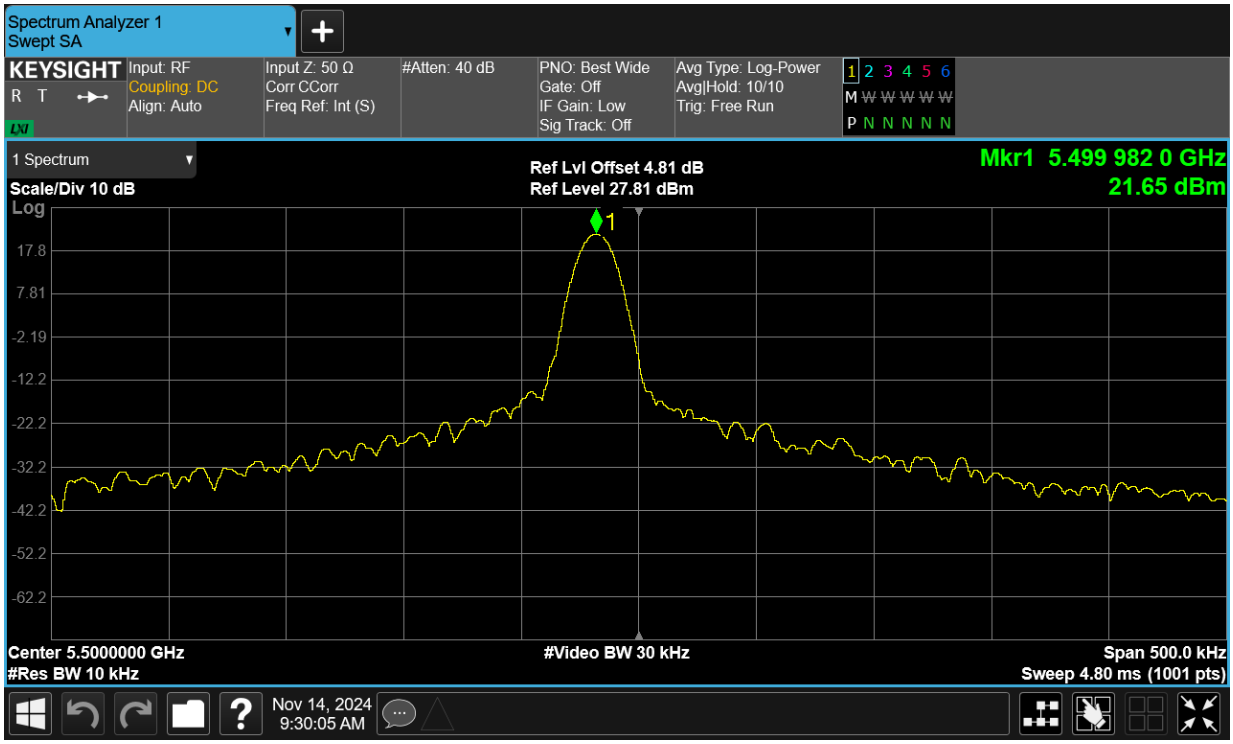
Test Data

Frequency Stability

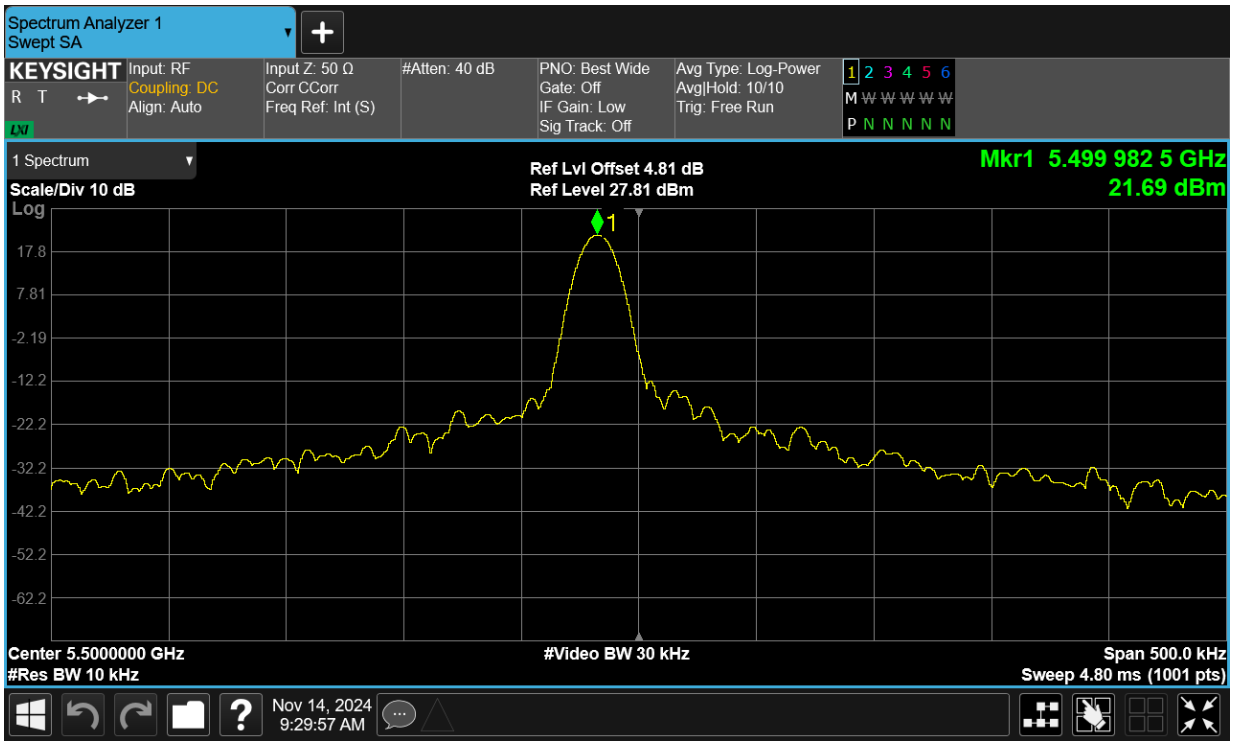
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5500	Ant1	5499.982	-3.27	Within authorized band	Pass
LVNT	a	5500	Ant1	5499.9825	-3.18		Pass
NVHT	a	5500	Ant1	5499.983	-3.09		Pass
NVLT	a	5500	Ant1	5499.9835	-3		Pass
NVNT	a	5500	Ant1	5499.984	-2.91		Pass
HVNT	ac80	5530	Ant1	5529.9805	-3.53		Pass
LVNT	ac80	5530	Ant1	5529.981	-3.44		Pass
NVHT	ac80	5530	Ant1	5529.981	-3.44		Pass
NVLT	ac80	5530	Ant1	5529.981	-3.44		Pass
NVNT	ac80	5530	Ant1	5529.9815	-3.35		Pass
HVNT	n40	5510	Ant1	5509.9815	-3.36		Pass
LVNT	n40	5510	Ant1	5509.9825	-3.18		Pass
NVHT	n40	5510	Ant1	5509.9835	-2.99		Pass
NVLT	n40	5510	Ant1	5509.982	-3.27		Pass
NVNT	n40	5510	Ant1	5509.9825	-3.18		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

