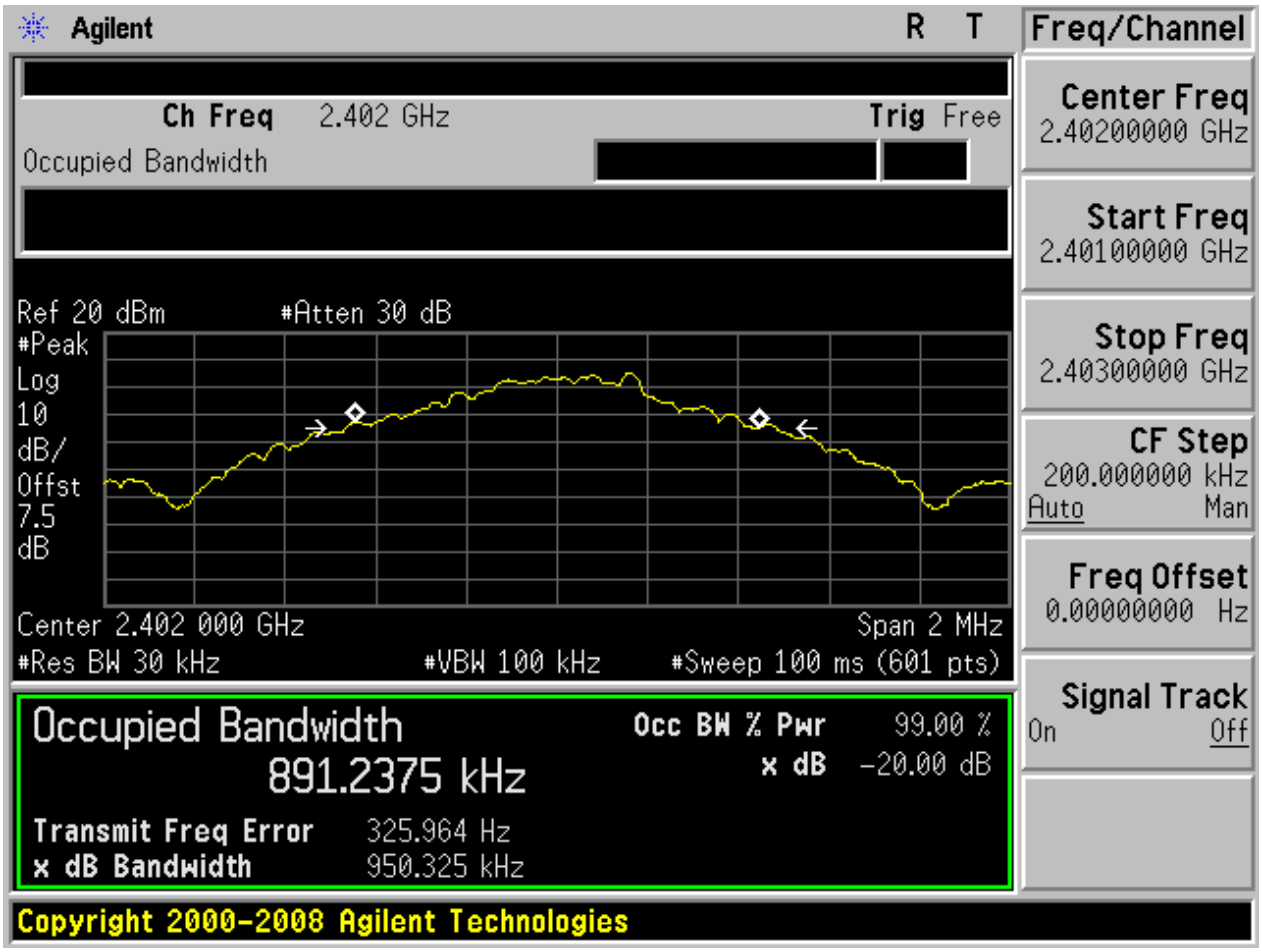
Appendix A: 20dB Emission Bandwidth (EBW)

1 Result Table

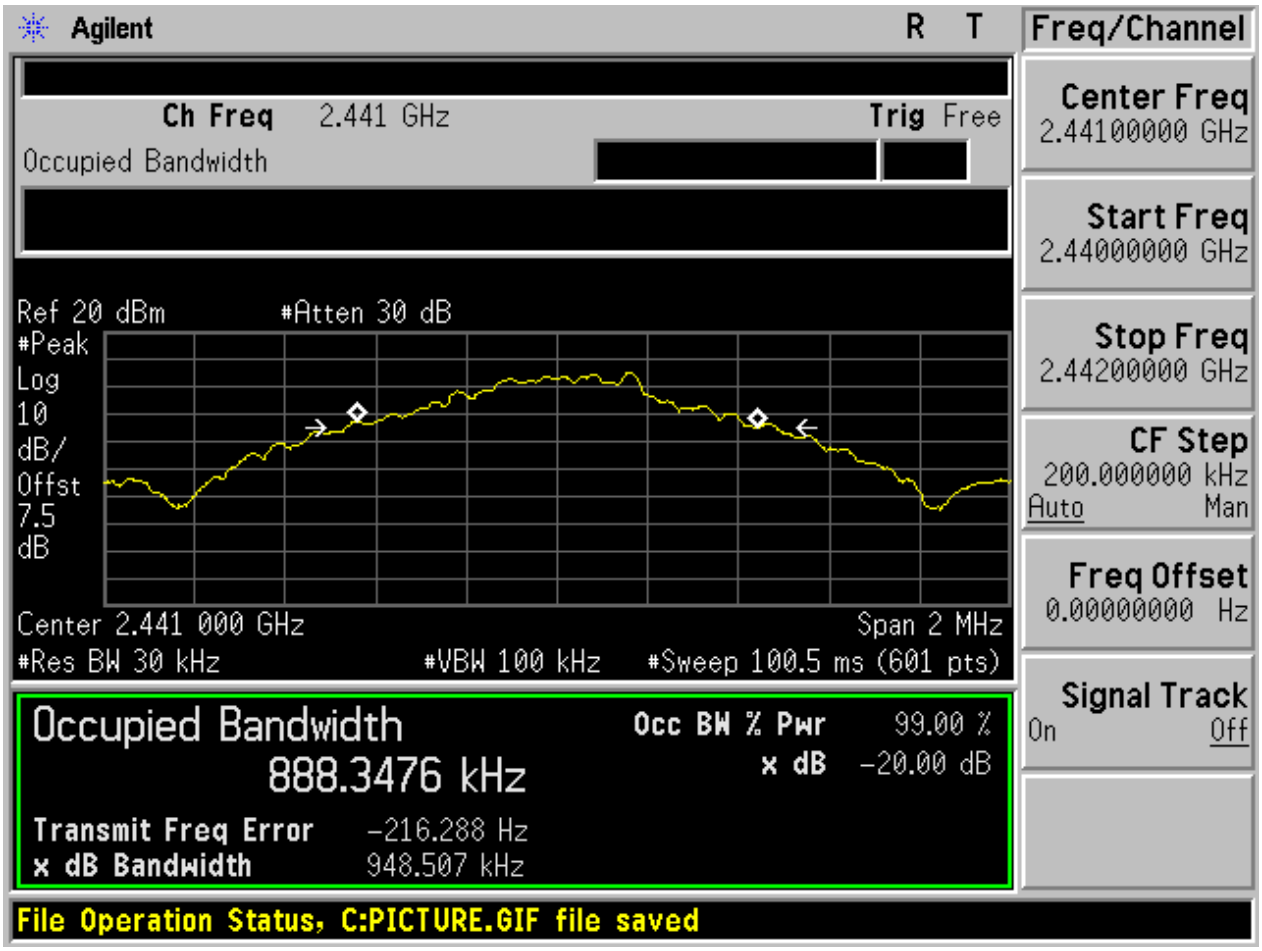
EUT Conf.	EBW [MHz]	Verdict
TM1_DH5_Ch0	0.950	Pass
TM1_DH5_Ch39	0.949	Pass
TM1_DH5_Ch78	0.948	Pass
TM2_2DH5_Ch0	1.278	Pass
TM2_2DH5_Ch39	1.278	Pass
TM2_2DH5_Ch78	1.278	Pass
TM3_3DH5_Ch0	1.264	Pass
TM3_3DH5_Ch39	1.265	Pass
TM3_3DH5_Ch78	1.265	Pass

2 Test Plot

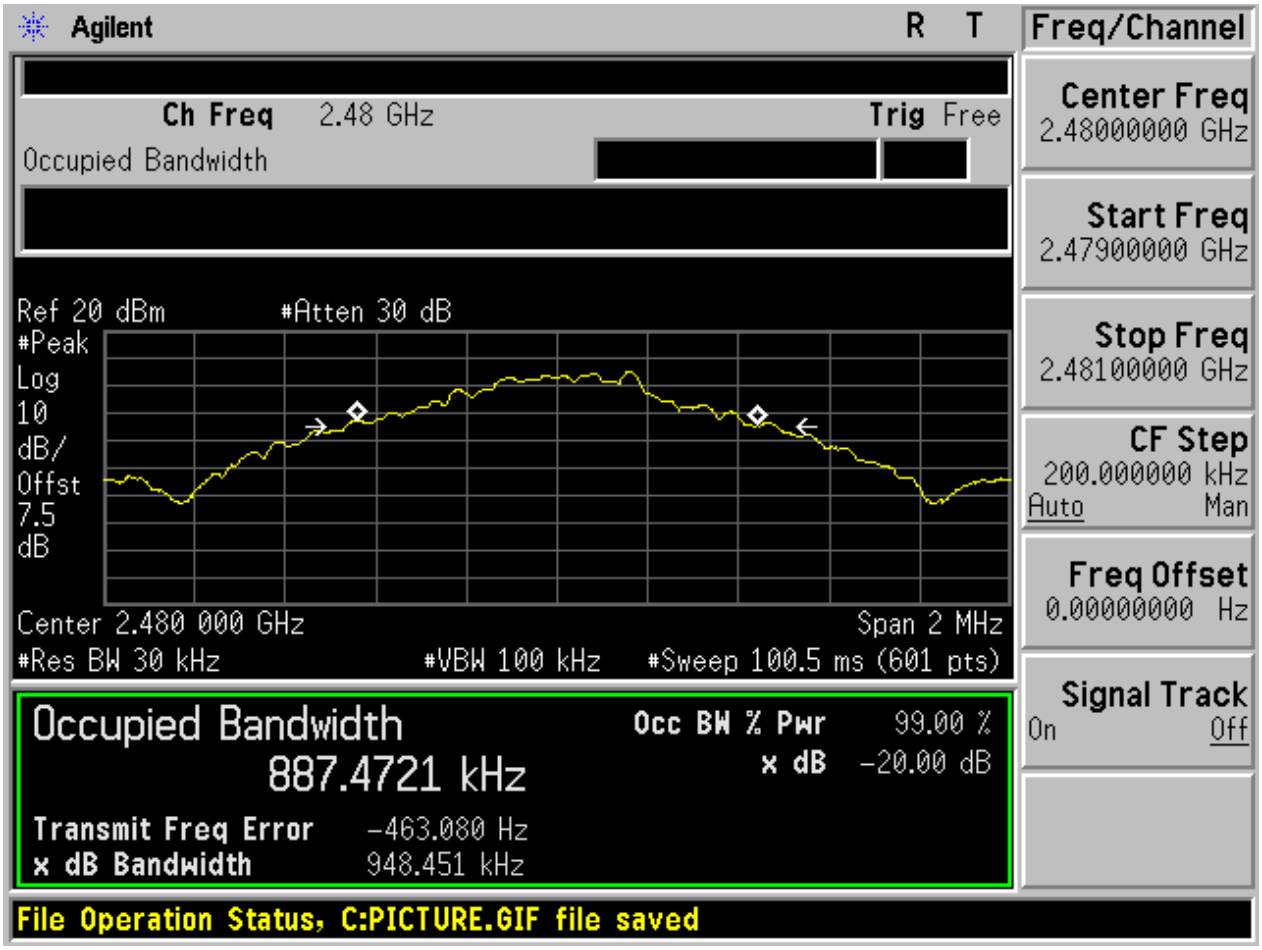
2.1 TM1_DH5_Ch0



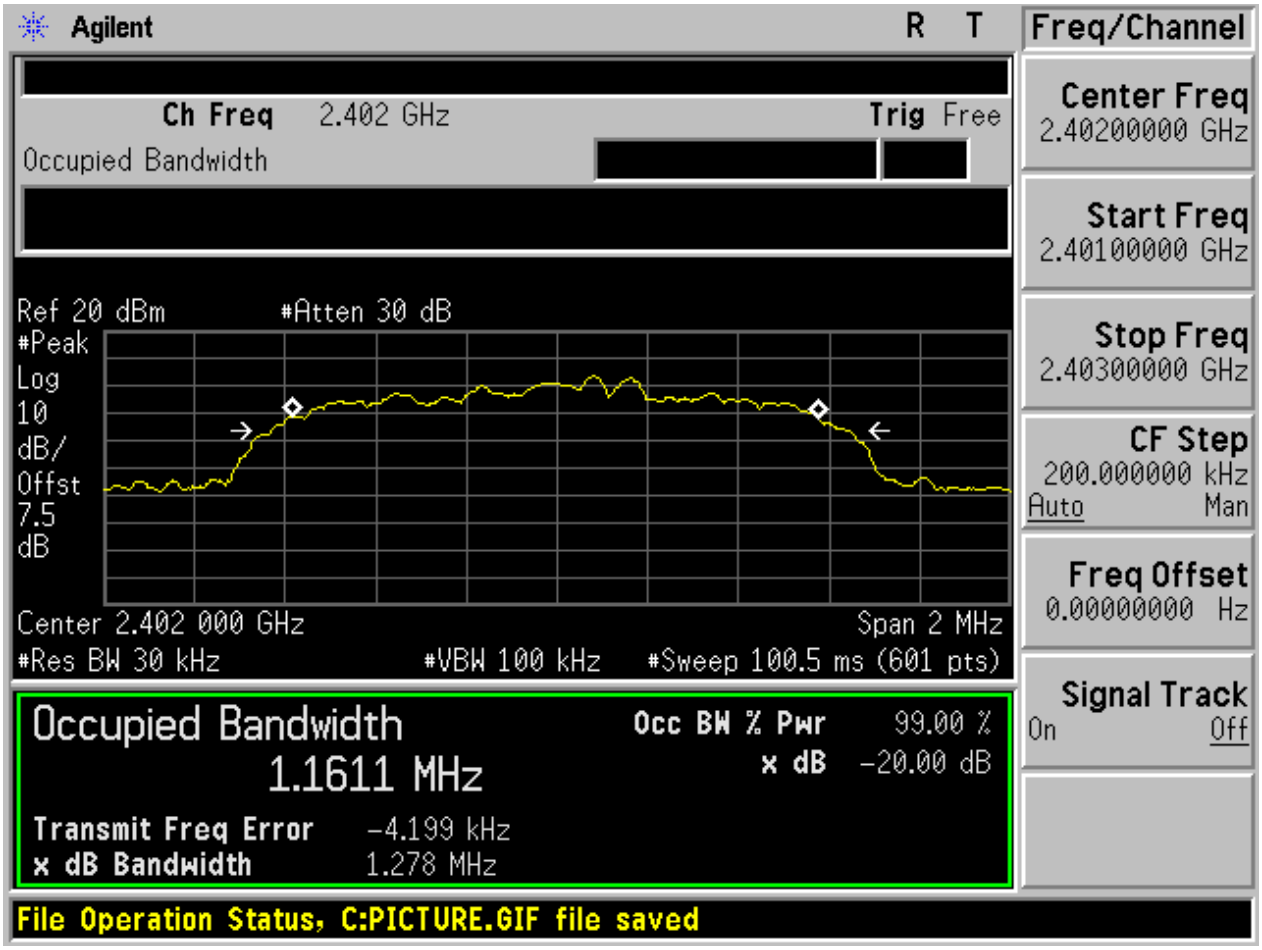
2.2 TM1_DH5_Ch39



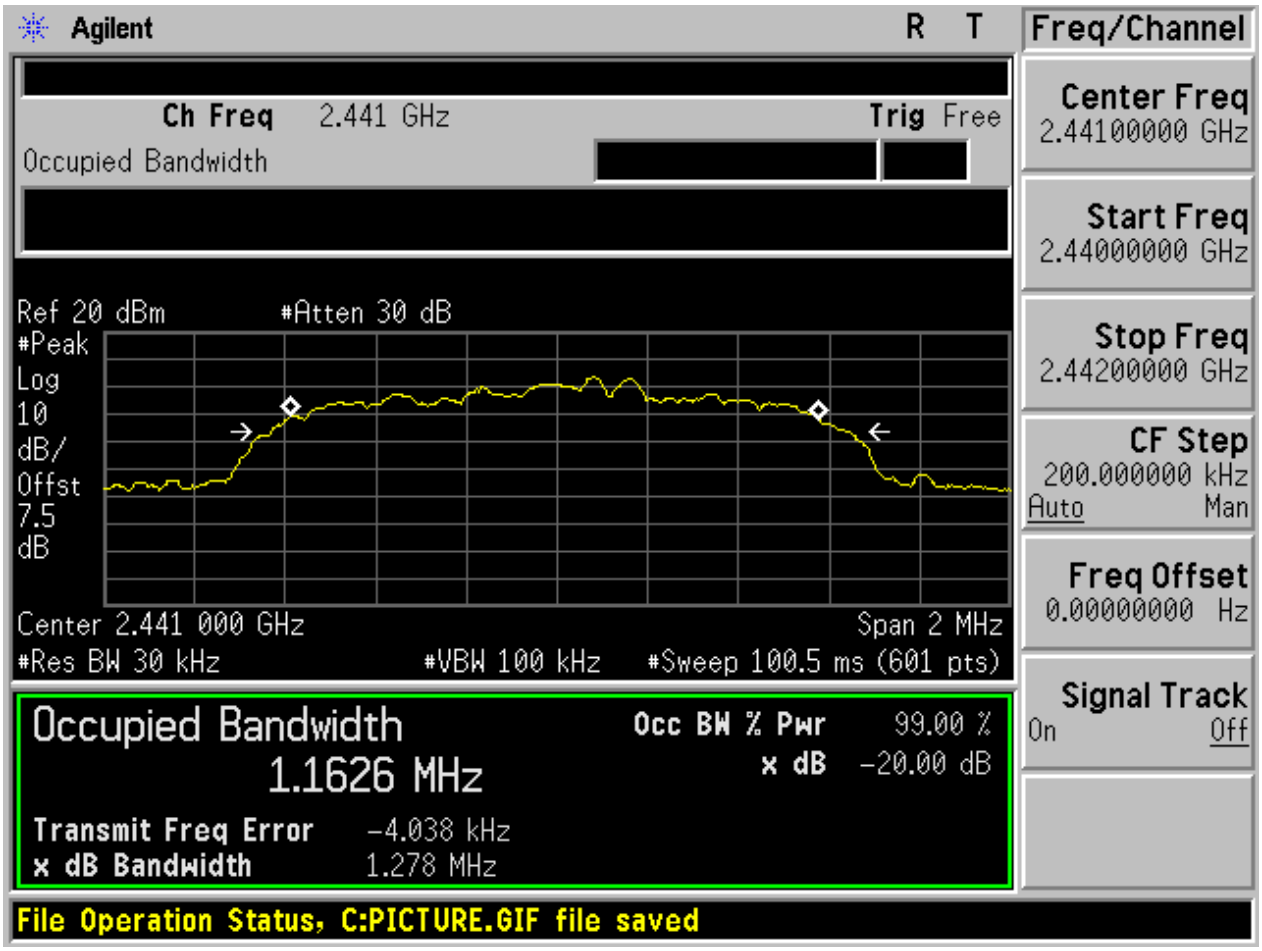
2.3 TM1_DH5_Ch78



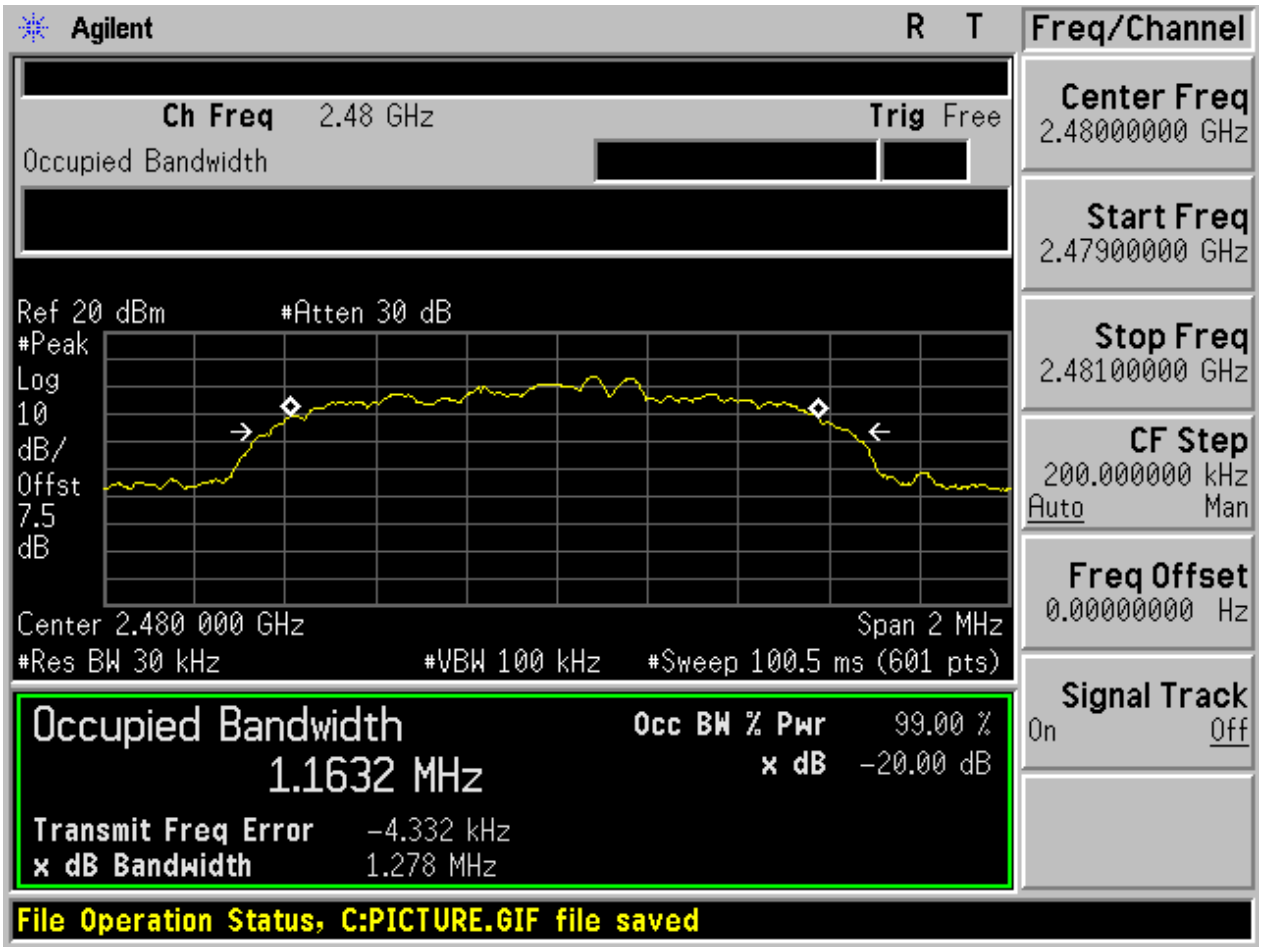
2.4 TM2_2DH5_Ch0



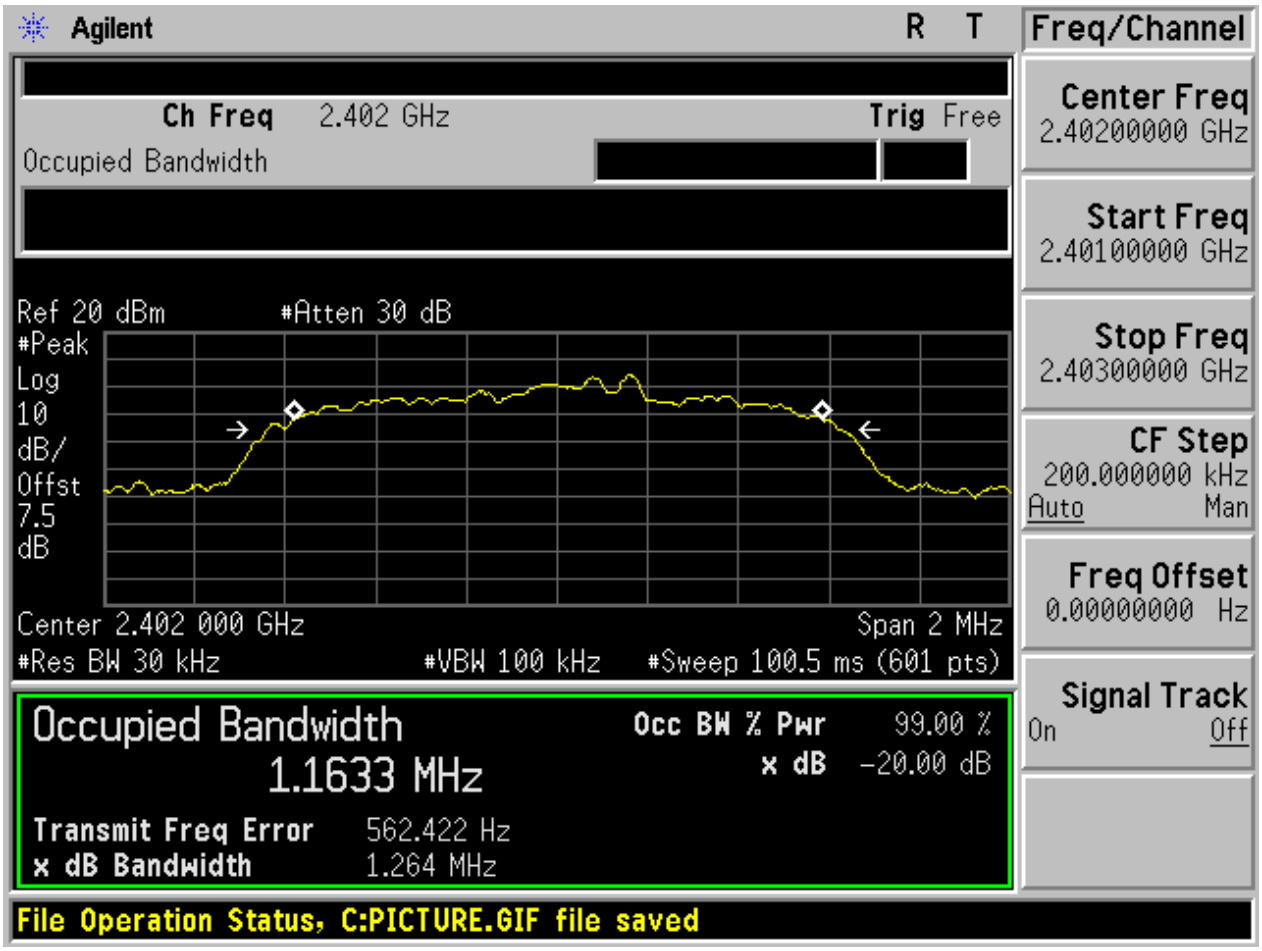
2.5 TM2_2DH5_Ch39



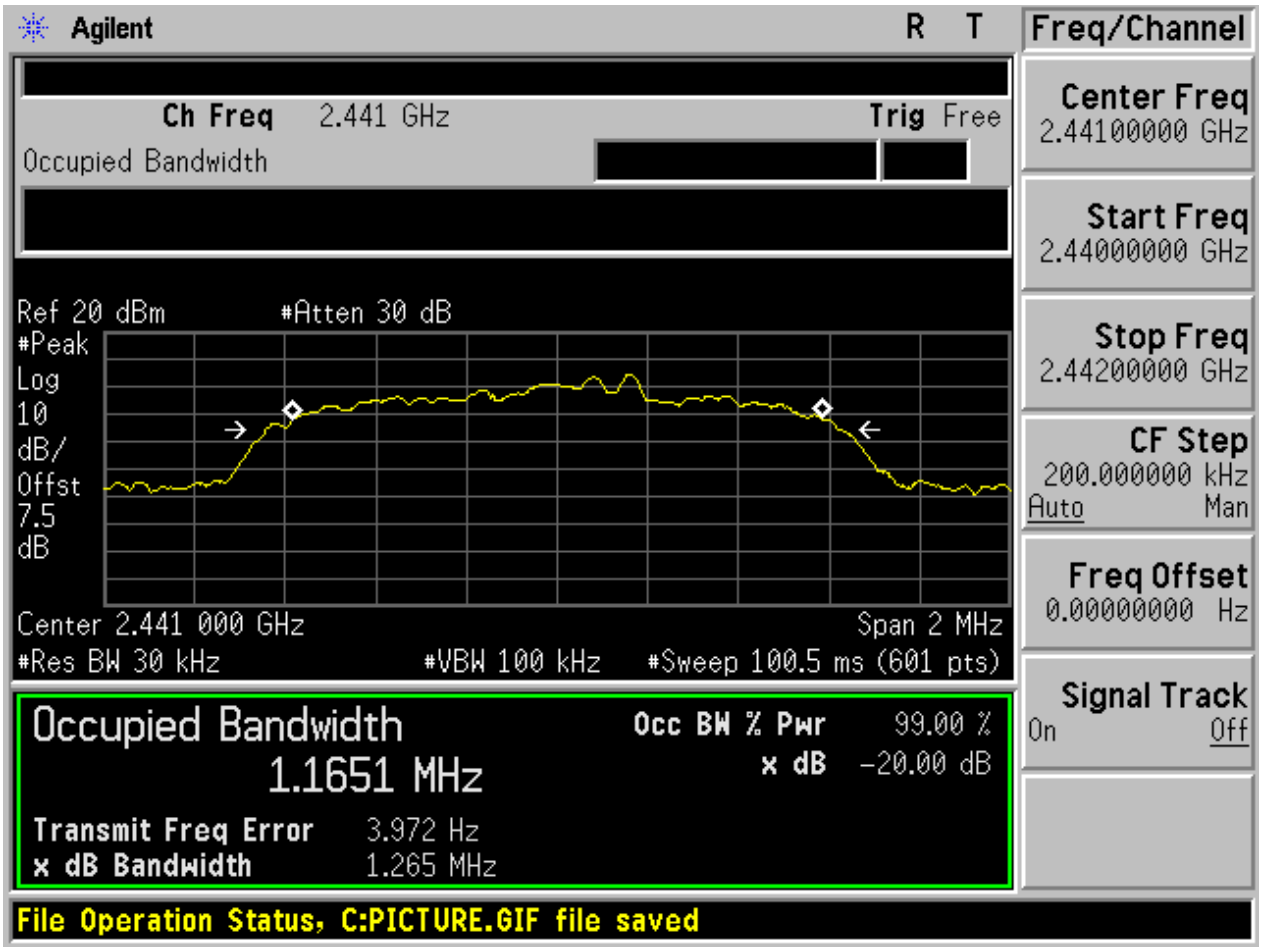
2.6 TM2_2DH5_Ch78



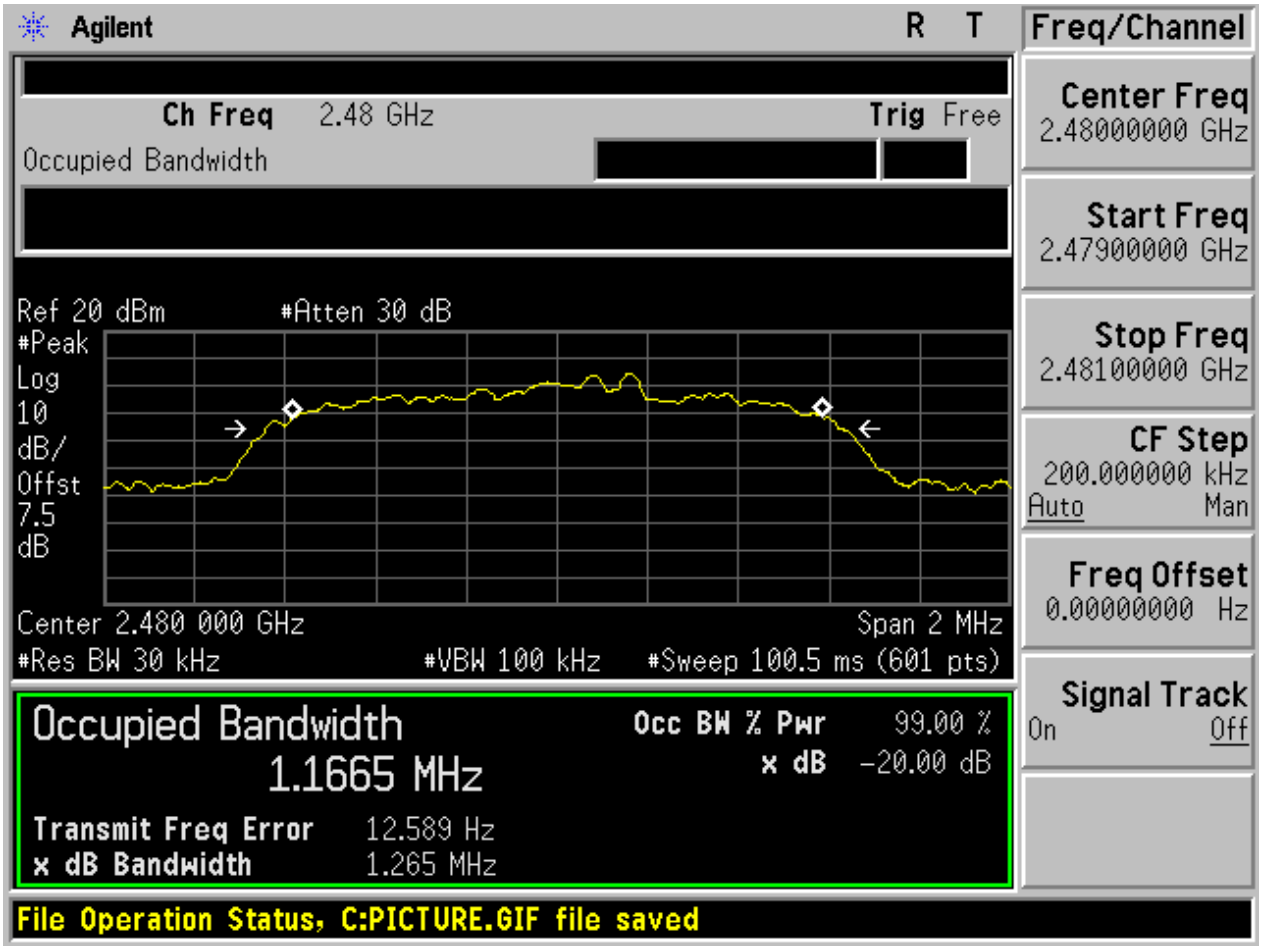
2.7 TM3_3DH5_Ch0



2.8 TM3_3DH5_Ch39



2.9 TM3_3DH5_Ch78



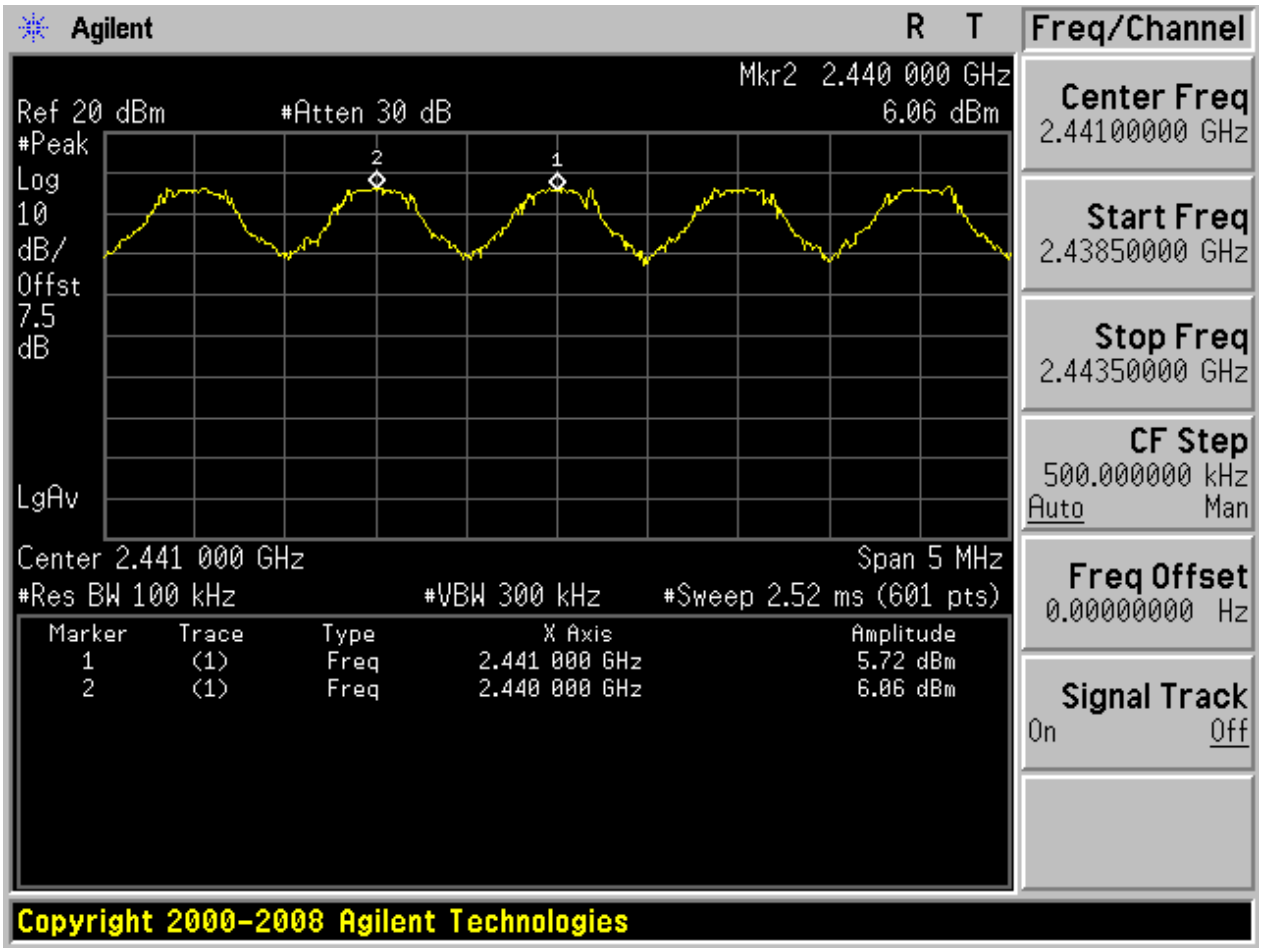
Appendix B: Carrier Frequency Separation

1 Result Table

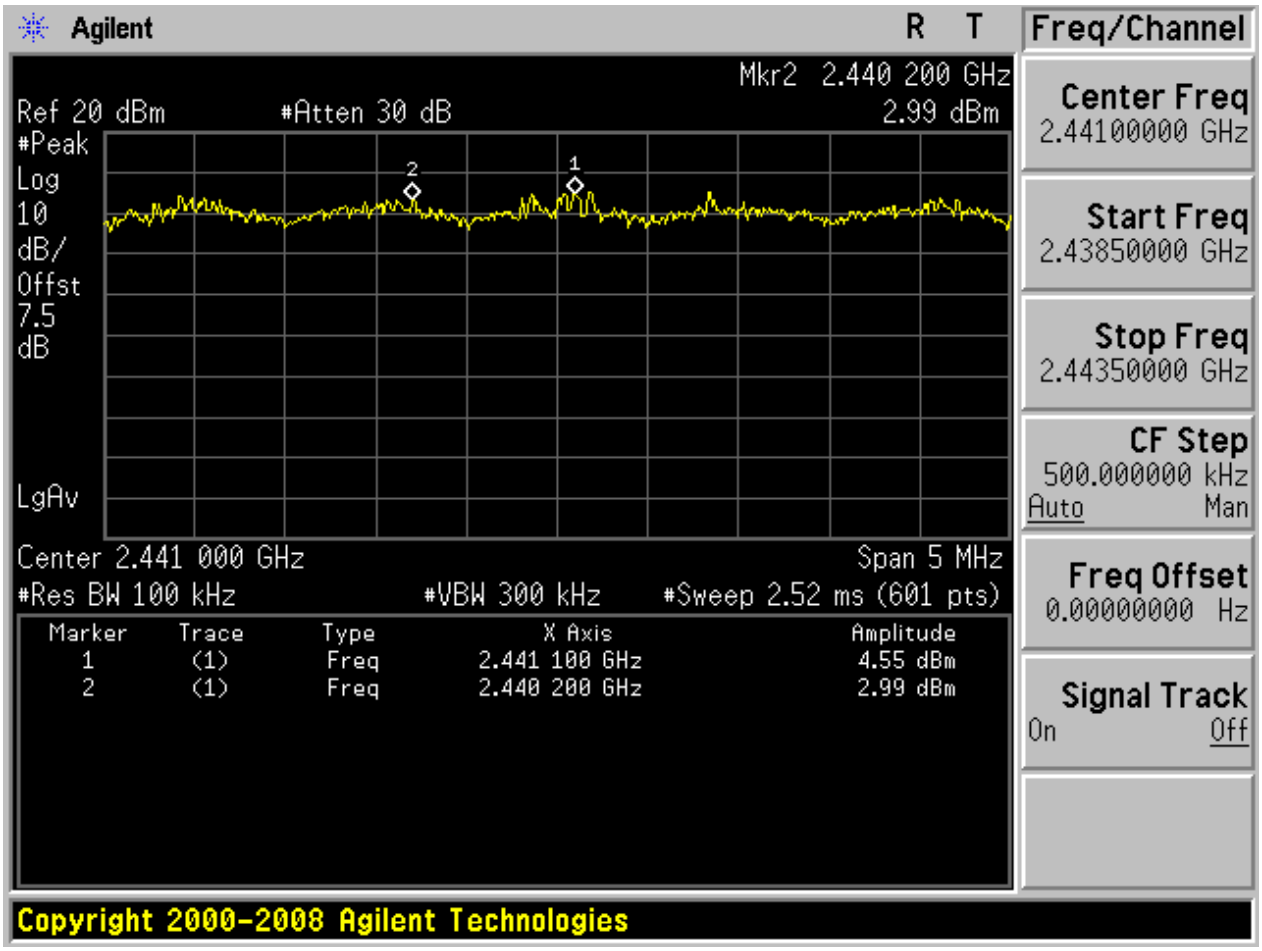
EUT Conf.	Carrier Frequency Separation [MHz]	Verdict
TM1_DH5_Hop	1.000	Pass
TM2_2DH5_Hop	0.900	Pass
TM3_3DH5_Hop	1.050	Pass

2 Test Plot

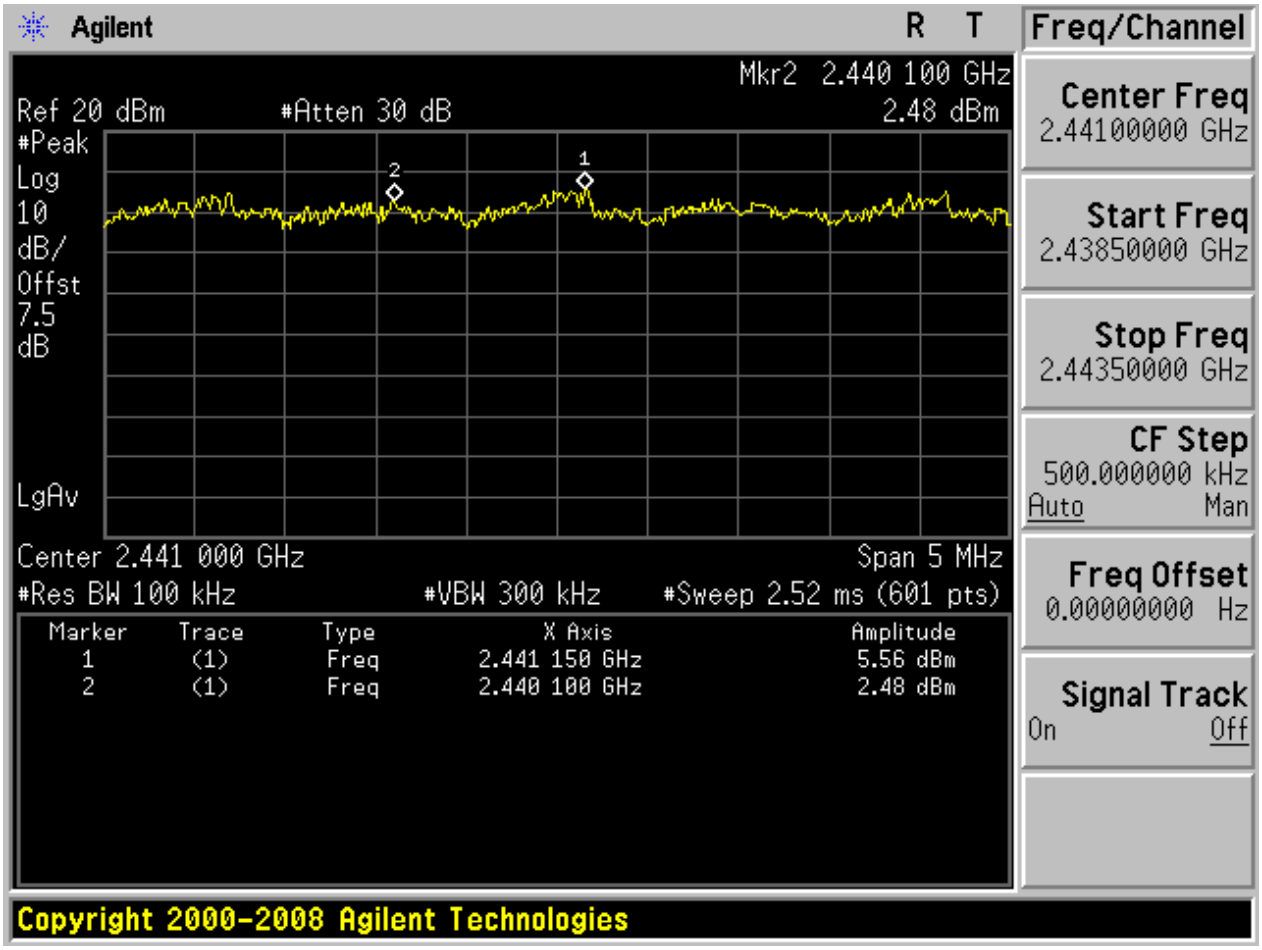
2.1 TM1_DH5_Hop



2.2 TM2_2DH5_Hop



2.3 TM3_3DH5_Hop



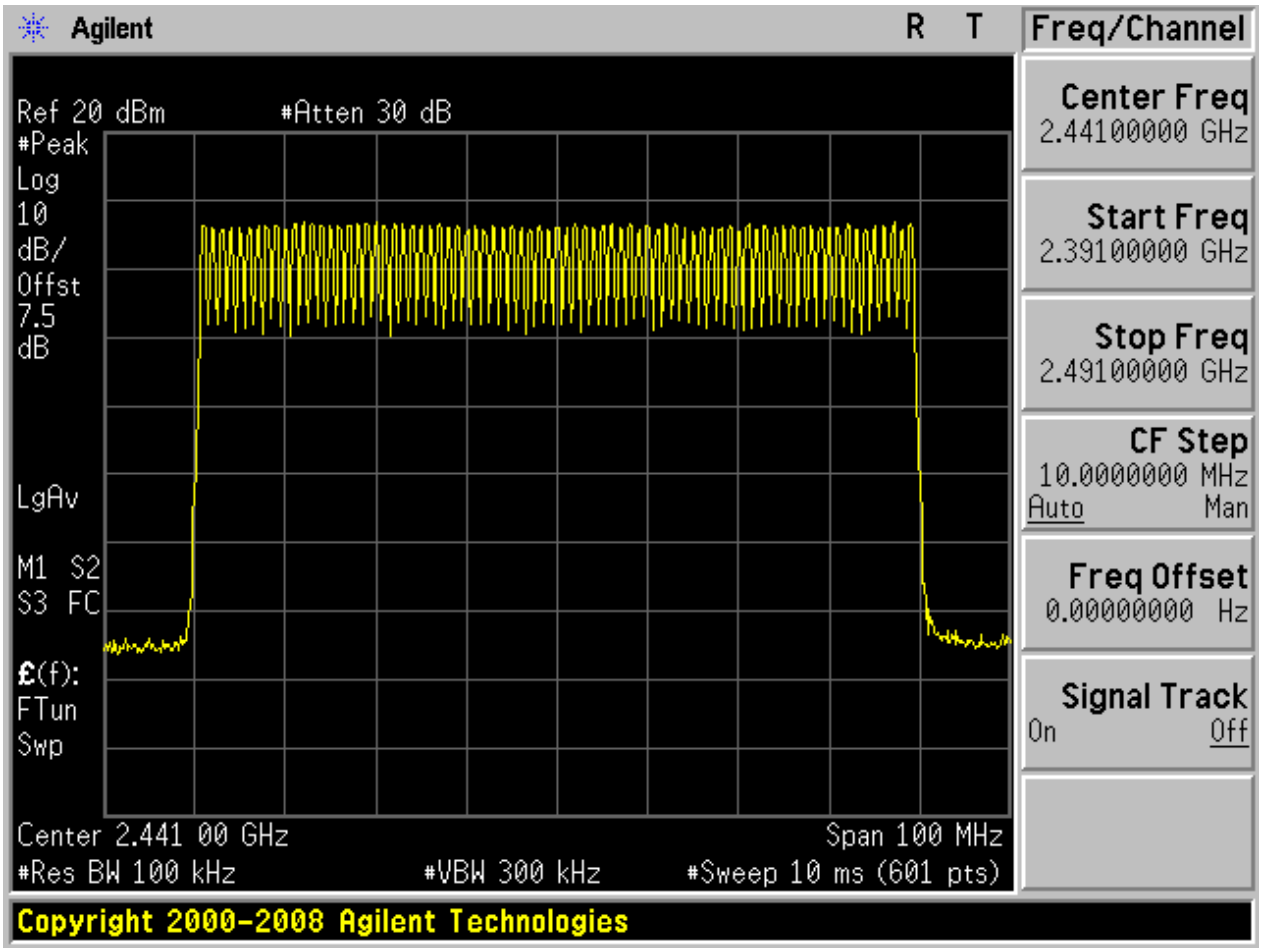
Appendix C: Number of Hopping Channel

1 Result Table

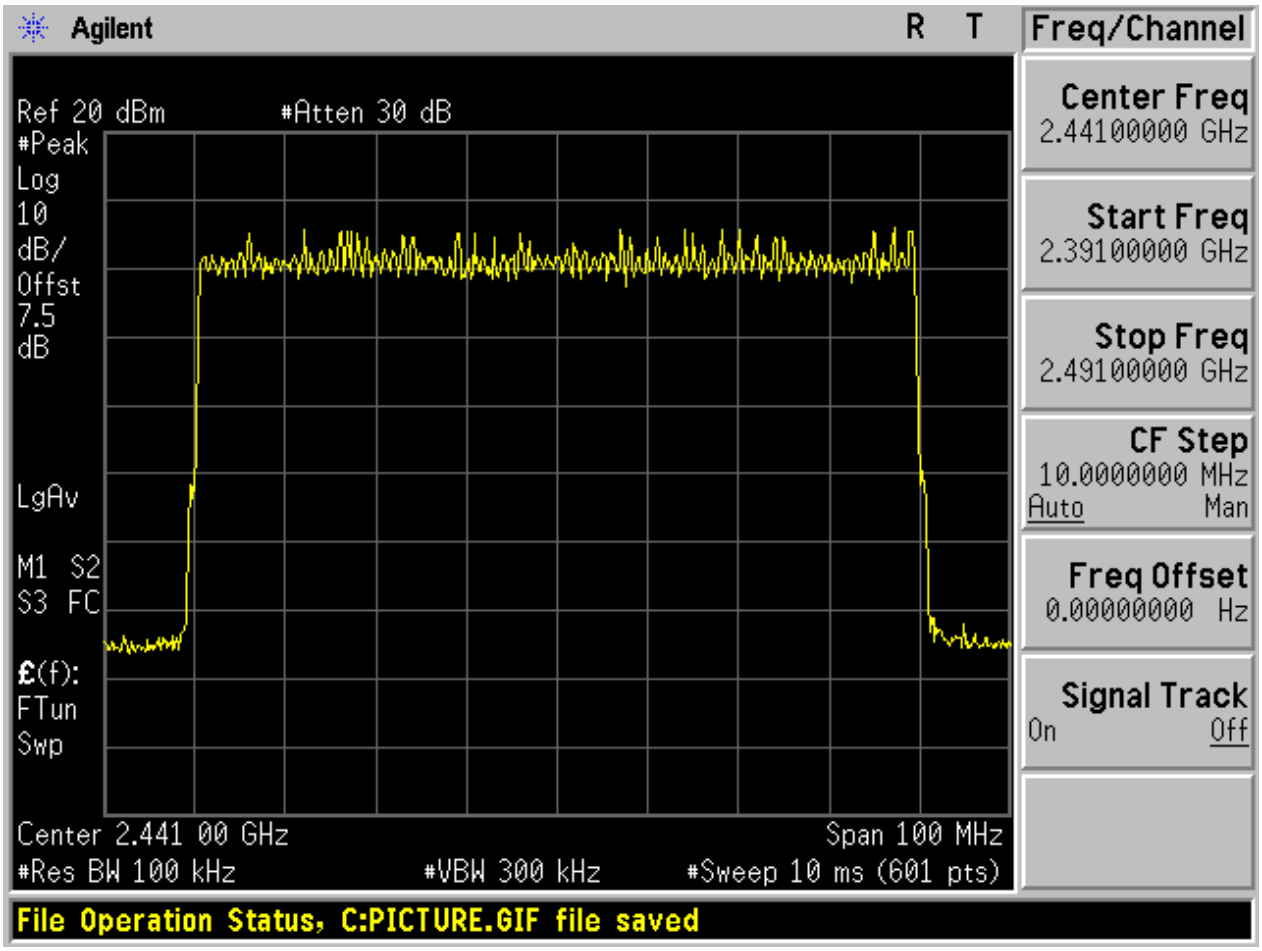
EUT Conf.	Number of Hopping Channel	Verdict
TM1_DH5_Hop	79	Pass
TM2_2DH5_Hop	79	Pass
TM3_3DH5_Hop	79	Pass

