



Appendix A: 20dB Emission Bandwidth (EBW)



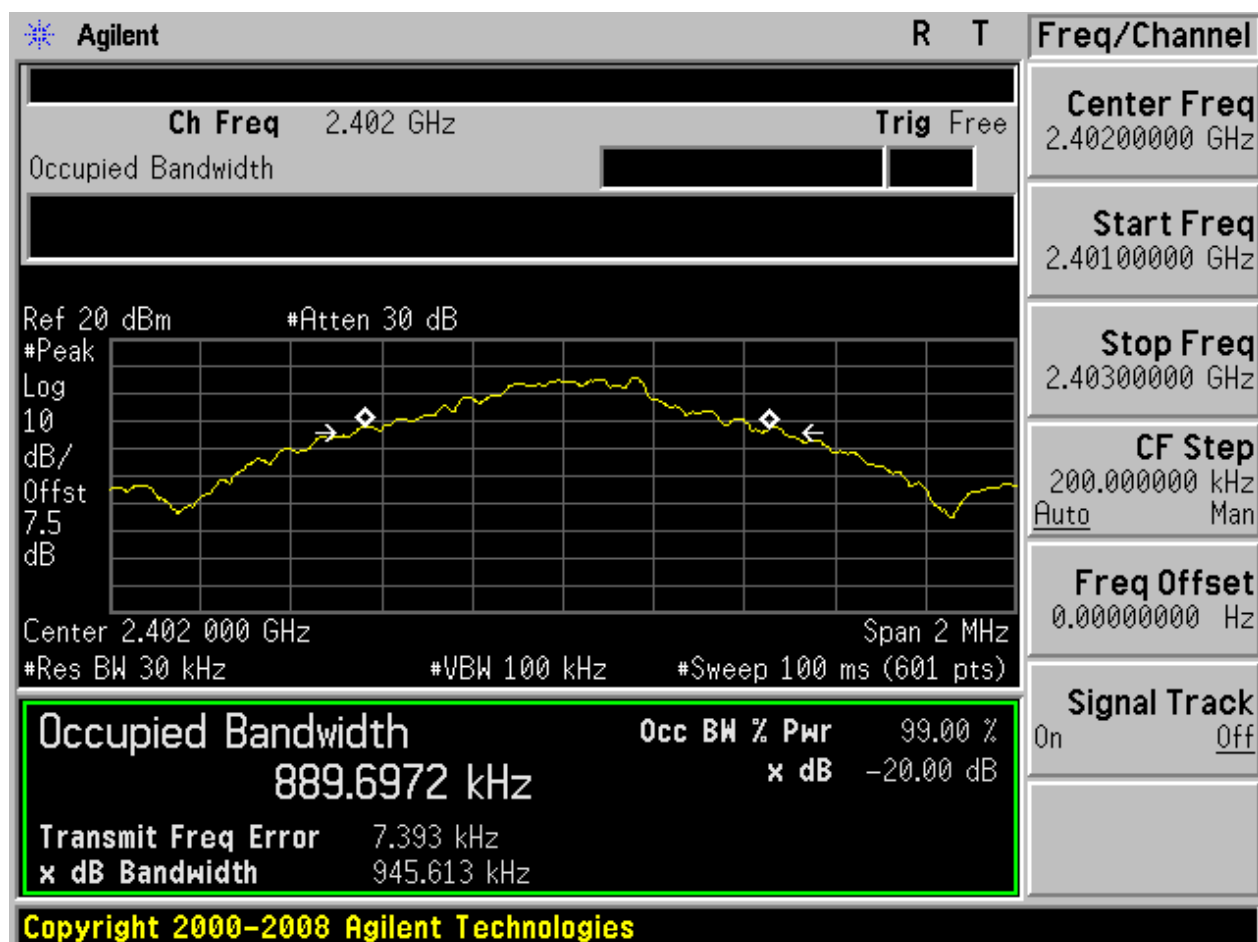
1 Result Table

EUT Conf.	EBW [MHz]	Verdict
TM1_DH5_Ch0	0.946	Pass
TM1_DH5_Ch39	0.947	Pass
TM1_DH5_Ch78	0.947	Pass
TM2_2DH5_Ch0	1.286	Pass
TM2_2DH5_Ch39	1.286	Pass
TM2_2DH5_Ch78	1.286	Pass
TM3_3DH5_Ch0	1.282	Pass
TM3_3DH5_Ch39	1.280	Pass
TM3_3DH5_Ch78	1.279	Pass



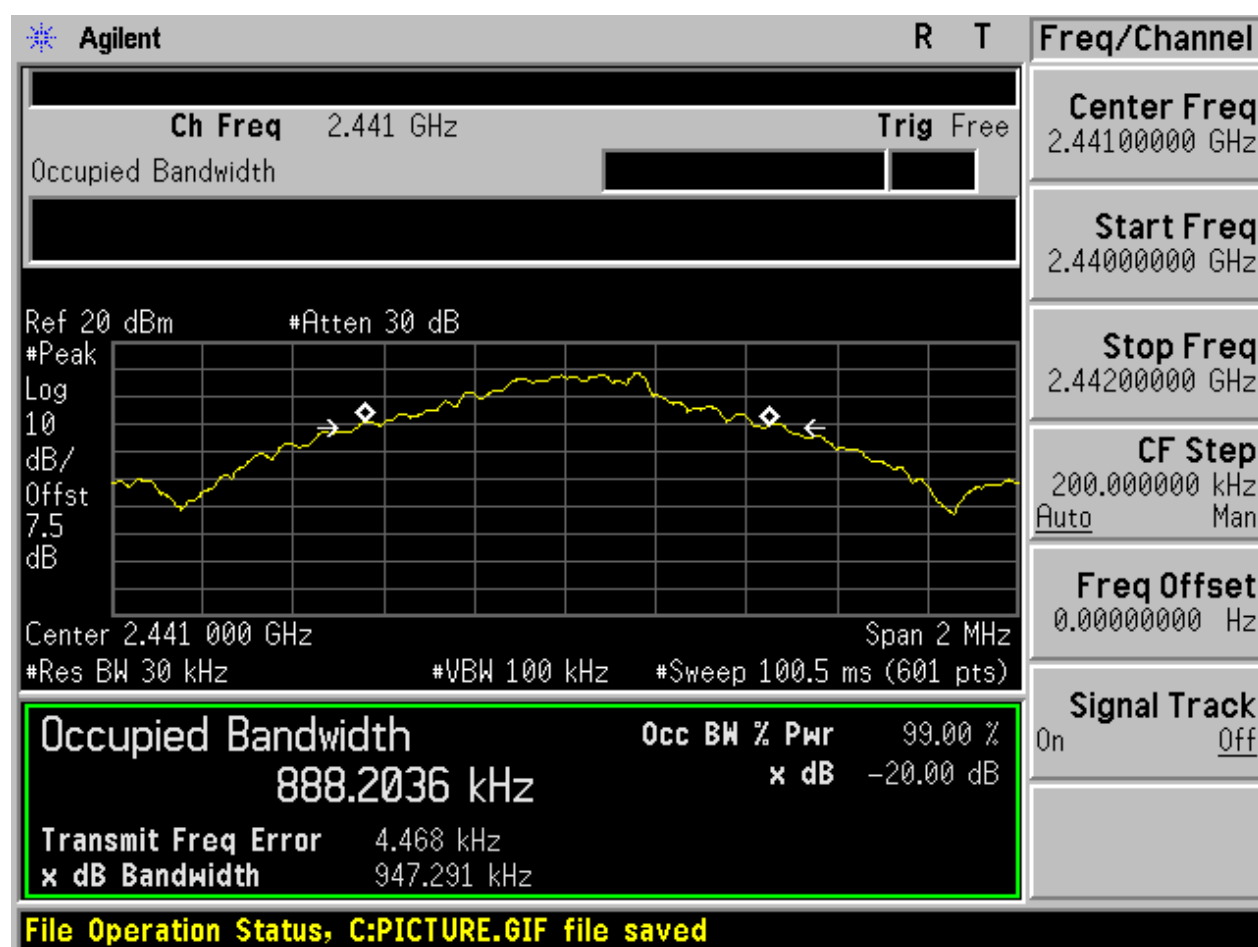
2 Test Plot

2.1 TM1_DH5_Ch0



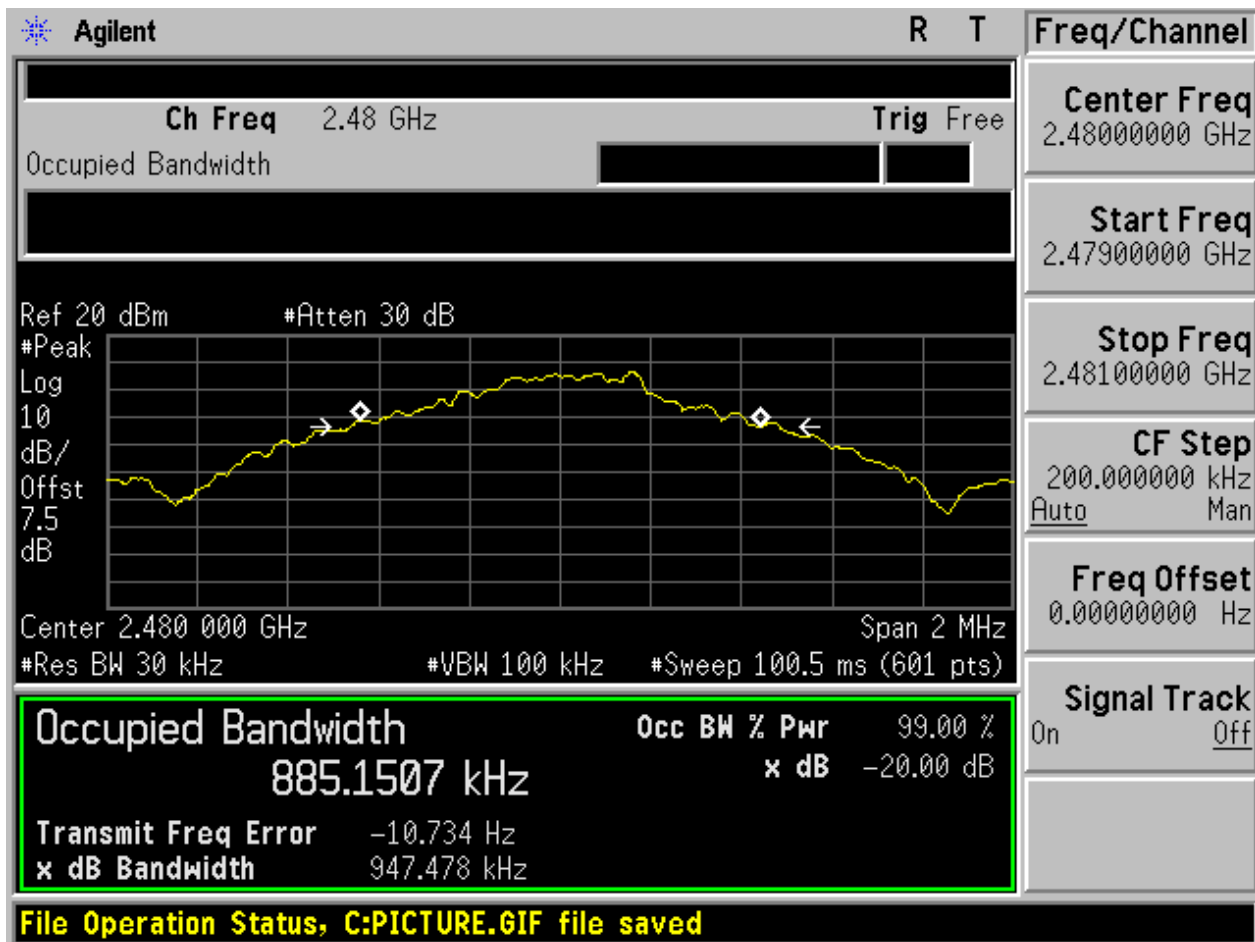


2.2 TM1_DH5_Ch39

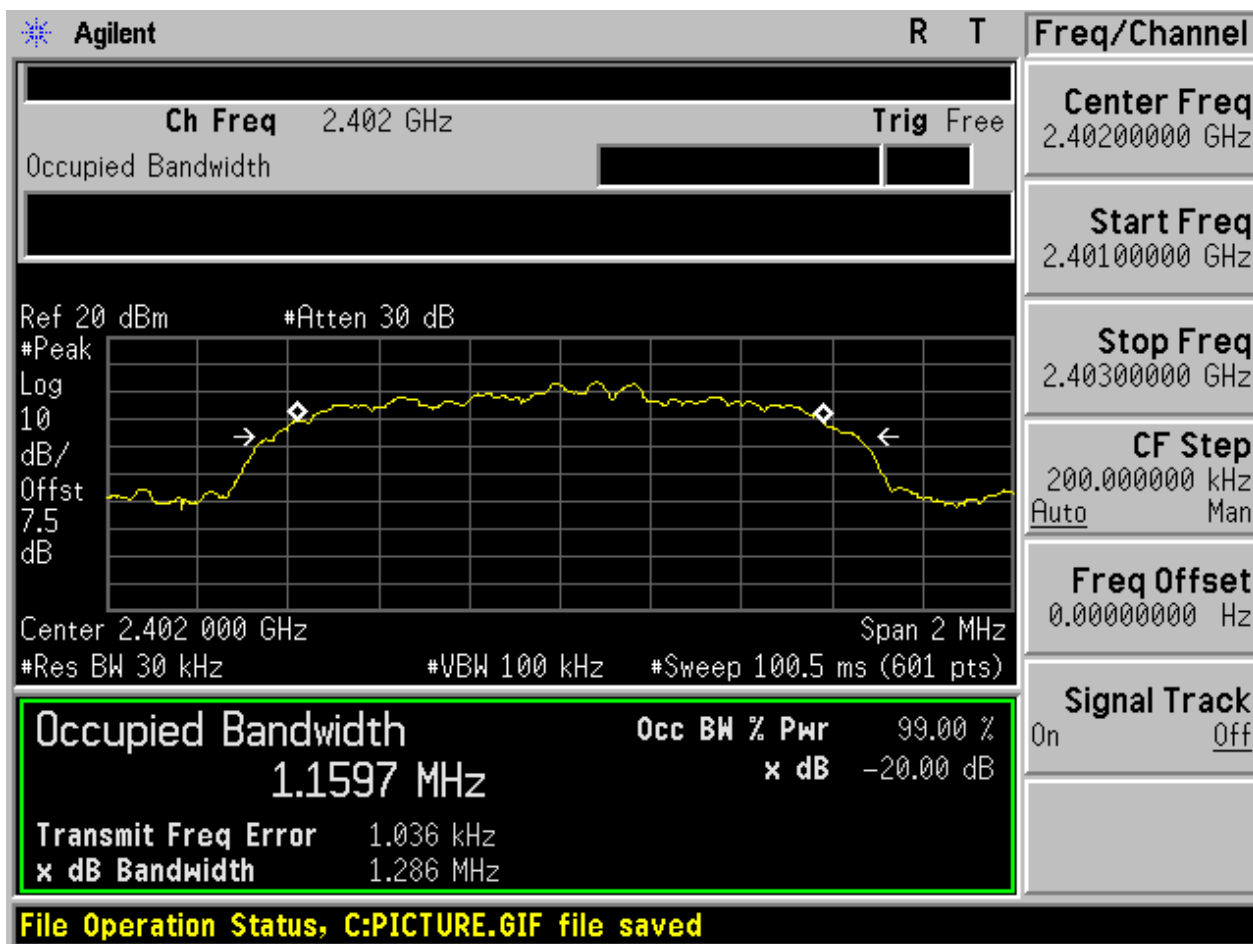




2.3 TM1_DH5_Ch78

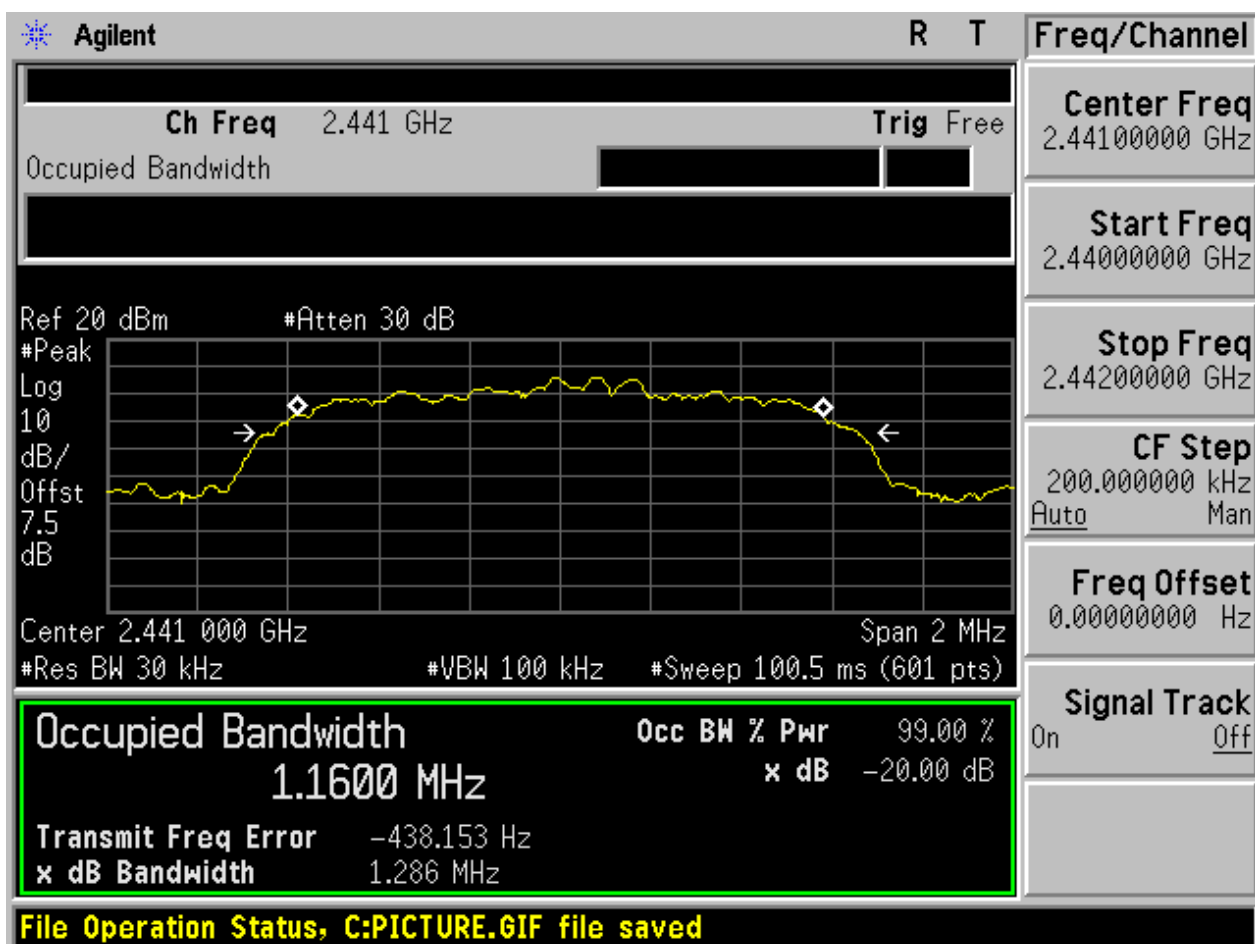


2.4 TM2_2DH5_Ch0



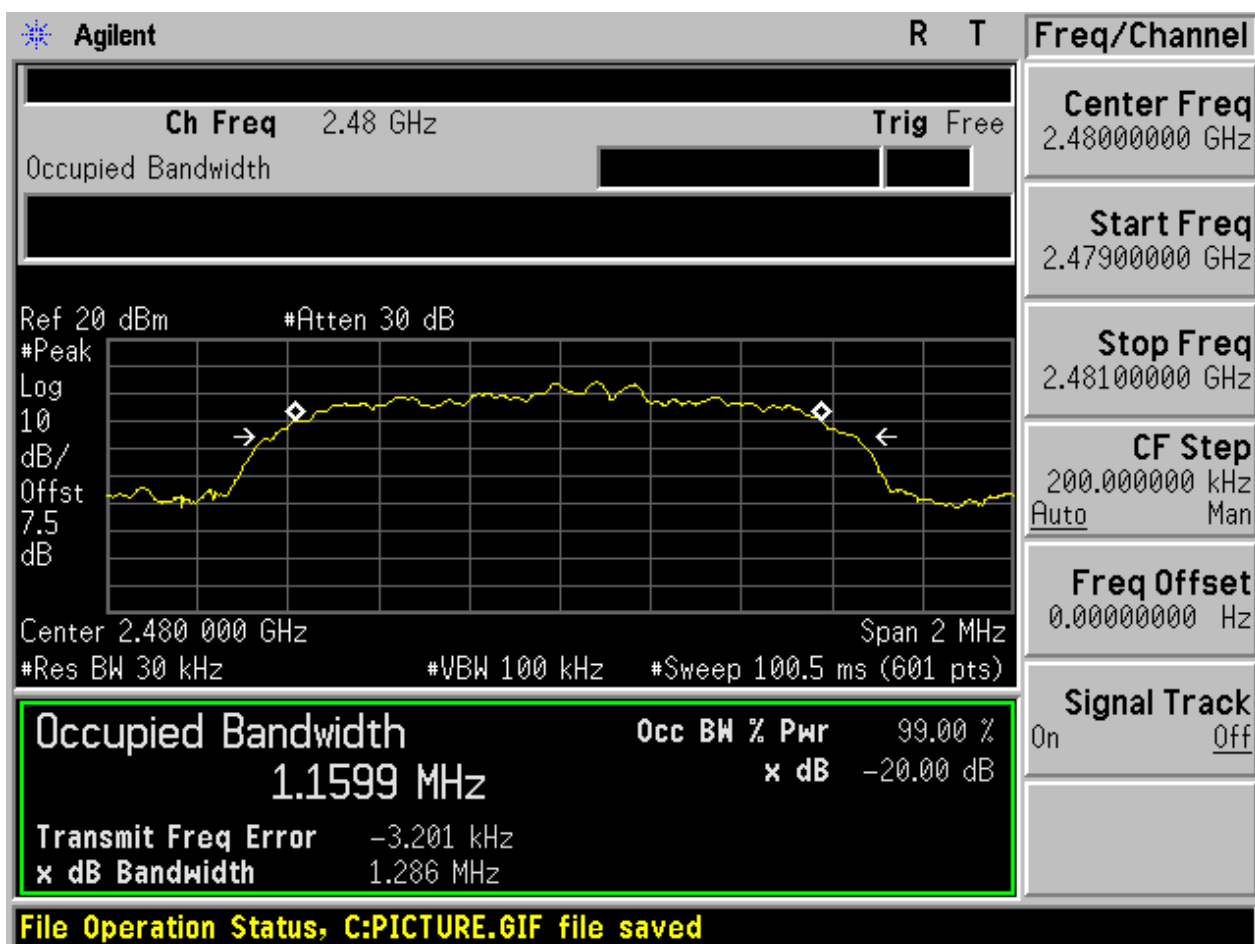


2.5 TM2_2DH5_Ch39



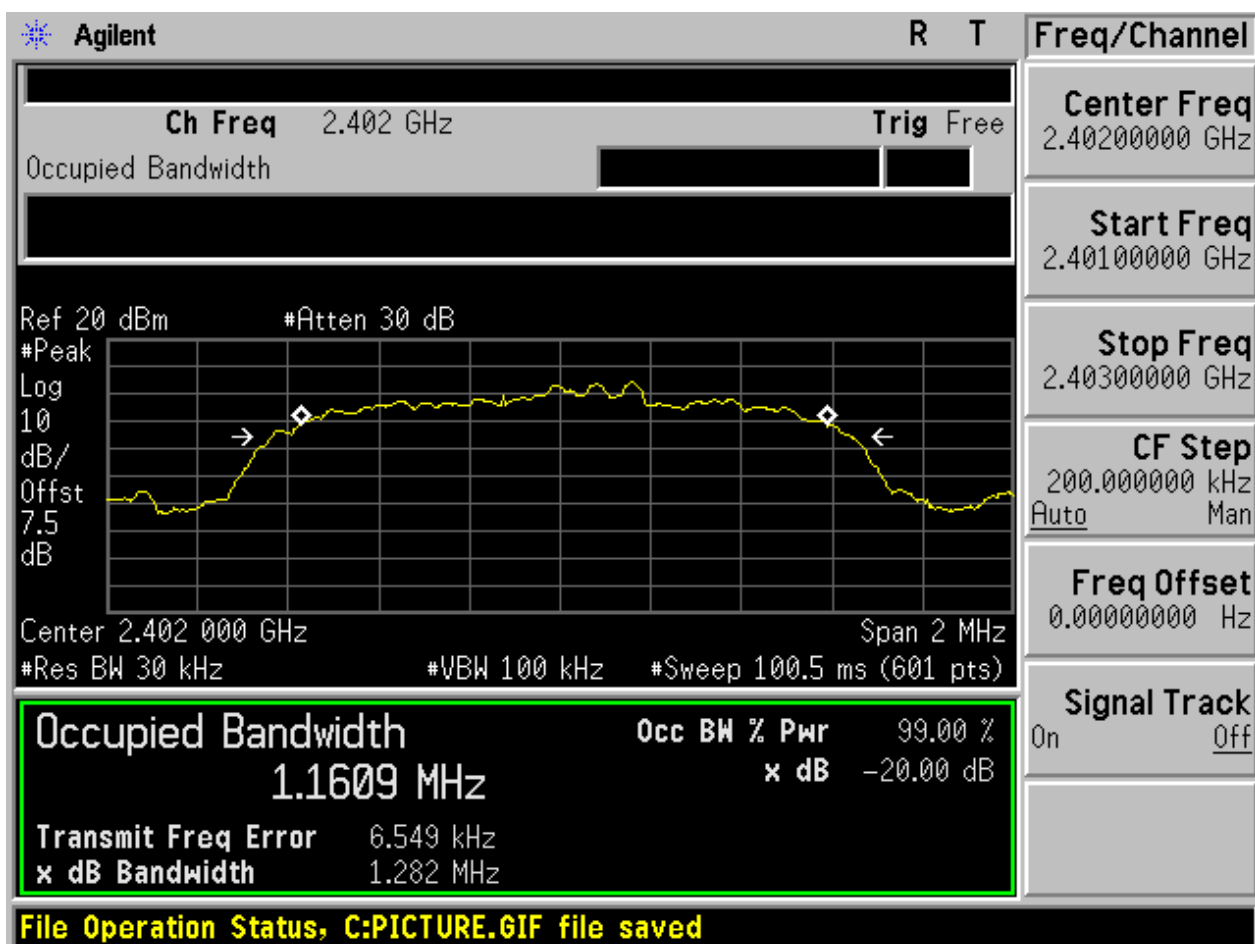


2.6 TM2_2DH5_Ch78



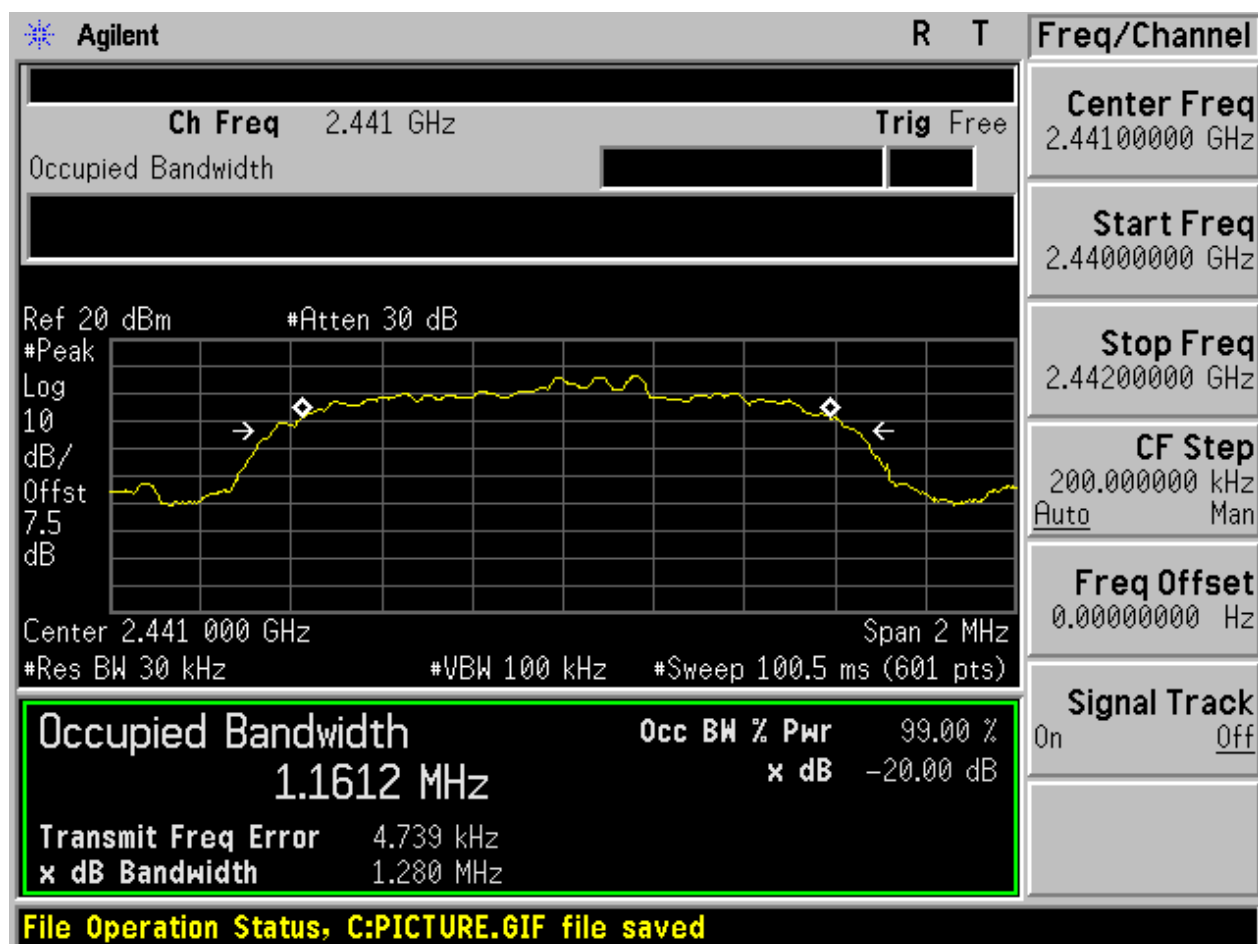


2.7 TM3_3DH5_Ch0



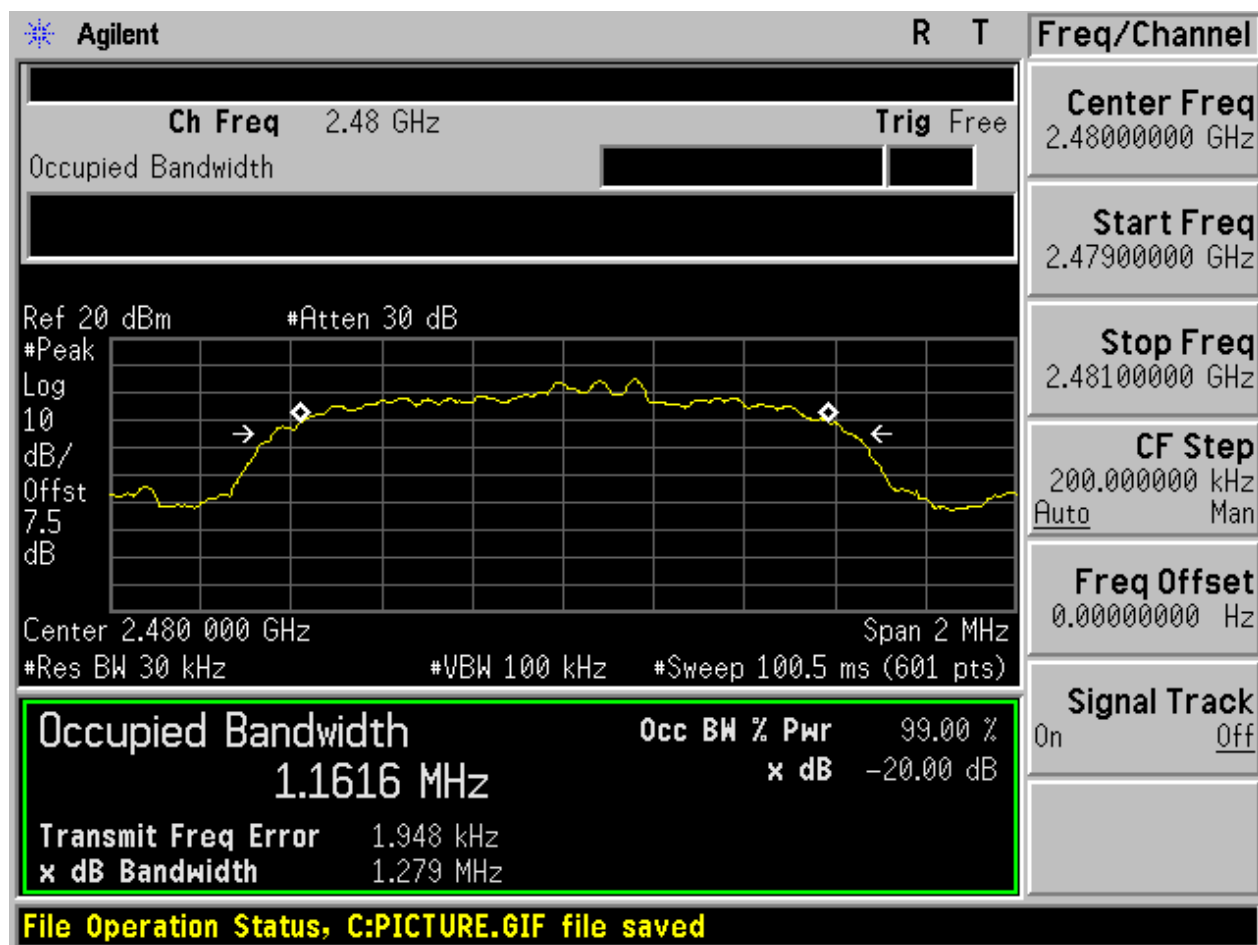


2.8 TM3_3DH5_Ch39





2.9 TM3_3DH5_Ch78





Appendix B: Carrier Frequency Separation



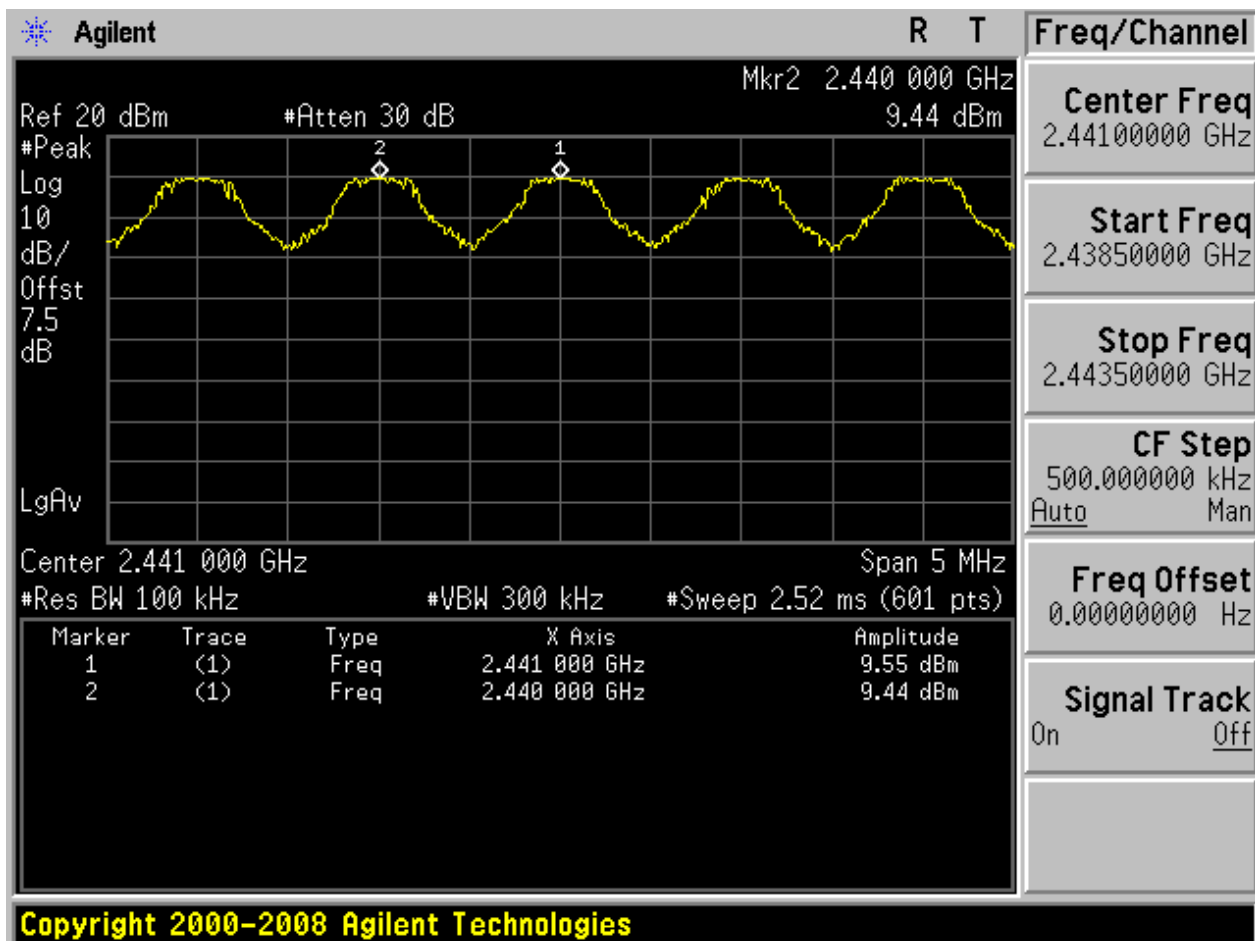
1 Result Table

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

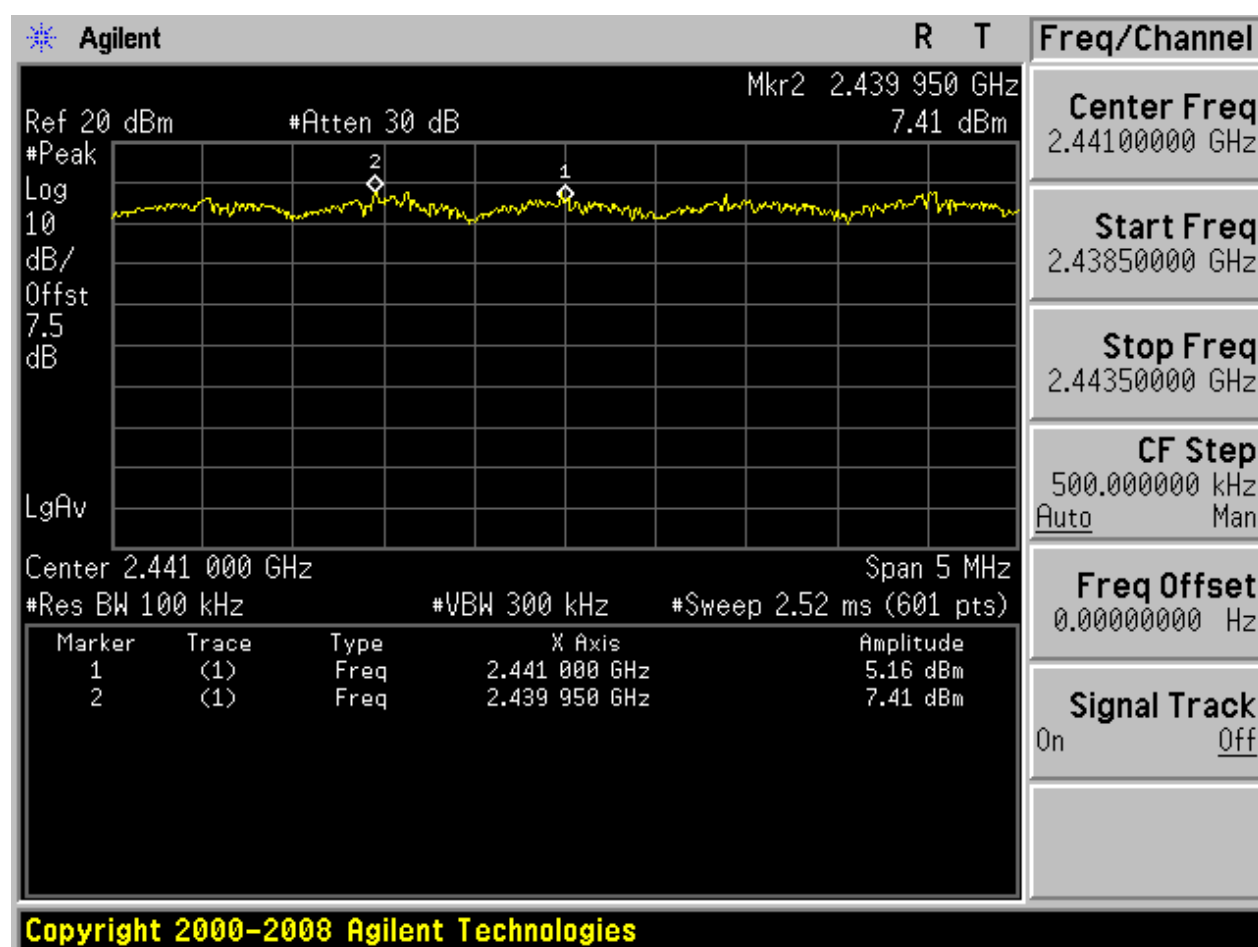


2 Test Plot

2.1 TM1_DH5_Hop

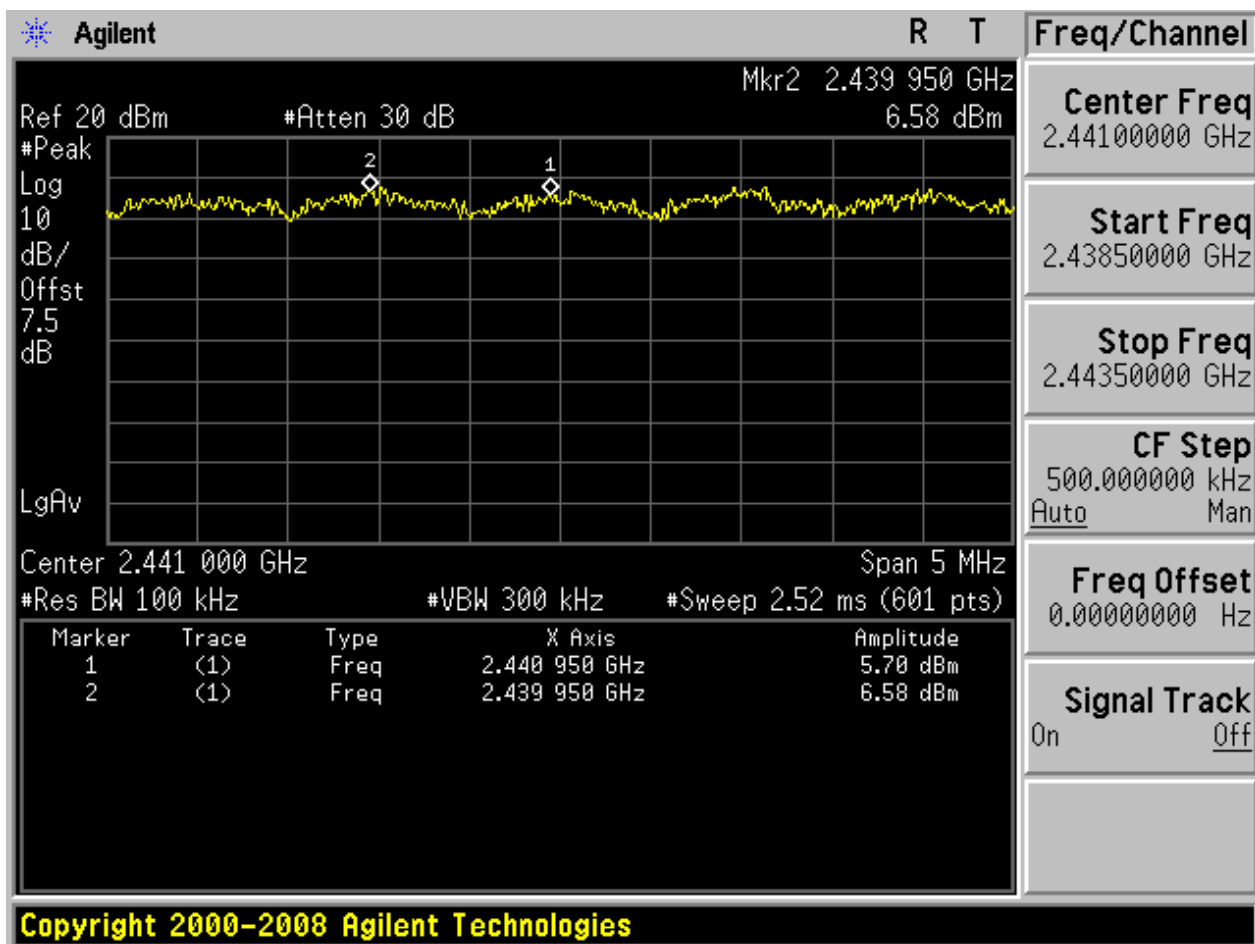


2.2 TM2_2DH5_Hop





2.3 TM3_3DH5_Hop





Appendix C: Number of Hopping Channel



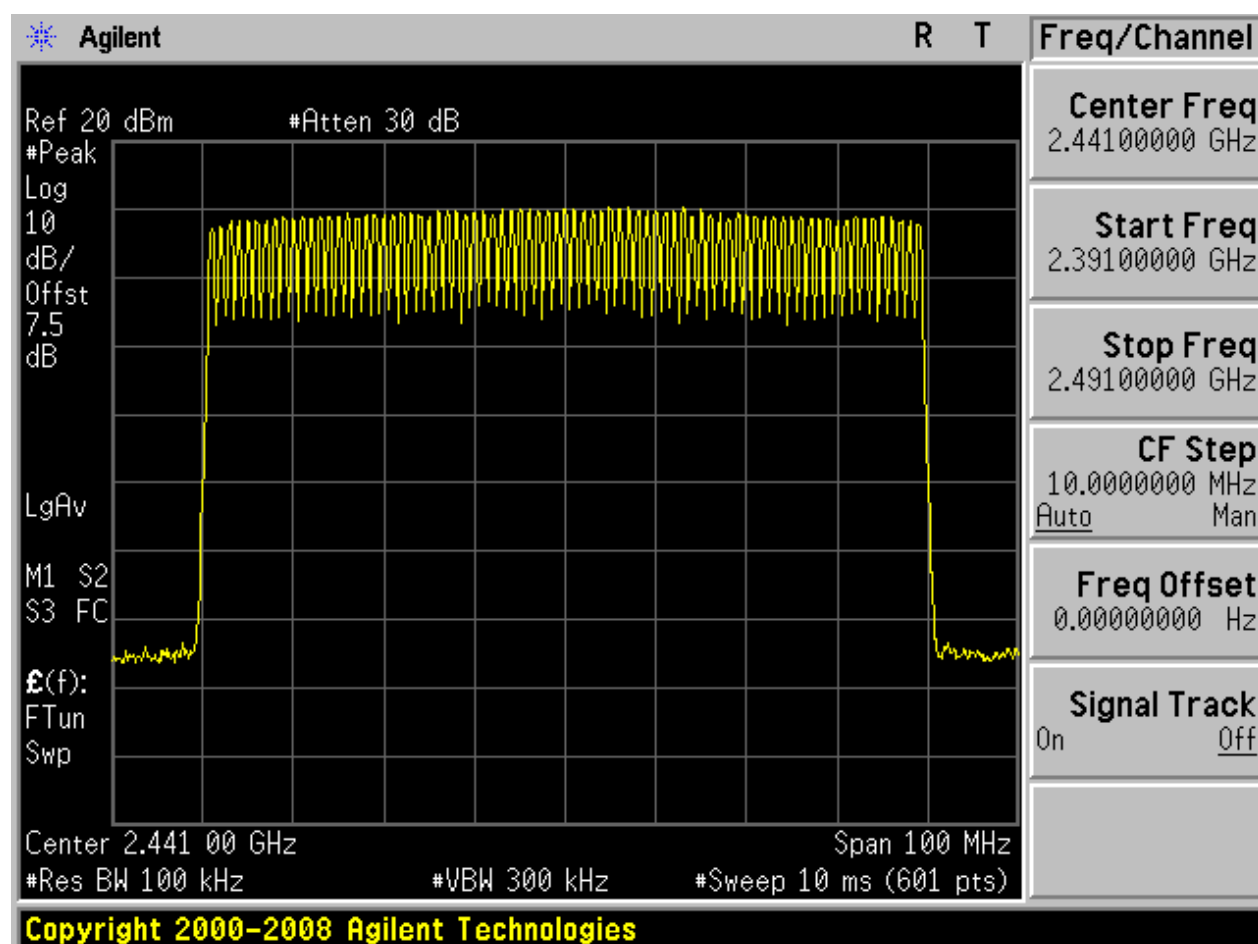
1 Result Table

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

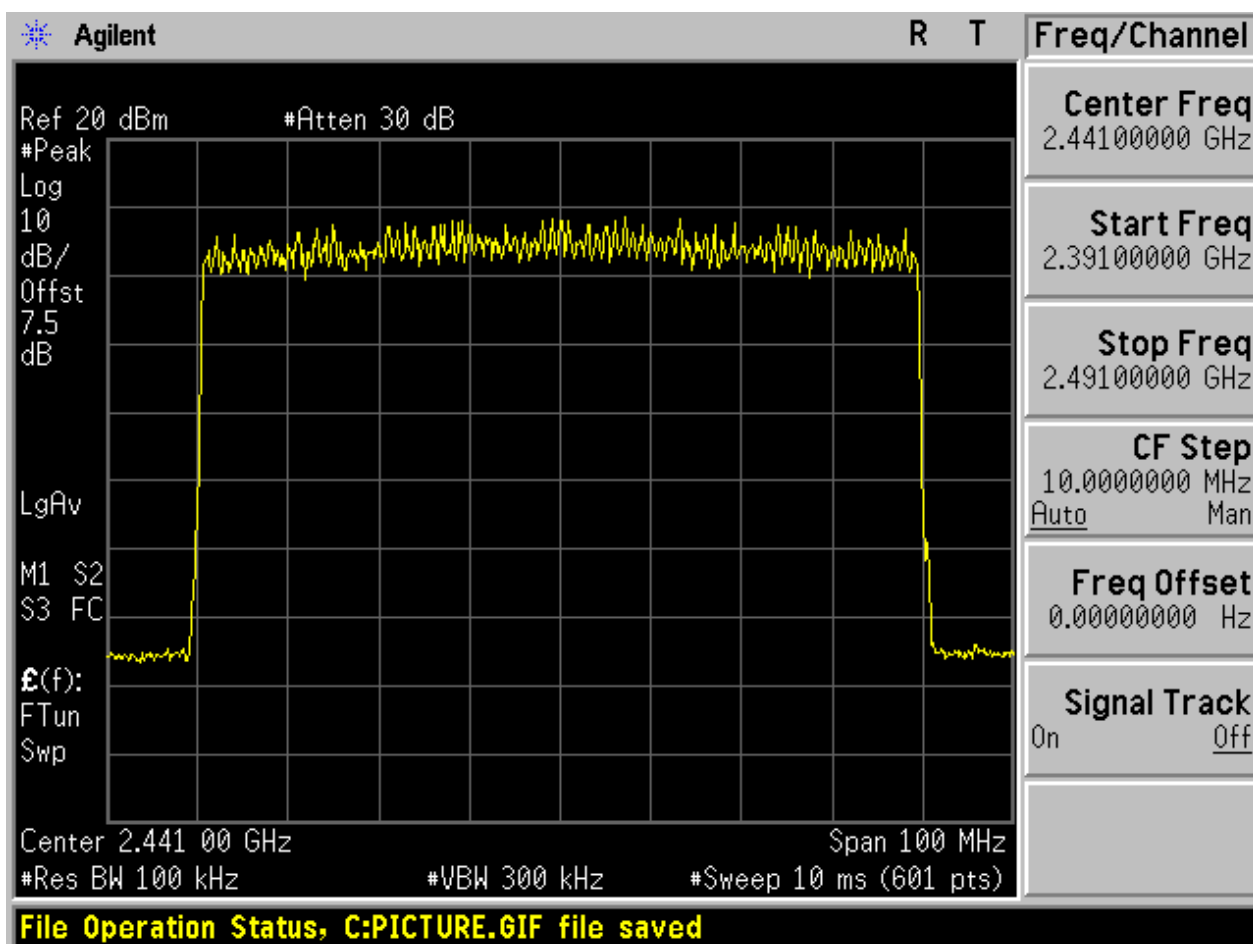


2 Test Plot

2.1 TM1_DH5_Hop

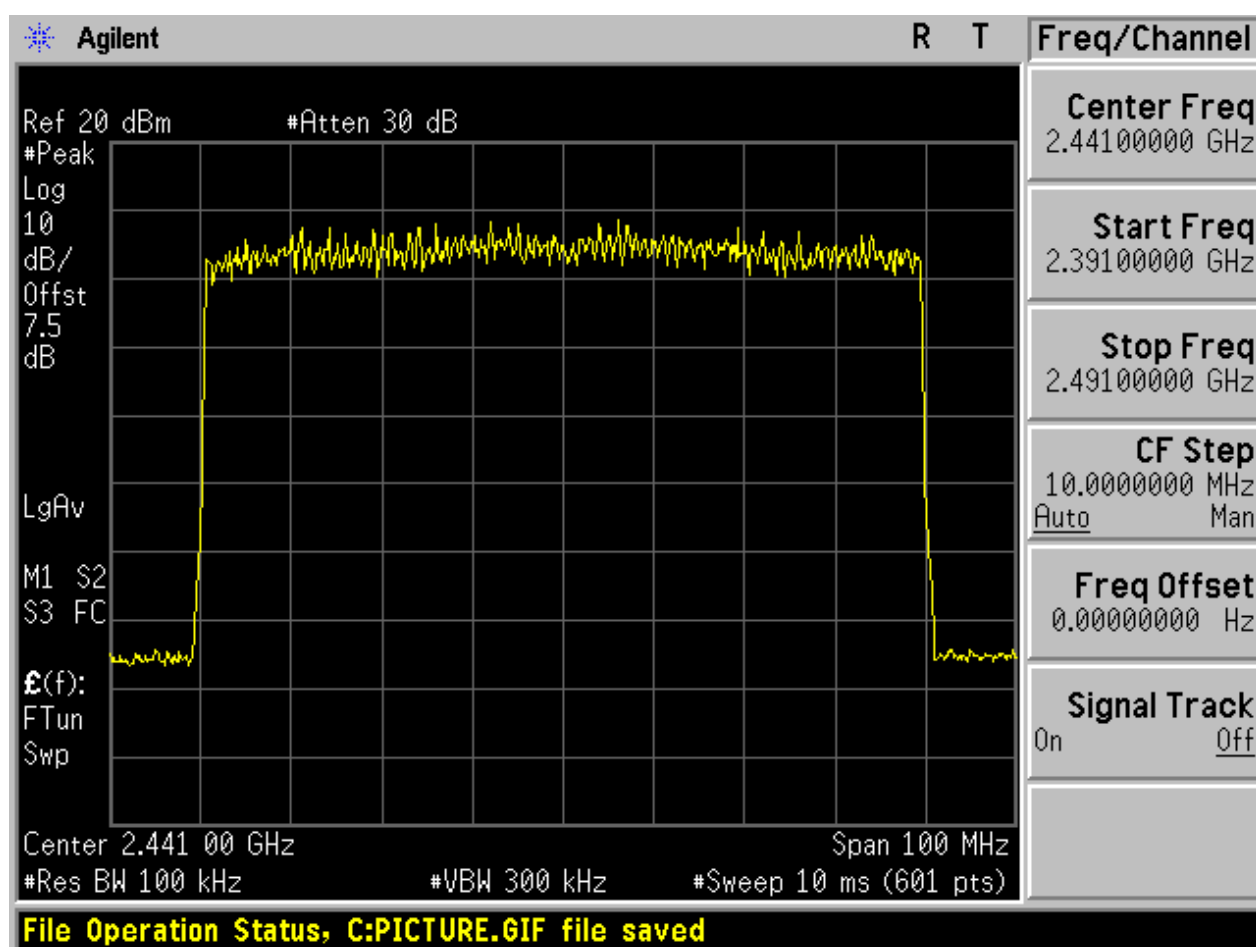


2.2 TM2_2DH5_Hop





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:

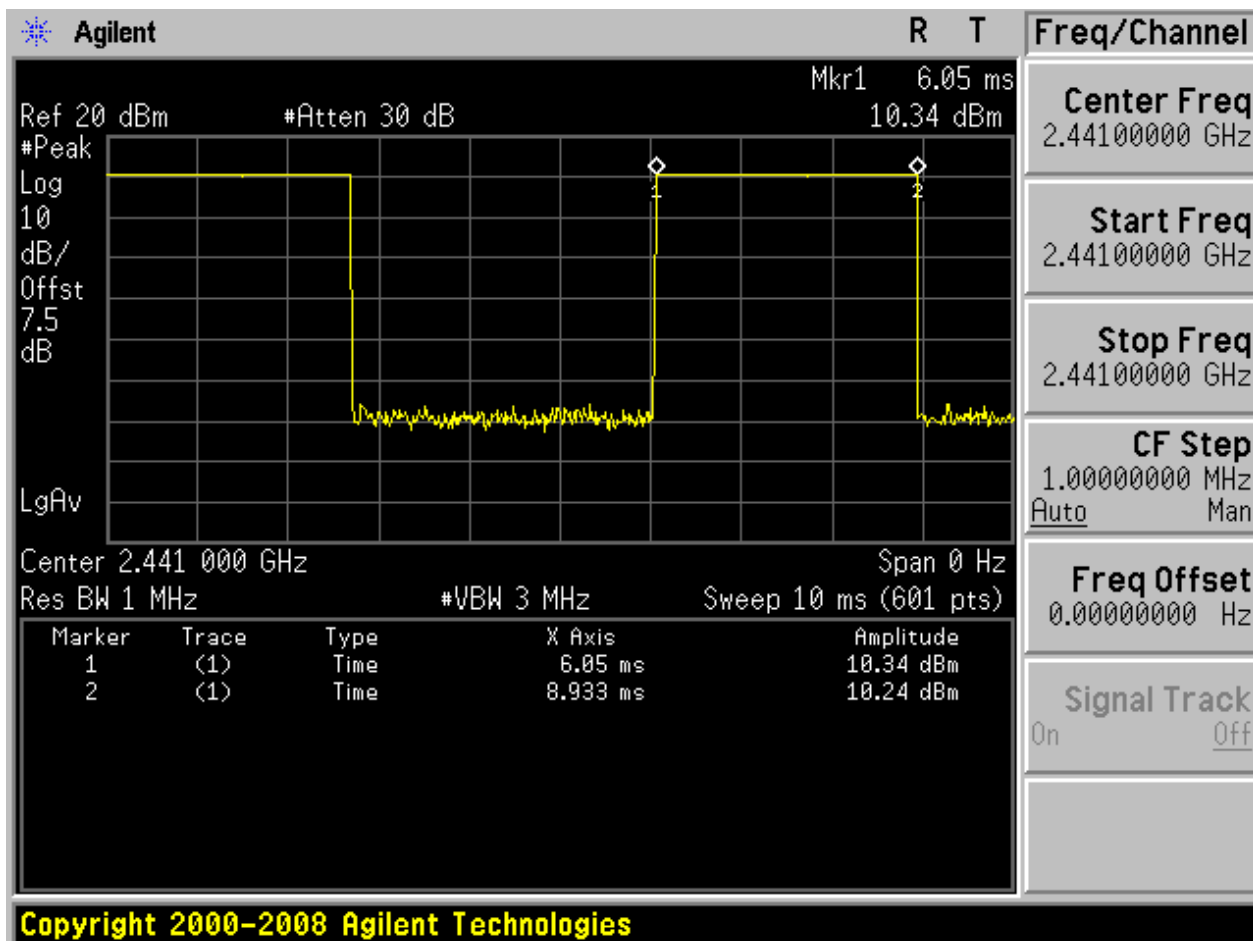
- The duration for dwell time calculation: $0.4 \text{ [s]} * \text{hopping number} = 0.4 \text{ [s]} * 79 \text{ [ch]} = 31.6 \text{ [s*ch]}$;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT 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 $1600 / 6 = 266.67 \text{ [ch*hop/s]}$;
- The hops per second on one channel: $266.67 \text{ [ch*hop/s]} / 79 \text{ [ch]} = 3.38 \text{ [hop/s]}$;
- The total hops for all channels within the dwell time calculation duration: $3.38 \text{ [hop/s]} * 31.6 \text{ [s*ch]} = 106.67 \text{ [hop*ch]}$;
- The dwell time for all channels hopping: $106.67 \text{ [hop*ch]} * \text{Burst Width [ms/hop/ch]}$.

EUT Conf.	Burst Width [ms/hop/ch]	Total Hops [hop*ch]	Dwell Time [s]	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

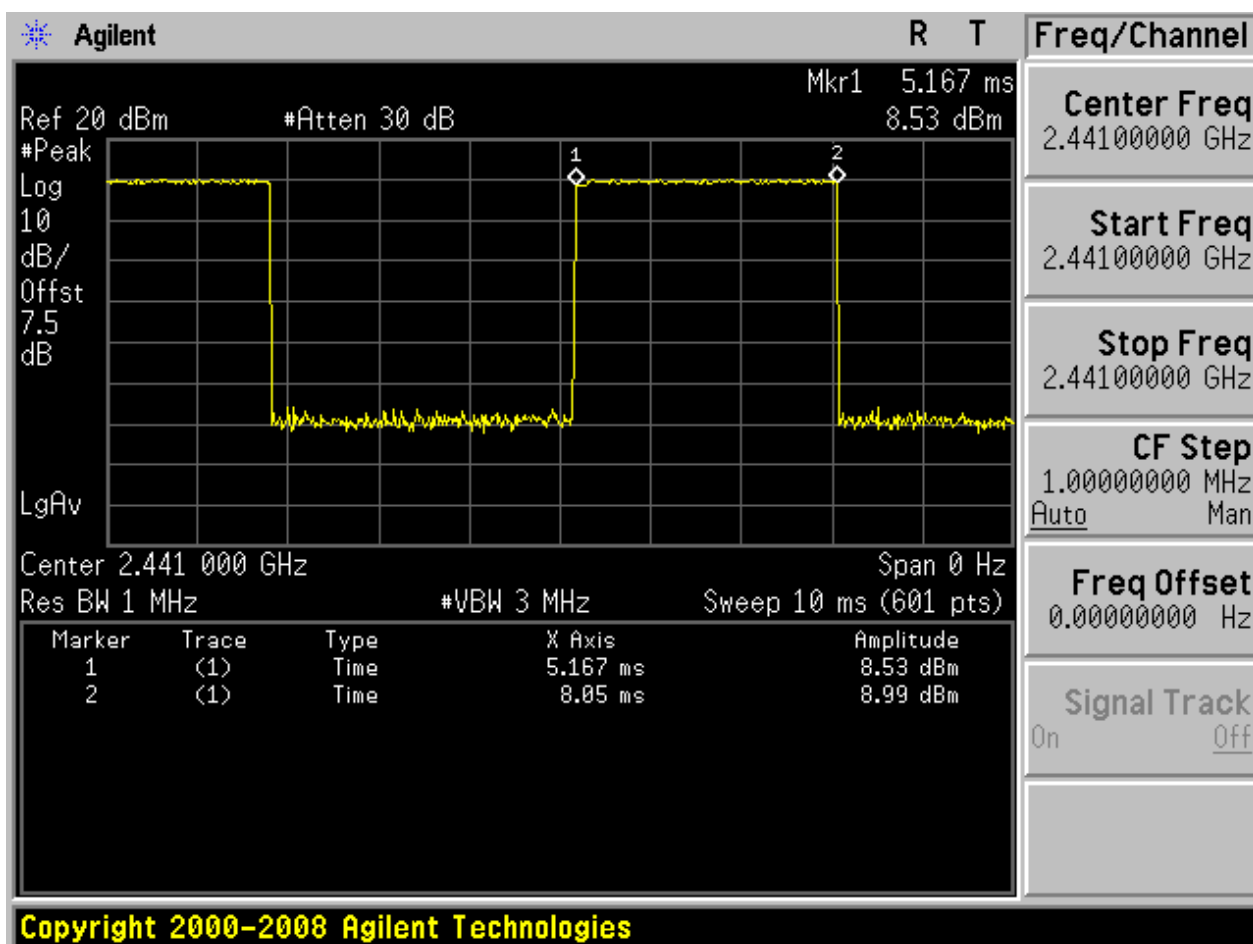
2 Test Plot

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

2.1 TM1_DH5_Ch39

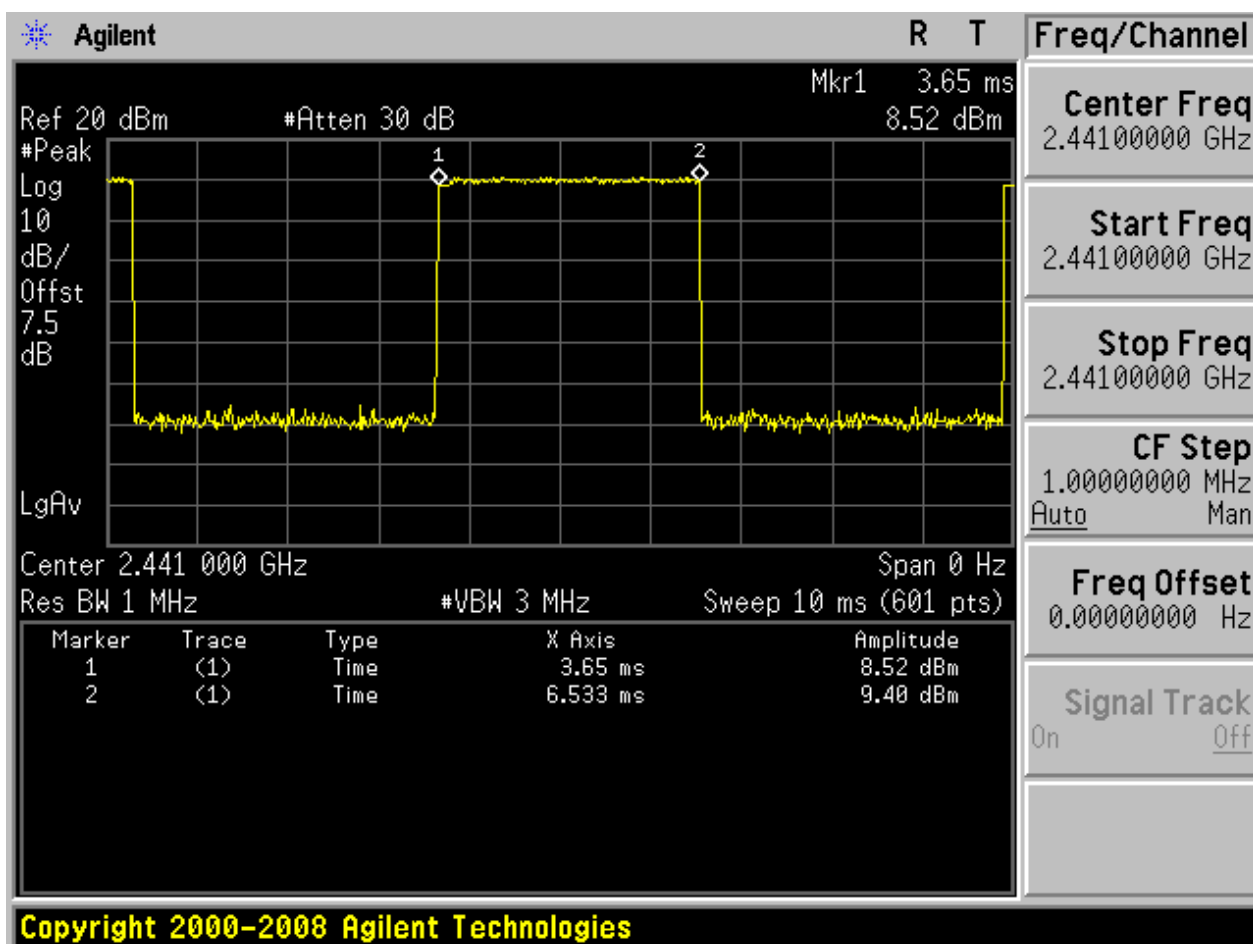


2.2 TM2_2DH5_Ch39





2.3 TM3_3DH5_Ch39



Appendix E: Maximum Peak Conducted Output Power



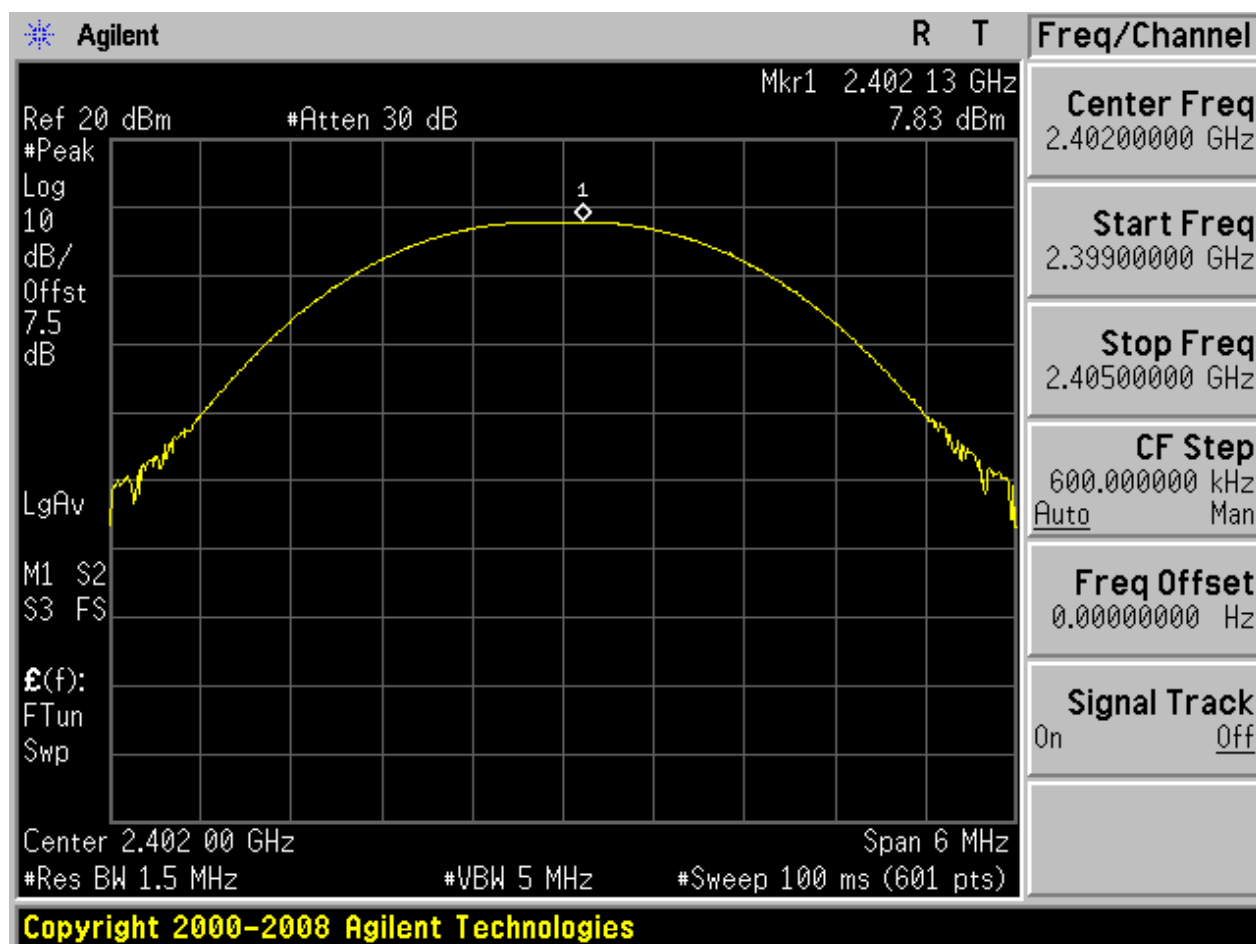
1 Result Table

EUT Conf.	Max. Peak Power [dBm]	Verdict
TM1_DH5_Ch0	7.83	Pass
TM1_DH5_Ch39	10.47	Pass
TM1_DH5_Ch78	8.5	Pass
TM2_2DH5_Ch0	7.85	Pass
TM2_2DH5_Ch39	10.46	Pass
TM2_2DH5_Ch78	8.44	Pass
TM3_3DH5_Ch0	8.04	Pass
TM3_3DH5_Ch39	10.68	Pass
TM3_3DH5_Ch78	8.66	Pass



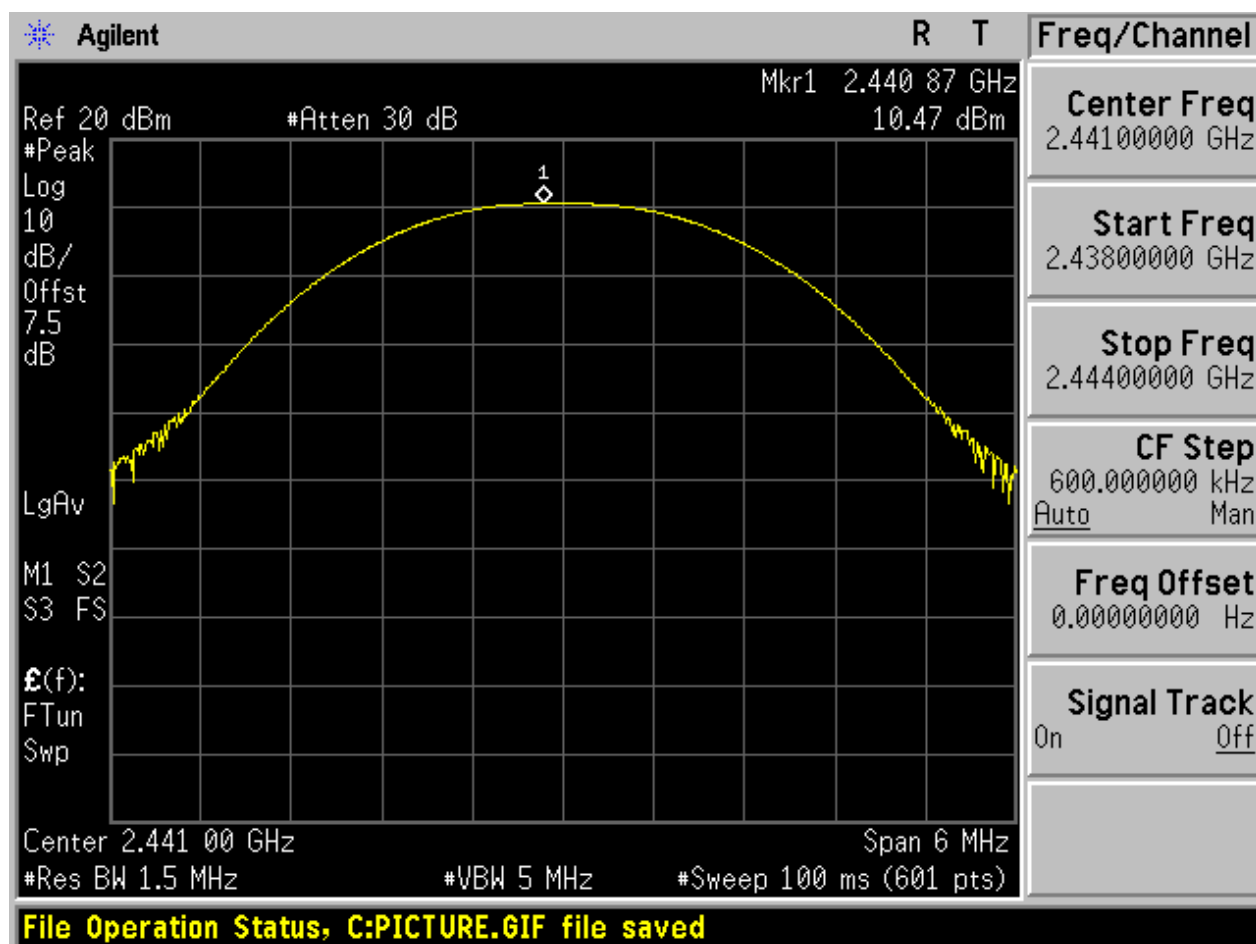
2 Test Plot

2.1 TM1_DH5_Ch0



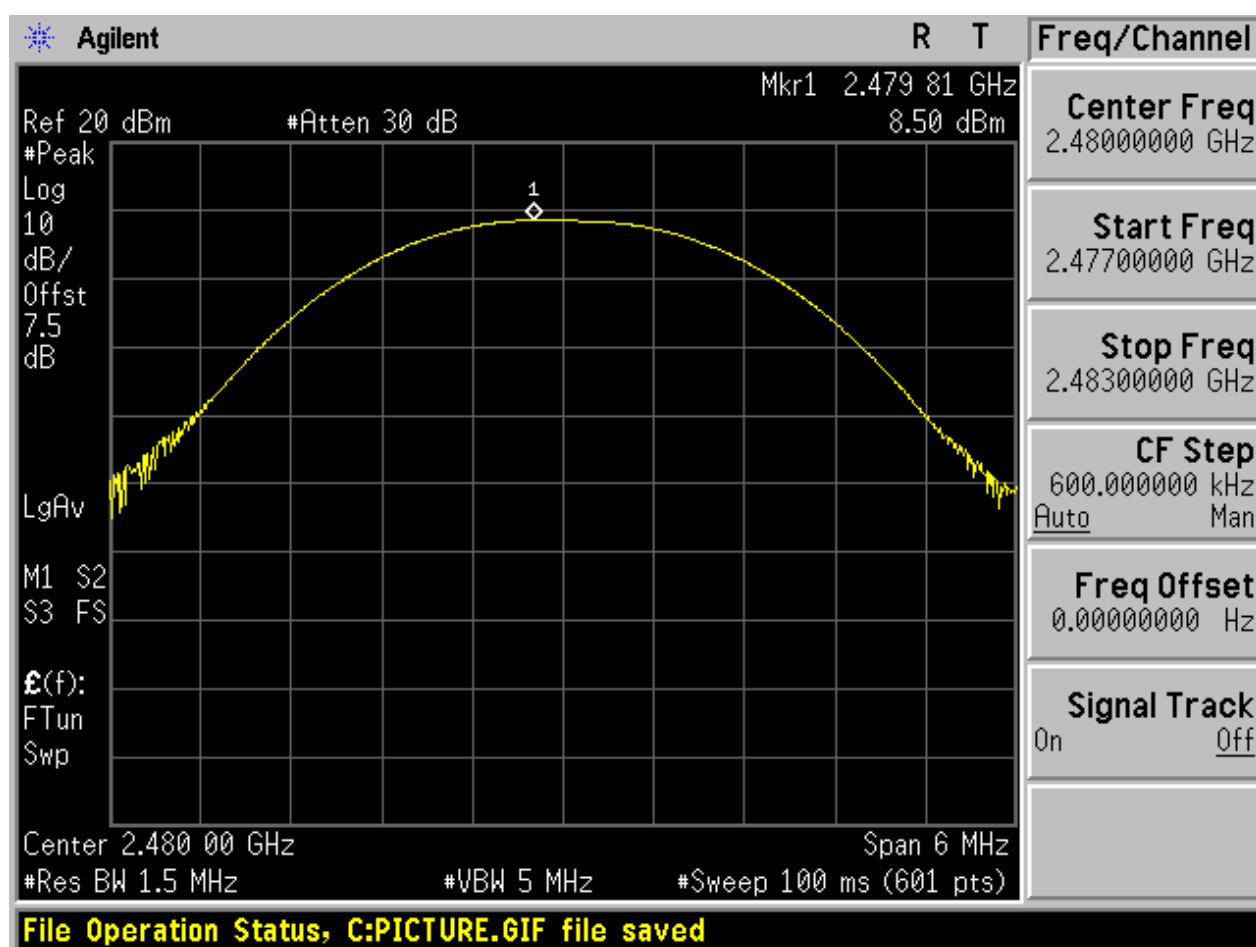


2.2 TM1_DH5_Ch39



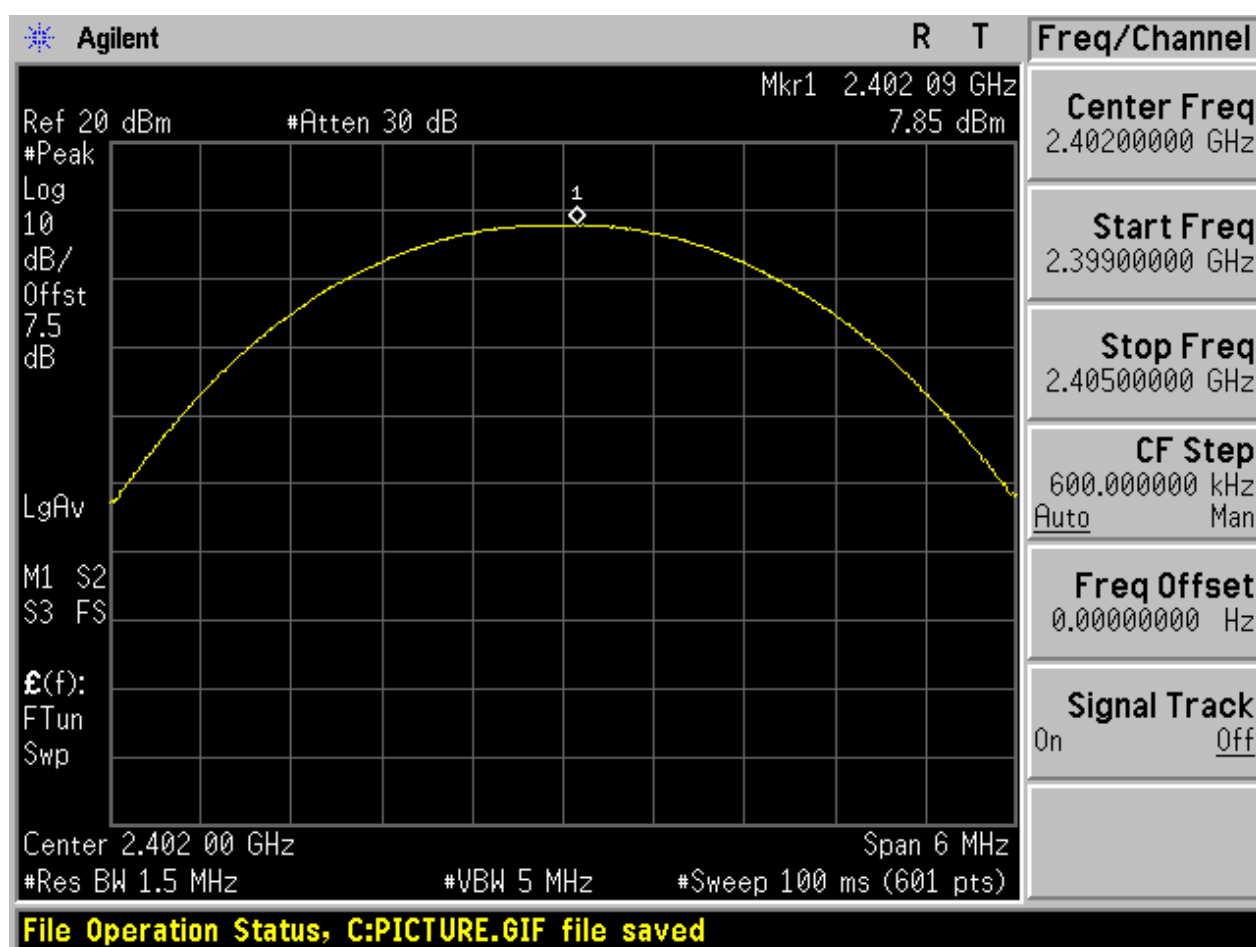


2.3 TM1_DH5_Ch78



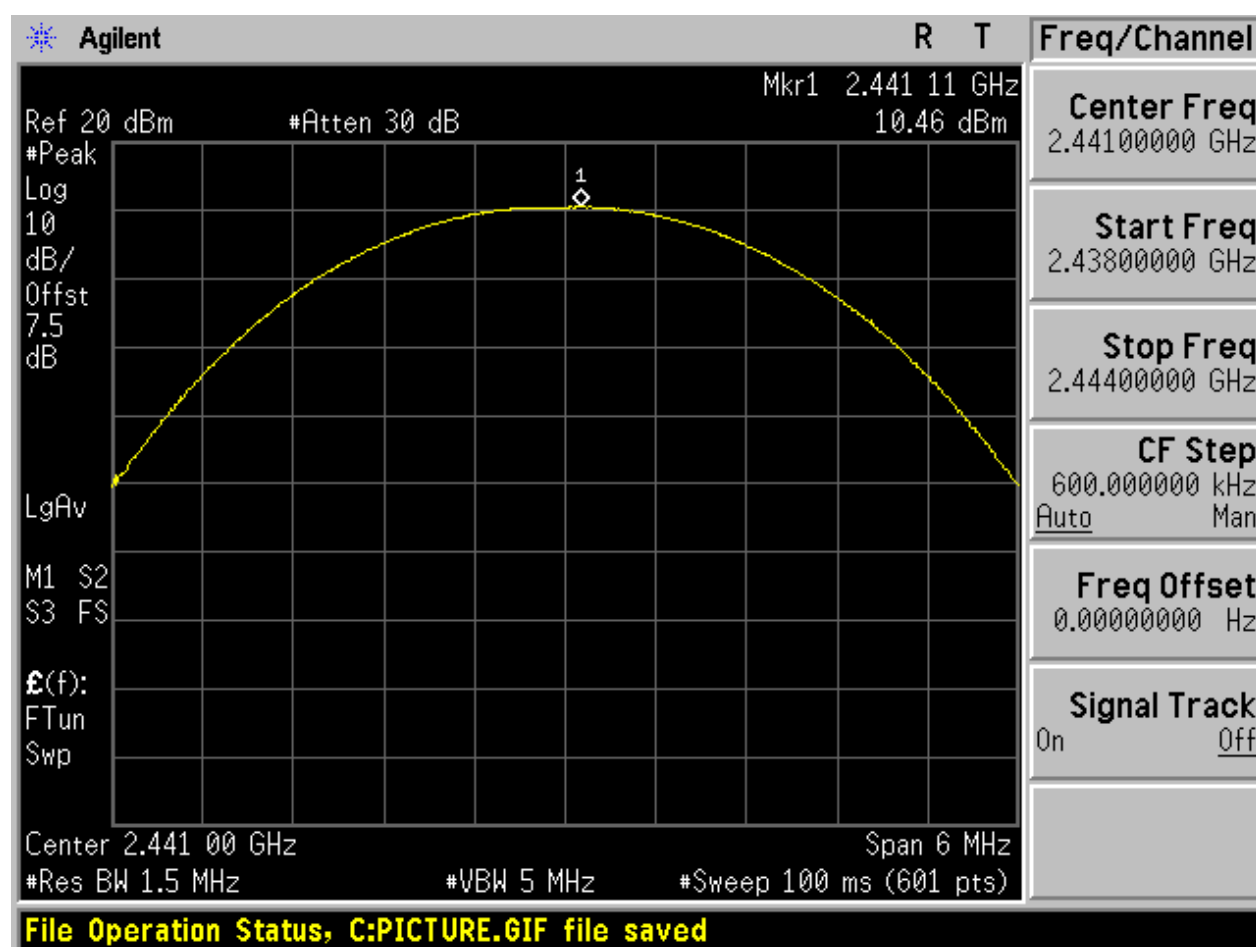


2.4 TM2_2DH5_Ch0

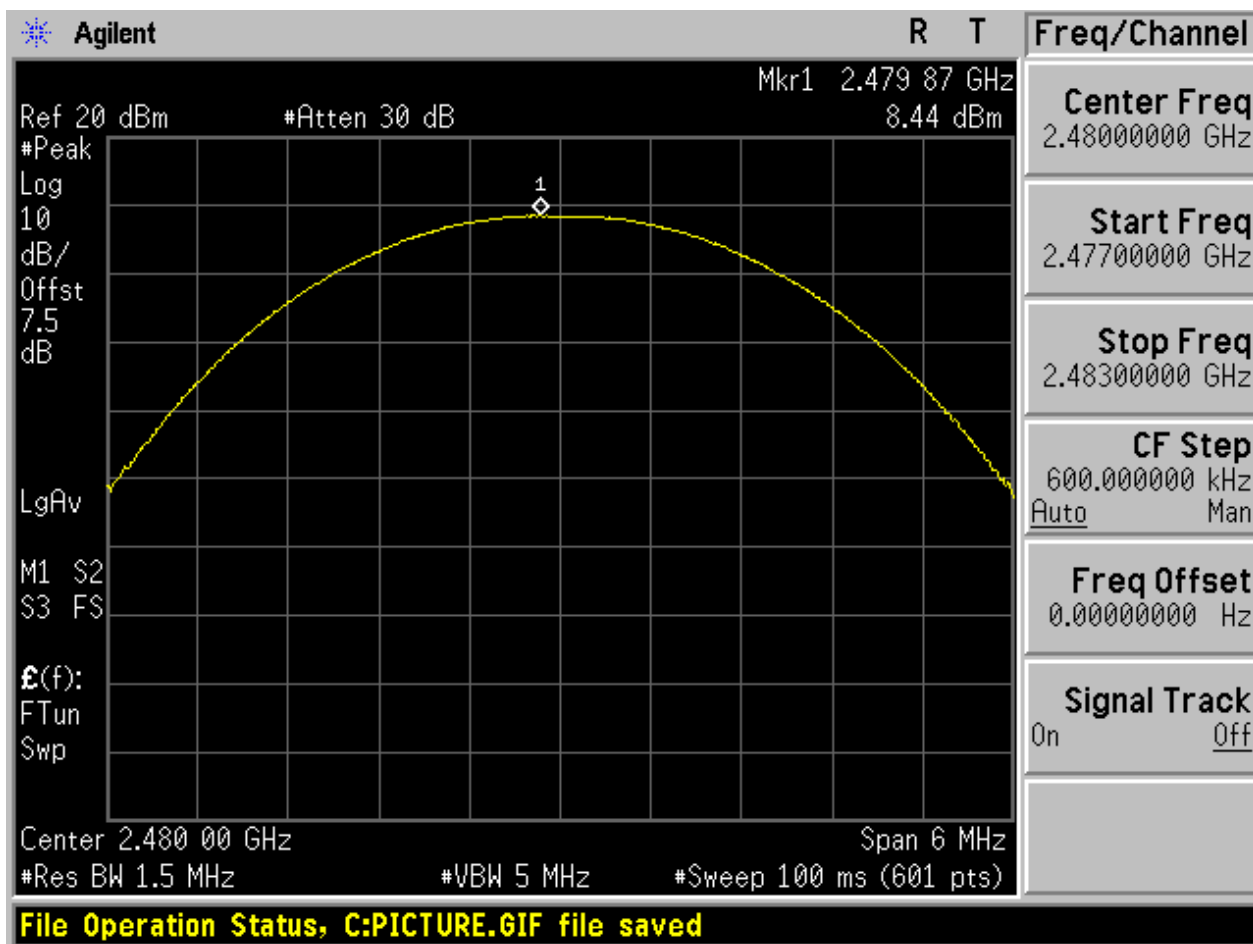




2.5 TM2_2DH5_Ch39

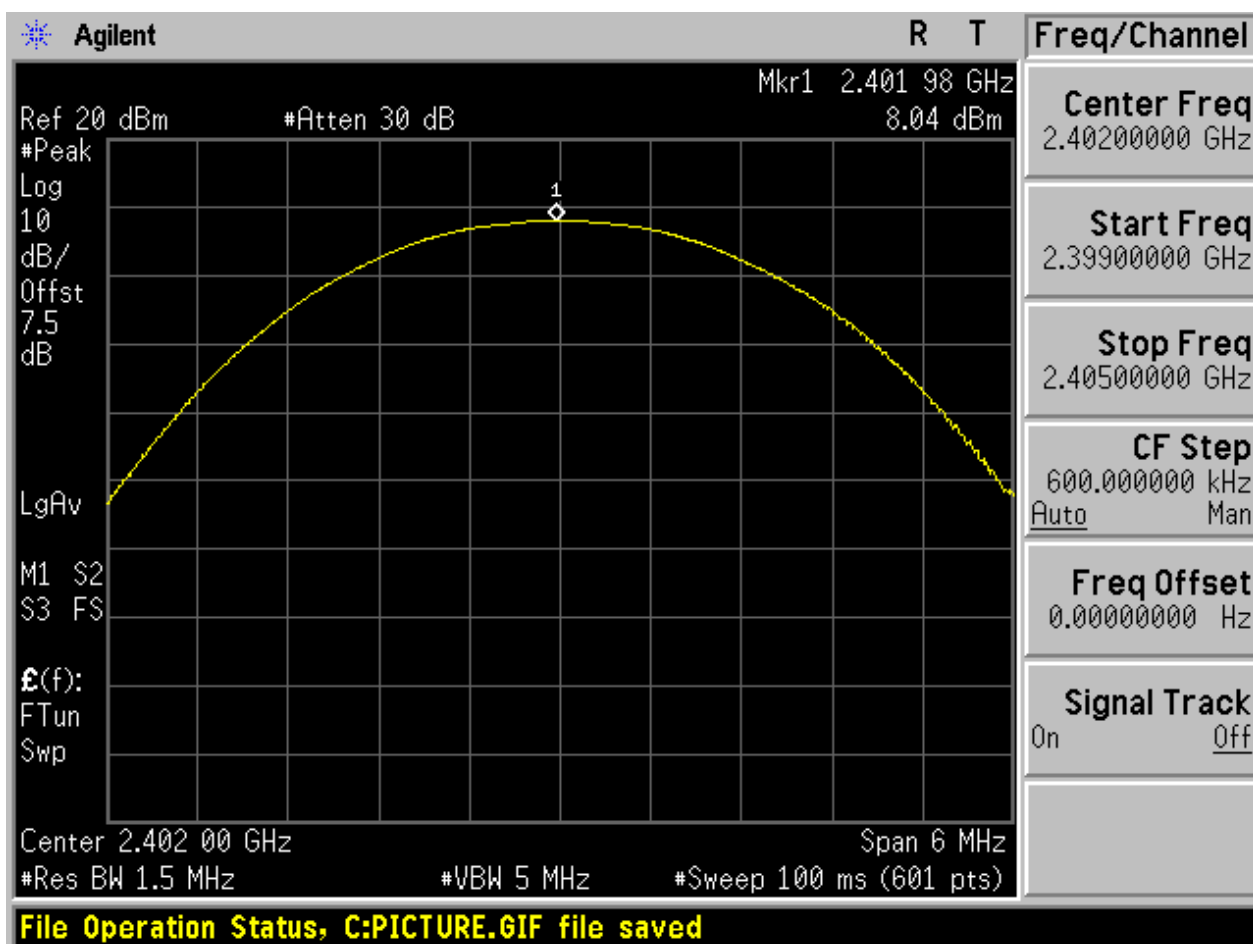


2.6 TM2_2DH5_Ch78



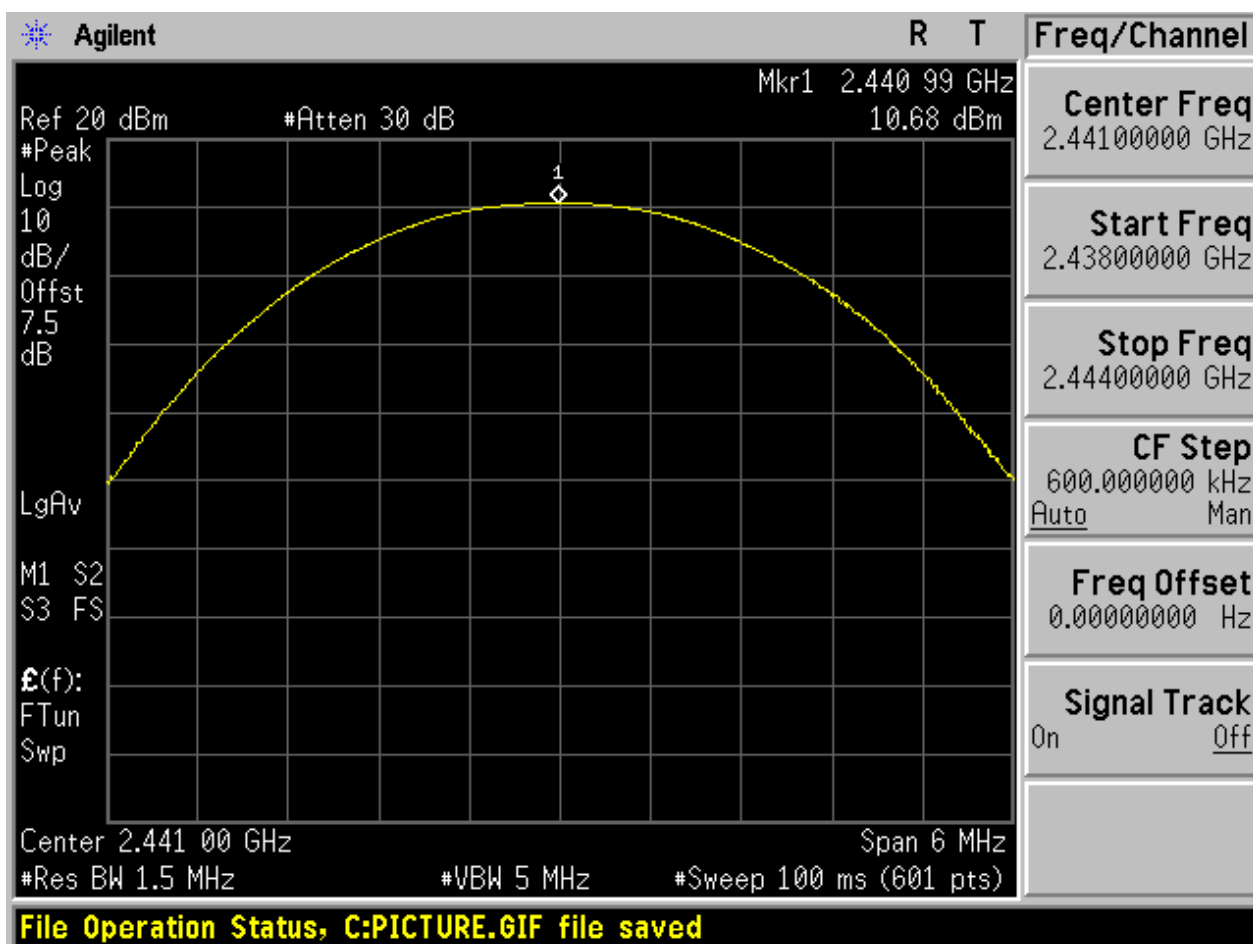


2.7 TM3_3DH5_Ch0



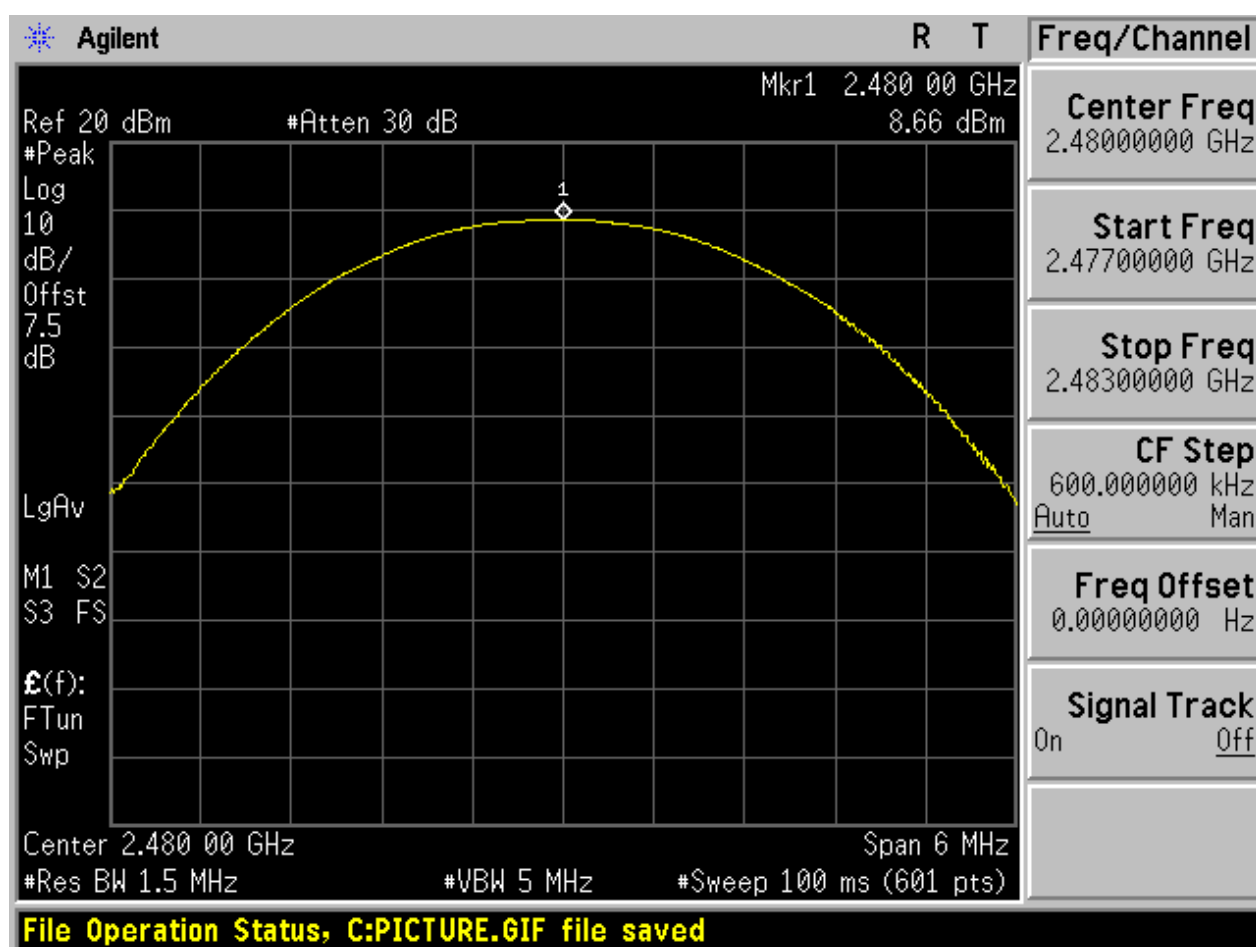


2.8 TM3_3DH5_Ch39





2.9 TM3_3DH5_Ch78



Appendix F: Band edge spurious emission

1 Result Table

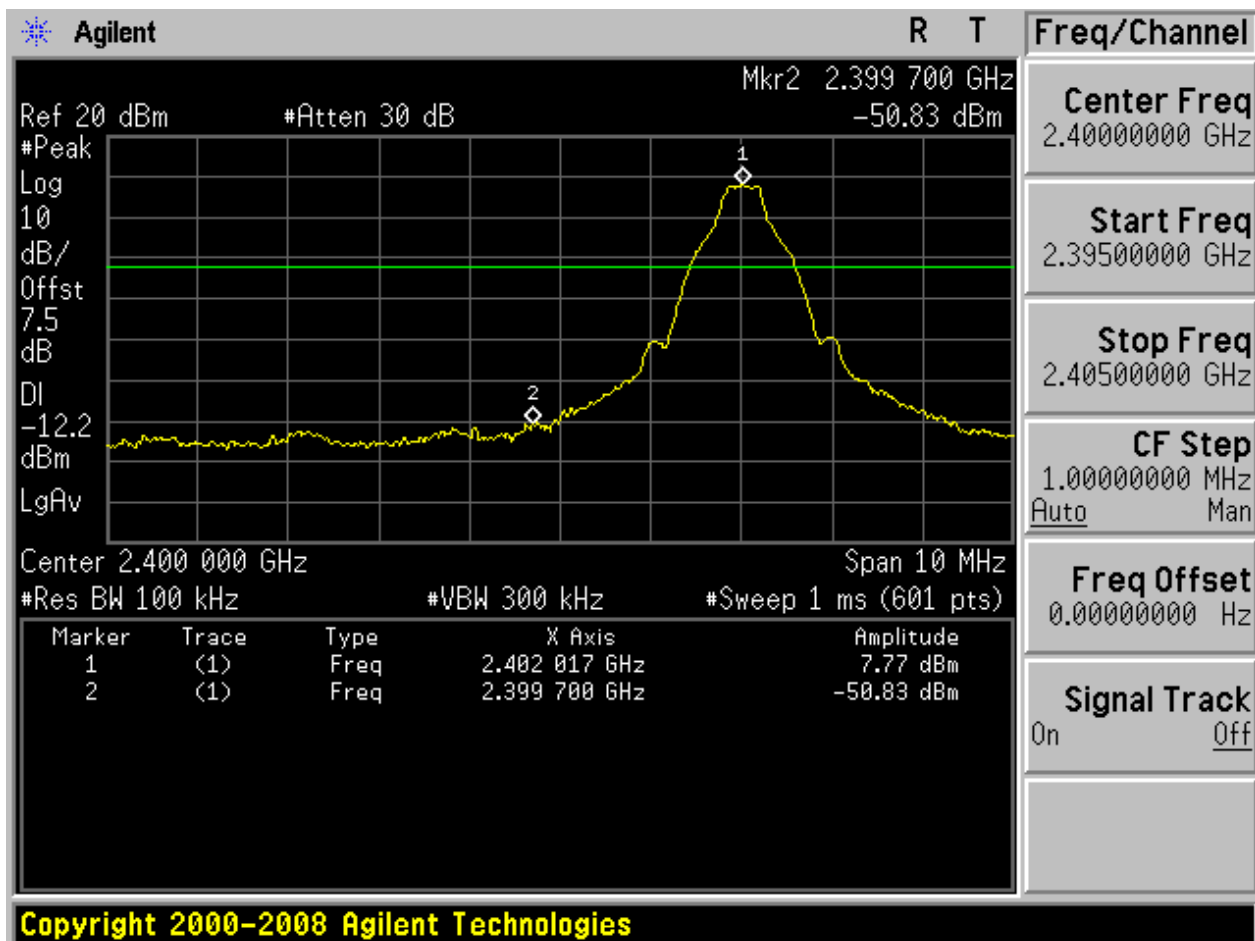
EUT Conf.	Channel No.	Carrier Frequency [MHz]	Max. Spurious Level [dBm]	Frequency Hopping	Carrier Power [dBm]	Limit [dBm]	Result
TM1_DH5_Ch0	0	2402	-50.83	Off	7.77	-12.23	Pass
	-	-	-54.17	On	7.88	-12.12	Pass
TM1_DH5_Ch78	78	2480	-53.78	Off	8.38	-11.62	Pass
	-	-	-54.02	On	8.32	-11.68	Pass
TM2_2DH5_Ch0	0	2402	-51.77	Off	5.90	-14.1	Pass
	-	-	-54.22	On	3.77	-16.23	Pass
TM2_2DH5_Ch78	78	2480	-53.59	Off	6.52	-13.48	Pass
	-	-	-53.9	On	6.35	-13.65	Pass
TM3_3DH5_Ch0	0	2402	-52.57	Off	5.89	-14.11	Pass
	-	-	-54.89	On	4.64	-15.36	Pass
TM3_3DH5_Ch78	78	2480	-54.03	Off	6.53	-13.47	Pass
	-	-	-54.72	On	4.80	-15.2	Pass