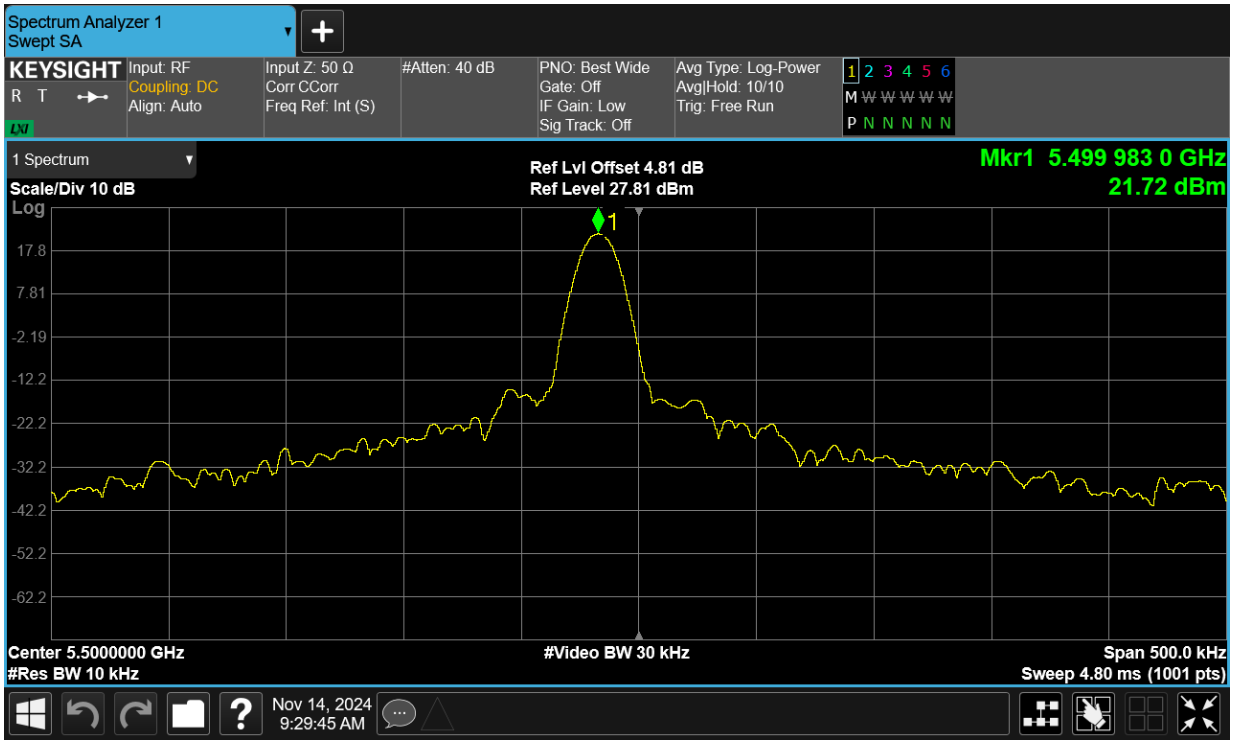
Freq. Stability HVNT a 5500MHz Ant1



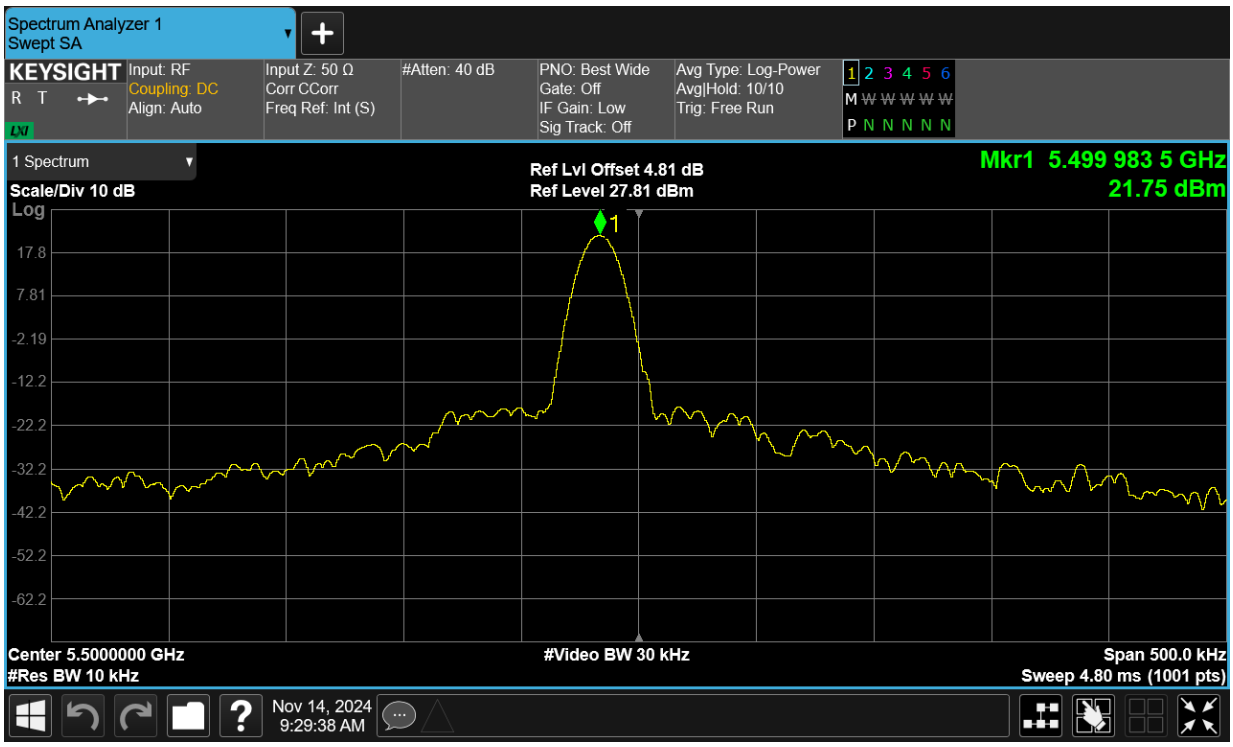
Freq. Stability LVNT a 5500MHz Ant1



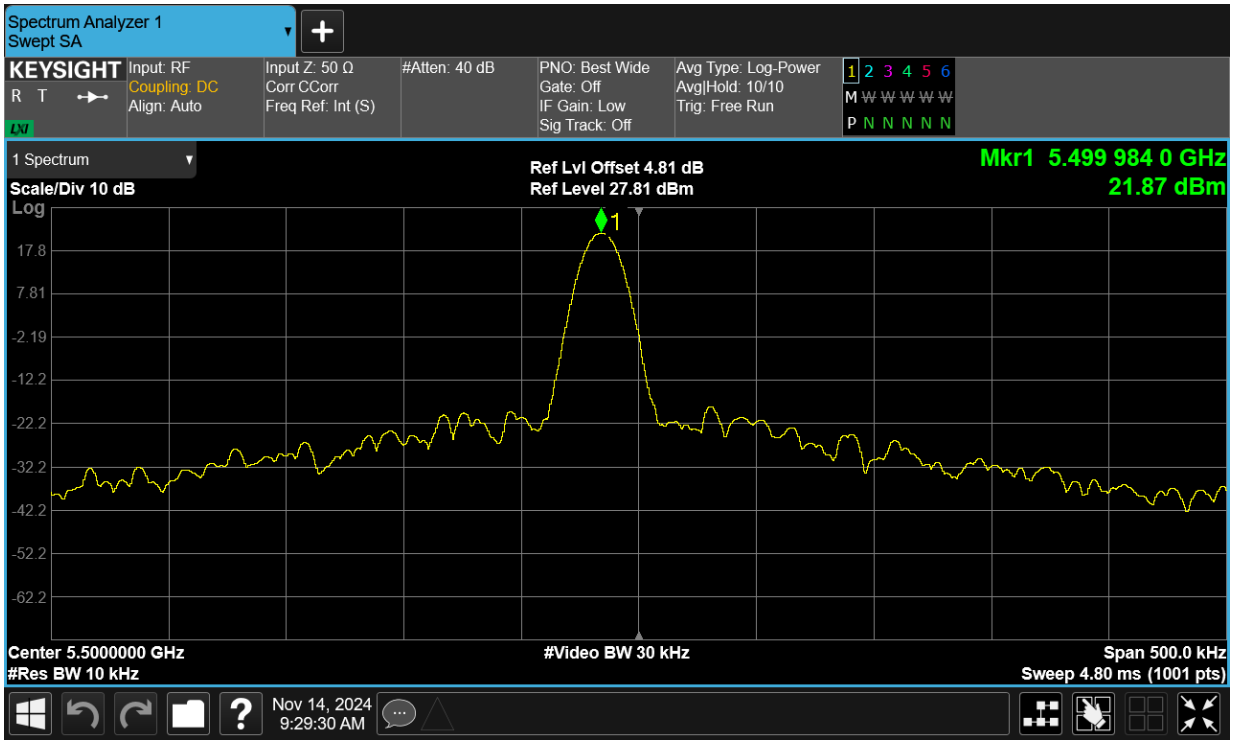
Freq. Stability NVHT a 5500MHz Ant1



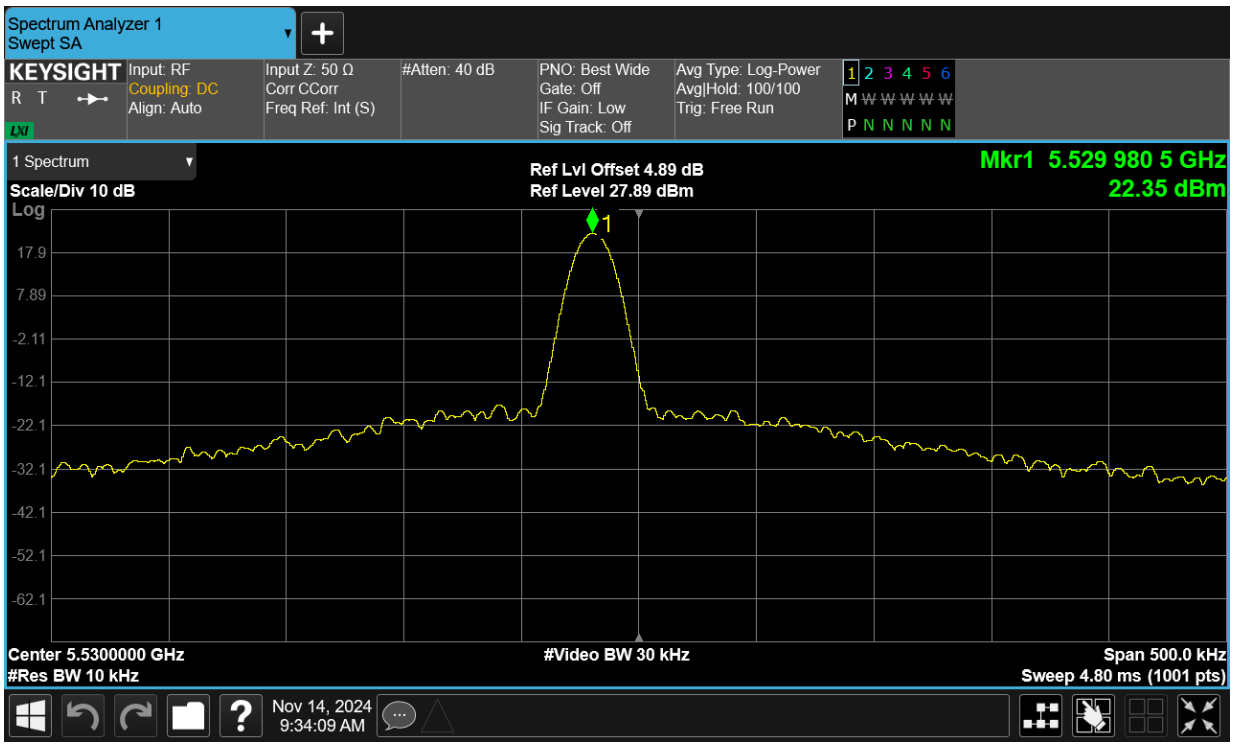
Freq. Stability NVLT a 5500MHz Ant1



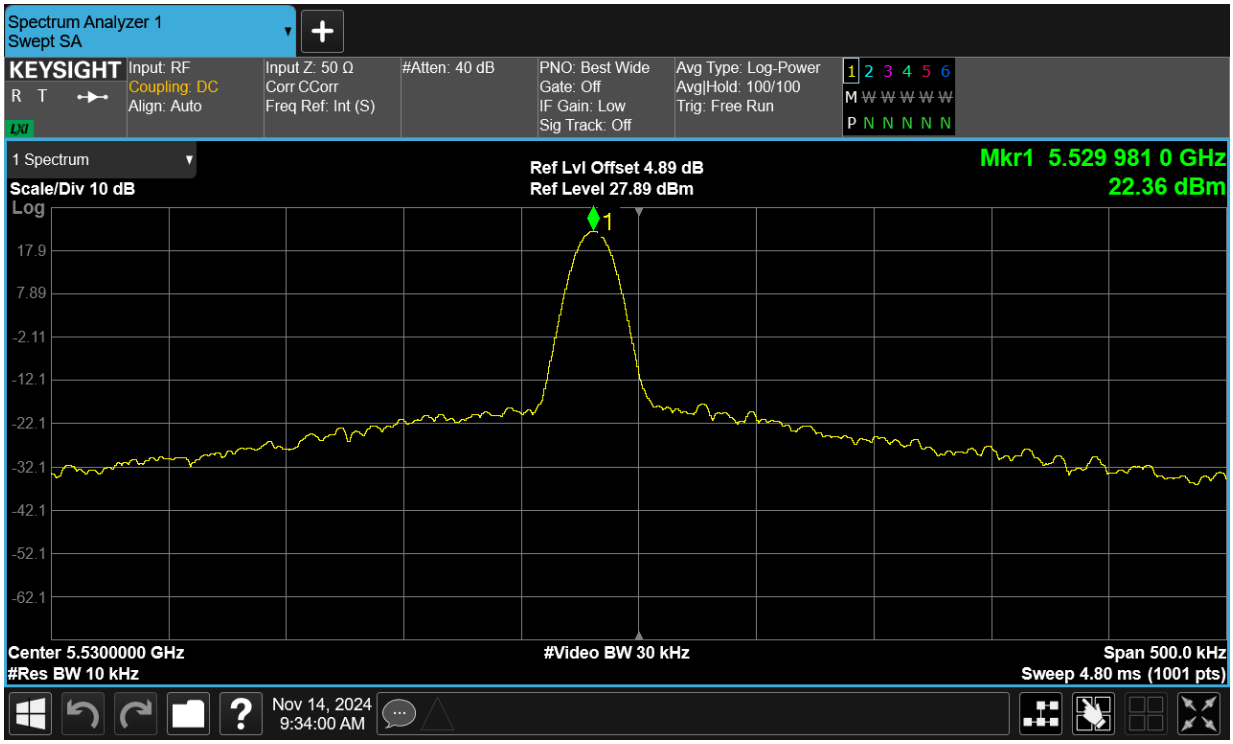
Freq. Stability NVNT a 5500MHz Ant1



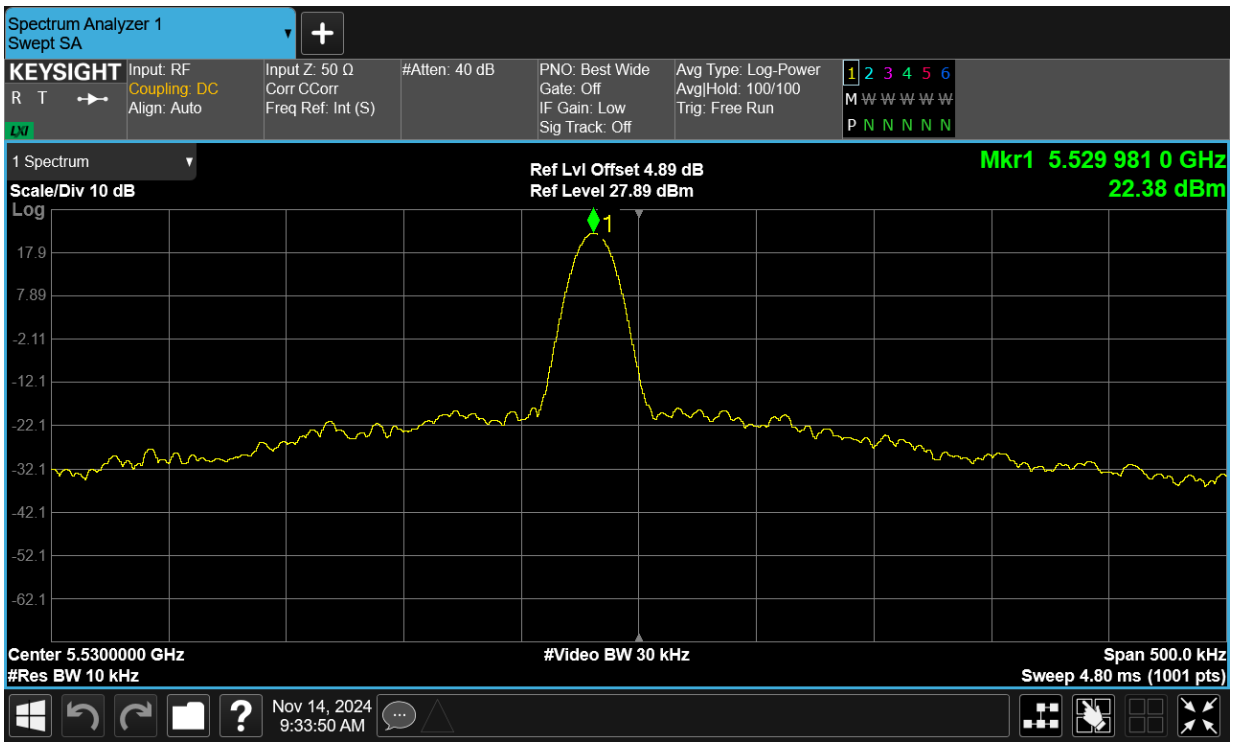
Freq. Stability HVNT ac80 5530MHz Ant1



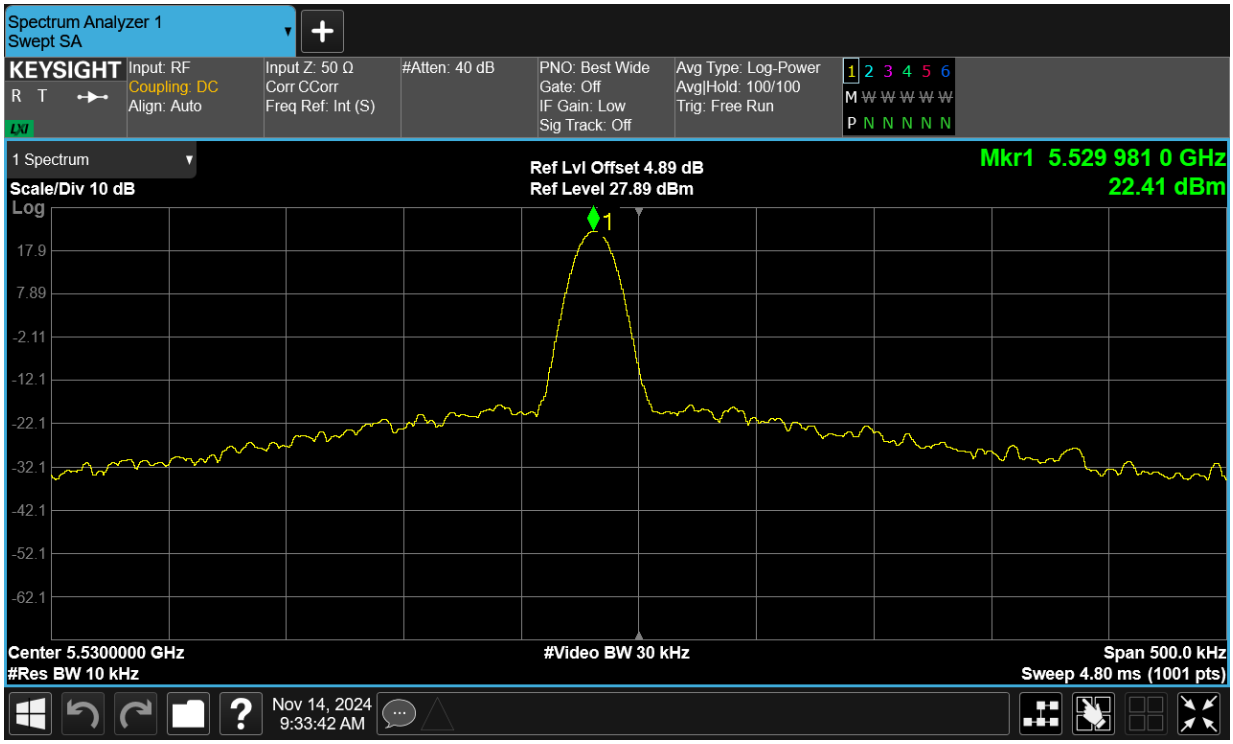
Freq. Stability LVNT ac80 5530MHz Ant1



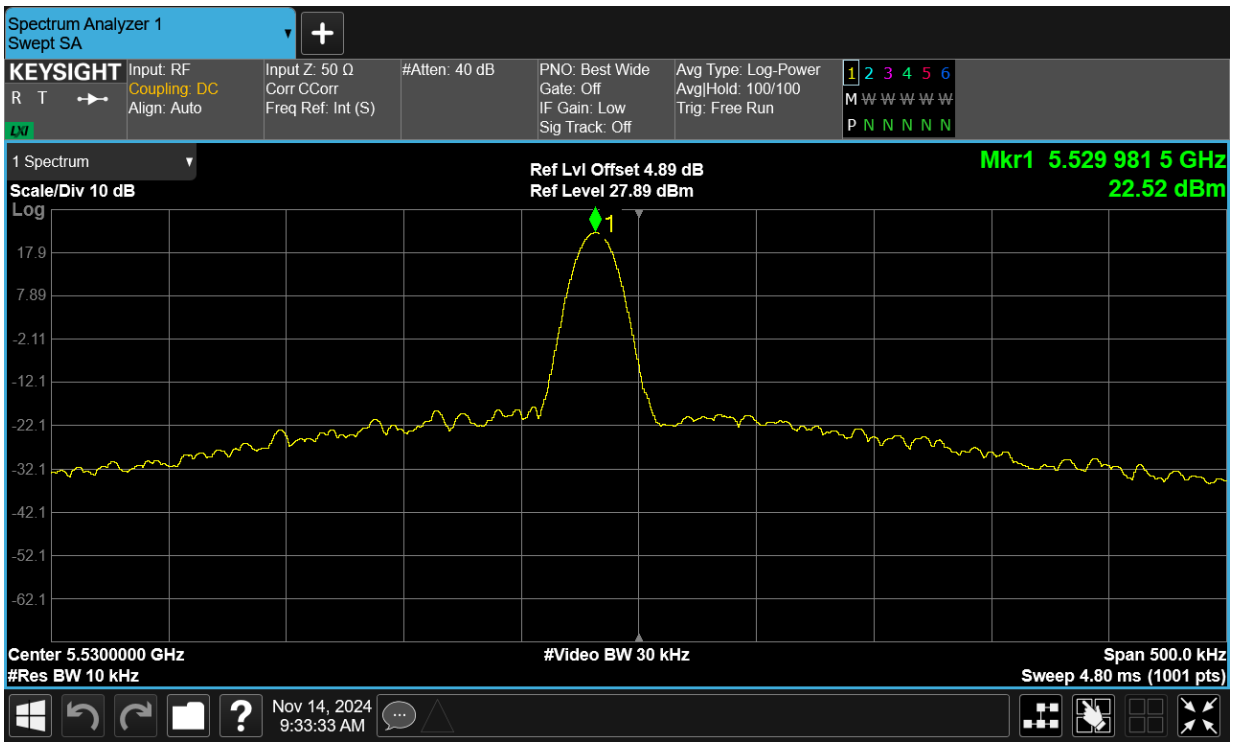
Freq. Stability NVHT ac80 5530MHz Ant1



Freq. Stability NVLT ac80 5530MHz Ant1

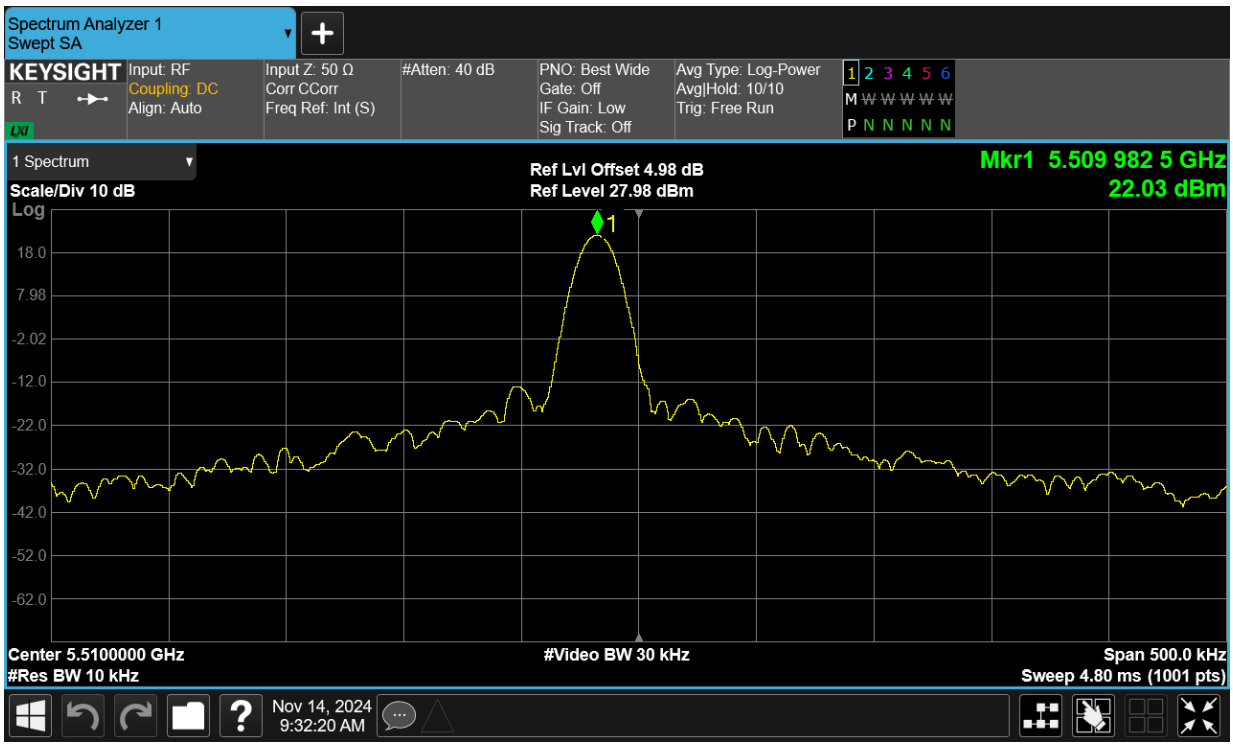


Freq. Stability NVNT ac80 5530MHz Ant1

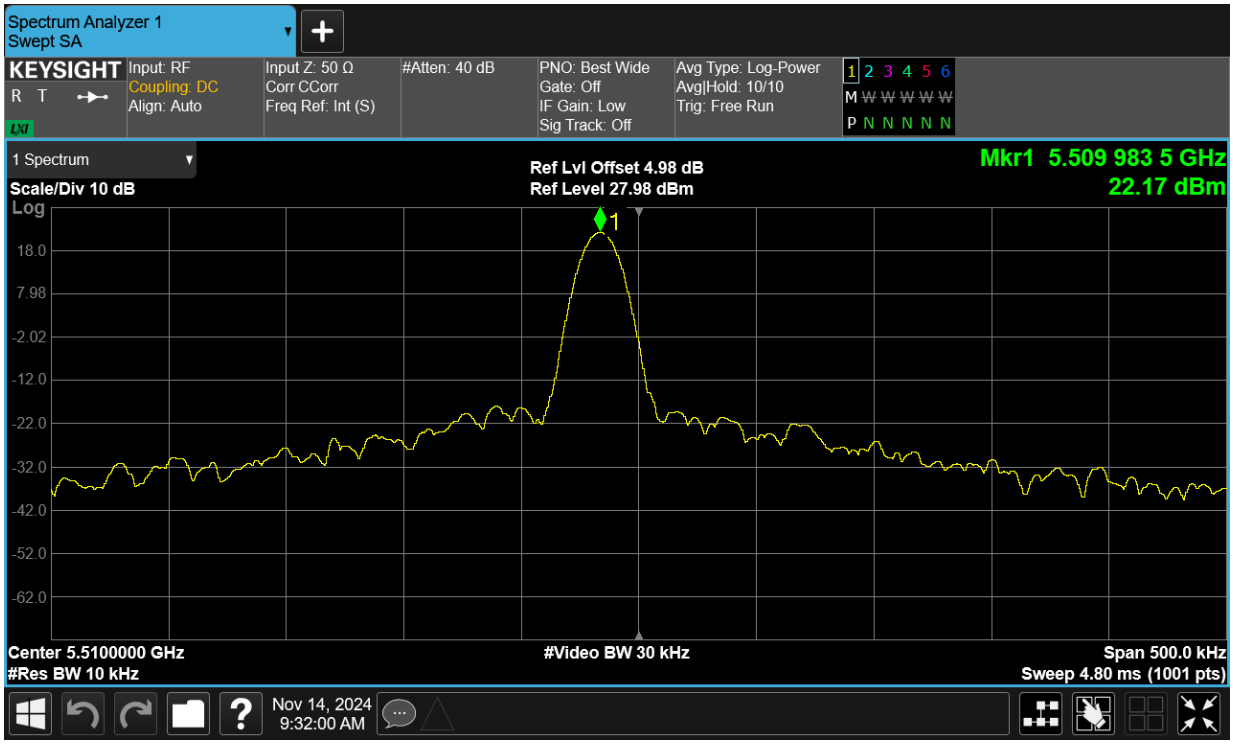


Freq. Stability HVNT n40 5510MHz Ant1

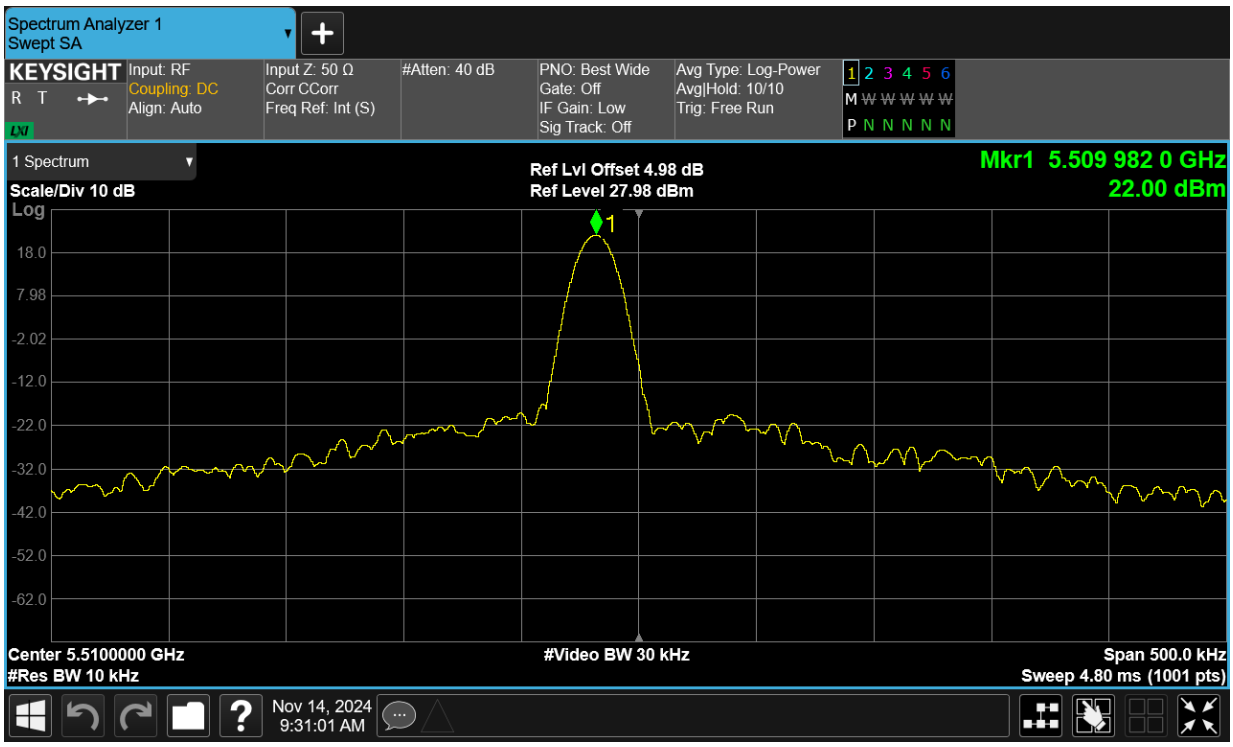
Freq. Stability LVNT n40 5510MHz Ant1



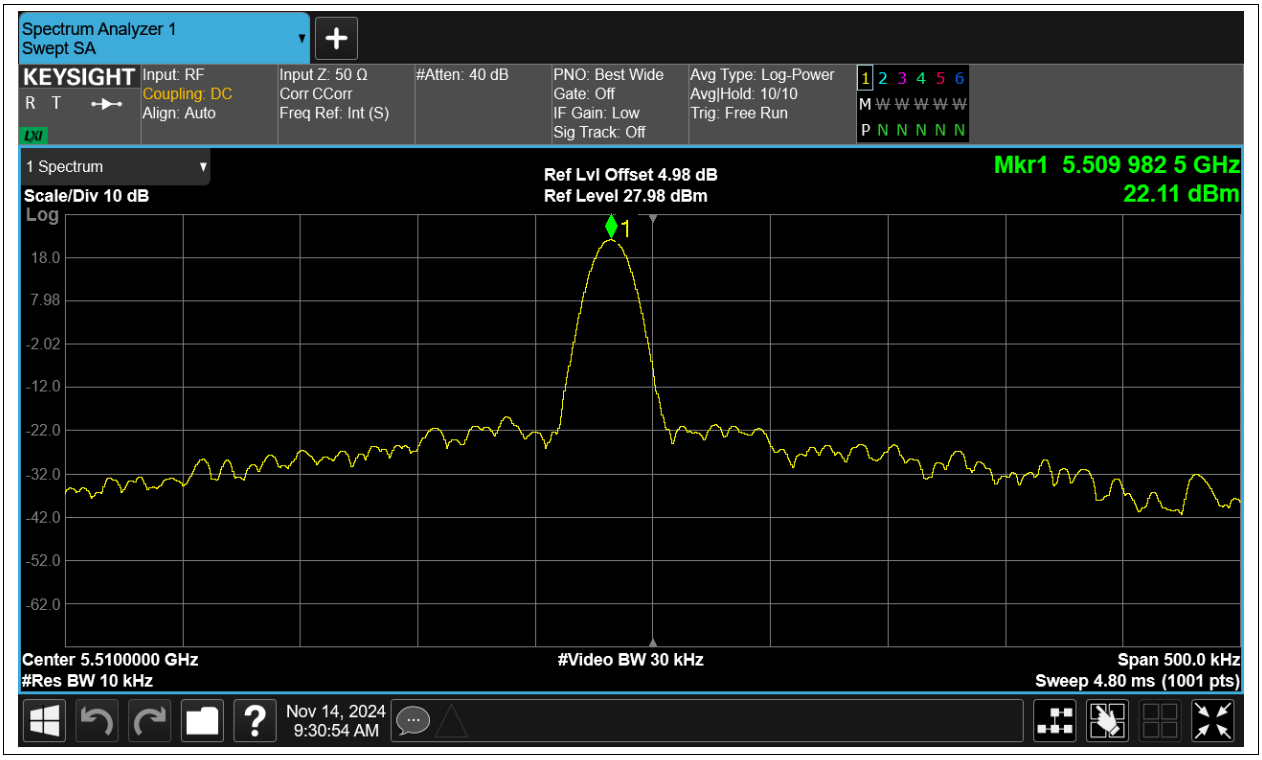
Freq. Stability NVHT n40 5510MHz Ant1



Freq. Stability NVLT n40 5510MHz Ant1



Freq. Stability NVNT n40 5510MHz Ant1

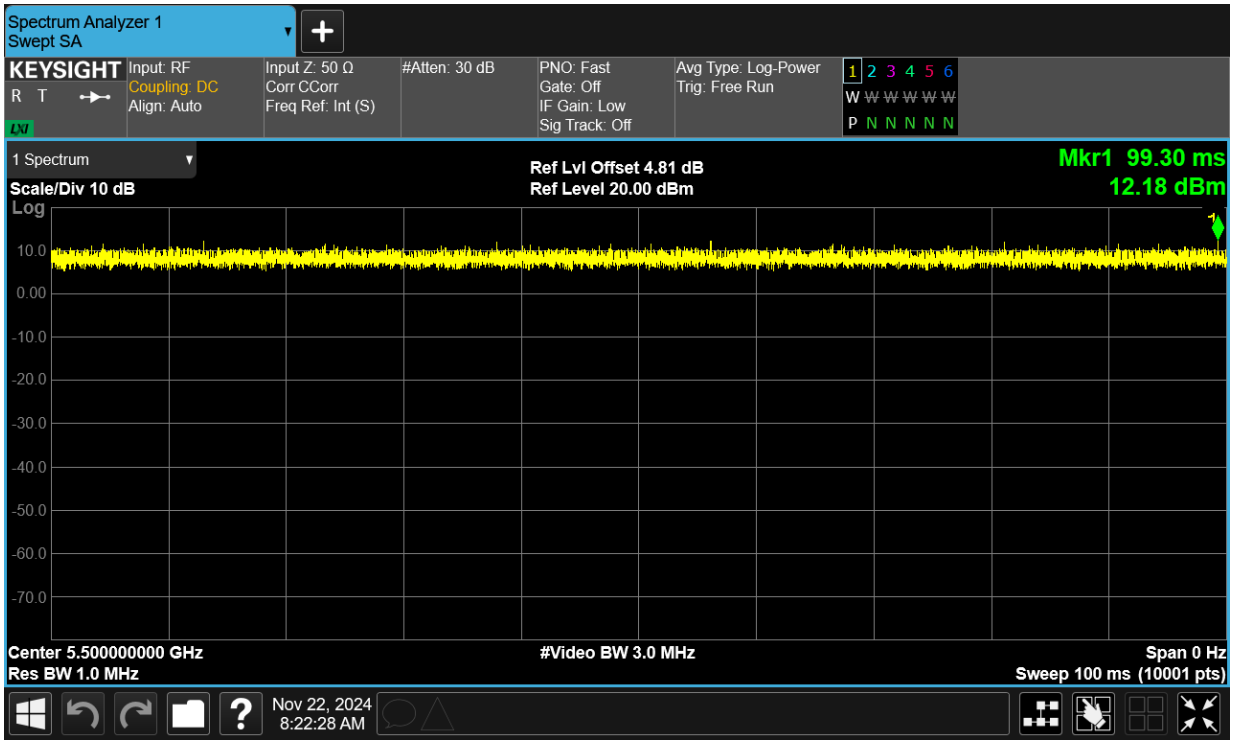

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 4.98 dB
Ref Level 27.98 dBm
Mkr1 5.509 982 5 GHz
22.11 dBm
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)
Nov 14, 2024
9:30:54 AM

Duty Cycle

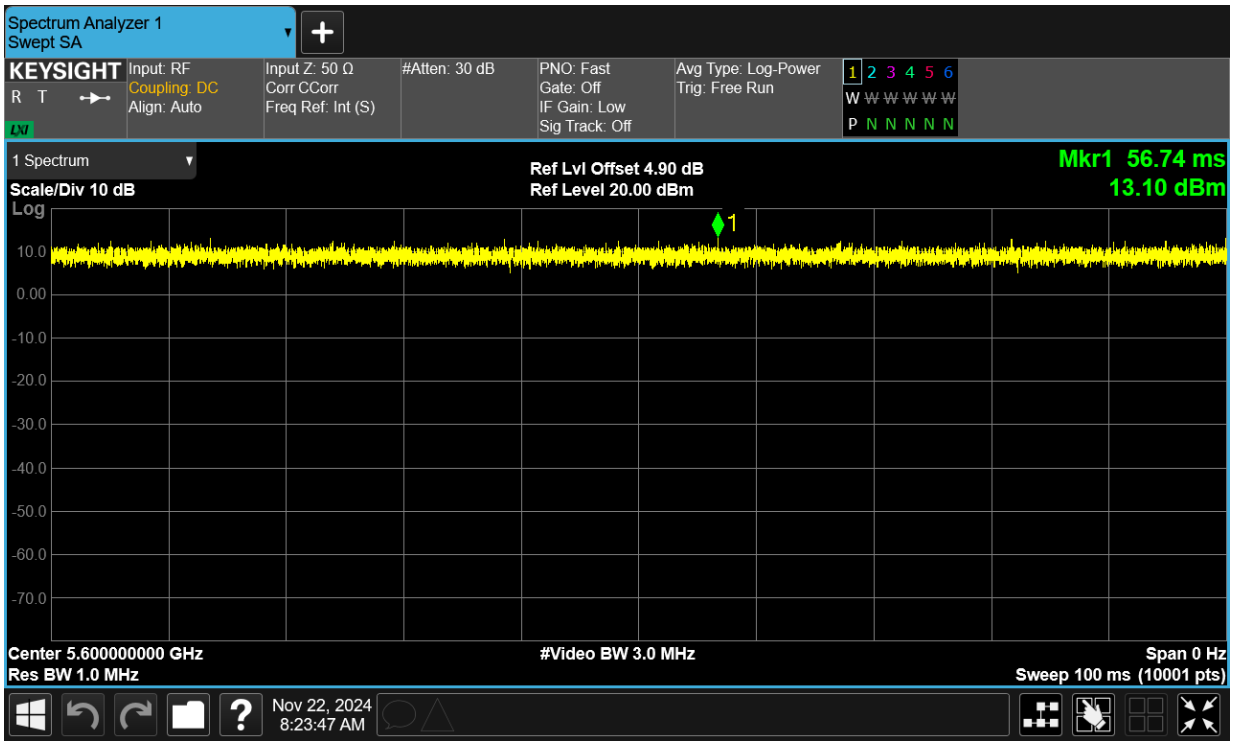
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant1	100	0
NVNT	a	5600	Ant1	100	0
NVNT	a	5700	Ant1	100	0
NVNT	ac20	5500	Ant1	100	0
NVNT	ac20	5600	Ant1	100	0
NVNT	ac20	5700	Ant1	100	0
NVNT	ac40	5510	Ant1	100	0
NVNT	ac40	5590	Ant1	100	0
NVNT	ac40	5670	Ant1	100	0
NVNT	ac80	5530	Ant1	100	0
NVNT	ac80	5610	Ant1	100	0
NVNT	n20	5500	Ant1	100	0
NVNT	n20	5600	Ant1	100	0
NVNT	n20	5700	Ant1	100	0
NVNT	n40	5510	Ant1	100	0
NVNT	n40	5590	Ant1	100	0
NVNT	n40	5670	Ant1	100	0