2 Test Plot

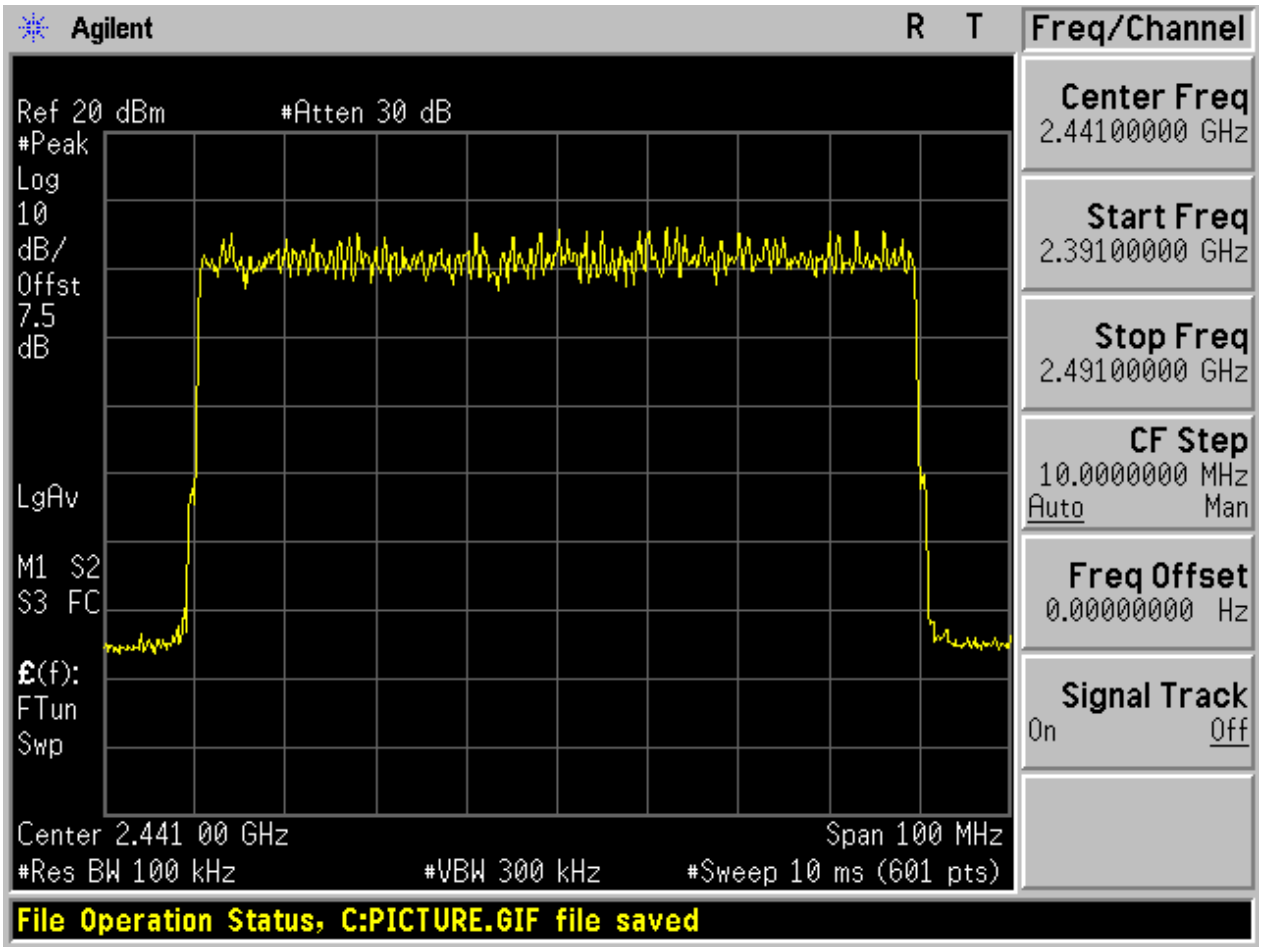
2.1 TM1_DH5_Hop



2.2 TM2_2DH5_Hop



2.3 TM3_3DH5_Hop



Appendix D: Time of Occupancy (Dwell Time)

1 Result Table

The Dwell Time = Burst Width * Total Hops. The detailed calculations are showed as follows:

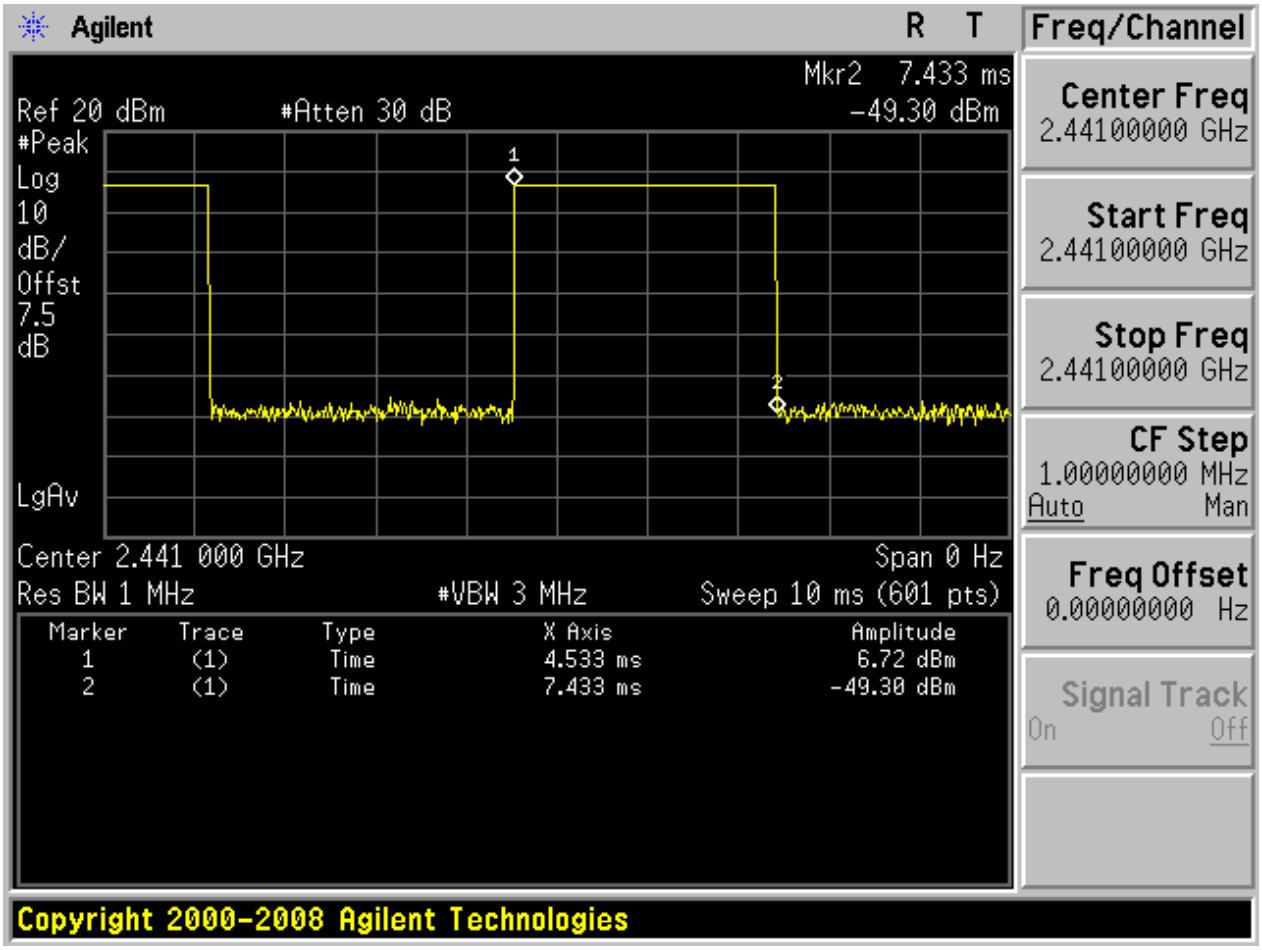
- The duration for dwell time calculation: 0.4 [s] * hopping number = 0.4 [s] * 79 [ch] = 31.6 [s*ch];
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf uses a slot type of 5-Tx&1-Rx and a hopping rate of 1600 [ch*hop/s] for all channels. So the final hopping rate for all channels is 1600 / 6 = 266.67 [ch*hop/s];
- The hops per second on one channel: 266.67 [ch*hop/s] / 79 [ch] =3.38 [hop/s];
- The total hops for all channels within the dwell time calculation duration: 3.38 [hop/s] * 31.6 [s*ch] = 106.67 [hop*ch];
- The dwell time for all channels hopping: 106.67 [hop*ch] * Burst Width [ms/hop/ch].

EUT Conf.	Burst Width [ms/hop/ch]	Total Hops [hop*ch]	Dwell Time [ms]	Verdict
TM1_DH5_Ch39	2.900	106.67	0.309	Pass
TM2_2DH5_Ch39	2.900	106.67	0.309	Pass
TM3_3DH5_Ch39	2.900	106.67	0.309	Pass

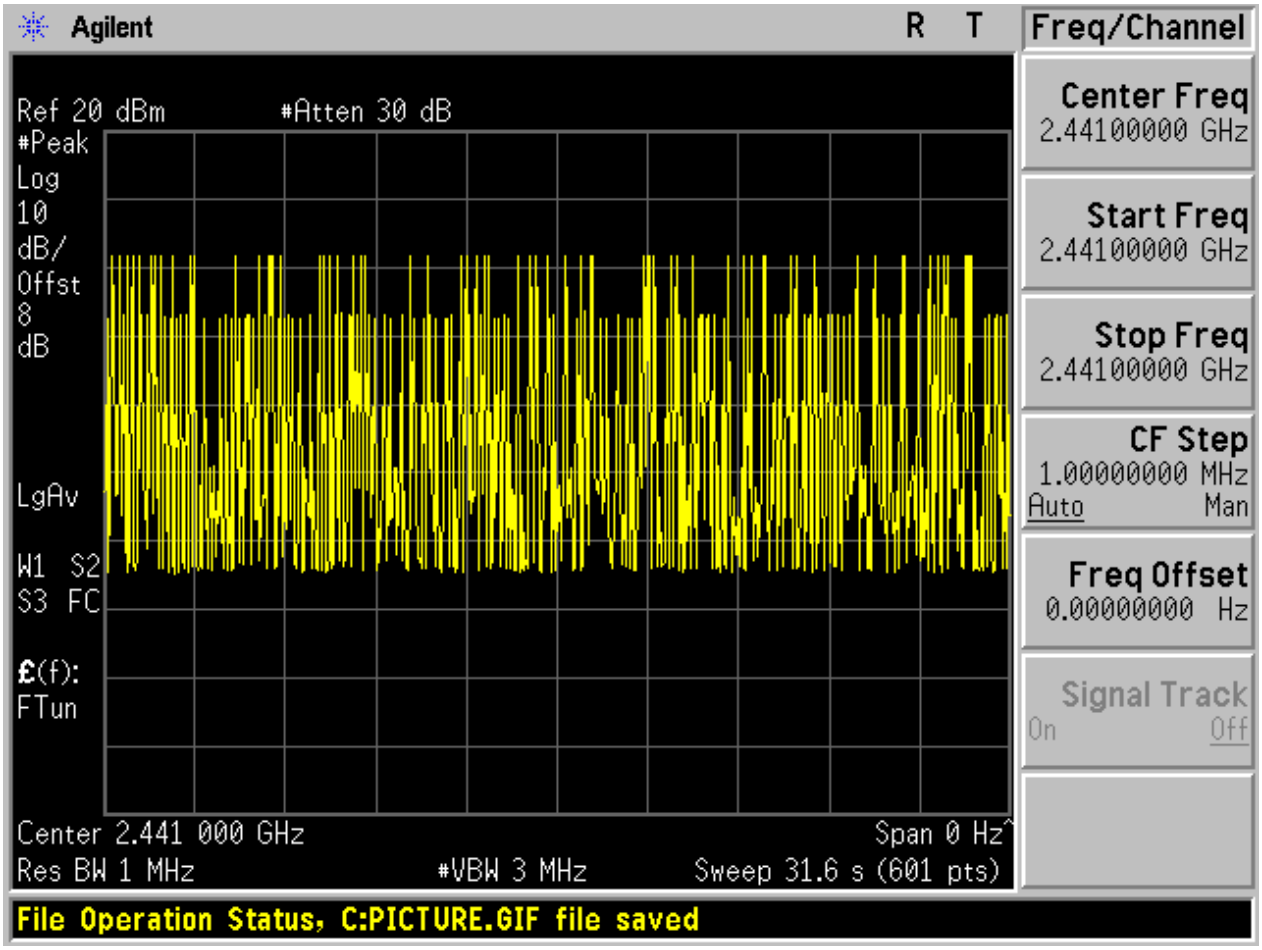
2 Test Plot

NOTE: The test plots are only for Burst Width measurements.

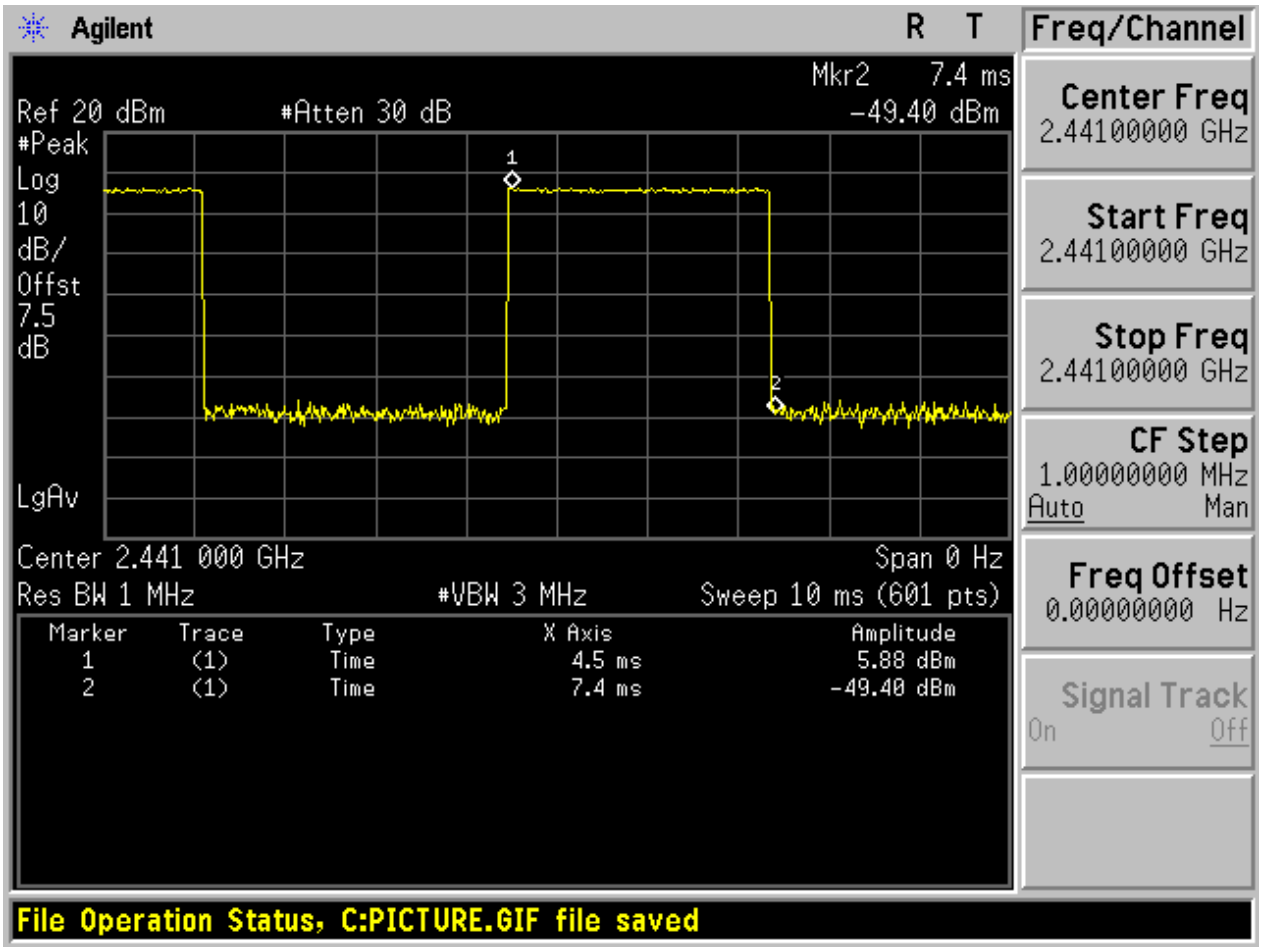
2.1 TM1_DH5_Ch39



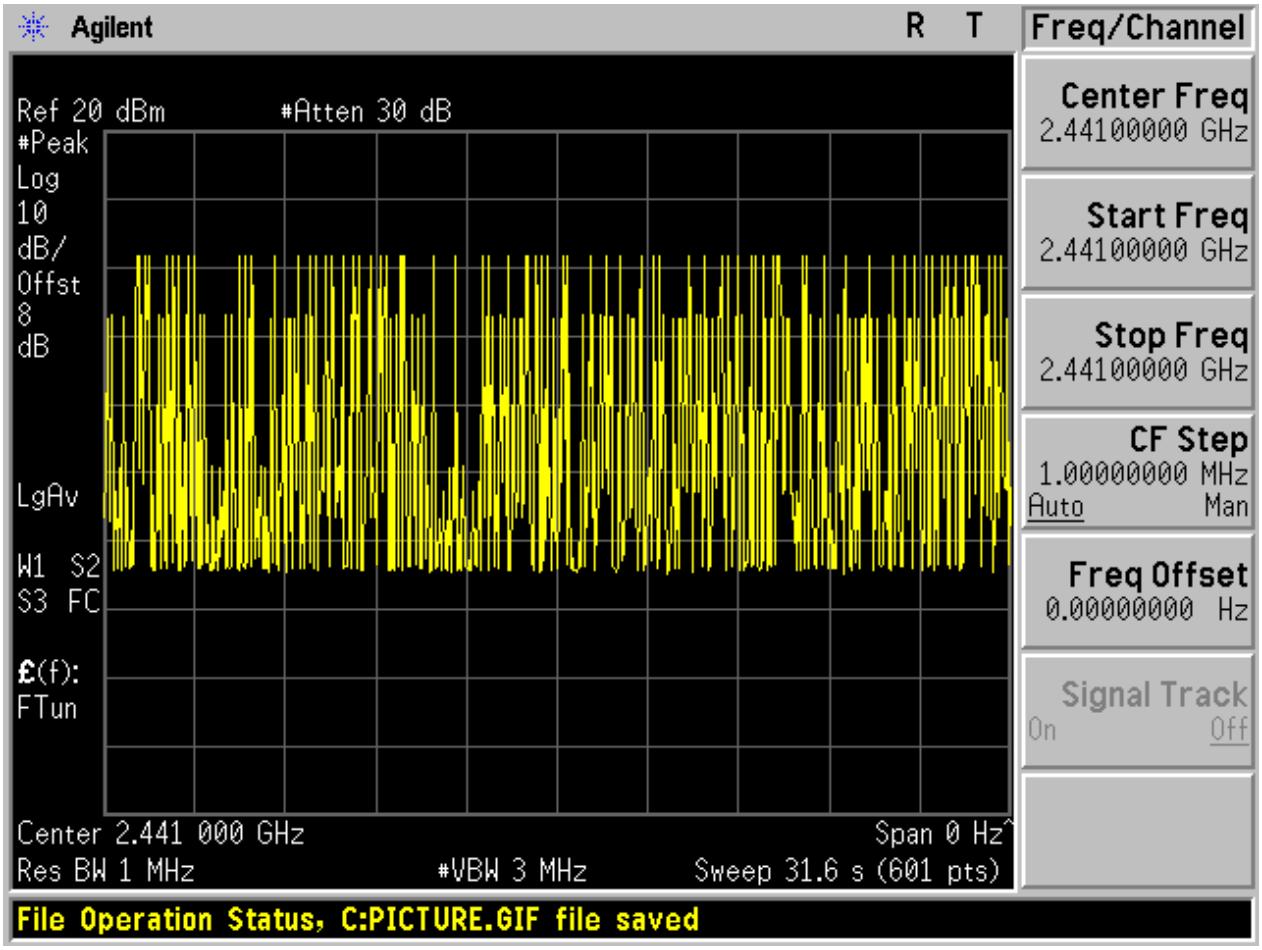
A period (Less than 106.7 burst)



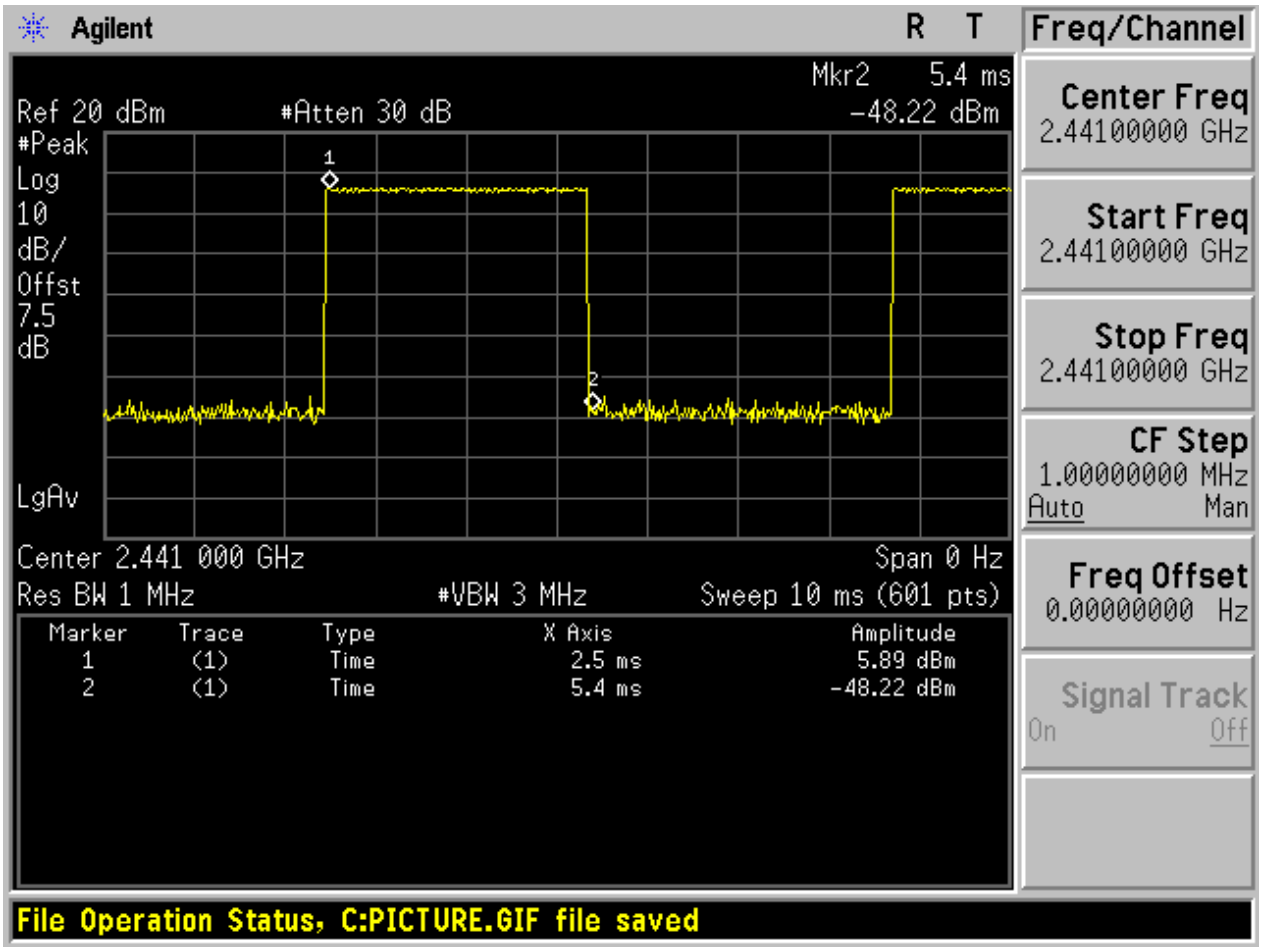
2.2 TM2_2DH5_Ch39



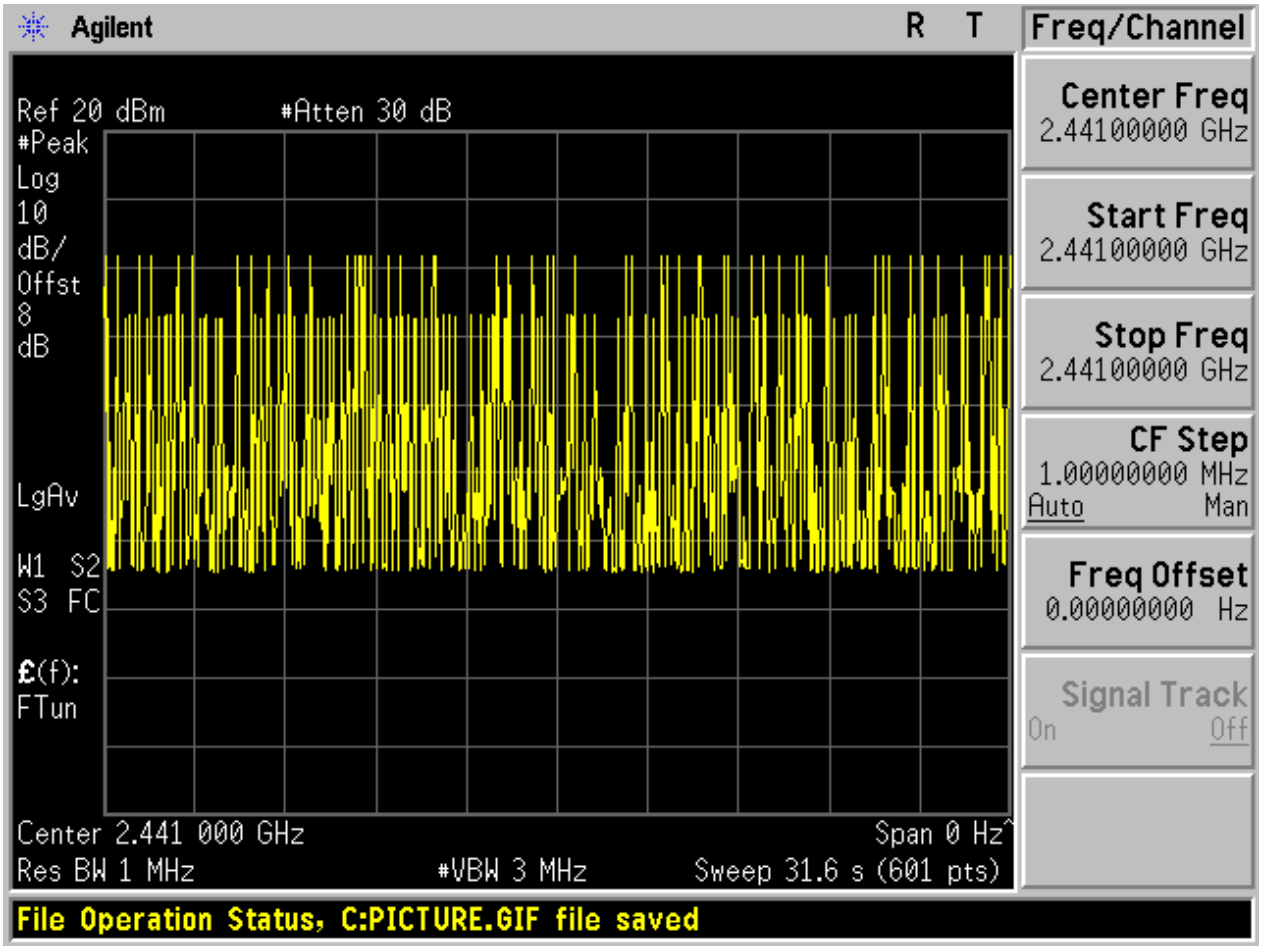
A period (Less than 106.7 burst)



2.3 TM3_3DH5_Ch39



A period (Less than 106.7 burst)



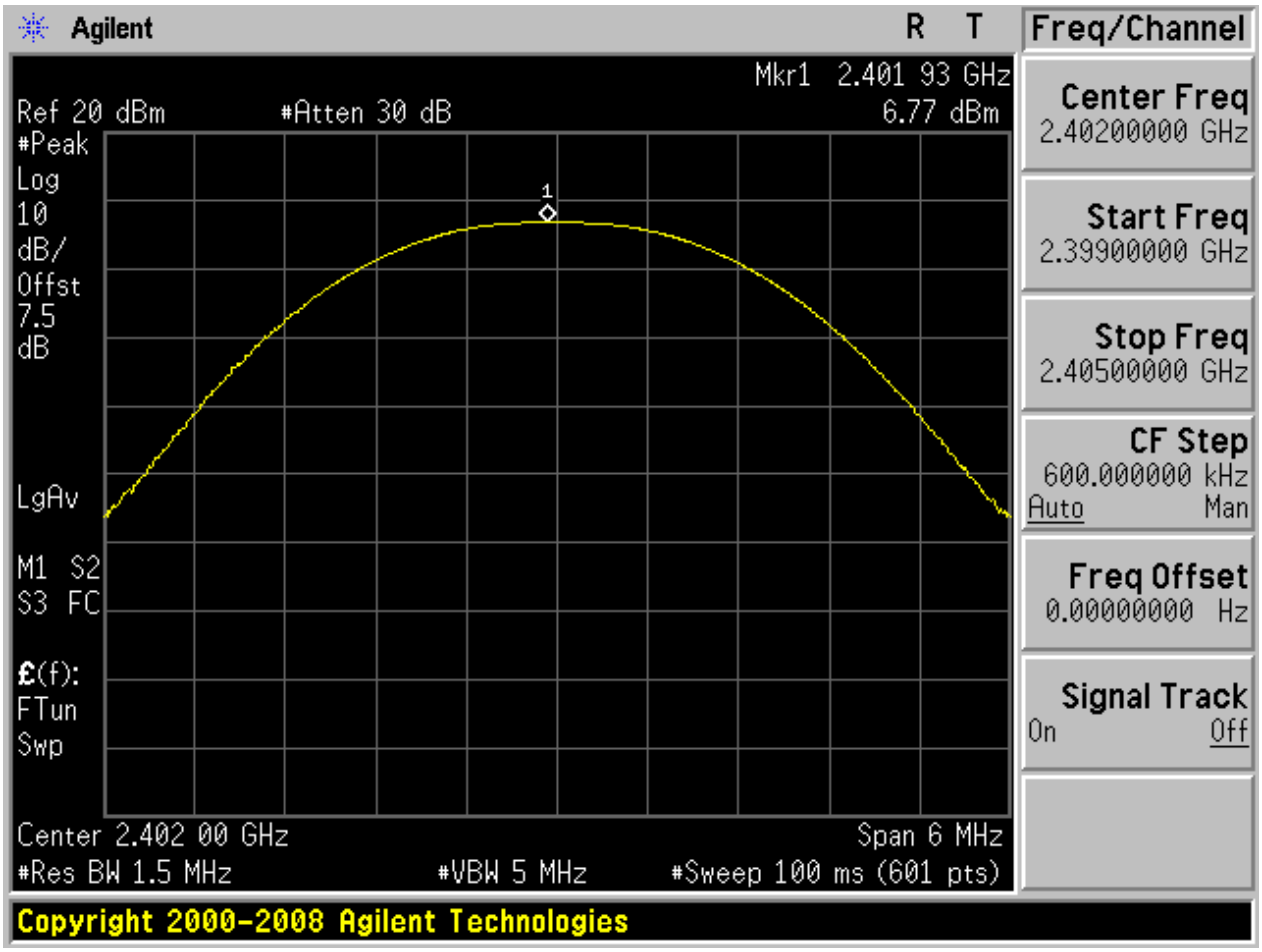
Appendix E: Maximum Peak Conducted Output Power

1 Result Table

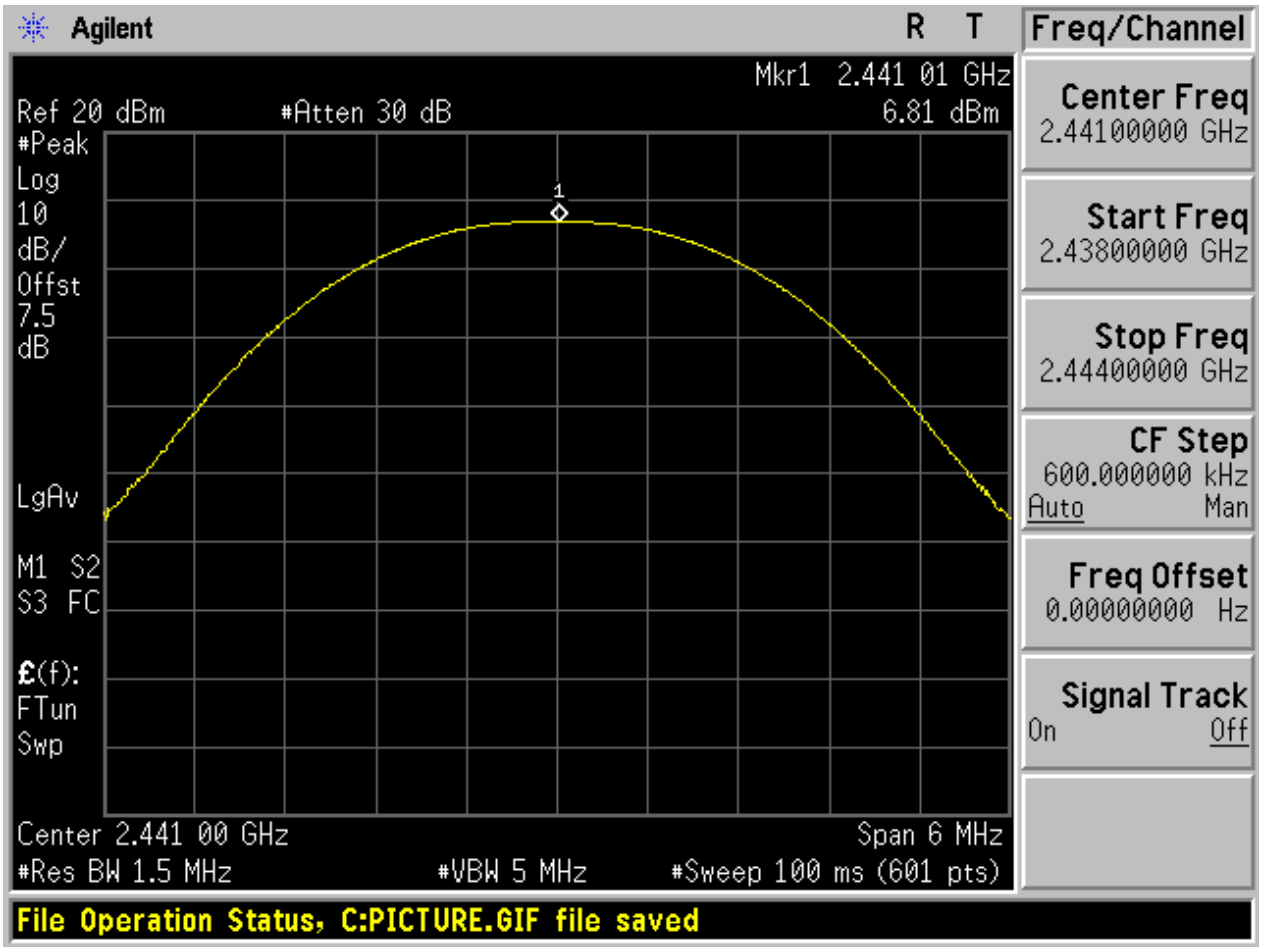
EUT Conf.	Max. Peak Power [dBm]	Verdict
TM1_DH5_Ch0	6.77	Pass
TM1_DH5_Ch39	6.81	Pass
TM1_DH5_Ch78	6.91	Pass
TM2_2DH5_Ch0	6.48	Pass
TM2_2DH5_Ch39	6.53	Pass
TM2_2DH5_Ch78	6.64	Pass
TM3_3DH5_Ch0	6.61	Pass
TM3_3DH5_Ch39	6.66	Pass
TM3_3DH5_Ch78	6.77	Pass

