

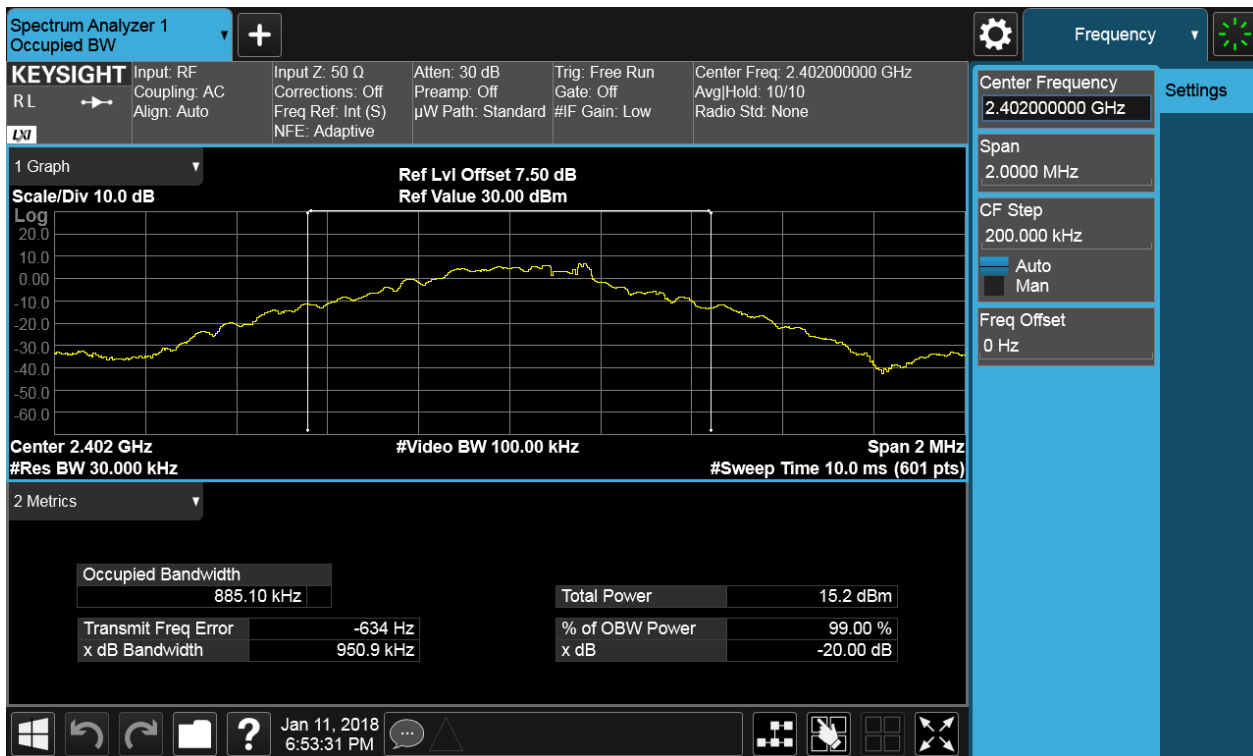
Appendix A: 20dB Emission Bandwidth (EBW)

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	1.28	Pass
TM2_2DH5_Ch78	1.27	Pass
TM3_3DH5_Ch0	1.27	Pass
TM3_3DH5_Ch39	1.28	Pass
TM3_3DH5_Ch78	1.27	Pass

2 Test Plot

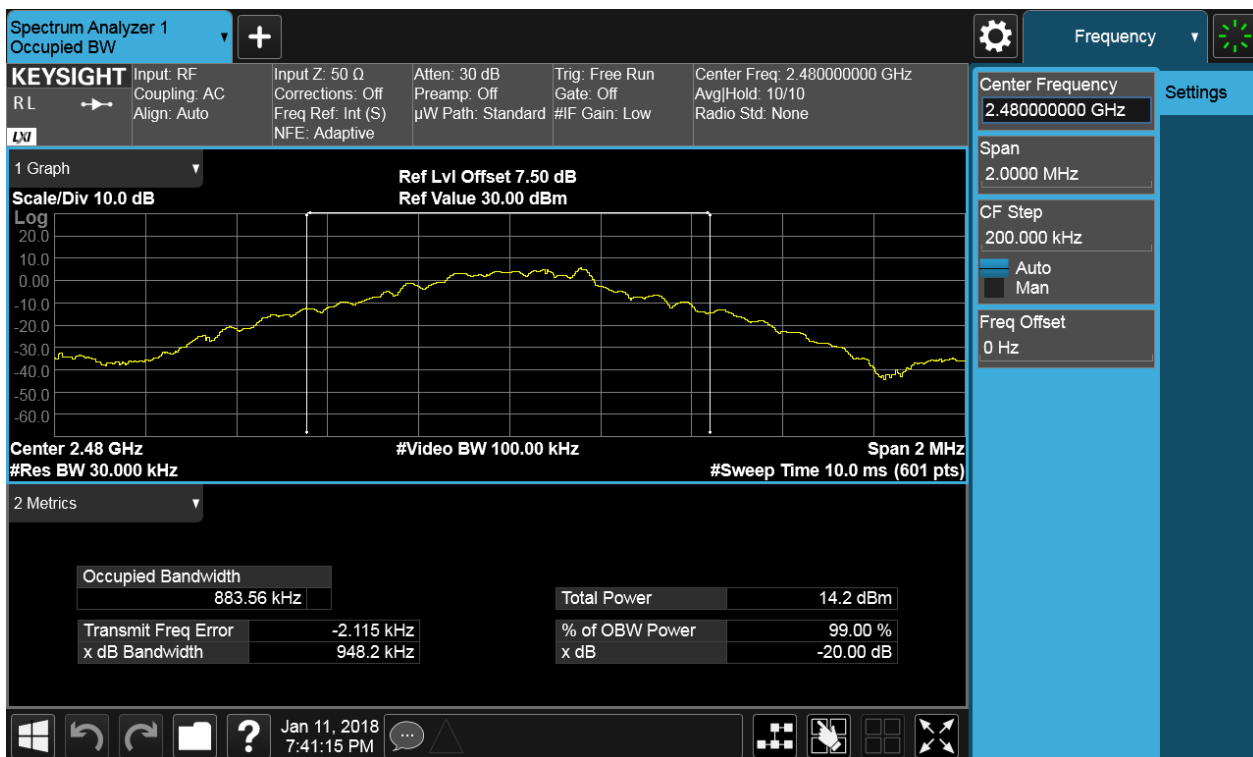
2.1 TM1_DH5_Ch0



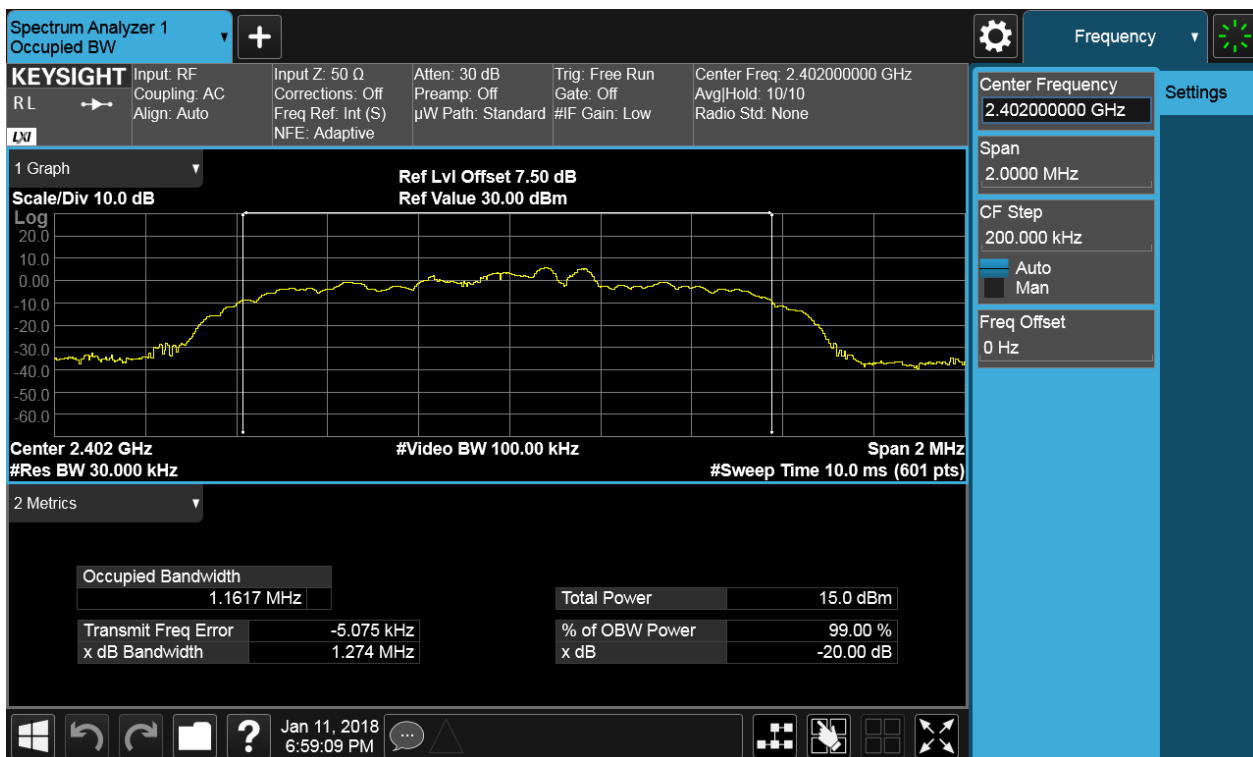
2.2 TM1_DH5_Ch39



2.3 TM1_DH5_Ch78



2.4 TM2_2DH5_Ch0



2.5 TM2_2DH5_Ch39



2.6 TM2_2DH5_Ch78



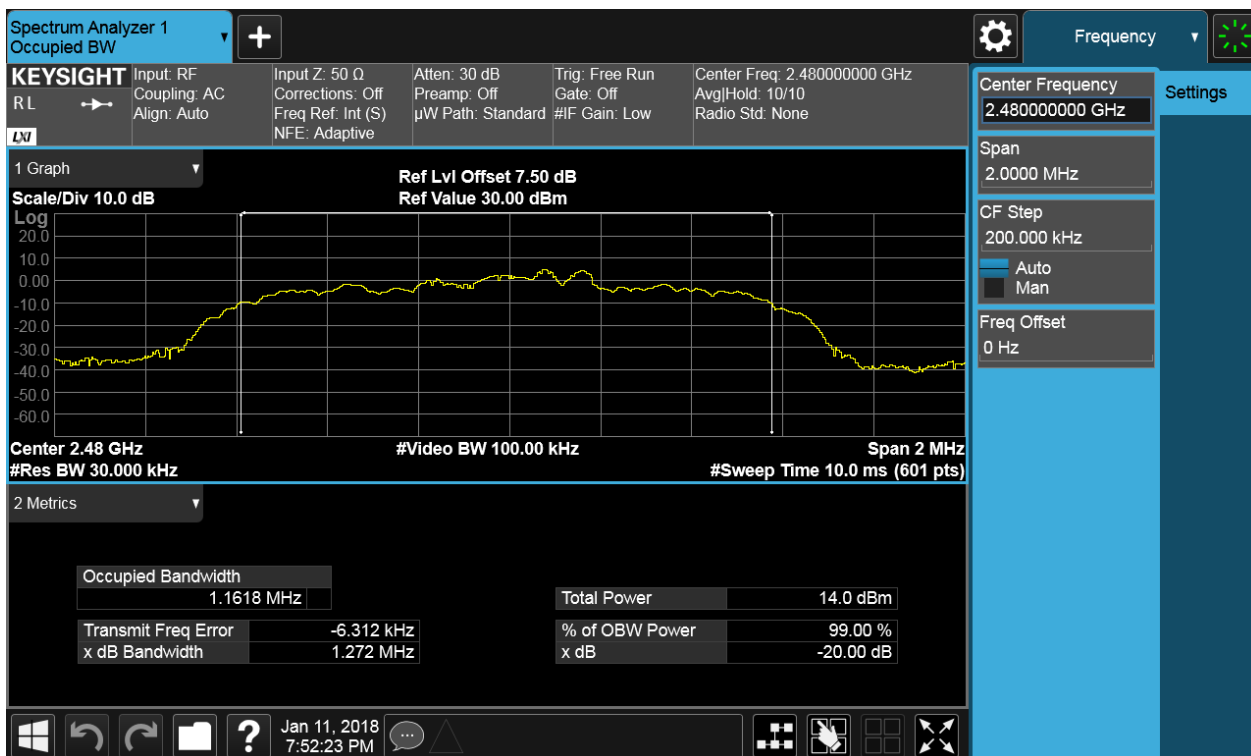
2.7 TM3_3DH5_Ch0



2.8 TM3_3DH5_Ch39



2.9 TM3_3DH5_Ch78



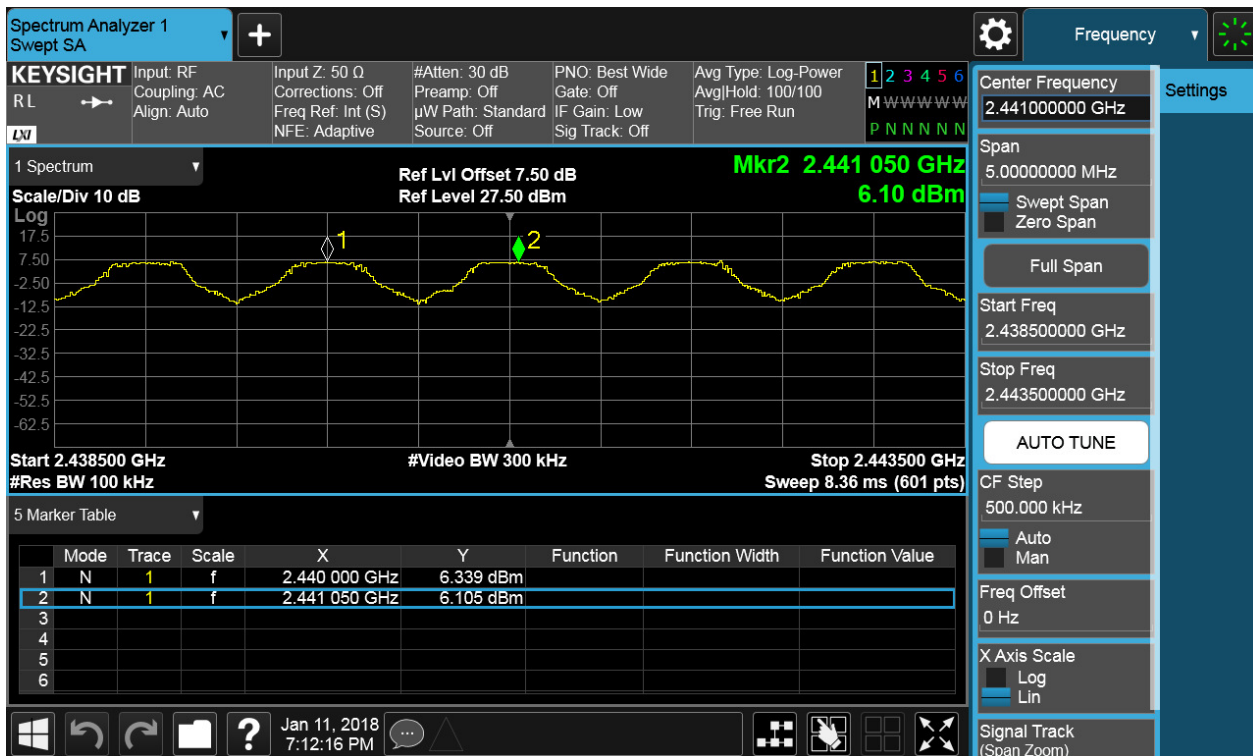
Appendix B: Carrier Frequency Separation

1 Result Table

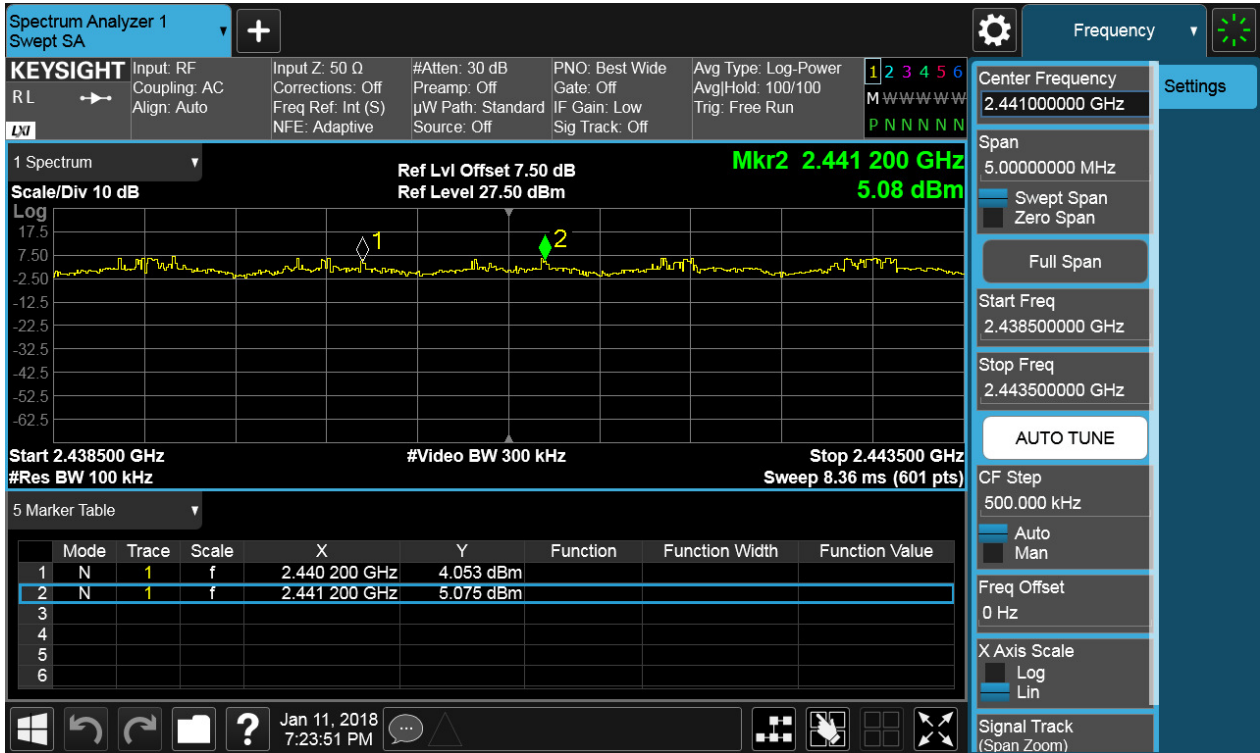
EUT Conf.	Carrier Frequency Separation [MHz]	Verdict
TM1_DH5_Hop	1.05	Pass
TM2_2DH5_Hop	1	Pass
TM3_3DH5_Hop	1	Pass