Test Graphs

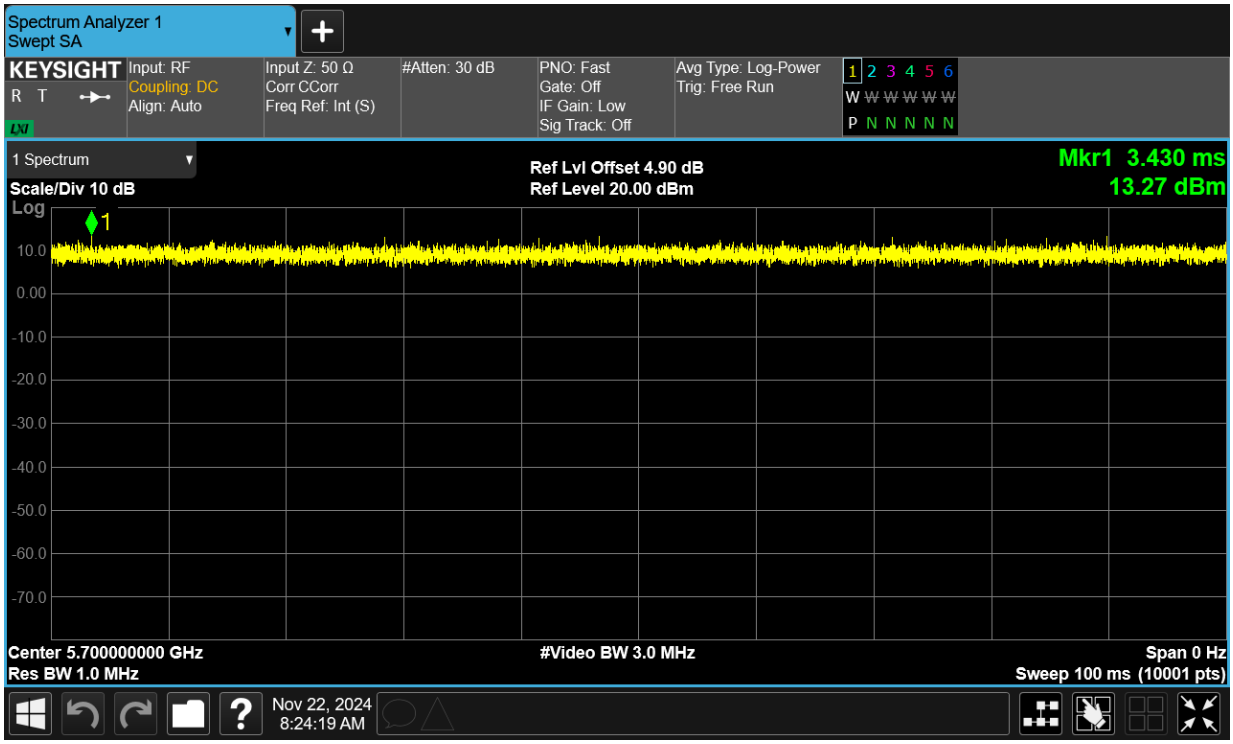
Duty Cycle NVNT a 5500MHz Ant1



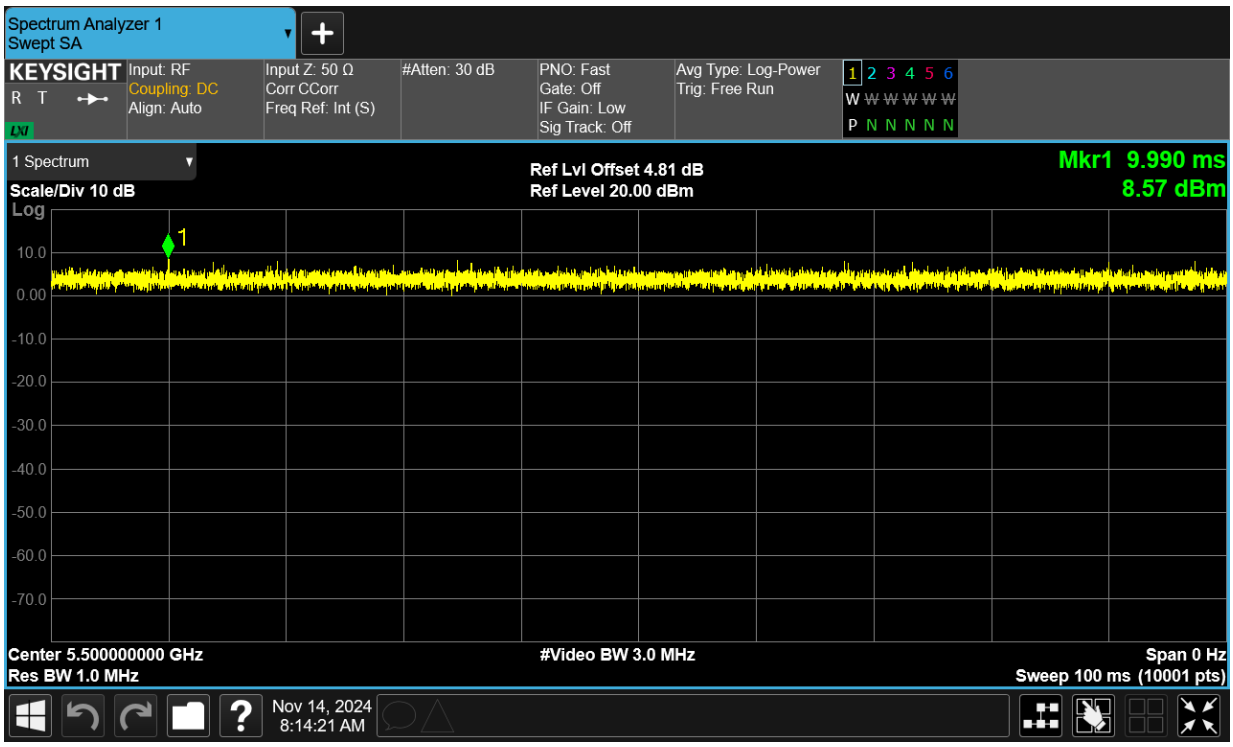
Duty Cycle NVNT a 5600MHz Ant1



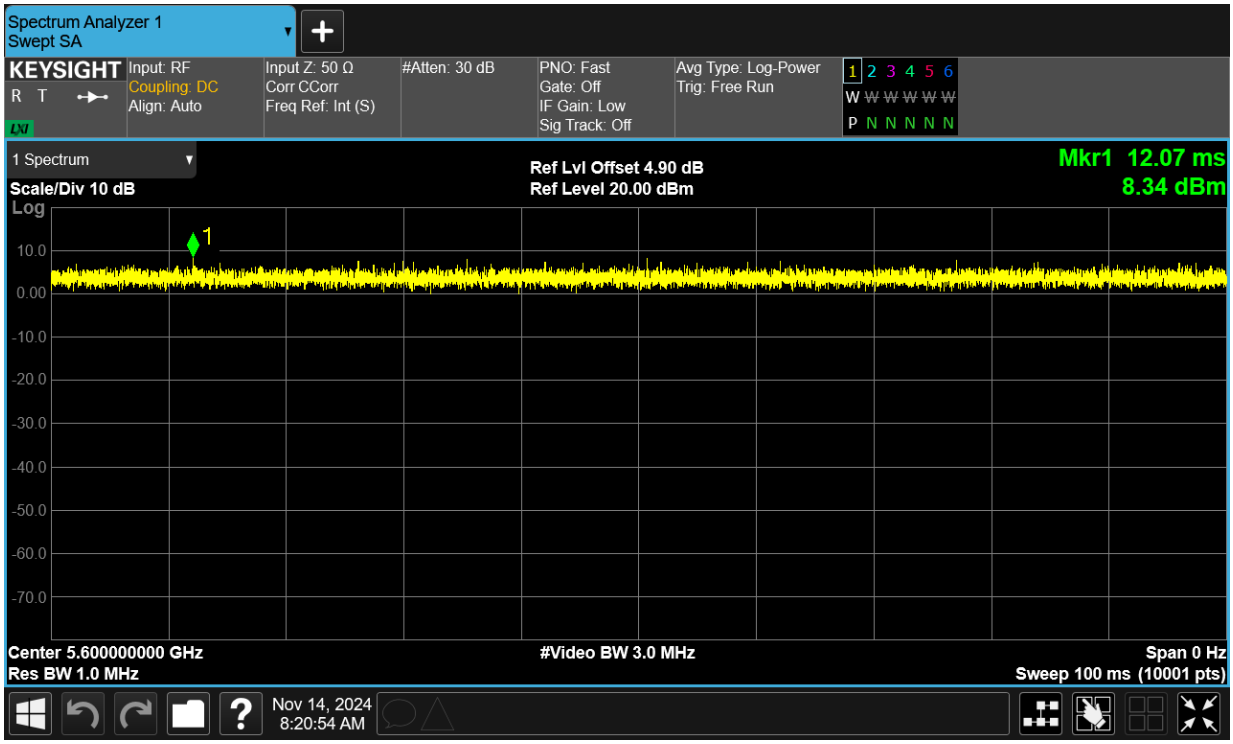
Duty Cycle NVNT a 5700MHz Ant1



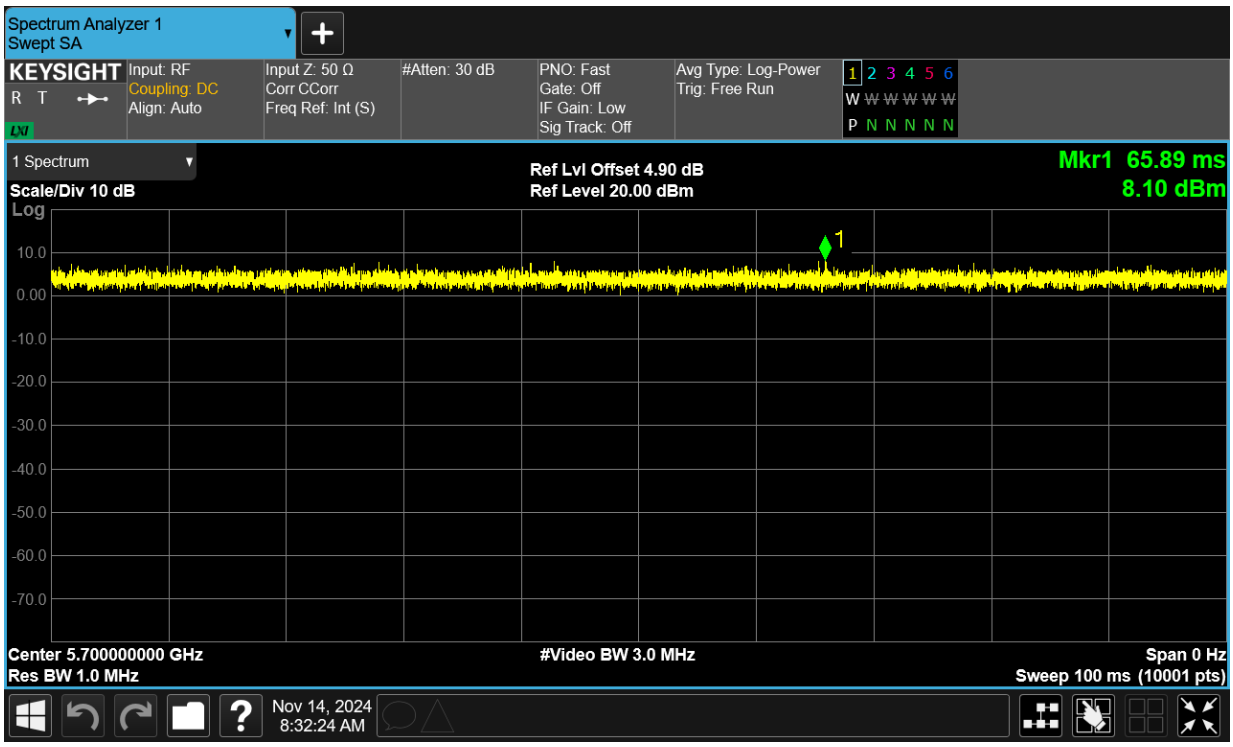
Duty Cycle NVNT ac20 5500MHz Ant1



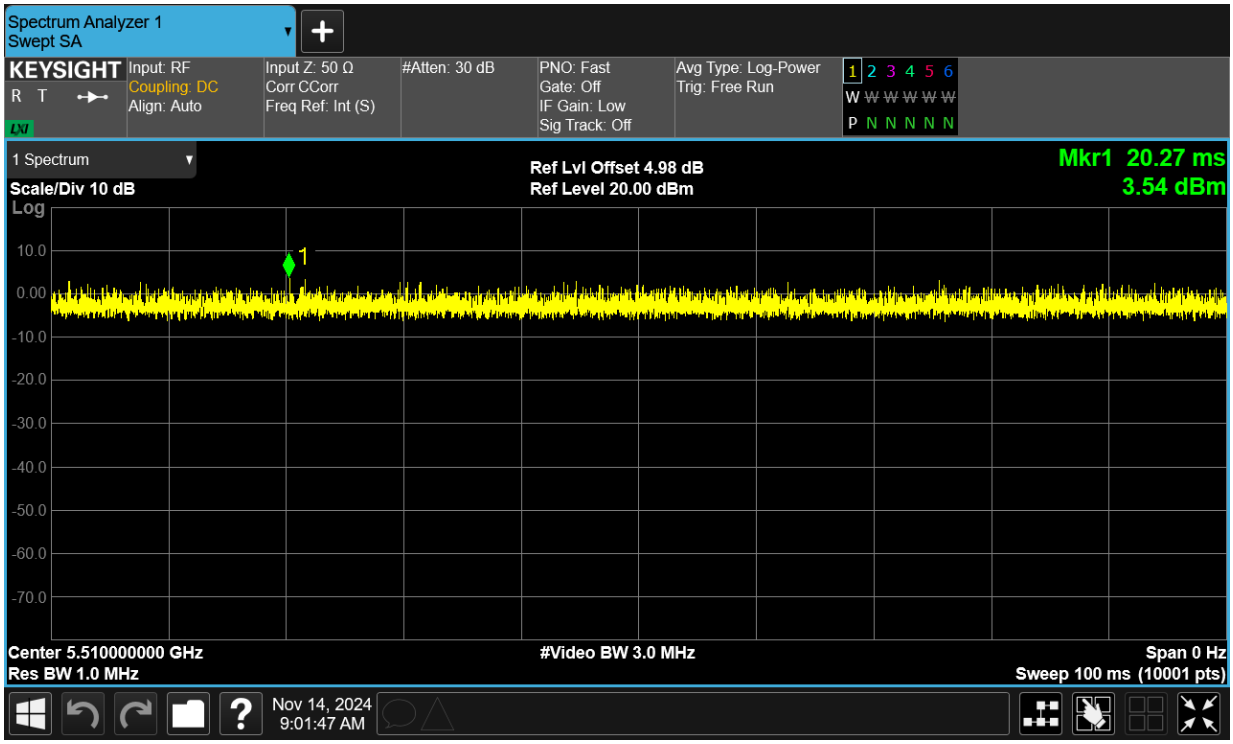
Duty Cycle NVNT ac20 5600MHz Ant1



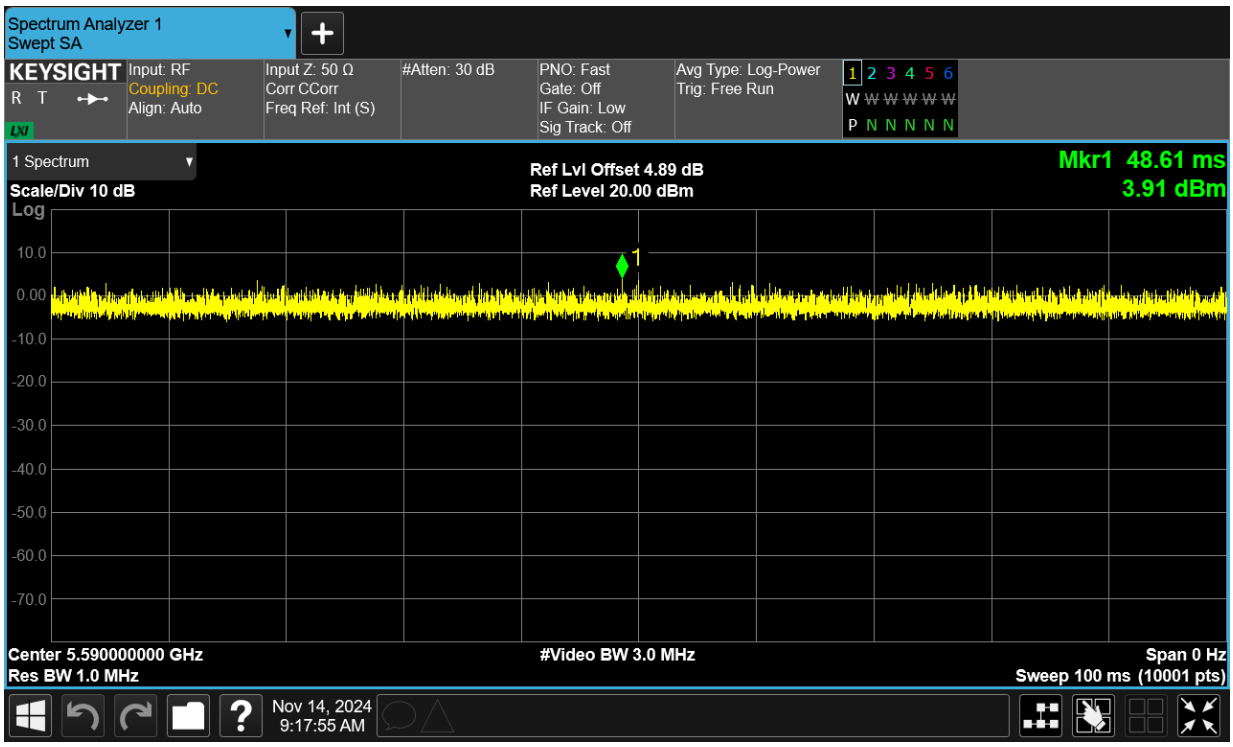
Duty Cycle NVNT ac20 5700MHz Ant1



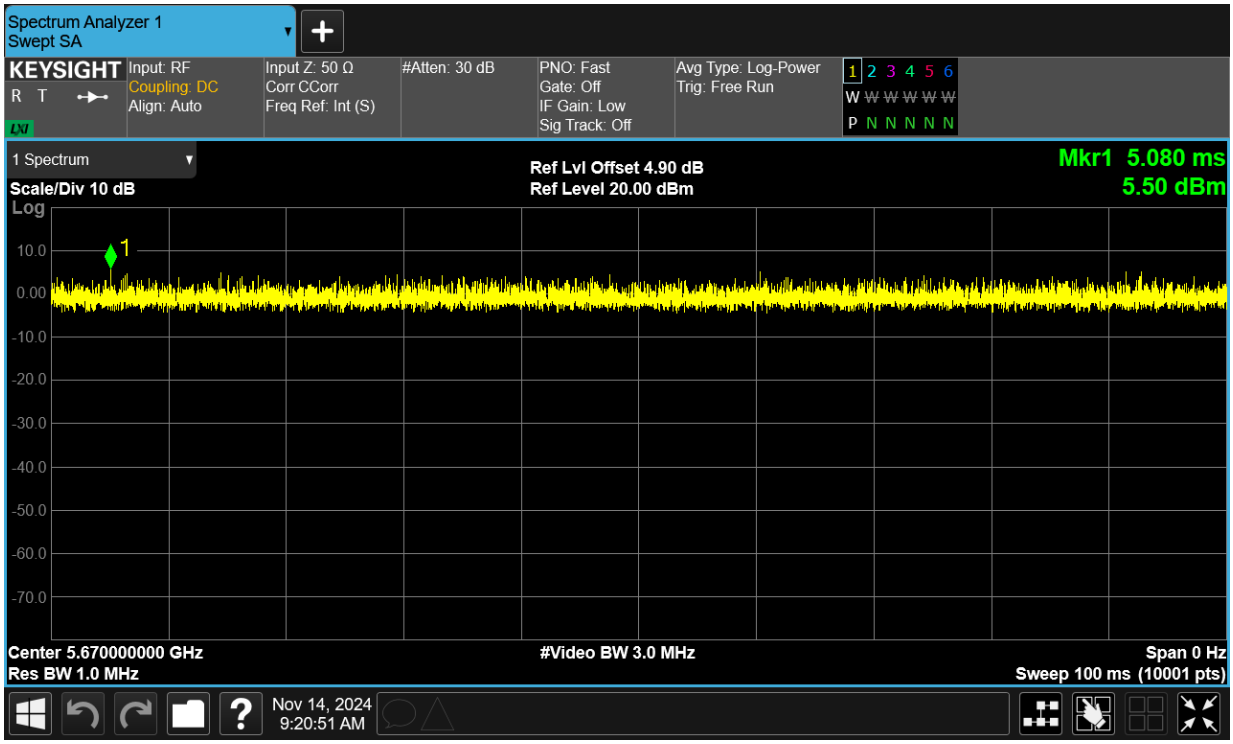
Duty Cycle NVNT ac40 5510MHz Ant1



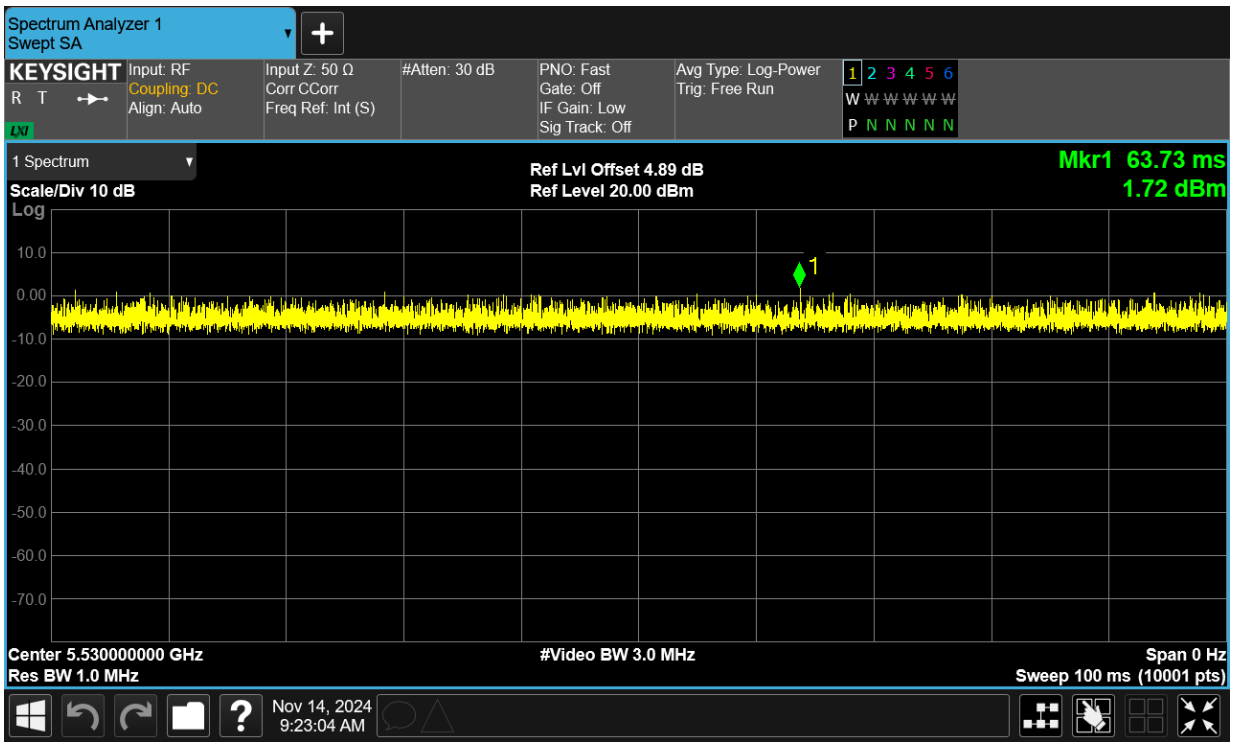
Duty Cycle NVNT ac40 5590MHz Ant1



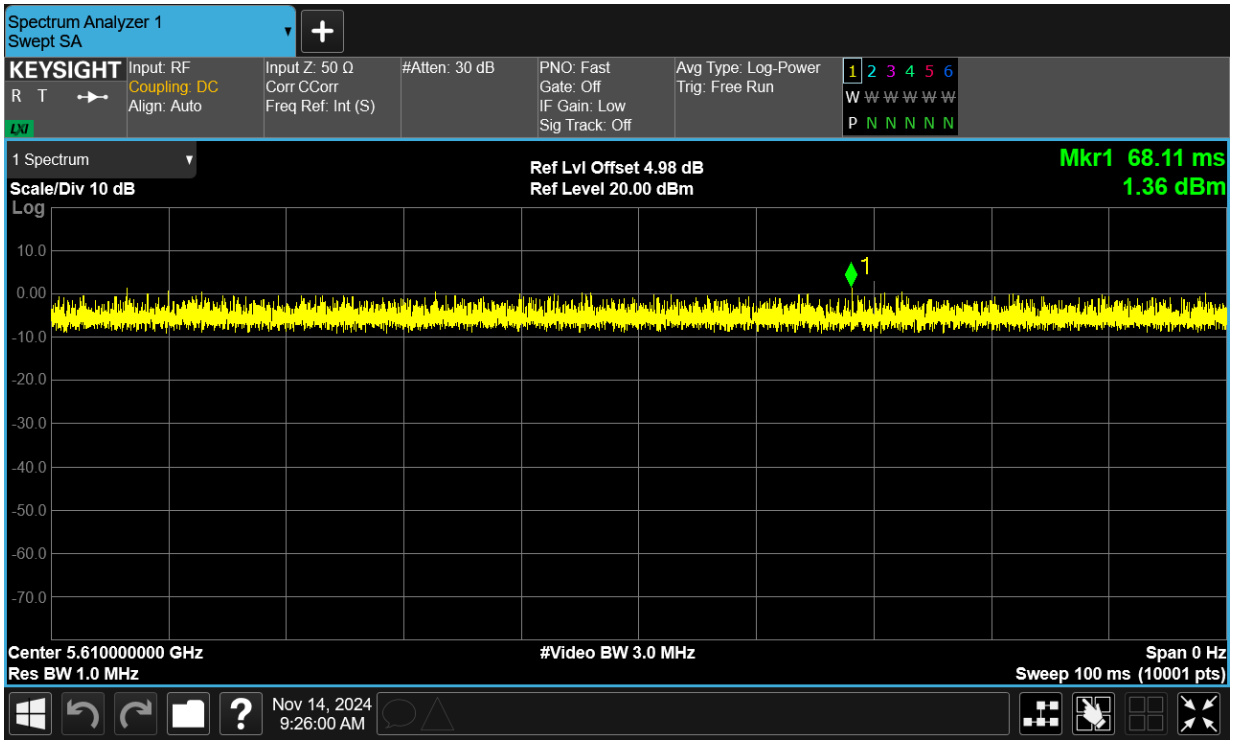
Duty Cycle NVNT ac40 5670MHz Ant1



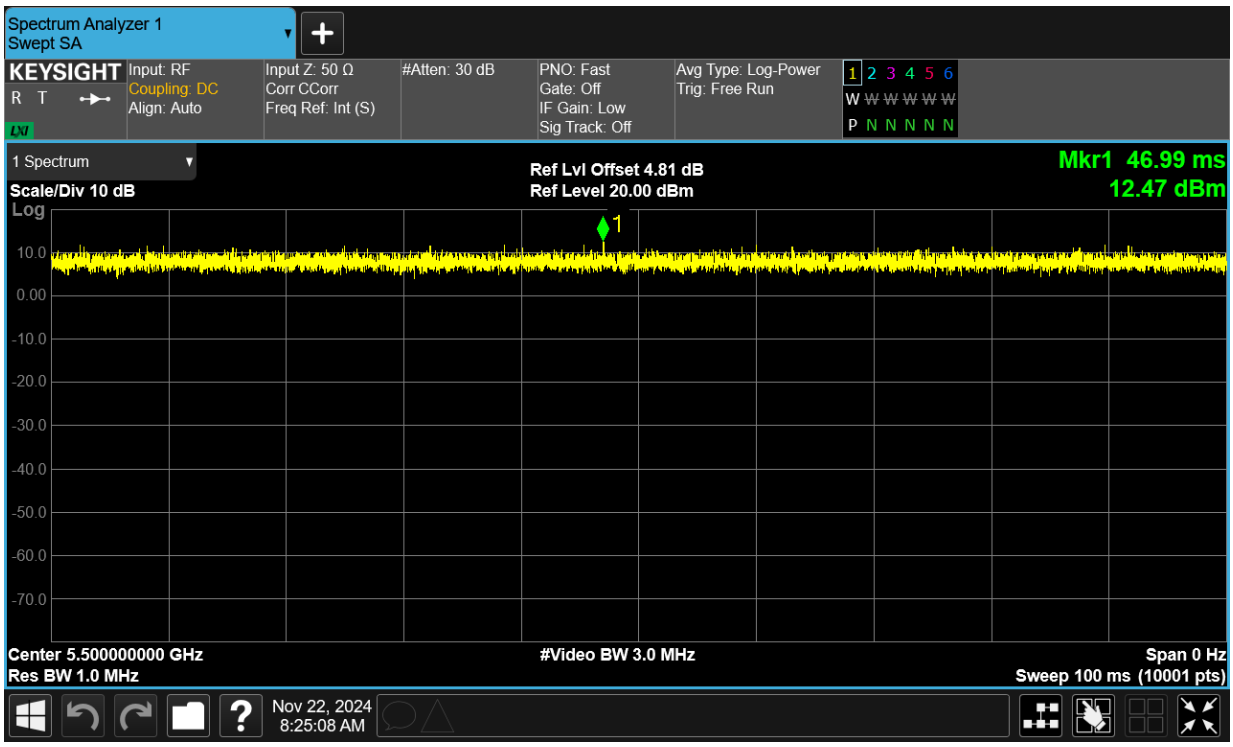
Duty Cycle NVNT ac80 5530MHz Ant1



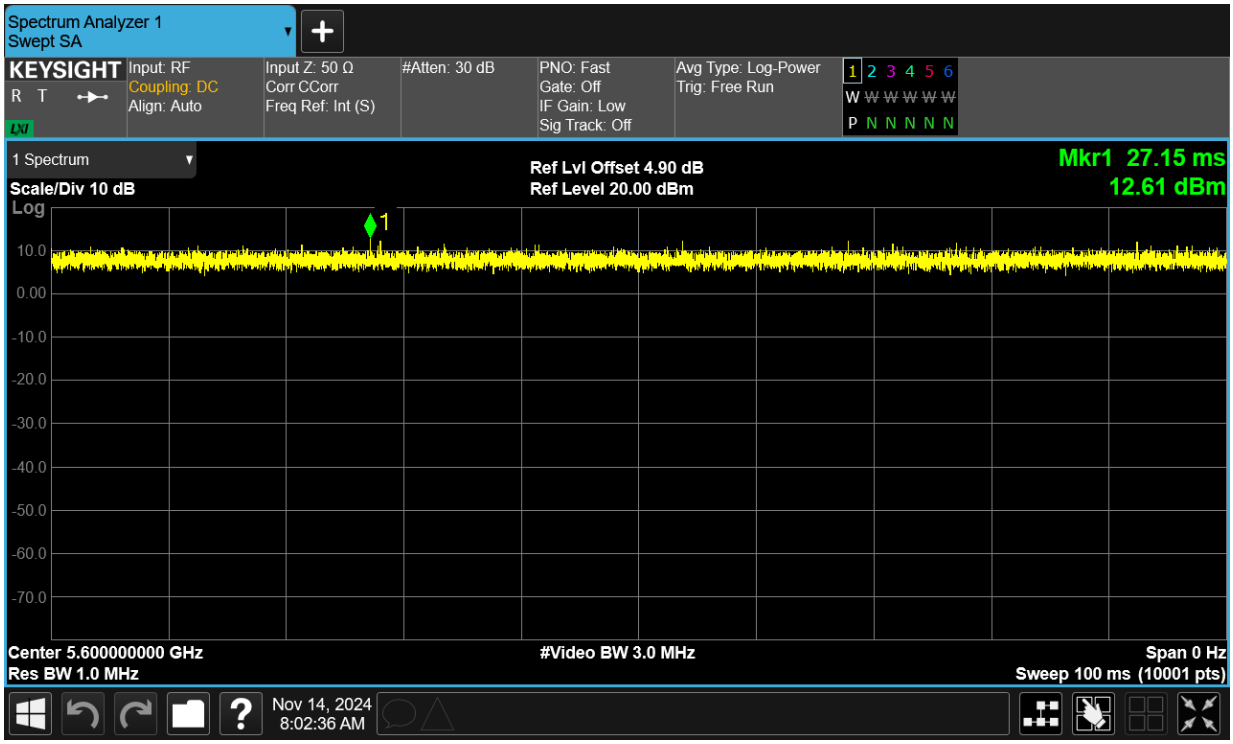
Duty Cycle NVNT ac80 5610MHz Ant1



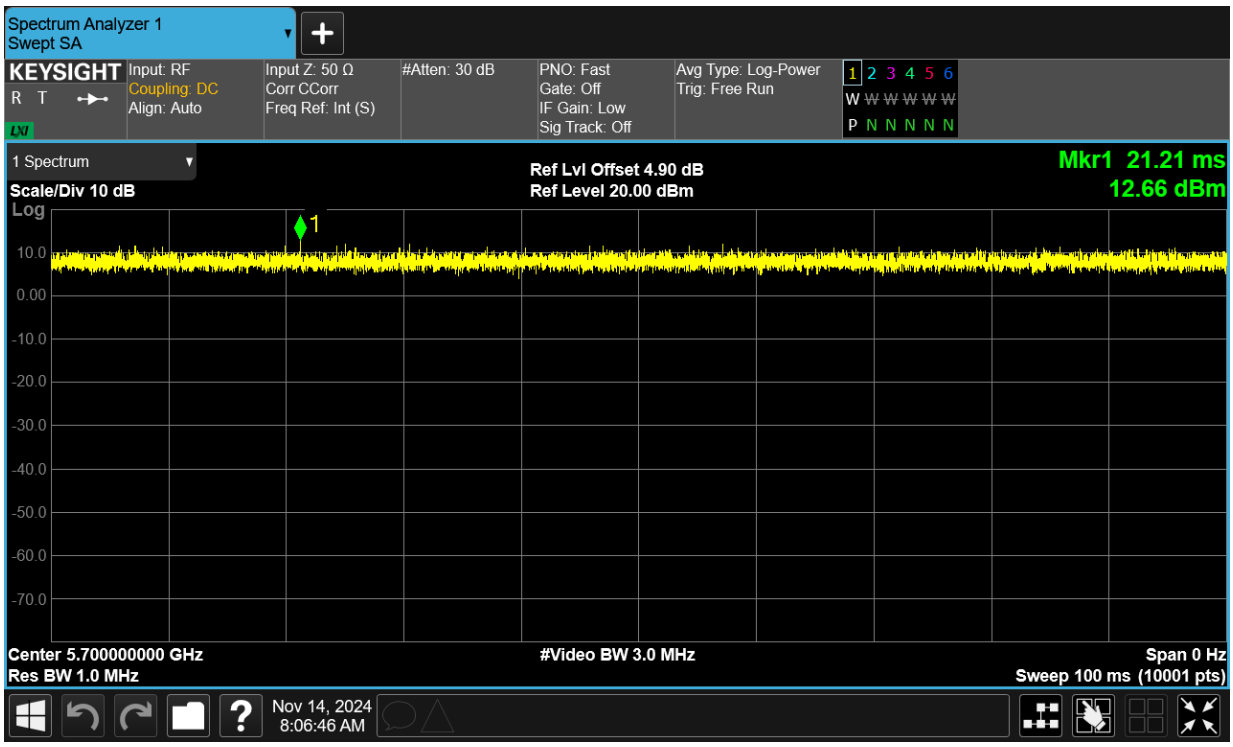
Duty Cycle NVNT n20 5500MHz Ant1



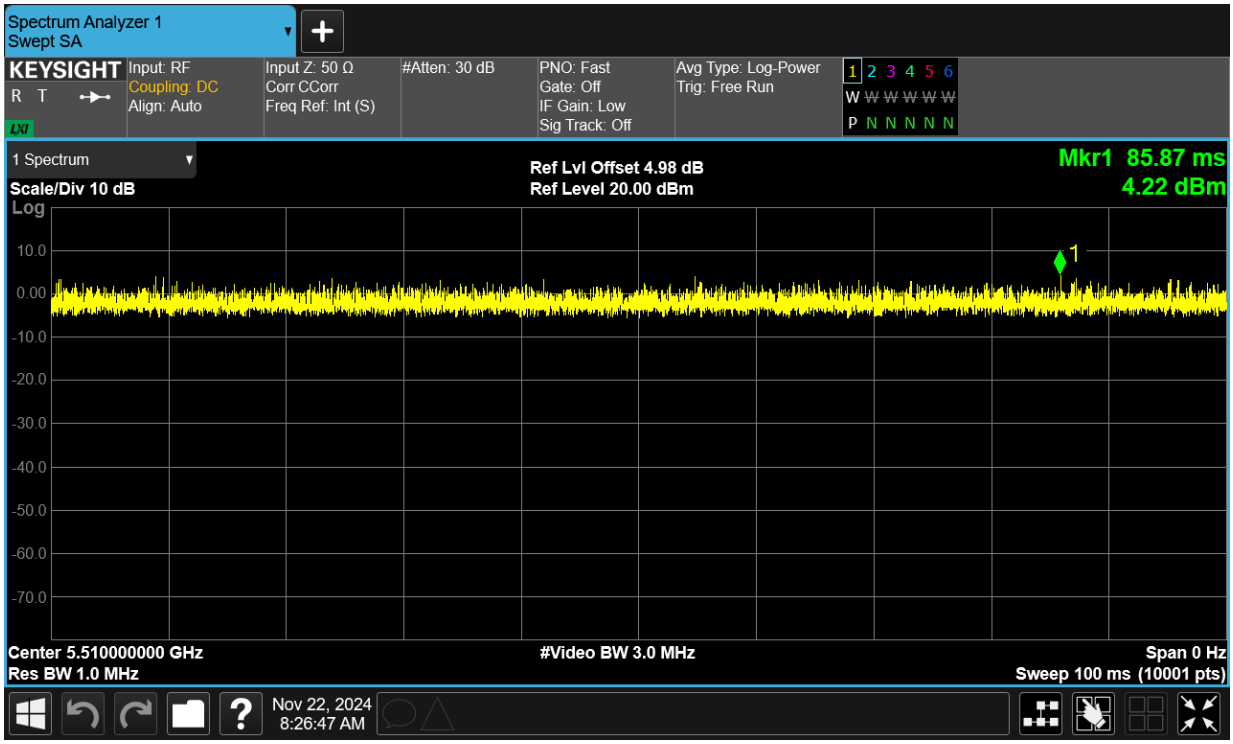
Duty Cycle NVNT n20 5600MHz Ant1



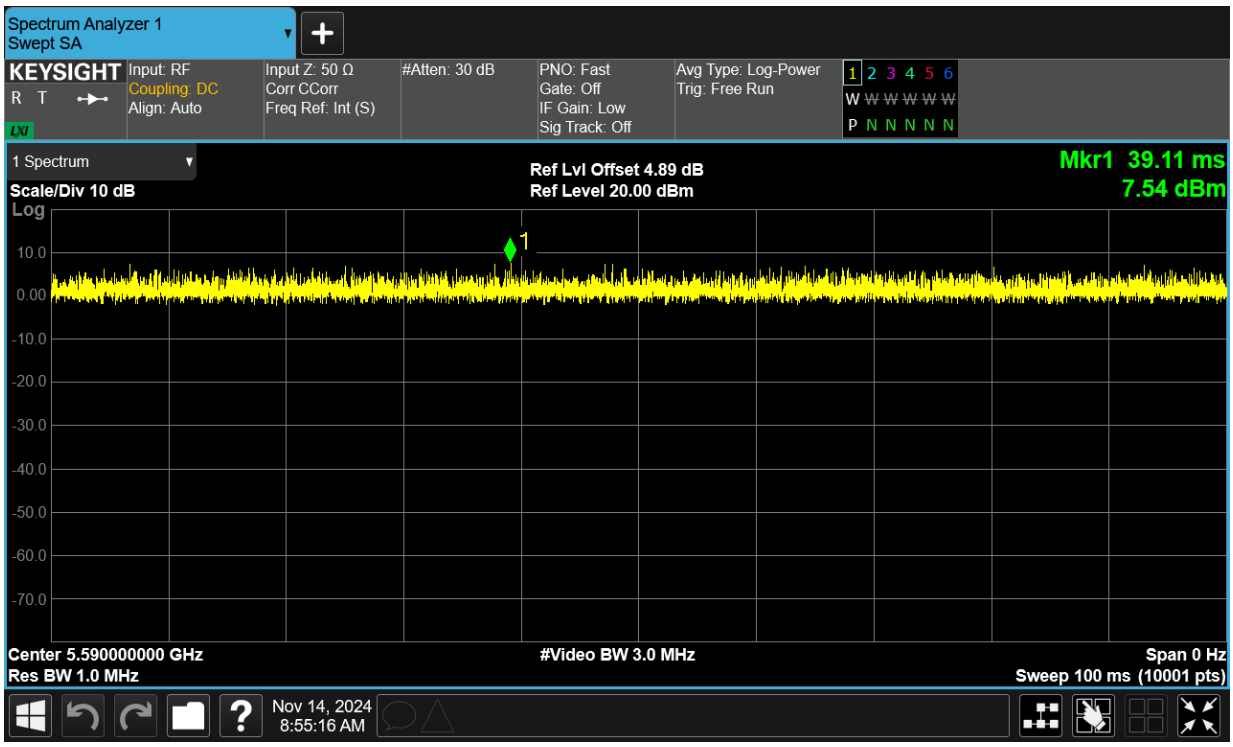
Duty Cycle NVNT n20 5700MHz Ant1



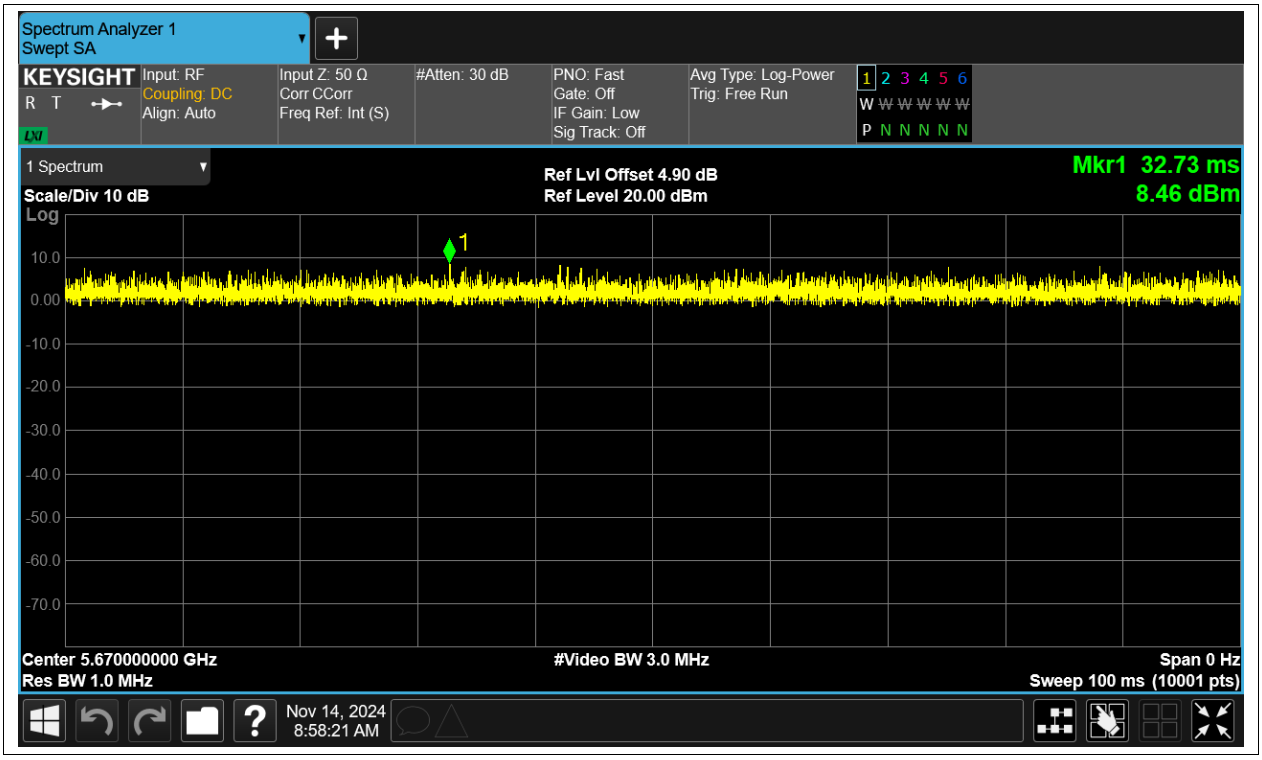
Duty Cycle NVNT n40 5510MHz Ant1



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
Log
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 32.73 ms
8.46 dBm
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)
Nov 14, 2024
8:58:21 AM

