

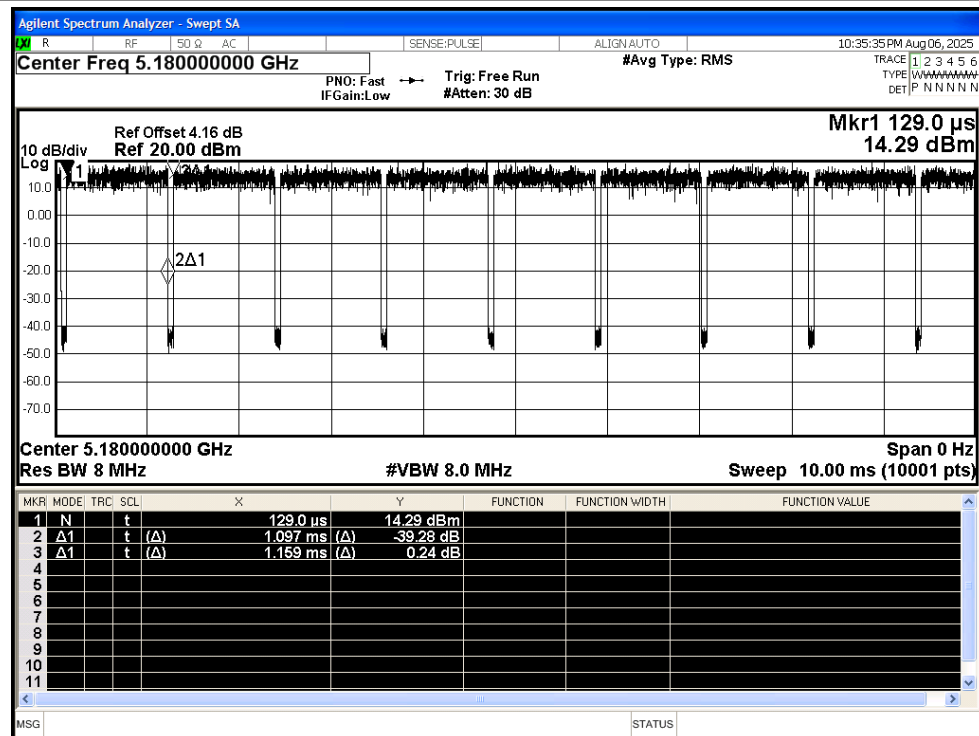
Appendix RF test data for WIFI5G-UNII band 1

Duty Cycle

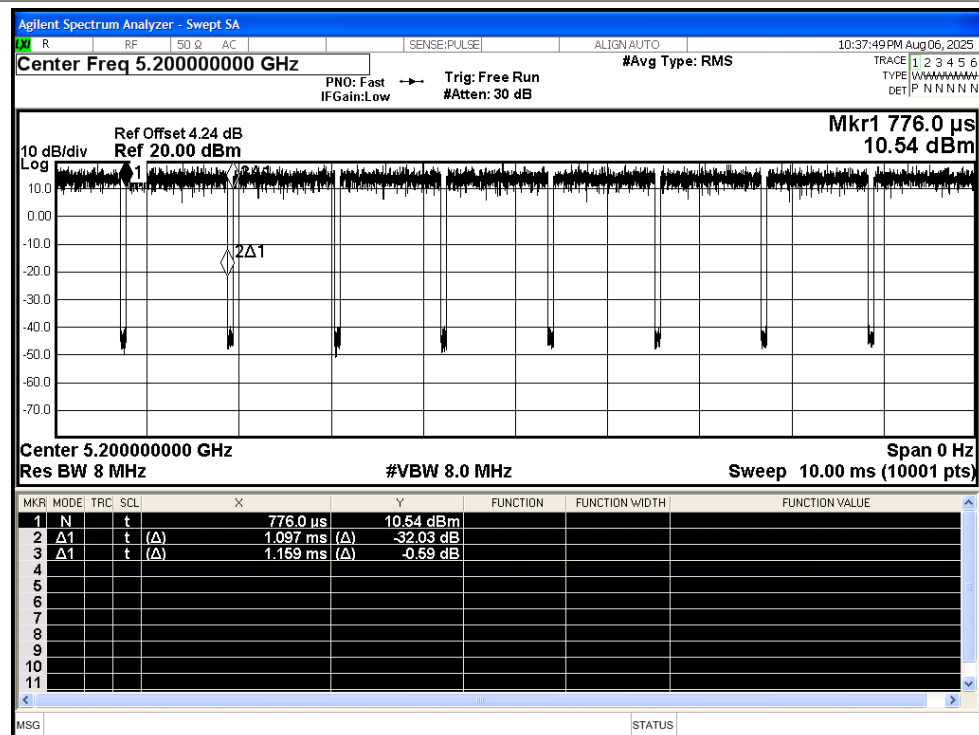
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	94.65	0.24	0.91
NVNT	a	5200	Ant1	94.65	0.24	0.91
NVNT	a	5240	Ant1	94.65	0.24	0.91
NVNT	n20	5180	Ant1	97.29	0.12	0.44
NVNT	n20	5200	Ant1	97.29	0.12	0.44
NVNT	n20	5240	Ant1	97.29	0.12	0.44
NVNT	n40	5190	Ant1	94.71	0.24	0.9
NVNT	n40	5230	Ant1	94.79	0.23	0.9
NVNT	ac20	5180	Ant1	97.35	0.12	0.44
NVNT	ac20	5200	Ant1	97.34	0.12	0.44
NVNT	ac20	5240	Ant1	97.34	0.12	0.44
NVNT	ac40	5190	Ant1	94.72	0.24	0.9
NVNT	ac40	5230	Ant1	94.81	0.23	0.9
NVNT	ac80	5210	Ant1	89.65	0.47	1.86

Test Graphs

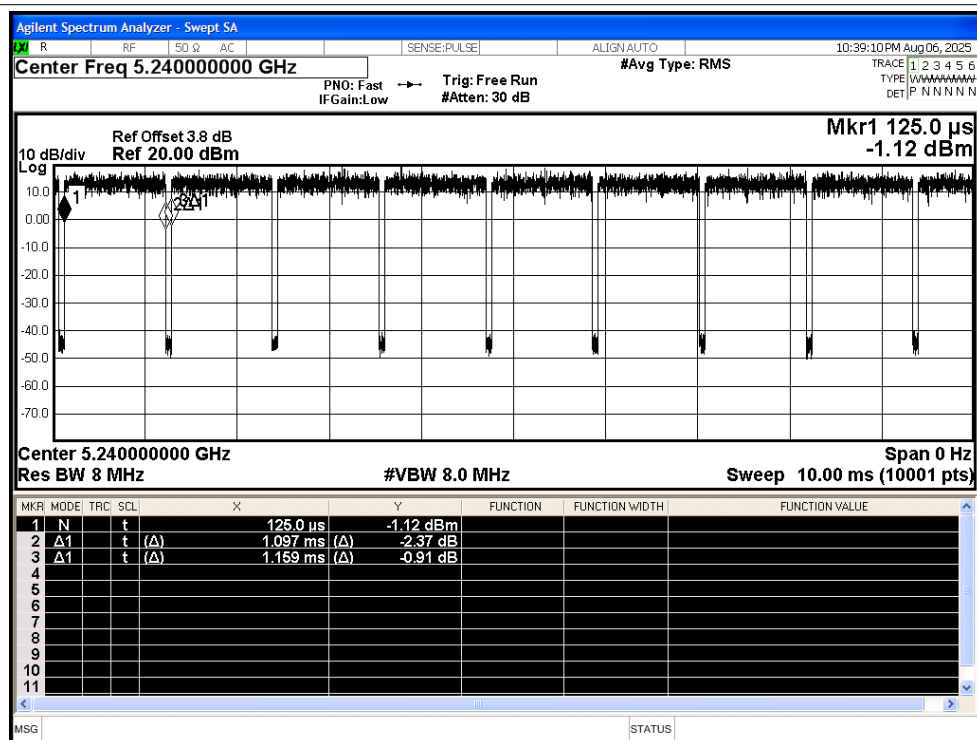
Duty Cycle NVNT a 5180MHz Ant1



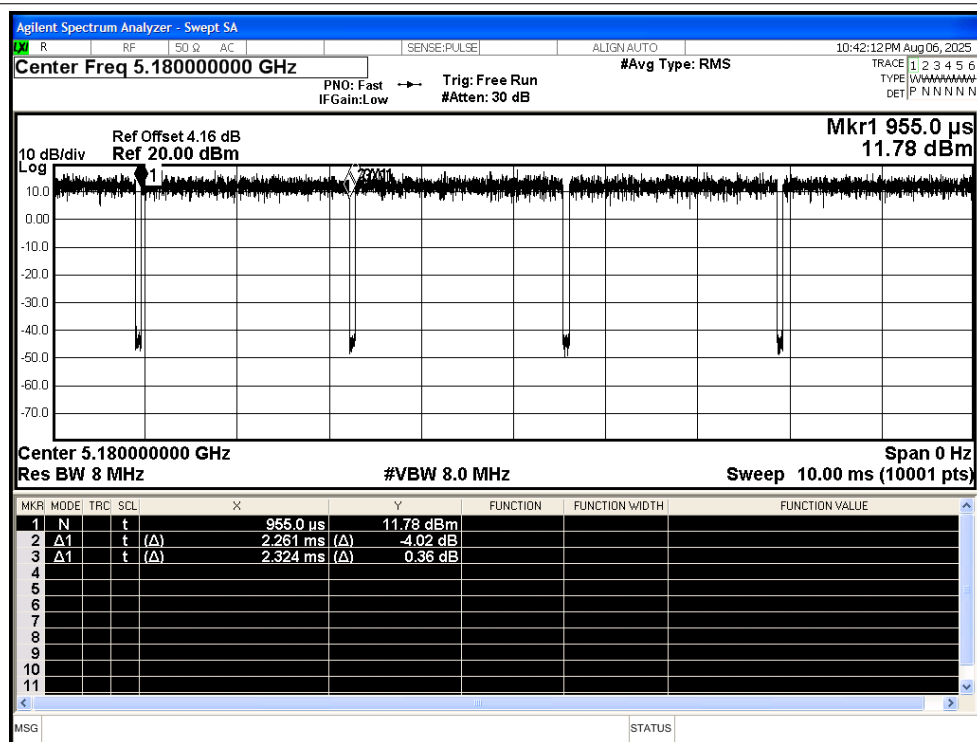
Duty Cycle NVNT a 5200MHz Ant1

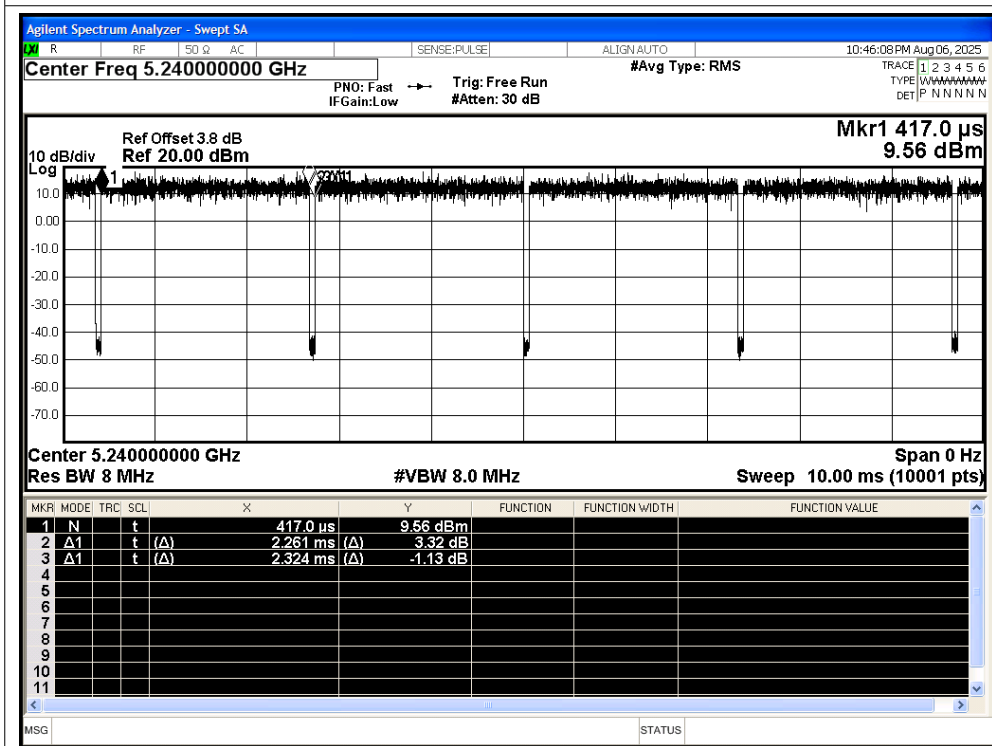
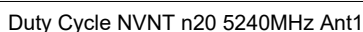


Duty Cycle NVNT a 5240MHz Ant1

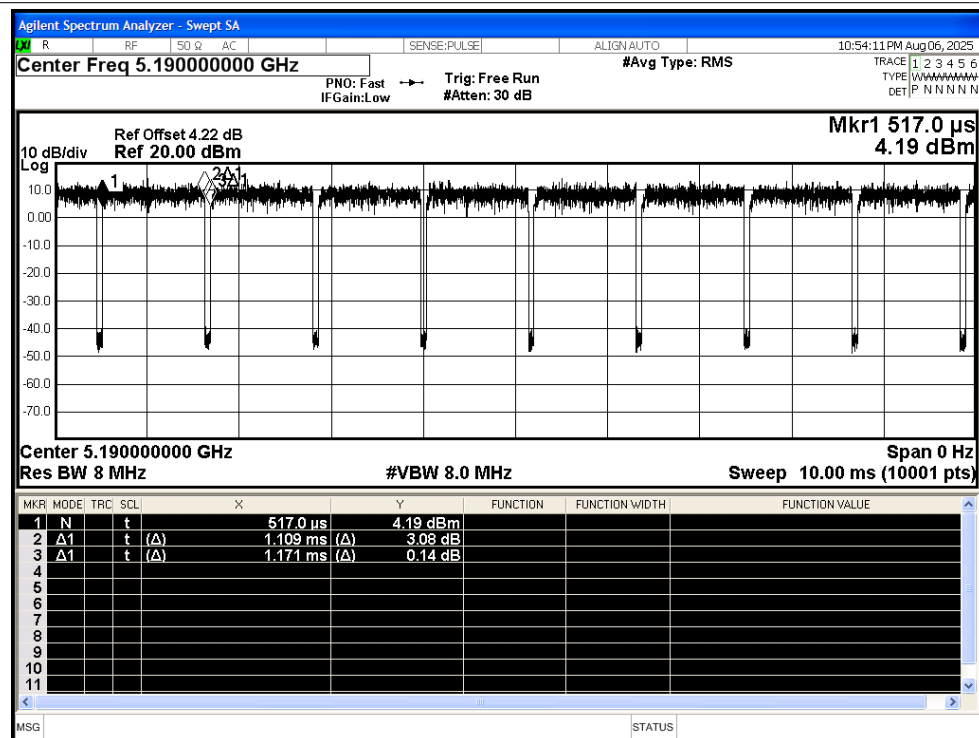


Duty Cycle NVNT n20 5180MHz Ant1

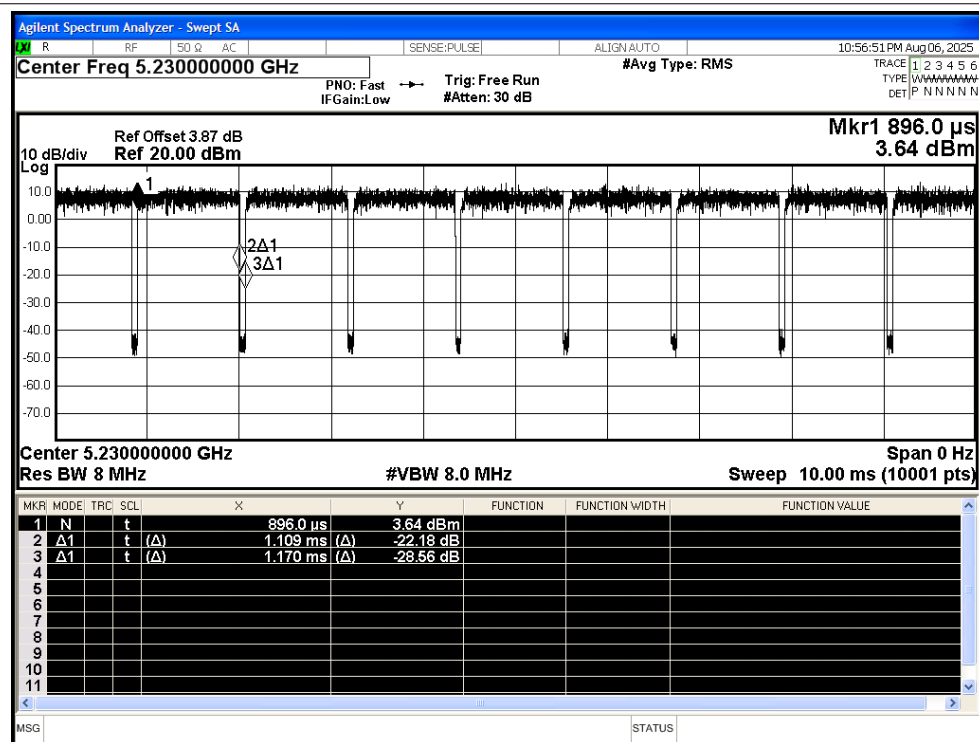


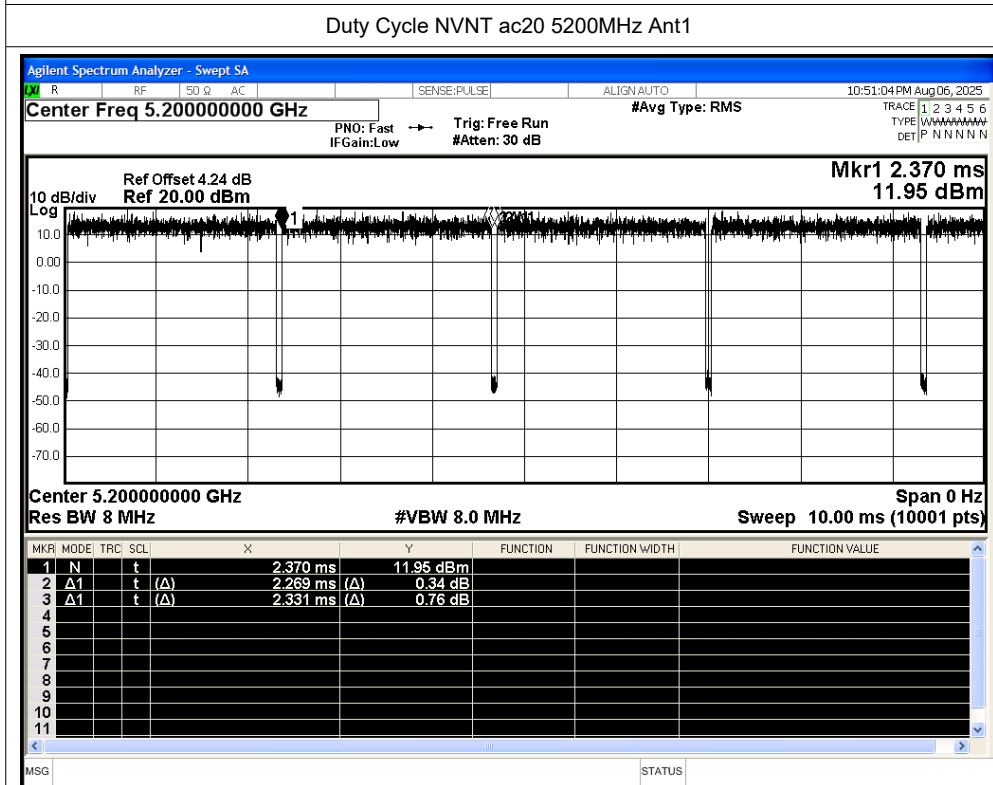
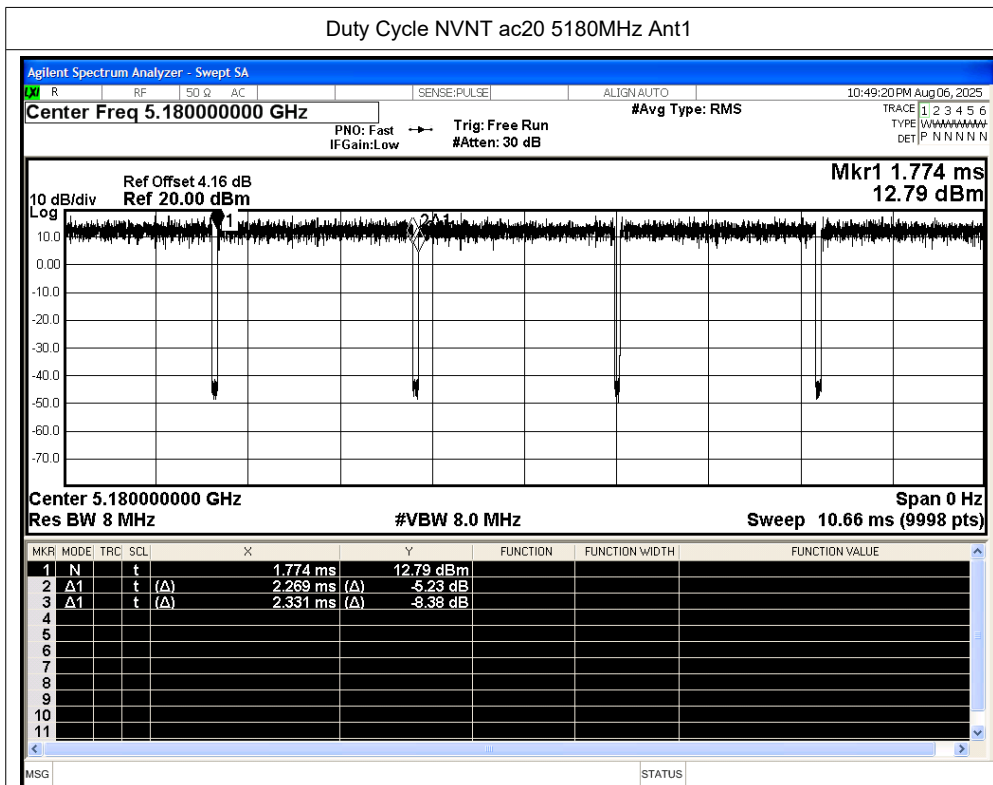


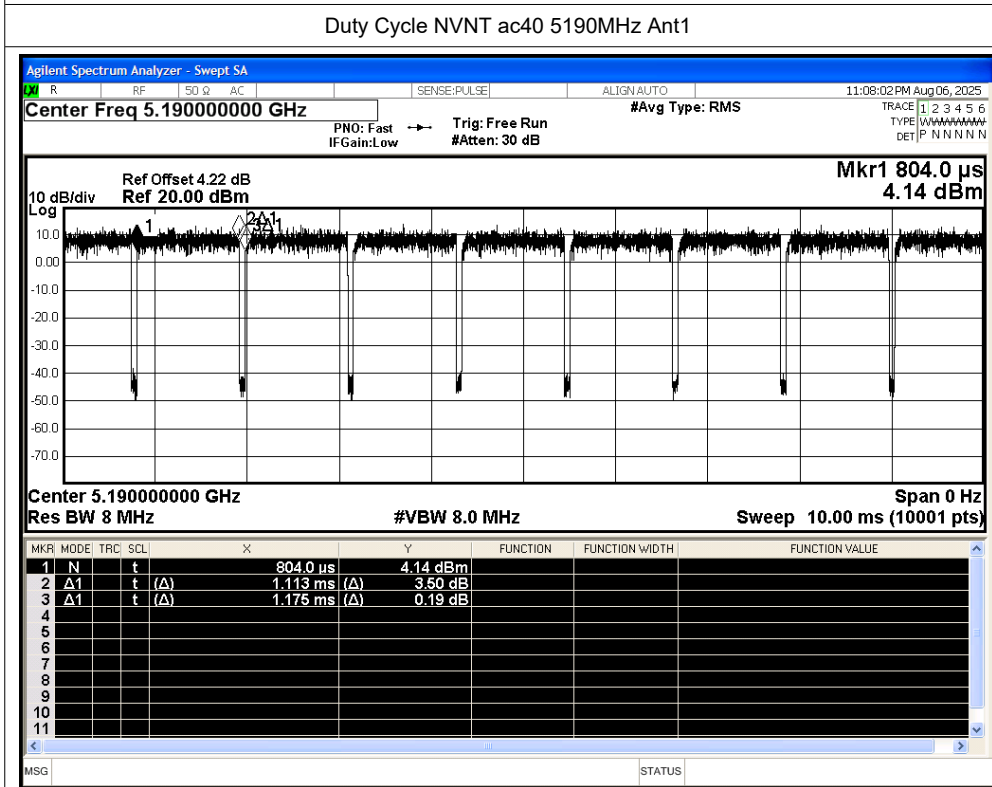
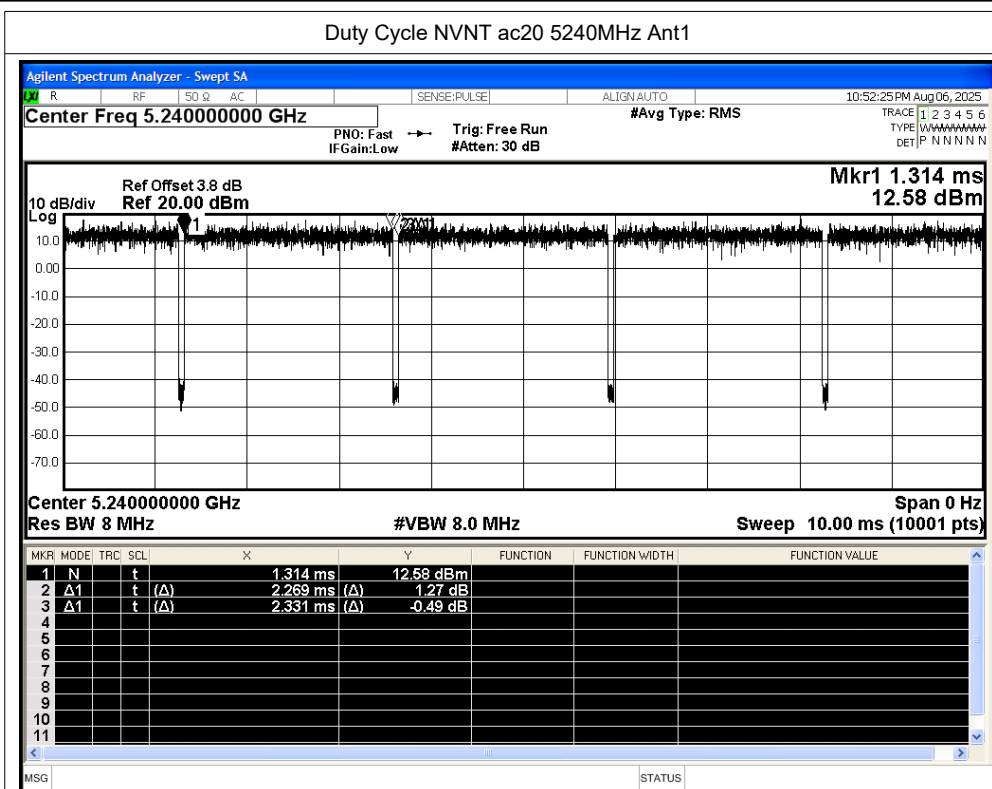
Duty Cycle NVNT n40 5190MHz Ant1

