



Appendix for Testreport

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.

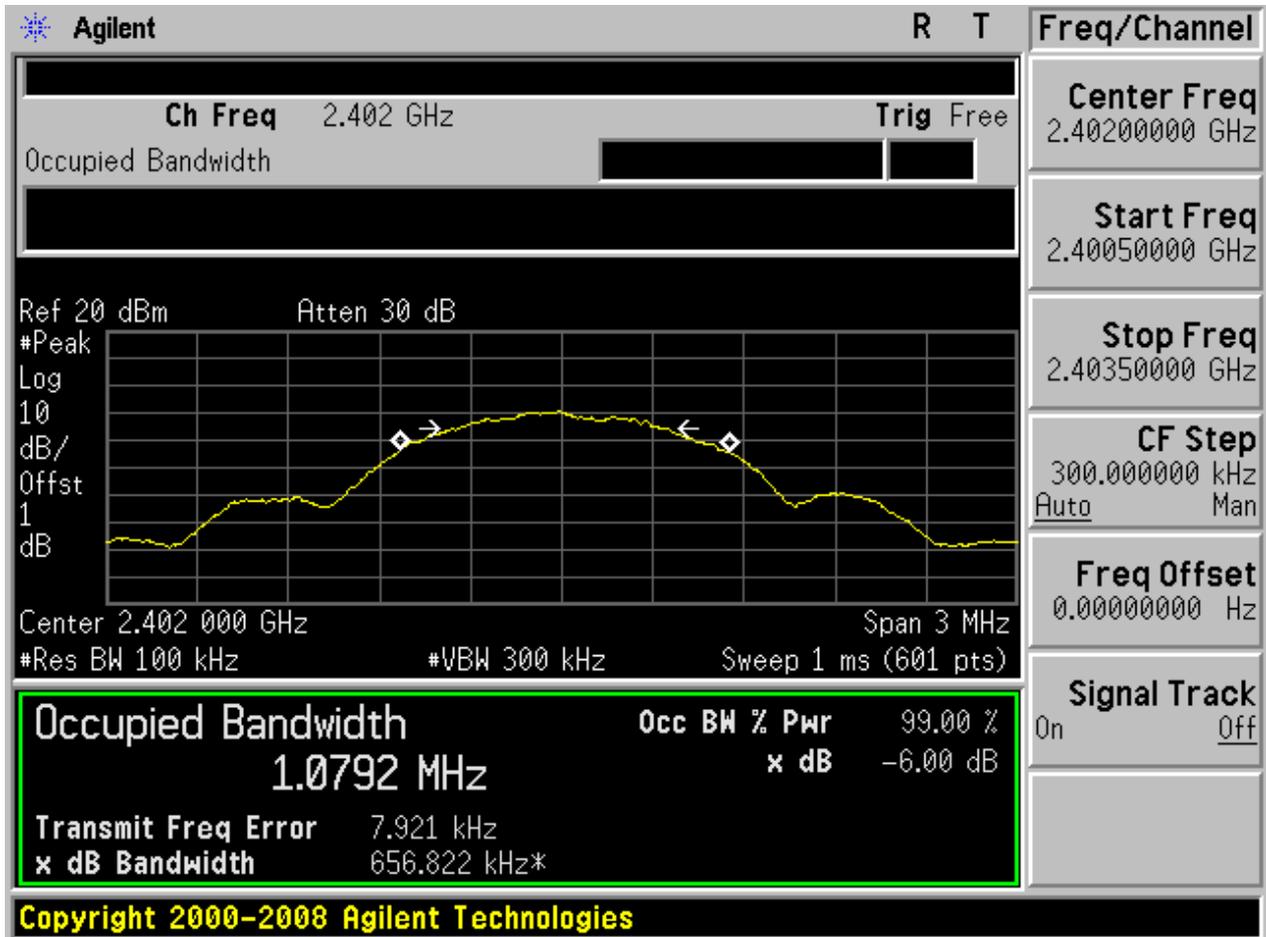
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[MHz]	Verdict
TM1_Ch0	L	2402	0.66	pass
TM1_Ch19	M	2440	0.71	pass
TM1_Ch39	H	2480	0.71	pass

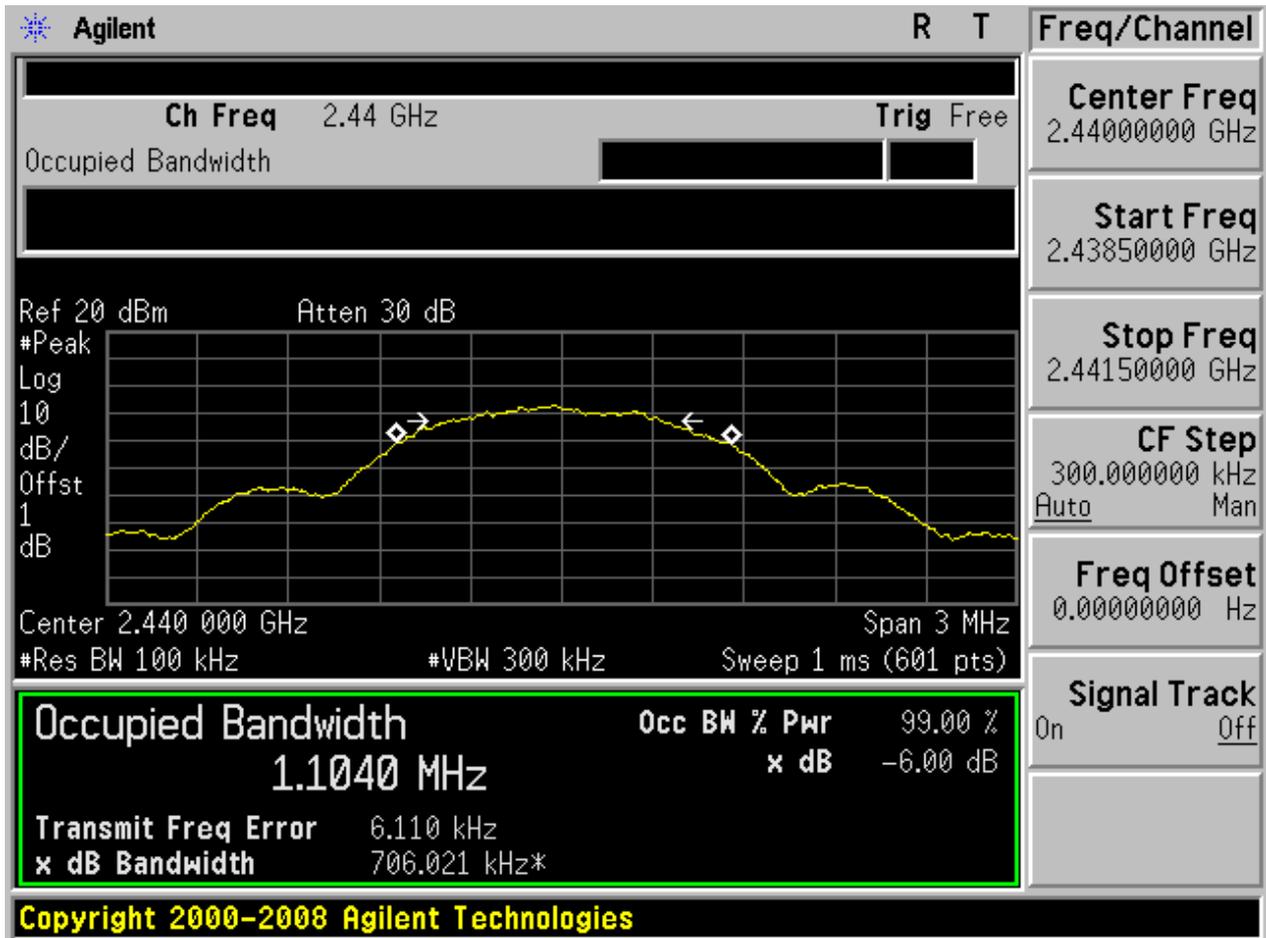
Part II - Test Plots

2.1 TM1_Ch0_L



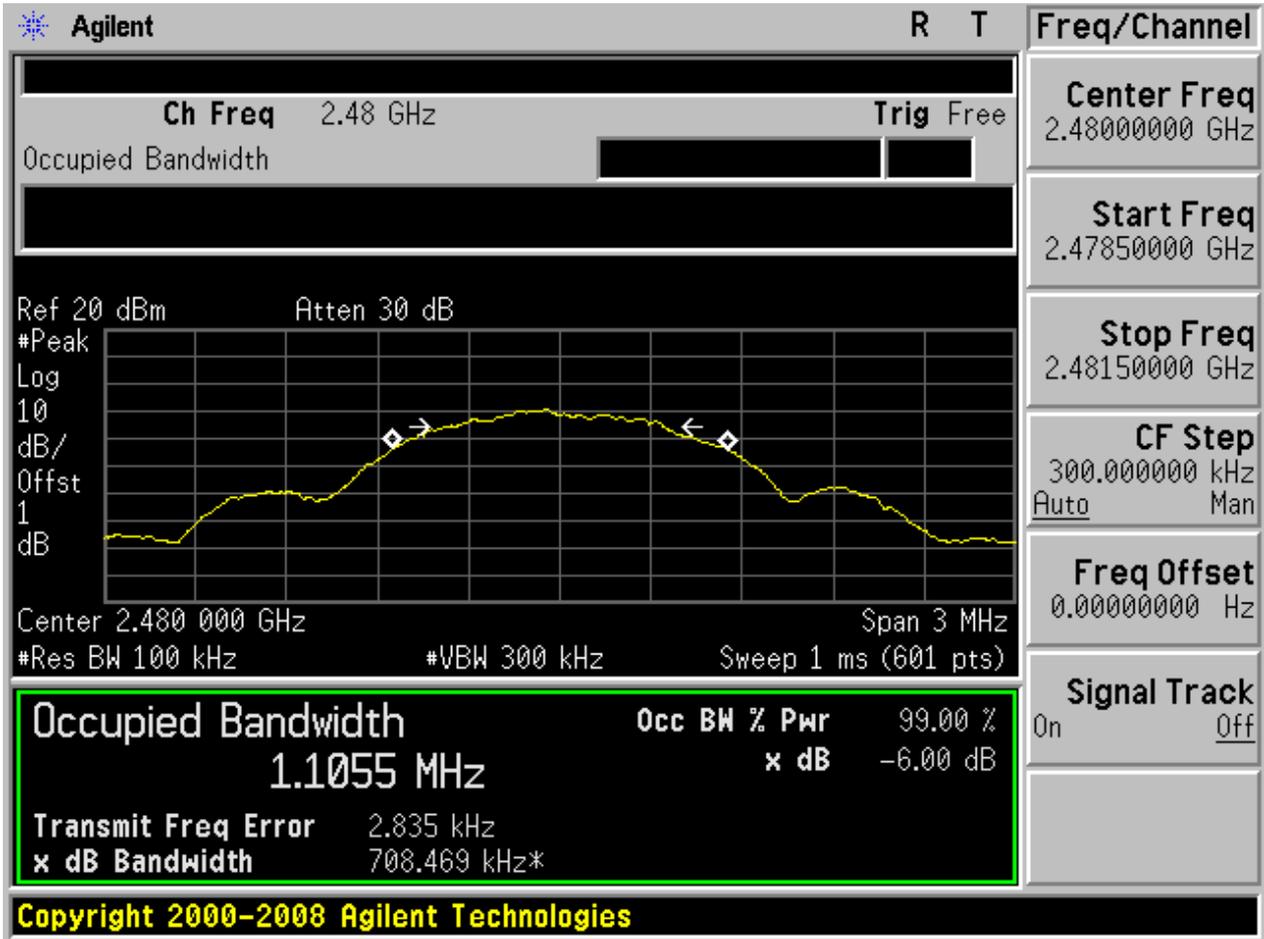


2.2 TM1_Ch19_M





2.3 TM1_Ch39_H





Appendix B: Occupied Bandwidth

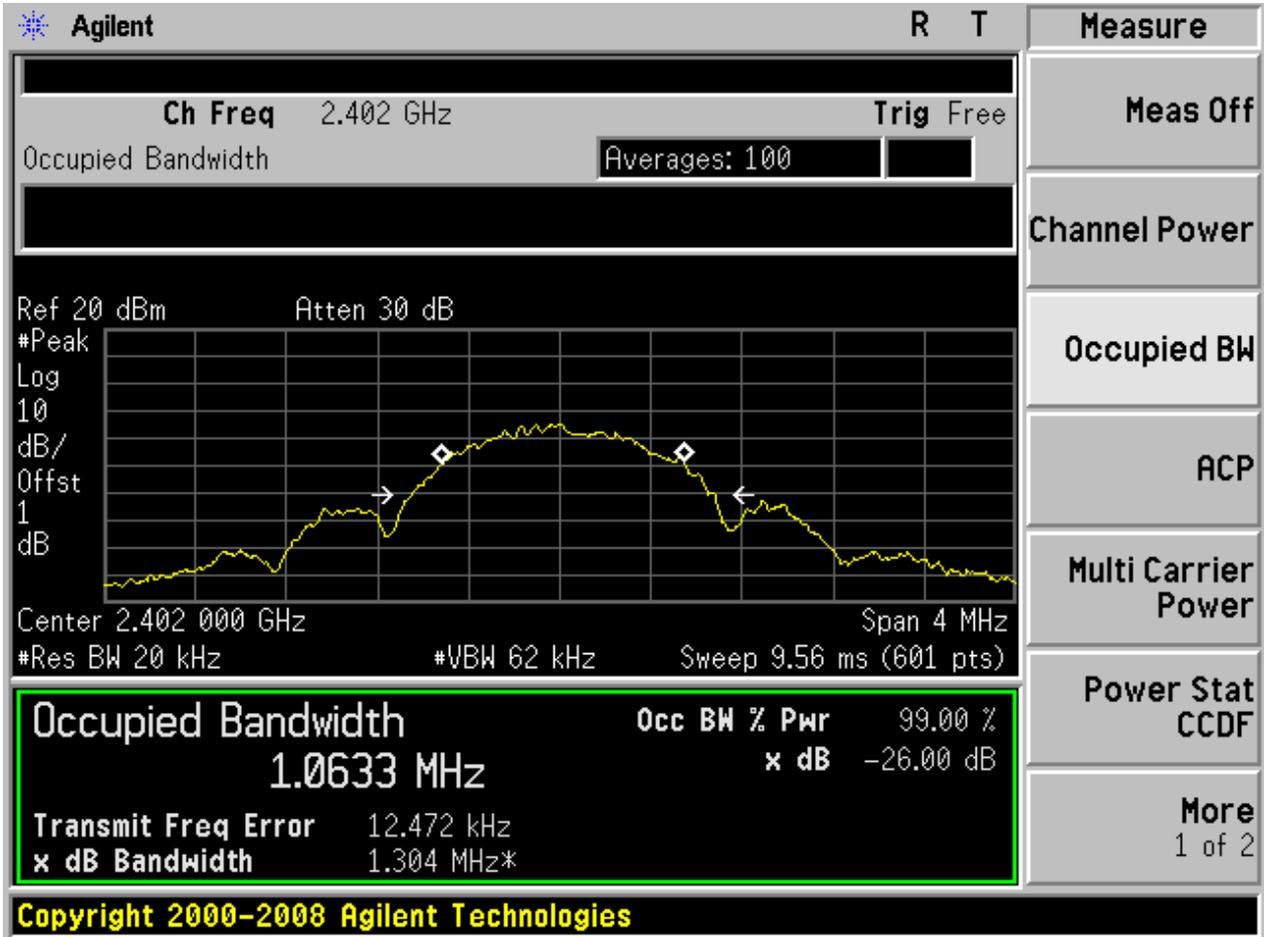
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part 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

