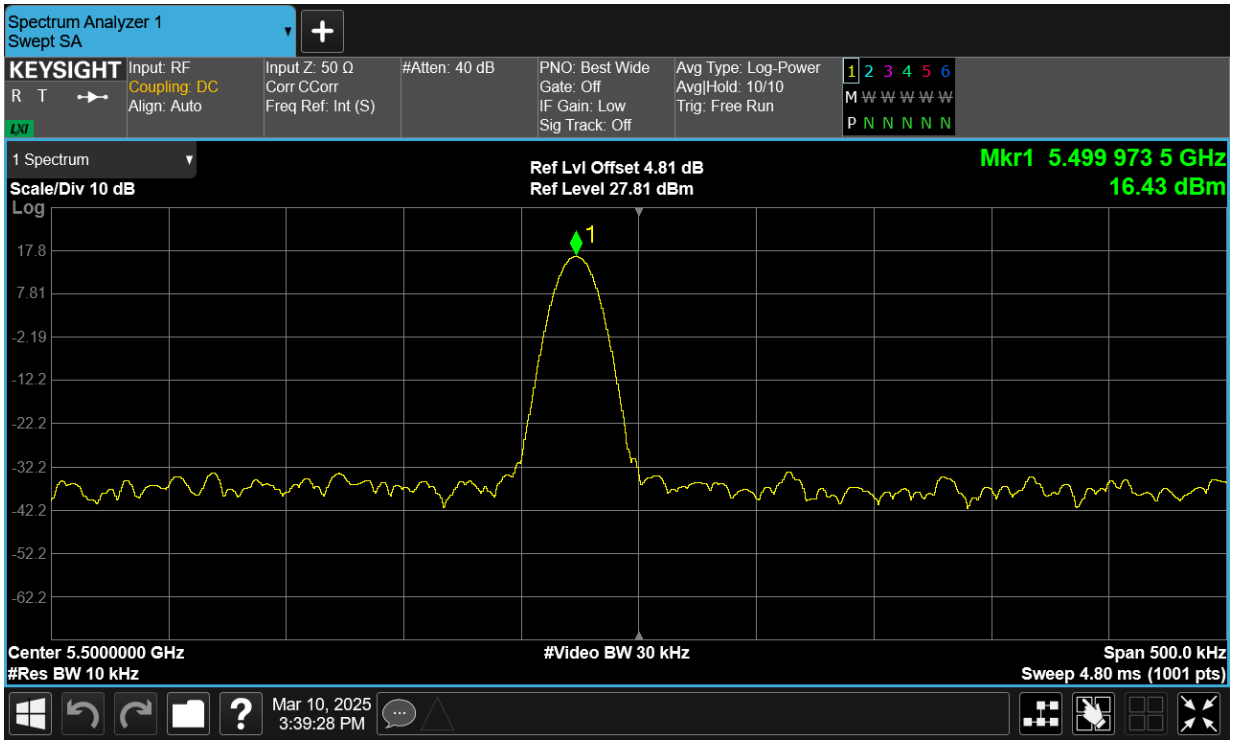
Test Data

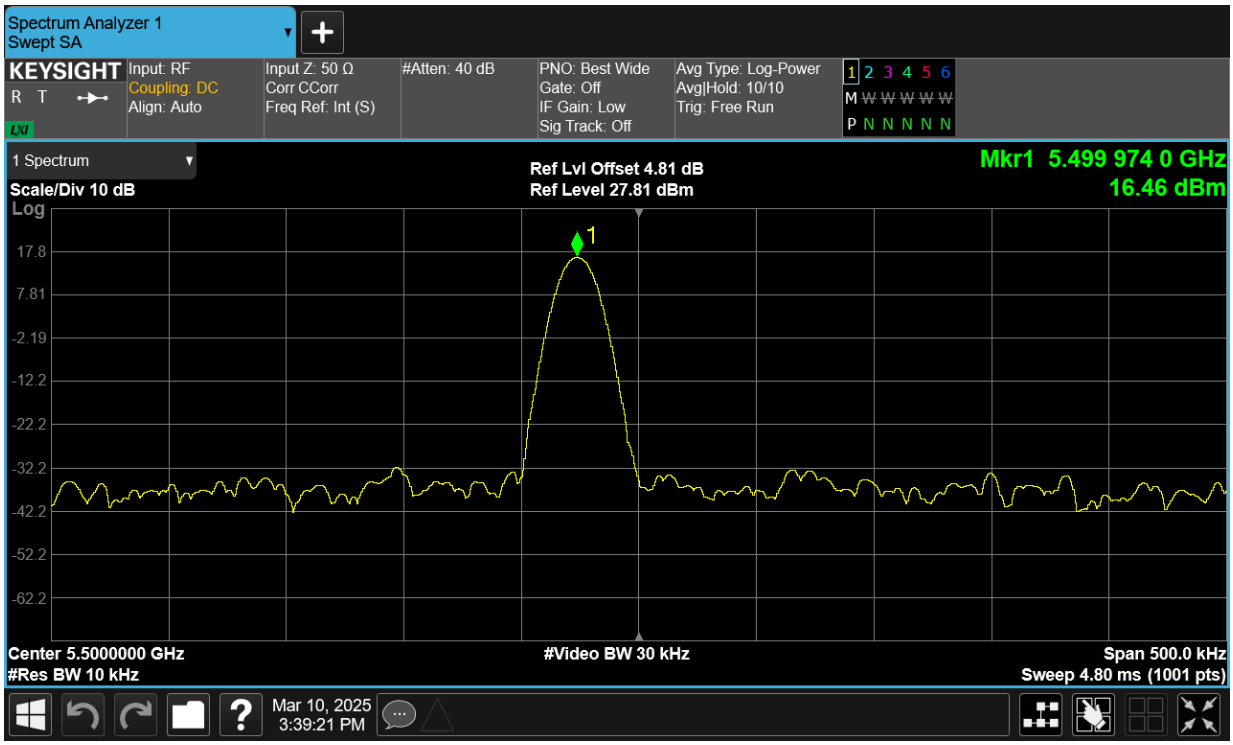
Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5500	Ant1	5499.9735	-4.82	Within authorized band	Pass
LVNT	a	5500	Ant1	5499.974	-4.73		Pass
NVHT	a	5500	Ant1	5499.9745	-4.64		Pass
NVLT	a	5500	Ant1	5499.9755	-4.45		Pass
NVNT	a	5500	Ant1	5499.977	-4.18		Pass
HVNT	ac80	5530	Ant1	5529.972	-5.06		Pass
LVNT	ac80	5530	Ant1	5529.972	-5.06		Pass
NVHT	ac80	5530	Ant1	5529.9725	-4.97		Pass
NVLT	ac80	5530	Ant1	5529.973	-4.88		Pass
NVNT	ac80	5530	Ant1	5529.974	-4.7		Pass
HVNT	n40	5510	Ant1	5509.972	-5.08		Pass
LVNT	n40	5510	Ant1	5509.972	-5.08		Pass
NVHT	n40	5510	Ant1	5509.9725	-4.99		Pass
NVLT	n40	5510	Ant1	5509.973	-4.9		Pass
NVNT	n40	5510	Ant1	5509.9735	-4.81		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.							

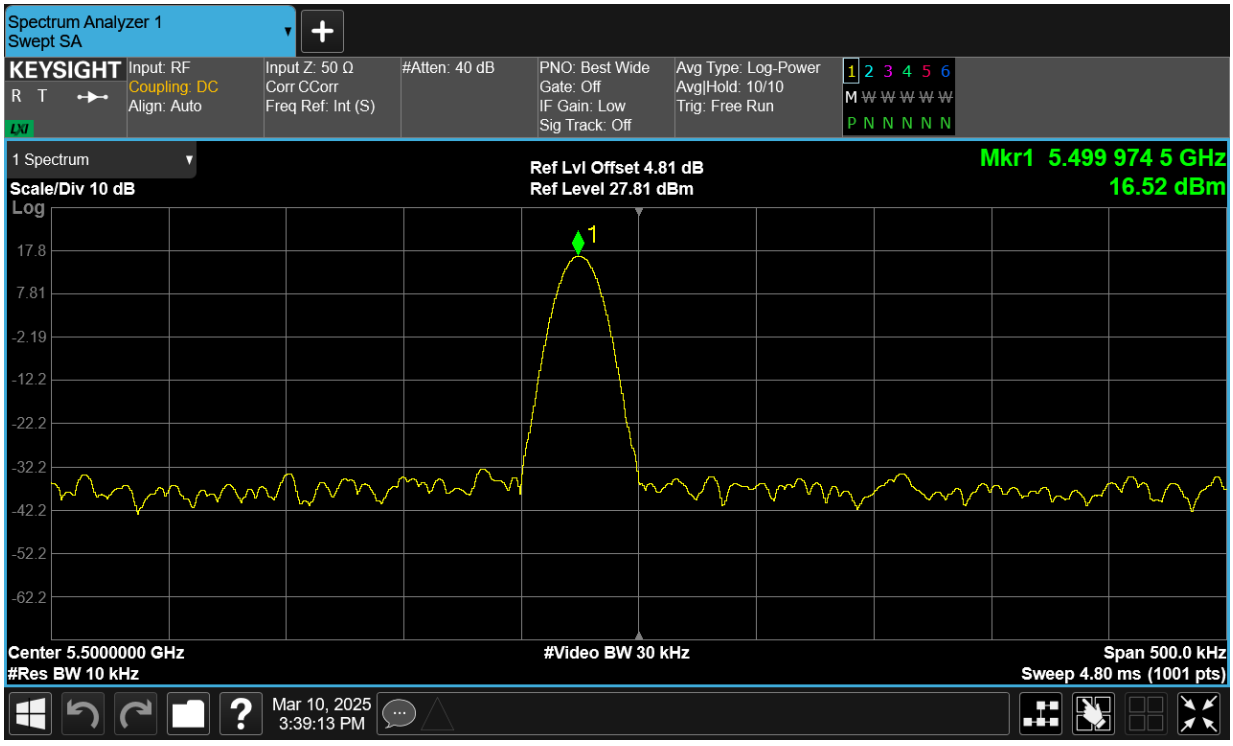
Test Graphs
Freq. Stability HVNT a 5500MHz Ant1