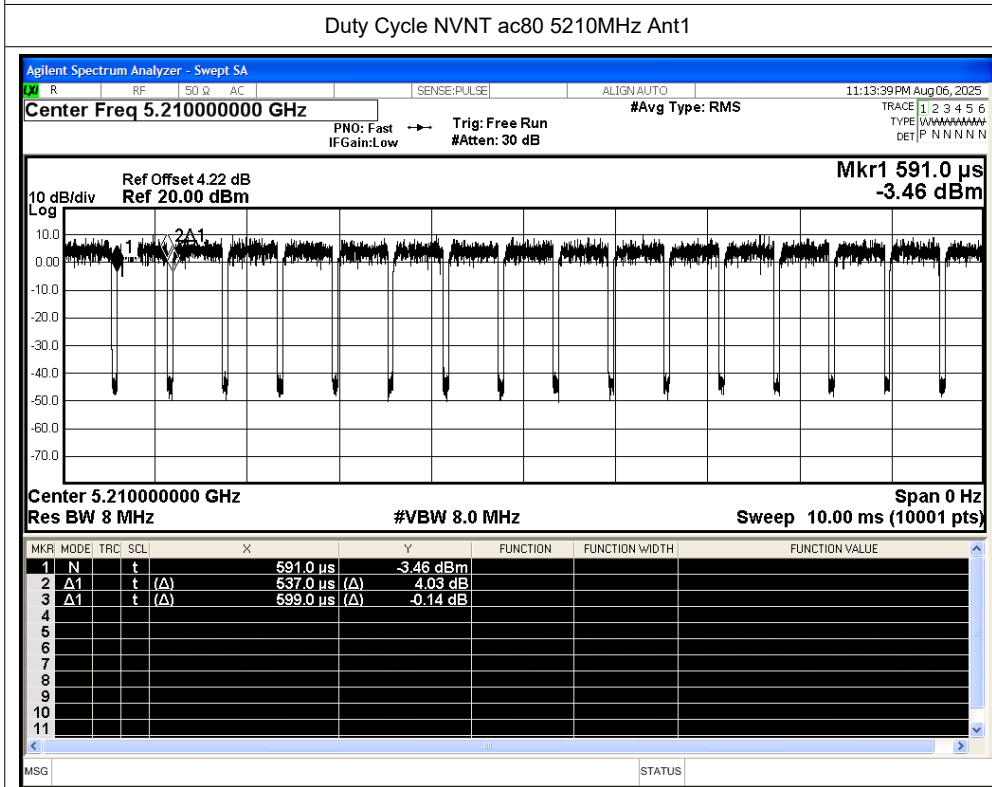
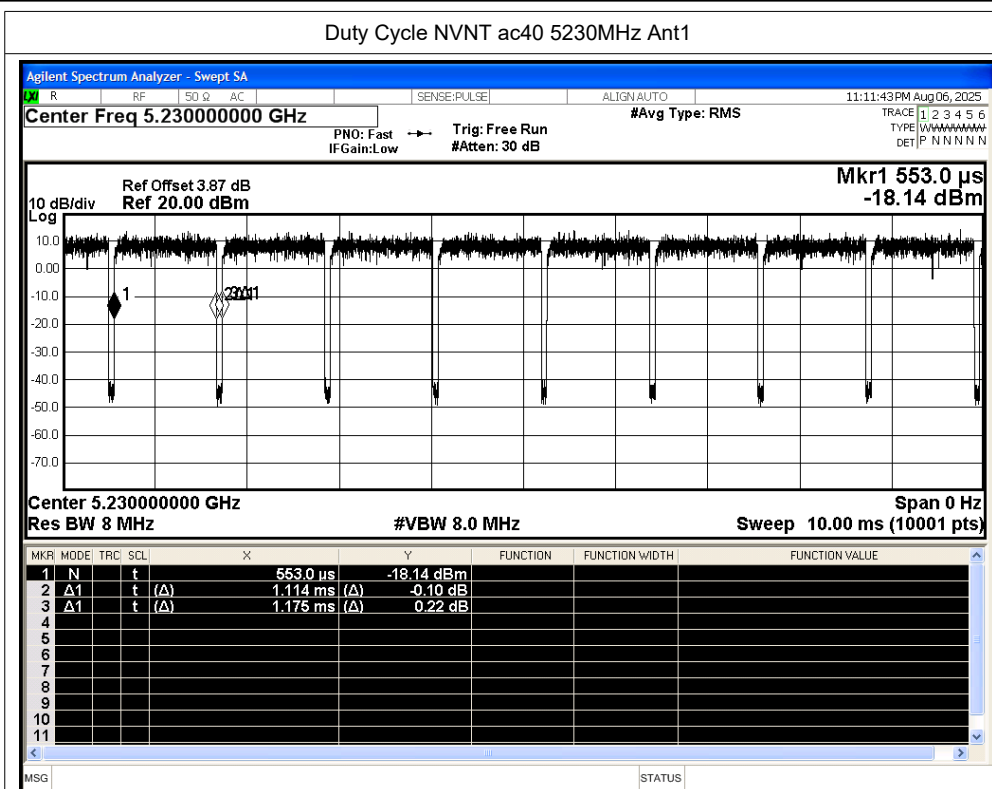


Duty Cycle NVNT n40 5230MHz Ant1







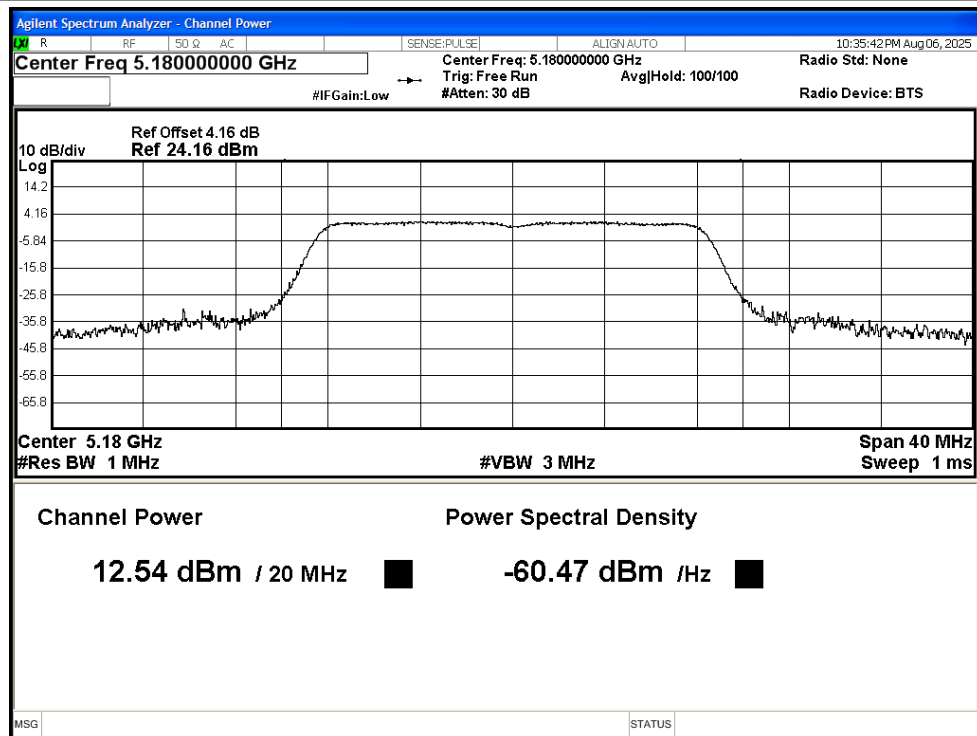


Maximum Conducted Output Power

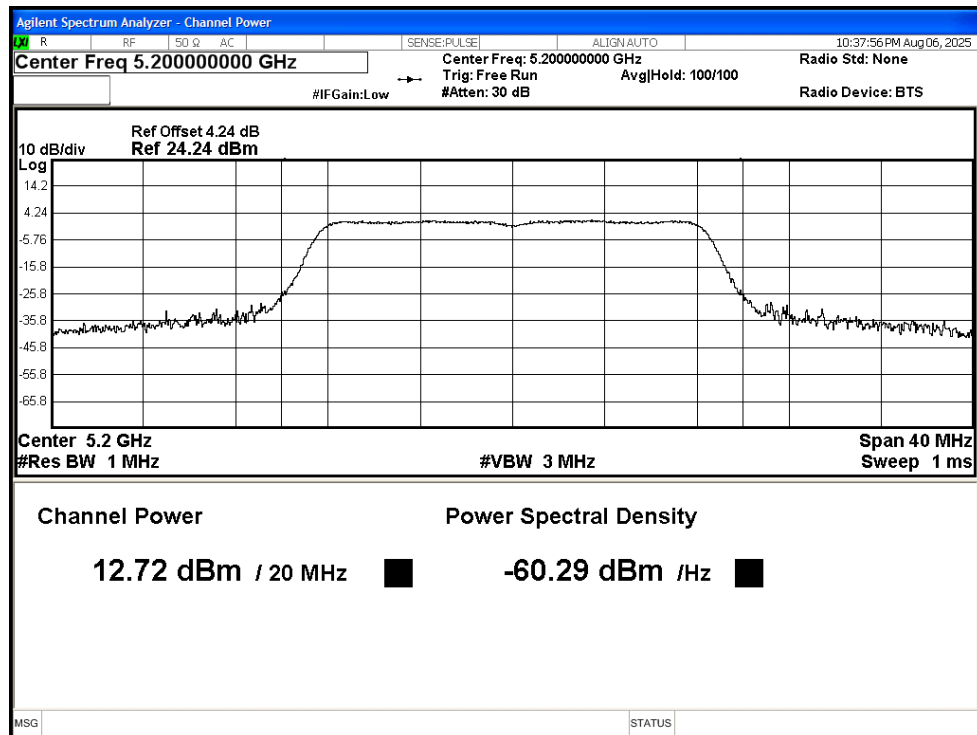
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.54	0.24	12.78	24	Pass
NVNT	a	5200	Ant1	12.72	0.24	12.96	24	Pass
NVNT	a	5240	Ant1	11.9	0.24	12.14	24	Pass
NVNT	n20	5180	Ant1	11.46	0.12	11.58	24	Pass
NVNT	n20	5200	Ant1	11.24	0.12	11.36	24	Pass
NVNT	n20	5240	Ant1	11.45	0.12	11.57	24	Pass
NVNT	n40	5190	Ant1	11.08	0.24	11.32	24	Pass
NVNT	n40	5230	Ant1	10.48	0.23	10.71	24	Pass
NVNT	ac20	5180	Ant1	11.48	0.12	11.6	24	Pass
NVNT	ac20	5200	Ant1	12.17	0.12	12.29	24	Pass
NVNT	ac20	5240	Ant1	11.4	0.12	11.52	24	Pass
NVNT	ac40	5190	Ant1	10.69	0.24	10.93	24	Pass
NVNT	ac40	5230	Ant1	11.01	0.23	11.24	24	Pass
NVNT	ac80	5210	Ant1	9.89	0.47	10.36	24	Pass

