

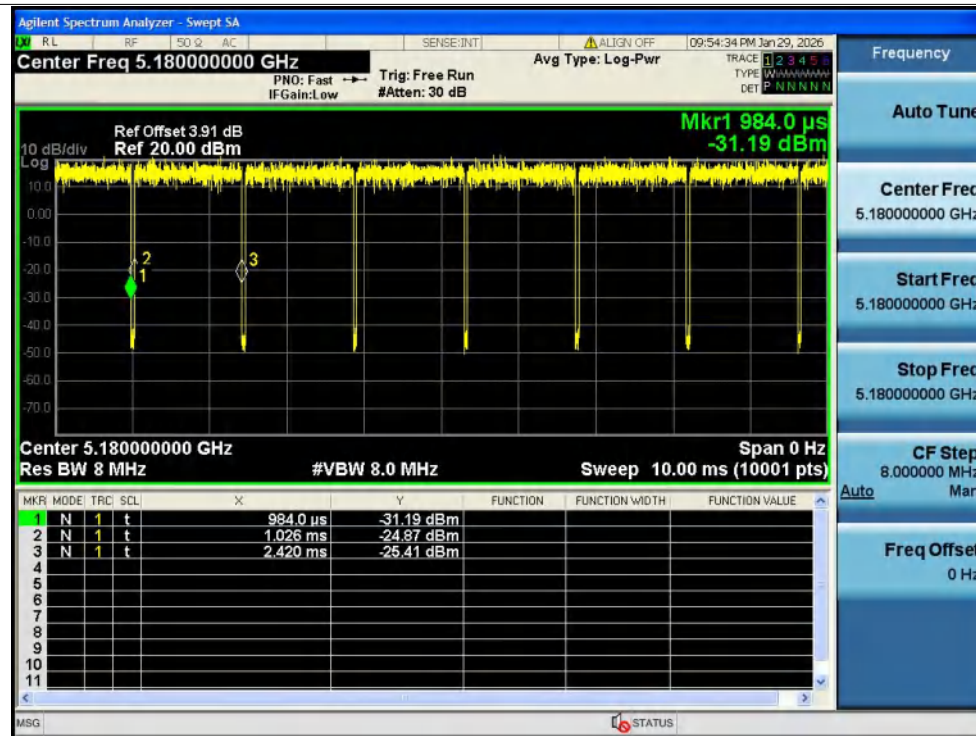
Appendix 5.1G WiFi

Duty Cycle

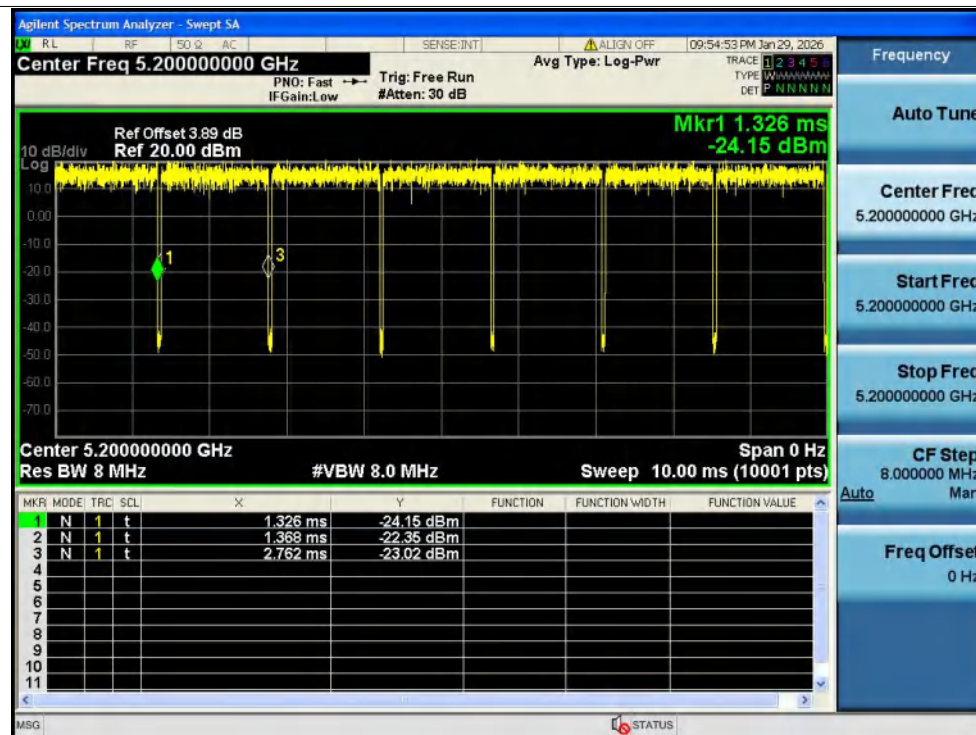
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.08	0.13	0.72
NVNT	a	5200	Ant1	97.08	0.13	0.72
NVNT	a	5240	Ant1	97.08	0.13	0.72
NVNT	n20	5180	Ant1	96.88	0.14	0.77
NVNT	n20	5200	Ant1	96.88	0.14	0.77
NVNT	n20	5240	Ant1	96.88	0.14	0.77
NVNT	n40	5190	Ant1	93.93	0.27	1.54
NVNT	n40	5230	Ant1	93.93	0.27	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	96.9	0.14	0.76
NVNT	ac40	5190	Ant1	93.82	0.28	1.53
NVNT	ac40	5230	Ant1	93.97	0.27	1.53
NVNT	ac80	5210	Ant1	88.32	0.54	3.08

