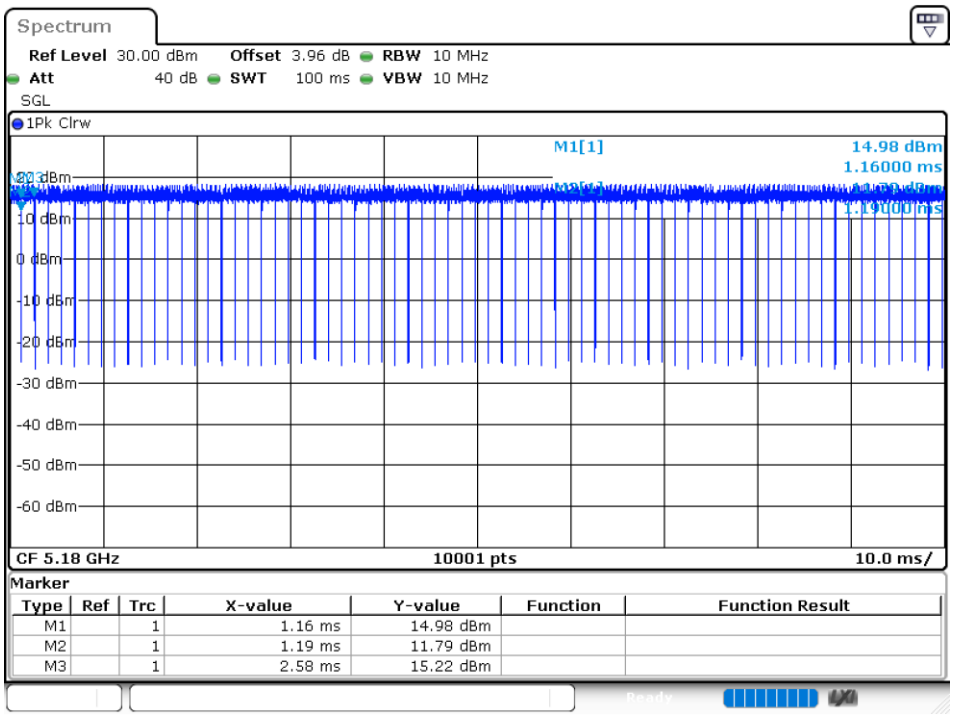
5.2G:

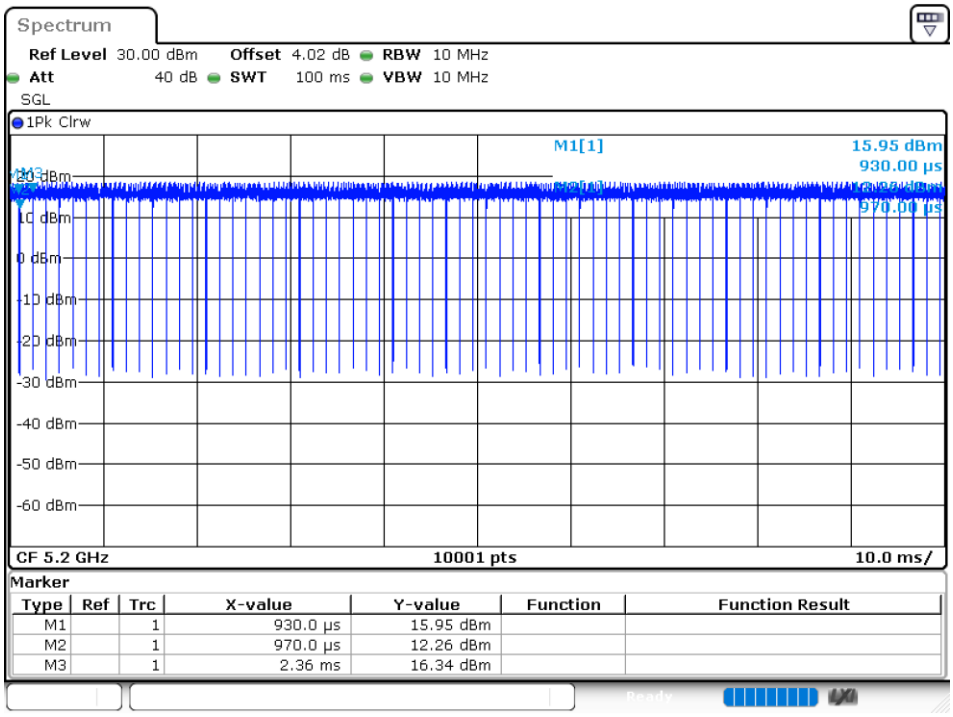
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	98.16	0.08	0.72
NVNT	a	5200	Ant1	98.15	0.08	0.72
NVNT	a	5240	Ant1	98.15	0.08	0.72
NVNT	n20	5180	Ant1	98.03	0.09	0.77
NVNT	n20	5200	Ant1	98.03	0.09	0.77
NVNT	n20	5240	Ant1	98.06	0.09	0.77
NVNT	n40	5190	Ant1	96.14	0.17	1.56
NVNT	n40	5230	Ant1	96.17	0.17	1.54
NVNT	ac20	5180	Ant1	98.08	0.08	0.76
NVNT	ac20	5200	Ant1	98.05	0.09	0.76
NVNT	ac20	5240	Ant1	98.05	0.09	0.76
NVNT	ac40	5190	Ant1	96.23	0.17	1.54
NVNT	ac40	5230	Ant1	96.27	0.17	1.52
NVNT	ac80	5210	Ant1	92.86	0.32	3.12

