Appendix for Test report

Appendix A: 20dB Emission Bandwidth (EBW)

1 Result Table

EUT Conf.	EBW [MHz]	Verdict
TM1_DH5_Ch0	0.95	Pass
TM1_DH5_Ch39	0.95	Pass
TM1_DH5_Ch78	0.95	Pass
TM2_2DH5_Ch0	1.27	Pass
TM2_2DH5_Ch39	1.27	Pass
TM2_2DH5_Ch78	1.27	Pass
TM3_3DH5_Ch0	1.27	Pass
TM3_3DH5_Ch39	1.27	Pass
TM3_3DH5_Ch78	1.27	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

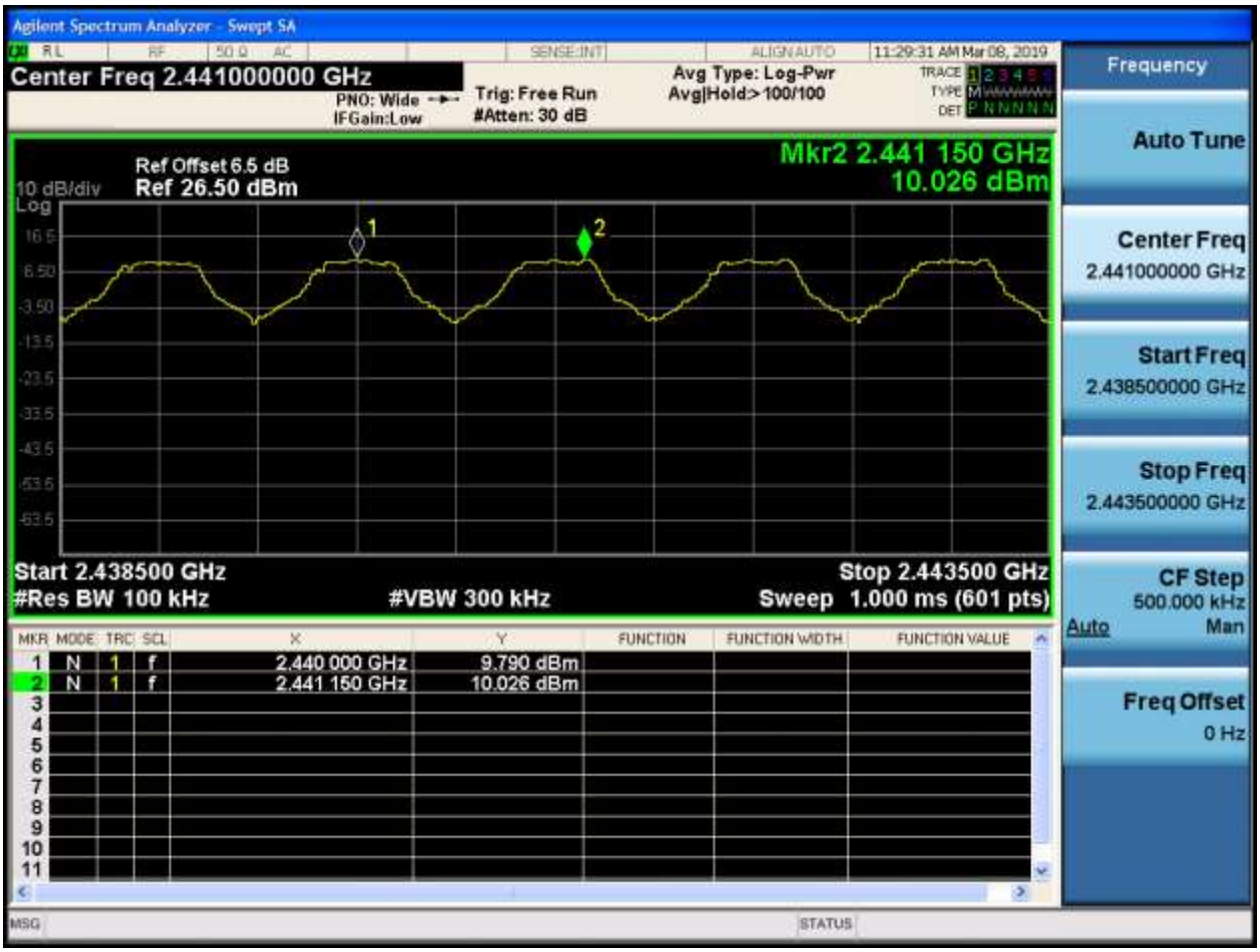
Appendix B: Carrier Frequency Separation

1 Result Table

EUT Conf.	Carrier Frequency Separation [MHz]	Limit[MHz]	Verdict
TM1_DH5_Hop	1.15	0.633	Pass
TM2_2DH5_Hop	1	0.847	Pass
TM3_3DH5_Hop	1.1	0.847	Pass

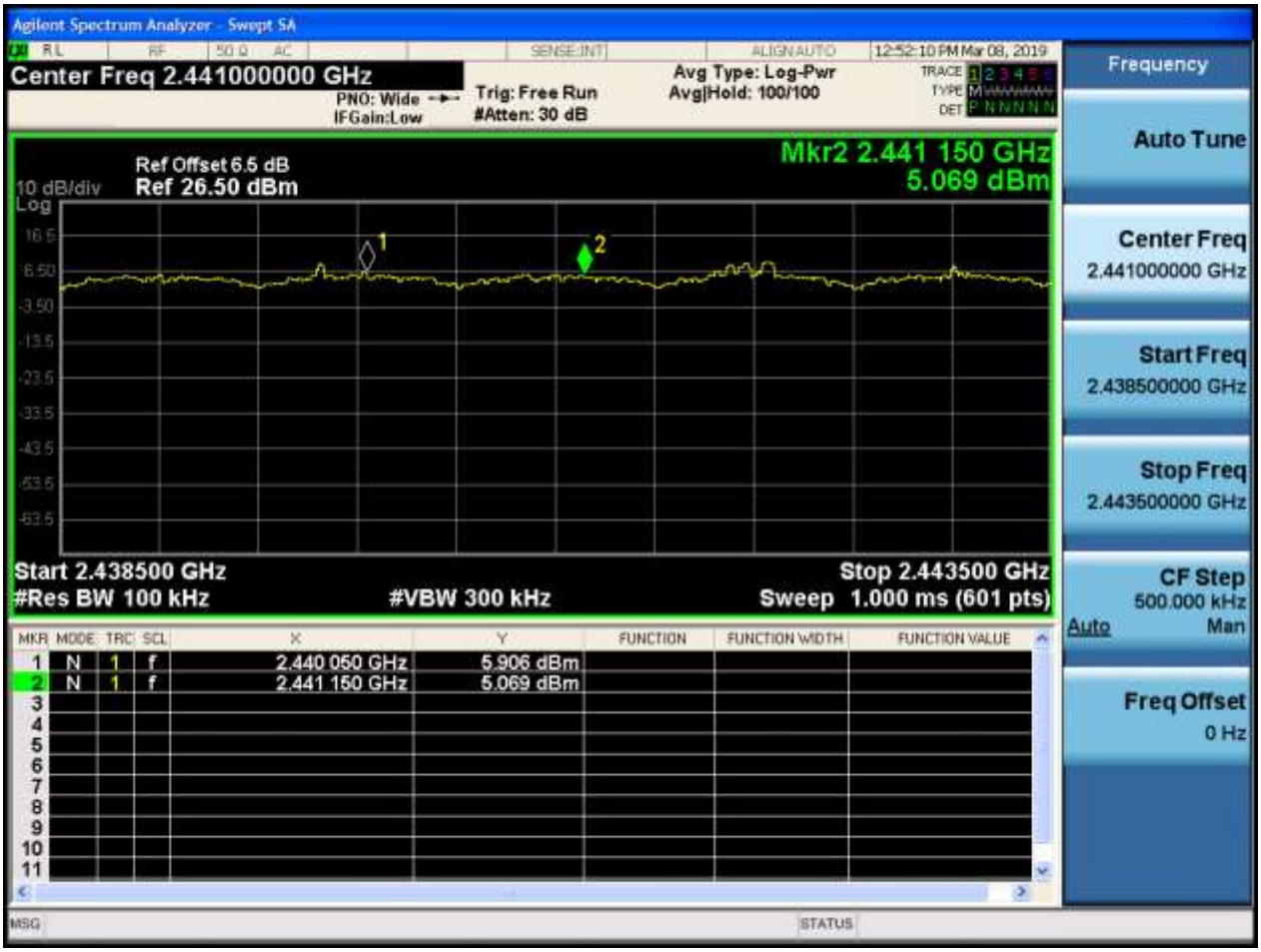
2 Test Plot

2.1 TM1_DH5_Hop



2.2 TM2_2DH5_Hop

2.3 TM3_3DH5_Hop



Appendix C: Number of Hopping Channel

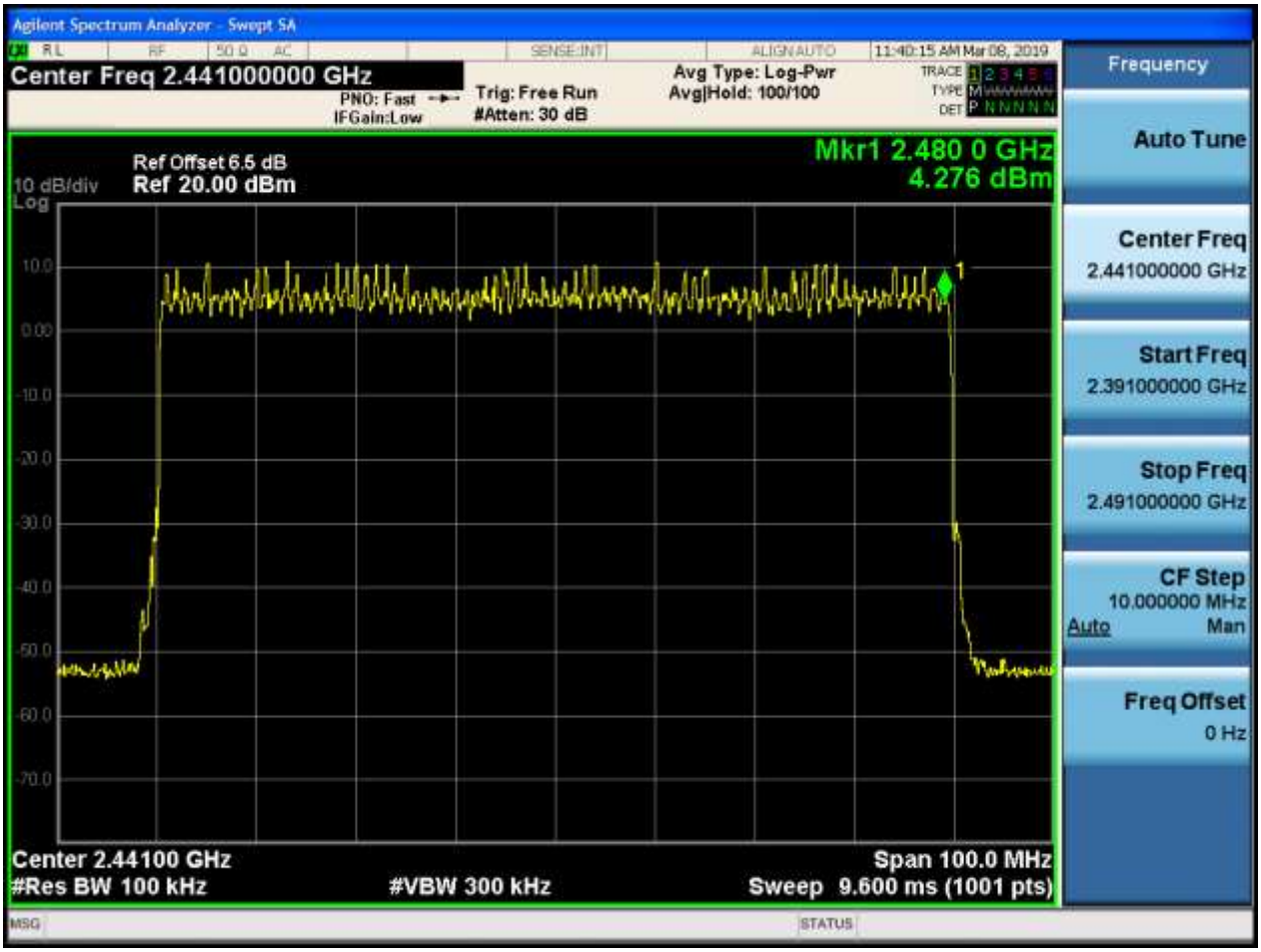
1 Result Table

EUT Conf.	Number of Hopping Channel	Limit	Verdict
TM1_DH5_Hop	79	≥15	Pass
TM2_2DH5_Hop	79	≥15	Pass
TM3_3DH5_Hop	79	≥15	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:

