



# Appendix A: 20dB Emission Bandwidth (EBW)



## 1 Result Table

EUT Conf.	EBW [MHz]	Verdict
TM1_DH5_Ch0	0.94	Pass
TM1_DH5_Ch39	0.94	Pass
TM1_DH5_Ch78	0.94	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



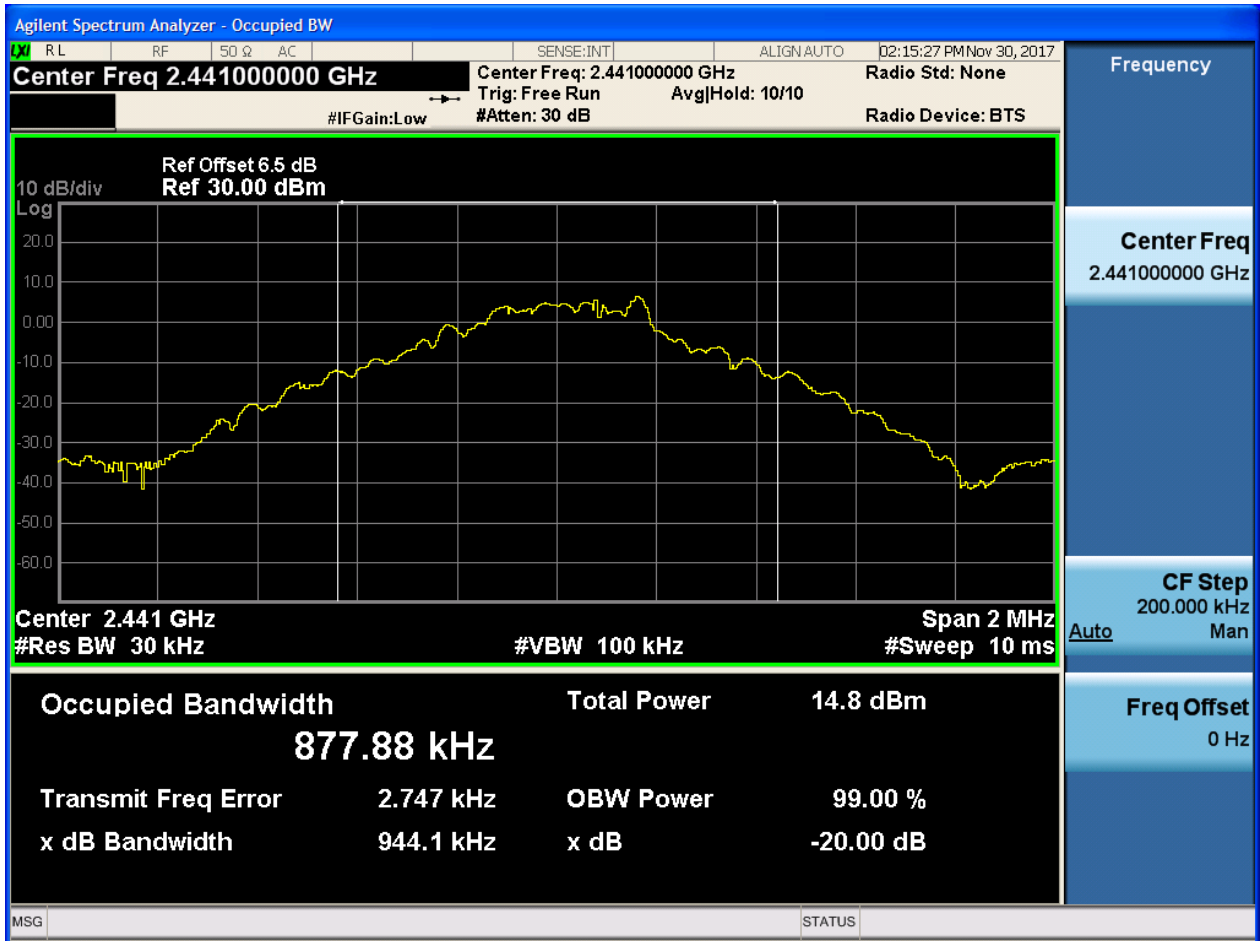
## 2 Test Plot

### 2.1 TM1\_DH5\_Ch0

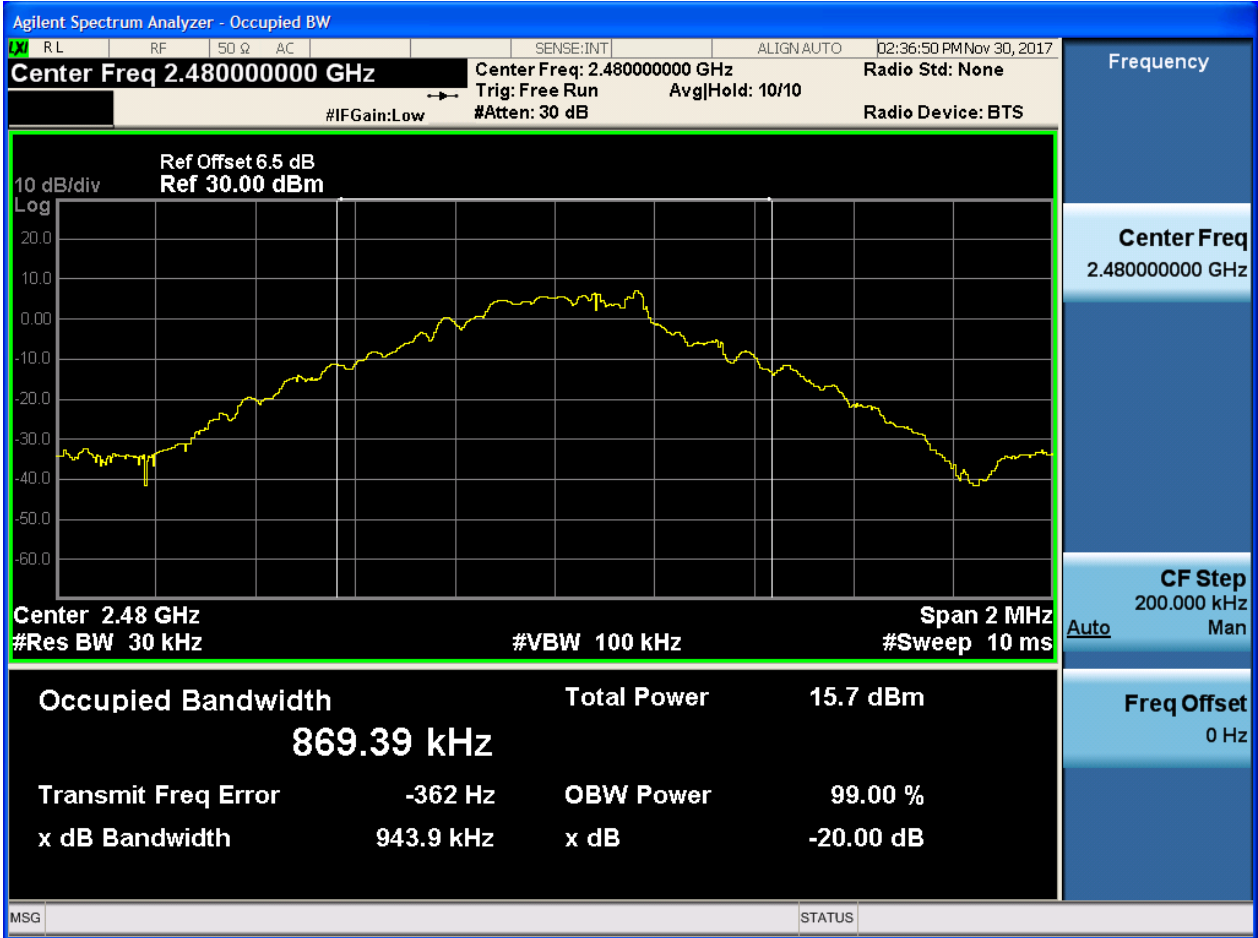




### 2.2 TM1\_DH5\_Ch39

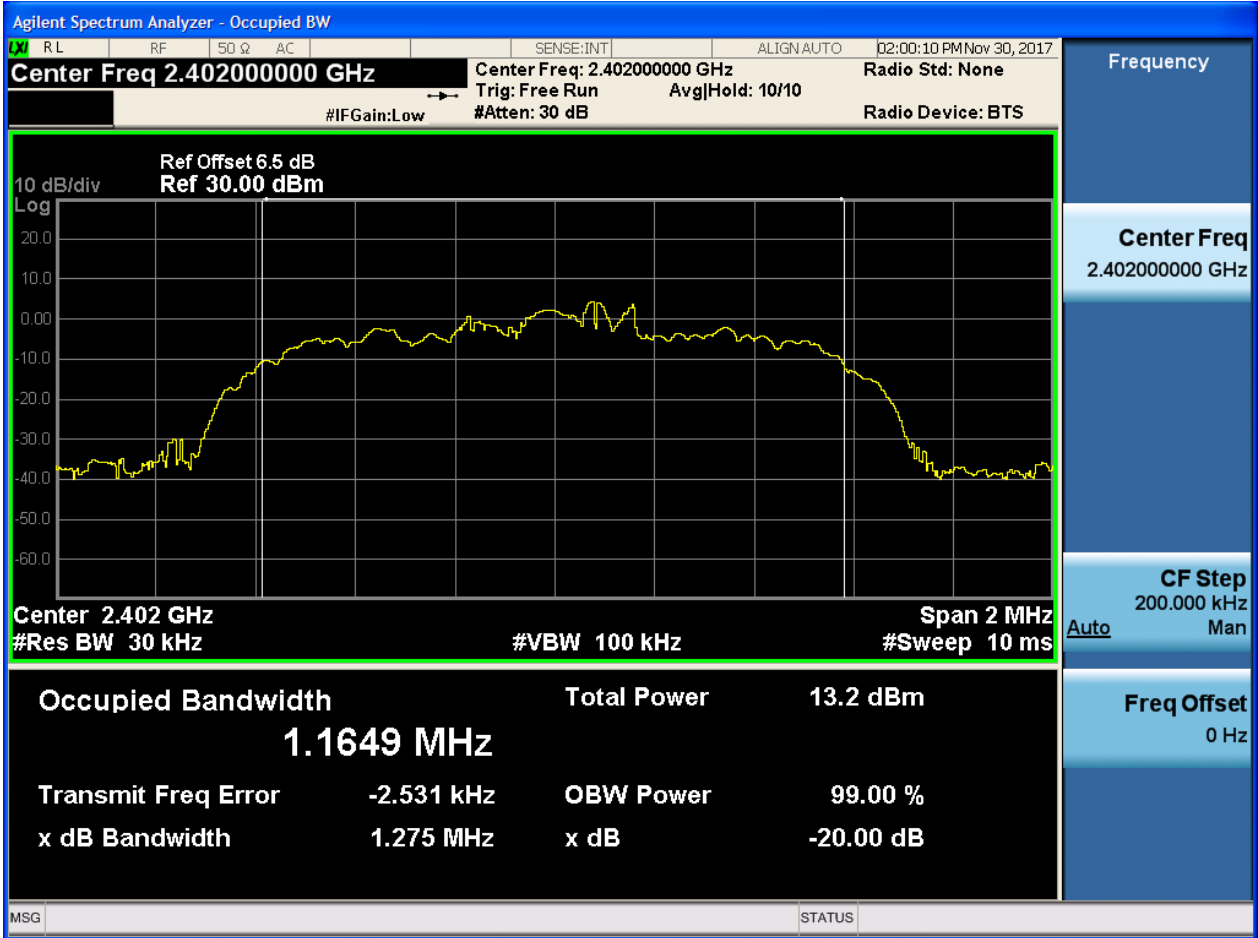


### 2.3 TM1\_DH5\_Ch78



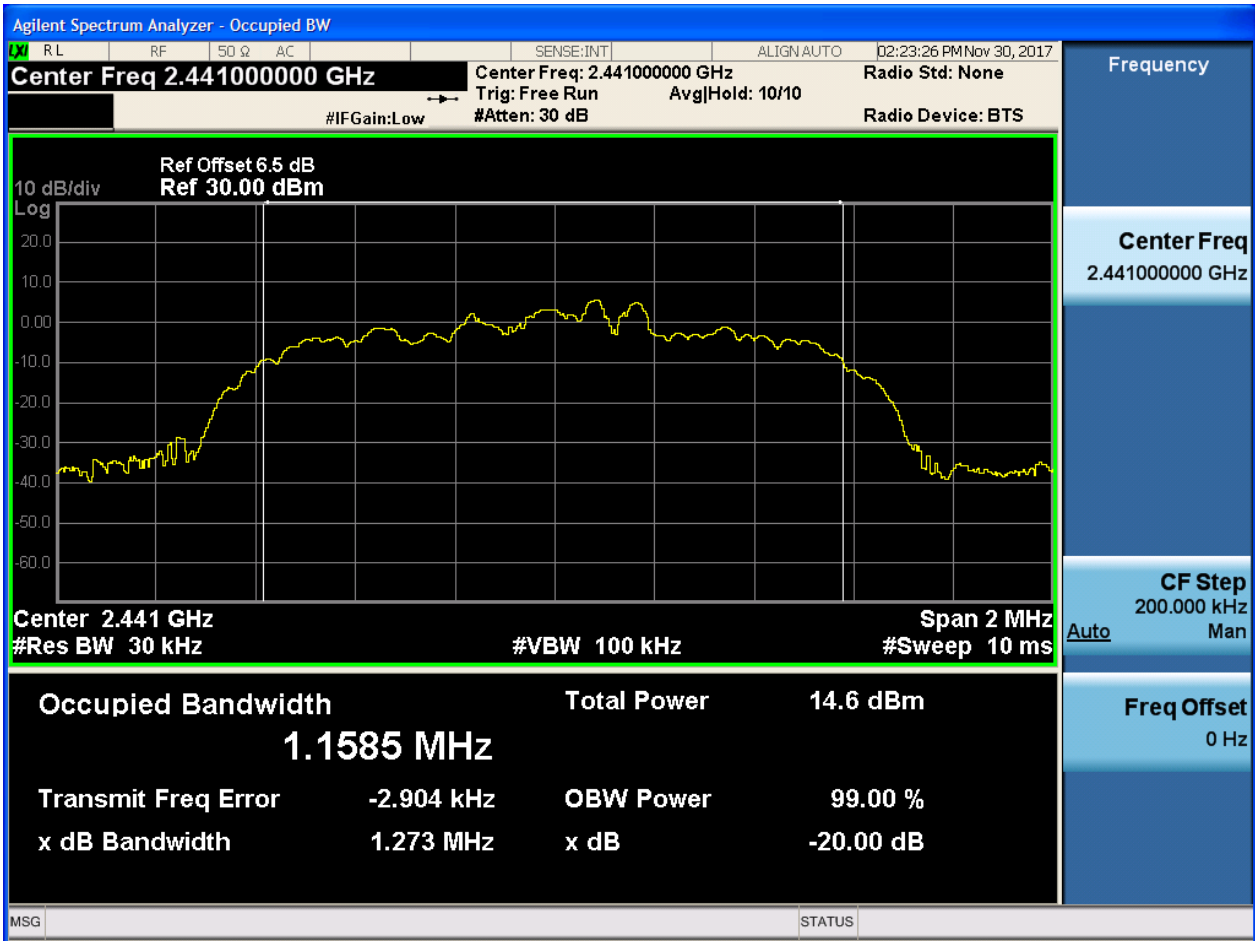


### 2.4 TM2\_2DH5\_Ch0



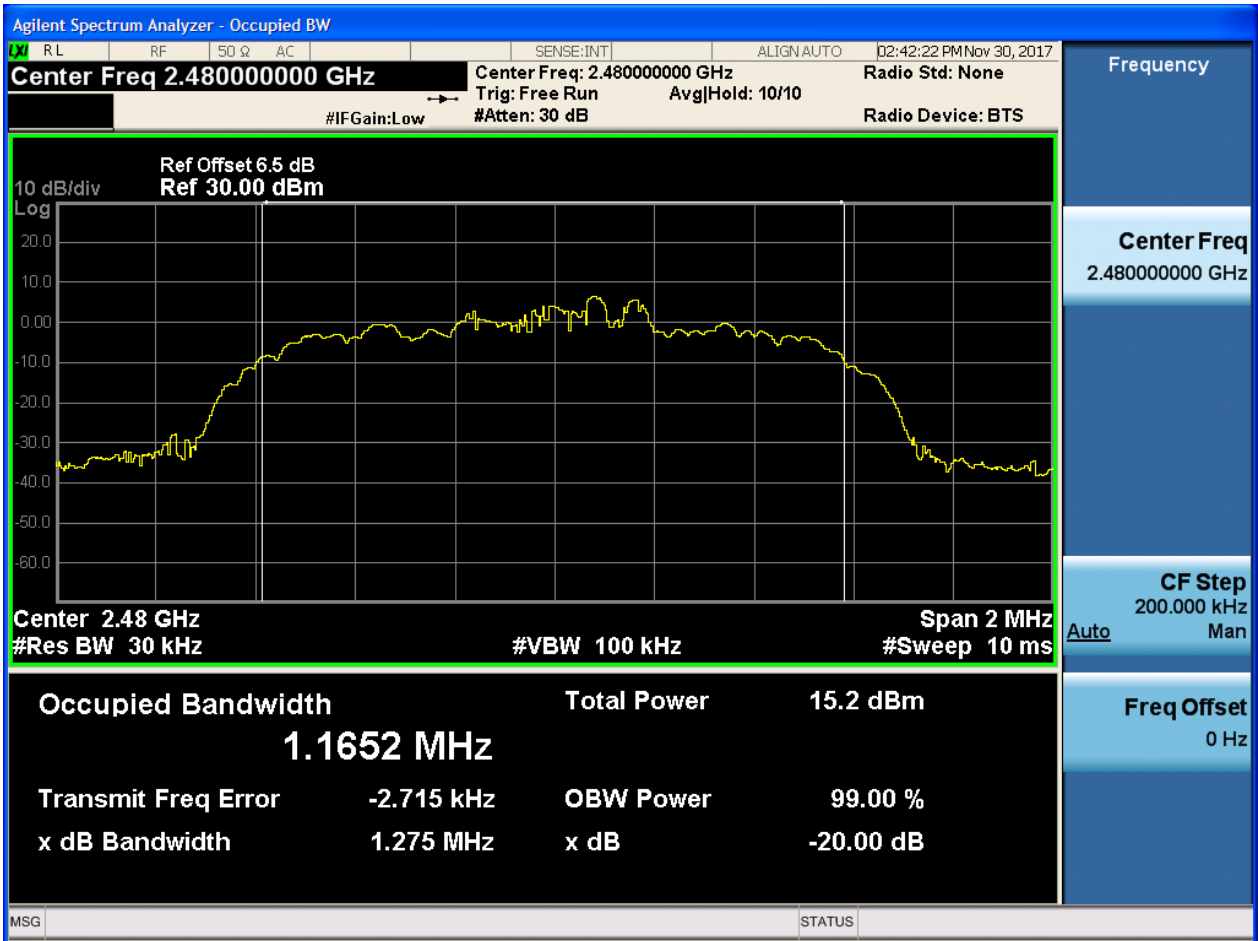


### 2.5 TM2\_2DH5\_Ch39





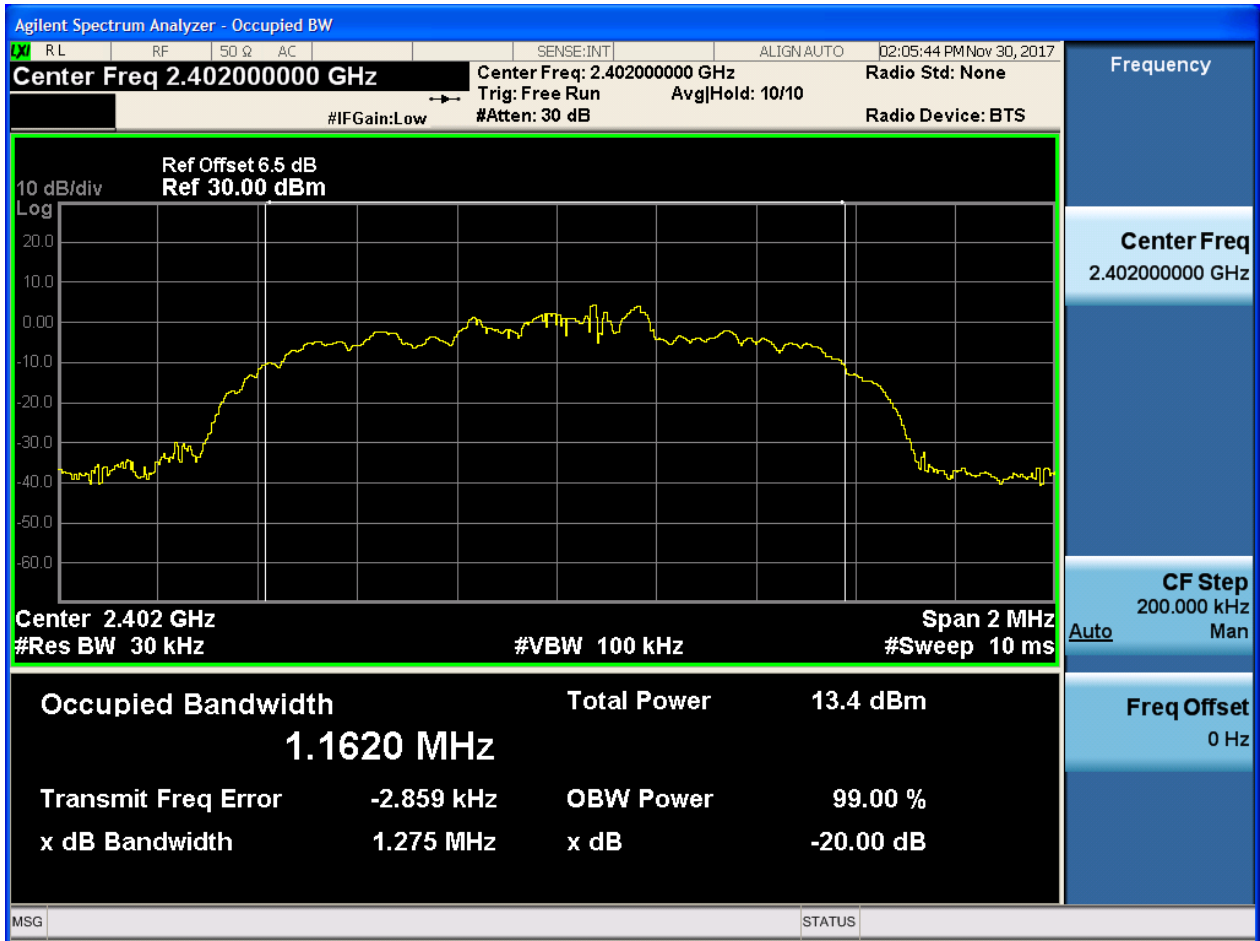
### 2.6 TM2\_2DH5\_Ch78





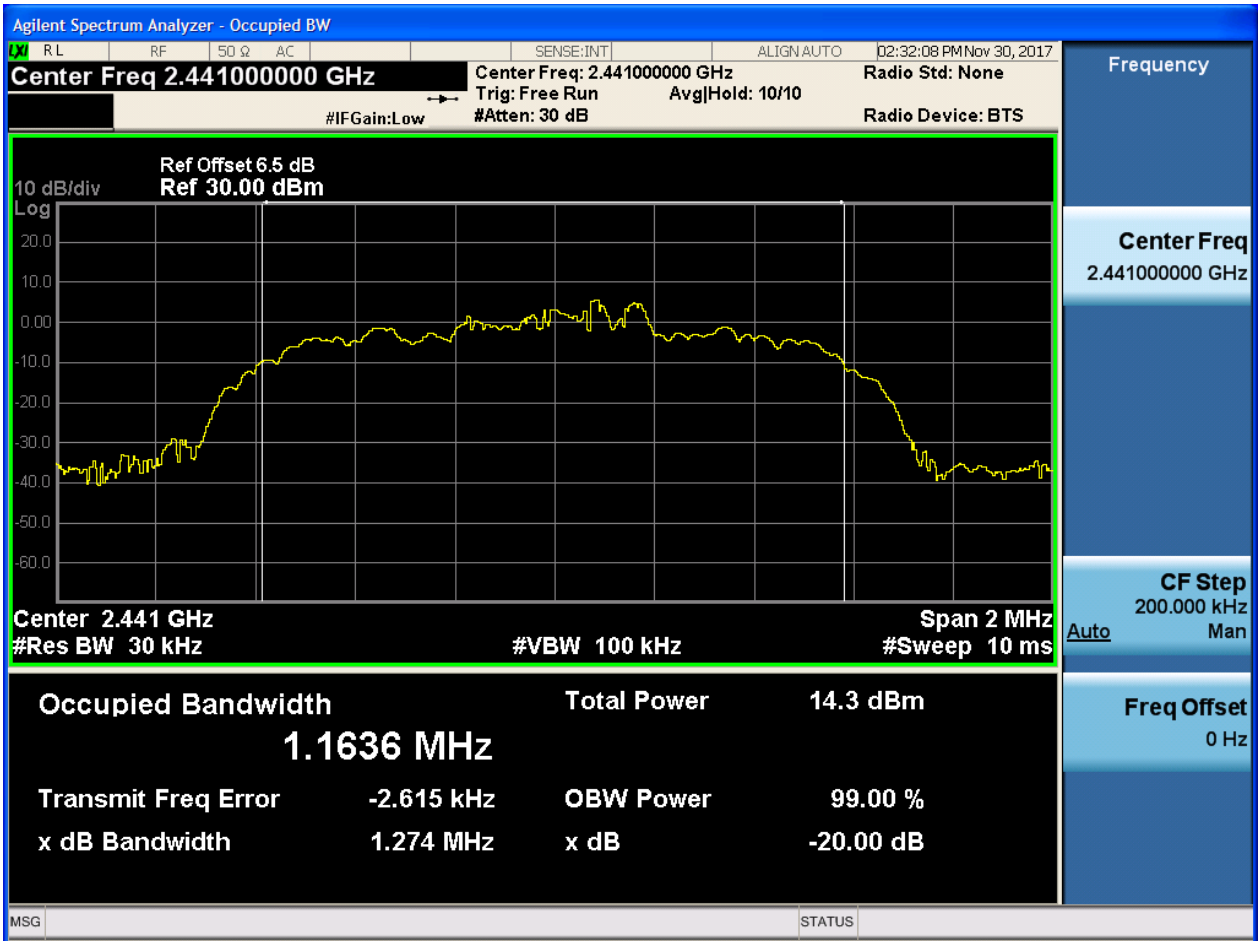


### 2.7 TM3\_3DH5\_Ch0



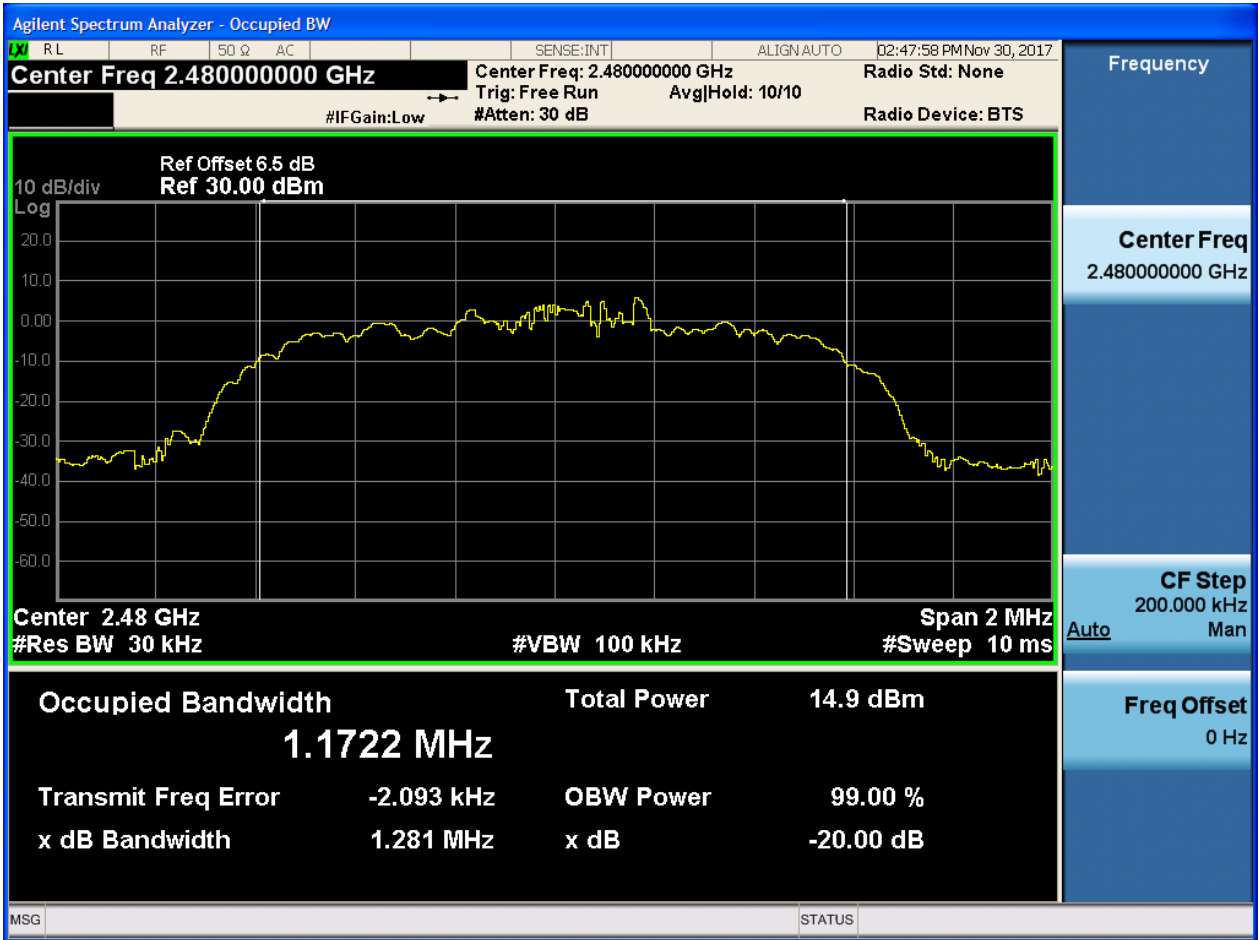


### 2.8 TM3\_3DH5\_Ch39





### 2.9 TM3\_3DH5\_Ch78





# Appendix B: Carrier Frequency Separation



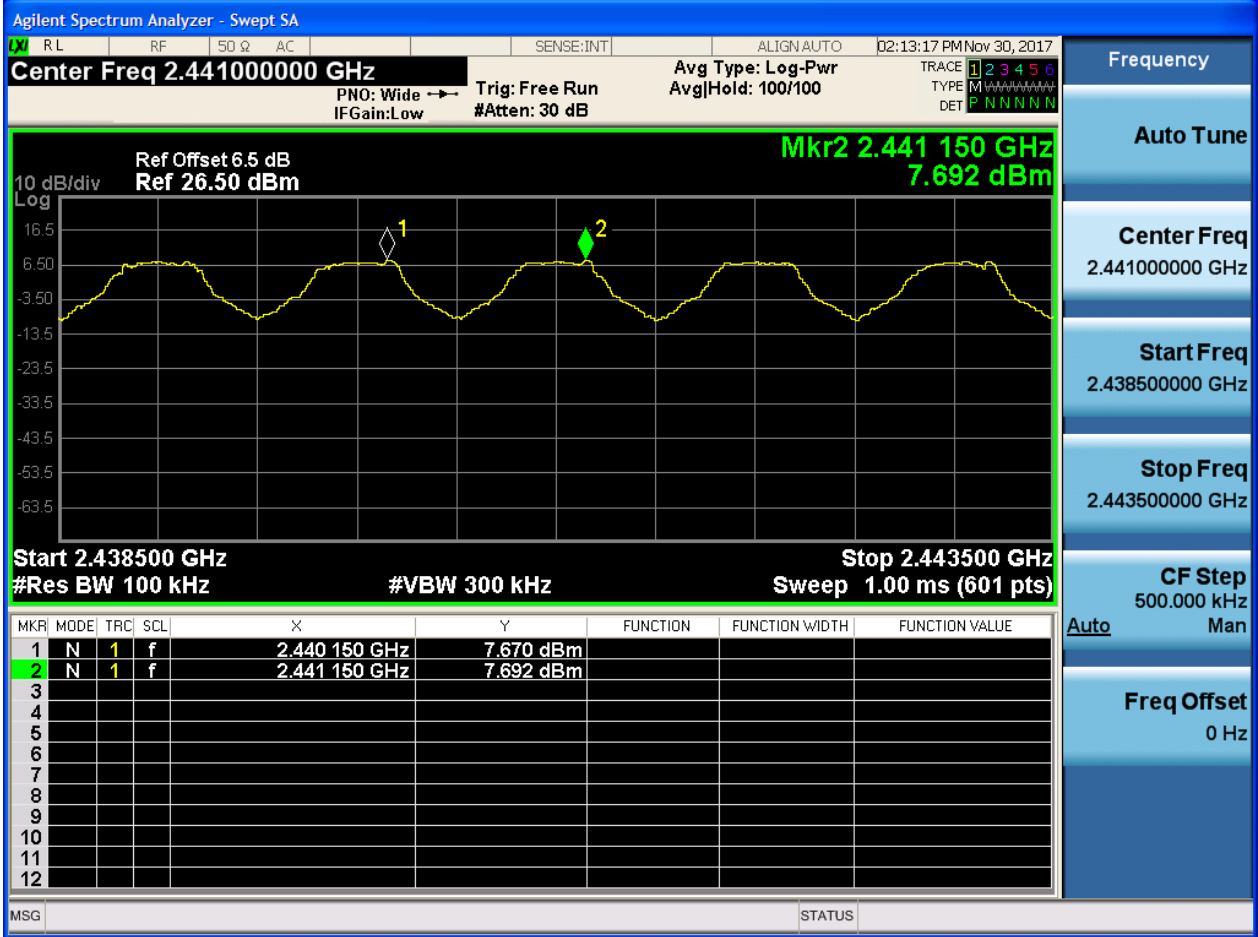
## 1 Result Table

EUT Conf.	Carrier Frequency Separation [MHz]	Verdict
TM1_DH5_Hop	1	Pass
TM2_2DH5_Hop	1	Pass
TM3_3DH5_Hop	1.05	Pass



