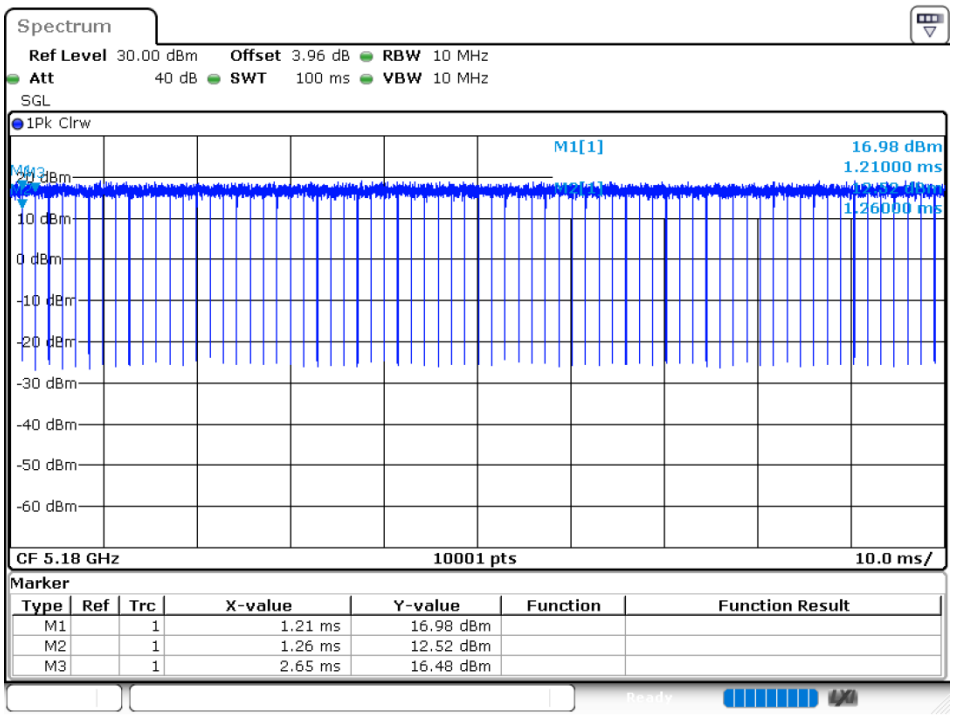
5.2G WIFI:

Duty Cycle

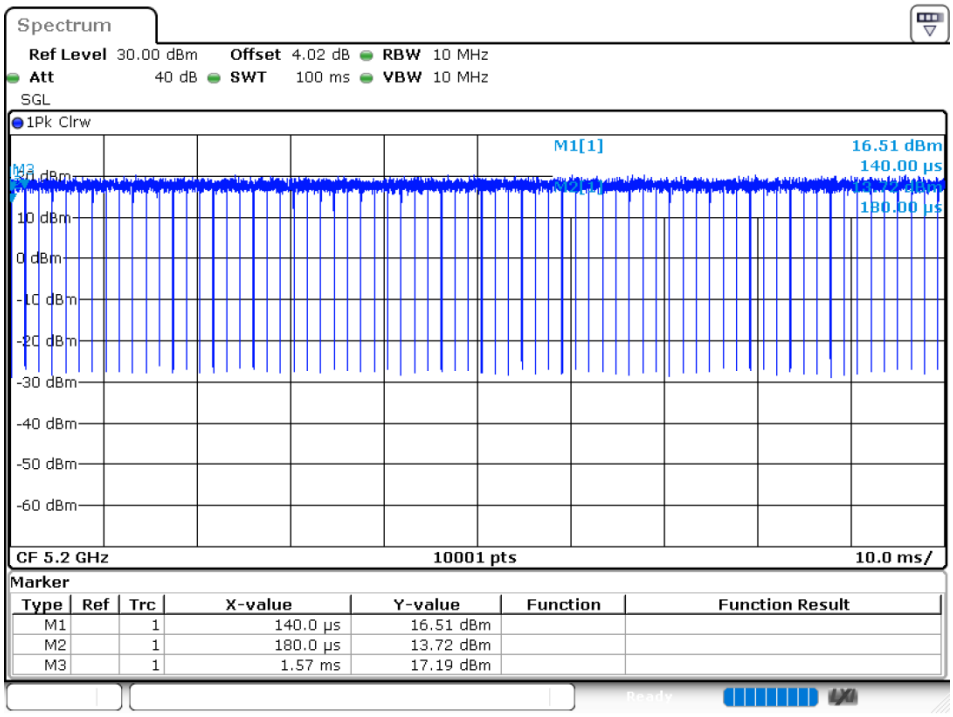
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.61	0.11	0.72
NVNT	a	5200	Ant1	97.57	0.11	0.72
NVNT	a	5240	Ant1	97.57	0.11	0.71
NVNT	n20	5180	Ant1	97.4	0.11	0.77
NVNT	n20	5200	Ant1	97.44	0.11	0.77
NVNT	n20	5240	Ant1	97.41	0.11	0.77
NVNT	n40	5190	Ant1	95.1	0.22	1.54
NVNT	n40	5230	Ant1	95.09	0.22	1.54
NVNT	ac20	5180	Ant1	97.43	0.11	0.76
NVNT	ac20	5200	Ant1	97.45	0.11	0.76
NVNT	ac20	5240	Ant1	97.46	0.11	0.76
NVNT	ac40	5190	Ant1	95.09	0.22	1.52
NVNT	ac40	5230	Ant1	95.08	0.22	1.54
NVNT	ac80	5210	Ant1	90.7	0.42	3.13