Test Graphs

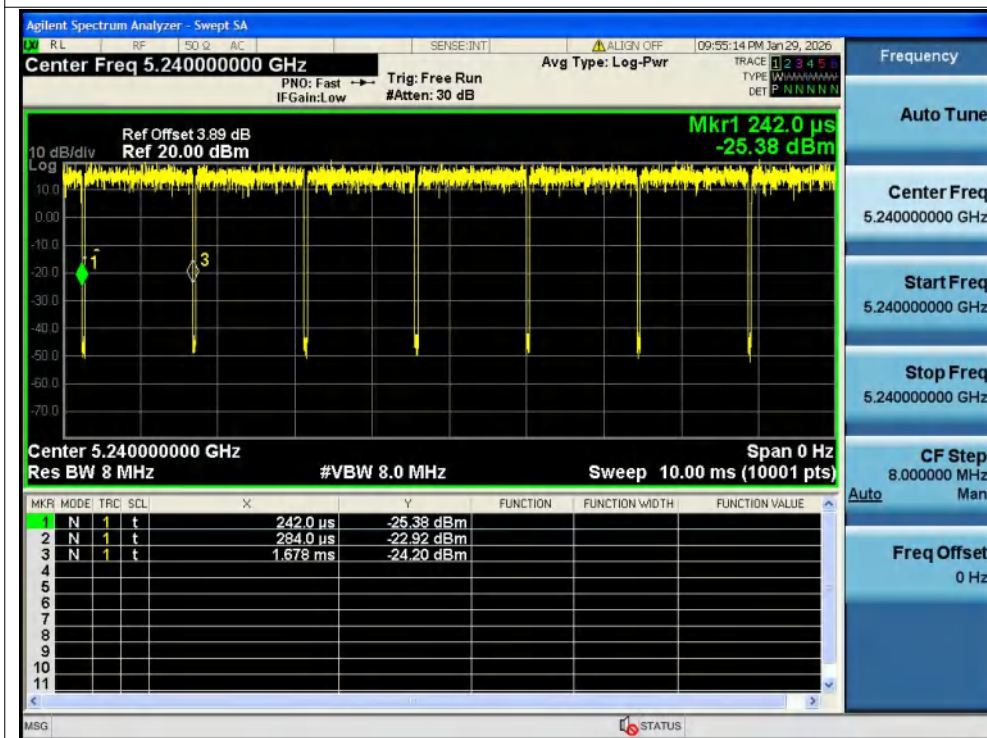
Duty Cycle NVNT a 5180MHz Ant1



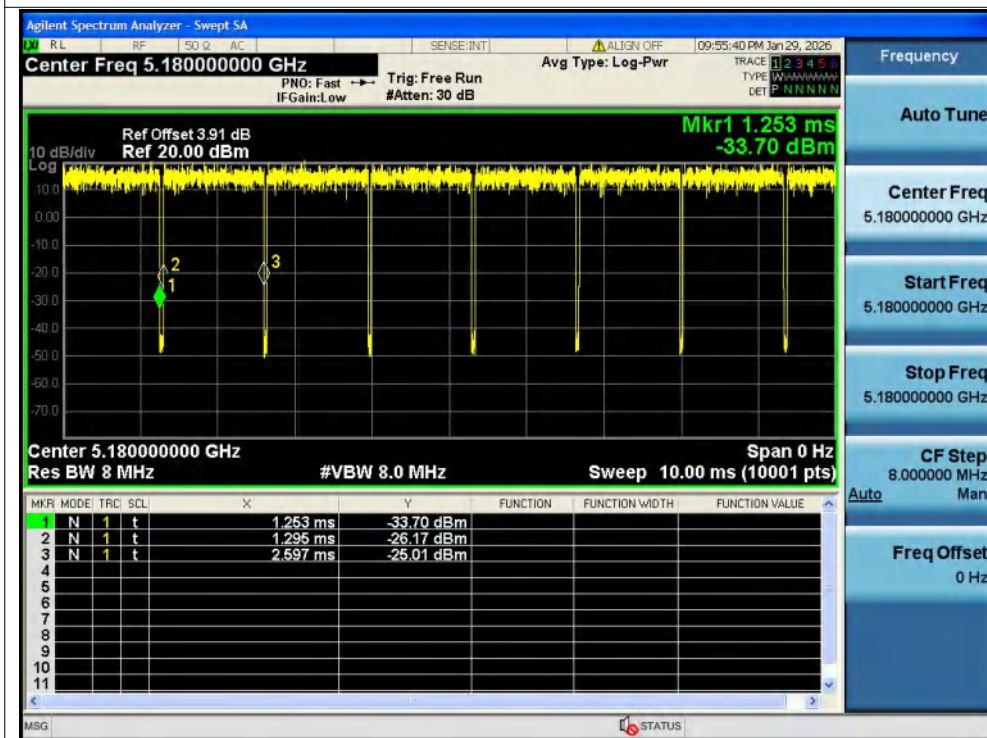
Duty Cycle NVNT a 5200MHz Ant1



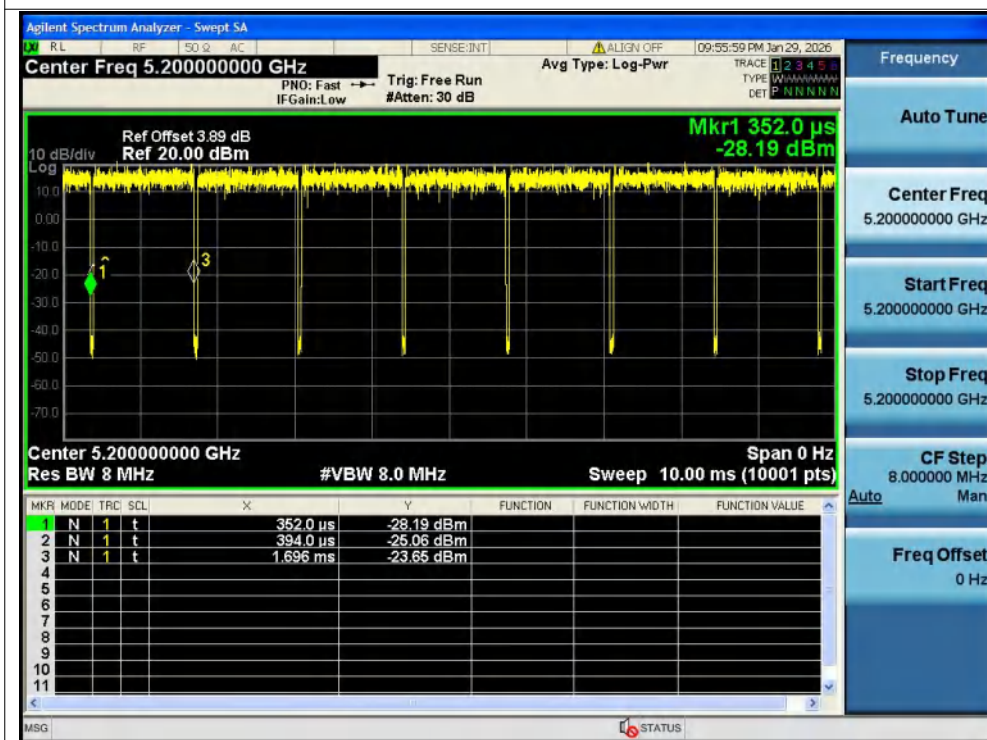
Duty Cycle NVNT a 5240MHz Ant1



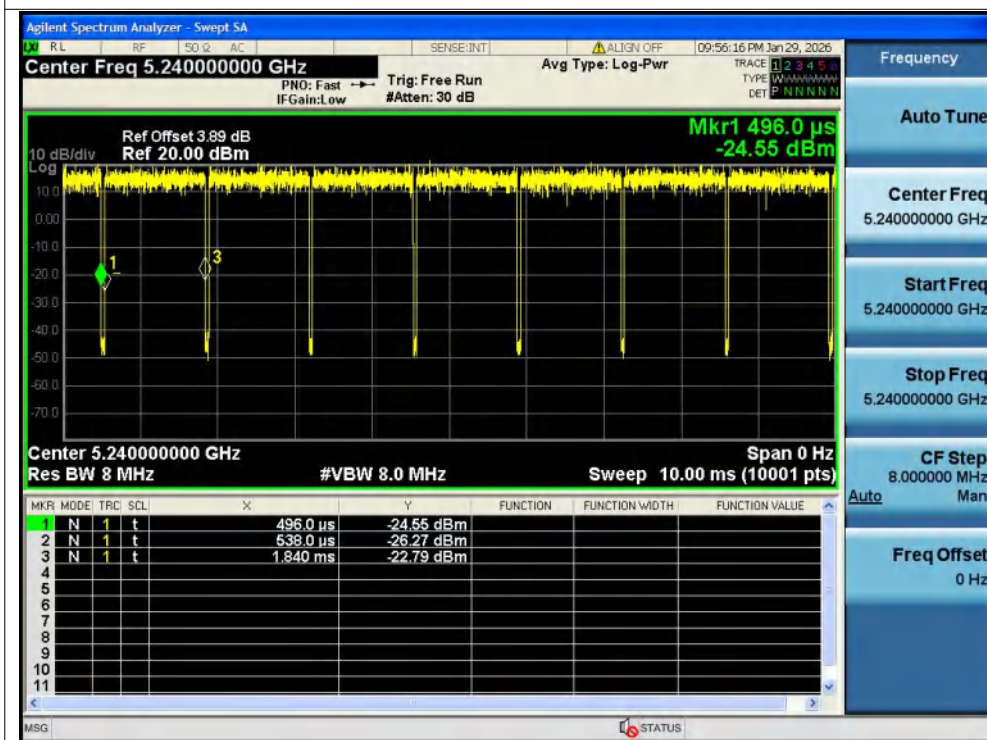
Duty Cycle NVNT n20 5180MHz Ant1



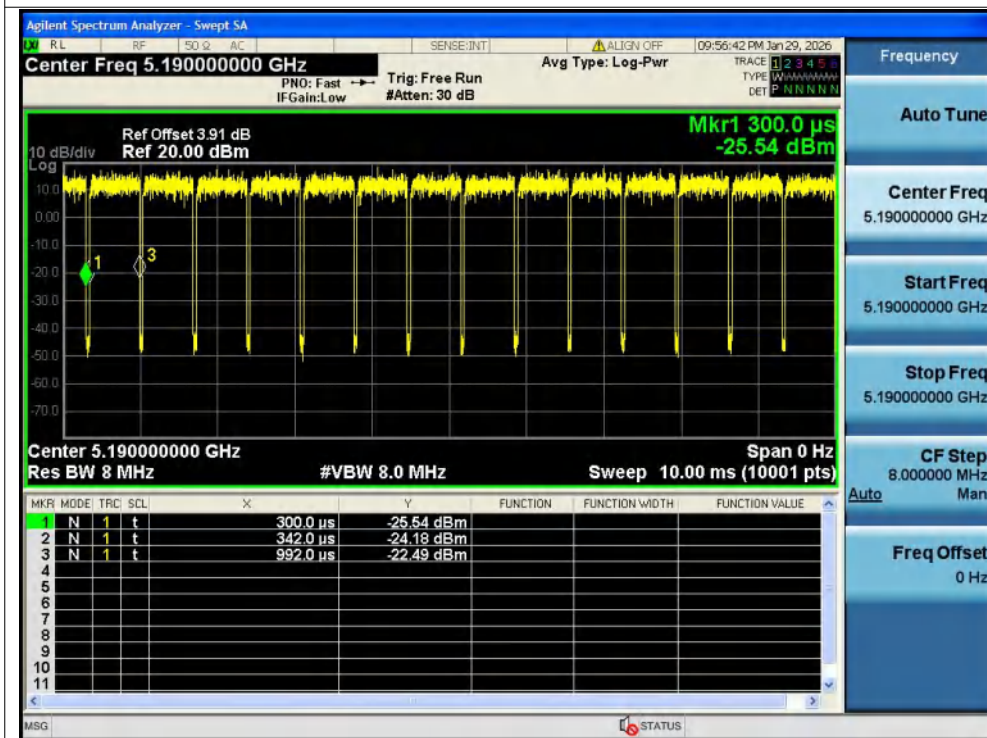
Duty Cycle NVNT n20 5200MHz Ant1



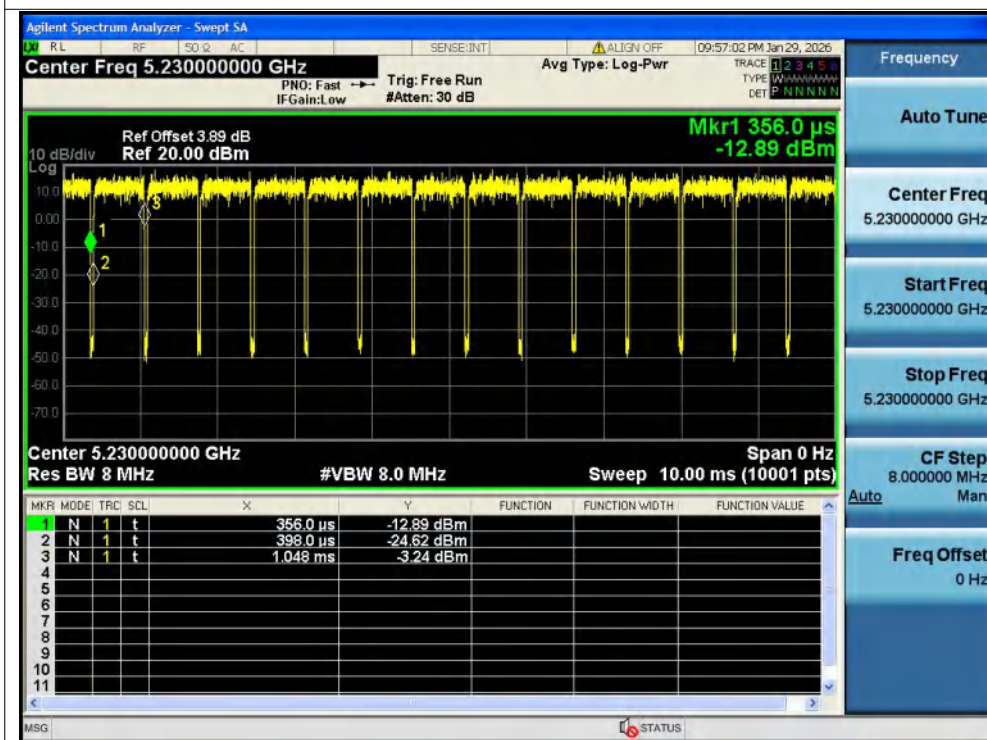
Duty Cycle NVNT n20 5240MHz Ant1



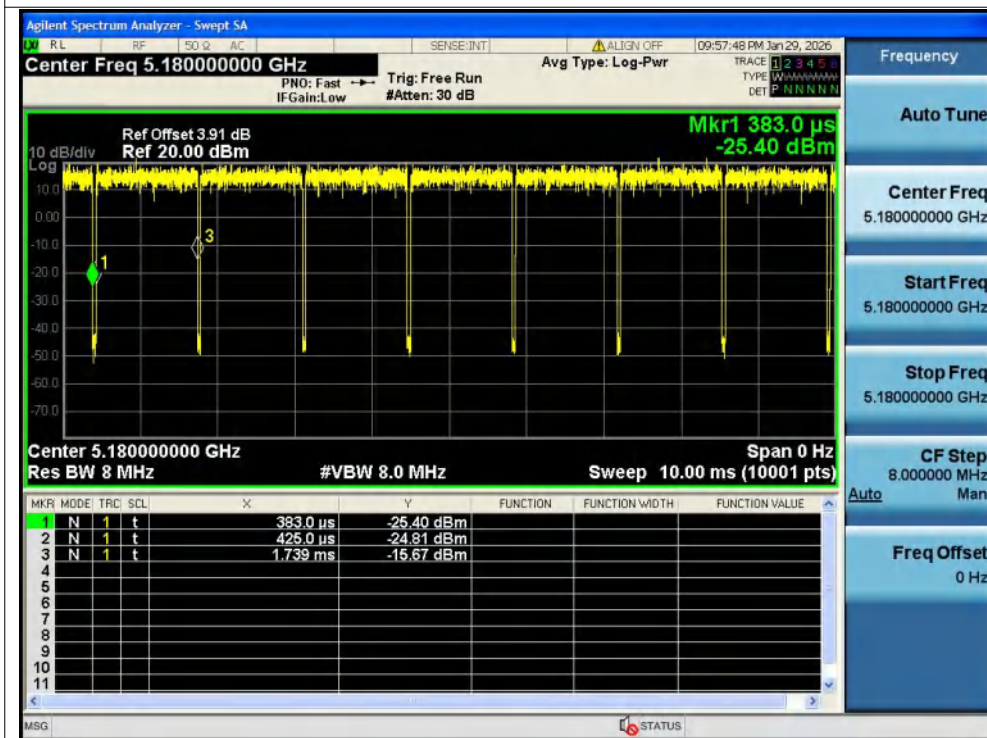
Duty Cycle NVNT n40 5190MHz Ant1



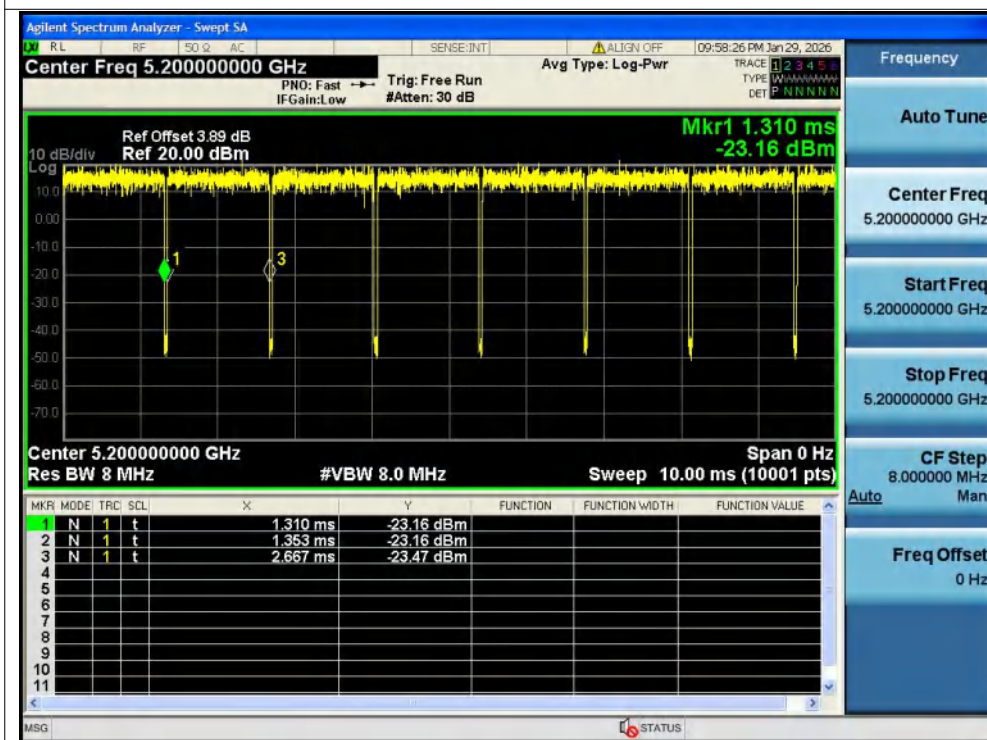
Duty Cycle NVNT n40 5230MHz Ant1



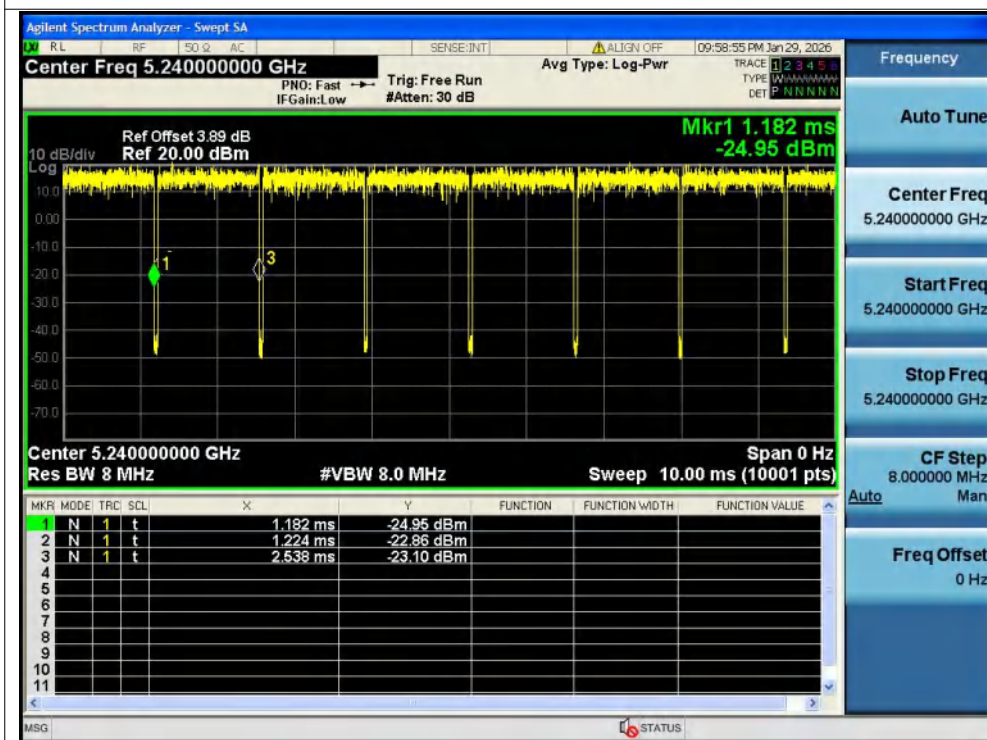
Duty Cycle NVNT ac20 5180MHz Ant1



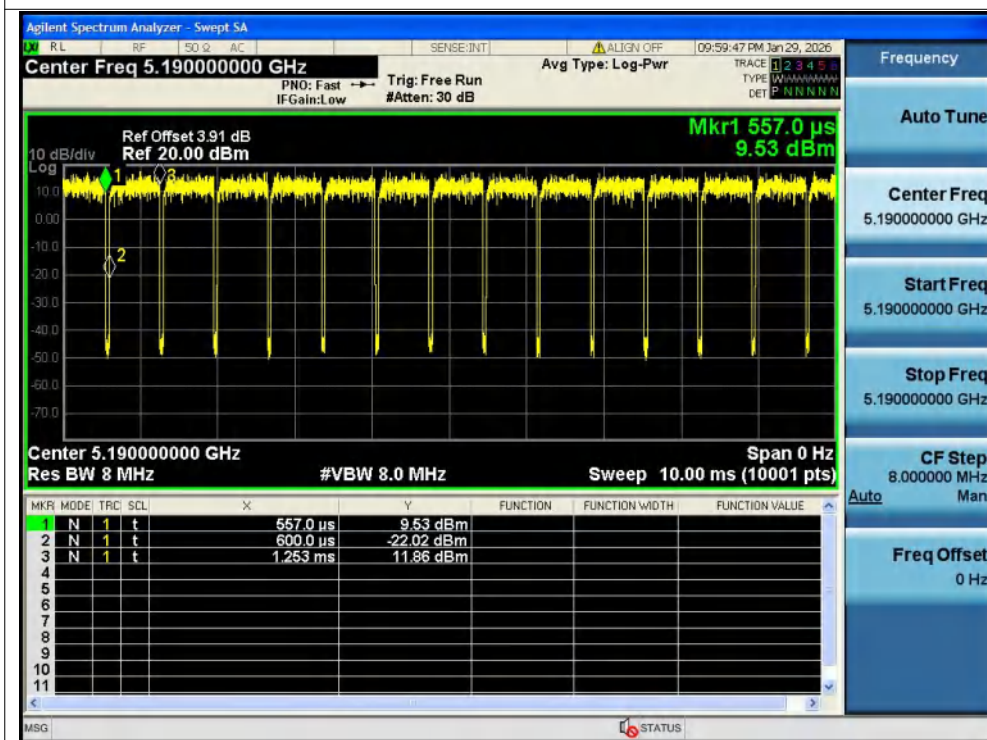
Duty Cycle NVNT ac20 5200MHz Ant1



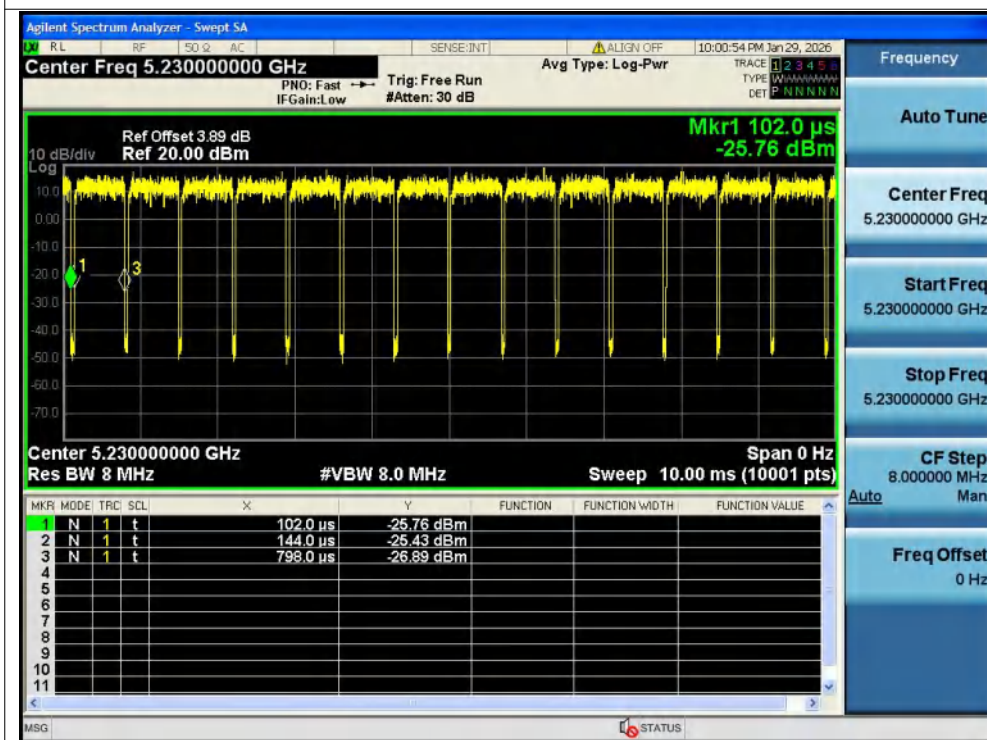
Duty Cycle NVNT ac20 5240MHz Ant1



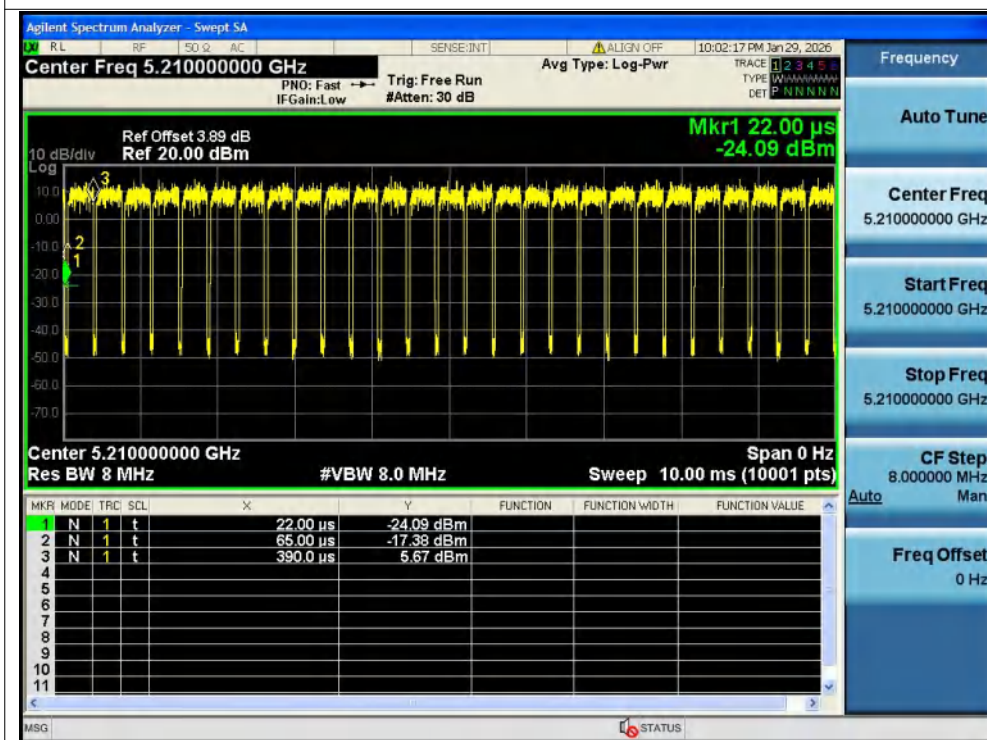
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1

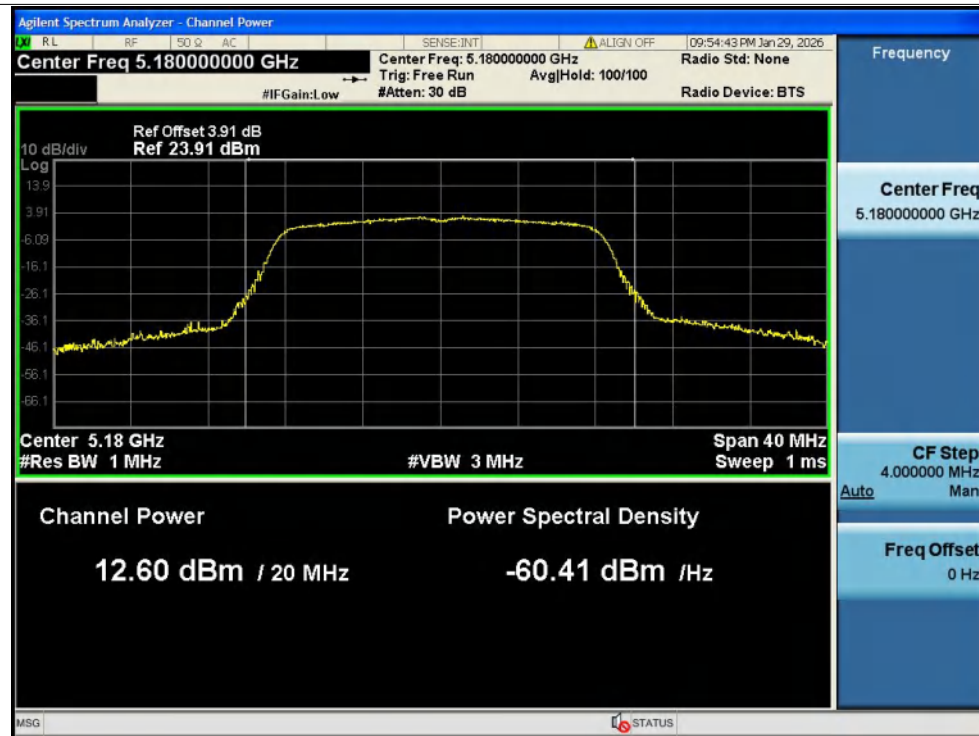


Maximum Conducted Output Power

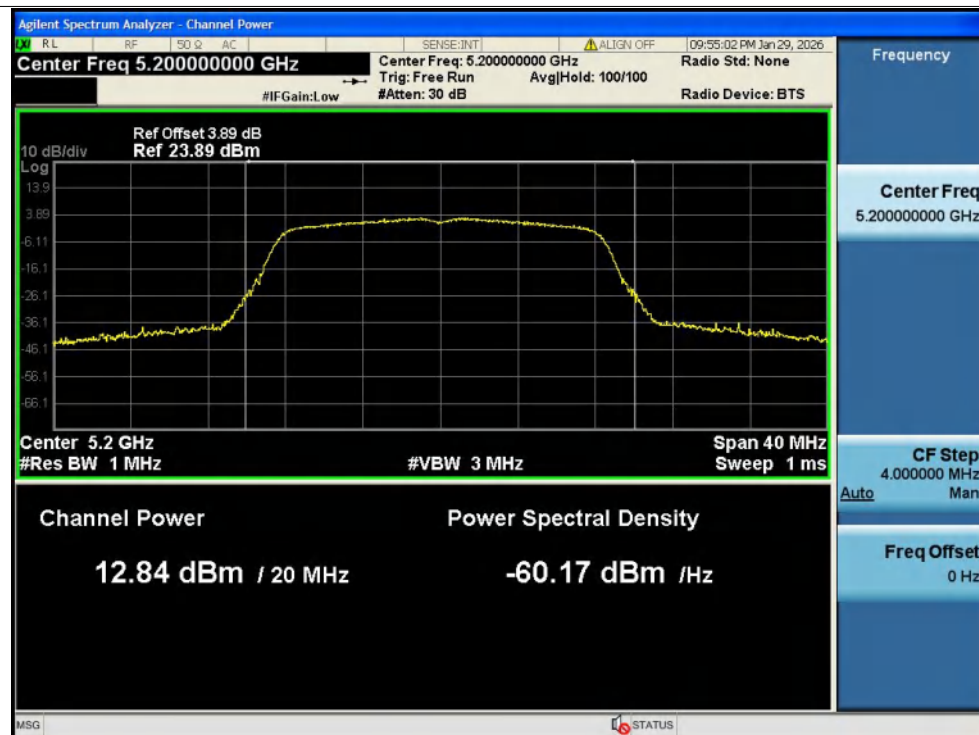
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.6	0.13	12.73	24	Pass
NVNT	a	5200	Ant1	12.84	0.13	12.97	24	Pass
NVNT	a	5240	Ant1	12.68	0.13	12.81	24	Pass
NVNT	n20	5180	Ant1	12.56	0.14	12.7	24	Pass
NVNT	n20	5200	Ant1	12.65	0.14	12.79	24	Pass
NVNT	n20	5240	Ant1	12.56	0.14	12.7	24	Pass
NVNT	n40	5190	Ant1	12.7	0.27	12.97	24	Pass
NVNT	n40	5230	Ant1	12.43	0.27	12.7	24	Pass
NVNT	ac20	5180	Ant1	12.5	0.14	12.64	24	Pass
NVNT	ac20	5200	Ant1	12.67	0.14	12.81	24	Pass
NVNT	ac20	5240	Ant1	12.63	0.14	12.77	24	Pass
NVNT	ac40	5190	Ant1	12.4	0.28	12.68	24	Pass
NVNT	ac40	5230	Ant1	12.5	0.27	12.77	24	Pass
NVNT	ac80	5210	Ant1	12.33	0.54	12.87	24	Pass