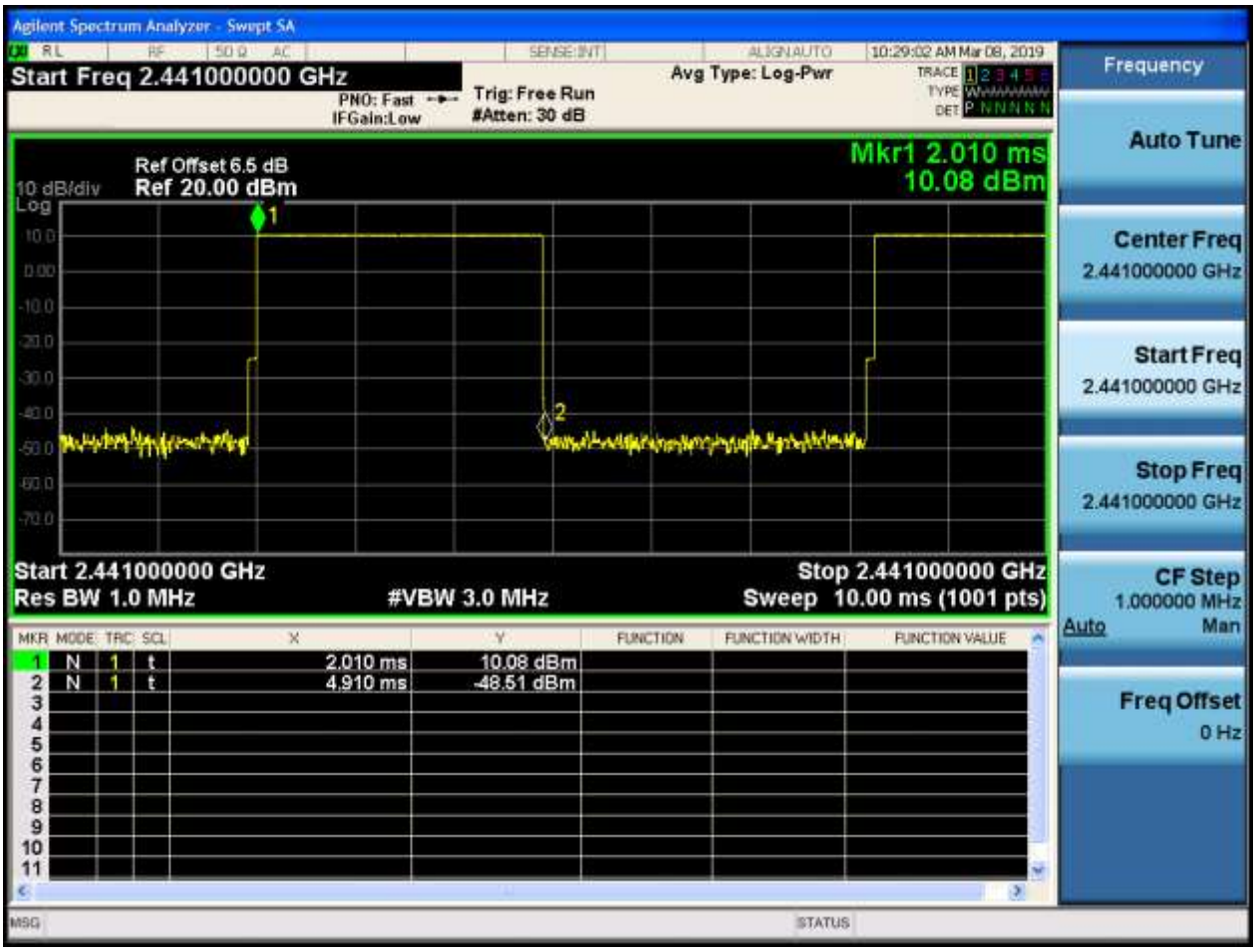
- The duration for dwell time calculation: 0.4 [s] * hopping number = 0.4 [s] * 79 [ch] = 31.6 [s*ch];
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf uses a slot type of 5-Tx&1-Rx and 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 [s/hop/ch]	Total Hops [hop*ch]	Dwell Time [ms]	Verdict
TM1_DH5_Ch39	0.0029	106.67	0.309	Pass
TM2_2DH5_Ch39	0.0029	106.67	0.309	Pass
TM3_3DH5_Ch39	0.0029	106.67	0.309	Pass

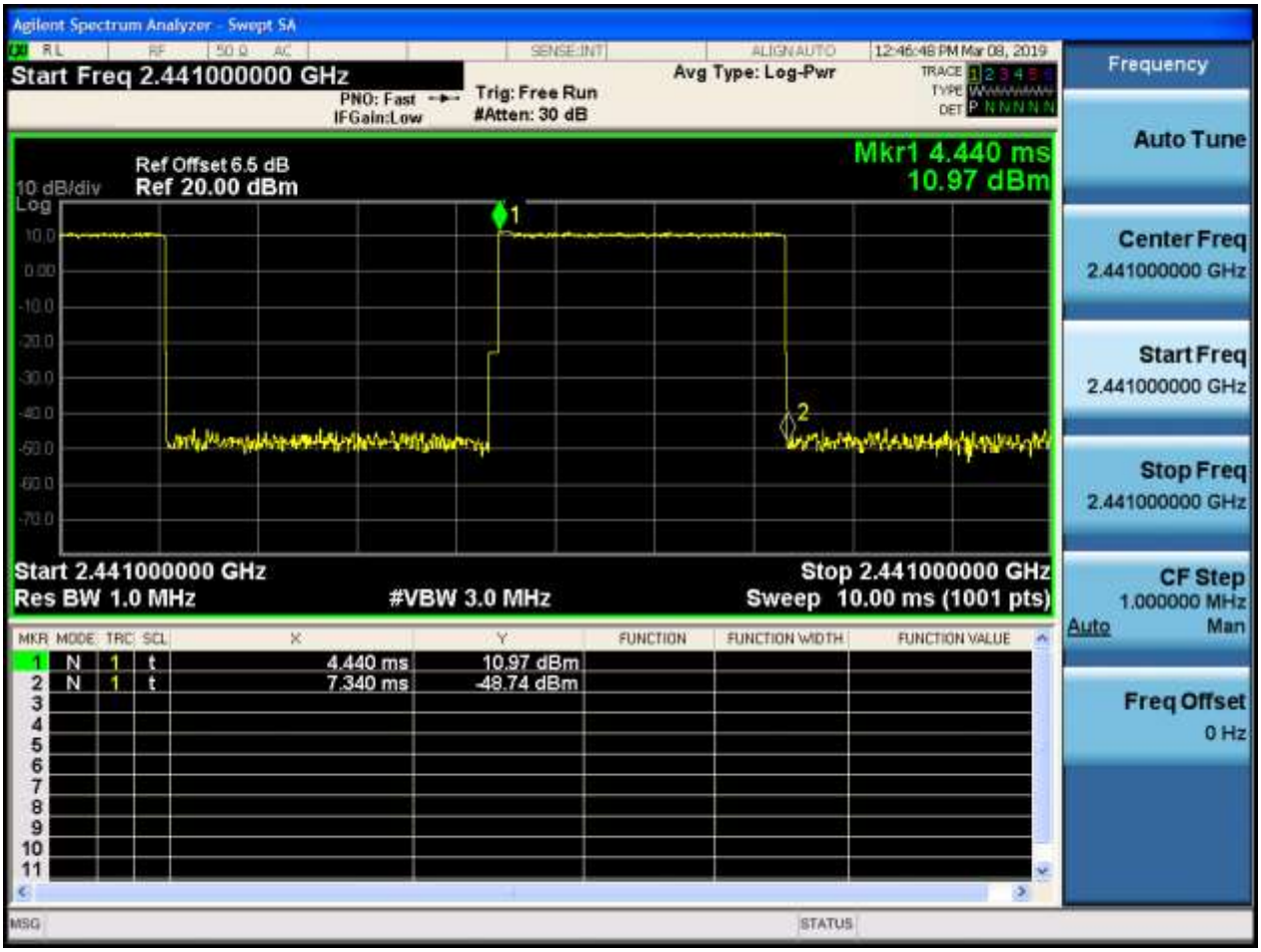
2 Test Plot

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

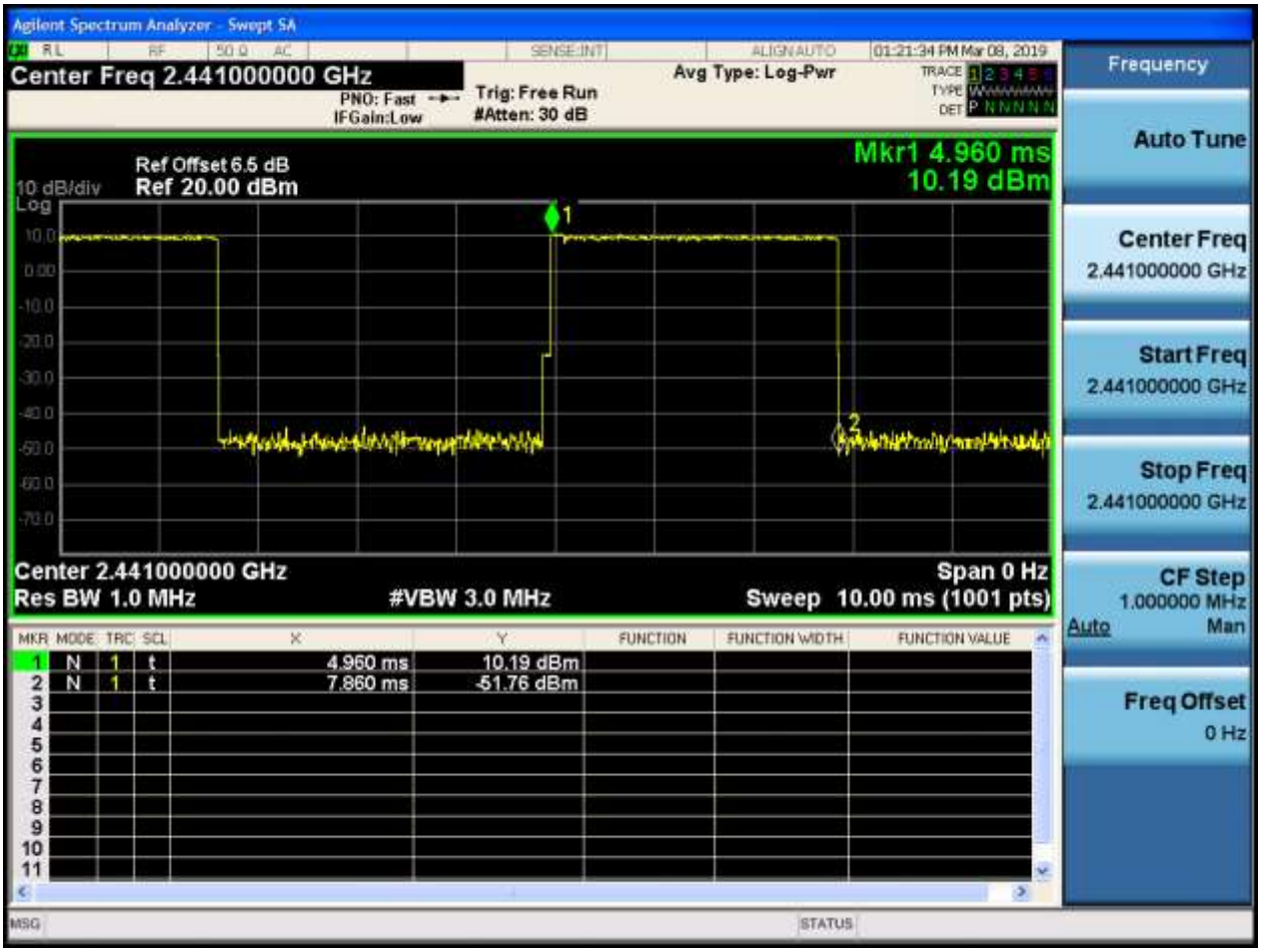
2.1 TM1_DH5_Ch39



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]	Limit[dBm]	Verdict
TM1_DH5_Ch0	10.439	20.97	Pass
TM1_DH5_Ch39	10.45	20.97	Pass
TM1_DH5_Ch78	10.681	20.97	Pass
TM2_2DH5_Ch0	10.774	20.97	Pass
TM2_2DH5_Ch39	11.435	20.97	Pass
TM2_2DH5_Ch78	10.967	20.97	Pass
TM3_3DH5_Ch0	10.785	20.97	Pass
TM3_3DH5_Ch39	10.727	20.97	Pass
TM3_3DH5_Ch78	10.976	20.97	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	-49.168	Off	10.224	-9.776	Pass
	-	-	-51.506	On	10.424	-9.576	Pass
TM1_DH5_Ch78	78	2480	-46.176	Off	10.345	-9.655	Pass
	-	-	-50.466	On	10.207	-9.793	Pass
TM2_2DH5_Ch0	0	2402	-42.675	Off	10.204	-9.796	Pass
	-	-	-44.725	On	10.489	-9.511	Pass
TM2_2DH5_Ch78	78	2480	-48.301	Off	10.373	-9.627	Pass
	-	-	-53.349	On	6.198	-13.802	Pass
TM3_3DH5_Ch0	0	2402	-41.956	Off	10.252	-9.748	Pass
	-	-	-45.632	On	10.255	-9.745	Pass
TM3_3DH5_Ch78	78	2480	-49.228	Off	10.463	-9.537	Pass
	-	-	-51.978	On	9.953	-10.047	Pass