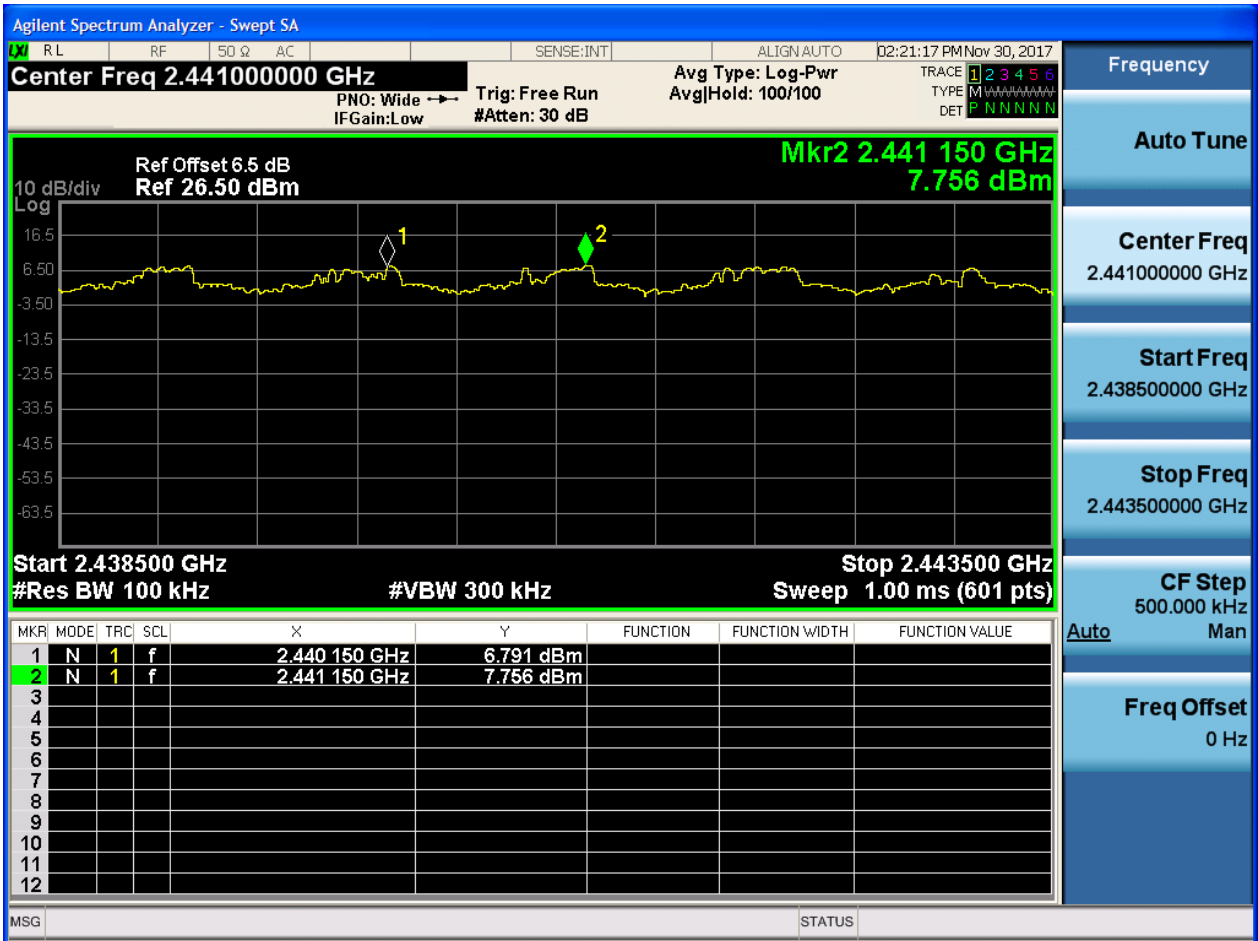
## 2 Test Plot

### 2.1 TM1\_DH5\_Hop



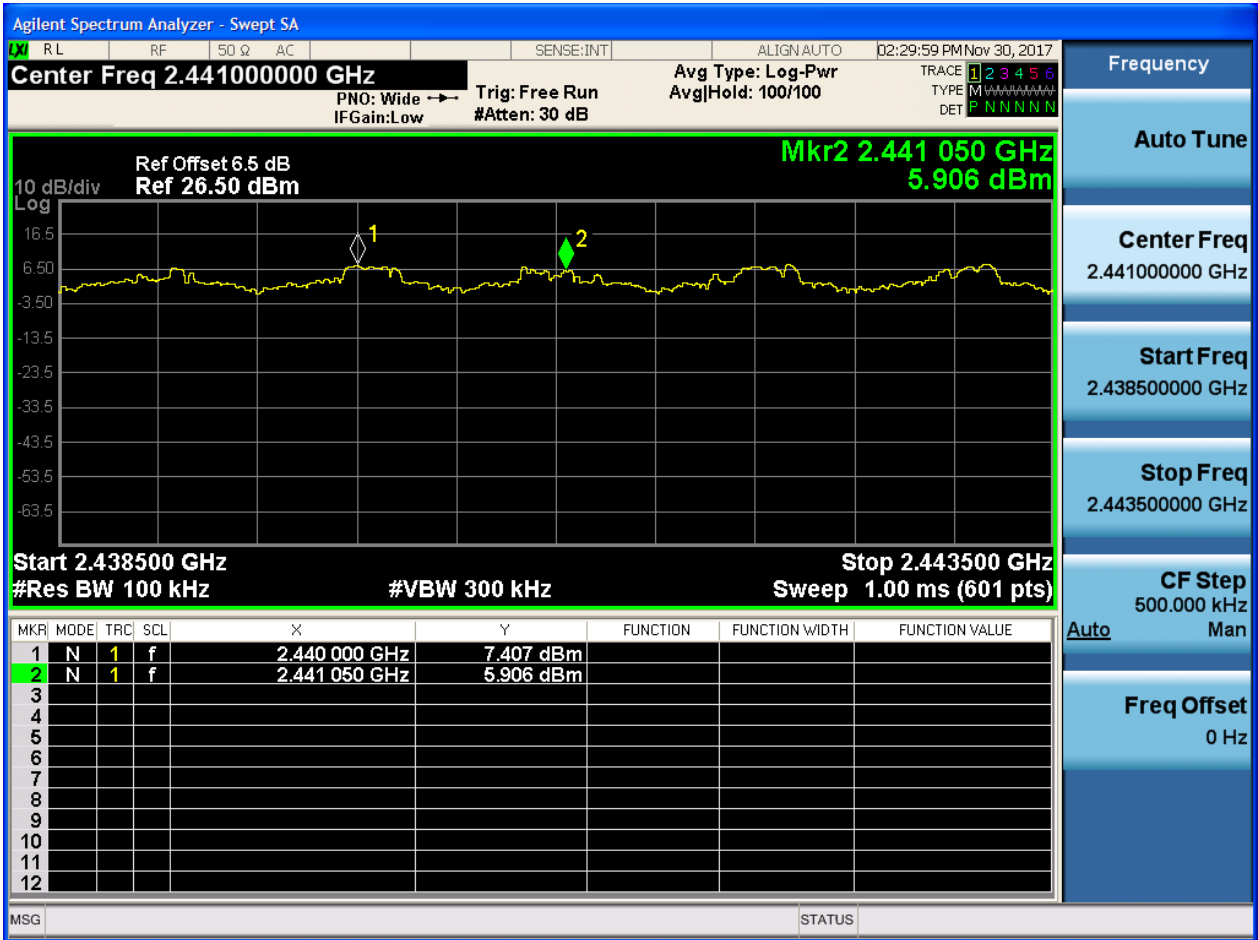


### 2.2 TM2\_2DH5\_Hop





### 2.3 TM3\_3DH5\_Hop







# Appendix C: Number of Hopping Channel

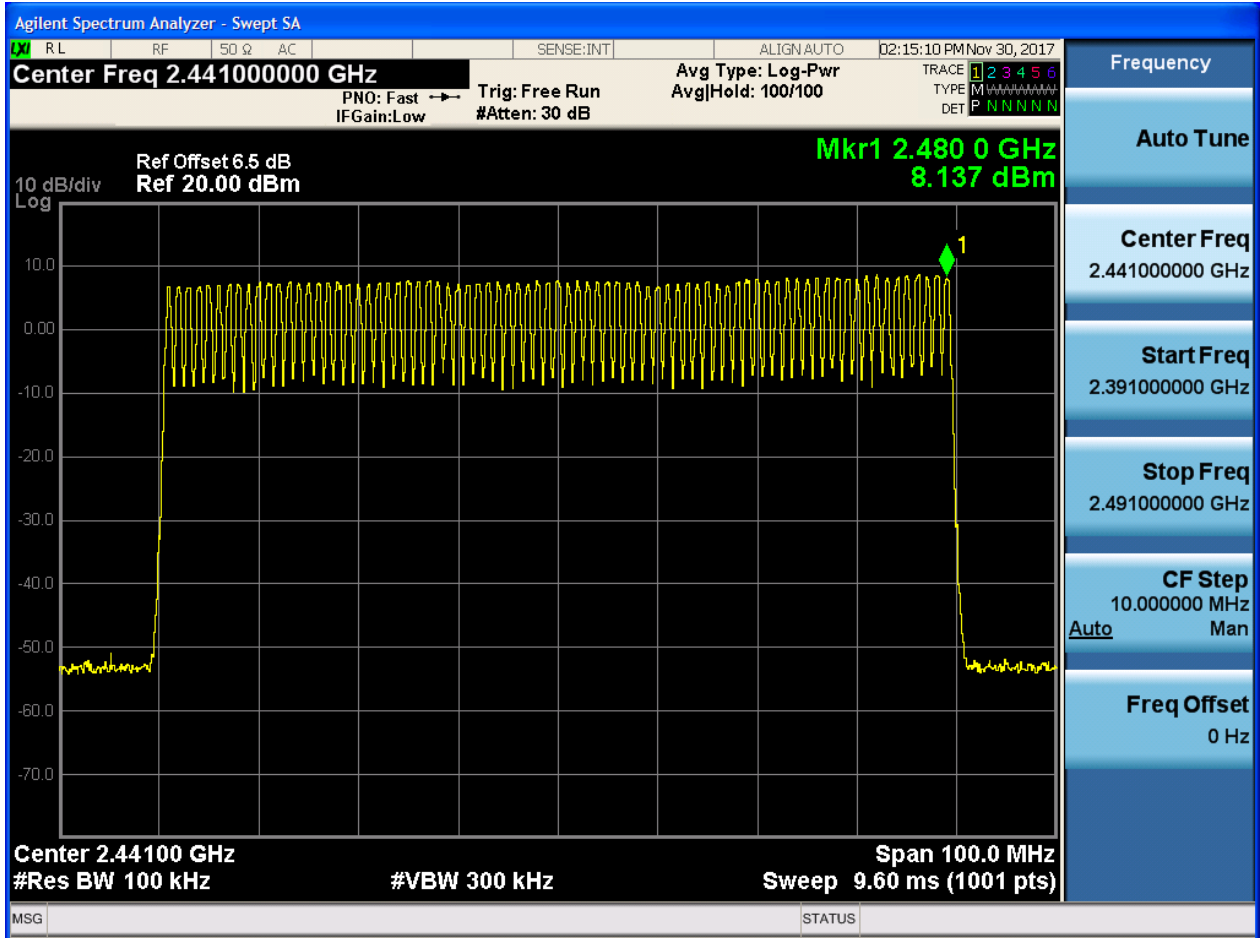


## 1 Result Table

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

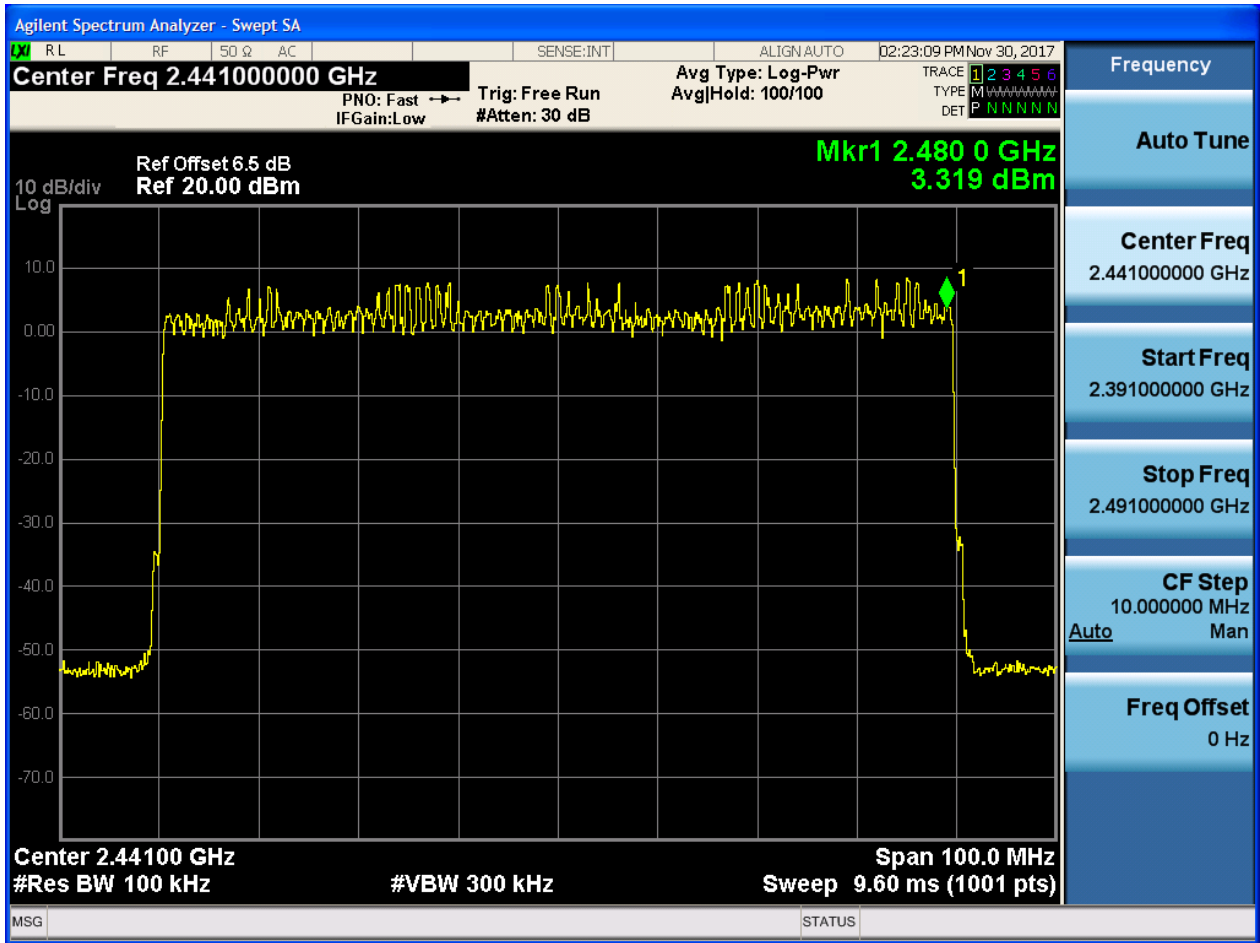
## 2 Test Plot

### 2.1 TM1\_DH5\_Hop



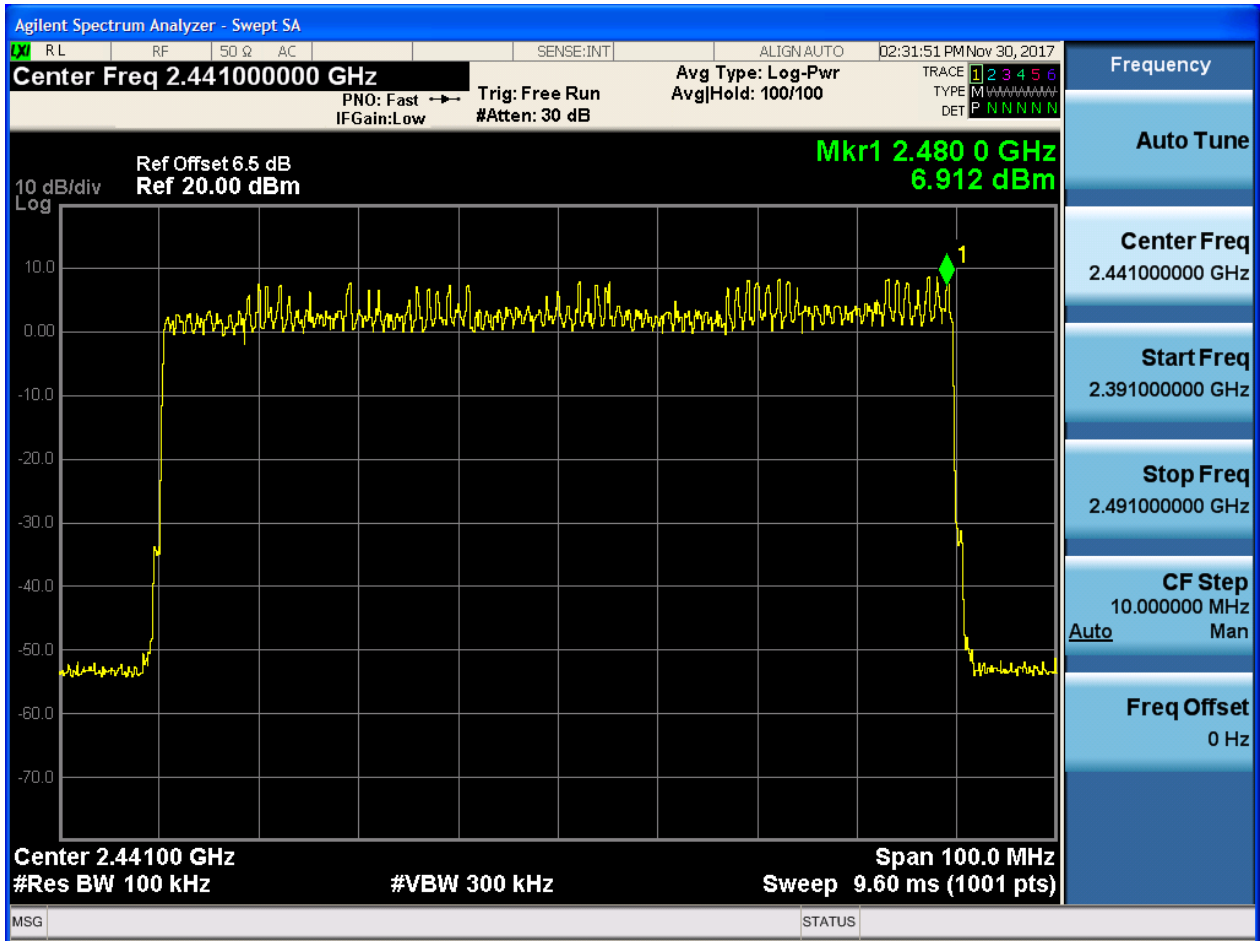


## 2.2 TM2\_2DH5\_Hop





### 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:  $106.67 \text{ [hop*ch]} * \text{Burst Width [ms/hop/ch]}$ .

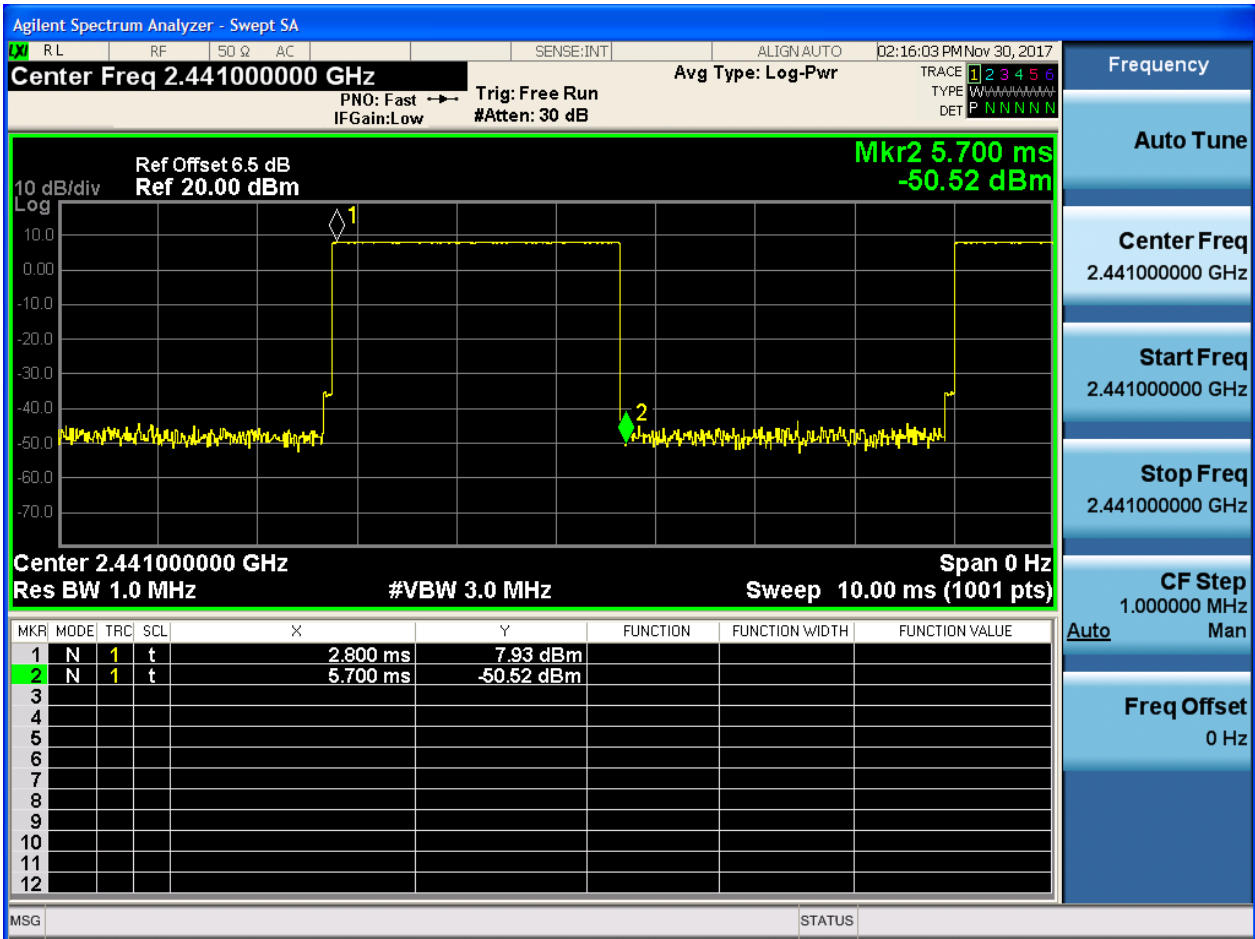
EUT Conf.	Burst Width [s/hop/ch]	Total Hops [hop*ch]	Dwell Time [ms]	Verdict
TM1_DH5_Ch39	0.0029	106.67	0.309	Pass
TM2_2DH5_Ch39	0.0029	106.67	0.309	Pass
TM3_3DH5_Ch39	0.0029	106.67	0.309	Pass



## 2 Test Plot

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

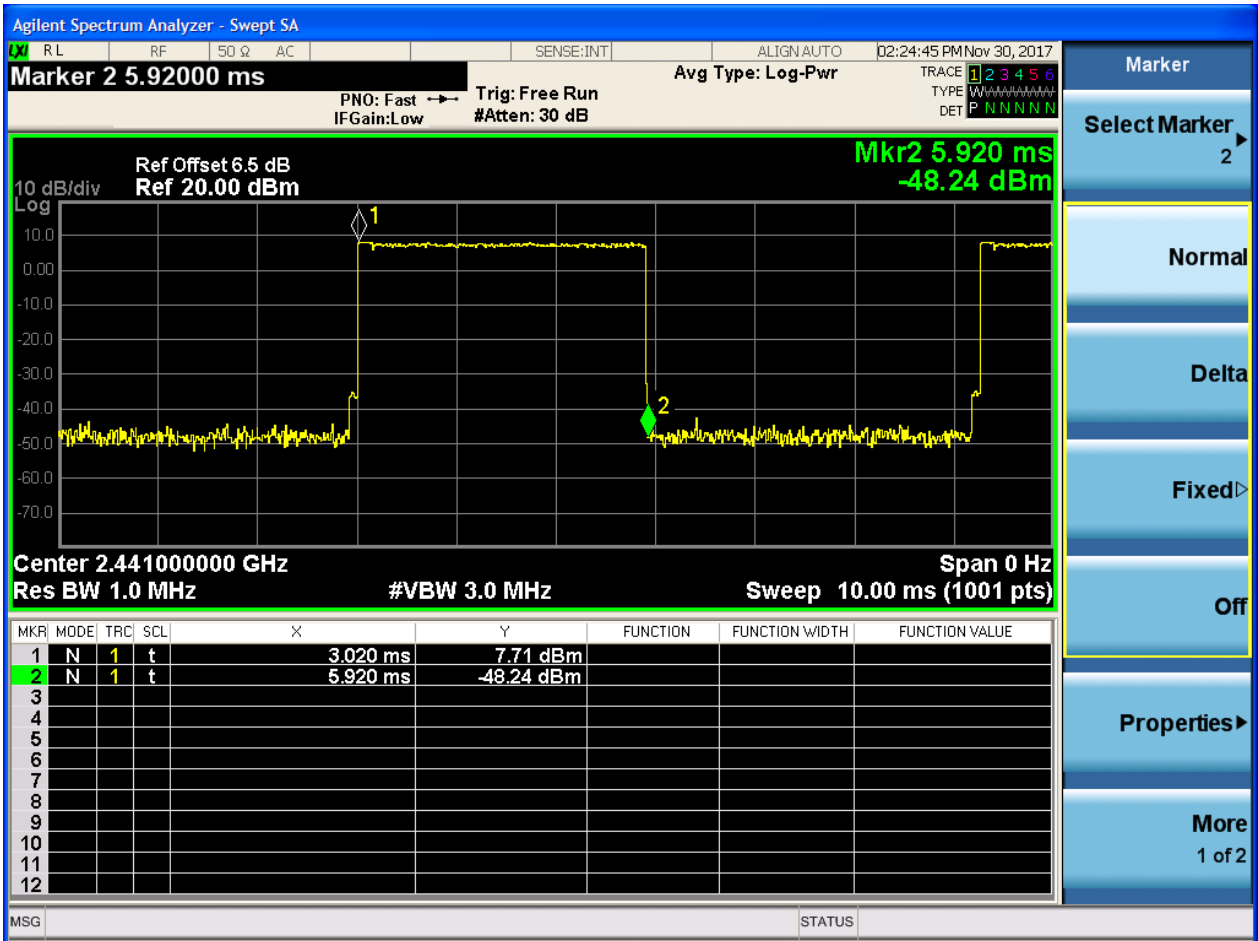
### 2.1 TM1\_DH5\_Ch39







### 2.2 TM2\_2DH5\_Ch39







# Appendix E: Maximum Peak Conducted Output Power

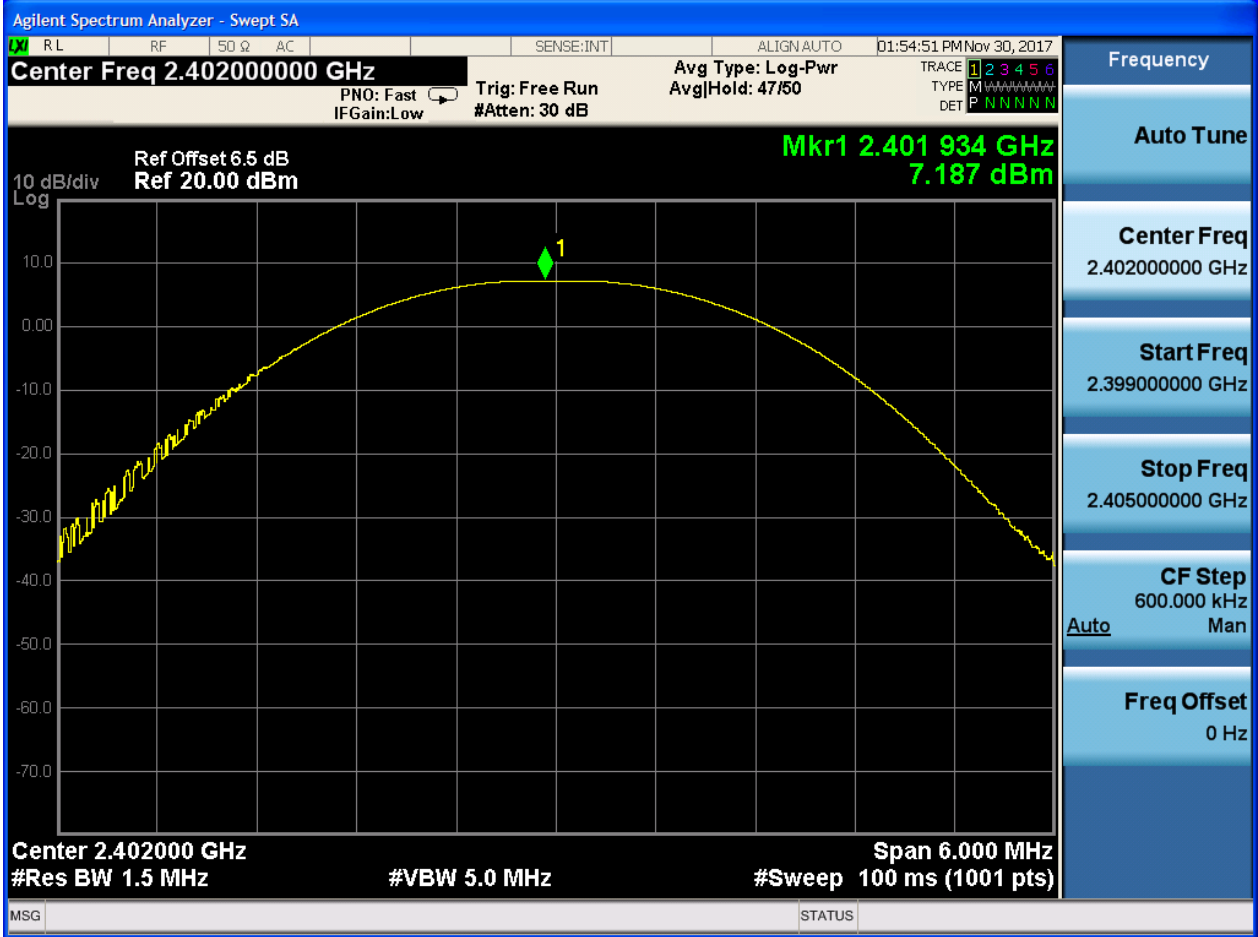


## 1 Result Table

EUT Conf.	Max. Peak Power [dBm]	Verdict
TM1_DH5_Ch0	7.187	Pass
TM1_DH5_Ch39	8.068	Pass
TM1_DH5_Ch78	8.968	Pass
TM2_2DH5_Ch0	7.313	Pass
TM2_2DH5_Ch39	8.378	Pass
TM2_2DH5_Ch78	9.247	Pass
TM3_3DH5_Ch0	7.41	Pass
TM3_3DH5_Ch39	8.379	Pass
TM3_3DH5_Ch78	9.276	Pass

