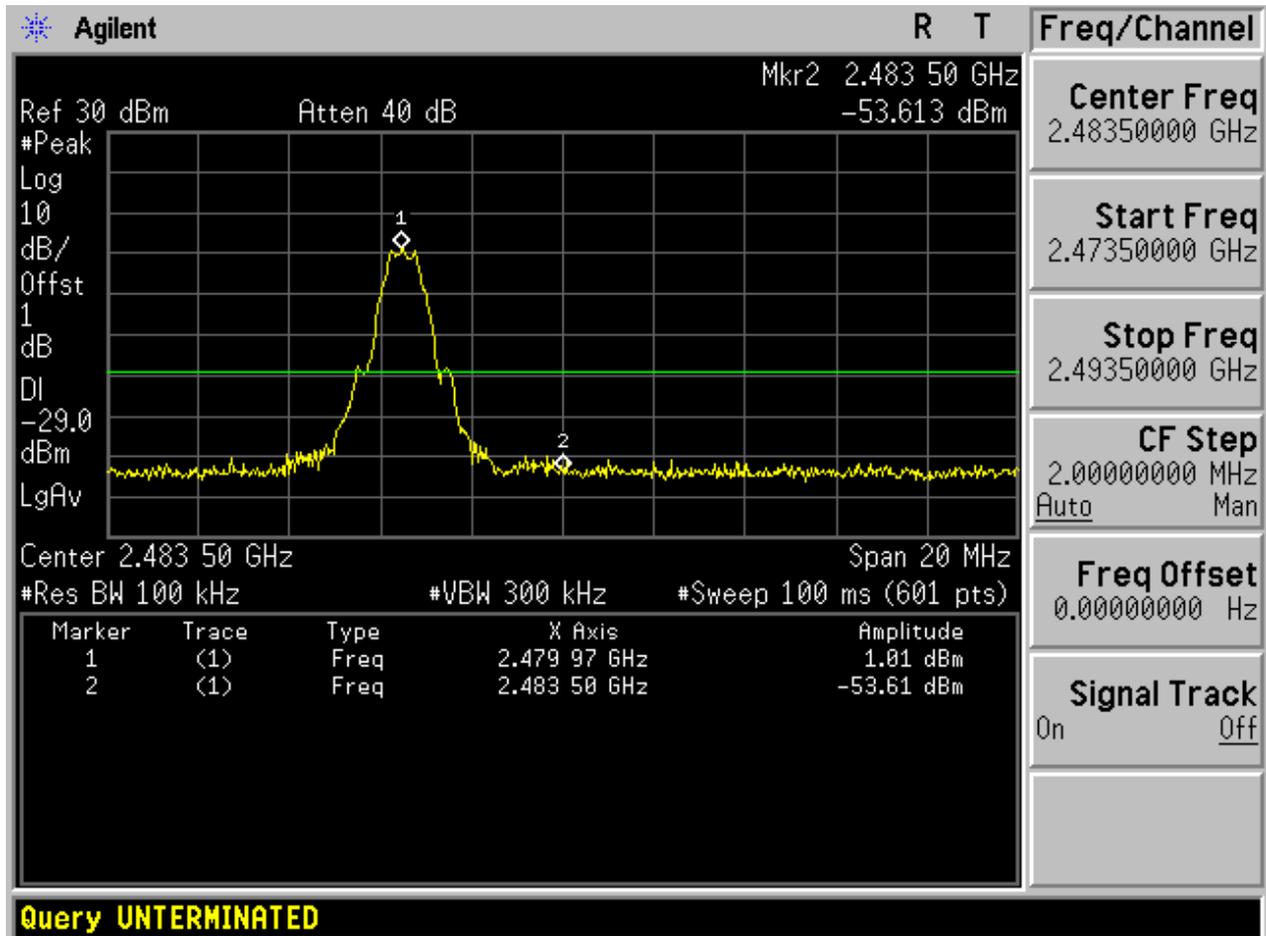
Test Mode	Test Channel	Frequency[MHz]	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
TM1_Ch0	L	2402	-0.70	-54.28	pass
TM1_Ch39	H	2480	1.01	-53.61	pass

5.2 Part II - Test Plots

5.2.1 TM1_Ch0_L



5.2.2 TM1_Ch39_H



6 Appendix F: Unwanted Emissions into Non-Restricted Frequency

Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" 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]-30[dBm], see test plots for detailed".

6.1 Part I - Test Results

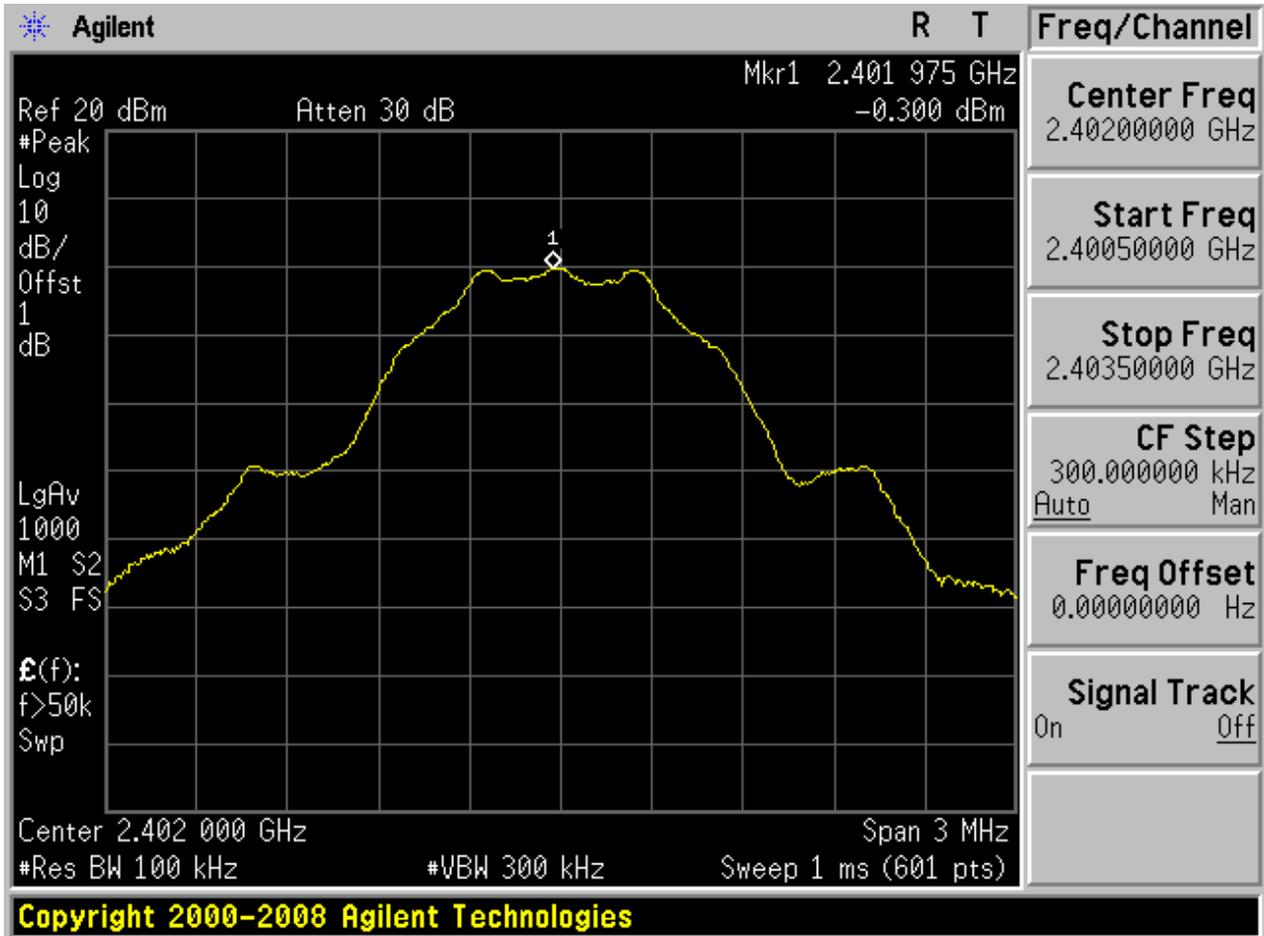
Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
TM1_Ch0	L	2402	-0.30	<limit	pass
TM1_Ch19	M	2440	0.75	<limit	pass
TM1_Ch39	H	2480	1.16	<limit	pass