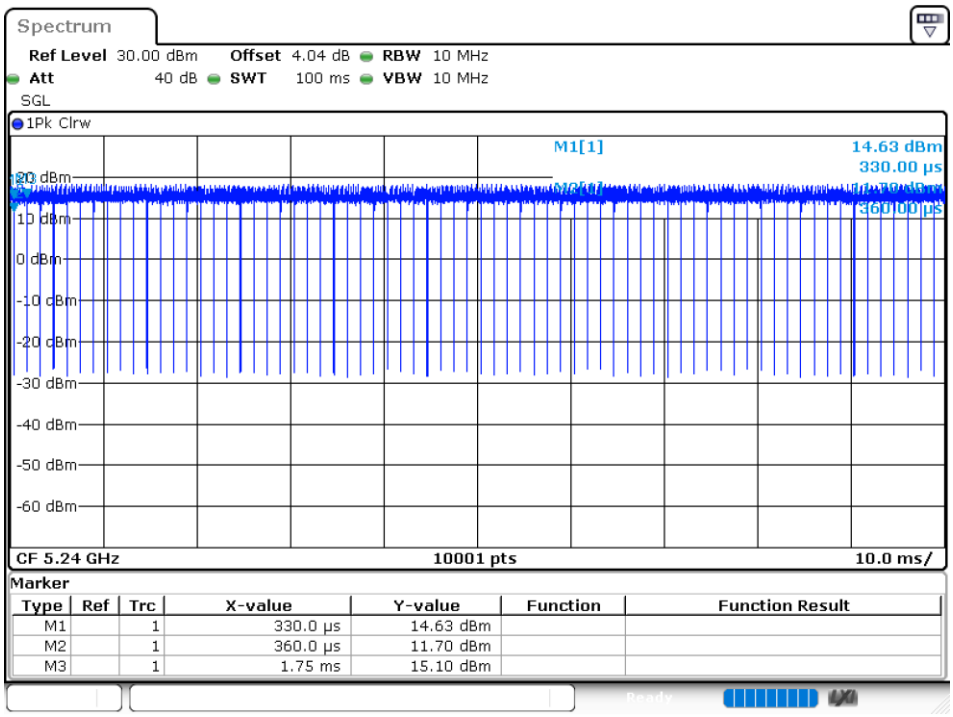
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