Test Graphs

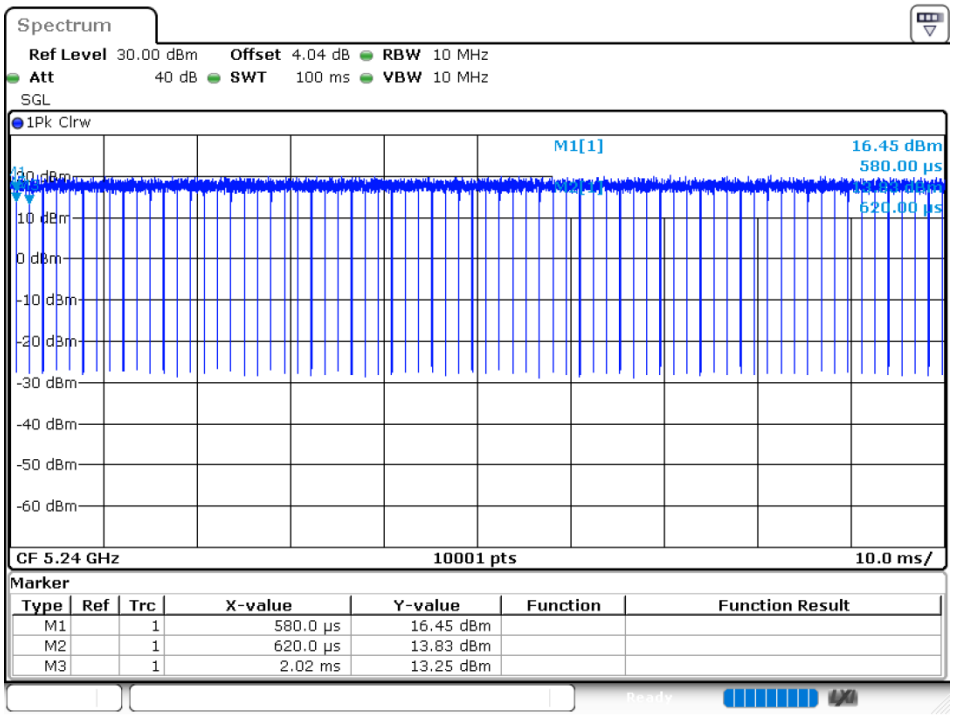
Duty Cycle NVNT a 5180MHz Ant1



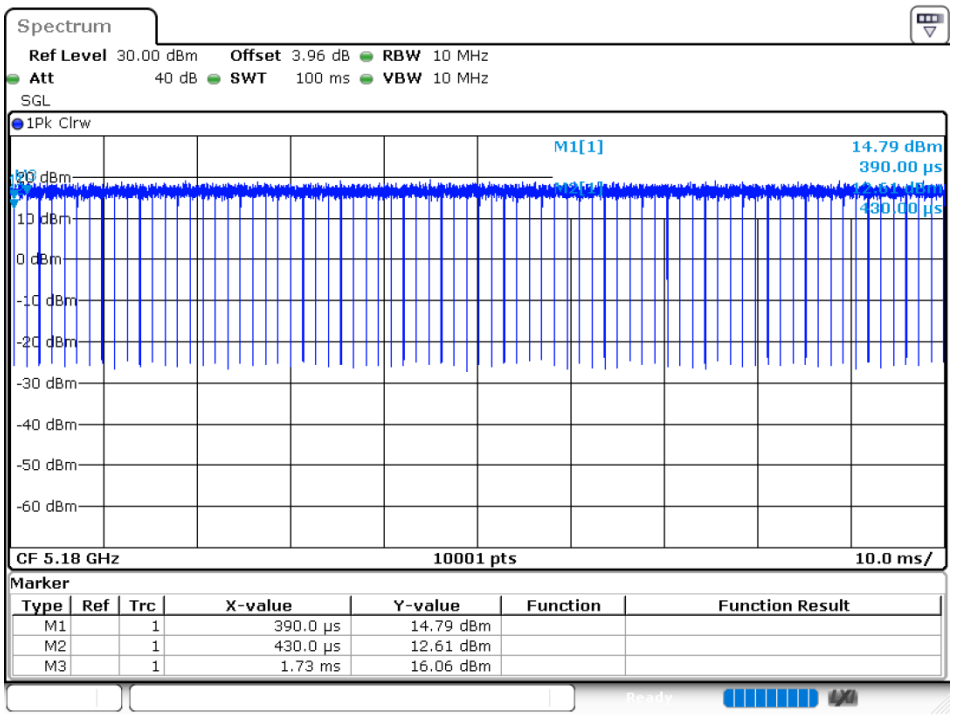
Duty Cycle NVNT a 5200MHz Ant1



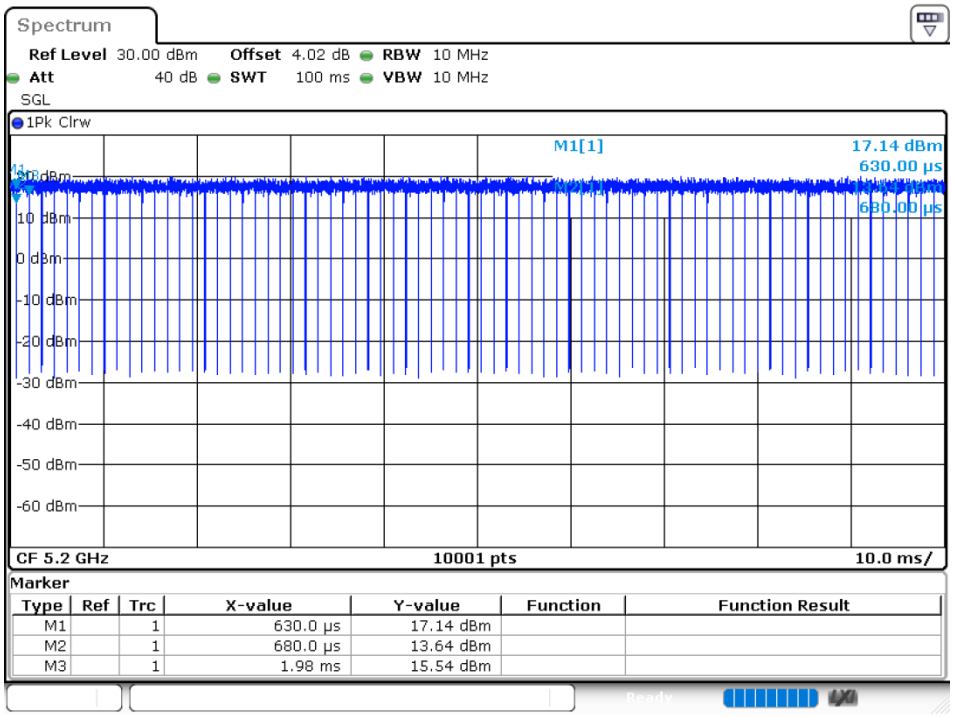
Duty Cycle NVNT a 5240MHz Ant1



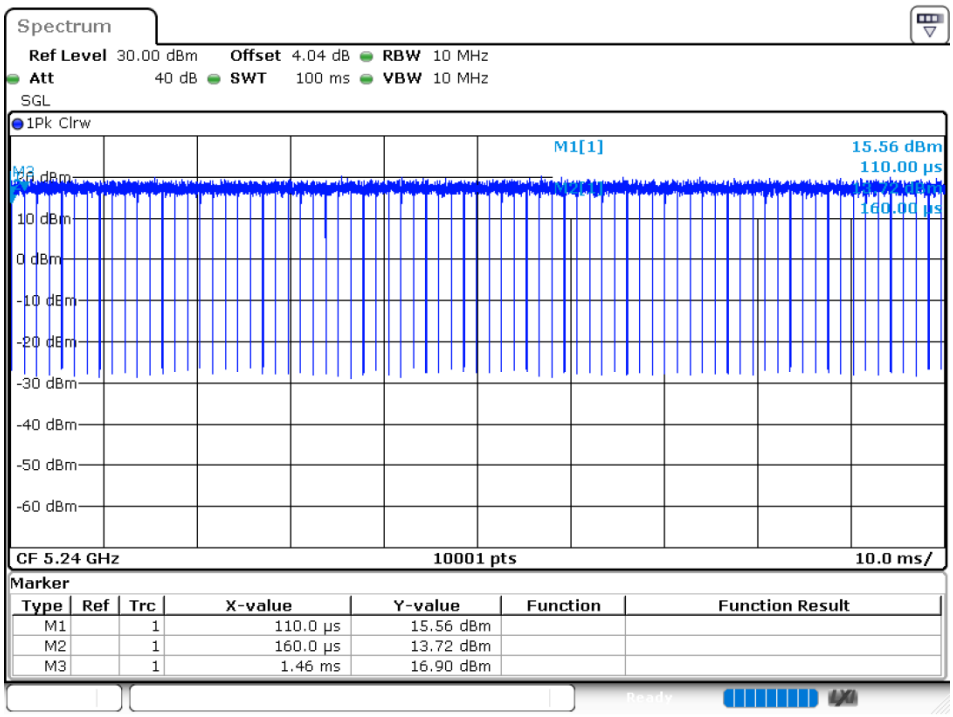
Duty Cycle NVNT n20 5180MHz Ant1



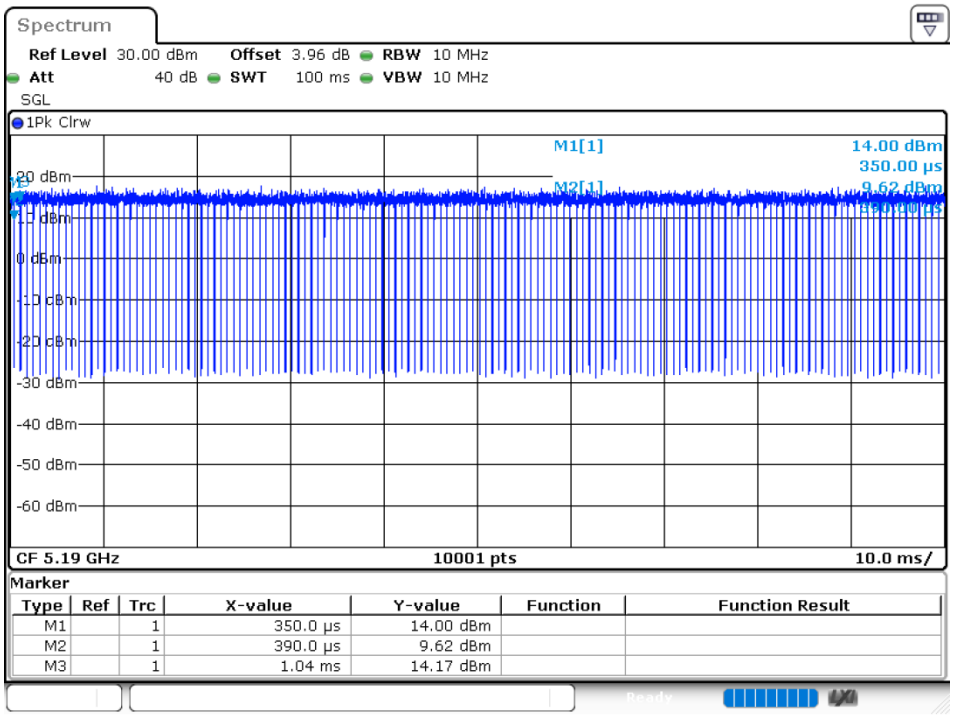
Duty Cycle NVNT n20 5200MHz Ant1



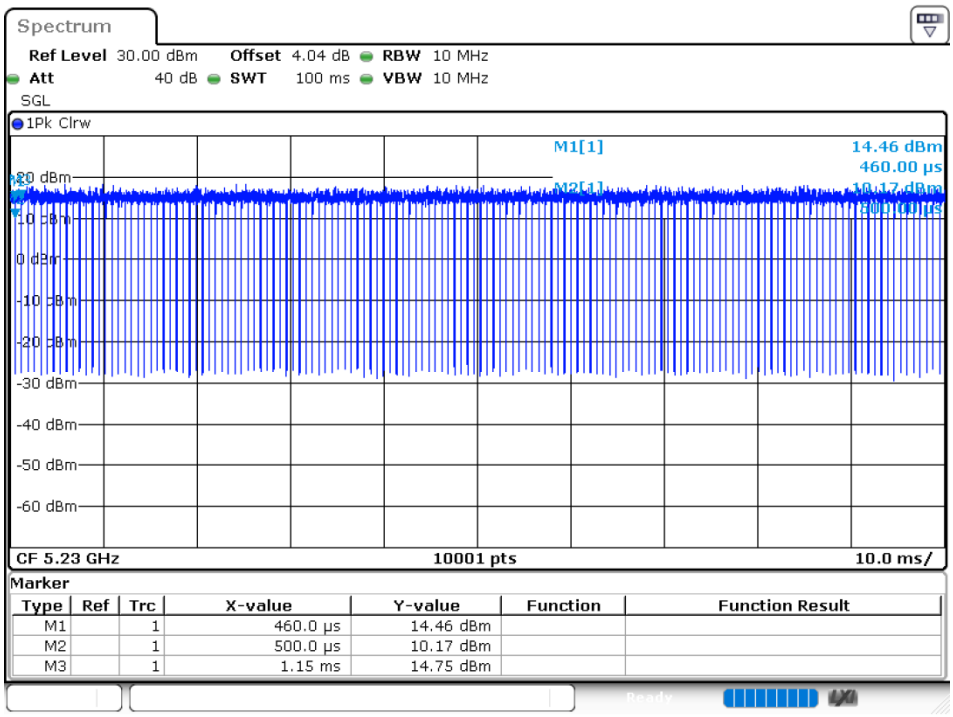
Duty Cycle NVNT n20 5240MHz Ant1



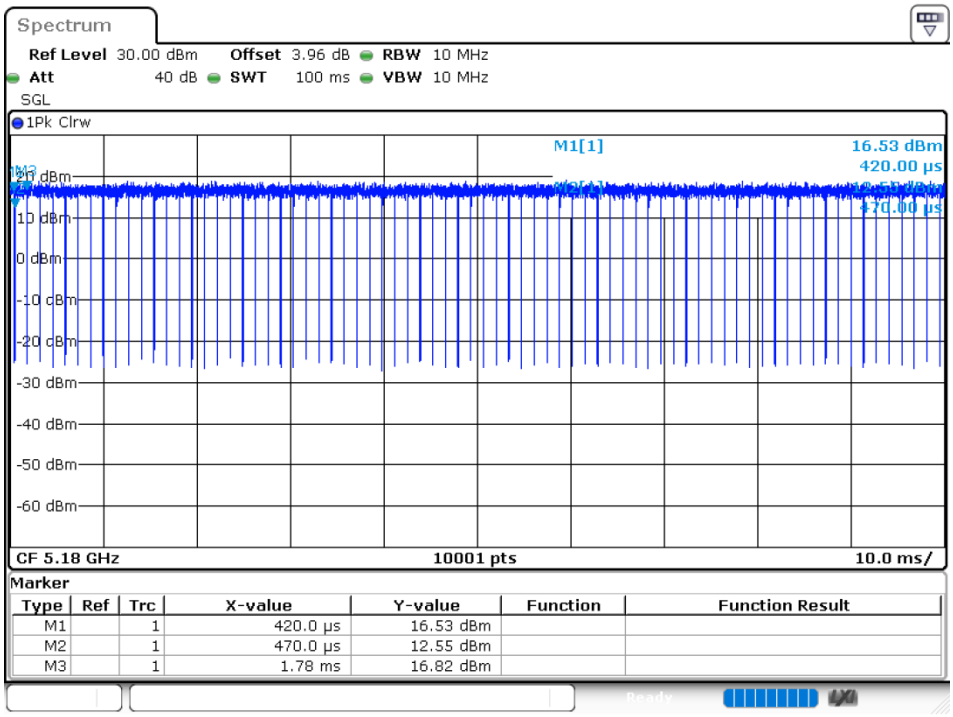
Duty Cycle NVNT n40 5190MHz Ant1



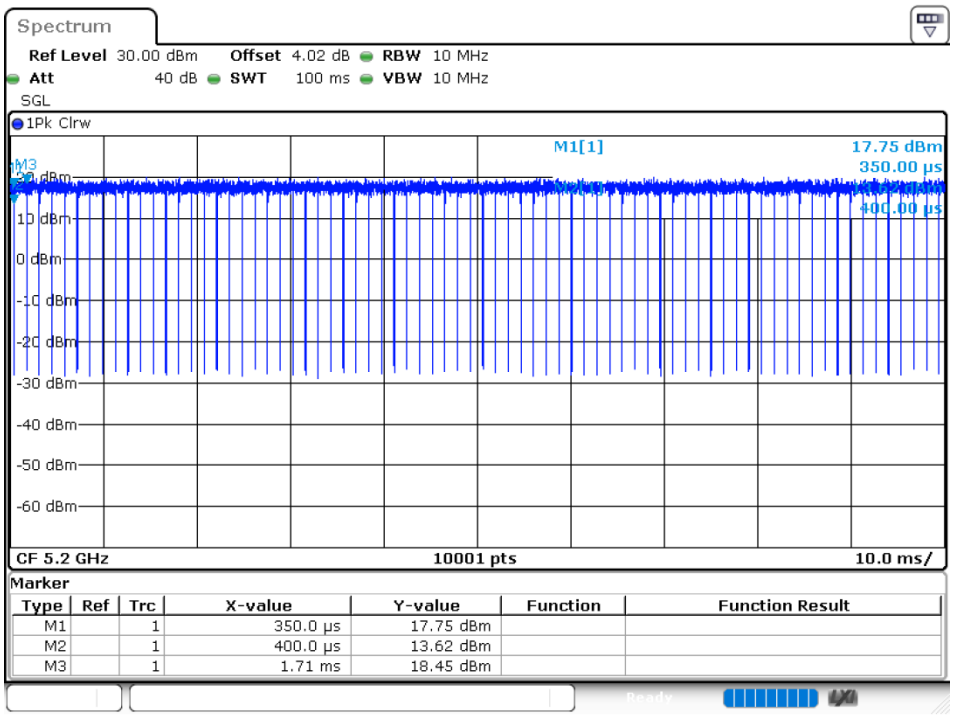
Duty Cycle NVNT n40 5230MHz Ant1



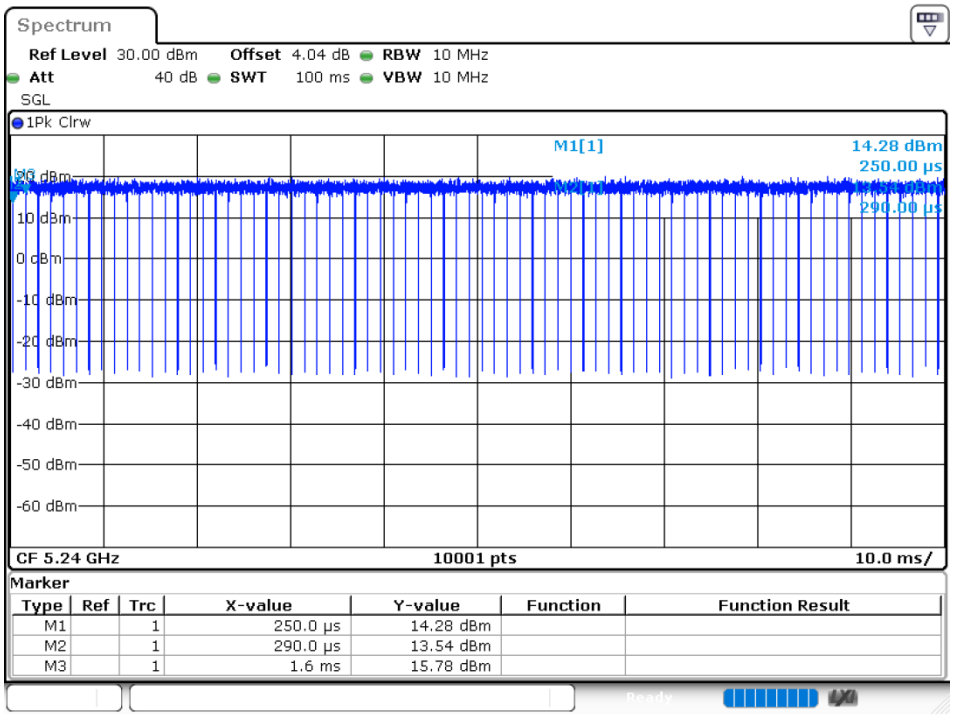
Duty Cycle NVNT ac20 5180MHz Ant1



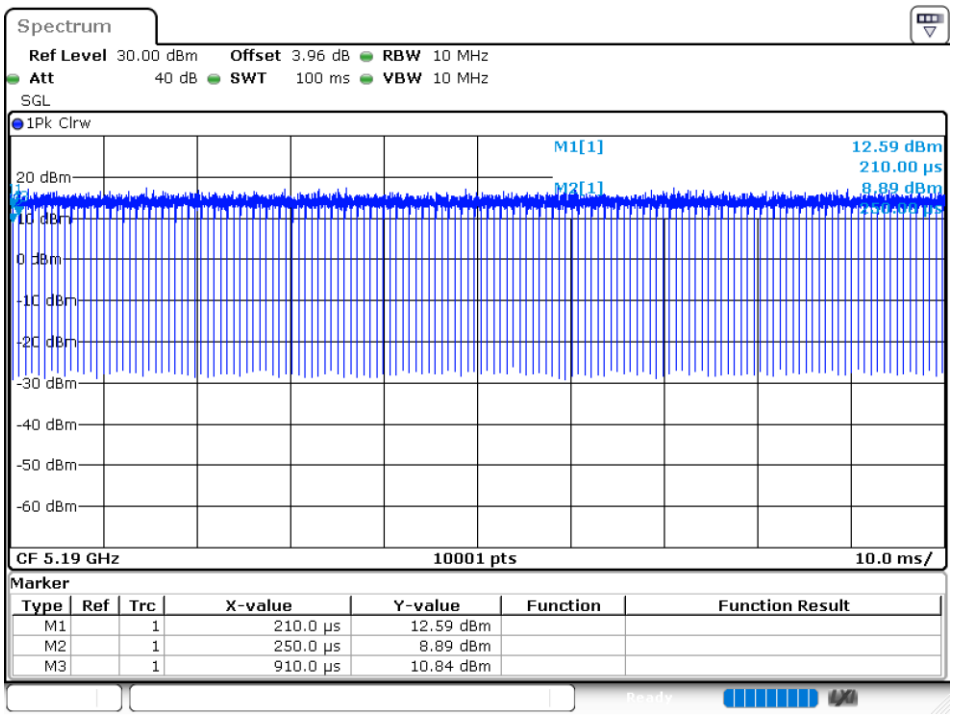
Duty Cycle NVNT ac20 5200MHz Ant1



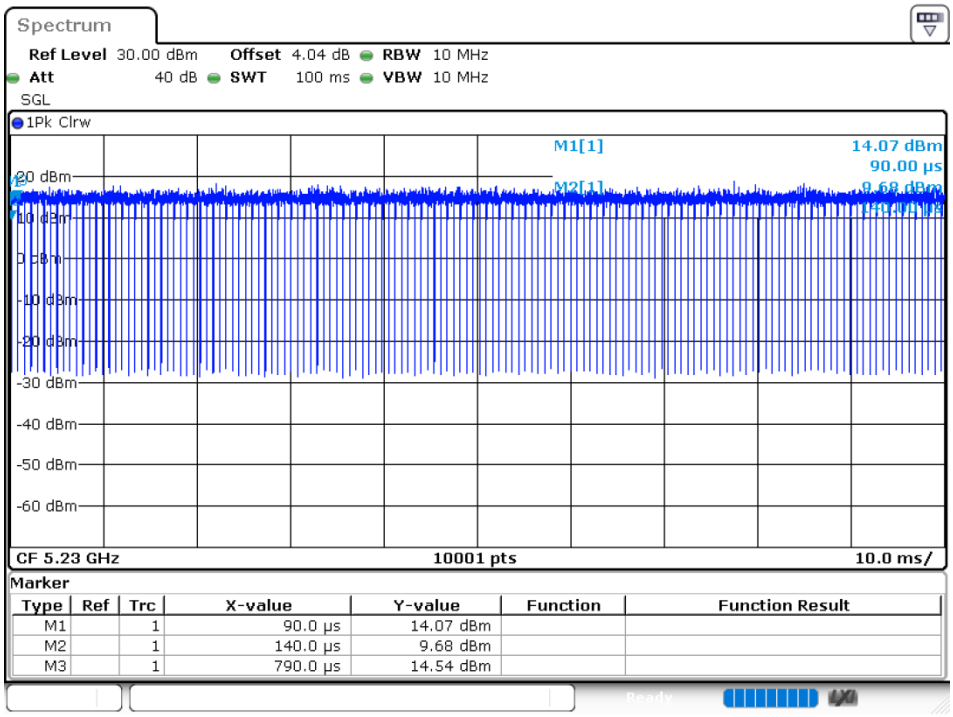
Duty Cycle NVNT ac20 5240MHz Ant1



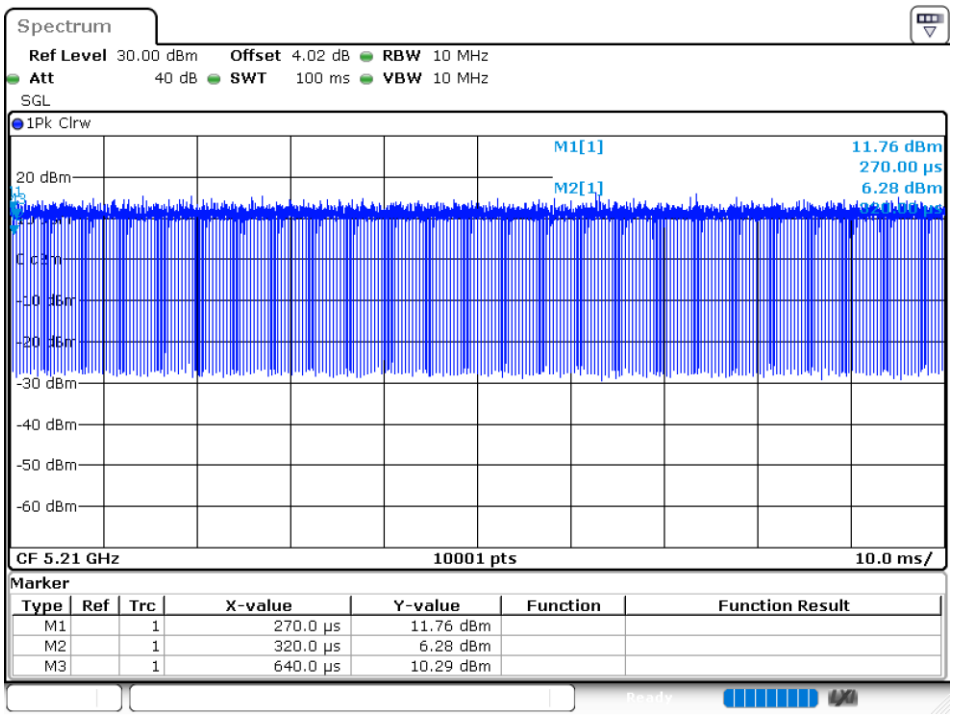
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1



Maximum Conducted Output Power

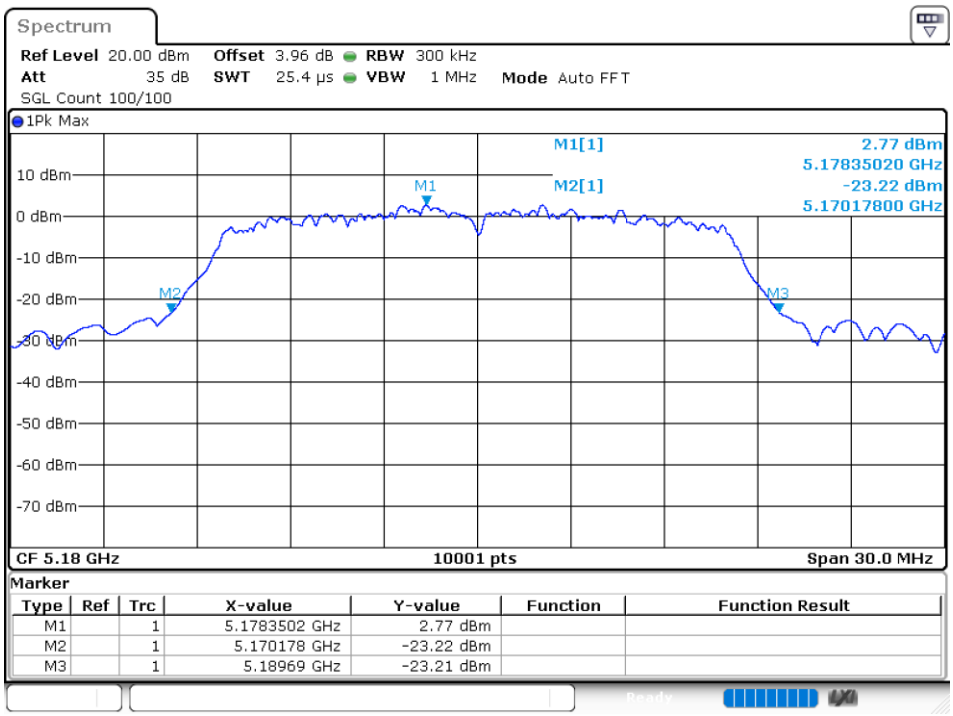
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.36	24	Pass
NVNT	a	5200	Ant1	12.13	24	Pass
NVNT	a	5240	Ant1	12.42	24	Pass
NVNT	n20	5180	Ant1	12.25	24	Pass
NVNT	n20	5200	Ant1	12.11	24	Pass
NVNT	n20	5240	Ant1	12.37	24	Pass
NVNT	n40	5190	Ant1	12.13	24	Pass
NVNT	n40	5230	Ant1	12.21	24	Pass
NVNT	ac20	5180	Ant1	11.98	24	Pass
NVNT	ac20	5200	Ant1	11.95	24	Pass
NVNT	ac20	5240	Ant1	12.41	24	Pass
NVNT	ac40	5190	Ant1	11.62	24	Pass
NVNT	ac40	5230	Ant1	11.52	24	Pass
NVNT	ac80	5210	Ant1	11.69	24	Pass

-26dB Bandwidth

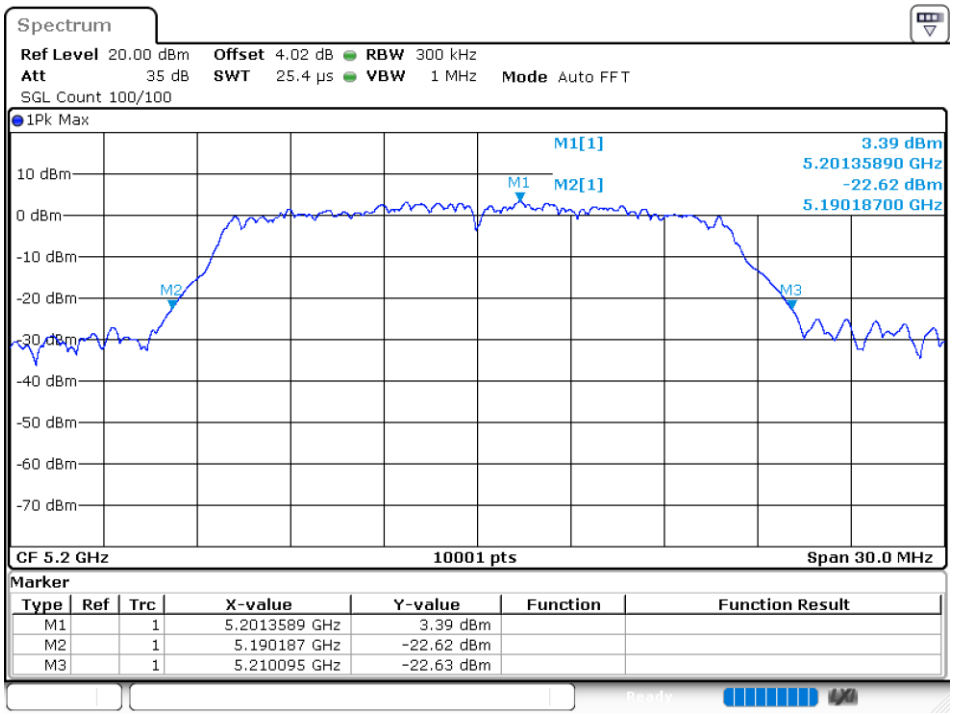
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.512	Pass
NVNT	a	5200	Ant1	19.908	Pass
NVNT	a	5240	Ant1	20.064	Pass
NVNT	n20	5180	Ant1	20.259	Pass
NVNT	n20	5200	Ant1	20.427	Pass
NVNT	n20	5240	Ant1	20.082	Pass
NVNT	n40	5190	Ant1	41.784	Pass
NVNT	n40	5230	Ant1	46.104	Pass
NVNT	ac20	5180	Ant1	20.598	Pass
NVNT	ac20	5200	Ant1	20.313	Pass
NVNT	ac20	5240	Ant1	20.532	Pass
NVNT	ac40	5190	Ant1	40.776	Pass
NVNT	ac40	5230	Ant1	40.8	Pass
NVNT	ac80	5210	Ant1	91.572	Pass