2 Test Plot

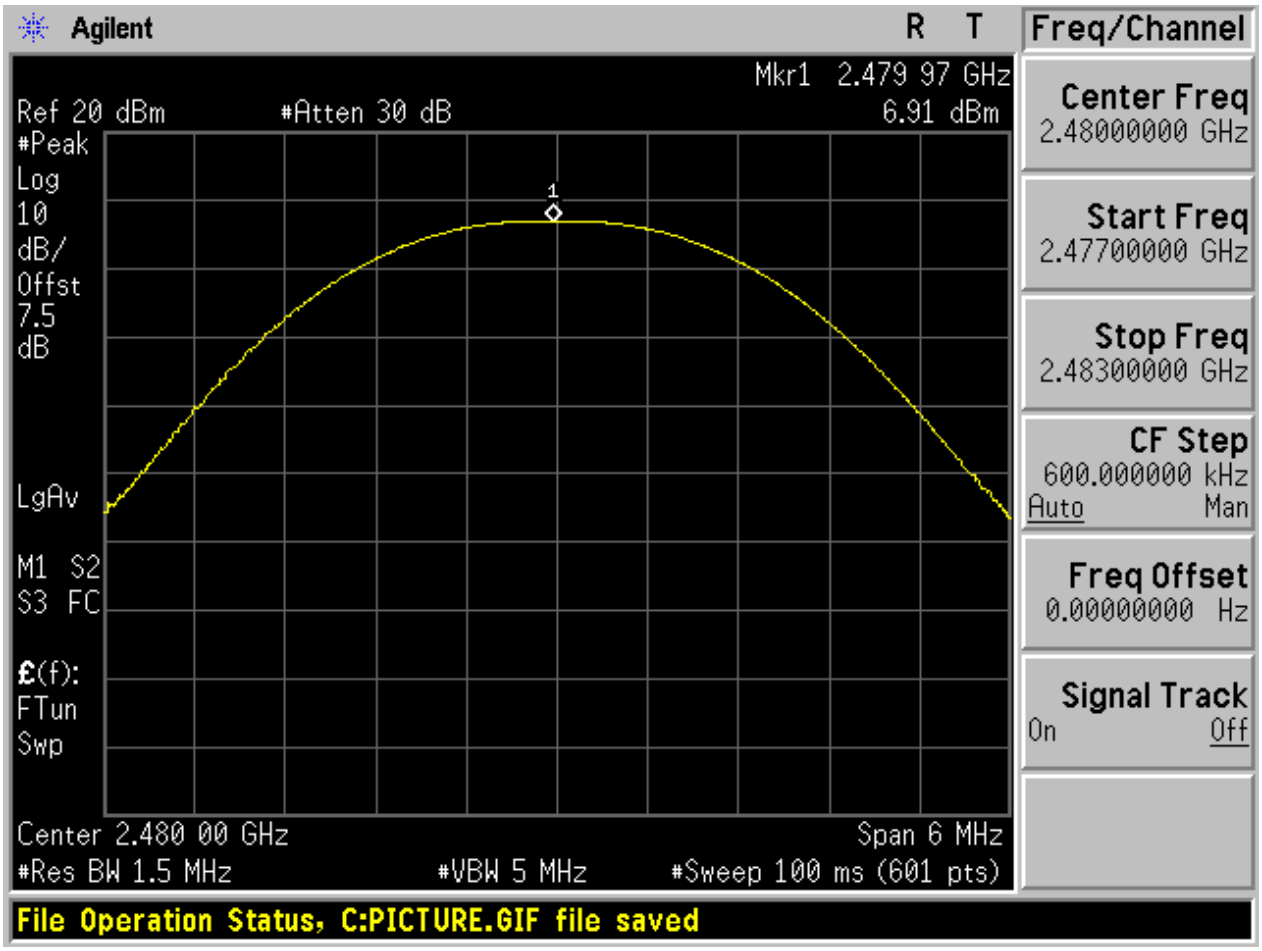
2.1 TM1_DH5_Ch0



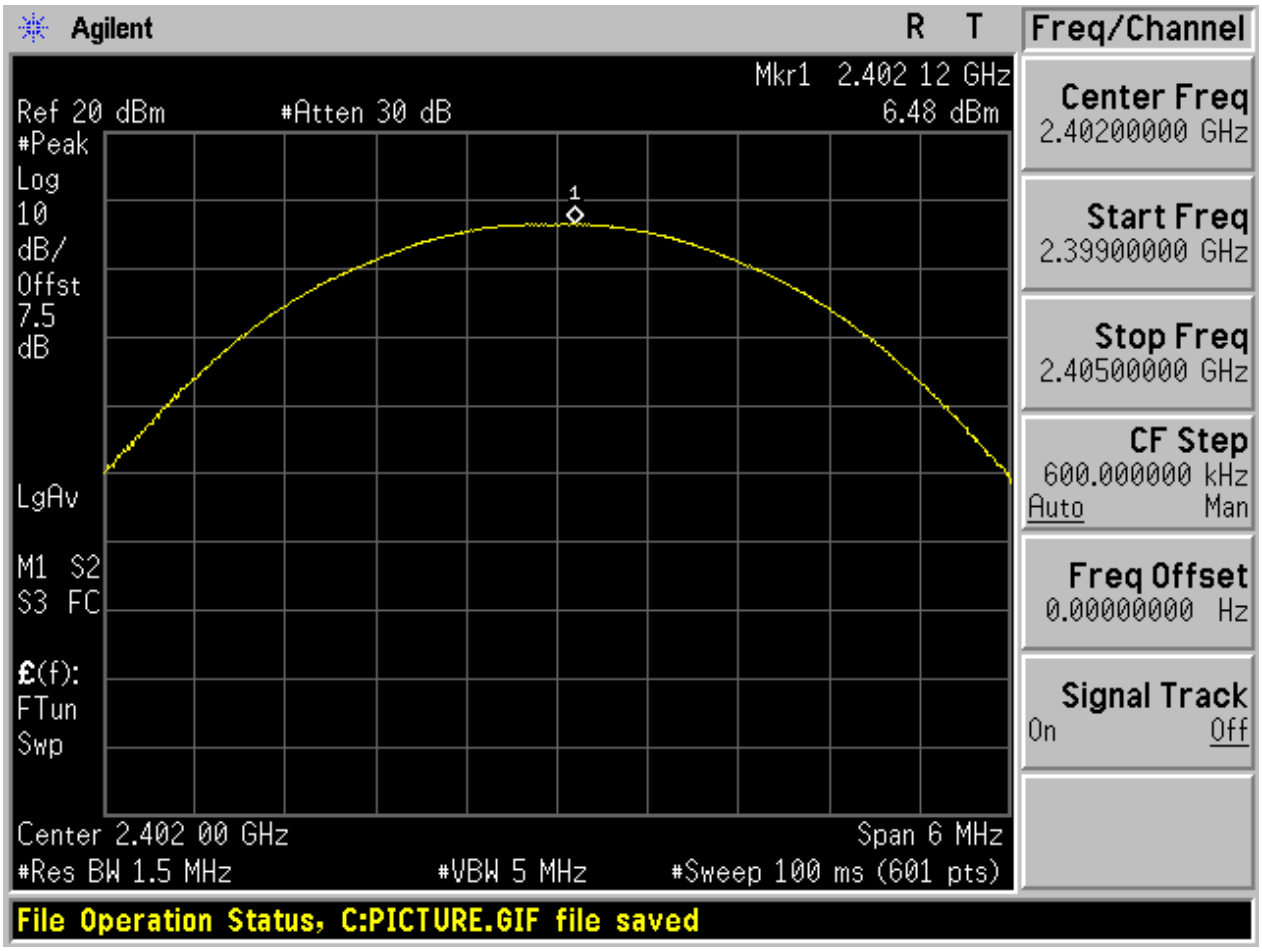
2.2 TM1_DH5_Ch39



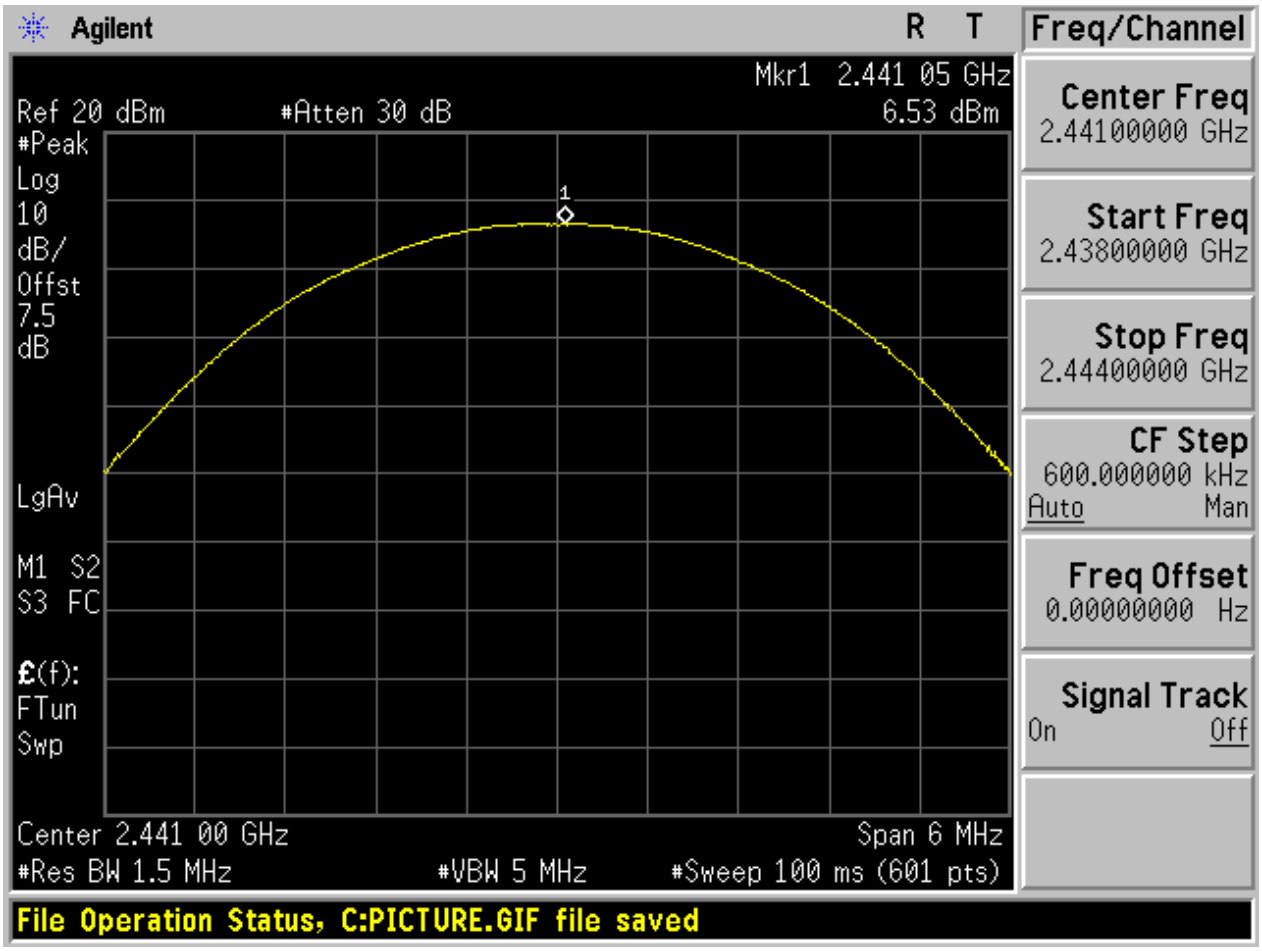
2.3 TM1_DH5_Ch78



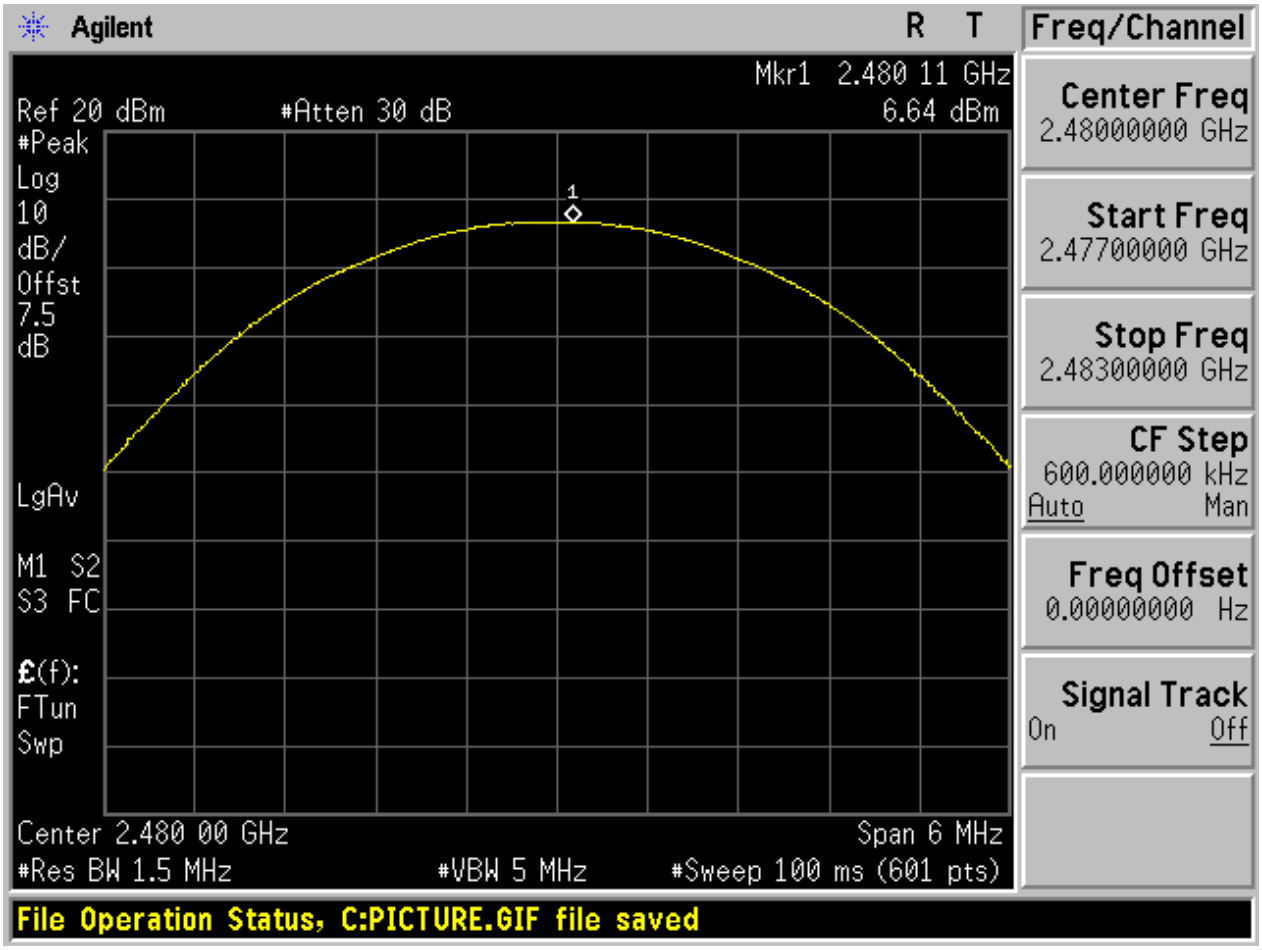
2.4 TM2_2DH5_Ch0



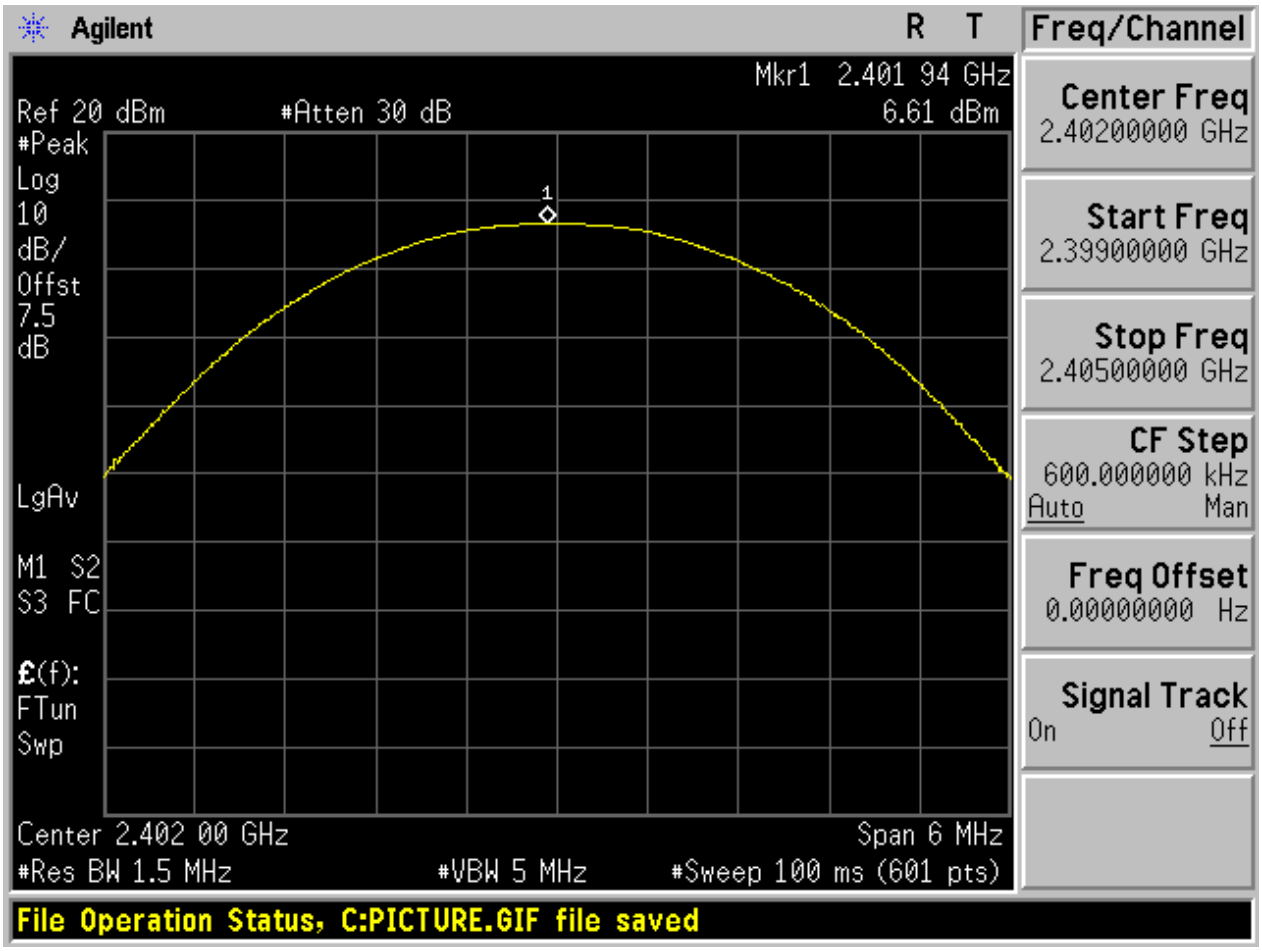
2.5 TM2_2DH5_Ch39



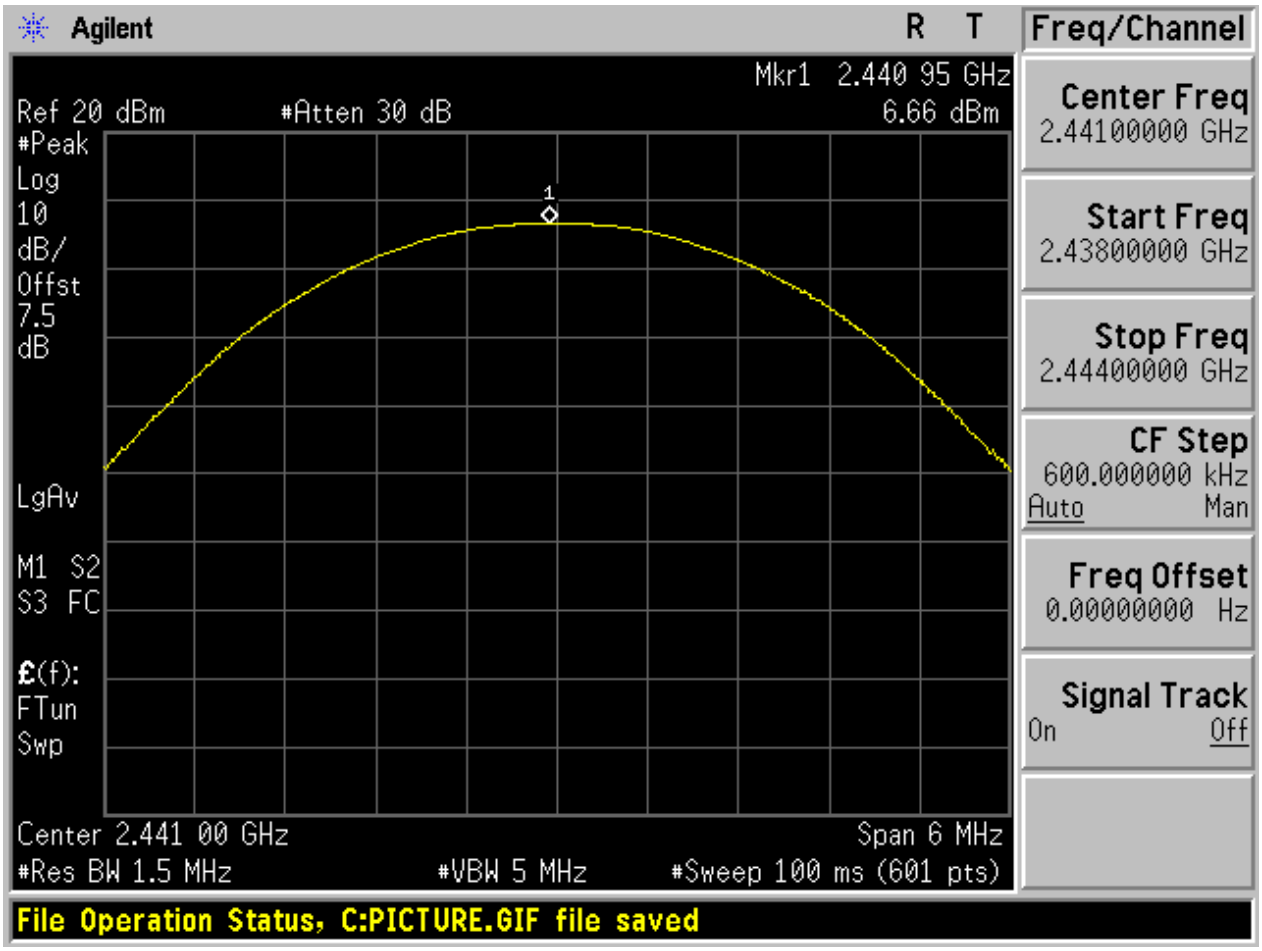
2.6 TM2_2DH5_Ch78



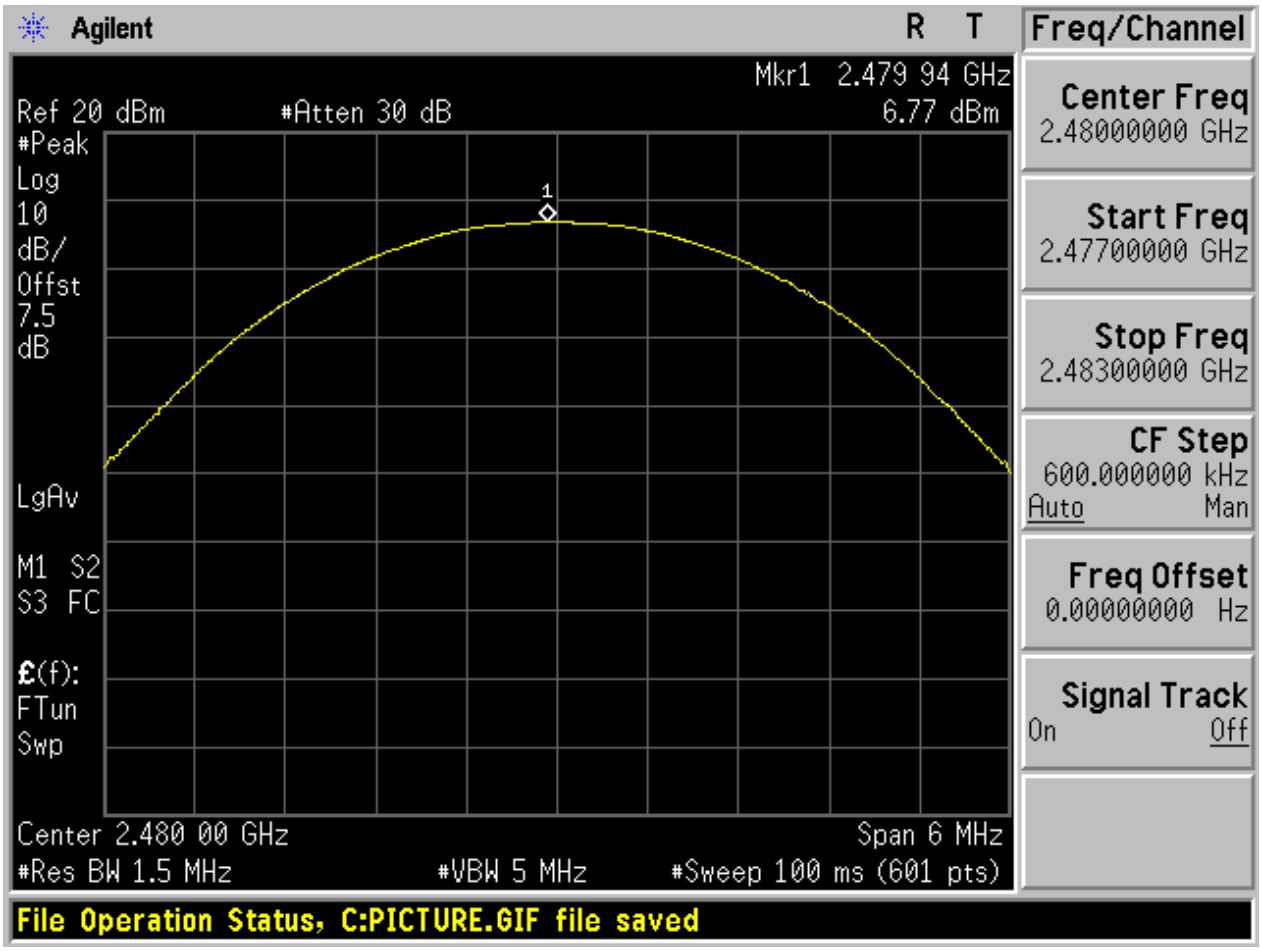
2.7 TM3_3DH5_Ch0



2.8 TM3_3DH5_Ch39



2.9 TM3_3DH5_Ch78



Appendix F: Average Power

1 Result Table

EUT Conf.	Average Power [dBm]	Verdict
TM1_DH5_Ch0	2.54	Pass
TM1_DH5_Ch39	3.25	Pass
TM1_DH5_Ch78	3.01	Pass
TM2_2DH5_Ch0	1.16	Pass
TM2_2DH5_Ch39	2.42	Pass
TM2_2DH5_Ch78	1.96	Pass
TM3_3DH5_Ch0	1.39	Pass
TM3_3DH5_Ch39	2.38	Pass
TM3_3DH5_Ch78	2.00	Pass

Appendix G: Band edge spurious emission

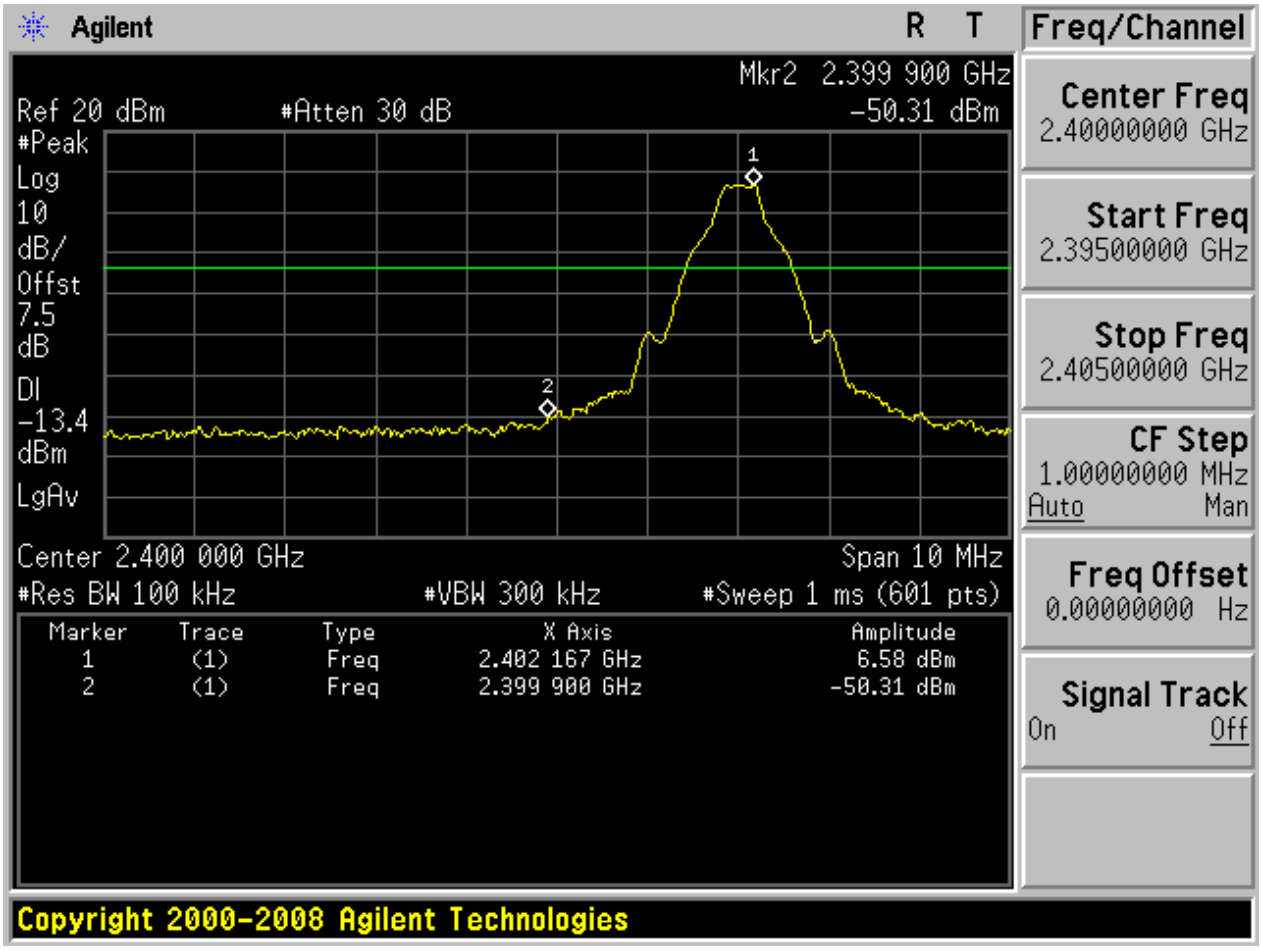
2 Result Table

EUT Conf.	Channel No.	Carrier Frequency [MHz]	Max. Spurious Level [dBm]	Frequency Hopping	Carrier Power [dBm]	Limit [dBm]	Result
TM1_DH5_Ch0	0	2402	-50.31	Off	6.58	-13.42	Pass
	-	-	-52.81	On	6.51	-13.49	Pass
TM1_DH5_Ch78	78	2480	-52.07	Off	6.80	-13.20	Pass
	-	-	-54.07	On	6.46	-13.54	Pass
TM2_2DH5_Ch0	0	2402	-49.75	Off	5.72	-14.28	Pass
	-	-	-52.41	On	5.08	-14.92	Pass
TM2_2DH5_Ch78	78	2480	-51.7	Off	6.01	-13.99	Pass
	-	-	-52.8	On	4.97	-15.03	Pass
TM3_3DH5_Ch0	0	2402	-49.64	Off	5.71	-14.29	Pass
	-	-	-51.91	On	3.77	-16.23	Pass
TM3_3DH5_Ch78	78	2480	-51.35	Off	6.00	-14.00	Pass
	-	-	-53.24	On	2.31	-17.69	Pass

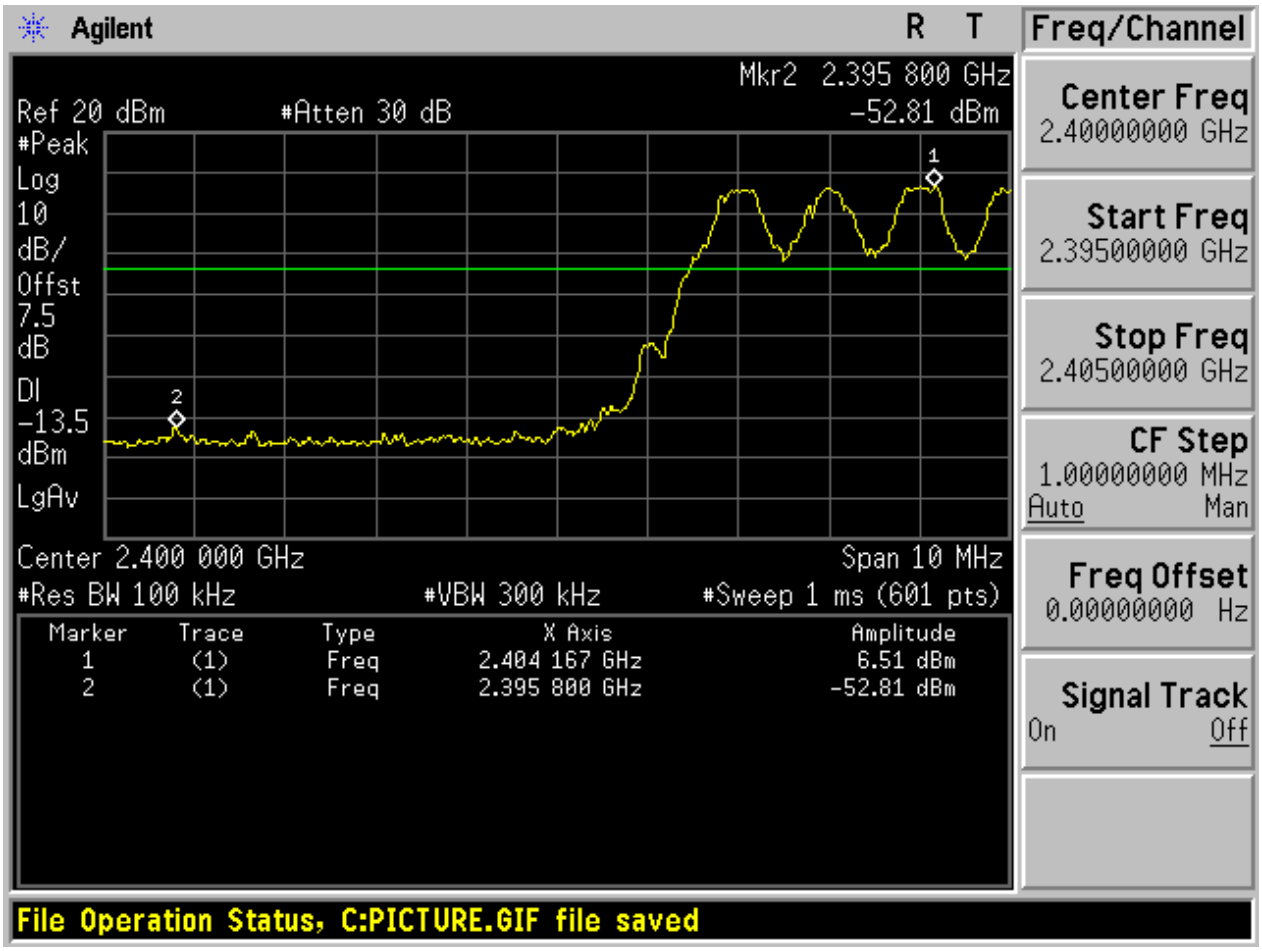
2 Test Plot

2.1 TM1_DH5_Ch0

No hopping

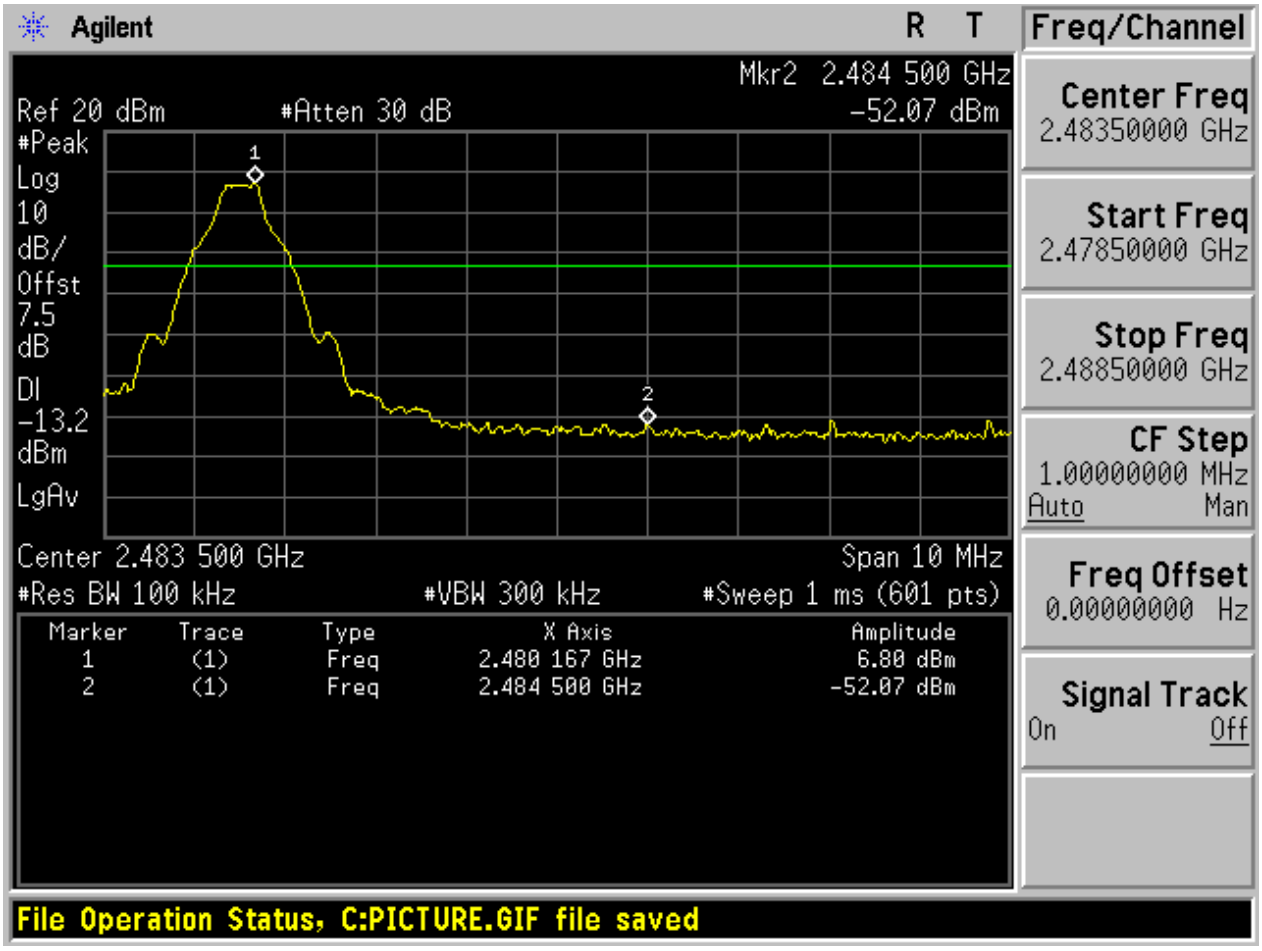


With hopping

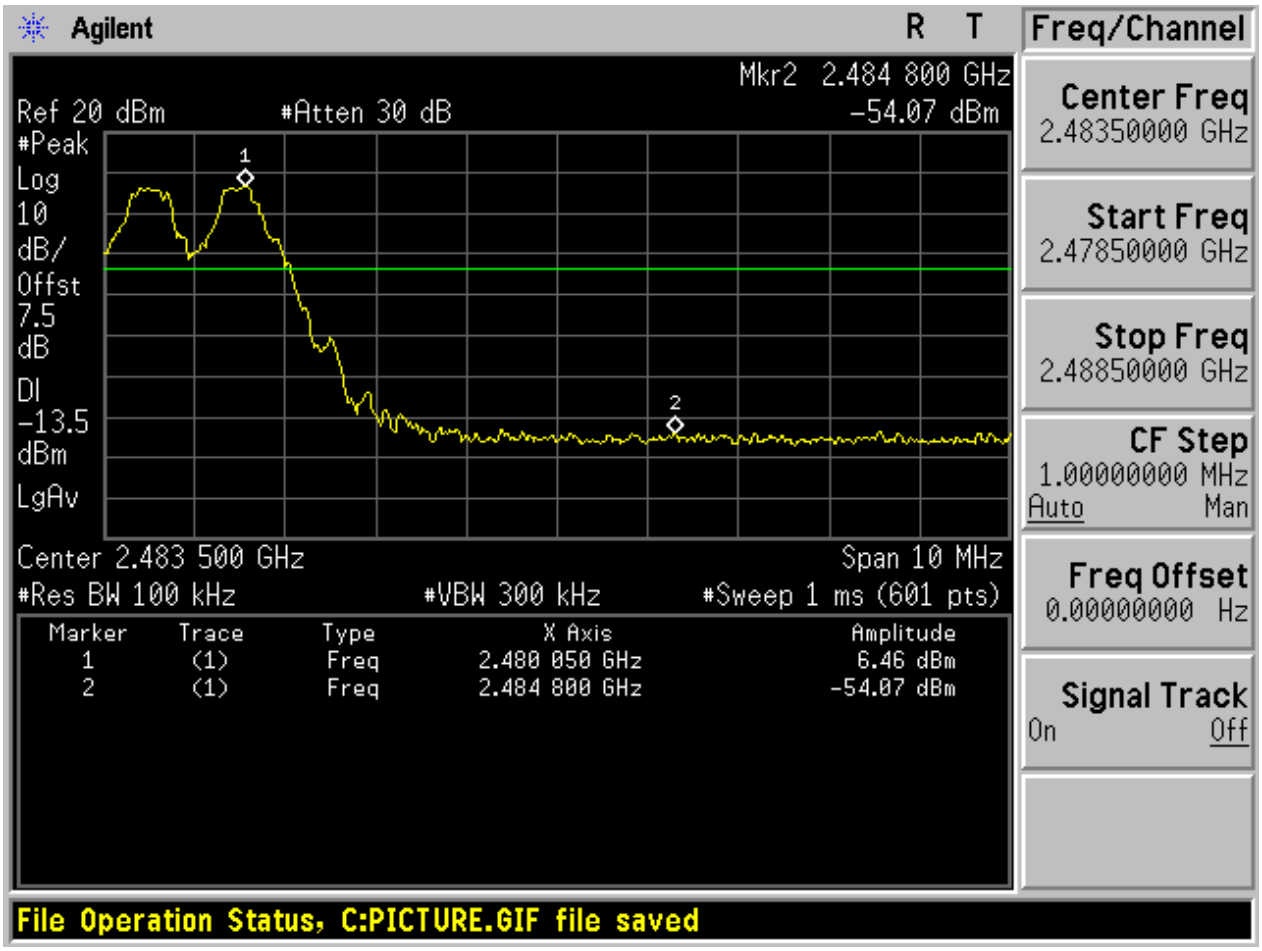


2.2 TM1_DH5_Ch78

No hopping

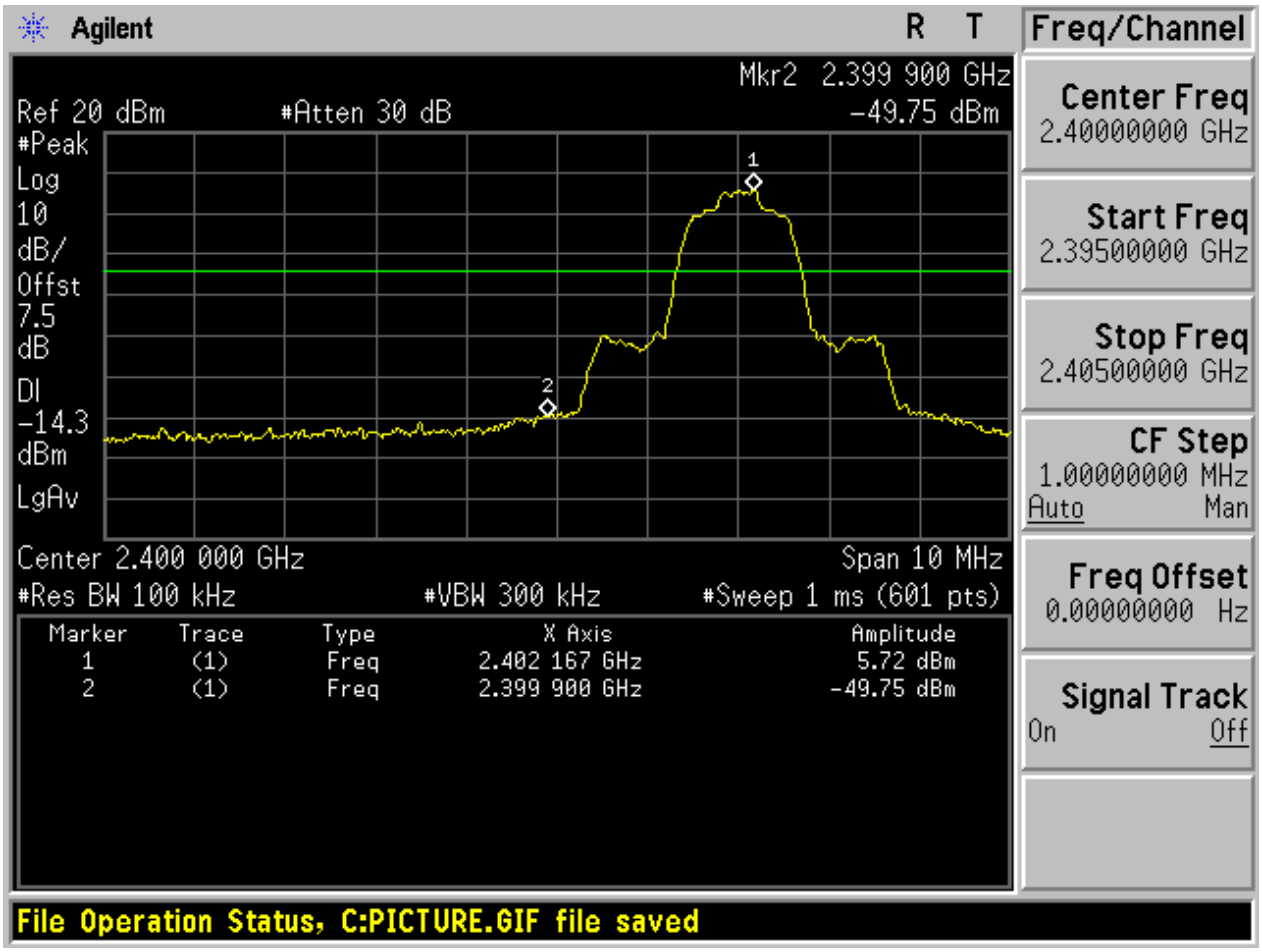


With hopping

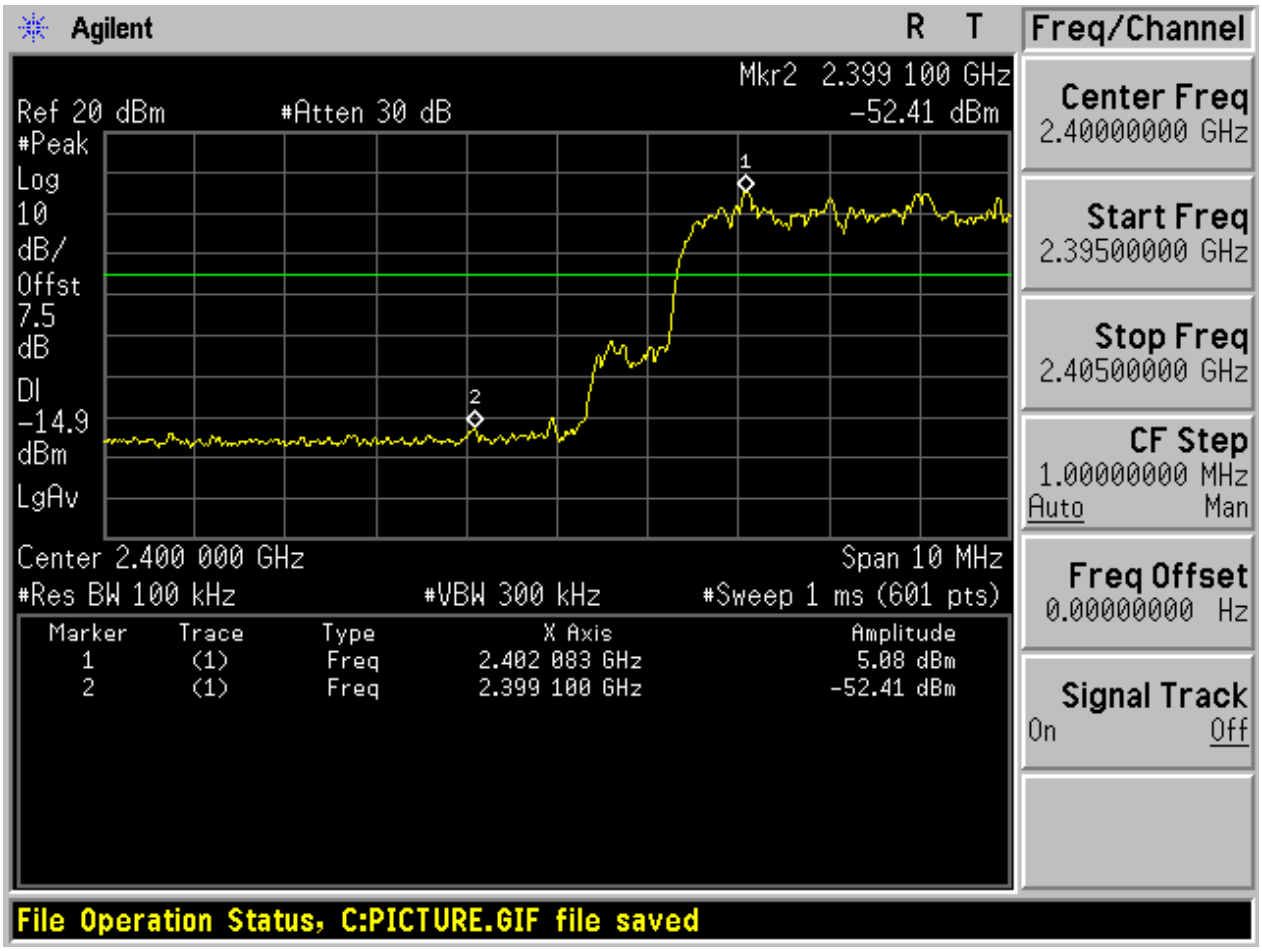


2.3 TM2_2DH5_Ch0

No hopping

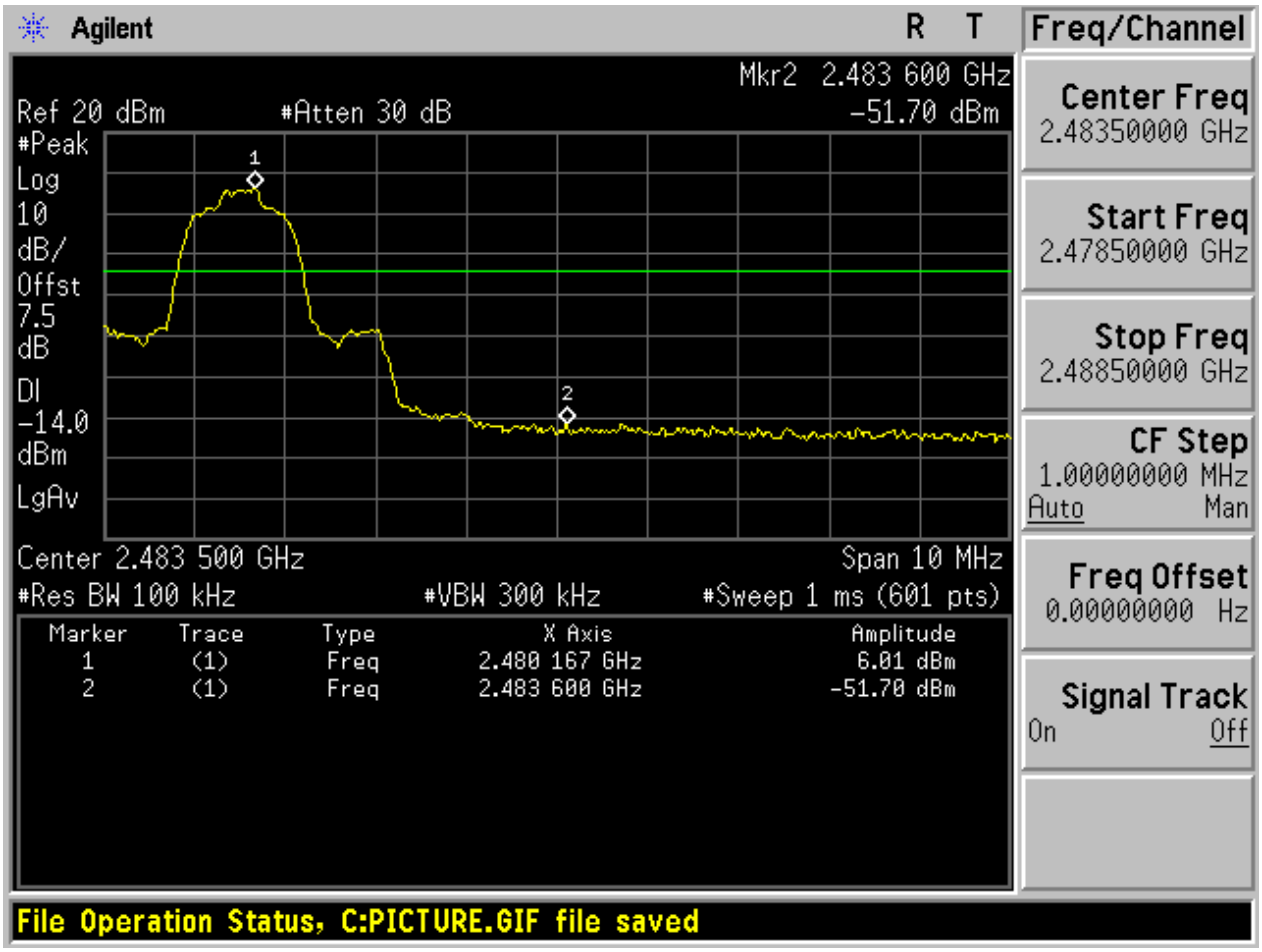


With hopping

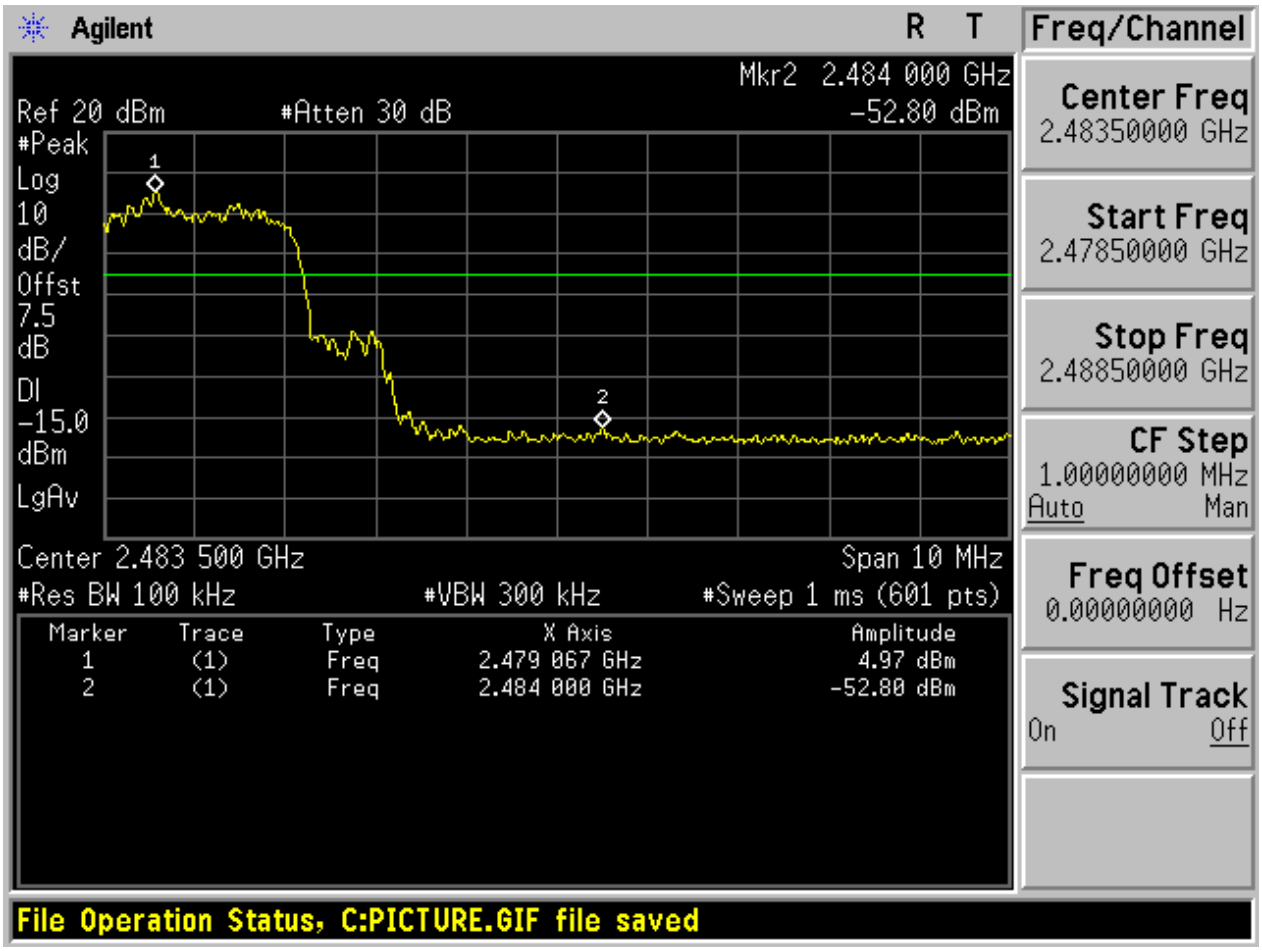


2.4 TM2_2DH5_Ch78

No hopping

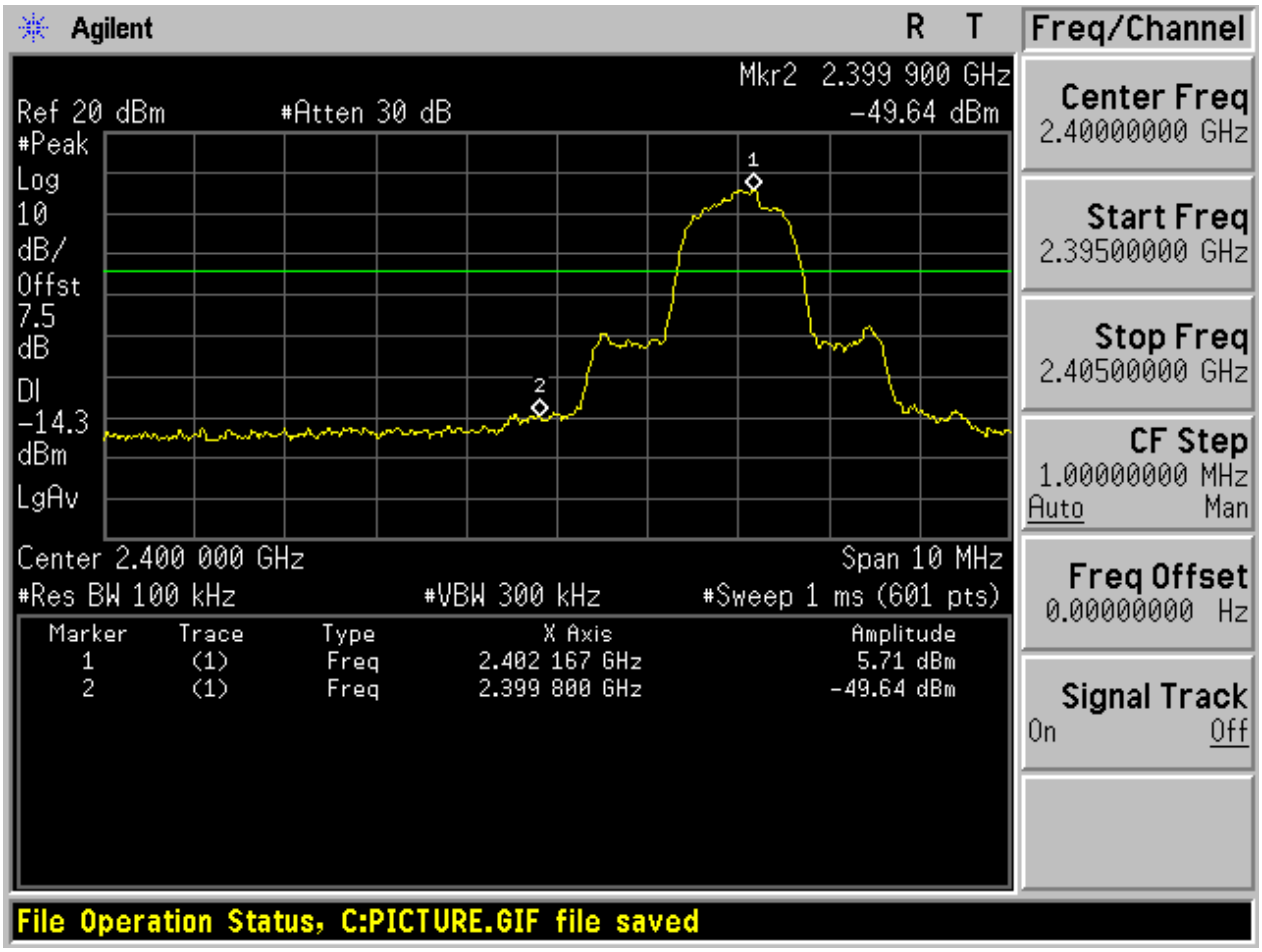


With hopping

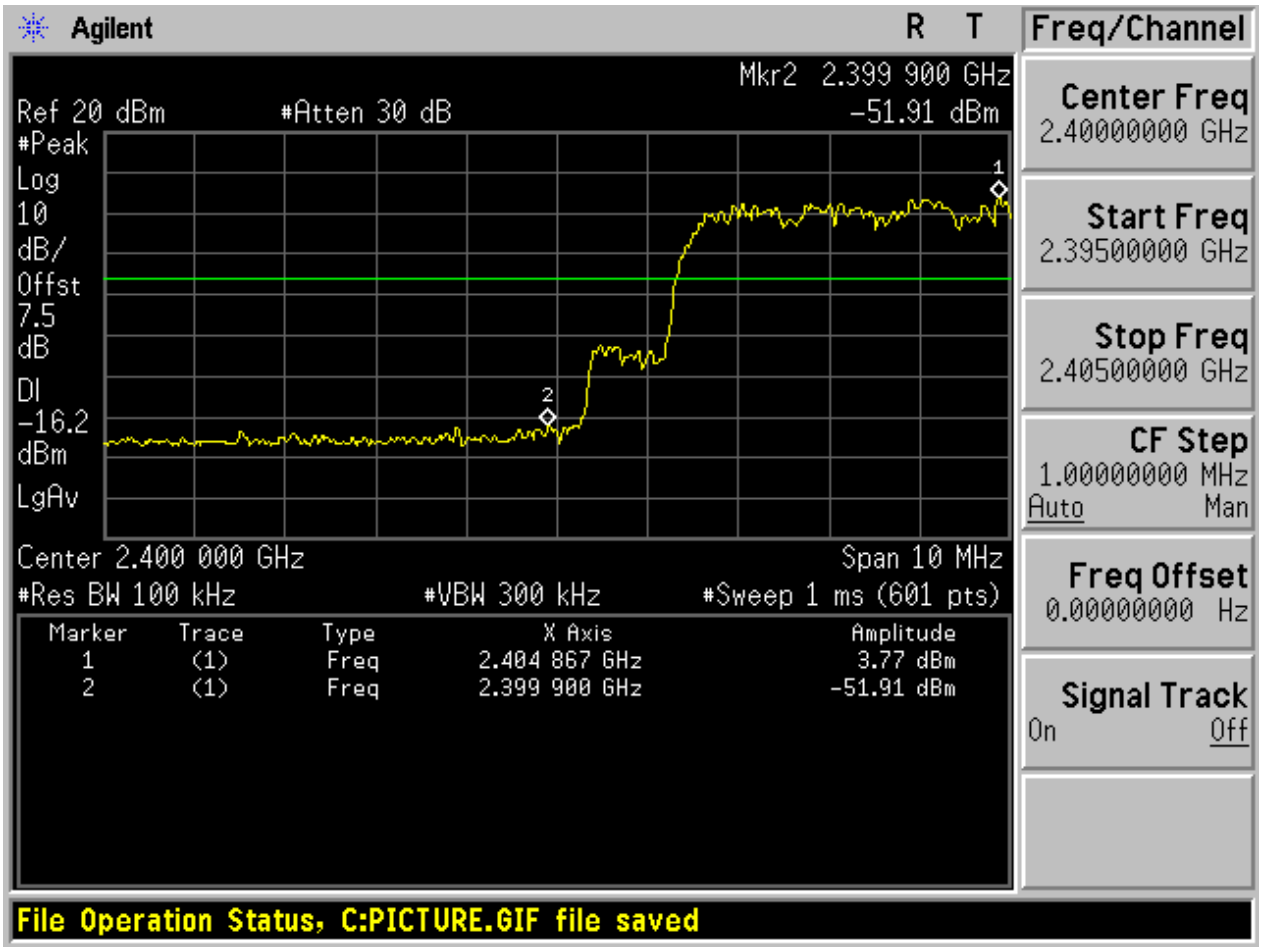


2.5 TM3_3DH5_Ch0

No hopping

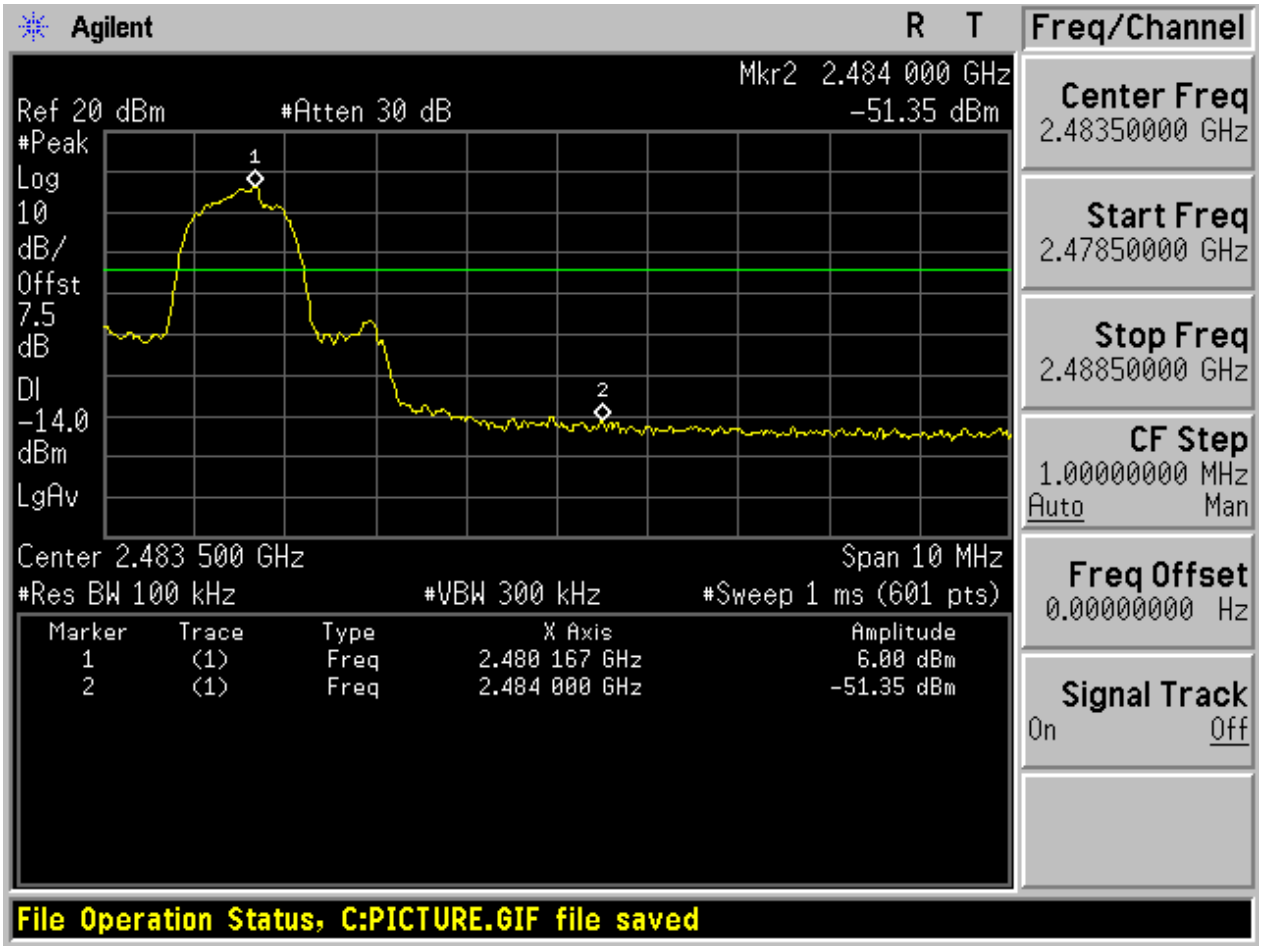


With hopping

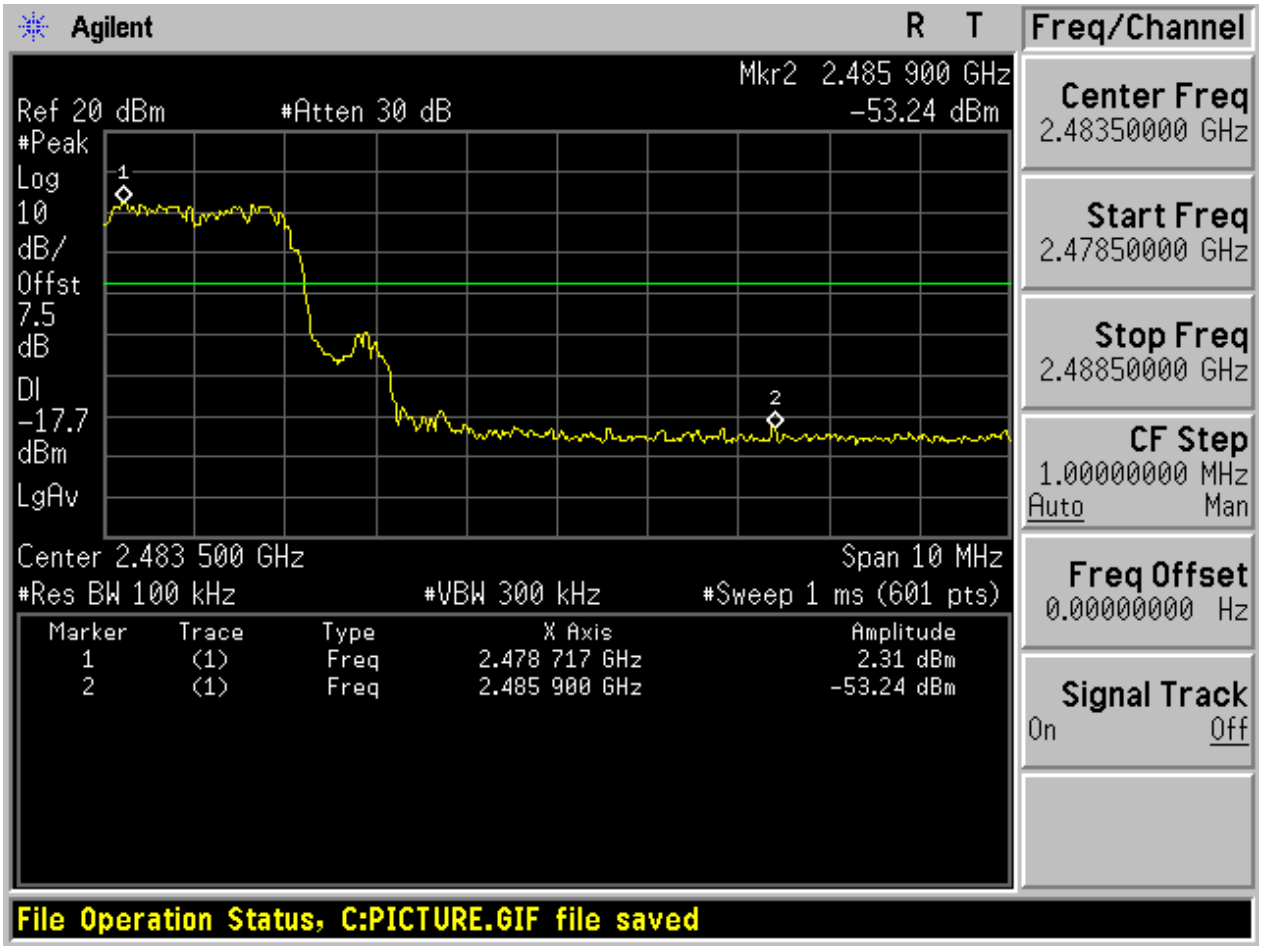


2.6 TM3_3DH5_Ch78

No hopping



With hopping



Appendix H: Conducted RF Spurious Emission

1 Result Table

In this Appendix, the “Pref” refers to the peak power level in any 100 kHz bandwidth within the fundamental emission which is used as the reference level, the “Puw” referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated, a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = 10 x lg(100 [kHz]/narrower RBW [kHz]). As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