2 Test Plot

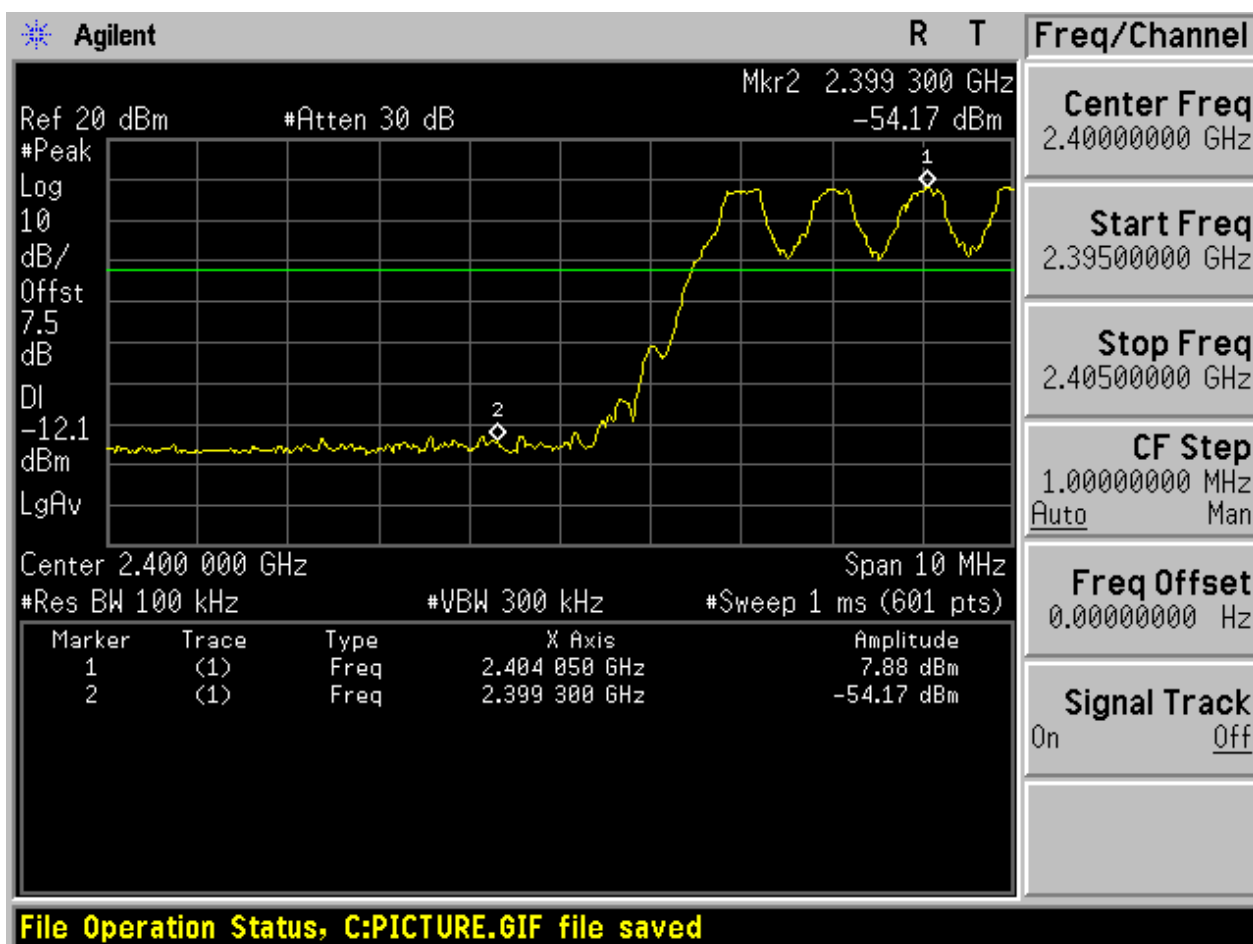
2.1 TM1_DH5_Ch0

No hopping





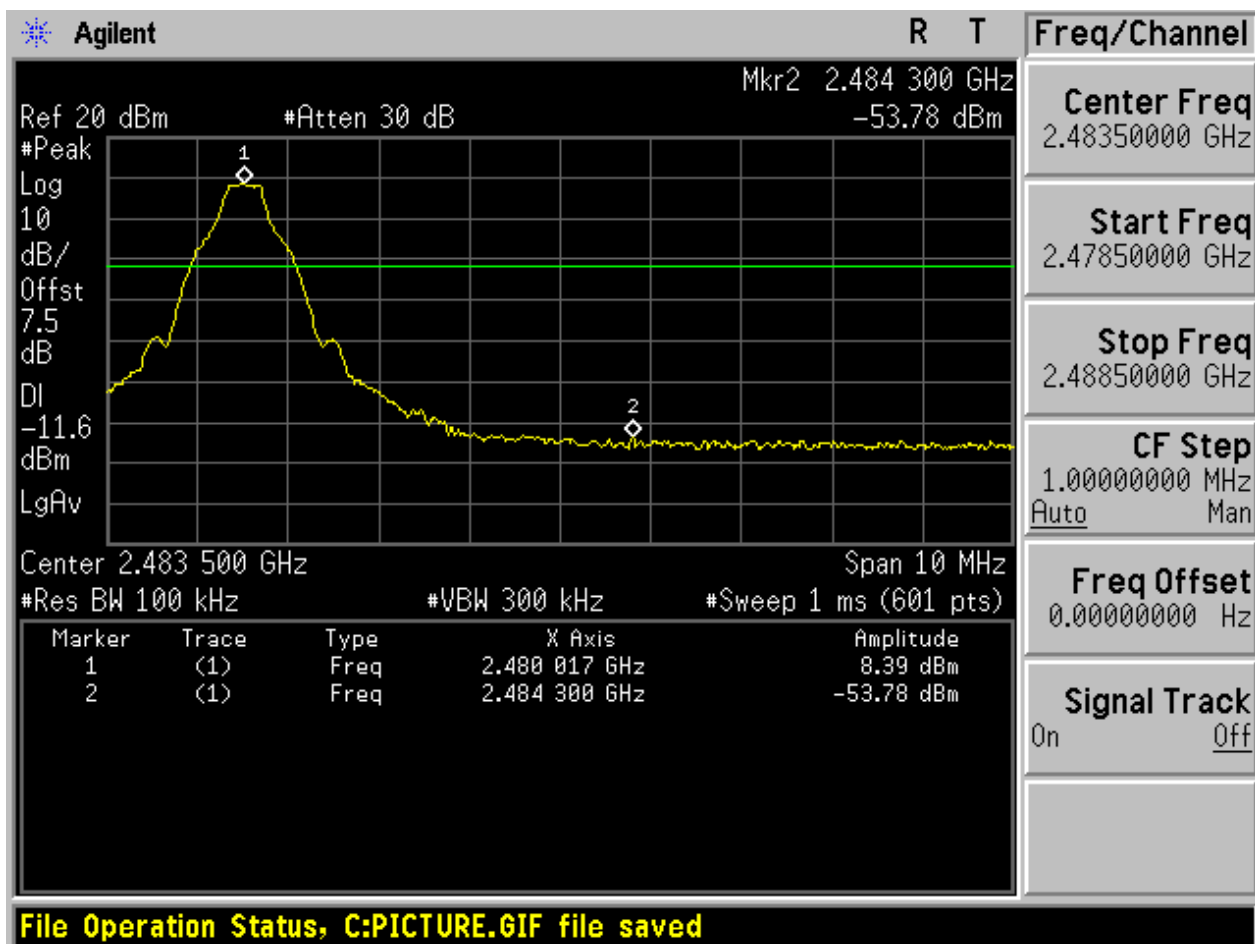
With hopping



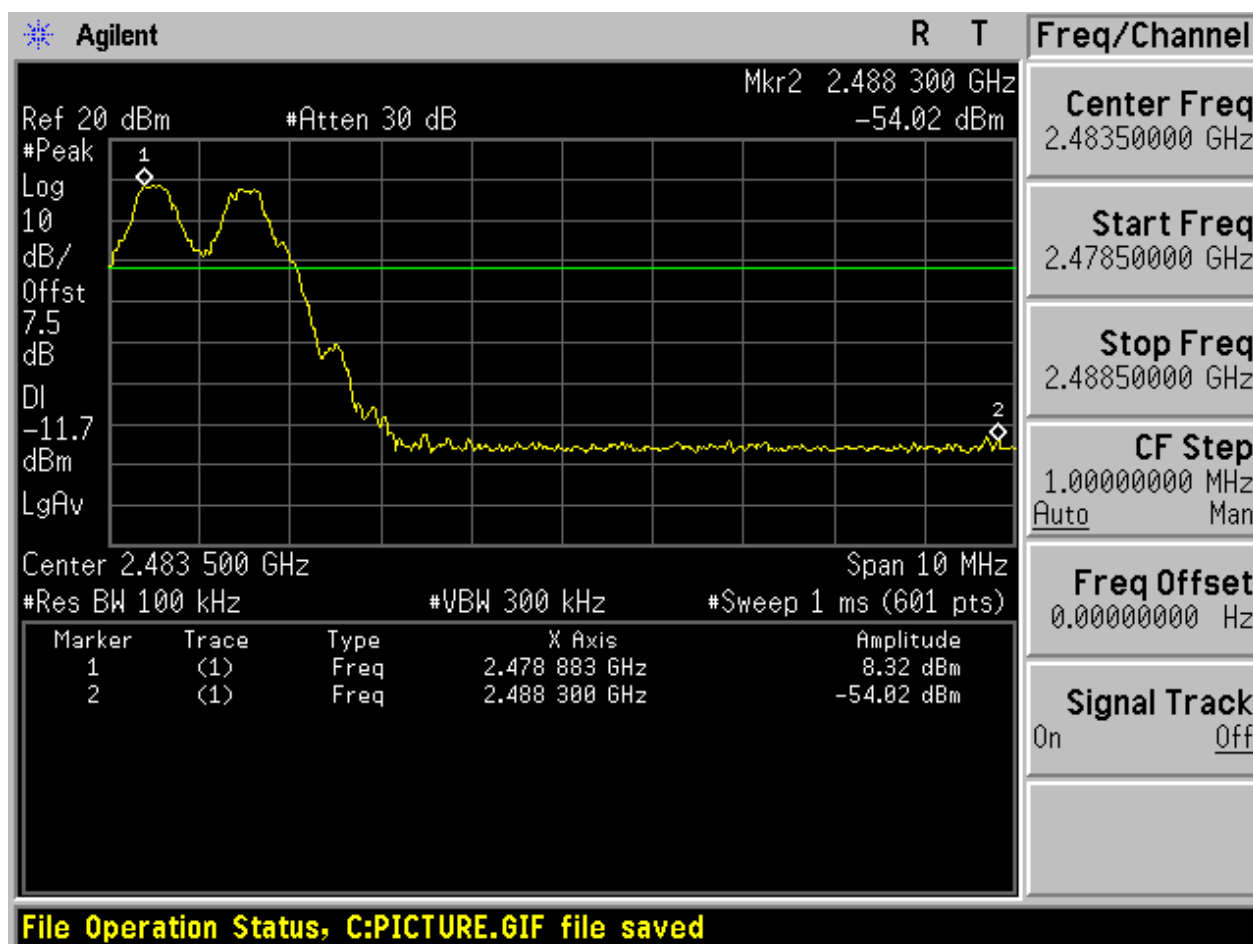


2.2 TM1_DH5_Ch78

No hopping

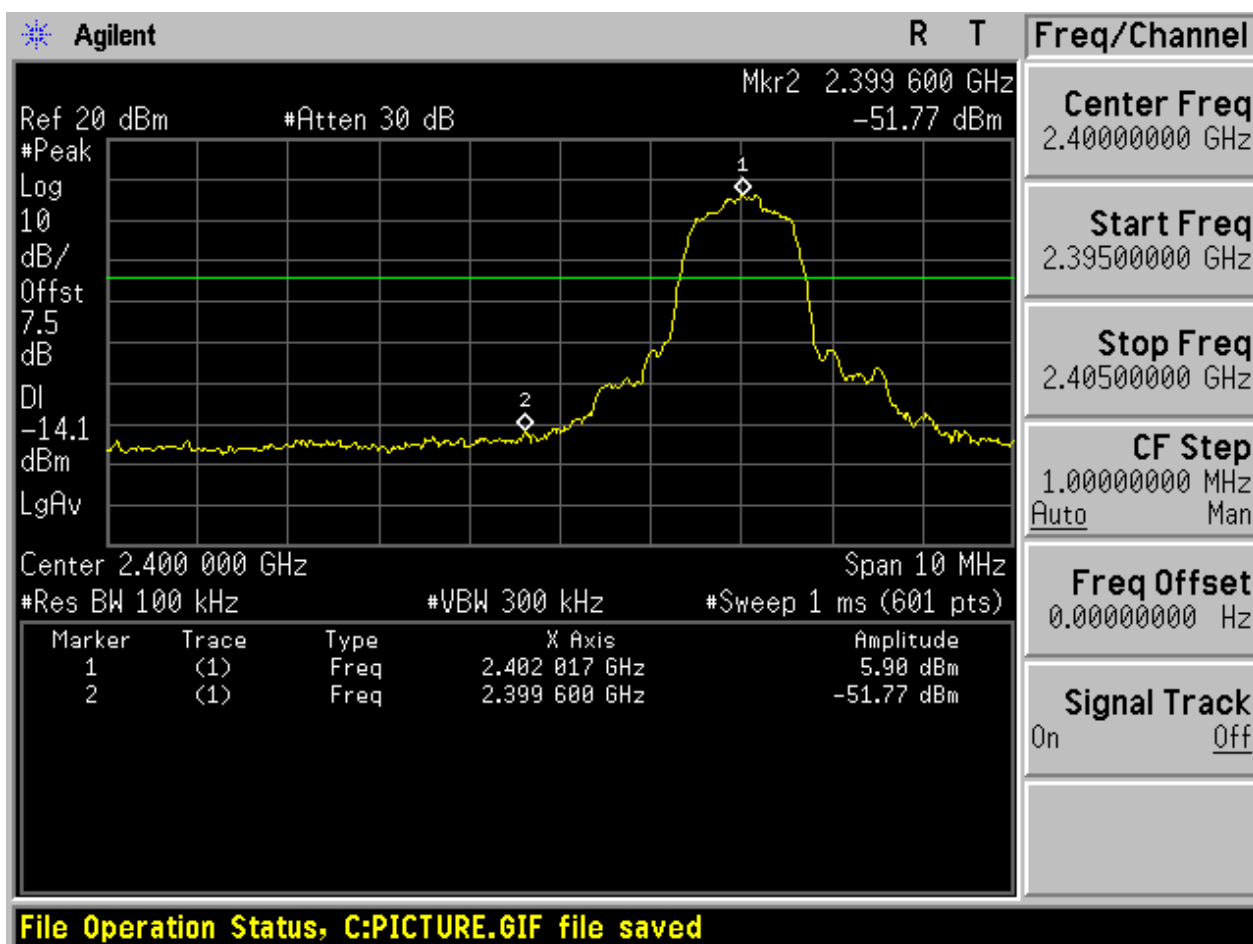


With hopping



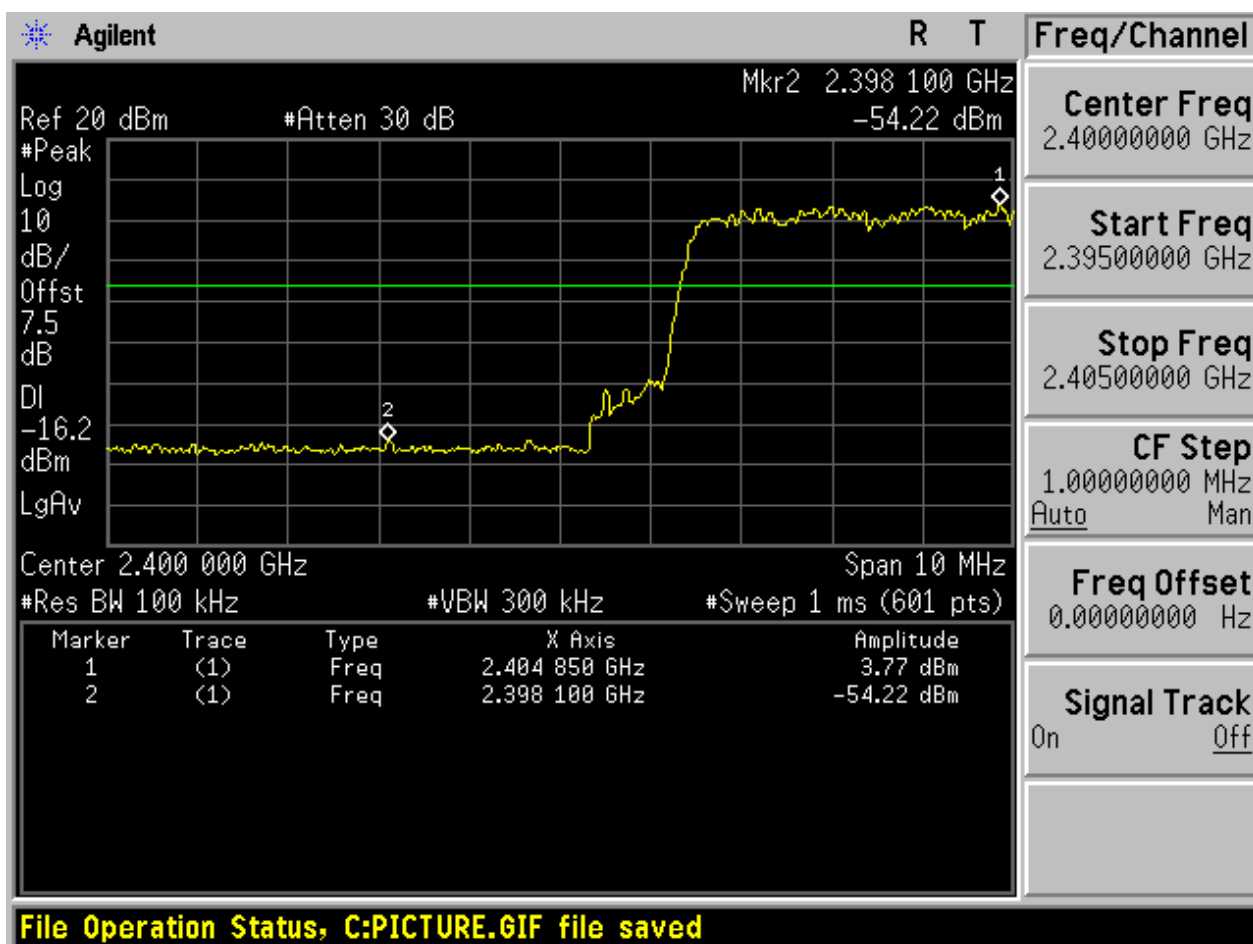
2.3 TM2_2DH5_Ch0

No hopping



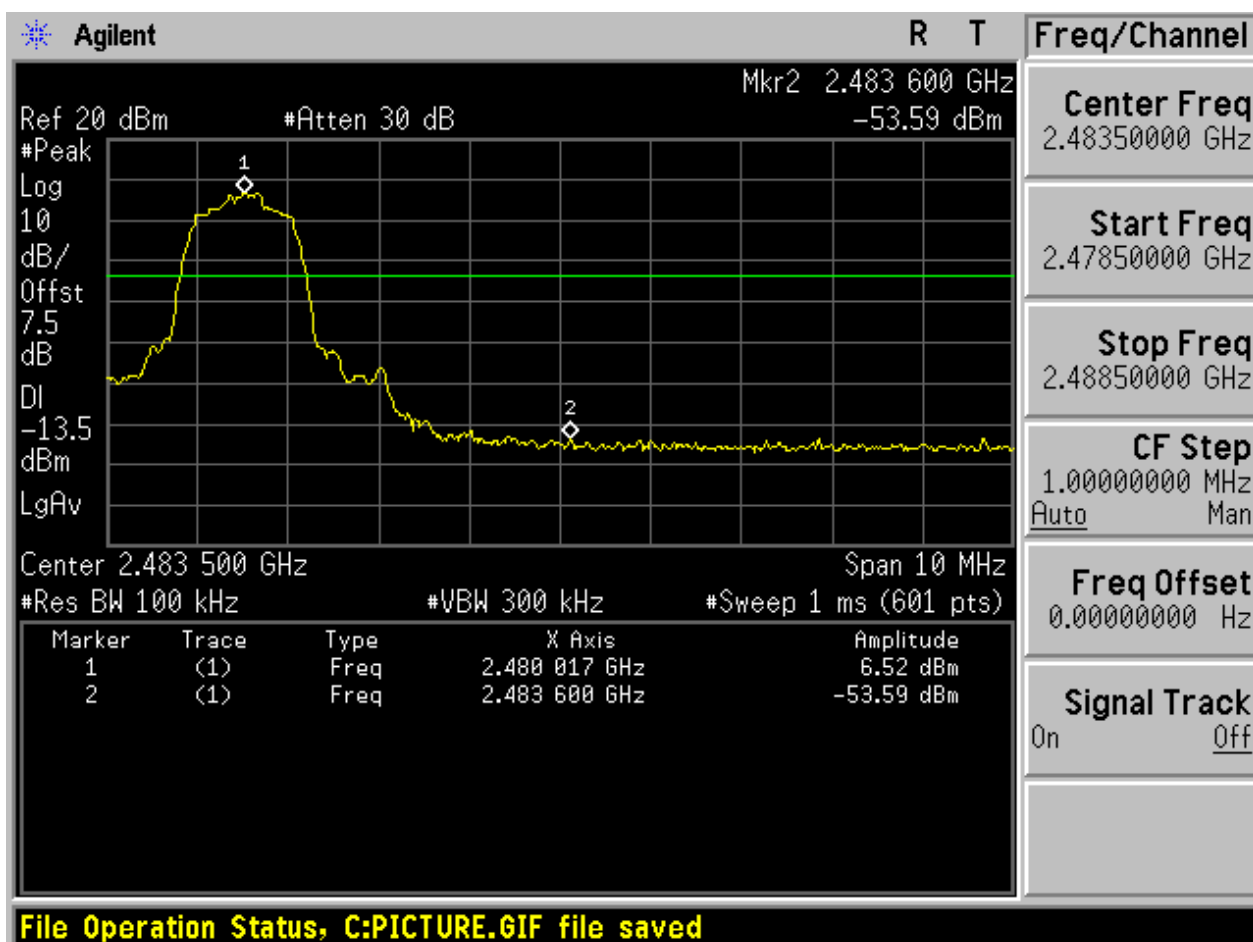


With hopping

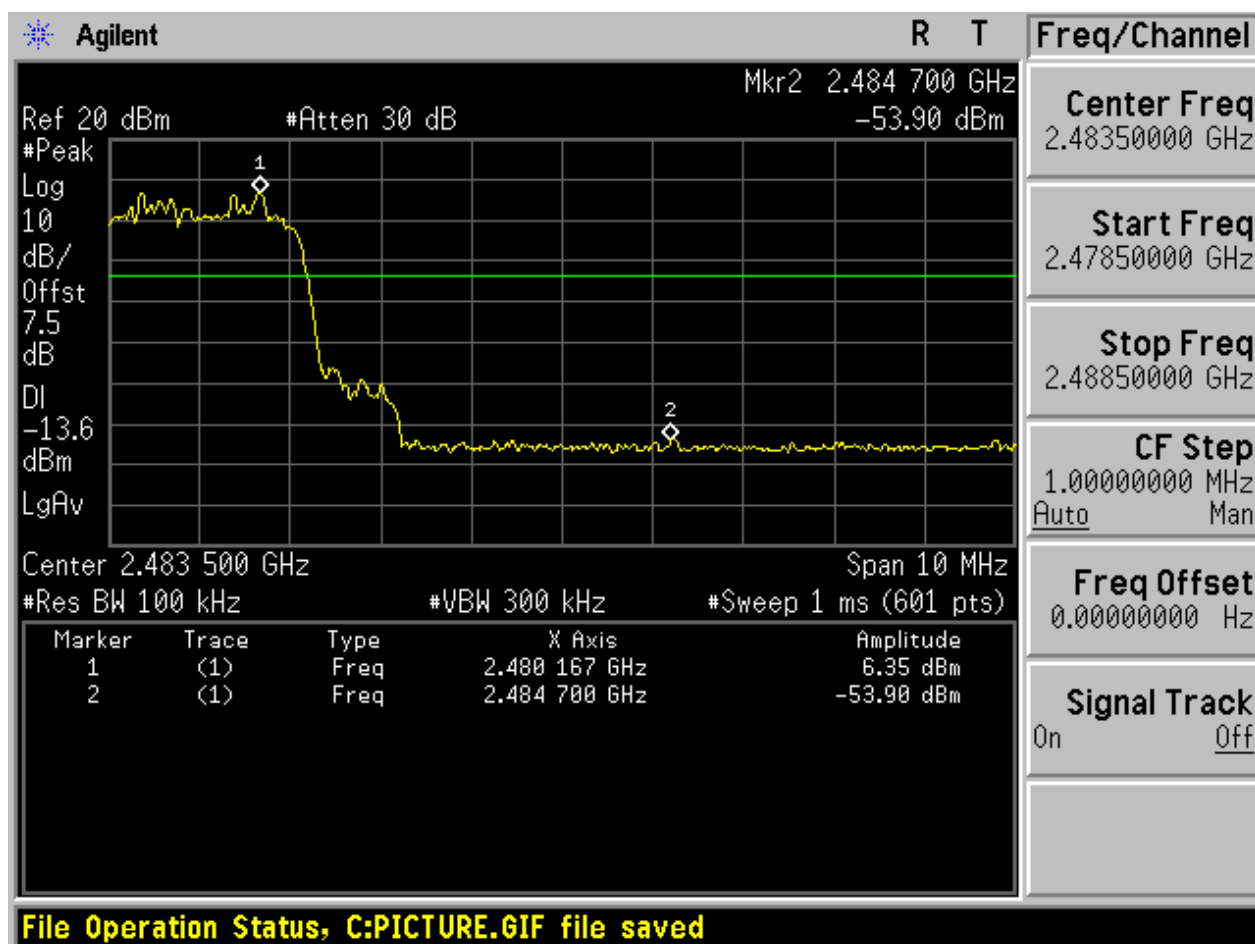


2.4 TM2_2DH5_Ch78

No hopping



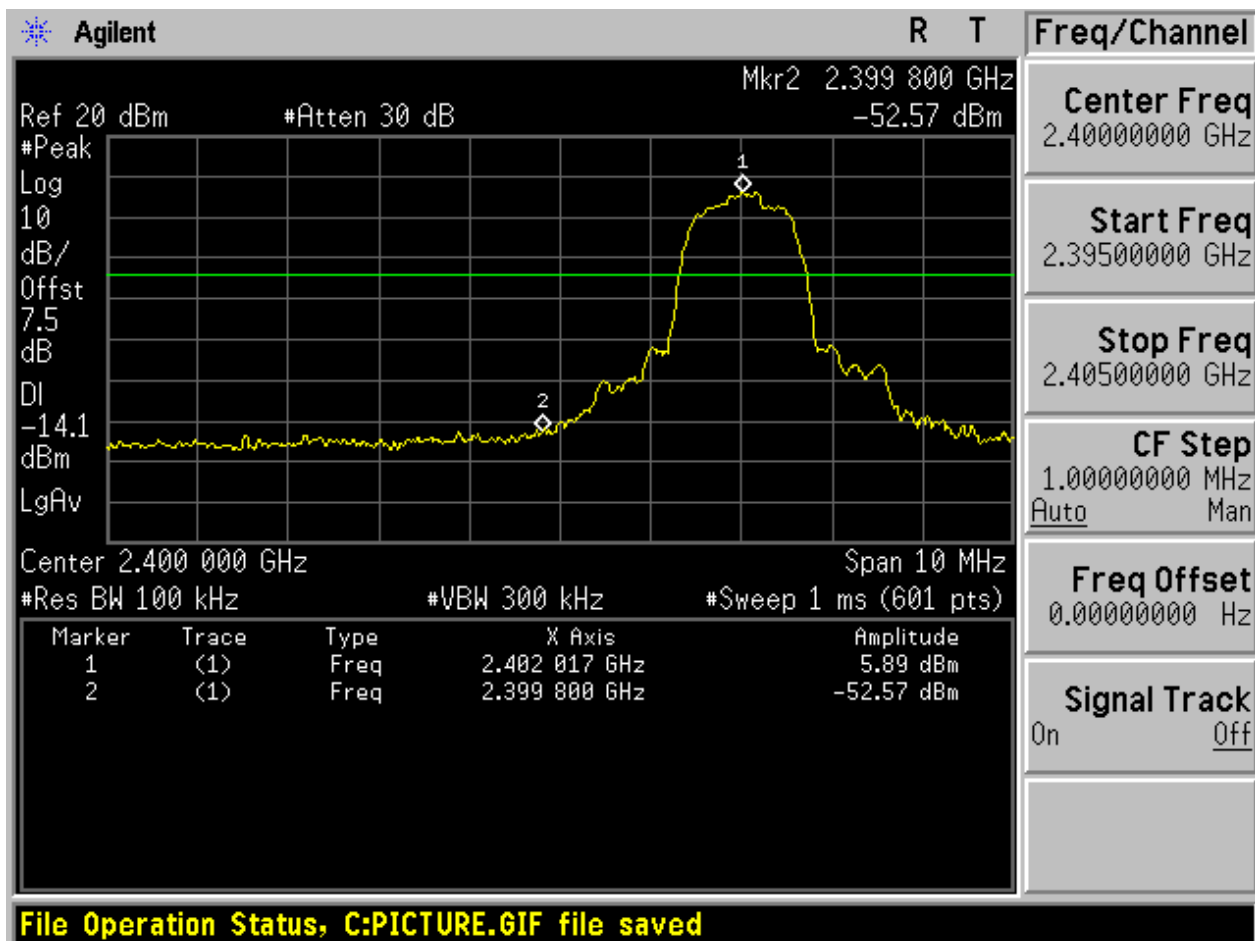
With hopping





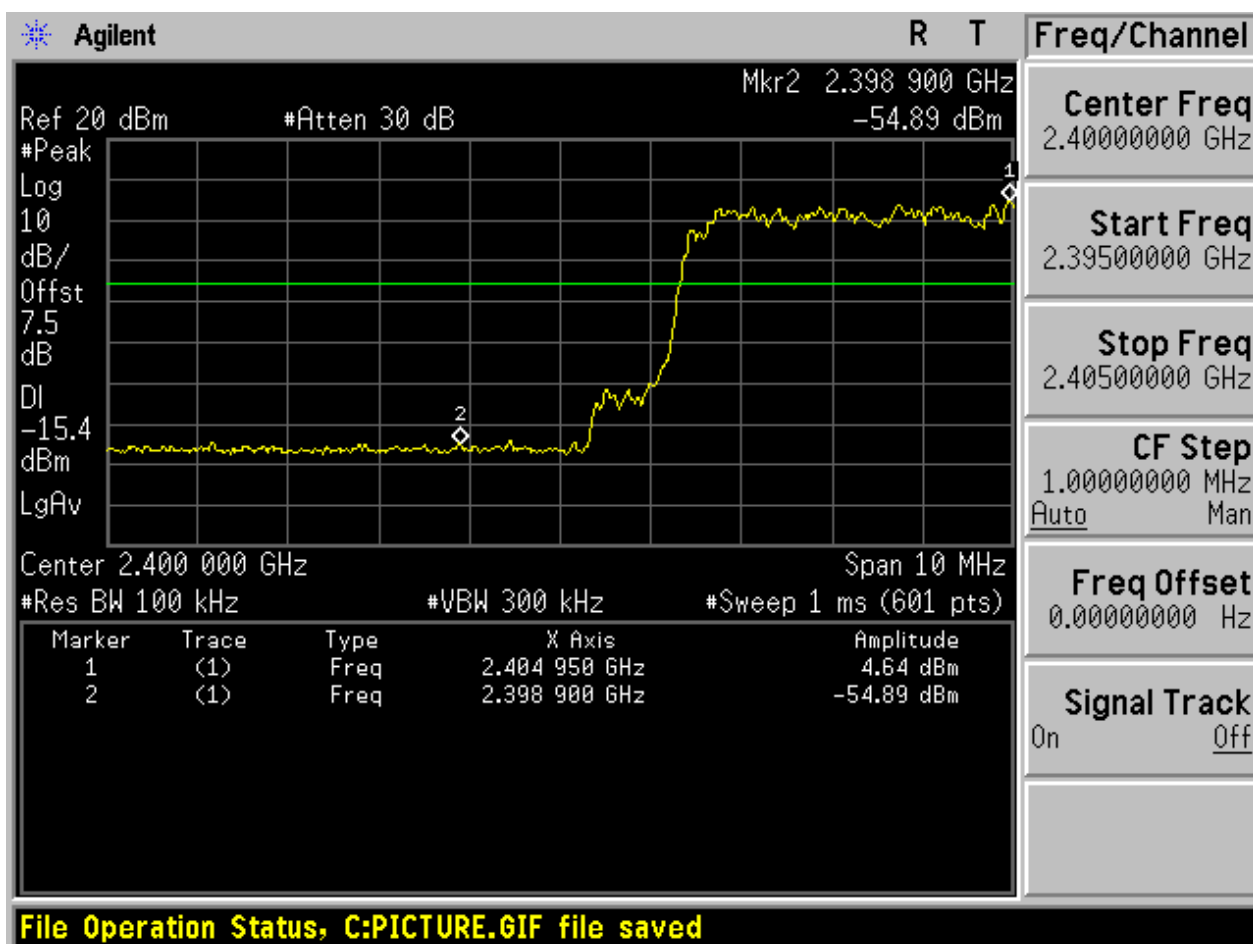
2.5 TM3_3DH5_Ch0

No hopping



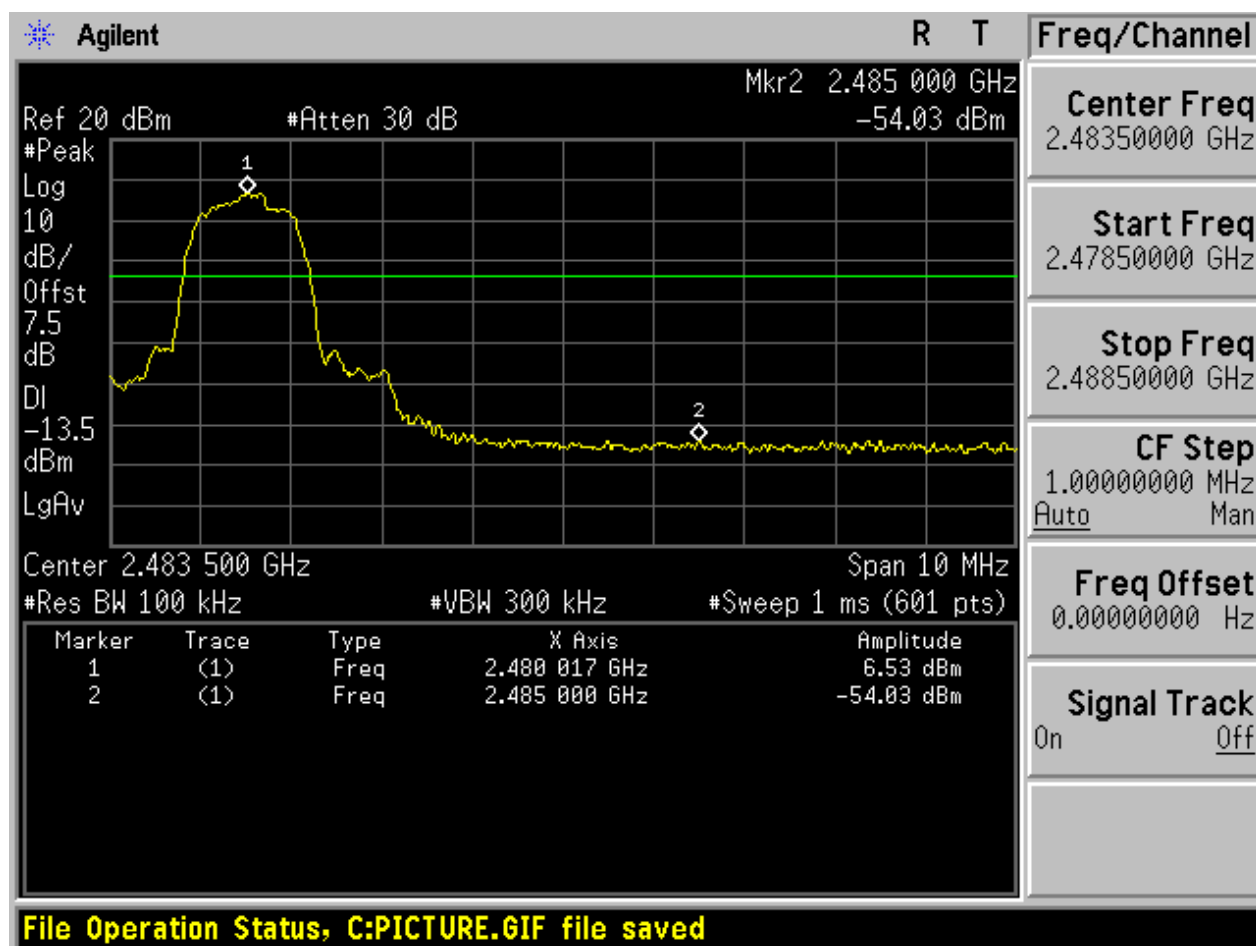


With hopping

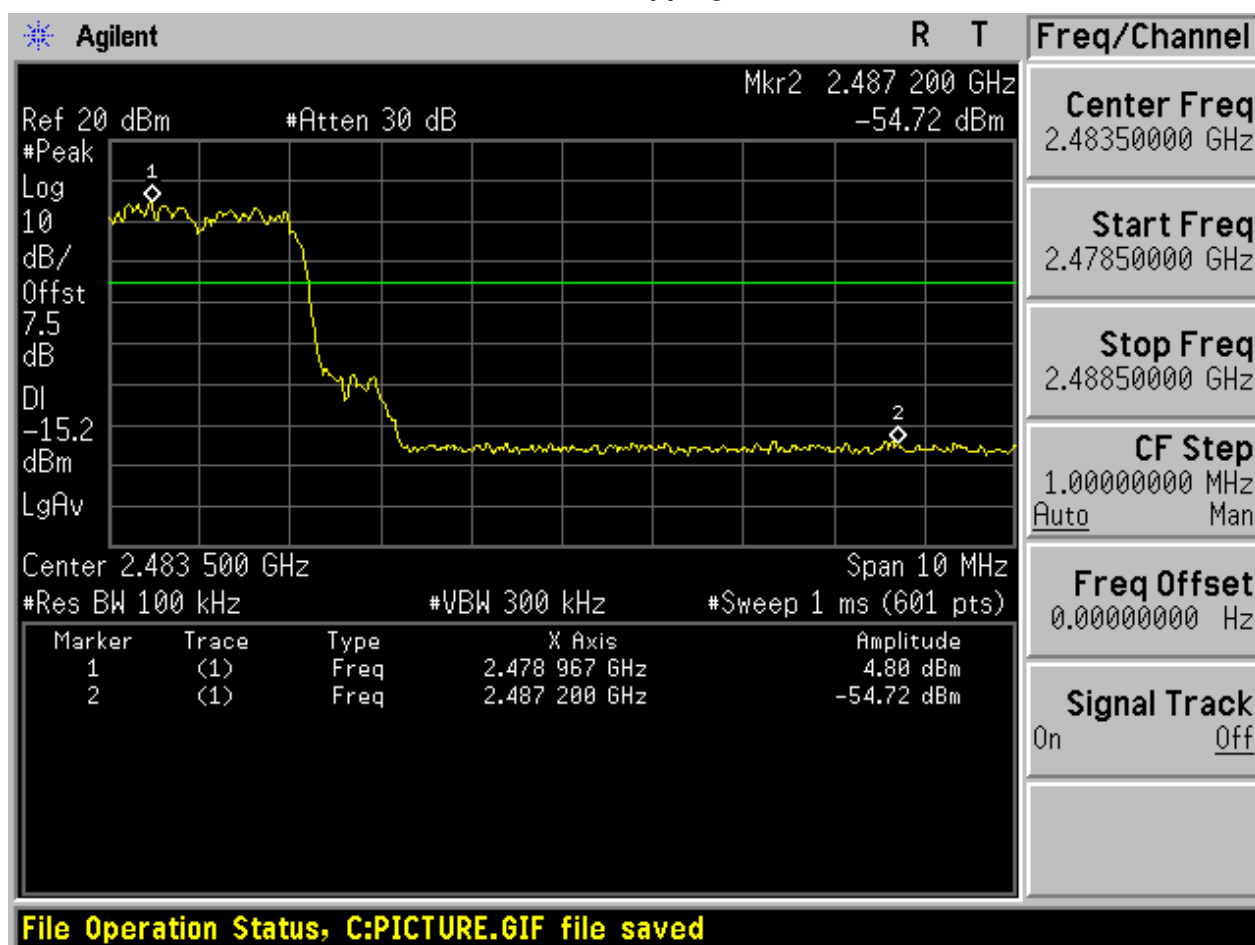


2.6 TM3_3DH5_Ch78

No hopping



With hopping





Appendix G: 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” 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.