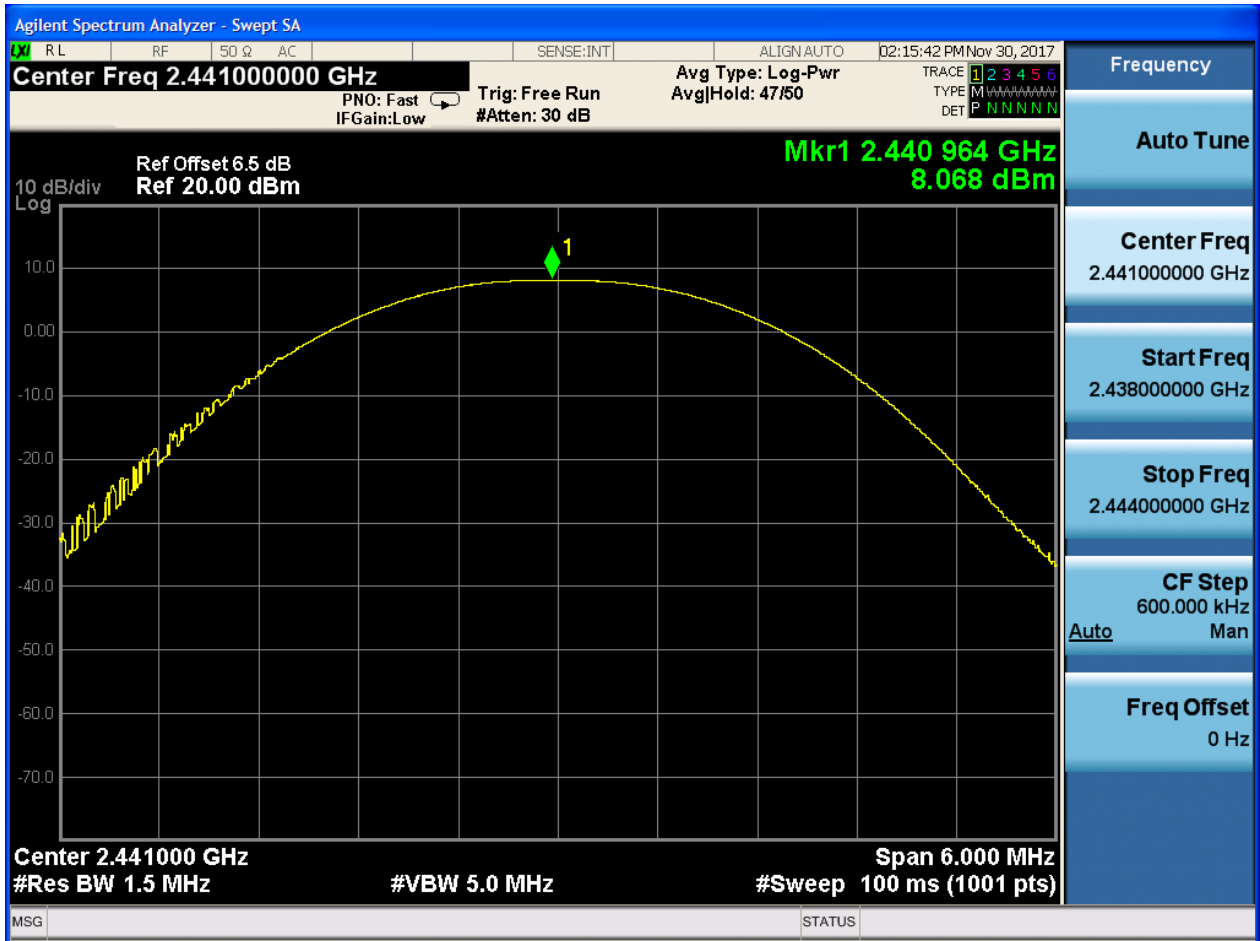
## 2 Test Plot

### 2.1 TM1\_DH5\_Ch0



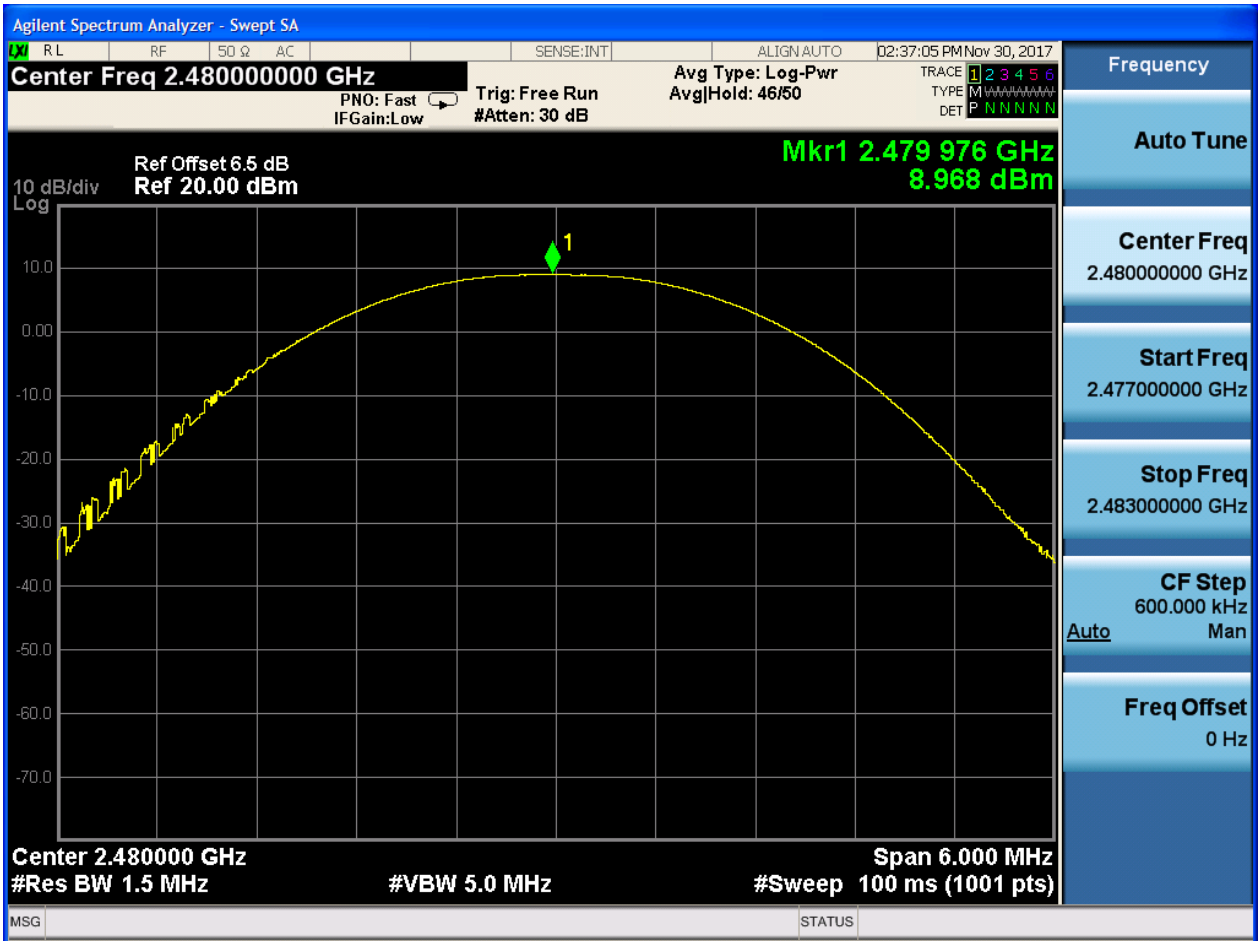


## 2.2 TM1\_DH5\_Ch39



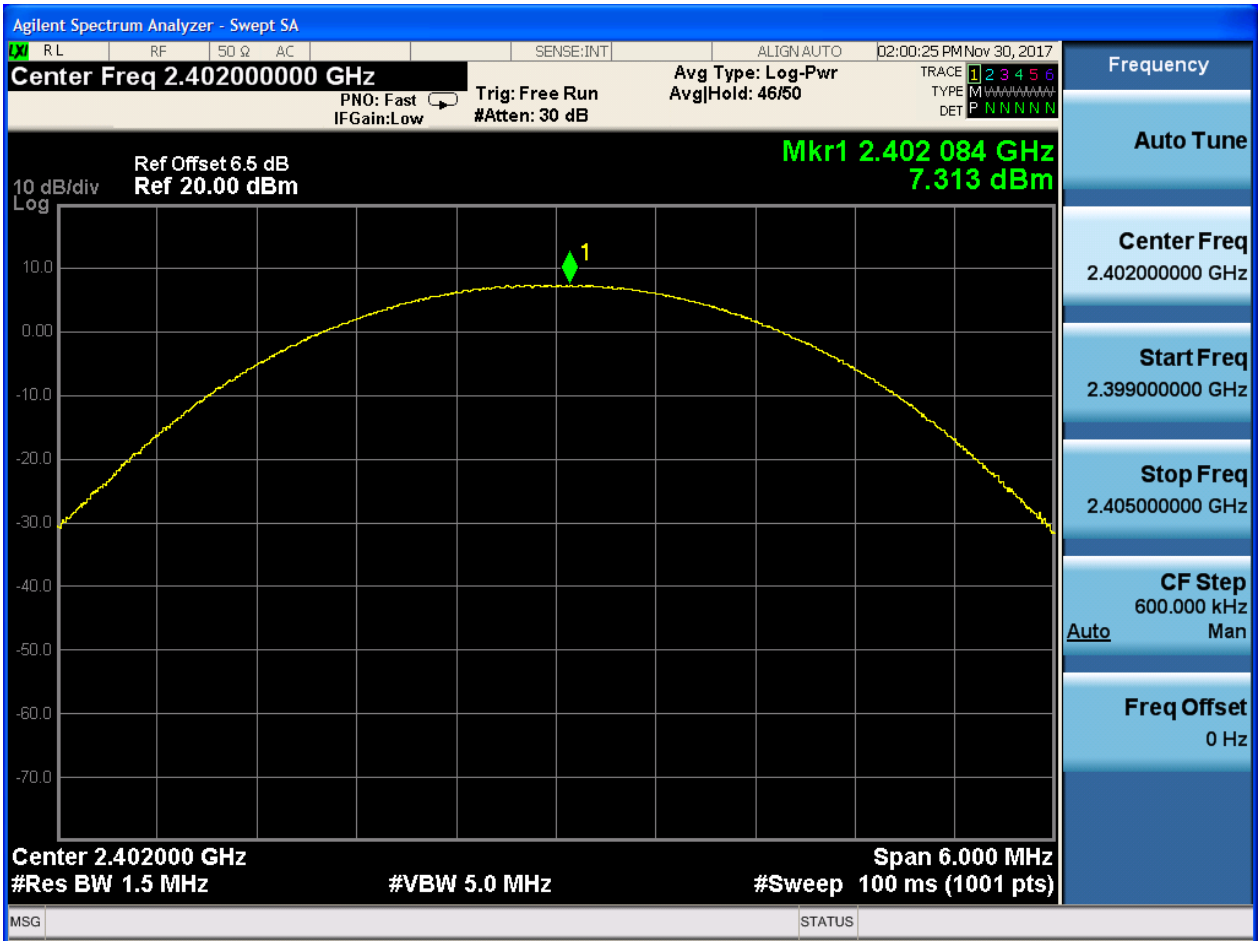


### 2.3 TM1\_DH5\_Ch78





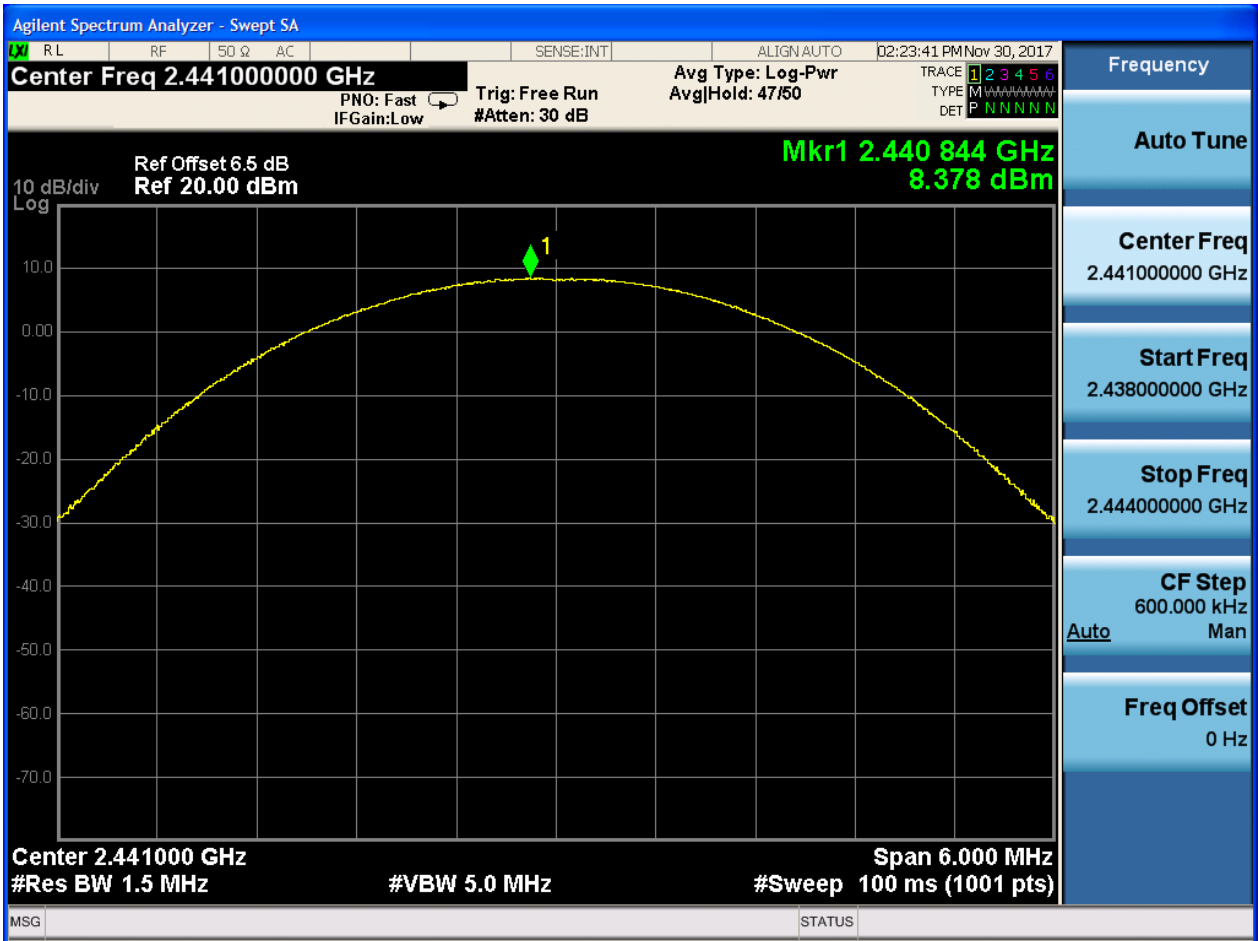
### 2.4 TM2\_2DH5\_Ch0





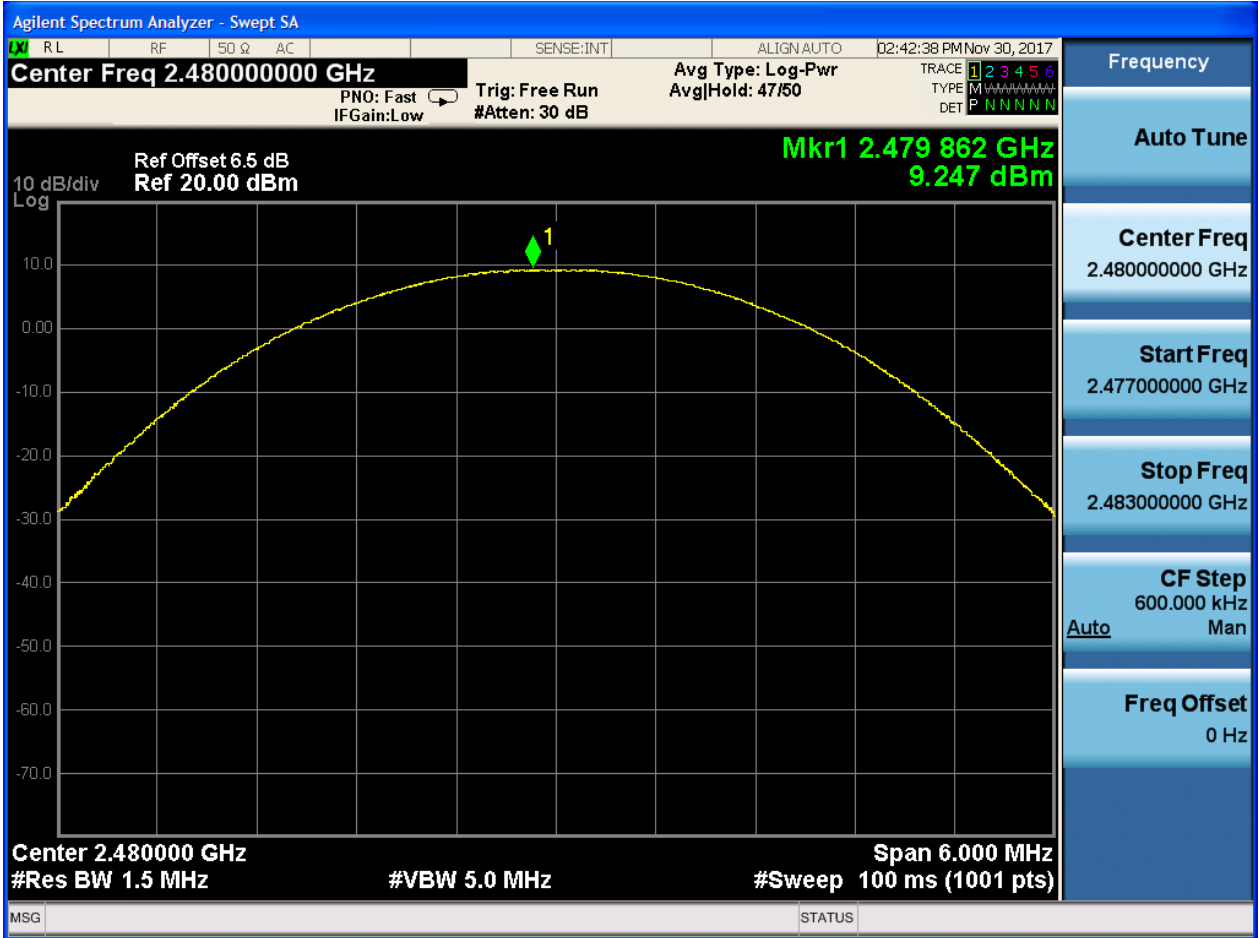


### 2.5 TM2\_2DH5\_Ch39



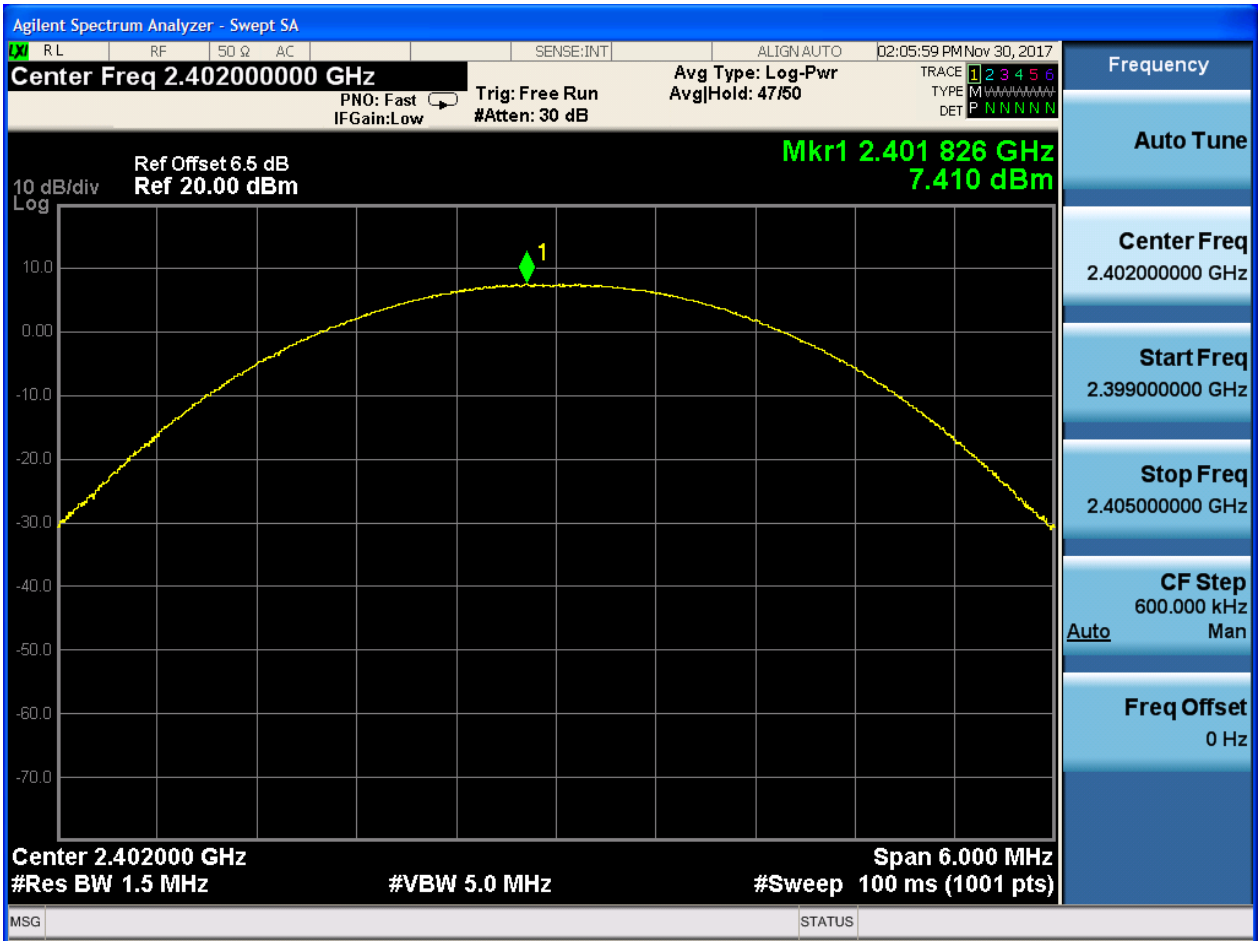


### 2.6 TM2\_2DH5\_Ch78



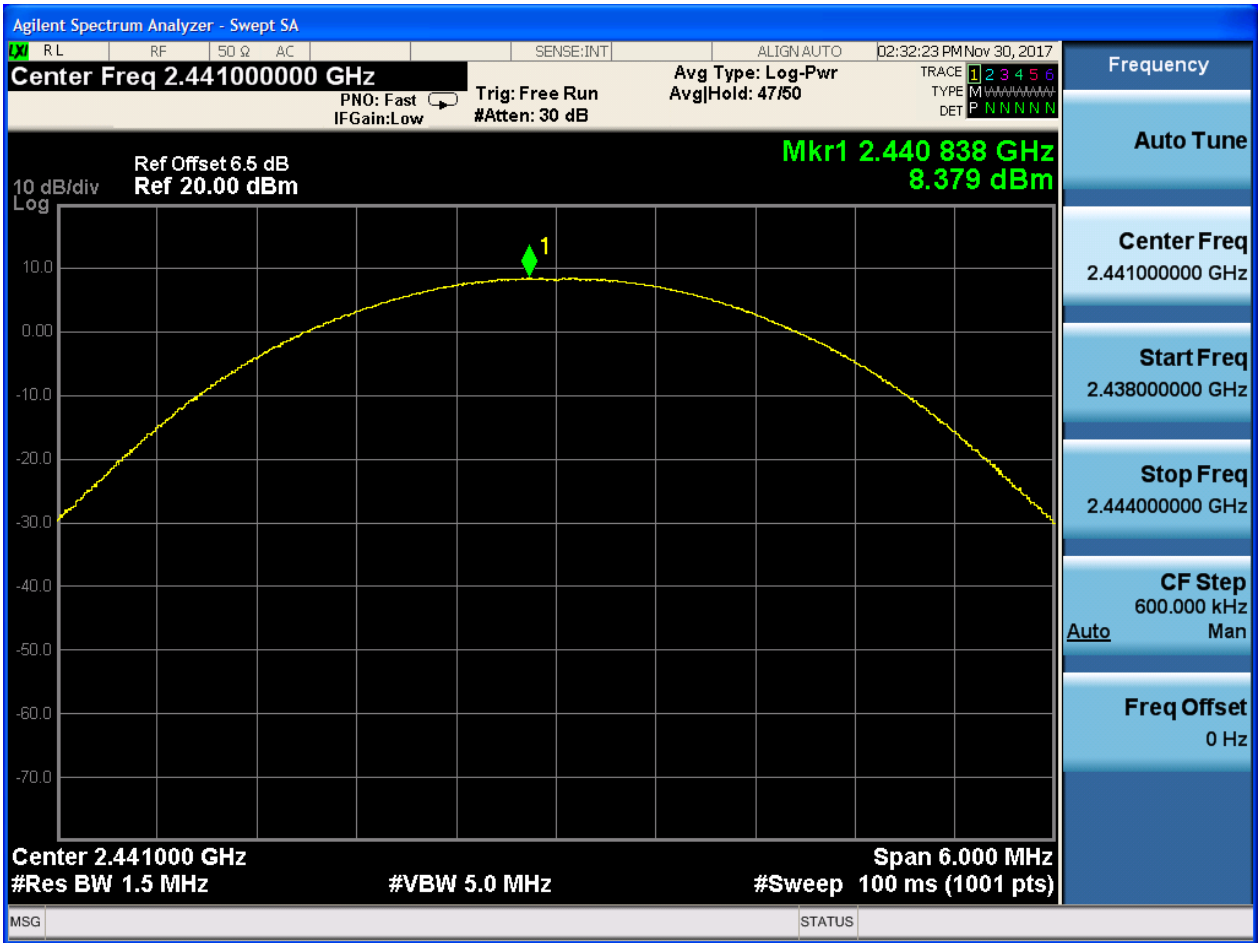


### 2.7 TM3\_3DH5\_Ch0



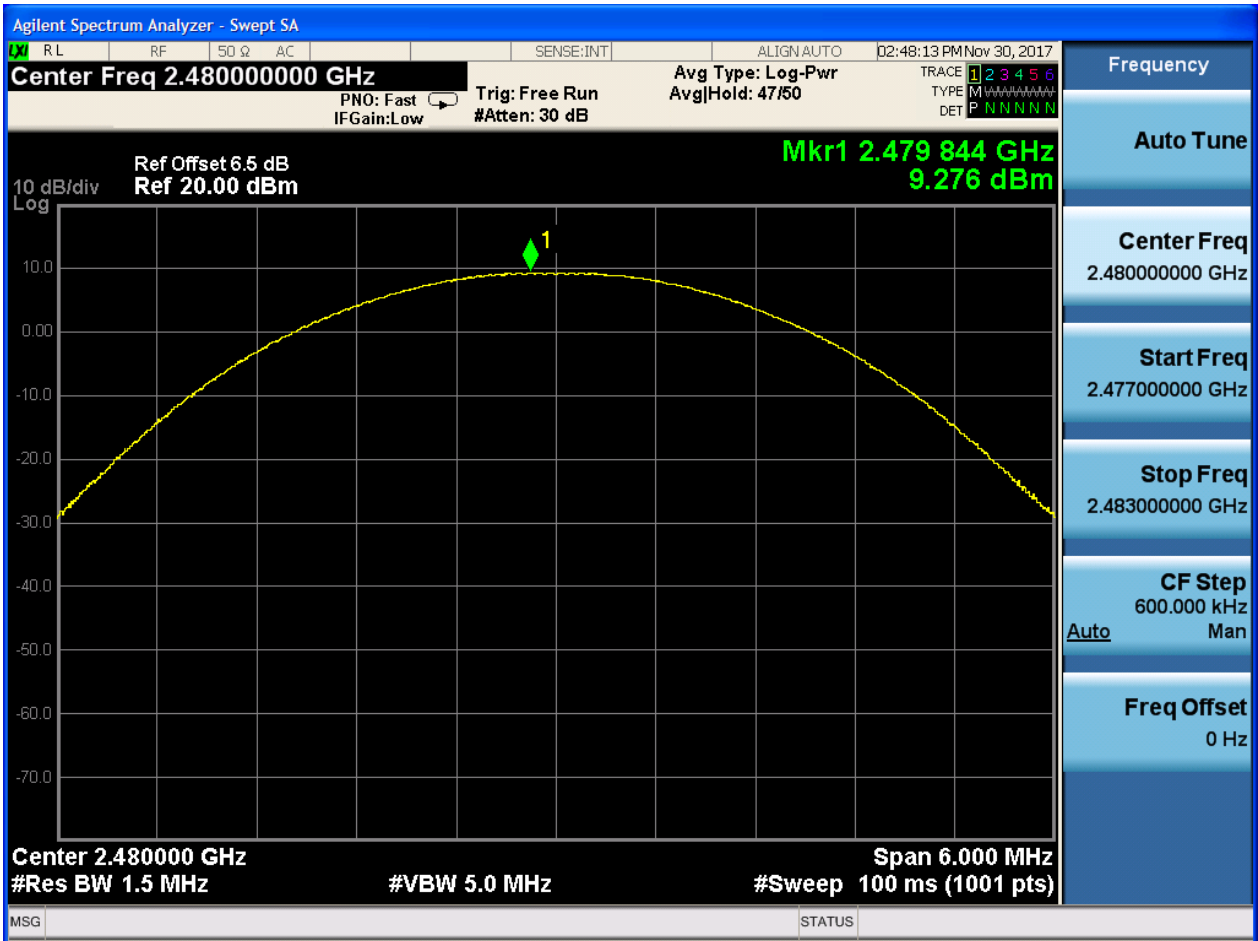


### 2.8 TM3\_3DH5\_Ch39





### 2.9 TM3\_3DH5\_Ch78





# Appendix F: Band edge spurious emission



## 1 Result Table

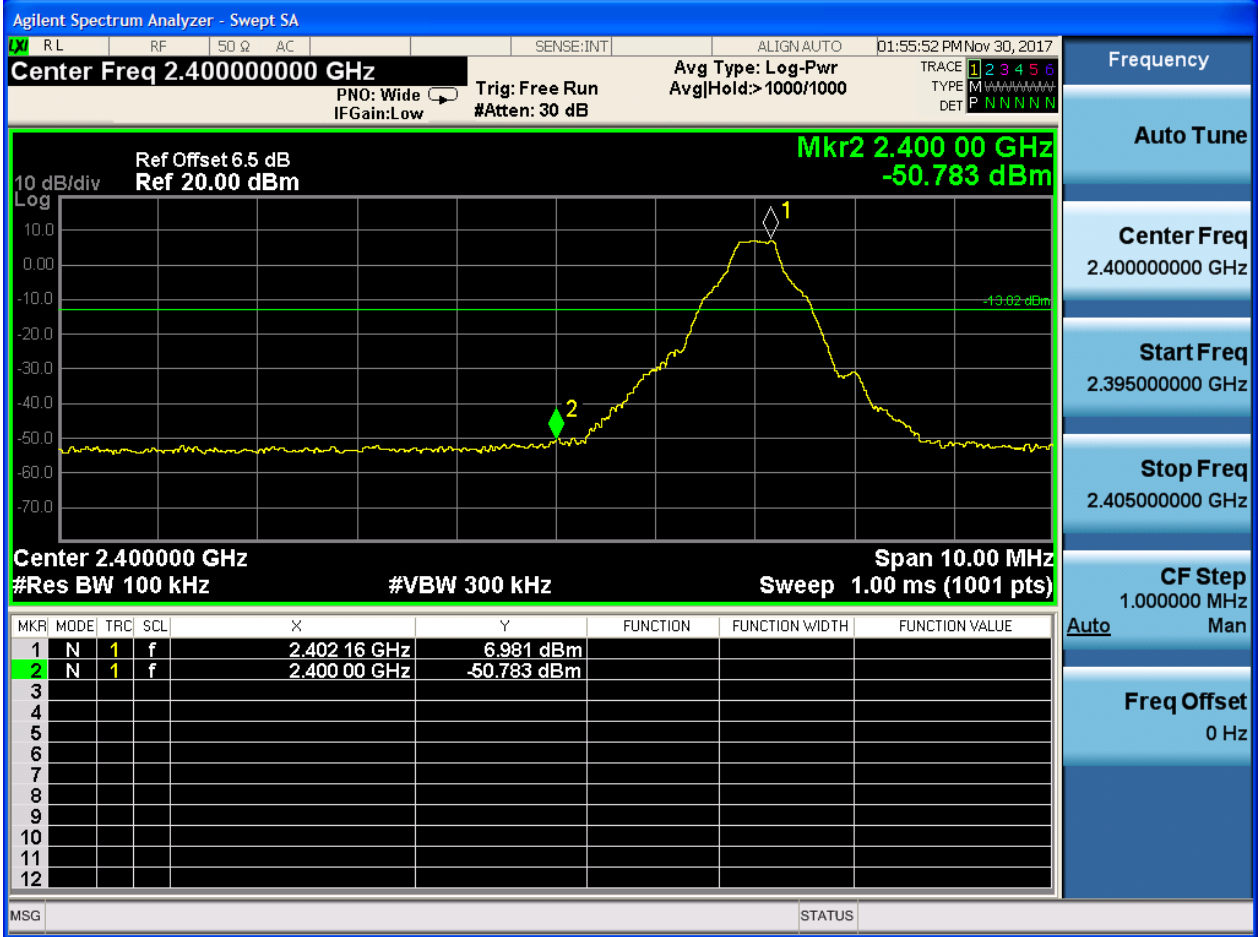
EUT Conf.	Channel No.	Carrier Frequency [MHz]	Max. Spurious Level [dBm]	Frequency Hopping	Carrier Power [dBm]	Limit [dBm]	Result
TM1_DH5_Ch0	0	2402	-50.783	Off	6.981	-13.019	Pass
	-	-	-52.924	On	7.045	-12.955	Pass
TM1_DH5_Ch78	78	2480	-53.456	Off	8.68	-11.32	Pass
	-	-	-53.504	On	8.404	-11.596	Pass
TM2_2DH_5_Ch0	0	2402	-49.394	Off	6.858	-13.142	Pass
	-	-	-51.805	On	6.858	-13.142	Pass
TM2_2DH_5_Ch78	78	2480	-52.973	Off	8.738	-11.262	Pass
	-	-	-54.345	On	8.178	-11.822	Pass
TM3_3DH_5_Ch0	0	2402	-48.983	Off	6.985	-13.015	Pass
	-	-	-52.011	On	6.853	-13.147	Pass
TM3_3DH_5_Ch78	78	2480	-52.93	Off	8.789	-11.211	Pass
	-	-	-53.641	On	8.632	-11.368	Pass



## 2 Test Plot

### 2.1 TM1\_DH5\_Ch0

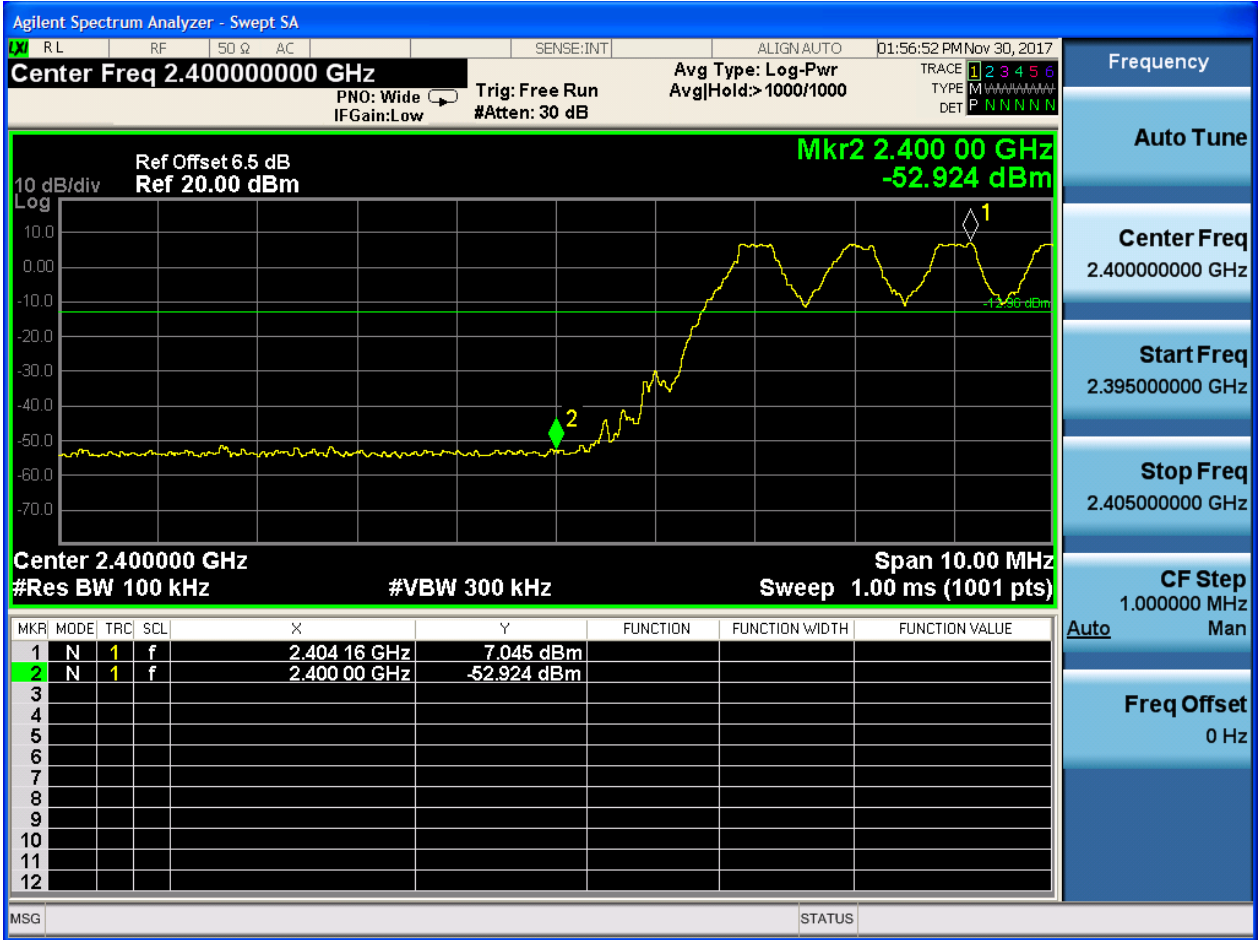
No hopping





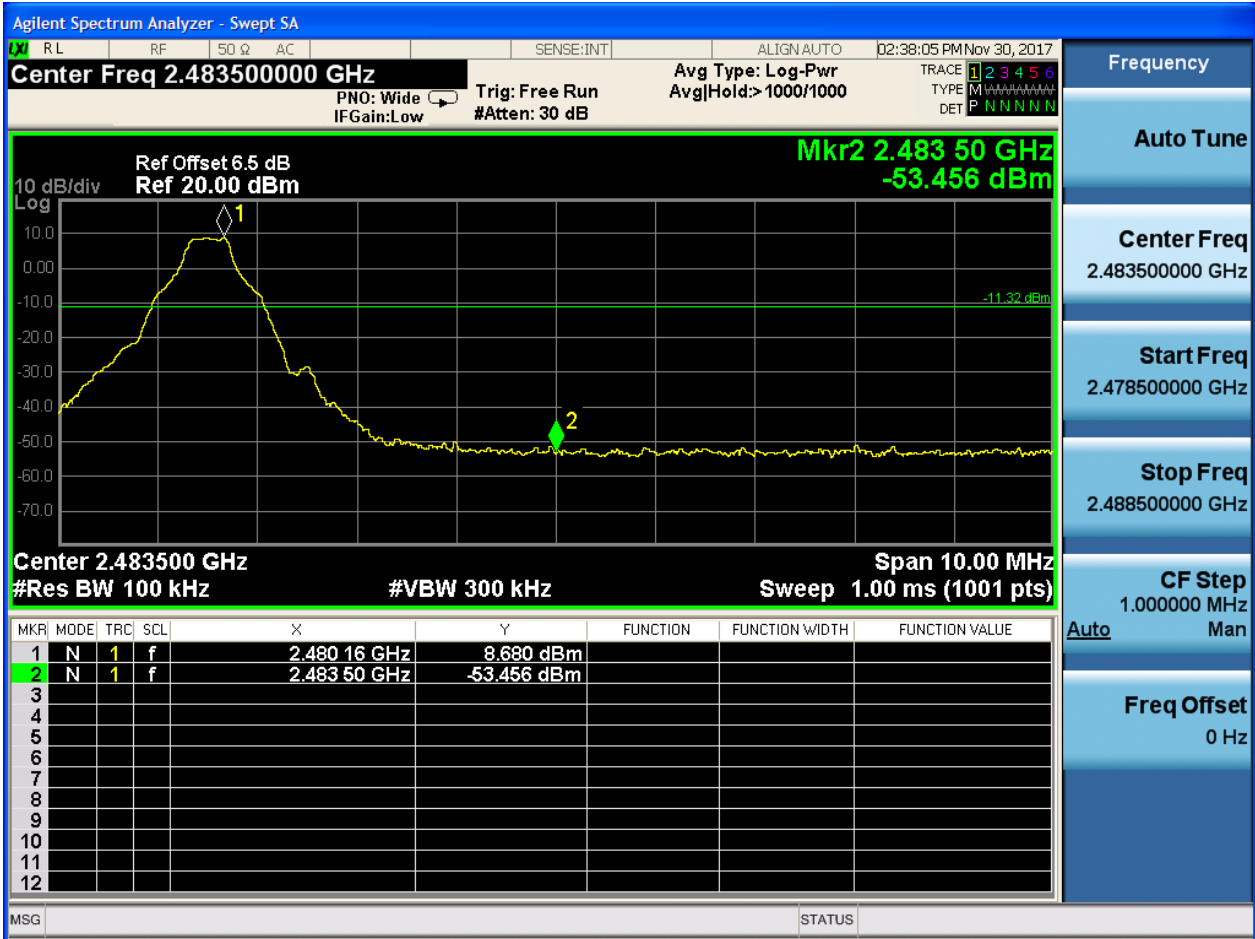


With hopping



2.2 TM1\_DH5\_Ch78

No hopping

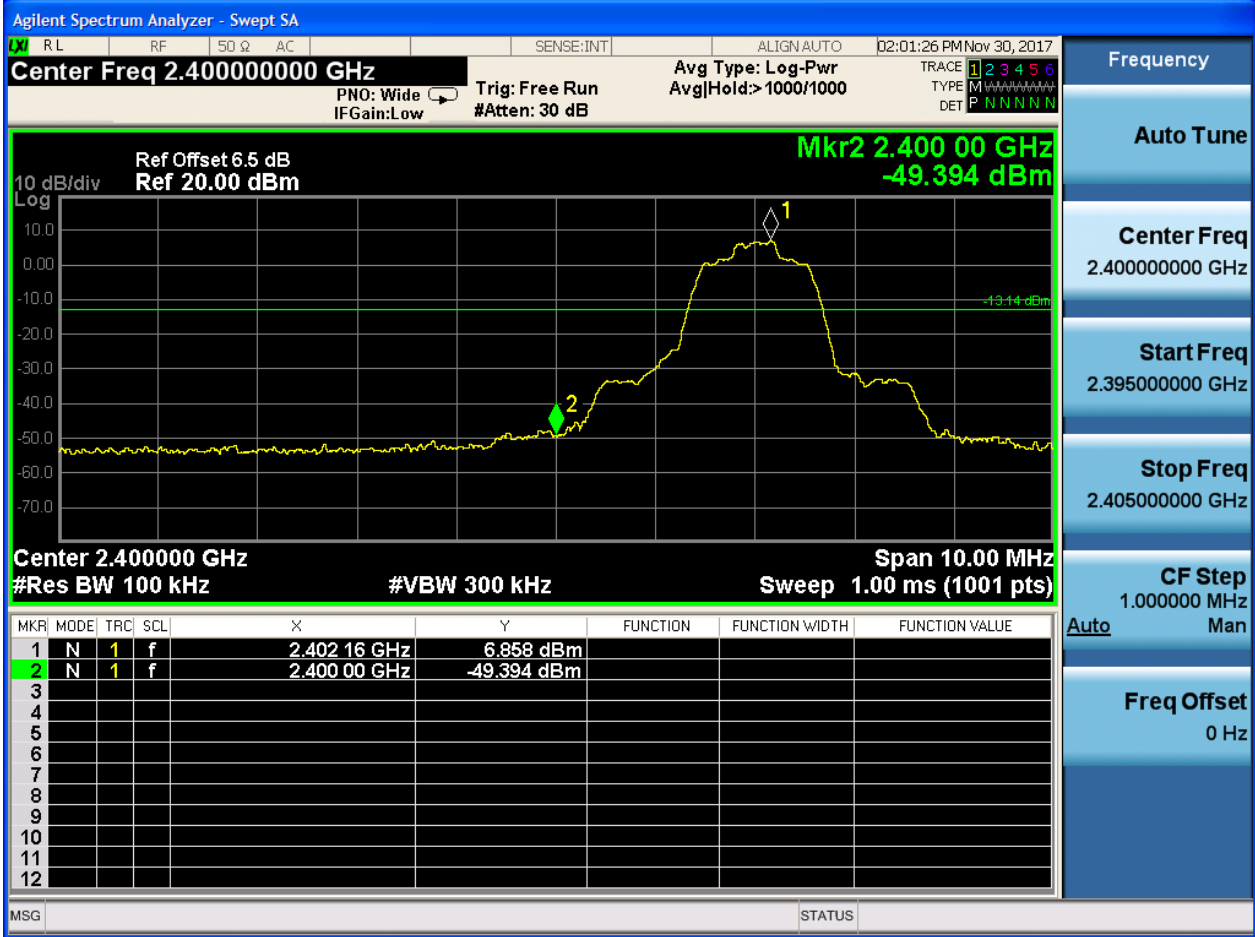




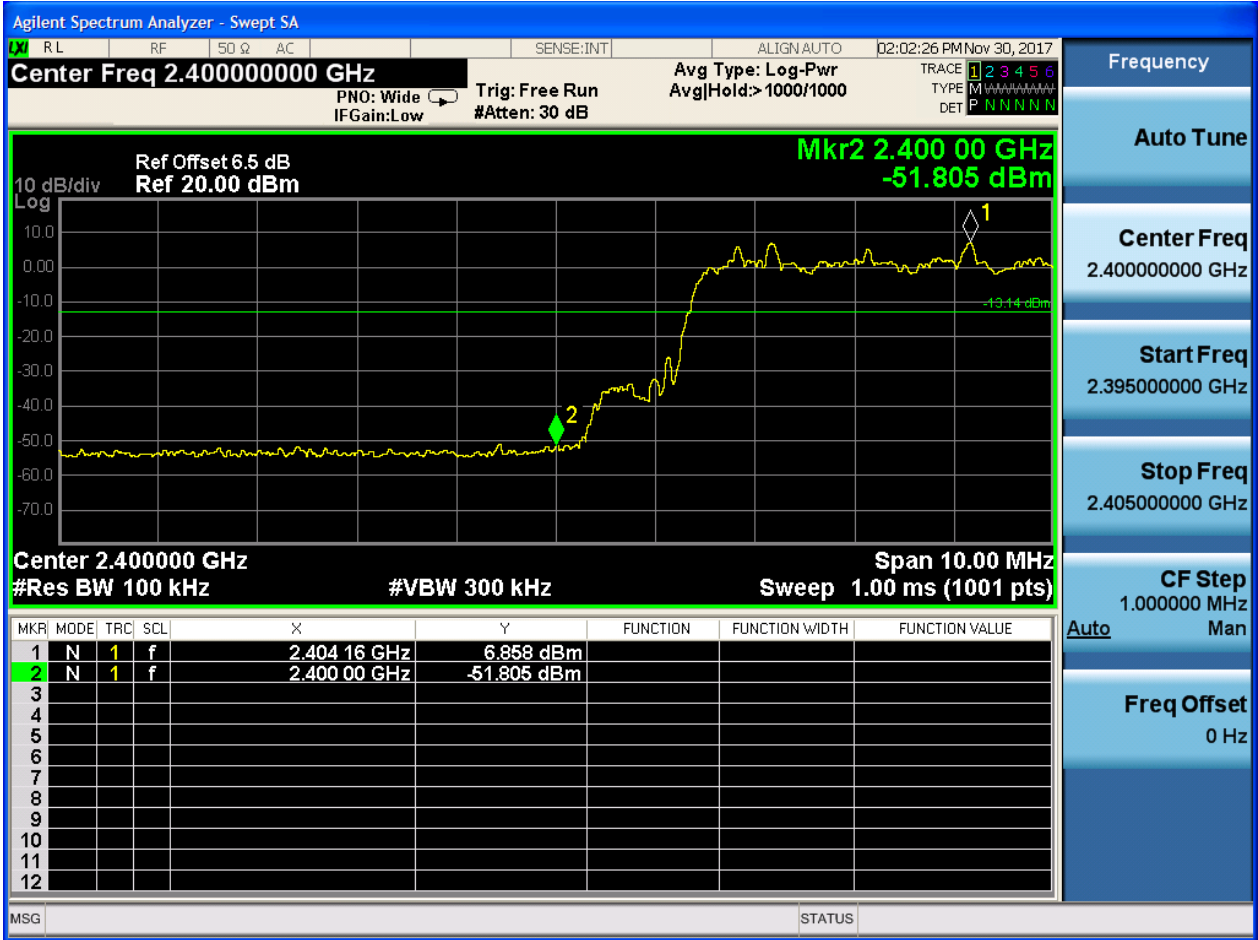


### 2.3 TM2\_2DH5\_Ch0

No hopping



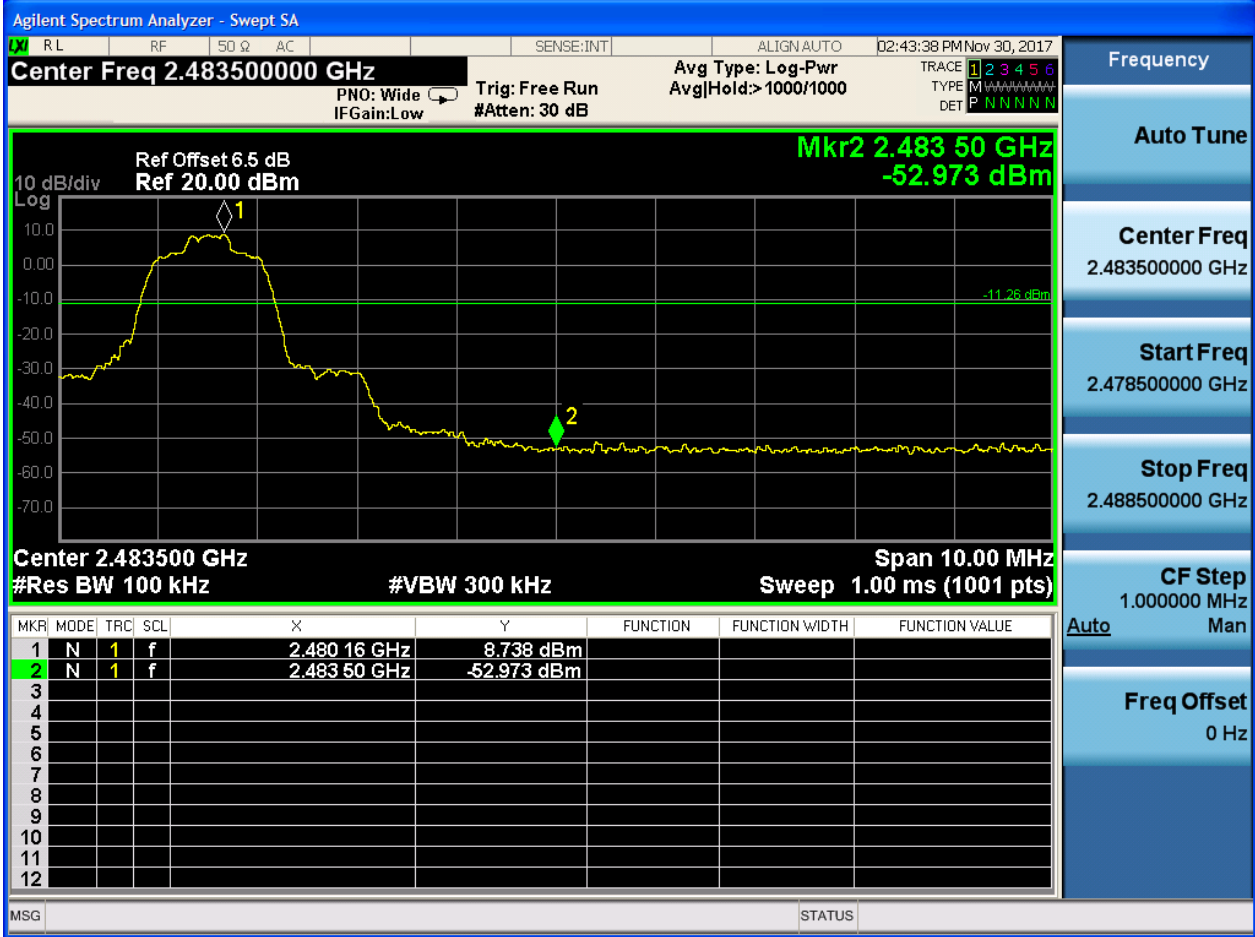
With hopping



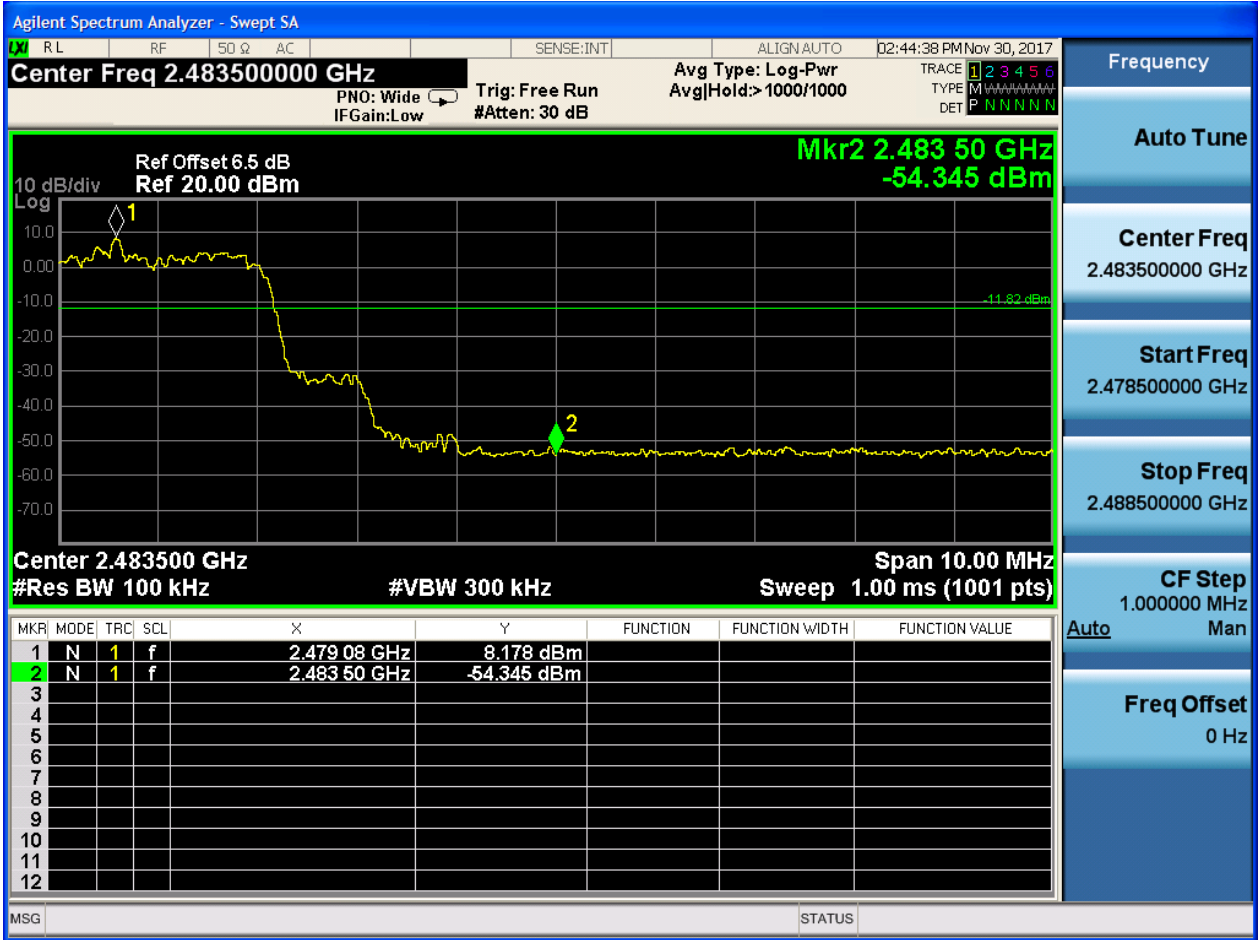


### 2.4 TM2\_2DH5\_Ch78

No hopping



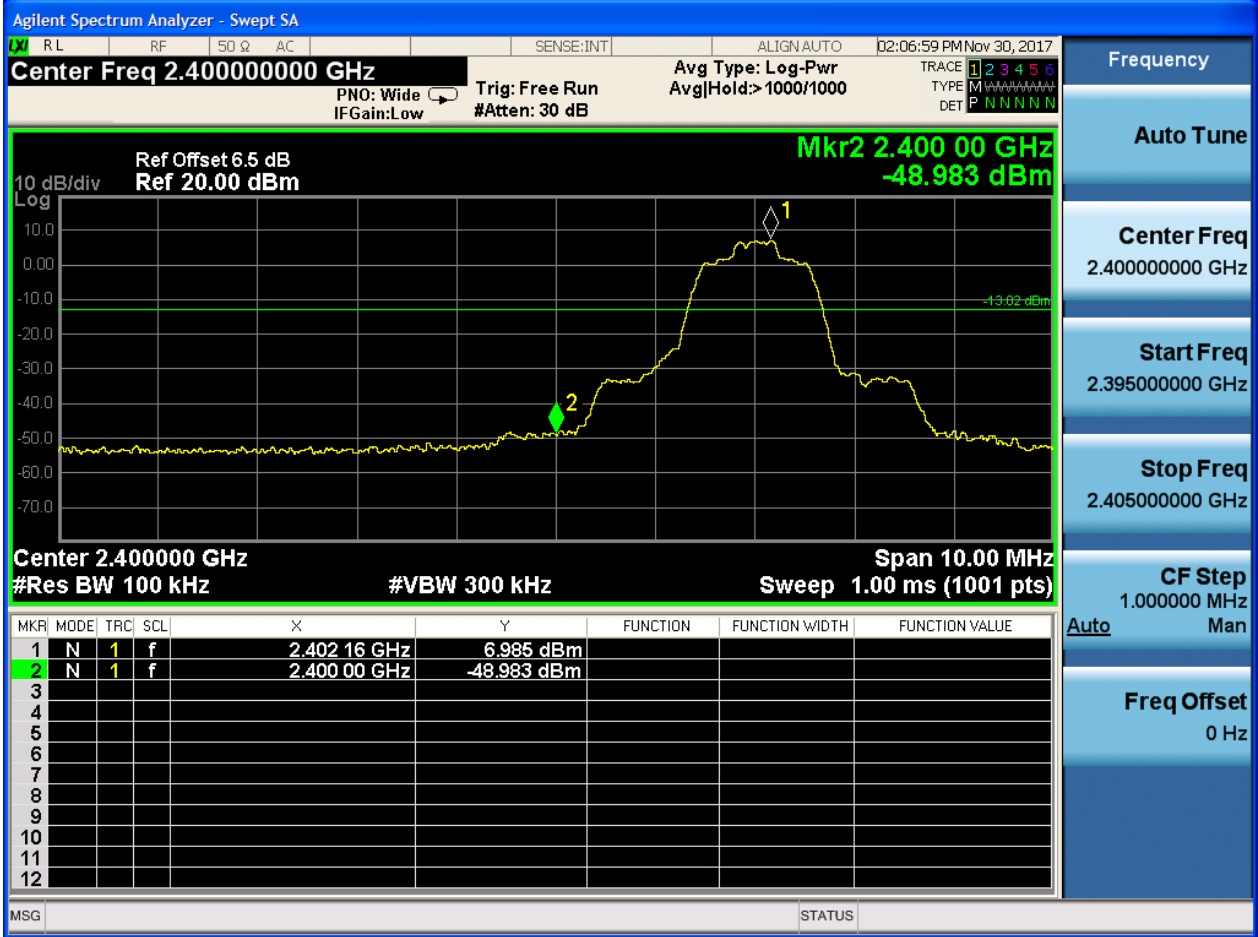
With hopping





2.5 TM3\_3DH5\_Ch0

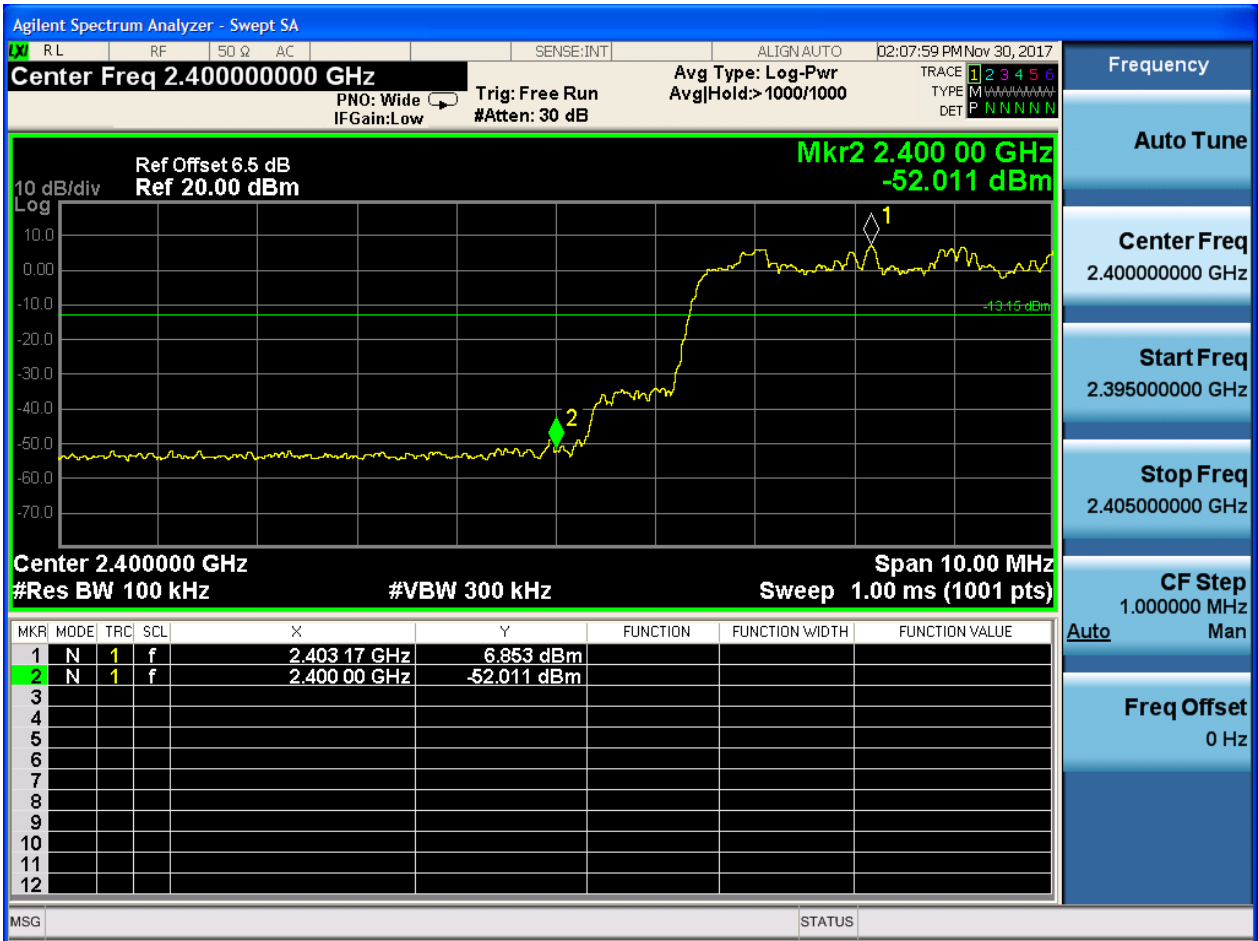
No hopping





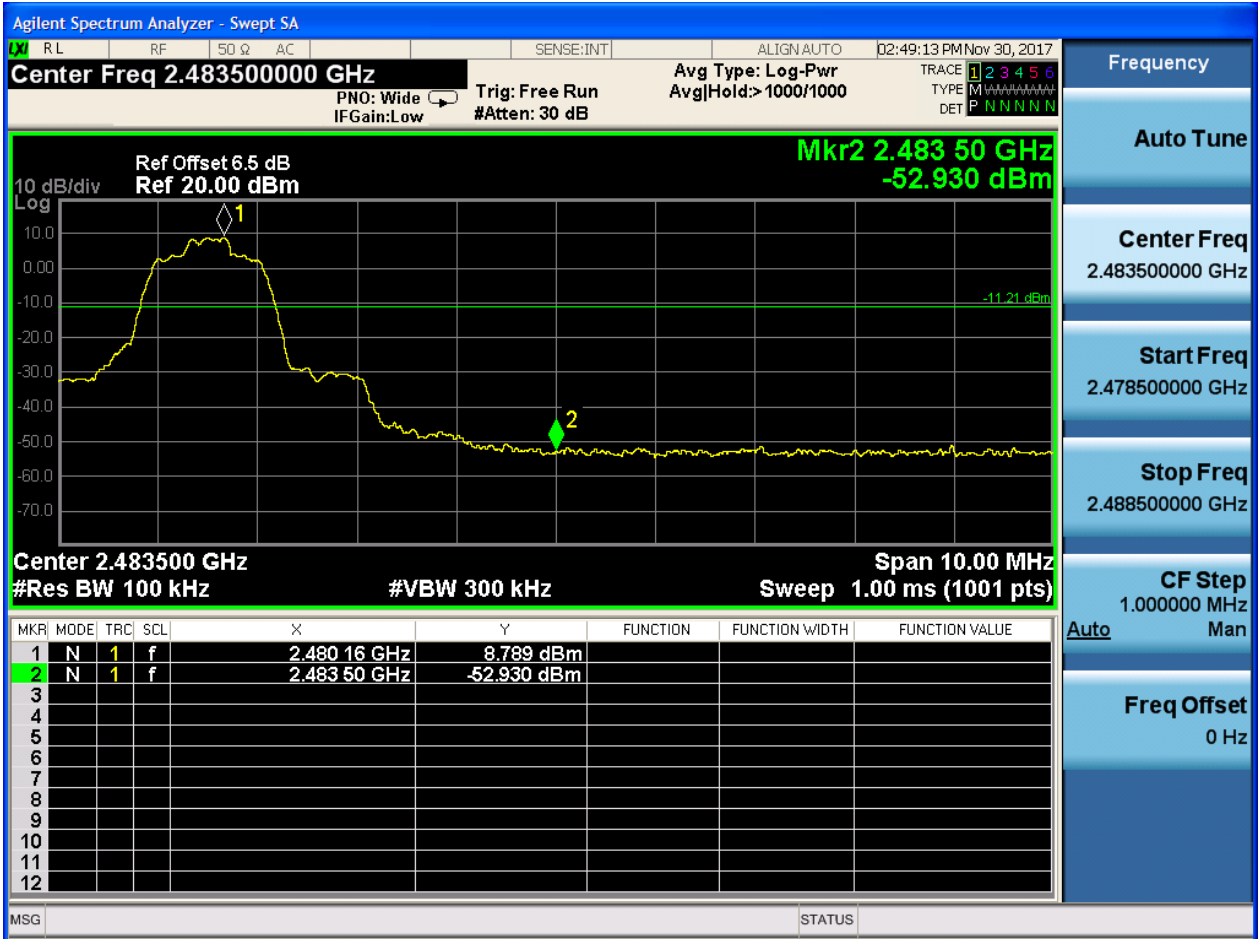


### With hopping

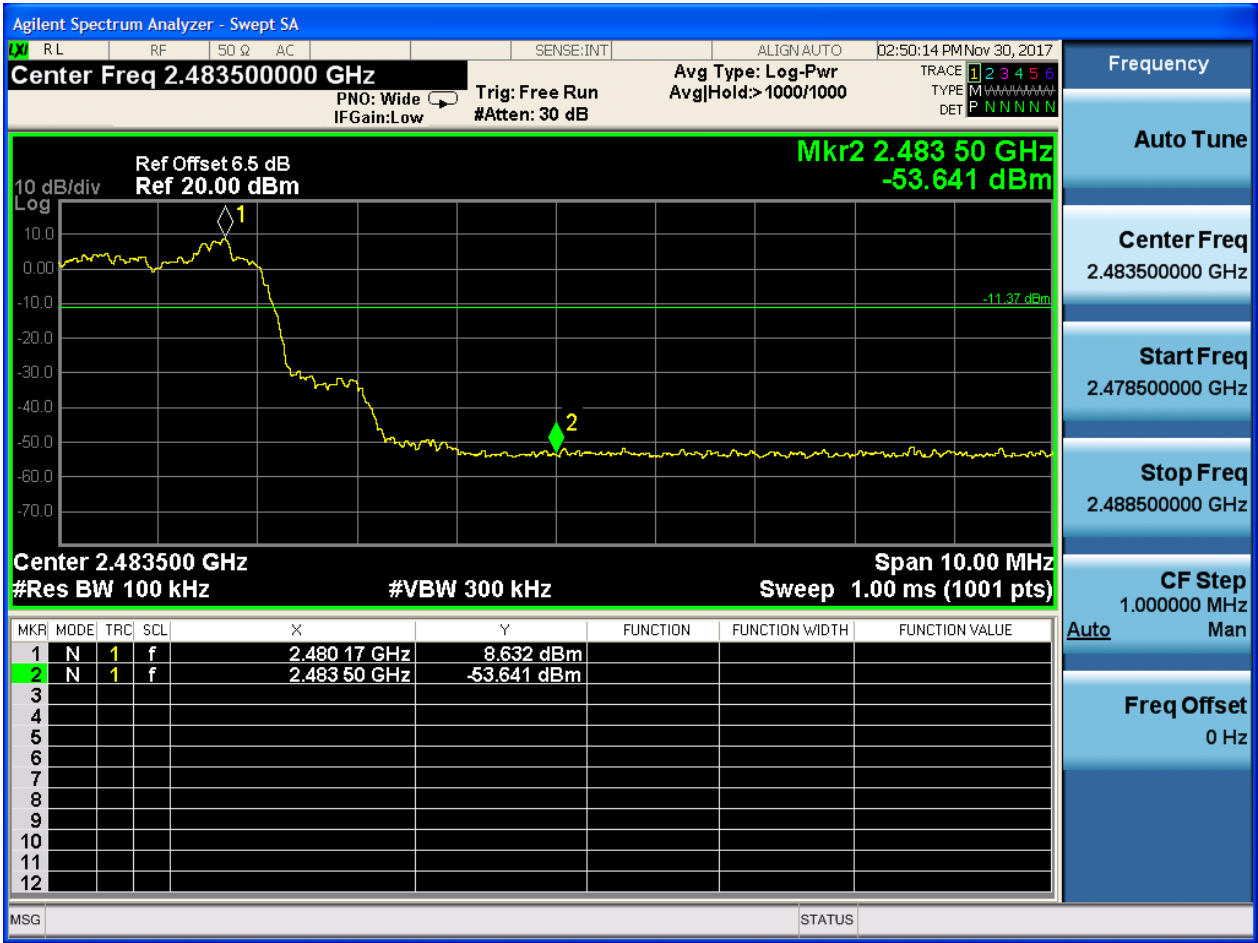


2.6 TM3\_3DH5\_Ch78

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”.

