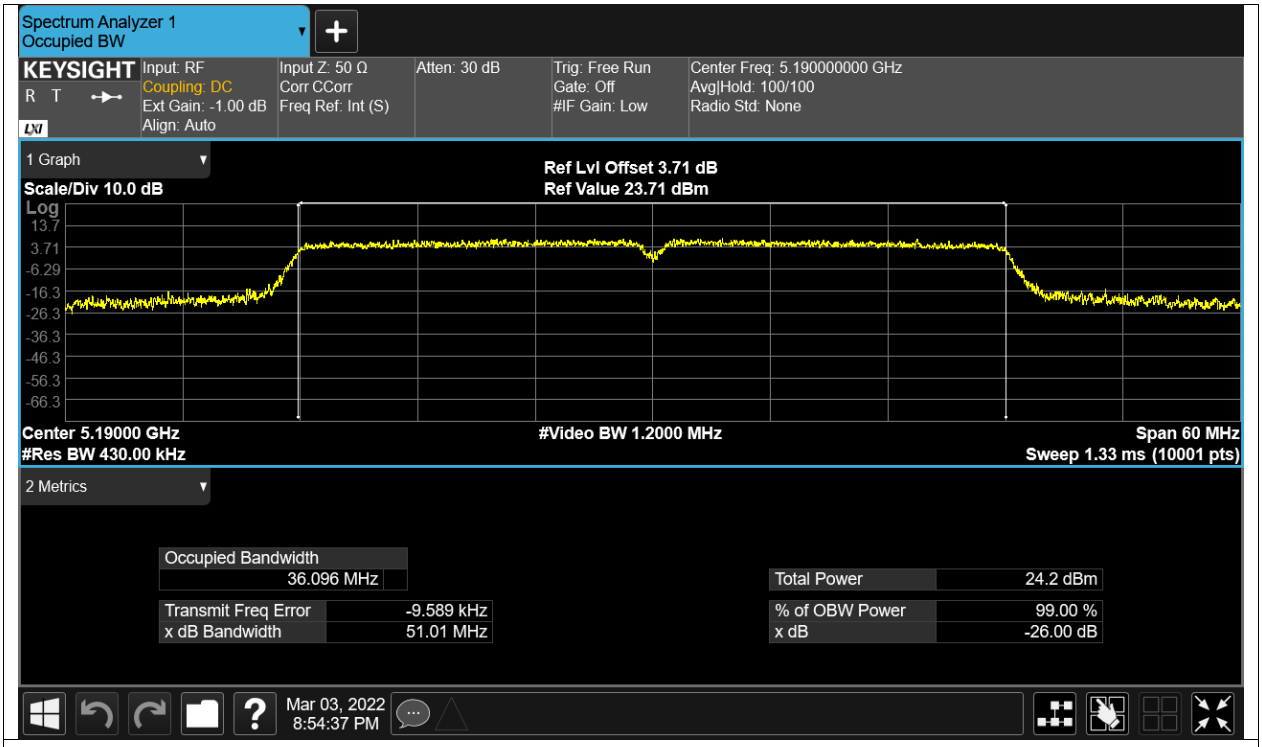
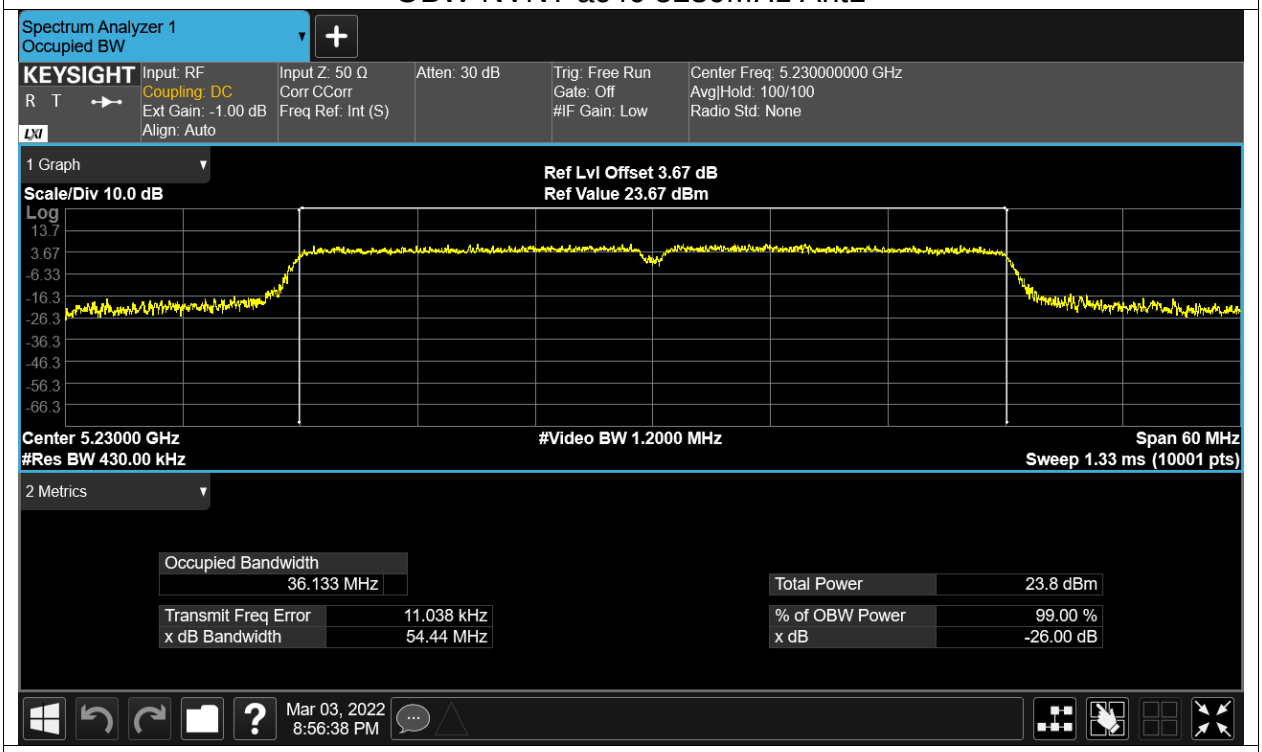
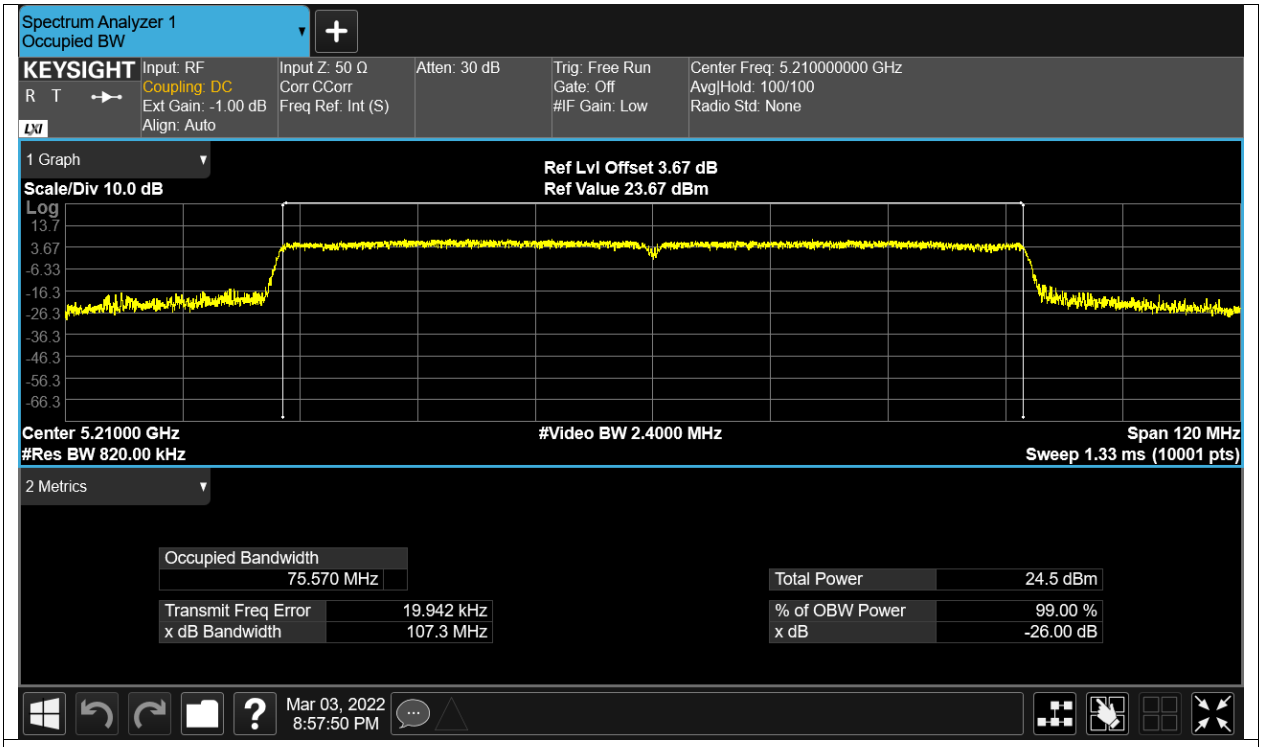


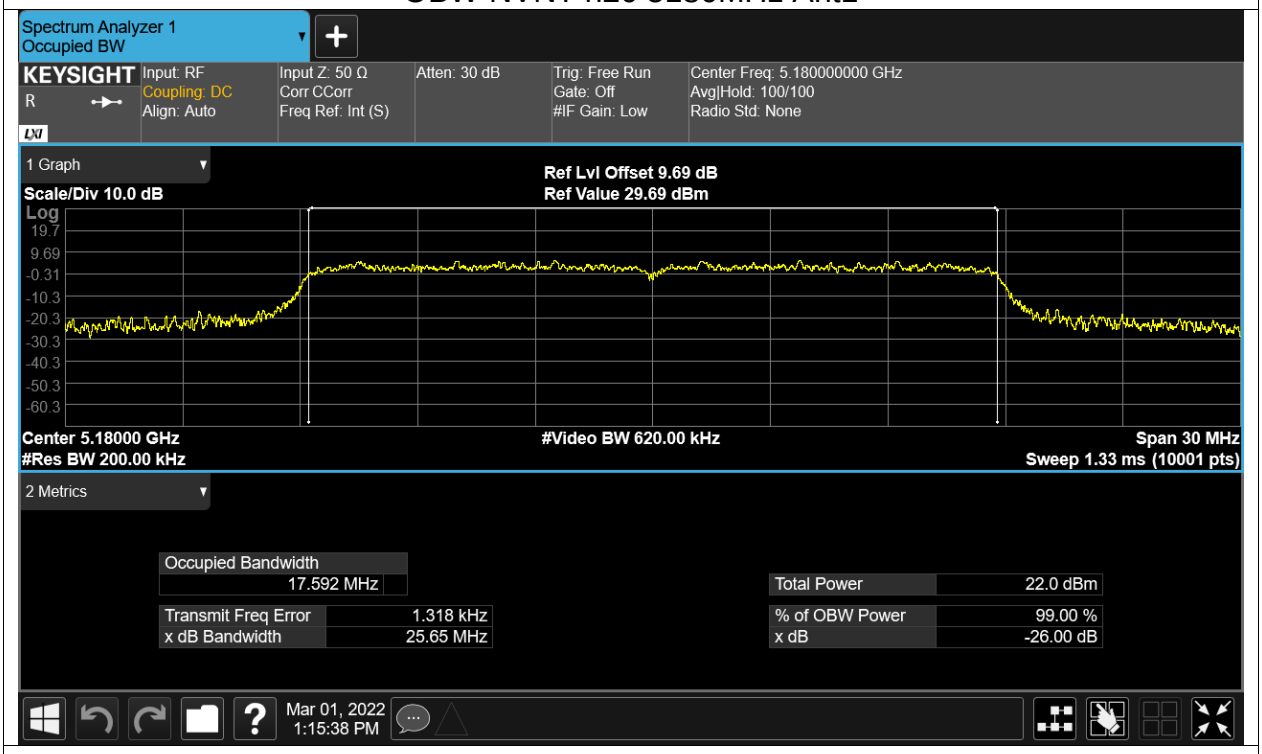
OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1



OBW NVNT n20 5180MHz Ant1



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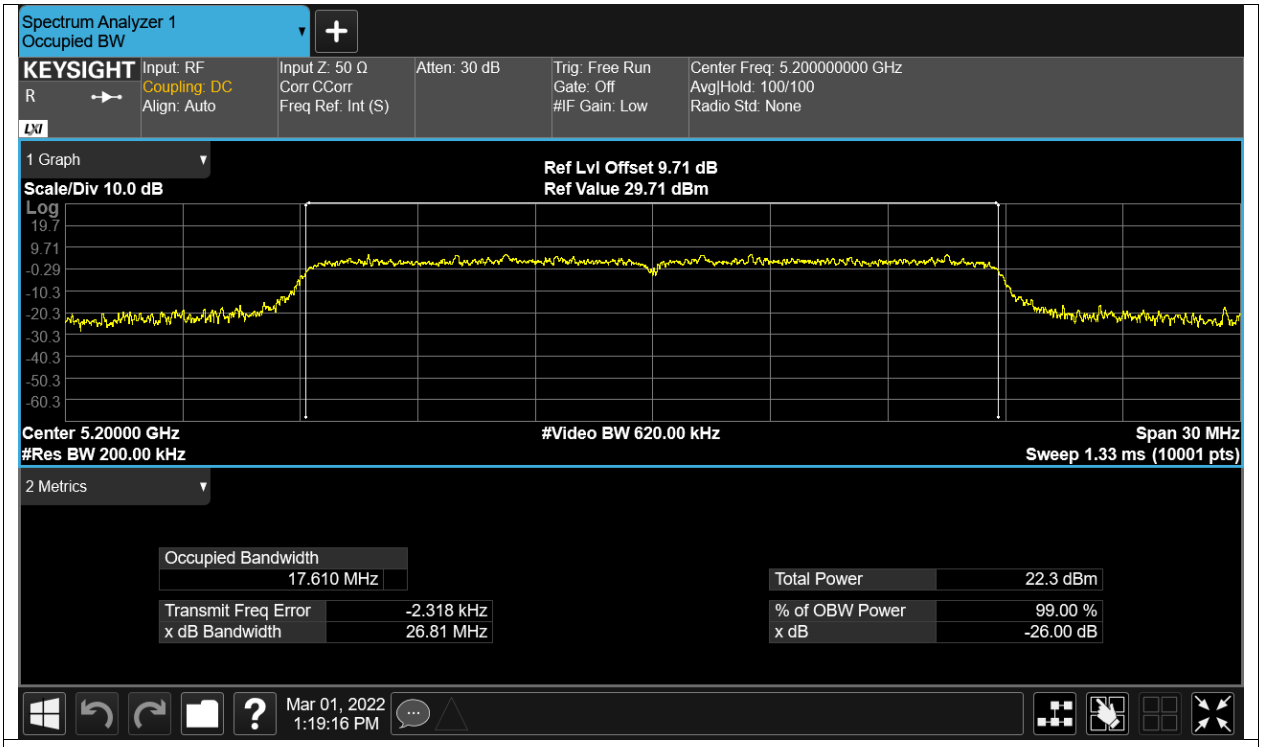
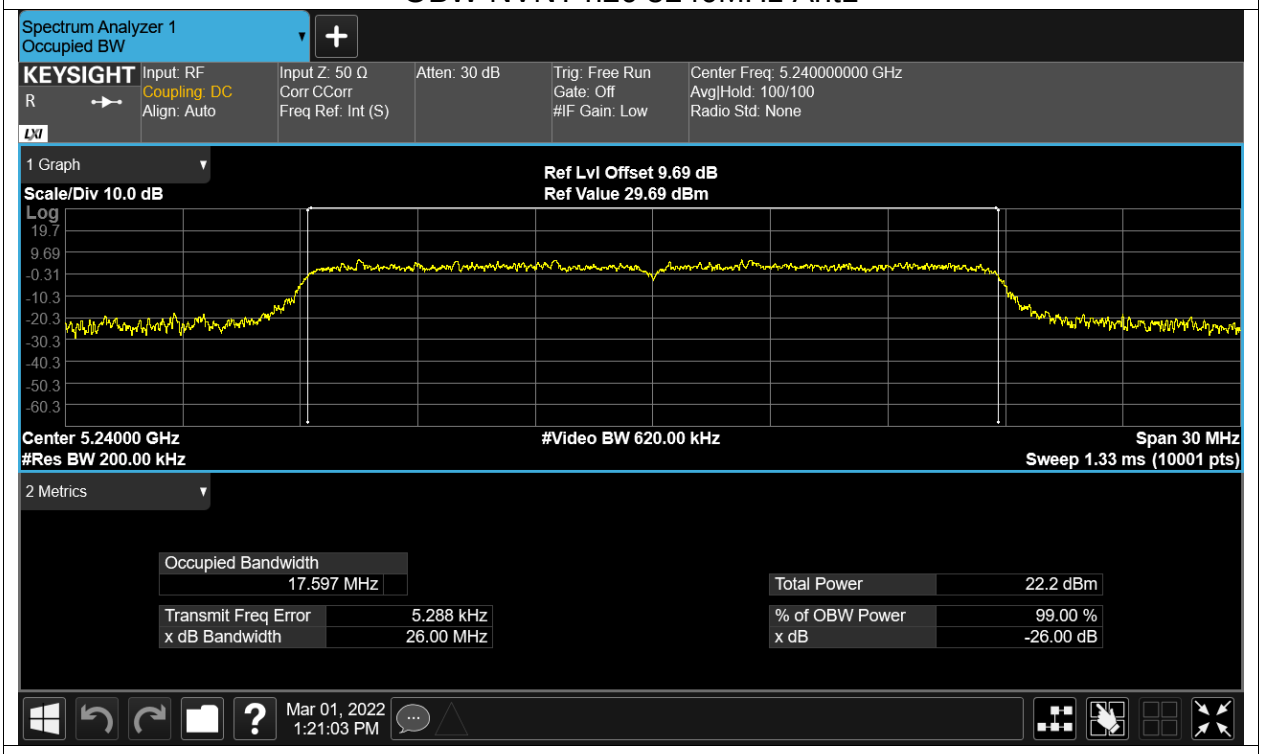
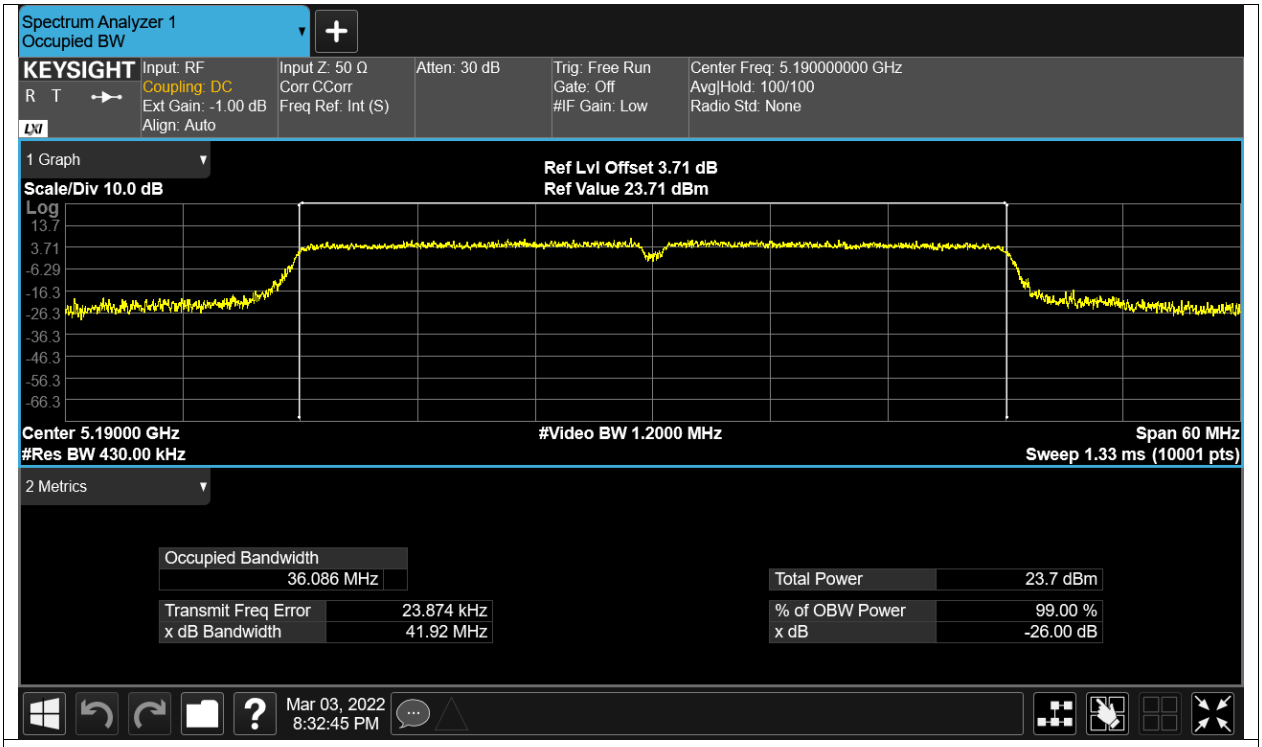


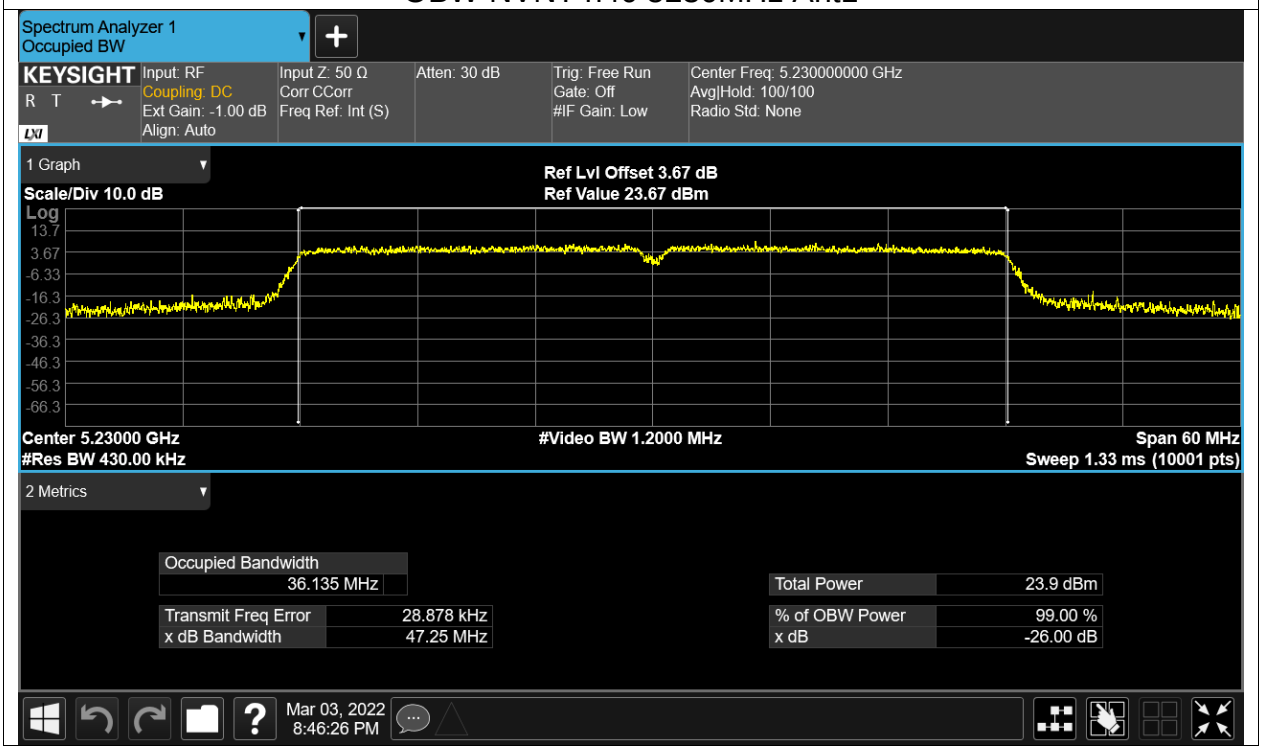
OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1

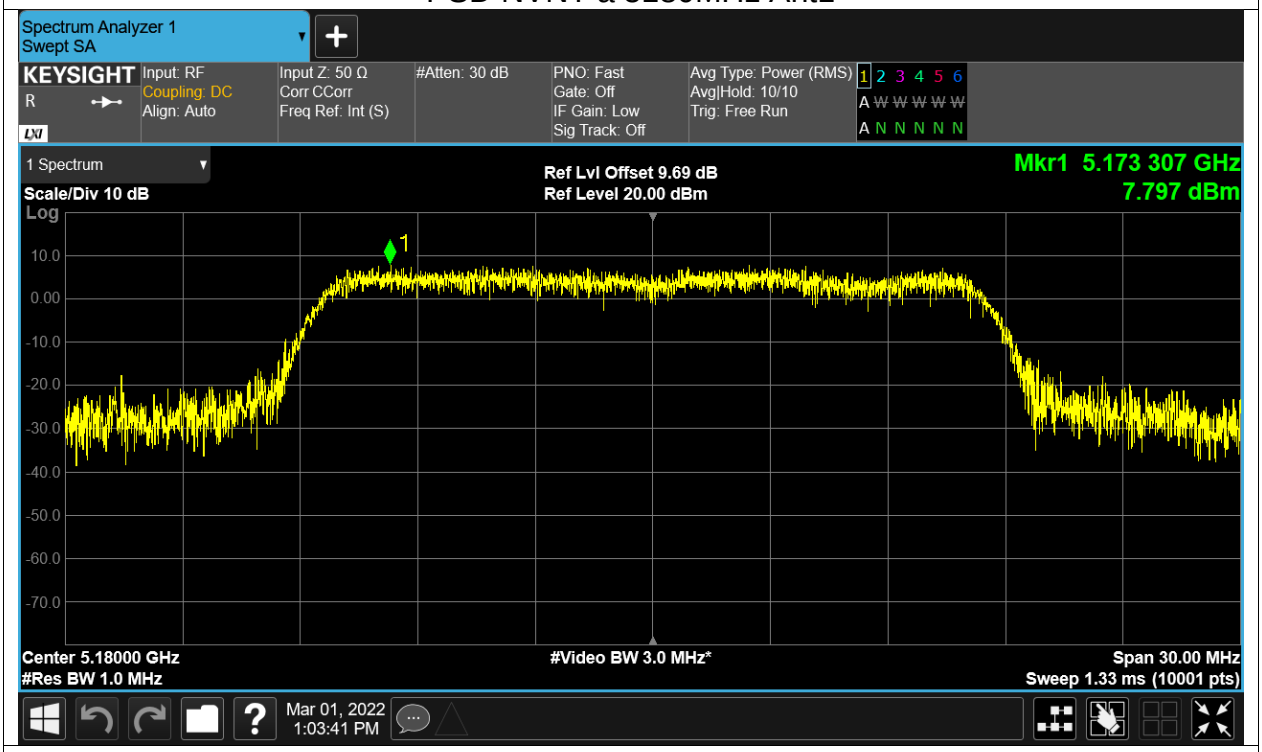


Maximum Power Spectral Density Level

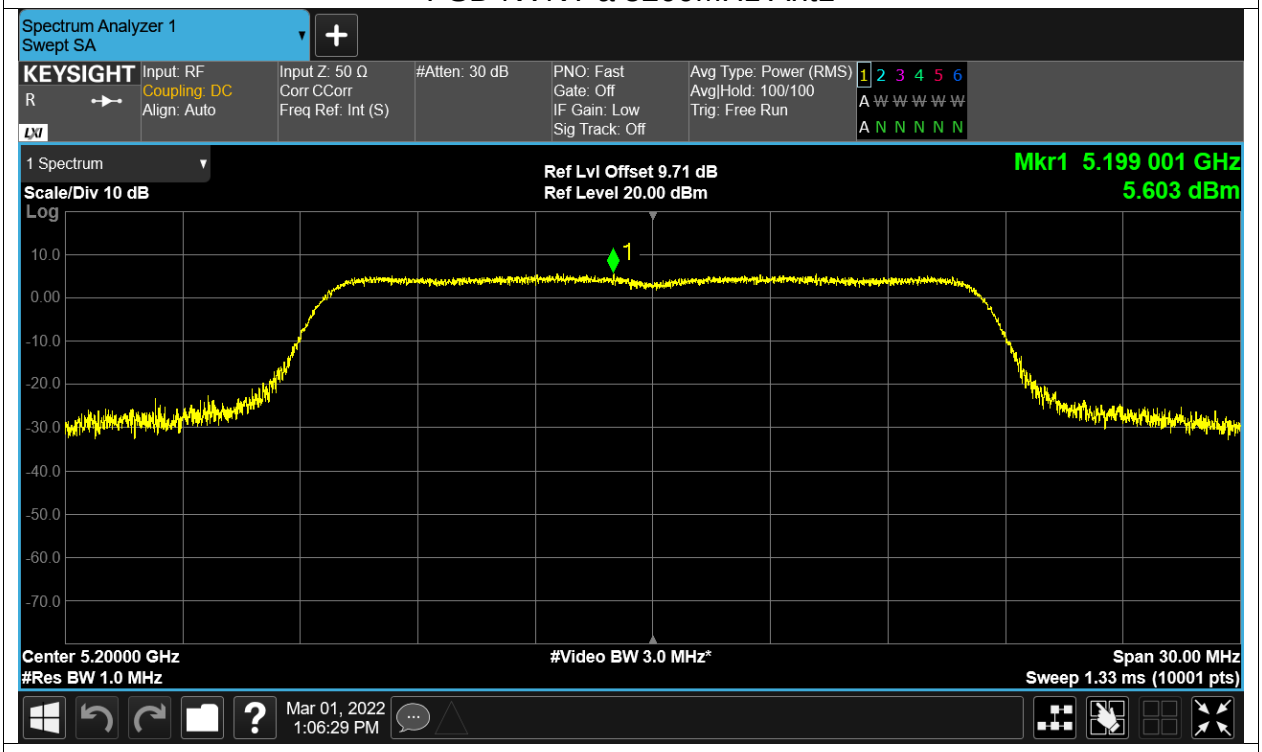
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	7.797	11	Pass
NVNT	a	5200	Ant1	5.603	11	Pass
NVNT	a	5240	Ant1	5.383	11	Pass
NVNT	ac20	5180	Ant1	5.862	11	Pass
NVNT	ac20	5200	Ant1	5.502	11	Pass
NVNT	ac20	5240	Ant1	5.508	11	Pass
NVNT	ac40	5190	Ant1	4.491	11	Pass
NVNT	ac40	5230	Ant1	4.38	11	Pass
NVNT	ac80	5210	Ant1	0.657	11	Pass
NVNT	n20	5180	Ant1	5.255	11	Pass
NVNT	n20	5200	Ant1	5.334	11	Pass
NVNT	n20	5240	Ant1	5.567	11	Pass
NVNT	n40	5190	Ant1	4.326	11	Pass
NVNT	n40	5230	Ant1	4.316	11	Pass