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

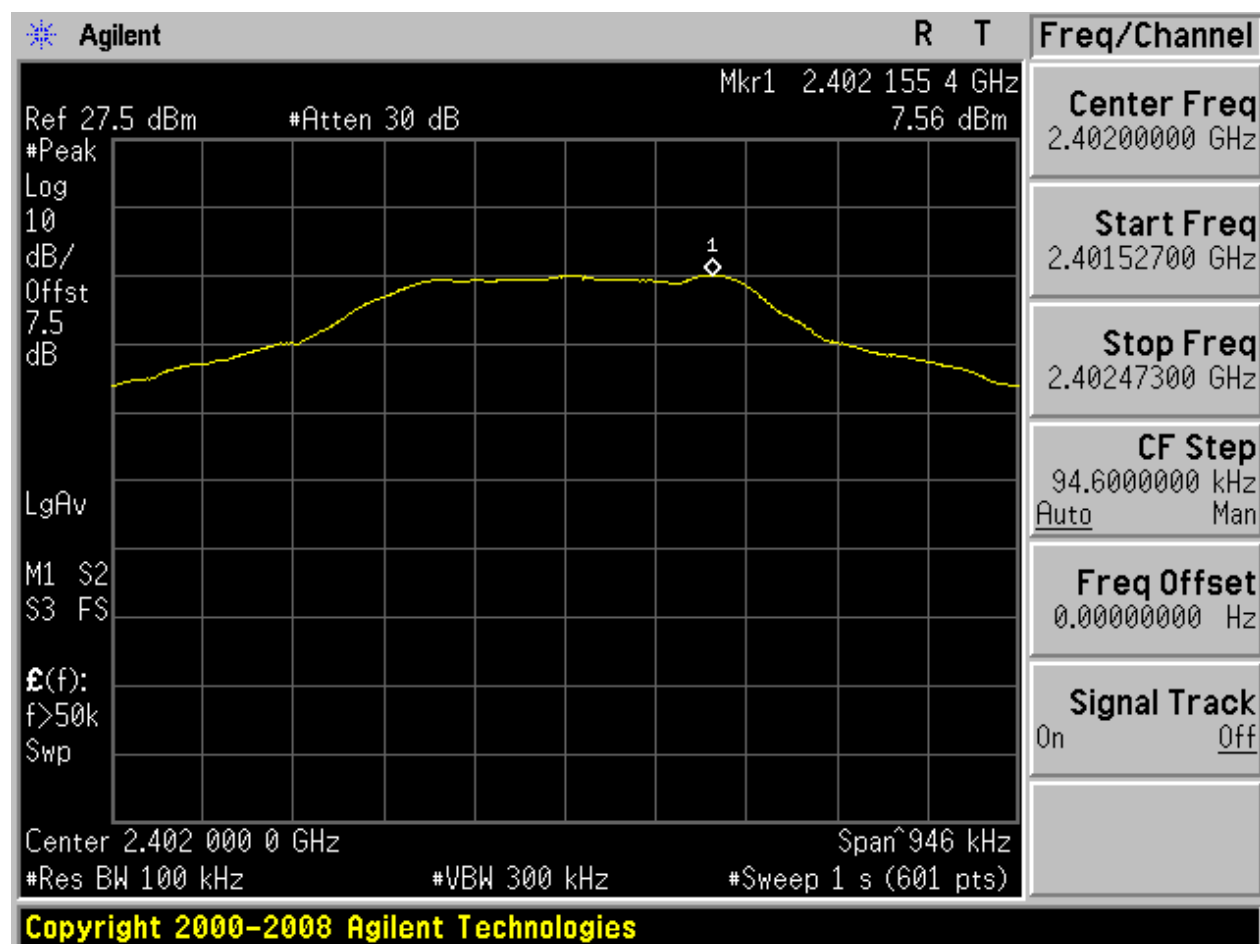
EUT Conf.	Pref [dBm/100 kHz]	Puw [dBm/100 kHz]	Verdict
TM1_DH5_Ch0	7.56	< Limit	Pass
TM1_DH5_Ch39	10.21	< Limit	Pass
TM1_DH5_Ch78	8.14	< Limit	Pass
TM2_2DH5_Ch0	5.73	< Limit	Pass
TM2_2DH5_Ch39	8.38	< Limit	Pass
TM2_2DH5_Ch78	6.30	< Limit	Pass
TM3_3DH5_Ch0	5.74	< Limit	Pass
TM3_3DH5_Ch39	8.39	< Limit	Pass
TM3_3DH5_Ch78	6.30	< Limit	Pass