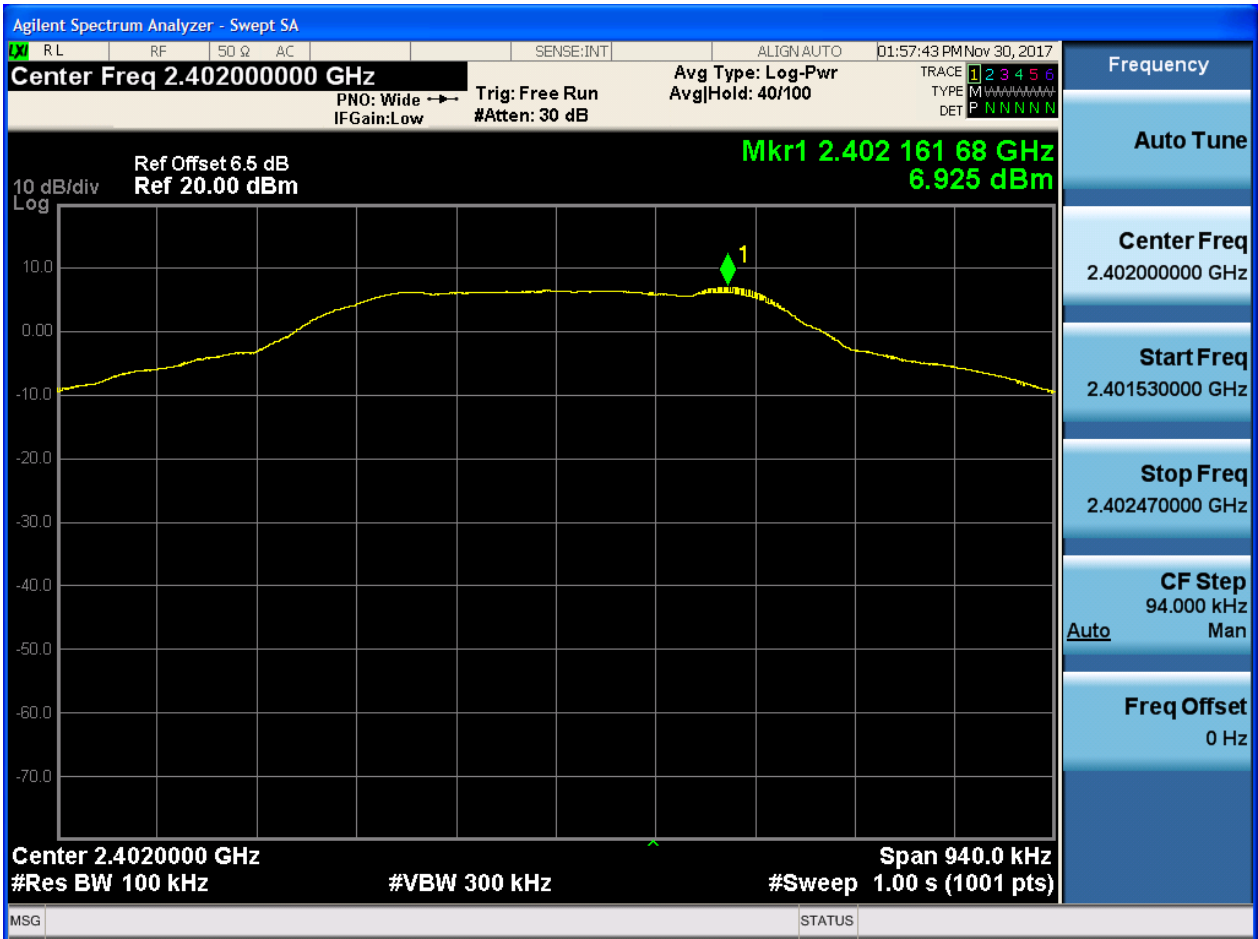
EUT Conf.	Pref [dBm/100 kHz]	Puw [dBm/100 kHz]	Verdict
TM1_DH5_Ch0	6.925	< Limit	Pass
TM1_DH5_Ch39	7.825	< Limit	Pass
TM1_DH5_Ch78	8.689	< Limit	Pass
TM2_2DH5_Ch0	6.881	< Limit	Pass
TM2_2DH5_Ch39	7.861	< Limit	Pass
TM2_2DH5_Ch78	8.715	< Limit	Pass
TM3_3DH5_Ch0	6.945	< Limit	Pass
TM3_3DH5_Ch39	7.858	< Limit	Pass
TM3_3DH5_Ch78	8.755	< Limit	Pass