Test Graphs

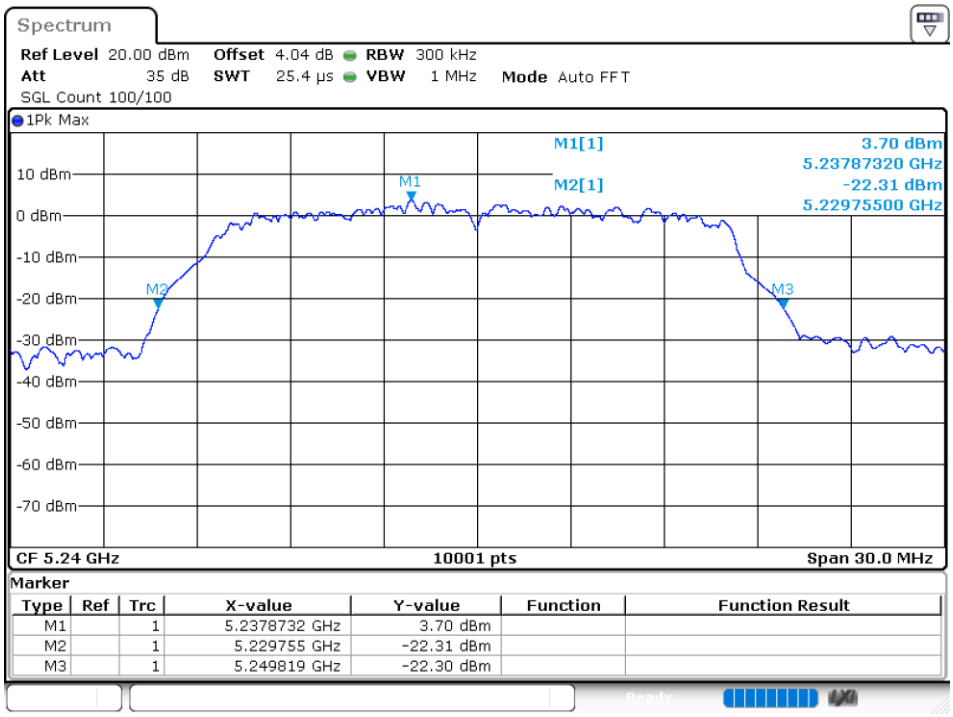
-26dB Bandwidth NVNT a 5180MHz Ant1



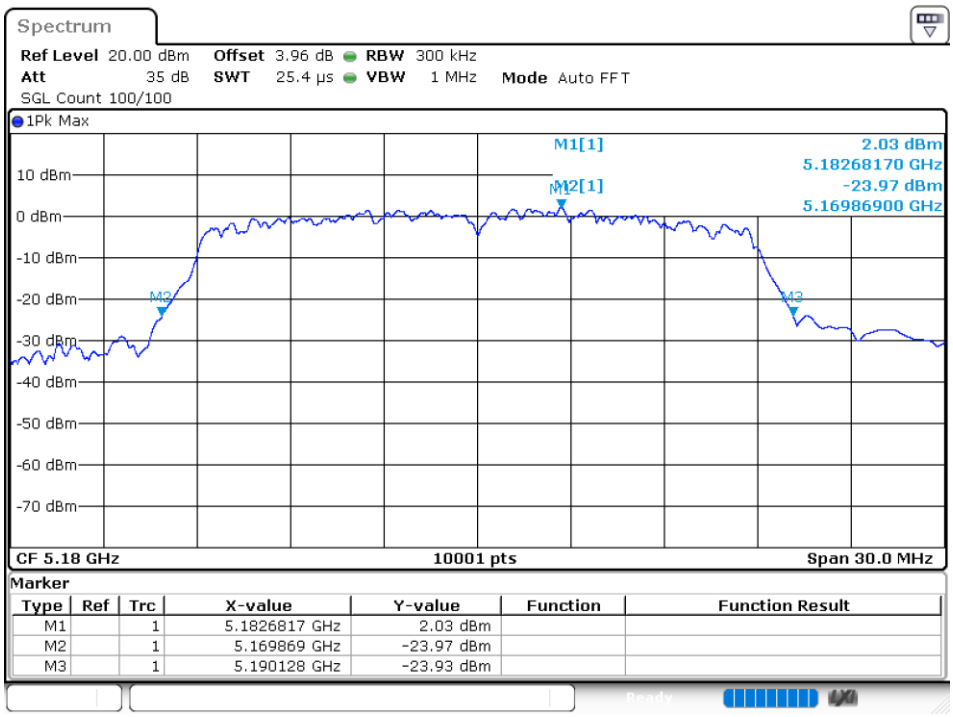
-26dB Bandwidth NVNT a 5200MHz Ant1



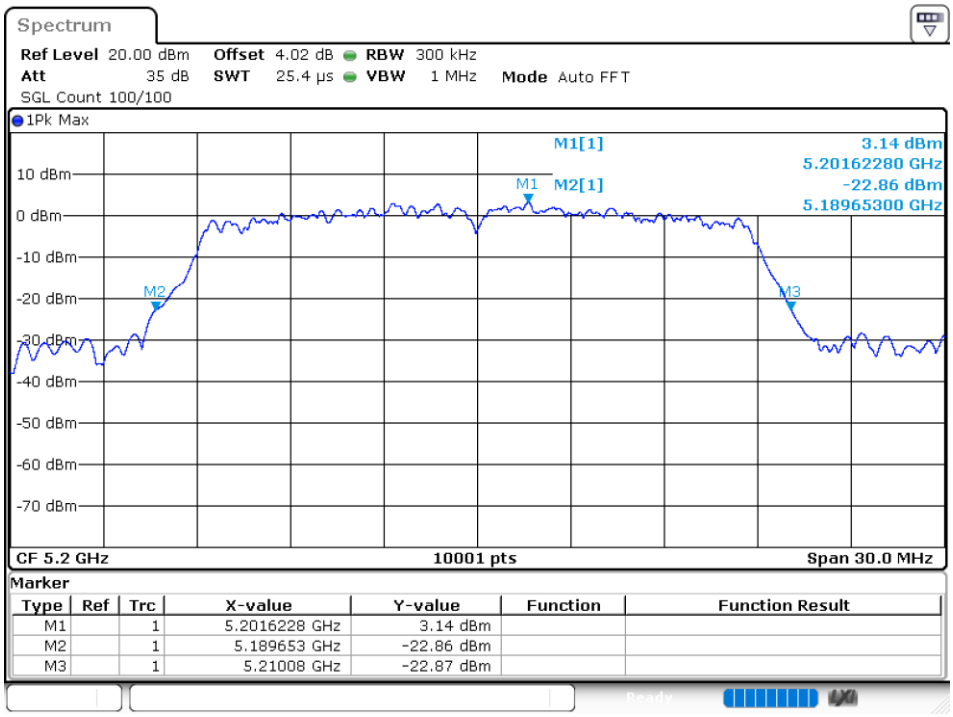
-26dB Bandwidth NVNT a 5240MHz Ant1



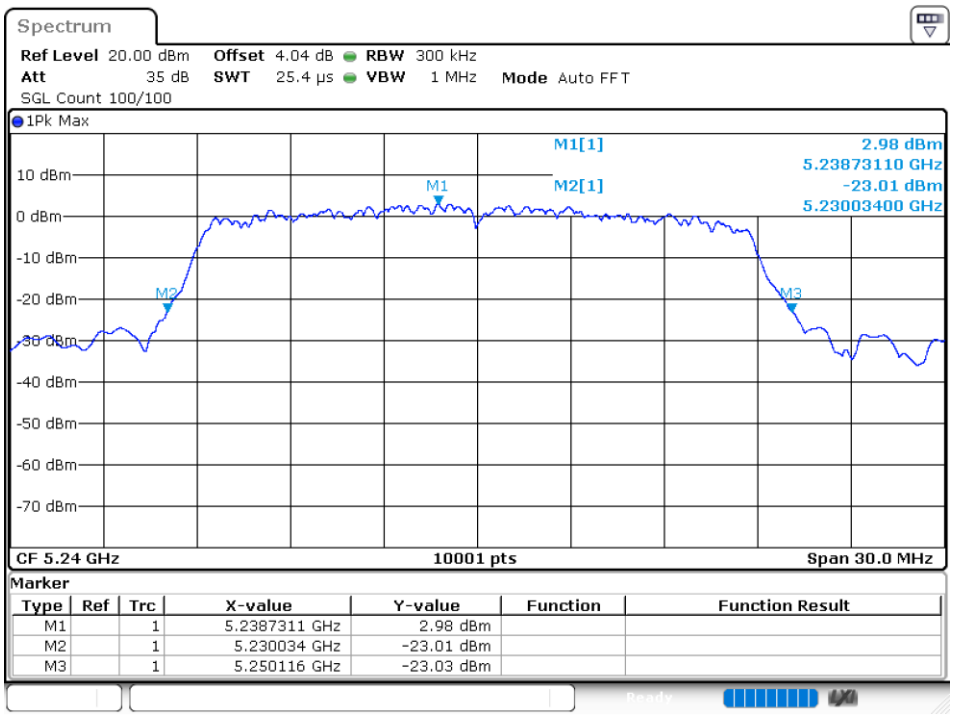
-26dB Bandwidth NVNT n20 5180MHz Ant1



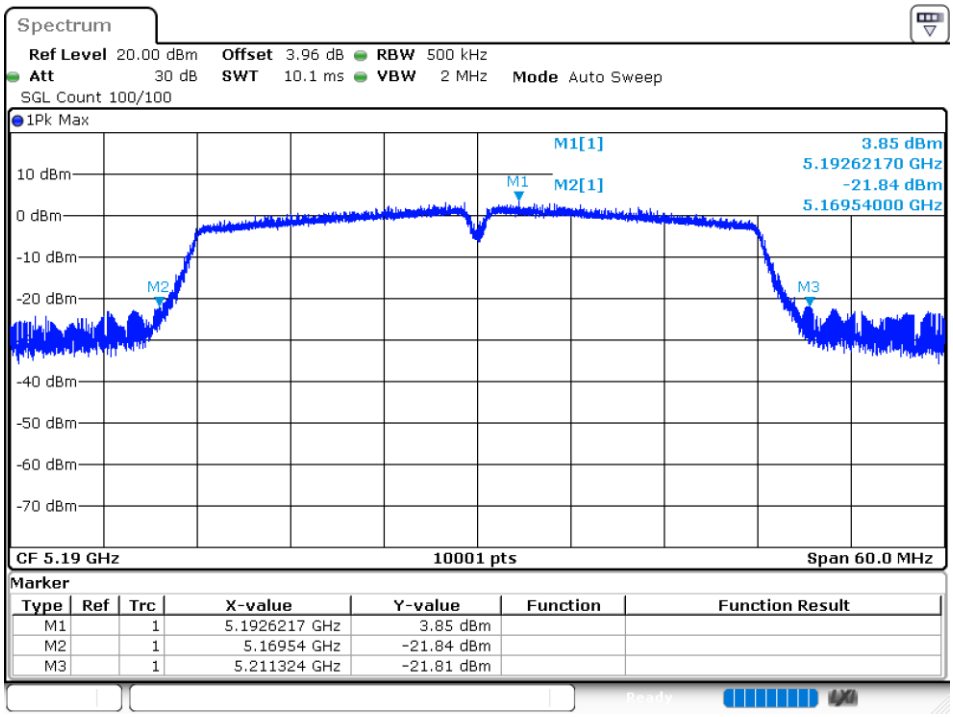
-26dB Bandwidth NVNT n20 5200MHz Ant1



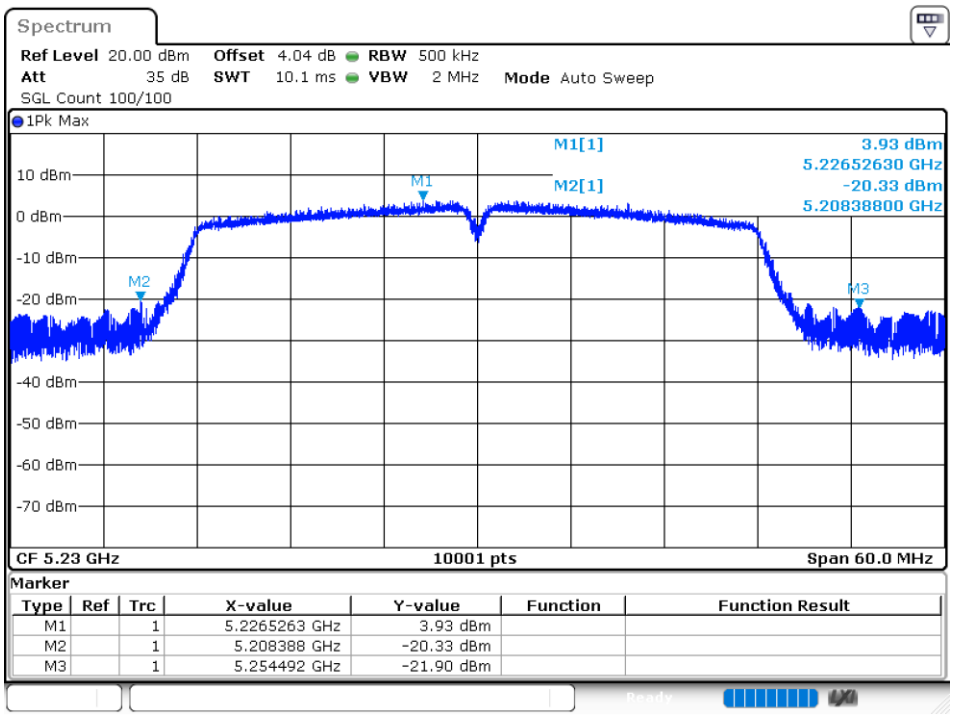
-26dB Bandwidth NVNT n20 5240MHz Ant1



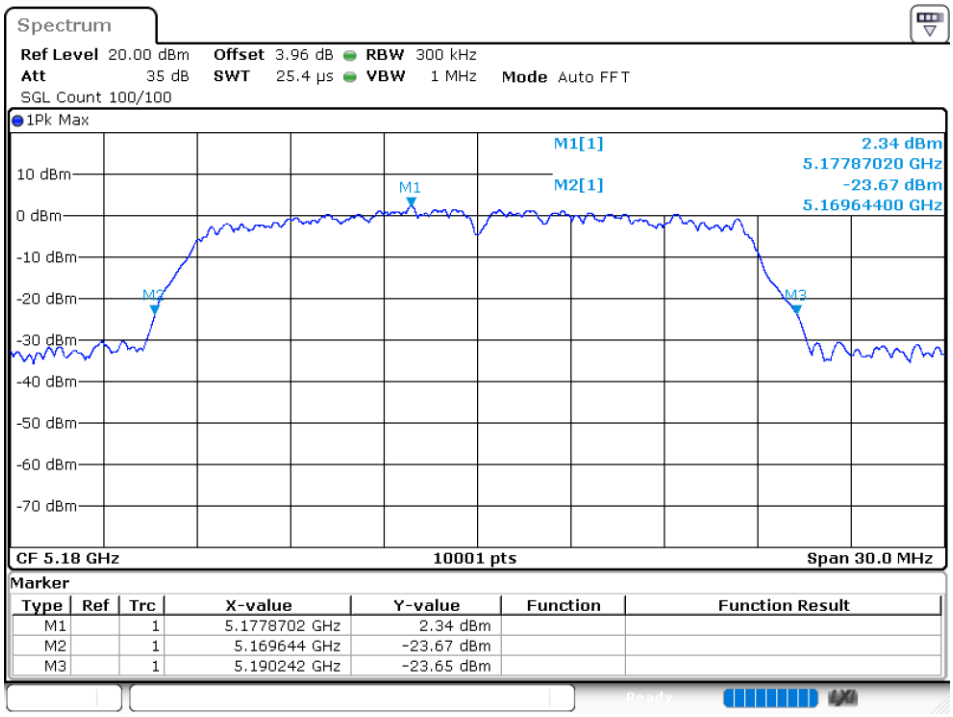
-26dB Bandwidth NVNT n40 5190MHz Ant1



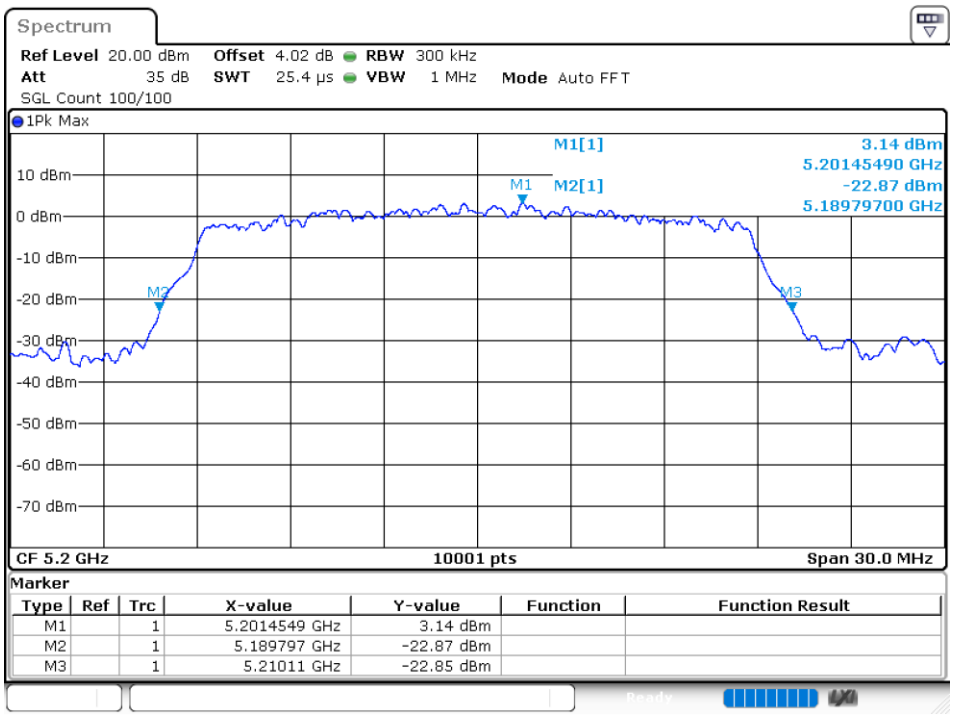
-26dB Bandwidth NVNT n40 5230MHz Ant1



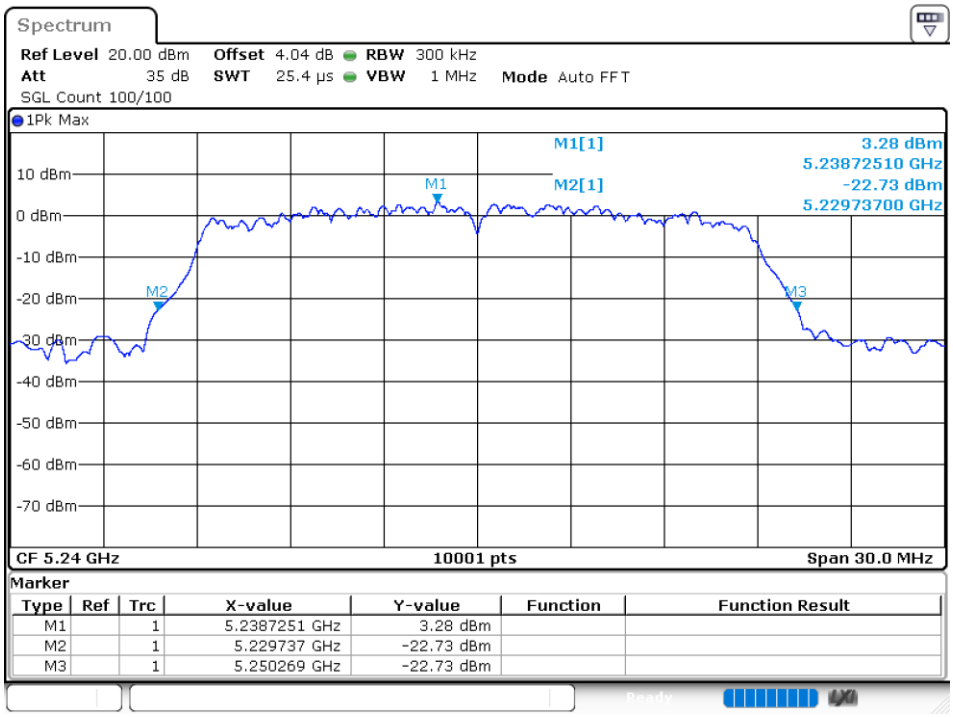
-26dB Bandwidth NVNT ac20 5180MHz Ant1



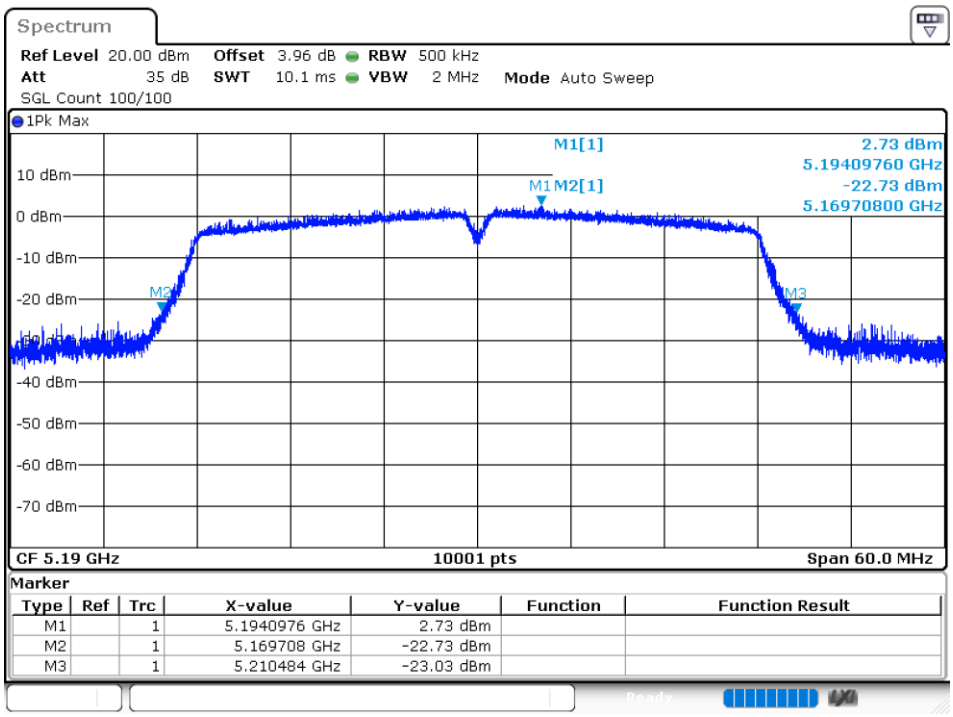
-26dB Bandwidth NVNT ac20 5200MHz Ant1



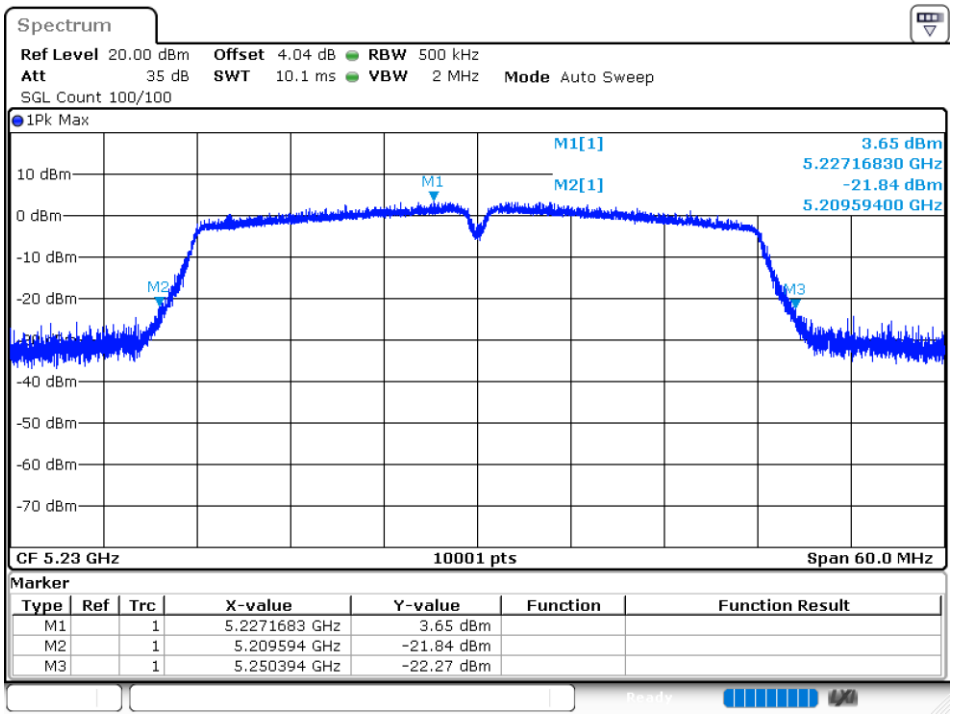
-26dB Bandwidth NVNT ac20 5240MHz Ant1



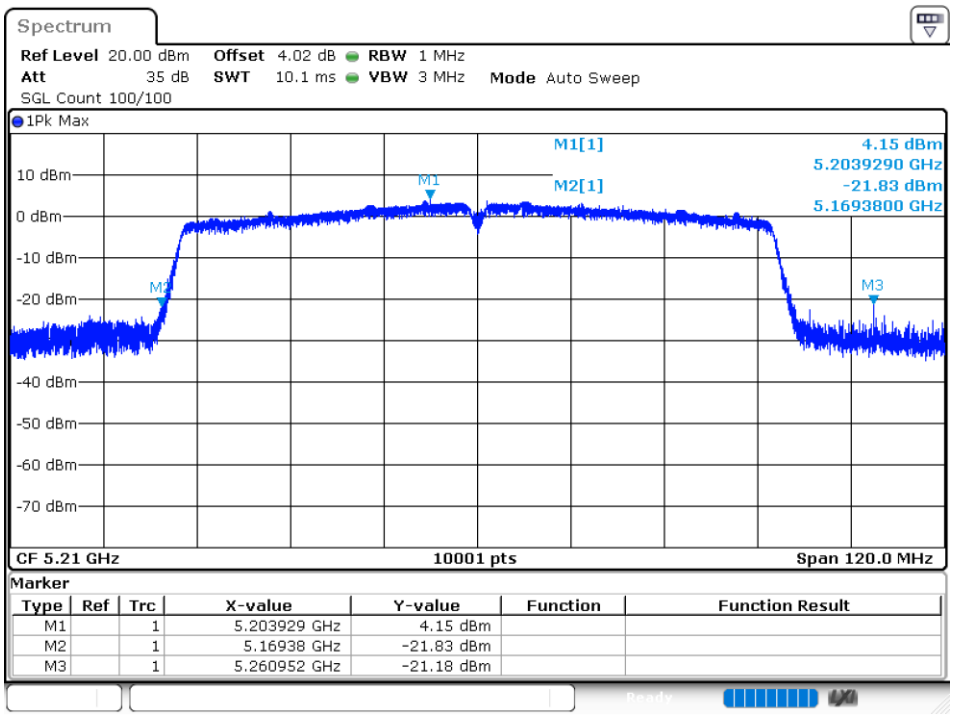
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