2 Test Plot

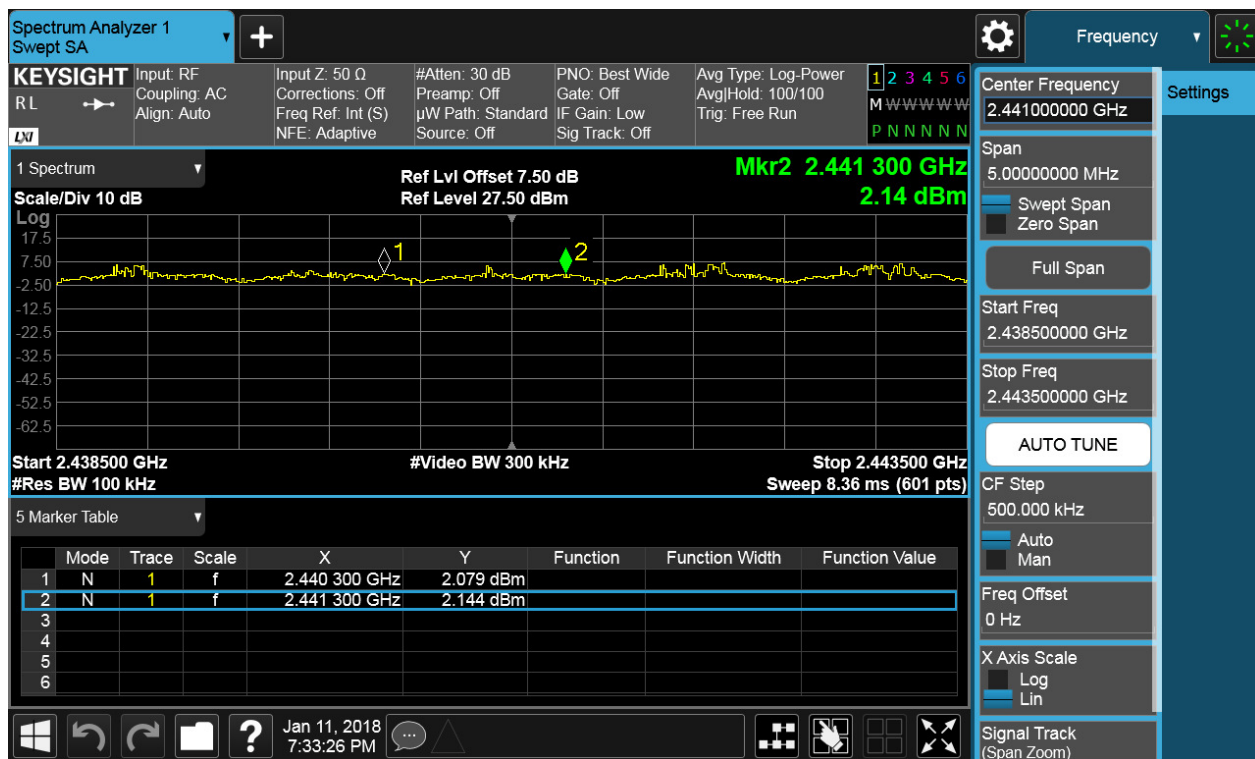
2.1 TM1_DH5_Hop



2.2 TM2_2DH5_Hop



2.3 TM3_3DH5_Hop



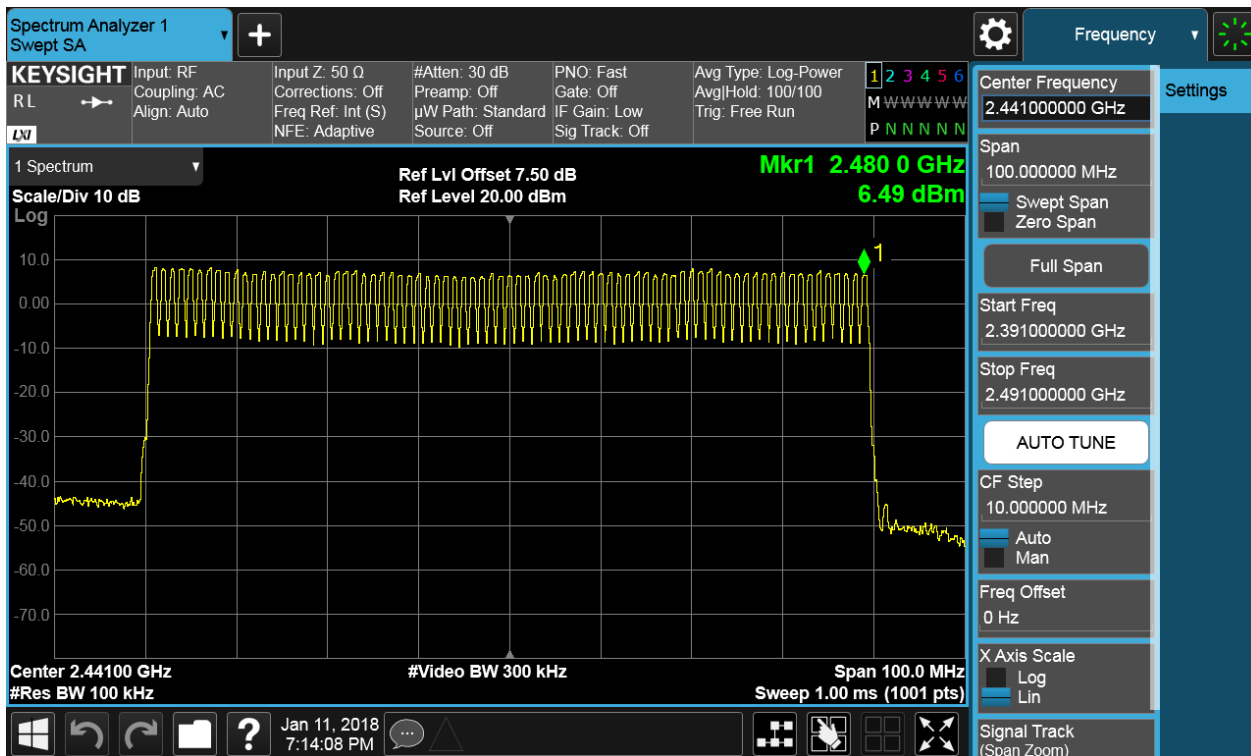
Appendix C: Number of Hopping Channel

1 Result Table

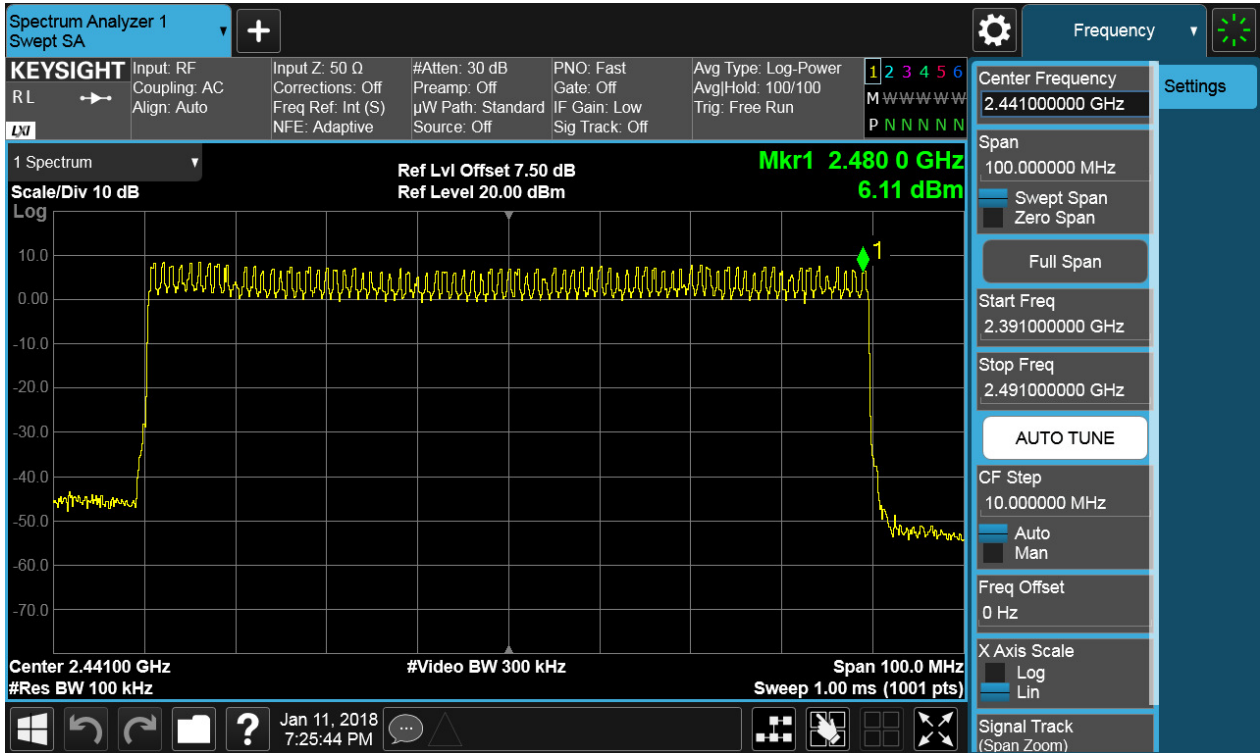
EUT Conf.	Number of Hopping Channel	Verdict
TM1_DH5_Hop	79	Pass
TM2_2DH5_Hop	79	Pass
TM3_3DH5_Hop	79	Pass

2 Test Plot

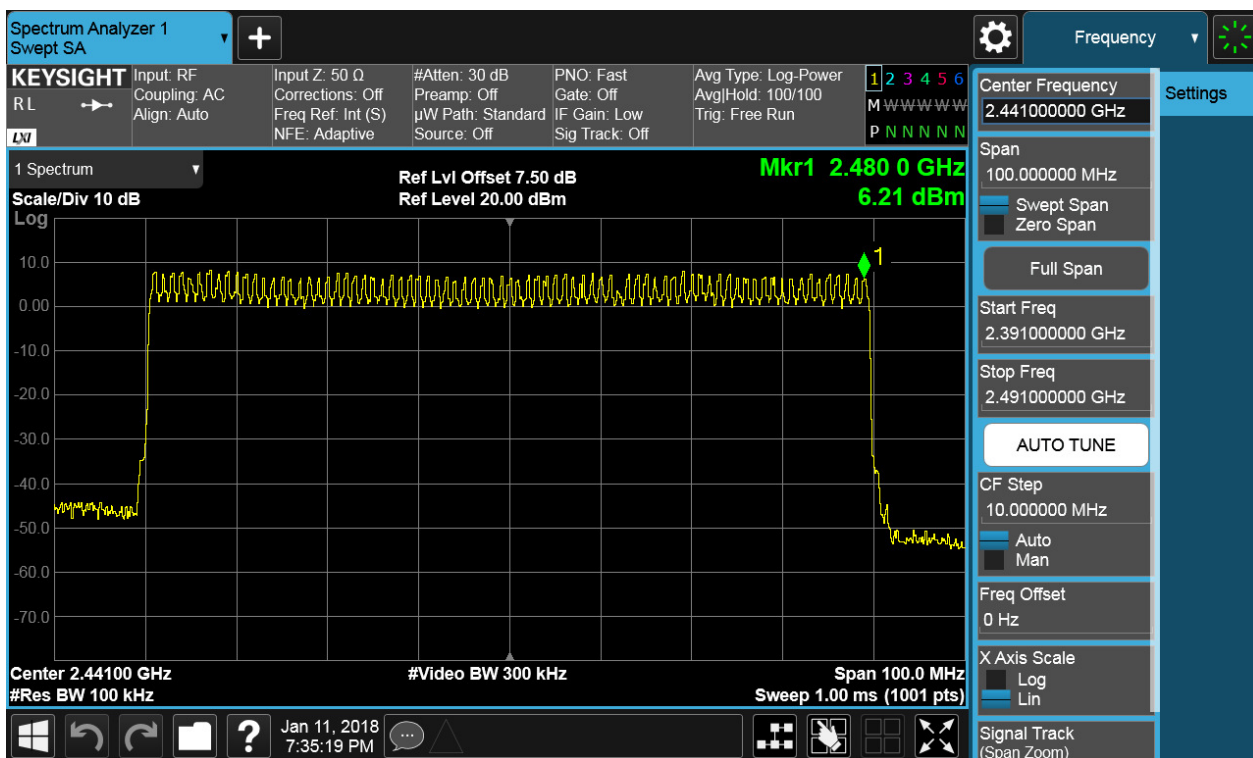
2.1 TM1_DH5_Hop



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:

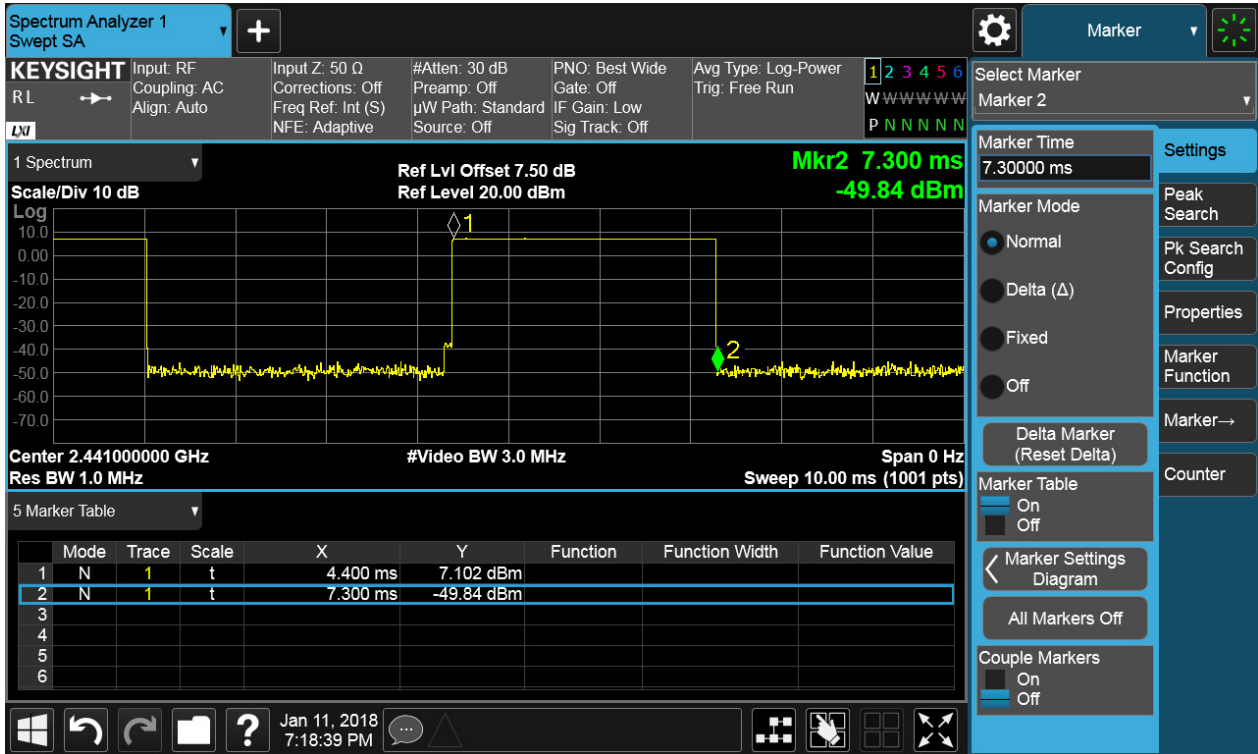
- The duration for dwell time calculation: $0.4 \text{ [s]} * \text{hopping number} = 0.4 \text{ [s]} * 79 \text{ [ch]} = 31.6 \text{ [s*ch]}$;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT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

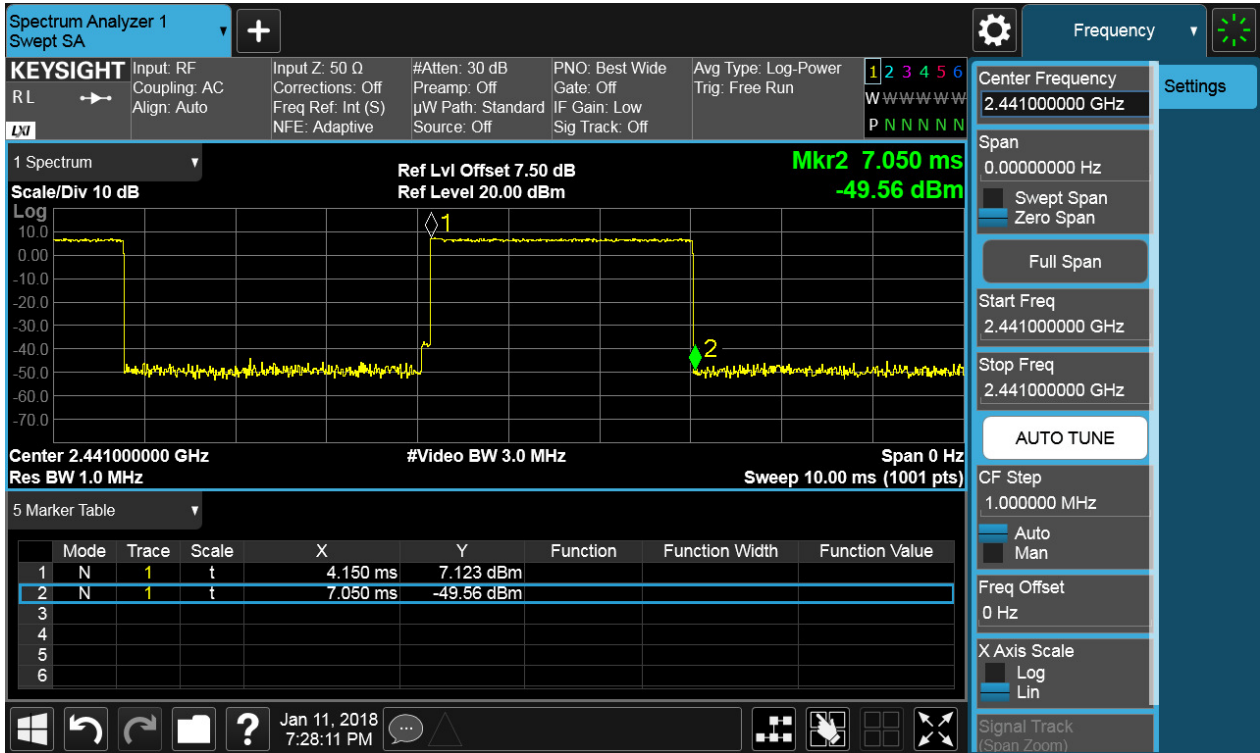
2 Test Plot

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

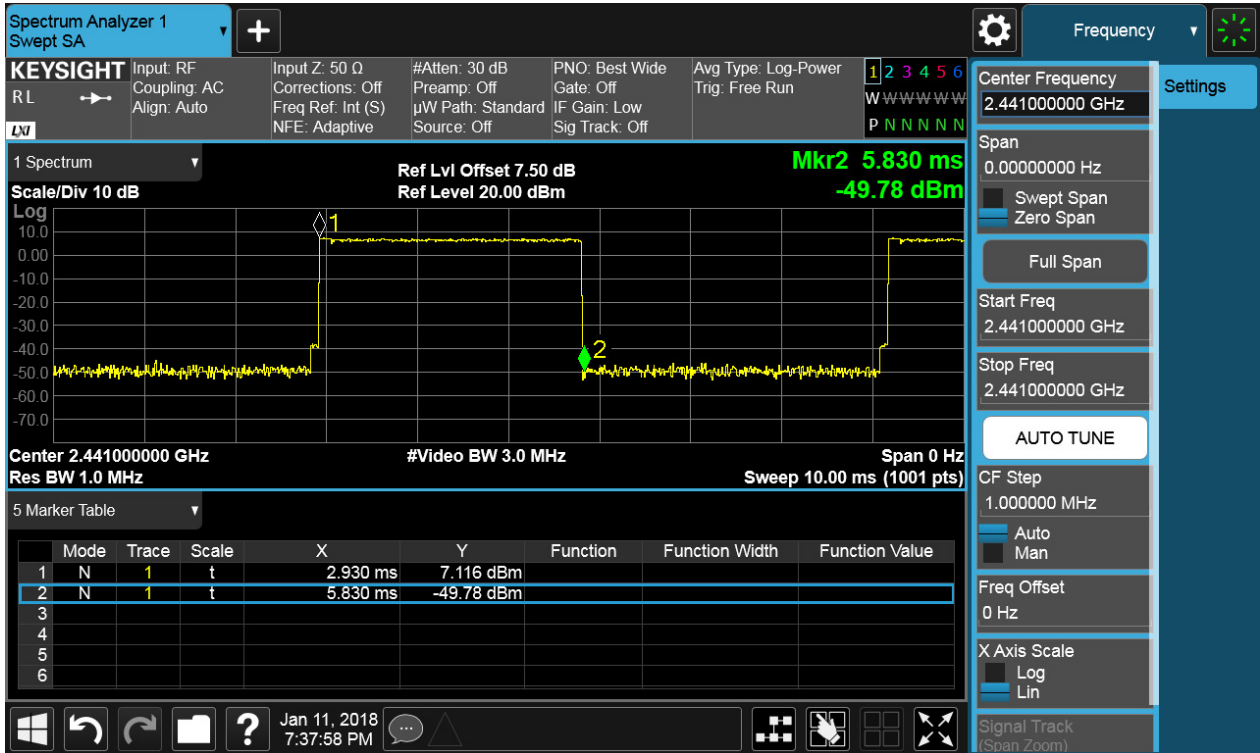
2.1 TM1_DH5_Ch39



2.2 TM2_2DH5_Ch39



2.3 TM3_3DH5_Ch39



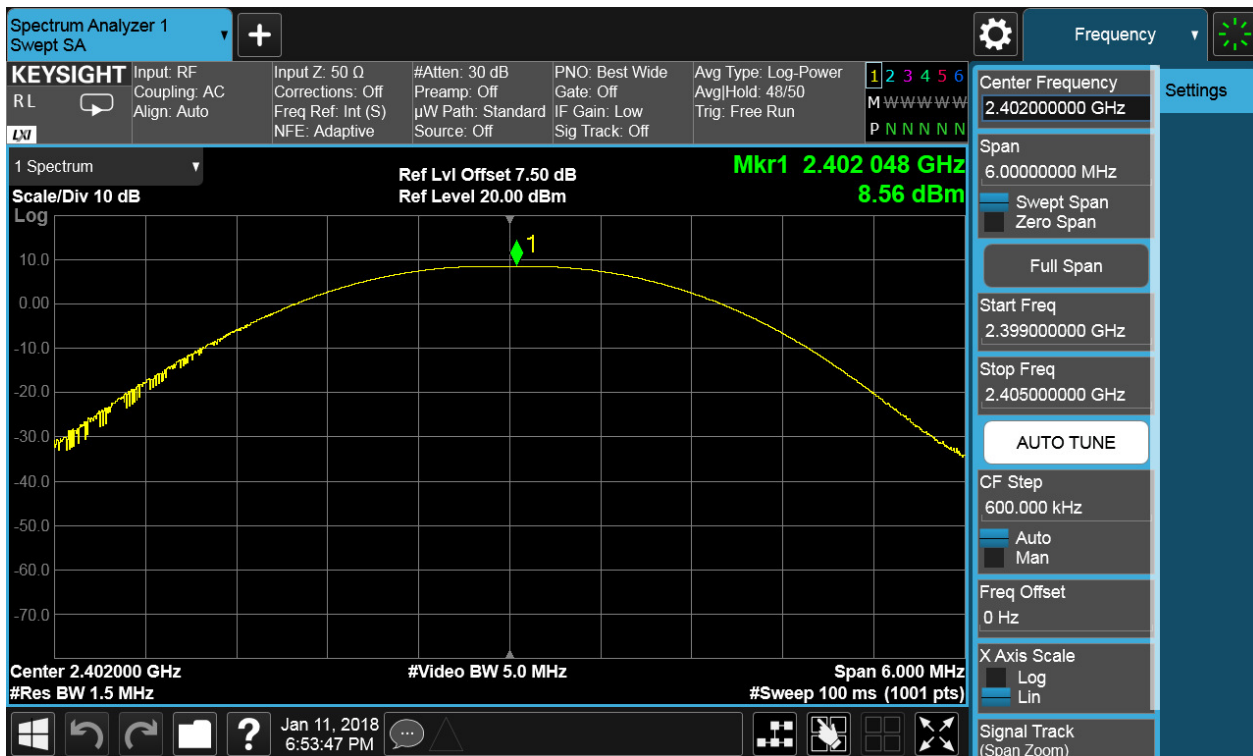
Appendix E: Maximum Peak Conducted Output Power