## 2 Test Plot

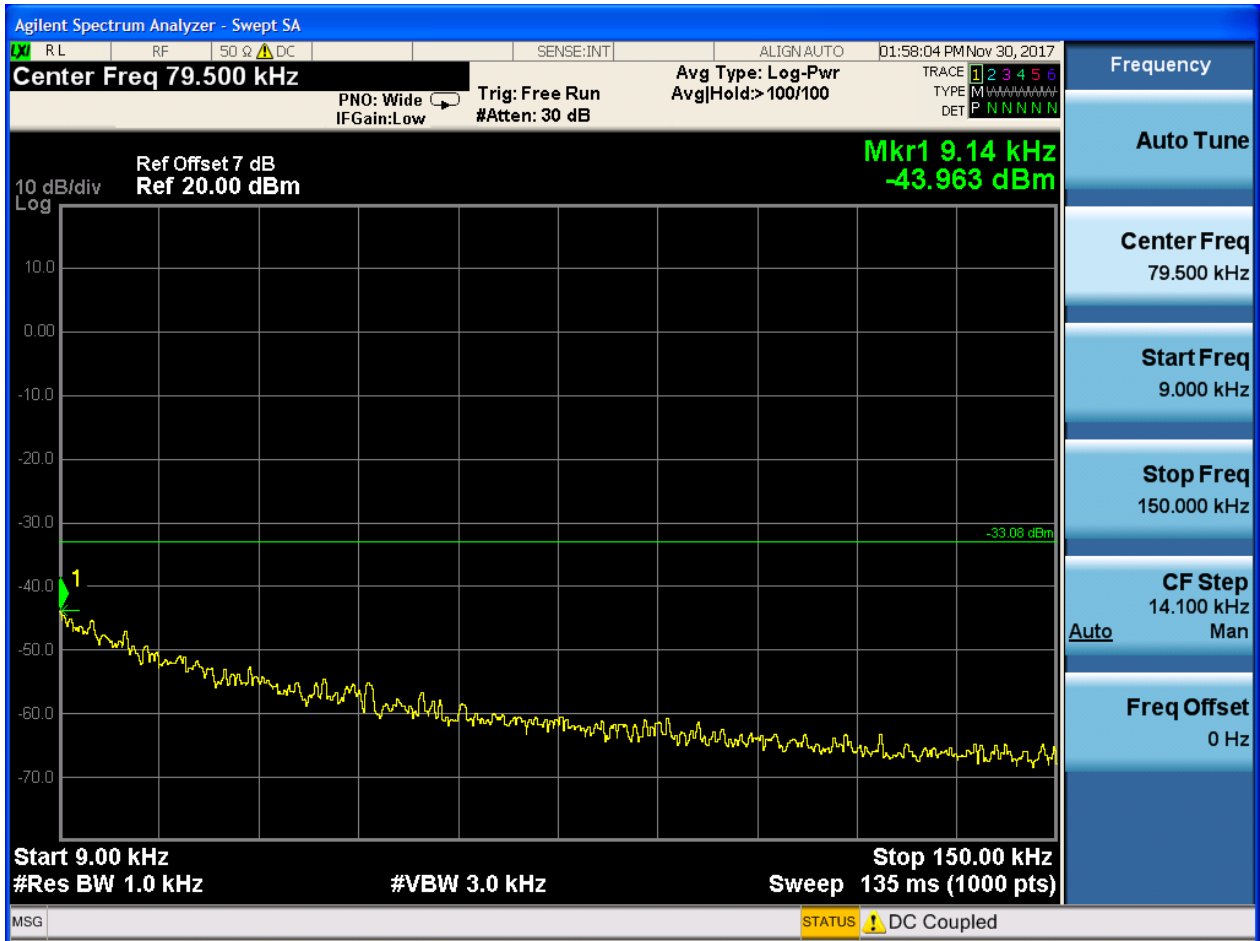
### 2.1 TM1\_DH5\_Ch0

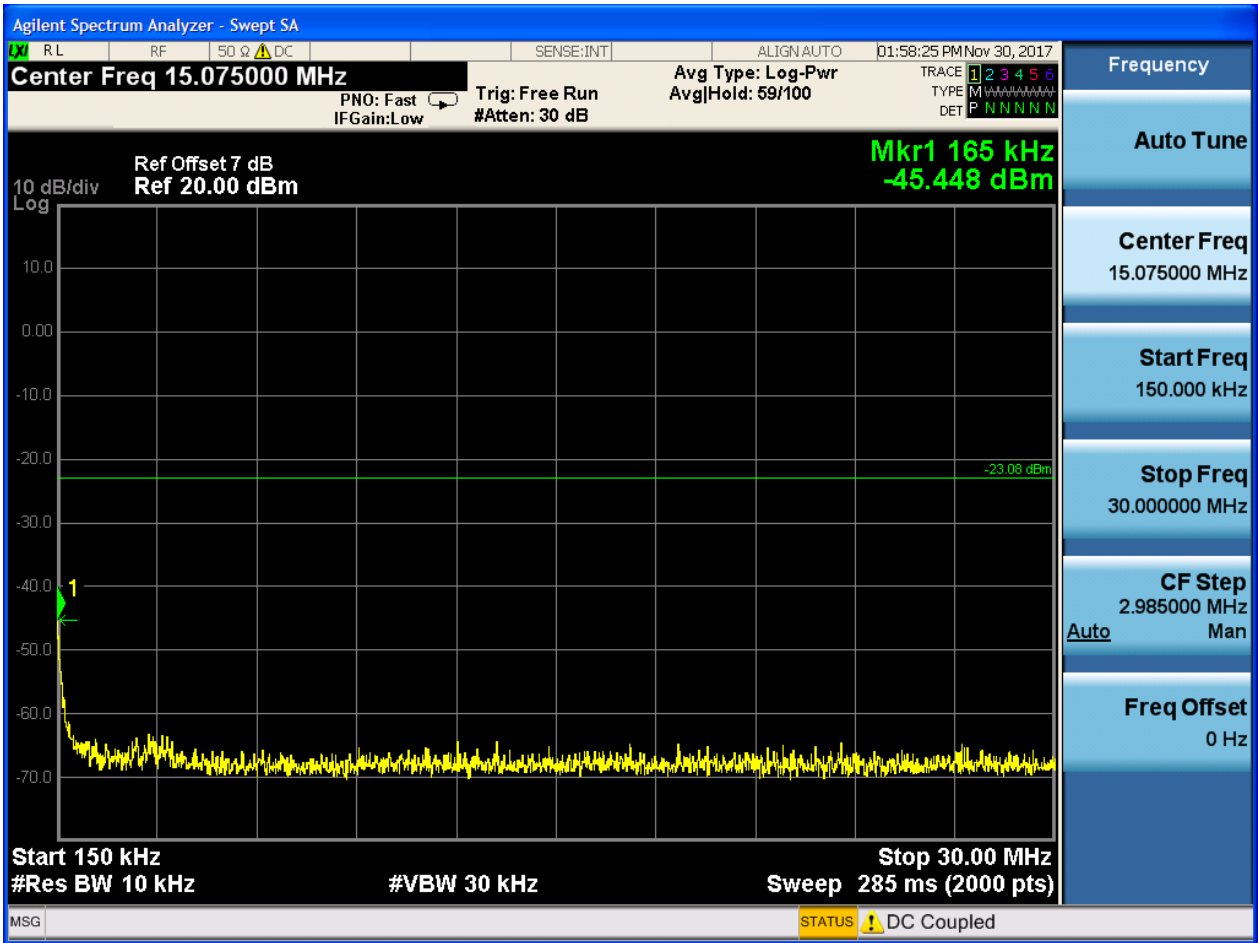
#### 2.1.1 Pref



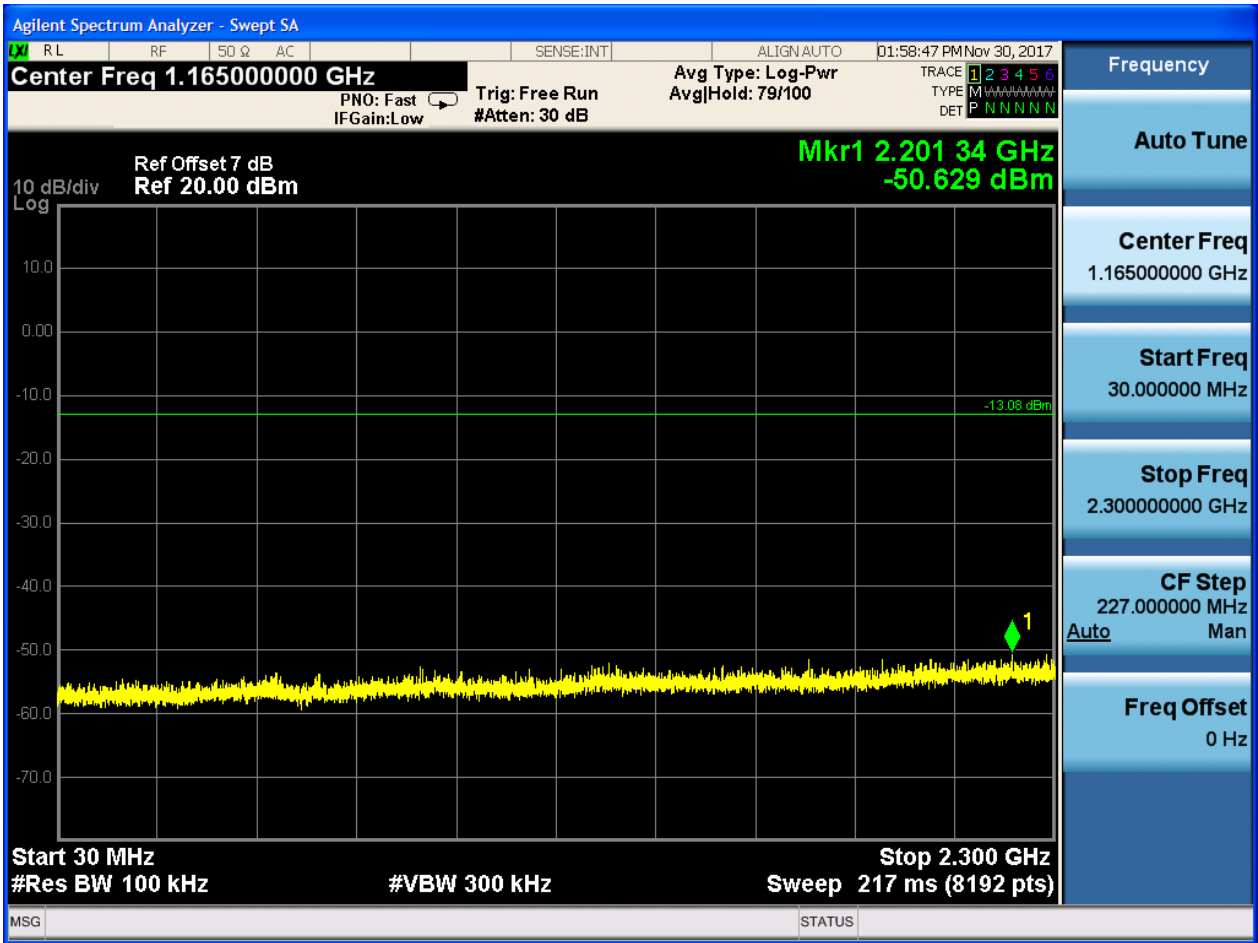


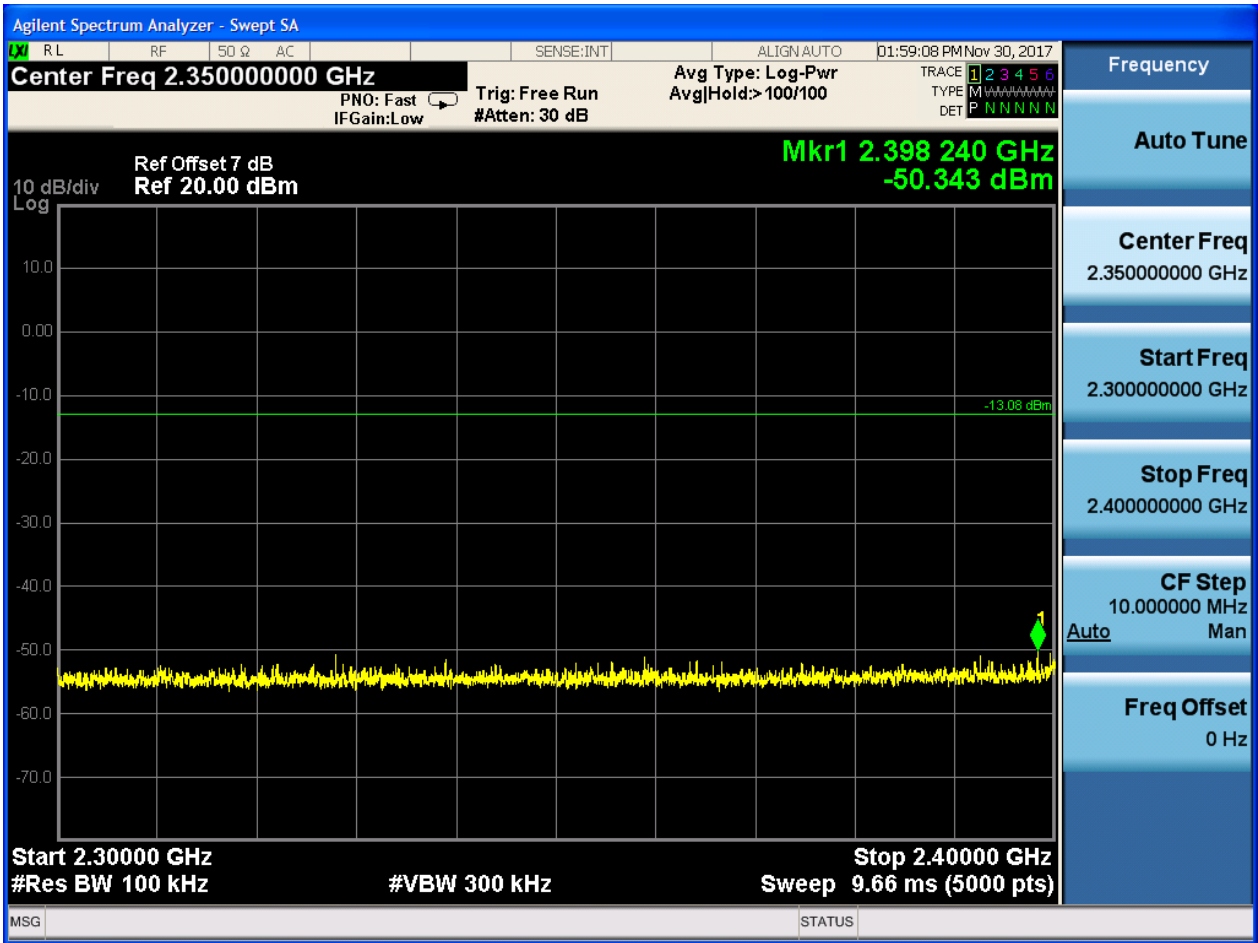
### 2.1.2 Puw

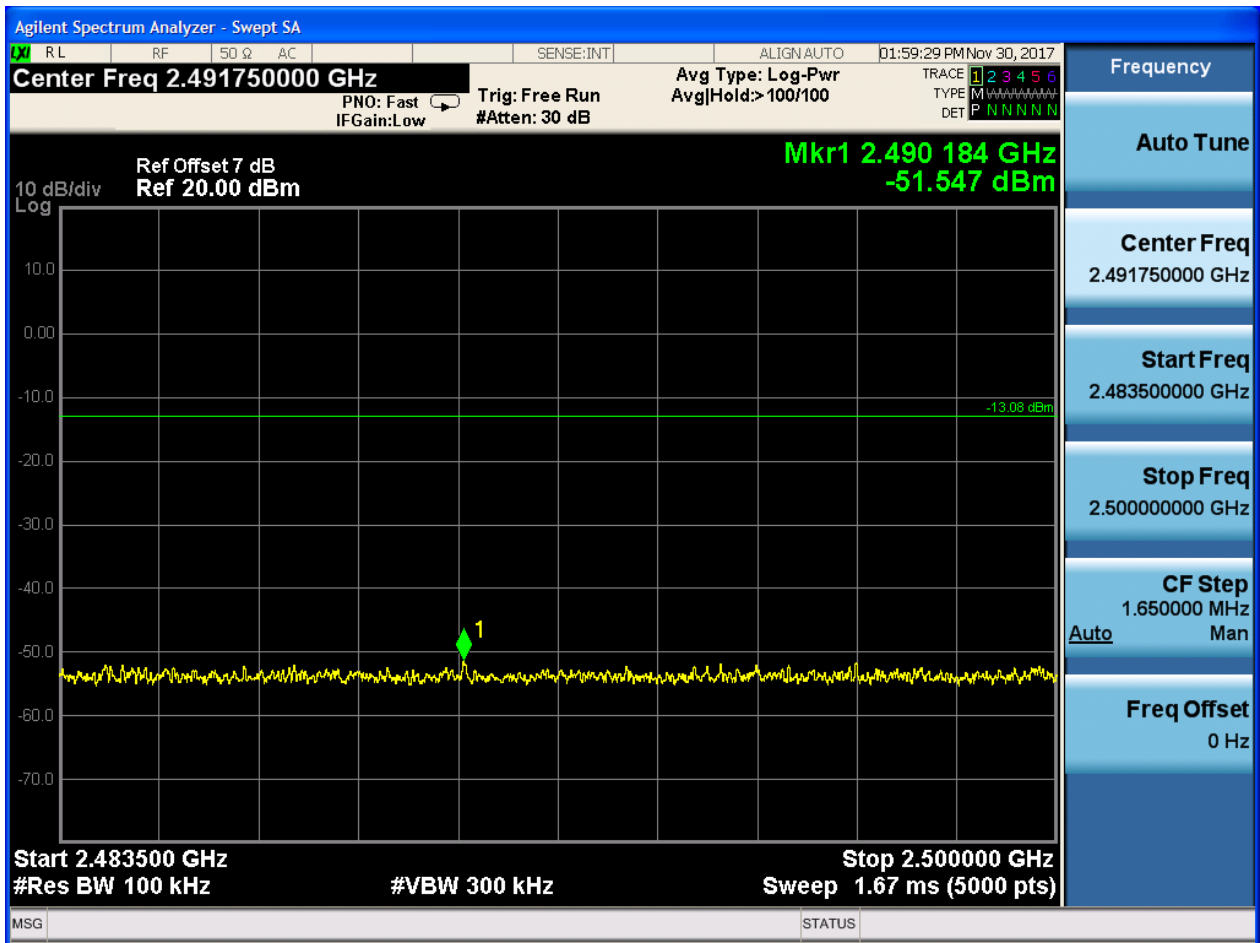


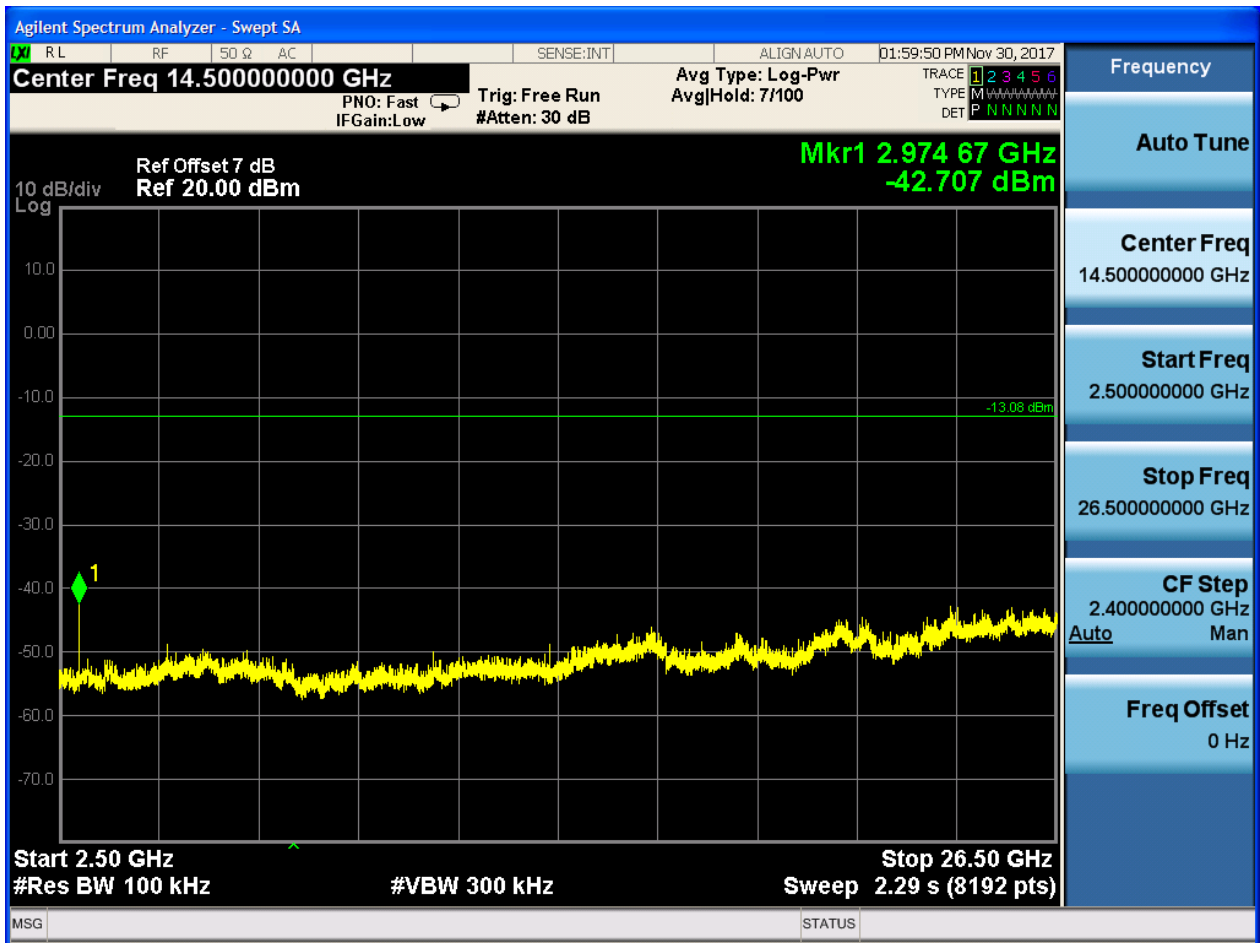








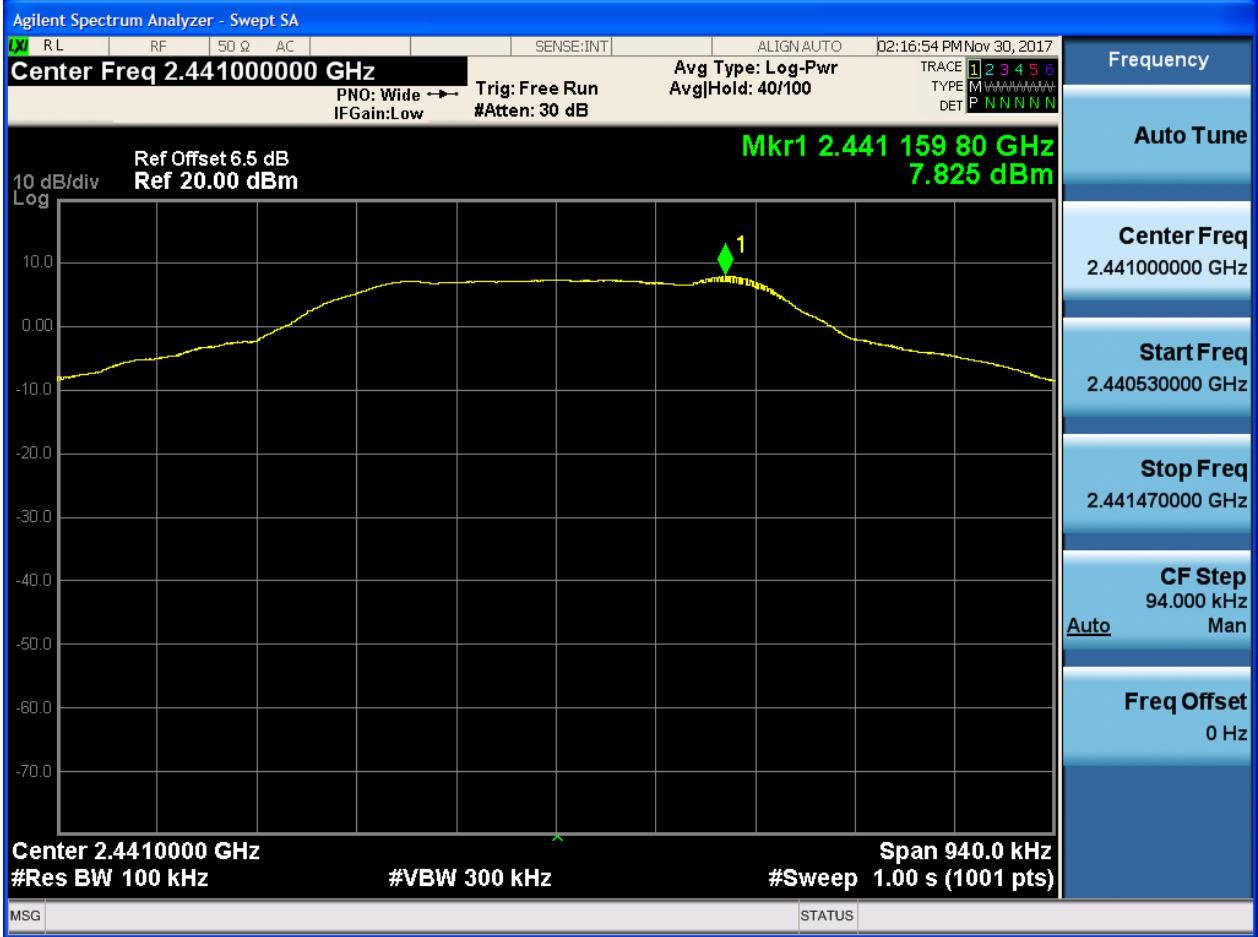




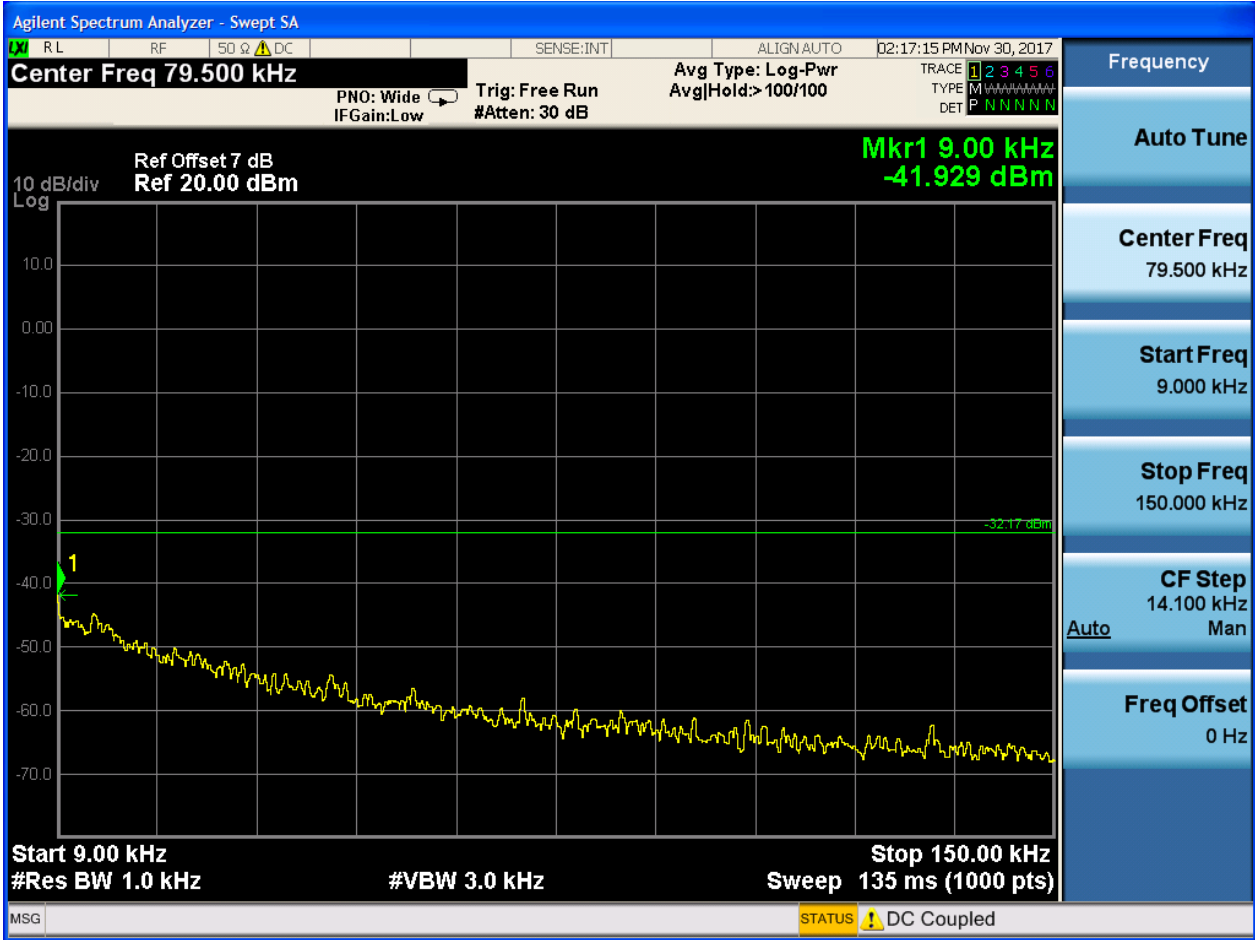


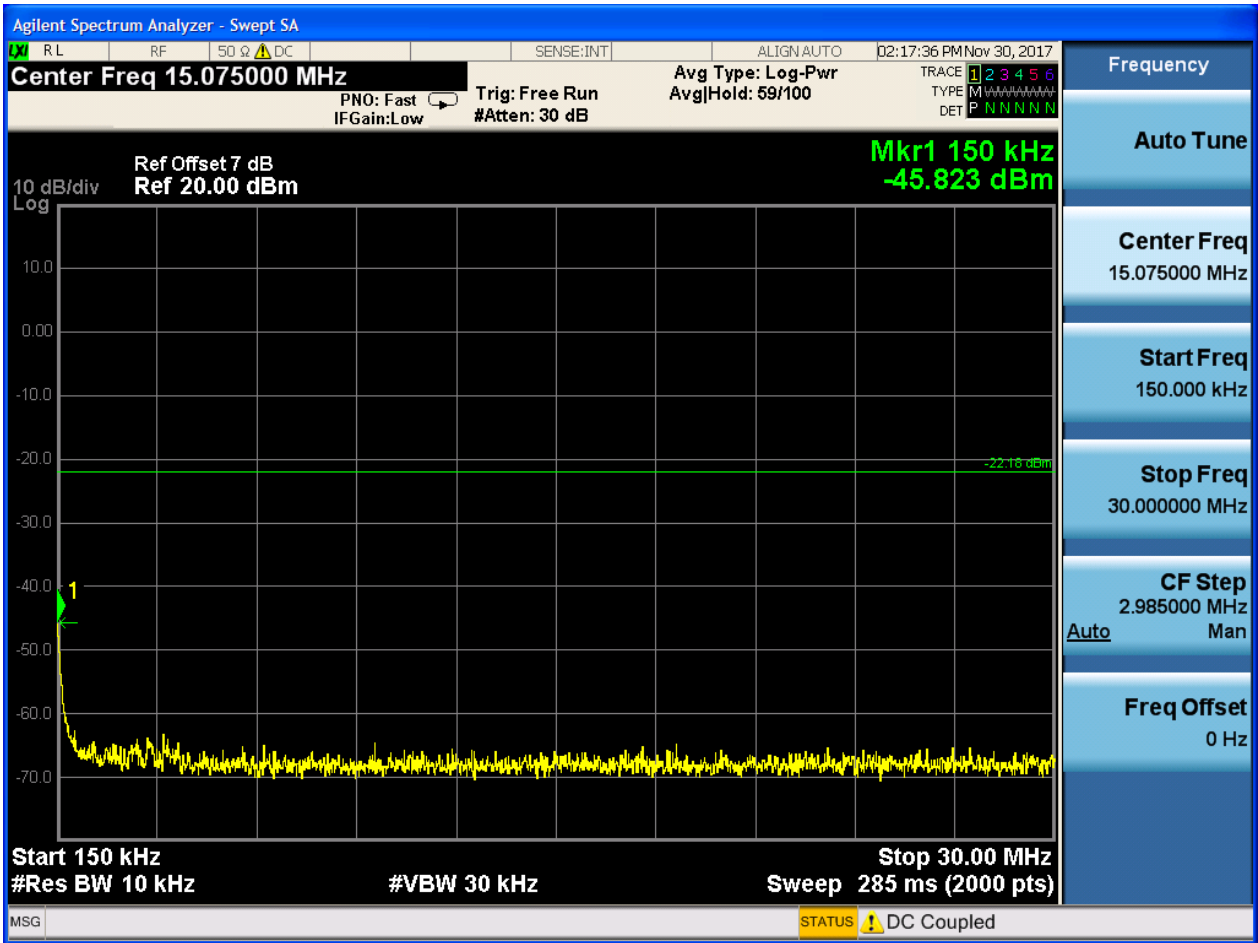
## 2.2 TM1\_DH5\_Ch39

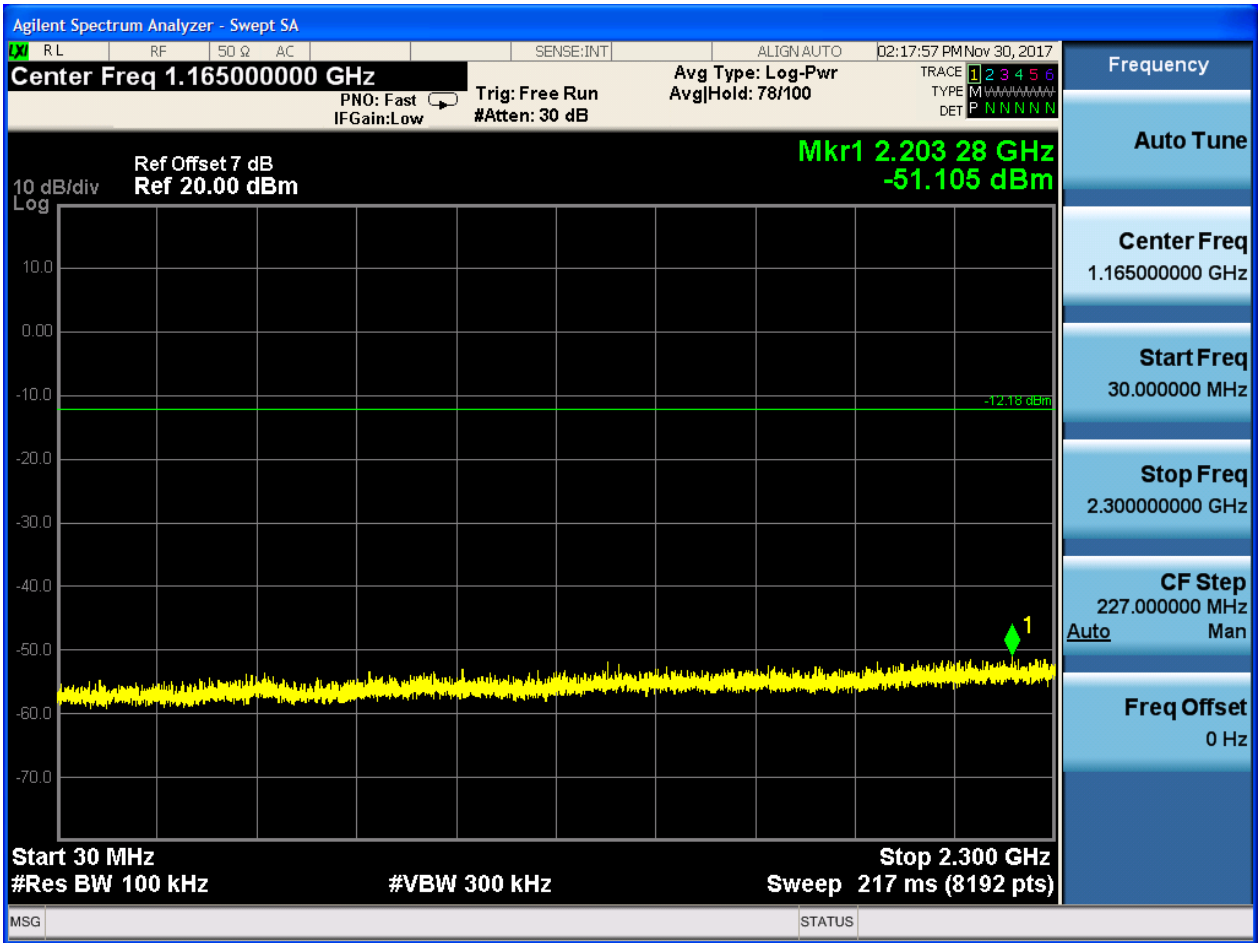
### 2.2.1 Pref



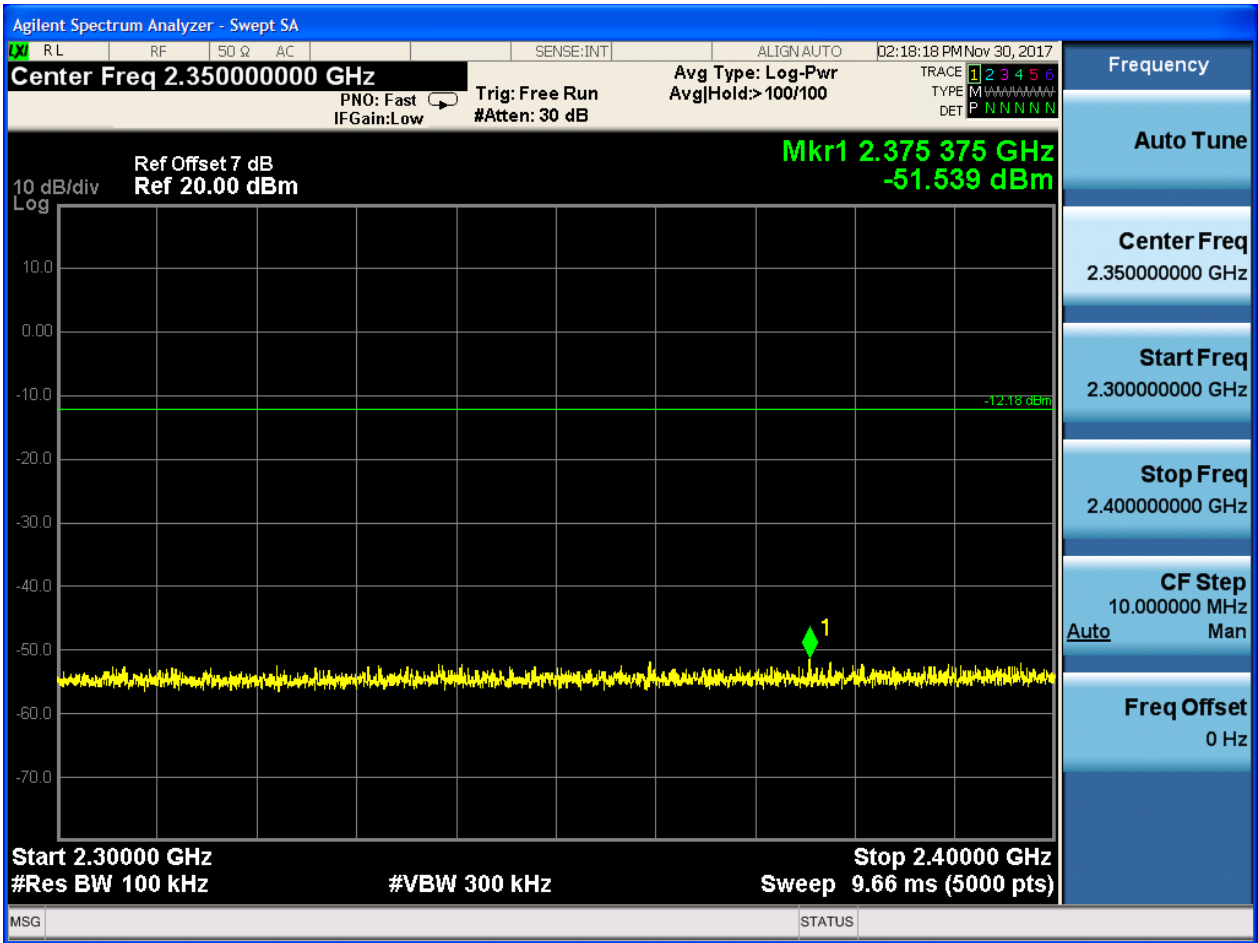
### 2.2.2 P<sub>uw</sub>

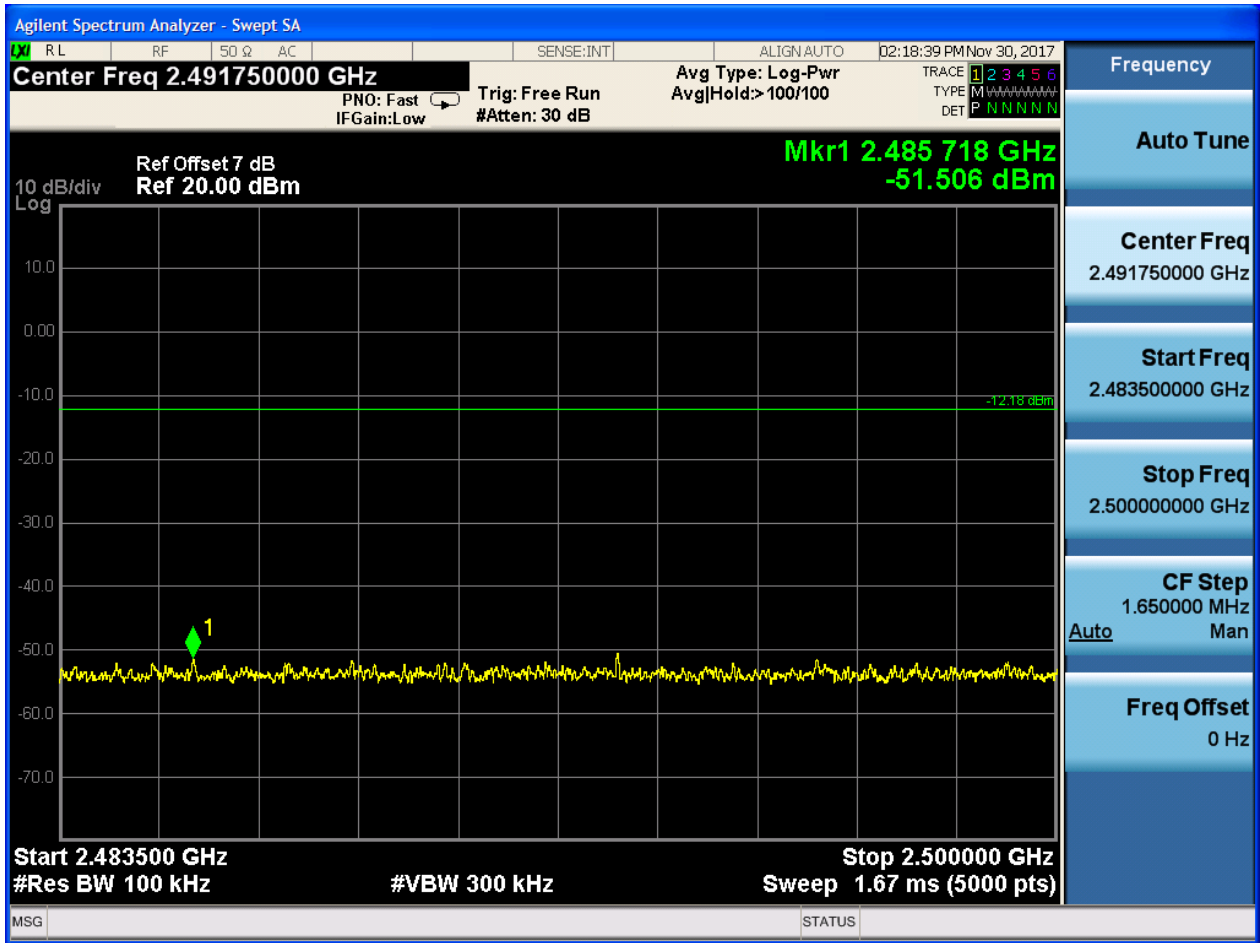


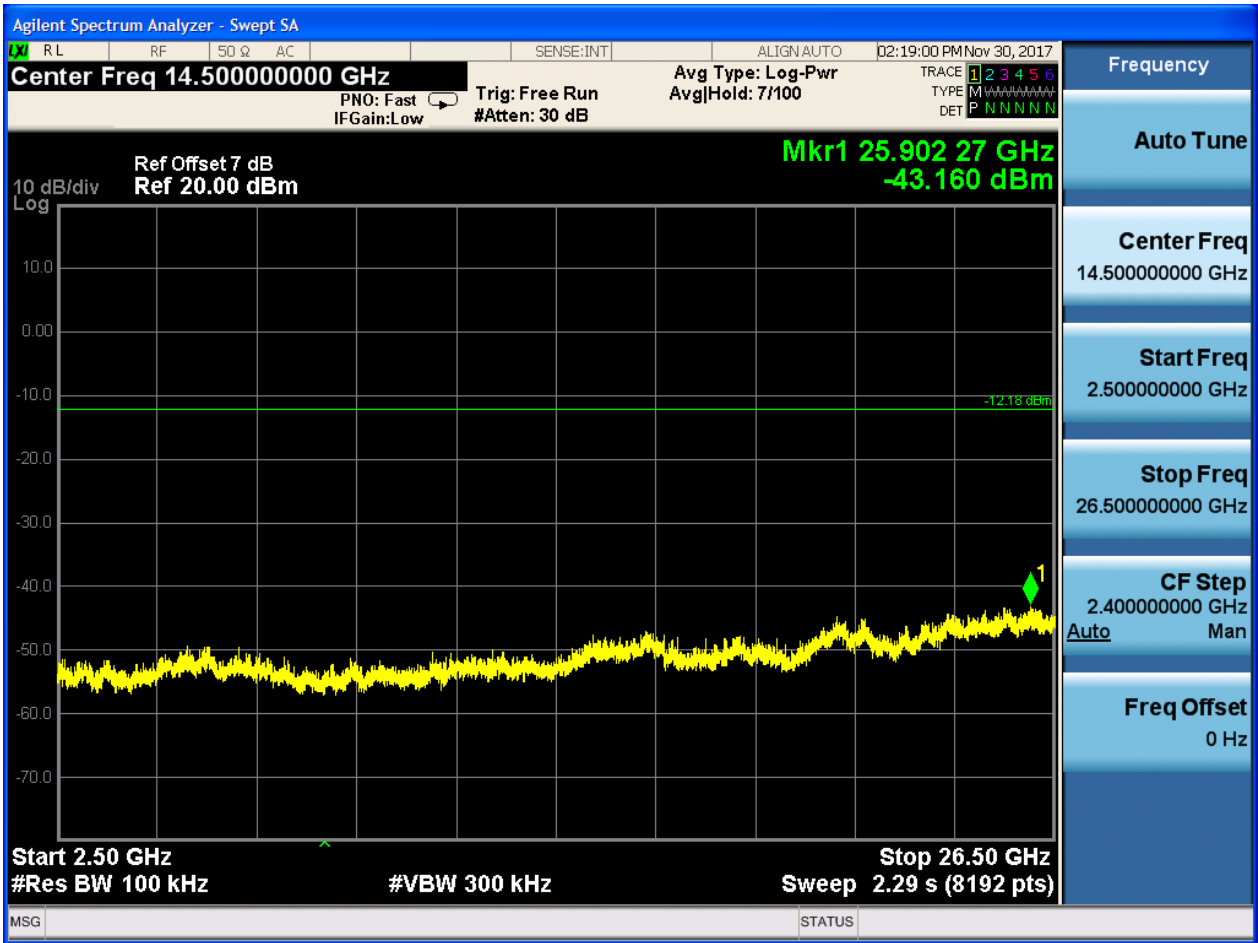








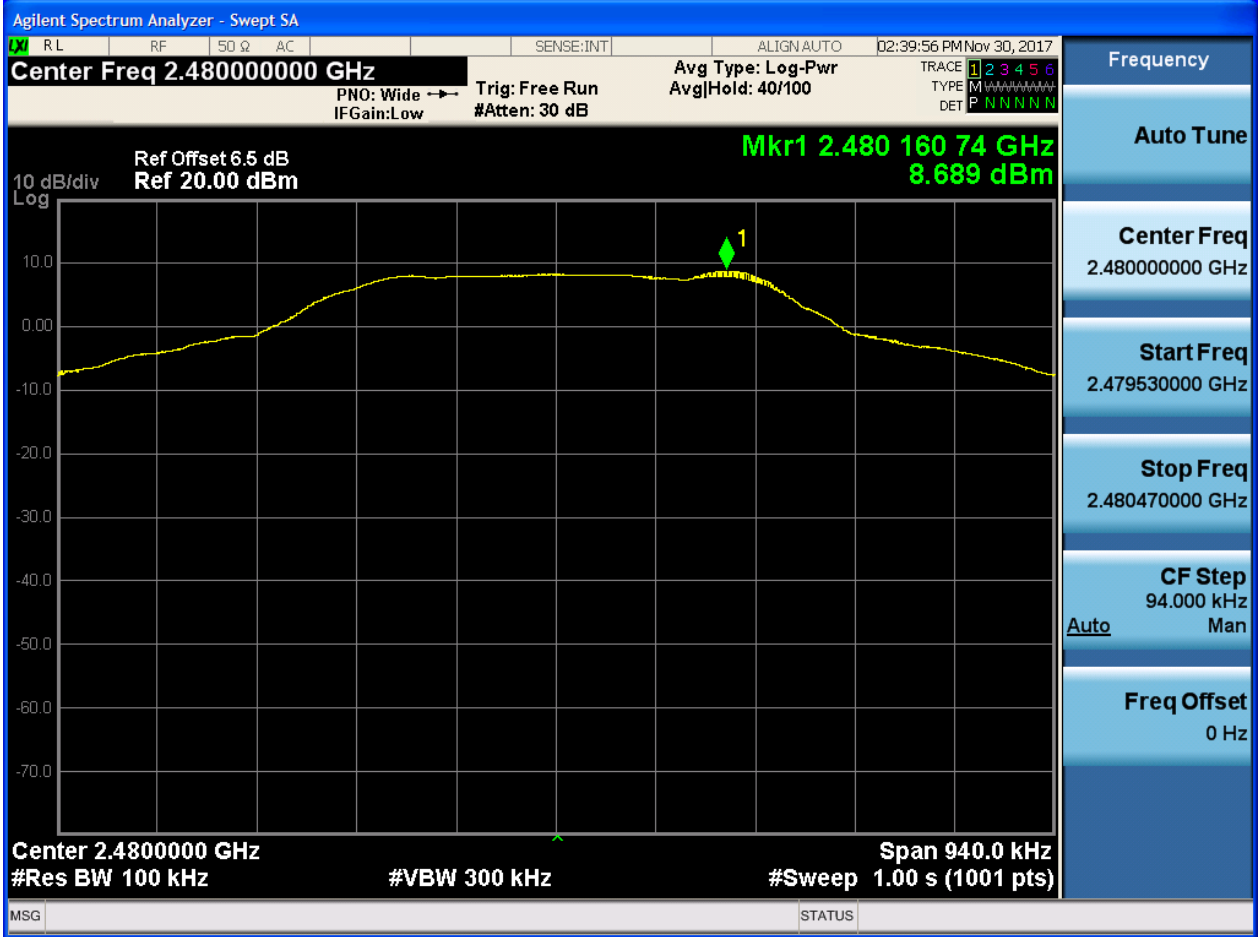






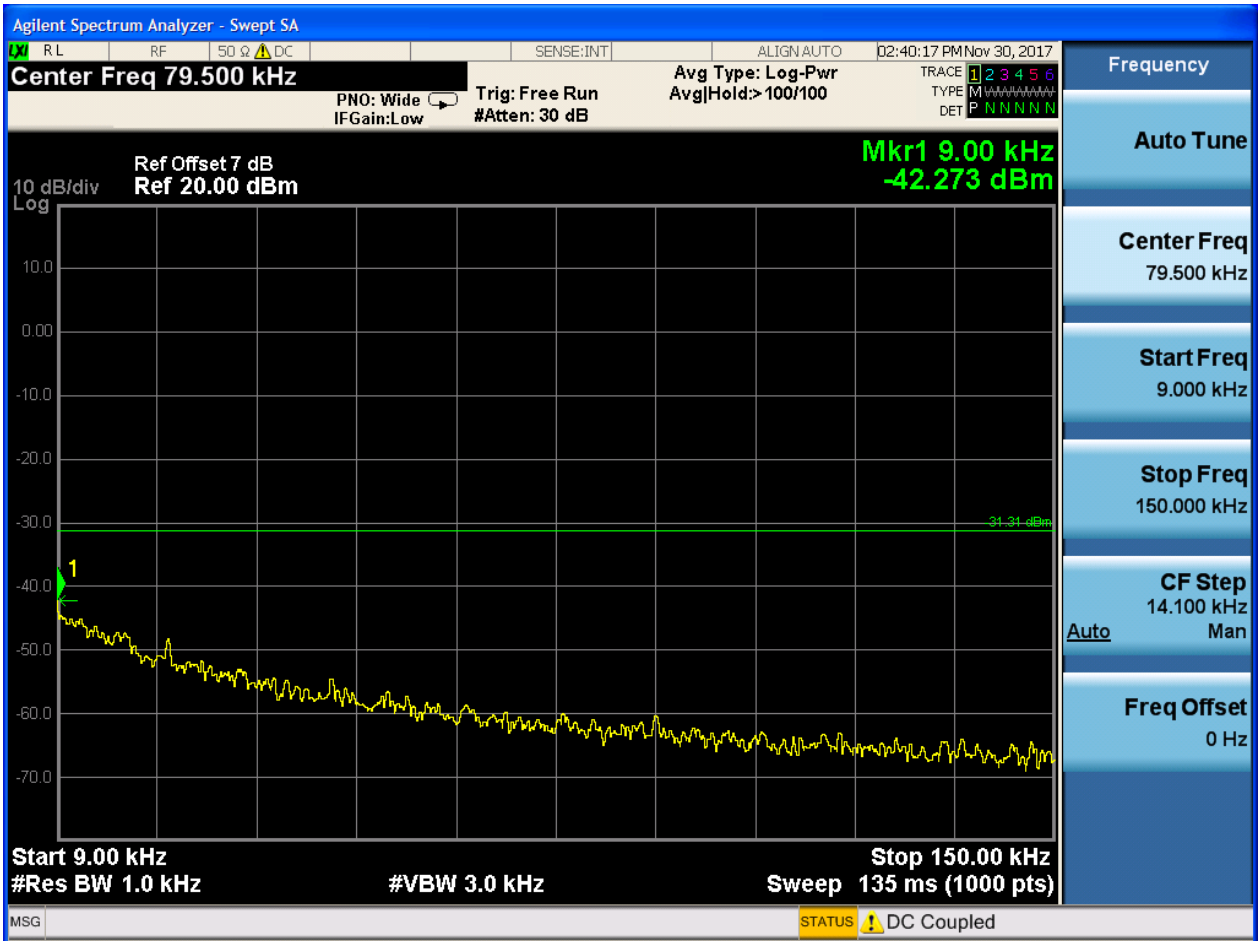