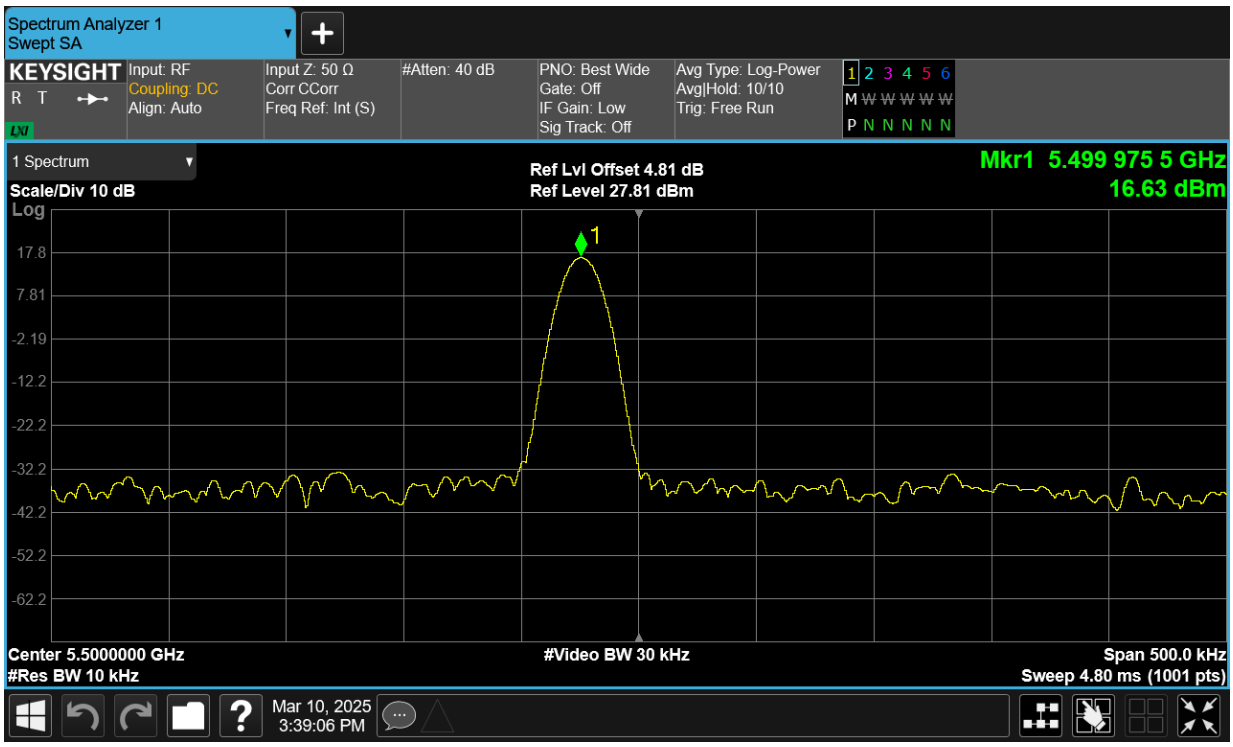
Freq. Stability LVNT a 5500MHz Ant1



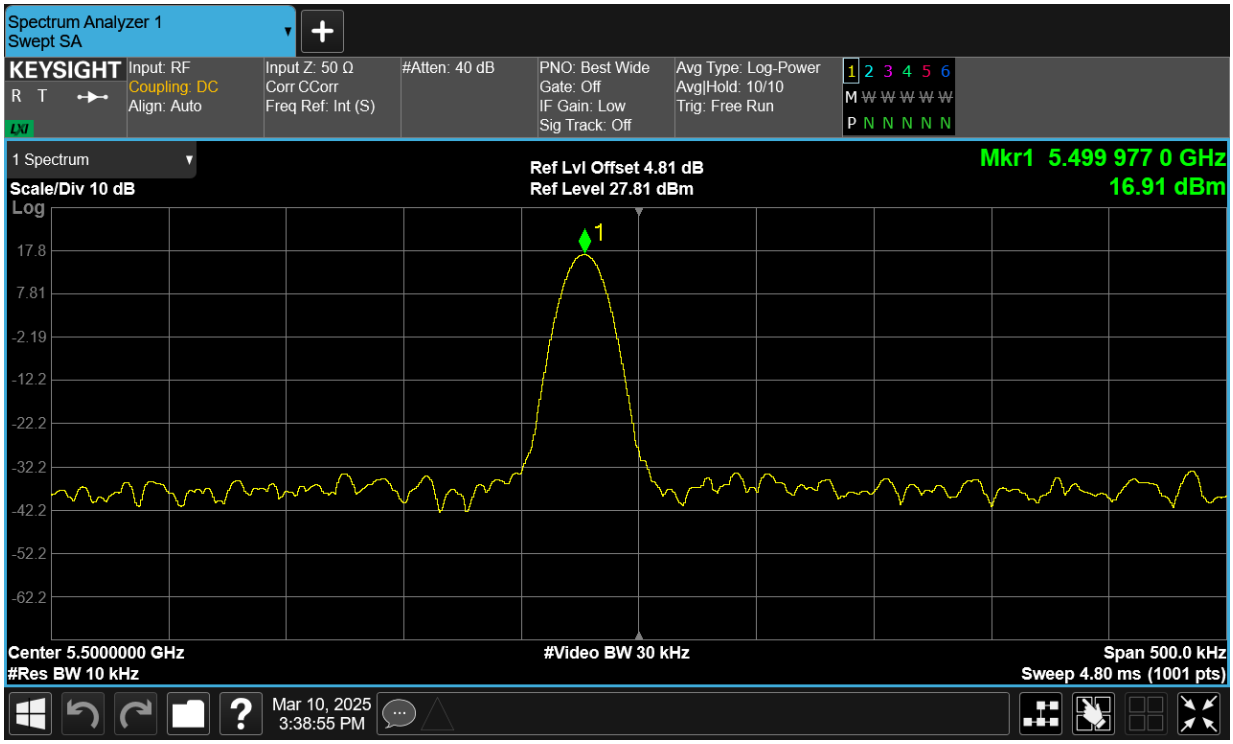
Freq. Stability NVHT a 5500MHz Ant1



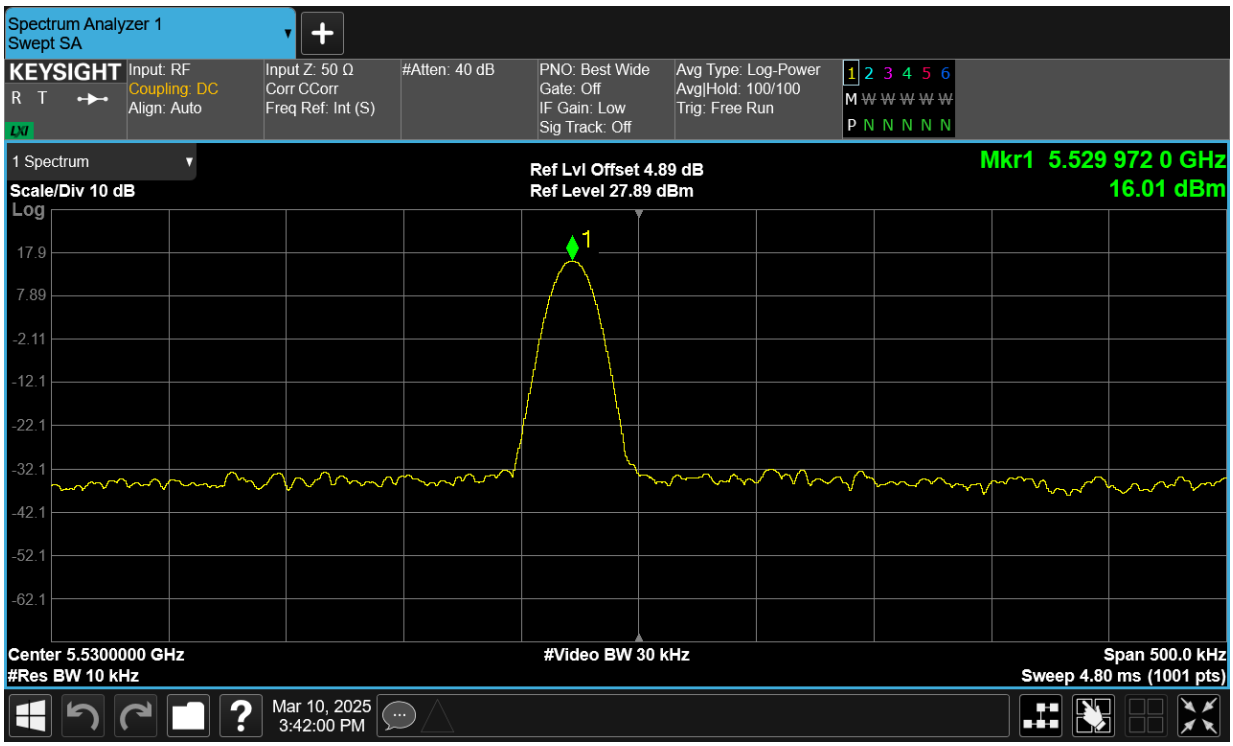
Freq. Stability NVLT a 5500MHz Ant1



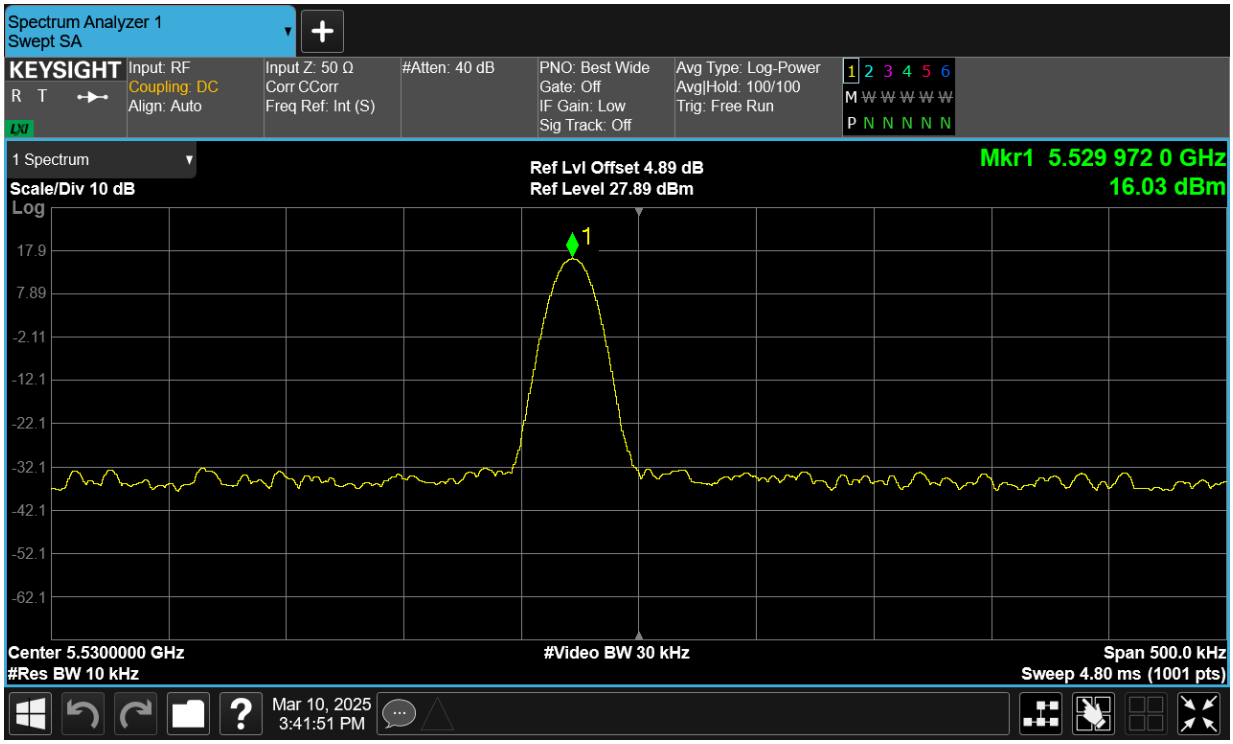
Freq. Stability NVNT a 5500MHz Ant1



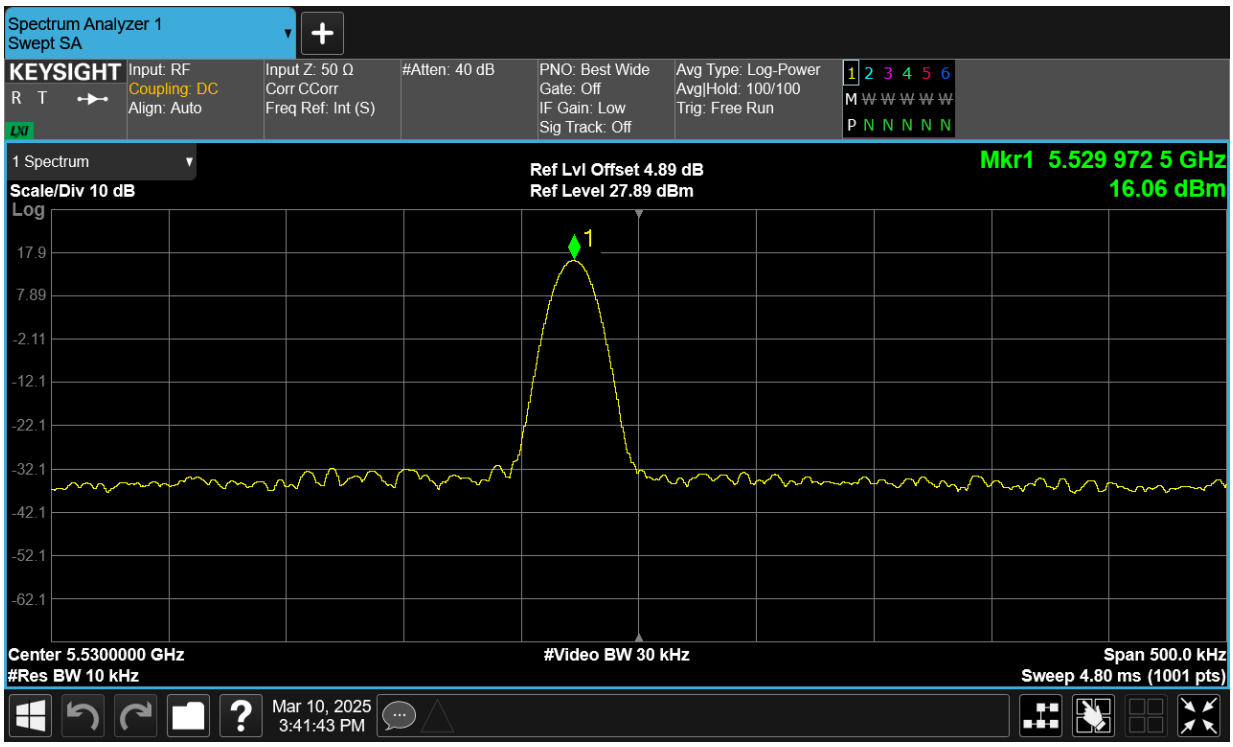
Freq. Stability HVNT ac80 5530MHz Ant1



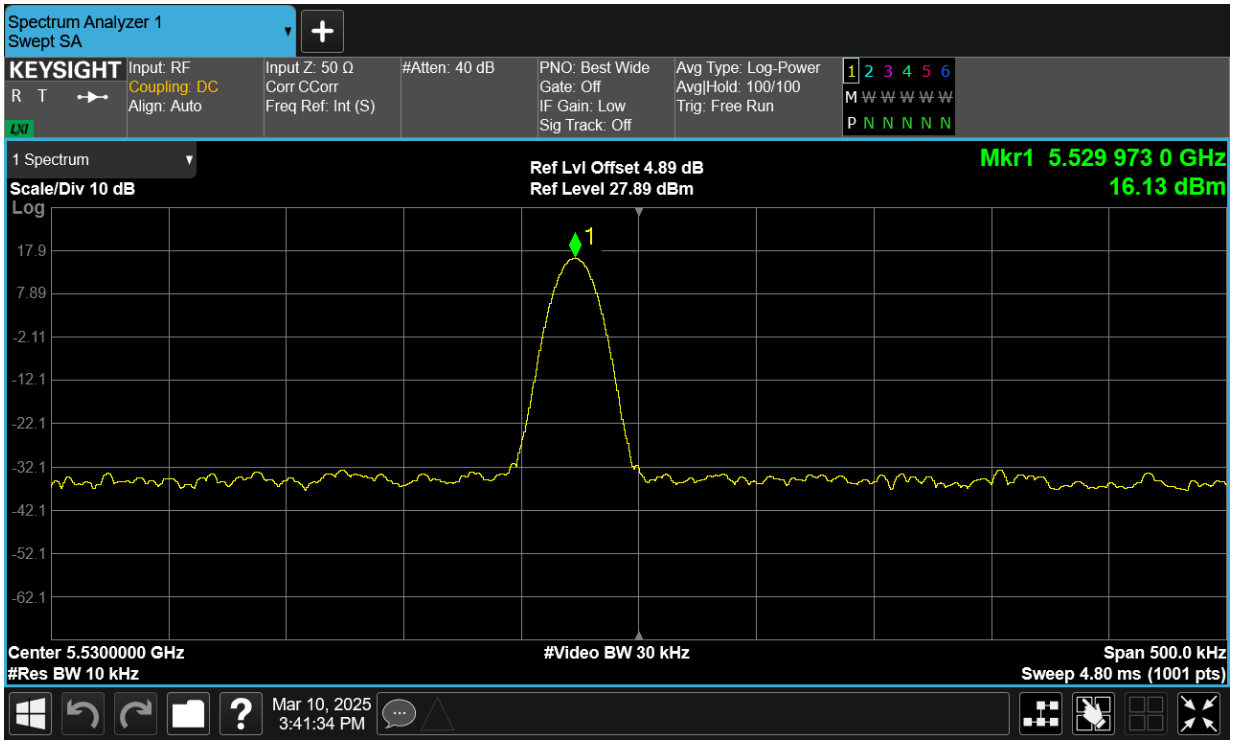
Freq. Stability LVNT ac80 5530MHz Ant1



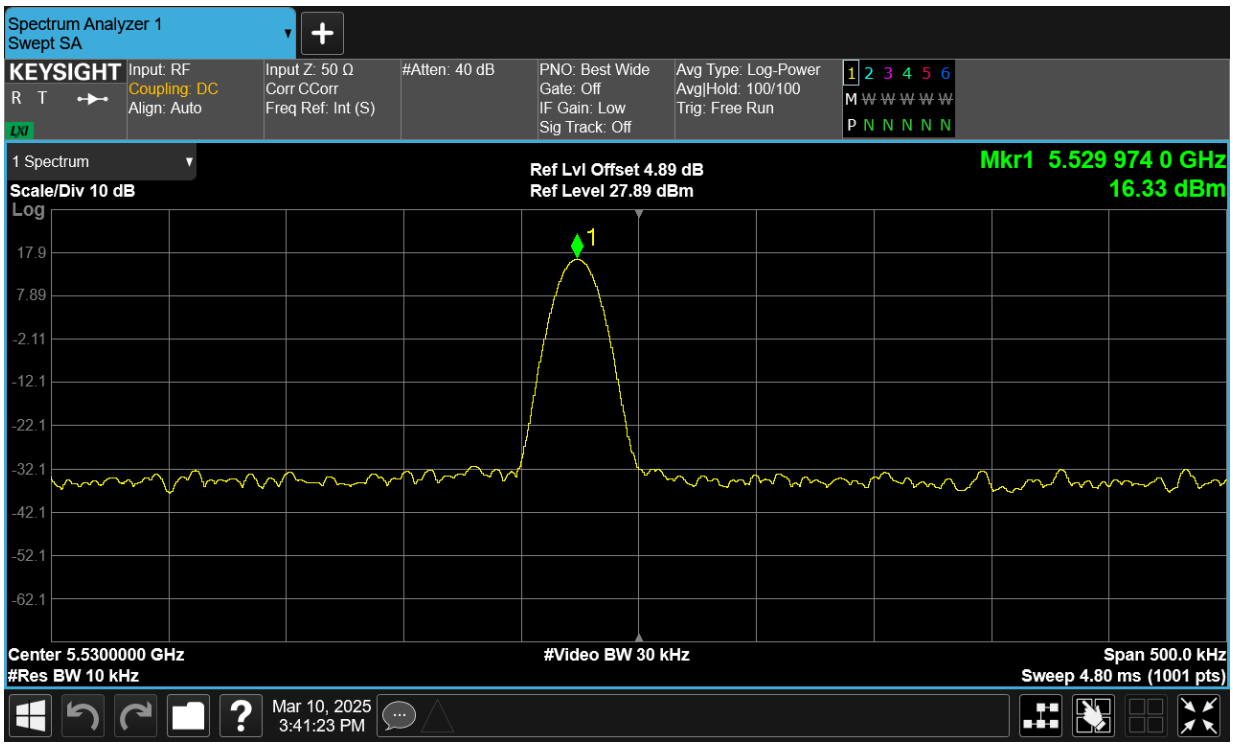
Freq. Stability NVHT ac80 5530MHz Ant1



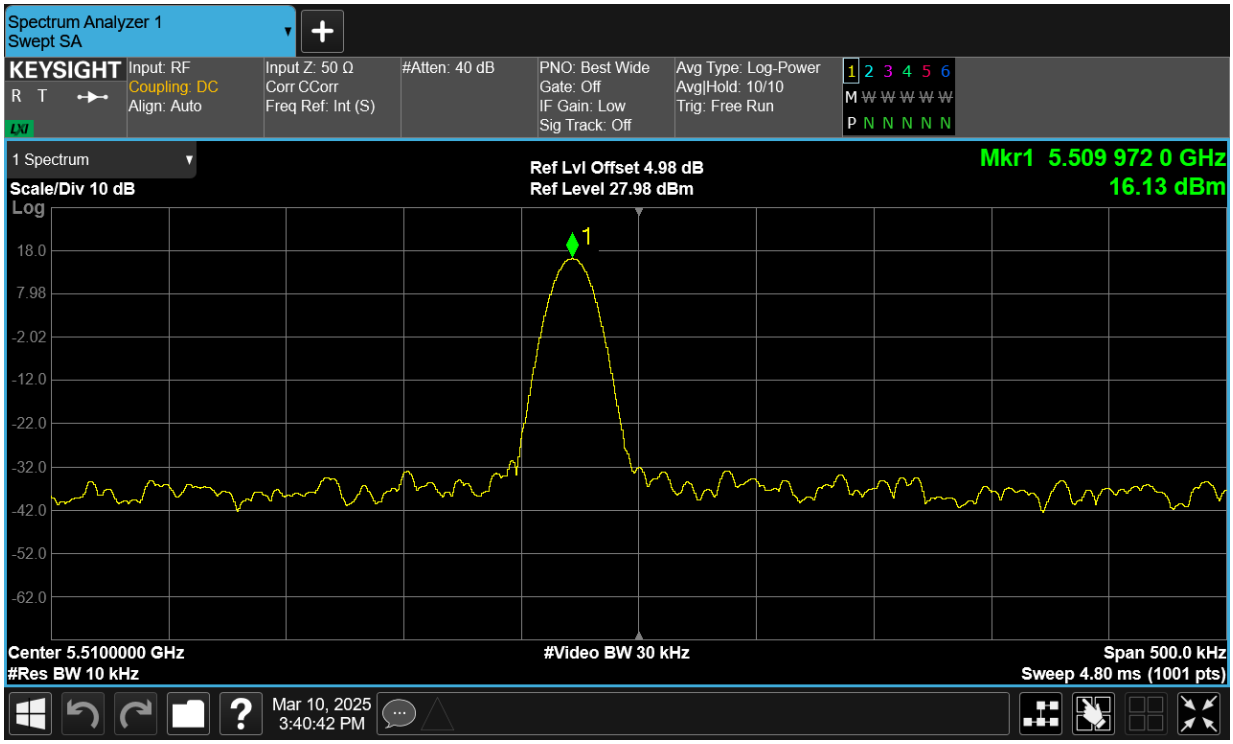
Freq. Stability NVLT ac80 5530MHz Ant1



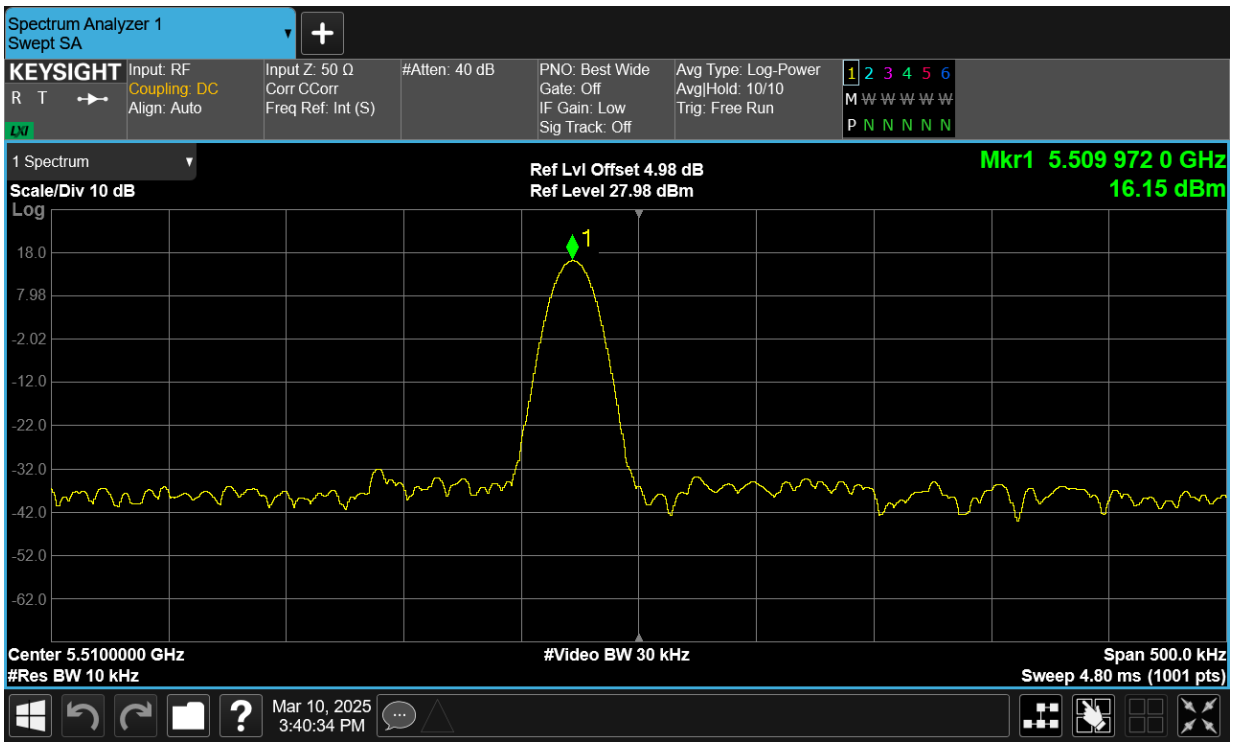
Freq. Stability NVNT ac80 5530MHz Ant1



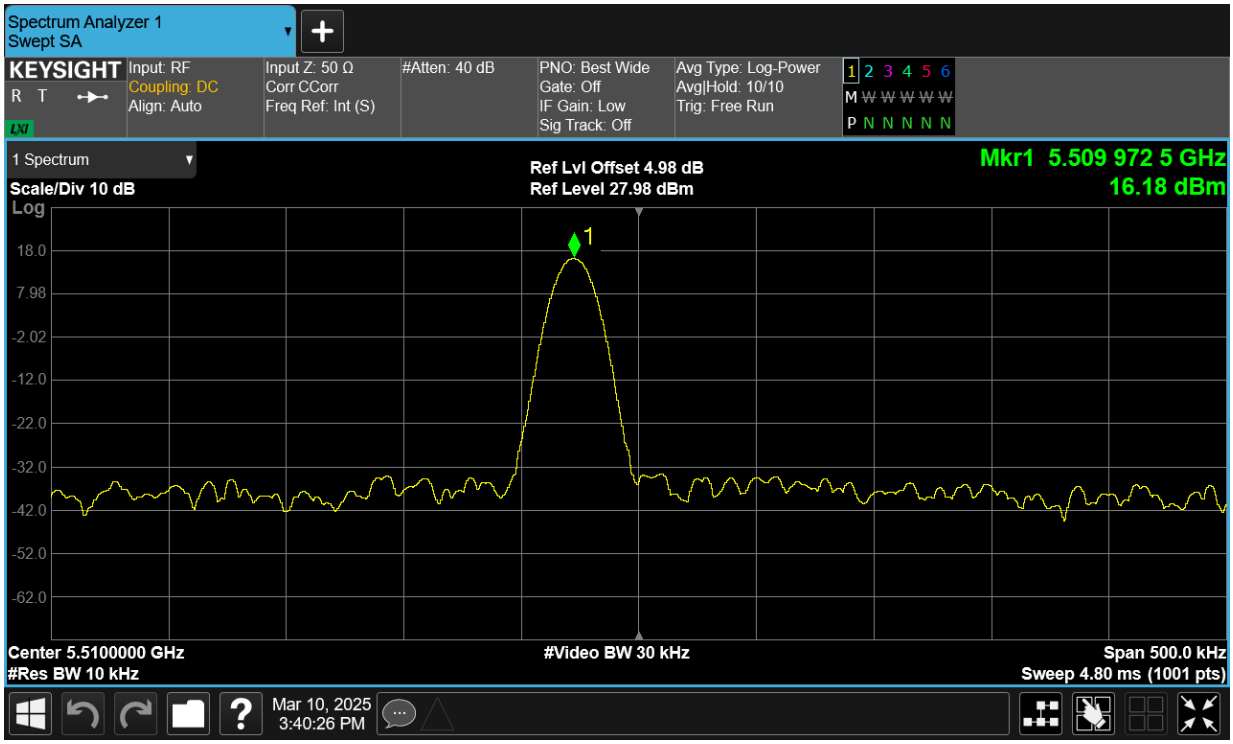
Freq. Stability HVNT n40 5510MHz Ant1



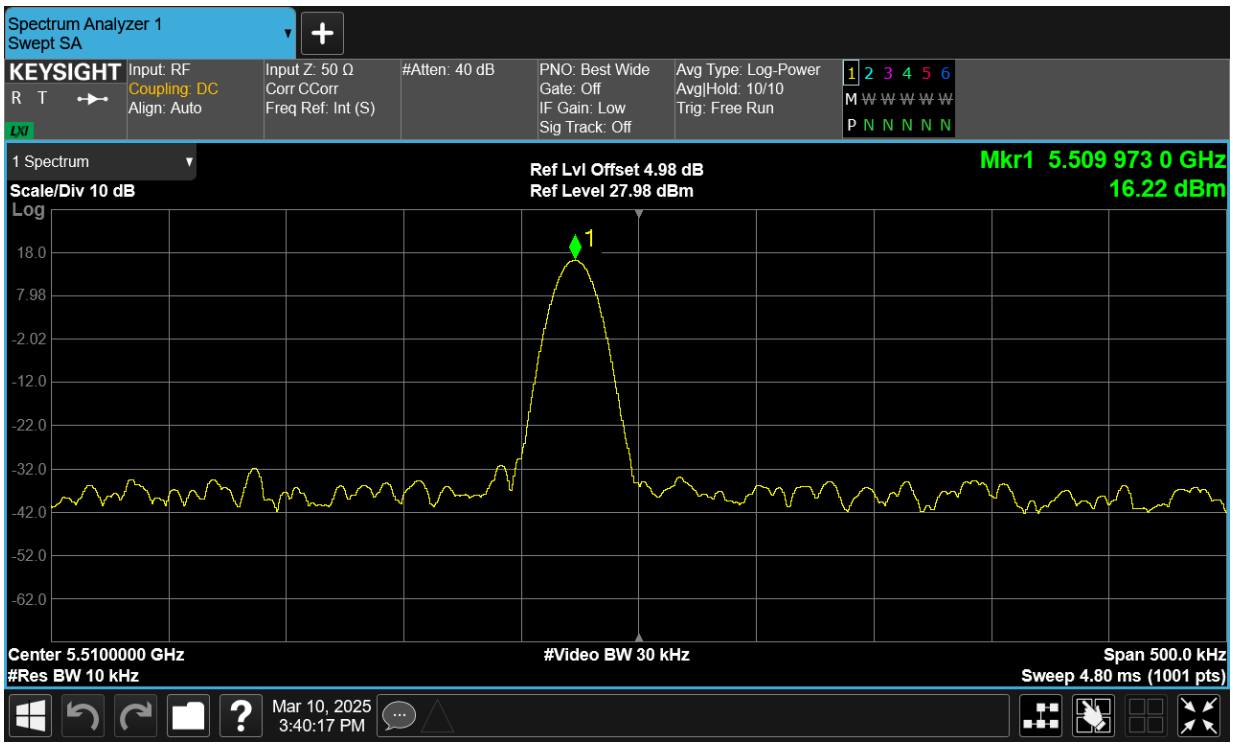
Freq. Stability LVNT n40 5510MHz Ant1



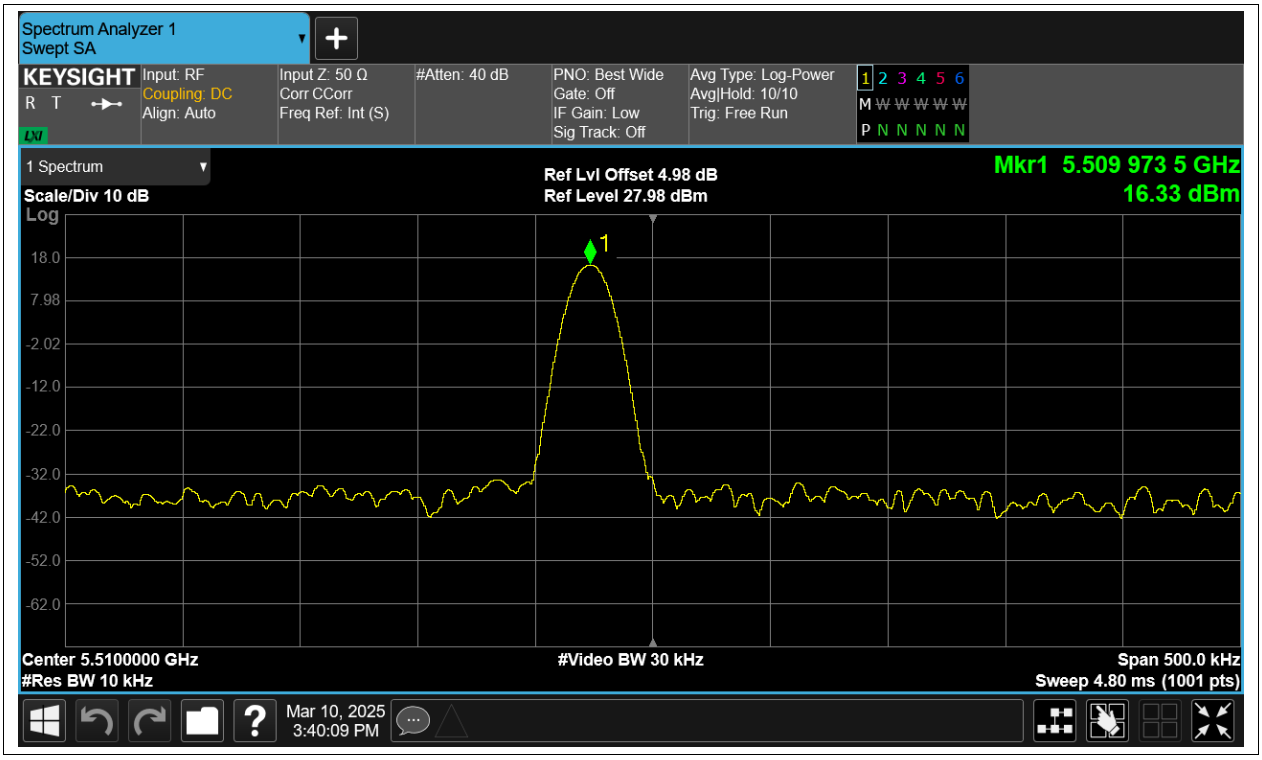
Freq. Stability NVHT n40 5510MHz Ant1



Freq. Stability NVLT n40 5510MHz Ant1



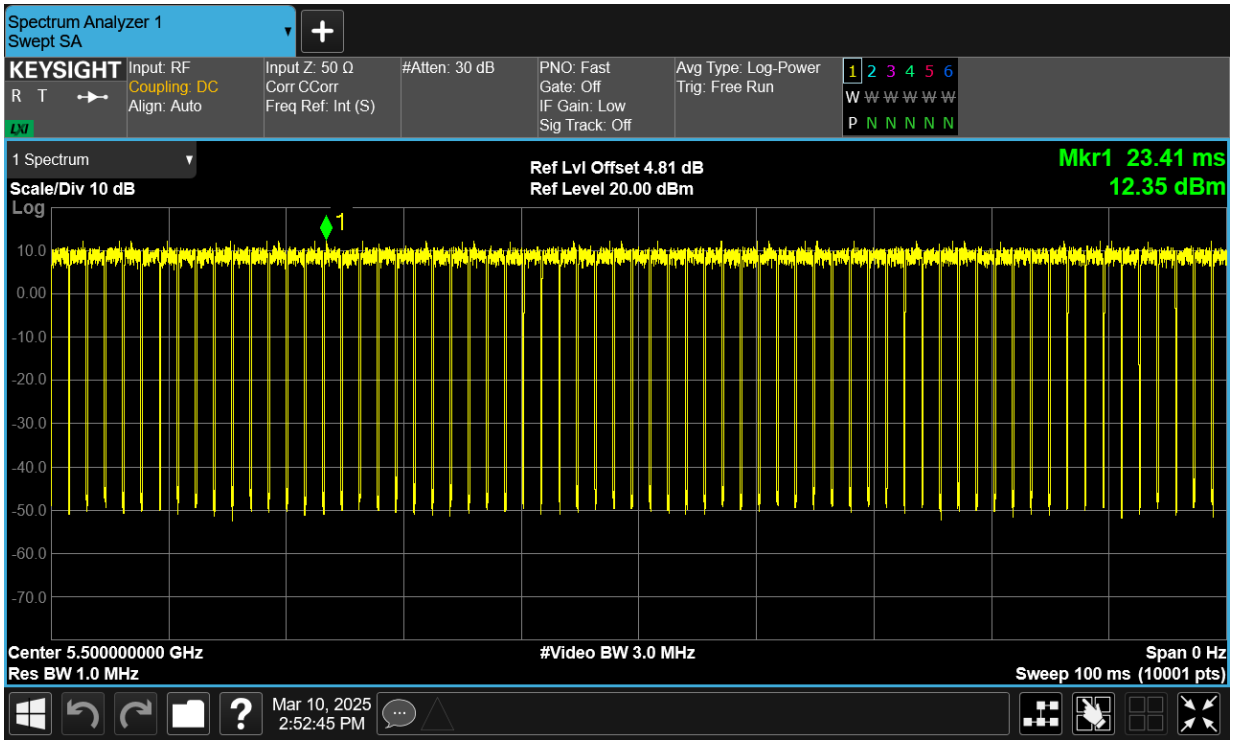
Freq. Stability NVNT n40 5510MHz Ant1


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 4.98 dB
Ref Level 27.98 dBm
Mkr1 5.509 973 5 GHz
16.33 dBm
Log
18.0
7.98
-2.02
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
Center 5.5100000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 500.0 kHz
Sweep 4.80 ms (1001 pts)
Mar 10, 2025
3:40:09 PM

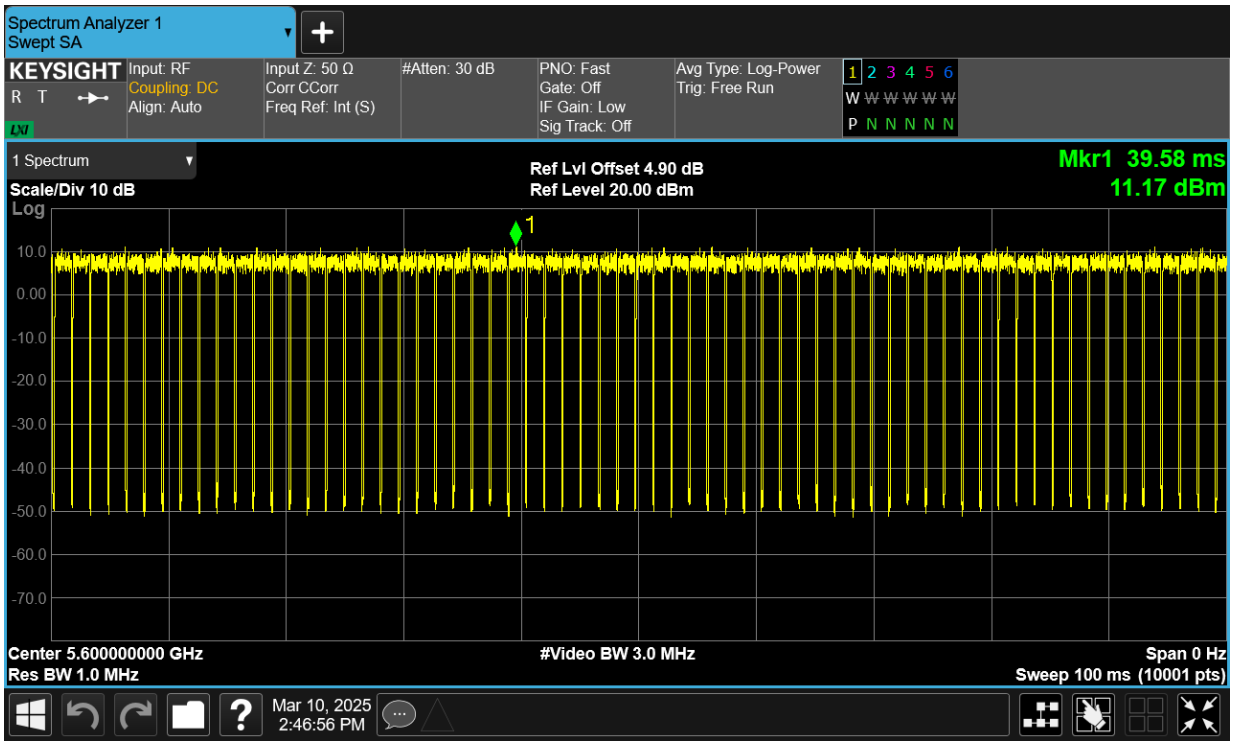
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant1	90.92	0.41
NVNT	a	5600	Ant1	90.73	0.42
NVNT	a	5700	Ant1	90.89	0.41
NVNT	ac20	5500	Ant1	89.14	0.5
NVNT	ac20	5600	Ant1	89.3	0.49
NVNT	ac20	5700	Ant1	89.3	0.49
NVNT	ac40	5510	Ant1	80.55	0.94
NVNT	ac40	5590	Ant1	80.53	0.94
NVNT	ac40	5670	Ant1	80.69	0.93
NVNT	ac80	5530	Ant1	68.7	1.63
NVNT	ac80	5610	Ant1	68.38	1.65
NVNT	n20	5500	Ant1	89.05	0.5
NVNT	n20	5600	Ant1	89.18	0.5
NVNT	n20	5700	Ant1	89.16	0.5
NVNT	n40	5510	Ant1	80.55	0.94
NVNT	n40	5590	Ant1	80.65	0.93
NVNT	n40	5670	Ant1	80.75	0.93

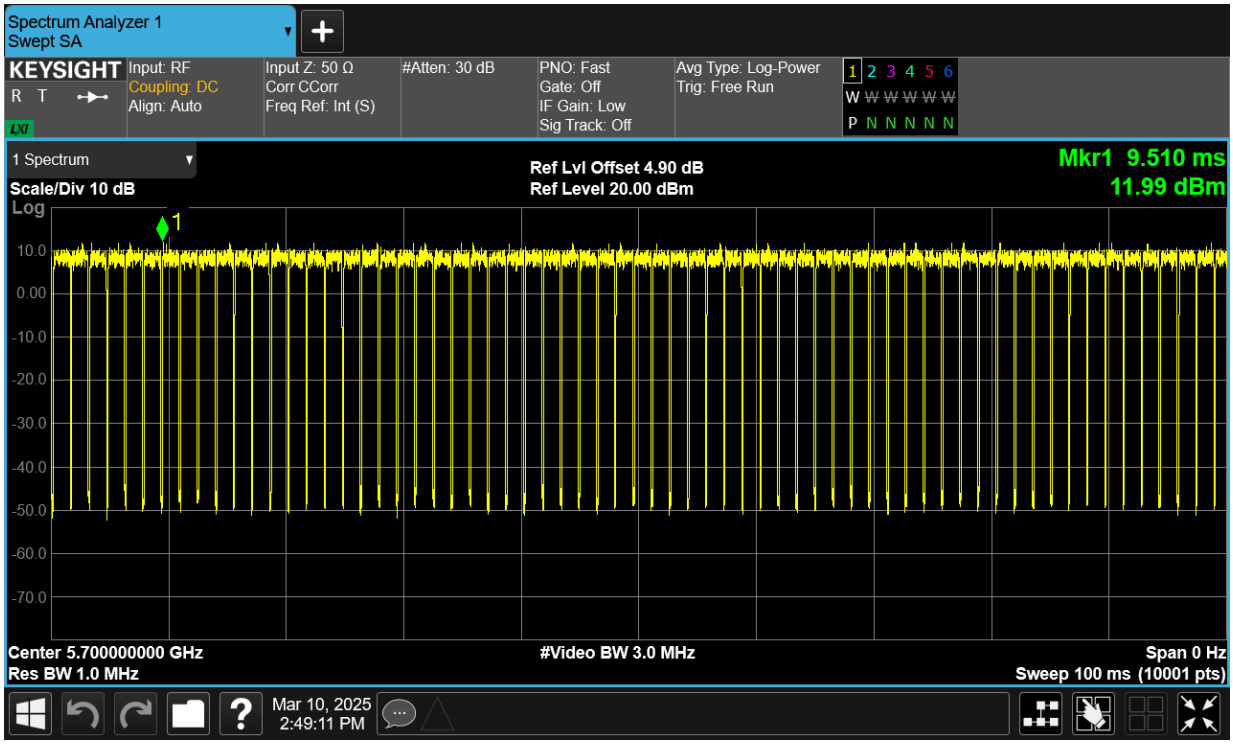
Test Graphs
Duty Cycle NVNT a 5500MHz Ant1