Test Graphs

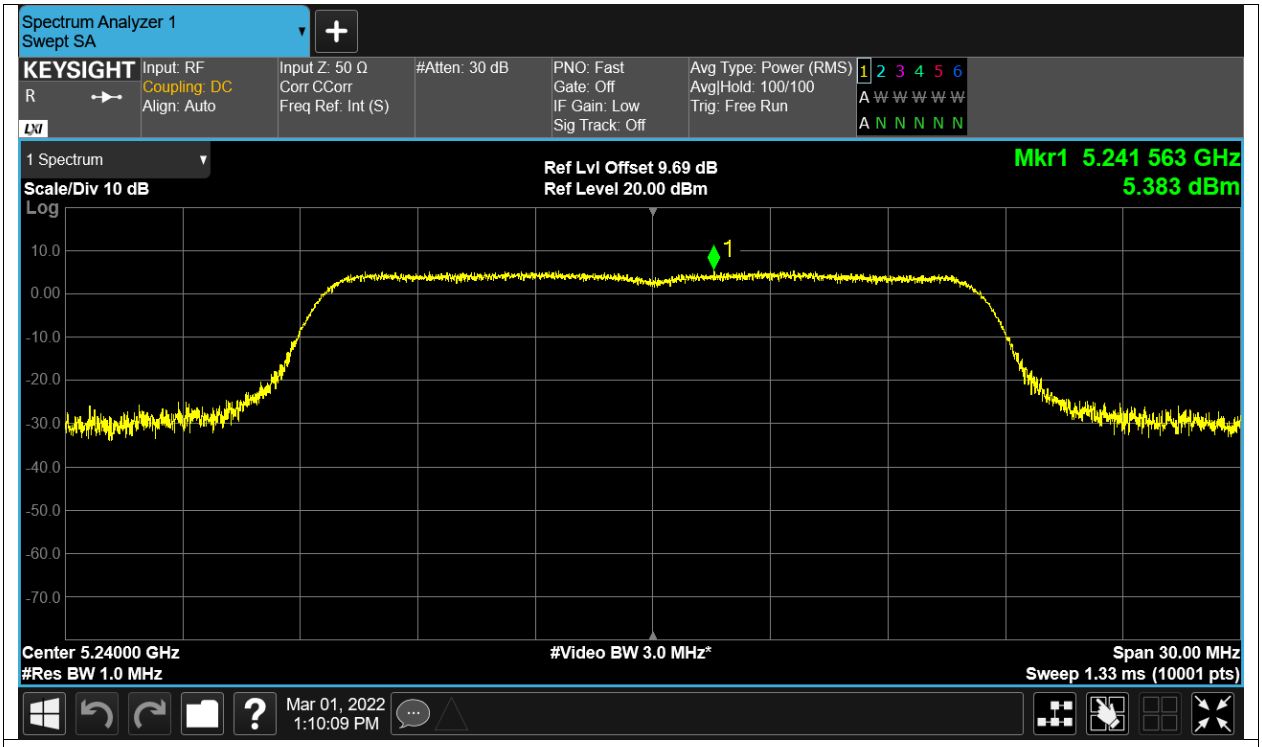
PSD NVNT a 5180MHz Ant1



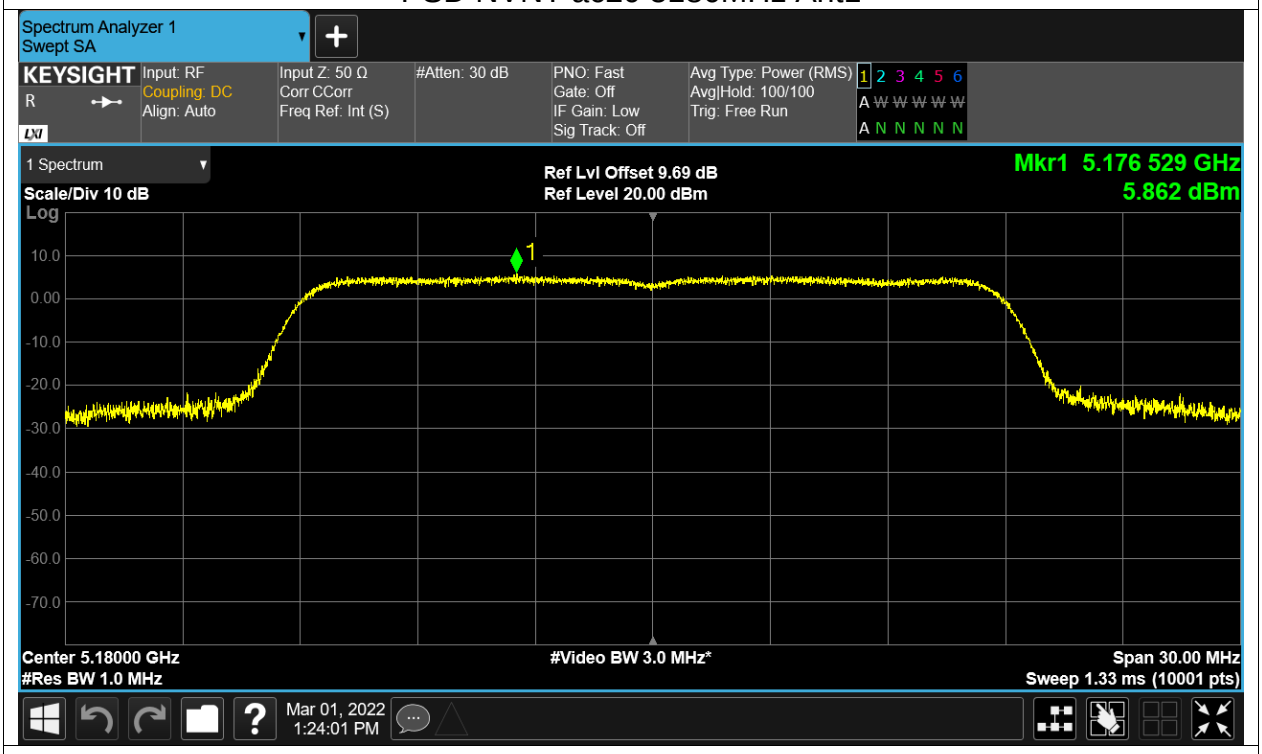
PSD NVNT a 5200MHz Ant1



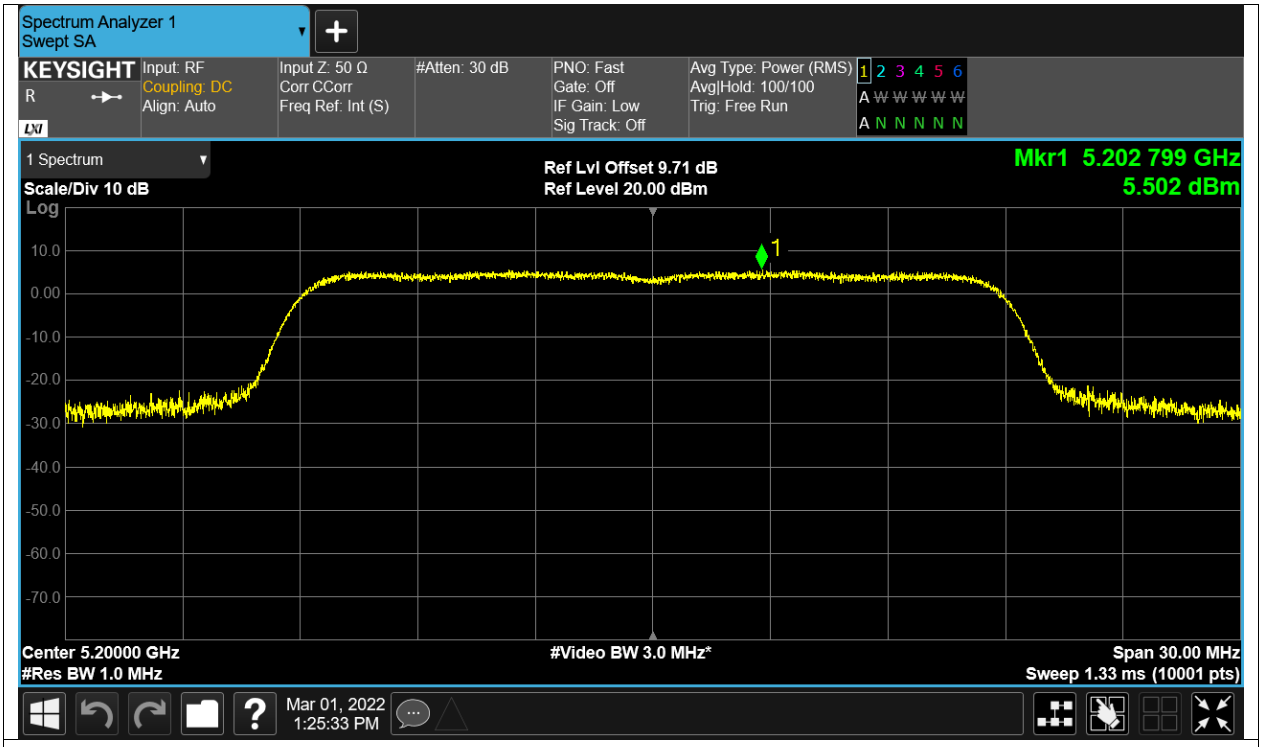
PSD NVNT a 5240MHz Ant1



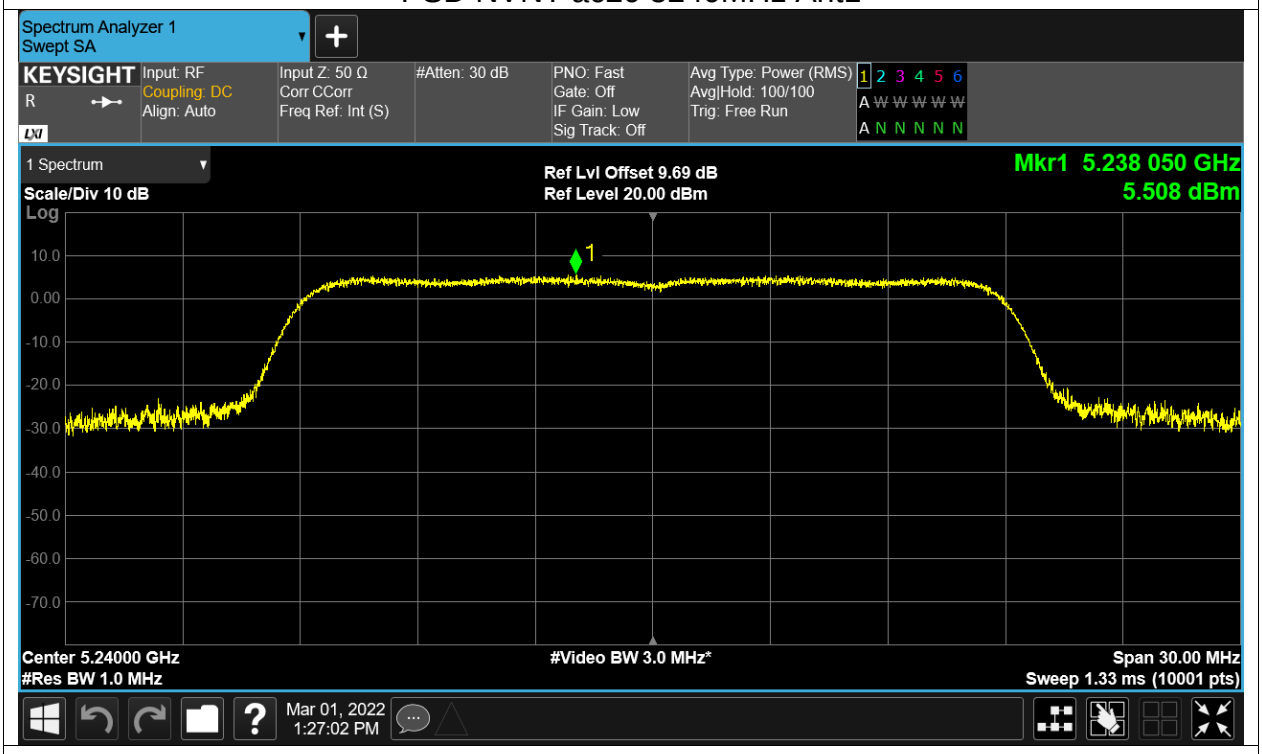
PSD NVNT ac20 5180MHz Ant1



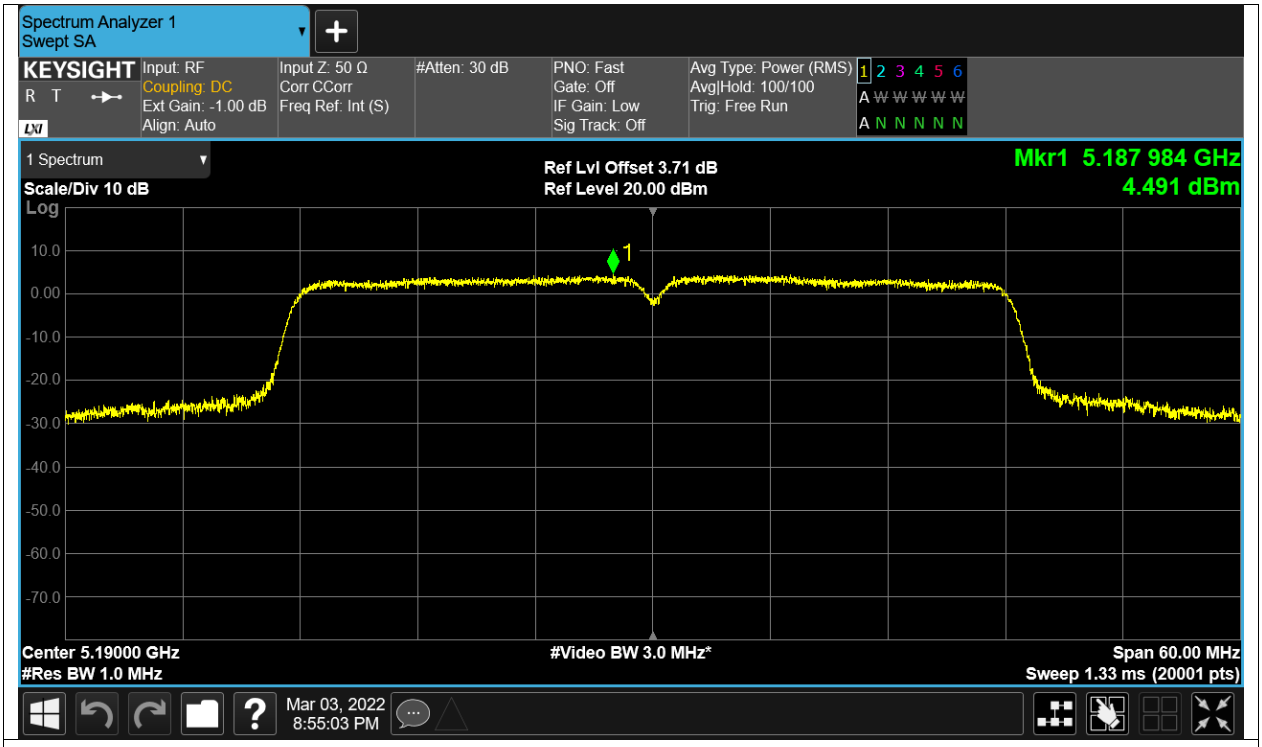
PSD NVNT ac20 5200MHz Ant1



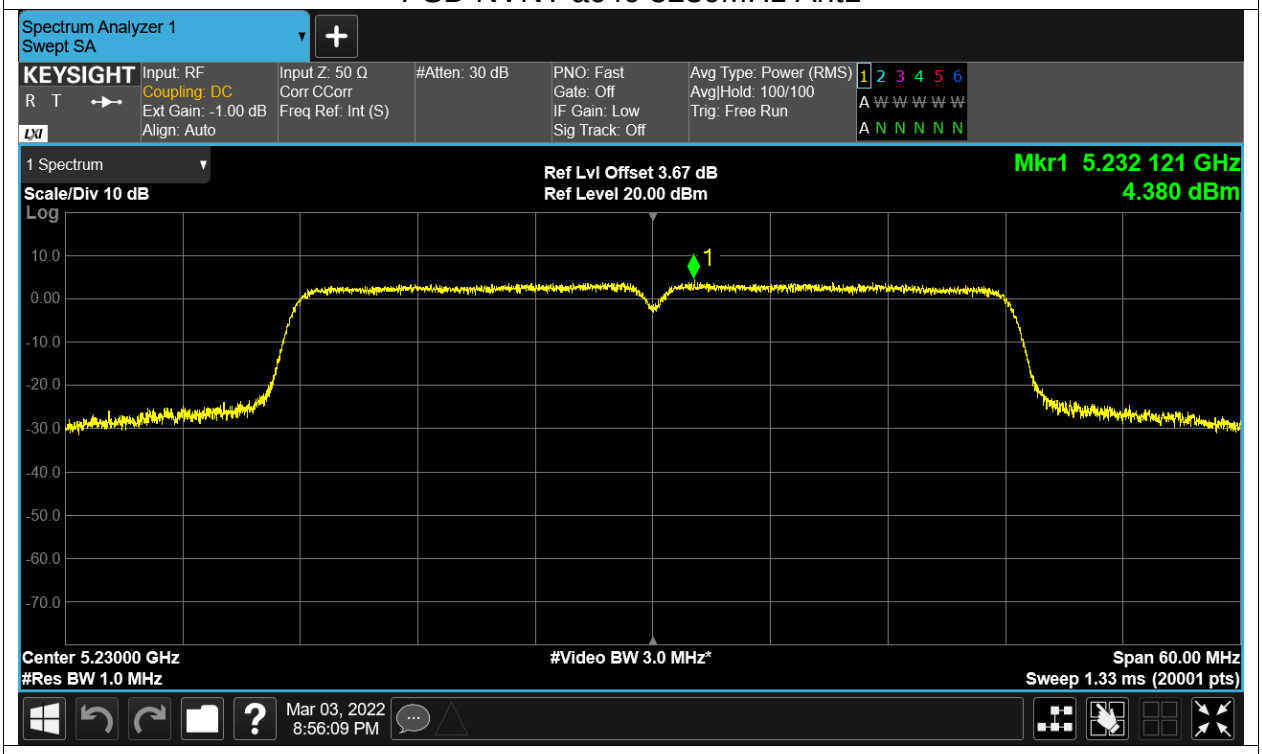
PSD NVNT ac20 5240MHz Ant1



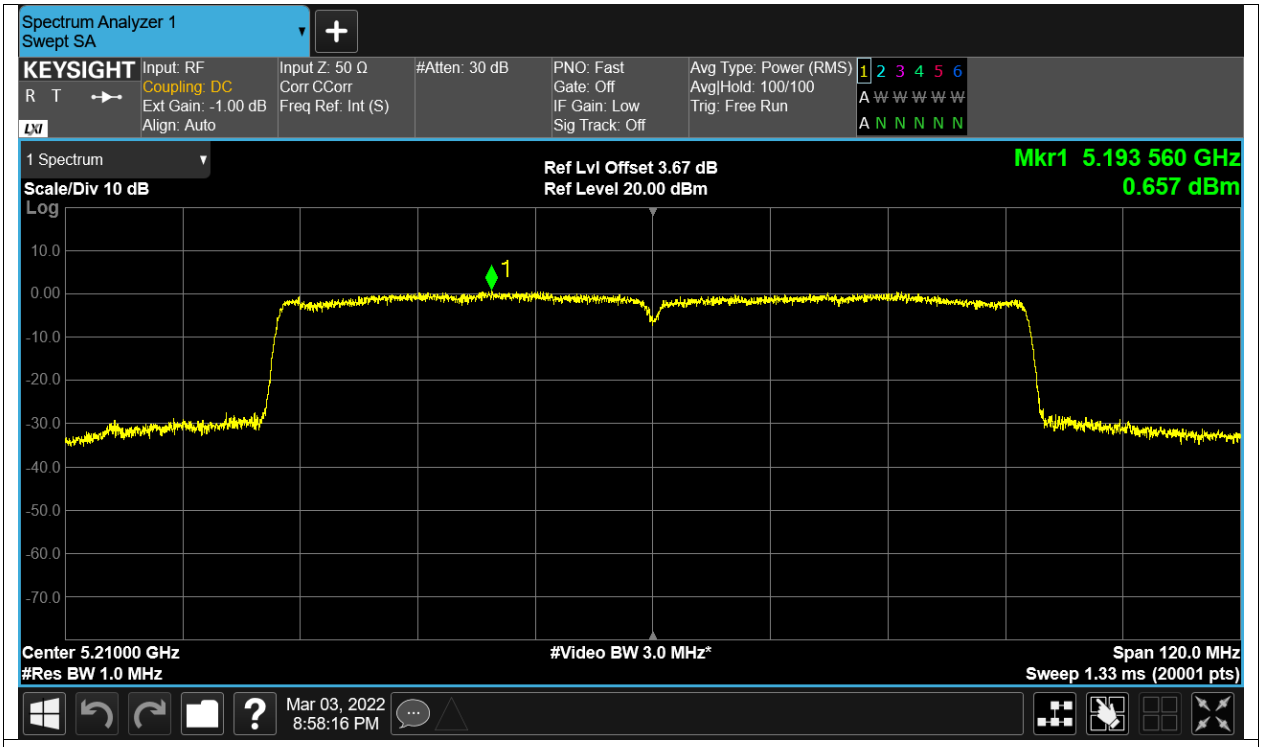
PSD NVNT ac40 5190MHz Ant1



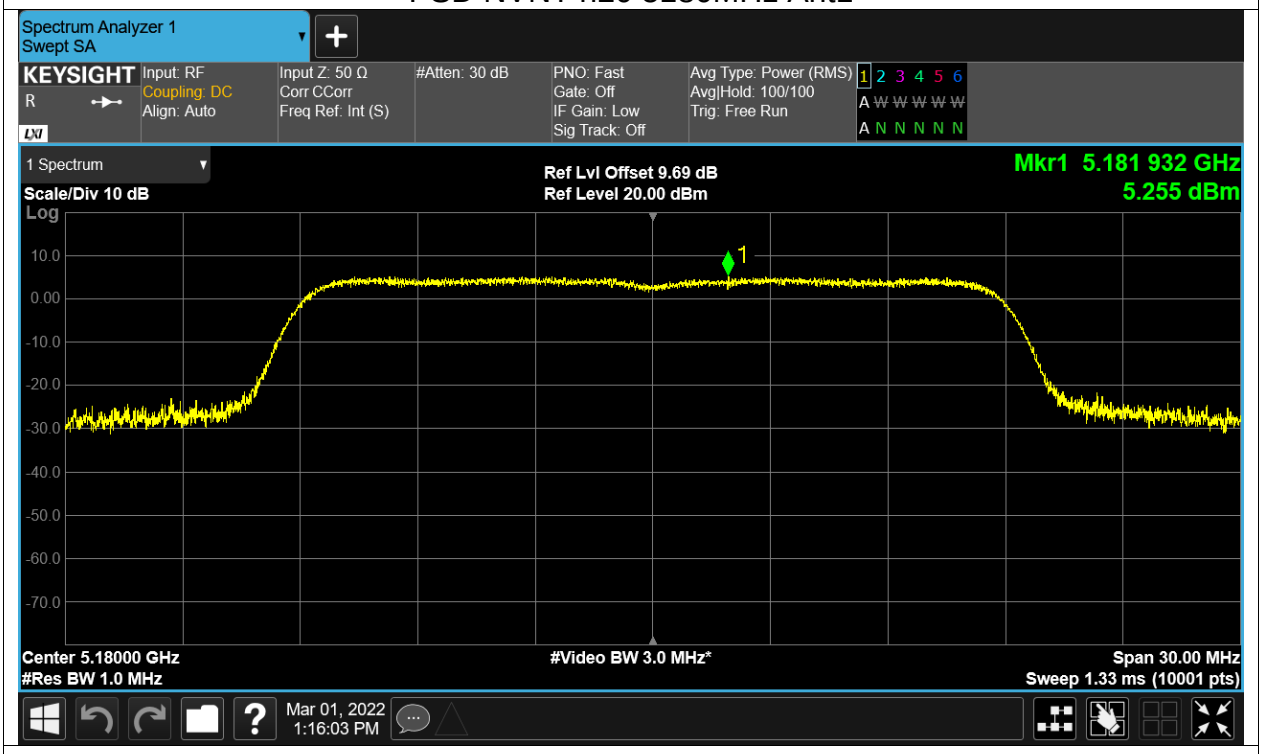
PSD NVNT ac40 5230MHz Ant1



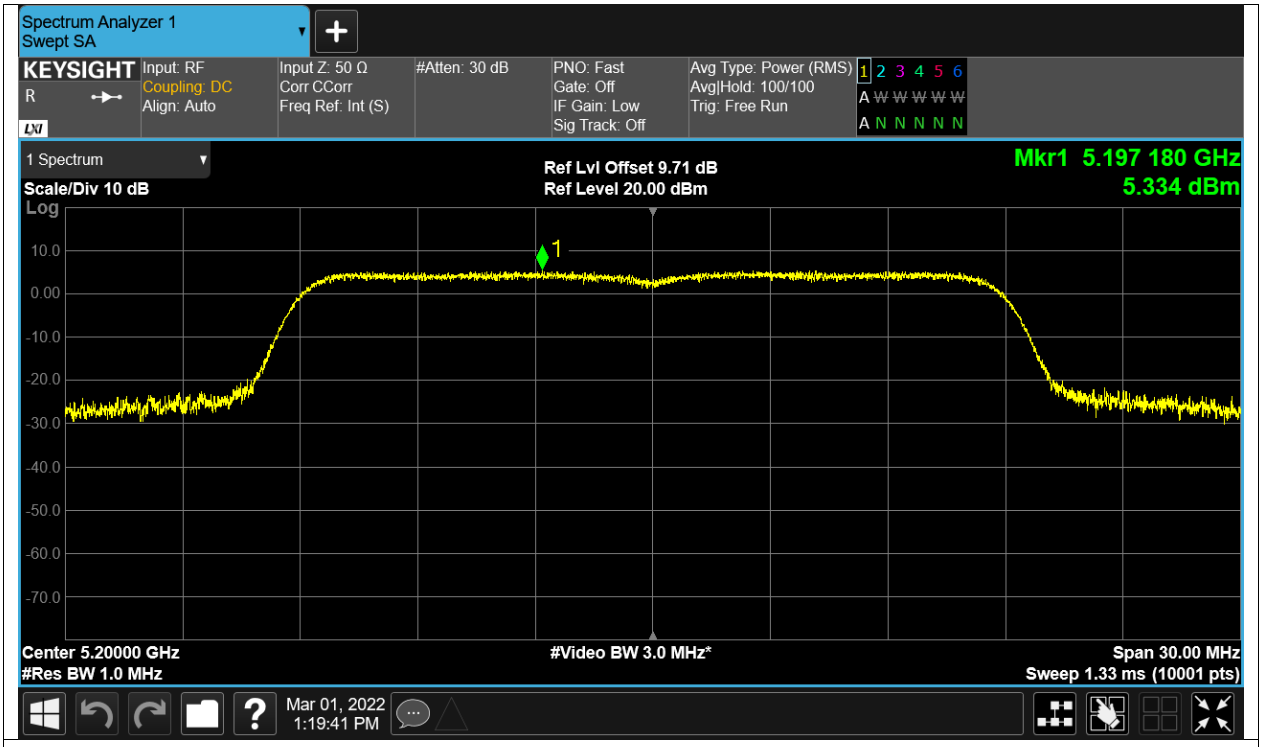
PSD NVNT ac80 5210MHz Ant1



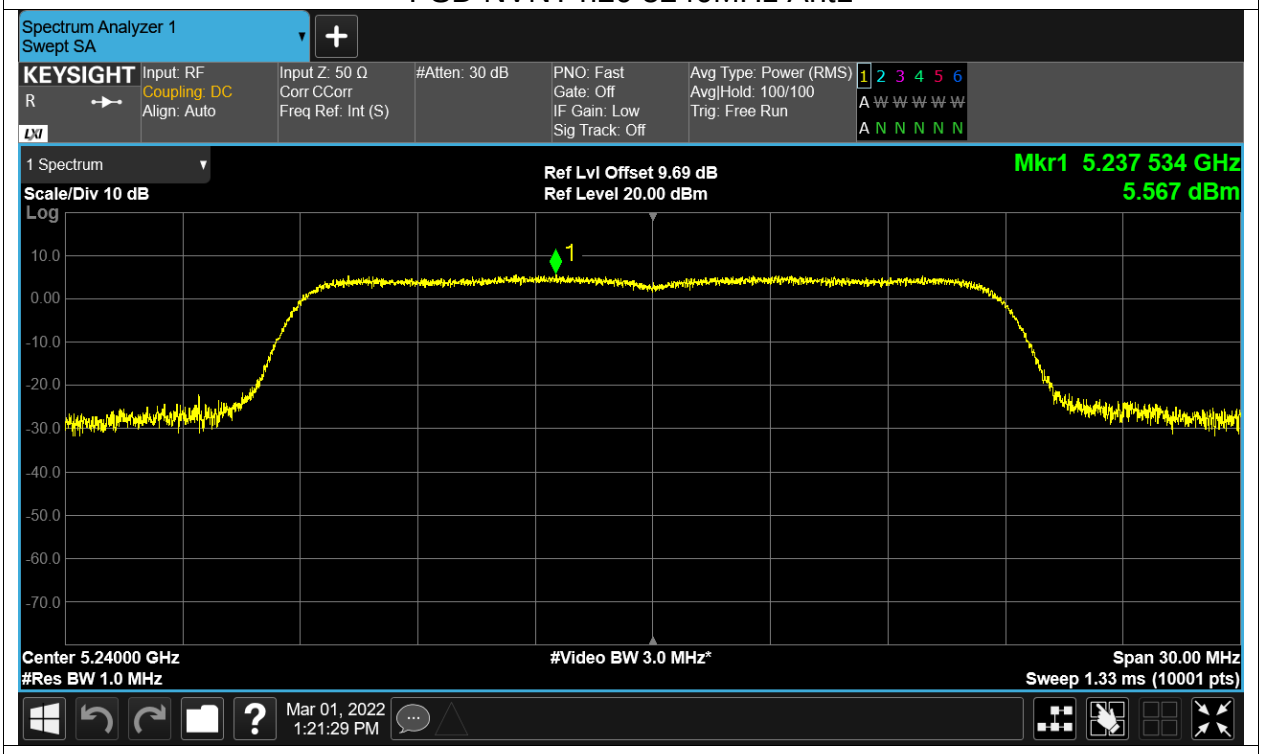
PSD NVNT n20 5180MHz Ant1



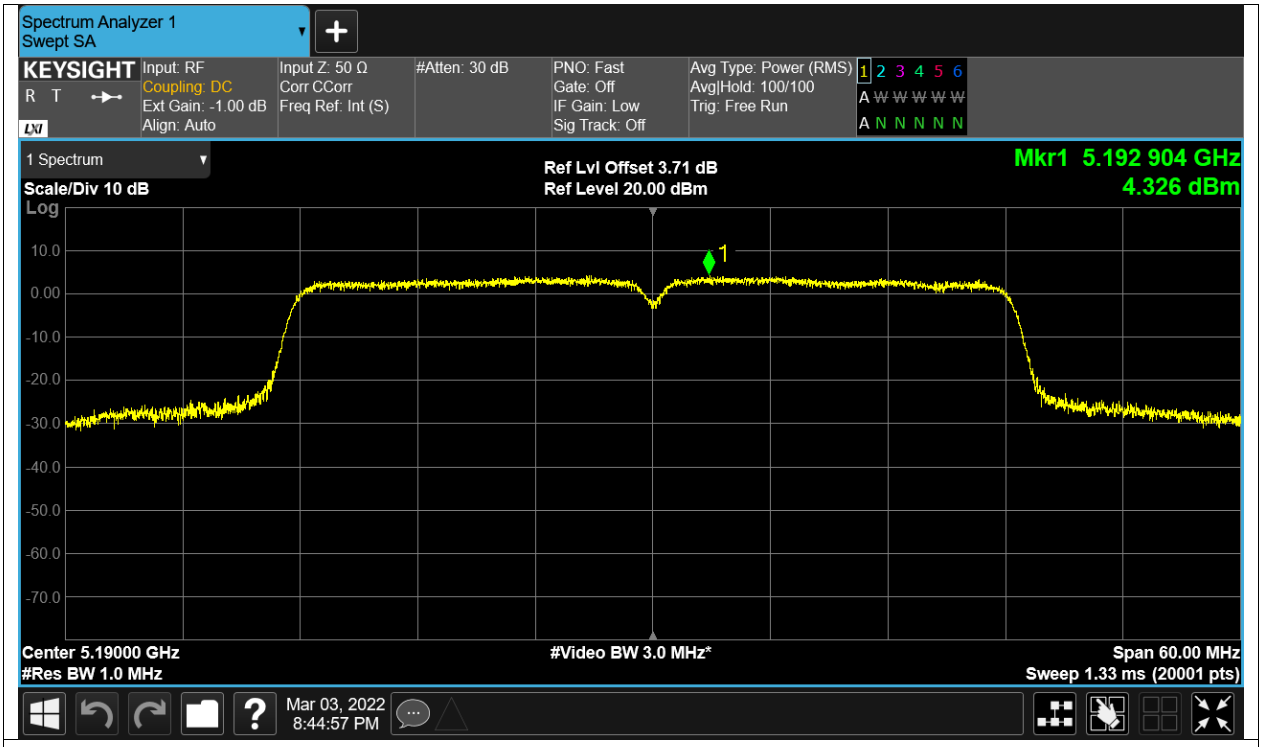
PSD NVNT n20 5200MHz Ant1



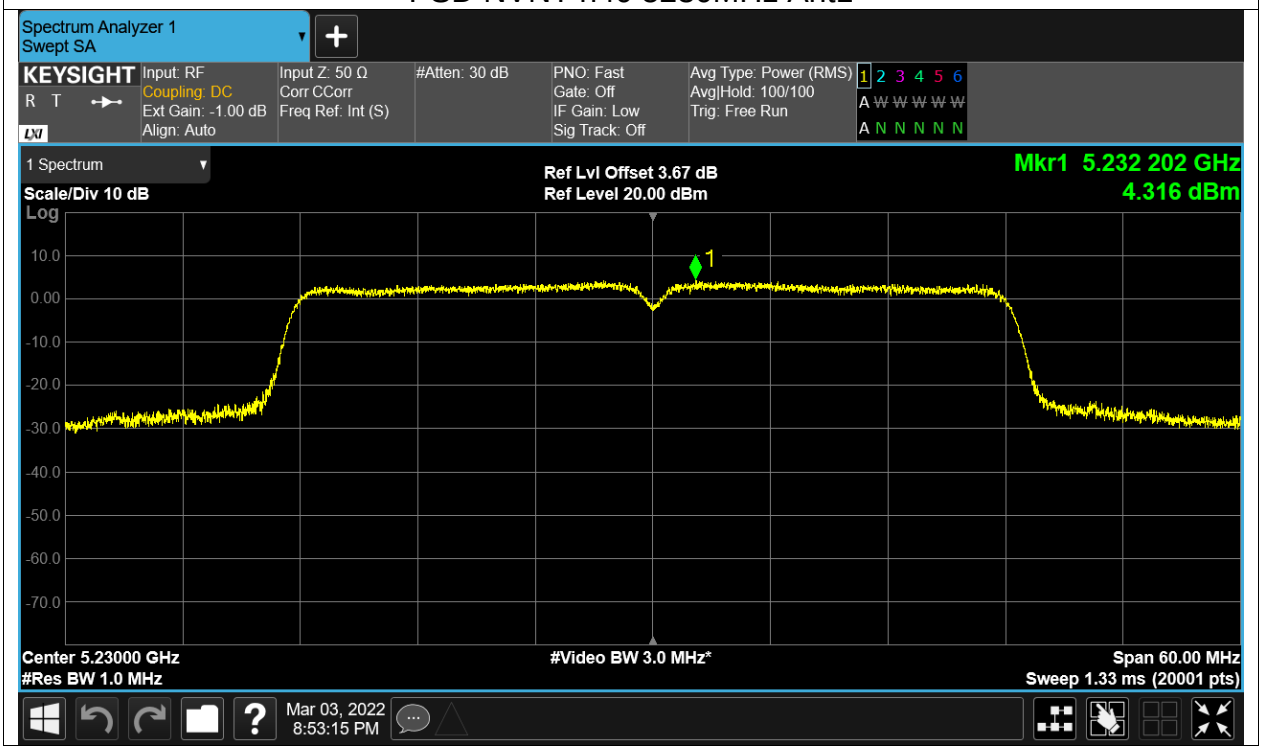
PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1