Test Graphs

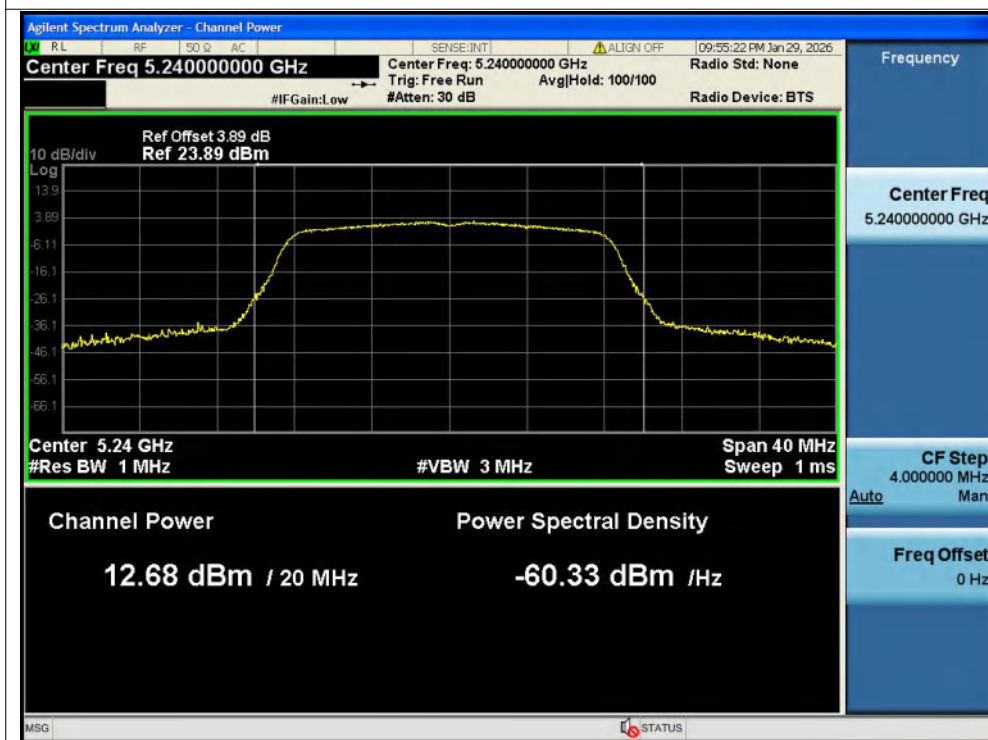
Power NVNT a 5180MHz Ant1



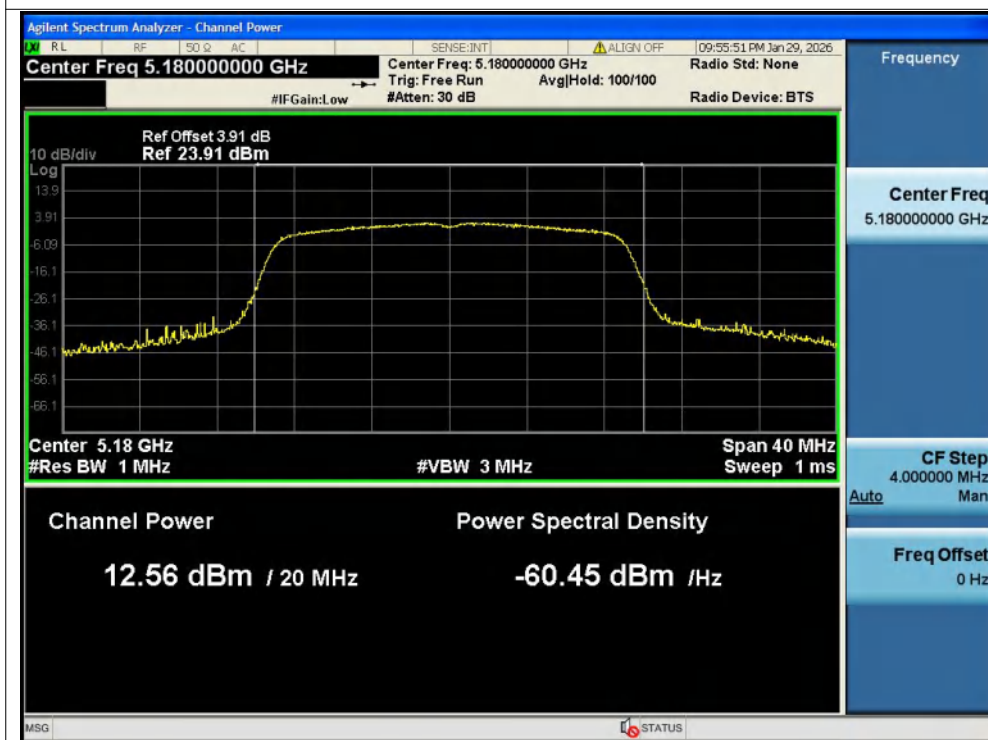
Power NVNT a 5200MHz Ant1



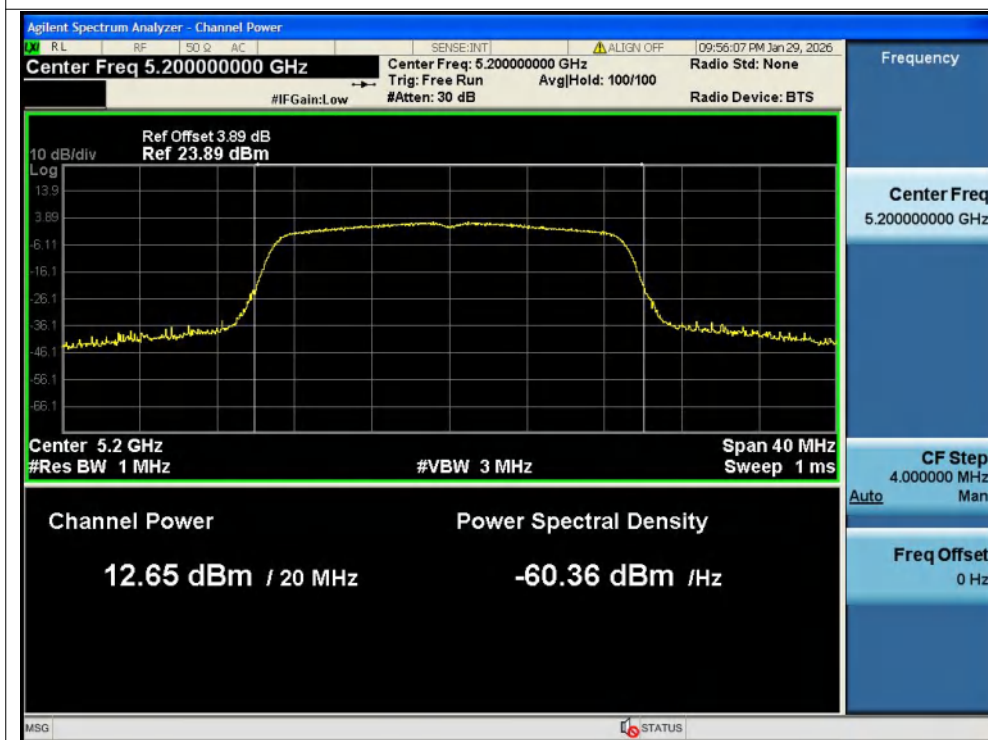
Power NVNT a 5240MHz Ant1



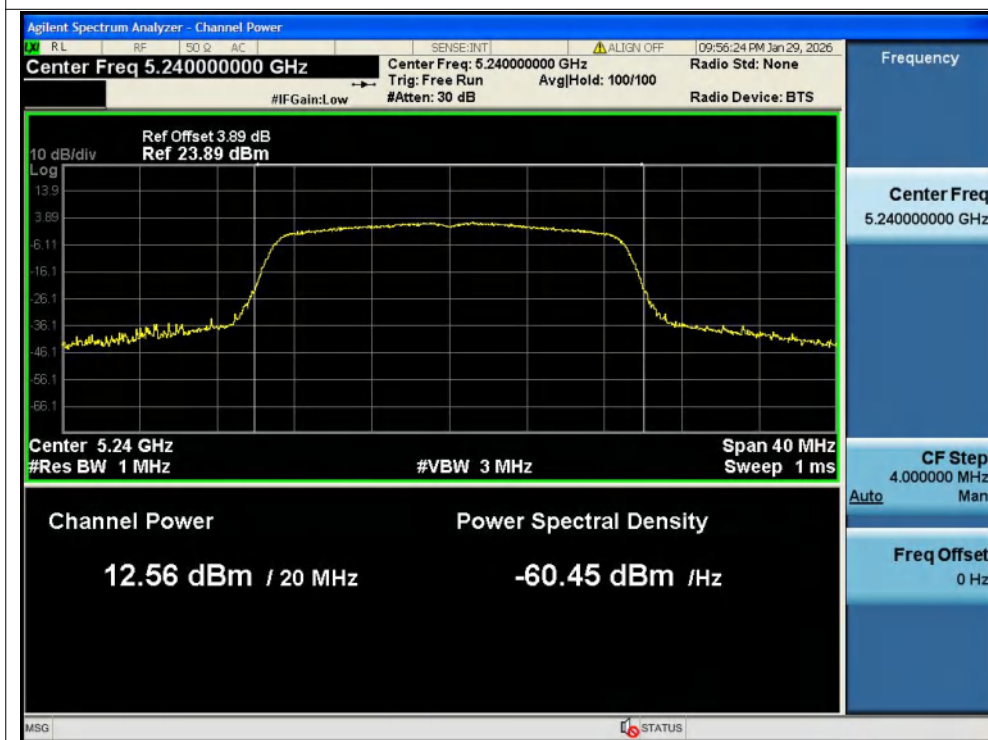
Power NVNT n20 5180MHz Ant1



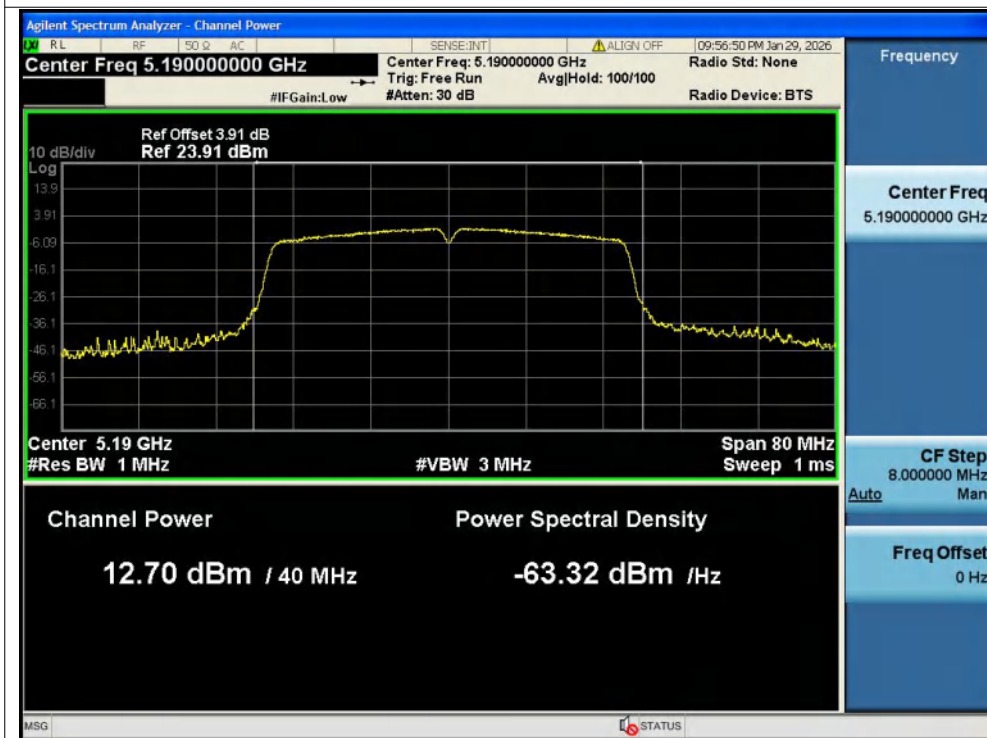
Power NVNT n20 5200MHz Ant1



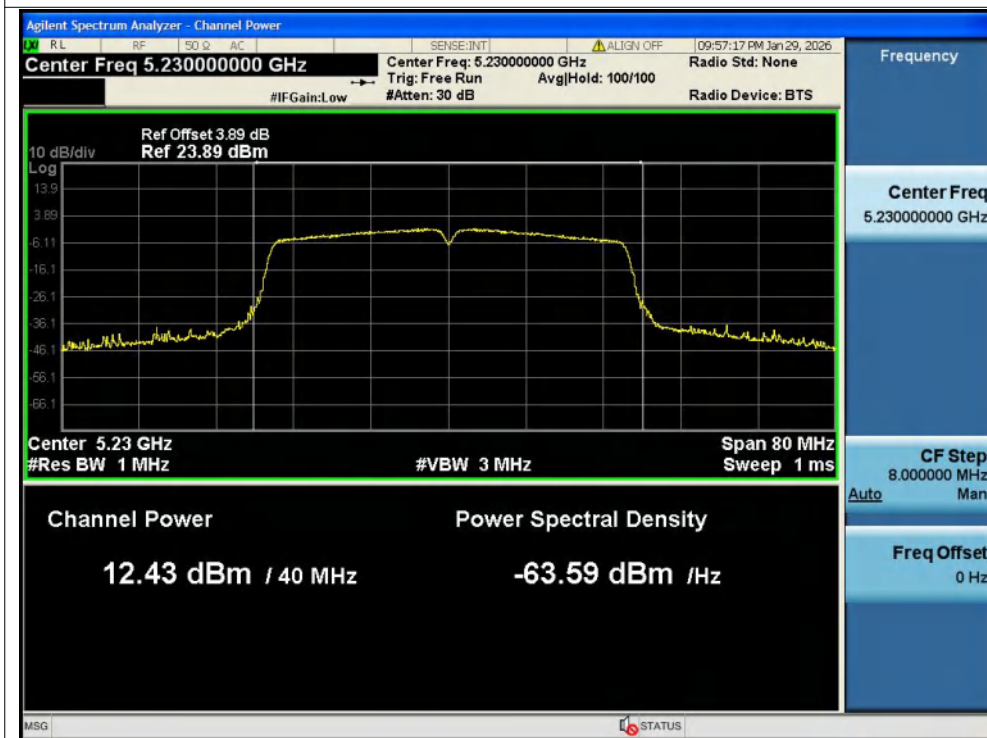
Power NVNT n20 5240MHz Ant1

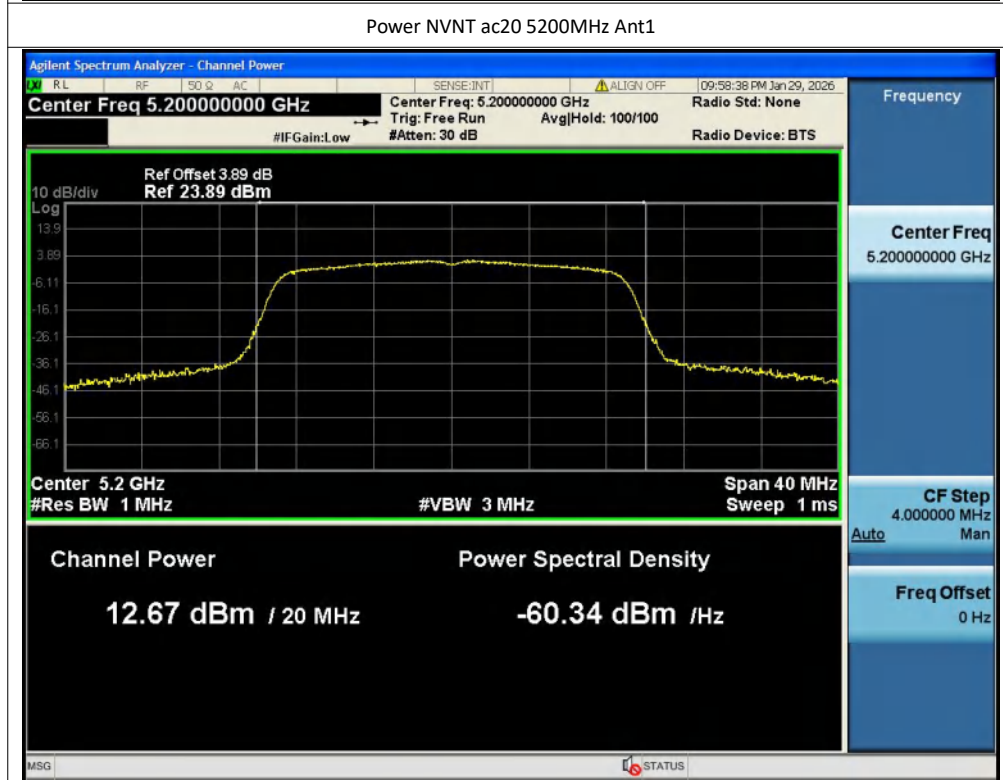
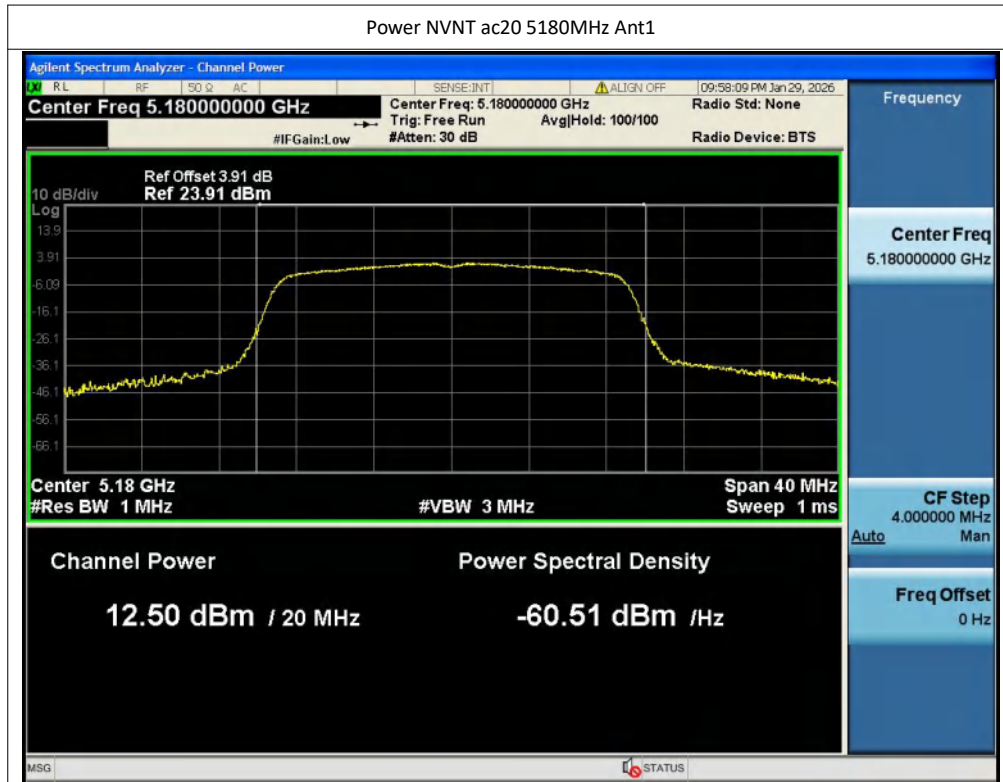


Power NVNT n40 5190MHz Ant1

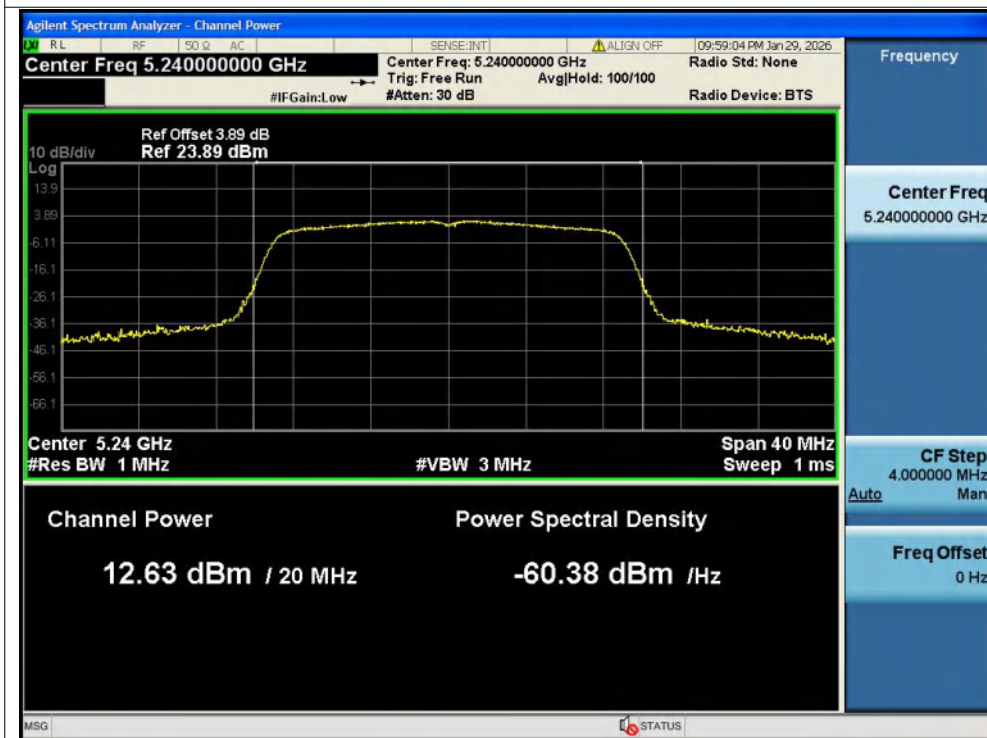


Power NVNT n40 5230MHz Ant1





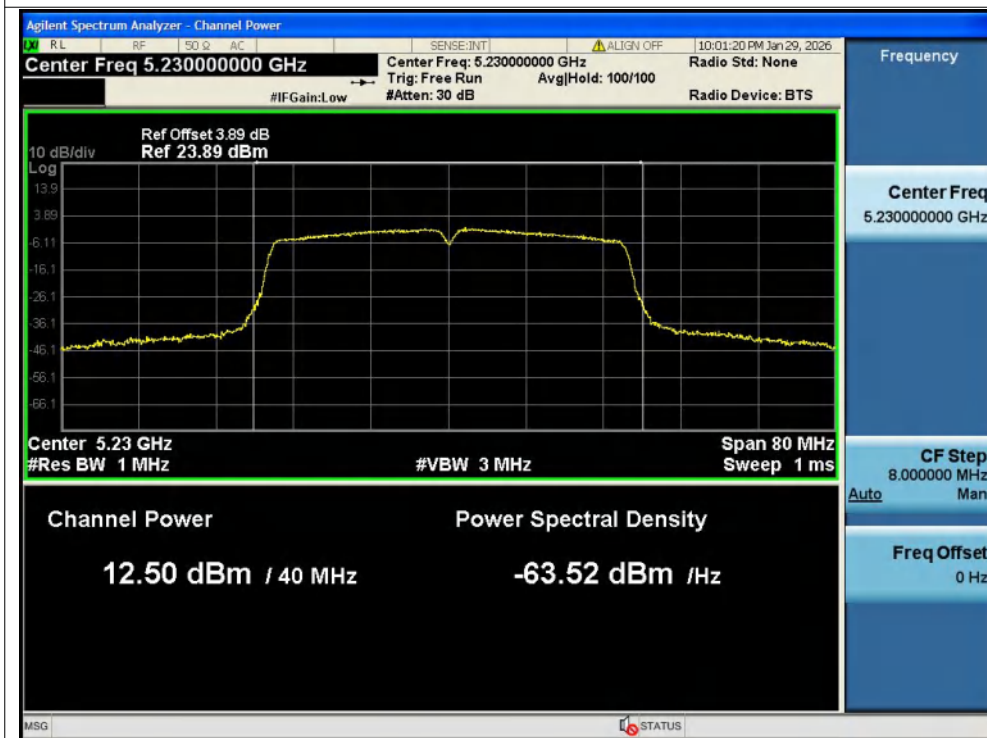
Power NVNT ac20 5240MHz Ant1



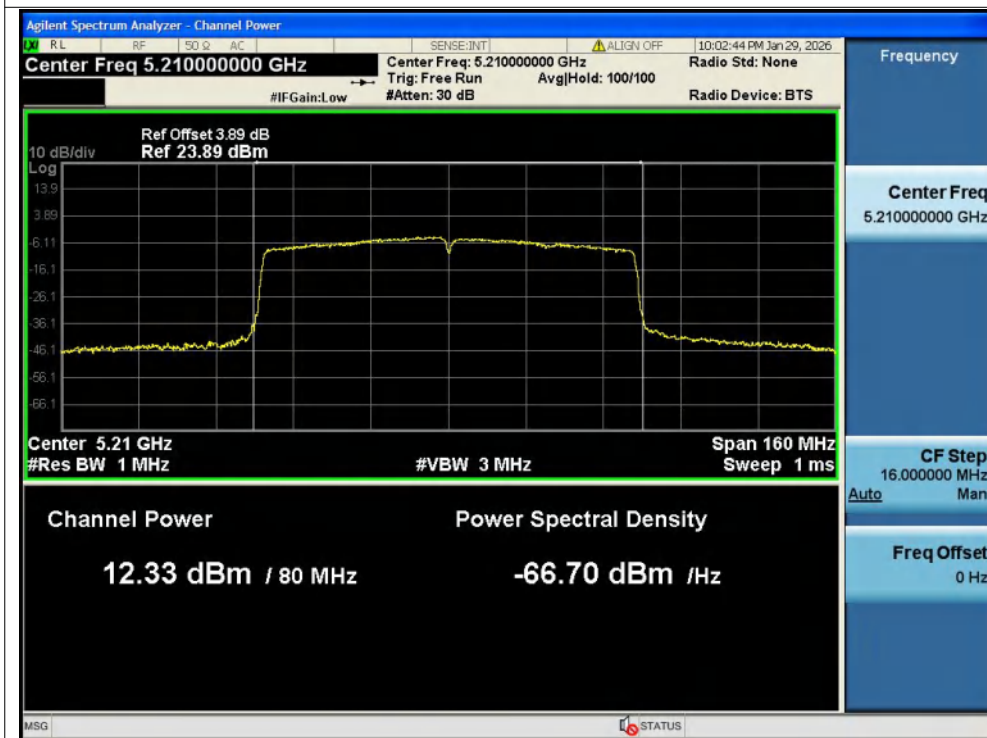
Power NVNT ac40 5190MHz Ant1



Power NVNT ac40 5230MHz Ant1



Power NVNT ac80 5210MHz Ant1



-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.04	0.5	Pass
NVNT	a	5200	Ant1	19.92	0.5	Pass
NVNT	a	5240	Ant1	20.01	0.5	Pass
NVNT	n20	5180	Ant1	20.23	0.5	Pass
NVNT	n20	5200	Ant1	22.42	0.5	Pass
NVNT	n20	5240	Ant1	20.76	0.5	Pass
NVNT	n40	5190	Ant1	39.65	0.5	Pass
NVNT	n40	5230	Ant1	39.75	0.5	Pass
NVNT	ac20	5180	Ant1	20.42	0.5	Pass
NVNT	ac20	5200	Ant1	20.24	0.5	Pass
NVNT	ac20	5240	Ant1	20.5	0.5	Pass
NVNT	ac40	5190	Ant1	39.77	0.5	Pass
NVNT	ac40	5230	Ant1	40.11	0.5	Pass
NVNT	ac80	5210	Ant1	78.9	0.5	Pass

Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1



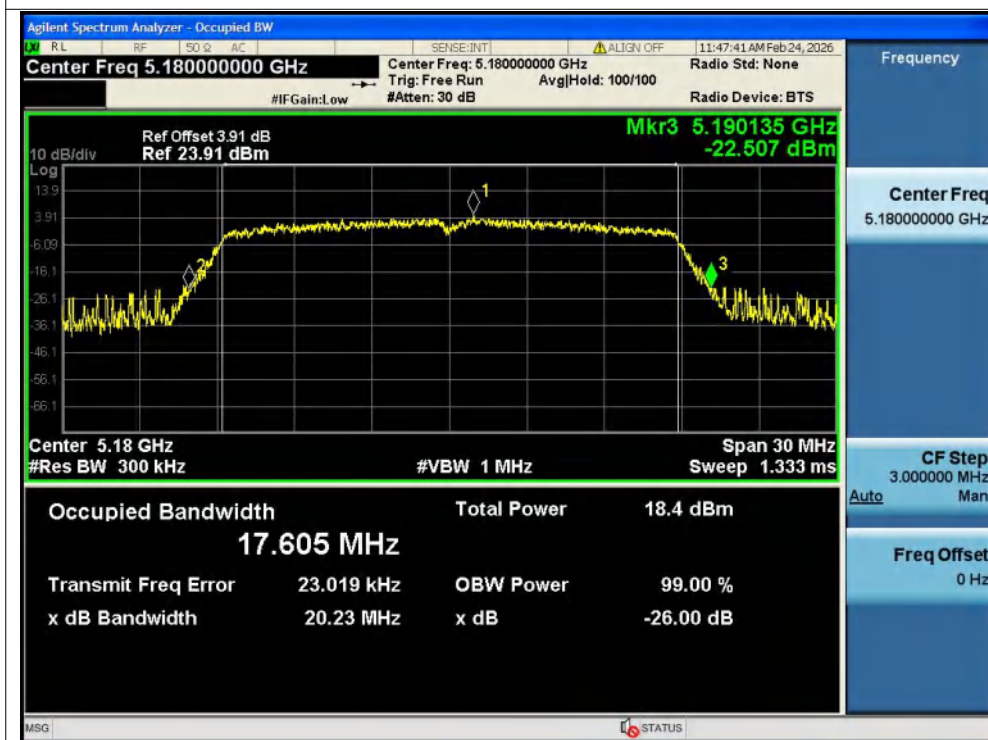
-26dB Bandwidth NVNT a 5200MHz Ant1



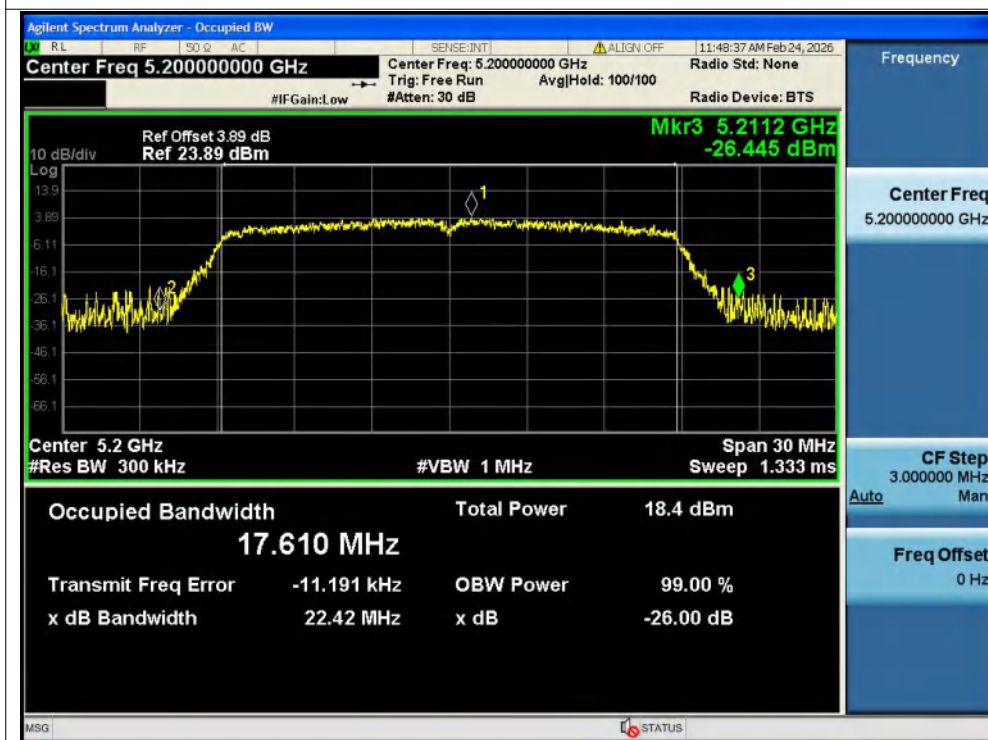
-26dB Bandwidth NVNT a 5240MHz Ant1



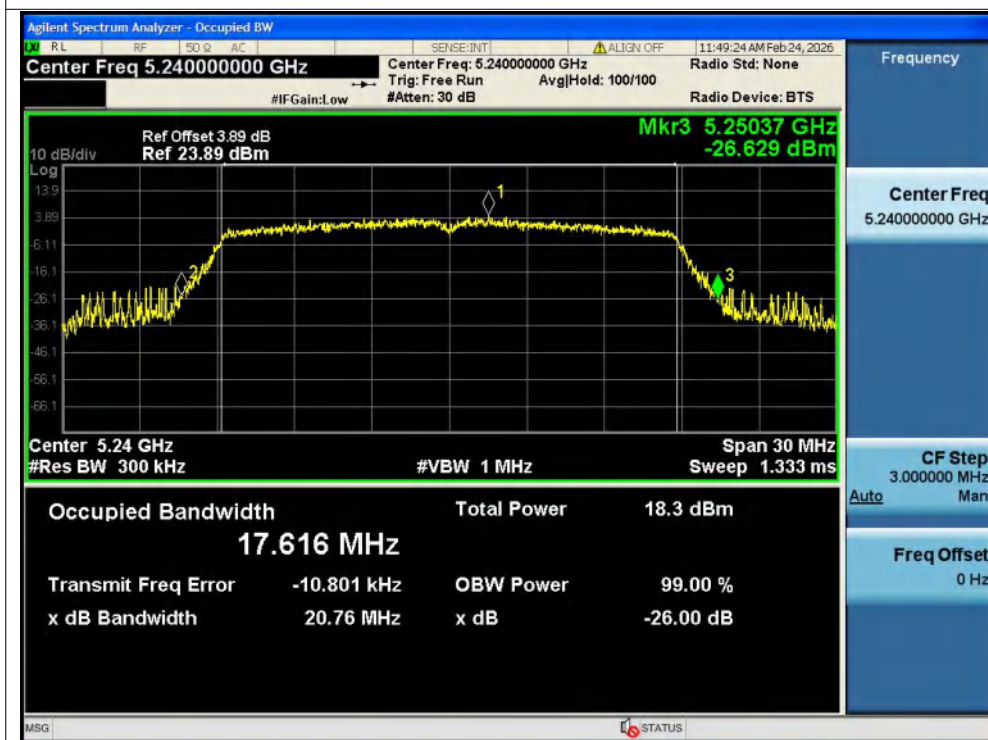
-26dB Bandwidth NVNT n20 5180MHz Ant1



-26dB Bandwidth NVNT n20 5200MHz Ant1



-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



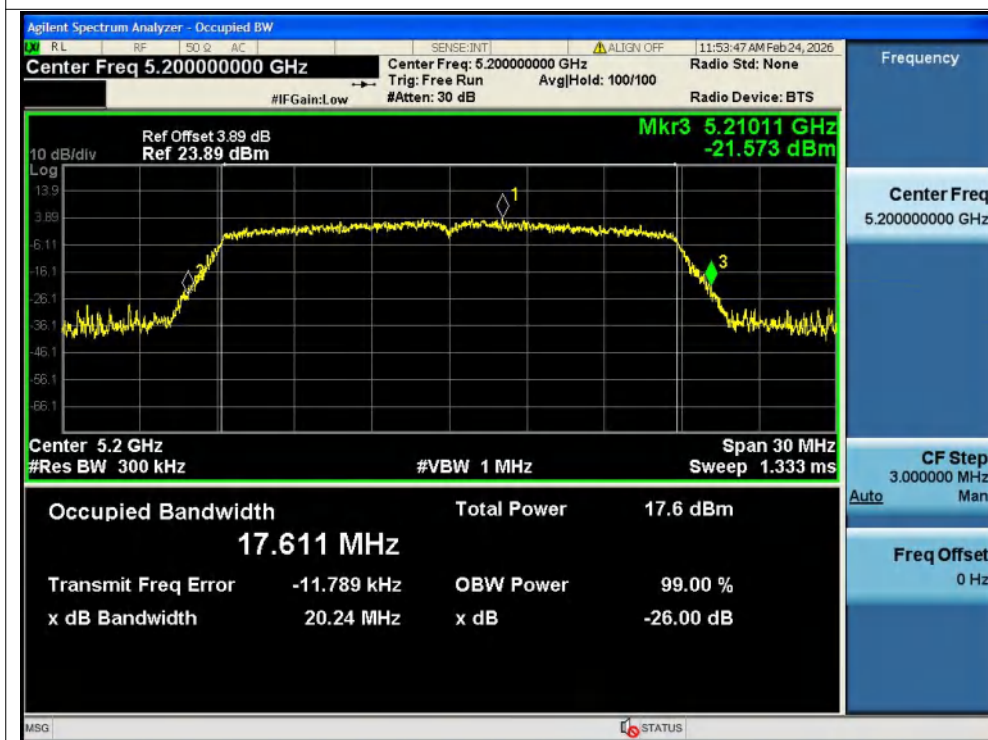
-26dB Bandwidth NVNT n40 5230MHz Ant1



-26dB Bandwidth NVNT ac20 5180MHz Ant1



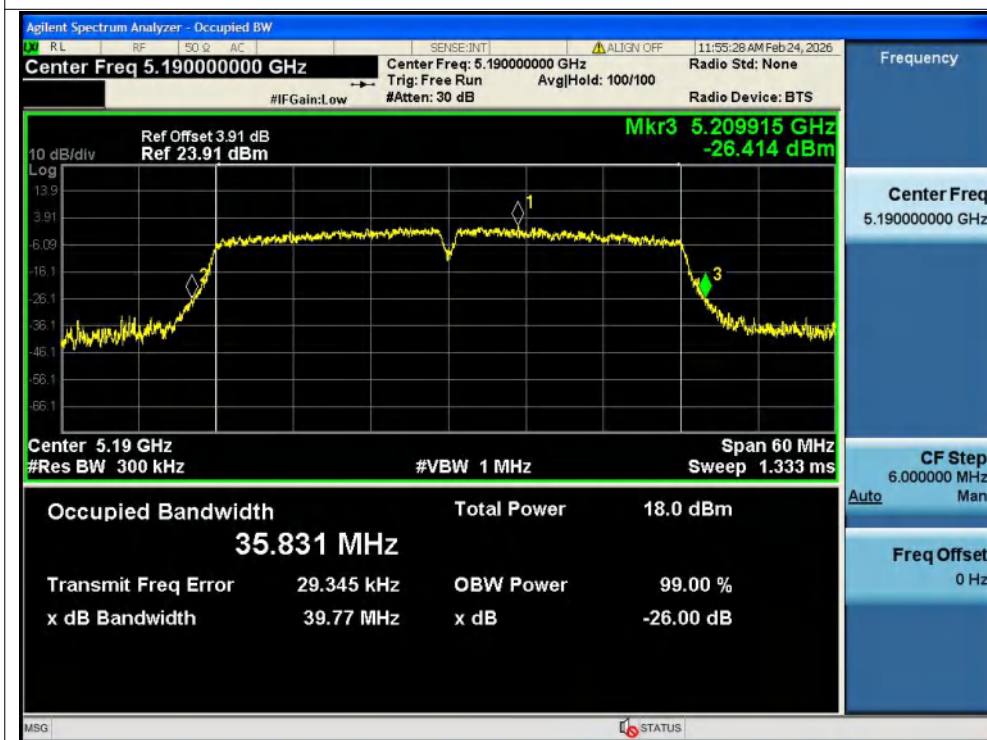
-26dB Bandwidth NVNT ac20 5200MHz Ant1



-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1

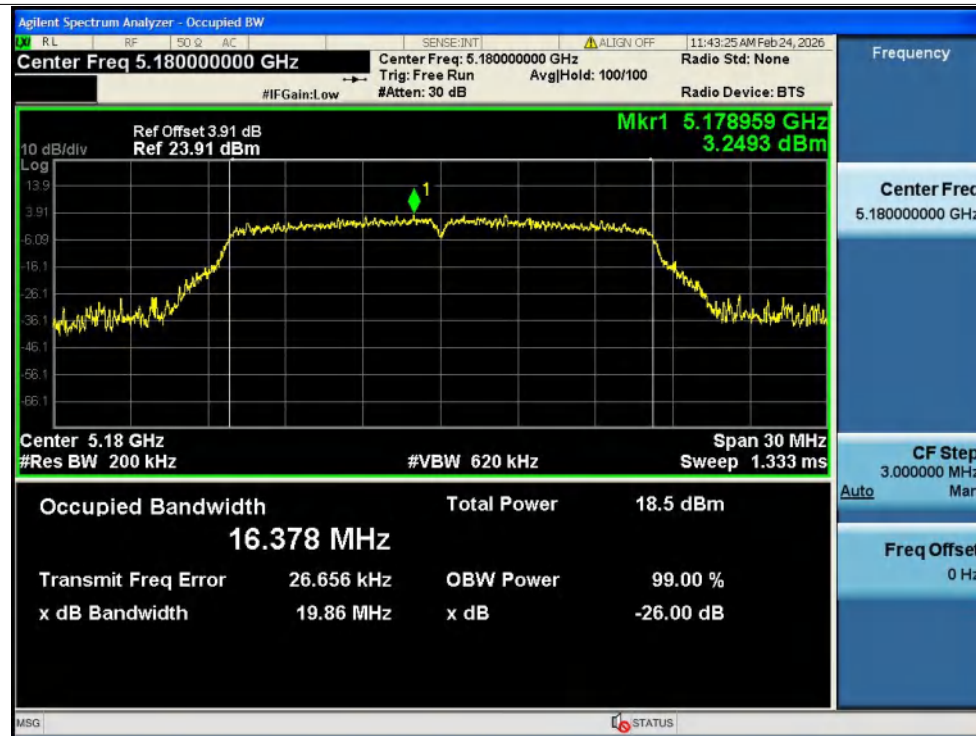


Occupied Channel Bandwidth

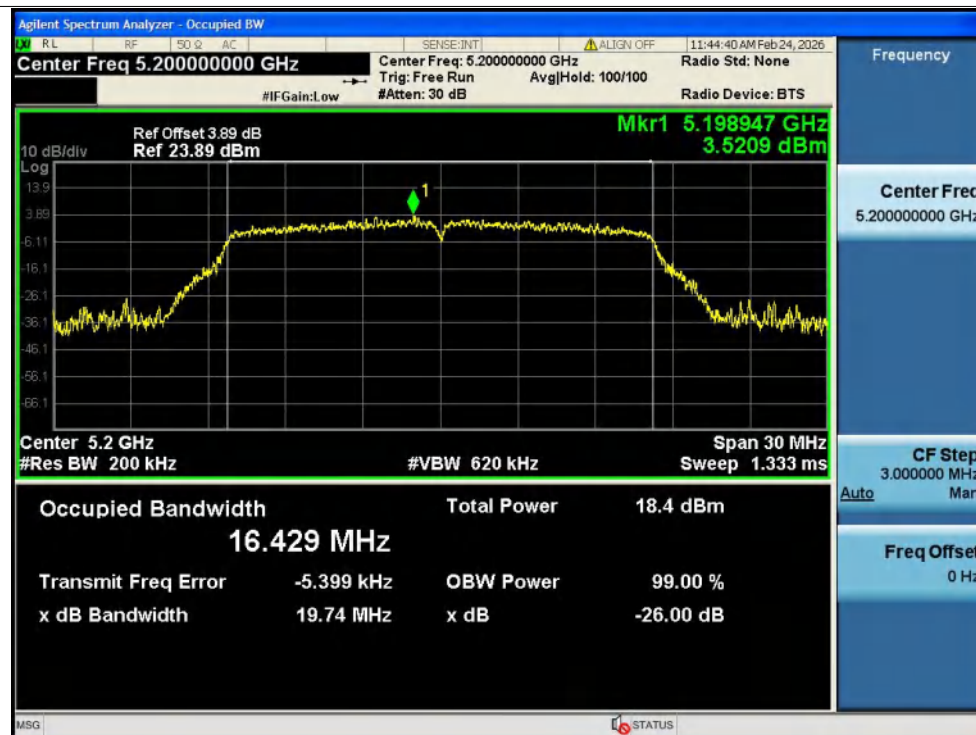
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.378
NVNT	a	5200	Ant1	16.429
NVNT	a	5240	Ant1	16.41
NVNT	n20	5180	Ant1	17.539
NVNT	n20	5200	Ant1	17.563
NVNT	n20	5240	Ant1	17.581
NVNT	n40	5190	Ant1	35.928
NVNT	n40	5230	Ant1	35.991
NVNT	ac20	5180	Ant1	17.514
NVNT	ac20	5200	Ant1	17.547
NVNT	ac20	5240	Ant1	17.536
NVNT	ac40	5190	Ant1	35.873
NVNT	ac40	5230	Ant1	35.927
NVNT	ac80	5210	Ant1	75.114

