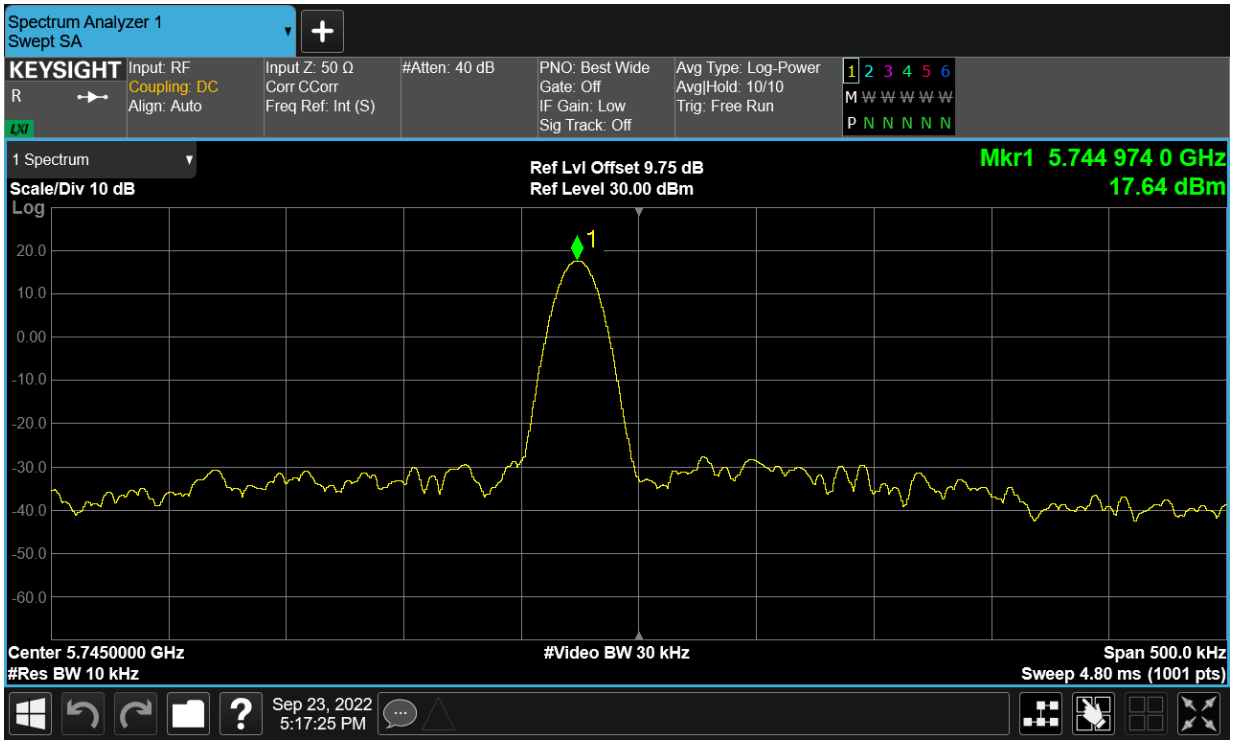
Test Data

Frequency Stability

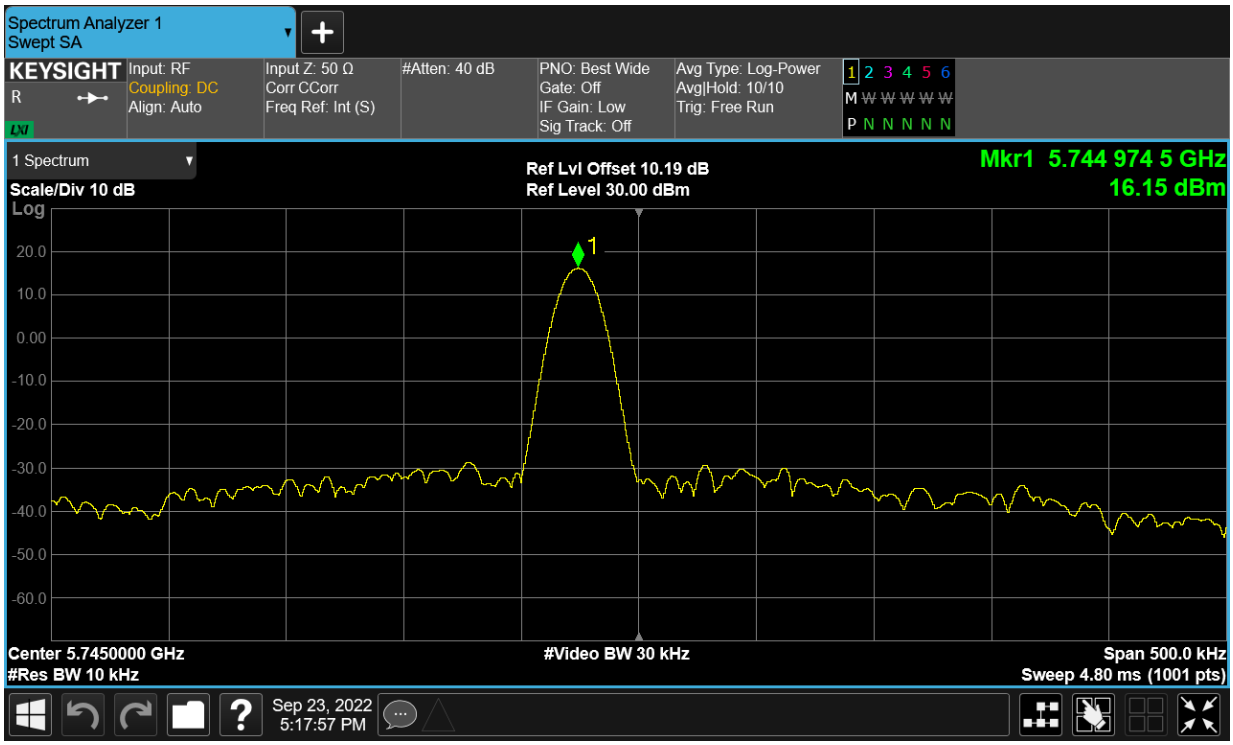
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5745	Ant1	5744.974	-4.53		Pass
HVNT	a	5745	Ant2	5744.9745	-4.44		Pass
LVNT	a	5745	Ant1	5744.974	-4.53		Pass
LVNT	a	5745	Ant2	5744.974	-4.53		Pass
NVHT	a	5745	Ant1	5744.974	-4.53		Pass
NVHT	a	5745	Ant2	5744.974	-4.53		Pass
NVLT	a	5745	Ant1	5744.9735	-4.61		Pass
NVLT	a	5745	Ant2	5744.974	-4.53		Pass
NVNT	a	5745	Ant1	5744.9735	-4.61		Pass
NVNT	a	5745	Ant2	5744.974	-4.53		Pass
HVNT	ac20	5745	Sum	5744.974	-4.53		Pass
LVNT	ac20	5745	Sum	5744.974	-4.53		Pass
NVHT	ac20	5745	Sum	5744.974	-4.53		Pass
NVLT	ac20	5745	Sum	5744.9745	-4.44		Pass
NVNT	ac20	5745	Sum	5744.975	-4.35		Pass
HVNT	ac40	5755	Sum	5754.977	-4		Pass
LVNT	ac40	5755	Sum	5754.977	-4		Pass
NVHT	ac40	5755	Sum	5754.977	-4	Within authorized band	Pass
NVLT	ac40	5755	Sum	5754.977	-4		Pass
NVNT	ac40	5755	Sum	5754.977	-4		Pass
HVNT	ac80	5775	Sum	5774.98	-3.46		Pass
LVNT	ac80	5775	Sum	5774.98	-3.46		Pass
NVHT	ac80	5775	Sum	5774.981	-3.29		Pass
NVLT	ac80	5775	Sum	5774.982	-3.12		Pass
NVNT	ac80	5775	Sum	5774.983	-2.94		Pass
HVNT	n20	5745	Sum	5744.974	-4.53		Pass
LVNT	n20	5745	Sum	5744.974	-4.53		Pass
NVHT	n20	5745	Sum	5744.974	-4.53		Pass
NVLT	n20	5745	Sum	5744.974	-4.53		Pass
NVNT	n20	5745	Sum	5744.974	-4.53		Pass
HVNT	n40	5755	Sum	5754.976	-4.17		Pass
LVNT	n40	5755	Sum	5754.9765	-4.08		Pass
NVHT	n40	5755	Sum	5754.976	-4.17		Pass
NVLT	n40	5755	Sum	5754.9765	-4.08		Pass
NVNT	n40	5755	Sum	5754.976	-4.17		Pass

Remark: “NTNV” means Normal Temperature Normal Voltage, “NVHT” means Normal Voltage High Temperature, “NVLT” means Normal Voltage Low Temperature, “LVNT” means Low Voltage Normal Temperature, “HVNT” means High Voltage Normal Temperature.