Test Graphs

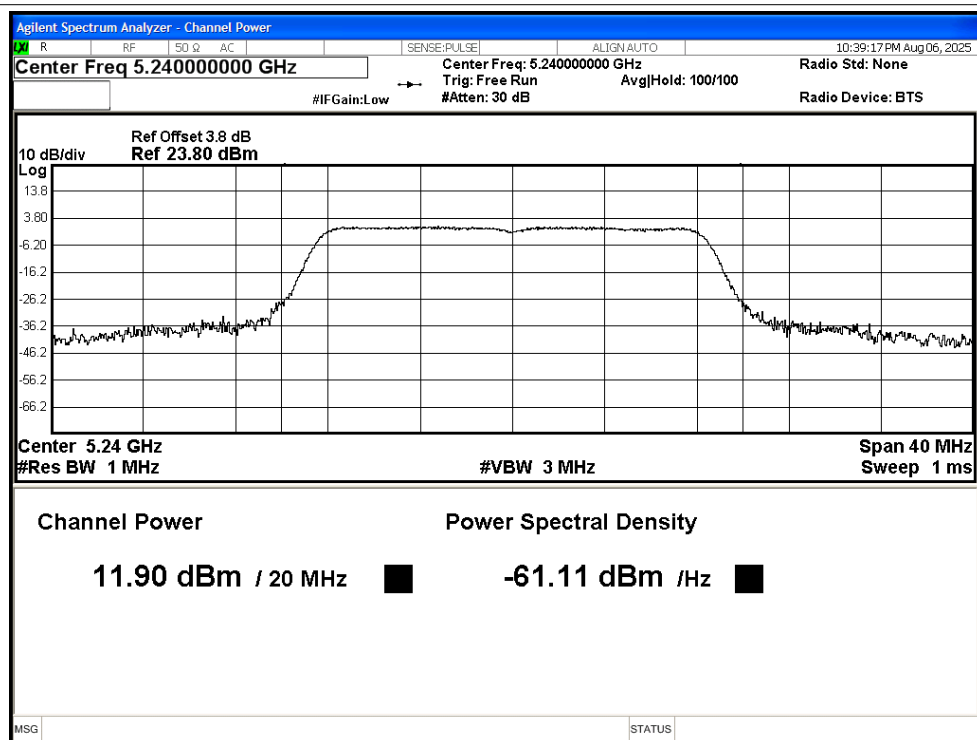
Power NVNT a 5180MHz Ant1



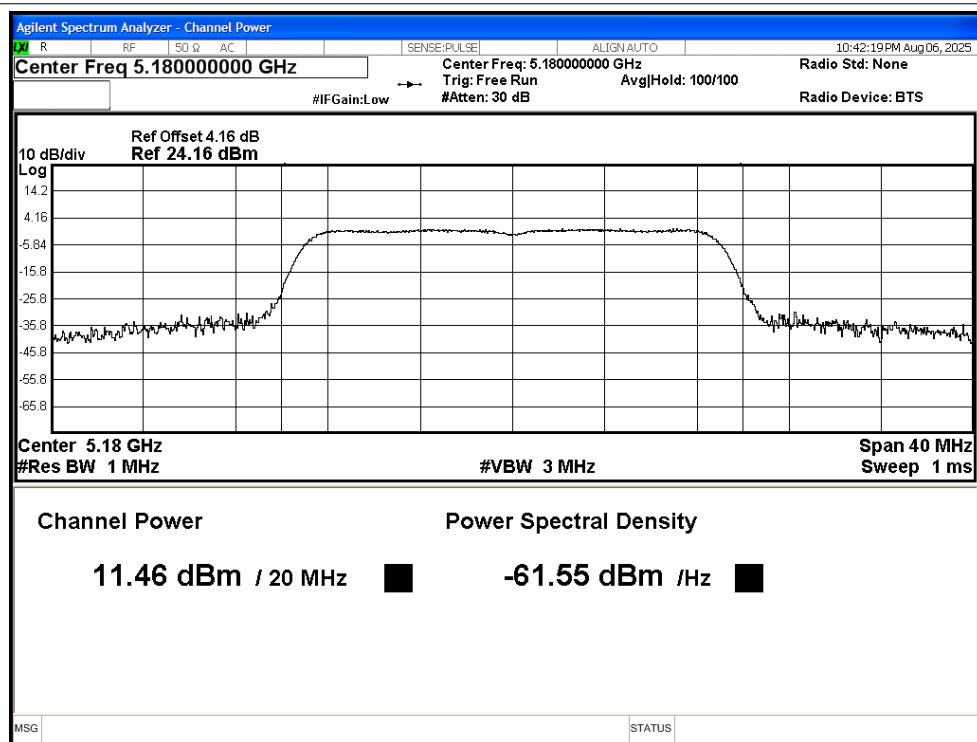
Power NVNT a 5200MHz Ant1



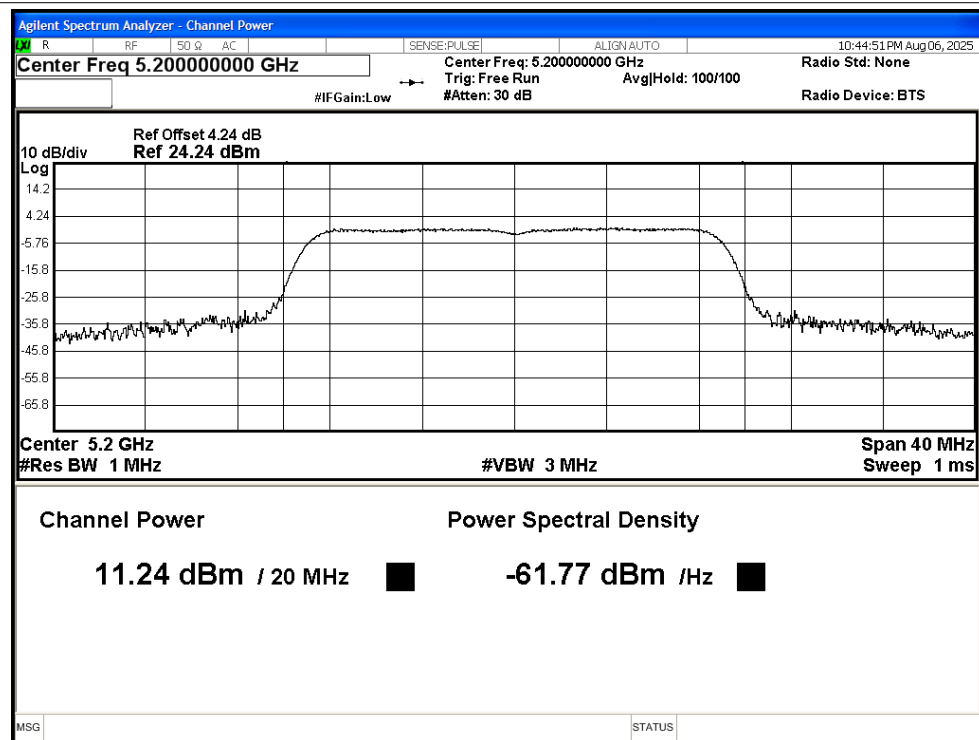
Power NVNT a 5240MHz Ant1



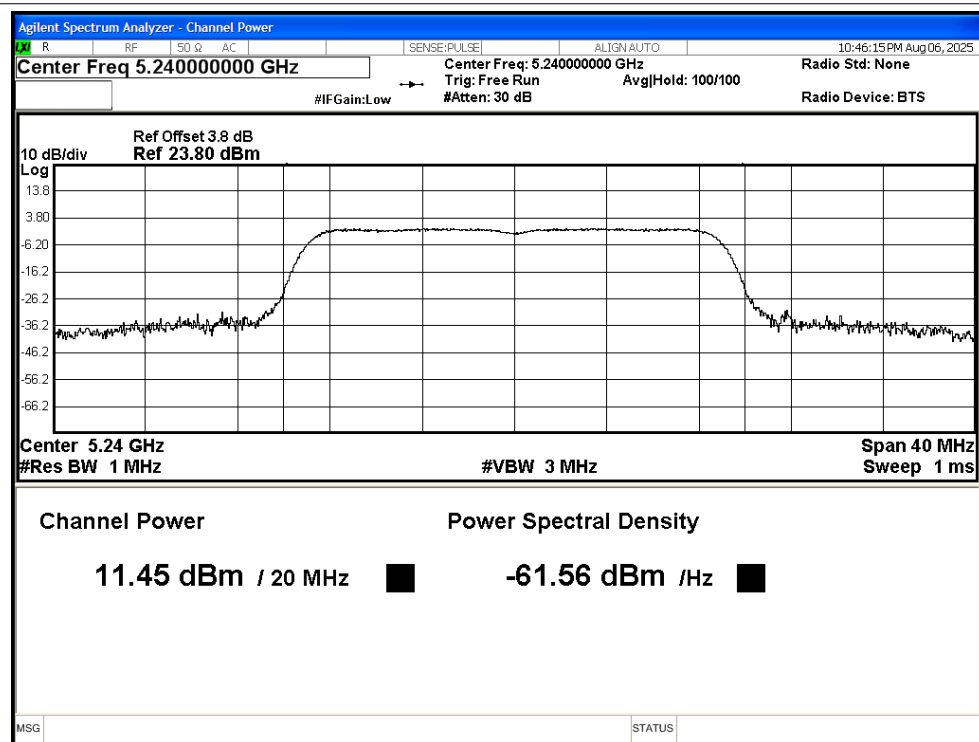
Power NVNT n20 5180MHz Ant1



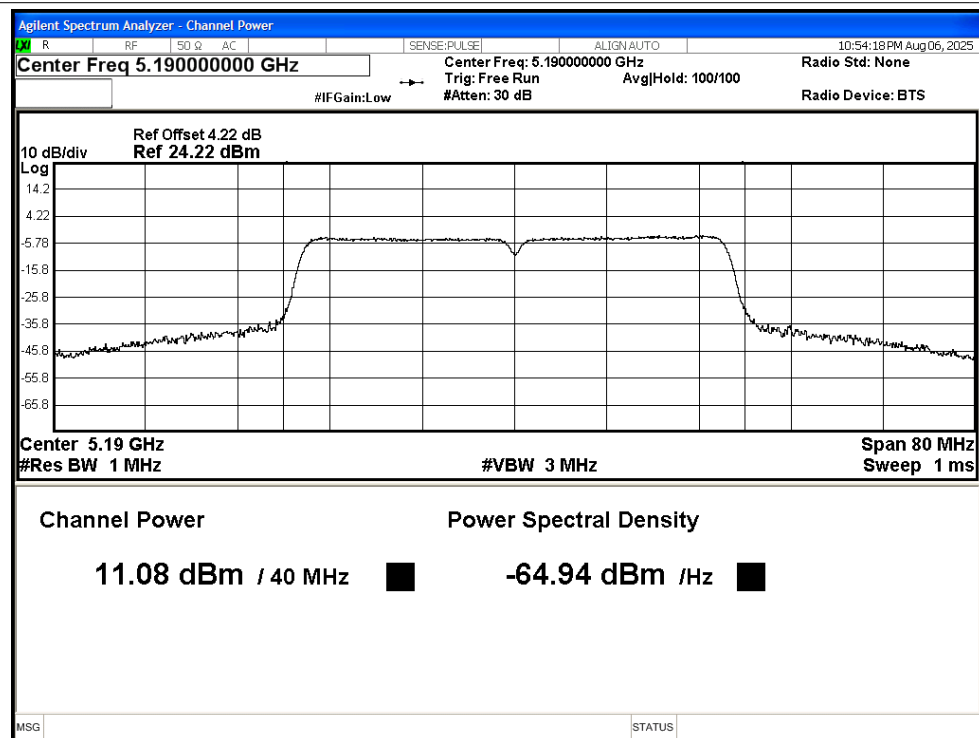
Power NVNT n20 5200MHz Ant1



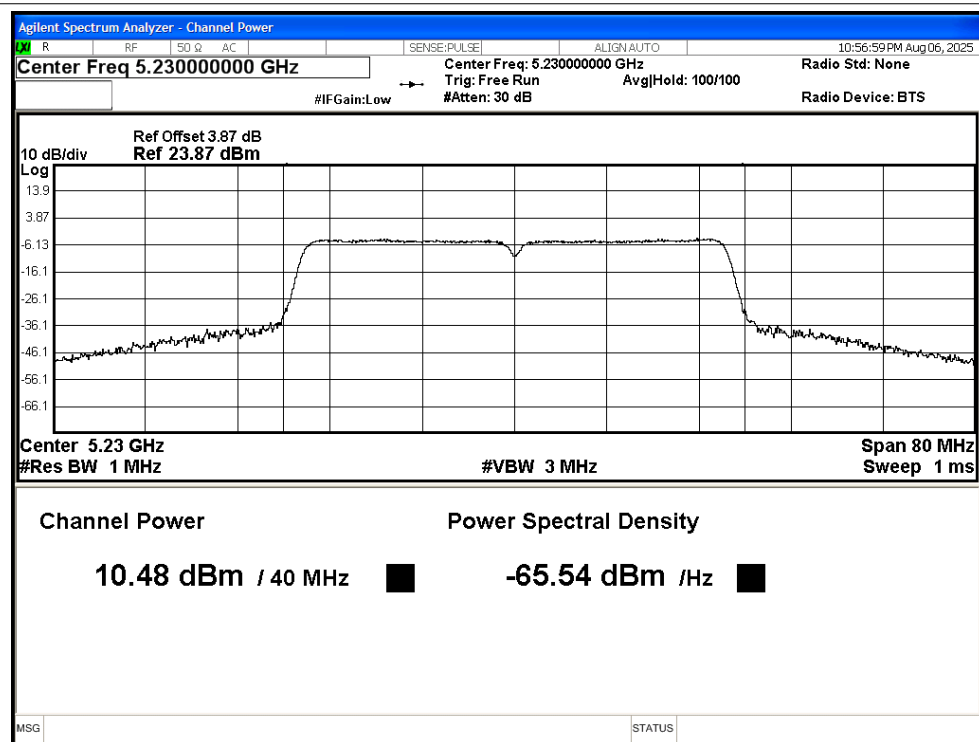
Power NVNT n20 5240MHz Ant1



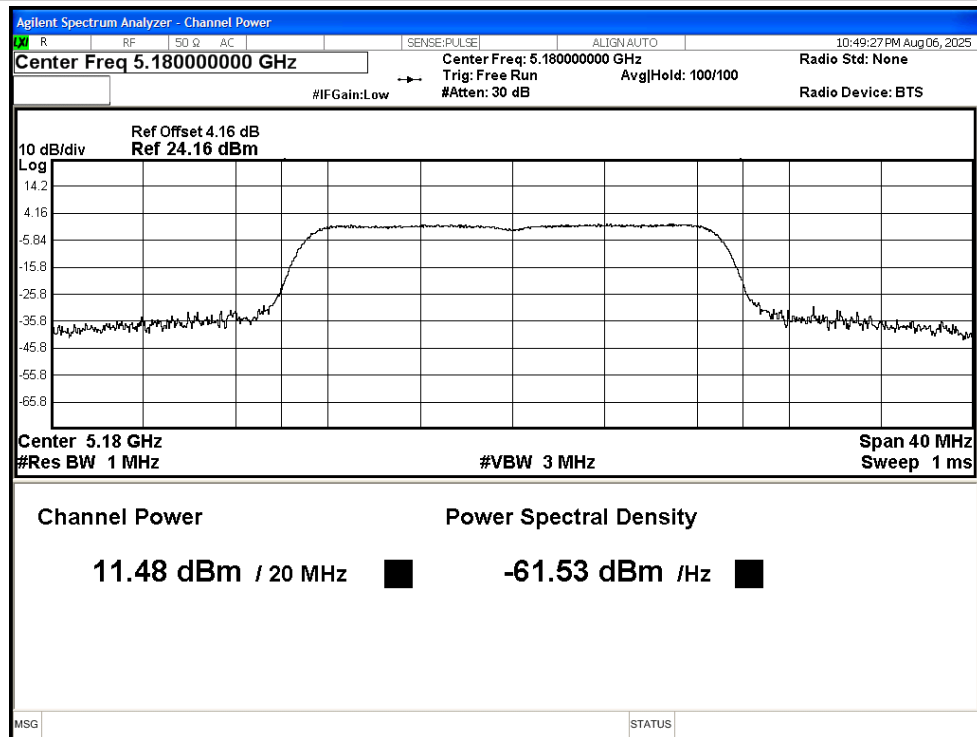
Power NVNT n40 5190MHz Ant1



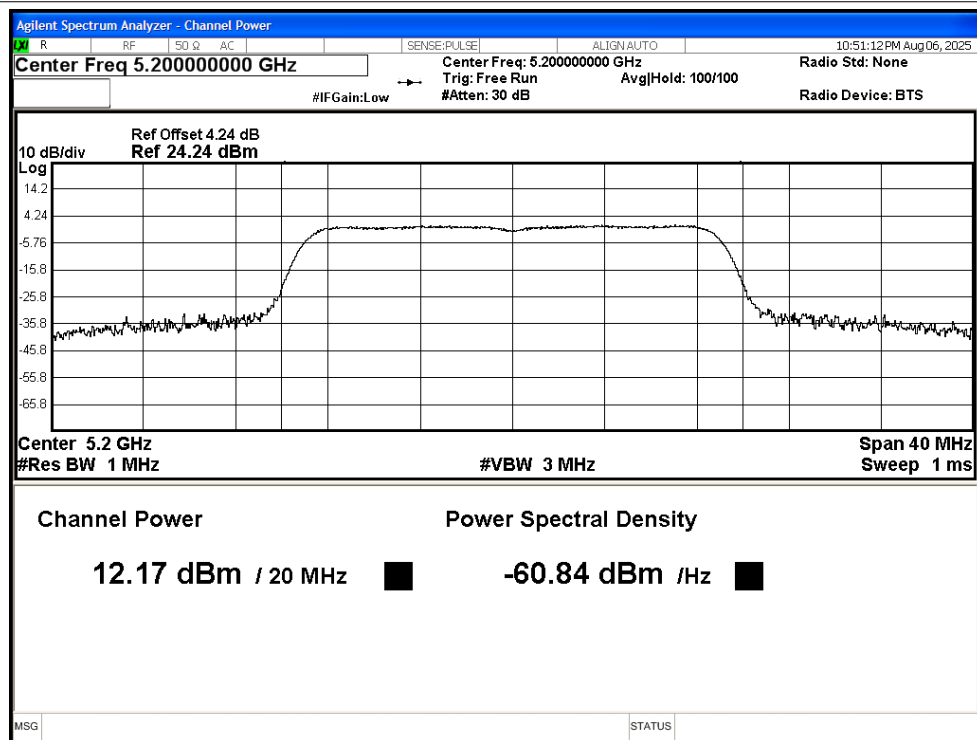
Power NVNT n40 5230MHz Ant1



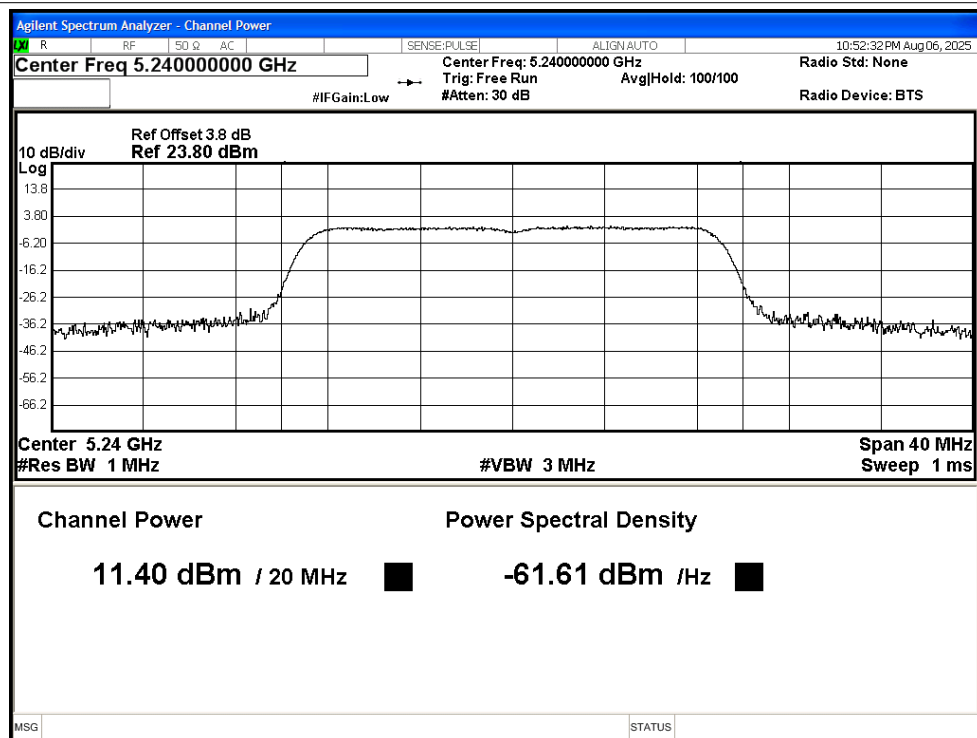
Power NVNT ac20 5180MHz Ant1



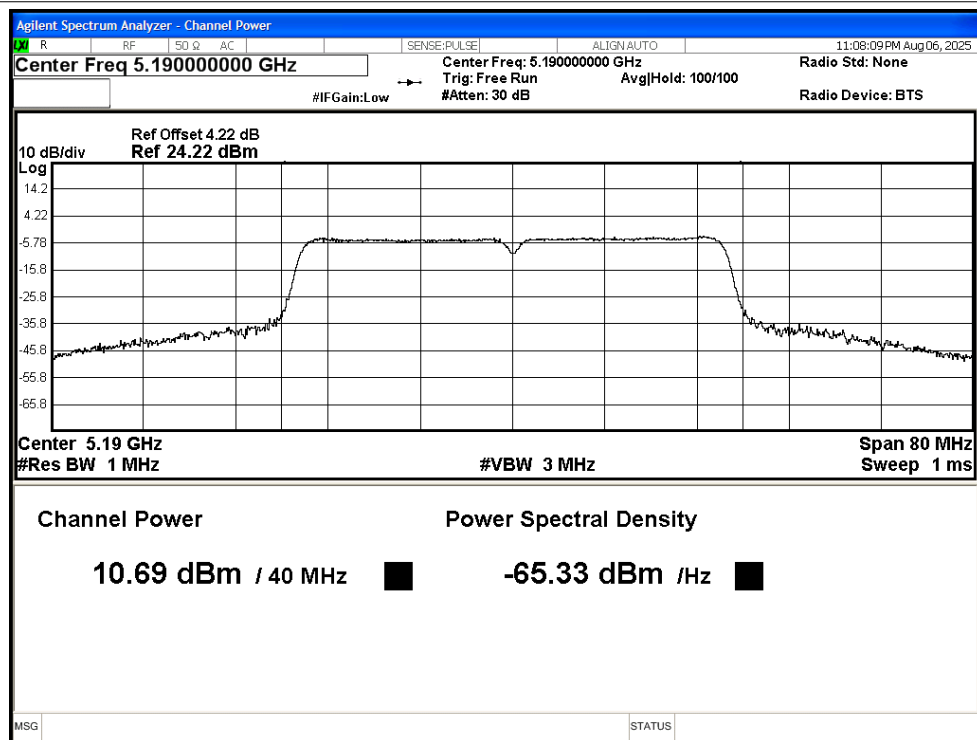
Power NVNT ac20 5200MHz Ant1



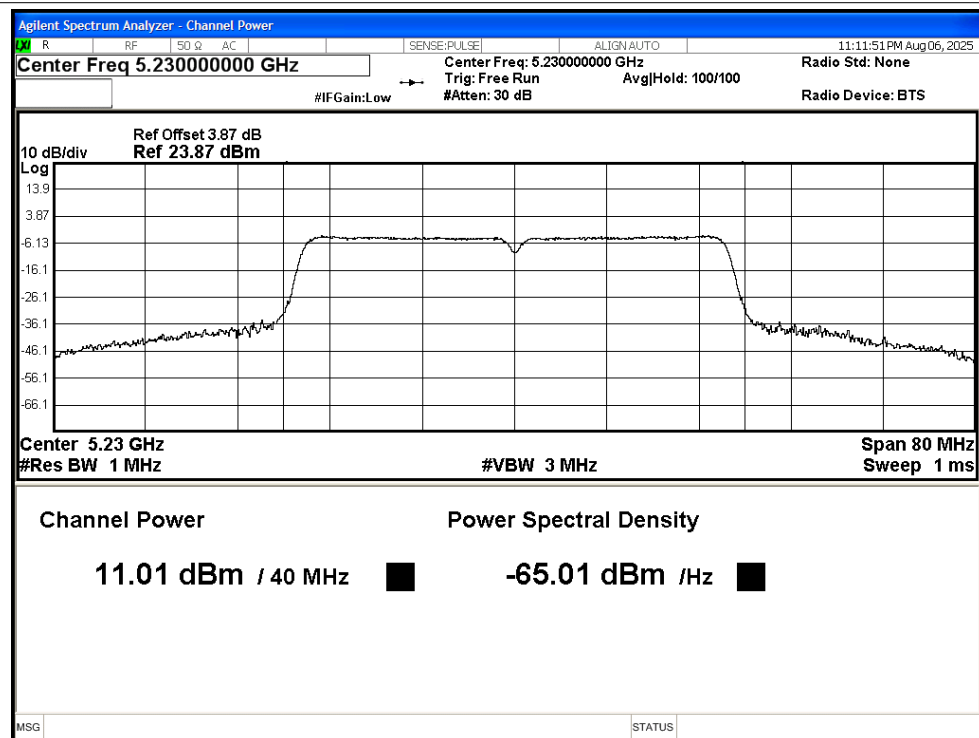
Power NVNT ac20 5240MHz Ant1



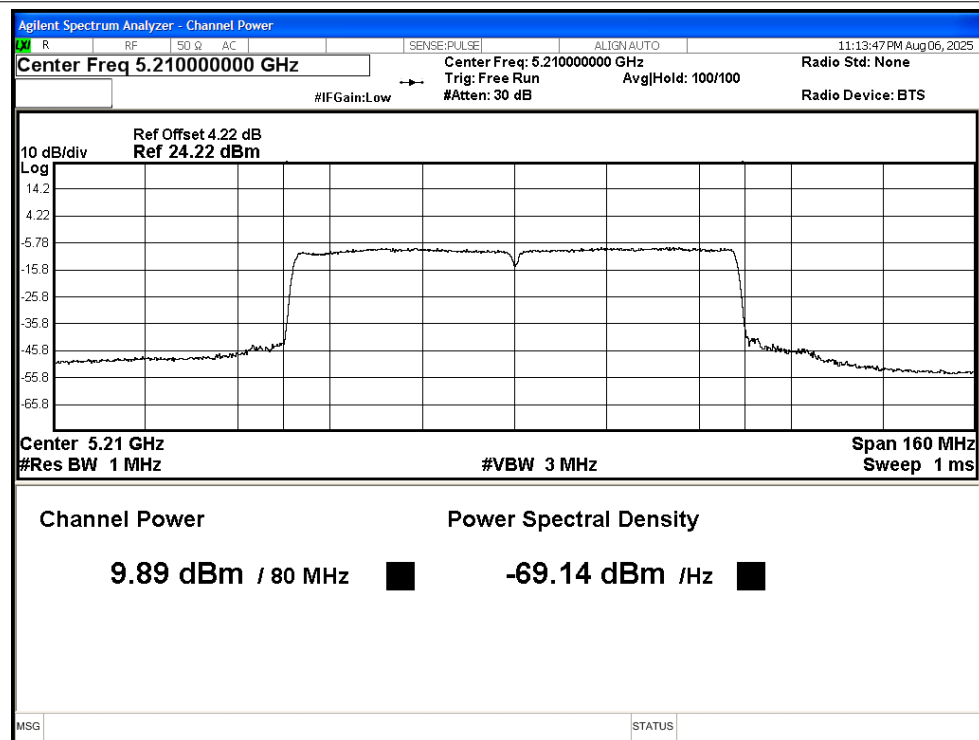
Power NVNT ac40 5190MHz Ant1



Power NVNT ac40 5230MHz Ant1



Power NVNT ac80 5210MHz Ant1

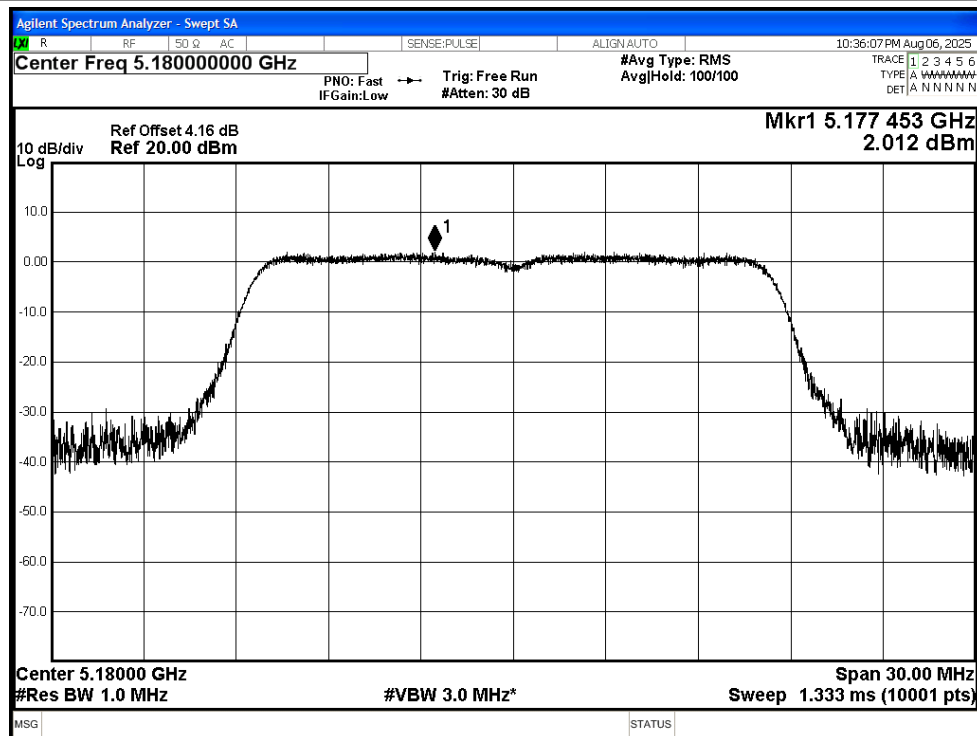


Maximum Power Spectral Density Level

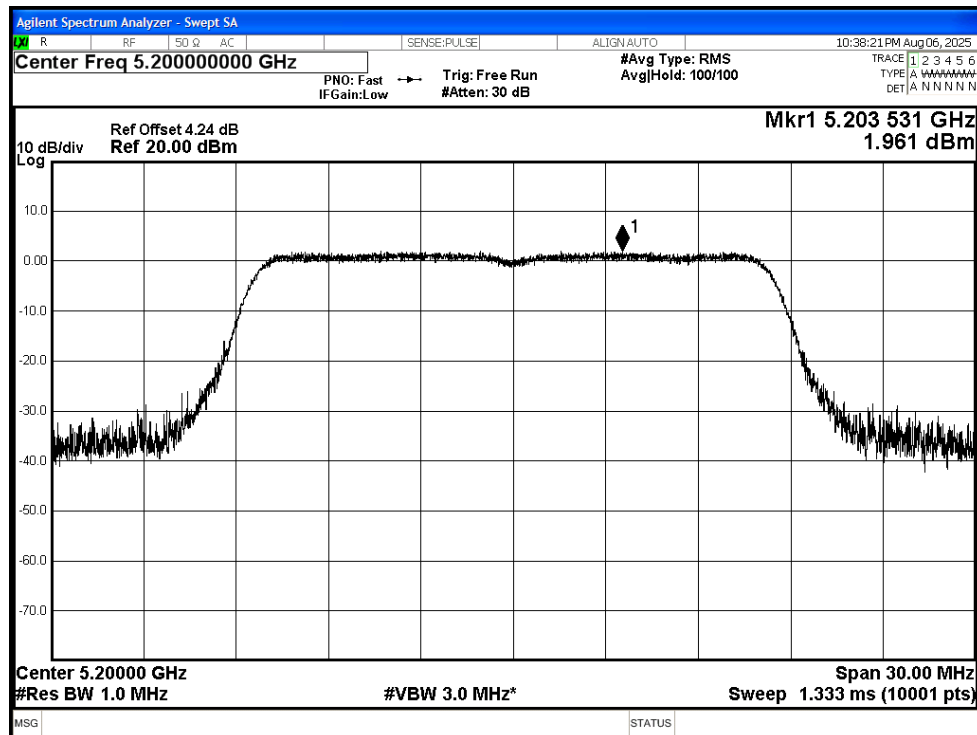
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	2.01	0.24	2.25	11	Pass
NVNT	a	5200	Ant1	1.96	0.24	2.2	11	Pass
NVNT	a	5240	Ant1	1.34	0.24	1.58	11	Pass
NVNT	n20	5180	Ant1	0.61	0.12	0.73	11	Pass
NVNT	n20	5200	Ant1	0.45	0.12	0.57	11	Pass
NVNT	n20	5240	Ant1	0.6	0.12	0.72	11	Pass
NVNT	n40	5190	Ant1	-2.47	0.24	-2.23	11	Pass
NVNT	n40	5230	Ant1	-3.12	0.23	-2.89	11	Pass
NVNT	ac20	5180	Ant1	0.81	0.12	0.93	11	Pass
NVNT	ac20	5200	Ant1	1.46	0.12	1.58	11	Pass
NVNT	ac20	5240	Ant1	0.68	0.12	0.8	11	Pass
NVNT	ac40	5190	Ant1	-2.89	0.24	-2.65	11	Pass
NVNT	ac40	5230	Ant1	-2.31	0.23	-2.08	11	Pass
NVNT	ac80	5210	Ant1	-6.41	0.47	-5.94	11	Pass