Maximum Conducted Output Power

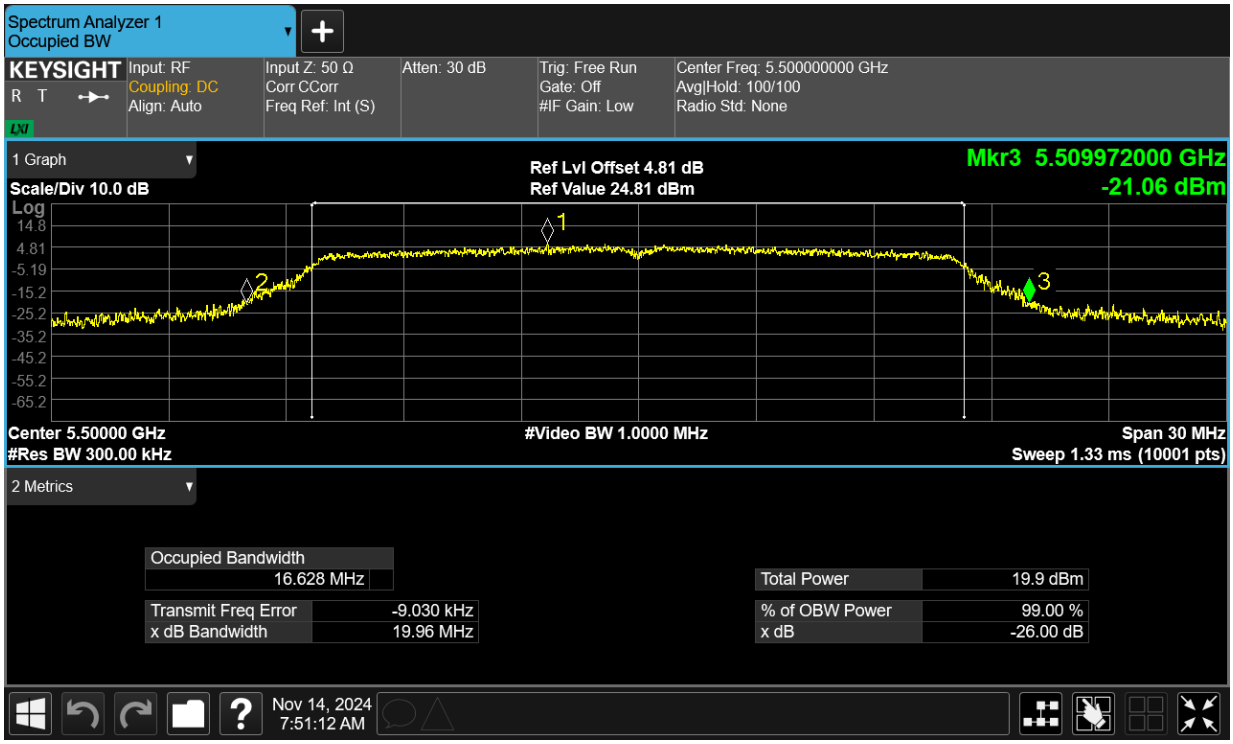
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	14.34	0	14.34	24	Pass
NVNT	a	5600	Ant1	14.29	0	14.29	24	Pass
NVNT	a	5700	Ant1	14.95	0	14.95	24	Pass
NVNT	ac20	5500	Ant1	10.98	0	10.98	24	Pass
NVNT	ac20	5600	Ant1	10.39	0	10.39	24	Pass
NVNT	ac20	5700	Ant1	10.8	0	10.8	24	Pass
NVNT	ac40	5510	Ant1	11.68	0	11.68	24	Pass
NVNT	ac40	5590	Ant1	10.7	0	10.7	24	Pass
NVNT	ac40	5670	Ant1	10.89	0	10.89	24	Pass
NVNT	ac80	5530	Ant1	10.29	0	10.29	24	Pass
NVNT	ac80	5610	Ant1	10.3	0	10.3	24	Pass
NVNT	n20	5500	Ant1	14.27	0	14.27	24	Pass
NVNT	n20	5600	Ant1	13.8	0	13.8	24	Pass
NVNT	n20	5700	Ant1	14.3	0	14.3	24	Pass
NVNT	n40	5510	Ant1	10.39	0	10.39	24	Pass
NVNT	n40	5590	Ant1	10.42	0	10.42	24	Pass
NVNT	n40	5670	Ant1	10.81	0	10.81	24	Pass

-26dB Bandwidth

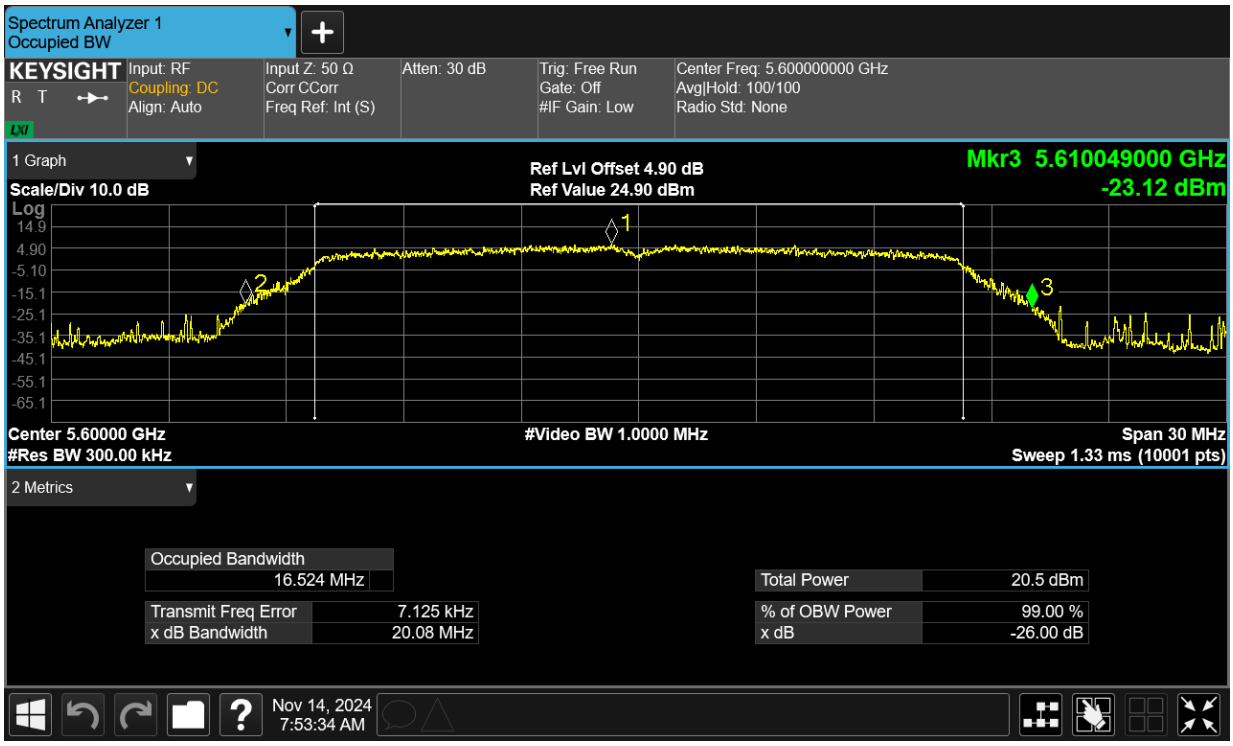
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5500	Ant1	19.962
NVNT	a	5600	Ant1	20.085
NVNT	a	5700	Ant1	19.946
NVNT	ac20	5500	Ant1	20.455
NVNT	ac20	5600	Ant1	20.3
NVNT	ac20	5700	Ant1	20.362
NVNT	ac40	5510	Ant1	39.518
NVNT	ac40	5590	Ant1	39.817
NVNT	ac40	5670	Ant1	39.596
NVNT	ac80	5530	Ant1	78.447
NVNT	ac80	5610	Ant1	78.753
NVNT	n20	5500	Ant1	20.457
NVNT	n20	5600	Ant1	20.218
NVNT	n20	5700	Ant1	20.392
NVNT	n40	5510	Ant1	39.977
NVNT	n40	5590	Ant1	39.166
NVNT	n40	5670	Ant1	39.736