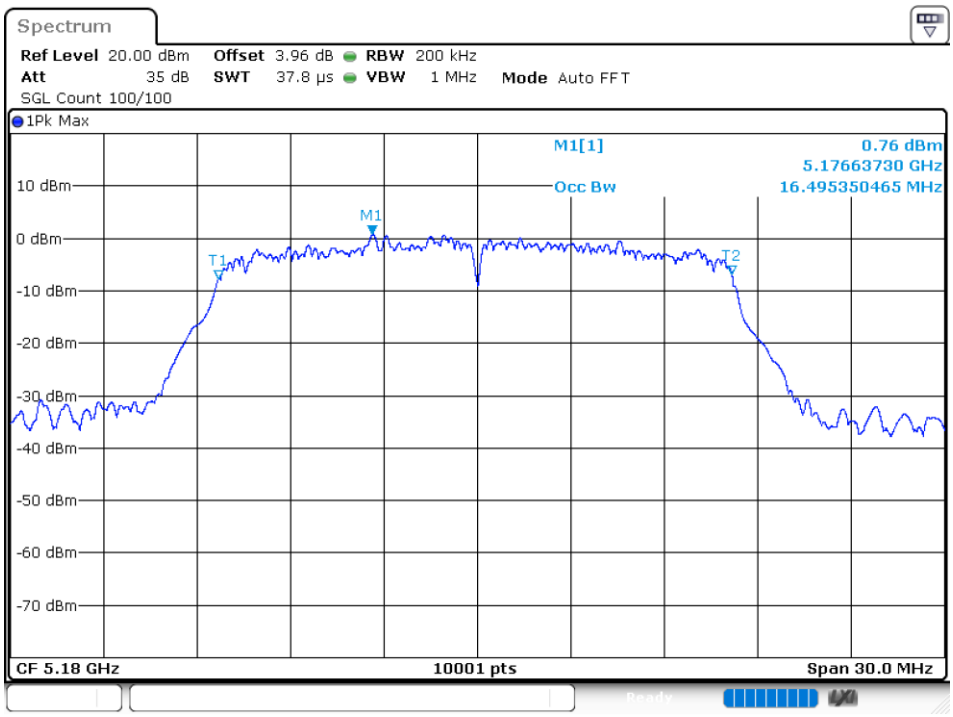
-26dB Bandwidth NVNT ac80 5210MHz Ant1



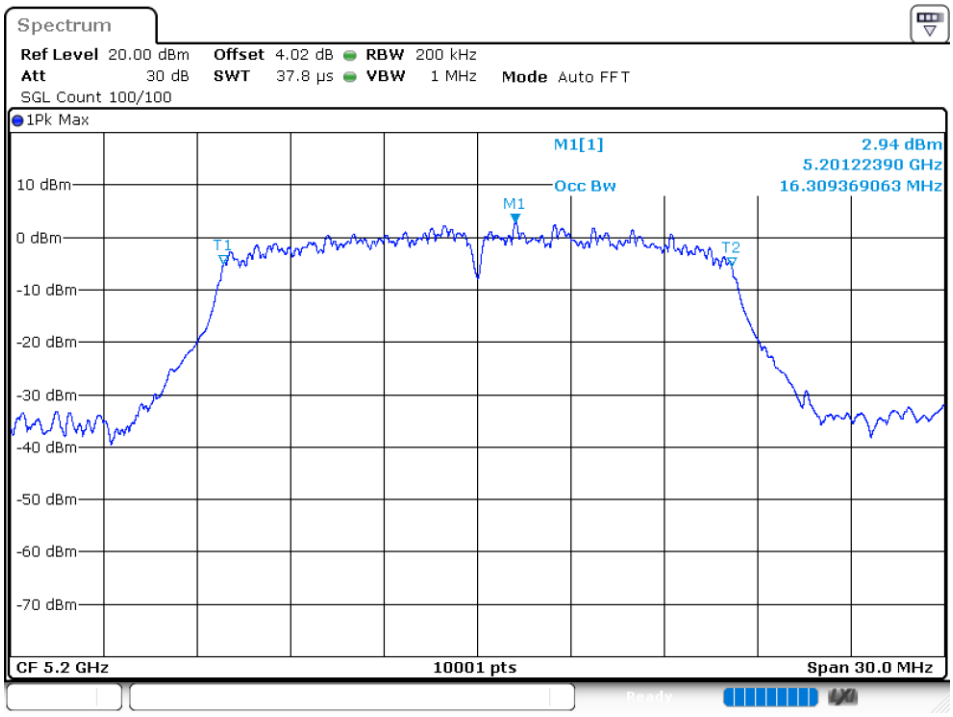
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.495
NVNT	a	5200	Ant1	16.309
NVNT	a	5240	Ant1	16.51
NVNT	n20	5180	Ant1	17.737
NVNT	n20	5200	Ant1	17.551
NVNT	n20	5240	Ant1	17.584
NVNT	n40	5190	Ant1	36.116
NVNT	n40	5230	Ant1	36.044
NVNT	ac20	5180	Ant1	17.584
NVNT	ac20	5200	Ant1	17.542
NVNT	ac20	5240	Ant1	17.551
NVNT	ac40	5190	Ant1	36.062
NVNT	ac40	5230	Ant1	36.002
NVNT	ac80	5210	Ant1	75.124