1 Result Table

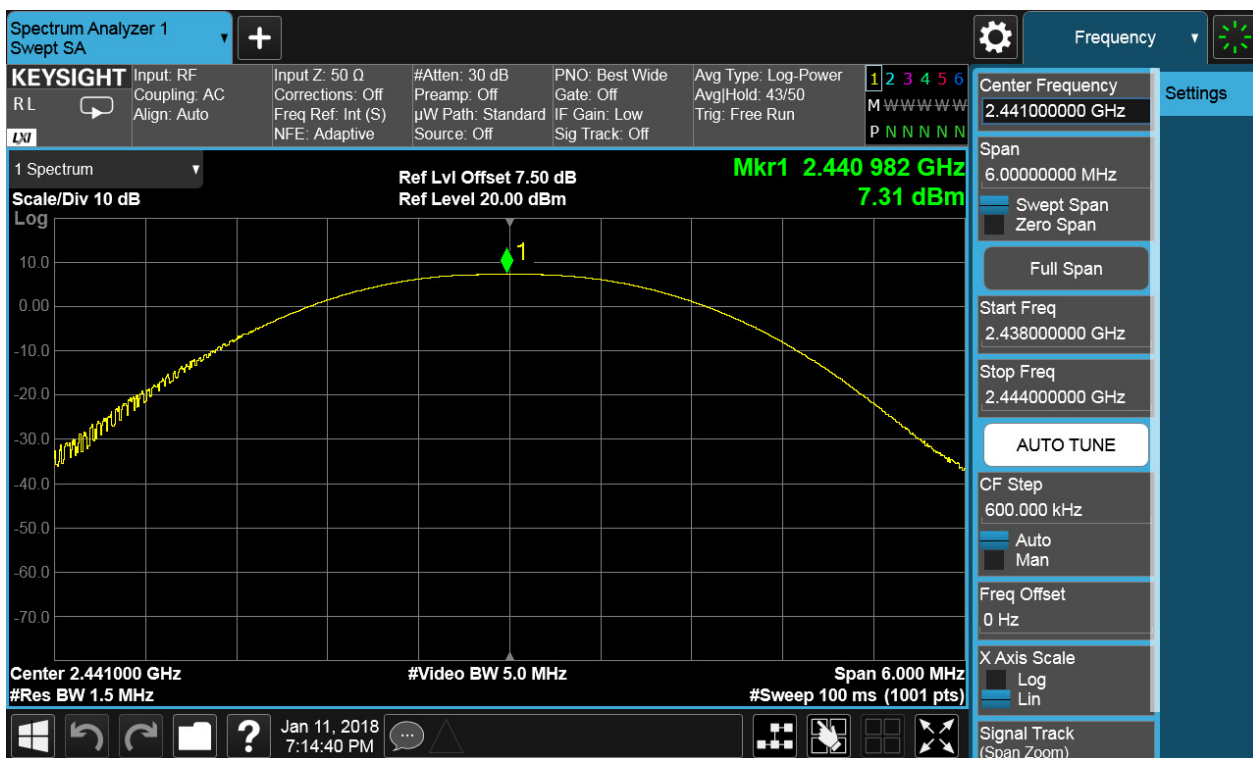
EUT Conf.	Max. Peak Power [dBm]	Verdict
TM1_DH5_Ch0	8.562	Pass
TM1_DH5_Ch39	7.315	Pass
TM1_DH5_Ch78	7.527	Pass
TM2_2DH5_Ch0	8.893	Pass
TM2_2DH5_Ch39	7.705	Pass
TM2_2DH5_Ch78	7.952	Pass
TM3_3DH5_Ch0	8.948	Pass
TM3_3DH5_Ch39	7.715	Pass
TM3_3DH5_Ch78	7.969	Pass

2 Test Plot

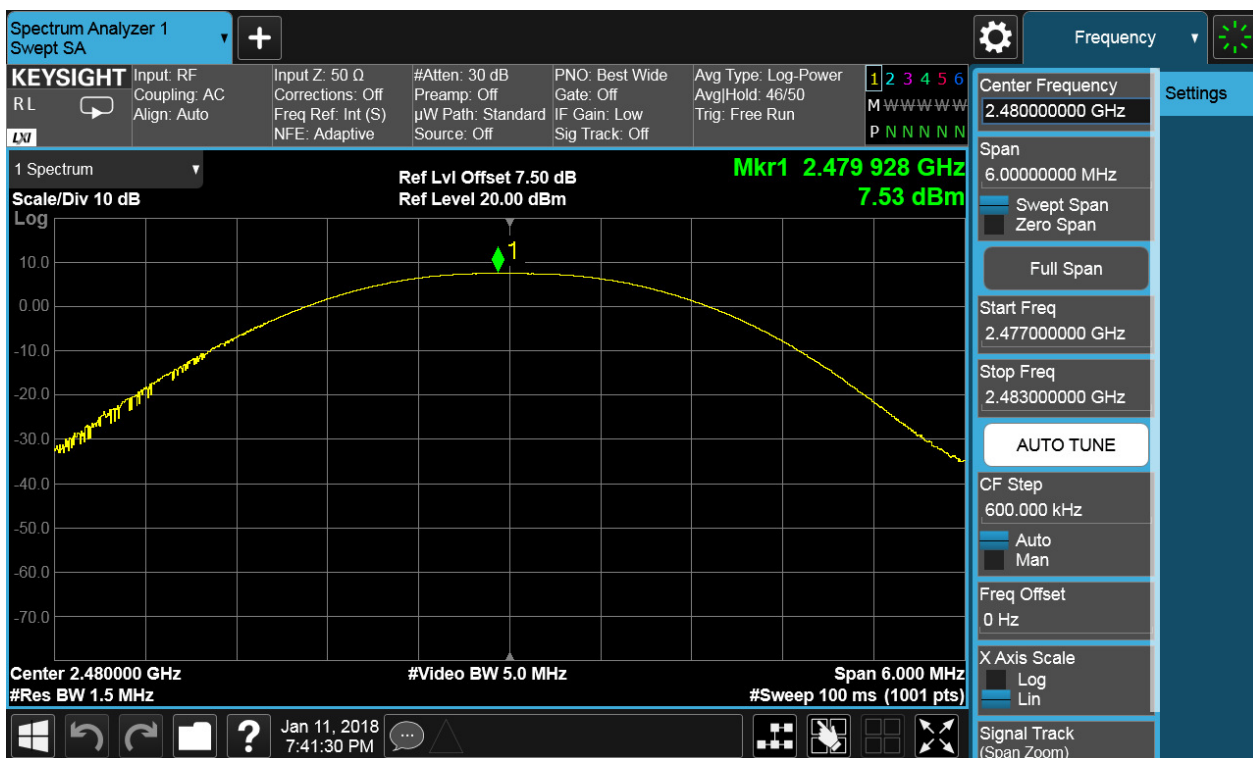
2.1 TM1_DH5_Ch0



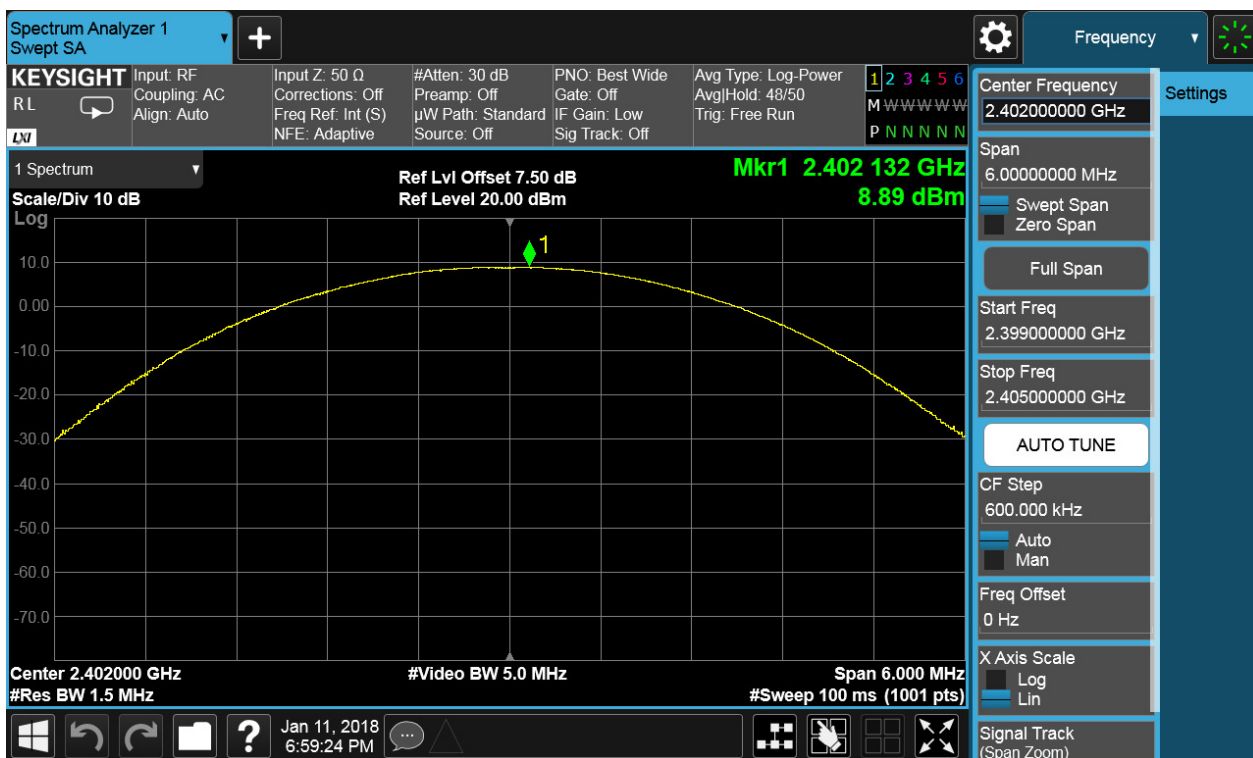
2.2 TM1_DH5_Ch39



2.3 TM1_DH5_Ch78



2.4 TM2_2DH5_Ch0



2.5 TM2_2DH5_Ch39



2.6 TM2_2DH5_Ch78





Keysight Spectrum Analyzer 1
Swept SA

KEYSIGHT R L

Input: RF
Coupling: AC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive

#Atten: 30 dB
Preamp: Off
 μ W Path: Standard
Source: Off

PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off

Avg Type: Log-Power
Avg/Hold: 48/50
Trig: Free Run

1 2 3 4 5 6
M W W W W W
P N N N N N

1 Spectrum

Scale/Div 10 dB
Log

Ref Lvl Offset 7.50 dB
Ref Level 20.00 dBm

Mkr1 2.401 862 GHz
8.95 dBm

Center 2.402000 GHz
#Res BW 1.5 MHz

#Video BW 5.0 MHz

Span 6.000 MHz
#Sweep 100 ms (1001 pts)

Center Frequency
2.40200000 GHz

Span
6.00000000 MHz

Swept Span
Zero Span

Full Span

Start Freq
2.399000000 GHz

Stop Freq
2.405000000 GHz

AUTO TUNE

CF Step
600.000 kHz

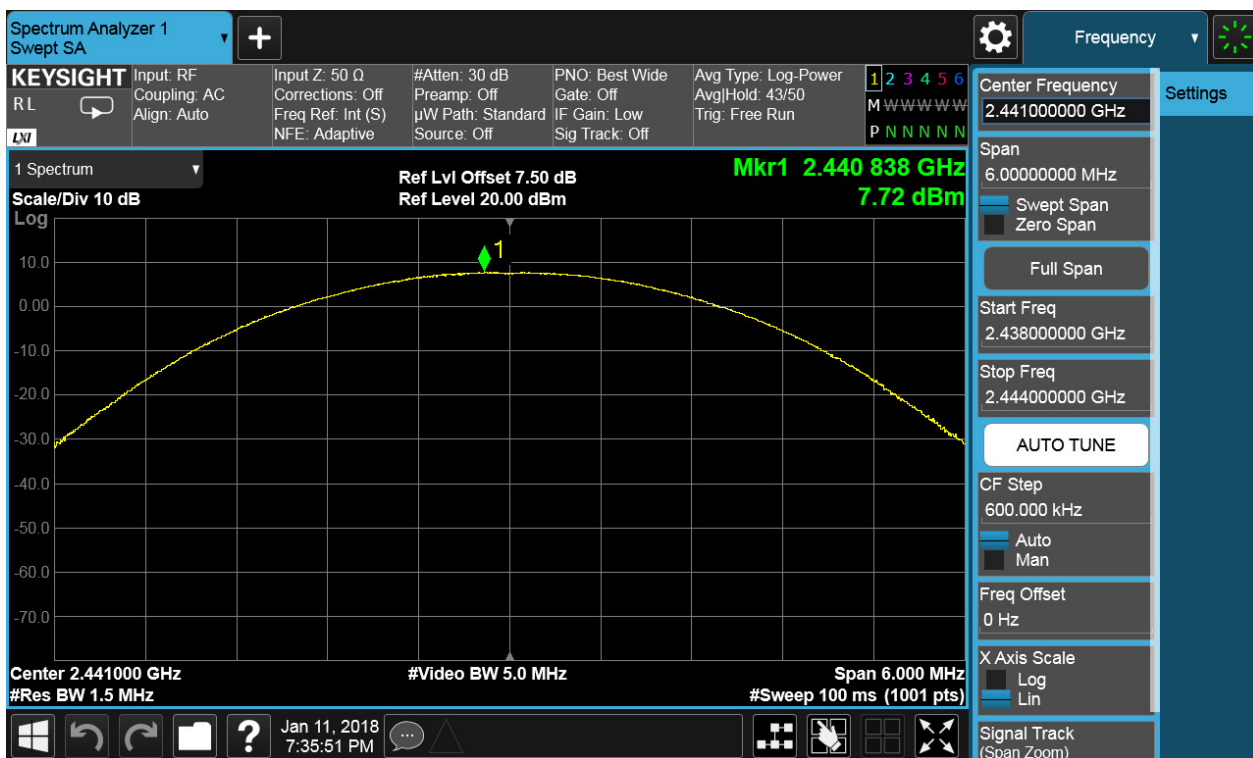
Auto
Man

Freq Offset
0 Hz

X Axis Scale
Log
Lin

Signal Track
(Span Zoom)

2.8 TM3_3DH5_Ch39



2.9 TM3_3DH5_Ch78



Appendix F: Band edge spurious emission

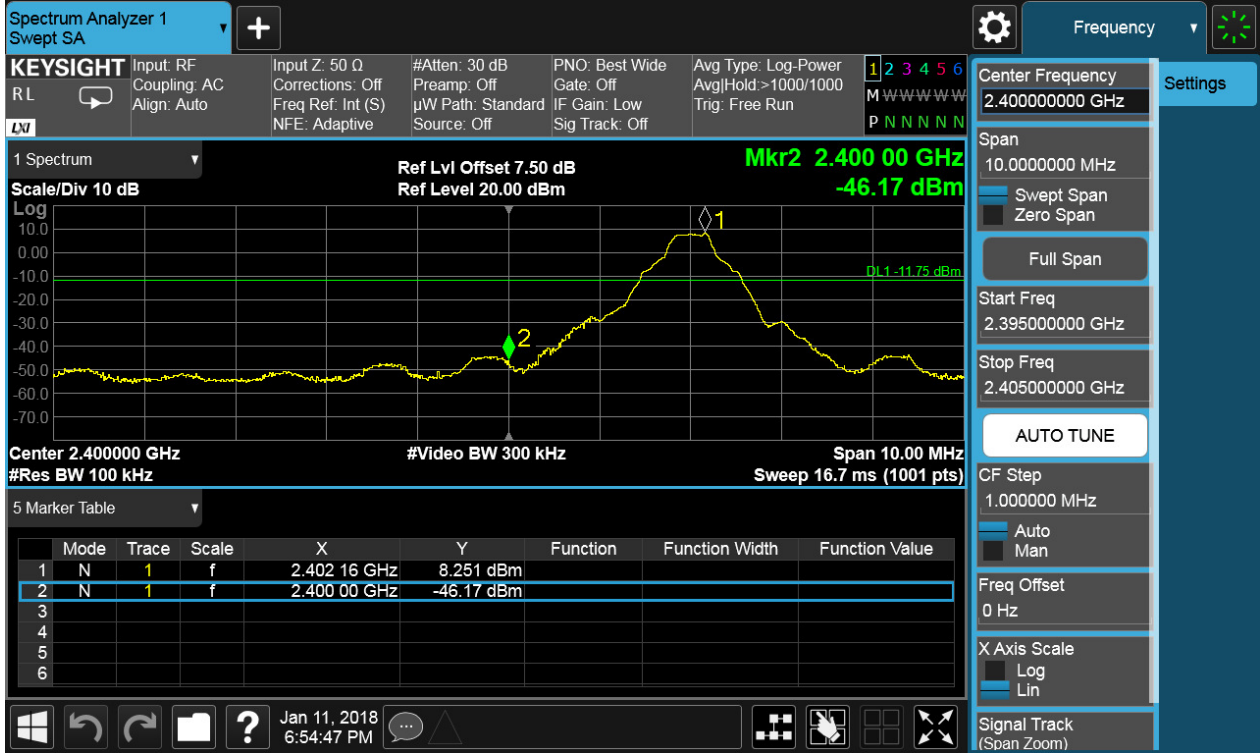
1 Result Table

EUT Conf.	Channel No.	Carrier Frequency [MHz]	Max. Spurious Level [dBm]	Frequency Hopping	Carrier Power [dBm]	Limit [dBm]	Result
TM1_DH5_Ch0	0	2402	-46.172	Off	8.251	-11.749	Pass
	-	-	-46.608	On	8.442	-11.558	Pass
TM1_DH5_Ch78	78	2480	-48.78	Off	7.156	-12.844	Pass
	-	-	-50.132	On	6.676	-13.324	Pass
TM2_2DH5_Ch0	0	2402	-46.104	Off	8.246	-11.754	Pass
	-	-	-49.779	On	8.451	-11.549	Pass
TM2_2DH5_Ch78	78	2480	-49.878	Off	7.213	-12.787	Pass
	-	-	-54.56	On	7.088	-12.912	Pass
TM3_3DH5_Ch0	0	2402	-46.897	Off	8.316	-11.684	Pass
	-	-	-49.882	On	7.599	-12.401	Pass
TM3_3DH5_Ch78	78	2480	-49.538	Off	7.23	-12.77	Pass
	-	-	-53.18	On	7.118	-12.882	Pass