Test Graphs
Freq. Stability HVNT a 5745MHz Ant1

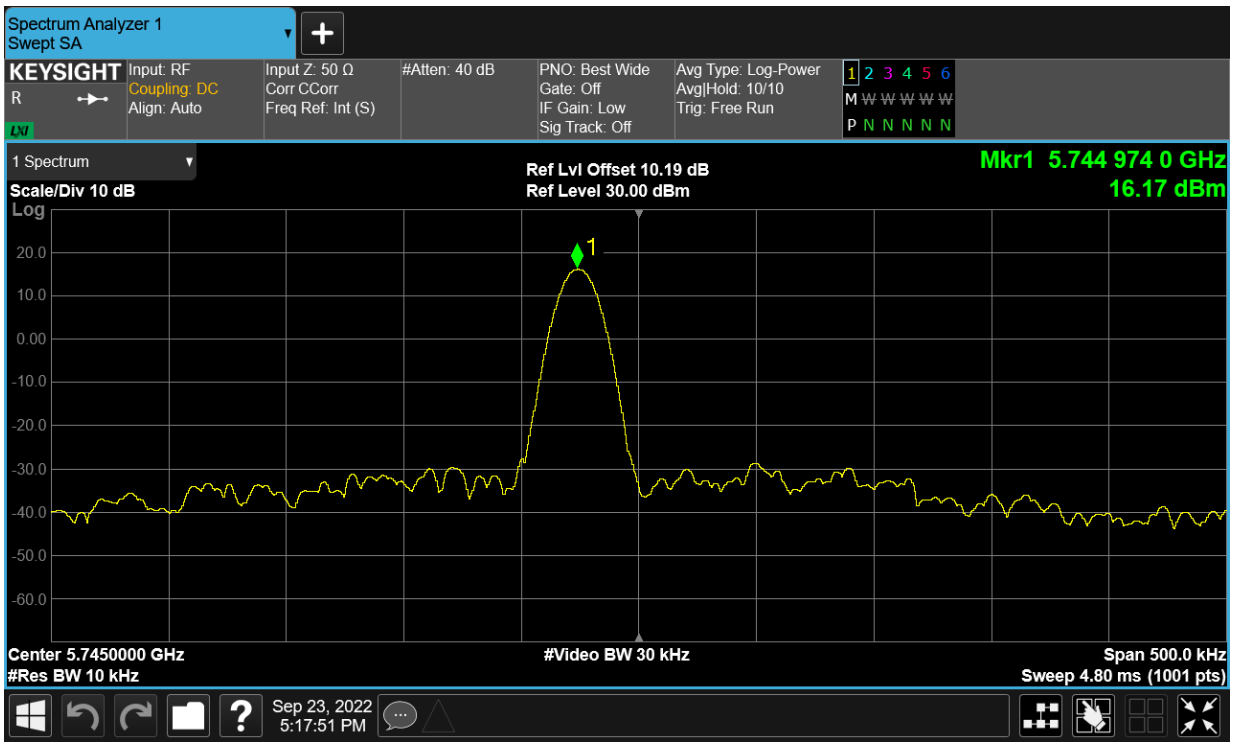


Freq. Stability HVNT a 5745MHz Ant2



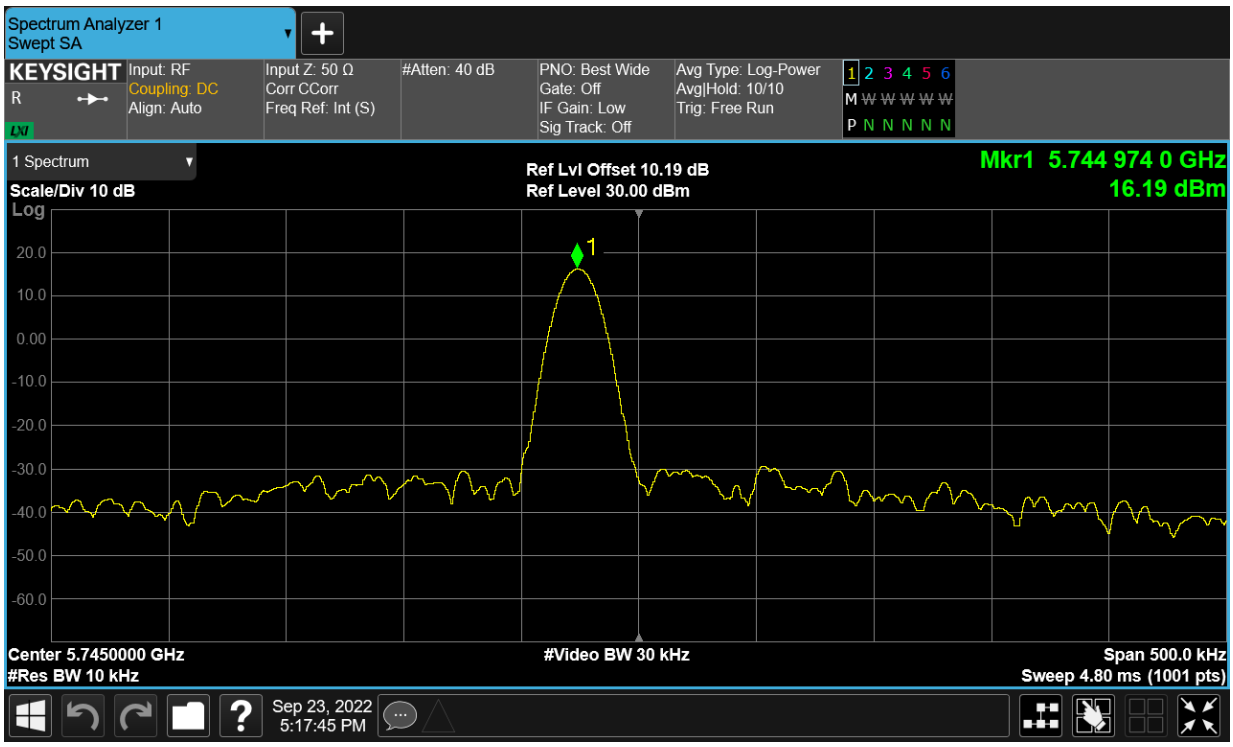
Freq. Stability LVNT a 5745MHz Ant1

Freq. Stability LVNT a 5745MHz Ant2

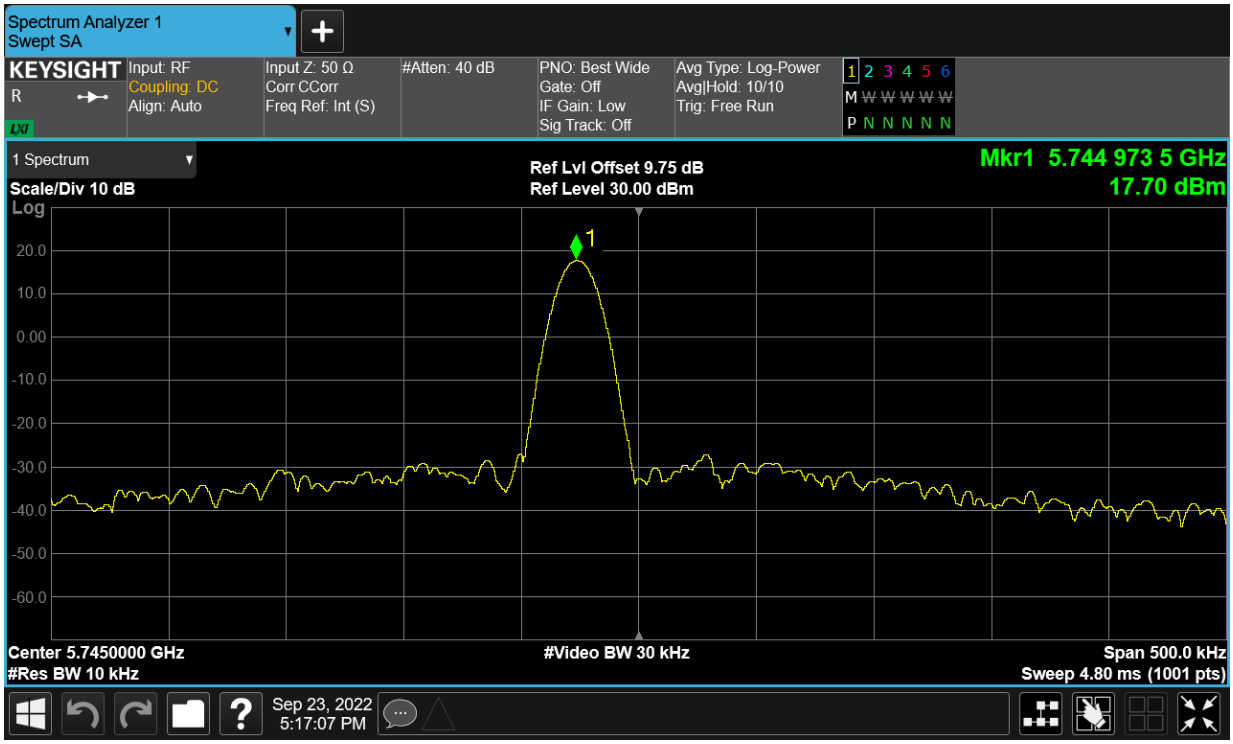


Freq. Stability NVHT a 5745MHz Ant1

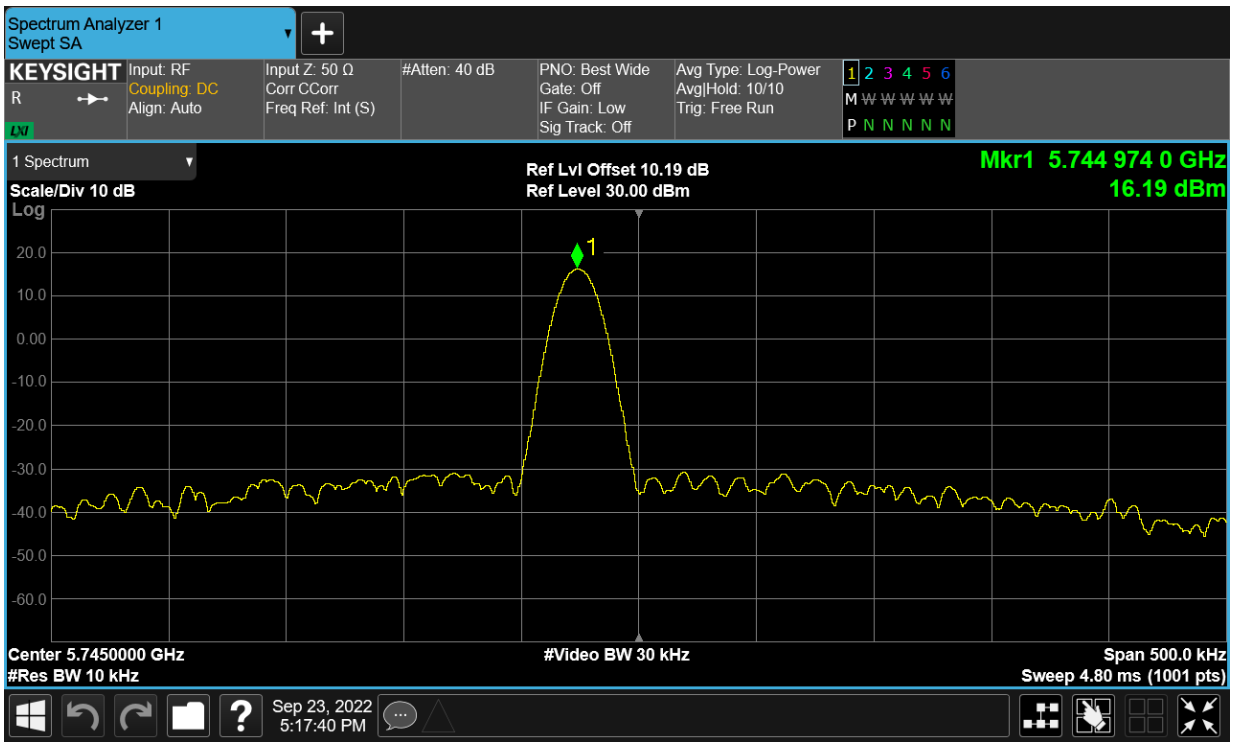
Freq. Stability NVHT a 5745MHz Ant2



Freq. Stability NVLT a 5745MHz Ant1

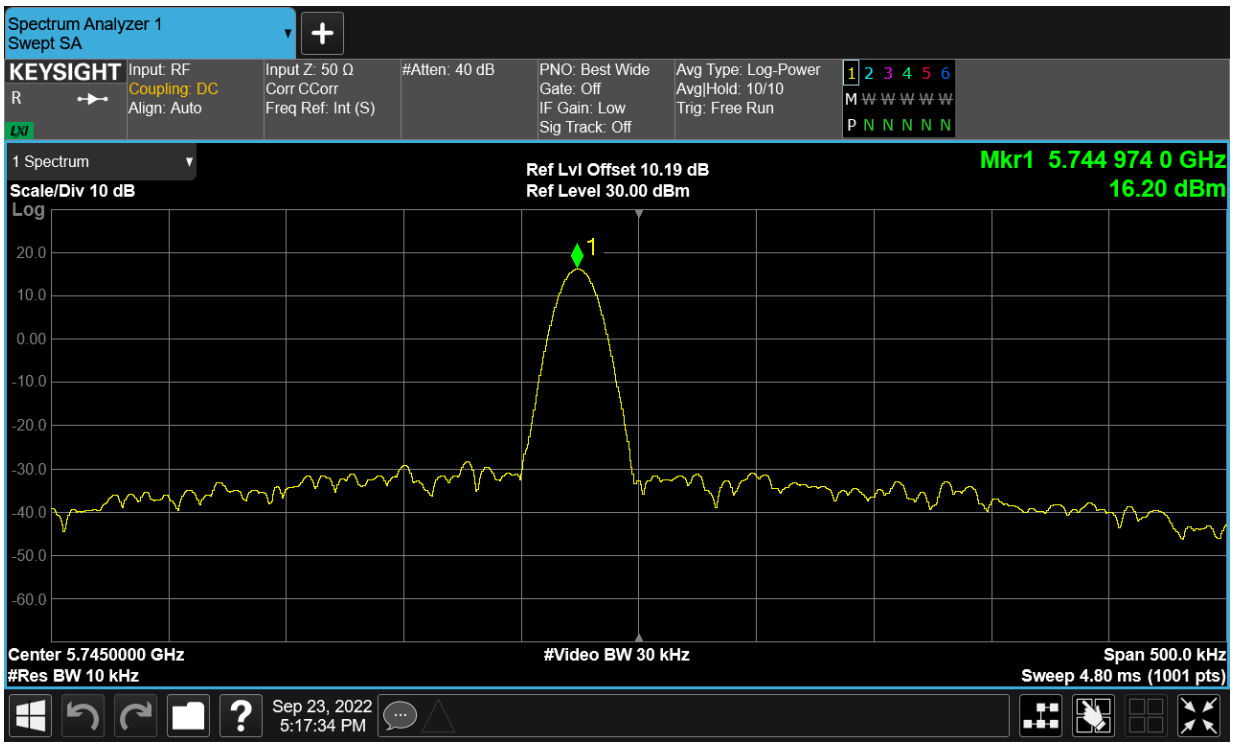


Freq. Stability NVLT a 5745MHz Ant2



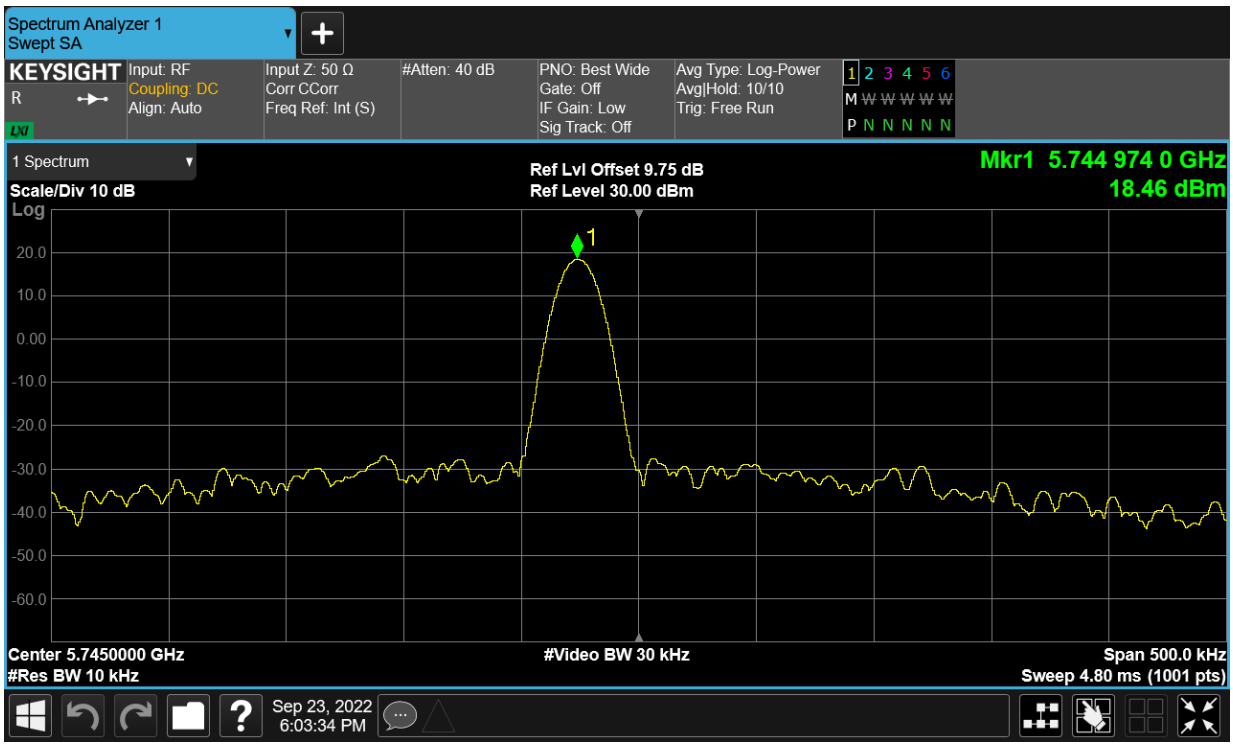
Freq. Stability NVNT a 5745MHz Ant1

Freq. Stability NVNT a 5745MHz Ant2



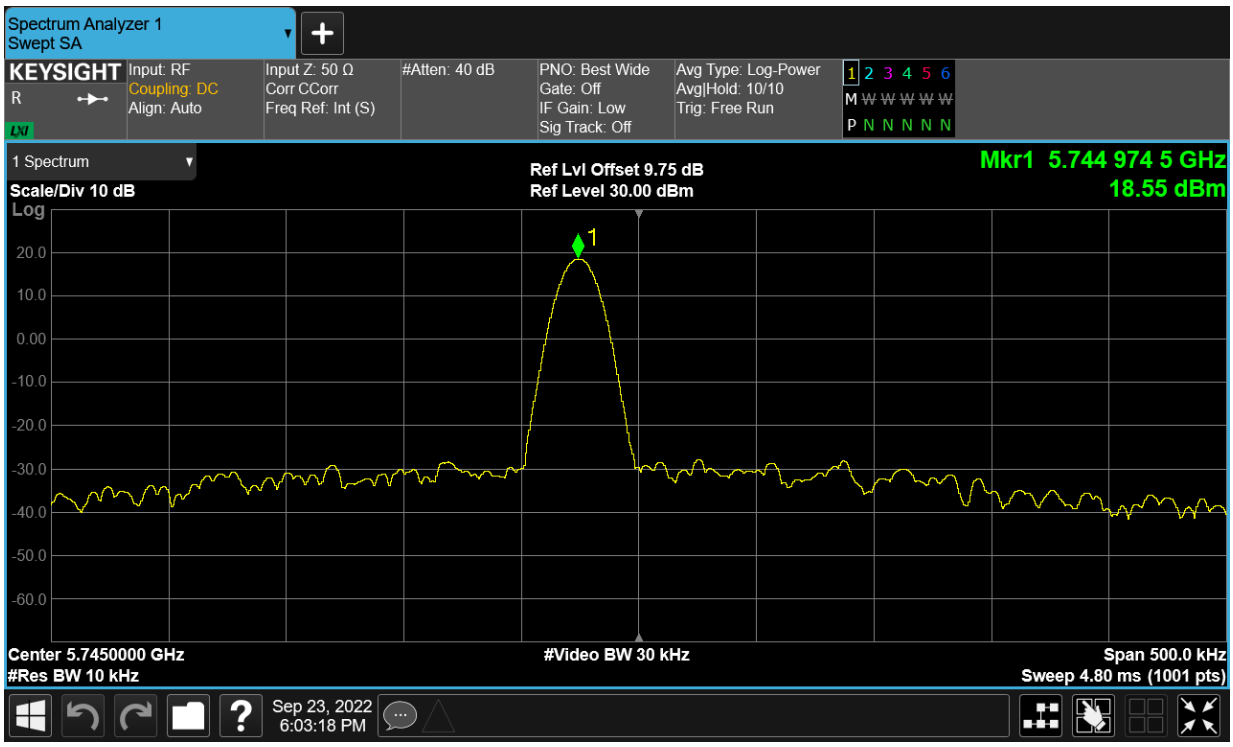
Freq. Stability HVNT ac20 5745MHz Sum

Freq. Stability LVNT ac20 5745MHz Sum

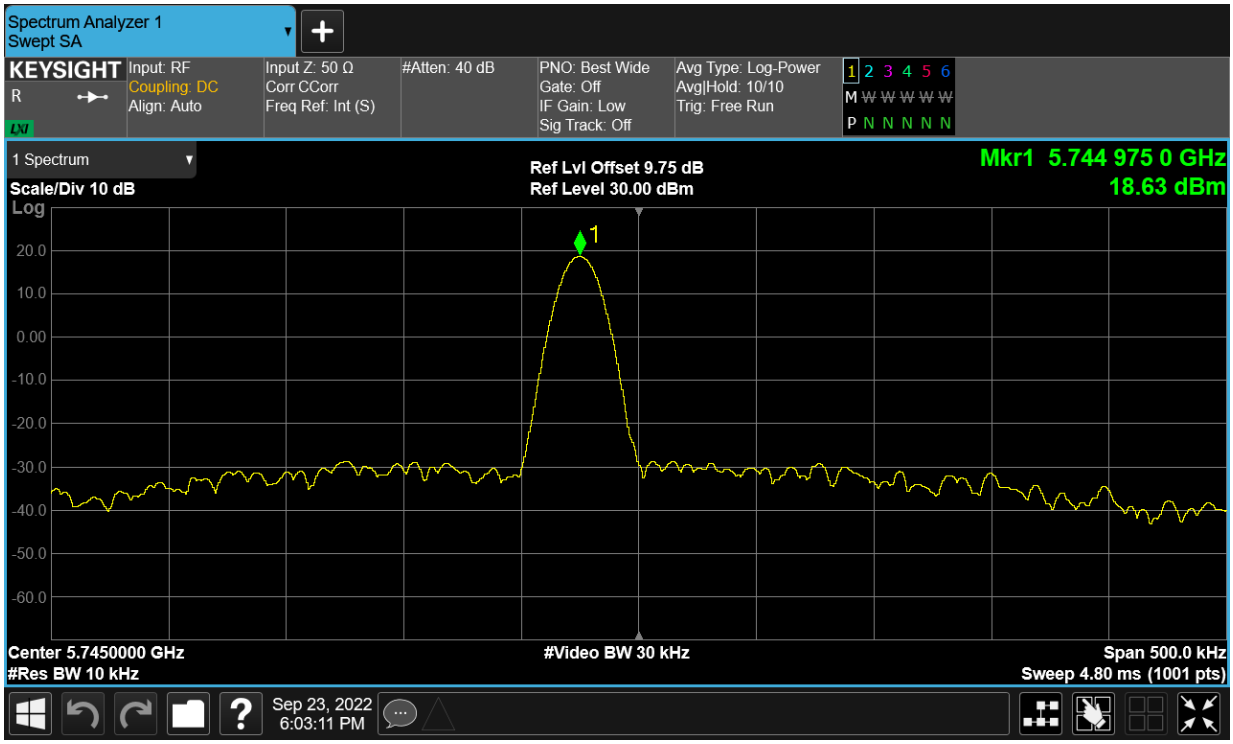


Freq. Stability NVHT ac20 5745MHz Sum

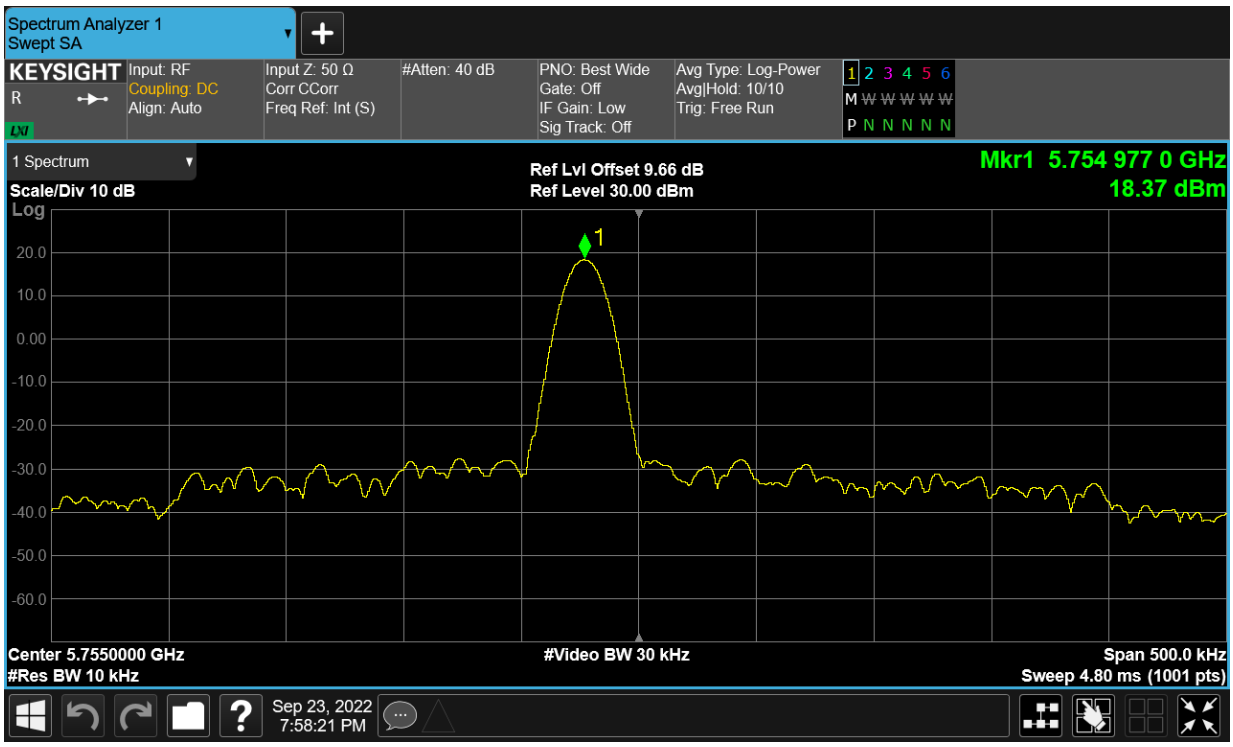