Part II - Test Plots

2.1 TM1_Ch0_L

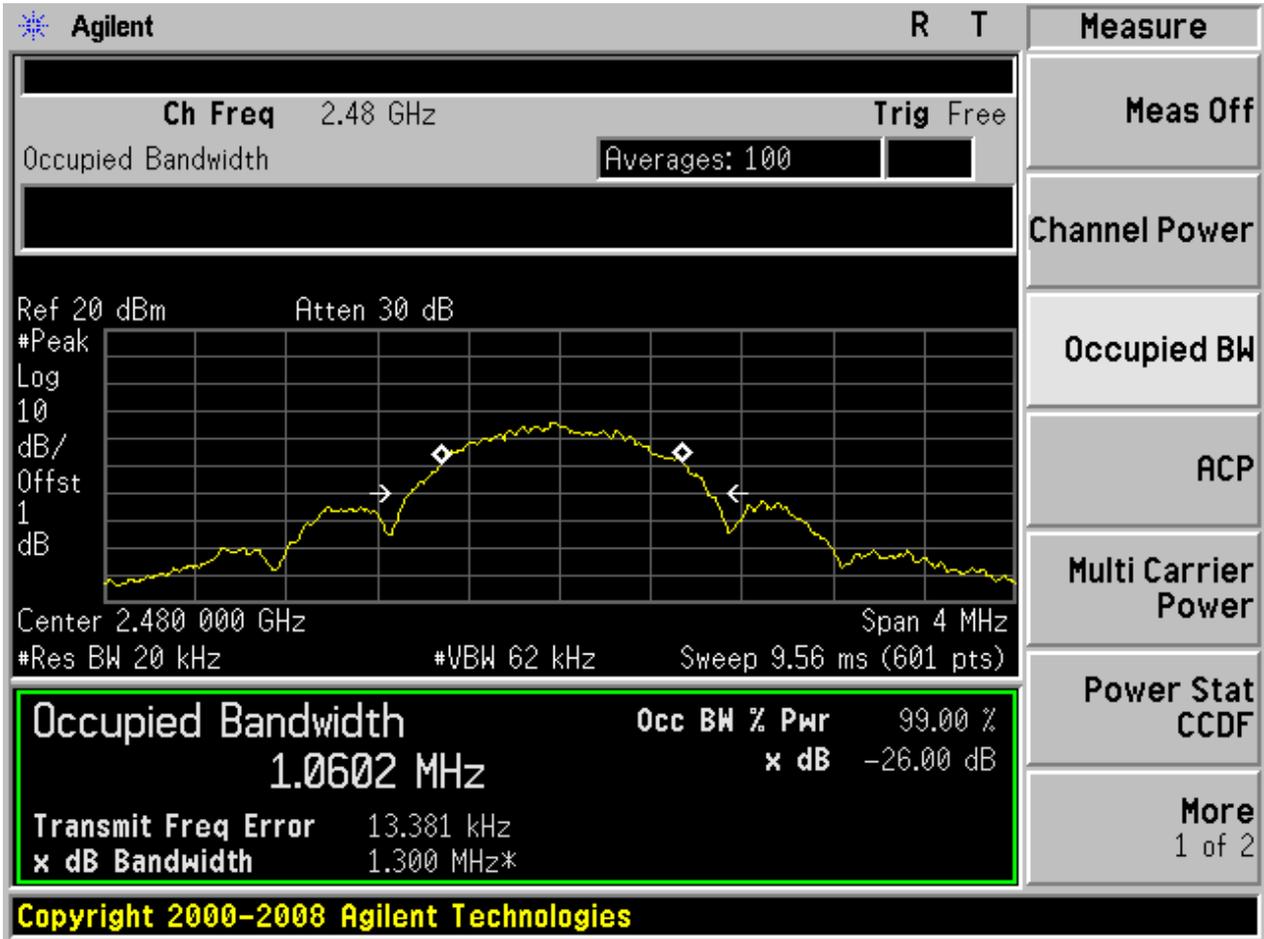


2.2 TM1_Ch19_M





2.3 TM1_Ch39_H



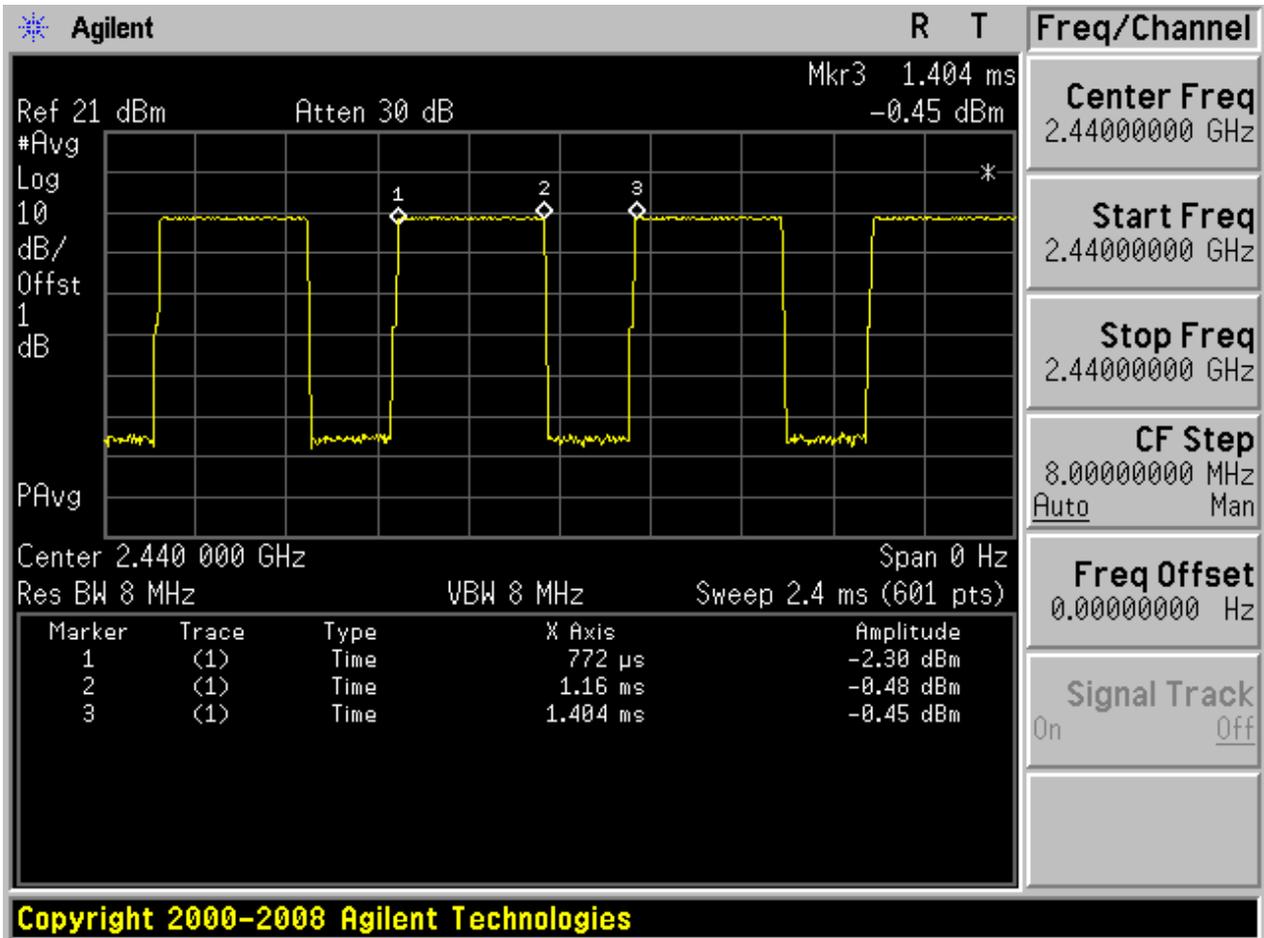
Appendix C: Duty Cycle

Part I - Test Results

Test Mode	TX Freq. [MHz]	Duty cycle [%]
TM1	CH0,CH19,CH39	61

Part II - Test Plots

2.1 TM1





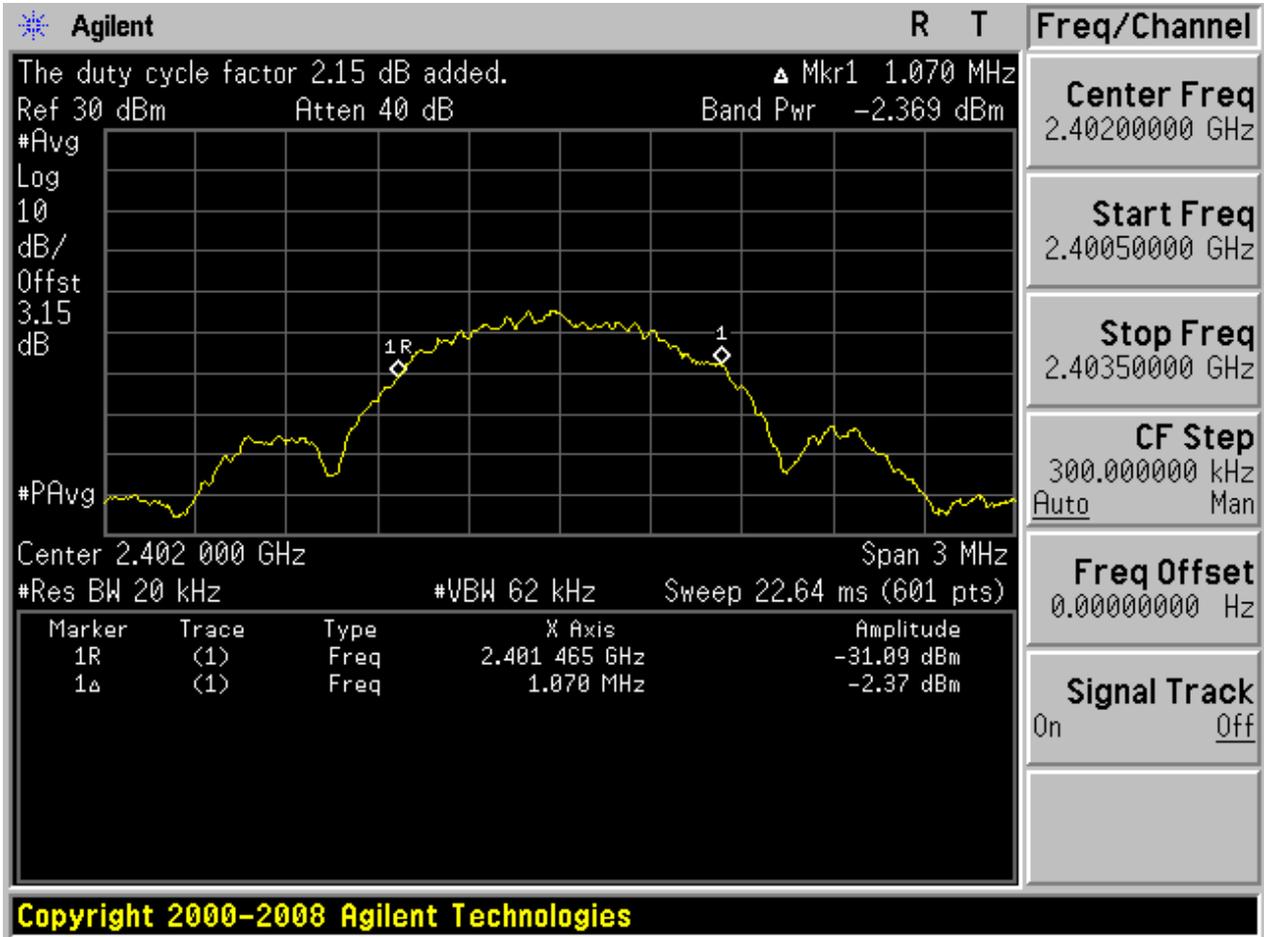
Appendix D: Maximum Conducted Average Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Duty Cycle [%]	Power[dBm]	Verdict
TM1_Ch0	L	2402	61	-2.37	pass
TM1_Ch19	M	2440	61	0.59	pass
TM1_Ch39	H	2480	61	-1.68	pass

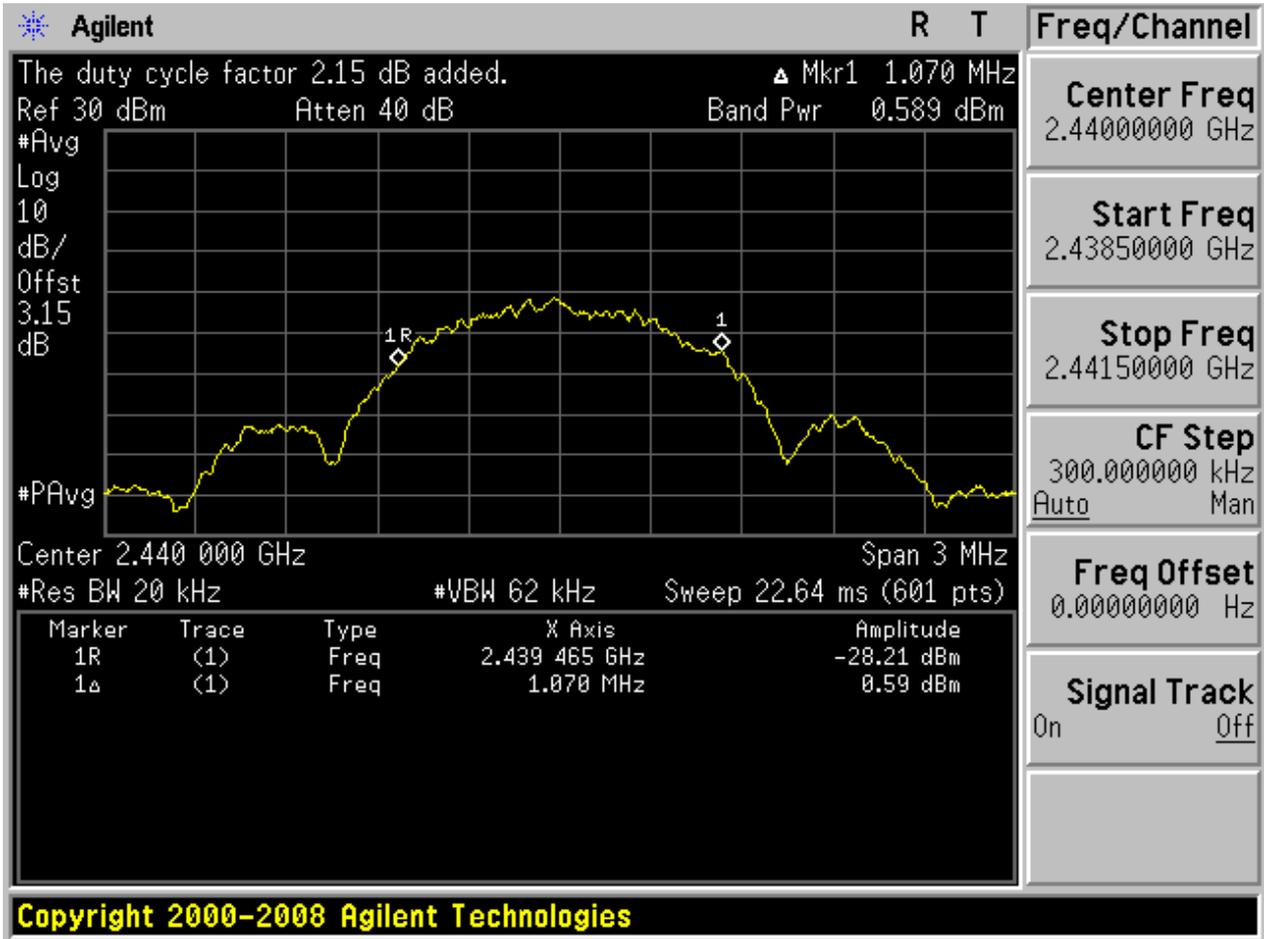
Part II - Test Plots

2.1 TM1_Ch0_L



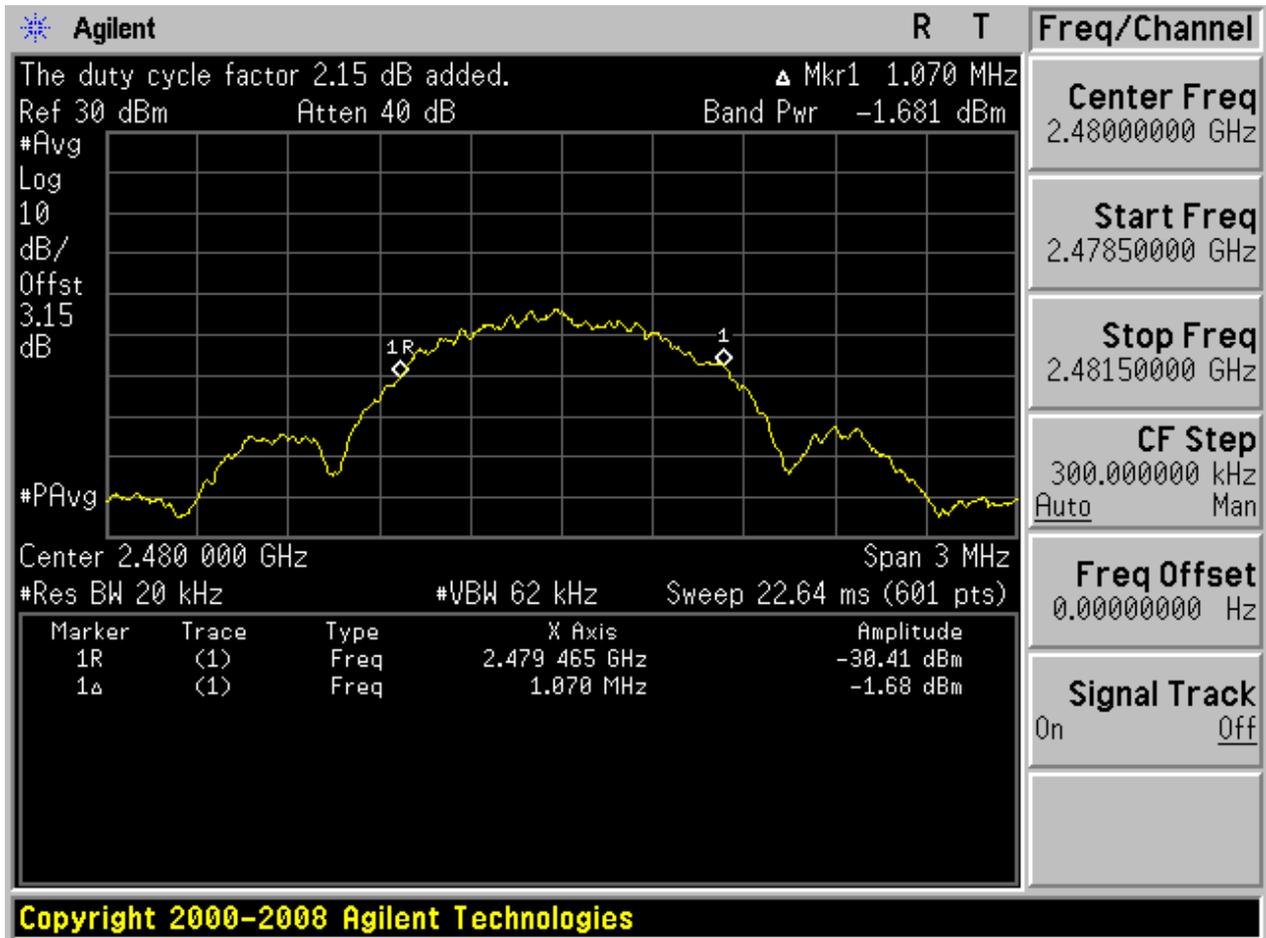


2.2 TM1_Ch19_M



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2.3 TM1_Ch39_H





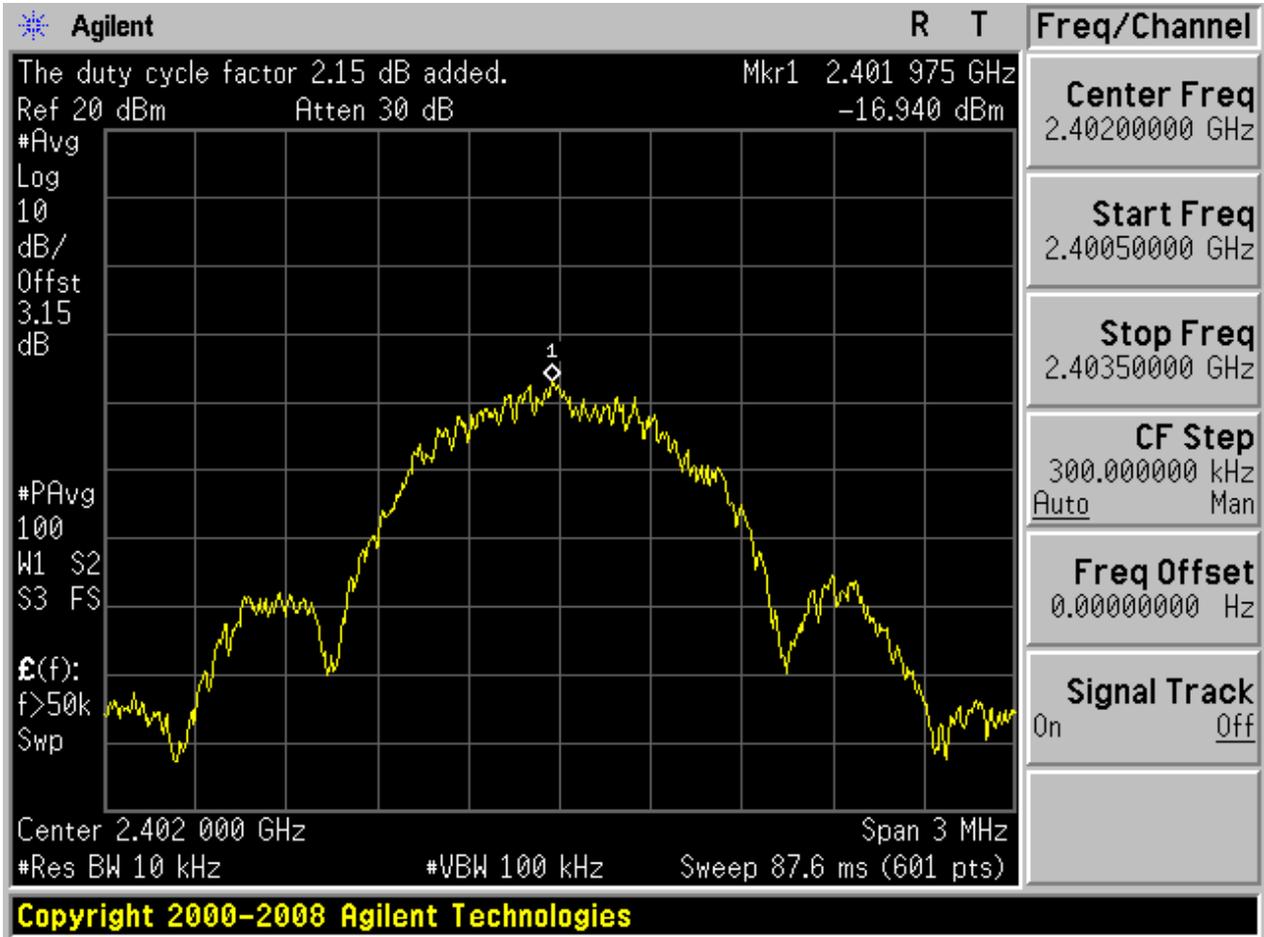
Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Duty Cycle [%]	PD[MHz]	Verdict
TM1 _Ch0	L	2402	61	-16.94	pass
TM1 _Ch19	M	2440	61	-13.11	pass
TM1 _Ch39	H	2480	61	-16.67	pass