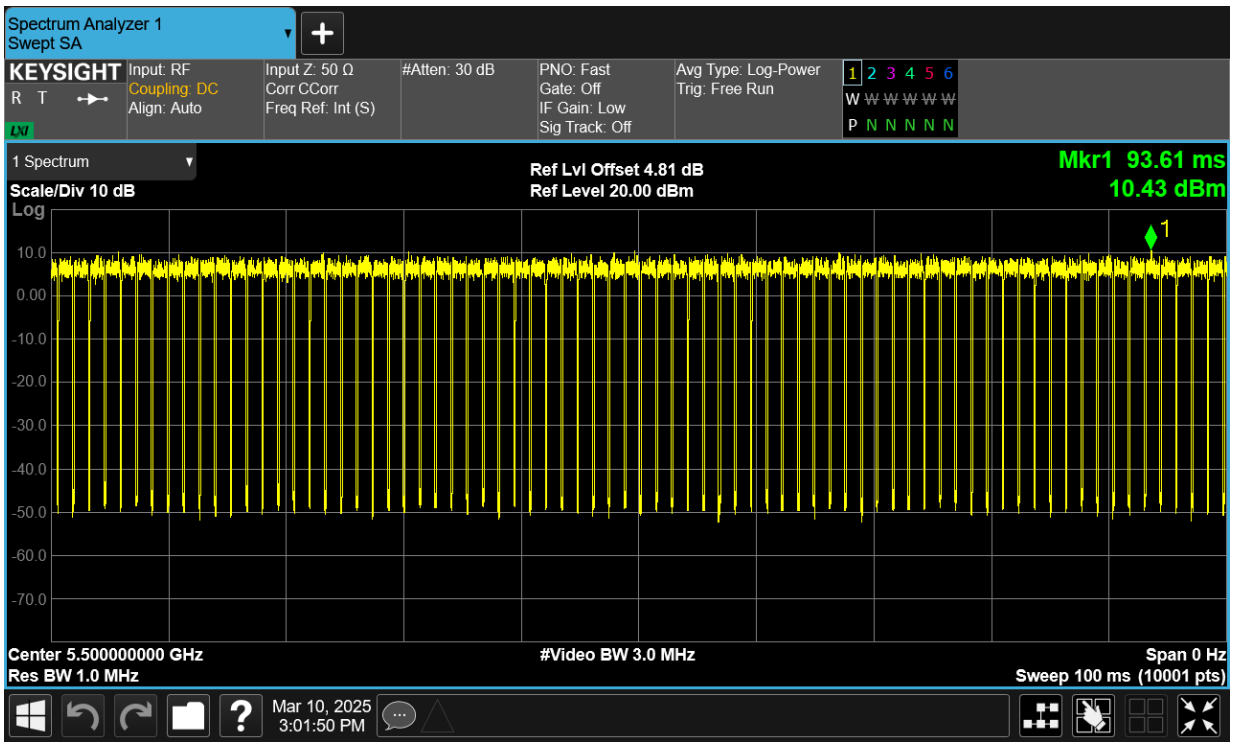
Duty Cycle NVNT a 5600MHz Ant1



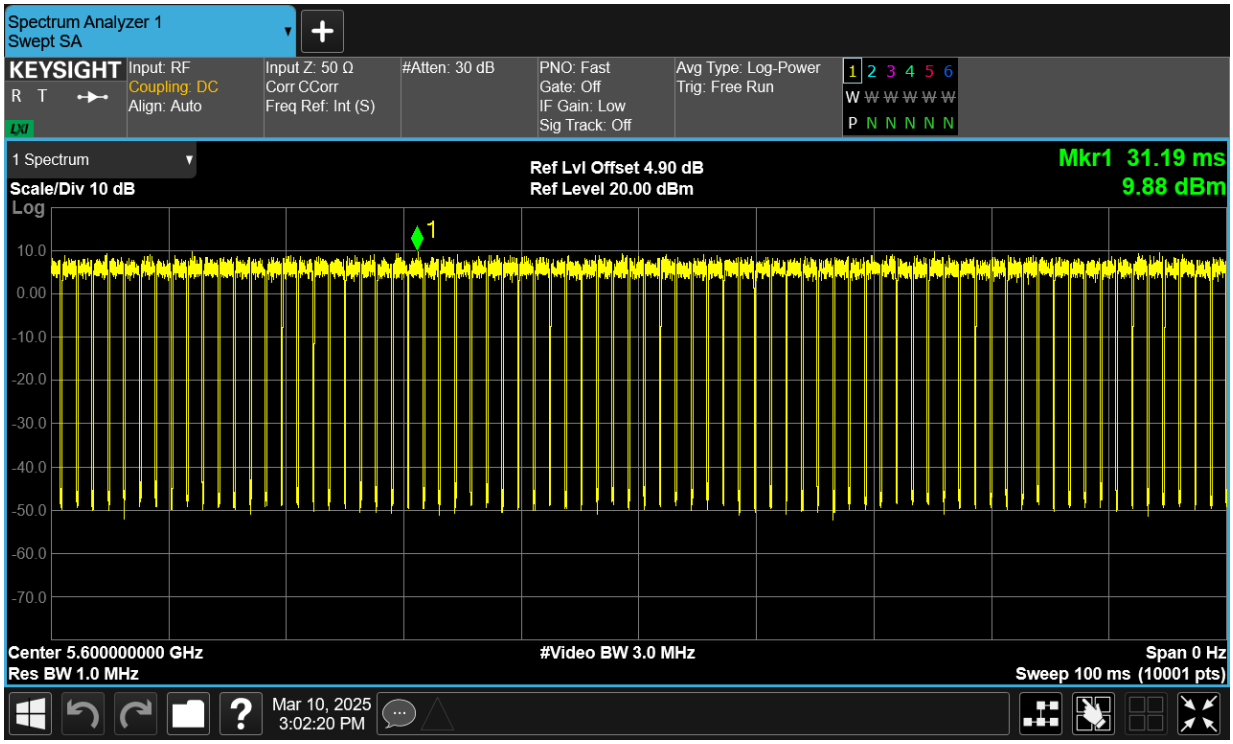
Duty Cycle NVNT a 5700MHz Ant1



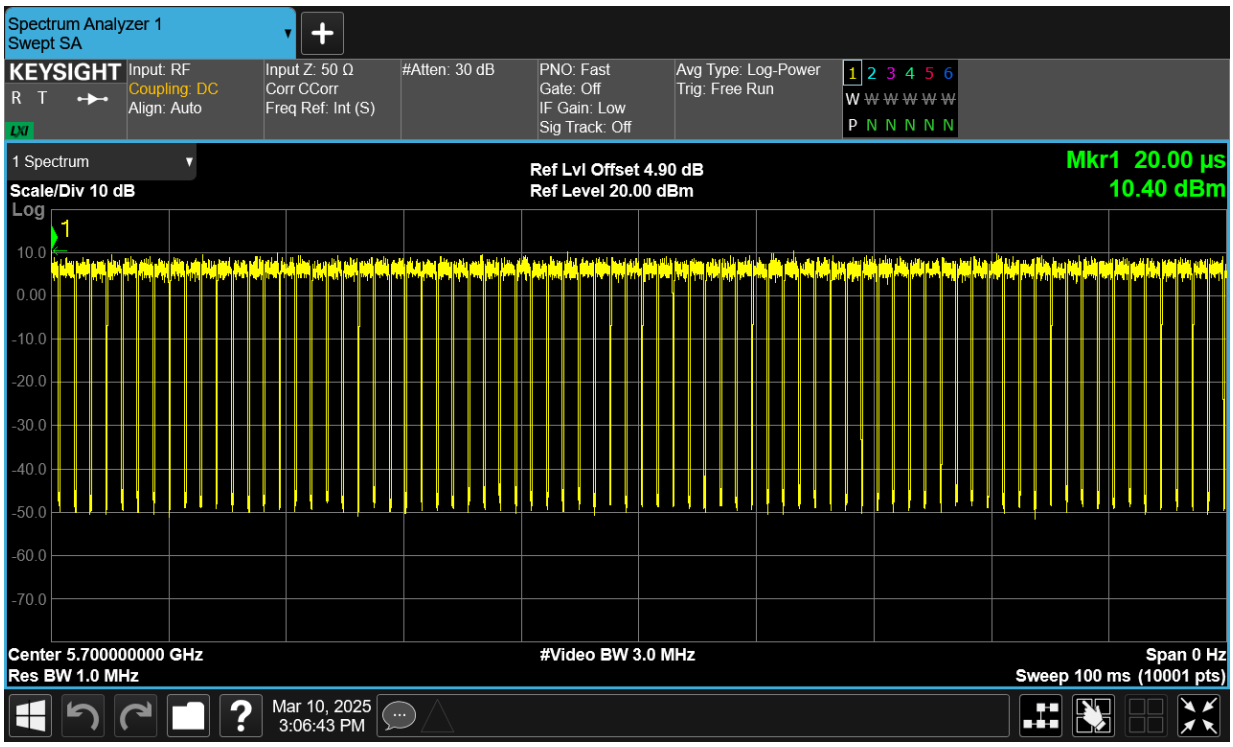
Duty Cycle NVNT ac20 5500MHz Ant1



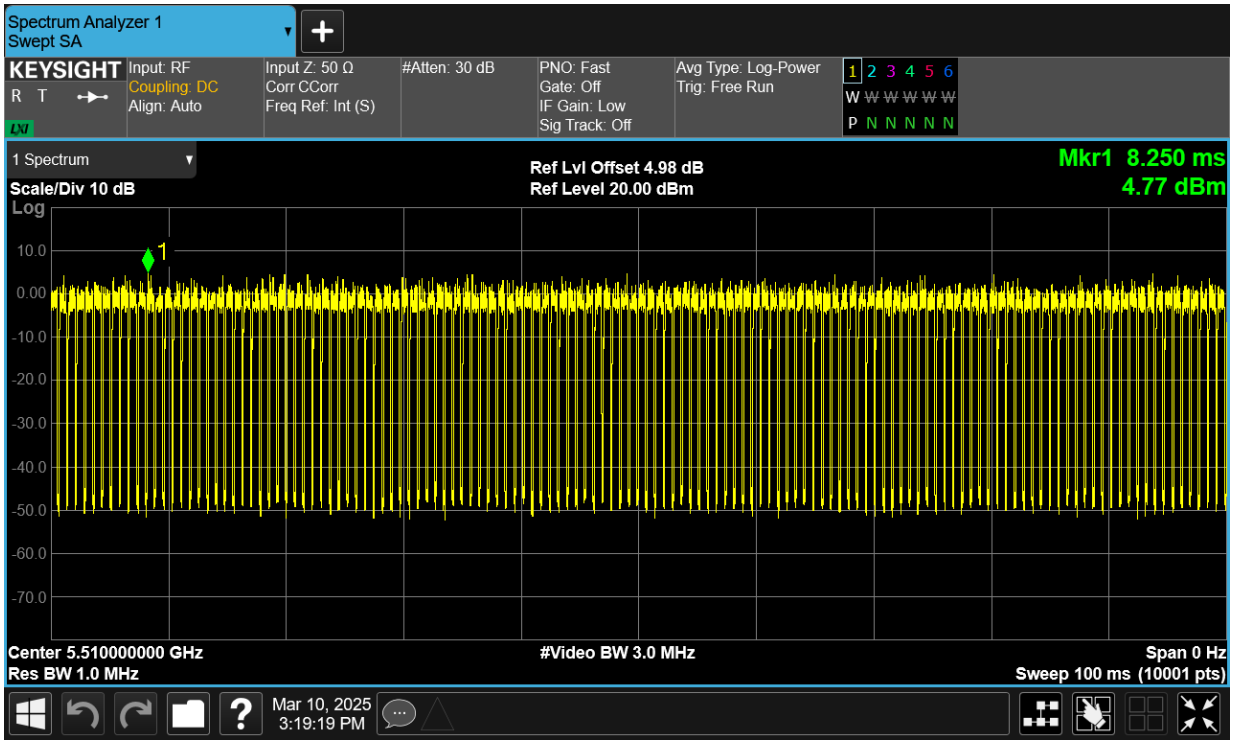
Duty Cycle NVNT ac20 5600MHz Ant1



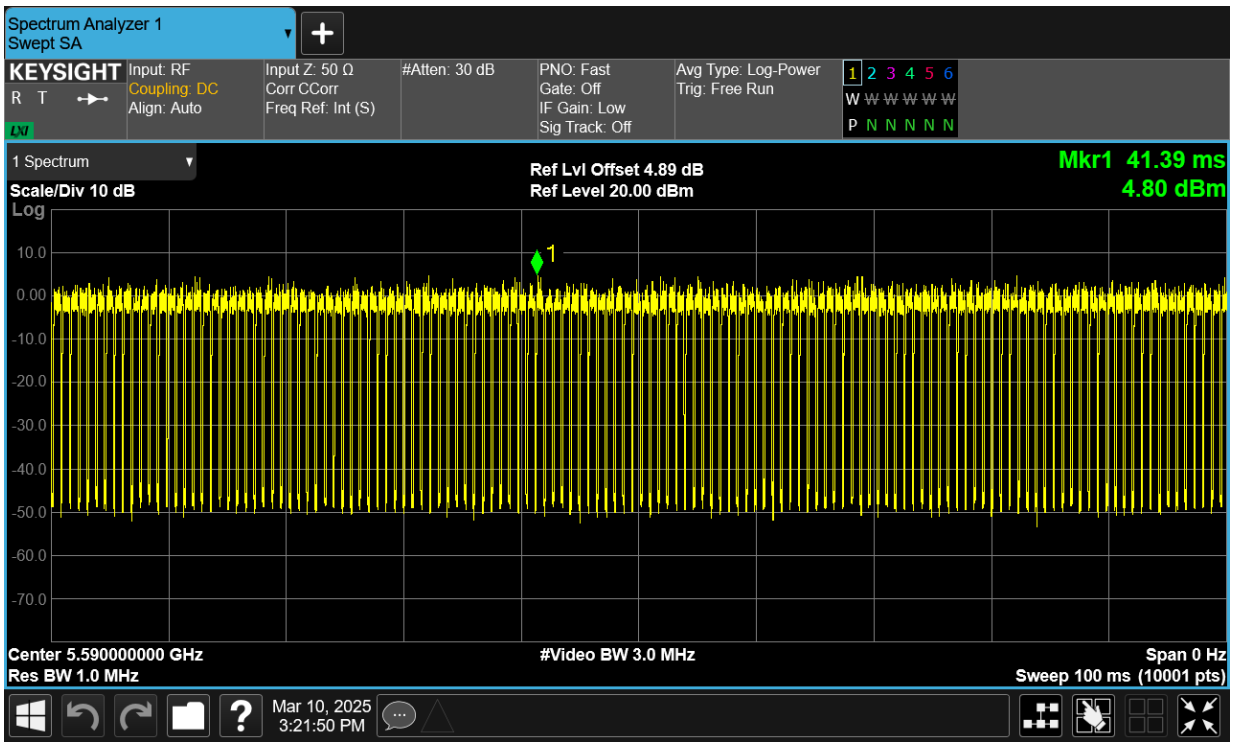
Duty Cycle NVNT ac20 5700MHz Ant1



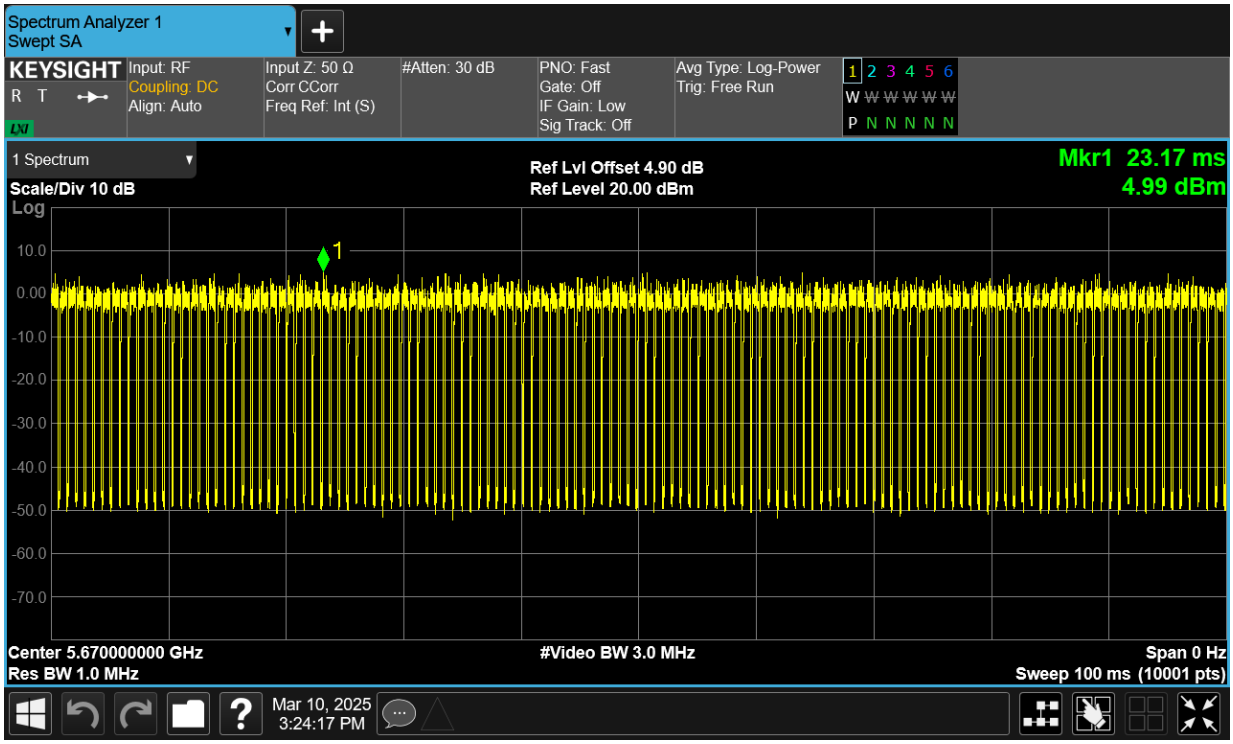
Duty Cycle NVNT ac40 5510MHz Ant1



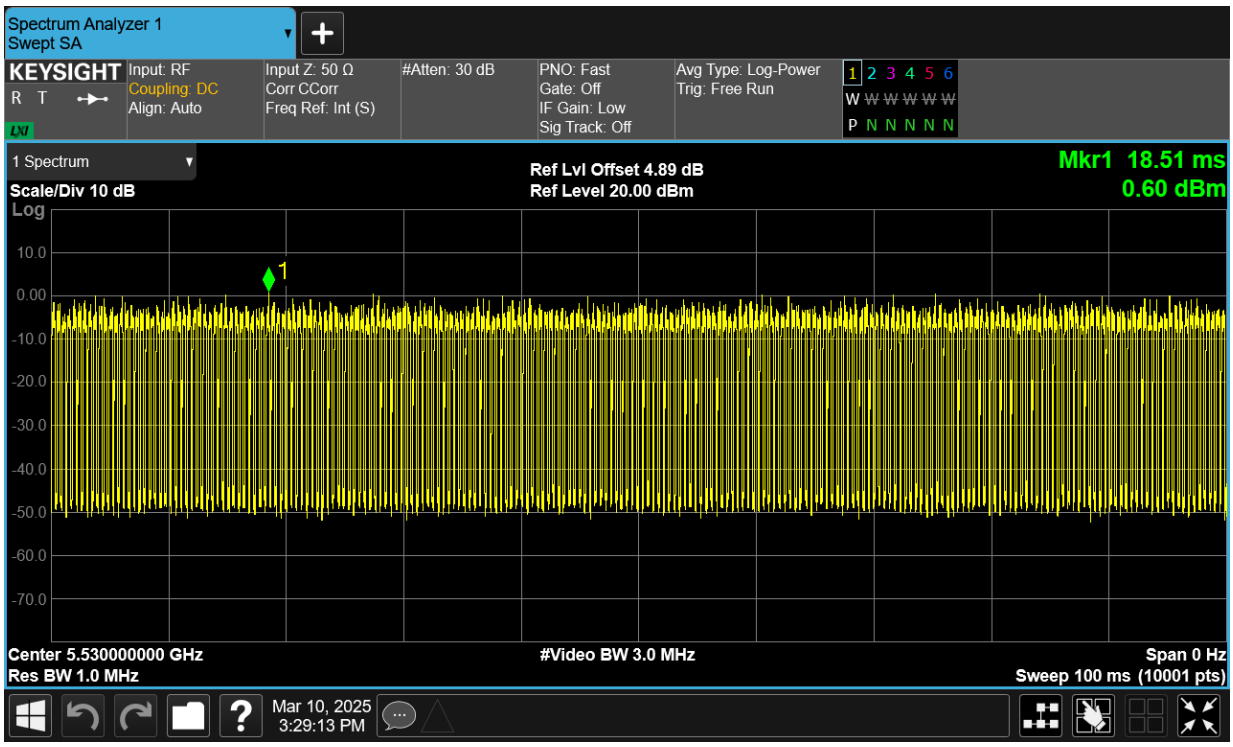
Duty Cycle NVNT ac40 5590MHz Ant1



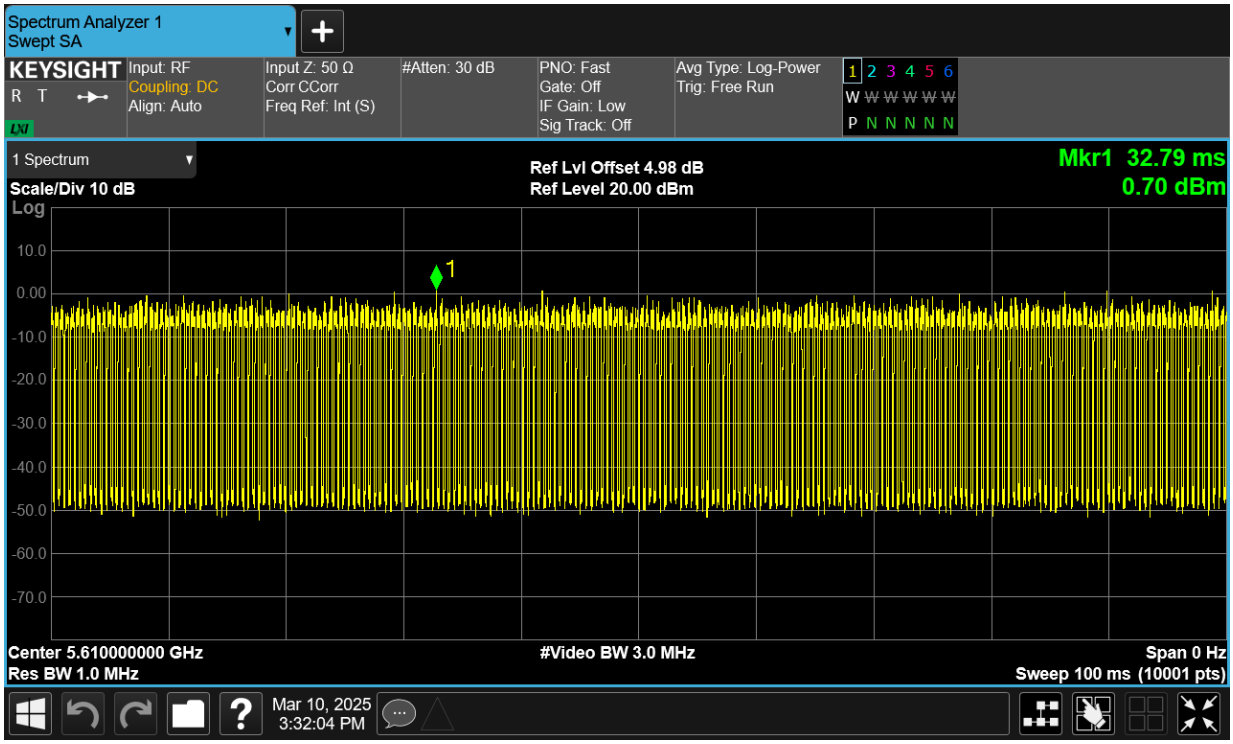
Duty Cycle NVNT ac40 5670MHz Ant1



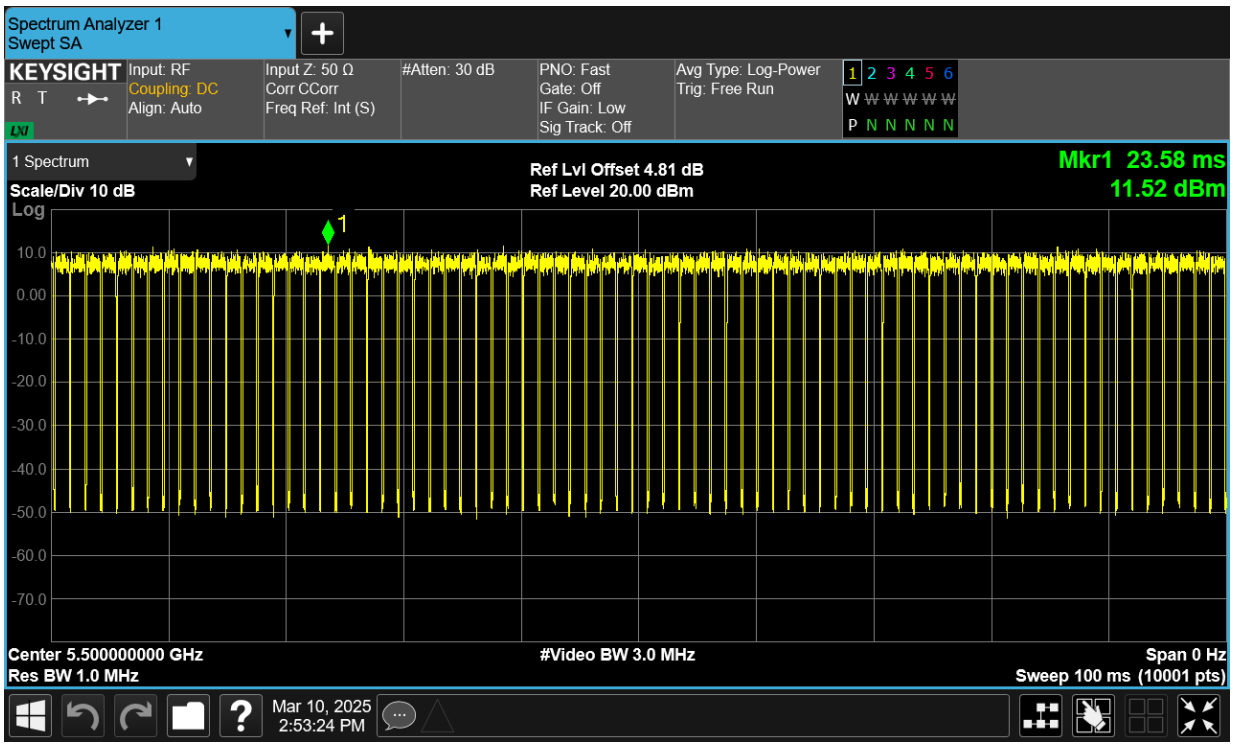
Duty Cycle NVNT ac80 5530MHz Ant1



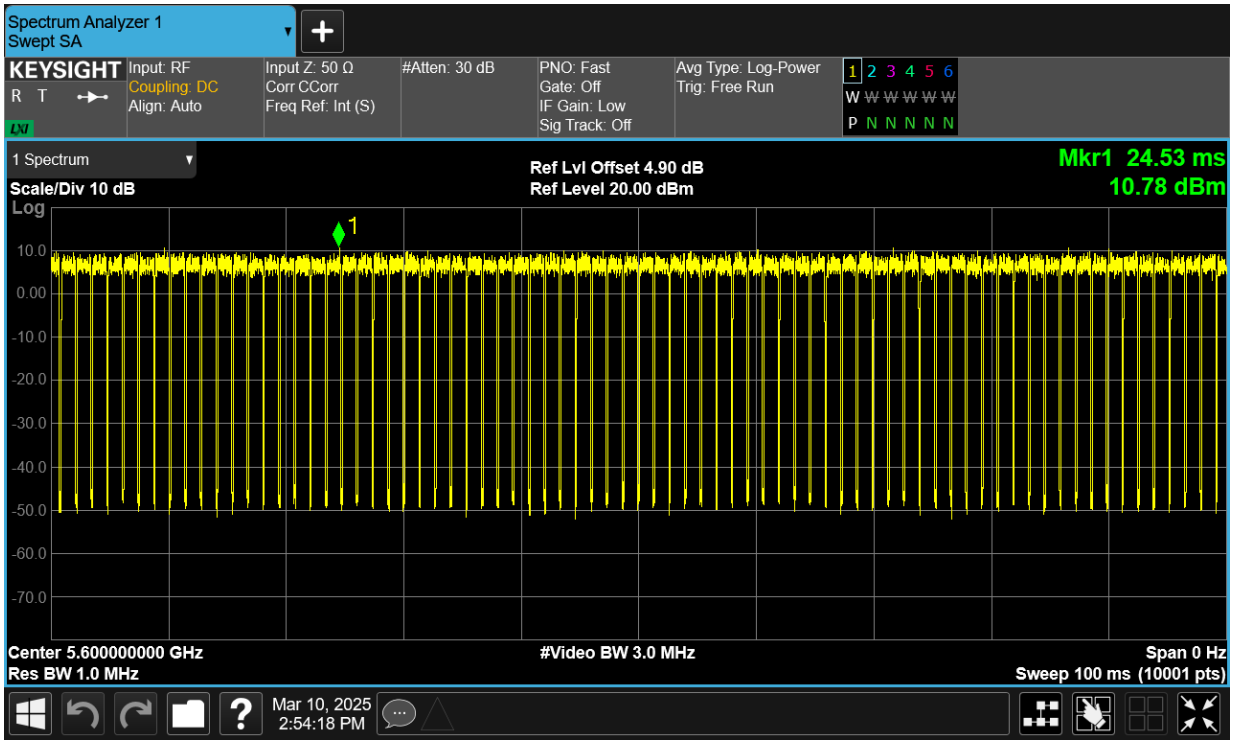
Duty Cycle NVNT ac80 5610MHz Ant1



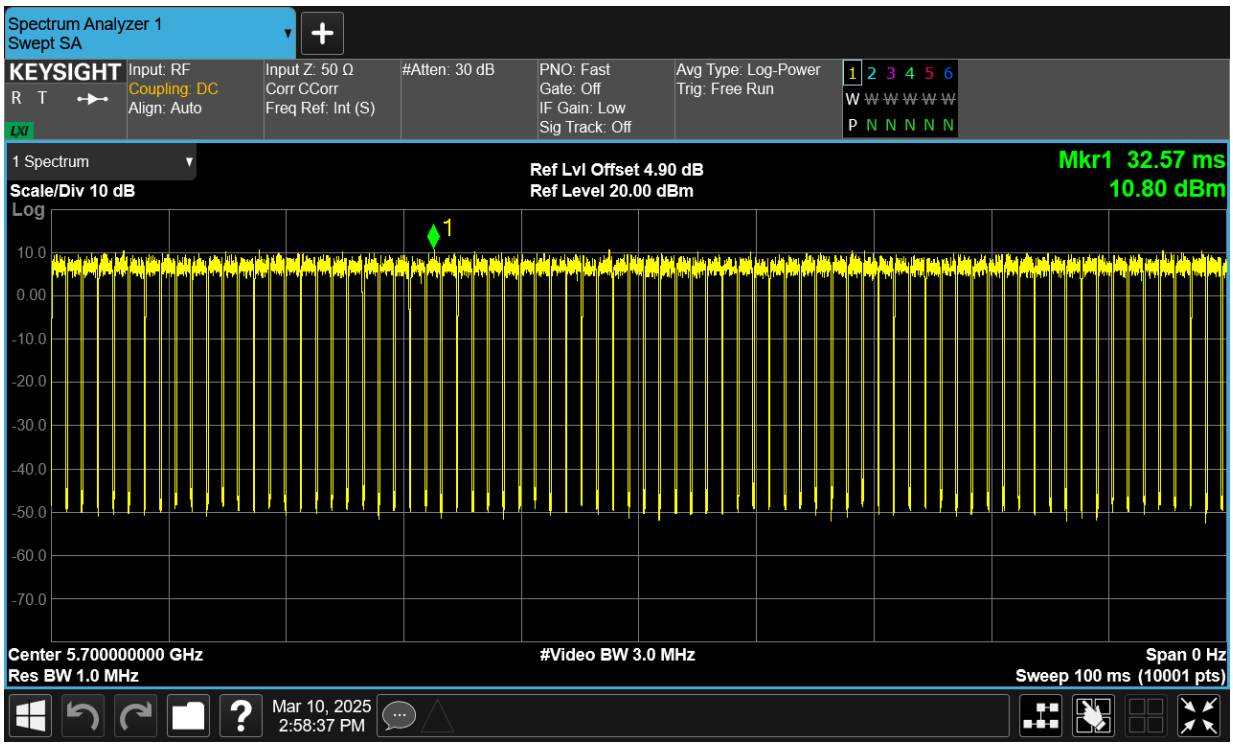
Duty Cycle NVNT n20 5500MHz Ant1



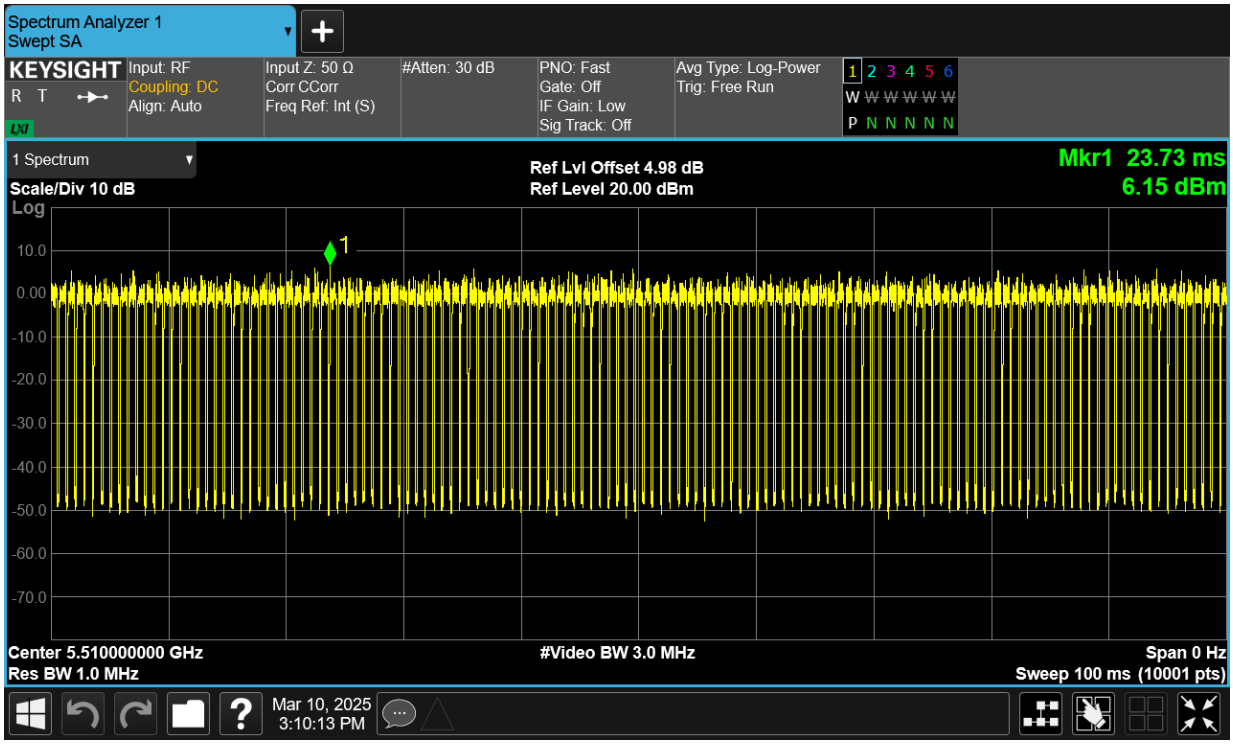
Duty Cycle NVNT n20 5600MHz Ant1



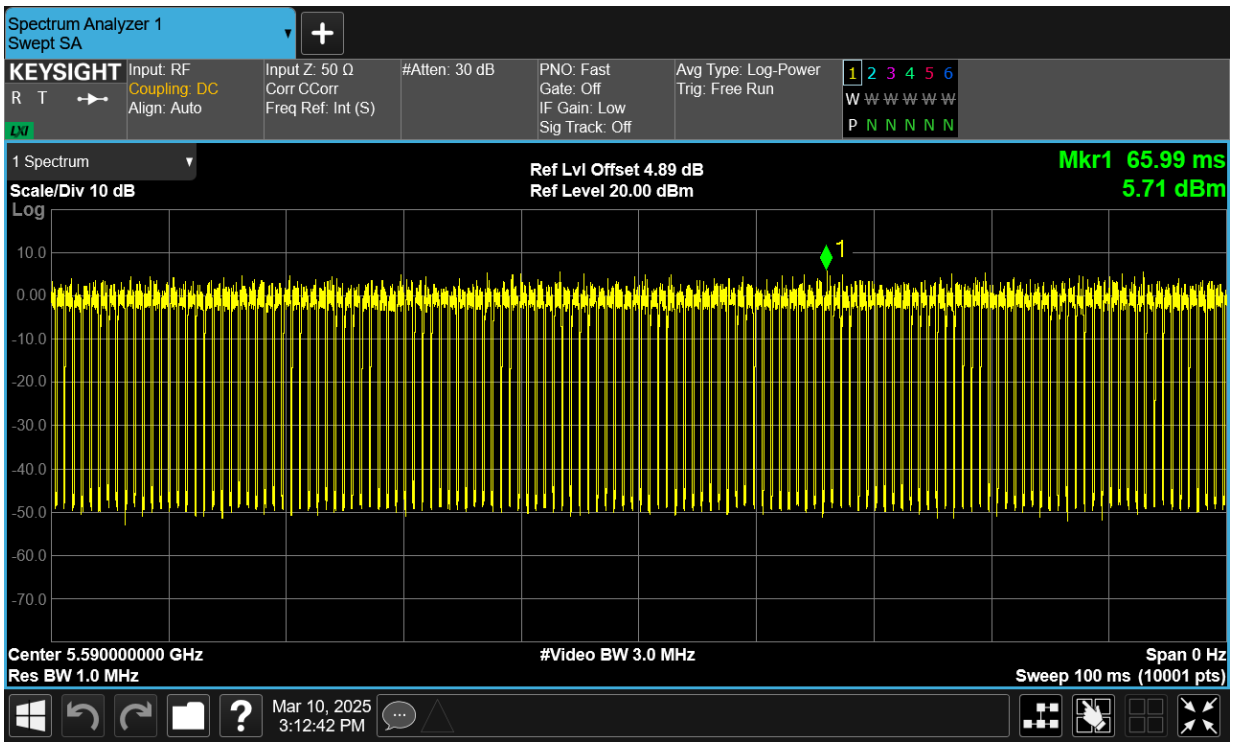
Duty Cycle NVNT n20 5700MHz Ant1



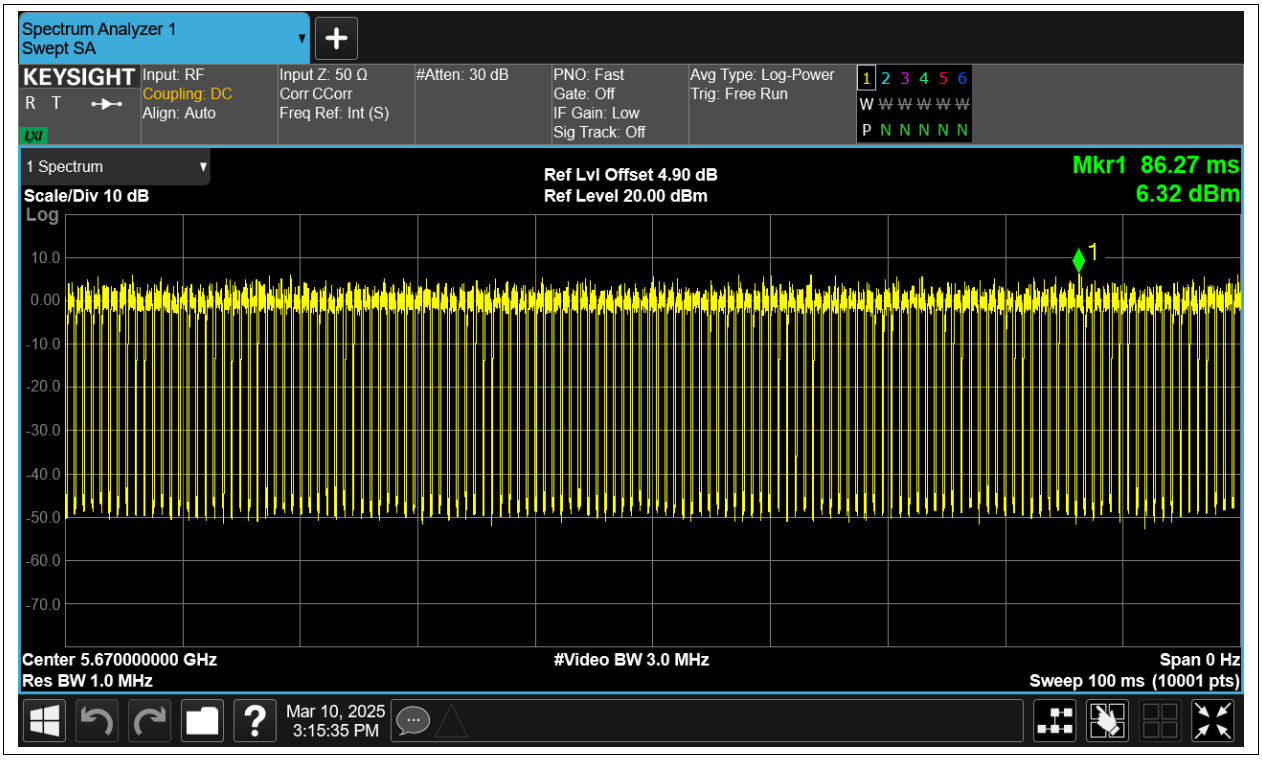
Duty Cycle NVNT n40 5510MHz Ant1



Duty Cycle NVNT n40 5590MHz Ant1



Duty Cycle NVNT n40 5670MHz 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
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 86.27 ms
6.32 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.670000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 100 ms (10001 pts)
Mar 10, 2025
3:15:35 PM