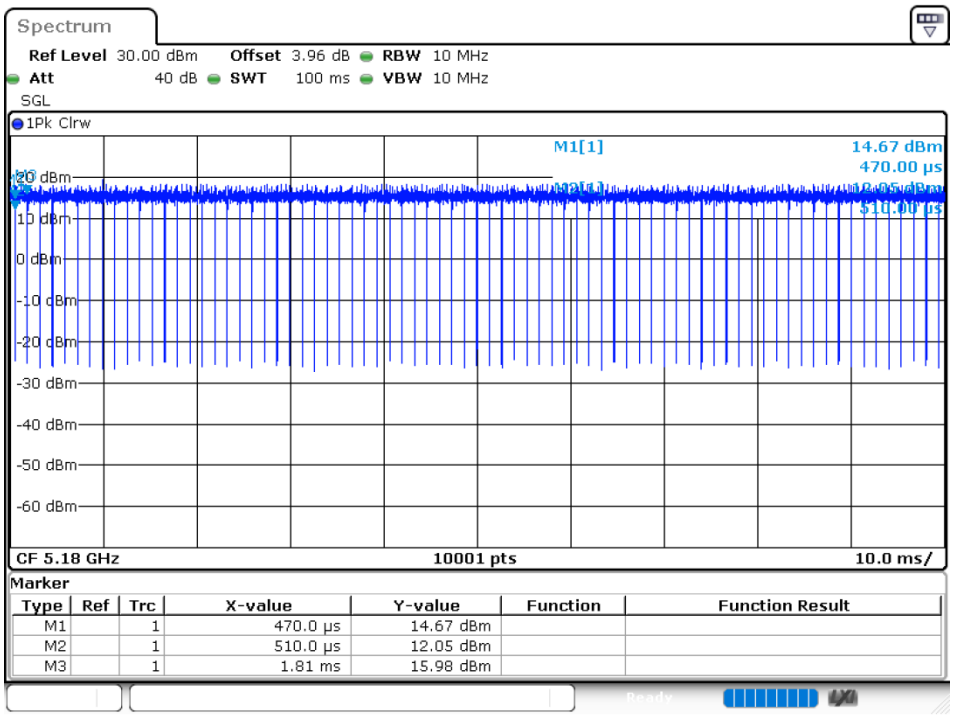
Duty Cycle NVNT a 5200MHz Ant1



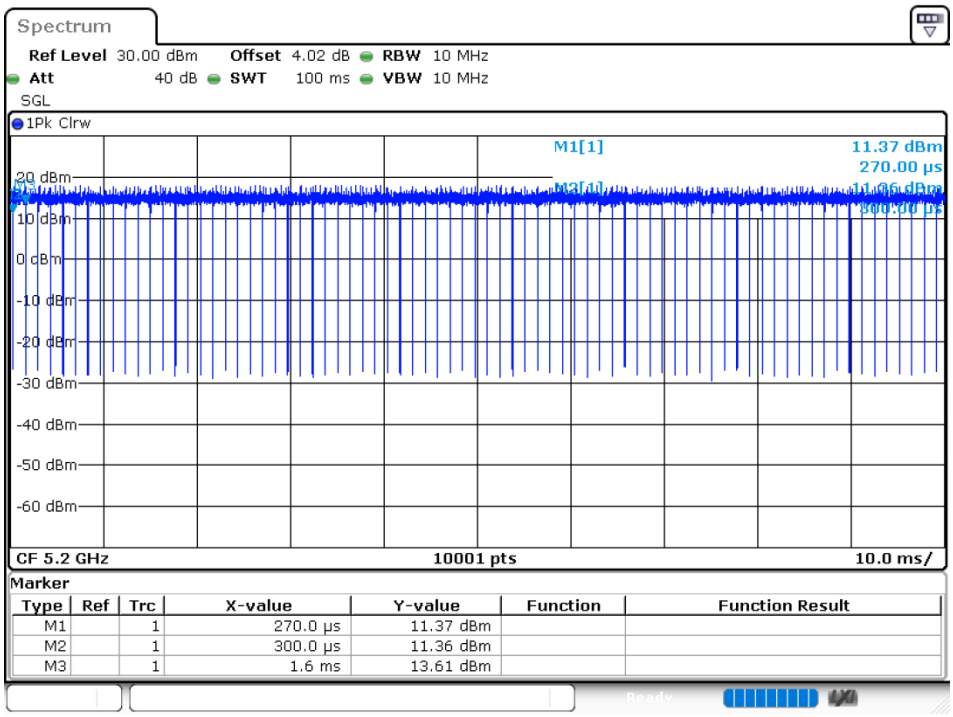
Duty Cycle NVNT a 5240MHz Ant1



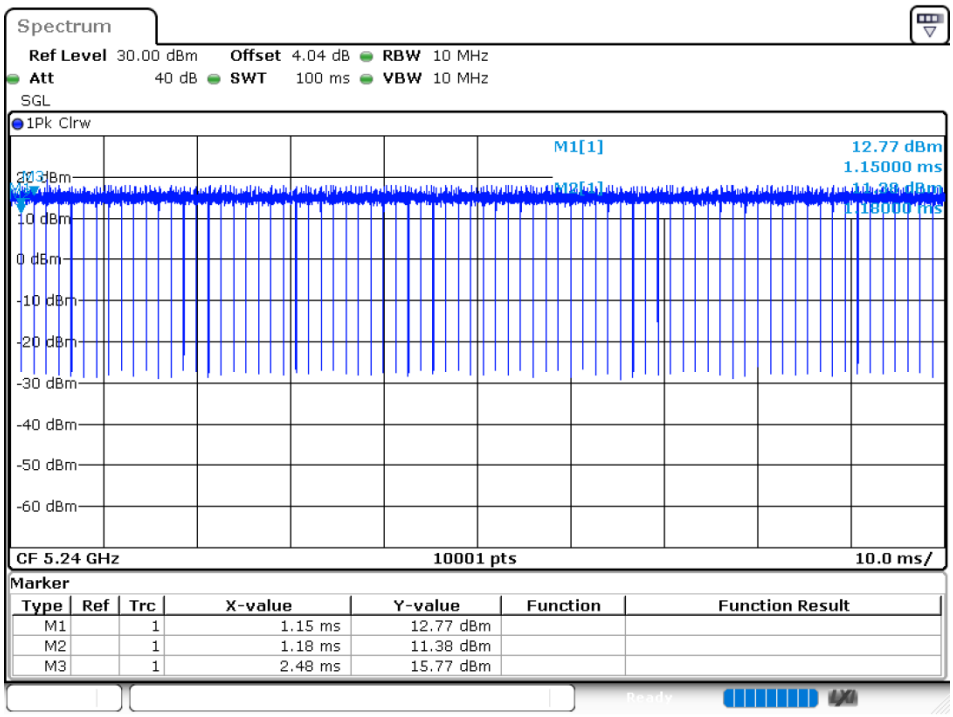
Duty Cycle NVNT n20 5180MHz Ant1



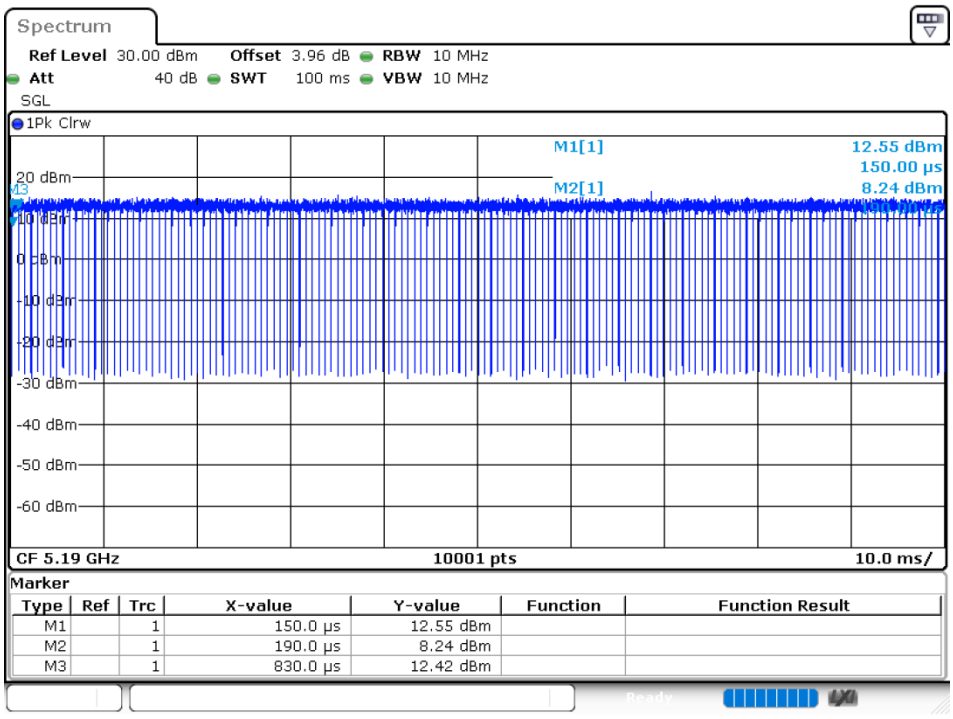
Duty Cycle NVNT n20 5200MHz Ant1



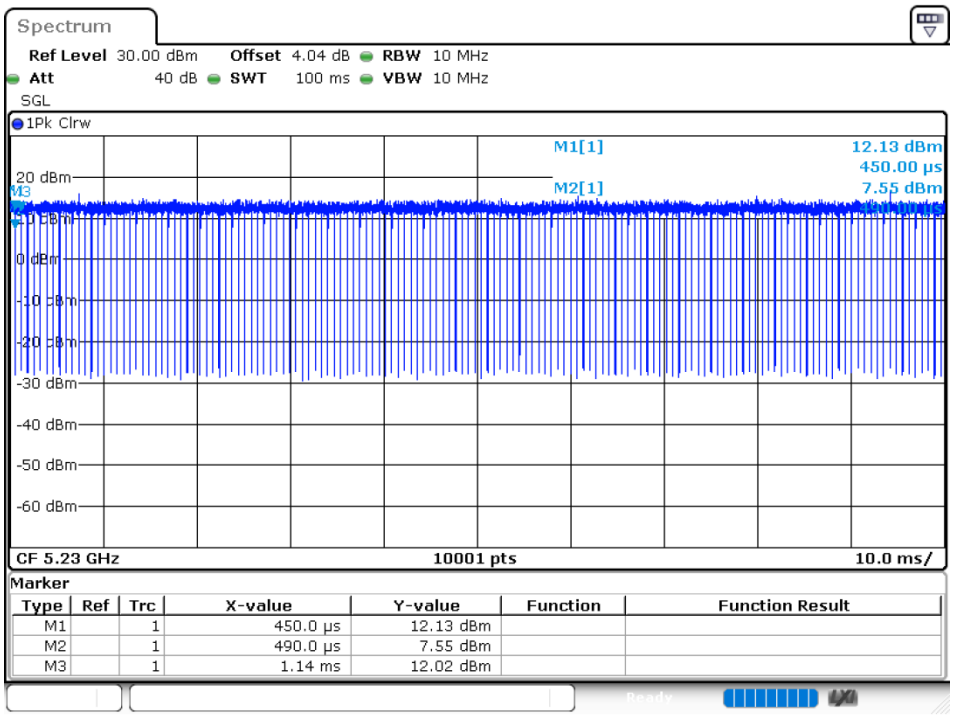
Duty Cycle NVNT n20 5240MHz Ant1



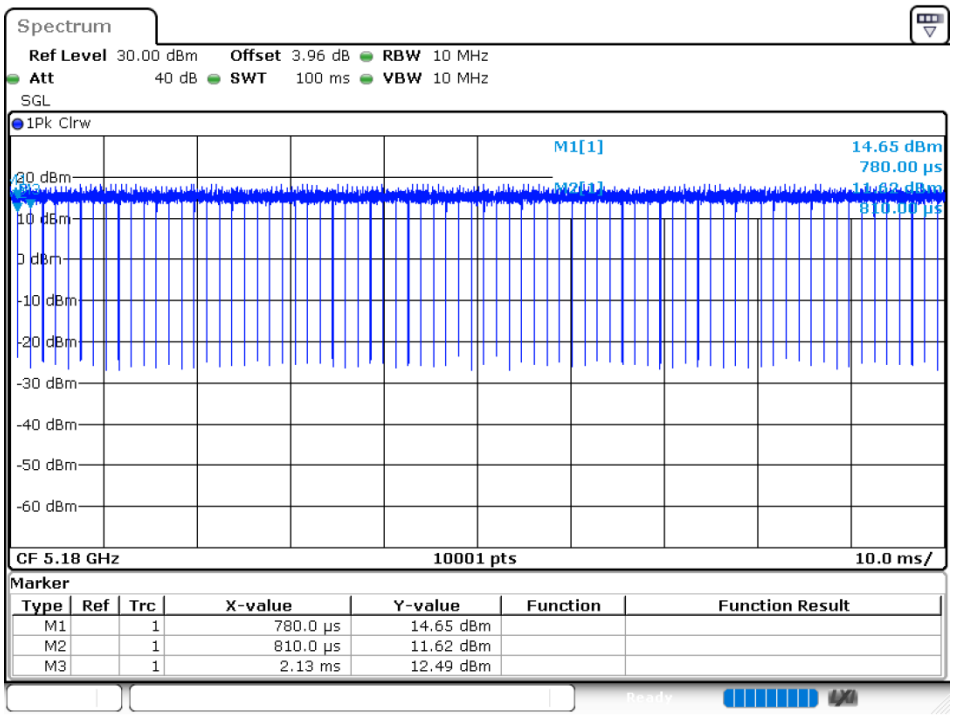
Duty Cycle NVNT n40 5190MHz Ant1



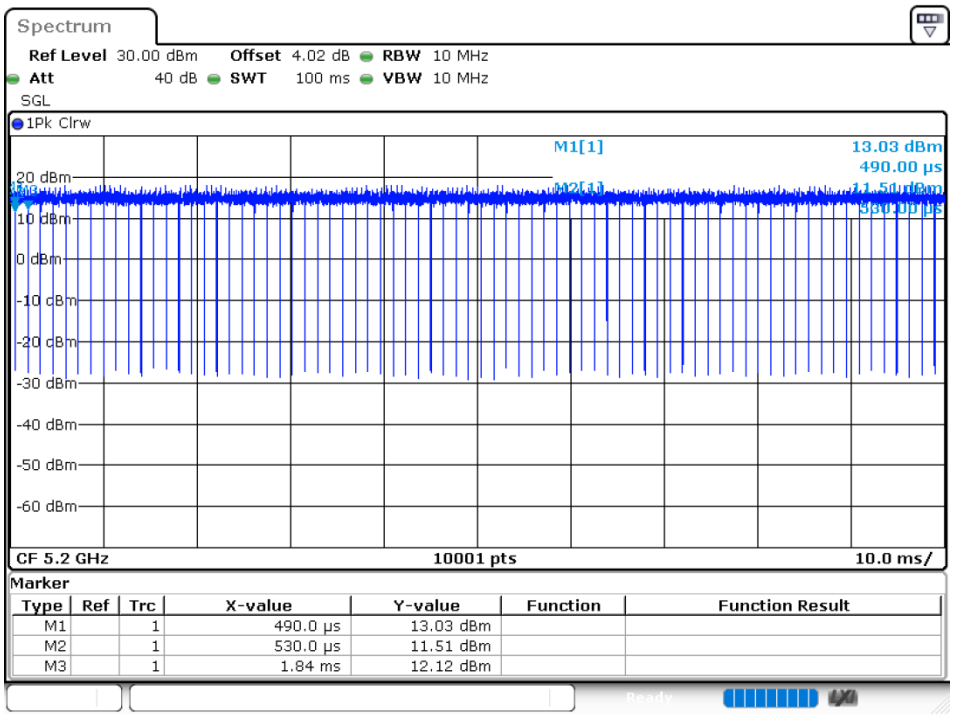