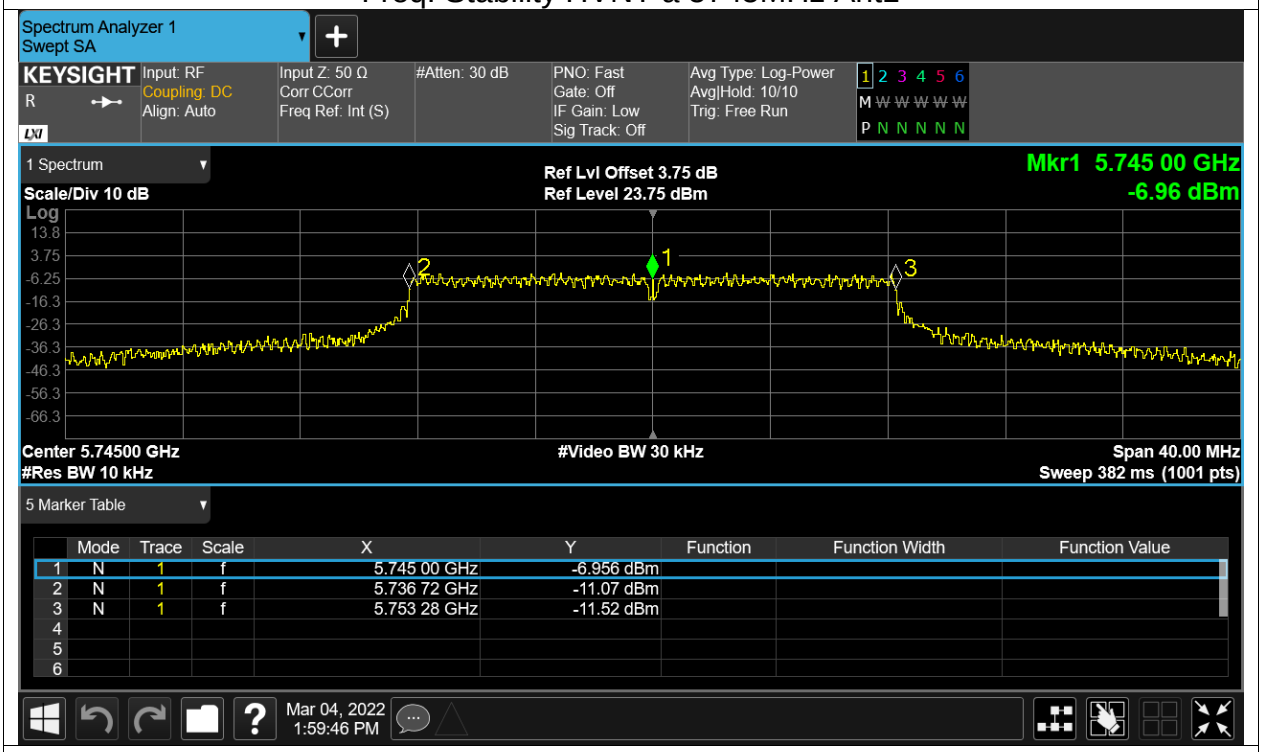
Appendix B – 5.8G Wi-Fi

Frequency Stability

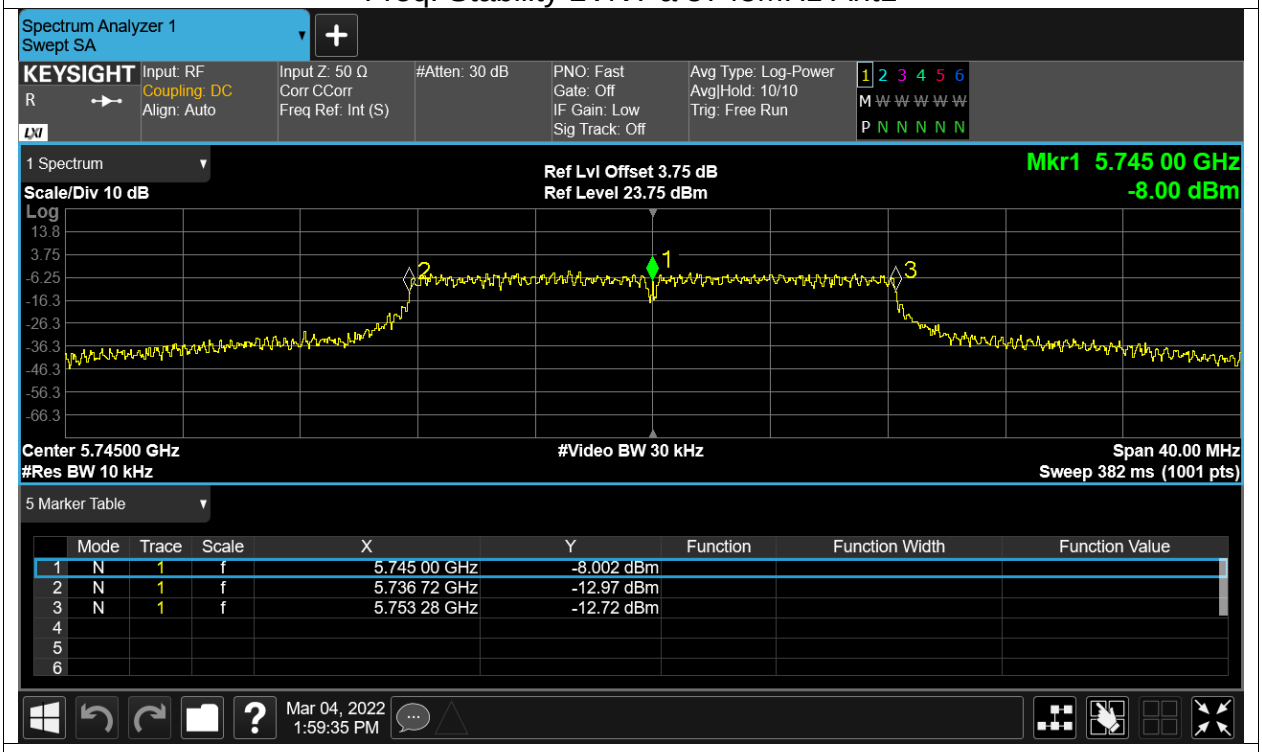
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5745	Ant1	5745	0	Within authorized band	Pass
LVNT	a	5745	Ant1	5745	0		Pass
NVHT	a	5745	Ant1	5744.98	-3.48		Pass
NVLT	a	5745	Ant1	5744.98	-3.48		Pass
NVNT	a	5745	Ant1	5744.98	-3.48		Pass
HVNT	ac80	5775	Ant1	5775	0		Pass
LVNT	ac80	5775	Ant1	5775	0		Pass
NVHT	ac80	5775	Ant1	5775	0		Pass
NVLT	ac80	5775	Ant1	5775	0		Pass
NVNT	ac80	5775	Ant1	5775	0		Pass
HVNT	n40	5755	Ant1	5755	0		Pass
LVNT	n40	5755	Ant1	5755	0		Pass
NVHT	n40	5755	Ant1	5755	0		Pass
NVLT	n40	5755	Ant1	5755	0		Pass
NVNT	n40	5755	Ant1	5754.96	-6.95		Pass
Remark: “NTNV” means Normal Temperature Normal Voltage, “HVNT” means High Voltage Normal Temperature, “LVNT” means Low Voltage Normal Temperature, “NVHT” means Normal Voltage High Temperature, “NVLT” means Normal Voltage Low Temperature,							

Test Graphs

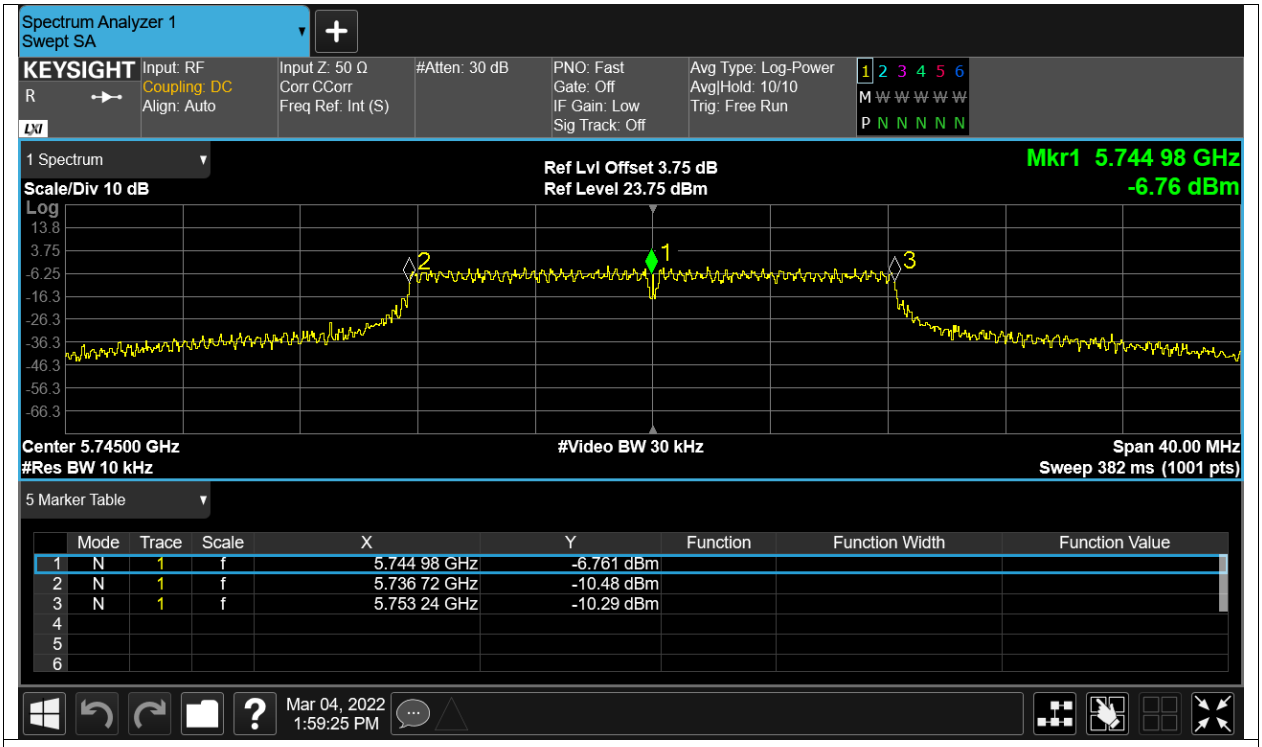
Freq. Stability HVNT a 5745MHz Ant1



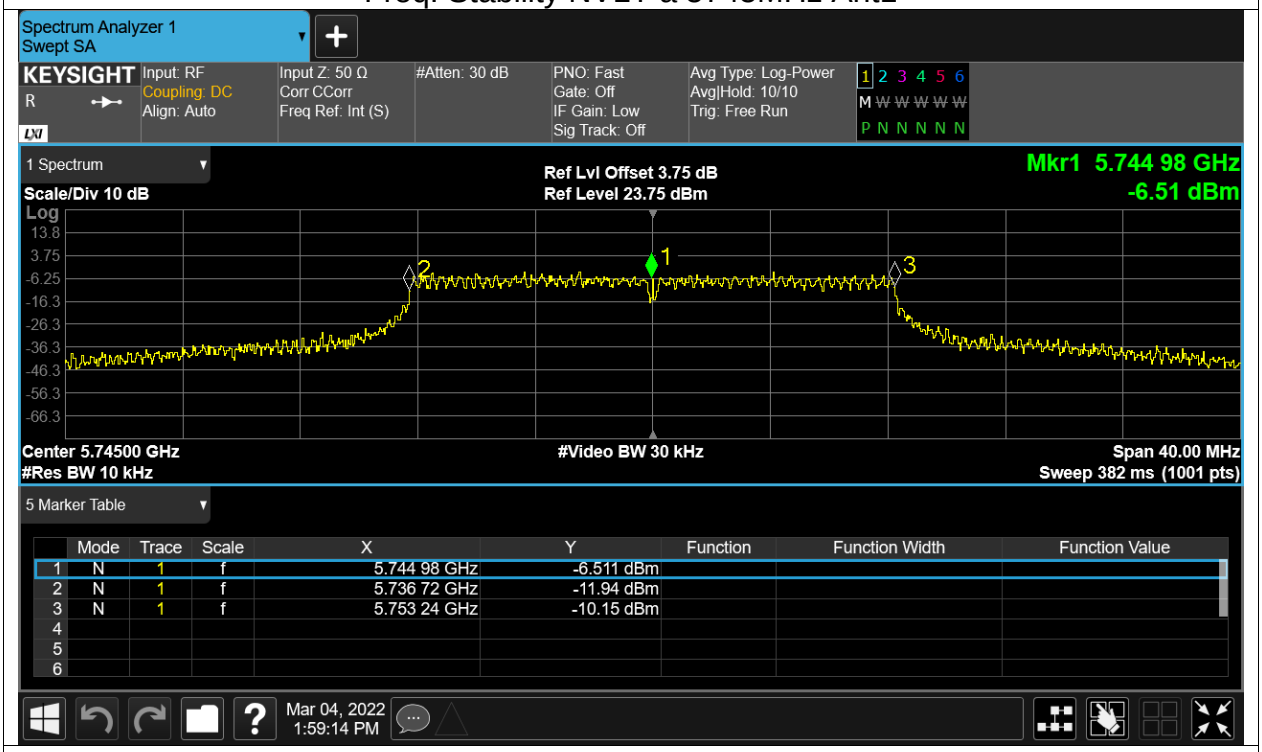
Freq. Stability LVNT a 5745MHz Ant1



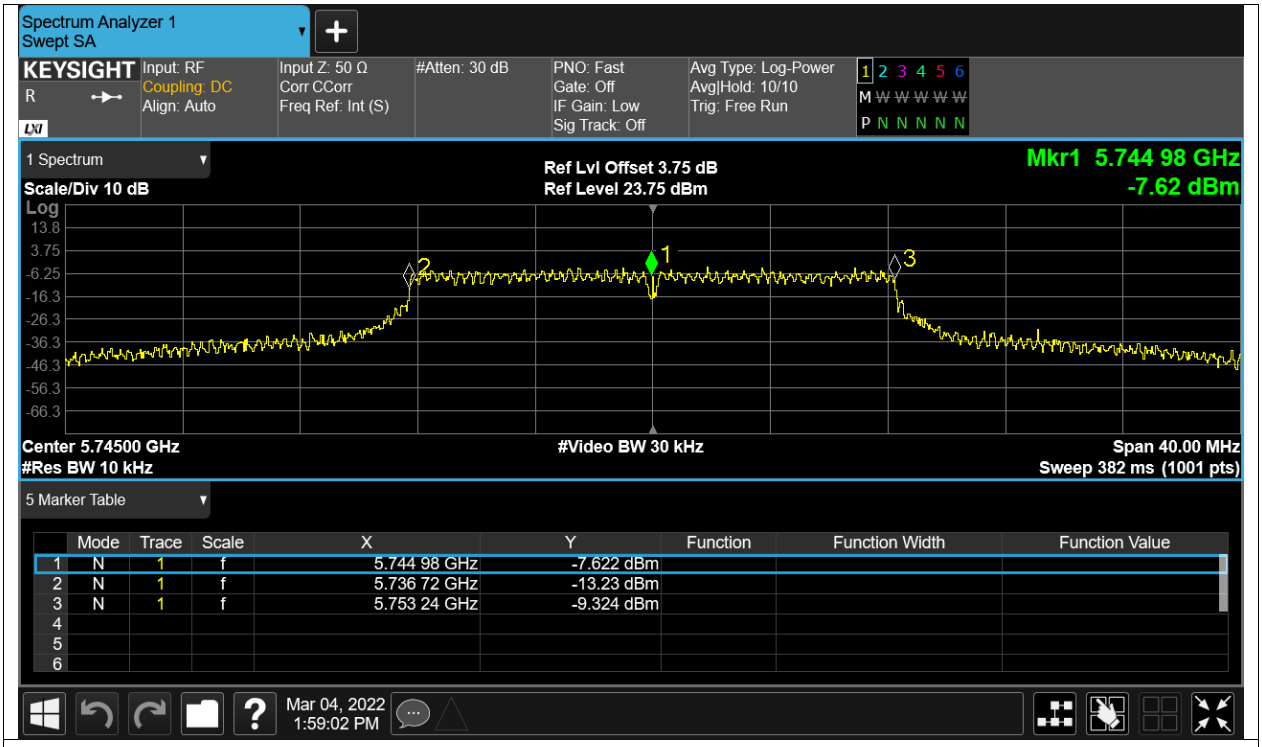
Freq. Stability NVHT a 5745MHz Ant1



Freq. Stability NVLT a 5745MHz Ant1

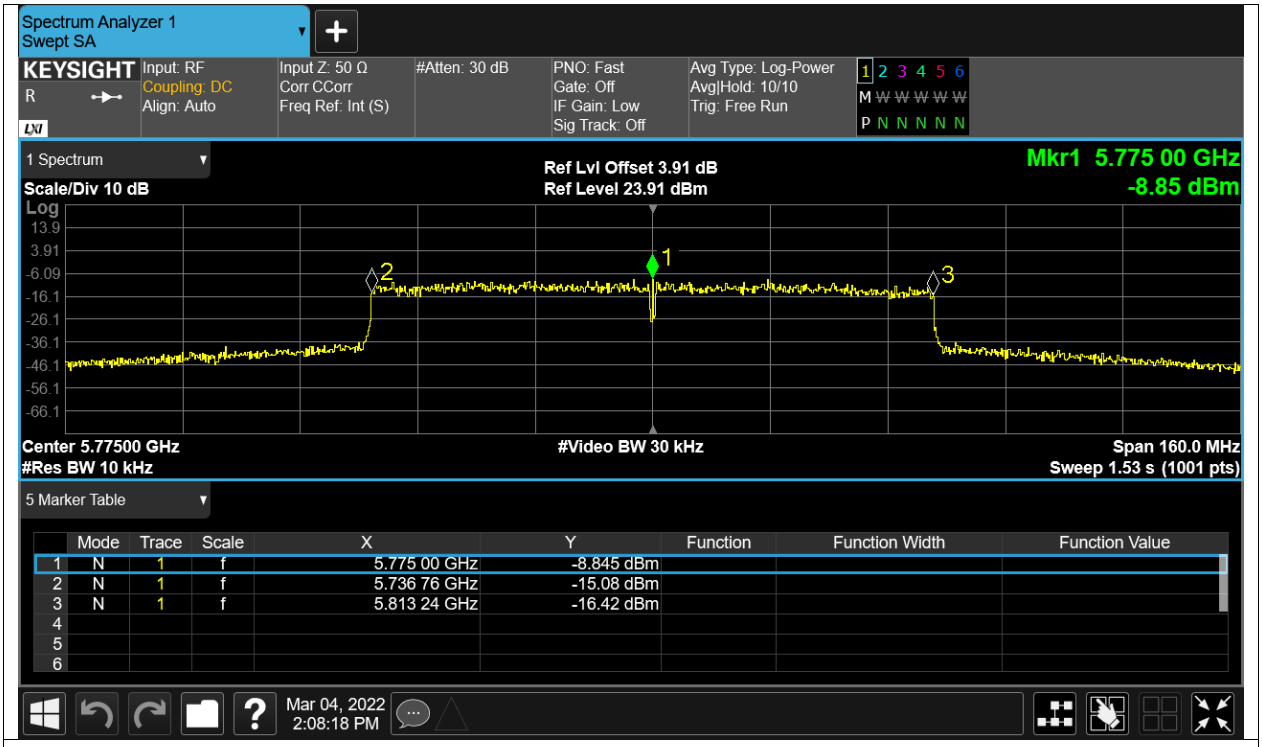


Freq. Stability NVNT a 5745MHz Ant1



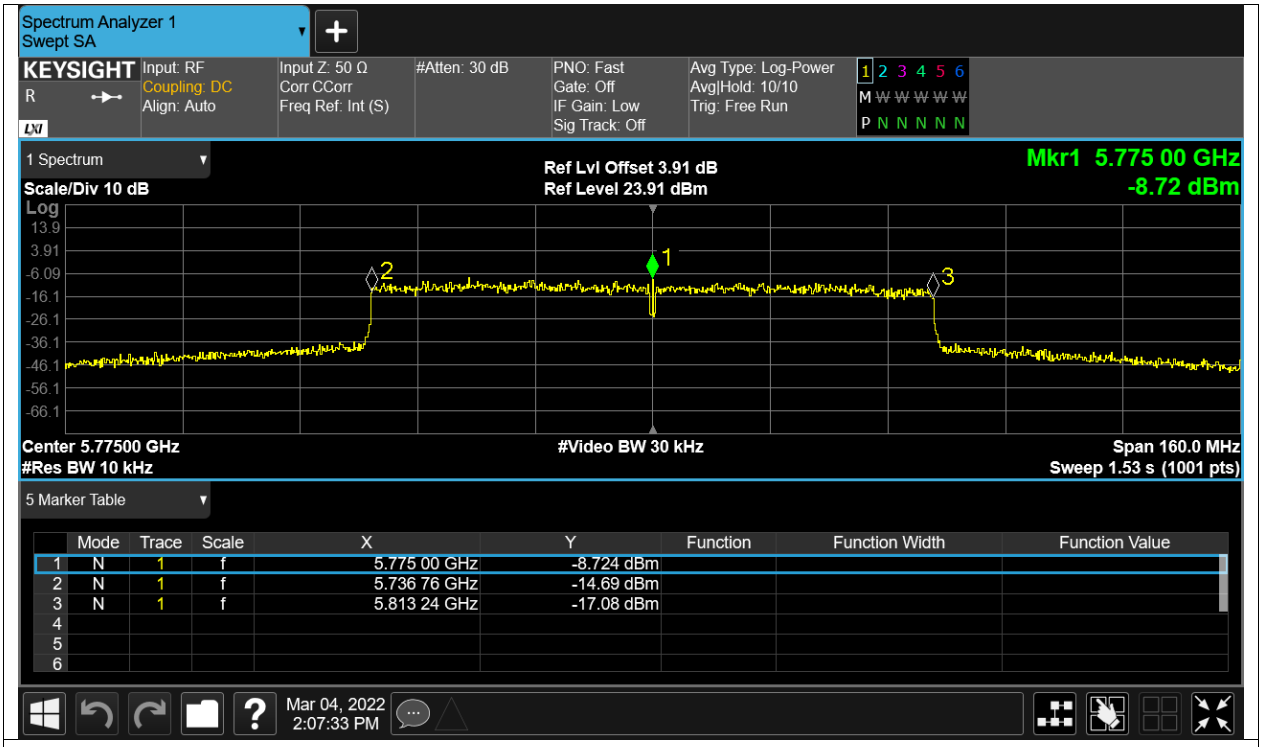
Freq. Stability HVNT ac80 5775MHz Ant1

Freq. Stability LVNT ac80 5775MHz Ant1

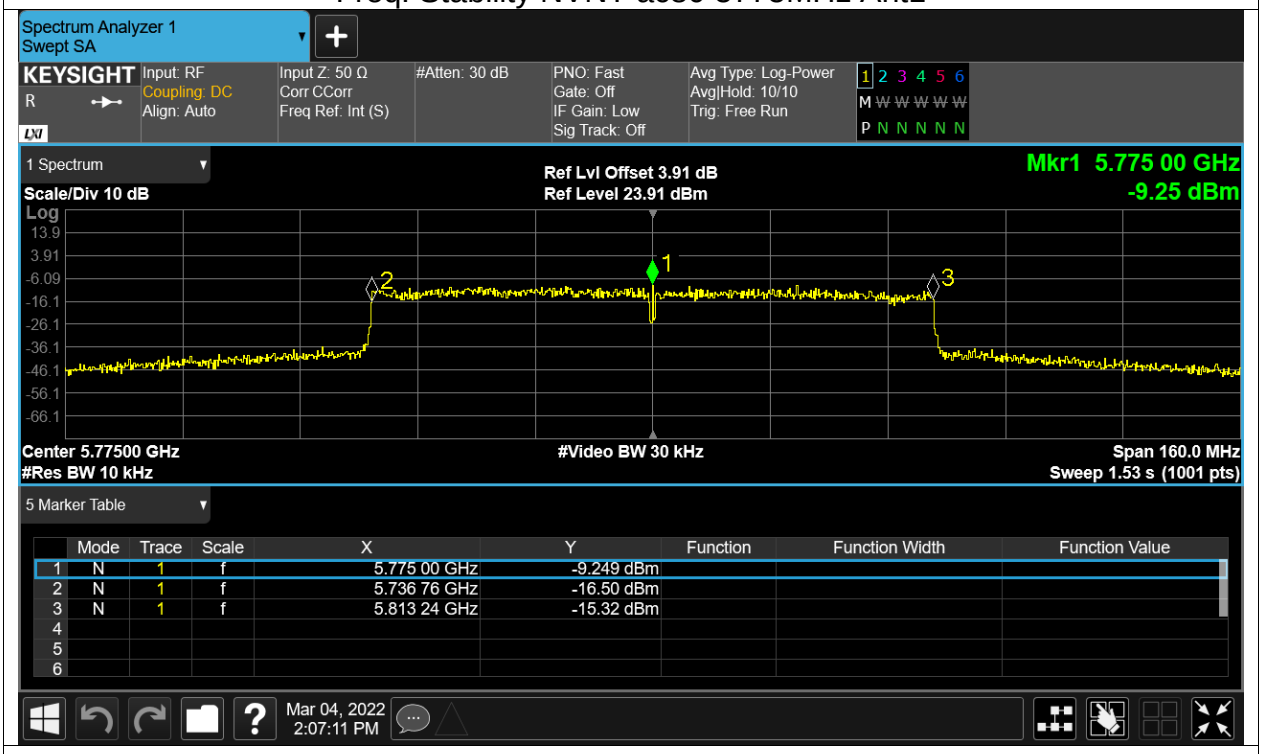


Freq. Stability NVHT ac80 5775MHz Ant1

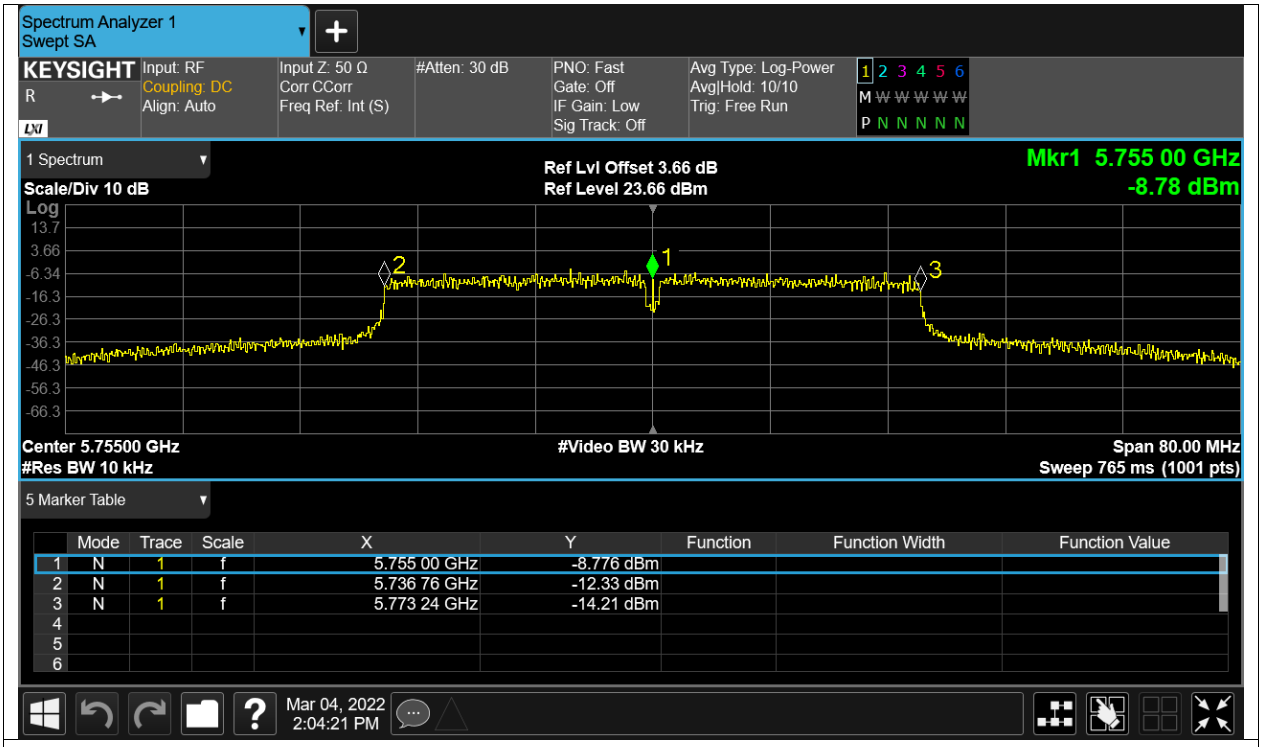
Freq. Stability NVLT ac80 5775MHz Ant1



Freq. Stability NVNT ac80 5775MHz Ant1

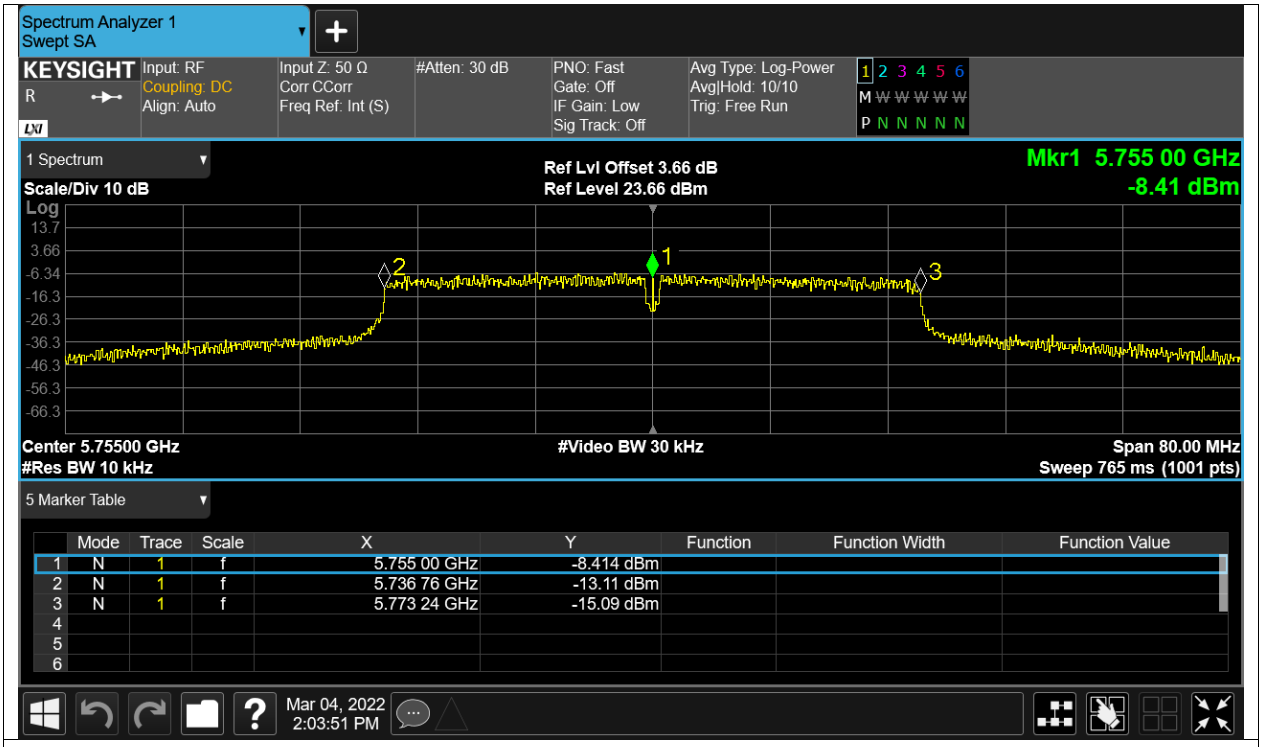


Freq. Stability HVNT n40 5755MHz Ant1



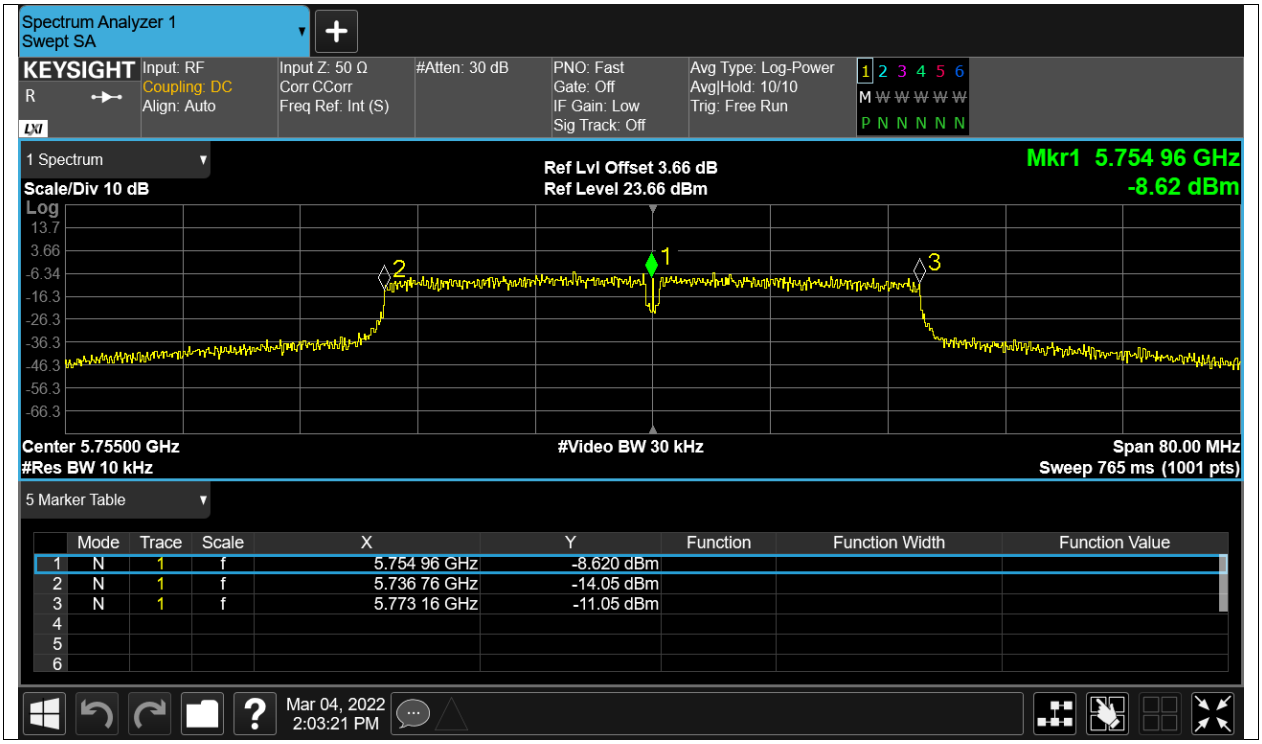
Freq. Stability LVNT n40 5755MHz Ant1

Freq. Stability NVHT n40 5755MHz Ant1



Freq. Stability NVLT n40 5755MHz Ant1

Freq. Stability NVNT n40 5755MHz Ant1

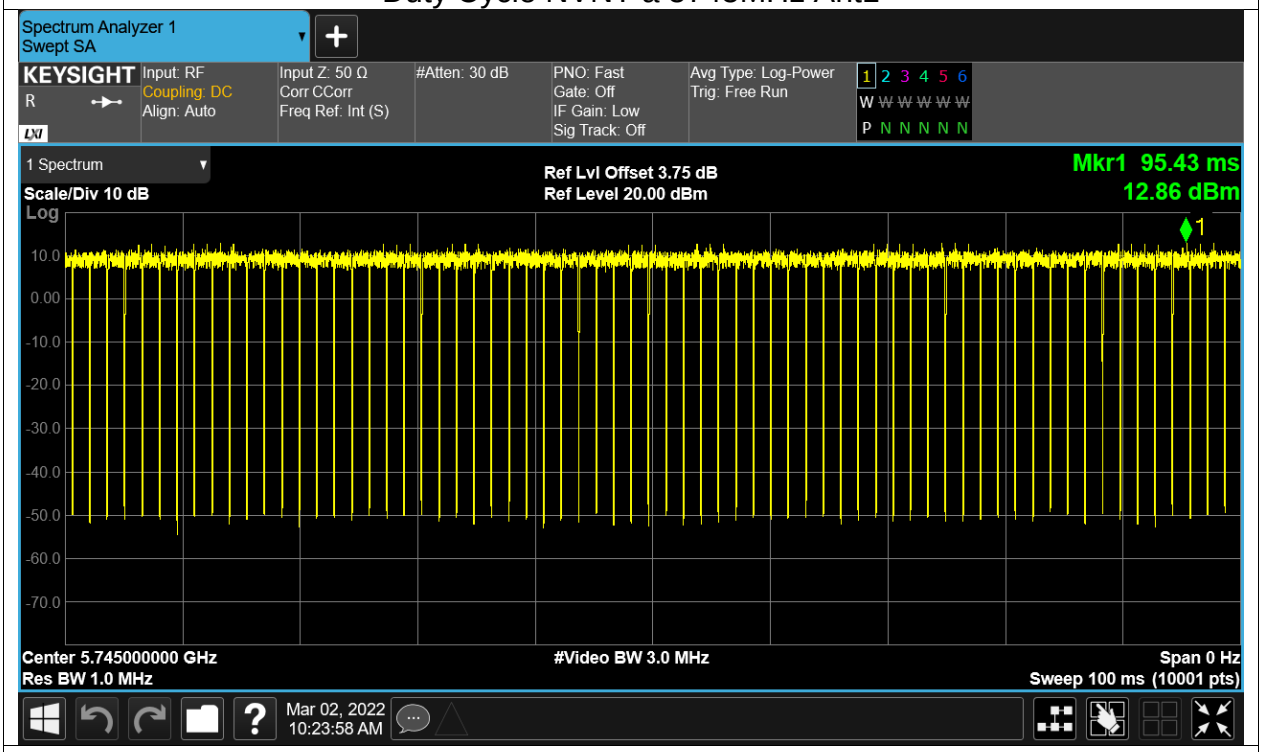

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
13.7
3.66
-6.34
-16.3
-26.3
-36.3
-46.3
-56.3
-66.3
Ref Lvl Offset 3.66 dB
Ref Level 23.66 dBm
Mkr1 5.754 96 GHz
-8.62 dBm
Center 5.75500 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 80.00 MHz
Sweep 765 ms (1001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 f 5.754 96 GHz -8.620 dBm
2 N 1 f 5.736 76 GHz -14.05 dBm
3 N 1 f 5.773 16 GHz -11.05 dBm
4
5
6
Mar 04, 2022
2:03:21 PM