2 Test Plot

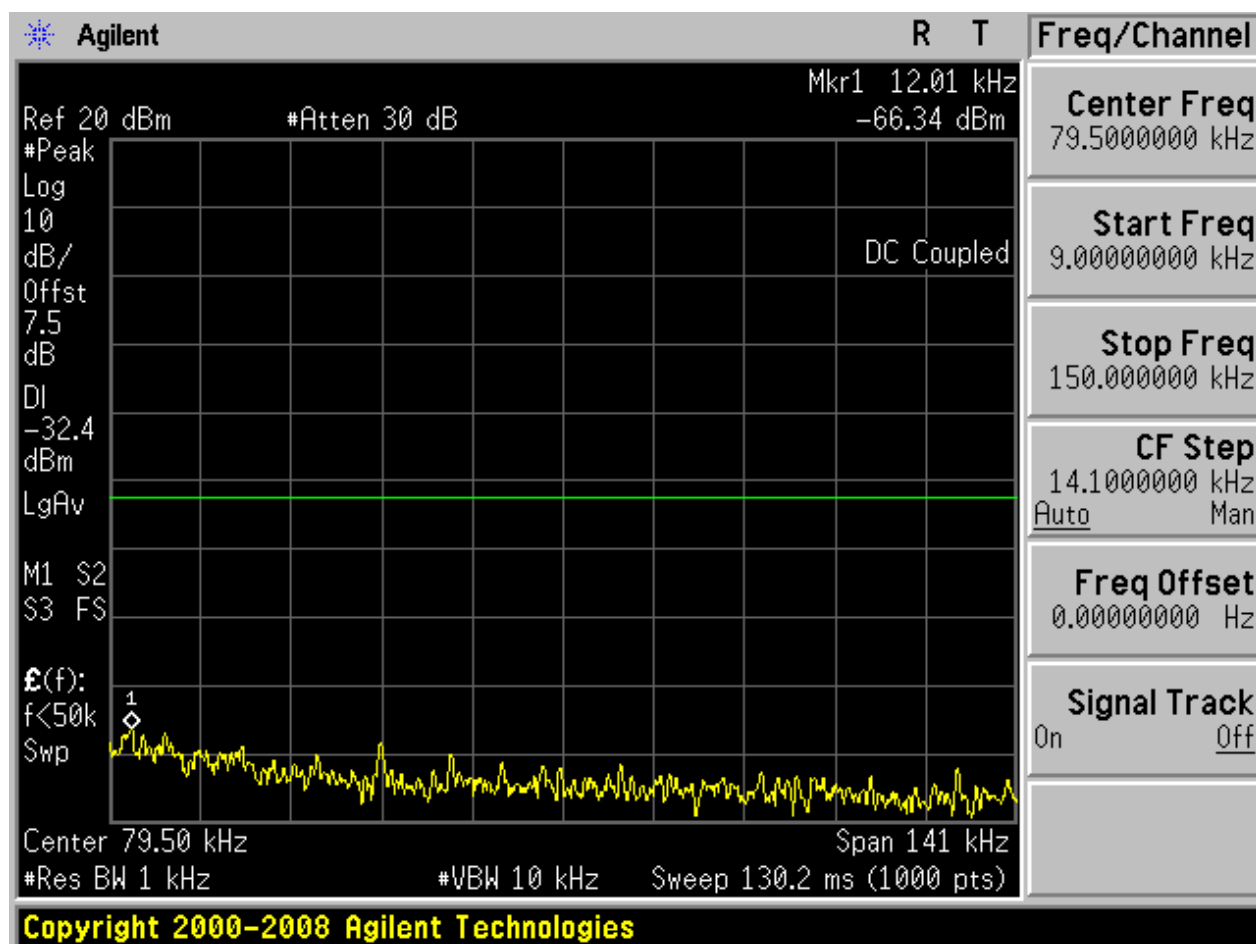
2.1 TM1_DH5_Ch0

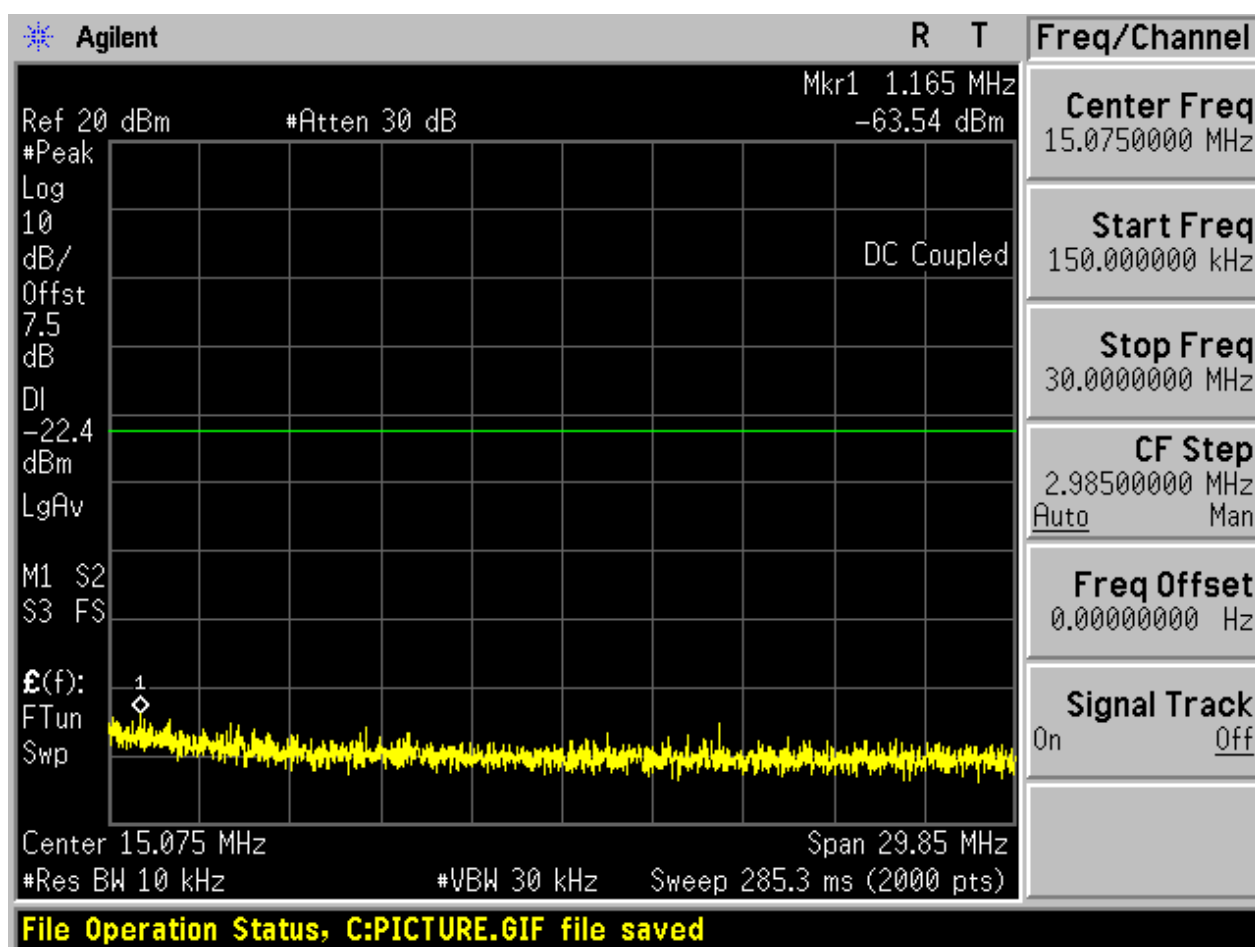
Pref

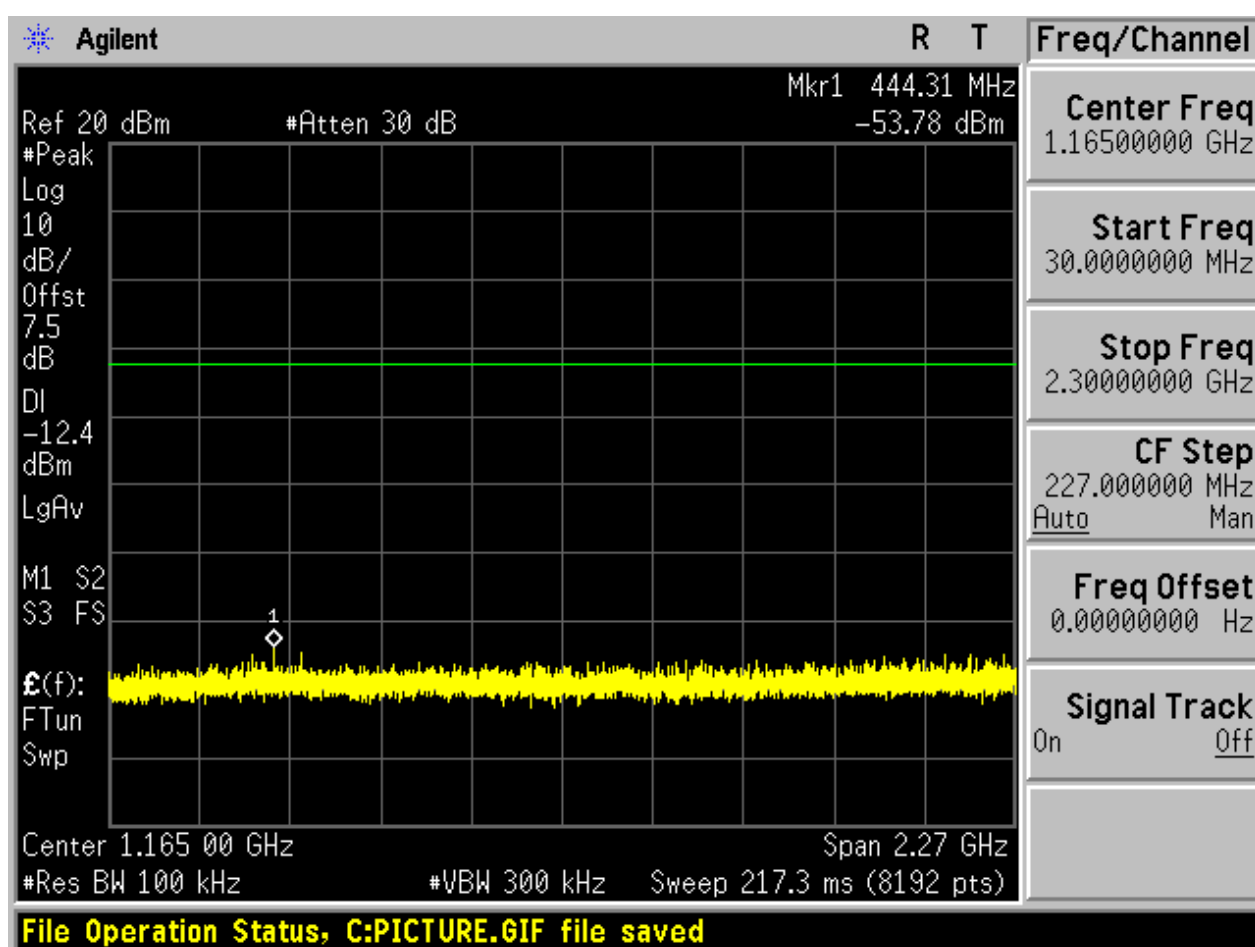


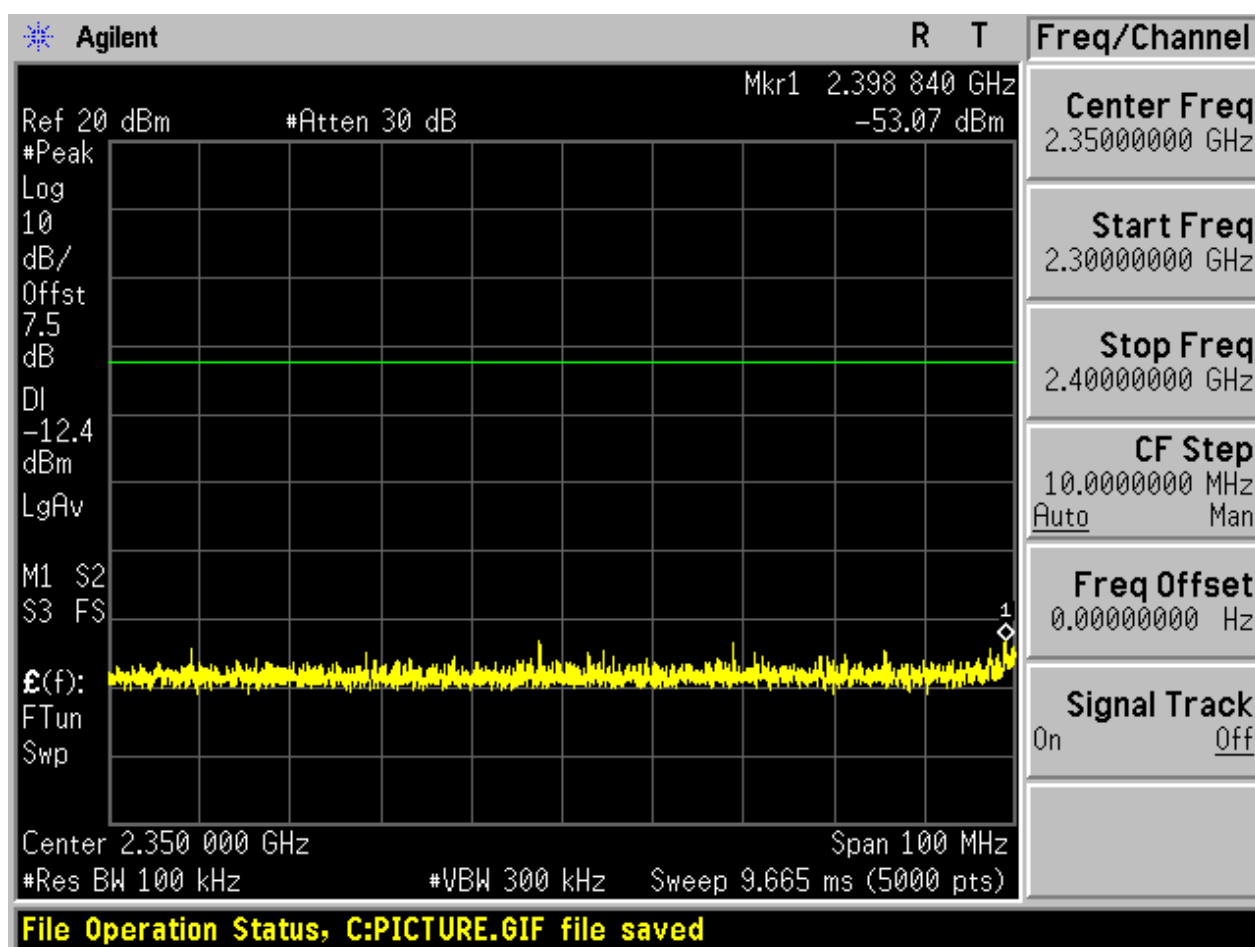


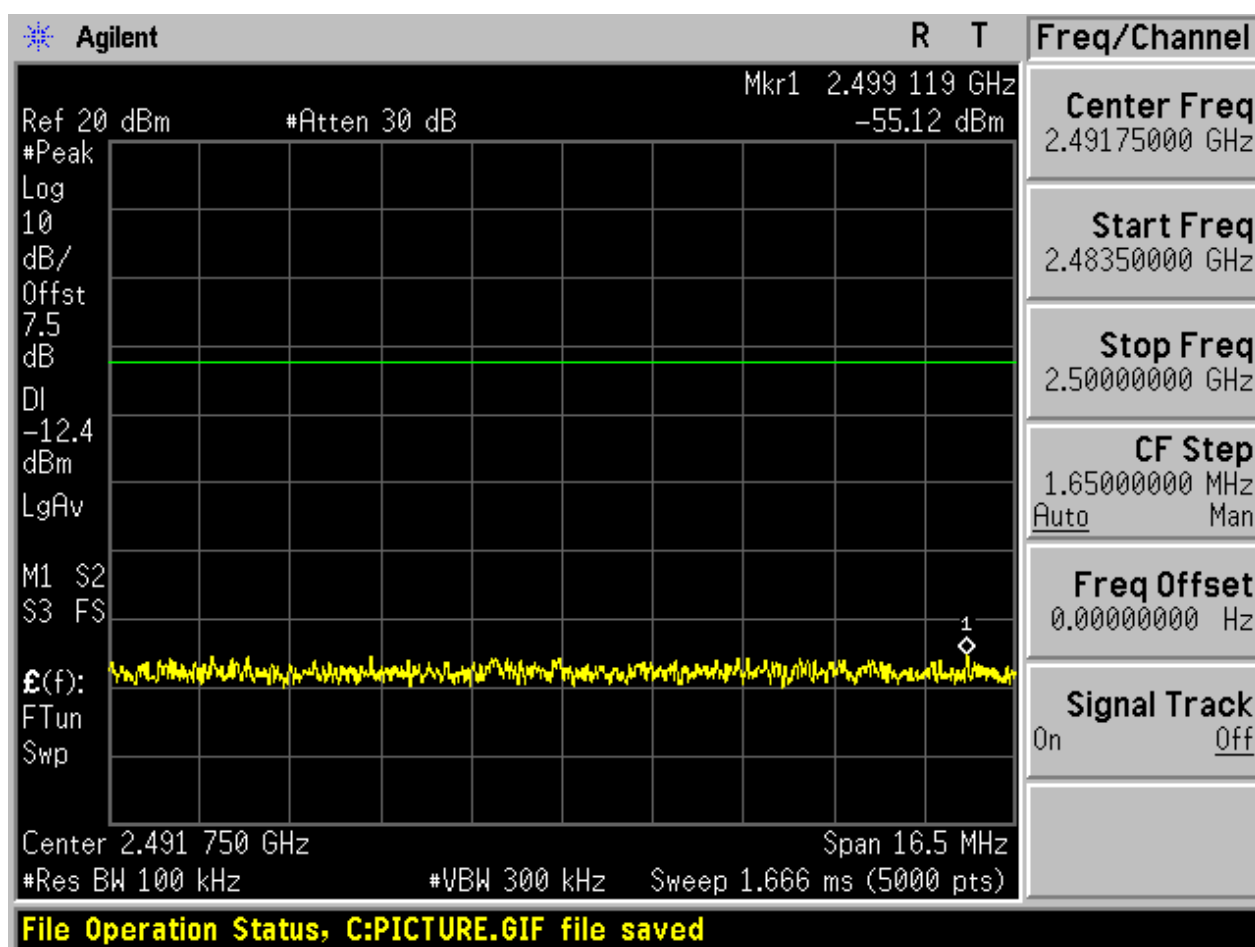
Puw

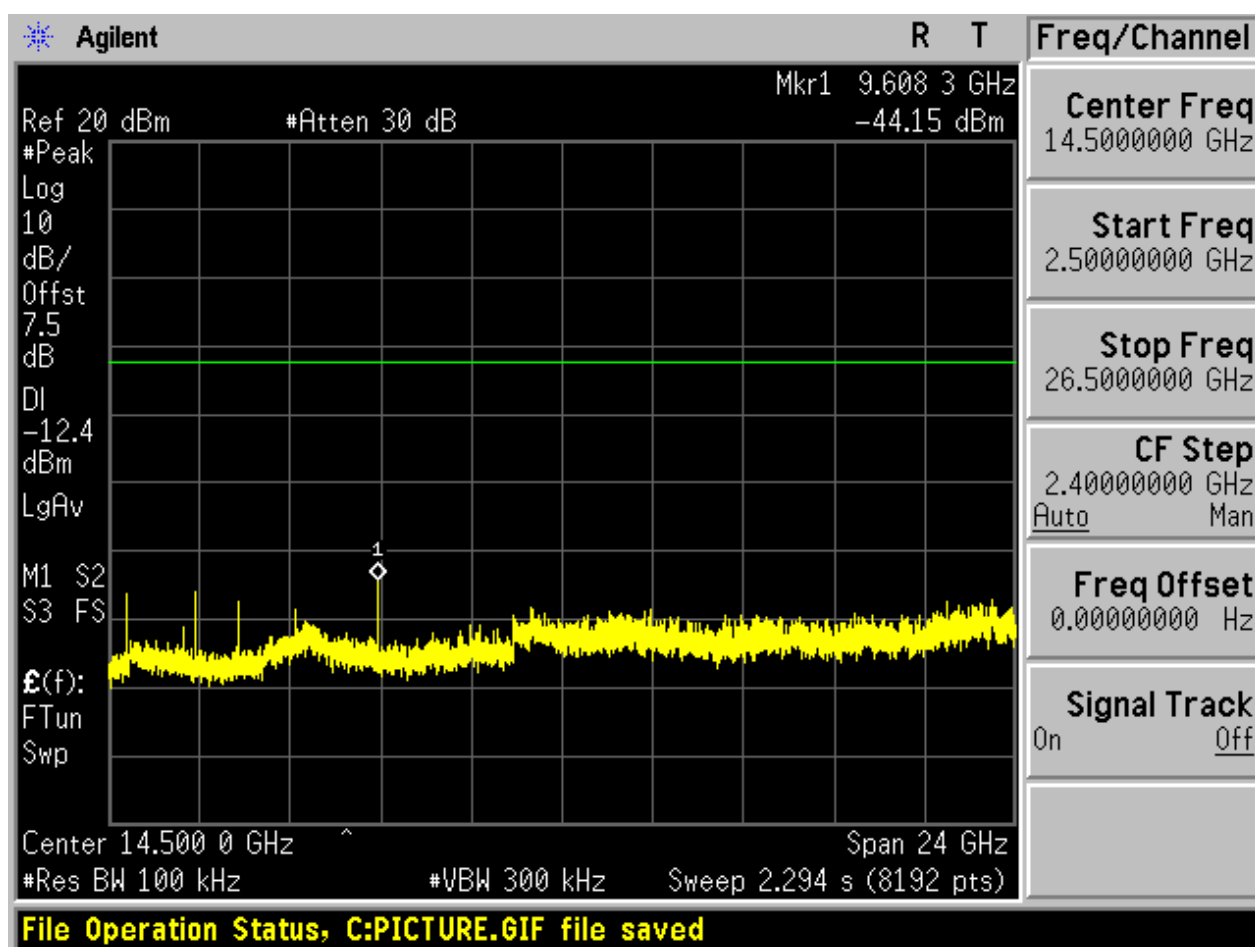






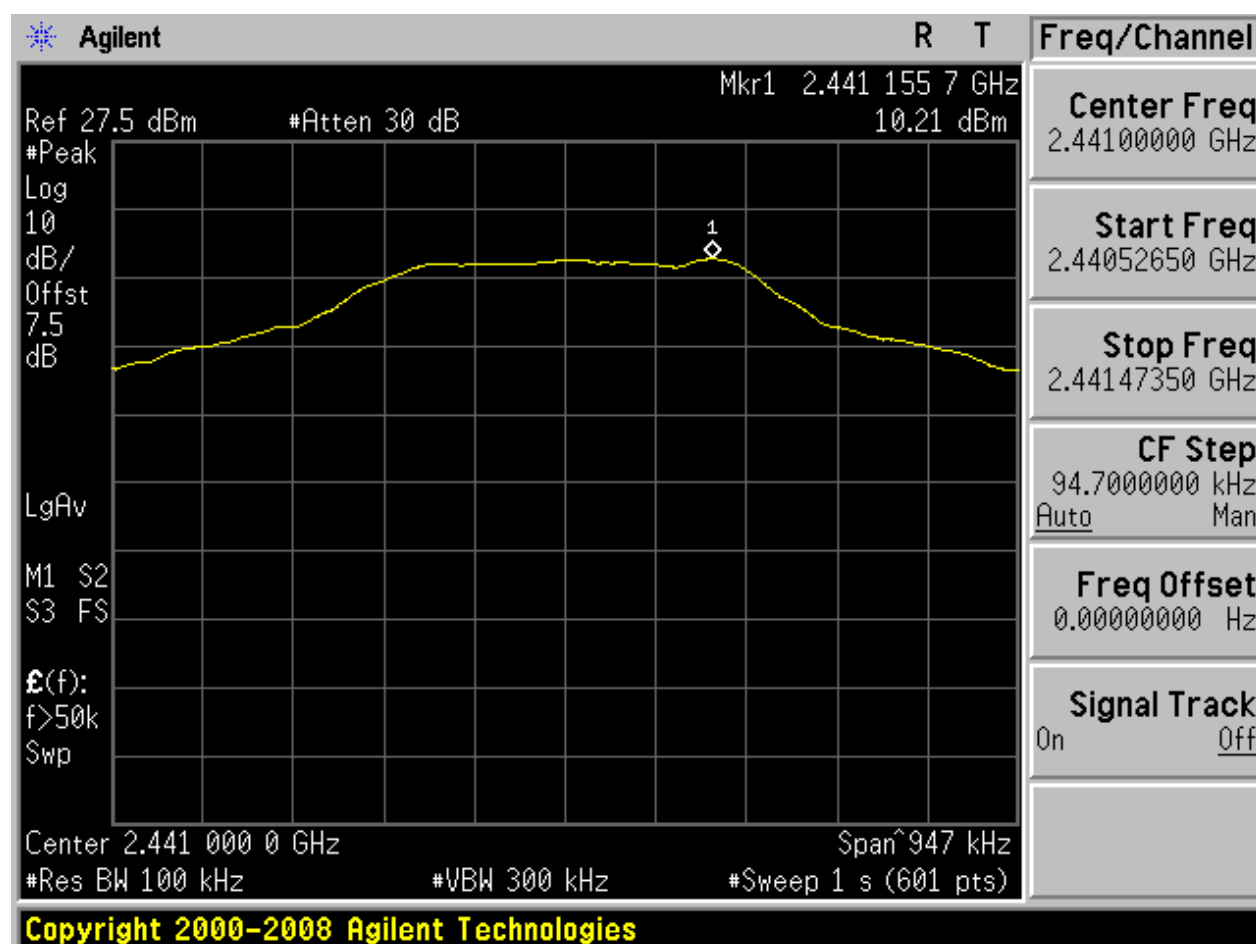






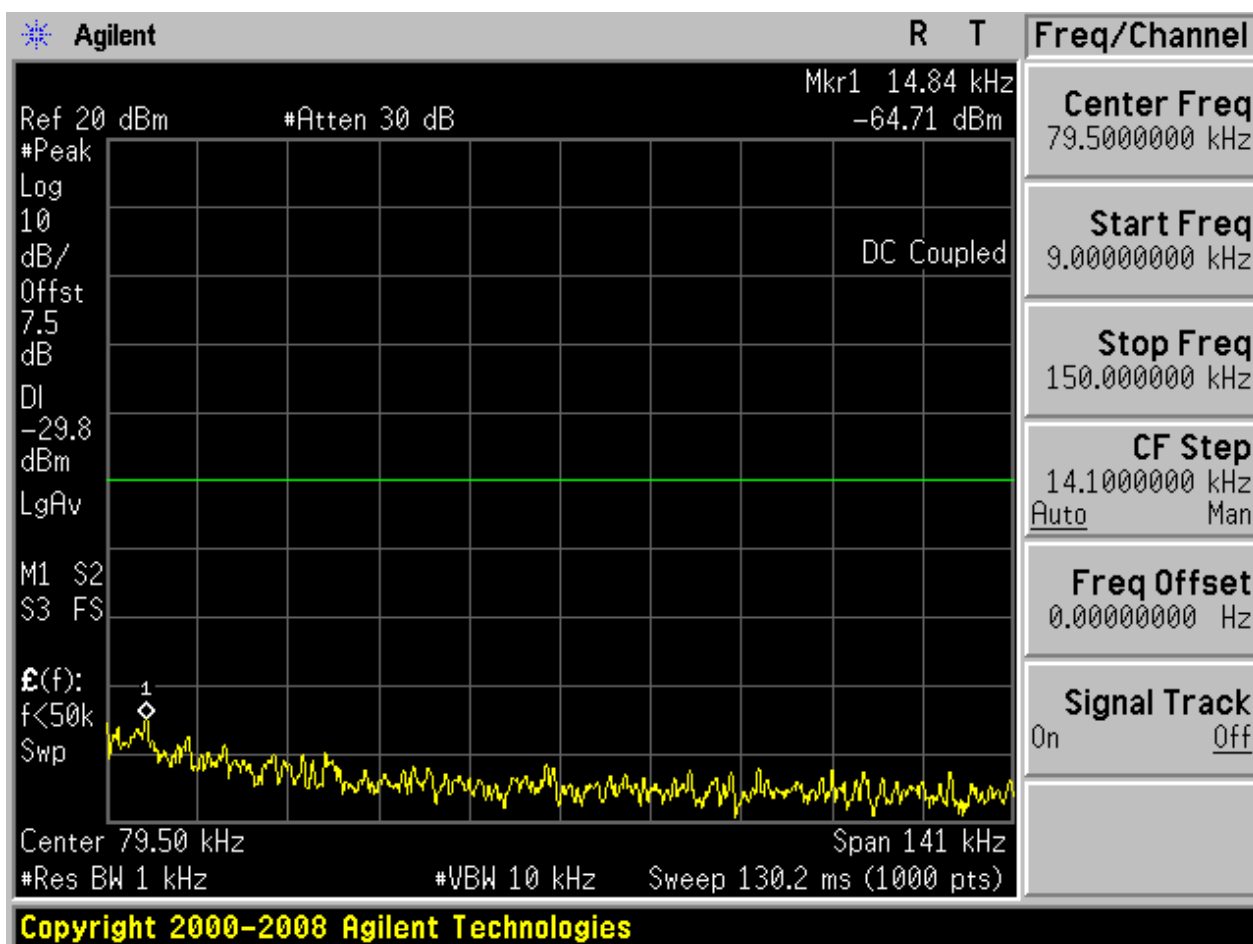
2.2 TM1_DH5_Ch39

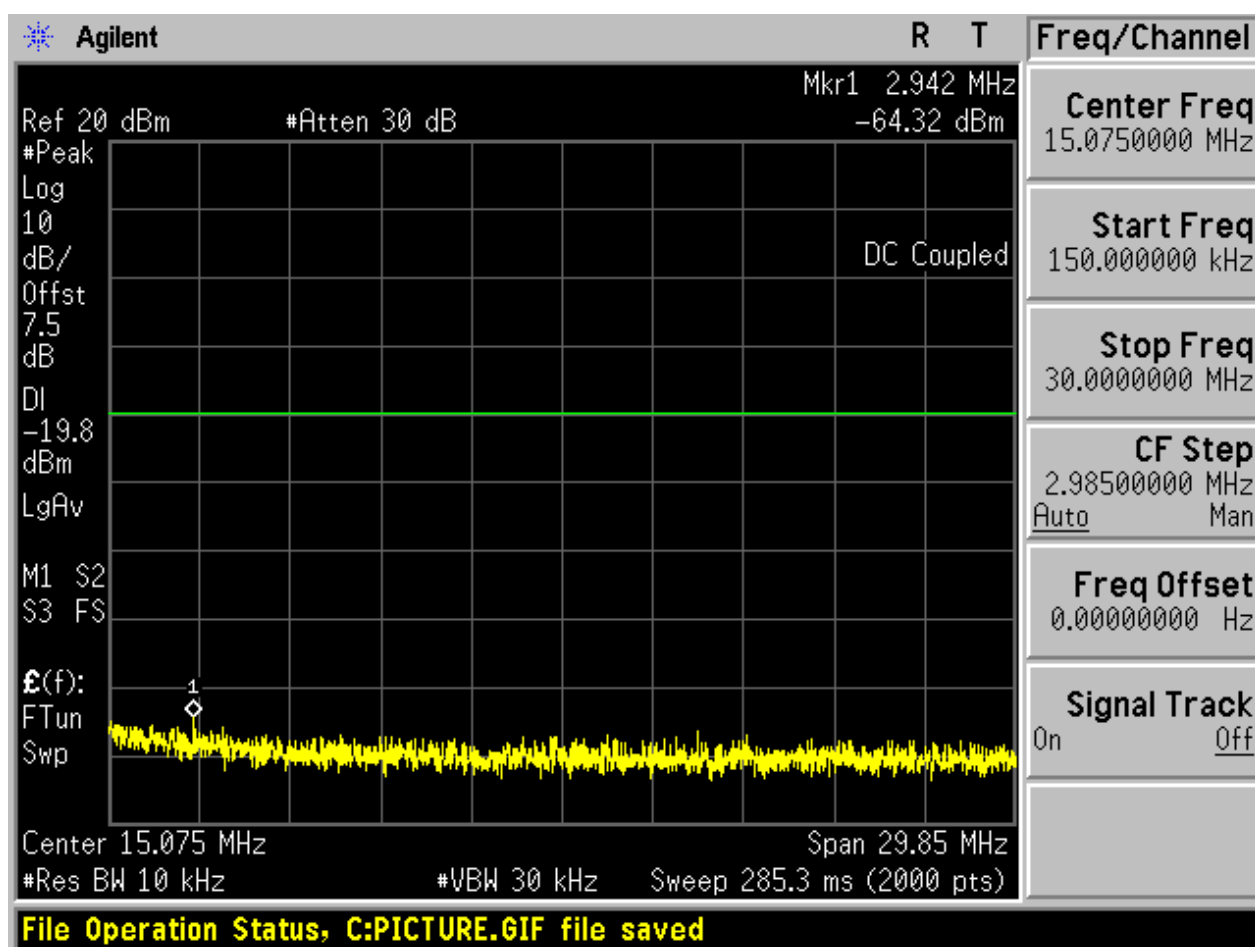
Pref

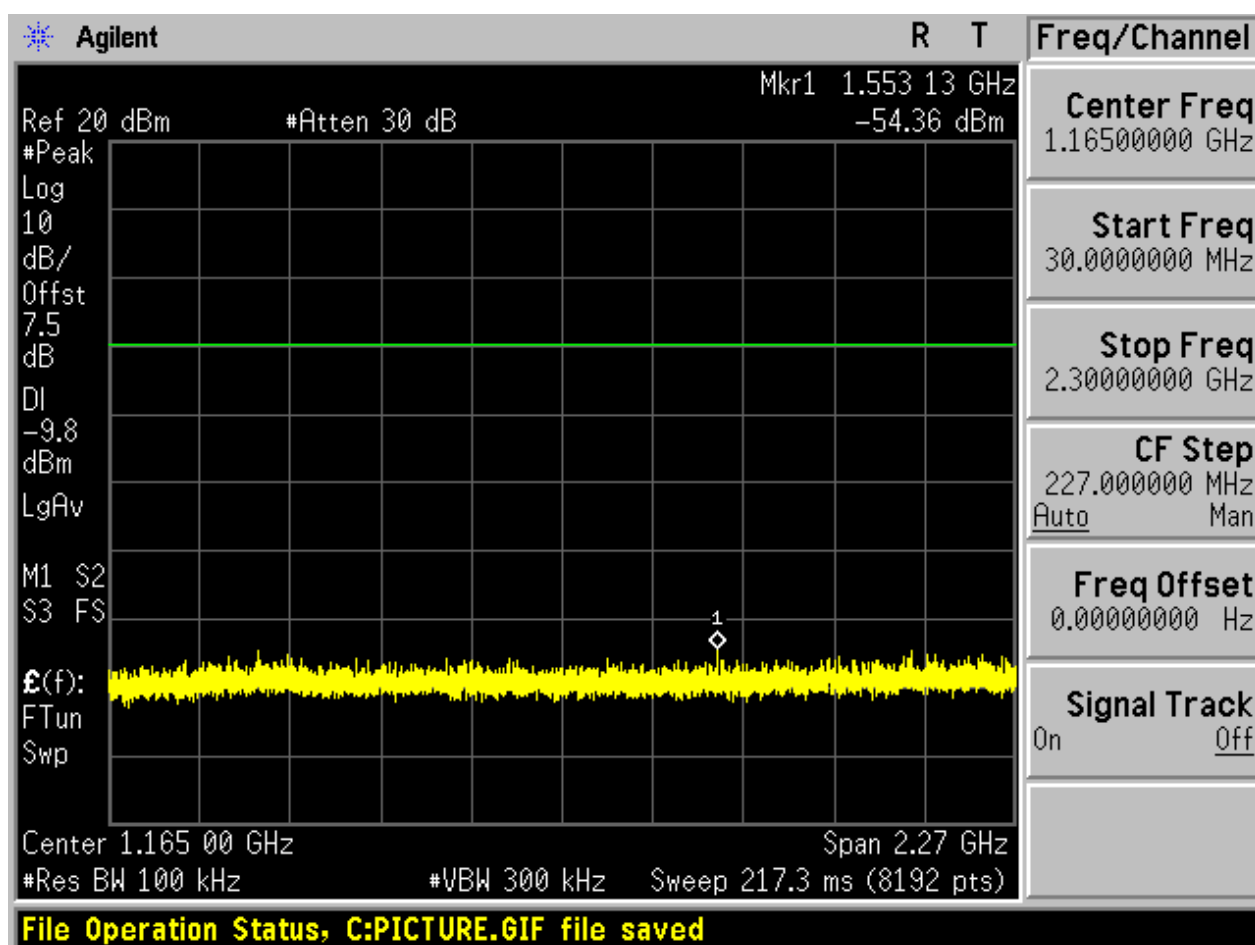


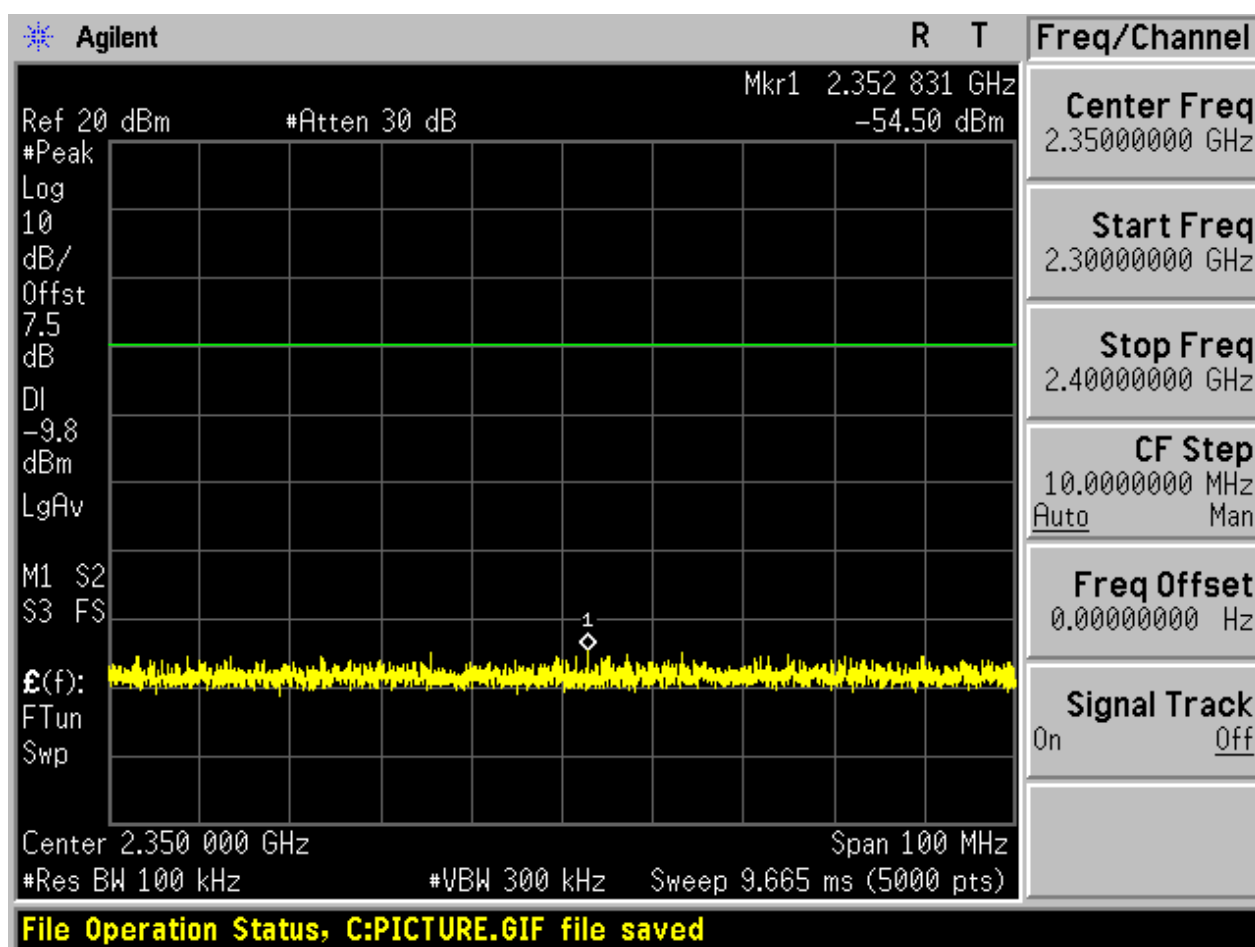


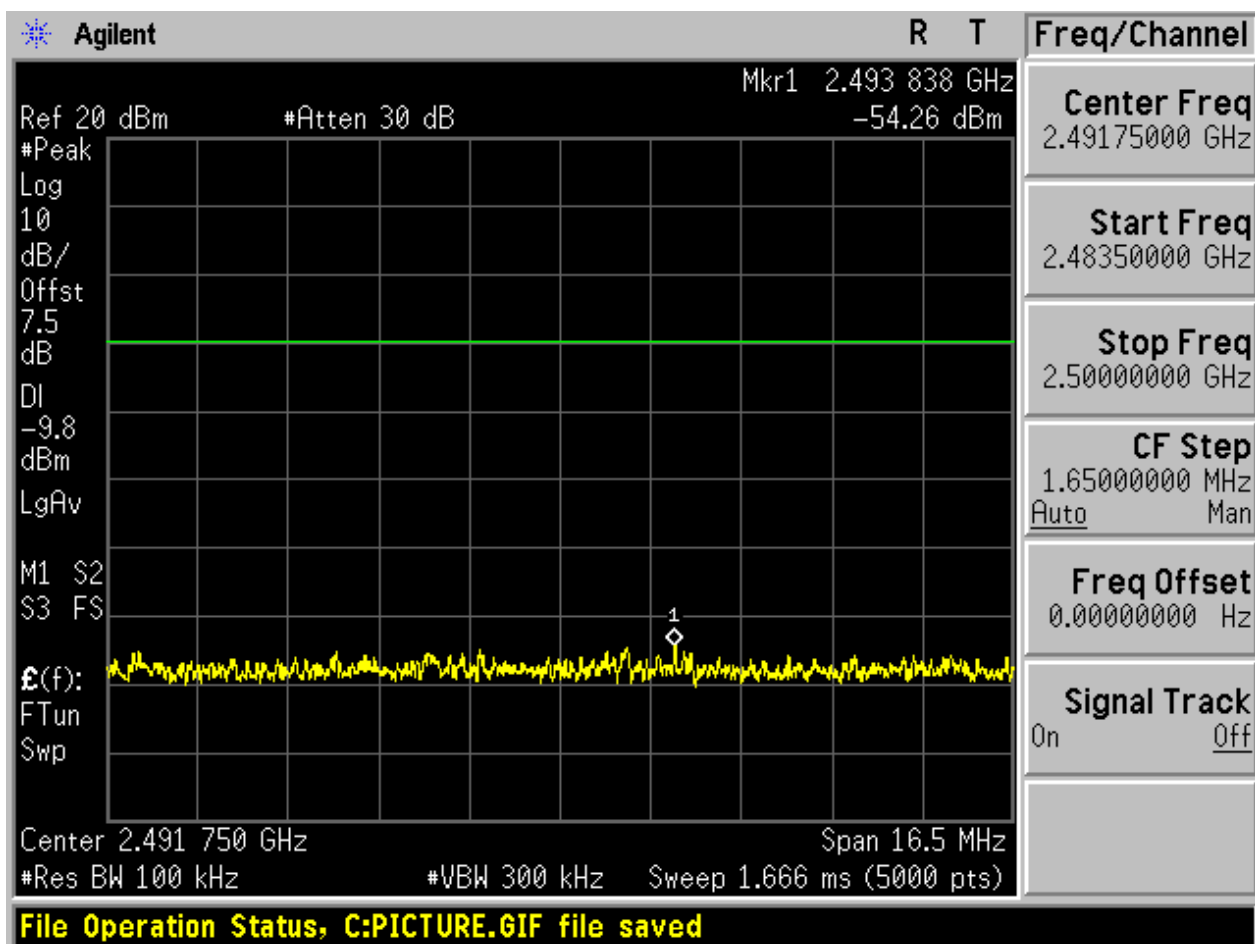
PuW

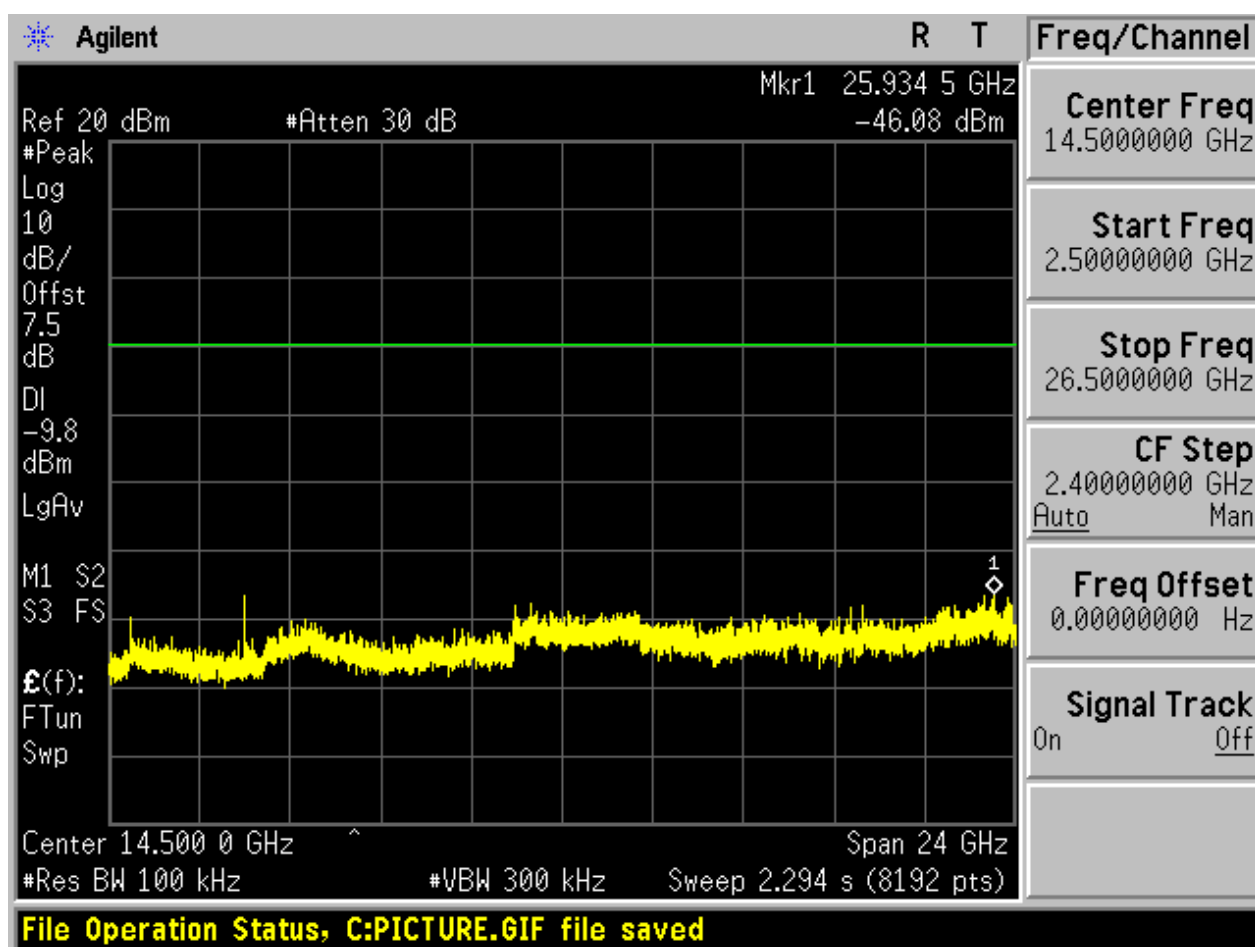








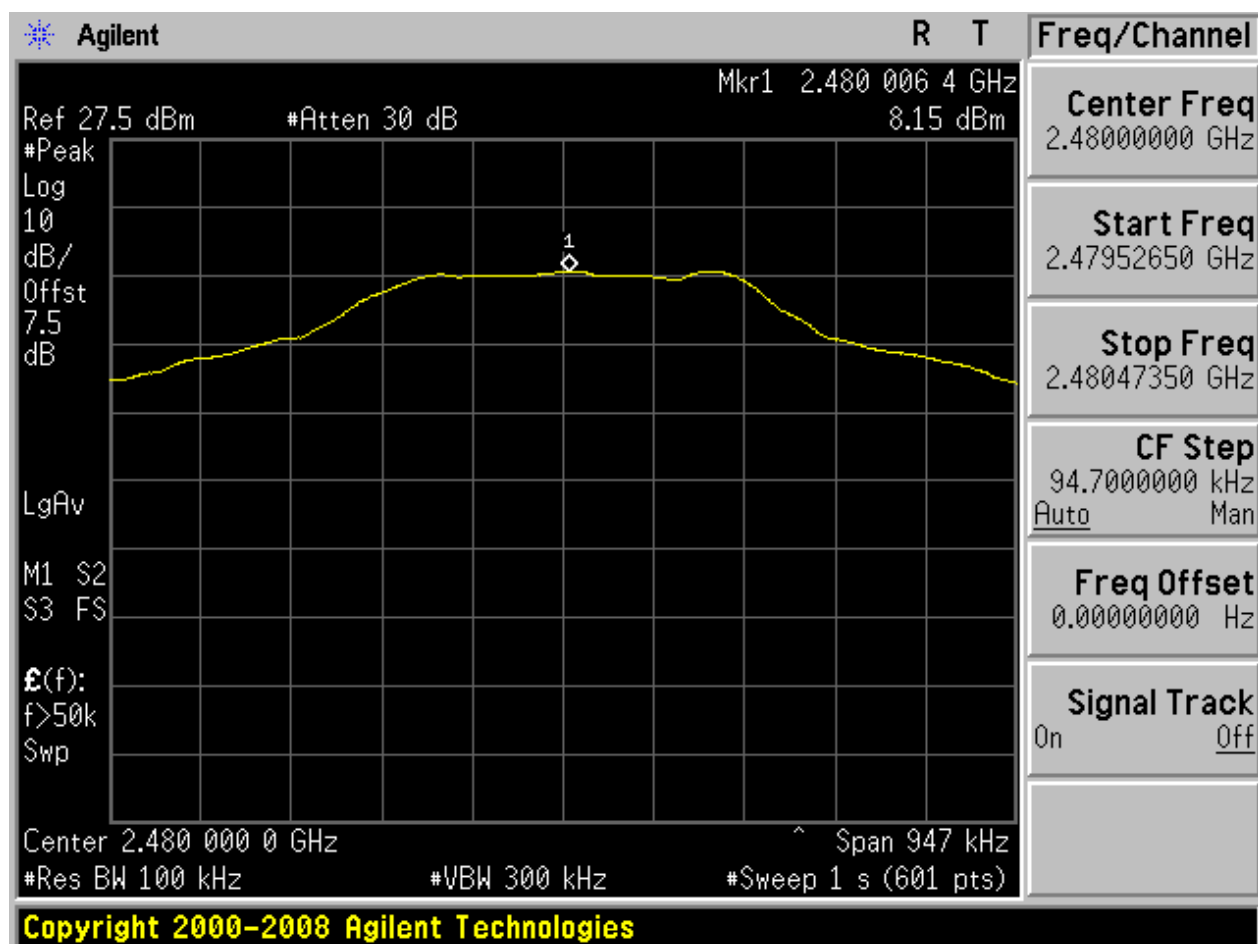


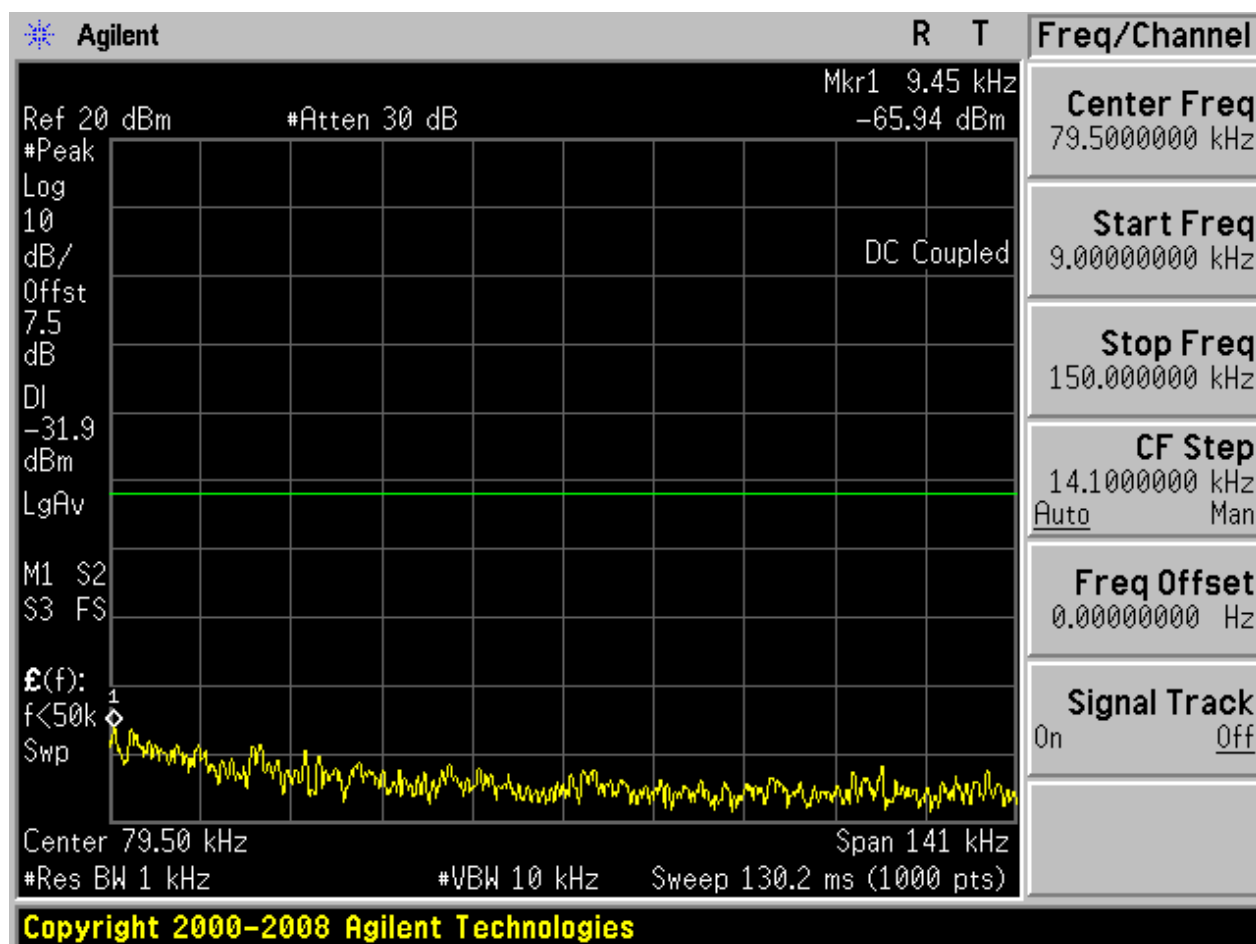


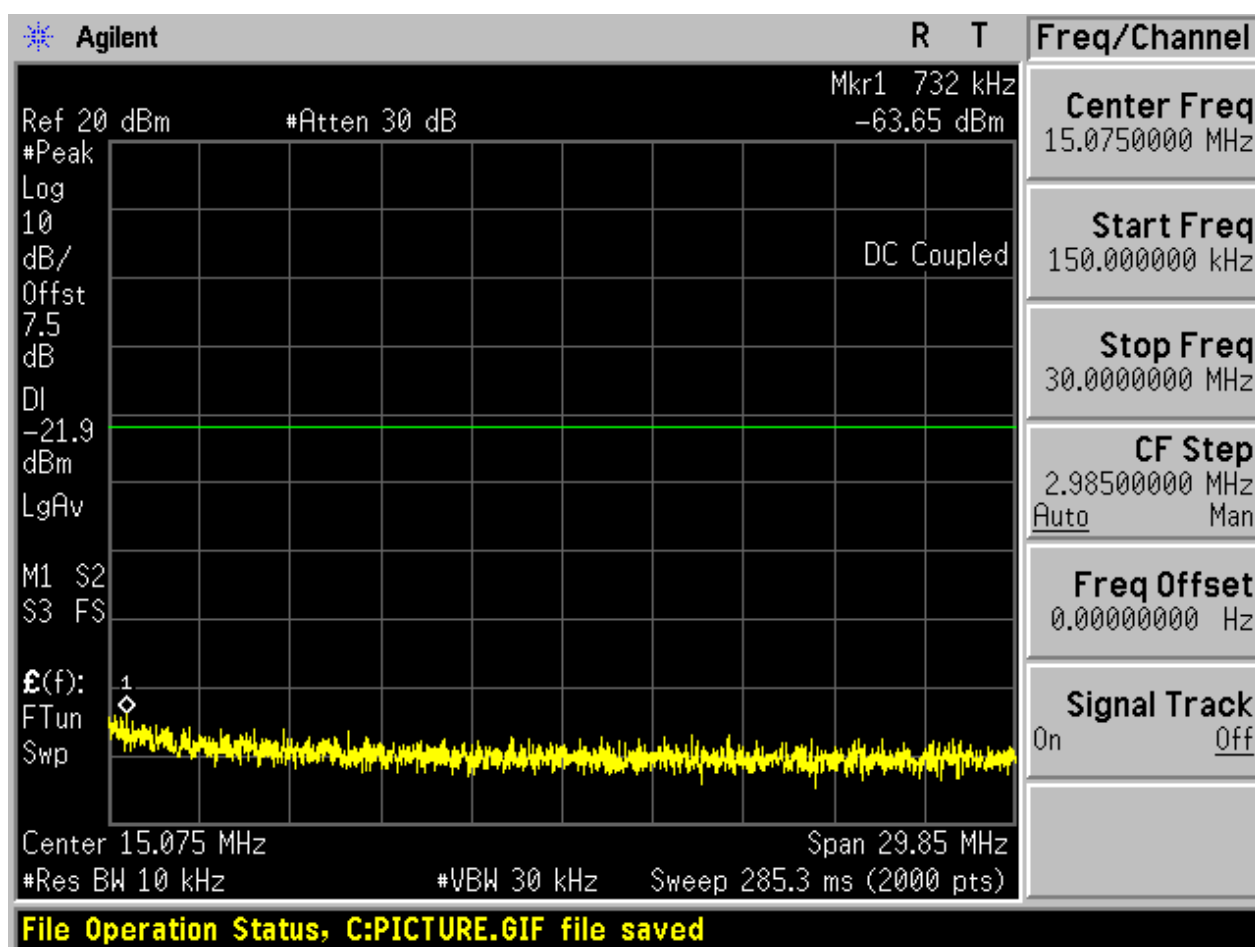


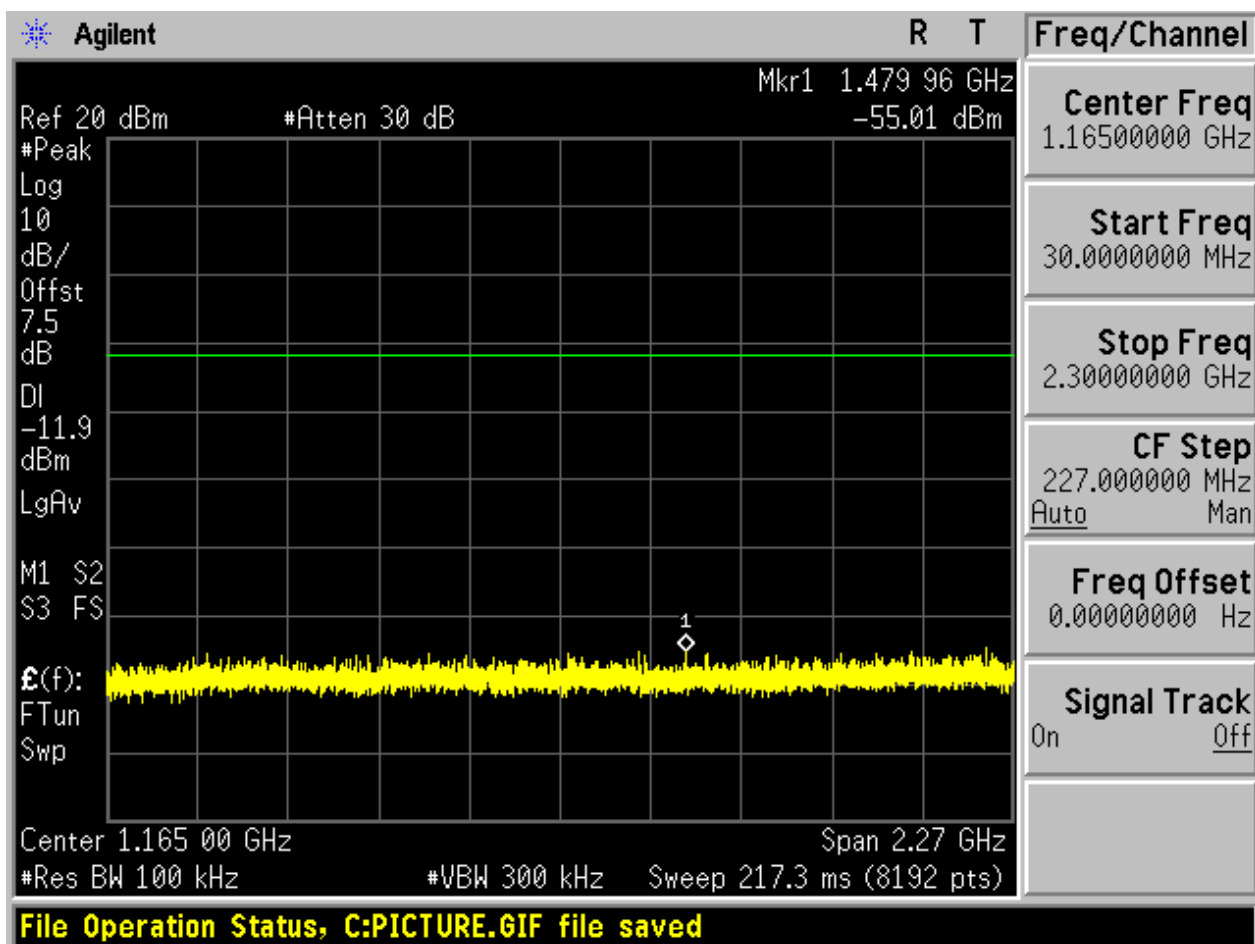
2.3 TM1_DH5_Ch78

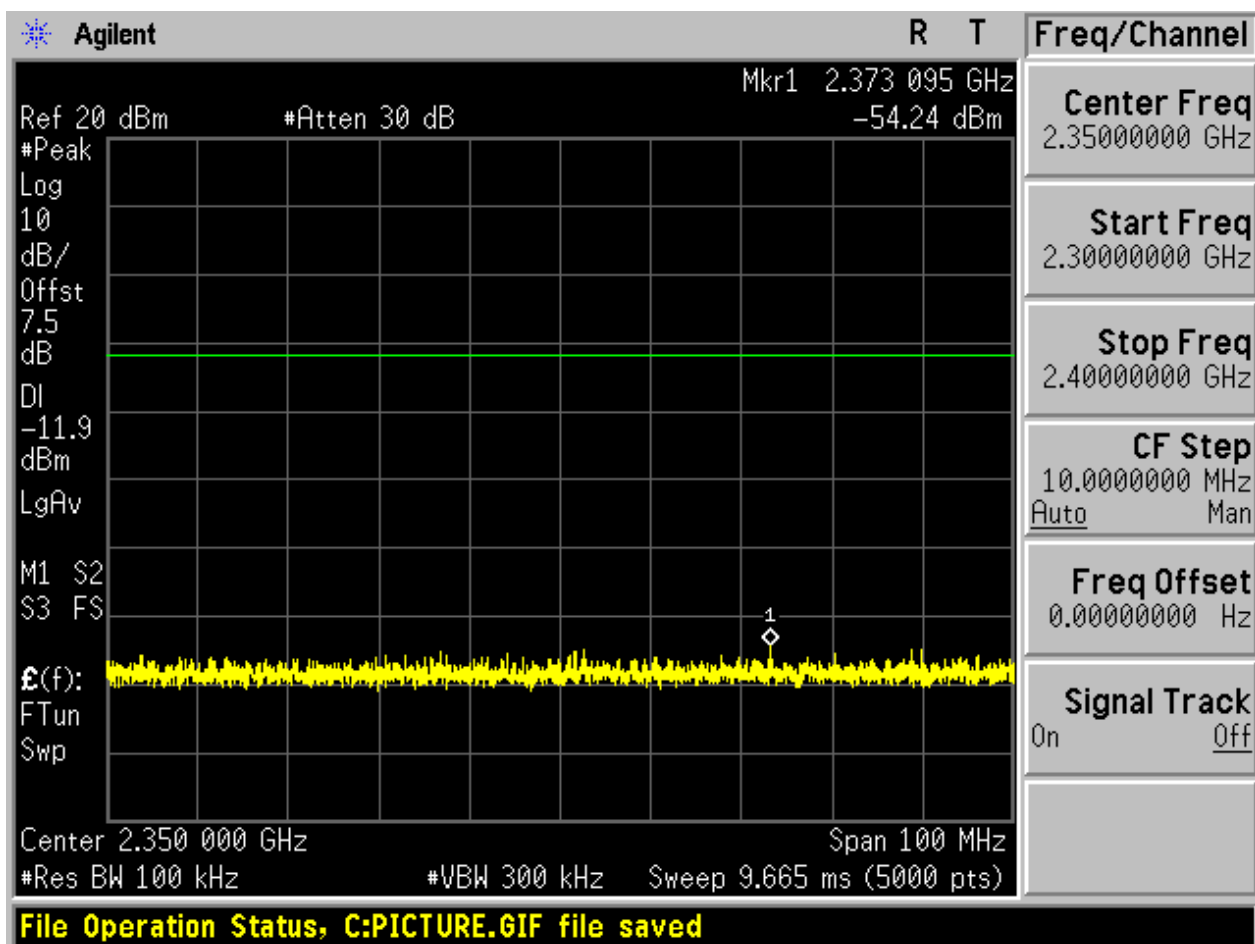
Pref

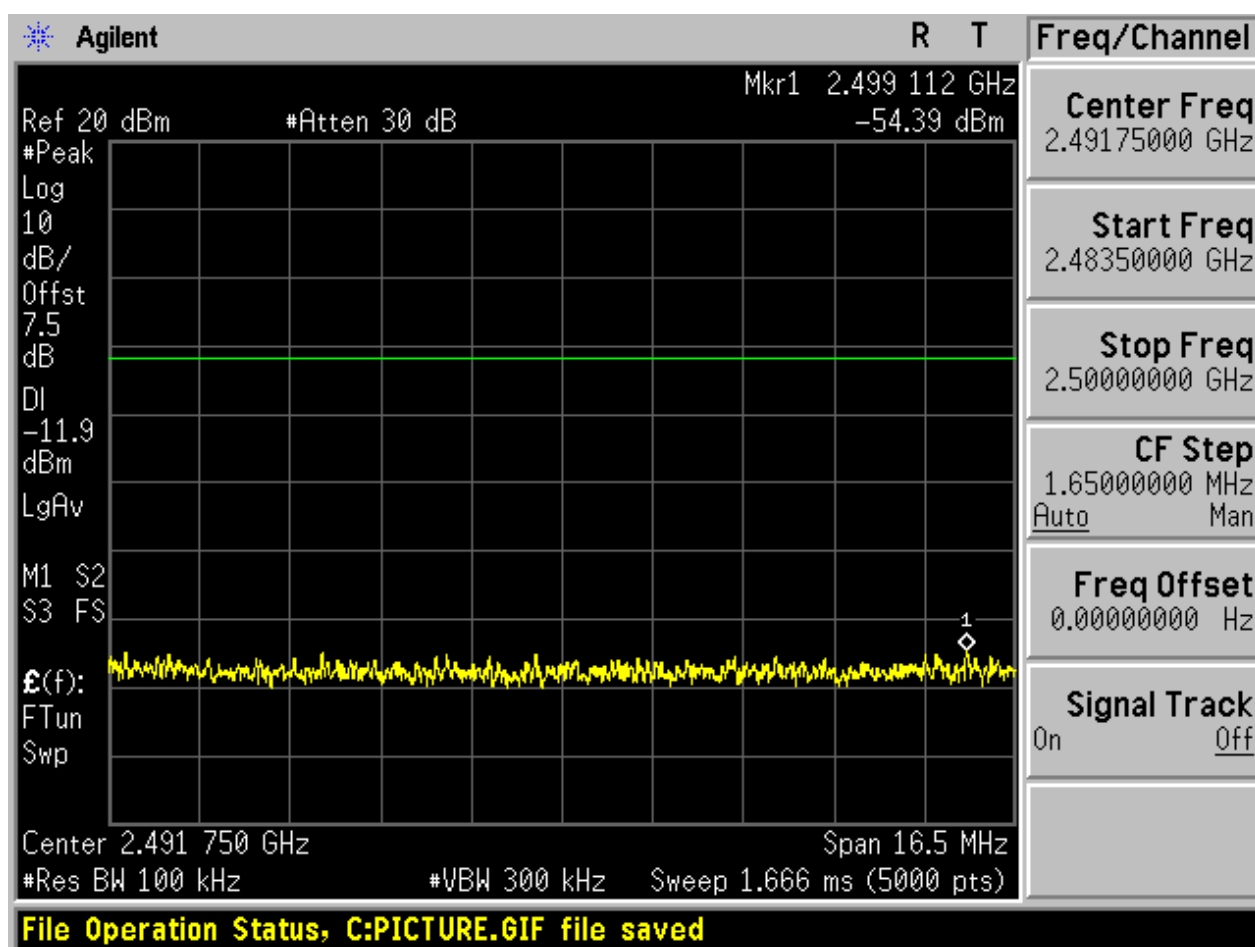


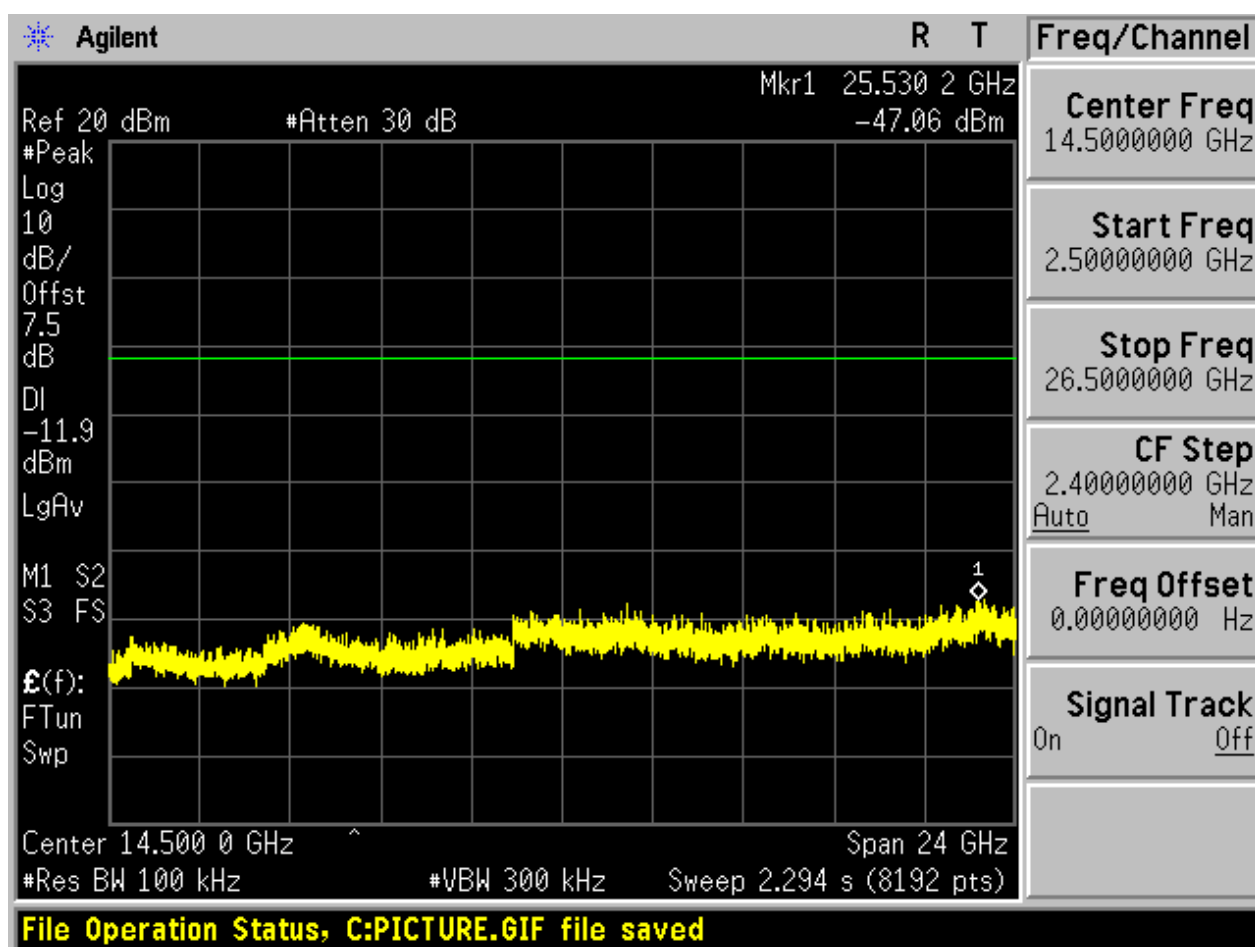
P_uw







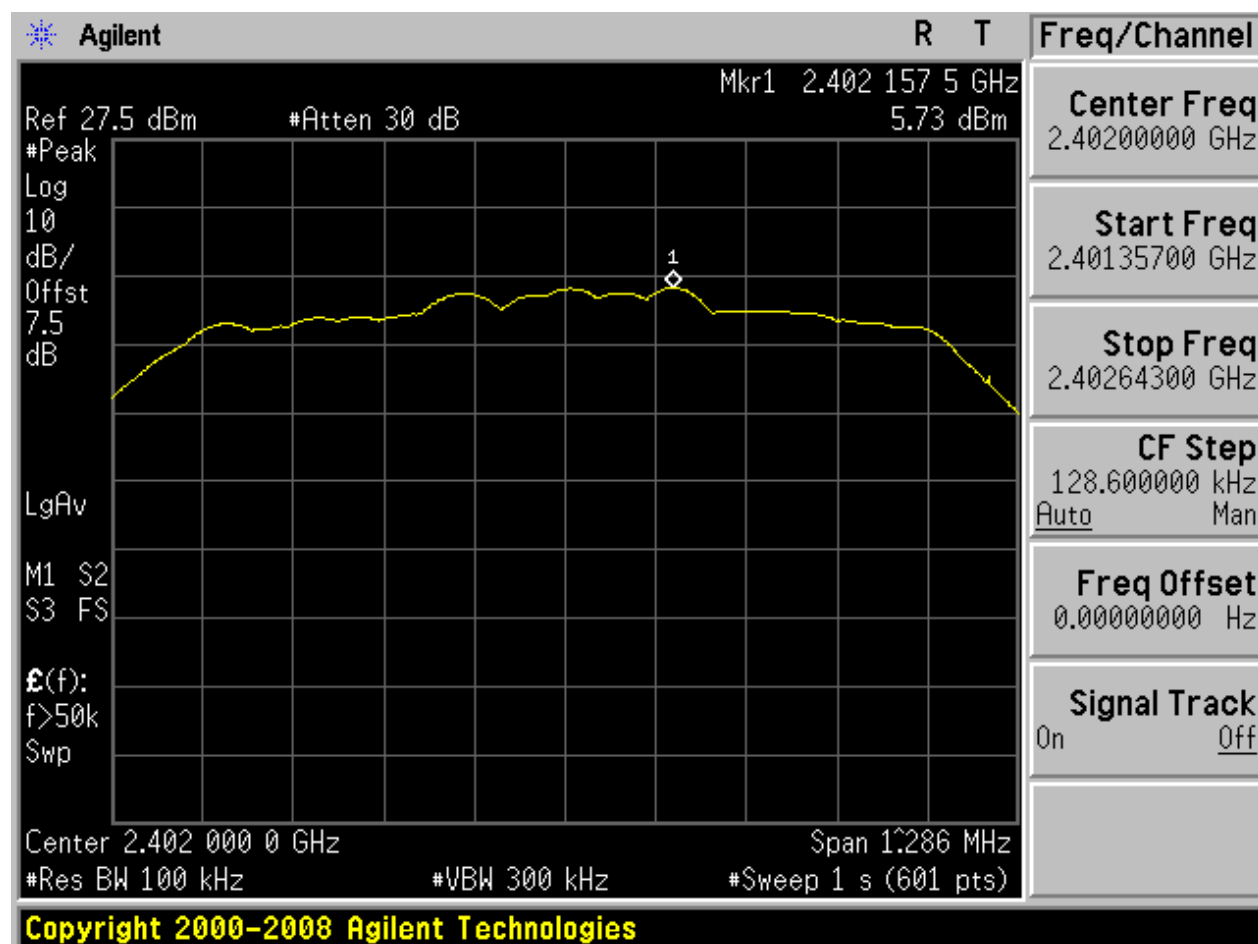




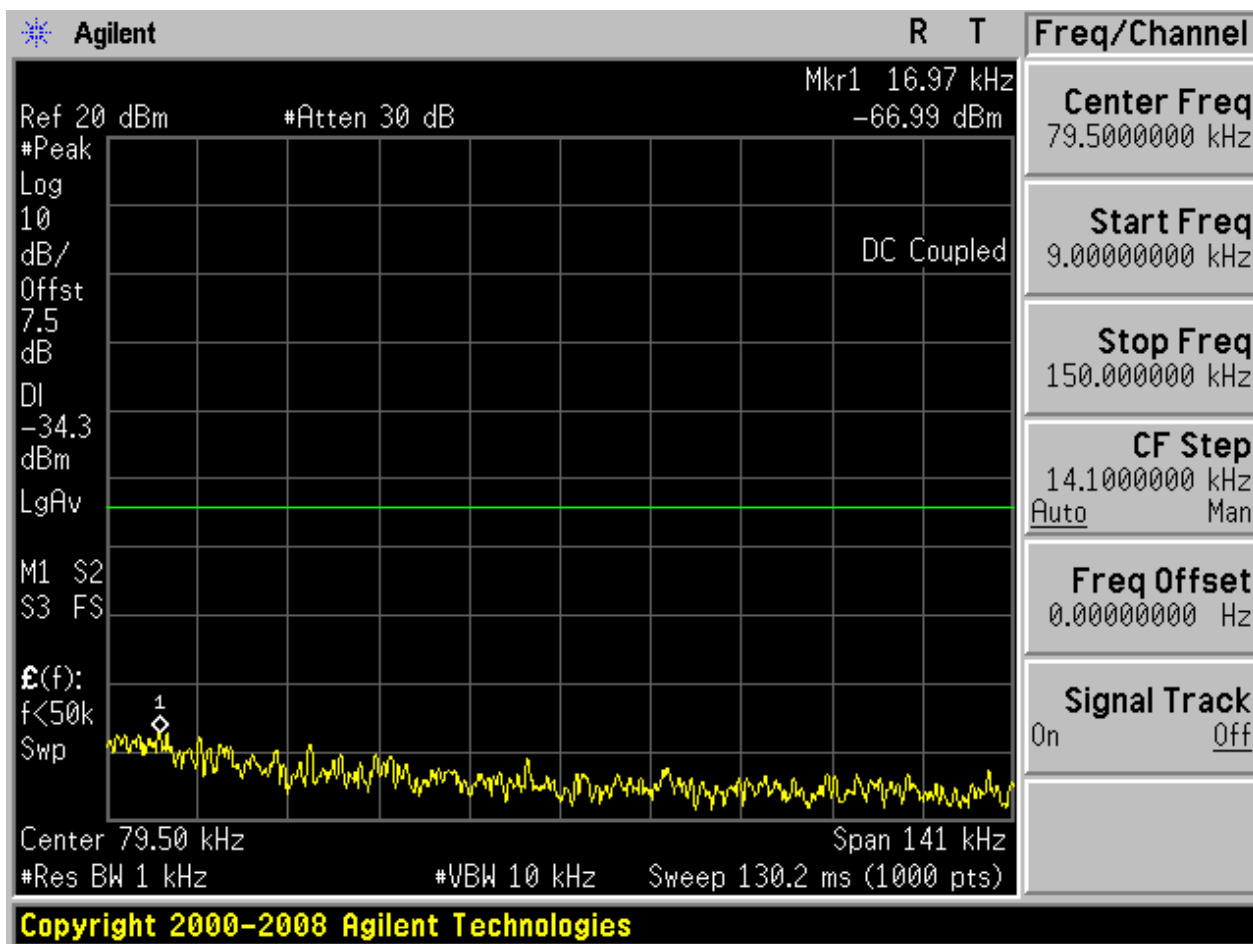


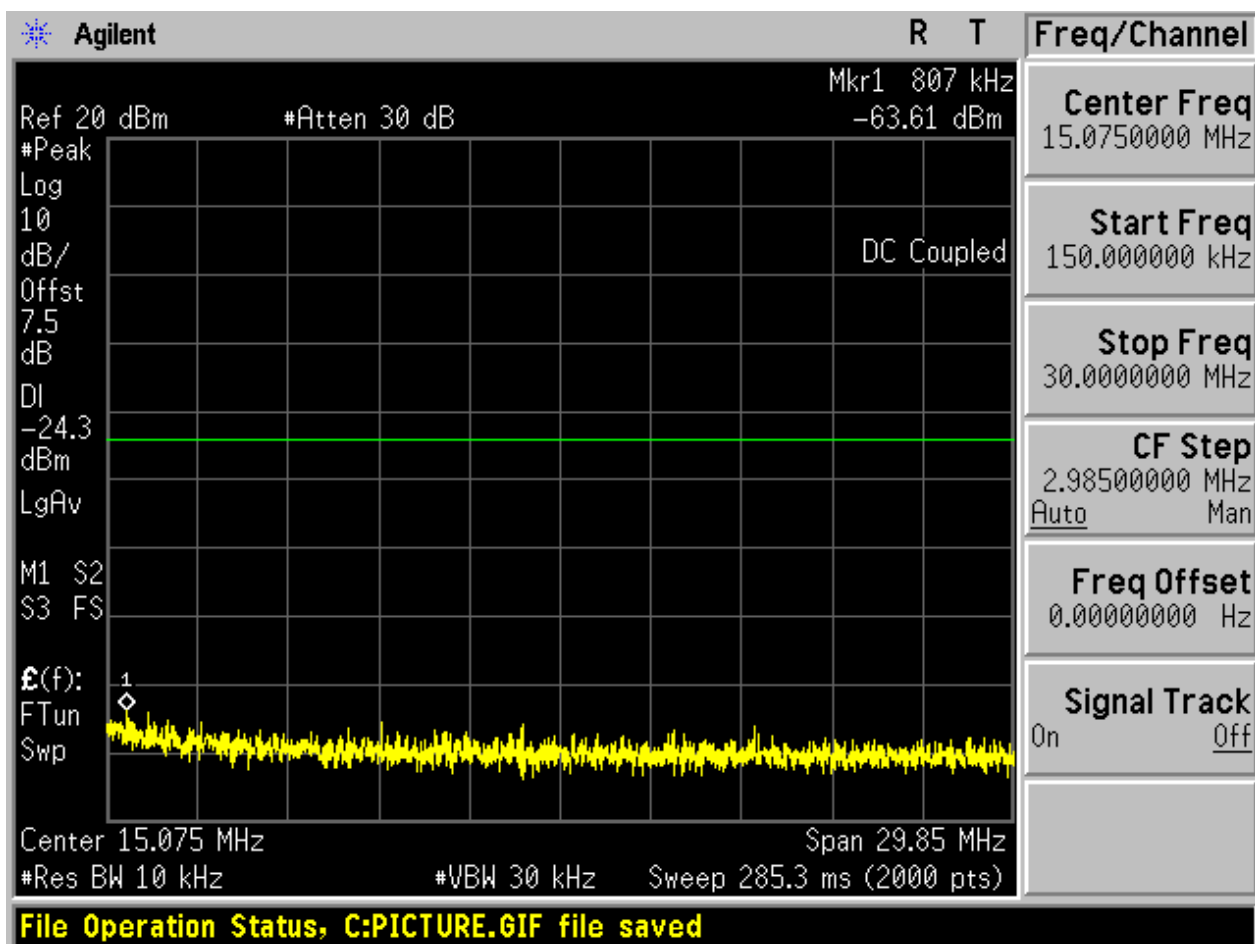
2.4 TM2_2DH5_Ch0

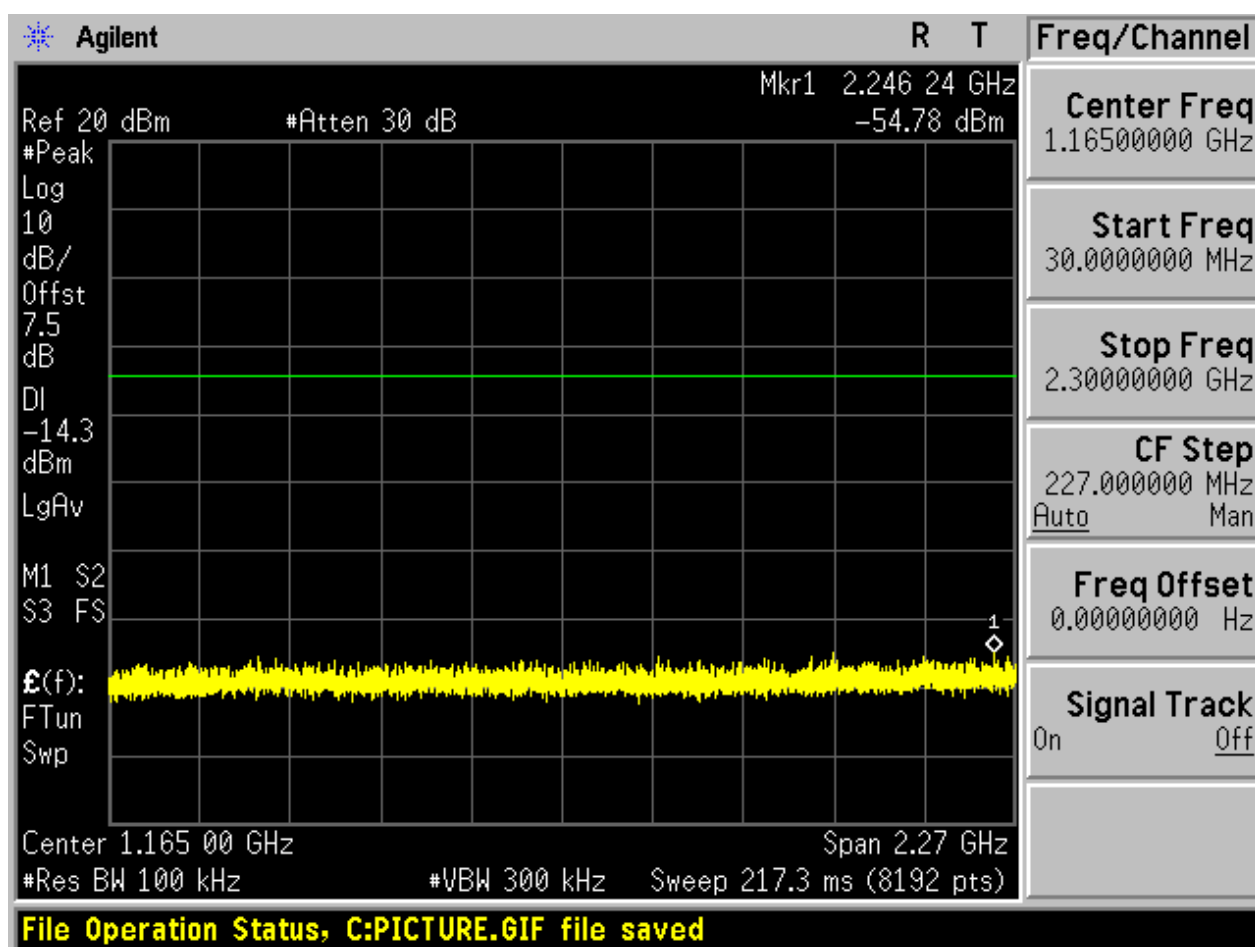