Freq. Stability NVLT ac20 5745MHz Sum



Freq. Stability NVNT ac20 5745MHz Sum

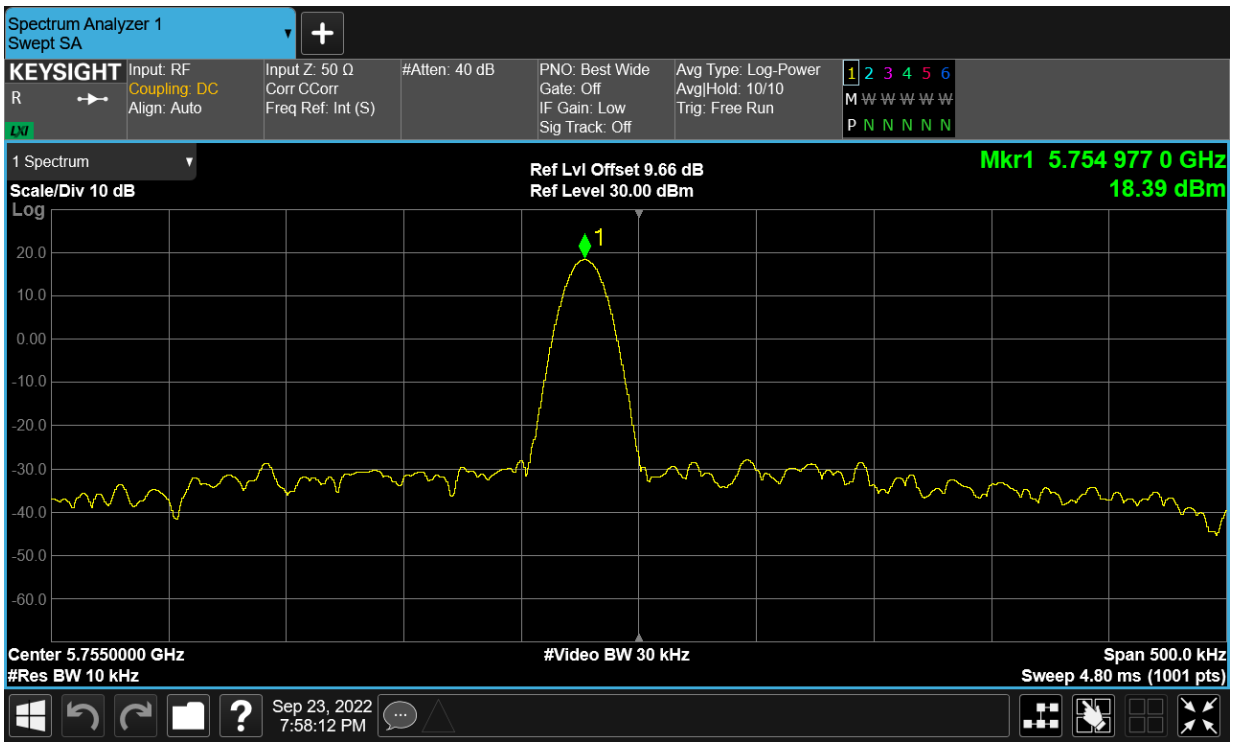


Freq. Stability HVNT ac40 5755MHz Sum

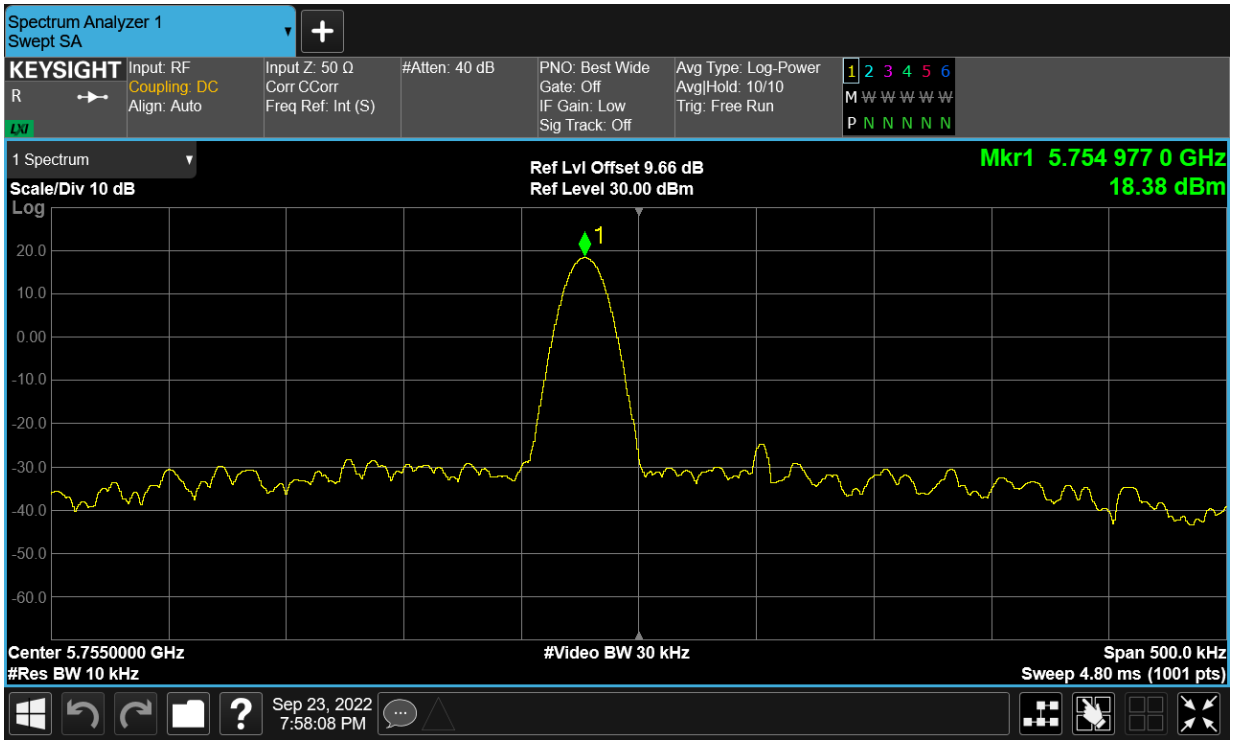


Freq. Stability LVNT ac40 5755MHz Sum

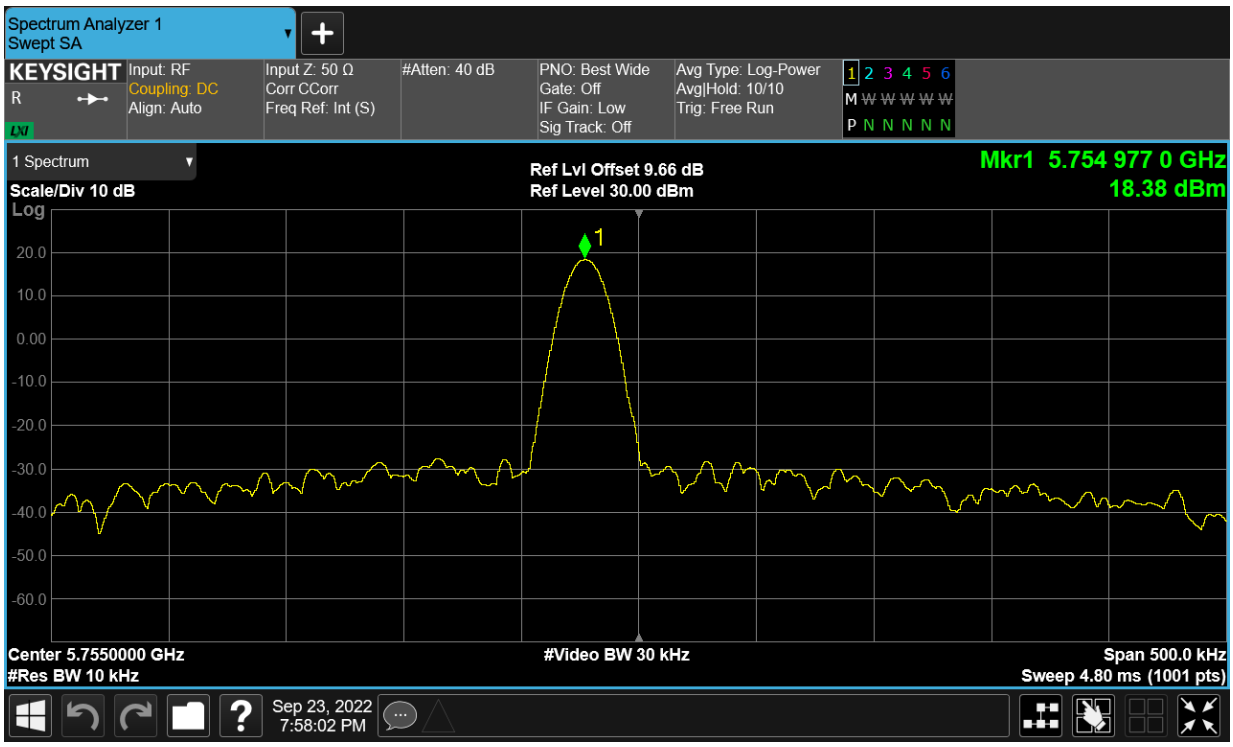
Freq. Stability NVHT ac40 5755MHz Sum



Freq. Stability NVLT ac40 5755MHz Sum

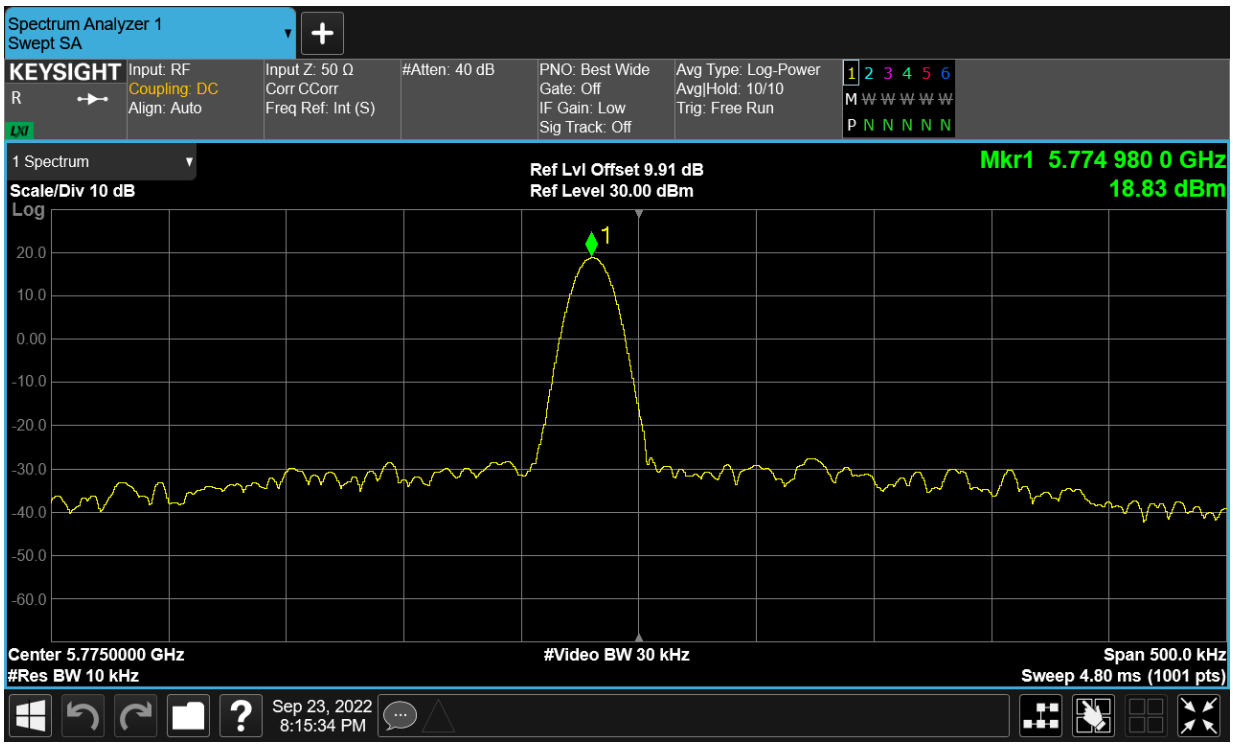


Freq. Stability NVNT ac40 5755MHz Sum



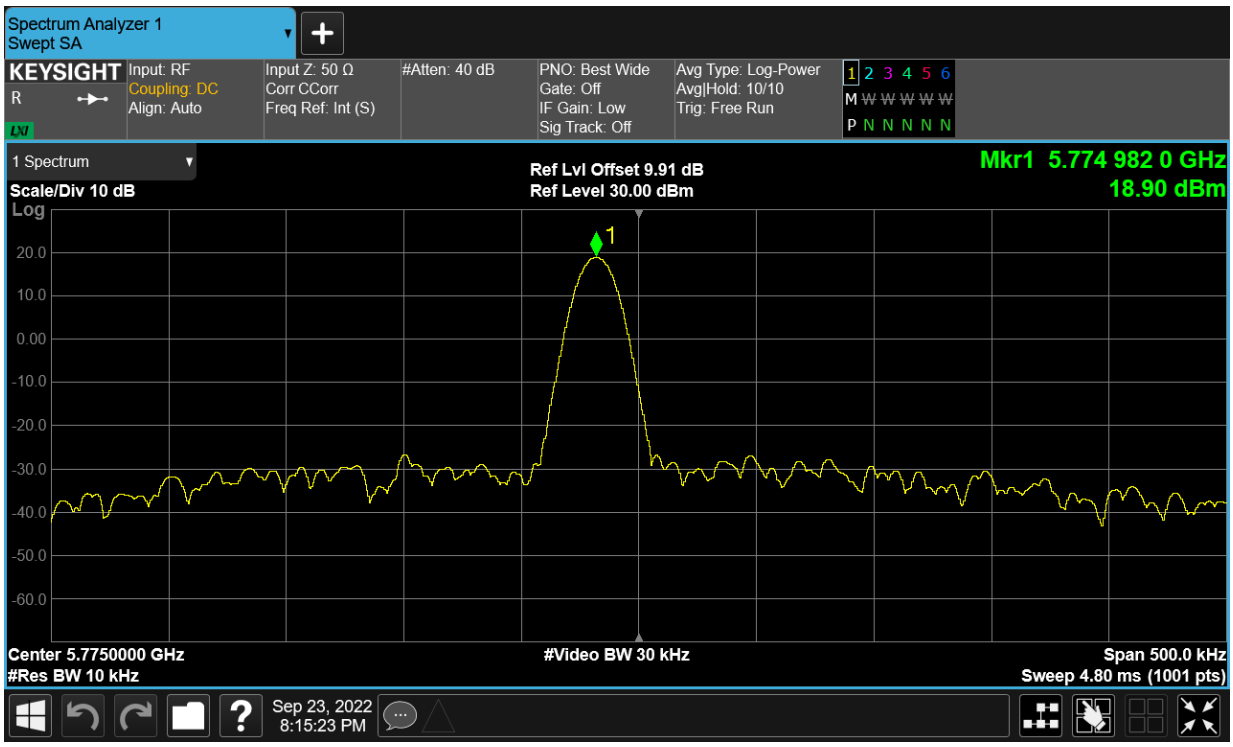
Freq. Stability HVNT ac80 5775MHz Sum

Freq. Stability LVNT ac80 5775MHz Sum



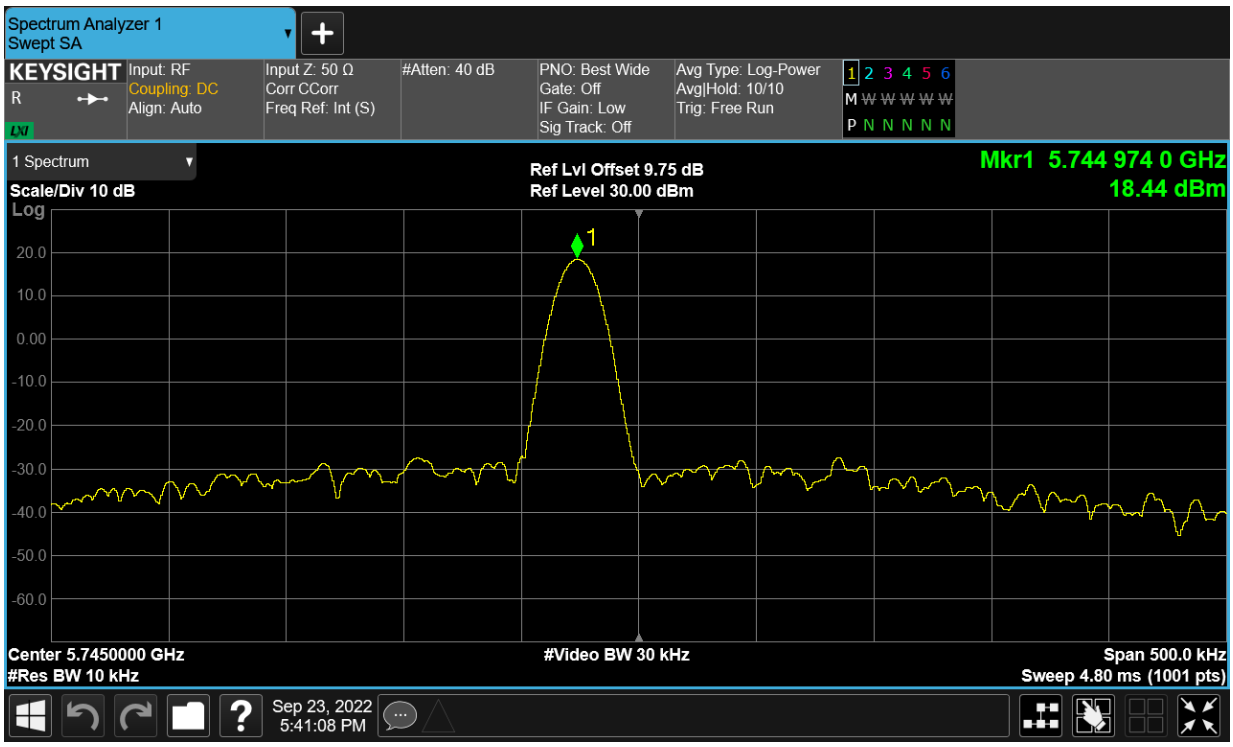
Freq. Stability NVHT ac80 5775MHz Sum

Freq. Stability NVLT ac80 5775MHz Sum

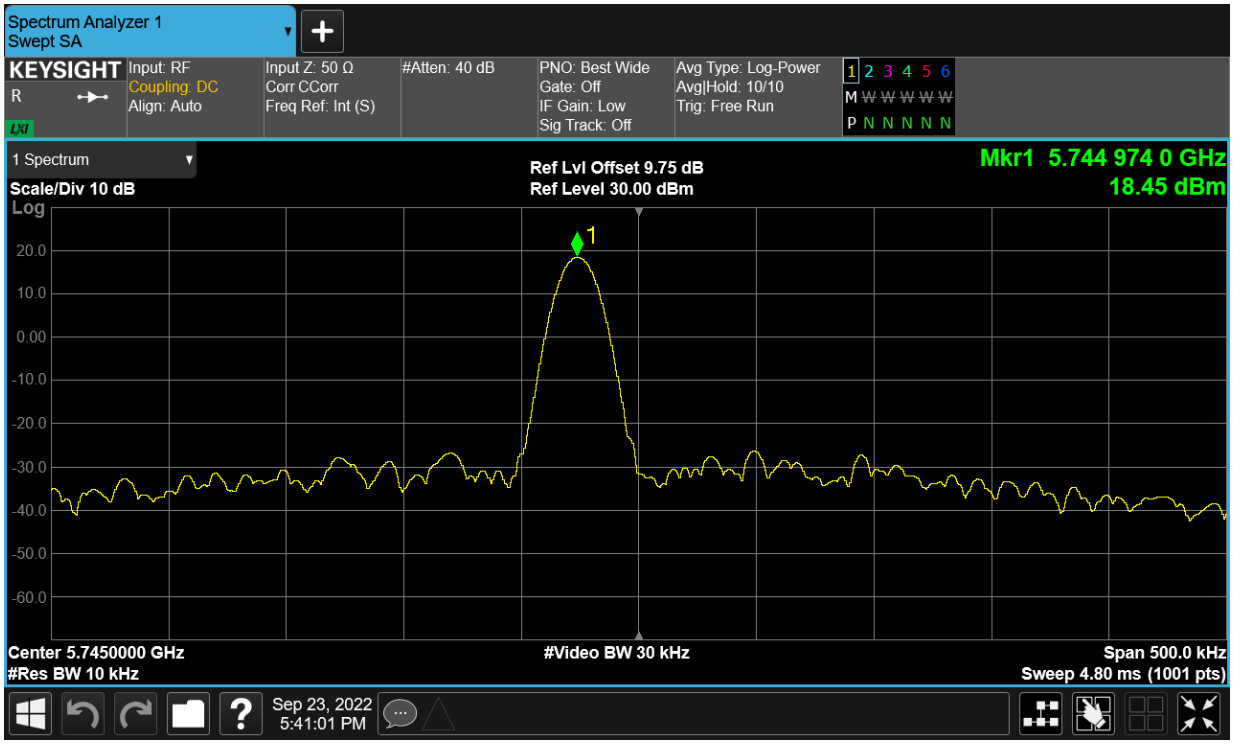


Freq. Stability NVNT ac80 5775MHz Sum

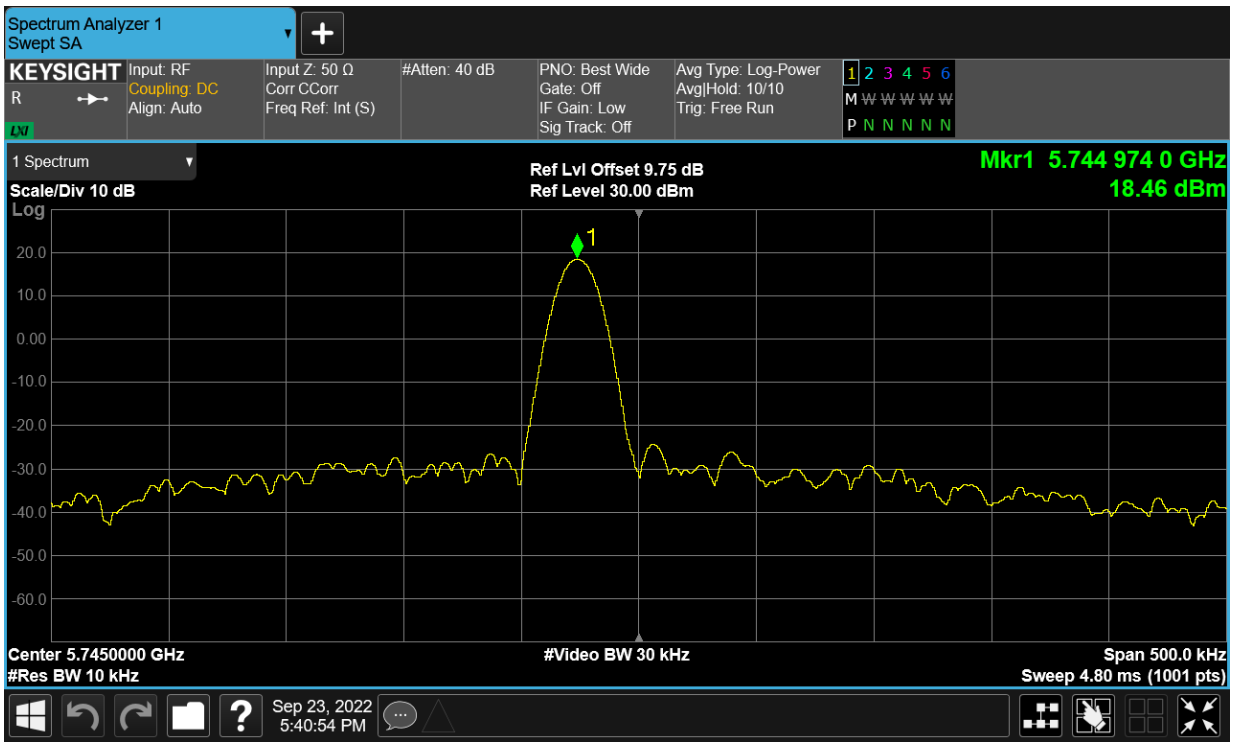
Freq. Stability HVNT n20 5745MHz Sum