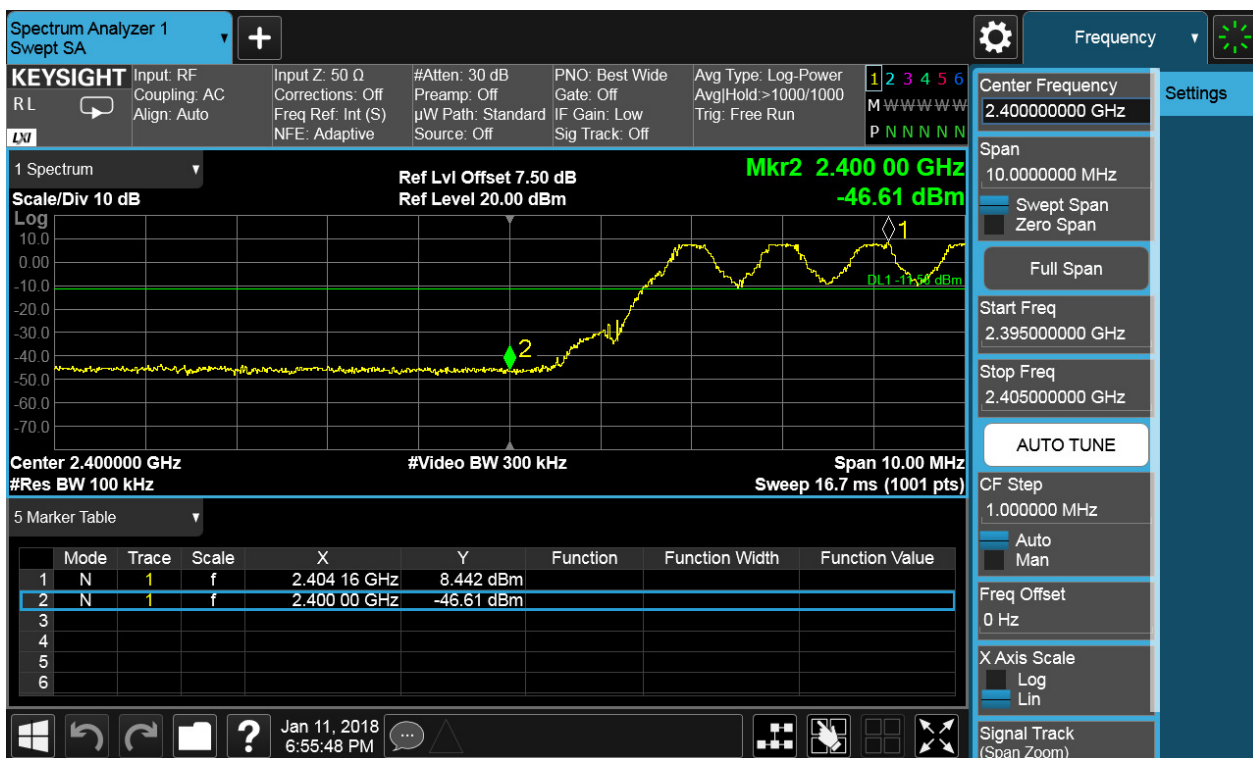
2 Test Plot

2.1 TM1_DH5_Ch0

No hopping

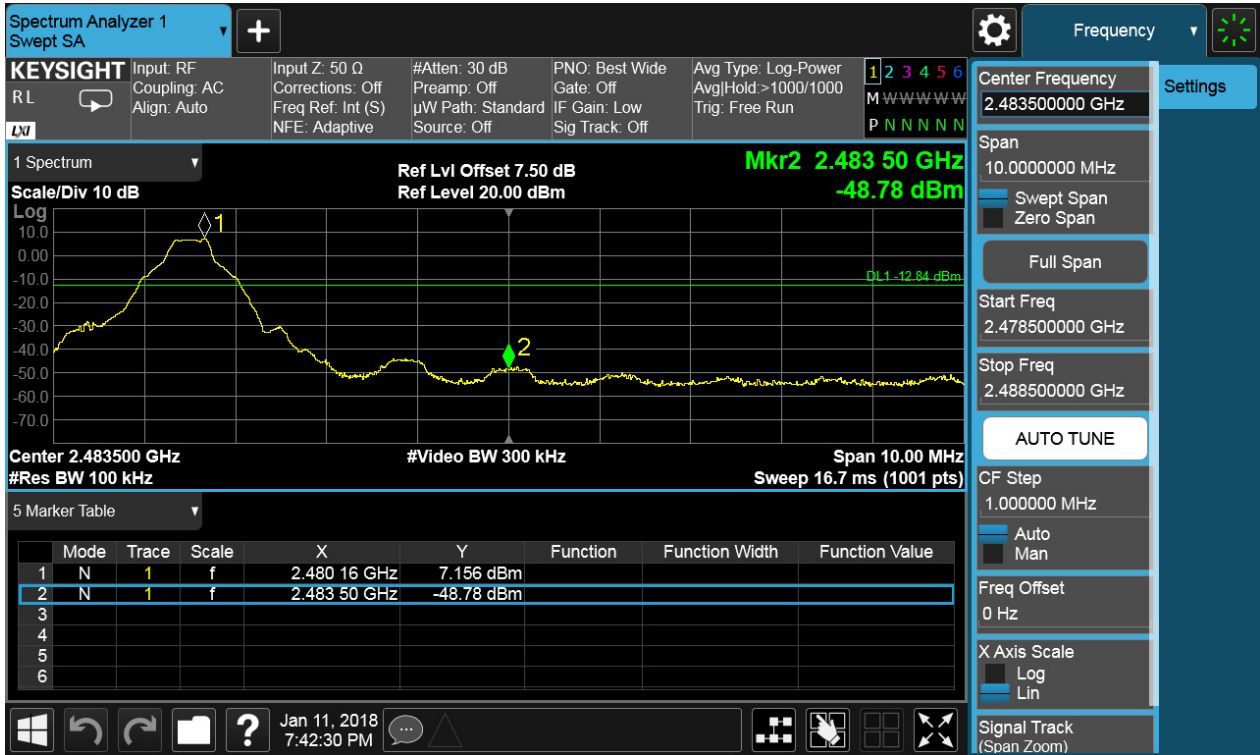


With hopping

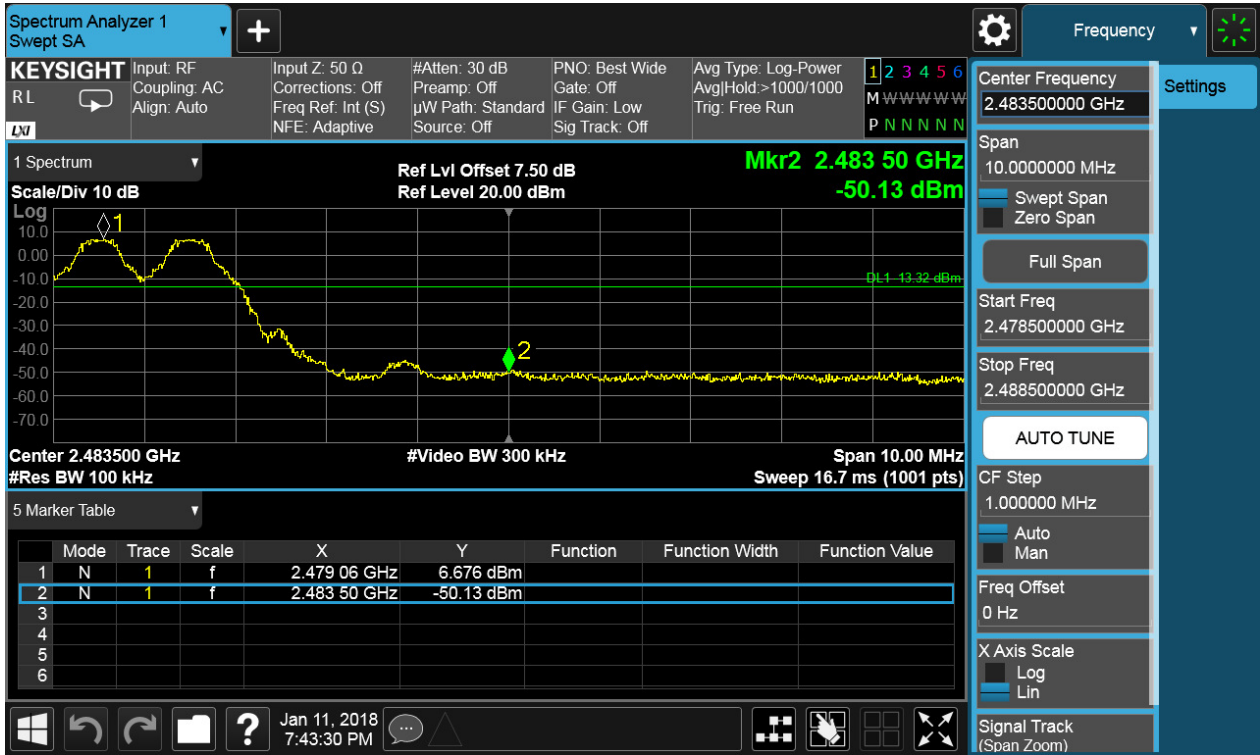


2.2 TM1_DH5_Ch78

No hopping

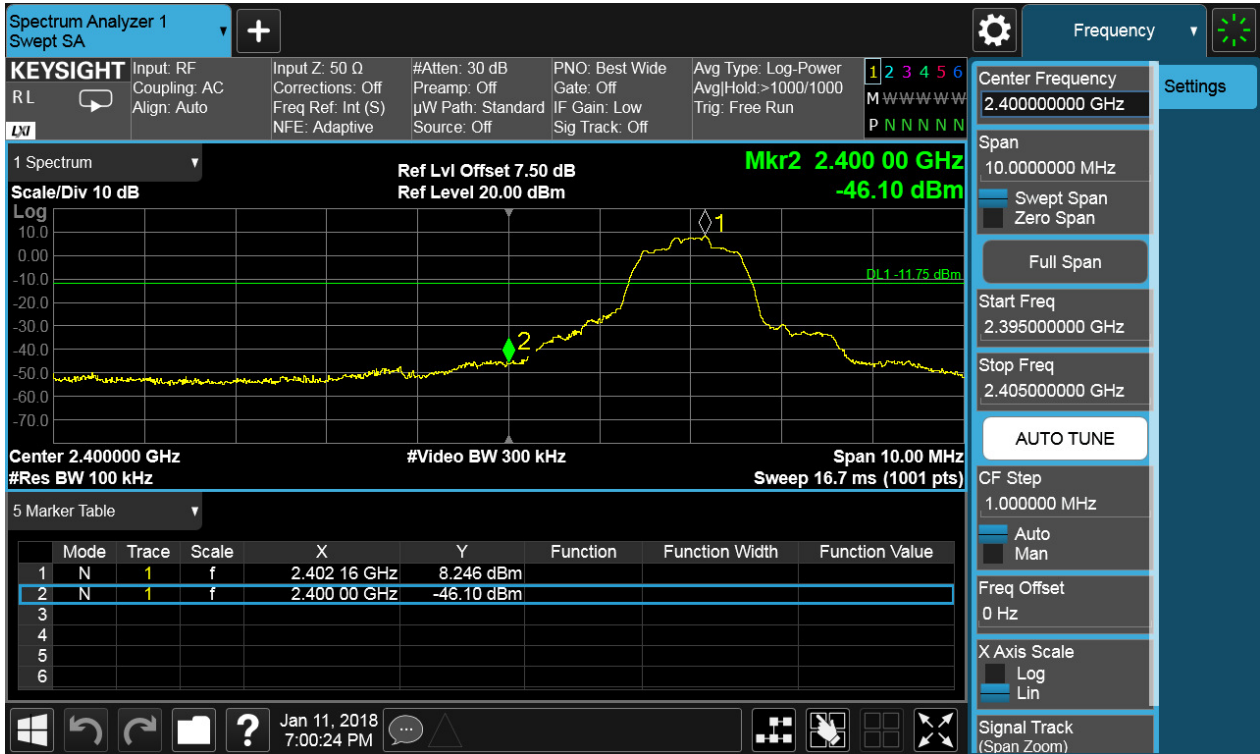


With hopping



2.3 TM2_2DH5_Ch0

No hopping



With hopping

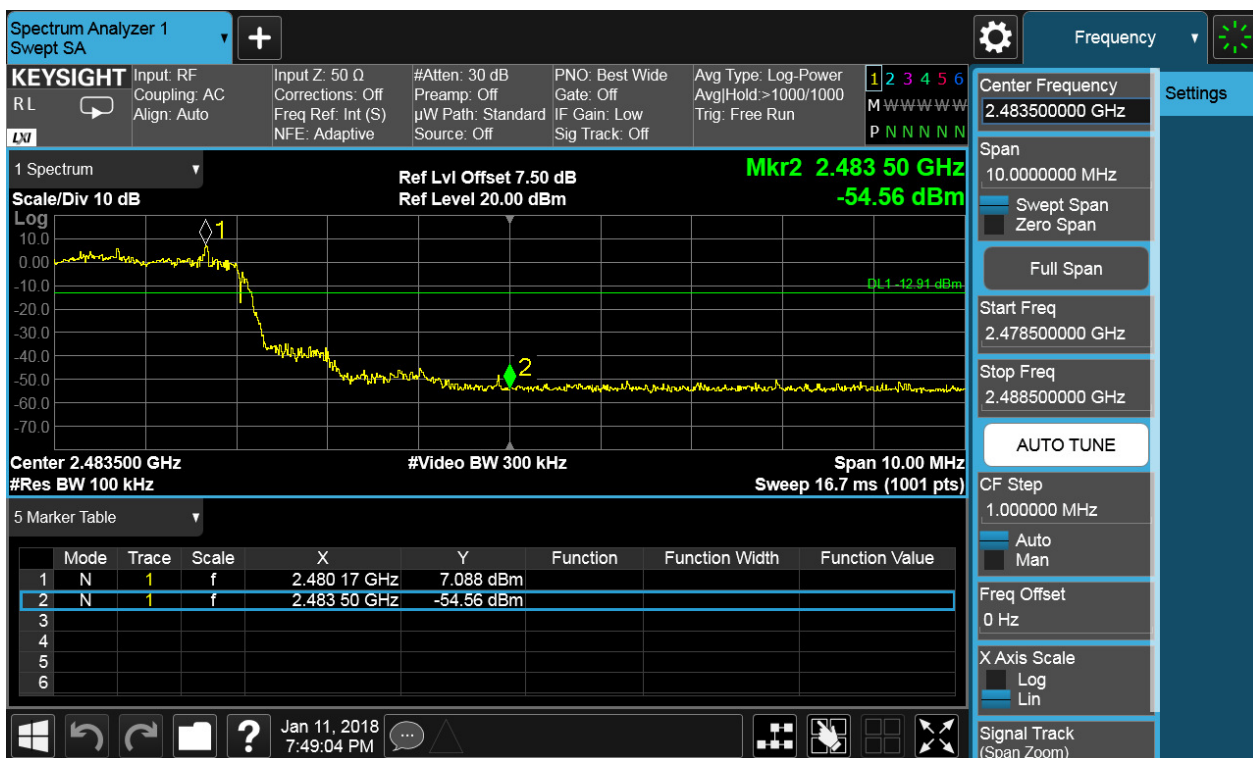


2.4 TM2_2DH5_Ch78

No hopping

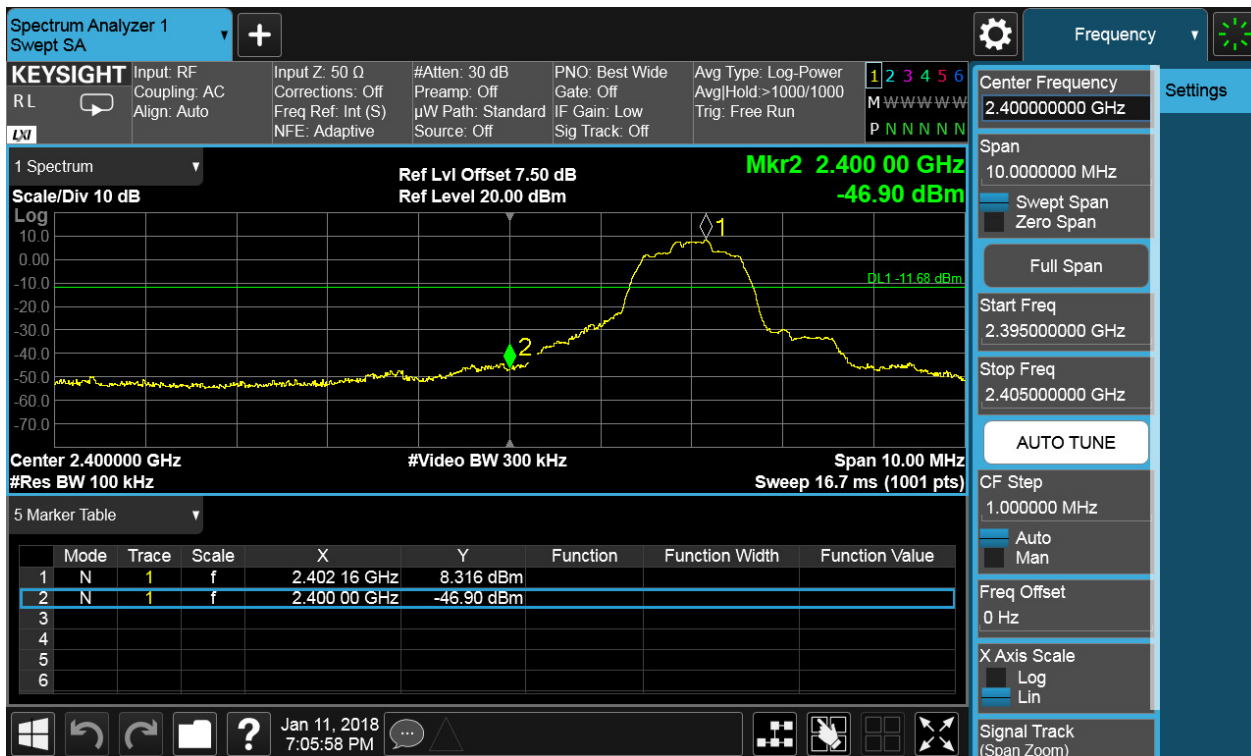


With hopping

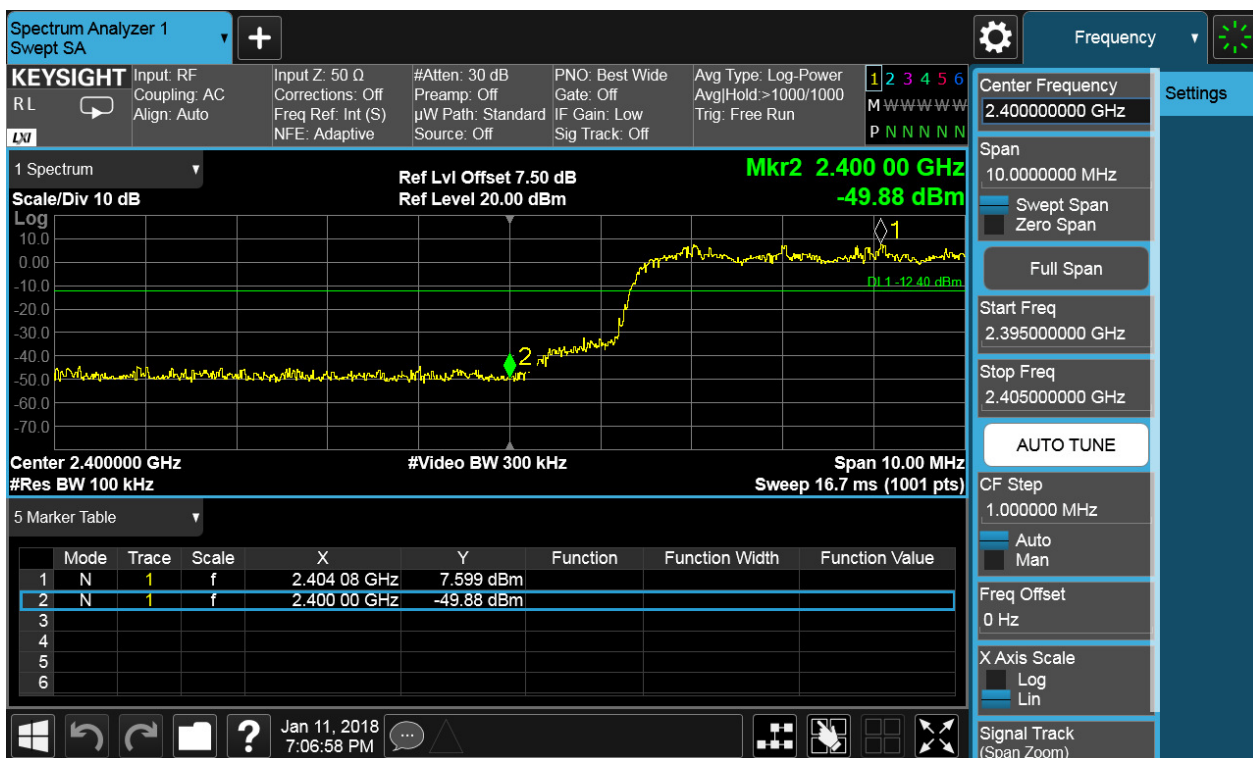


2.5 TM3_3DH5_Ch0

No hopping

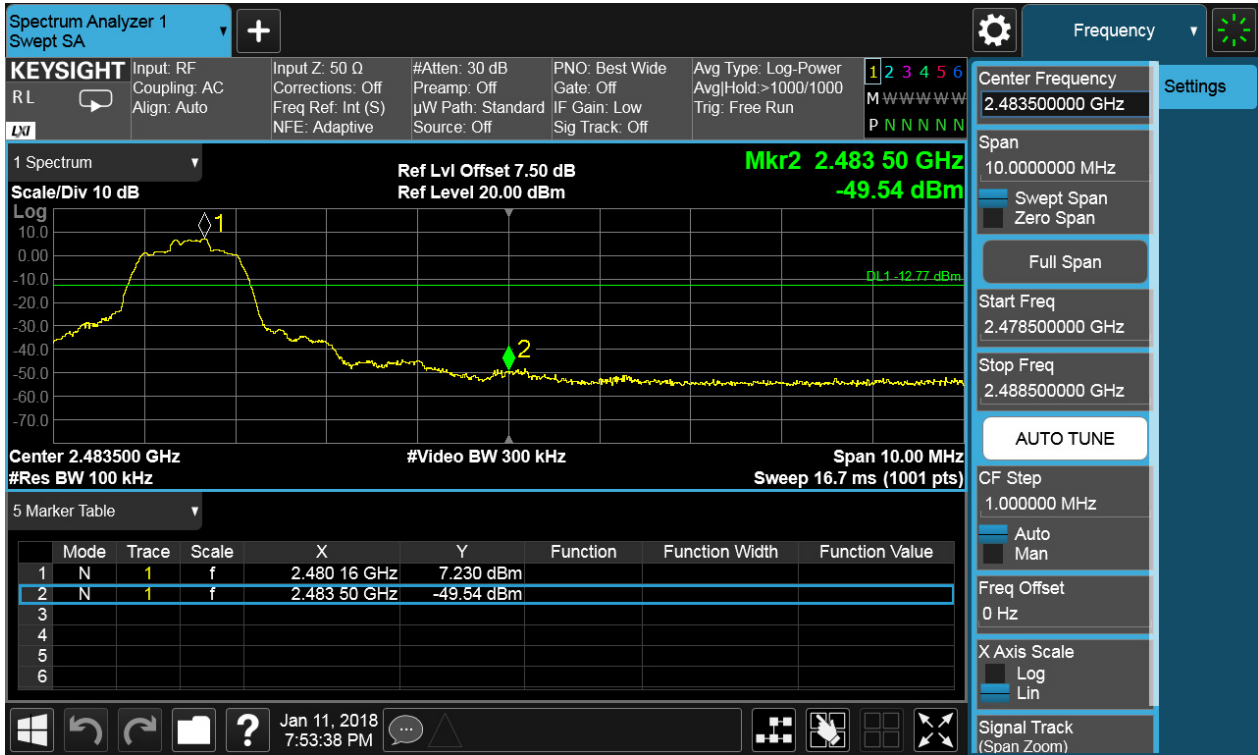


With hopping

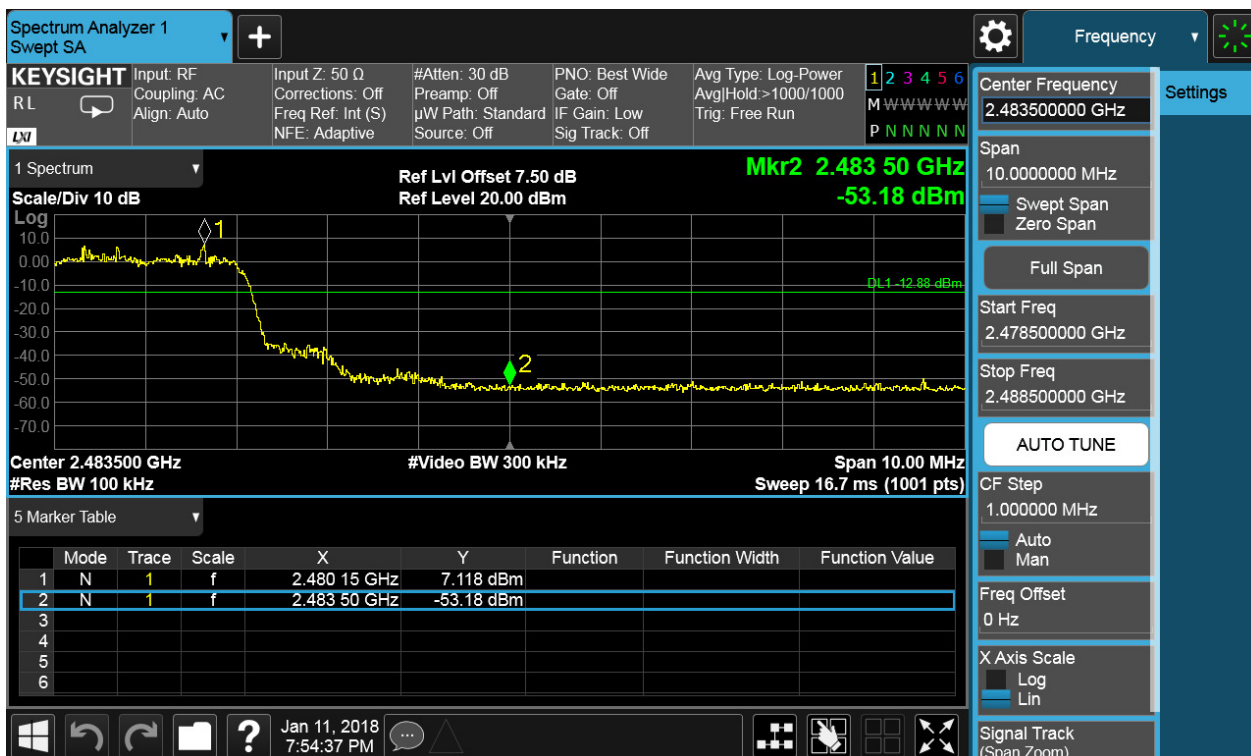


2.6 TM3_3DH5_Ch78

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.