Duty Cycle

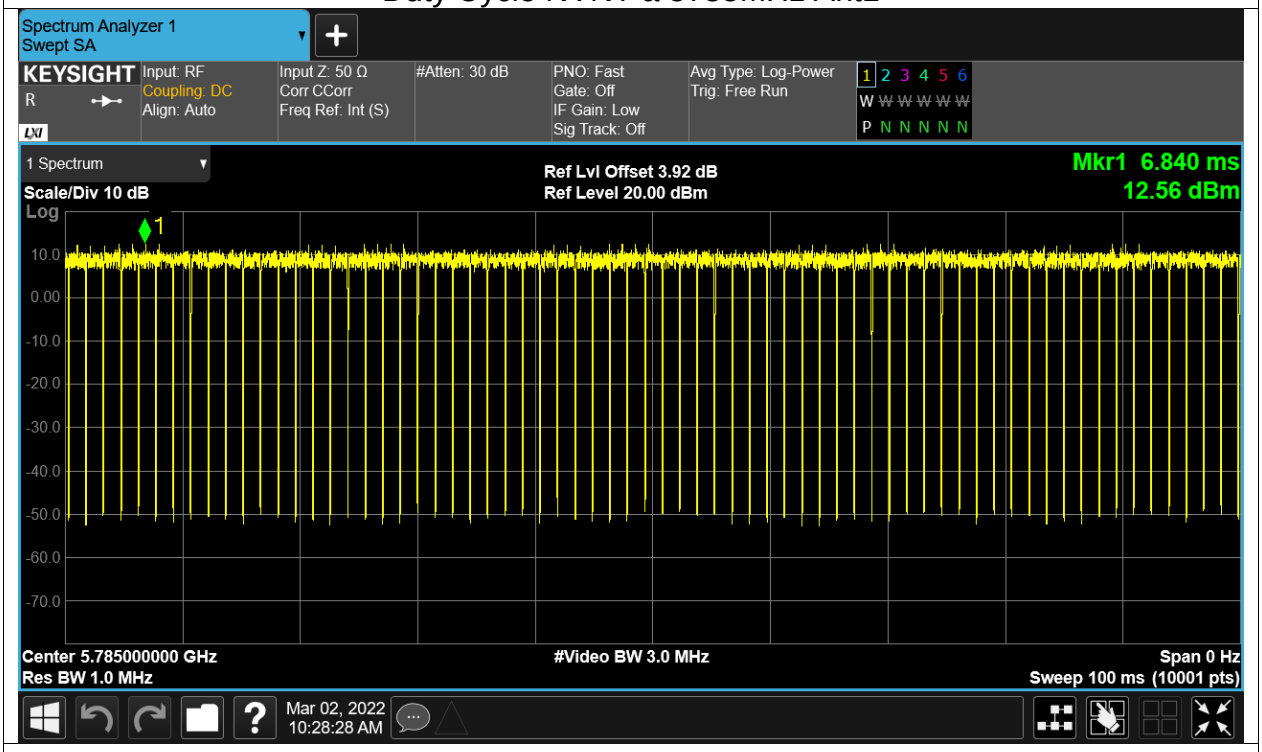
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	94.77	0.23
NVNT	a	5785	Ant1	94.7	0.24
NVNT	a	5825	Ant1	94.64	0.24
NVNT	ac20	5745	Ant1	94.46	0.25
NVNT	ac20	5785	Ant1	94.46	0.25
NVNT	ac20	5825	Ant1	94.44	0.25
NVNT	ac40	5755	Ant1	89.33	0.49
NVNT	ac40	5795	Ant1	89.55	0.48
NVNT	ac80	5775	Ant1	81.13	0.91
NVNT	n20	5745	Ant1	94.47	0.25
NVNT	n20	5785	Ant1	94.24	0.26
NVNT	n20	5825	Ant1	94.46	0.25
NVNT	n40	5755	Ant1	89.2	0.5
NVNT	n40	5795	Ant1	89.39	0.49