Test Graphs

OBW NVNT a 5180MHz Ant1



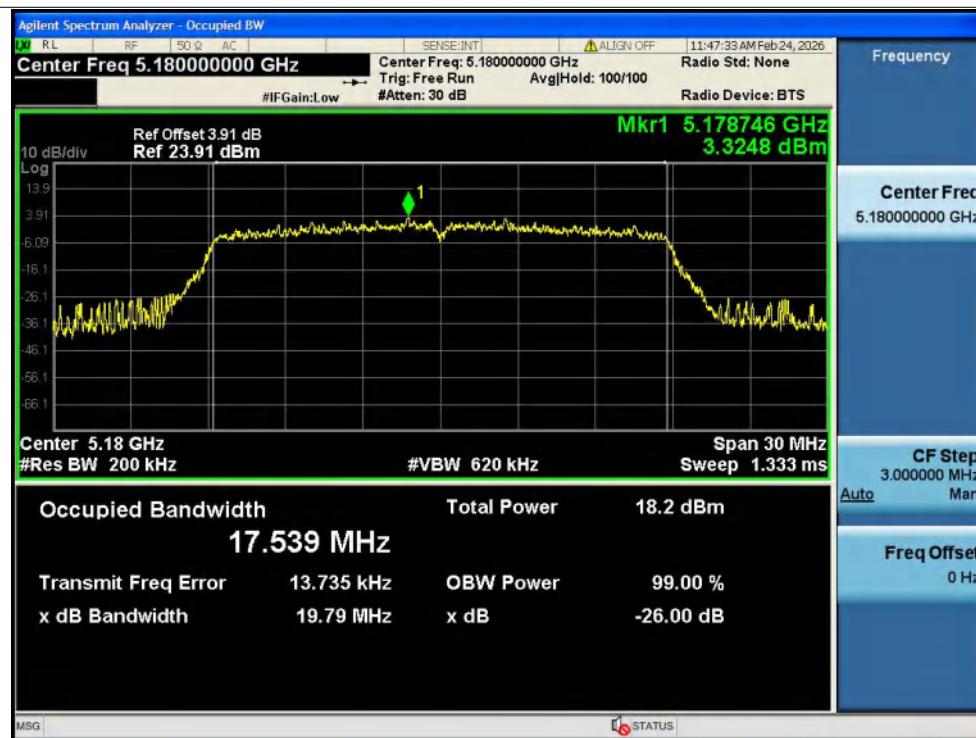
OBW NVNT a 5200MHz Ant1



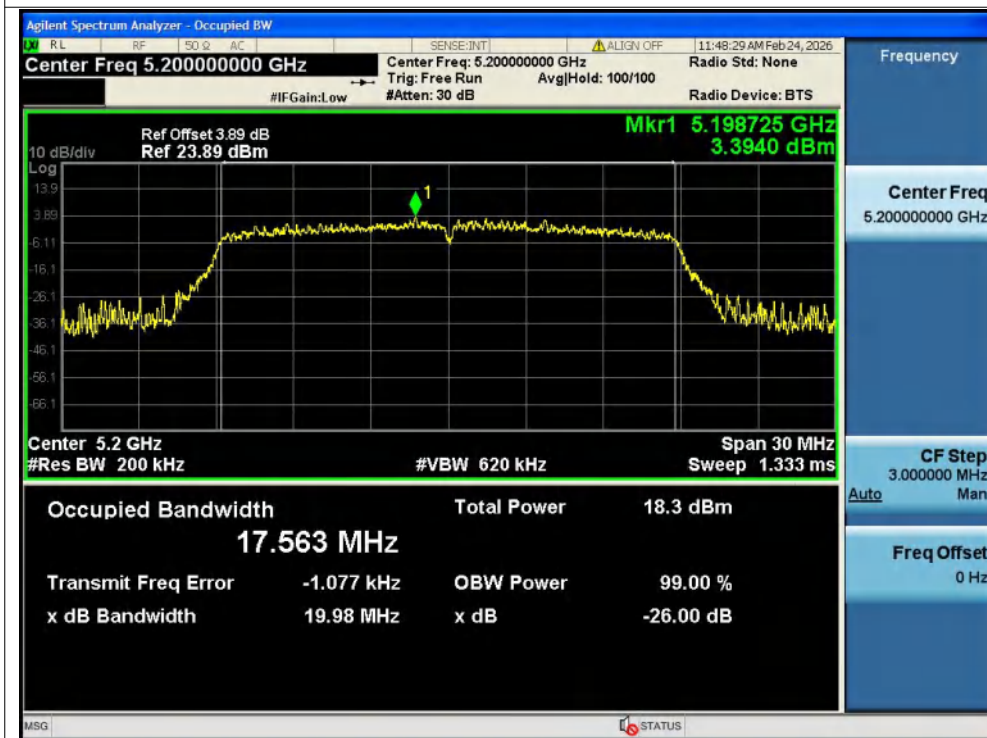
OBW NVNT a 5240MHz Ant1



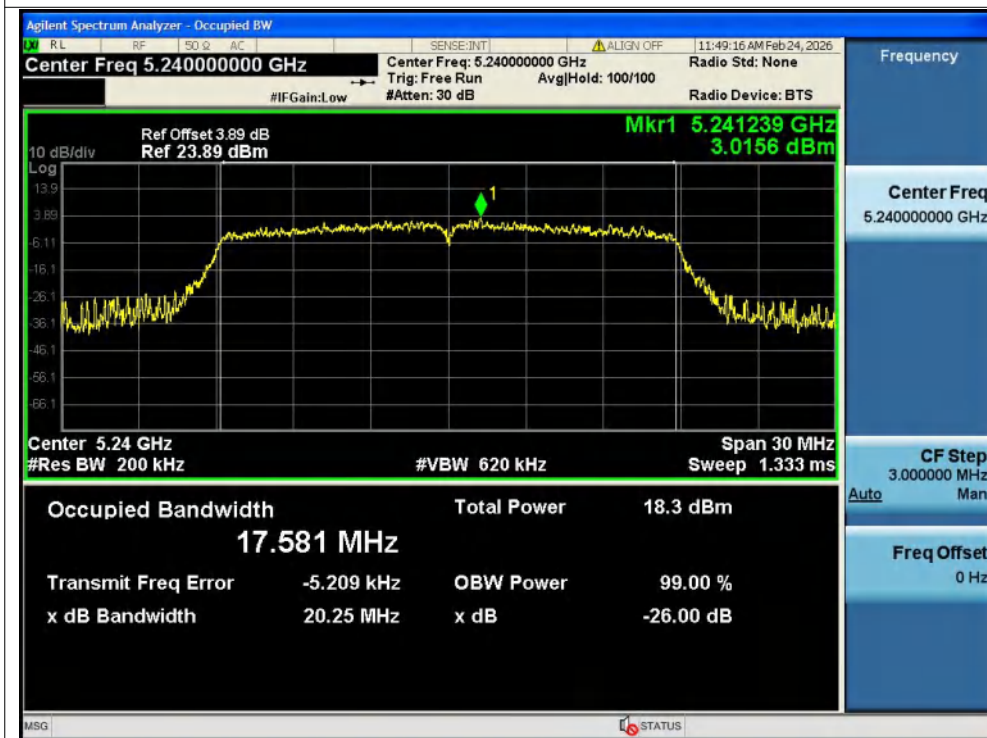
OBW NVNT n20 5180MHz Ant1



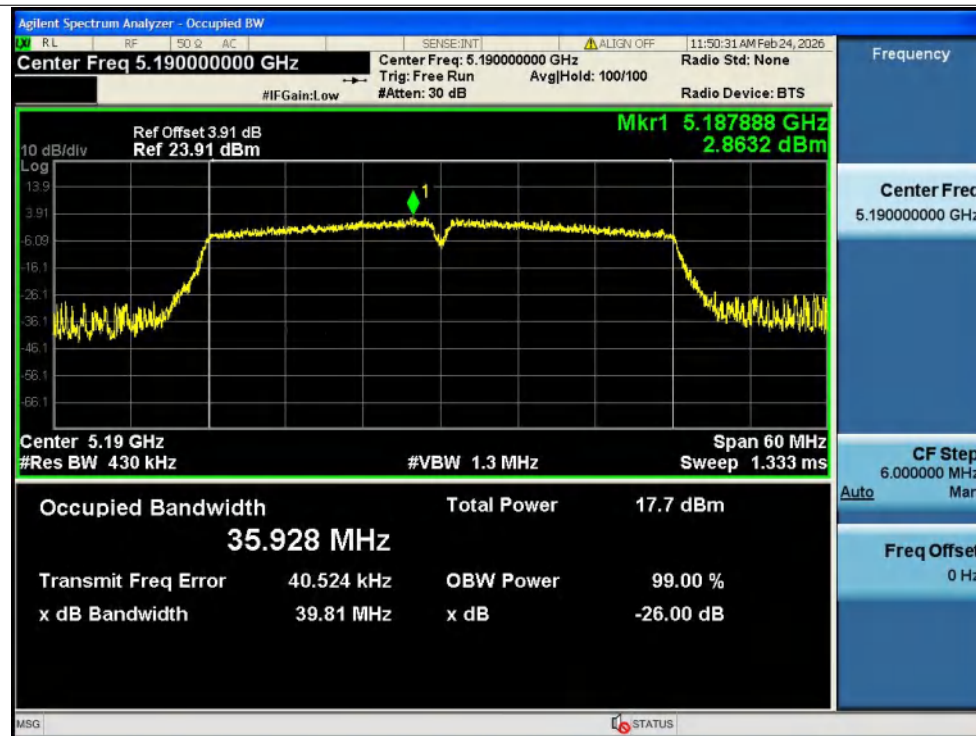
OBW NVNT n20 5200MHz Ant1



OBW NVNT n20 5240MHz Ant1



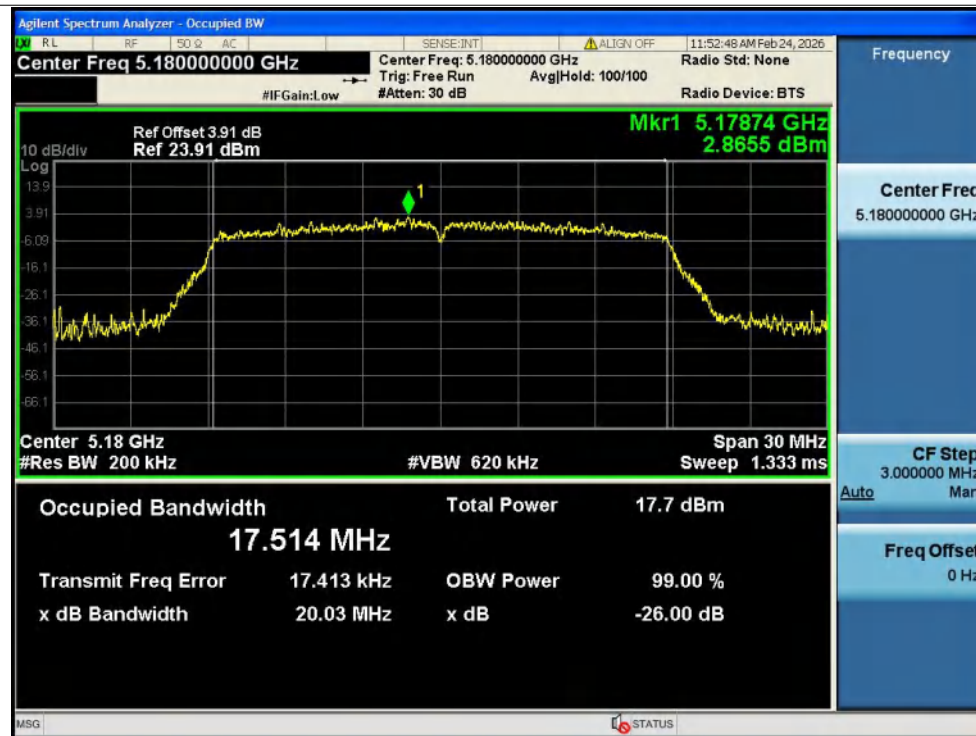
OBW NVNT n40 5190MHz Ant1



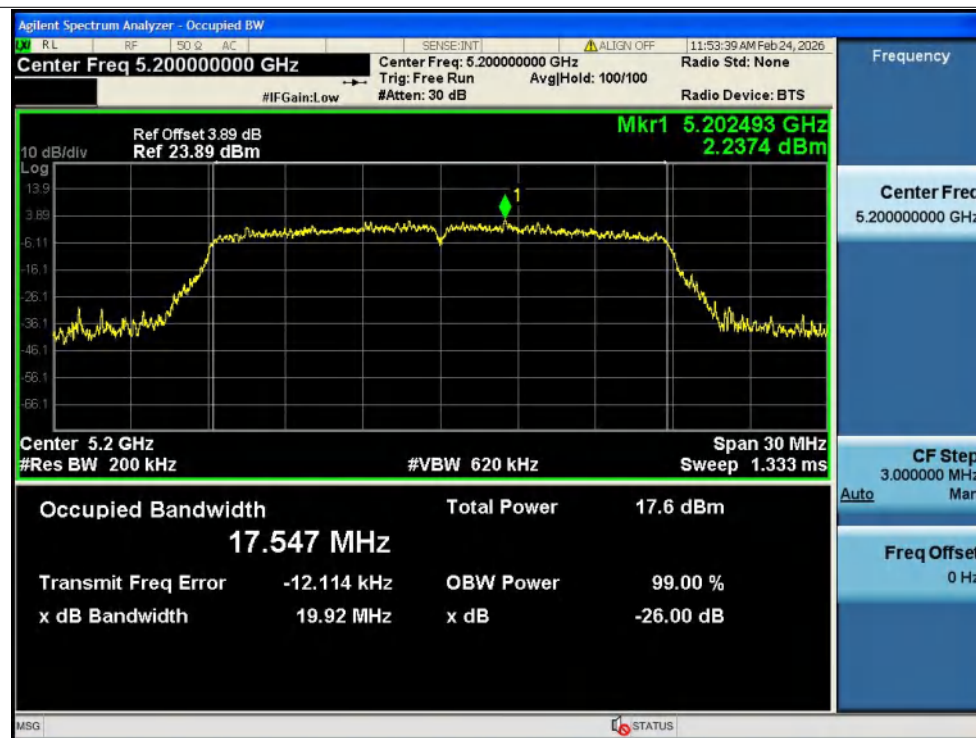
OBW NVNT n40 5230MHz Ant1



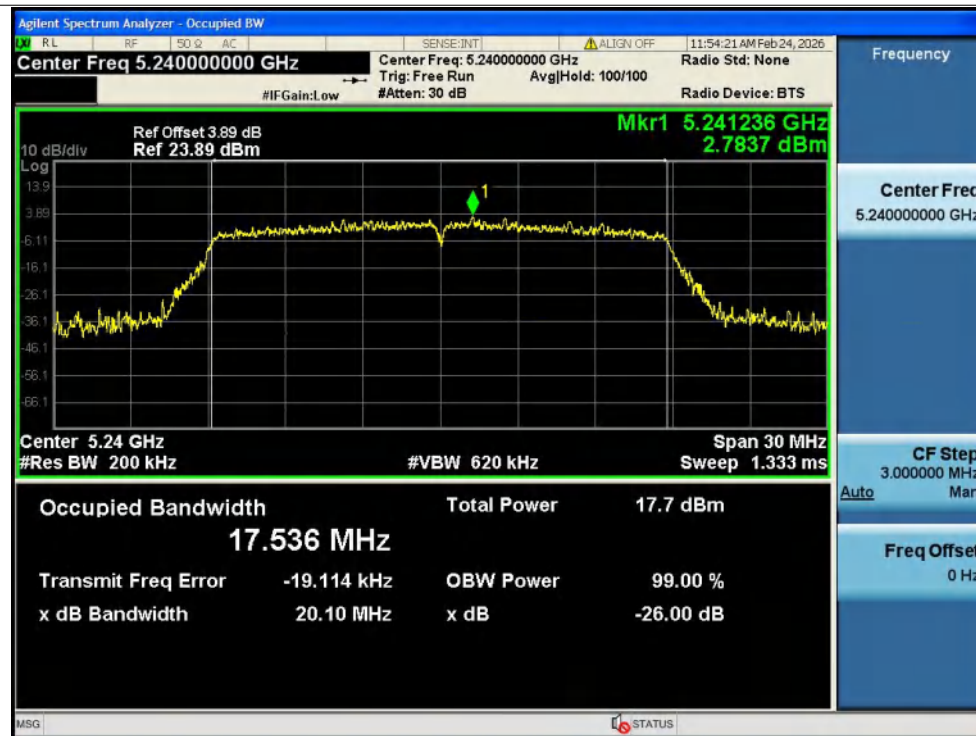
OBW NVNT ac20 5180MHz Ant1



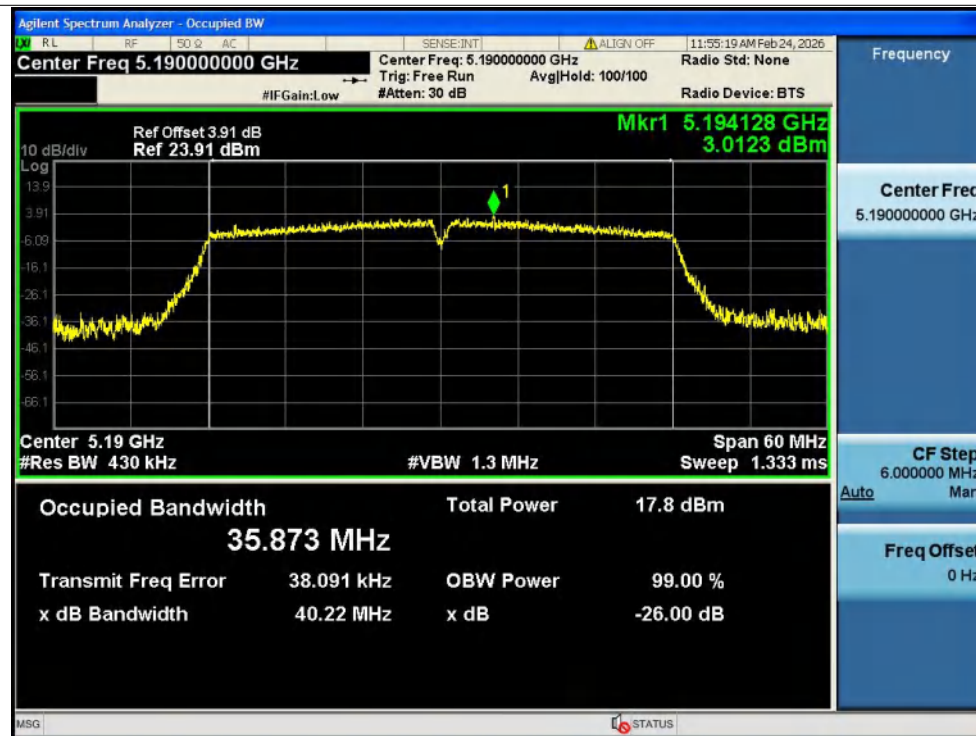
OBW NVNT ac20 5200MHz Ant1



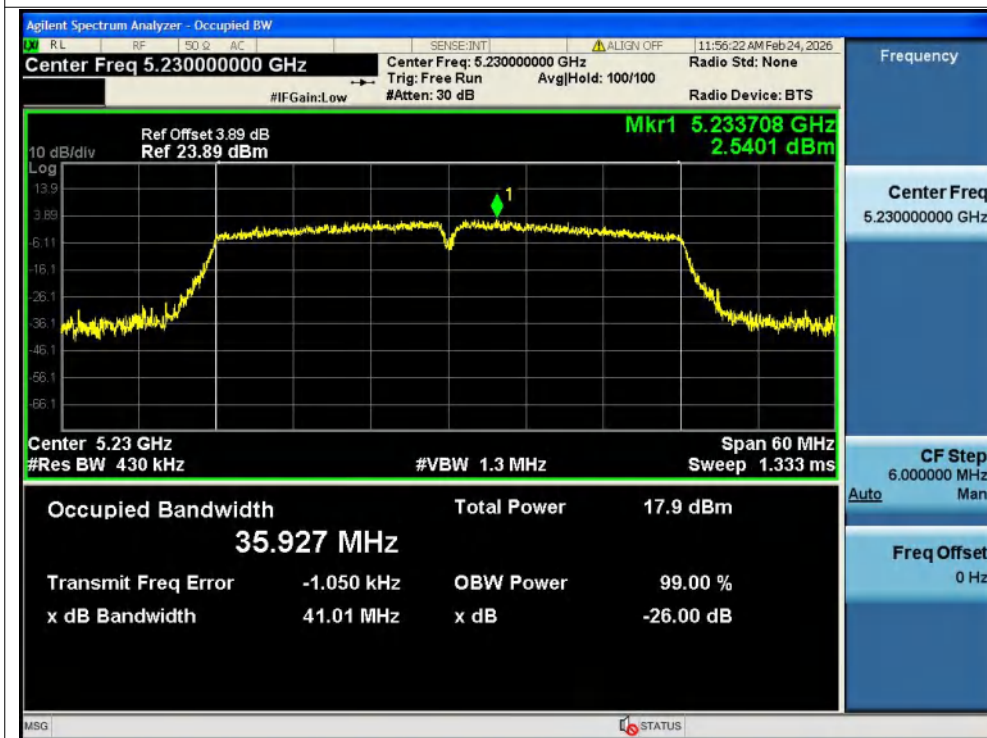
OBW NVNT ac20 5240MHz Ant1



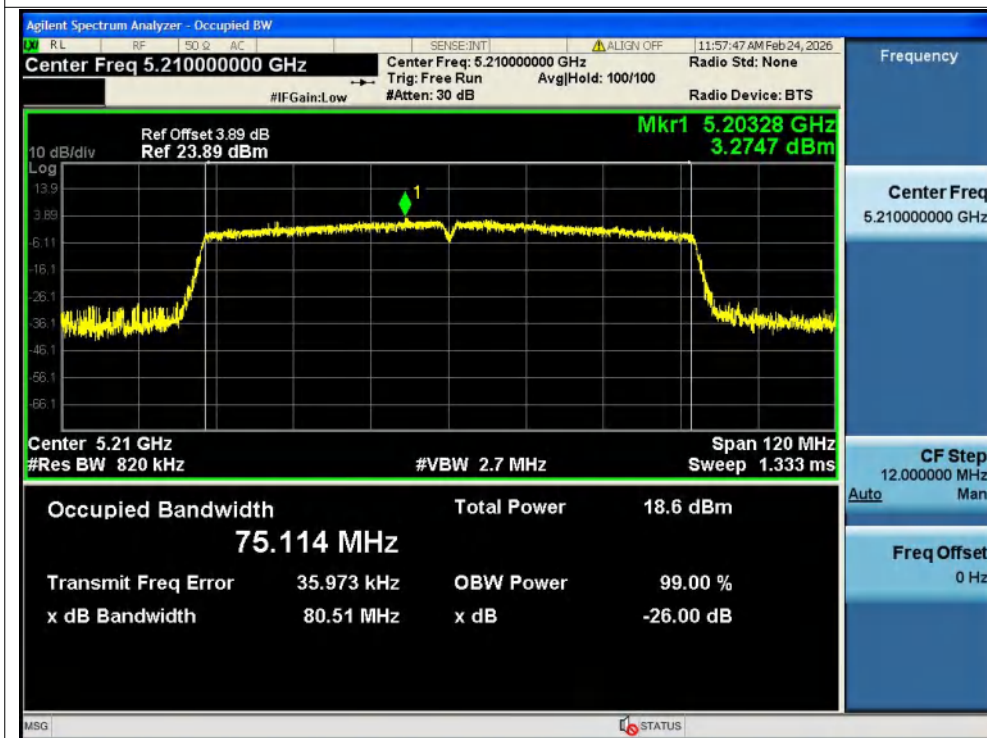
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1

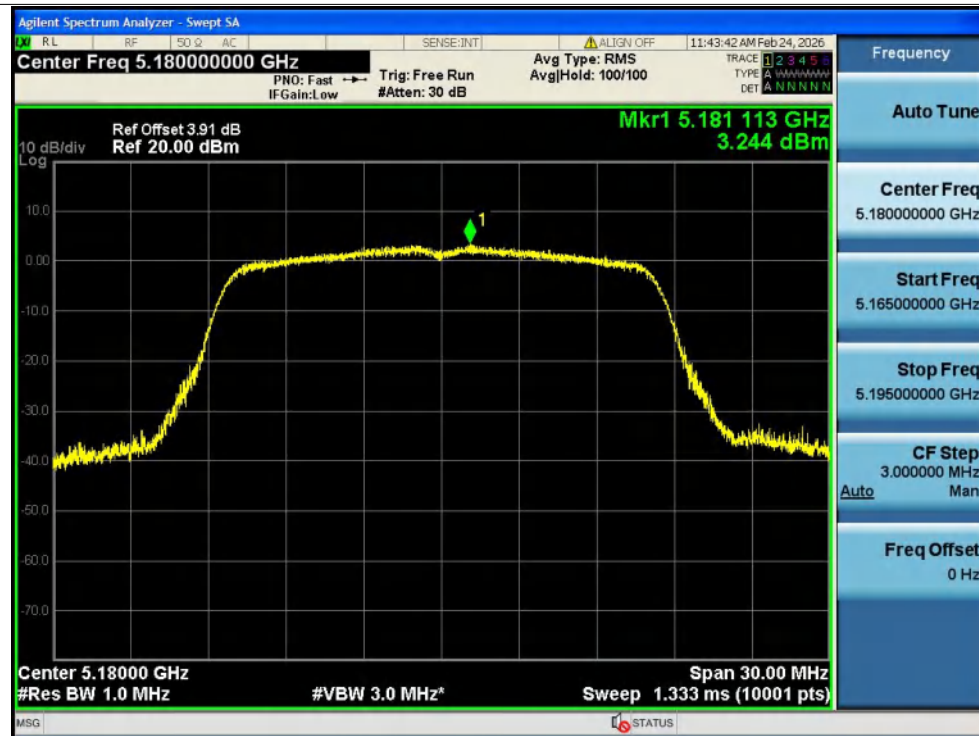


Maximum Power Spectral Density Level

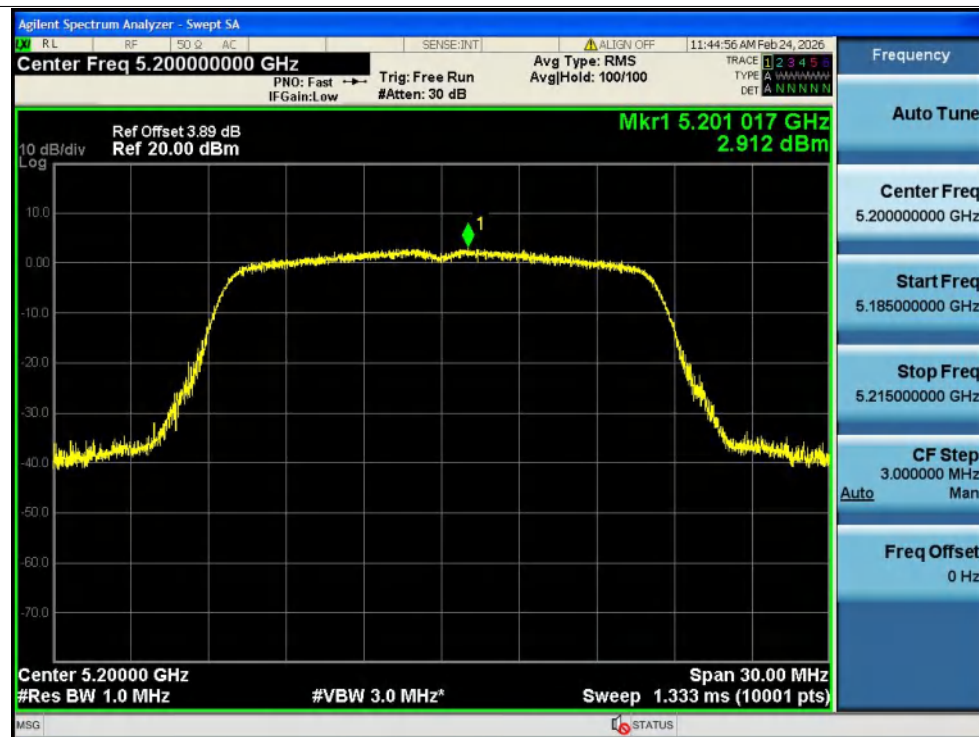
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	3.24	0.13	3.37	11	Pass
NVNT	a	5200	Ant1	2.91	0.13	3.04	11	Pass
NVNT	a	5240	Ant1	3.1	0.13	3.23	11	Pass
NVNT	n20	5180	Ant1	2.91	0.14	3.05	11	Pass
NVNT	n20	5200	Ant1	3.02	0.14	3.16	11	Pass
NVNT	n20	5240	Ant1	2.86	0.14	3	11	Pass
NVNT	n40	5190	Ant1	-0.86	0.27	-0.59	11	Pass
NVNT	n40	5230	Ant1	-0.67	0.27	-0.4	11	Pass
NVNT	ac20	5180	Ant1	2.05	0.14	2.19	11	Pass
NVNT	ac20	5200	Ant1	2.12	0.14	2.26	11	Pass
NVNT	ac20	5240	Ant1	2.16	0.14	2.3	11	Pass
NVNT	ac40	5190	Ant1	-0.58	0.28	-0.3	11	Pass
NVNT	ac40	5230	Ant1	-0.53	0.27	-0.26	11	Pass
NVNT	ac80	5210	Ant1	-3.77	0.54	-3.23	11	Pass