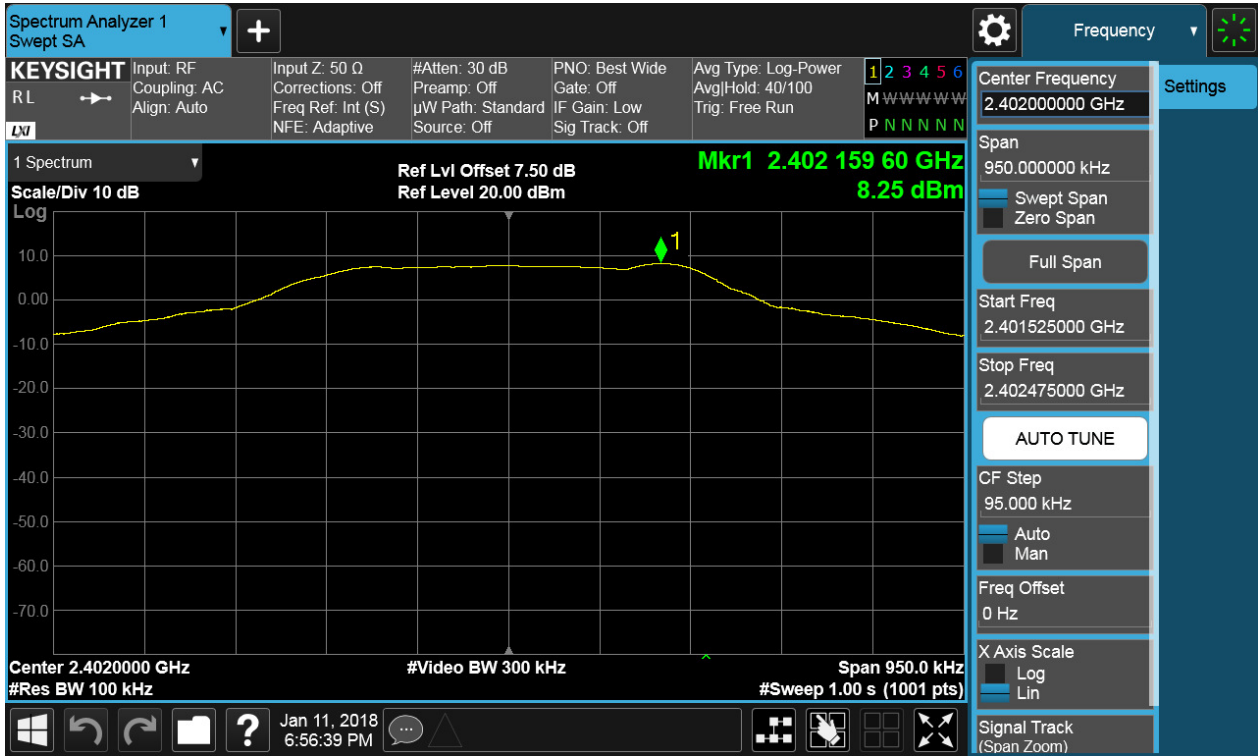
In the result table, the “< Limit” denotes that “The Puw [dBm] is less than Pref [dBm] - 20 [dB], see test plots for detailed”.

EUT Conf.	Pref [dBm/100 kHz]	Puw [dBm/100 kHz]	Verdict
TM1_DH5_Ch0	8.249	< Limit	Pass
TM1_DH5_Ch39	7.009	< Limit	Pass
TM1_DH5_Ch78	7.159	< Limit	Pass
TM2_2DH5_Ch0	8.343	< Limit	Pass
TM2_2DH5_Ch39	7.038	< Limit	Pass
TM2_2DH5_Ch78	7.226	< Limit	Pass
TM3_3DH5_Ch0	8.325	< Limit	Pass
TM3_3DH5_Ch39	7.036	< Limit	Pass
TM3_3DH5_Ch78	7.242	< Limit	Pass