2 Test Plot

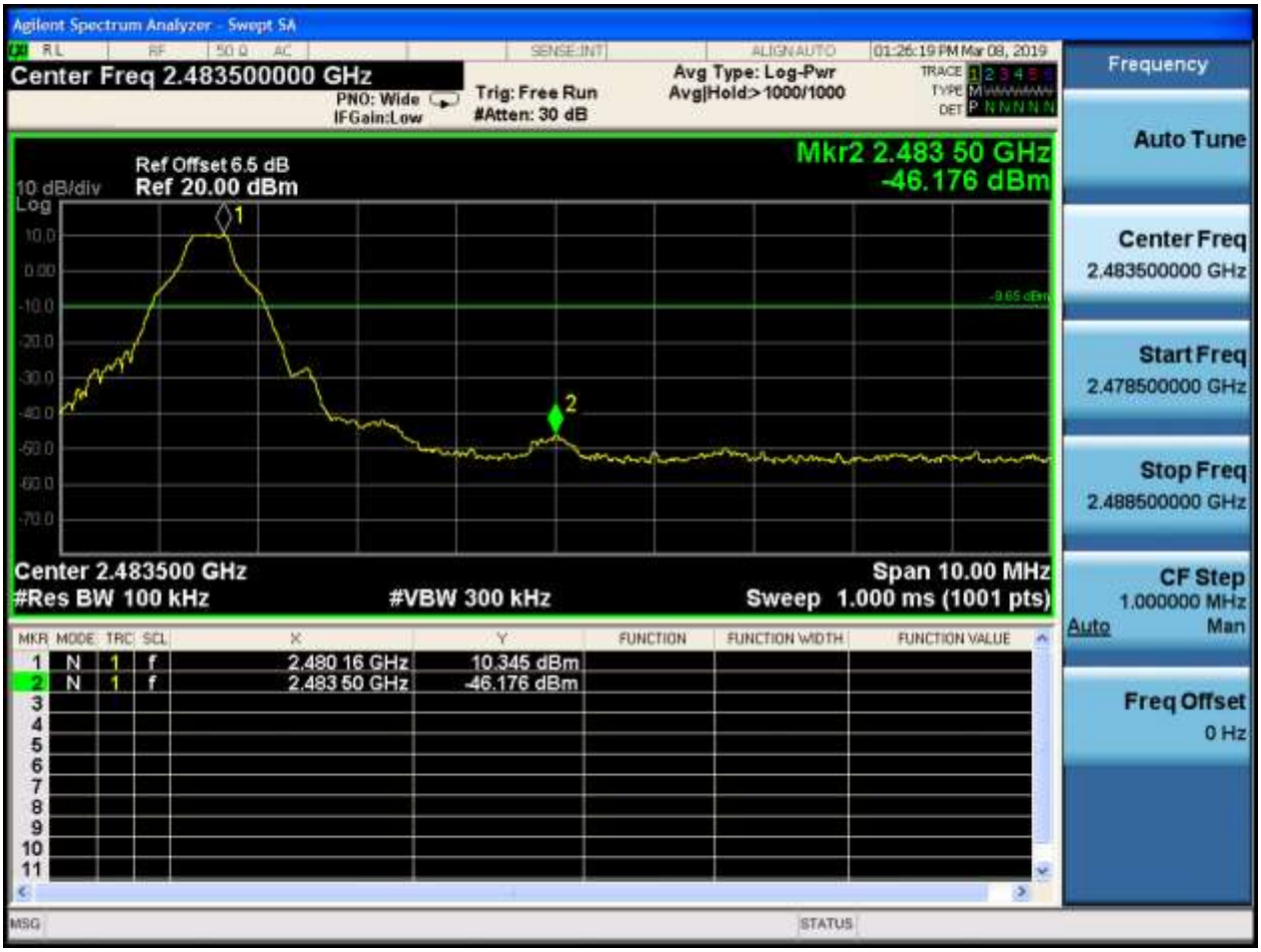
2.1 TM1_DH5_Ch0

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” 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”.

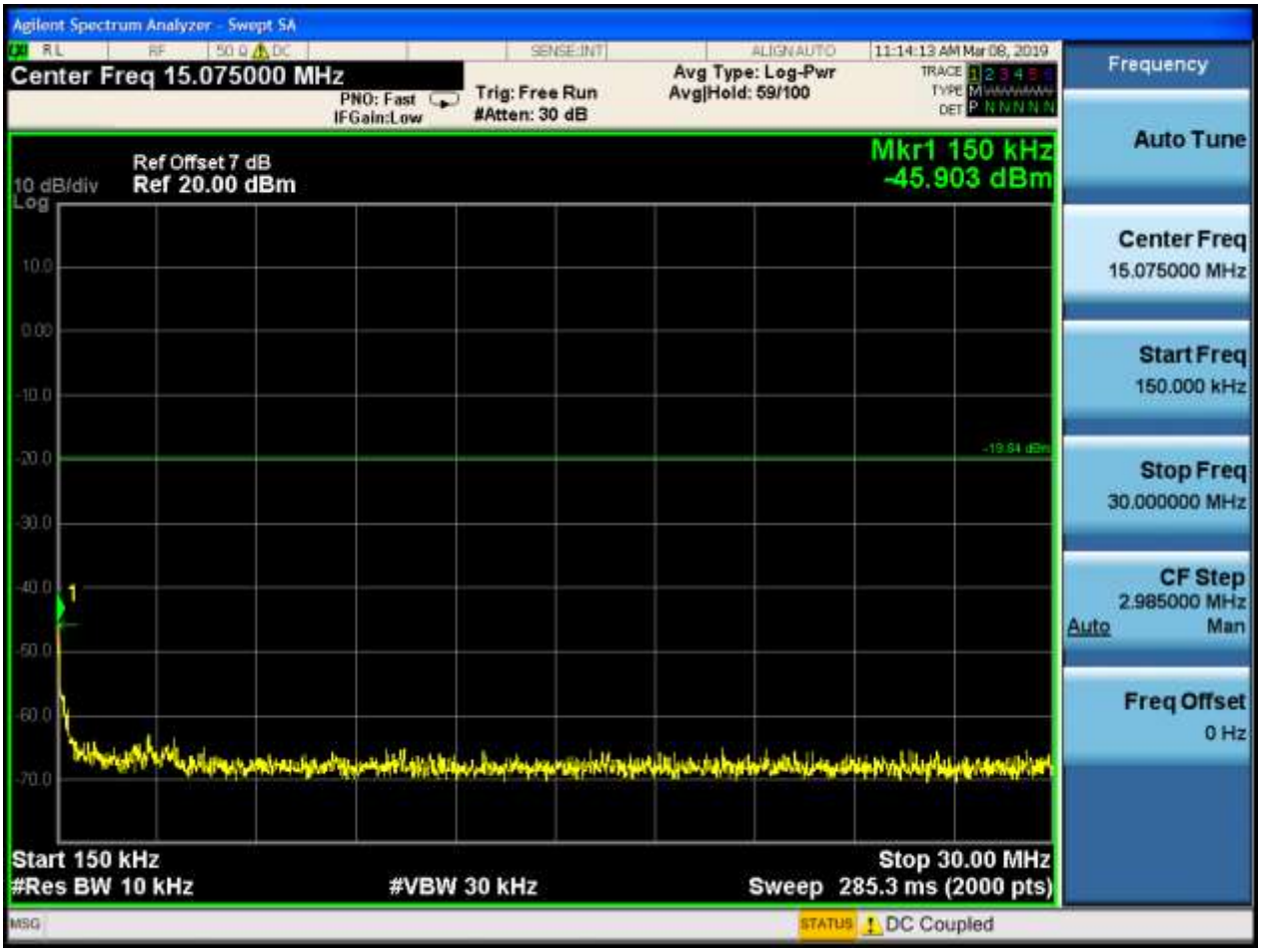
EUT Conf.	Pref [dBm/100 kHz]	Puw [dBm/100 kHz]	Verdict
TM1_DH5_Ch0	10.157	< Limit	Pass
TM1_DH5_Ch39	10.102	< Limit	Pass
TM1_DH5_Ch78	10.319	< Limit	Pass
TM2_2DH5_Ch0	10.195	< Limit	Pass
TM2_2DH5_Ch39	10.792	< Limit	Pass
TM2_2DH5_Ch78	10.338	< Limit	Pass
TM3_3DH5_Ch0	10.189	< Limit	Pass
TM3_3DH5_Ch39	10.138	< Limit	Pass
TM3_3DH5_Ch78	10.378	< Limit	Pass