Duty Cycle NVNT n40 5230MHz Ant1



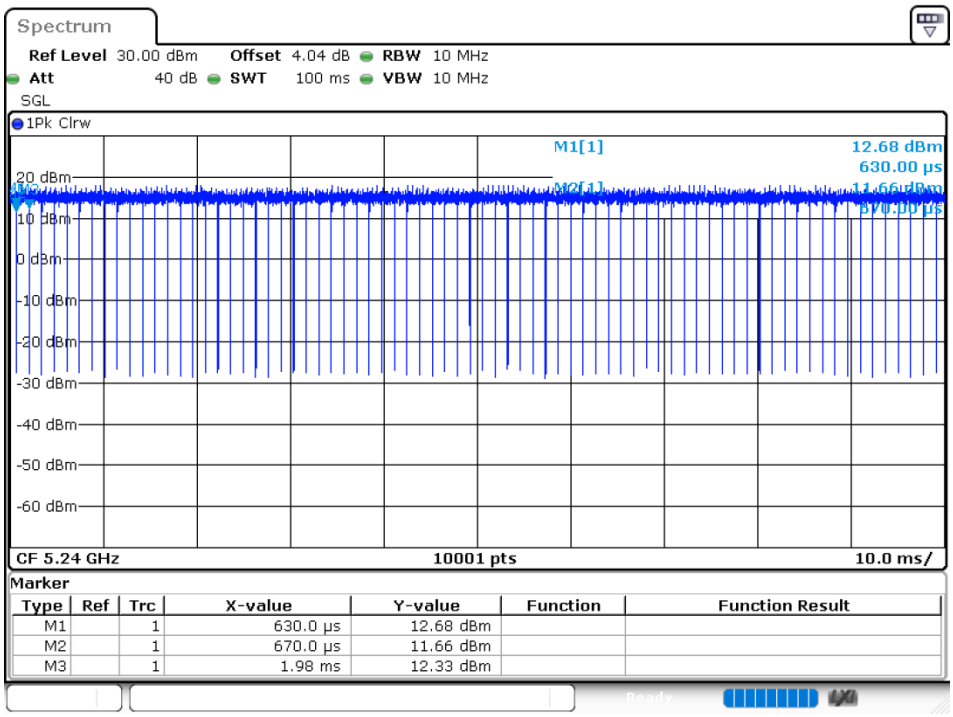
Duty Cycle NVNT ac20 5180MHz Ant1



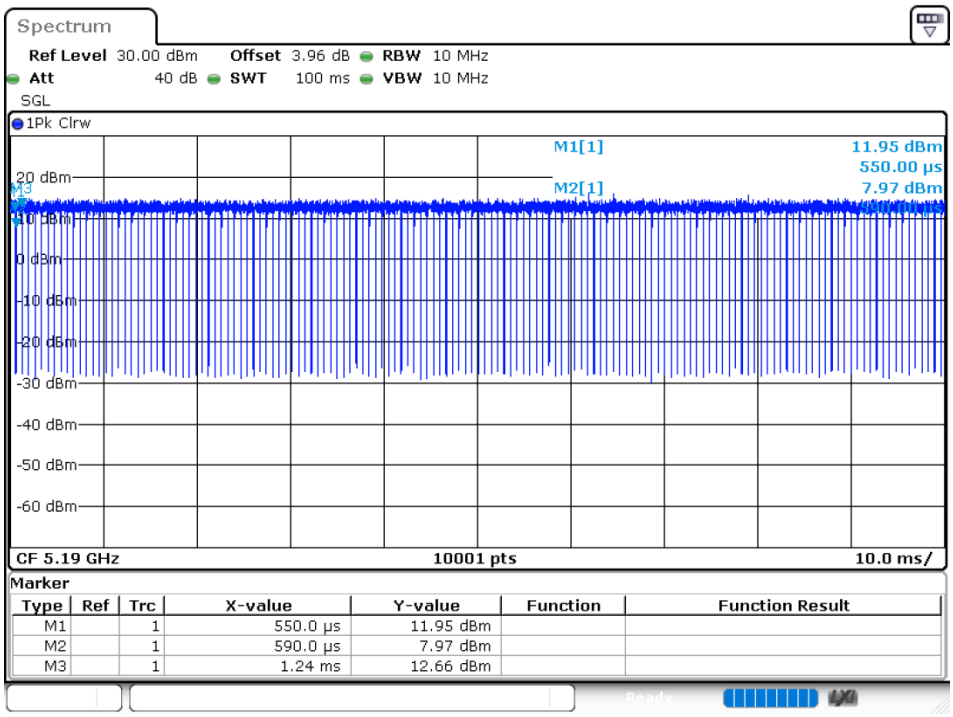
Duty Cycle NVNT ac20 5200MHz Ant1



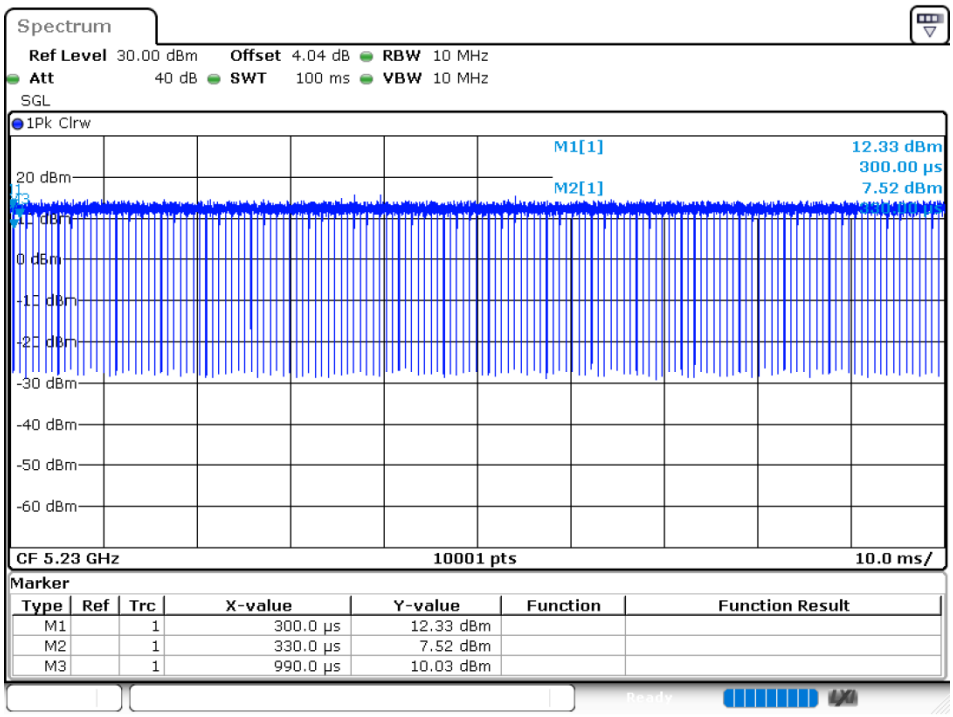
Duty Cycle NVNT ac20 5240MHz Ant1



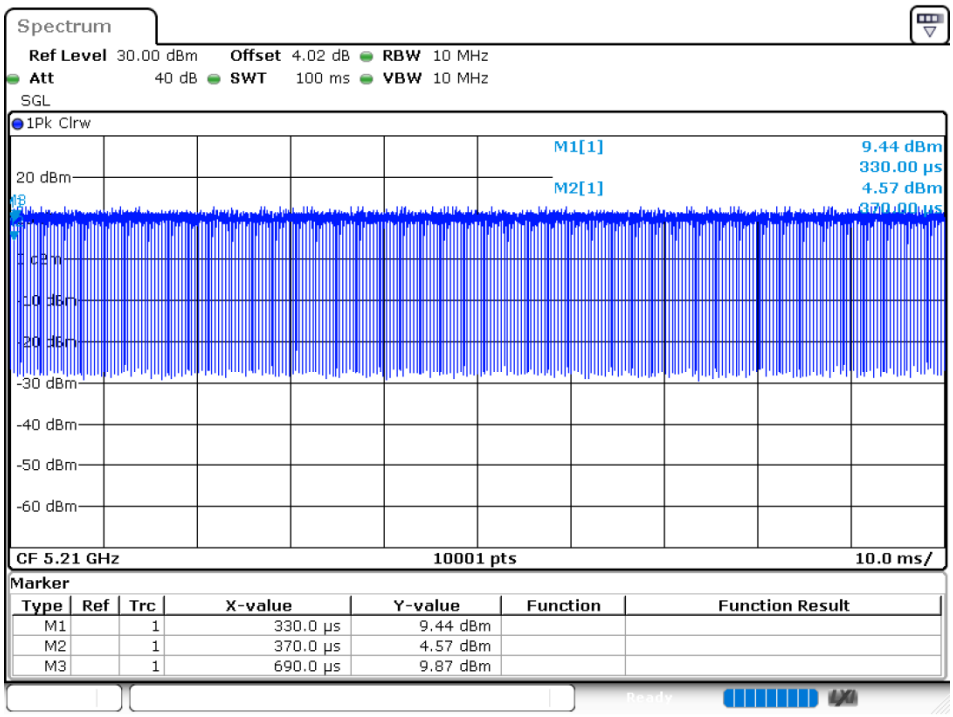
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1



Maximum Conducted Output Power

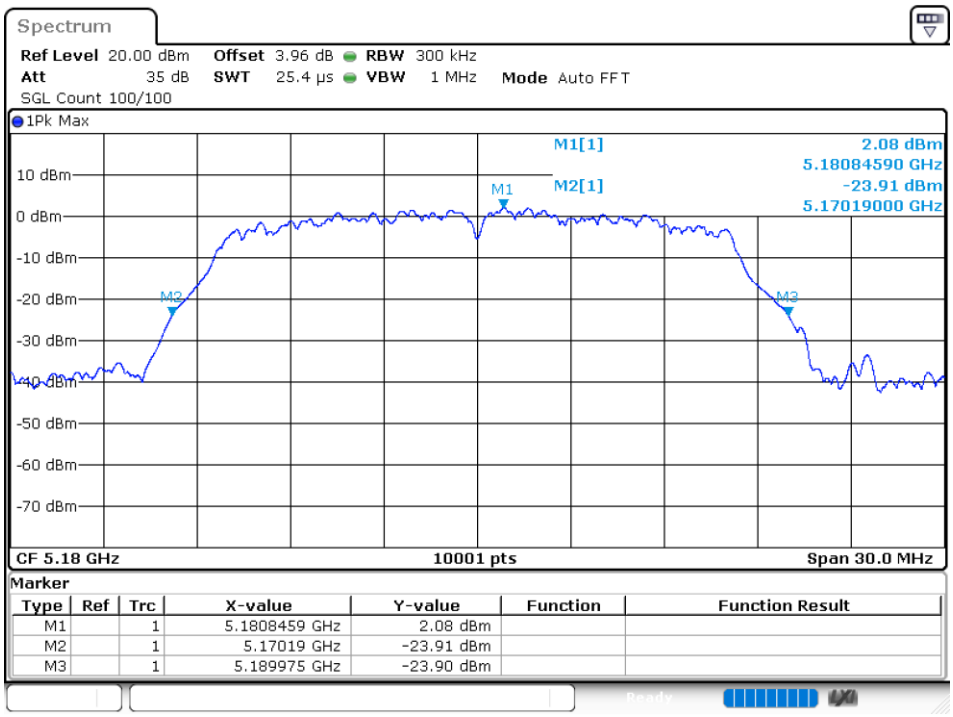
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	11.35	24	Pass