Part II - Test Plots

2.1 TM1_Ch0_L



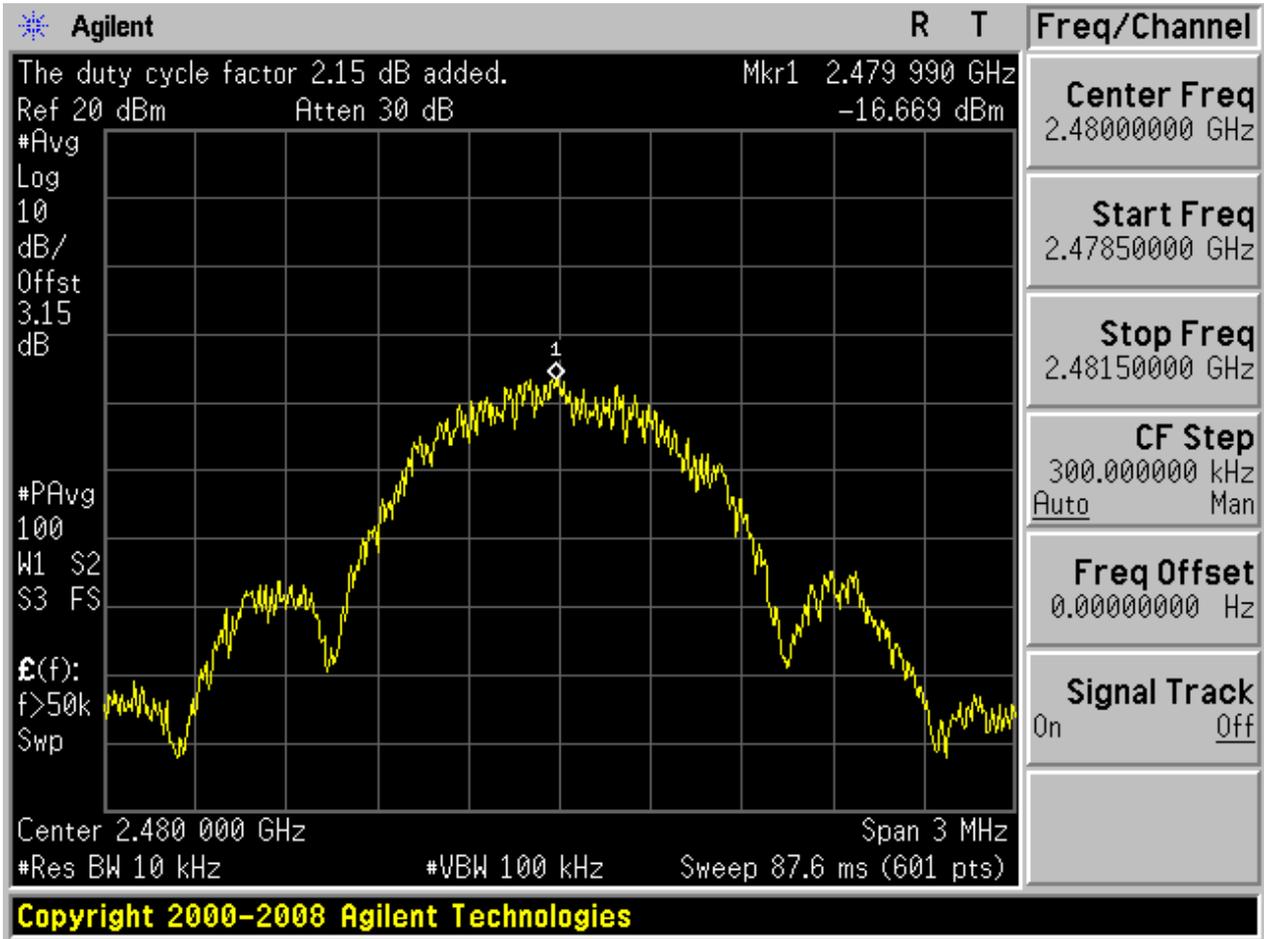


2.2 TM1_Ch19_M





2.3 TM1_Ch39_H





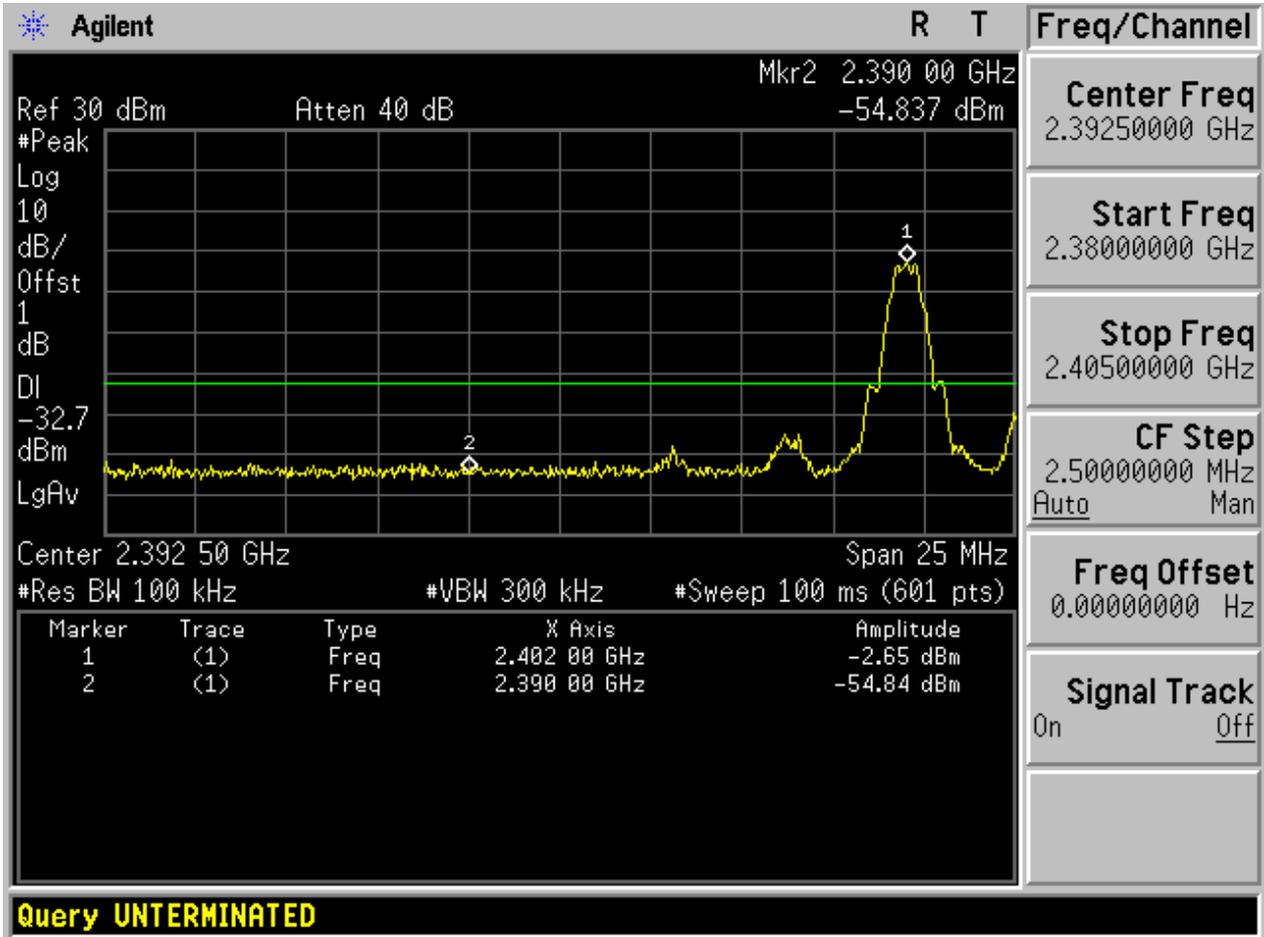
Appendix F: Band Edges Compliance

Part I - Test Results

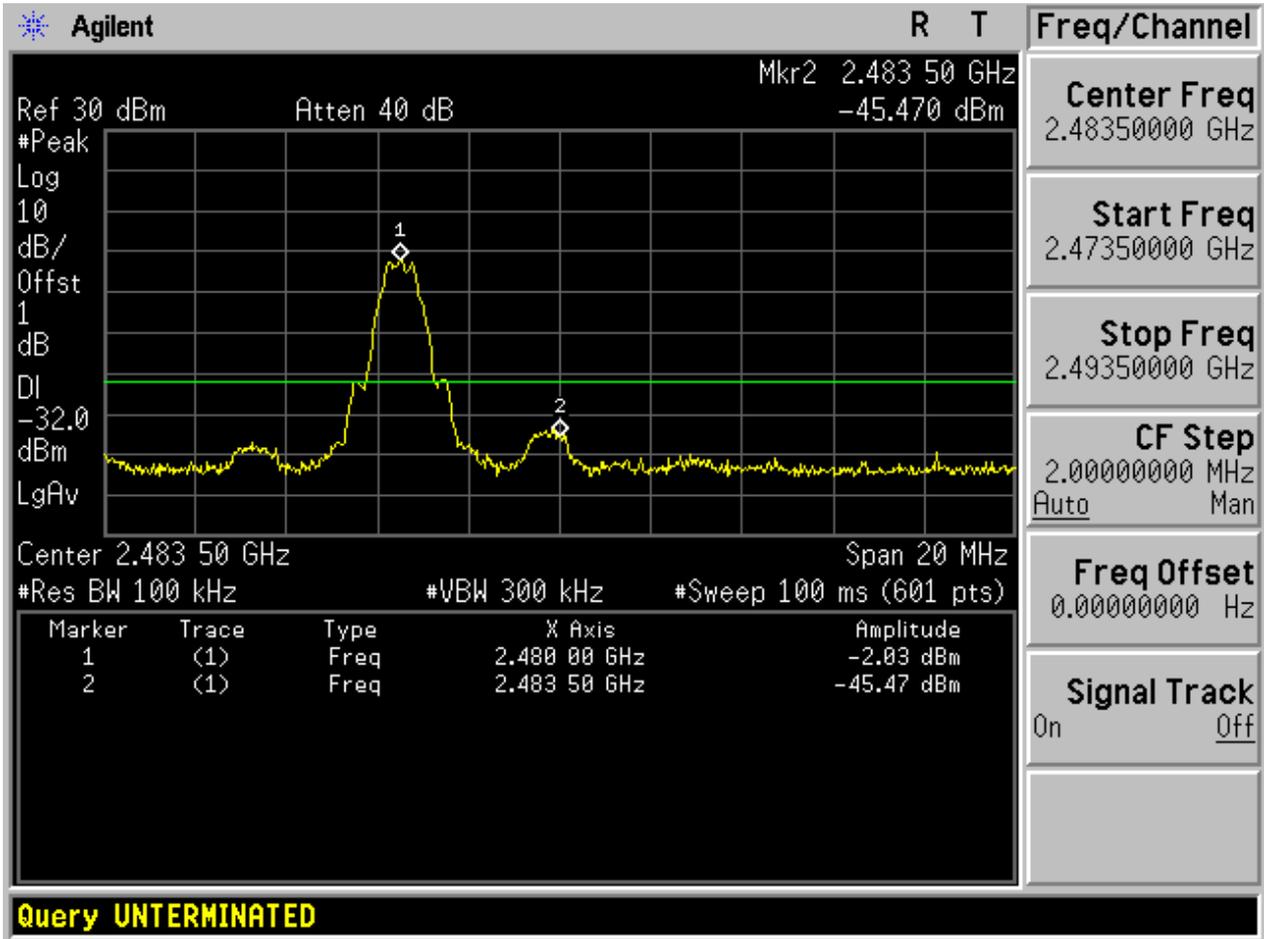
Test Mode	Test Channel	Frequency[MHz]	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
TM1_Ch0	L	2402	-2.65	-54.84	pass
TM1_Ch39	H	2480	-2.03	-45.47	pass

Part II - Test Plots

2.1 TM1_Ch0_L



2.2 TM1_Ch39_H



Appendix G: 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".

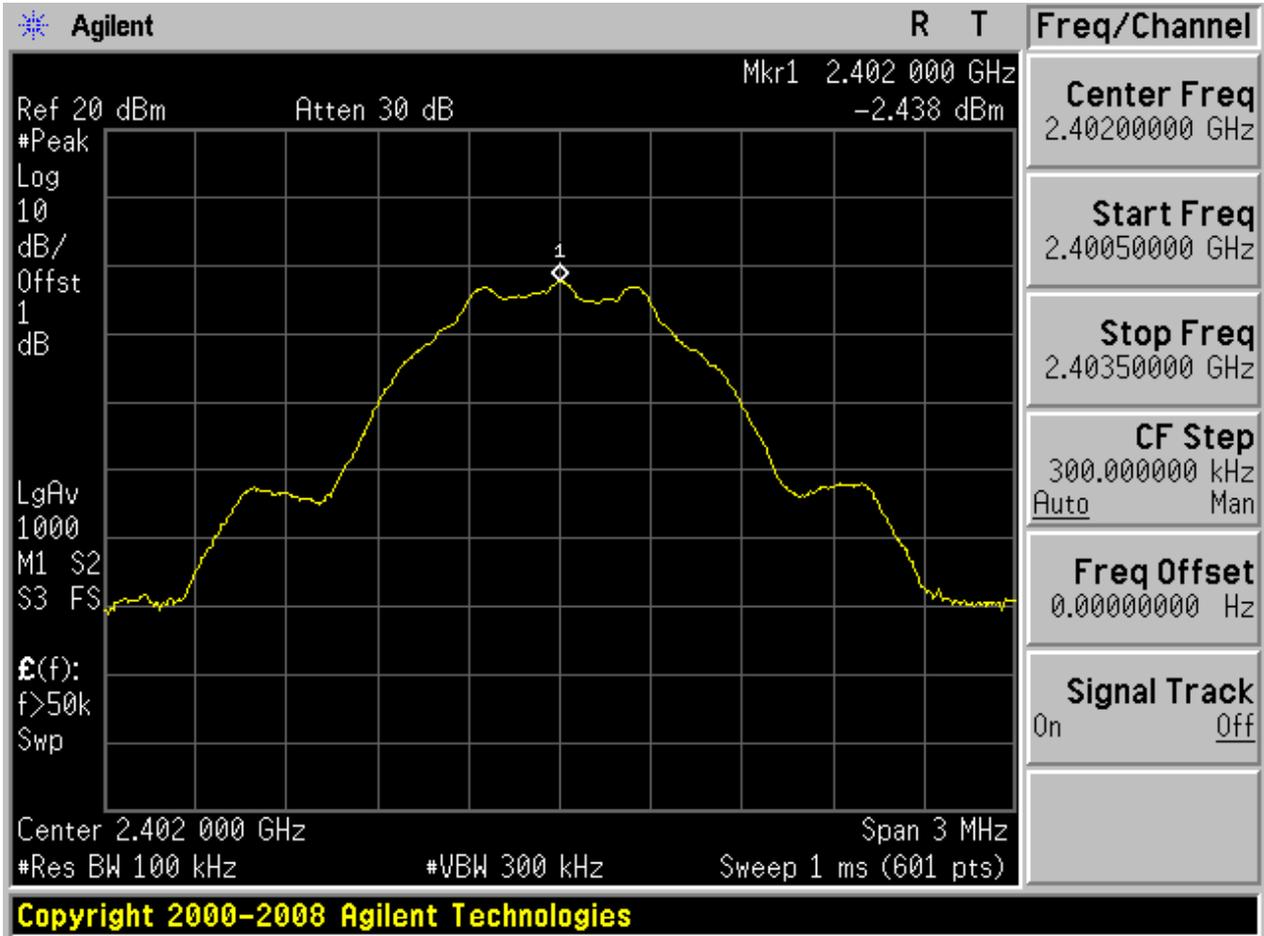
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
TM1_Ch0	L	2402	-2.44	<limit	pass
TM1_Ch19	M	2440	0.47	<limit	pass
TM1_Ch39	H	2480	-1.78	<limit	pass