Test Graphs

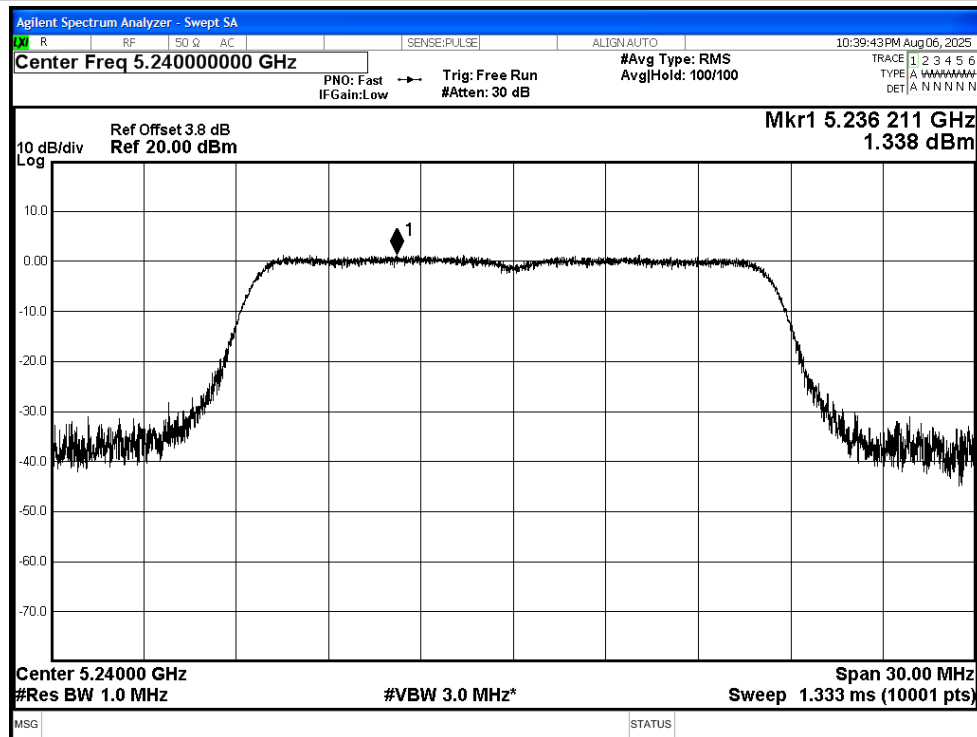
PSD NVNT a 5180MHz Ant1



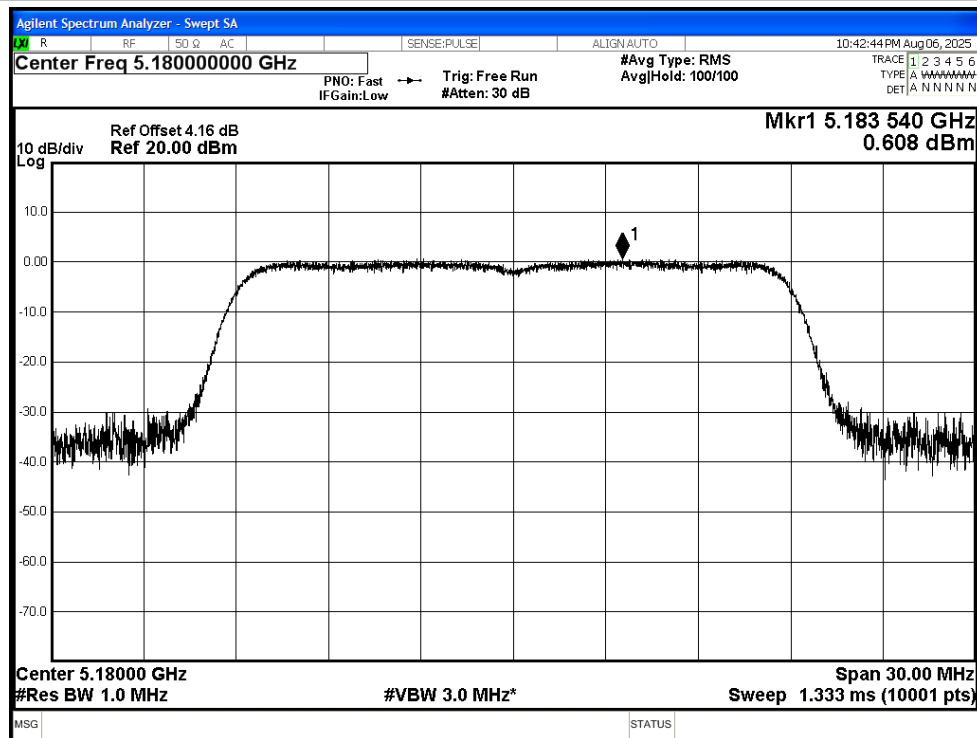
PSD NVNT a 5200MHz Ant1



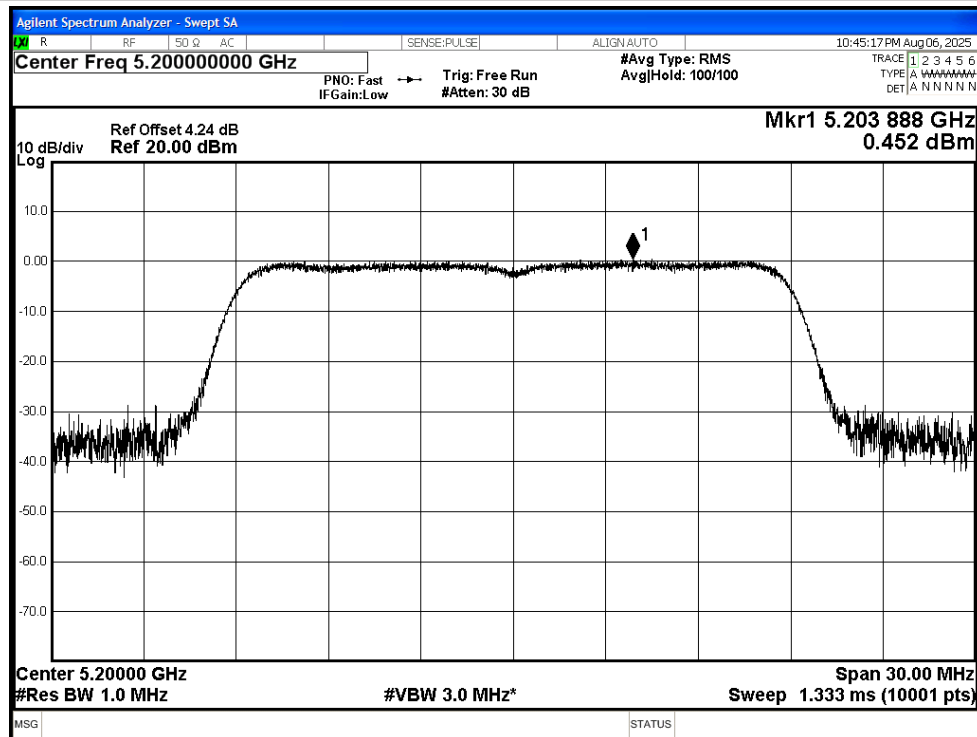
PSD NVNT a 5240MHz Ant1



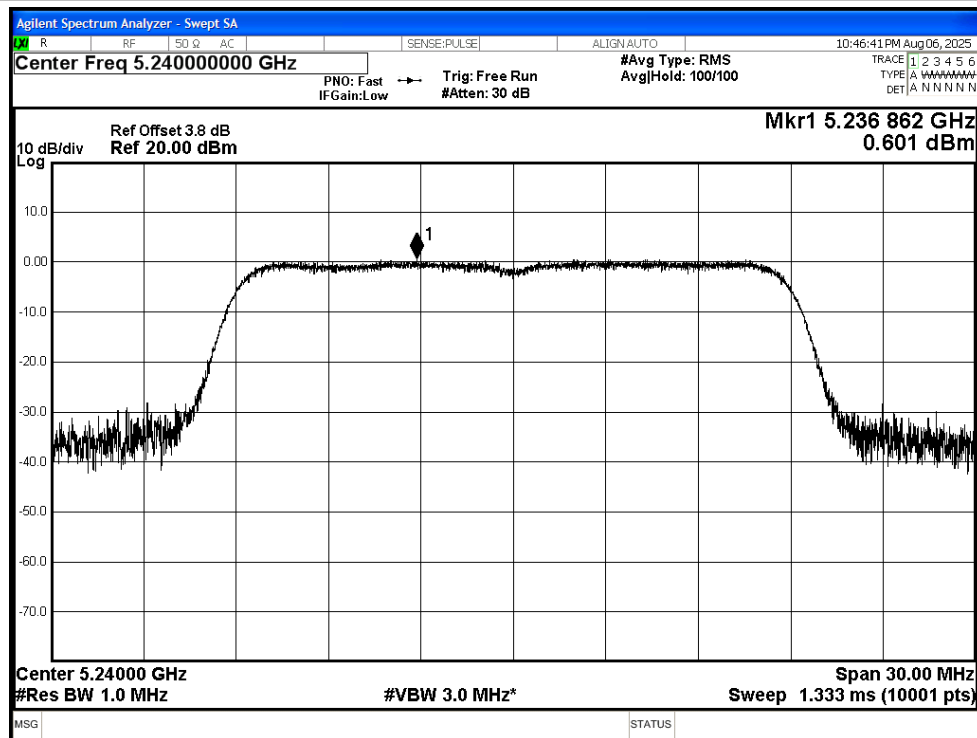
PSD NVNT n20 5180MHz Ant1



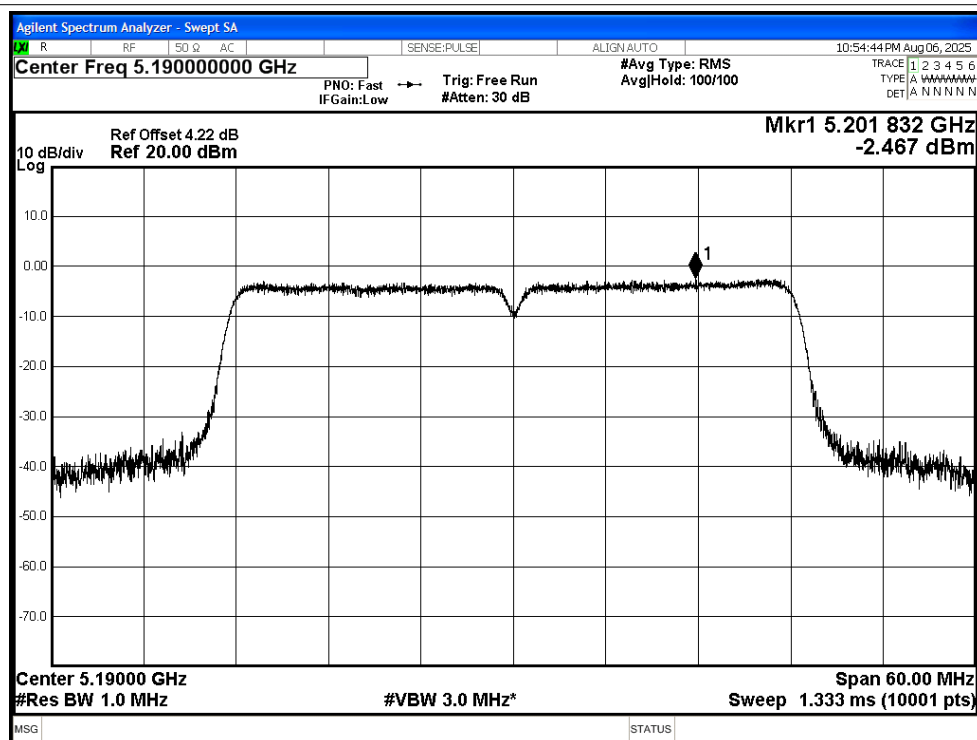
PSD NVNT n20 5200MHz Ant1



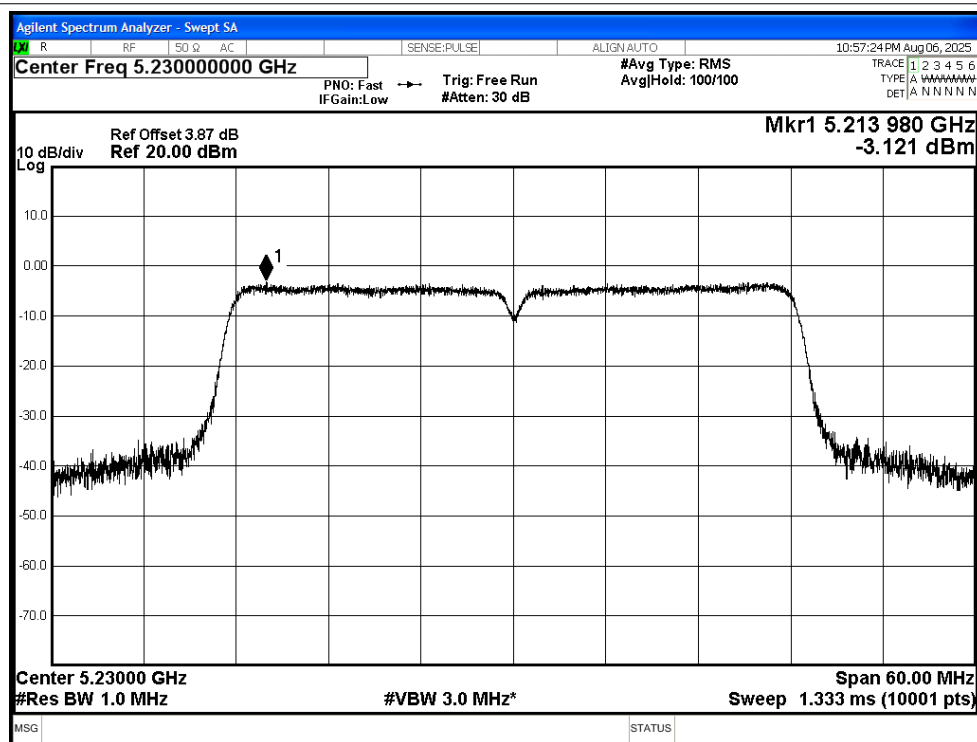
PSD NVNT n20 5240MHz Ant1



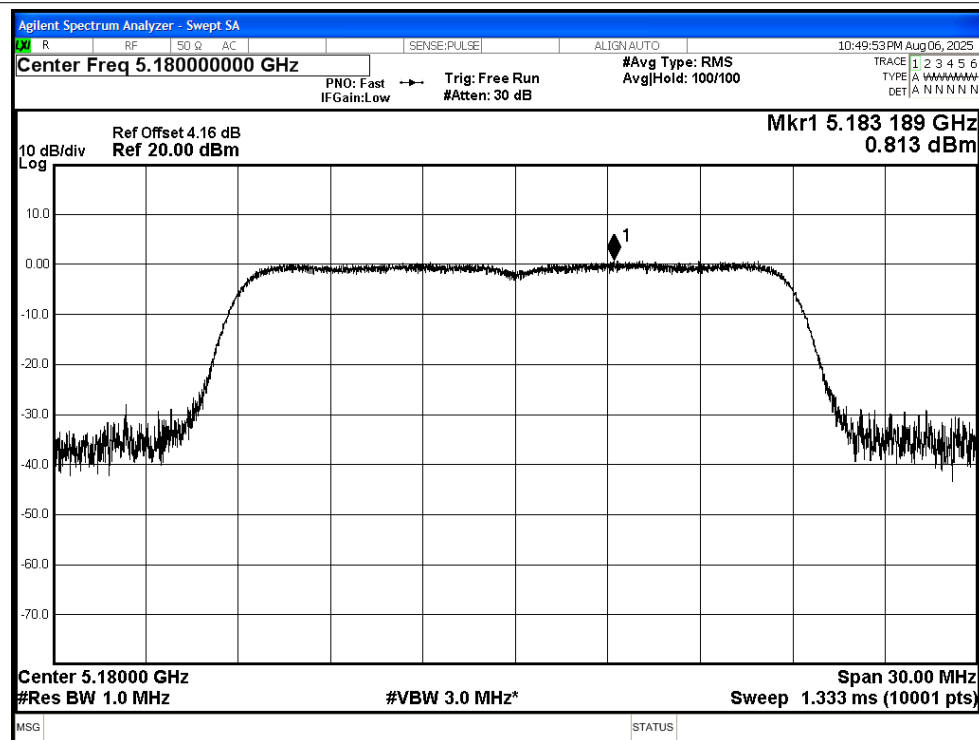
PSD NVNT n40 5190MHz Ant1



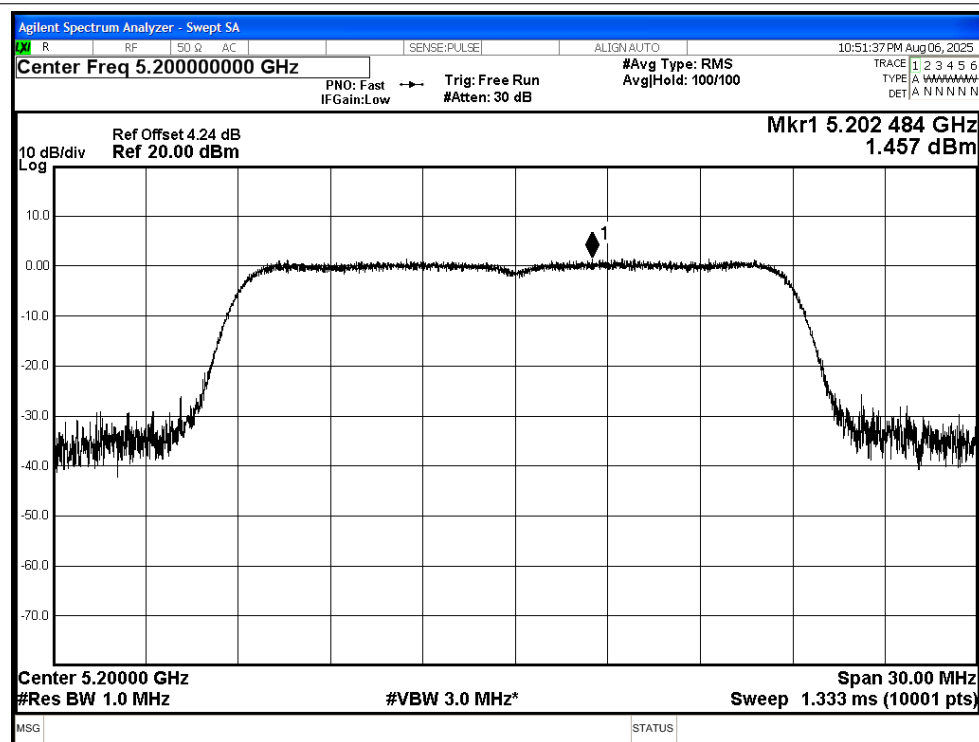
PSD NVNT n40 5230MHz Ant1



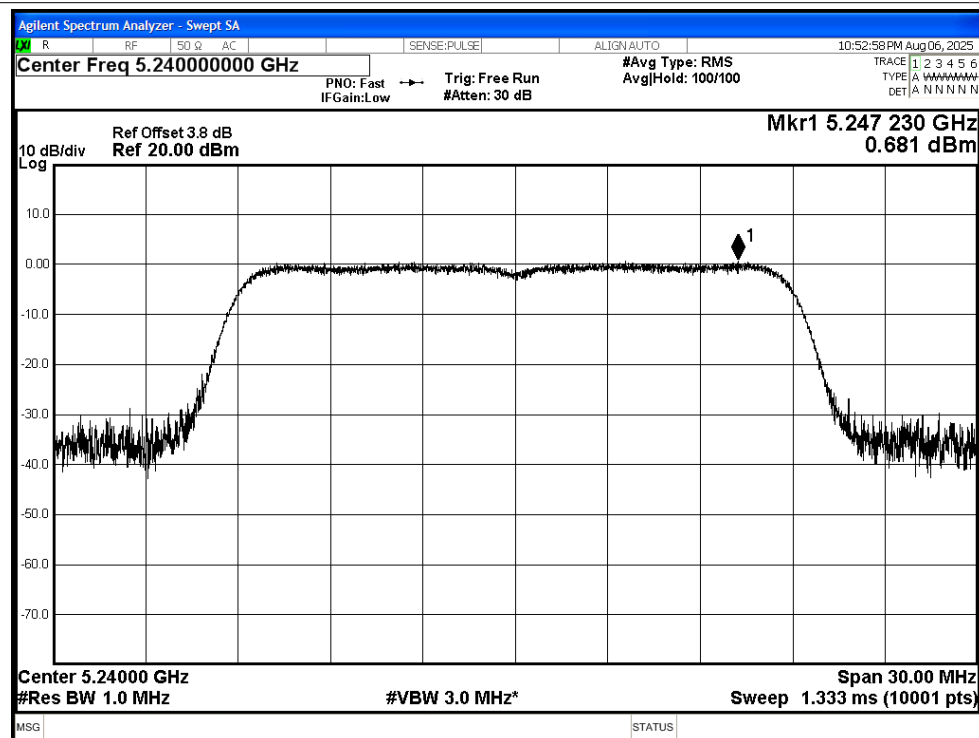
PSD NVNT ac20 5180MHz Ant1



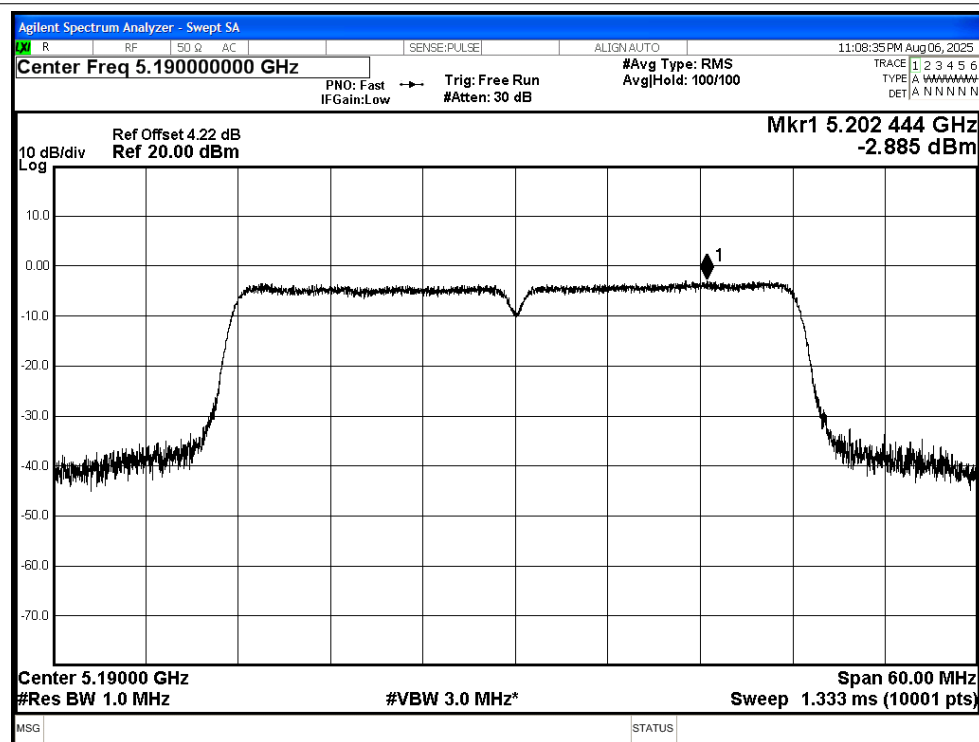
PSD NVNT ac20 5200MHz Ant1



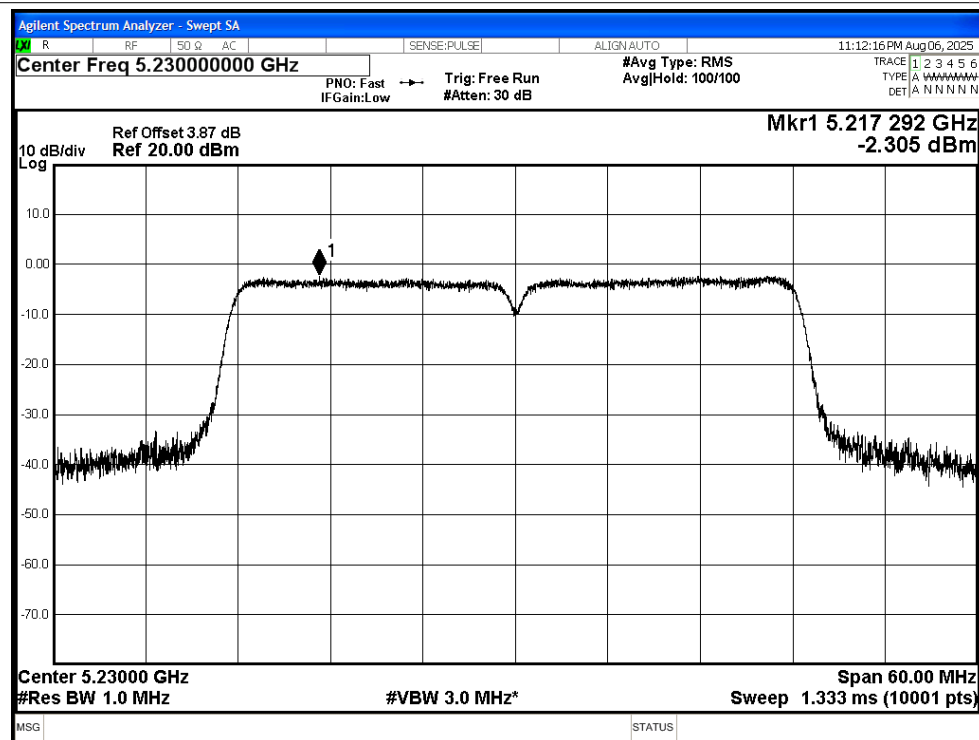
PSD NVNT ac20 5240MHz Ant1



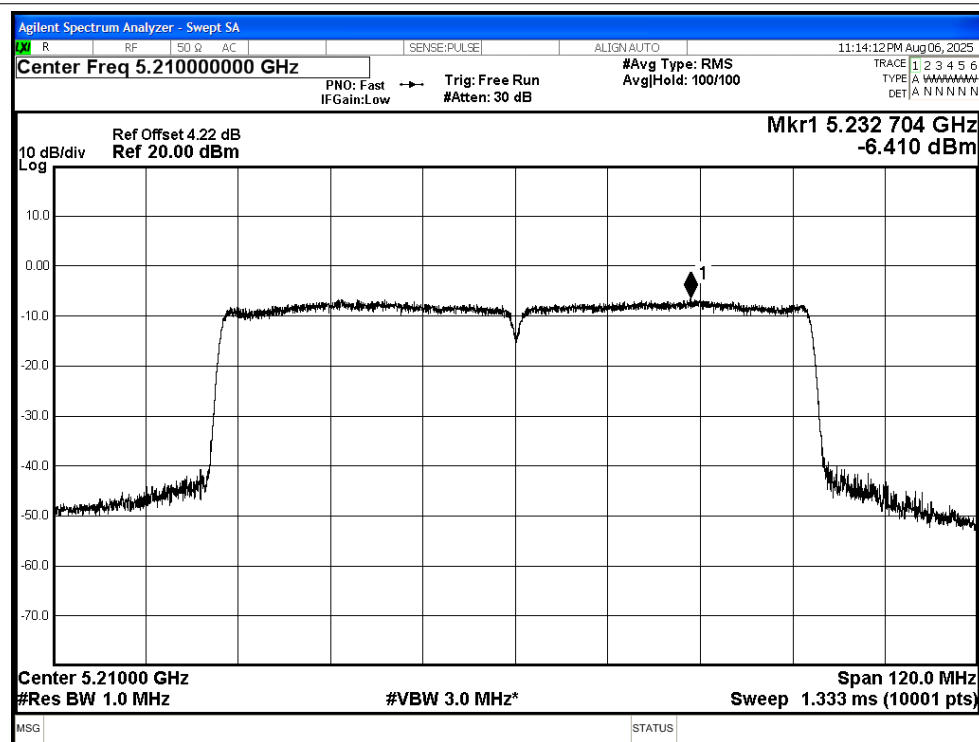
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1

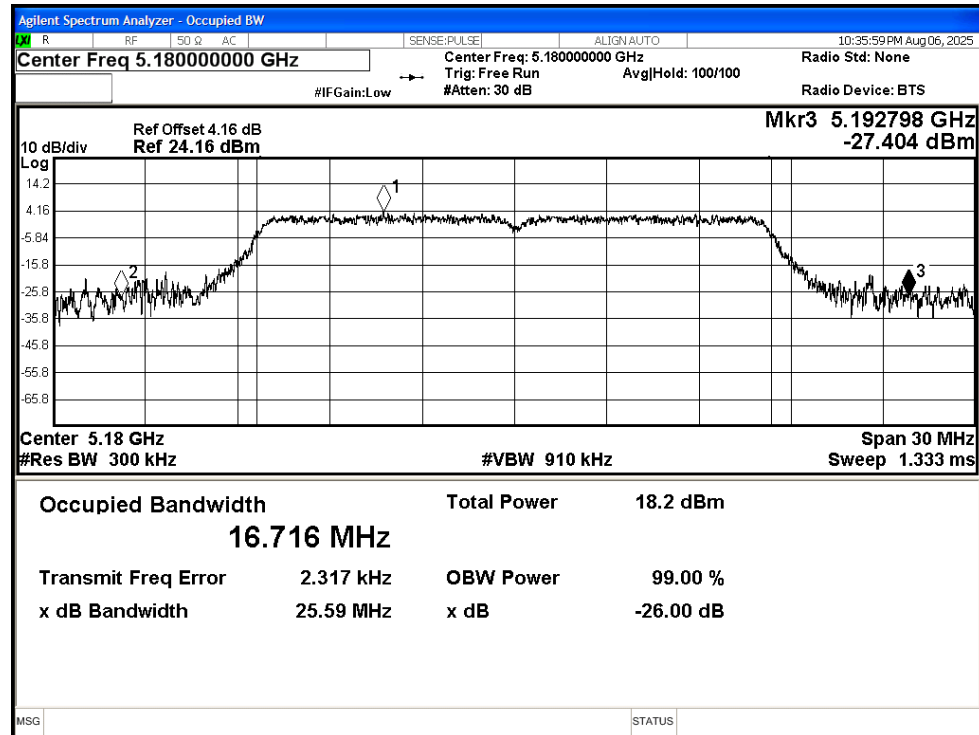


-26dB Bandwidth

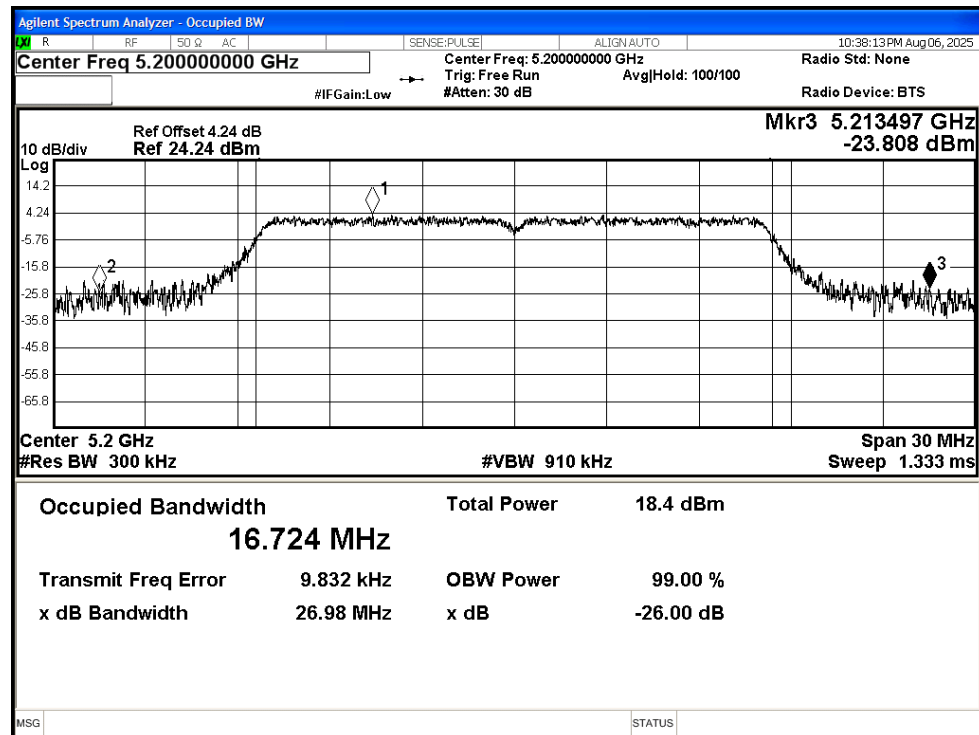
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	25.592	≥ 0.5	Pass
NVNT	a	5200	Ant1	26.975	≥ 0.5	Pass
NVNT	a	5240	Ant1	25.431	≥ 0.5	Pass
NVNT	n20	5180	Ant1	26.654	≥ 0.5	Pass
NVNT	n20	5200	Ant1	27.147	≥ 0.5	Pass
NVNT	n20	5240	Ant1	28.955	≥ 0.5	Pass
NVNT	n40	5190	Ant1	50.128	≥ 0.5	Pass
NVNT	n40	5230	Ant1	48.891	≥ 0.5	Pass
NVNT	ac20	5180	Ant1	27.253	≥ 0.5	Pass
NVNT	ac20	5200	Ant1	28.531	≥ 0.5	Pass
NVNT	ac20	5240	Ant1	28.521	≥ 0.5	Pass
NVNT	ac40	5190	Ant1	47.804	≥ 0.5	Pass
NVNT	ac40	5230	Ant1	47.419	≥ 0.5	Pass
NVNT	ac80	5210	Ant1	83.053	≥ 0.5	Pass