NVNT	a	5200	Ant1	11.62	24	Pass
NVNT	a	5240	Ant1	11.2	24	Pass
NVNT	n20	5180	Ant1	11.01	24	Pass
NVNT	n20	5200	Ant1	10.61	24	Pass
NVNT	n20	5240	Ant1	10.88	24	Pass
NVNT	n40	5190	Ant1	10.99	24	Pass
NVNT	n40	5230	Ant1	10.74	24	Pass
NVNT	ac20	5180	Ant1	11	24	Pass
NVNT	ac20	5200	Ant1	10.69	24	Pass
NVNT	ac20	5240	Ant1	10.79	24	Pass
NVNT	ac40	5190	Ant1	10.59	24	Pass
NVNT	ac40	5230	Ant1	11	24	Pass
NVNT	ac80	5210	Ant1	10.79	24	Pass

Note: The average power value already includes the duty cycle factor

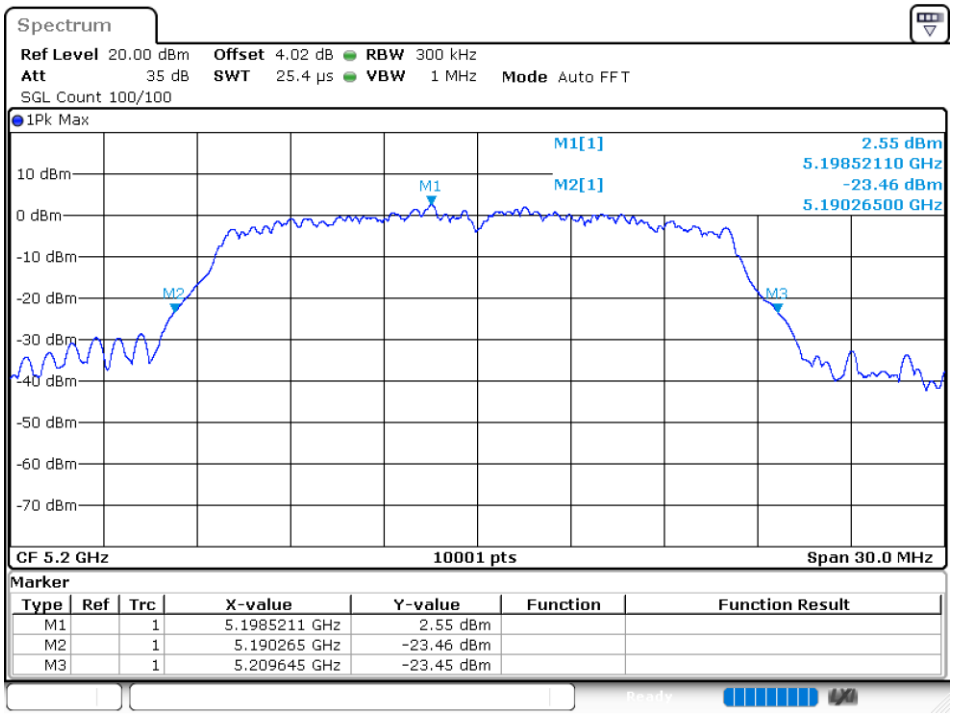
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.785	Pass
NVNT	a	5200	Ant1	19.38	Pass
NVNT	a	5240	Ant1	19.539	Pass
NVNT	n20	5180	Ant1	19.719	Pass
NVNT	n20	5200	Ant1	20.196	Pass
NVNT	n20	5240	Ant1	20.07	Pass
NVNT	n40	5190	Ant1	40.656	Pass
NVNT	n40	5230	Ant1	40.668	Pass
NVNT	ac20	5180	Ant1	20.265	Pass
NVNT	ac20	5200	Ant1	20.175	Pass
NVNT	ac20	5240	Ant1	20.022	Pass
NVNT	ac40	5190	Ant1	40.662	Pass
NVNT	ac40	5230	Ant1	40.806	Pass
NVNT	ac80	5210	Ant1	81.768	Pass