6.2 Part II - Test Plots

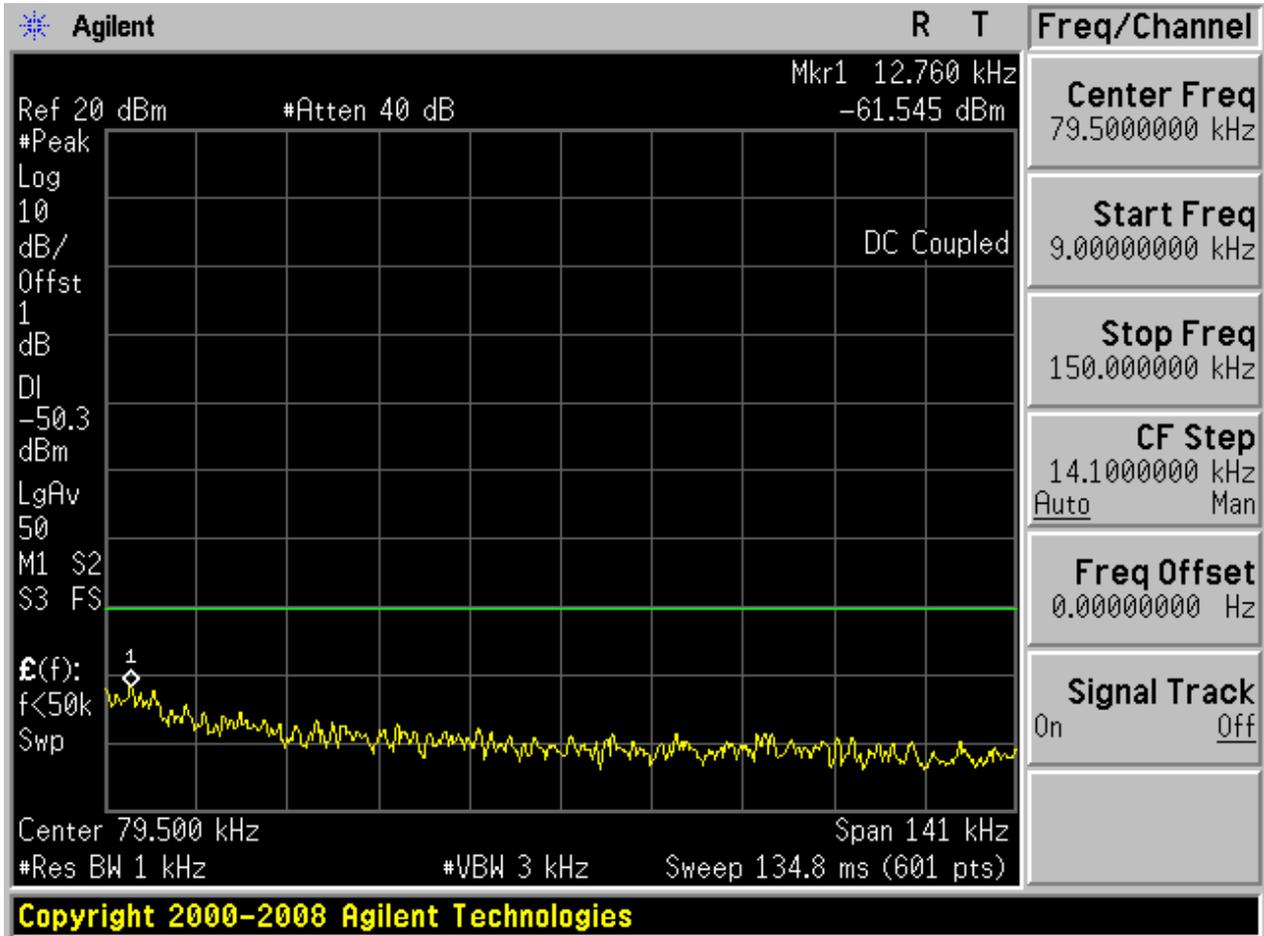
6.2.1 TM1_Ch0_L

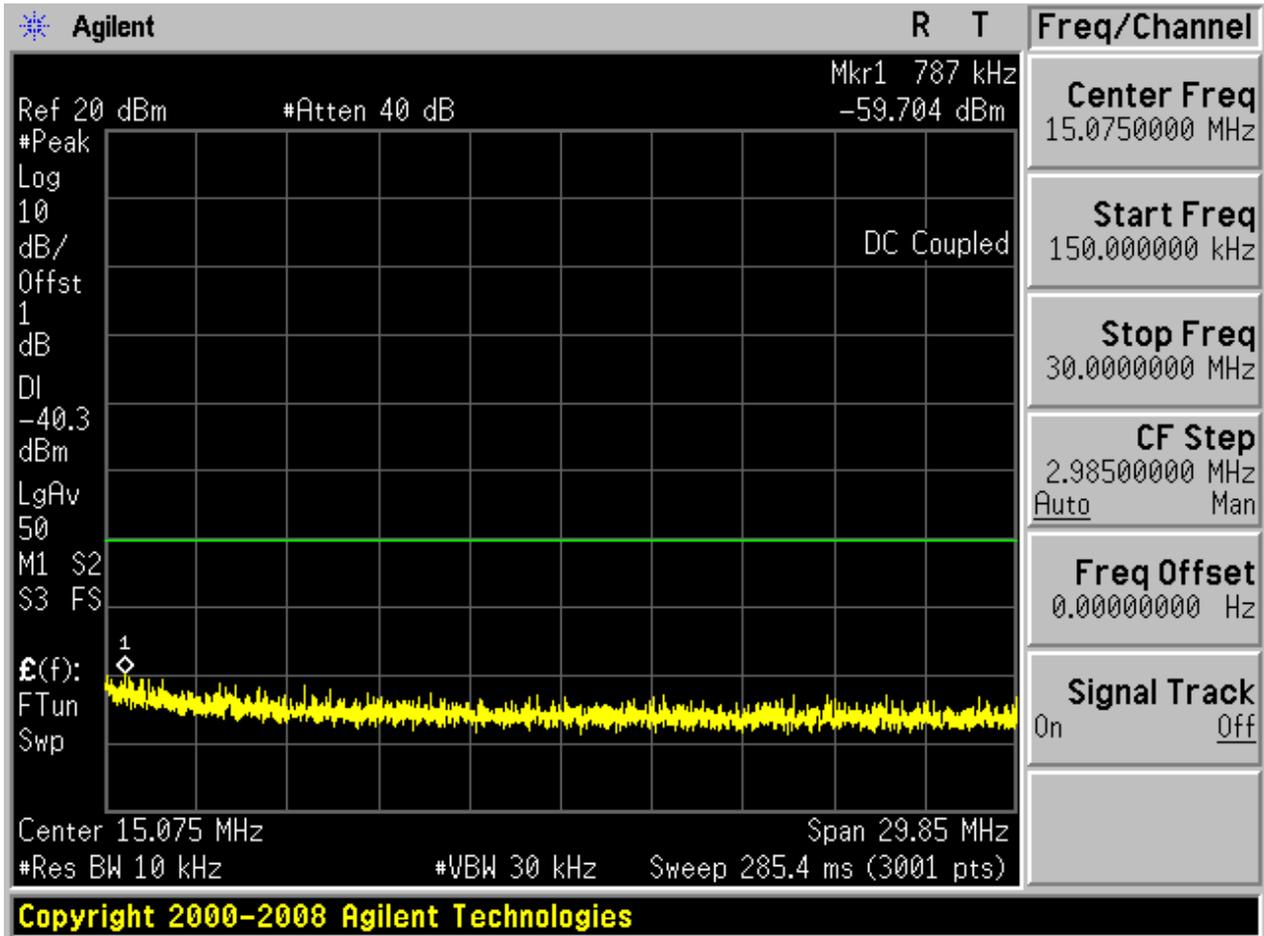
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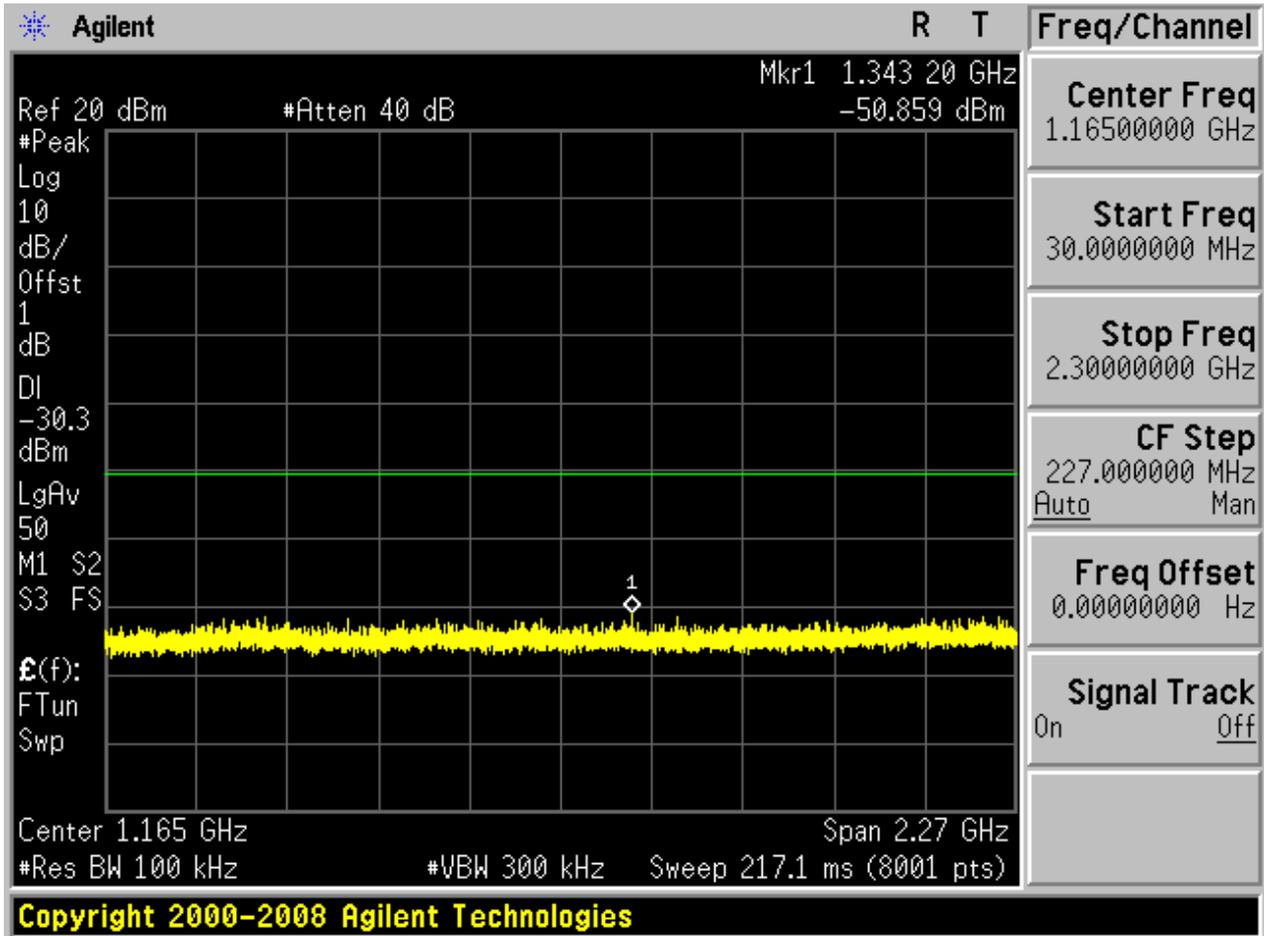


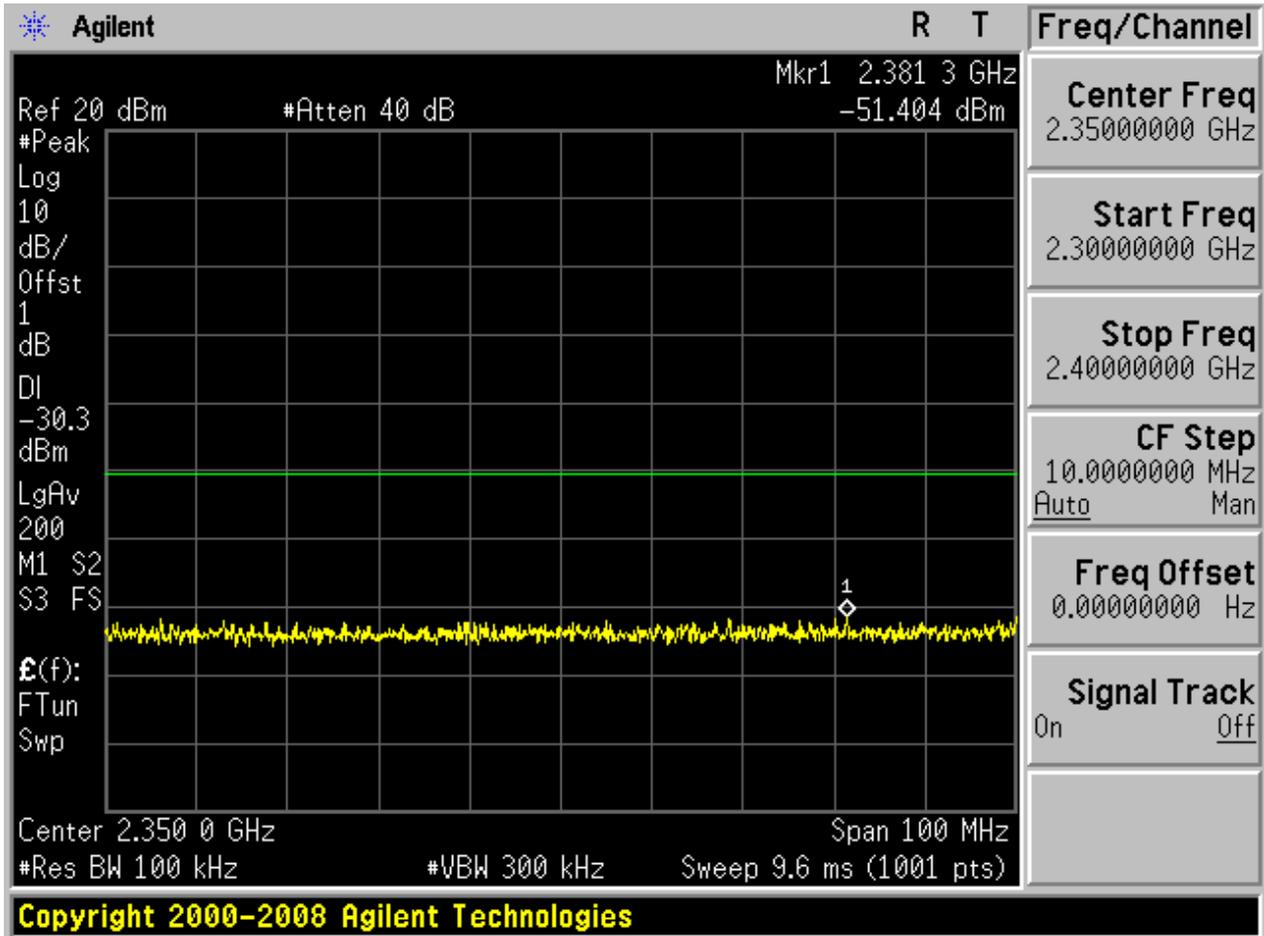


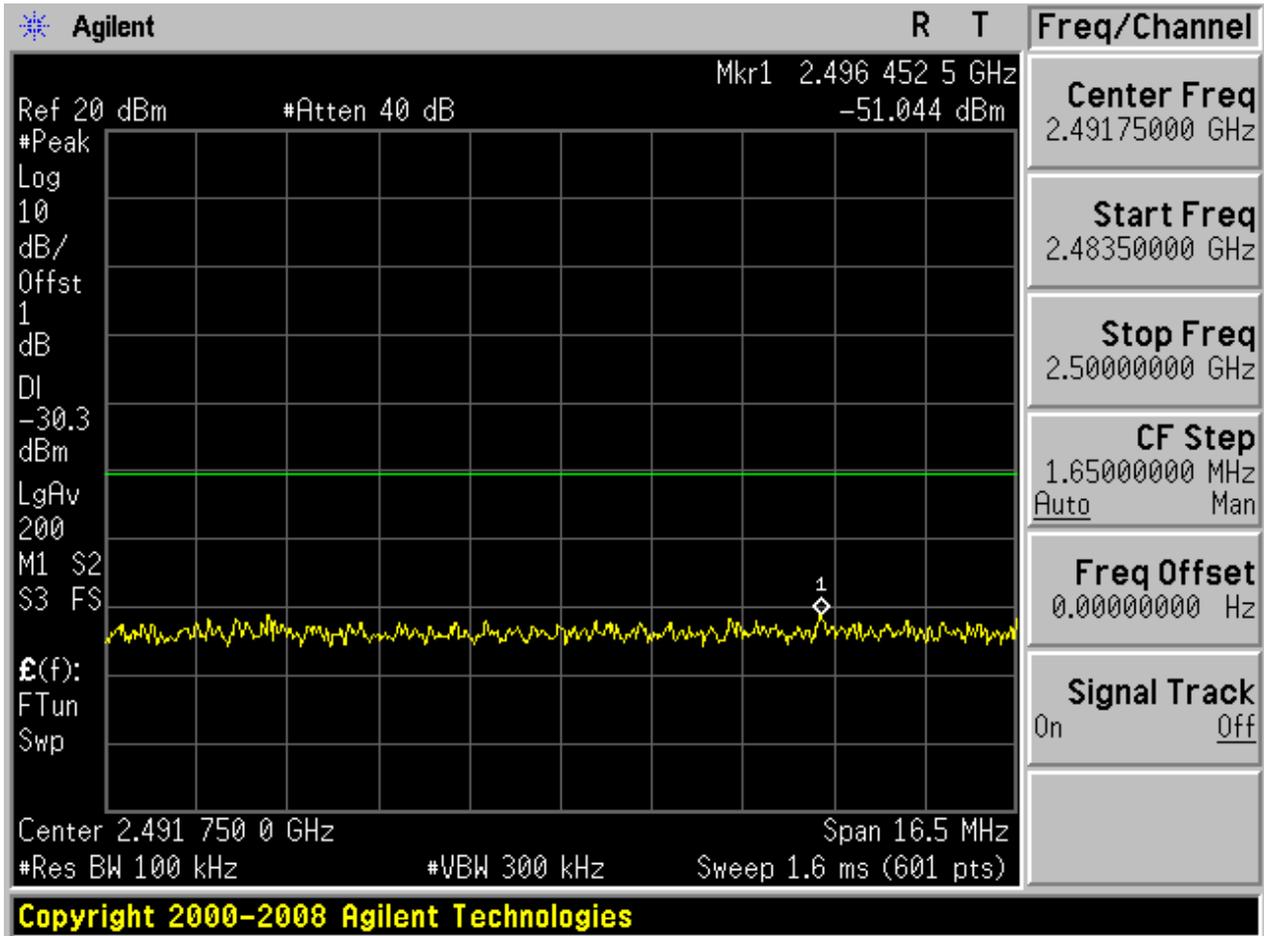
6.2.1.2 Puw:

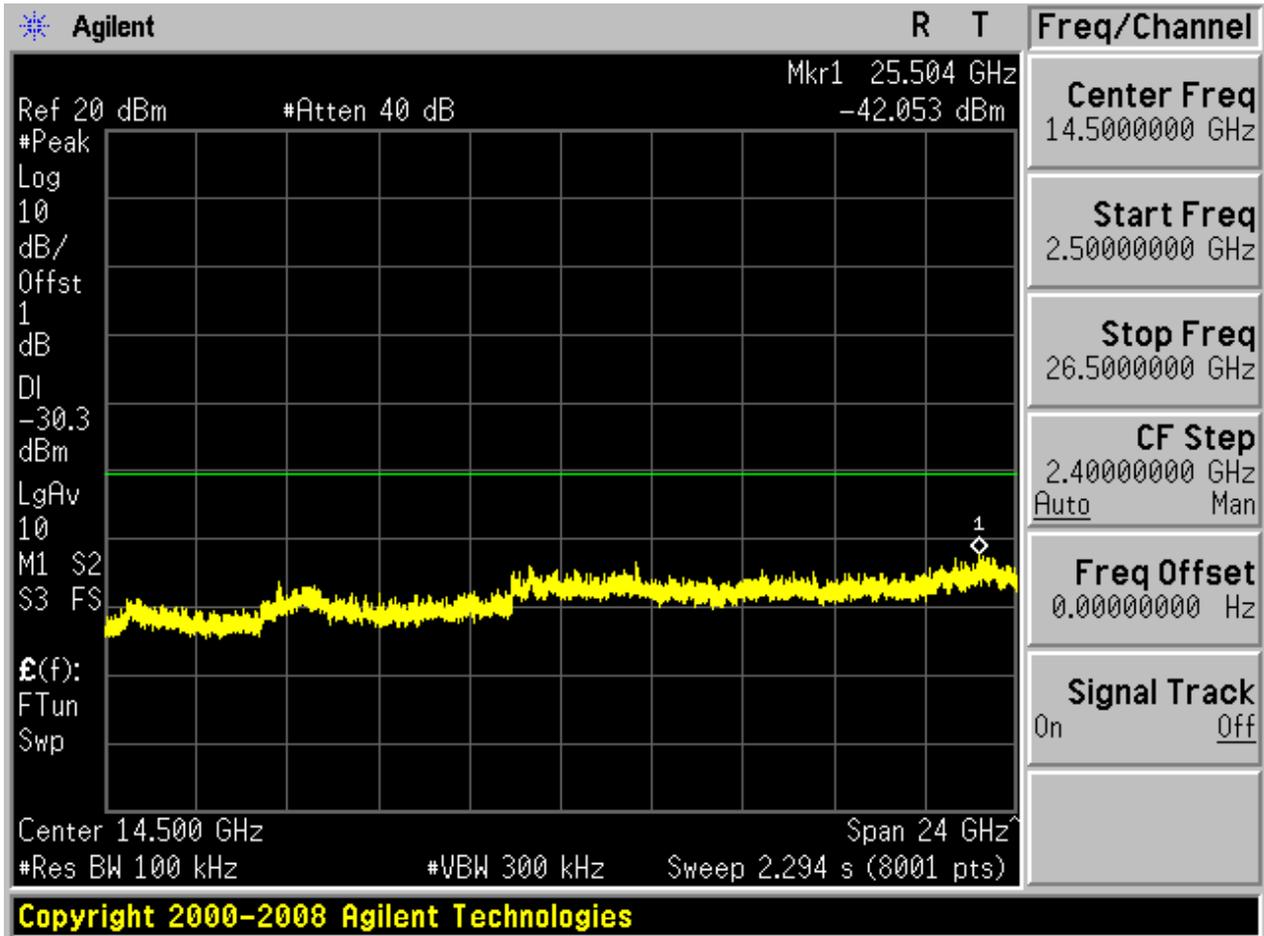








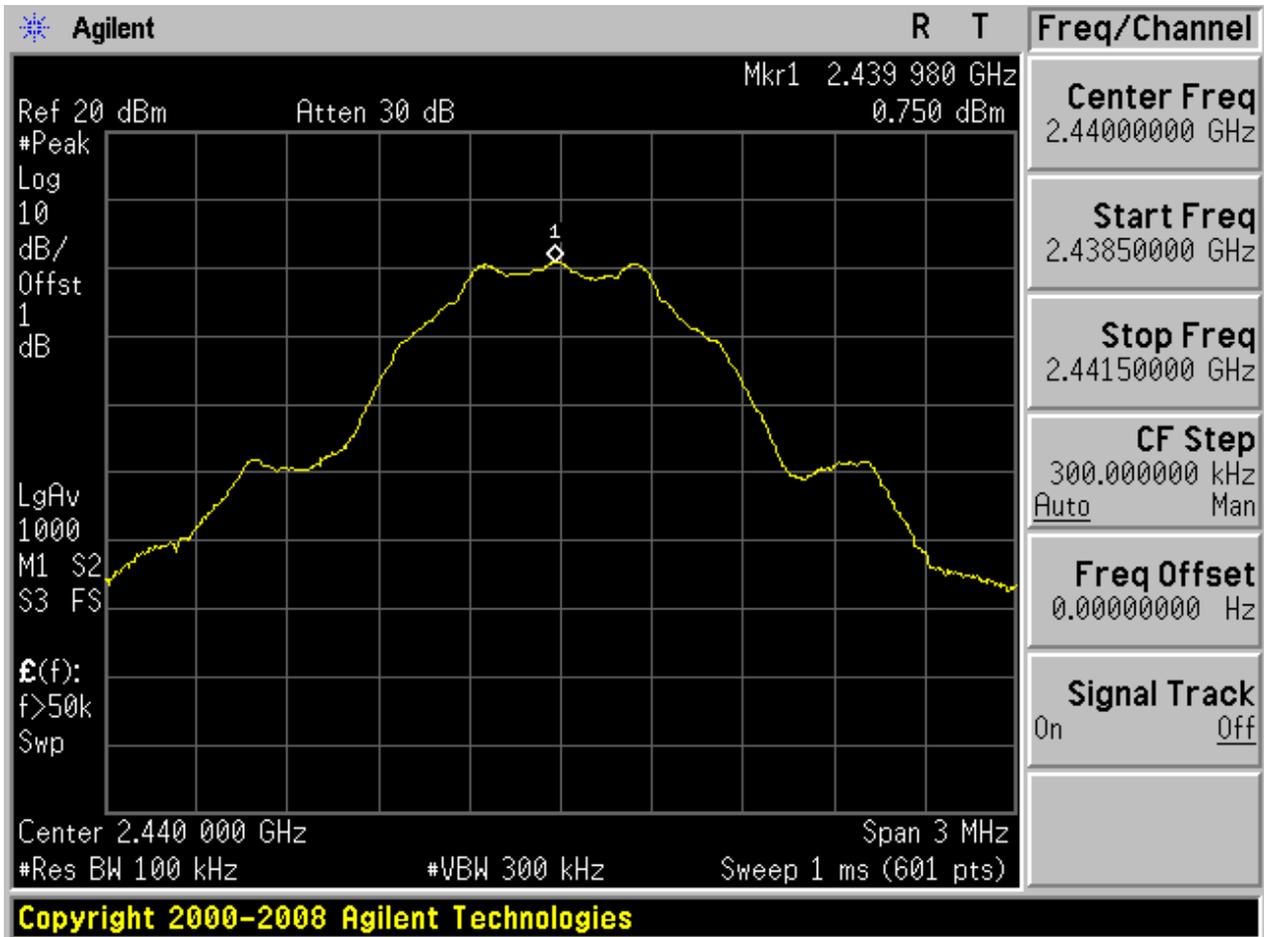




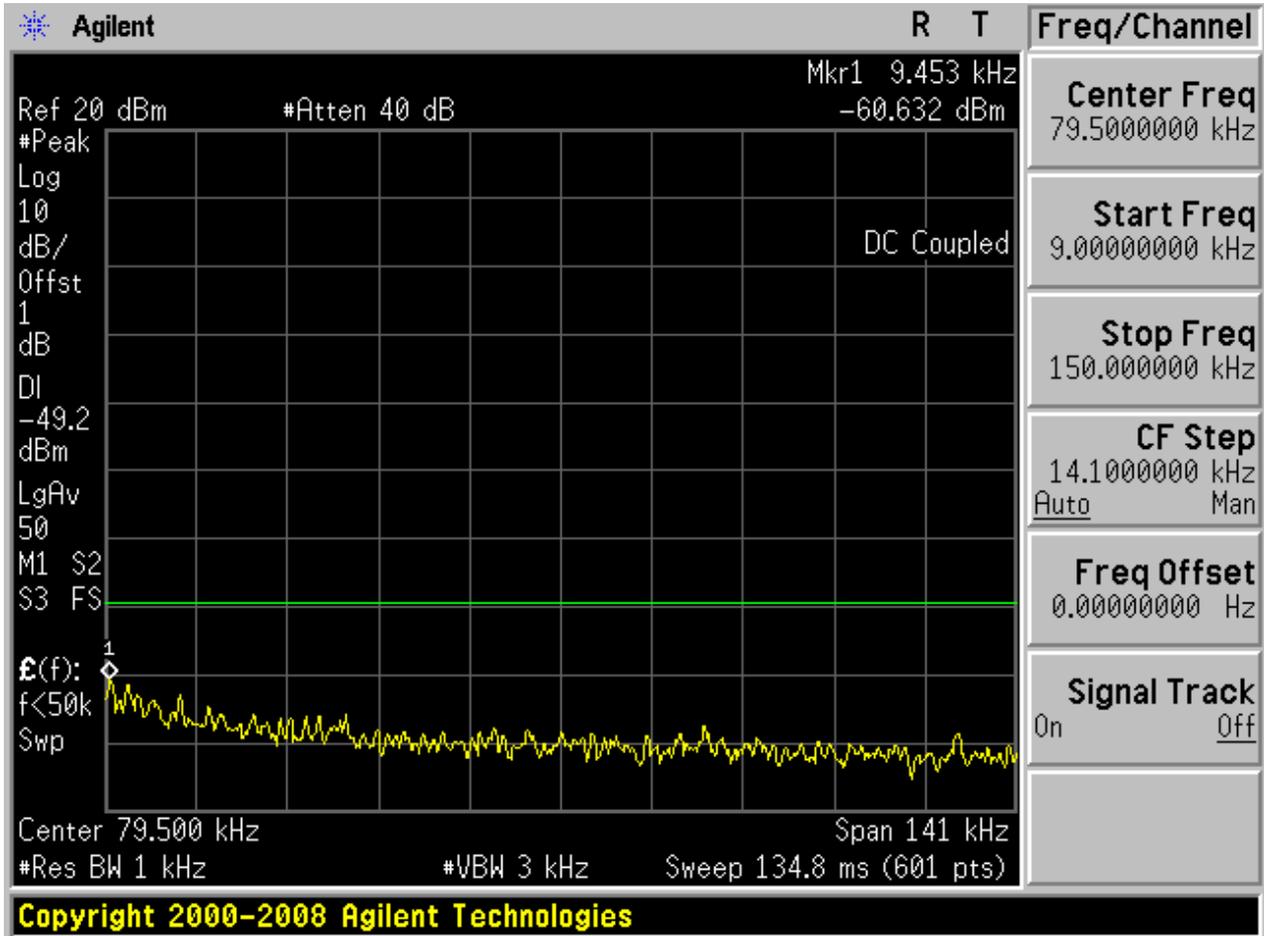


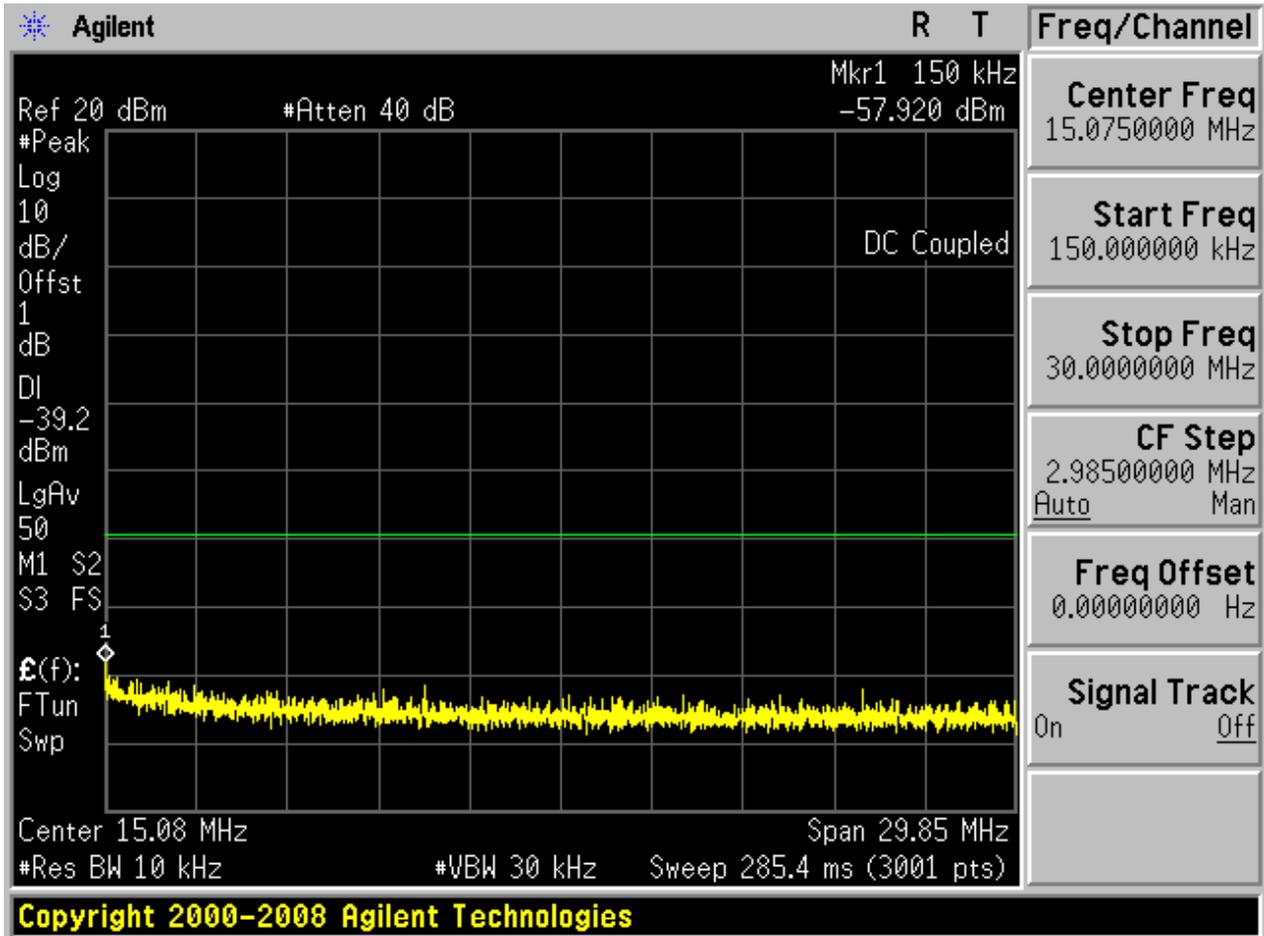
6.2.2 TM1_Ch19_M