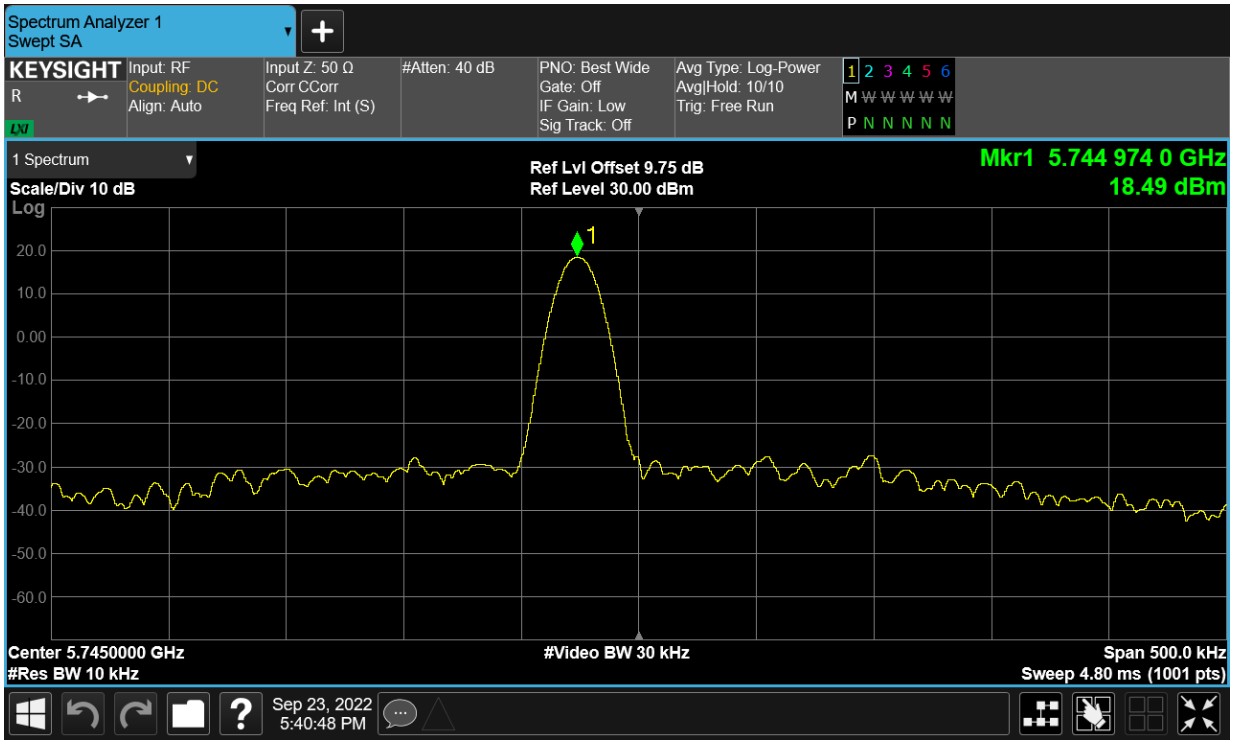
Freq. Stability LVNT n20 5745MHz Sum



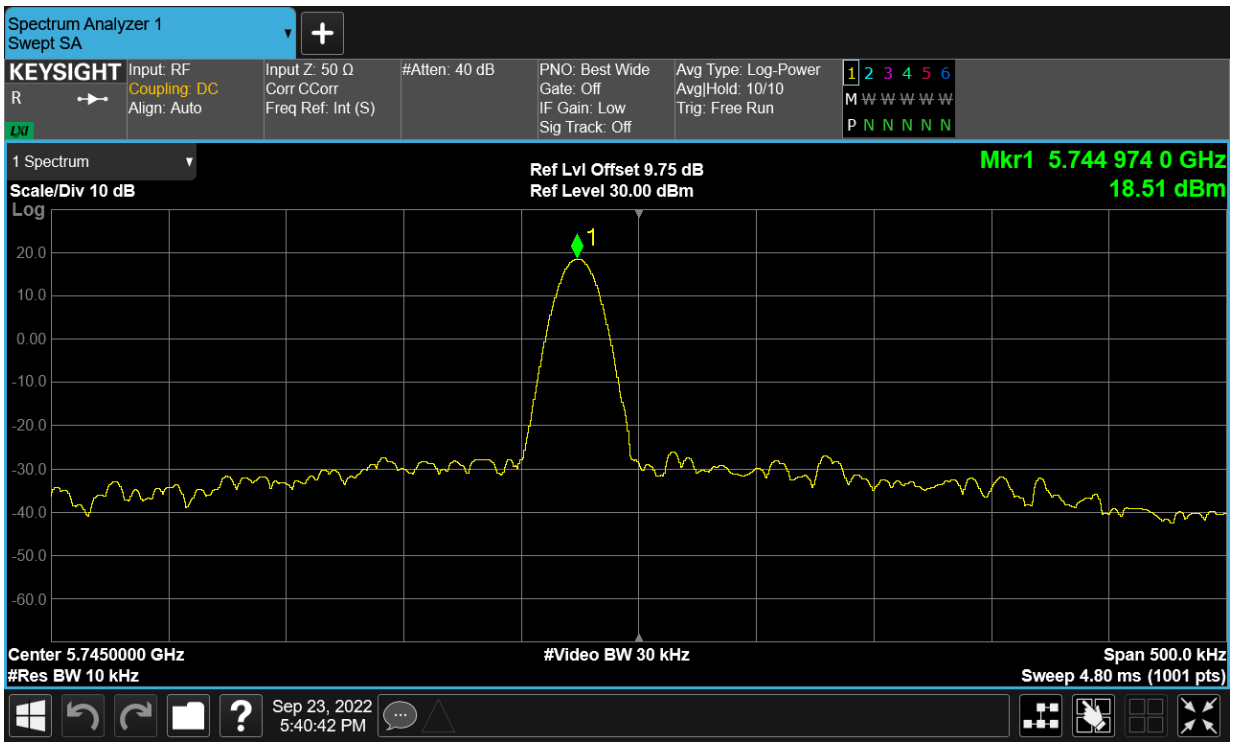
Freq. Stability NVHT n20 5745MHz Sum



Freq. Stability NVLT n20 5745MHz Sum

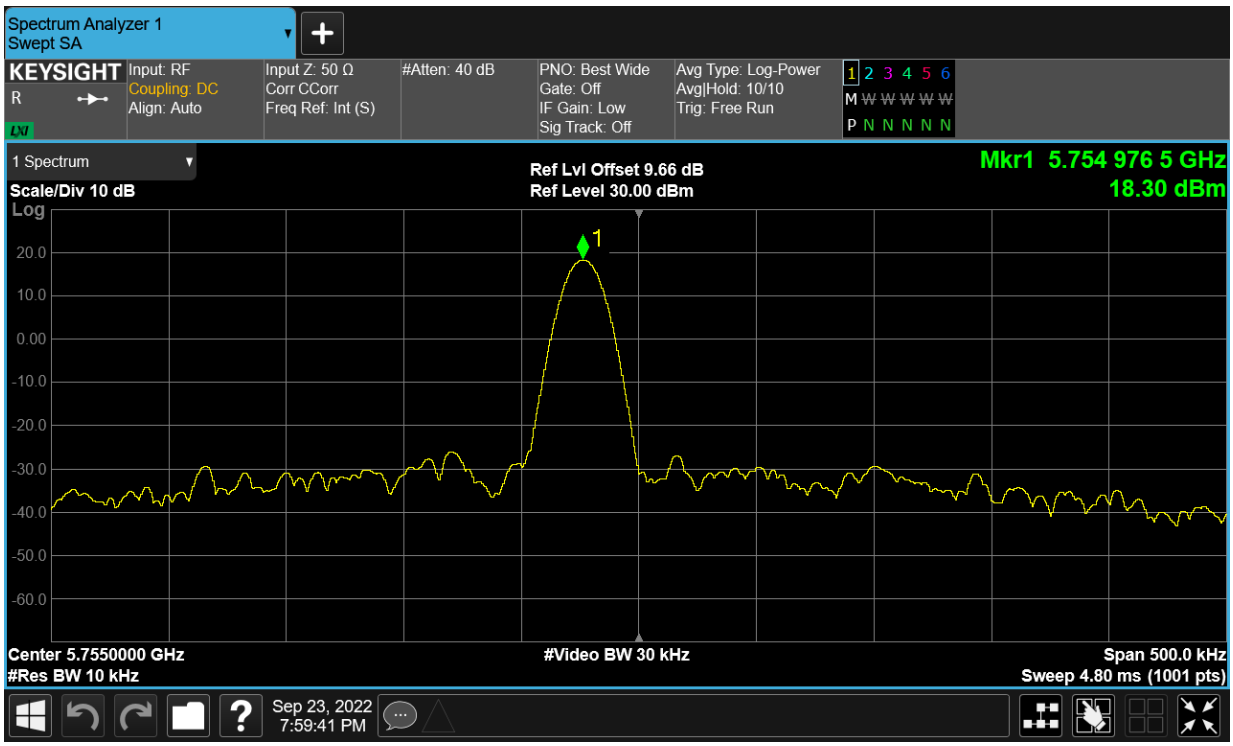


Freq. Stability NVNT n20 5745MHz Sum



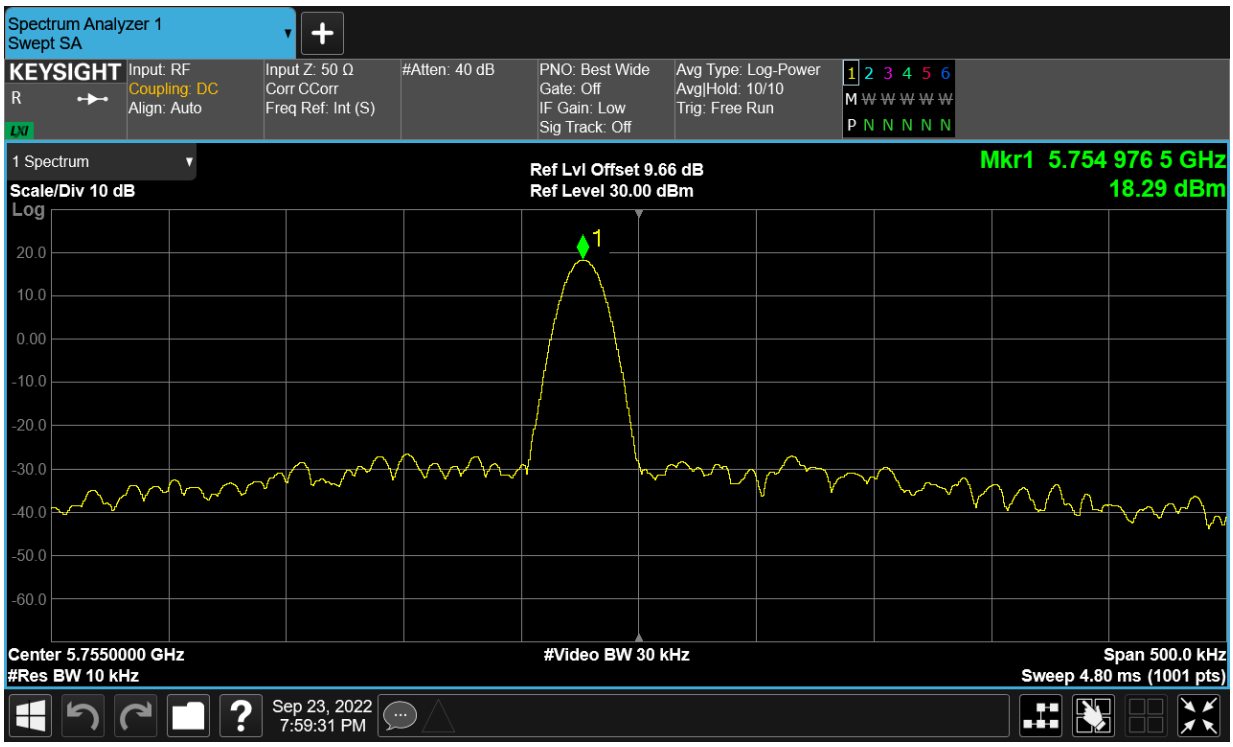
Freq. Stability HVNT n40 5755MHz Sum

Freq. Stability LVNT n40 5755MHz Sum

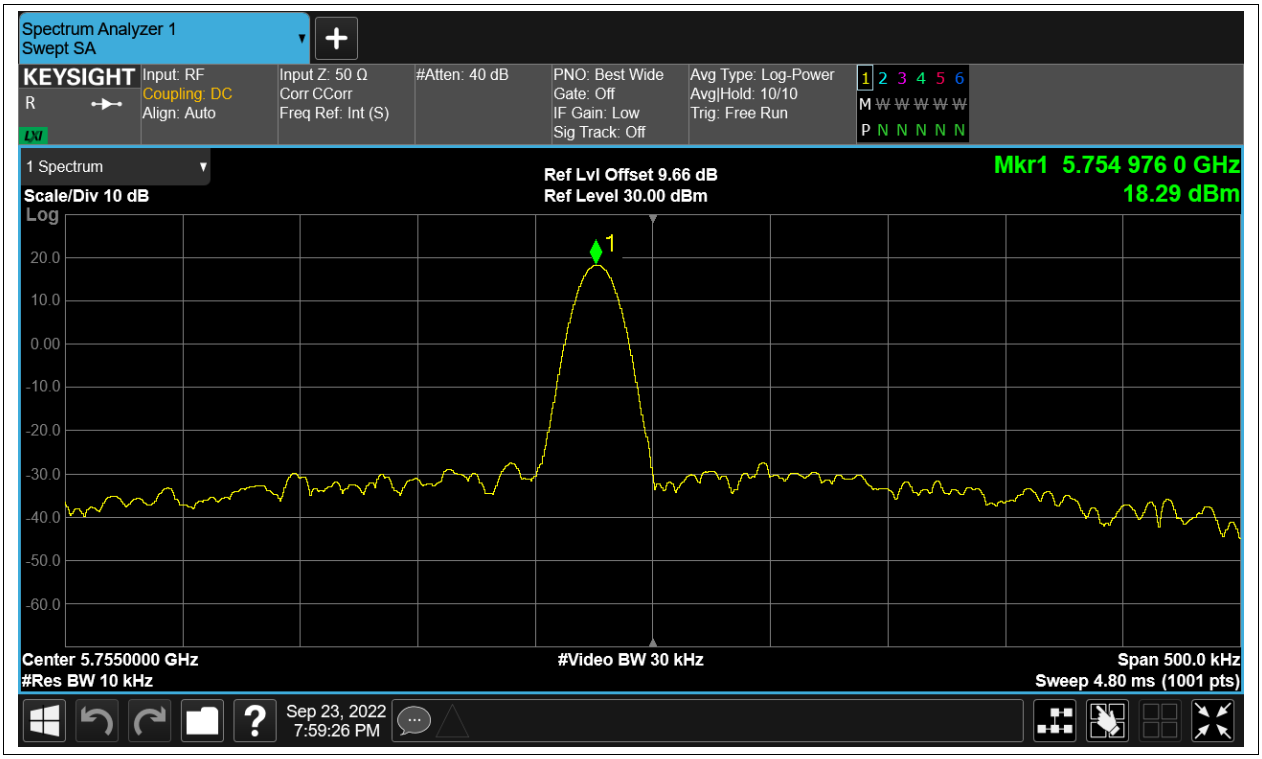


Freq. Stability NVHT n40 5755MHz Sum

Freq. Stability NVLT n40 5755MHz Sum



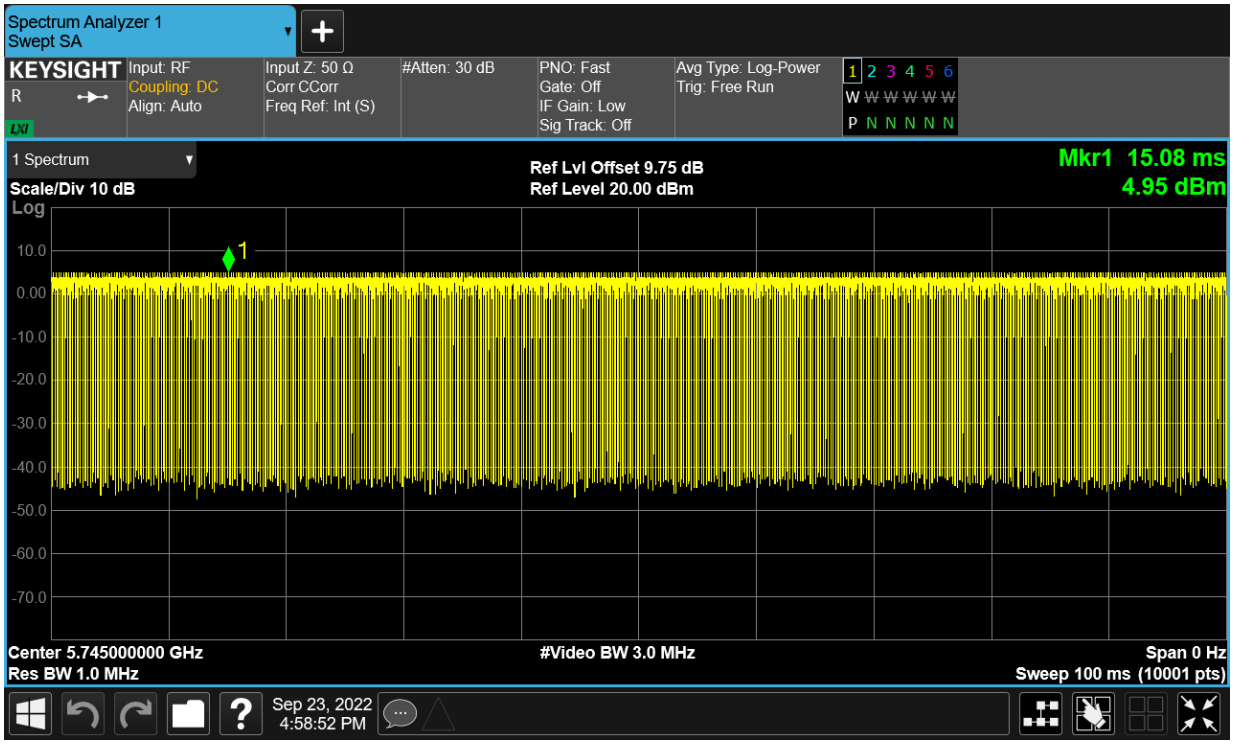
Freq. Stability NVNT n40 5755MHz Sum


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 9.66 dB
Ref Level 30.00 dBm
Mkr1 5.754 976 0 GHz
18.29 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center 5.7550000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 500.0 kHz
Sweep 4.80 ms (1001 pts)
Sep 23, 2022
7:59:26 PM