Pref

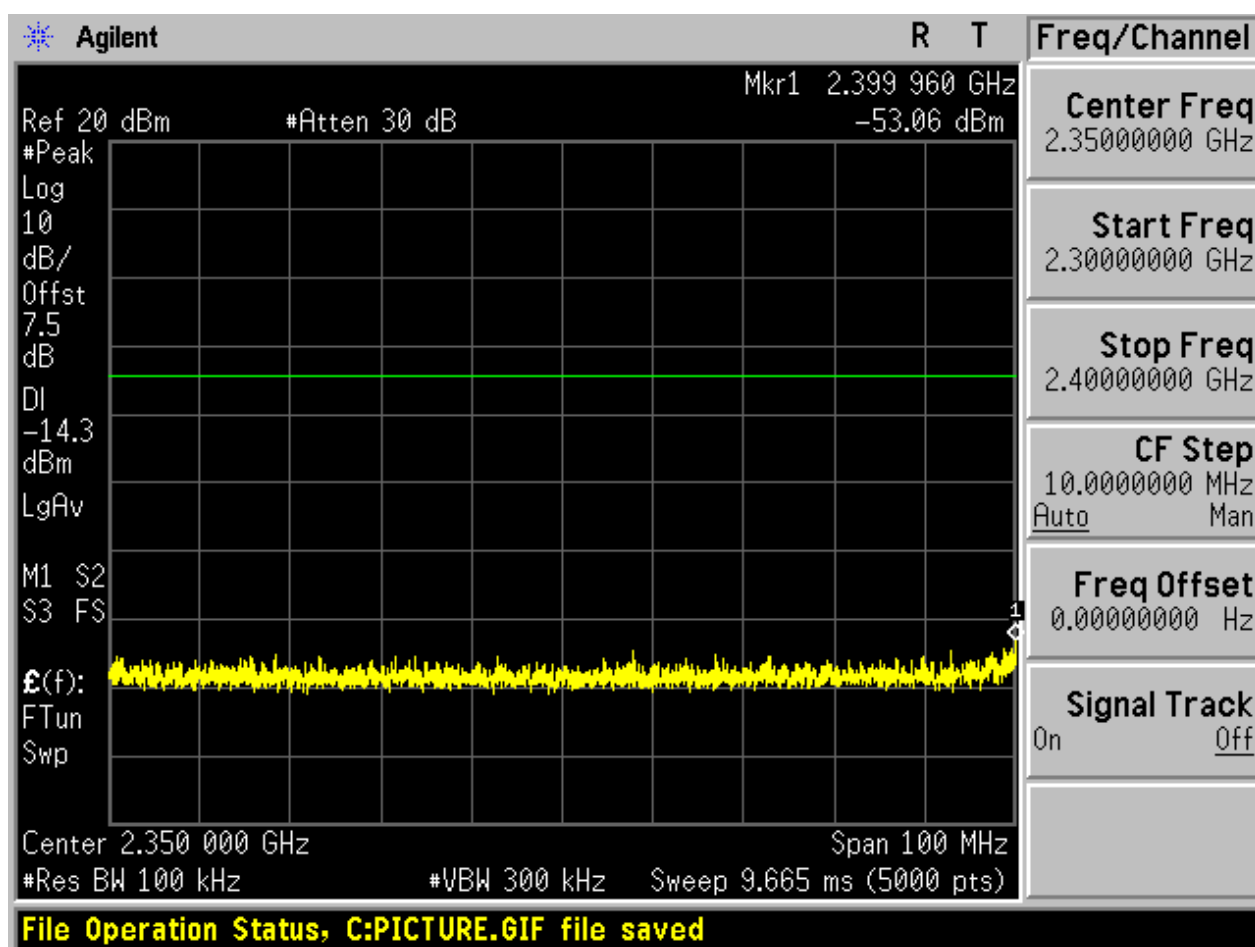


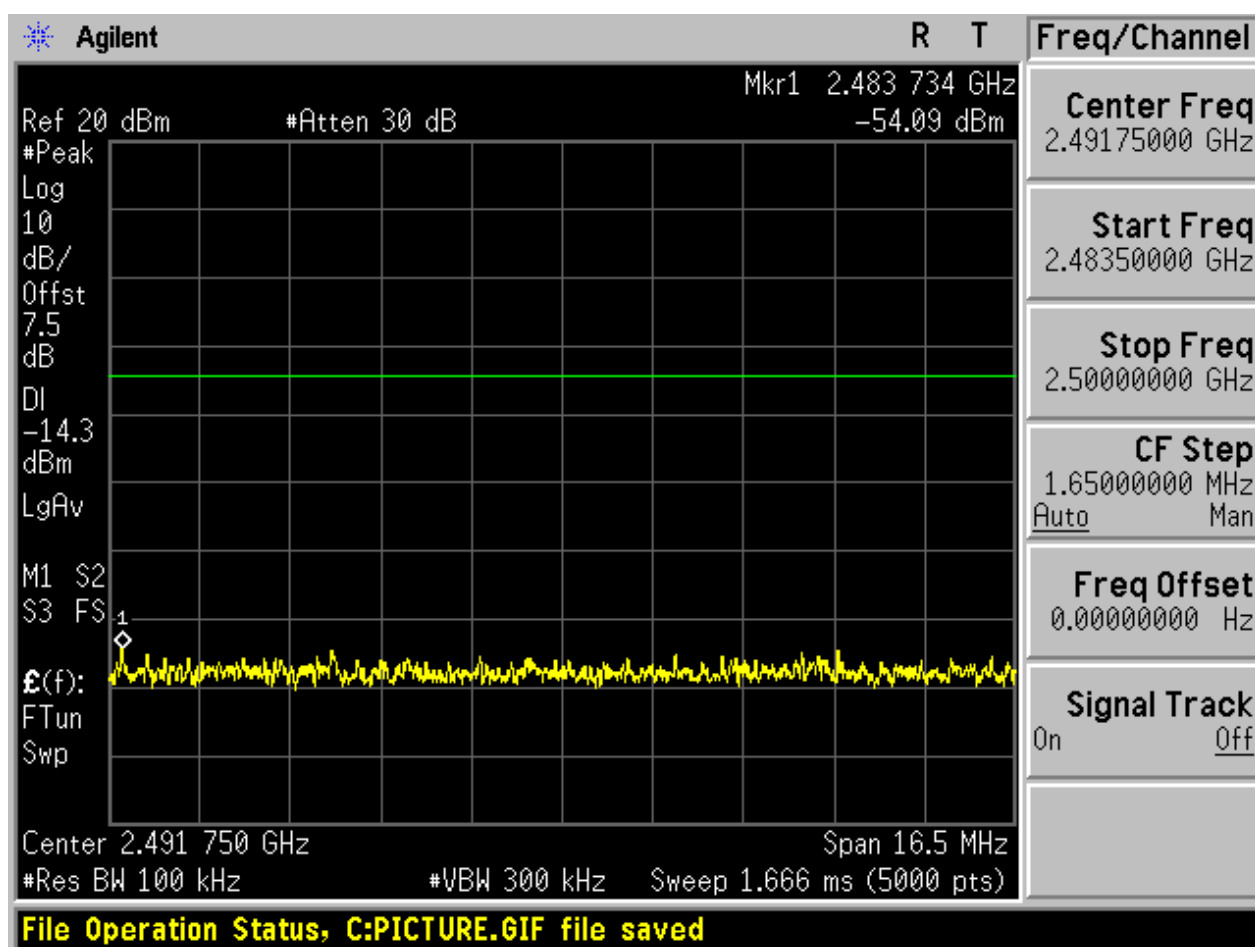
Puw

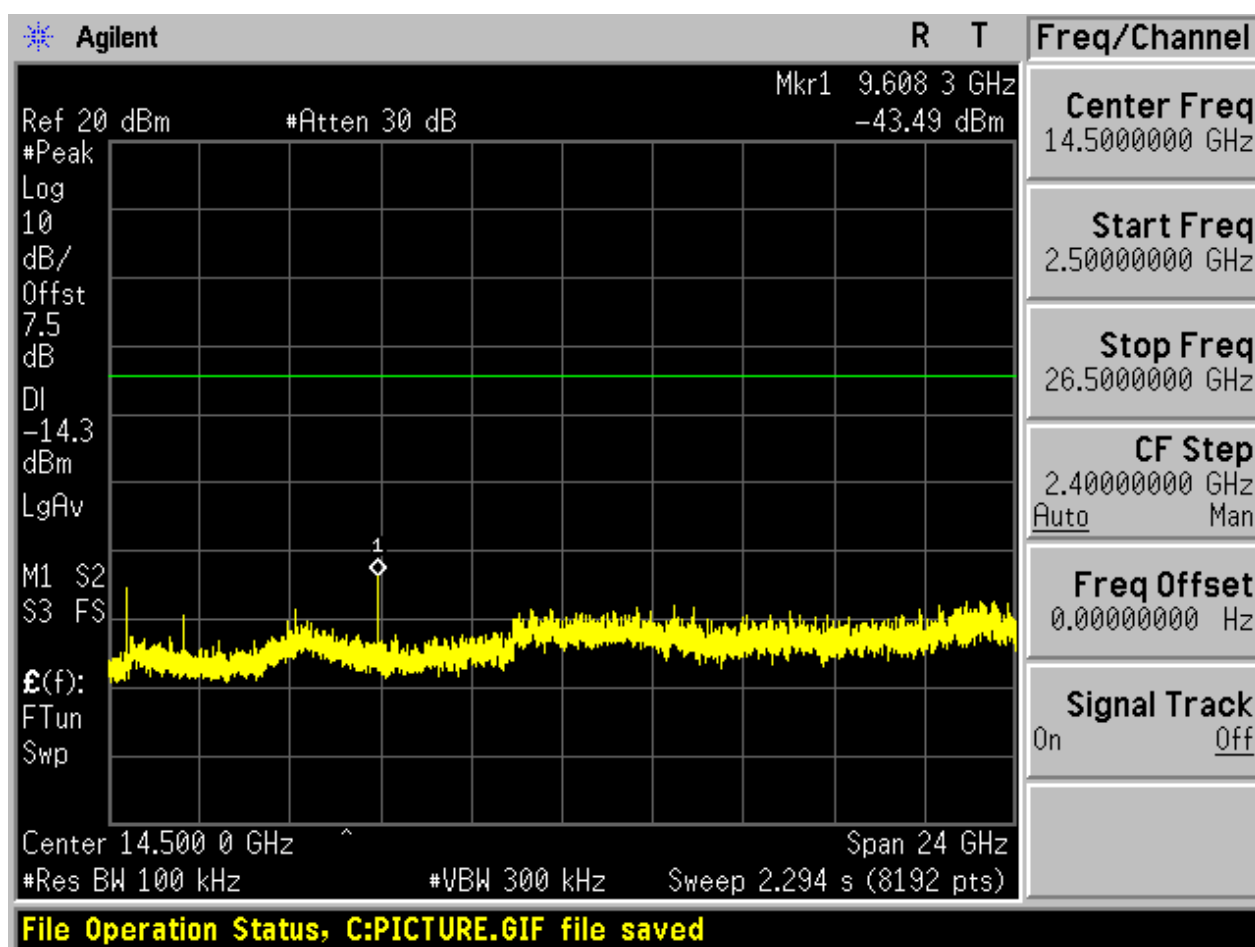








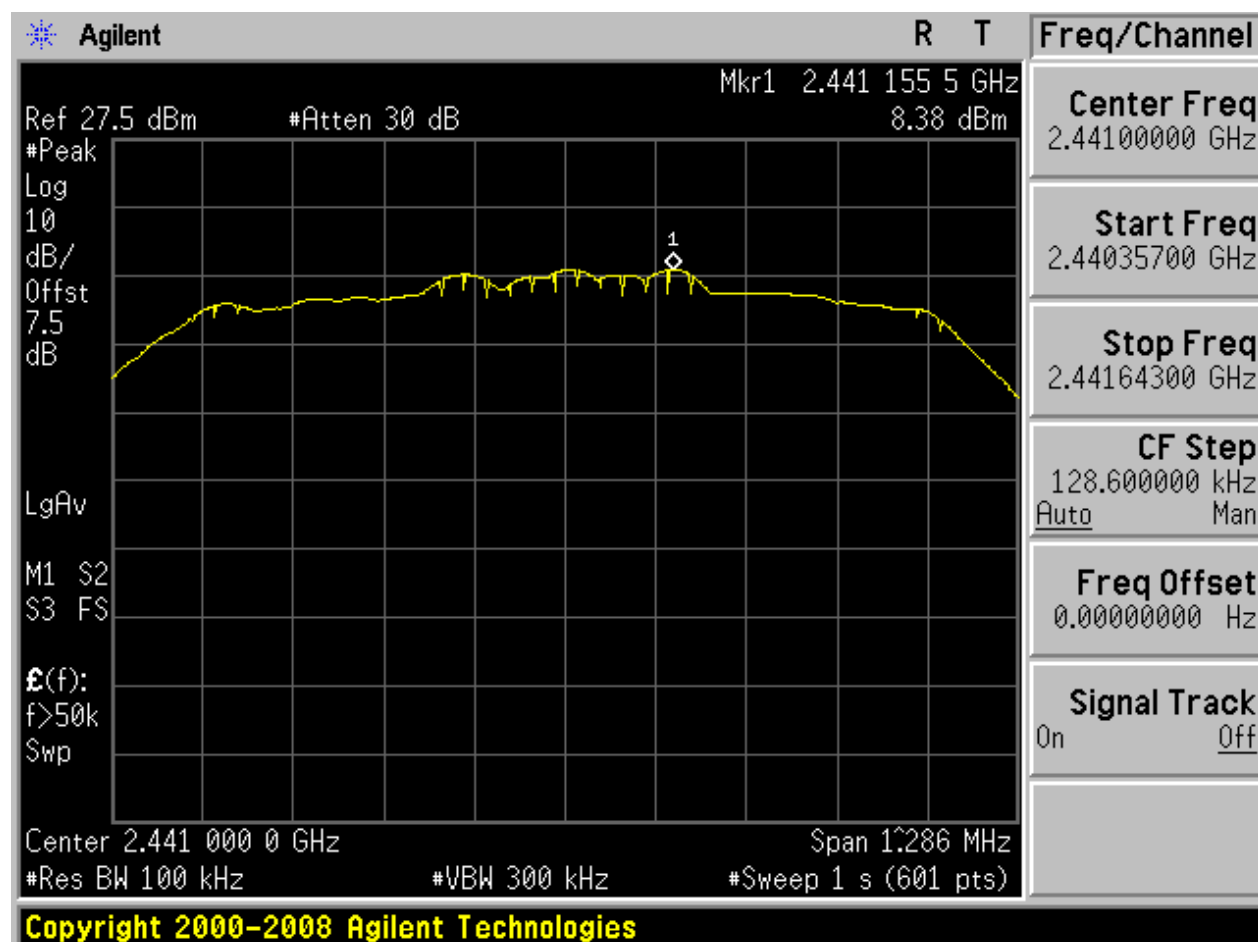




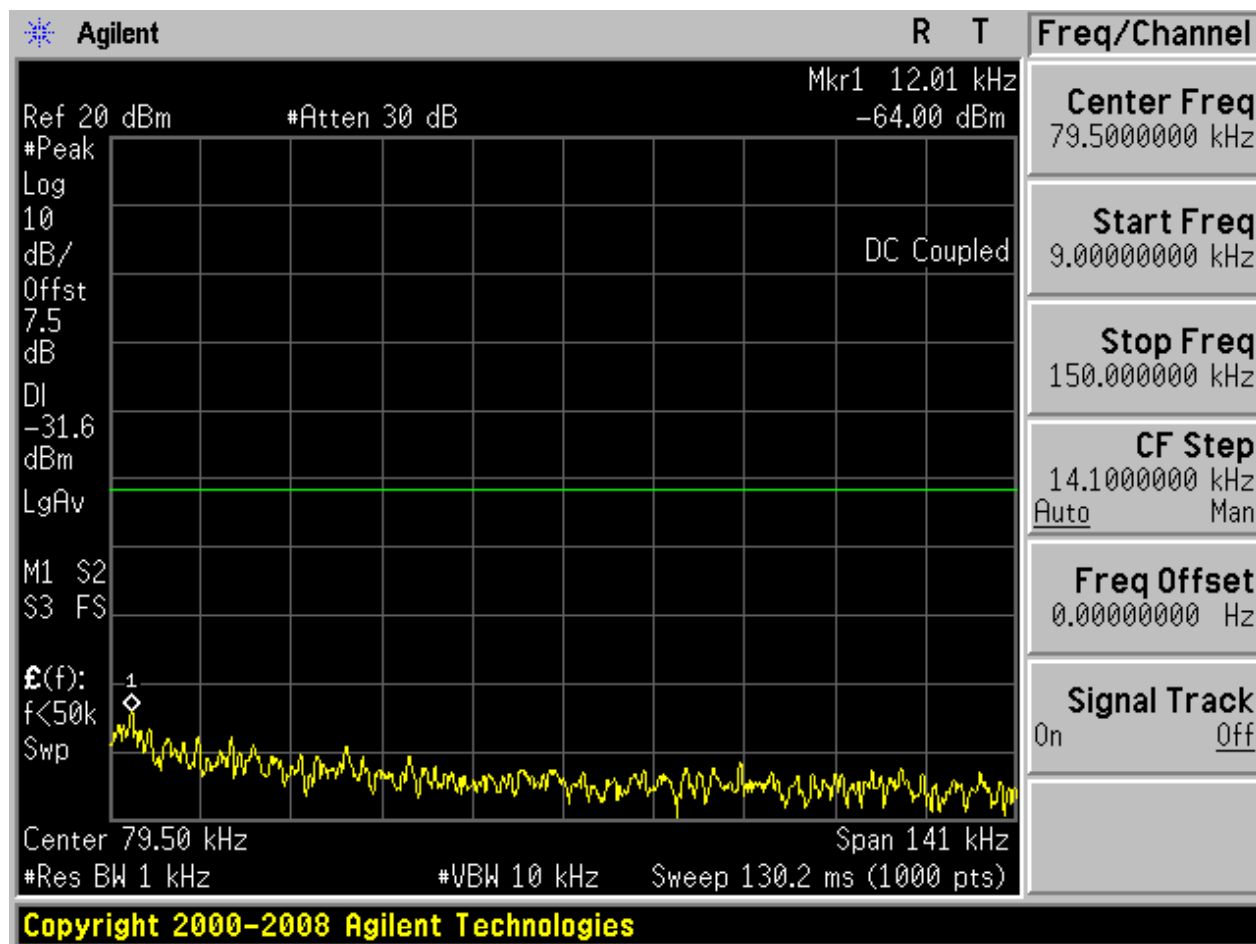


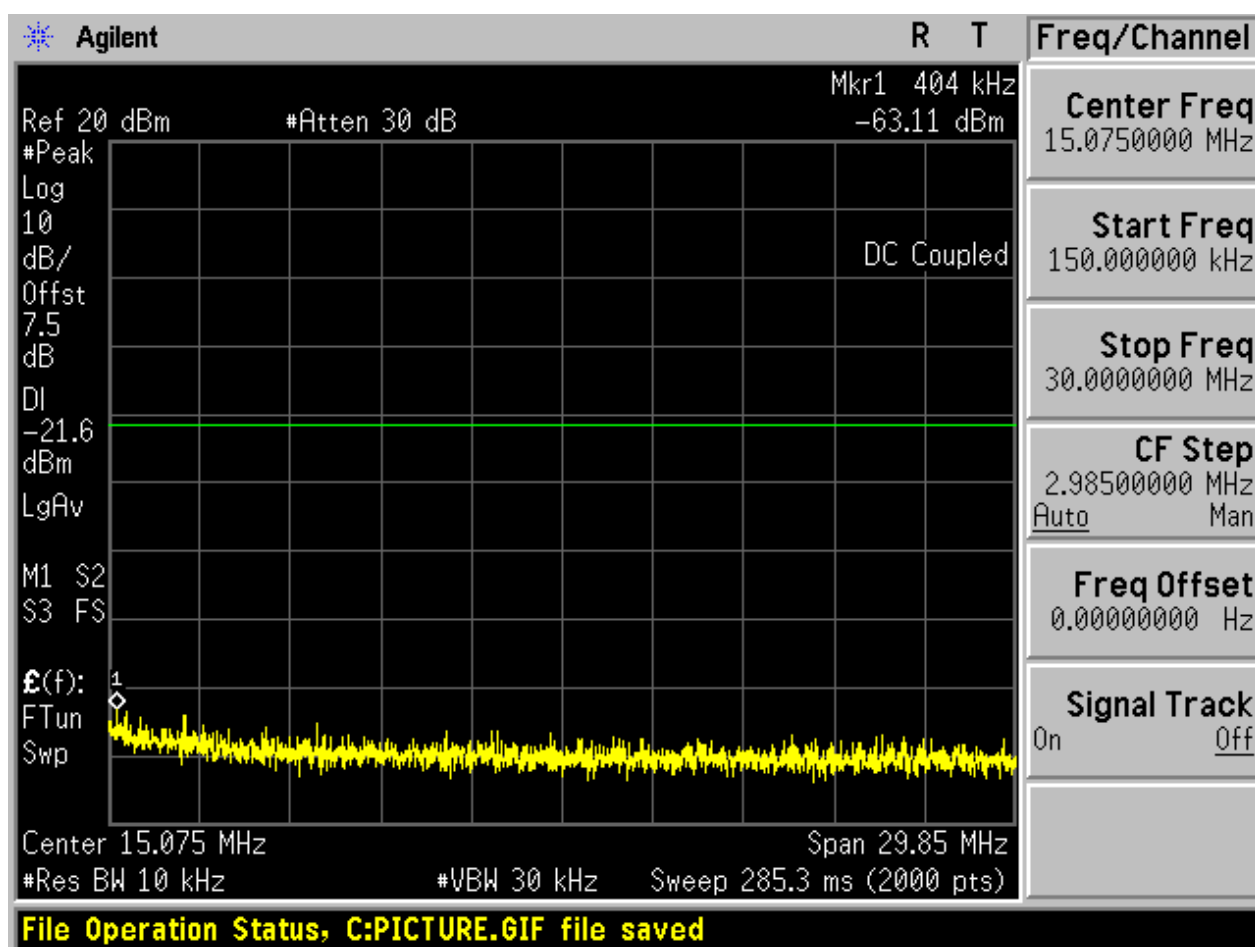
2.5 TM2_2DH5_Ch39

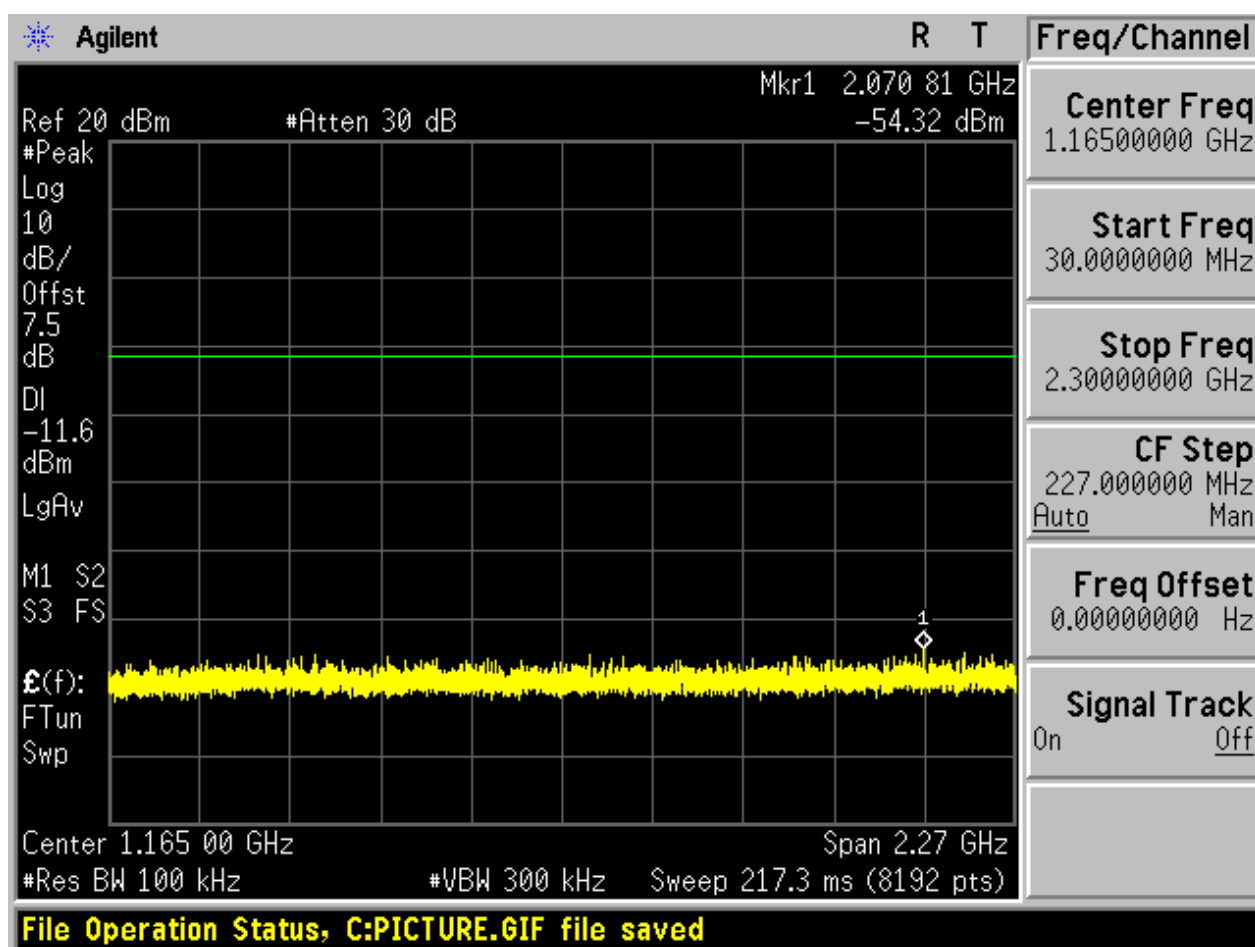
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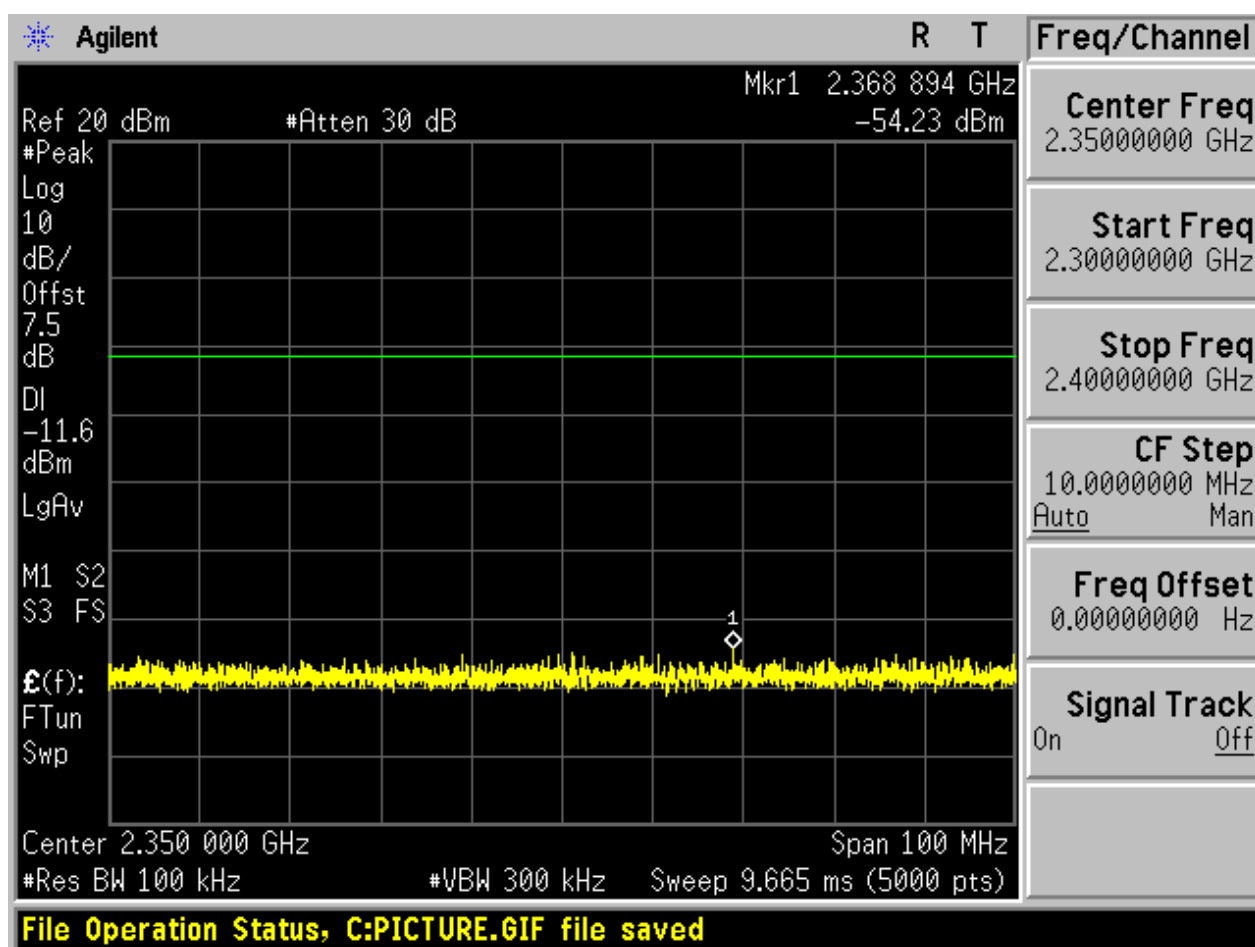


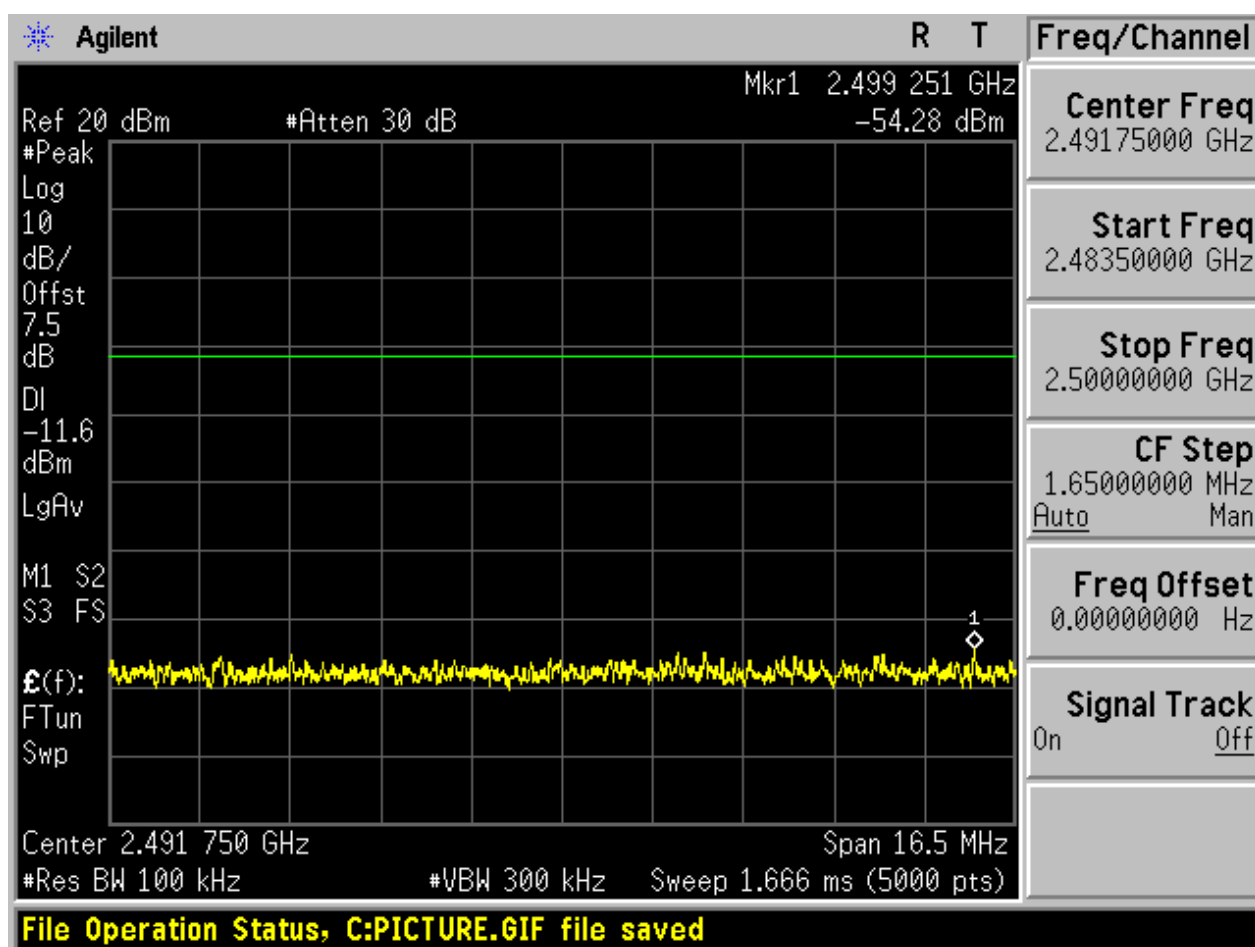
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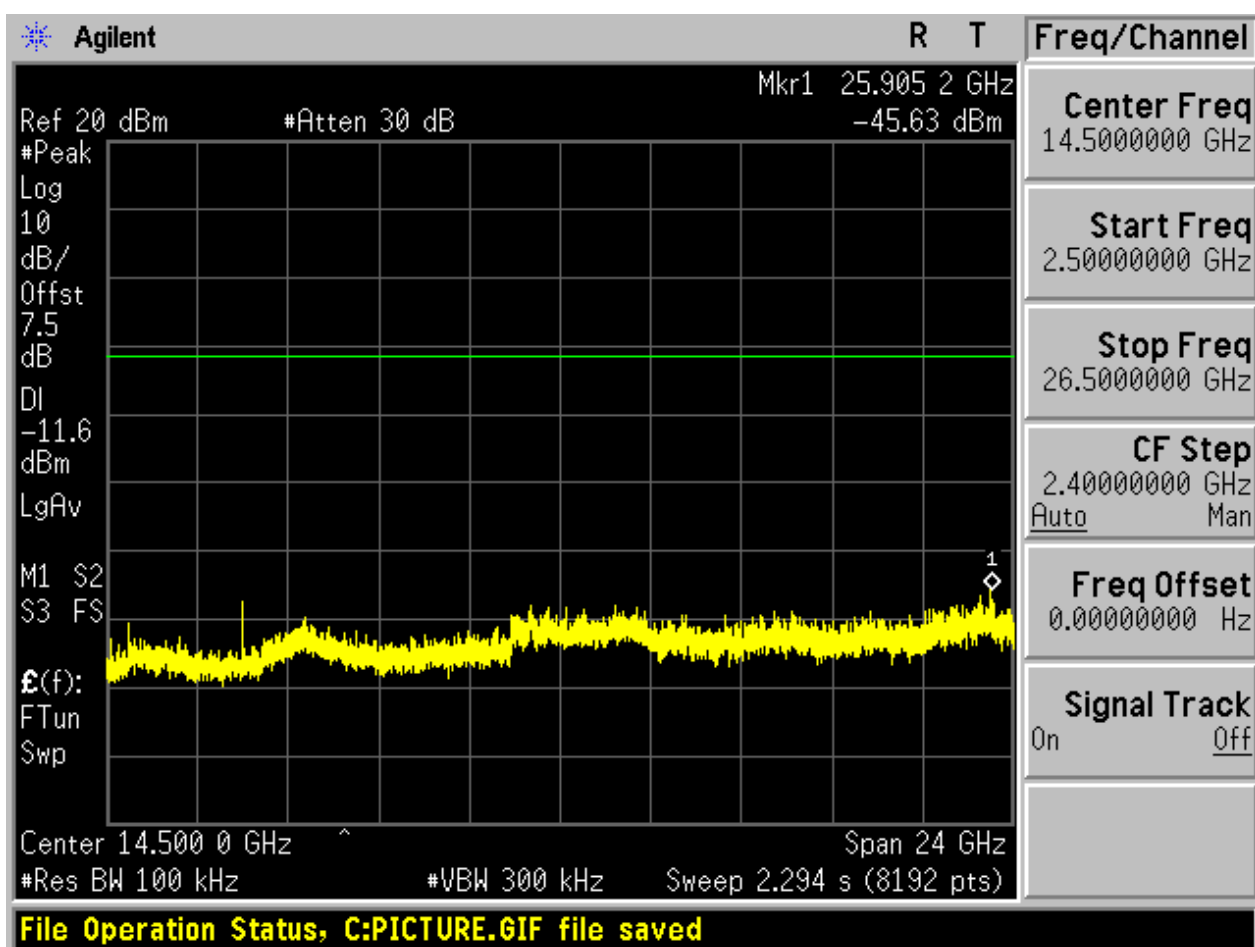






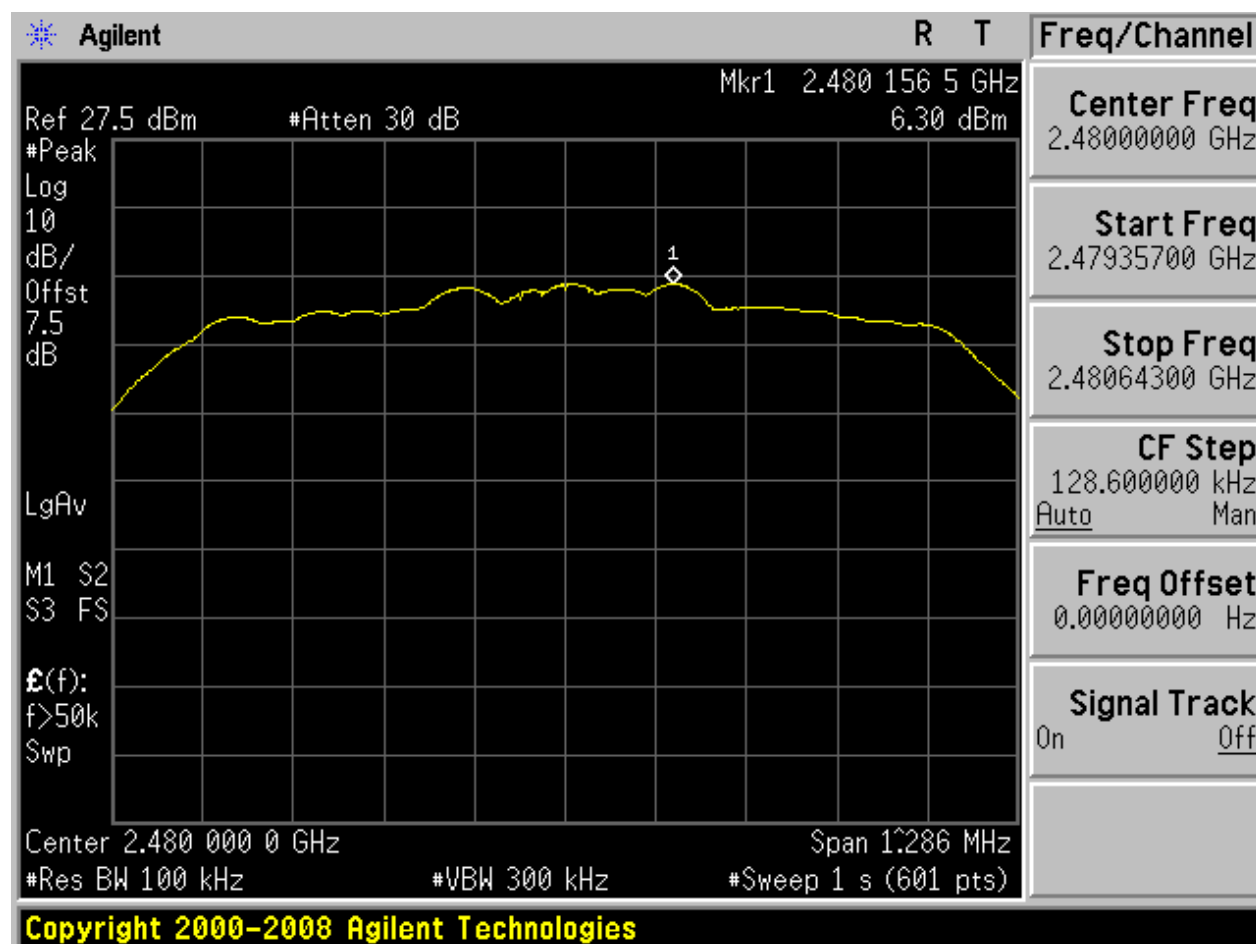




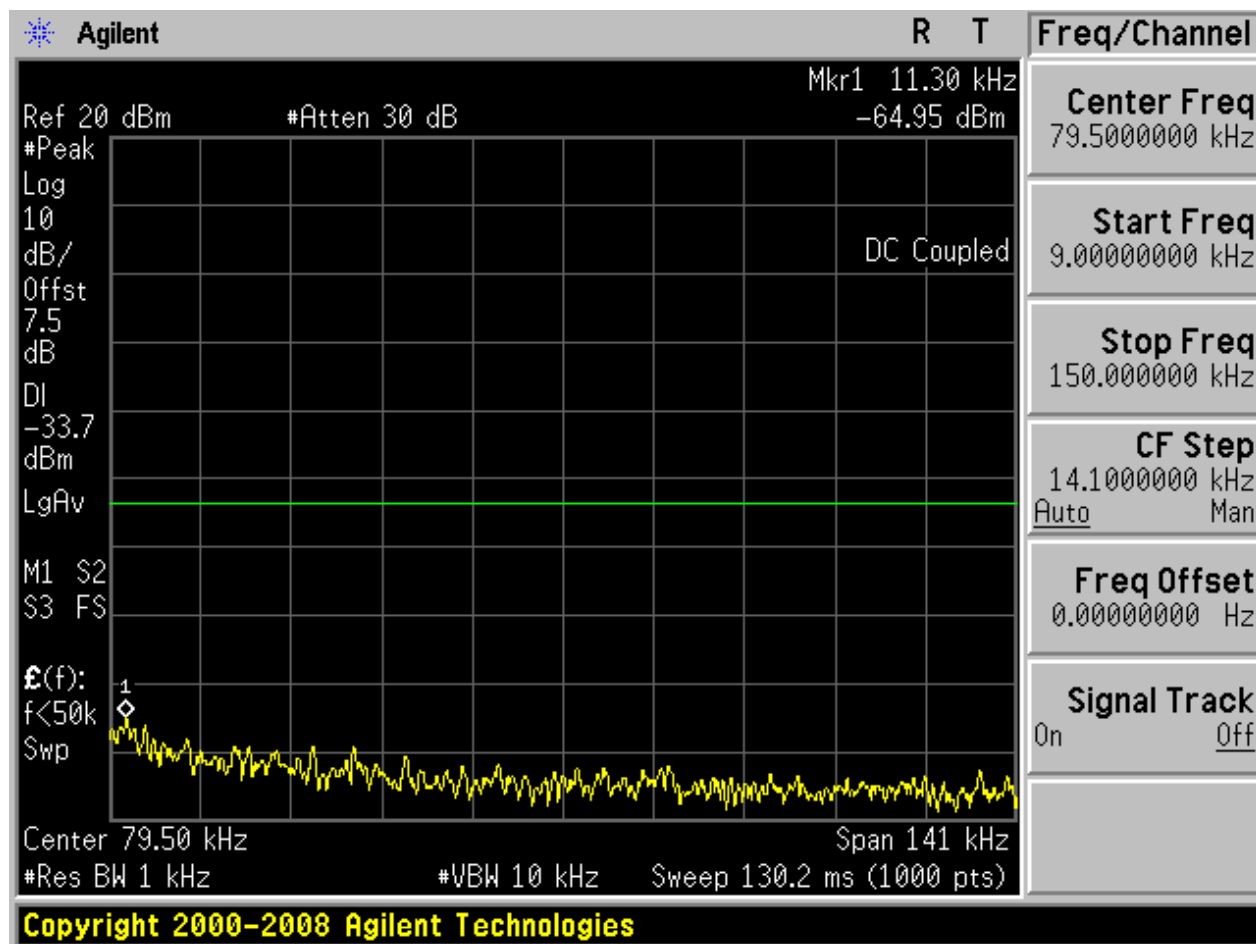


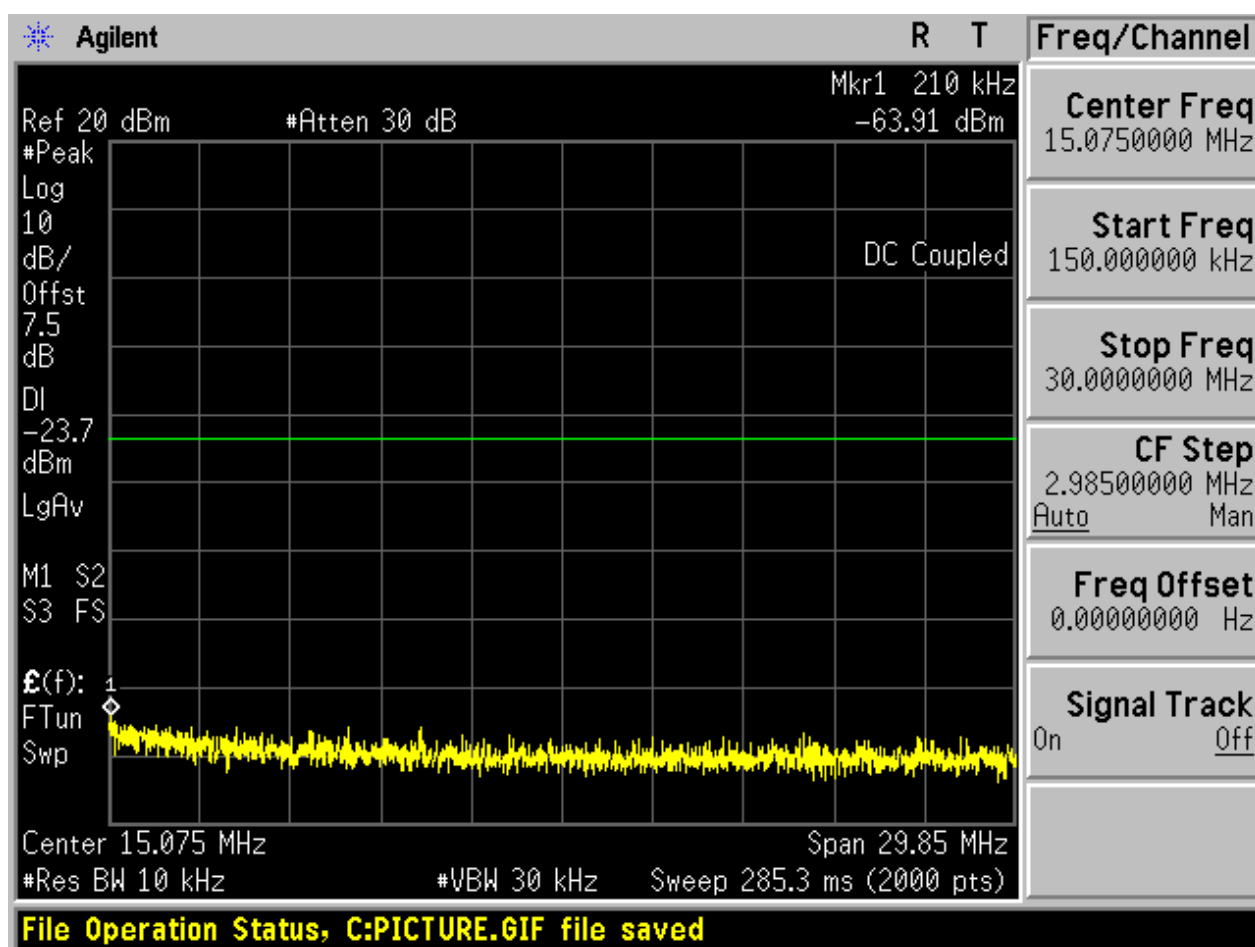
2.6 TM2_2DH5_Ch78

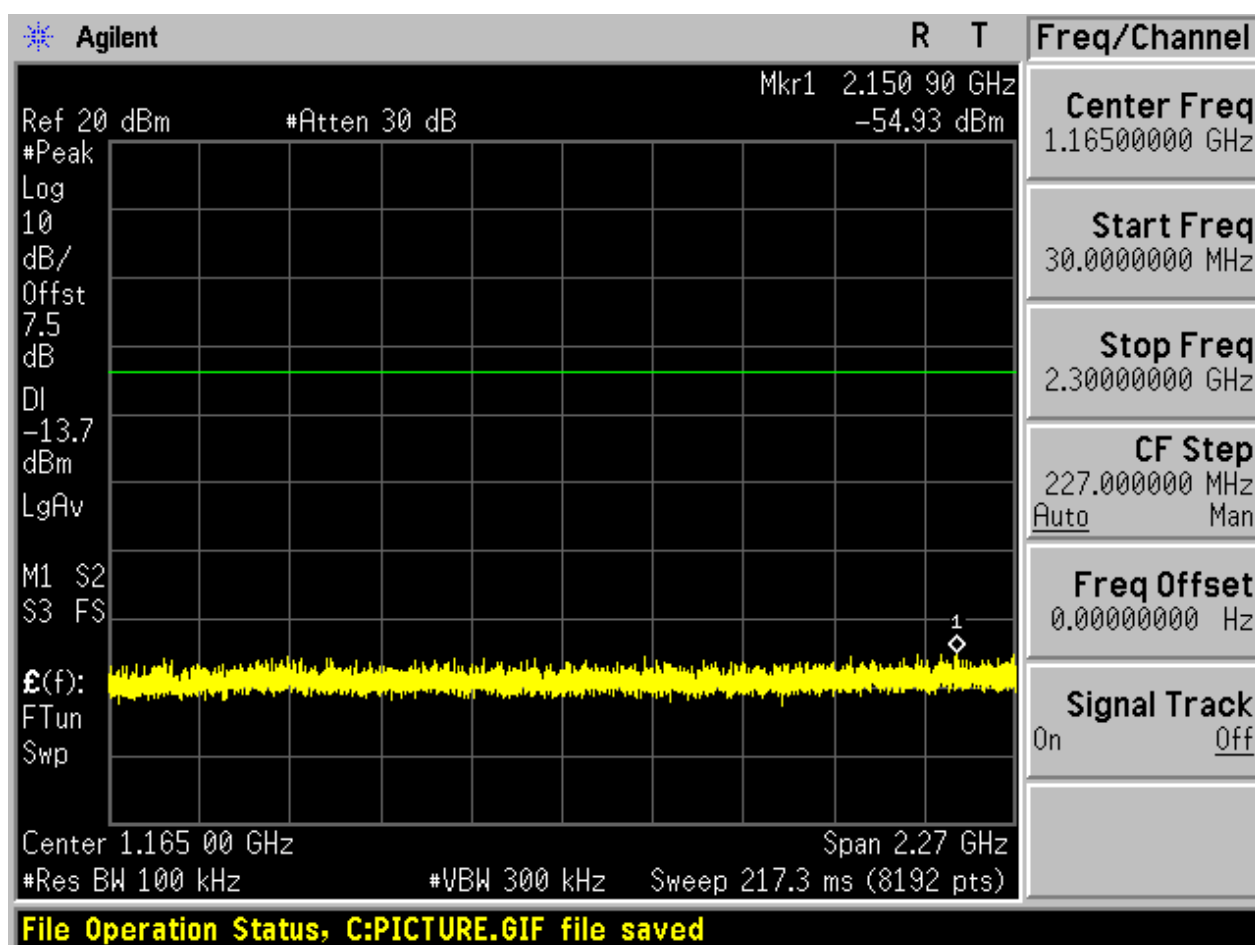
Pref

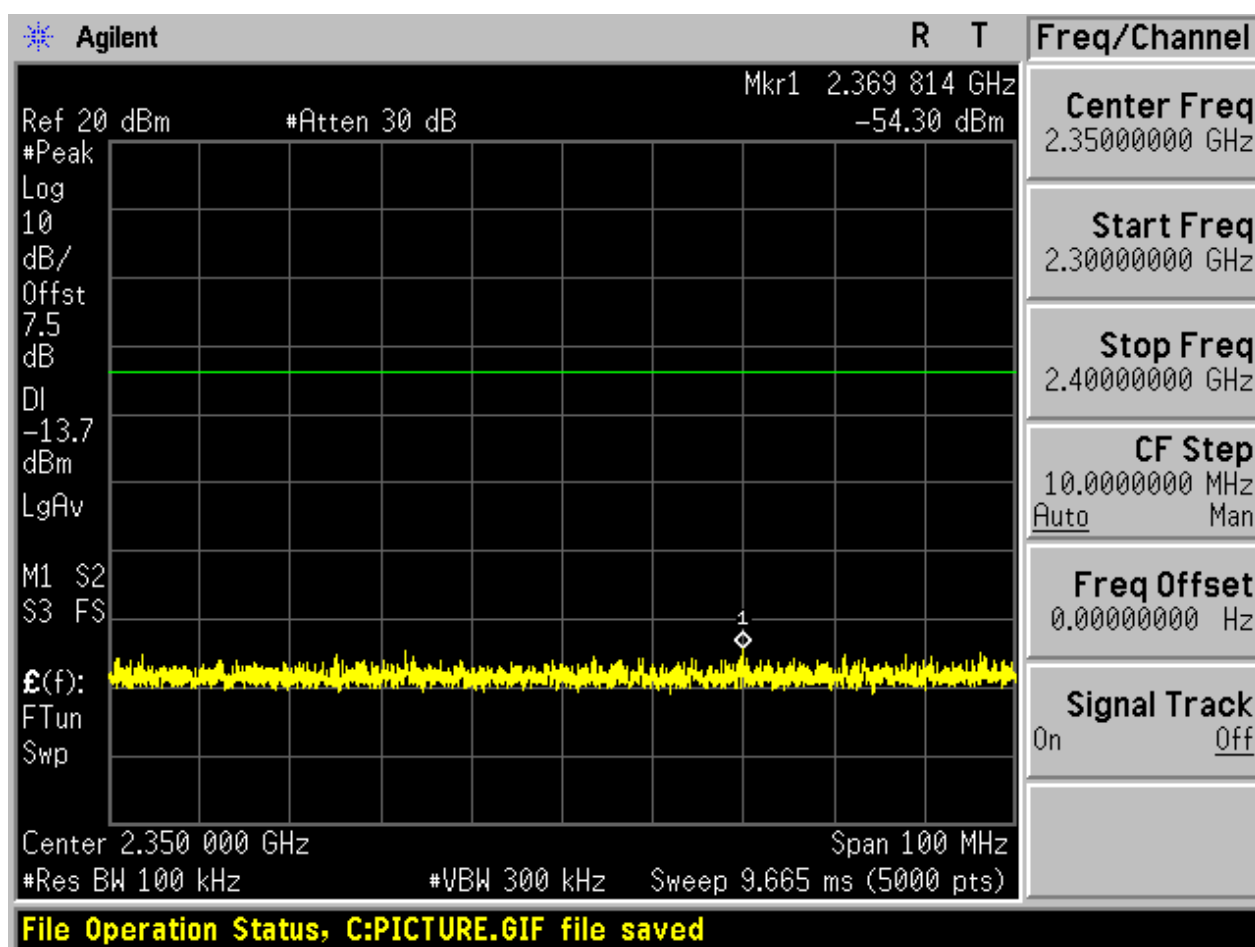


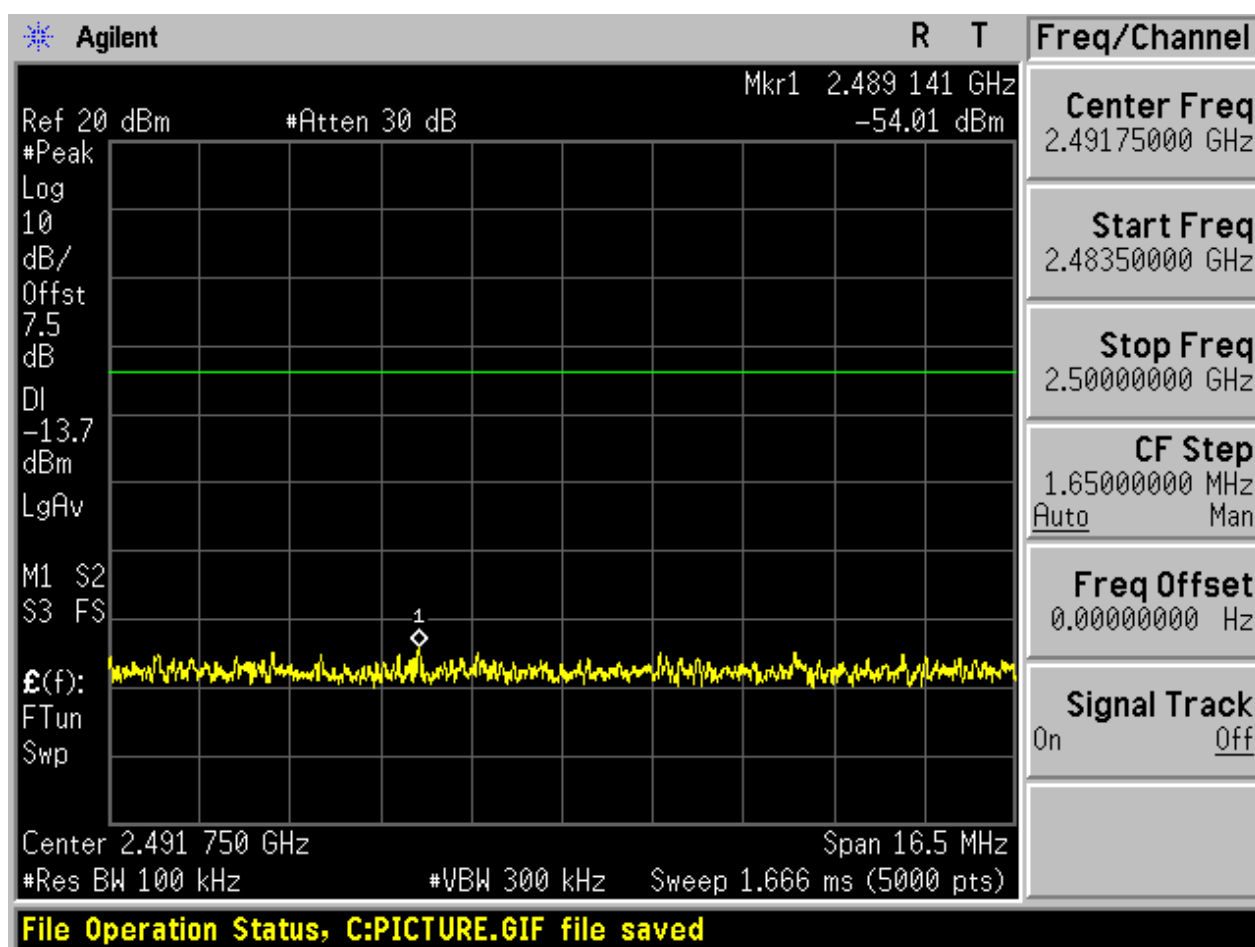
Puw

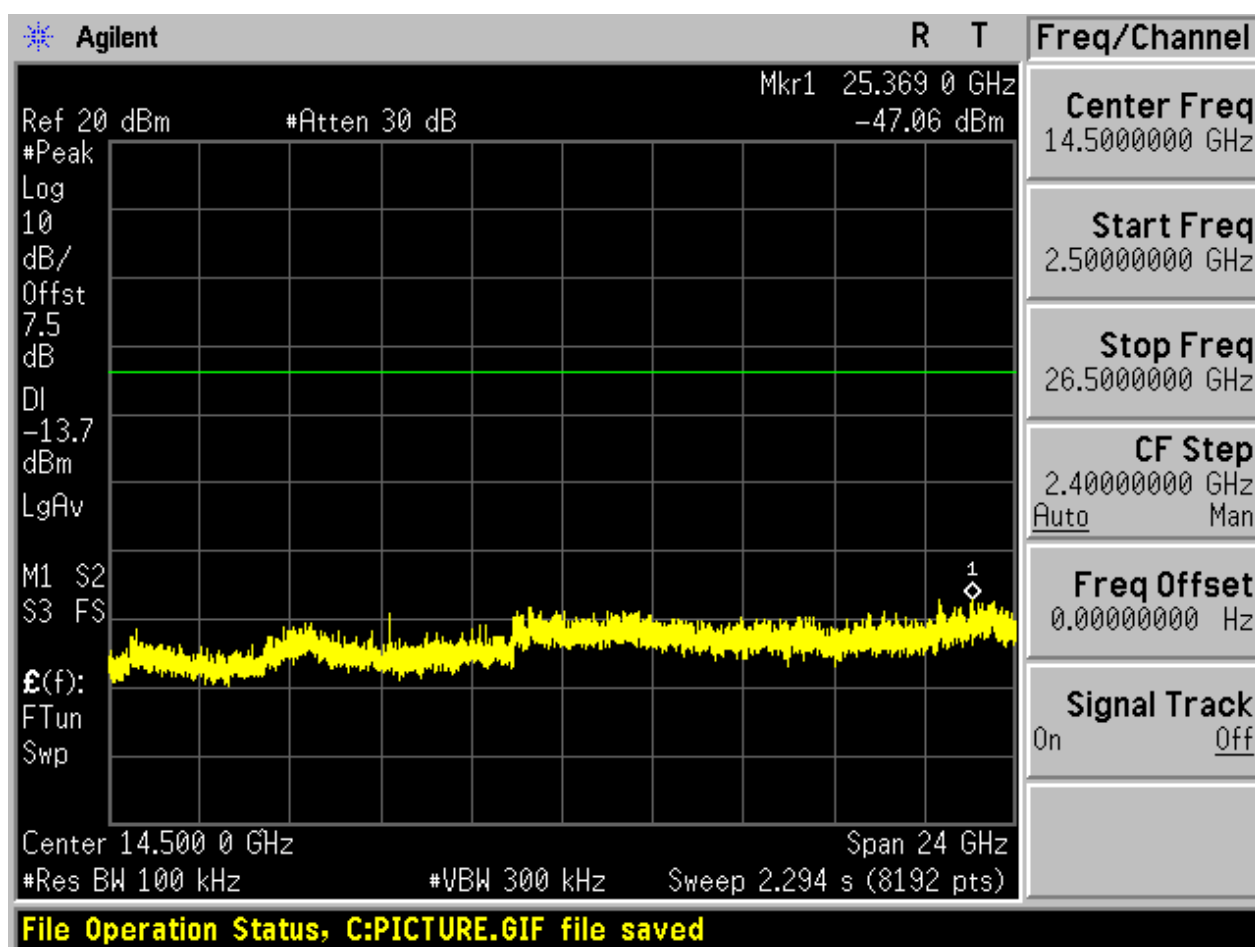








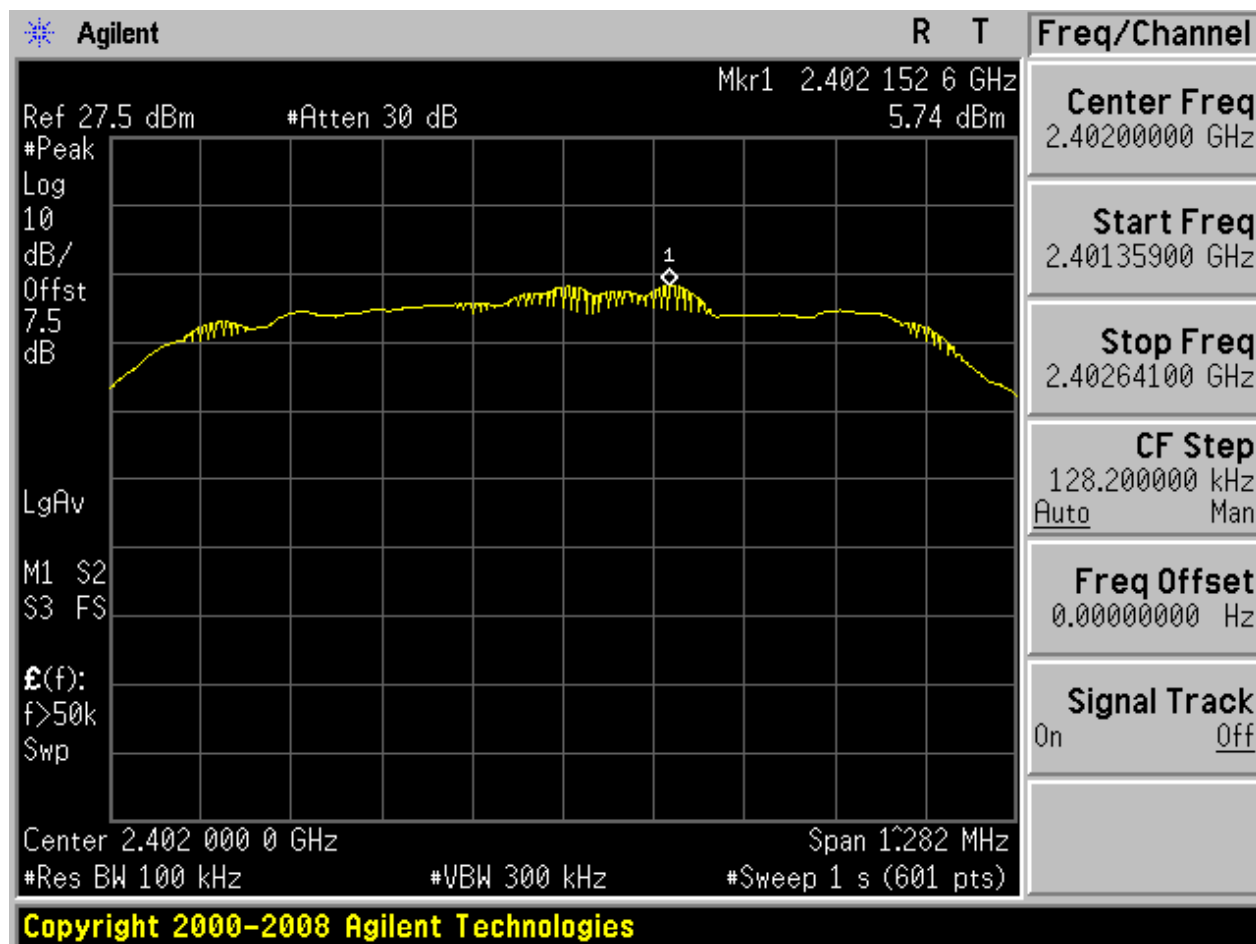






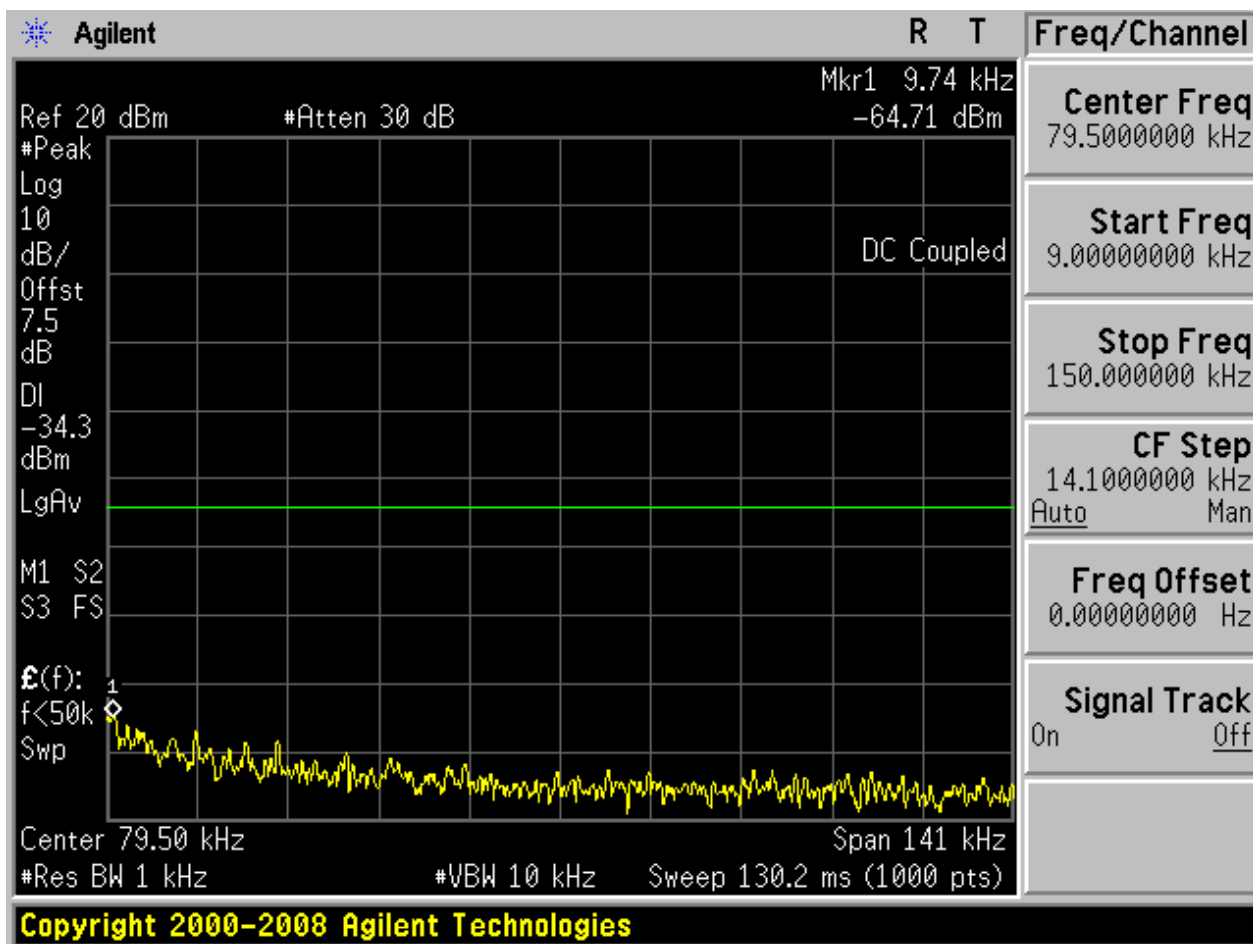
2.7 TM3_3DH5_Ch0

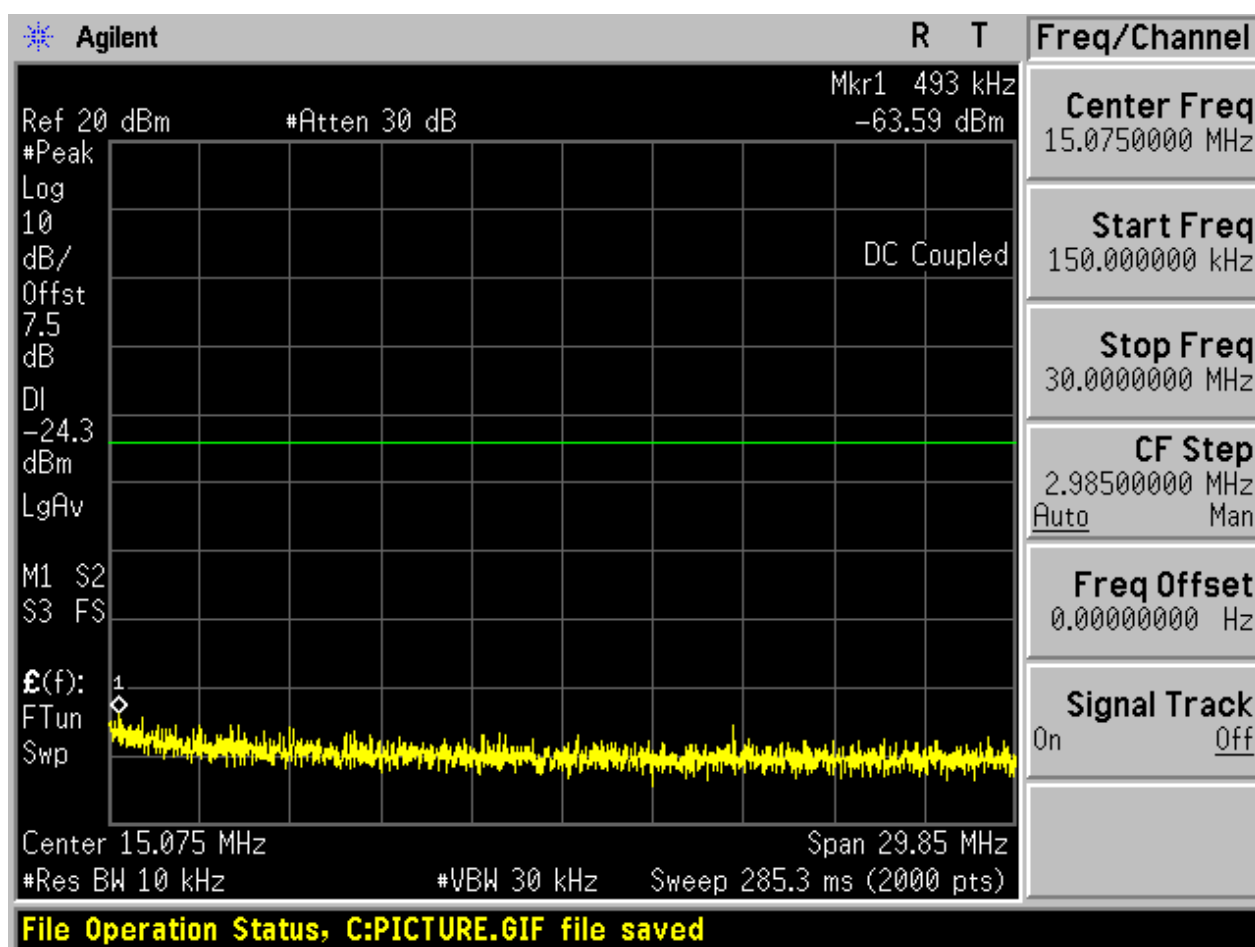
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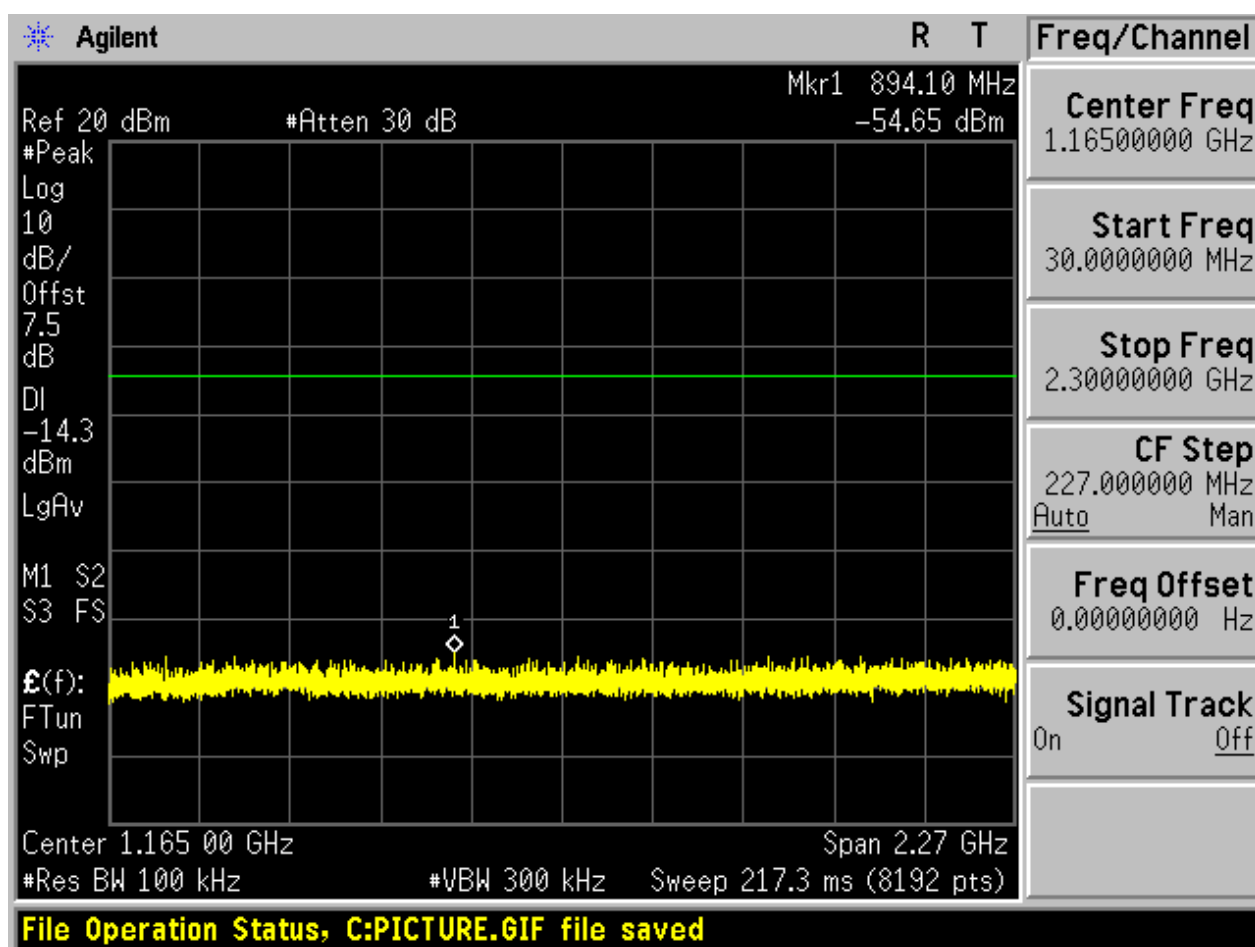