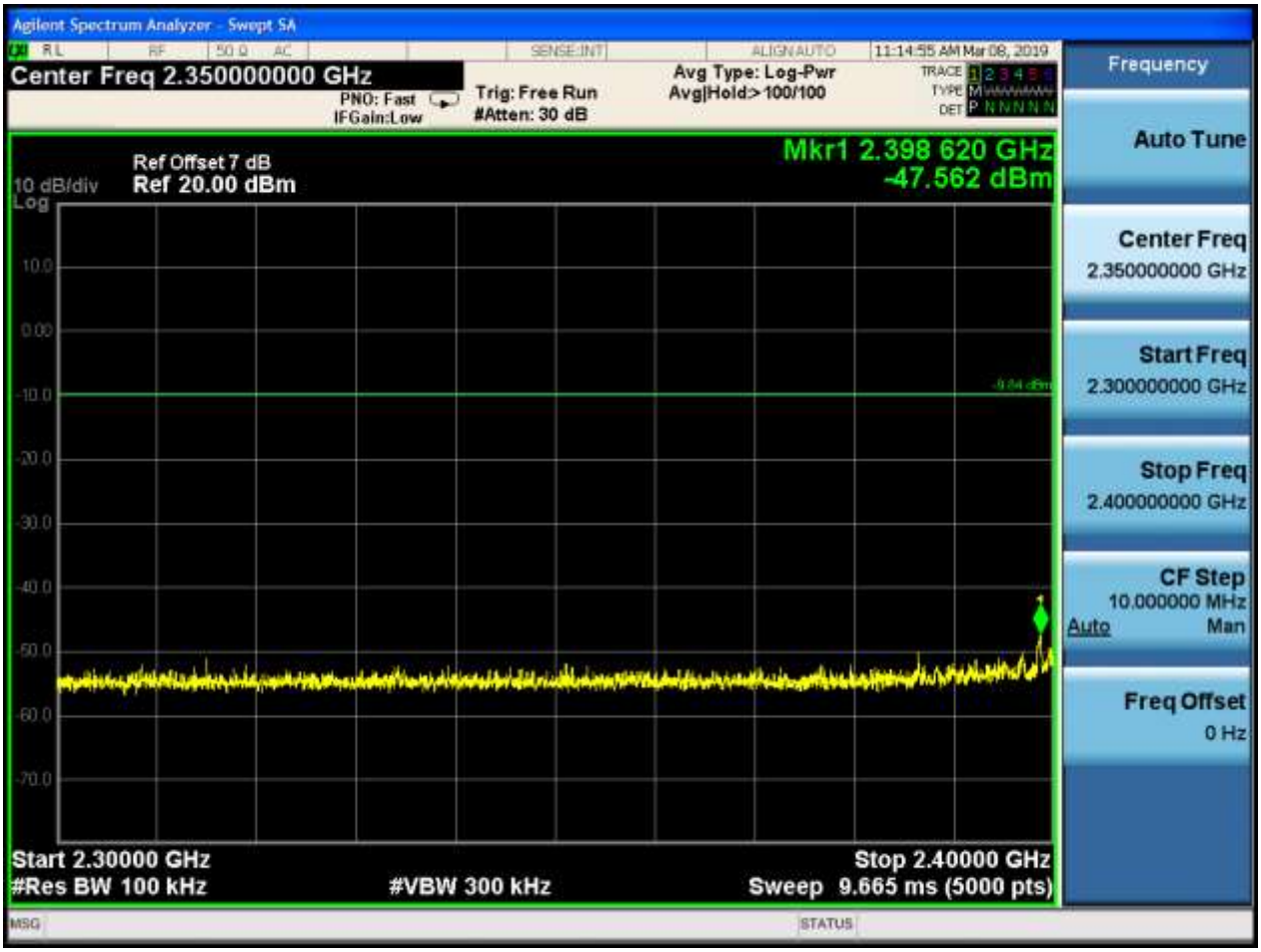
2 Test Plot

2.1 TM1_DH5_Ch0

2.1.1 Pref

2.1.2 Puw

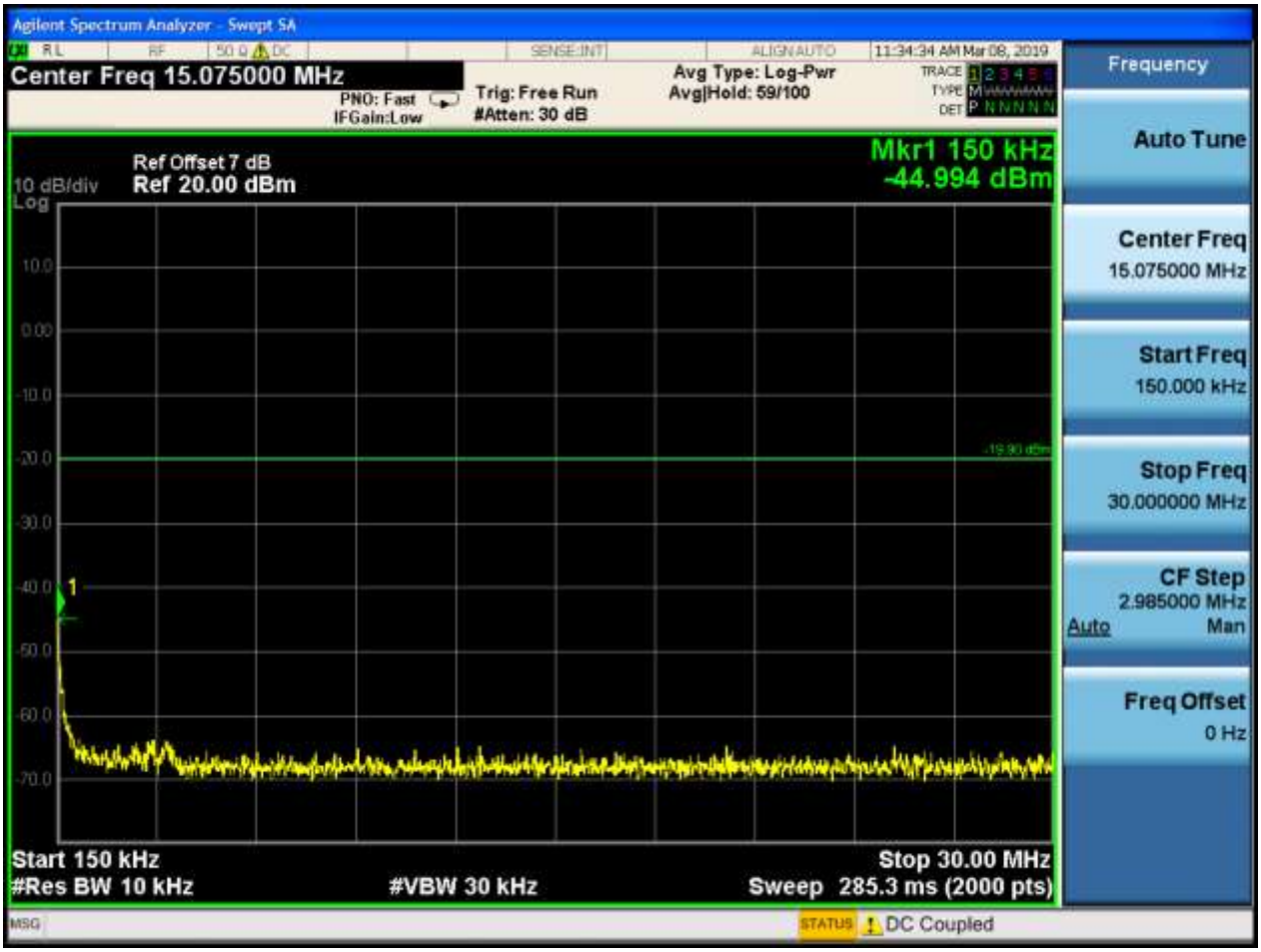


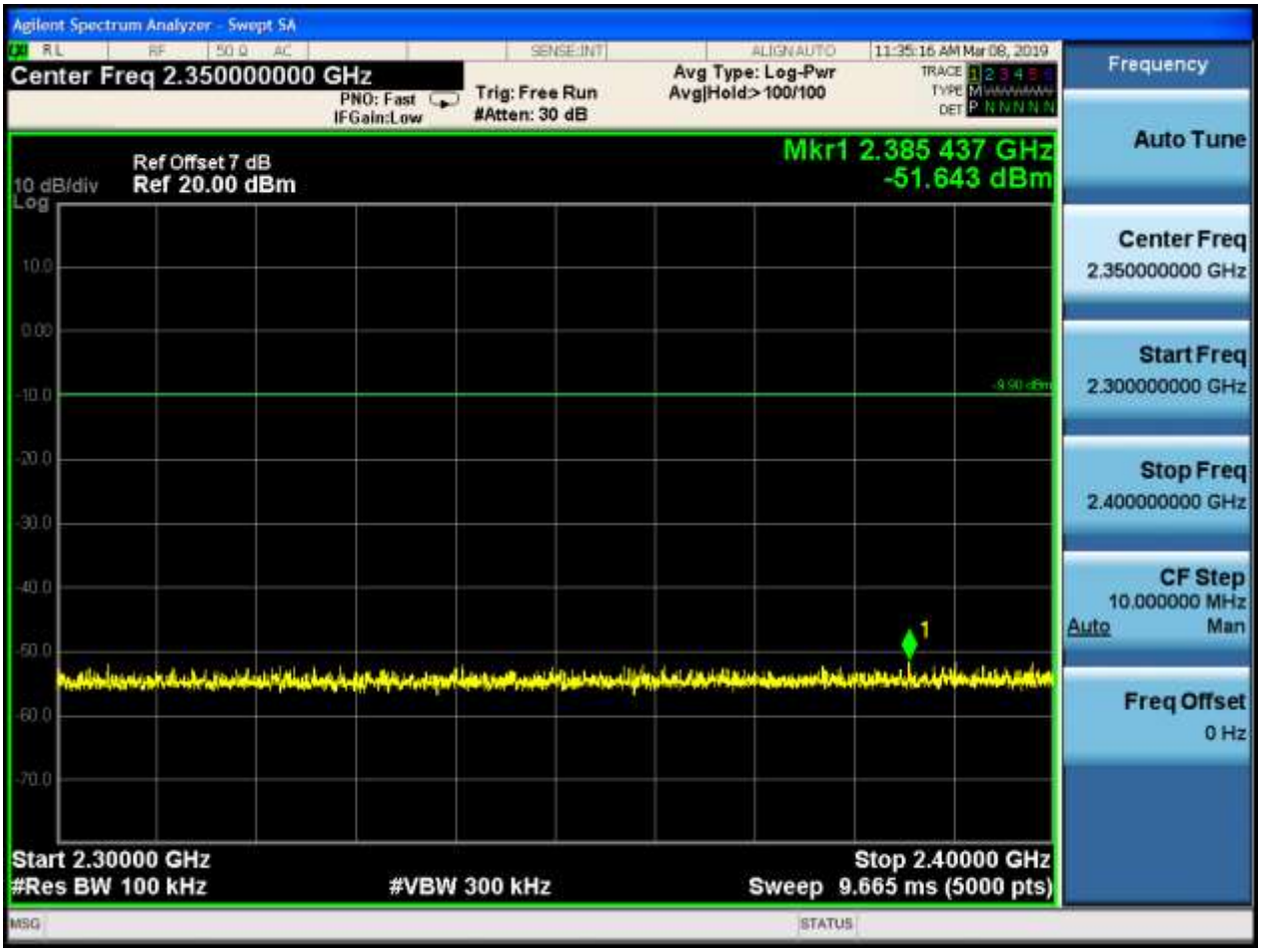


2.2 TM1_DH5_Ch39

2.2.1 Pref

2.2.2 Puw

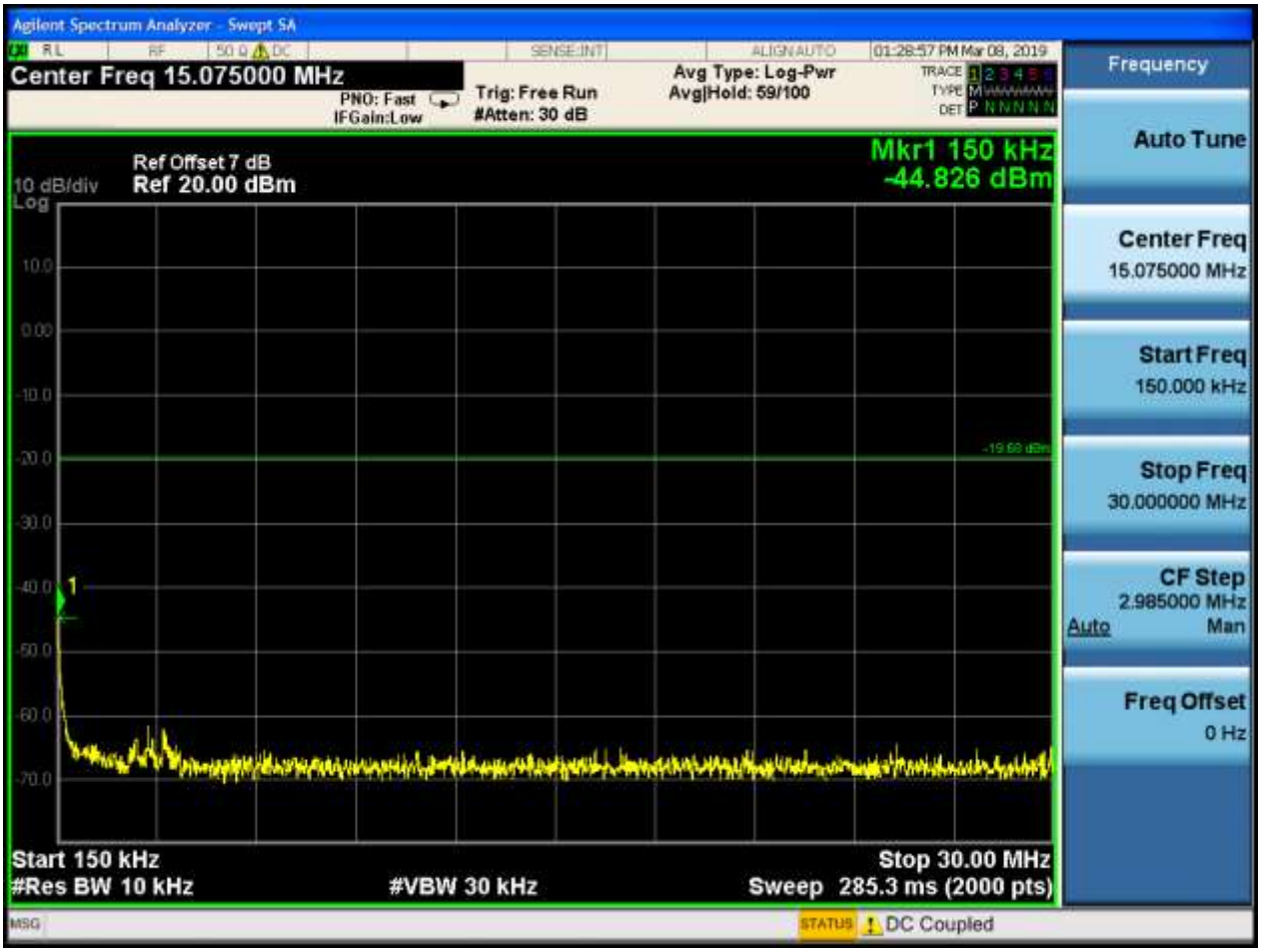