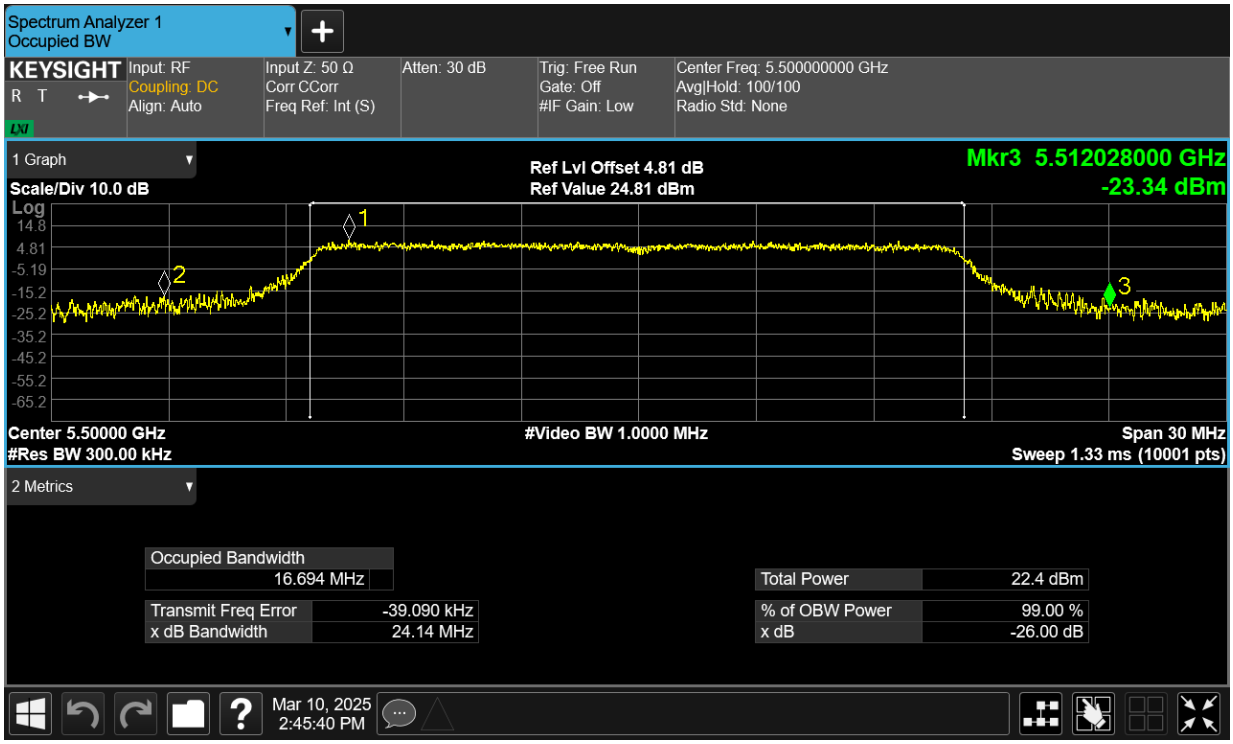
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	16.18	0.41	16.59	24	Pass
NVNT	a	5600	Ant1	14.77	0.42	15.19	24	Pass
NVNT	a	5700	Ant1	15.18	0.41	15.59	24	Pass
NVNT	ac20	5500	Ant1	14.34	0.5	14.84	24	Pass
NVNT	ac20	5600	Ant1	12.84	0.49	13.33	24	Pass
NVNT	ac20	5700	Ant1	13.38	0.49	13.87	24	Pass
NVNT	ac40	5510	Ant1	13.89	0.94	14.83	24	Pass
NVNT	ac40	5590	Ant1	12.81	0.94	13.75	24	Pass
NVNT	ac40	5670	Ant1	13.08	0.93	14.01	24	Pass
NVNT	ac80	5530	Ant1	12.39	1.63	14.02	24	Pass
NVNT	ac80	5610	Ant1	11.45	1.65	13.1	24	Pass
NVNT	n20	5500	Ant1	15.33	0.5	15.83	24	Pass
NVNT	n20	5600	Ant1	13.74	0.5	14.24	24	Pass
NVNT	n20	5700	Ant1	14.2	0.5	14.7	24	Pass
NVNT	n40	5510	Ant1	14.9	0.94	15.84	24	Pass
NVNT	n40	5590	Ant1	13.64	0.93	14.57	24	Pass
NVNT	n40	5670	Ant1	13.96	0.93	14.89	24	Pass

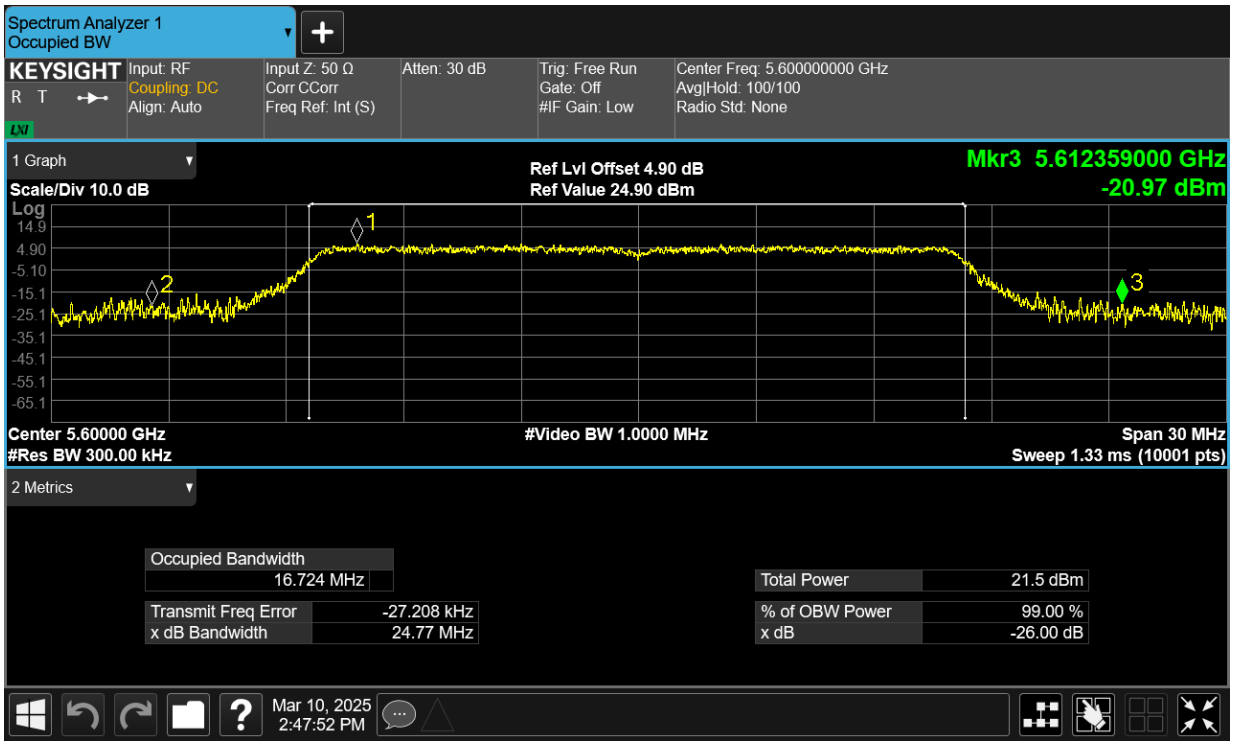
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5500	Ant1	24.135
NVNT	a	5600	Ant1	24.773
NVNT	a	5700	Ant1	25.079
NVNT	ac20	5500	Ant1	27.523
NVNT	ac20	5600	Ant1	28.089
NVNT	ac20	5700	Ant1	25.536
NVNT	ac40	5510	Ant1	54.906
NVNT	ac40	5590	Ant1	53.574
NVNT	ac40	5670	Ant1	54.337
NVNT	ac80	5530	Ant1	80.439
NVNT	ac80	5610	Ant1	79.754
NVNT	n20	5500	Ant1	28.209
NVNT	n20	5600	Ant1	28.944
NVNT	n20	5700	Ant1	29.563
NVNT	n40	5510	Ant1	58.765
NVNT	n40	5590	Ant1	55.179
NVNT	n40	5670	Ant1	50.62

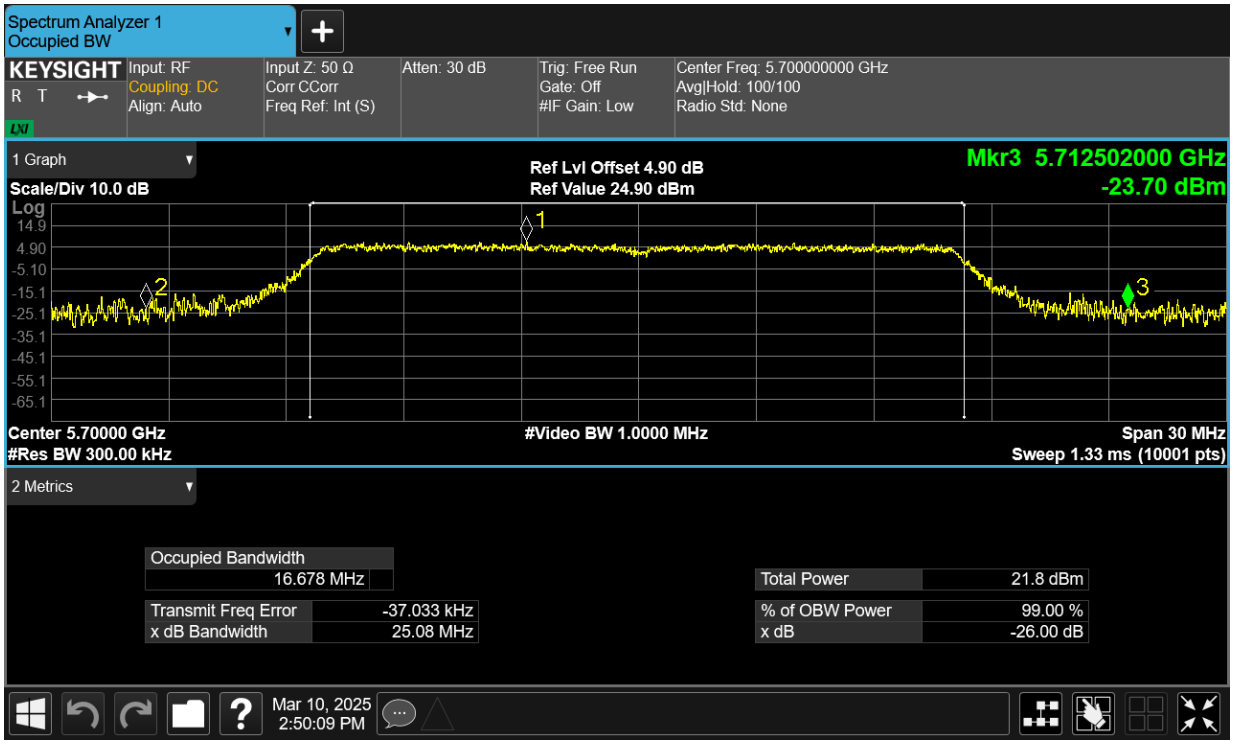
Test Graphs
-26dB Bandwidth NVNT a 5500MHz Ant1