Test Graphs

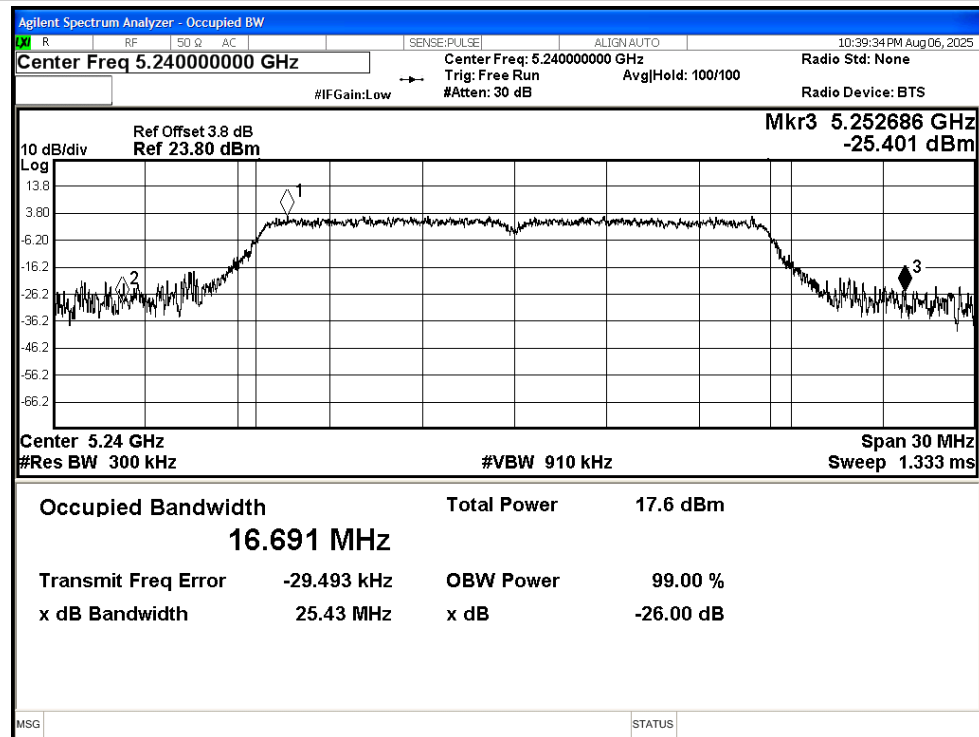
-26dB Bandwidth NVNT a 5180MHz Ant1



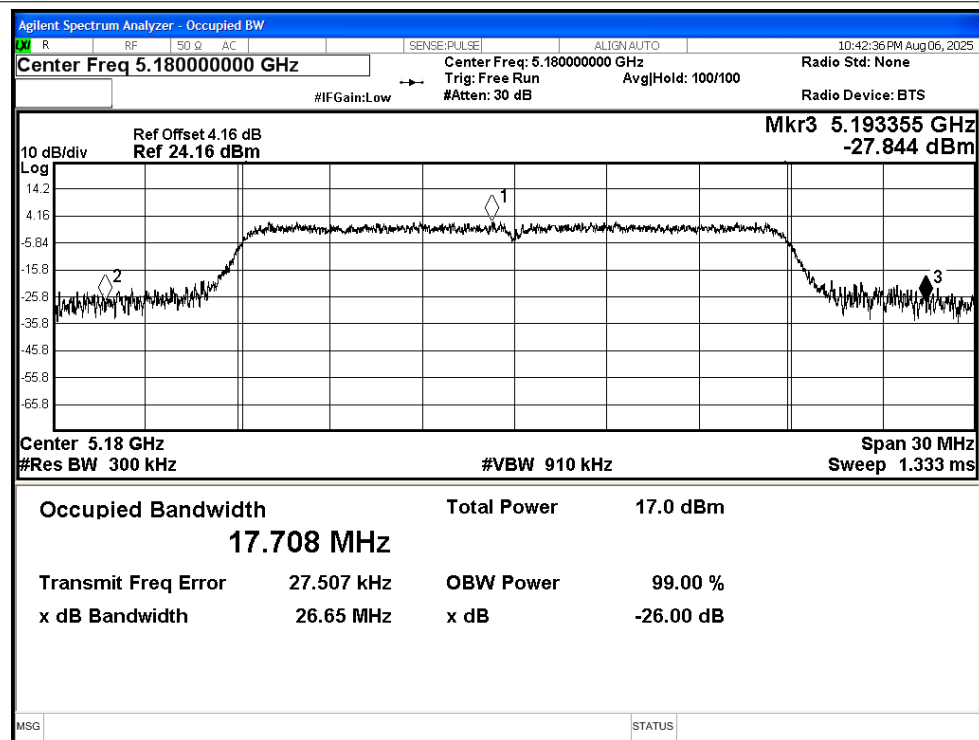
-26dB Bandwidth NVNT a 5200MHz Ant1



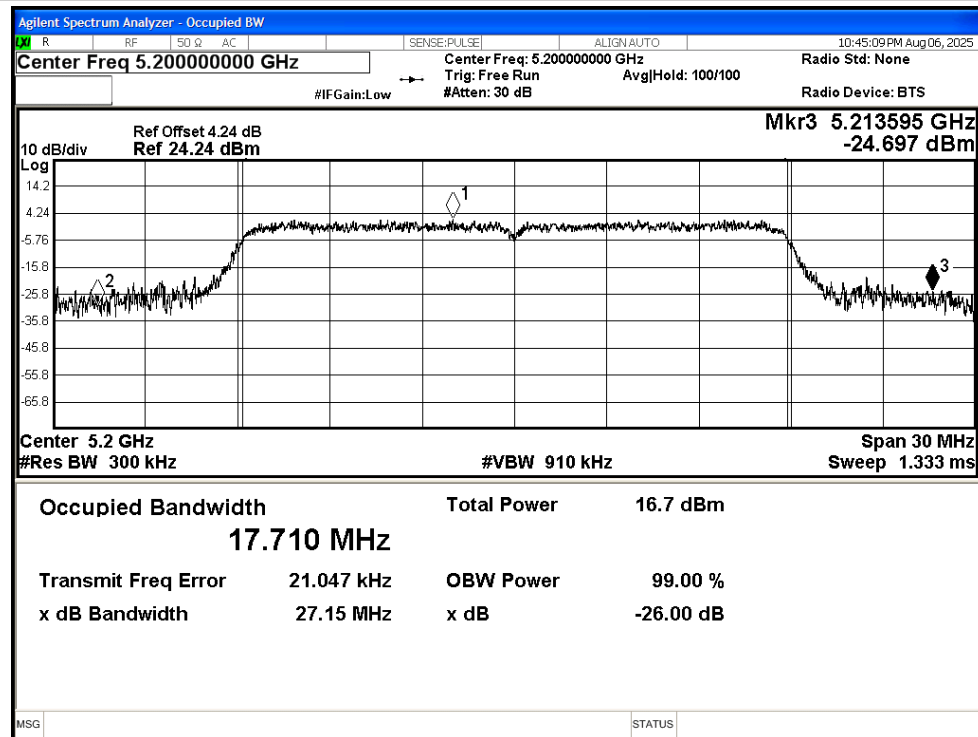
-26dB Bandwidth NVNT a 5240MHz Ant1



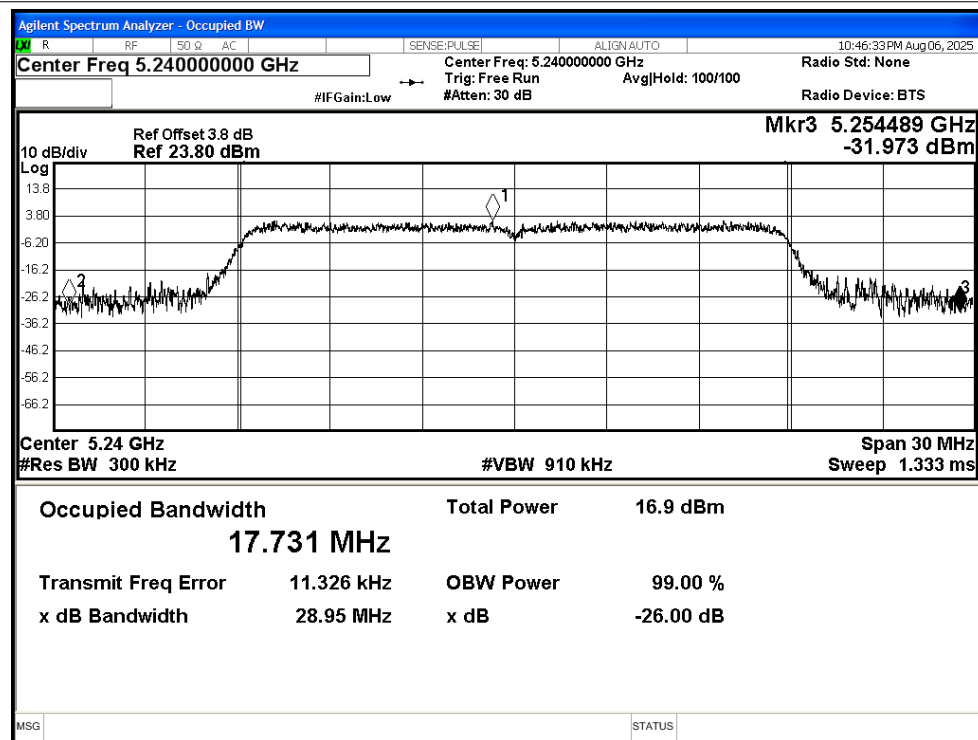
-26dB Bandwidth NVNT n20 5180MHz Ant1



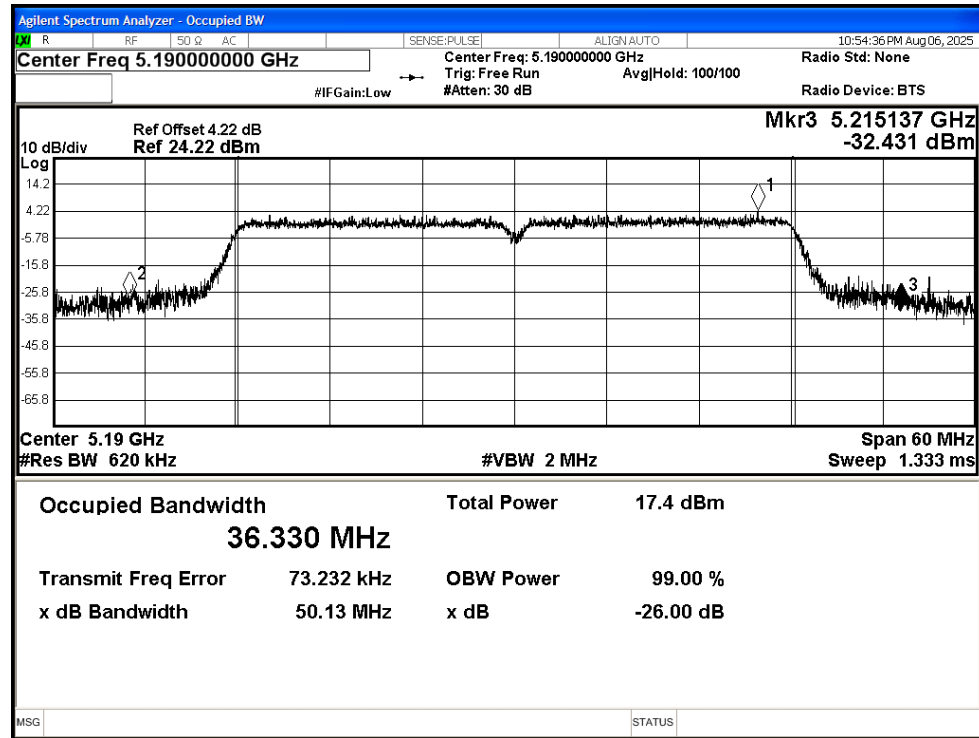
-26dB Bandwidth NVNT n20 5200MHz Ant1



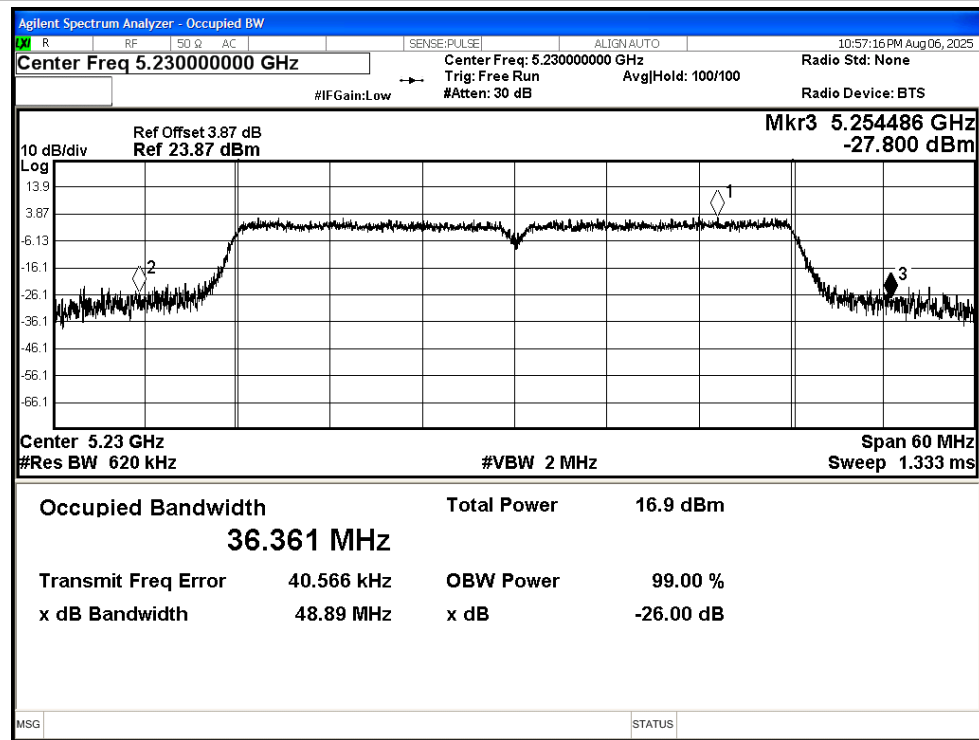
-26dB Bandwidth NVNT n20 5240MHz Ant1



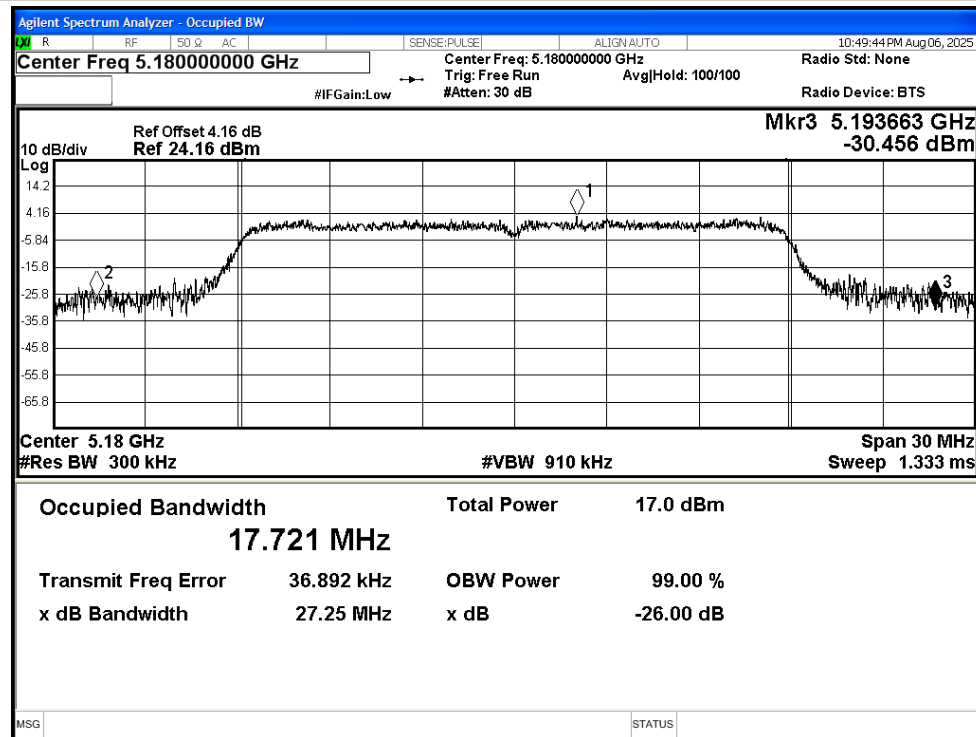
-26dB Bandwidth NVNT n40 5190MHz Ant1



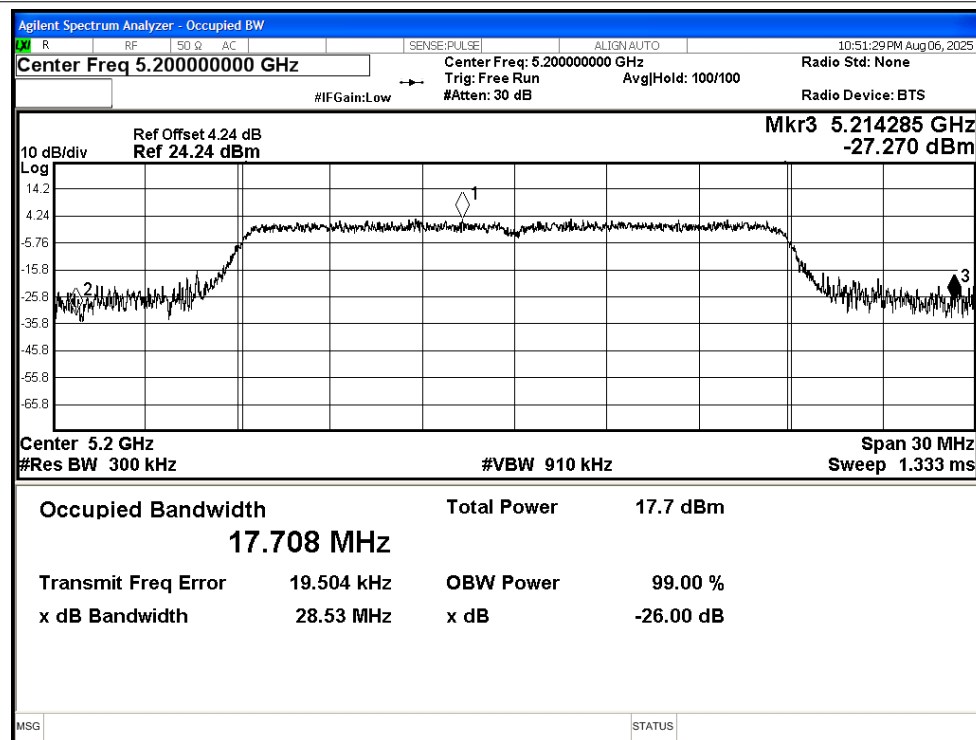
-26dB Bandwidth NVNT n40 5230MHz Ant1



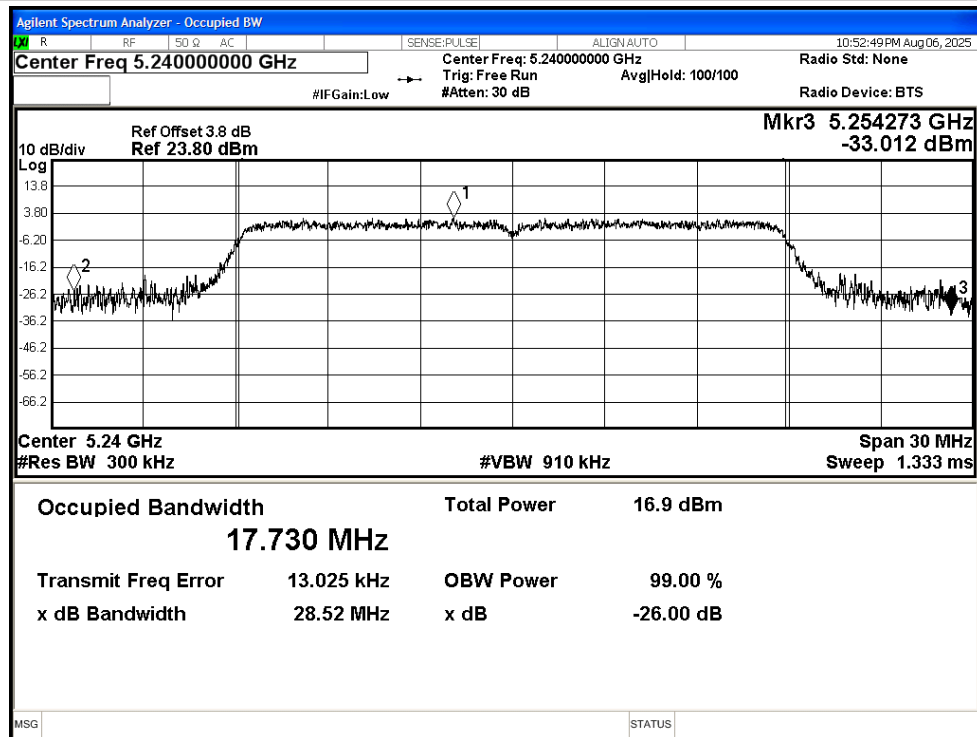
-26dB Bandwidth NVNT ac20 5180MHz Ant1



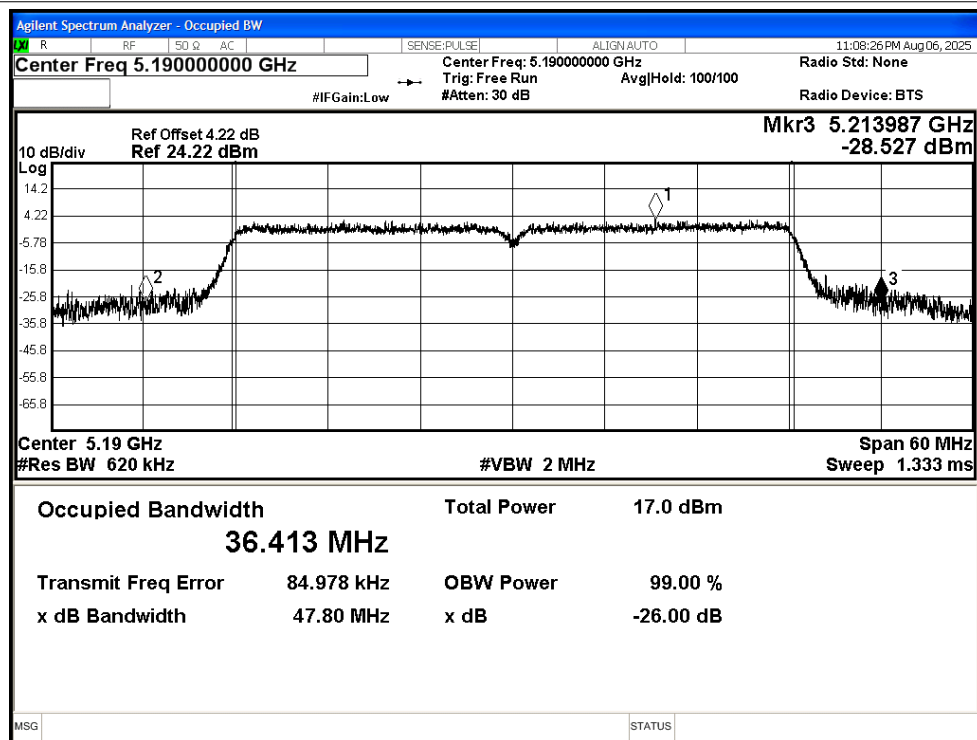
-26dB Bandwidth NVNT ac20 5200MHz Ant1



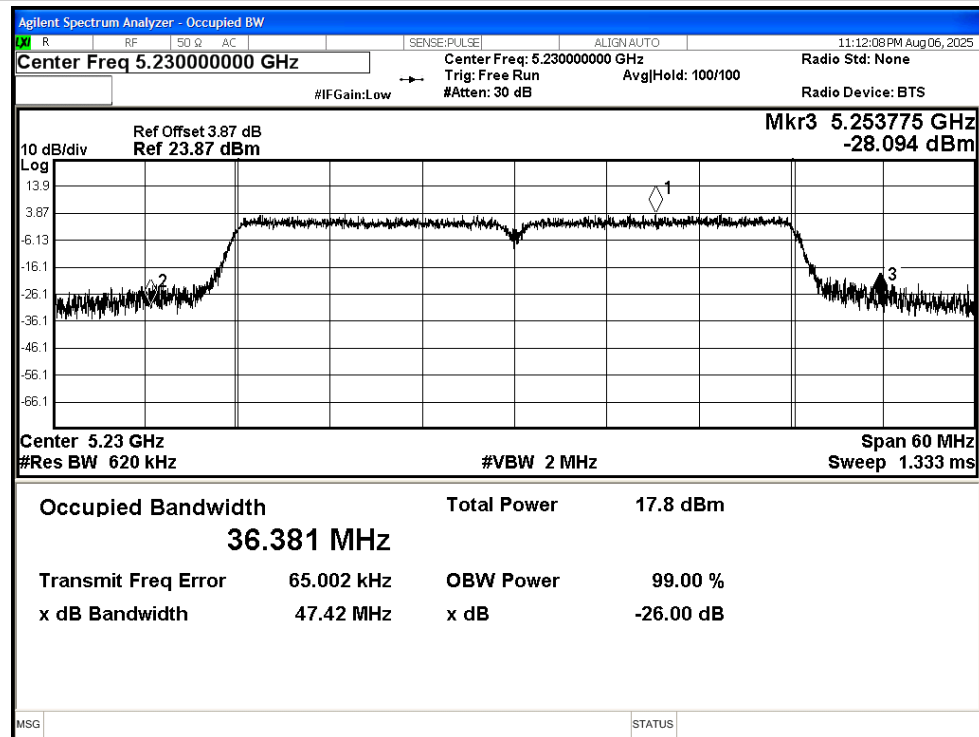
-26dB Bandwidth NVNT ac20 5240MHz Ant1



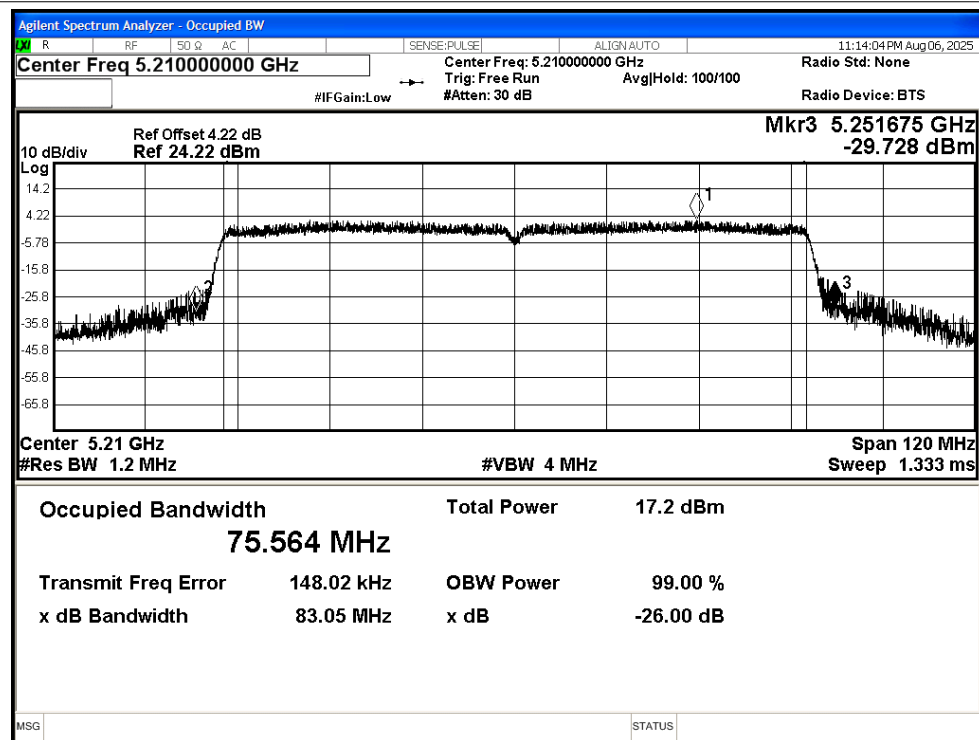
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1

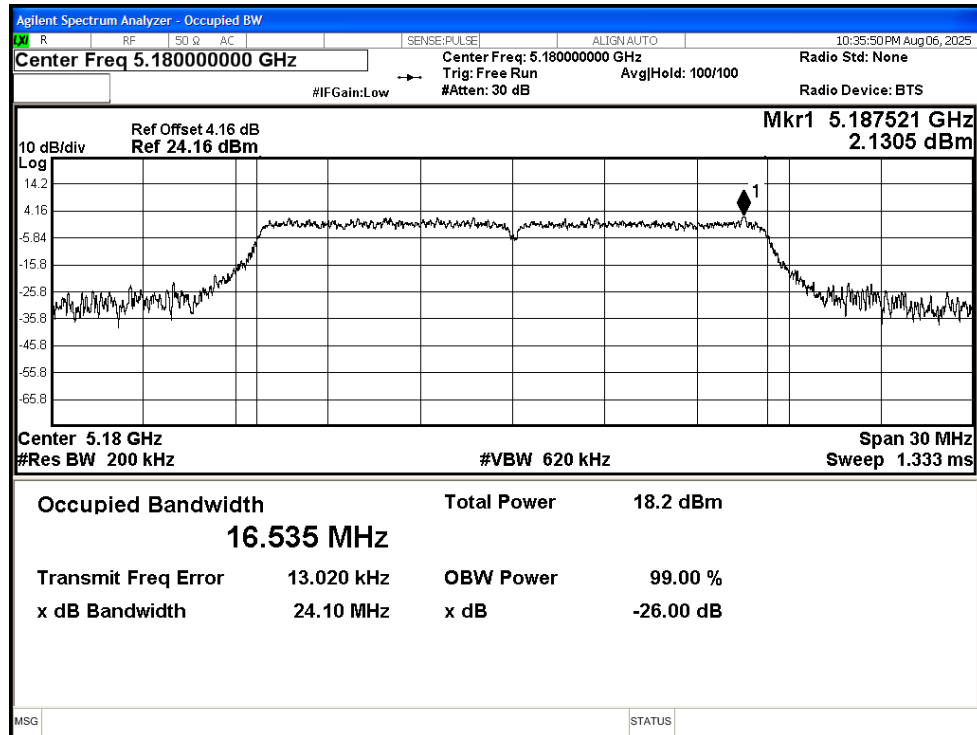


Occupied Channel Bandwidth

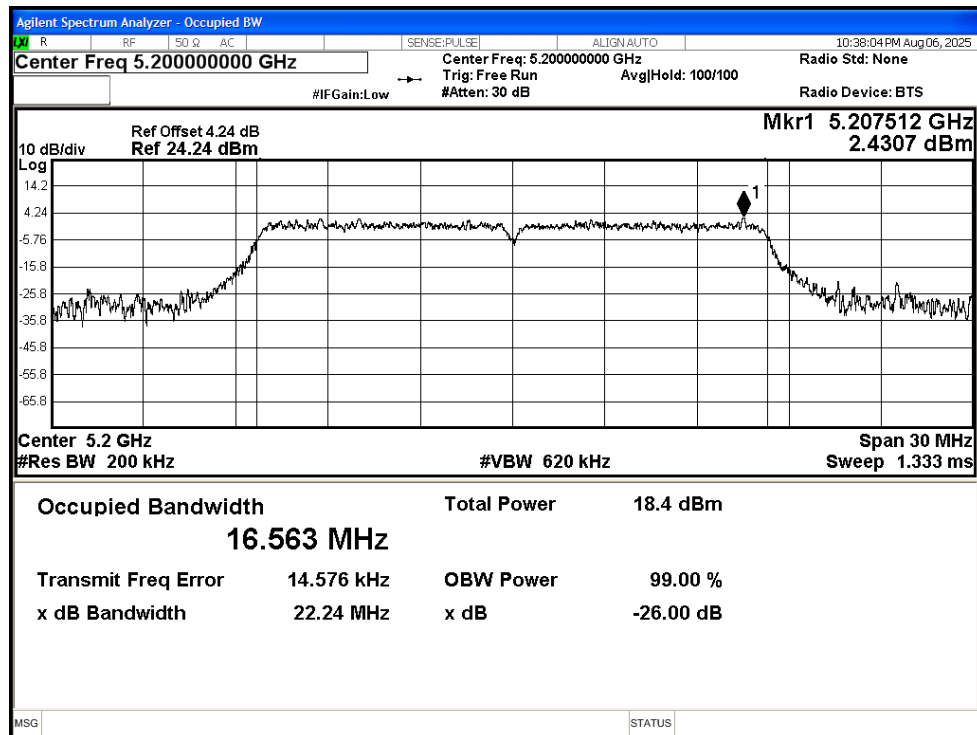
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.535
NVNT	a	5200	Ant1	16.563
NVNT	a	5240	Ant1	16.51
NVNT	n20	5180	Ant1	17.616
NVNT	n20	5200	Ant1	17.627
NVNT	n20	5240	Ant1	17.635
NVNT	n40	5190	Ant1	36.295
NVNT	n40	5230	Ant1	36.309
NVNT	ac20	5180	Ant1	17.64
NVNT	ac20	5200	Ant1	17.631
NVNT	ac20	5240	Ant1	17.639
NVNT	ac40	5190	Ant1	36.319
NVNT	ac40	5230	Ant1	36.295
NVNT	ac80	5210	Ant1	75.426