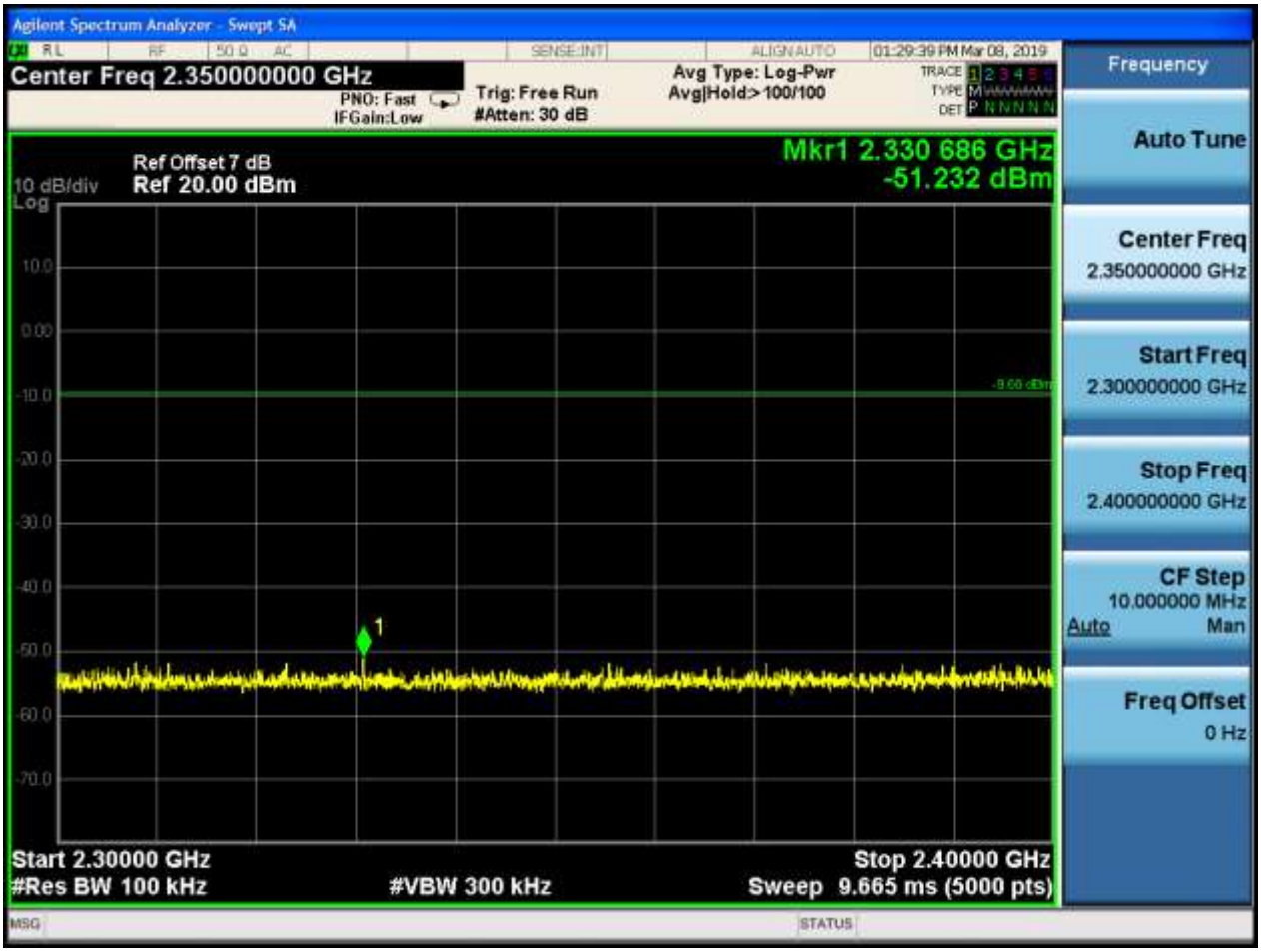


2.3 TM1_DH5_Ch78

2.3.1 Pref

2.3.2 Puw

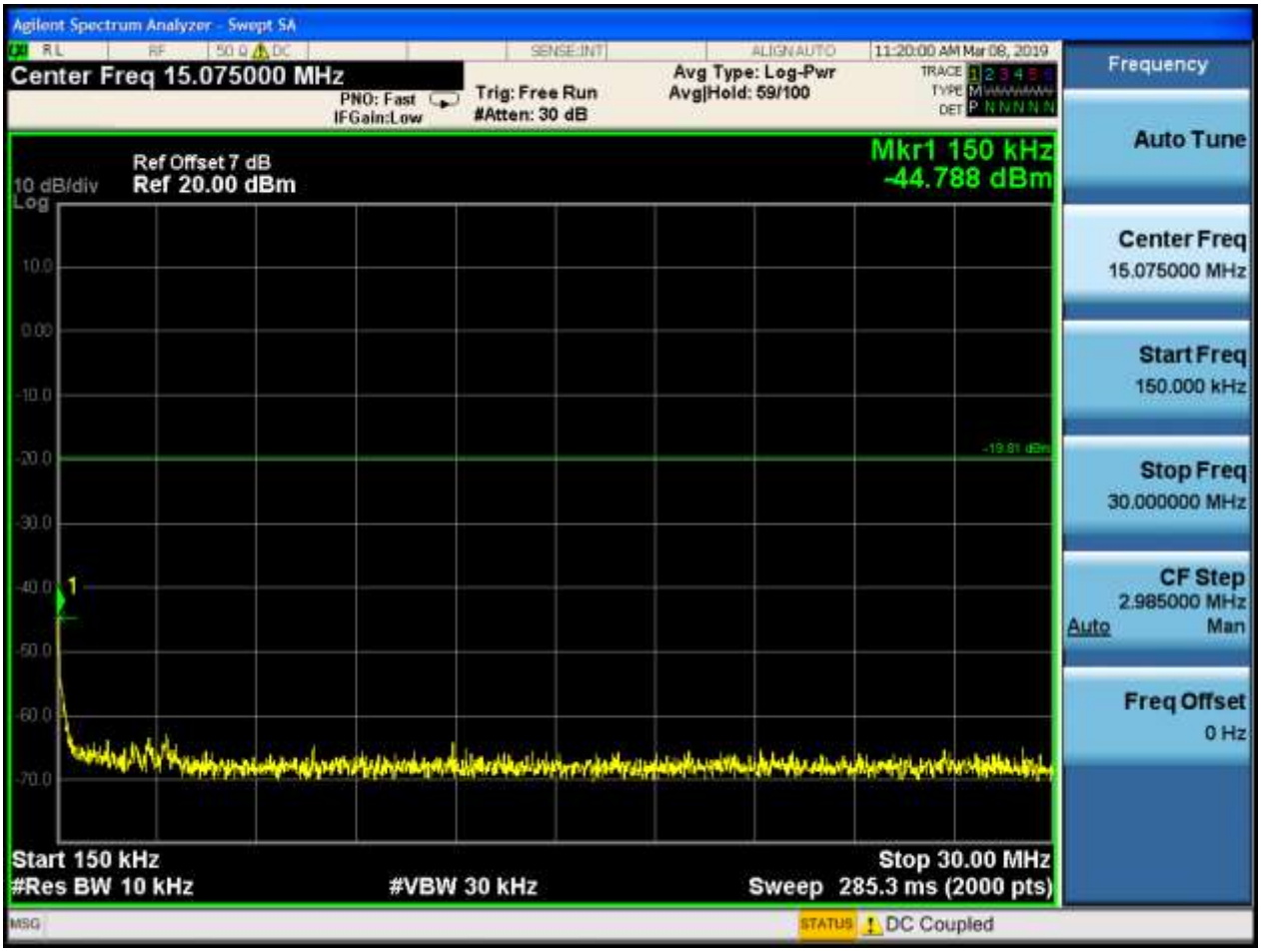


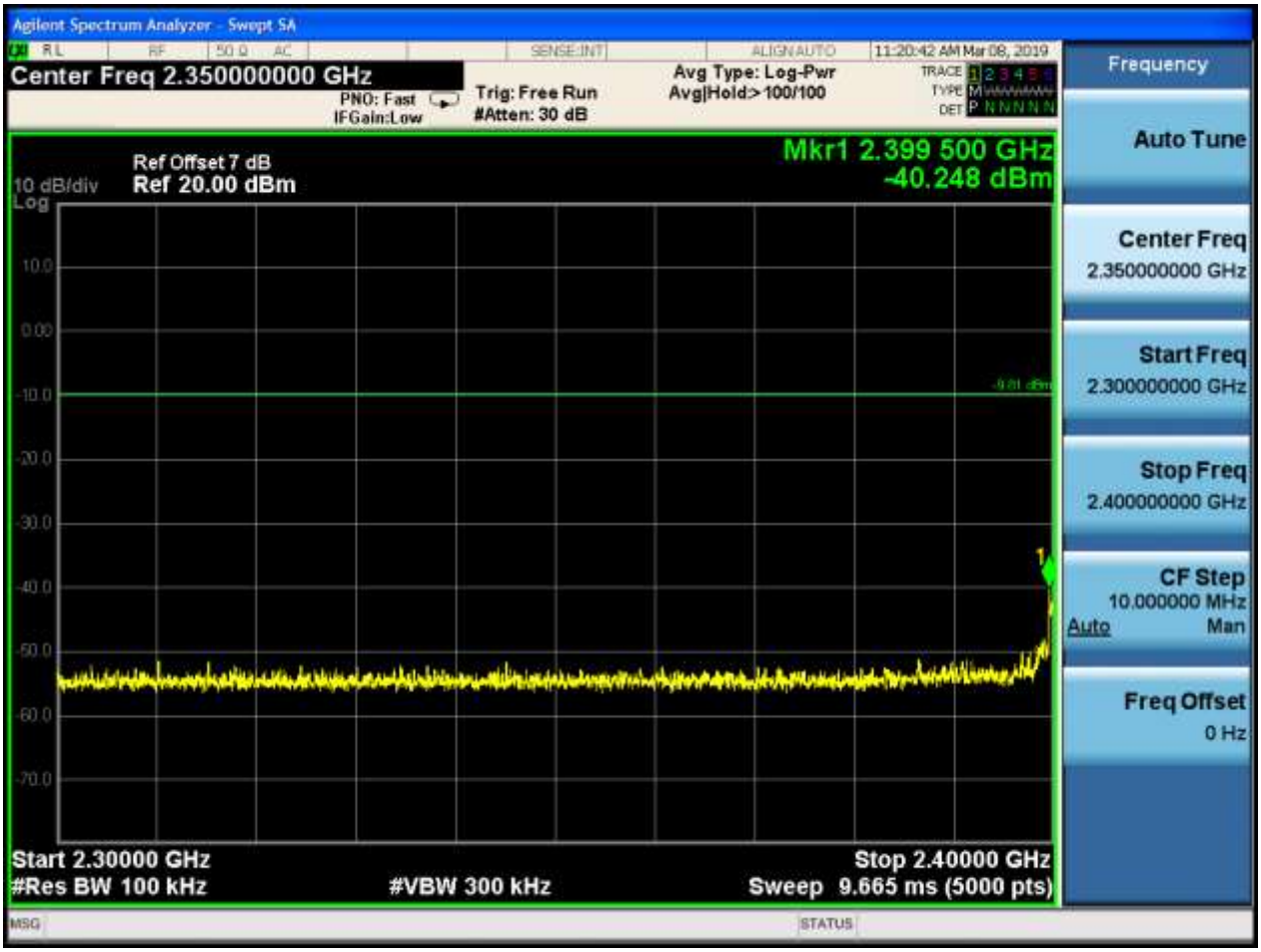


2.4 TM2_2DH5_Ch0

2.4.1 Pref

2.4.2 Puw

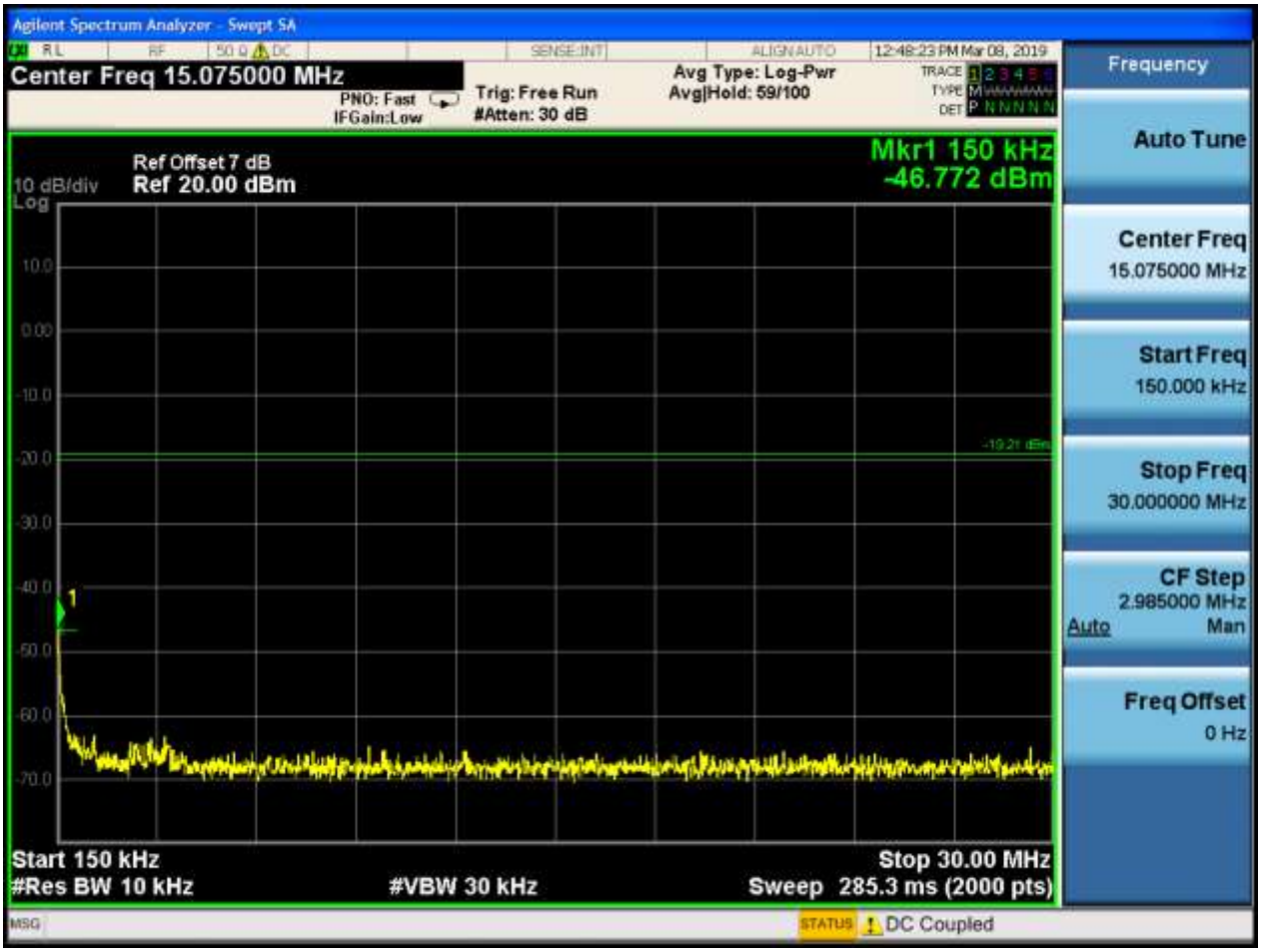