### 2.3 TM1\_DH5\_Ch78

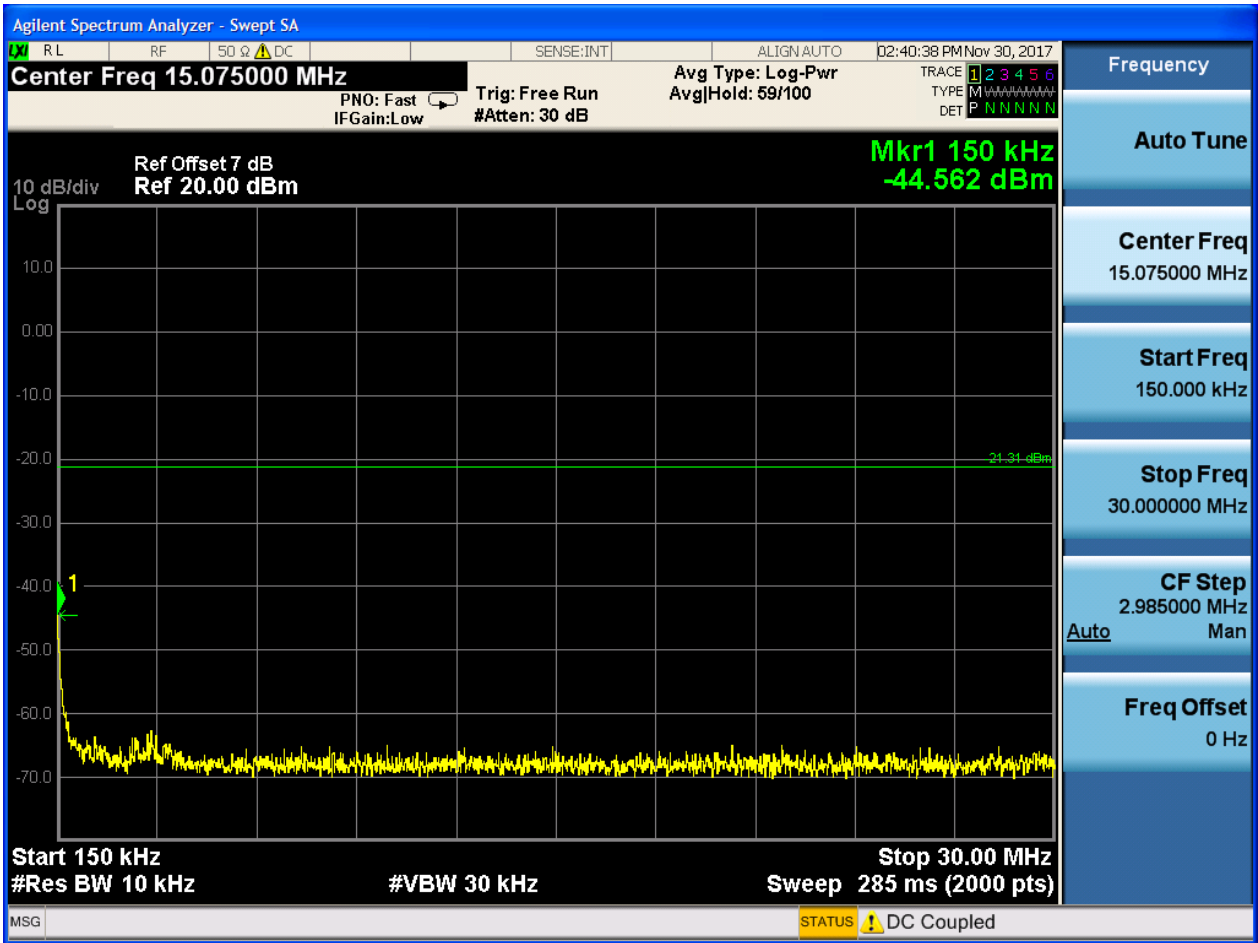
#### 2.3.1 Pref

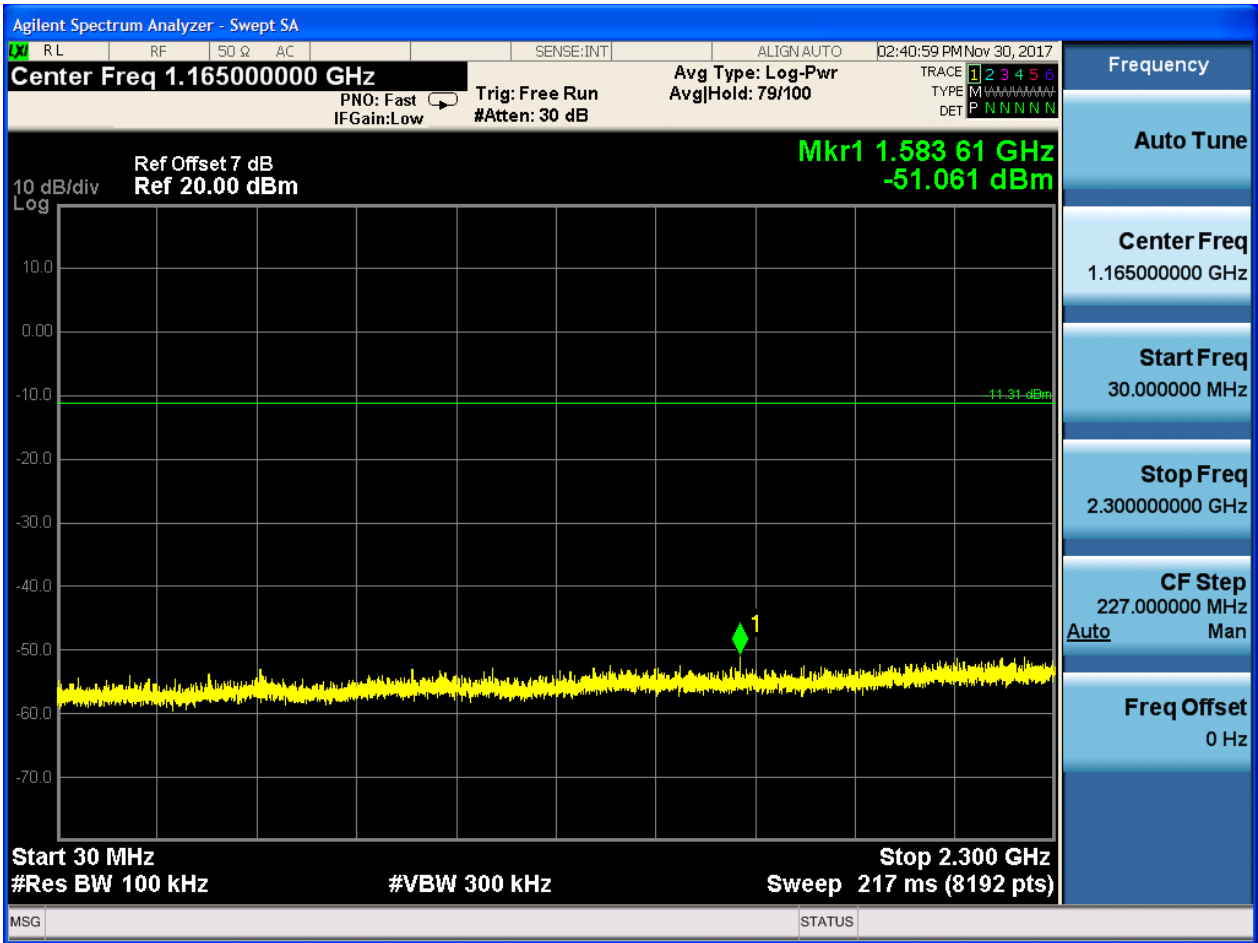


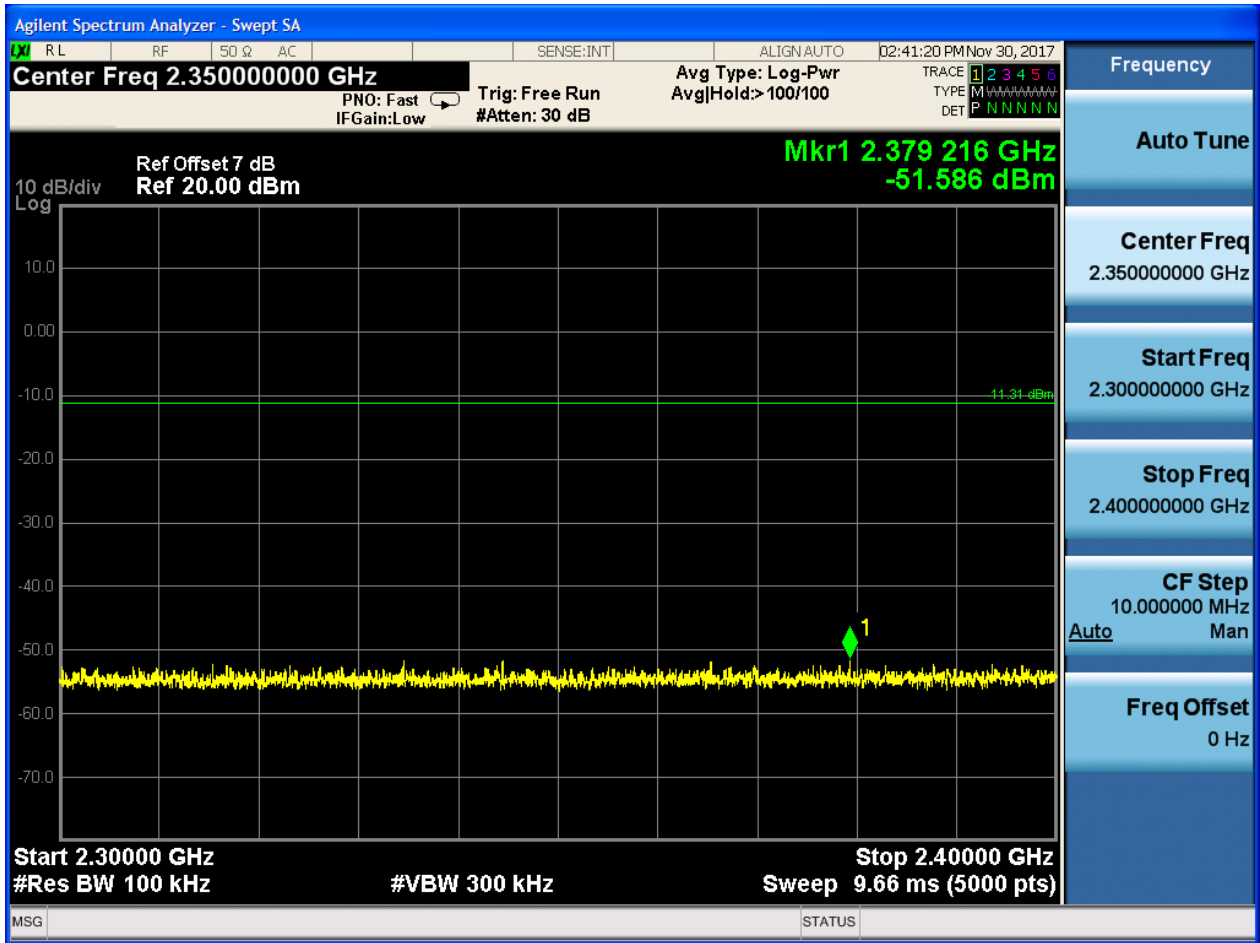


### 2.3.2 Puw

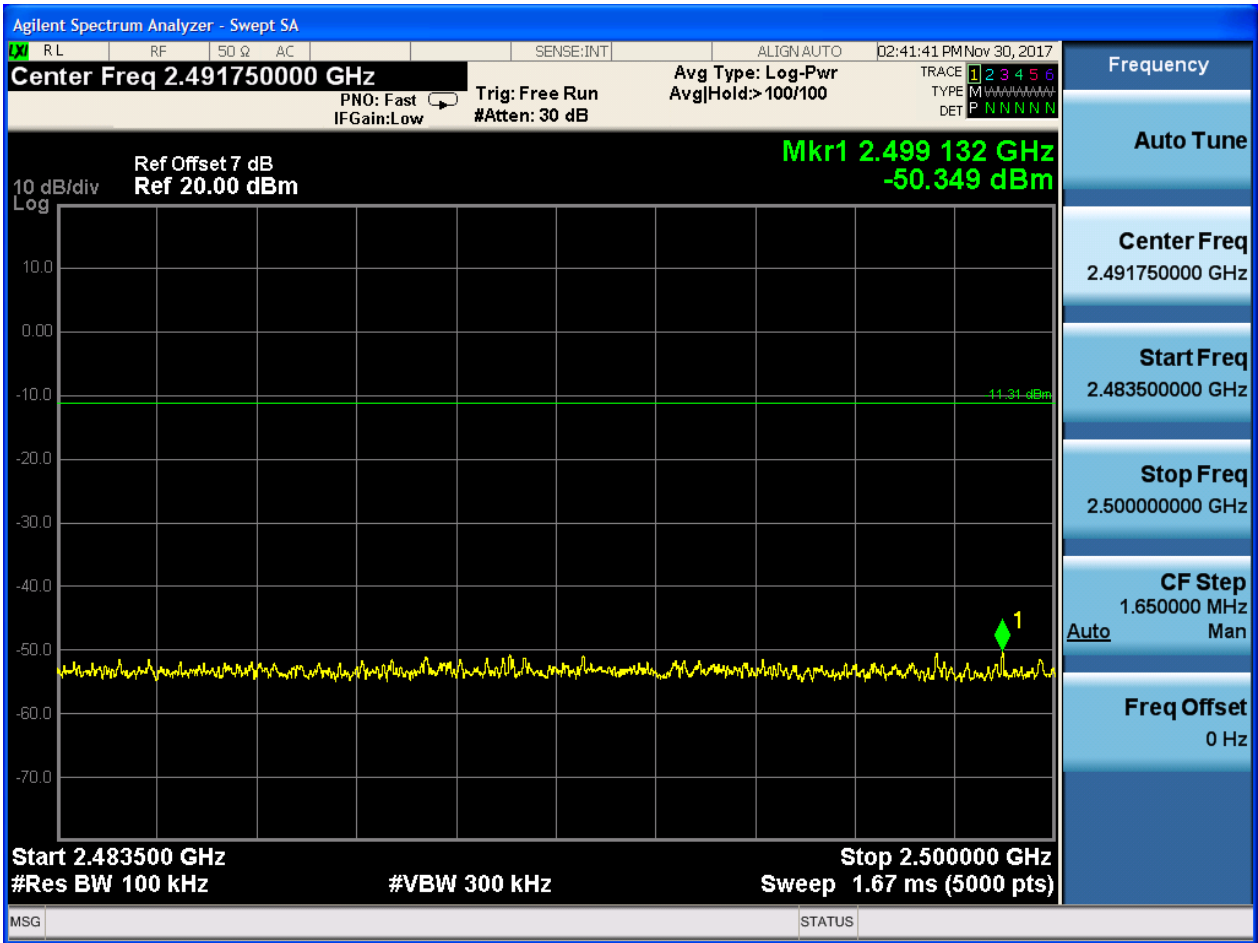


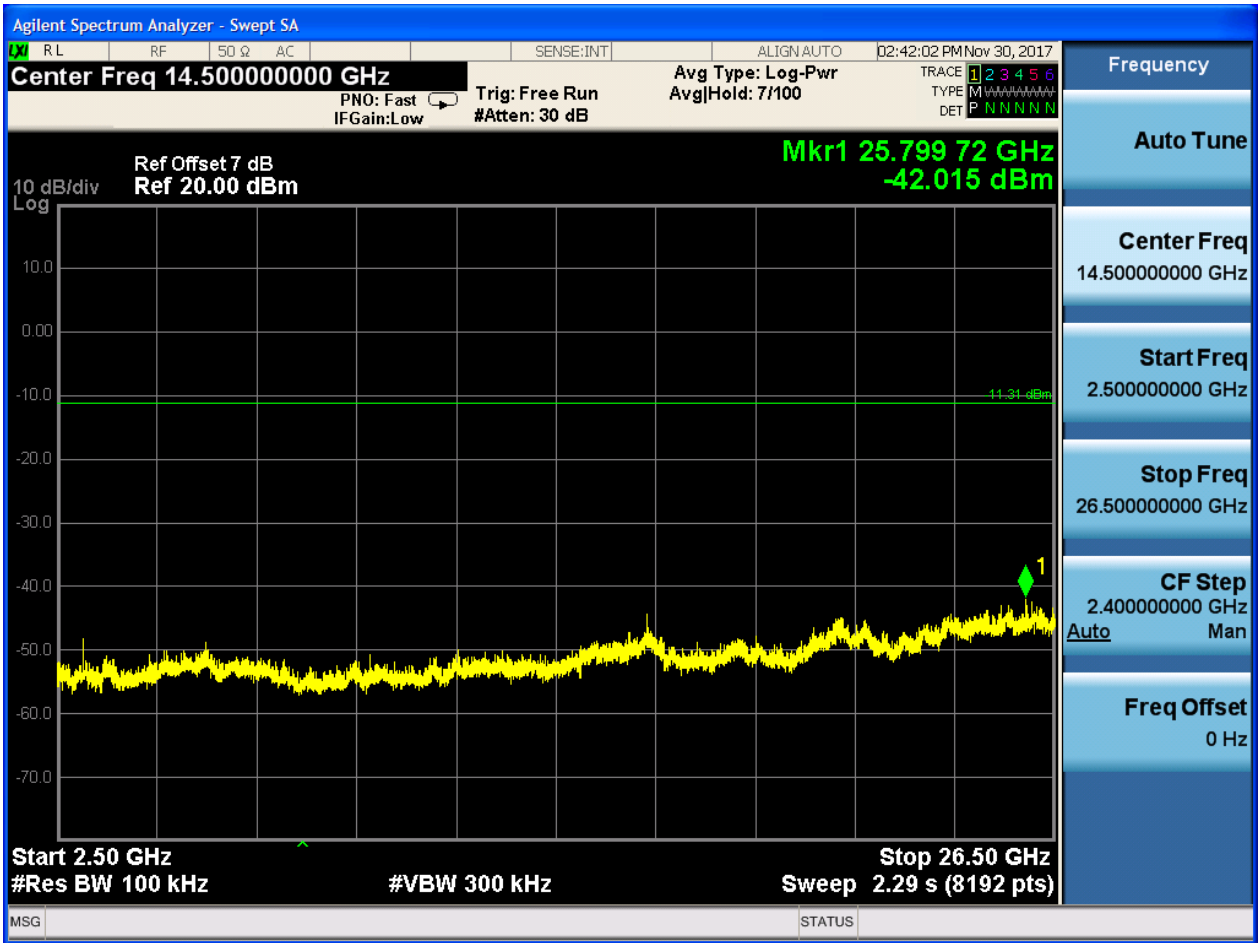






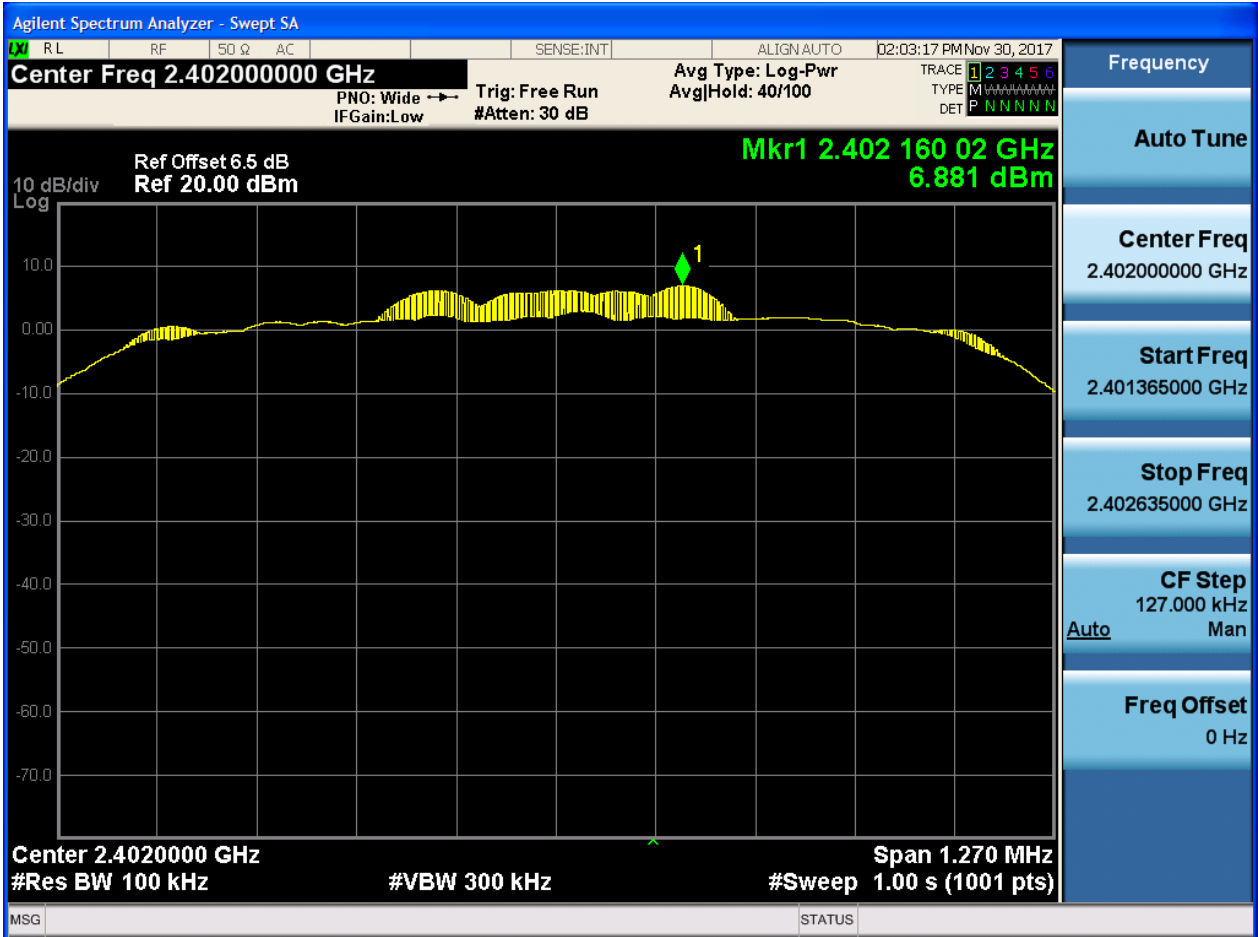




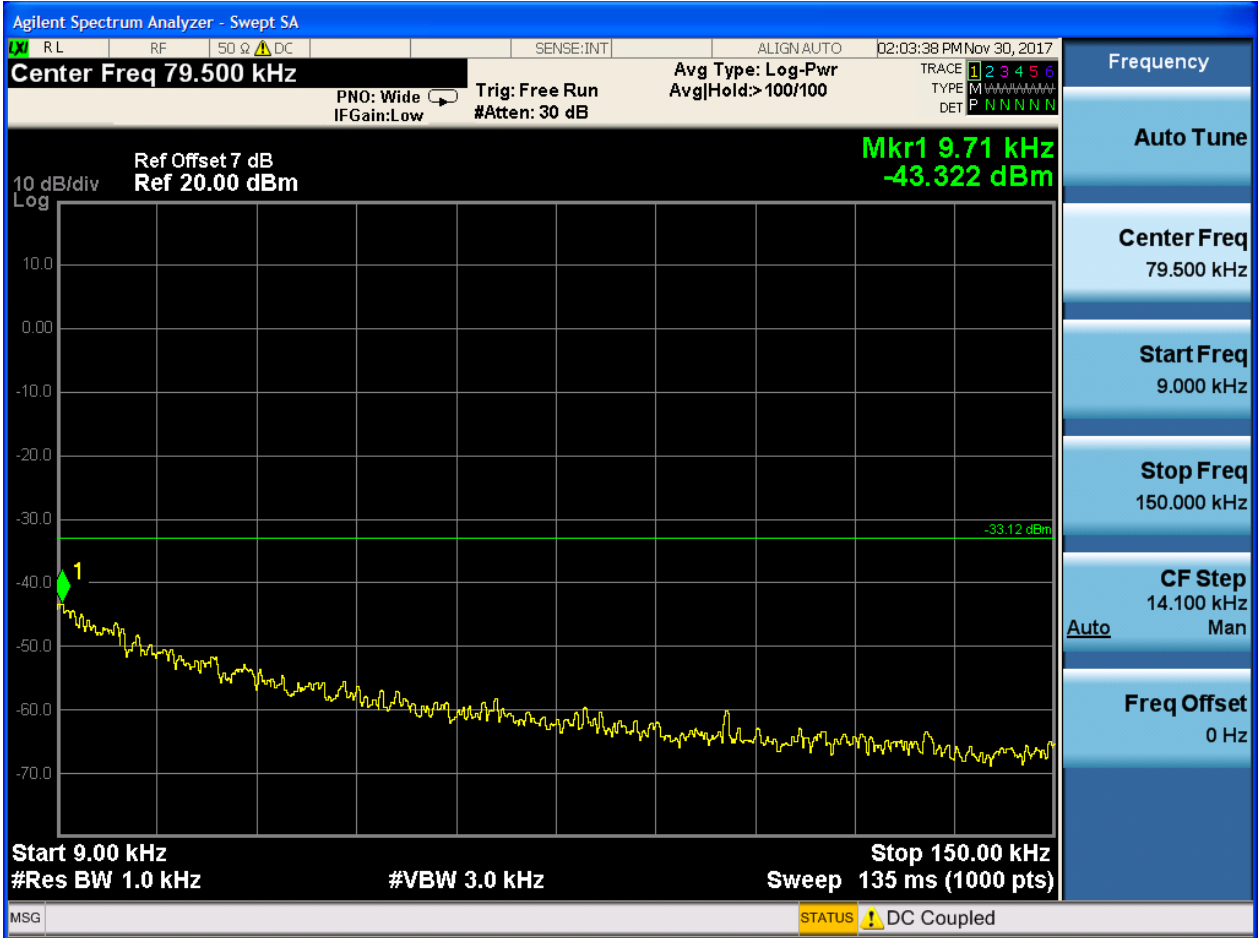


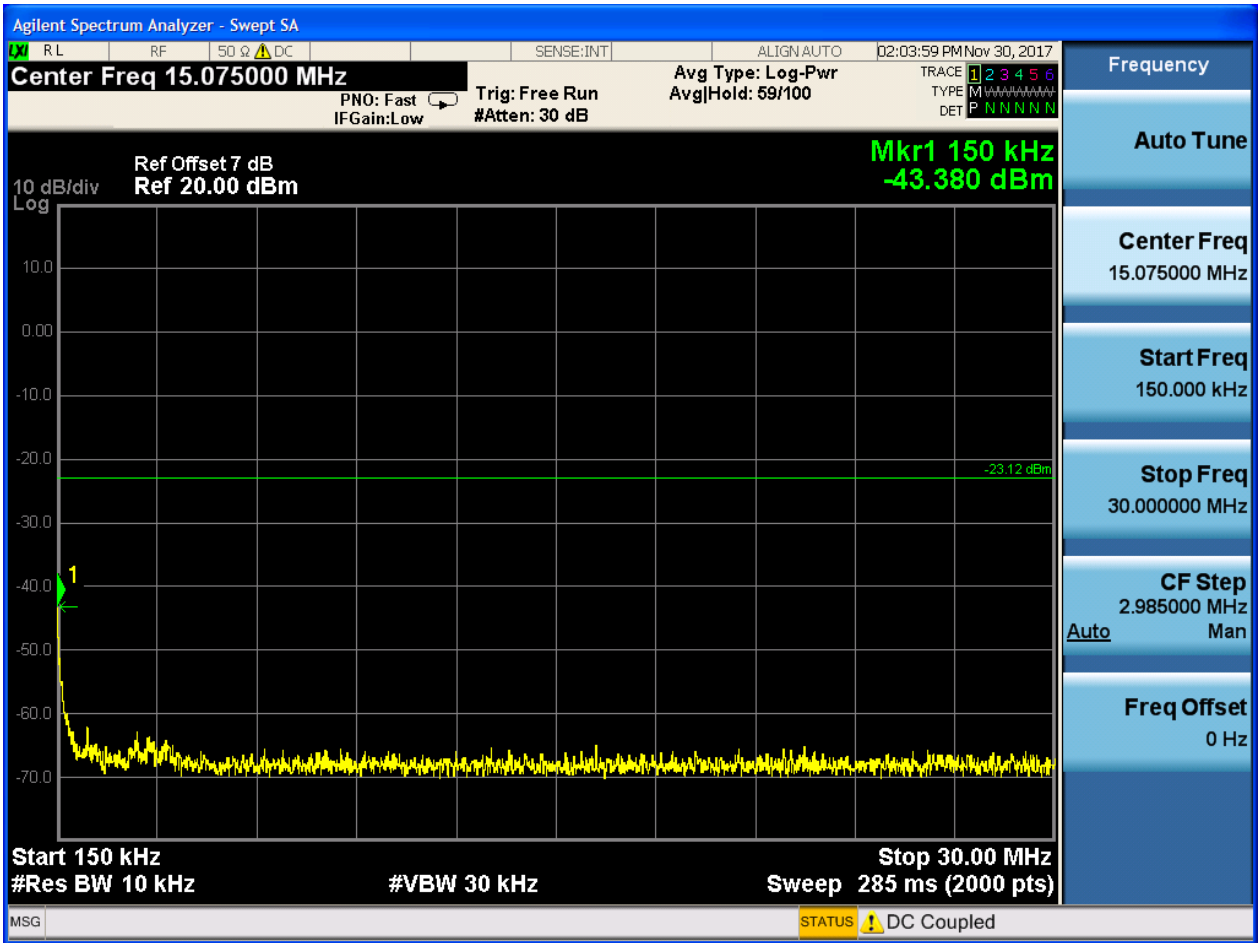
## 2.4 TM2\_2DH5\_Ch0

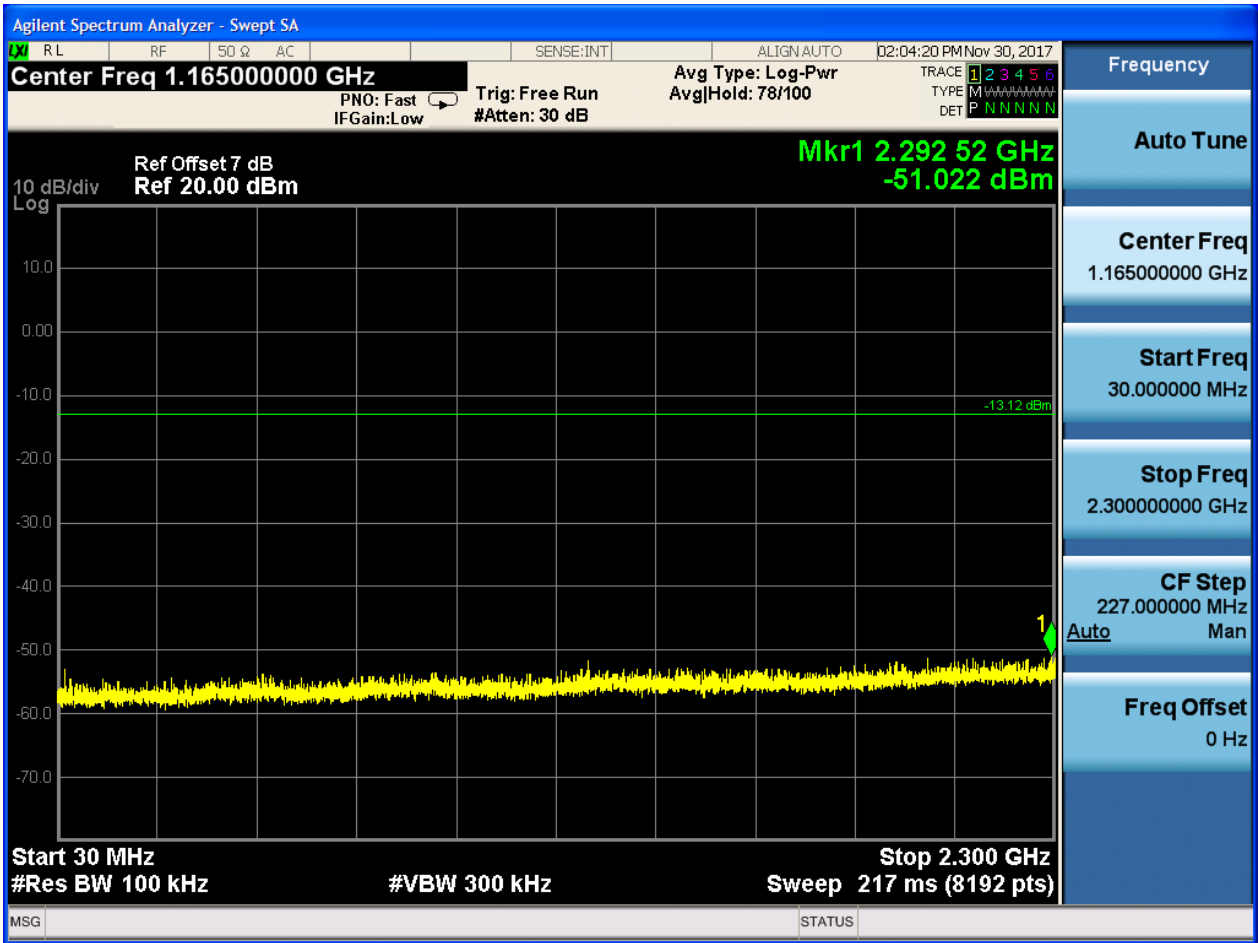
### 2.4.1 Pref

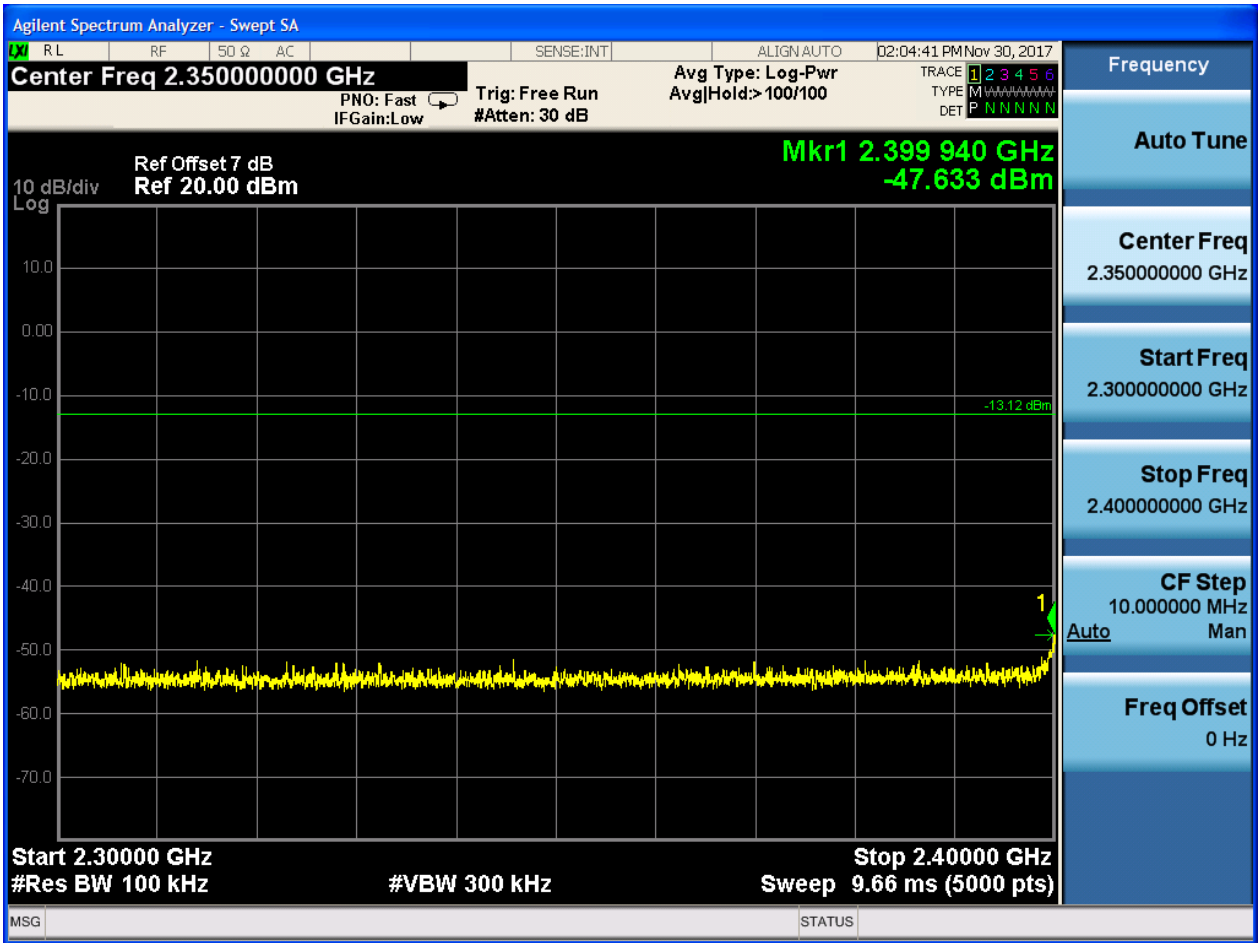


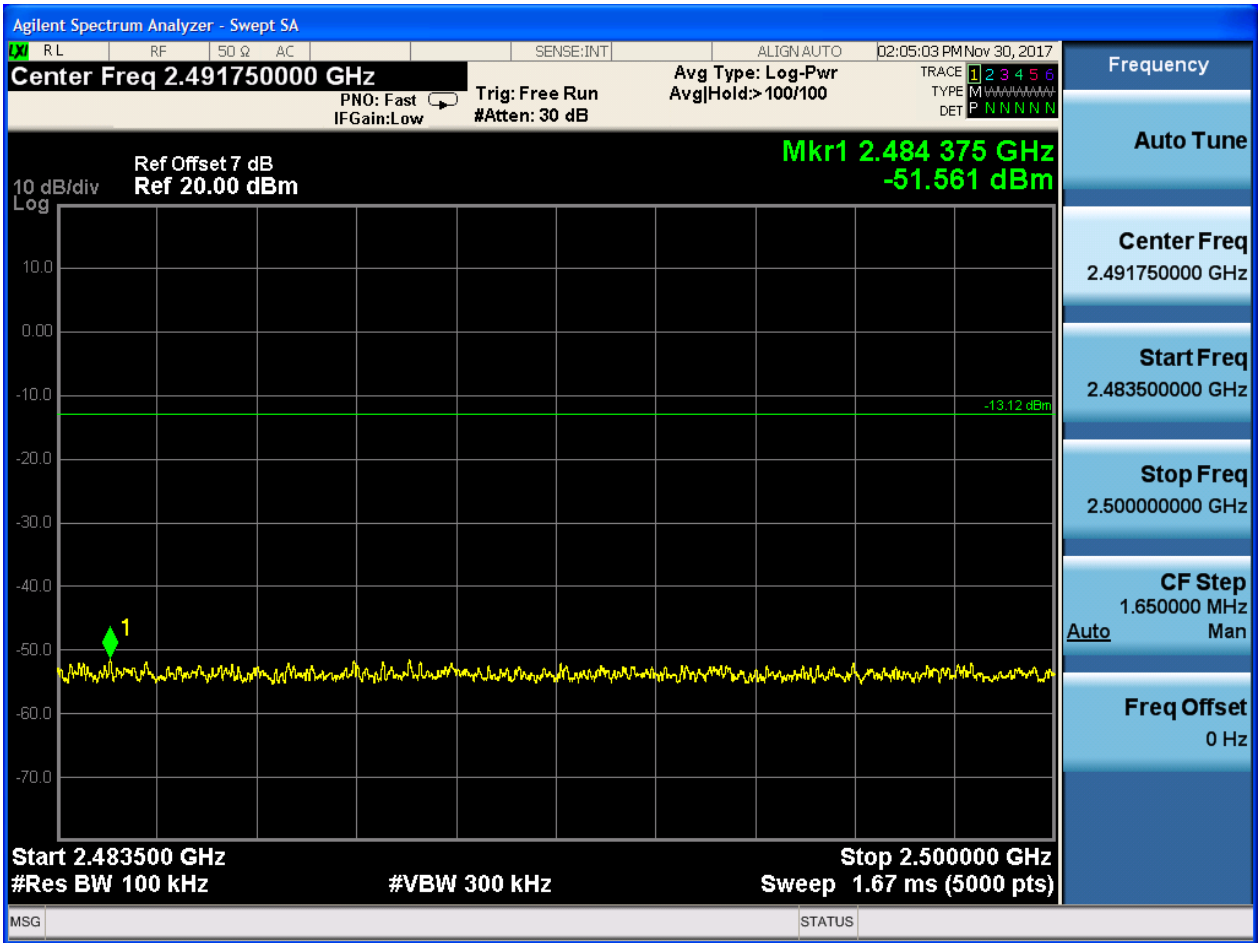
2.4.2 Puw



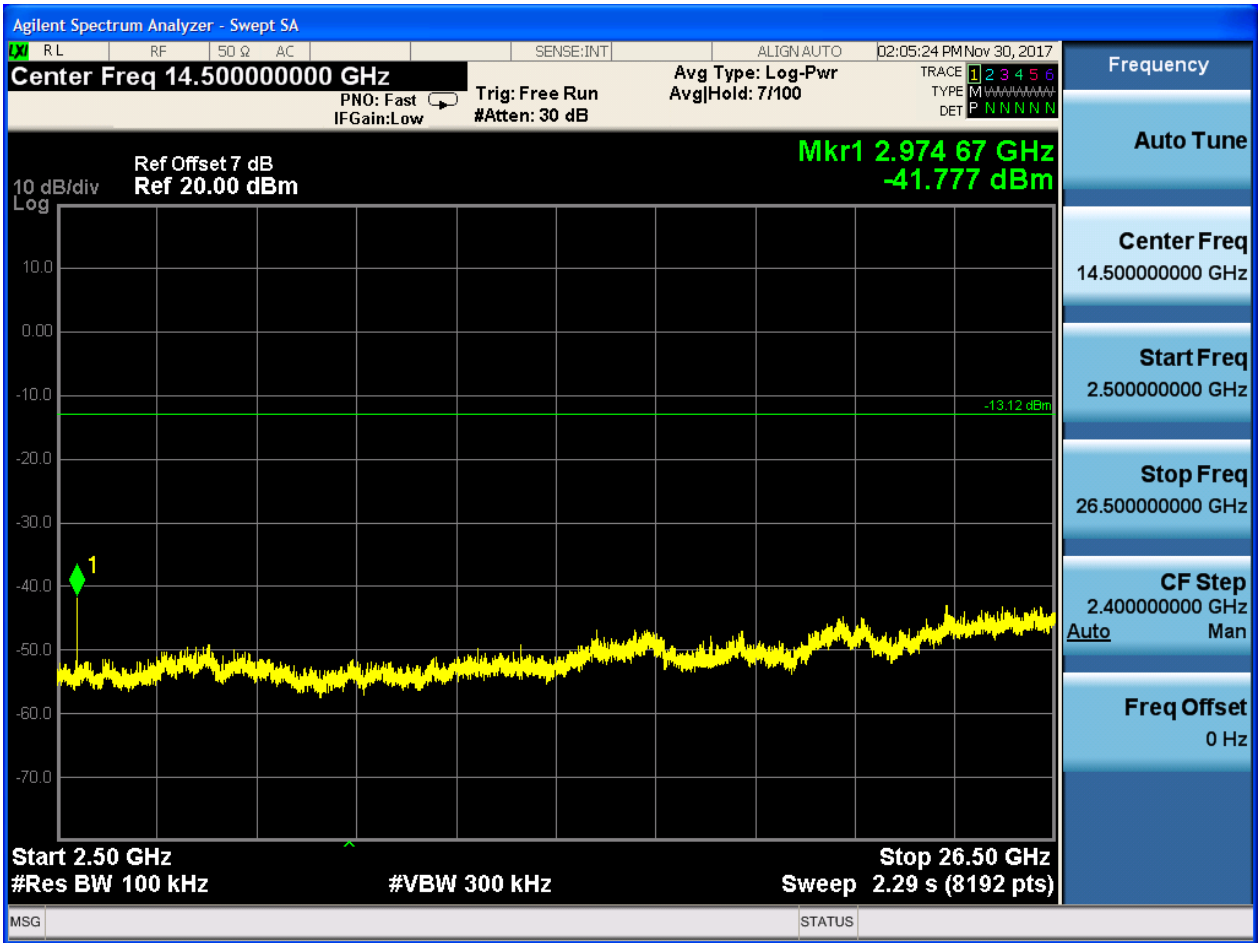








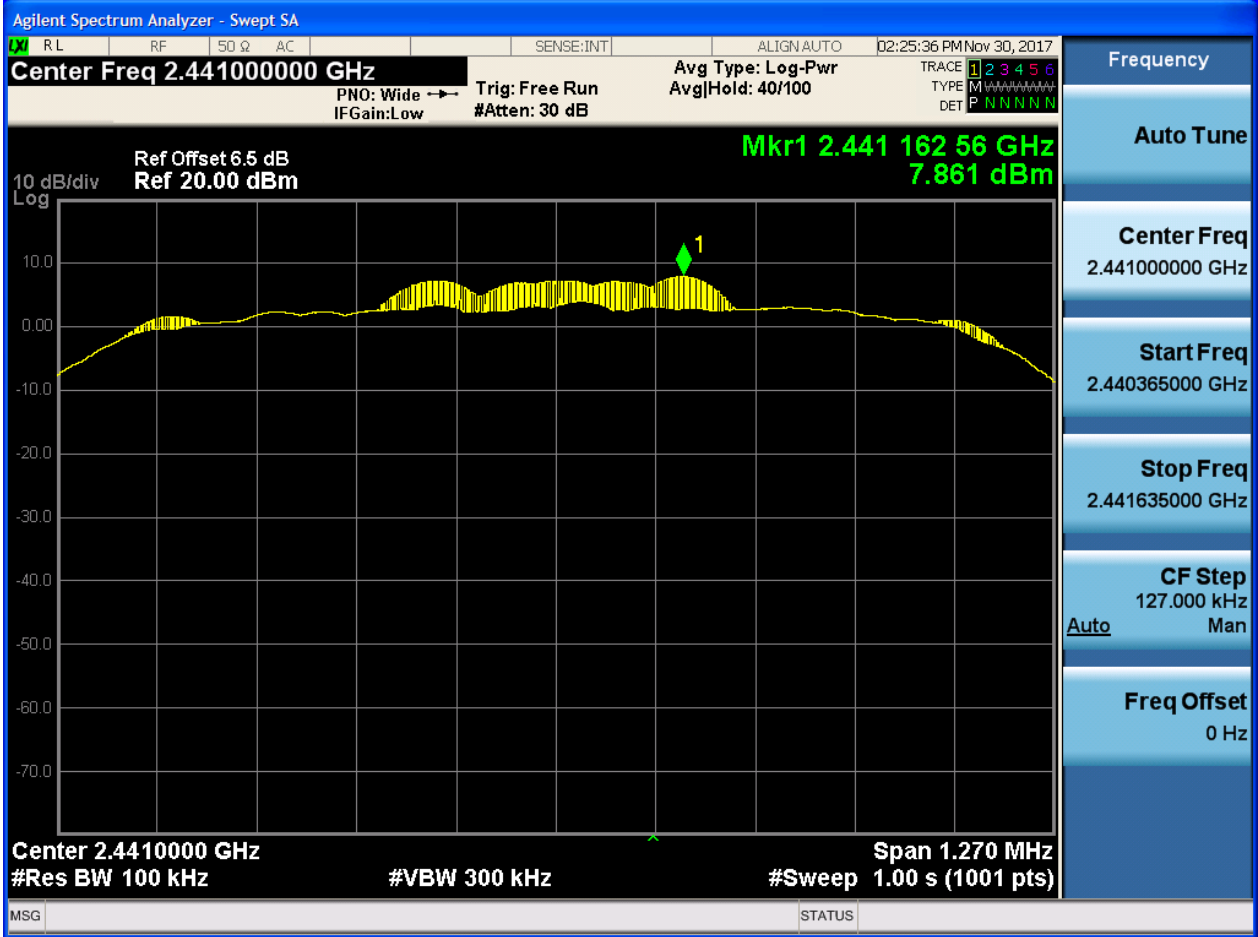






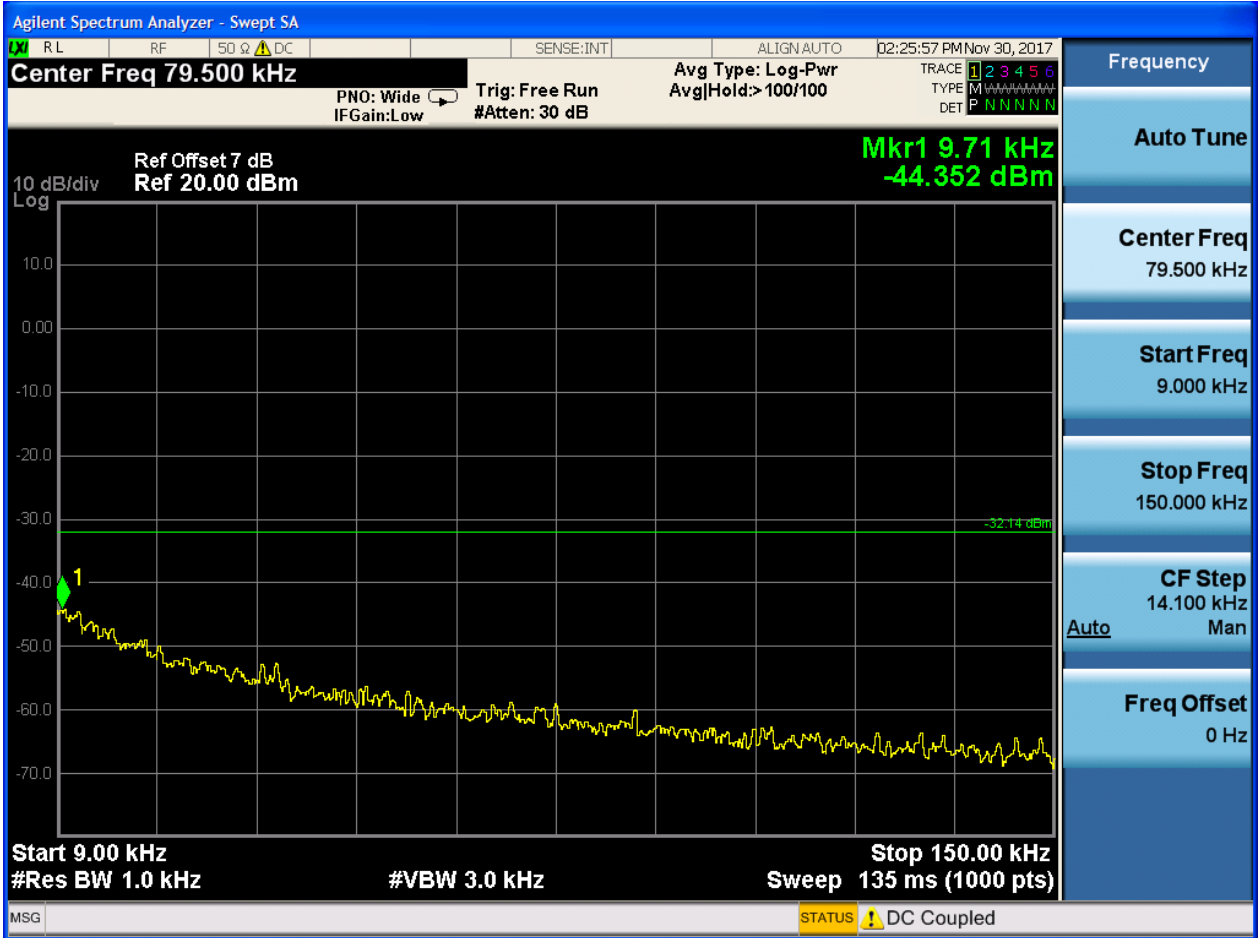
## 2.5 TM2\_2DH5\_Ch39

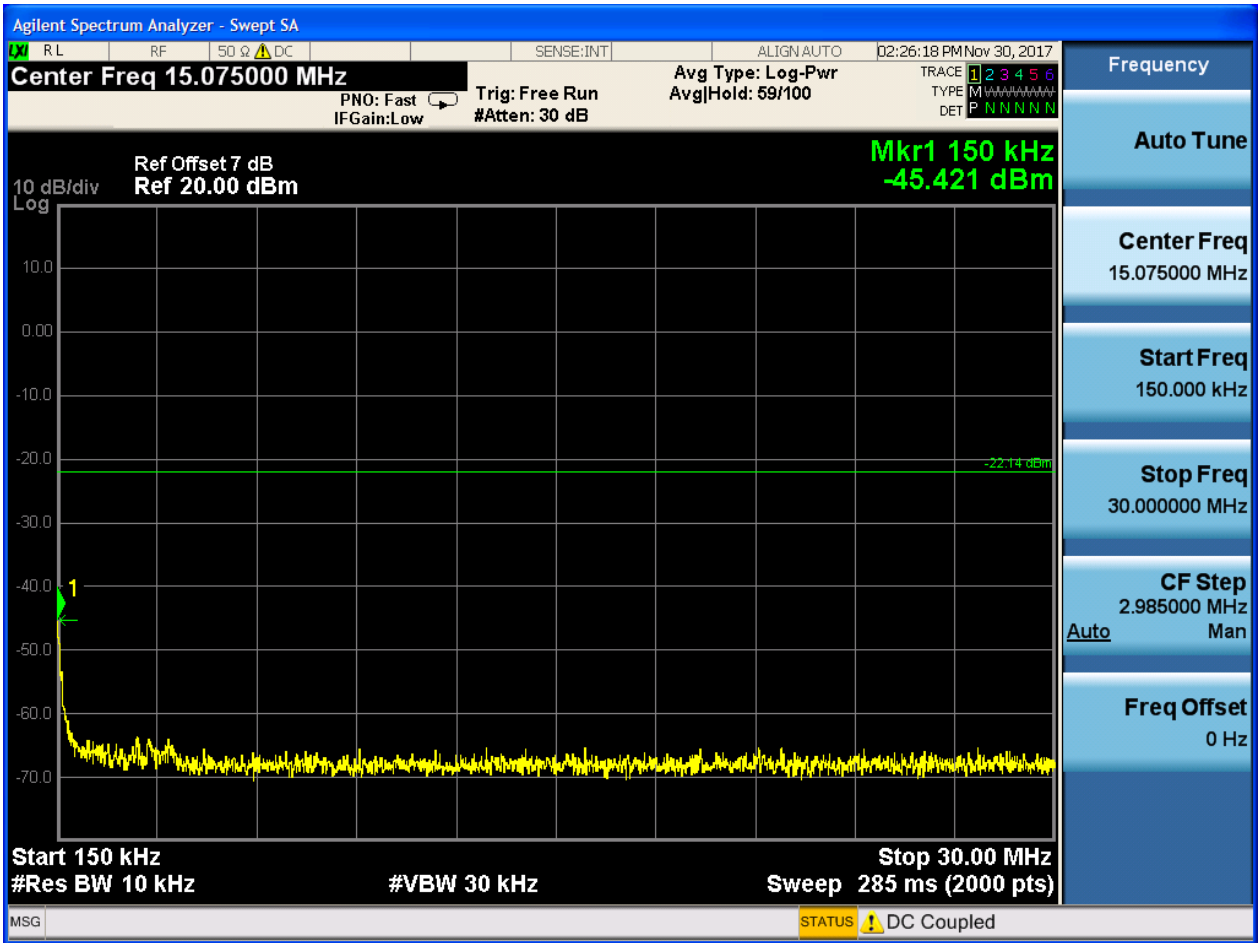
### 2.5.1 Pref

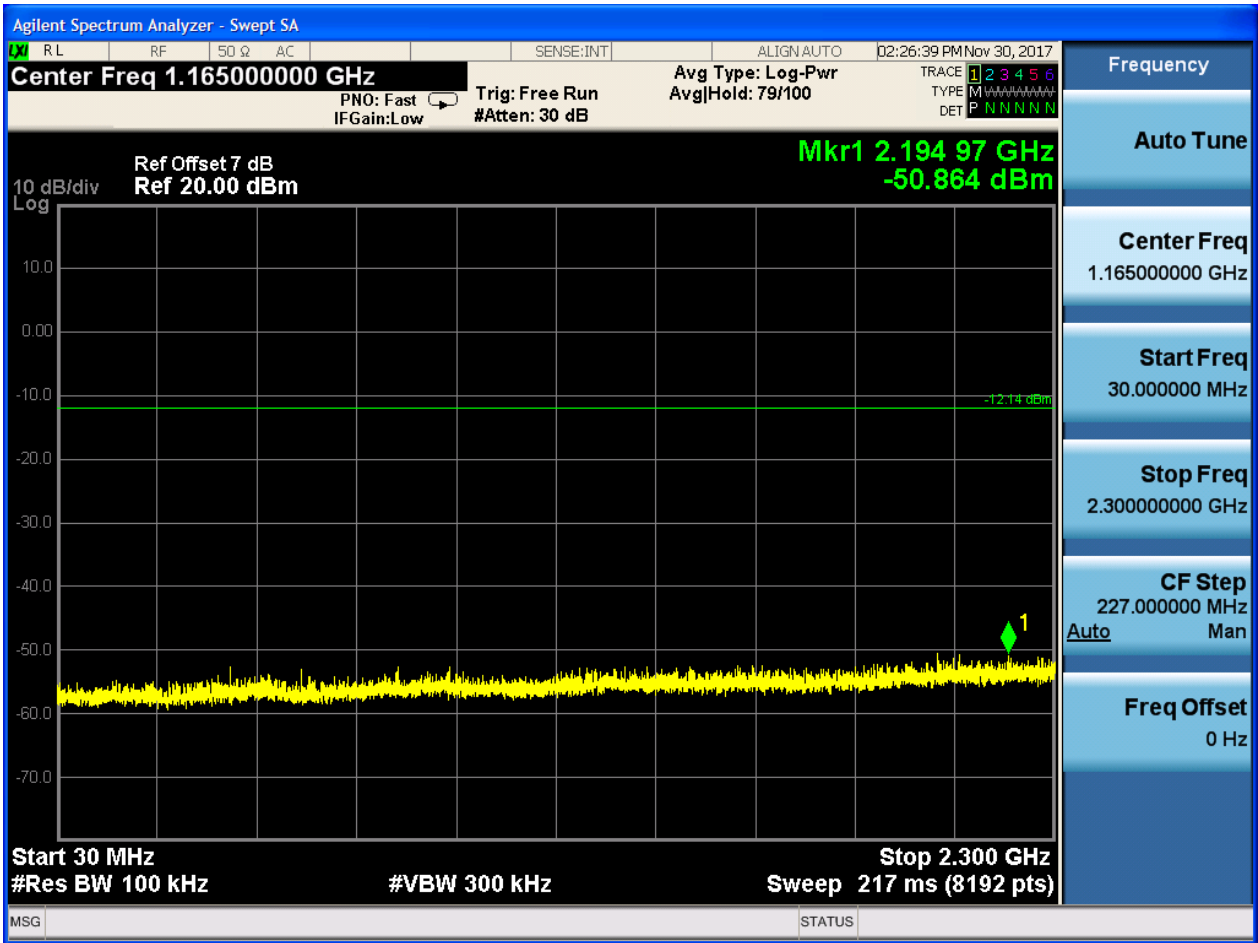