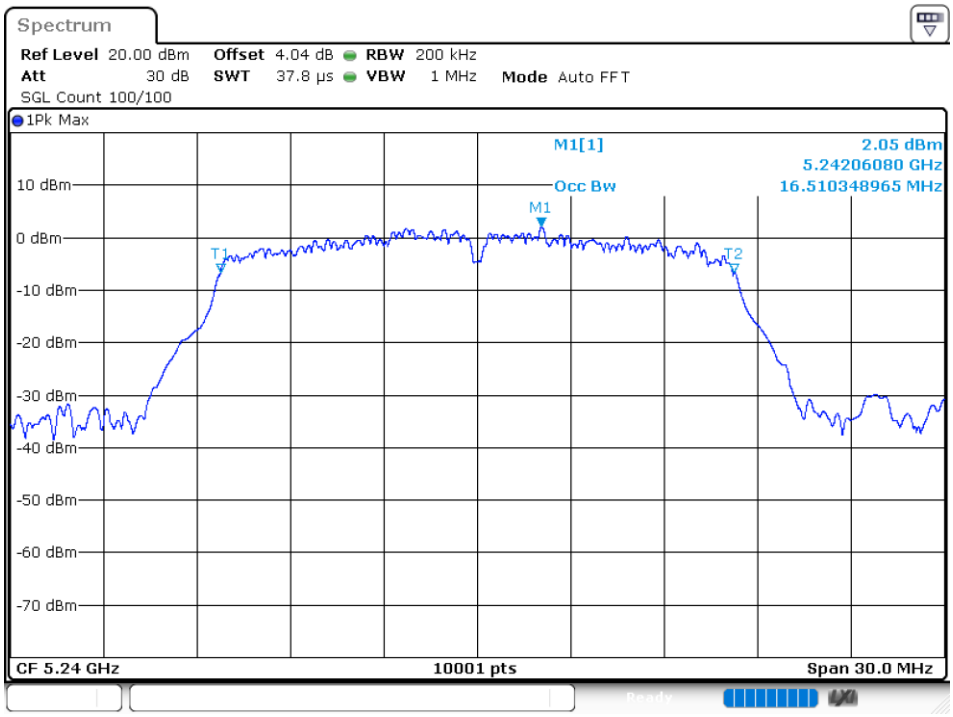
Test Graphs
OBW NVNT a 5180MHz Ant1



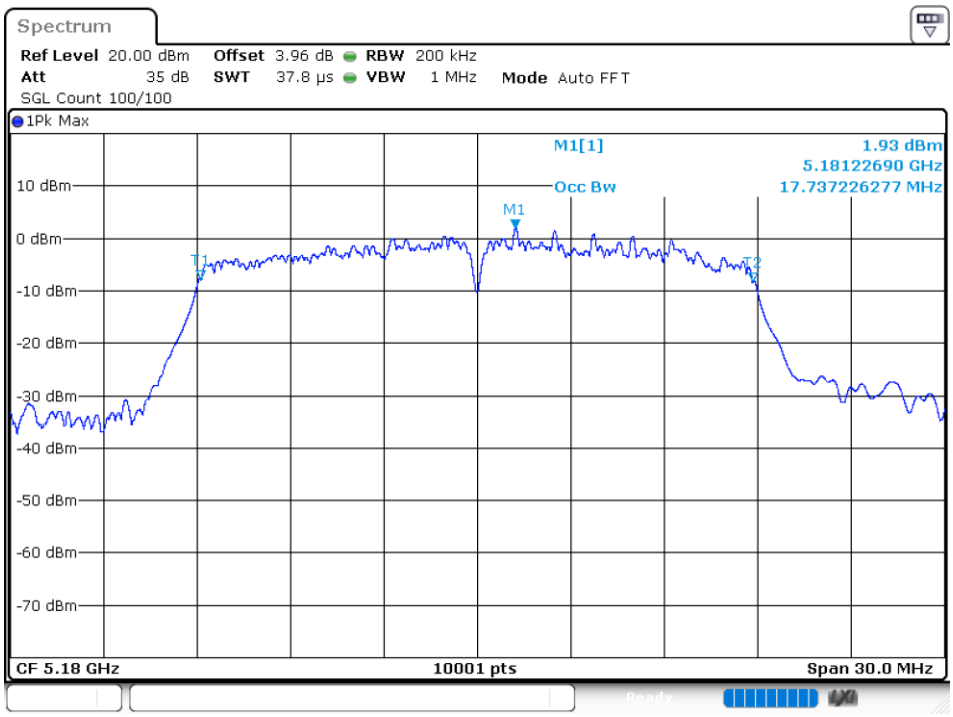
OBW NVNT a 5200MHz Ant1



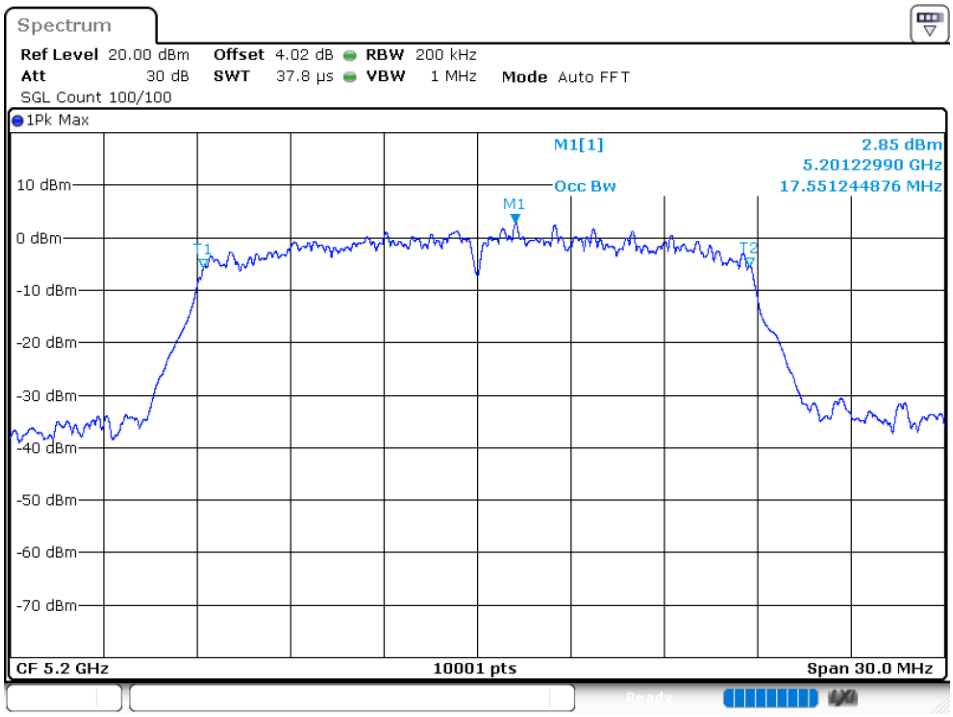
OBW NVNT a 5240MHz Ant1



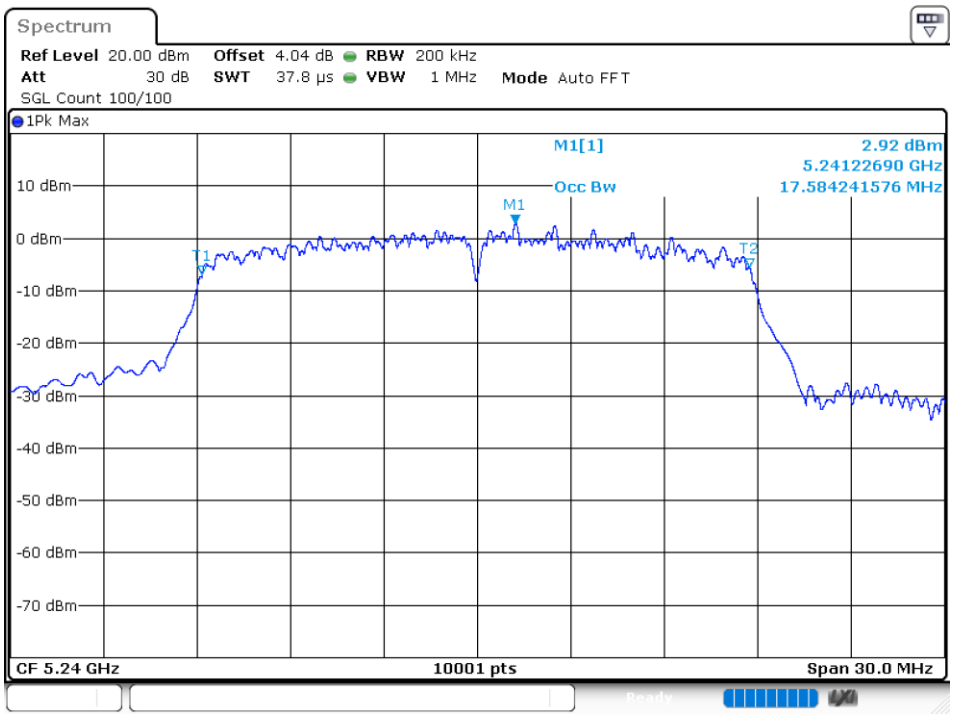
OBW NVNT n20 5180MHz Ant1



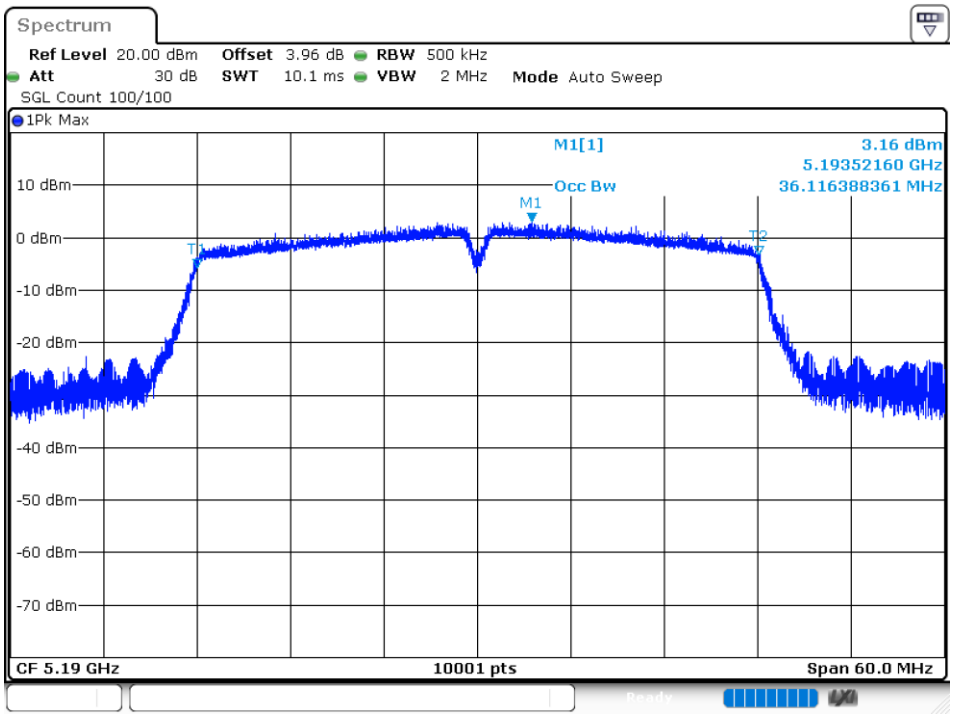
OBW NVNT n20 5200MHz Ant1



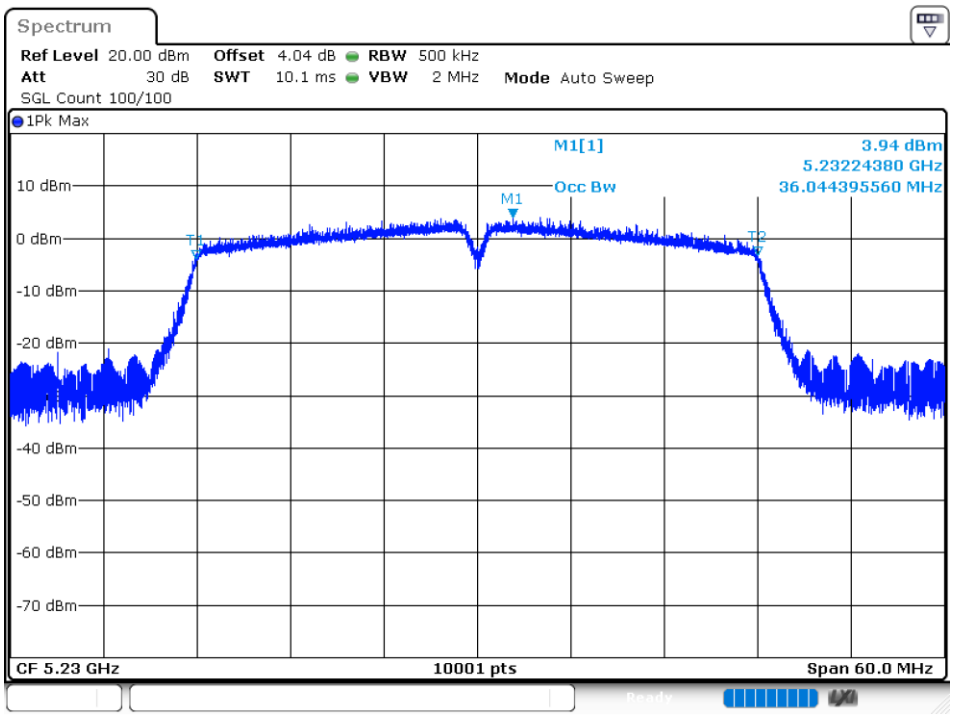
OBW NVNT n20 5240MHz Ant1



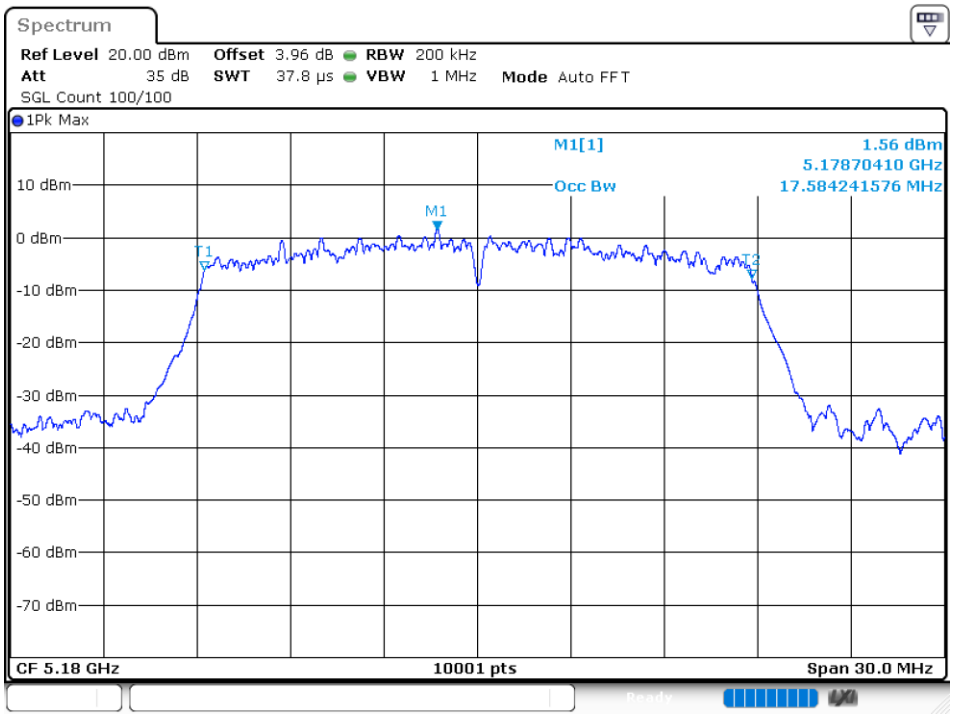
OBW NVNT n40 5190MHz Ant1



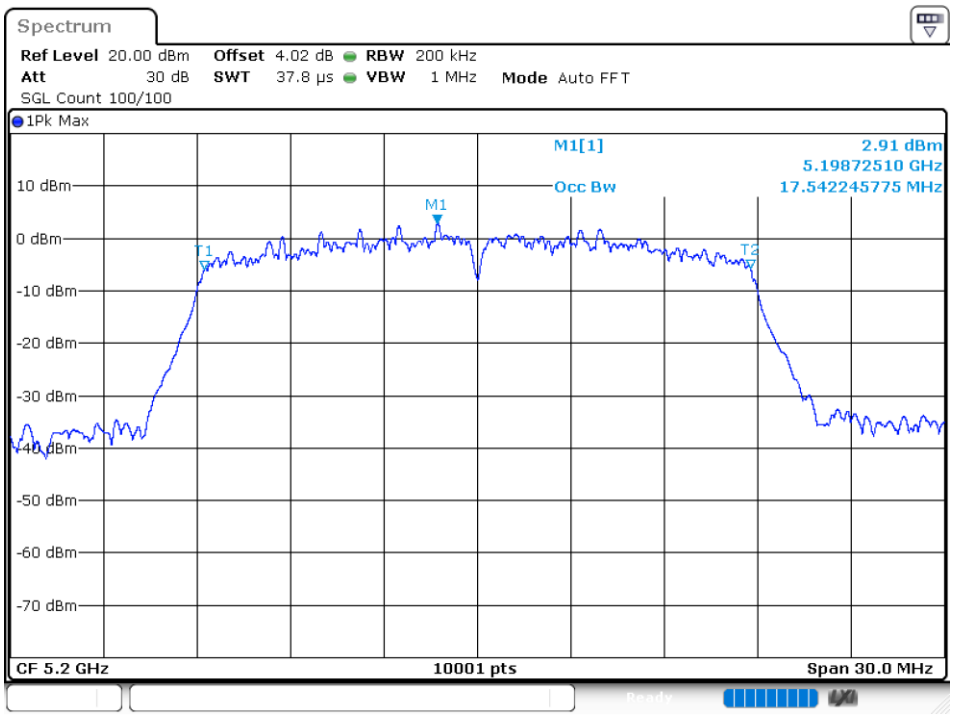
OBW NVNT n40 5230MHz Ant1



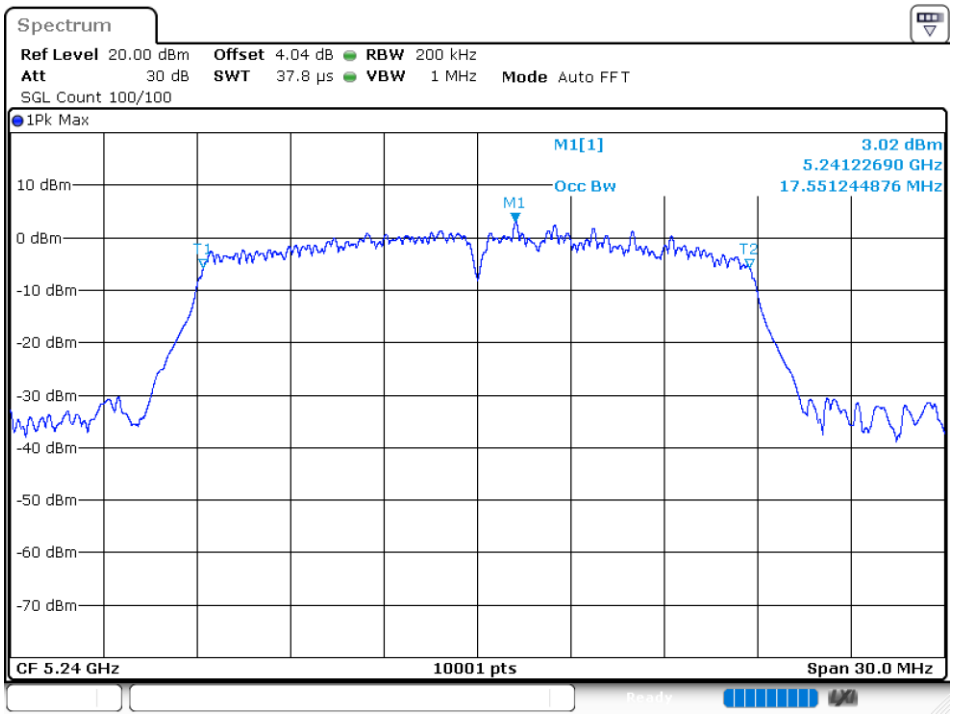
OBW NVNT ac20 5180MHz Ant1



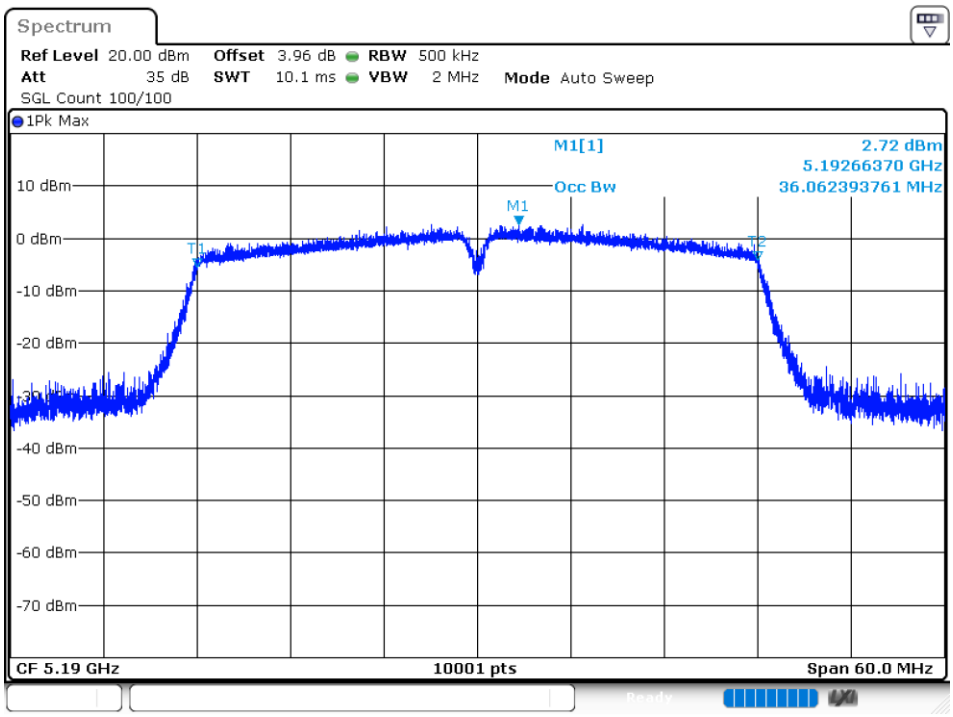
OBW NVNT ac20 5200MHz Ant1



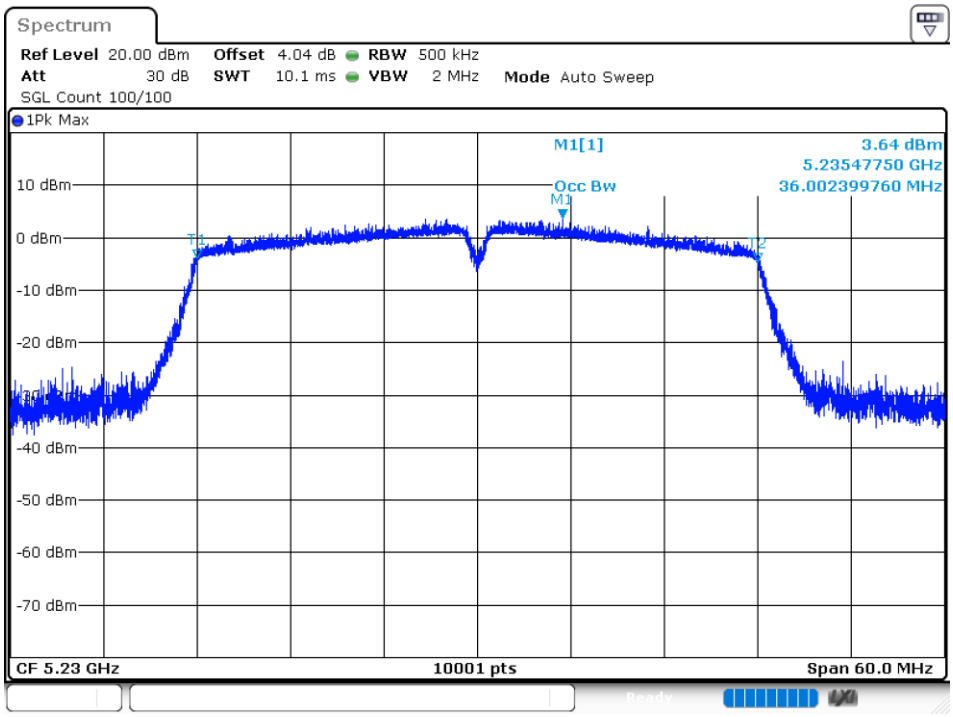
OBW NVNT ac20 5240MHz Ant1



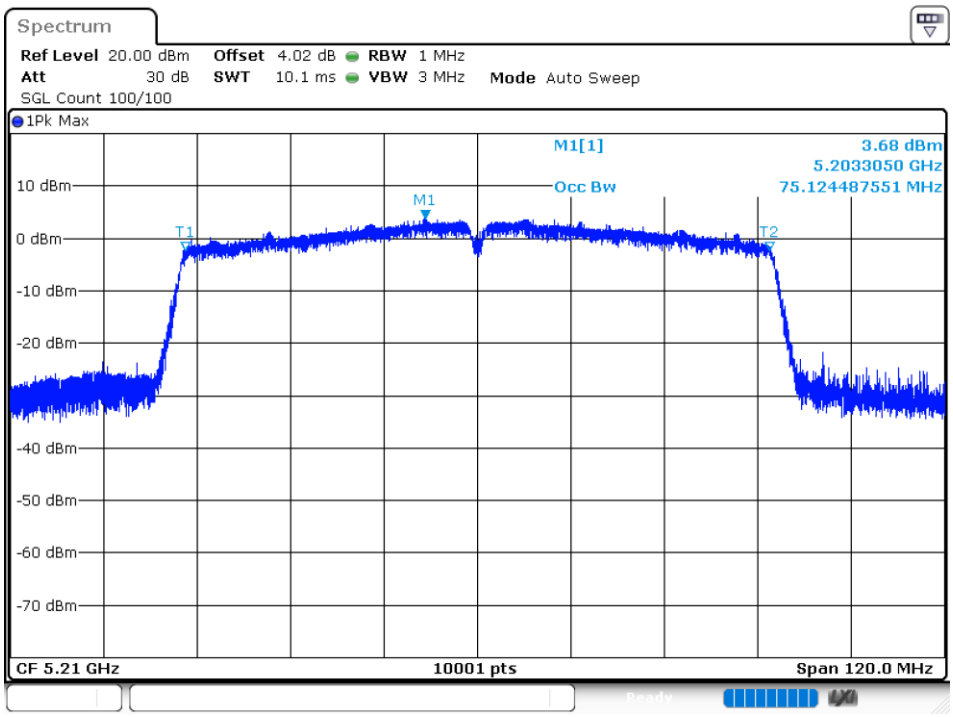
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1

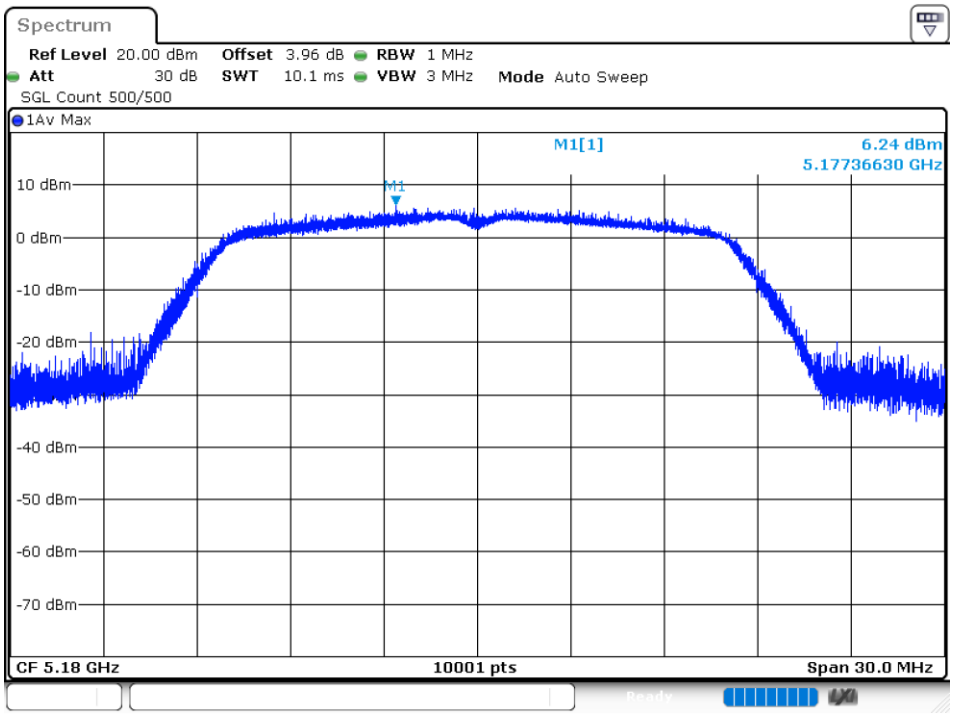


Maximum Power Spectral Density Level

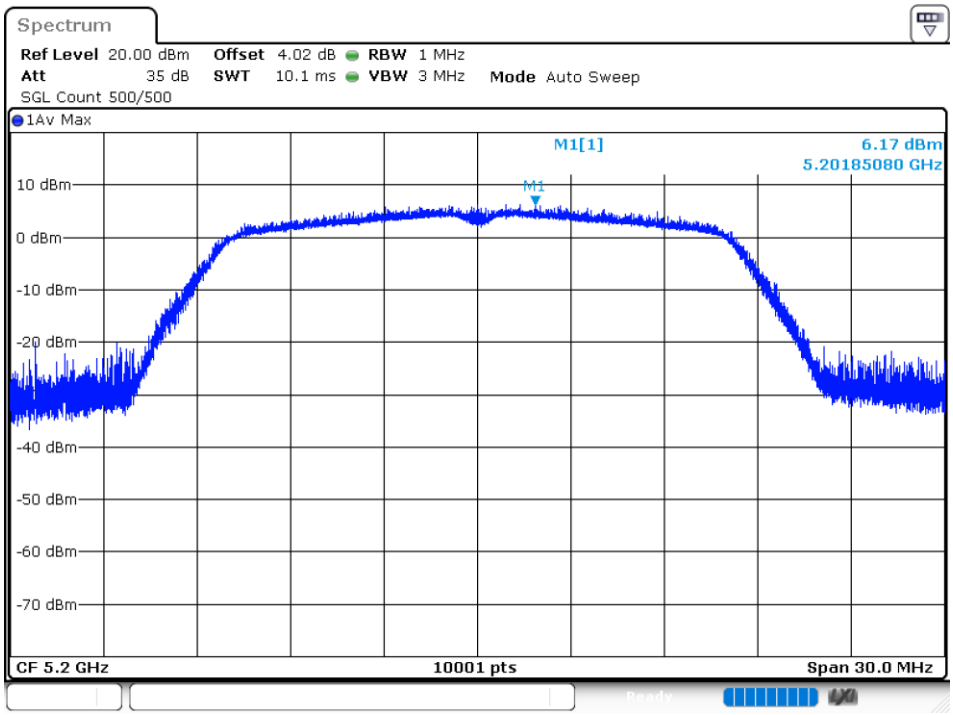
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	6.24	0.11	6.35	11	Pass
NVNT	a	5200	Ant1	6.17	0.11	6.28	11	Pass
NVNT	a	5240	Ant1	7.01	0.11	7.12	11	Pass
NVNT	n20	5180	Ant1	5.26	0.11	5.37	11	Pass
NVNT	n20	5200	Ant1	6.16	0.11	6.27	11	Pass
NVNT	n20	5240	Ant1	6.06	0.11	6.17	11	Pass
NVNT	n40	5190	Ant1	3.18	0.22	3.4	11	Pass
NVNT	n40	5230	Ant1	3.56	0.22	3.78	11	Pass
NVNT	ac20	5180	Ant1	4.99	0.11	5.1	11	Pass
NVNT	ac20	5200	Ant1	6.14	0.11	6.25	11	Pass
NVNT	ac20	5240	Ant1	5.78	0.11	5.89	11	Pass
NVNT	ac40	5190	Ant1	2.95	0.22	3.17	11	Pass
NVNT	ac40	5230	Ant1	3.52	0.22	3.74	11	Pass
NVNT	ac80	5210	Ant1	-0.61	0.42	-0.19	11	Pass