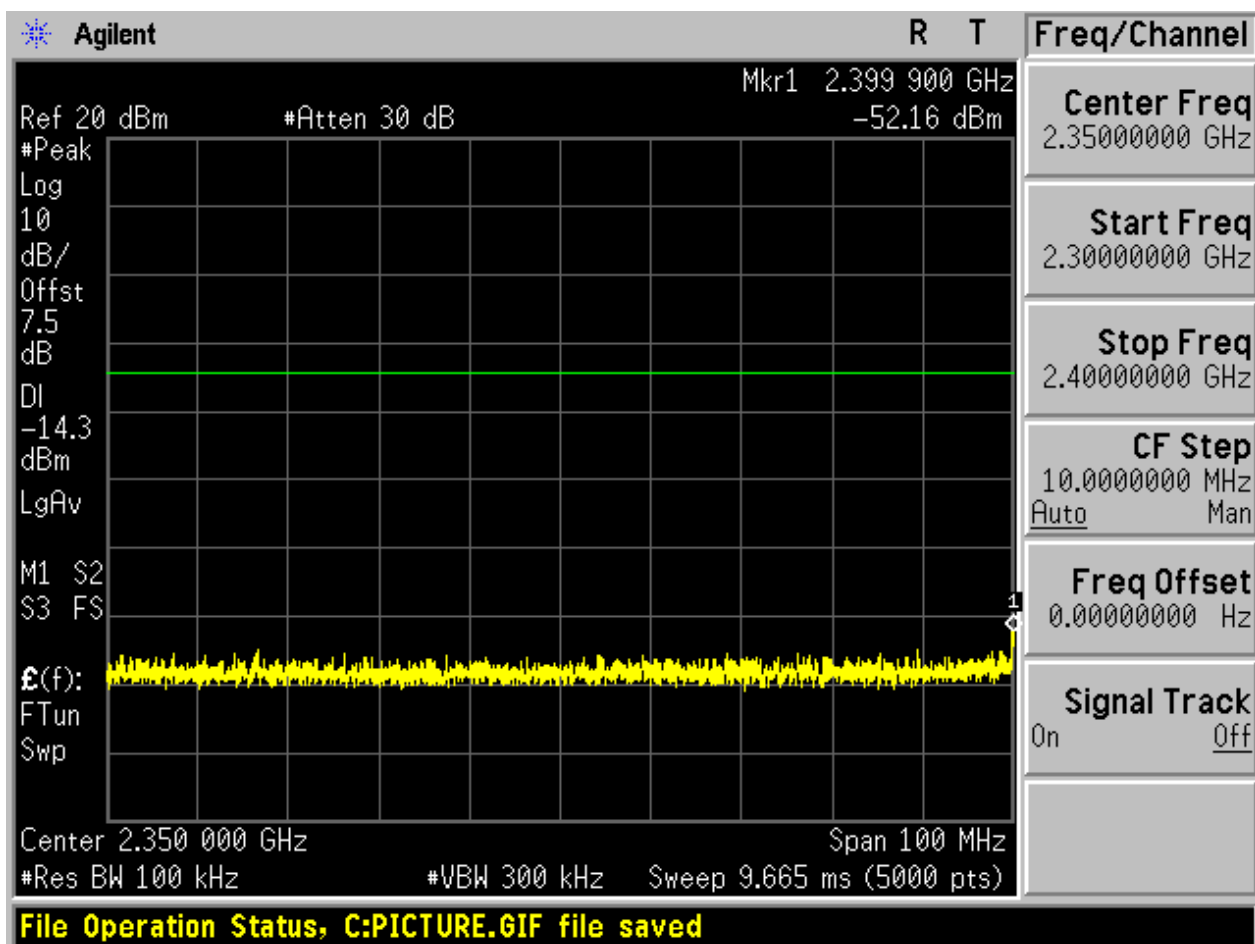


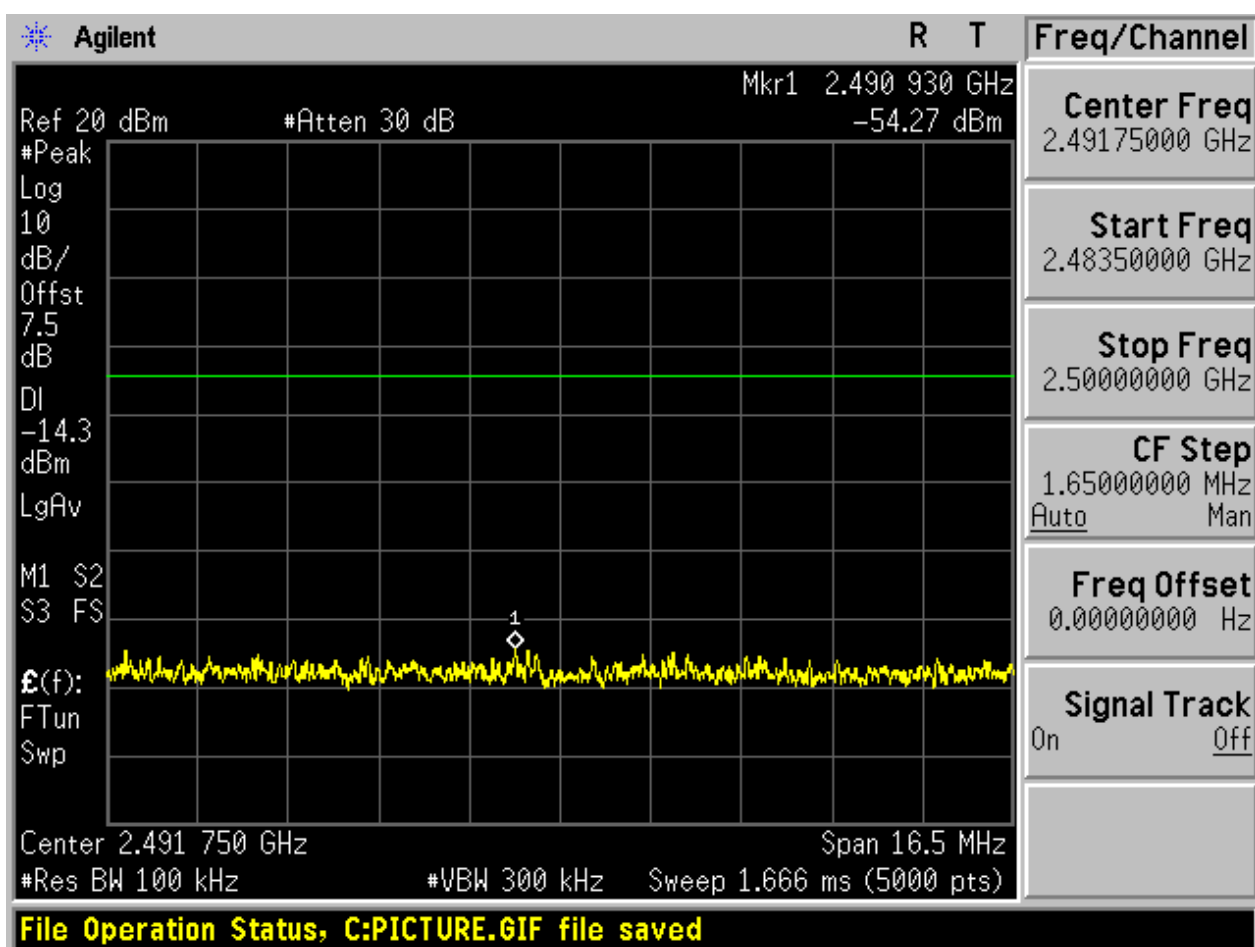
PuW

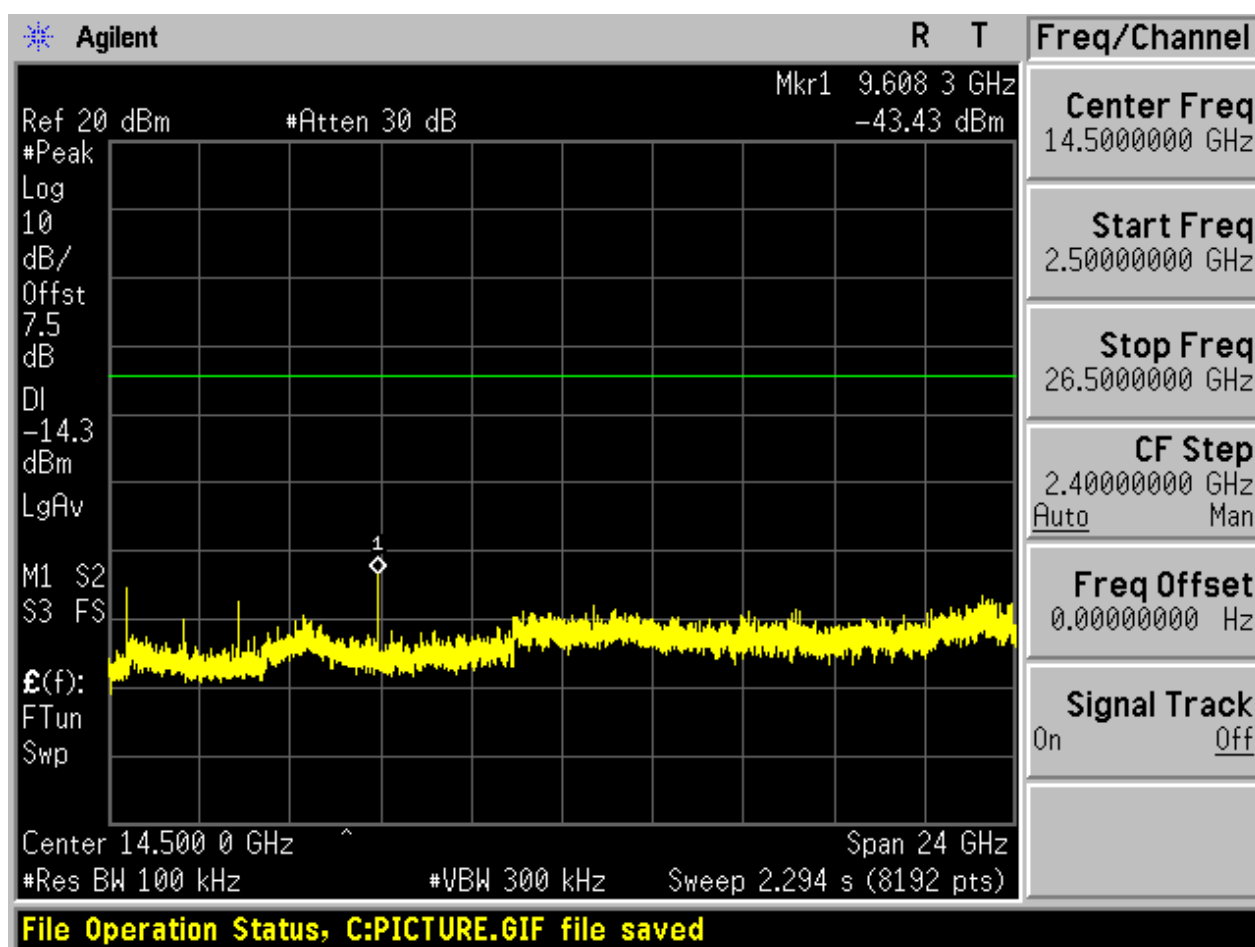








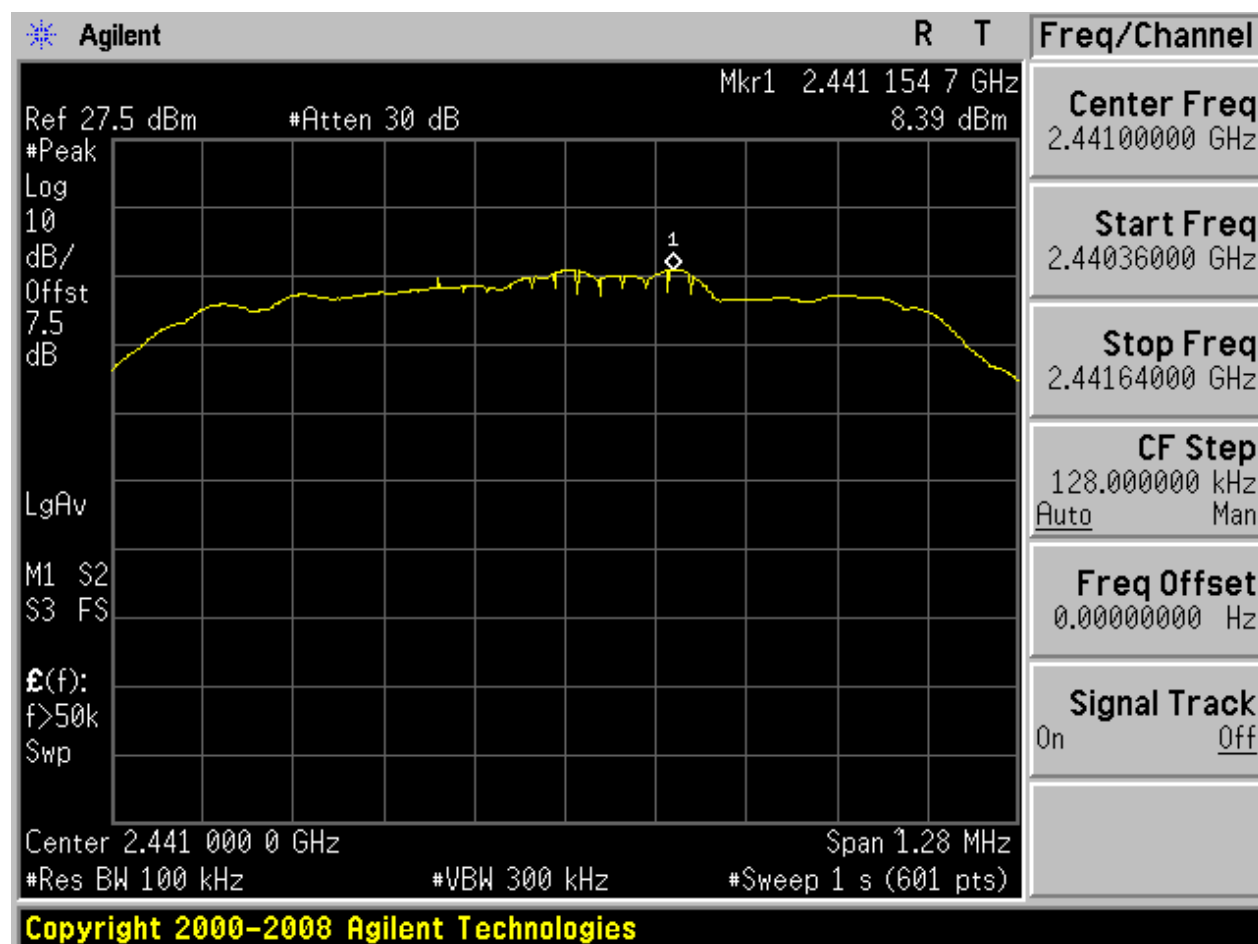






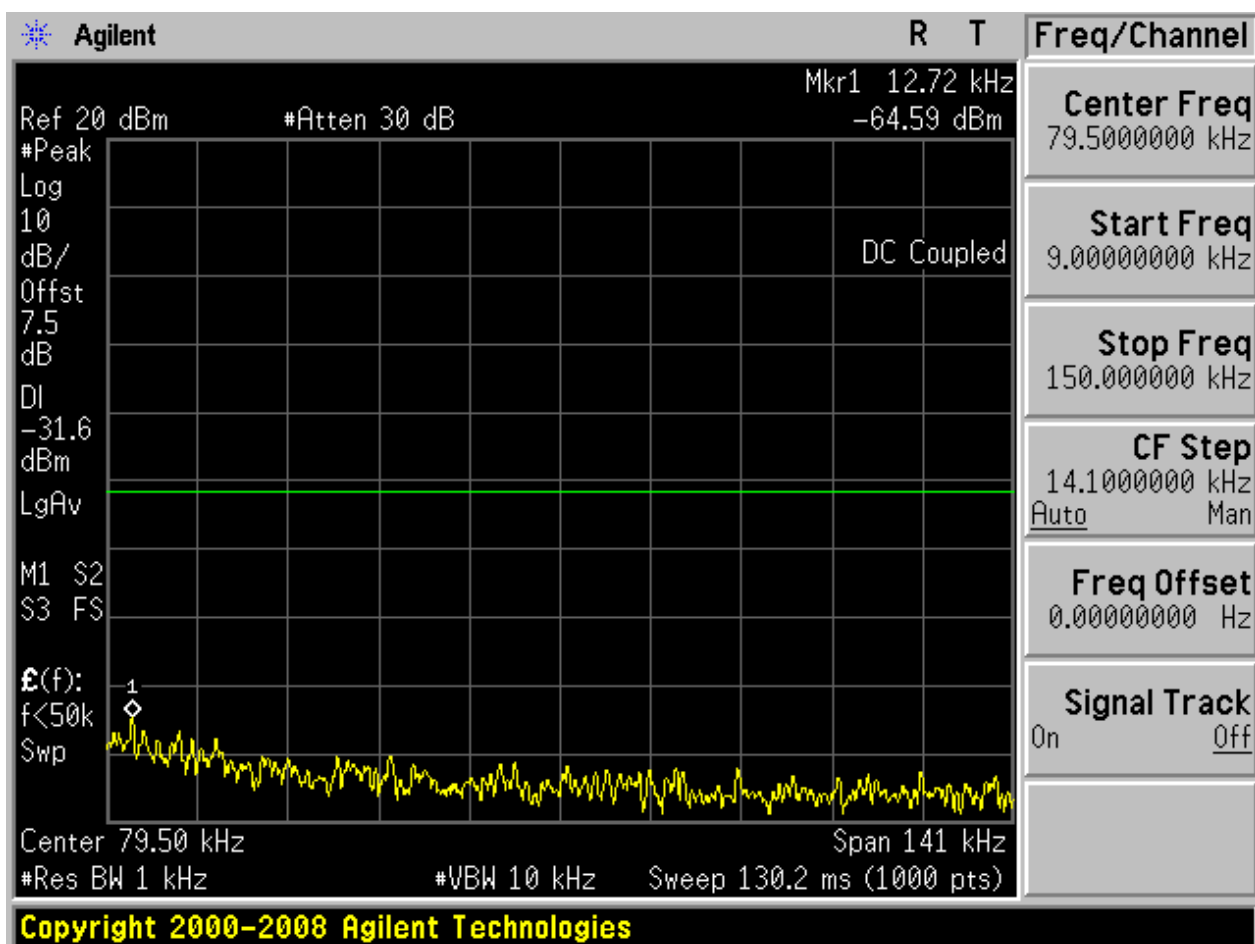
2.8 TM3_3DH5_Ch39

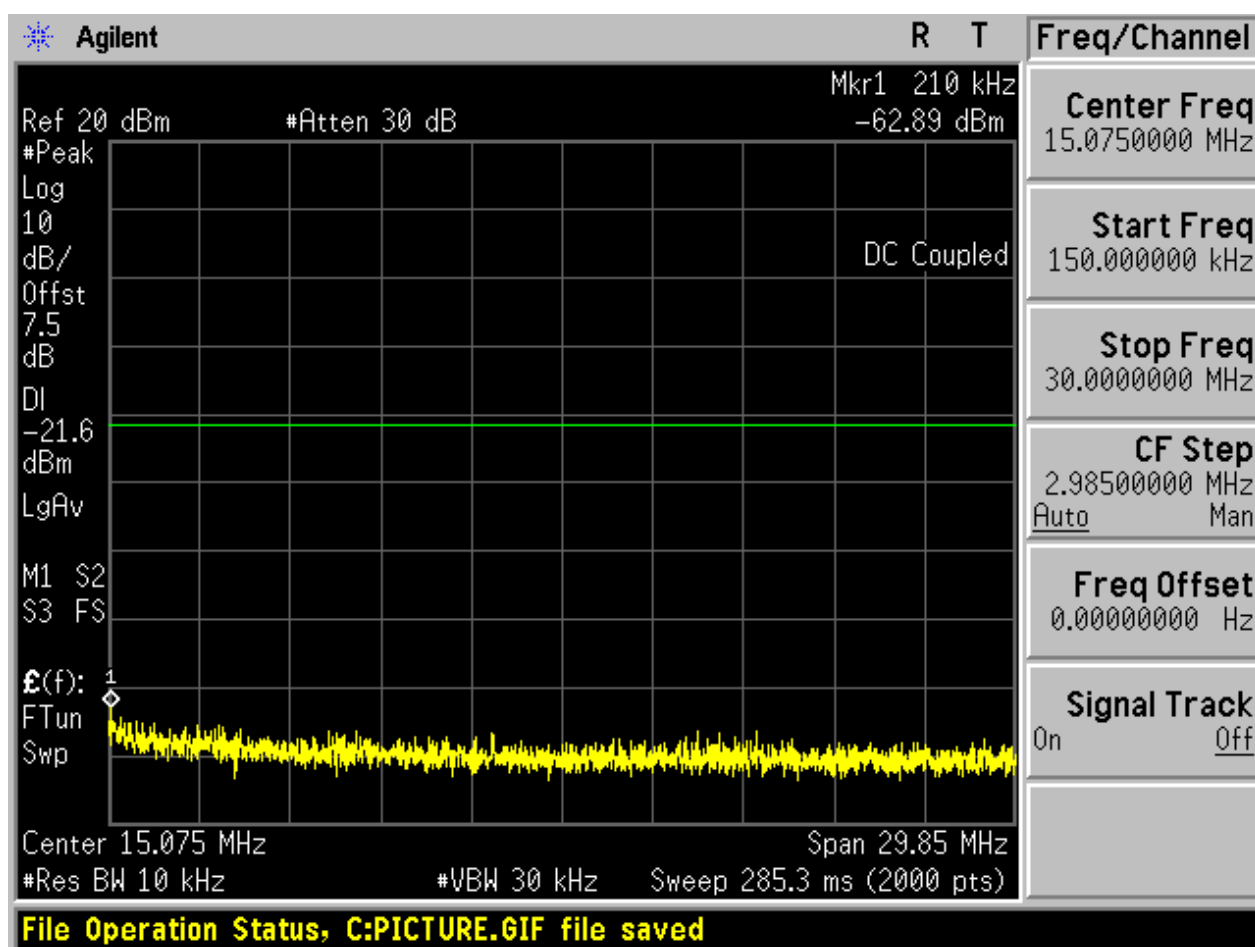
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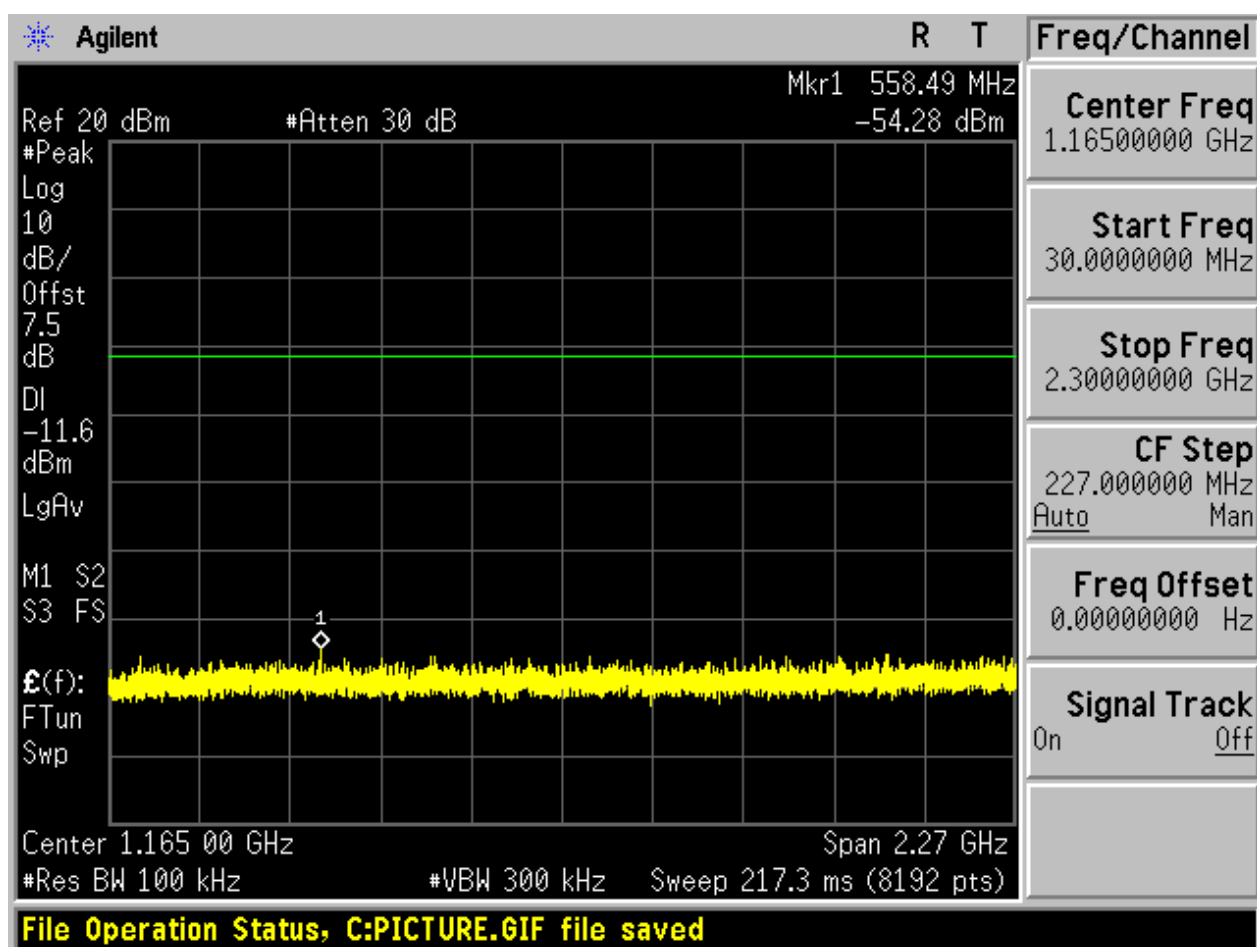


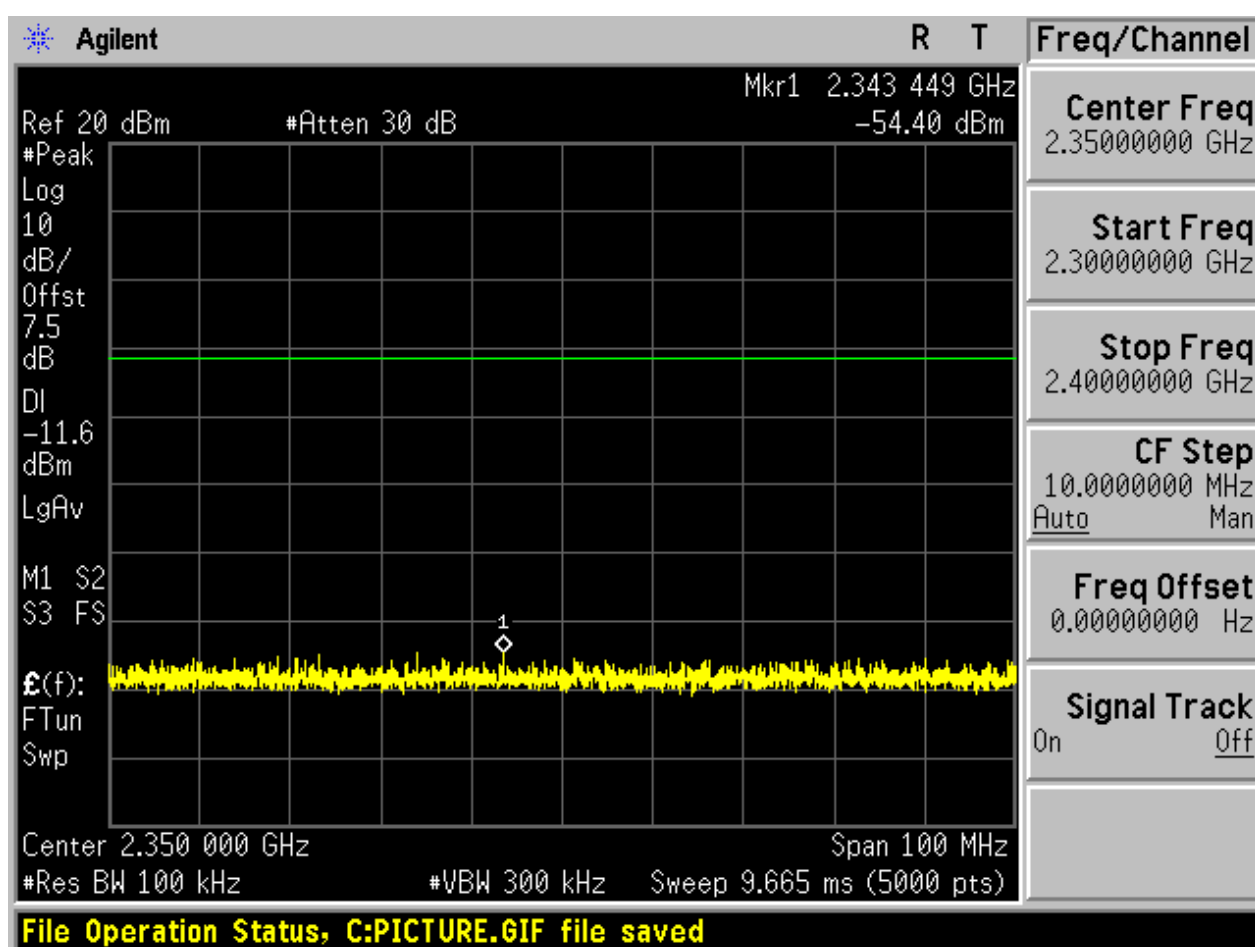


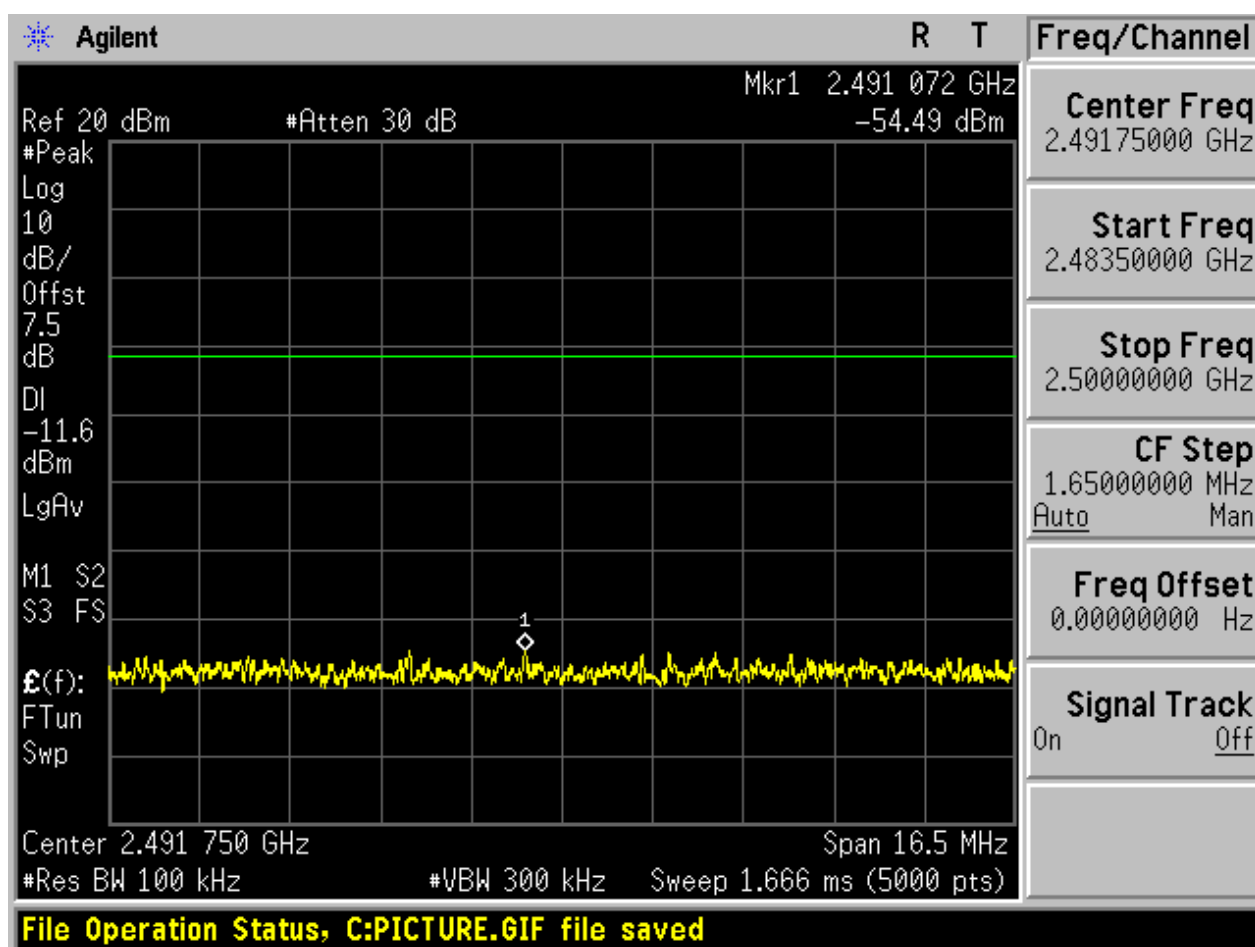
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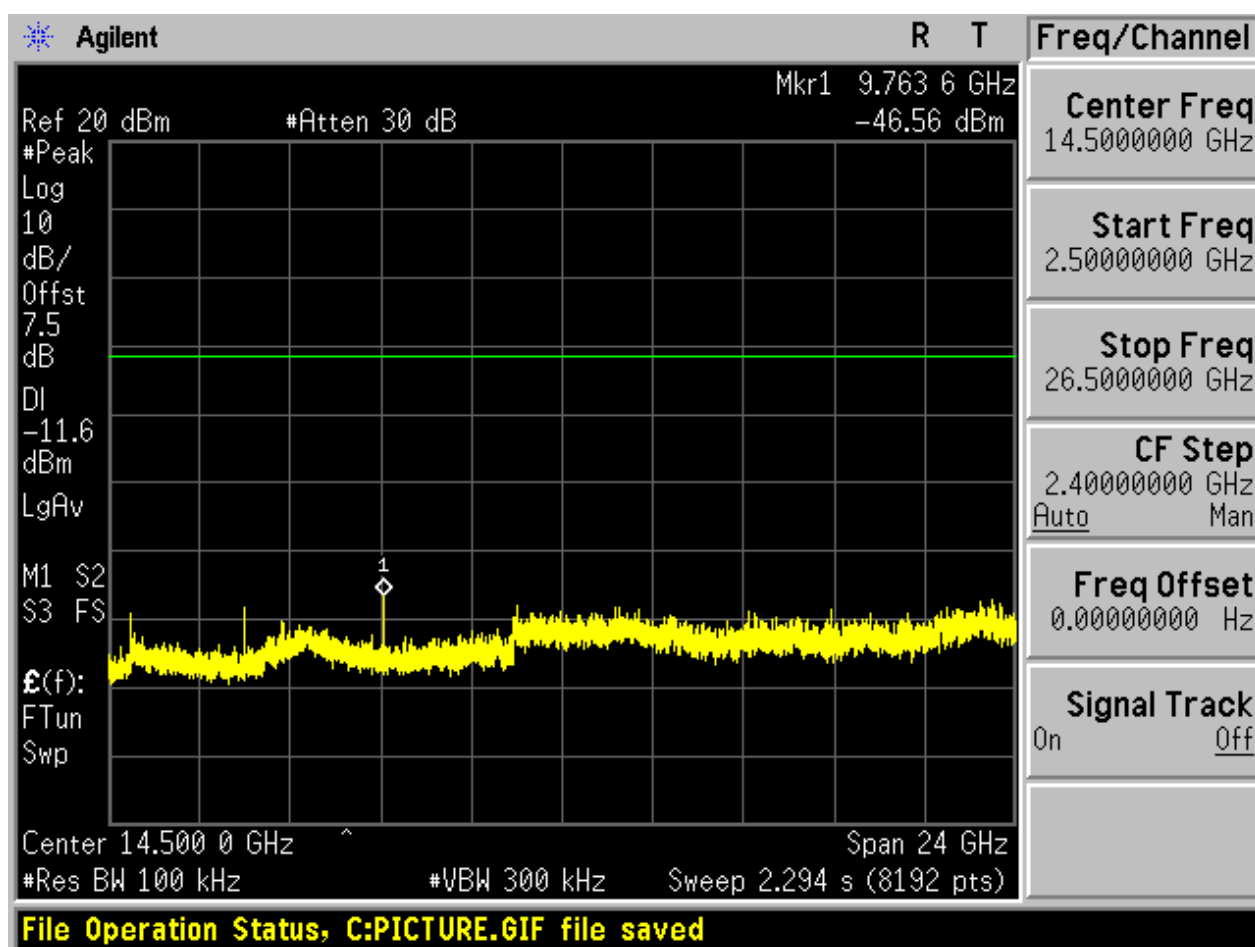








