

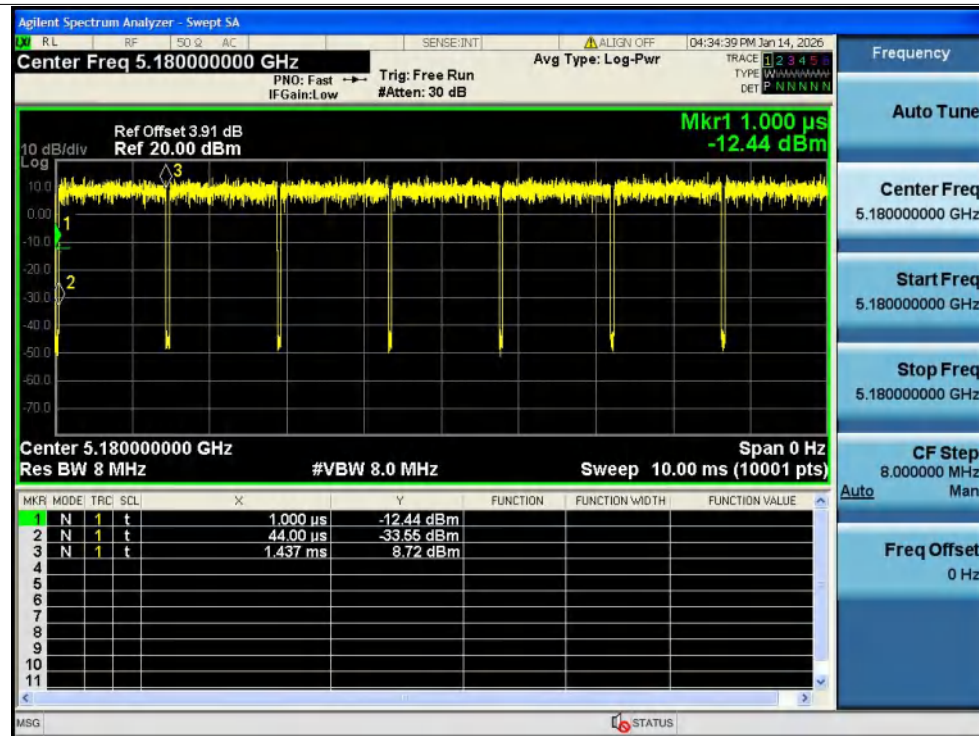
Appendix G 5.1G WIFI

Duty Cycle

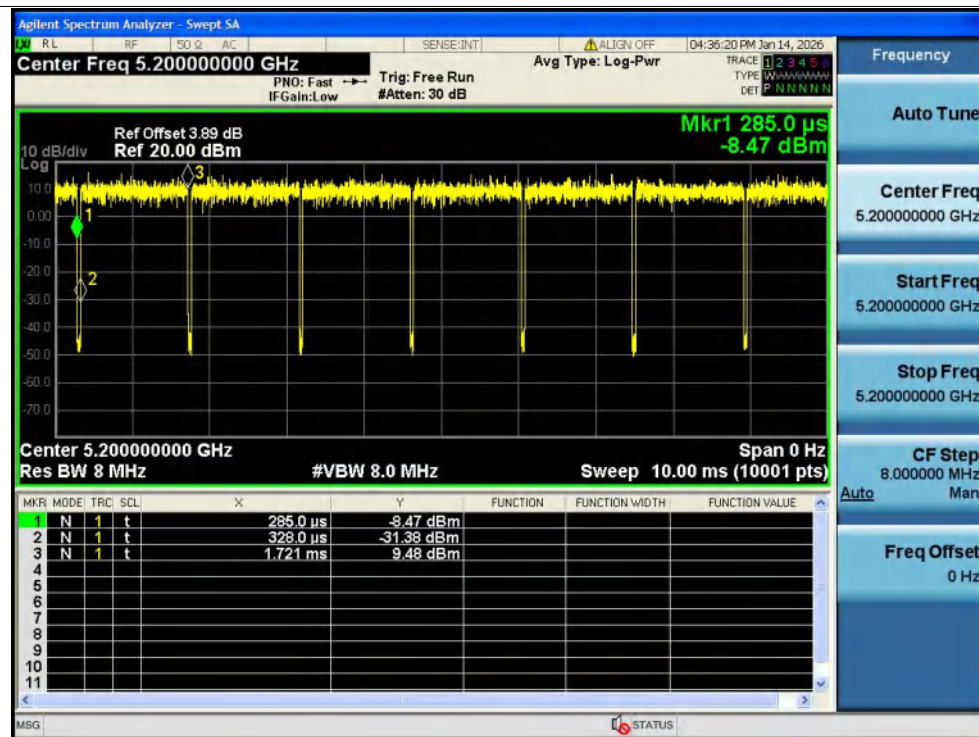
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.01	0.13	0.72
NVNT	a	5200	Ant1	97.01	0.13	0.72
NVNT	a	5240	Ant1	97.08	0.13	0.72
NVNT	n20	5180	Ant1	96.8	0.14	0.77
NVNT	n20	5200	Ant1	96.8	0.14	0.77
NVNT	n20	5240	Ant1	96.8	0.14	0.77
NVNT	n40	5190	Ant1	93.93	0.27	1.54
NVNT	n40	5230	Ant1	93.79	0.28	1.54
NVNT	ac20	5180	Ant1	96.9	0.14	0.76
NVNT	ac20	5200	Ant1	96.83	0.14	0.76
NVNT	ac20	5240	Ant1	96.83	0.14	0.76
NVNT	ac40	5190	Ant1	93.97	0.27	1.53
NVNT	ac40	5230	Ant1	93.82	0.28	1.53