Test Graphs

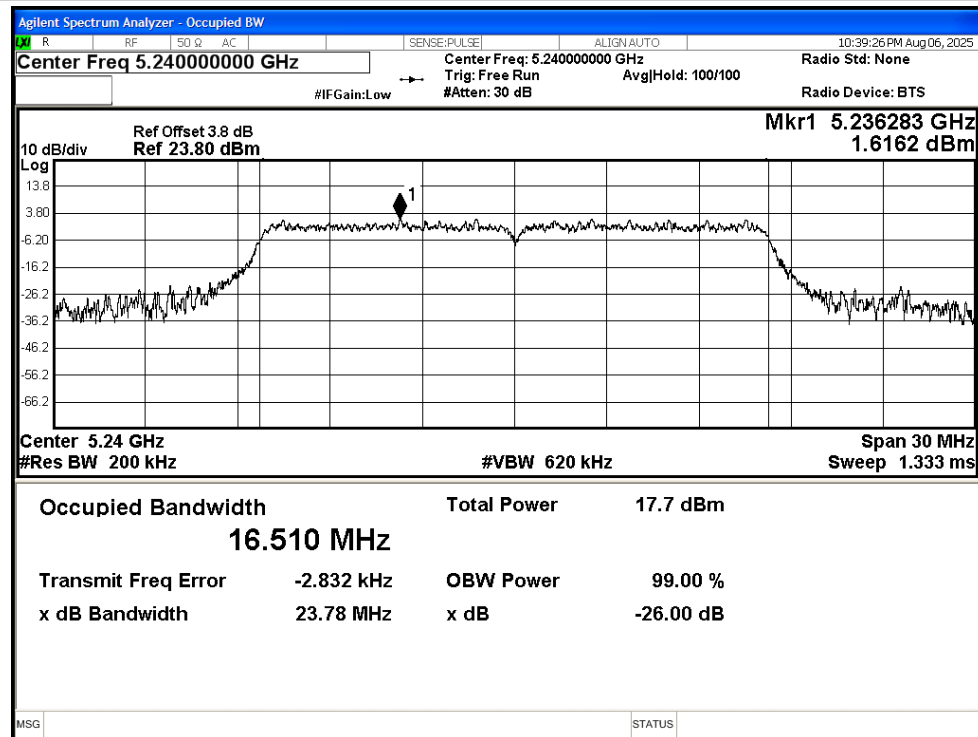
OBW NVNT a 5180MHz Ant1



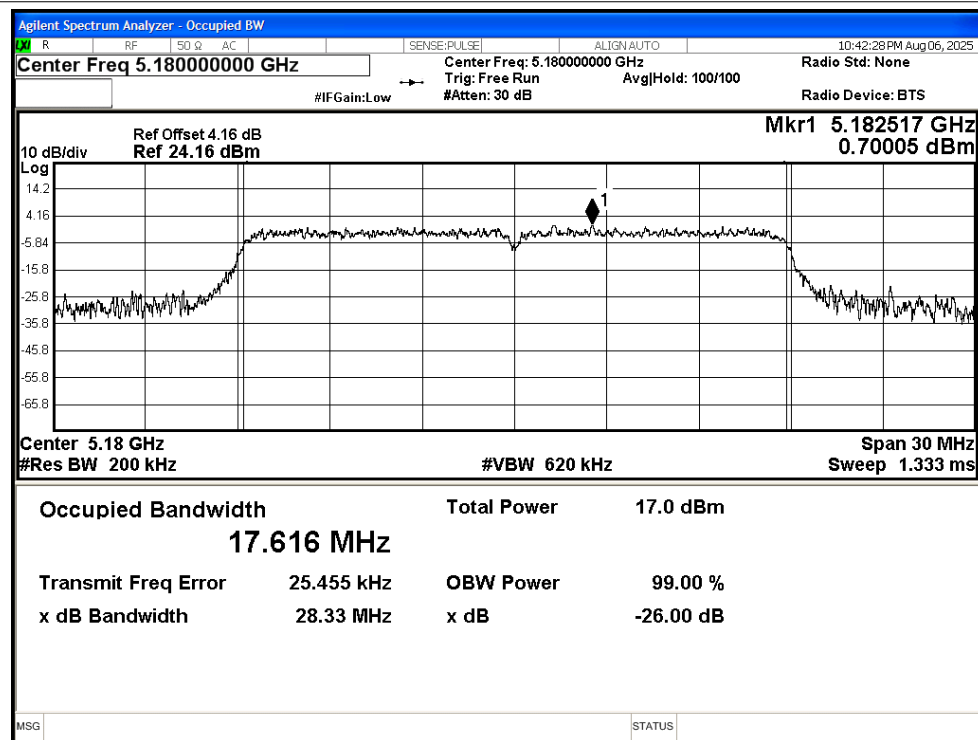
OBW NVNT a 5200MHz Ant1



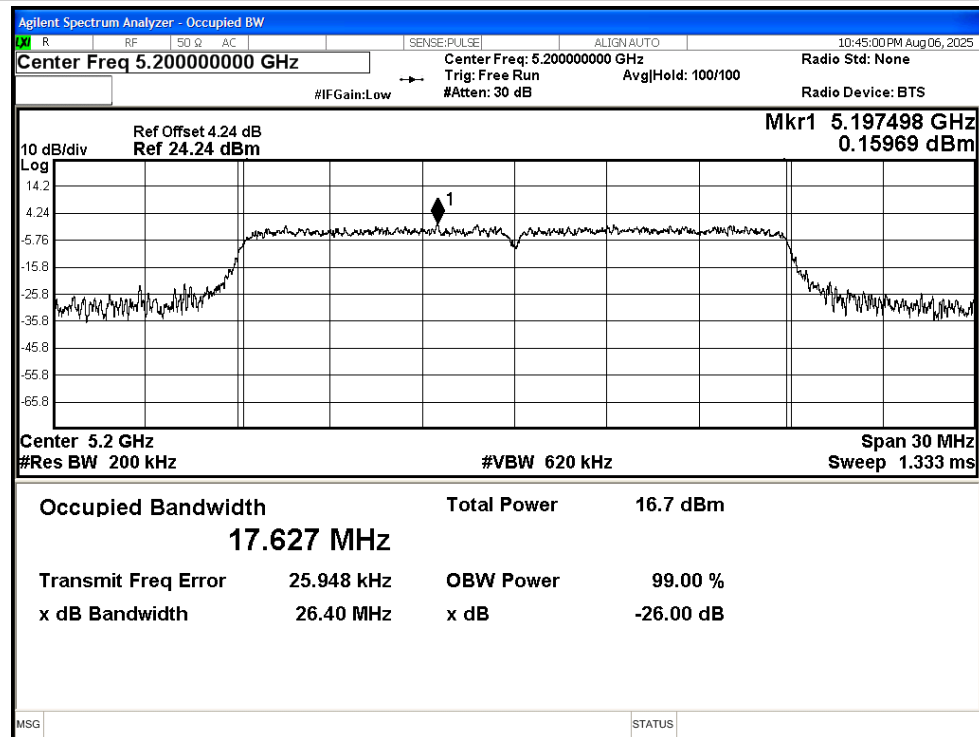
OBW NVNT a 5240MHz Ant1



OBW NVNT n20 5180MHz Ant1



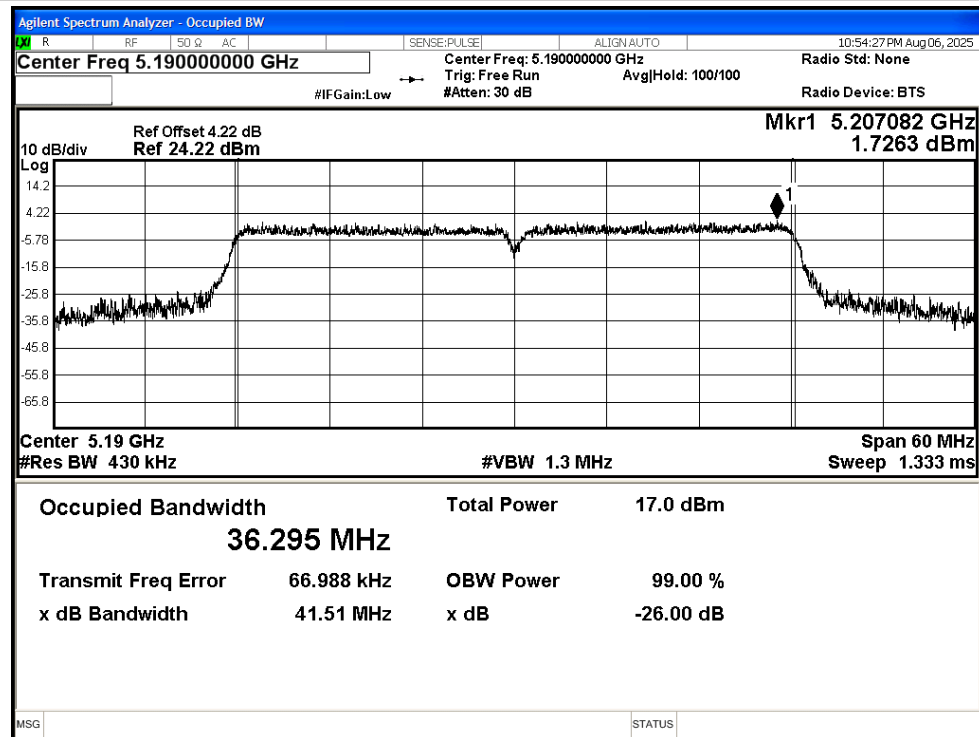
OBW NVNT n20 5200MHz Ant1



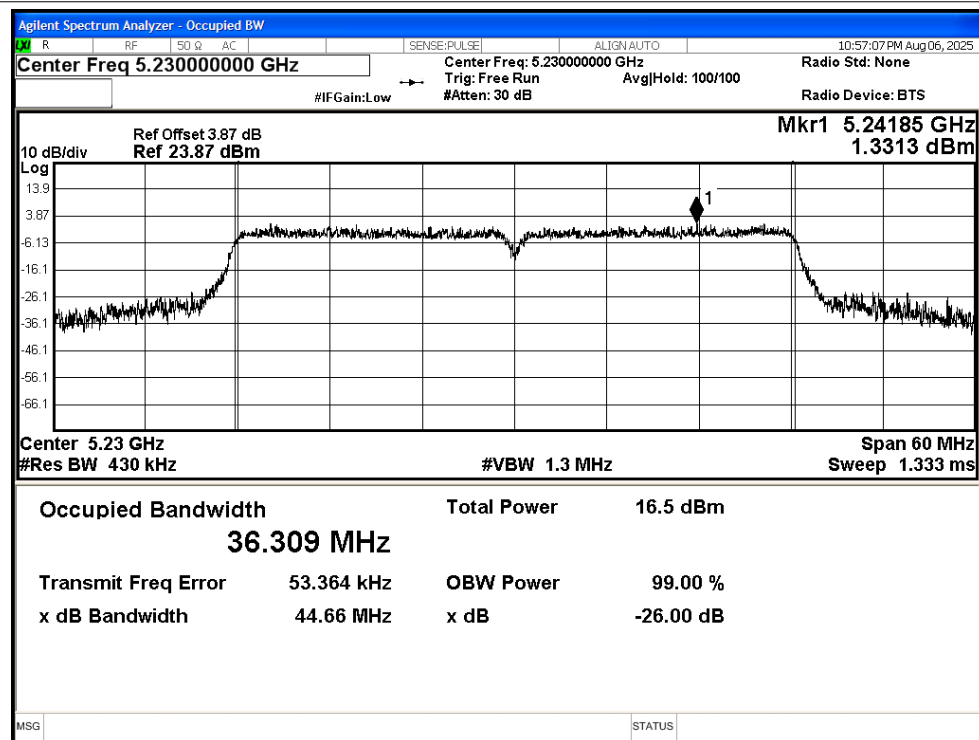
OBW NVNT n20 5240MHz Ant1



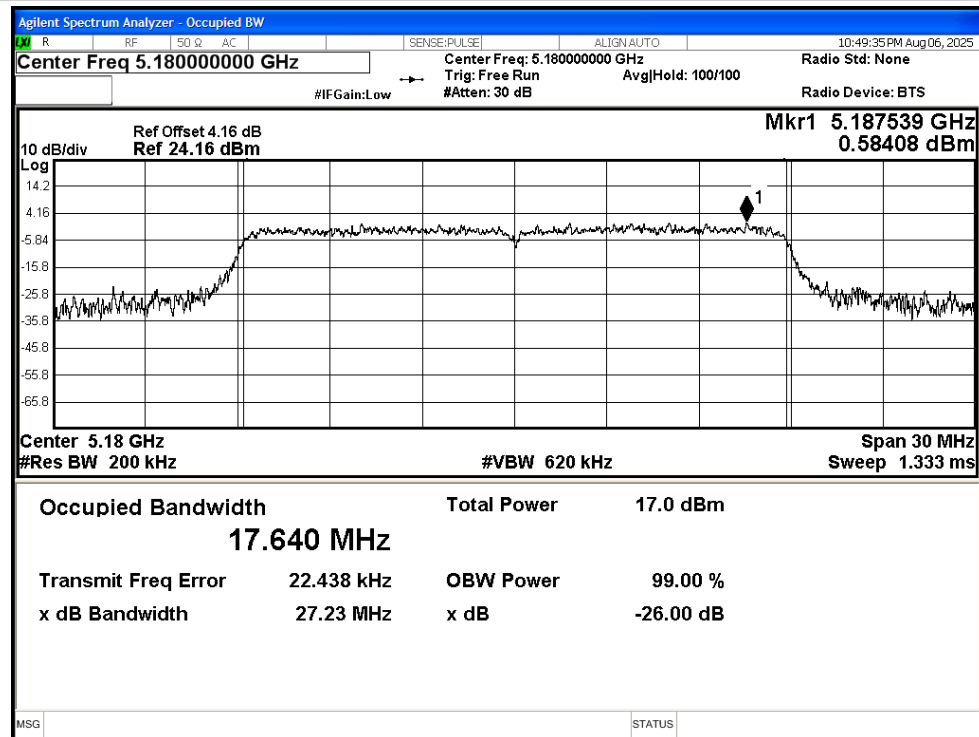
OBW NVNT n40 5190MHz Ant1



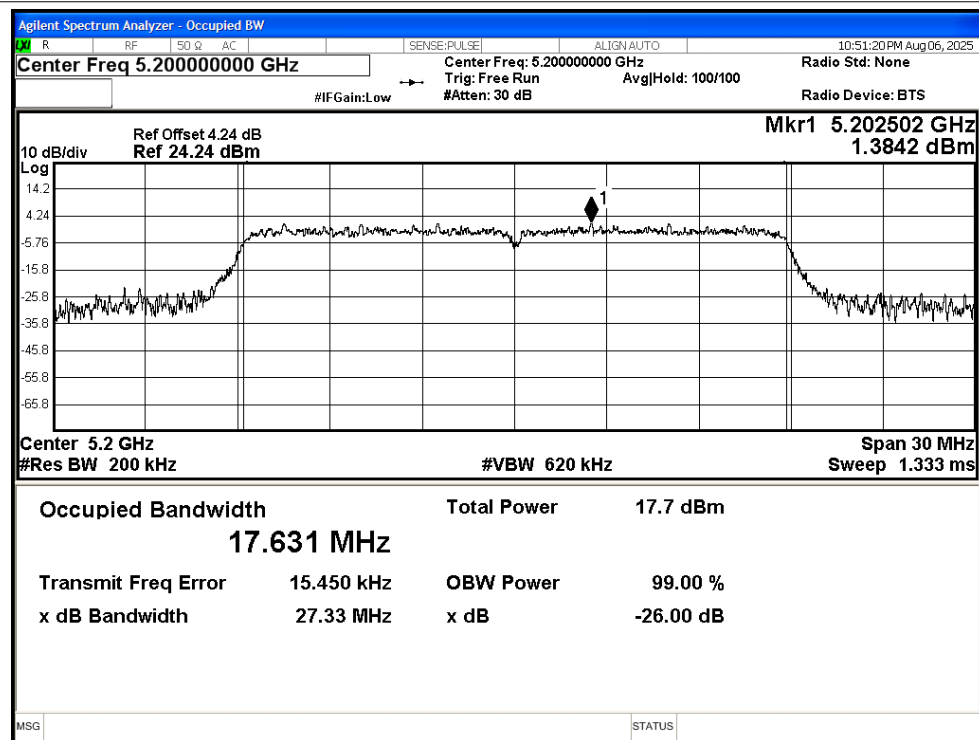
OBW NVNT n40 5230MHz Ant1



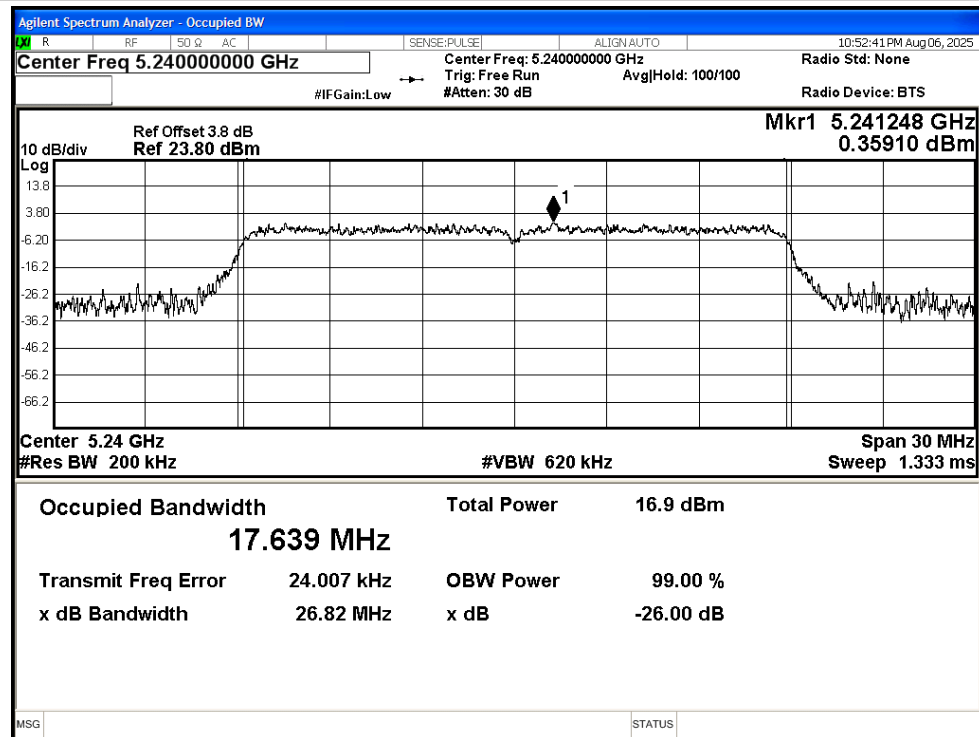
OBW NVNT ac20 5180MHz Ant1



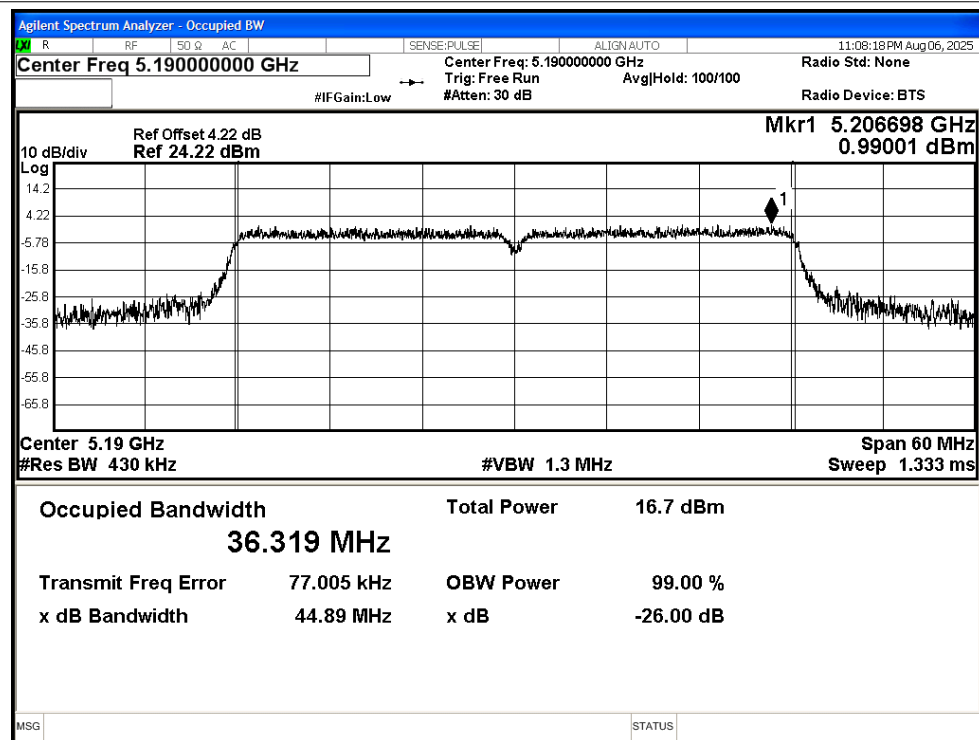
OBW NVNT ac20 5200MHz Ant1



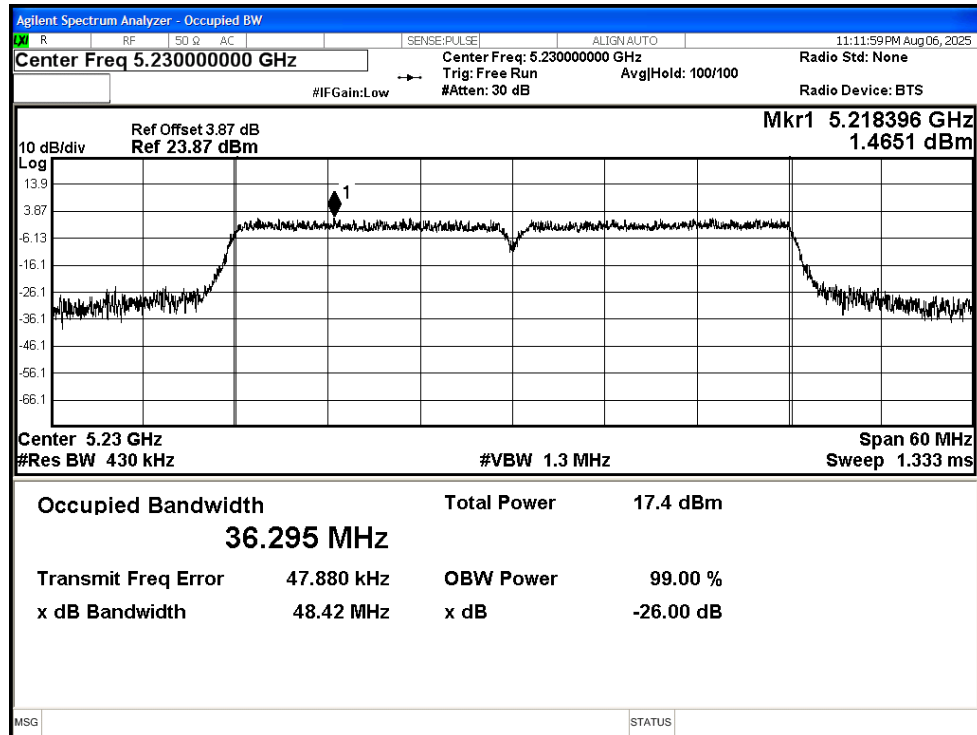
OBW NVNT ac20 5240MHz Ant1



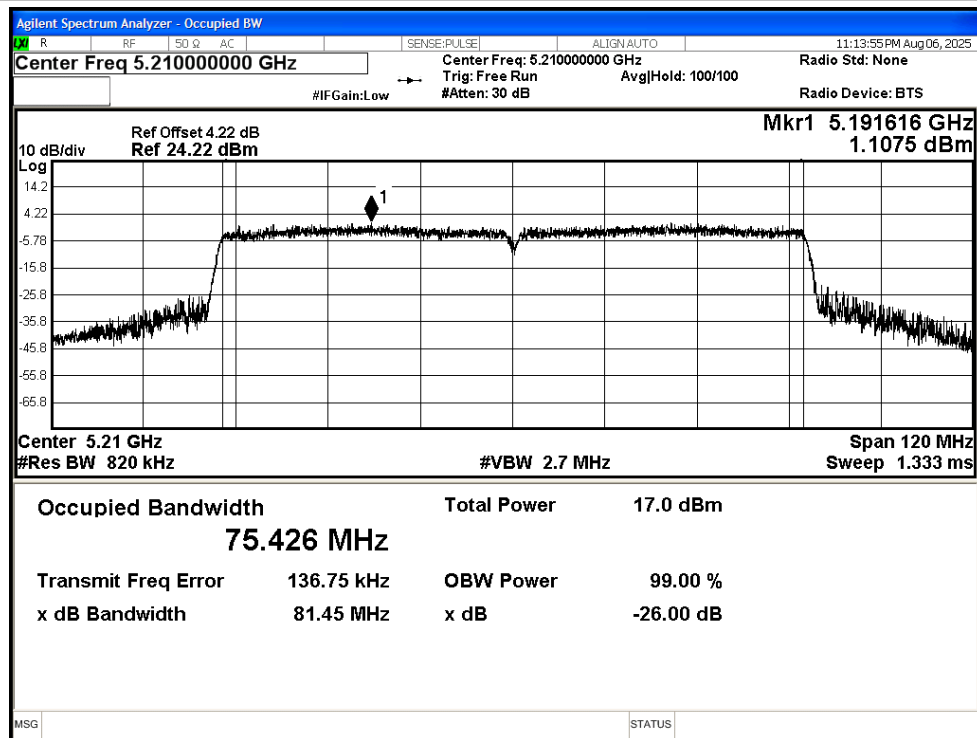
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



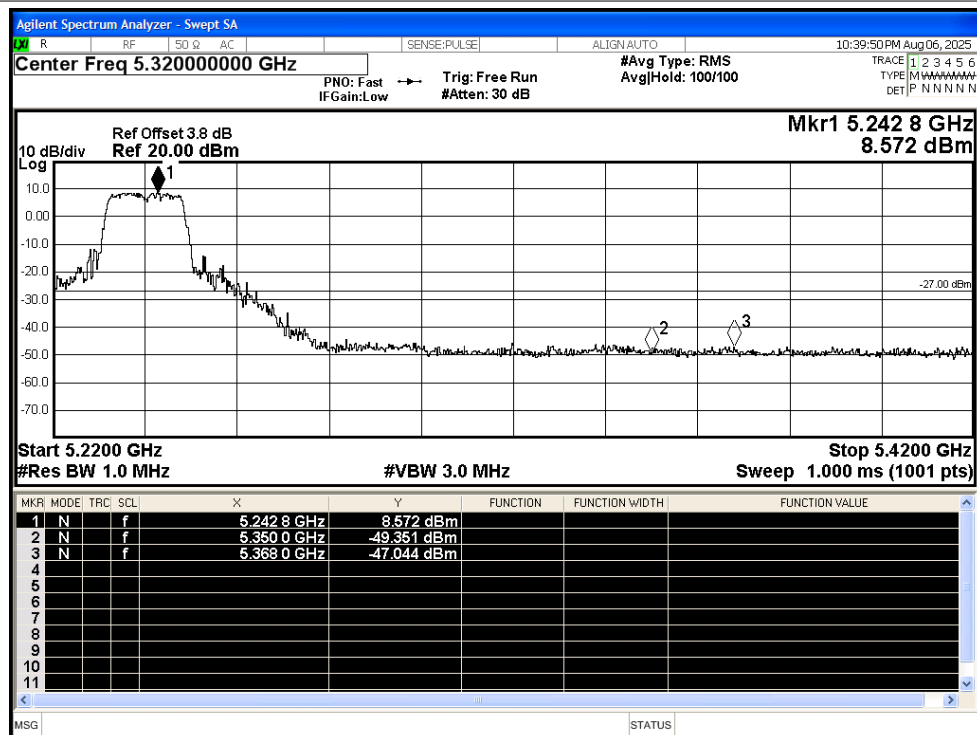
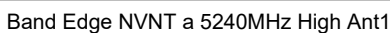
OBW NVNT ac80 5210MHz Ant1

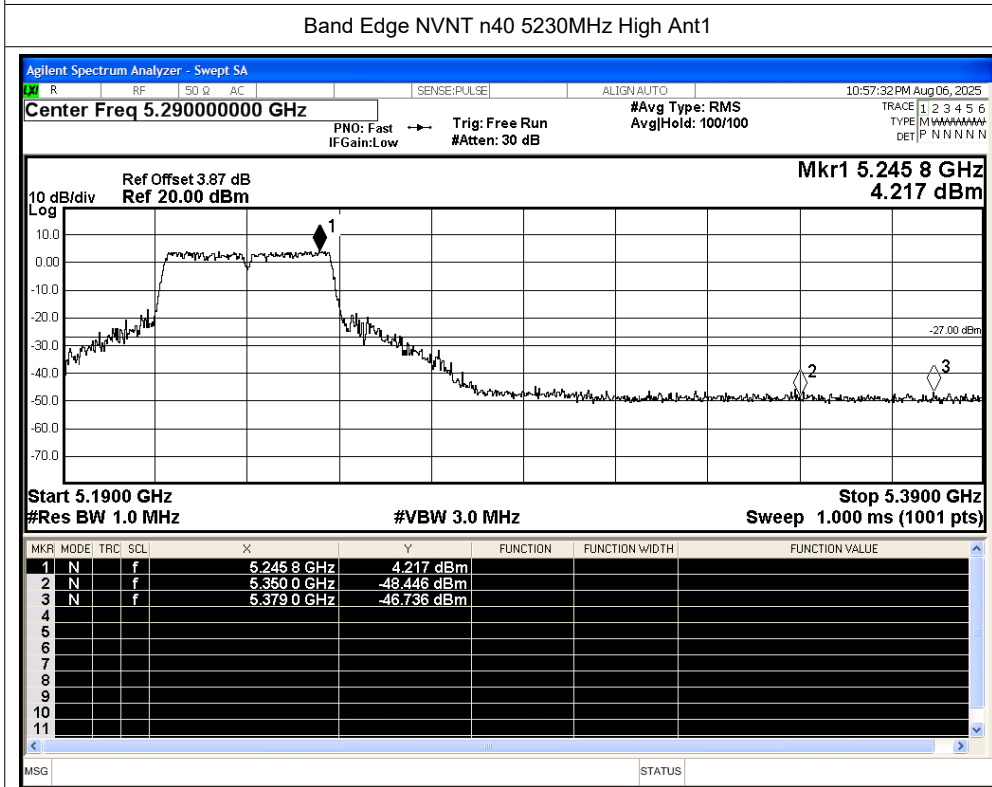
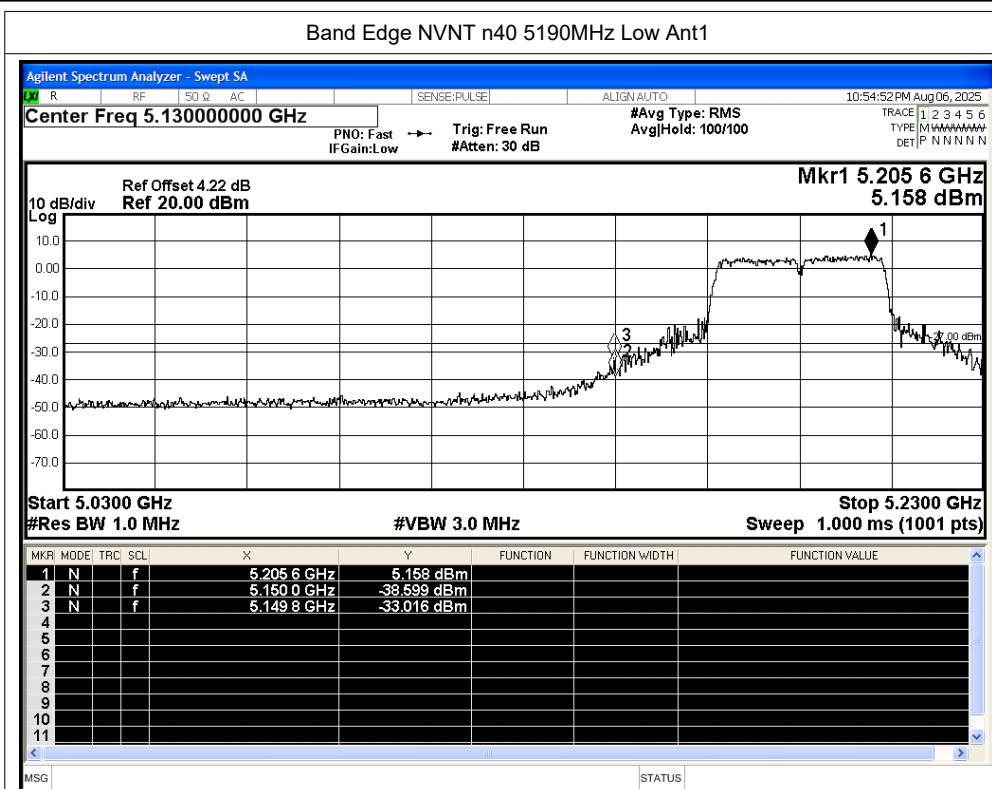