Test Graphs

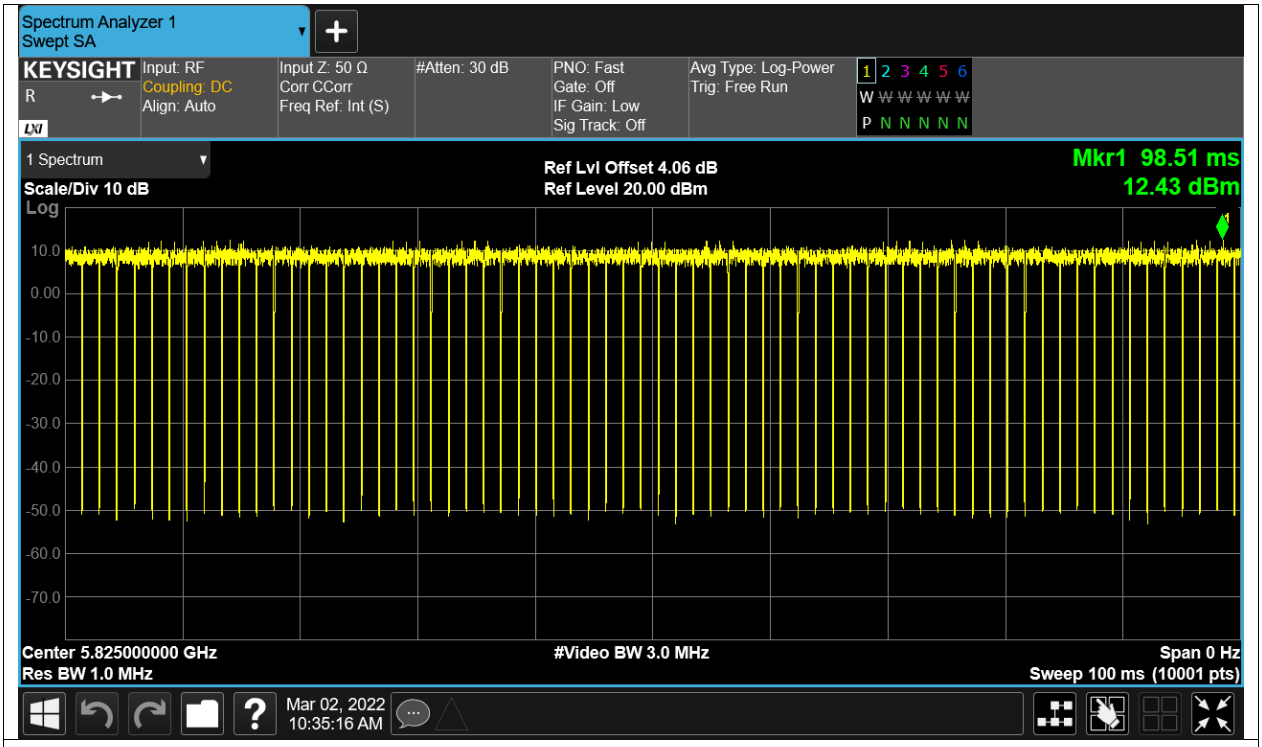
Duty Cycle NVNT a 5745MHz Ant1



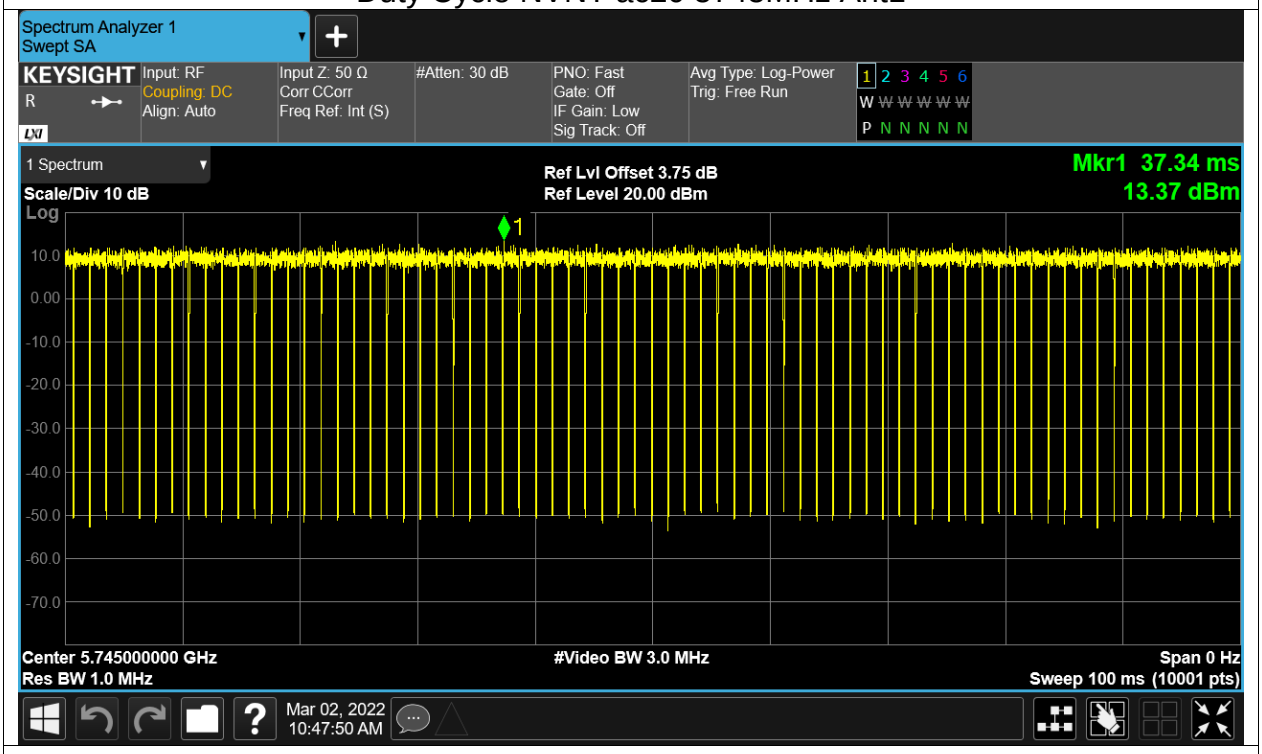
Duty Cycle NVNT a 5785MHz Ant1



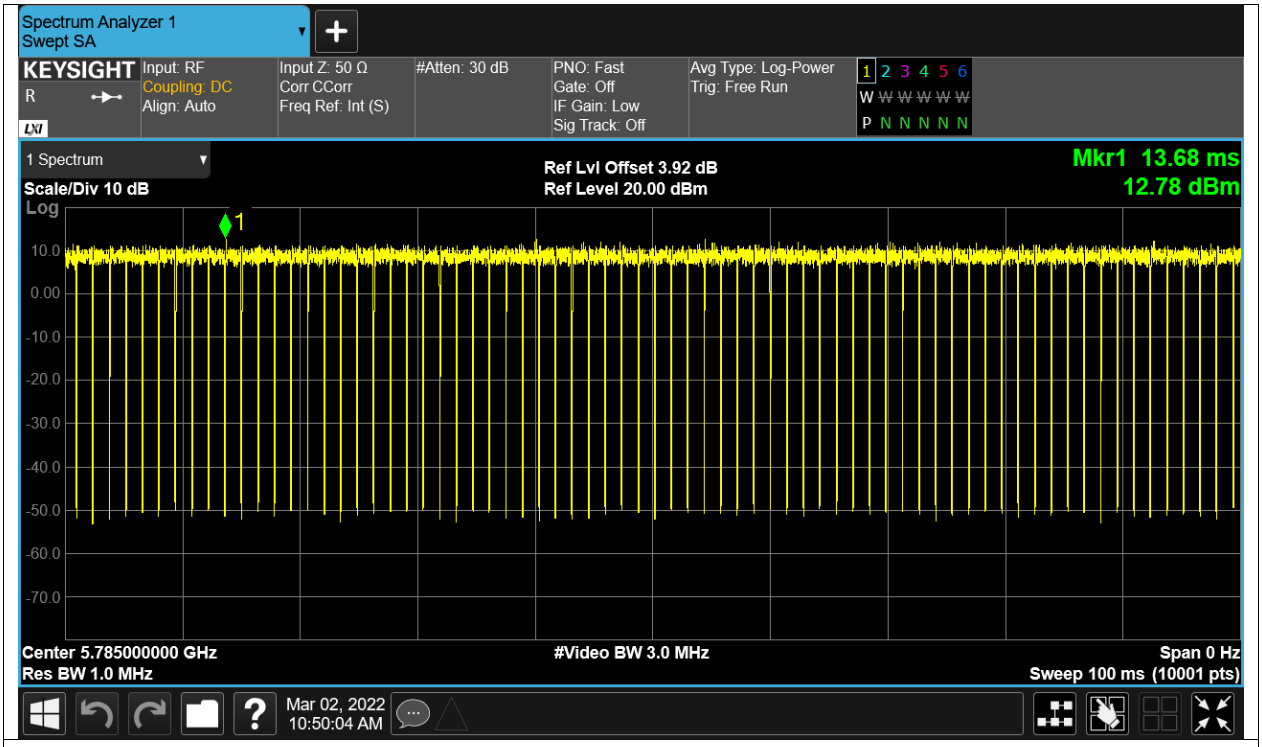
Duty Cycle NVNT a 5825MHz Ant1



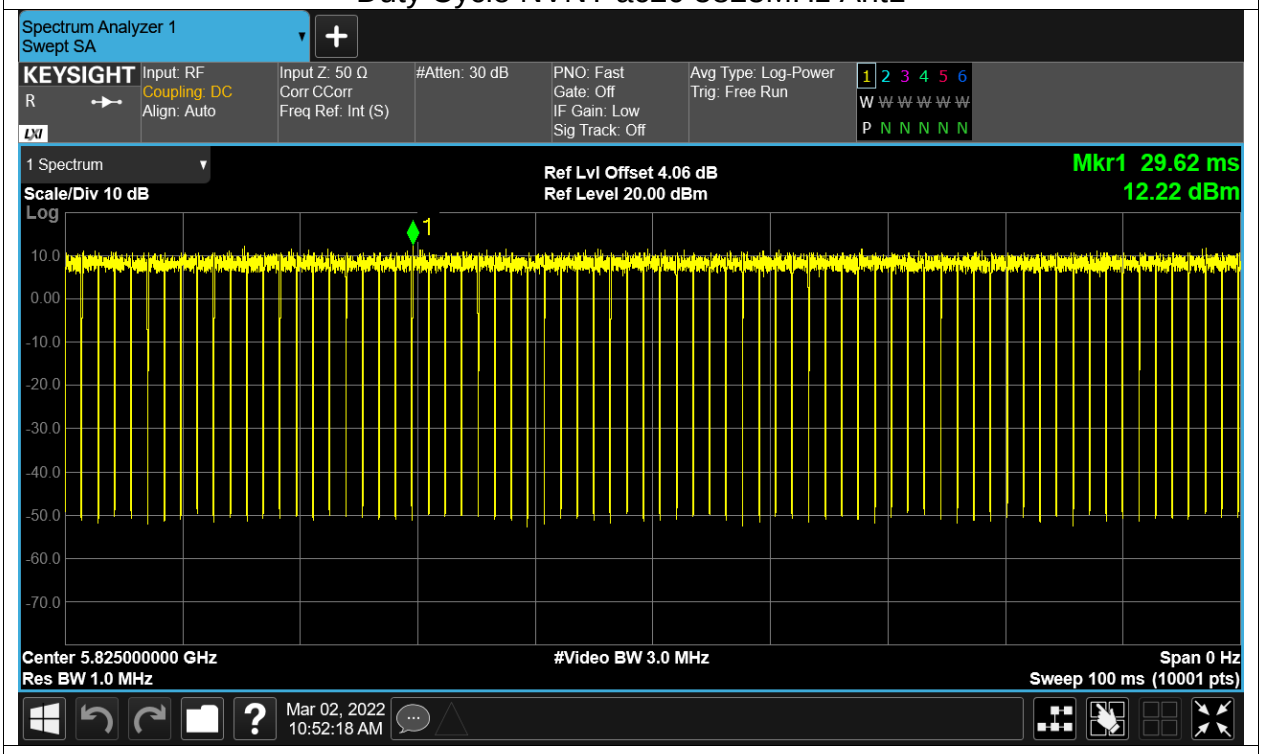
Duty Cycle NVNT ac20 5745MHz Ant1



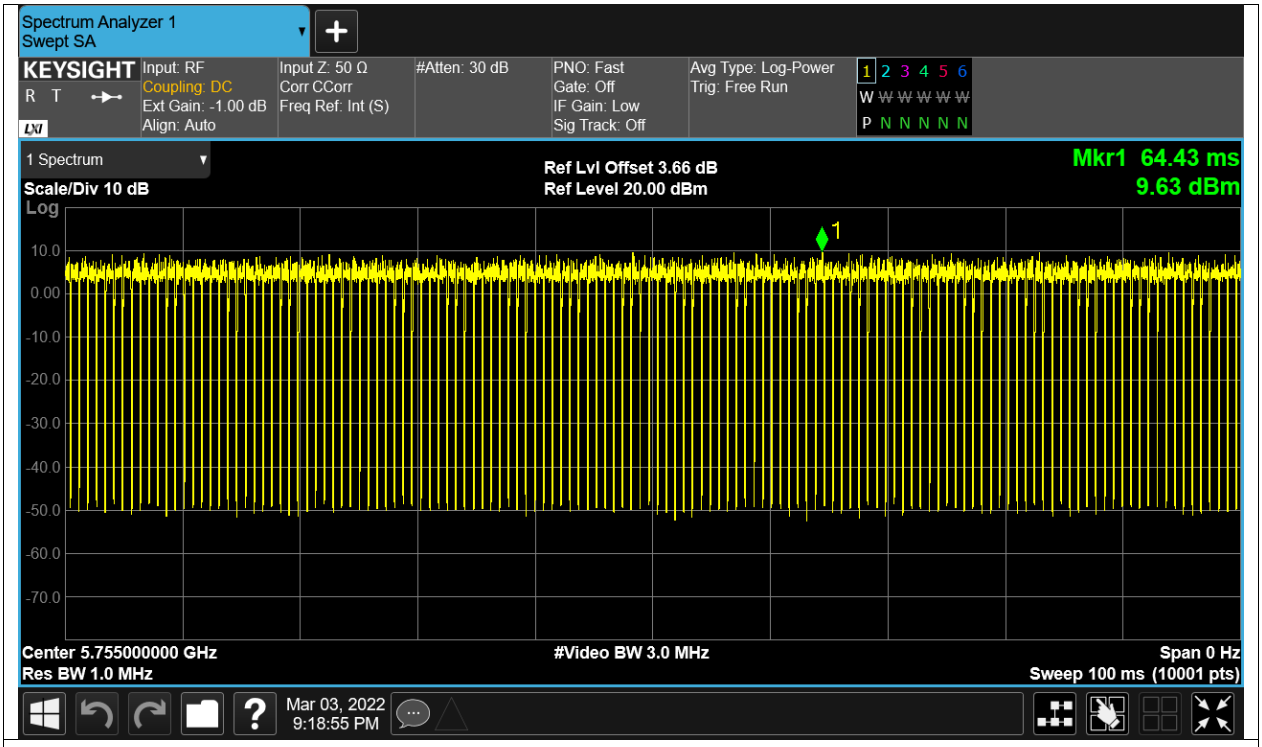
Duty Cycle NVNT ac20 5785MHz Ant1



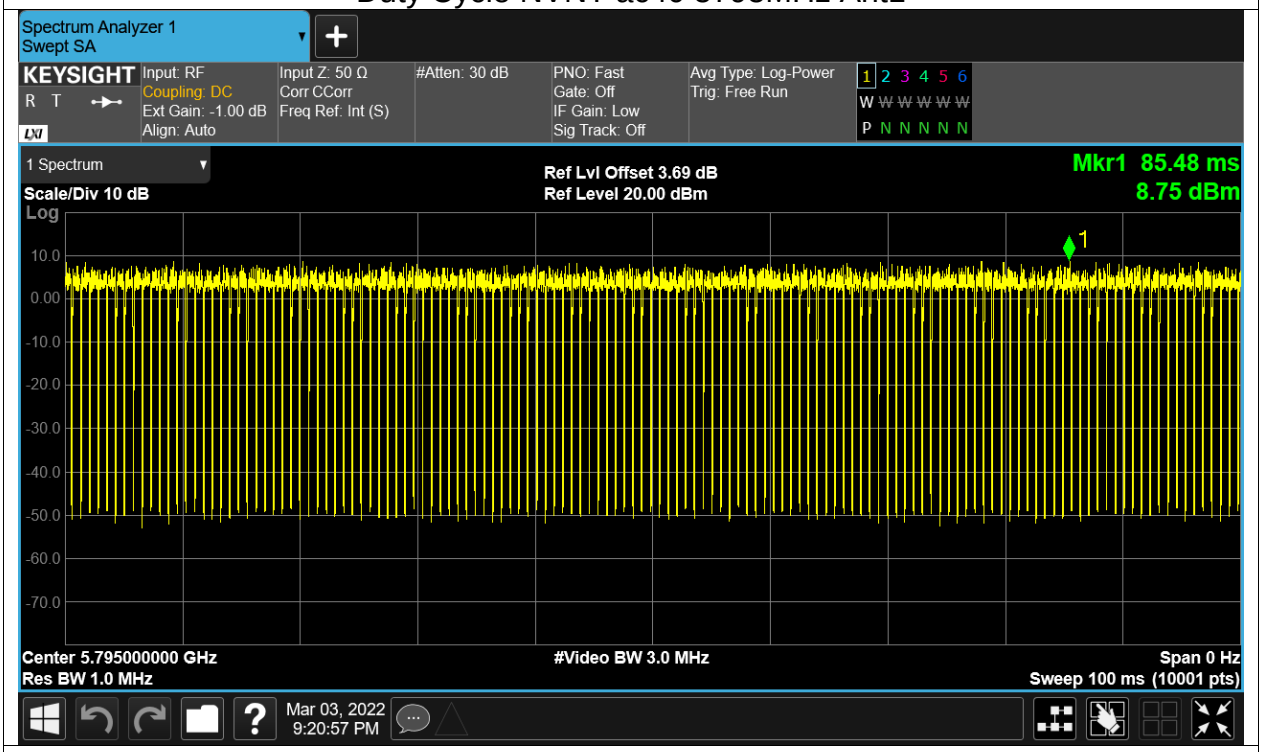
Duty Cycle NVNT ac20 5825MHz Ant1



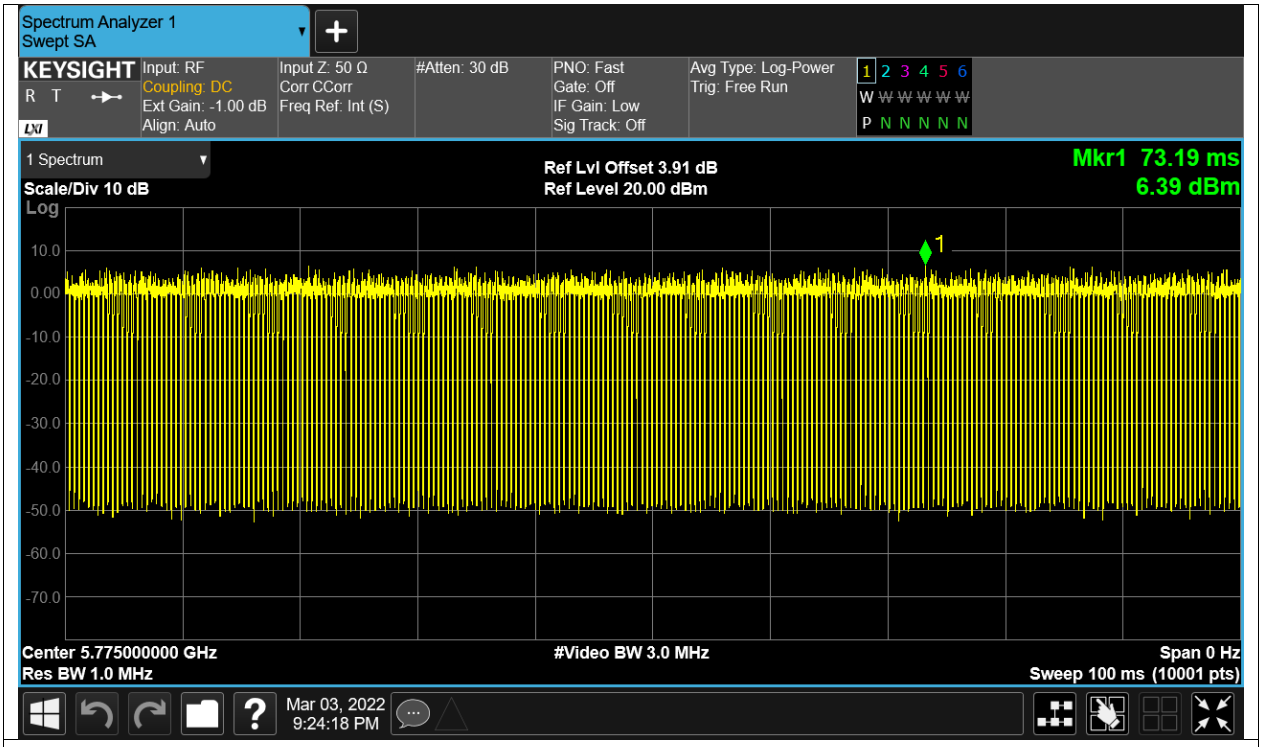
Duty Cycle NVNT ac40 5755MHz Ant1



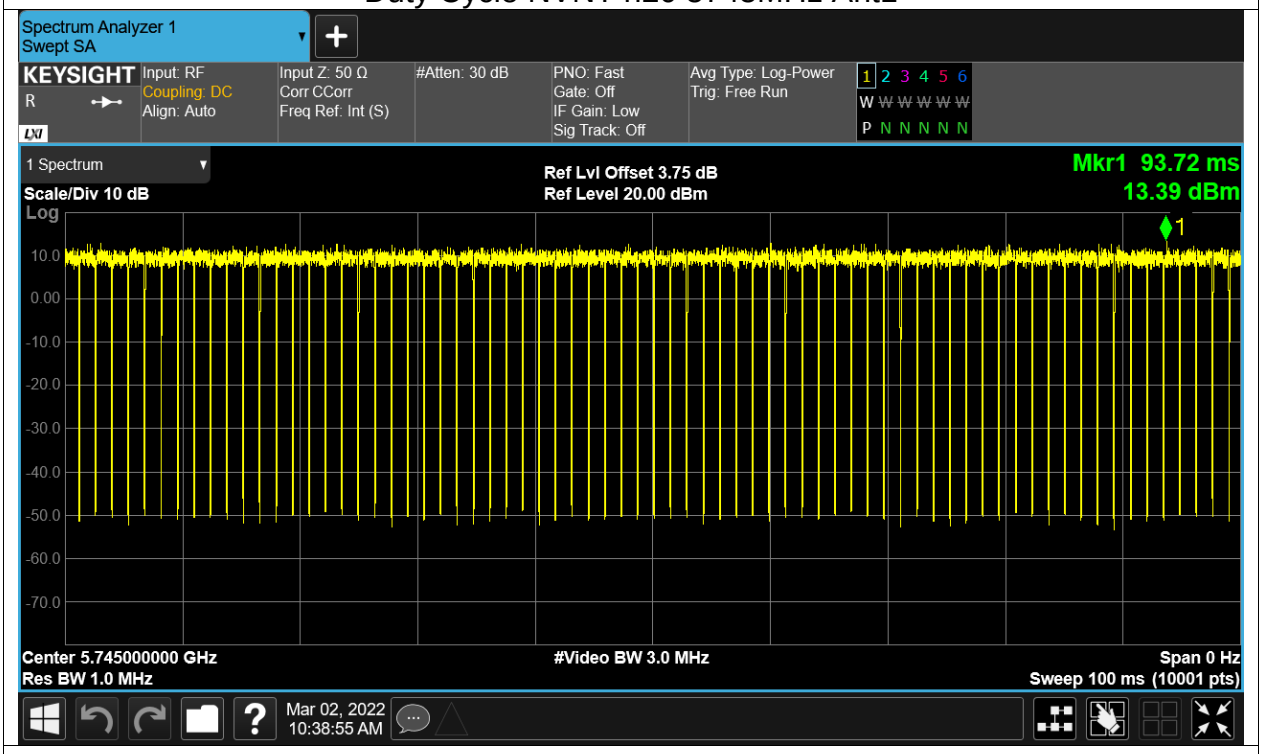
Duty Cycle NVNT ac40 5795MHz Ant1



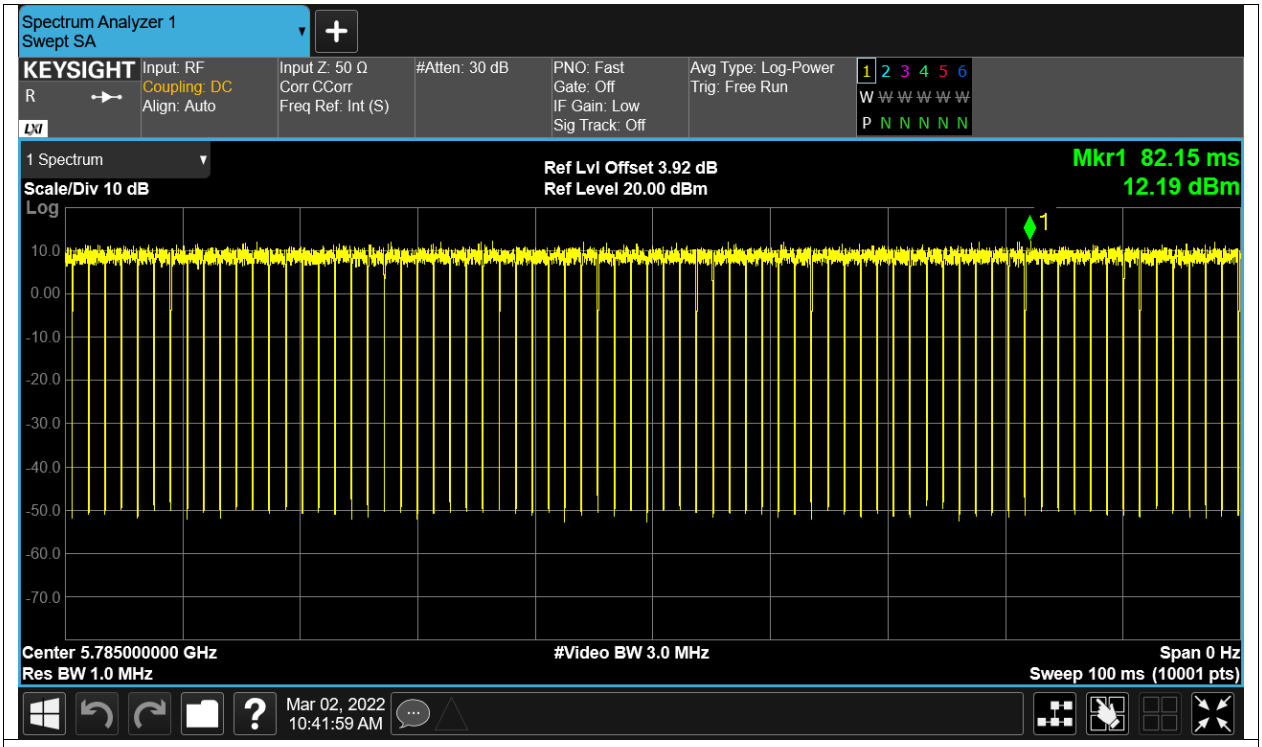
Duty Cycle NVNT ac80 5775MHz Ant1



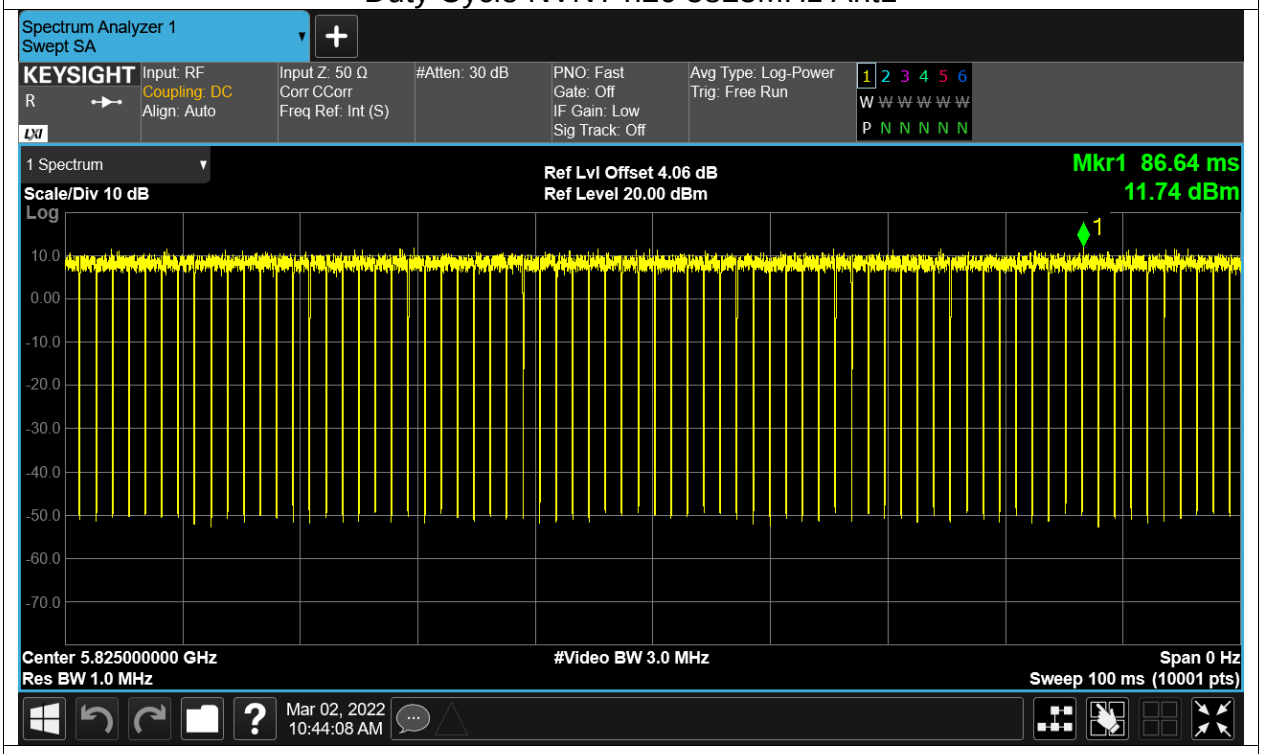
Duty Cycle NVNT n20 5745MHz Ant1



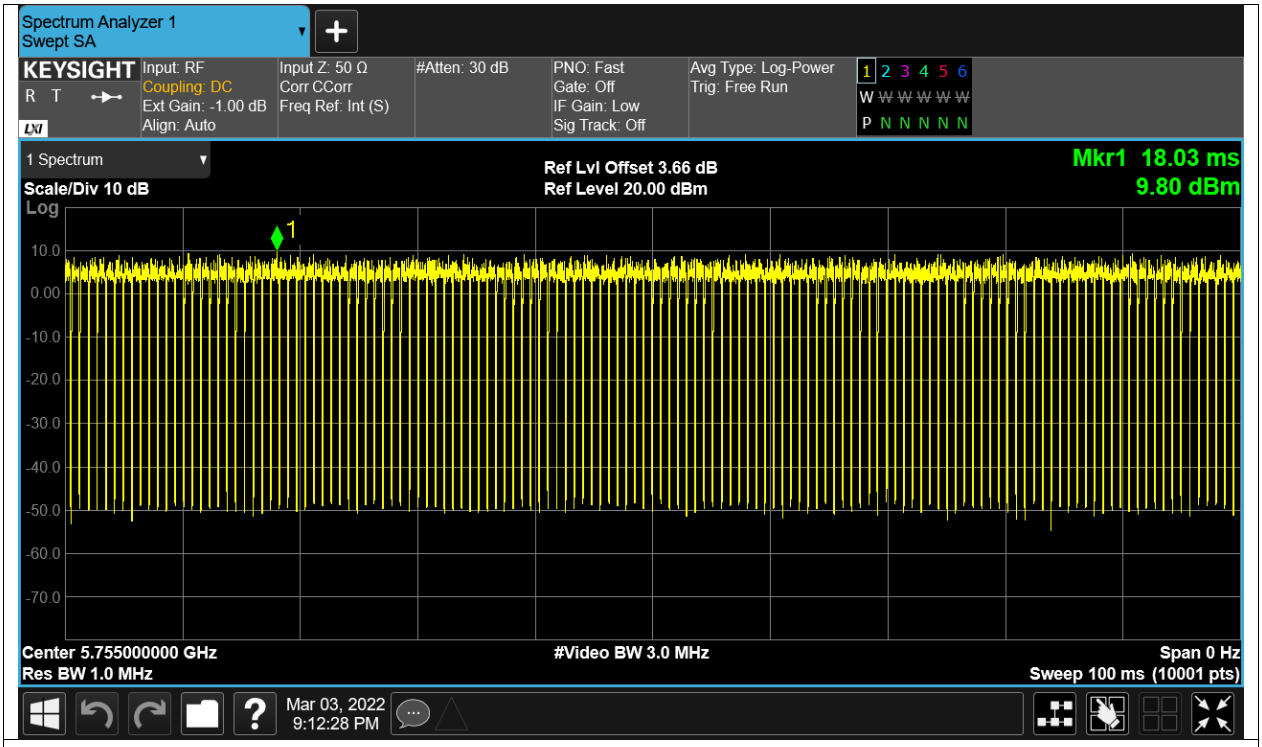
Duty Cycle NVNT n20 5785MHz Ant1



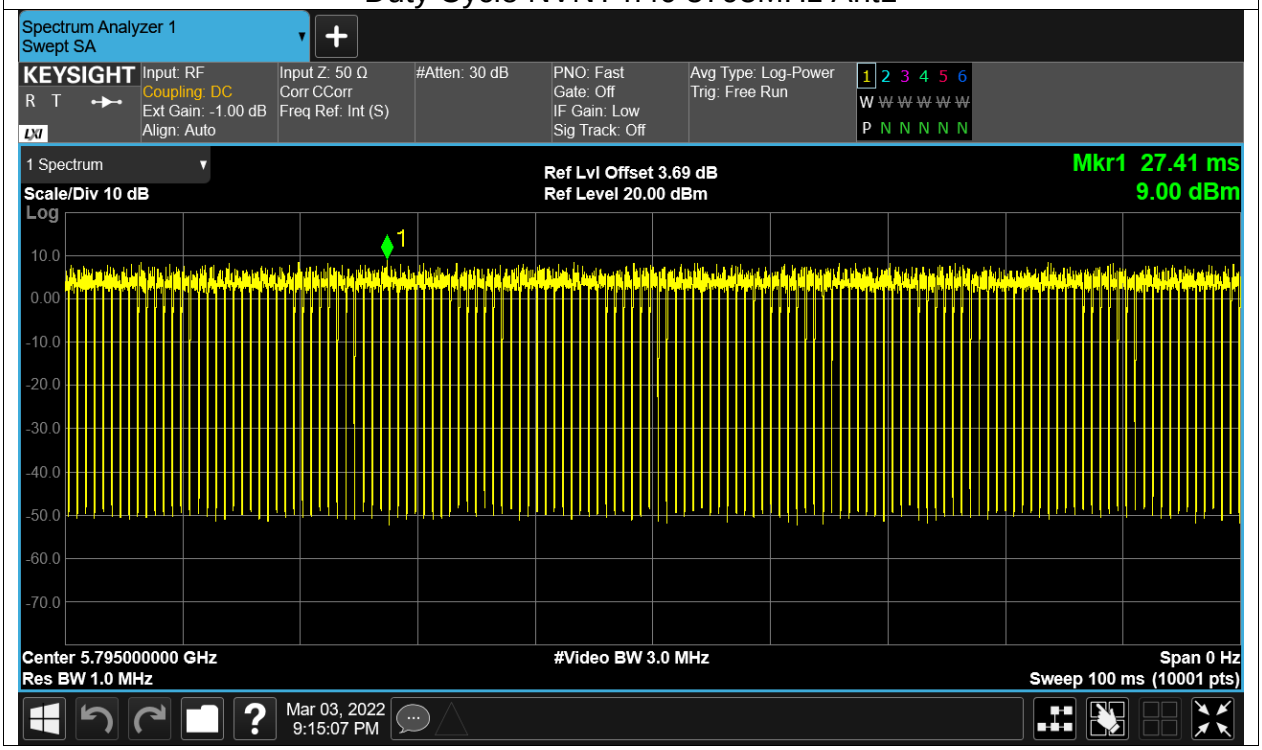
Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



Duty Cycle NVNT n40 5795MHz Ant1



Maximum Conducted Output Power

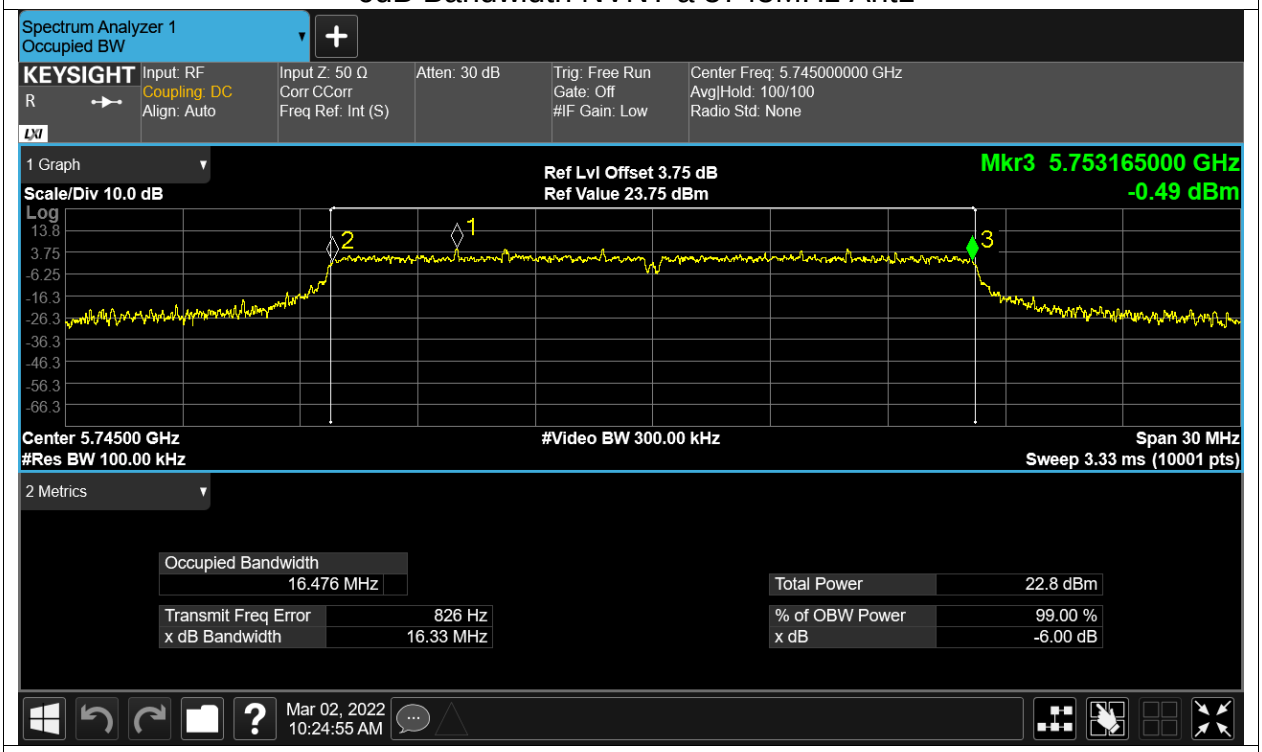
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	17.61	0.23	17.84	30	Pass
NVNT	a	5785	Ant1	16.96	0.24	17.2	30	Pass
NVNT	a	5825	Ant1	16.91	0.24	17.15	30	Pass
NVNT	ac20	5745	Ant1	17.74	0.25	17.99	30	Pass
NVNT	ac20	5785	Ant1	17.19	0.25	17.44	30	Pass
NVNT	ac20	5825	Ant1	16.75	0.25	17	30	Pass
NVNT	ac40	5755	Ant1	17.64	0.49	18.13	30	Pass
NVNT	ac40	5795	Ant1	17.02	0.48	17.5	30	Pass
NVNT	ac80	5775	Ant1	17.34	0.91	18.25	30	Pass
NVNT	n20	5745	Ant1	17.81	0.25	18.06	30	Pass
NVNT	n20	5785	Ant1	17.23	0.26	17.49	30	Pass
NVNT	n20	5825	Ant1	16.81	0.25	17.06	30	Pass
NVNT	n40	5755	Ant1	17.81	0	17.81	30	Pass
NVNT	n40	5795	Ant1	17.04	0.49	17.53	30	Pass

-6dB Bandwidth

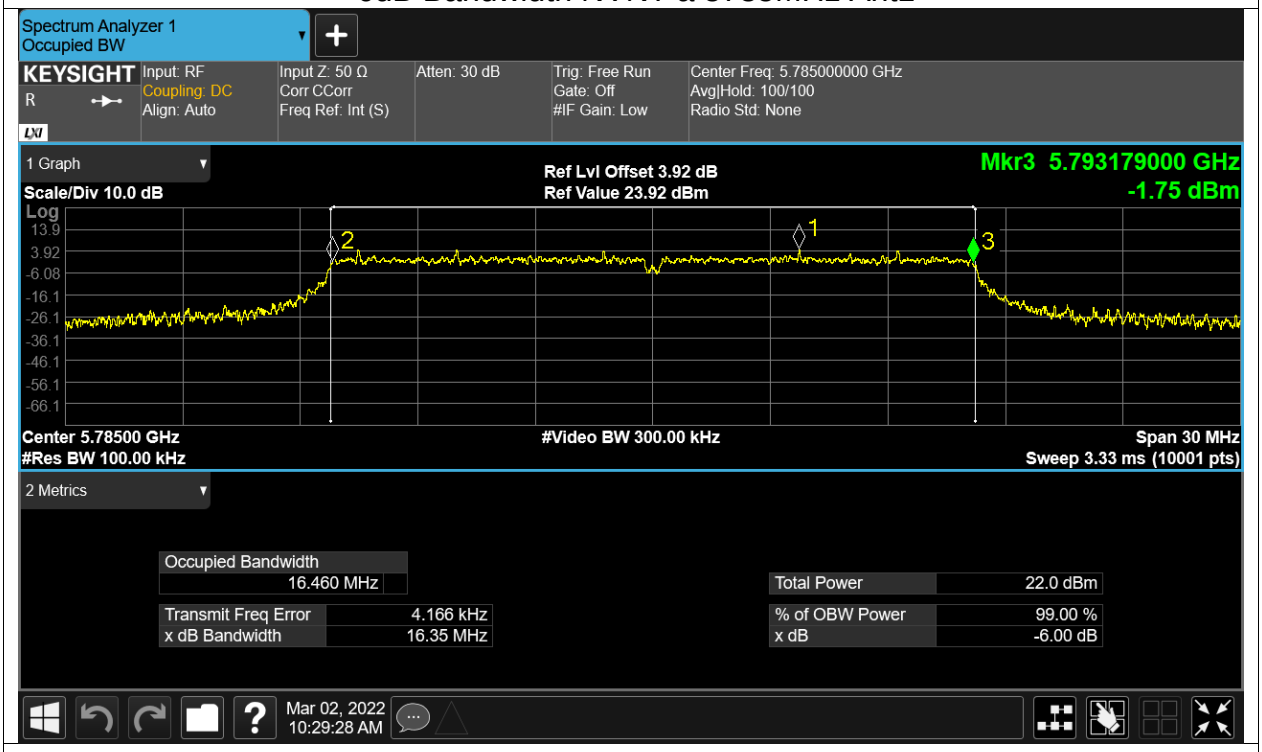
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.329	0.5	Pass
NVNT	a	5785	Ant1	16.35	0.5	Pass
NVNT	a	5825	Ant1	16.356	0.5	Pass
NVNT	ac20	5745	Ant1	17.002	0.5	Pass
NVNT	ac20	5785	Ant1	17.306	0.5	Pass
NVNT	ac20	5825	Ant1	17.258	0.5	Pass
NVNT	ac40	5755	Ant1	35.484	0.5	Pass
NVNT	ac40	5795	Ant1	35.415	0.5	Pass
NVNT	ac80	5775	Ant1	75.356	0.5	Pass
NVNT	n20	5745	Ant1	17.162	0.5	Pass
NVNT	n20	5785	Ant1	17.291	0.5	Pass
NVNT	n20	5825	Ant1	17.526	0.5	Pass
NVNT	n40	5755	Ant1	35.334	0.5	Pass
NVNT	n40	5795	Ant1	35.508	0.5	Pass