Test Graphs

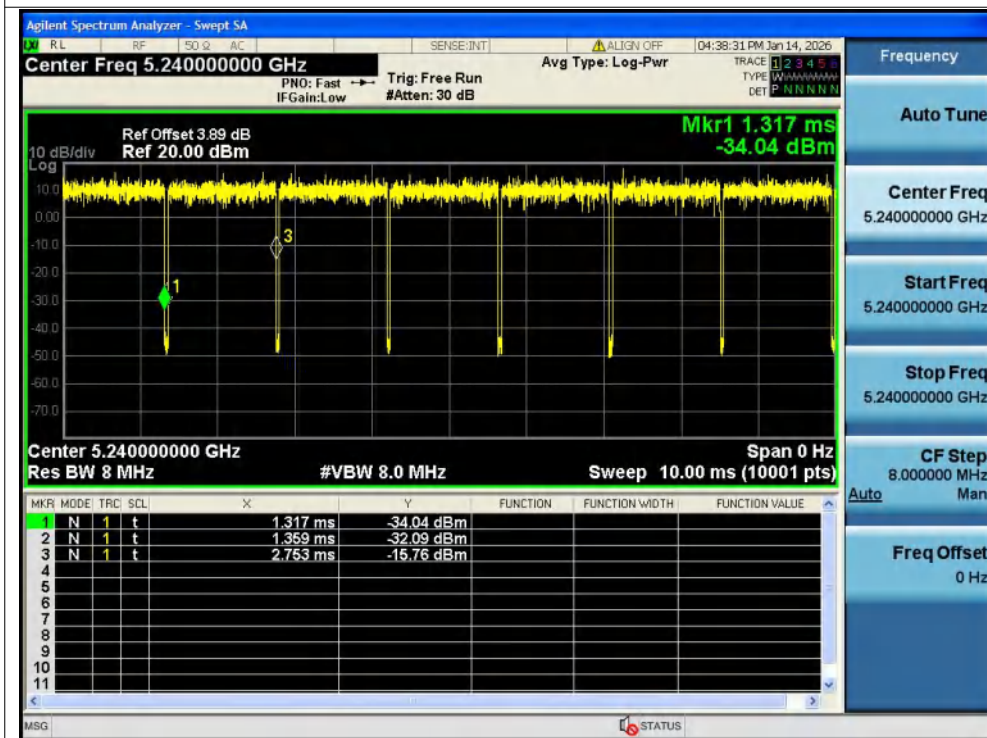
Duty Cycle NVNT a 5180MHz Ant1



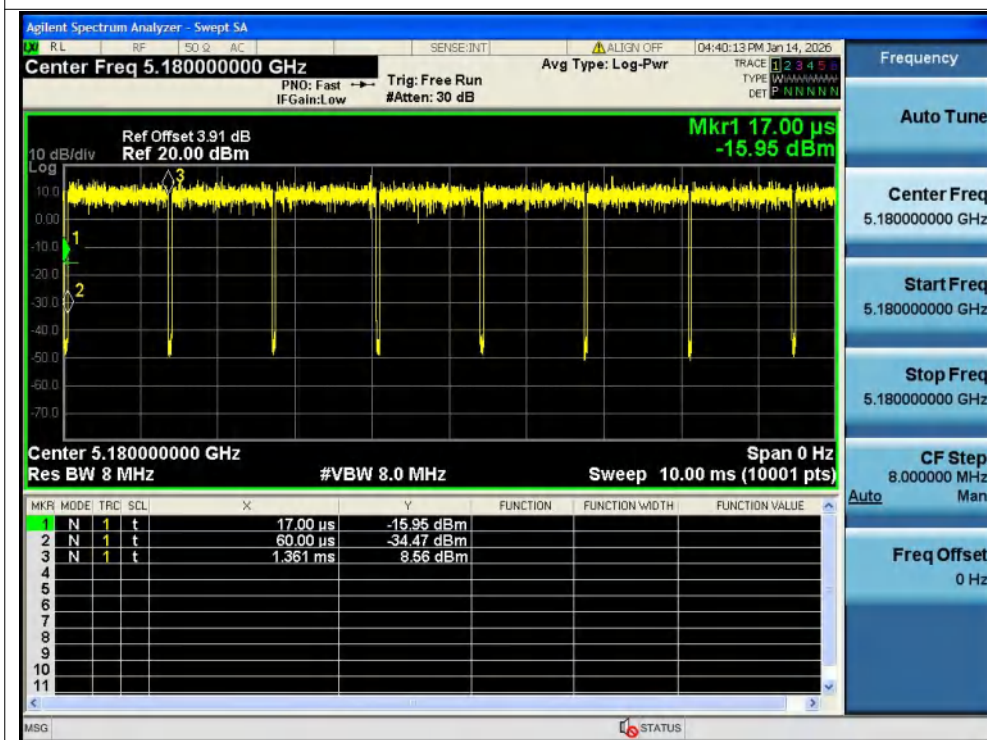
Duty Cycle NVNT a 5200MHz Ant1



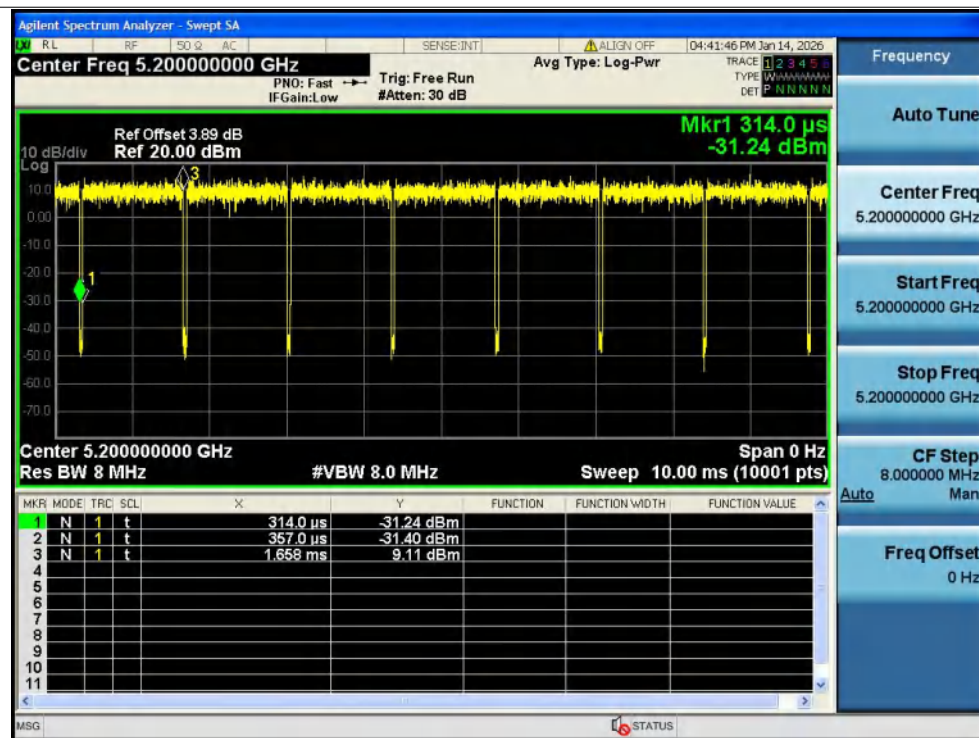
Duty Cycle NVNT a 5240MHz Ant1



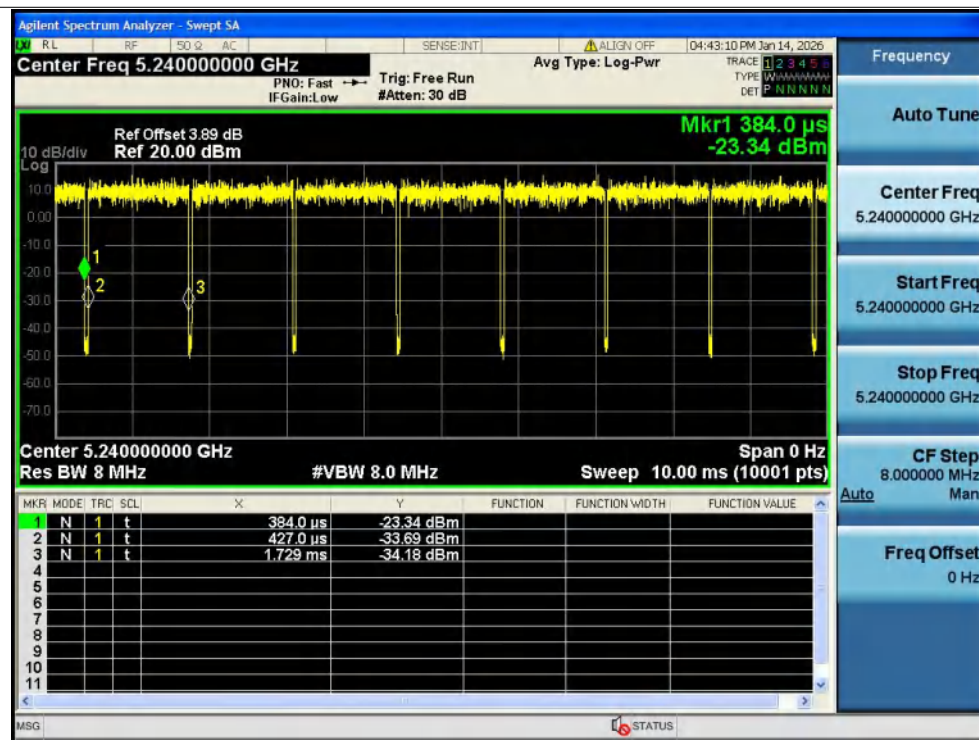
Duty Cycle NVNT n20 5180MHz Ant1



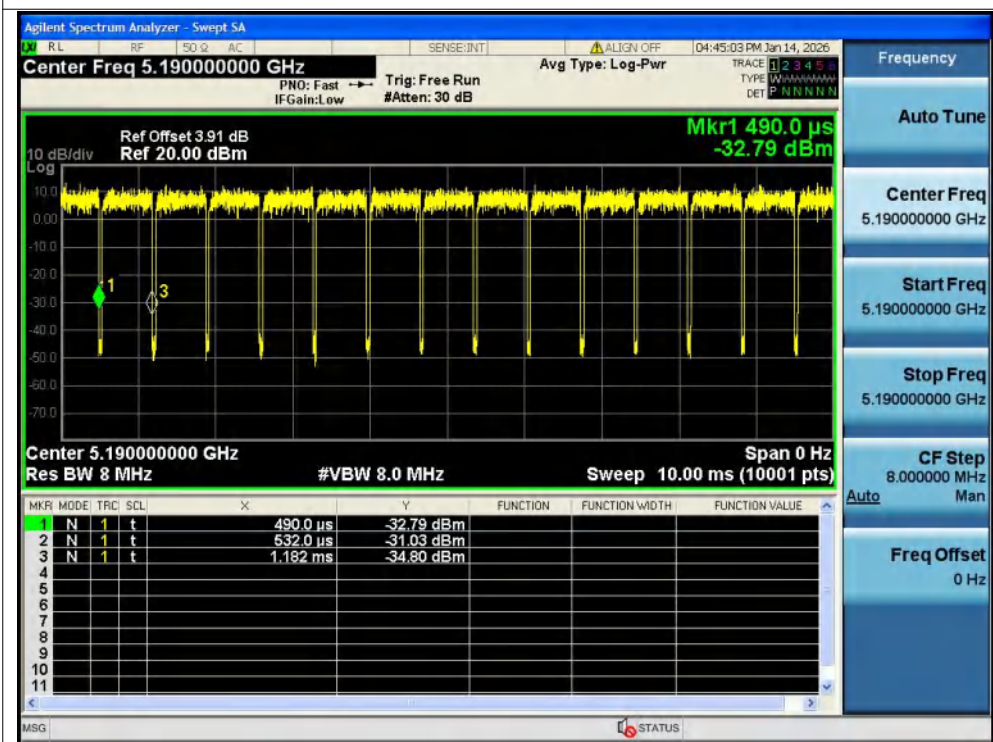
Duty Cycle NVNT n20 5200MHz Ant1



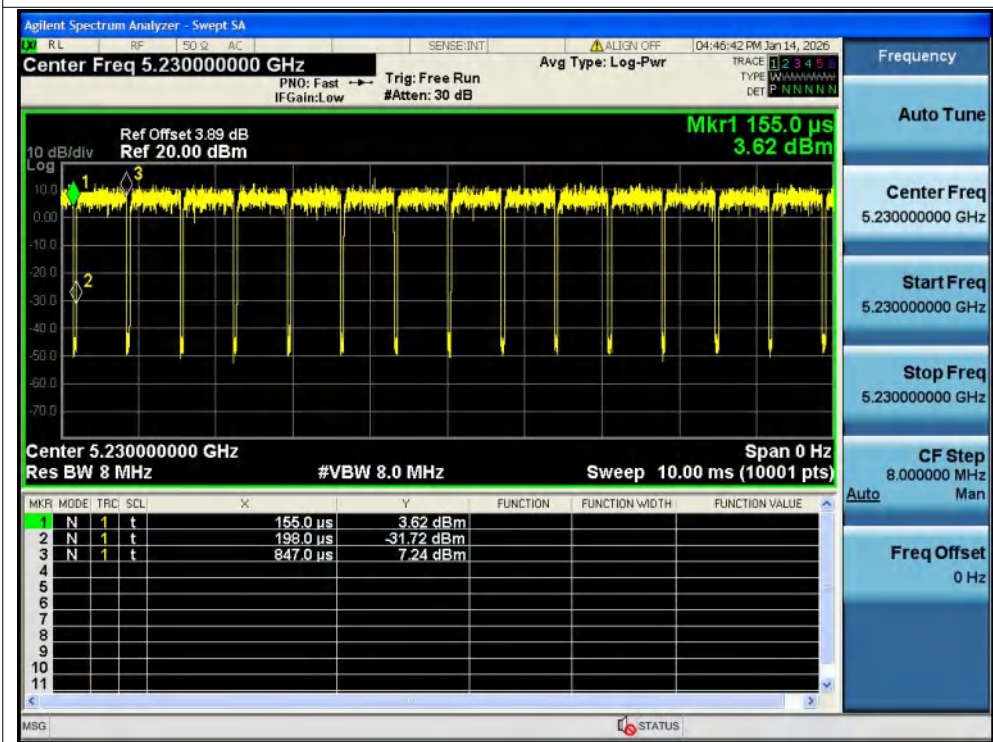
Duty Cycle NVNT n20 5240MHz Ant1



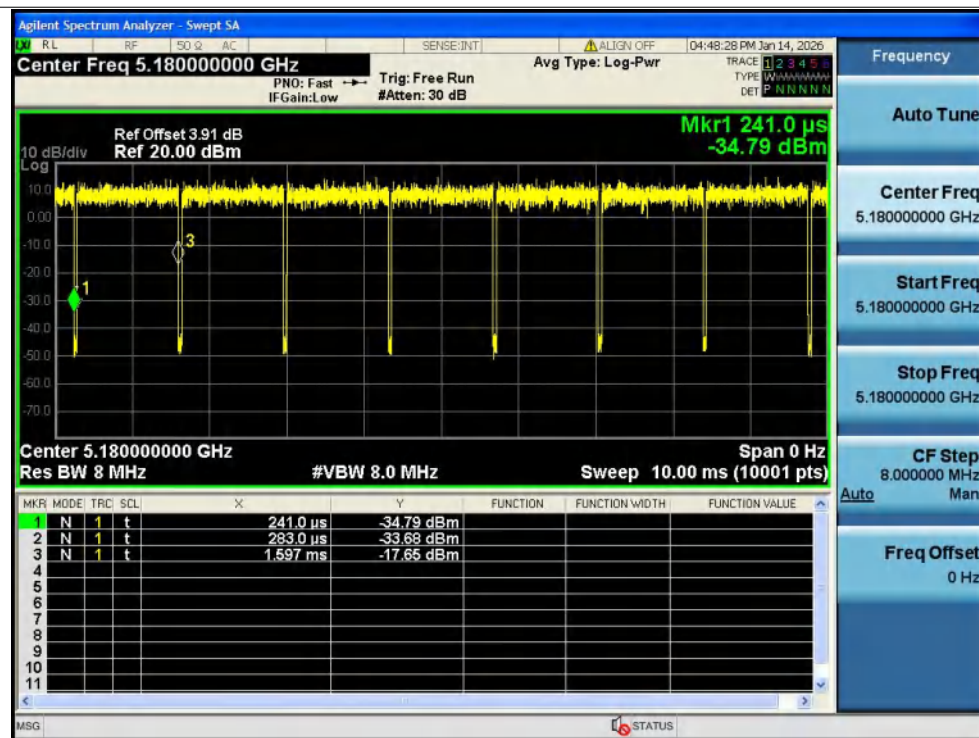
Duty Cycle NVNT n40 5190MHz Ant1



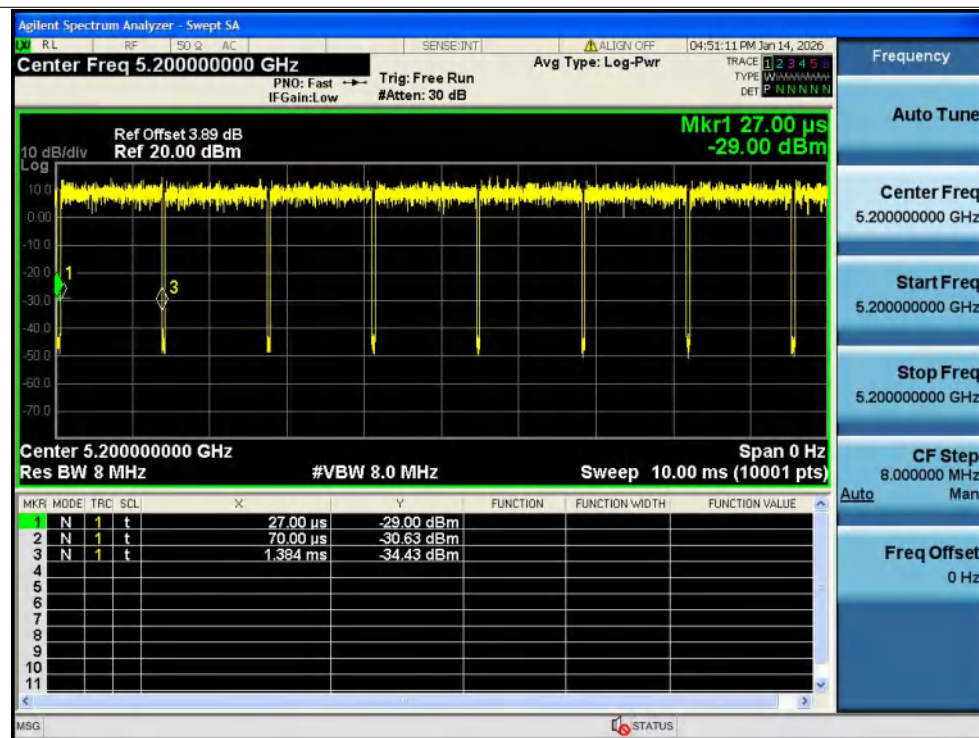
Duty Cycle NVNT n40 5230MHz Ant1



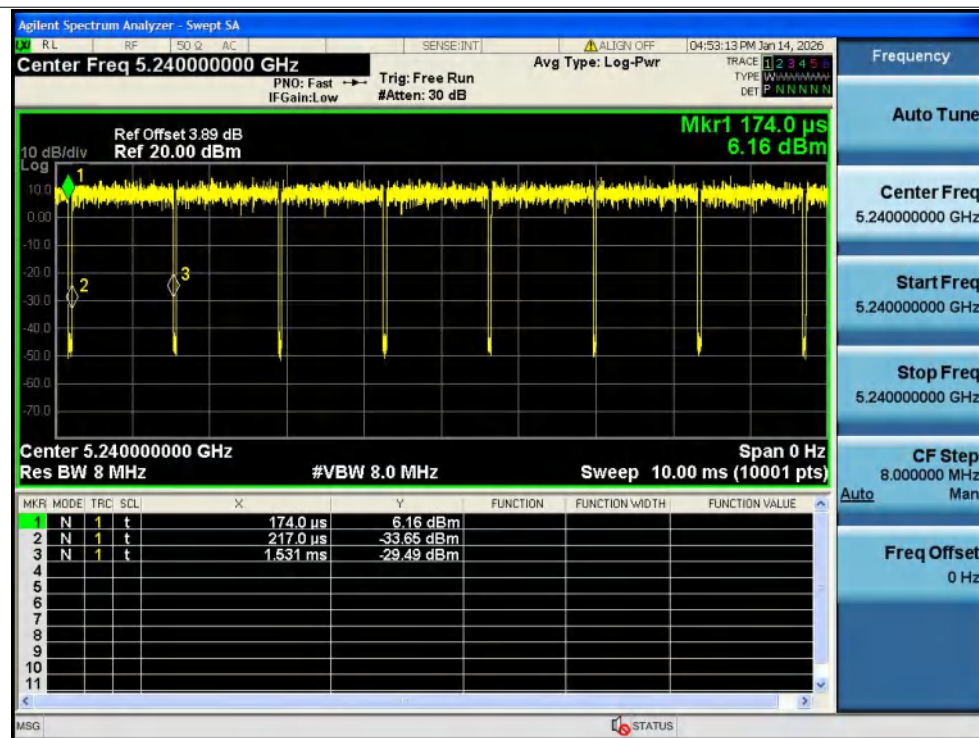
Duty Cycle NVNT ac20 5180MHz Ant1



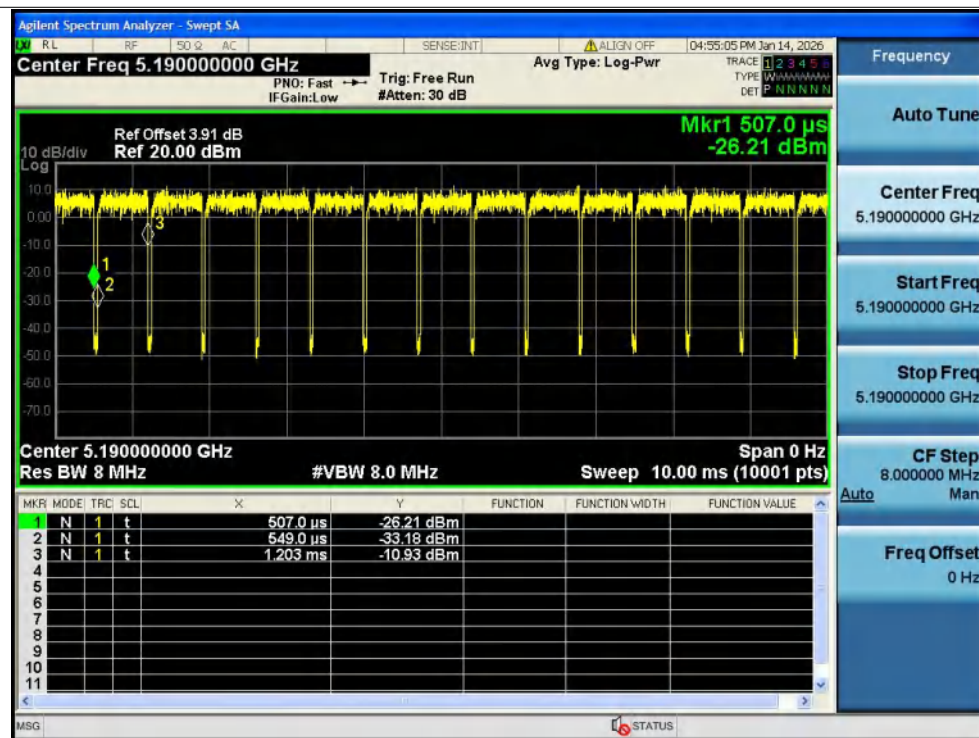
Duty Cycle NVNT ac20 5200MHz Ant1

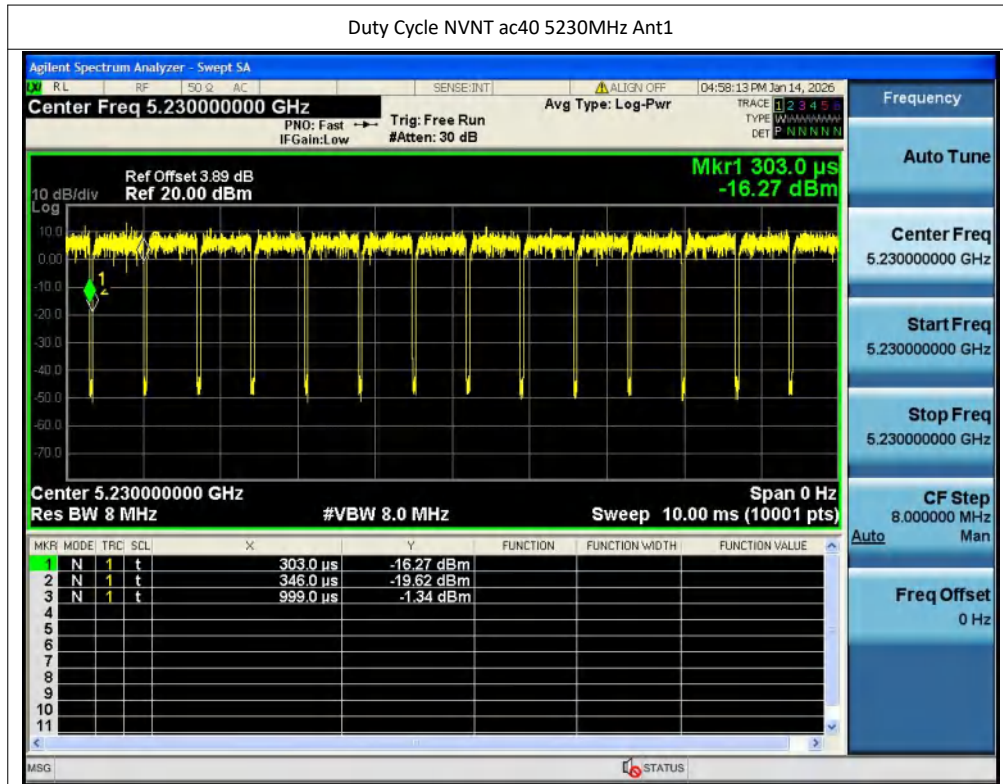


Duty Cycle NVNT ac20 5240MHz Ant1



Duty Cycle NVNT ac40 5190MHz Ant1





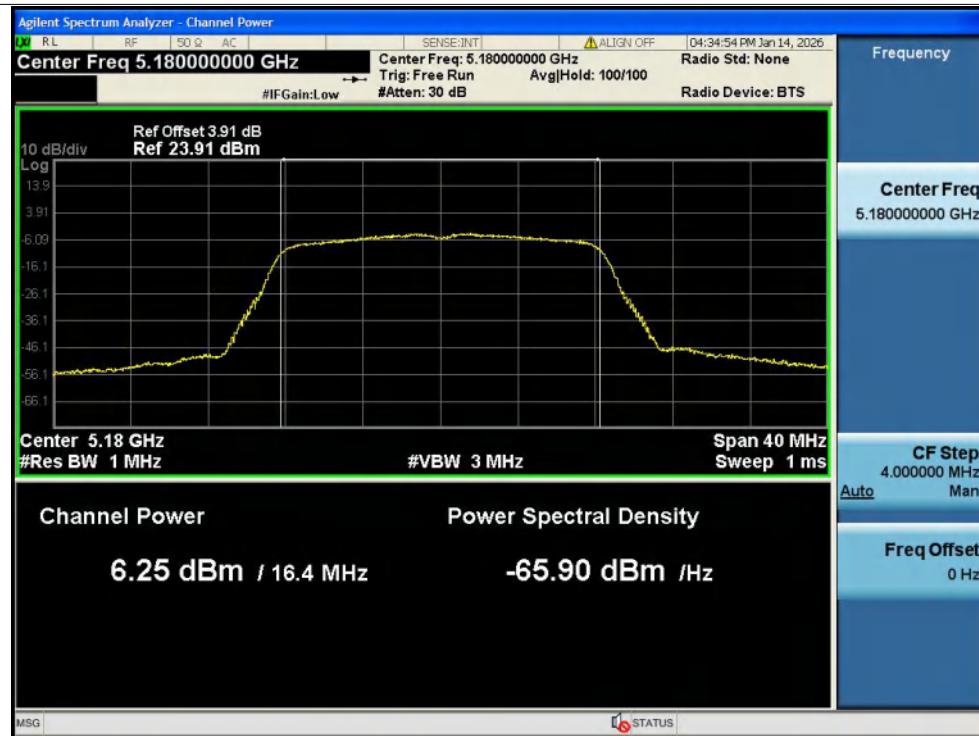


Maximum Conducted Output Power

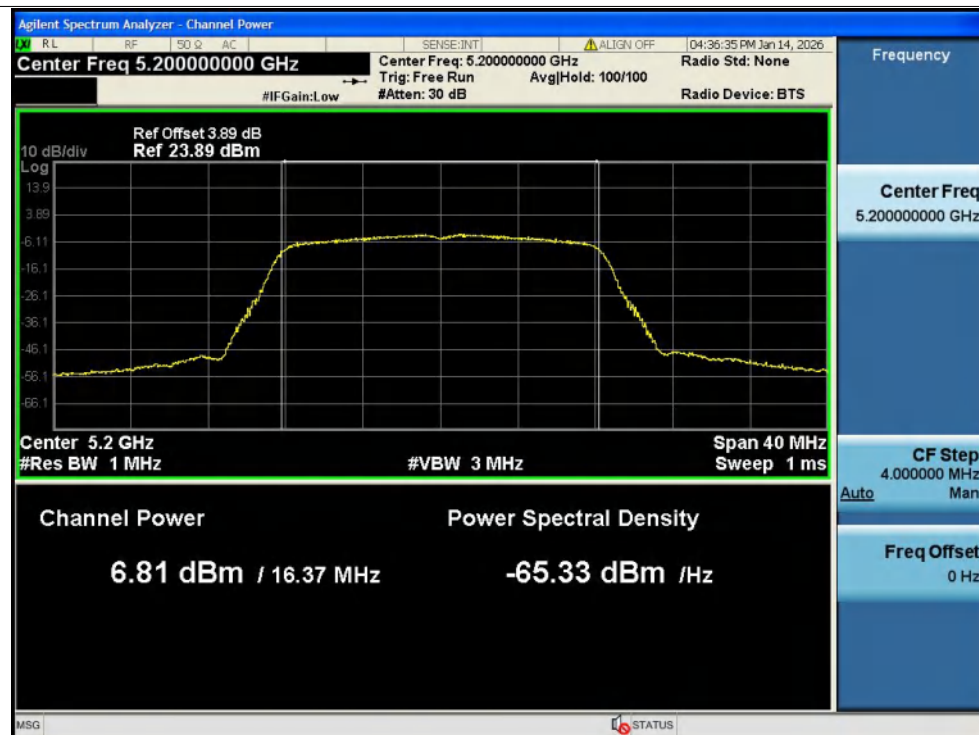
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	6.25	0.13	6.38	24	Pass
NVNT	a	5200	Ant1	6.81	0.13	6.94	24	Pass
NVNT	a	5240	Ant1	6.75	0.13	6.88	24	Pass
HVNT	a	5180	Ant1	6.45	0.11	6.56	24	Pass
NVNT	n20	5180	Ant1	6.51	0.14	6.65	24	Pass
NVNT	n20	5200	Ant1	6.76	0.14	6.9	24	Pass
NVNT	n20	5240	Ant1	6.38	0.14	6.52	24	Pass
NVNT	n40	5190	Ant1	6.23	0.27	6.5	24	Pass
NVNT	n40	5230	Ant1	6.3	0.28	6.58	24	Pass
NVNT	ac20	5180	Ant1	6.07	0.14	6.21	24	Pass
NVNT	ac20	5200	Ant1	6.41	0.14	6.55	24	Pass
NVNT	ac20	5240	Ant1	6.58	0.14	6.72	24	Pass
NVNT	ac40	5190	Ant1	6.36	0.27	6.63	24	Pass
NVNT	ac40	5230	Ant1	6.57	0.28	6.85	24	Pass