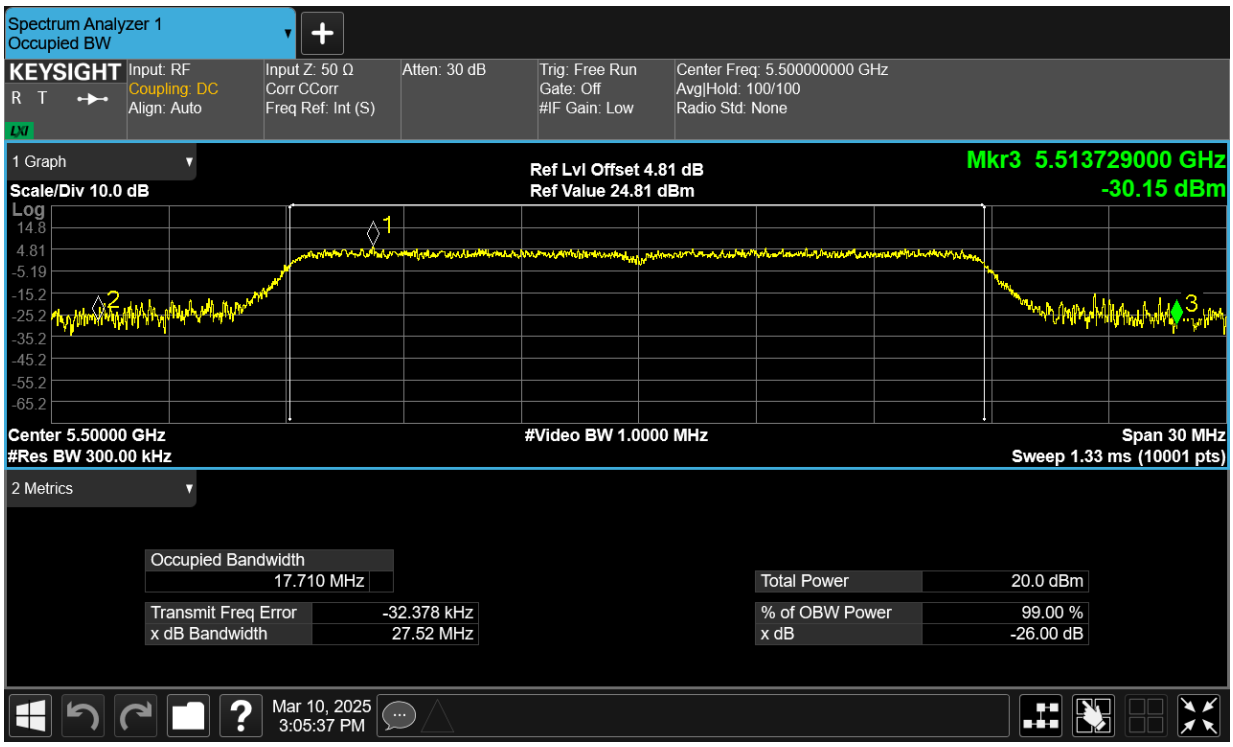
-26dB Bandwidth NVNT a 5600MHz Ant1



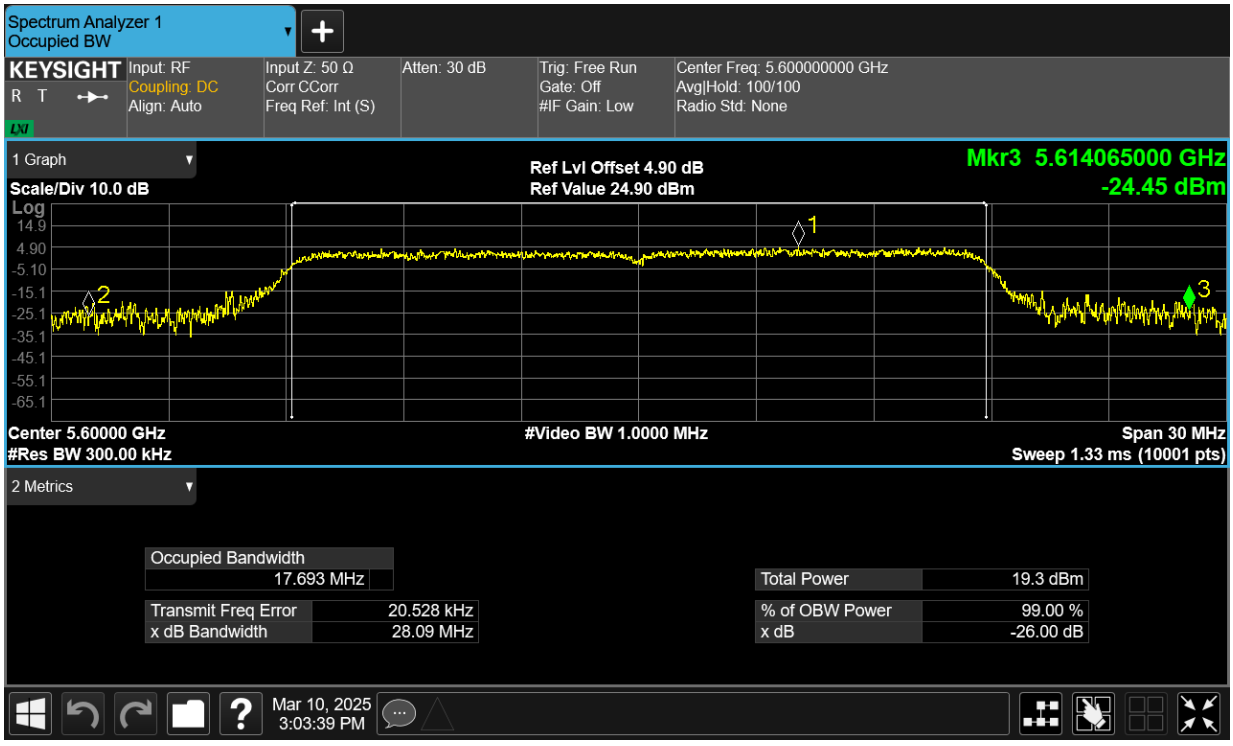
-26dB Bandwidth NVNT a 5700MHz Ant1



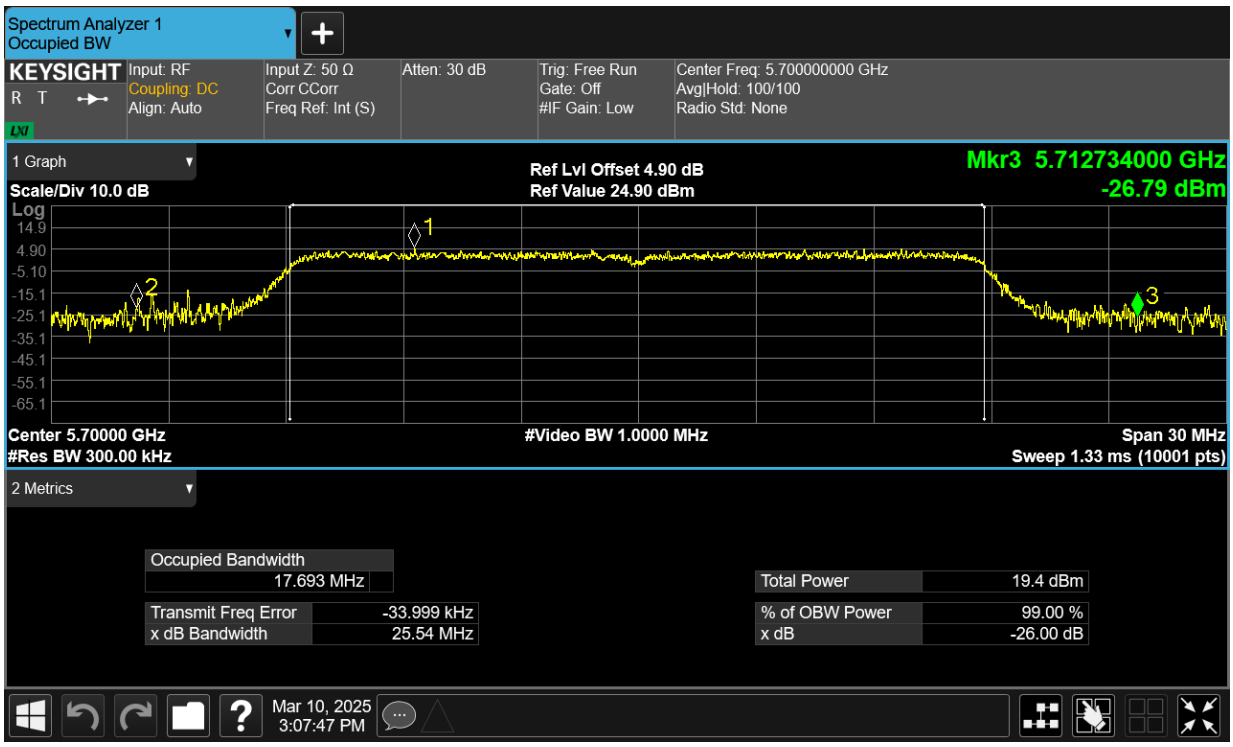
-26dB Bandwidth NVNT ac20 5500MHz Ant1



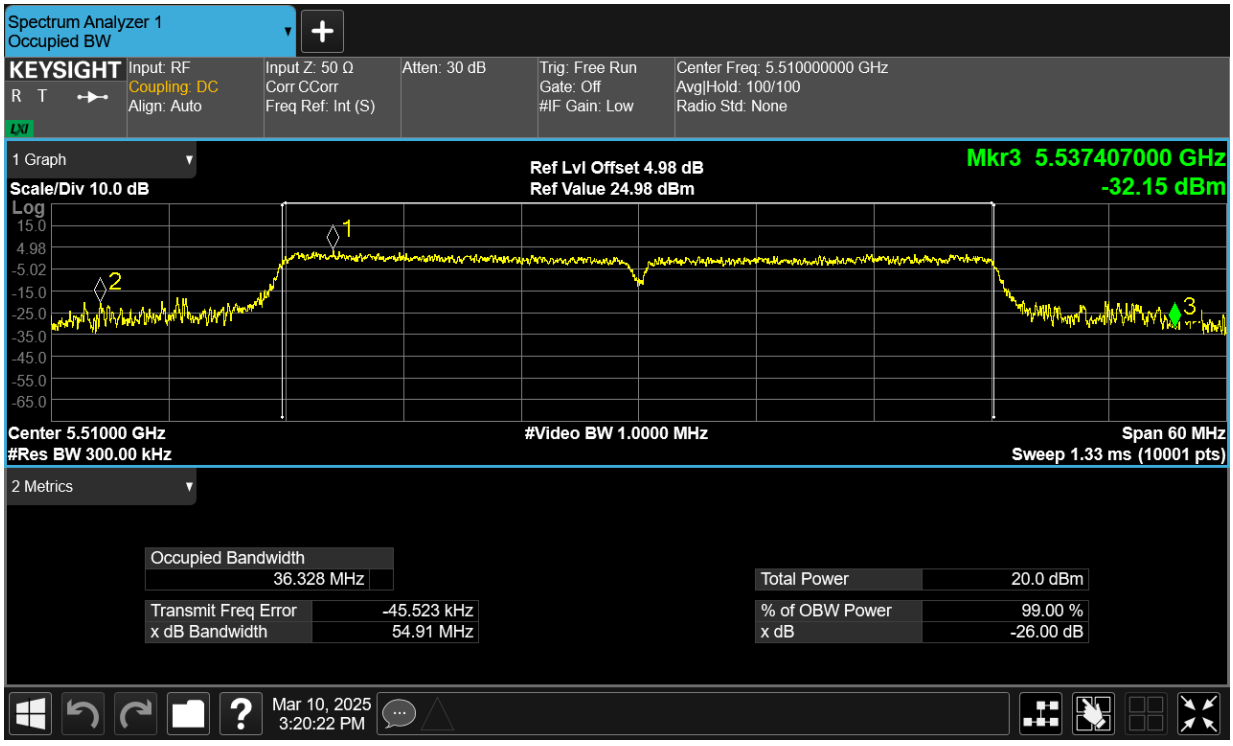
-26dB Bandwidth NVNT ac20 5600MHz Ant1



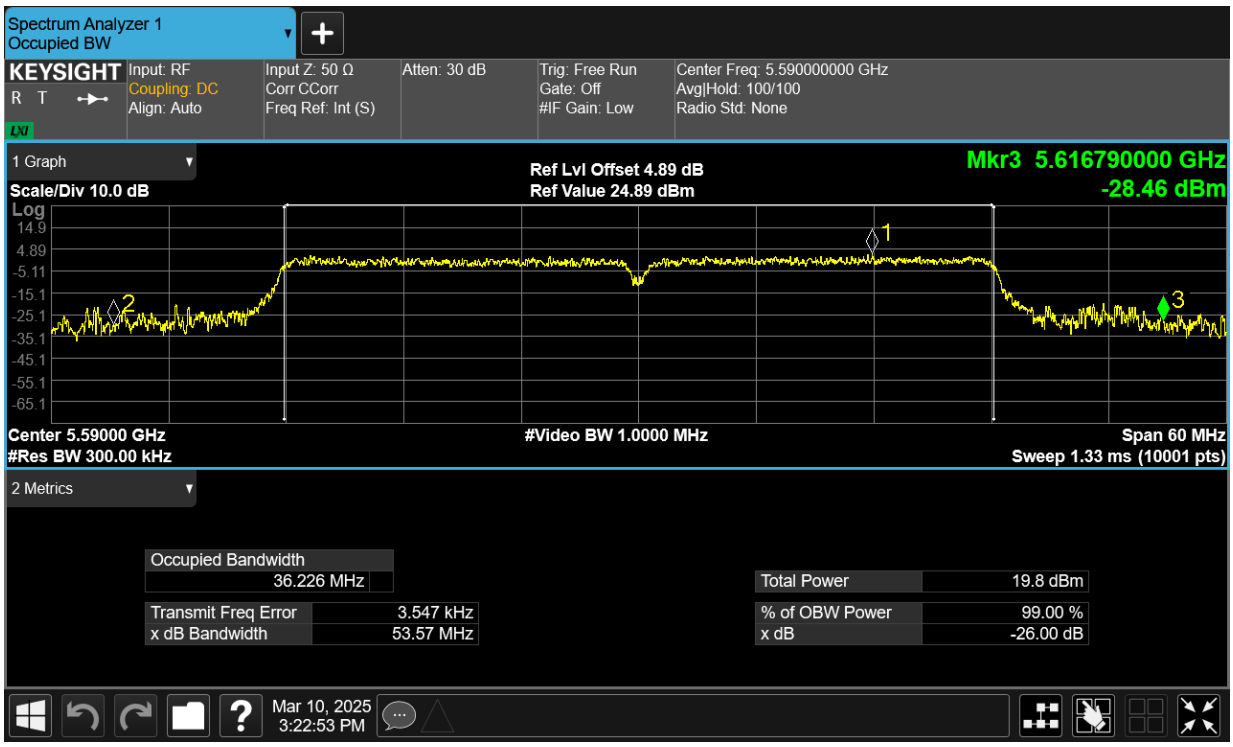
-26dB Bandwidth NVNT ac20 5700MHz Ant1



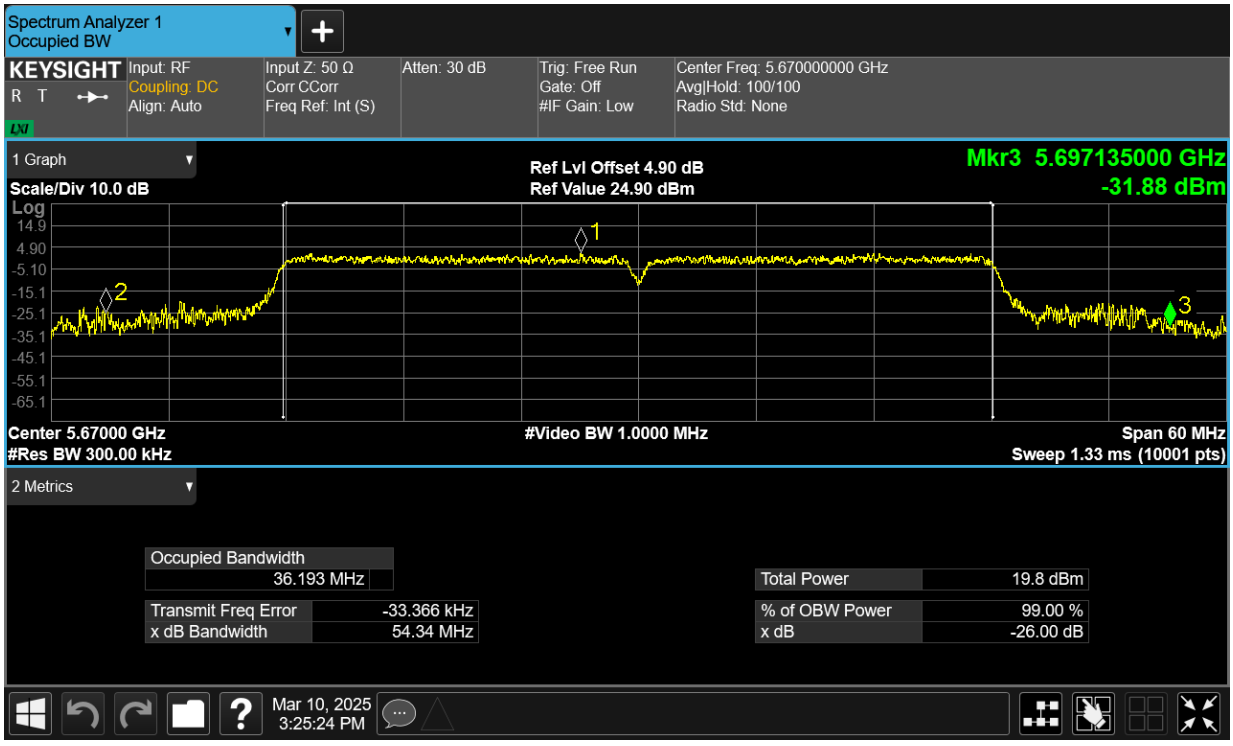
-26dB Bandwidth NVNT ac40 5510MHz Ant1



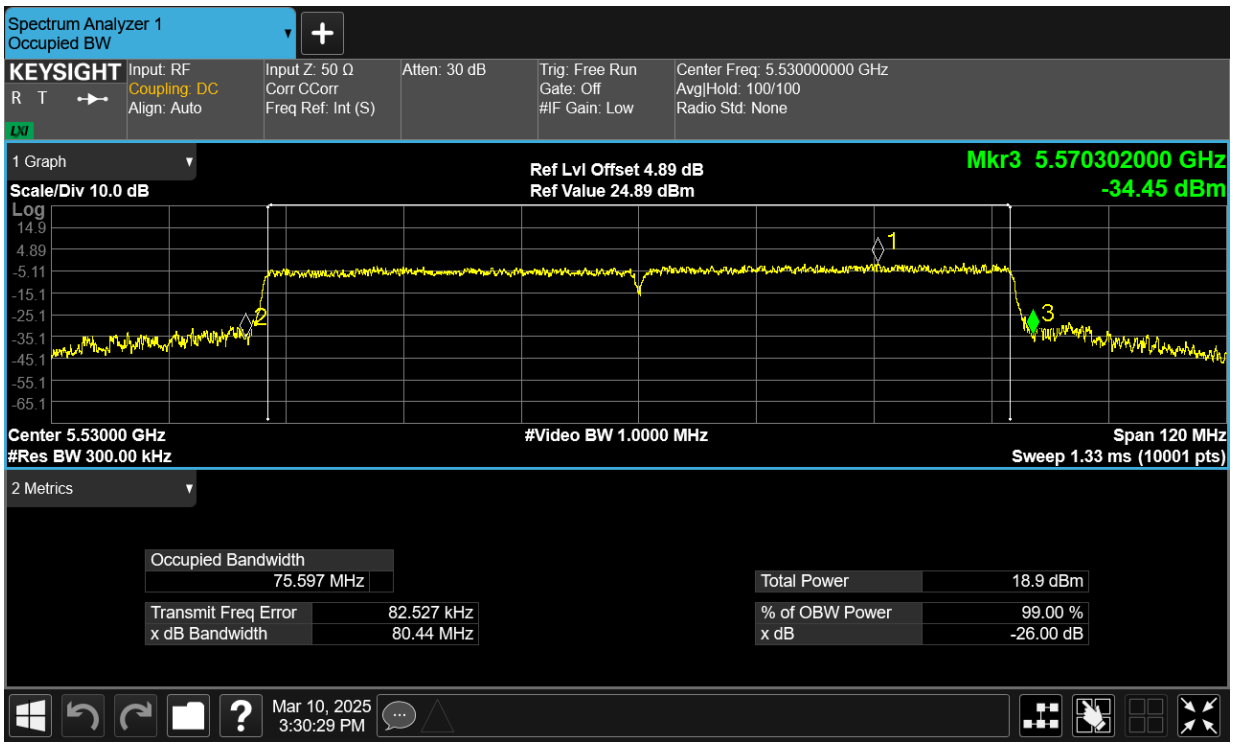
-26dB Bandwidth NVNT ac40 5590MHz Ant1



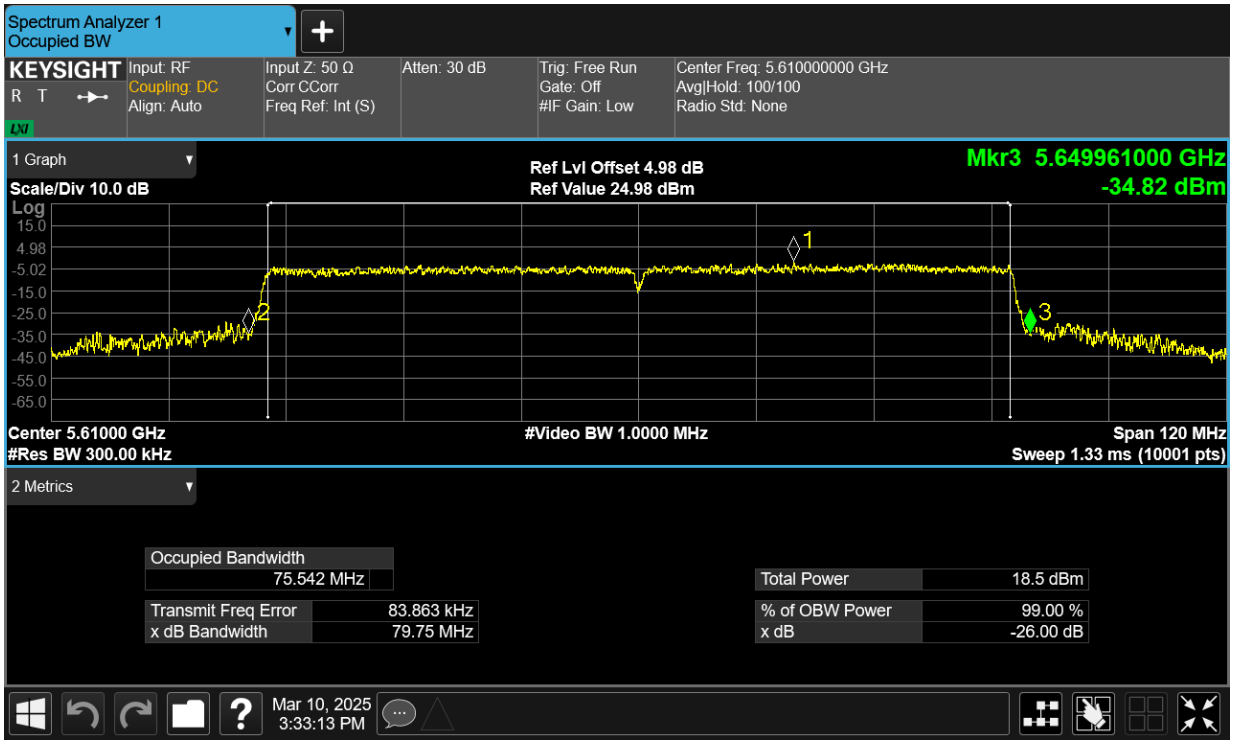
-26dB Bandwidth NVNT ac40 5670MHz Ant1



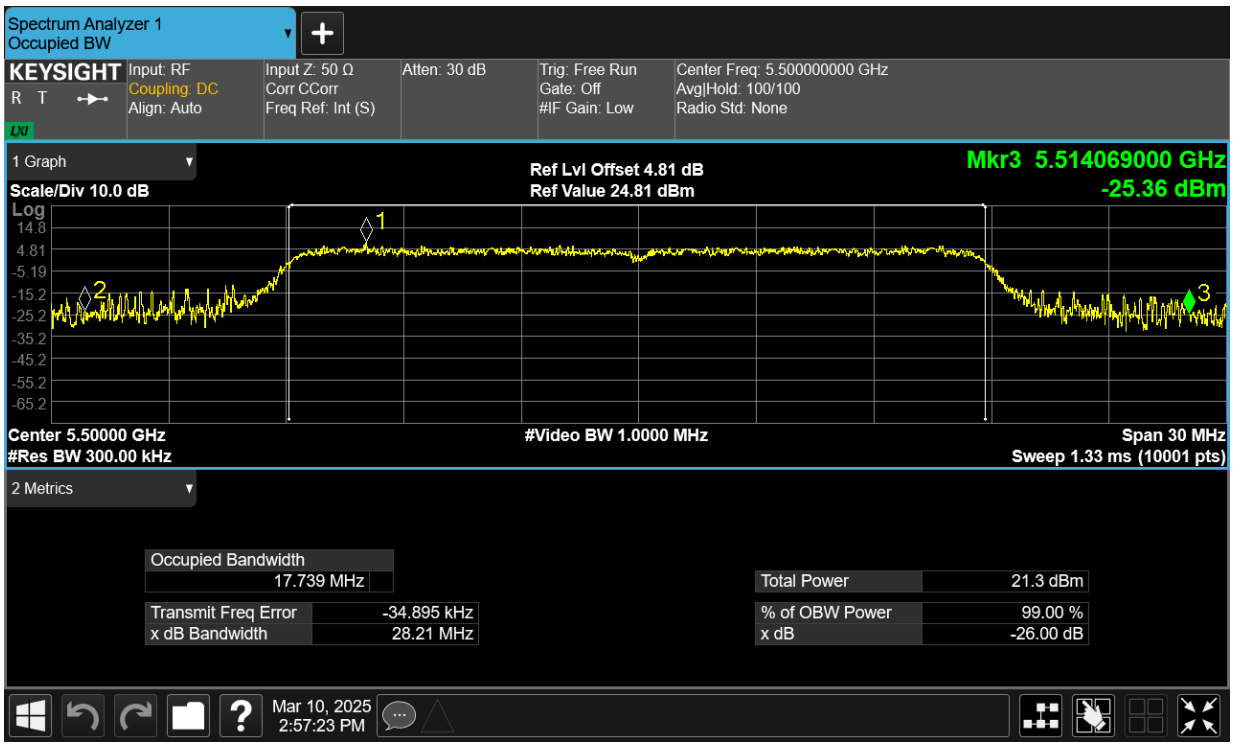
-26dB Bandwidth NVNT ac80 5530MHz Ant1



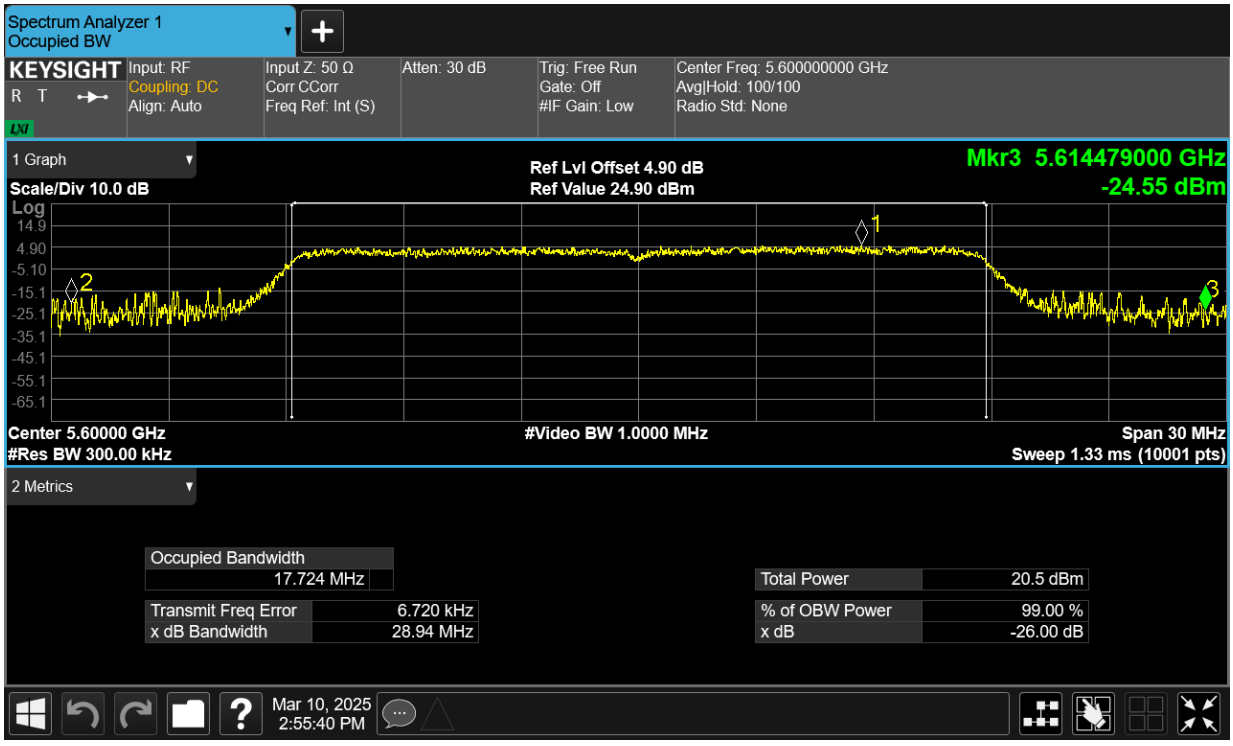
-26dB Bandwidth NVNT ac80 5610MHz Ant1



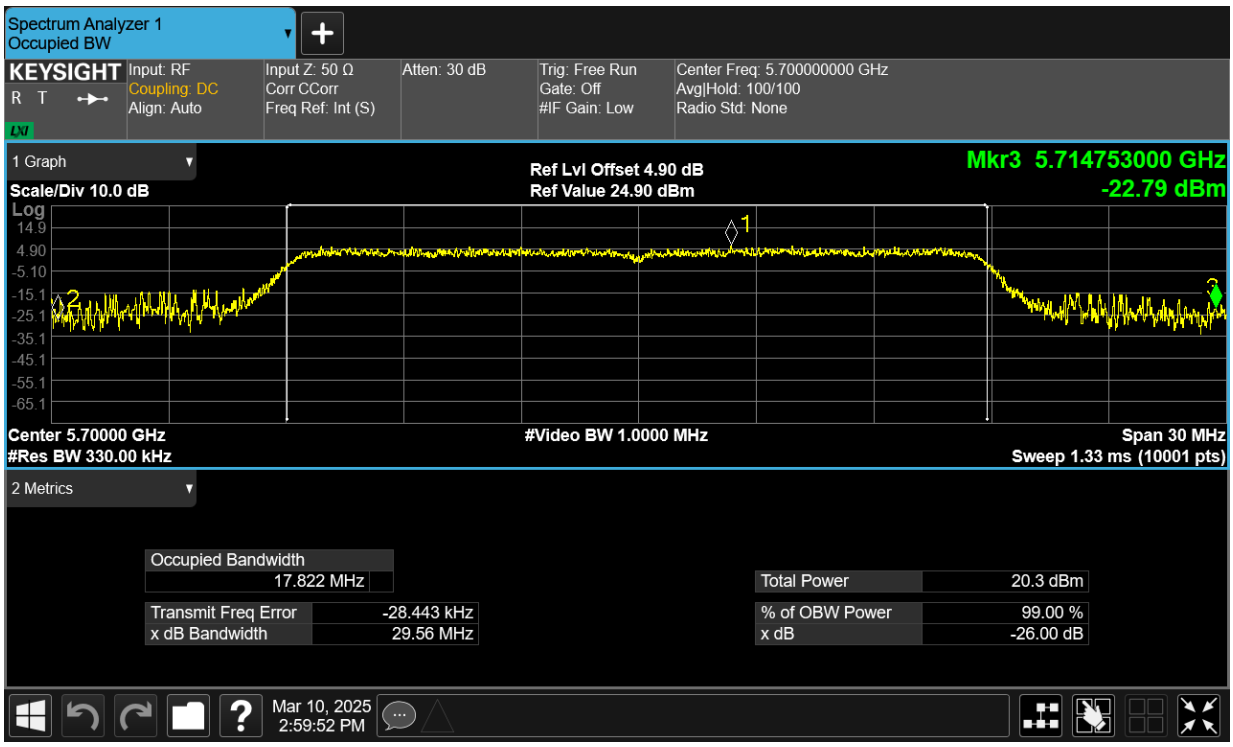
-26dB Bandwidth NVNT n20 5500MHz Ant1



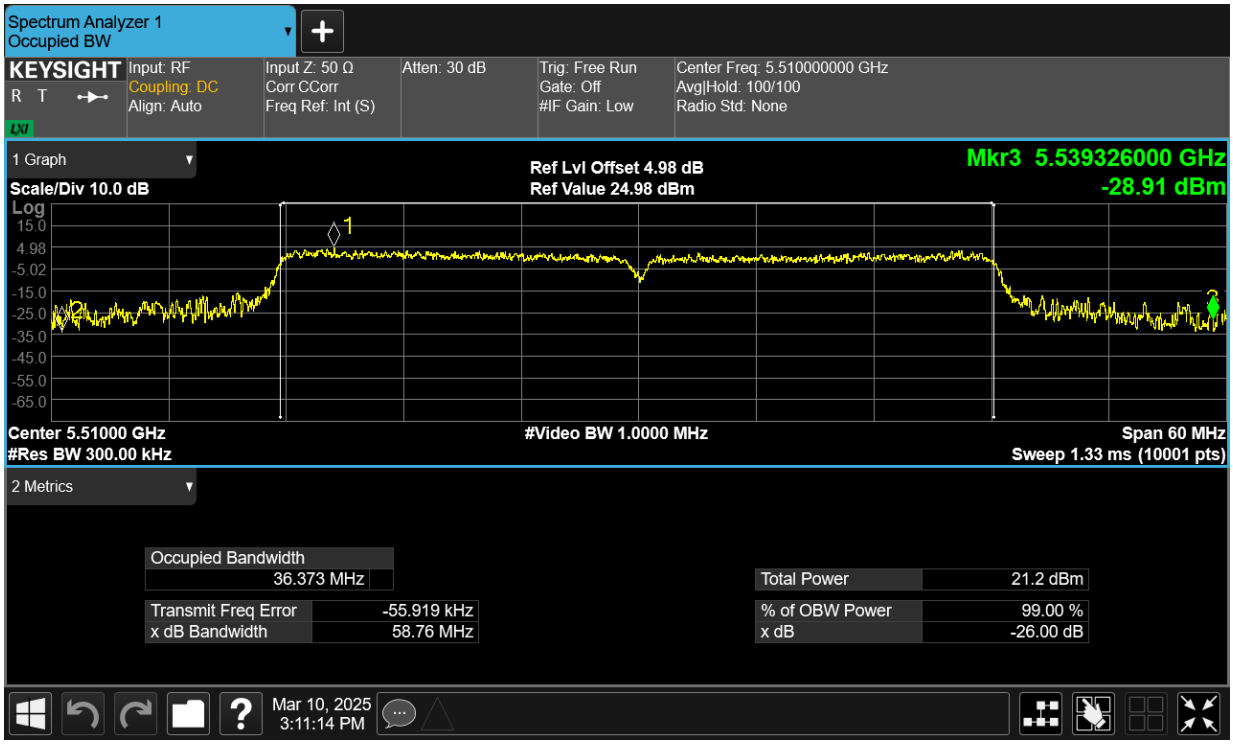
-26dB Bandwidth NVNT n20 5600MHz Ant1



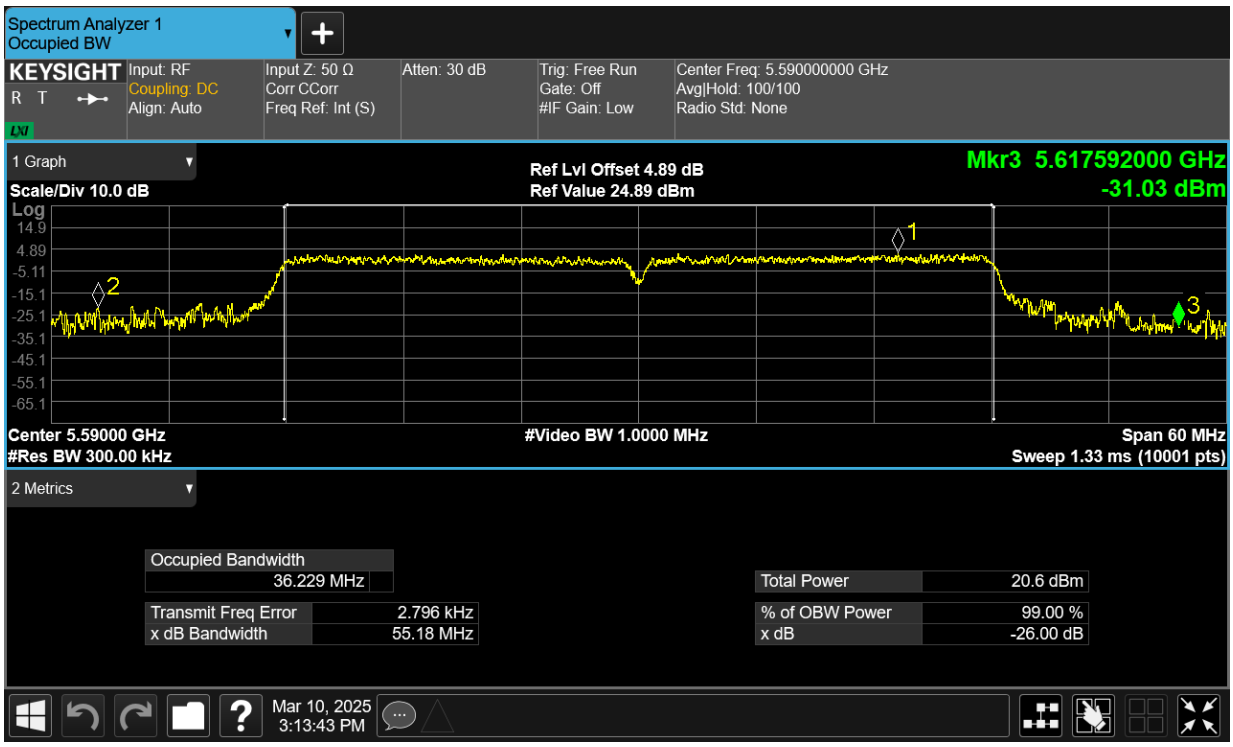
-26dB Bandwidth NVNT n20 5700MHz Ant1



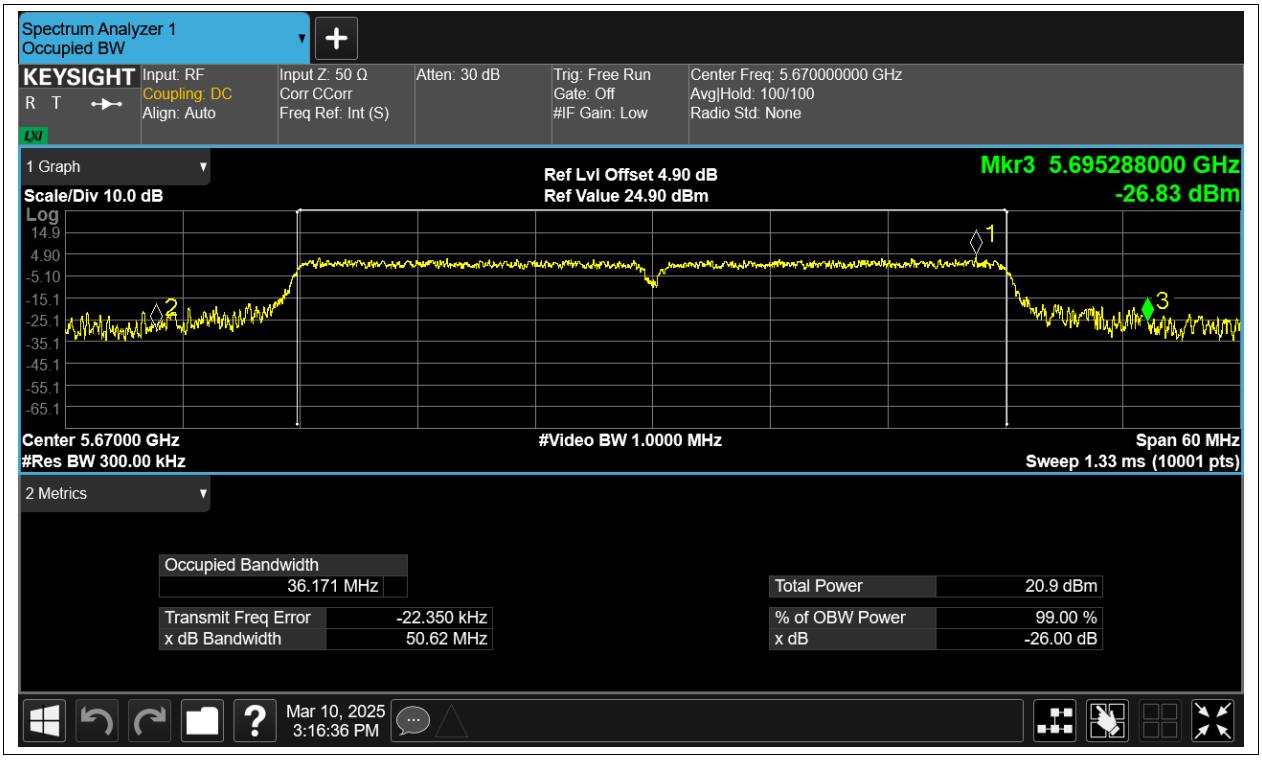
-26dB Bandwidth NVNT n40 5510MHz Ant1



-26dB Bandwidth NVNT n40 5590MHz Ant1



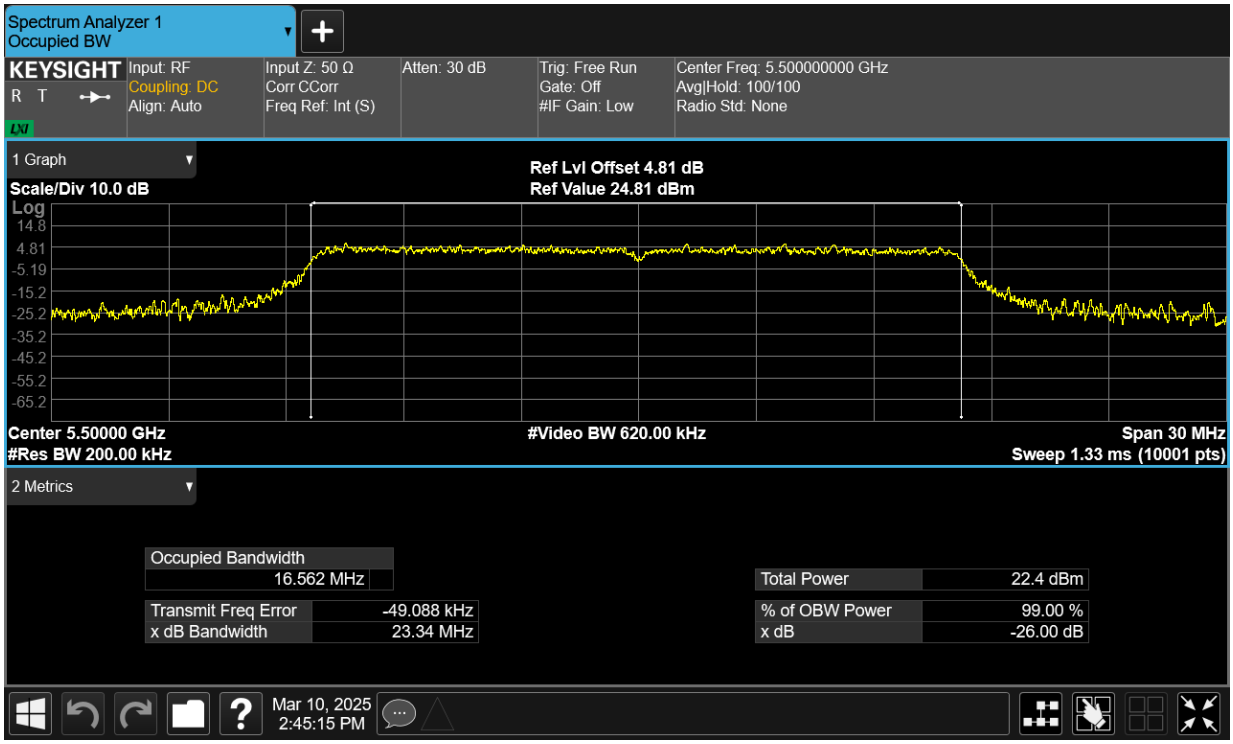
-26dB Bandwidth NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Mkr3 5.695288000 GHz
-26.83 dBm
Scale/Div 10.0 dB
Log
14.9
4.90
-5.10
-15.1
-25.1
-35.1
-45.1
-55.1
-65.1
Center 5.67000 GHz
#Res BW 300.00 kHz
#Video BW 1.0000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
36.171 MHz
Transmit Freq Error -22.350 kHz
x dB Bandwidth 50.62 MHz
Total Power 20.9 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Mar 10, 2025
3:16:36 PM

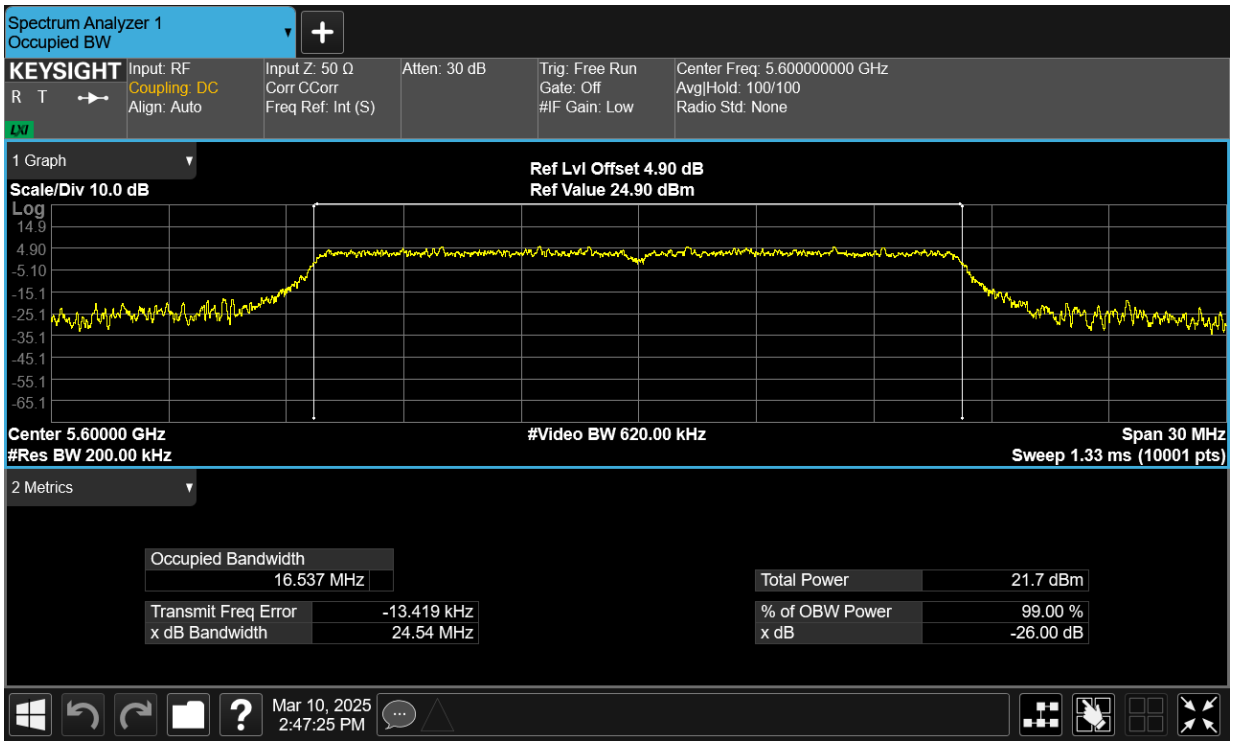
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.562
NVNT	a	5600	Ant1	16.537
NVNT	a	5700	Ant1	16.525
NVNT	ac20	5500	Ant1	17.624
NVNT	ac20	5600	Ant1	17.631
NVNT	ac20	5700	Ant1	17.62
NVNT	ac40	5510	Ant1	36.4
NVNT	ac40	5590	Ant1	36.305
NVNT	ac40	5670	Ant1	36.292
NVNT	ac80	5530	Ant1	75.594
NVNT	ac80	5610	Ant1	75.597
NVNT	n20	5500	Ant1	17.665
NVNT	n20	5600	Ant1	17.622
NVNT	n20	5700	Ant1	17.638
NVNT	n40	5510	Ant1	36.447
NVNT	n40	5590	Ant1	36.407
NVNT	n40	5670	Ant1	36.356