Test Graphs

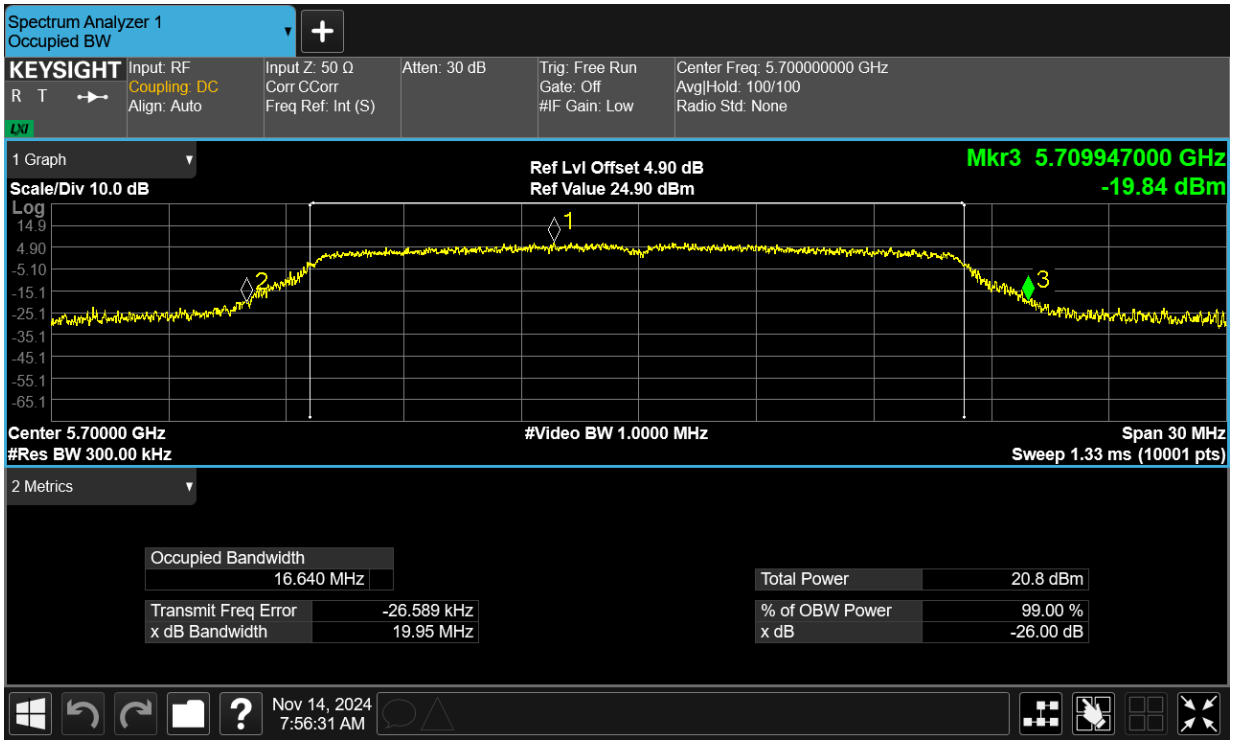
-26dB Bandwidth NVNT a 5500MHz Ant1



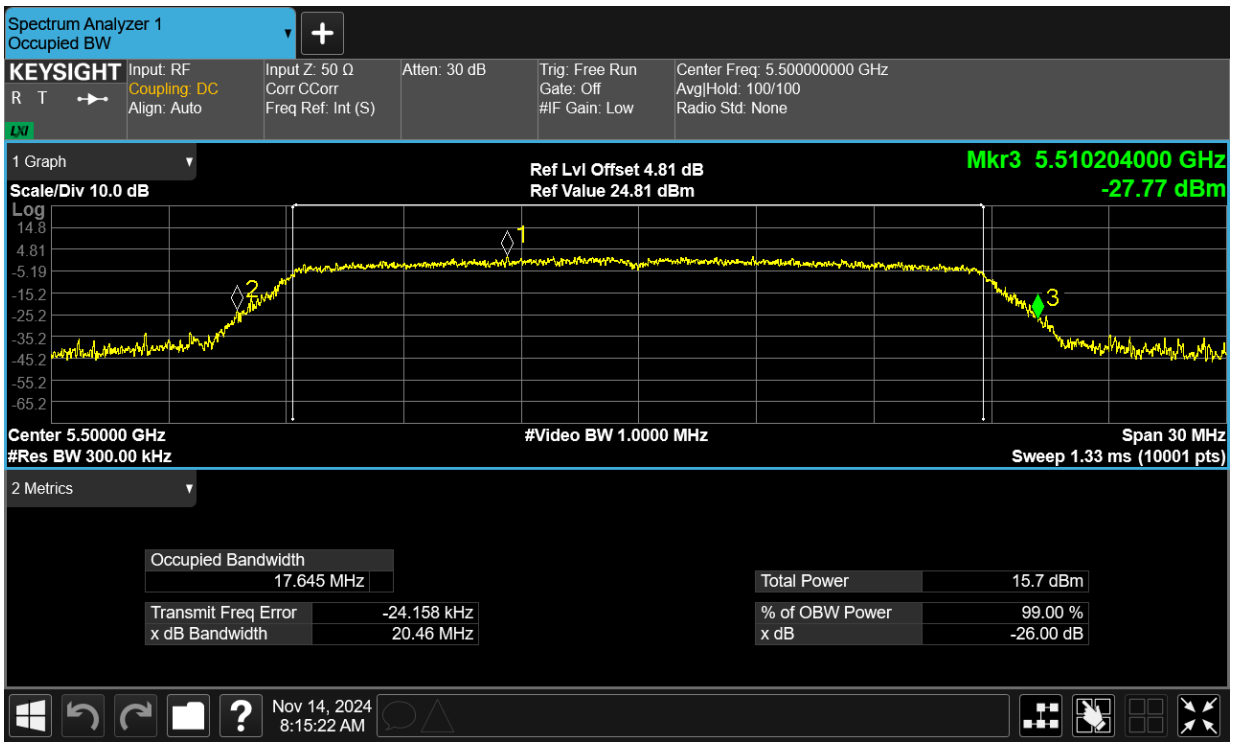
-26dB Bandwidth NVNT a 5600MHz Ant1



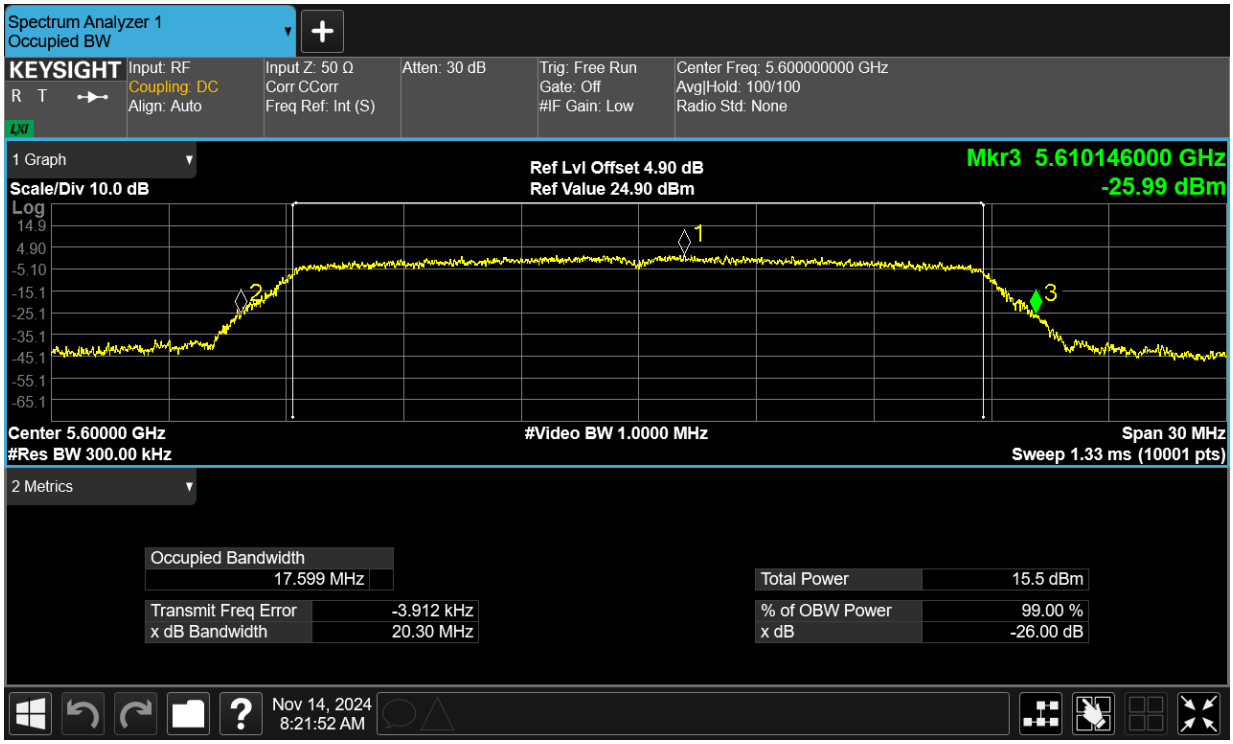
-26dB Bandwidth NVNT a 5700MHz Ant1



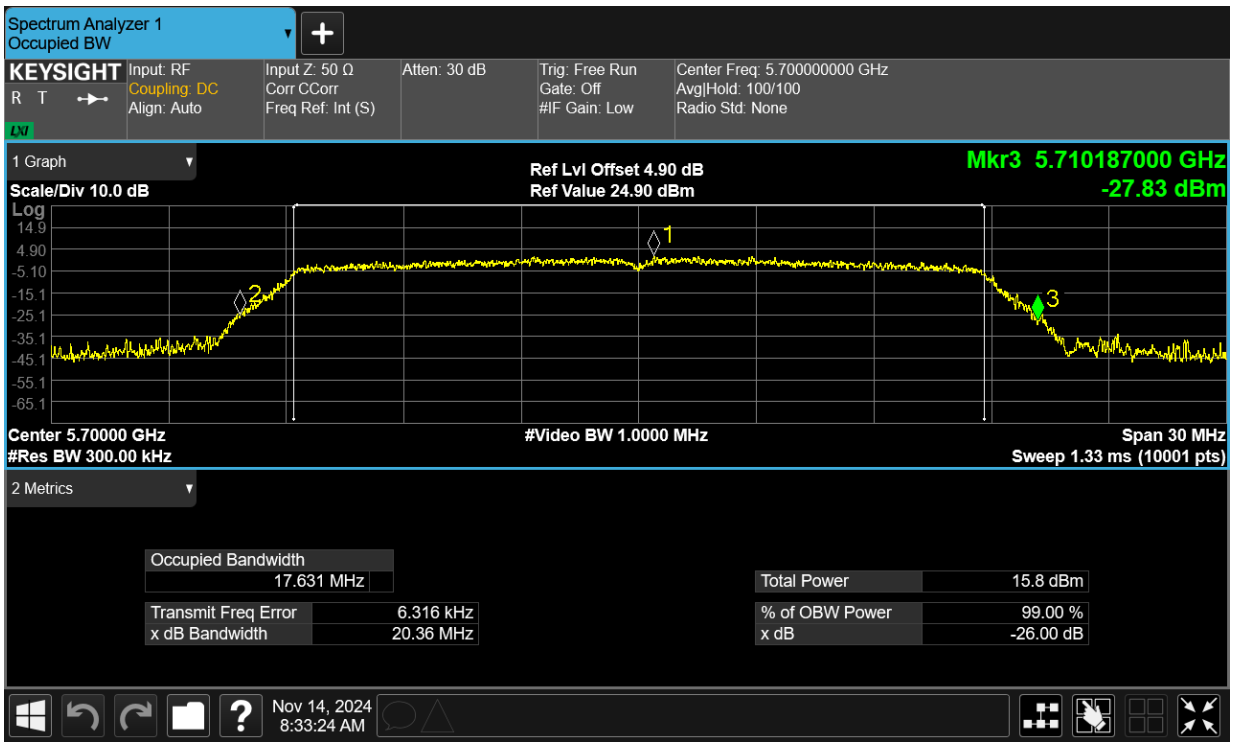
-26dB Bandwidth NVNT ac20 5500MHz Ant1



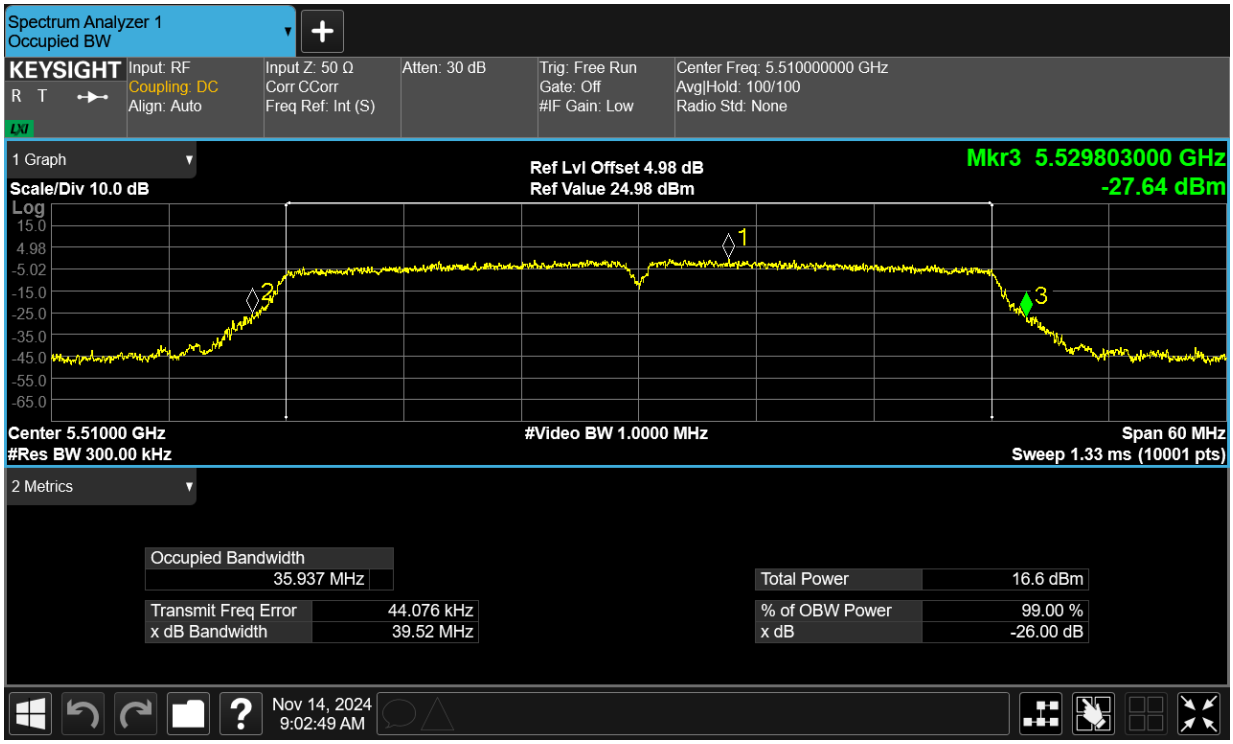
-26dB Bandwidth NVNT ac20 5600MHz Ant1



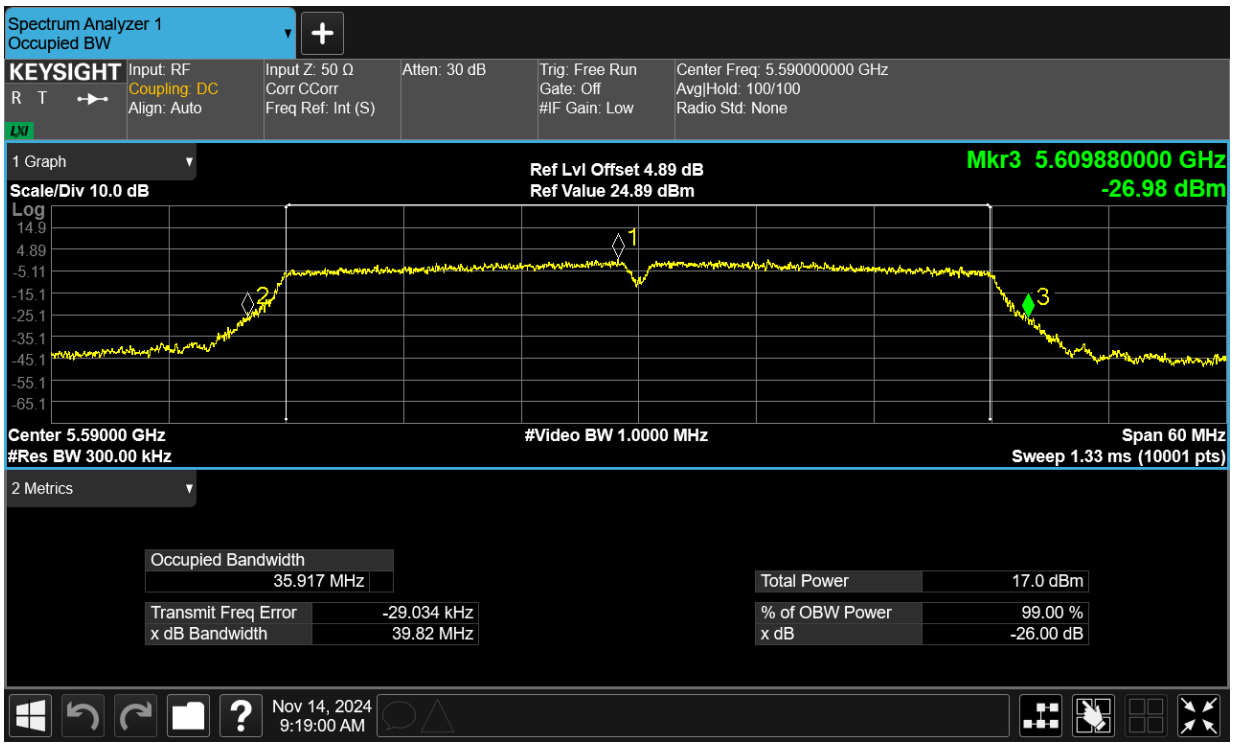
-26dB Bandwidth NVNT ac20 5700MHz Ant1



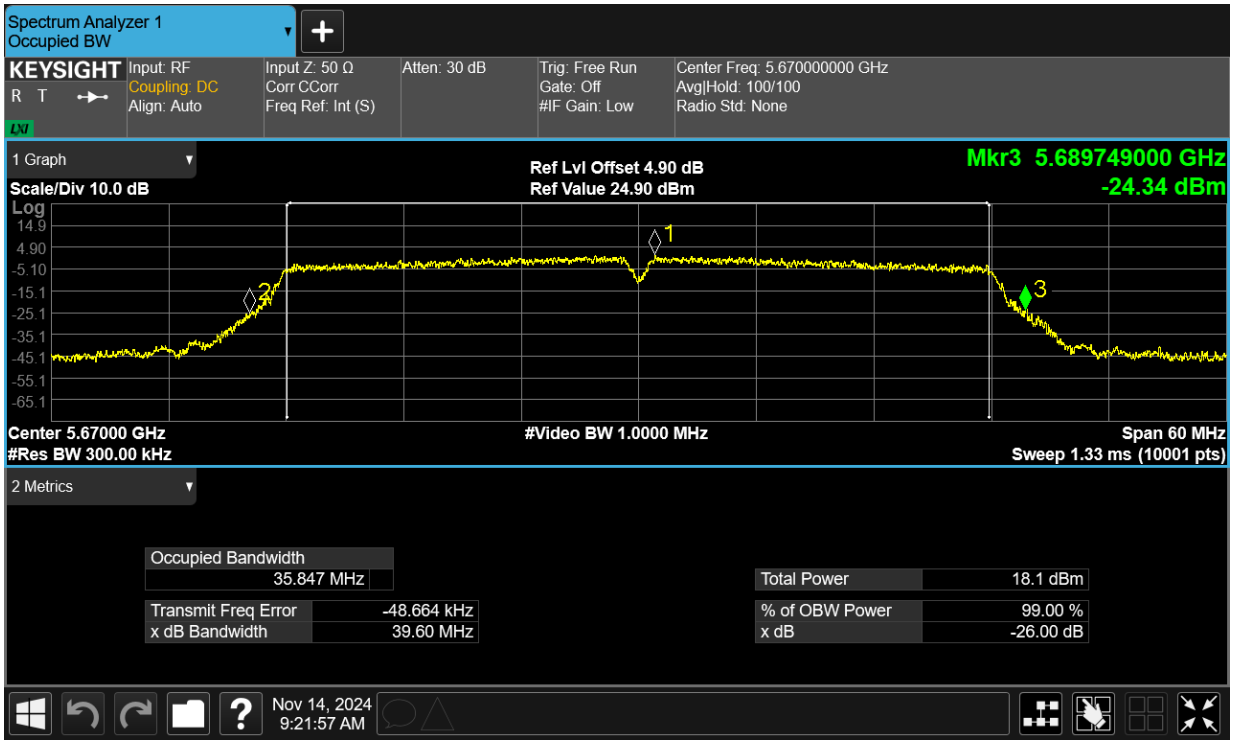
-26dB Bandwidth NVNT ac40 5510MHz Ant1



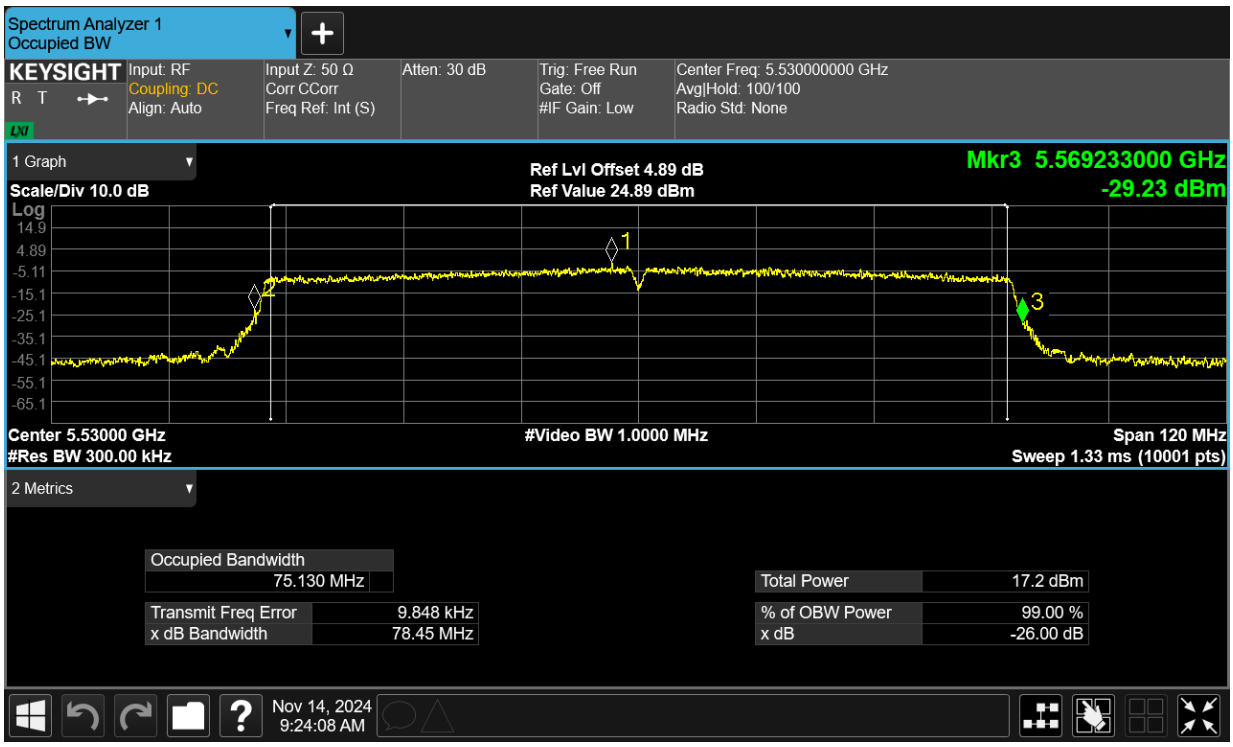
-26dB Bandwidth NVNT ac40 5590MHz Ant1



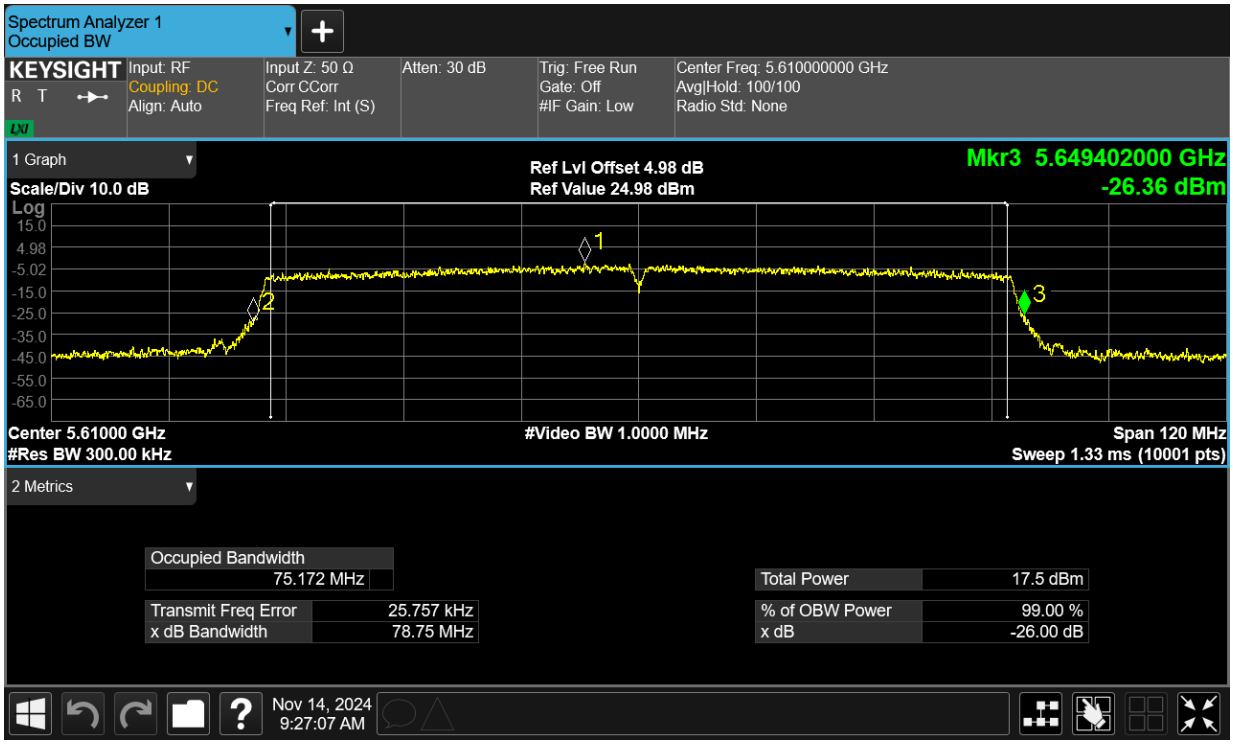
-26dB Bandwidth NVNT ac40 5670MHz Ant1



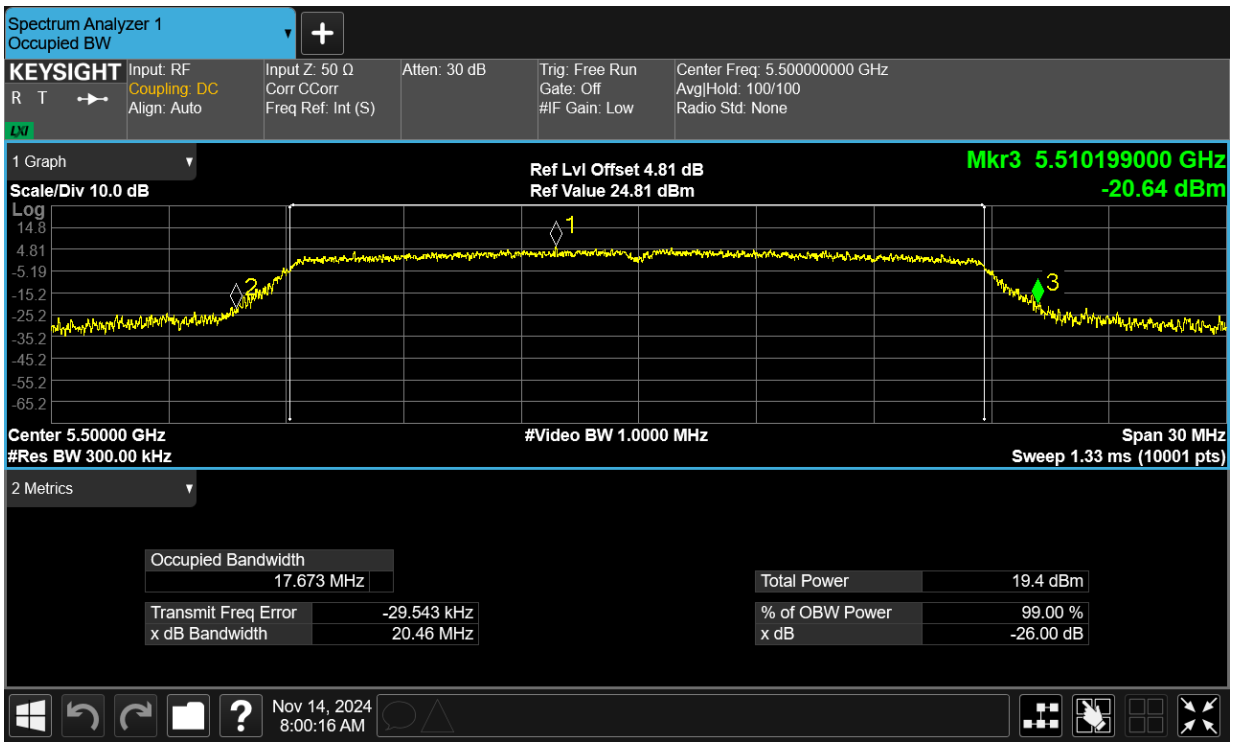
-26dB Bandwidth NVNT ac80 5530MHz Ant1



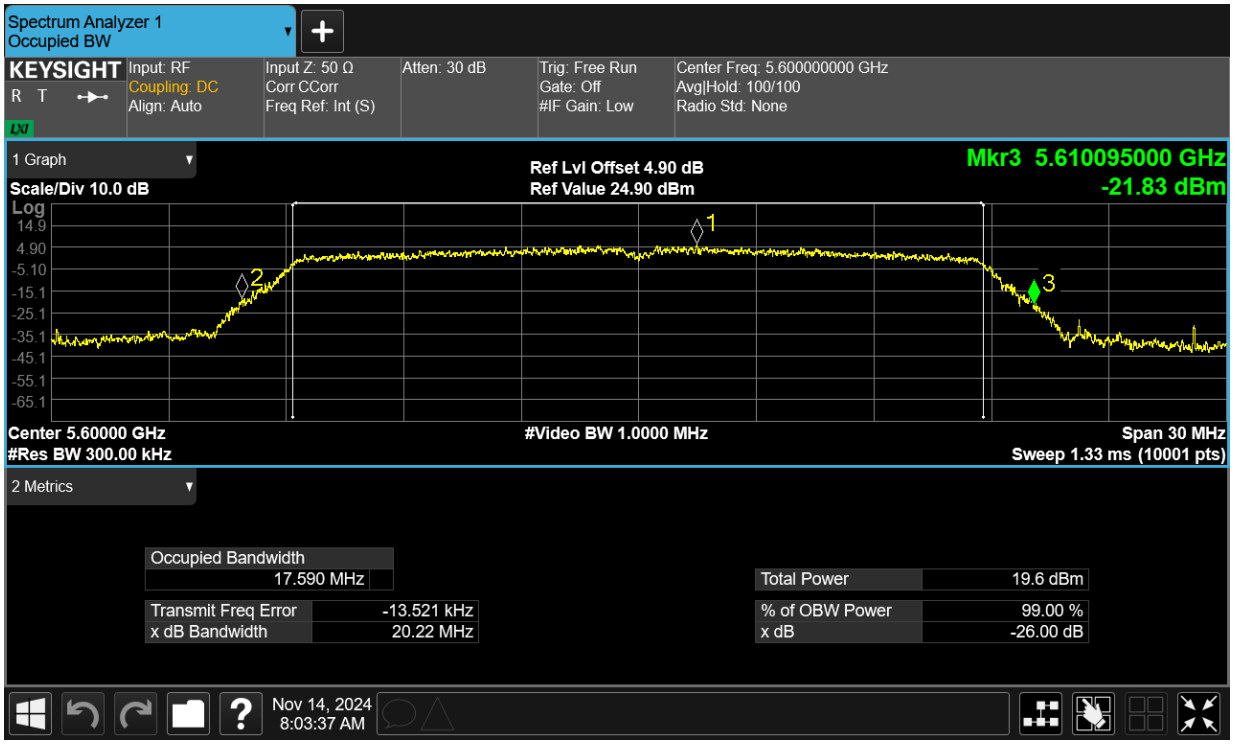
-26dB Bandwidth NVNT ac80 5610MHz Ant1



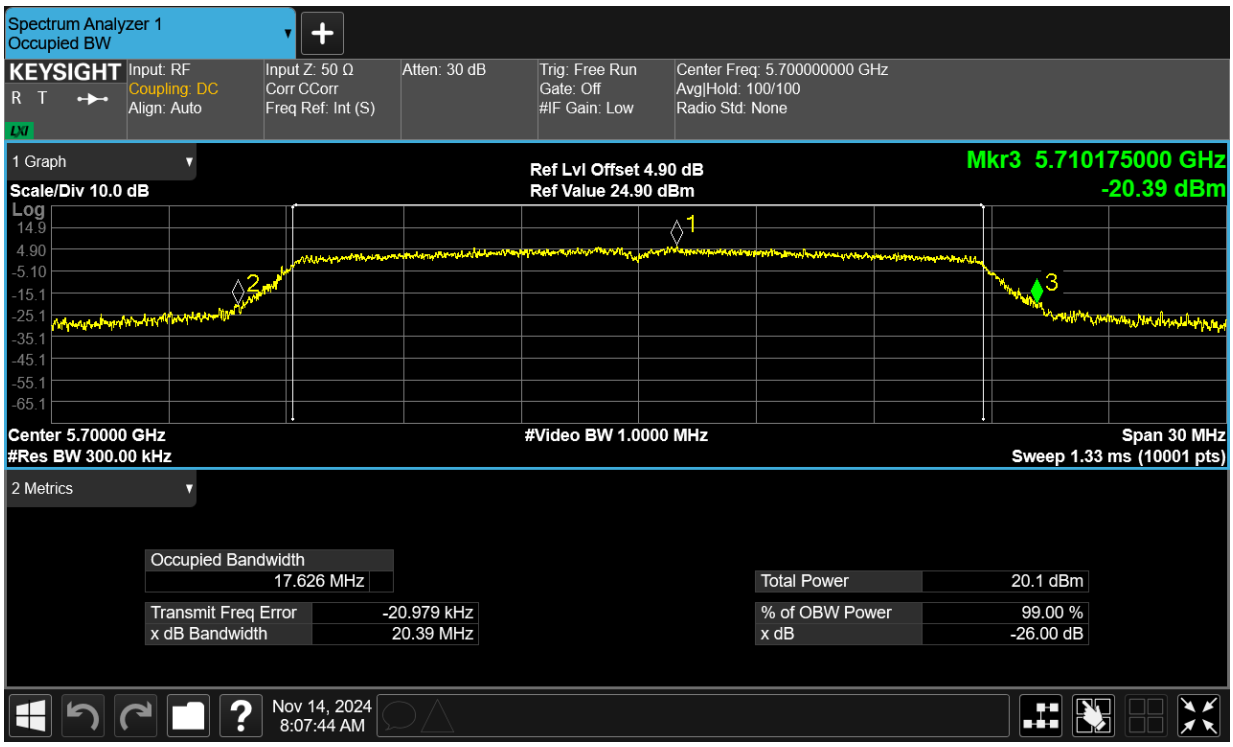
-26dB Bandwidth NVNT n20 5500MHz Ant1



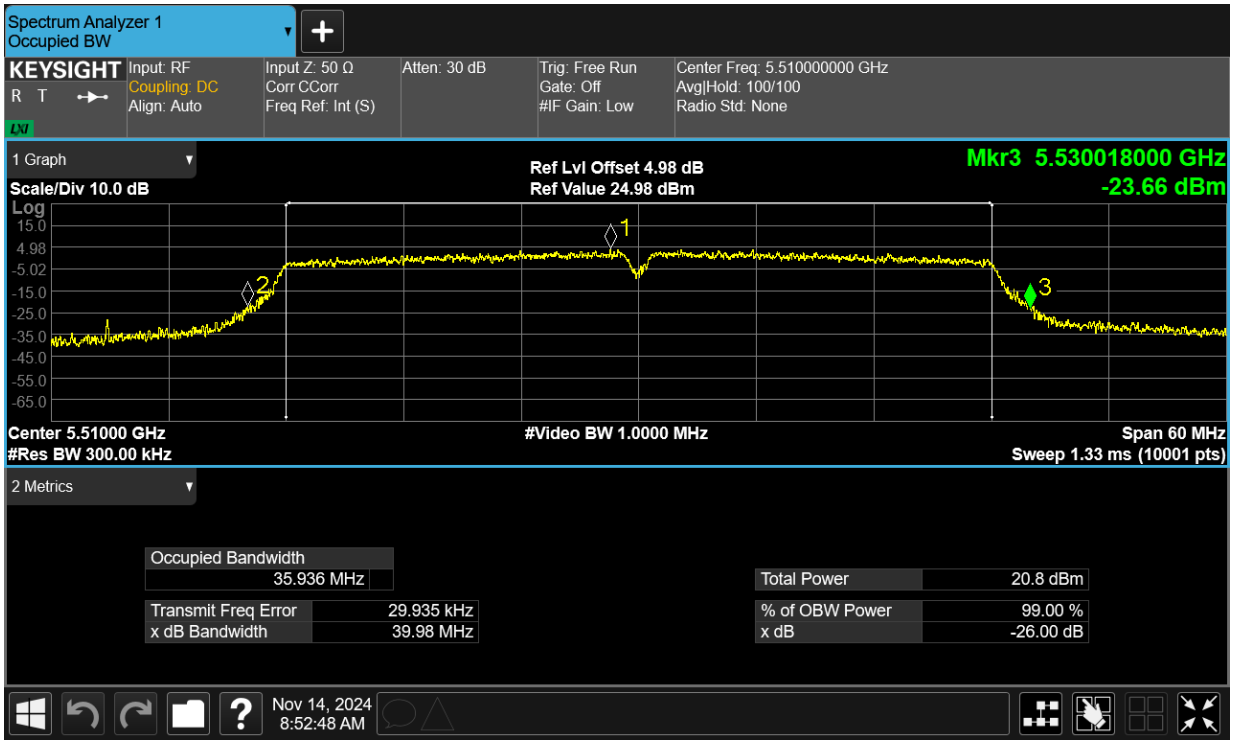
-26dB Bandwidth NVNT n20 5600MHz Ant1



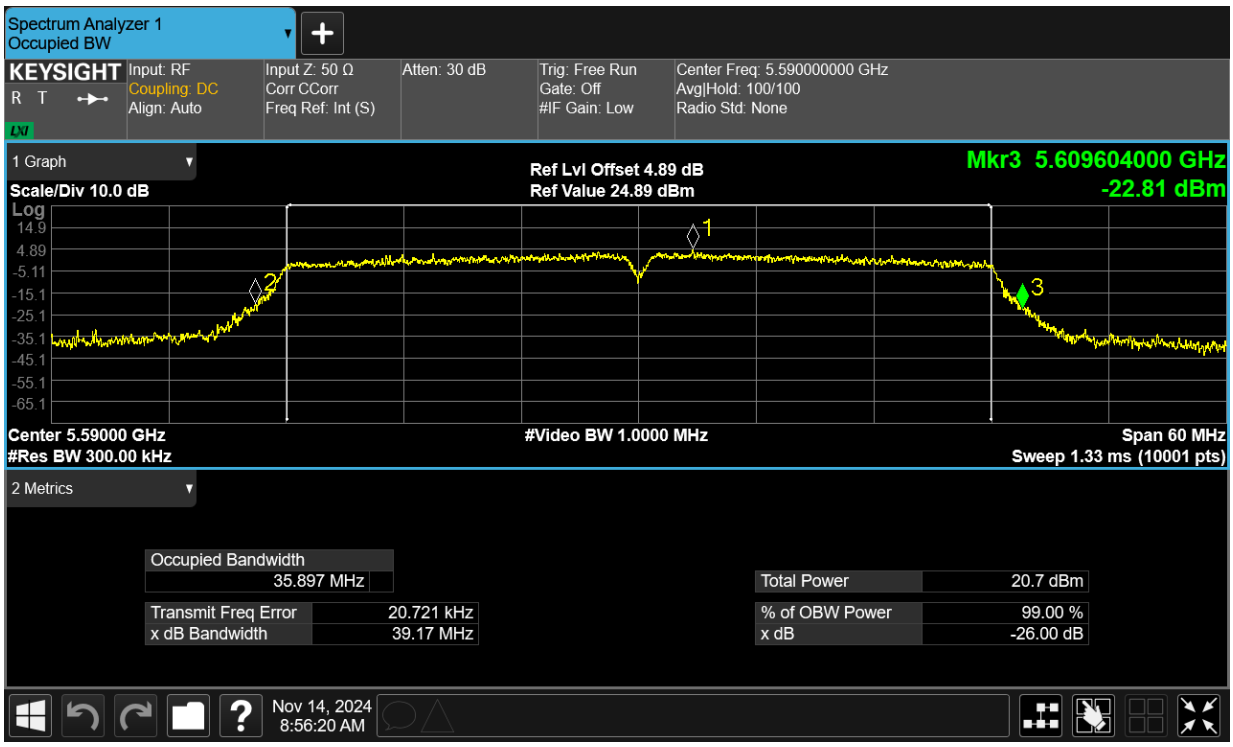