Part II - Test Plots

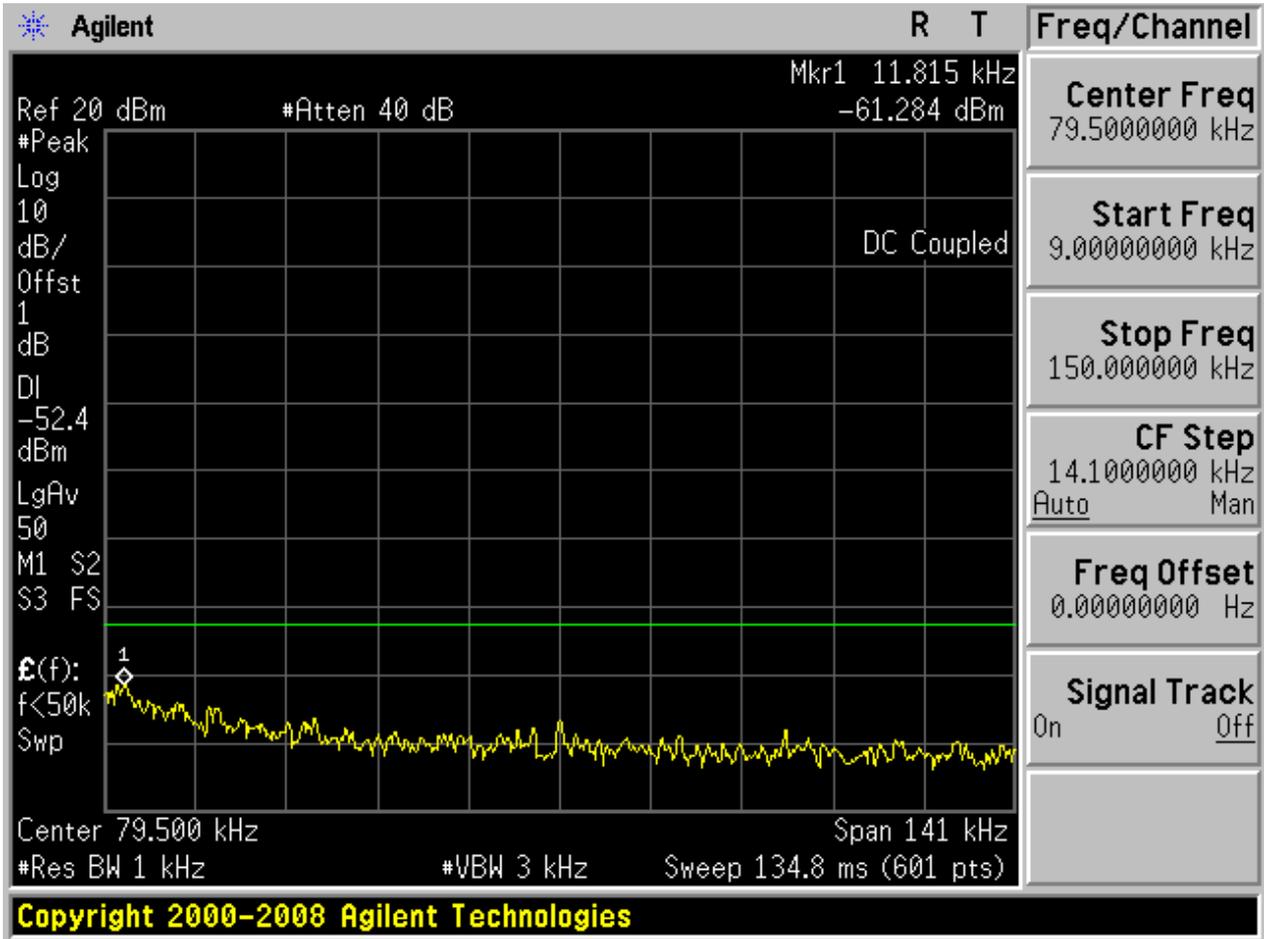
2.1 TM1_Ch0_L

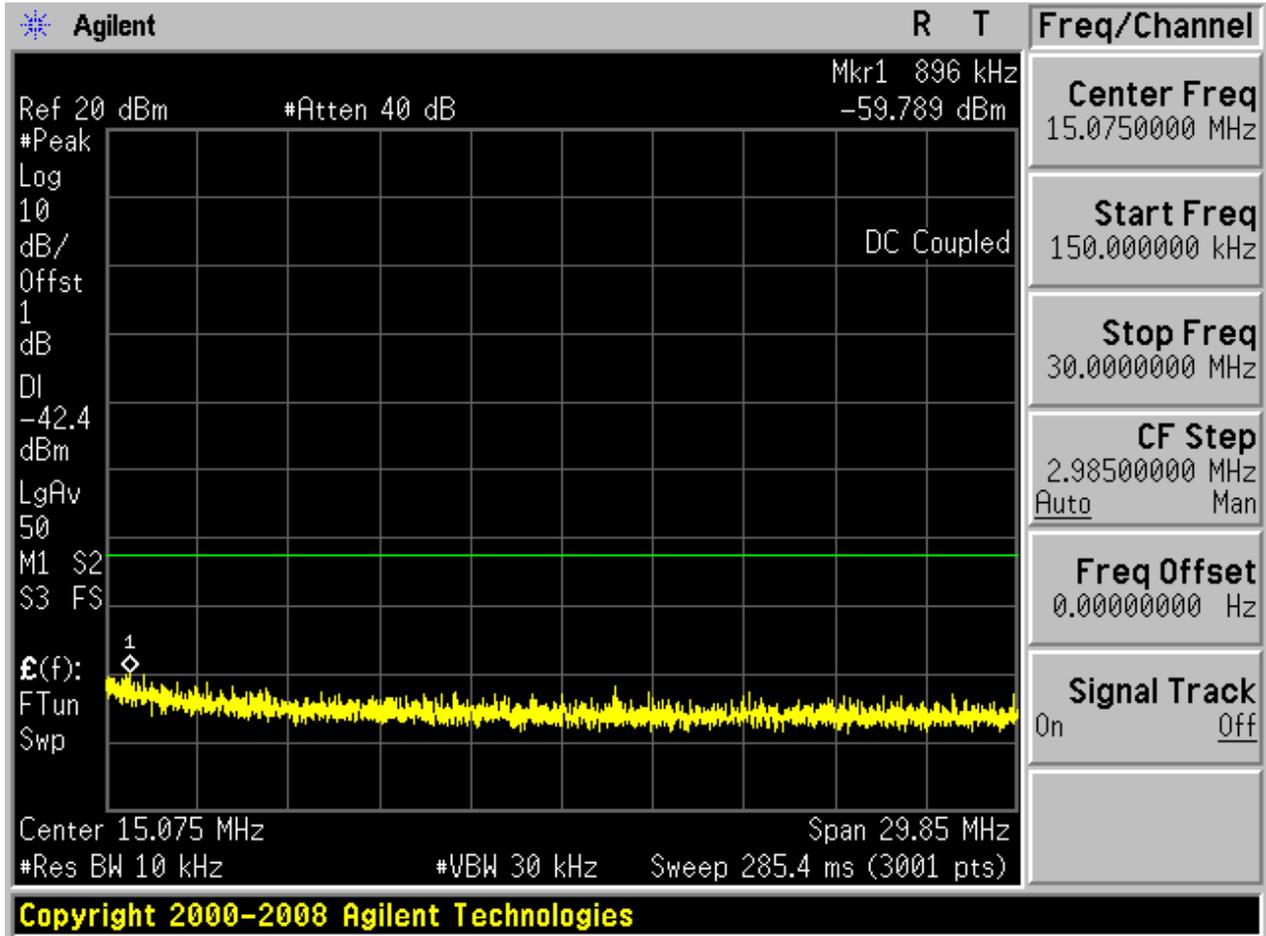
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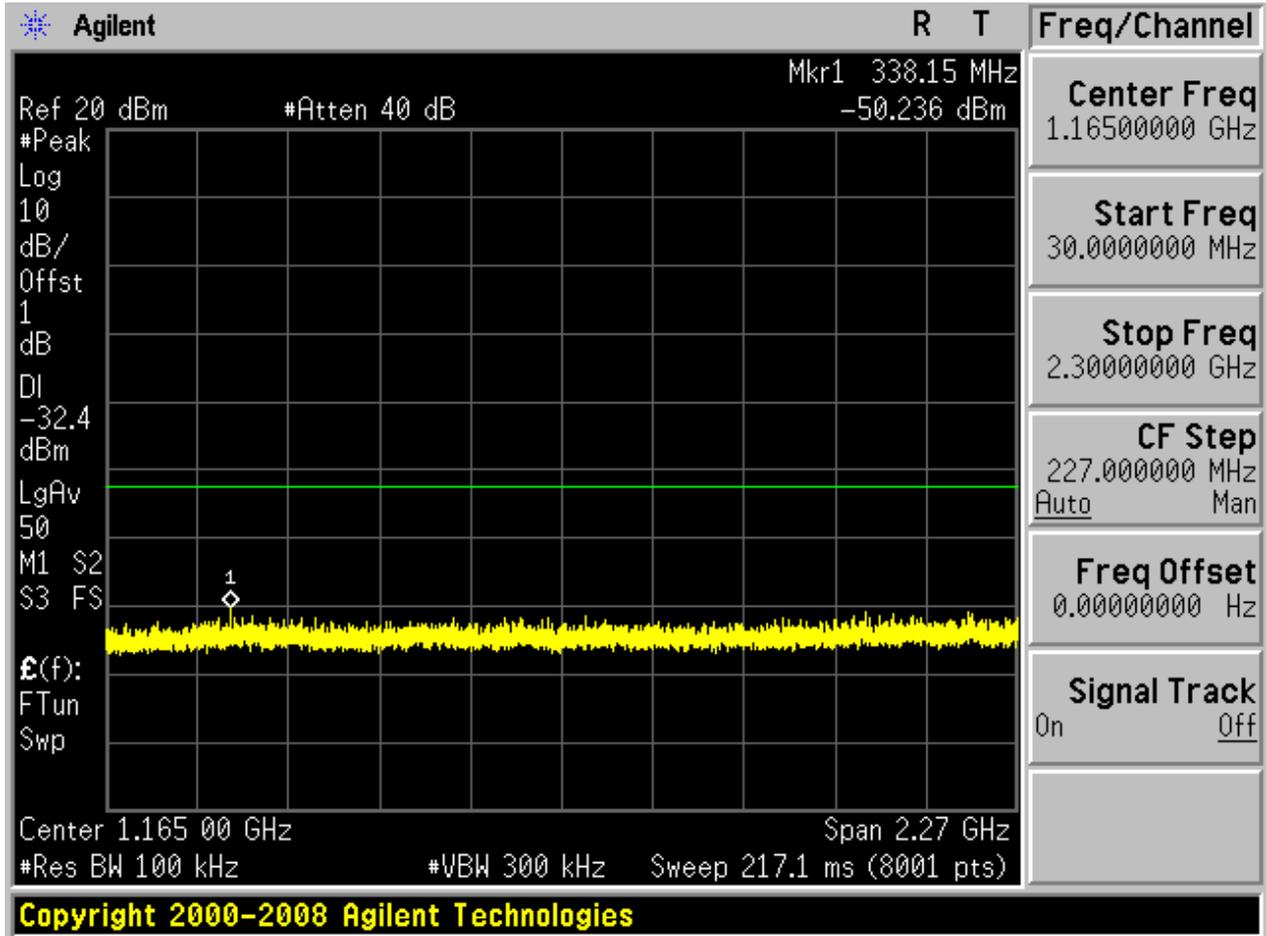


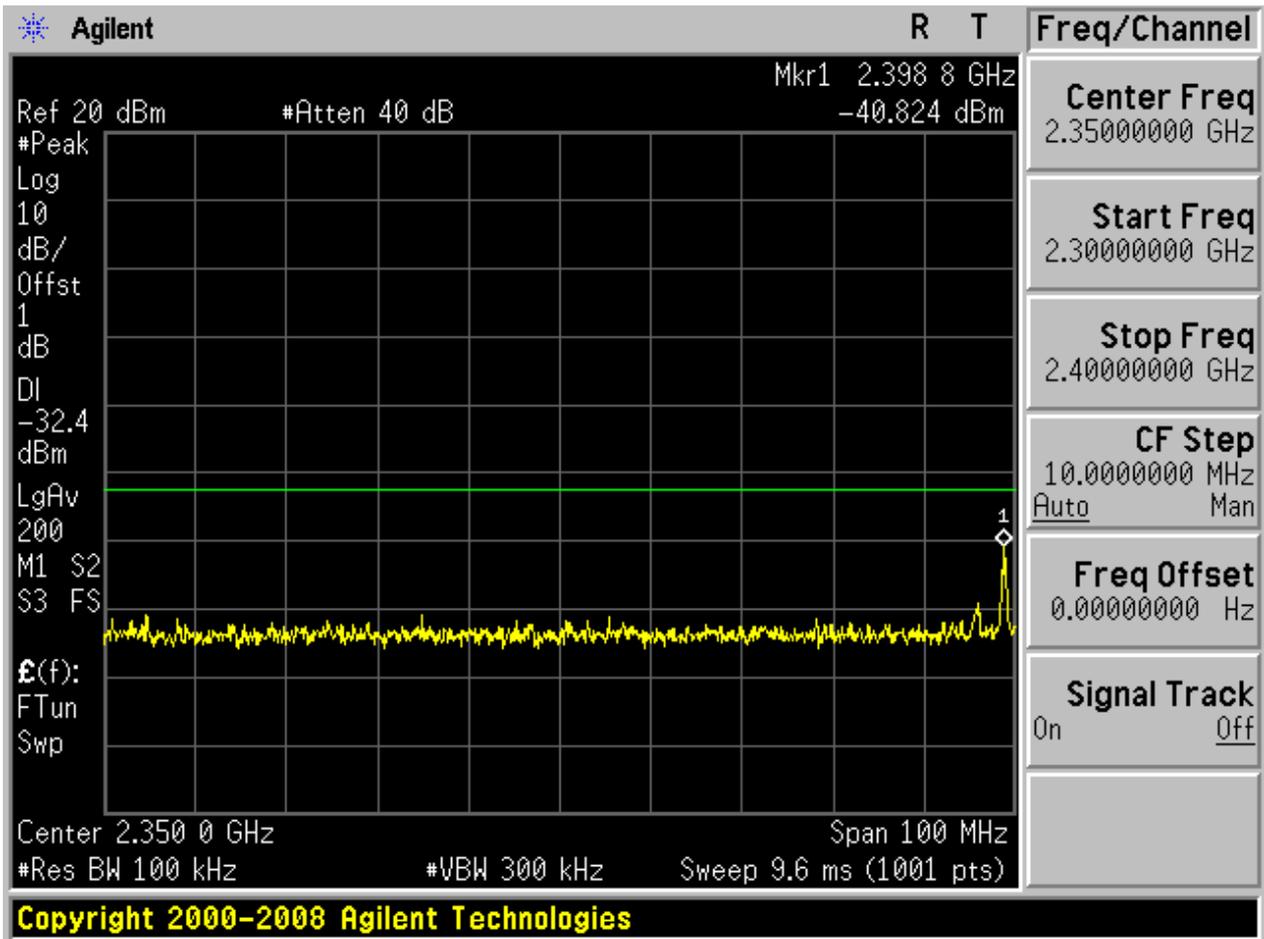


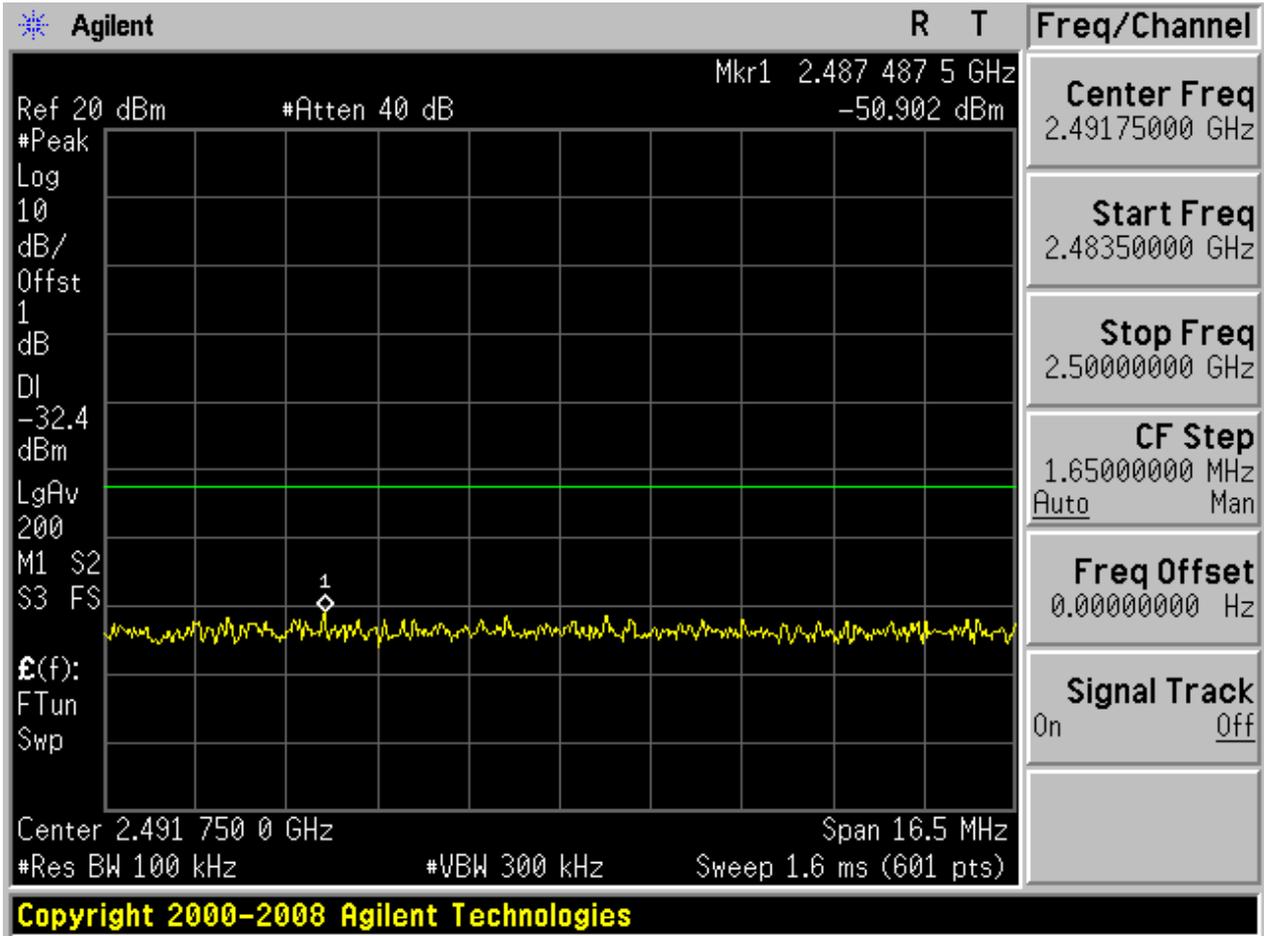
Puw:

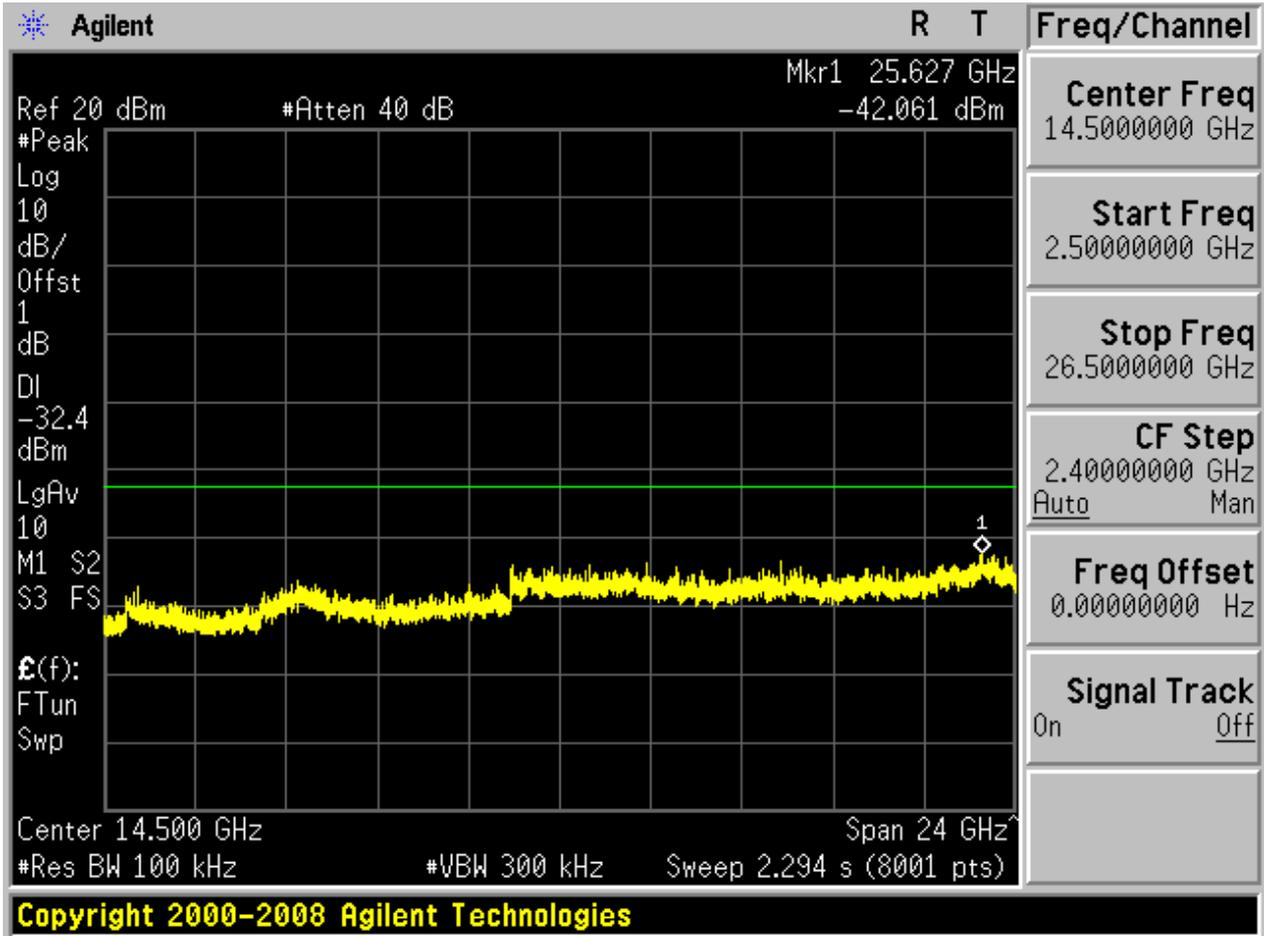








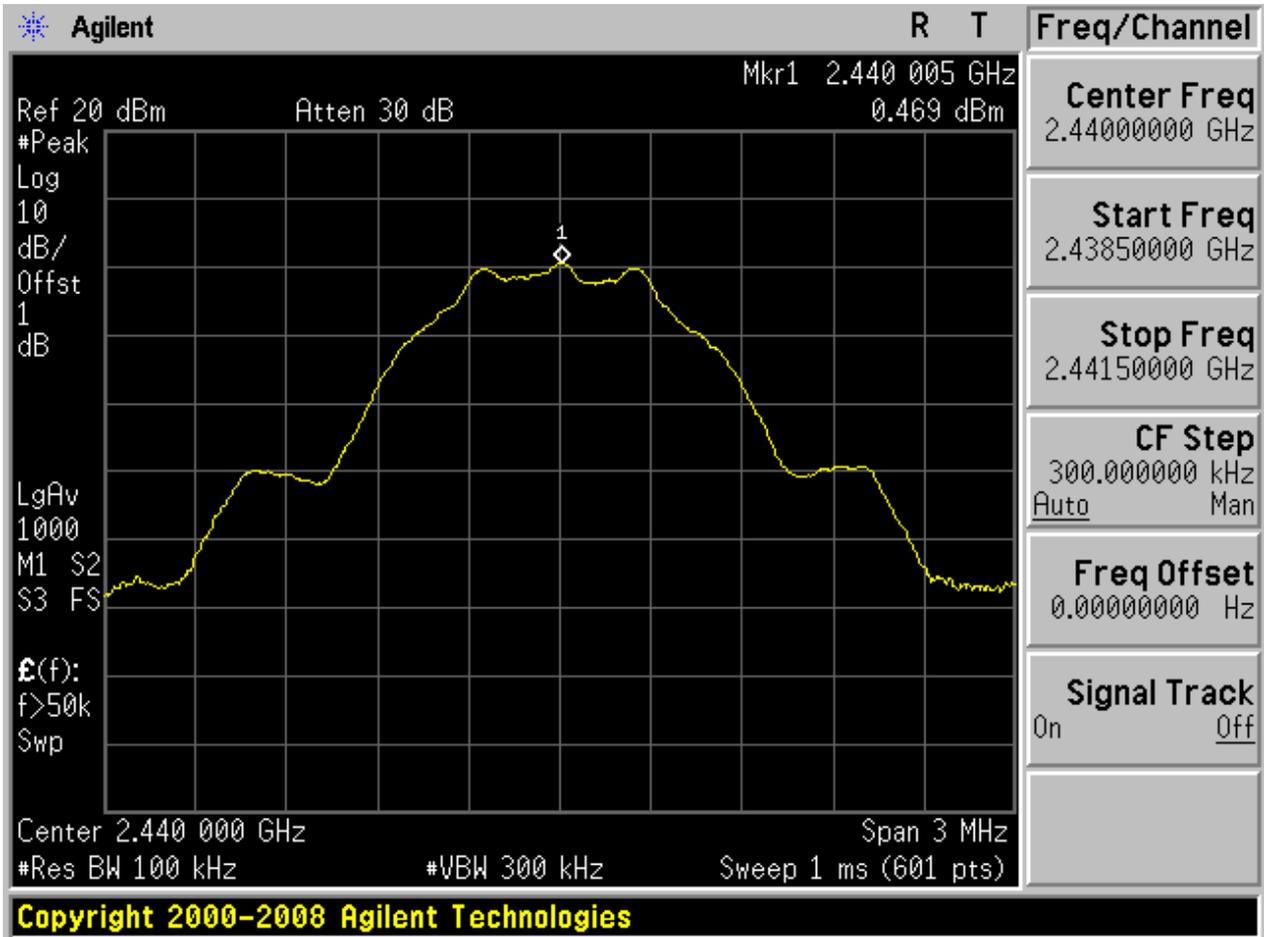






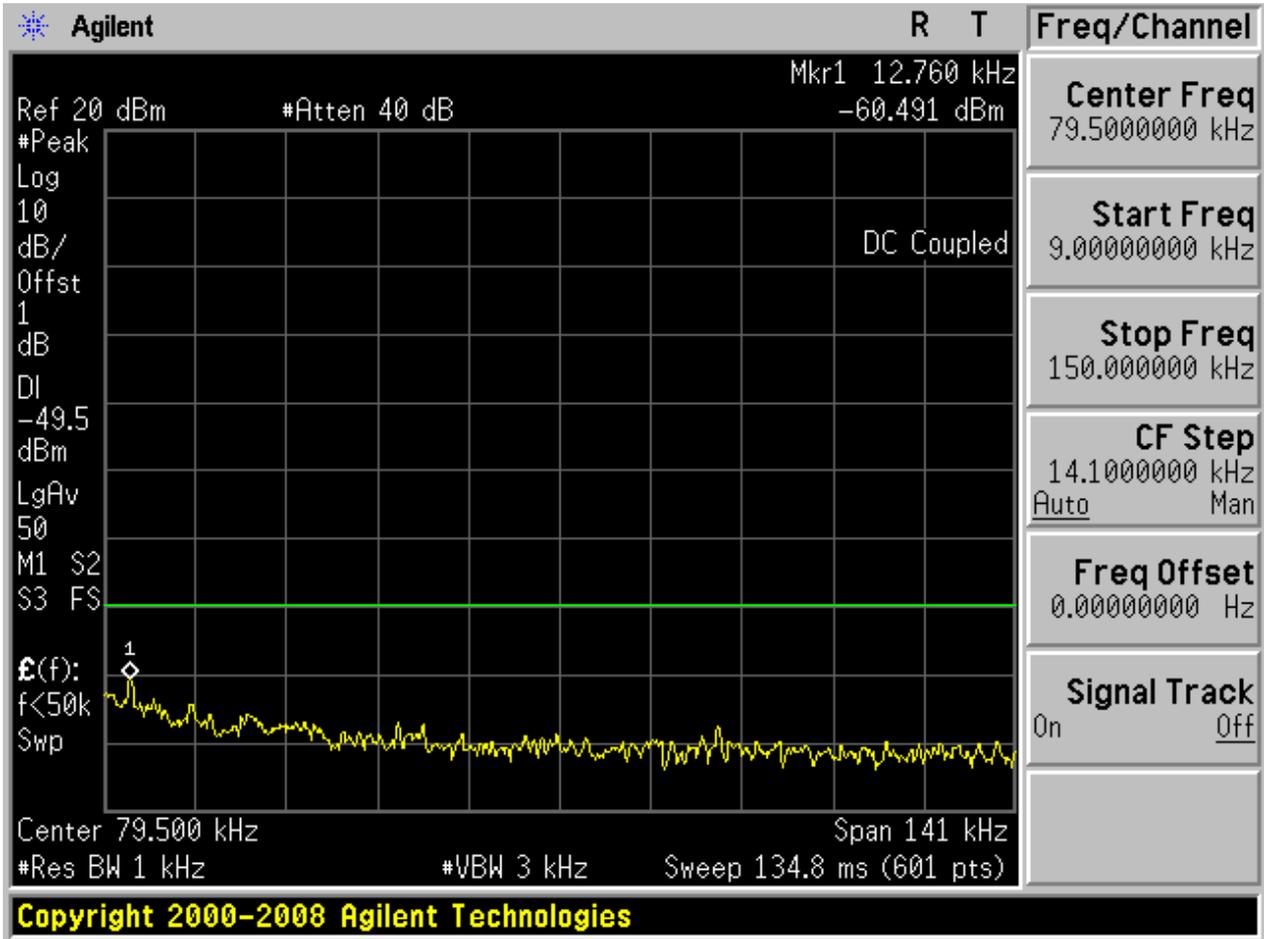
2.2 TM1_Ch19_M

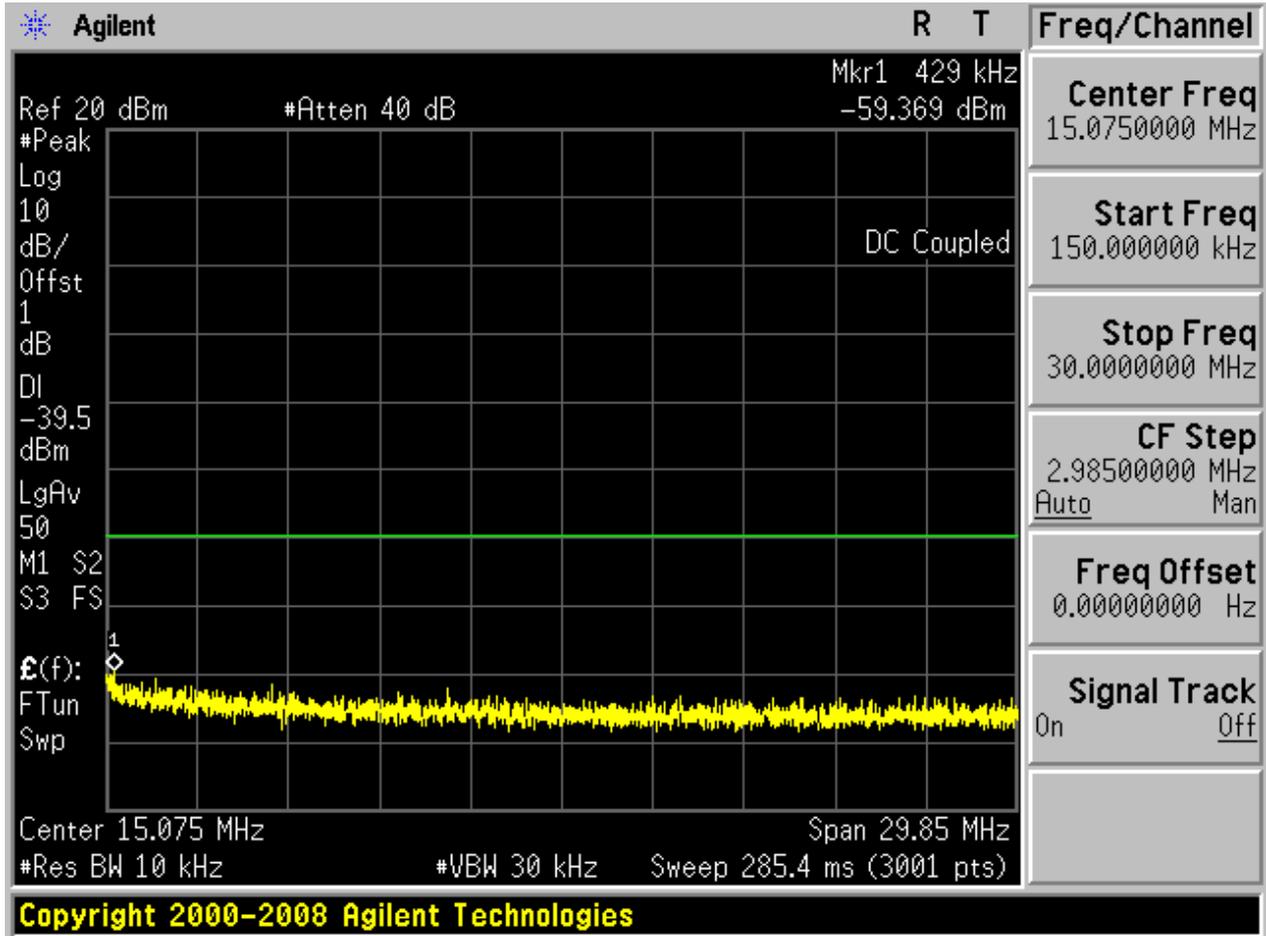
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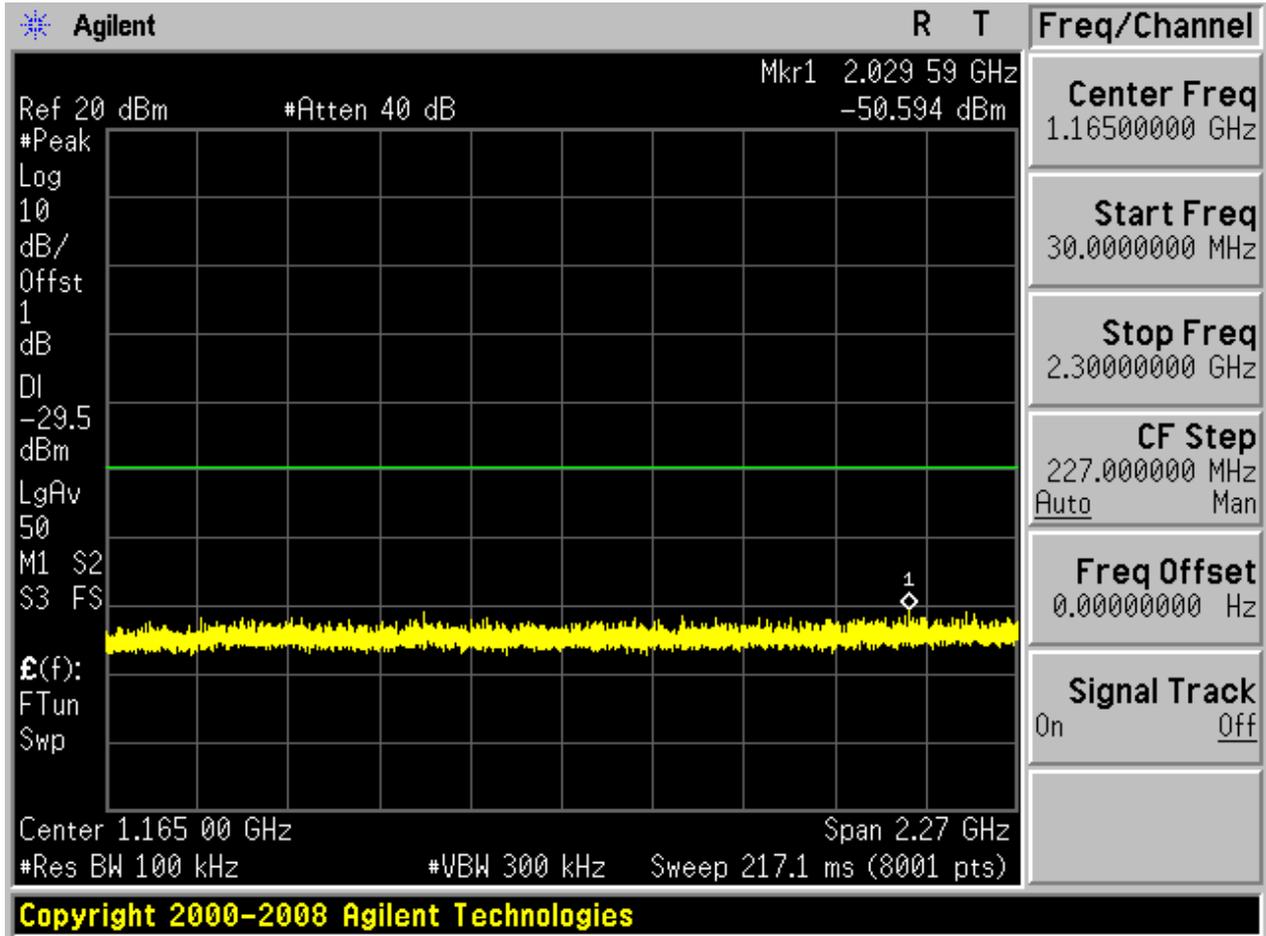


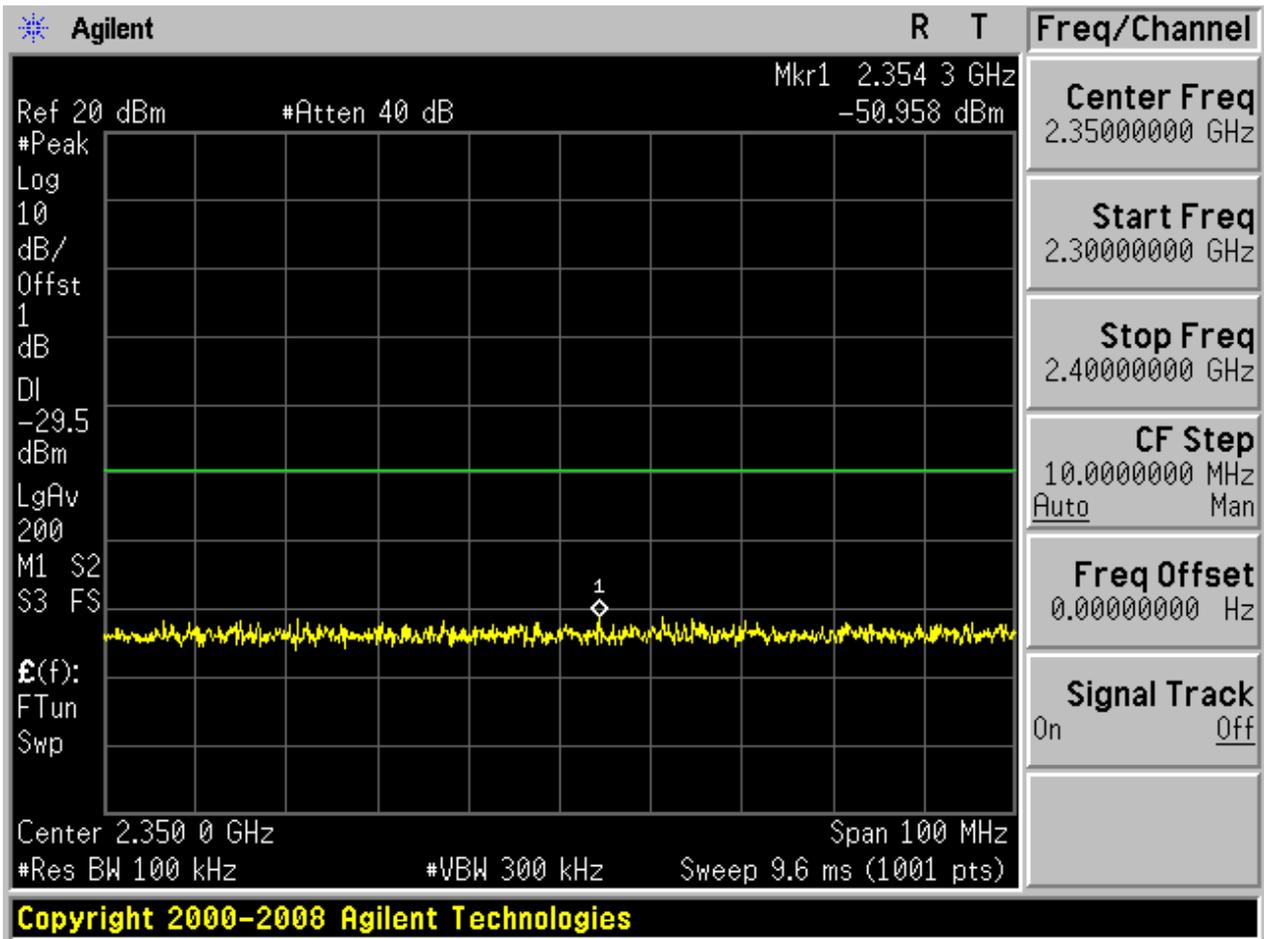


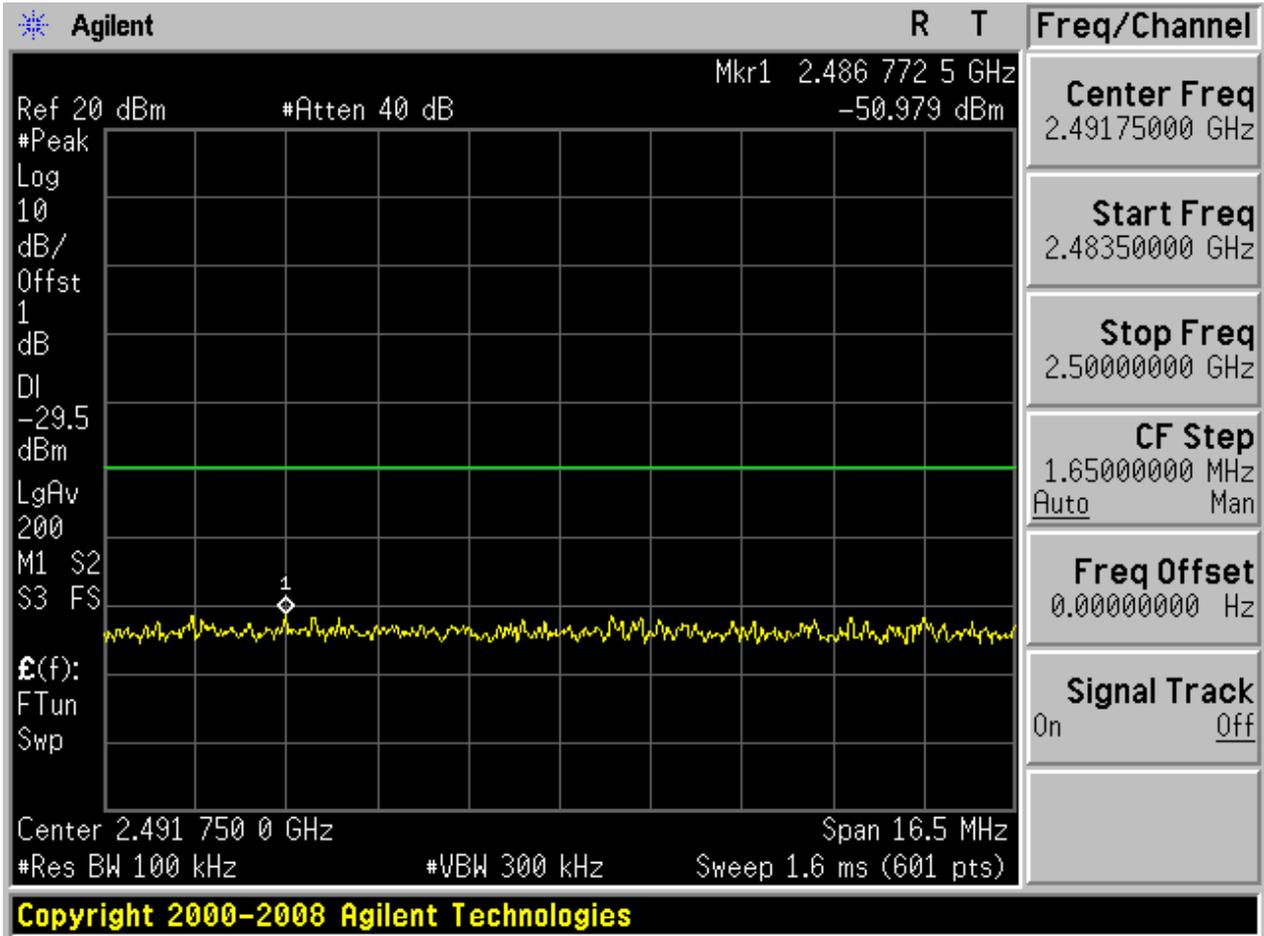
Puw:

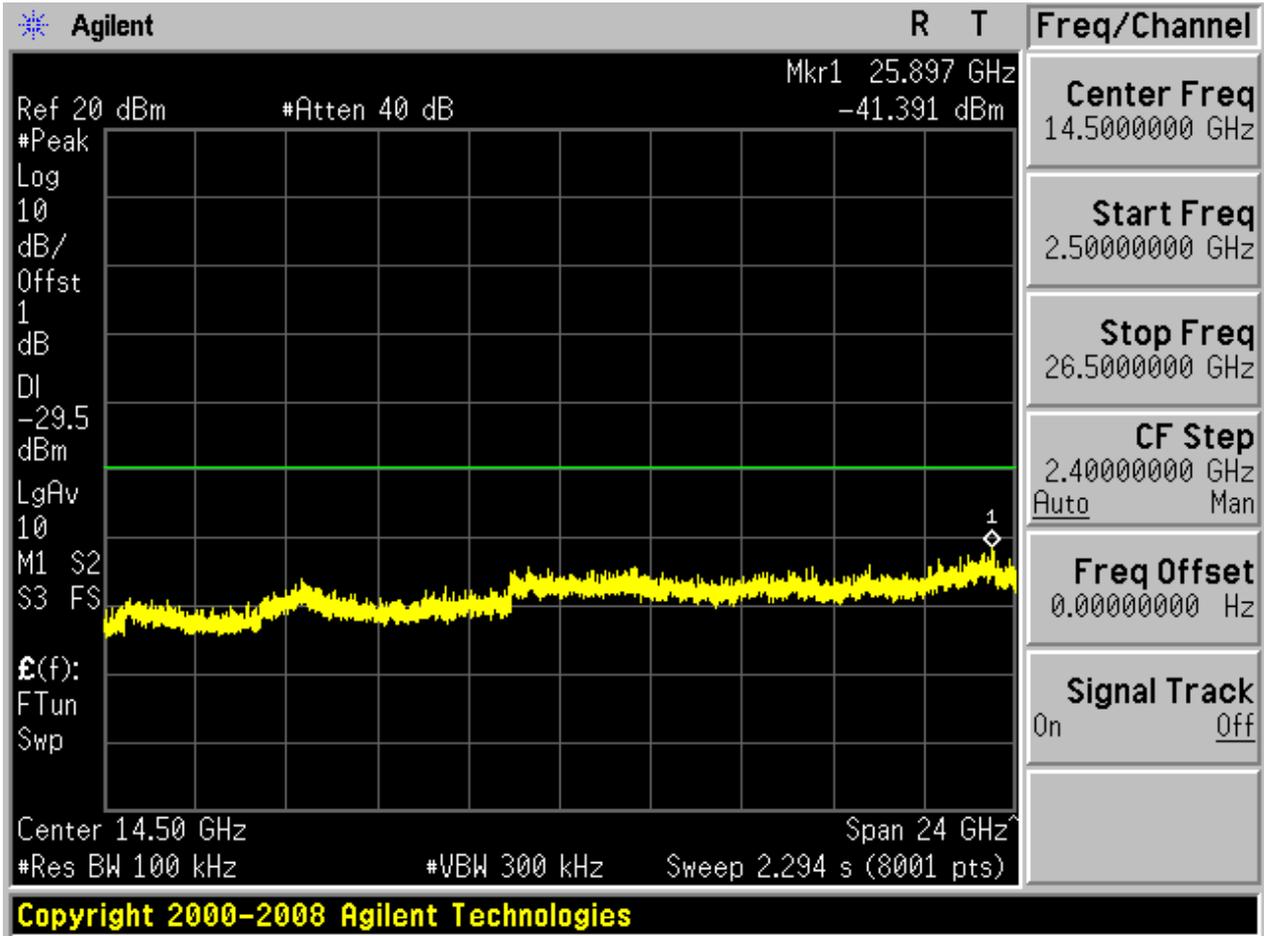








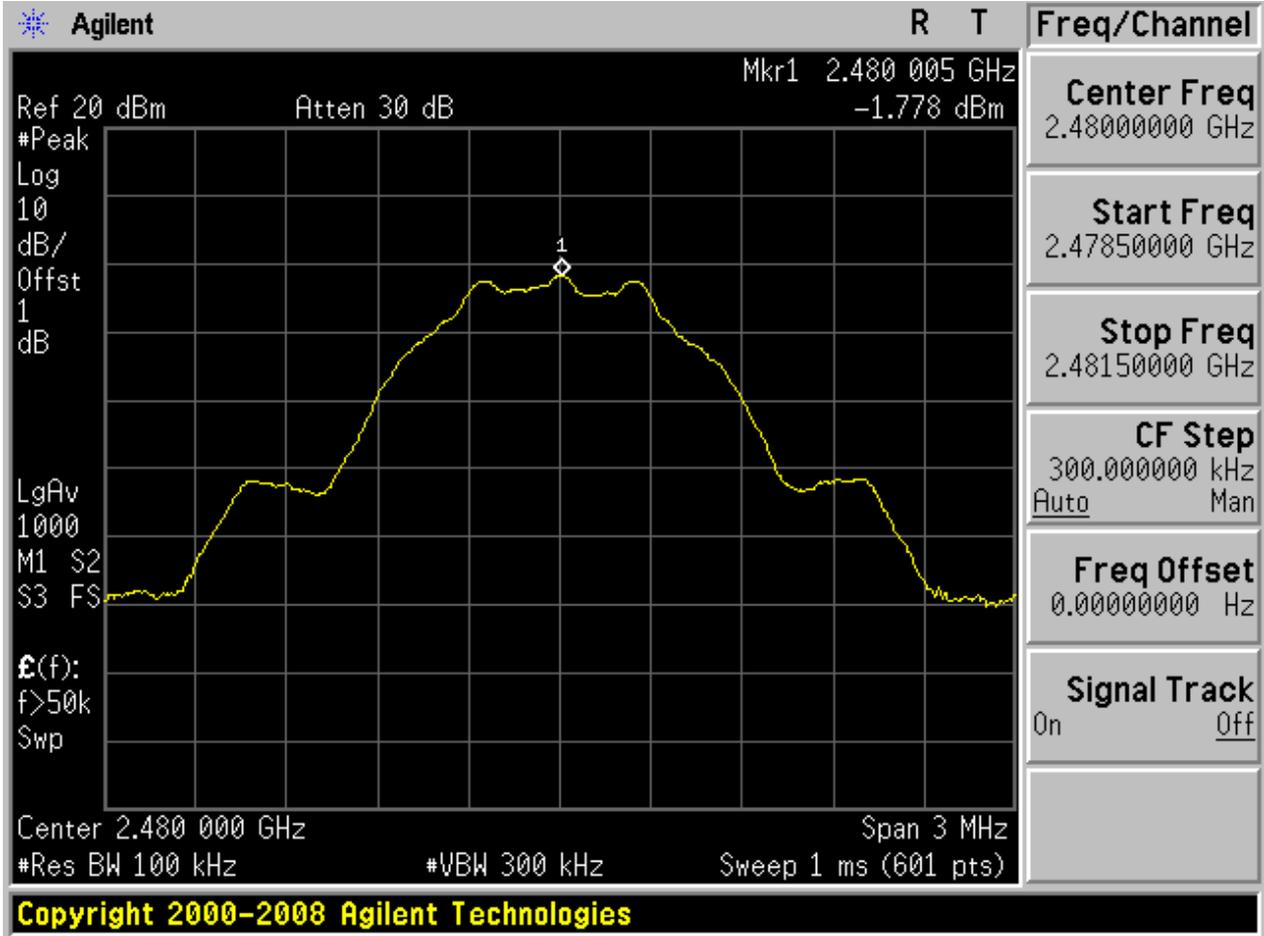




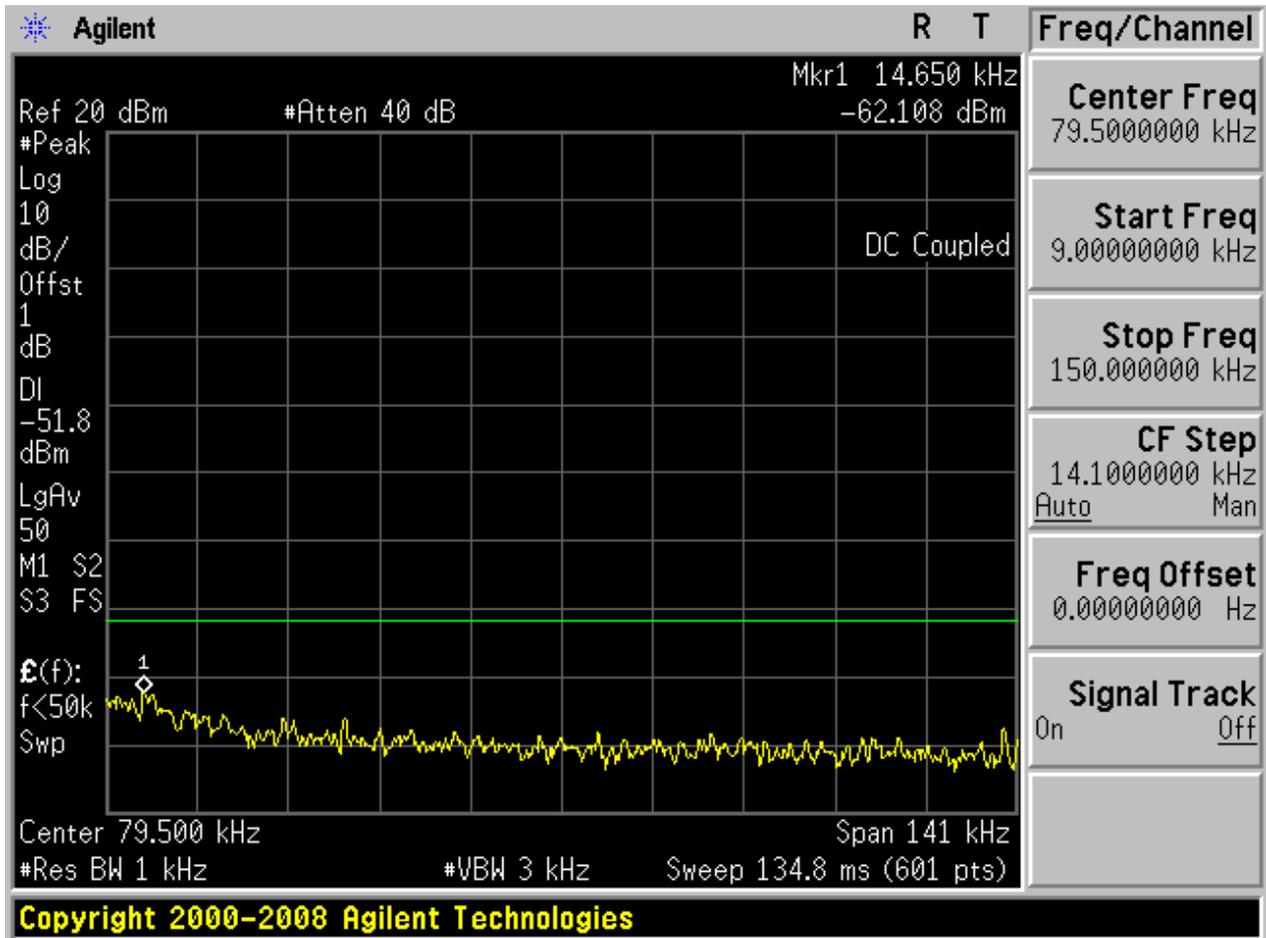


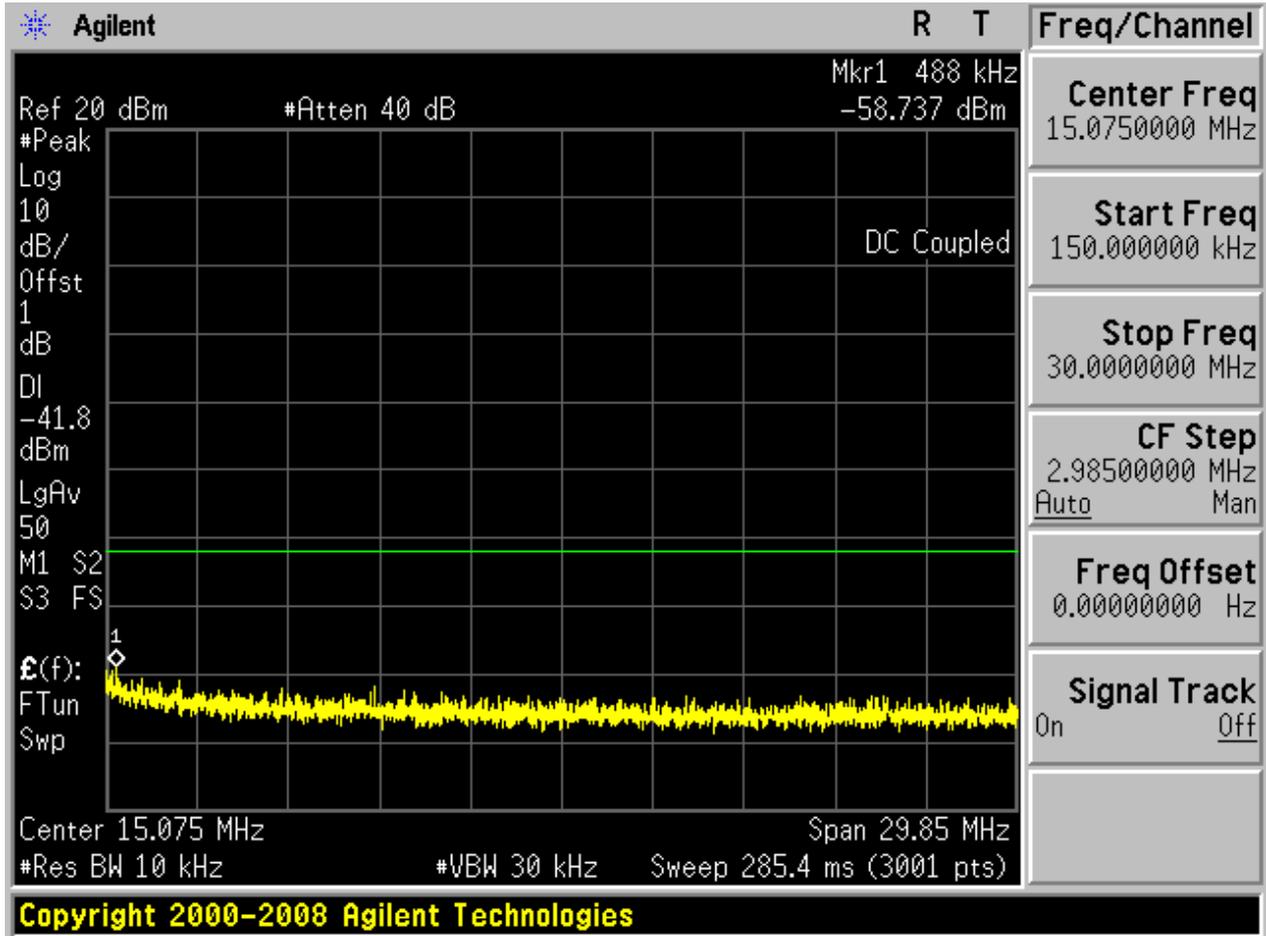
2.3 TM1_Ch39_H

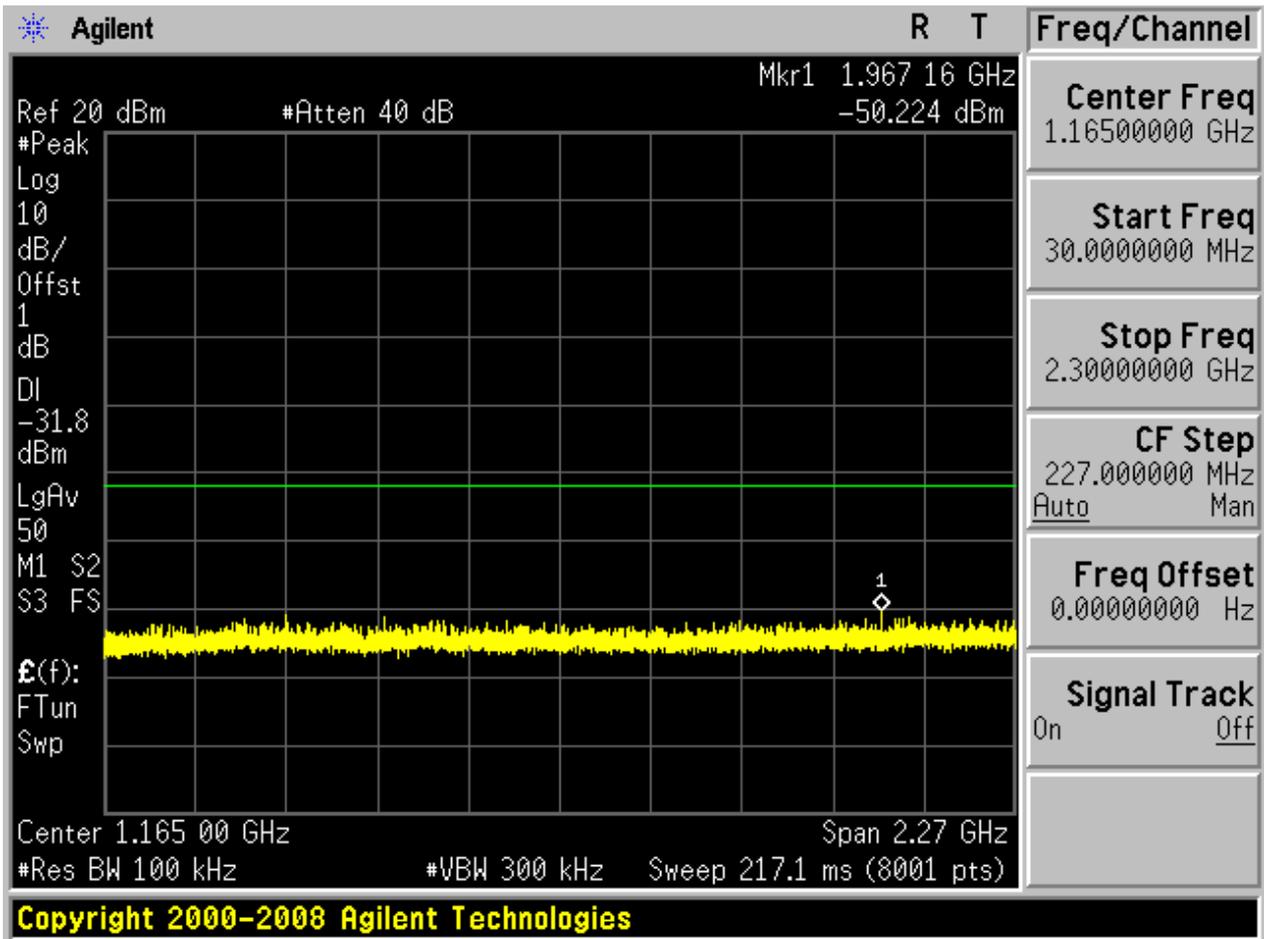
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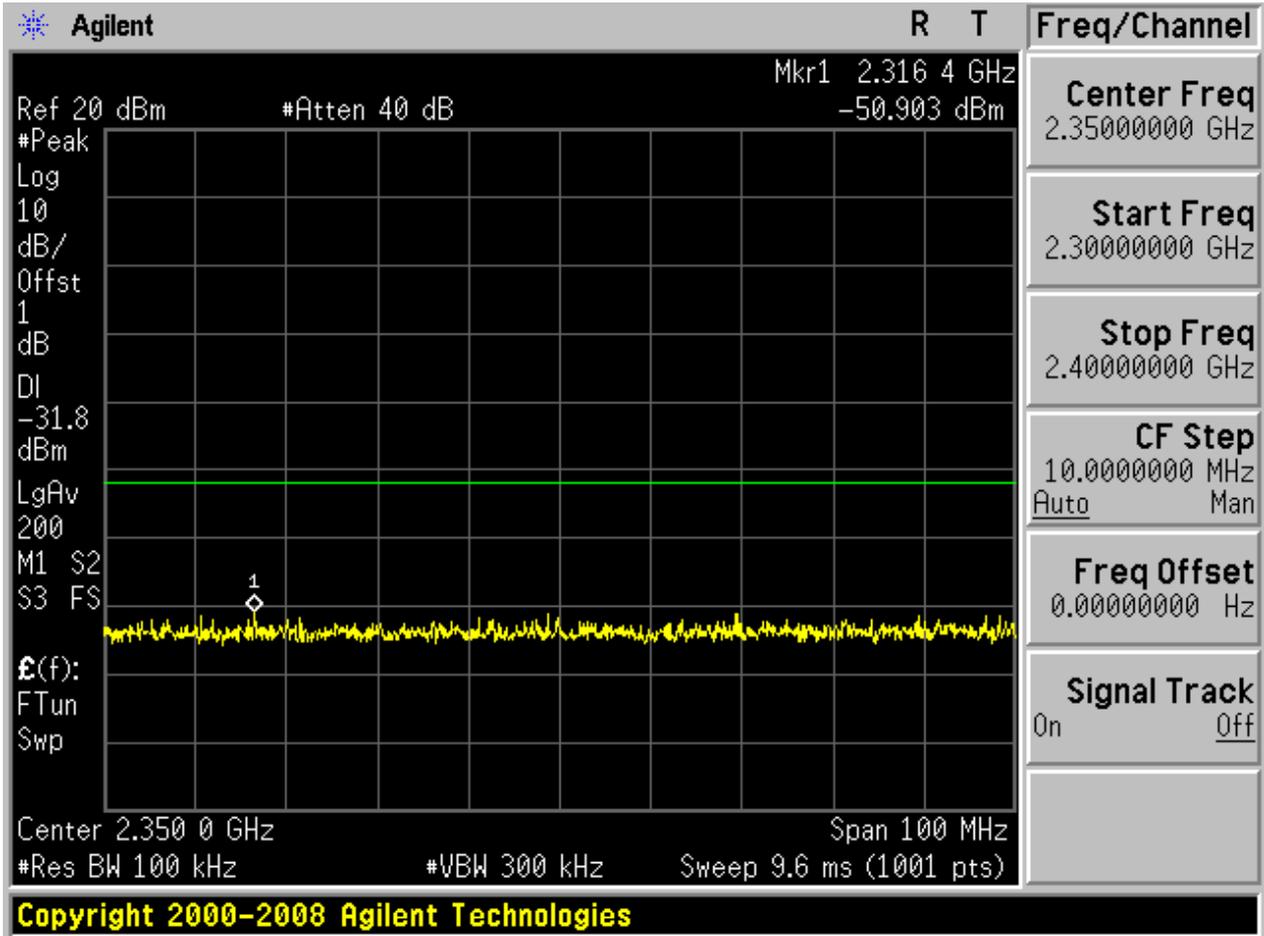