Test Graphs

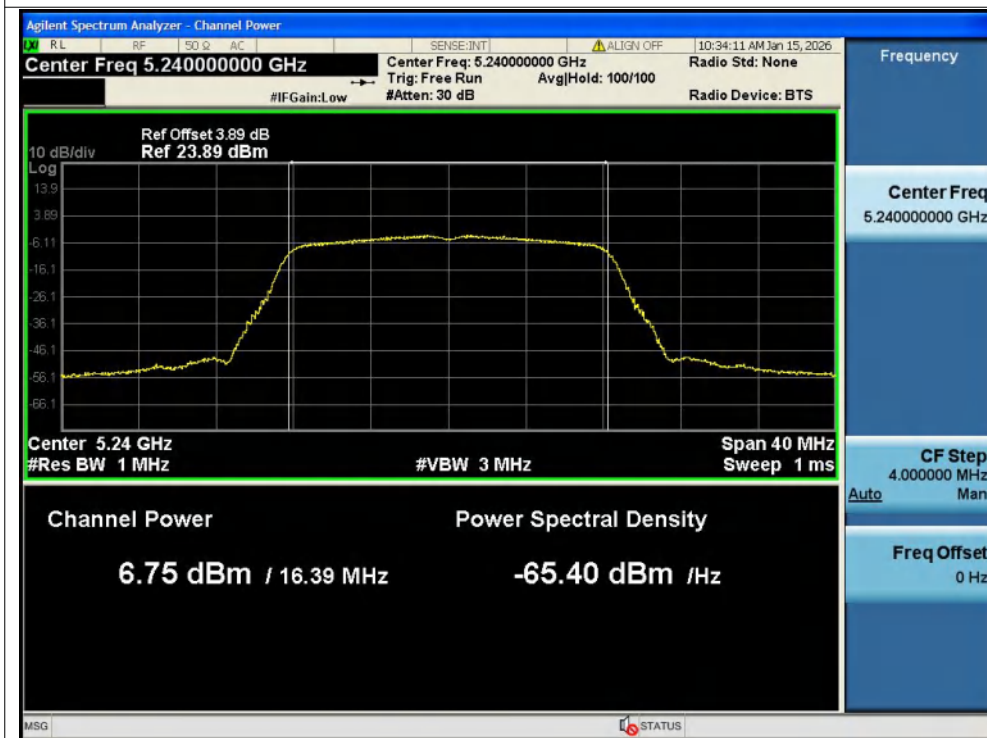
Power NVNT a 5180MHz Ant1



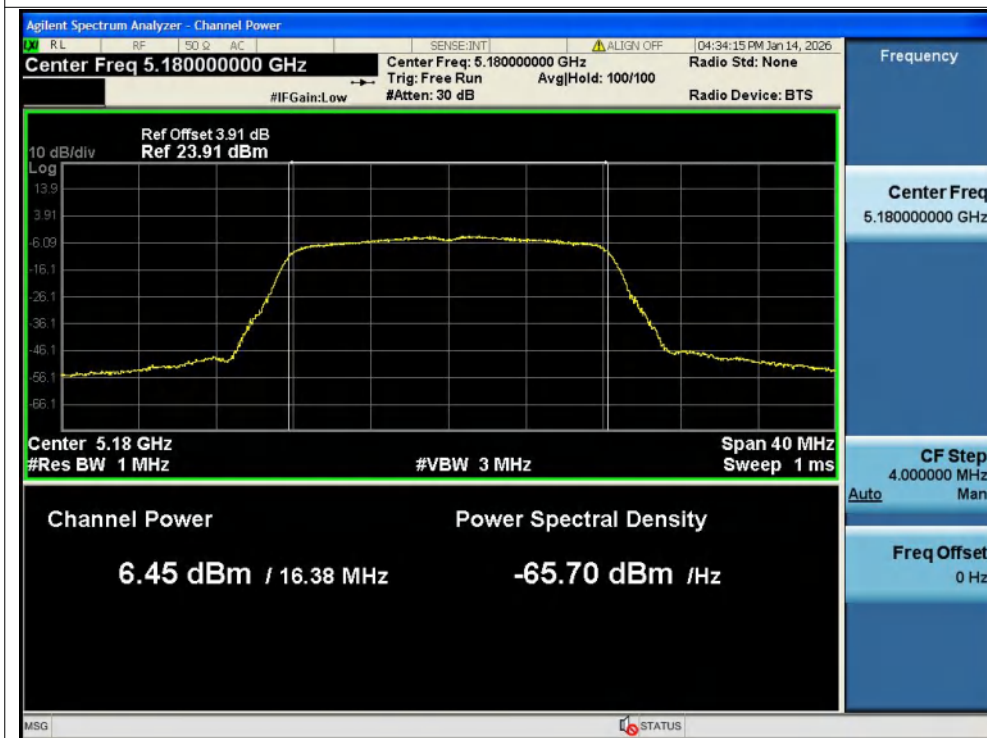
Power NVNT a 5200MHz Ant1



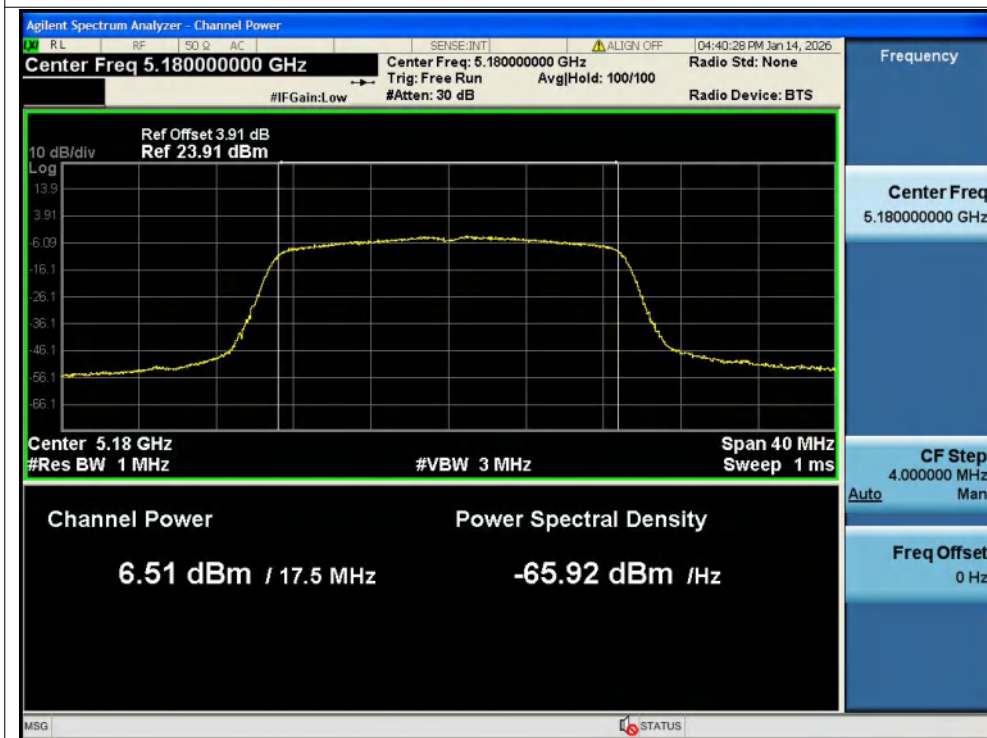
Power NVNT a 5240MHz Ant1



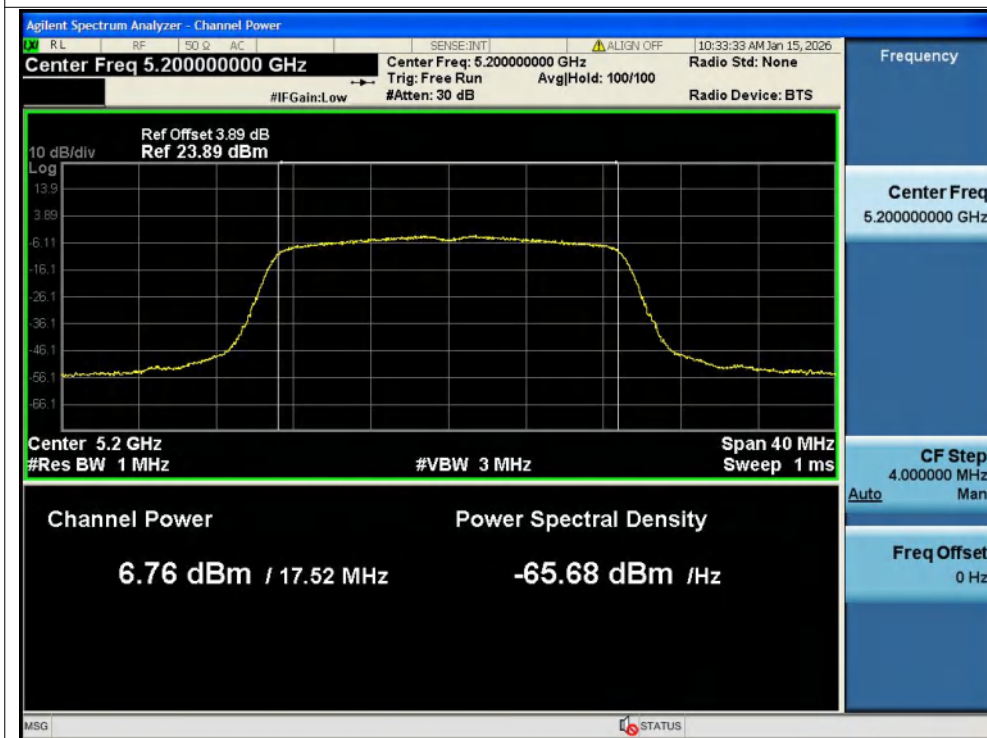
Power HVNT a 5180MHz Ant1



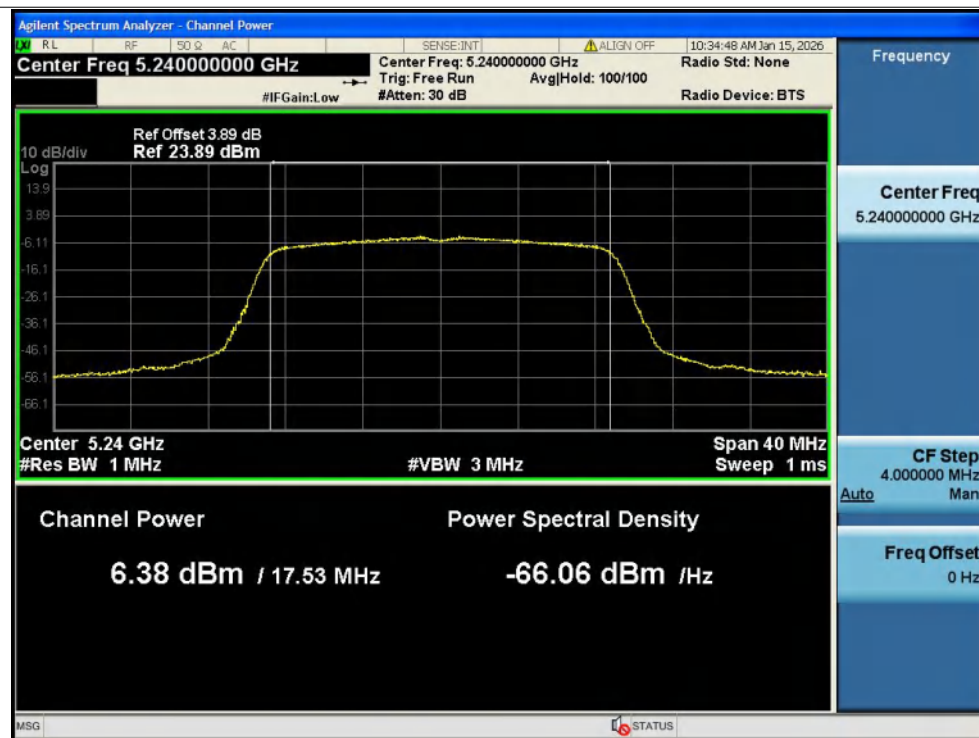
Power NVNT n20 5180MHz Ant1



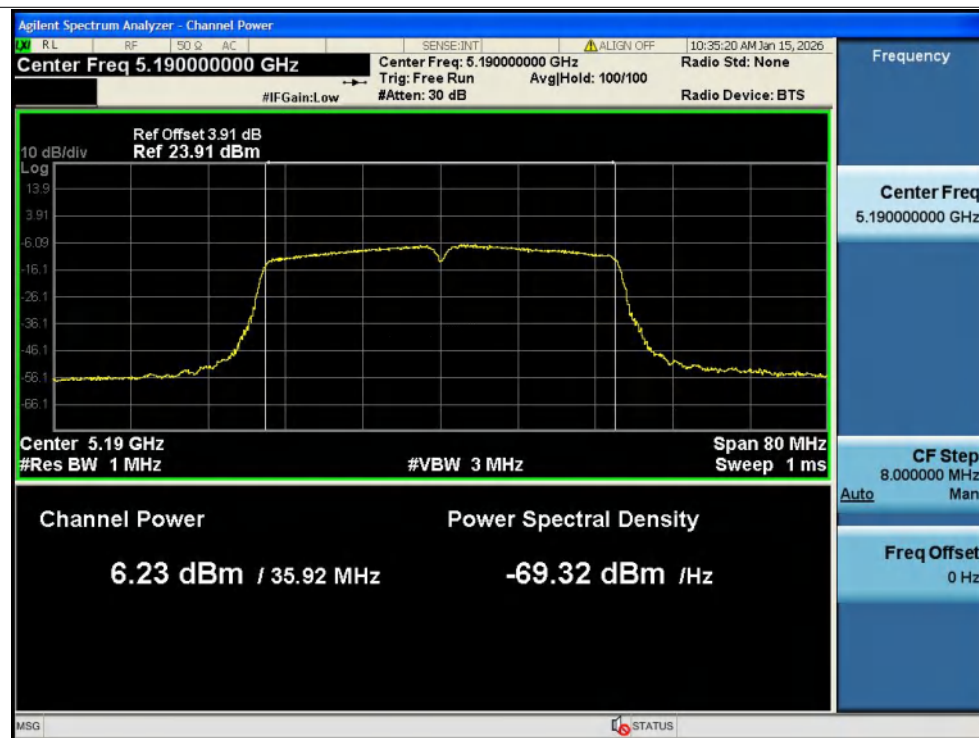
Power NVNT n20 5200MHz Ant1



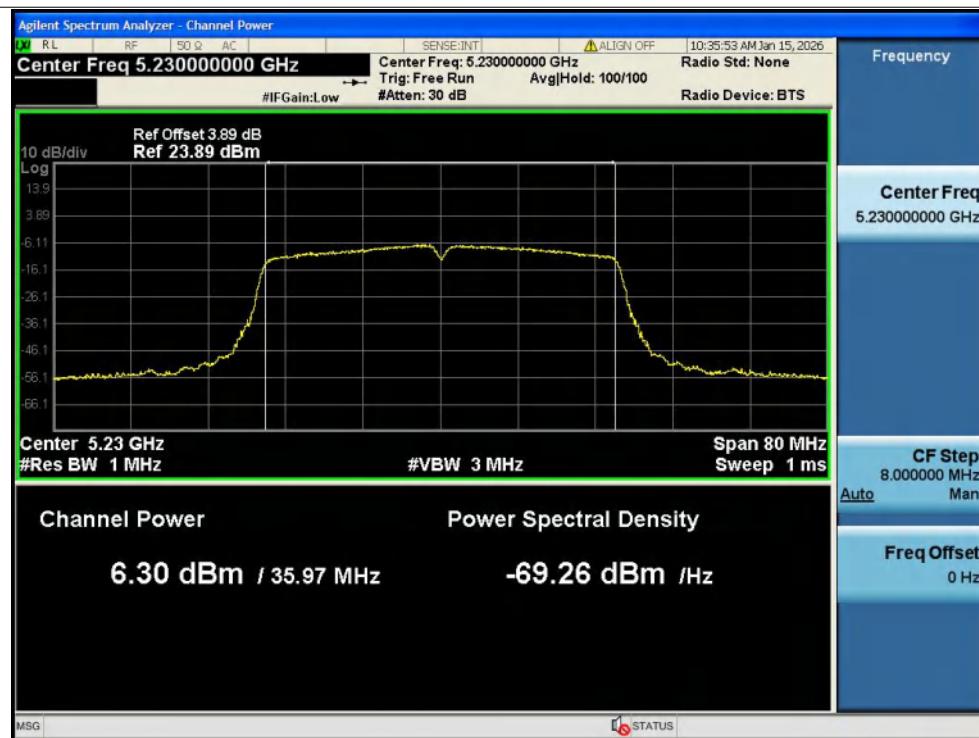
Power NVNT n20 5240MHz Ant1



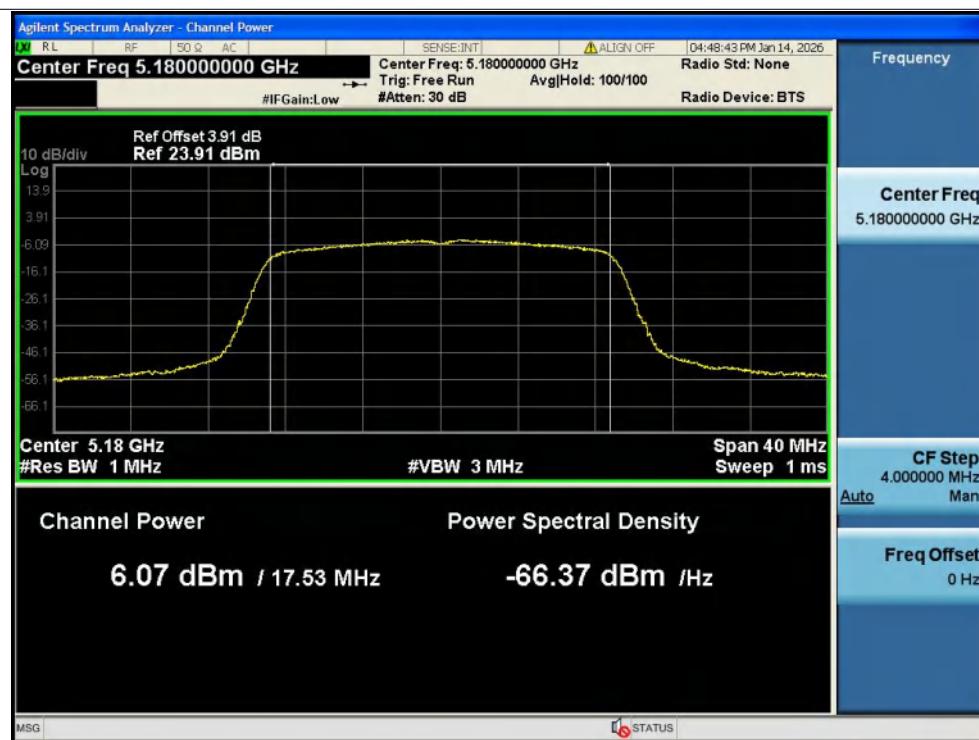
Power NVNT n40 5190MHz Ant1

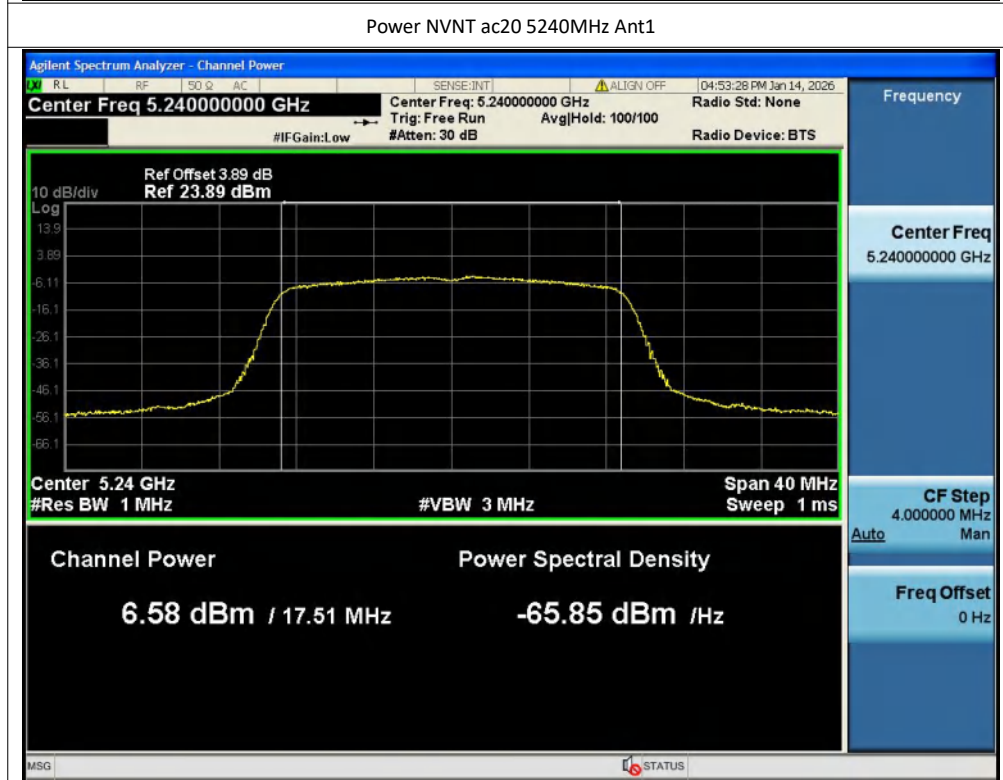
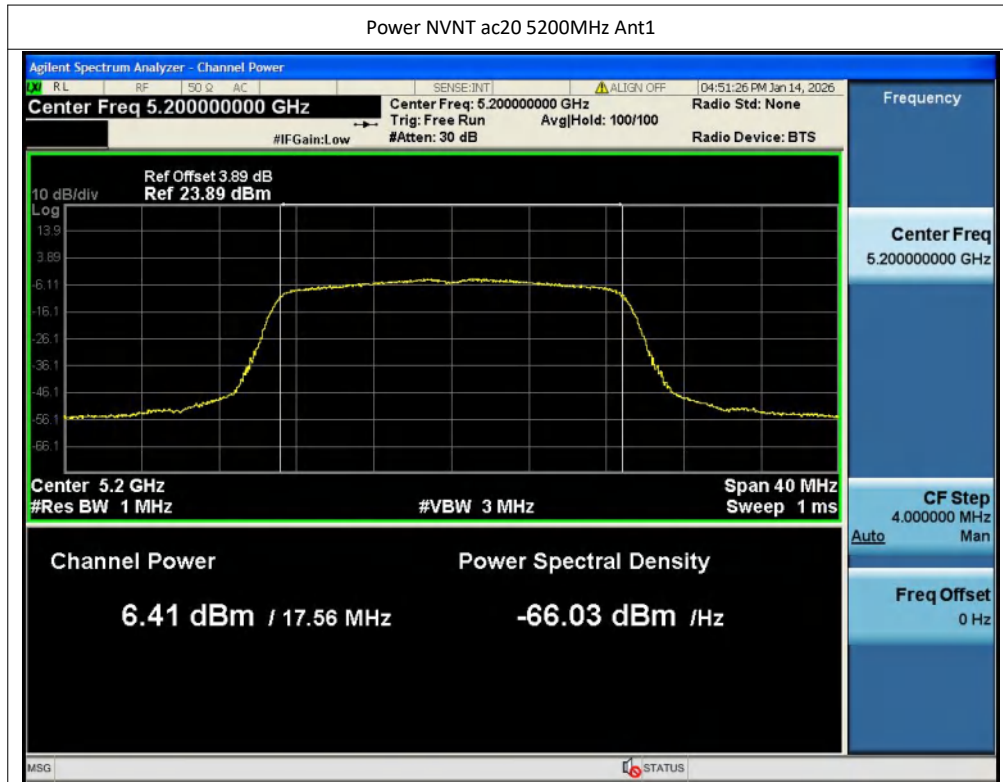


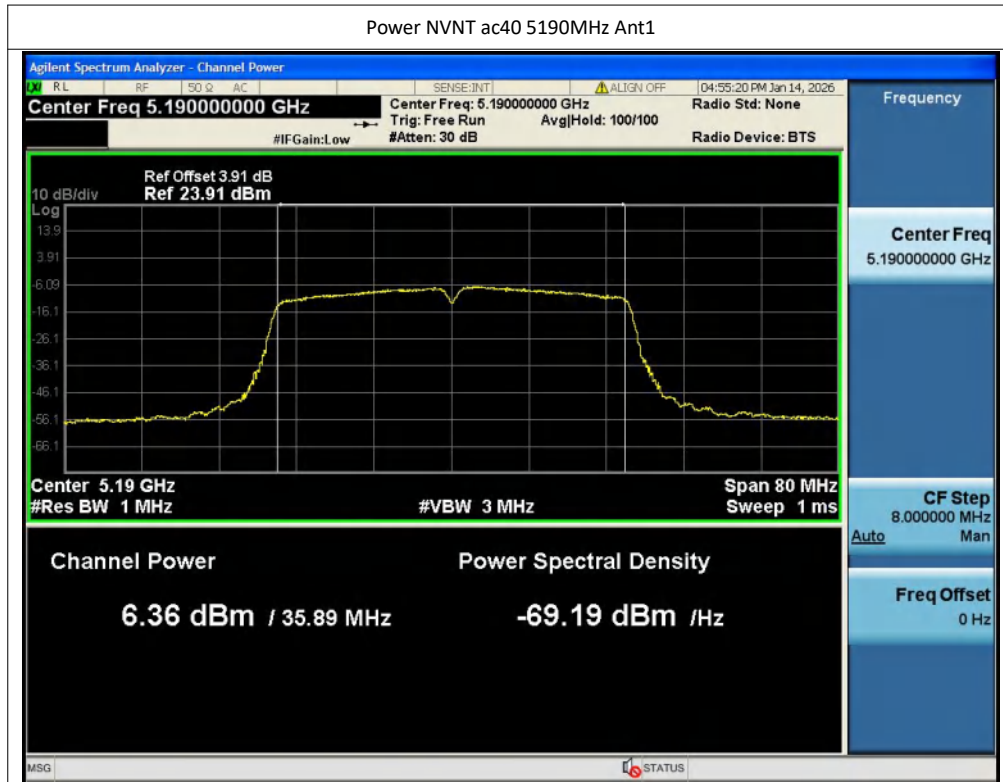
Power NVNT n40 5230MHz Ant1



Power NVNT ac20 5180MHz Ant1







-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.03	Pass
NVNT	a	5200	Ant1	20.09	Pass
NVNT	a	5240	Ant1	19.94	Pass
NVNT	n20	5180	Ant1	20.21	Pass
NVNT	n20	5200	Ant1	20.39	Pass
NVNT	n20	5240	Ant1	20.37	Pass
NVNT	n40	5190	Ant1	39.48	Pass
NVNT	n40	5230	Ant1	39.51	Pass
NVNT	ac20	5180	Ant1	20.19	Pass
NVNT	ac20	5200	Ant1	20.26	Pass
NVNT	ac20	5240	Ant1	20.4	Pass
NVNT	ac40	5190	Ant1	39.44	Pass
NVNT	ac40	5230	Ant1	40.05	Pass

Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1



-26dB Bandwidth NVNT a 5200MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1