-26dB Bandwidth NVNT n20 5700MHz Ant1



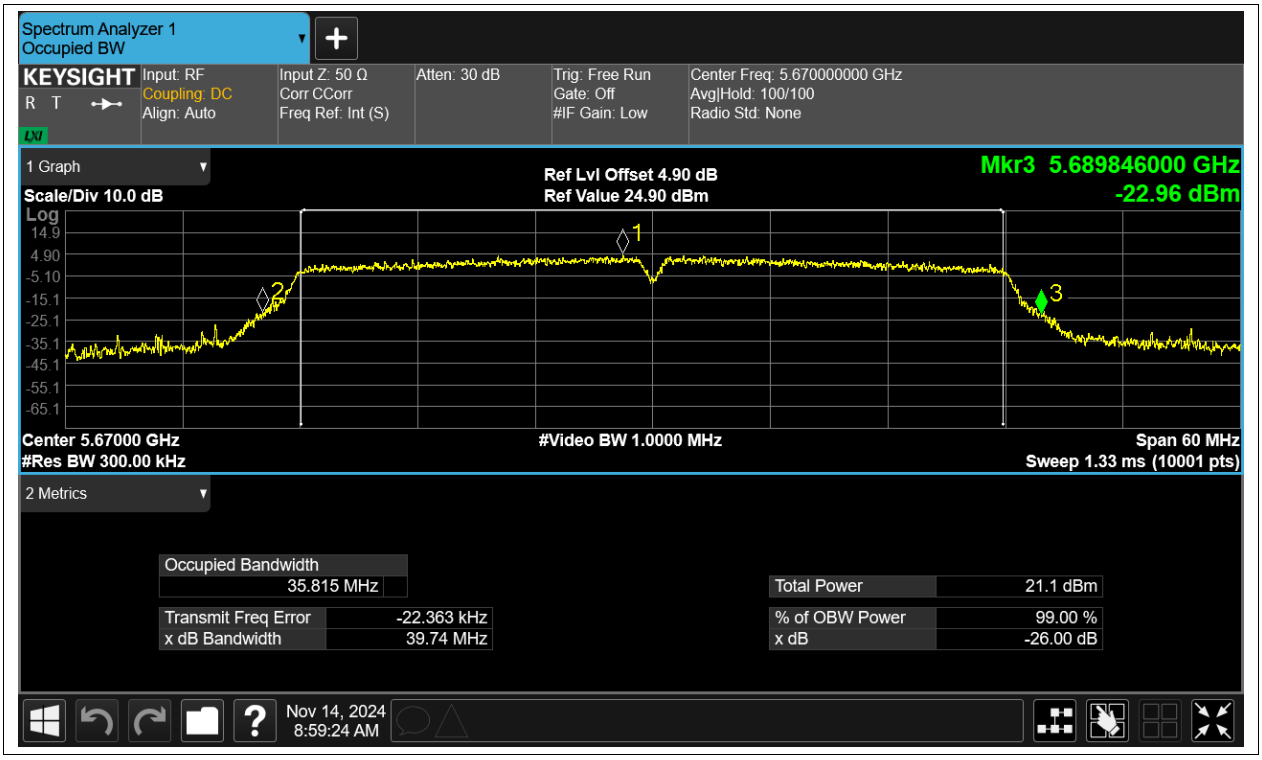
-26dB Bandwidth NVNT n40 5510MHz Ant1



-26dB Bandwidth NVNT n40 5590MHz Ant1



-26dB Bandwidth NVNT n40 5670MHz Ant1

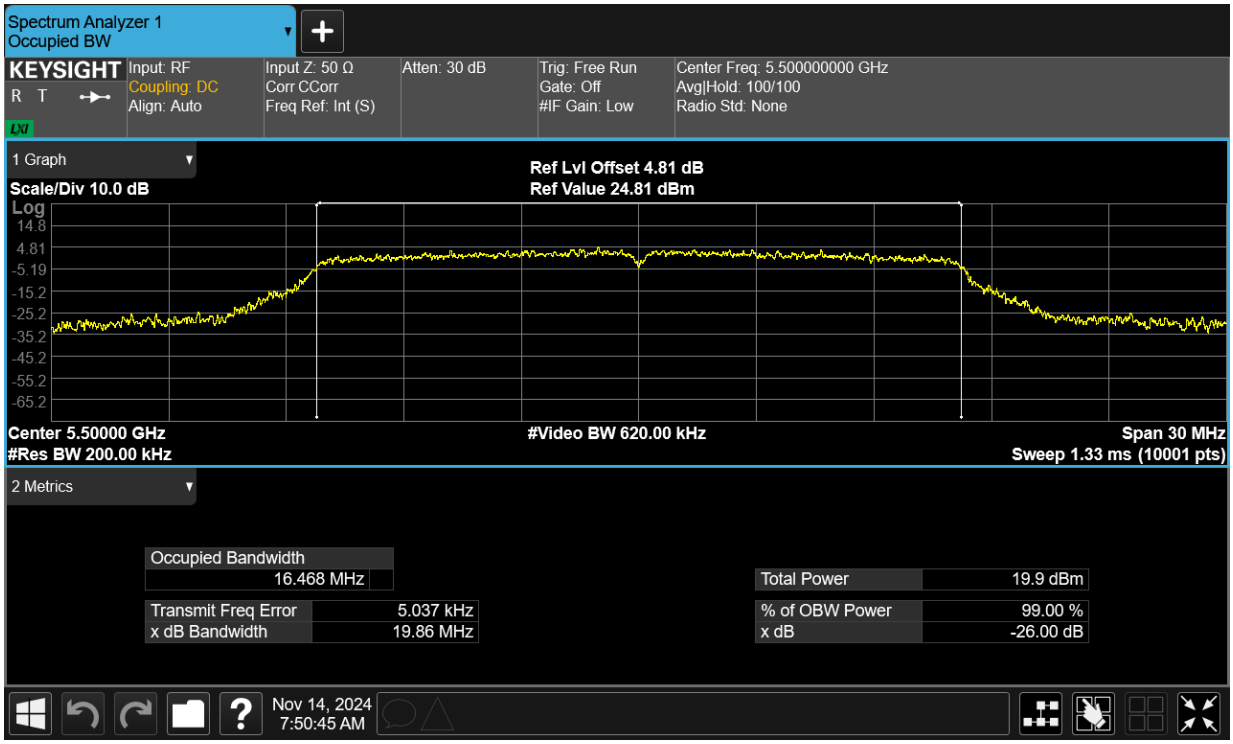

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Mkr3 5.689846000 GHz
-22.96 dBm
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
35.815 MHz
Transmit Freq Error -22.363 kHz
x dB Bandwidth 39.74 MHz
Total Power 21.1 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Nov 14, 2024
8:59:24 AM

Occupied Channel Bandwidth

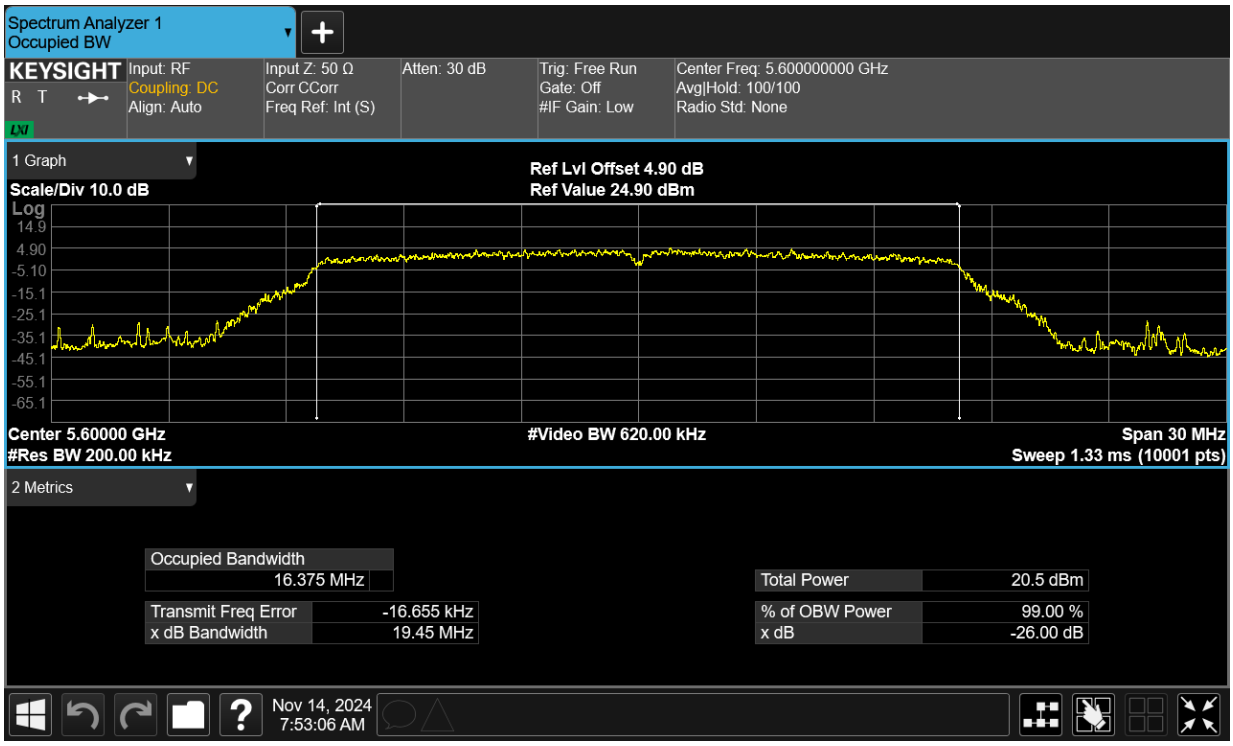
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.468
NVNT	a	5600	Ant1	16.375
NVNT	a	5700	Ant1	16.429
NVNT	ac20	5500	Ant1	17.567
NVNT	ac20	5600	Ant1	17.551
NVNT	ac20	5700	Ant1	17.552
NVNT	ac40	5510	Ant1	35.962
NVNT	ac40	5590	Ant1	35.988
NVNT	ac40	5670	Ant1	35.917
NVNT	ac80	5530	Ant1	75.086
NVNT	ac80	5610	Ant1	75.143
NVNT	n20	5500	Ant1	17.582
NVNT	n20	5600	Ant1	17.551
NVNT	n20	5700	Ant1	17.599
NVNT	n40	5510	Ant1	35.997
NVNT	n40	5590	Ant1	35.961
NVNT	n40	5670	Ant1	35.928