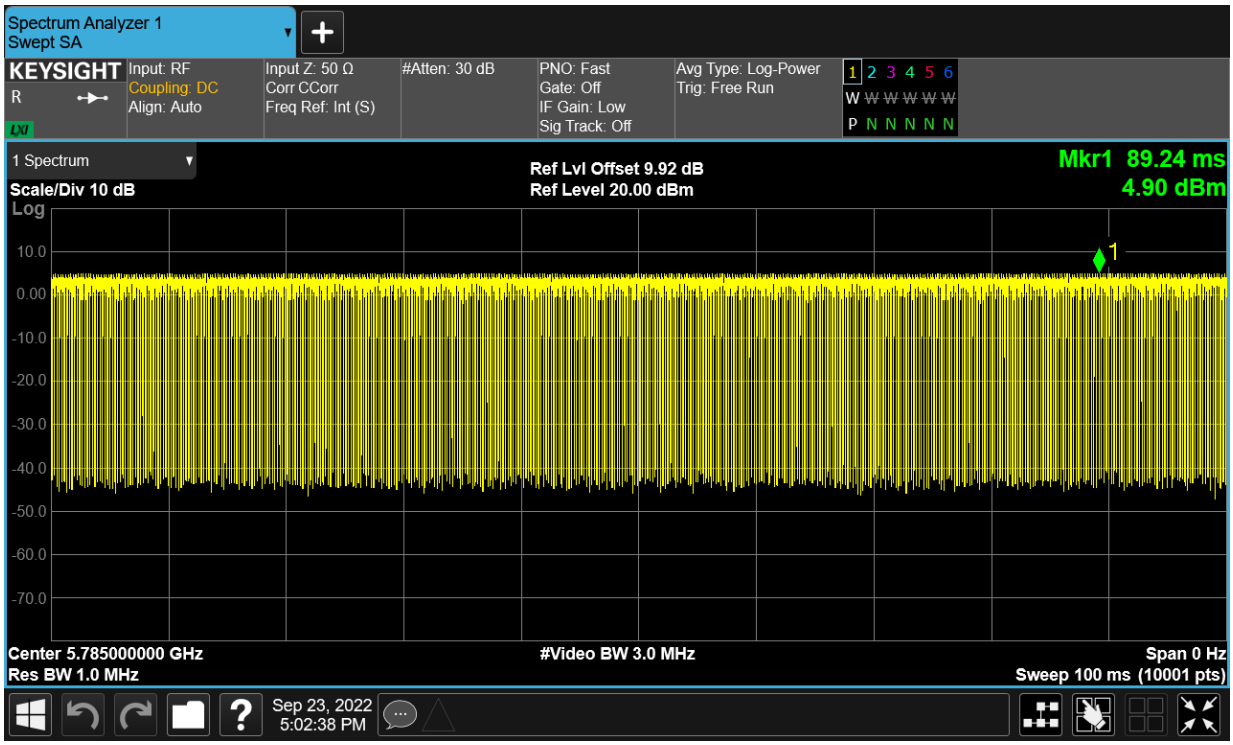
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	88.11	0.55
NVNT	a	5785	Ant1	88.36	0.54
NVNT	a	5825	Ant1	88.28	0.54
NVNT	a	5745	Ant2	88.49	0.53
NVNT	a	5785	Ant2	88.19	0.55
NVNT	a	5825	Ant2	88.51	0.53
NVNT	ac20	5745	Sum	86.38	0.64
NVNT	ac20	5785	Sum	86.27	0.64
NVNT	ac20	5825	Sum	86.61	0.62
NVNT	ac40	5755	Sum	79.35	1
NVNT	ac40	5795	Sum	79.34	1
NVNT	ac80	5775	Sum	74.3	1.29
NVNT	n20	5745	Sum	87.56	0.58
NVNT	n20	5785	Sum	87.81	0.56
NVNT	n20	5825	Sum	87.67	0.57
NVNT	n40	5755	Sum	81.88	0.87
NVNT	n40	5795	Sum	81.93	0.87

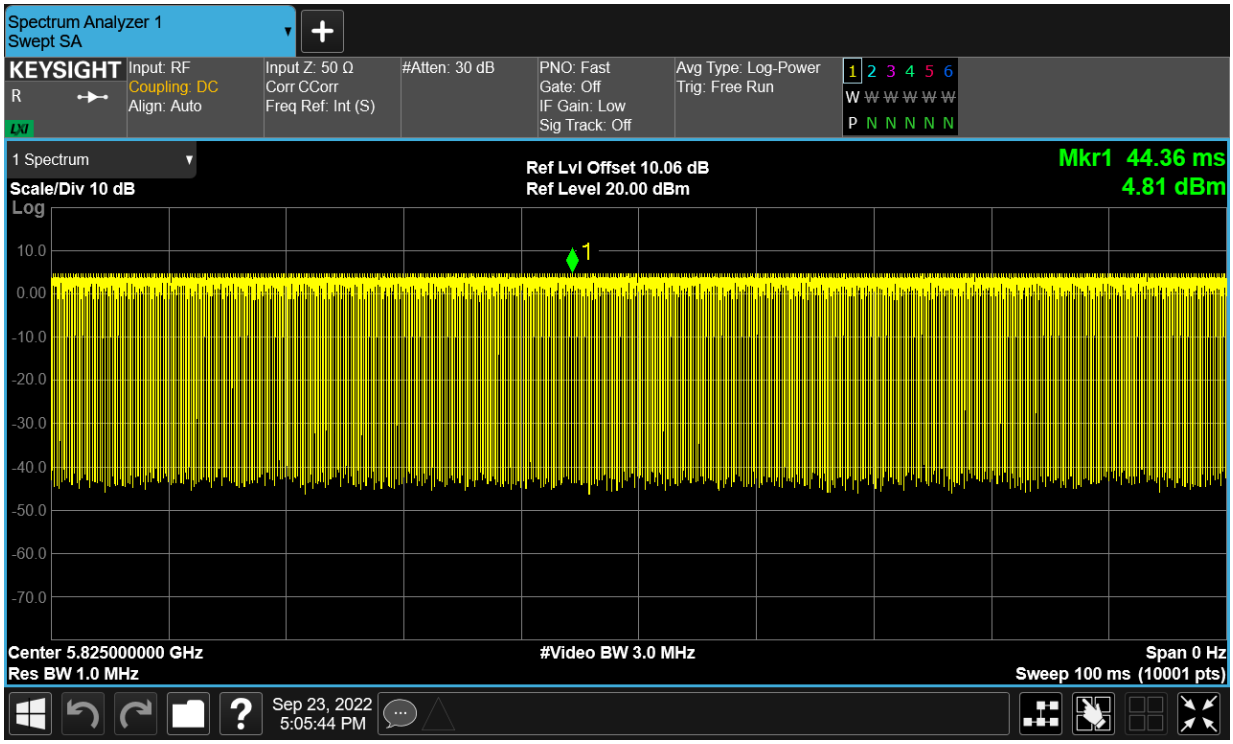
Test Graphs
Duty Cycle NVNT a 5745MHz Ant1