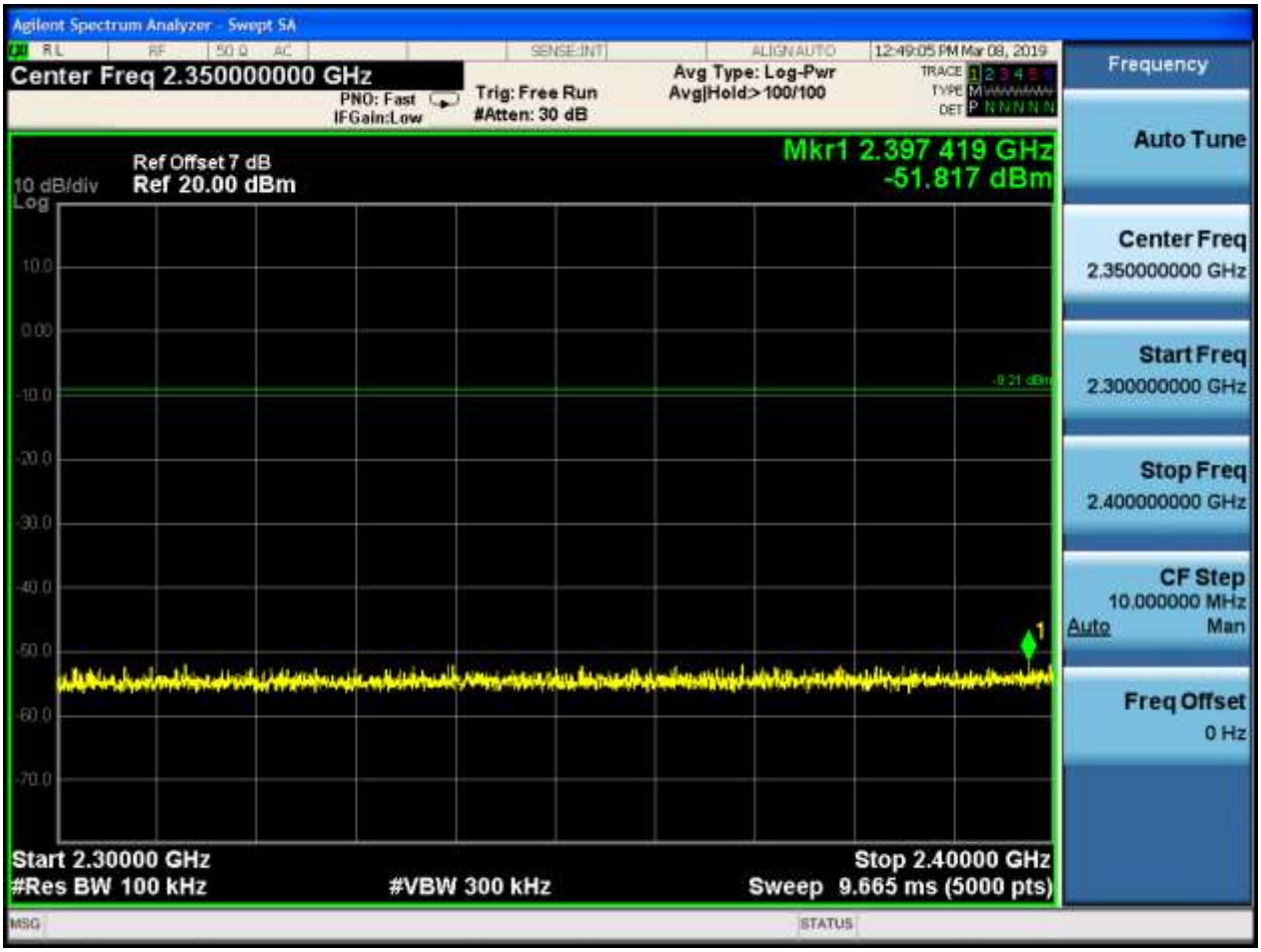


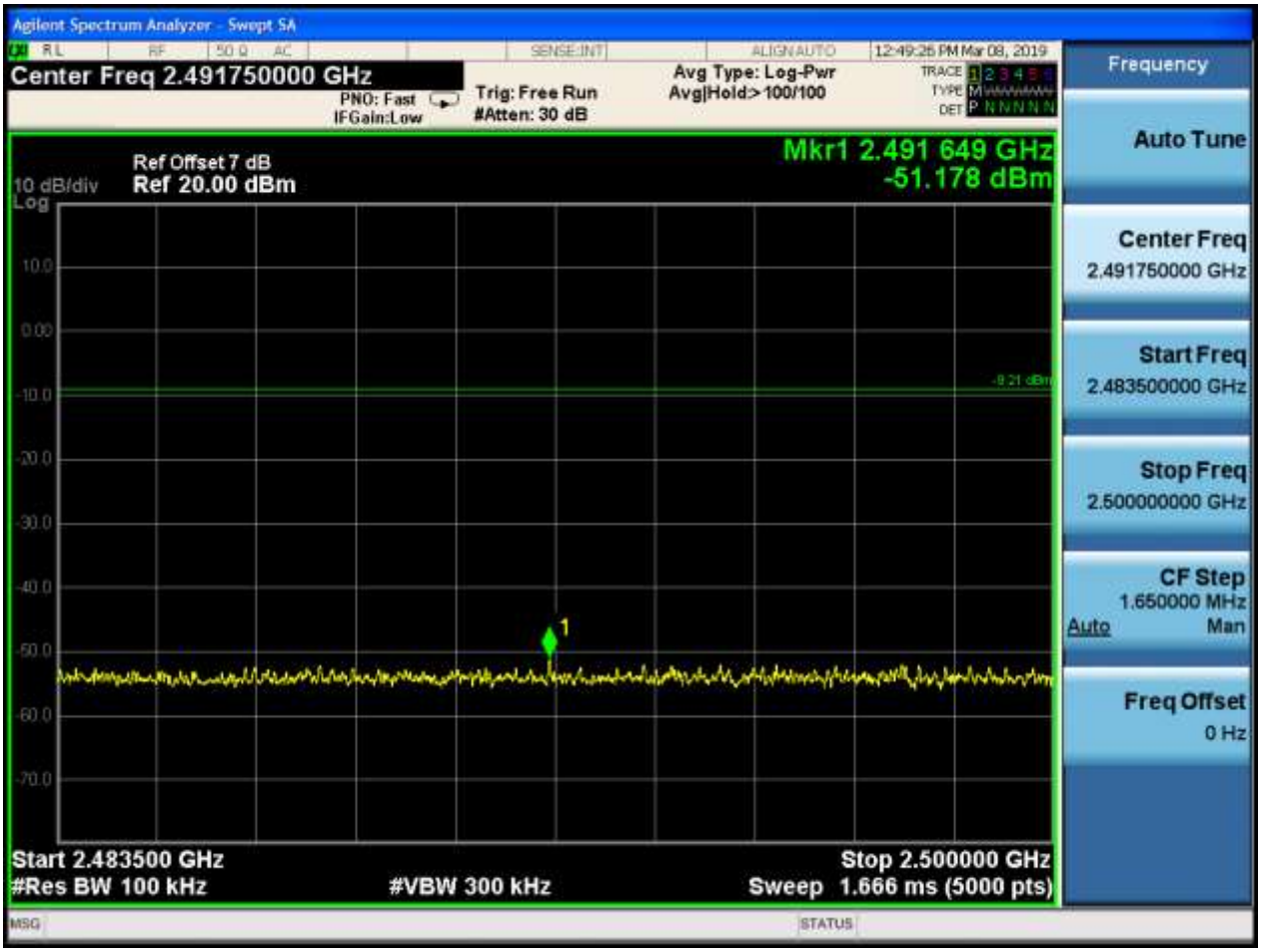
2.5 TM2_2DH5_Ch39

2.5.1 Pref

2.5.2 Puw



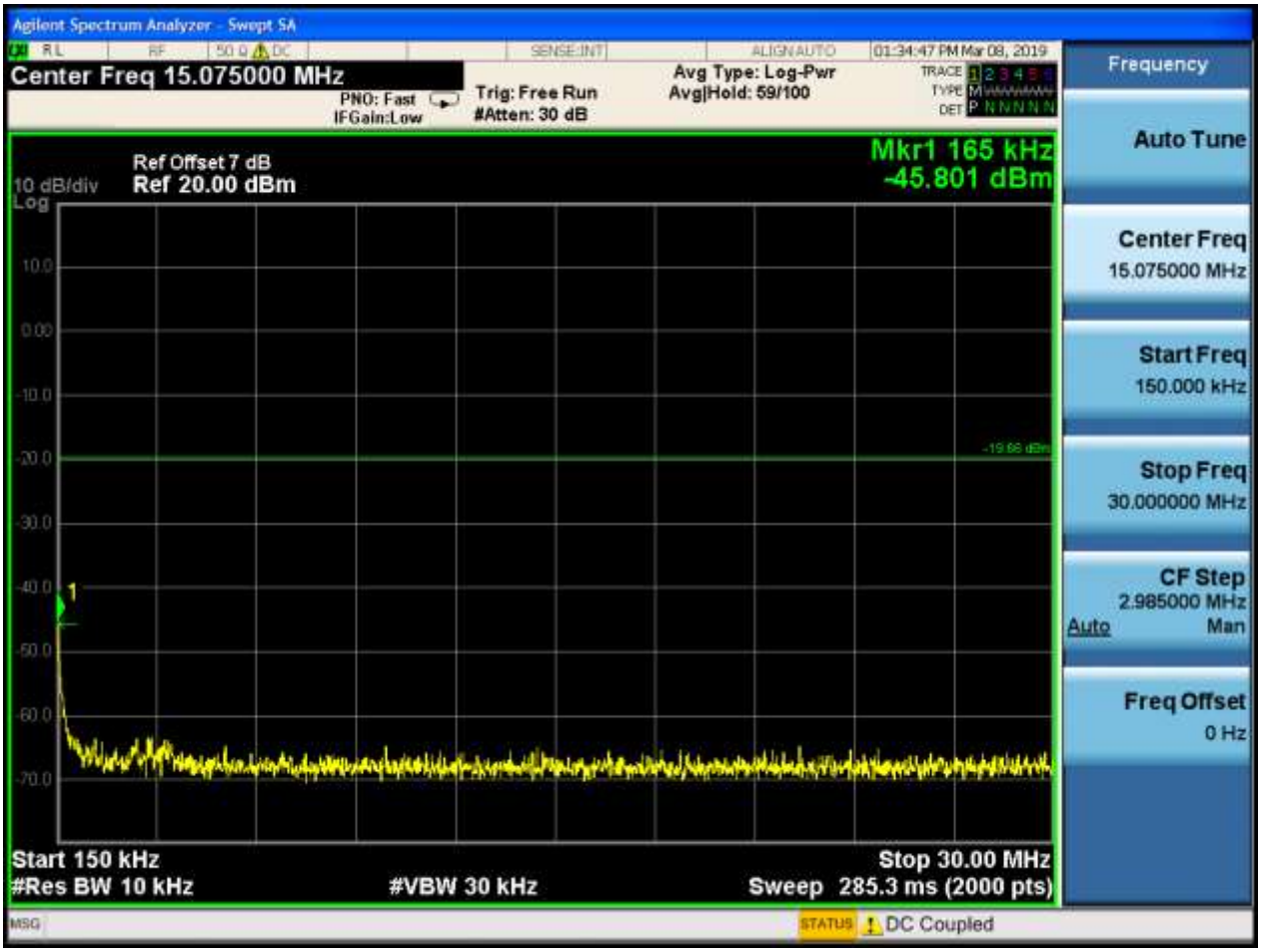


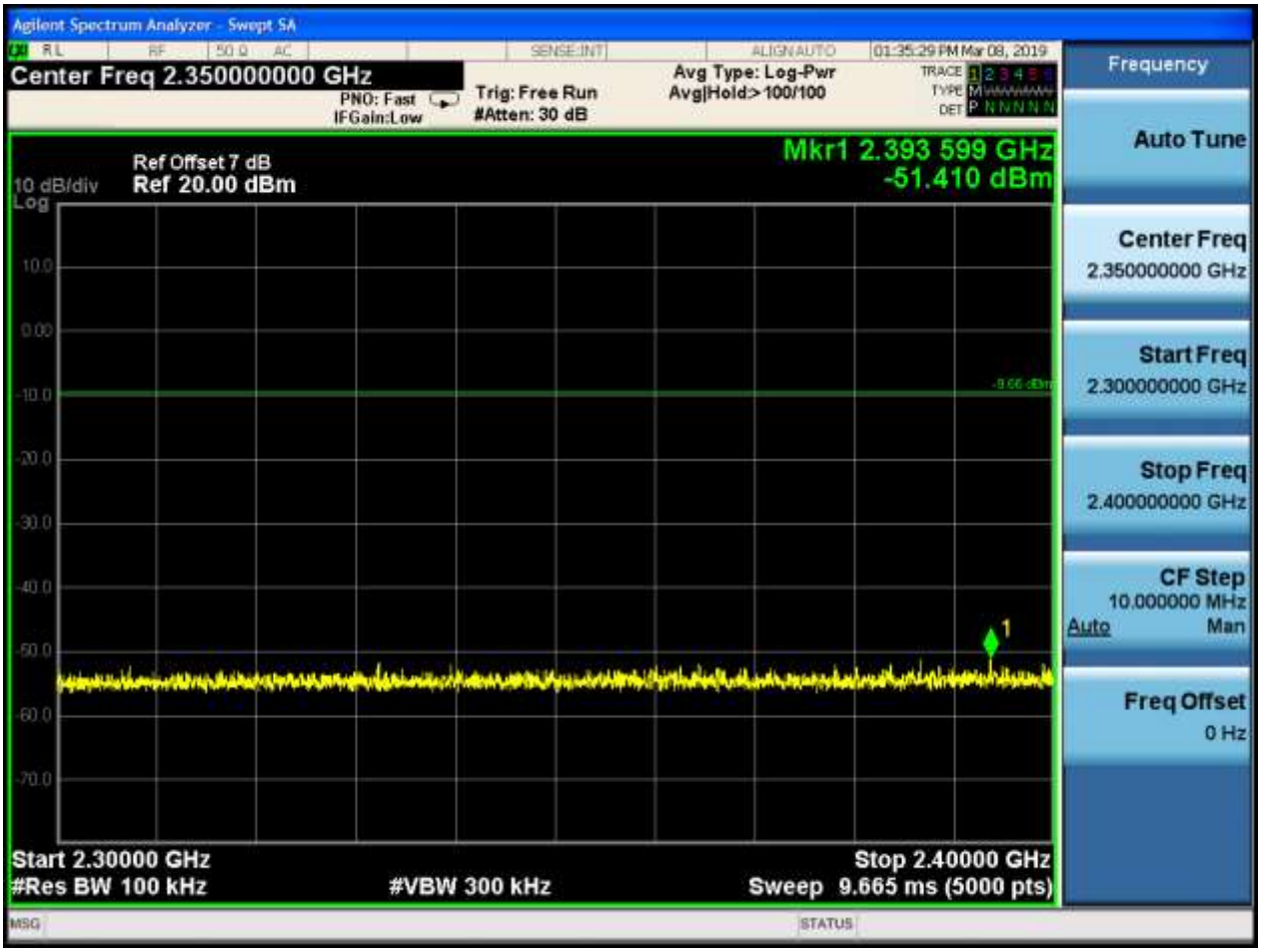


2.6 TM2_2DH5_Ch78