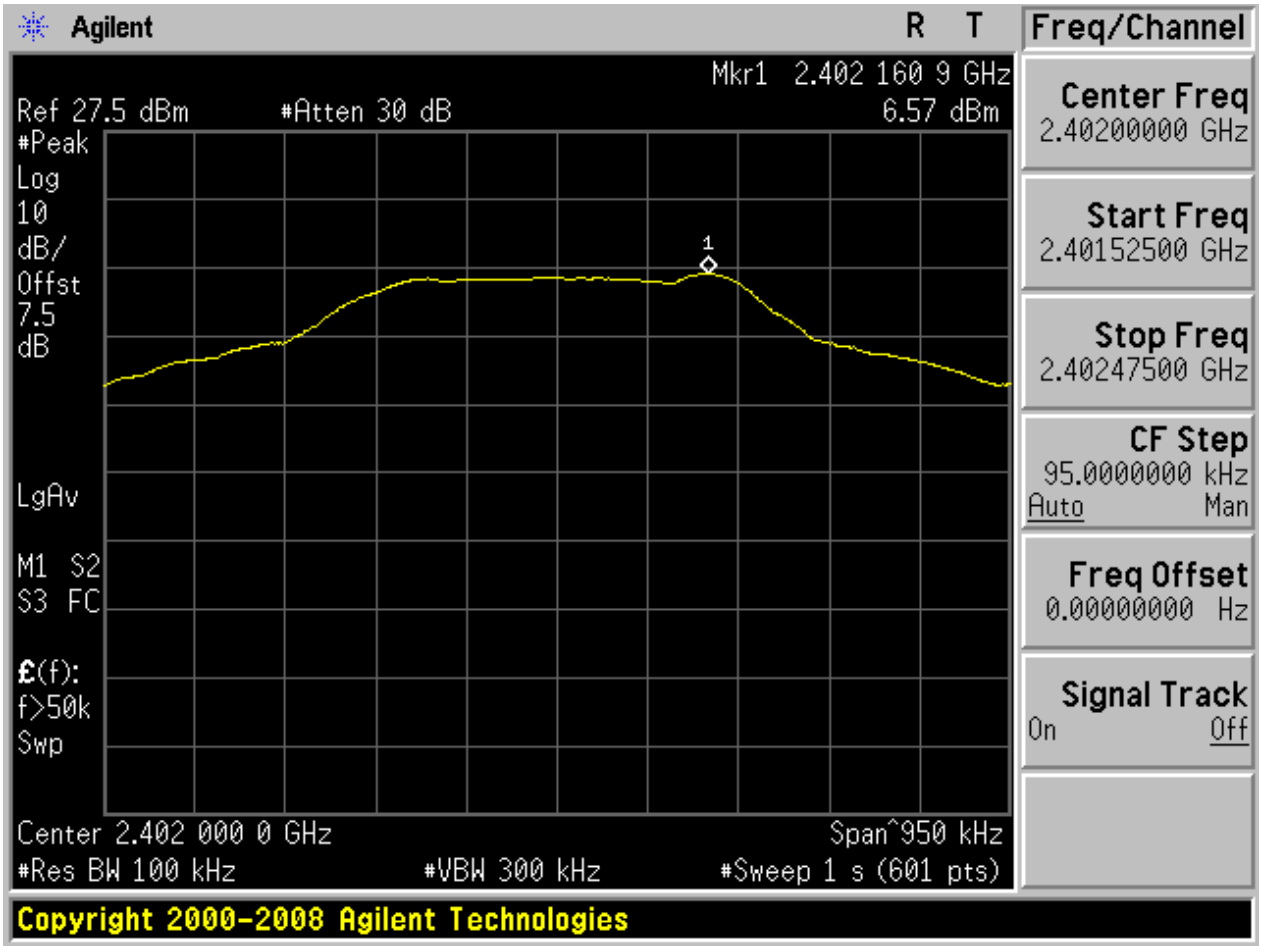
In the result table, the “< Limit” denotes that “The Puw [dBm] is less than Pref [dBm] - 20 [dB], see test plots for detailed”.

EUT Conf.	Pref [dBm/100 kHz]	Puw [dBm/100 kHz]	Verdict
TM1_DH5_Ch0	6.57	< Limit	Pass
TM1_DH5_Ch39	6.61	< Limit	Pass
TM1_DH5_Ch78	6.73	< Limit	Pass
TM2_2DH5_Ch0	5.65	< Limit	Pass
TM2_2DH5_Ch39	5.75	< Limit	Pass
TM2_2DH5_Ch78	5.92	< Limit	Pass
TM3_3DH5_Ch0	5.68	< Limit	Pass
TM3_3DH5_Ch39	5.78	< Limit	Pass
TM3_3DH5_Ch78	5.93	< Limit	Pass