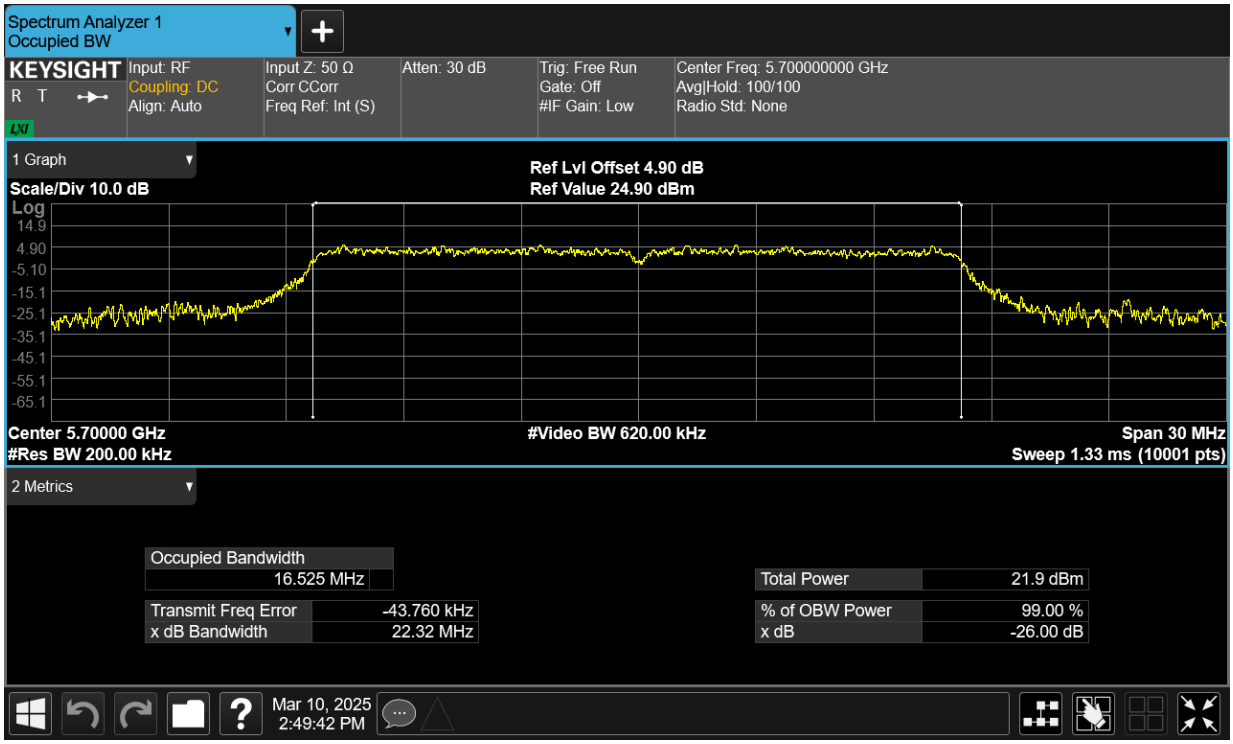
Test Graphs
OBW NVNT a 5500MHz Ant1



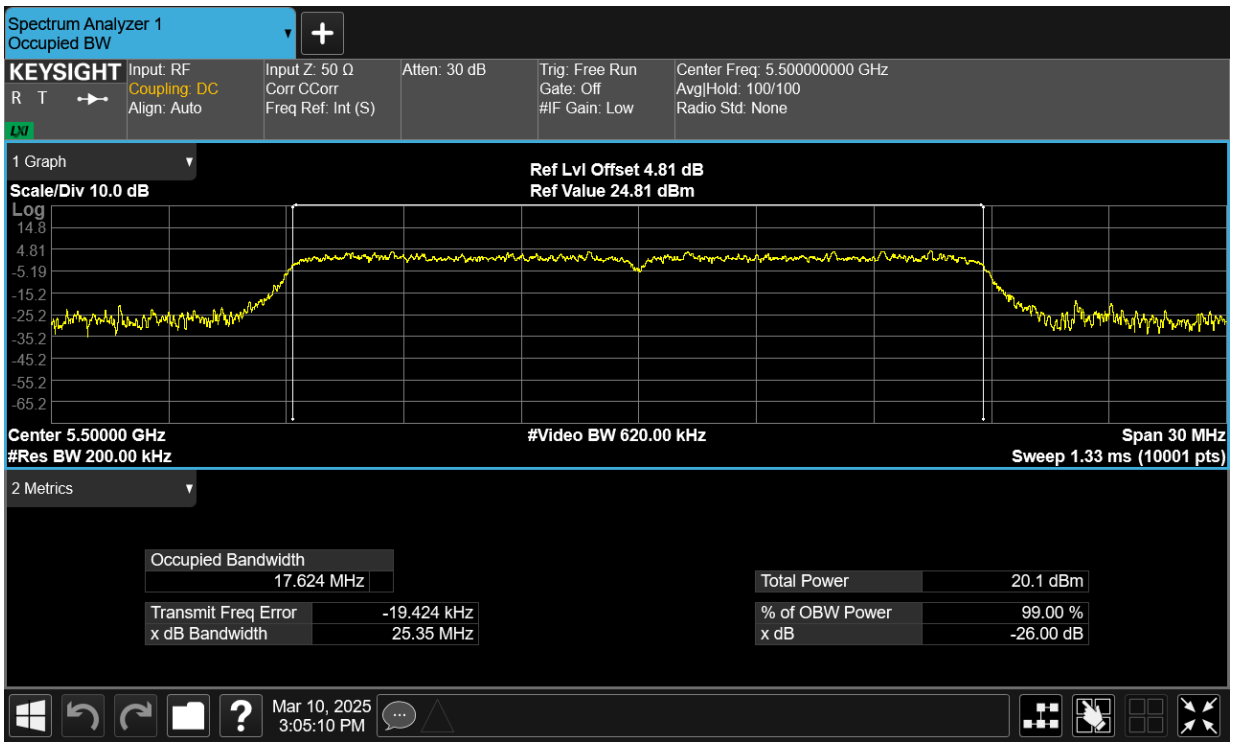
OBW NVNT a 5600MHz Ant1



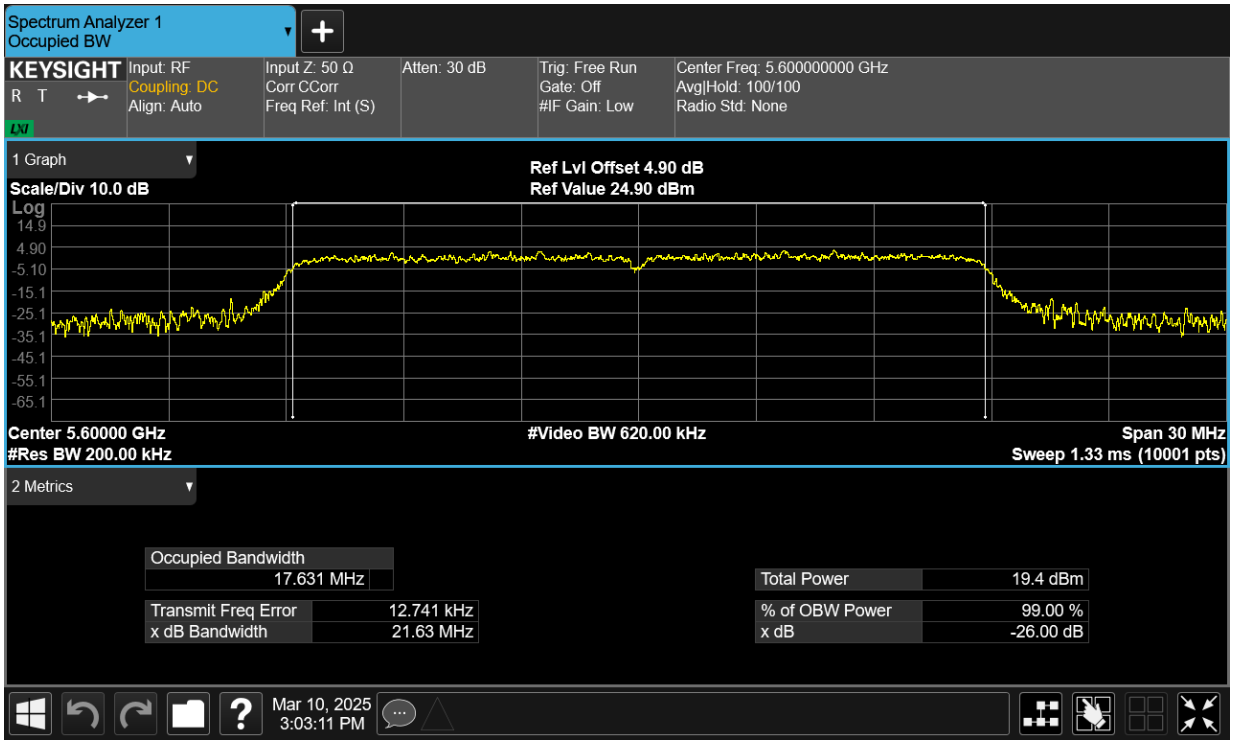
OBW NVNT a 5700MHz Ant1



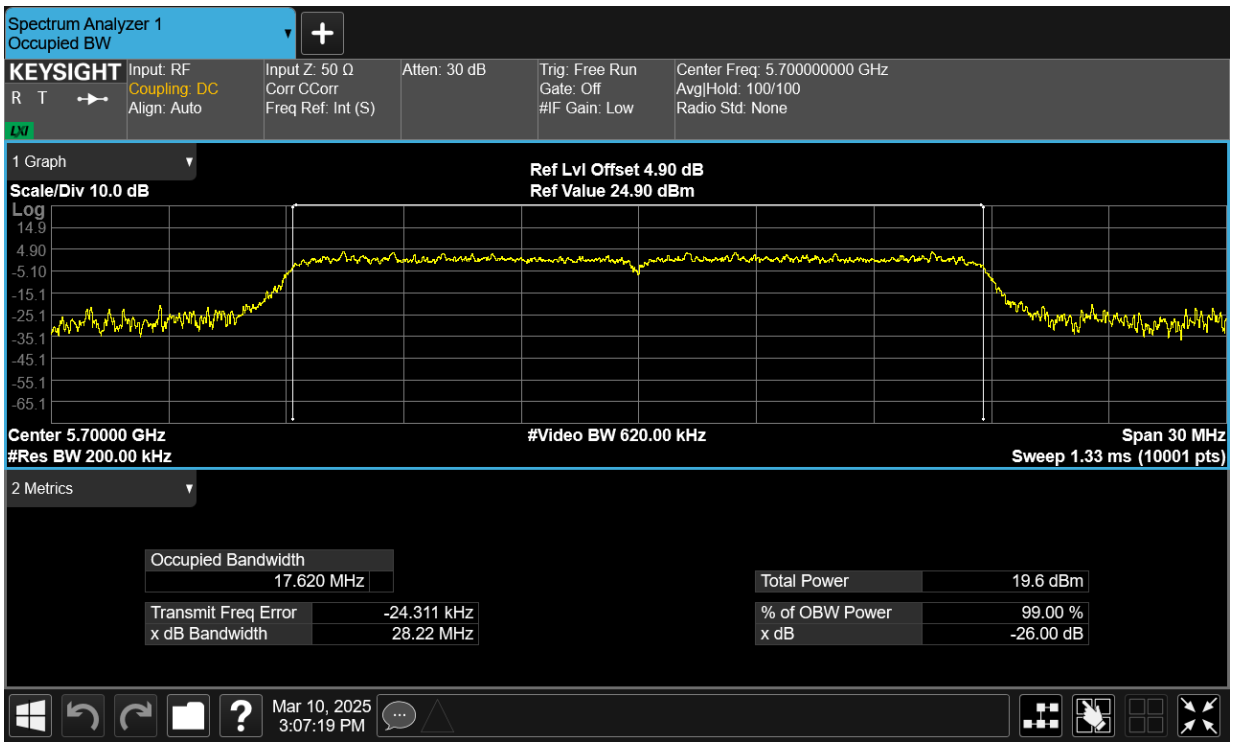
OBW NVNT ac20 5500MHz Ant1



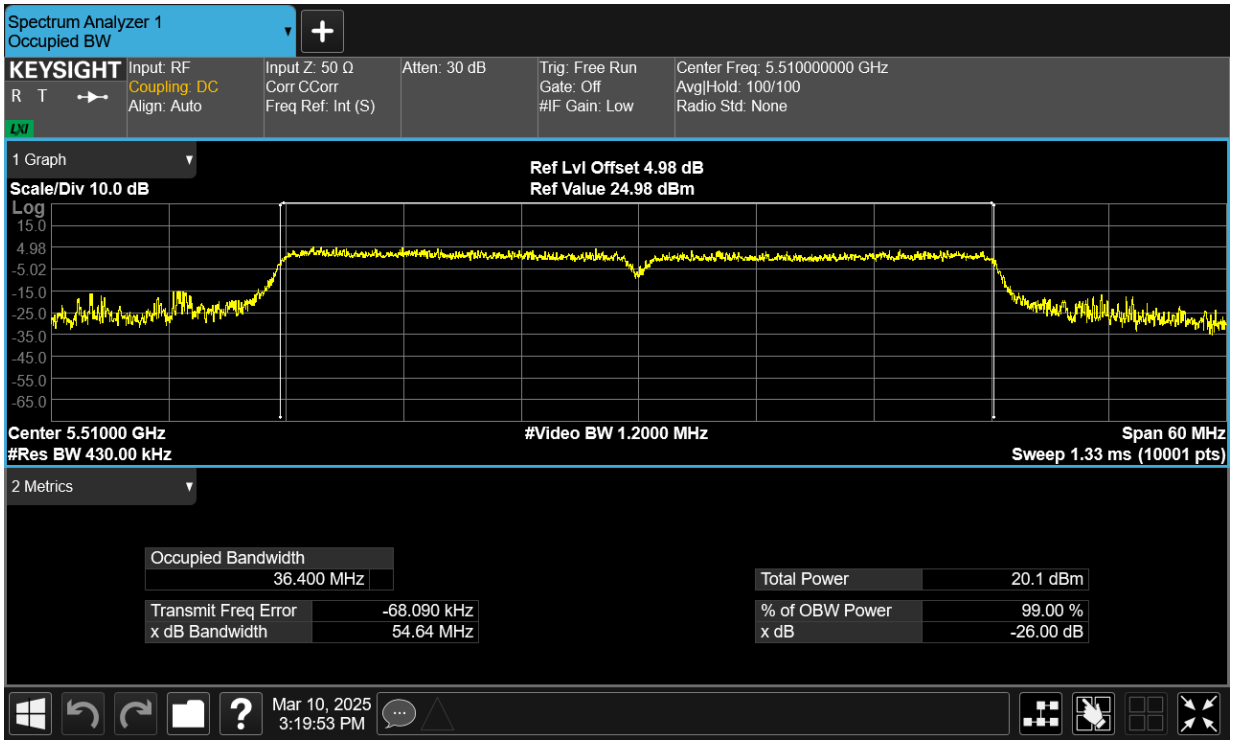
OBW NVNT ac20 5600MHz Ant1



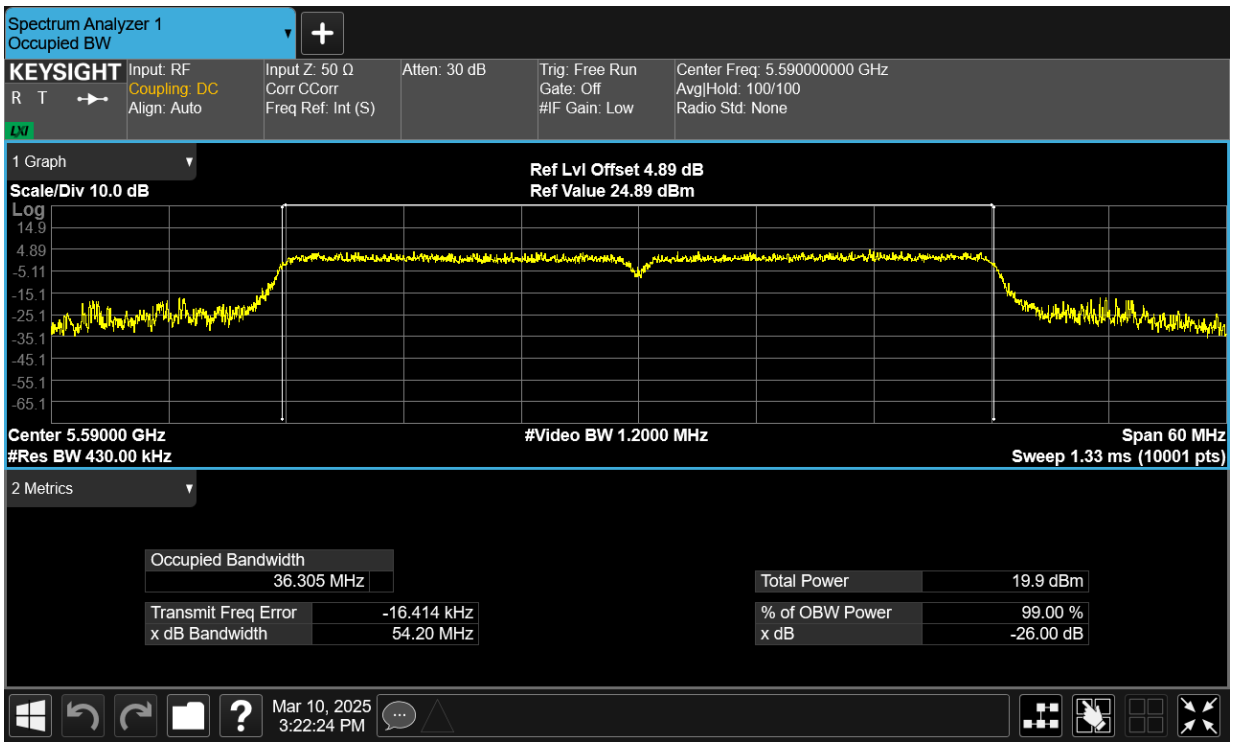
OBW NVNT ac20 5700MHz Ant1



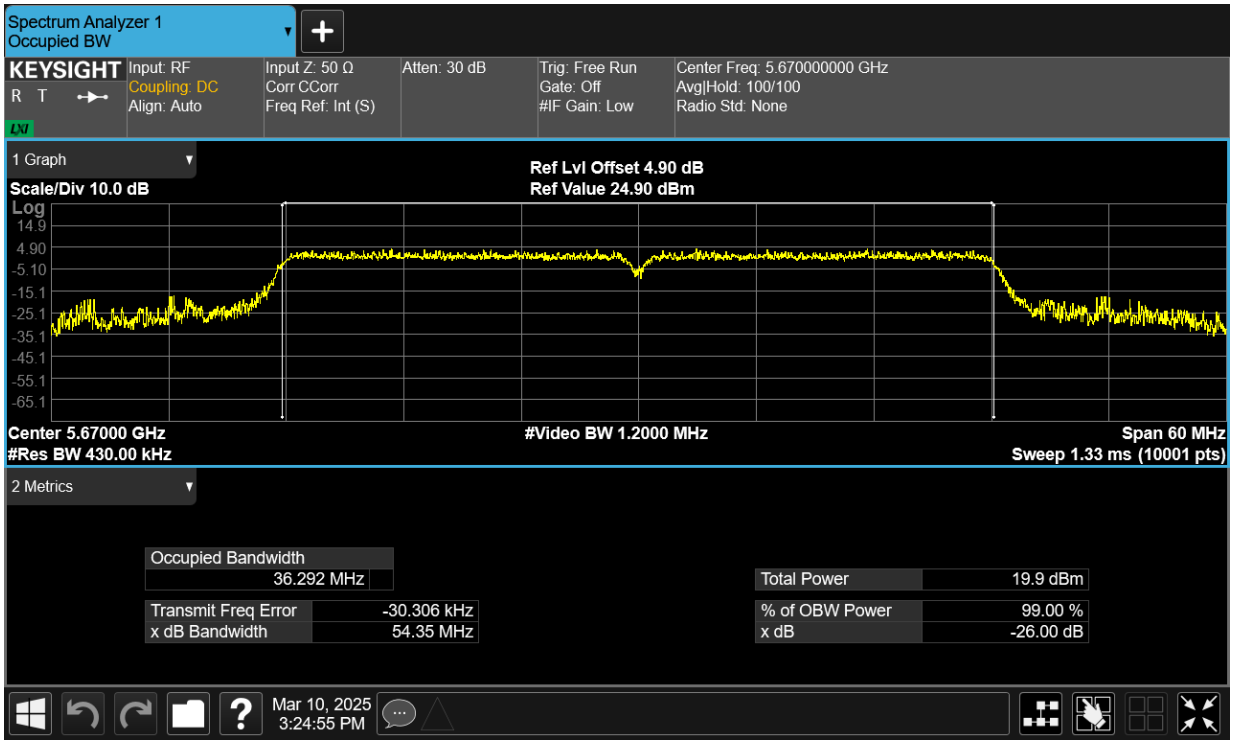
OBW NVNT ac40 5510MHz Ant1



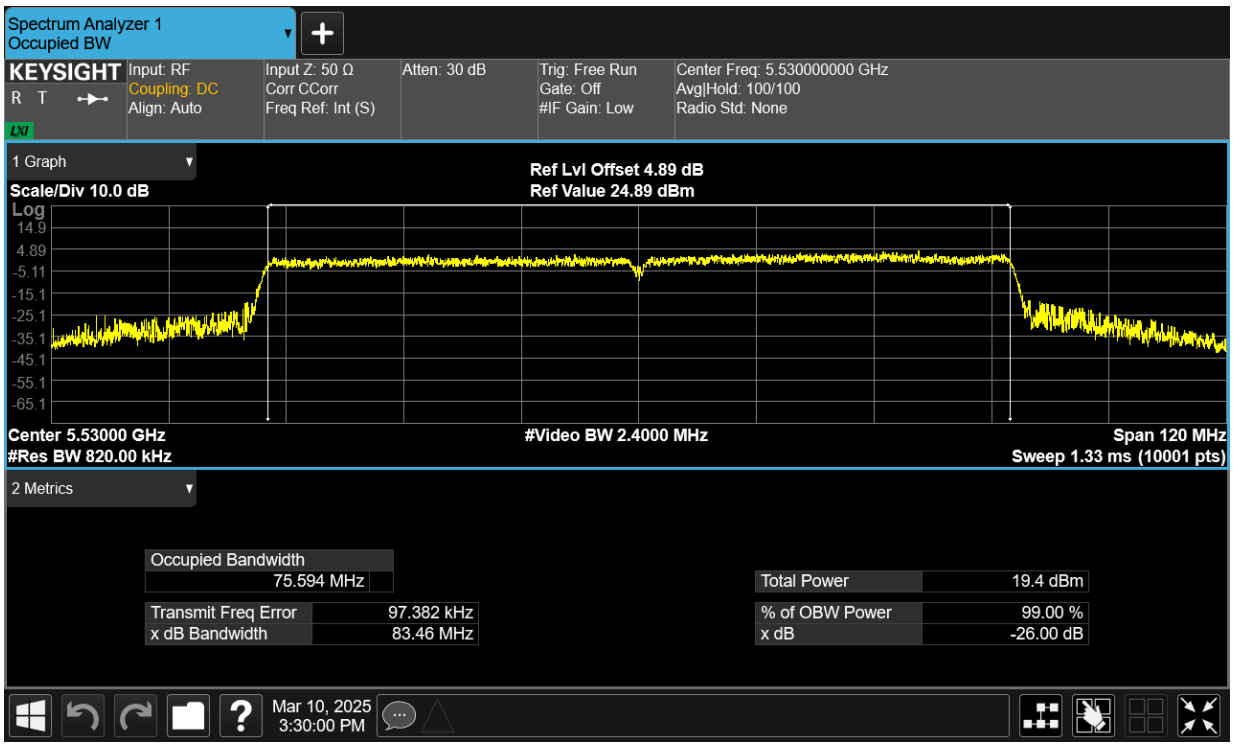
OBW NVNT ac40 5590MHz Ant1



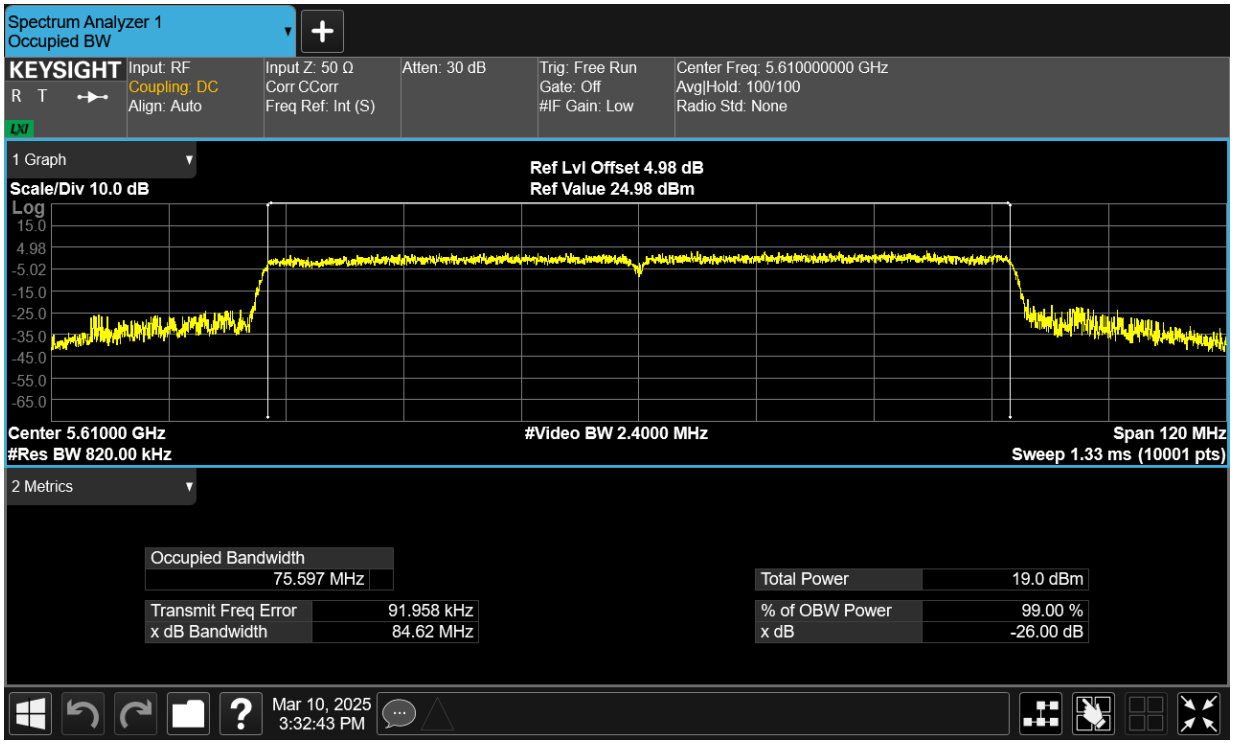
OBW NVNT ac40 5670MHz Ant1



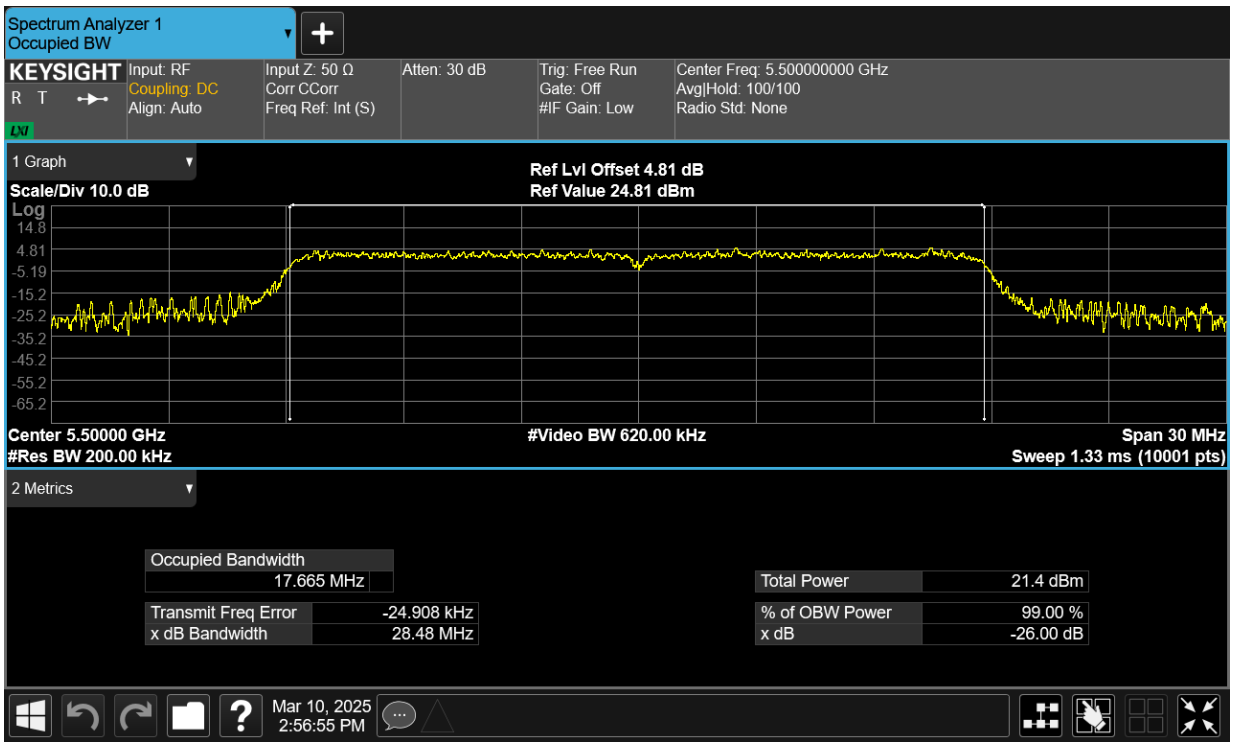
OBW NVNT ac80 5530MHz Ant1



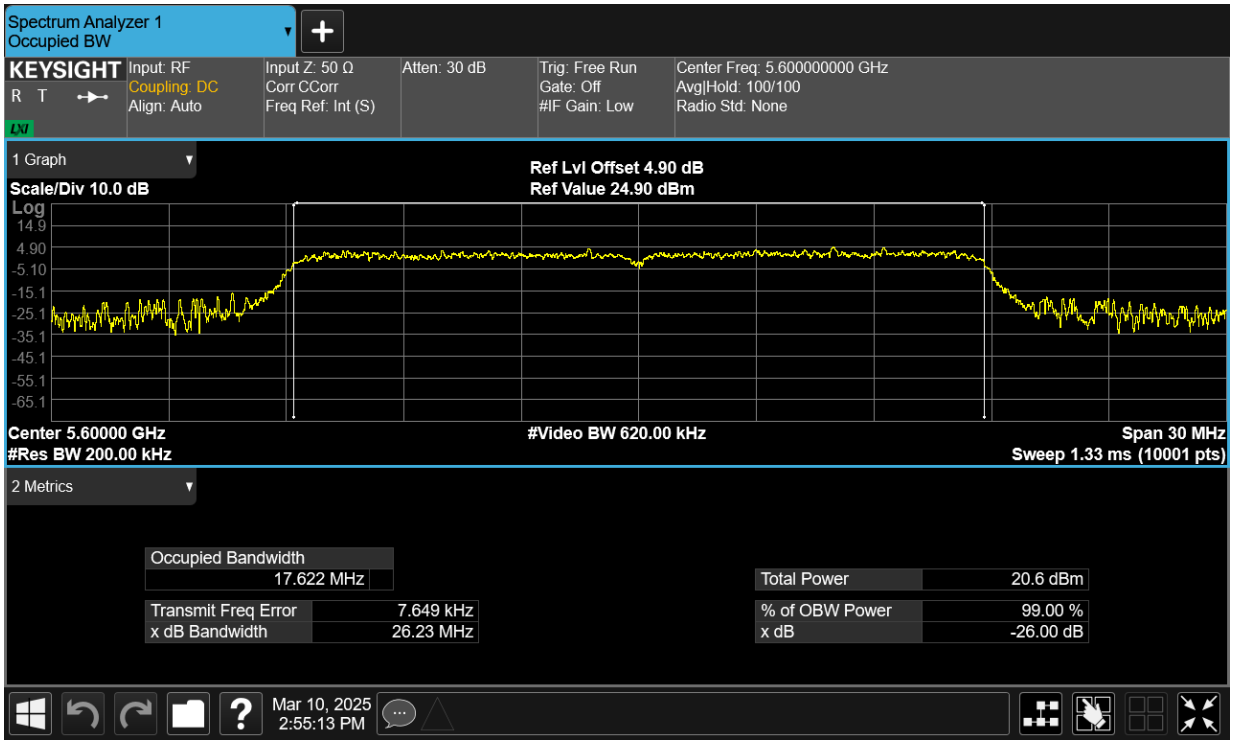
OBW NVNT ac80 5610MHz Ant1



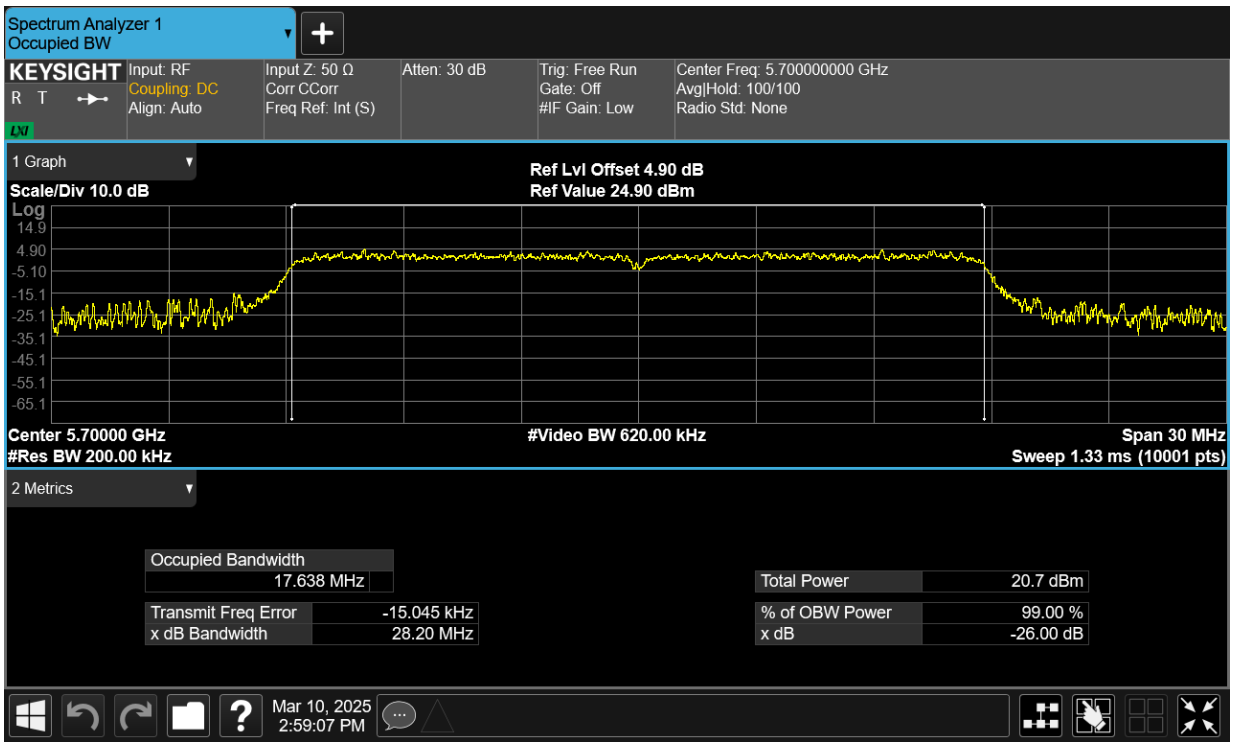
OBW NVNT n20 5500MHz Ant1



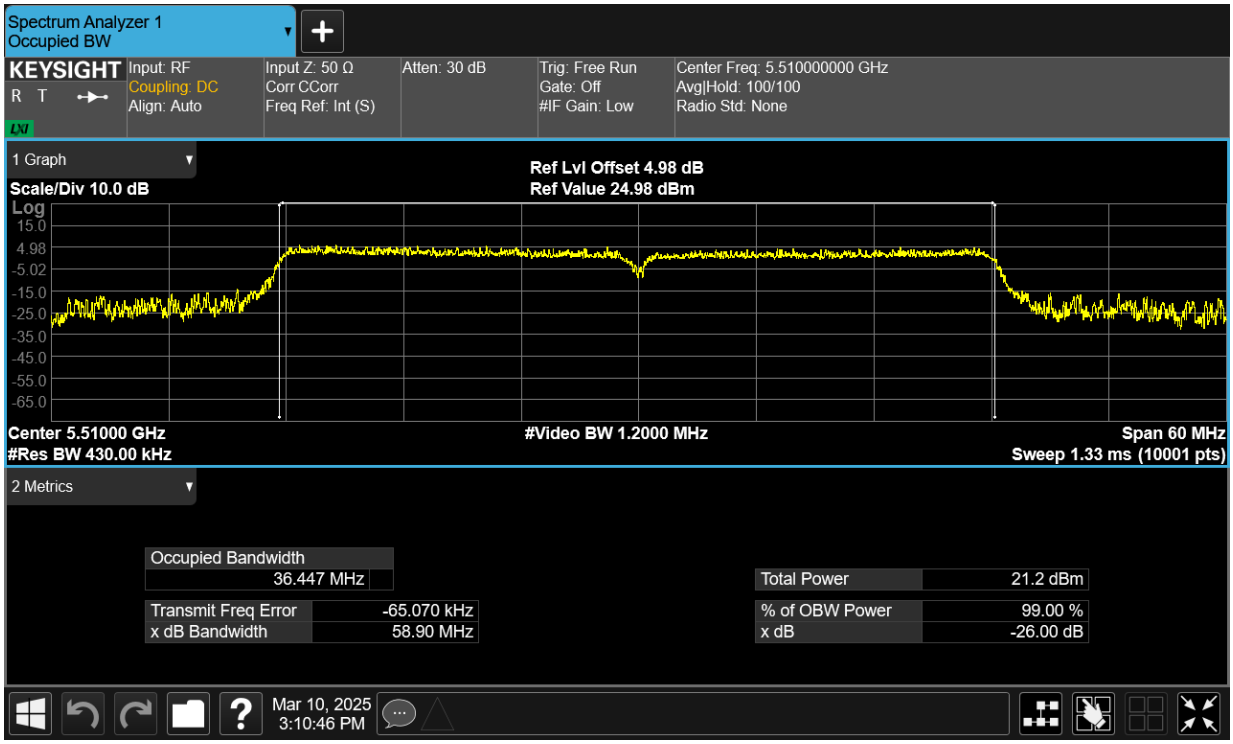
OBW NVNT n20 5600MHz Ant1



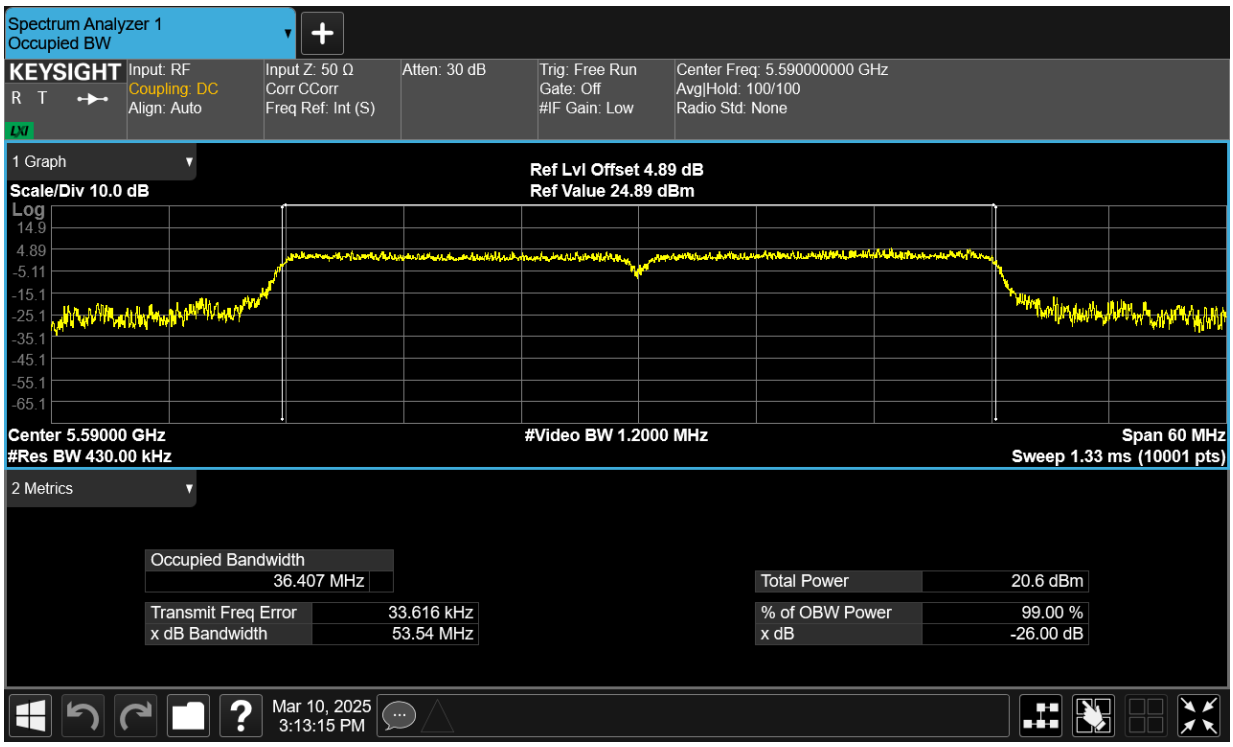
OBW NVNT n20 5700MHz Ant1



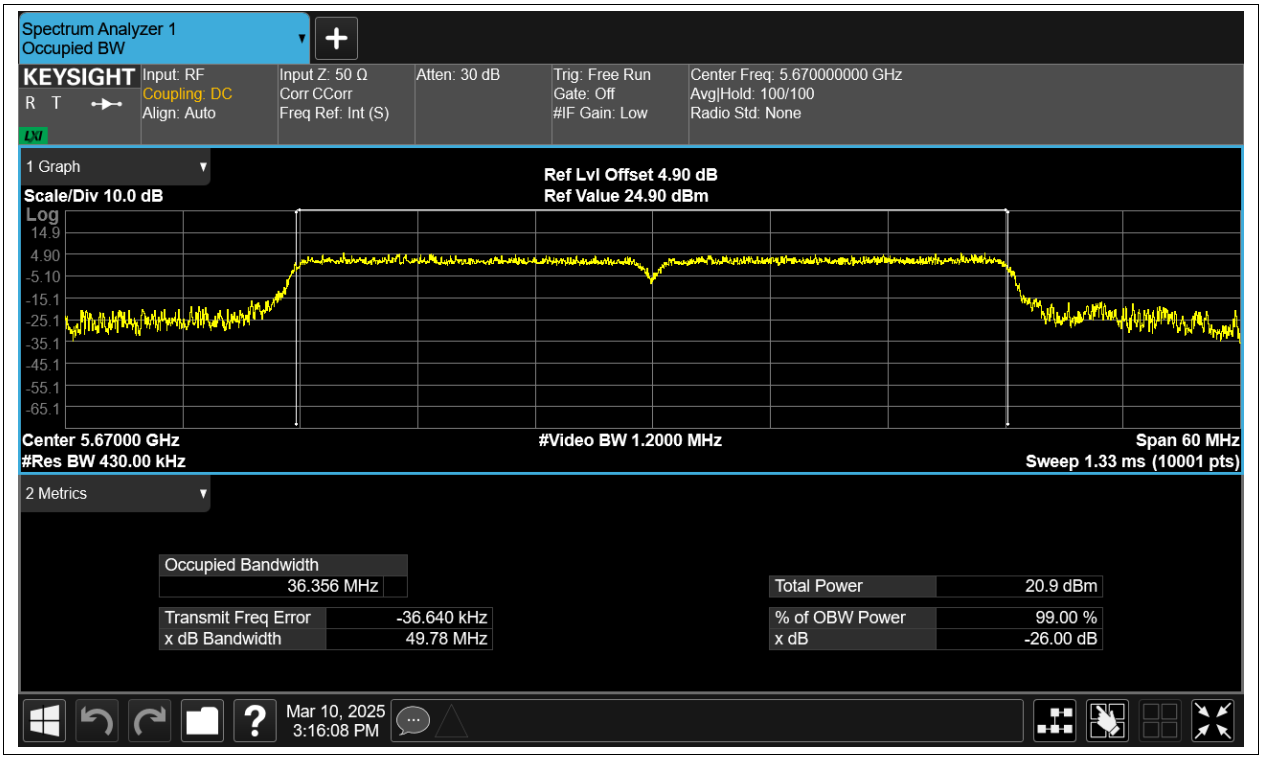
OBW NVNT n40 5510MHz Ant1



OBW NVNT n40 5590MHz Ant1