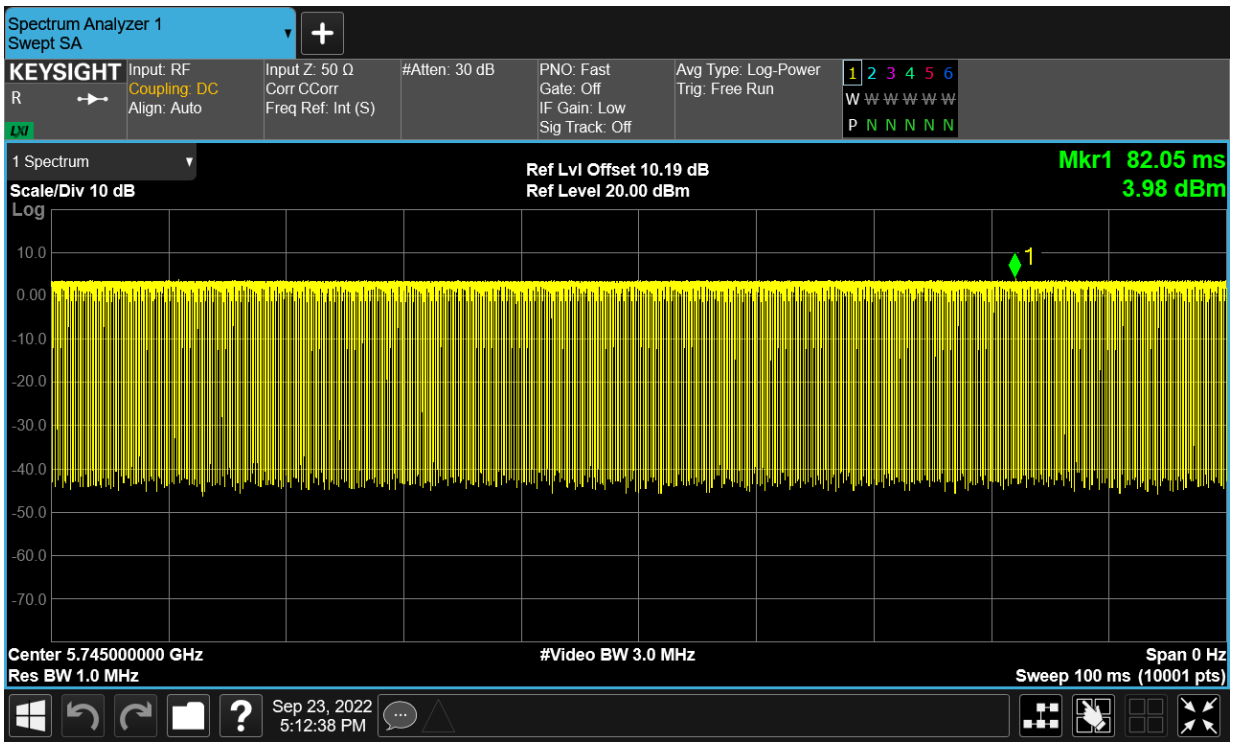
Duty Cycle NVNT a 5785MHz Ant1



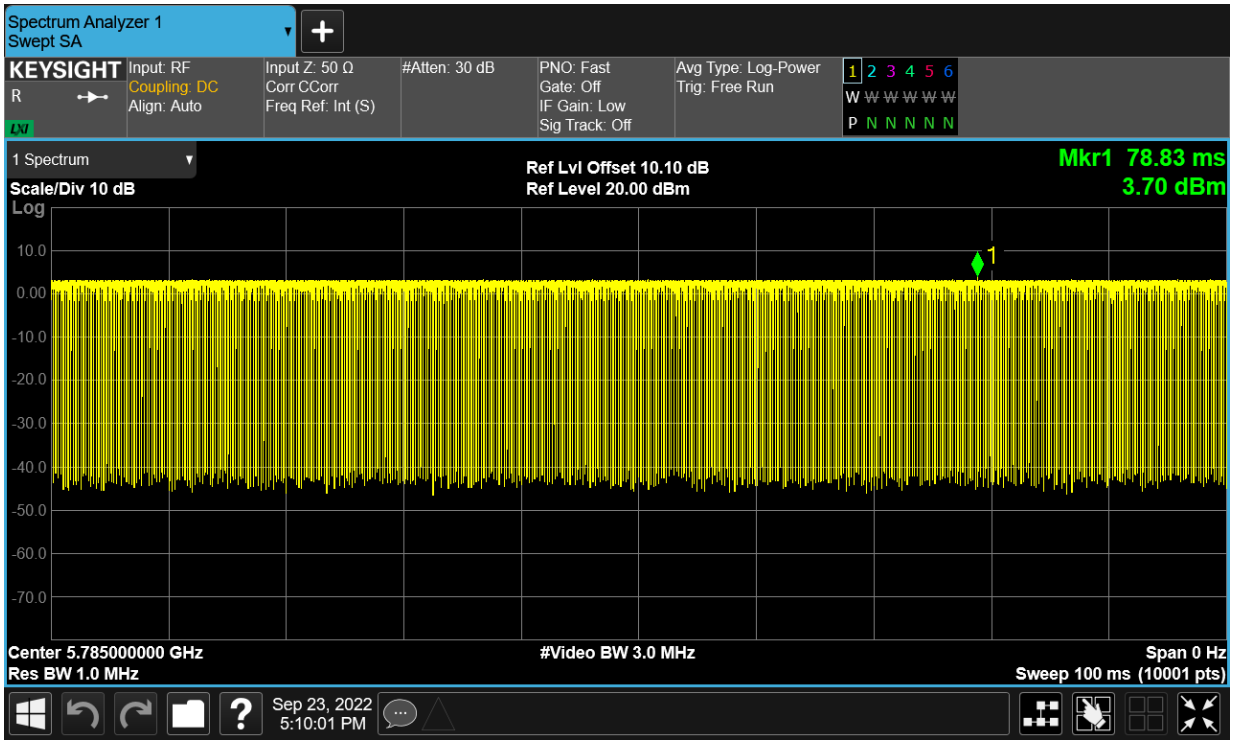
Duty Cycle NVNT a 5825MHz Ant1



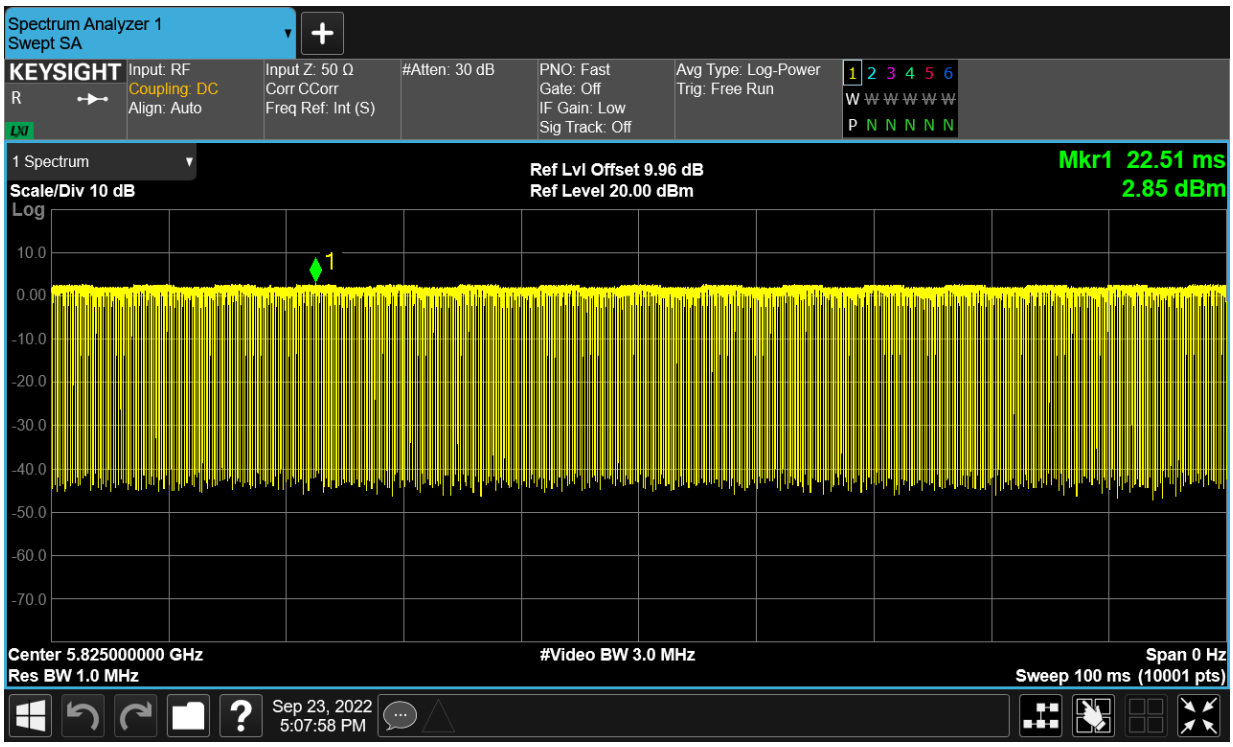
Duty Cycle NVNT a 5745MHz Ant2



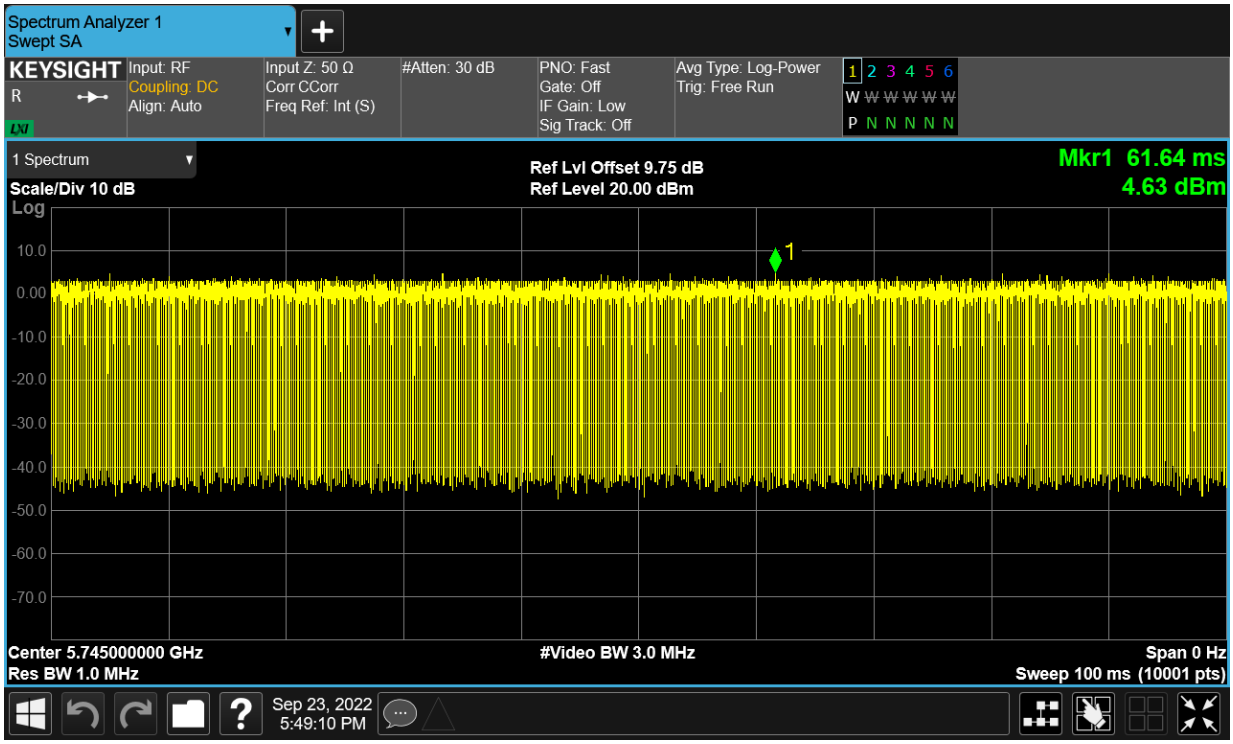
Duty Cycle NVNT a 5785MHz Ant2



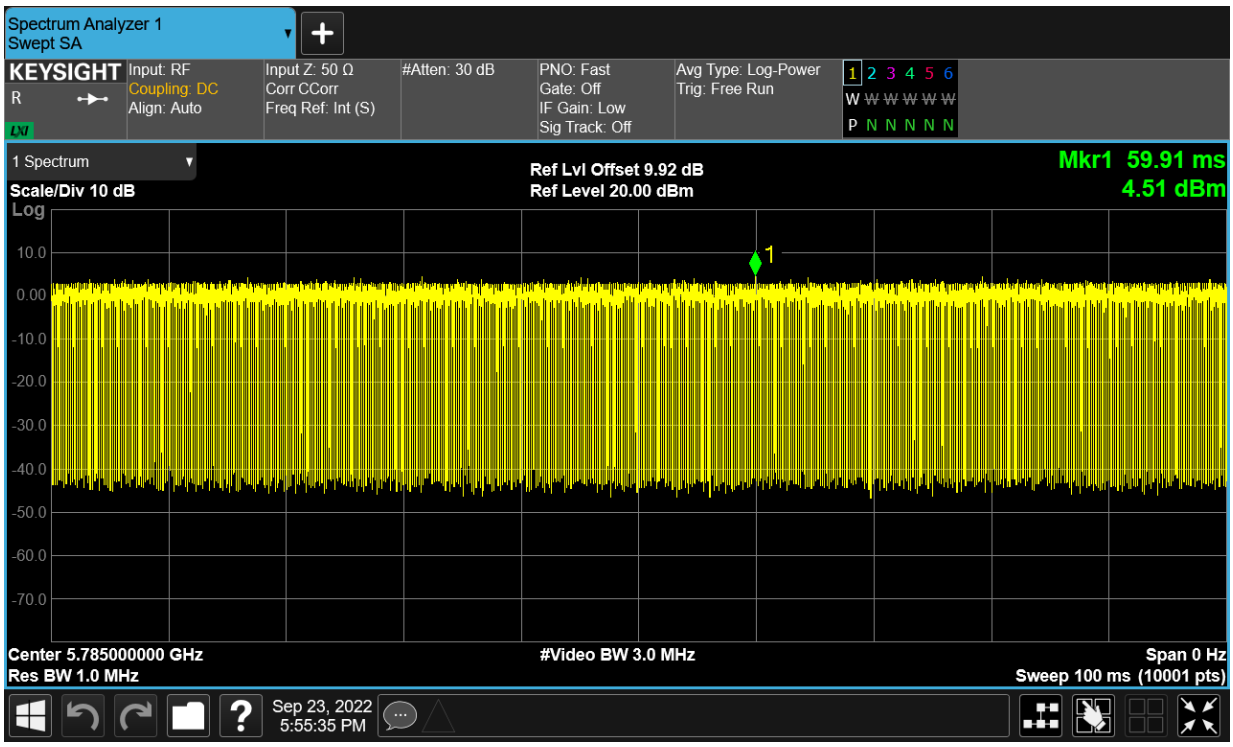
Duty Cycle NVNT a 5825MHz Ant2



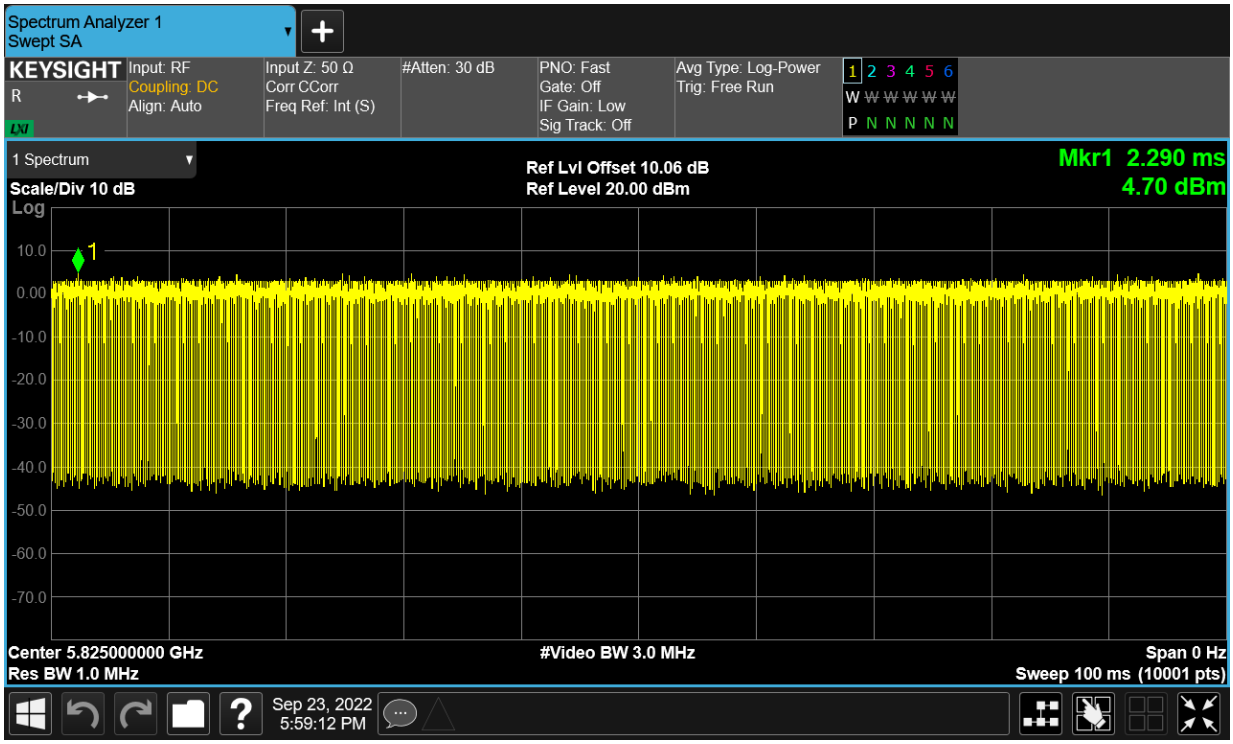
Duty Cycle NVNT ac20 5745MHz Sum



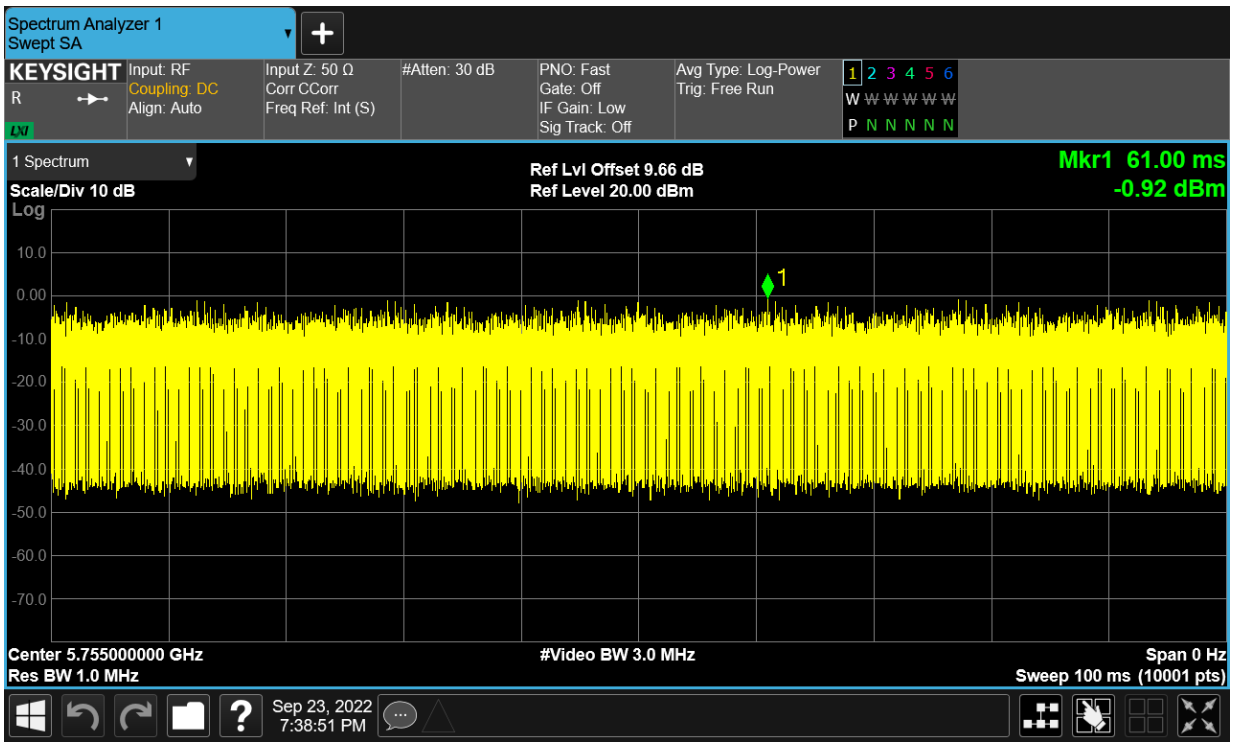
Duty Cycle NVNT ac20 5785MHz Sum



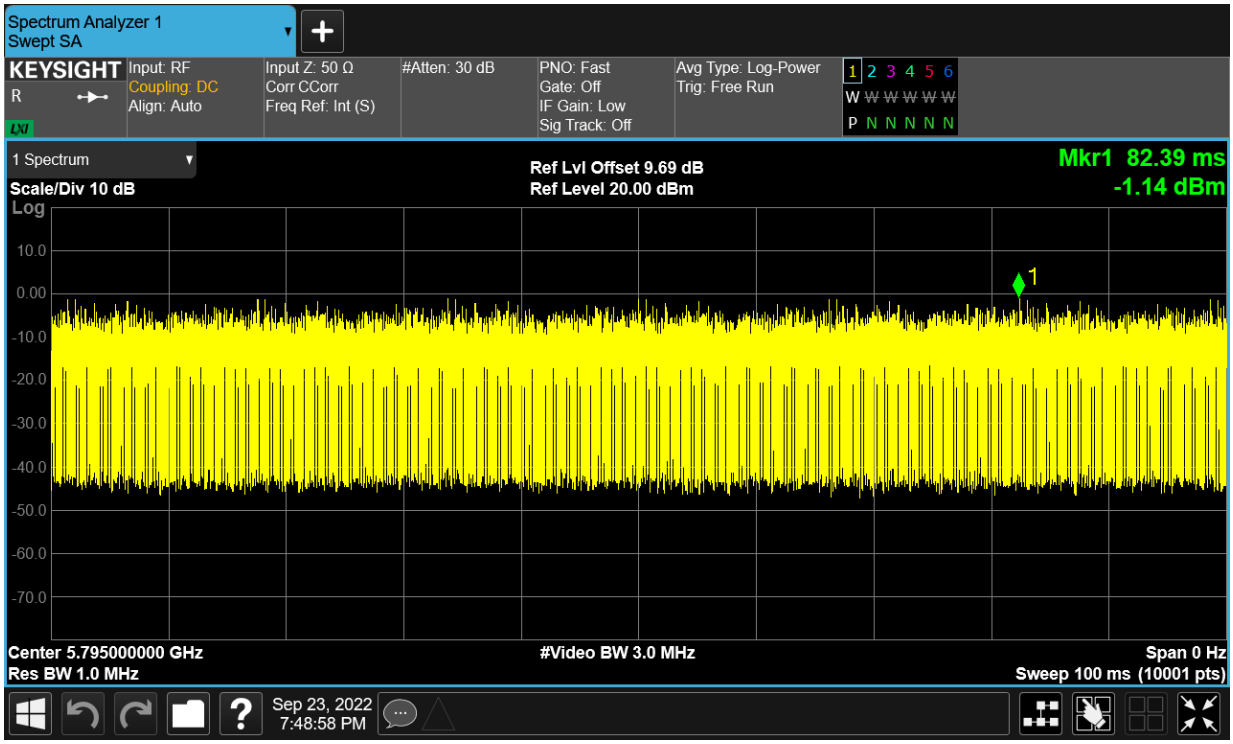
Duty Cycle NVNT ac20 5825MHz Sum



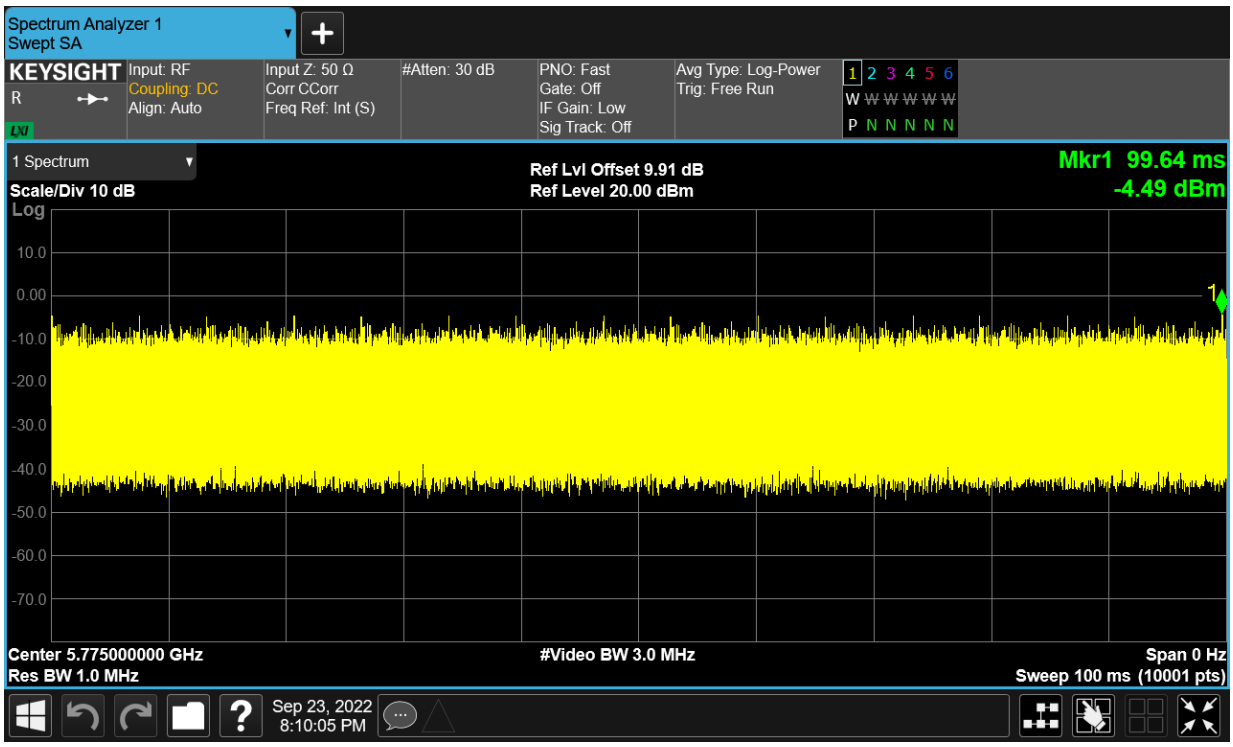
Duty Cycle NVNT ac40 5755MHz Sum



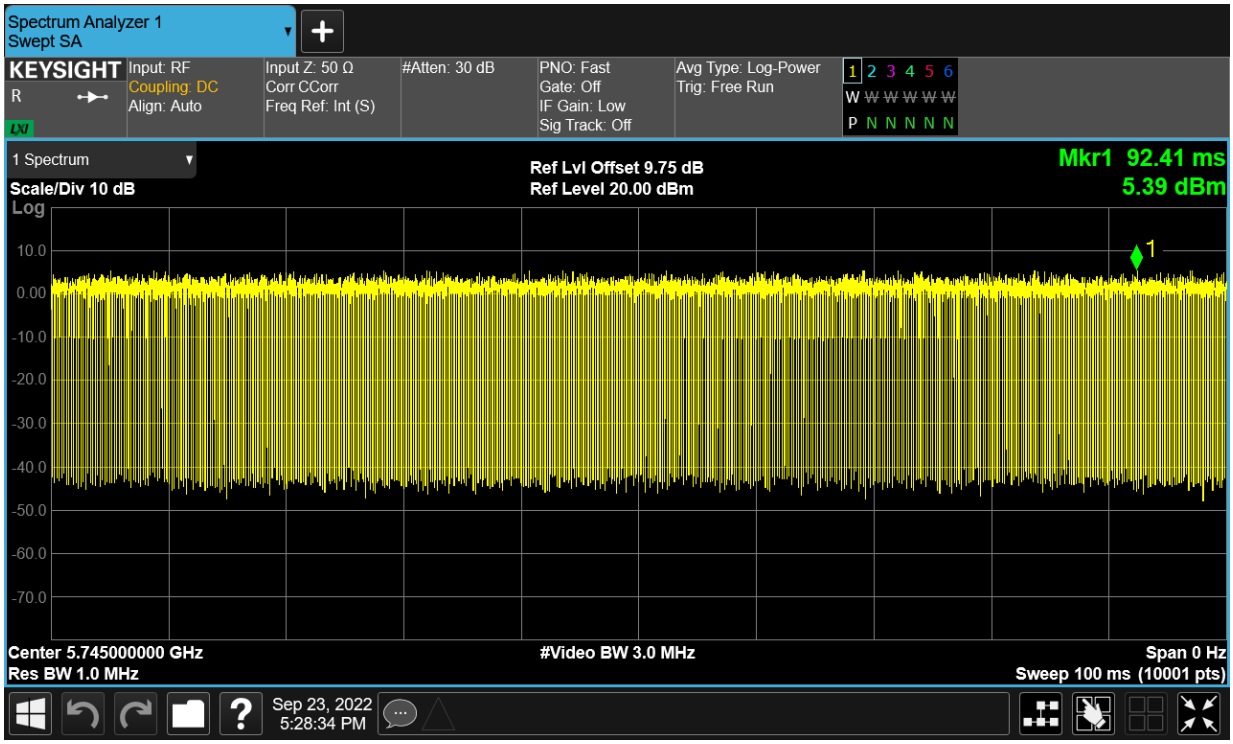
Duty Cycle NVNT ac40 5795MHz Sum



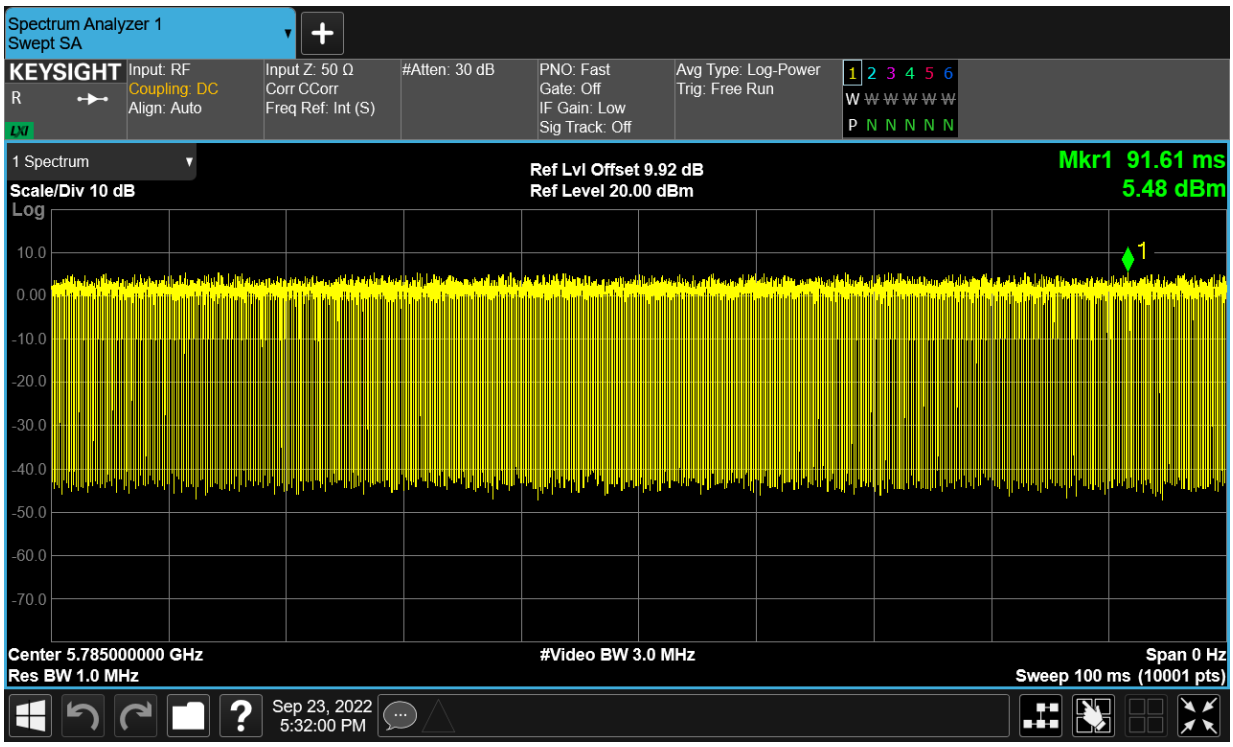
Duty Cycle NVNT ac80 5775MHz Sum



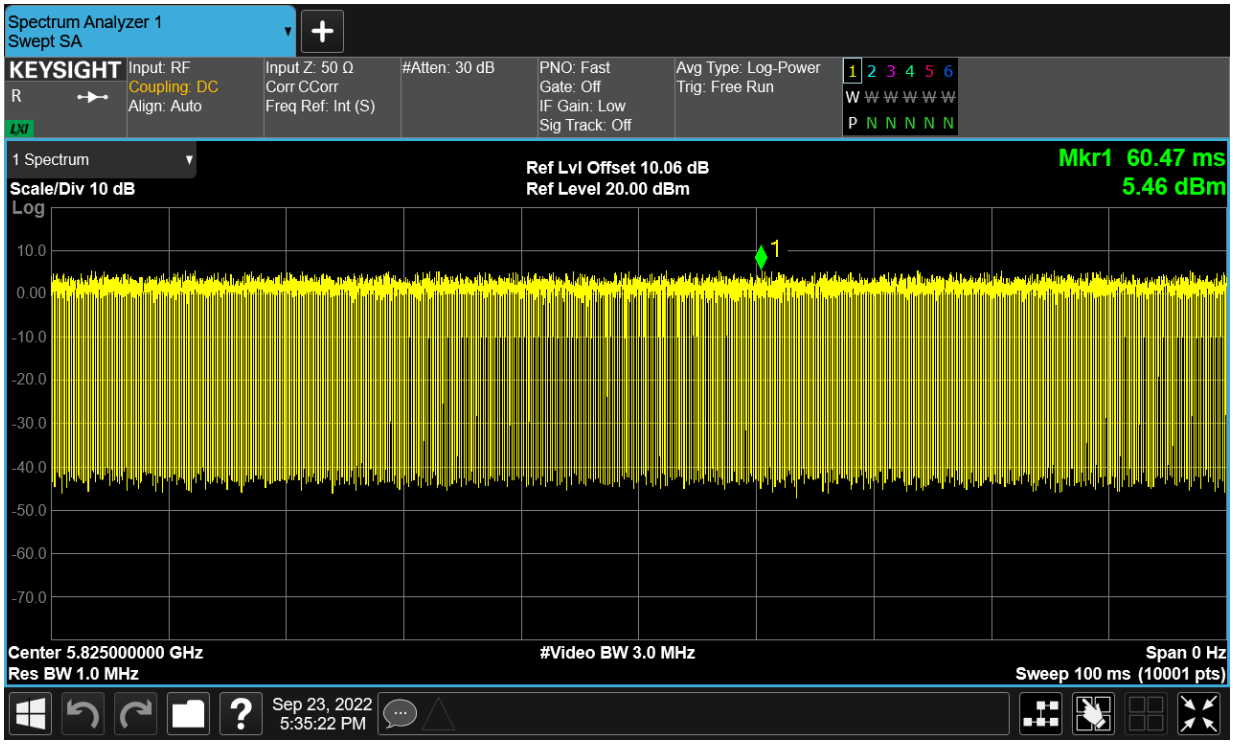
Duty Cycle NVNT n20 5745MHz Sum



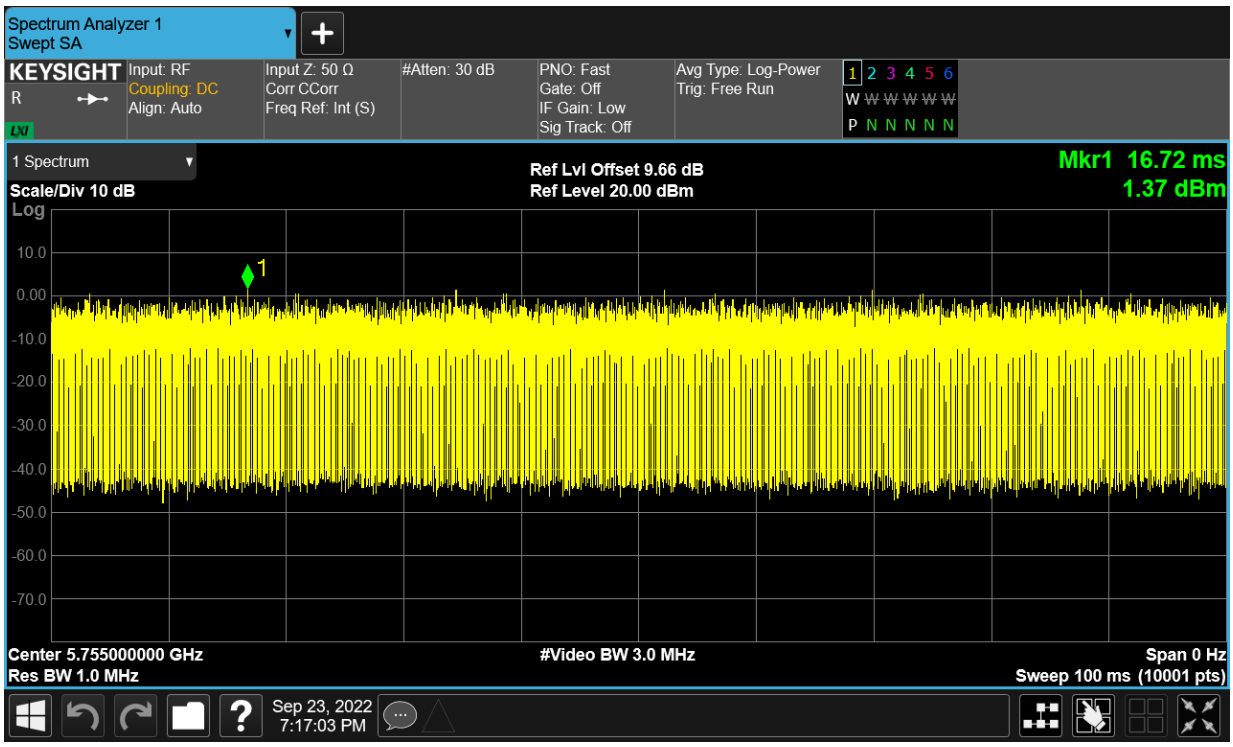
Duty Cycle NVNT n20 5785MHz Sum



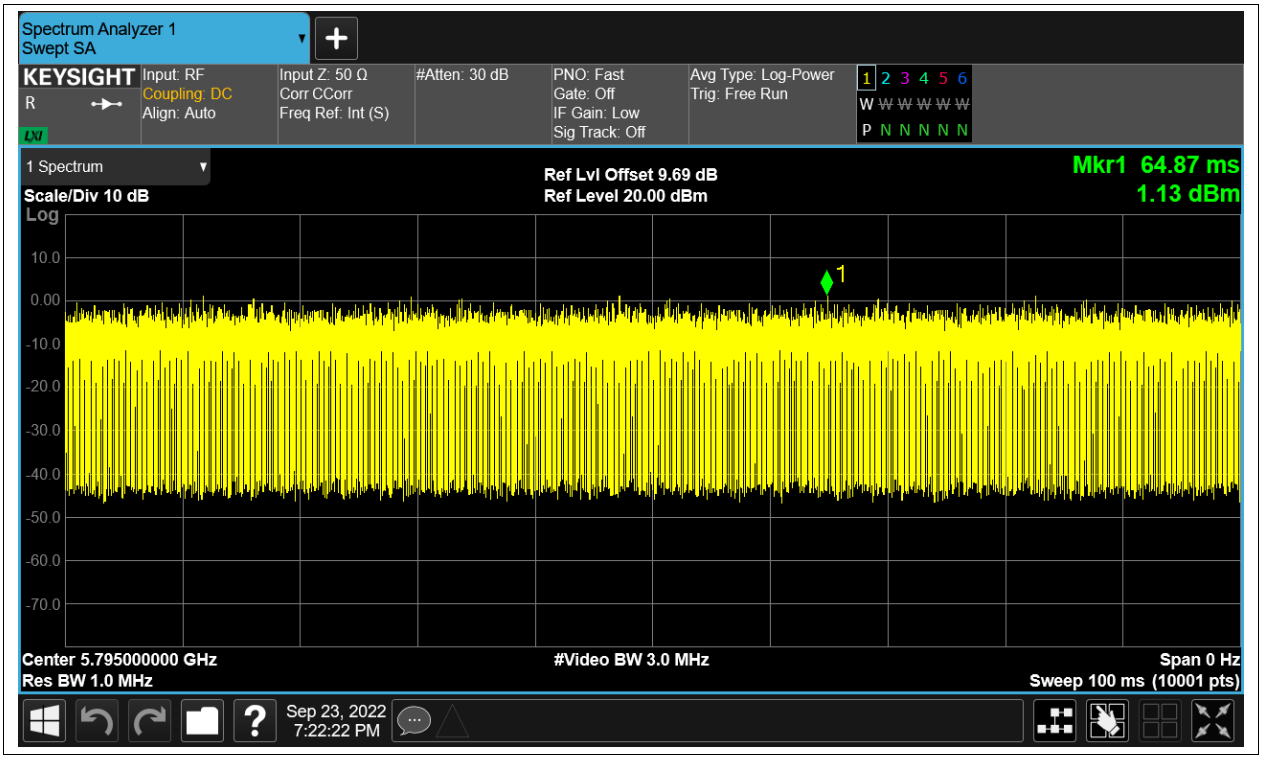
Duty Cycle NVNT n20 5825MHz Sum



Duty Cycle NVNT n40 5755MHz Sum



Duty Cycle NVNT n40 5795MHz Sum


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 9.69 dB
Ref Level 20.00 dBm
Mkr1 64.87 ms
1.13 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.795000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 100 ms (10001 pts)
Sep 23, 2022
7:22:22 PM

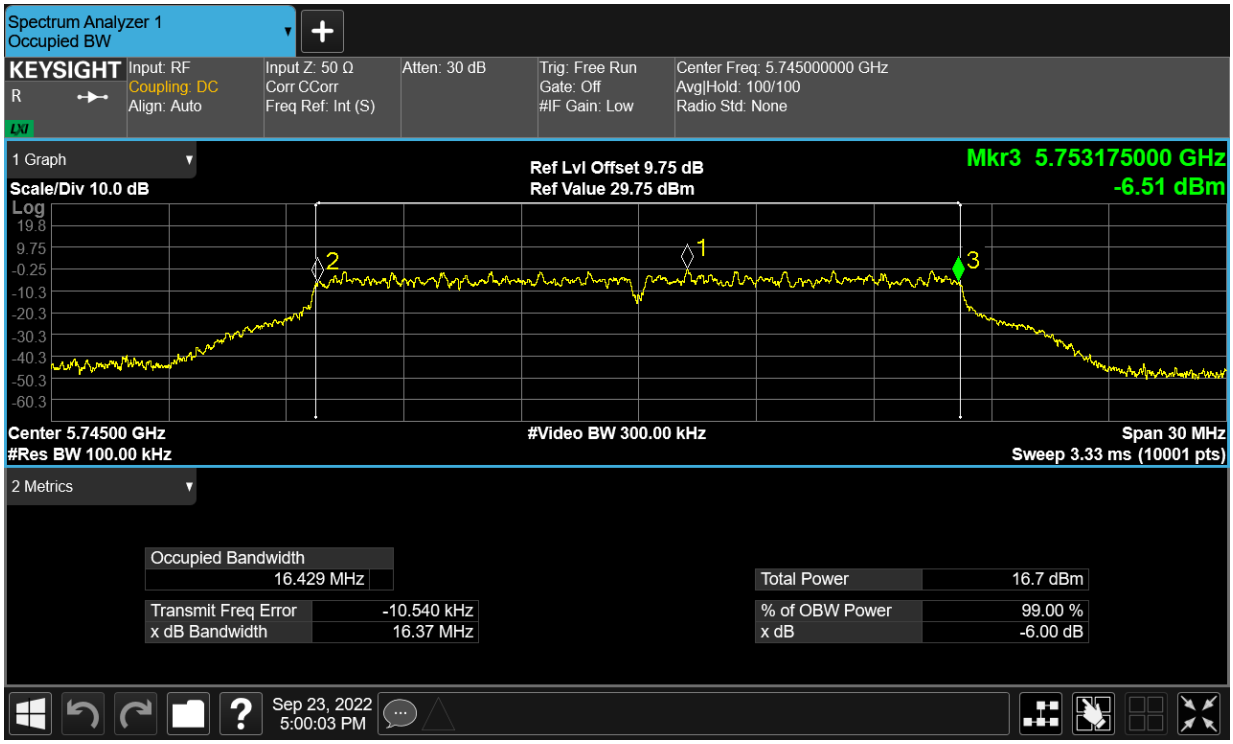
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	11	0.55	11.55	29.98	Pass
NVNT	a	5785	Ant1	11.04	0.54	11.58	29.98	Pass
NVNT	a	5825	Ant1	11.19	0.54	11.73	29.98	Pass
NVNT	a	5745	Ant2	10.37	0.53	10.9	29.98	Pass
NVNT	a	5785	Ant2	10.15	0.55	10.7	29.98	Pass
NVNT	a	5825	Ant2	9.88	0.53	10.41	29.98	Pass
NVNT	ac20	5745	Ant1	9.11	0.64	9.75	29.98	Pass
NVNT	ac20	5745	Ant2	8.72	0.64	9.36	29.98	Pass
NVNT	ac20	5745	Sum	11.93	0.64	12.57	29.98	Pass
NVNT	ac20	5785	Ant1	9.23	0.64	9.87	29.98	Pass
NVNT	ac20	5785	Ant2	8.44	0.64	9.08	29.98	Pass
NVNT	ac20	5785	Sum	11.863	0.64	12.503	29.98	Pass
NVNT	ac20	5825	Ant1	9.36	0.62	9.98	29.98	Pass
NVNT	ac20	5825	Ant2	7.96	0.62	8.58	29.98	Pass
NVNT	ac20	5825	Sum	11.726	0.62	12.346	29.98	Pass