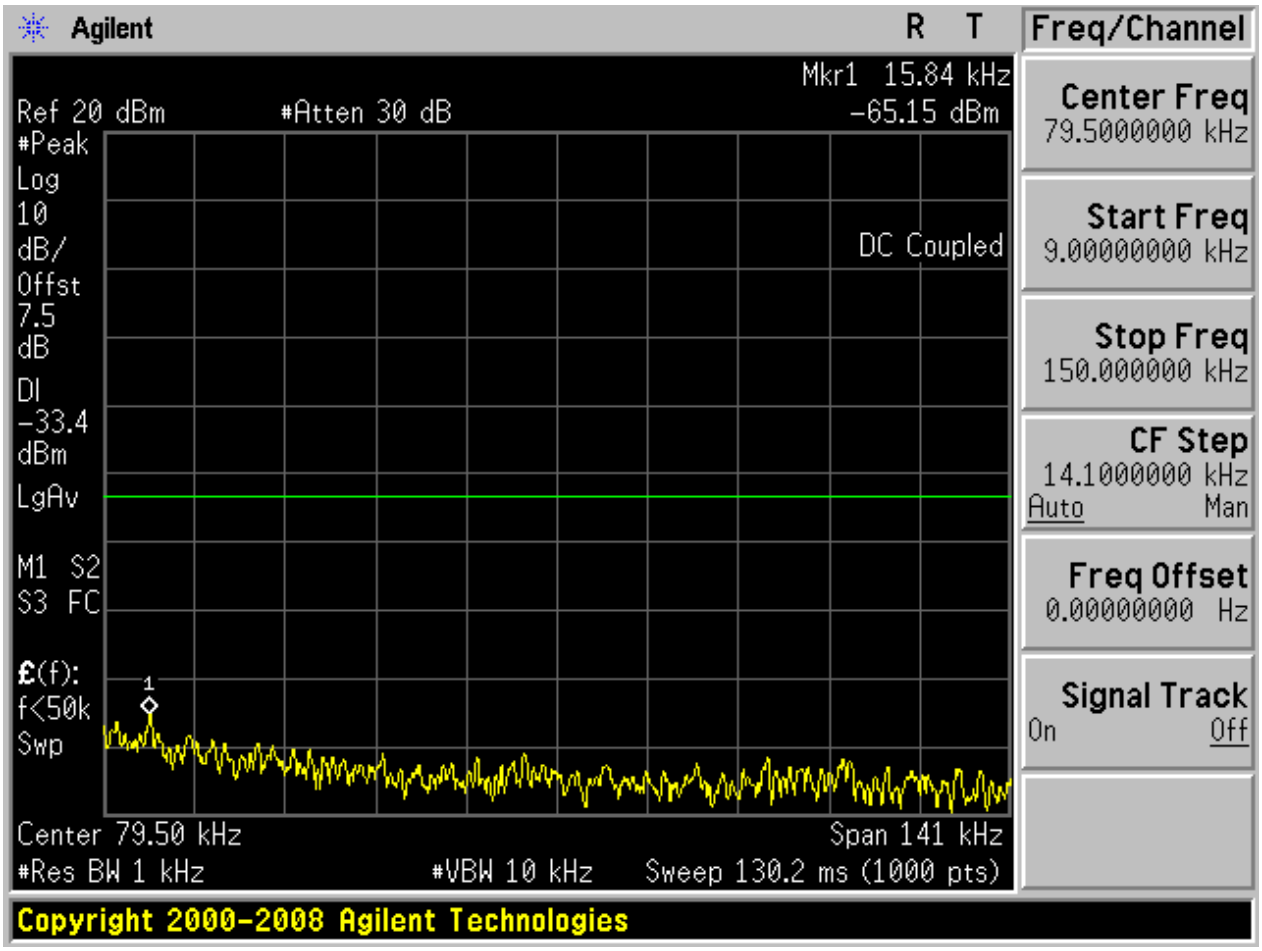
2 Test Plot

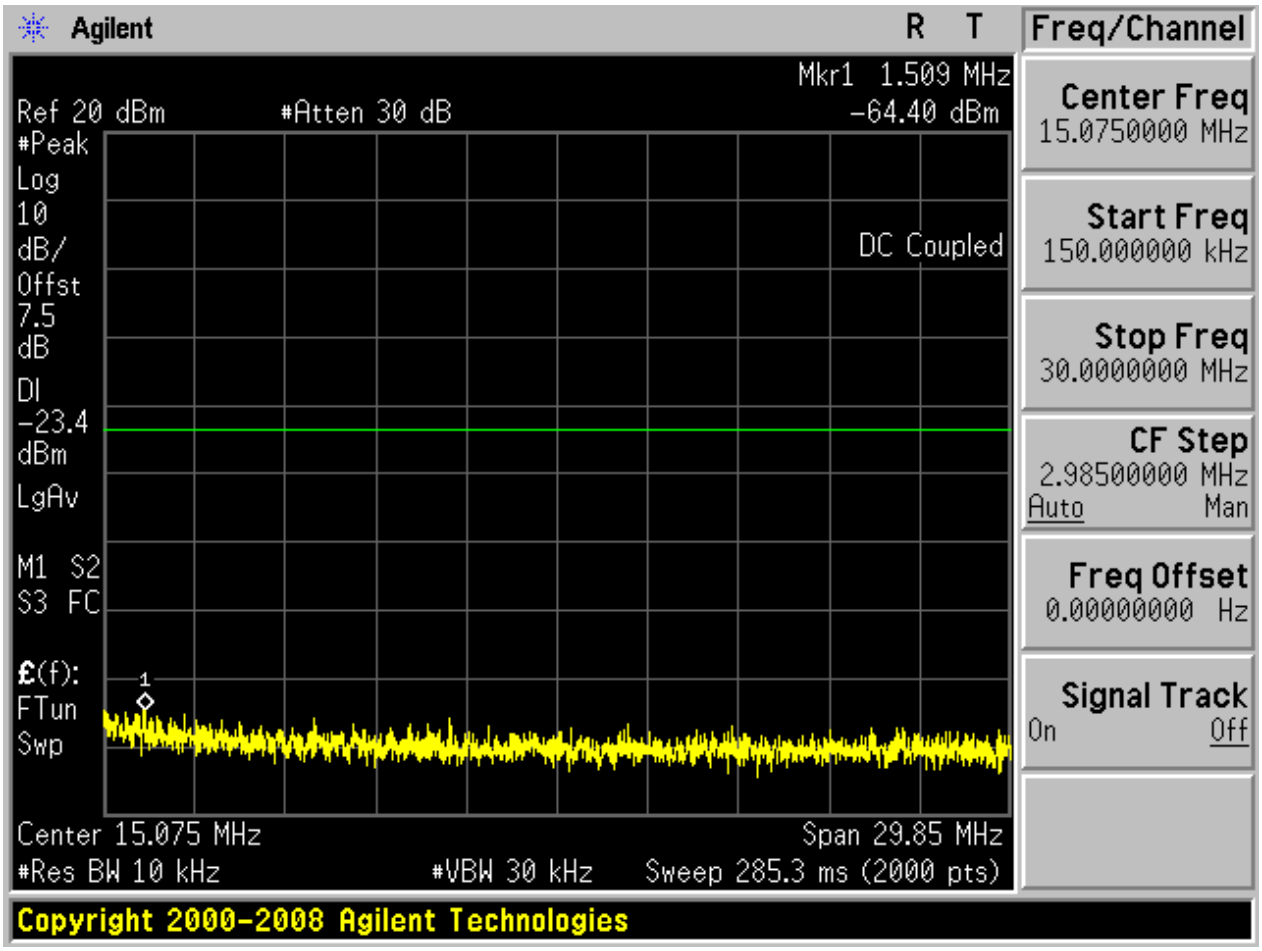
2.1 TM1_DH5_Ch0

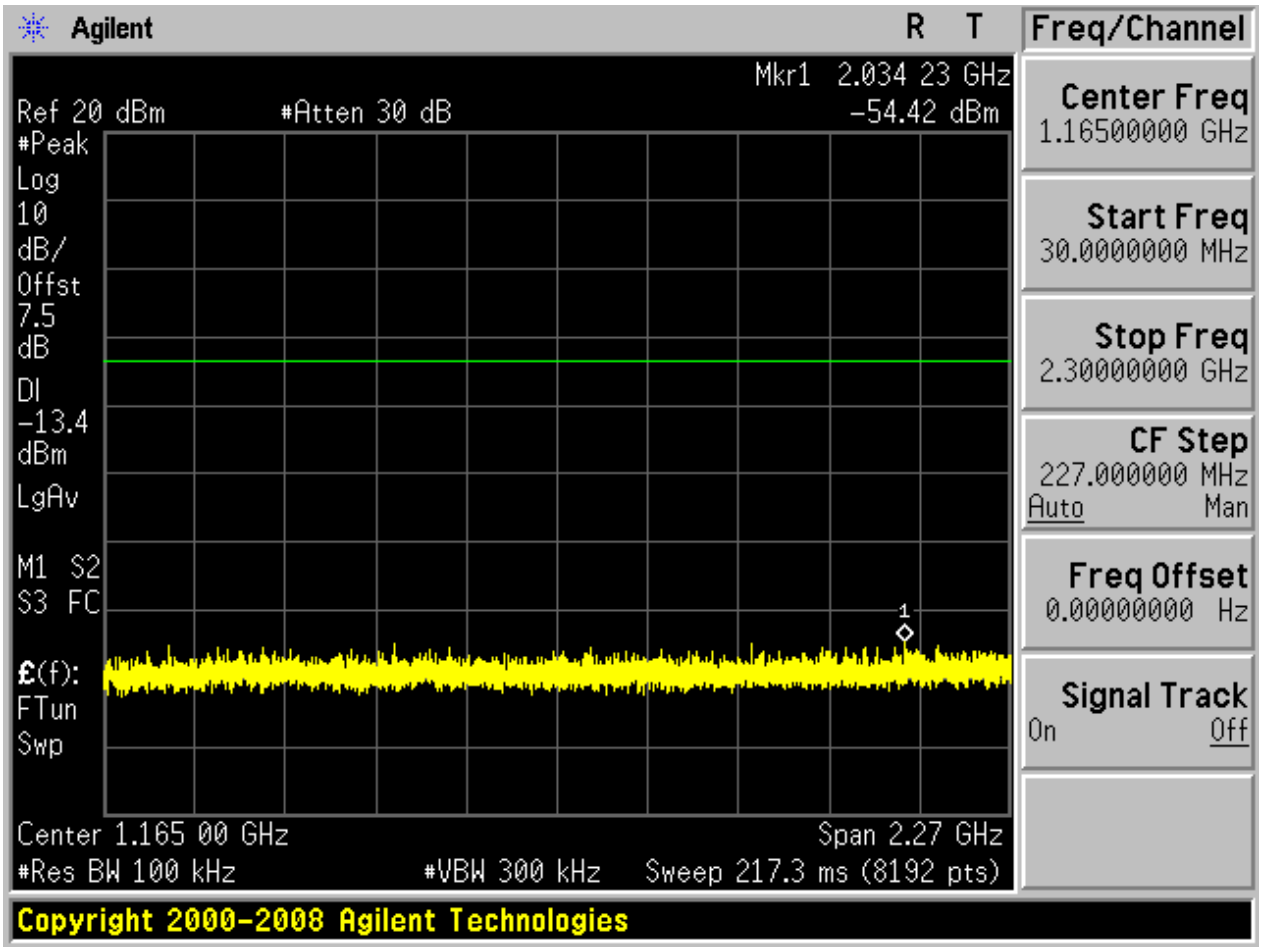
2.1.1 Pref

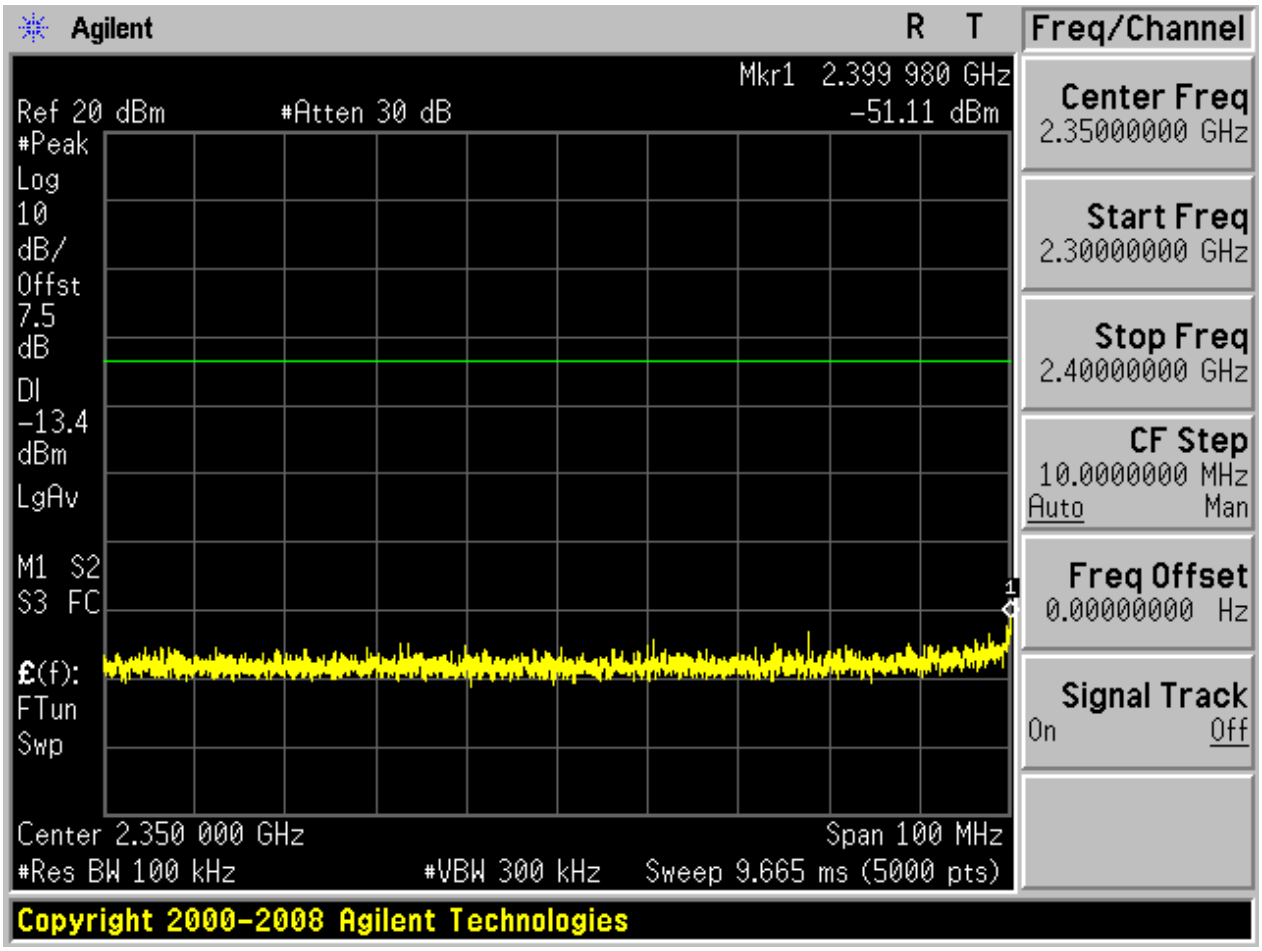


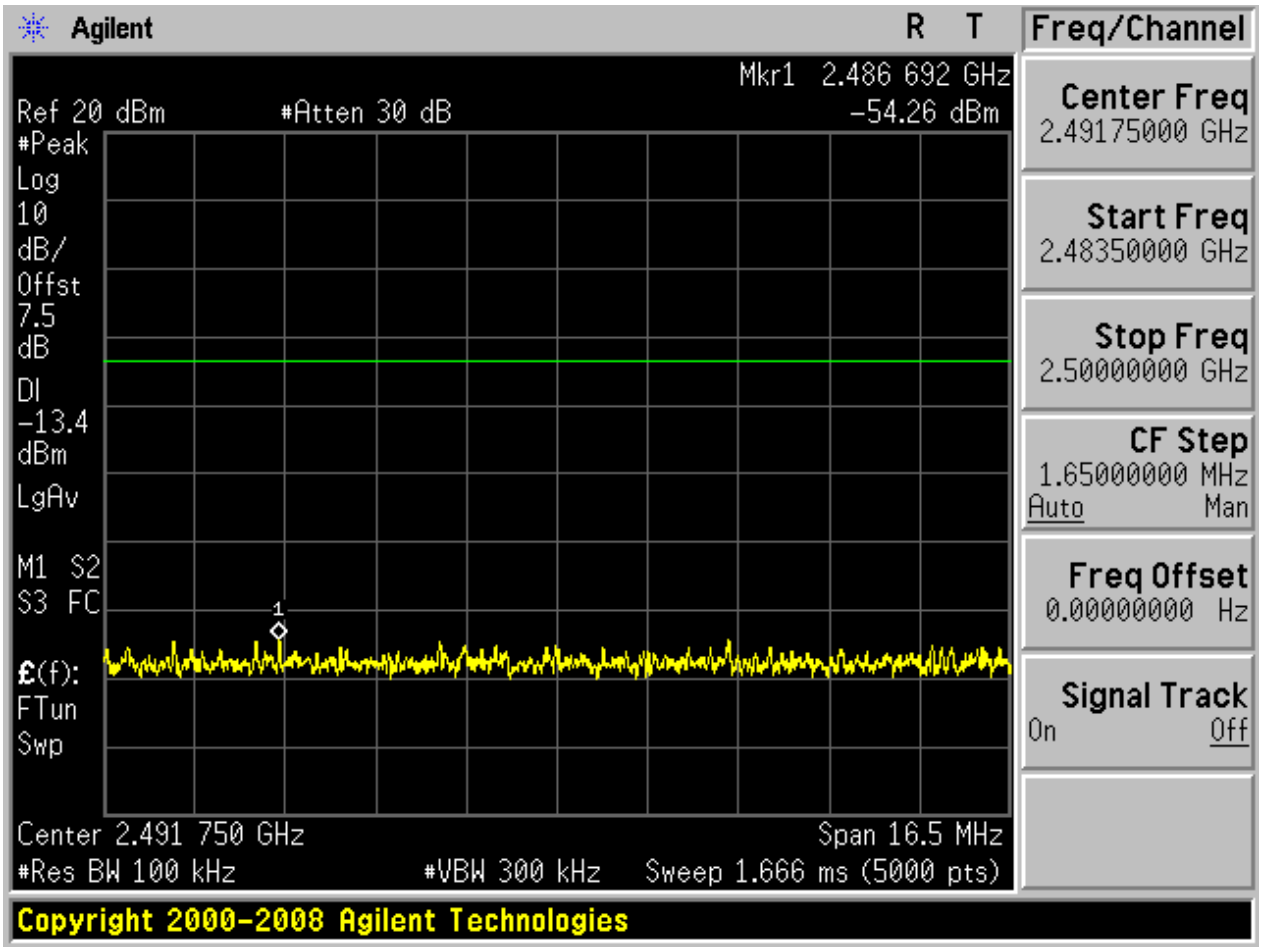
2.1.2 Puw

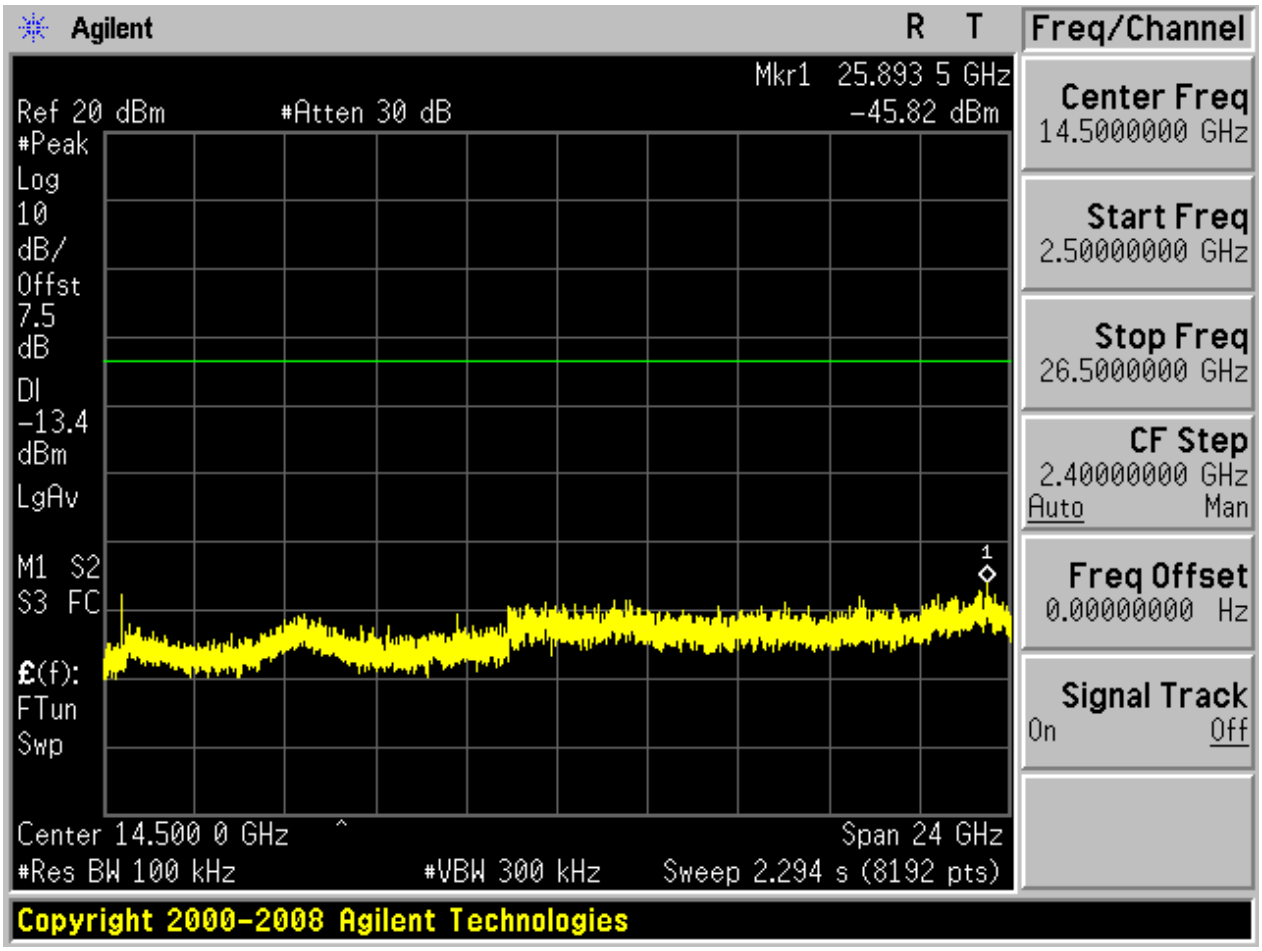






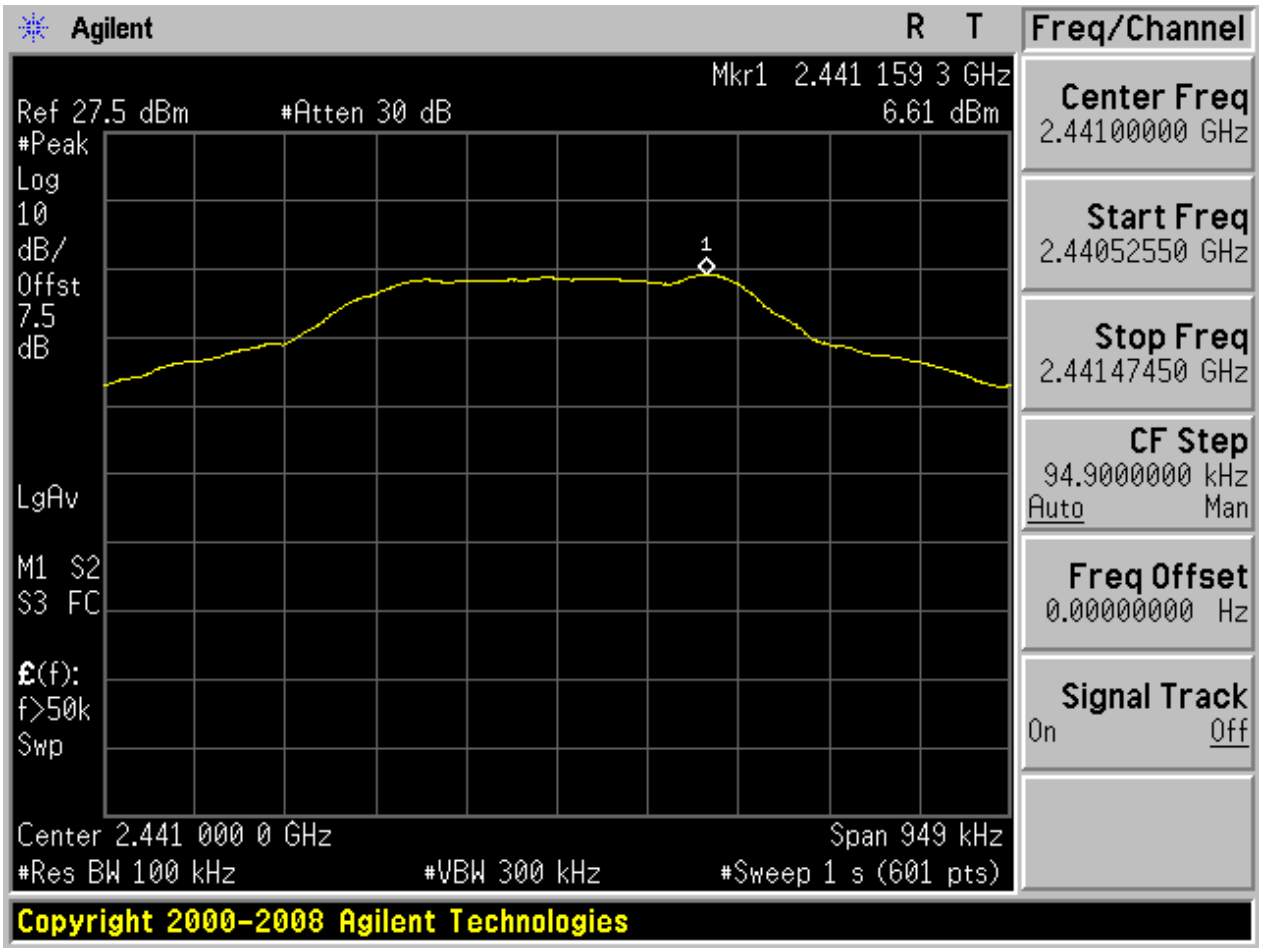




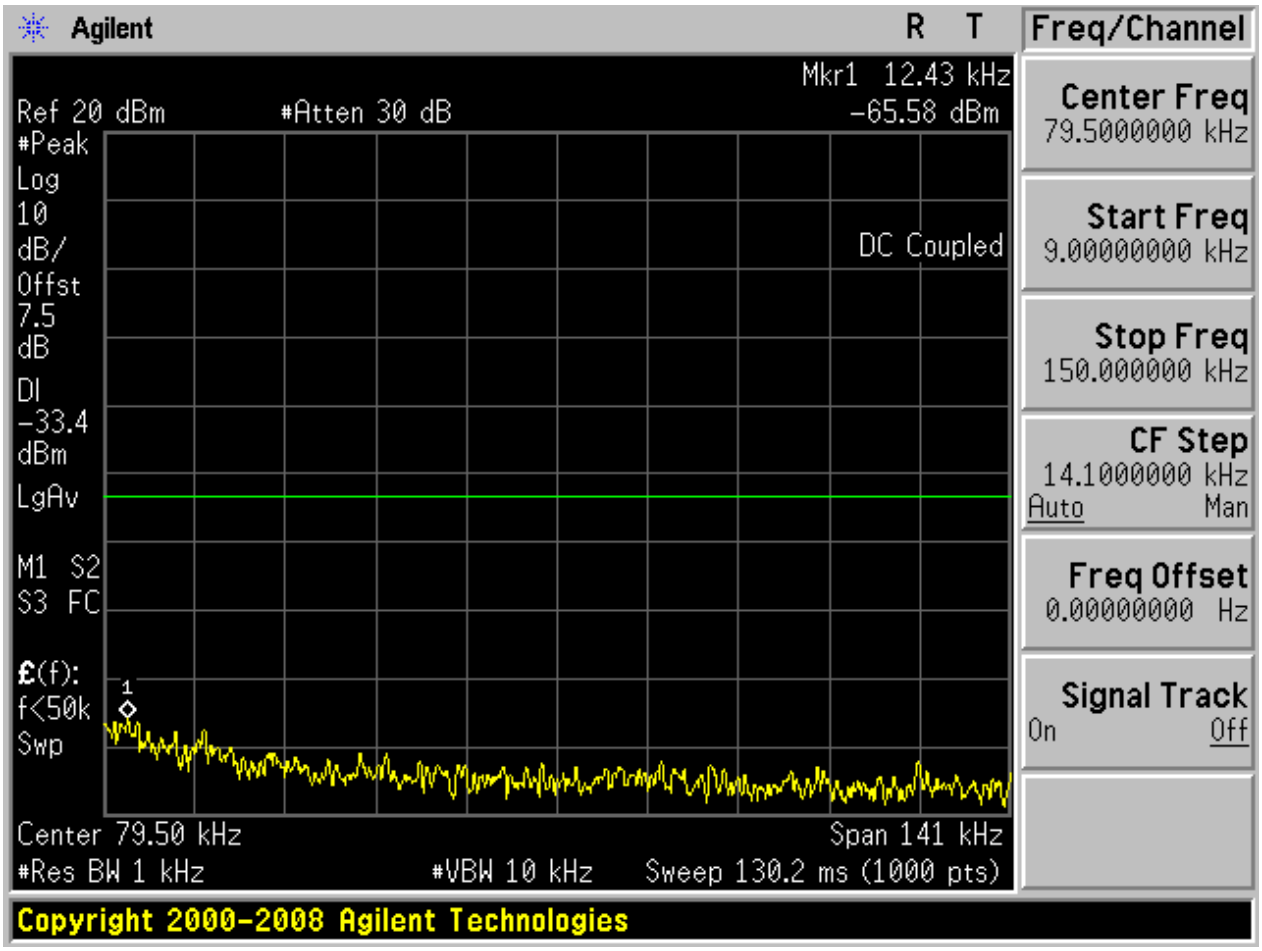


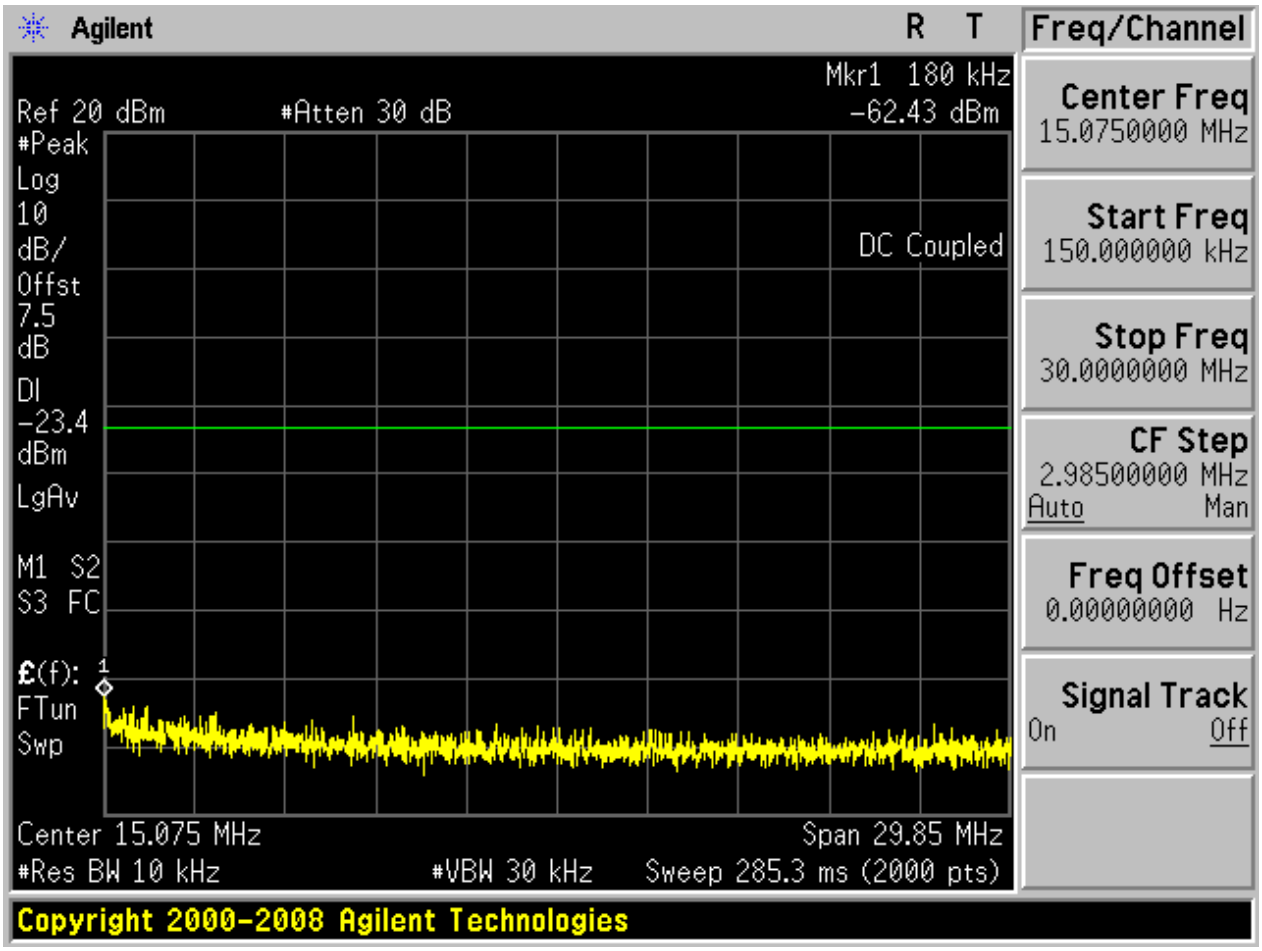
2.2 TM1_DH5_Ch39

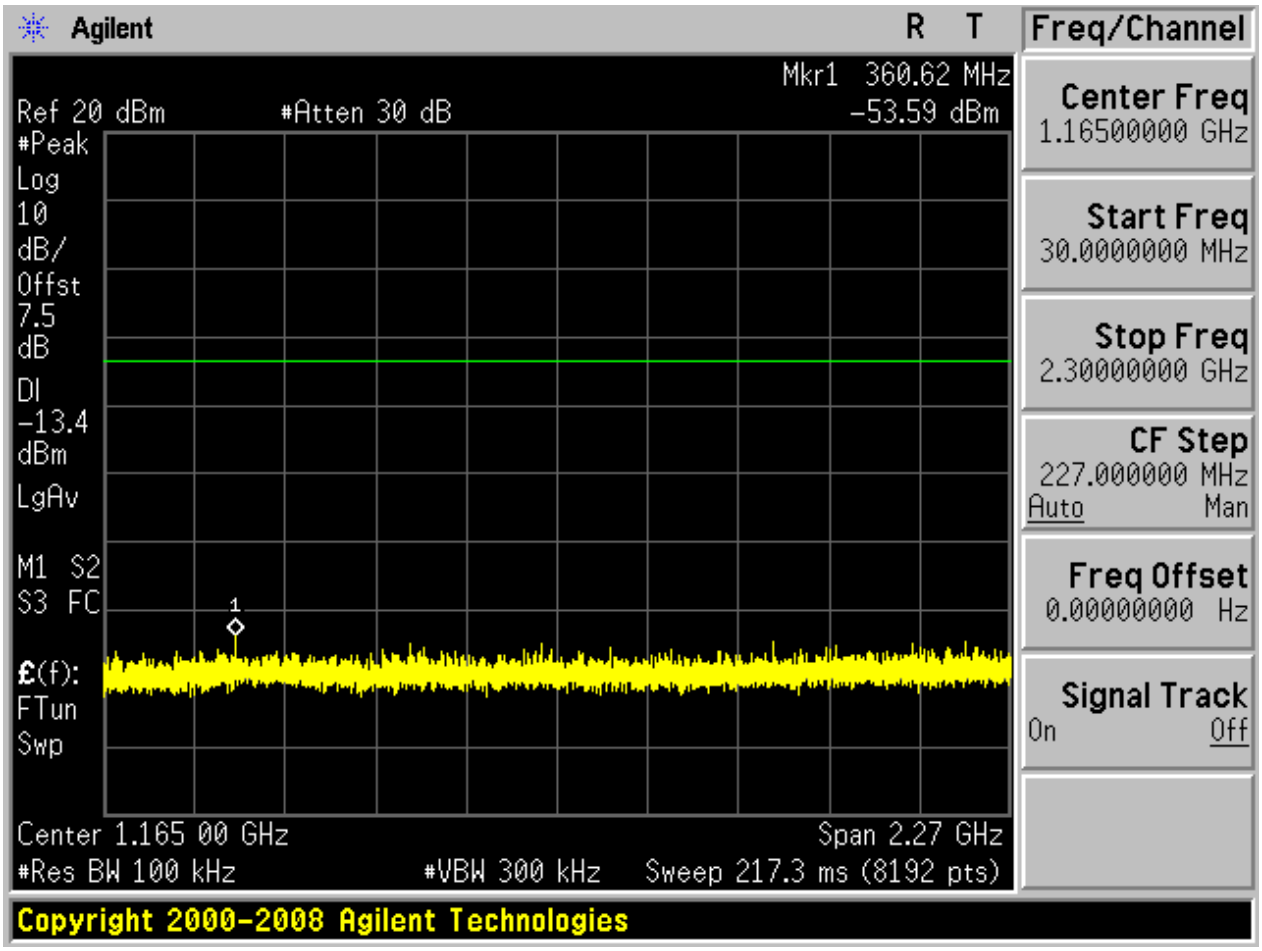
2.2.1 Pref

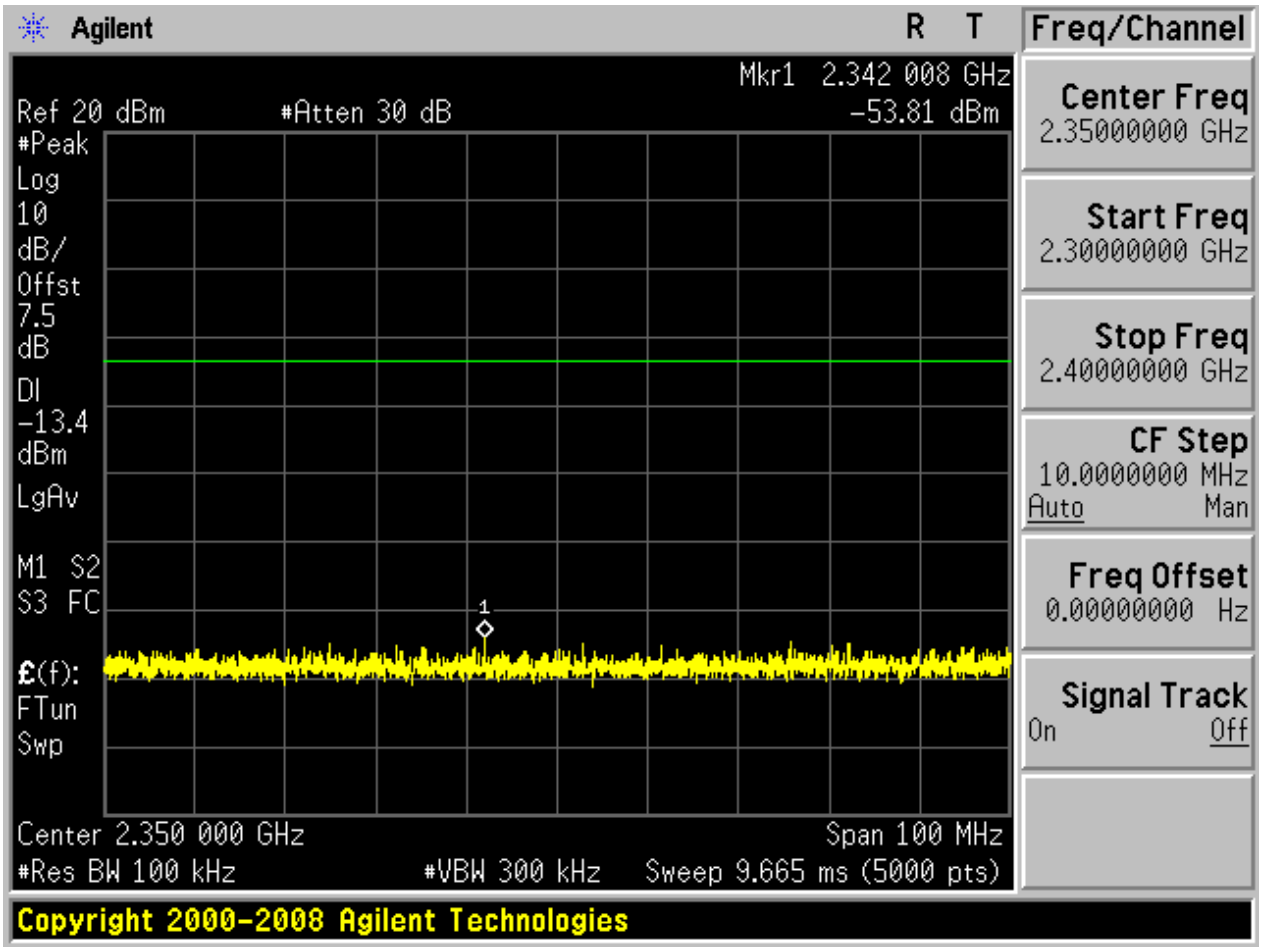


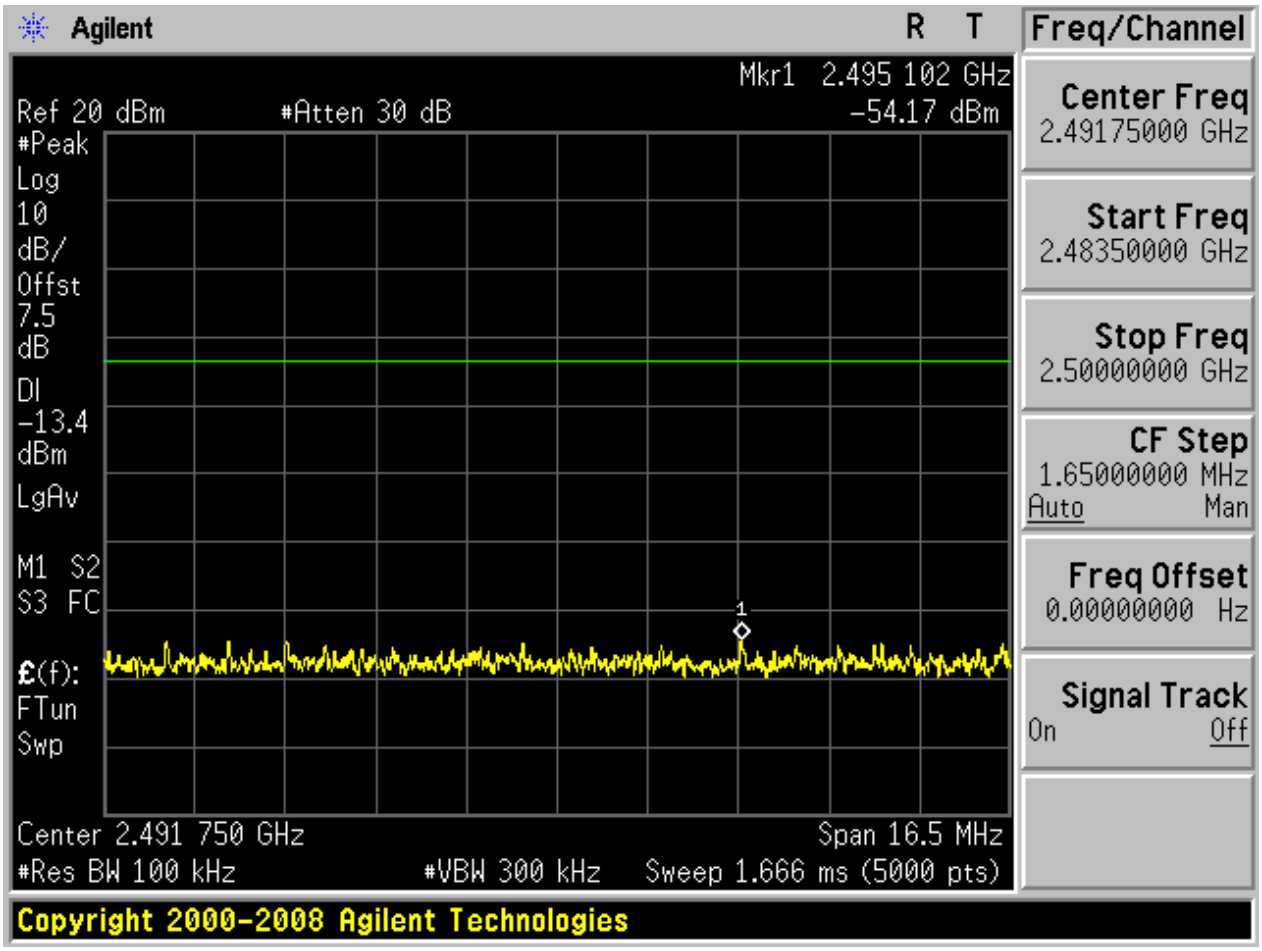
2.2.2 Puw

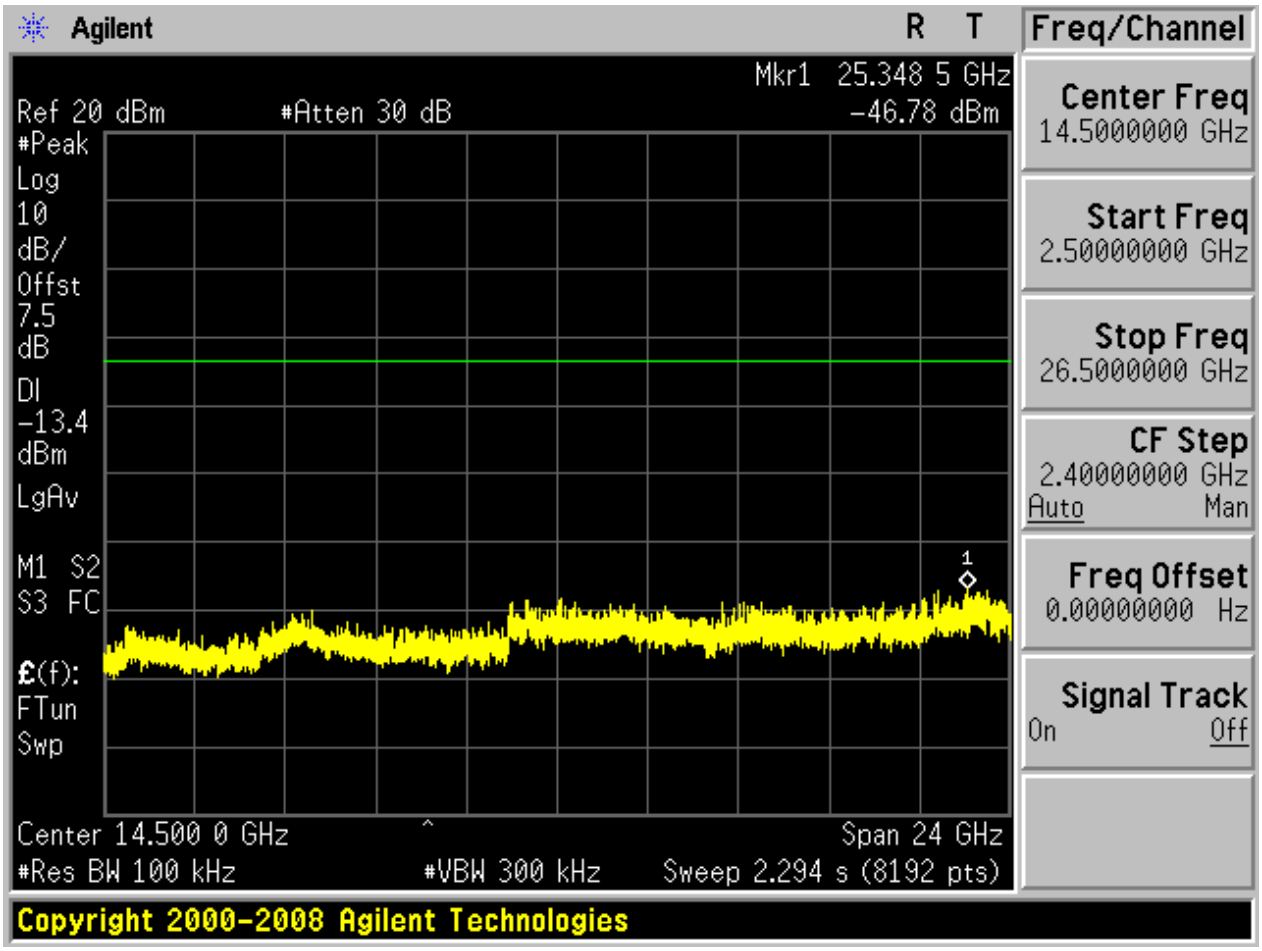






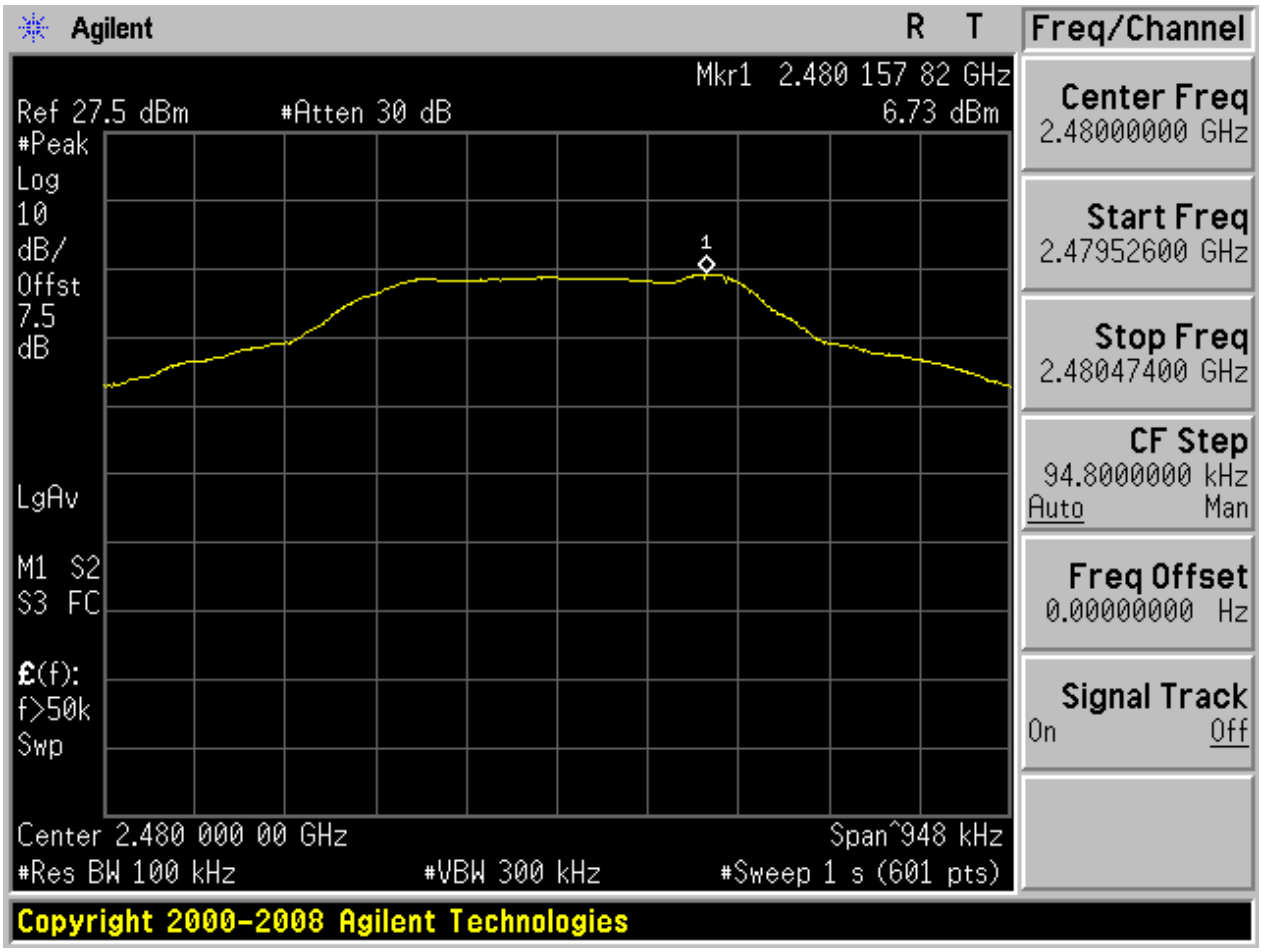




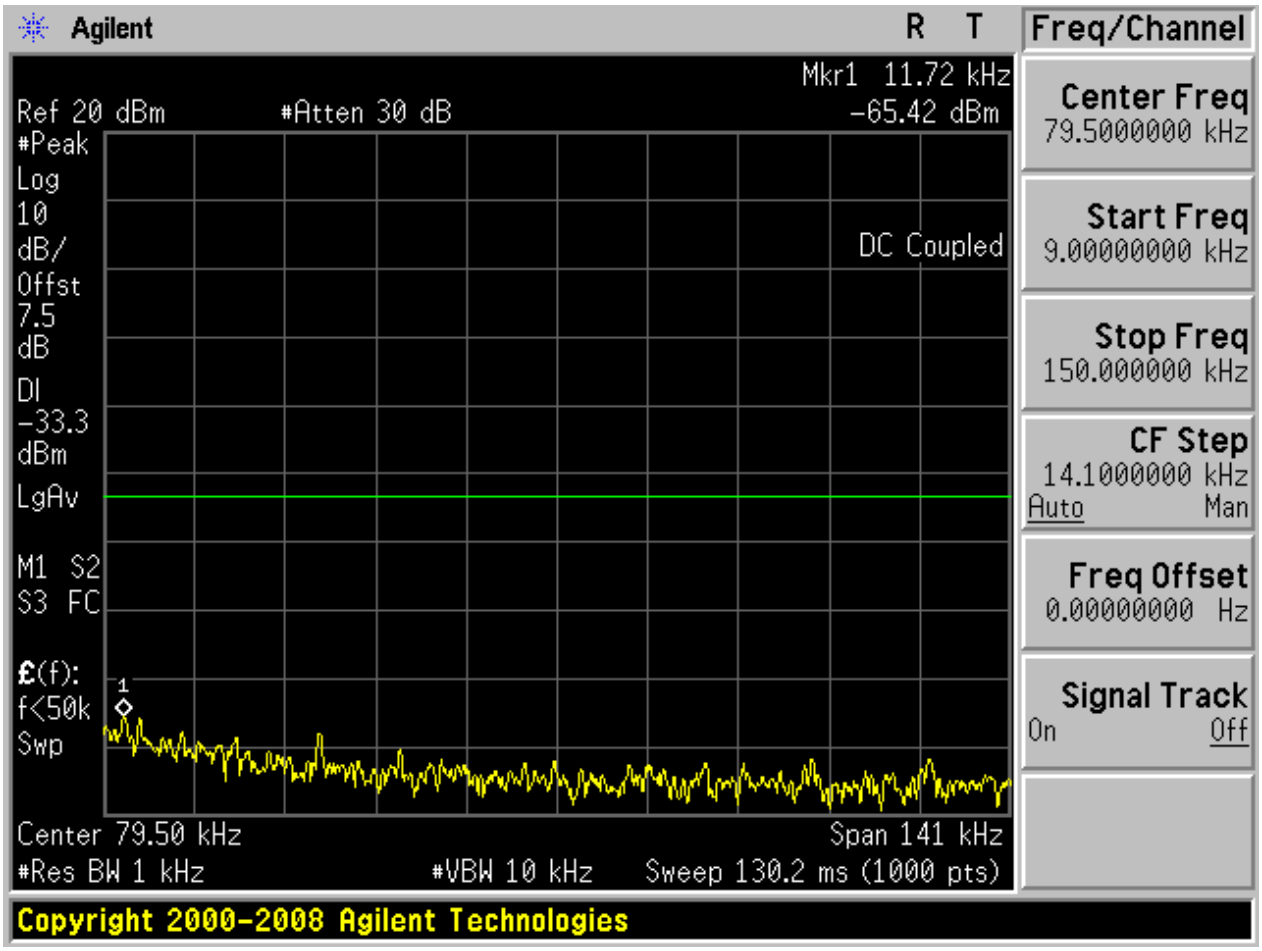


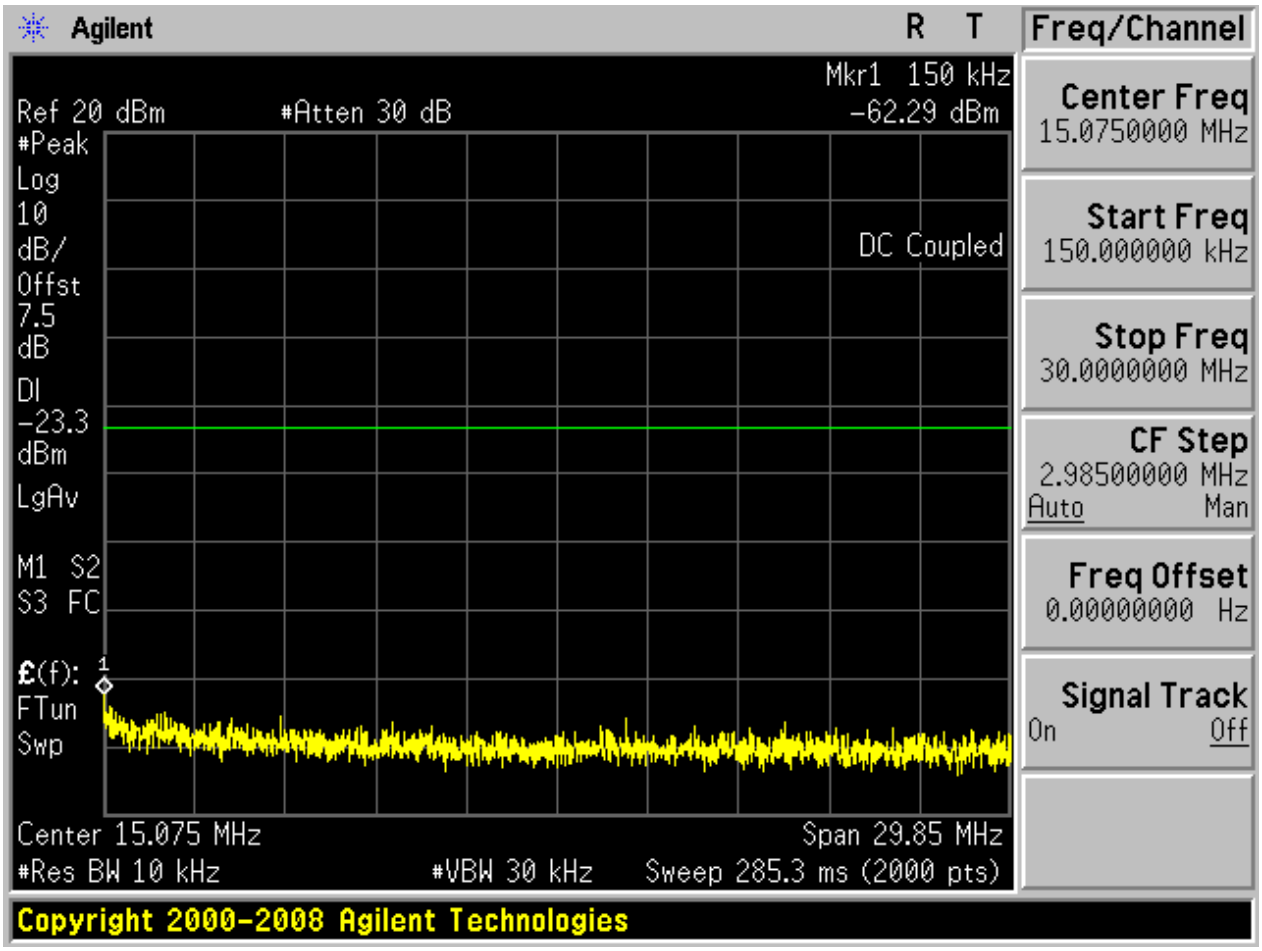
2.3 TM1_DH5_Ch78

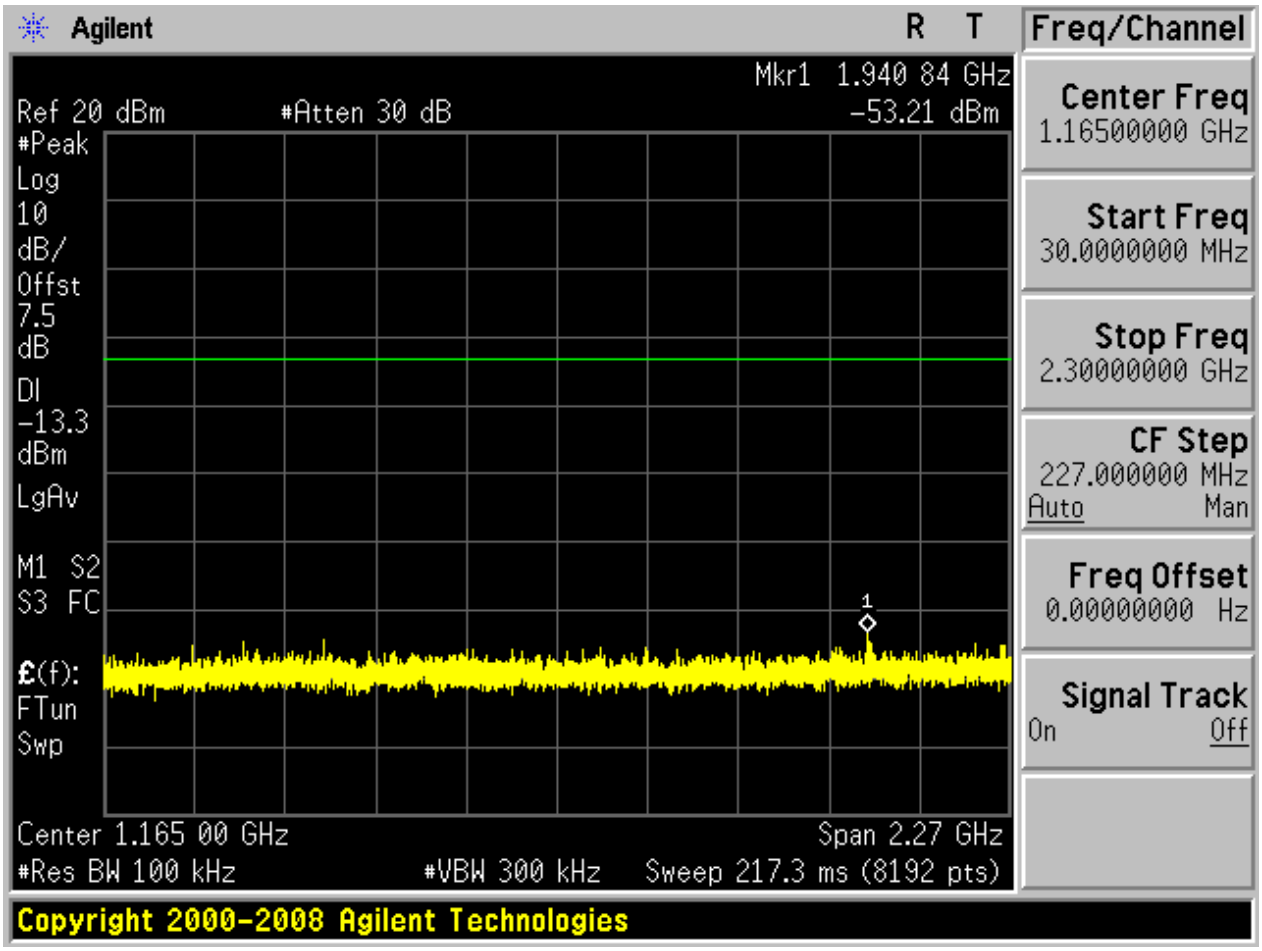
2.3.1 Pref

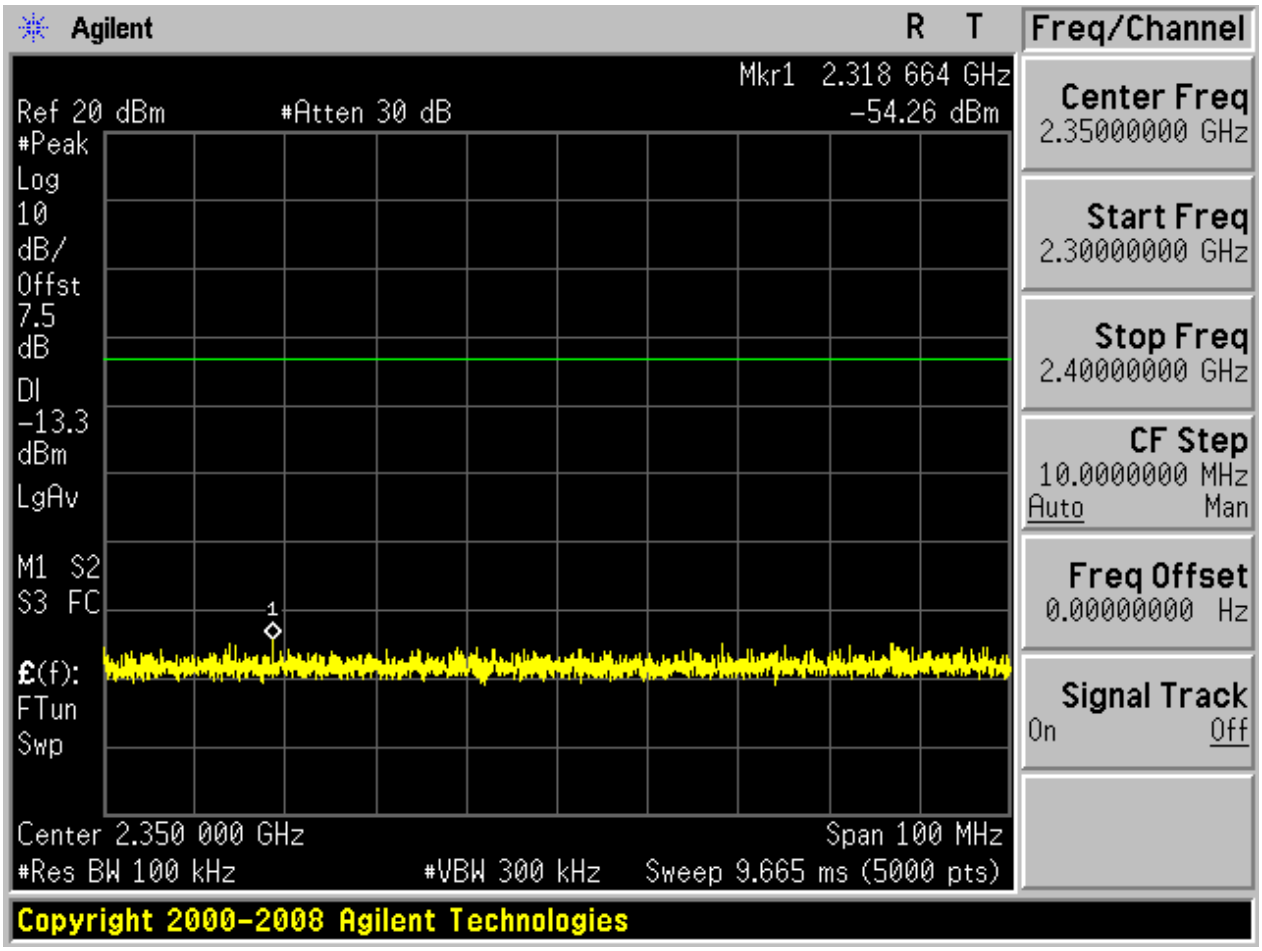


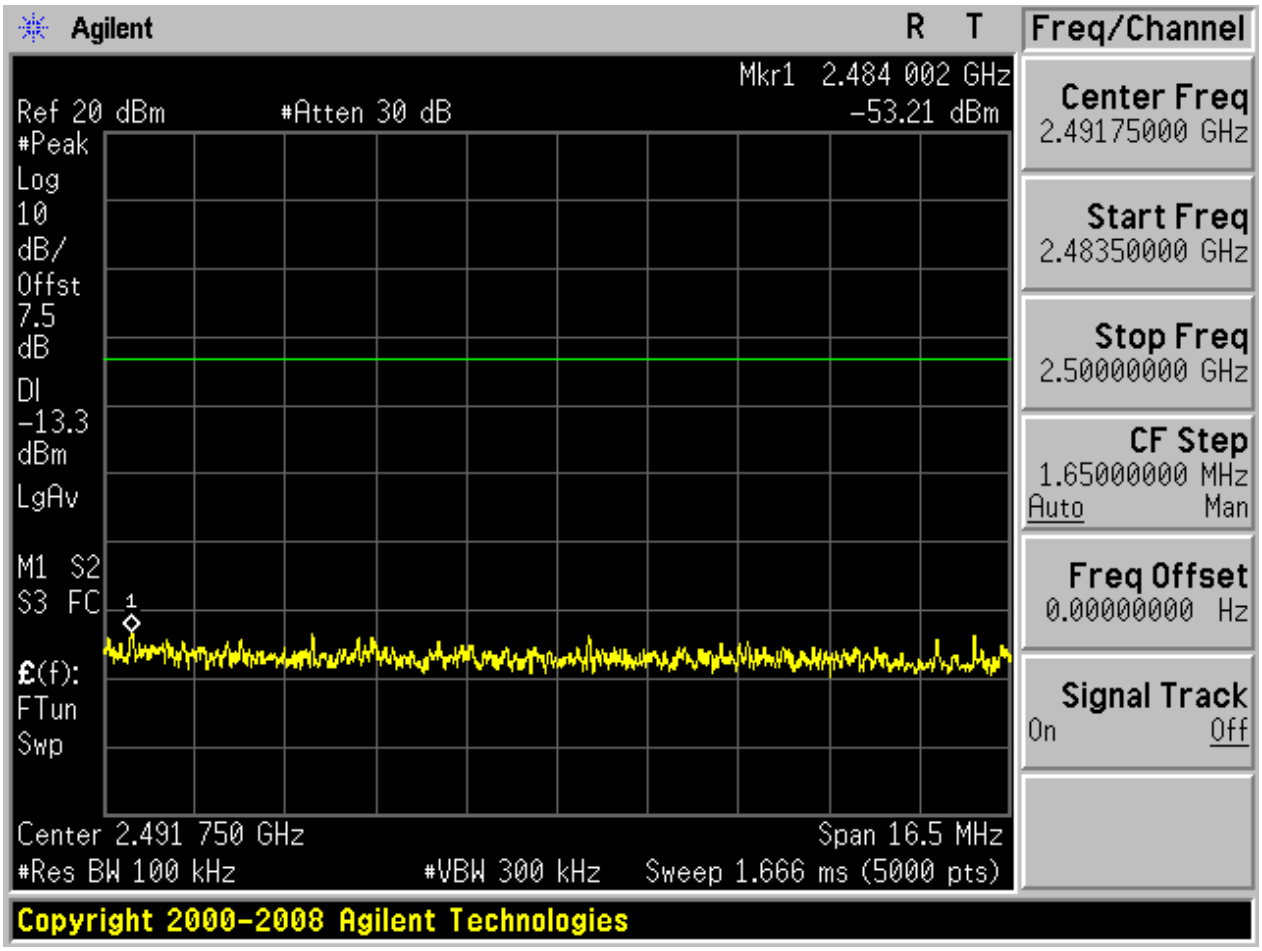
2.3.2 Puw

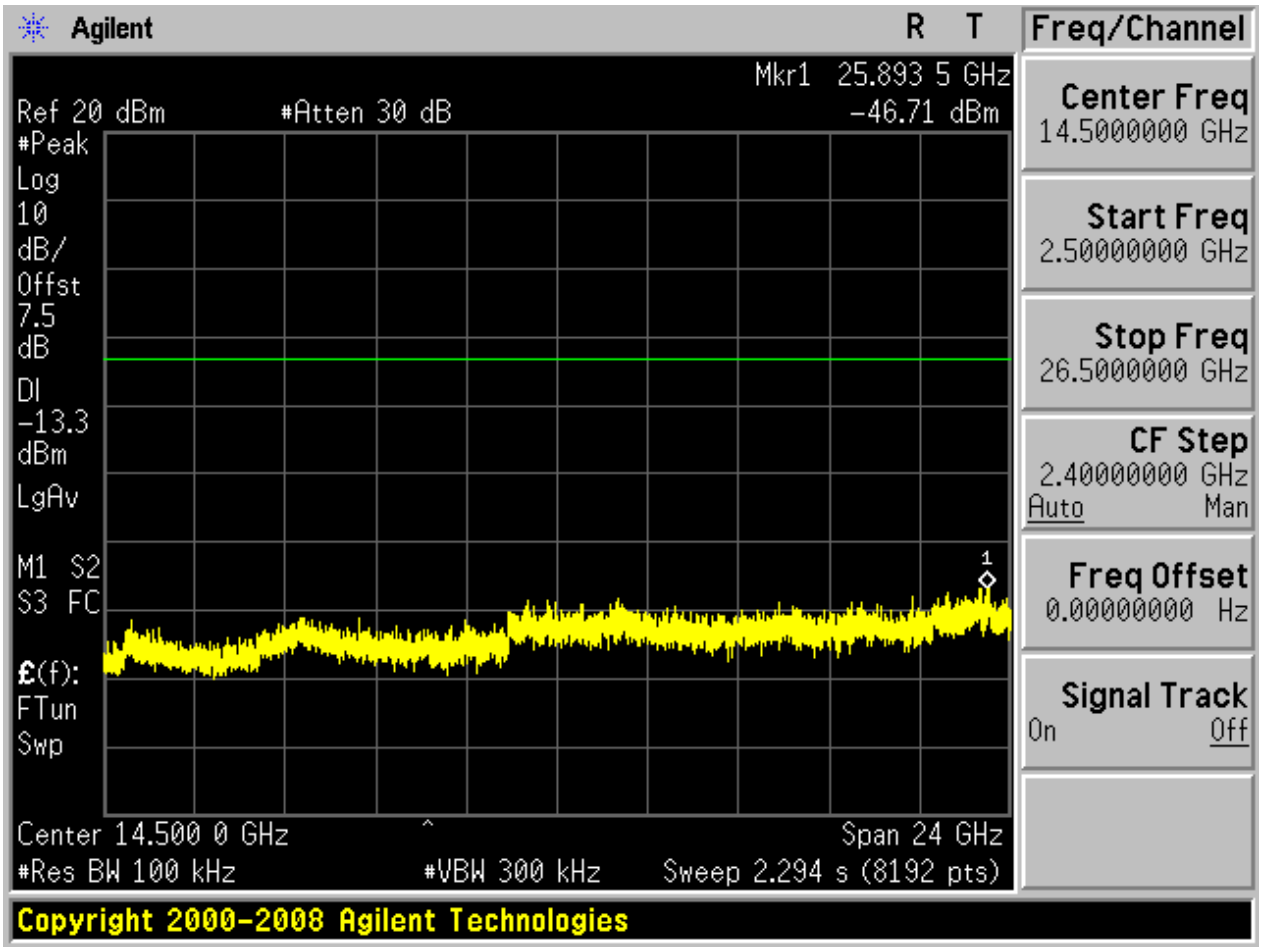






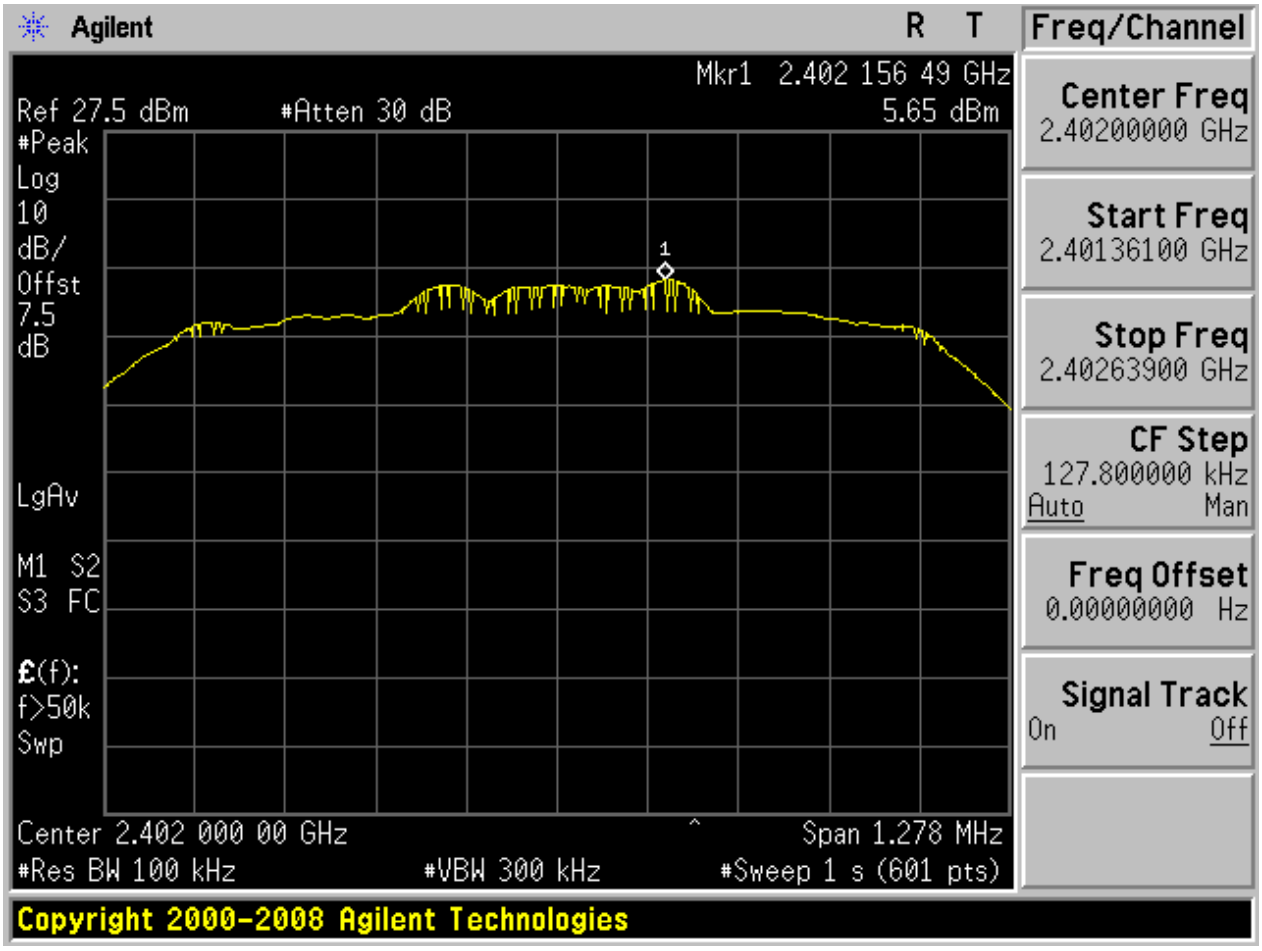




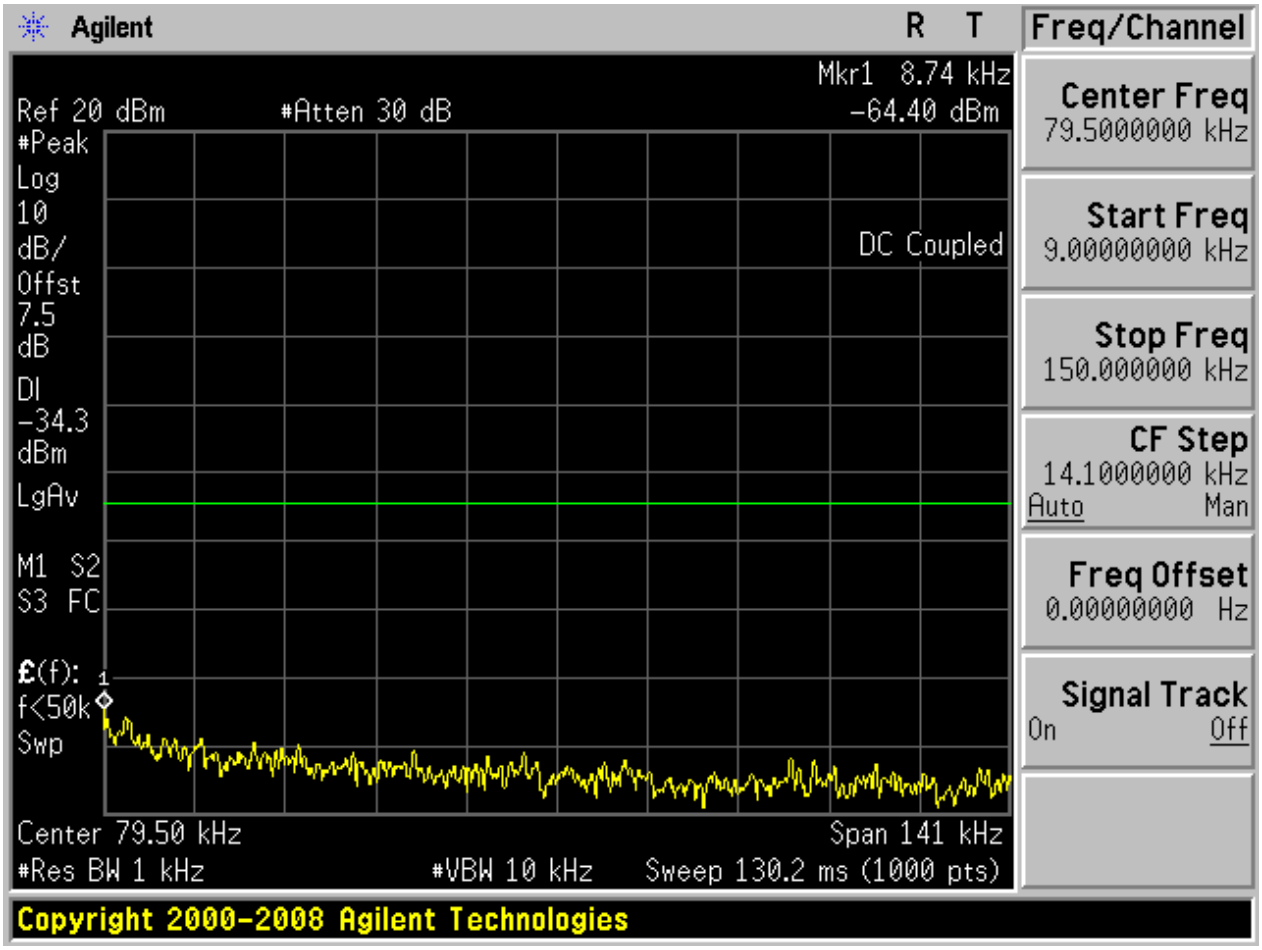


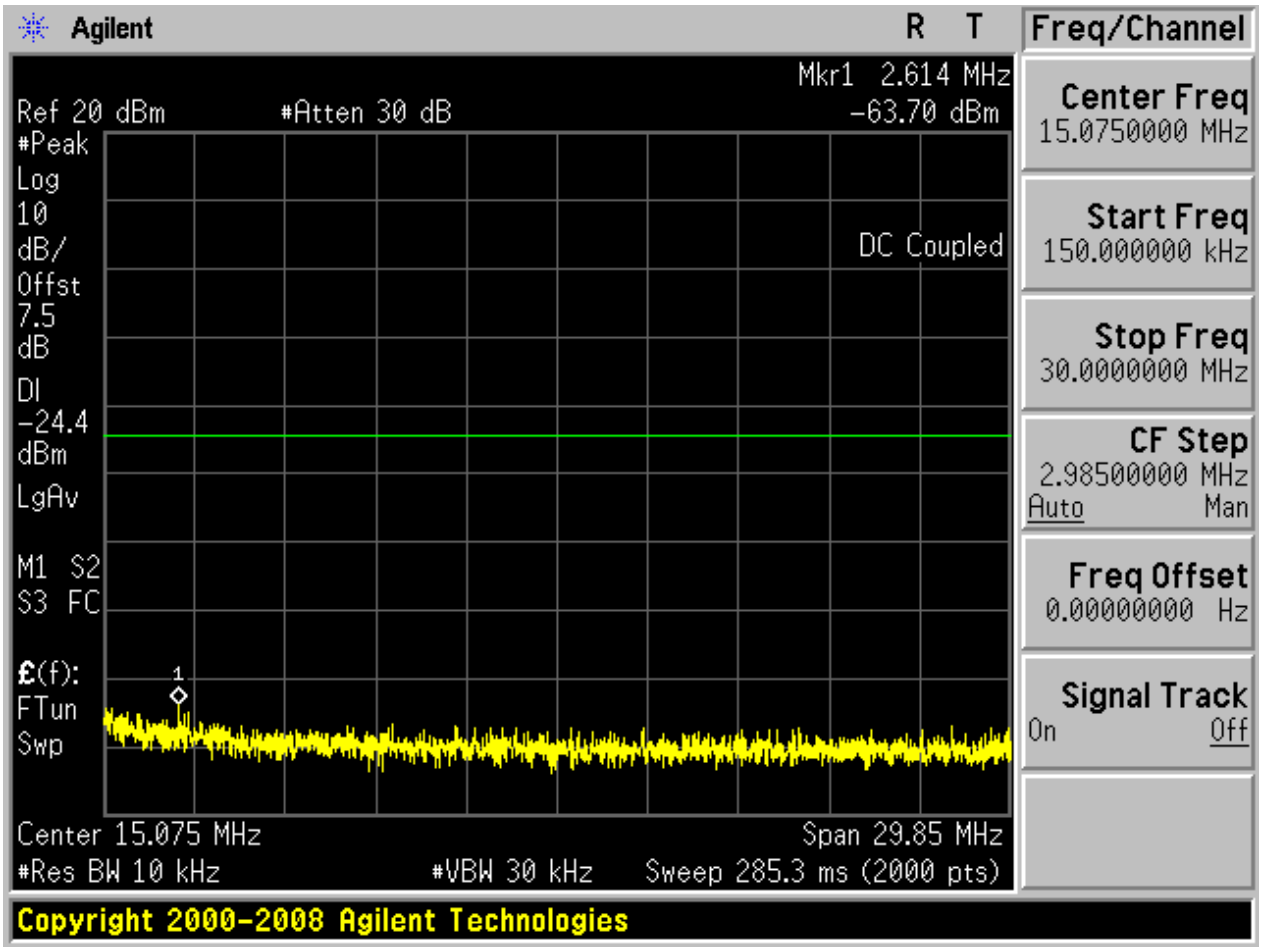
2.4 TM2_2DH5_Ch0

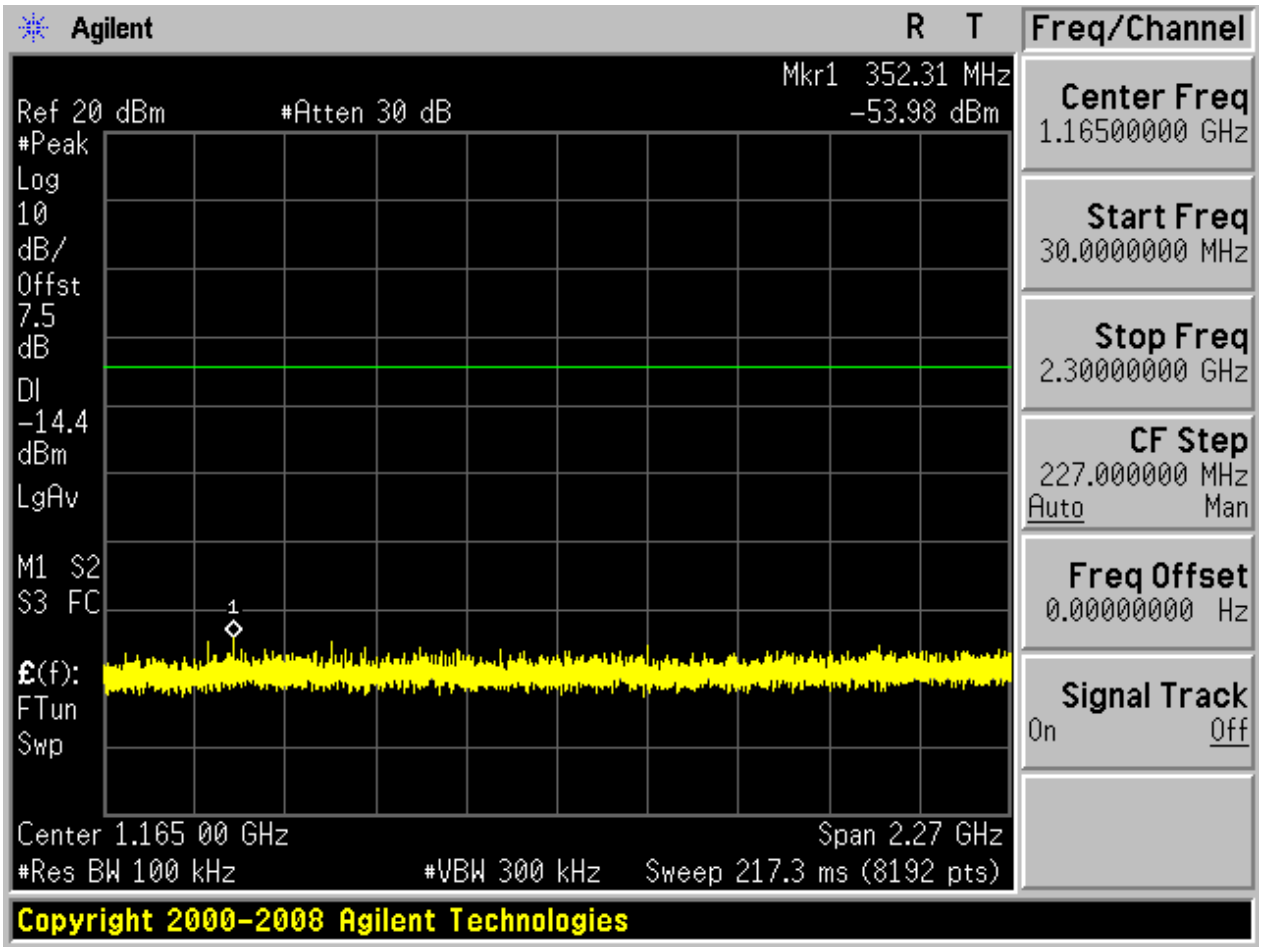
2.4.1 Pref

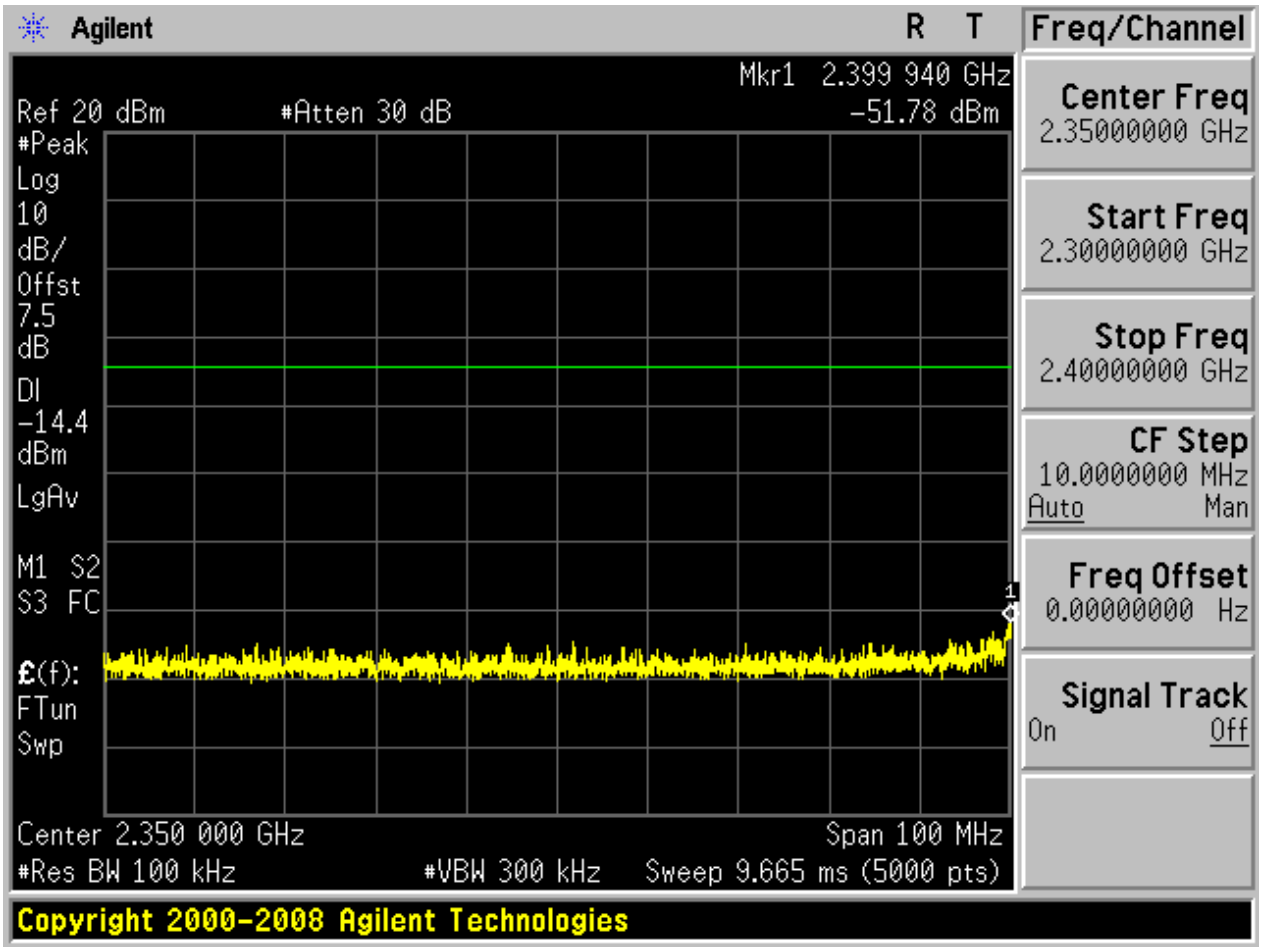


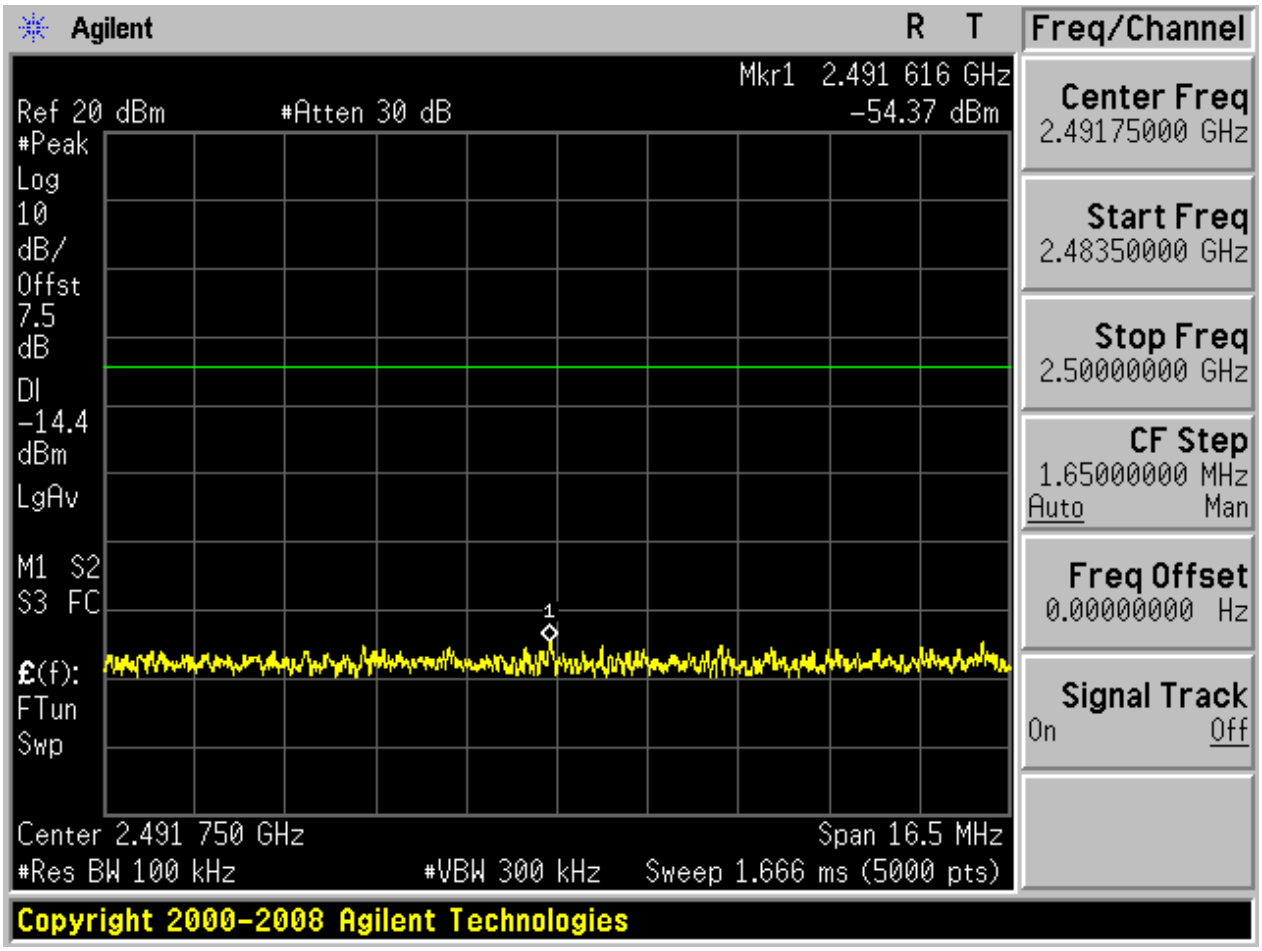
2.4.2 Puw

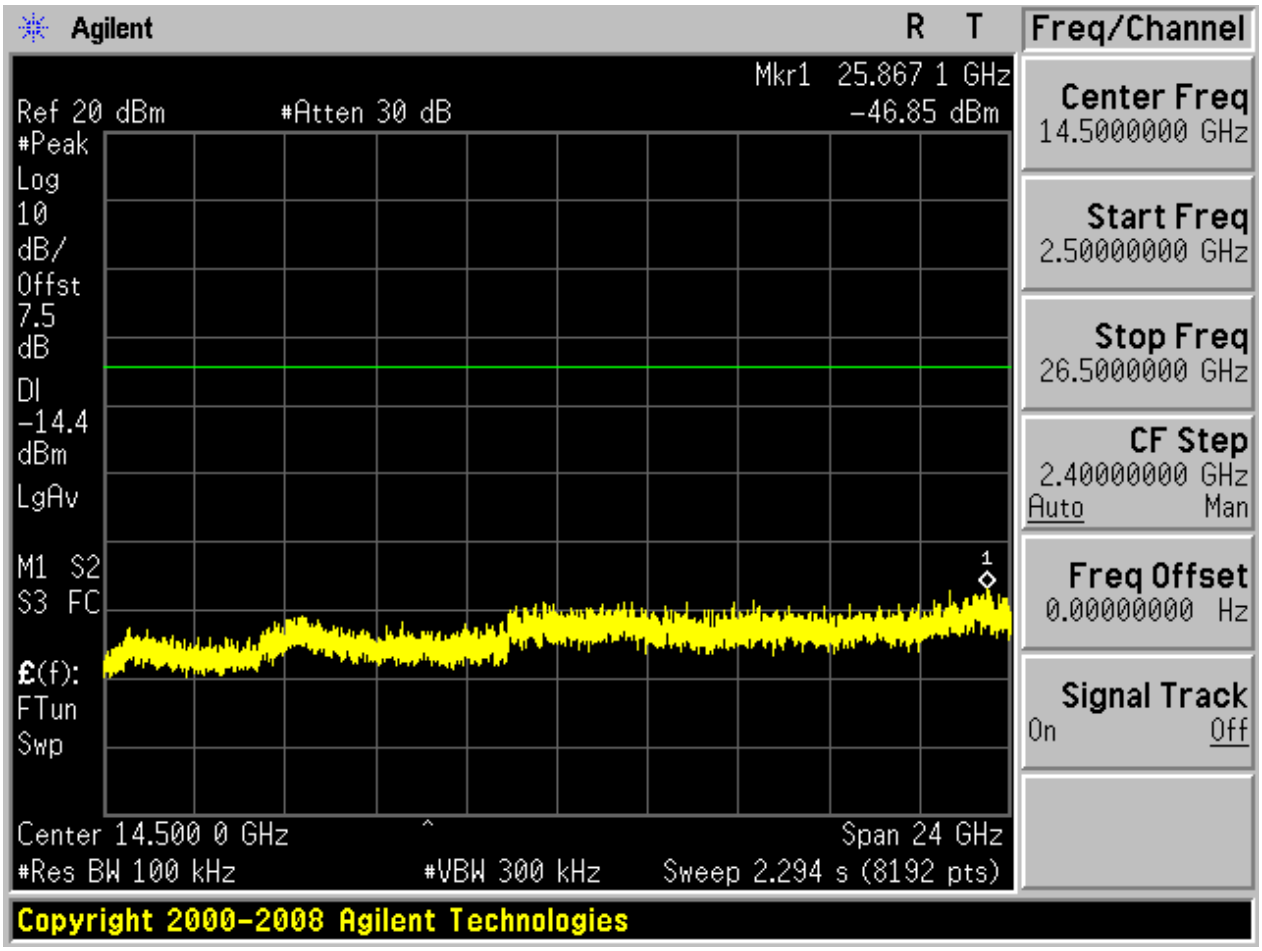






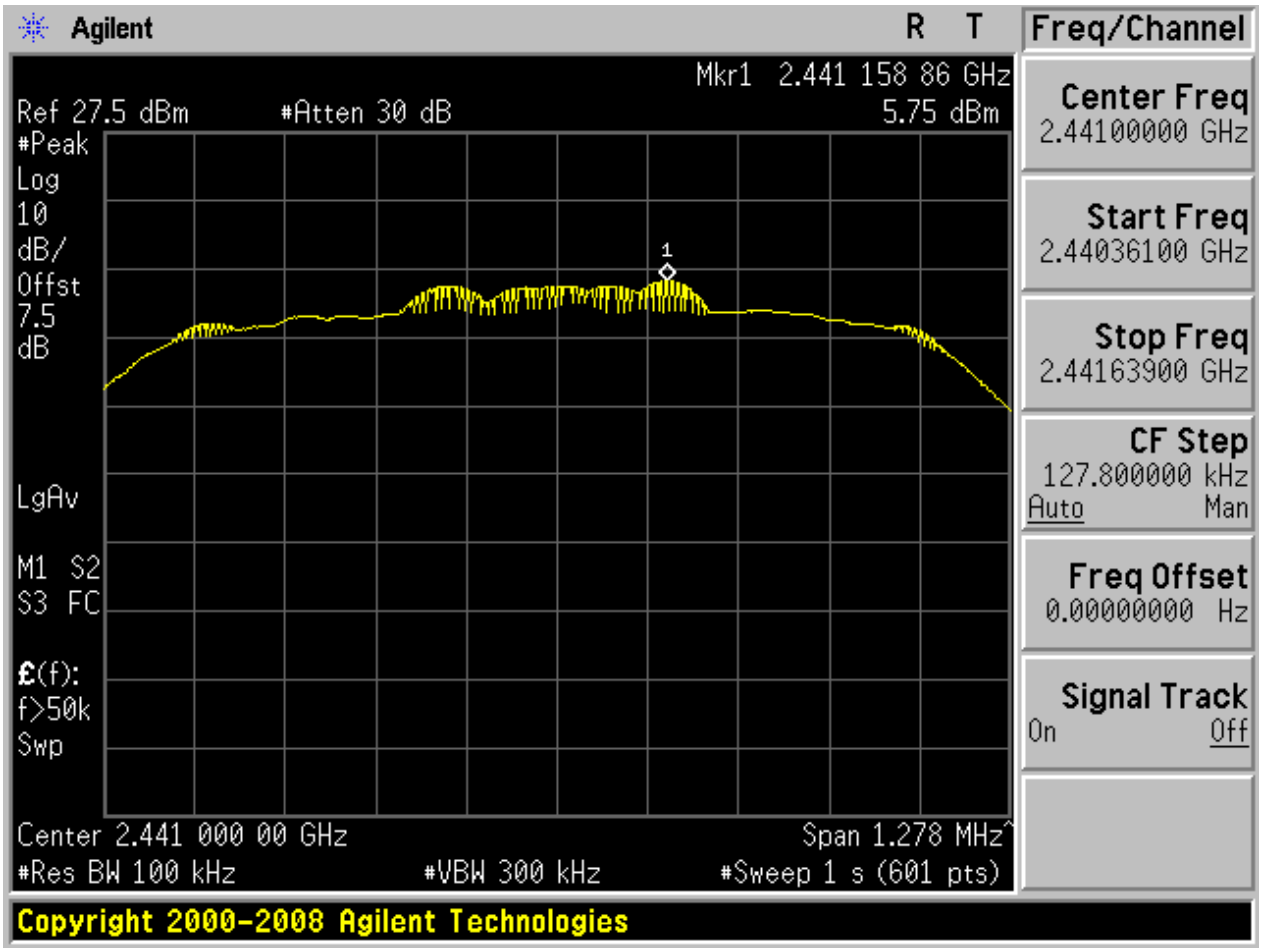




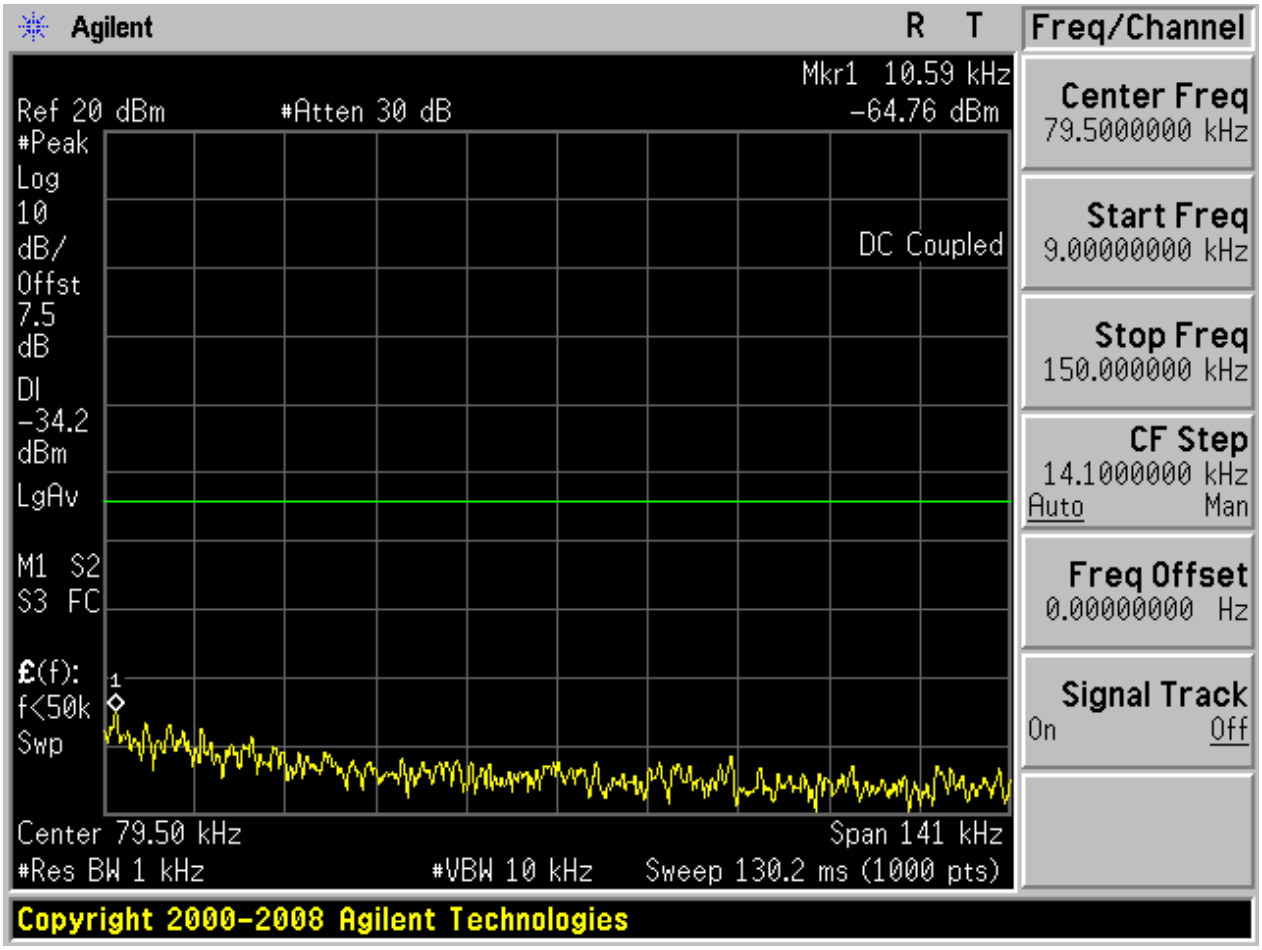