Test Graphs

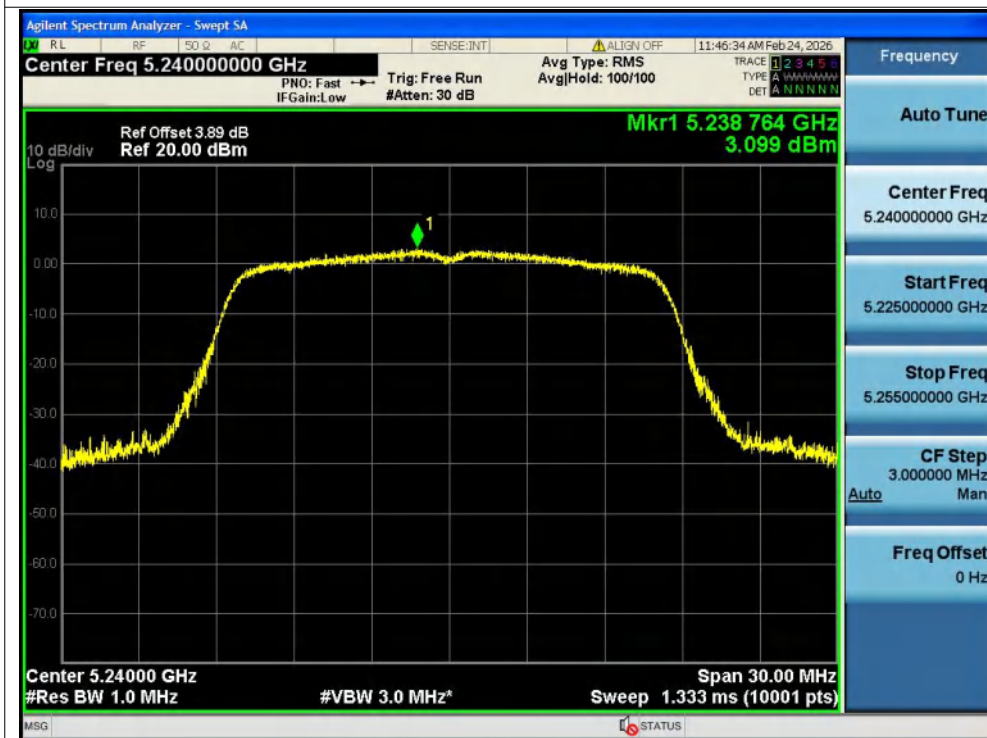
PSD NVNT a 5180MHz Ant1



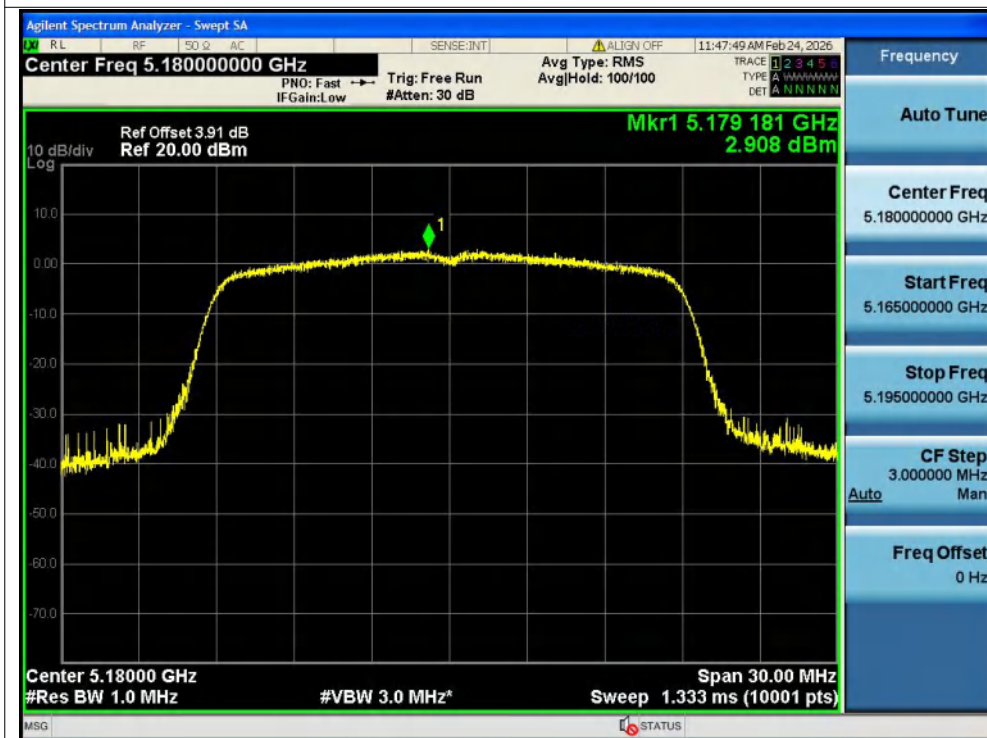
PSD NVNT a 5200MHz Ant1



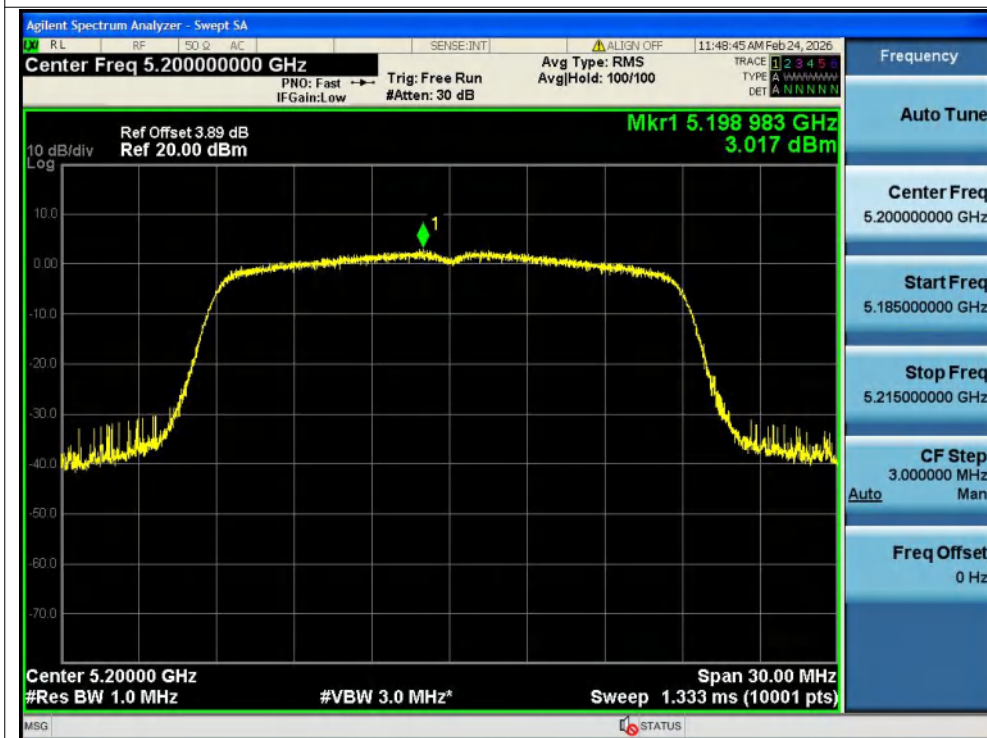
PSD NVNT a 5240MHz Ant1



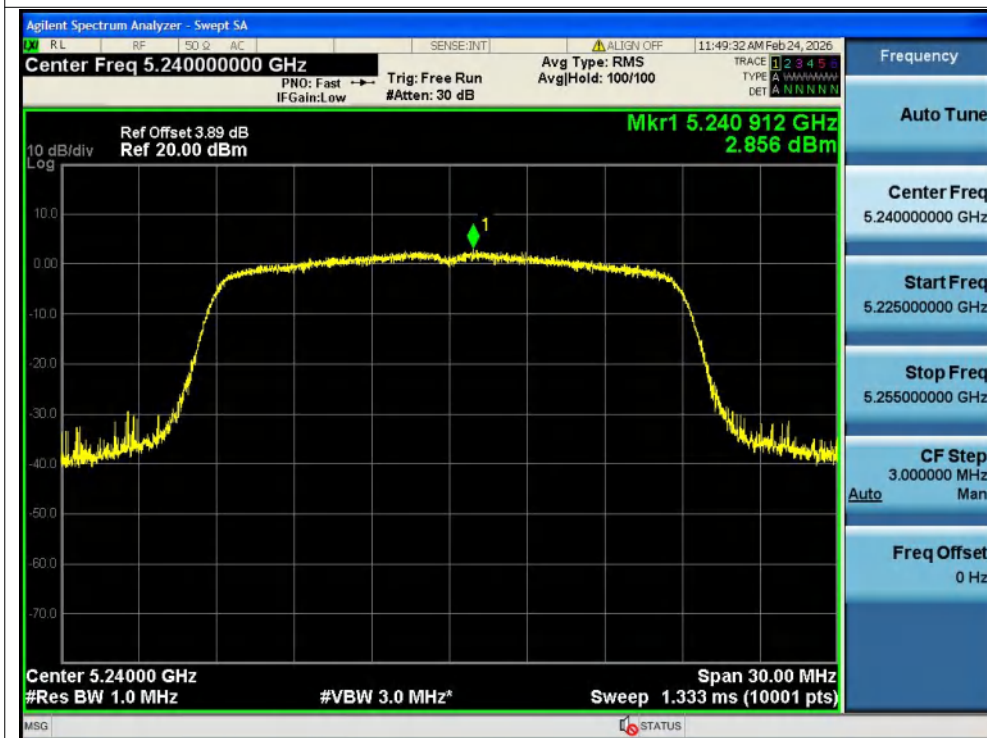
PSD NVNT n20 5180MHz Ant1



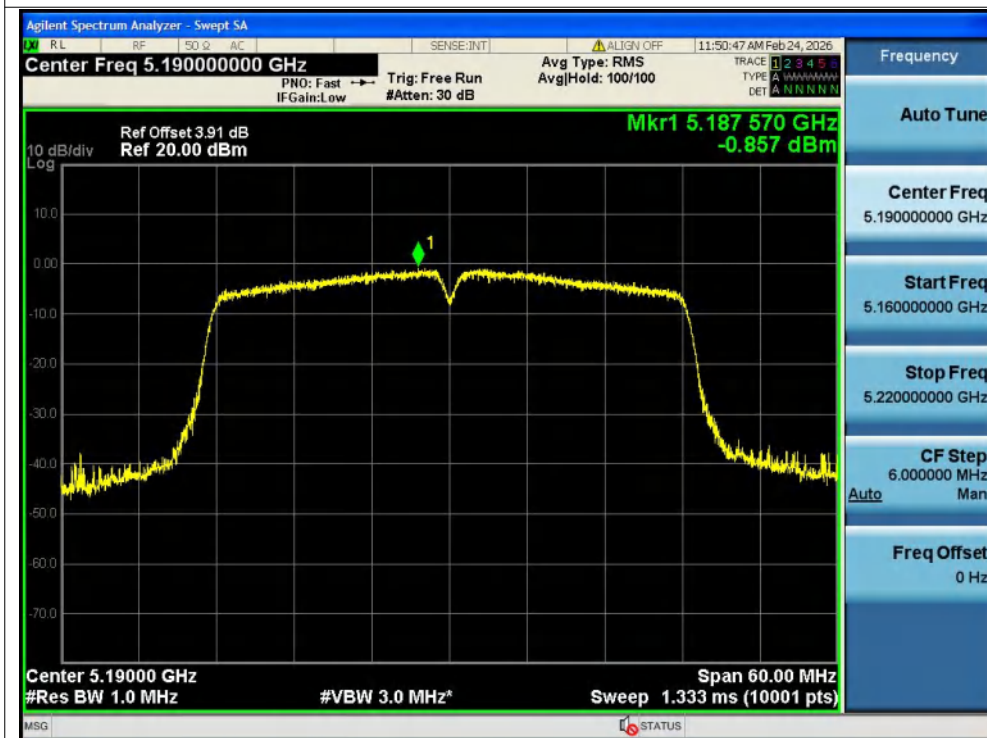
PSD NVNT n20 5200MHz Ant1



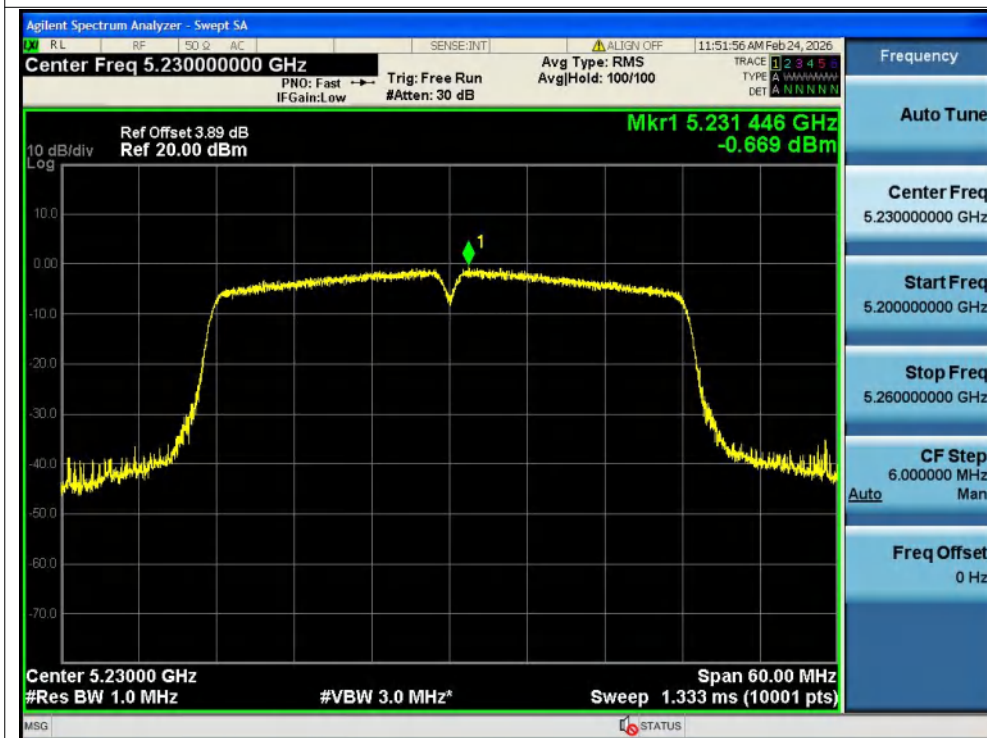
PSD NVNT n20 5240MHz Ant1



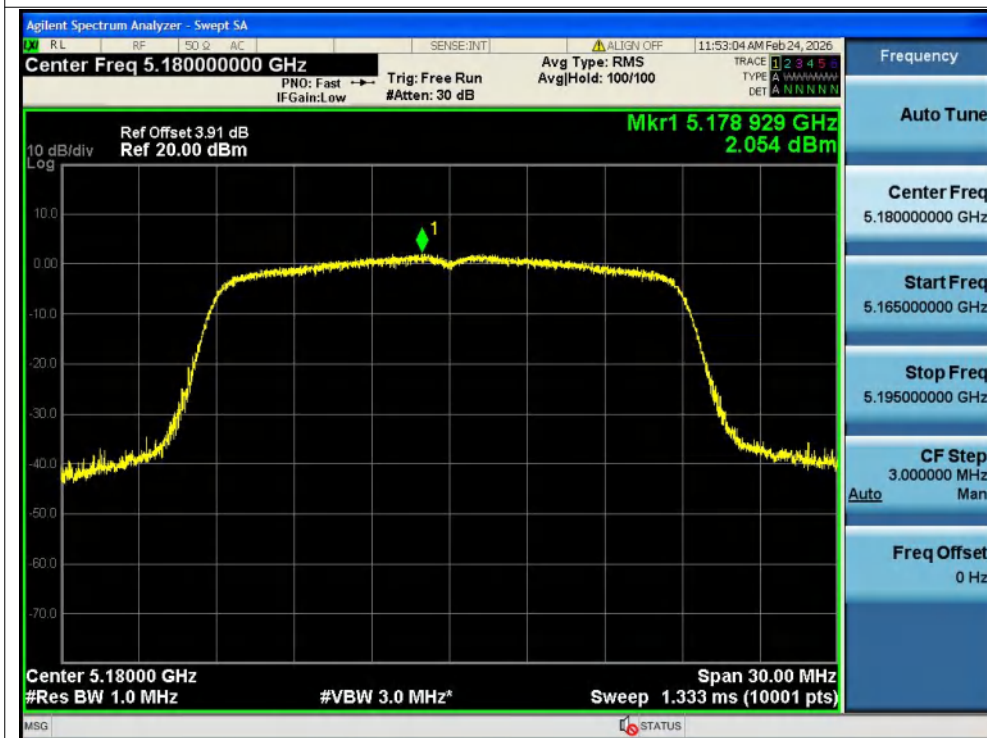
PSD NVNT n40 5190MHz Ant1



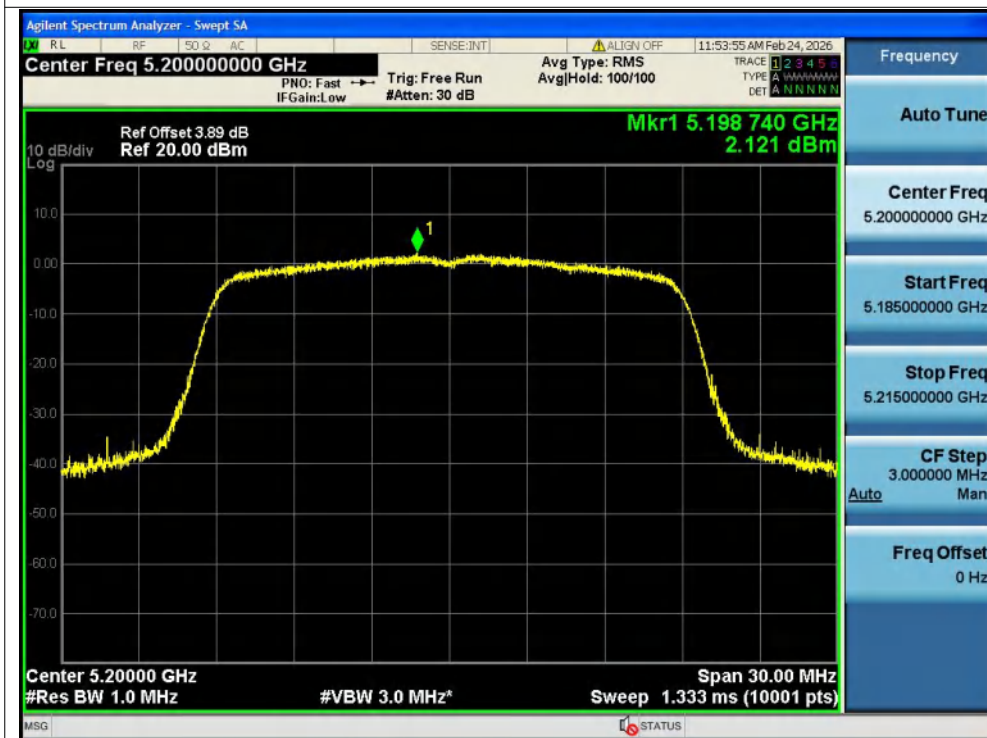
PSD NVNT n40 5230MHz Ant1



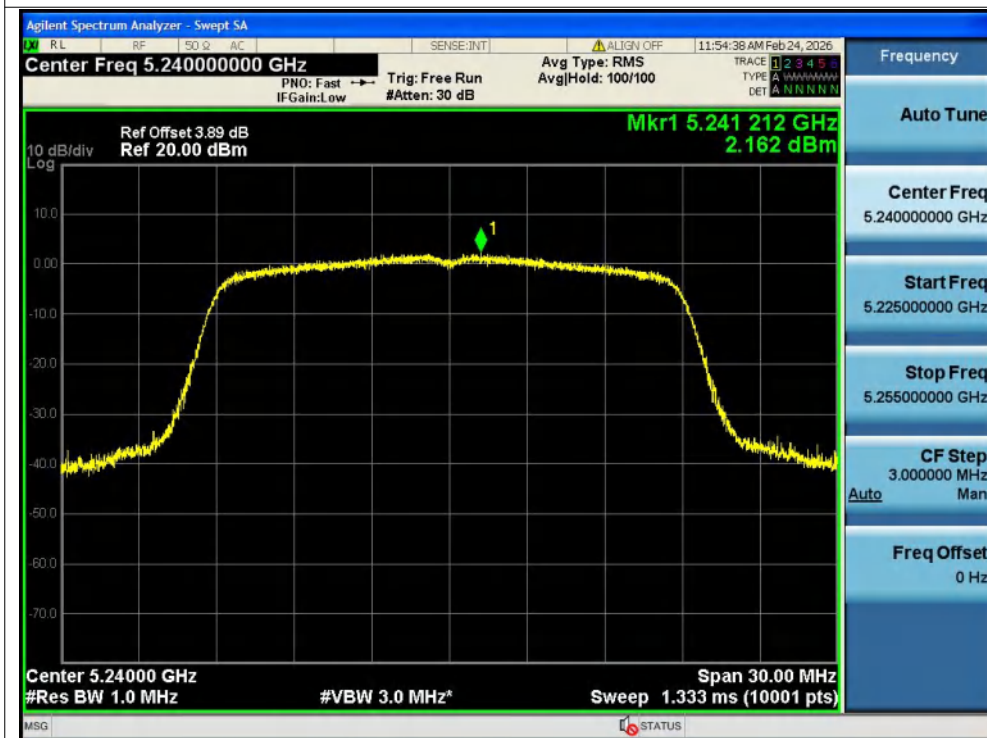
PSD NVNT ac20 5180MHz Ant1



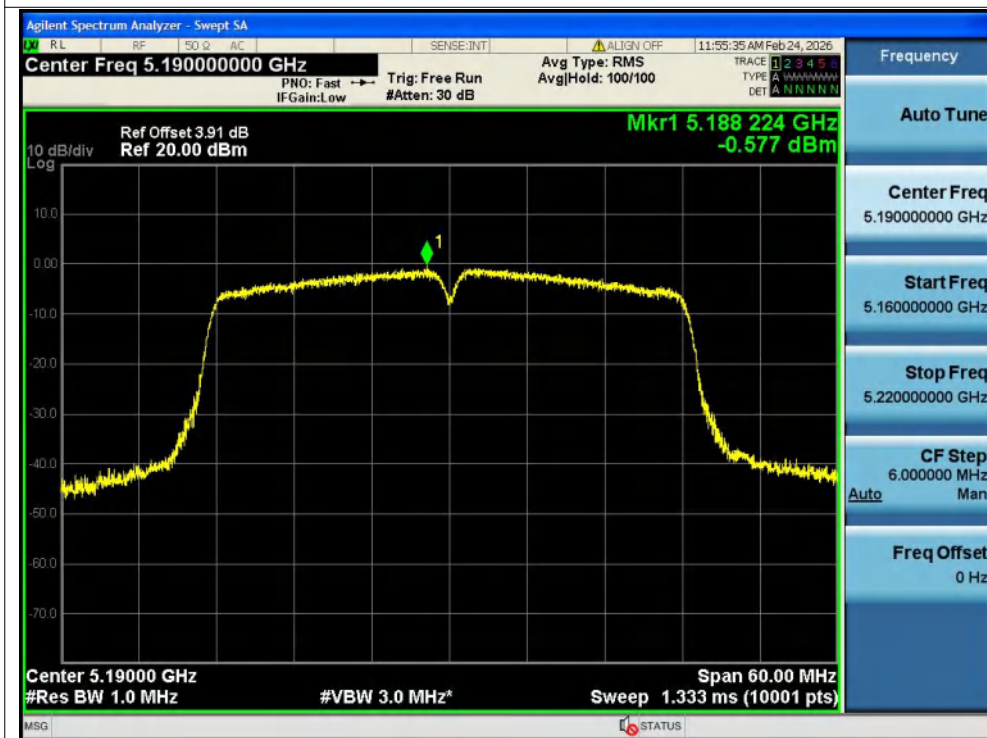
PSD NVNT ac20 5200MHz Ant1



PSD NVNT ac20 5240MHz Ant1



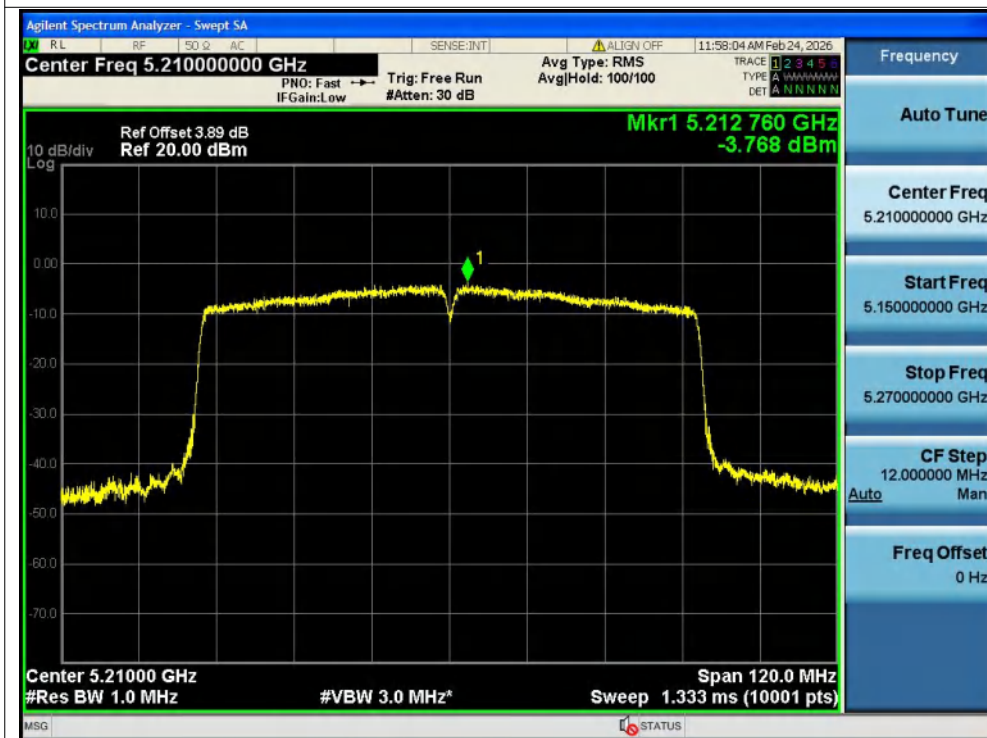
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1



Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-28.57	-27	Pass
NVNT	a	5240	Ant1	-41.27	-27	Pass
NVNT	n20	5180	Ant1	-27.76	-27	Pass
NVNT	n20	5240	Ant1	-41.65	-27	Pass
NVNT	n40	5190	Ant1	-26.1	-27	Fail
NVNT	n40	5230	Ant1	-40.28	-27	Pass
NVNT	ac20	5180	Ant1	-32.99	-27	Pass
NVNT	ac20	5240	Ant1	-41.69	-27	Pass
NVNT	ac40	5190	Ant1	-27.32	-27	Pass
NVNT	ac40	5230	Ant1	-41.98	-27	Pass

Test Graphs

Band Edge NVNT a 5180MHz Low Ant1



Band Edge NVNT a 5240MHz High Ant1



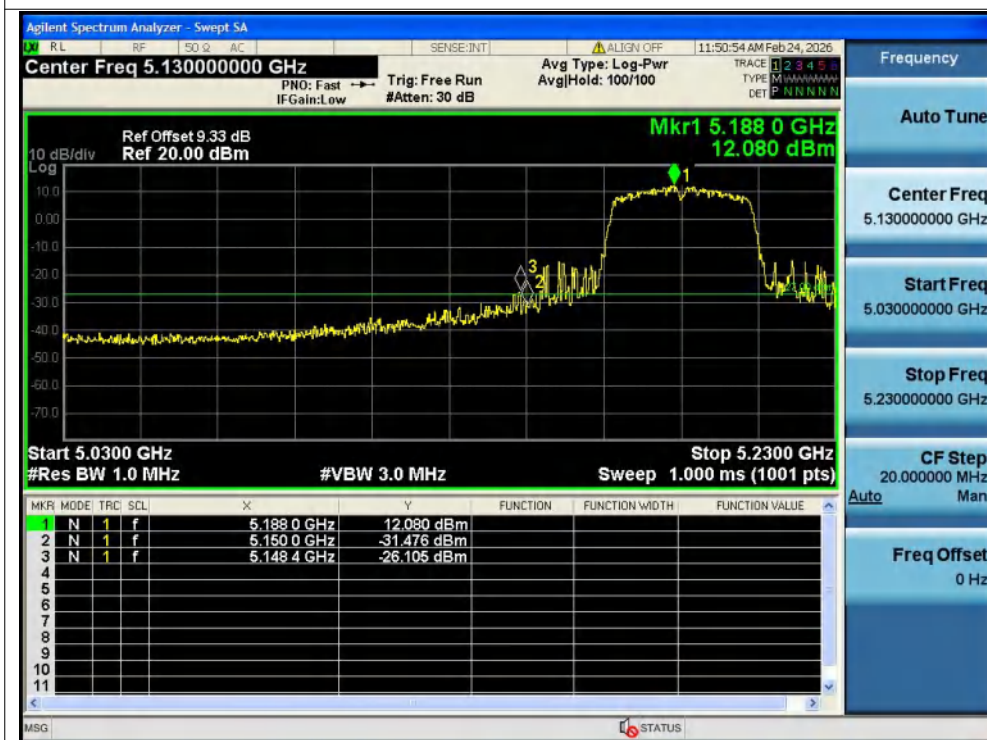
Band Edge NVNT n20 5180MHz Low Ant1



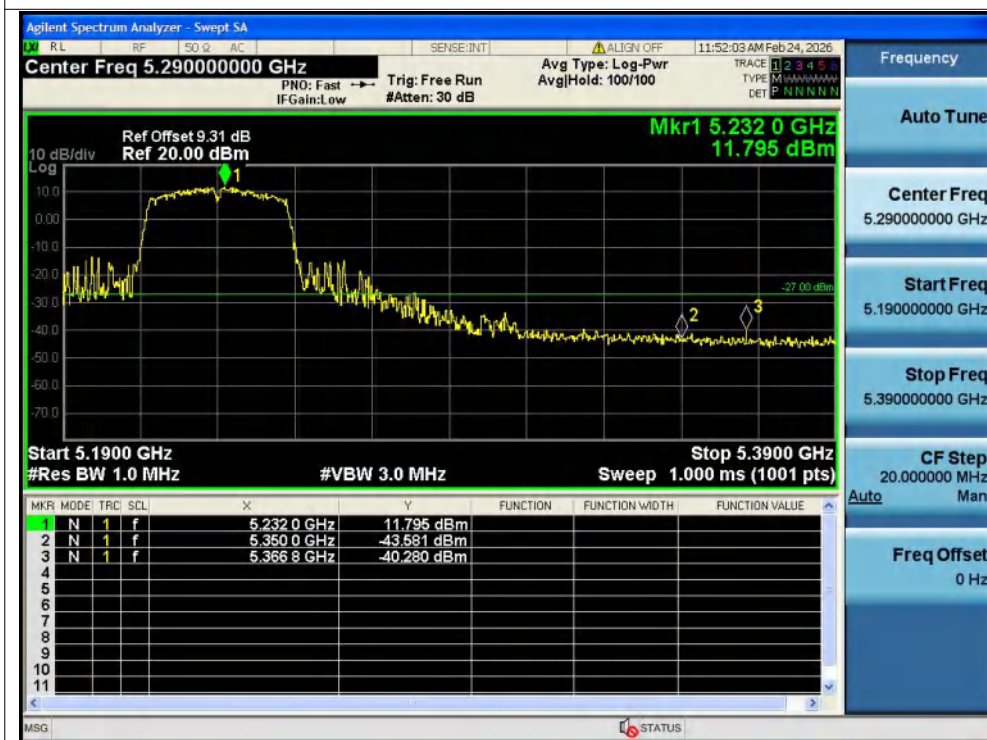
Band Edge NVNT n20 5240MHz High Ant1



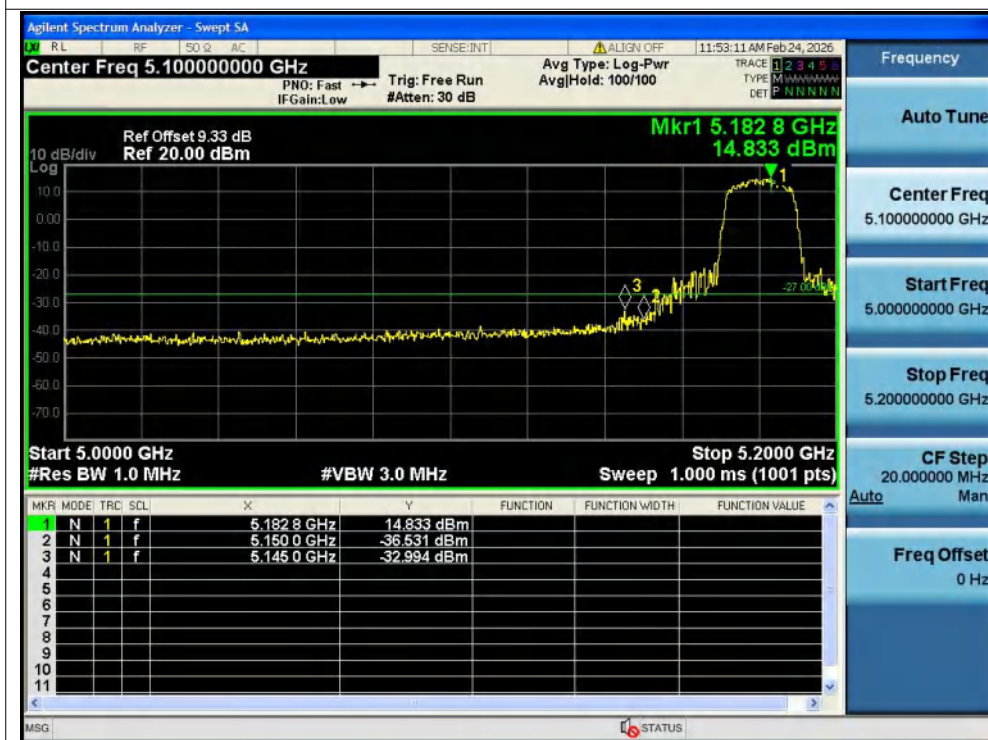
Band Edge NVNT n40 5190MHz Low Ant1



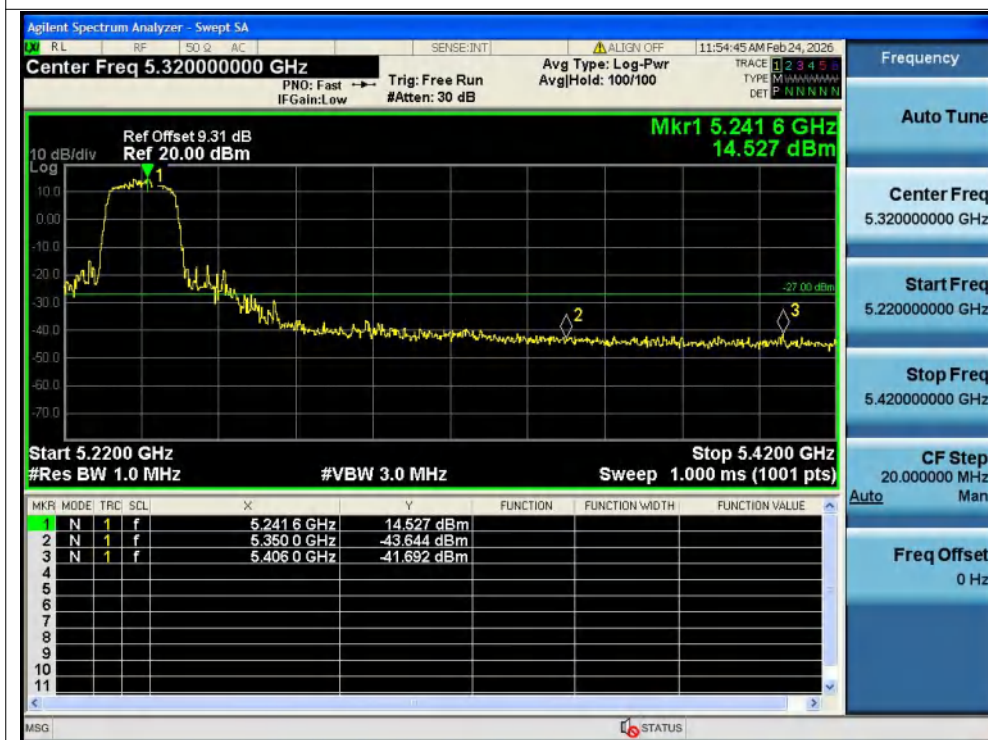
Band Edge NVNT n40 5230MHz High Ant1



Band Edge NVNT ac20 5180MHz Low Ant1



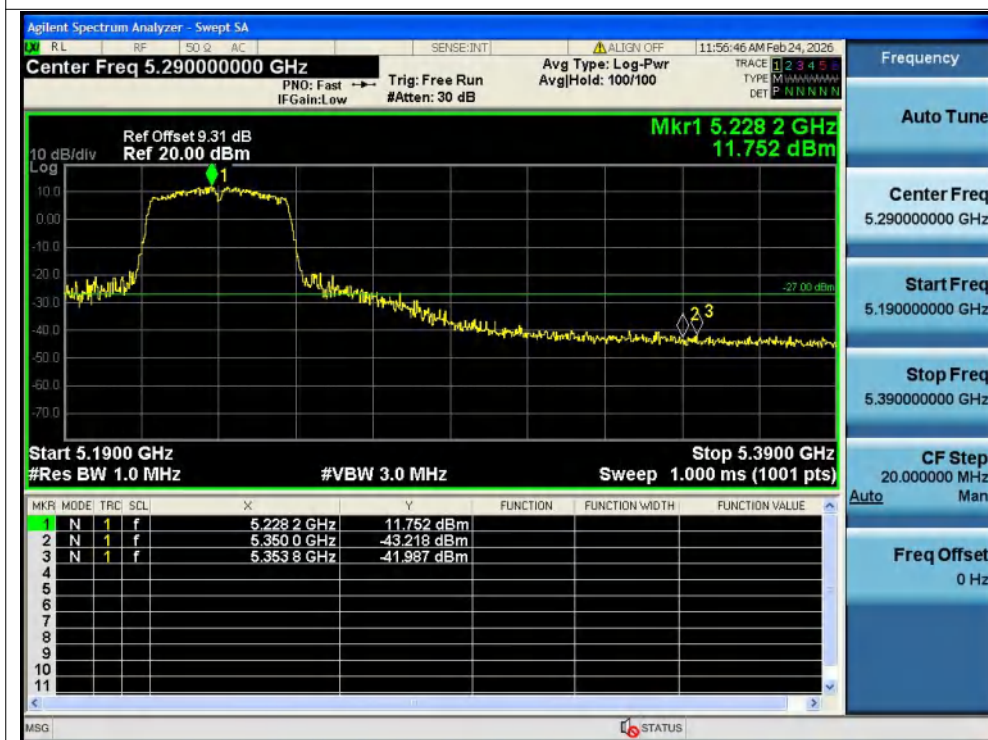
Band Edge NVNT ac20 5240MHz High Ant1



Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1

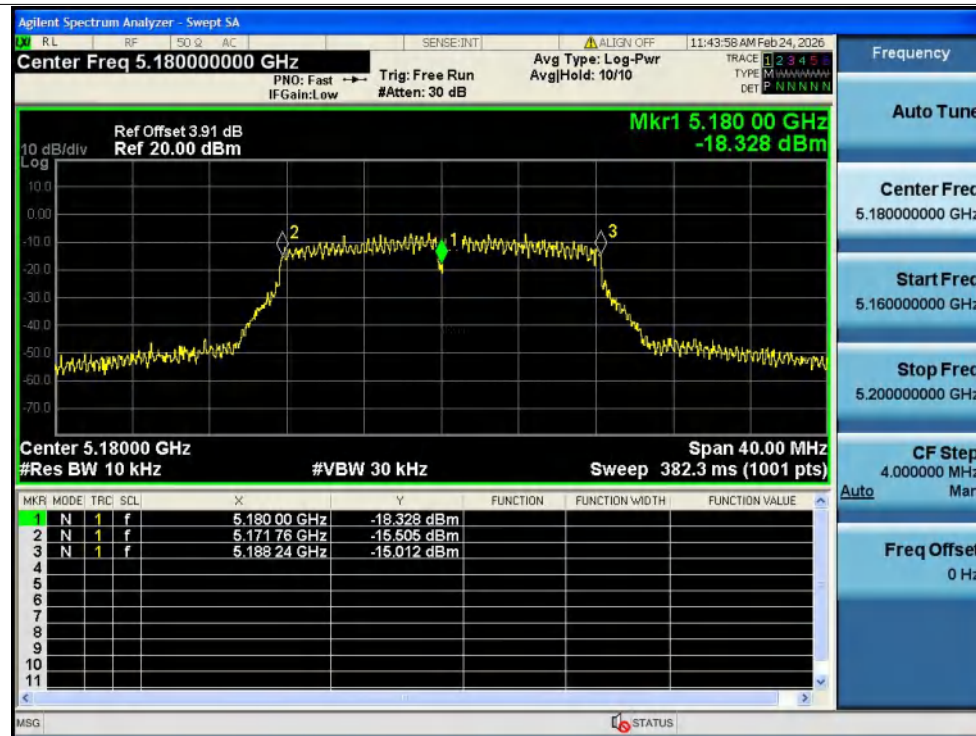


Frequency Stability

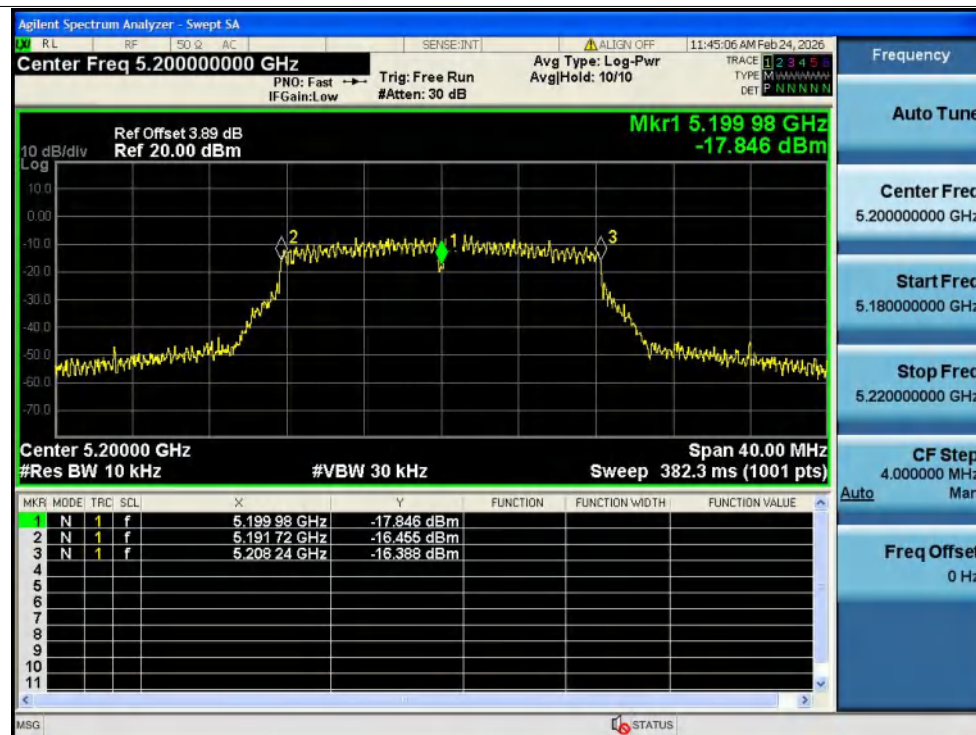
Condition	Mode	Time (mins)	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	0	5180	Ant1	5180	0	0	25	Pass
NVNT	a	0	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	a	0	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	n20	0	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	n20	0	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	n20	0	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	n40	0	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	n40	0	5230	Ant1	5229.96	-40000	-7.65	25	Pass
NVNT	ac20	0	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	ac20	0	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	ac20	0	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	ac40	0	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	ac40	0	5230	Ant1	5230	0	0	25	Pass
NVNT	ac80	0	5210	Ant1	5210	0	0	25	Pass

Test Graphs

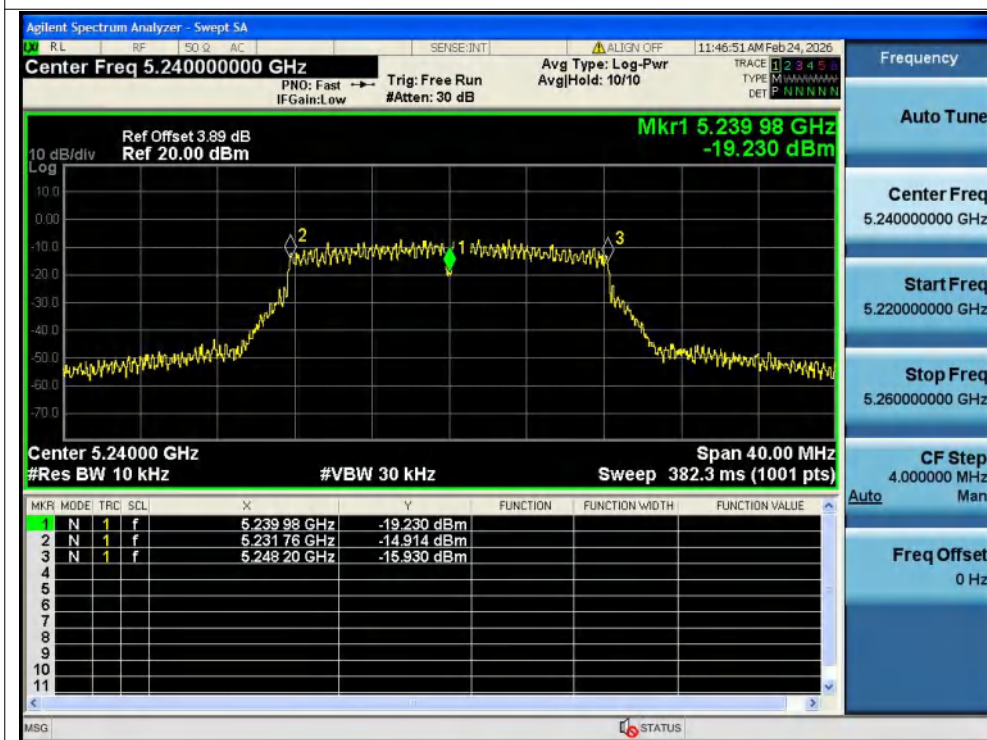
Freq. Stability NVNT a 5180MHz Ant1 0 Minutes