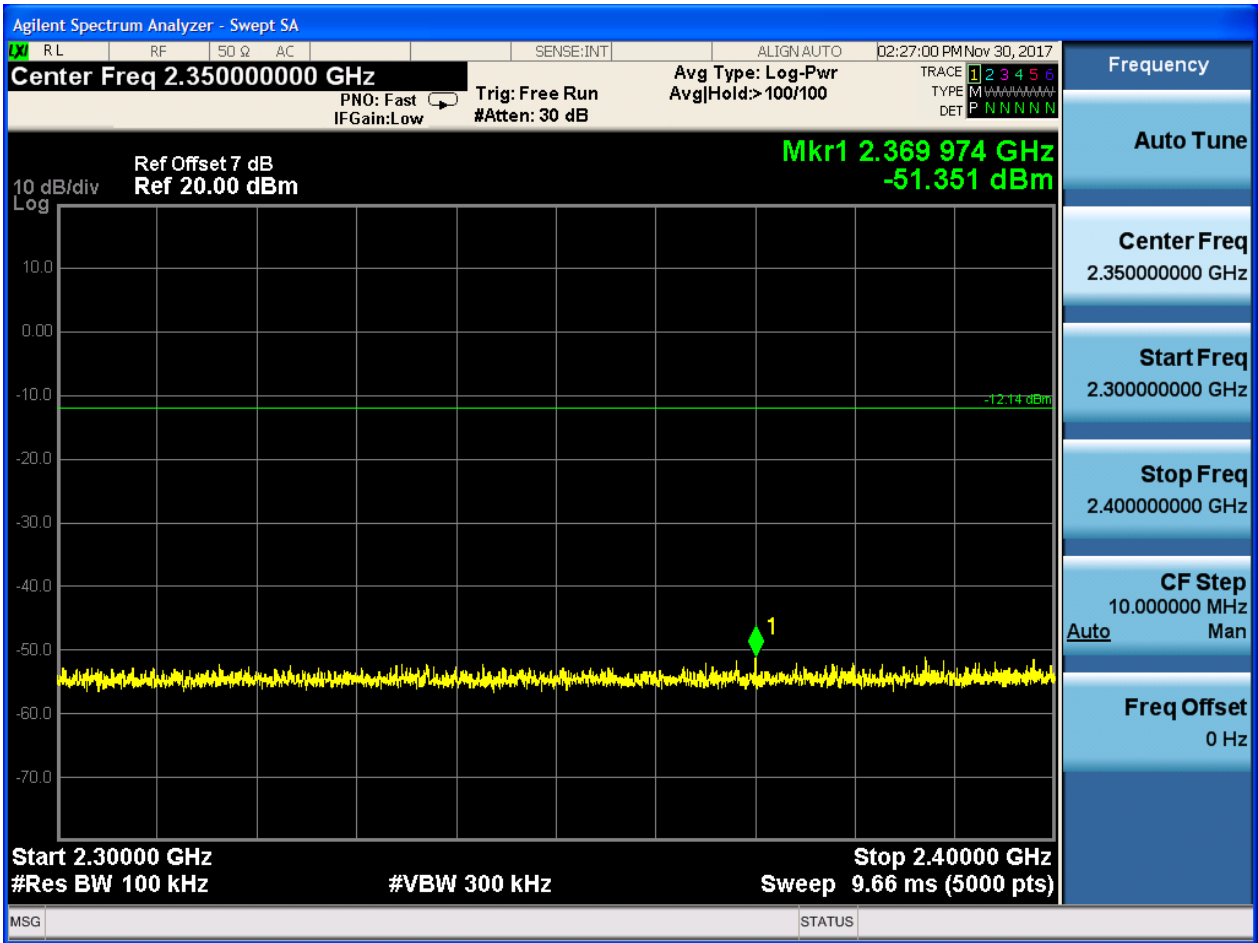


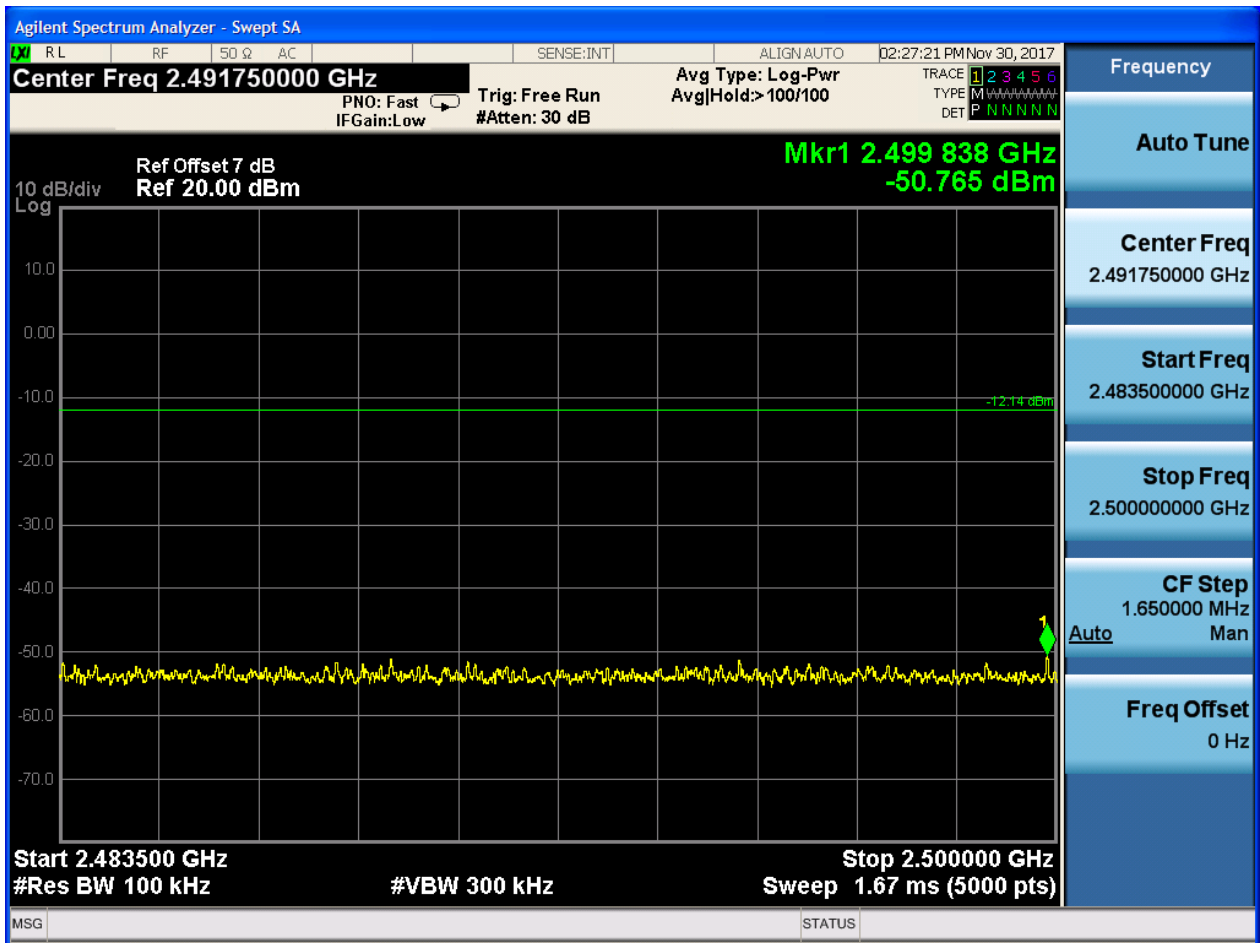
### 2.5.2 P<sub>uw</sub>

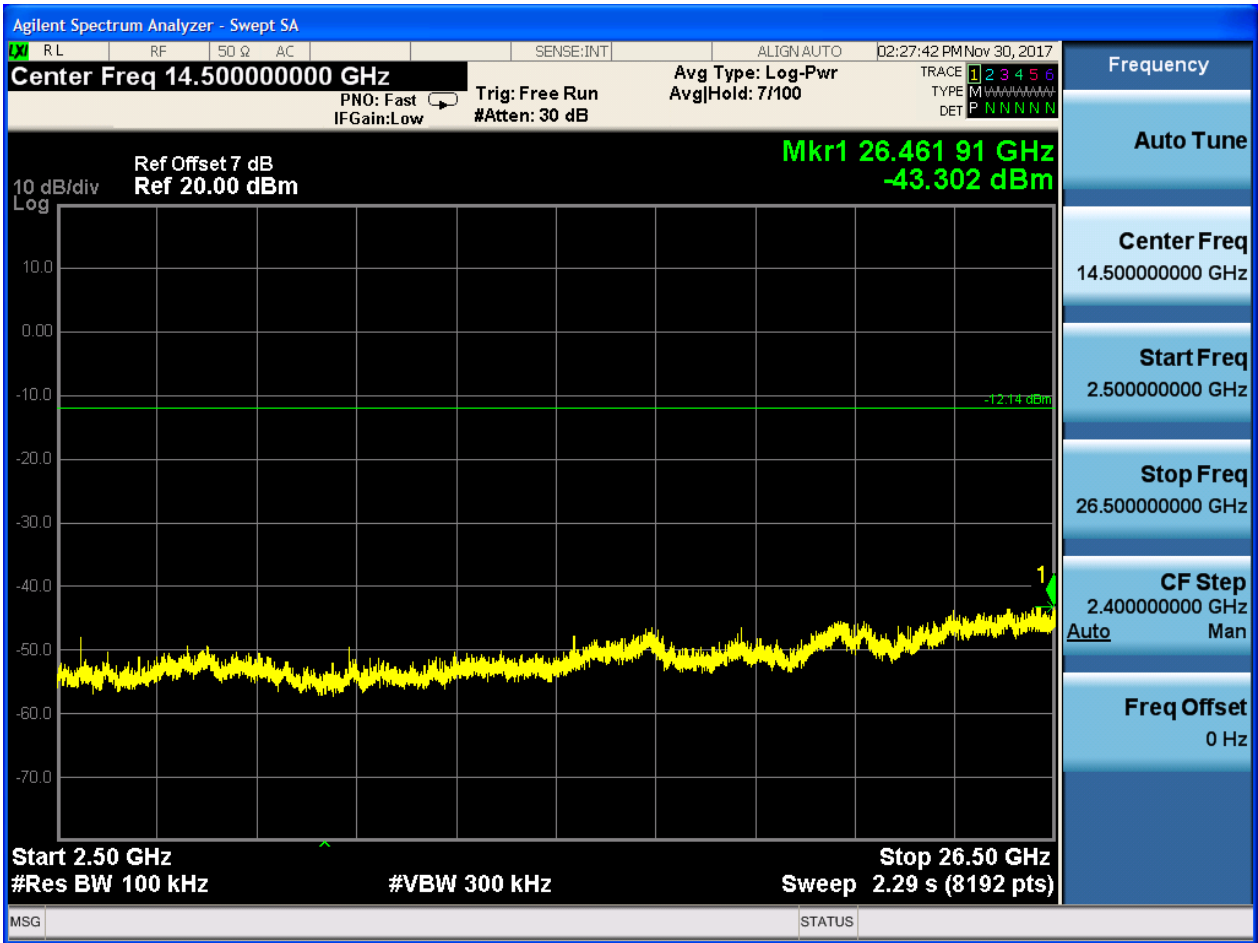










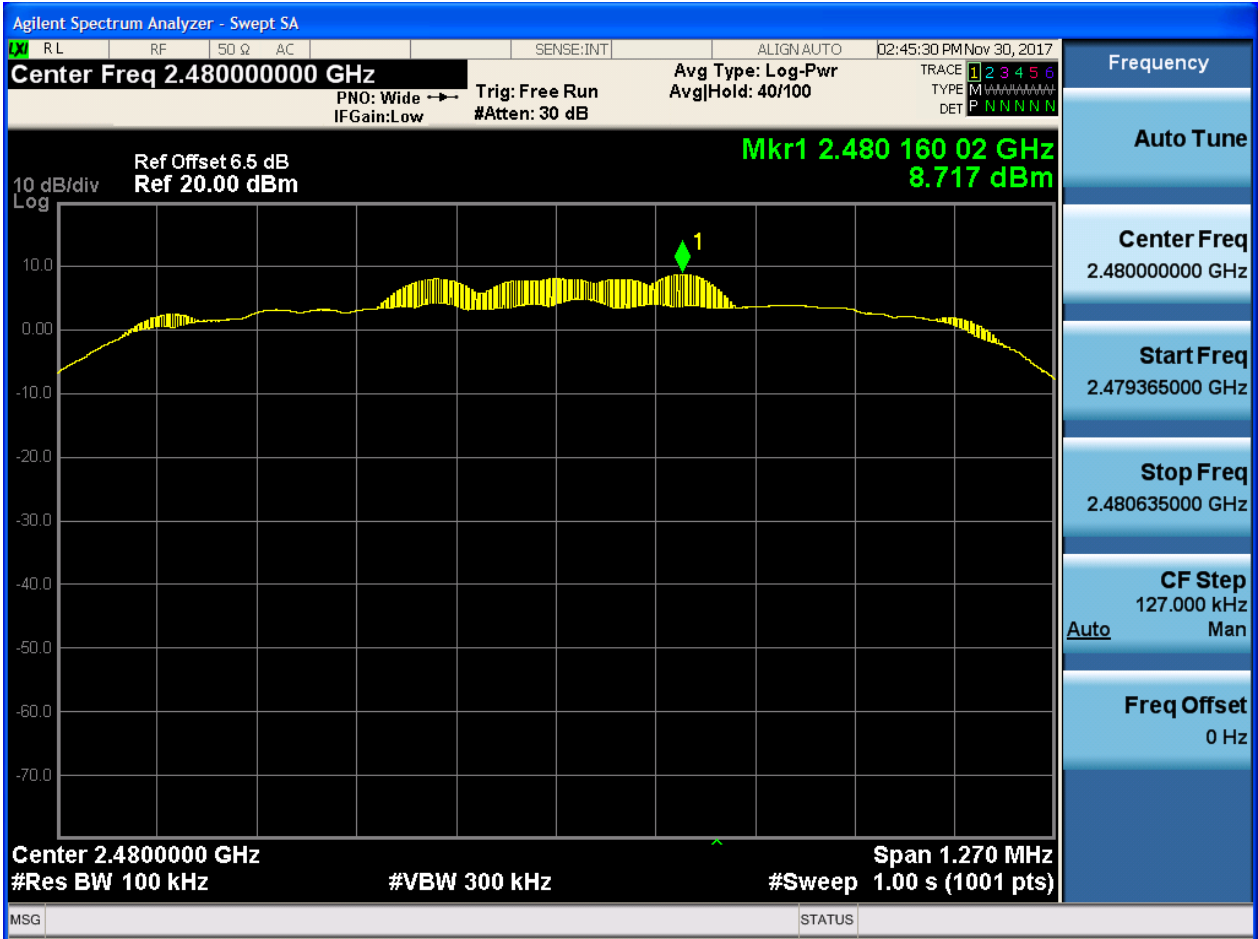




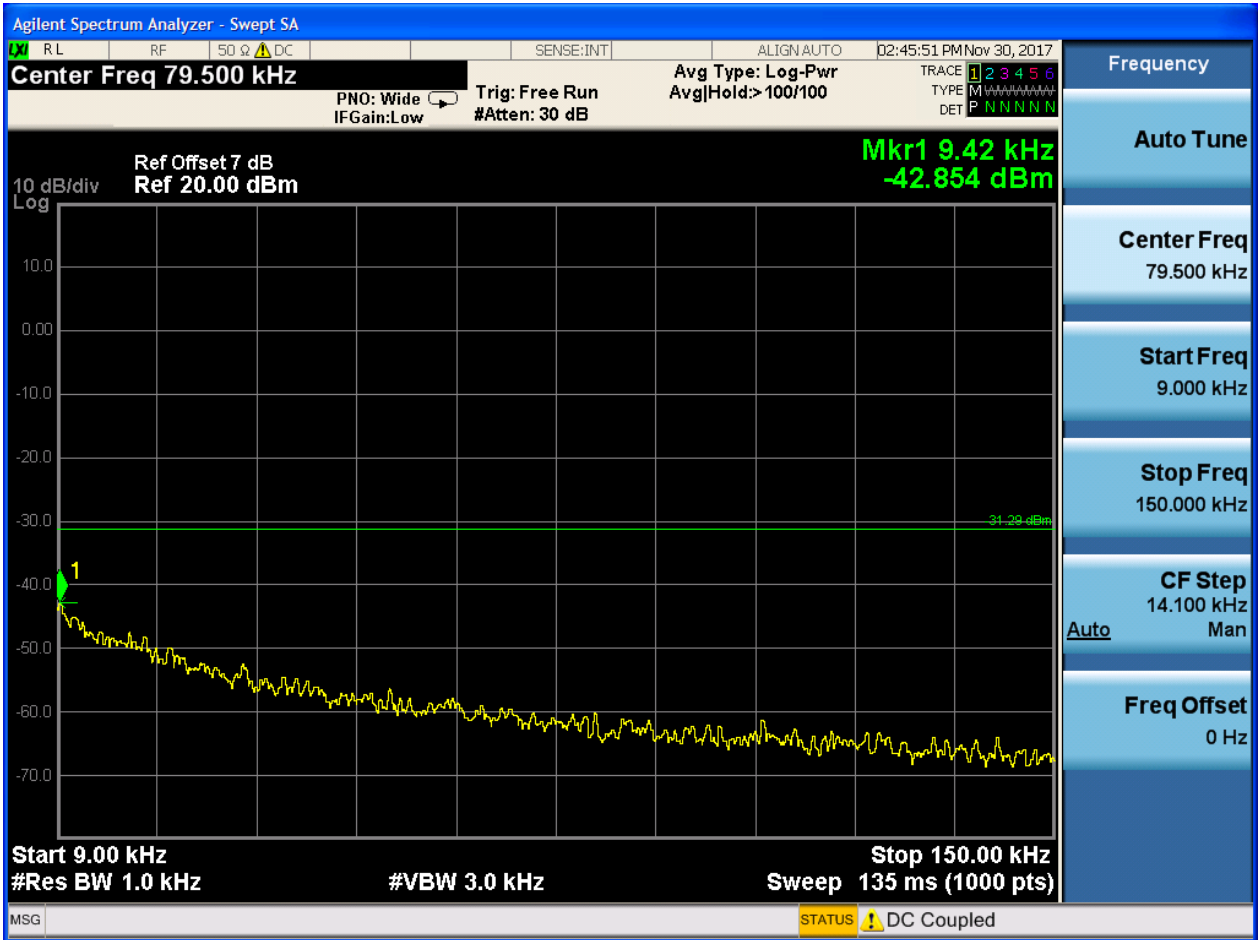


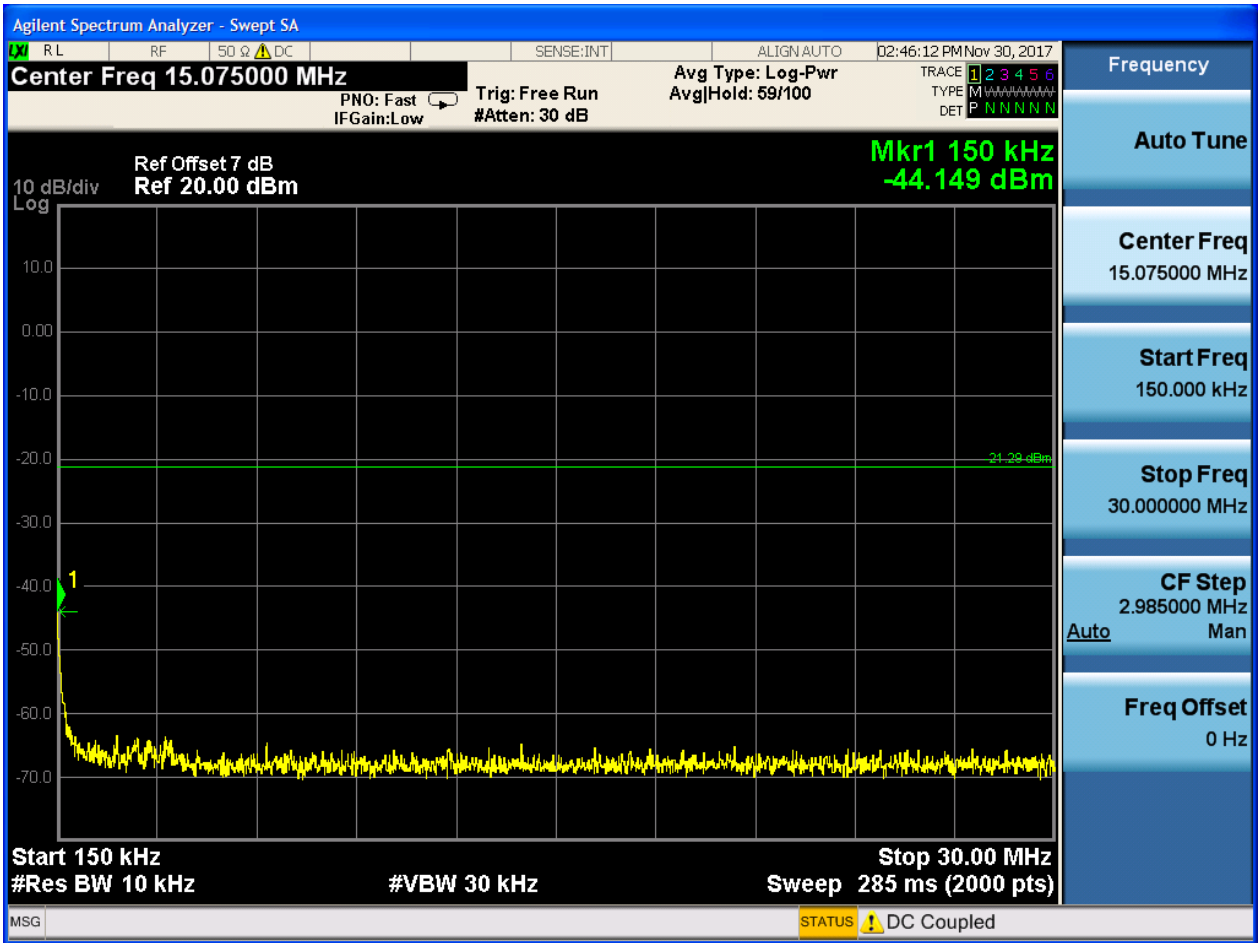
## 2.6 TM2\_2DH5\_Ch78

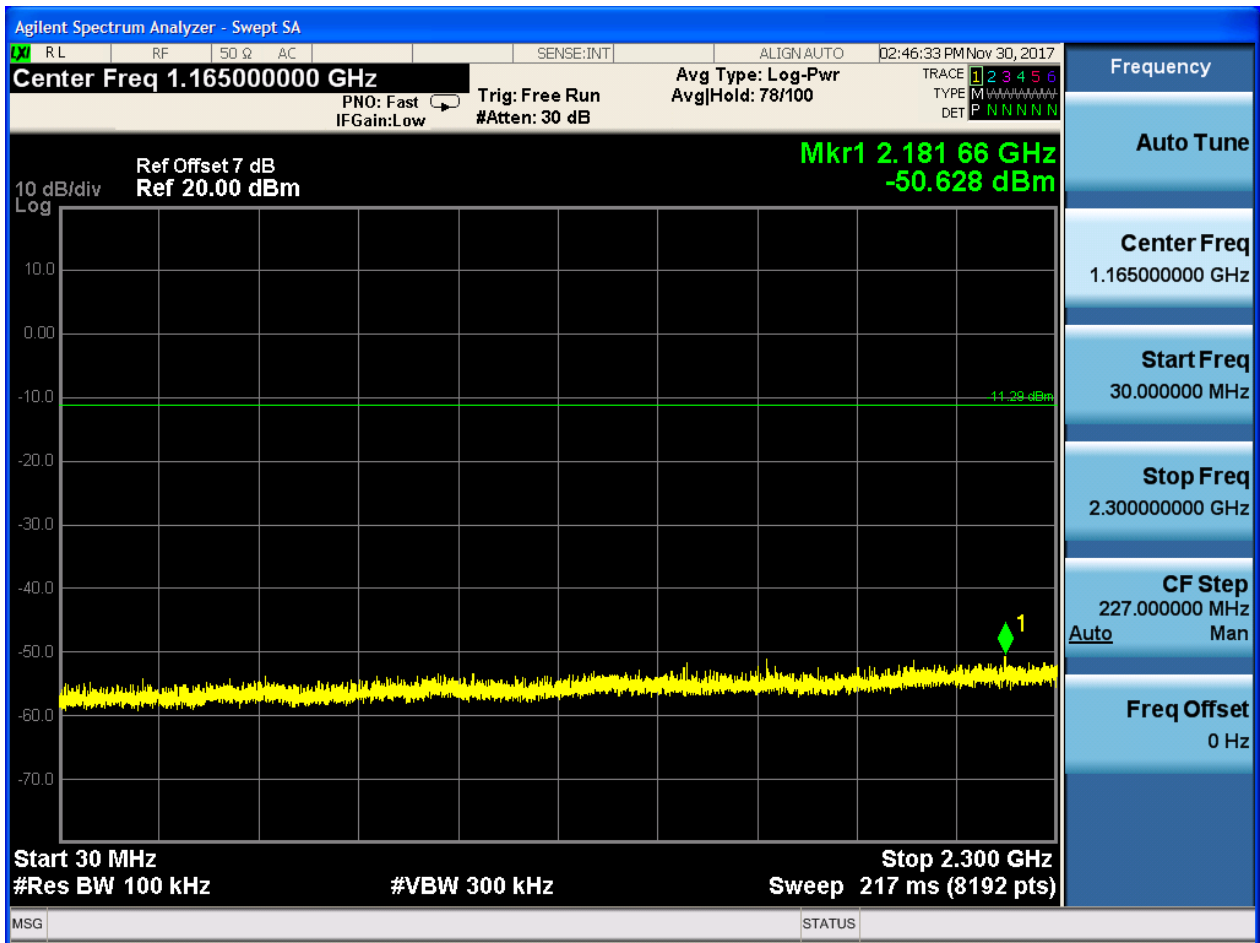
### 2.6.1 Pref

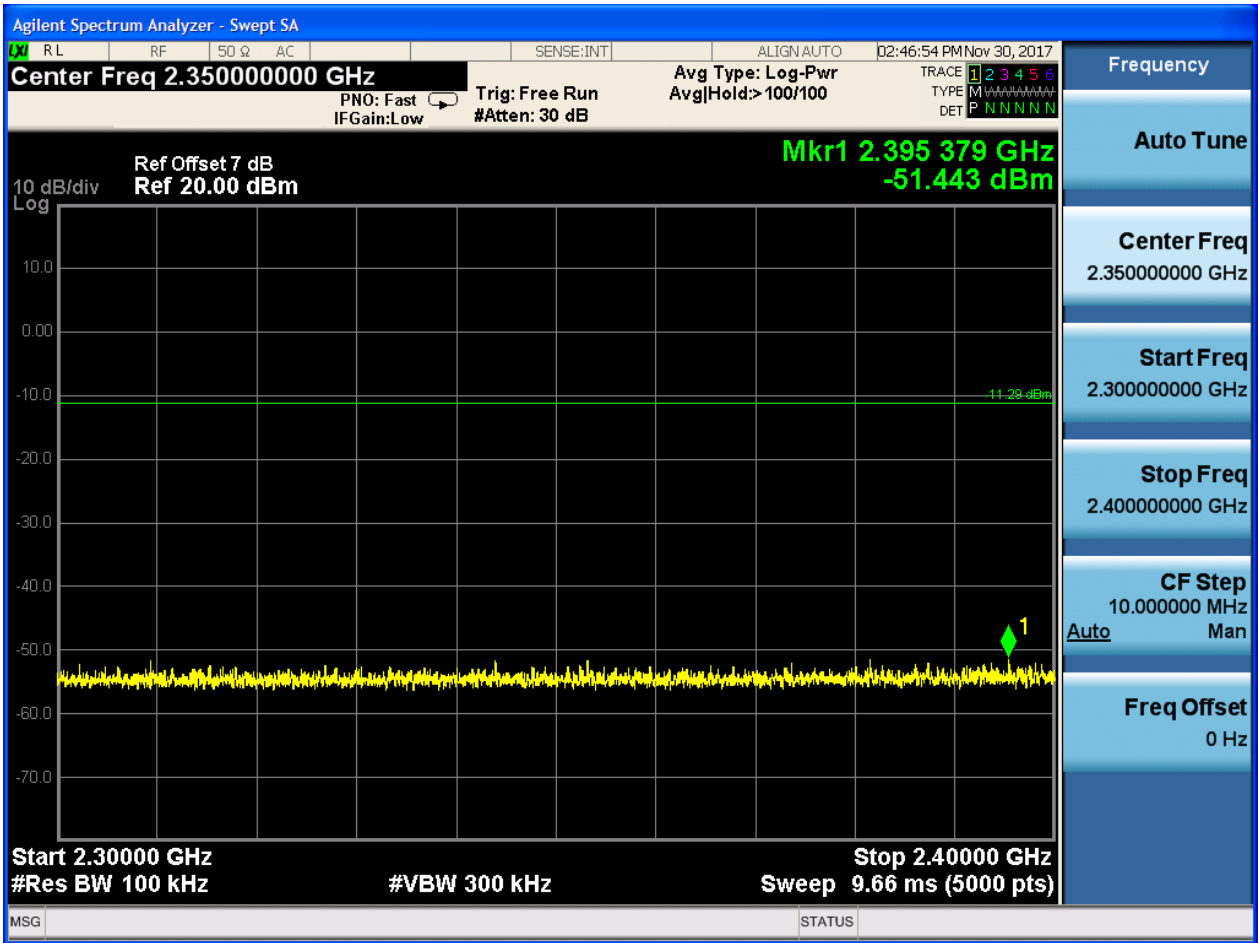


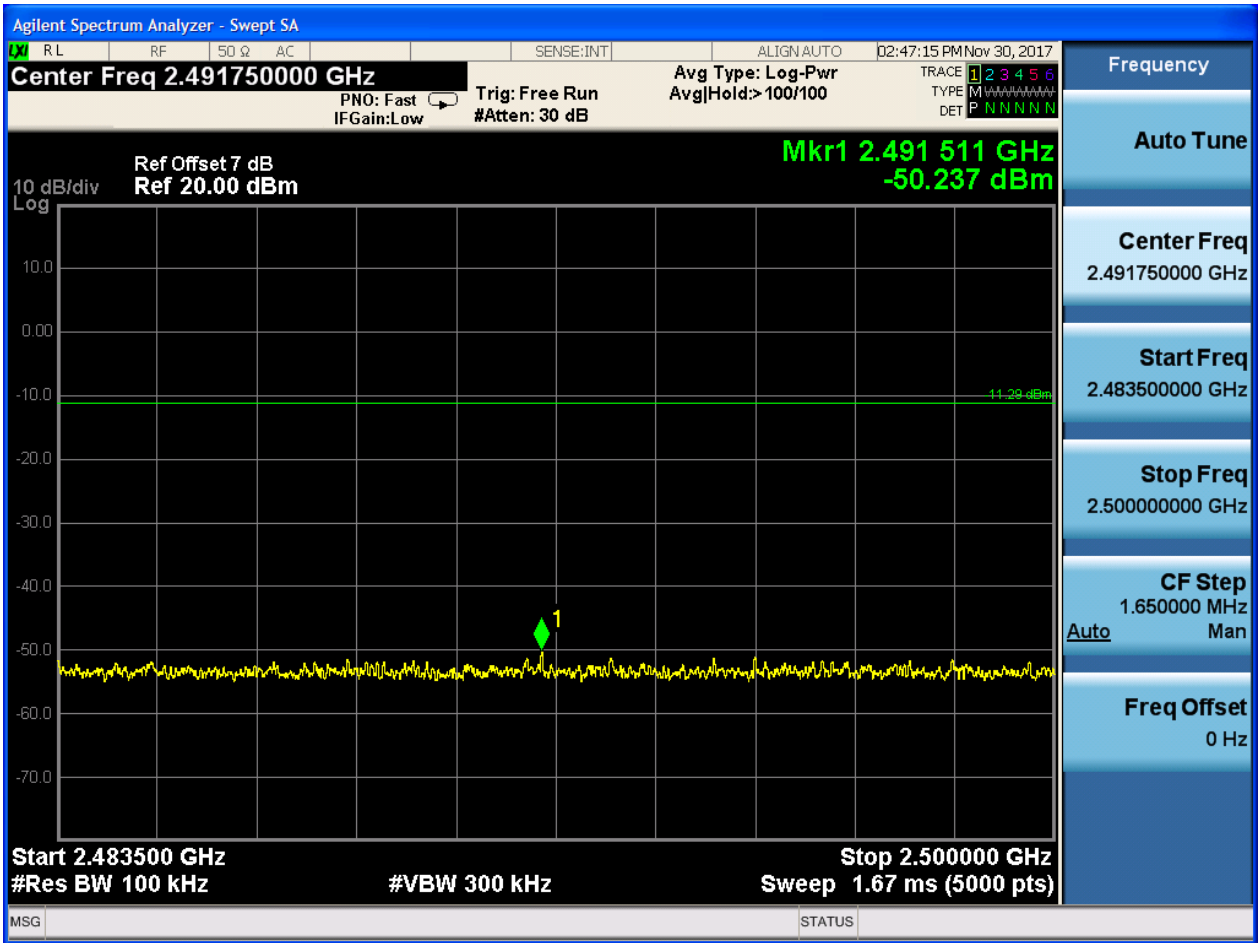
2.6.2 Puw

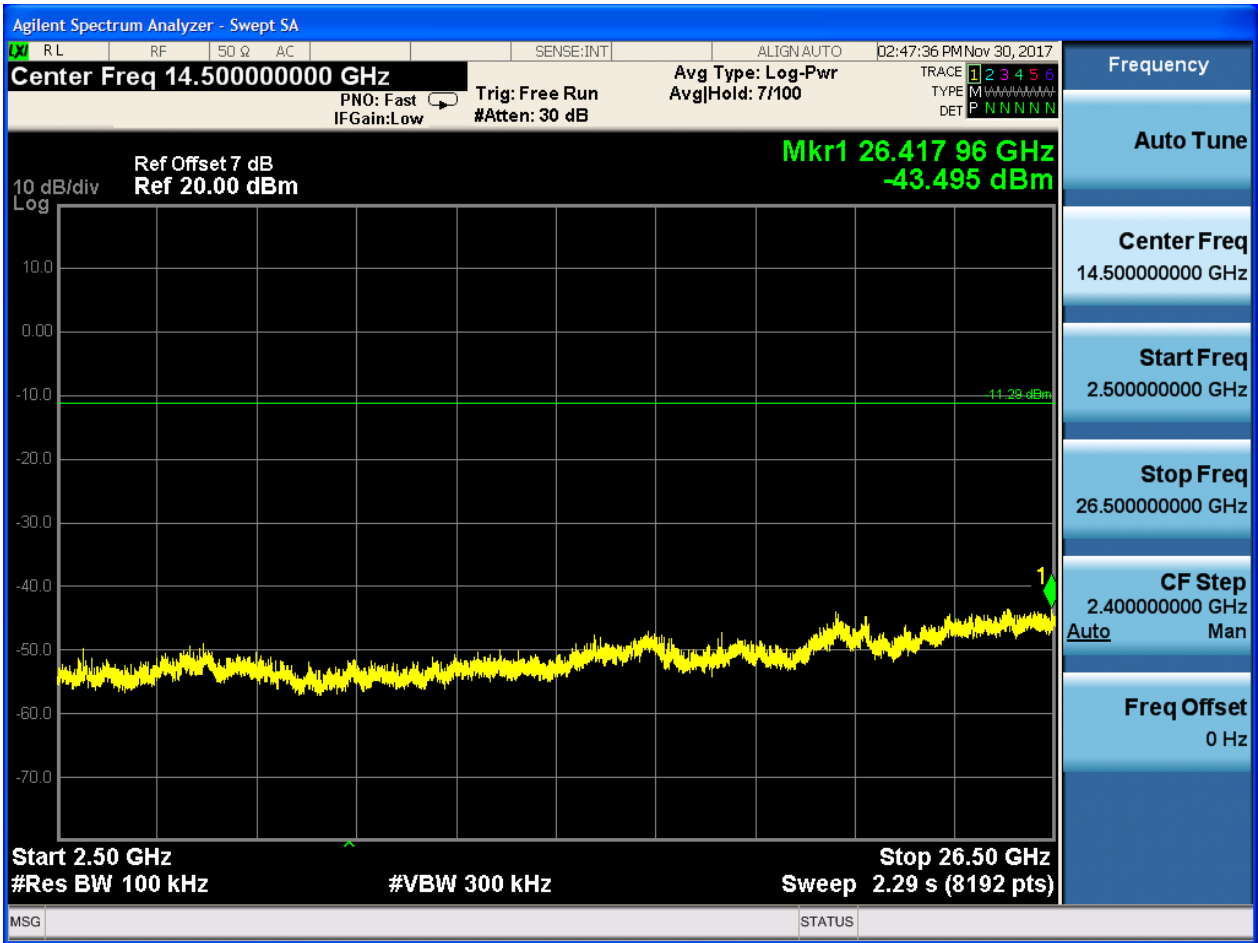






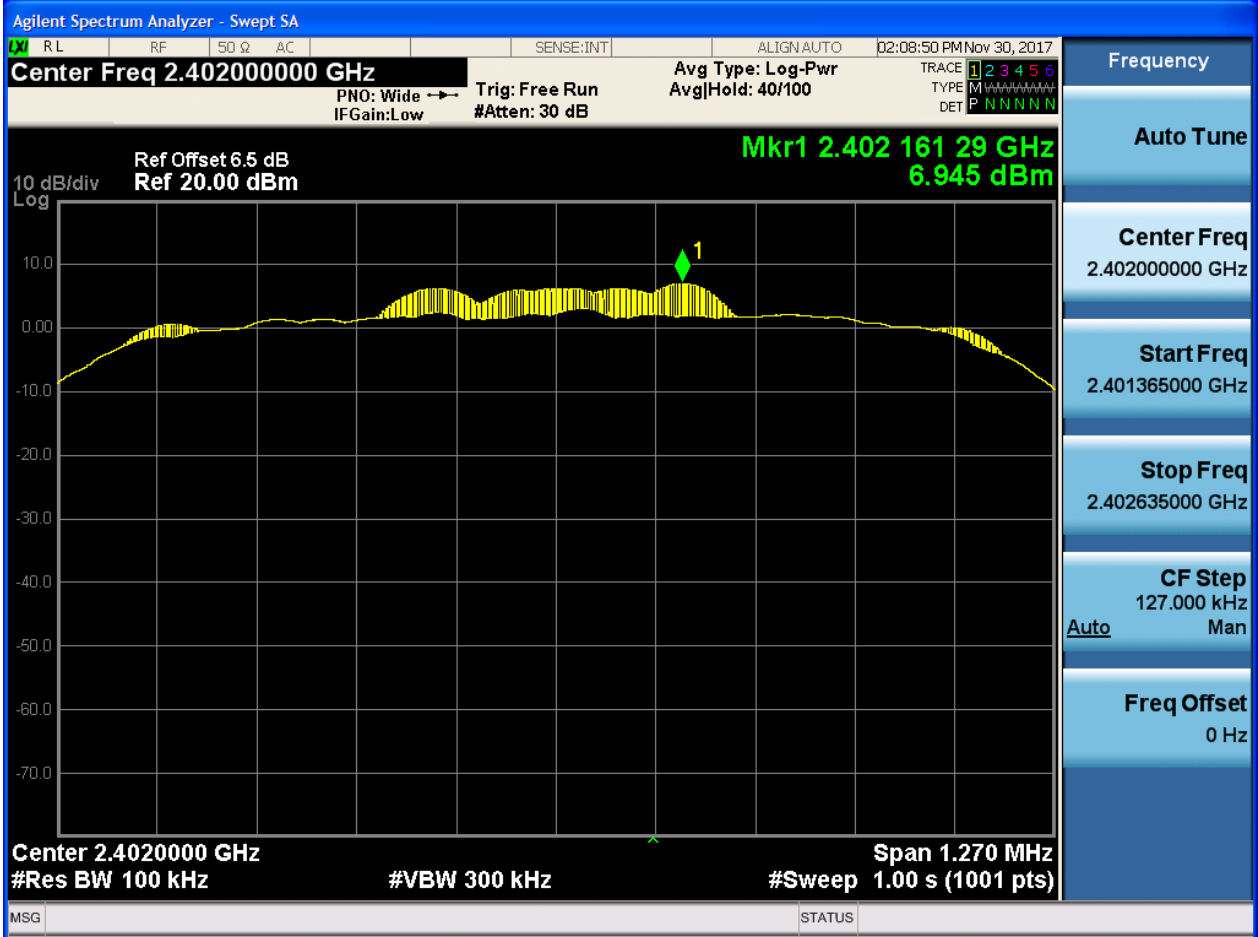






## 2.7 TM3\_3DH5\_Ch0

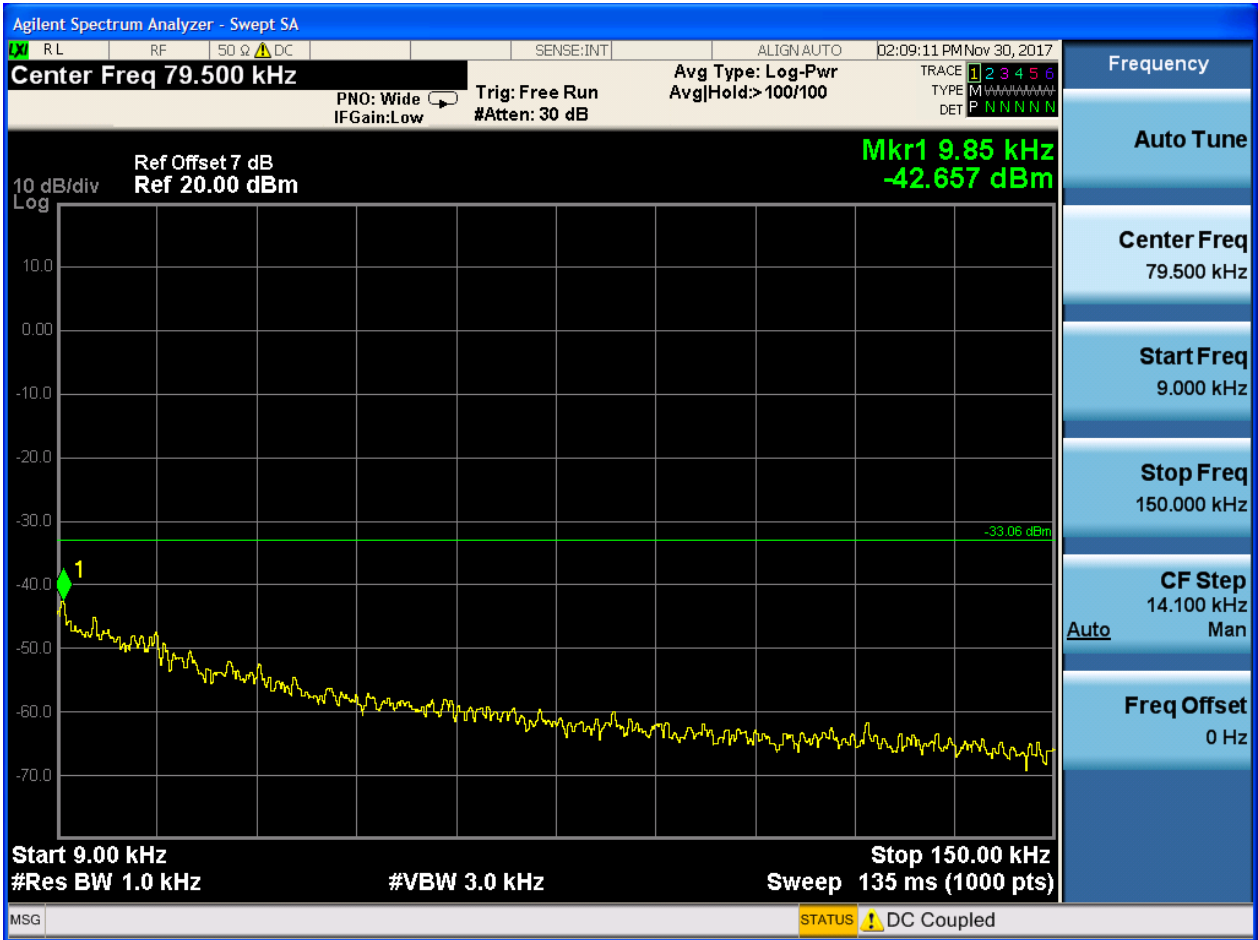
### 2.7.1 Pref

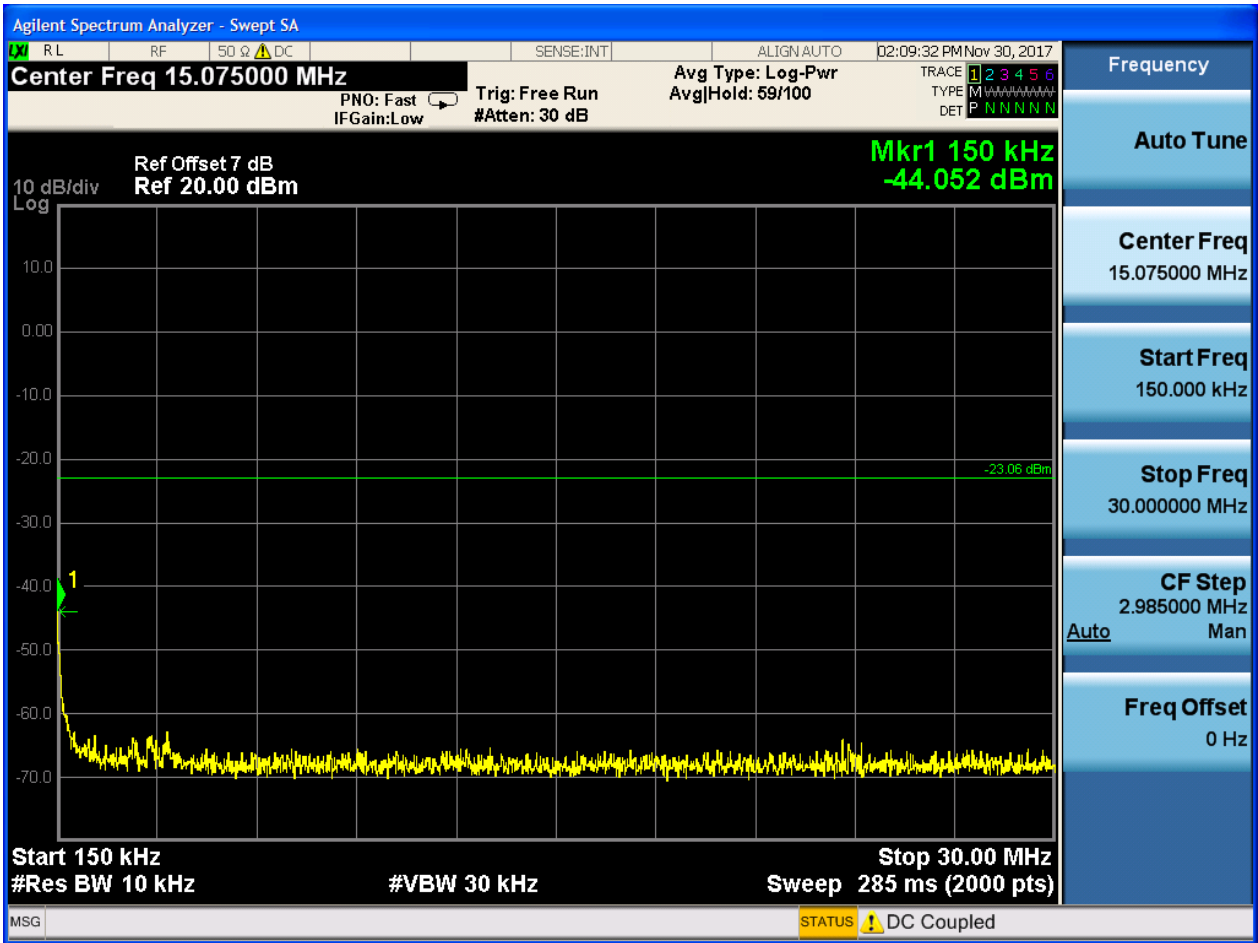


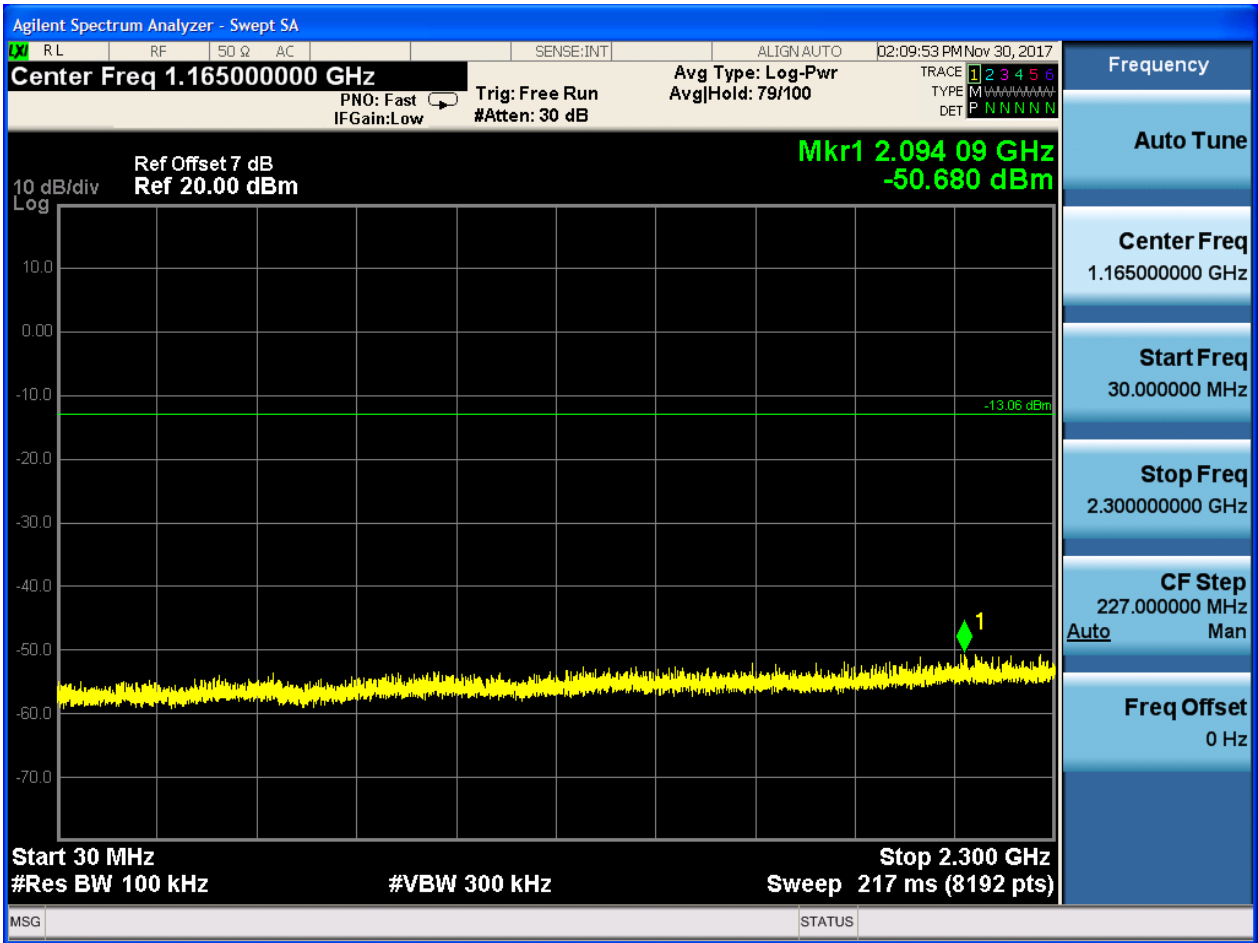


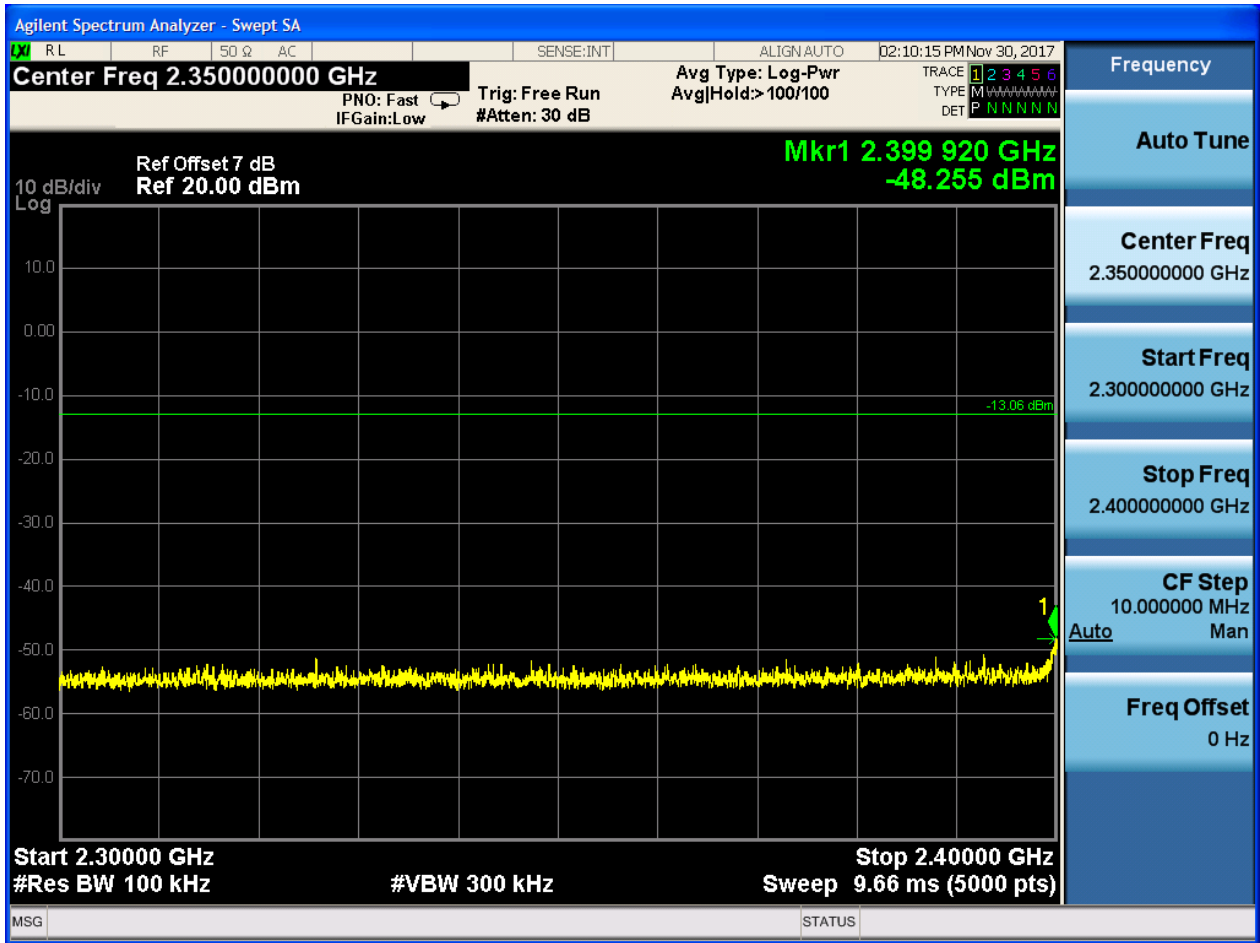


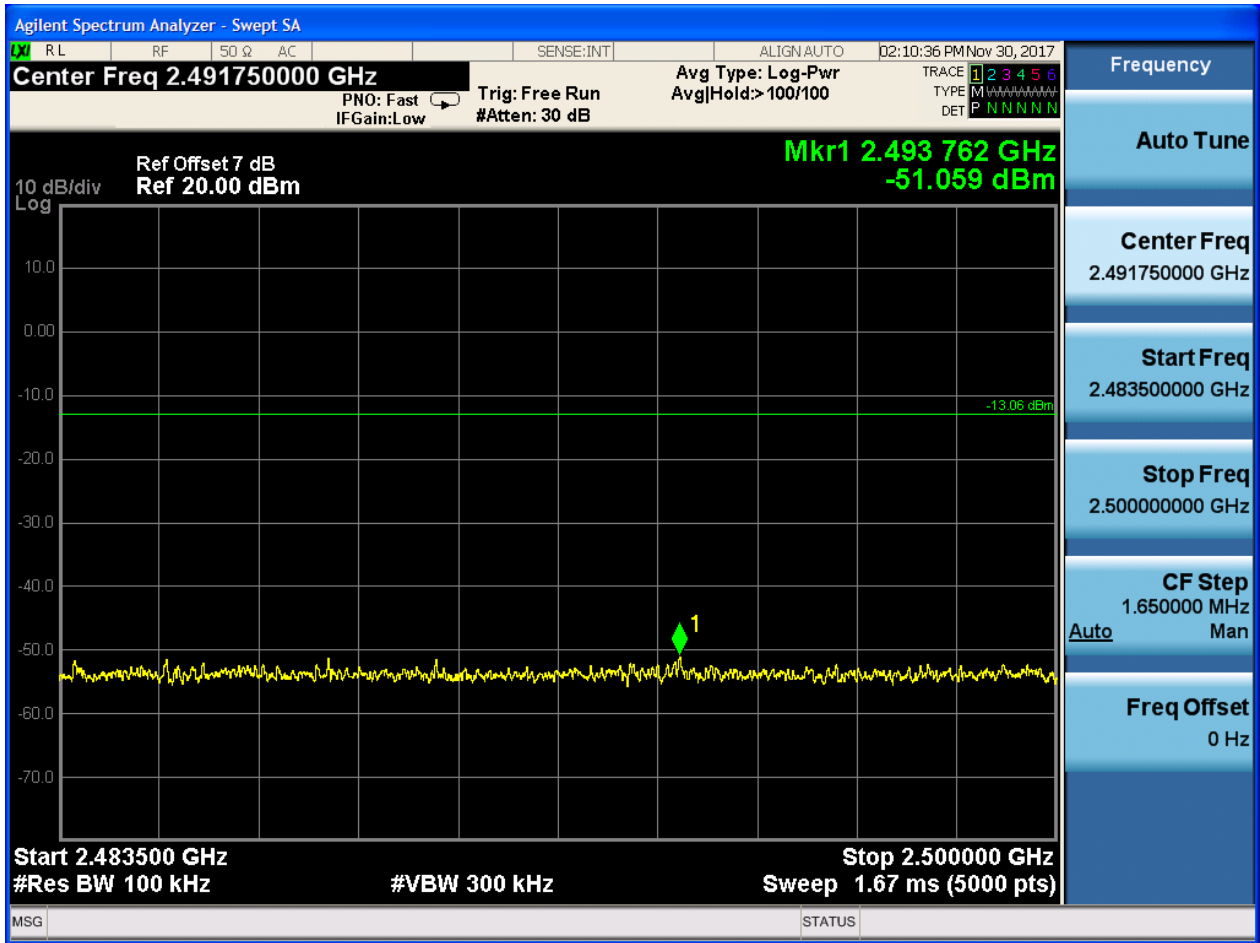