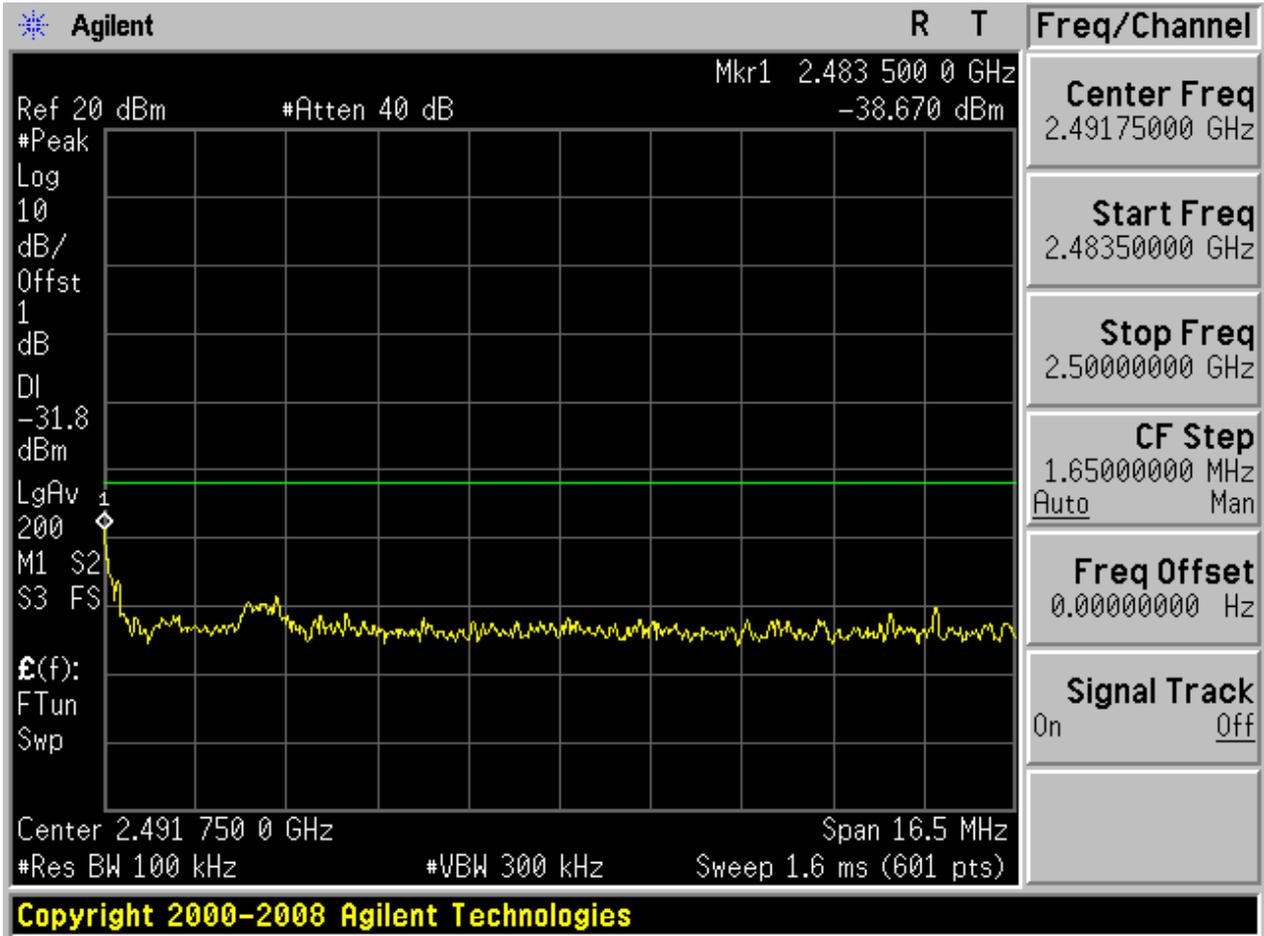
Puw:

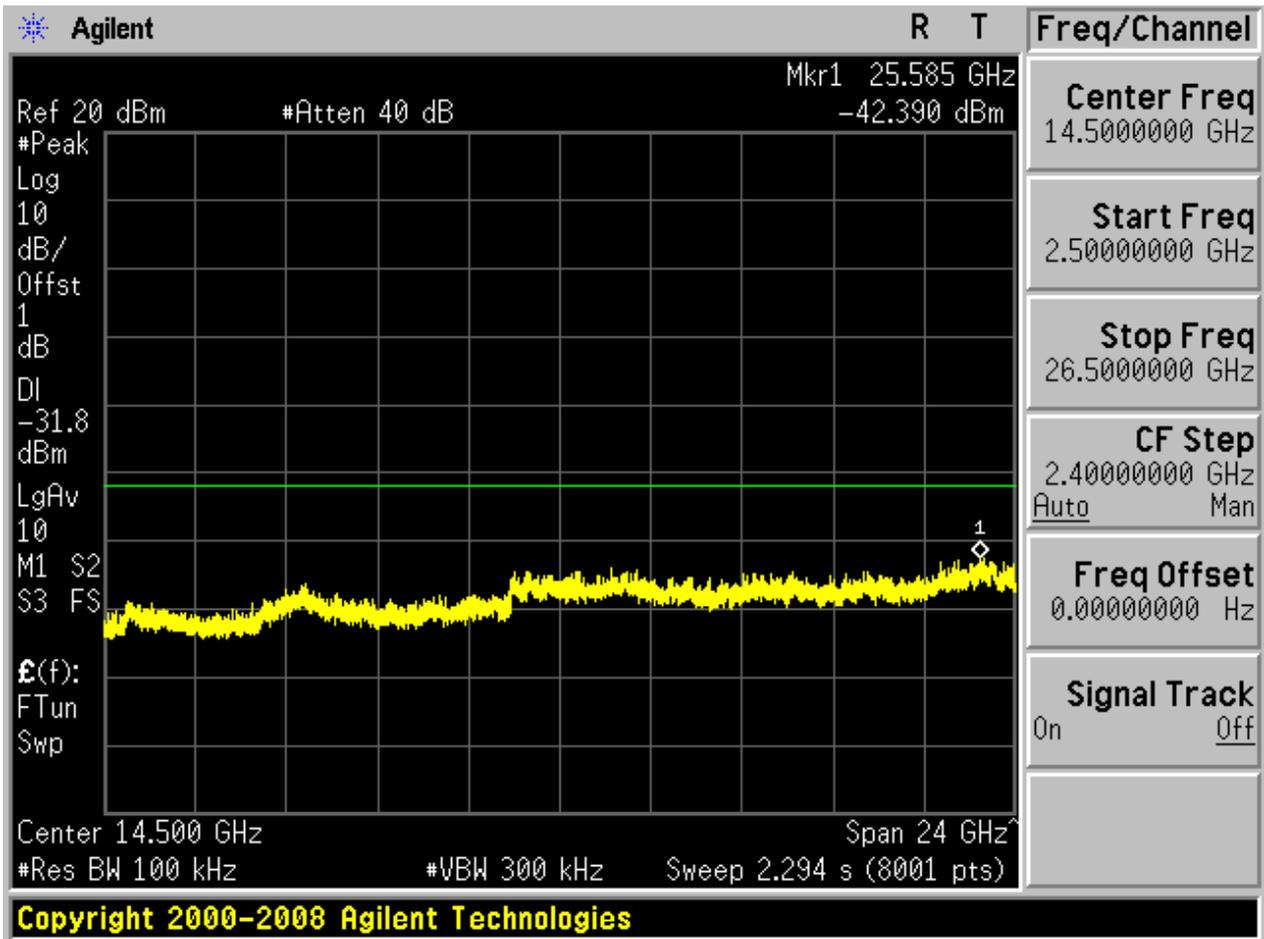














Appendix H: Radiated Spurious Emission & Spurious in Restricted Band

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

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

The simultaneous transmission has been considered

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

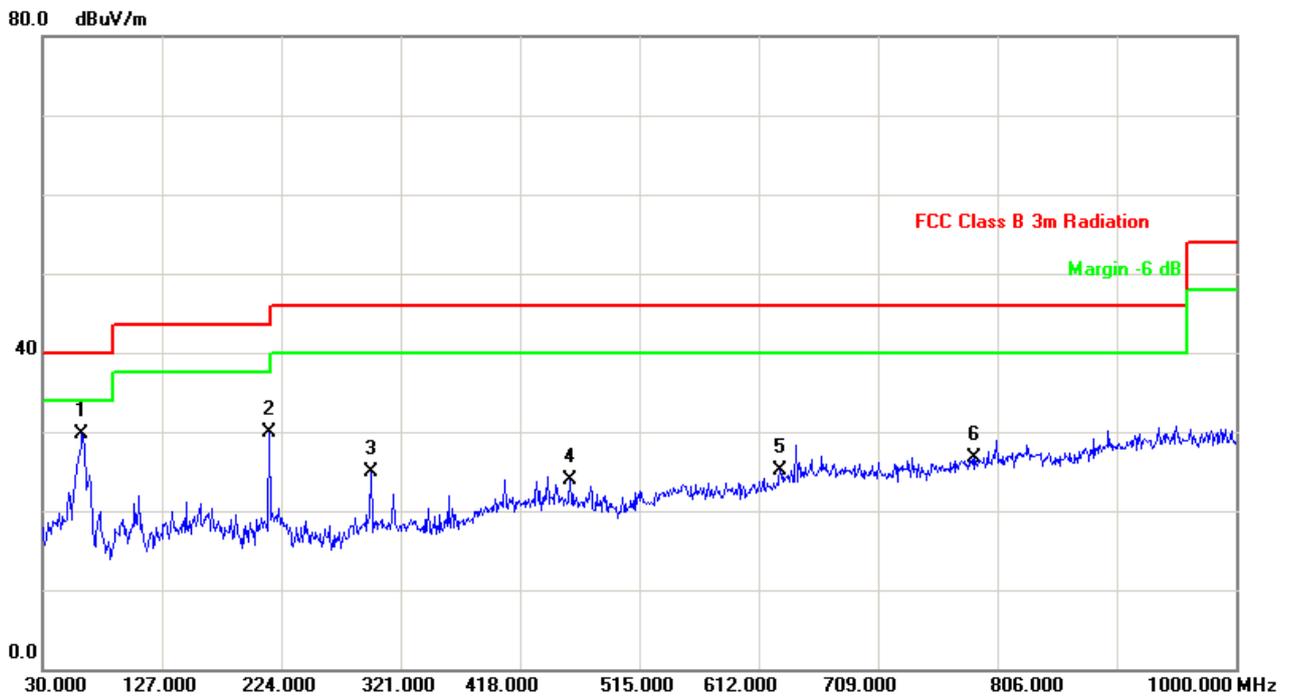
Part 1: Testing Range of “9 kHz to 30MHz”

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

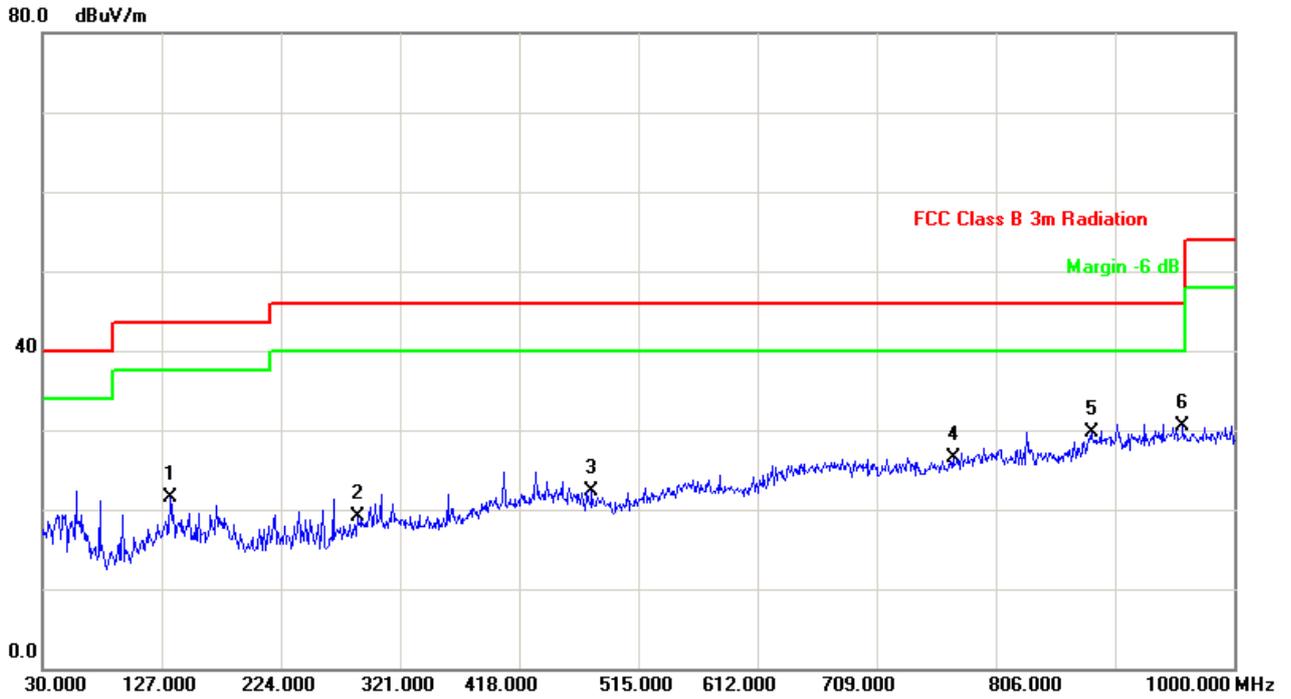
Part 2: Testing Range of “30 MHz to 1 GHz”

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).



No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Margin dB	Plarization
1		62.0100	43.62	-13.83	29.79	40.00	-10.21	VERTICAL
2		214.3000	43.46	-13.58	29.88	43.50	-13.62	VERTICAL
3		296.7500	34.62	-9.66	24.96	46.00	-21.04	VERTICAL
4		458.7400	30.03	-6.16	23.87	46.00	-22.13	VERTICAL
5		629.4600	28.01	-2.87	25.14	46.00	-20.86	VERTICAL
6		787.5700	26.98	-0.23	26.75	46.00	-19.25	VERTICAL



No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Margin dB	Comment
1		133.79	33.03	-11.53	21.50	43.50	-22.00	HORIZONTAL
2		286.08	29.46	-10.31	19.15	46.00	-26.85	HORIZONTAL
3		477.17	29.03	-6.70	22.33	46.00	-23.67	HORIZONTAL
4		771.08	27.19	-0.75	26.44	46.00	-19.56	HORIZONTAL
5		883.60	28.50	1.17	29.67	46.00	-16.33	HORIZONTAL
6		958.290	27.39	3.07	30.46	46.00	-15.54	HORIZONTAL



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

NOTE1: No peak found in the Test Range of “18 GHz to 26.5GHz”

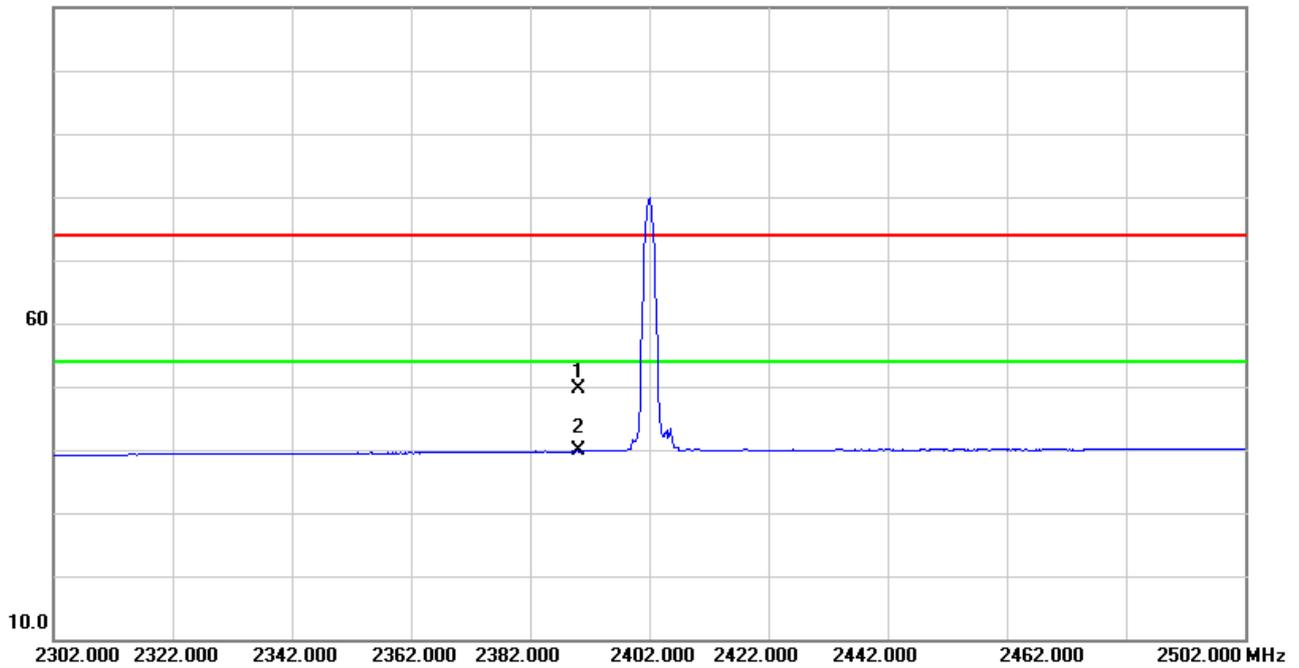
Part 4: Testing Range of “2.3GHz to 2.5GHz”

- 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.