Test Graphs

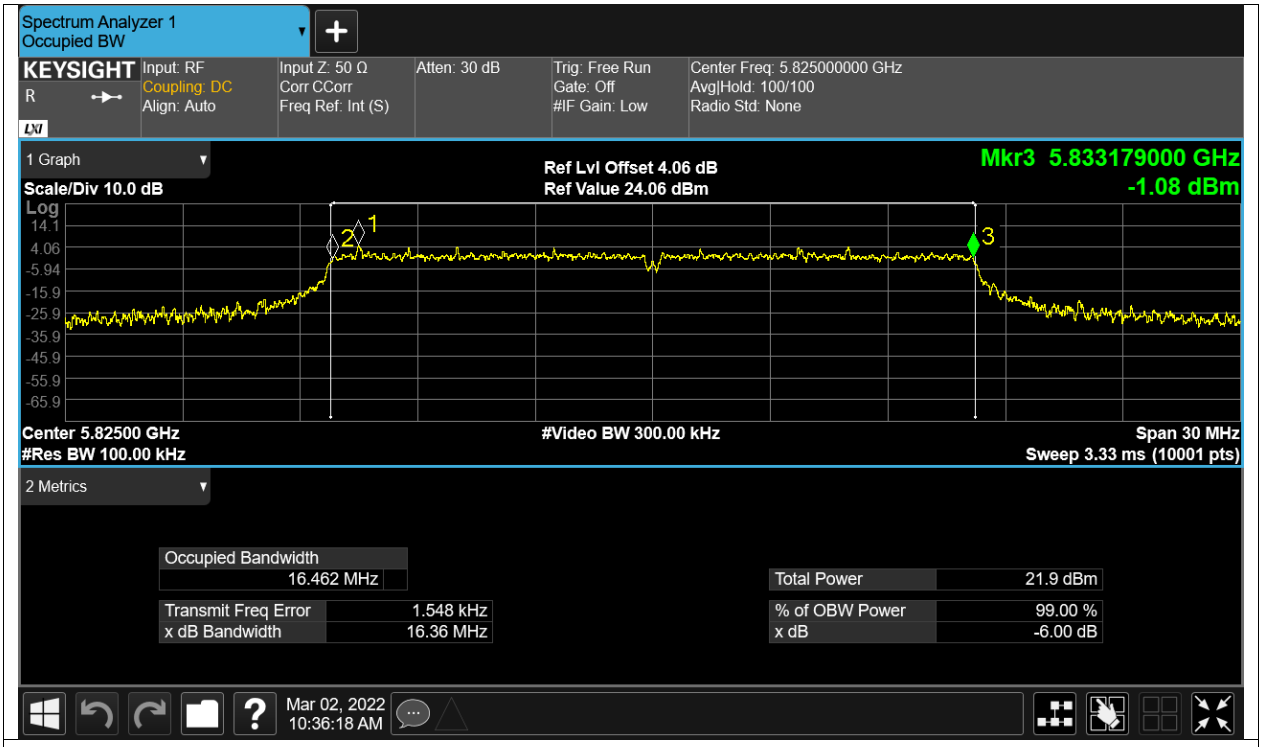
-6dB Bandwidth NVNT a 5745MHz Ant1



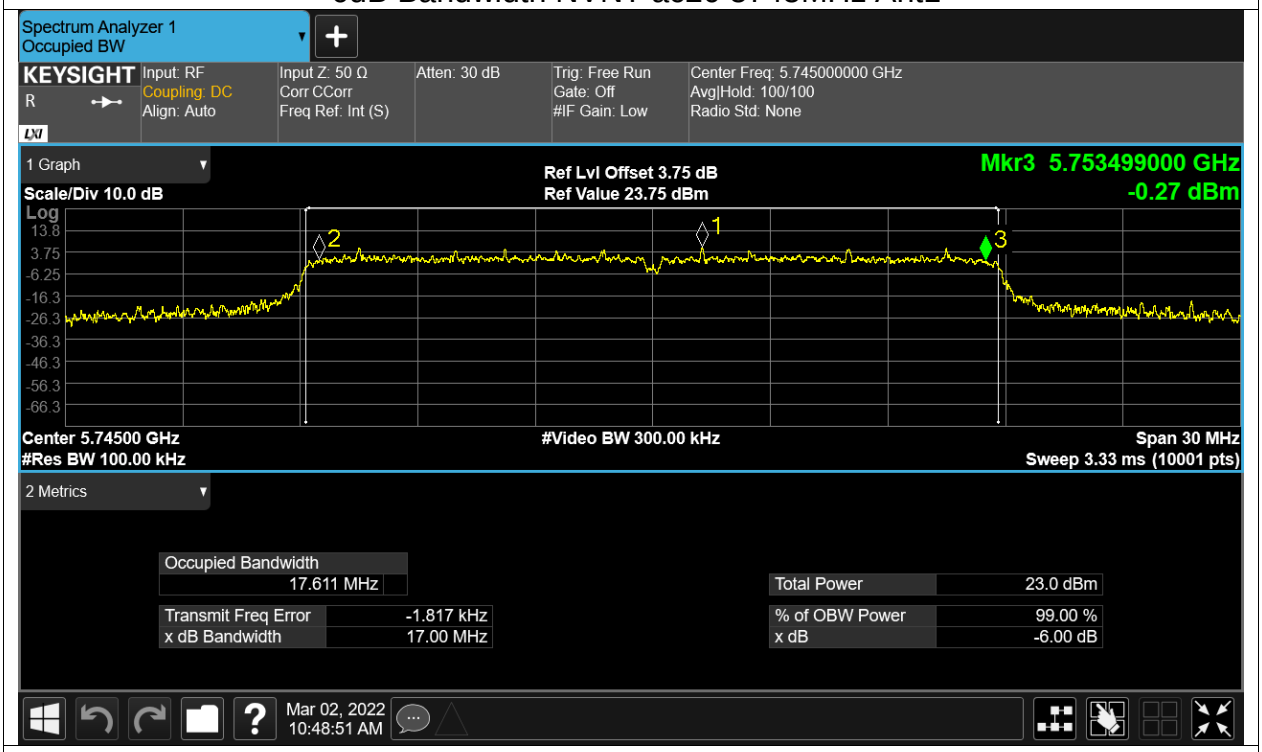
-6dB Bandwidth NVNT a 5785MHz Ant1



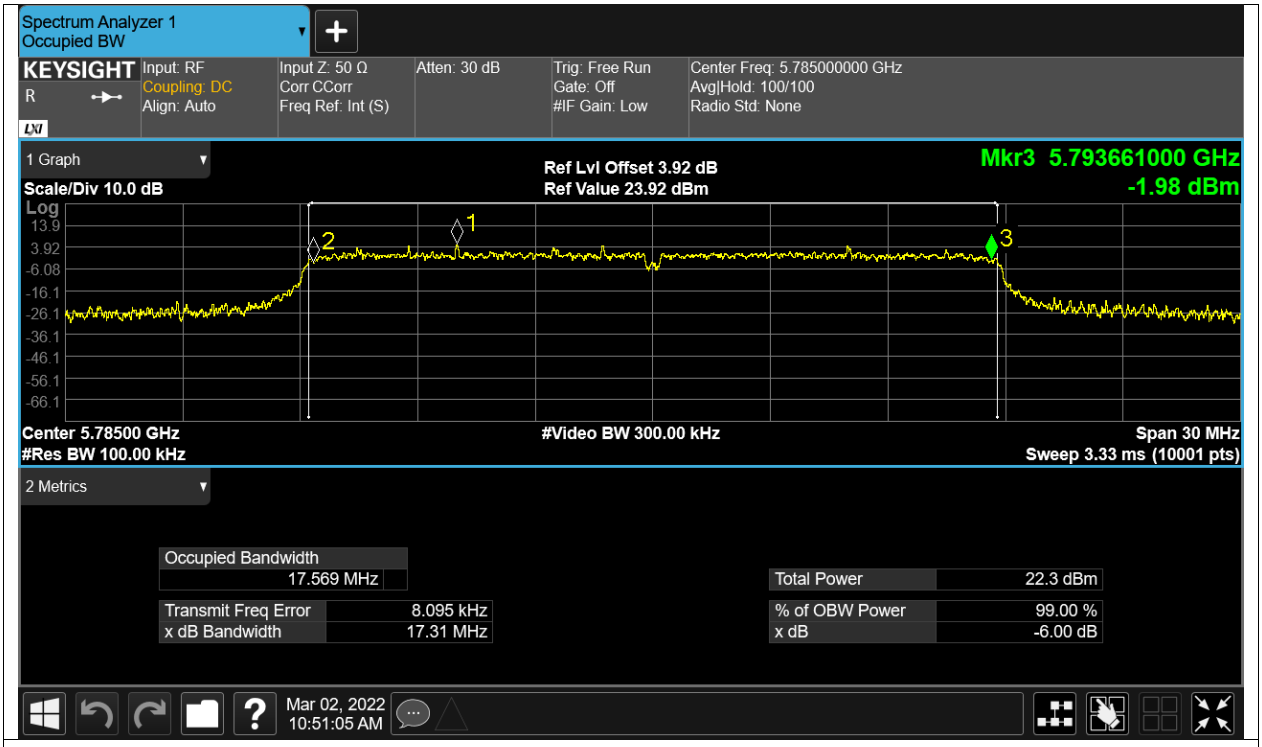
-6dB Bandwidth NVNT a 5825MHz Ant1



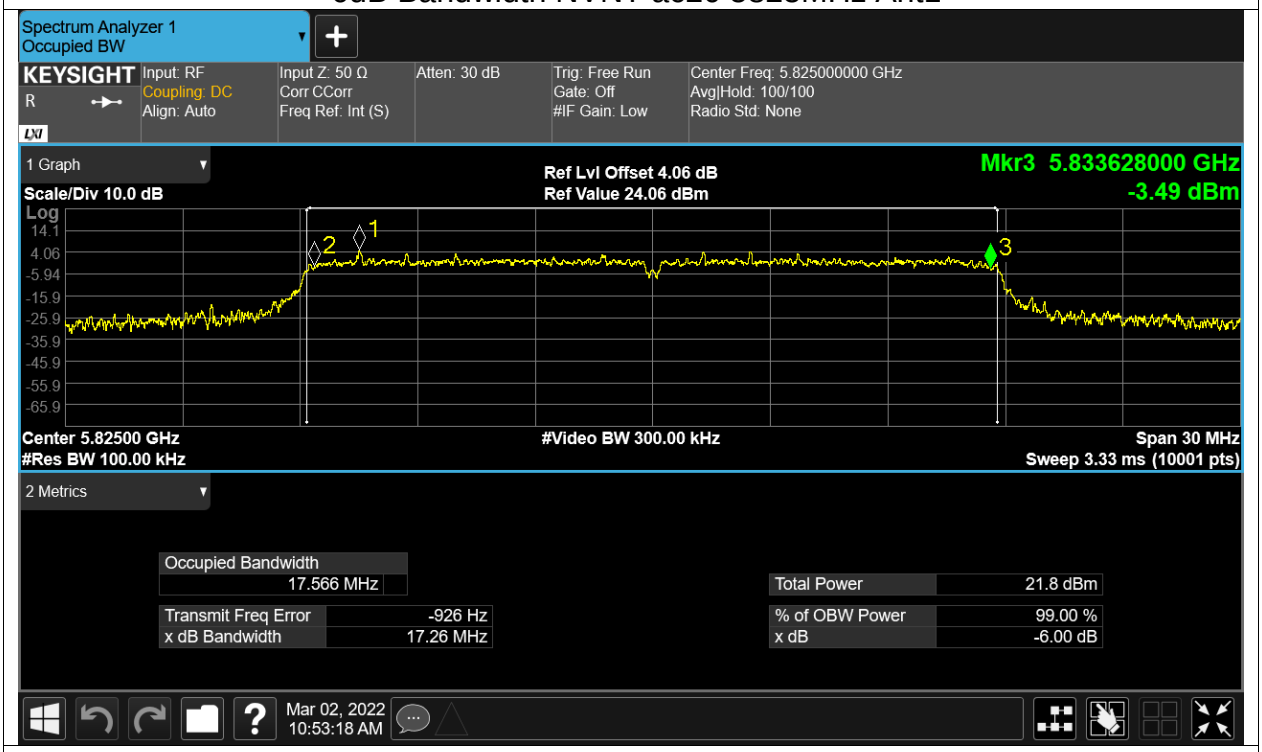
-6dB Bandwidth NVNT ac20 5745MHz Ant1



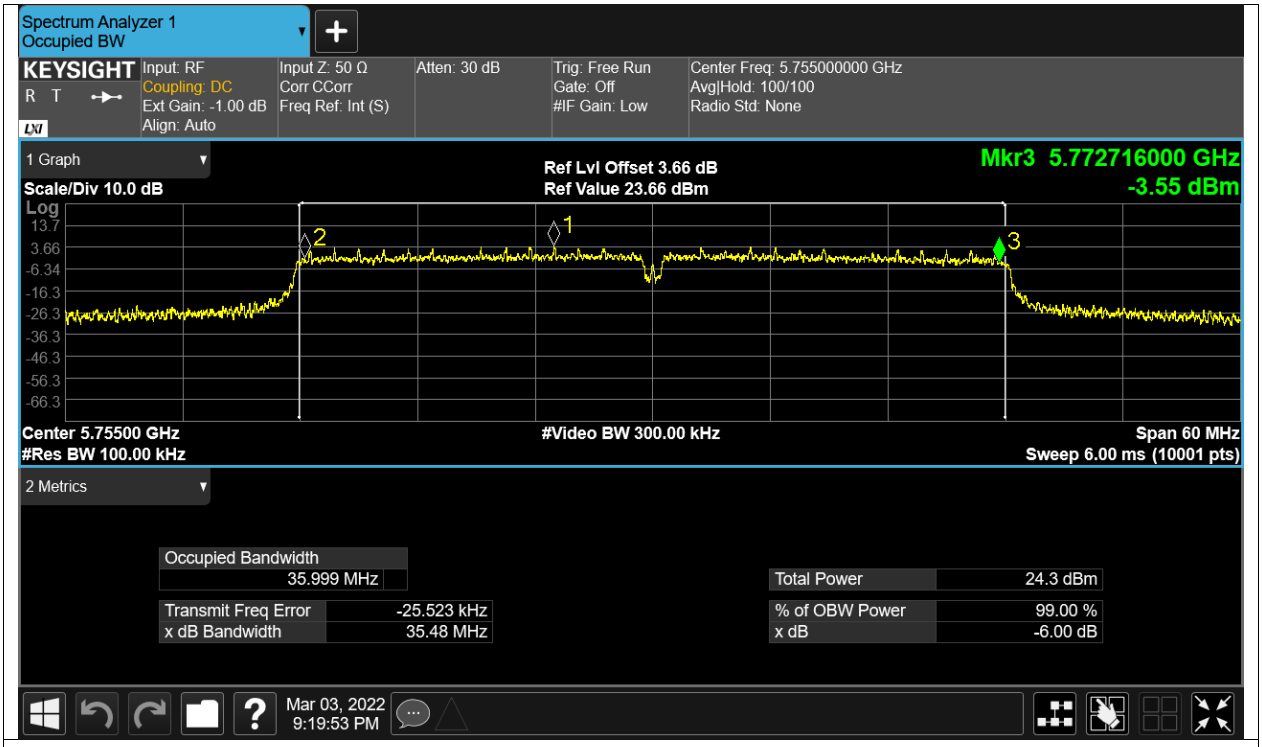
-6dB Bandwidth NVNT ac20 5785MHz Ant1



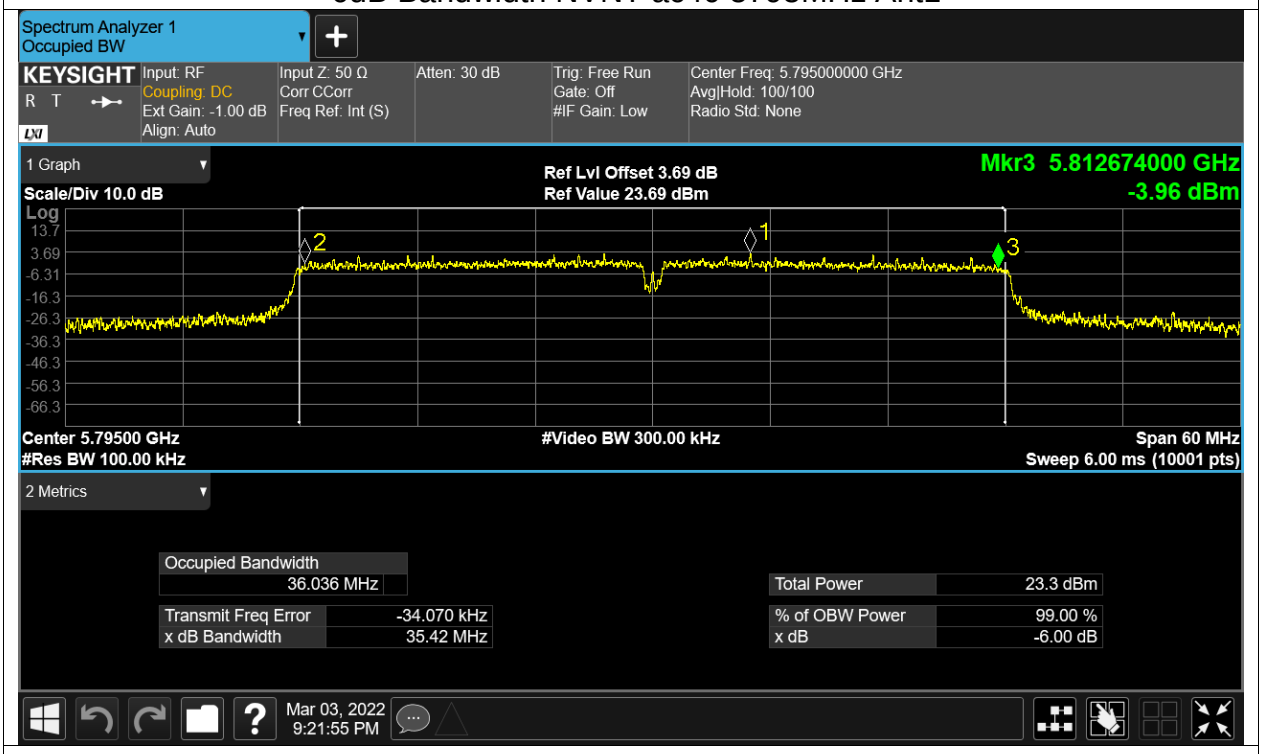
-6dB Bandwidth NVNT ac20 5825MHz Ant1



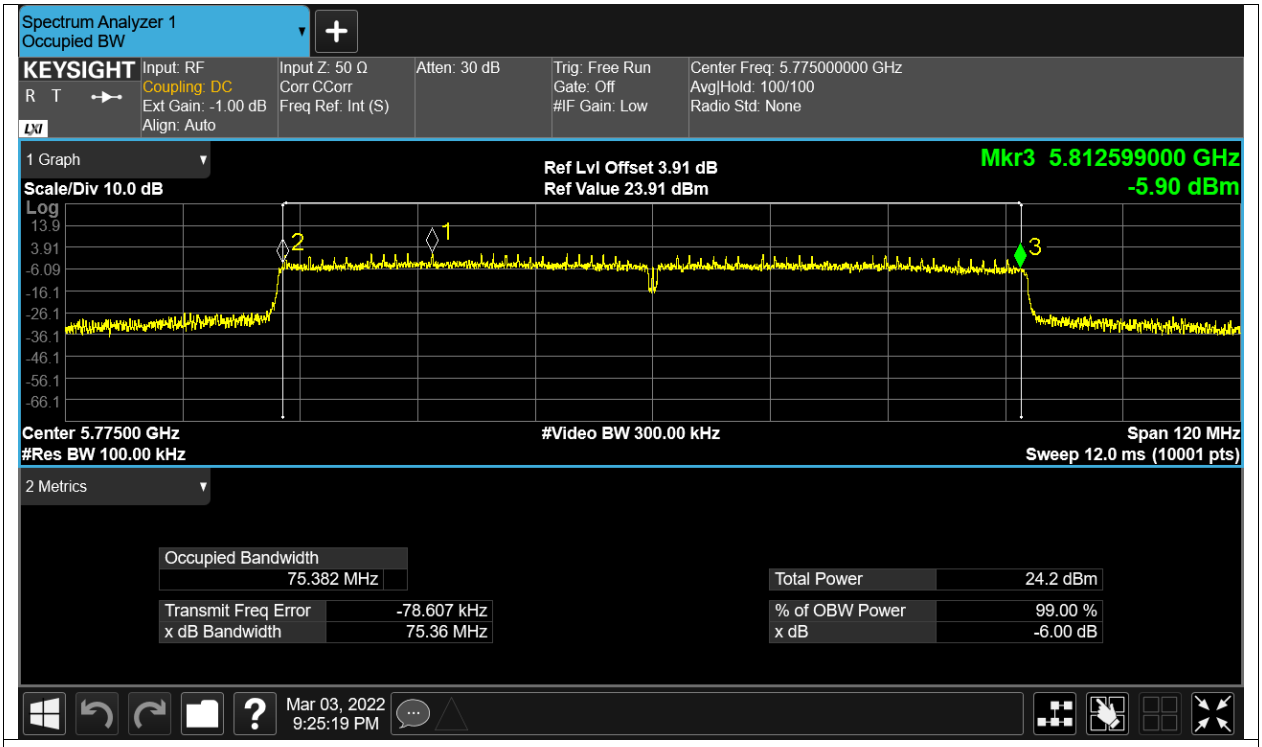
-6dB Bandwidth NVNT ac40 5755MHz Ant1



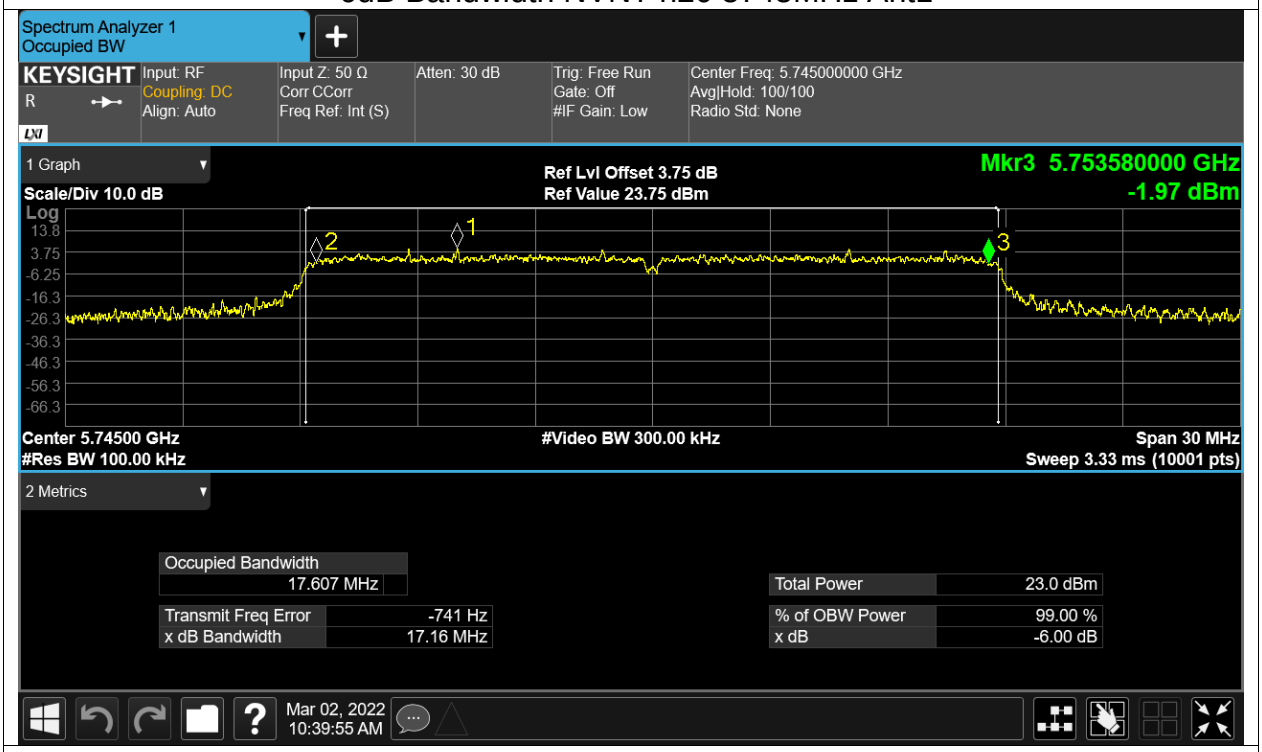
-6dB Bandwidth NVNT ac40 5795MHz Ant1



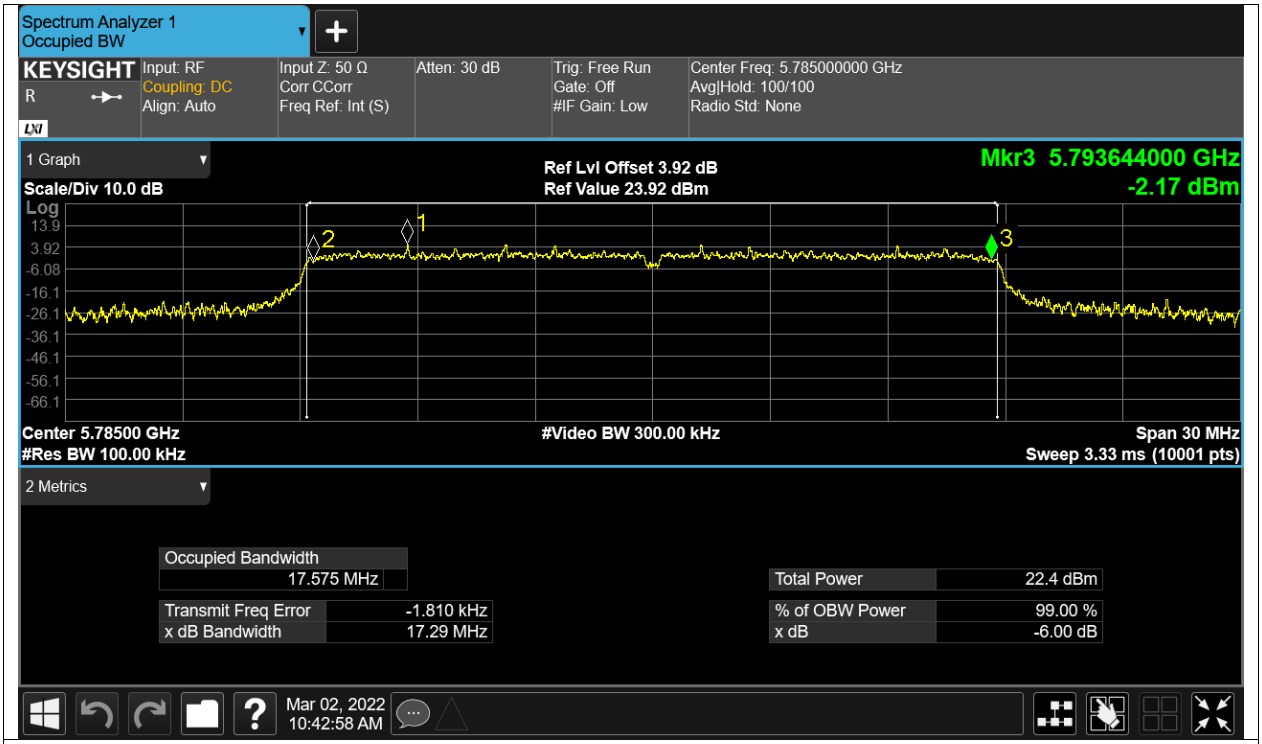
-6dB Bandwidth NVNT ac80 5775MHz Ant1



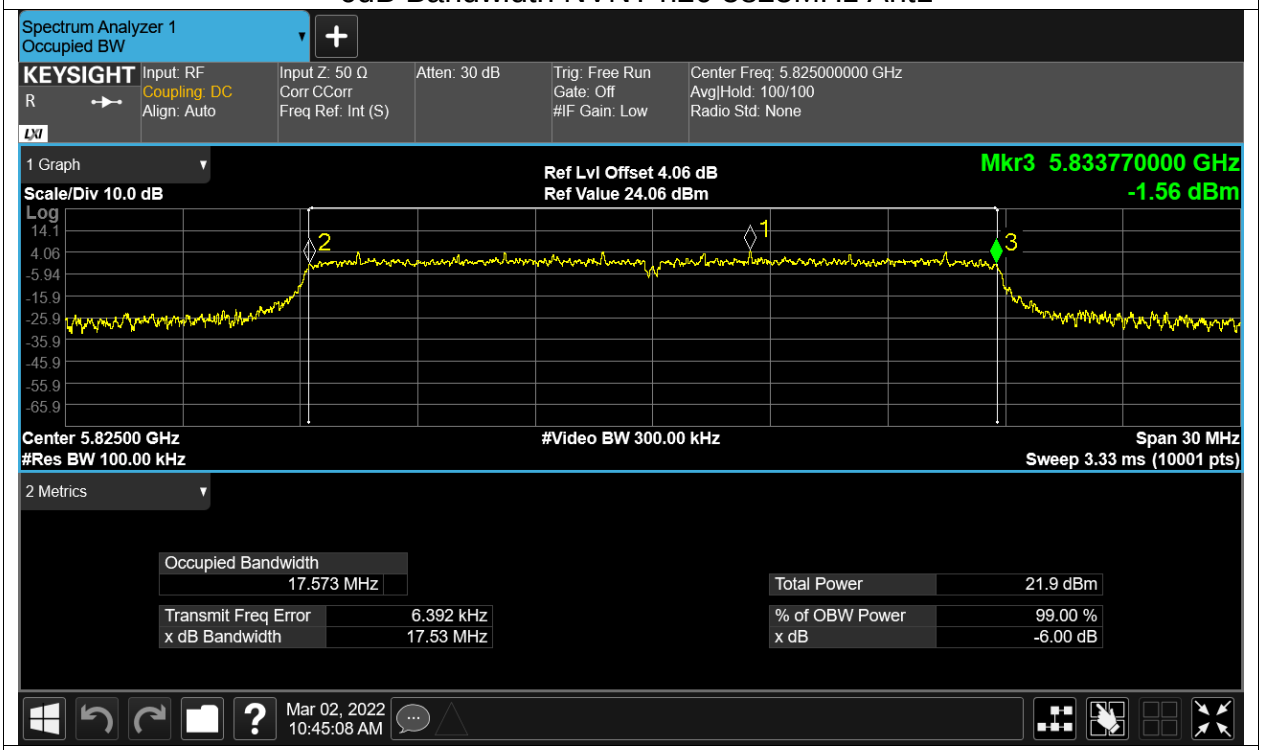
-6dB Bandwidth NVNT n20 5745MHz Ant1



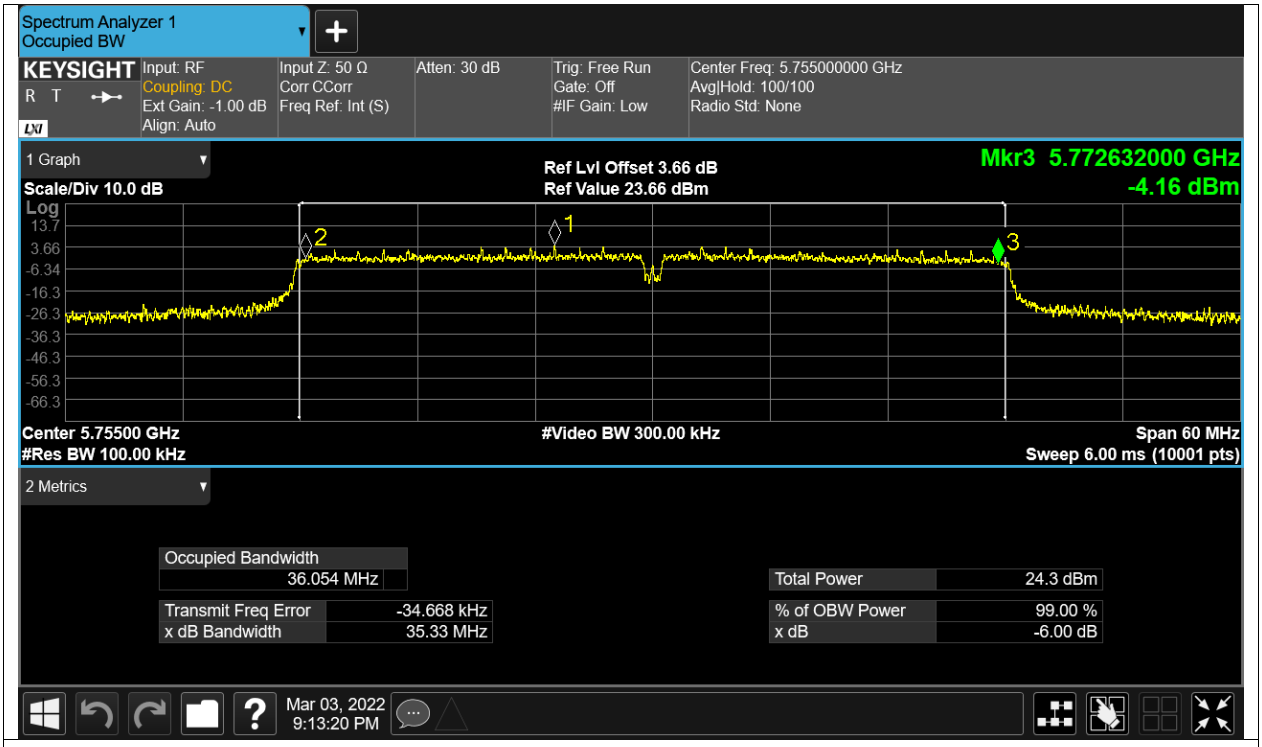
-6dB Bandwidth NVNT n20 5785MHz Ant1



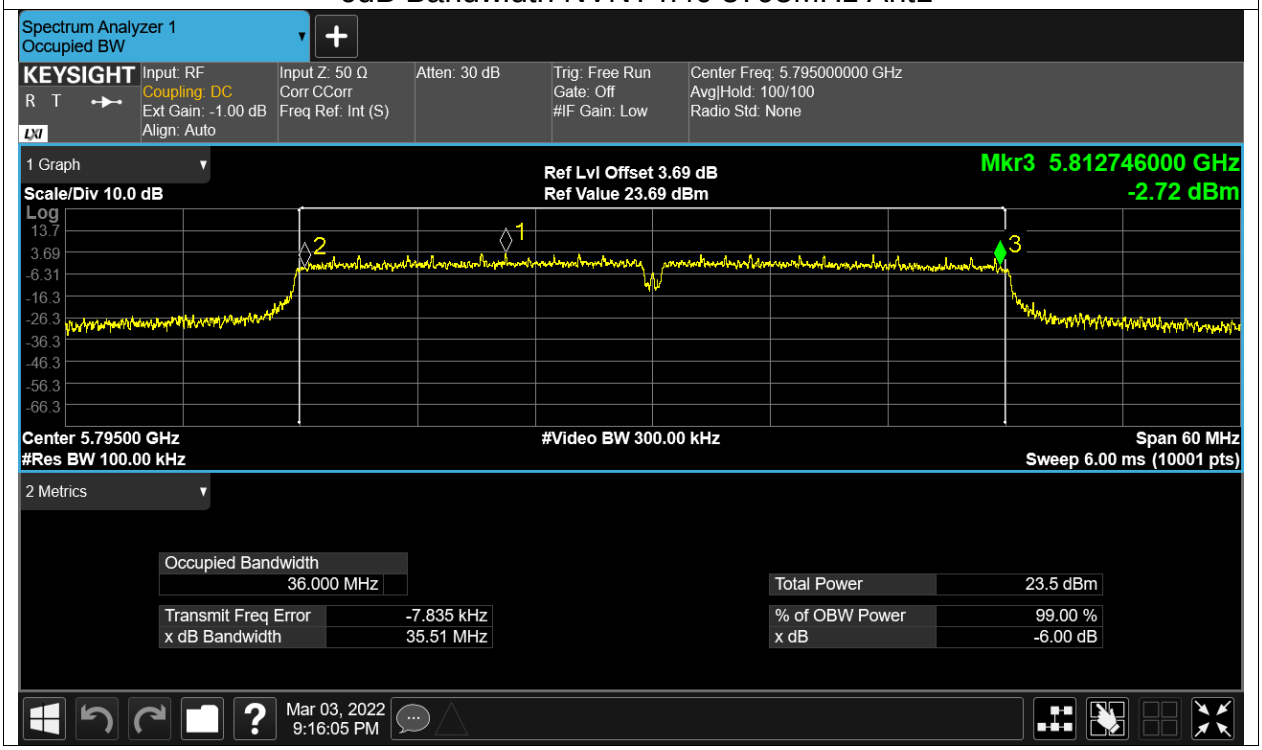
-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1



-6dB Bandwidth NVNT n40 5795MHz Ant1

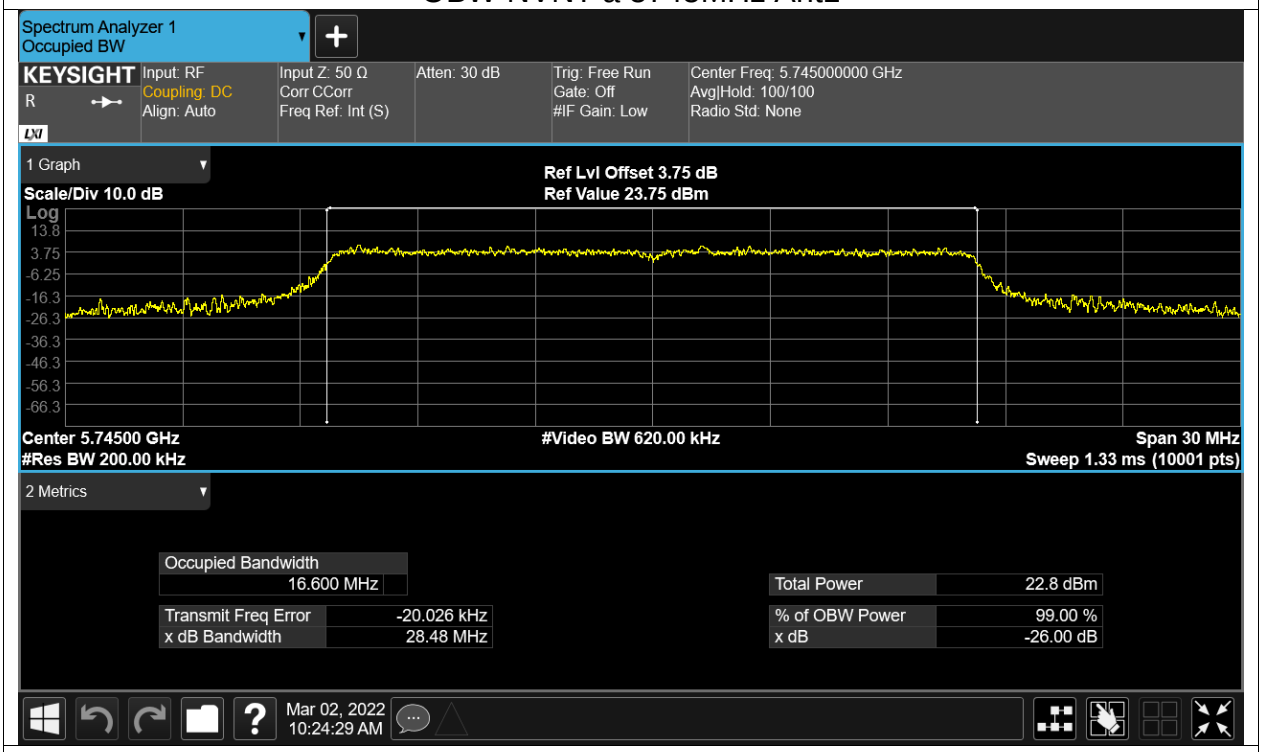


Occupied Channel Bandwidth

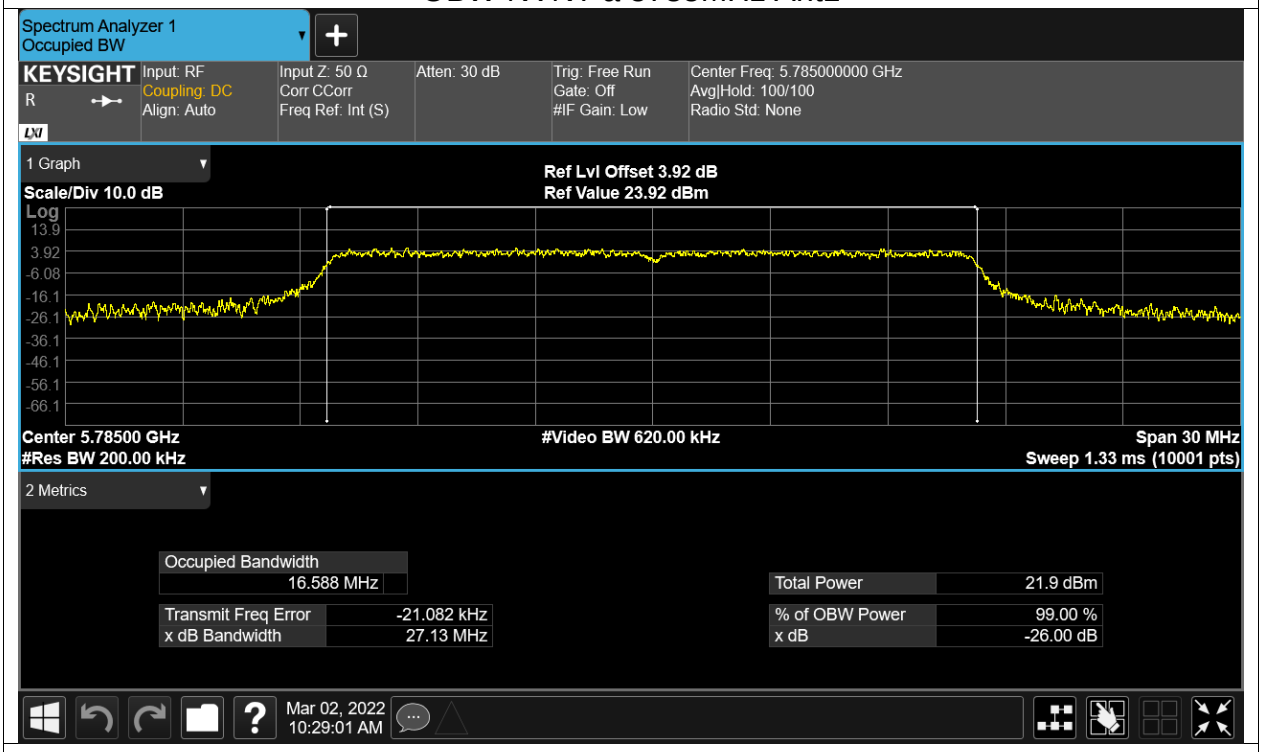
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.60022424
NVNT	a	5785	Ant1	16.58835945
NVNT	a	5825	Ant1	16.61179163
NVNT	ac20	5745	Ant1	17.66884788
NVNT	ac20	5785	Ant1	17.6196276
NVNT	ac20	5825	Ant1	17.5982611
NVNT	ac40	5755	Ant1	36.0829252
NVNT	ac40	5795	Ant1	36.12244914
NVNT	ac80	5775	Ant1	75.46927045
NVNT	n20	5745	Ant1	17.65823312
NVNT	n20	5785	Ant1	17.58866411
NVNT	n20	5825	Ant1	17.58721409
NVNT	n40	5755	Ant1	36.13351067
NVNT	n40	5795	Ant1	36.08842455