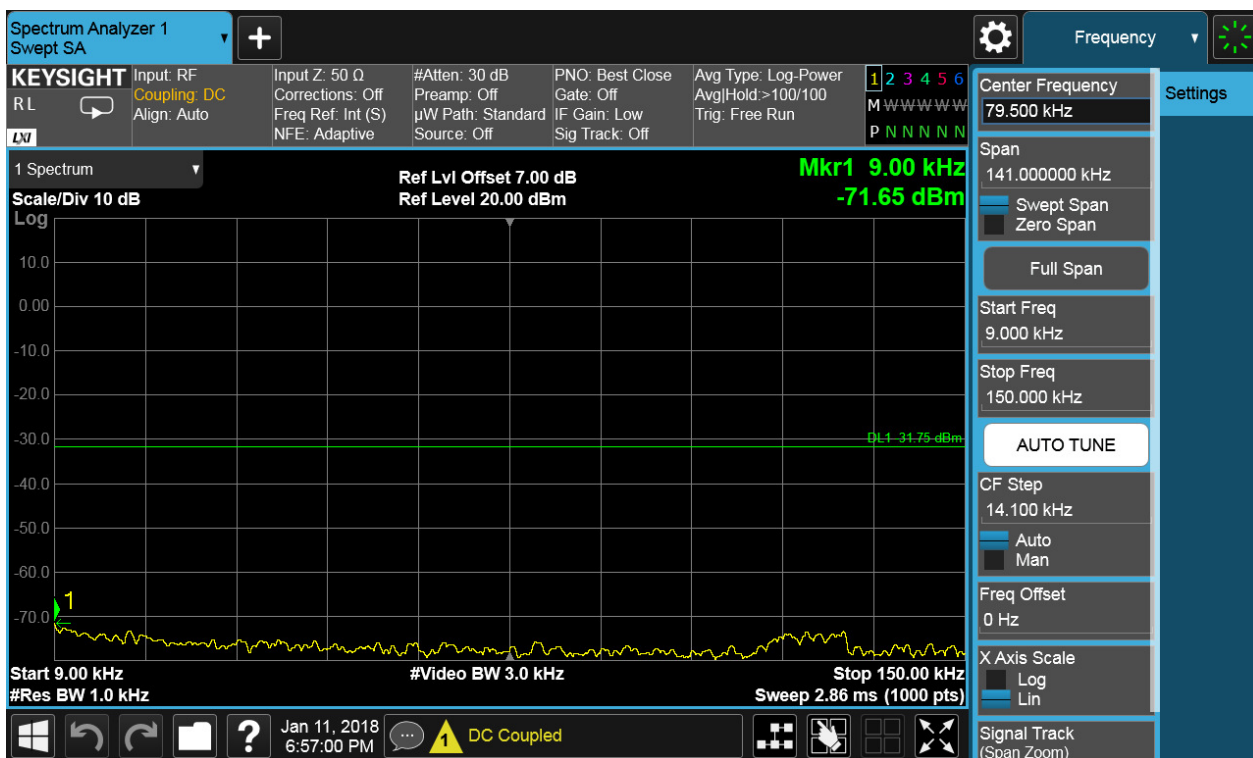
2 Test Plot

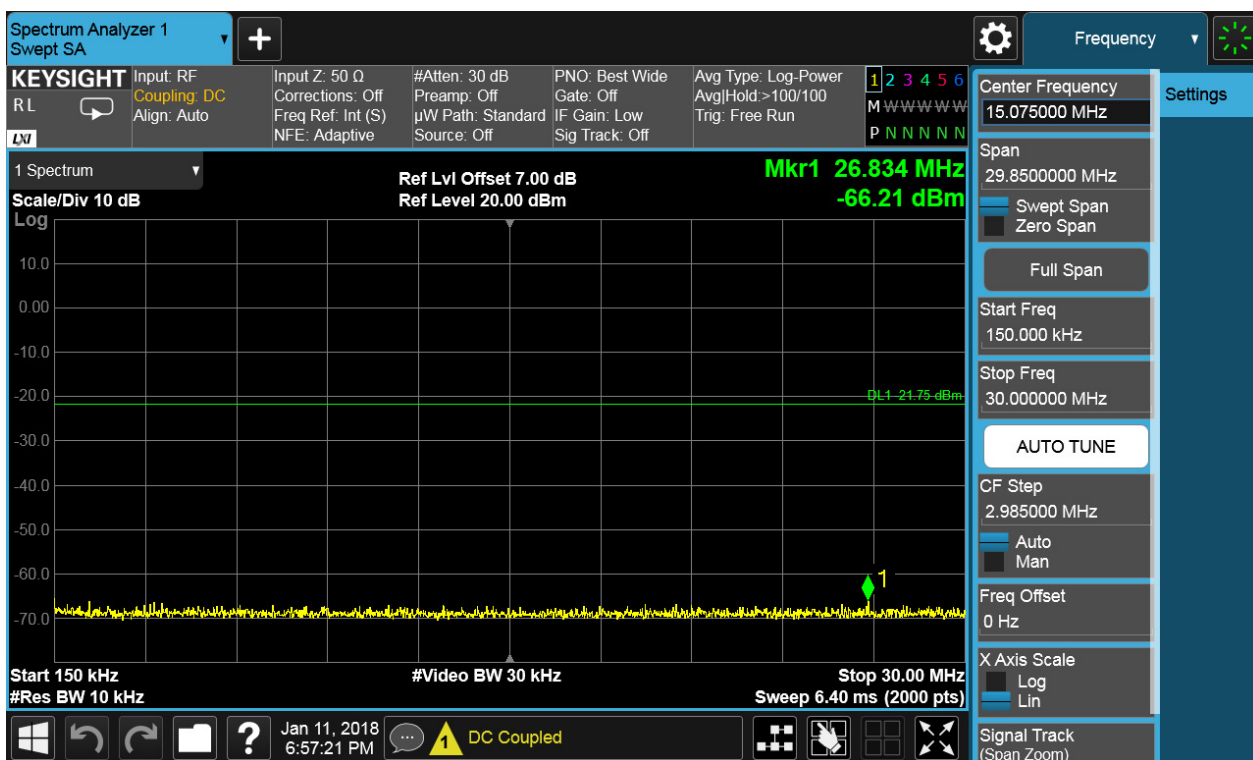
2.1 TM1_DH5_Ch0

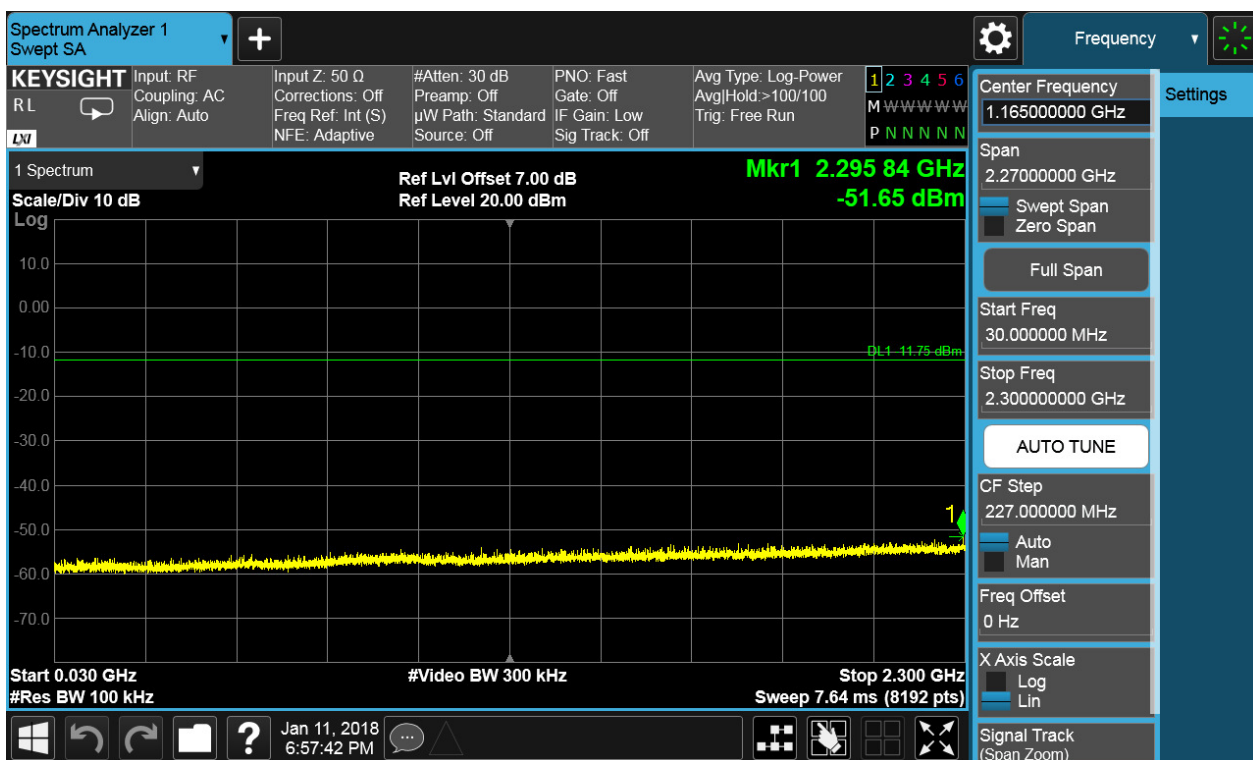
2.1.1 Pref

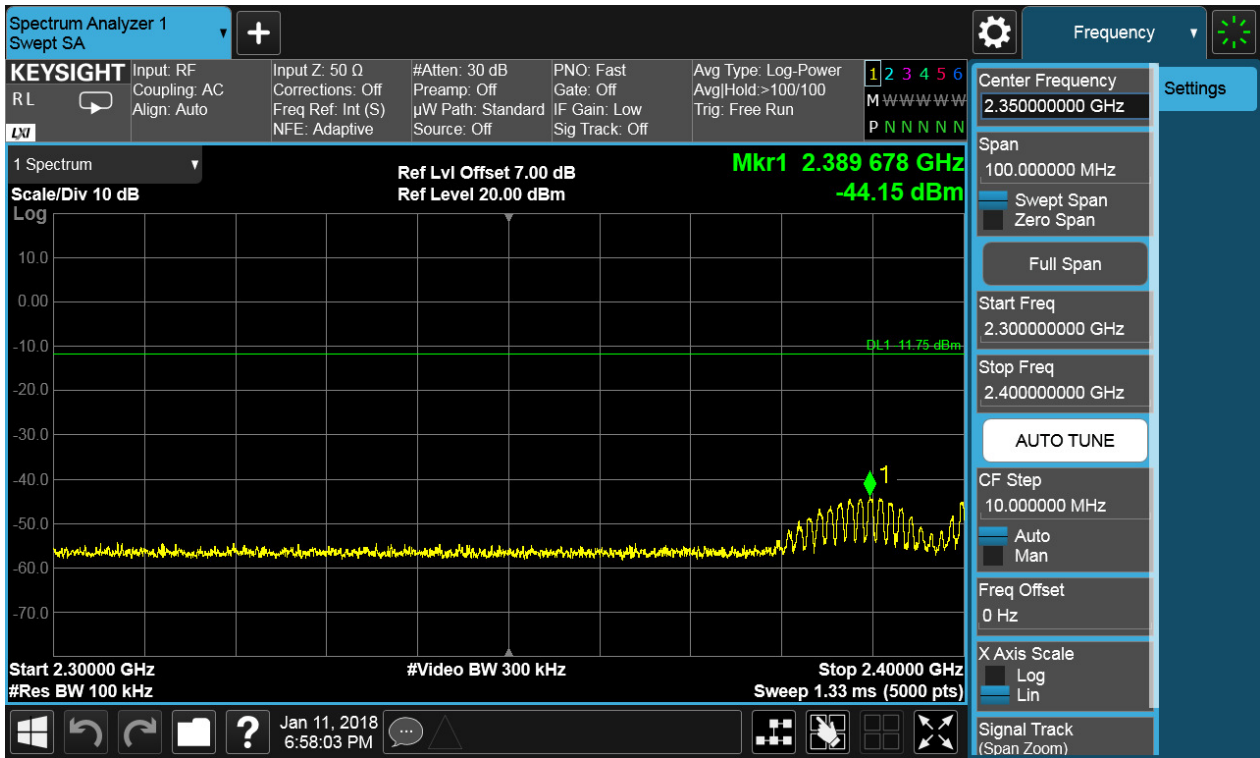


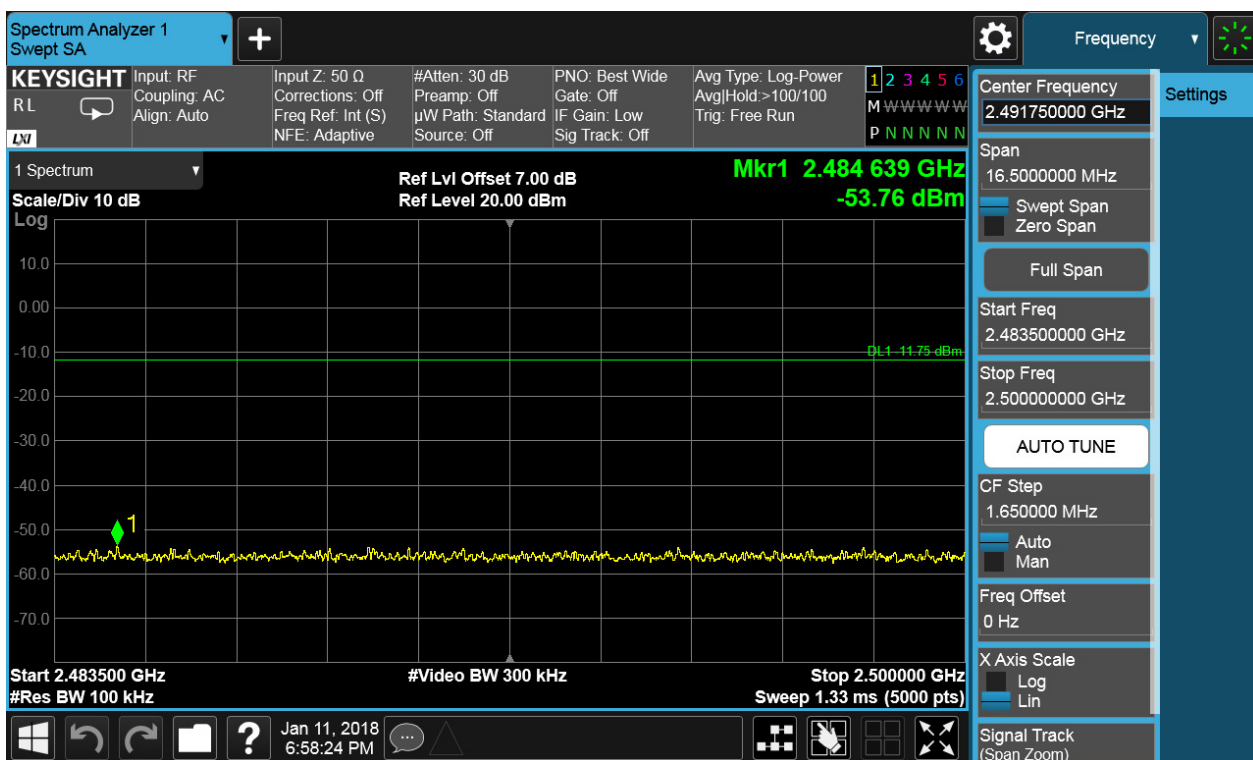
2.1.2 Puw

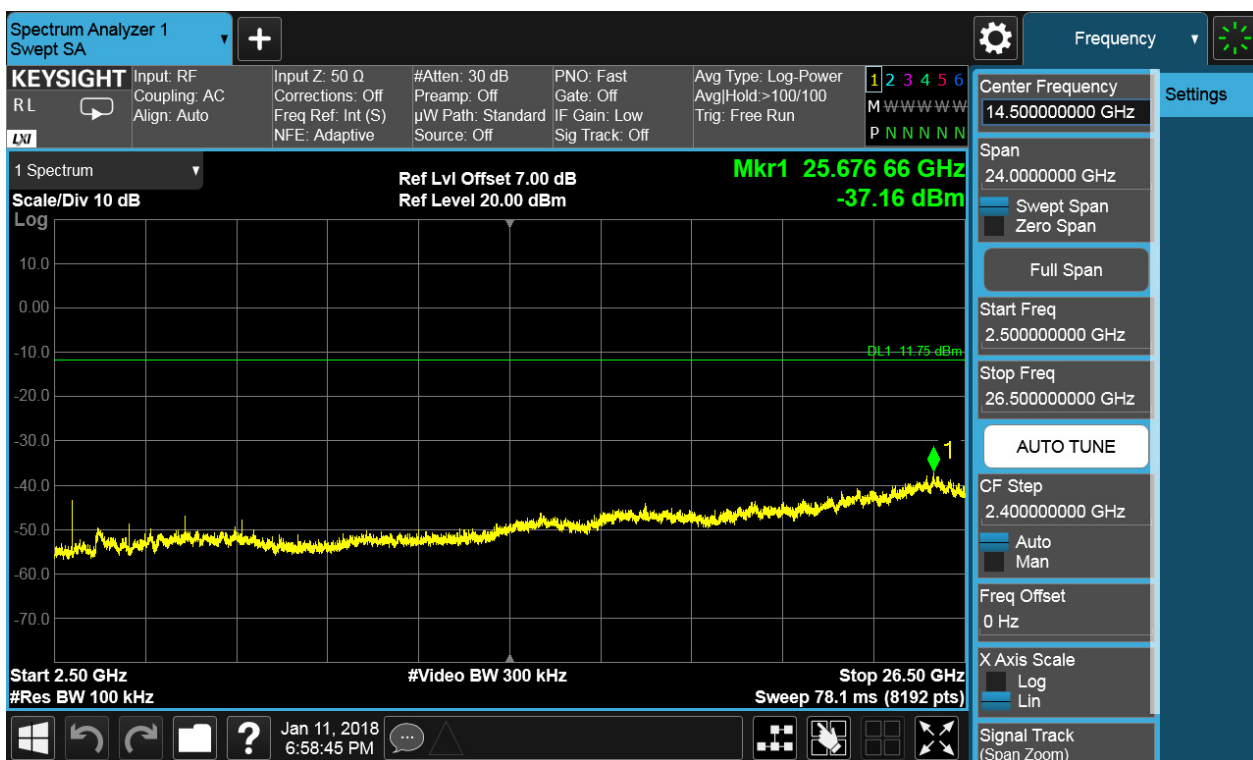






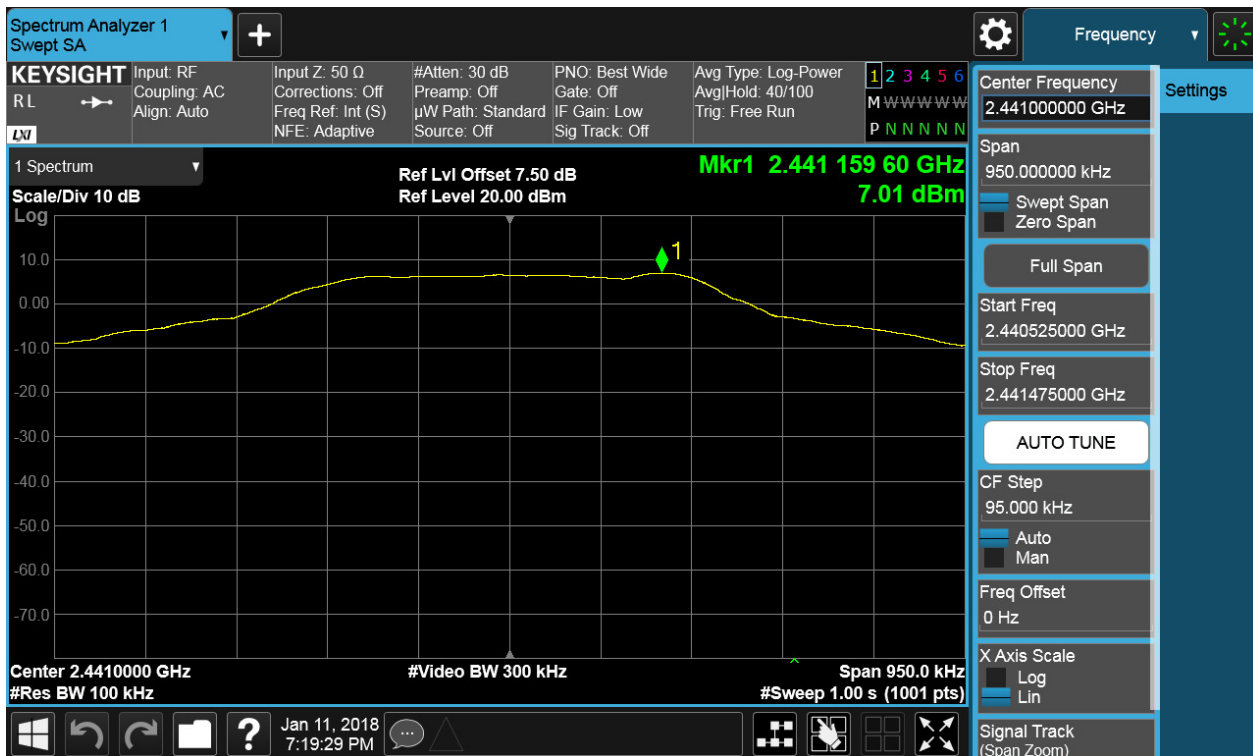




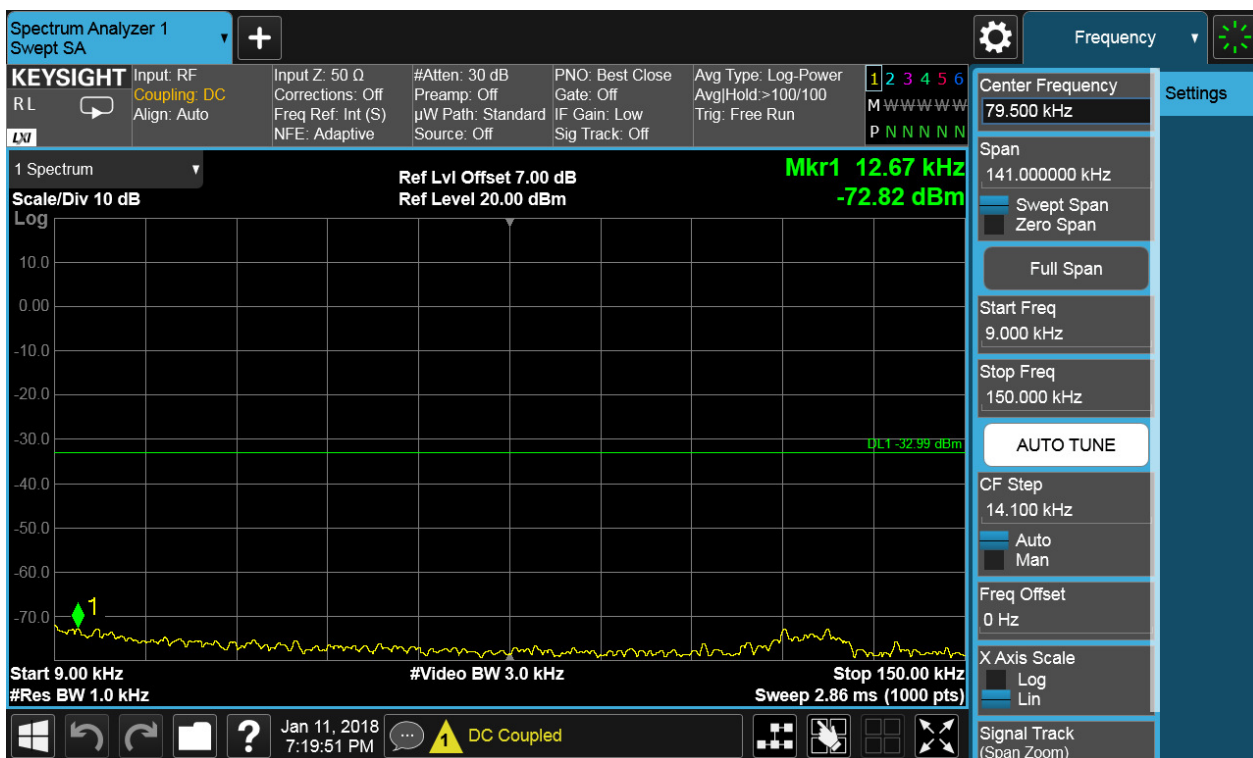


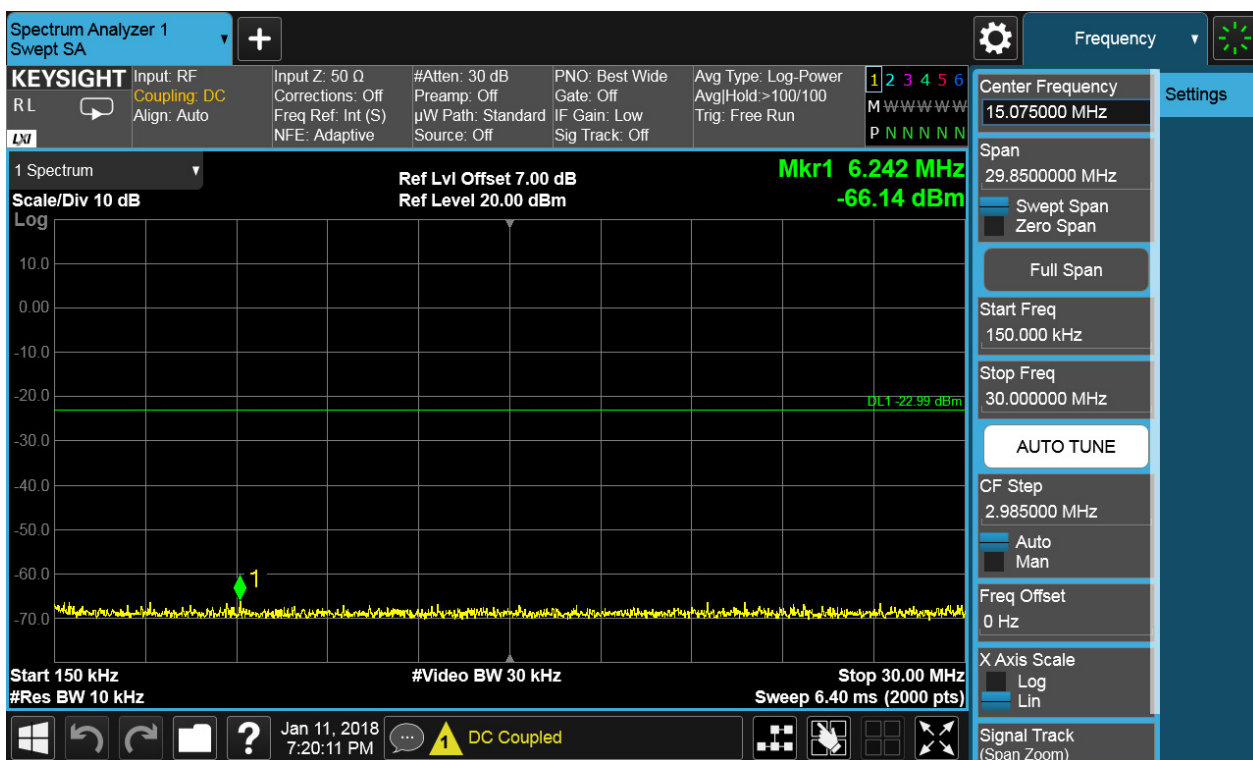
2.2 TM1_DH5_Ch39

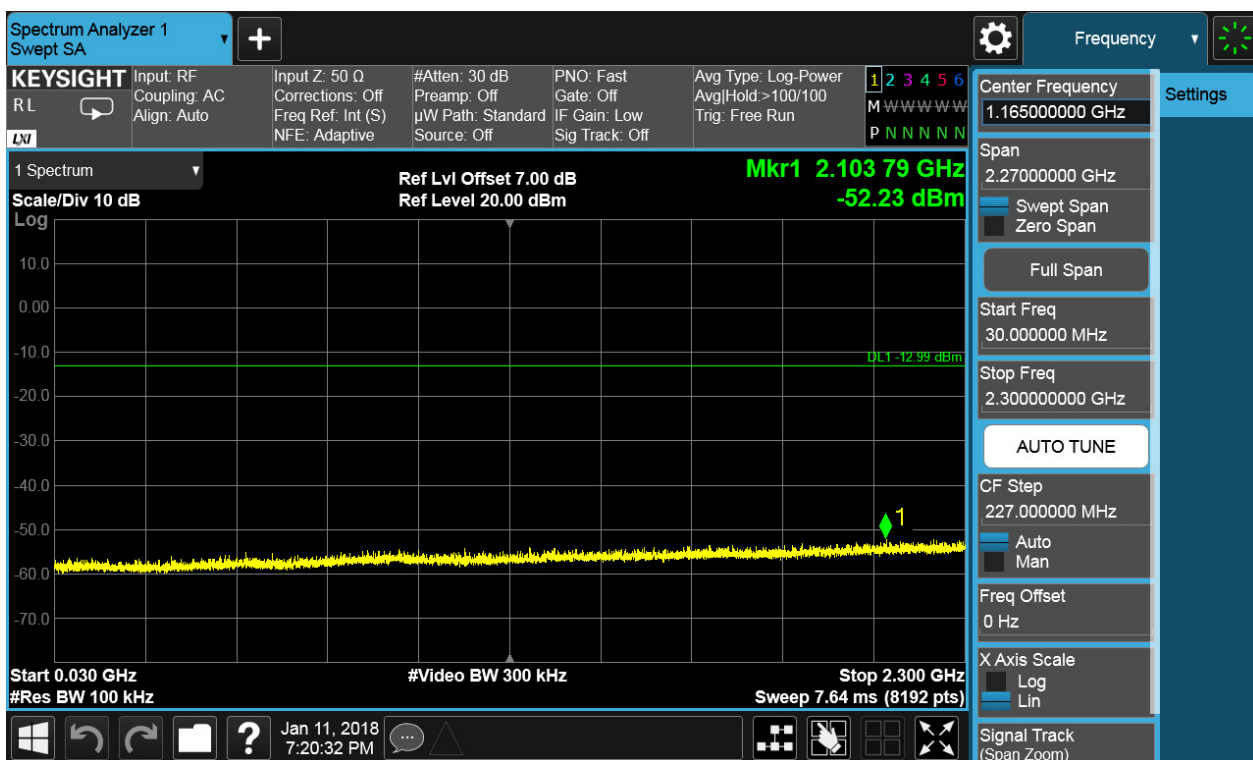