NVNT	ac40	5755	Ant1	8.14	1	9.14	29.98	Pass
NVNT	ac40	5755	Ant2	7.81	1	8.81	29.98	Pass
NVNT	ac40	5755	Sum	10.988	1	11.988	29.98	Pass
NVNT	ac40	5795	Ant1	8.08	1	9.08	29.98	Pass
NVNT	ac40	5795	Ant2	7.62	1	8.62	29.98	Pass
NVNT	ac40	5795	Sum	10.866	1	11.866	29.98	Pass
NVNT	ac80	5775	Ant1	7.65	1.29	8.94	29.98	Pass
NVNT	ac80	5775	Ant2	7.51	1.29	8.8	29.98	Pass
NVNT	ac80	5775	Sum	10.591	1.29	11.881	29.98	Pass
NVNT	n20	5745	Ant1	10.44	0.58	11.02	29.98	Pass
NVNT	n20	5745	Ant2	9.9	0.58	10.48	29.98	Pass
NVNT	n20	5745	Sum	13.189	0.58	13.769	29.98	Pass
NVNT	n20	5785	Ant1	10.54	0.56	11.1	29.98	Pass
NVNT	n20	5785	Ant2	9.76	0.56	10.32	29.98	Pass
NVNT	n20	5785	Sum	13.178	0.56	13.738	29.98	Pass
NVNT	n20	5825	Ant1	10.74	0.57	11.31	29.98	Pass
NVNT	n20	5825	Ant2	9.45	0.57	10.02	29.98	Pass
NVNT	n20	5825	Sum	13.153	0.57	13.723	29.98	Pass
NVNT	n40	5755	Ant1	10.39	0.87	11.26	29.98	Pass
NVNT	n40	5755	Ant2	9.86	0.87	10.73	29.98	Pass
NVNT	n40	5755	Sum	13.143	0.87	14.013	29.98	Pass
NVNT	n40	5795	Ant1	10.44	0.87	11.31	29.98	Pass
NVNT	n40	5795	Ant2	9.57	0.87	10.44	29.98	Pass
NVNT	n40	5795	Sum	13.037	0.87	13.907	29.98	Pass

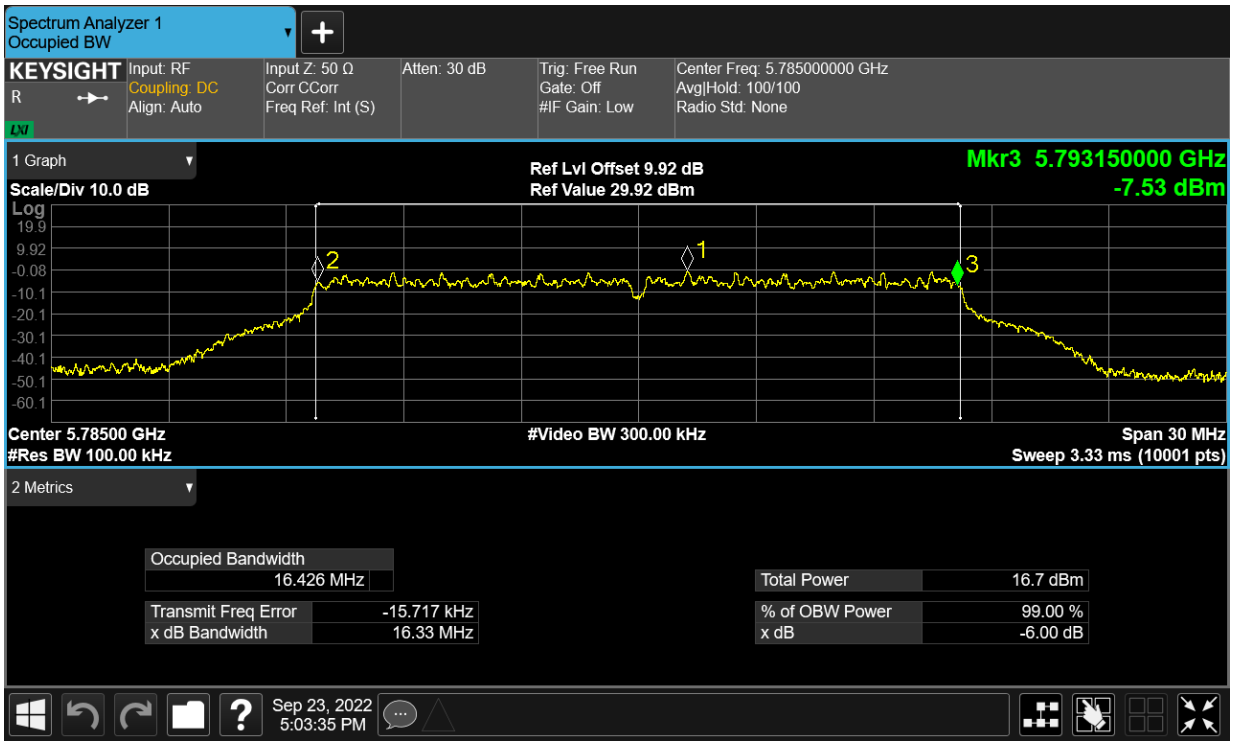
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	a	5745	Ant1	16.371	0.5	Pass
NVNT	a	5785	Ant1	16.331	0.5	Pass
NVNT	a	5825	Ant1	16.417	0.5	Pass
NVNT	a	5745	Ant2	16.41	0.5	Pass
NVNT	a	5785	Ant2	16.425	0.5	Pass
NVNT	a	5825	Ant2	16.379	0.5	Pass
NVNT	ac20	5745	Ant1	17.663	0.5	Pass
NVNT	ac20	5745	Ant2	17.672	0.5	Pass
NVNT	ac20	5785	Ant1	17.639	0.5	Pass
NVNT	ac20	5785	Ant2	17.716	0.5	Pass
NVNT	ac20	5825	Ant1	17.648	0.5	Pass
NVNT	ac20	5825	Ant2	17.733	0.5	Pass
NVNT	ac40	5755	Ant1	36.372	0.5	Pass
NVNT	ac40	5755	Ant2	36.401	0.5	Pass
NVNT	ac40	5795	Ant1	36.302	0.5	Pass
NVNT	ac40	5795	Ant2	36.39	0.5	Pass
NVNT	ac80	5775	Ant1	75.797	0.5	Pass
NVNT	ac80	5775	Ant2	76.334	0.5	Pass
NVNT	n20	5745	Ant1	17.701	0.5	Pass
NVNT	n20	5745	Ant2	17.702	0.5	Pass
NVNT	n20	5785	Ant1	17.674	0.5	Pass
NVNT	n20	5785	Ant2	17.65	0.5	Pass
NVNT	n20	5825	Ant1	17.684	0.5	Pass
NVNT	n20	5825	Ant2	17.648	0.5	Pass
NVNT	n40	5755	Ant1	36.437	0.5	Pass
NVNT	n40	5755	Ant2	36.442	0.5	Pass
NVNT	n40	5795	Ant1	36.393	0.5	Pass
NVNT	n40	5795	Ant2	36.395	0.5	Pass