Test Graphs

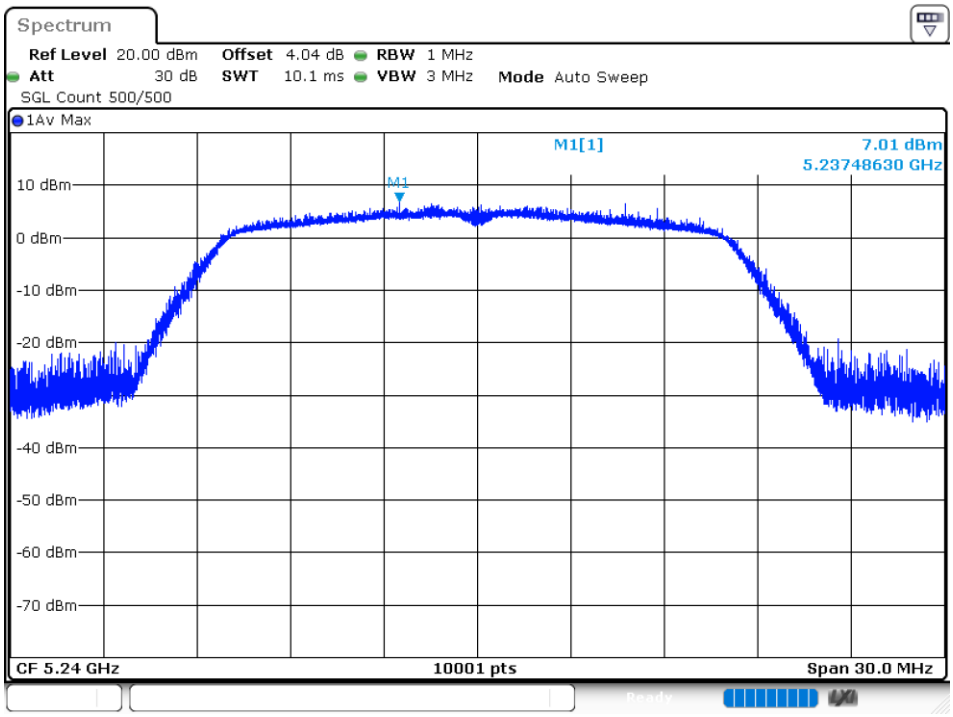
PSD NVNT a 5180MHz Ant1



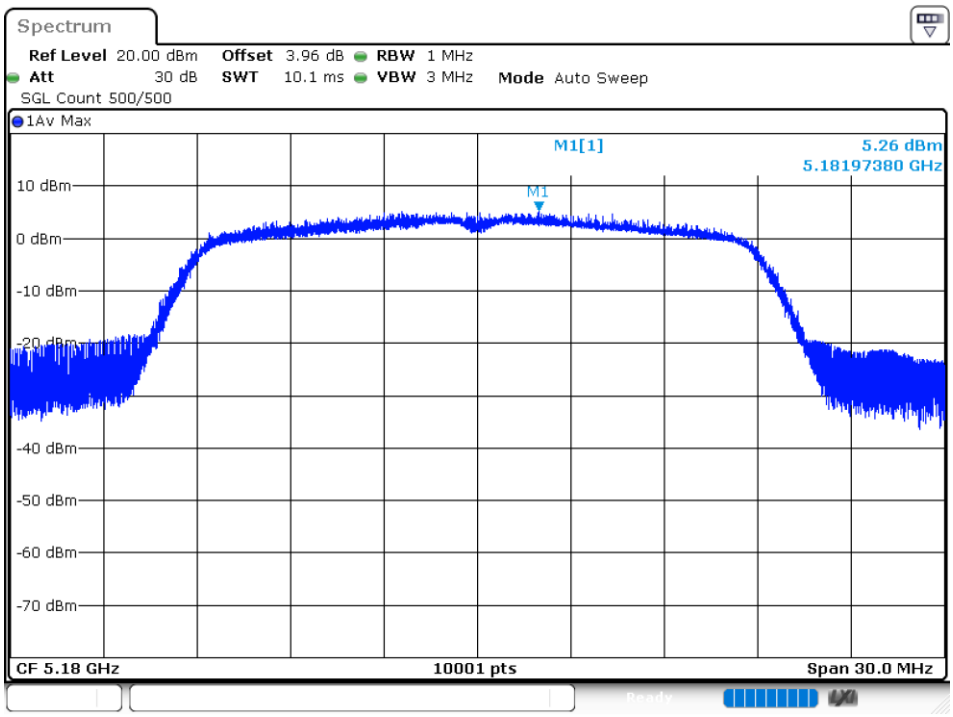
PSD NVNT a 5200MHz Ant1



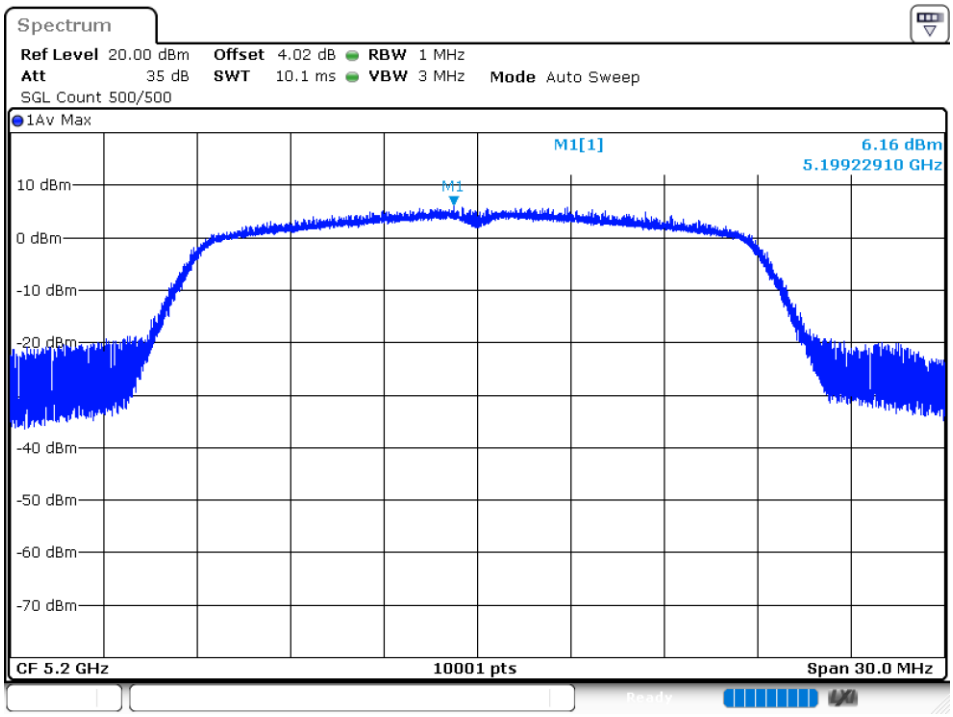
PSD NVNT a 5240MHz Ant1



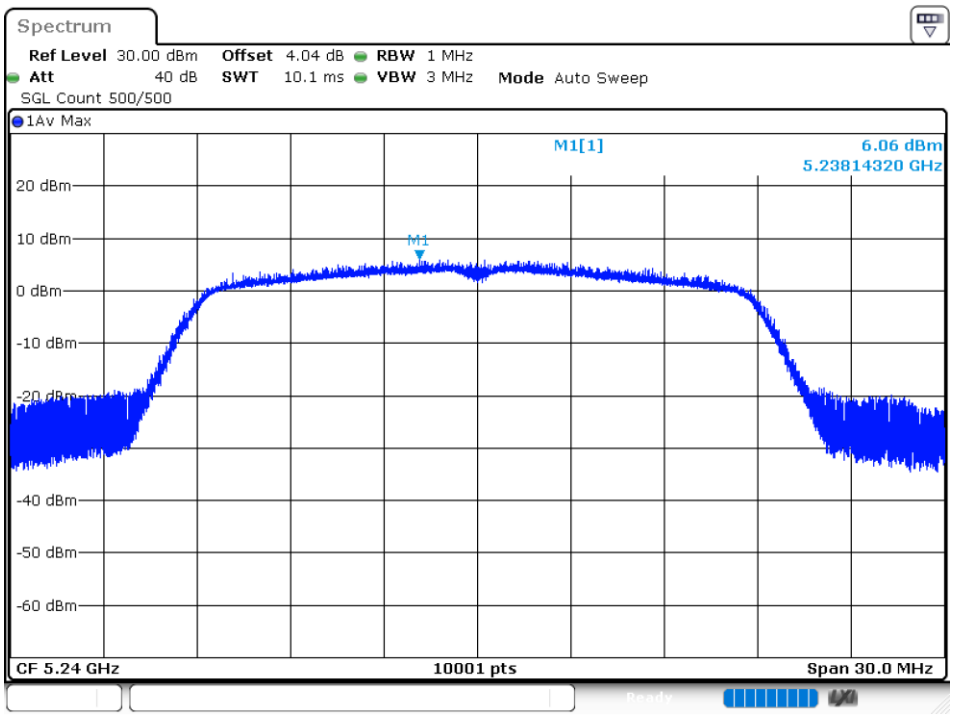
PSD NVNT n20 5180MHz Ant1



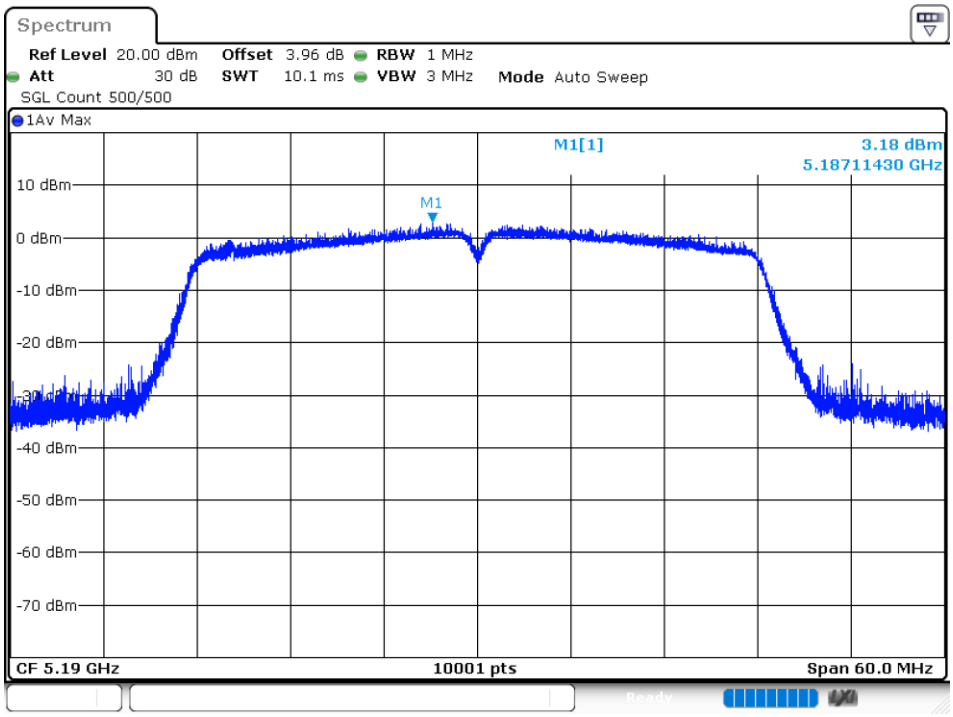
PSD NVNT n20 5200MHz Ant1



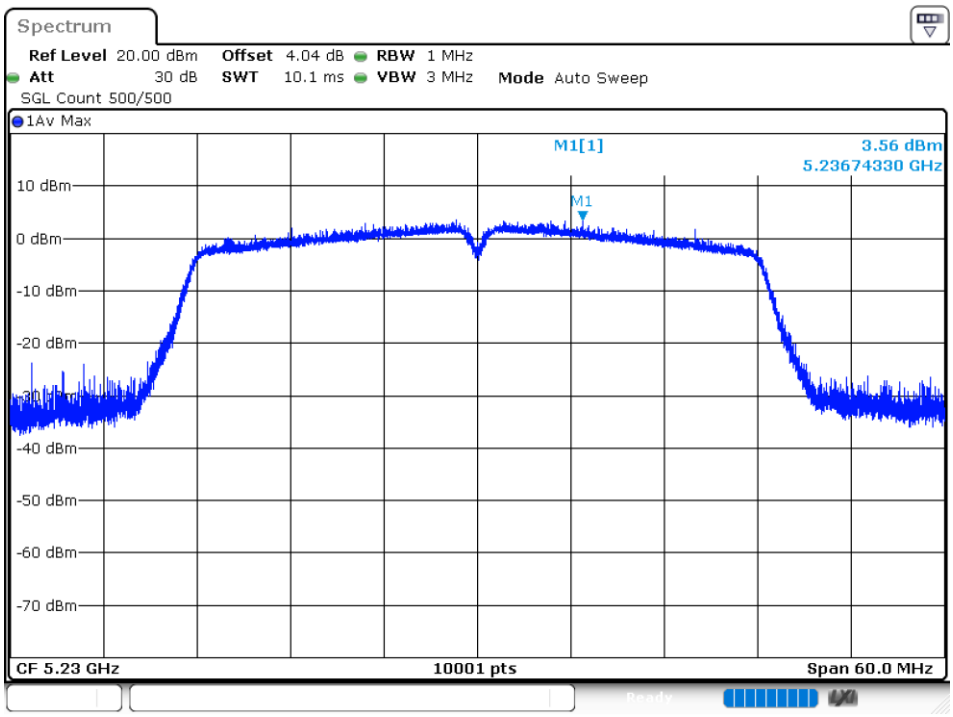
PSD NVNT n20 5240MHz Ant1



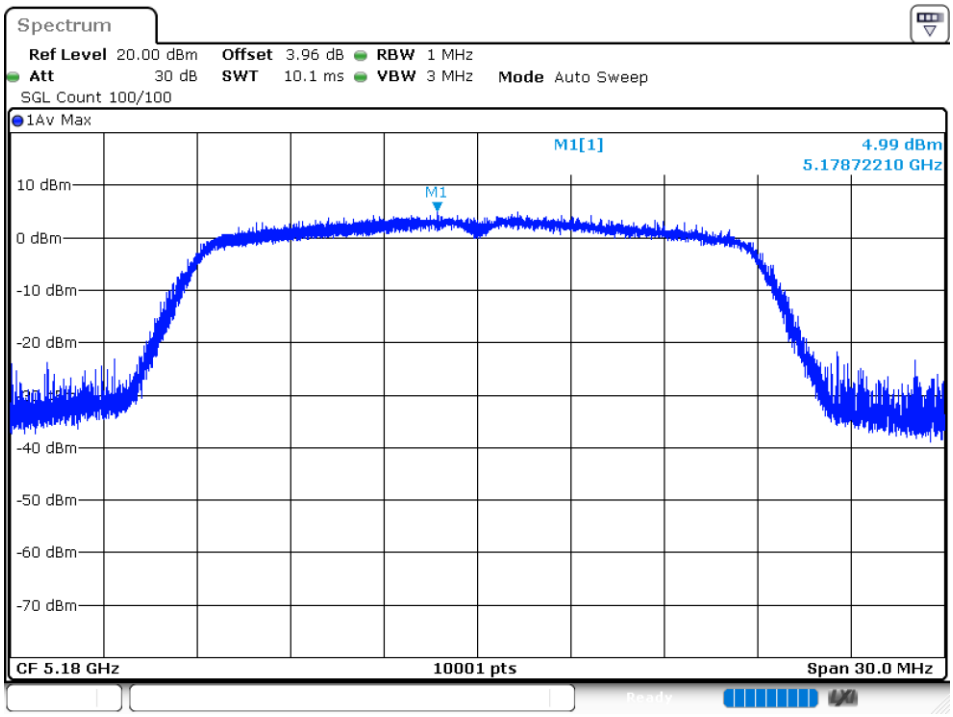
PSD NVNT n40 5190MHz Ant1



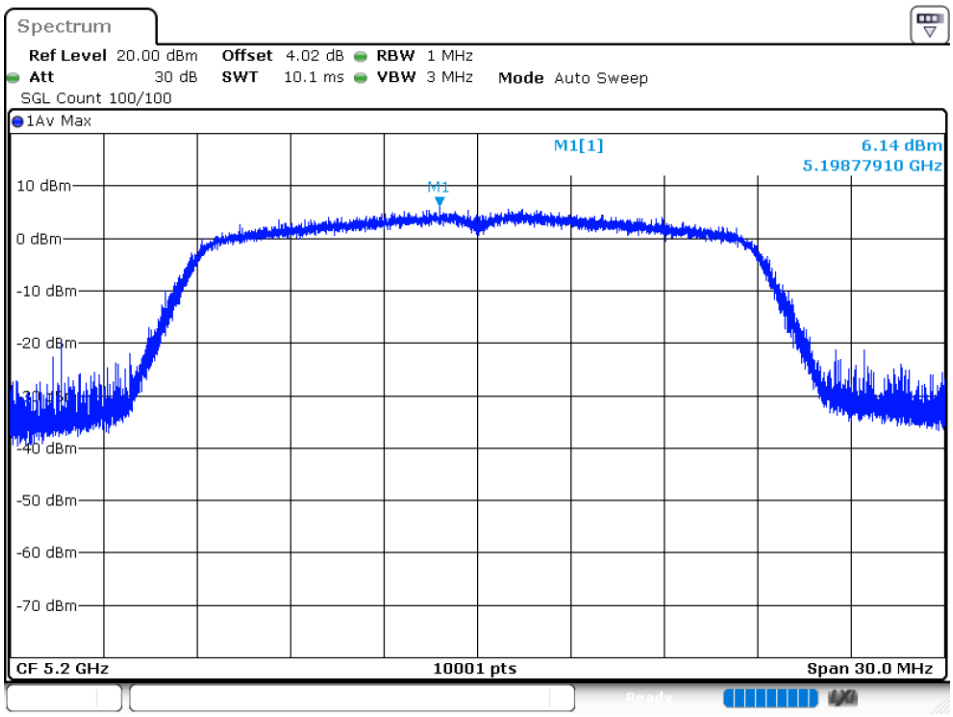
PSD NVNT n40 5230MHz Ant1



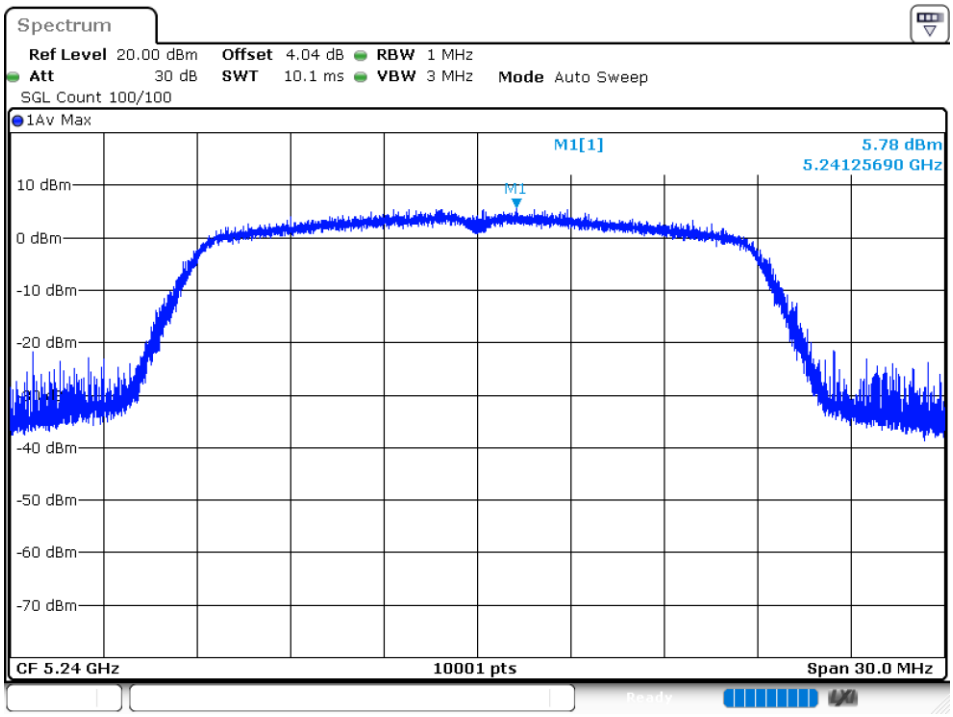
PSD NVNT ac20 5180MHz Ant1



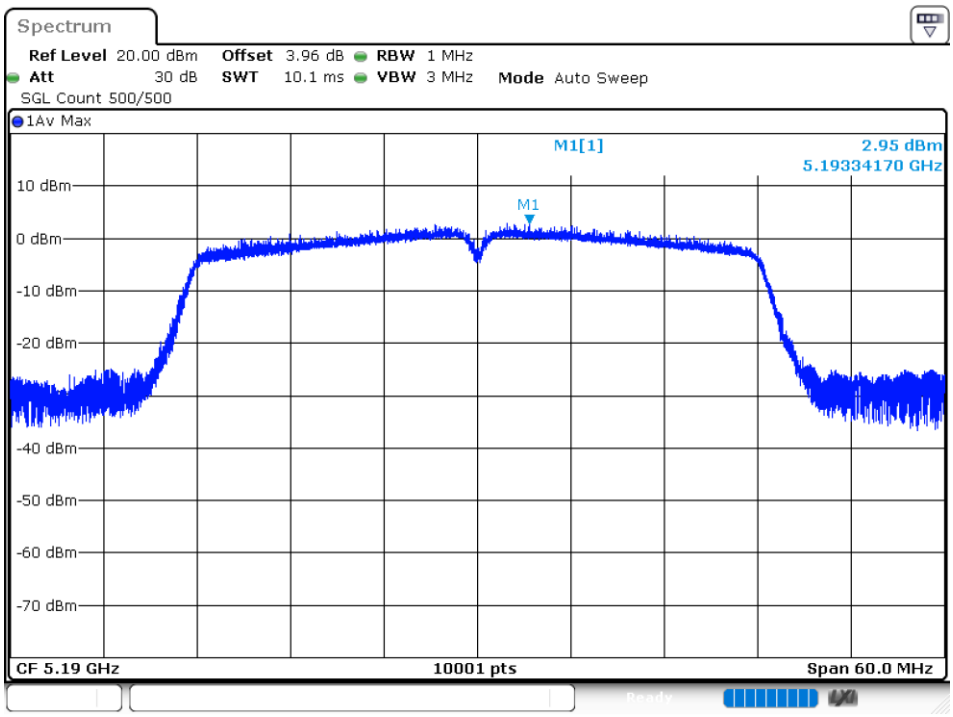
PSD NVNT ac20 5200MHz Ant1



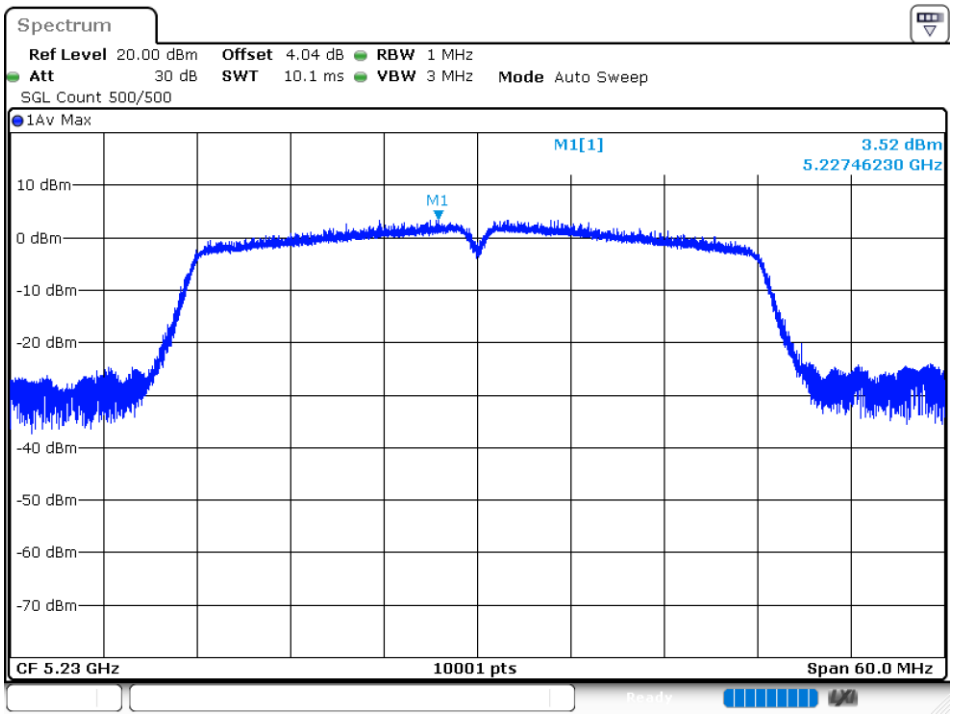
PSD NVNT ac20 5240MHz Ant1



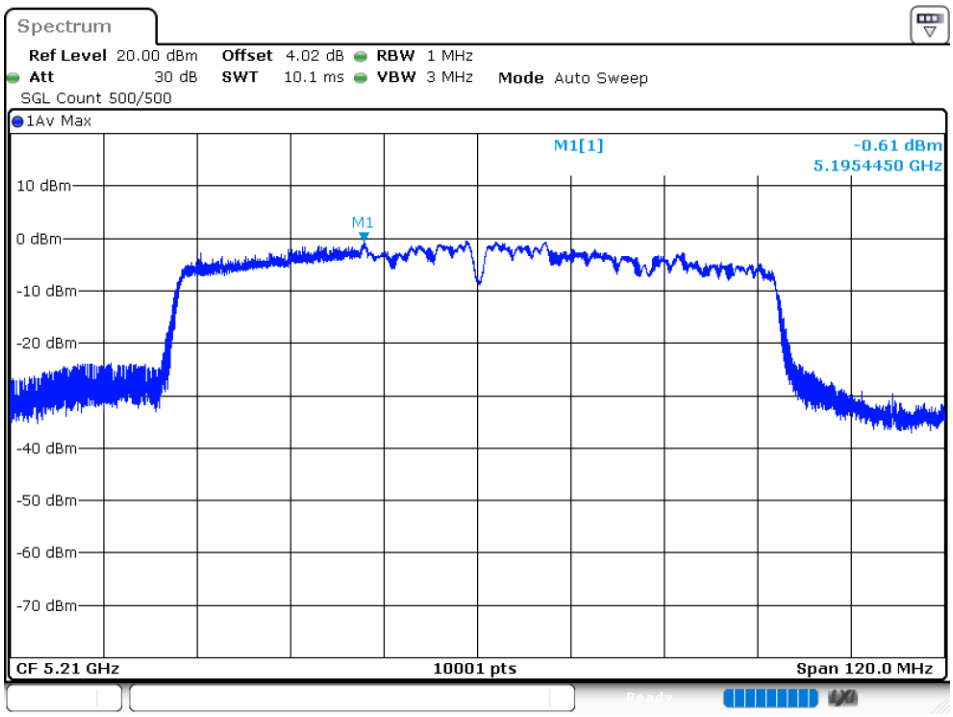
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1