2.2.1 Pref

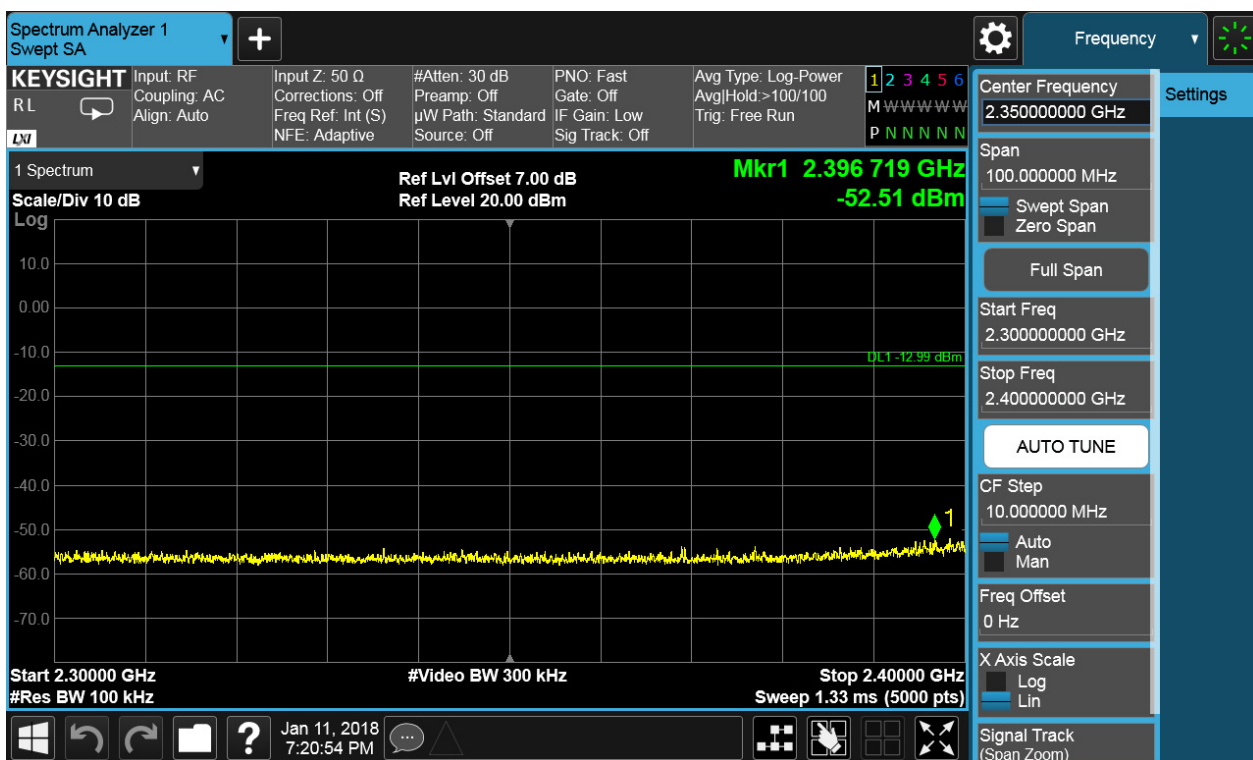


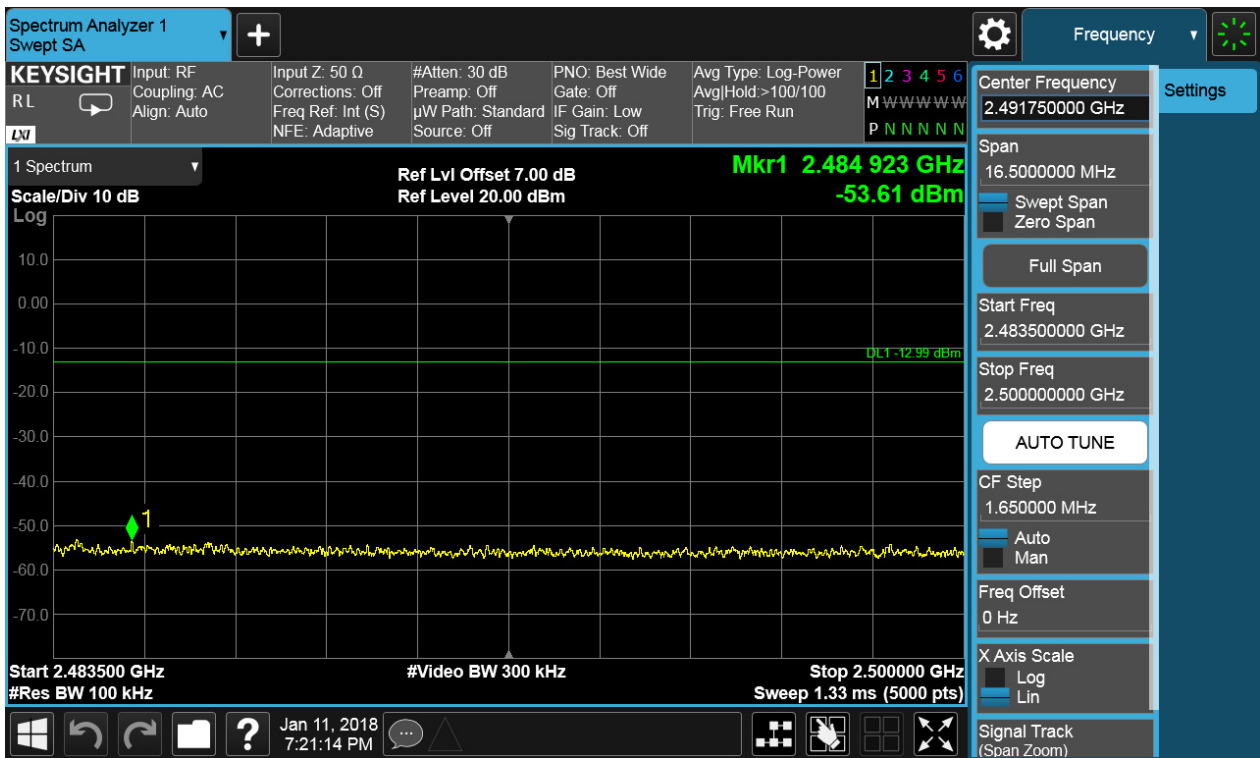
2.2.2 Puw

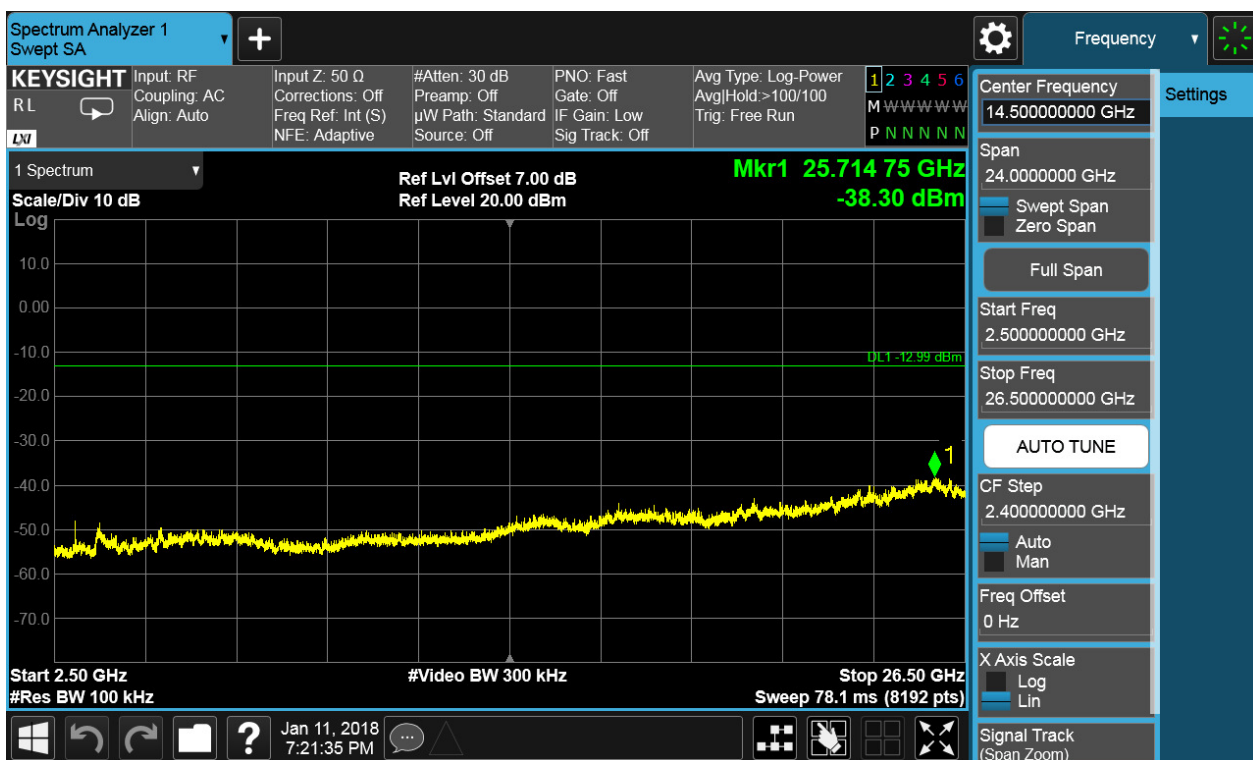






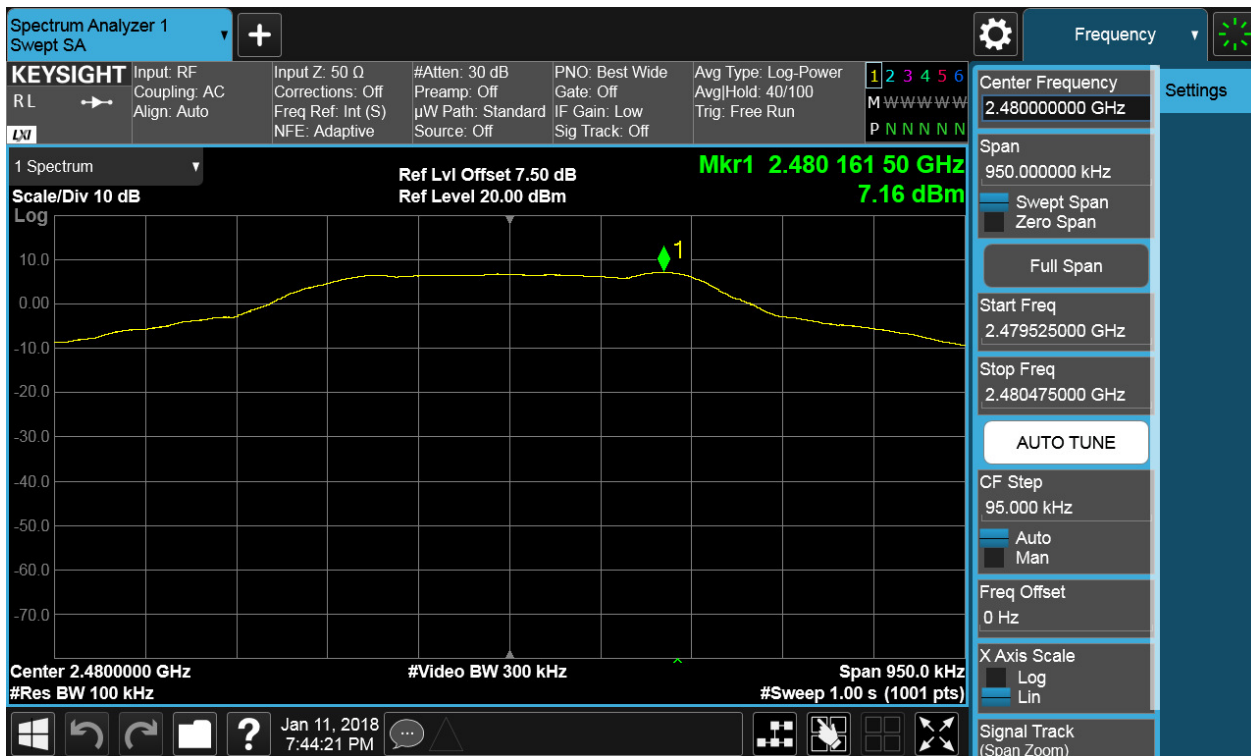




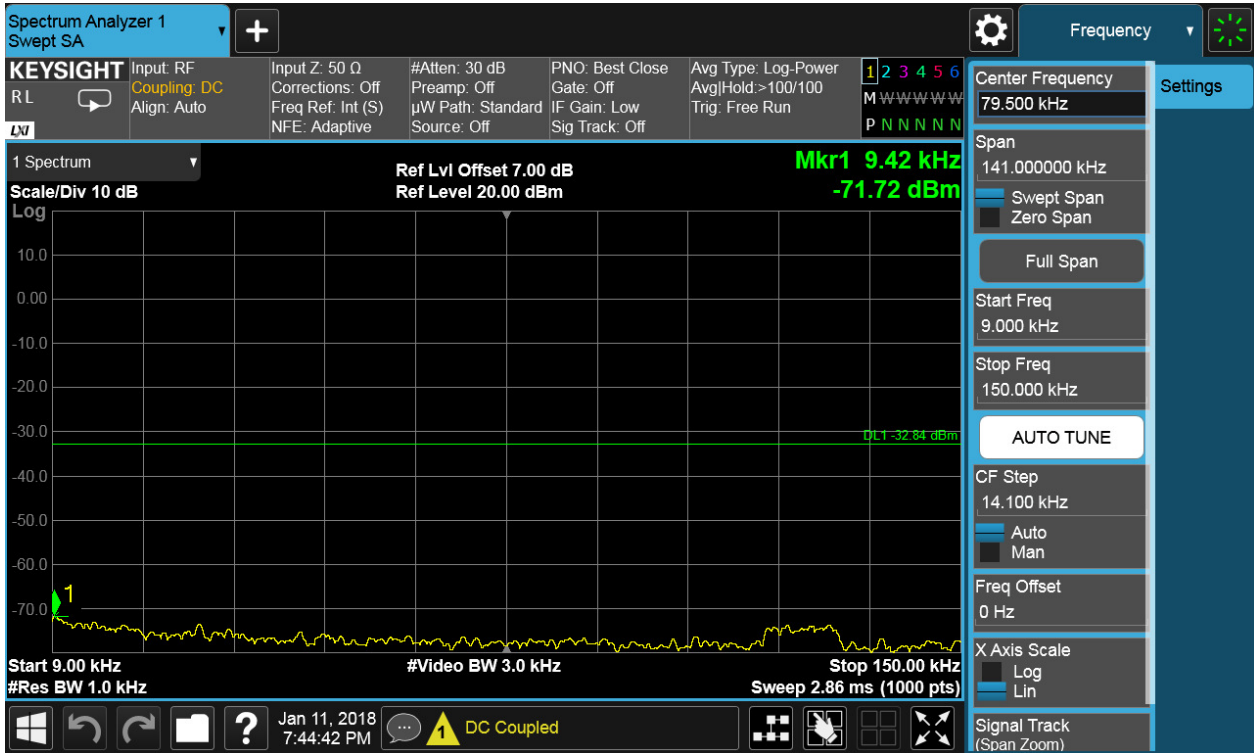


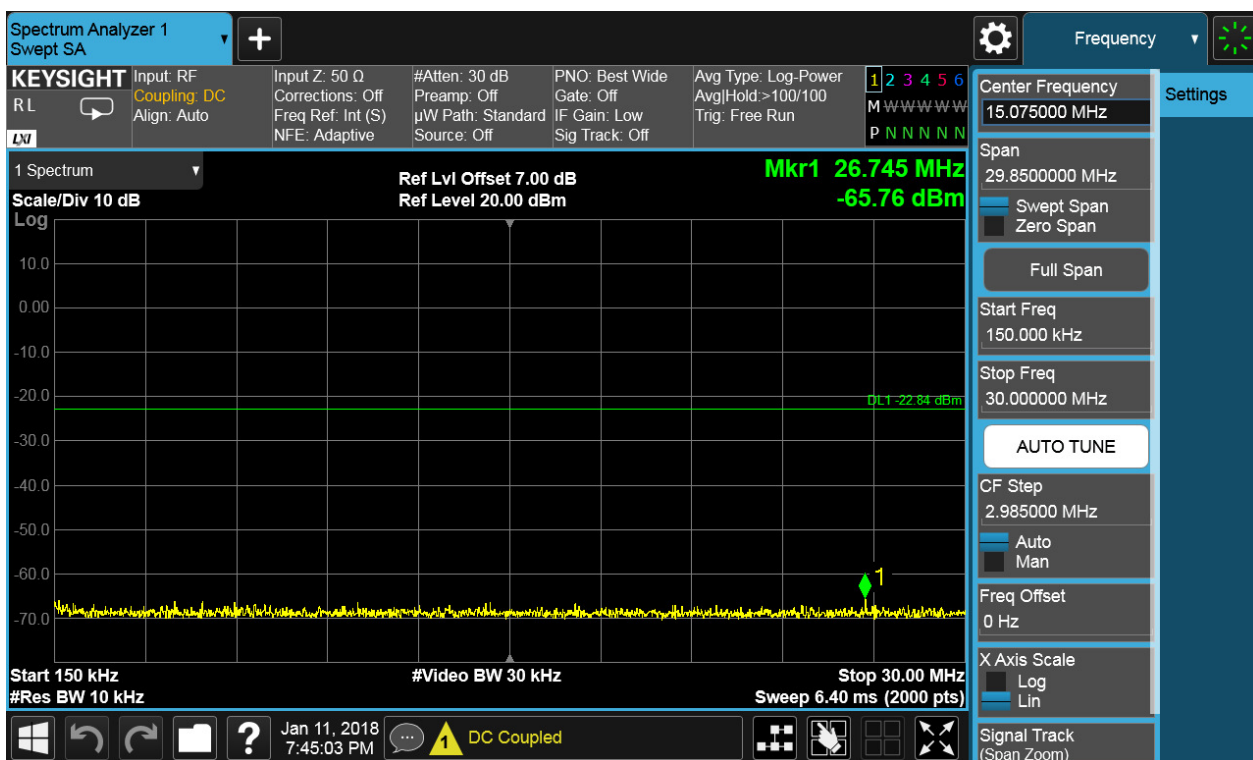
2.3 TM1_DH5_Ch78

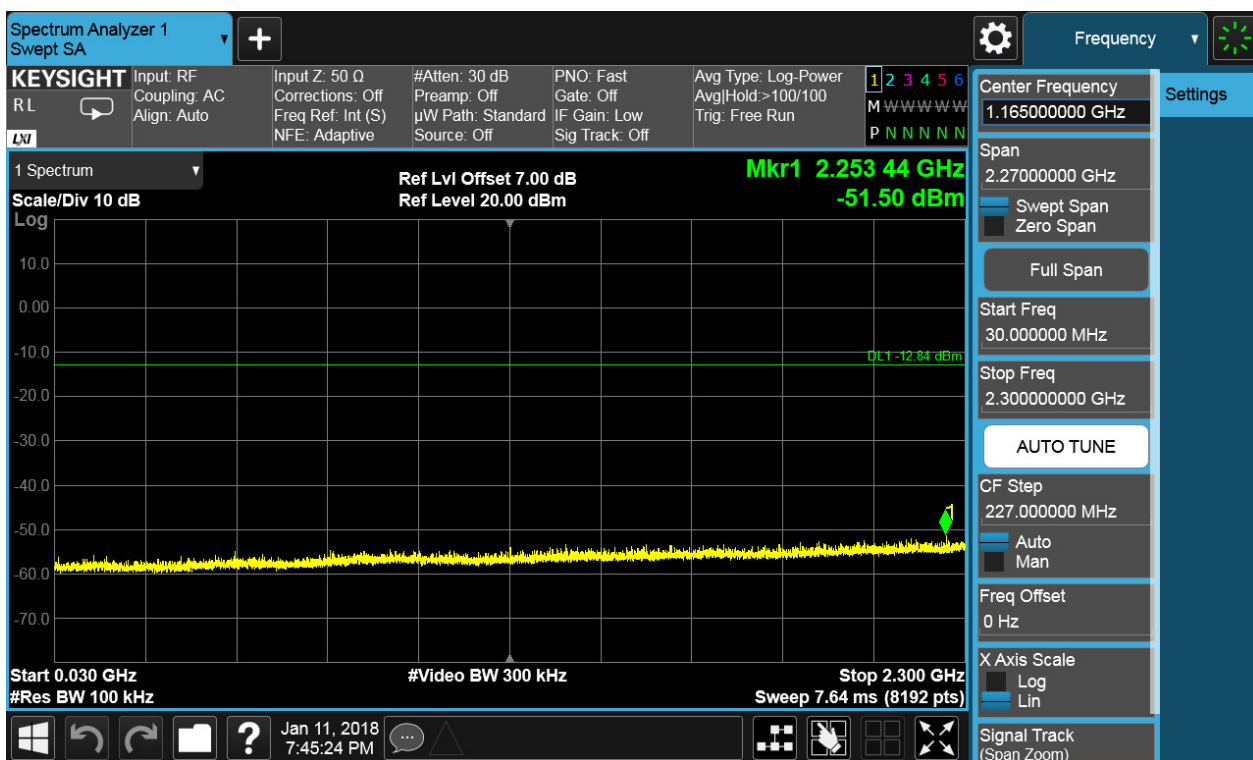
2.3.1 Pref

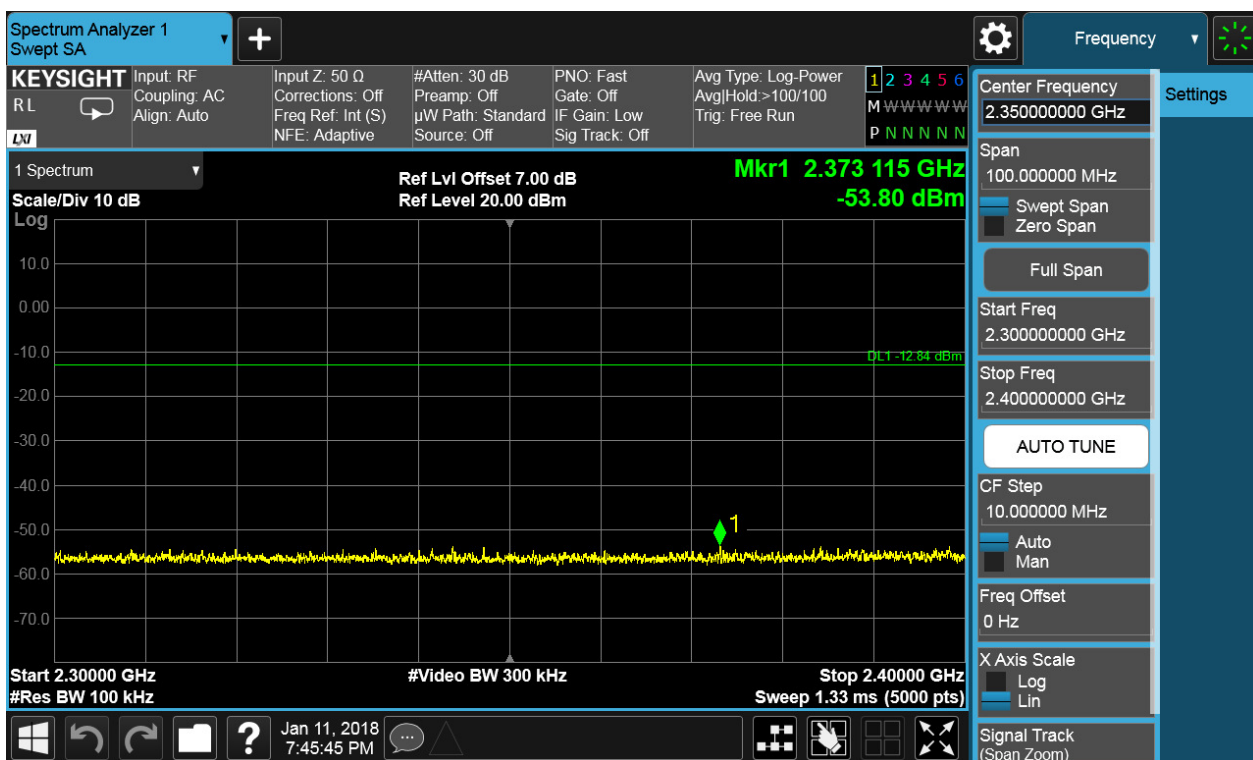


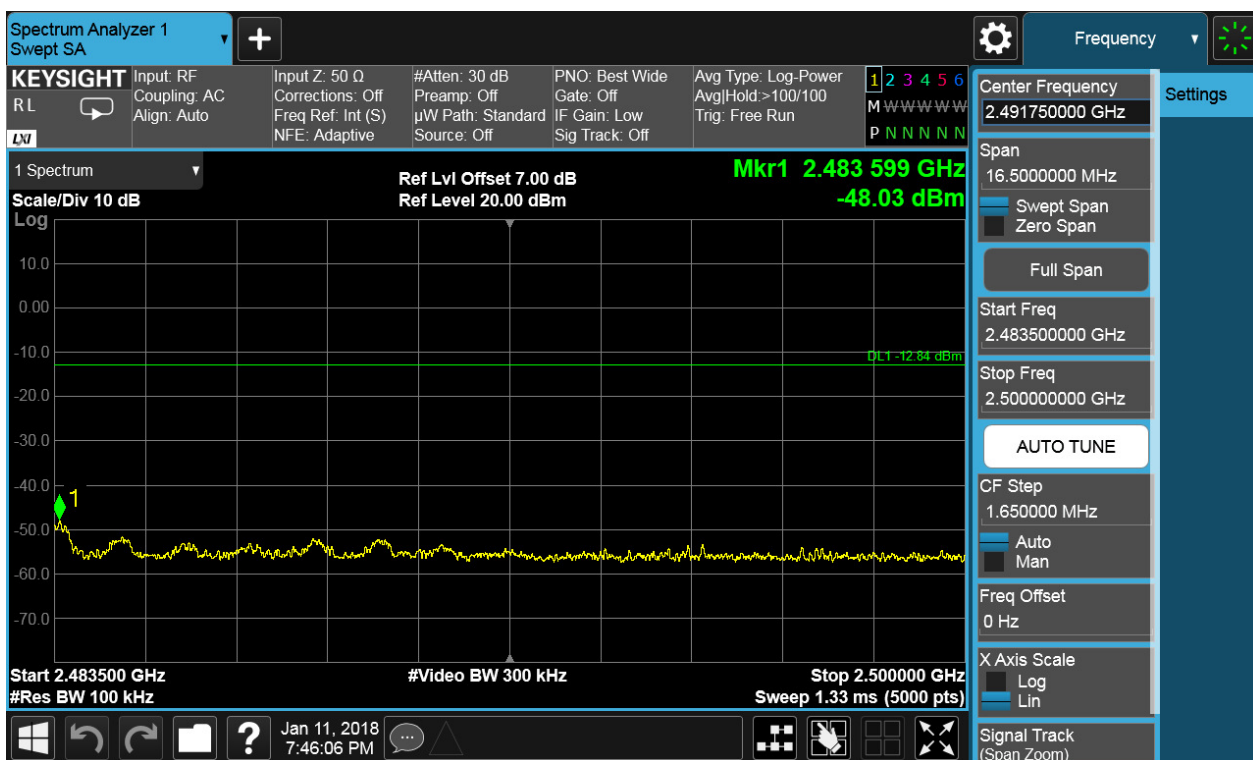
2.3.2 Puw