Test Graphs

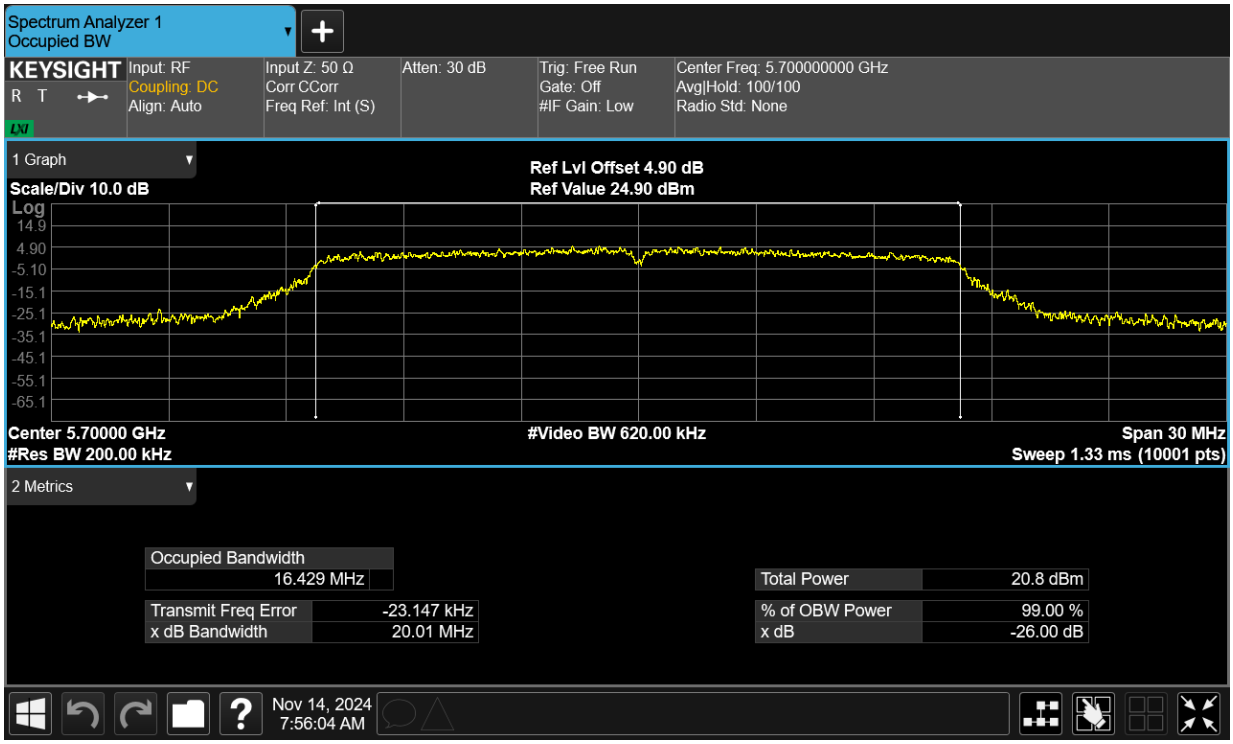
OBW NVNT a 5500MHz Ant1



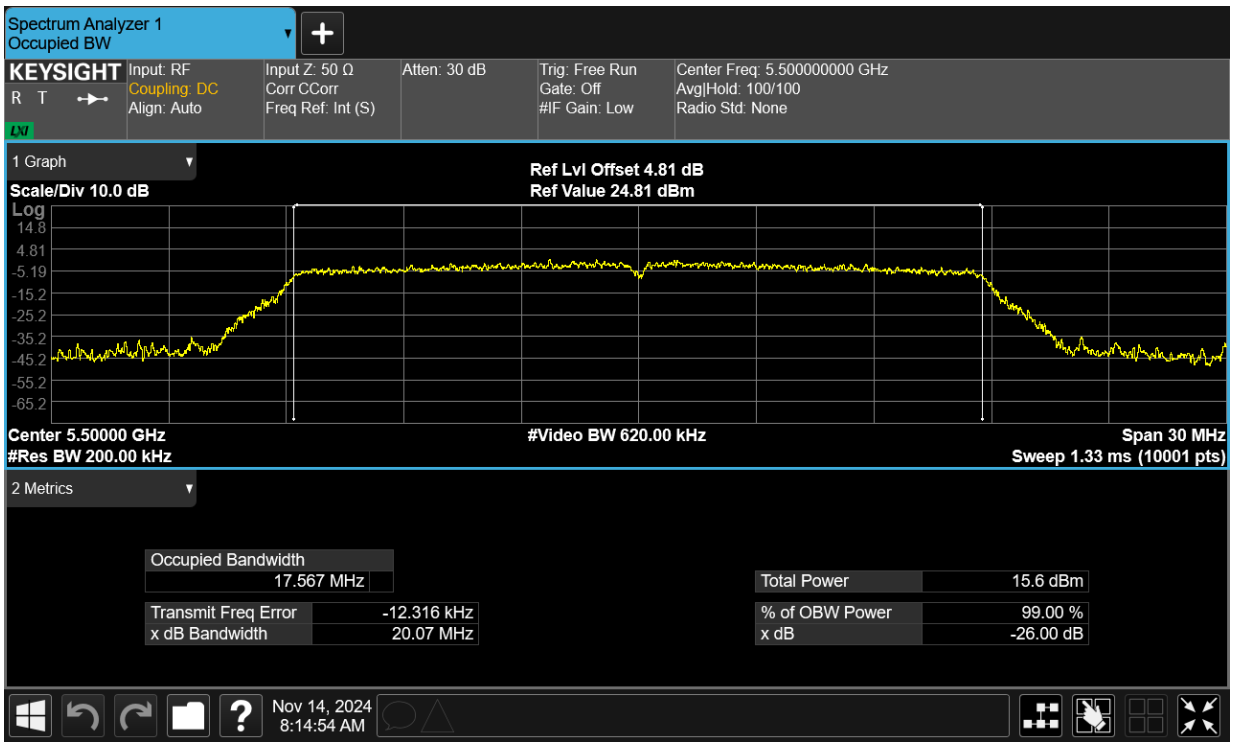
OBW NVNT a 5600MHz Ant1



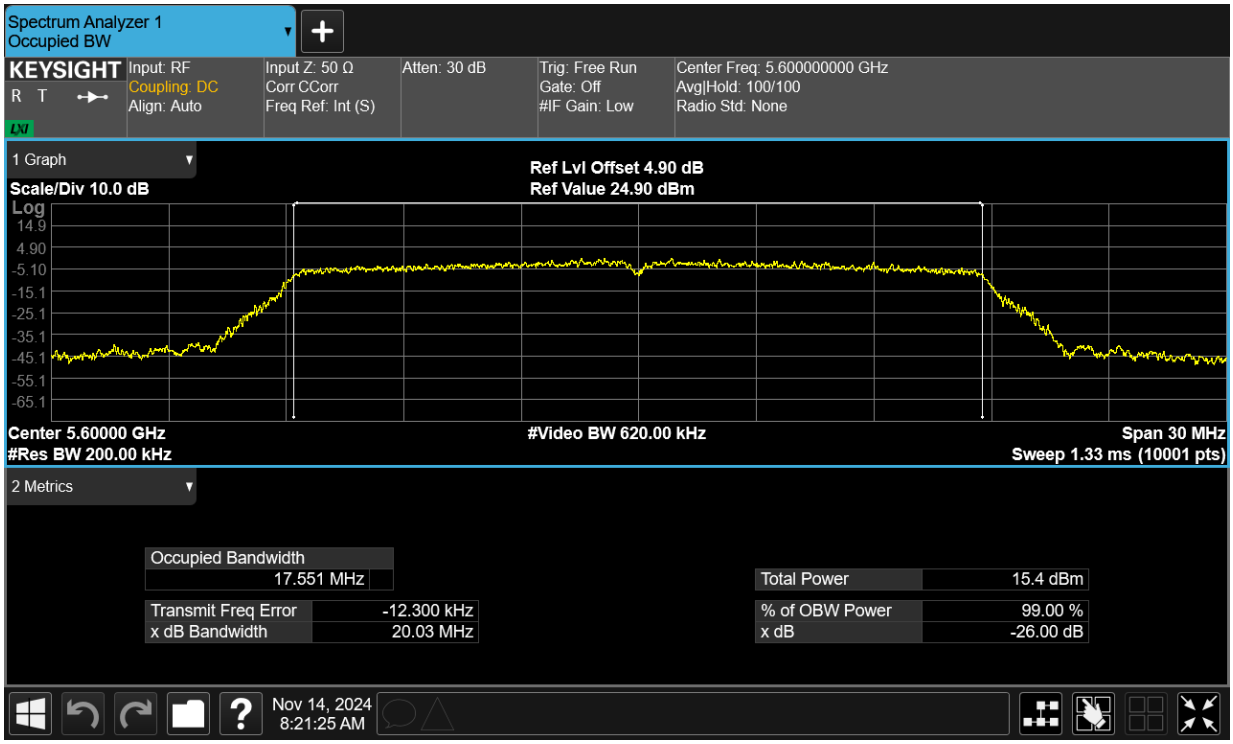
OBW NVNT a 5700MHz Ant1



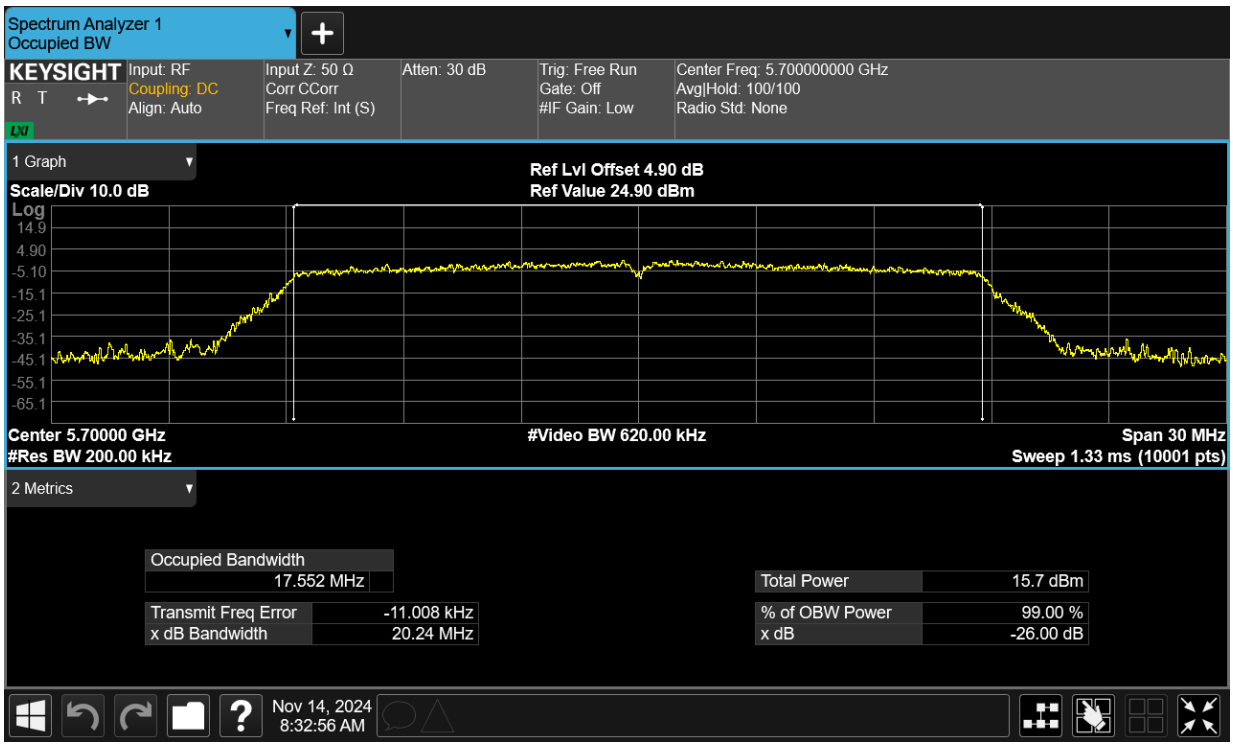
OBW NVNT ac20 5500MHz Ant1



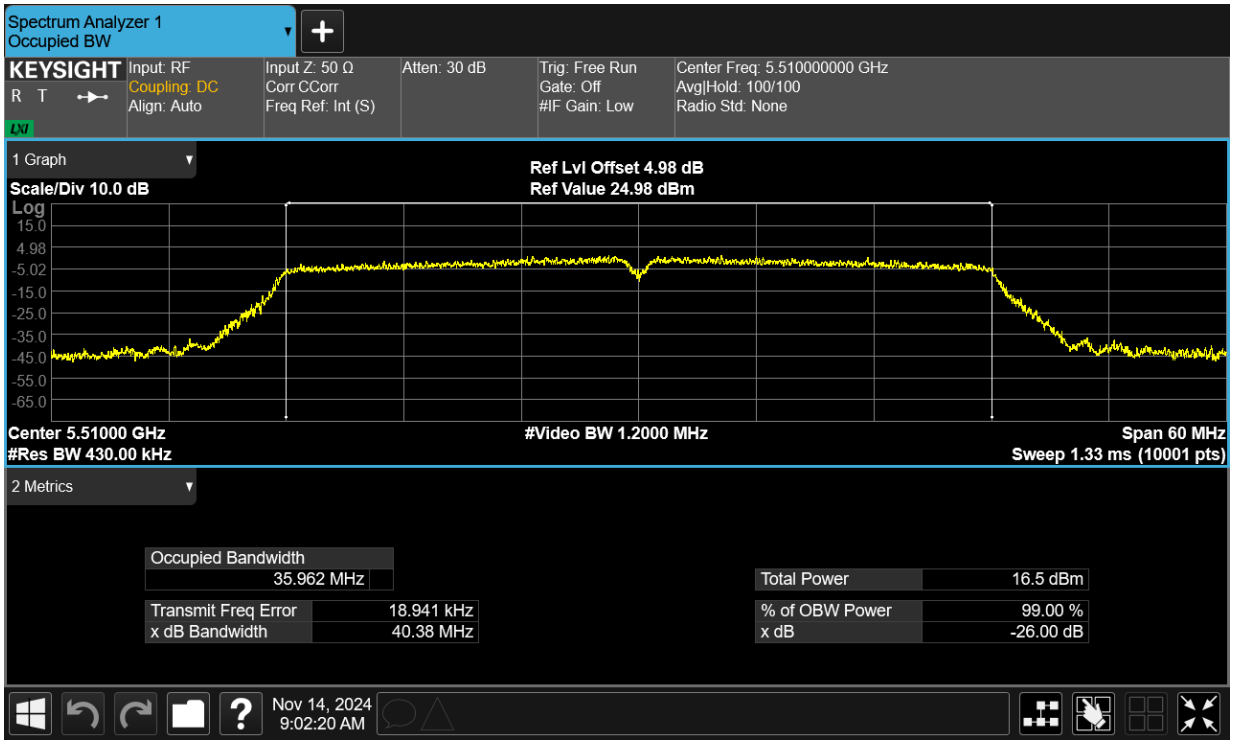
OBW NVNT ac20 5600MHz Ant1



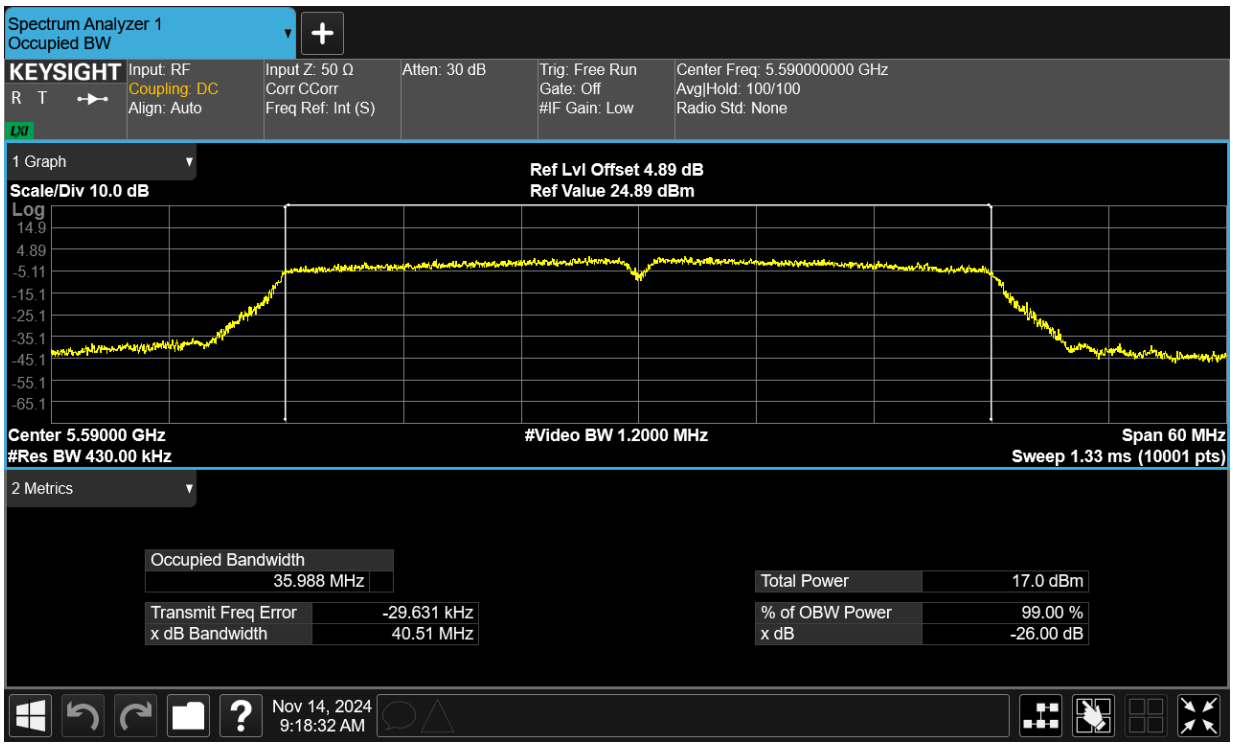
OBW NVNT ac20 5700MHz Ant1



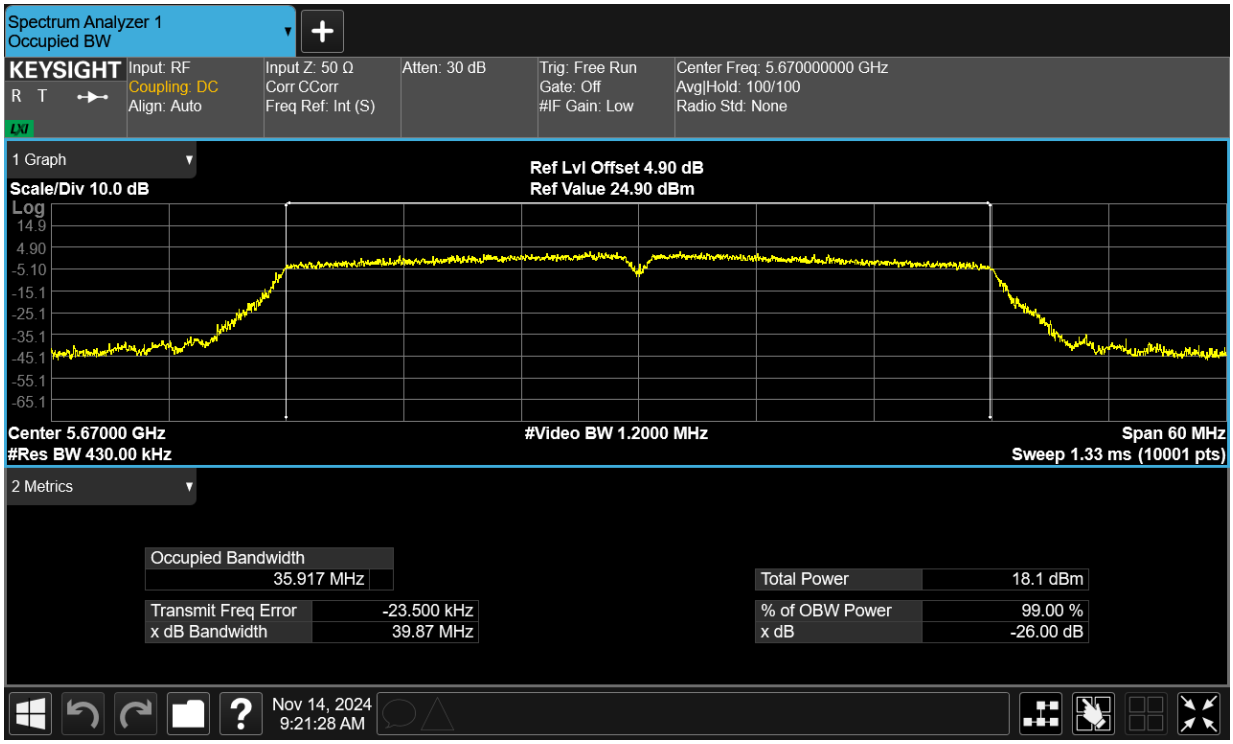
OBW NVNT ac40 5510MHz Ant1



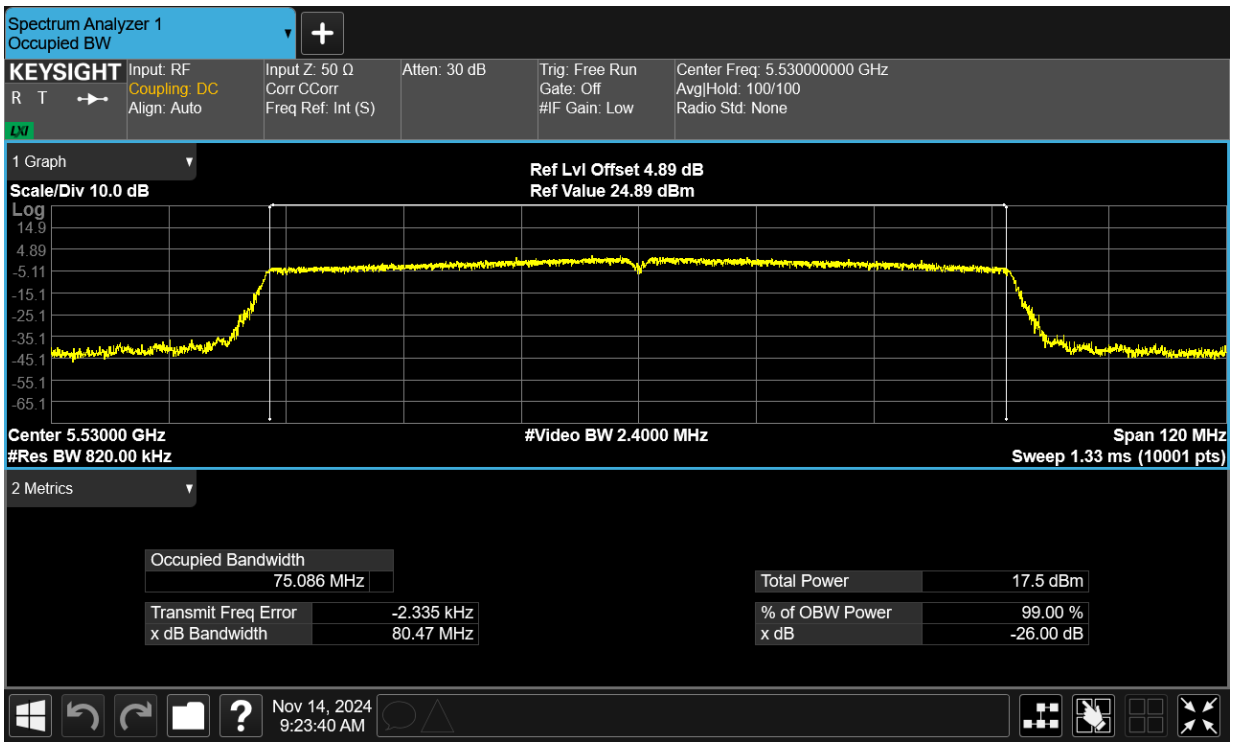
OBW NVNT ac40 5590MHz Ant1



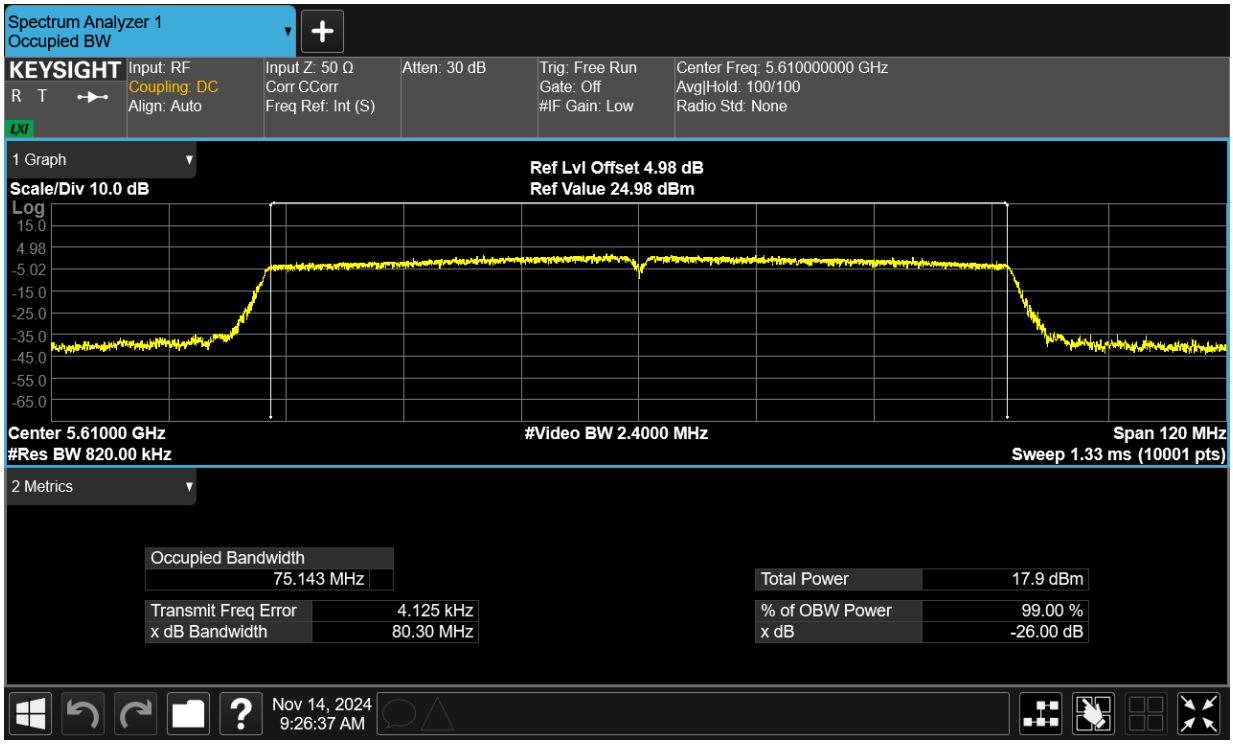
OBW NVNT ac40 5670MHz Ant1



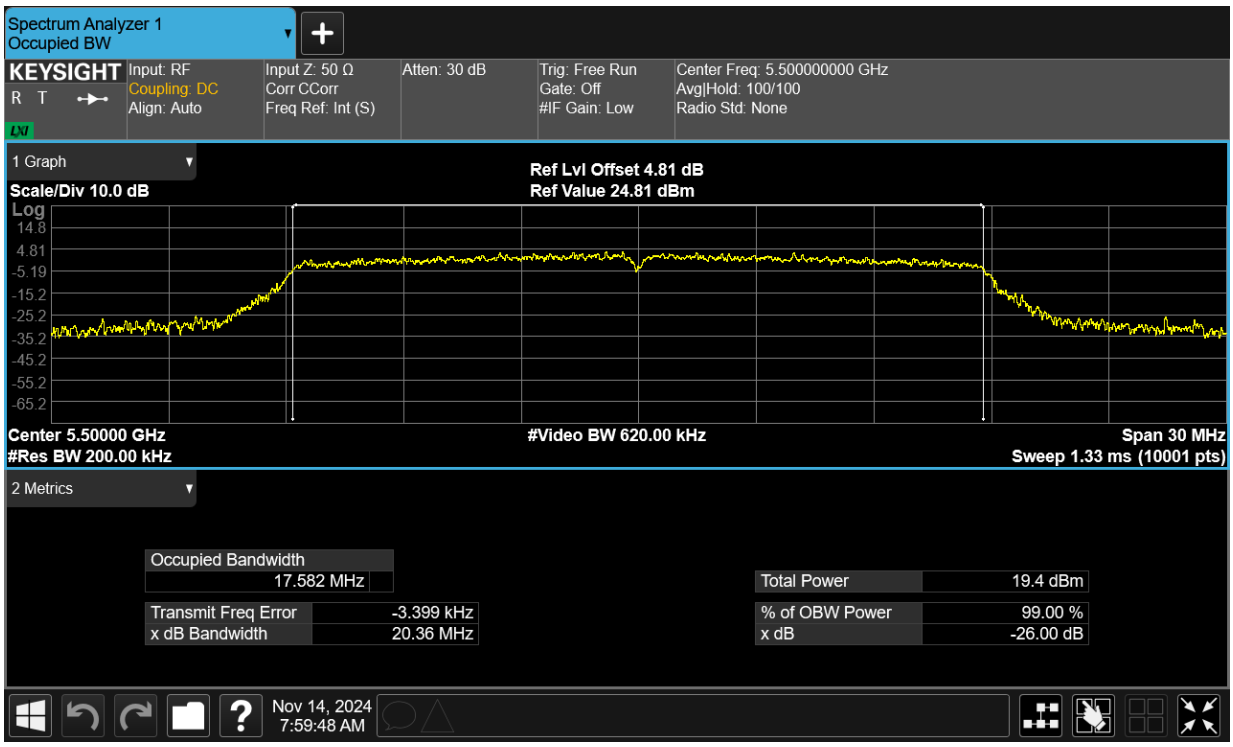
OBW NVNT ac80 5530MHz Ant1



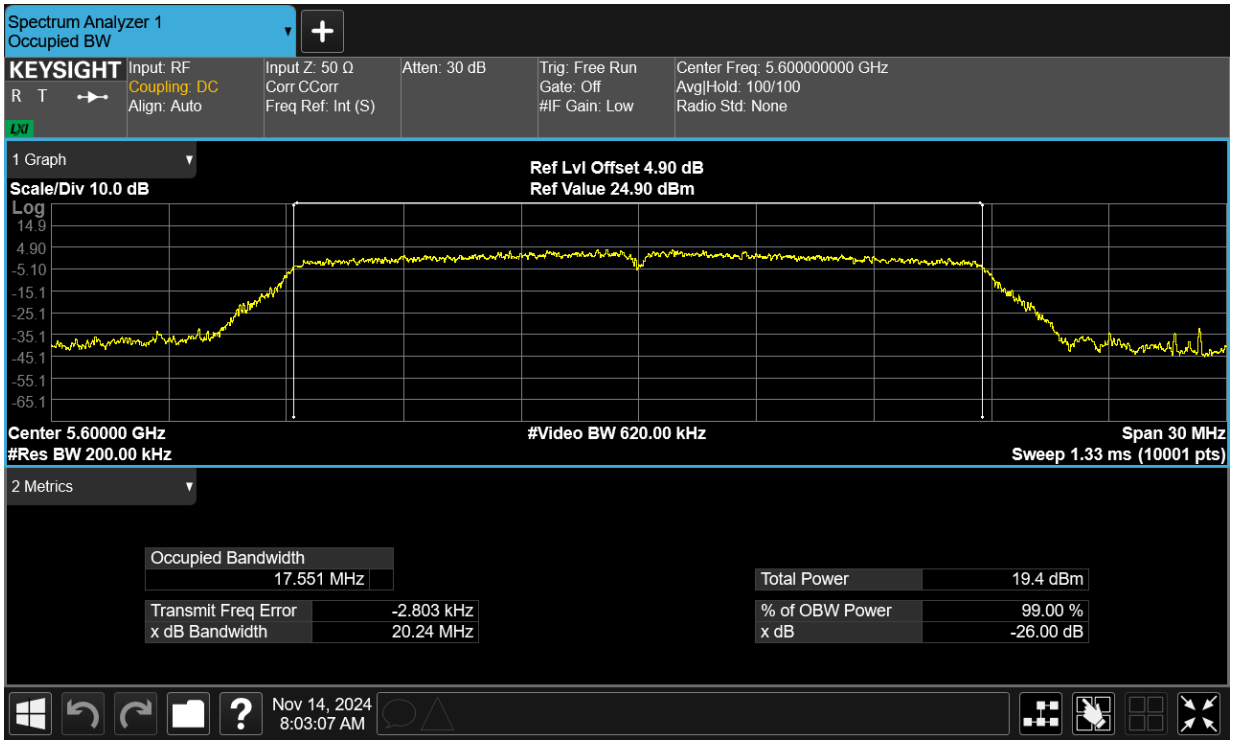
OBW NVNT ac80 5610MHz Ant1



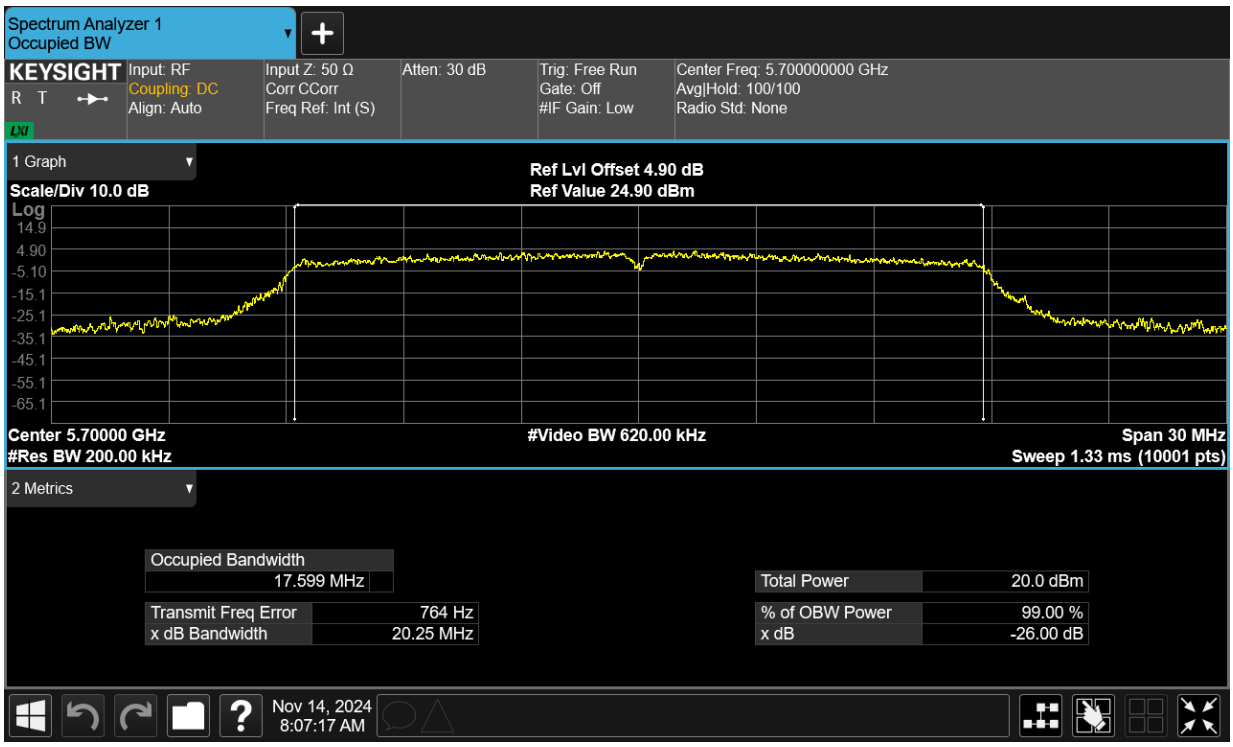
OBW NVNT n20 5500MHz Ant1



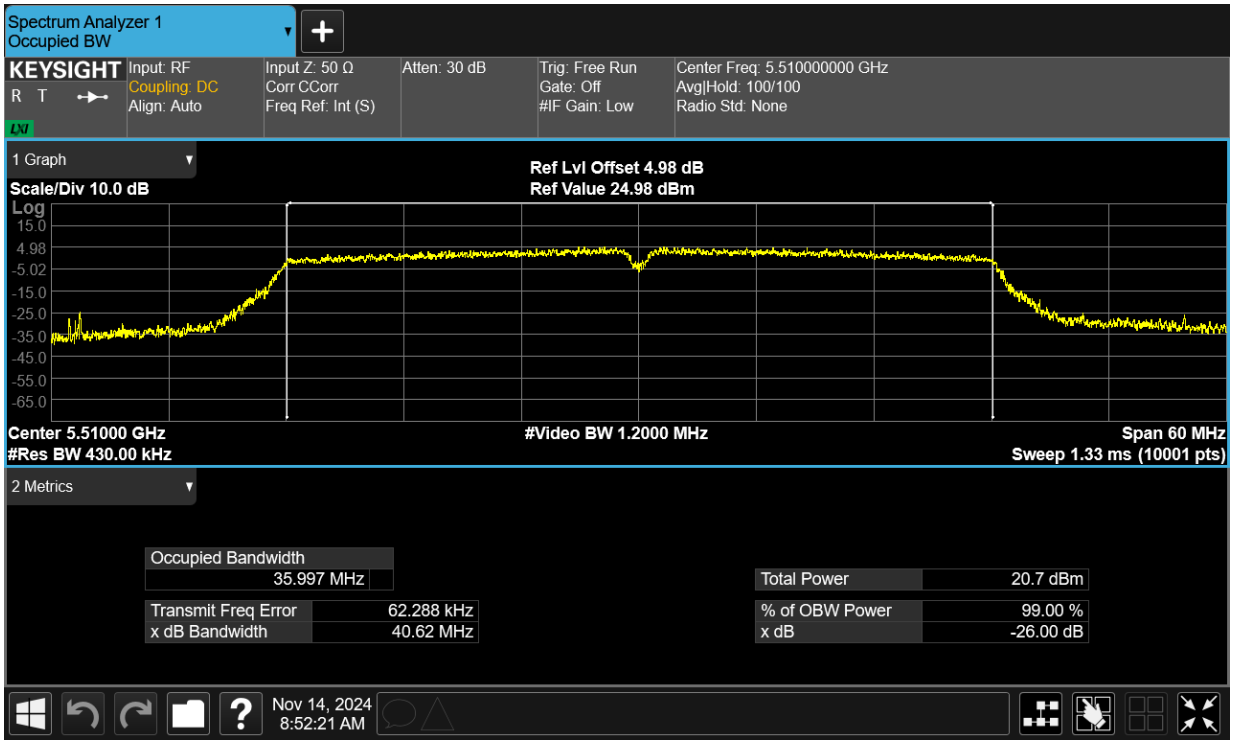
OBW NVNT n20 5600MHz Ant1



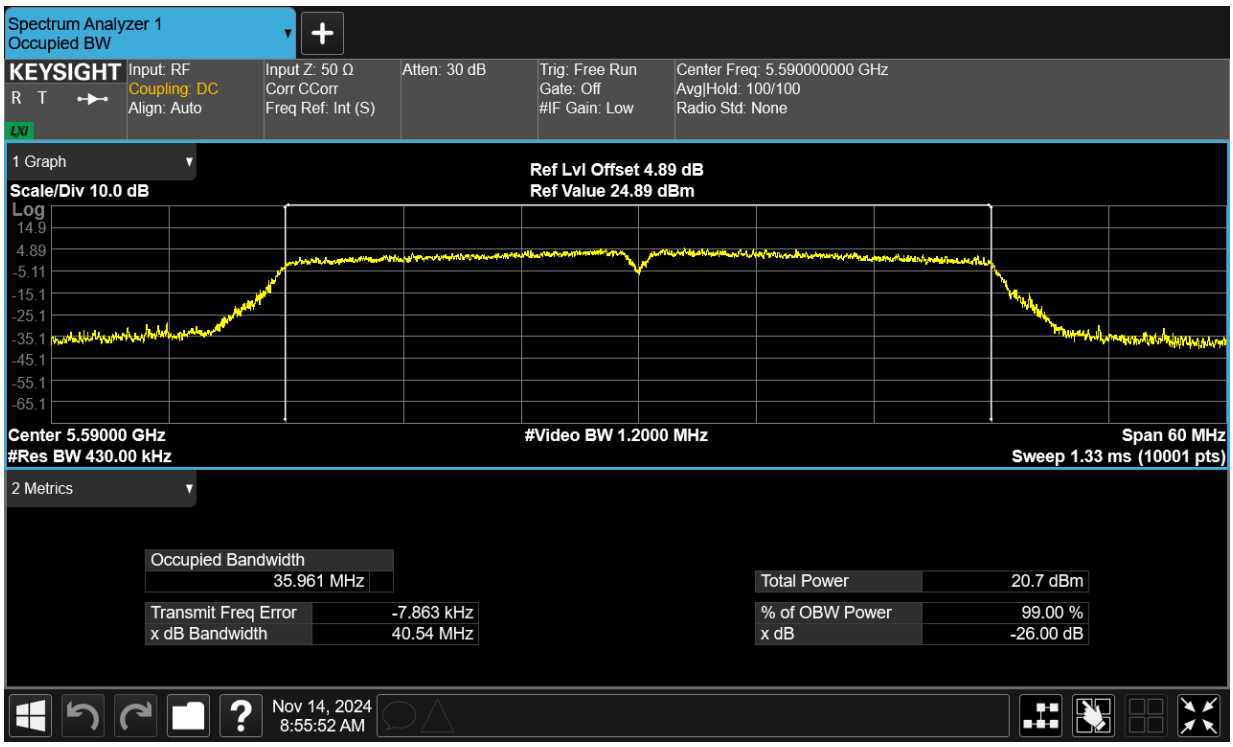
OBW NVNT n20 5700MHz Ant1



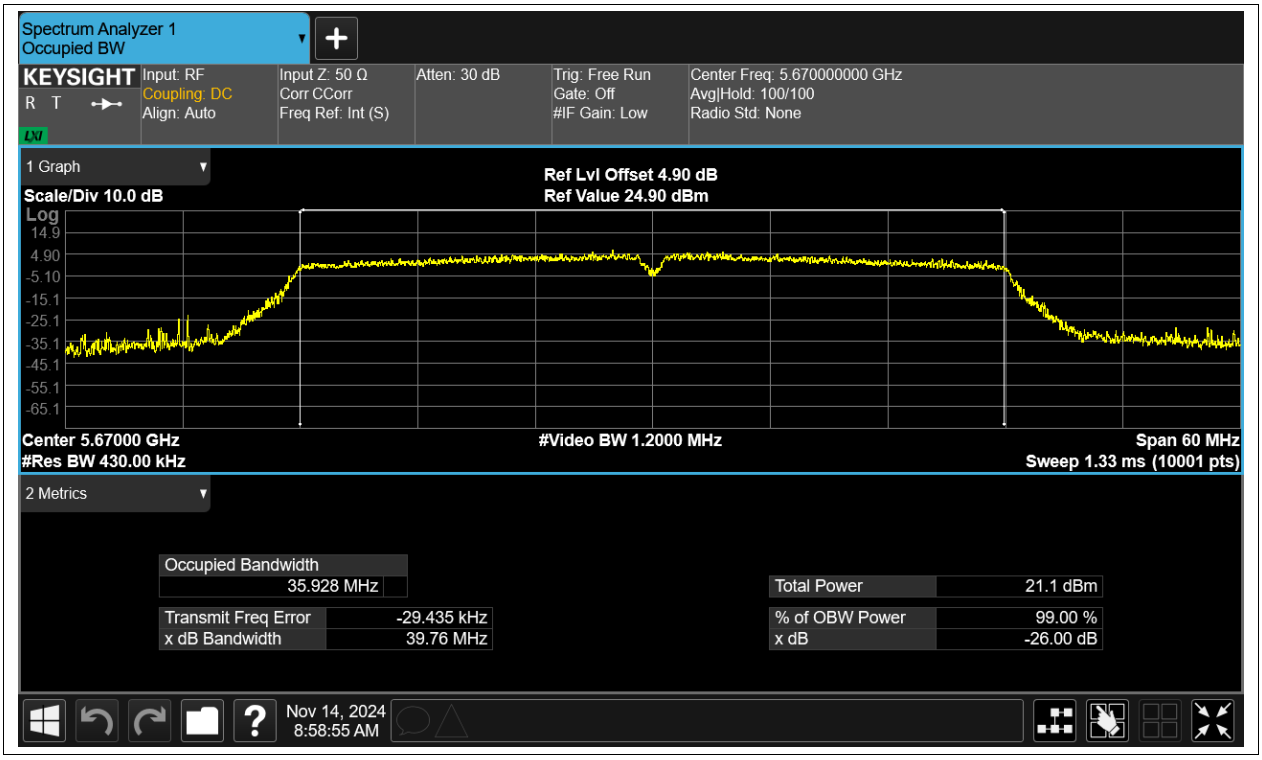
OBW NVNT n40 5510MHz Ant1



OBW NVNT n40 5590MHz Ant1



OBW NVNT n40 5670MHz Ant1

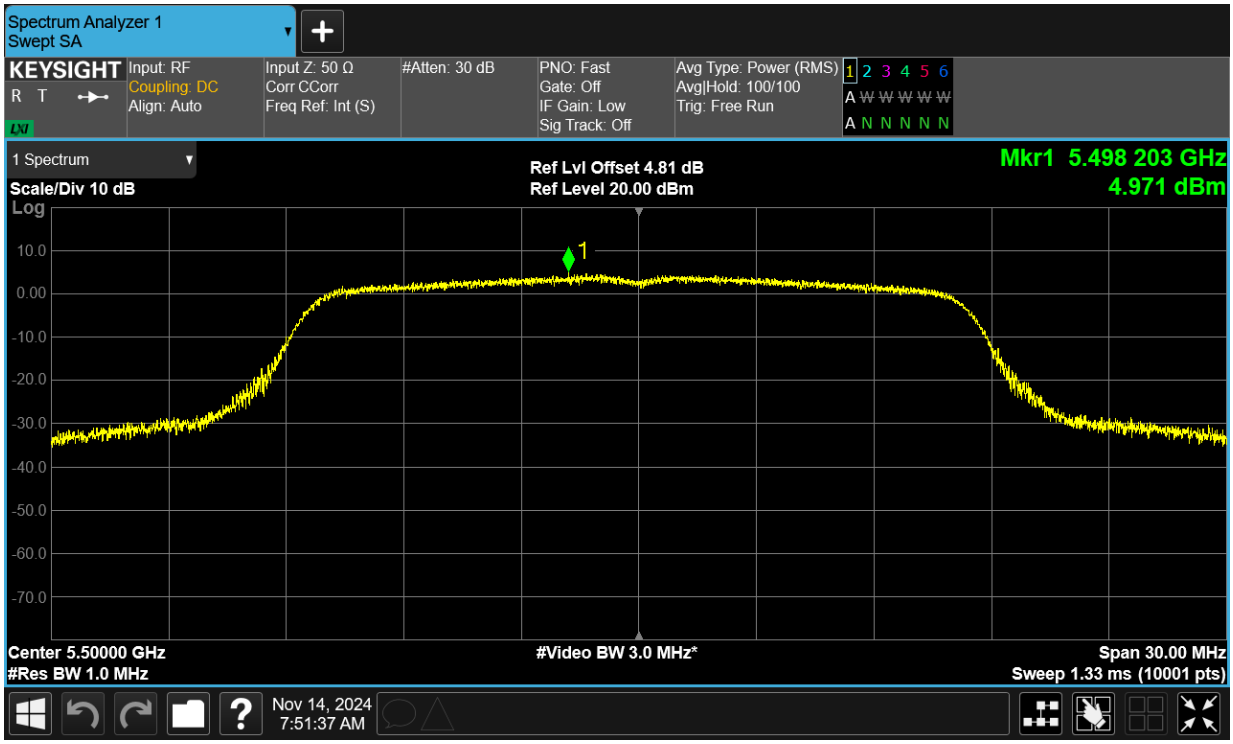

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Scale/Div 10.0 dB
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
35.928 MHz
Transmit Freq Error -29.435 kHz
x dB Bandwidth 39.76 MHz
Total Power 21.1 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Nov 14, 2024
8:58:55 AM

Maximum Power Spectral Density Level

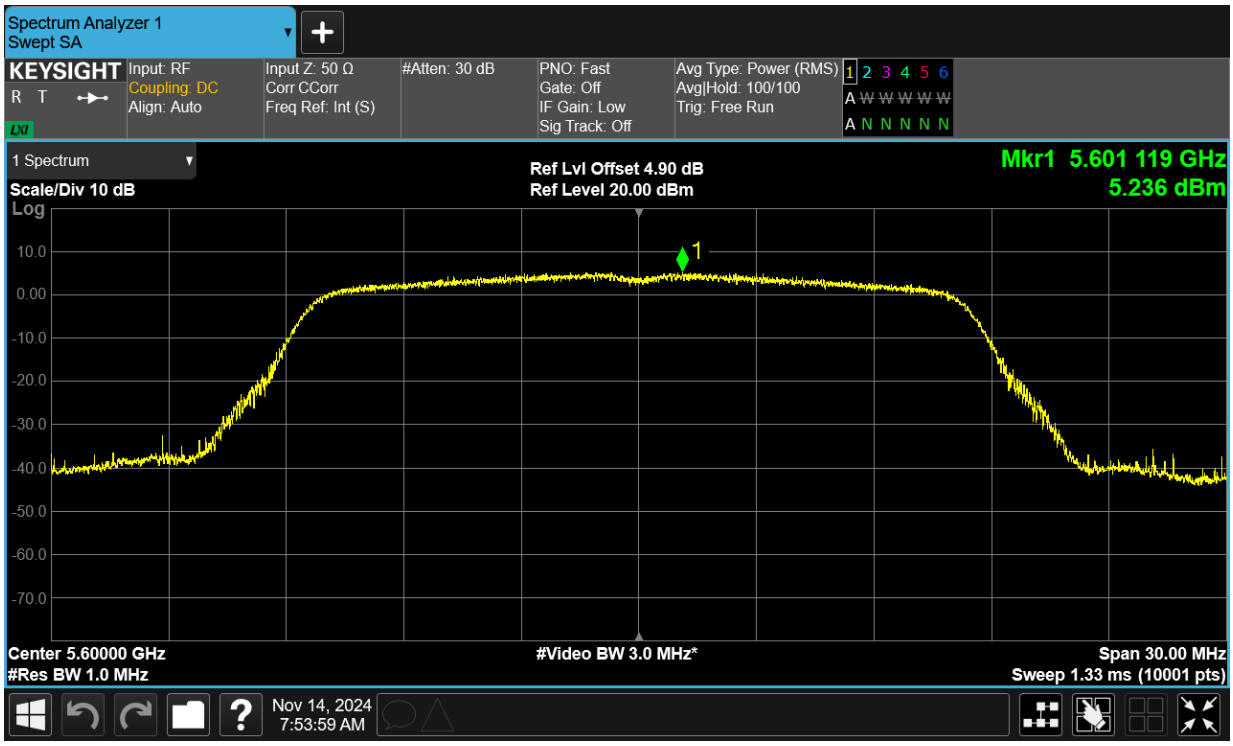
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	4.971	11	Pass
NVNT	a	5600	Ant1	5.236	11	Pass
NVNT	a	5700	Ant1	5.489	11	Pass
NVNT	ac20	5500	Ant1	0.217	11	Pass
NVNT	ac20	5600	Ant1	0.152	11	Pass
NVNT	ac20	5700	Ant1	0.431	11	Pass
NVNT	ac40	5510	Ant1	-1.855	11	Pass
NVNT	ac40	5590	Ant1	-1.357	11	Pass
NVNT	ac40	5670	Ant1	-0.309	11	Pass
NVNT	ac80	5530	Ant1	-4.69	11	Pass
NVNT	ac80	5610	Ant1	-4.594	11	Pass
NVNT	n20	5500	Ant1	3.823	11	Pass
NVNT	n20	5600	Ant1	3.988	11	Pass
NVNT	n20	5700	Ant1	4.804	11	Pass
NVNT	n40	5510	Ant1	2.354	11	Pass
NVNT	n40	5590	Ant1	2.319	11	Pass
NVNT	n40	5670	Ant1	2.901	11	Pass