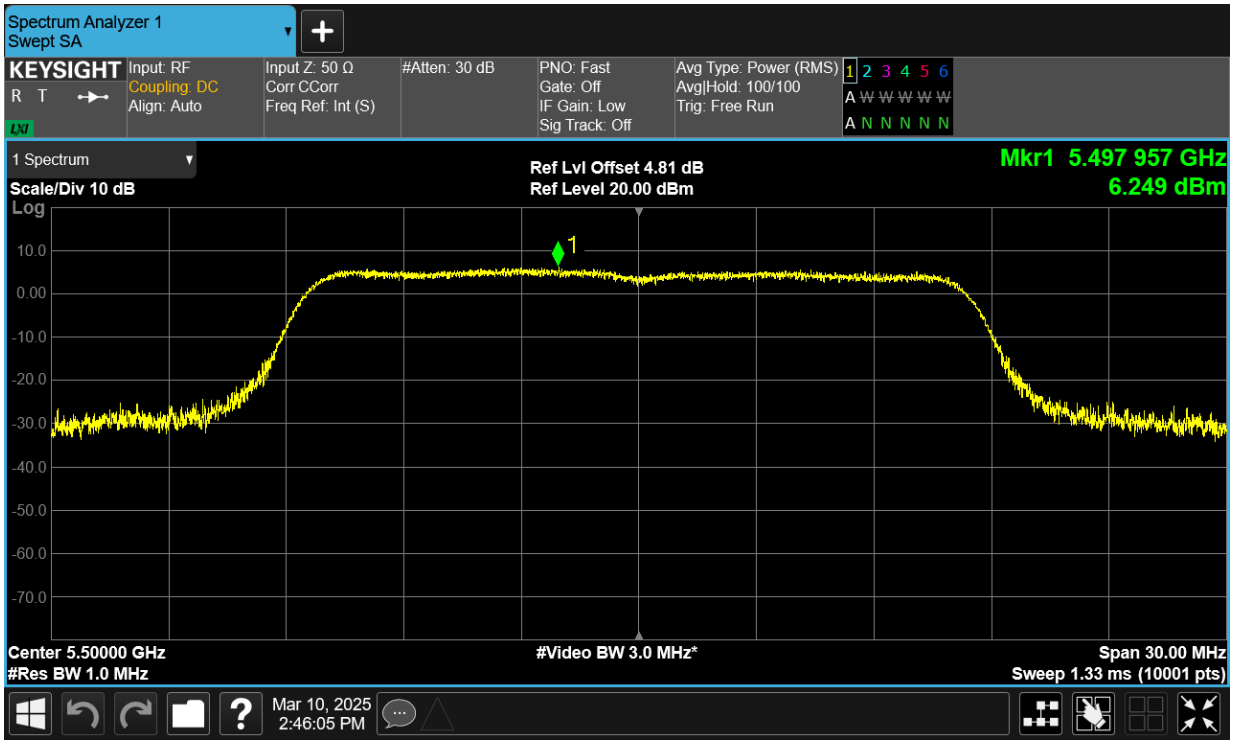
OBW NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Scale/Div 10.0 dB
Log
14.9
4.90
-5.10
-15.1
-25.1
-35.1
-45.1
-55.1
-65.1
Center 5.67000 GHz
#Res BW 430.00 kHz
#Video BW 1.2000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
36.356 MHz
Transmit Freq Error -36.640 kHz
x dB Bandwidth 49.78 MHz
Total Power 20.9 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Mar 10, 2025
3:16:08 PM

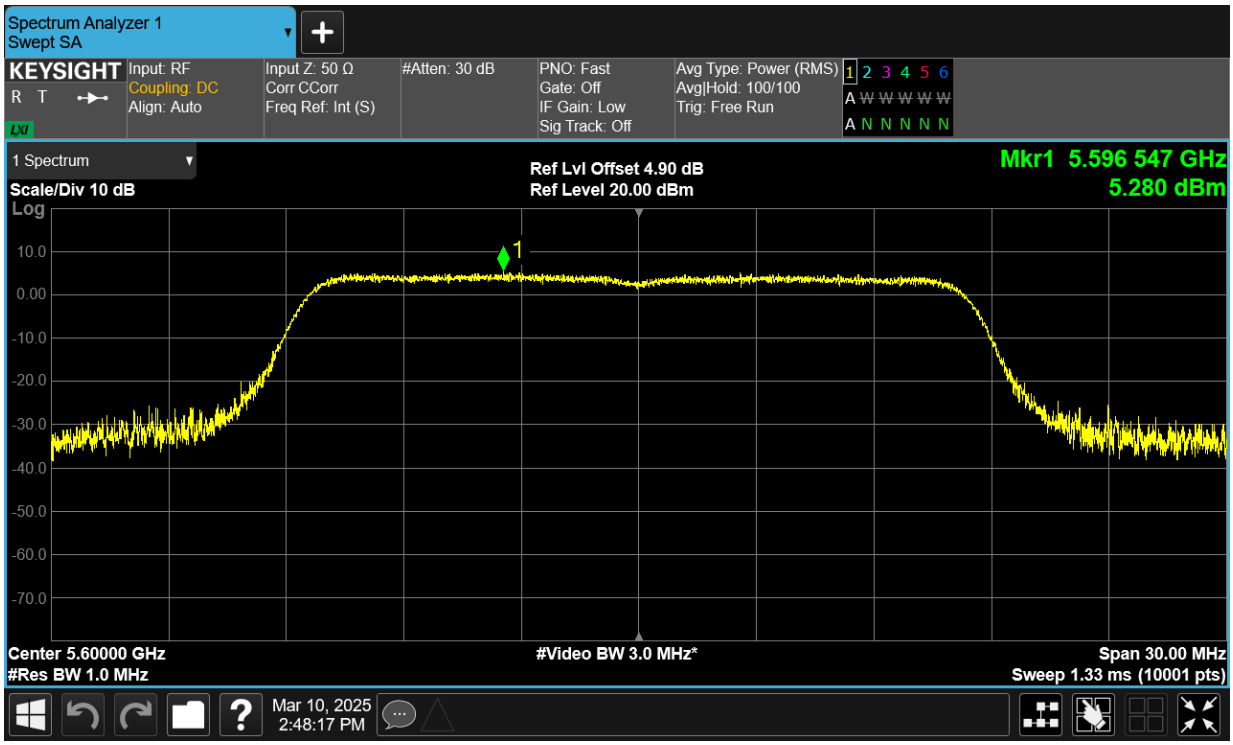
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	6.249	11	Pass
NVNT	a	5600	Ant1	5.28	11	Pass
NVNT	a	5700	Ant1	5.547	11	Pass
NVNT	ac20	5500	Ant1	3.454	11	Pass
NVNT	ac20	5600	Ant1	2.72	11	Pass
NVNT	ac20	5700	Ant1	2.827	11	Pass
NVNT	ac40	5510	Ant1	0.883	11	Pass
NVNT	ac40	5590	Ant1	-0.619	11	Pass
NVNT	ac40	5670	Ant1	-0.172	11	Pass
NVNT	ac80	5530	Ant1	-4.906	11	Pass
NVNT	ac80	5610	Ant1	-5.311	11	Pass
NVNT	n20	5500	Ant1	4.469	11	Pass
NVNT	n20	5600	Ant1	4.014	11	Pass
NVNT	n20	5700	Ant1	3.728	11	Pass
NVNT	n40	5510	Ant1	1.704	11	Pass
NVNT	n40	5590	Ant1	0.975	11	Pass
NVNT	n40	5670	Ant1	1.137	11	Pass