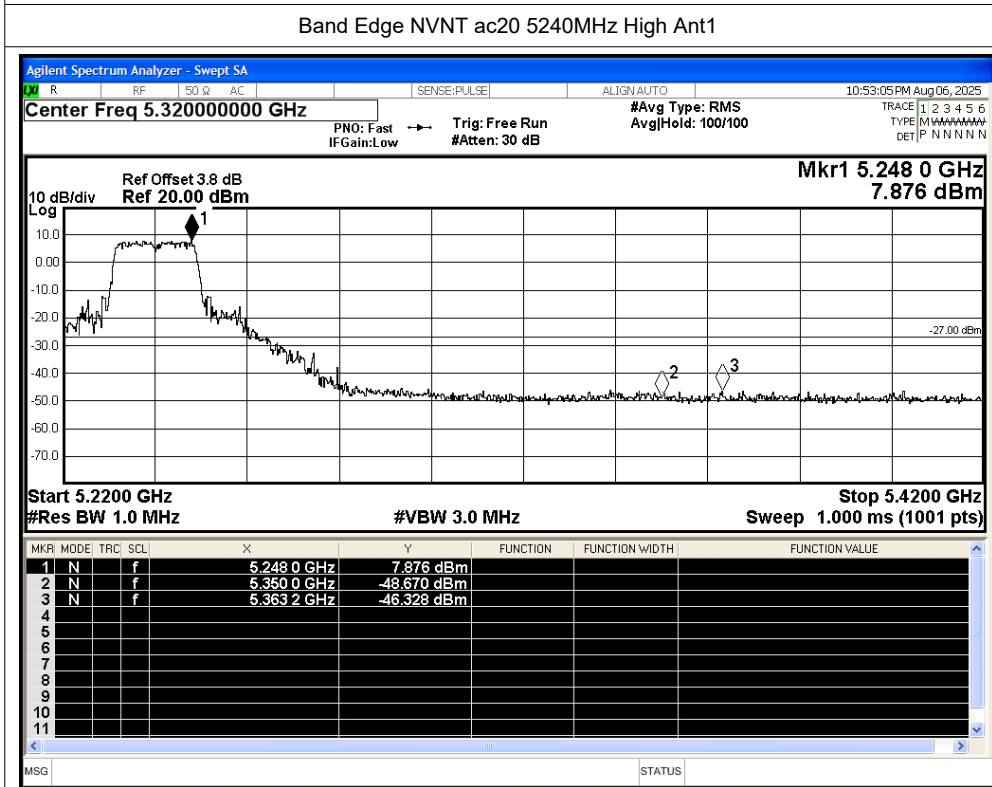
Band Edge

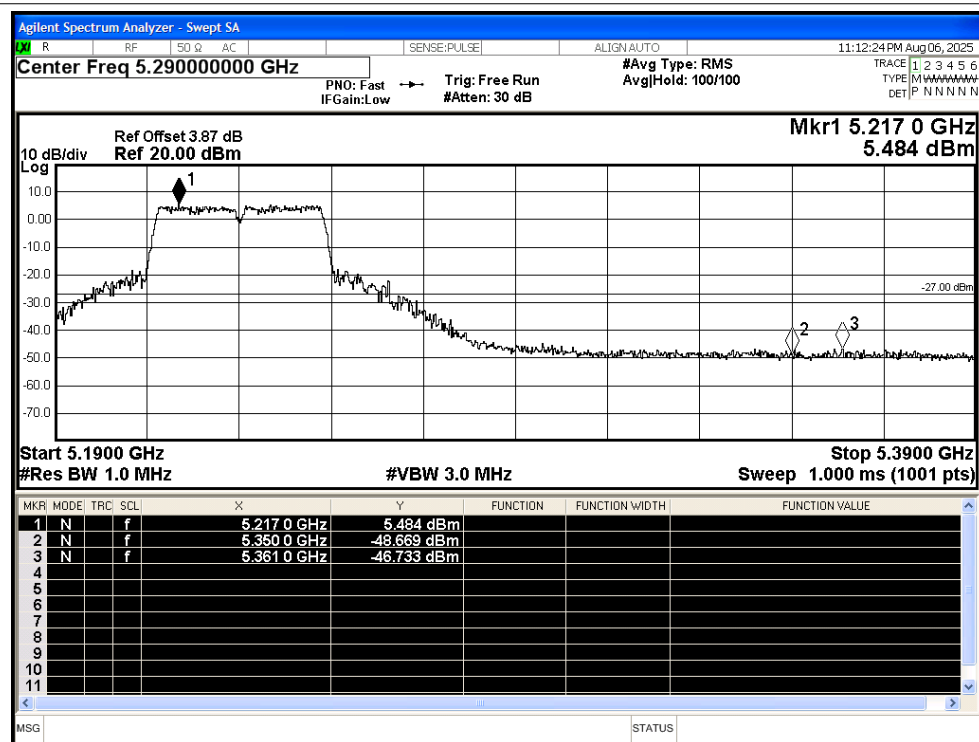
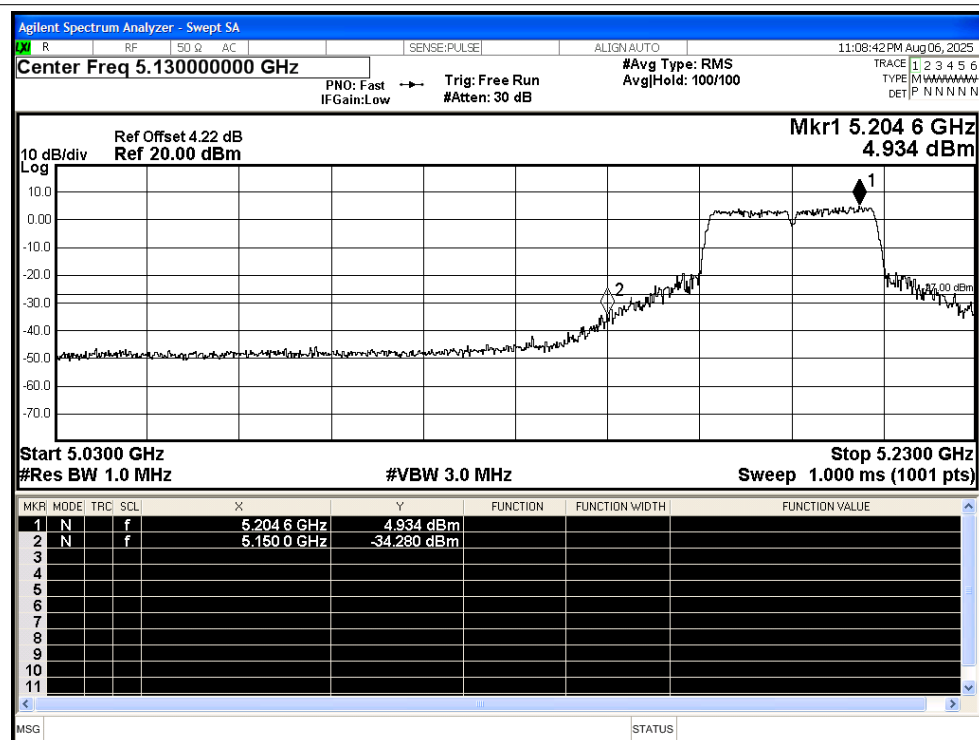
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-38.65	-27	Pass
NVNT	a	5240	Ant1	-47.04	-27	Pass
NVNT	n20	5180	Ant1	-35.05	-27	Pass
NVNT	n20	5240	Ant1	-46.52	-27	Pass
NVNT	n40	5190	Ant1	-33.02	-27	Pass
NVNT	n40	5230	Ant1	-46.74	-27	Pass
NVNT	ac20	5180	Ant1	-30.58	-27	Pass
NVNT	ac20	5240	Ant1	-46.33	-27	Pass
NVNT	ac40	5190	Ant1	-34.28	-27	Pass
NVNT	ac40	5230	Ant1	-46.73	-27	Pass
NVNT	ac80	5210	Ant1	-46.05	-27	Pass
NVNT	ac80	5210	Ant1	-37.14	-27	Pass

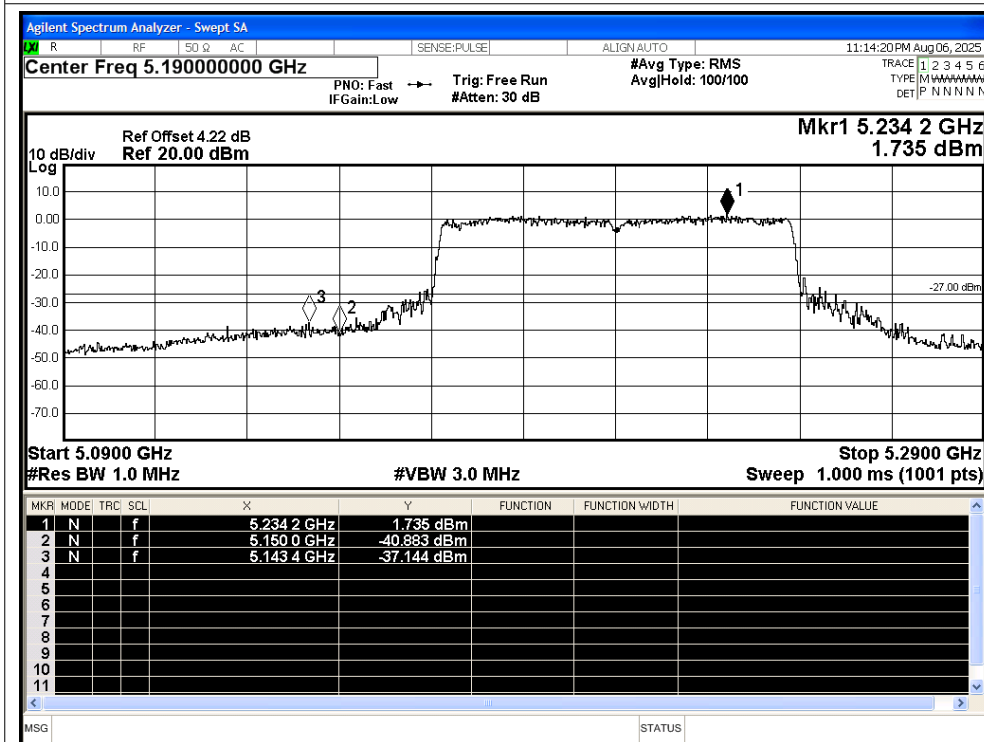
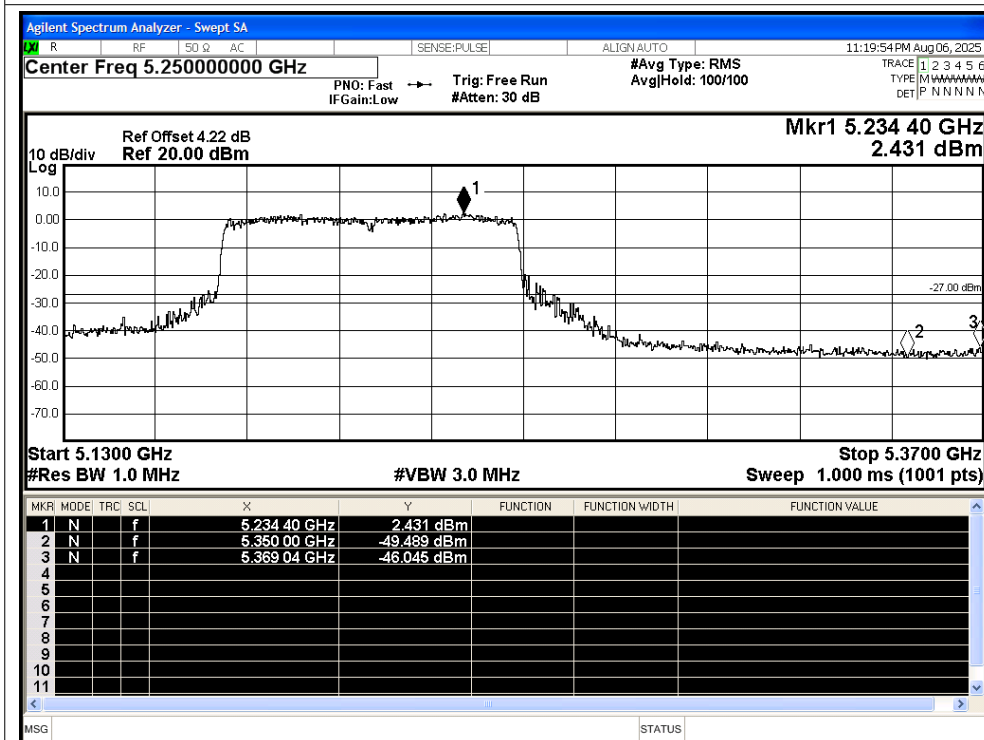
Band Edge NVNT a 5180MHz Low Ant1









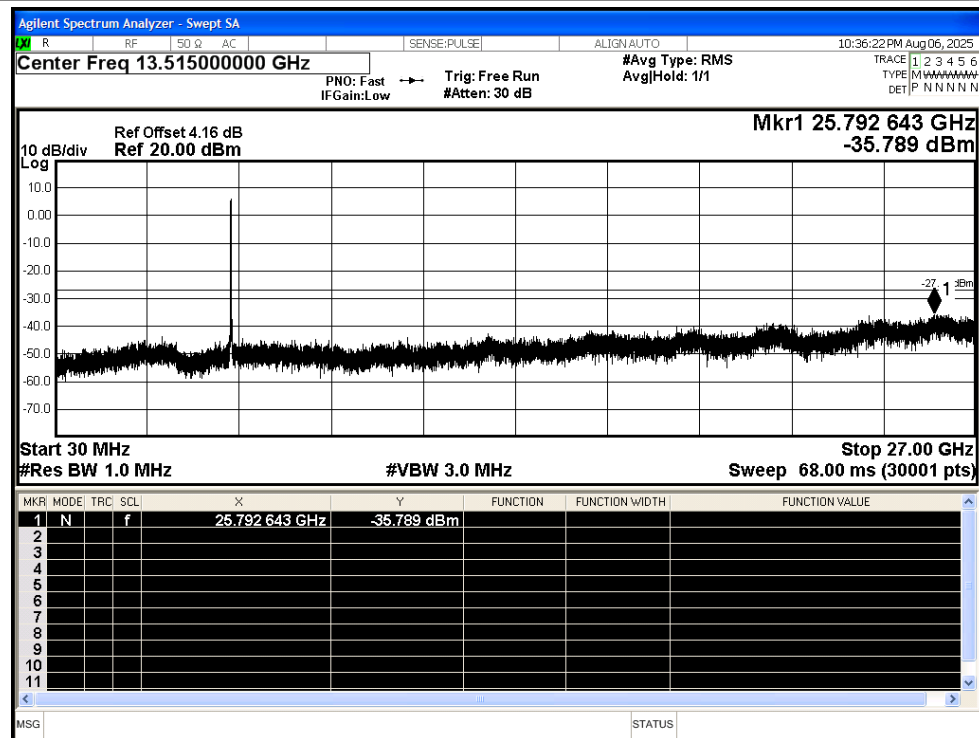


Conducted RF Spurious Emission

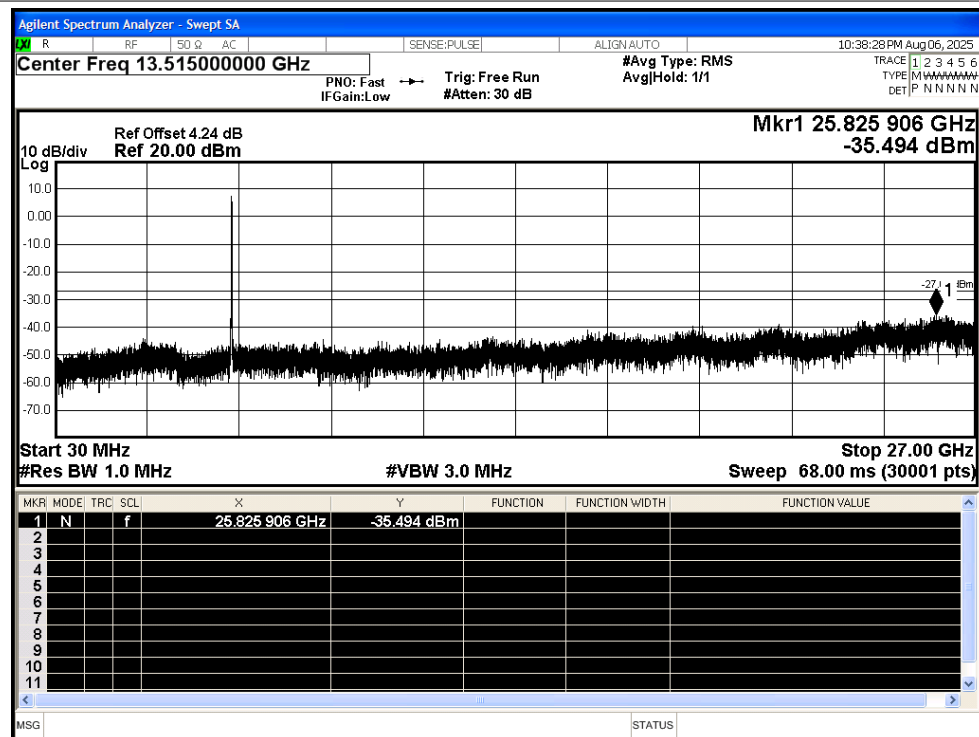
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-35.789	-27	Pass
NVNT	a	5200	Ant1	-35.494	-27	Pass
NVNT	a	5240	Ant1	-35.544	-27	Pass
NVNT	n20	5180	Ant1	-35.408	-27	Pass
NVNT	n20	5200	Ant1	-34.972	-27	Pass
NVNT	n20	5240	Ant1	-35.854	-27	Pass
NVNT	n40	5190	Ant1	-34.172	-27	Pass
NVNT	n40	5230	Ant1	-36.423	-27	Pass
NVNT	ac20	5180	Ant1	-35.339	-27	Pass
NVNT	ac20	5200	Ant1	-35.399	-27	Pass
NVNT	ac20	5240	Ant1	-35.688	-27	Pass
NVNT	ac40	5190	Ant1	-35.377	-27	Pass
NVNT	ac40	5230	Ant1	-35.42	-27	Pass
NVNT	ac80	5210	Ant1	-34.101	-27	Pass

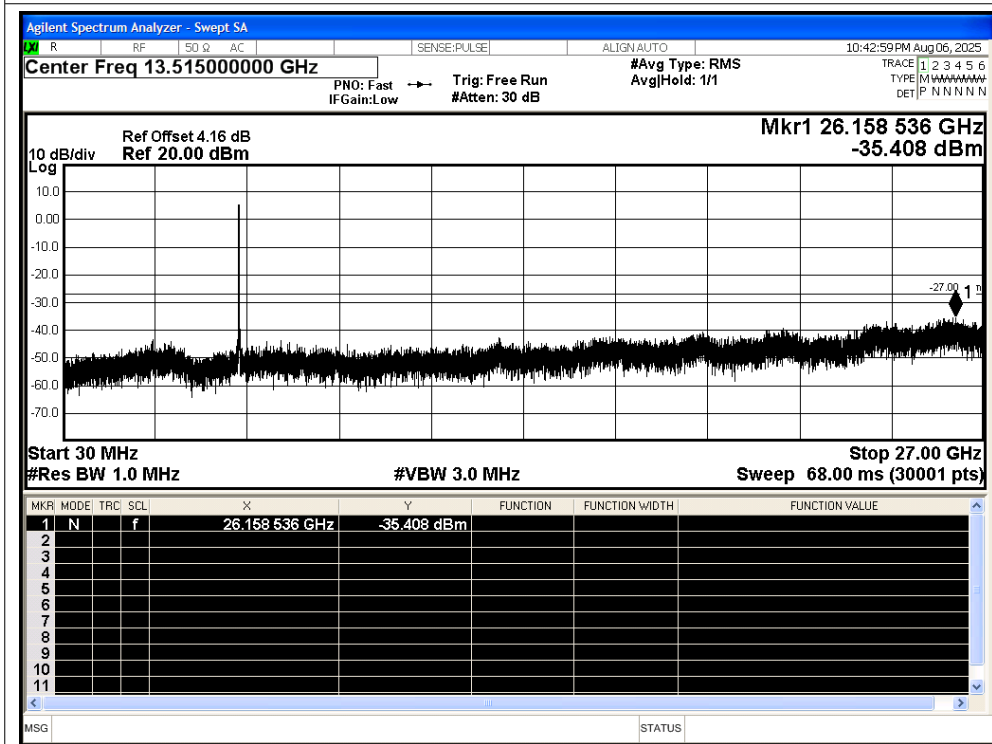
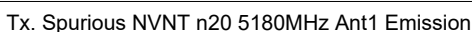
Test Graphs