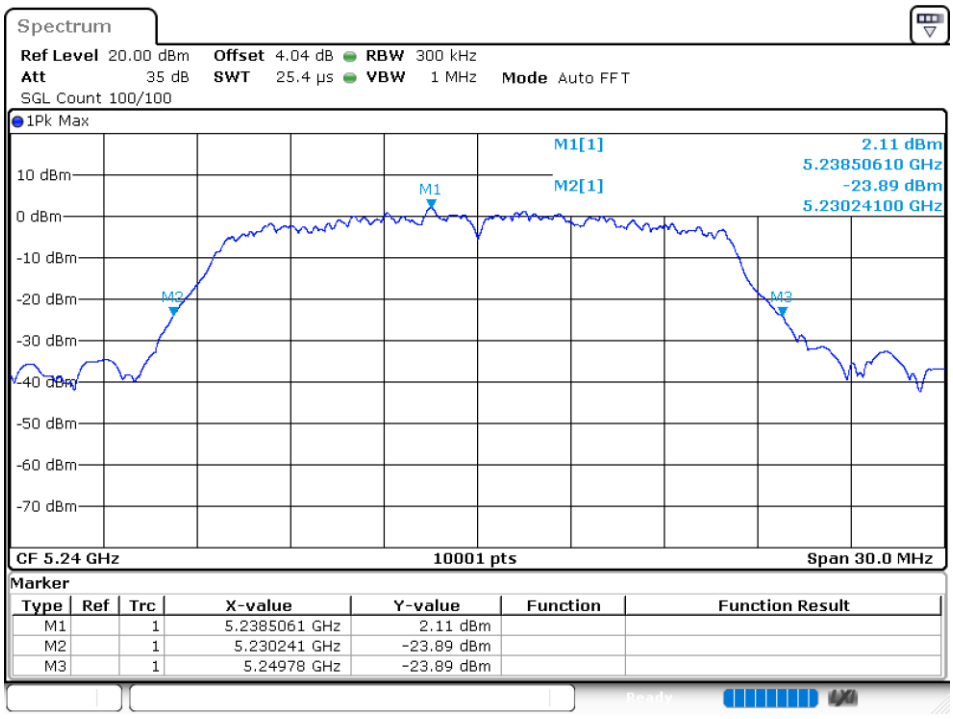
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1