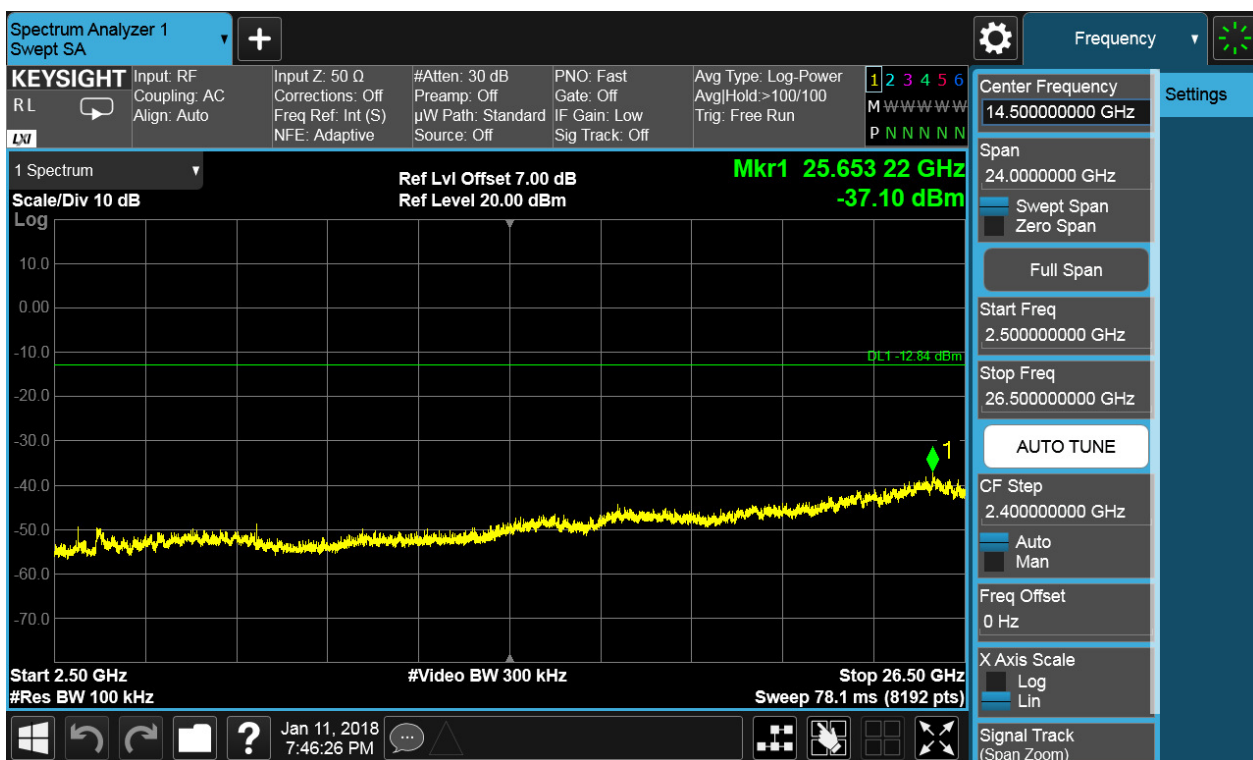






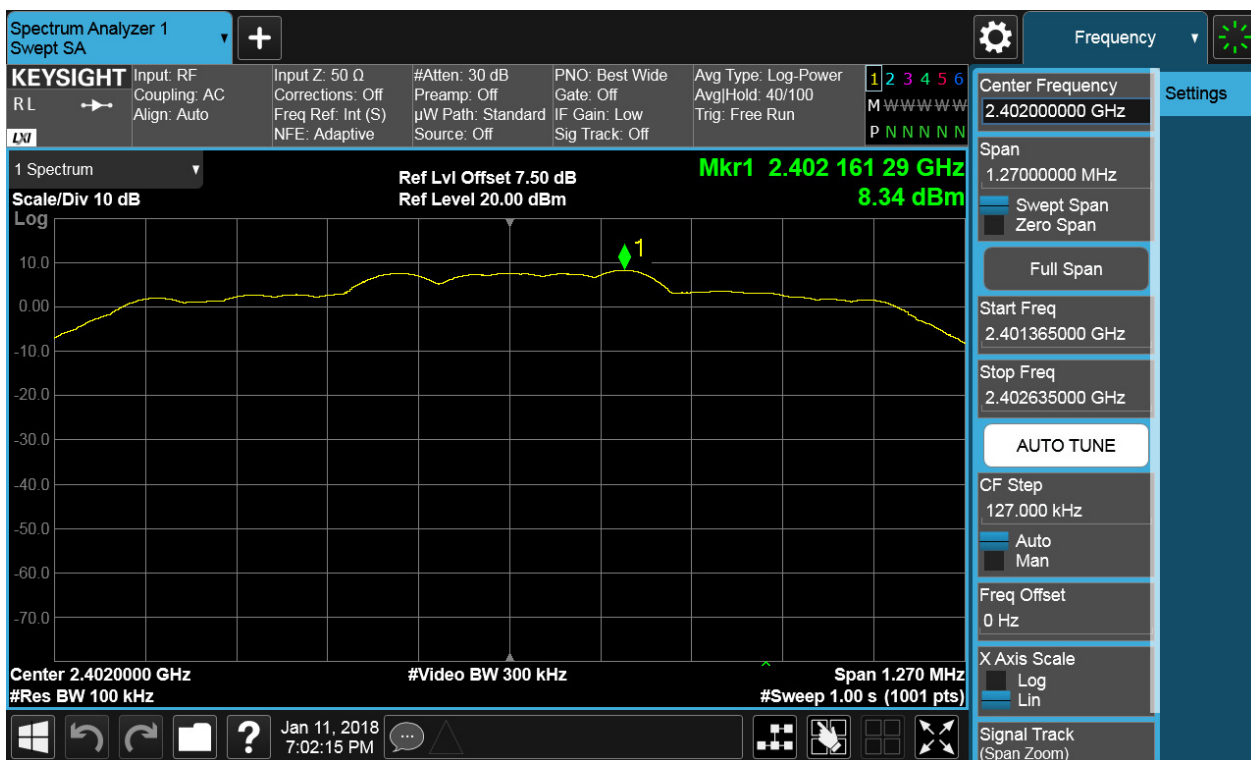




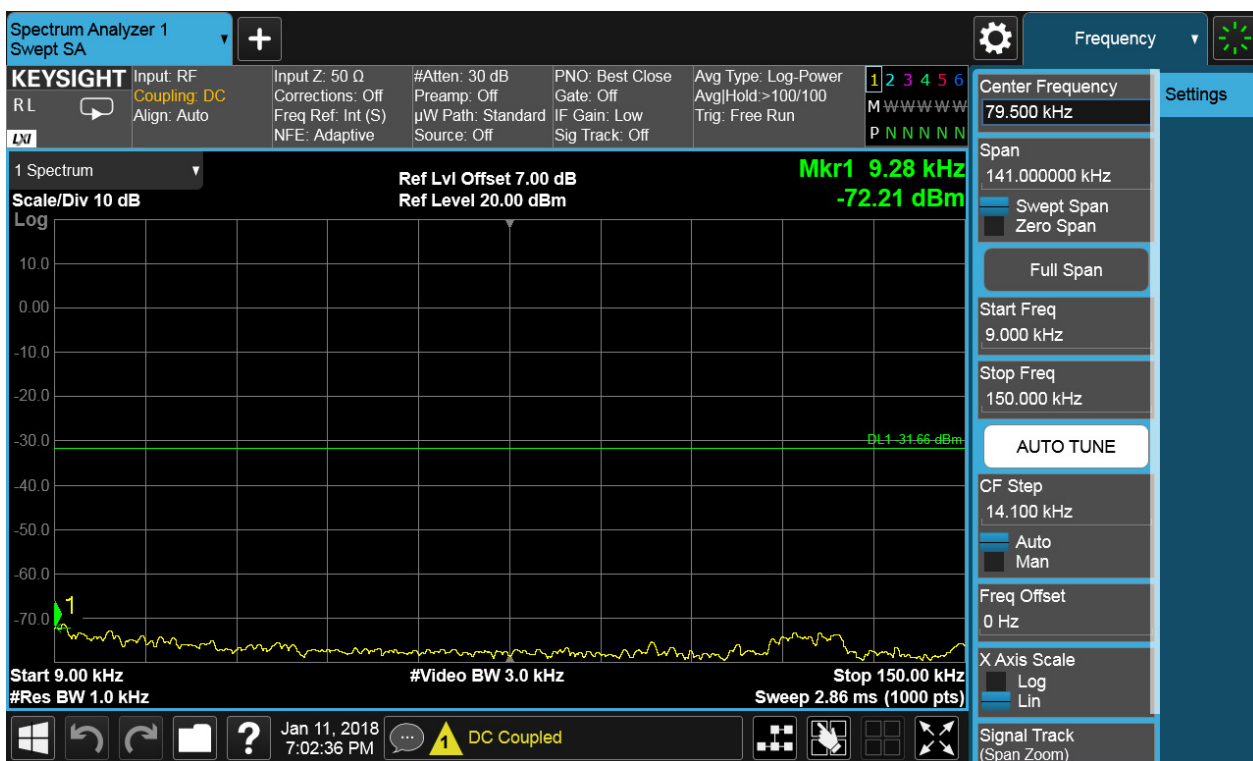


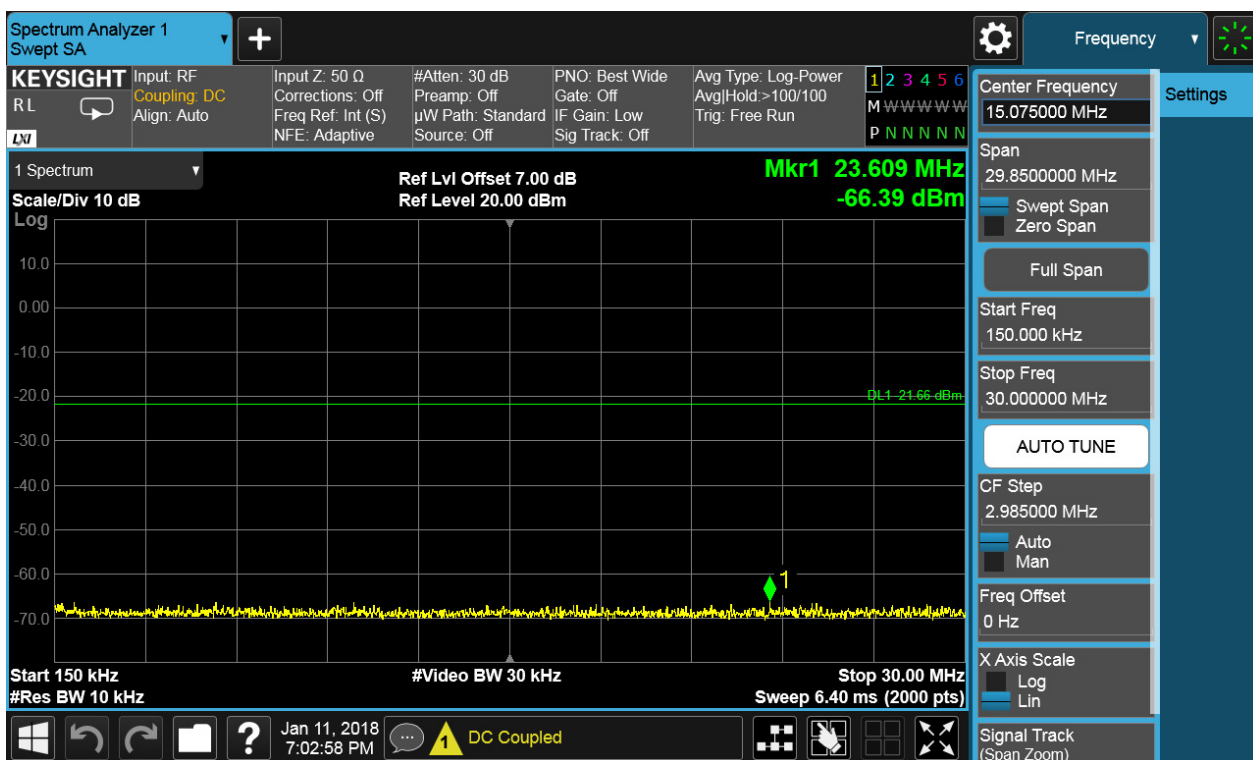
2.4 TM2_2DH5_Ch0

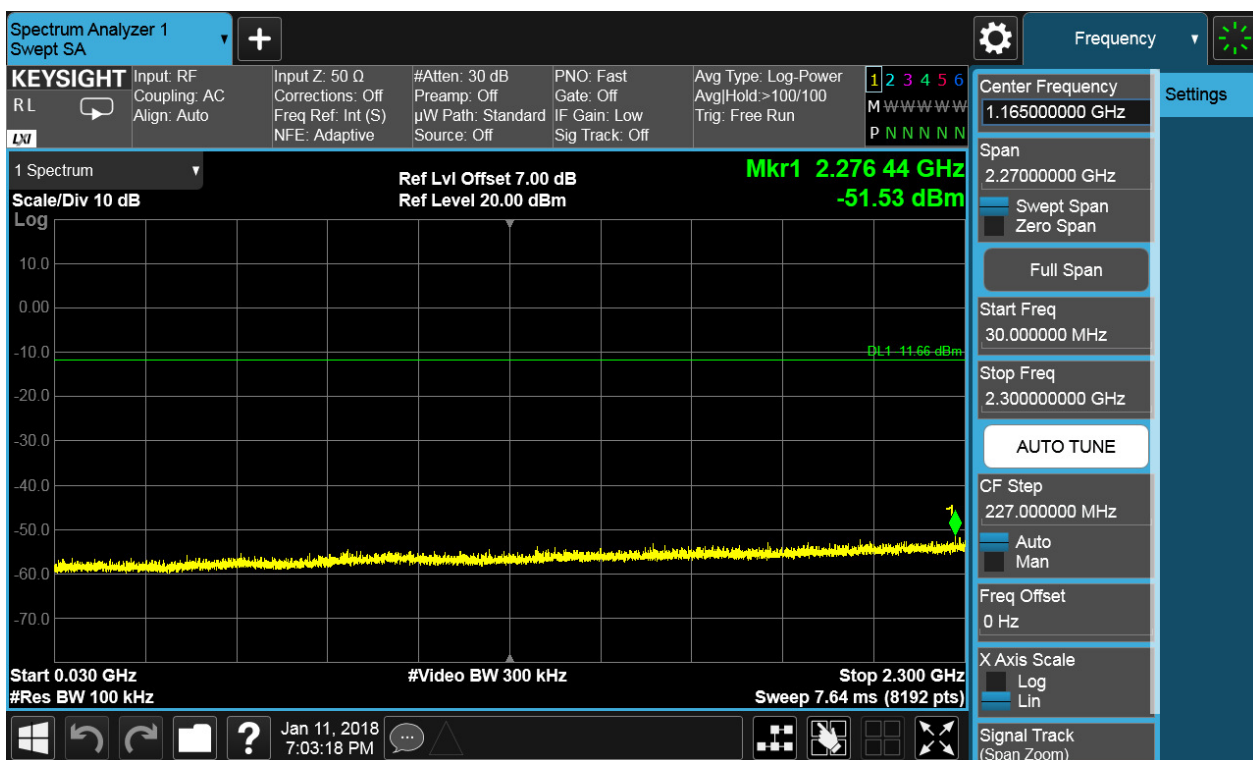
2.4.1 Pref

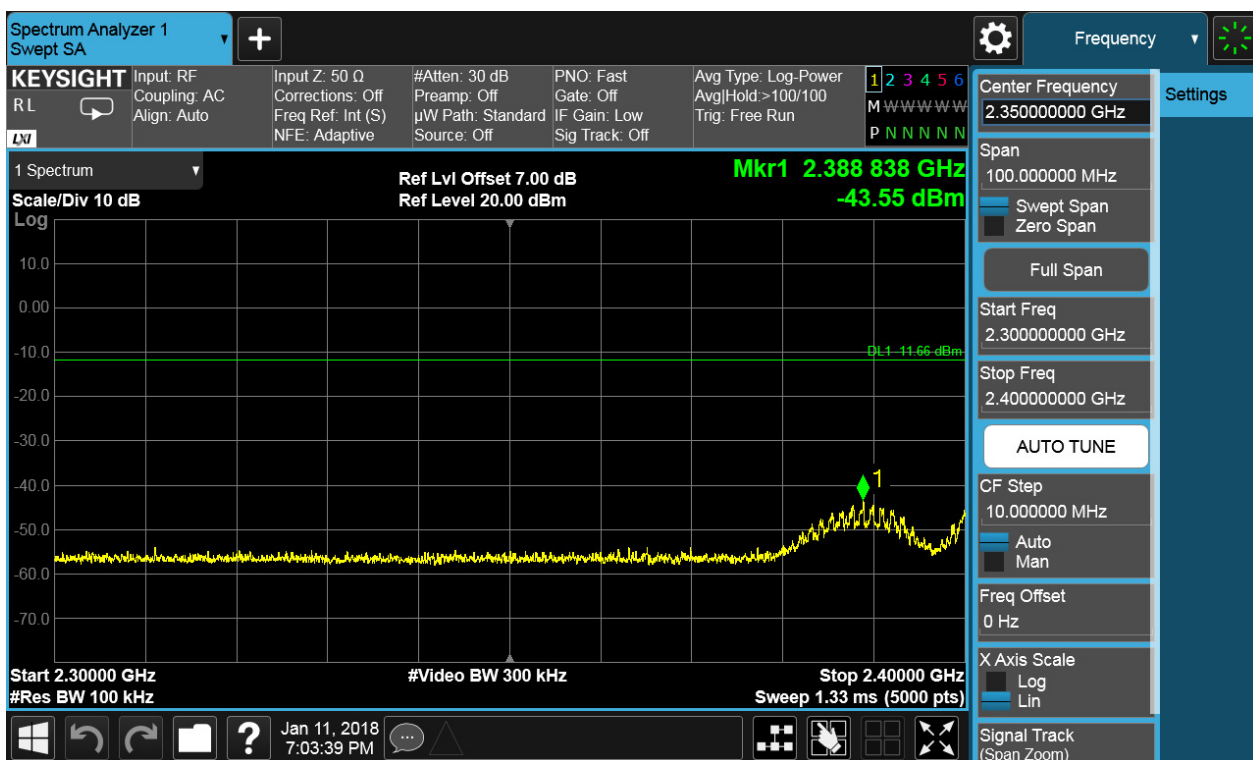


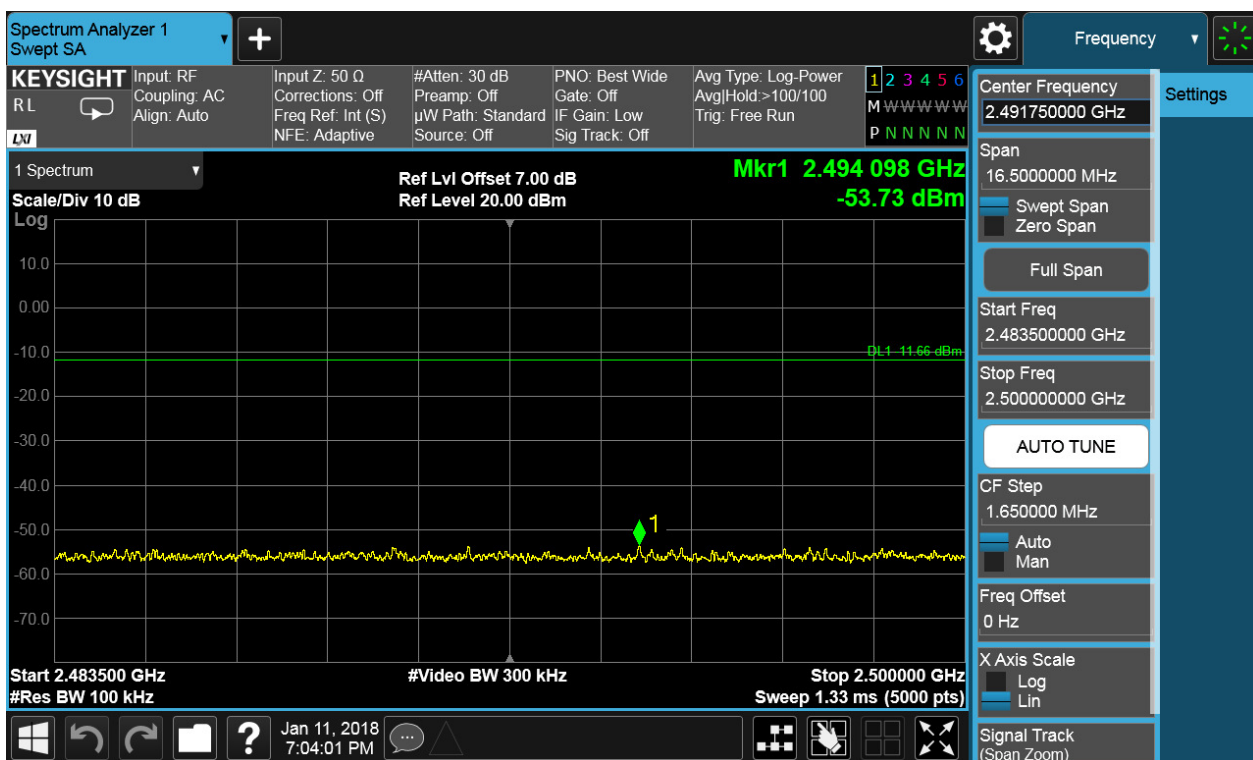
2.4.2 Puw

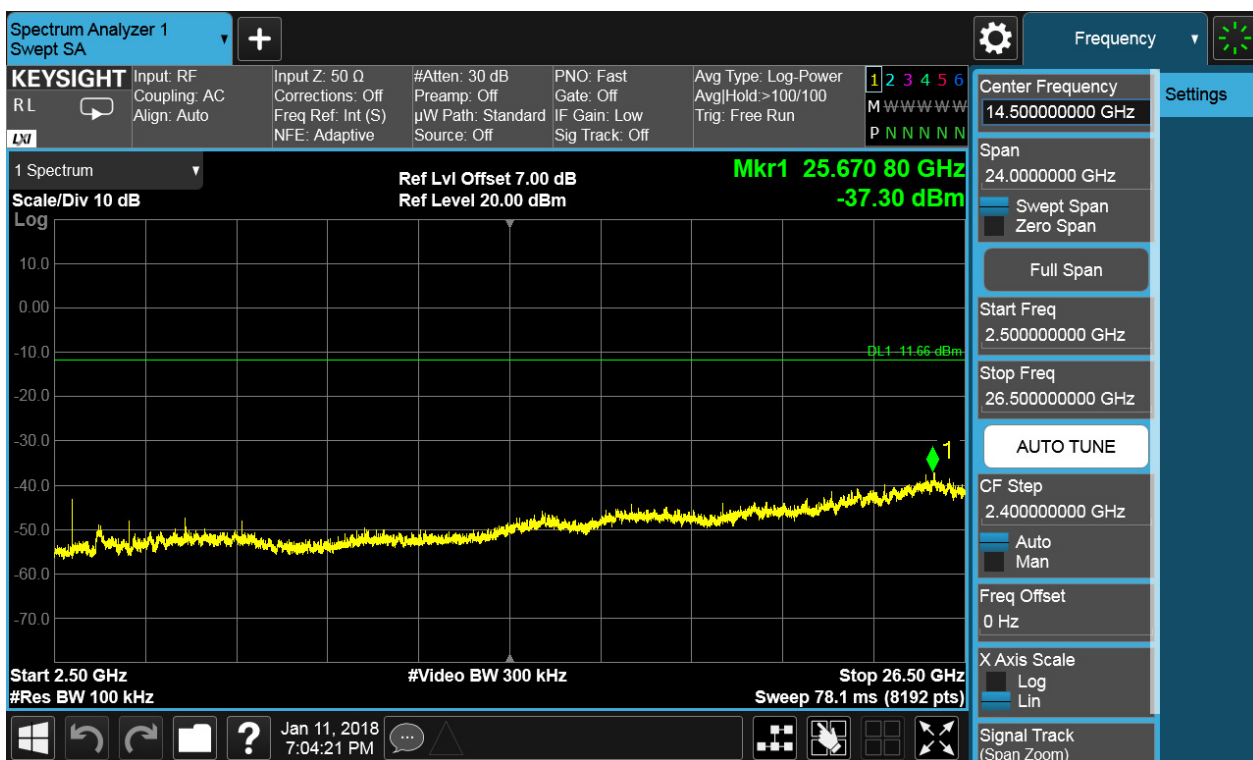






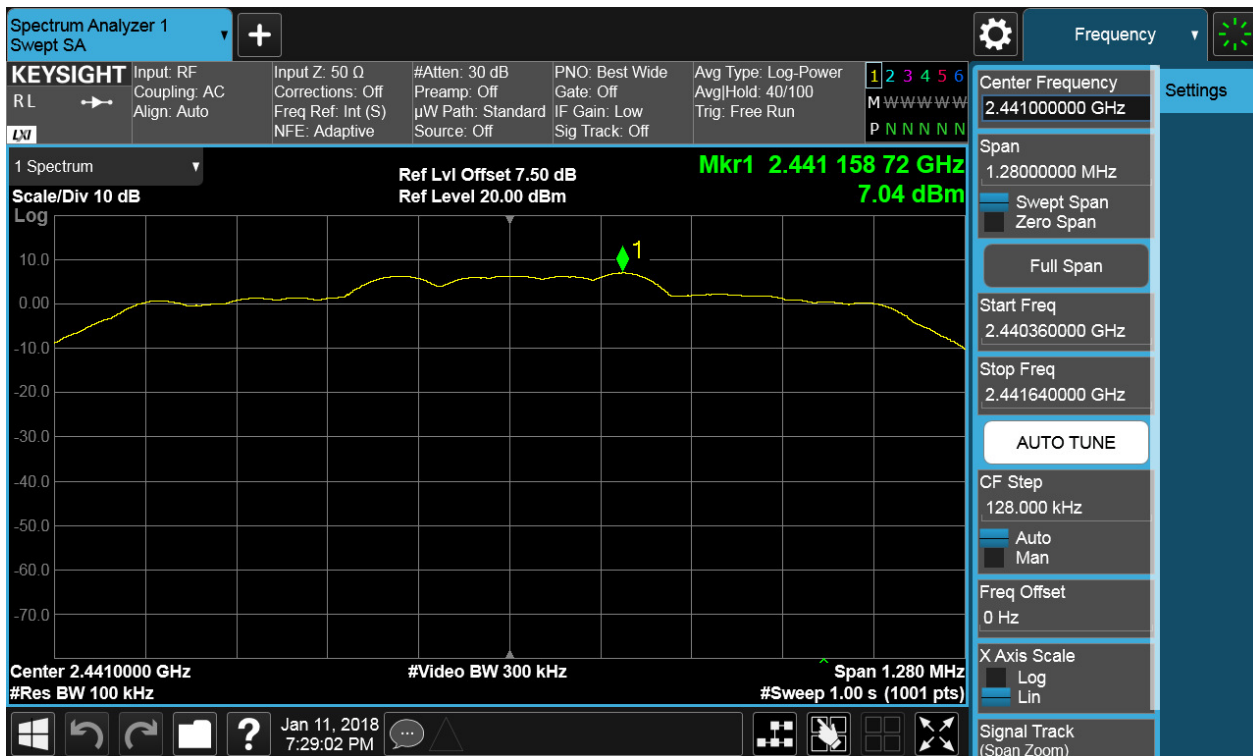






2.5 TM2_2DH5_Ch39

2.5.1 Pref



2.5.2 Puw