Tx. Spurious NVNT a 5180MHz Ant1 Emission

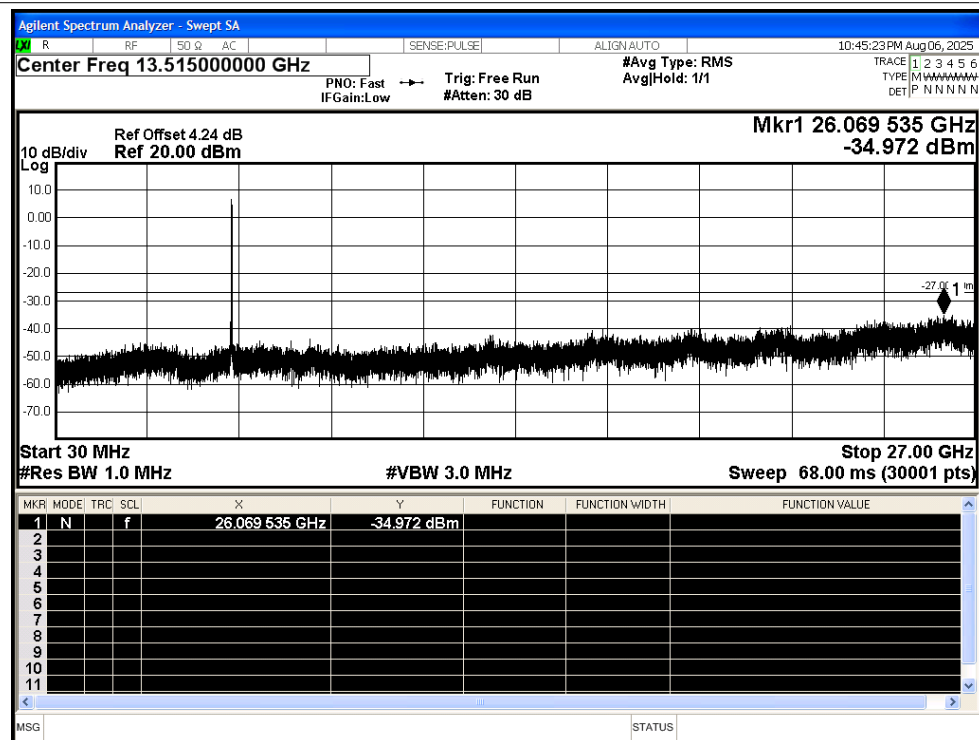


Tx. Spurious NVNT a 5200MHz Ant1 Emission

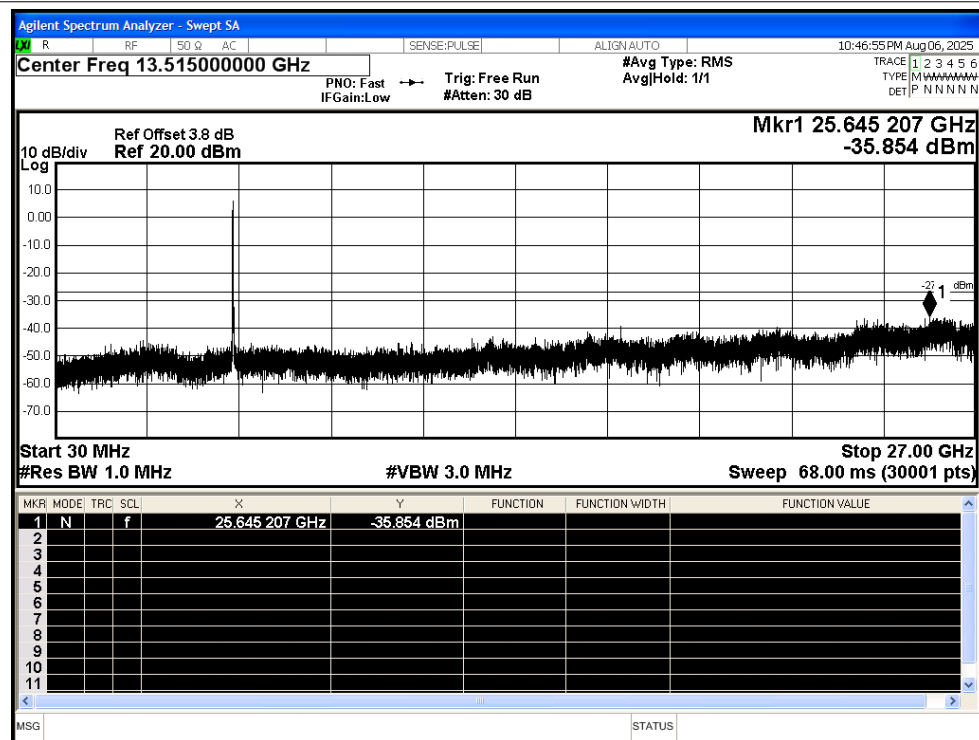


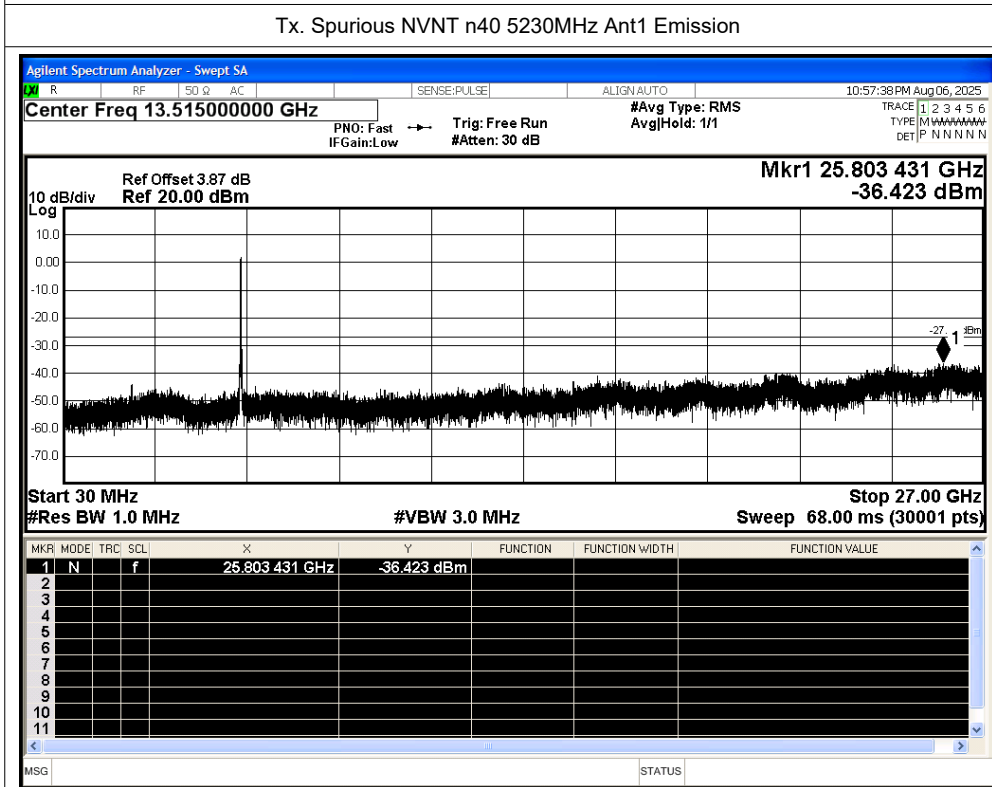


Tx. Spurious NVNT n20 5200MHz Ant1 Emission

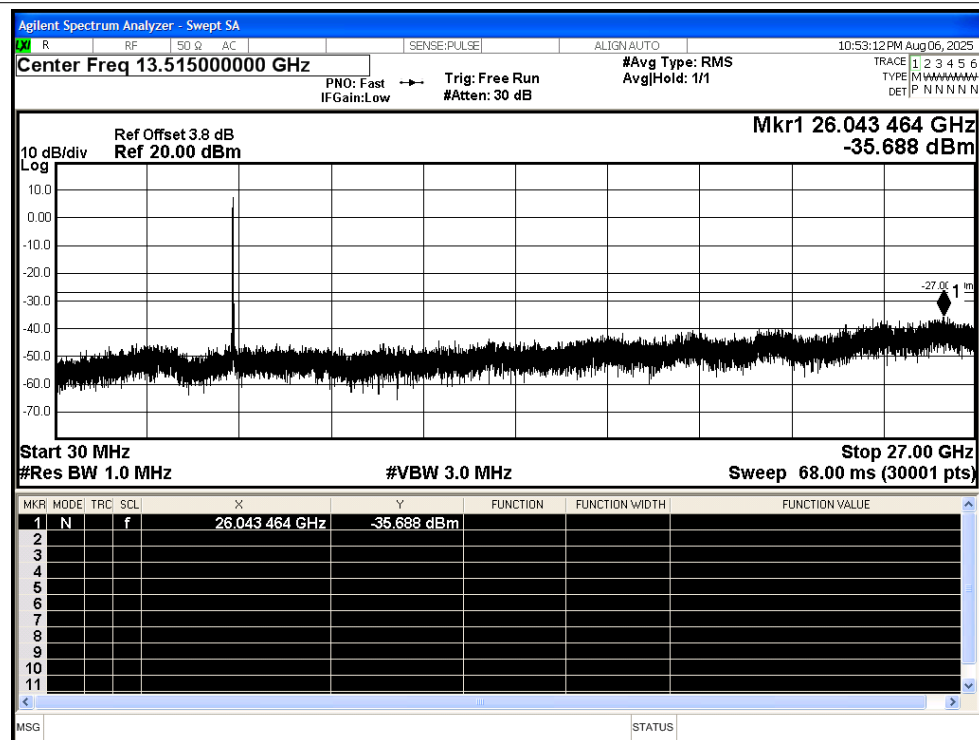


Tx. Spurious NVNT n20 5240MHz Ant1 Emission

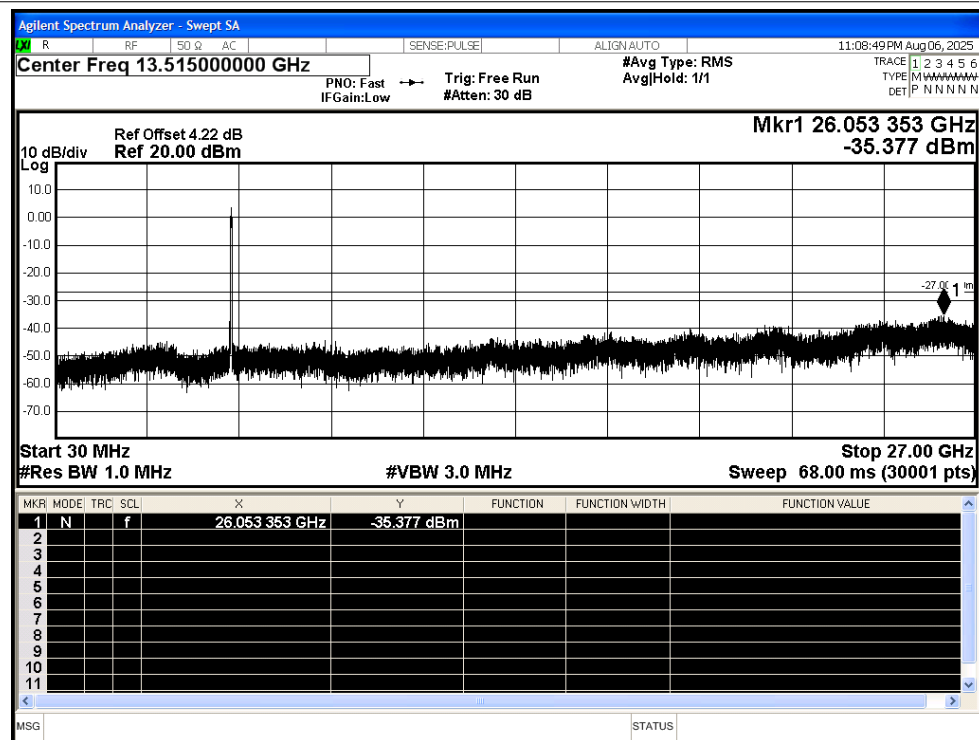




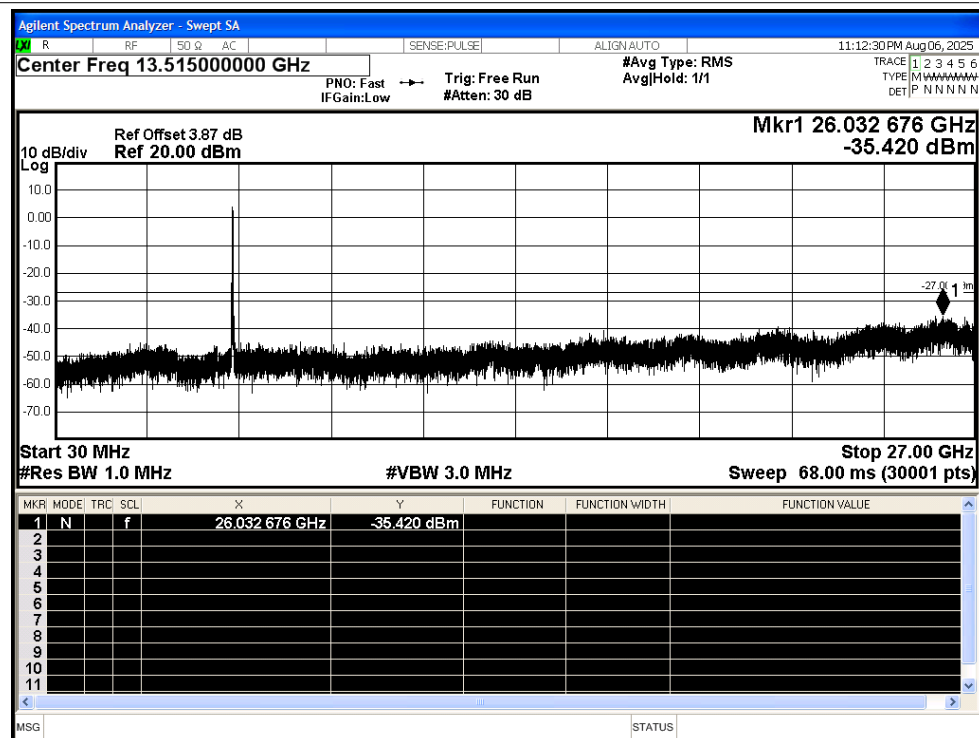
Tx. Spurious NVNT ac20 5240MHz Ant1 Emission



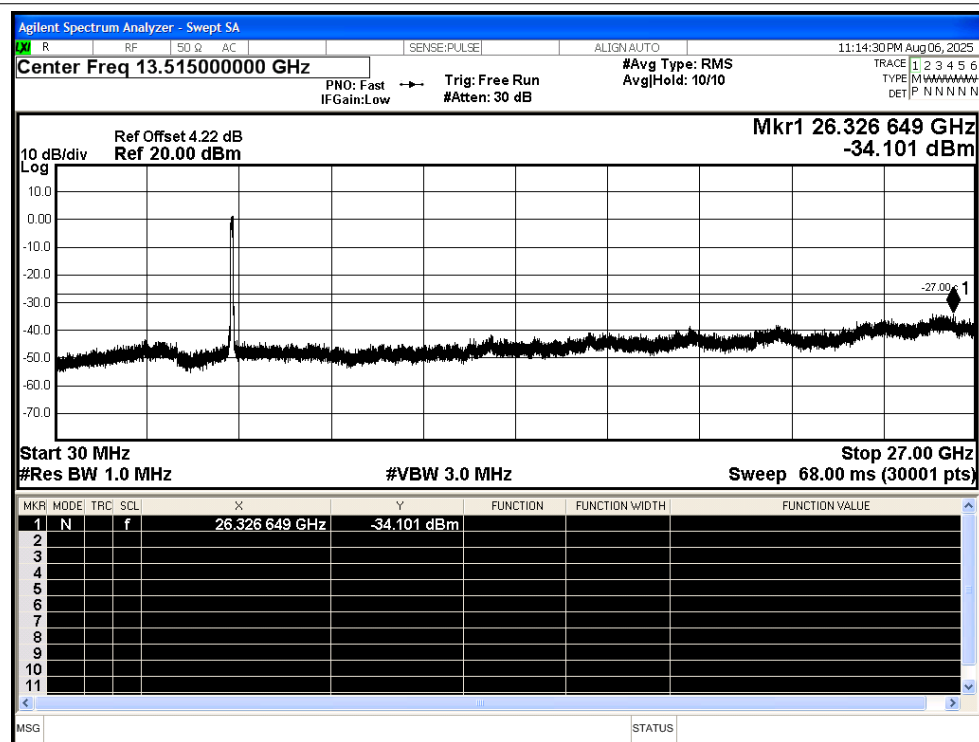
Tx. Spurious NVNT ac40 5190MHz Ant1 Emission



Tx. Spurious NVNT ac40 5230MHz Ant1 Emission



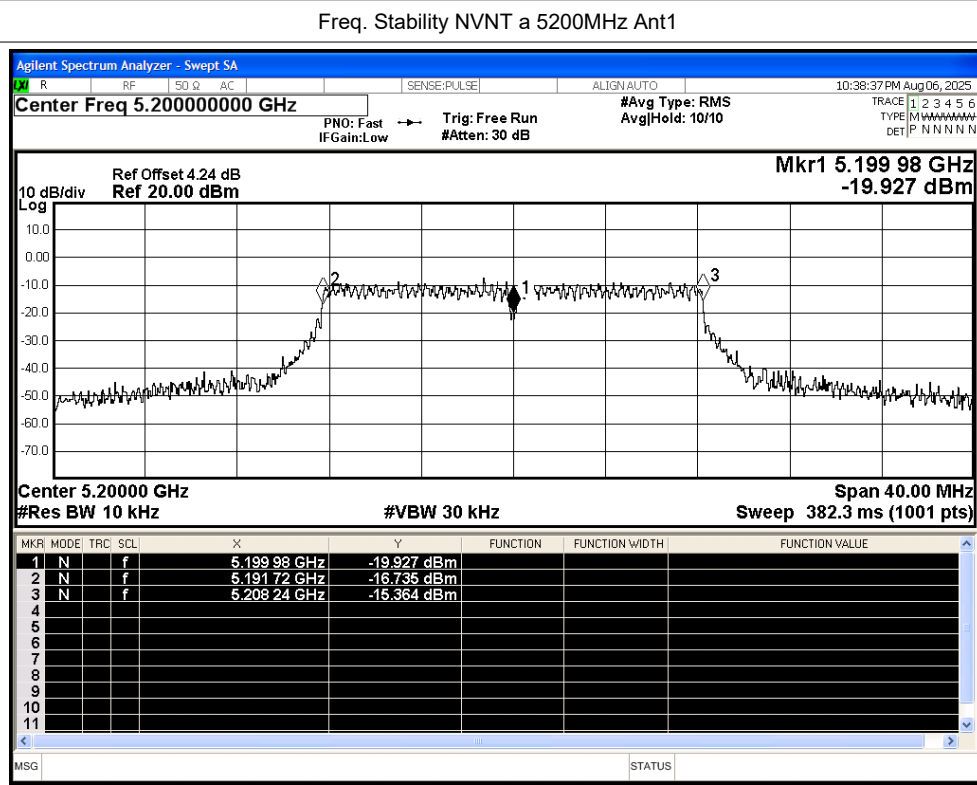
Tx. Spurious NVNT ac80 5210MHz Ant1 Emission

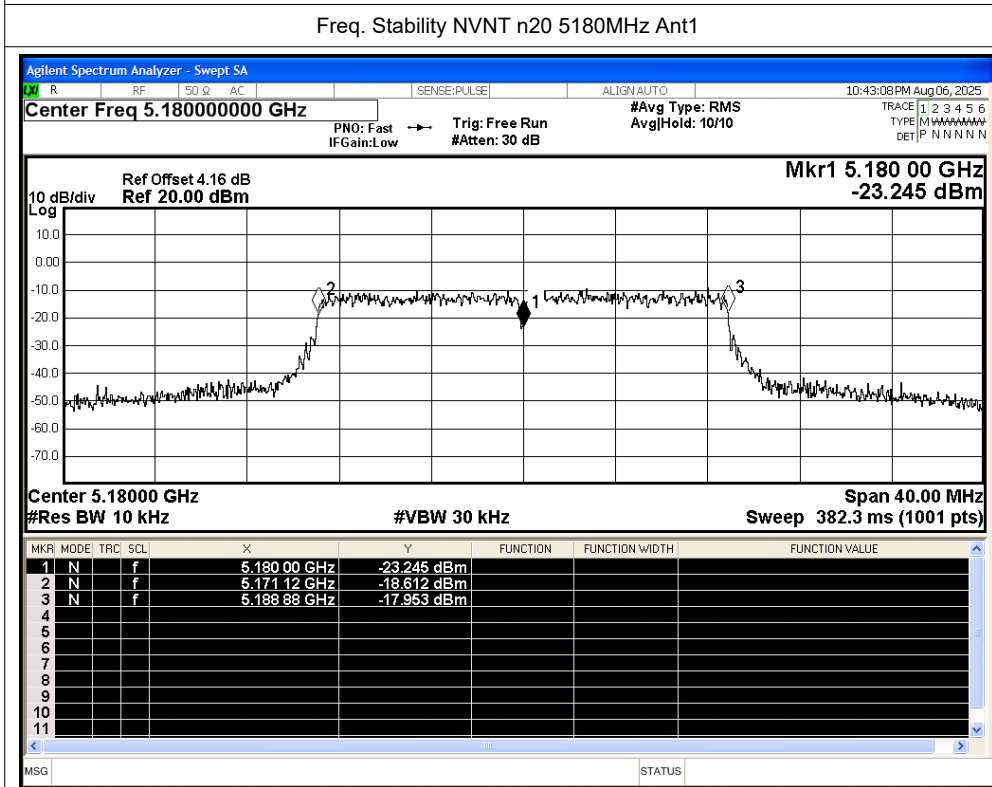


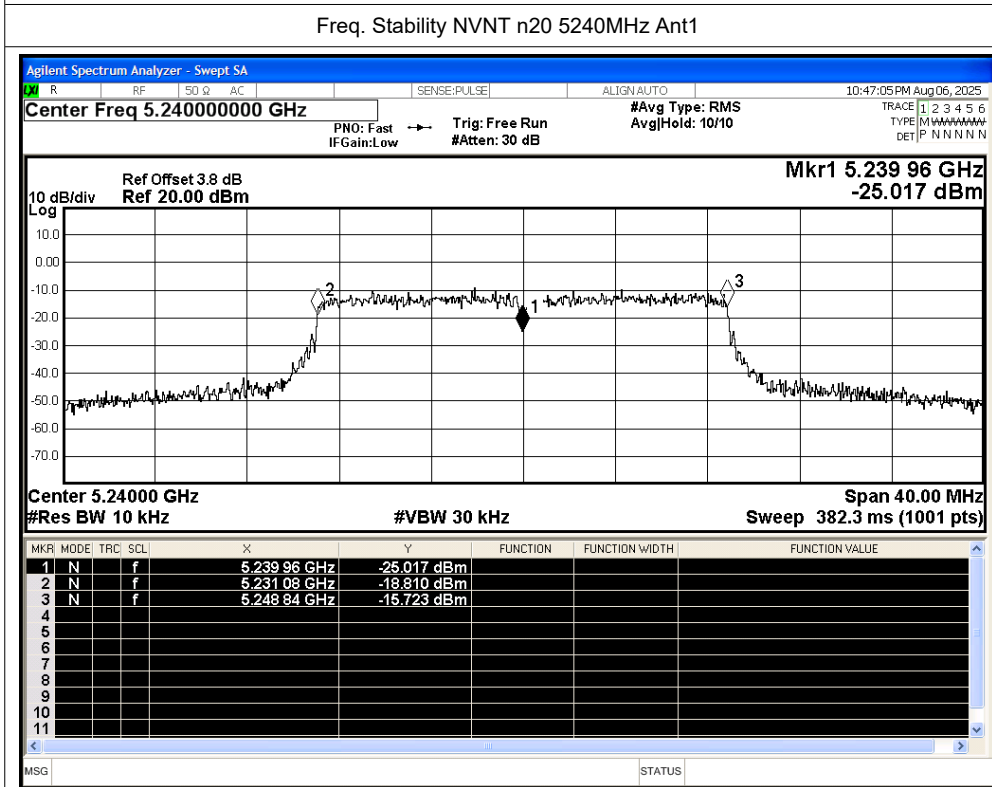
Frequency Stability

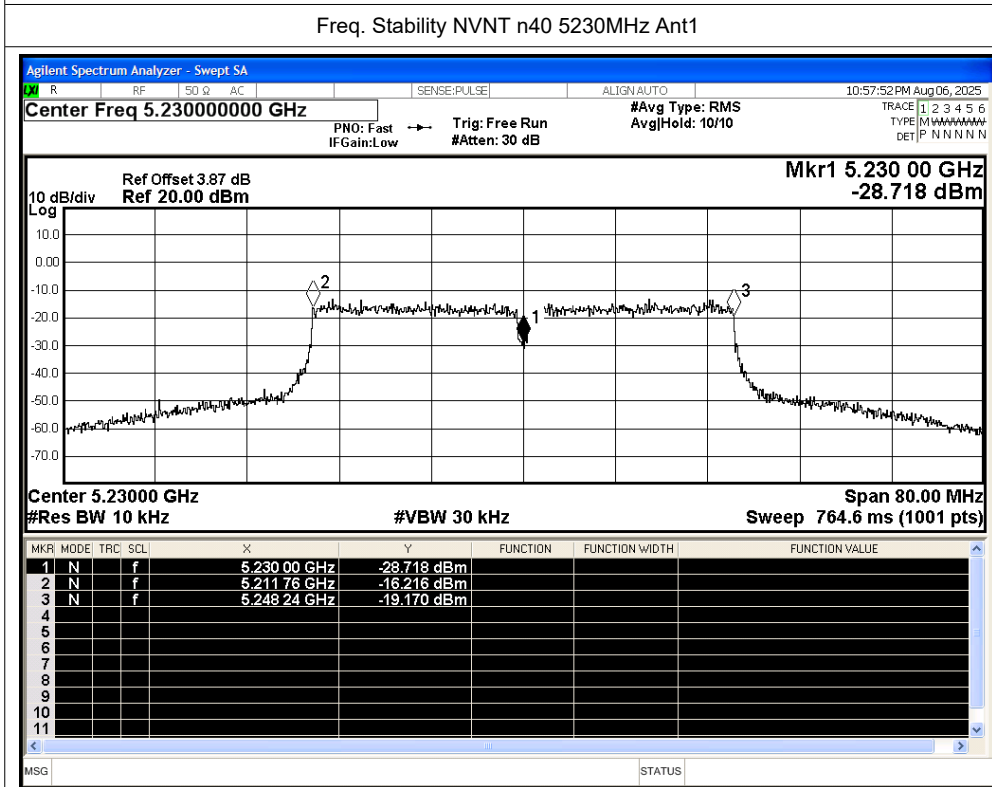
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	n20	5180	Ant1	5180	0	0	25	Pass
NVNT	n20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	n20	5240	Ant1	5239.96	-40000	-7.63	25	Pass
NVNT	n40	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	ac20	5240	Ant1	5239.96	-40000	-7.63	25	Pass
NVNT	ac40	5190	Ant1	5190	0	0	25	Pass
NVNT	ac40	5230	Ant1	5229.96	-40000	-7.65	25	Pass
NVNT	ac80	5210	Ant1	5210	0	0	25	Pass

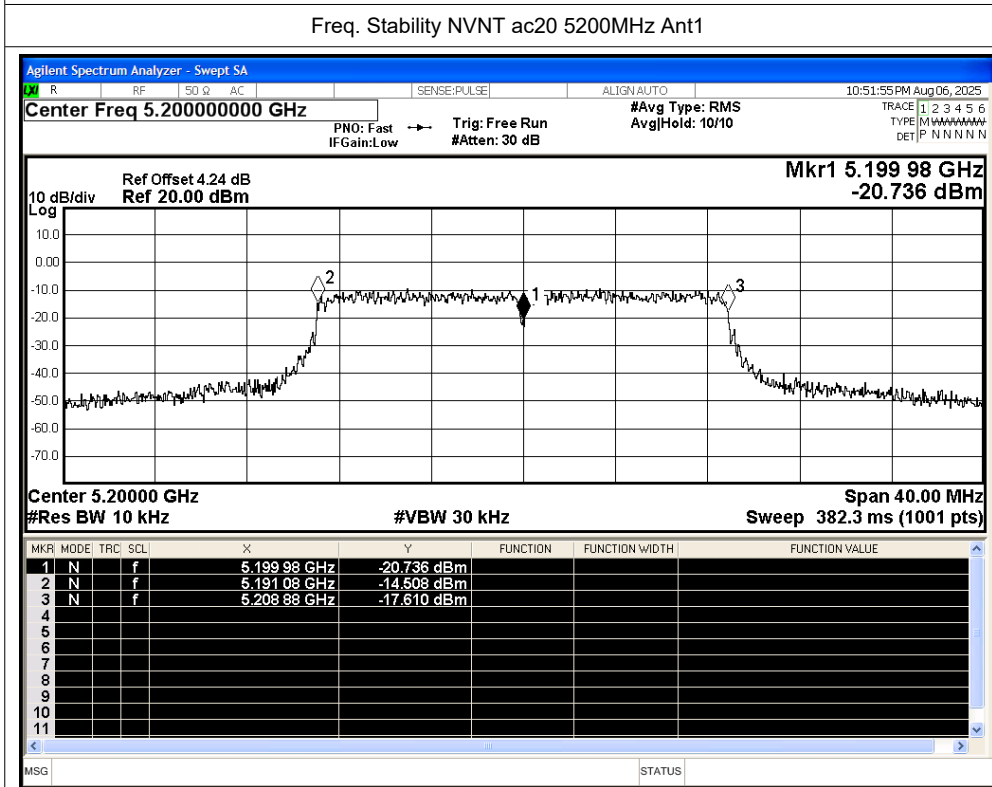
Freq. Stability NVNT a 5180MHz Ant1

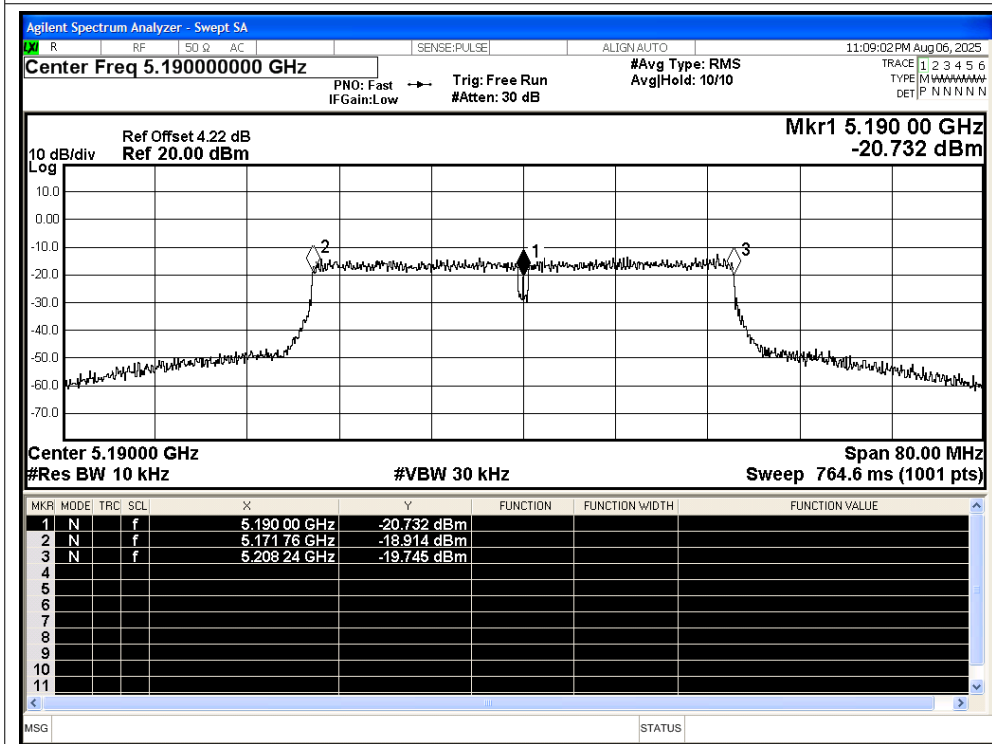
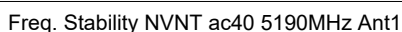


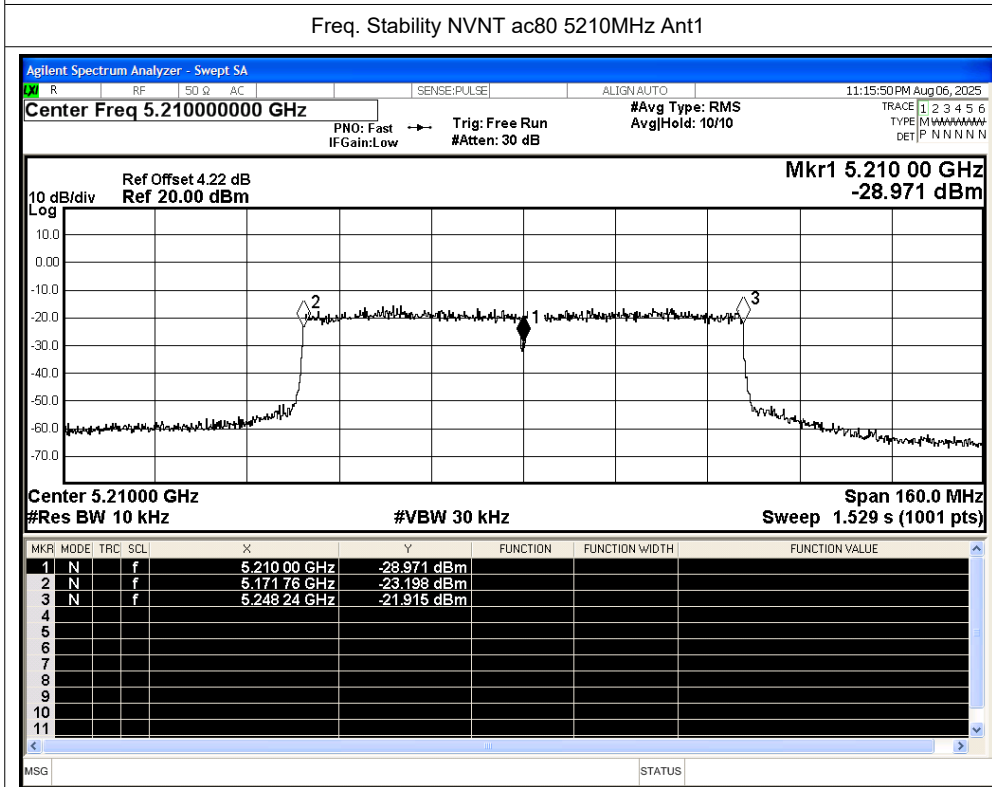


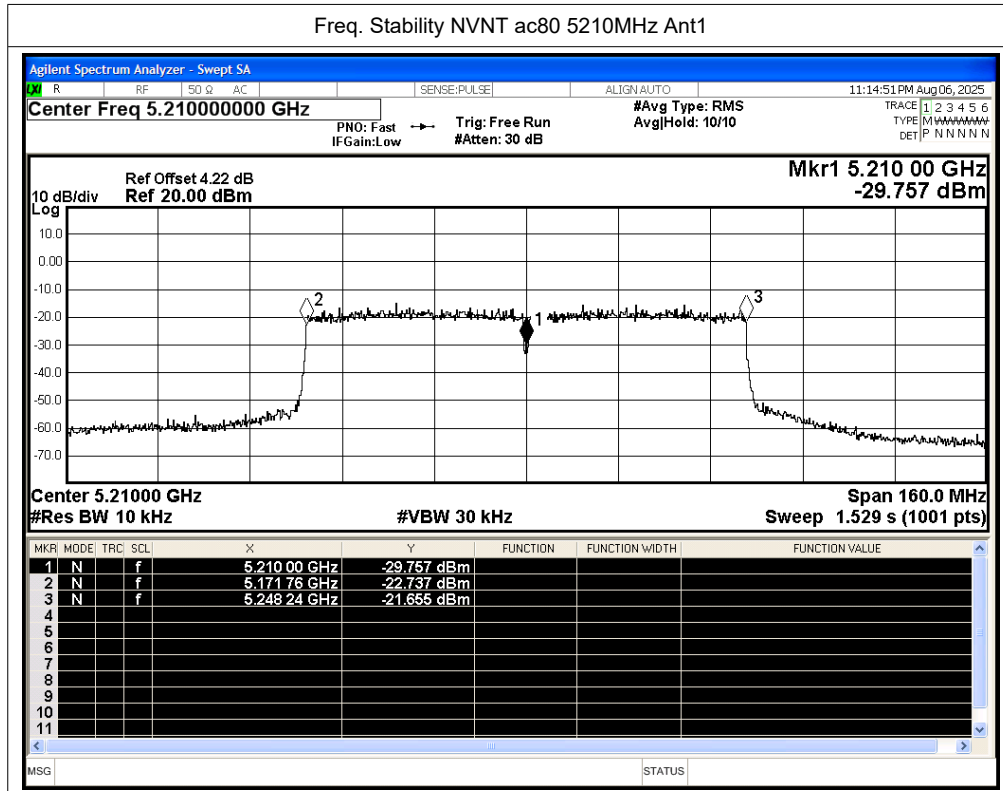












***** End of Report *****