-26dB Bandwidth NVNT n20 5180MHz Ant1



-26dB Bandwidth NVNT n20 5200MHz Ant1



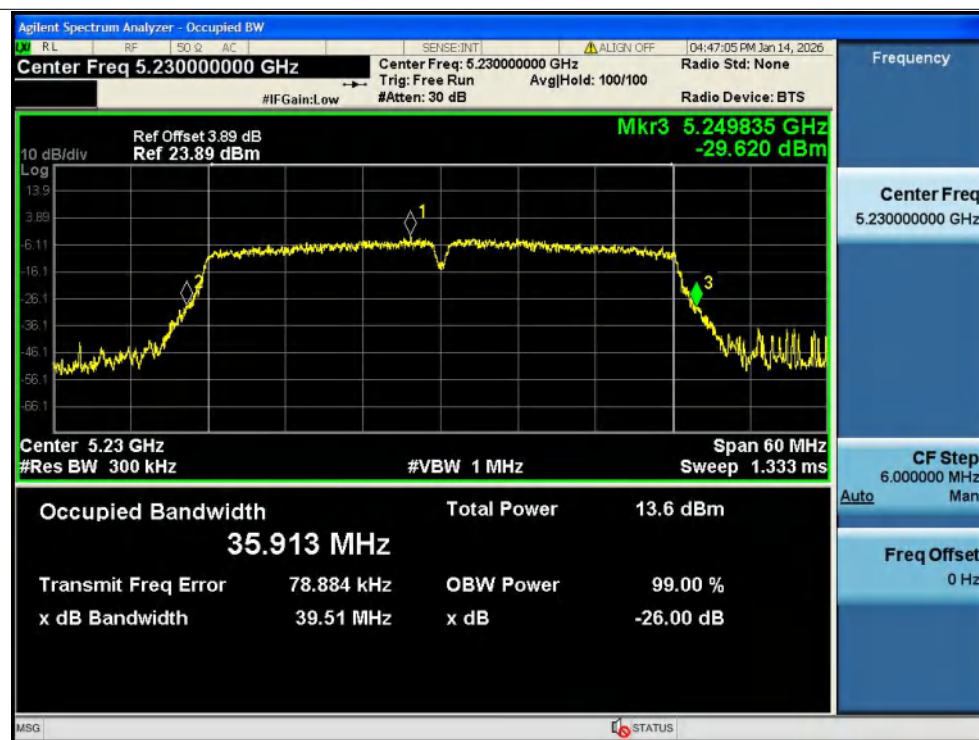
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant1



-26dB Bandwidth NVNT ac20 5180MHz Ant1



-26dB Bandwidth NVNT ac20 5200MHz Ant1

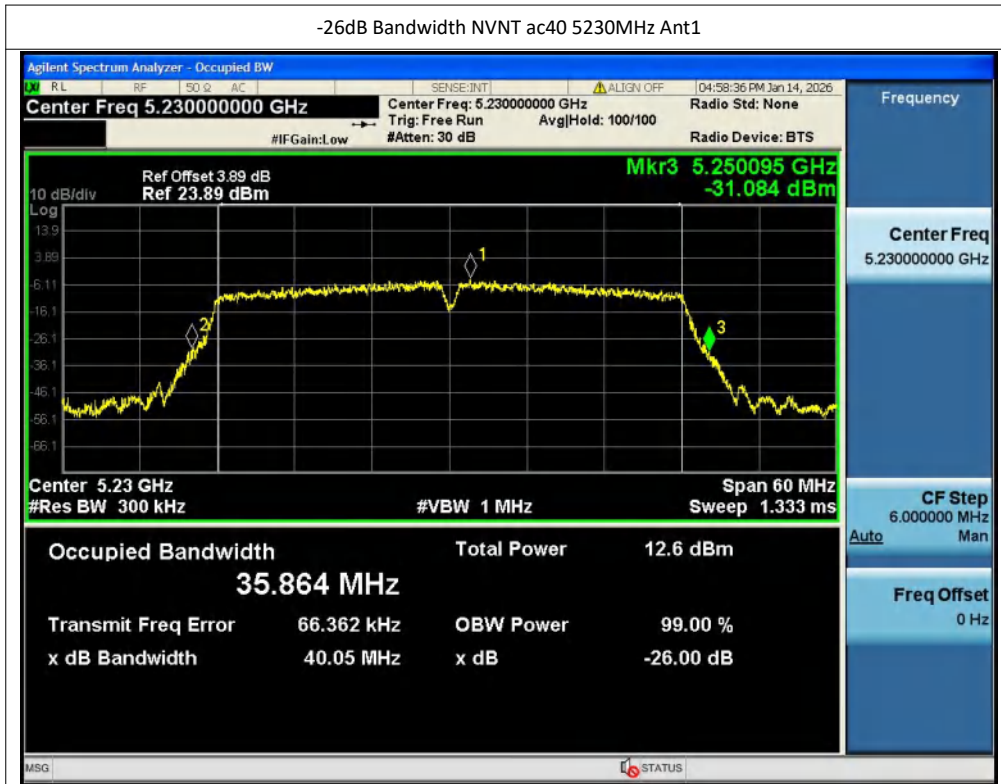


-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1





Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.403
NVNT	a	5200	Ant1	16.368
NVNT	a	5240	Ant1	16.39
NVNT	n20	5180	Ant1	17.498
NVNT	n20	5200	Ant1	17.523
NVNT	n20	5240	Ant1	17.526
NVNT	n40	5190	Ant1	35.919
NVNT	n40	5230	Ant1	35.972
NVNT	ac20	5180	Ant1	17.53
NVNT	ac20	5200	Ant1	17.557
NVNT	ac20	5240	Ant1	17.511
NVNT	ac40	5190	Ant1	35.887
NVNT	ac40	5230	Ant1	35.967

Test Graphs

OBW NVNT a 5180MHz Ant1



OBW NVNT a 5200MHz Ant1



OBW NVNT a 5240MHz Ant1



OBW NVNT n20 5180MHz Ant1



OBW NVNT n20 5200MHz Ant1



OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1

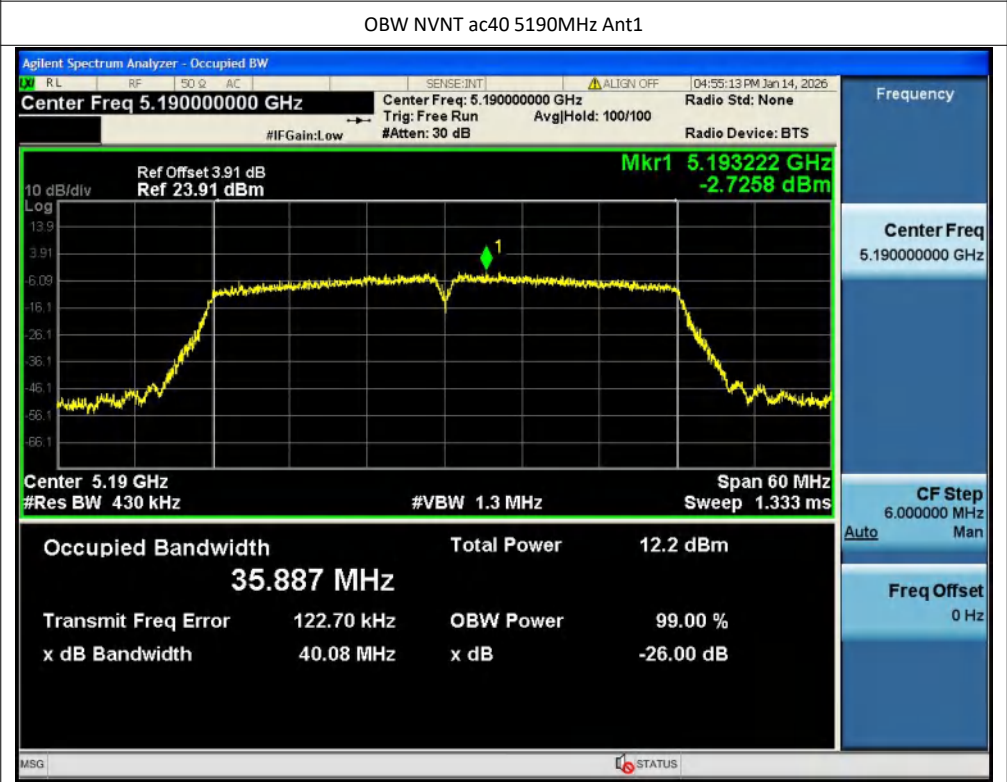
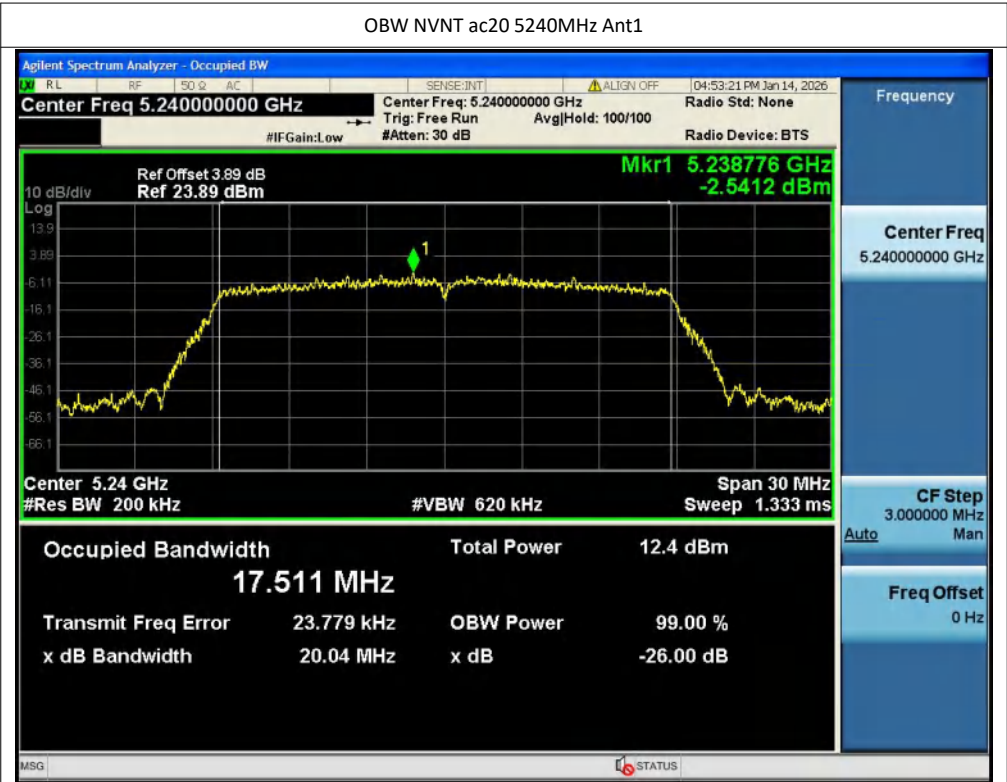


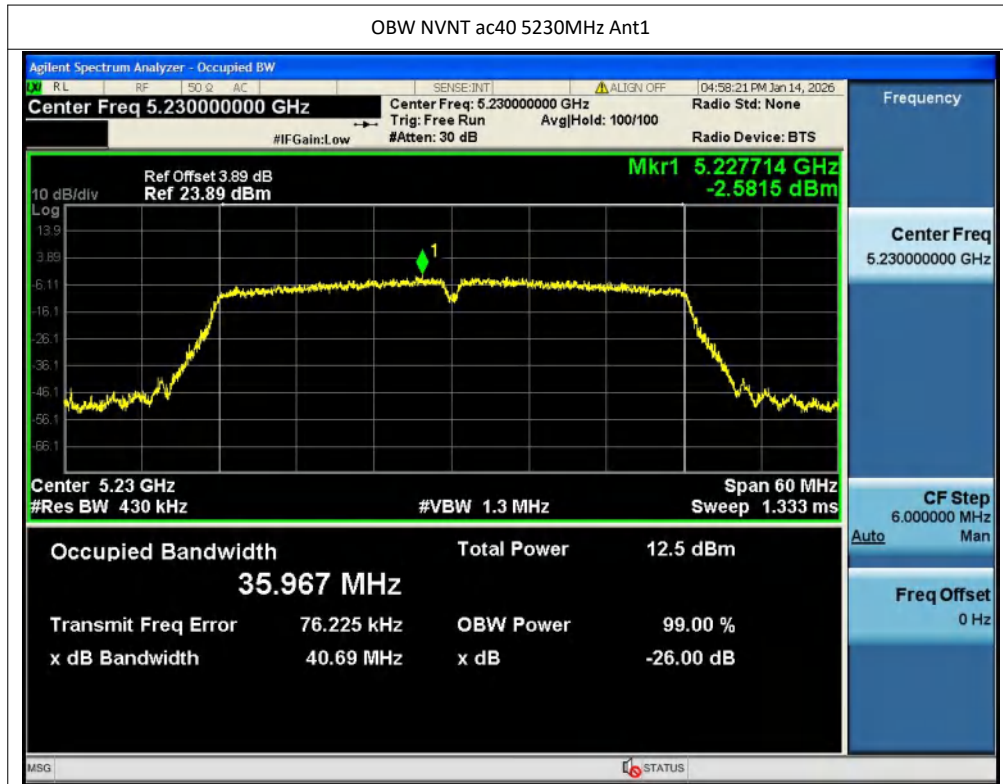
OBW NVNT ac20 5180MHz Ant1



OBW NVNT ac20 5200MHz Ant1







Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	-3.06	0.13	-2.93	11	Pass
NVNT	a	5200	Ant1	-2.78	0.13	-2.65	11	Pass
NVNT	a	5240	Ant1	-2.1	0.13	-1.97	11	Pass
NVNT	n20	5180	Ant1	-3.42	0.14	-3.28	11	Pass
NVNT	n20	5200	Ant1	-2.6	0.14	-2.46	11	Pass
NVNT	n20	5240	Ant1	-2.38	0.14	-2.24	11	Pass
NVNT	n40	5190	Ant1	-4.62	0.27	-4.35	11	Pass
NVNT	n40	5230	Ant1	-4.61	0.28	-4.33	11	Pass
NVNT	ac20	5180	Ant1	-3.74	0.14	-3.6	11	Pass
NVNT	ac20	5200	Ant1	-3.08	0.14	-2.94	11	Pass
NVNT	ac20	5240	Ant1	-3.2	0.14	-3.06	11	Pass
NVNT	ac40	5190	Ant1	-6.31	0.27	-6.04	11	Pass
NVNT	ac40	5230	Ant1	-6.09	0.28	-5.81	11	Pass