2.6.1 Pref

2.6.2 Puw

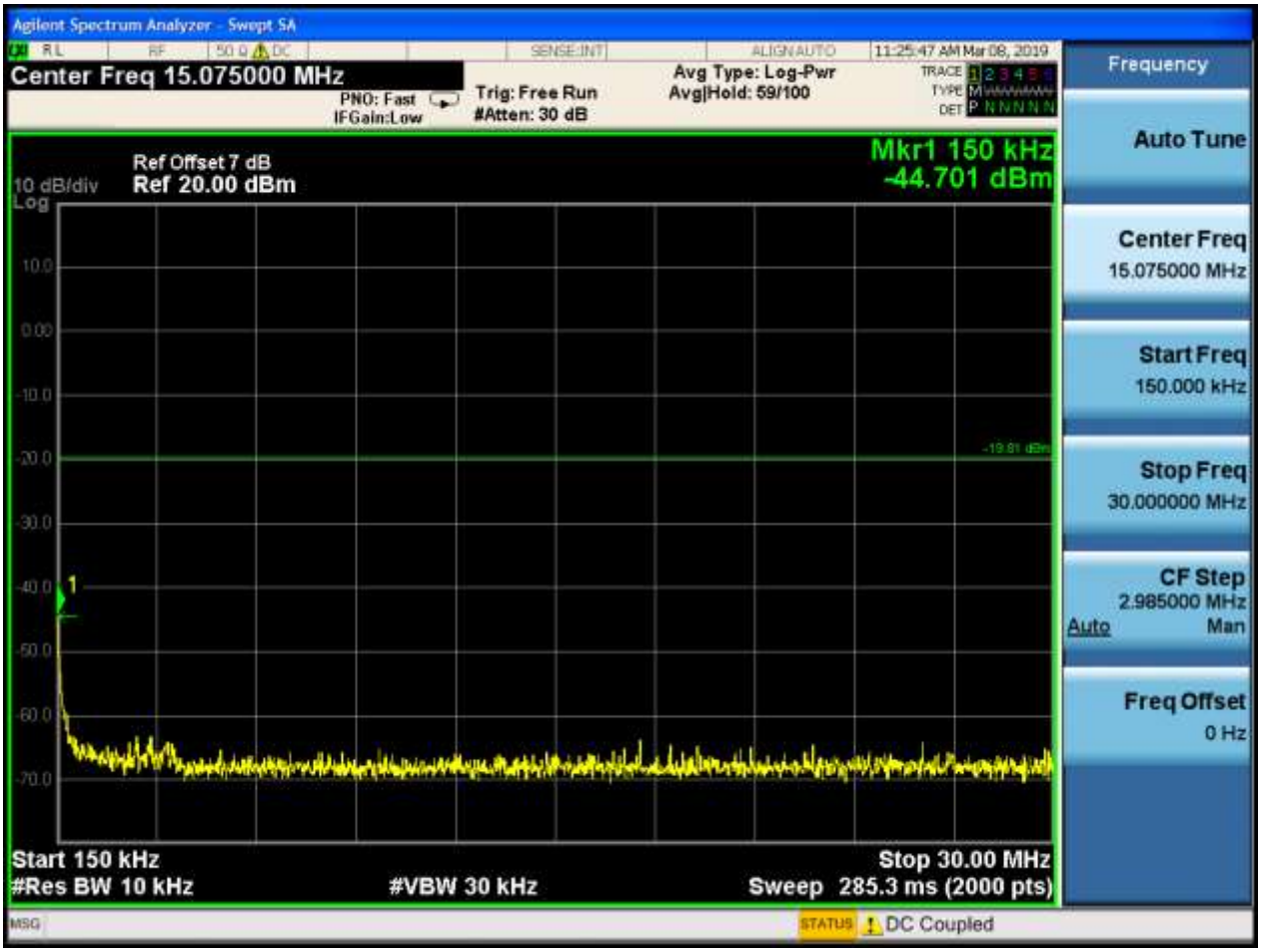


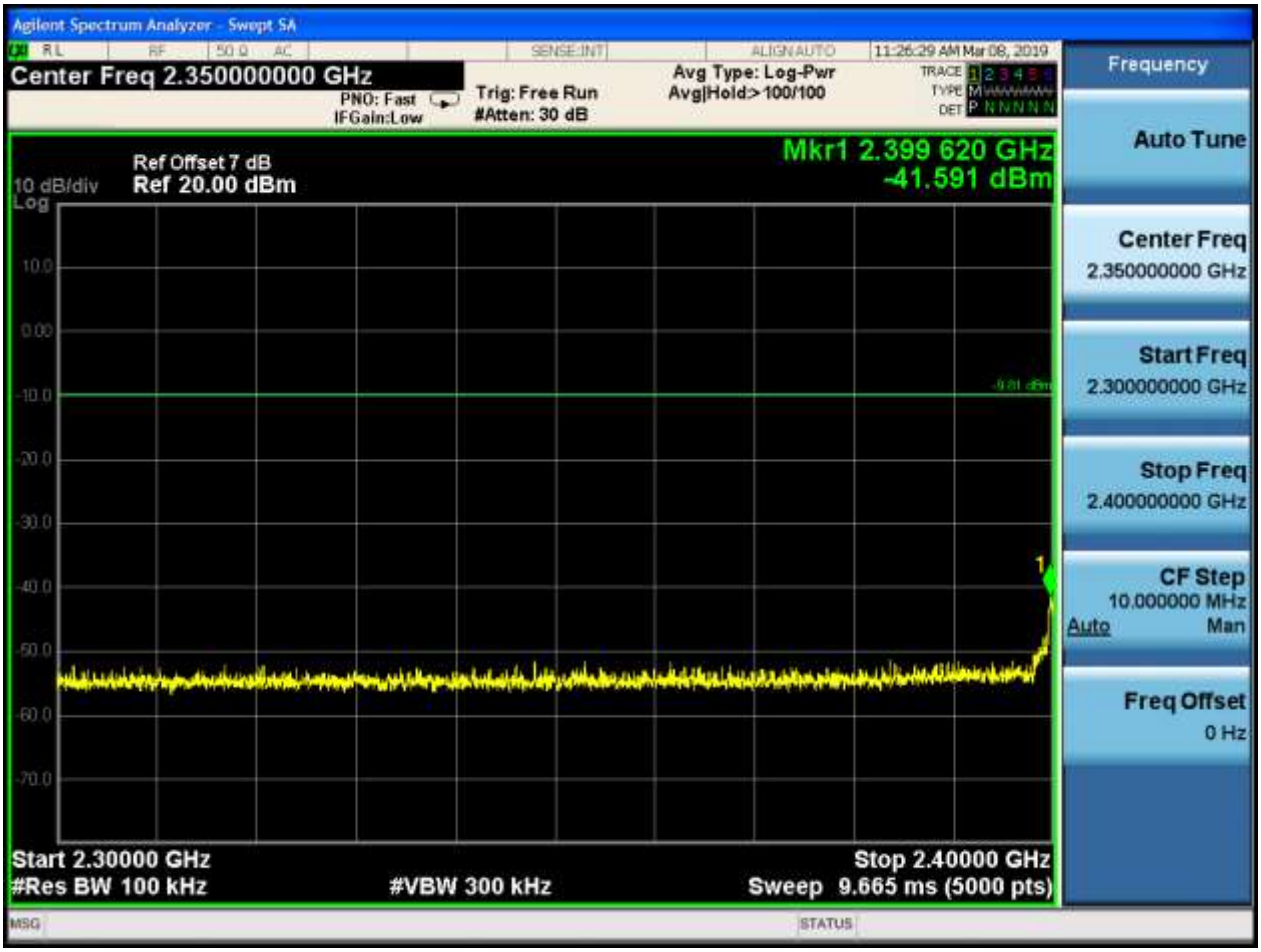


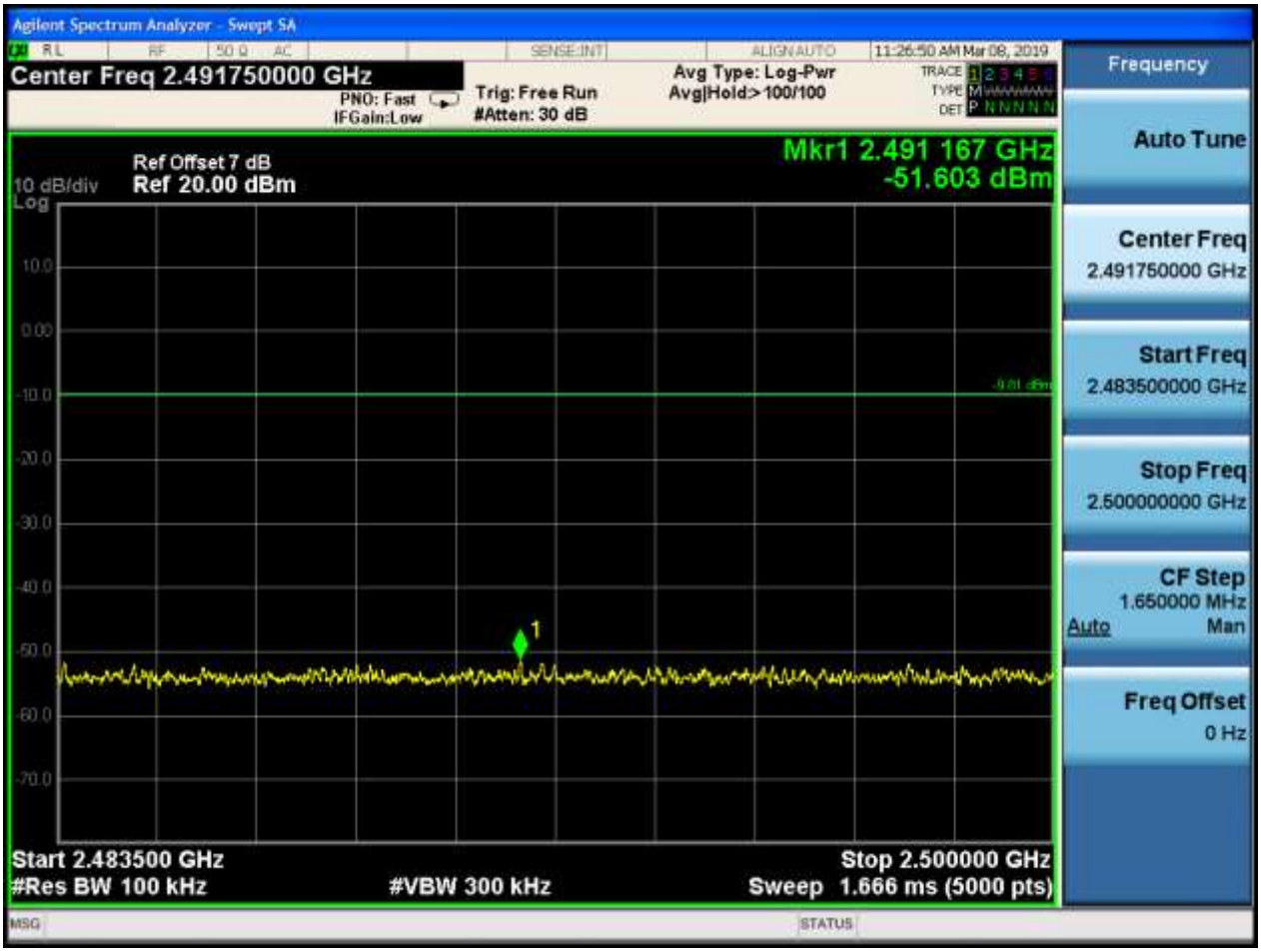
2.7 TM3_3DH5_Ch0

2.7.1 Pref

2.7.2 Puw



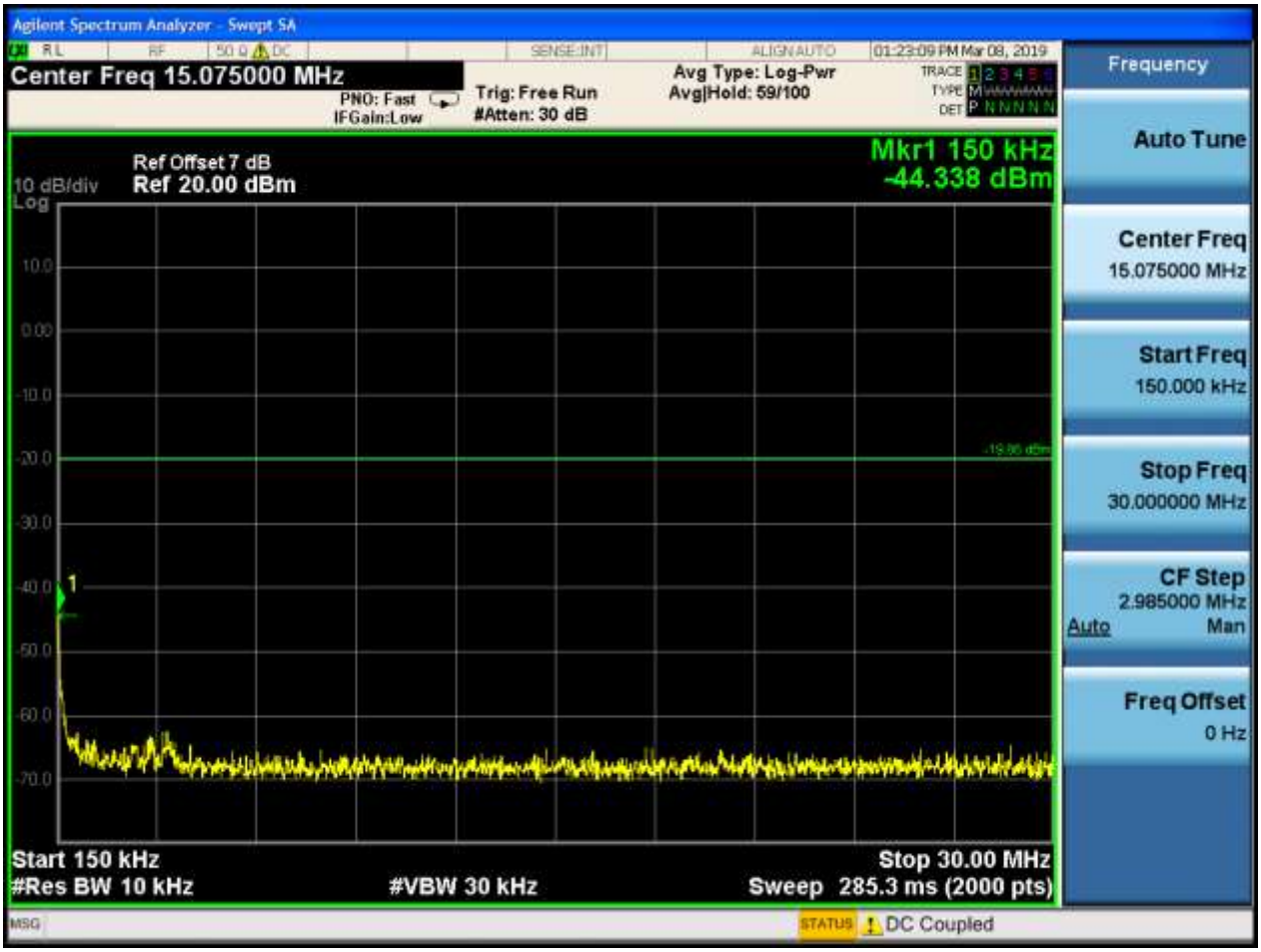