Channel 0

Vertical

110.0 dB μ V/m

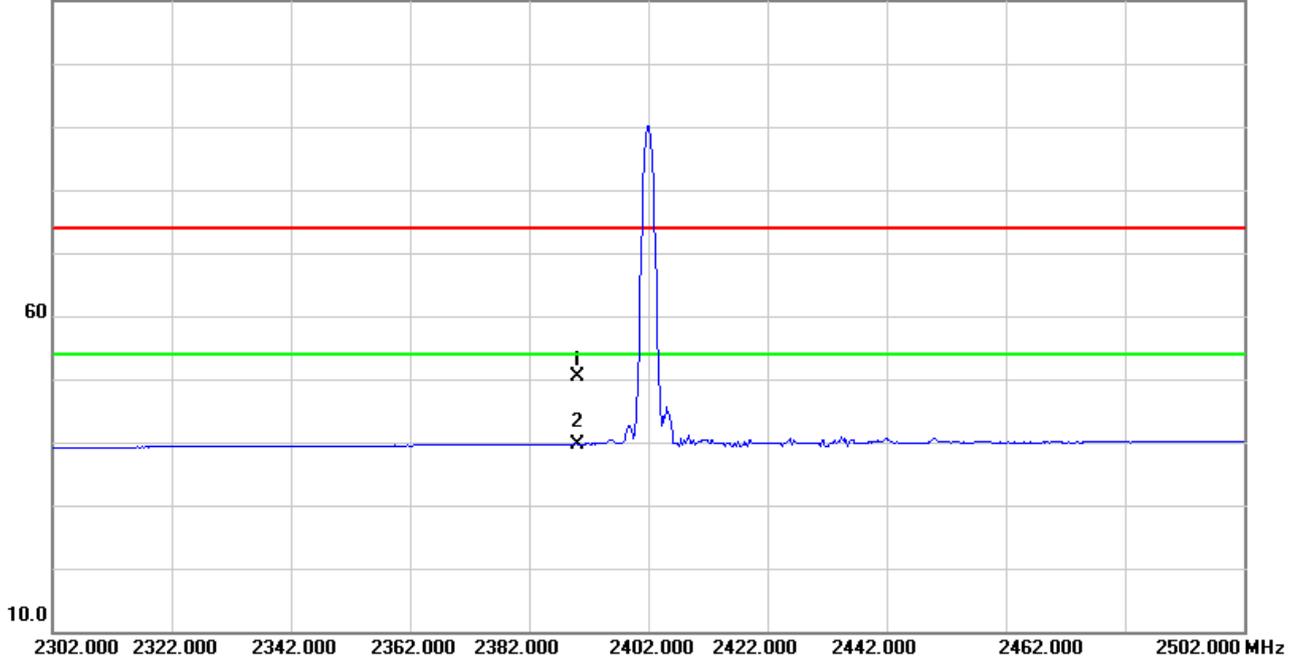


Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Polarization
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	13.73	35.88	49.61	74.00	-24.39	peak	VERTICAL
2	*	2390.000	3.93	35.88	39.81	54.00	-14.19	AVG	VERTICAL

Horizontal

110.0 dBuV/m



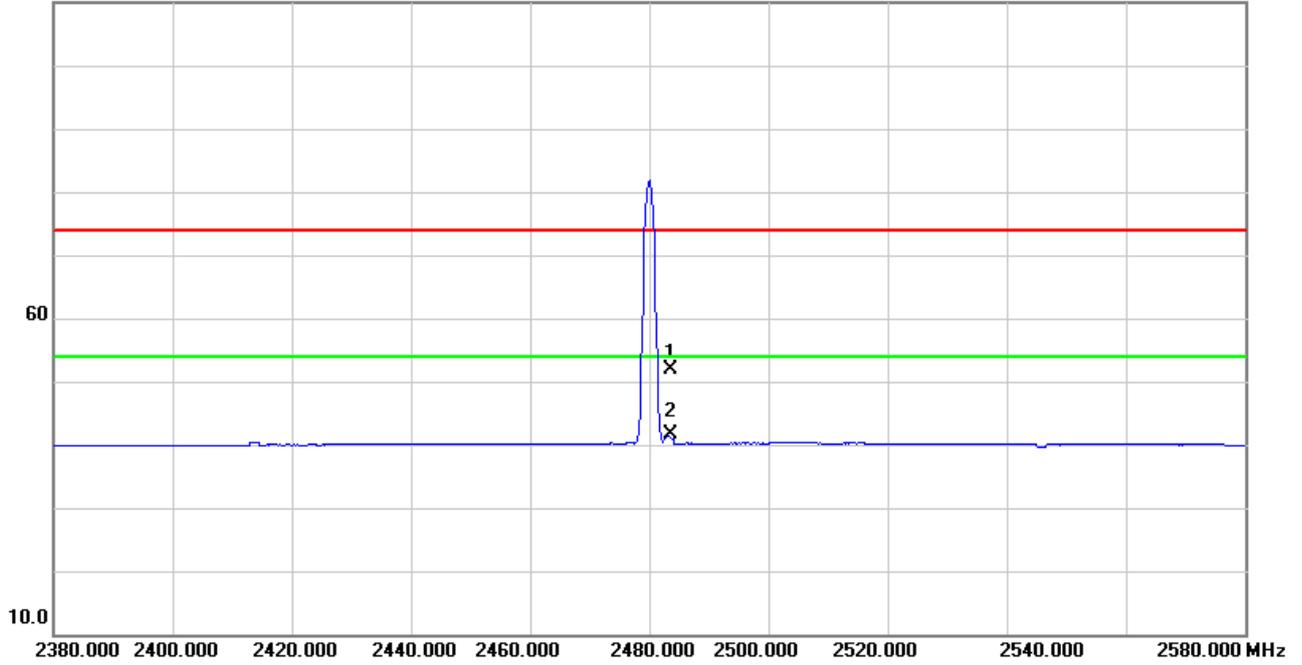
Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Polarization
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	14.44	35.88	50.32	74.00	-23.68	peak	HORIZONTAL
2	*	2390.000	3.78	35.88	39.66	54.00	-14.34	AVG	HORIZONTAL

Channel 39

Vertical

110.0 dBuV/m

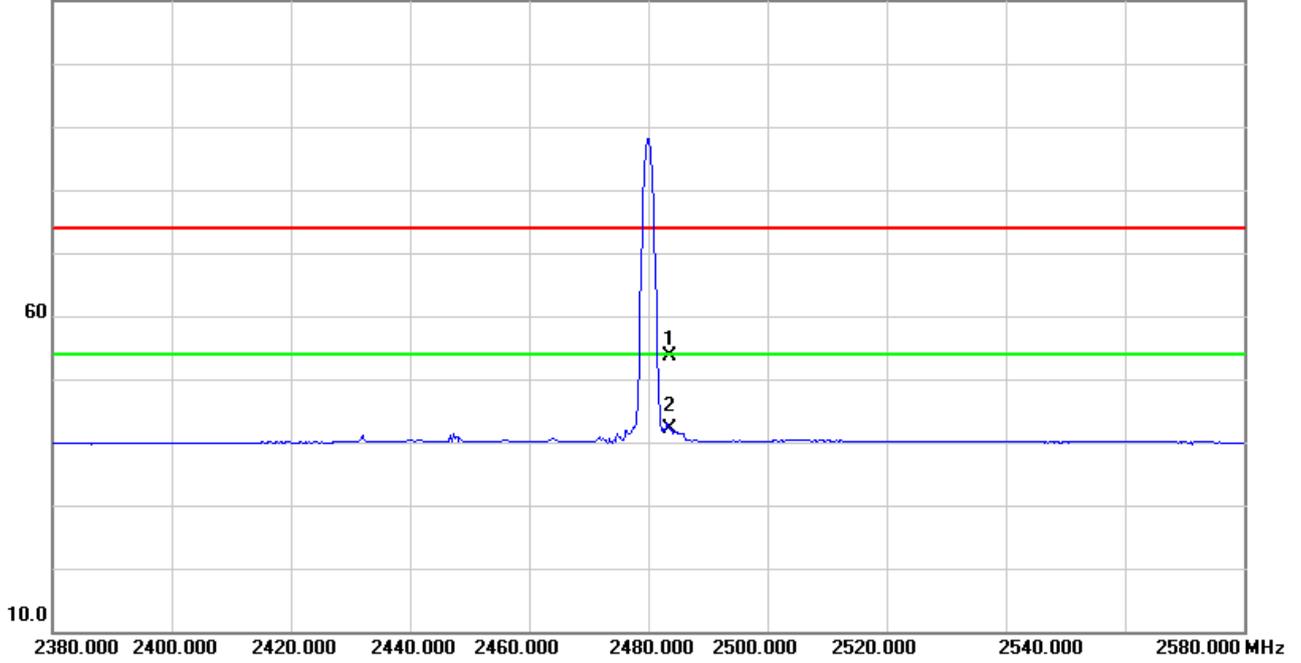


Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Polarization
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	15.58	36.39	51.97	74.00	-22.03	peak	VERTICAL
2	*	2483.500	5.34	36.39	41.73	54.00	-12.27	AVG	VERTICAL

Horizontal

110.0 dBuV/m



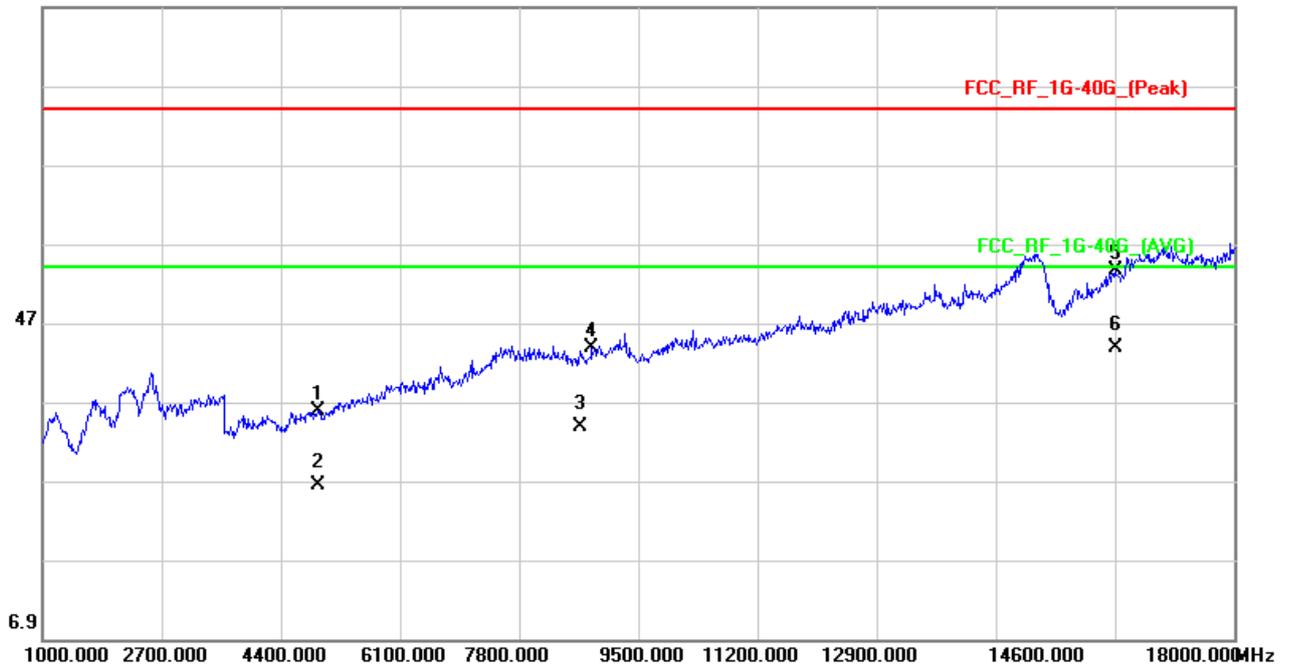
Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Polarization
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2483.500	17.34	36.39	53.73	74.00	-20.27	peak	HORIZONTAL
2	*	2483.500	5.76	36.39	42.15	54.00	-11.85	AVG	HORIZONTAL

Part 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).

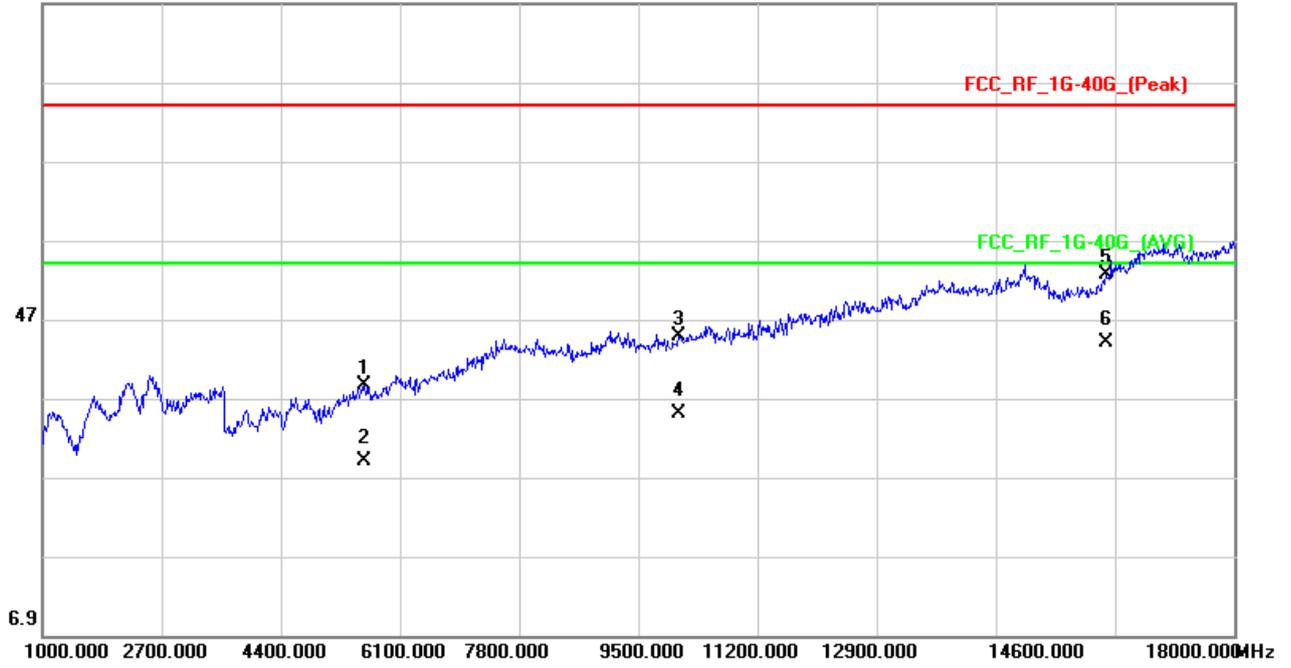
Vertical

86.9 dB μ V/m



Horizontal

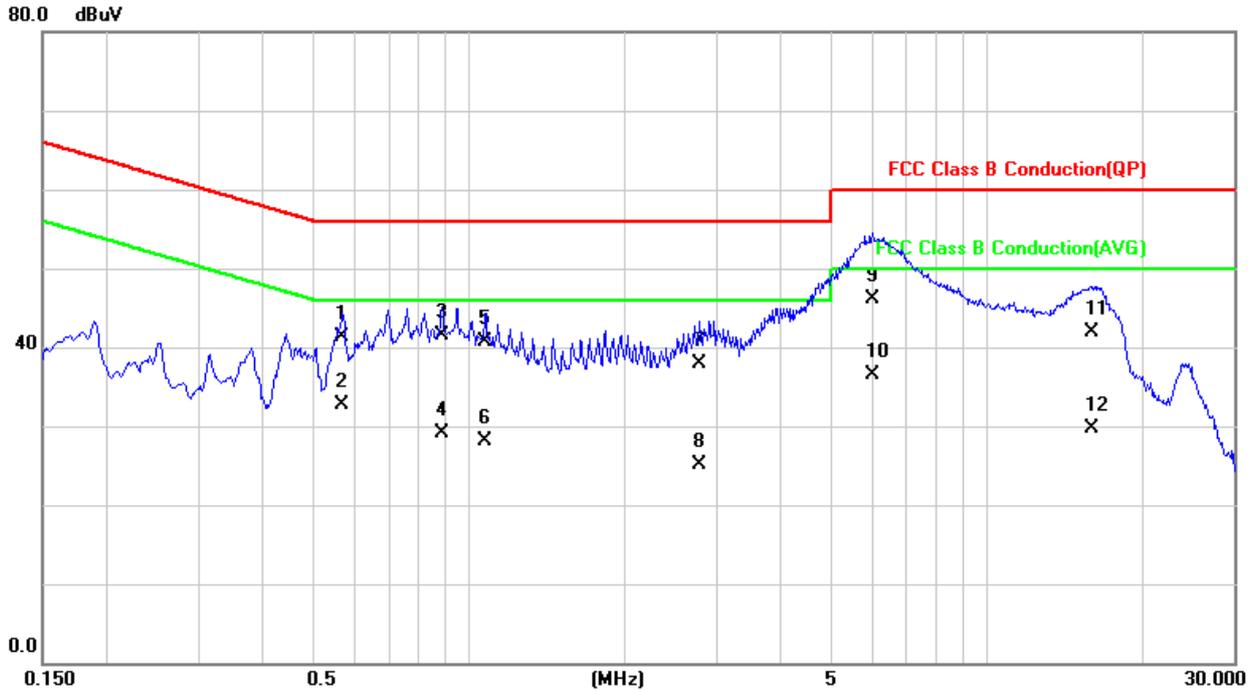
86.9 dBuV/m



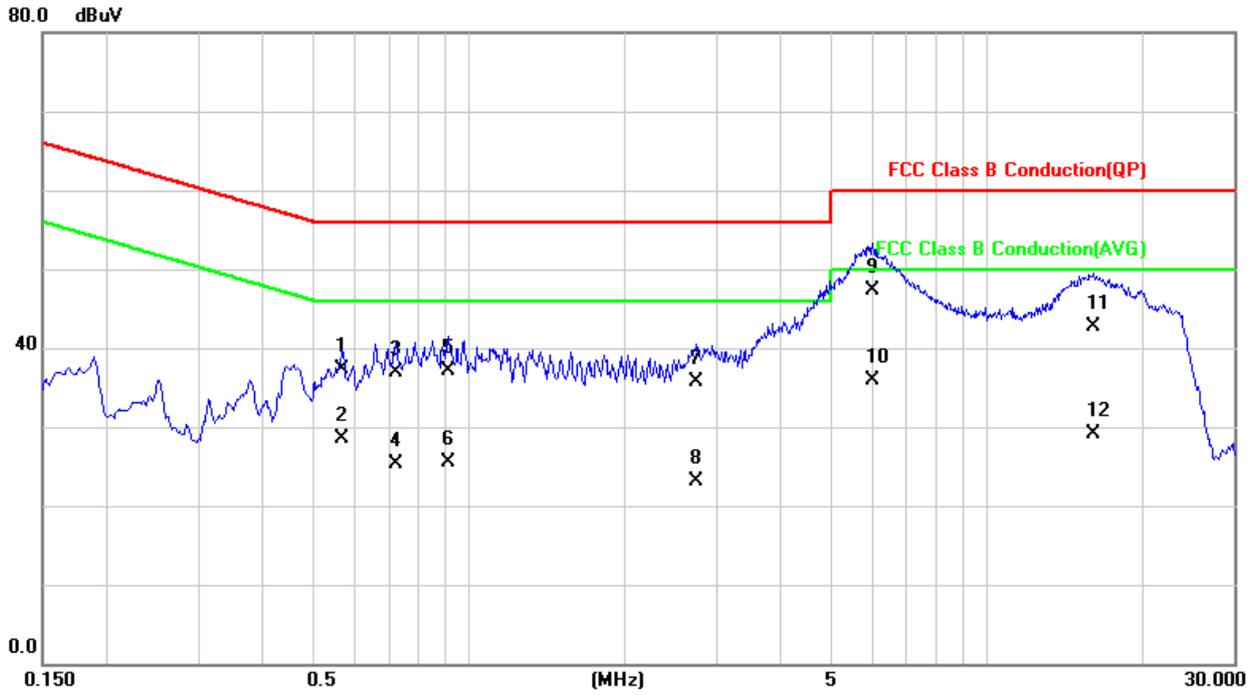
8 Appendix I: Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz

Channel 39



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Line
1	0.5685	31.40	9.84	41.24	56.00	-14.76	QP	L1
2	0.5685	22.90	9.84	32.74	46.00	-13.26	AVG	L1
3	0.8857	31.50	9.95	41.45	56.00	-14.55	QP	L1
4	0.8857	19.10	9.95	29.05	46.00	-16.95	AVG	L1
5	1.0747	30.70	9.99	40.69	56.00	-15.31	QP	L1
6	1.0747	18.20	9.99	28.19	46.00	-17.81	AVG	L1
7	2.7802	28.10	9.87	37.97	56.00	-18.03	QP	L1
8	2.7802	15.30	9.87	25.17	46.00	-20.83	AVG	L1
9	6.0090	36.60	9.46	46.06	60.00	-13.94	QP	L1
10	6.0090	27.10	9.46	36.56	50.00	-13.44	AVG	L1
11	15.8955	31.70	10.30	42.00	60.00	-18.00	QP	L1
12	15.8955	19.50	10.30	29.80	50.00	-20.20	AVG	L1



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Line
1	0.5685	27.60	9.67	37.27	56.00	-18.73	QP	N
2	0.5685	18.90	9.67	28.57	46.00	-17.43	AVG	N
3	0.7236	27.30	9.70	37.00	56.00	-19.00	QP	N
4	0.7236	15.60	9.70	25.30	46.00	-20.70	AVG	N
5	0.9127	27.40	9.75	37.15	56.00	-18.85	QP	N
6	0.9127	15.70	9.75	25.45	46.00	-20.55	AVG	N
7	2.7510	25.90	9.83	35.73	56.00	-20.27	QP	N
8	2.7510	13.20	9.83	23.03	46.00	-22.97	AVG	N
9	6.0135	37.20	10.12	47.32	60.00	-12.68	QP	N
10	6.0135	25.80	10.12	35.92	50.00	-14.08	AVG	N
11	16.0598	32.50	10.27	42.77	60.00	-17.23	QP	N
12	16.0598	18.90	10.27	29.17	50.00	-20.83	AVG	N

END