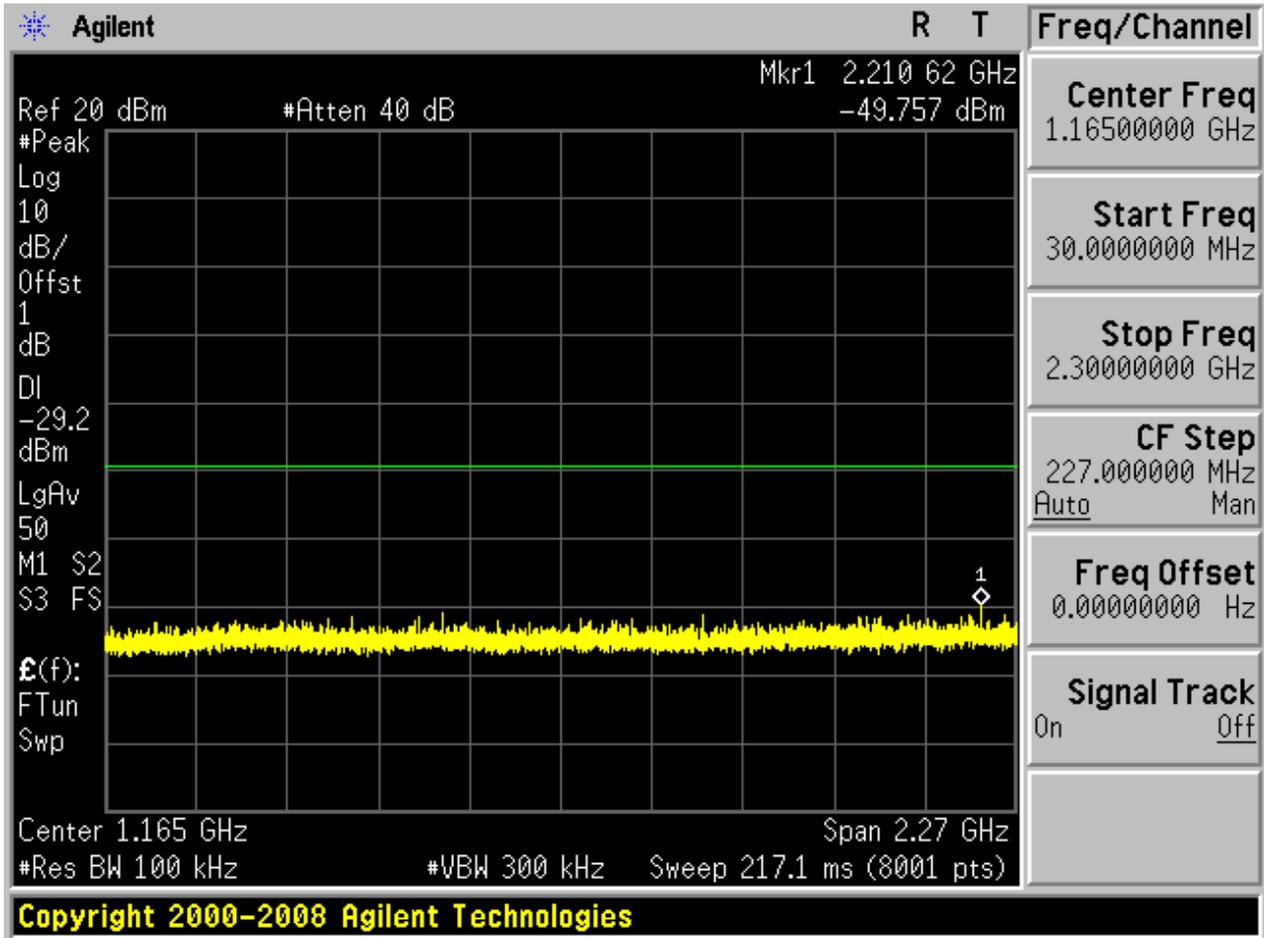
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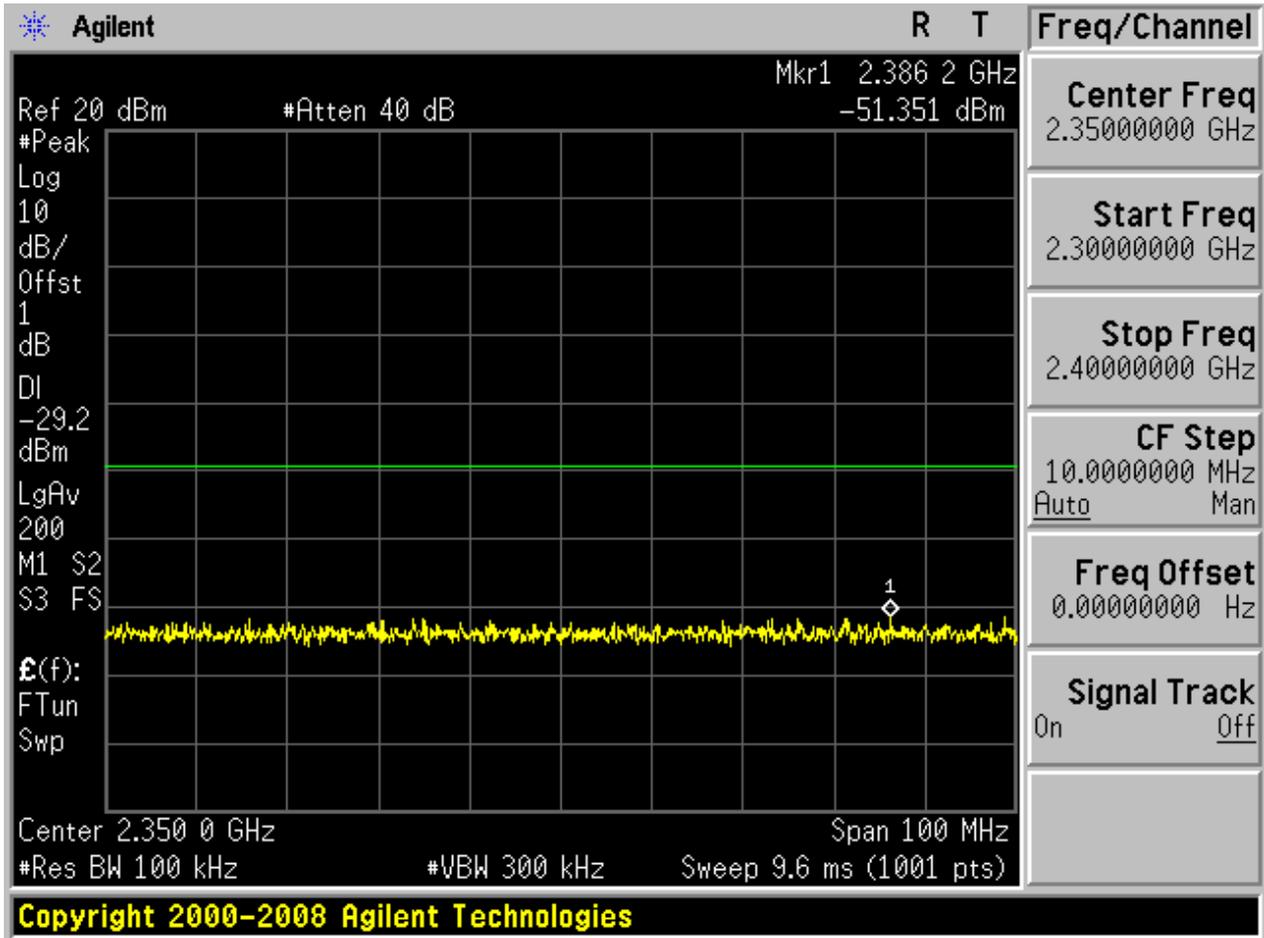


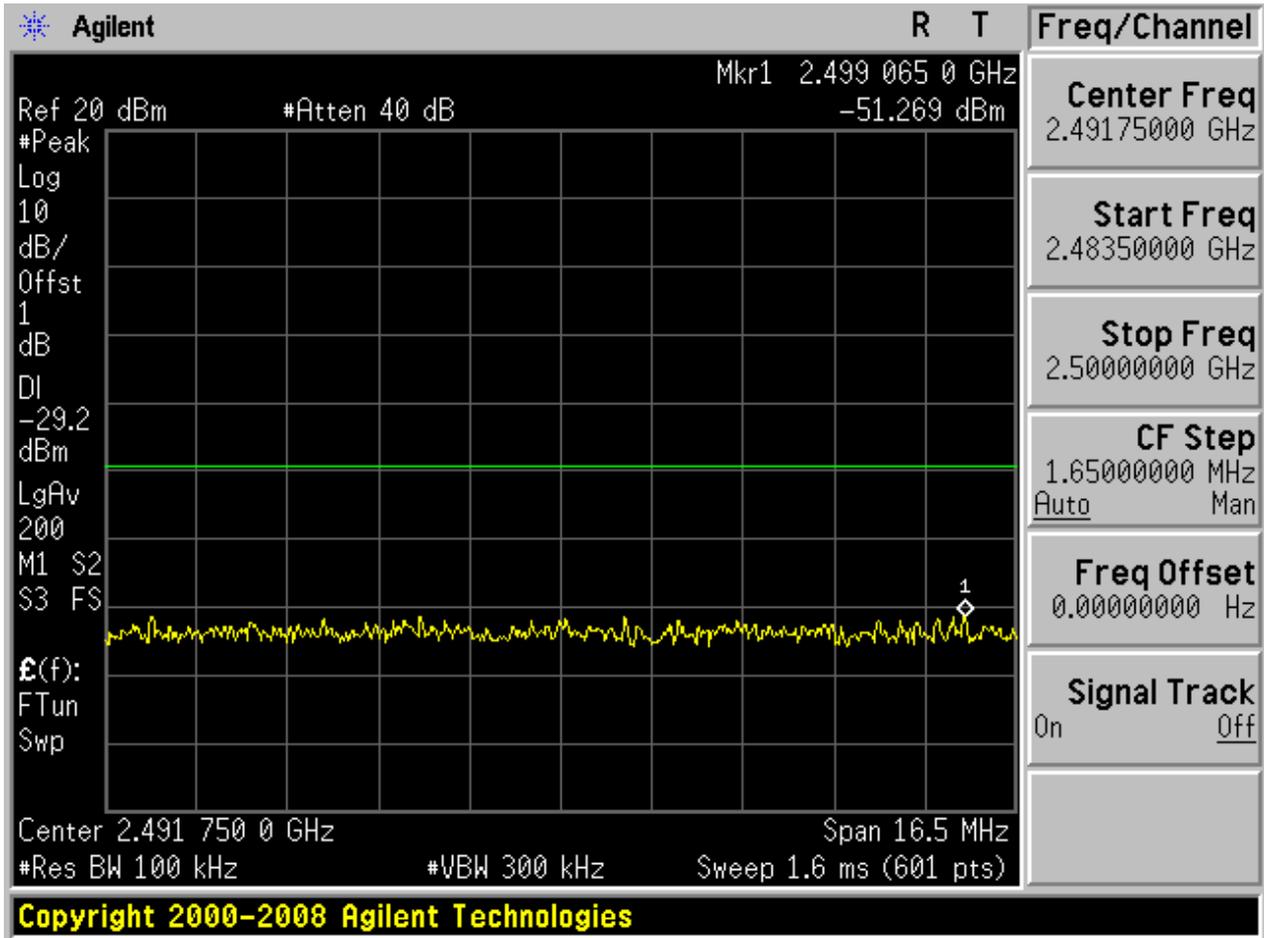
6.2.2.2 Puw:

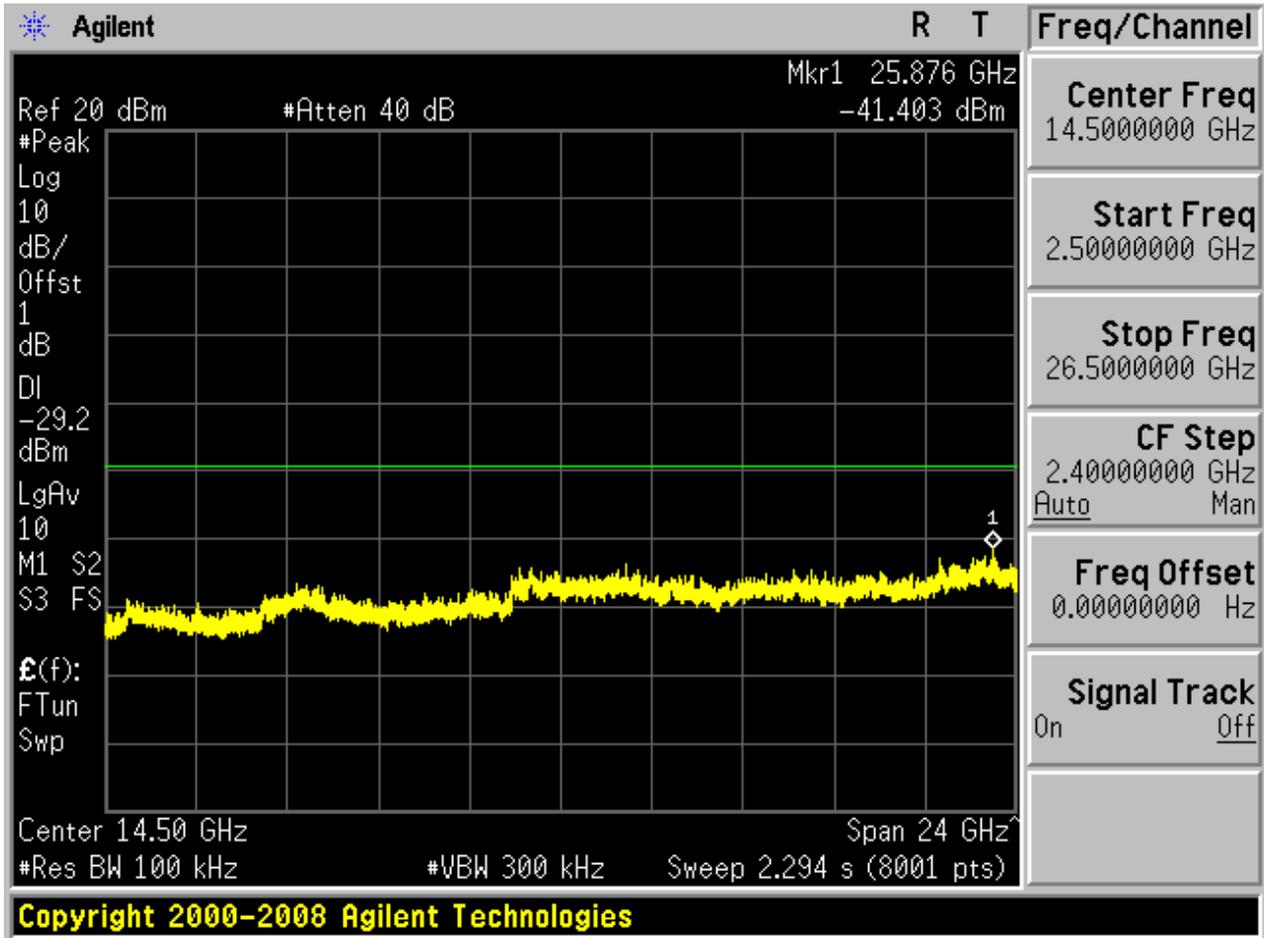






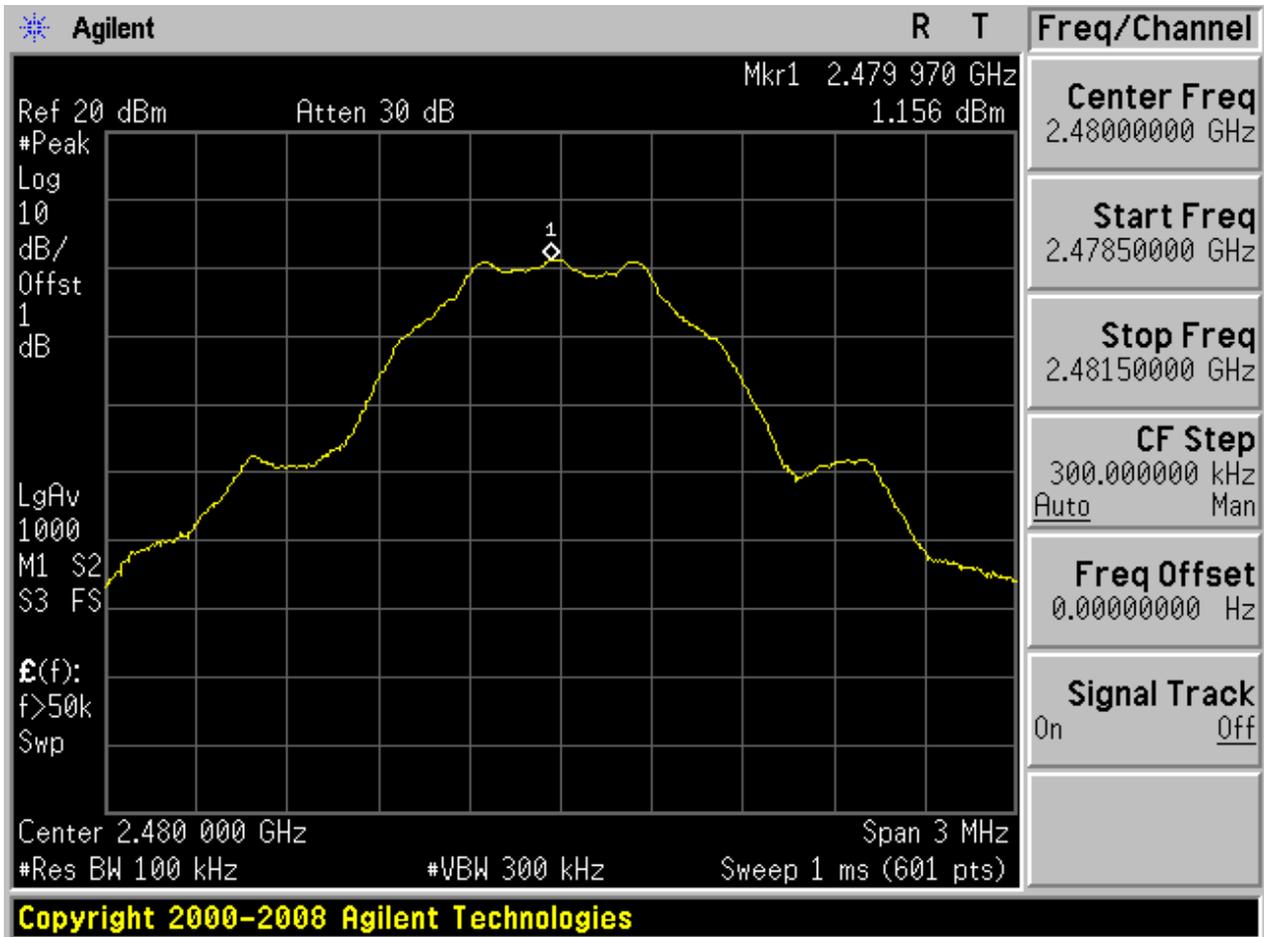






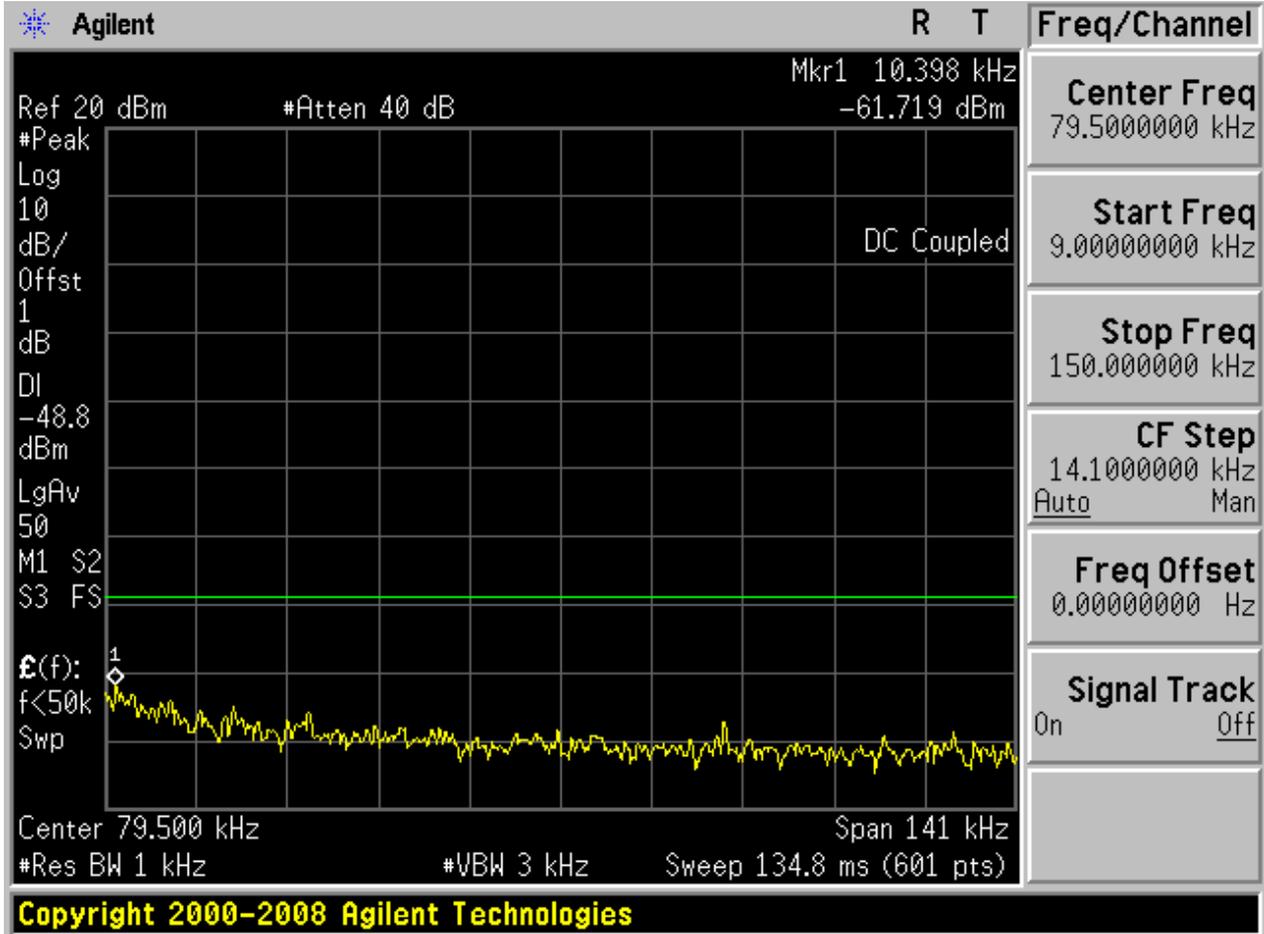
6.2.3 TM1_Ch39_H

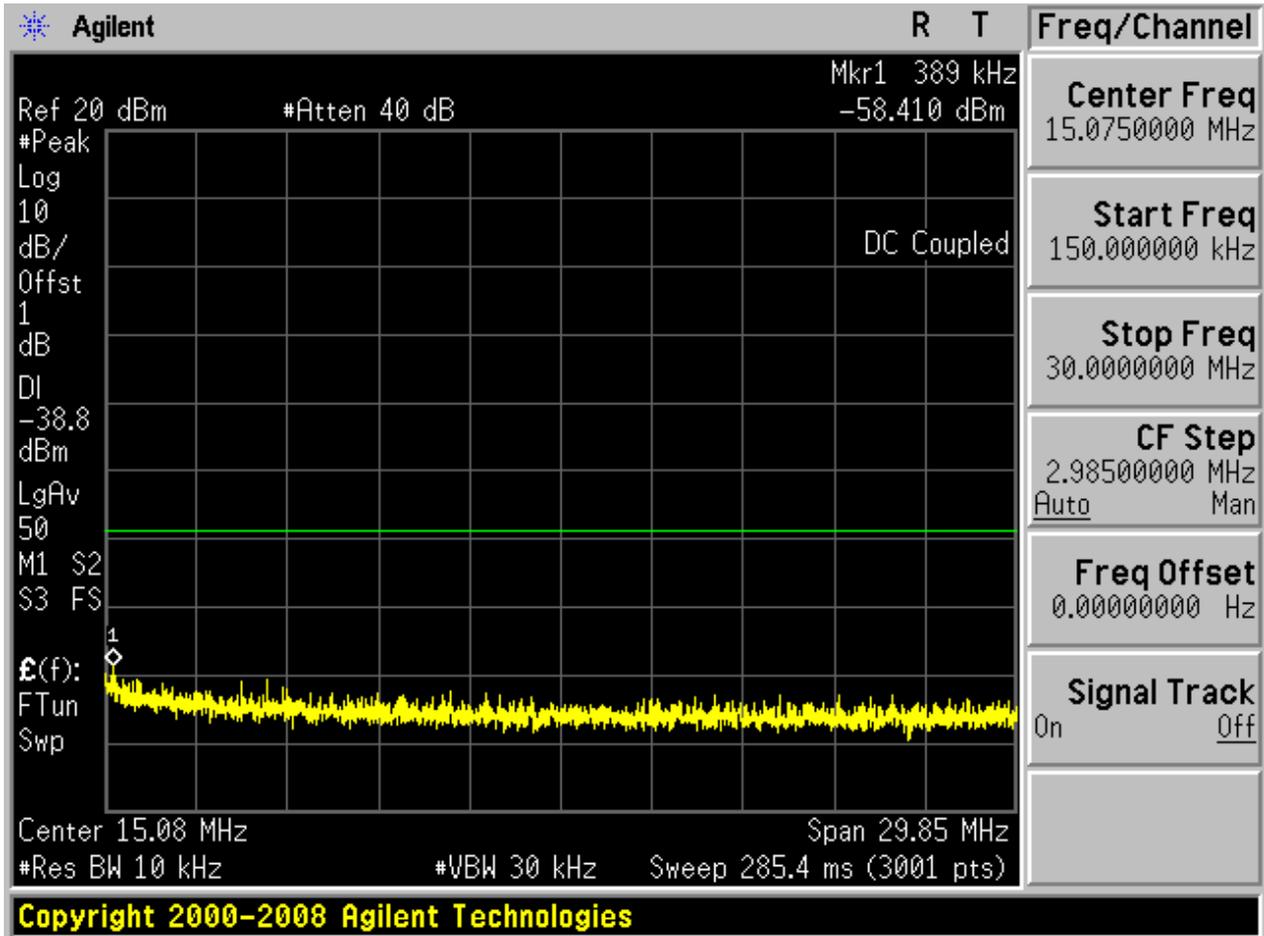
6.2.3.1 Pref:

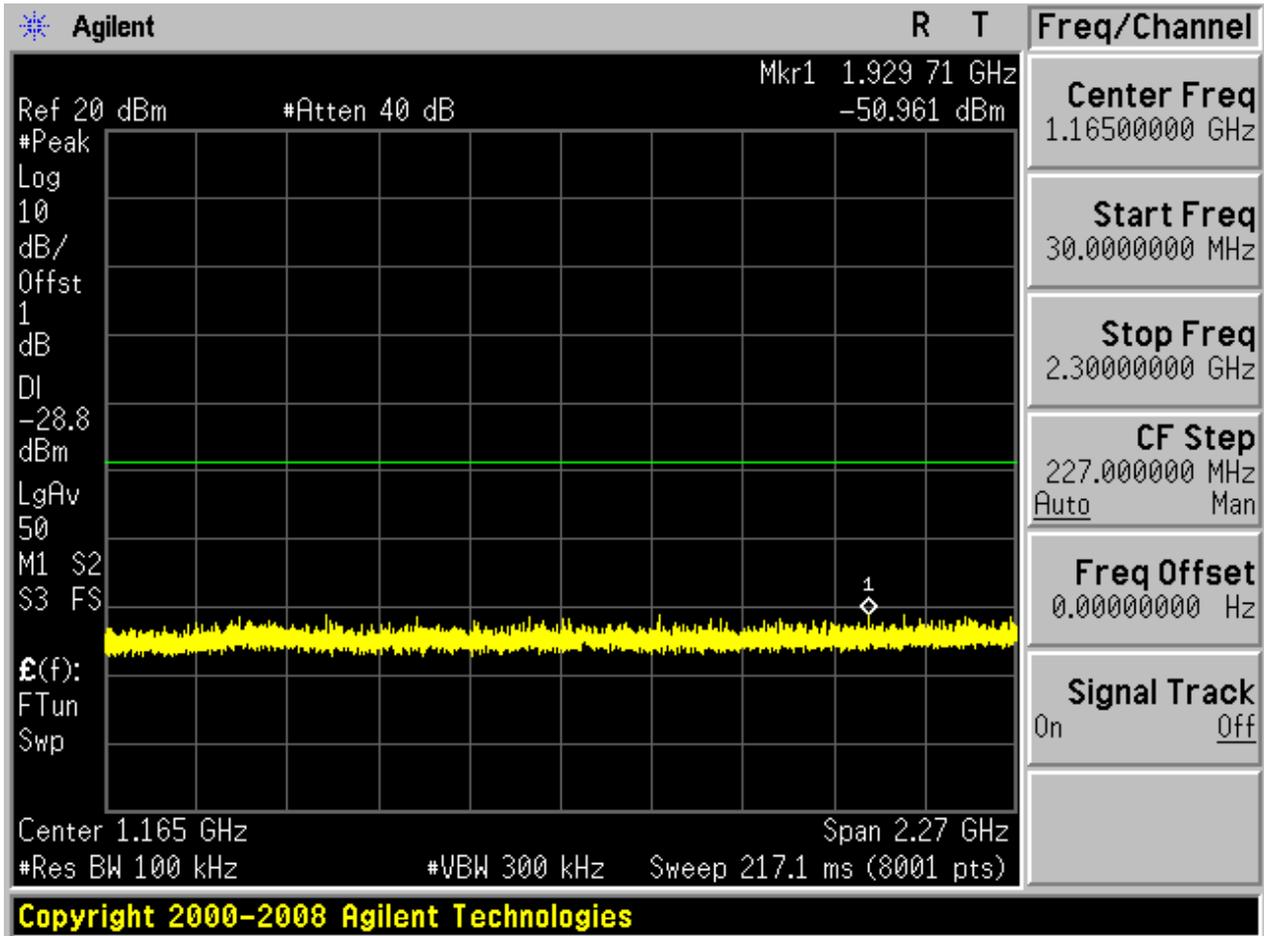


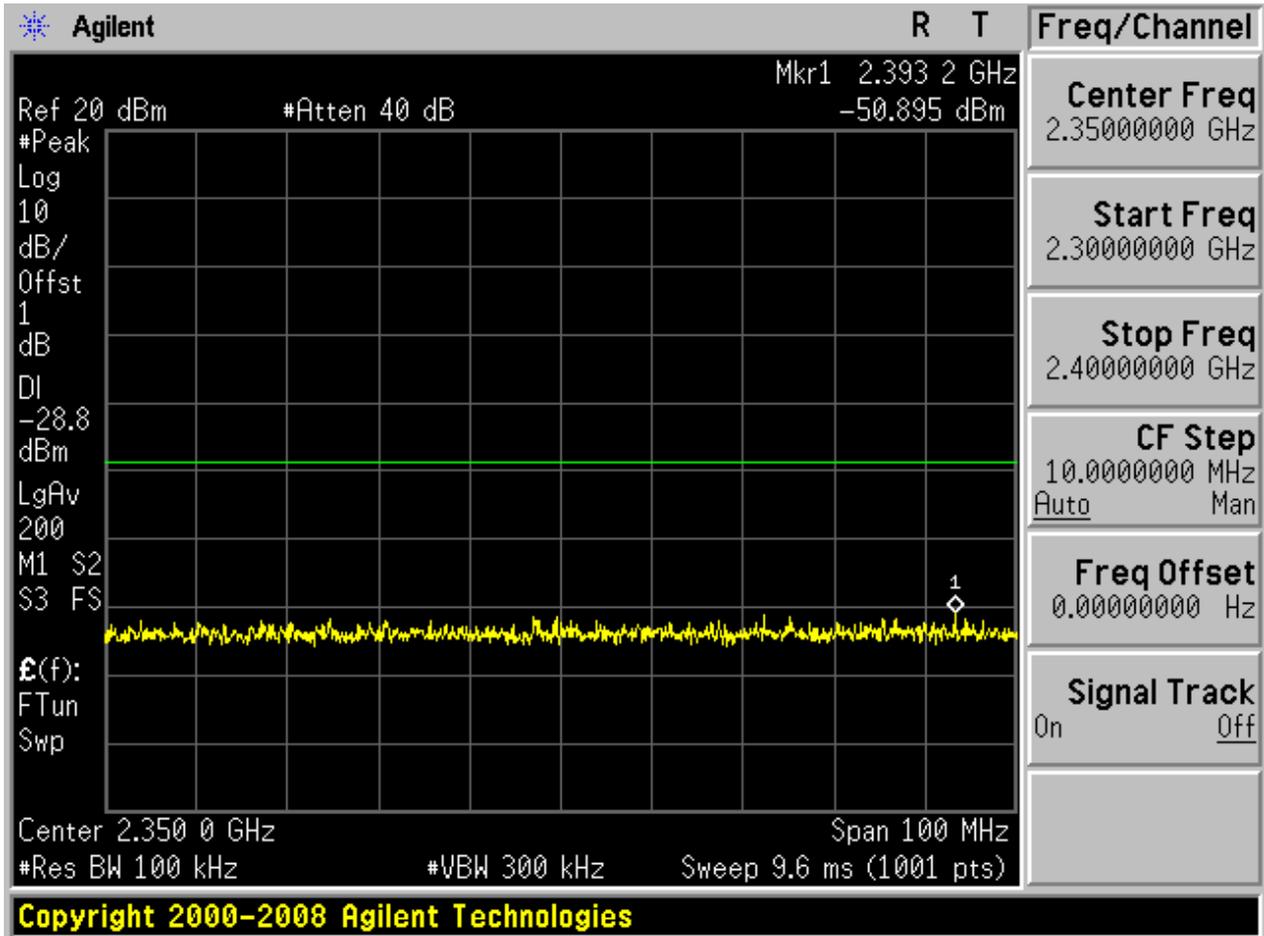


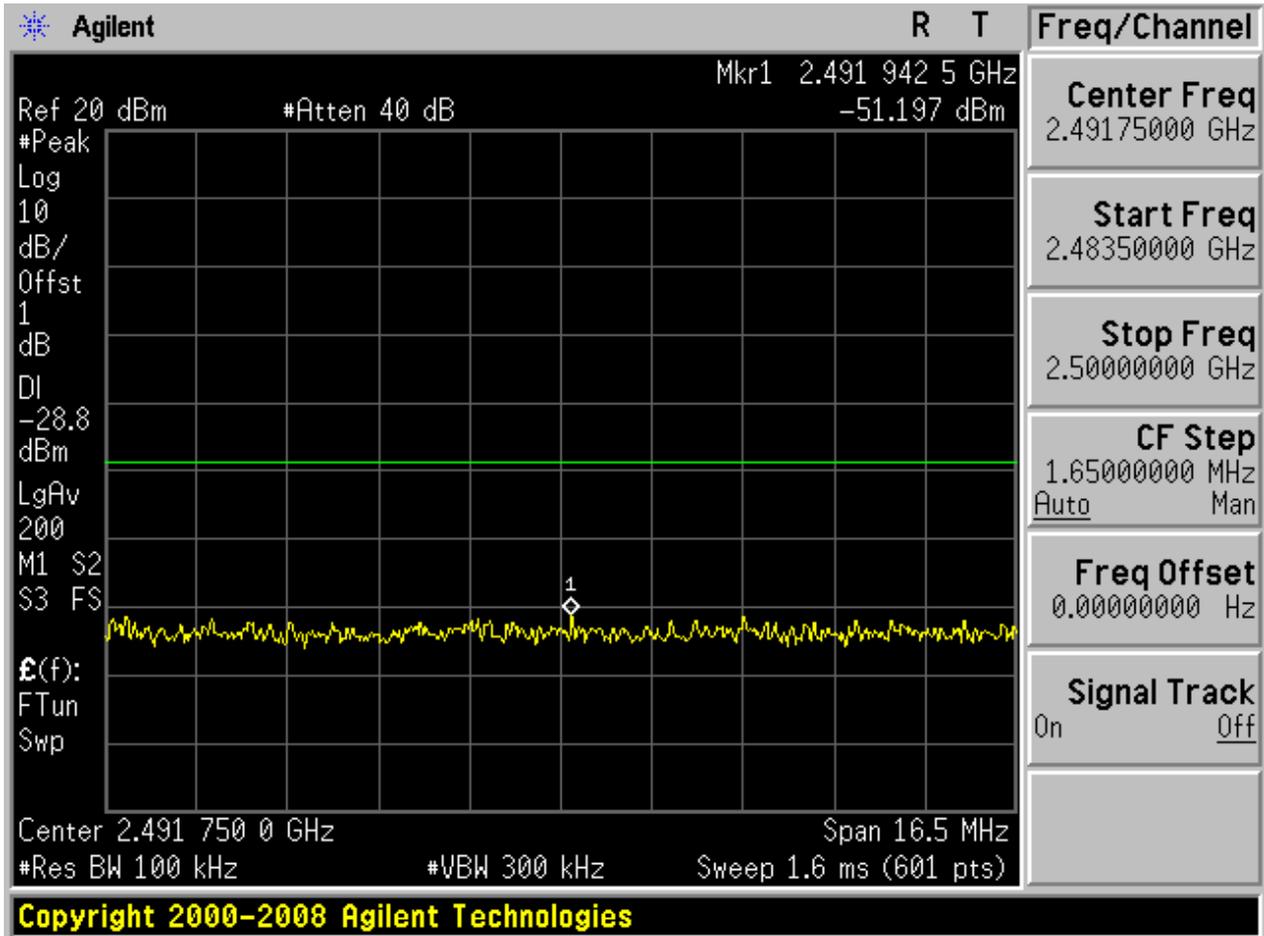
6.2.3.2 Puw:

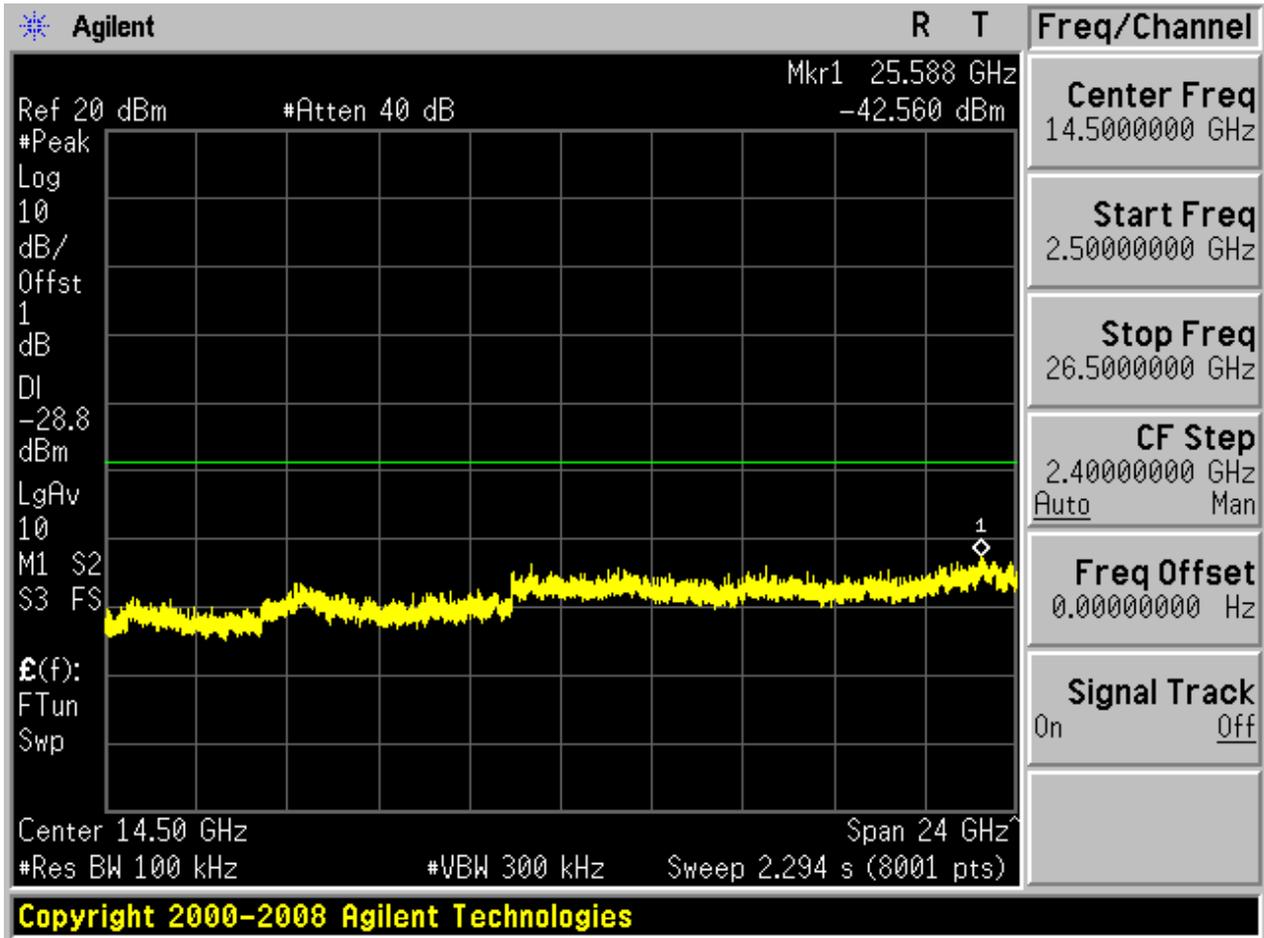














7 Appendix G: Radiated Spurious Emission & Spurious in Restricted Band

Note: We tested all modes, but the data presented below is the worst case. Below

1GHz, RBW = 100 kHz, VBW = 300 kHz.

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

The simultaneous transmission has been considered

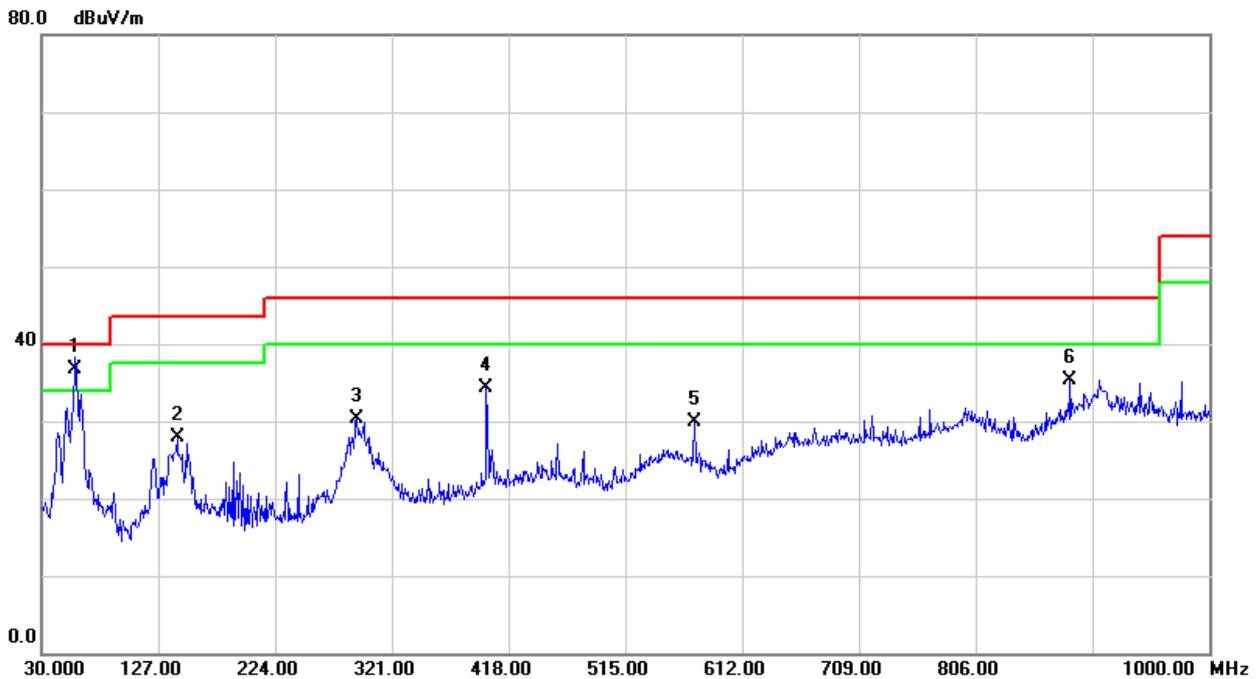
7.1 Part 1: Testing Range of “9 kHz to 30MHz”

NOTE1: No peak found in the Test Range of “9 kHz to 30MHz”

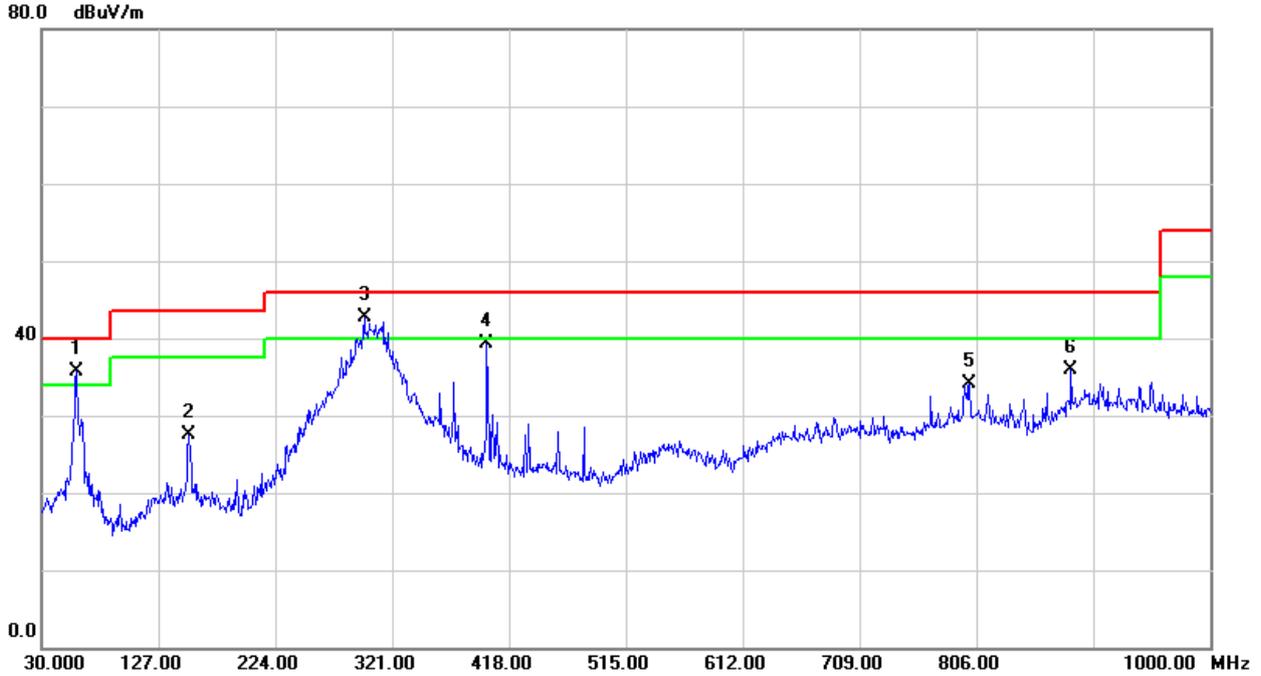
7.2 Part 2: Testing Range of “30 MHz to 1 GHz”

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).