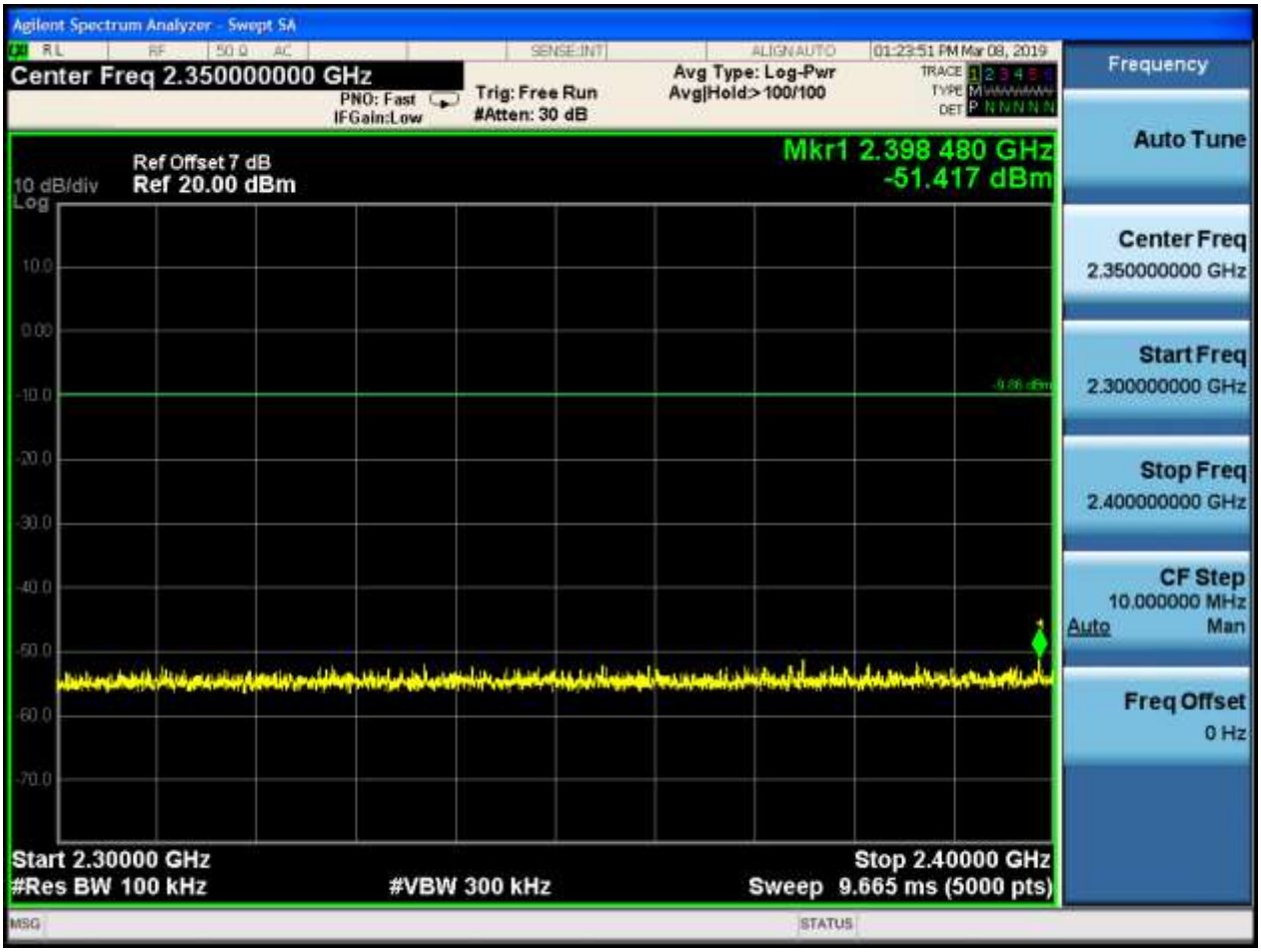


2.8 TM3_3DH5_Ch39

2.8.1 Pref

2.8.2 Puw

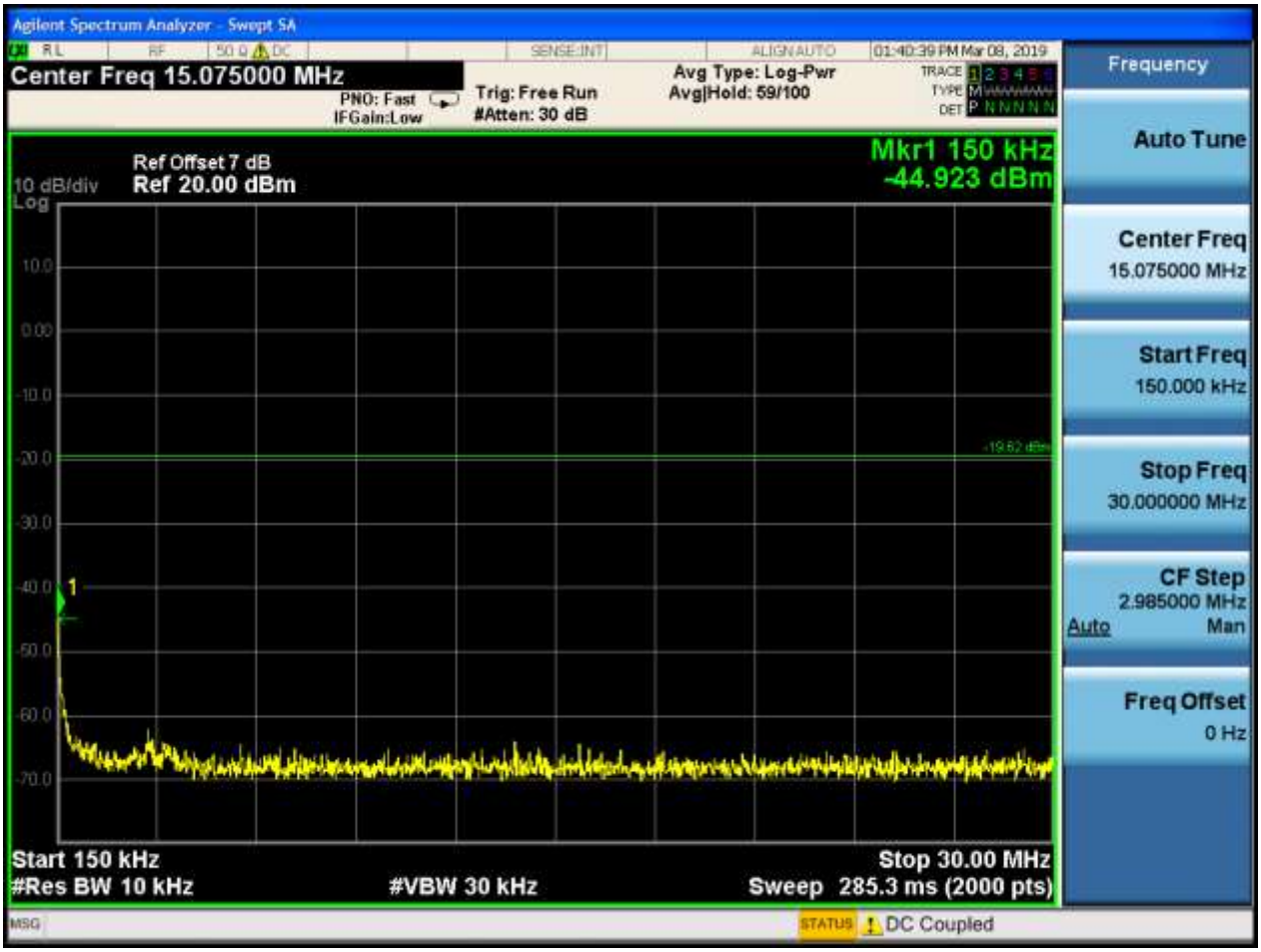


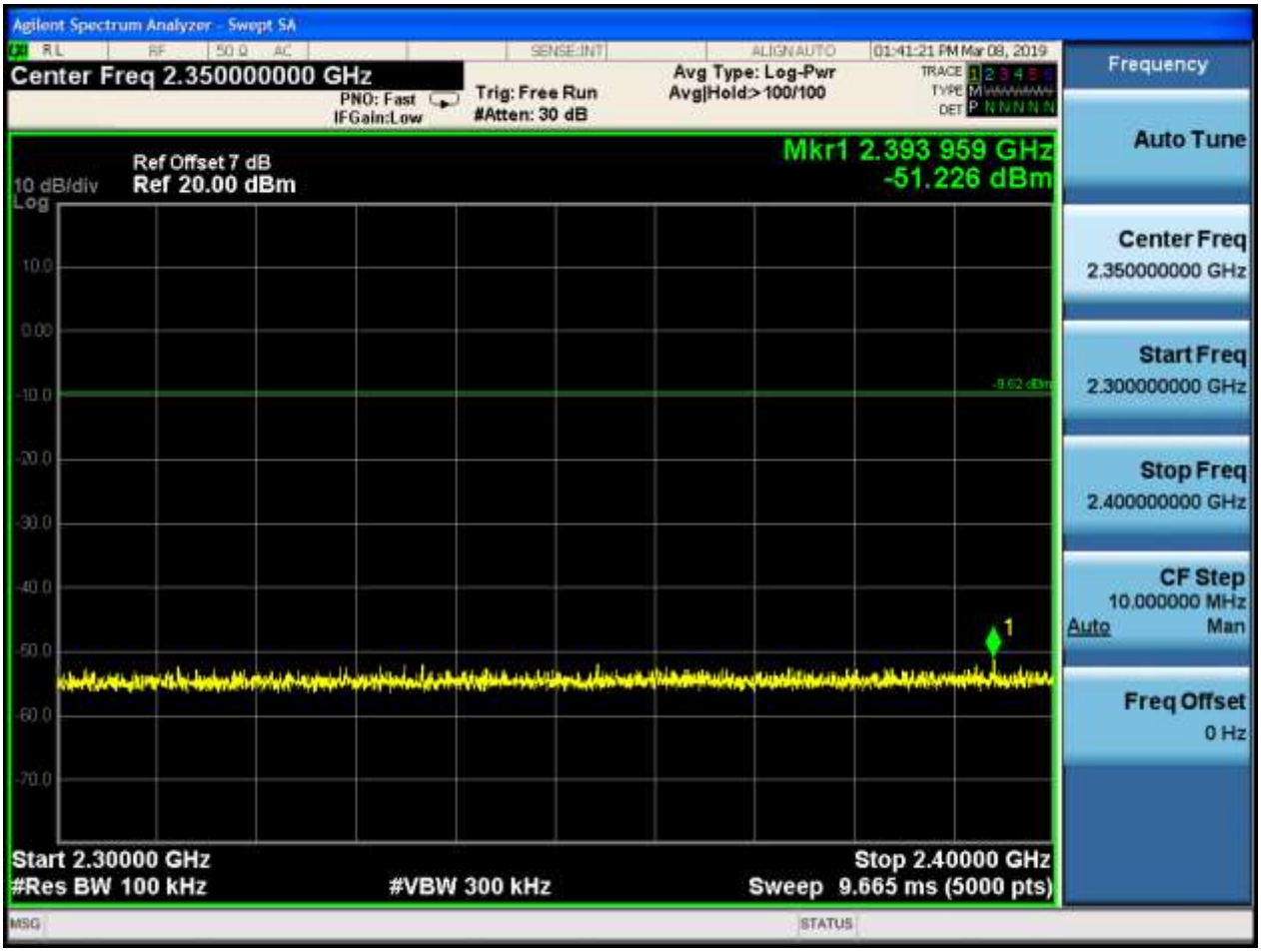


2.9 TM3_3DH5_Ch78

2.9.1 Pref

2.9.2 Puw





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