Test Graphs

PSD NVNT a 5180MHz Ant1



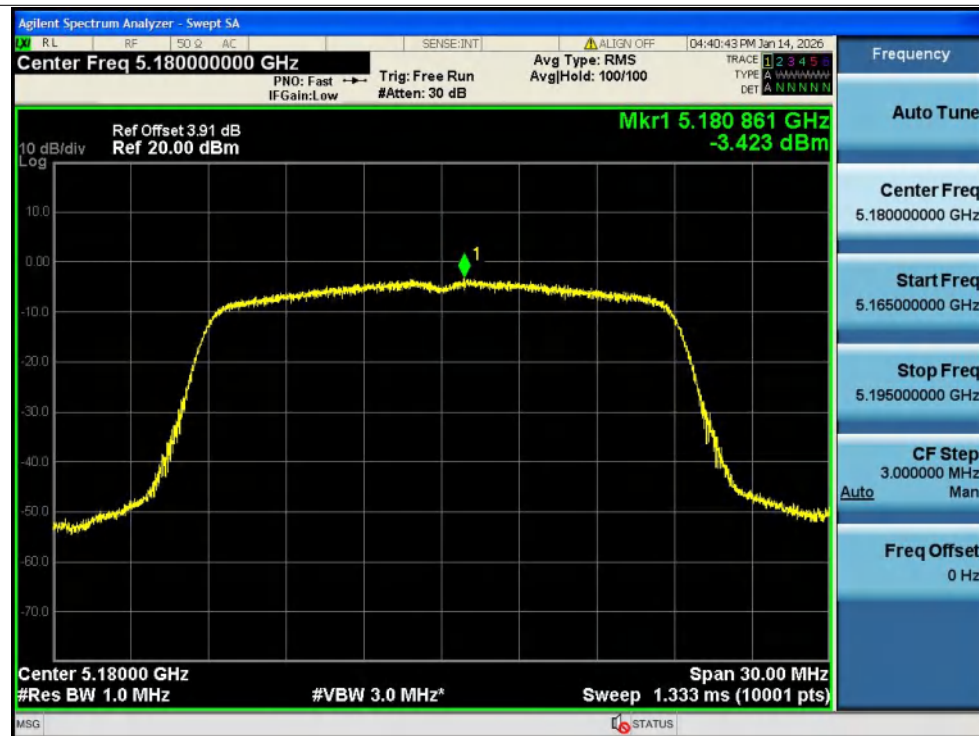
PSD NVNT a 5200MHz Ant1



PSD NVNT a 5240MHz Ant1



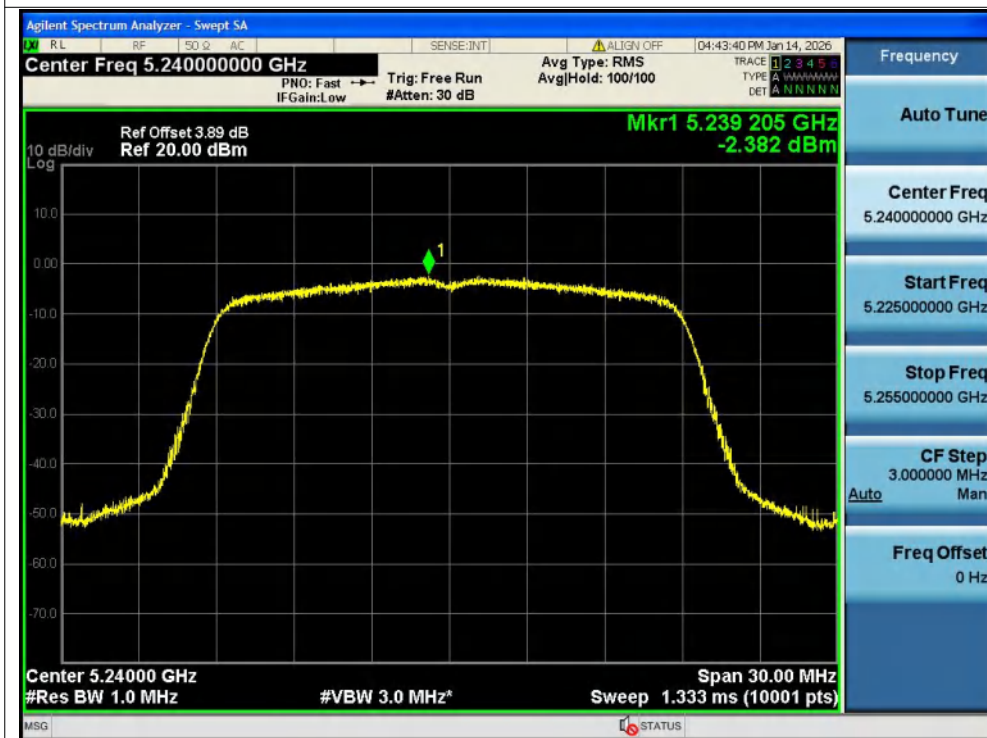
PSD NVNT n20 5180MHz Ant1



PSD NVNT n20 5200MHz Ant1



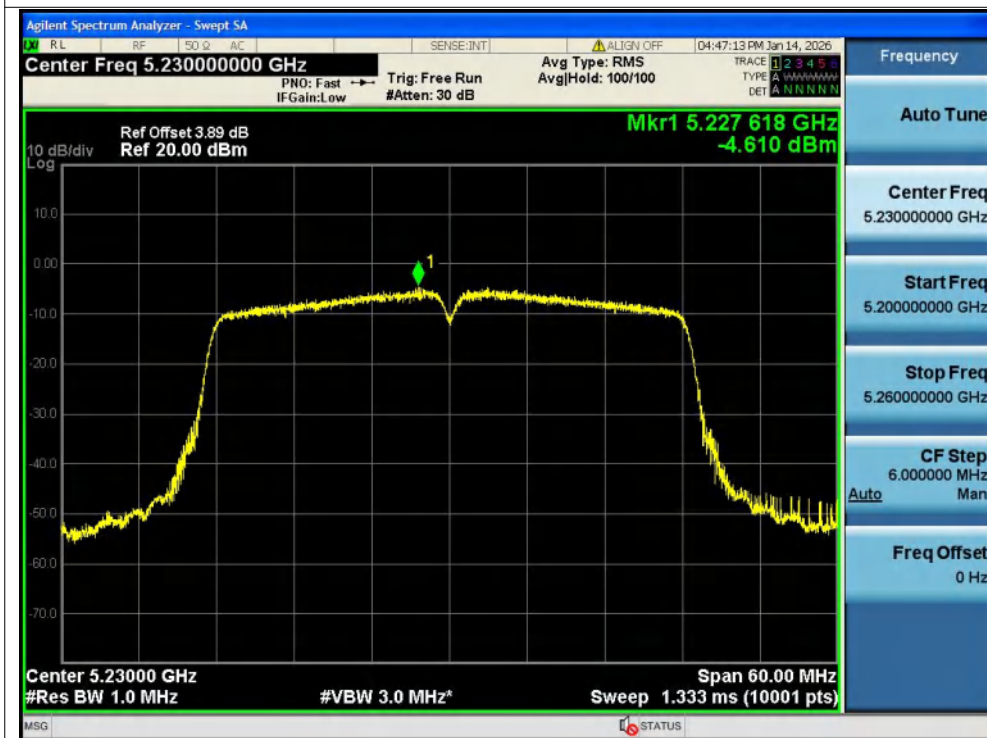
PSD NVNT n20 5240MHz Ant1



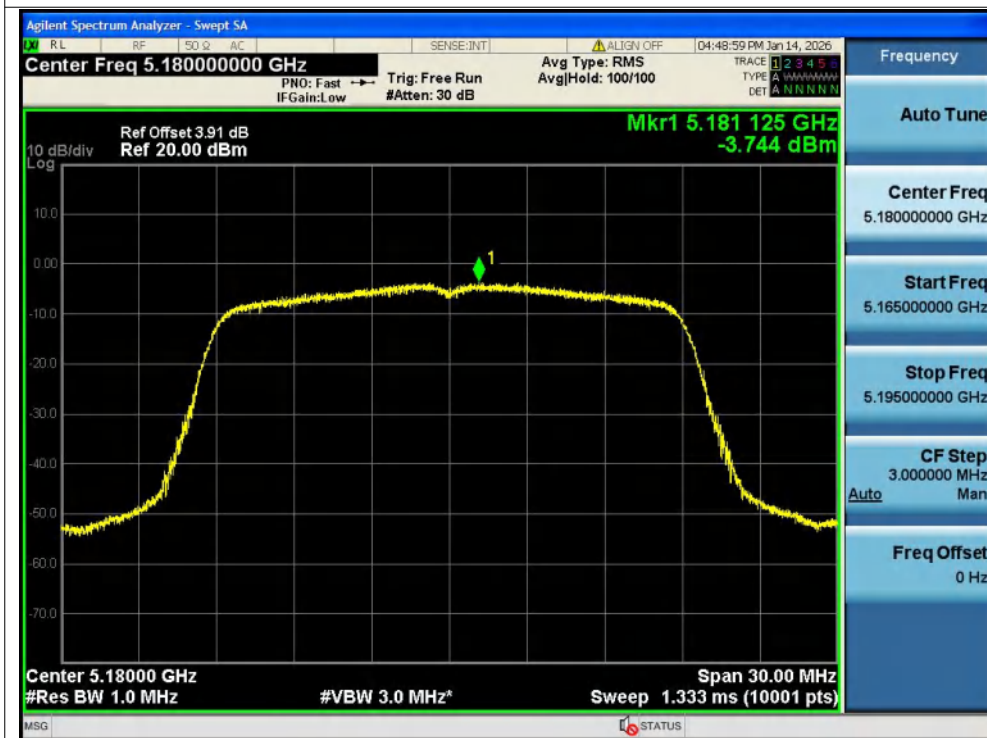
PSD NVNT n40 5190MHz Ant1



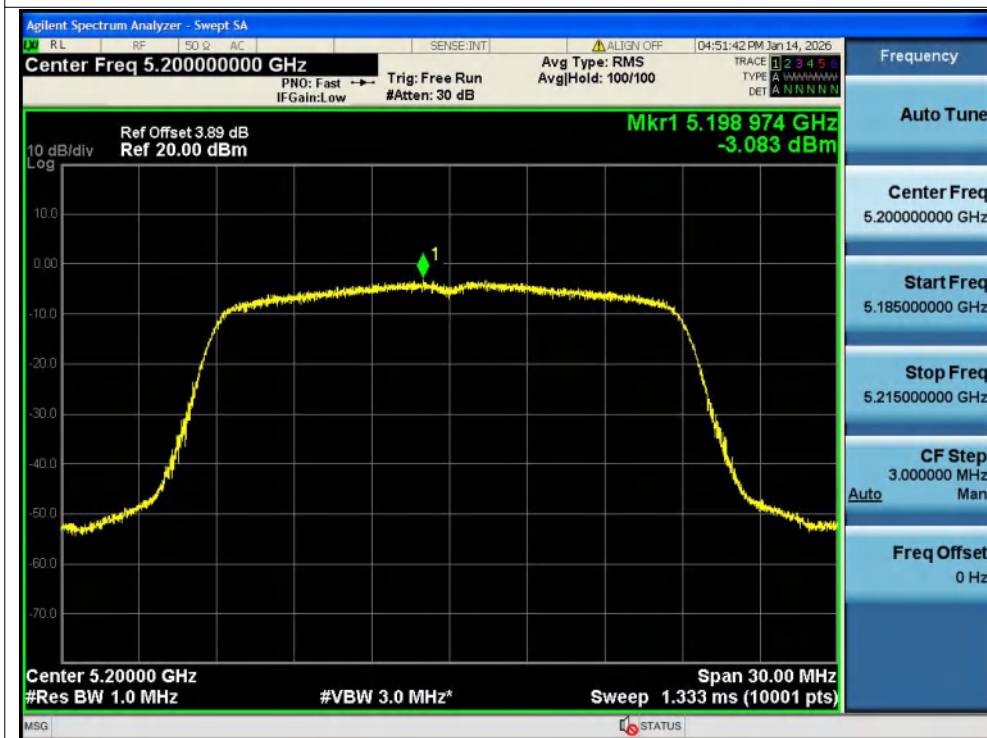
PSD NVNT n40 5230MHz Ant1



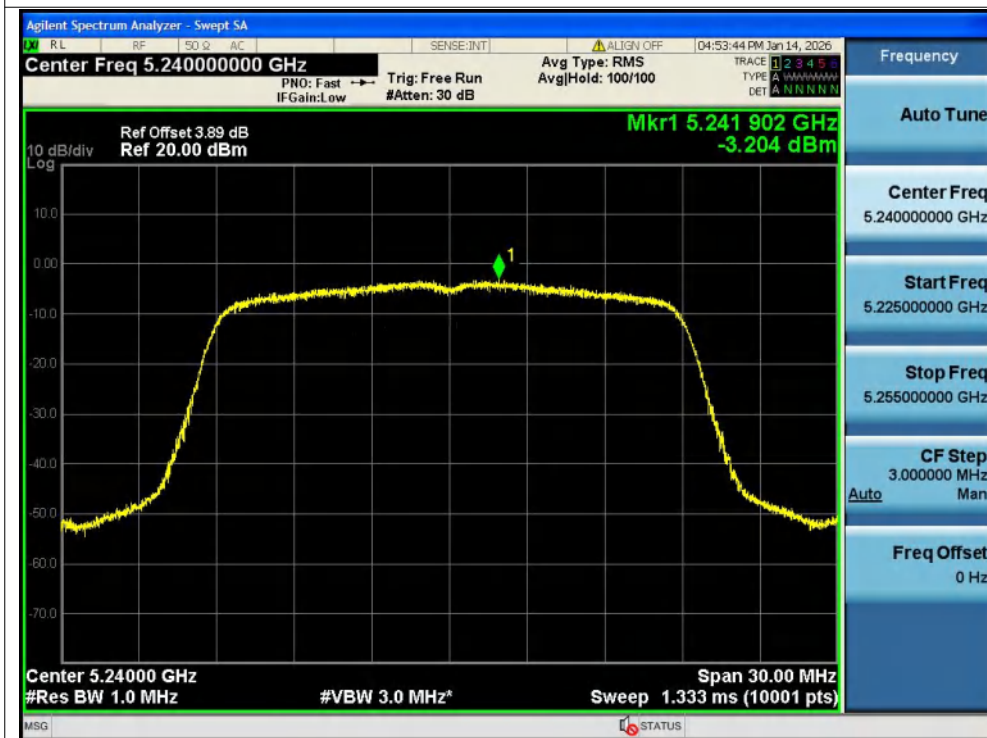
PSD NVNT ac20 5180MHz Ant1



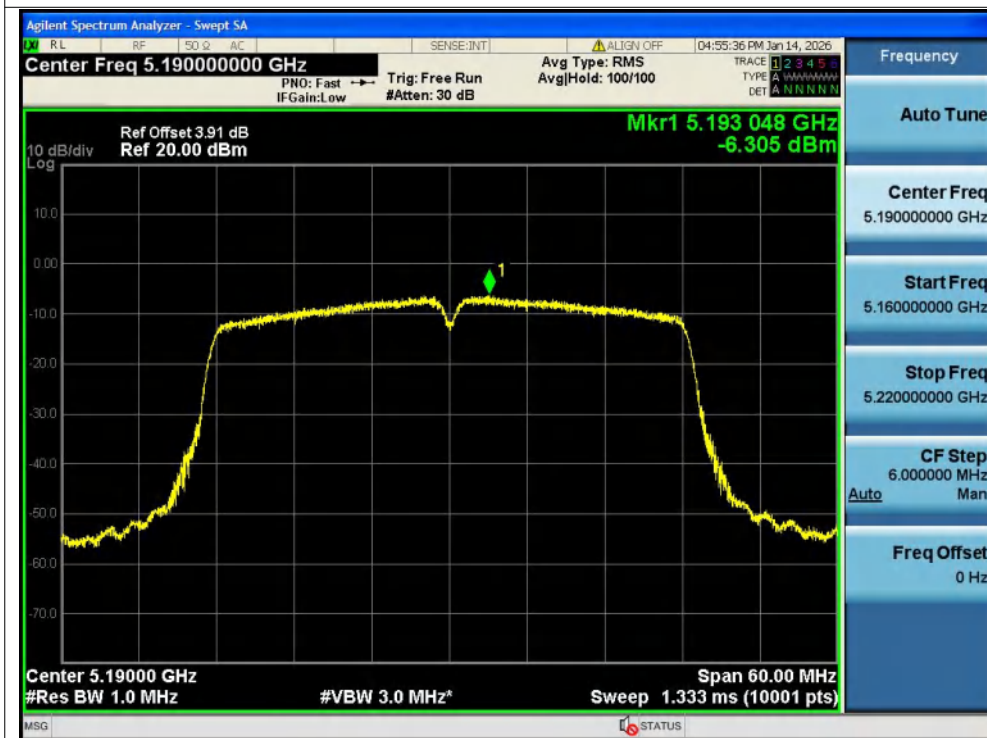
PSD NVNT ac20 5200MHz Ant1

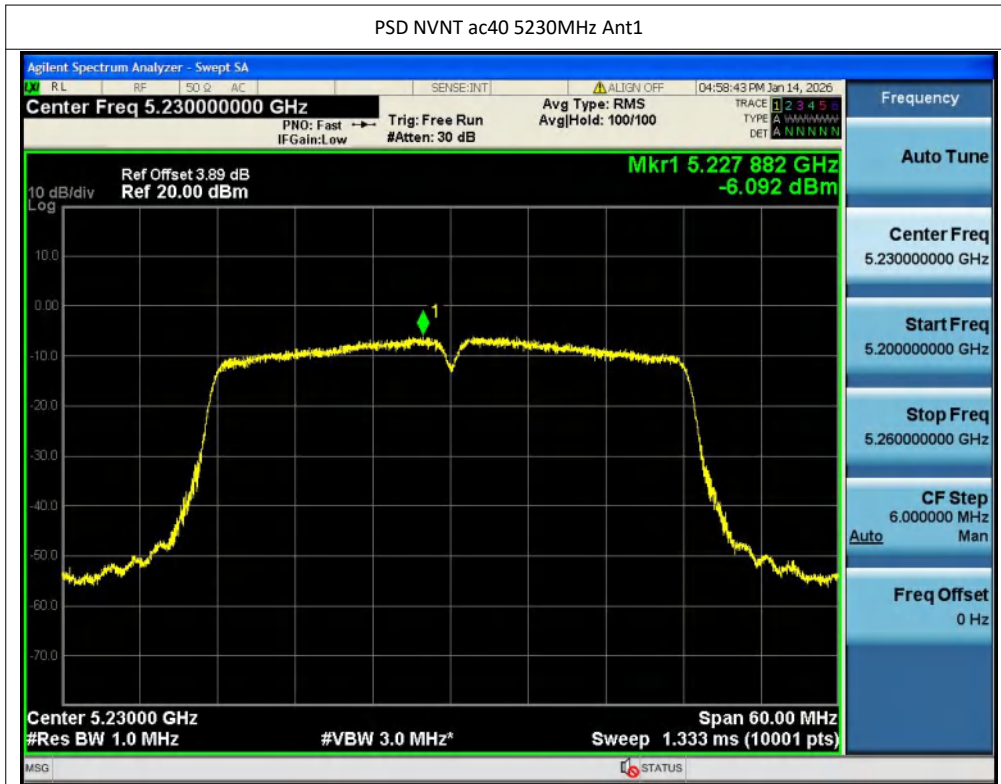


PSD NVNT ac20 5240MHz Ant1



PSD NVNT ac40 5190MHz Ant1





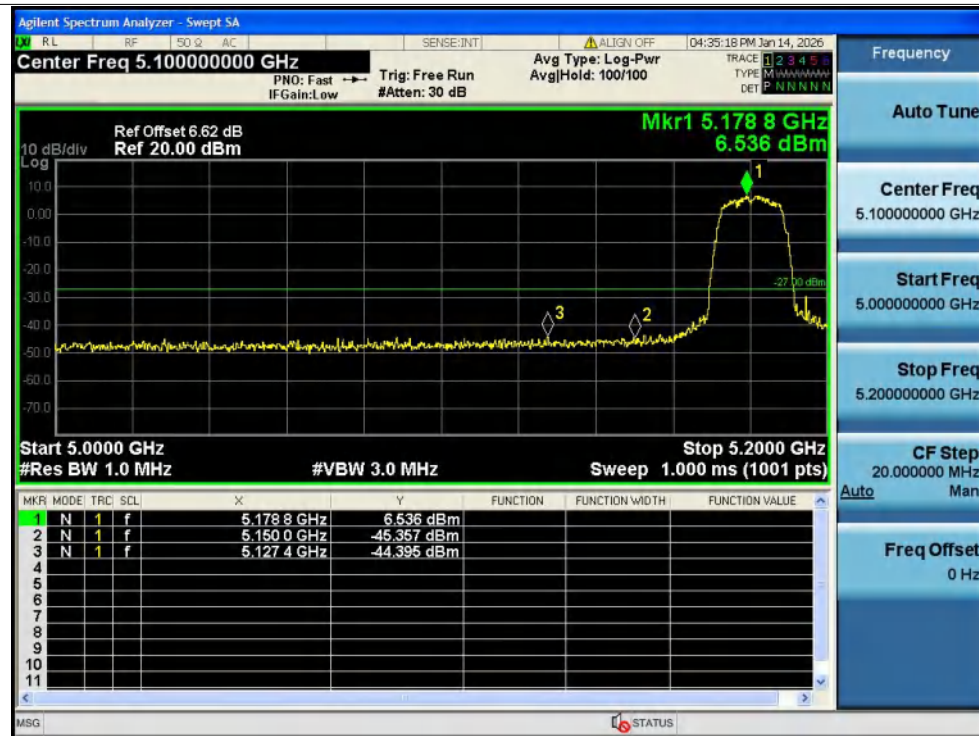


Band Edge

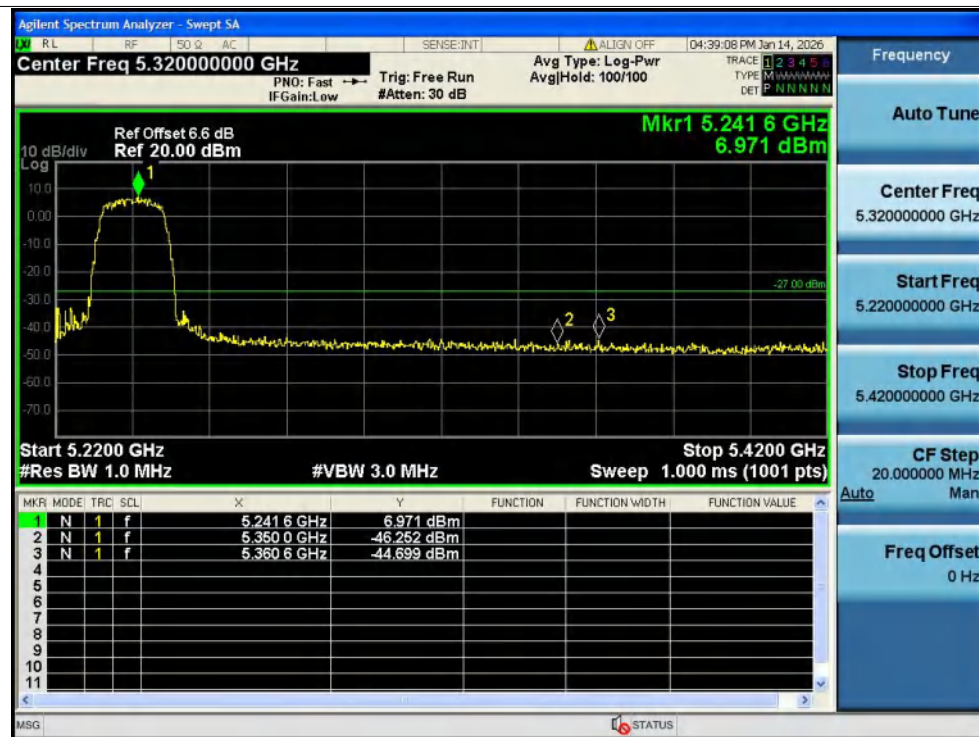
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-44.39	-27	Pass
NVNT	a	5240	Ant1	-44.69	-27	Pass
NVNT	n20	5180	Ant1	-38.78	-27	Pass
NVNT	n20	5240	Ant1	-45.09	-27	Pass
NVNT	n40	5190	Ant1	-36.16	-27	Pass
NVNT	n40	5230	Ant1	-44.04	-27	Pass
NVNT	ac20	5180	Ant1	-43.98	-27	Pass
NVNT	ac20	5240	Ant1	-44.84	-27	Pass
NVNT	ac40	5190	Ant1	-44.35	-27	Pass
NVNT	ac40	5230	Ant1	-44.52	-27	Pass