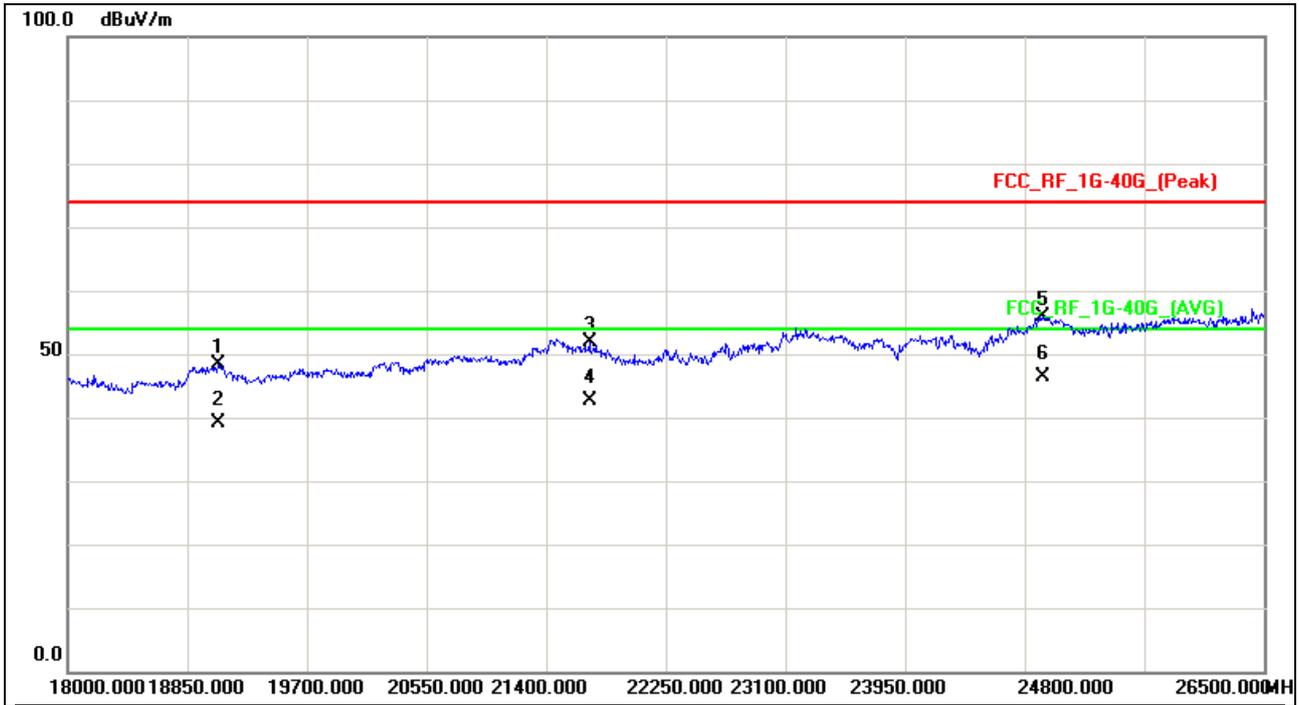


Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Plarization
58.1300	35.61	14.55	40.0	-4.39	VERTICAL
142.5200	27.96	14.34	43.50	-15.54	VERTICAL
291.9000	30.30	13.65	46.00	-15.70	VERTICAL
399.5700	34.21	11.10	46.00	-11.79	VERTICAL
572.2300	29.83	7.74	46.00	-16.17	VERTICAL
884.5700	35.30	3.15	46.00	-10.70	VERTICAL

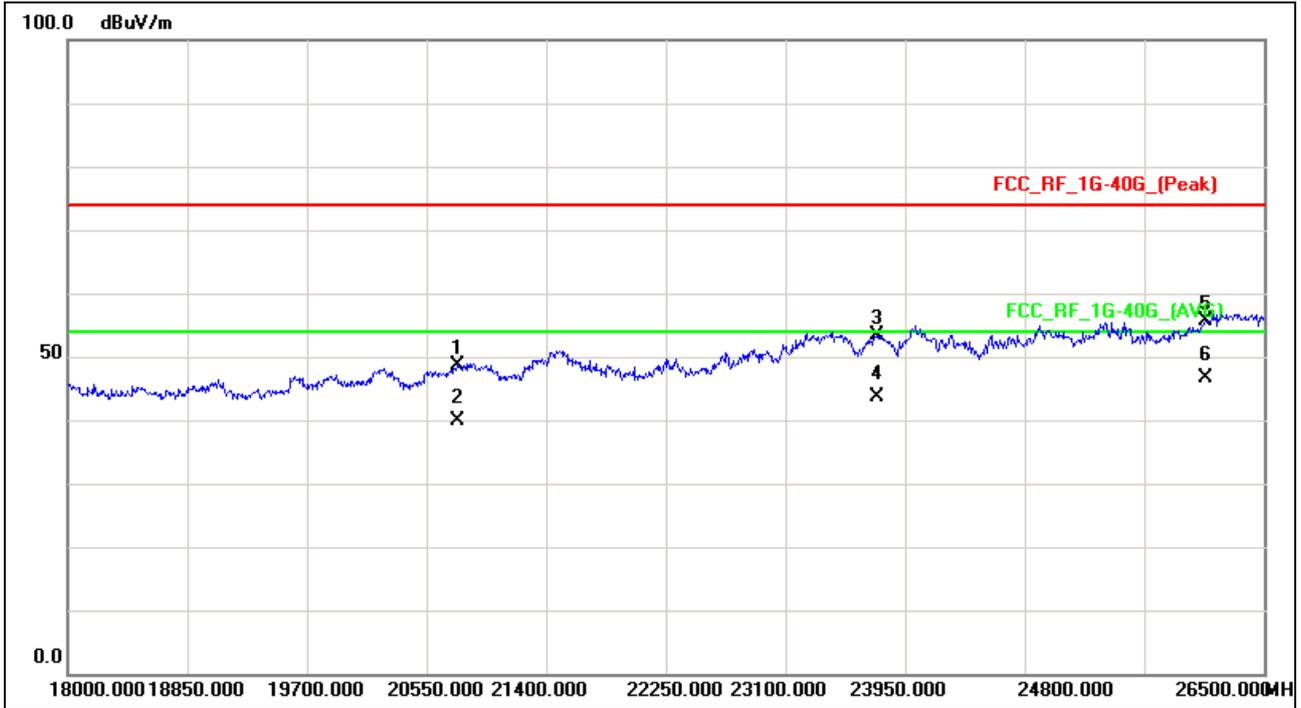


Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Plarization
59.1000	35.76	14.64	40.0	-4.24	HORIZONTAL
152.2200	27.41	14.03	43.50	-16.09	HORIZONTAL
297.7200	41.63	13.54	46.00	-4.37	HORIZONTAL
399.5700	39.34	11.10	46.00	-6.66	HORIZONTAL
572.2300	34.05	4.74	46.00	-11.95	HORIZONTAL
884.5700	35.95	3.15	46.00	-10.05	HORIZONTAL

7.3Part 3: Testing Range of “18 GHz to 26.5 GHz”



Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
19066.750	V	26.86	21.61	48.47	74.00	-25.53	
19066.750	V	17.56	21.61	39.17	54.00	-14.83	
21706.000	V	29.69	22.14	51.83	74.00	-22.17	
21706.000	V	20.54	22.14	42.68	54.00	-11.32	
24931.750	V	30.12	25.76	55.88	74.00	-18.12	
24931.750	V	20.67	25.76	46.43	54.00	-7.57	



Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
20766.750	H	27.46	21.23	48.69	74.00	-25.31	
20766.750	H	18.67	21.23	39.90	54.00	-14.10	
23750.250	H	28.60	24.78	53.38	74.00	-20.62	
23750.250	H	18.86	24.78	43.64	54.00	-10.36	
26087.750	H	29.41	26.24	55.65	74.00	-18.35	
26087.750	H	20.27	26.24	46.51	54.00	-7.49	

7.4Part 4: 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 dB μ V/m) and Average Limit (54 dB μ V/m).

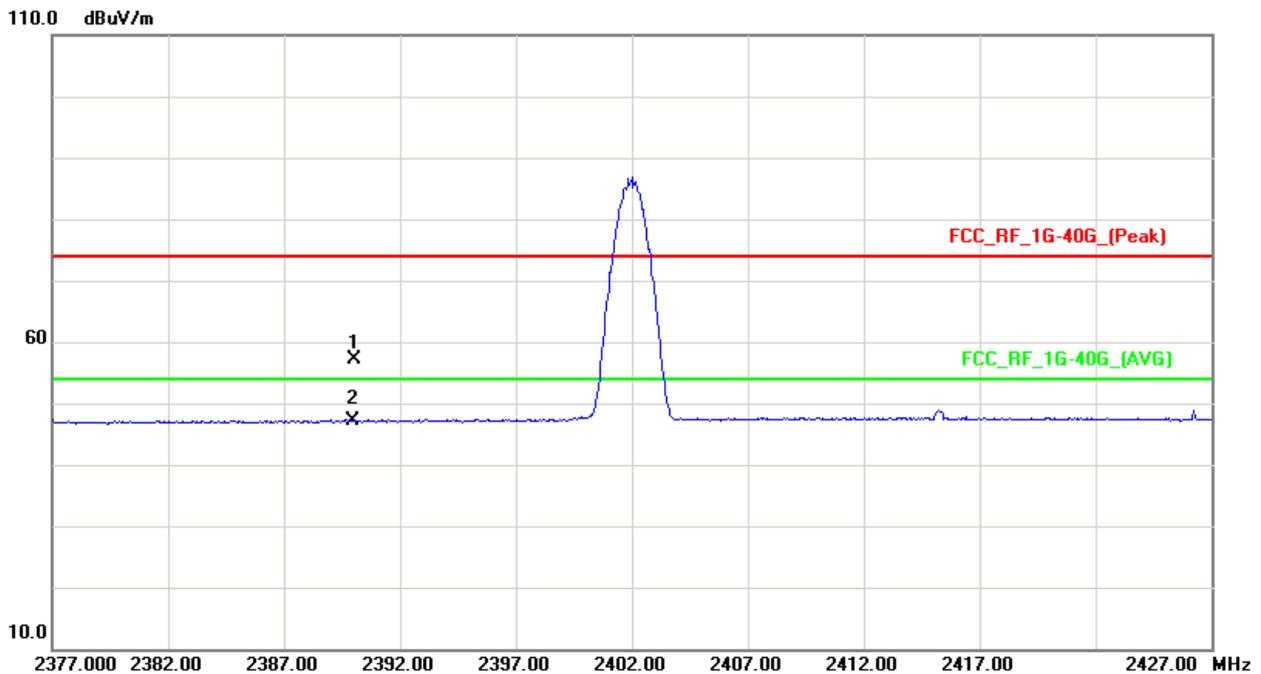
Note 3: The peak spike exceeds the limit line is EUT’s operating frequency.

Test Mode:

7.4.1Test Mode:

7.4.1.1Channel 0

Vertical



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

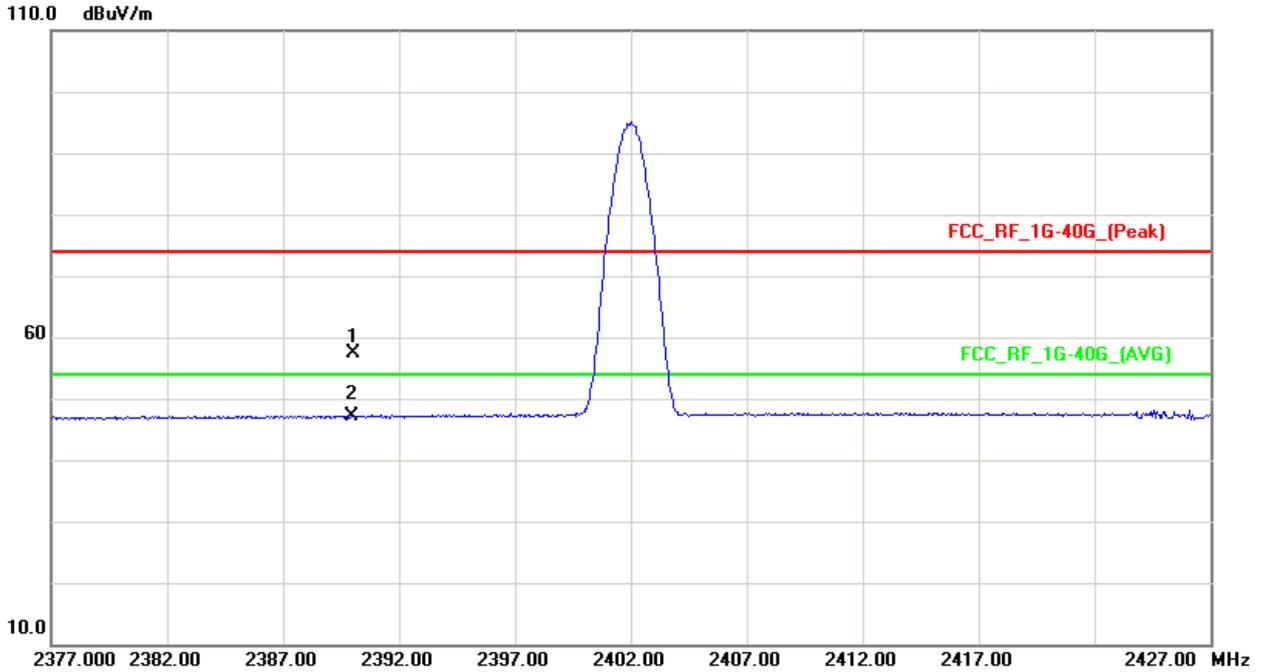
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Polarization
2390.000000	57.19	34.17	74.0	-16.81	VERTICAL

MEASUREMENT RESULT: AV Detector



Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Polarization
2390.000000	47.01	34.17	54.0	-6.99	VERTICAL



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

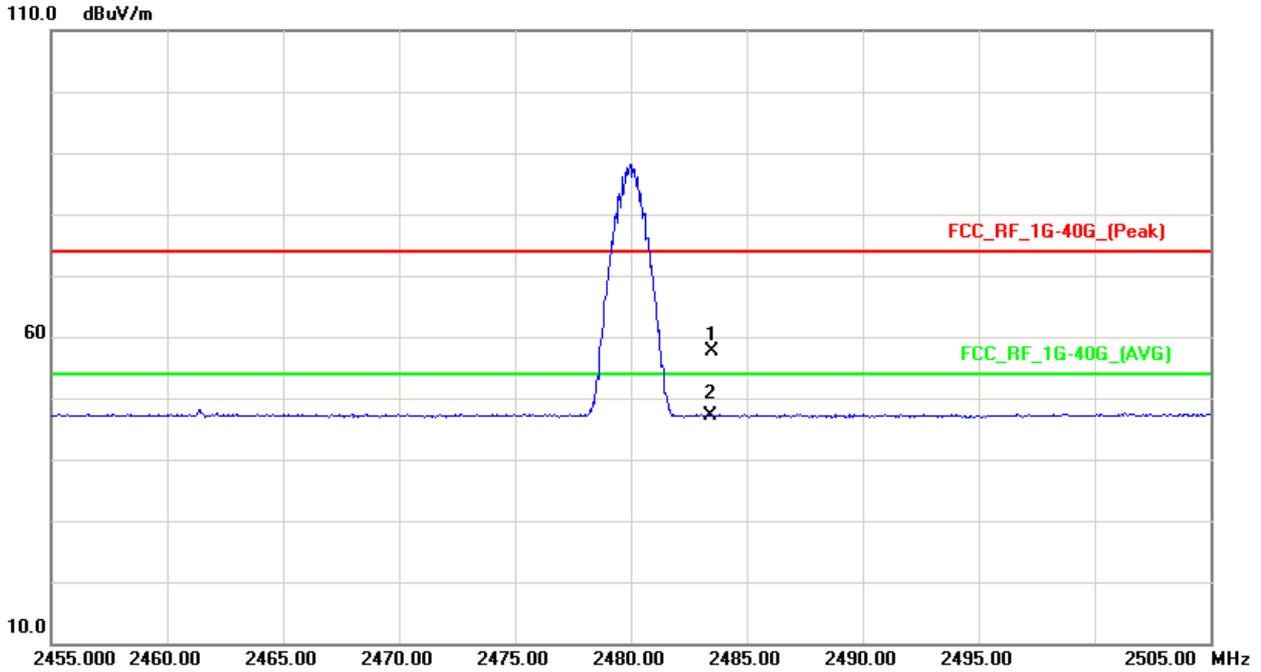
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Polarization
2390.000000	57.45	34.17	74.0	-16.55	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Polarization
2390.000000	47.08	34.17	54.0	-6.92	HORIZONTAL