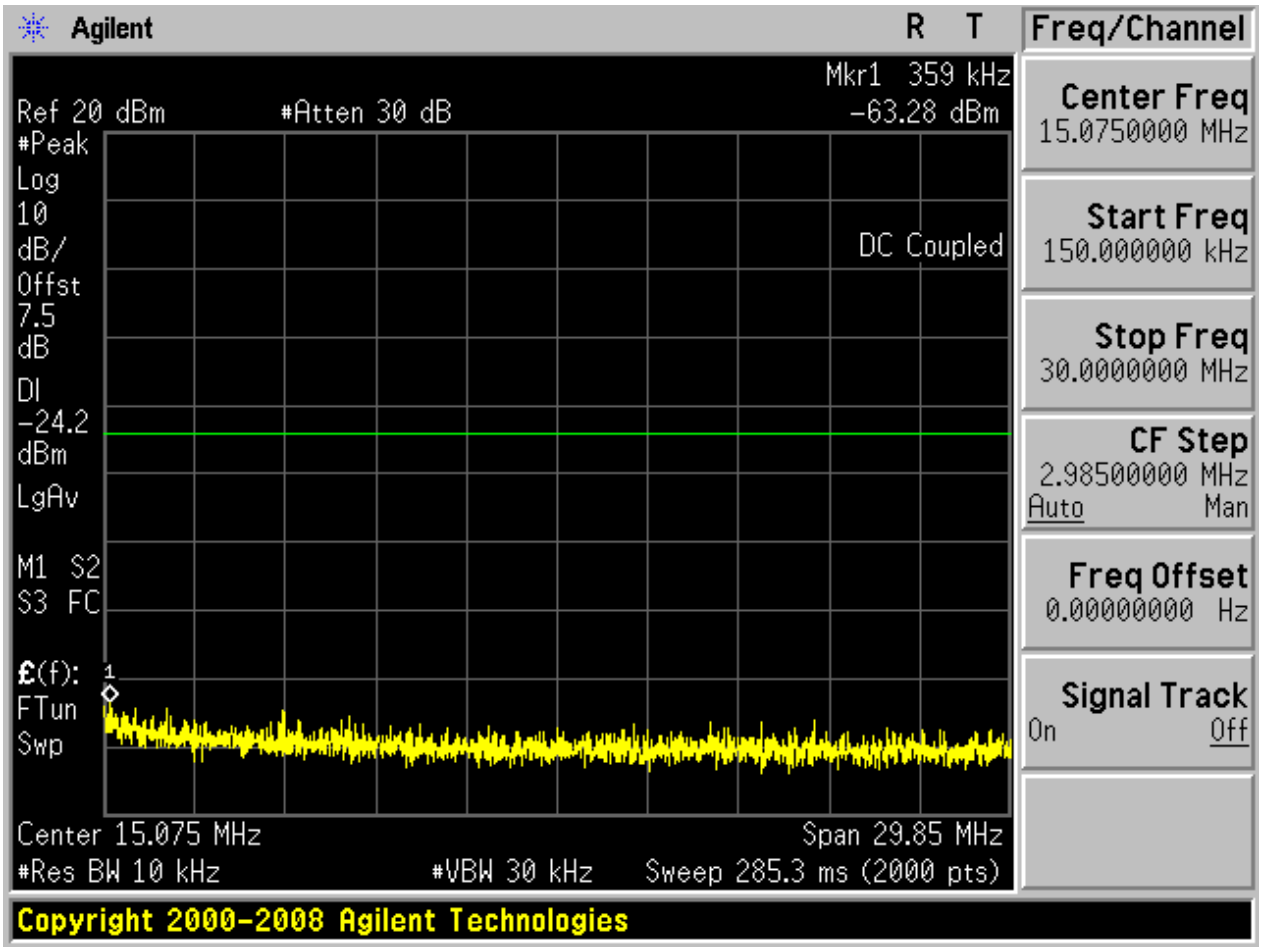
2.5 TM2_2DH5_Ch39

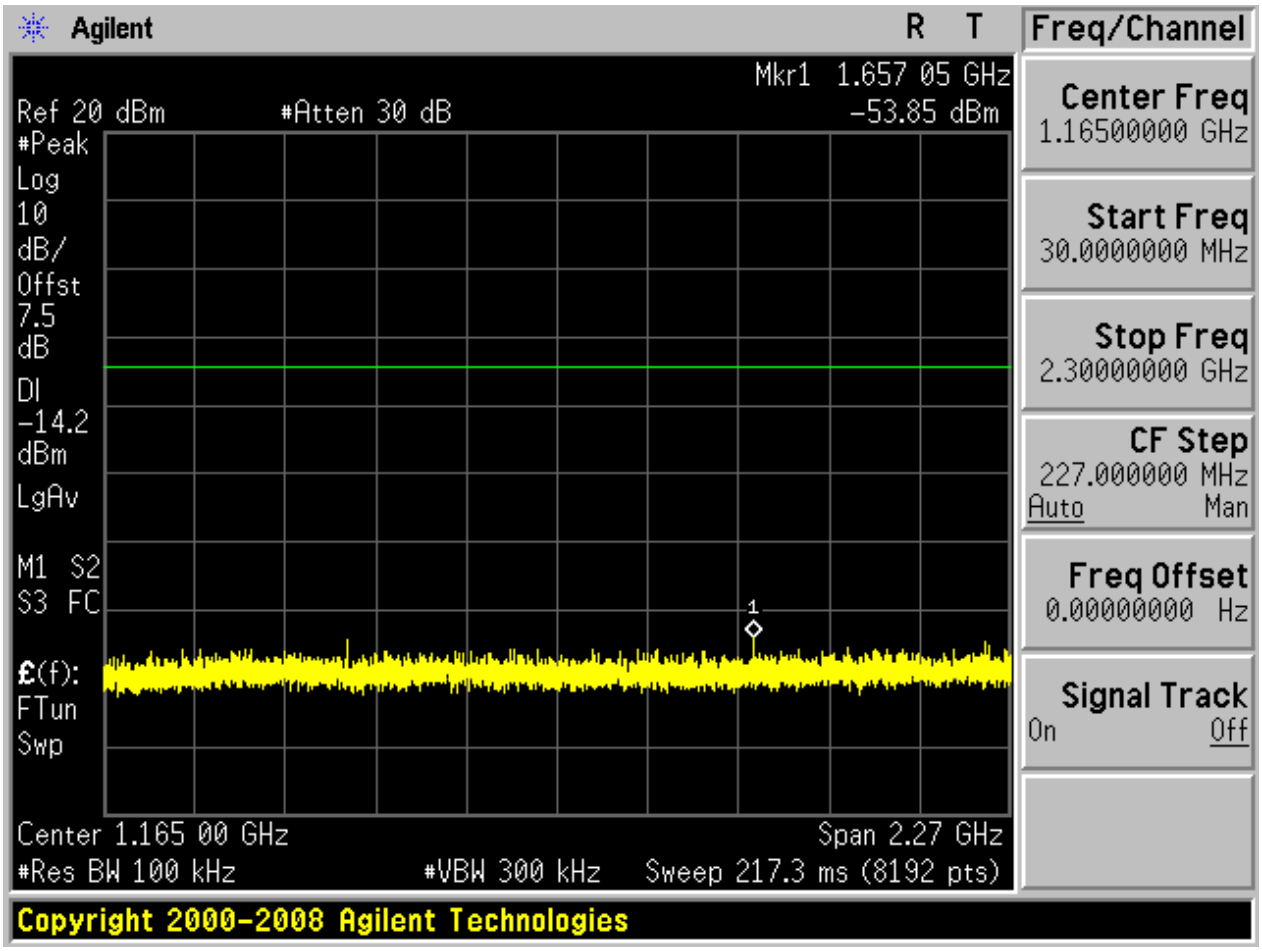
2.5.1 Pref

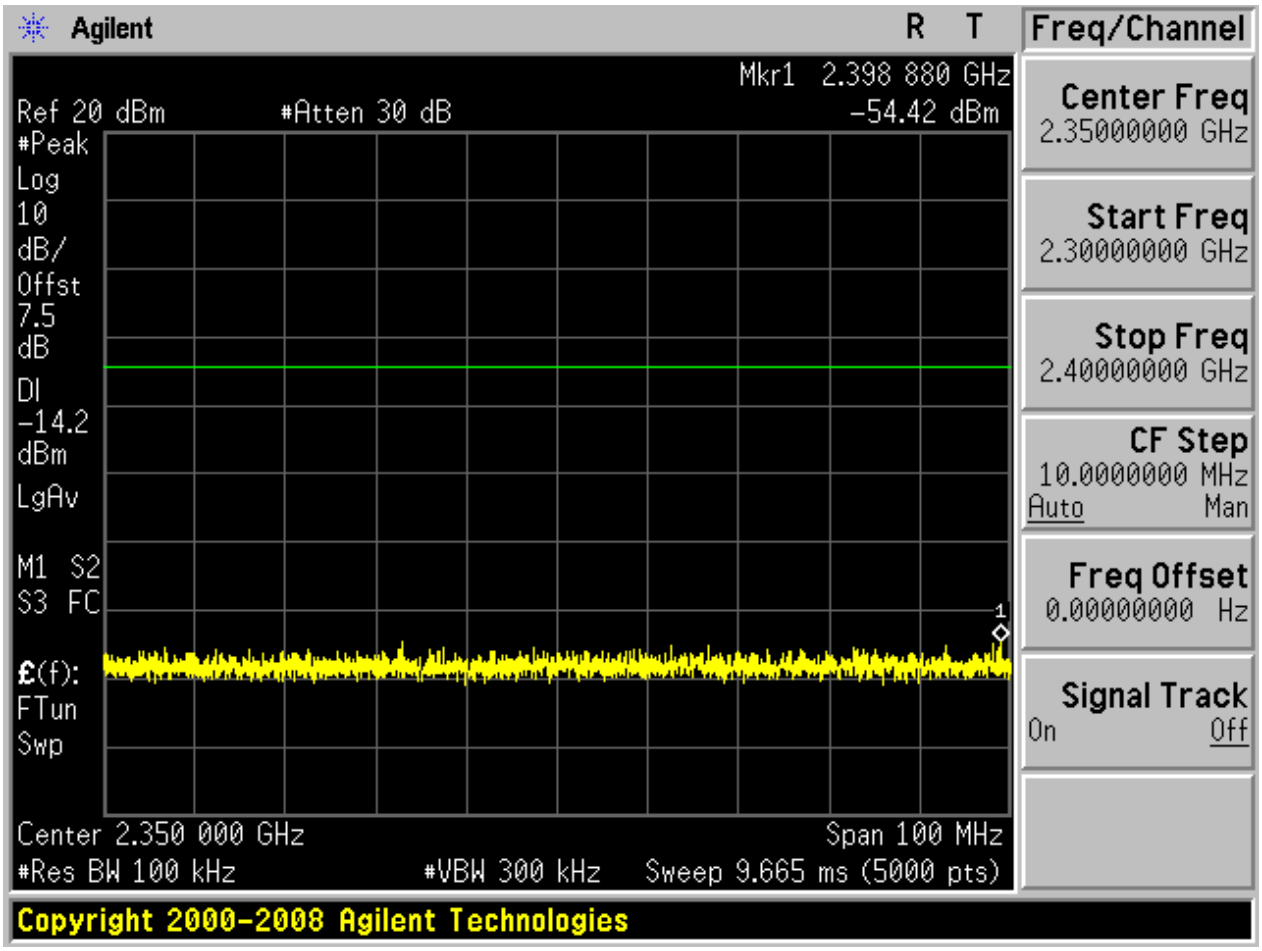


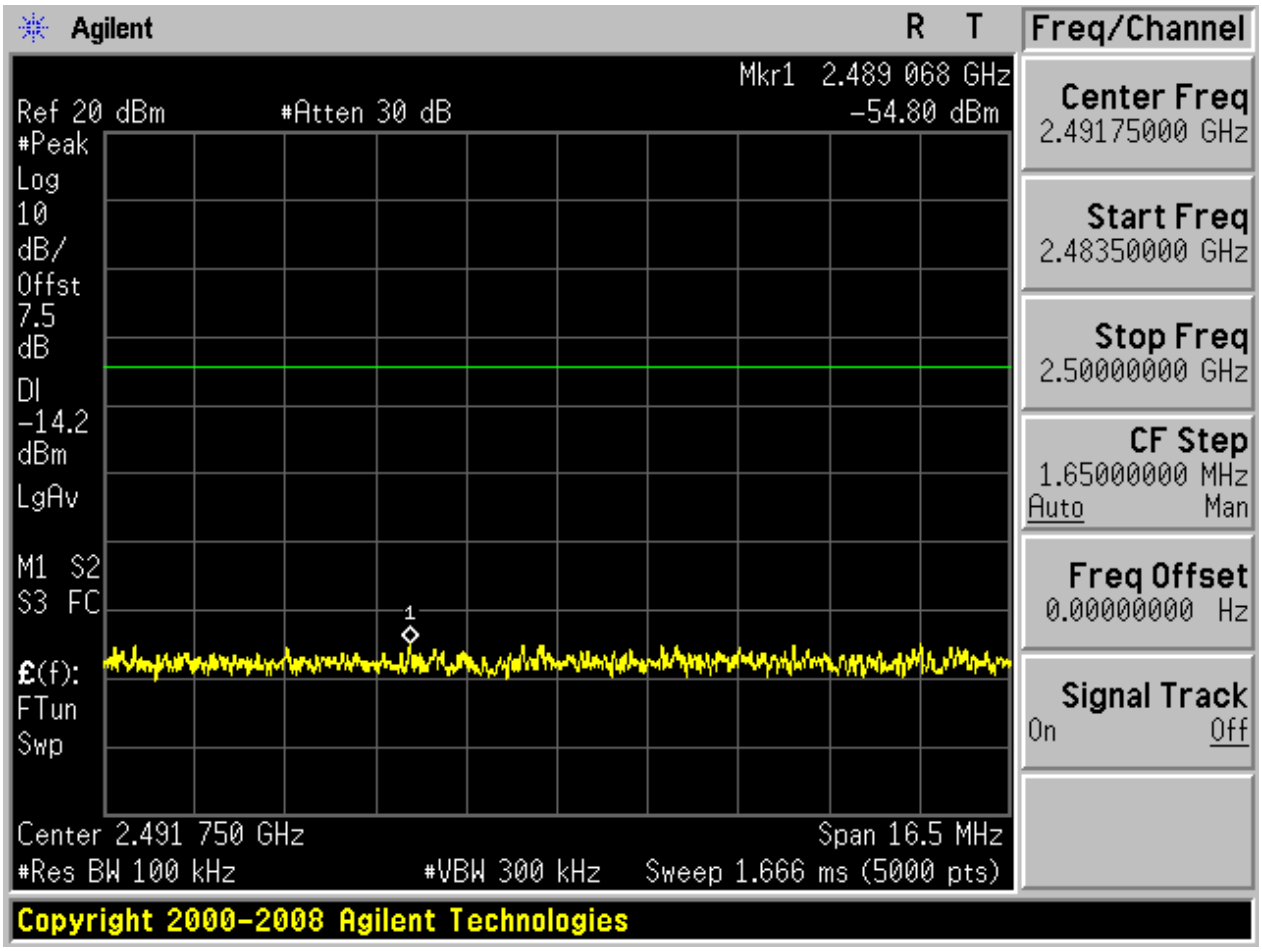
2.5.2 Puw

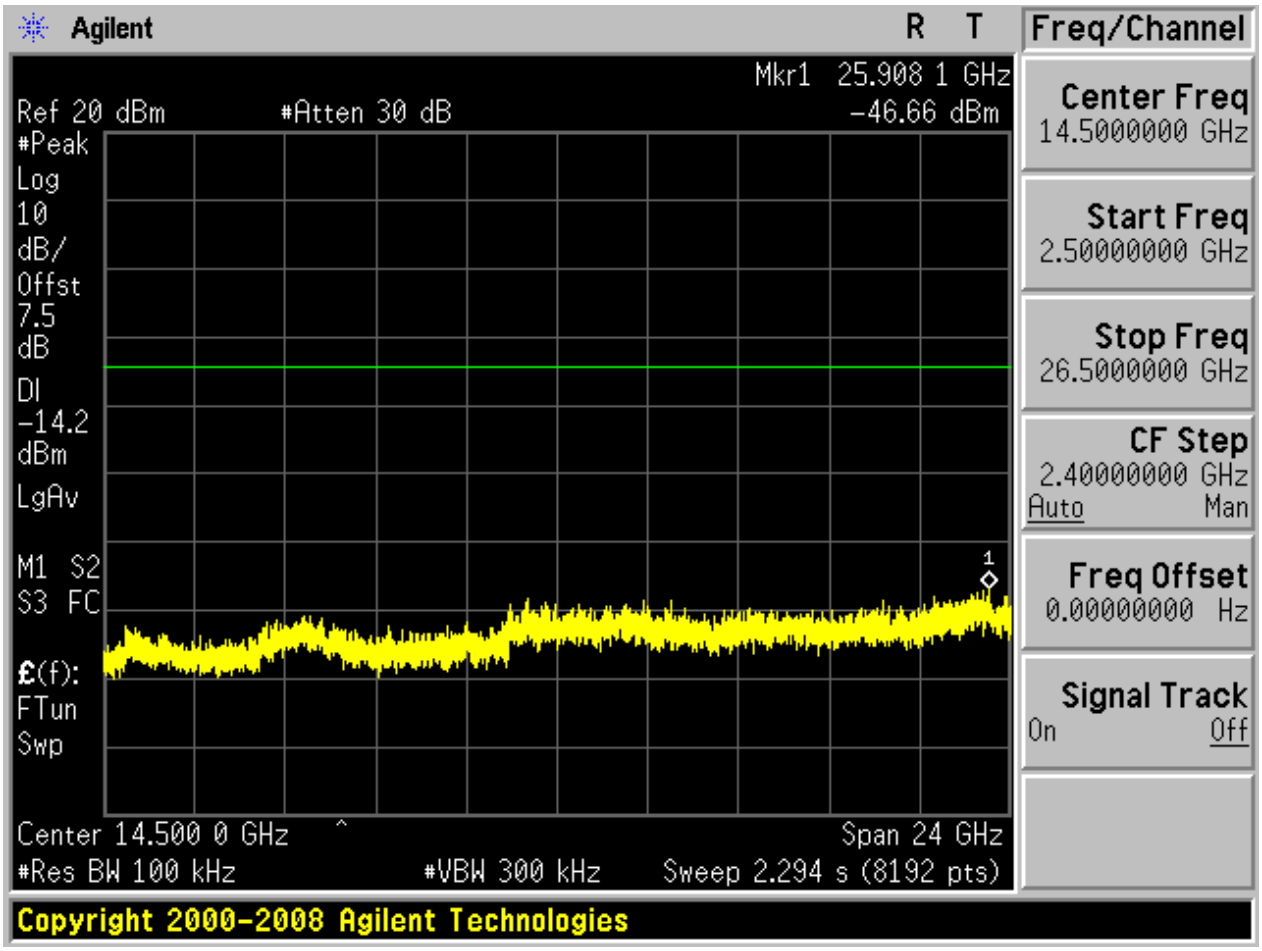






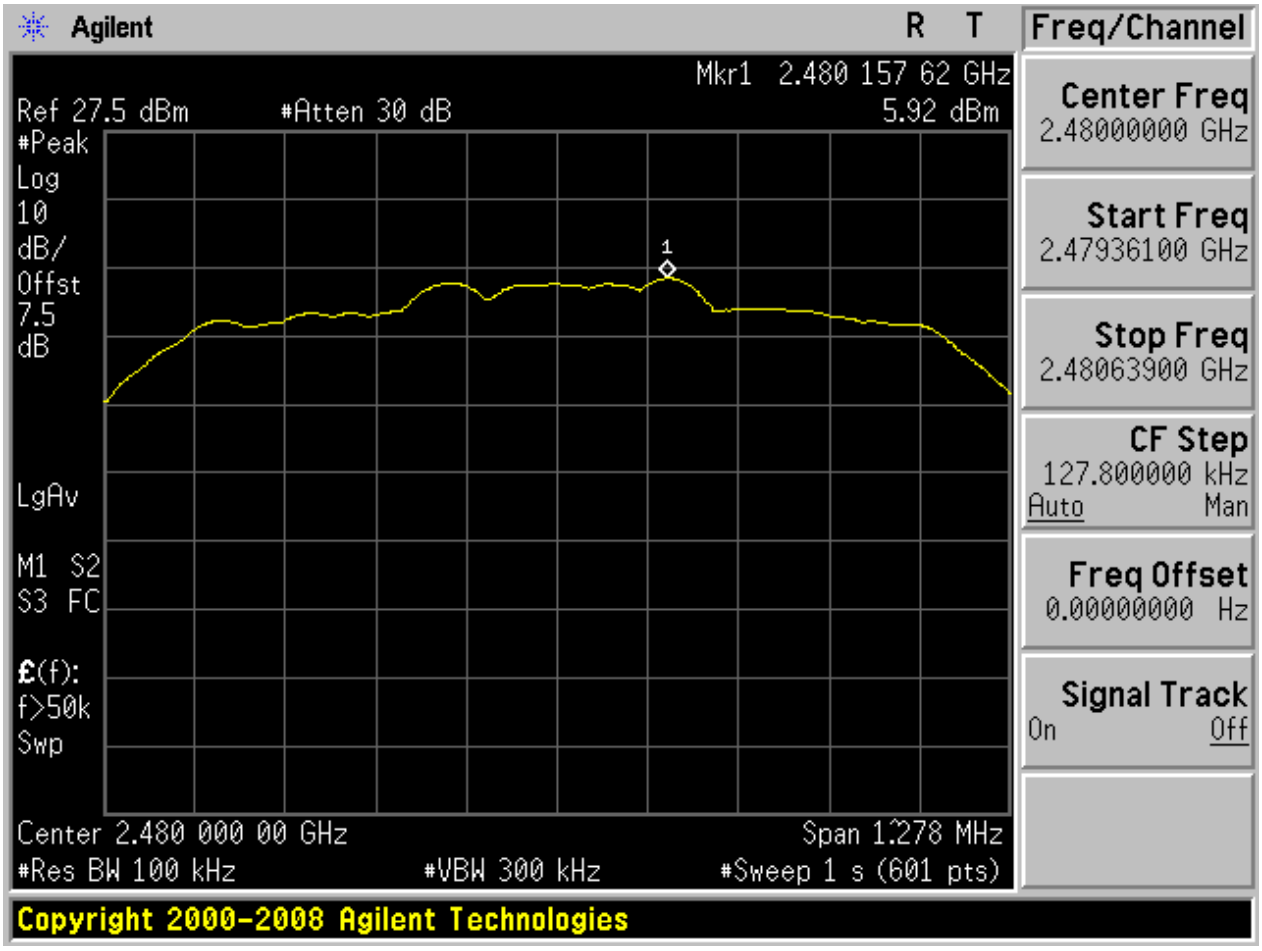




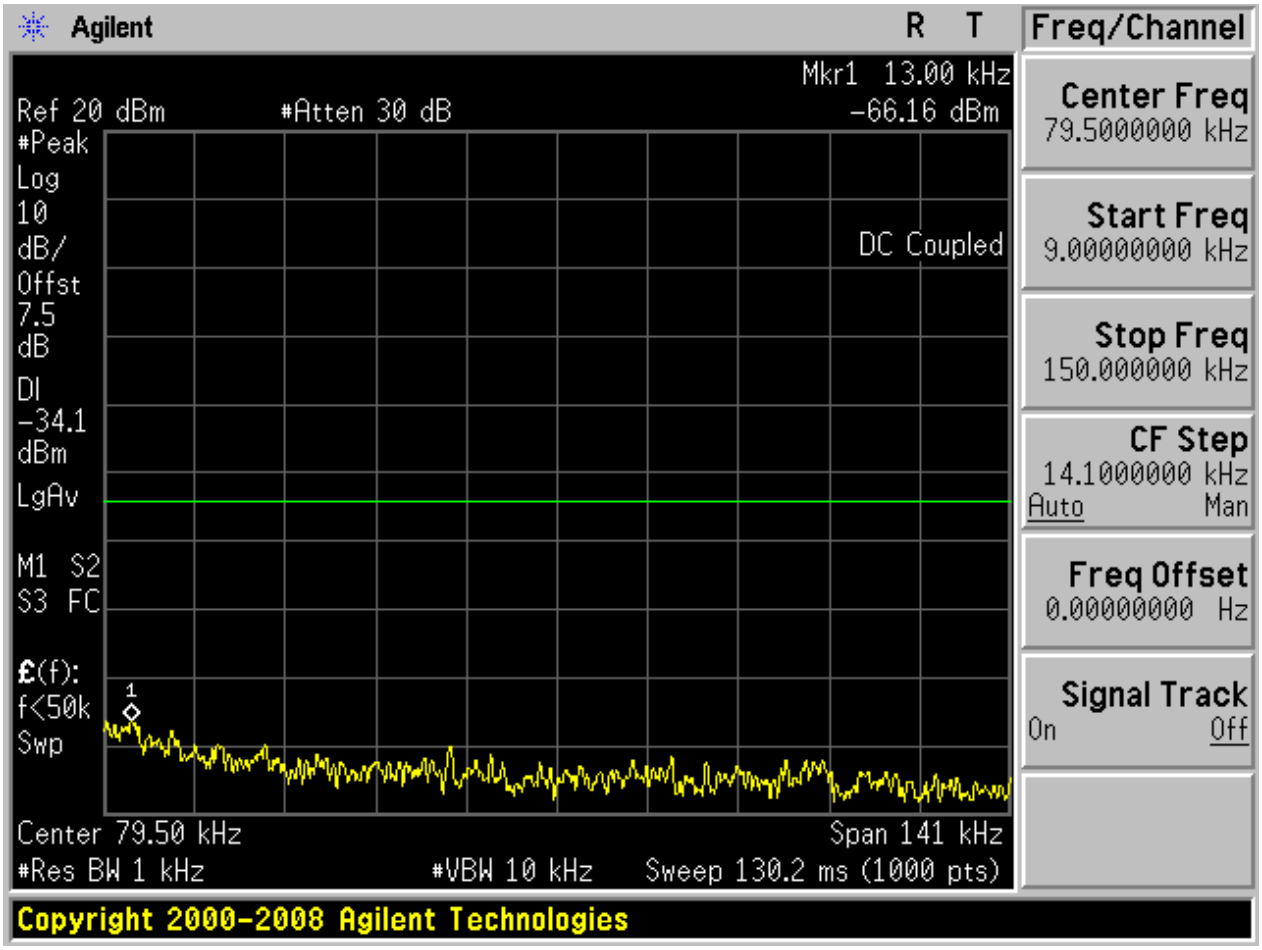


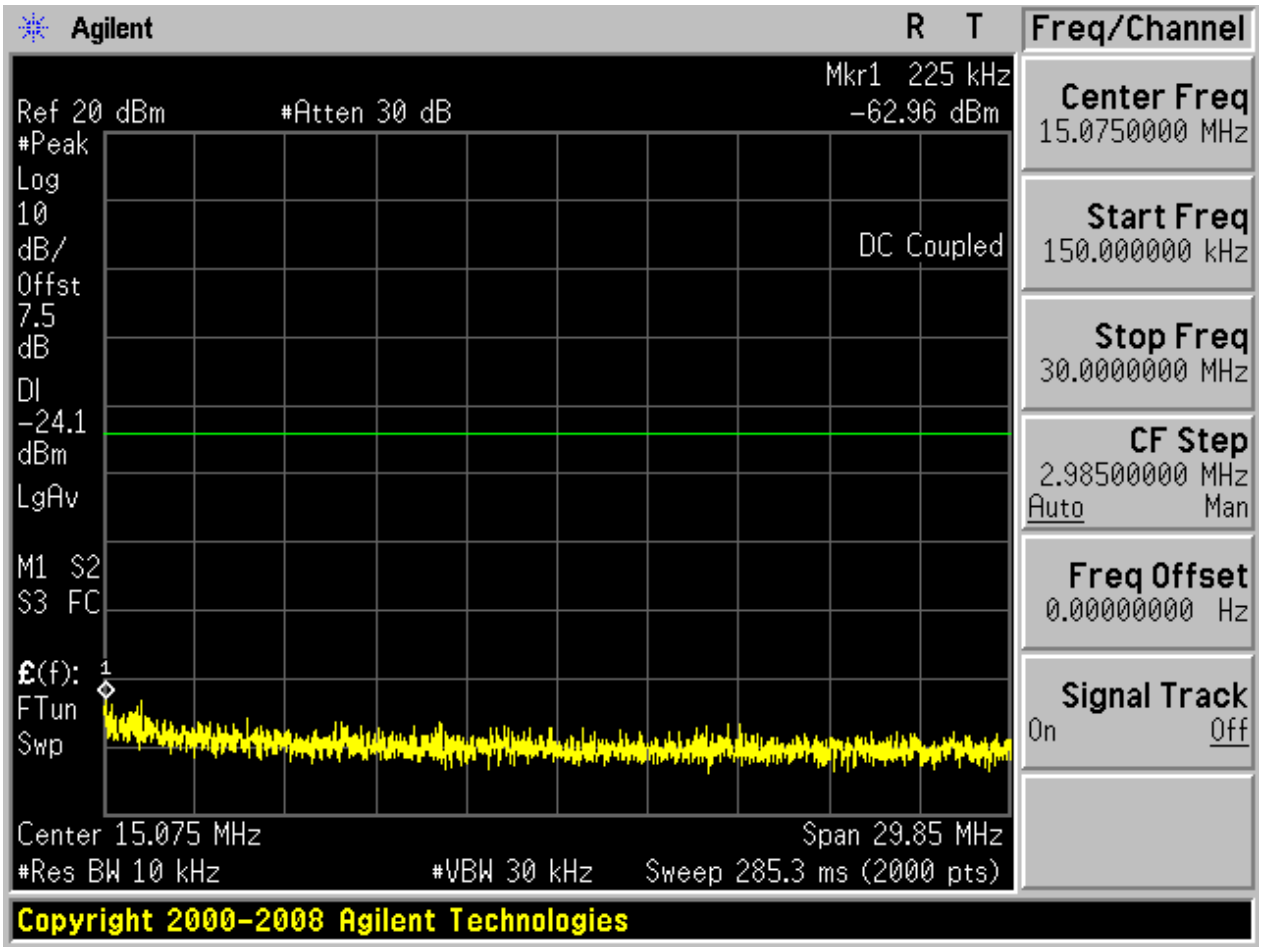
2.6 TM2_2DH5_Ch78

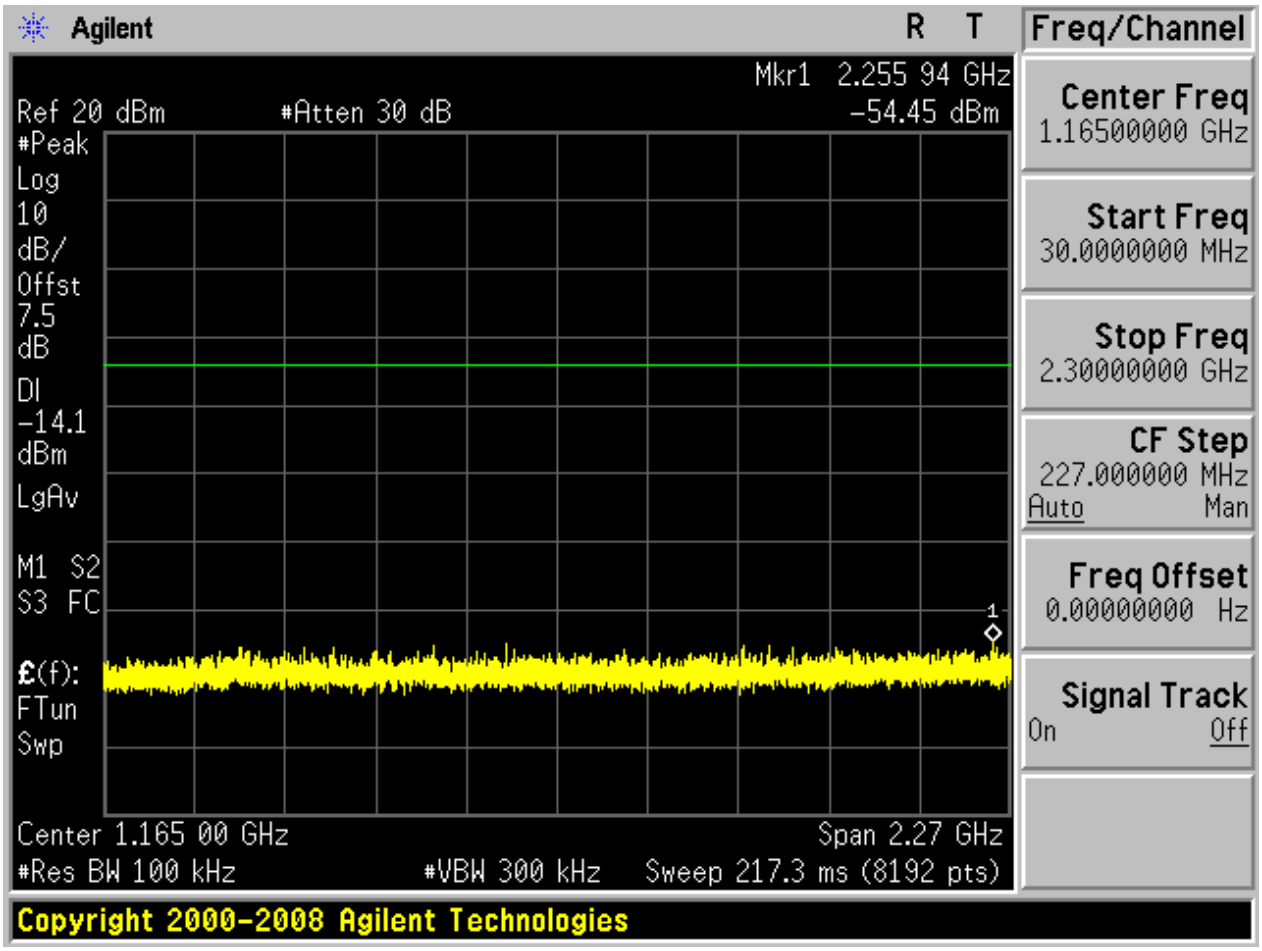
2.6.1 Pref

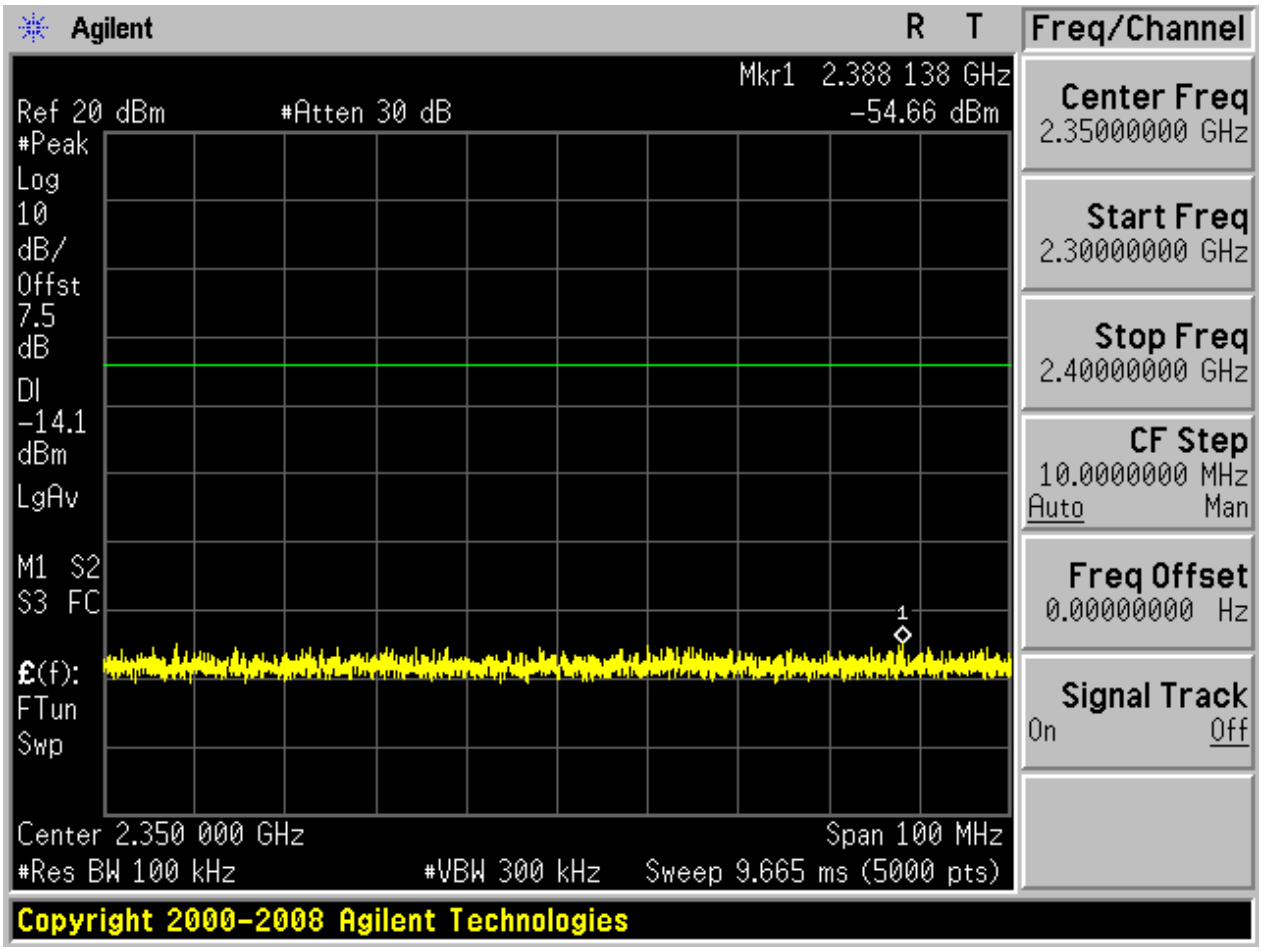


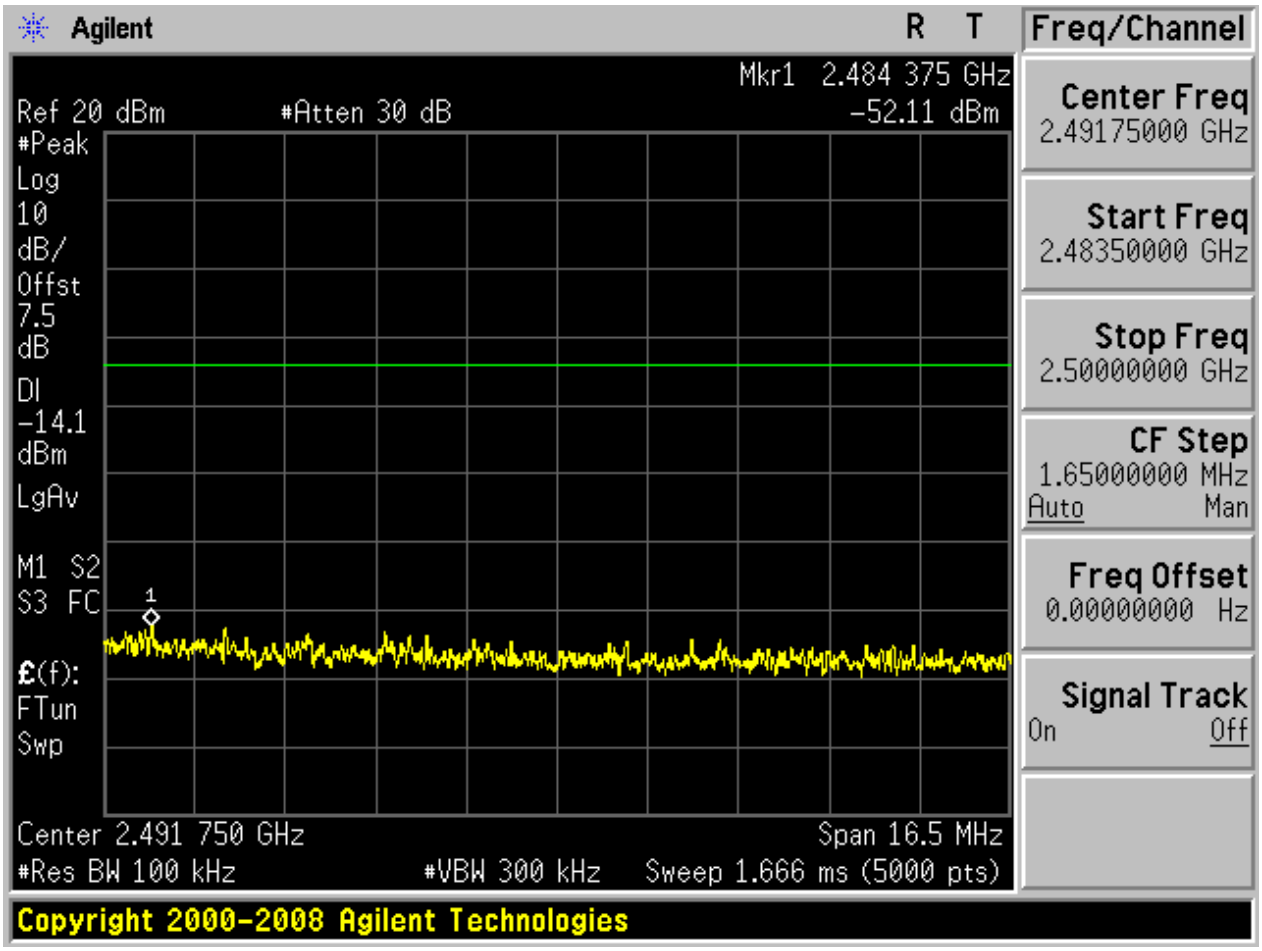
2.6.2 Puw

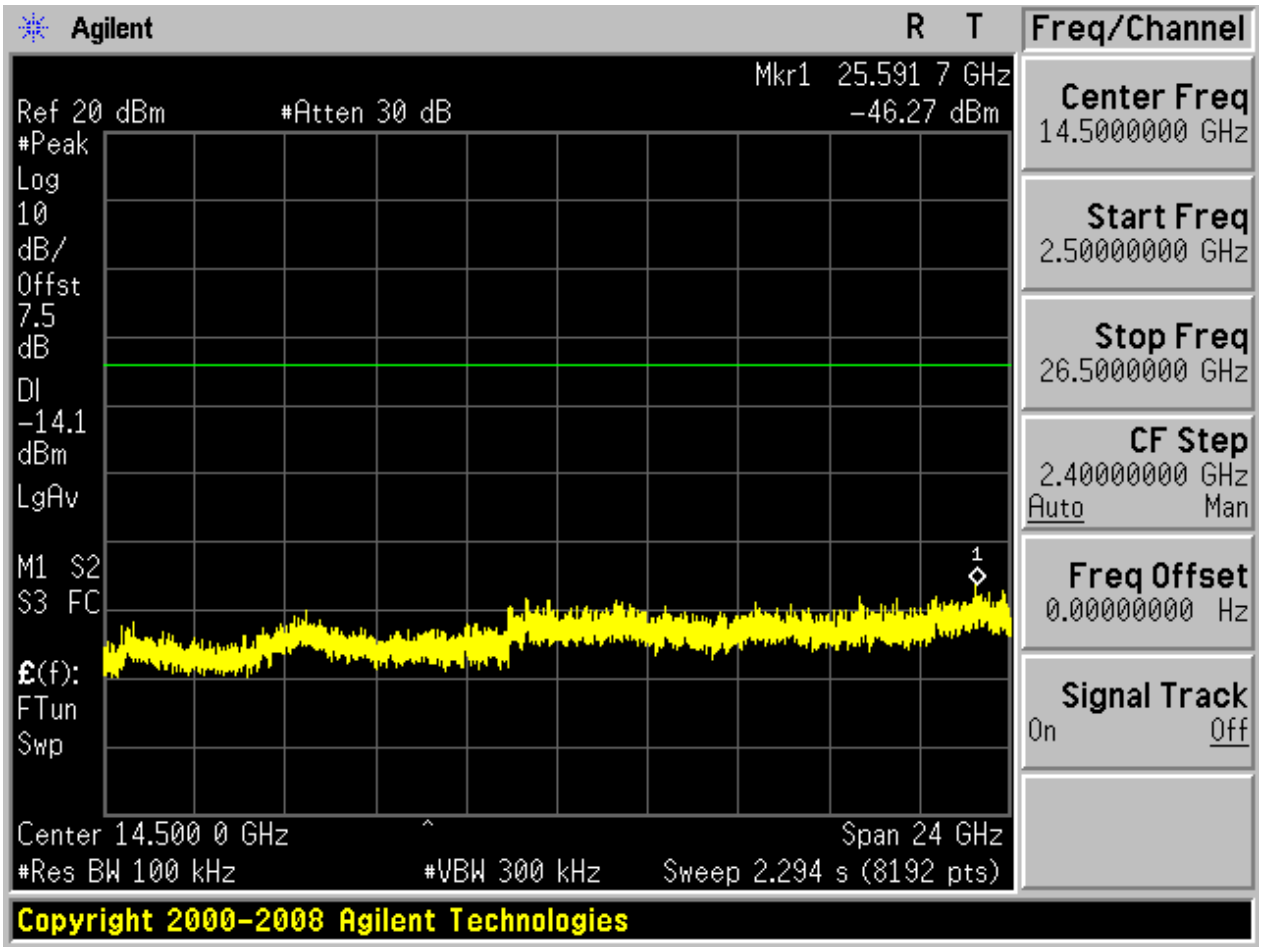






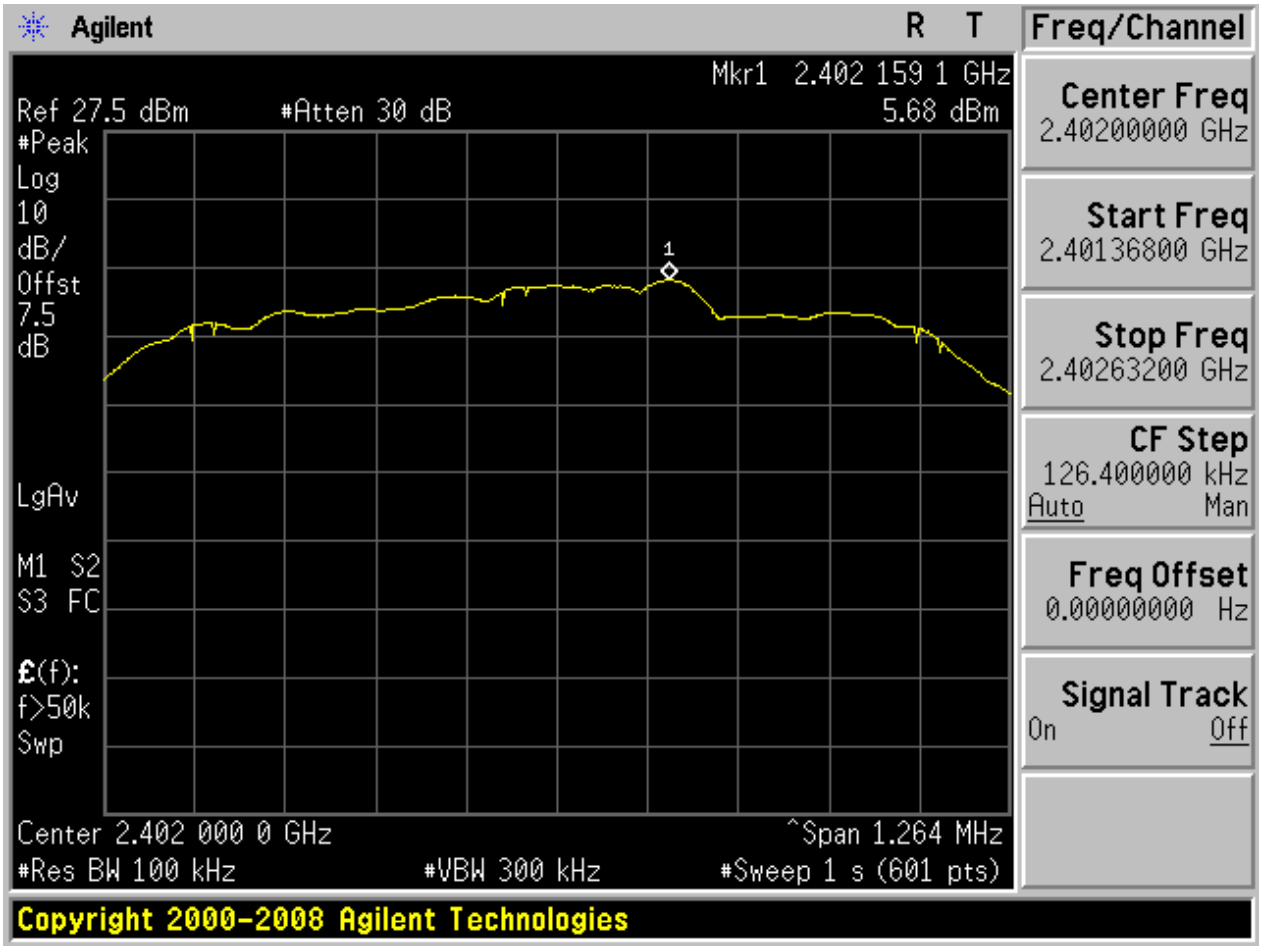




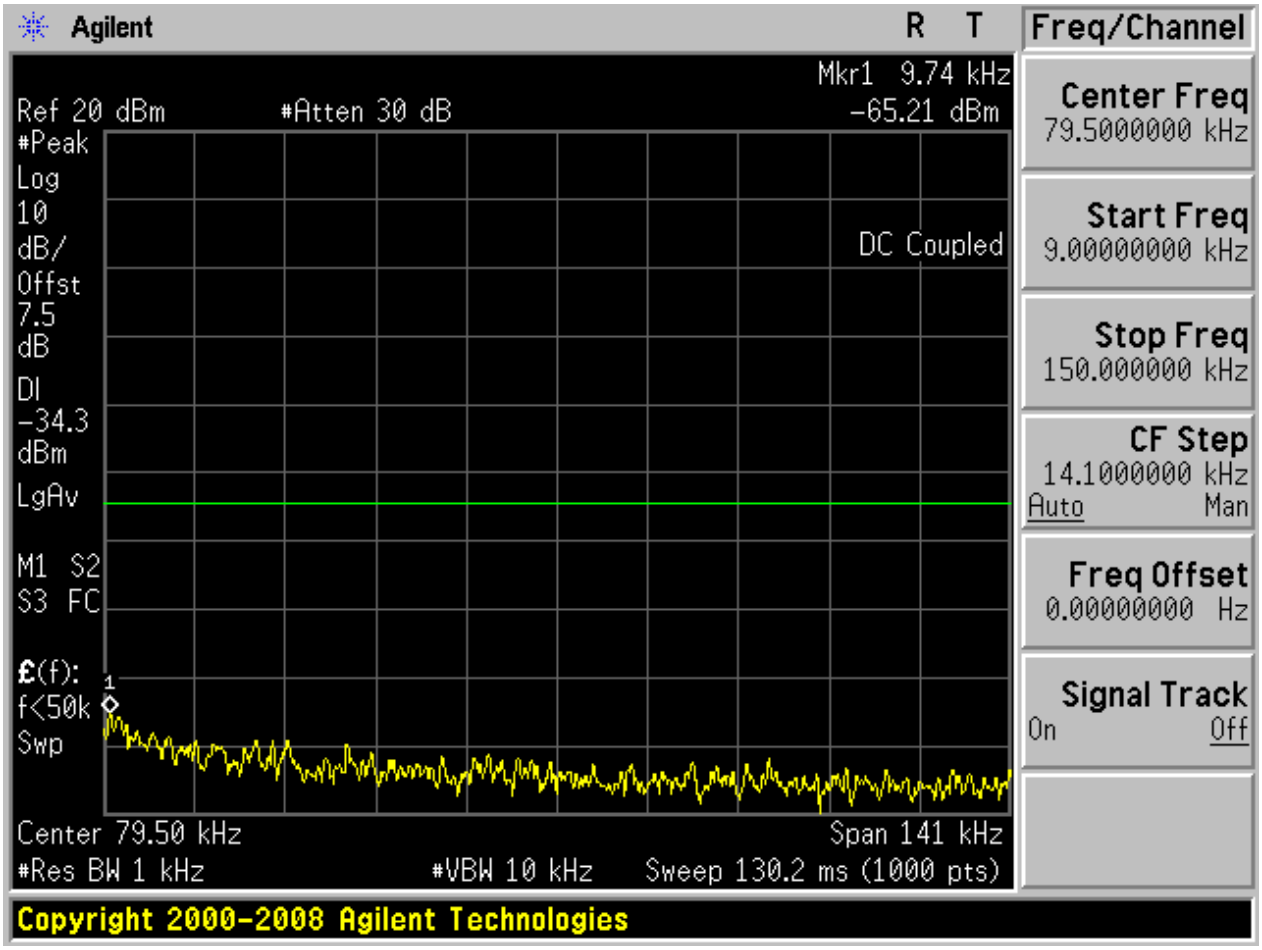


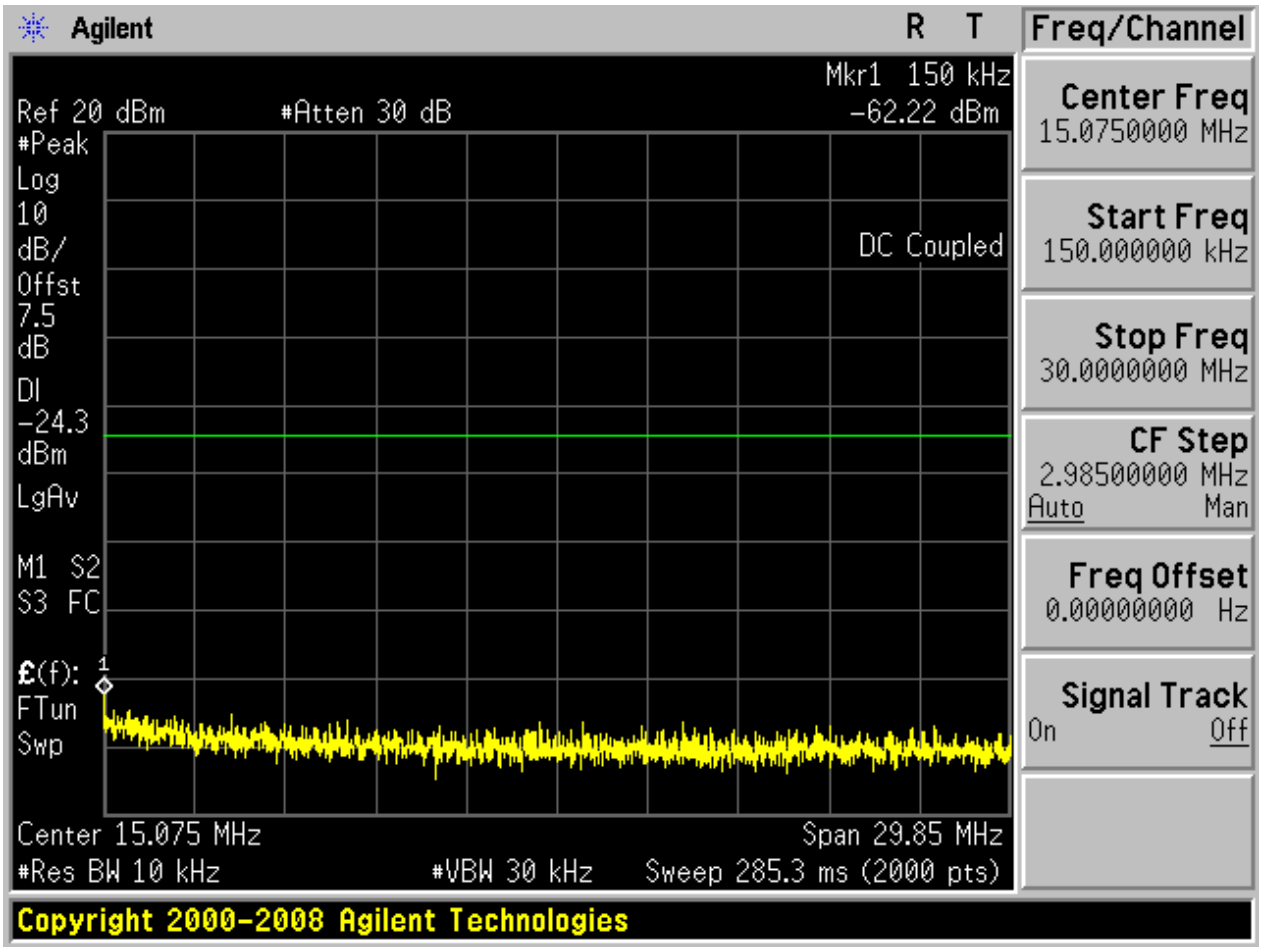
2.7 TM3_3DH5_Ch0

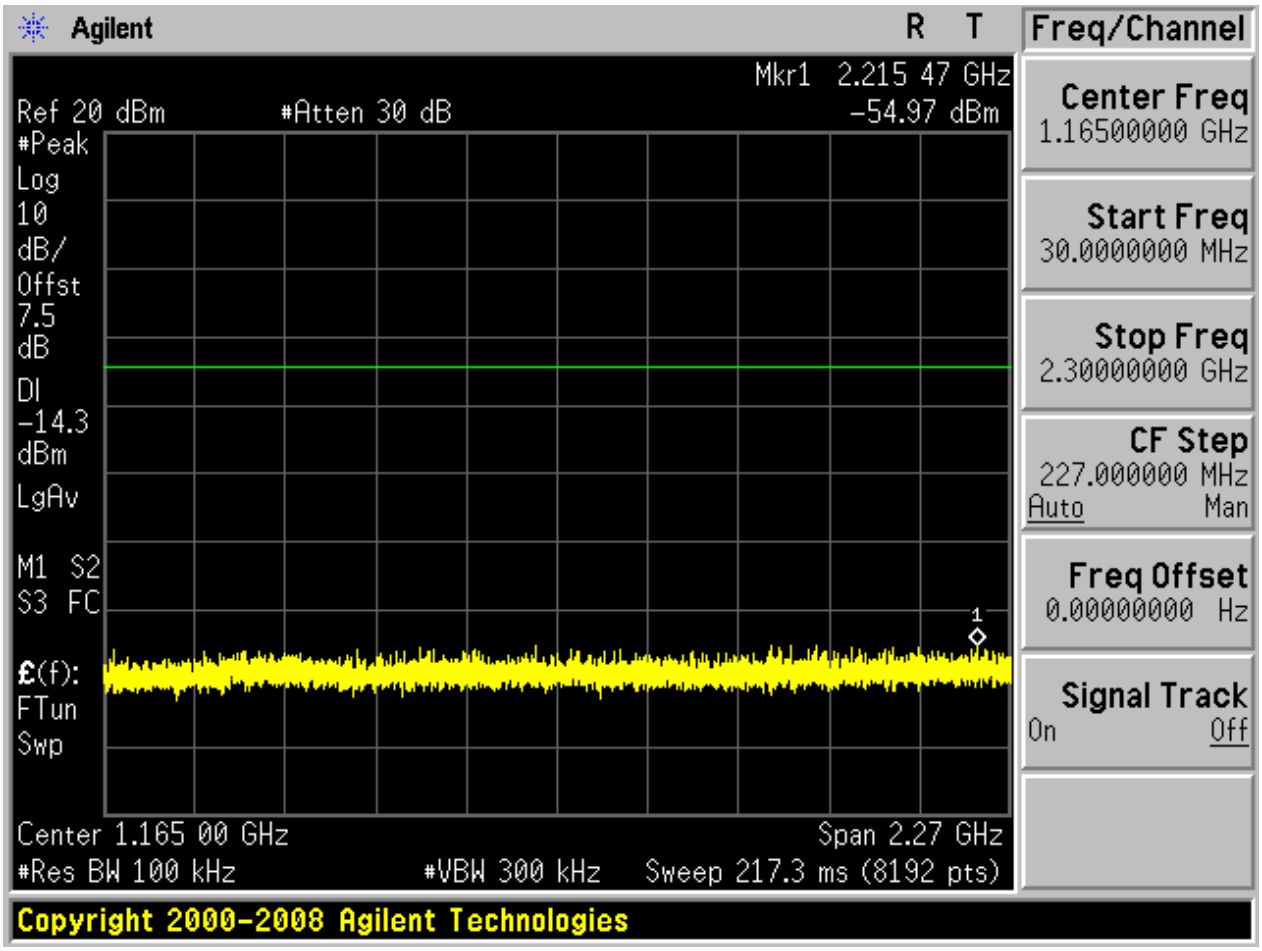
2.7.1 Pref

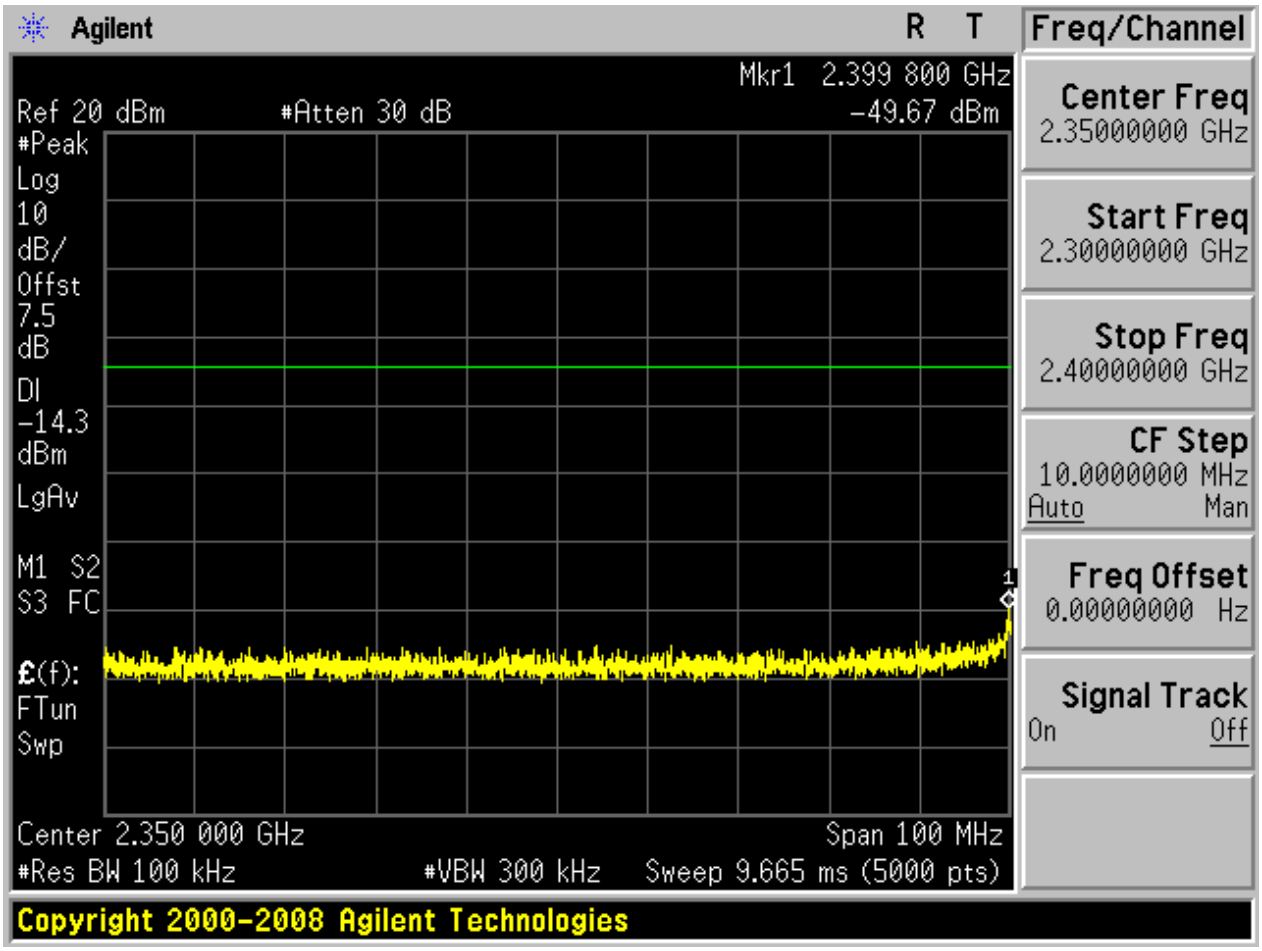


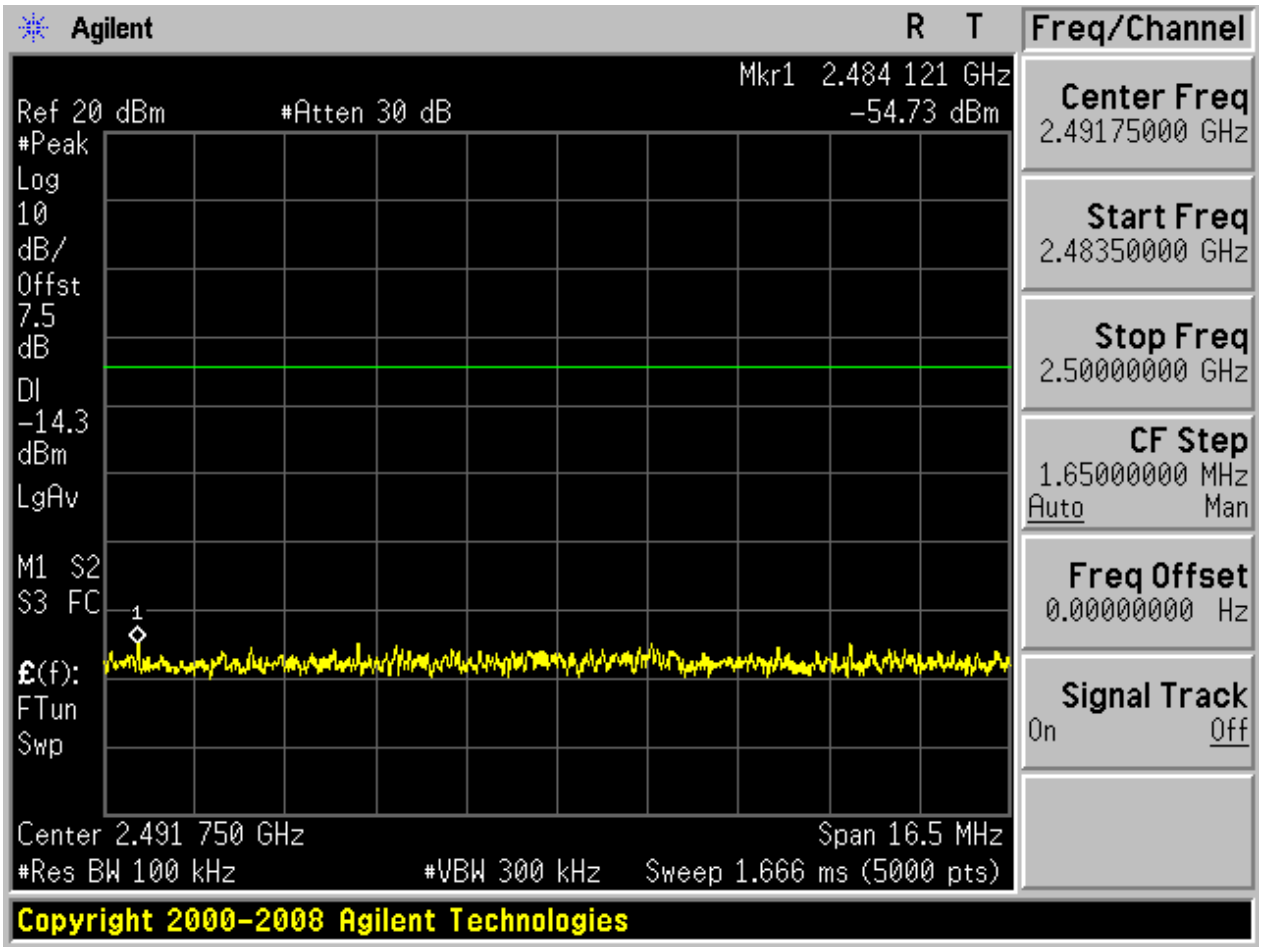
2.7.2 Puw

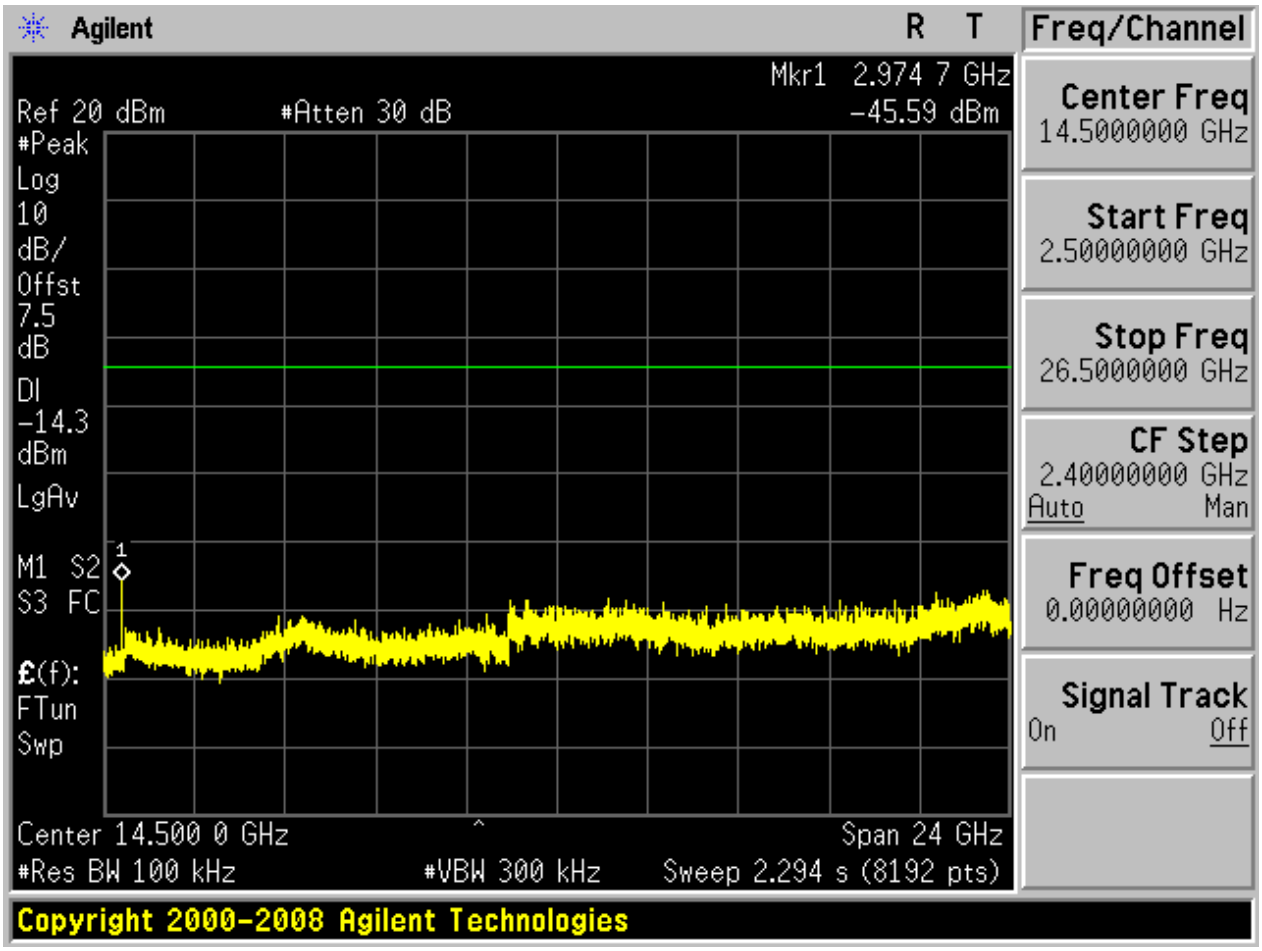






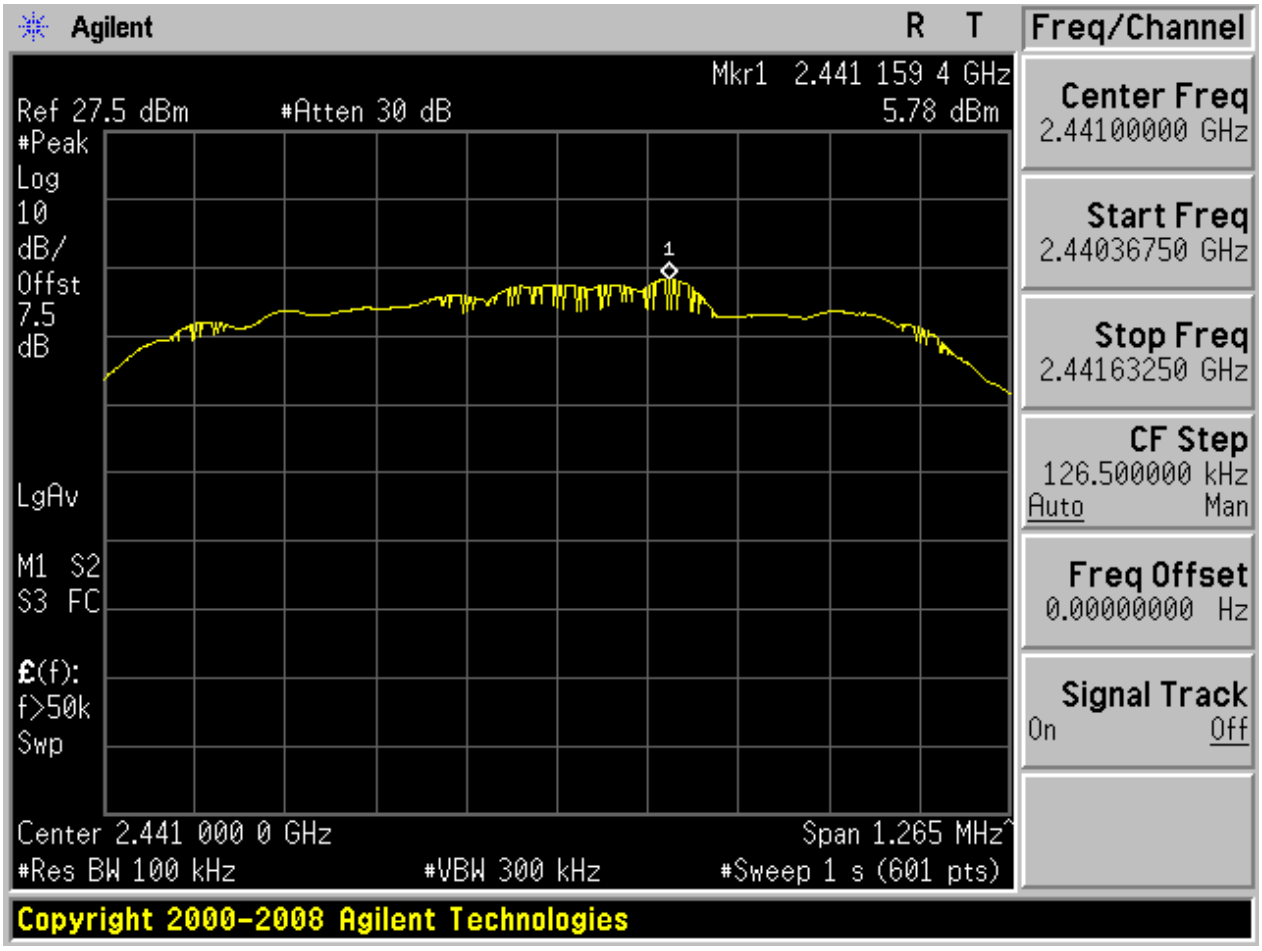




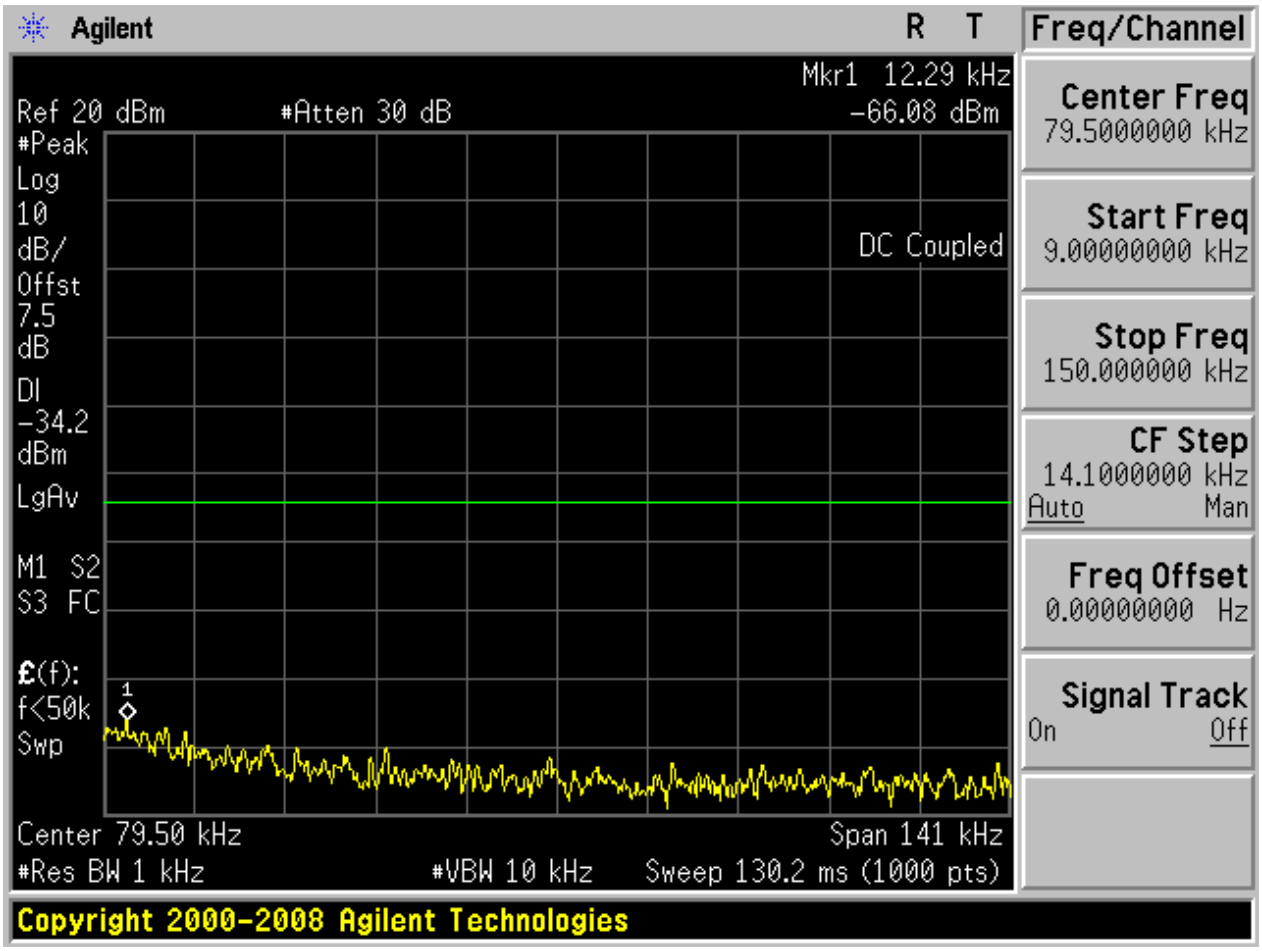


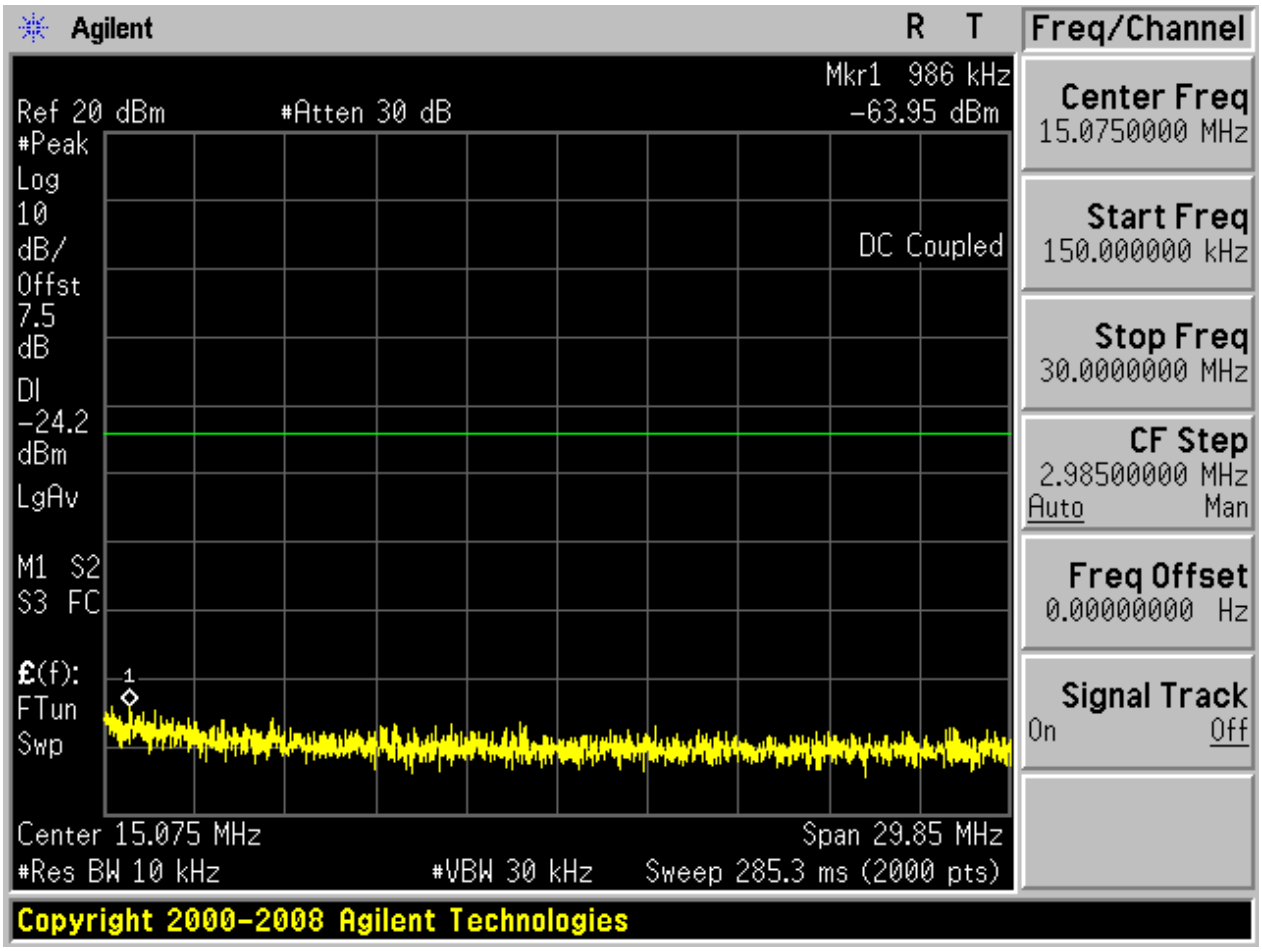
2.8 TM3_3DH5_Ch39

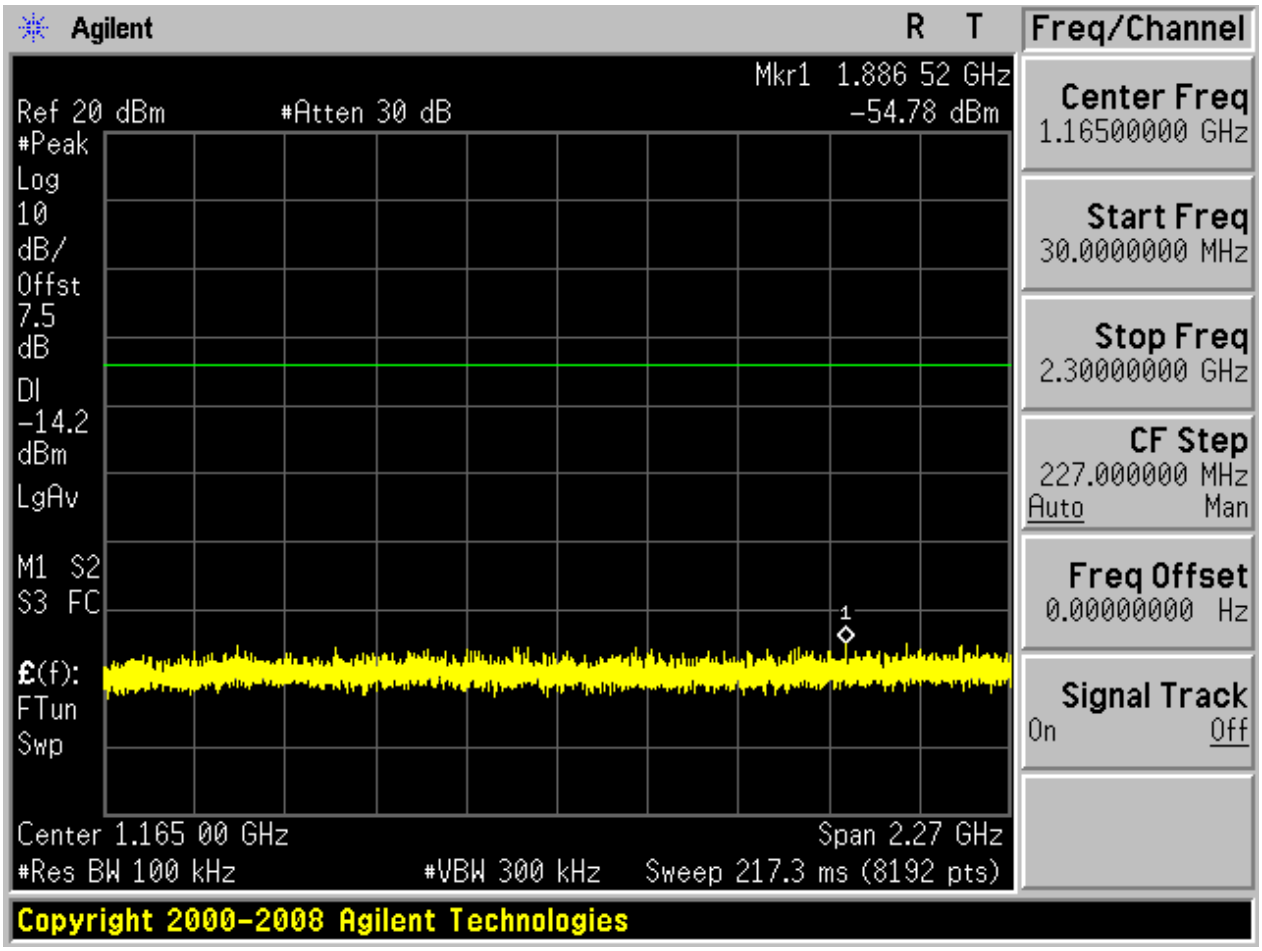
2.8.1 Pref

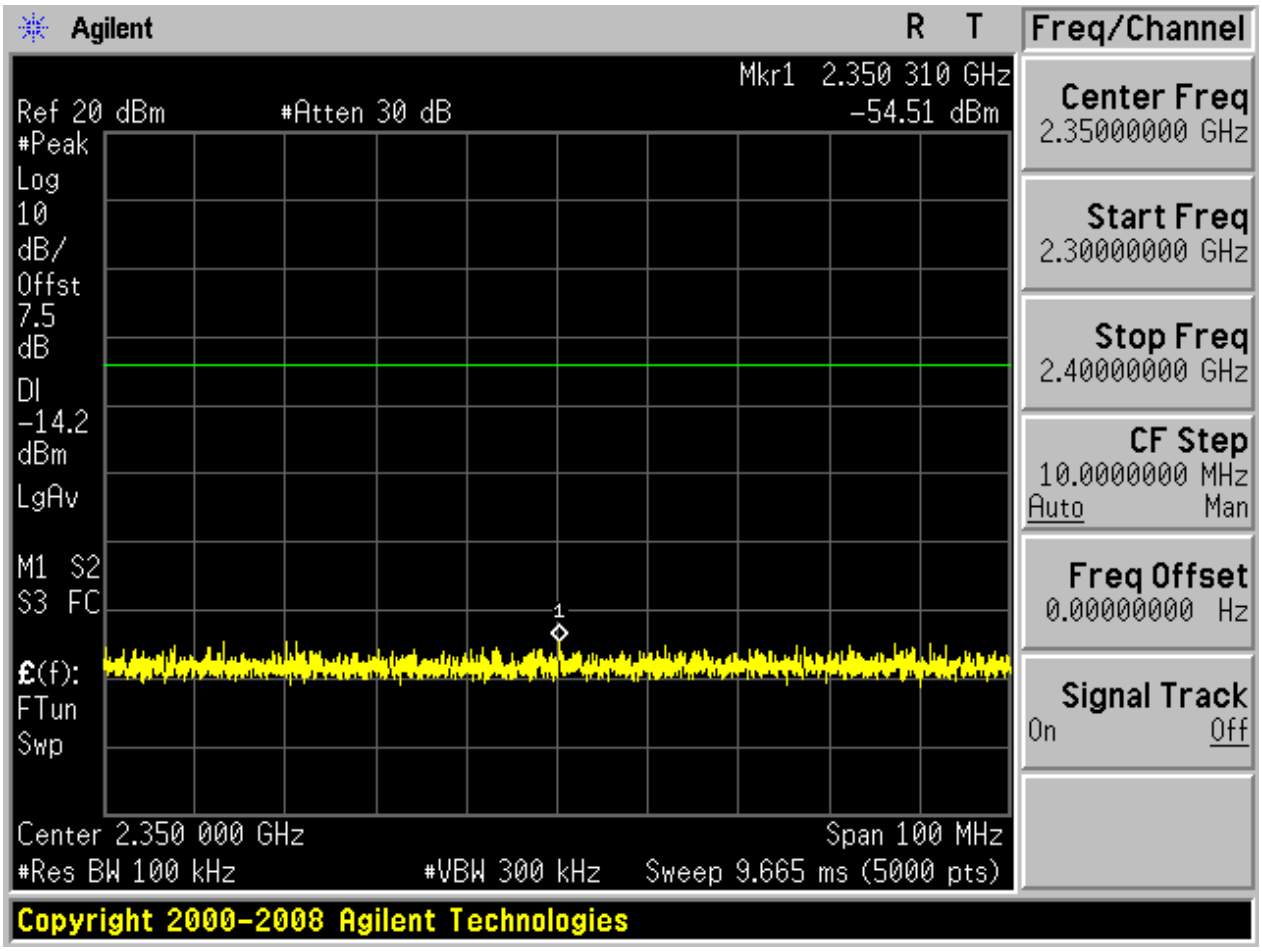


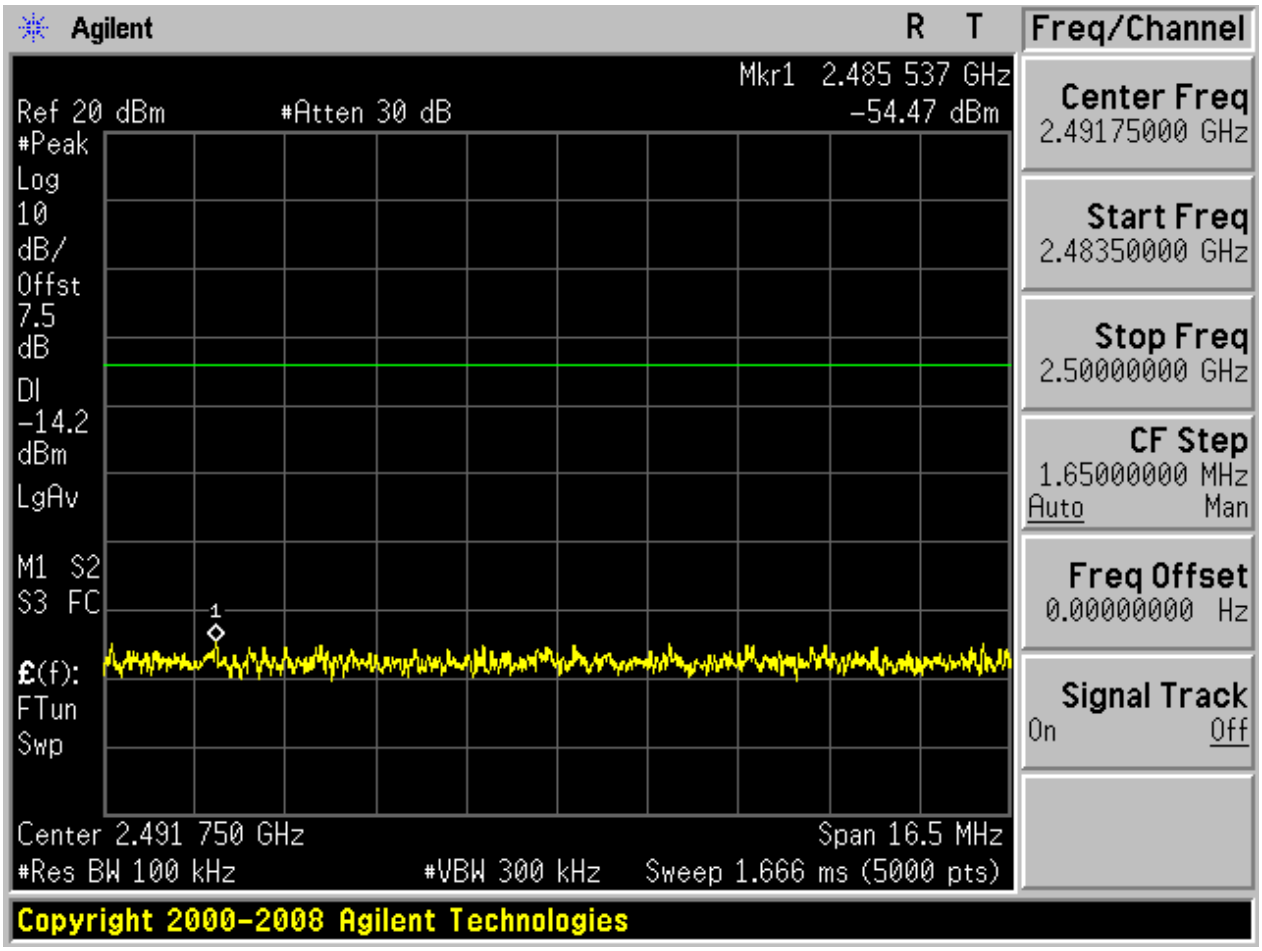
2.8.2 Puw

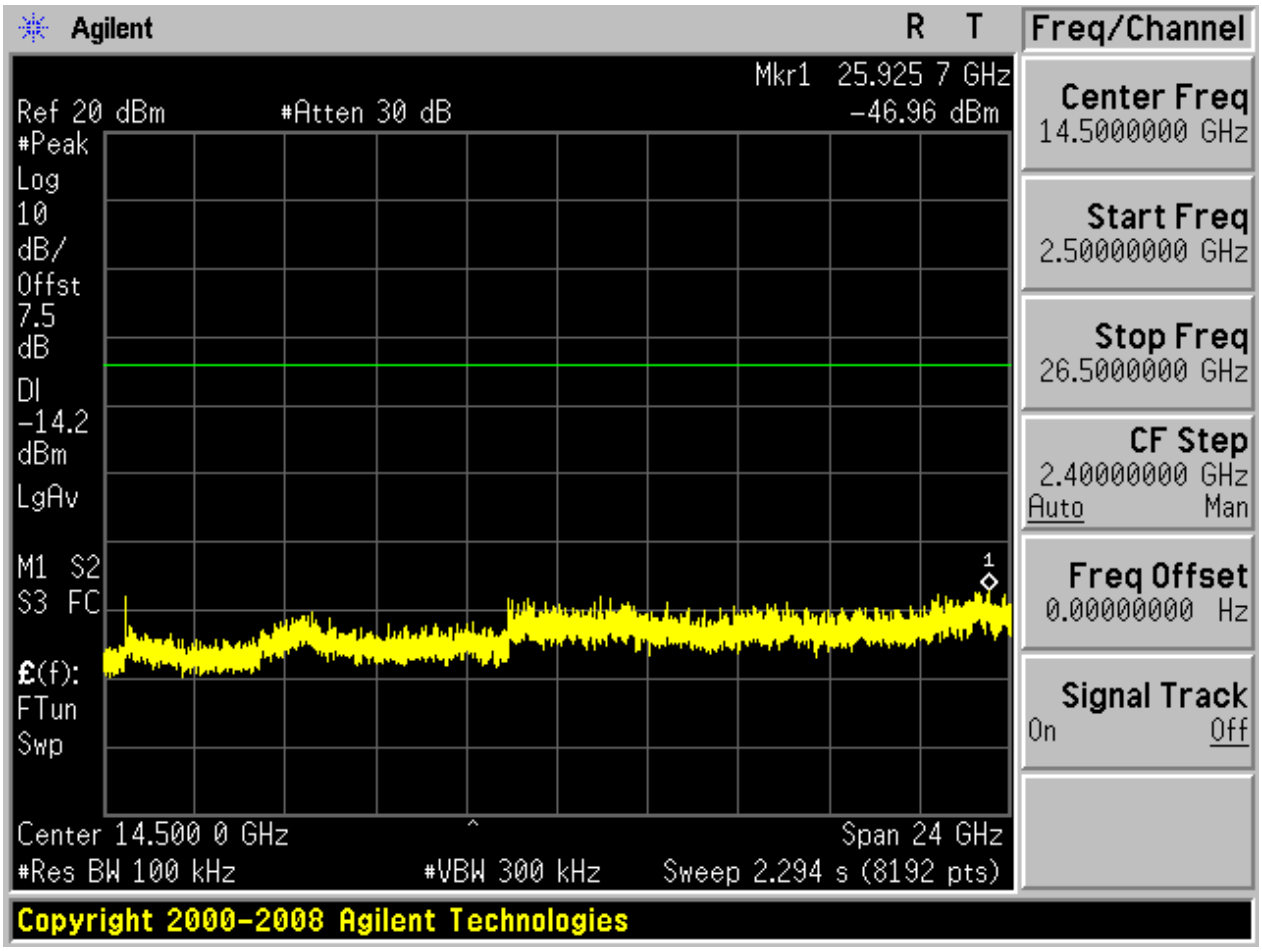






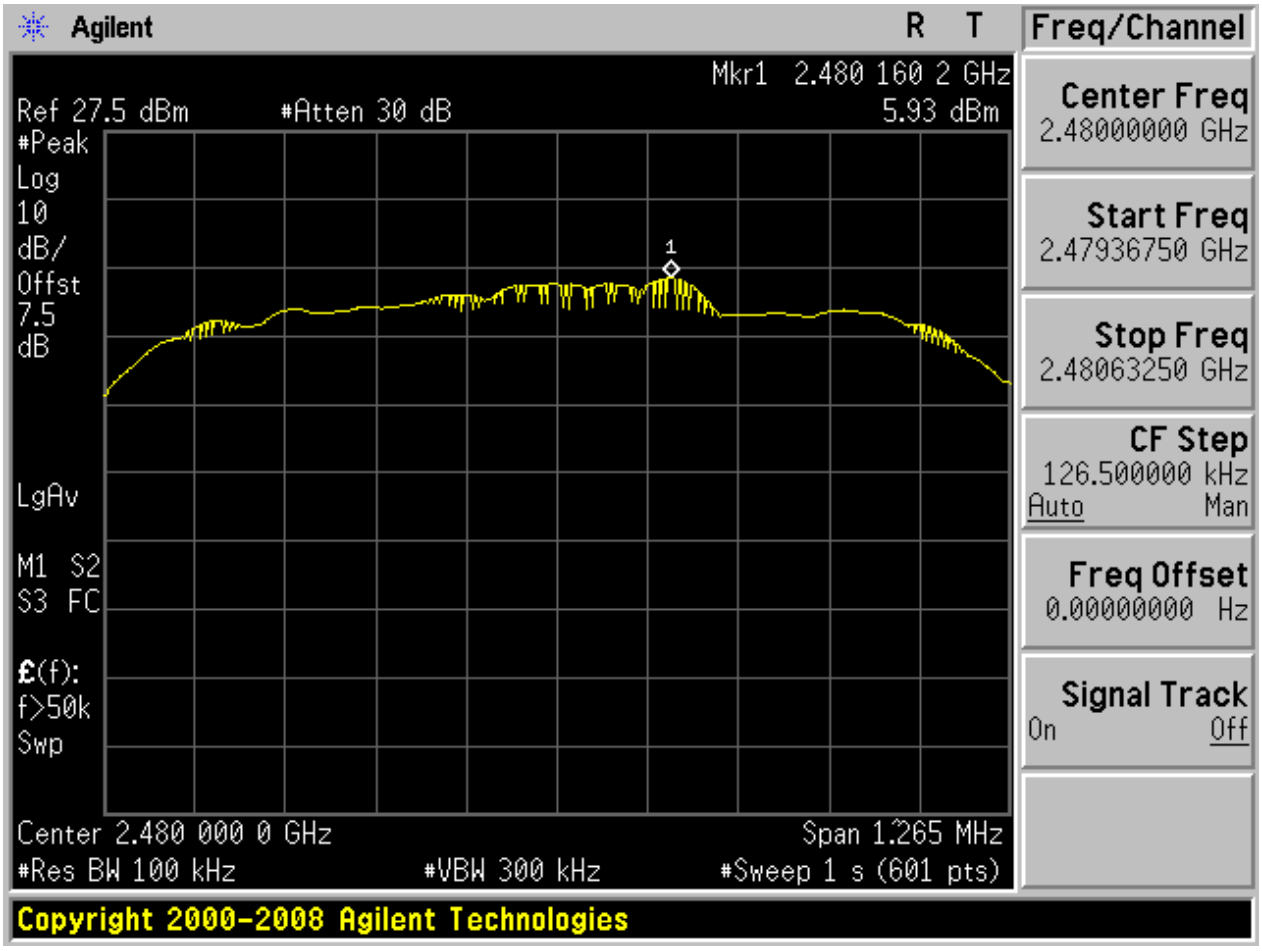




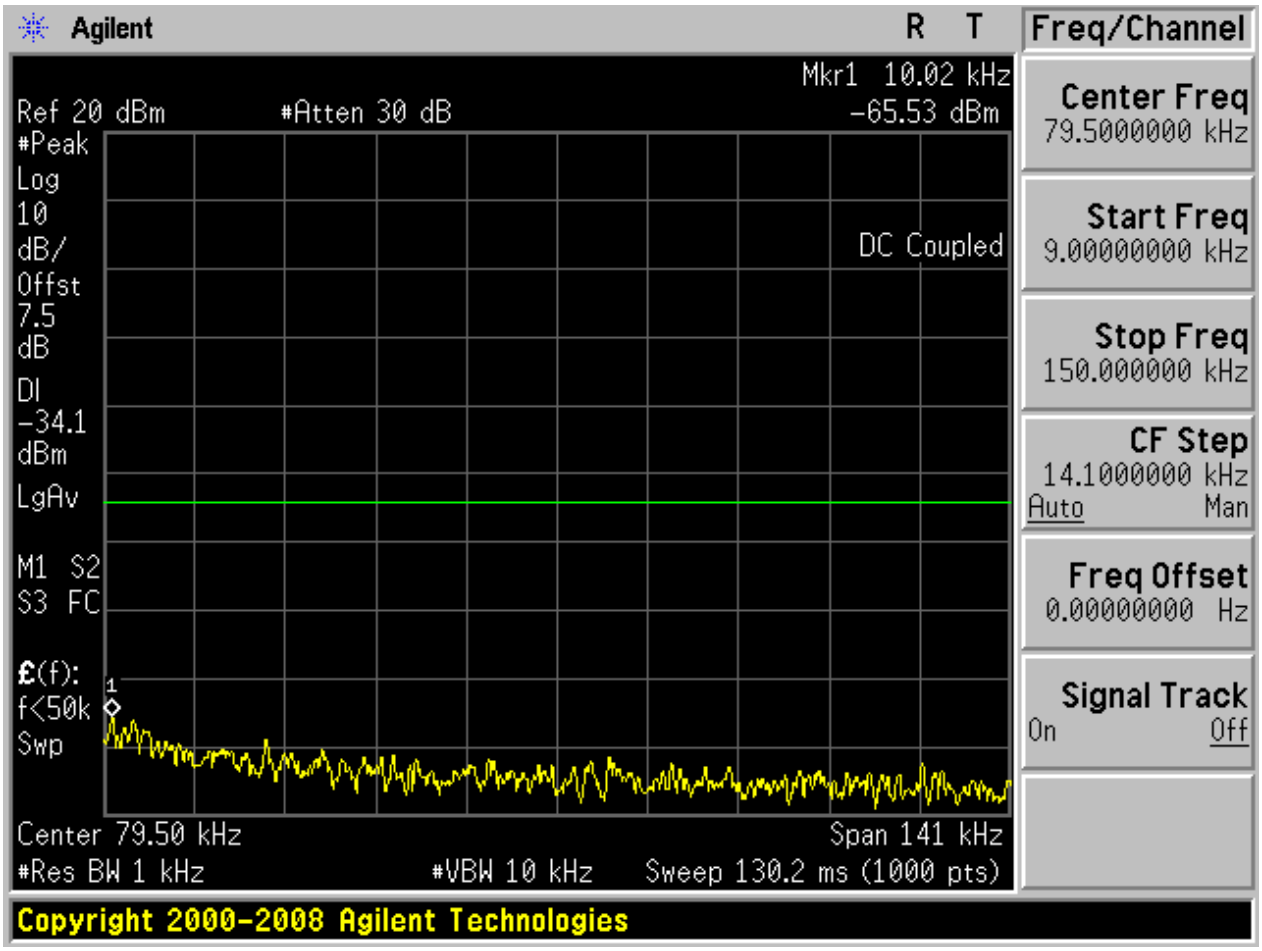


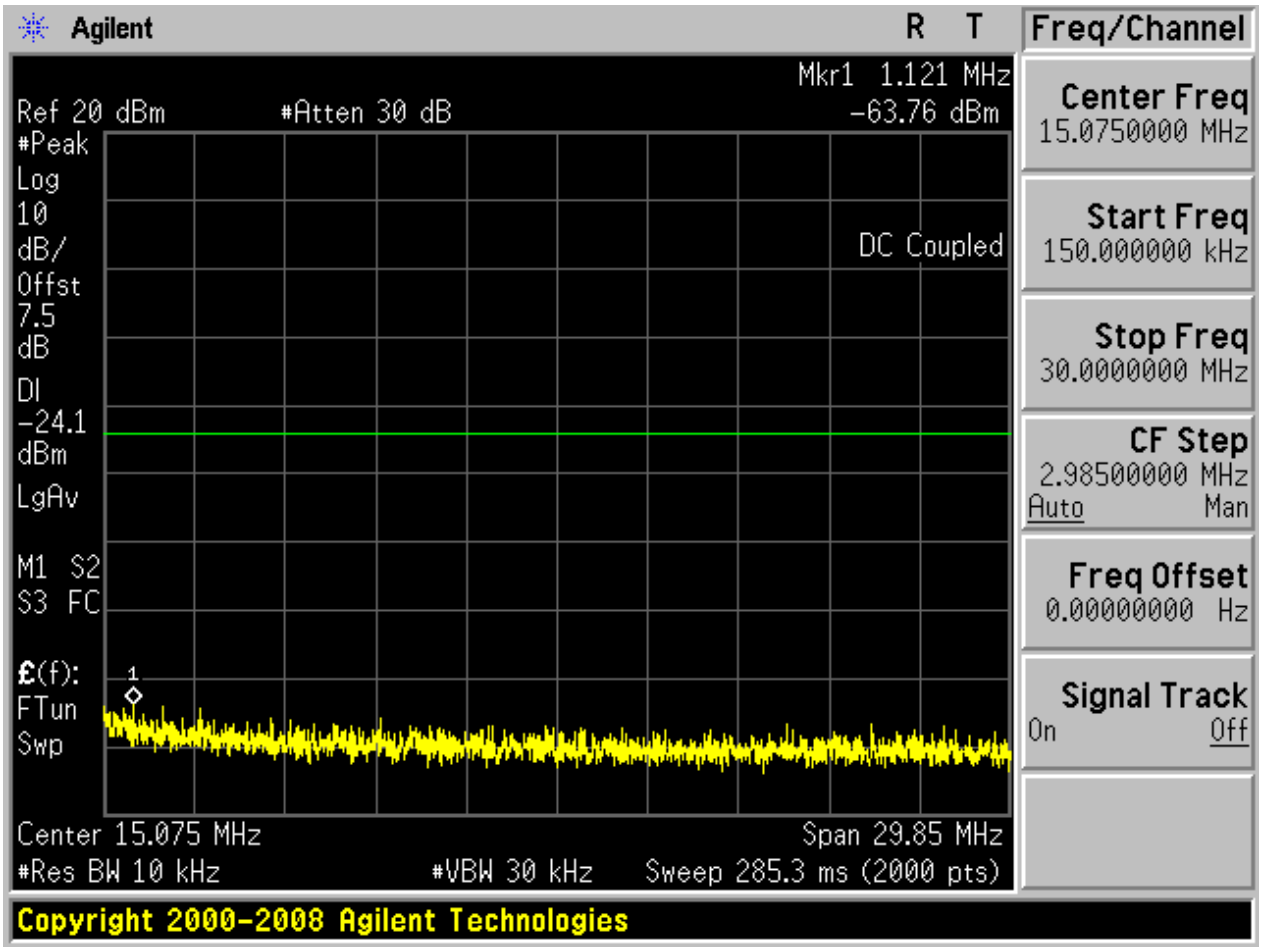