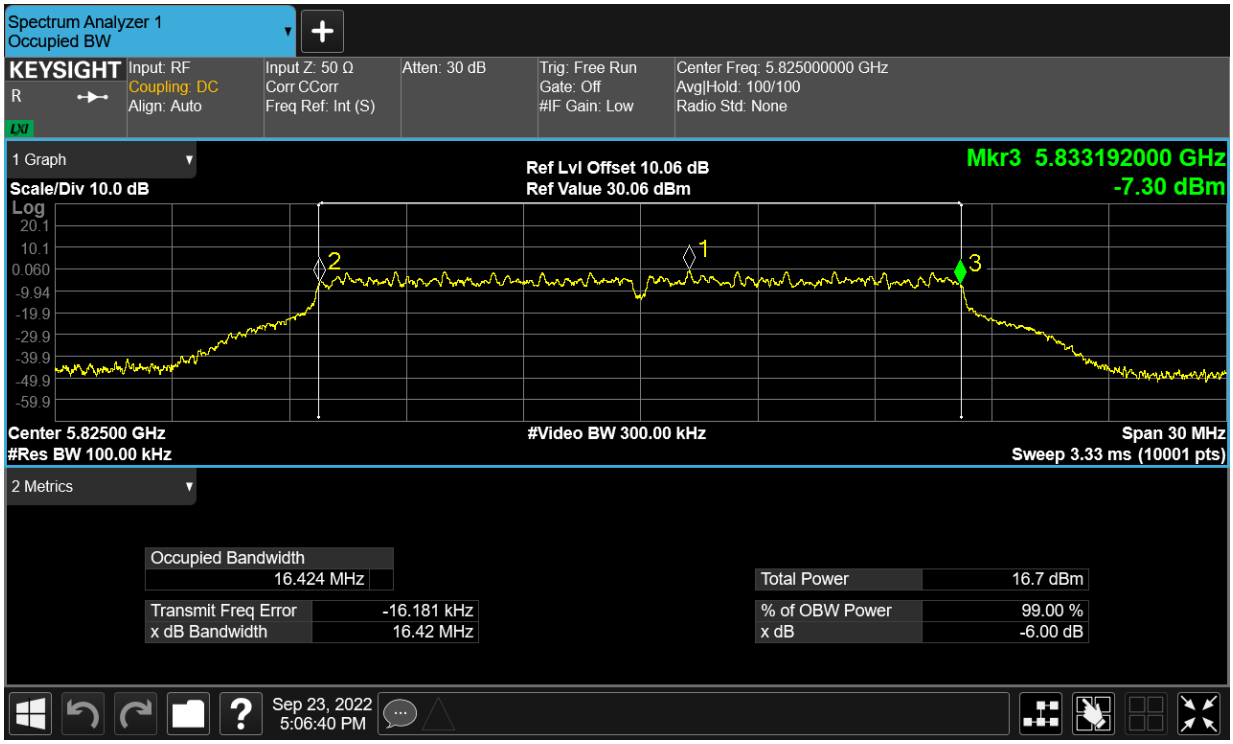
Test Graphs
-6dB Bandwidth NVNT a 5745MHz Ant1



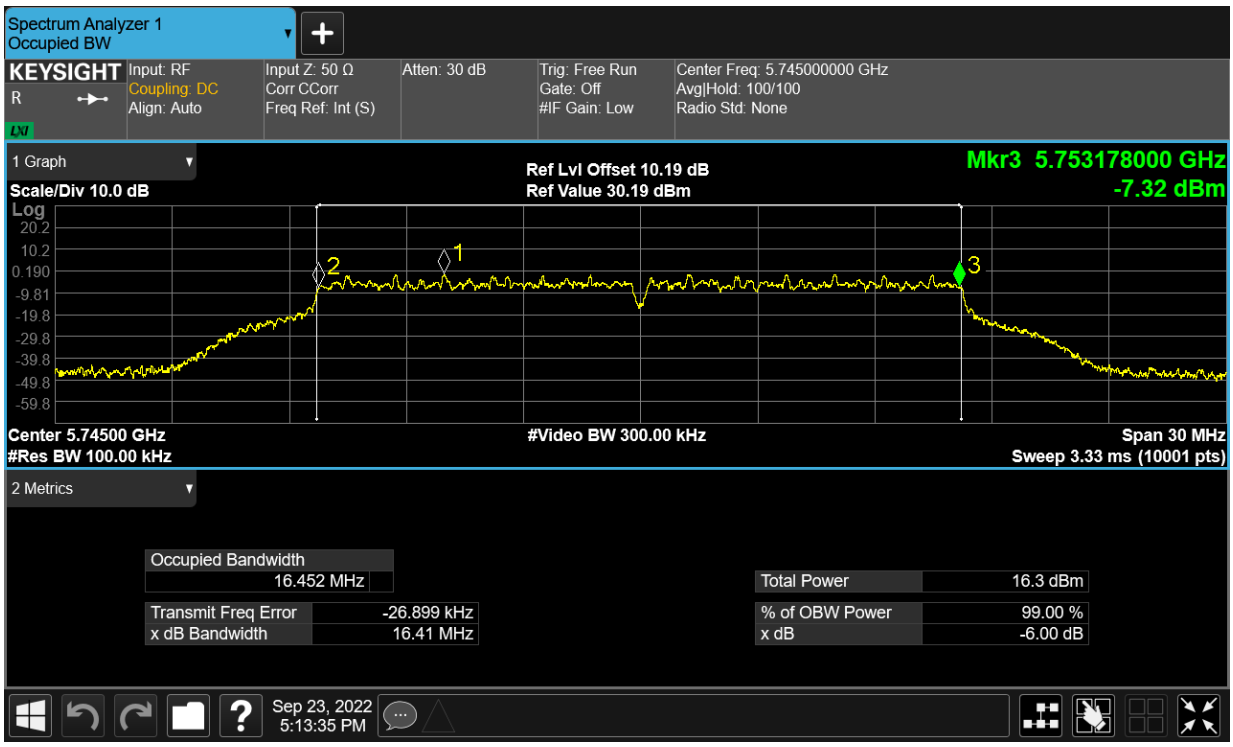
-6dB Bandwidth NVNT a 5785MHz Ant1



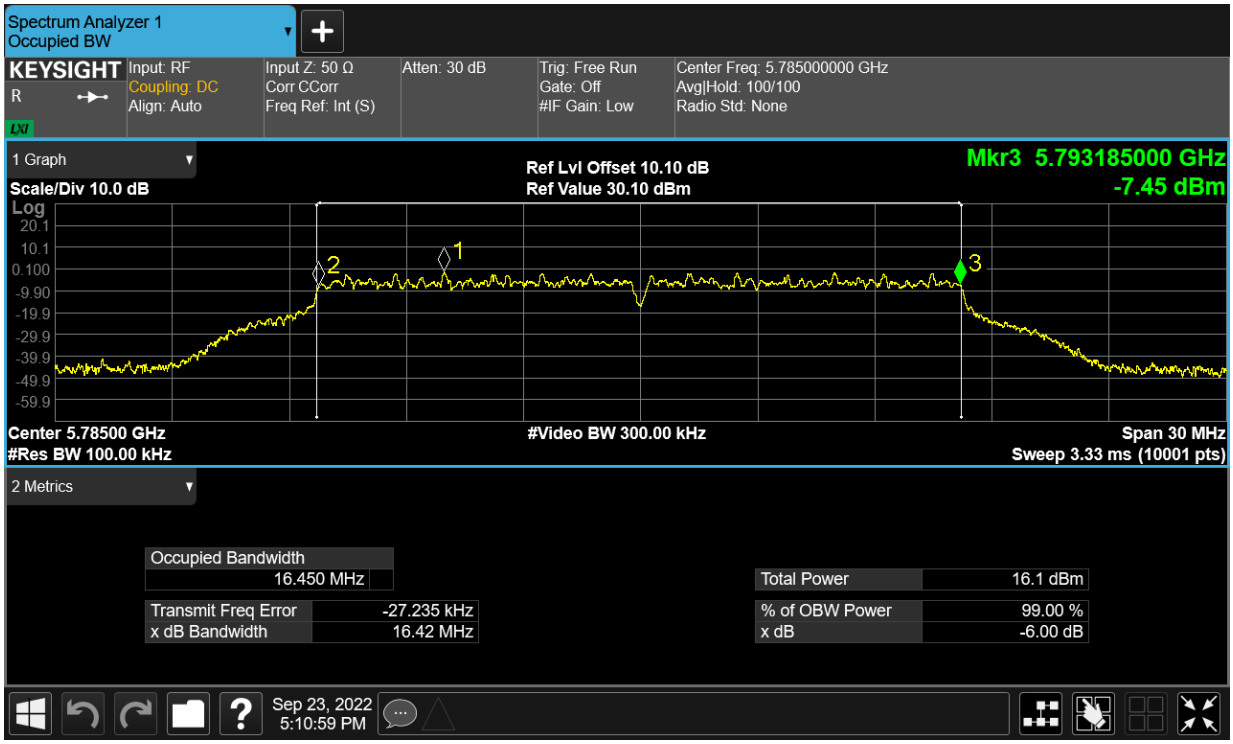
-6dB Bandwidth NVNT a 5825MHz Ant1



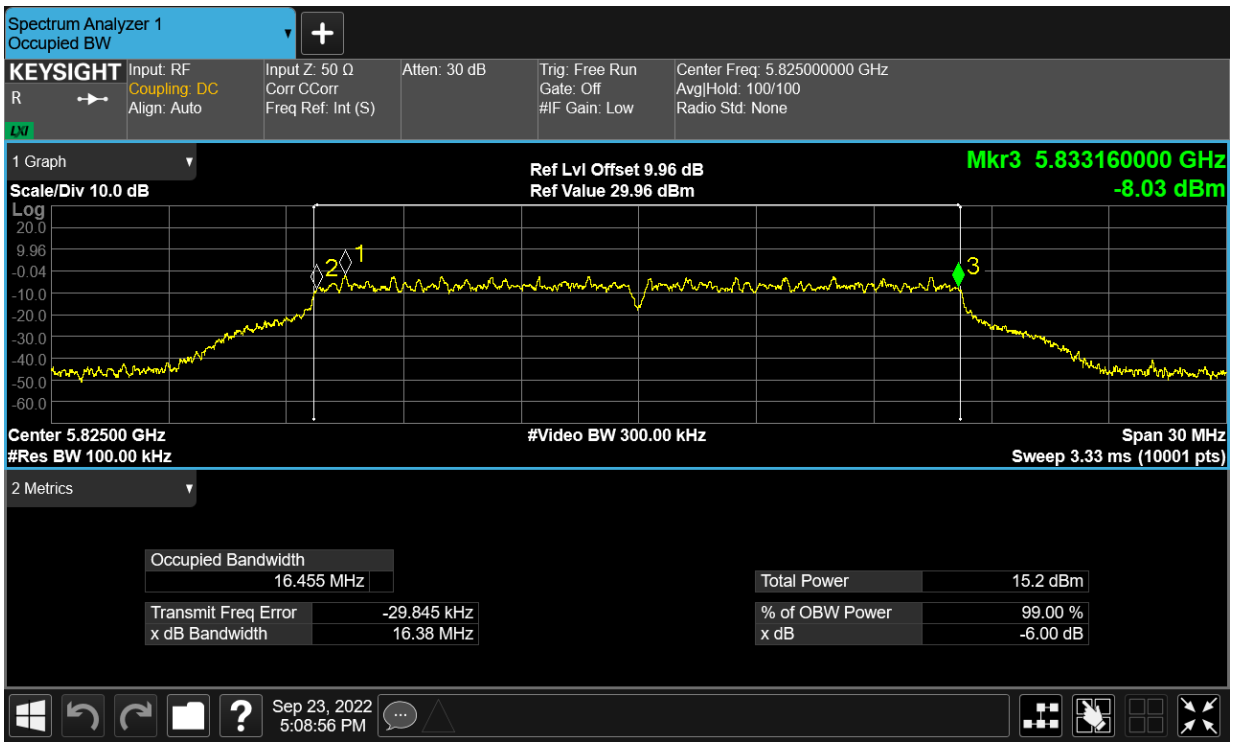
-6dB Bandwidth NVNT a 5745MHz Ant2



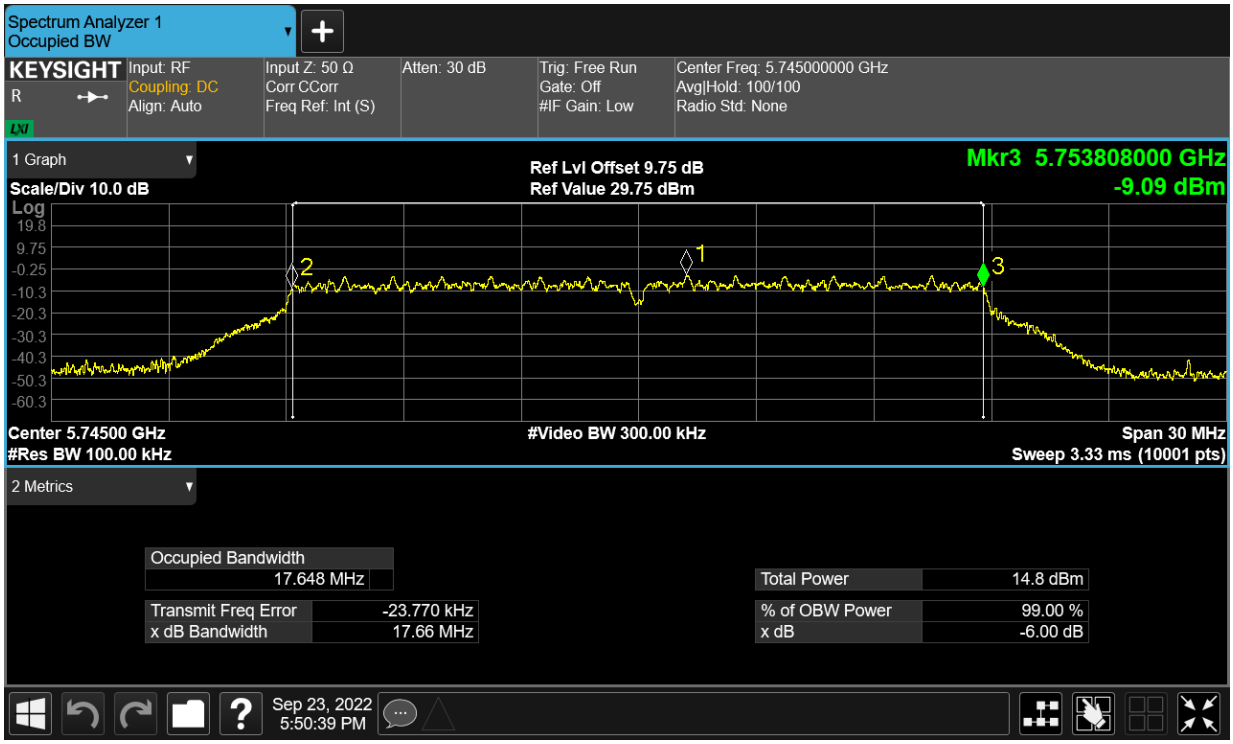
-6dB Bandwidth NVNT a 5785MHz Ant2



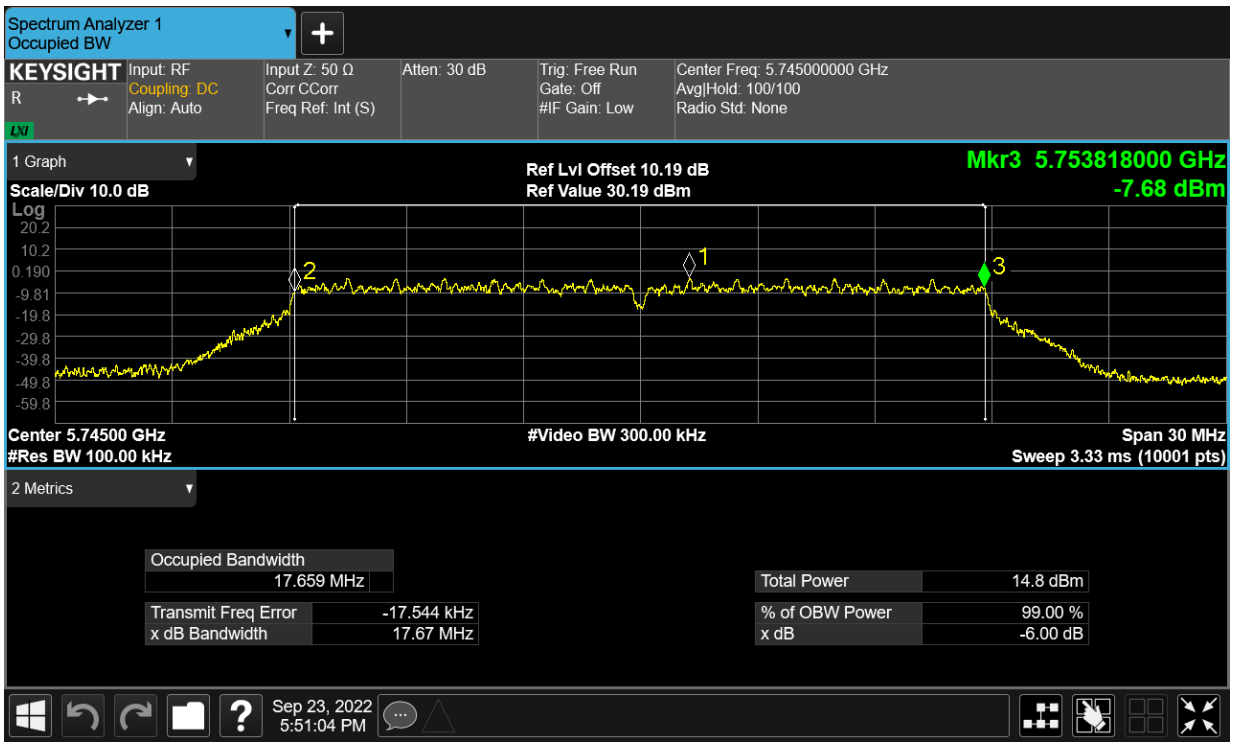
-6dB Bandwidth NVNT a 5825MHz Ant2



-6dB Bandwidth NVNT ac20 5745MHz Ant1



-6dB Bandwidth NVNT ac20 5745MHz Ant2



-6dB Bandwidth NVNT ac20 5785MHz Ant1