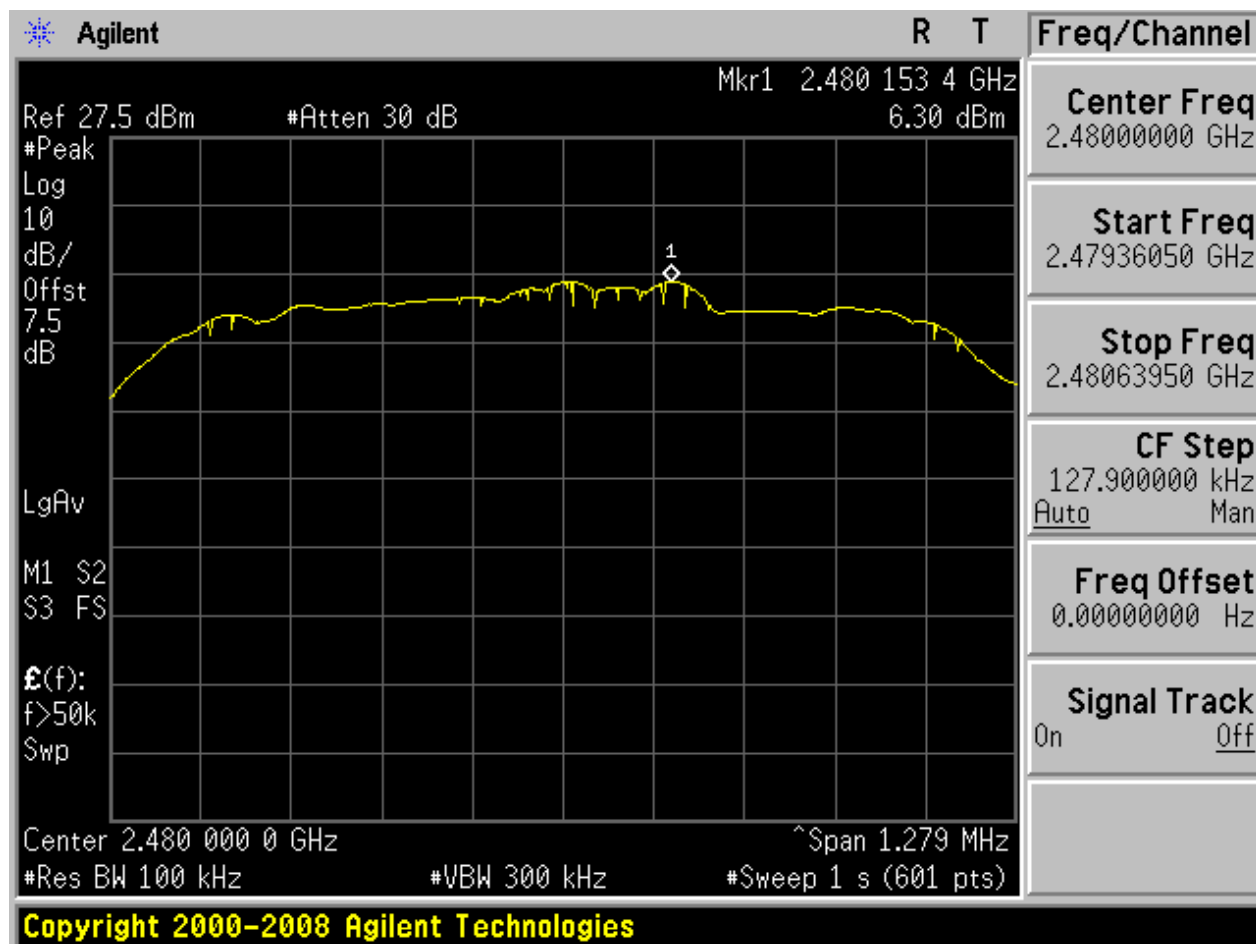


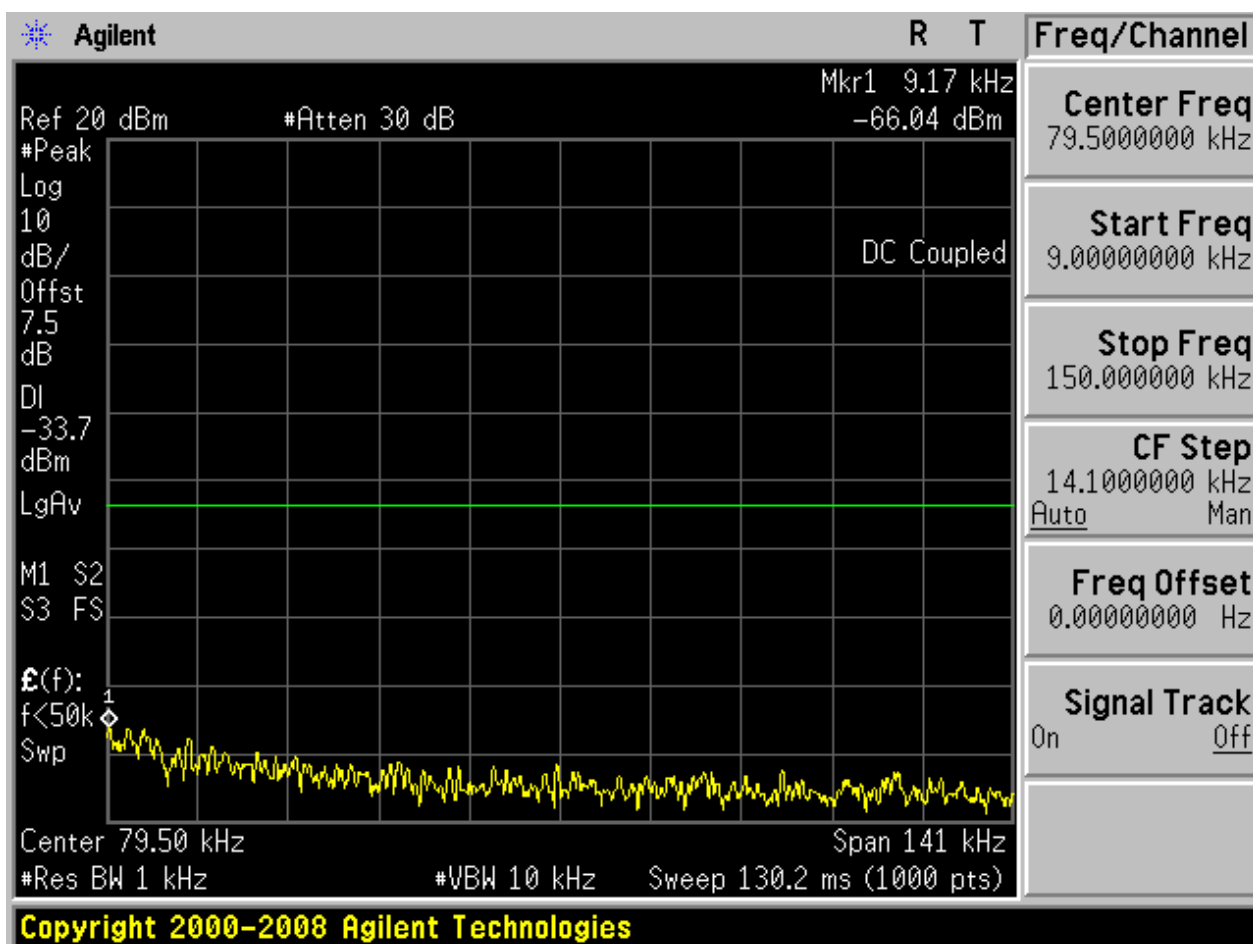


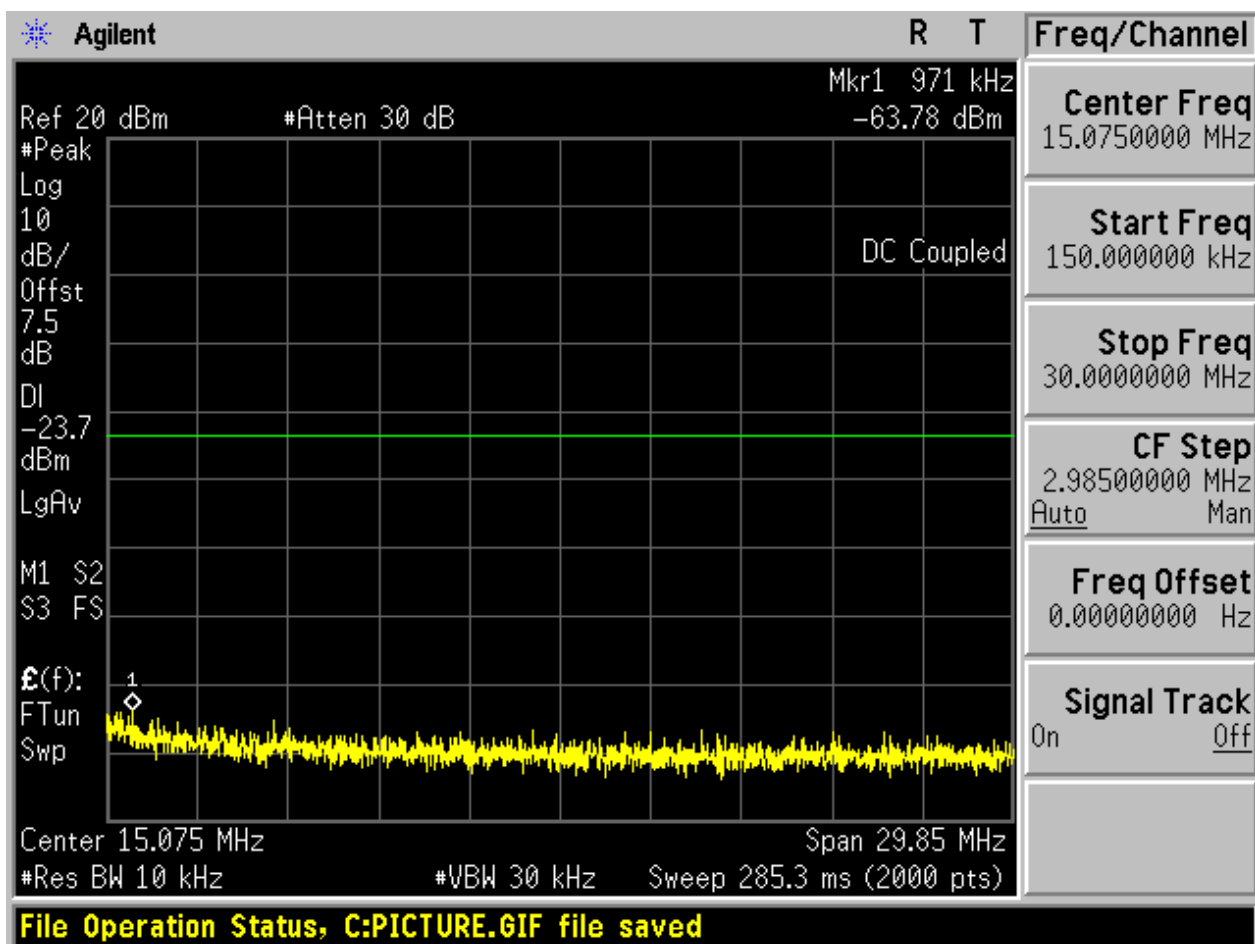


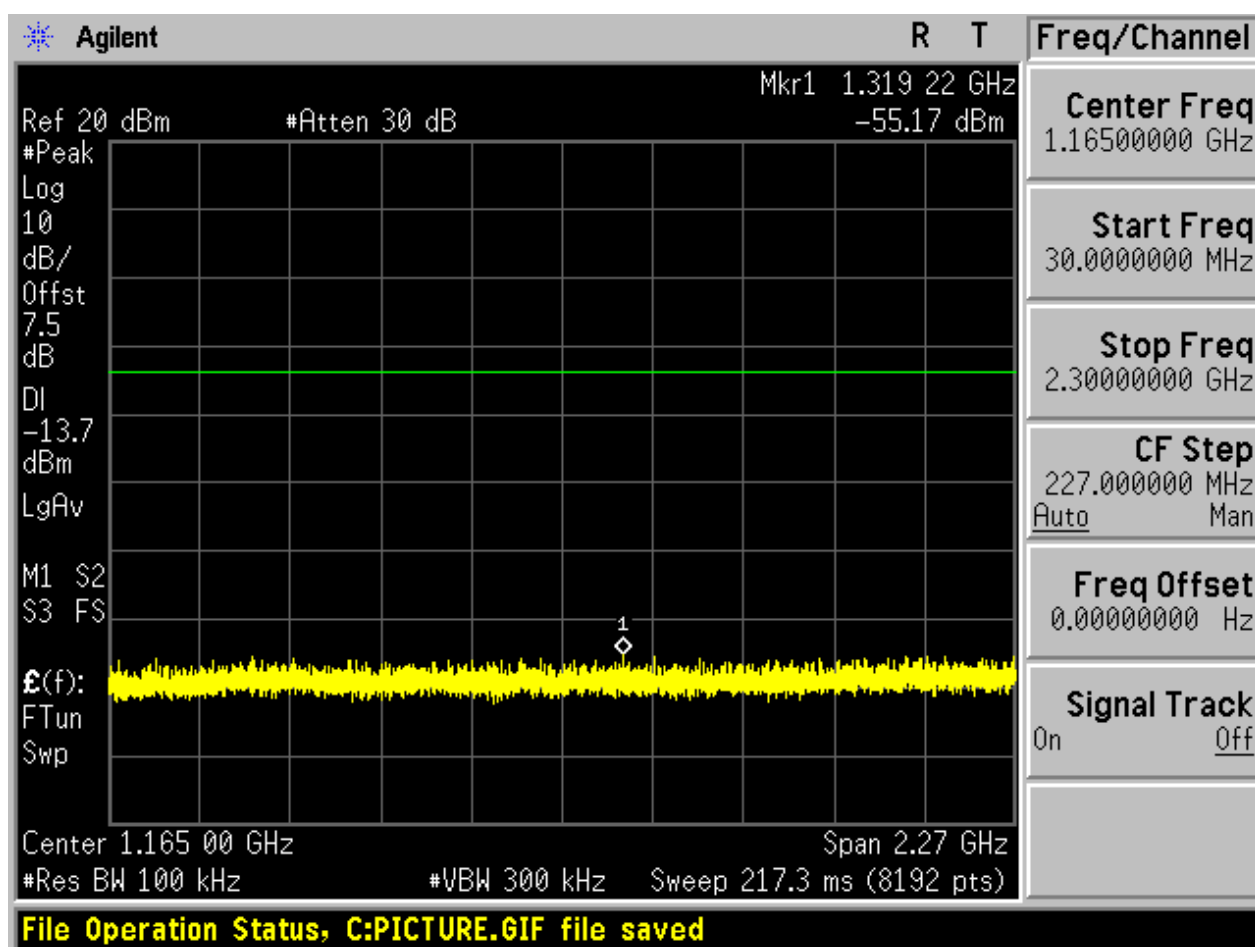
2.9 TM3_3DH5_Ch78

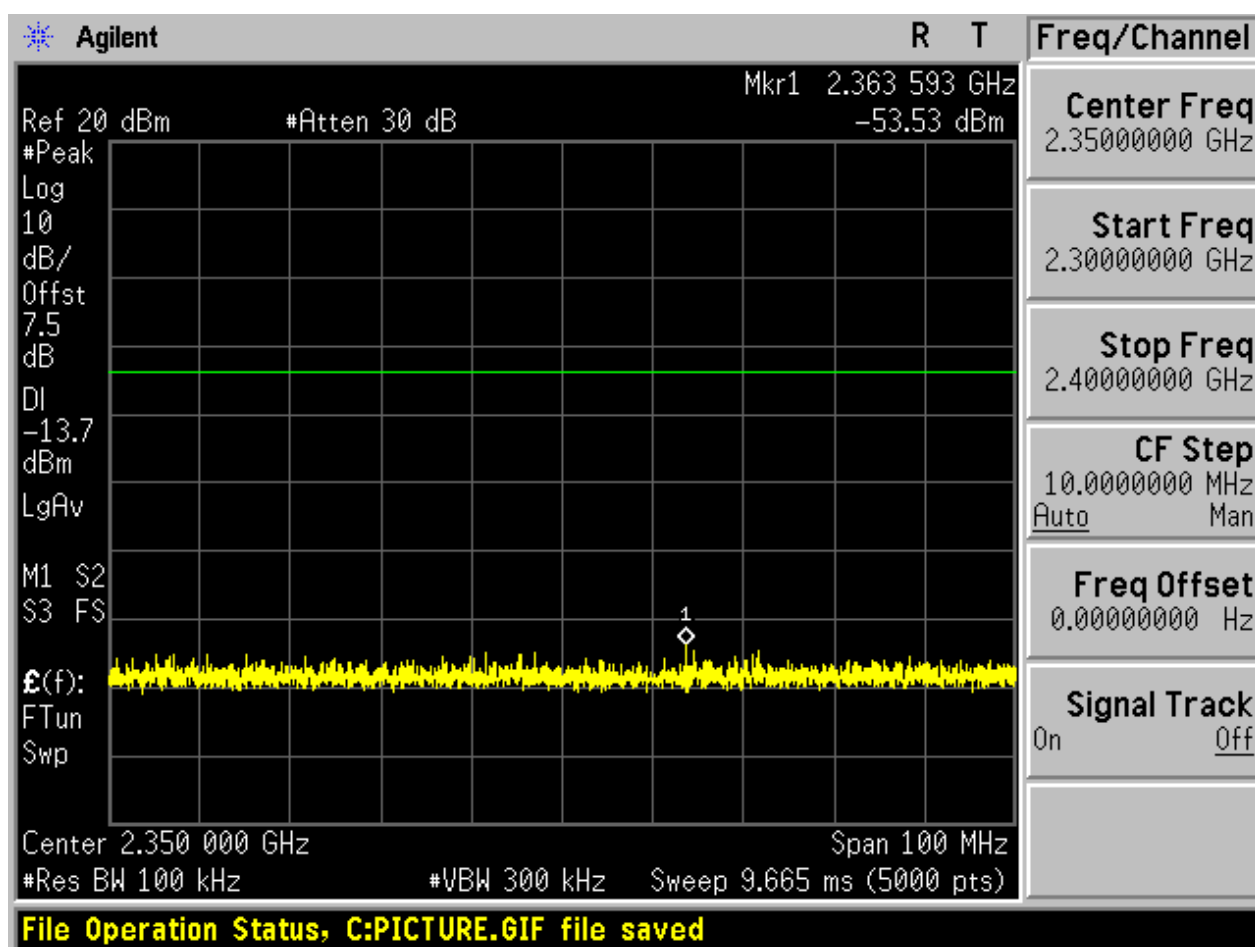
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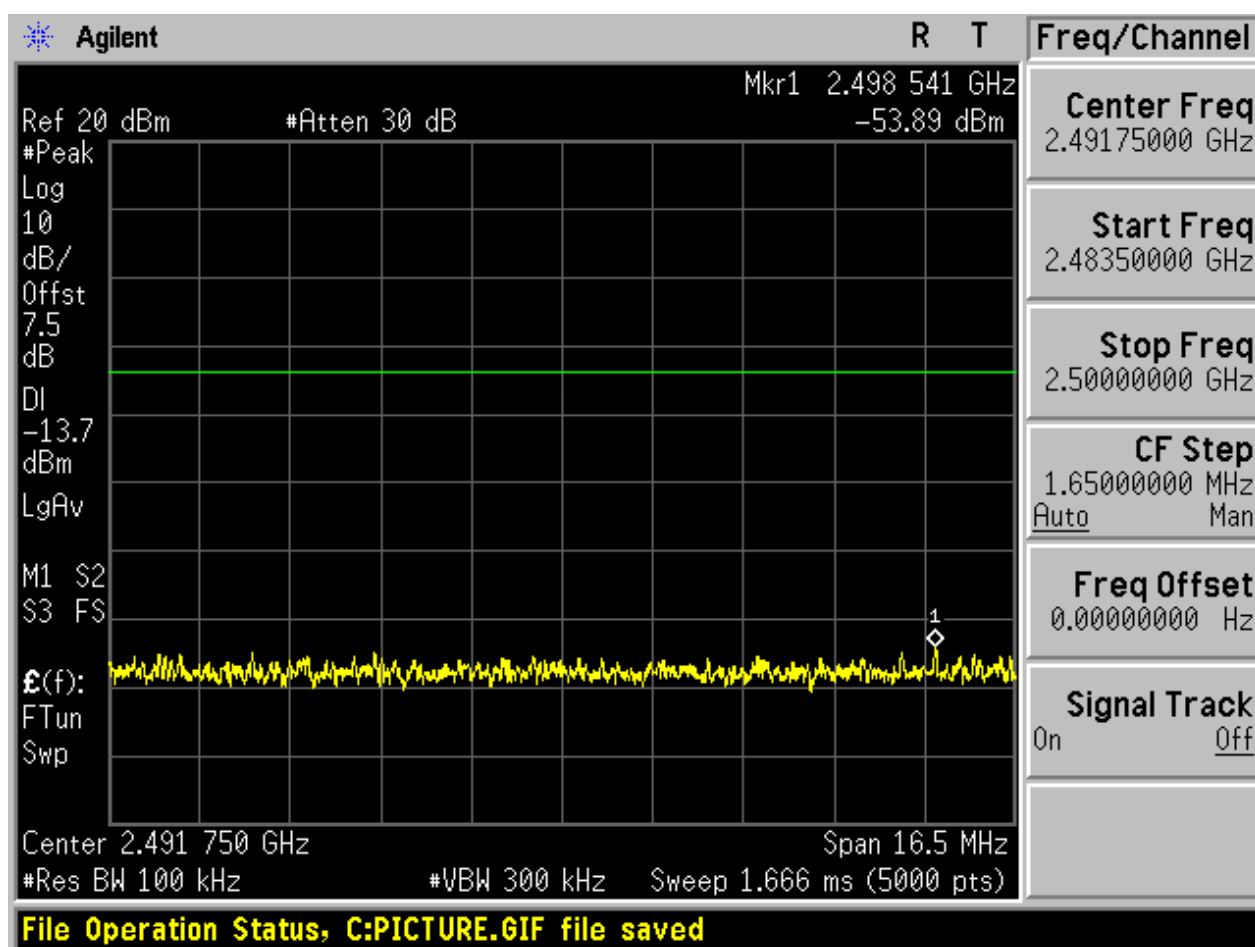


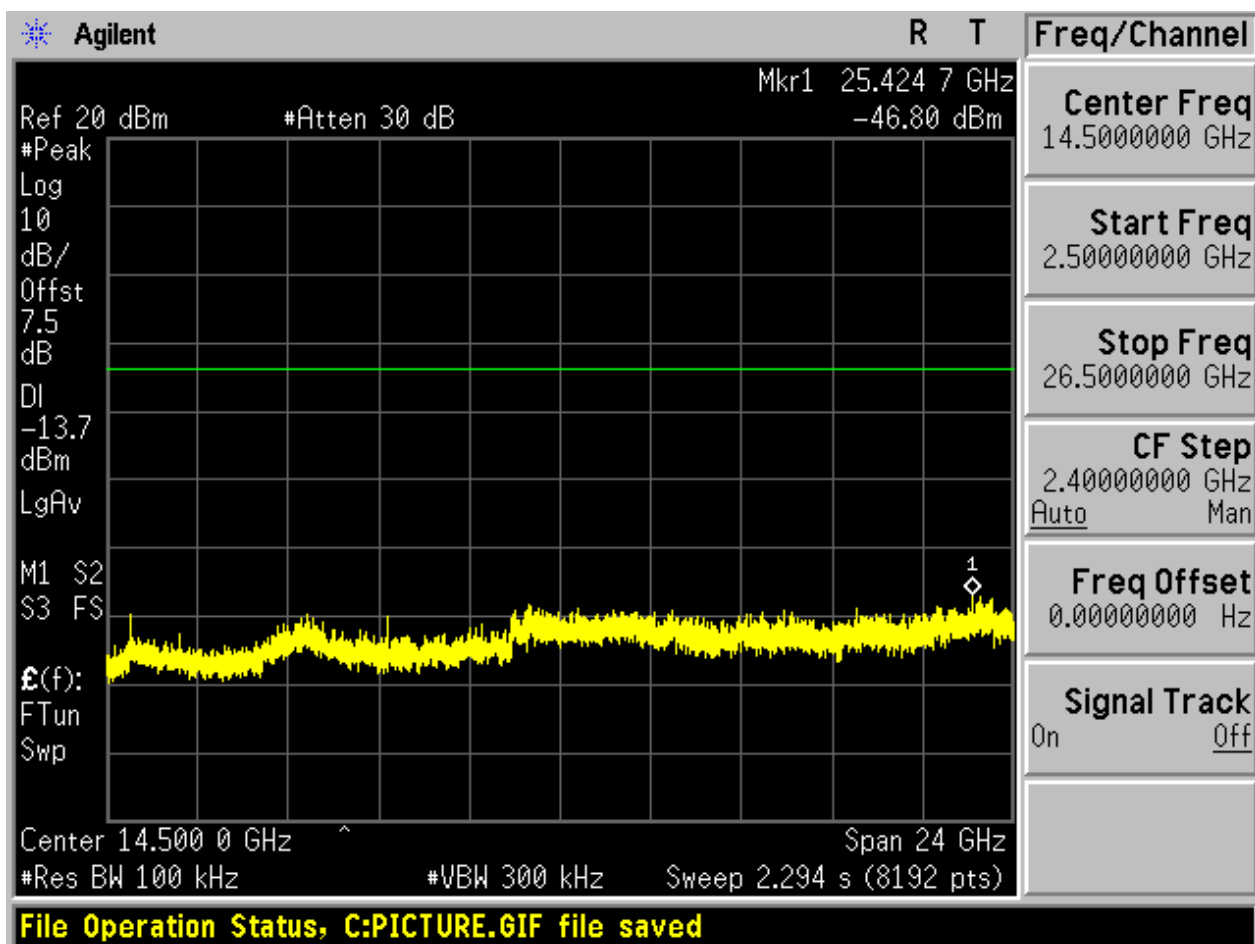
P_uw











Appendix H: Radiated Emissions in the Restricted Bands

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



1 Result Table

The whole testing range is from “30 MHz to 26.5 GHz (10th harmonics)” is divided into 4 parts according to the test site settings, which are:

- (Part 1): Test range of “9 KHz to 30 MHz”,
- (Part 2): Test range of “30 MHz to 1 GHz”,
- (Part 3): Test range of “18 GHz to 26.5 GHz”.
- (Part 4): Test range of “2.3 GHz to 2.5 GHz”, and
- (Part 5): Test range of “1 GHz to 18 GHz”.

In this Appendix, only the test results and plots under the worst case can be reported. In the result table, the “< Limit” denotes that “Not found obvious spikes or see marked spikes on plots and listed emissions records”.

Test Range	EUT Conf.	Emissions	Verdict
30 MHz to 1 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass
18 GHz to 26.5 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass
	TM1_DH5_Ch78 (Worst Conf.)	< Limit	Pass
2.3 GHz to 2.5 GHz	TM1_DH5_Ch0 (Worse Conf.)	< Limit	Pass
1 GHz to 18 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass

2 Result Plot

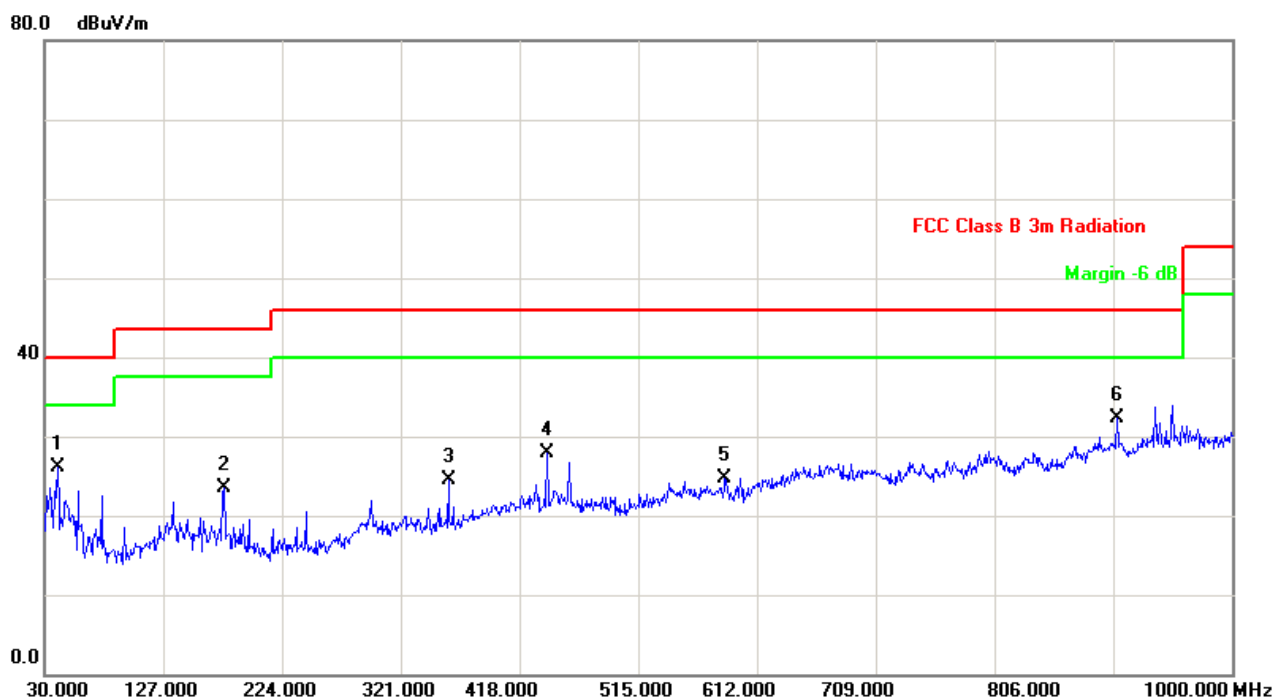
Part 1: Testing Range of “9 kHz to 30MHz”

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

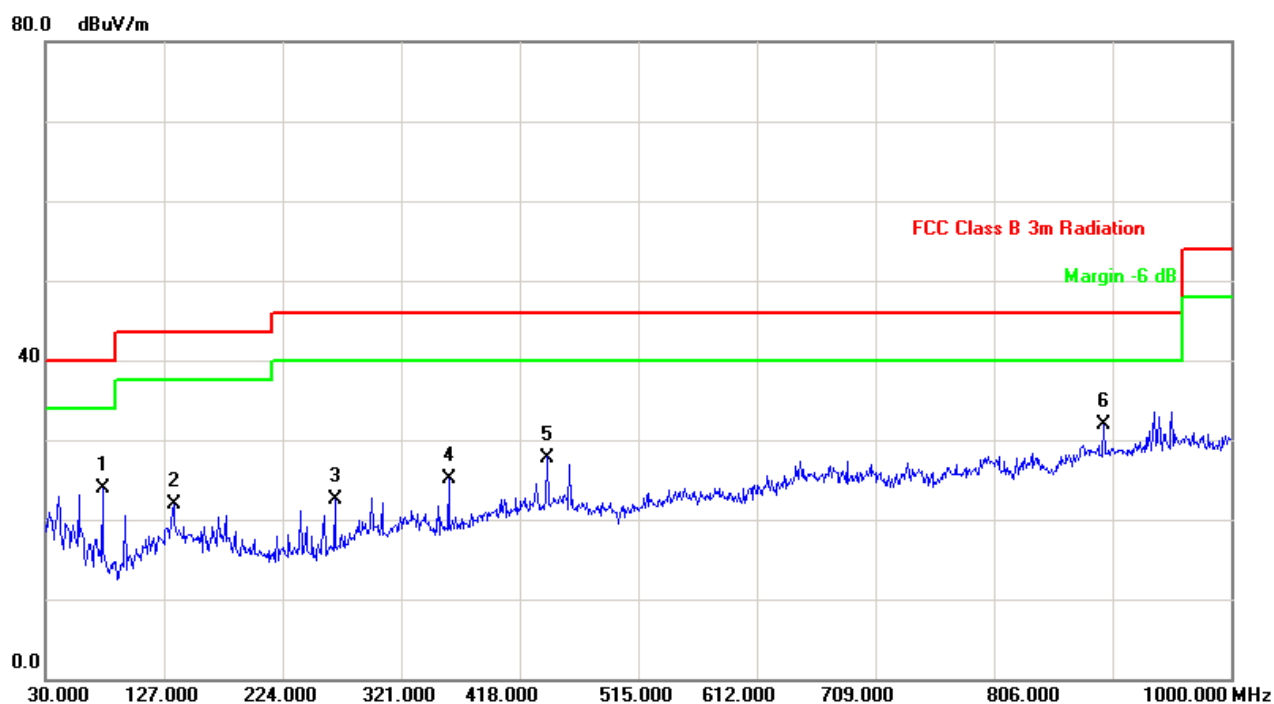
Part 2: Testing Range of “30 MHz to 1 GHz”

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		40.67	38.62	-12.49	26.13	40.00	-13.87	VERTICAL
2		176.47	34.91	-11.35	23.56	43.50	-19.94	VERTICAL
3		359.80	33.87	-9.40	24.47	46.00	-21.53	VERTICAL
4		440.31	34.01	-6.15	27.86	46.00	-18.14	VERTICAL
5		585.81	29.31	-4.63	24.68	46.00	-21.32	VERTICAL
6		905.910	30.39	1.84	32.23	46.00	-13.77	VERTICAL



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Plarization
1		76.5600	39.30	-15.40	23.90	40.00	-16.10	HORIZONTAL
2		134.7600	33.45	-11.54	21.91	43.50	-21.59	HORIZONTAL
3		266.6800	34.52	-12.07	22.45	46.00	-23.55	HORIZONTAL
4		359.8000	34.50	-9.40	25.10	46.00	-20.90	HORIZONTAL
5		440.3100	33.95	-6.15	27.80	46.00	-18.20	HORIZONTAL
6	*	895.2400	30.42	1.53	31.95	46.00	-14.05	HORIZONTAL



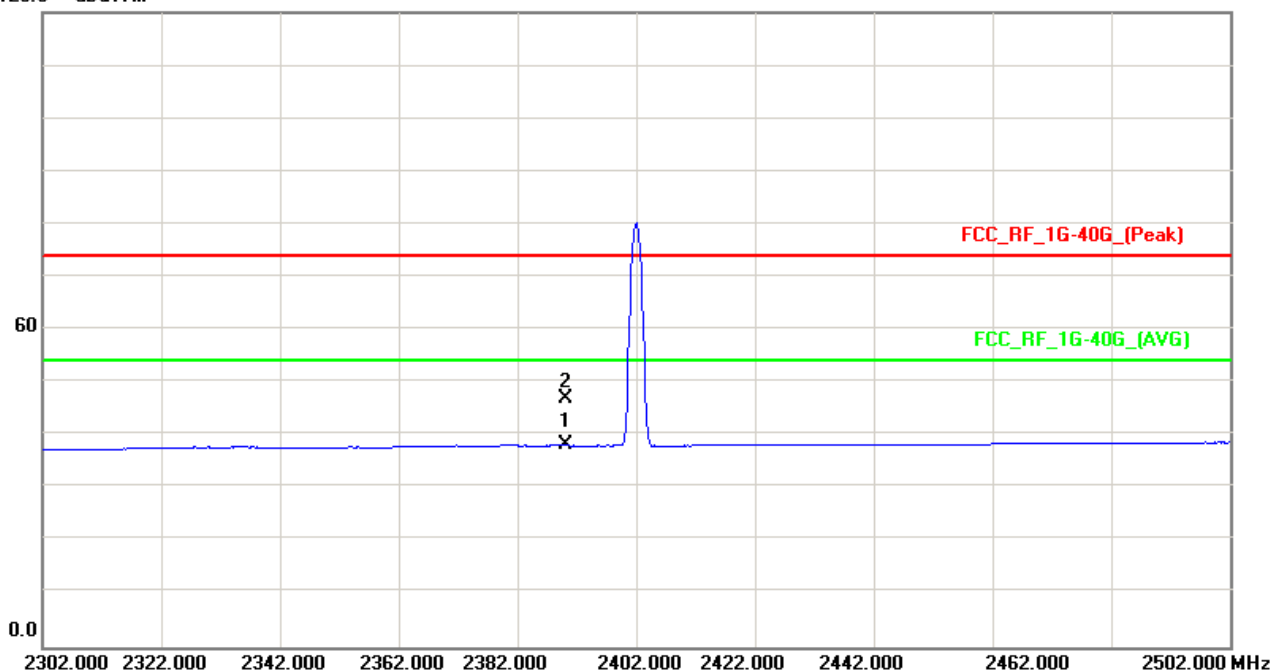
Part 3: Testing Range of “18 GHz to 26.5 GHz”

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

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

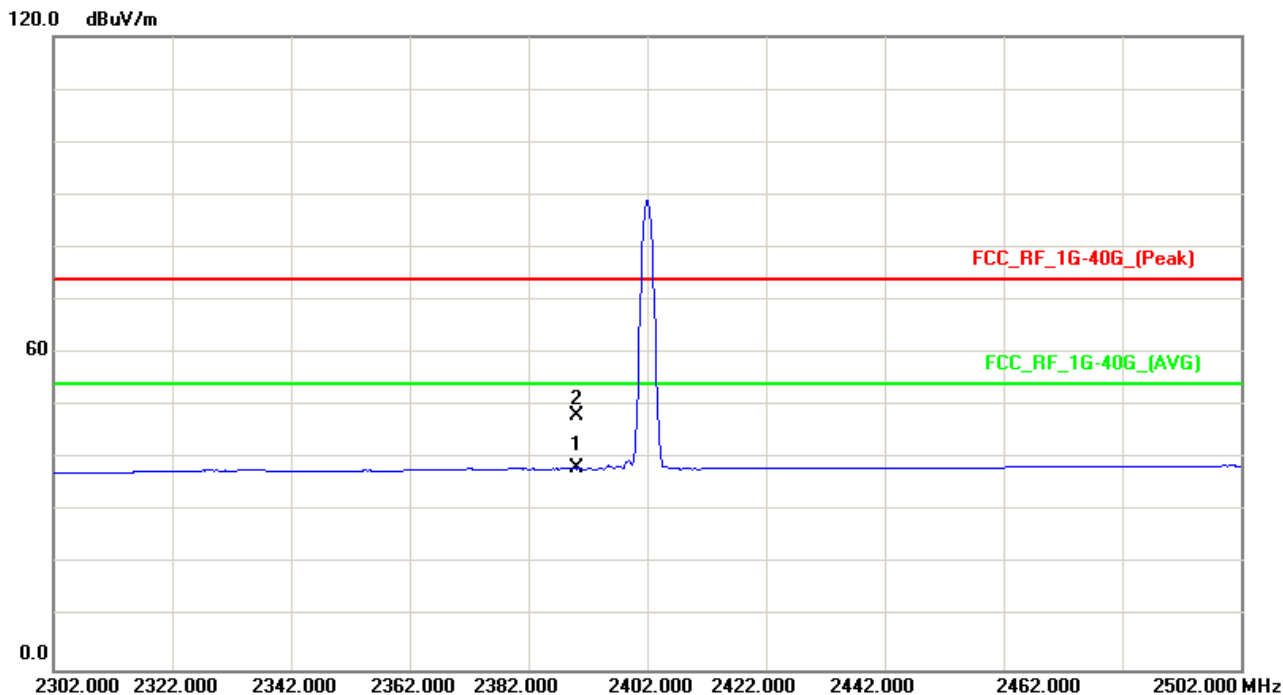
- Note 1: The testing range of “2.3 GHz to 2.5 GHz” is for checking radiated emissions located in restricted bands near the EUT operating bands.
- Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).
- Note 3: The peak spike exceeds the limit line is EUT’s operating frequency.

Channel 0

120.0 dB μ V/m


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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dB μ V	dB	dB μ V/m	dB μ V/m	dB	Detector	Polarization
1	*	2390.000	2.23	35.88	38.11	54.00	-15.89	AVG	VERTICAL
2		2390.000	11.01	35.88	46.89	74.00	-27.11	peak	VERTICAL

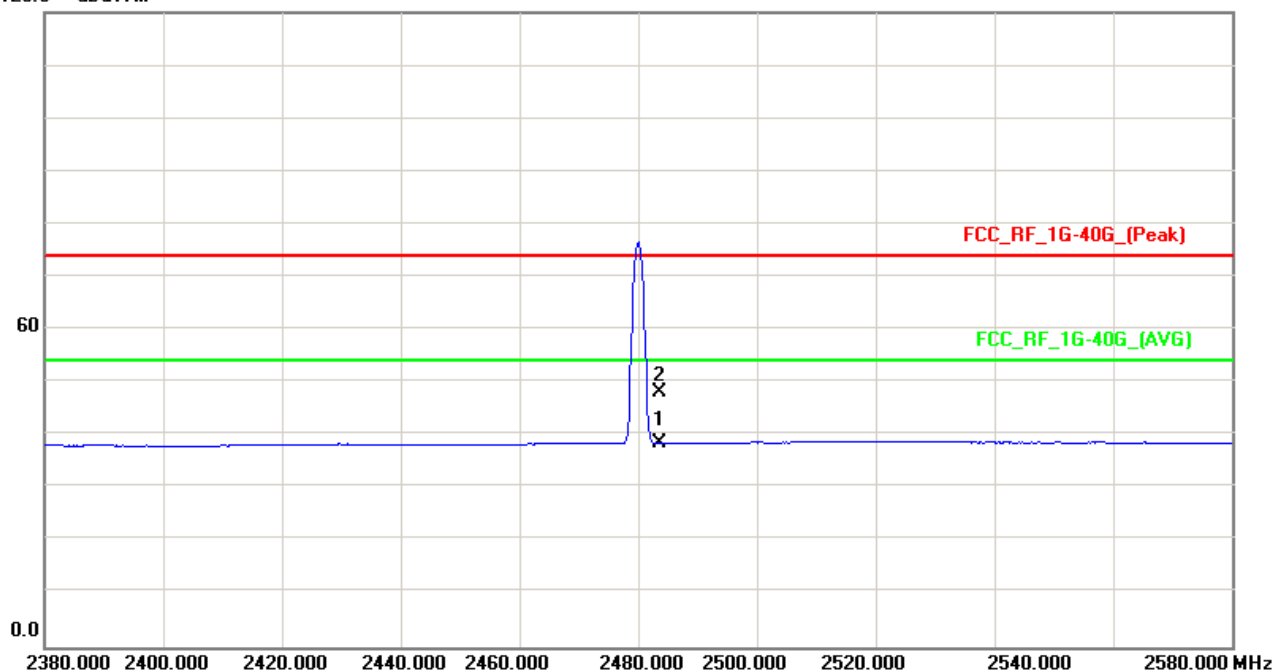


Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Polarization
1	*	2390.000	2.24	35.88	38.12	54.00	-15.88	AVG	HORIZONTAL
2		2390.000	12.31	35.88	48.19	74.00	-25.81	peak	HORIZONTAL

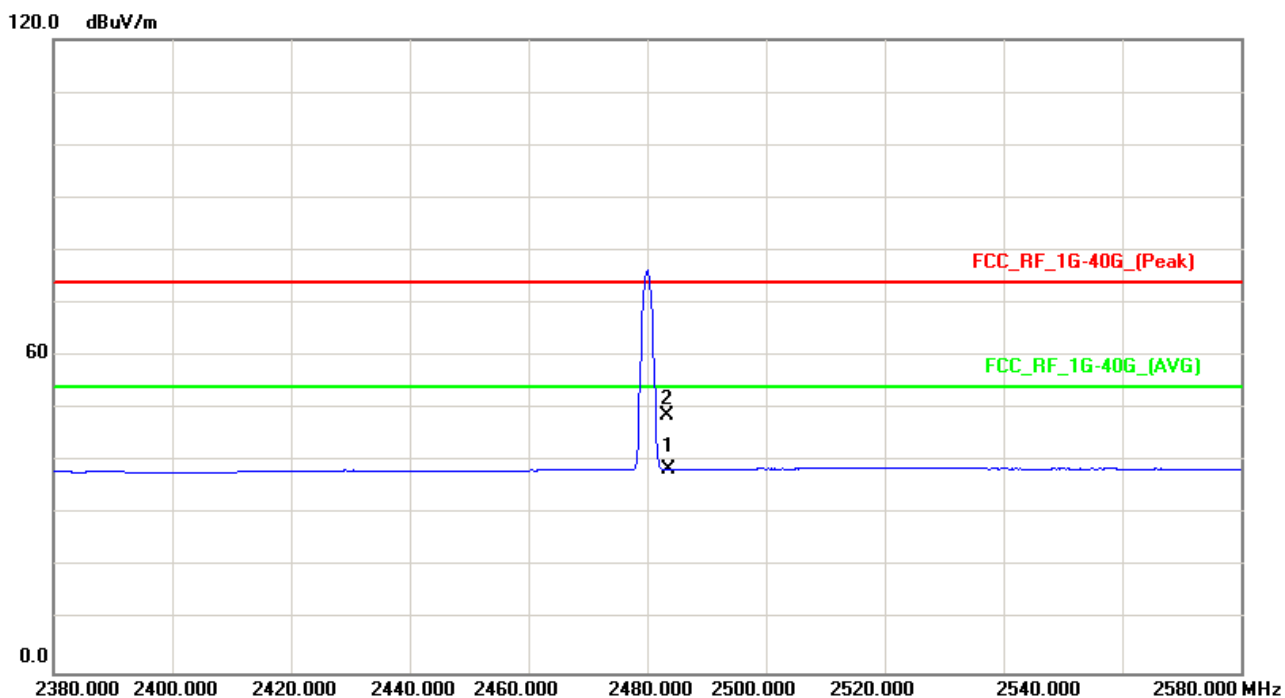
Channel 78

120.0 dBuV/m



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Polarization
1	*	2483.500	2.04	36.39	38.43	54.00	-15.57	AVG	VERTICAL
2		2483.500	11.74	36.39	48.13	74.00	-25.87	peak	VERTICAL



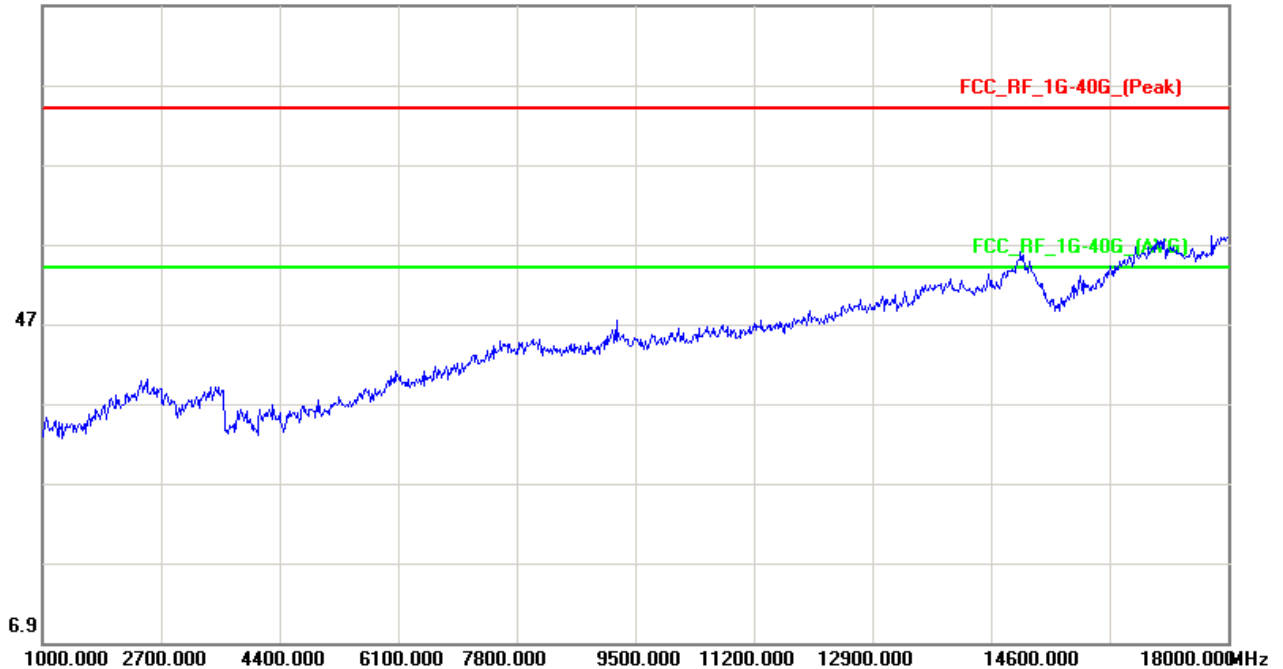
Note: The peak exceeds the limit line is carrier frequency.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Polarization
1	*	2483.500	2.24	36.39	38.63	54.00	-15.37	AVG	HORIZONTAL
2		2483.400	12.32	36.39	48.71	74.00	-25.29	peak	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).

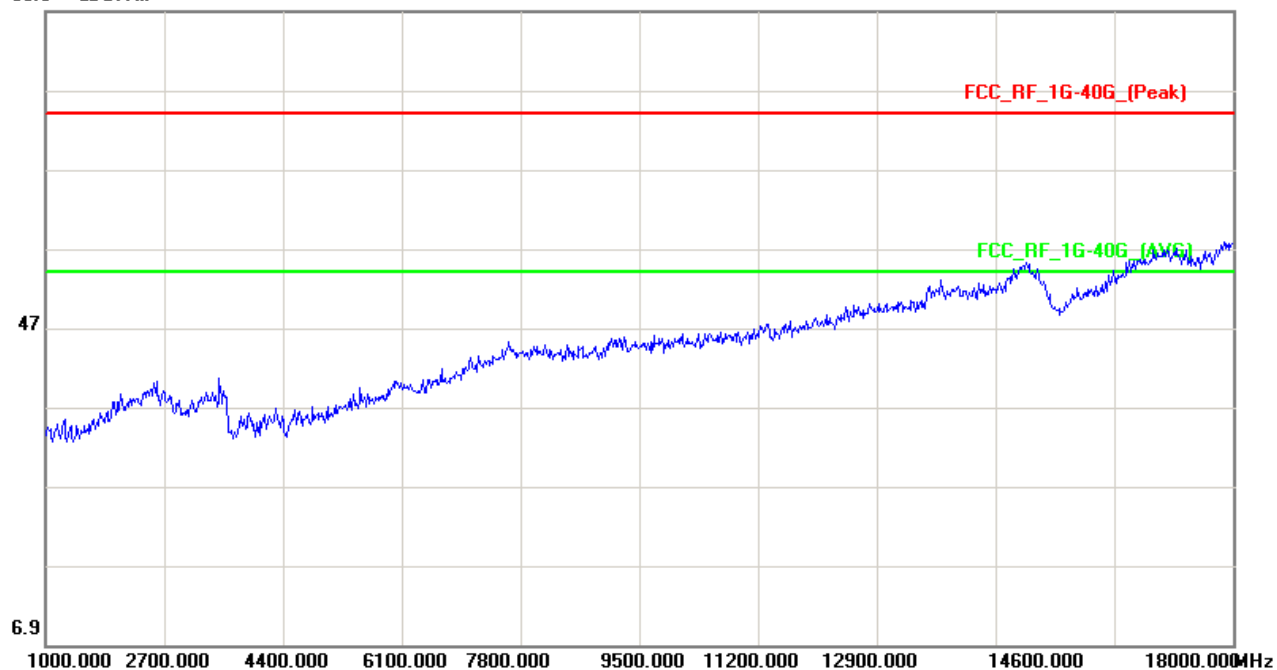
Vertical

86.9 dB μ V/m




Horizontal

86.9 dBuV/m





Appendix I: AC Power Line Conducted Emissions

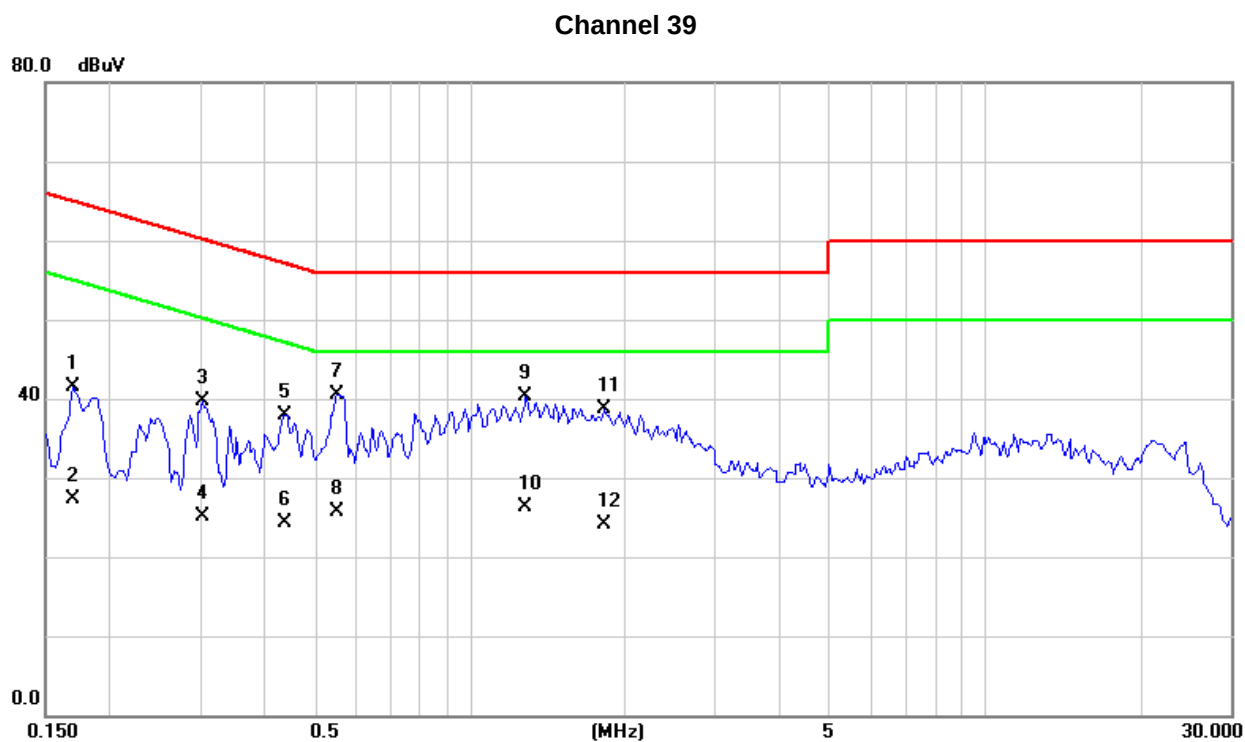


1 Result Table

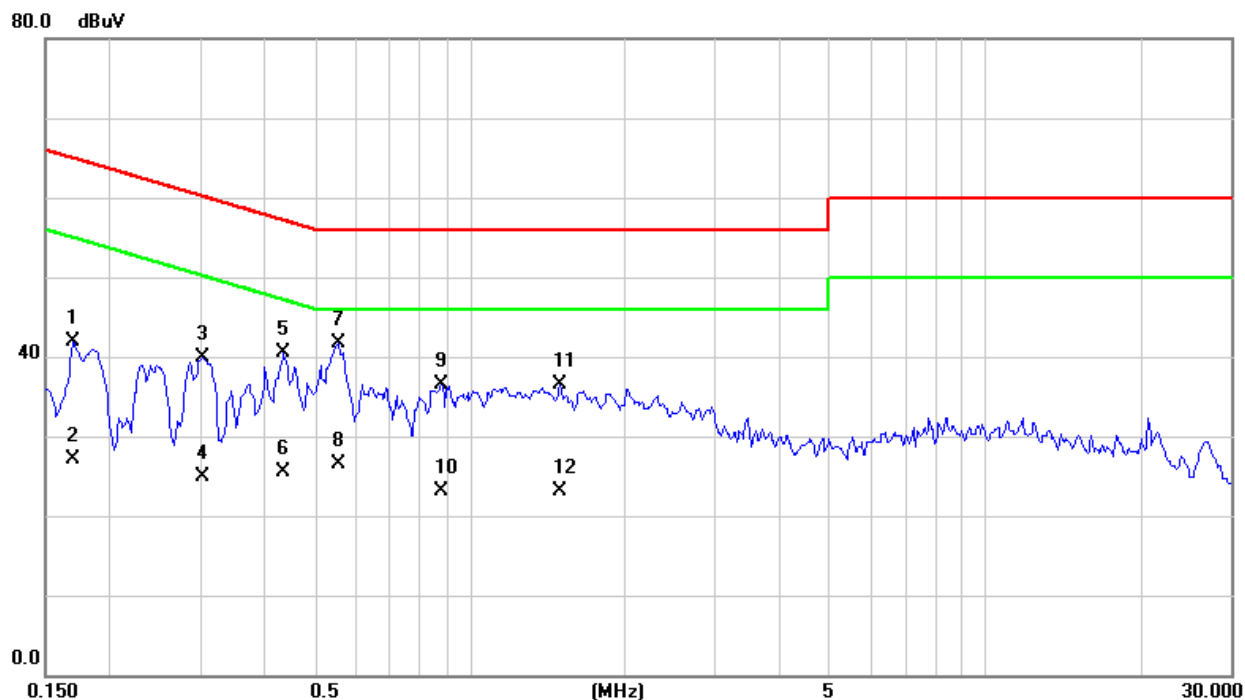
In this Appendix, only the test results and plots under the worst case can be reported.

EUT Conf.	Maximum Emissions	Verdict
TM1_DH5_Ch39	Not found obvious spikes or see marked spikes on plots and listed emissions records.	Pass

2 Result Plot



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Line
1	0.1695	31.73	9.69	41.42	64.98	-23.56	QP	L1
2	0.1695	17.60	9.69	27.29	54.98	-27.69	AVG	L1
3	0.3023	29.96	9.76	39.72	60.18	-20.46	QP	L1
4	0.3023	15.40	9.76	25.16	50.18	-25.02	AVG	L1
5	0.4352	28.08	9.81	37.89	57.15	-19.26	QP	L1
6	0.4352	14.50	9.81	24.31	47.15	-22.84	AVG	L1
7	0.5523	30.60	9.84	40.44	56.00	-15.56	QP	L1
8	0.5523	15.90	9.84	25.74	46.00	-20.26	AVG	L1
9	1.2867	30.32	10.00	40.32	56.00	-15.68	QP	L1
10	1.2867	16.30	10.00	26.30	46.00	-19.70	AVG	L1
11	1.8258	28.78	9.88	38.66	56.00	-17.34	QP	L1
12	1.8258	14.20	9.88	24.08	46.00	-21.92	AVG	L1



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Line
1	0.1695	32.30	9.60	41.90	64.98	-23.08	QP	N
2	0.1695	17.50	9.60	27.10	54.98	-27.88	AVG	N
3	0.3023	30.37	9.63	40.00	60.18	-20.18	QP	N
4	0.3023	15.30	9.63	24.93	50.18	-25.25	AVG	N
5	0.4351	30.86	9.64	40.50	57.15	-16.65	QP	N
6	0.4351	15.80	9.64	25.44	47.15	-21.71	AVG	N
7	0.5562	31.99	9.67	41.66	56.00	-14.34	QP	N
8	0.5562	16.90	9.67	26.57	46.00	-19.43	AVG	N
9	0.8843	26.66	9.75	36.41	56.00	-19.59	QP	N
10	0.8843	13.40	9.75	23.15	46.00	-22.85	AVG	N
11	1.4976	26.60	9.82	36.42	56.00	-19.58	QP	N
12	1.4976	13.20	9.82	23.02	46.00	-22.98	AVG	N

END