2.9 TM3_3DH5_Ch78

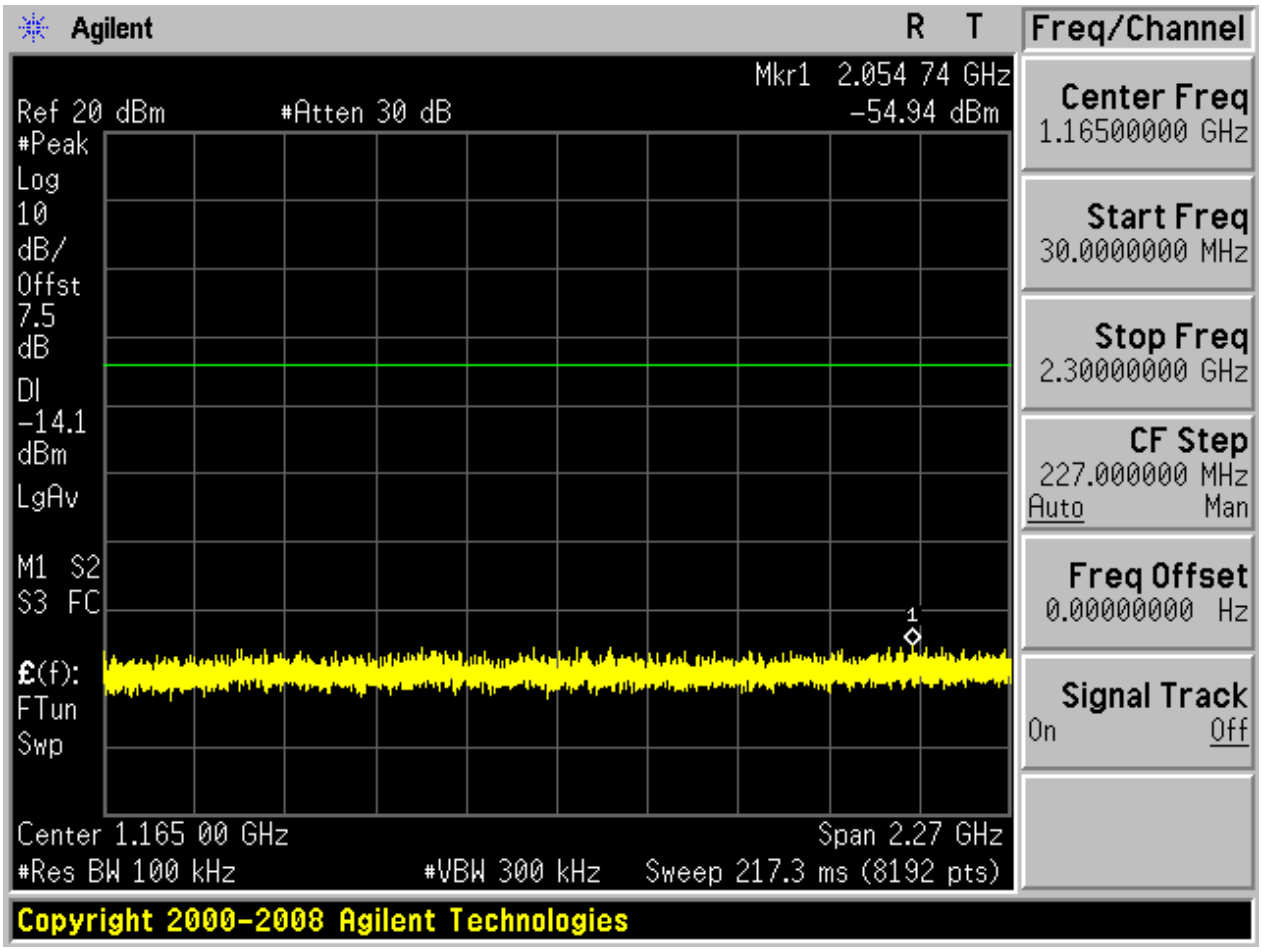
2.9.1 Pref

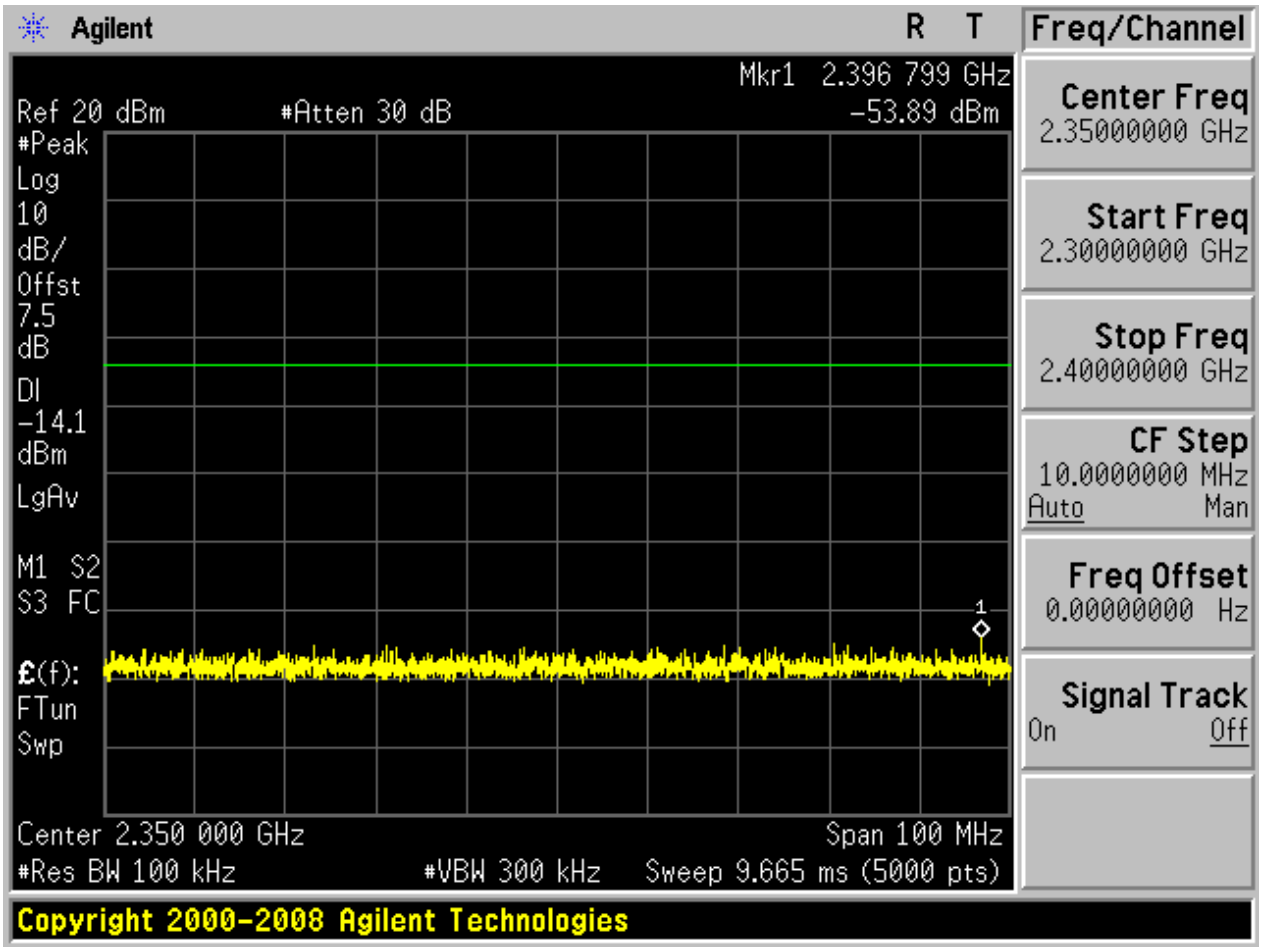


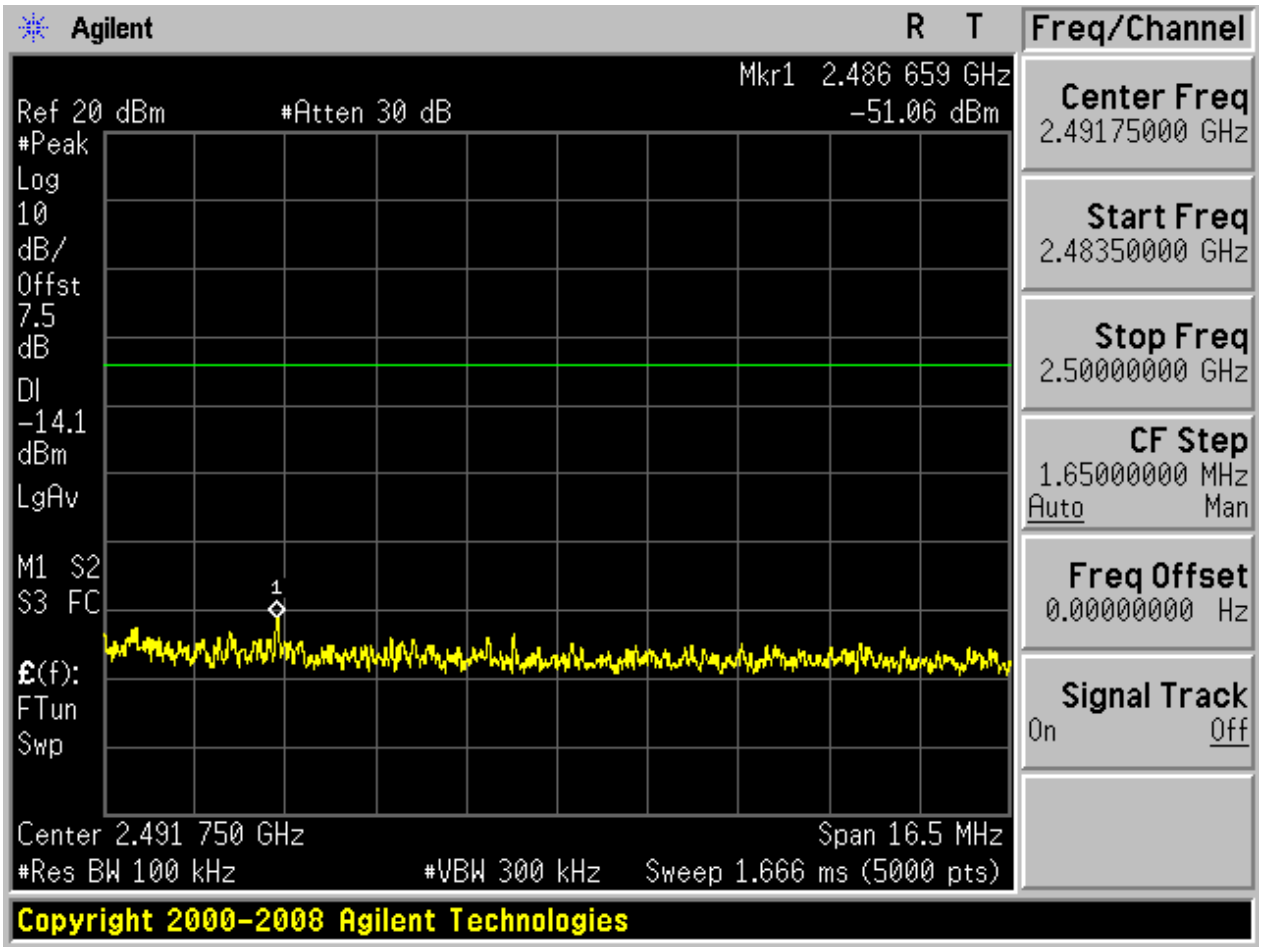
2.9.2 Puw

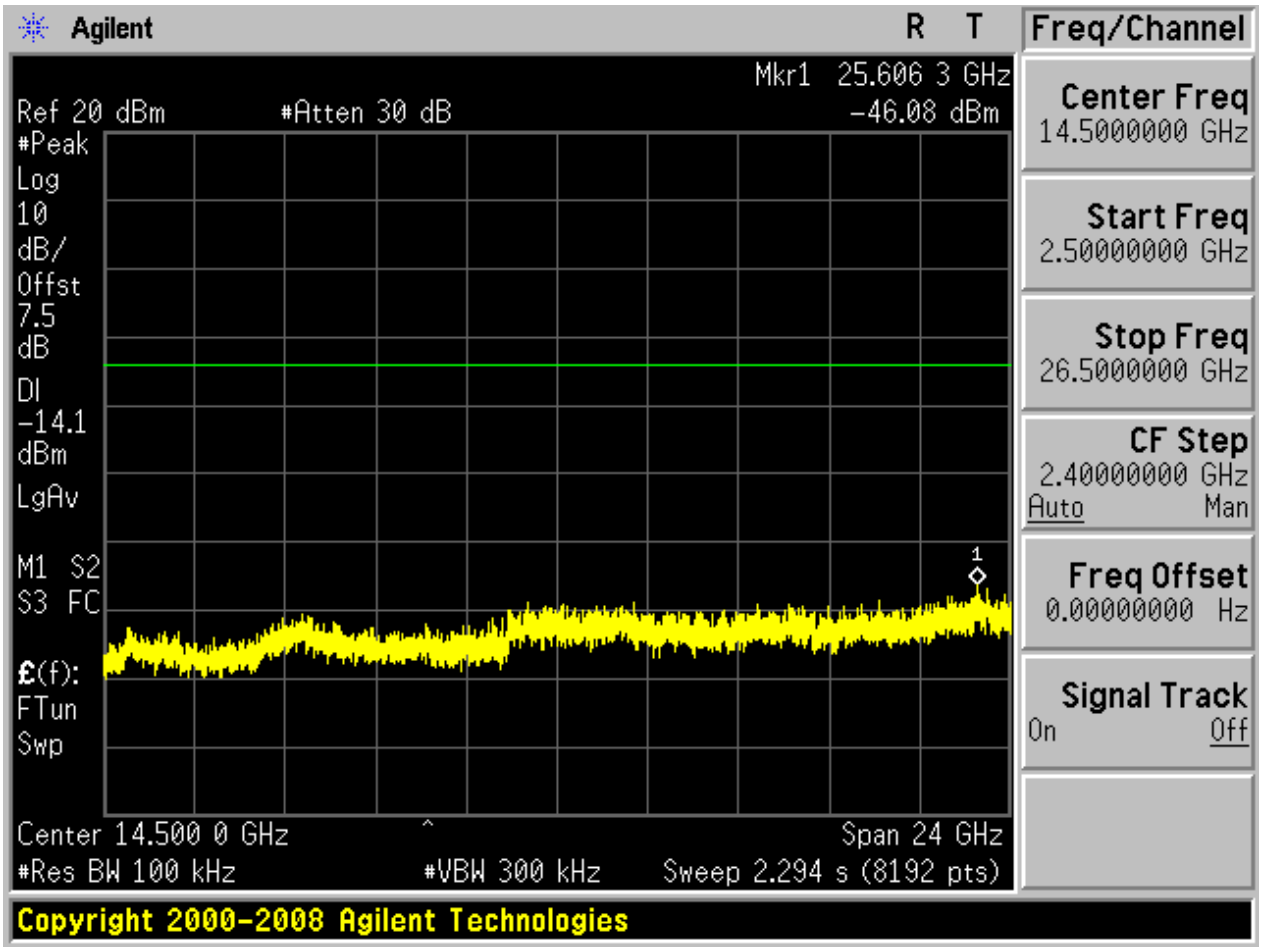










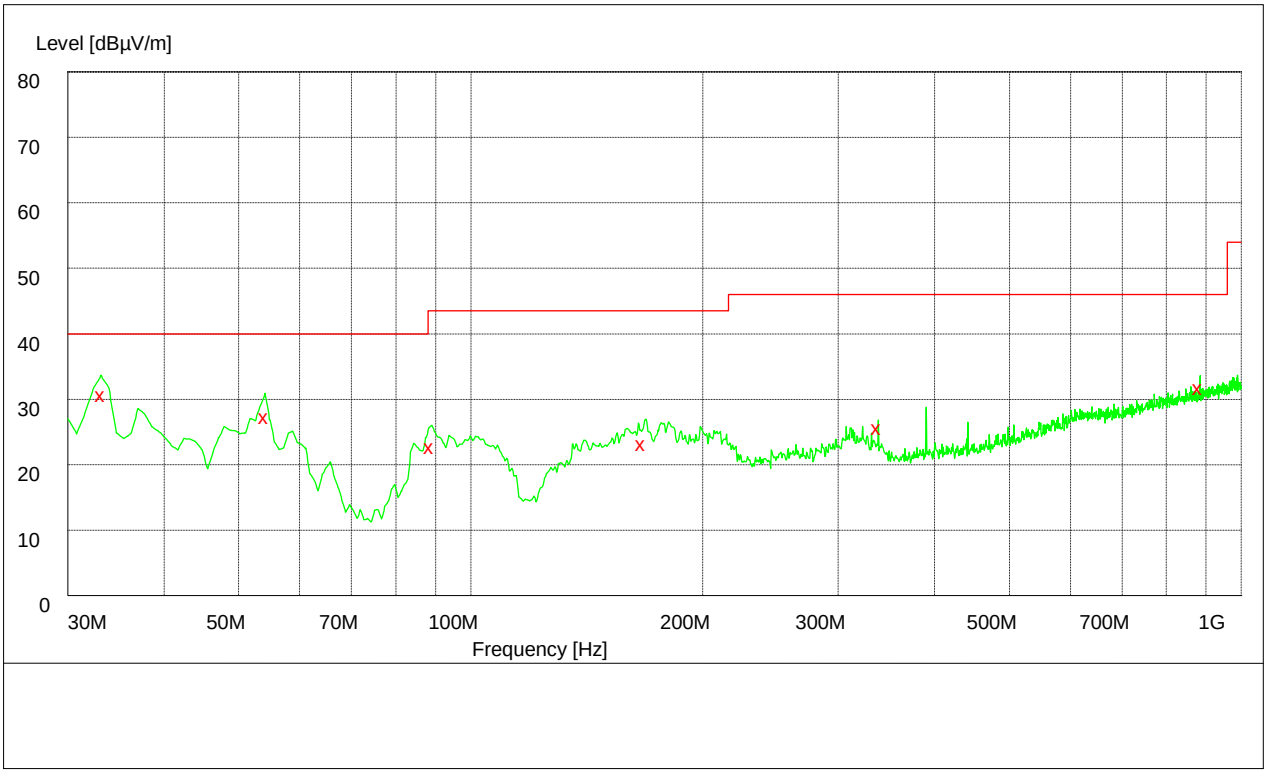


Appendix I: Radiated Emissions in the Restricted Bands

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.

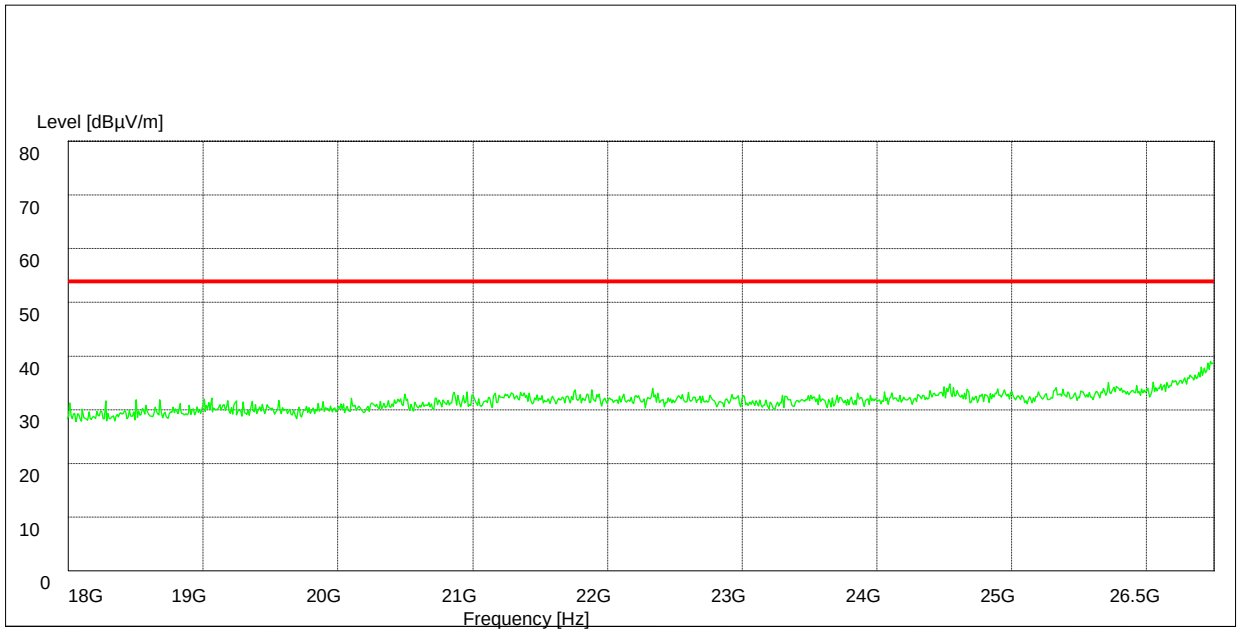
Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
33.300000	32.20	11.8	40.0	7.8	100.0	19.00	VERTICAL
54.240000	28.70	12.7	40.0	11.3	100.0	291.00	VERTICAL
88.800000	24.30	11.5	43.5	19.2	100.0	89.00	VERTICAL
167.400000	24.70	10.0	43.5	18.8	100.0	167.00	VERTICAL
337.980000	27.10	16.9	46.0	18.9	100.0	261.00	HORIZONTAL
883.920000	33.10	26.1	46.0	12.9	100.0	49.00	HORIZONTAL

Part 2: Testing Range of "18 GHz to 26.5 GHz"

Note: No peak found in pre- test.



Part 3: Testing Range of "2.3GHz to 2.5GHz"

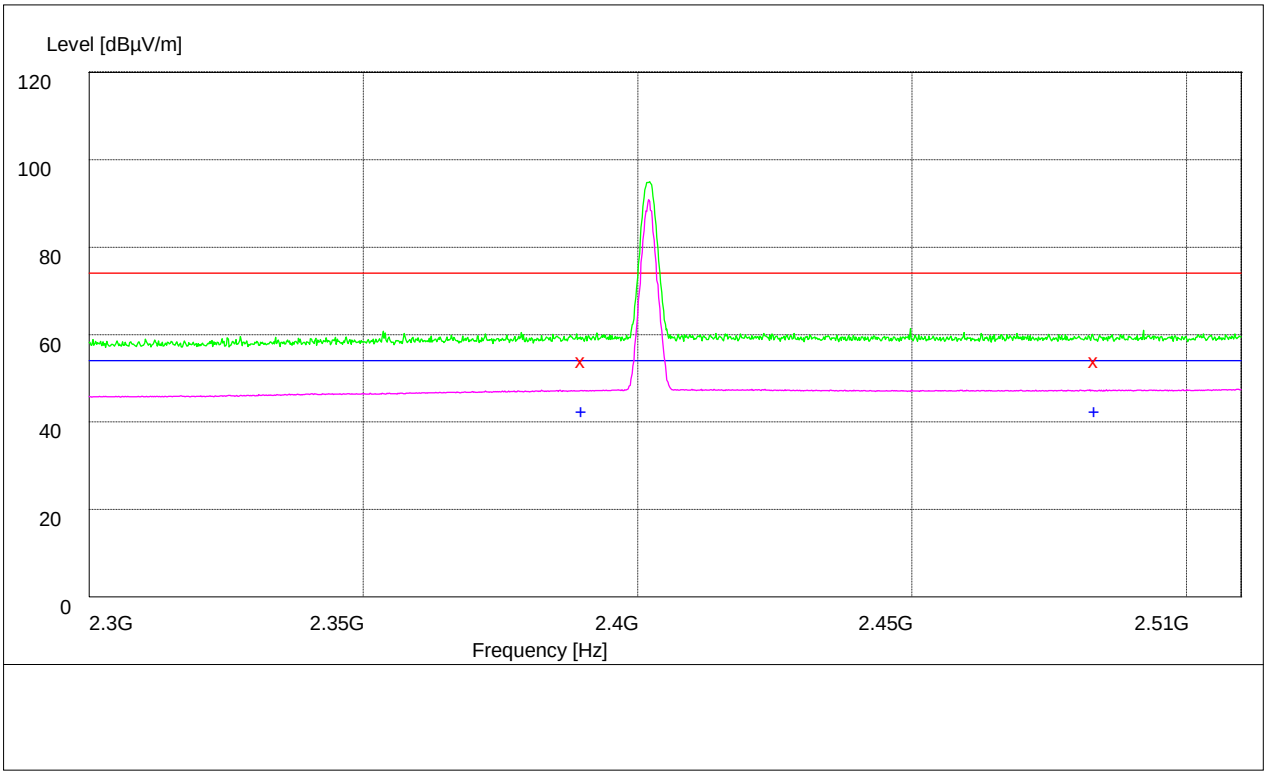
Note 1: The testing range of "2.3 GHz to 2.5 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

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

3 Test Mode:

3.1 Channel 00



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

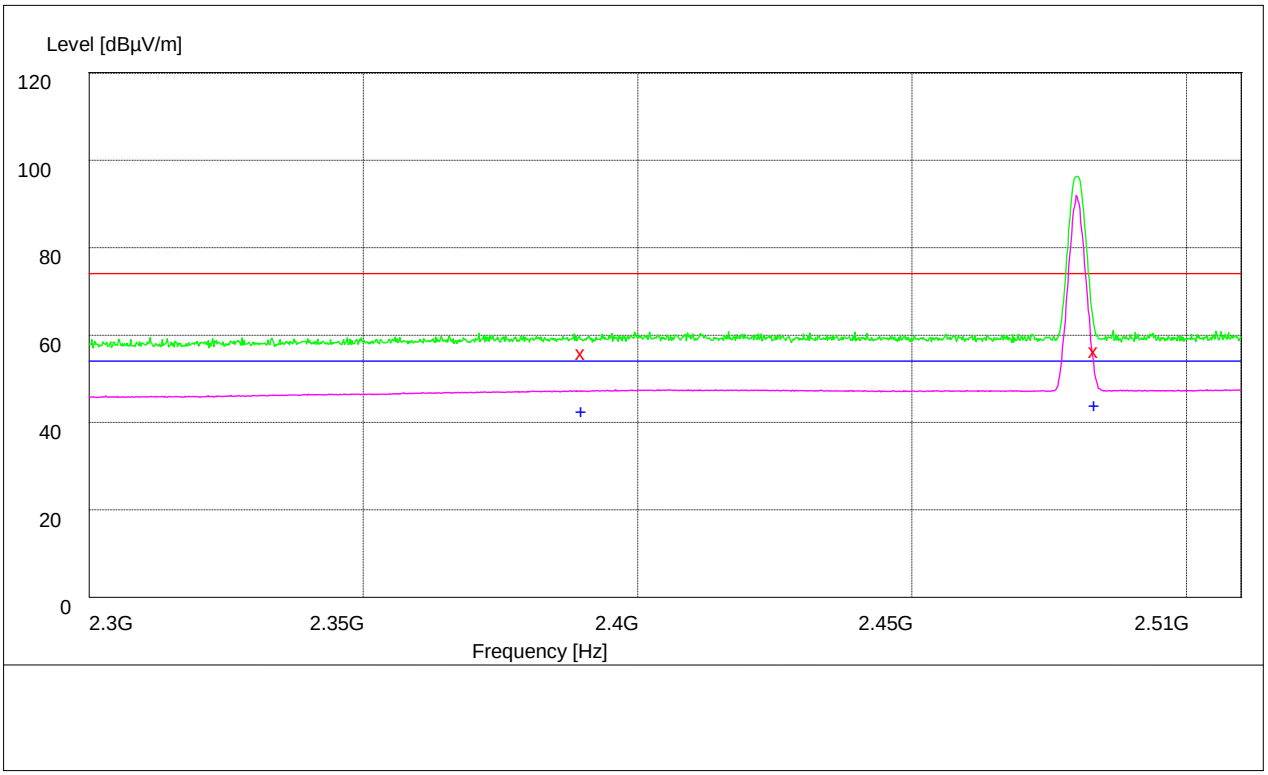
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	56.20	34.7	74.0	17.8	100.0	216.00	HORIZONTAL