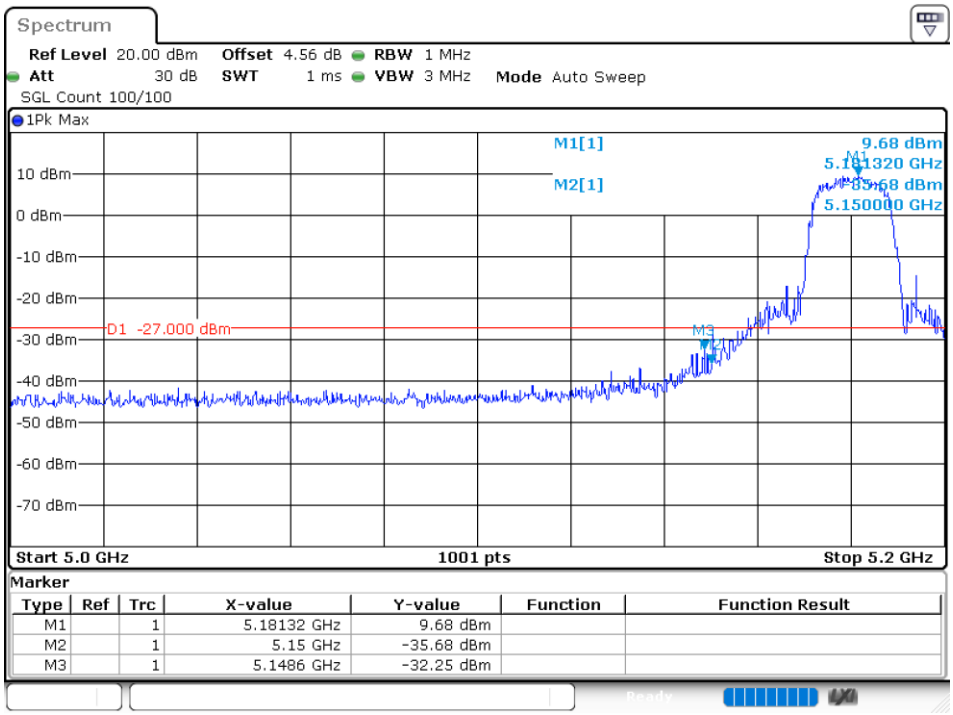
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-32.24	-27	Pass
NVNT	a	5240	Ant1	-45.29	-27	Pass
NVNT	n20	5180	Ant1	-28.07	-27	Pass
NVNT	n20	5240	Ant1	-36.03	-27	Pass
NVNT	n40	5190	Ant1	-27.5	-27	Pass
NVNT	n40	5230	Ant1	-36.81	-27	Pass
NVNT	ac20	5180	Ant1	-32.74	-27	Pass
NVNT	ac20	5240	Ant1	-35.94	-27	Pass
NVNT	ac40	5190	Ant1	-28.36	-27	Pass
NVNT	ac40	5230	Ant1	-36.79	-27	Pass
NVNT	ac80	5210	Ant1	-38.16	-27	Pass

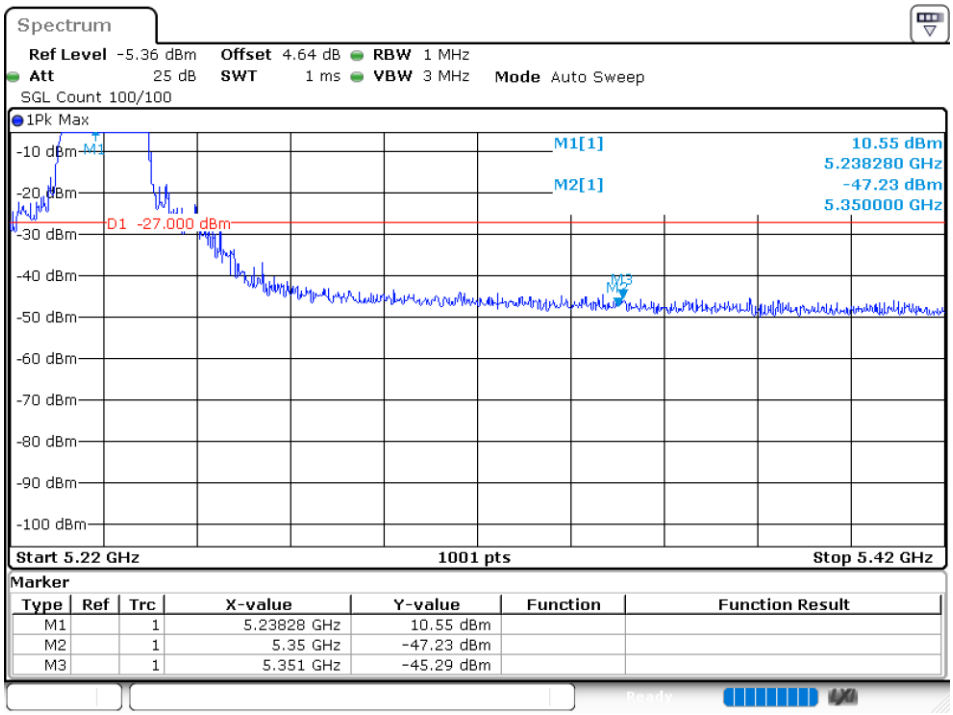
Note: This test has increased antenna gain .