7.4.1.2 Channel 39



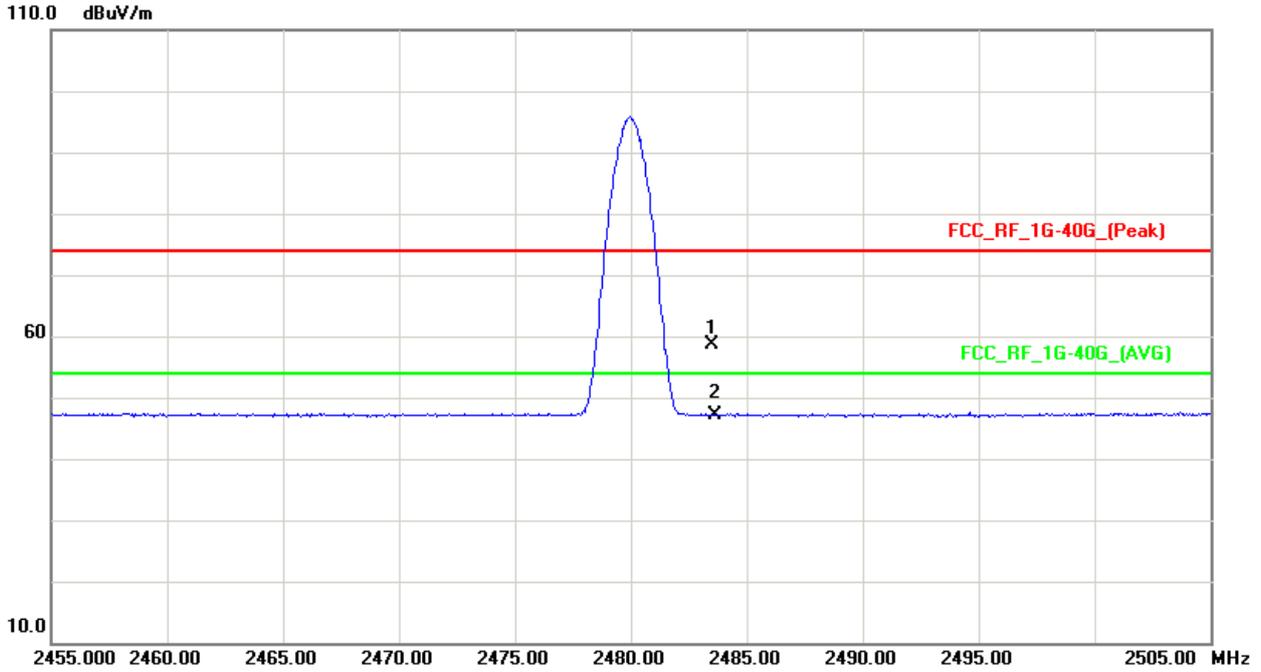
Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Polarization
2483.500000	57.73	34.43	74.0	-16.27	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Polarization
2483.500000	47.04	34.43	54.0	-6.96	VERTICAL



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	Polarization
2483.500000	58.73	34.43	74.0	-15.27	HORIZONTAL

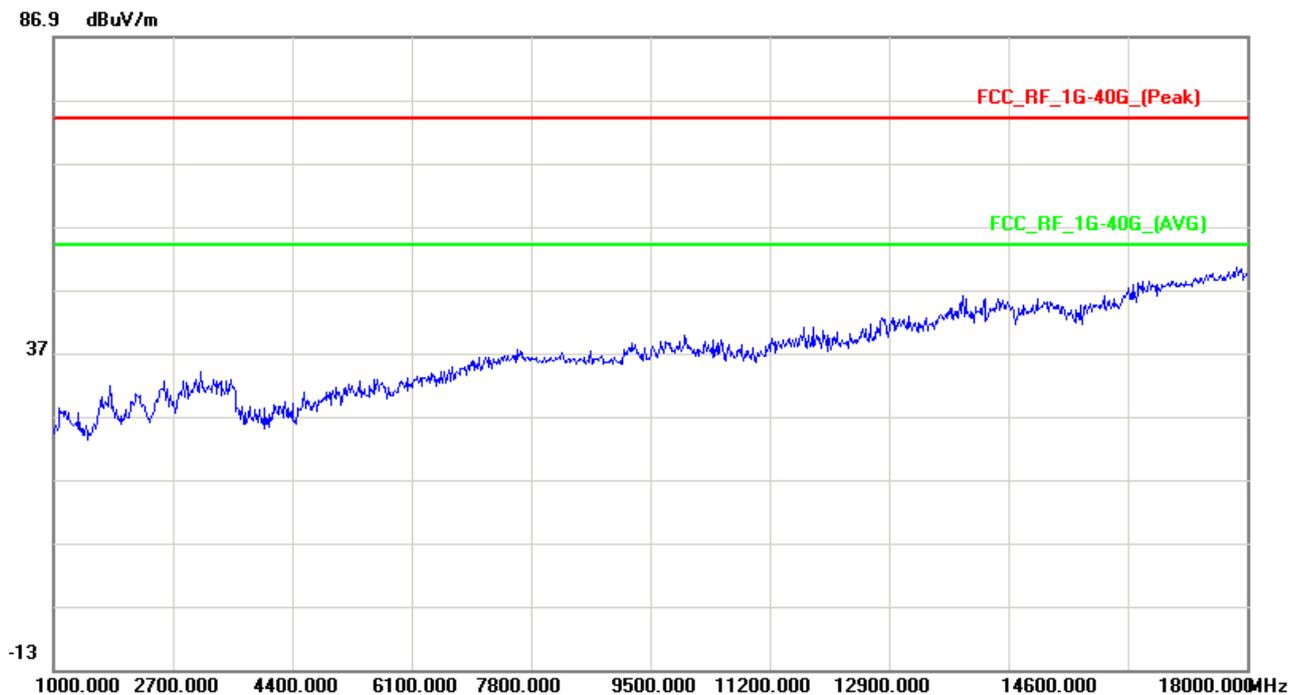
MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Polarization
2483.500000	47.06	34.43	54.0	-6.94	HORIZONTAL

7.5Part 5: 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).

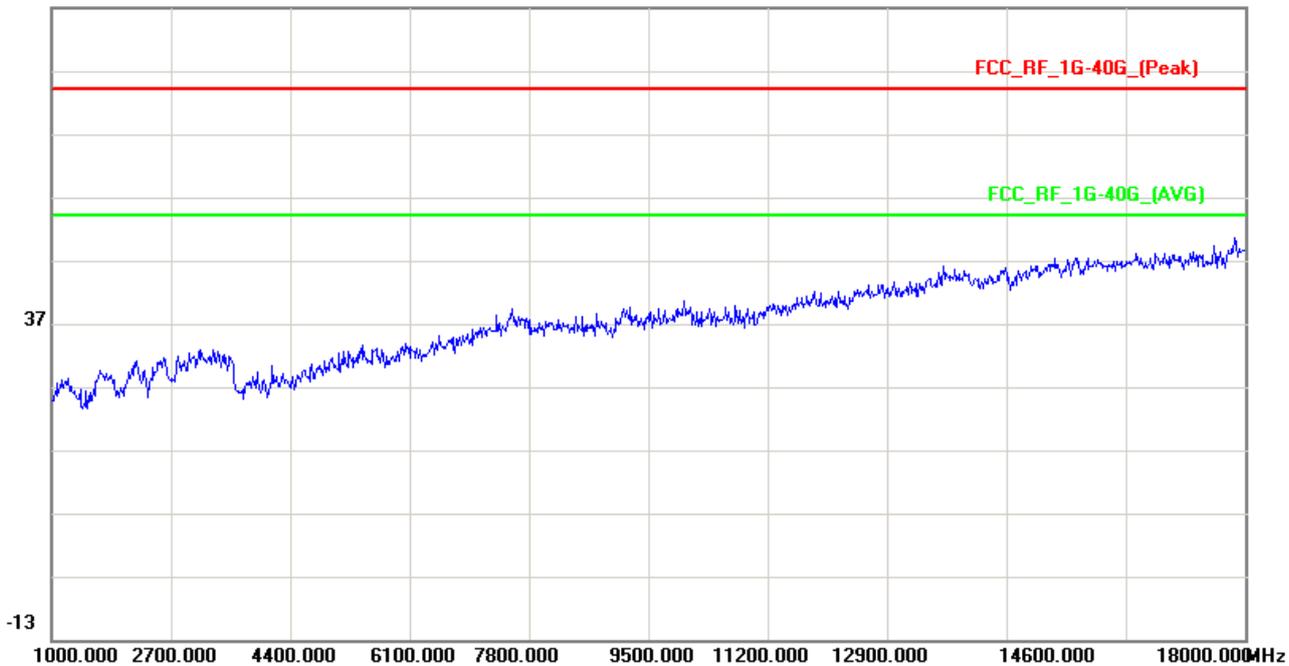
Vertical



Horizontal



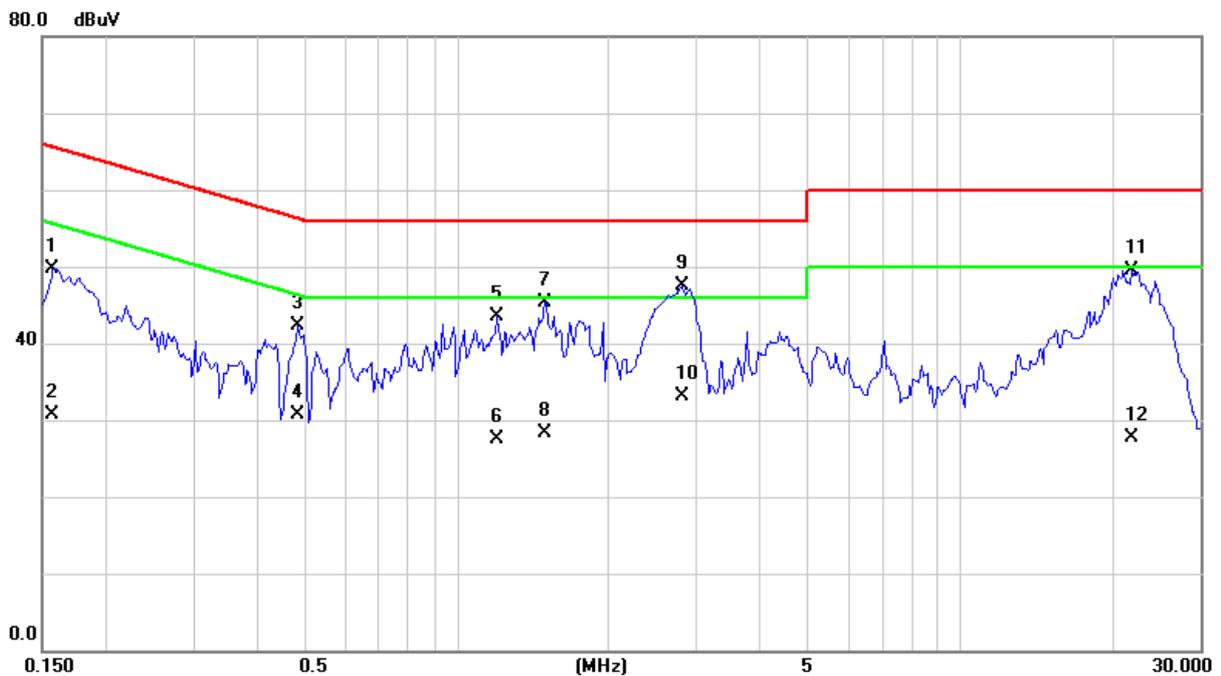
86.9 dBuV/m



8 Appendix H: Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz

Channel 39



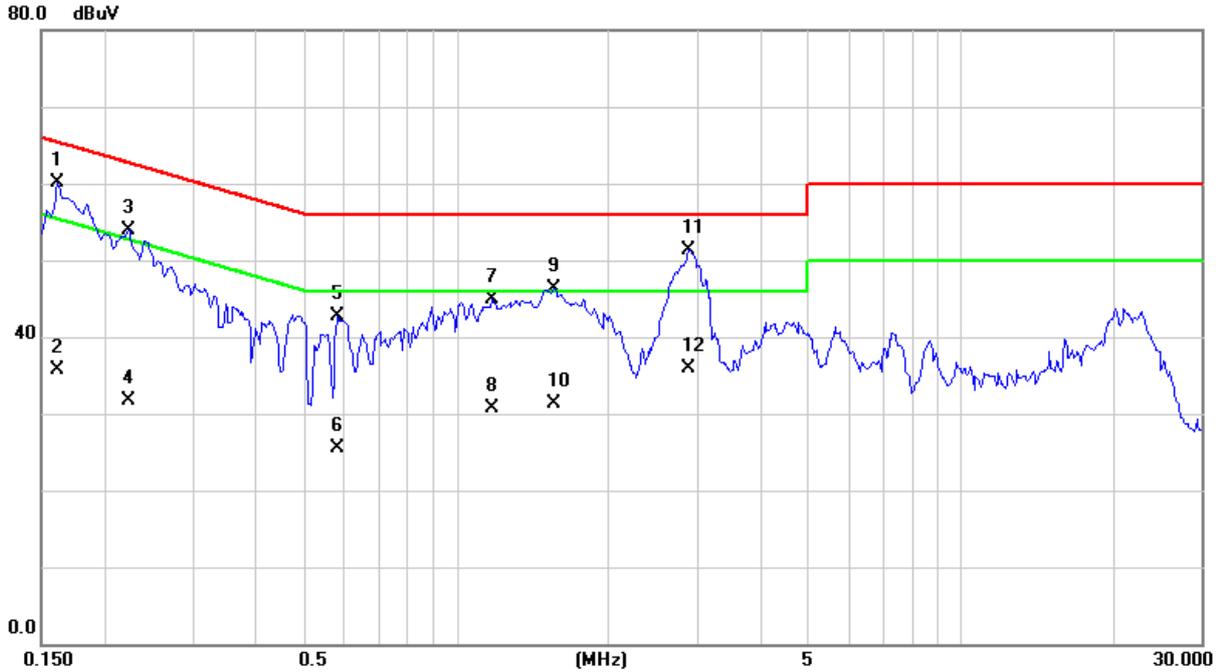
MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Line	PE
0.1578	49.76	9.48	65.58	-15.82	L1	FLO
0.4820	42.38	9.63	56.30	-13.92	L1	FLO
1.2008	43.44	9.63	56.0	-12.56	L1	FLO
1.5016	45.40	9.62	56.0	-10.06	L1	FLO
2.8062	47.41	9.62	56.0	-8.59	L1	FLO
21.9414	49.55	10.07	60.0	-10.45	L1	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Line	PE
0.1578	30.78	9.48	55.58	-24.80	L1	FLO
0.4820	30.63	9.63	46.30	-15.67	L1	FLO

1.2008	27.53	9.63	46.0	-18.47	L1	FLO
1.5016	28.22	9.62	46.0	-17.78	L1	FLO
2.8062	33.02	9.62	46.0	-12.98	L1	FLO
21.9414	27.77	10.07	50.0	-22.23	L1	FLO



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.1617	60.06	9.59	65.38	-5.32	N	FLO
0.2242	53.90	9.57	62.66	-8.76	N	FLO
0.5797	42.66	9.58	56.0	-13.34	N	FLO
1.1773	44.90	9.61	56.0	-11.10	N	FLO
1.5680	46.38	9.62	56.0	-9.62	N	FLO
2.8883	51.35	9.64	56.0	-4.65	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.1617	35.69	9.59	55.38	-19.69	N	FLO
0.2242	31.67	9.57	52.66	-20.99	N	FLO
0.5797	25.48	9.58	46.0	-20.52	N	FLO
1.1773	30.71	9.61	46.0	-15.29	N	FLO
1.5680	31.32	9.62	46.0	-14.68	N	FLO
2.8883	35.84	9.64	46.0	-10.16	N	FLO



Note: Level= Reading level+ Transd (cable loss + correction factor).The reading level is used to calculate by software which is not shown in the sheet.

END