Test Graphs

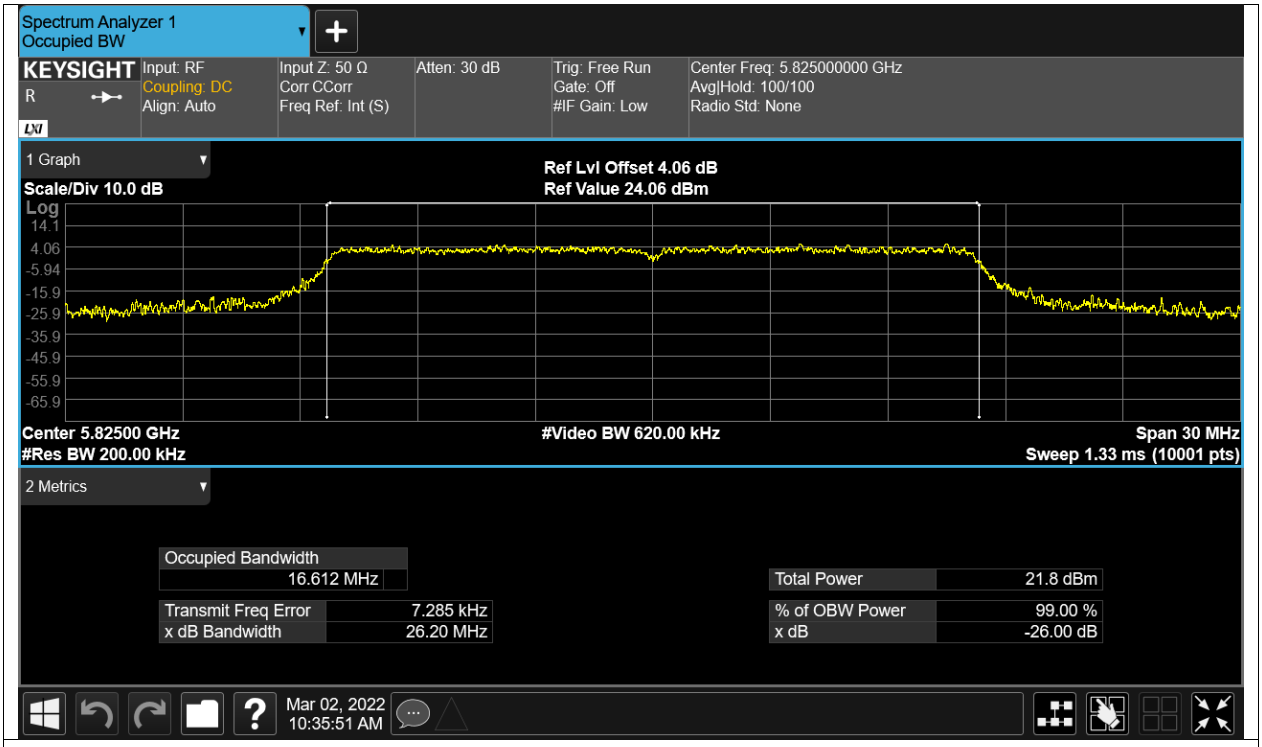
OBW NVNT a 5745MHz Ant1



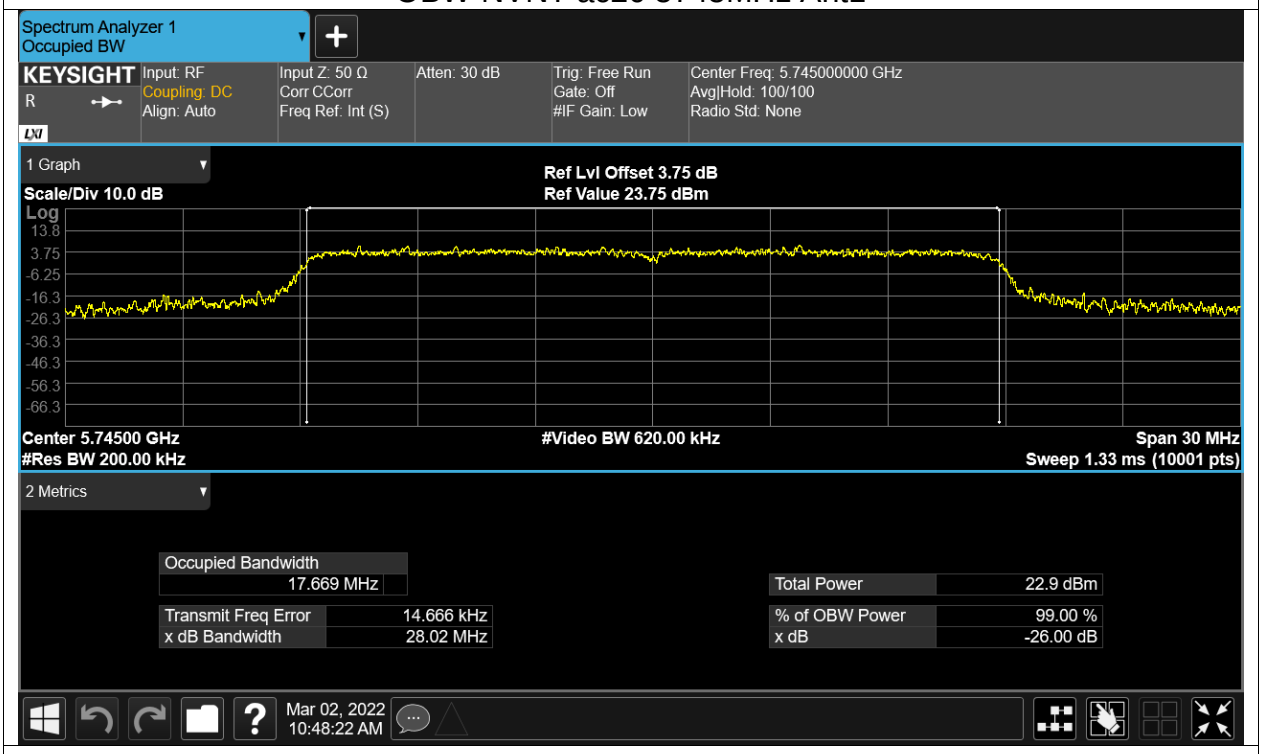
OBW NVNT a 5785MHz Ant1



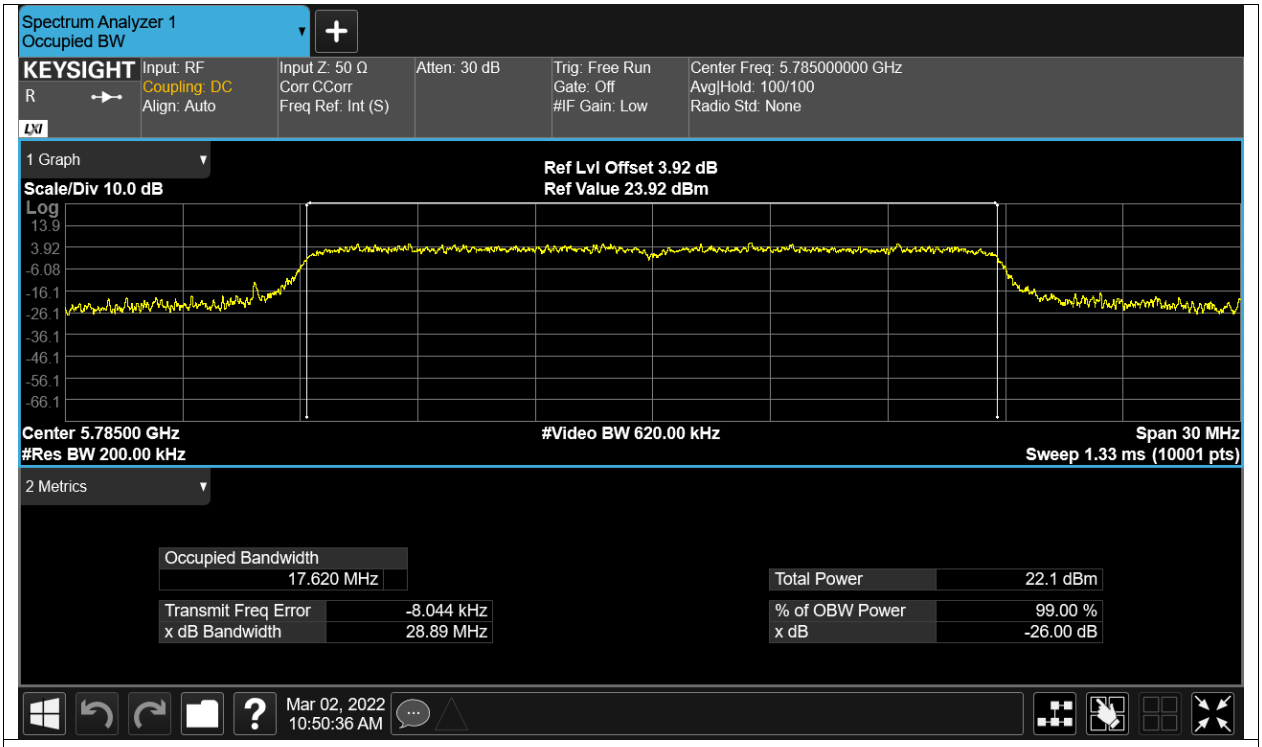
OBW NVNT a 5825MHz Ant1



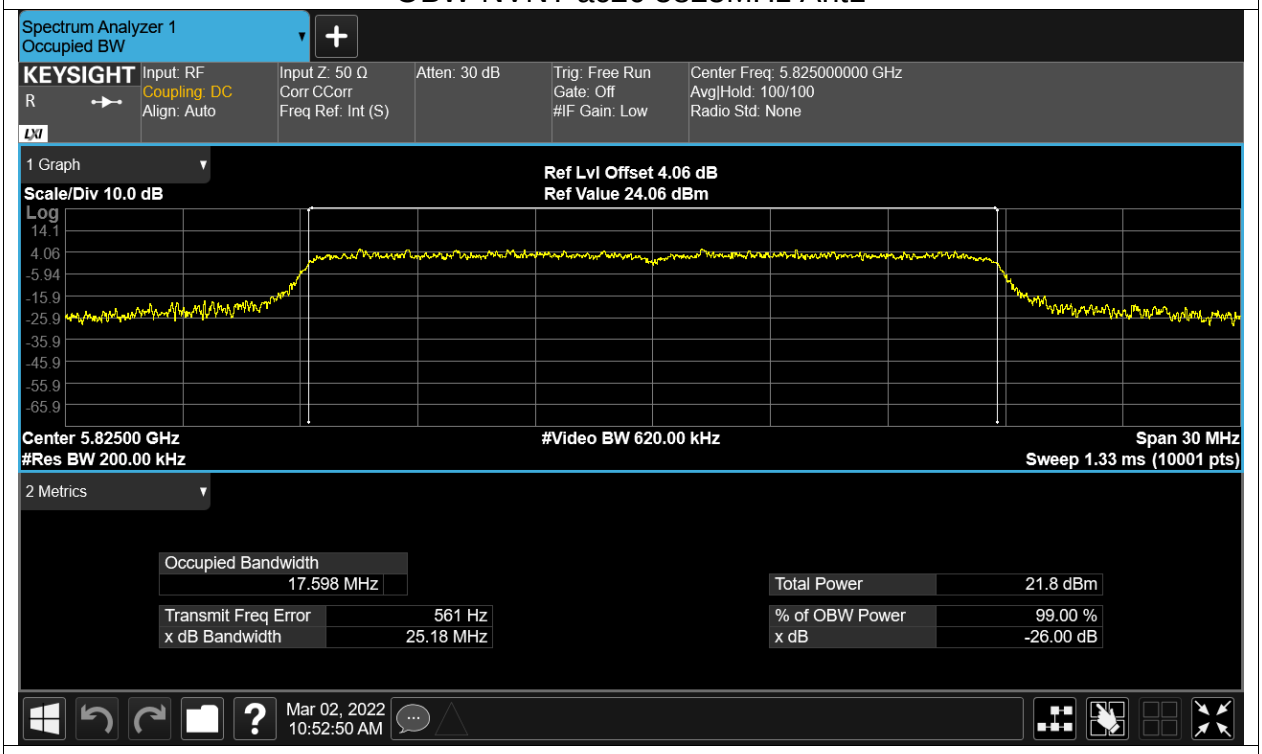
OBW NVNT ac20 5745MHz Ant1



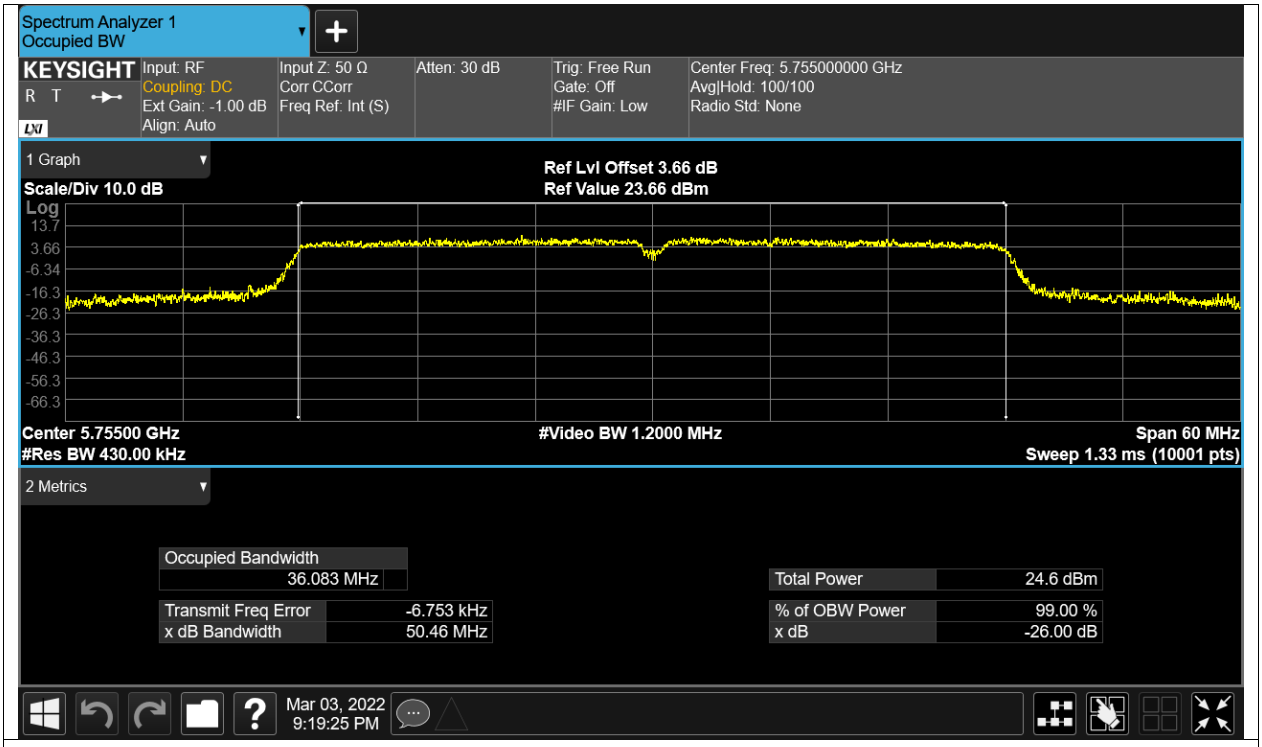
OBW NVNT ac20 5785MHz Ant1



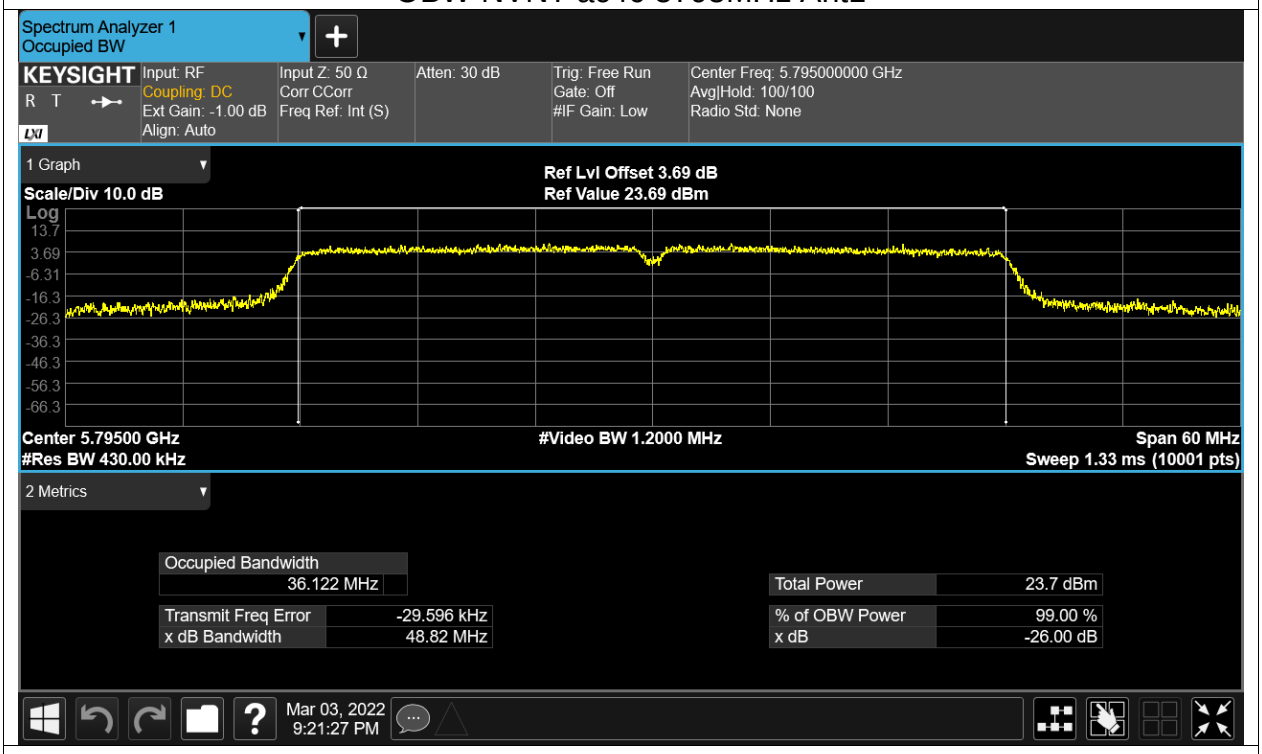
OBW NVNT ac20 5825MHz Ant1



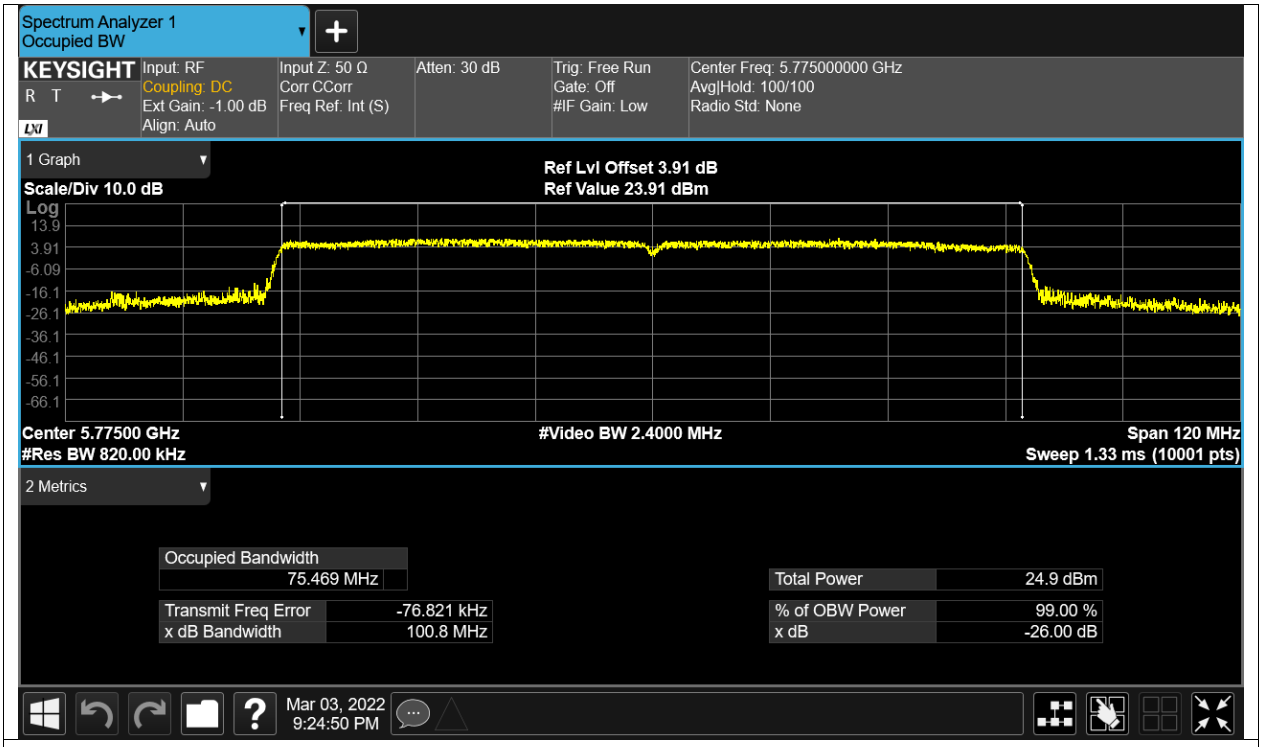
OBW NVNT ac40 5755MHz Ant1



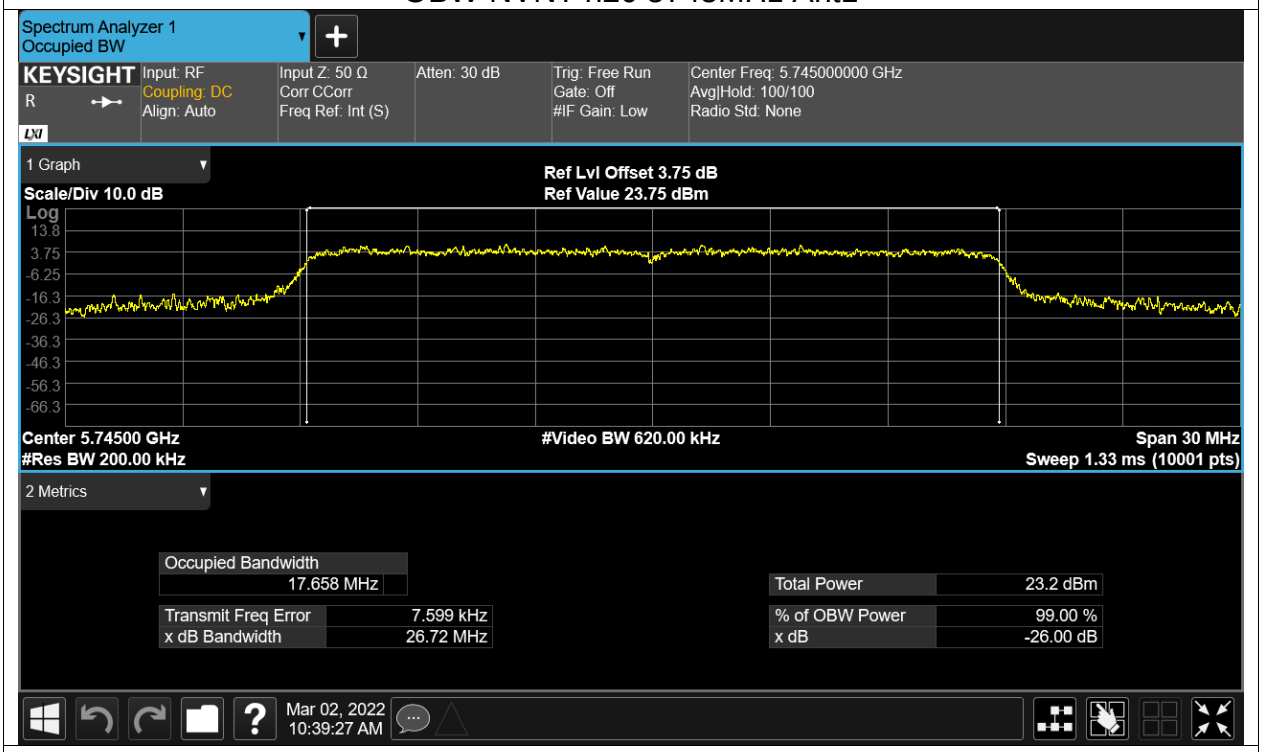
OBW NVNT ac40 5795MHz Ant1



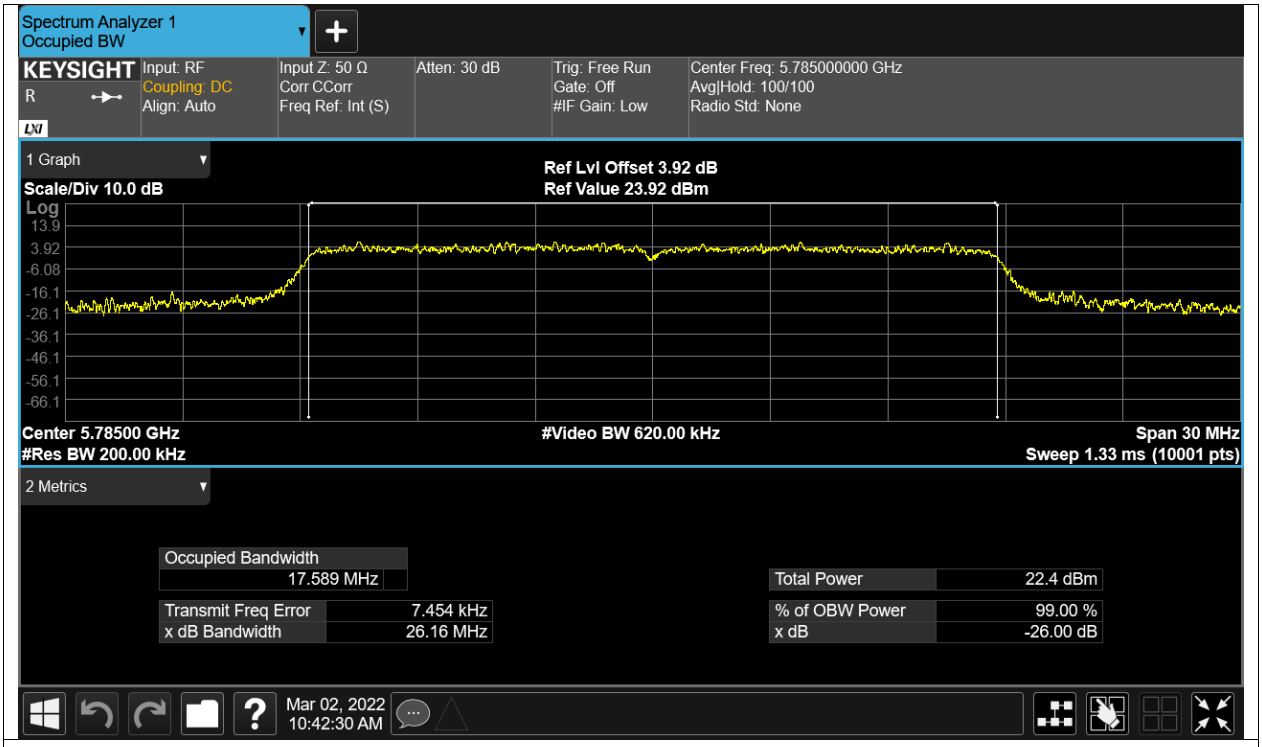
OBW NVNT ac80 5775MHz Ant1



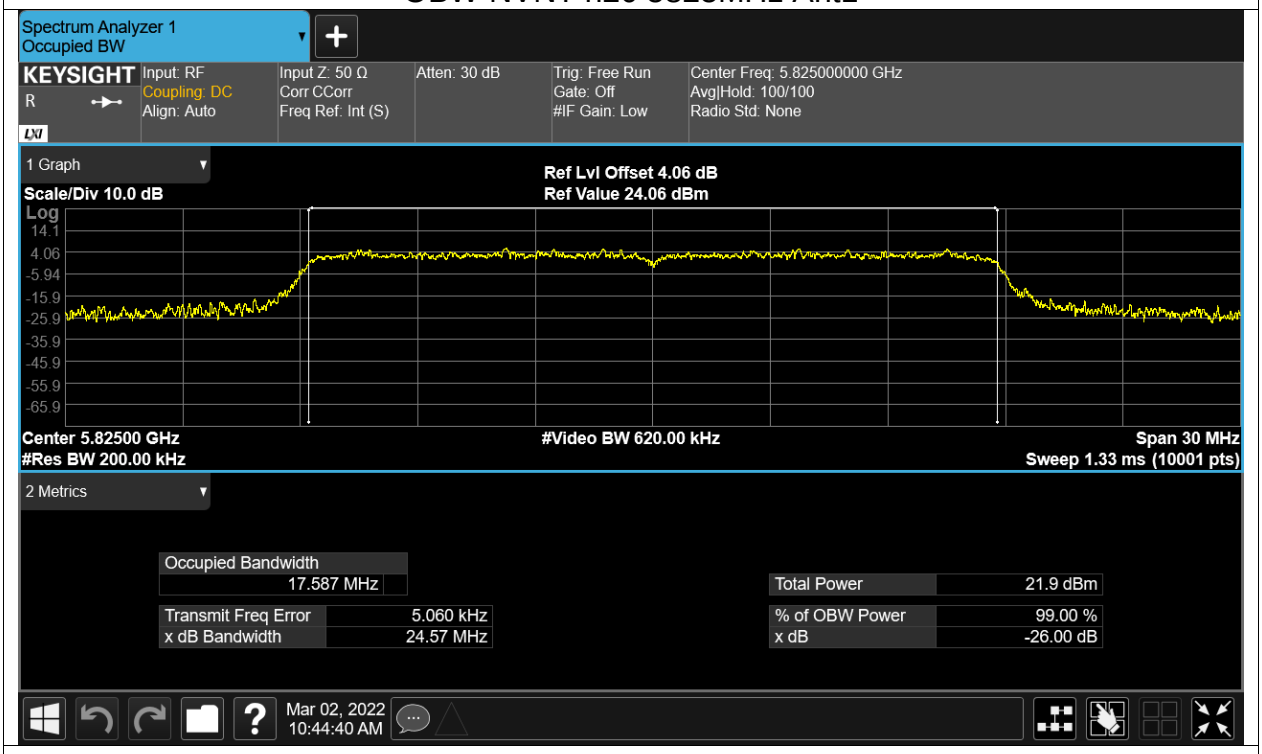
OBW NVNT n20 5745MHz Ant1



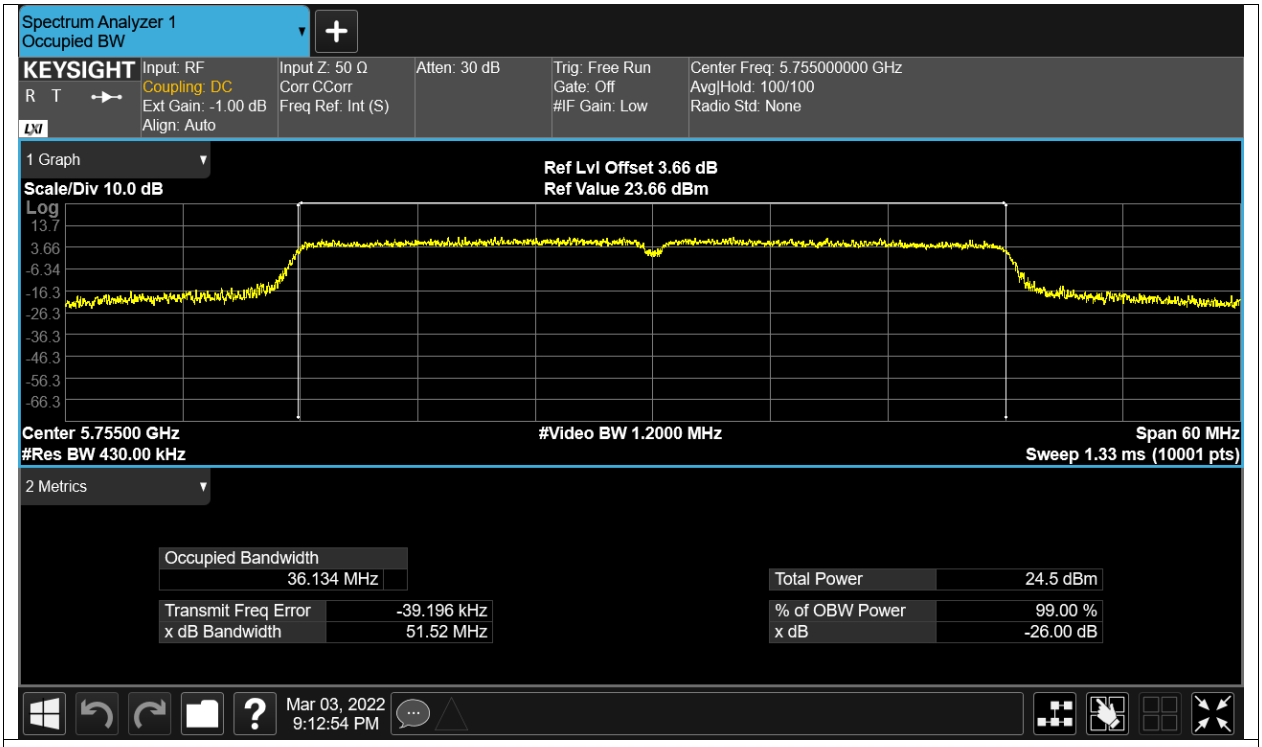
OBW NVNT n20 5785MHz Ant1



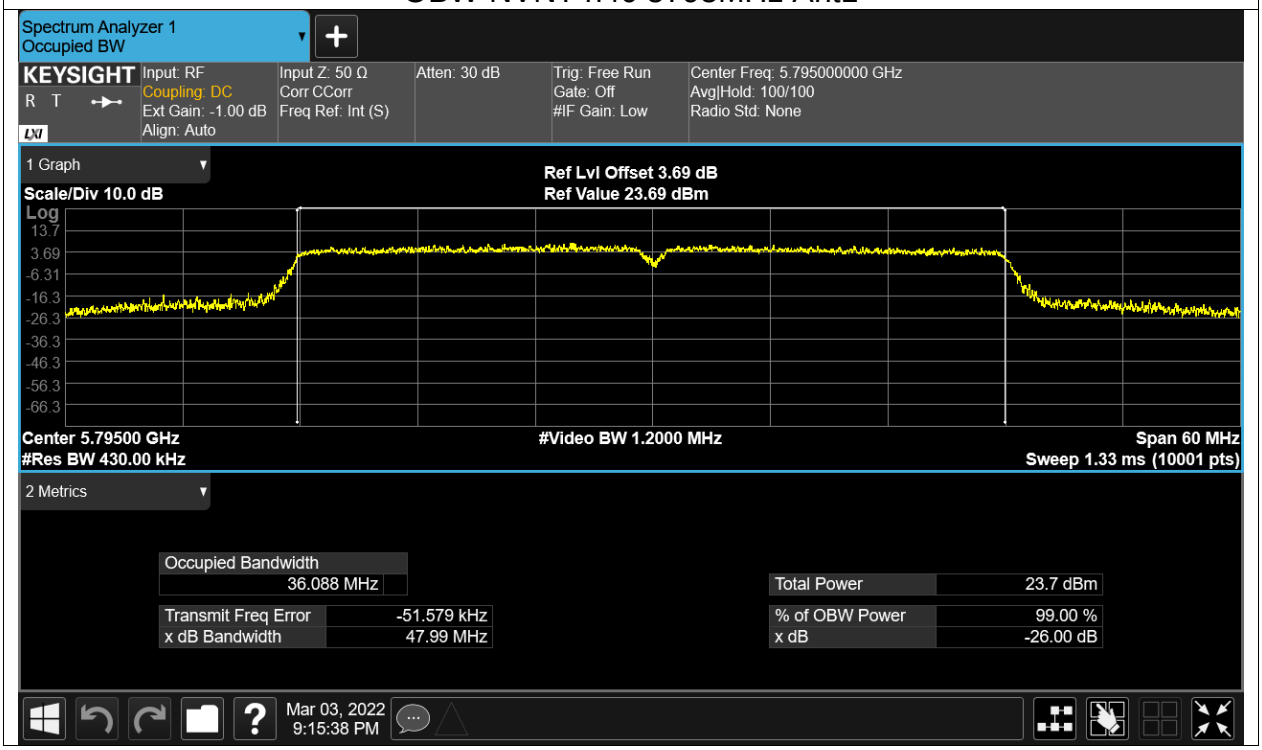
OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



OBW NVNT n40 5795MHz Ant1

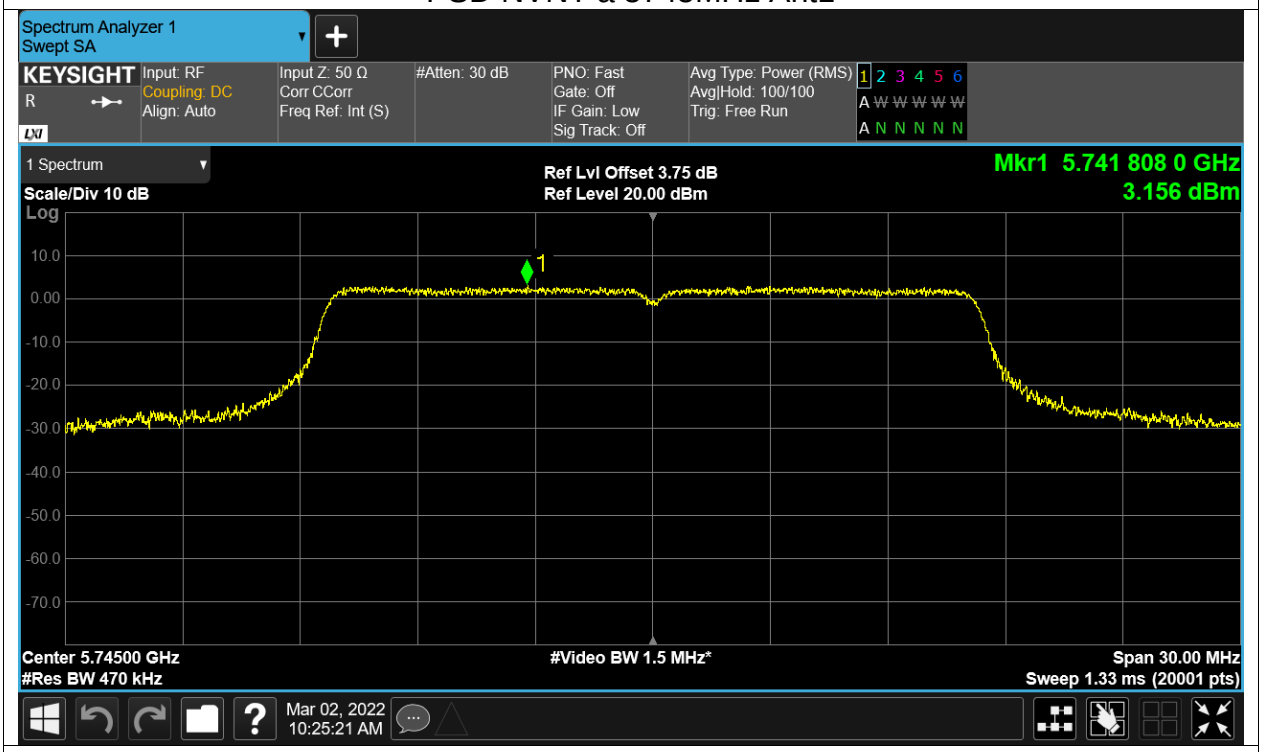


Maximum Power Spectral Density Level

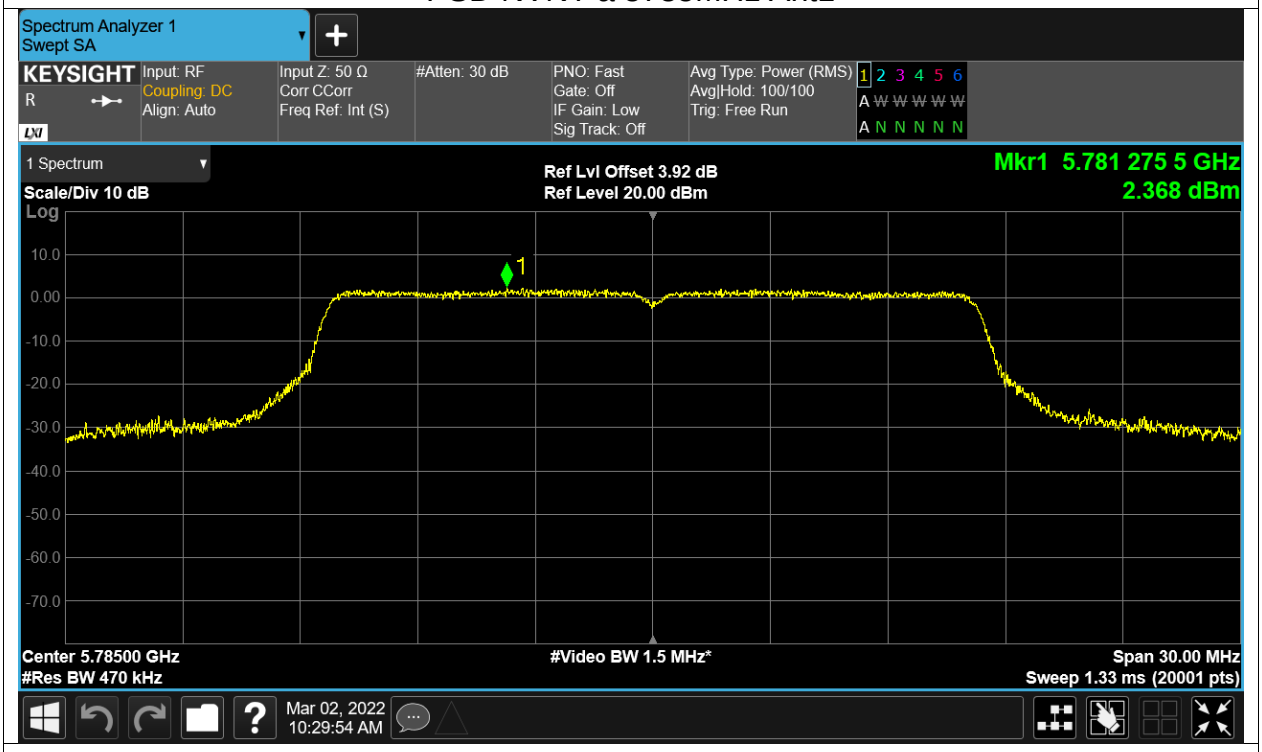
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	3.156	30	Pass
NVNT	a	5785	Ant1	2.368	30	Pass
NVNT	a	5825	Ant1	1.979	30	Pass
NVNT	ac20	5745	Ant1	3.024	30	Pass
NVNT	ac20	5785	Ant1	2.054	30	Pass
NVNT	ac20	5825	Ant1	1.846	30	Pass
NVNT	ac40	5755	Ant1	1.337	30	Pass
NVNT	ac40	5795	Ant1	0.912	30	Pass
NVNT	ac80	5775	Ant1	-1.978	30	Pass
NVNT	n20	5745	Ant1	3.005	30	Pass
NVNT	n20	5785	Ant1	2.519	30	Pass
NVNT	n20	5825	Ant1	1.896	30	Pass
NVNT	n40	5755	Ant1	1.77	30	Pass
NVNT	n40	5795	Ant1	0.951	30	Pass