2483.500000	56.10	35.0	74.0	17.9	100.0	285.00	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	44.60	34.7	54.0	9.4	100.0	177.00	VERTICAL
2483.500000	44.60	35.0	54.0	9.4	100.0	360.00	VERTICAL

3.2 Channel 78



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

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.10	34.7	74.0	15.9	100.0	223.00	HORIZONTAL
2483.500000	58.50	35.0	74.0	15.5	100.0	2.00	VERTICAL

MEASUREMENT RESULT: AV Detector

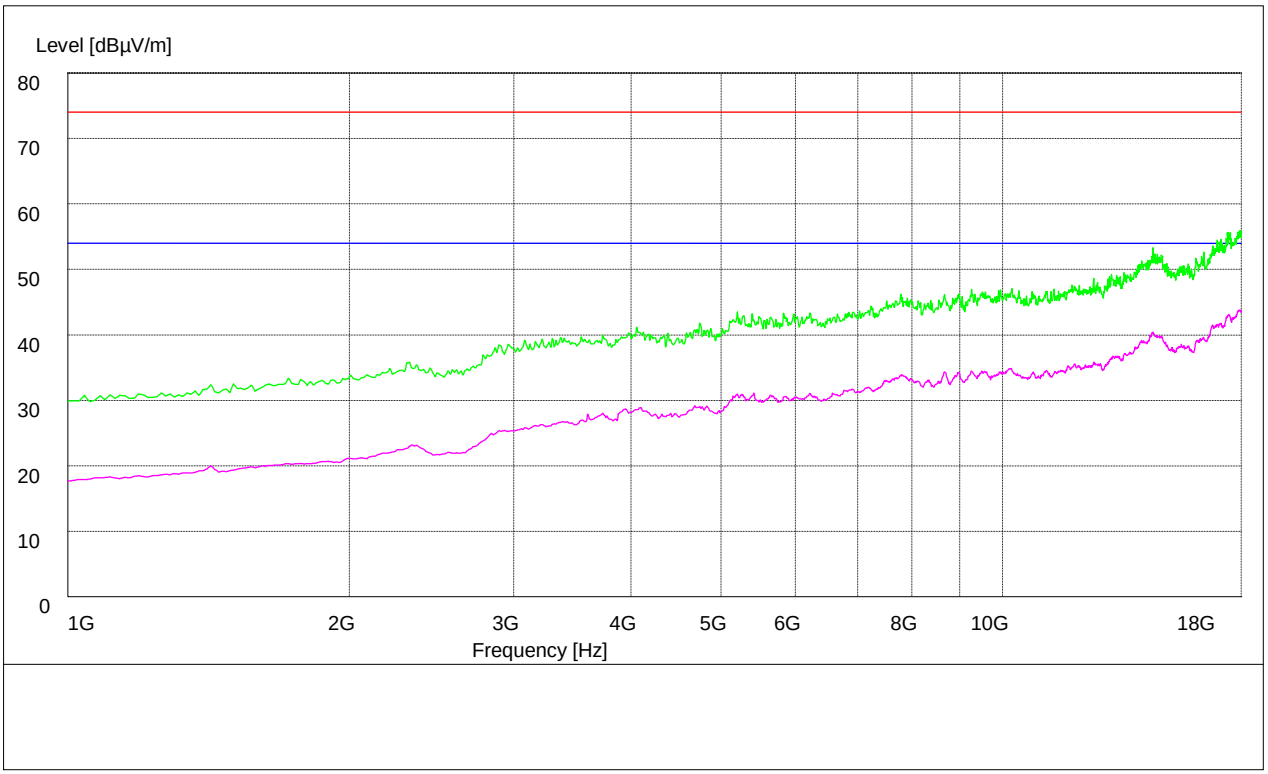
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	44.70	34.7	54.0	9.3	100.0	238.00	VERTICAL
2483.500000	46.00	35.0	54.0	8.0	100.0	142.00	HORIZONTAL

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.

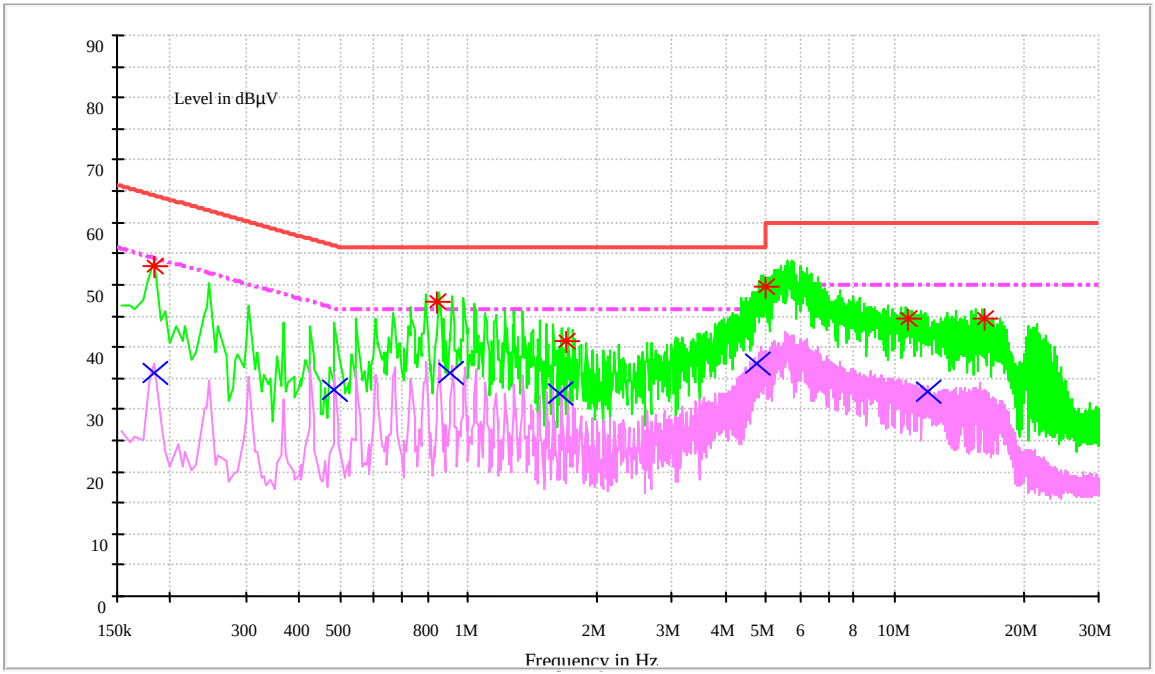
Note 2: The testing range of "1 GHz to 18 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

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



Appendix J: AC Power Line Conducted Emissions

Channel 39



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182734	53.0	9.7	64.4	11.4	L1	FLO
0.845508	47.1	9.7	56.0	8.9	N	FLO
1.695116	41.0	9.7	56.0	15.0	N	FLO
4.972781	49.8	9.8	56.0	6.2	N	FLO
10.713904	44.4	9.9	60.0	15.6	N	FLO
16.157659	44.6	10.1	60.0	15.4	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182502	35.9	9.7	54.4	18.5	L1	FLO
0.482834	33.2	9.7	46.3	13.1	N	FLO
0.904054	36.0	9.7	46.0	10.0	N	FLO
1.627128	32.5	9.7	46.0	13.5	N	FLO
4.753128	37.4	9.8	46.0	8.6	N	FLO
11.947924	32.8	10.0	50.0	17.2	N	FLO

END