Test Graphs

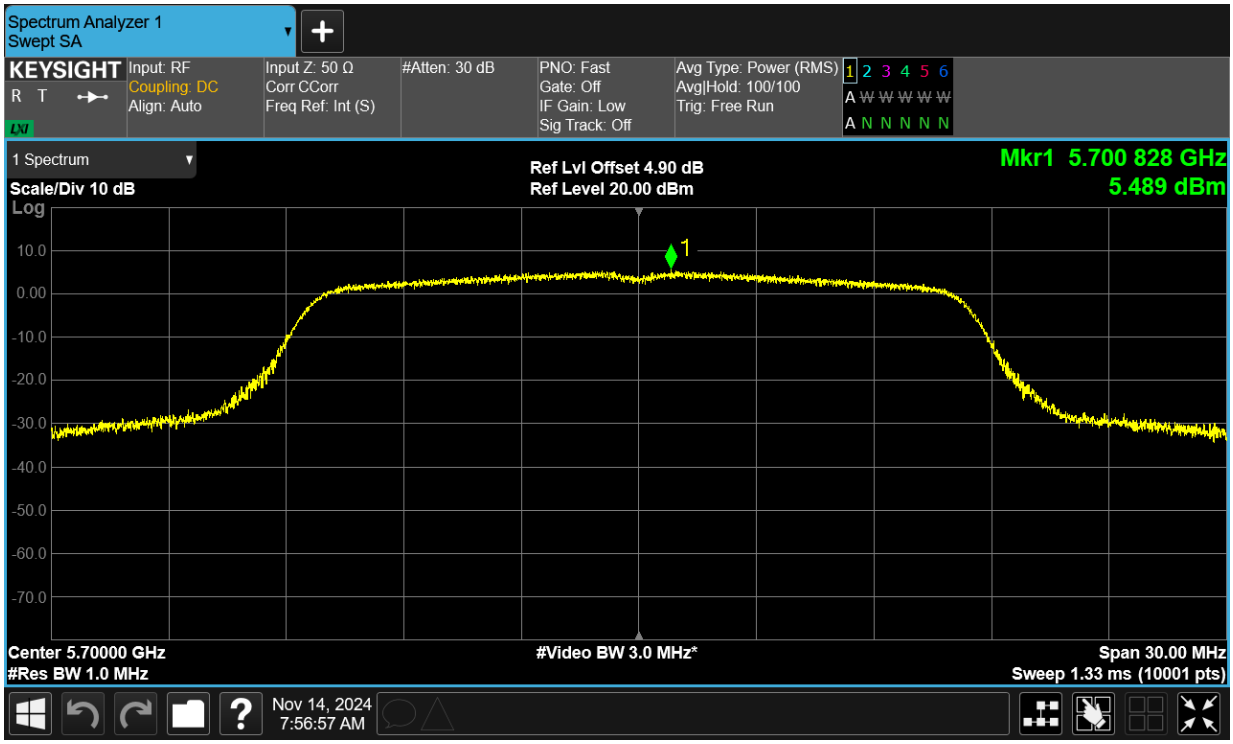
PSD NVNT a 5500MHz Ant1



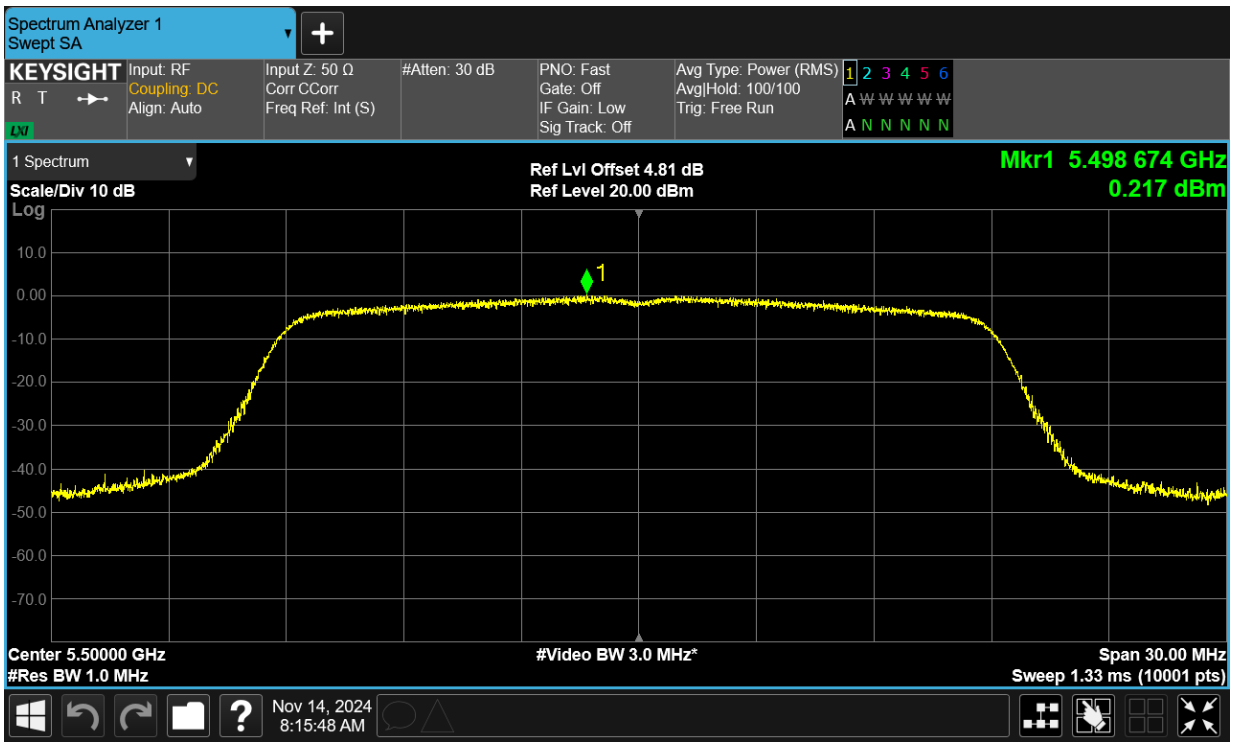
PSD NVNT a 5600MHz Ant1



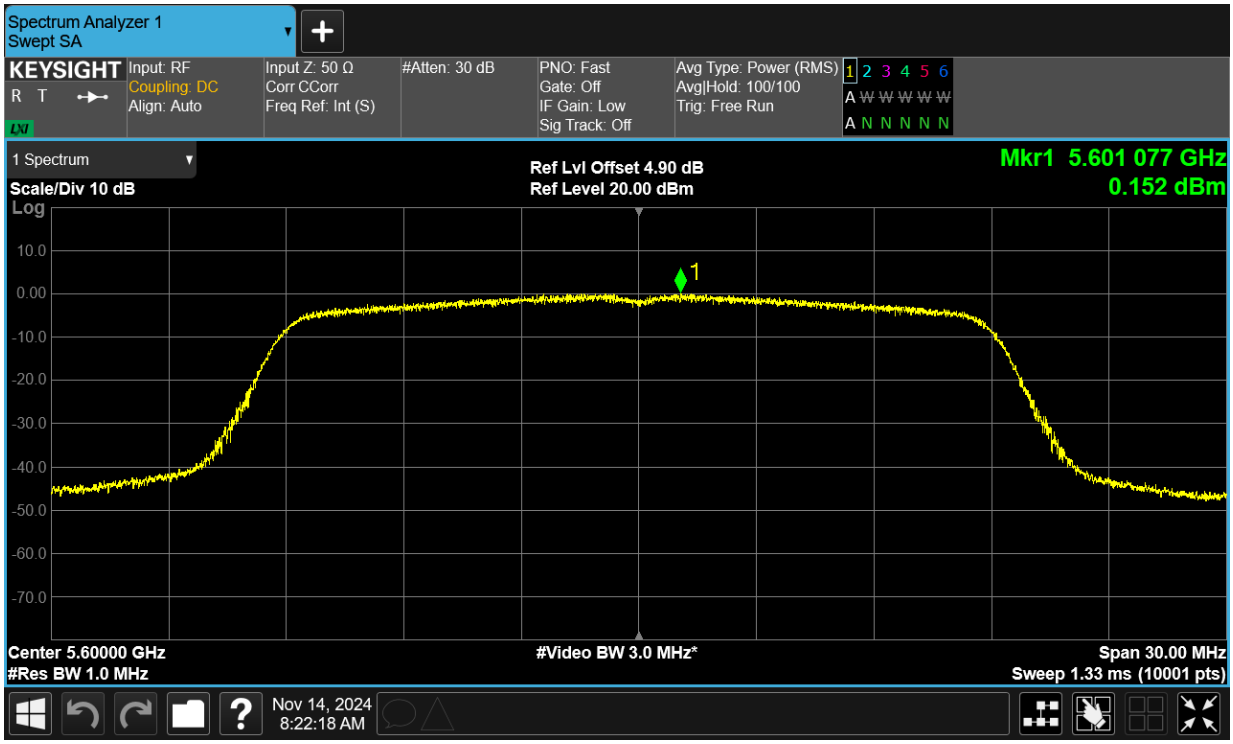
PSD NVNT a 5700MHz Ant1



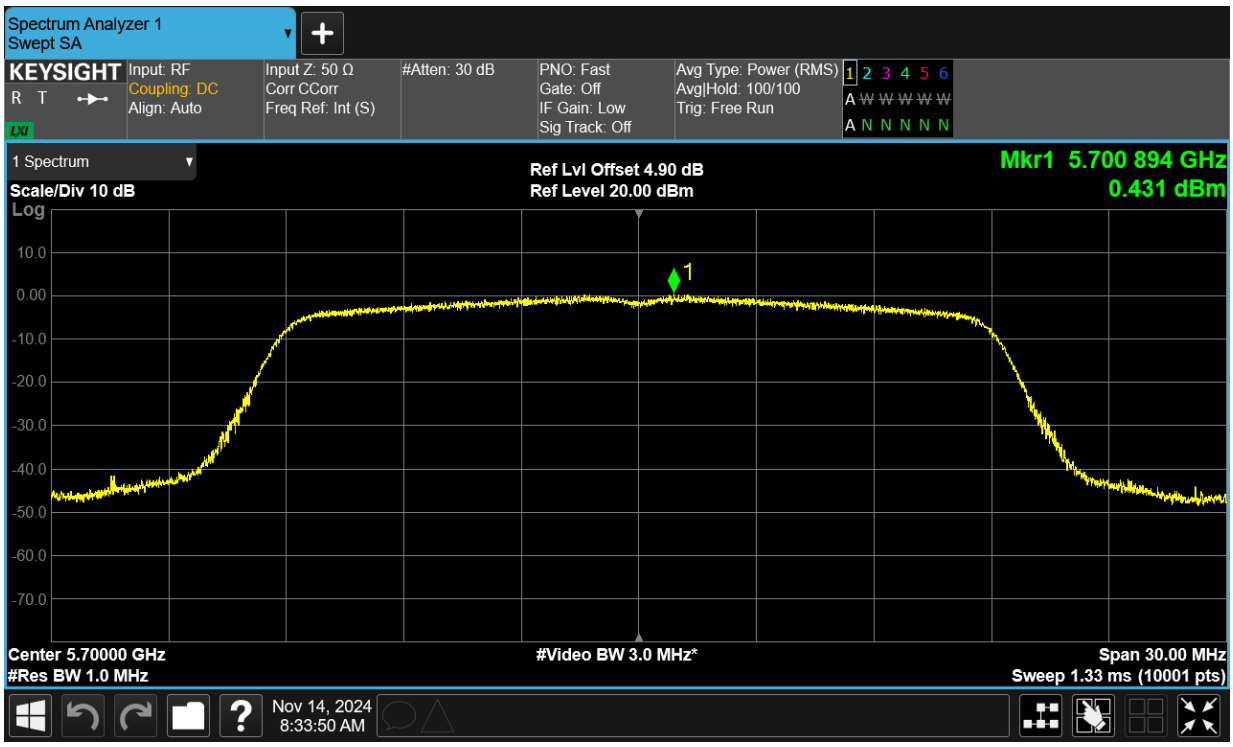
PSD NVNT ac20 5500MHz Ant1



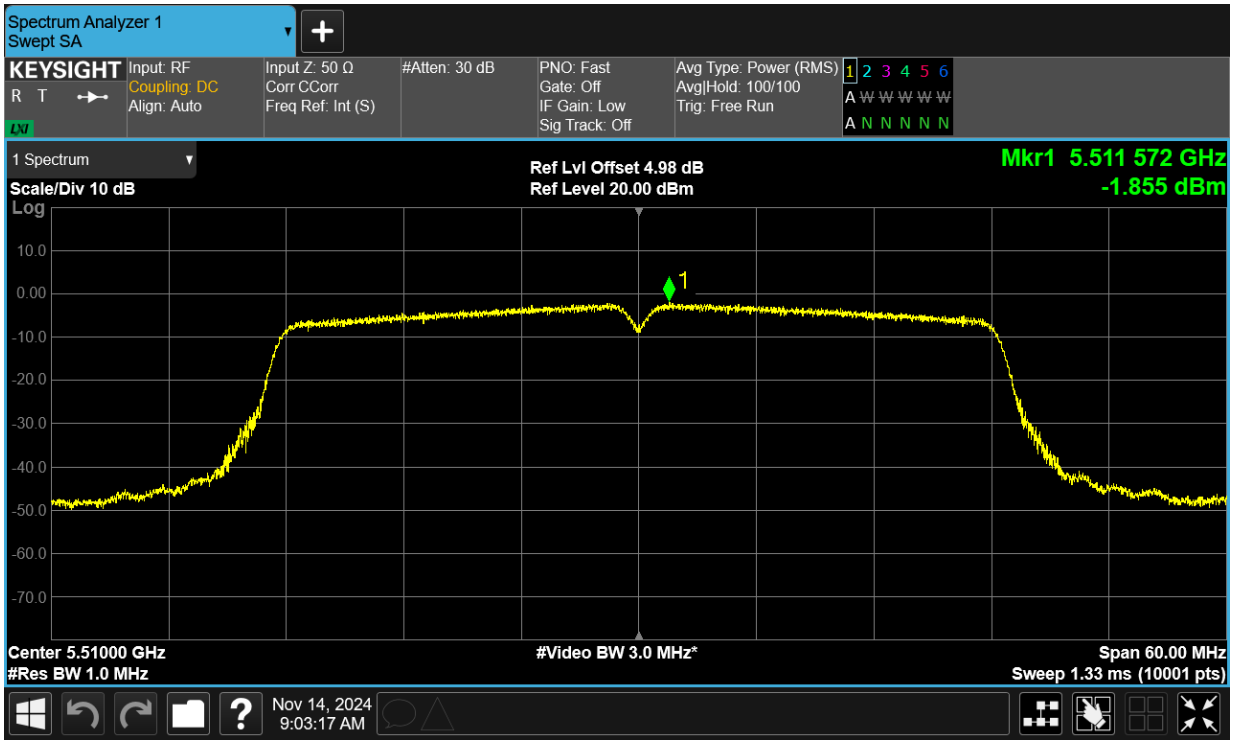
PSD NVNT ac20 5600MHz Ant1



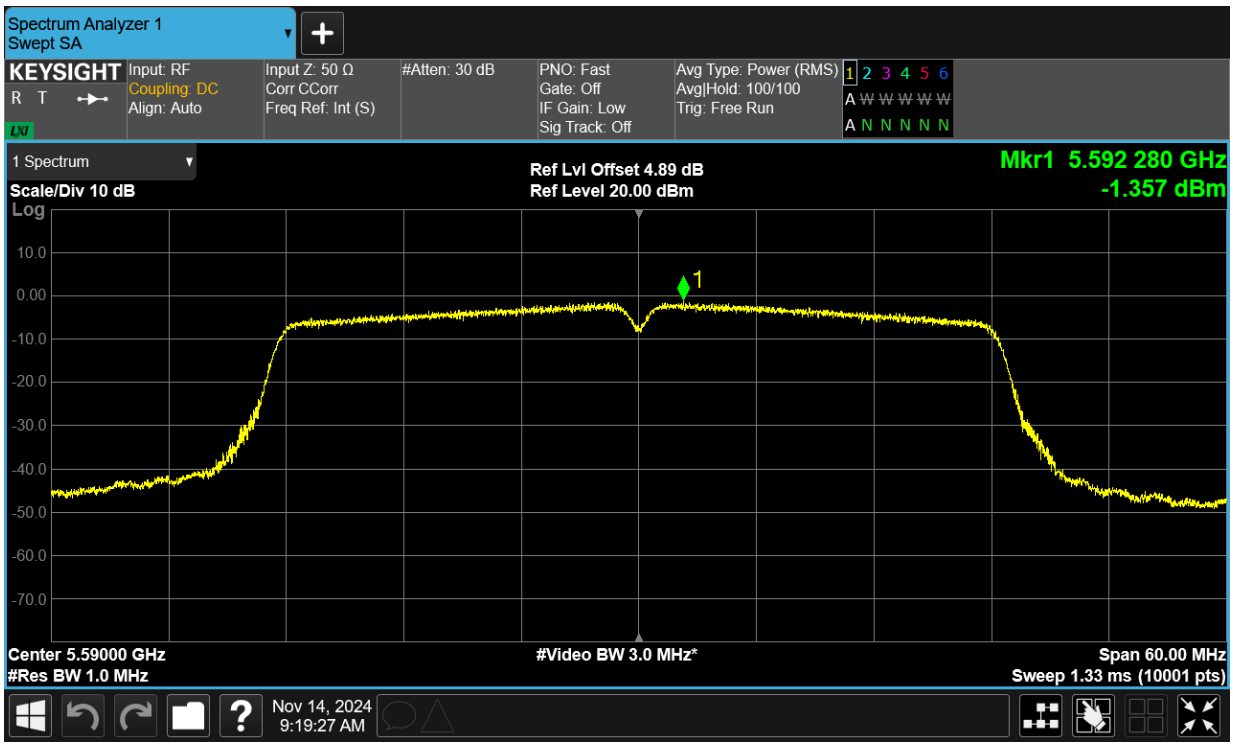
PSD NVNT ac20 5700MHz Ant1



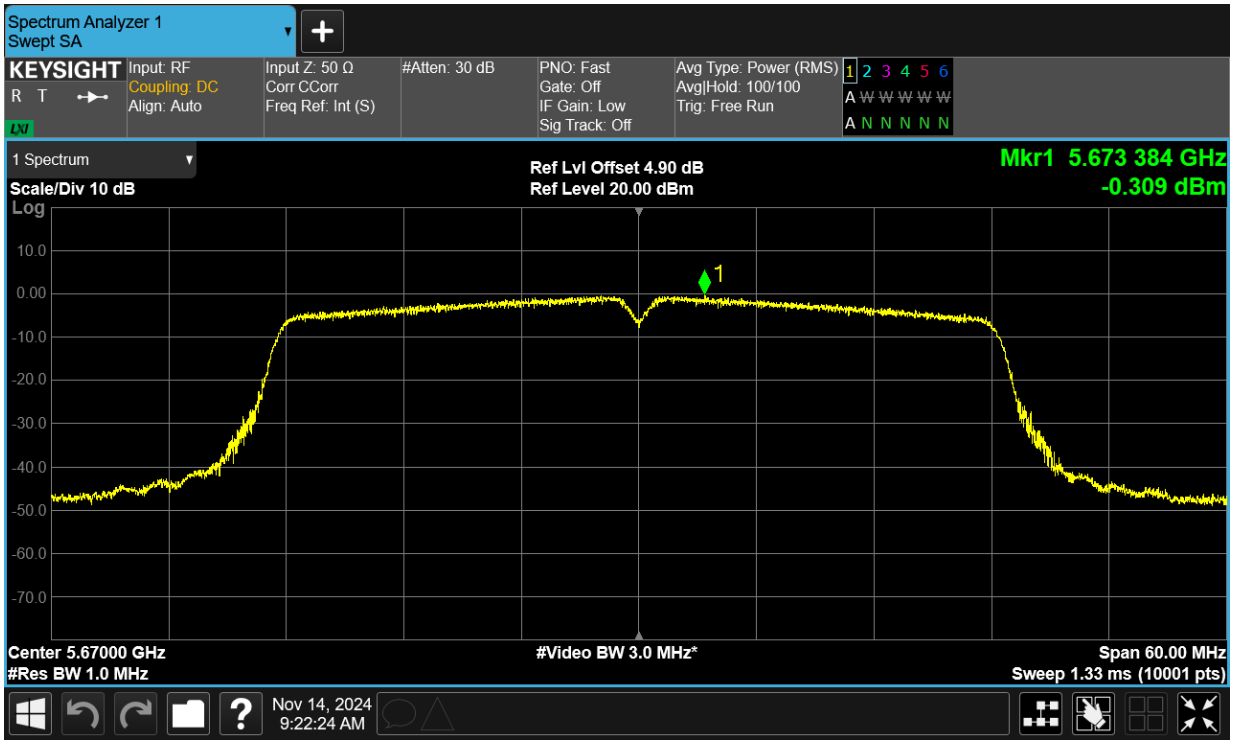
PSD NVNT ac40 5510MHz Ant1



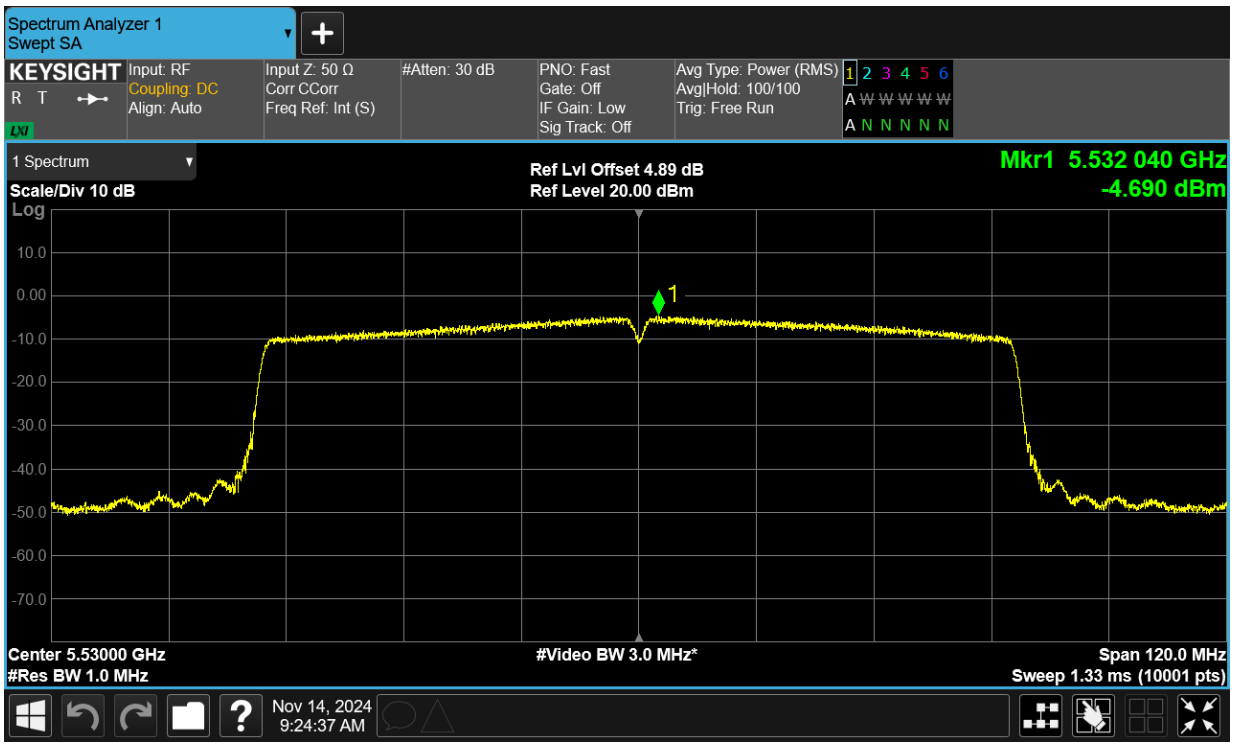
PSD NVNT ac40 5590MHz Ant1



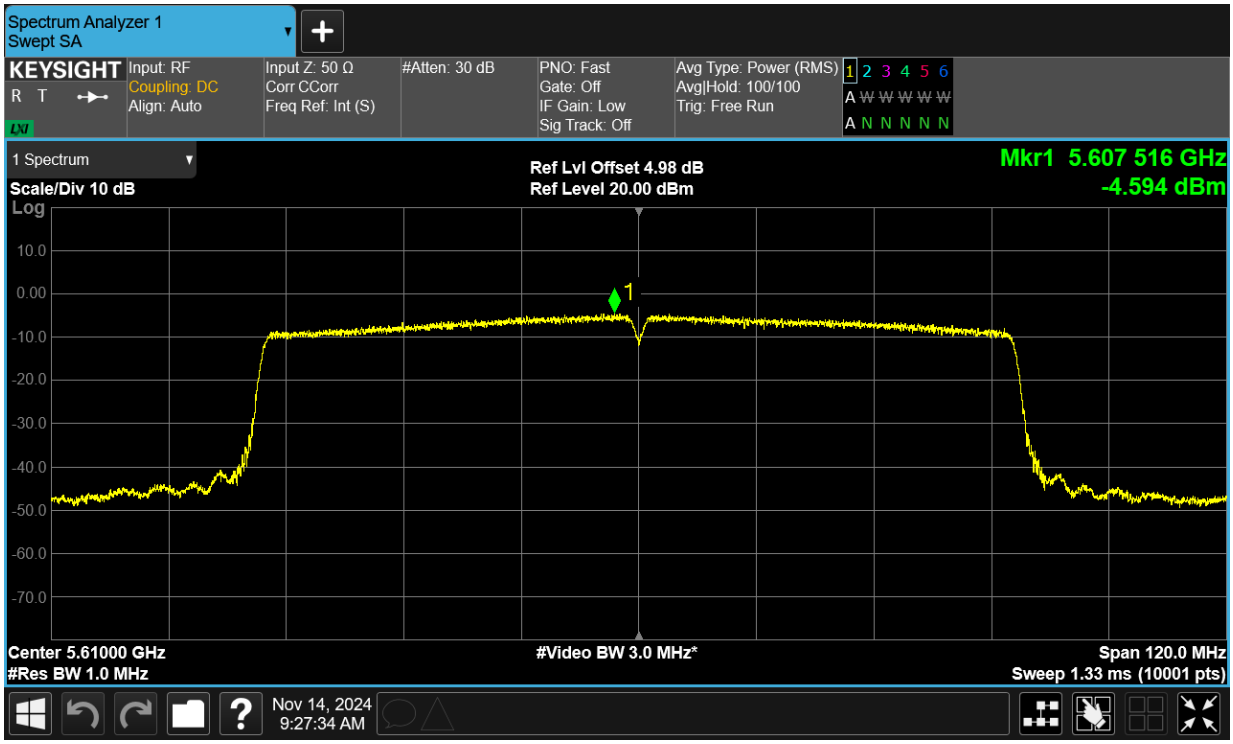
PSD NVNT ac40 5670MHz Ant1



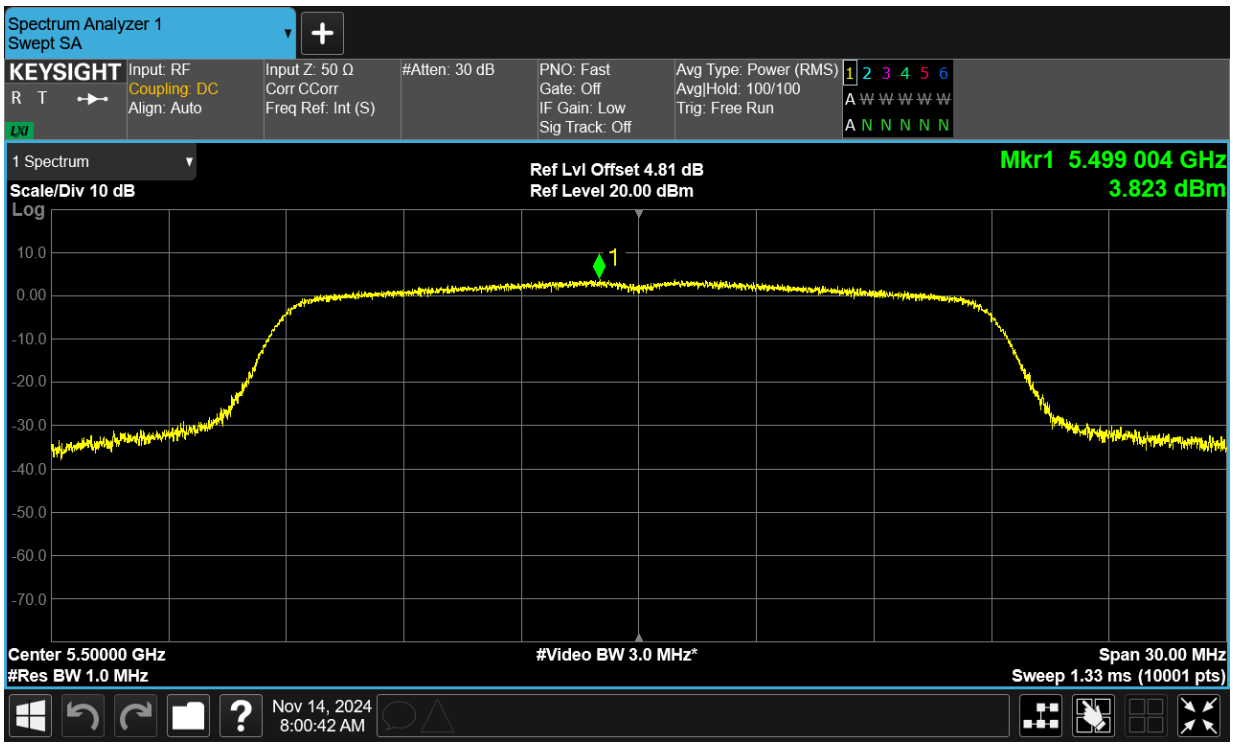
PSD NVNT ac80 5530MHz Ant1



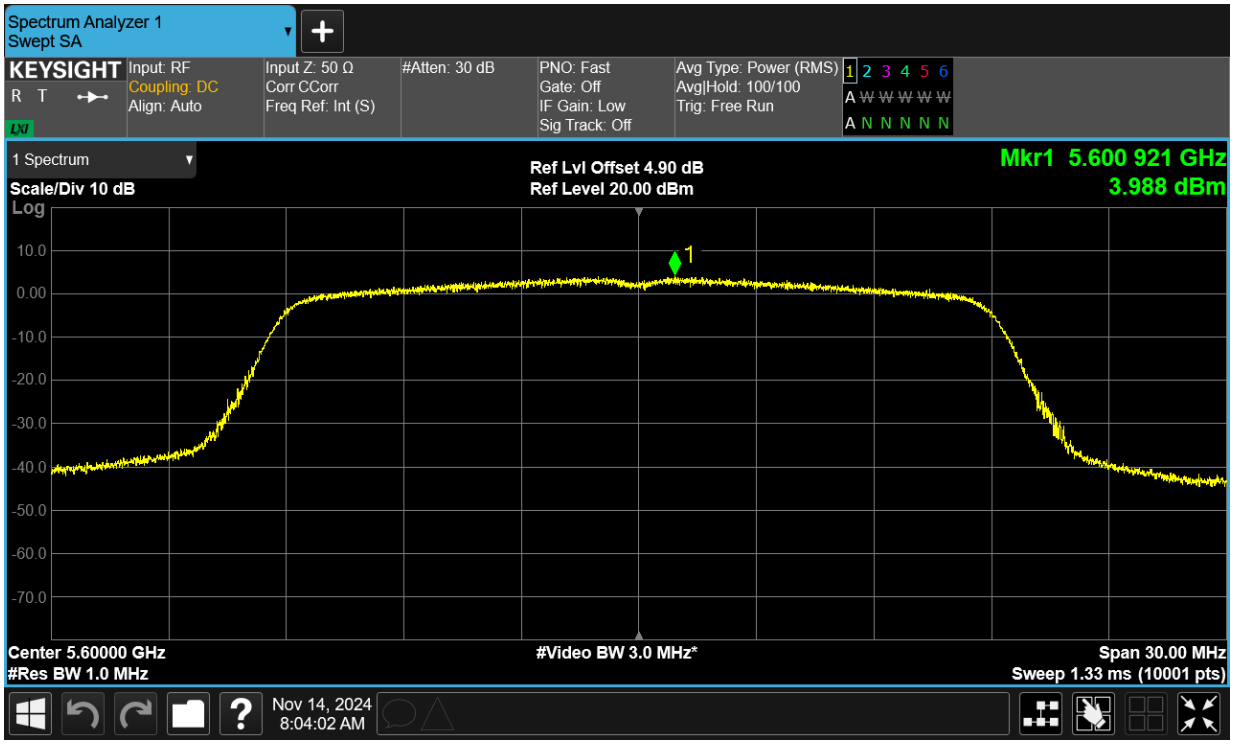
PSD NVNT ac80 5610MHz Ant1



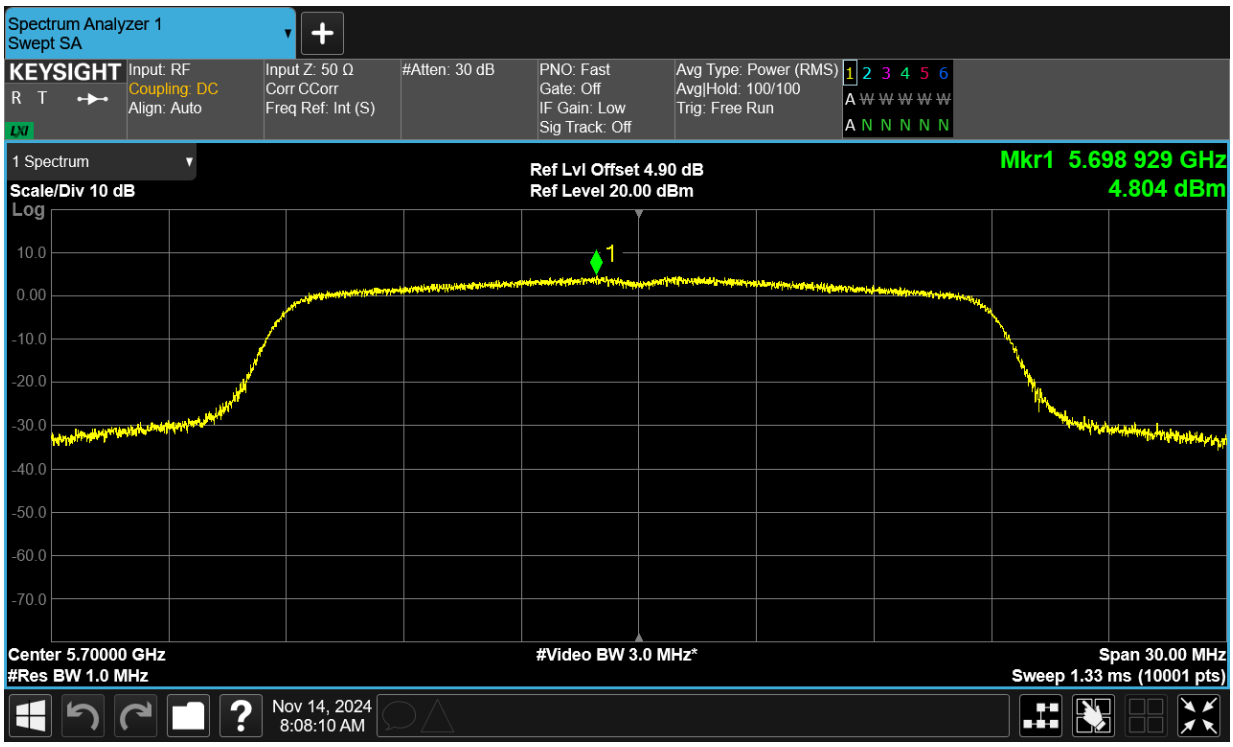
PSD NVNT n20 5500MHz Ant1



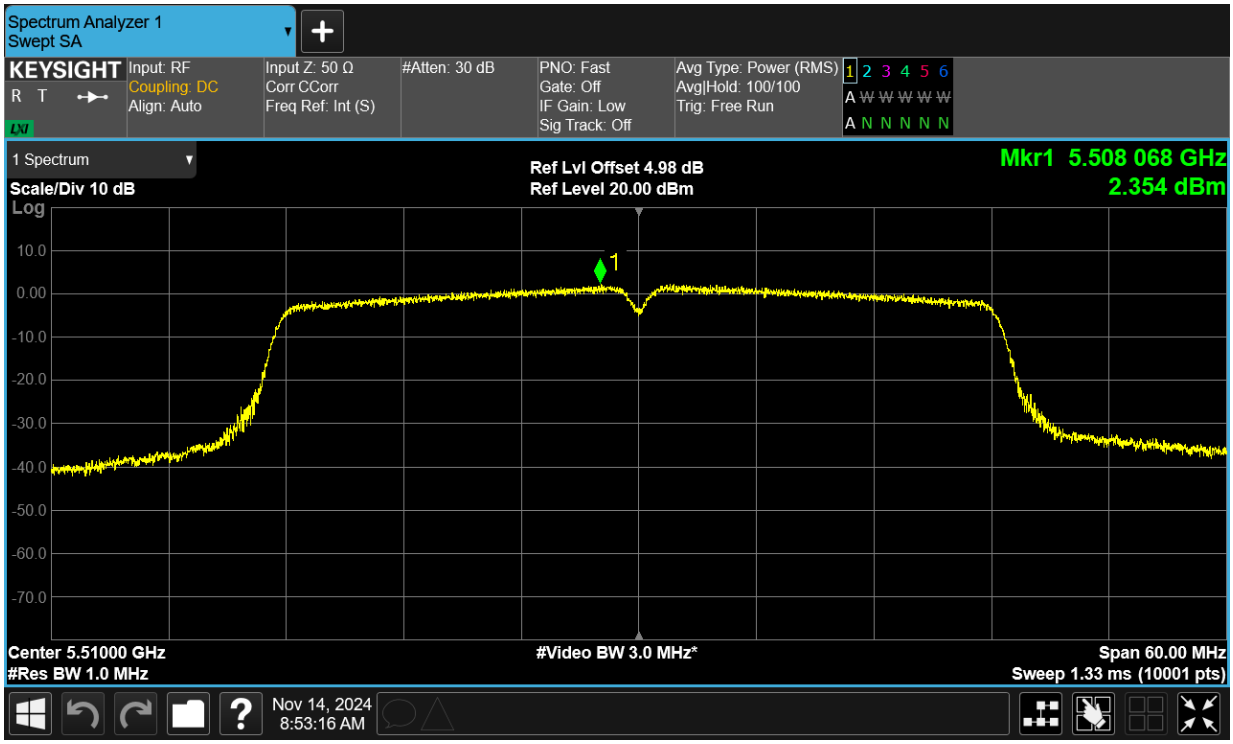
PSD NVNT n20 5600MHz Ant1



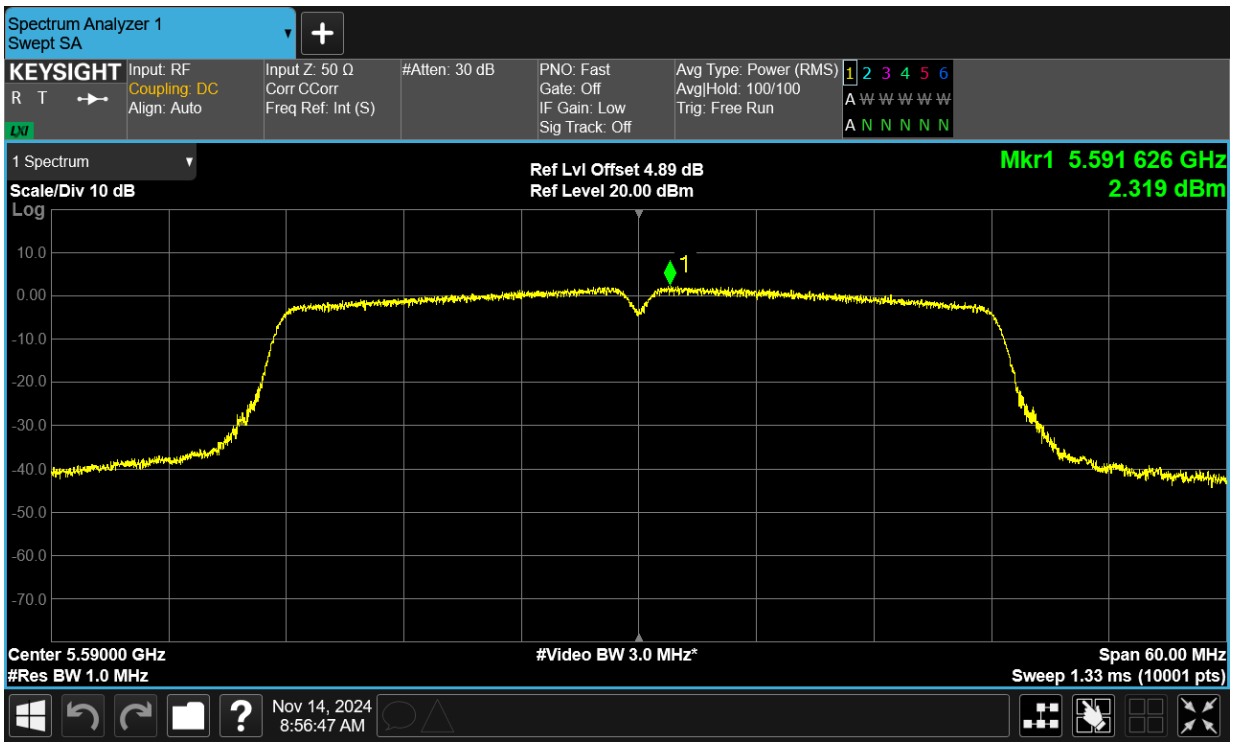
PSD NVNT n20 5700MHz Ant1



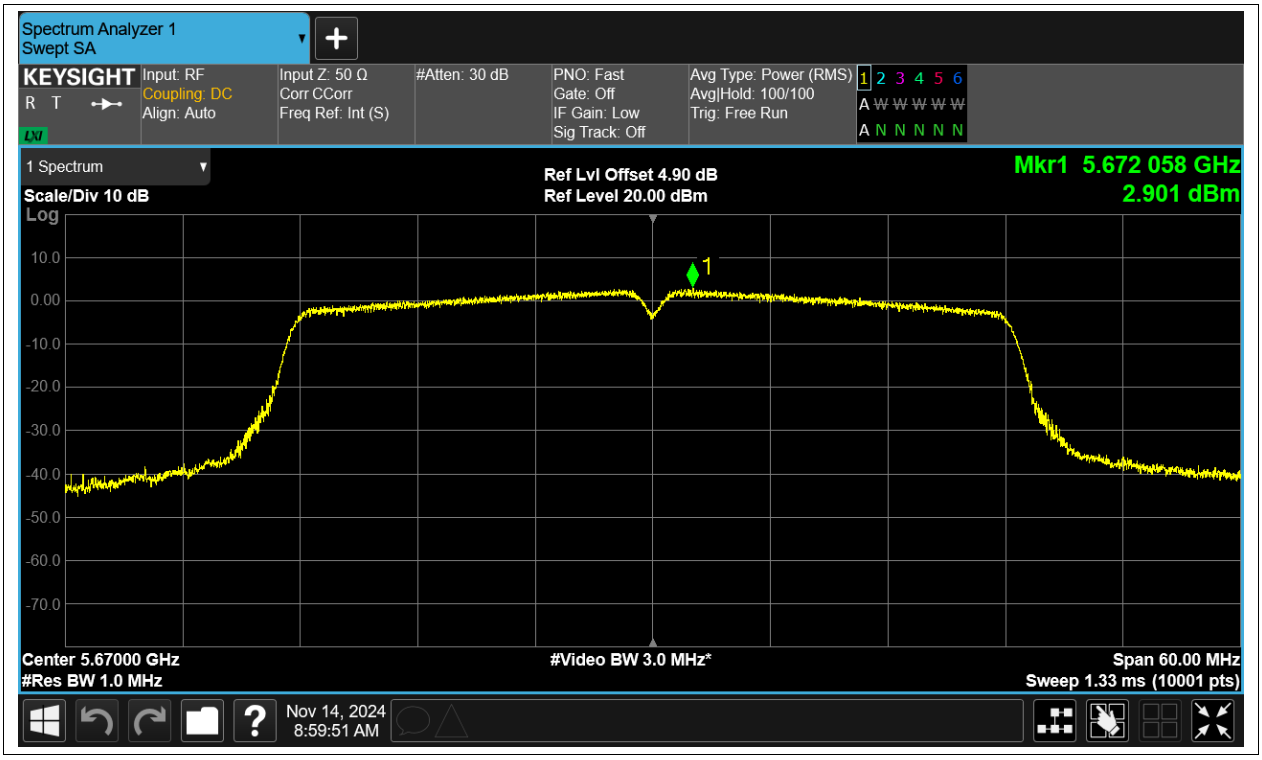
PSD NVNT n40 5510MHz Ant1



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
Log
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 5.672 058 GHz
2.901 dBm
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)
Nov 14, 2024
8:59:51 AM