### 2.7.2 Puw

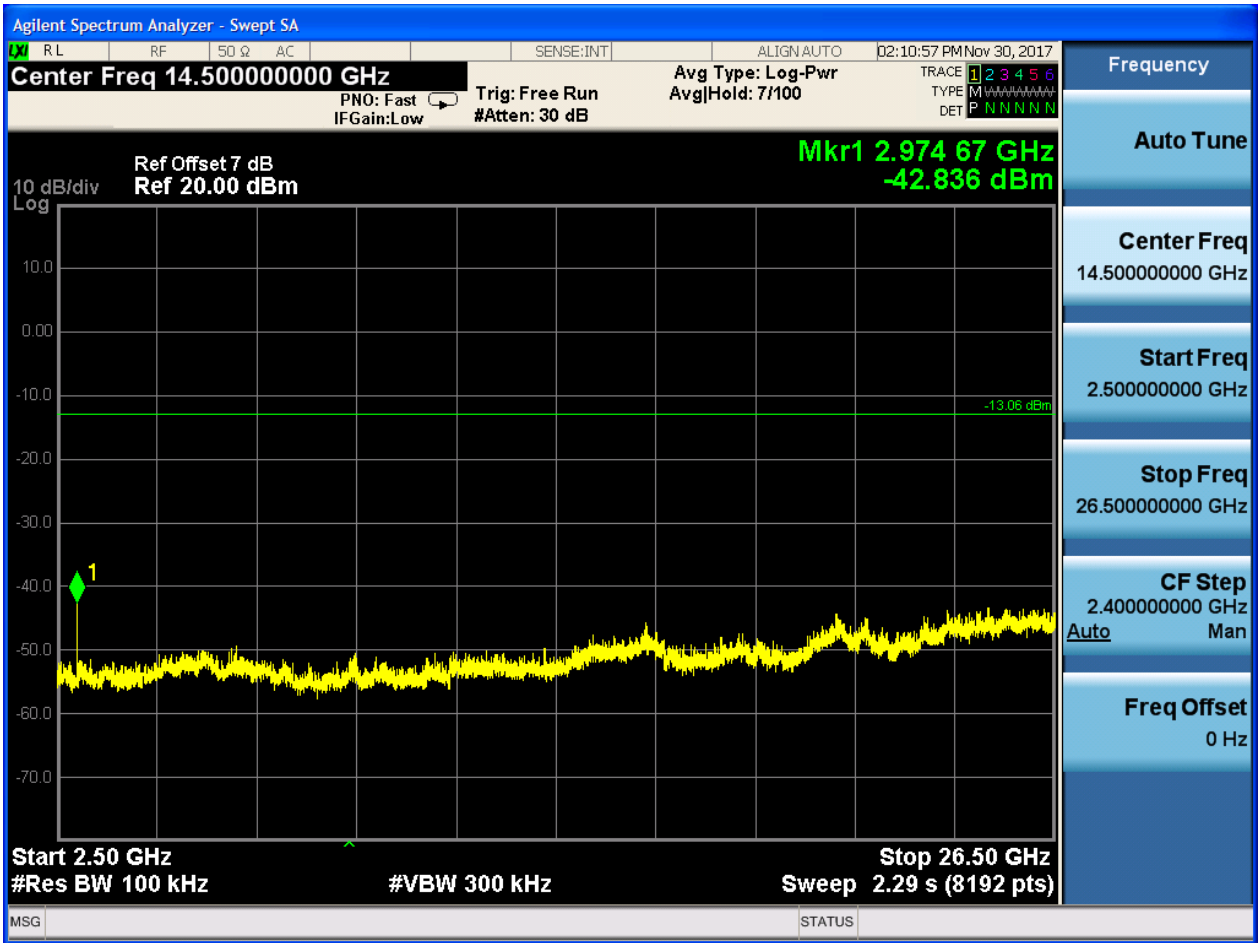






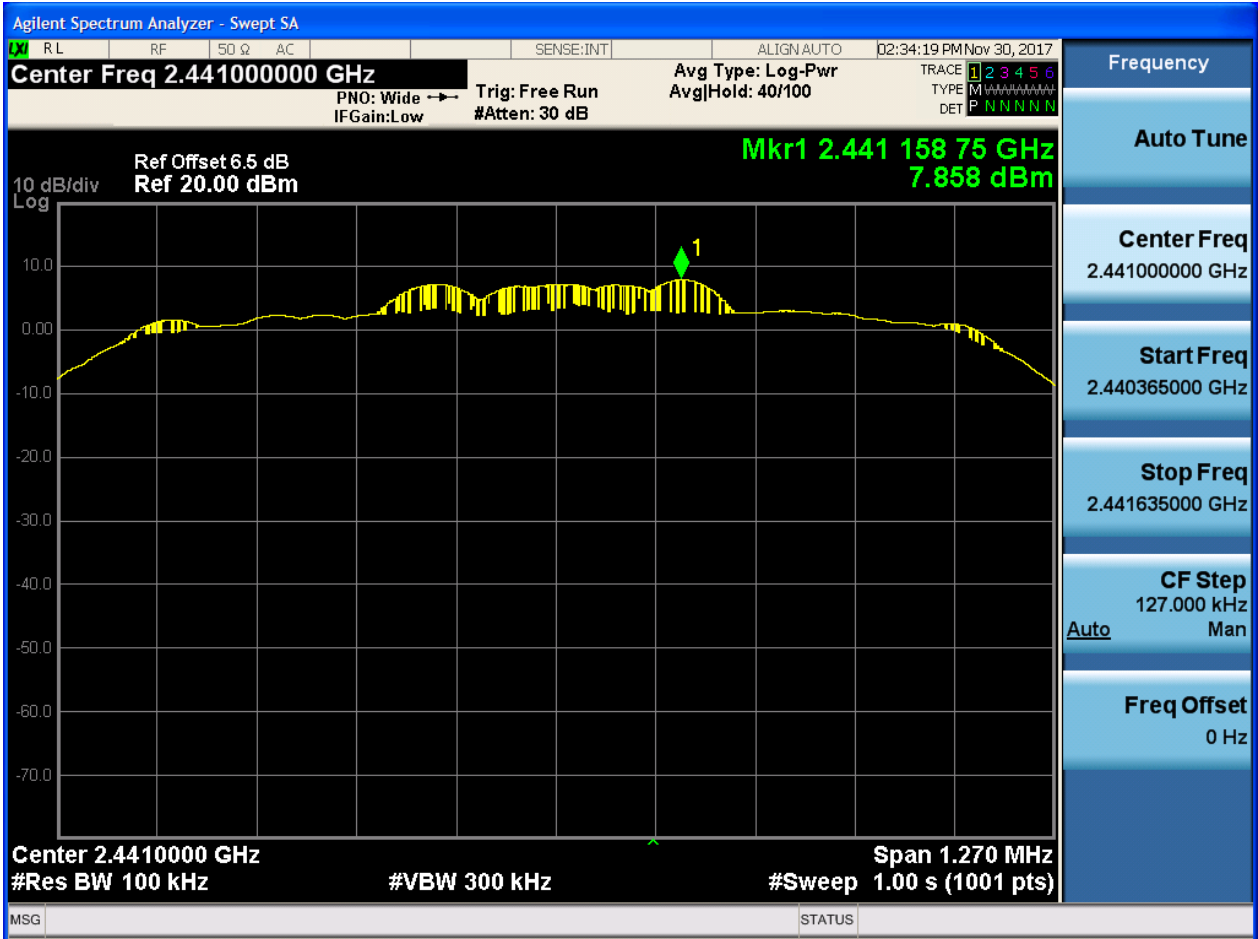




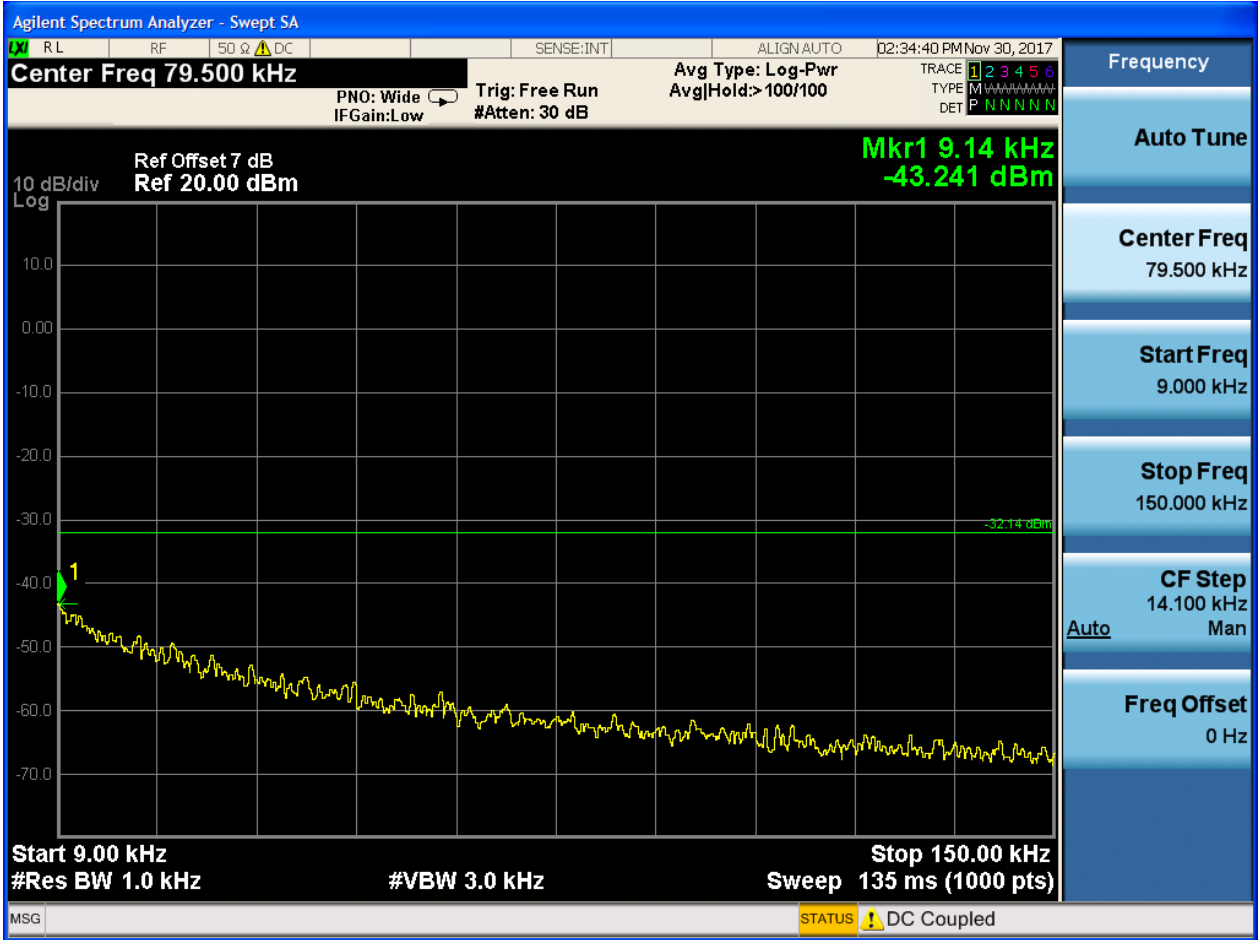


## 2.8 TM3\_3DH5\_Ch39

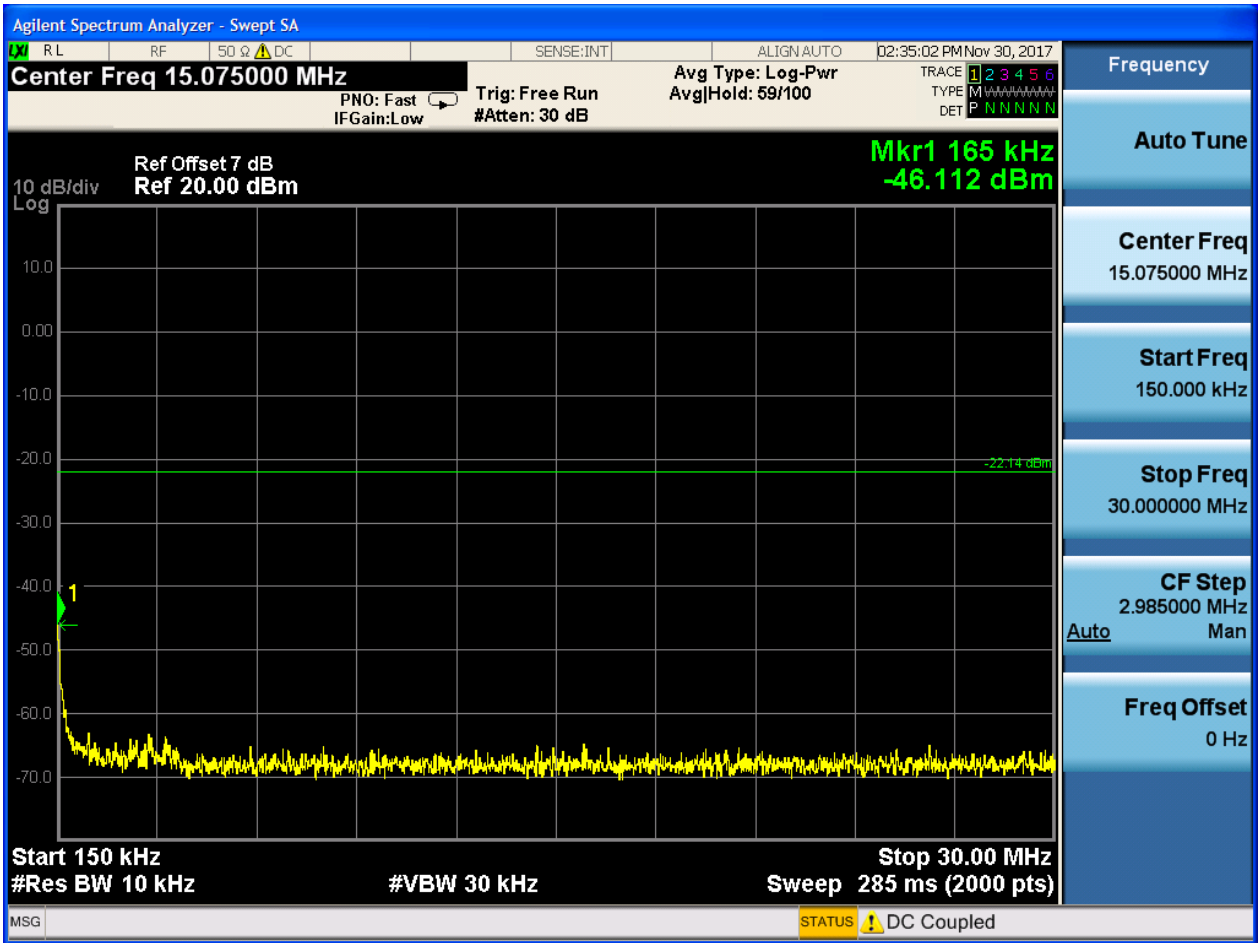
### 2.8.1 Pref

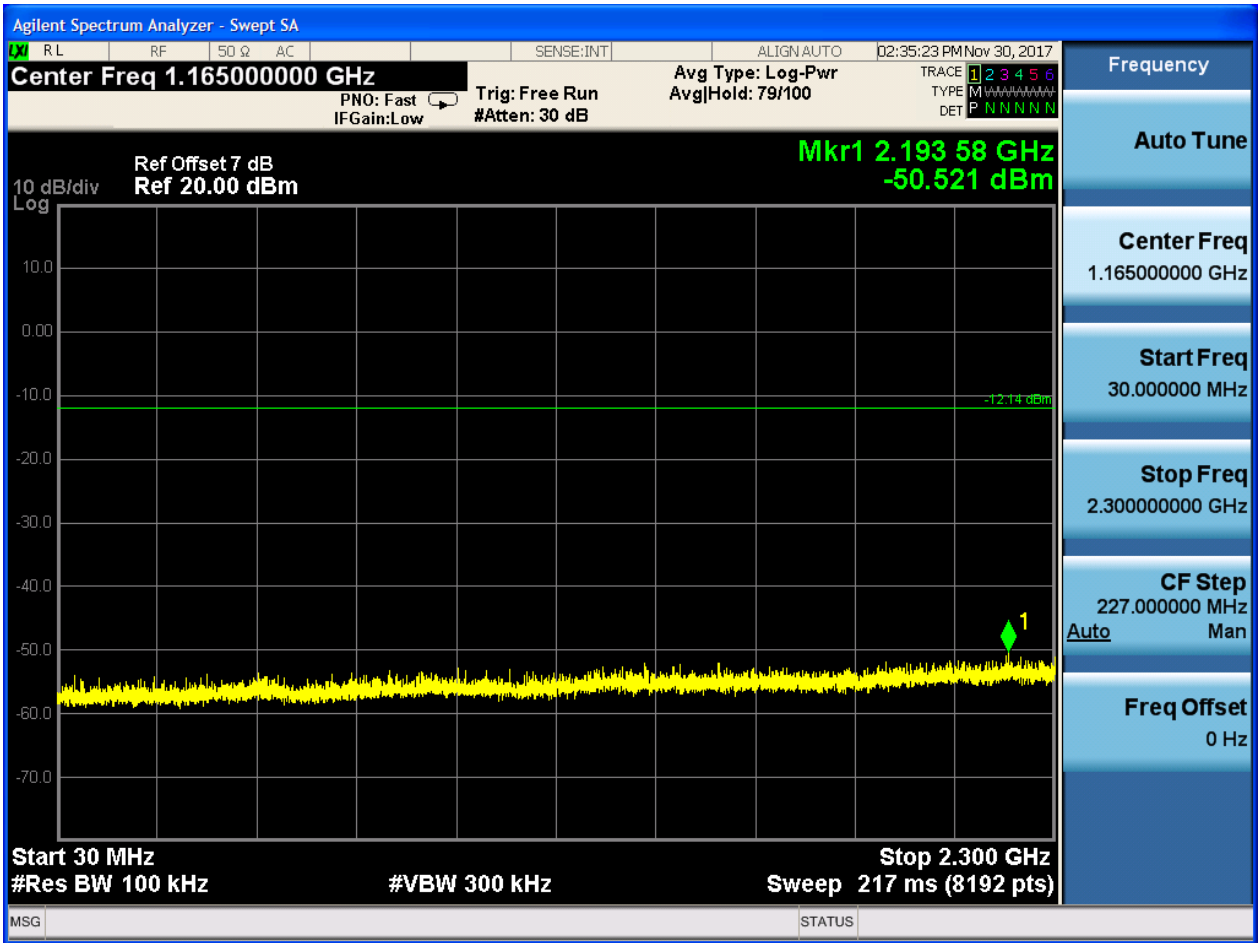


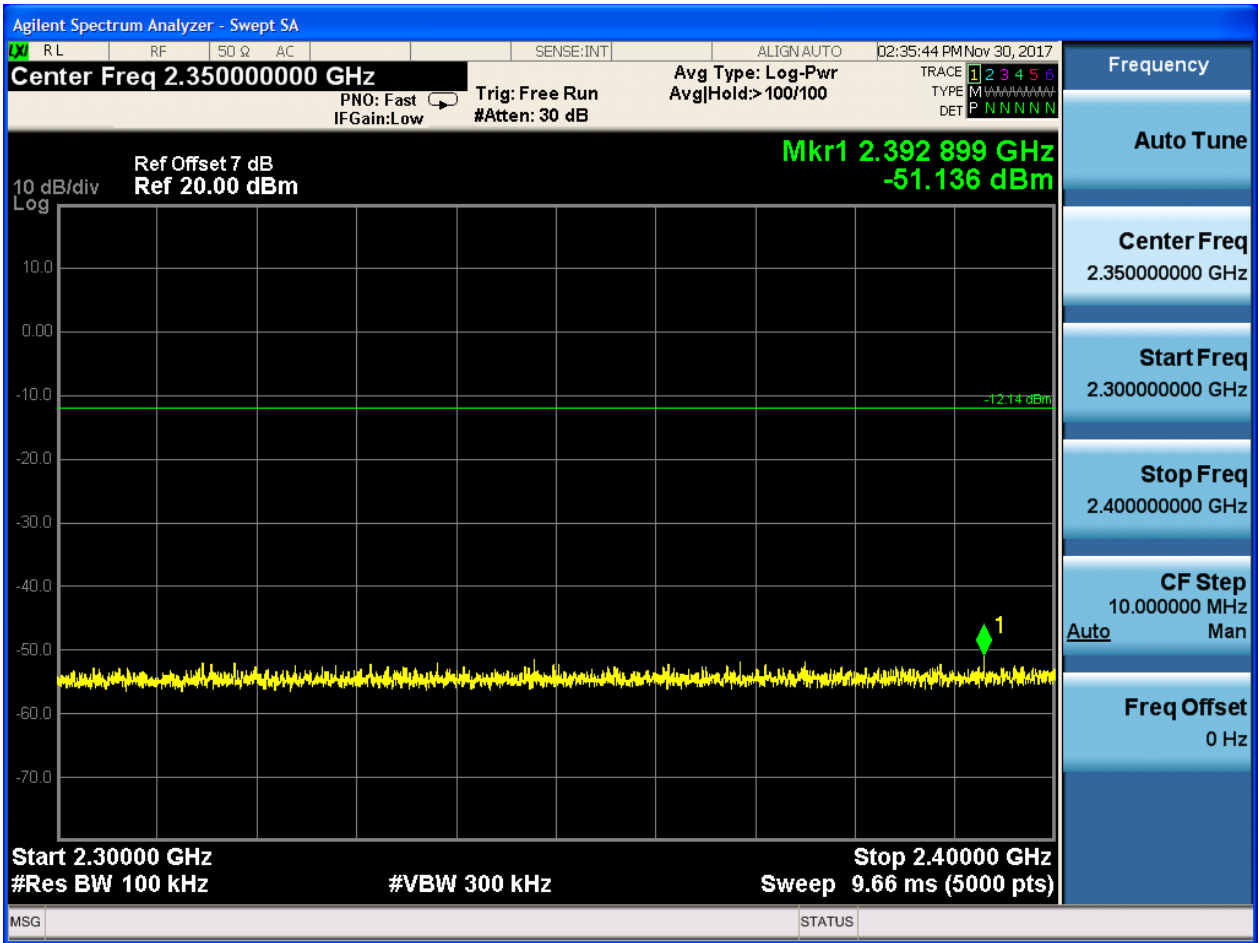
### 2.8.2 P<sub>uw</sub>

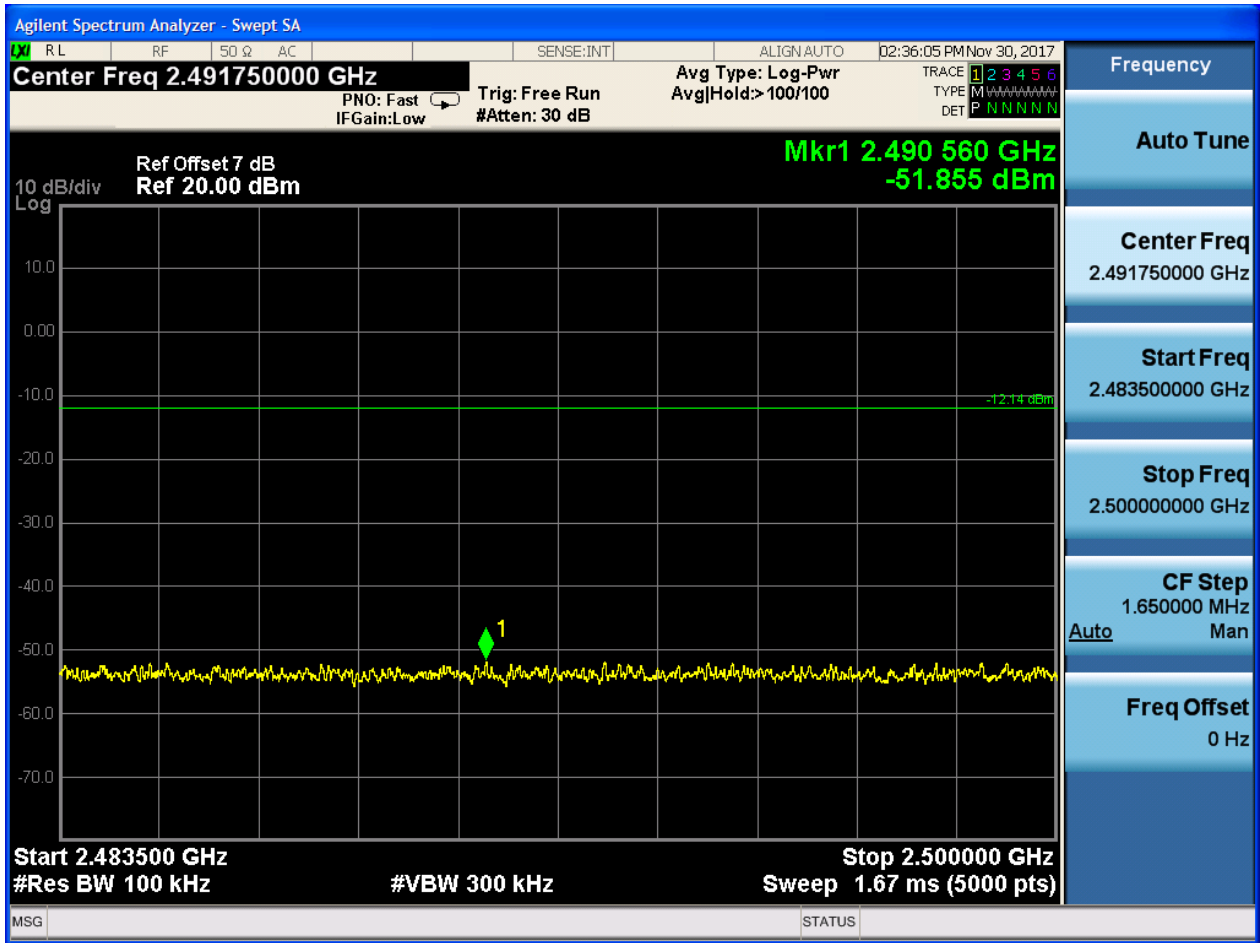








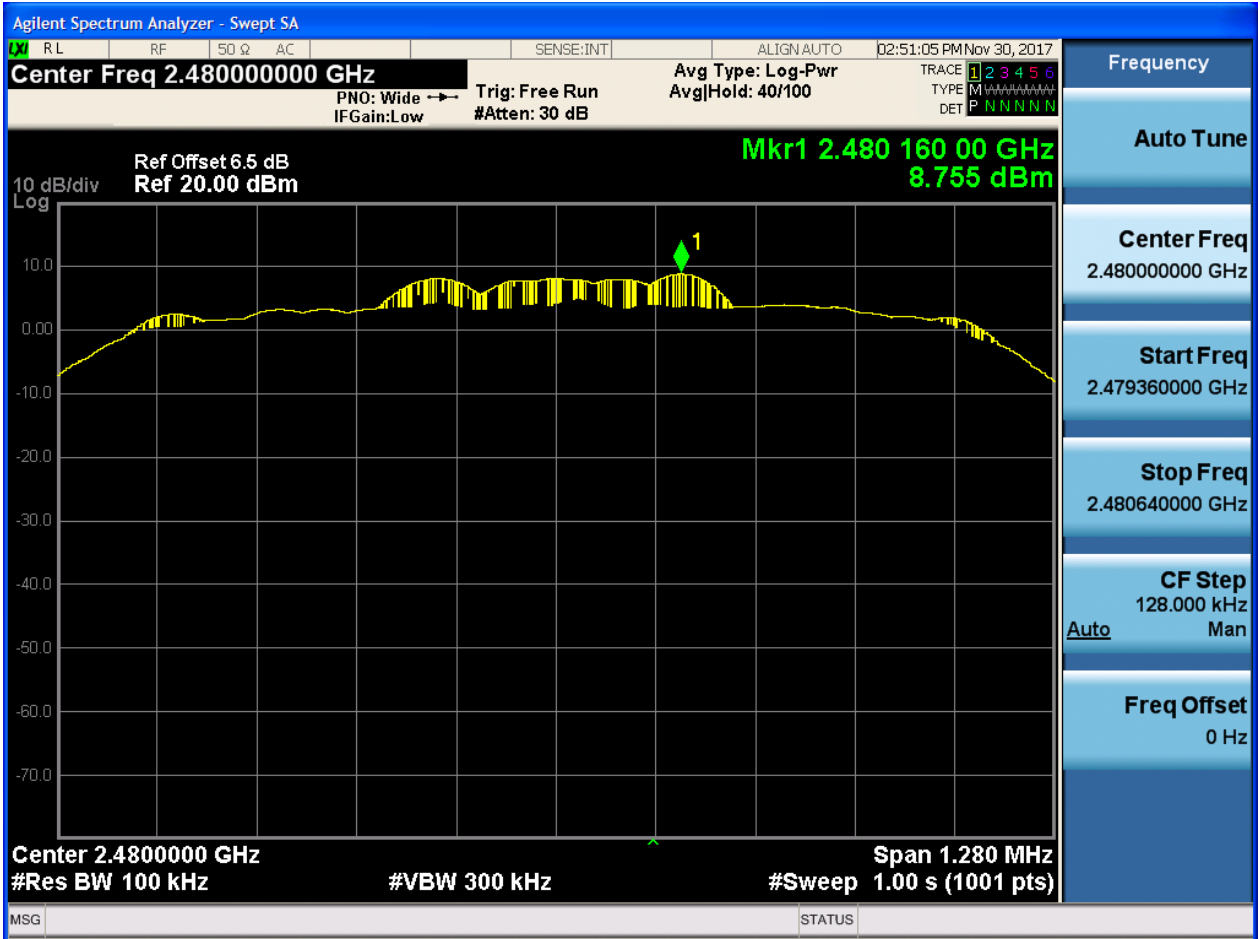






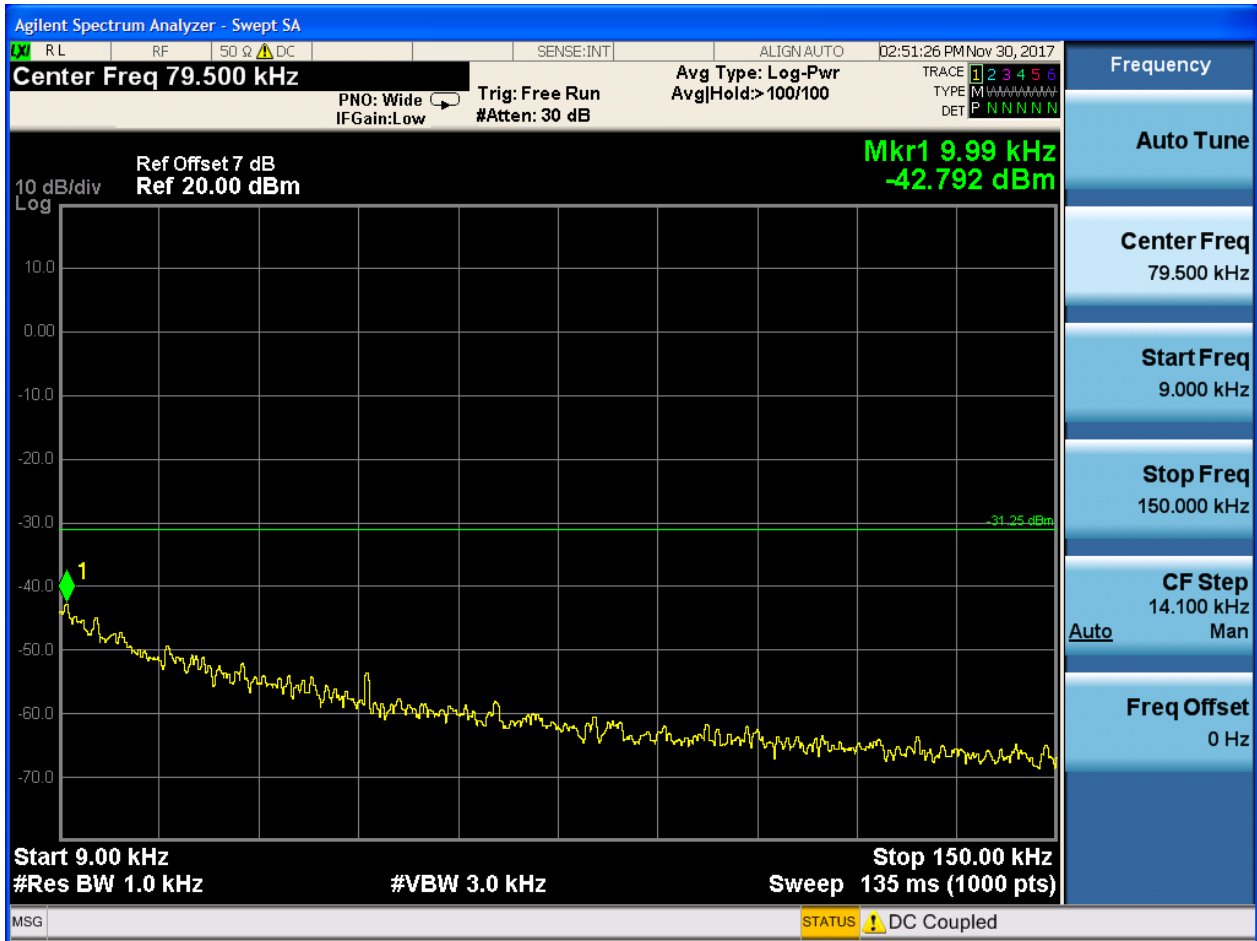
## 2.9 TM3\_3DH5\_Ch78

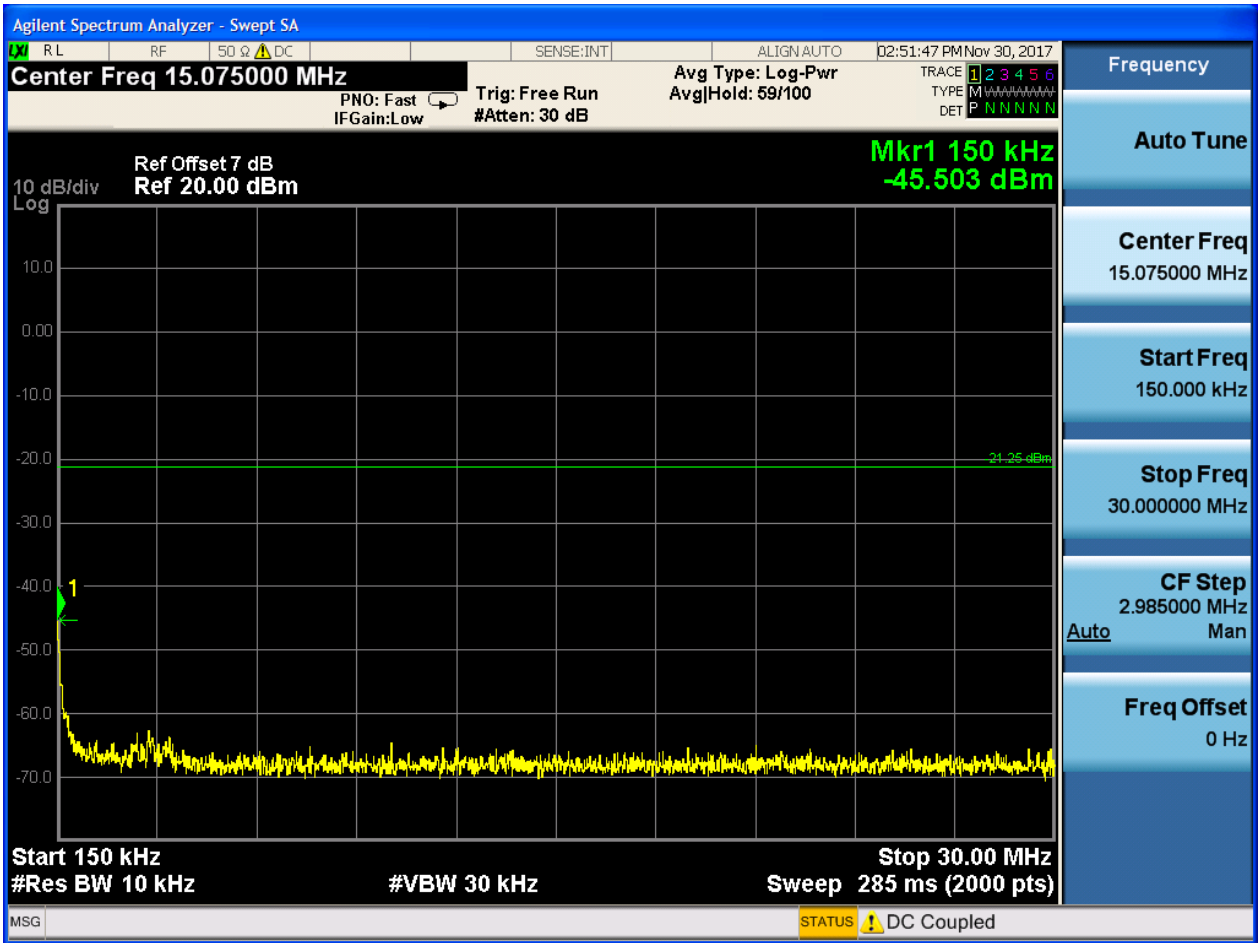
### 2.9.1 Pref



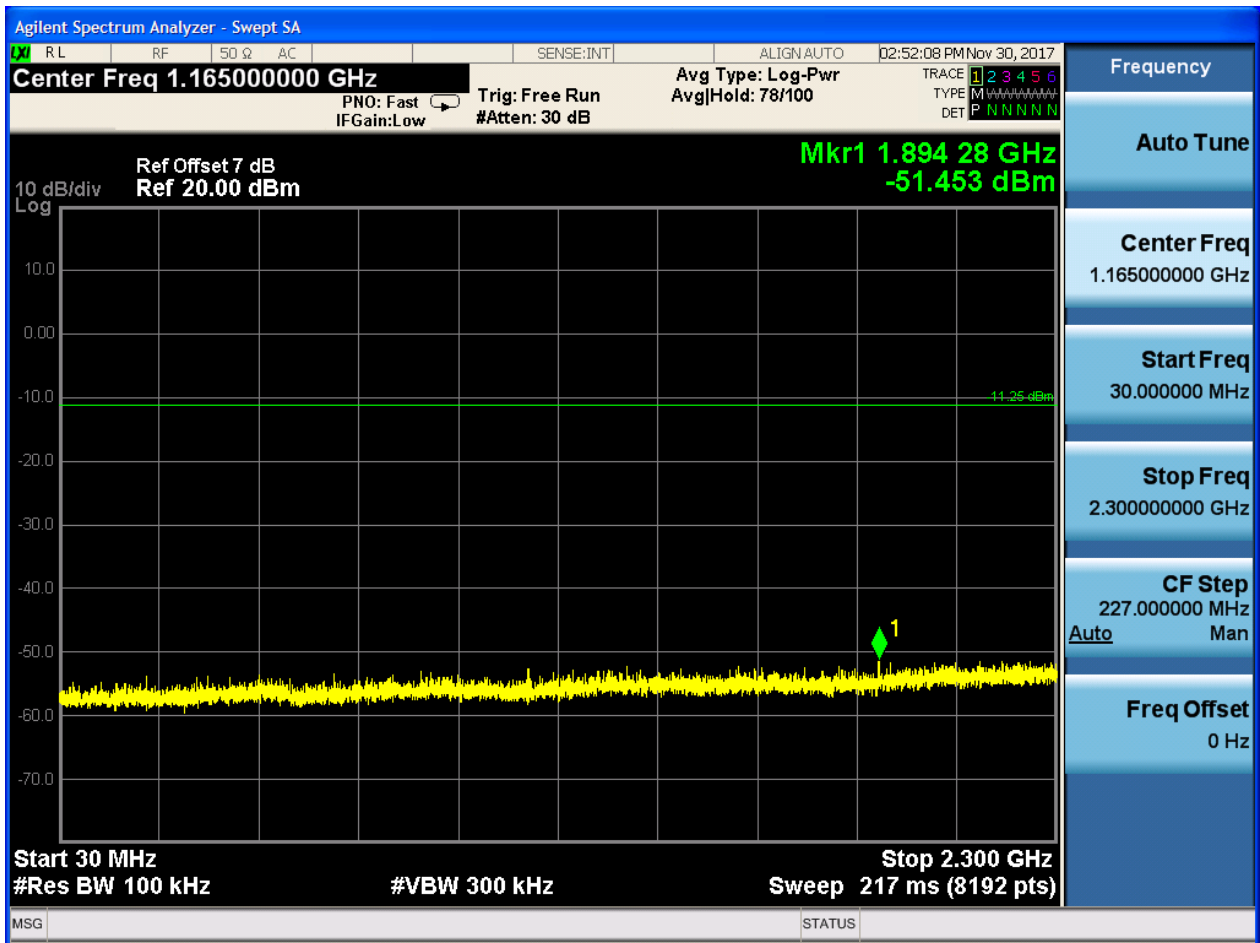


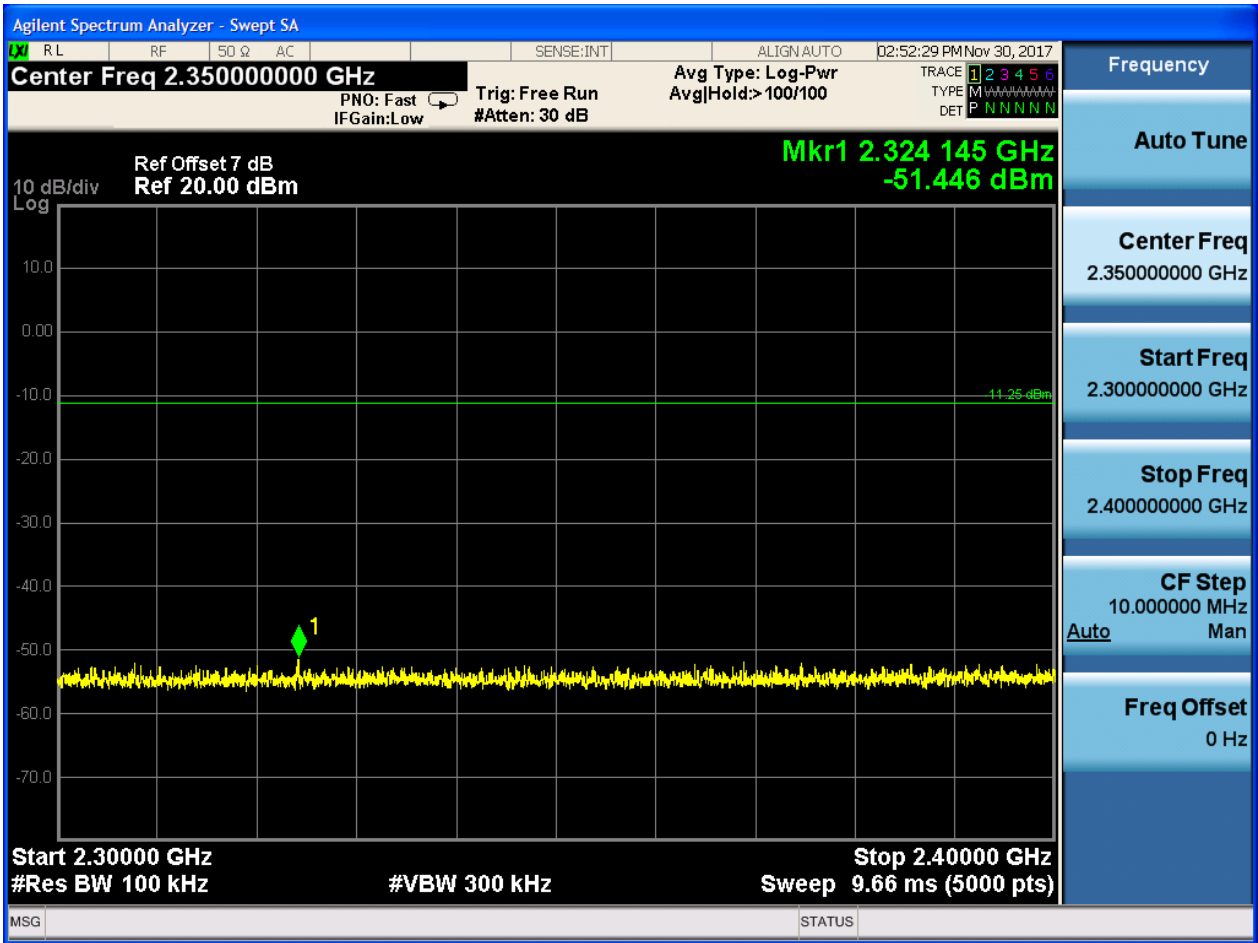
### 2.9.2 Puw

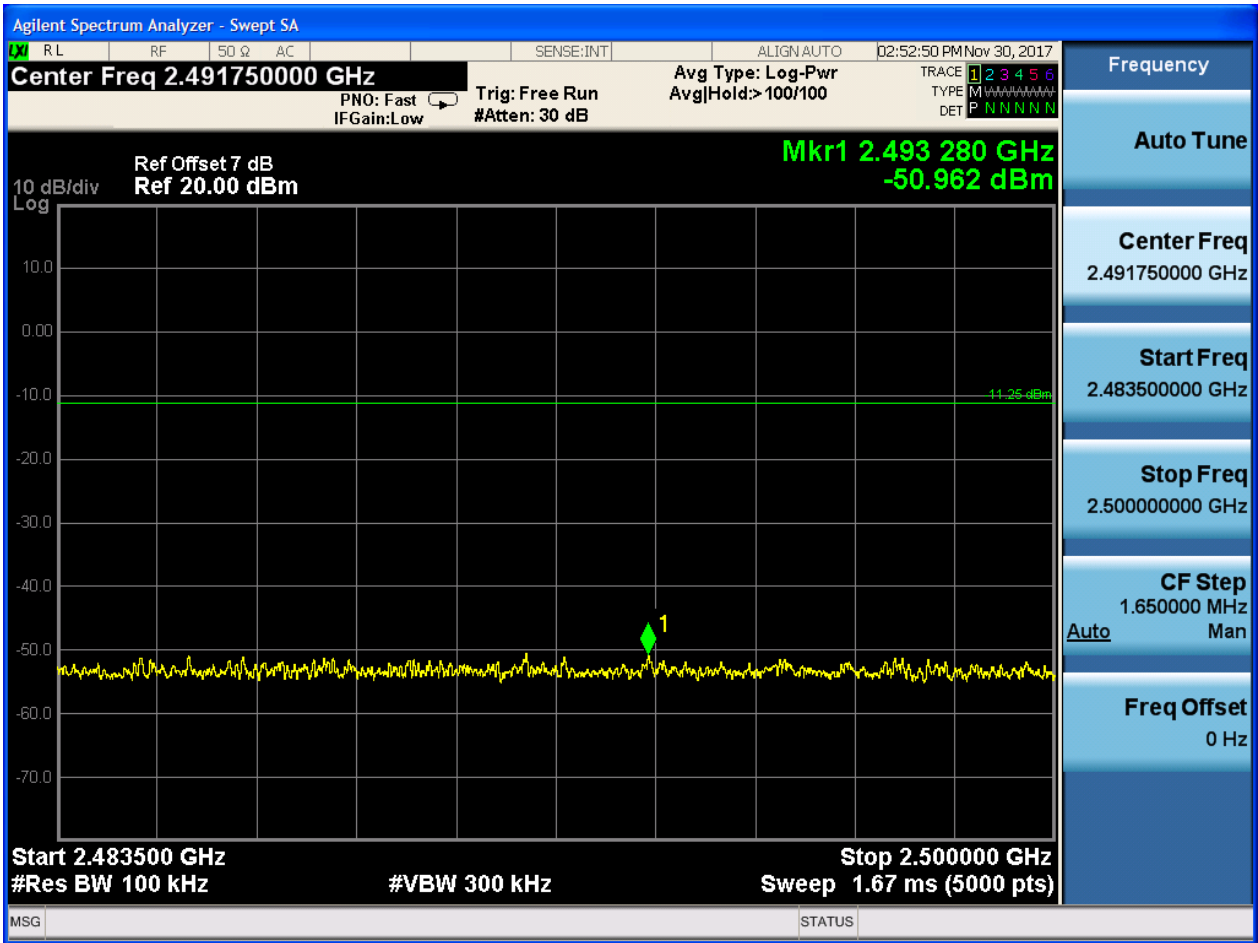


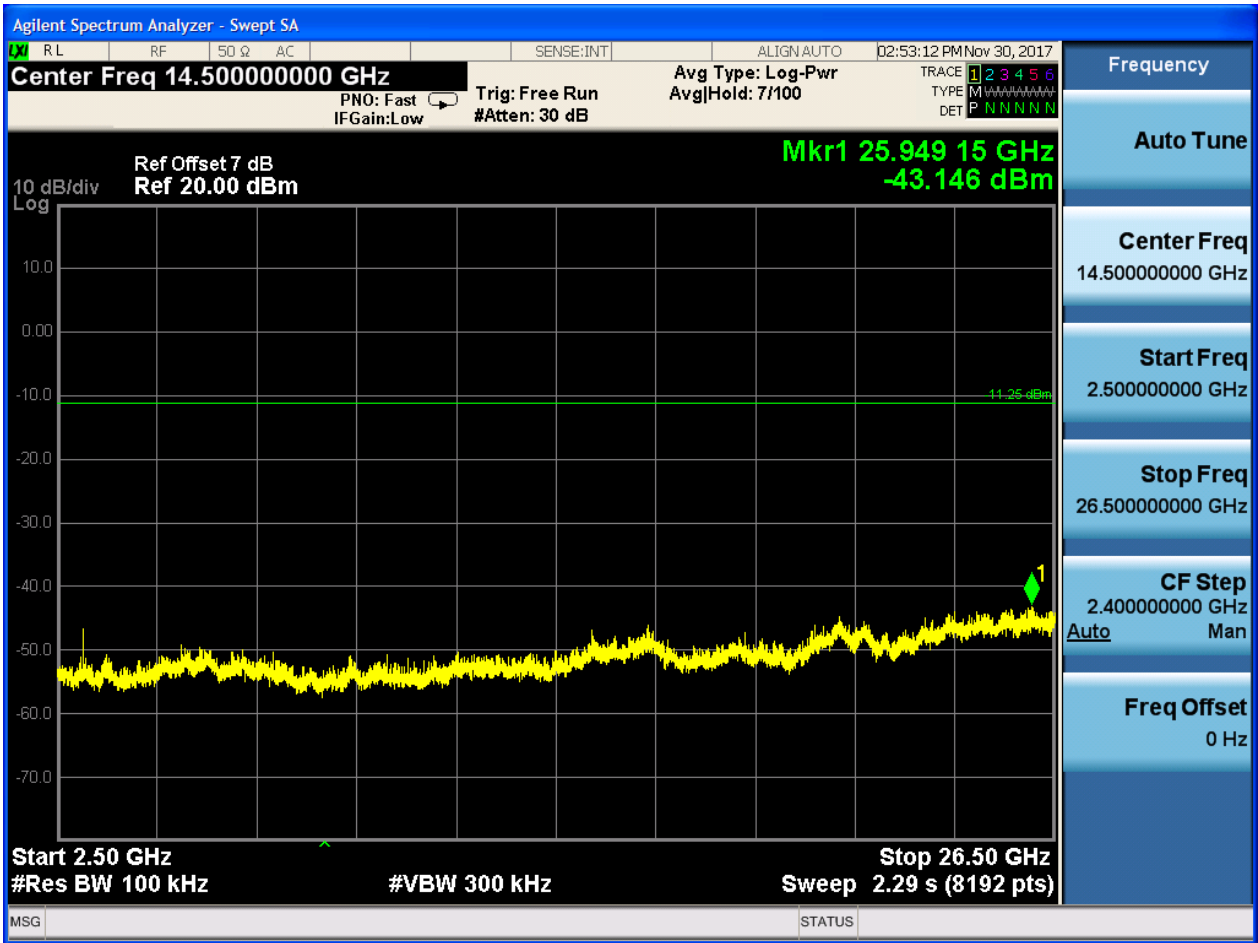












END

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