Test Graphs

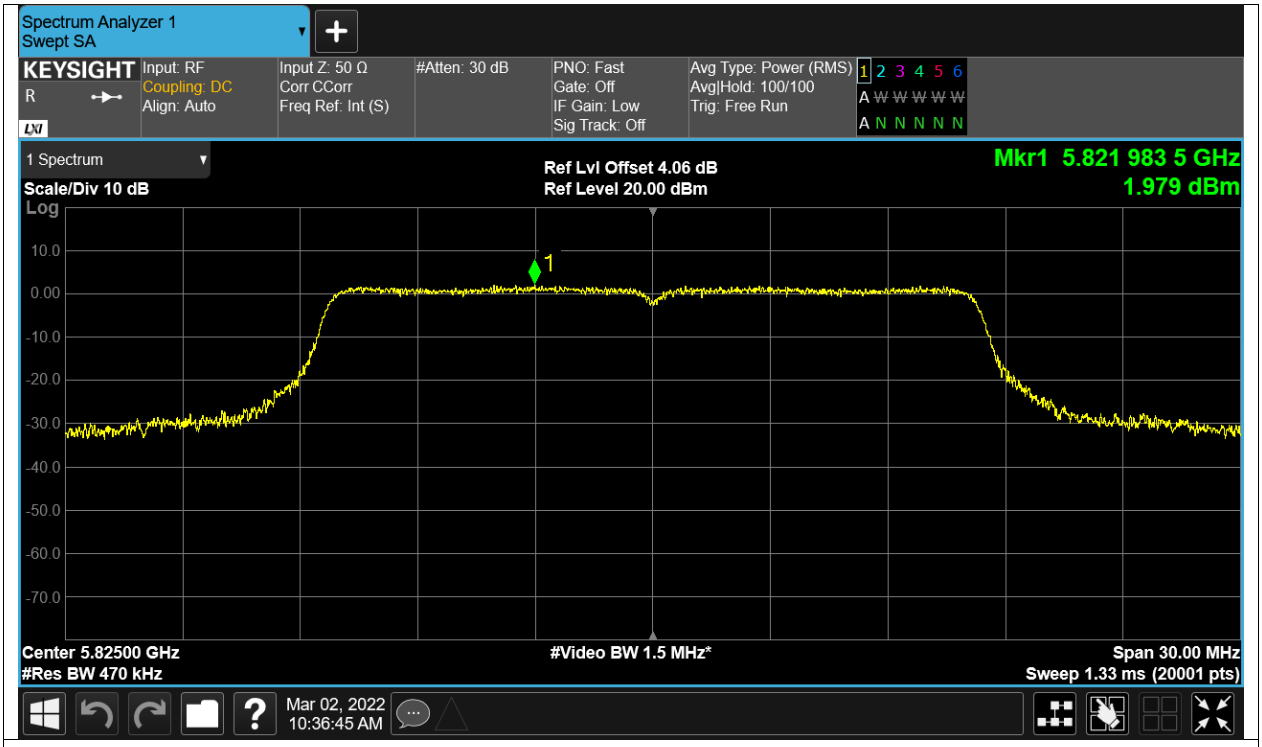
PSD NVNT a 5745MHz Ant1



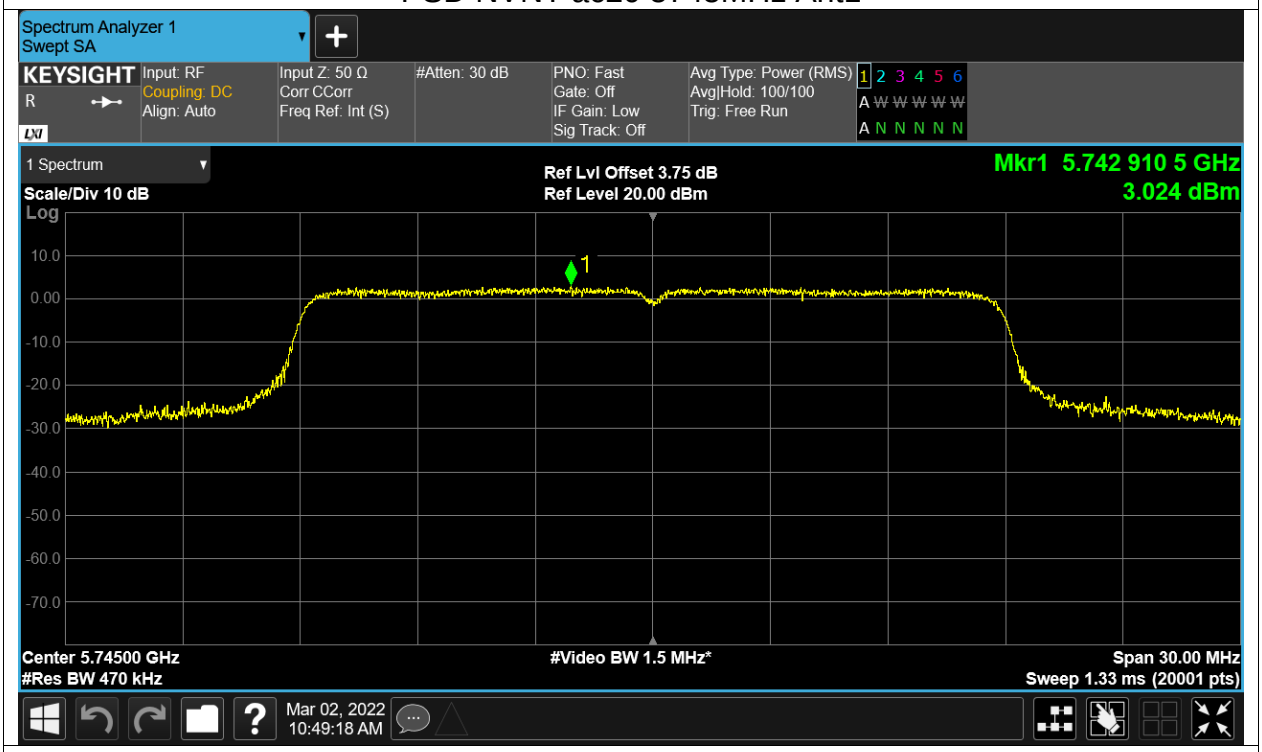
PSD NVNT a 5785MHz Ant1



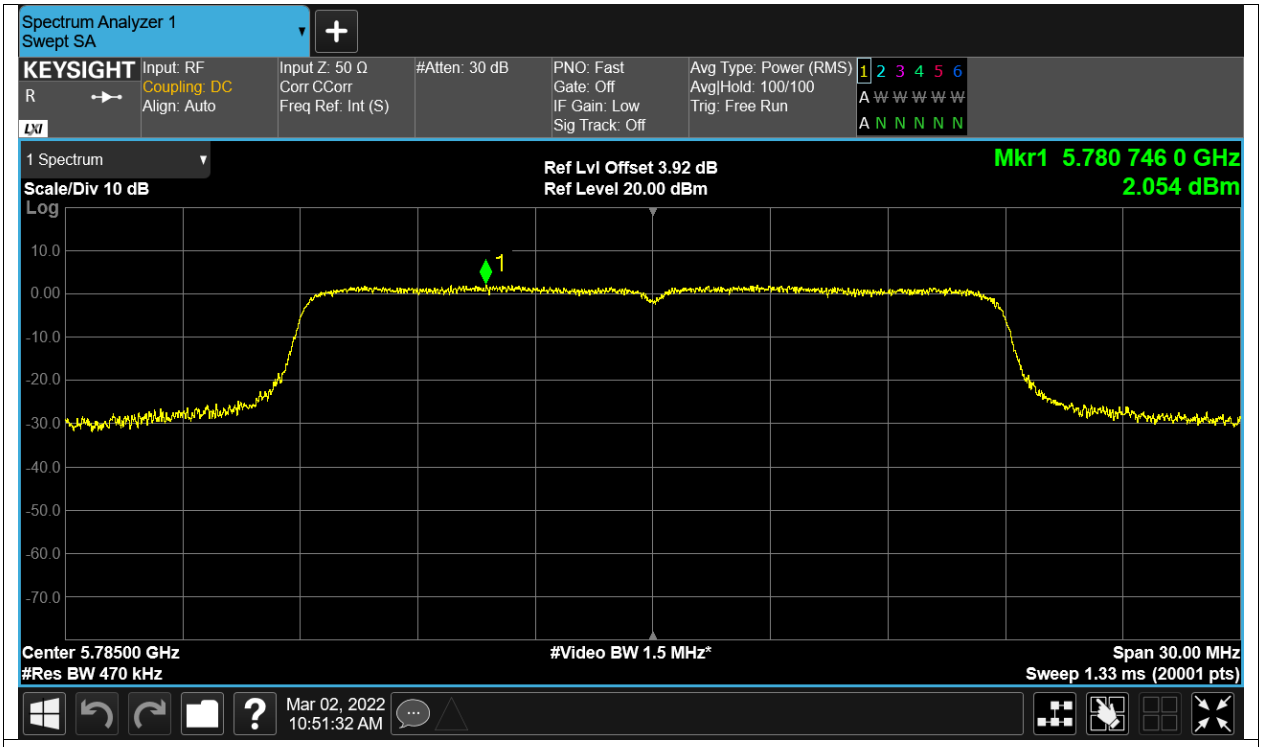
PSD NVNT a 5825MHz Ant1



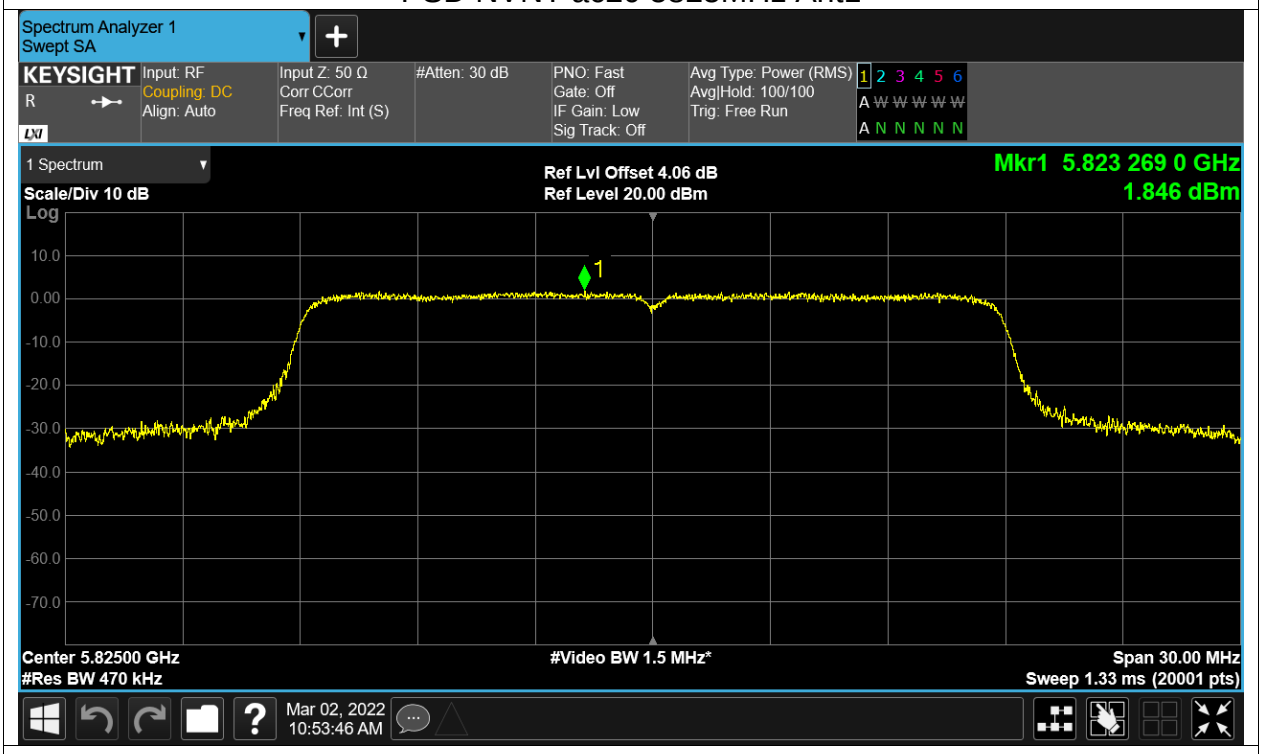
PSD NVNT ac20 5745MHz Ant1



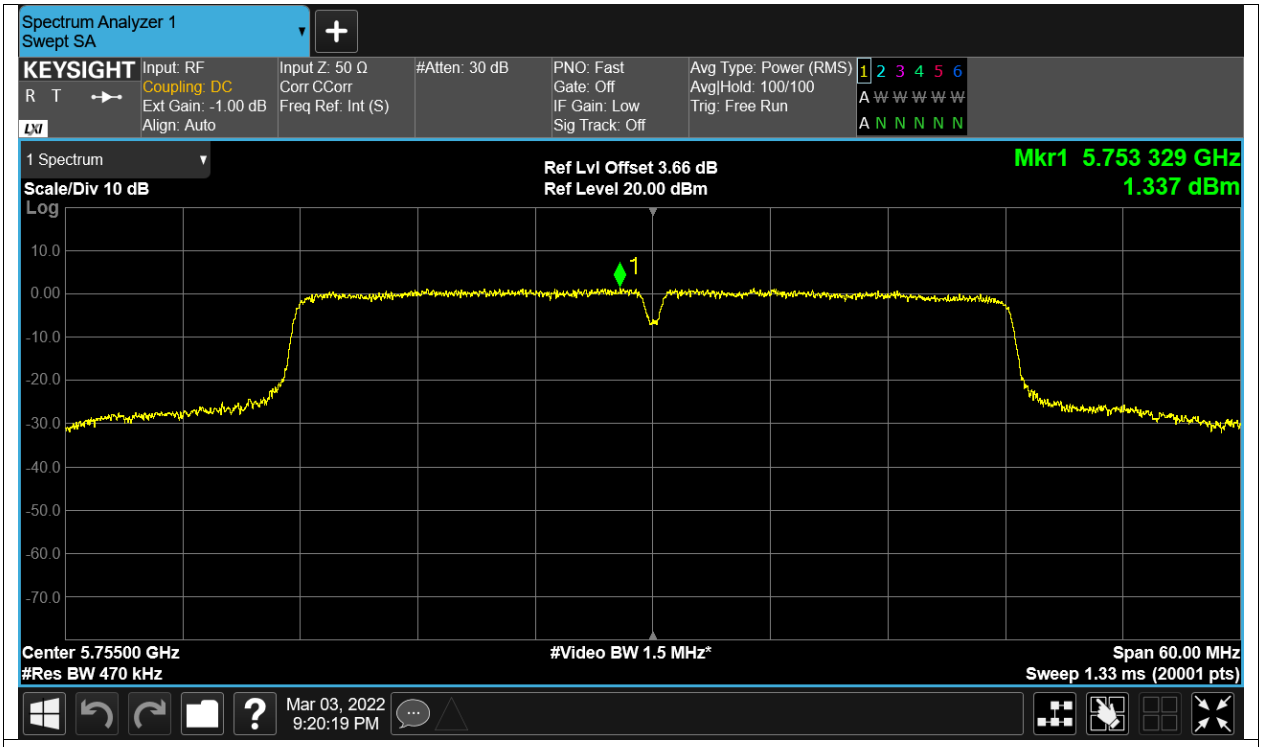
PSD NVNT ac20 5785MHz Ant1



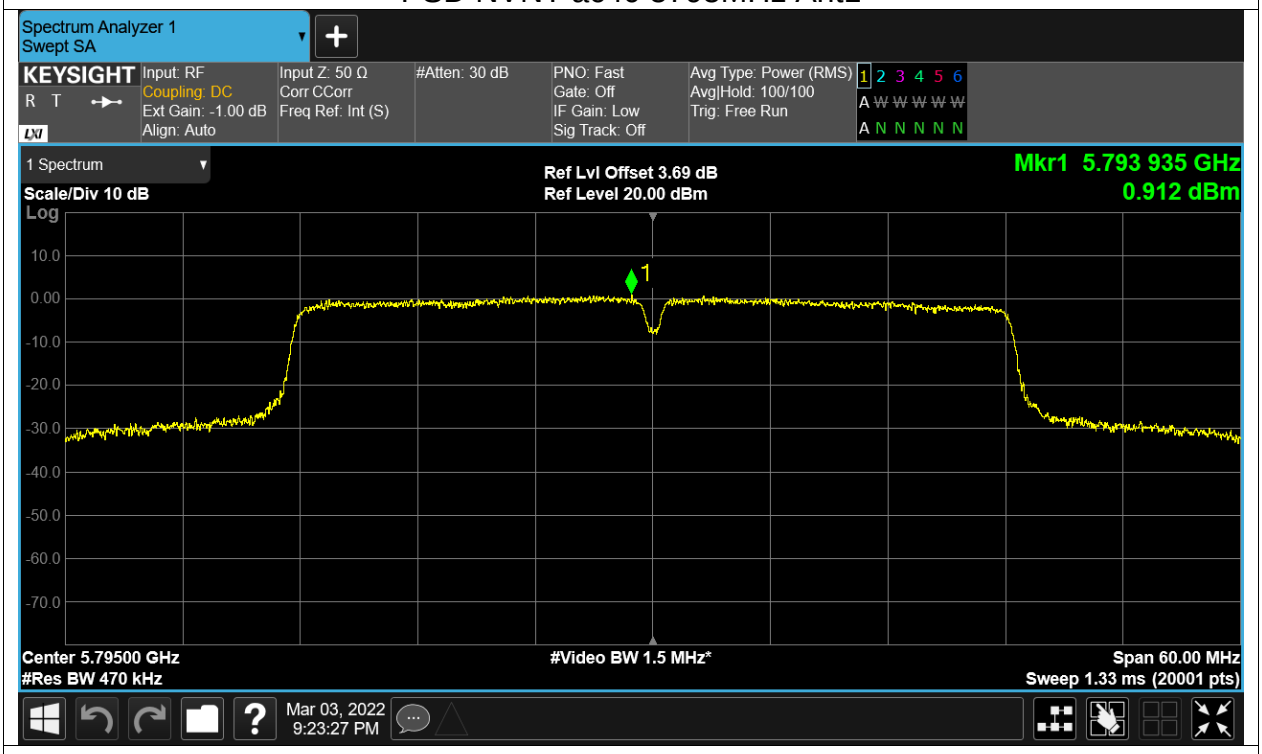
PSD NVNT ac20 5825MHz Ant1



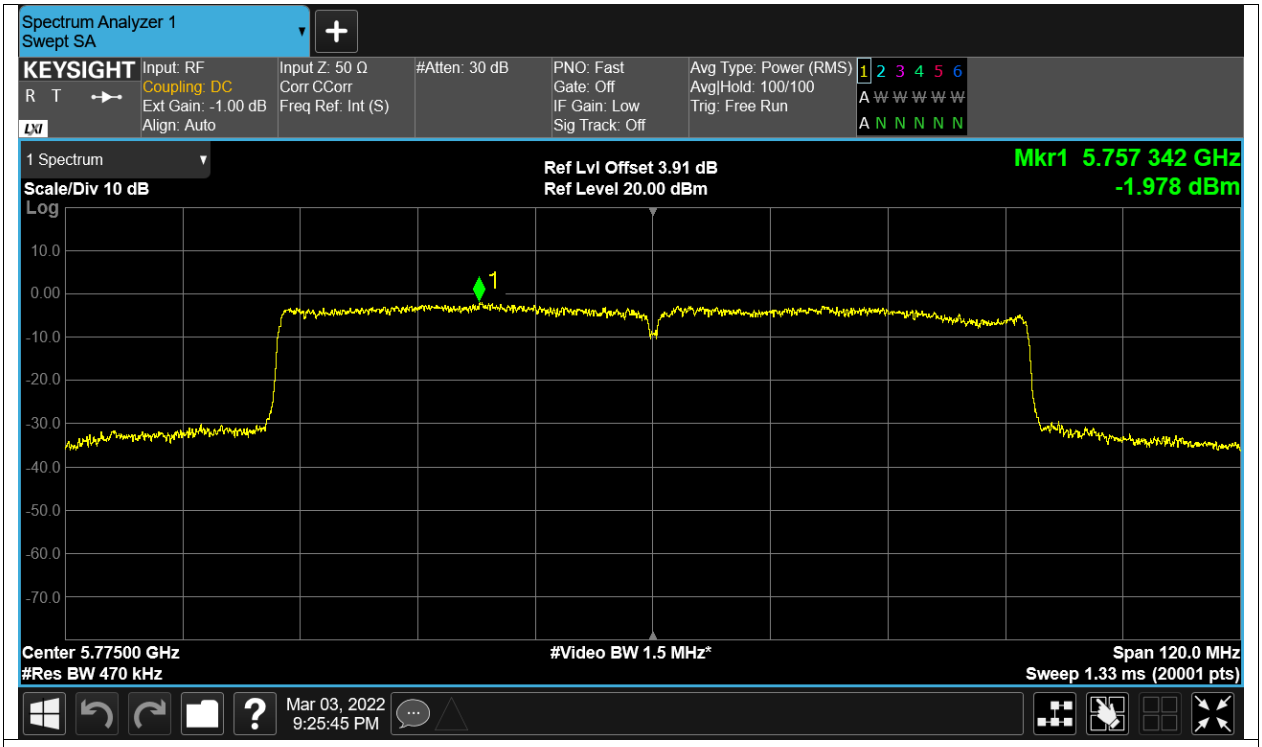
PSD NVNT ac40 5755MHz Ant1



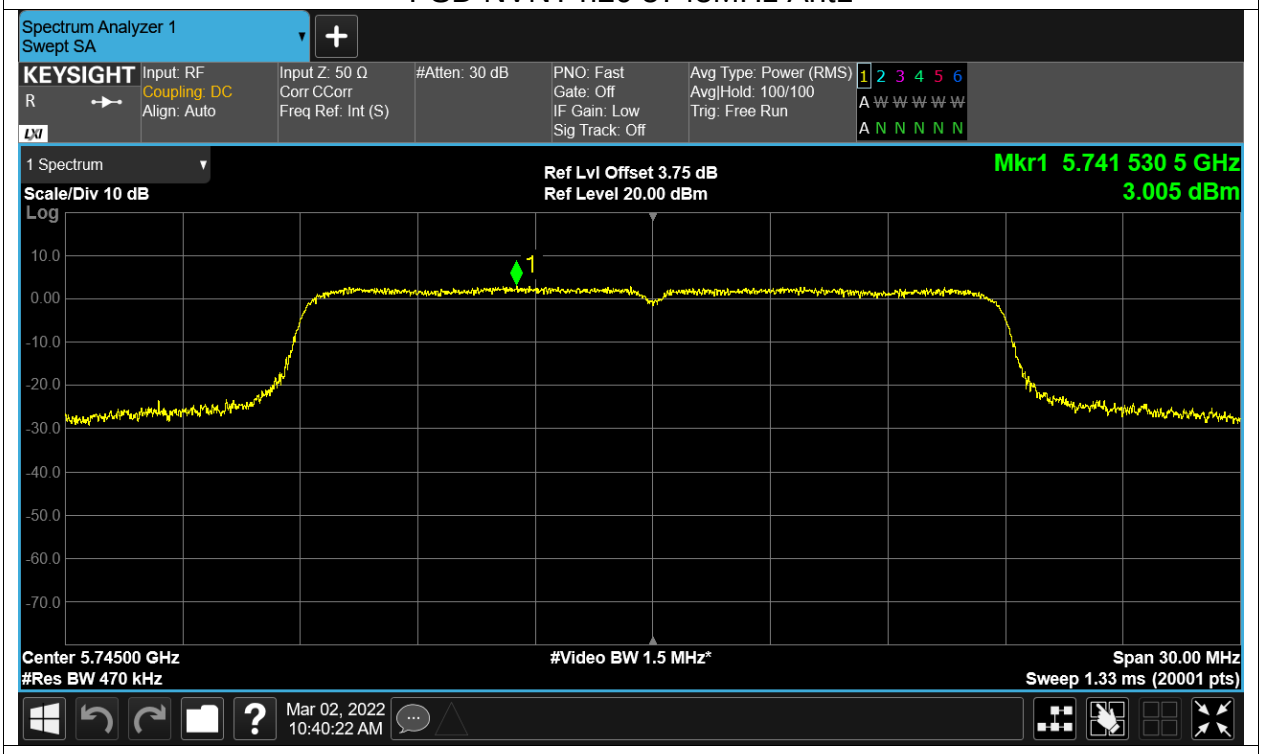
PSD NVNT ac40 5795MHz Ant1



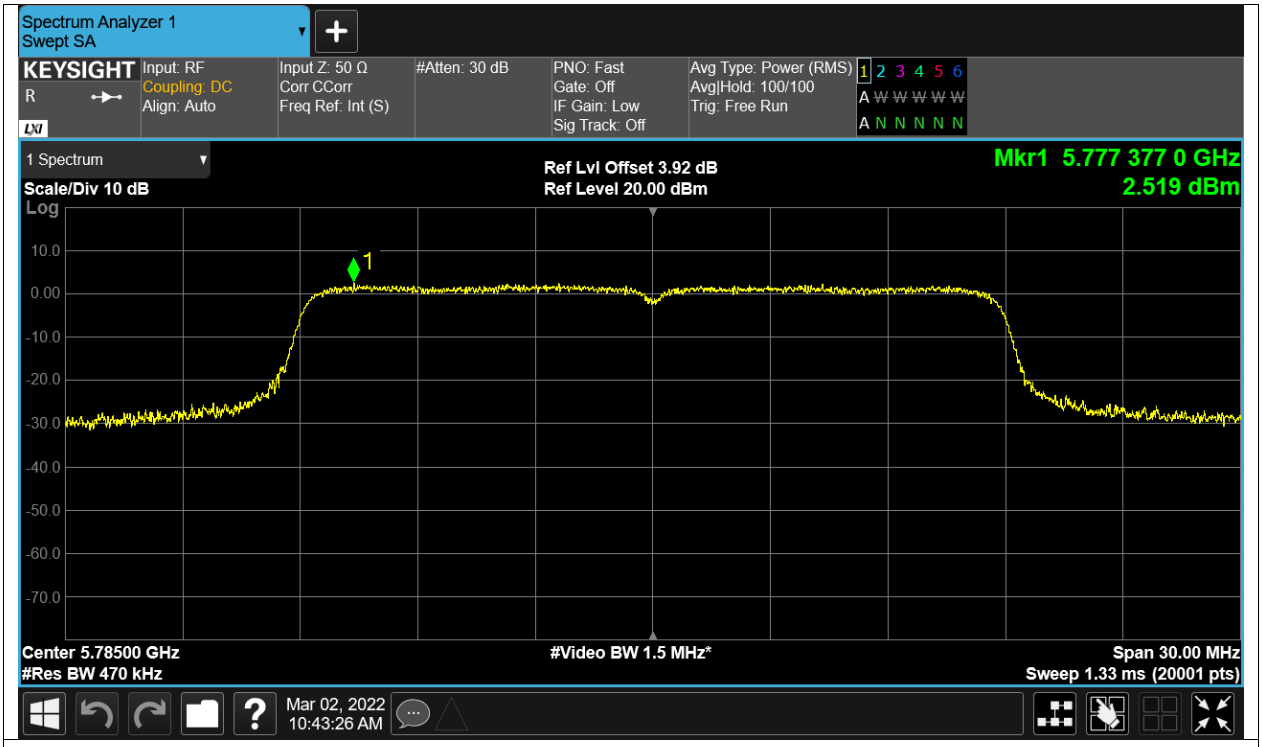
PSD NVNT ac80 5775MHz Ant1



PSD NVNT n20 5745MHz Ant1



PSD NVNT n20 5785MHz Ant1



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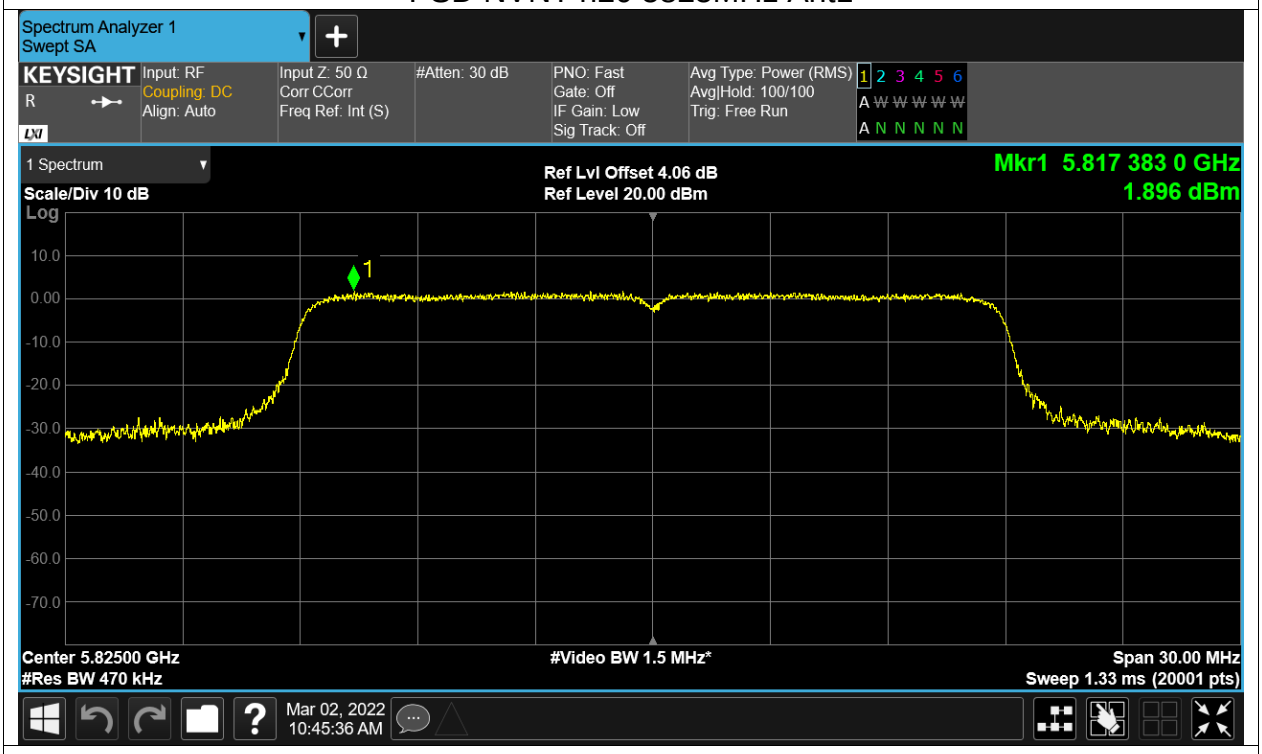
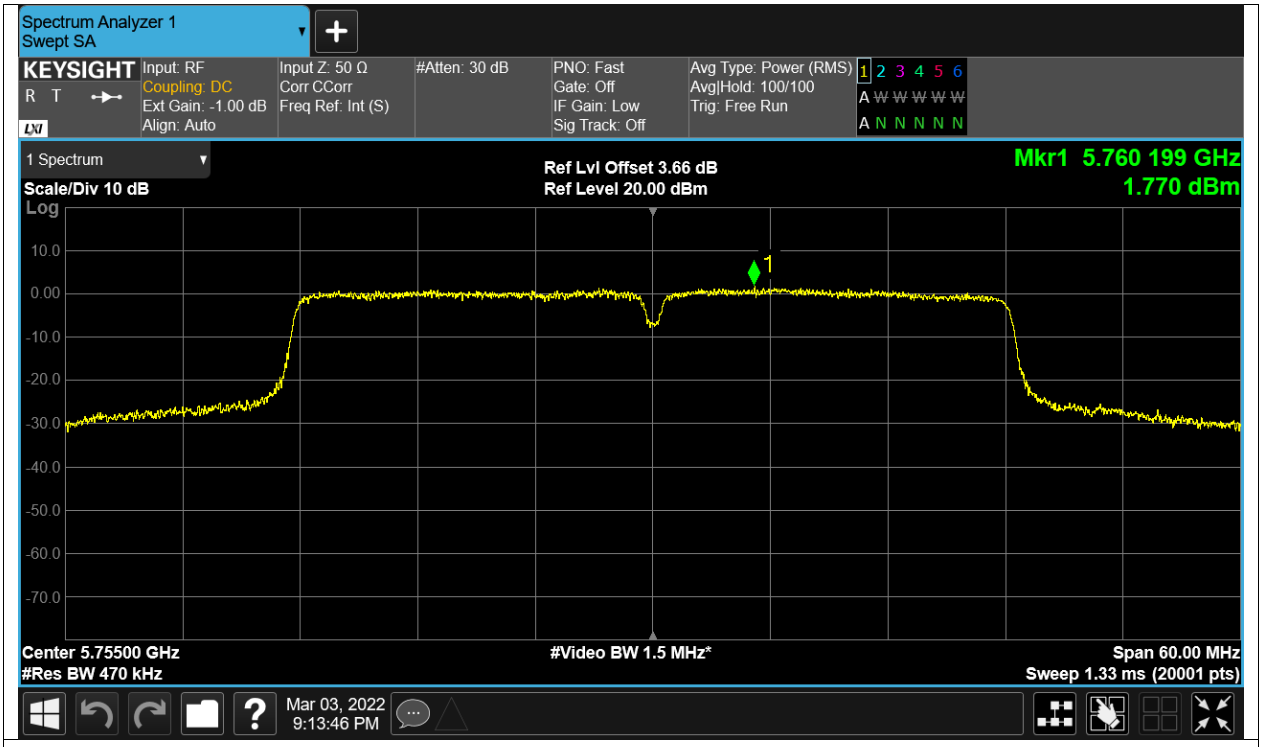


PSD NVNT n40 5755MHz Ant1



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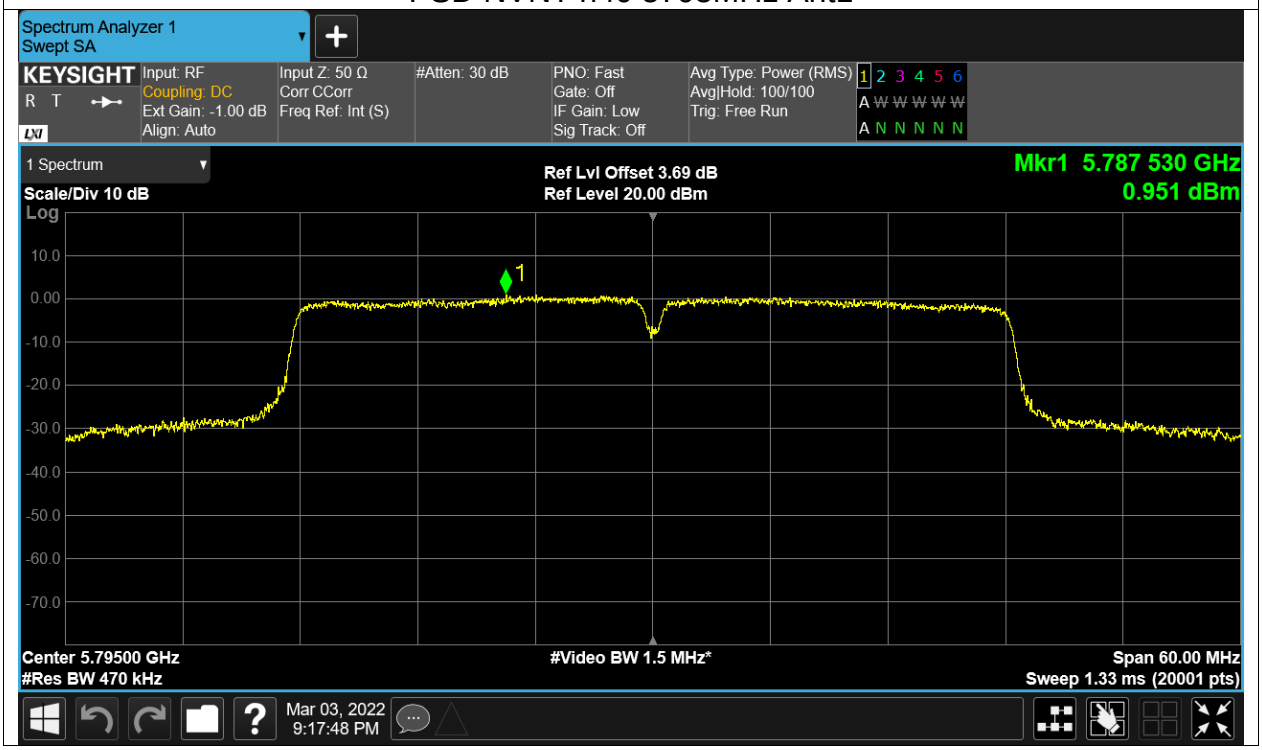

------End of report------