Test Graphs

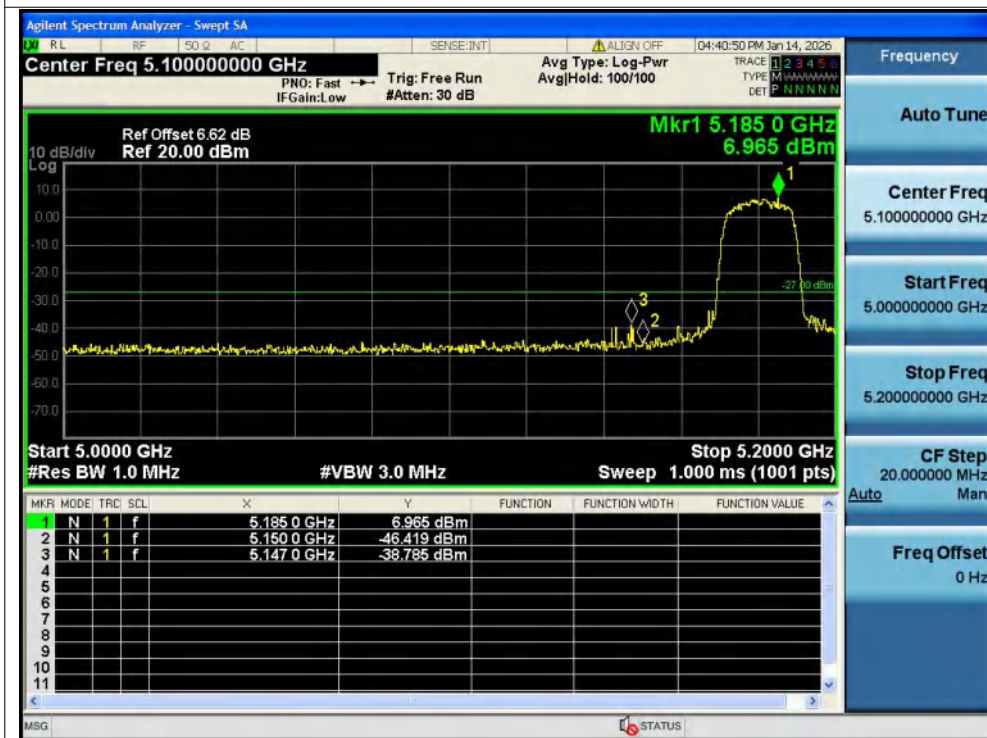
Band Edge NVNT a 5180MHz Low Ant1



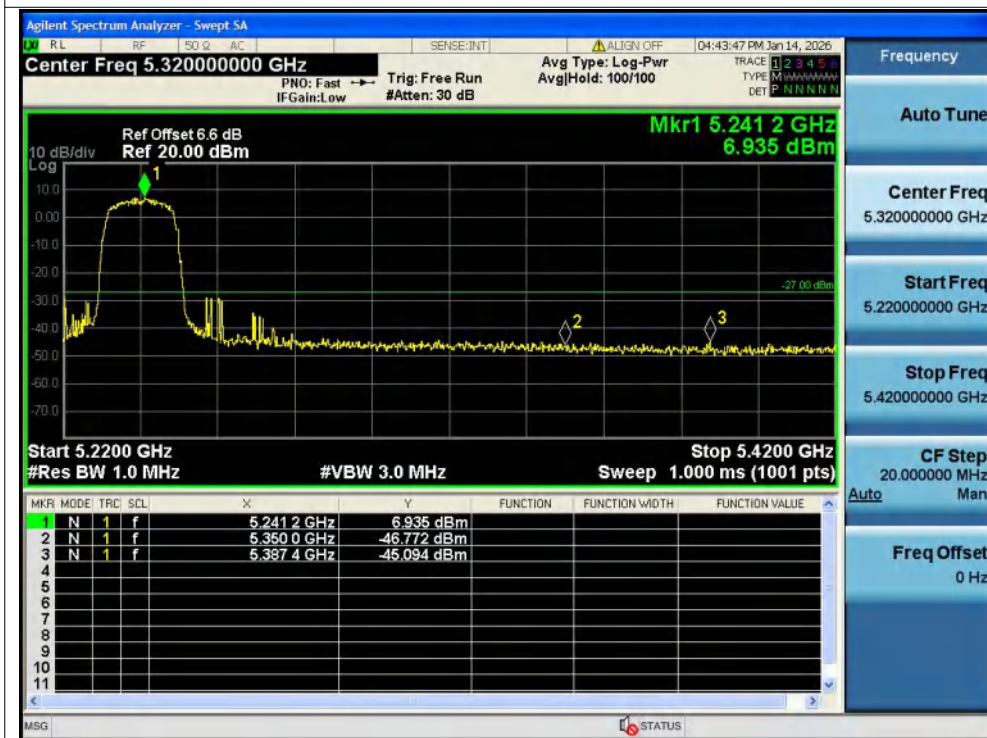
Band Edge NVNT a 5240MHz High Ant1



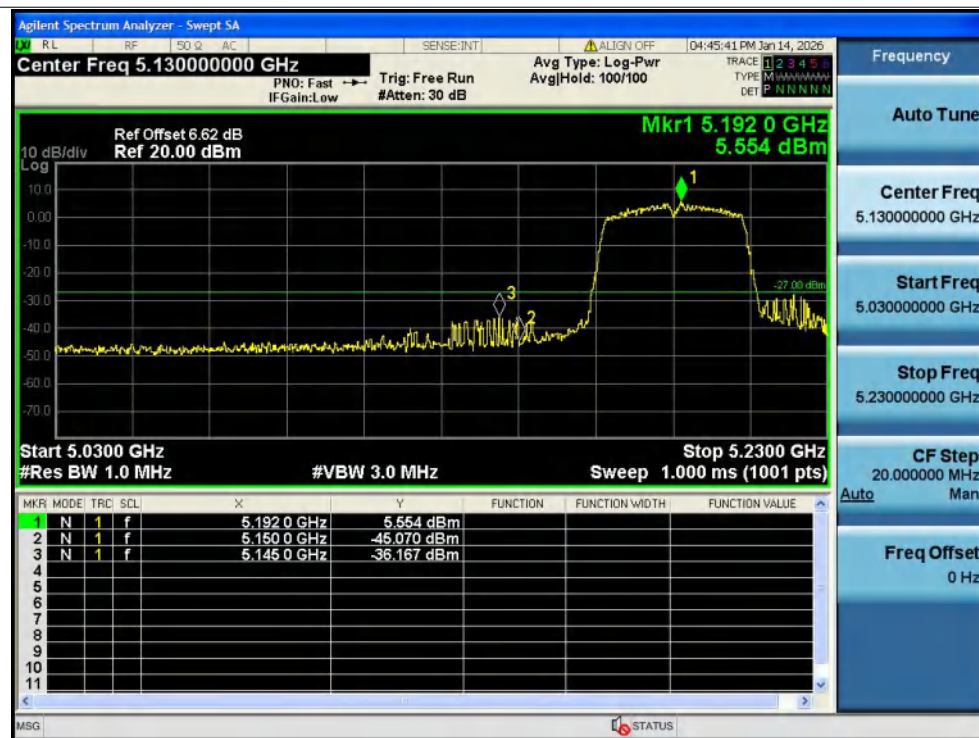
Band Edge NVNT n20 5180MHz Low Ant1



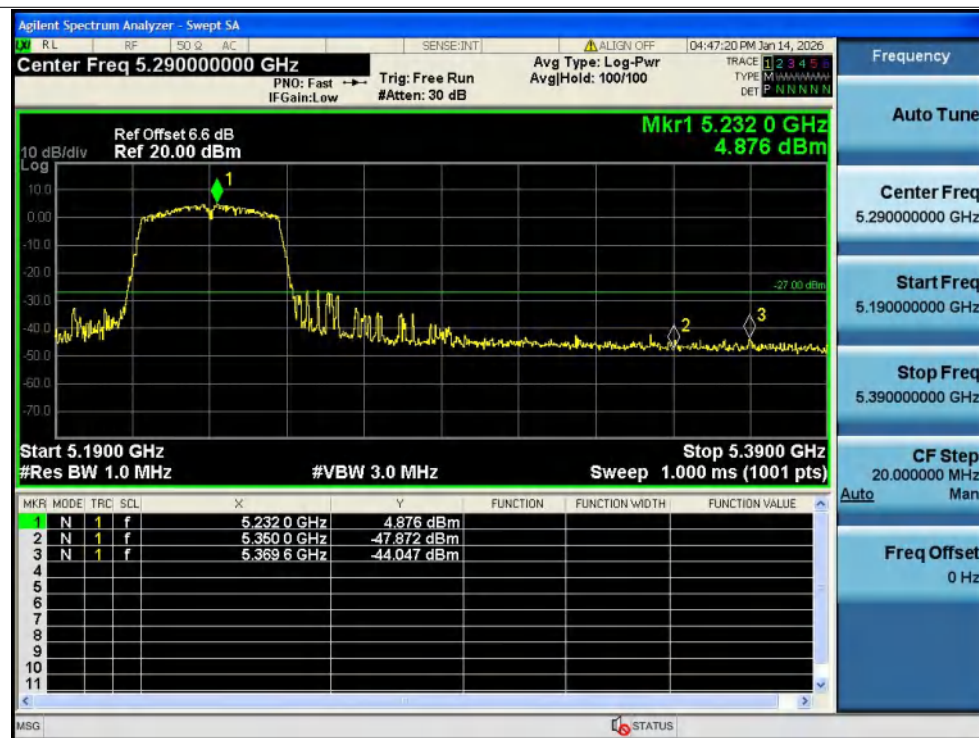
Band Edge NVNT n20 5240MHz High Ant1



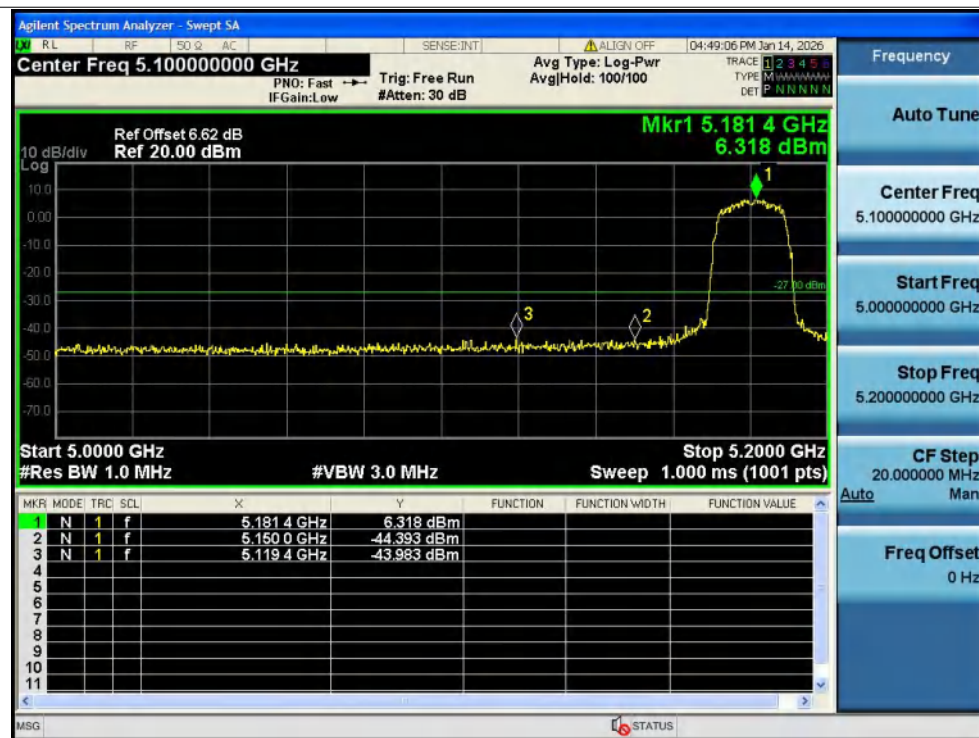
Band Edge NVNT n40 5190MHz Low Ant1



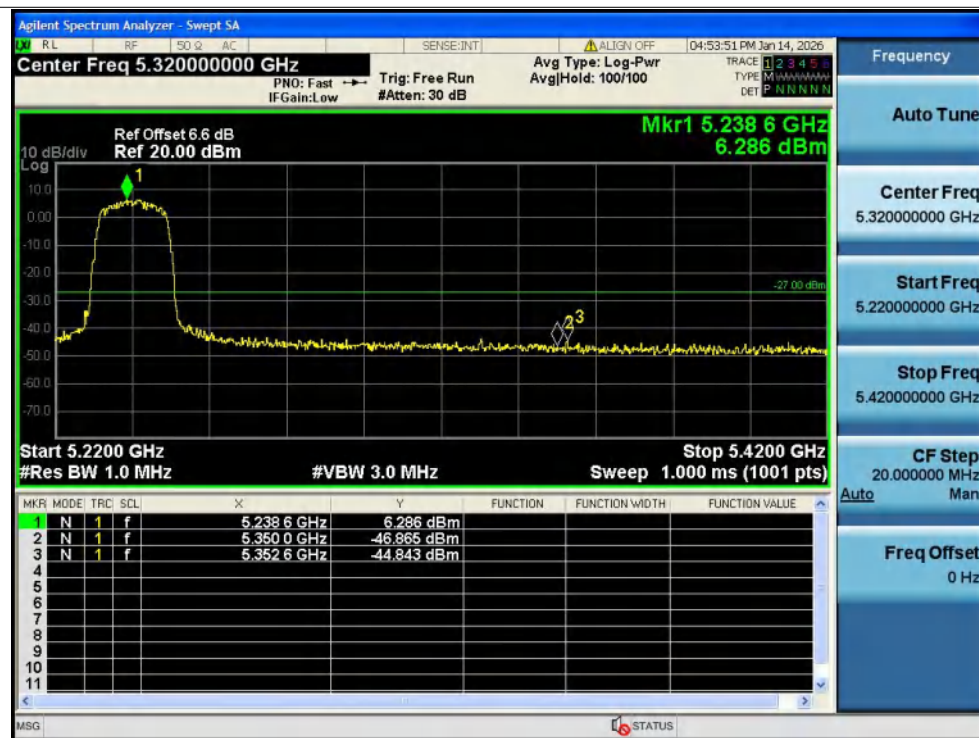
Band Edge NVNT n40 5230MHz High Ant1



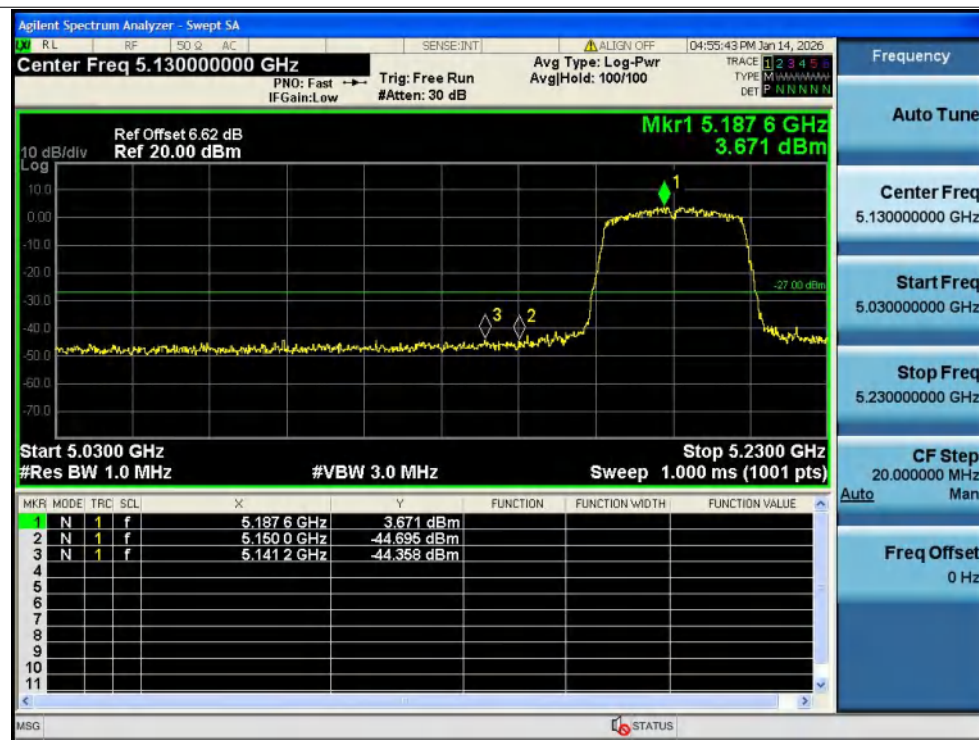
Band Edge NVNT ac20 5180MHz Low Ant1



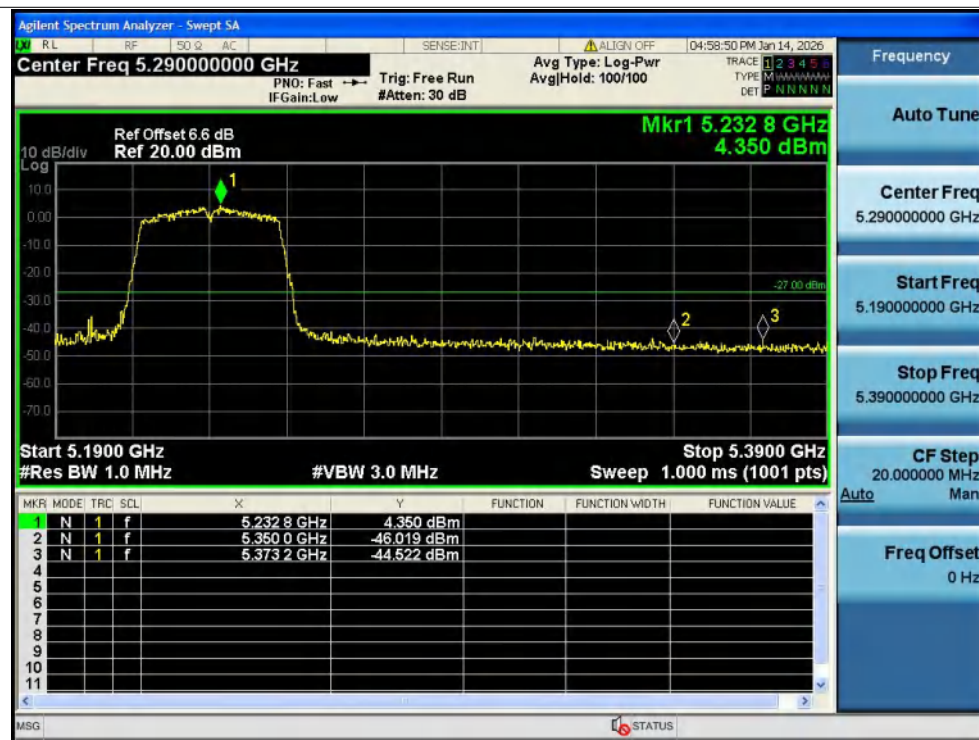
Band Edge NVNT ac20 5240MHz High Ant1



Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1

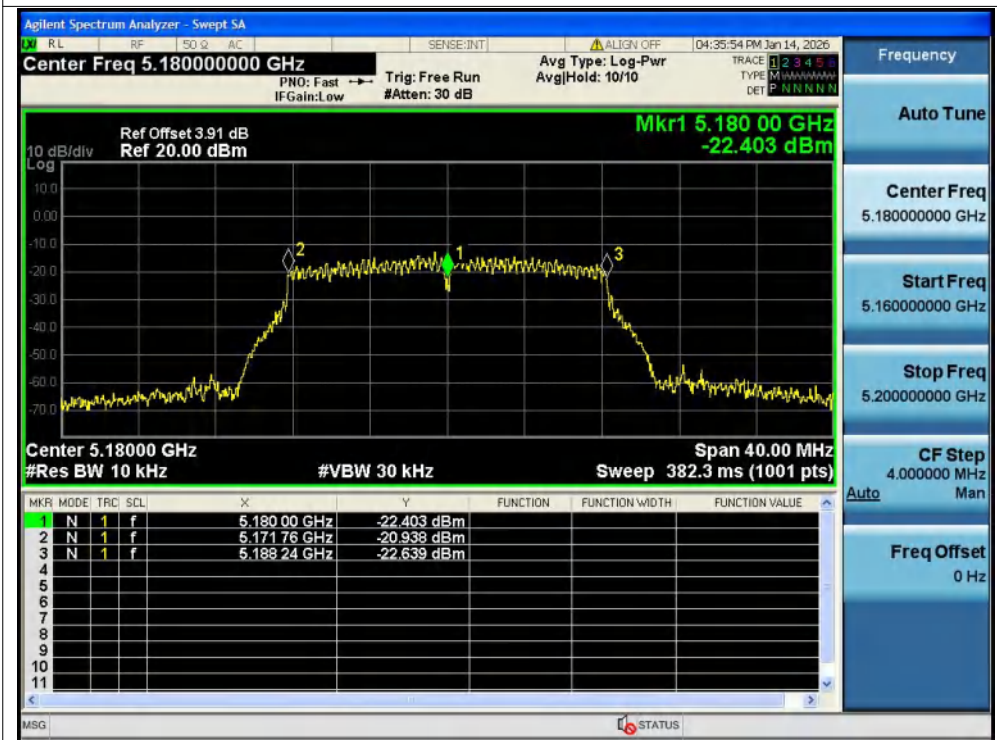


Frequency Stability

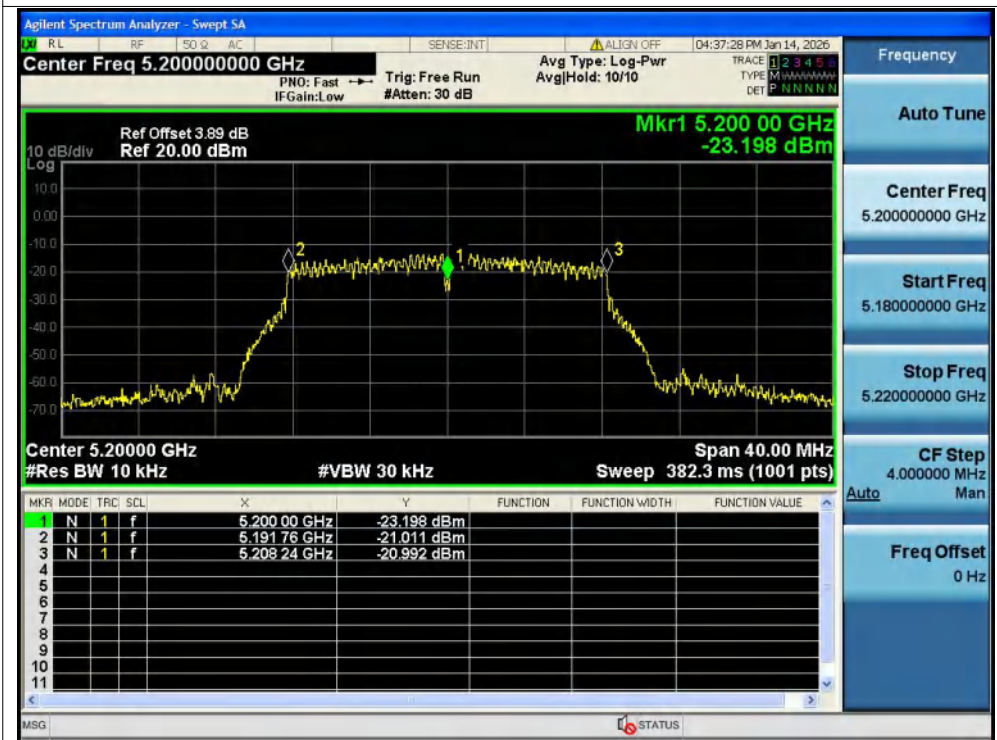
Condition	Mode	Time (mins)	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	0	5180	Ant1	5180	0	0	25	Pass
NVNT	a	0	5200	Ant1	5200	0	0	25	Pass
NVNT	a	0	5240	Ant1	5240	0	0	25	Pass
NVNT	n20	0	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	n20	0	5200	Ant1	5200.02	20000	3.85	25	Pass
NVNT	n20	0	5240	Ant1	5240	0	0	25	Pass
NVNT	n40	0	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	0	5230	Ant1	5229.96	-40000	-7.65	25	Pass
NVNT	ac20	0	5180	Ant1	5180	0	0	25	Pass
NVNT	ac20	0	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	0	5240	Ant1	5240.02	20000	3.82	25	Pass
NVNT	ac40	0	5190	Ant1	5190	0	0	25	Pass
NVNT	ac40	0	5230	Ant1	5230	0	0	25	Pass

Test Graphs

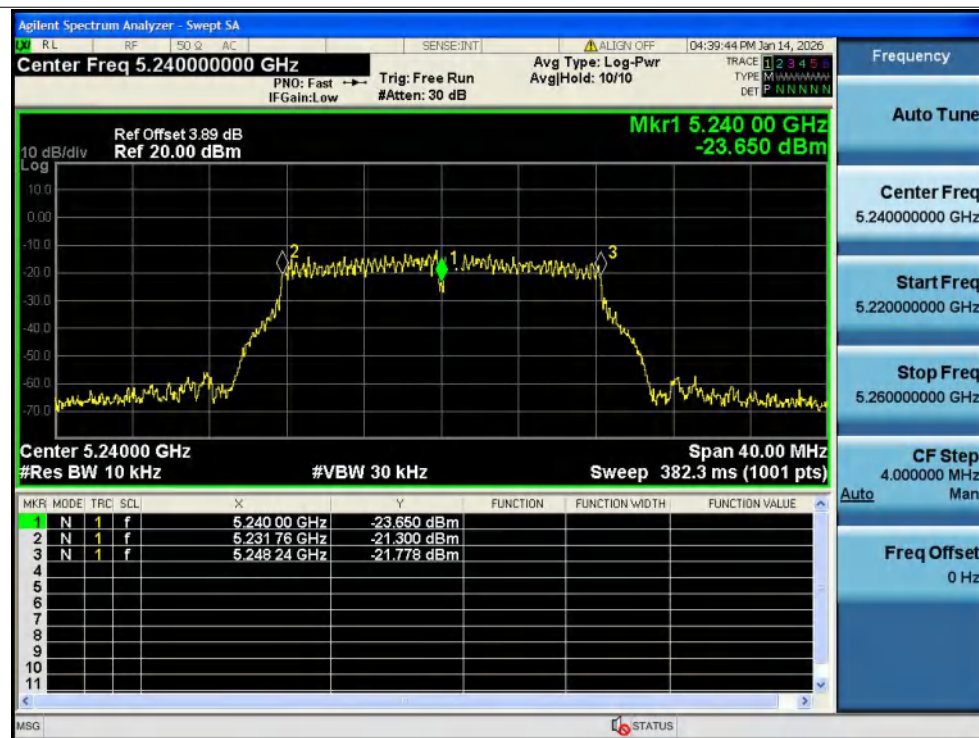
Freq. Stability NVNT a 5180MHz Ant1 0 Minutes