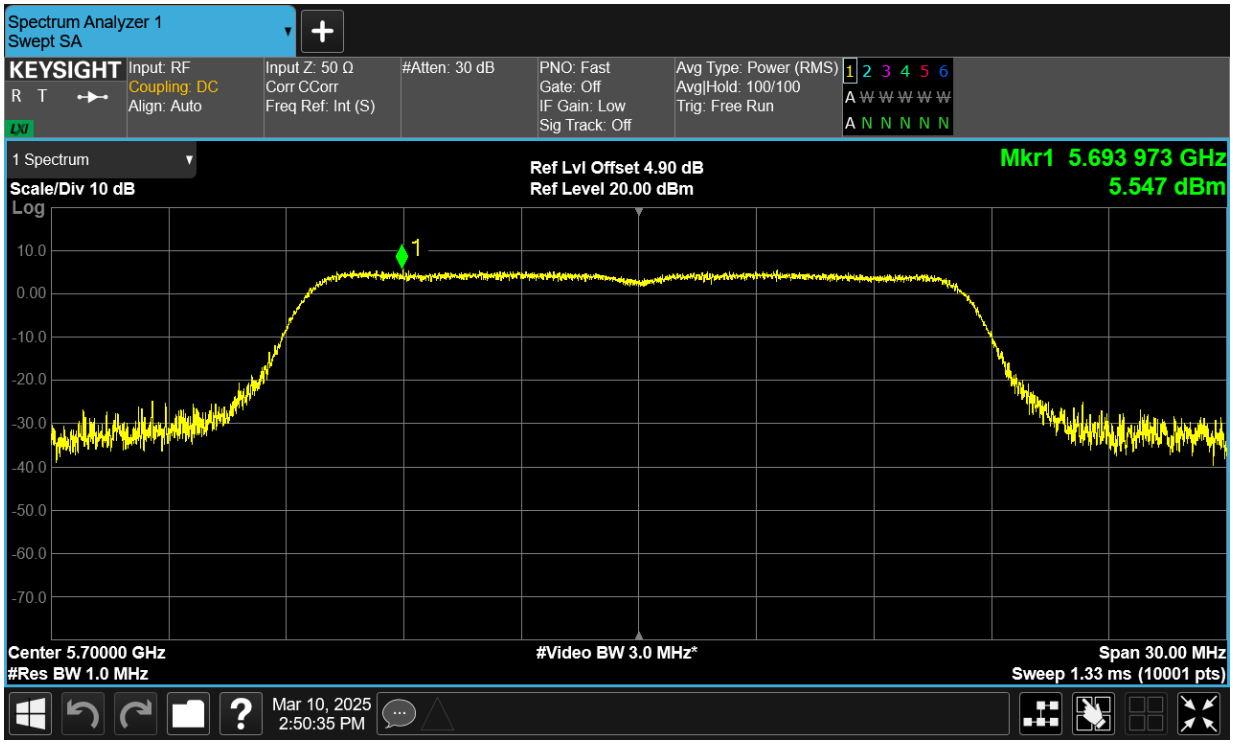
Test Graphs
PSD NVNT a 5500MHz Ant1



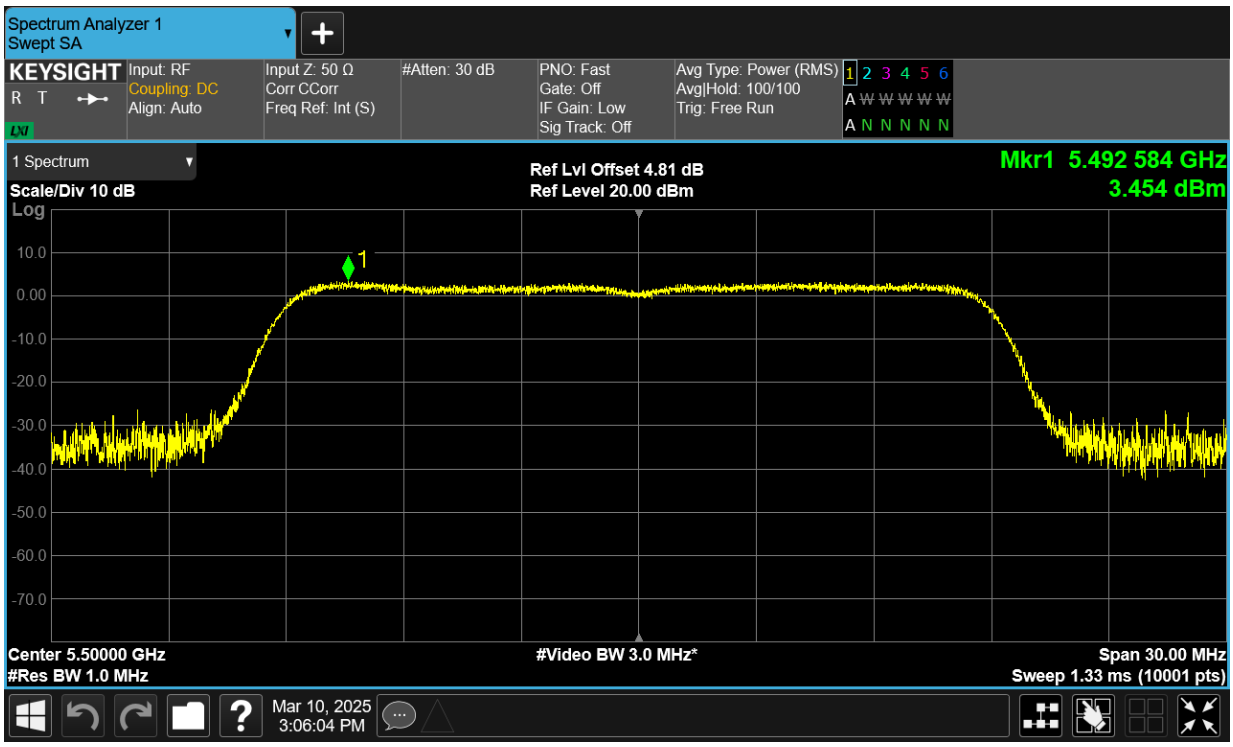
PSD NVNT a 5600MHz Ant1



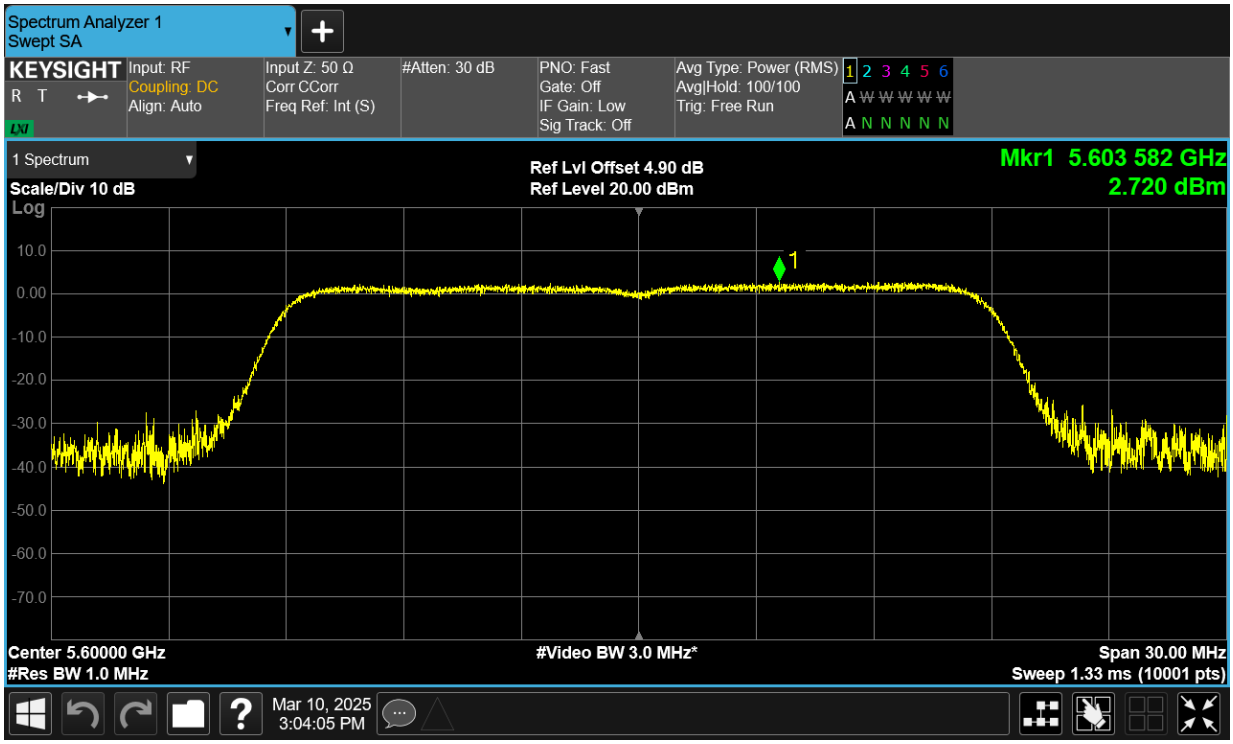
PSD NVNT a 5700MHz Ant1



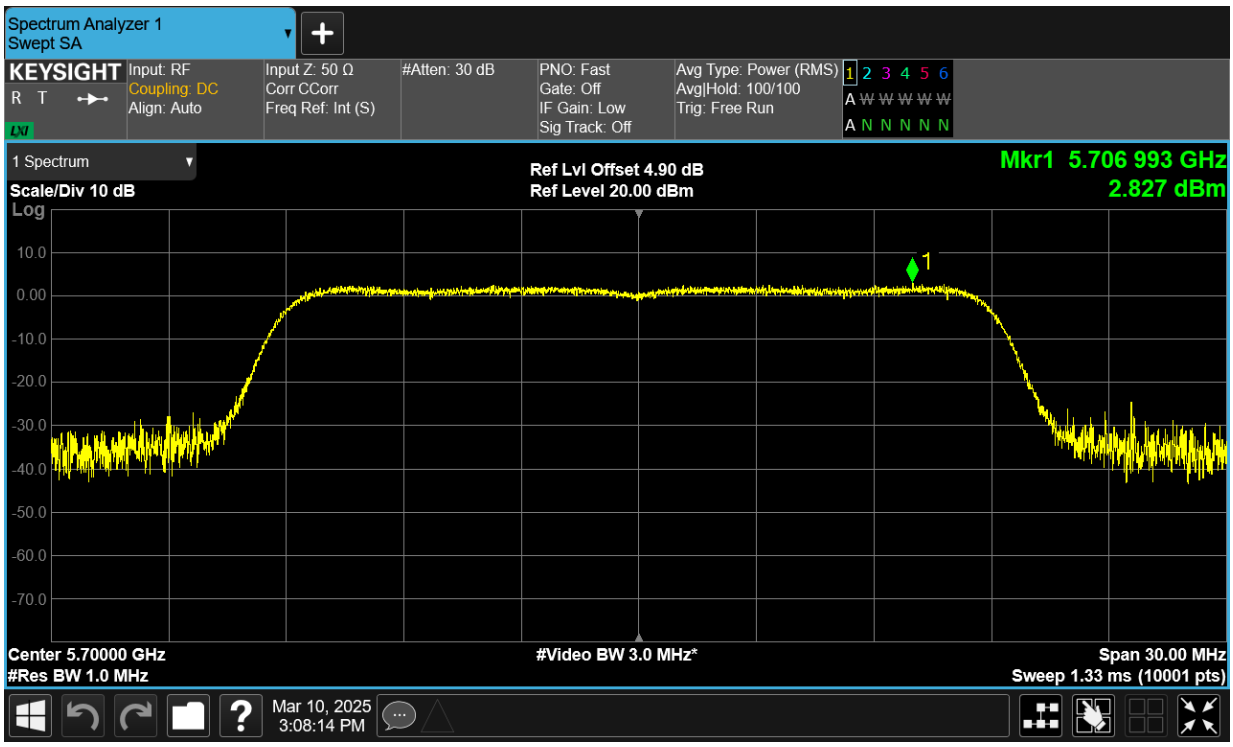
PSD NVNT ac20 5500MHz Ant1



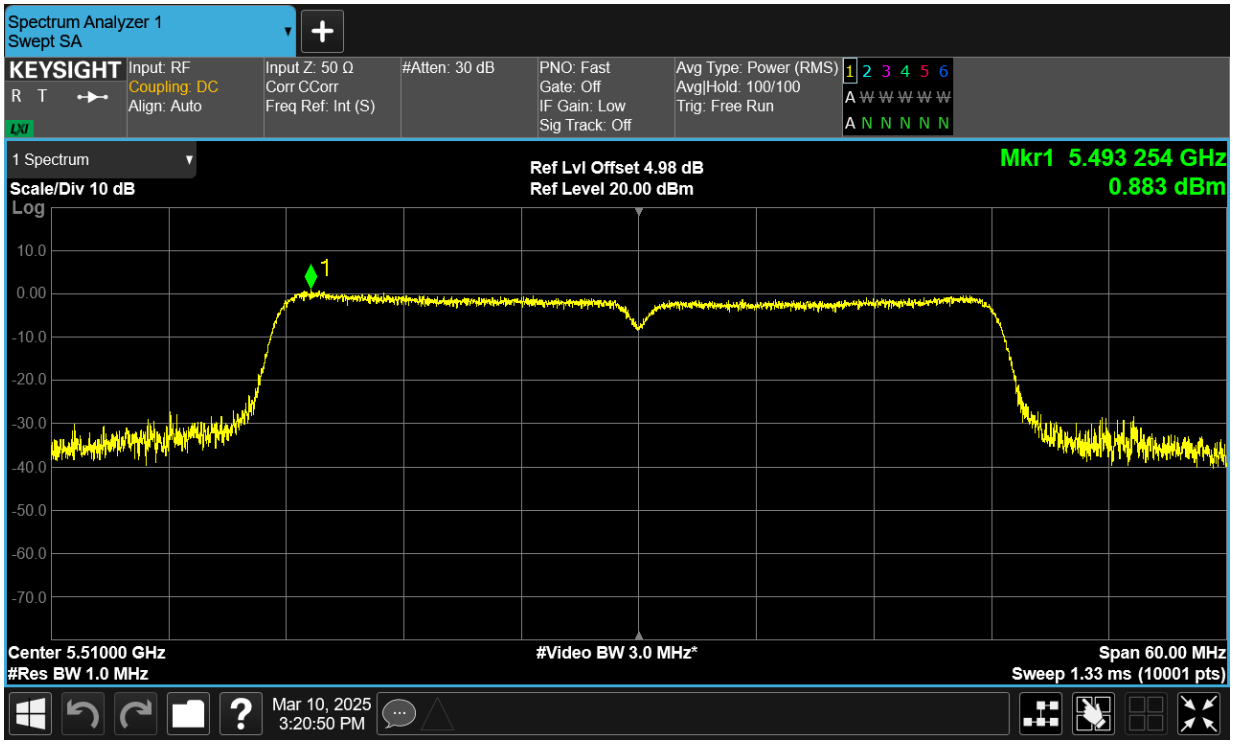
PSD NVNT ac20 5600MHz Ant1



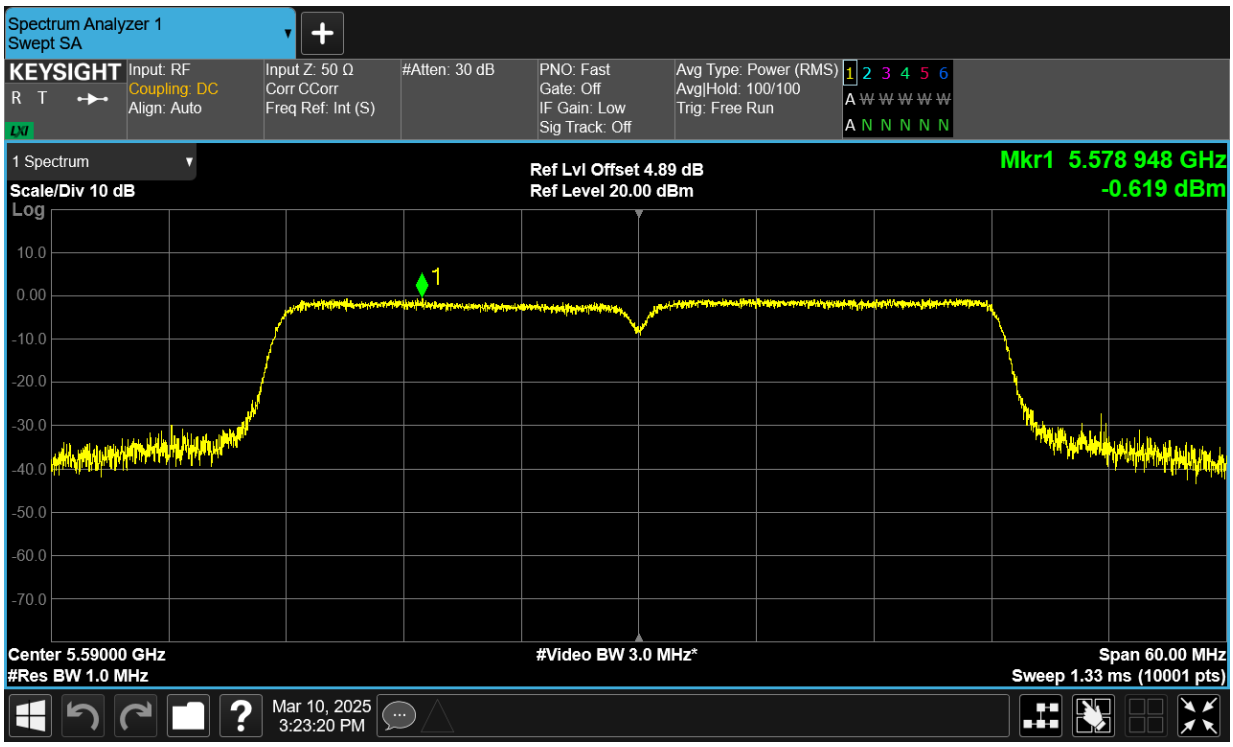
PSD NVNT ac20 5700MHz Ant1



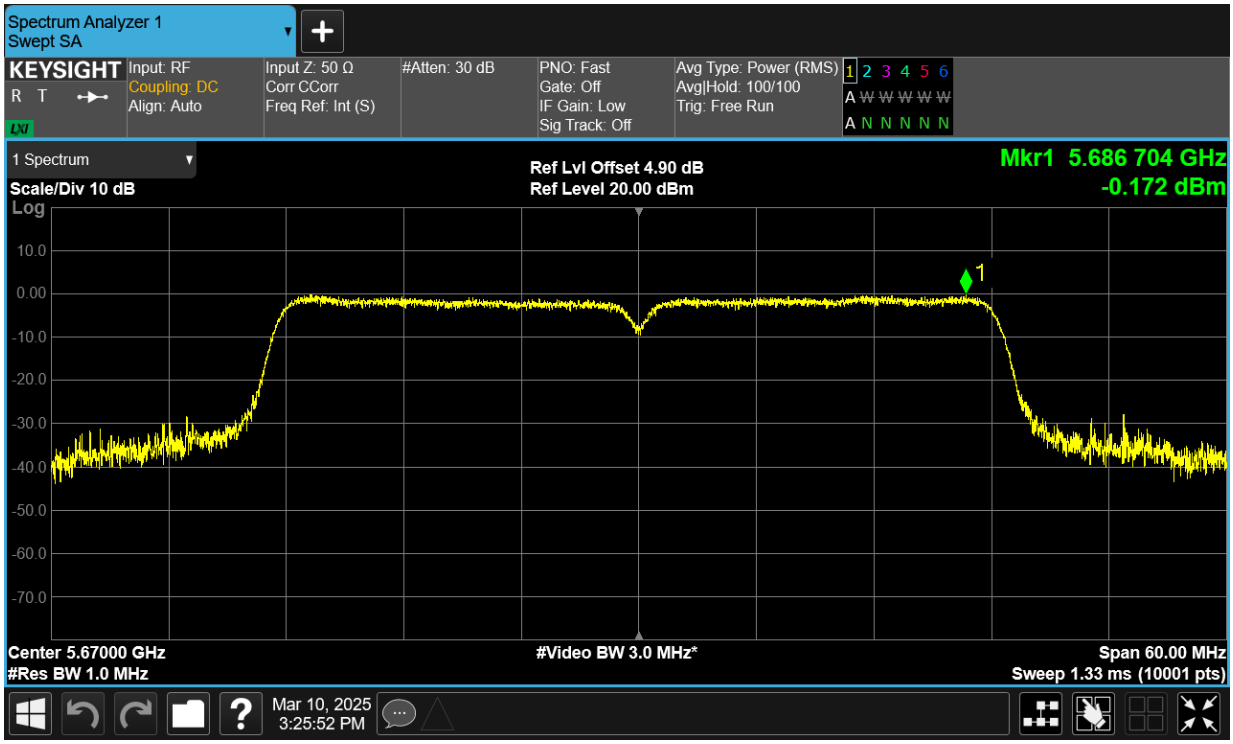
PSD NVNT ac40 5510MHz Ant1



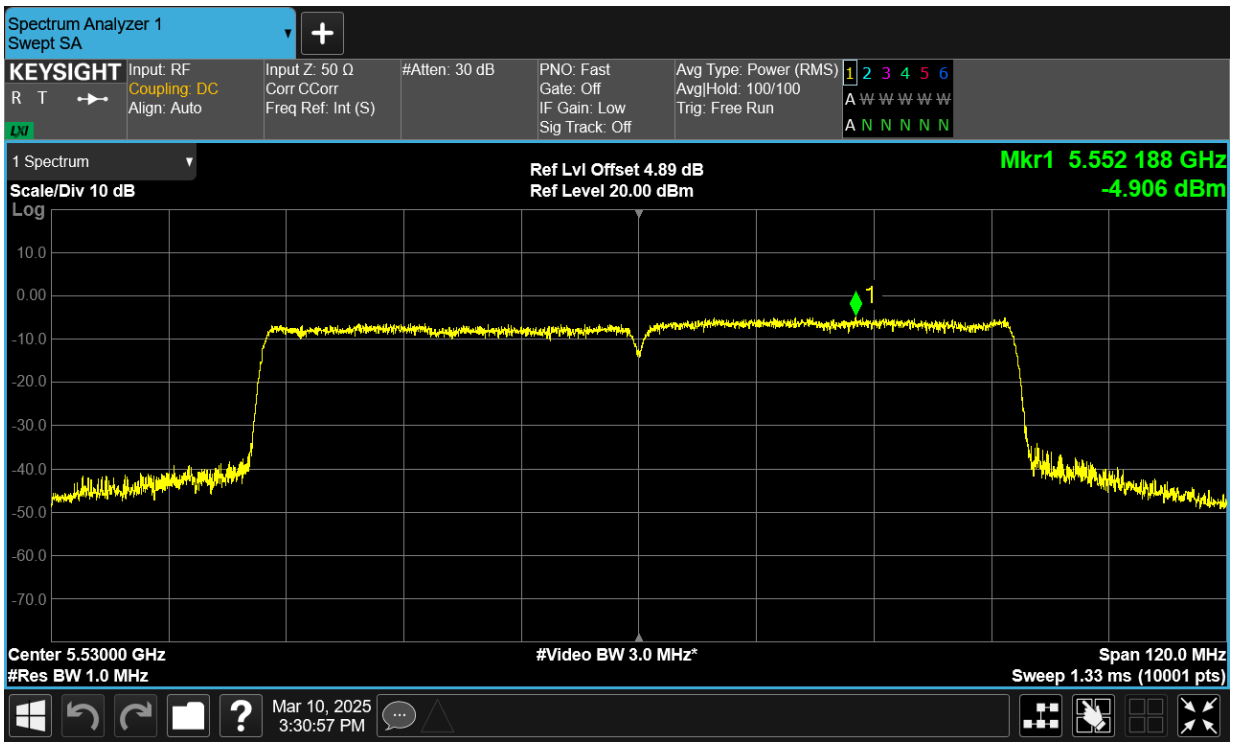
PSD NVNT ac40 5590MHz Ant1



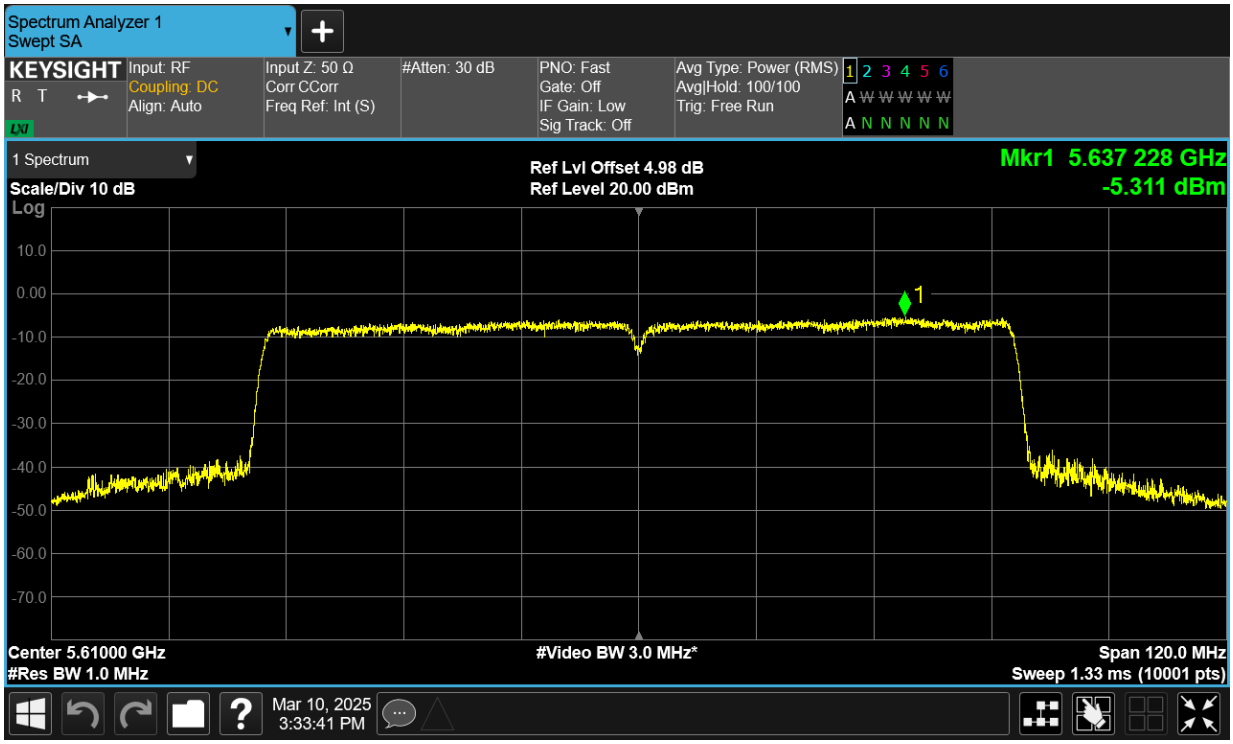
PSD NVNT ac40 5670MHz Ant1



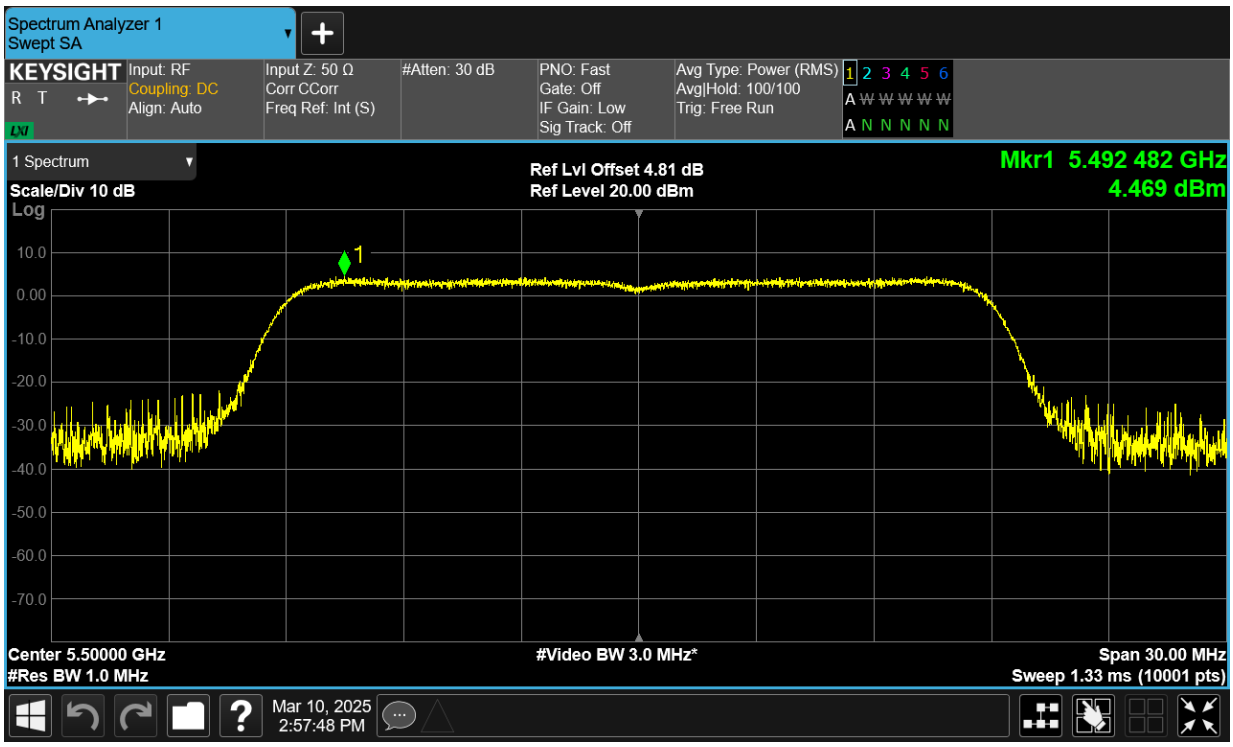
PSD NVNT ac80 5530MHz Ant1



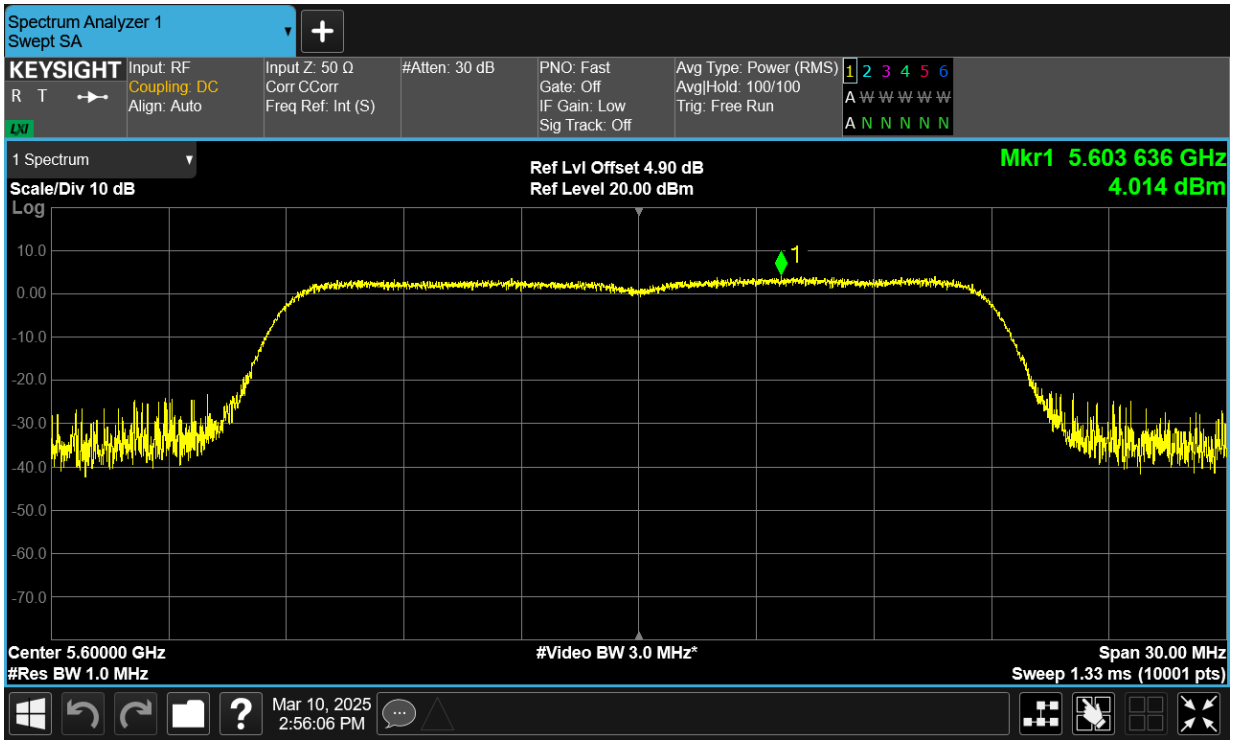
PSD NVNT ac80 5610MHz Ant1



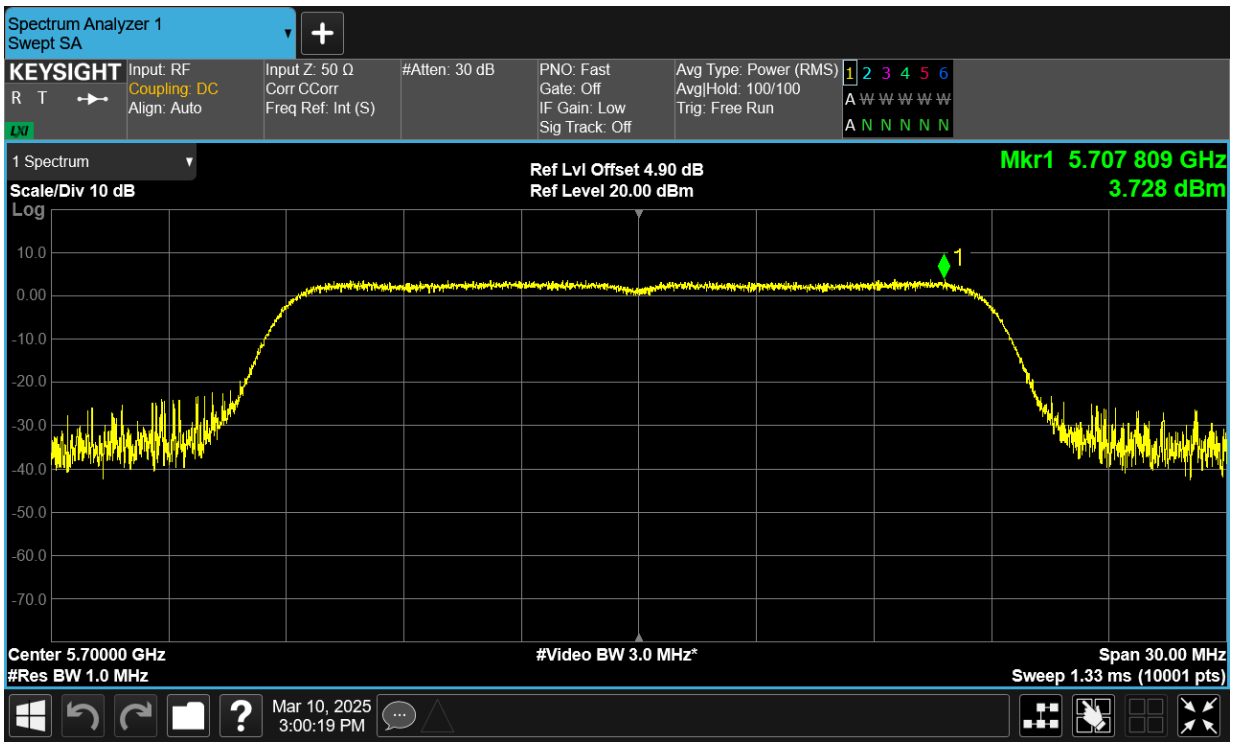
PSD NVNT n20 5500MHz Ant1



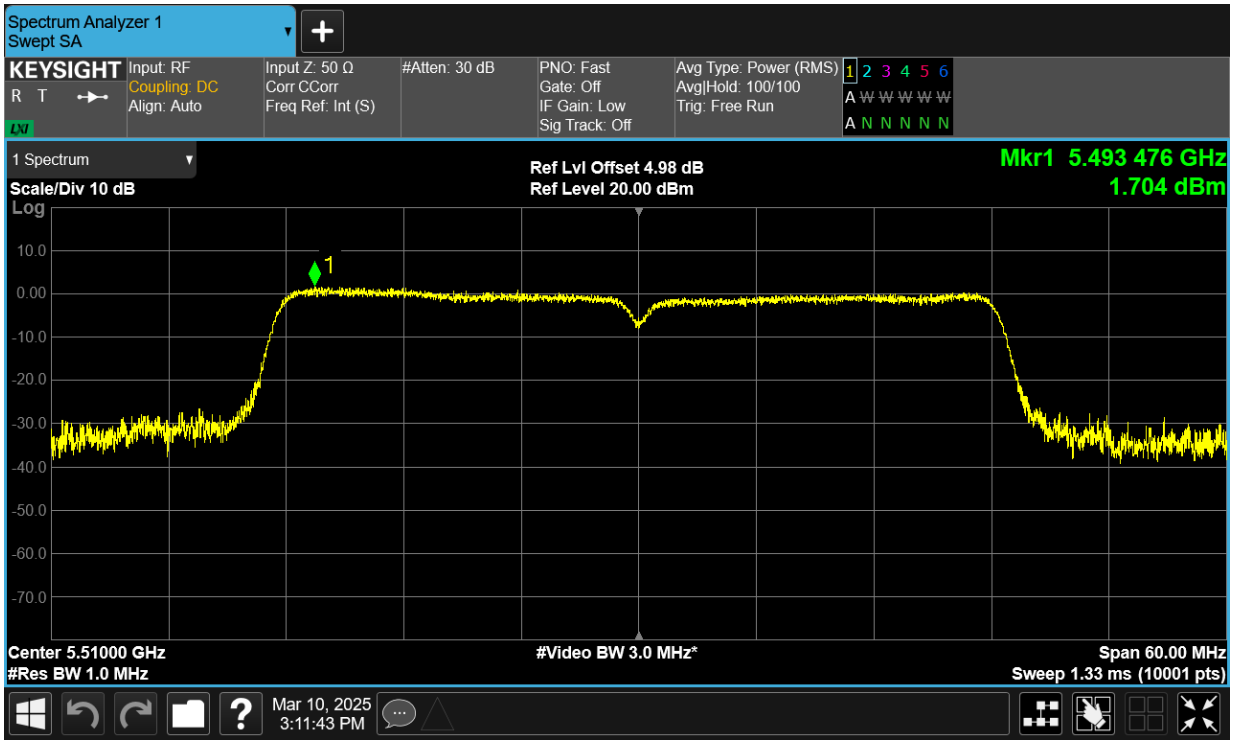
PSD NVNT n20 5600MHz Ant1



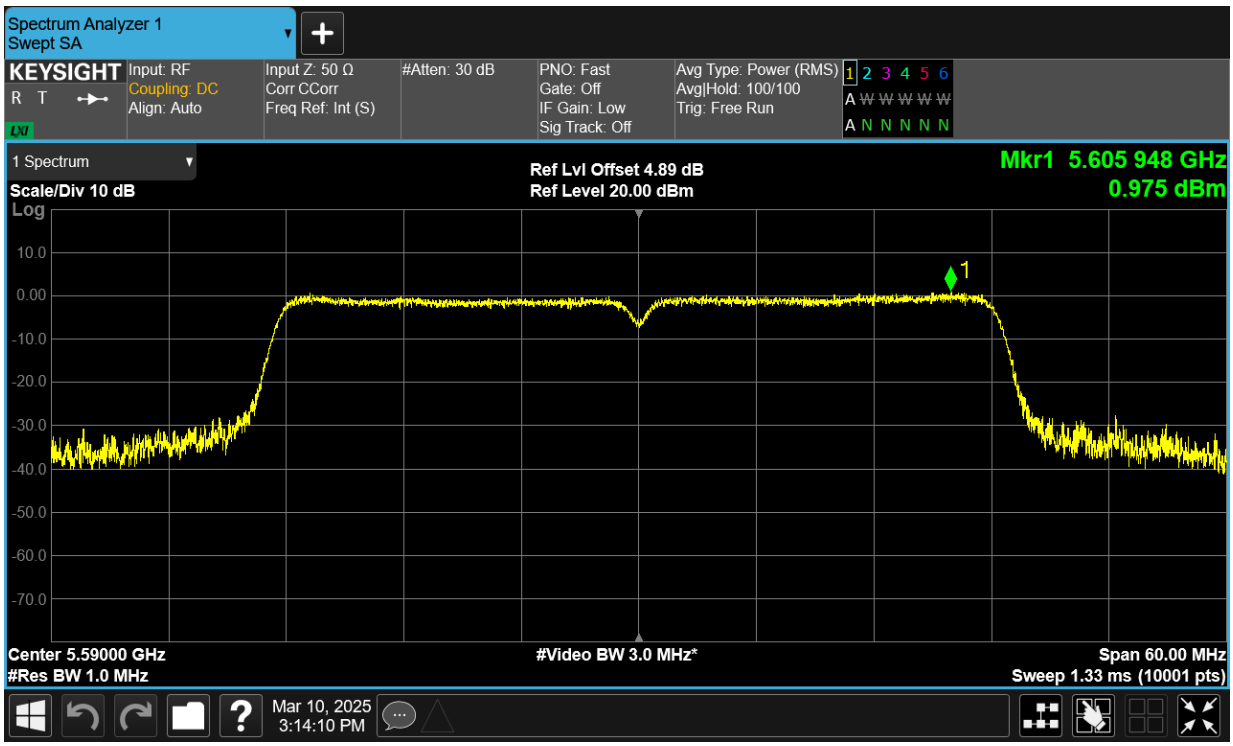
PSD NVNT n20 5700MHz Ant1



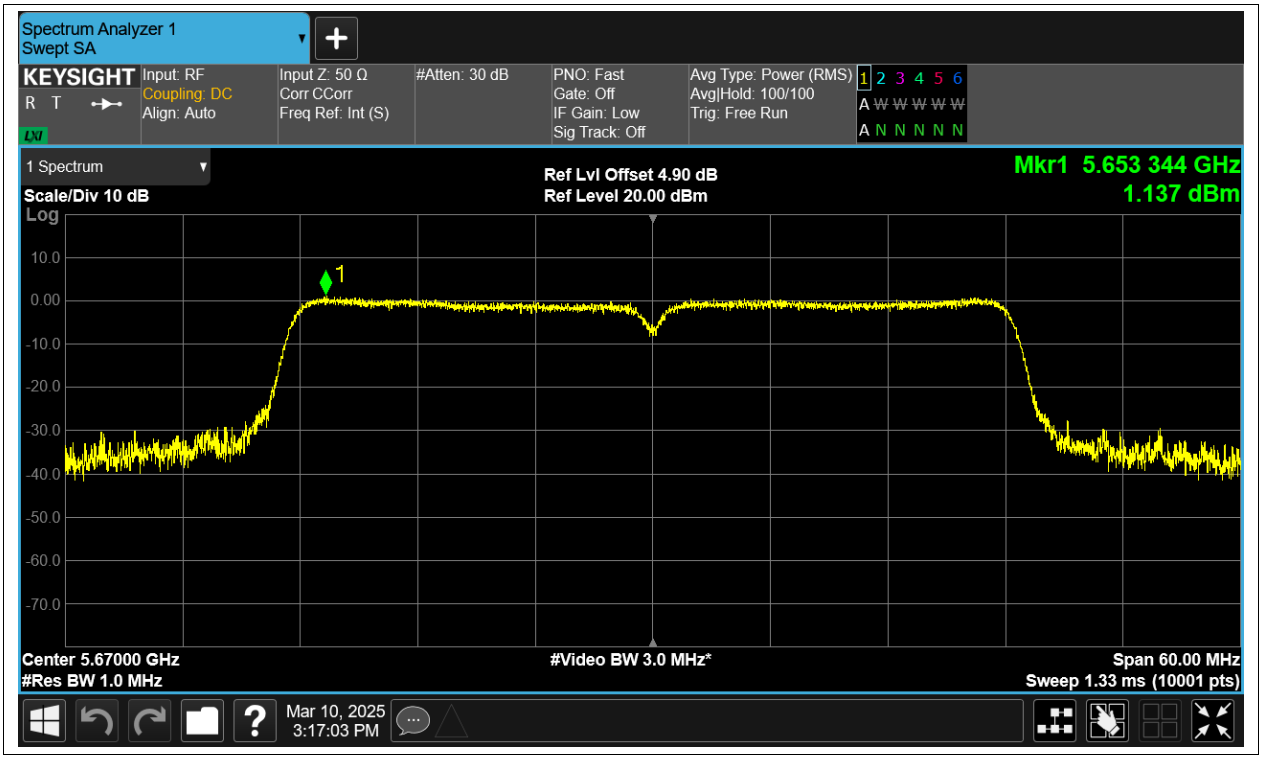
PSD NVNT n40 5510MHz Ant1



PSD NVNT n40 5590MHz Ant1



PSD NVNT n40 5670MHz 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: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 5.653 344 GHz
1.137 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.67000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Span 60.00 MHz
Sweep 1.33 ms (10001 pts)
Mar 10, 2025
3:17:03 PM