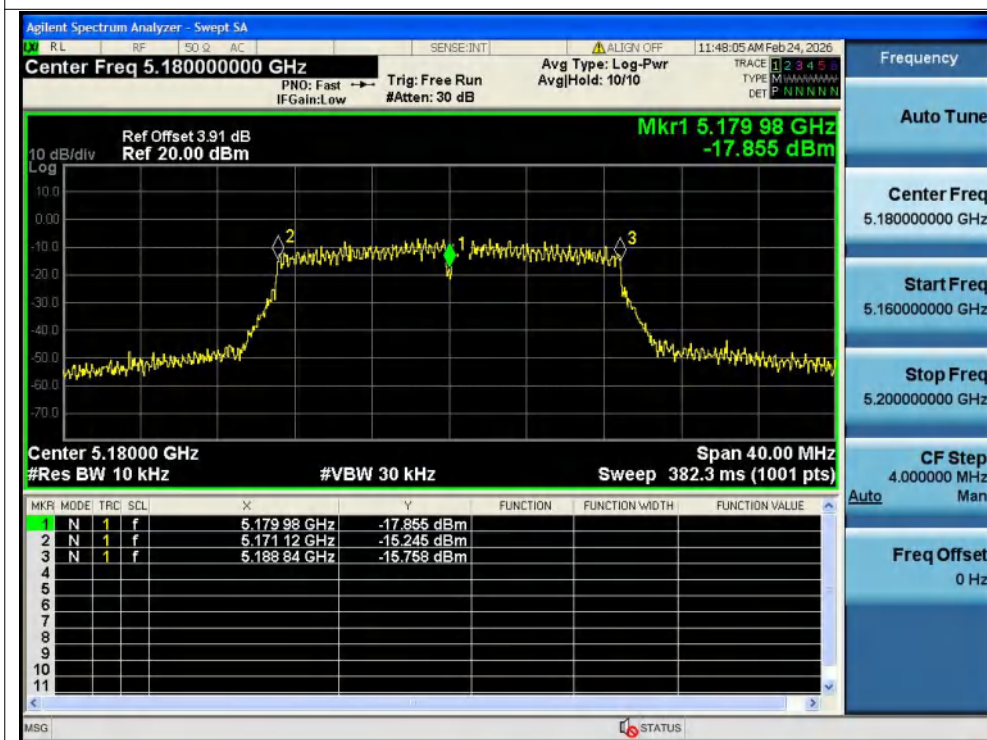
Freq. Stability NVNT a 5200MHz Ant1 0 Minutes



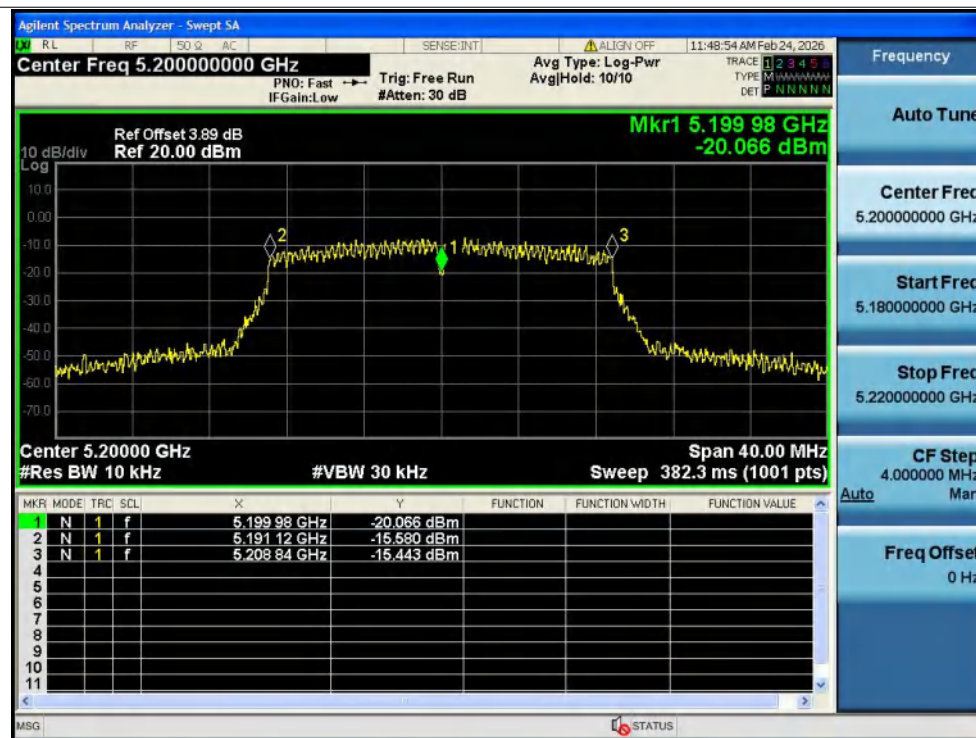
Freq. Stability NVNT a 5240MHz Ant1 0 Minutes



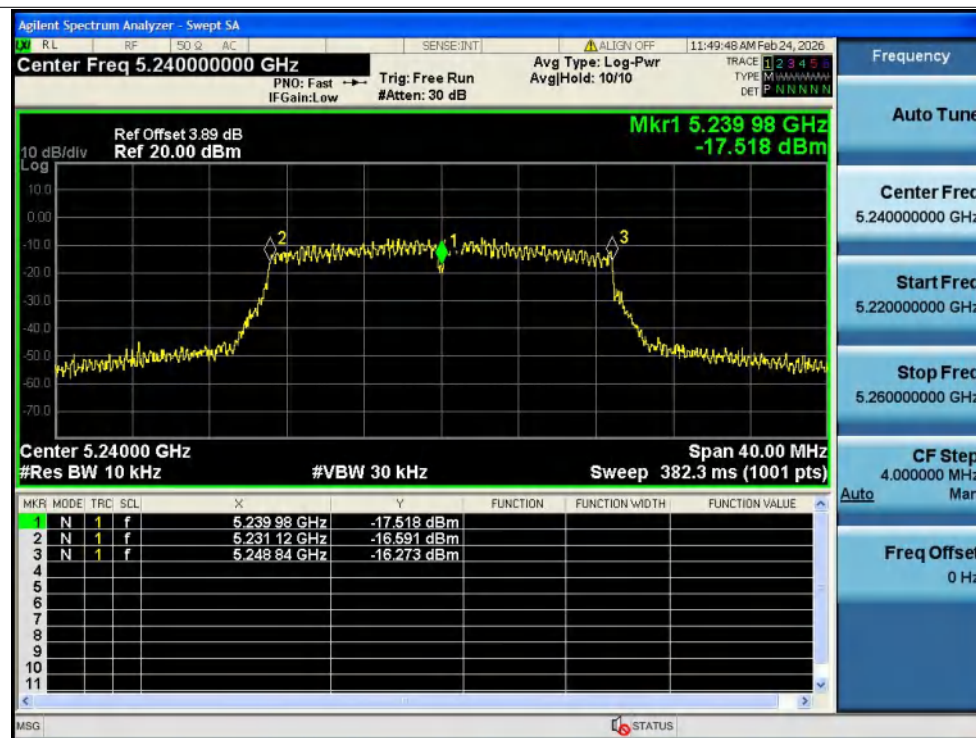
Freq. Stability NVNT n20 5180MHz Ant1 0 Minutes



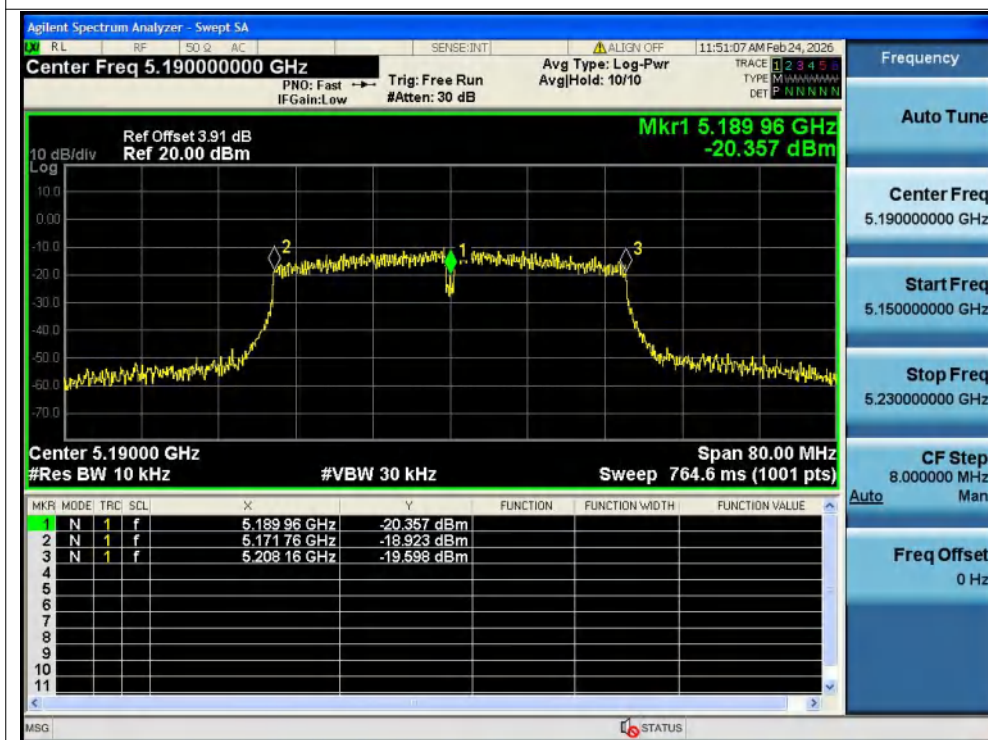
Freq. Stability NVNT n20 5200MHz Ant1 0 Minutes



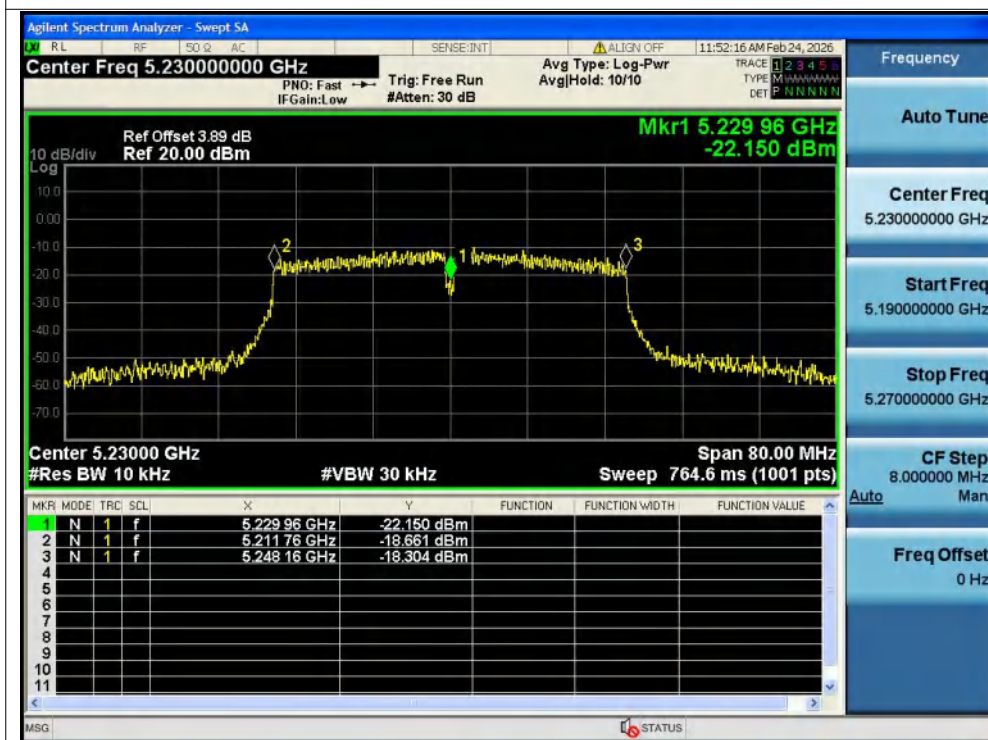
Freq. Stability NVNT n20 5240MHz Ant1 0 Minutes



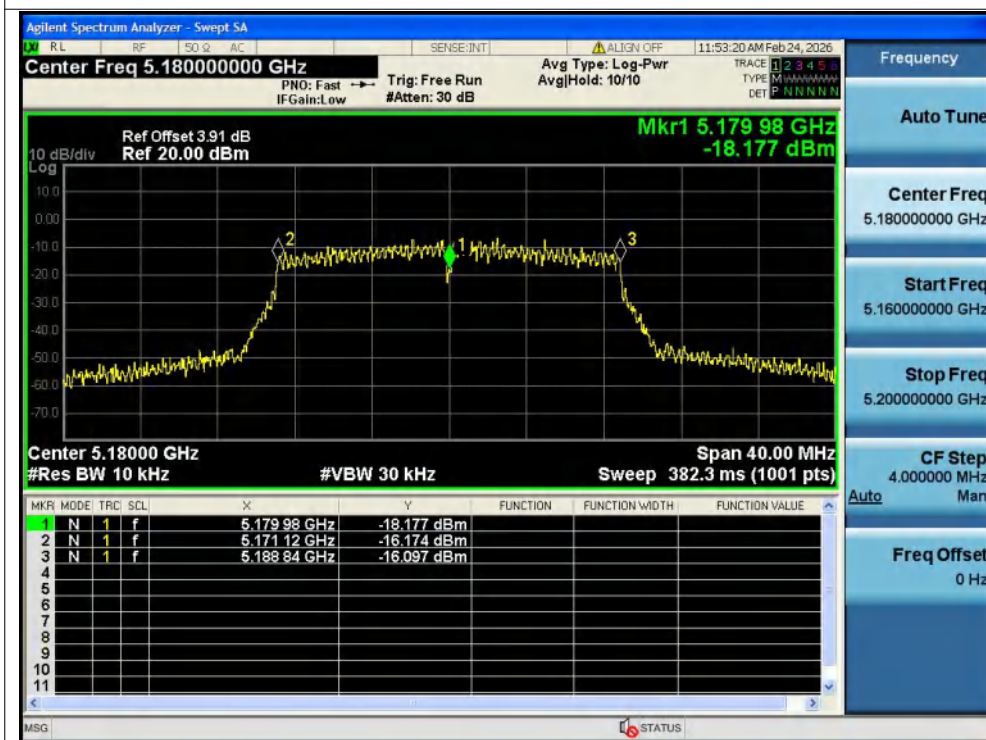
Freq. Stability NVNT n40 5190MHz Ant1 0 Minutes



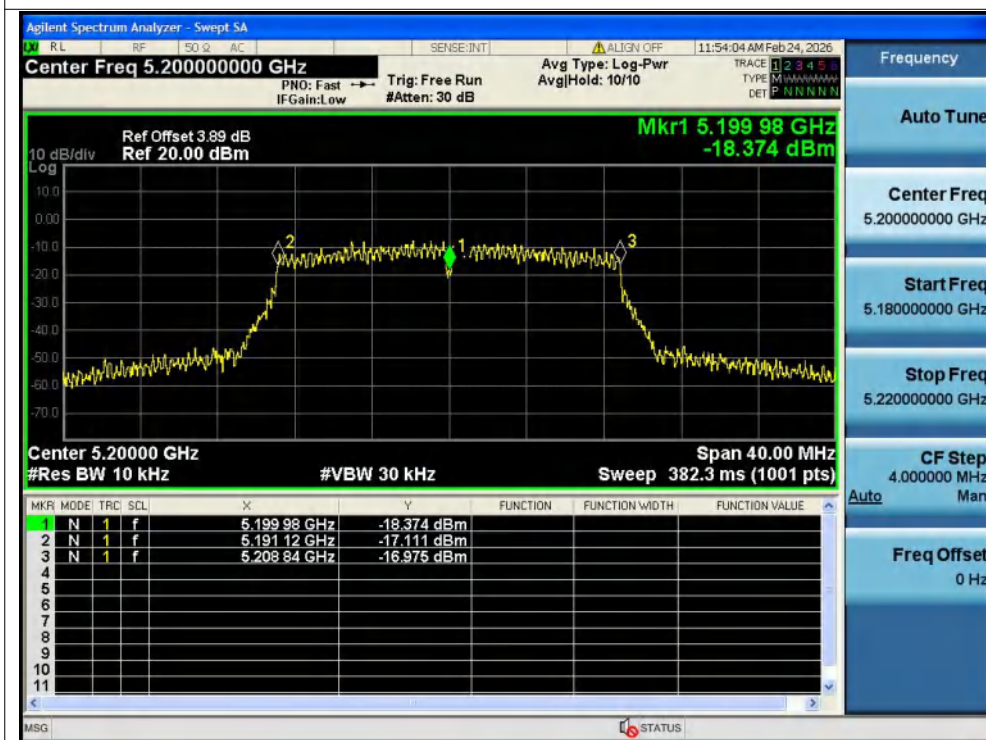
Freq. Stability NVNT n40 5230MHz Ant1 0 Minutes



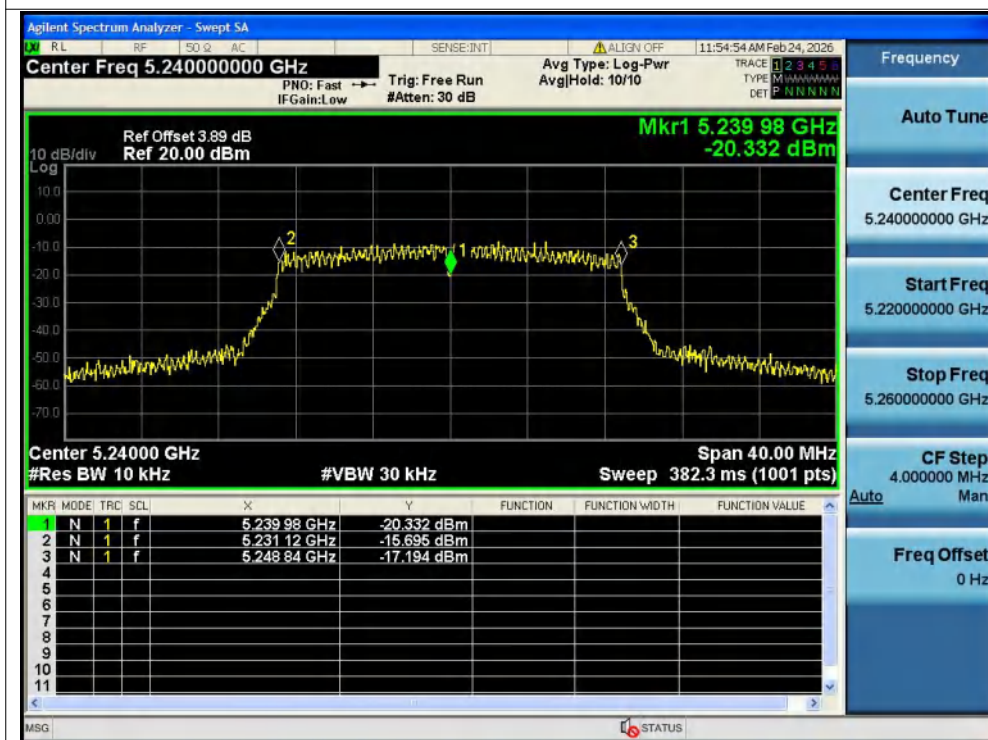
Freq. Stability NVNT ac20 5180MHz Ant1 0 Minutes



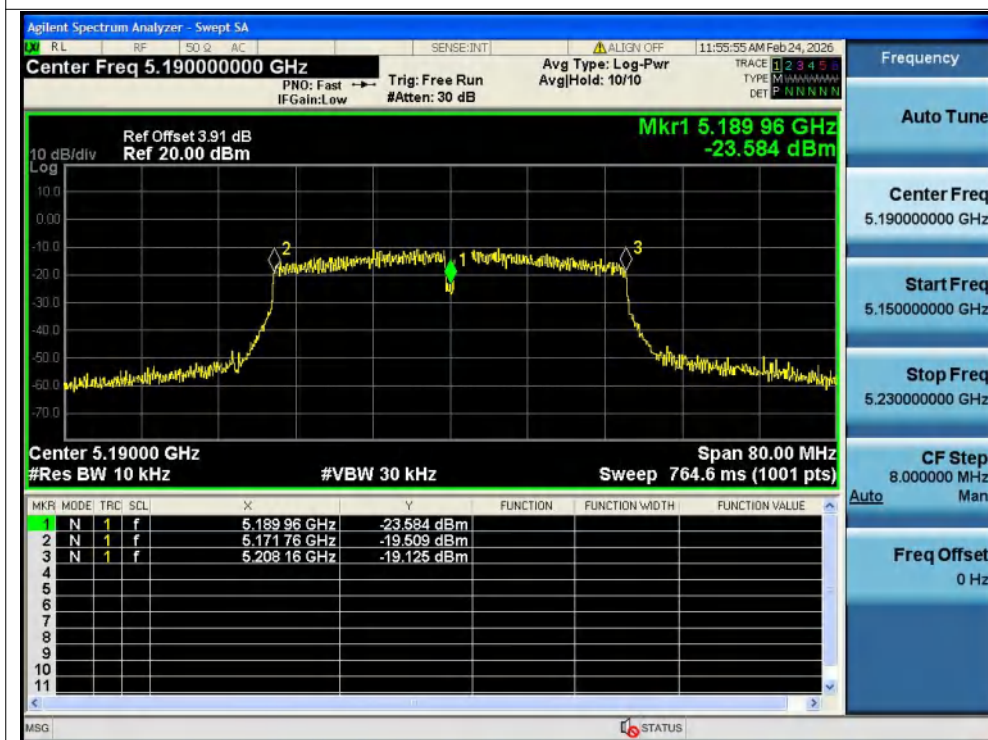
Freq. Stability NVNT ac20 5200MHz Ant1 0 Minutes



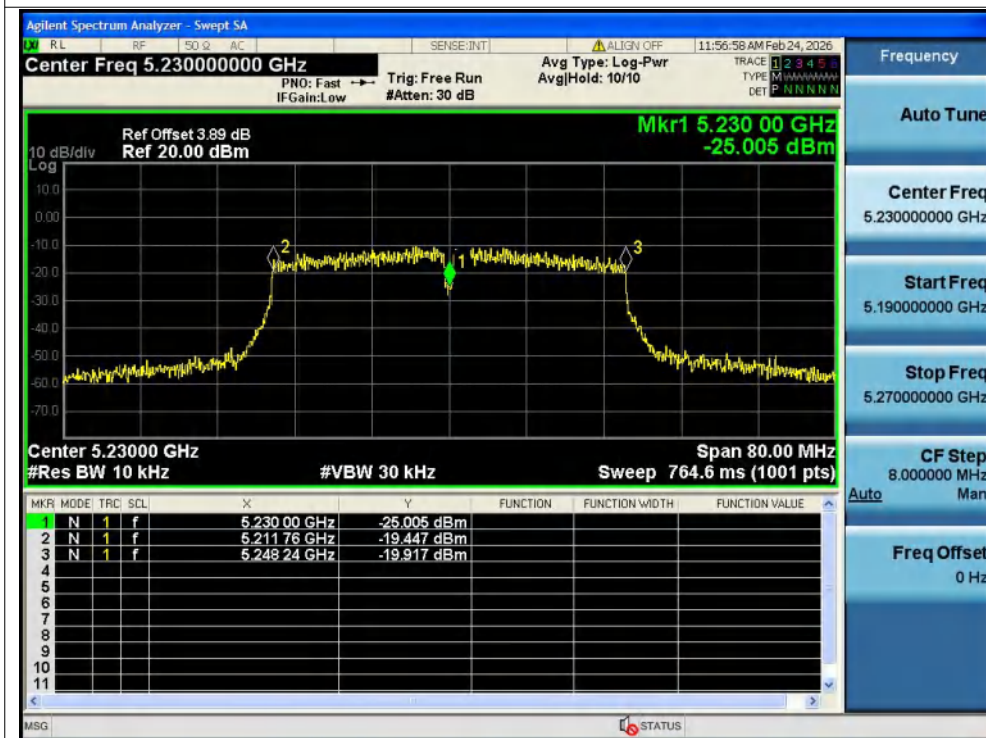
Freq. Stability NVNT ac20 5240MHz Ant1 0 Minutes



Freq. Stability NVNT ac40 5190MHz Ant1 0 Minutes



Freq. Stability NVNT ac40 5230MHz Ant1 0 Minutes



Freq. Stability NVNT ac80 5210MHz Ant1 0 Minutes