Freq. Stability NVNT a 5200MHz Ant1 0 Minutes



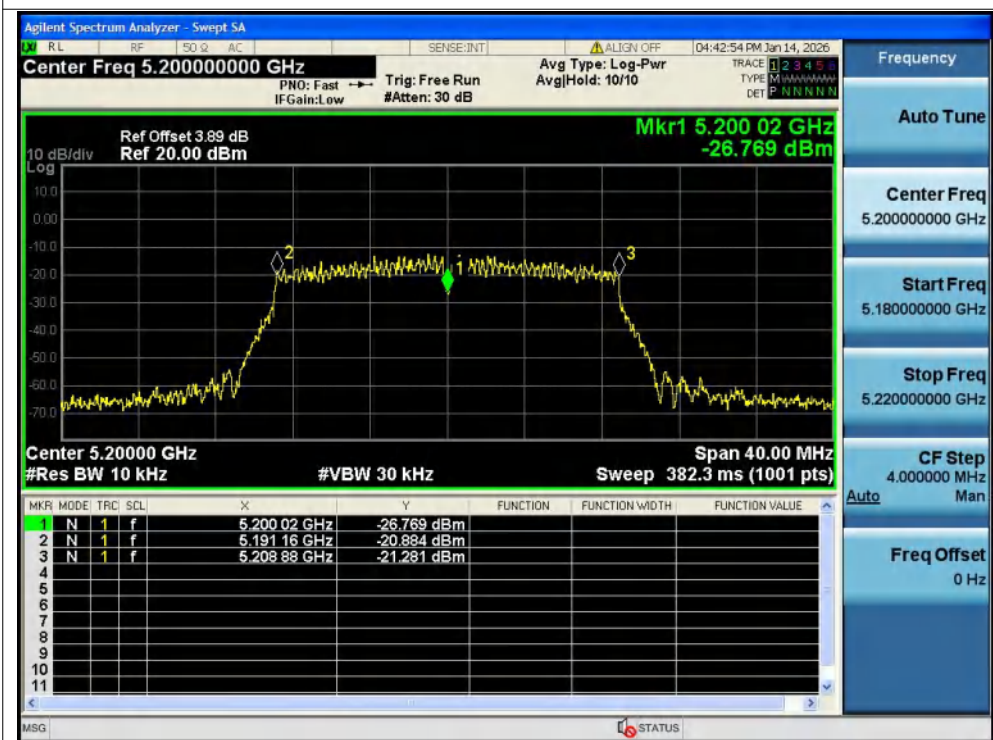
Freq. Stability NVNT a 5240MHz Ant1 0 Minutes



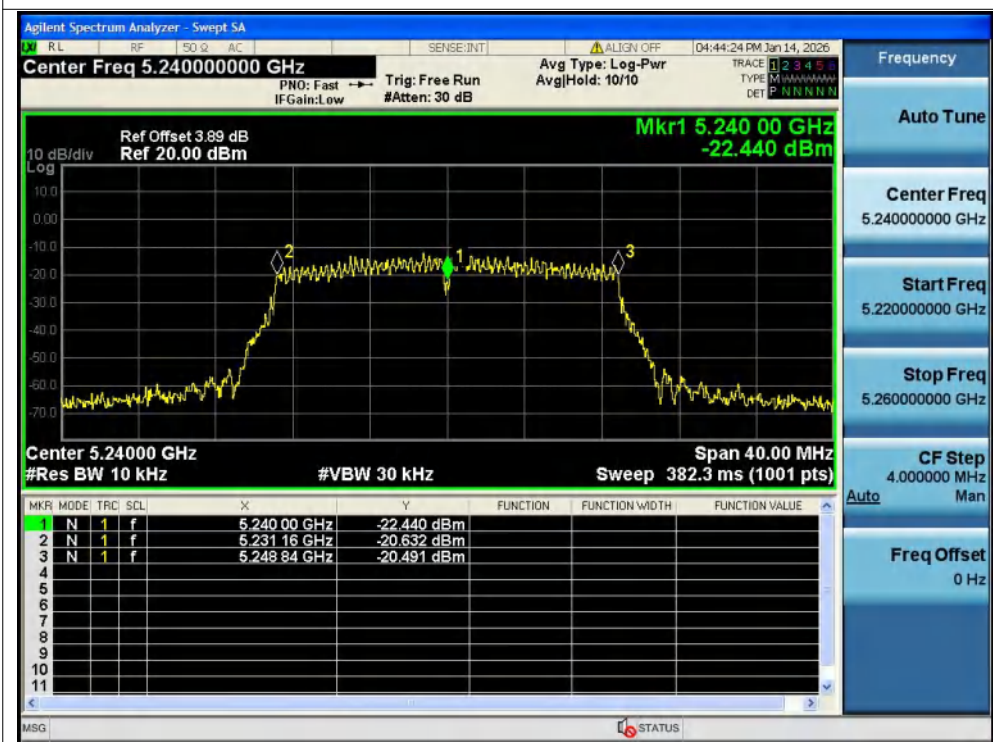
Freq. Stability NVNT n20 5180MHz Ant1 0 Minutes



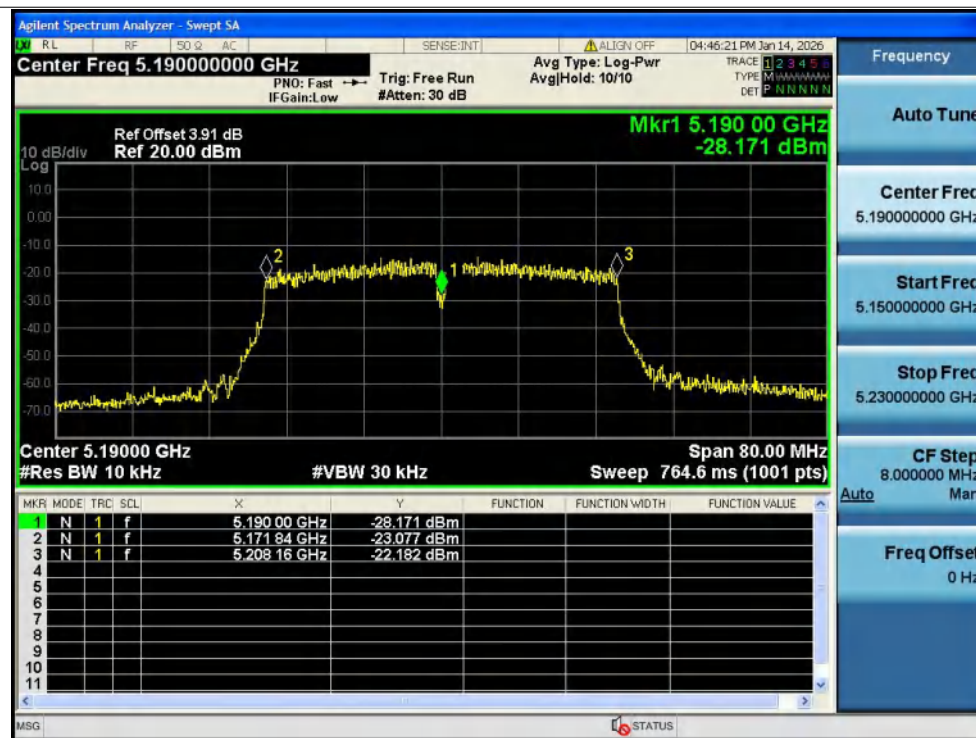
Freq. Stability NVNT n20 5200MHz Ant1 0 Minutes



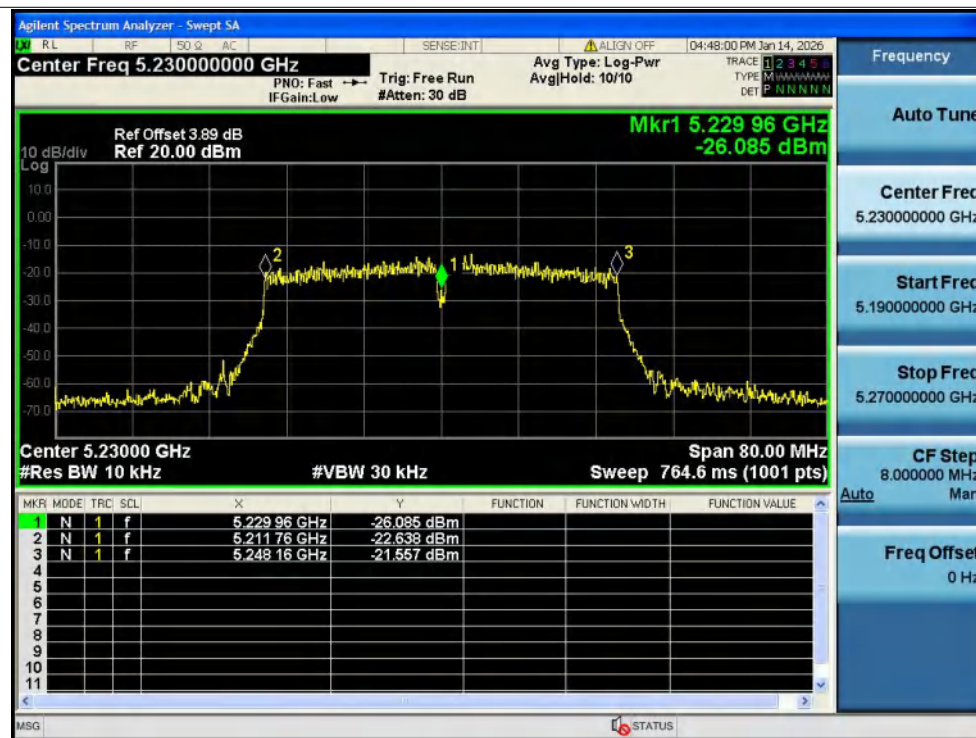
Freq. Stability NVNT n20 5240MHz Ant1 0 Minutes



Freq. Stability NVNT n40 5190MHz Ant1 0 Minutes



Freq. Stability NVNT n40 5230MHz Ant1 0 Minutes



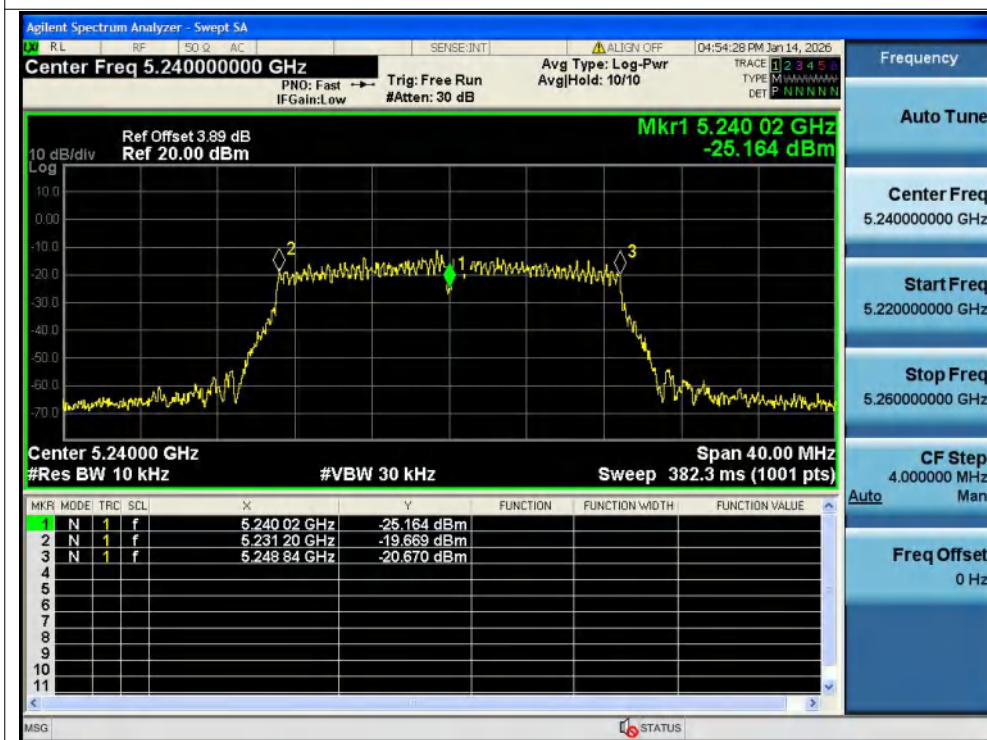
Freq. Stability NVNT ac20 5180MHz Ant1 0 Minutes



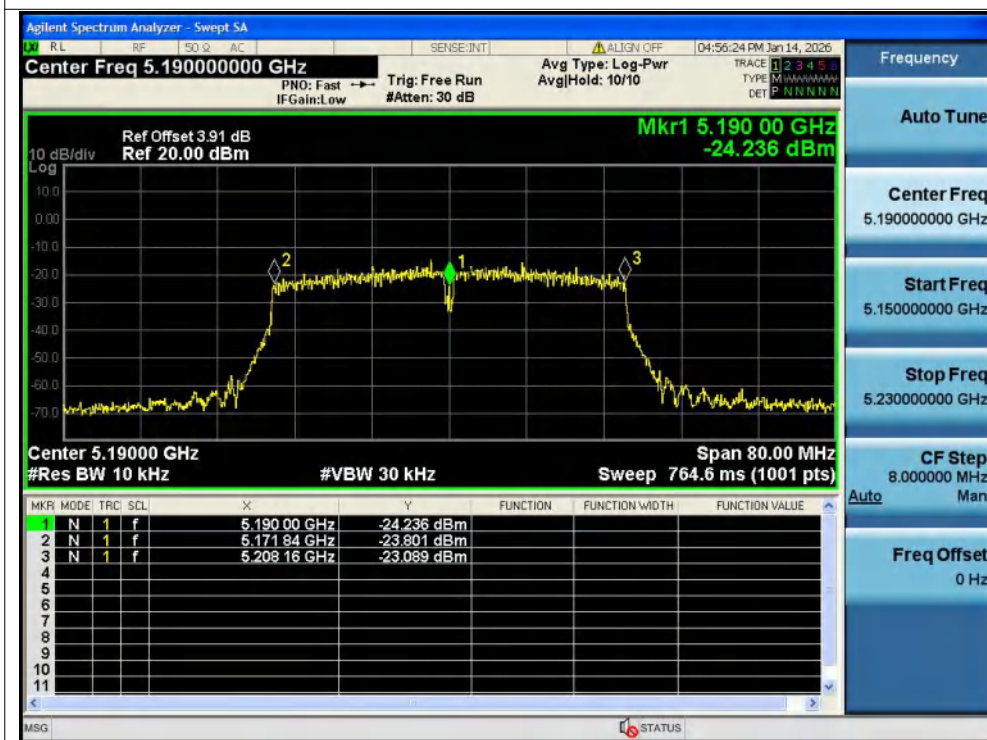
Freq. Stability NVNT ac20 5200MHz Ant1 0 Minutes

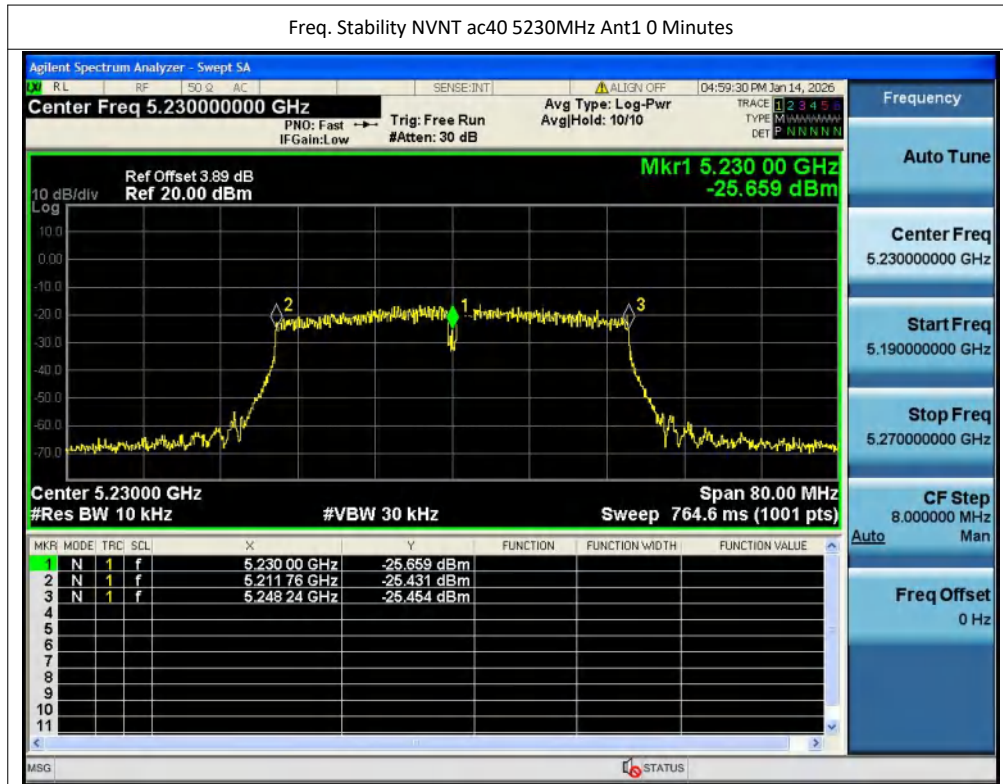


Freq. Stability NVNT ac20 5240MHz Ant1 0 Minutes



Freq. Stability NVNT ac40 5190MHz Ant1 0 Minutes



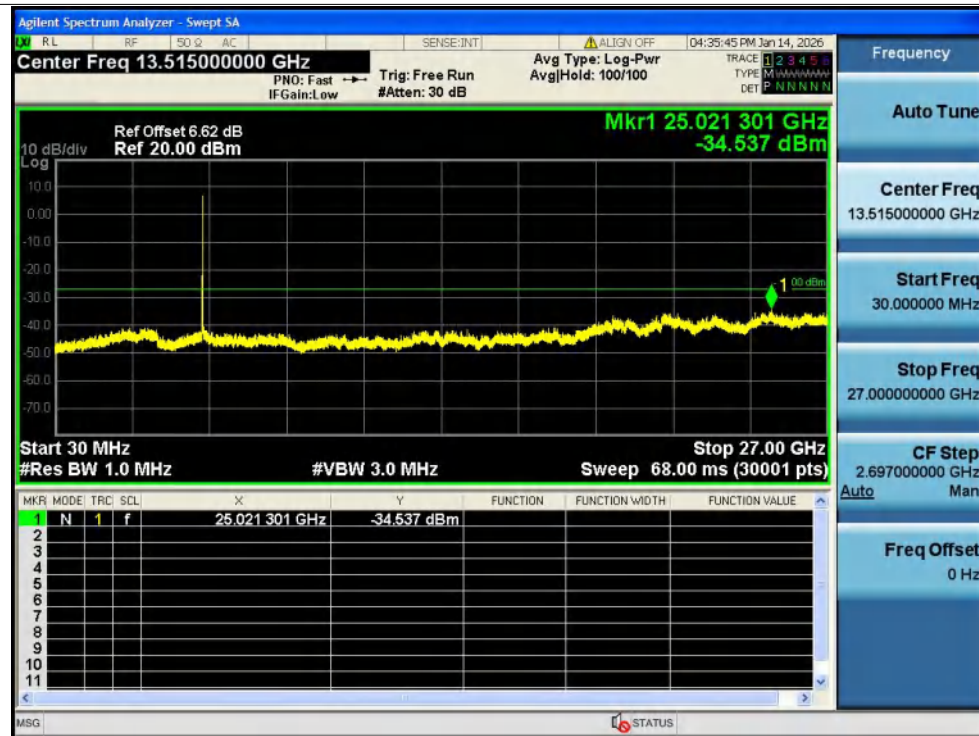


Conducted RF Spurious Emission

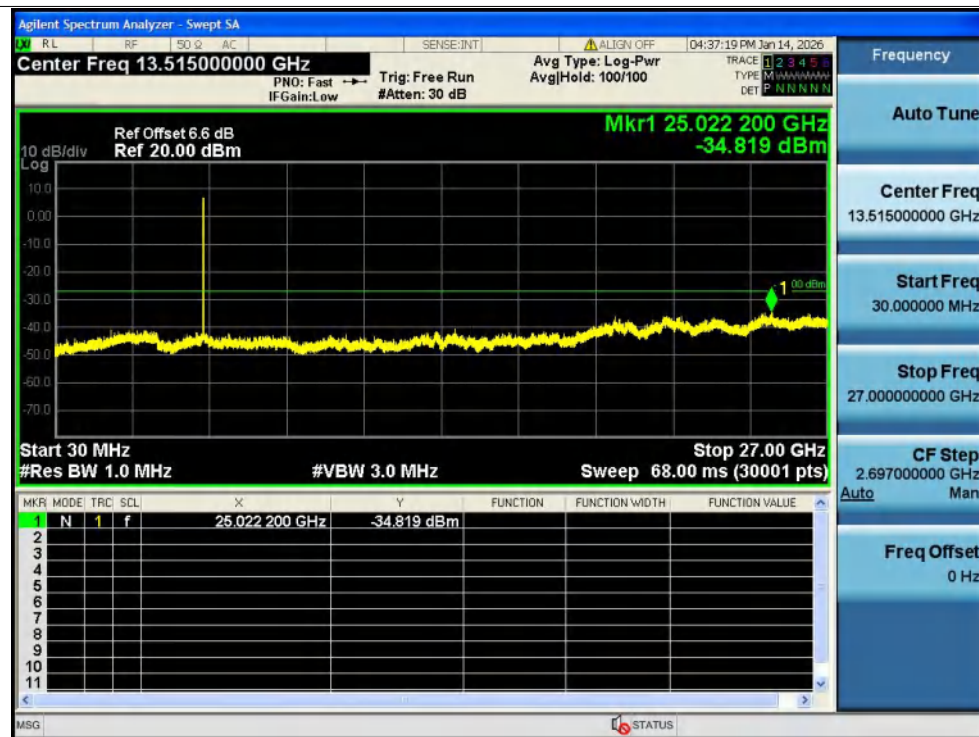
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-34.53	-27	Pass
NVNT	a	5200	Ant1	-34.81	-27	Pass
NVNT	a	5240	Ant1	-33.94	-27	Pass
NVNT	n20	5180	Ant1	-35.17	-27	Pass
NVNT	n20	5200	Ant1	-34.52	-27	Pass
NVNT	n20	5240	Ant1	-34.56	-27	Pass
NVNT	n40	5190	Ant1	-34.72	-27	Pass
NVNT	n40	5230	Ant1	-34.29	-27	Pass
NVNT	ac20	5180	Ant1	-34.97	-27	Pass
NVNT	ac20	5200	Ant1	-34.52	-27	Pass
NVNT	ac20	5240	Ant1	-34.86	-27	Pass
NVNT	ac40	5190	Ant1	-34.64	-27	Pass
NVNT	ac40	5230	Ant1	-34.42	-27	Pass