Test Graphs

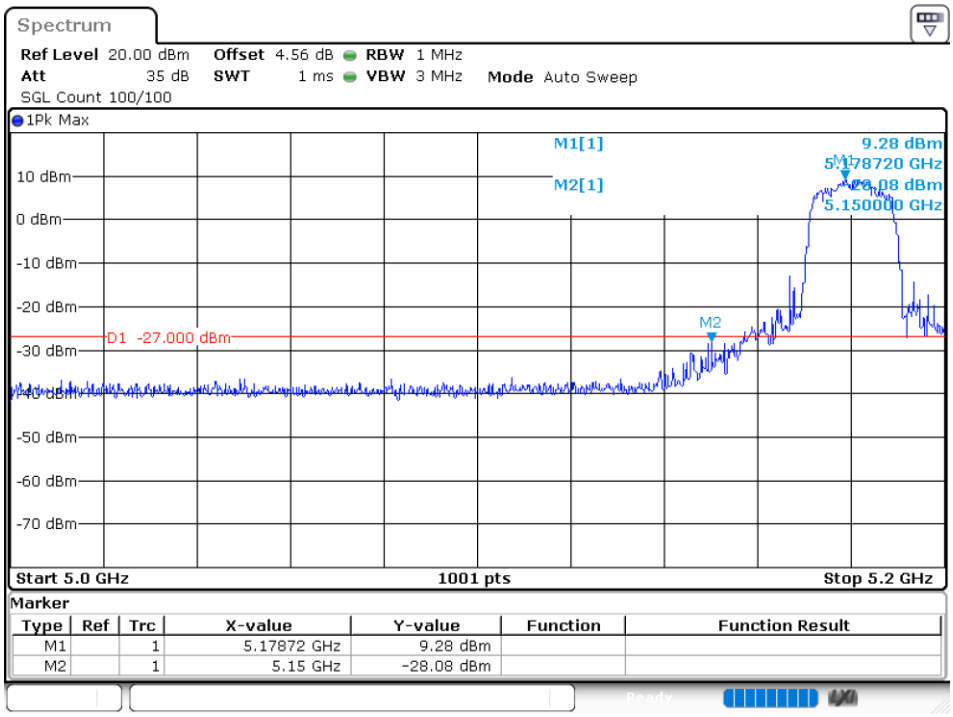
Band Edge NVNT a 5180MHz Low Ant1



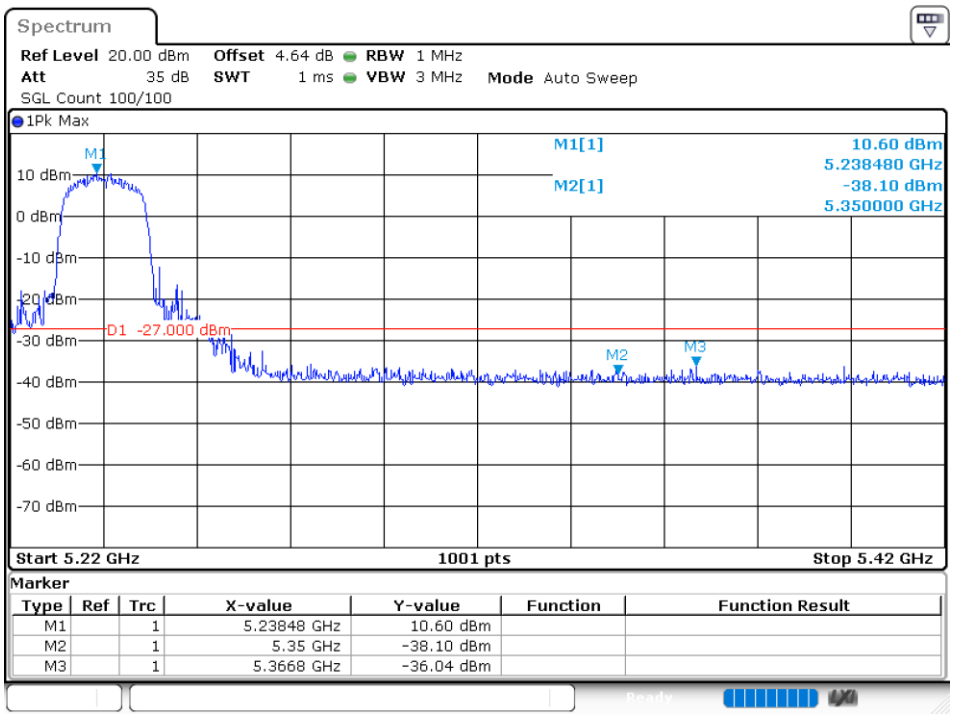
Band Edge NVNT a 5240MHz High Ant1



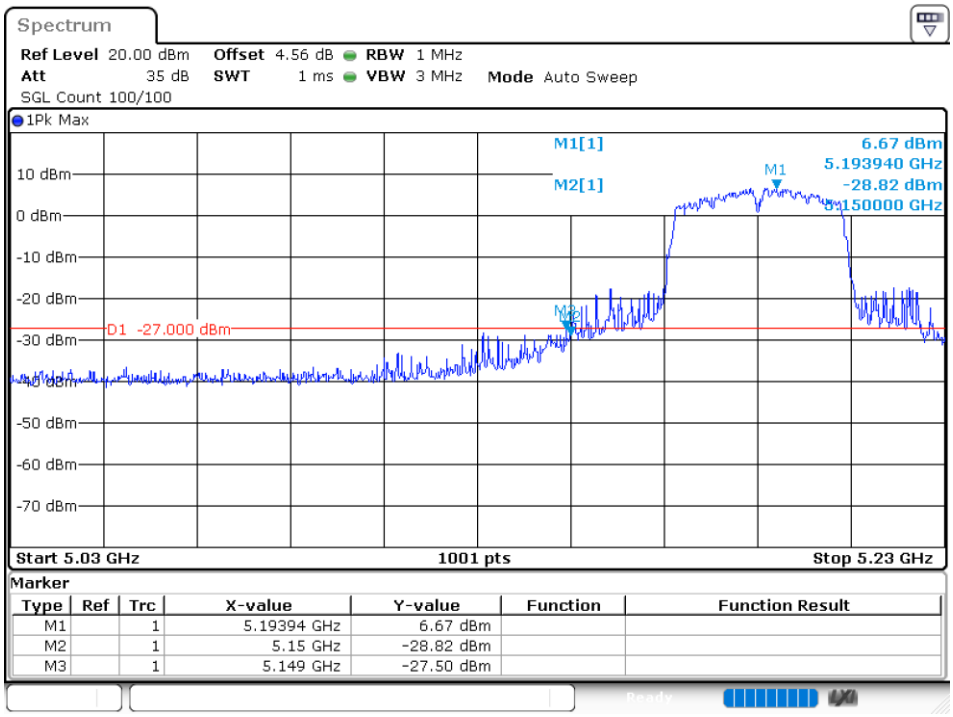
Band Edge NVNT n20 5180MHz Low Ant1



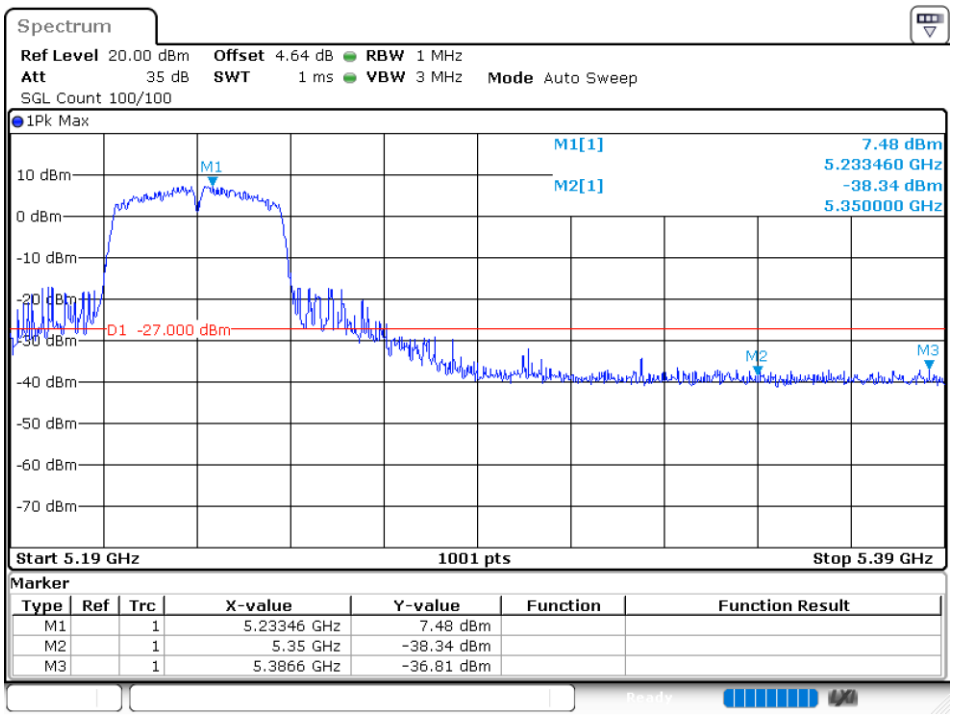
Band Edge NVNT n20 5240MHz High Ant1



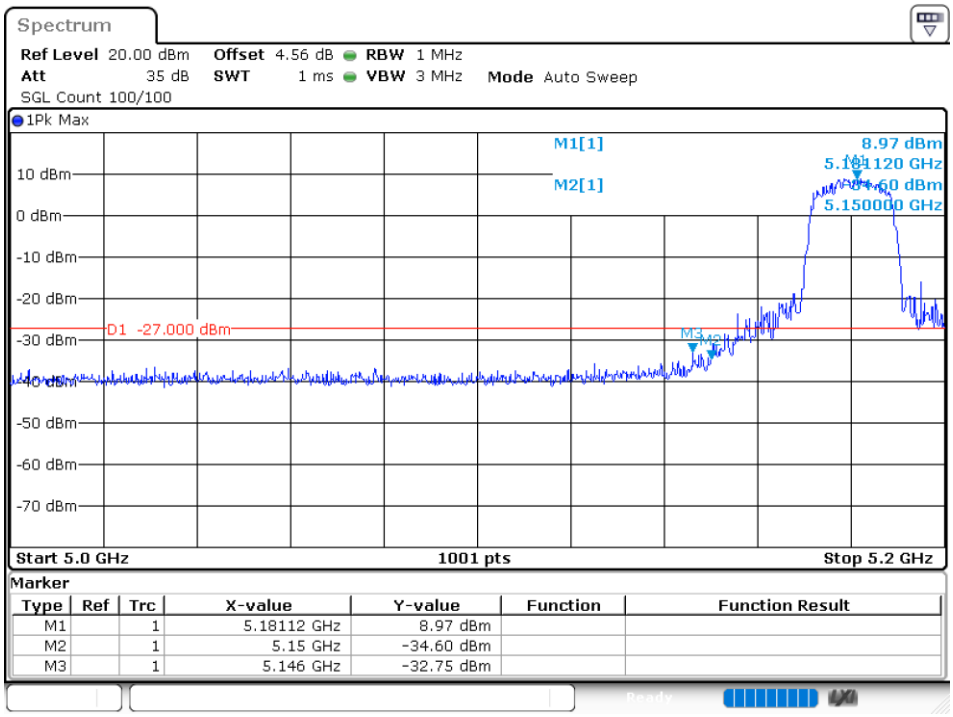
Band Edge NVNT n40 5190MHz Low Ant1



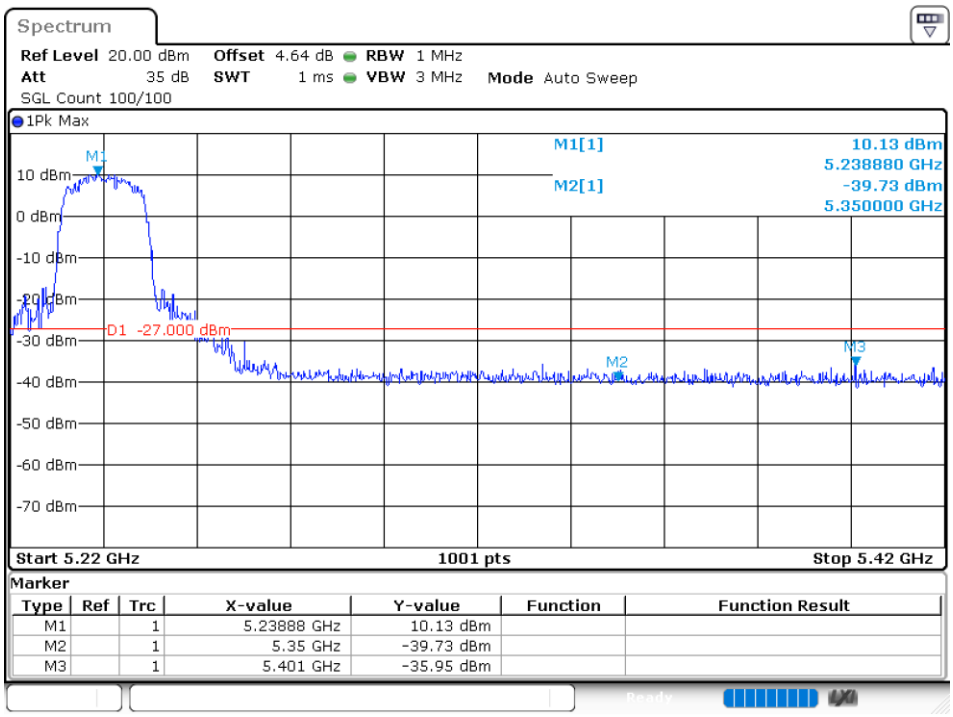
Band Edge NVNT n40 5230MHz High Ant1



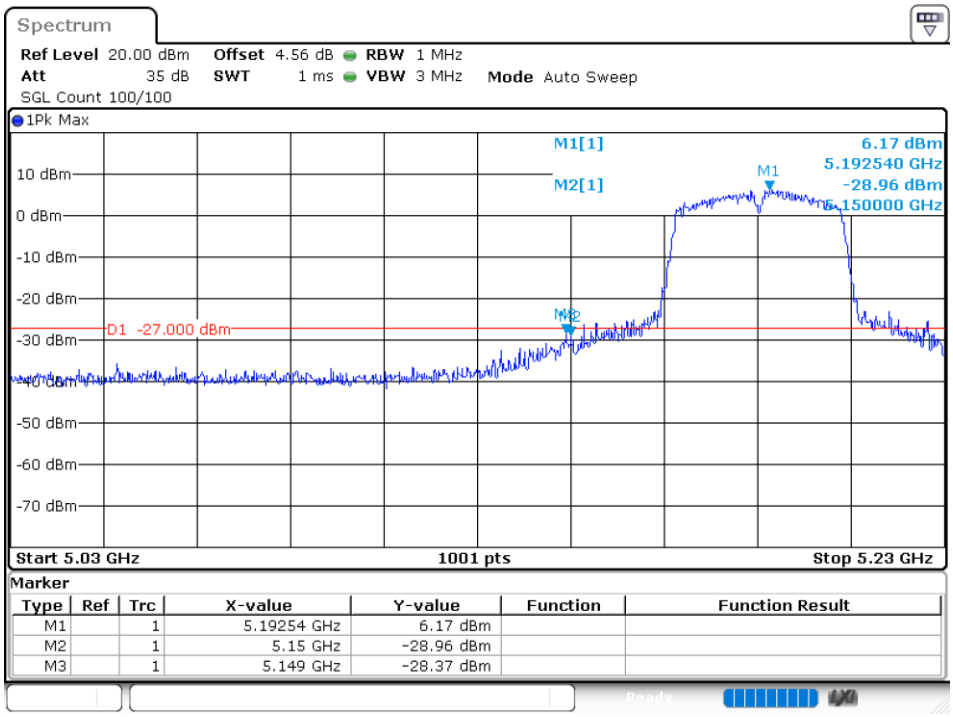
Band Edge NVNT ac20 5180MHz Low Ant1



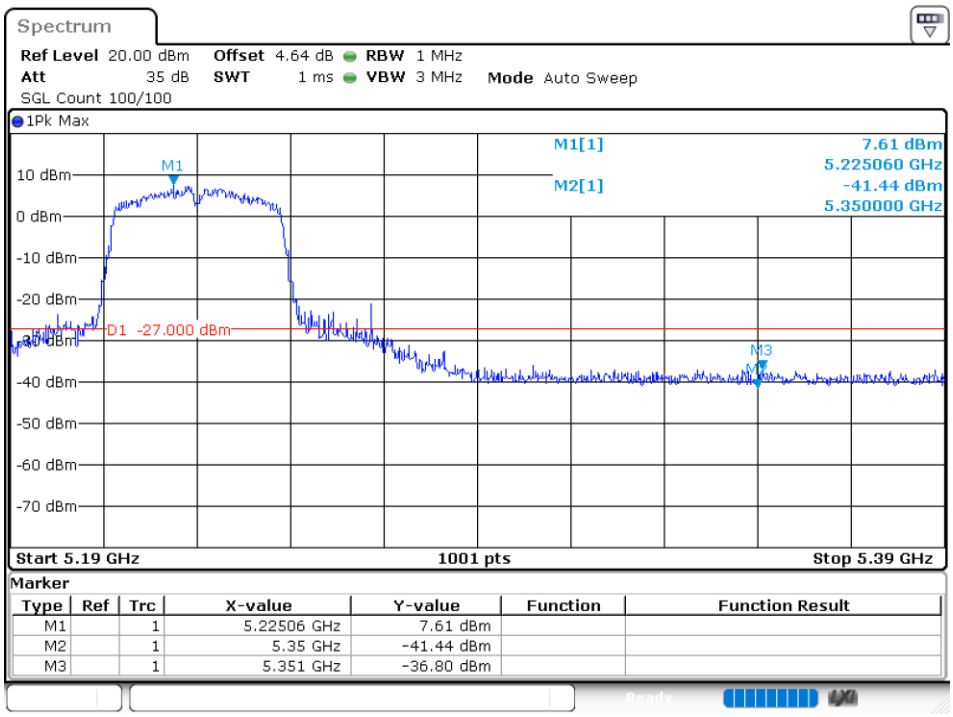
Band Edge NVNT ac20 5240MHz High Ant1



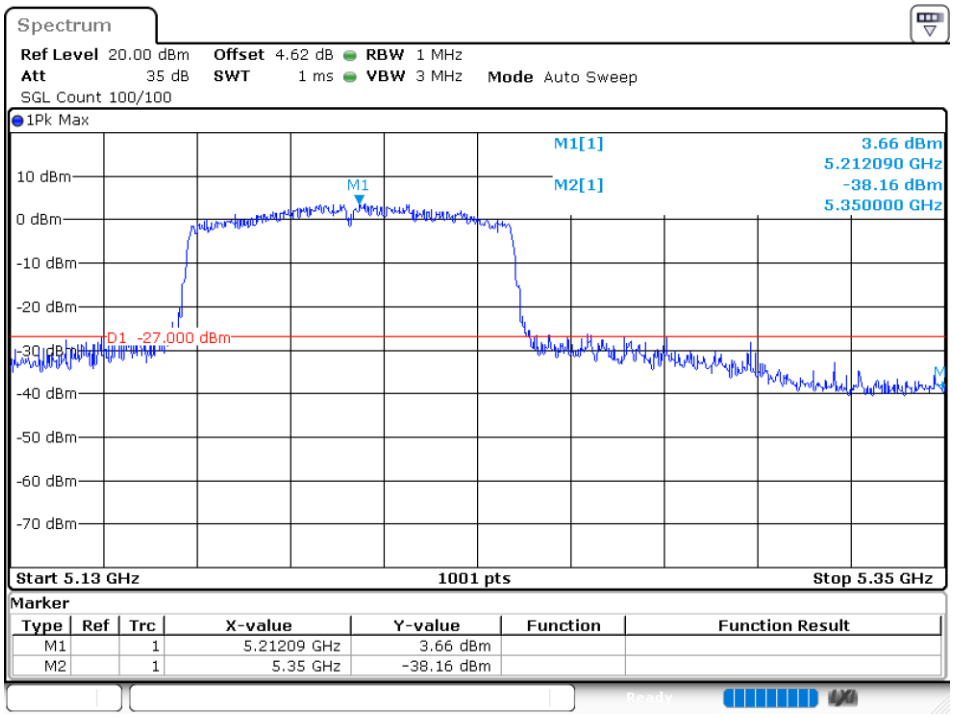
Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1



Band Edge NVNT ac80 5210MHz High Ant1

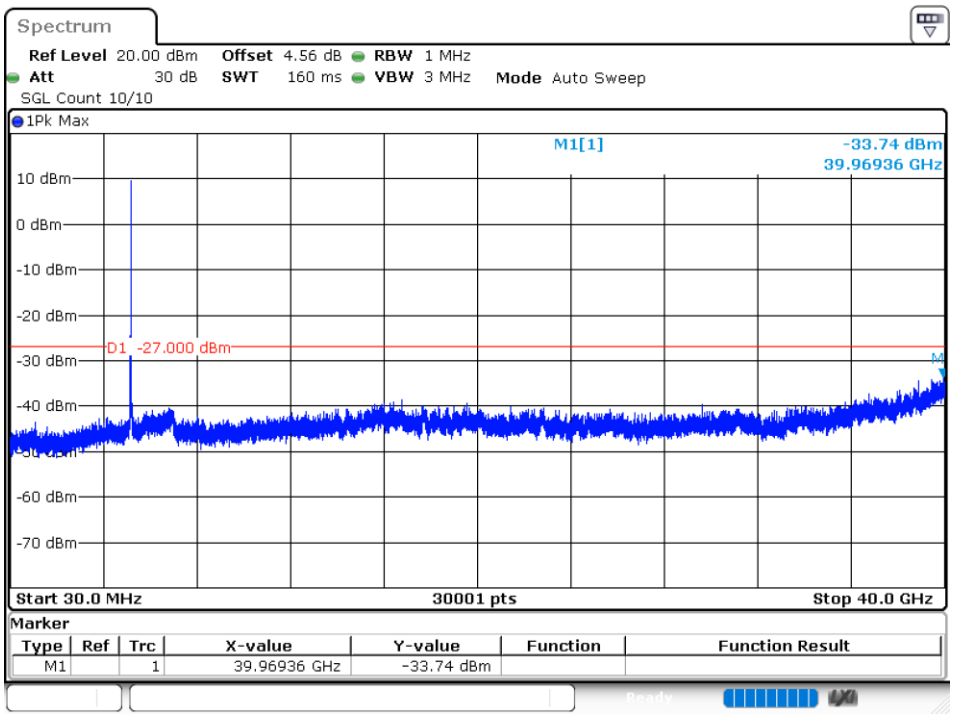


Conducted RF Spurious Emission

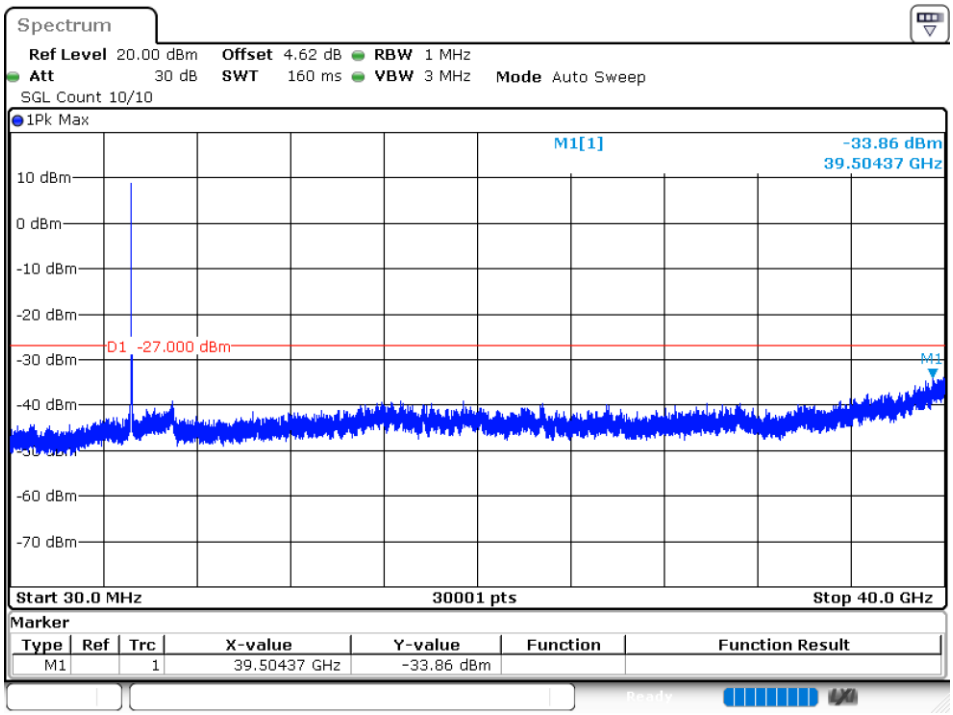
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-33.74	-27	Pass
NVNT	a	5200	Ant1	-33.85	-27	Pass
NVNT	a	5240	Ant1	-34.07	-27	Pass
NVNT	n20	5180	Ant1	-32.76	-27	Pass
NVNT	n20	5200	Ant1	-32.5	-27	Pass
NVNT	n20	5240	Ant1	-32.18	-27	Pass
NVNT	n40	5190	Ant1	-32.27	-27	Pass
NVNT	n40	5230	Ant1	-32.68	-27	Pass
NVNT	ac20	5180	Ant1	-32.17	-27	Pass
NVNT	ac20	5200	Ant1	-32.68	-27	Pass
NVNT	ac20	5240	Ant1	-31.98	-27	Pass
NVNT	ac40	5190	Ant1	-33.07	-27	Pass
NVNT	ac40	5230	Ant1	-32.94	-27	Pass
NVNT	ac80	5210	Ant1	-32.6	-27	Pass

Test Graphs

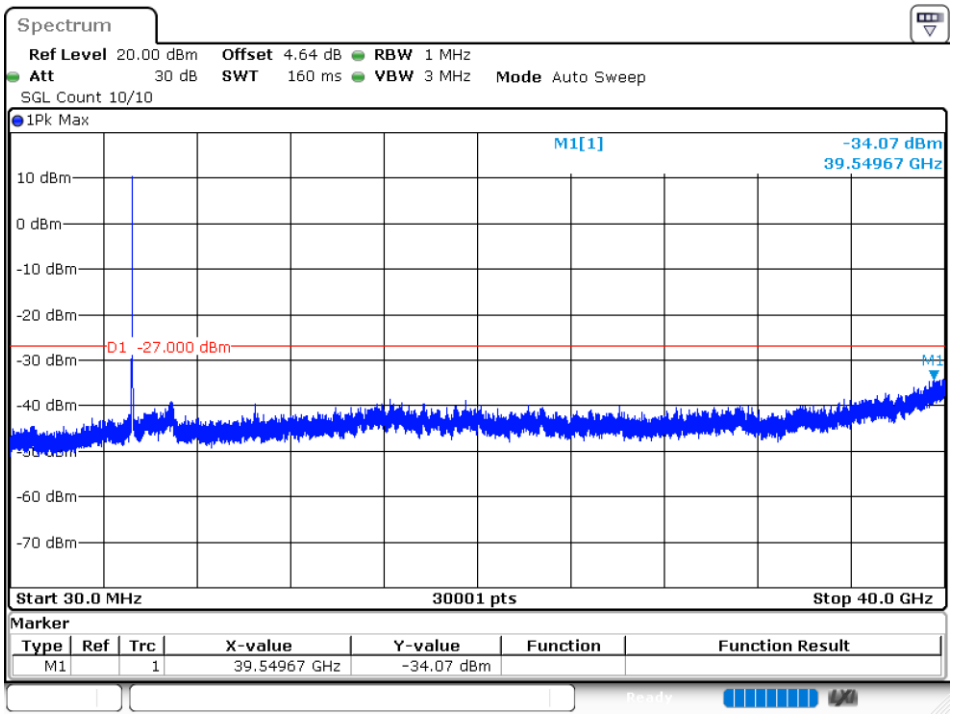
Tx. Spurious NVNT a 5180MHz Ant1 Emission



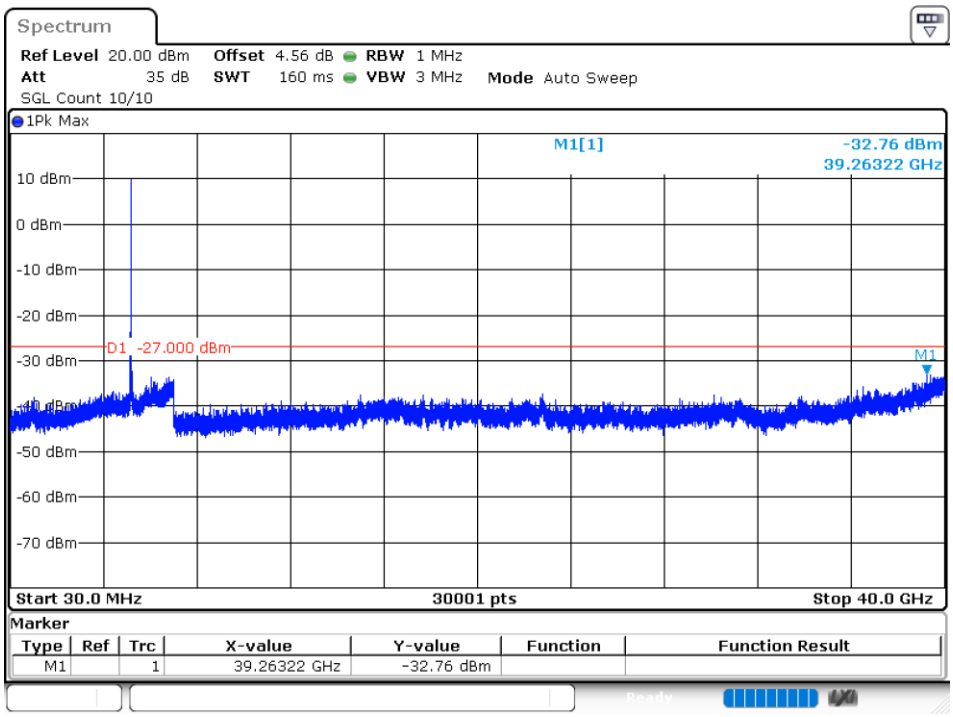
Tx. Spurious NVNT a 5200MHz Ant1 Emission



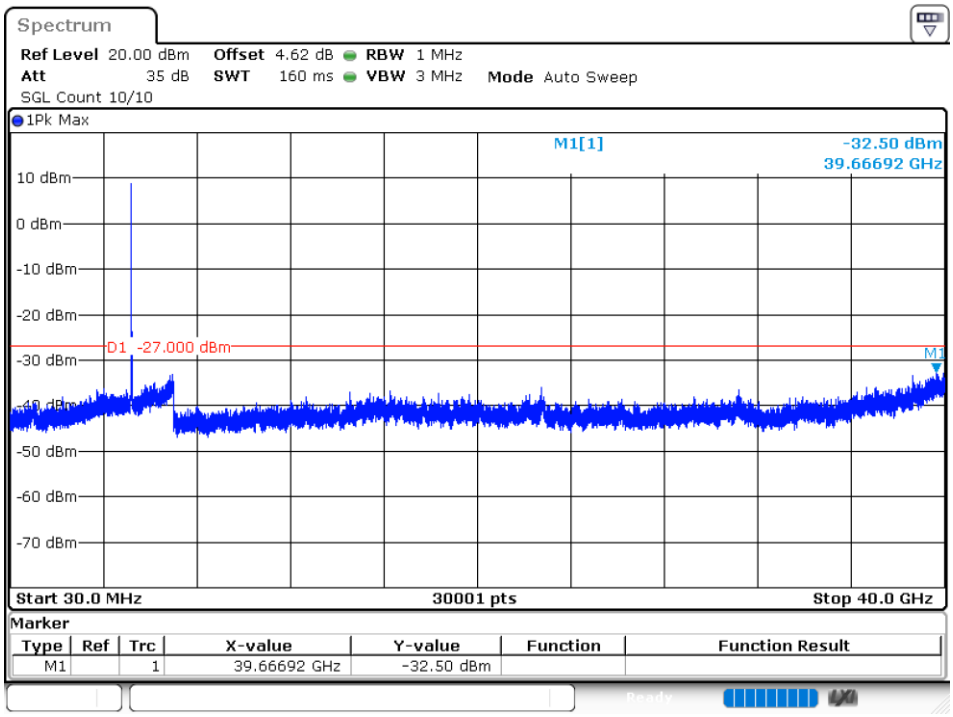
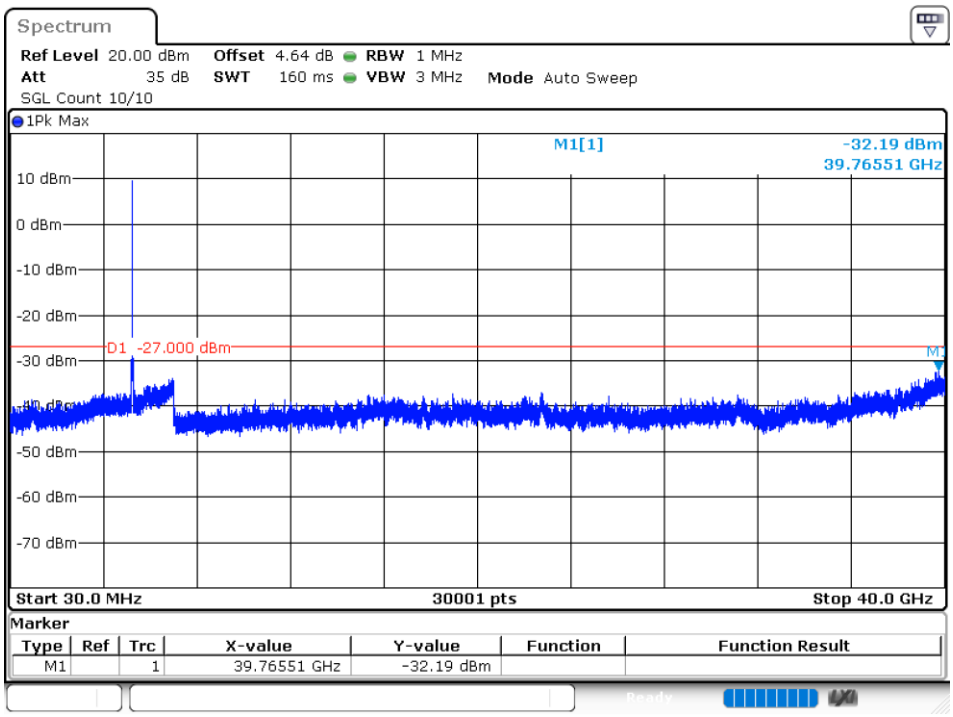
Tx. Spurious NVNT a 5240MHz Ant1 Emission



Tx. Spurious NVNT n20 5180MHz Ant1 Emission



Tx. Spurious NVNT n20 5200MHz Ant1 Emission



Tx. Spurious NVNT n20 5240MHz Ant1 Emission