Test Graphs

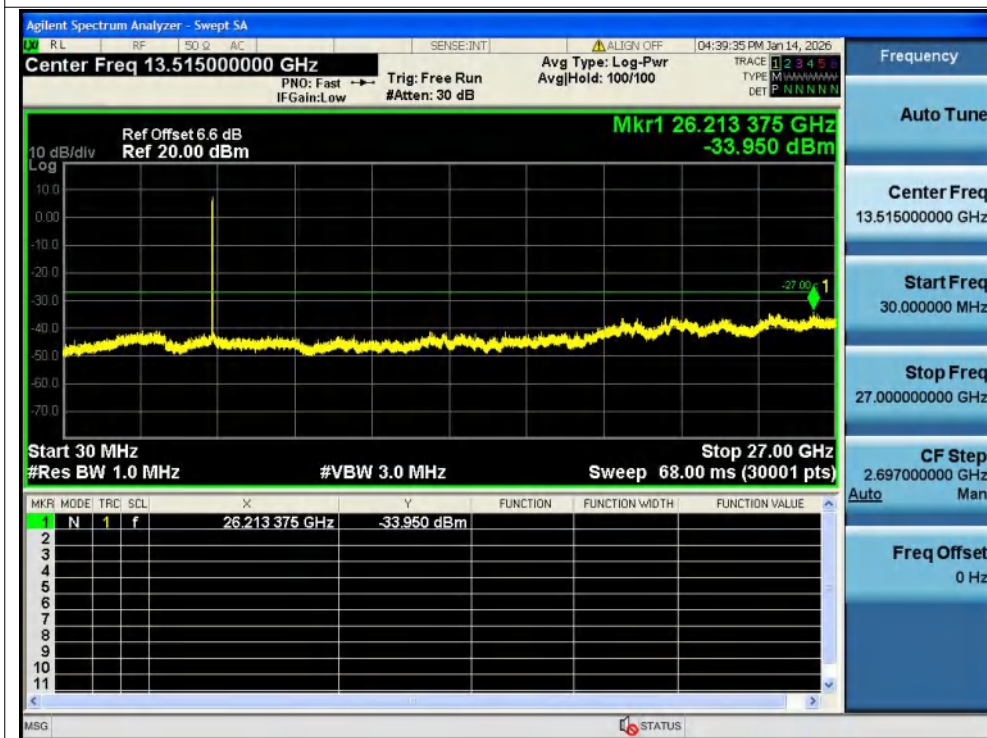
Tx. Spurious NVNT a 5180MHz Ant1 Emission



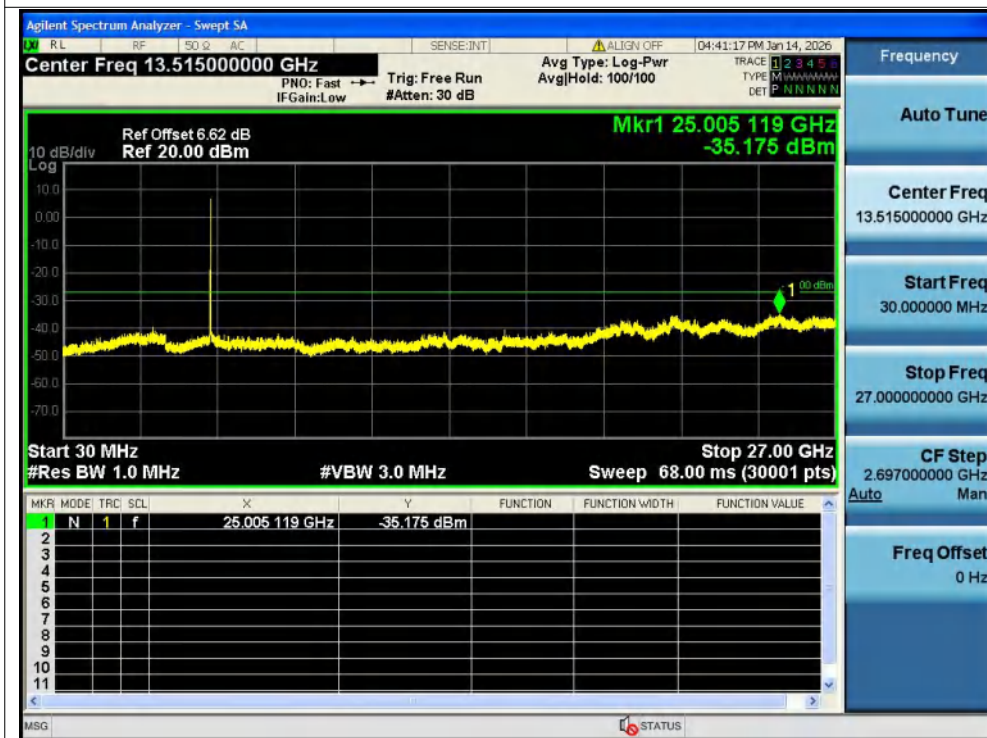
Tx. Spurious NVNT a 5200MHz Ant1 Emission



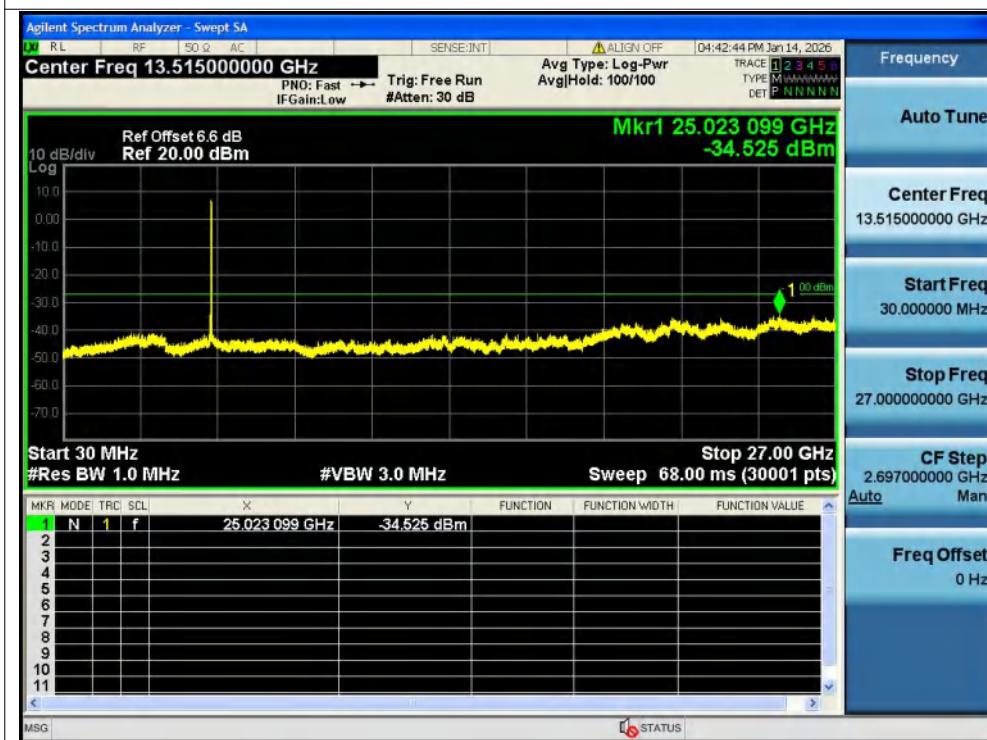
Tx. Spurious NVNT a 5240MHz Ant1 Emission



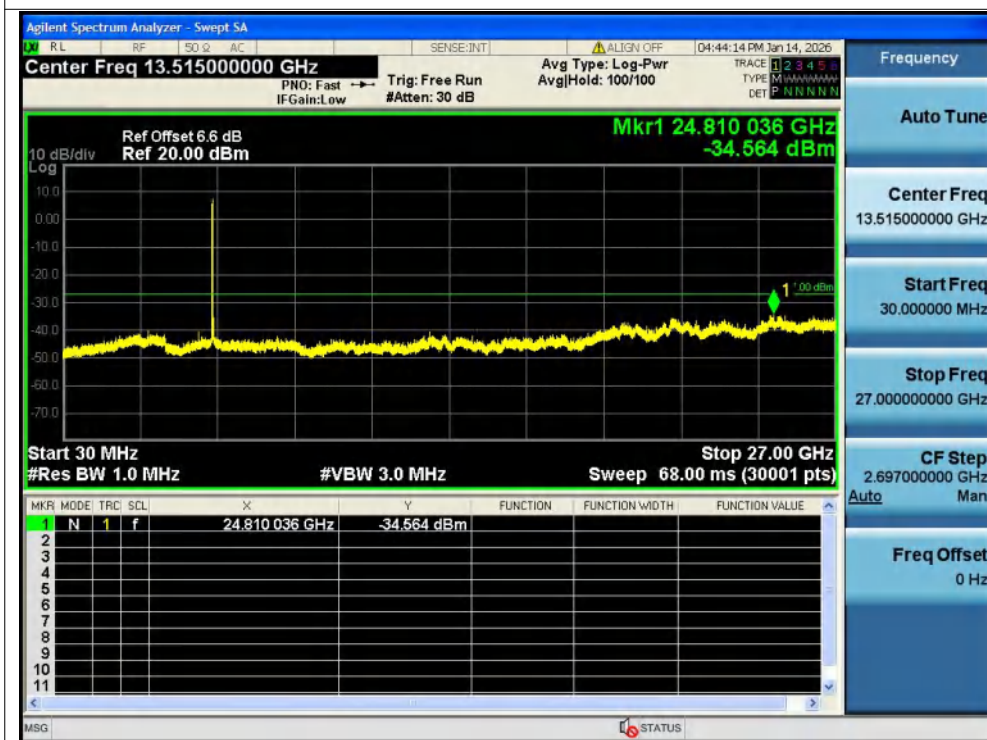
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



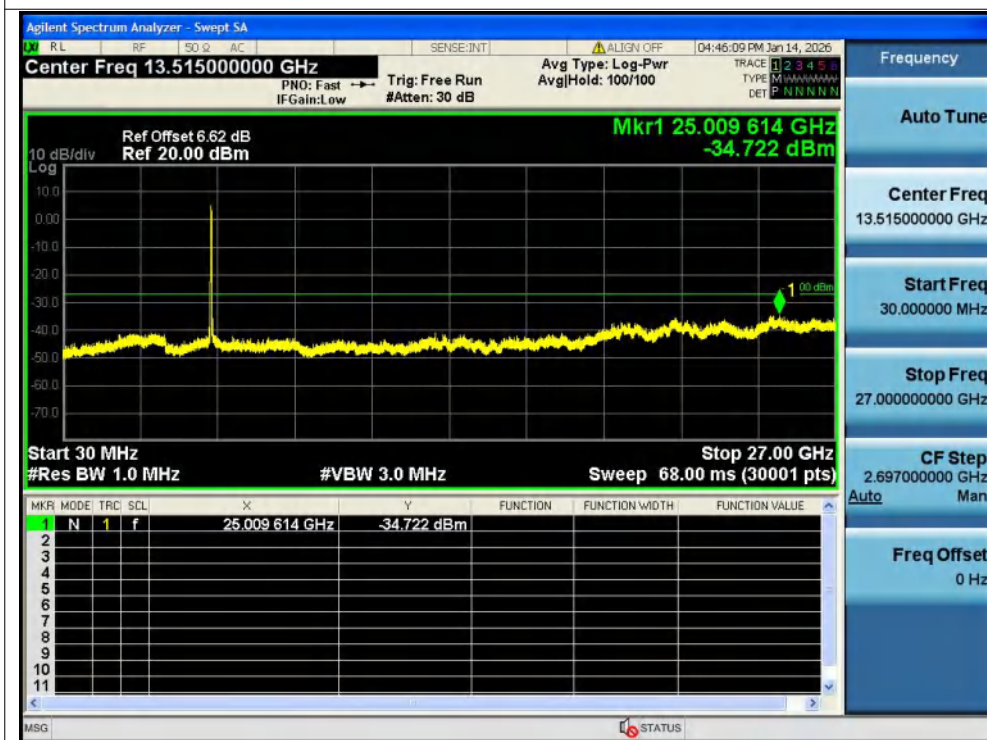
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



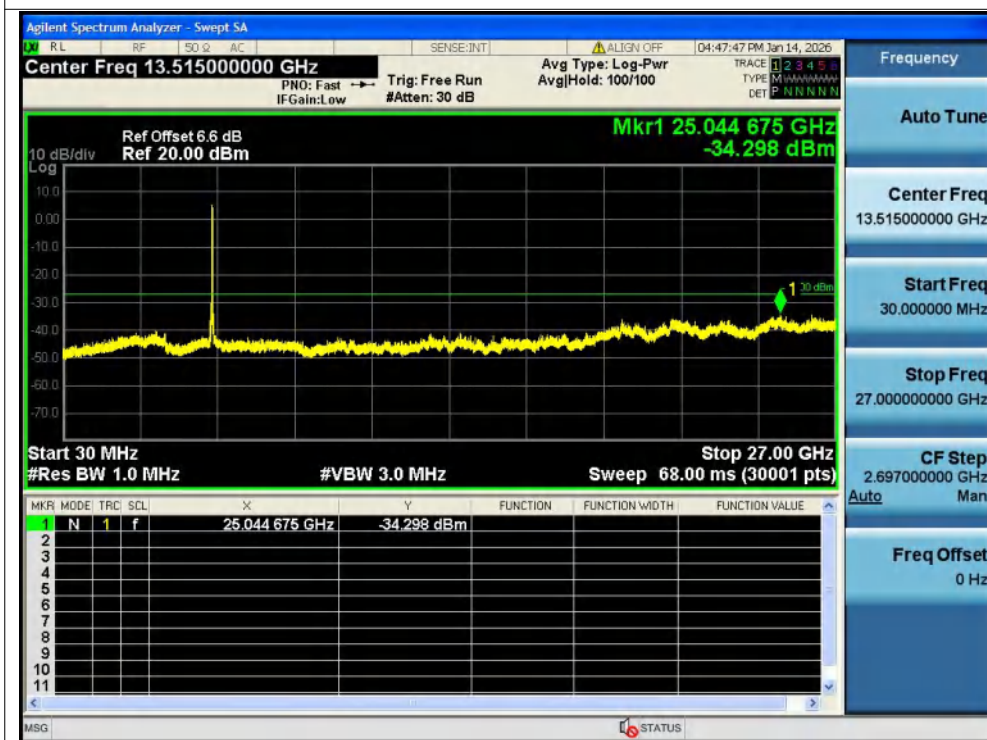
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



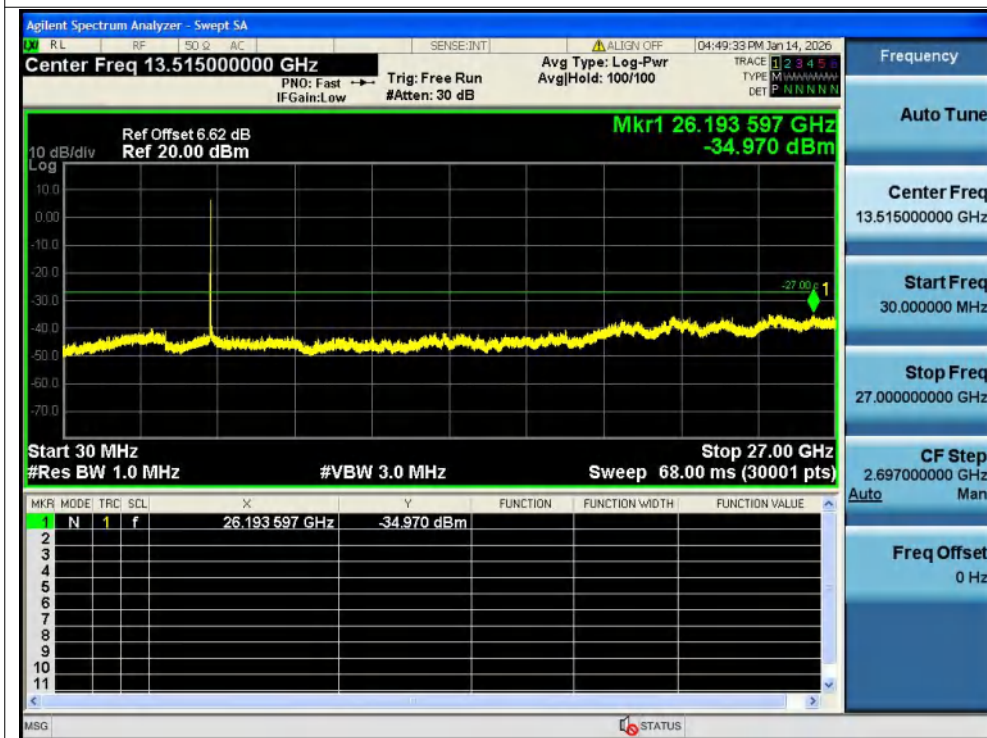
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



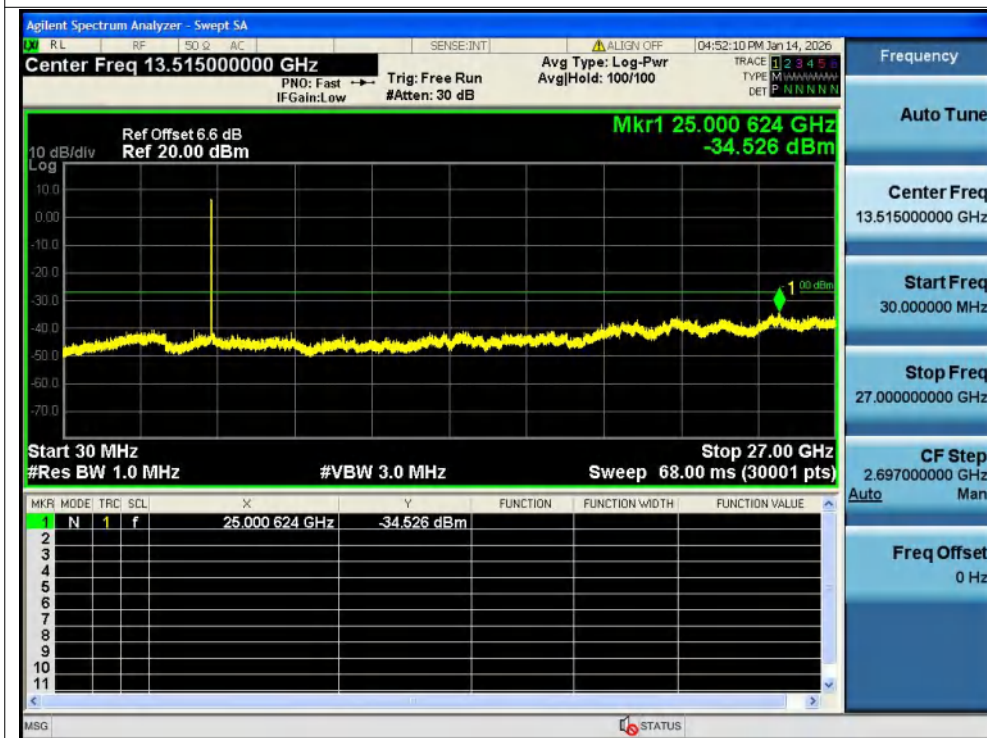
Tx. Spurious NVNT n40 5230MHz Ant1 Emission



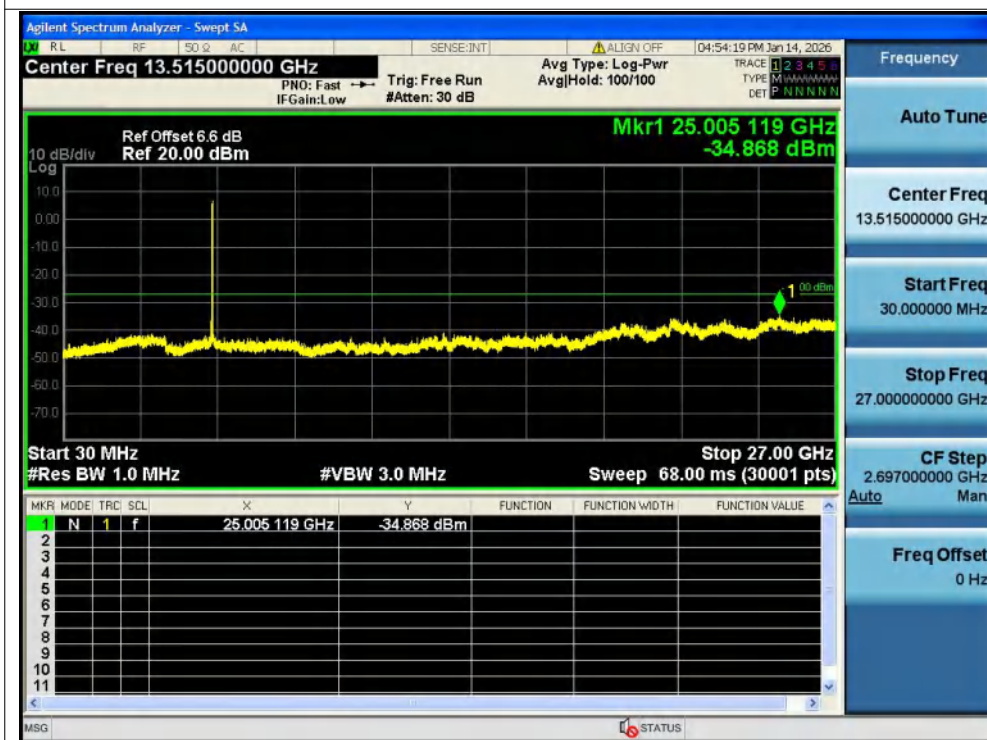
Tx. Spurious NVNT ac20 5180MHz Ant1 Emission



Tx. Spurious NVNT ac20 5200MHz Ant1 Emission



Tx. Spurious NVNT ac20 5240MHz Ant1 Emission



Tx. Spurious NVNT ac40 5190MHz Ant1 Emission