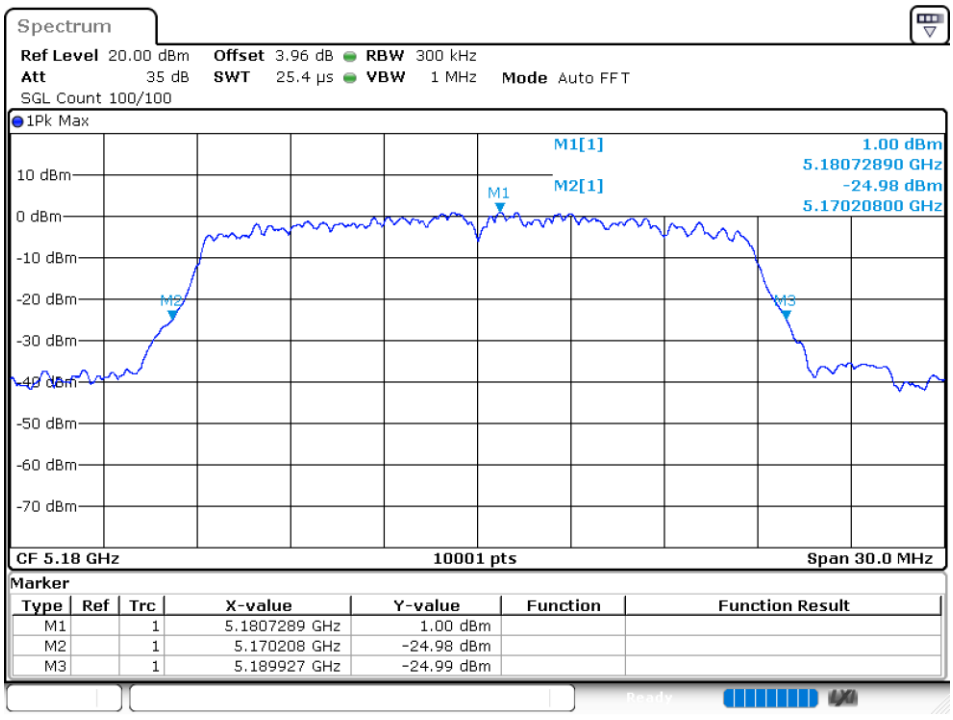
-26dB Bandwidth NVNT a 5200MHz Ant1



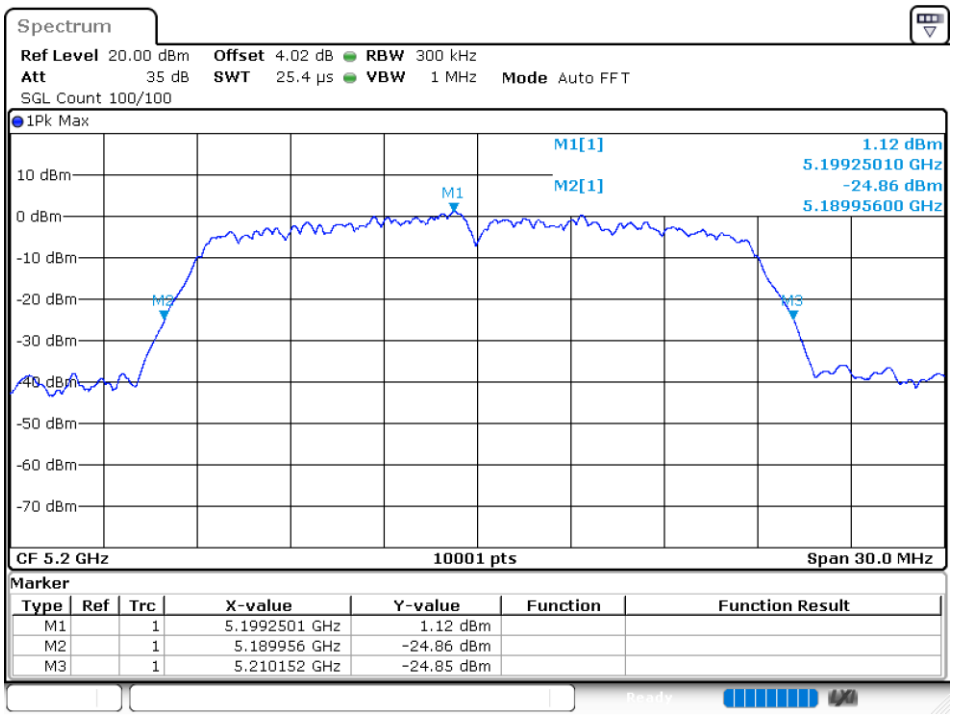
-26dB Bandwidth NVNT a 5240MHz Ant1



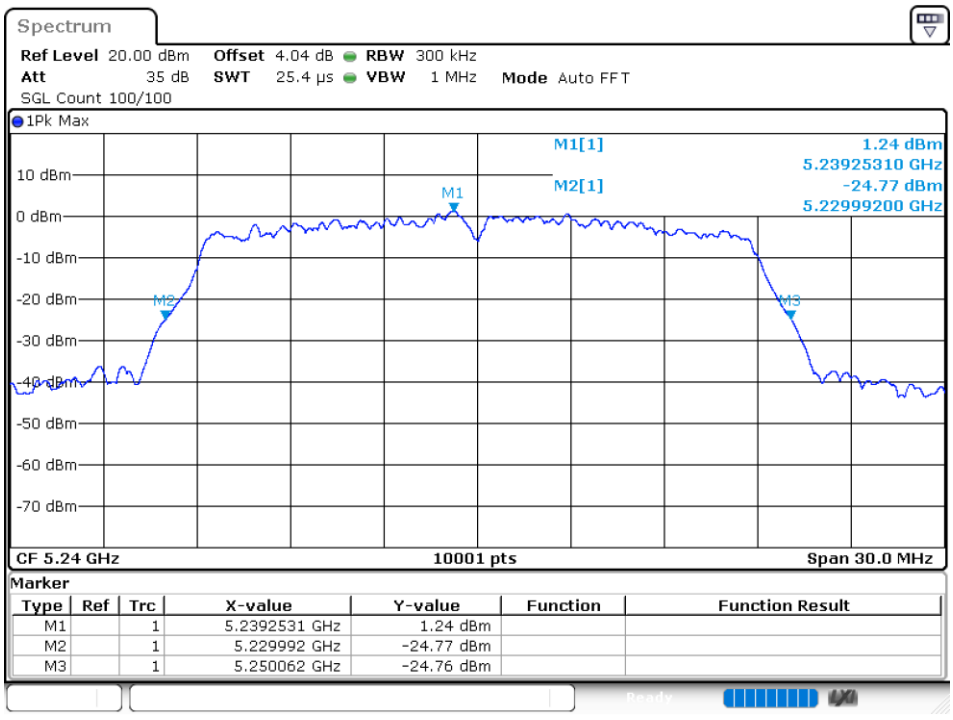
-26dB Bandwidth NVNT n20 5180MHz Ant1



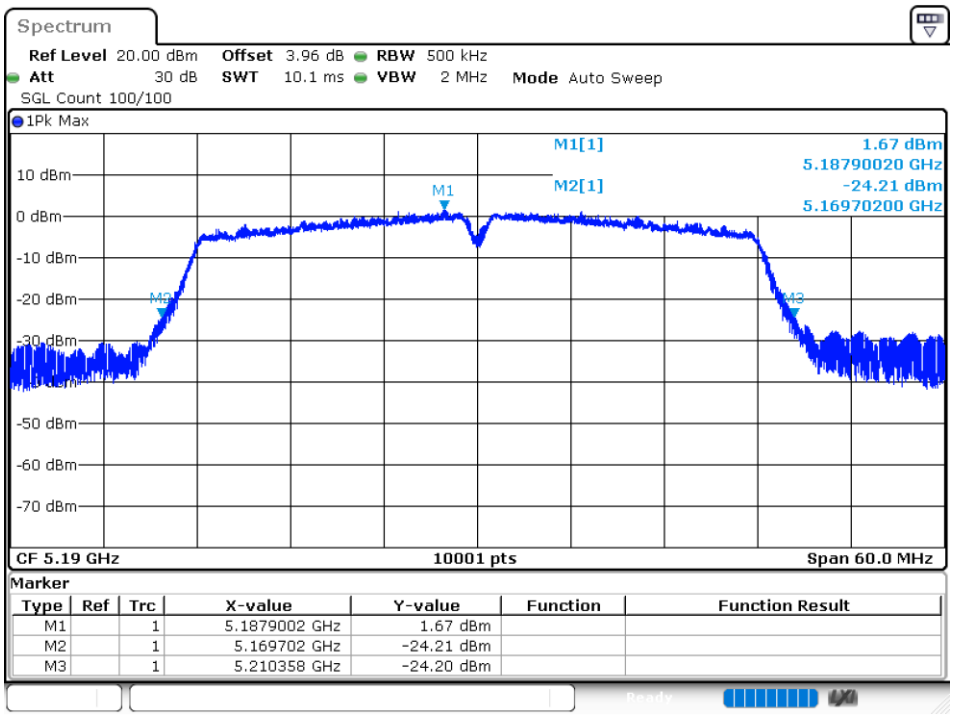
-26dB Bandwidth NVNT n20 5200MHz Ant1



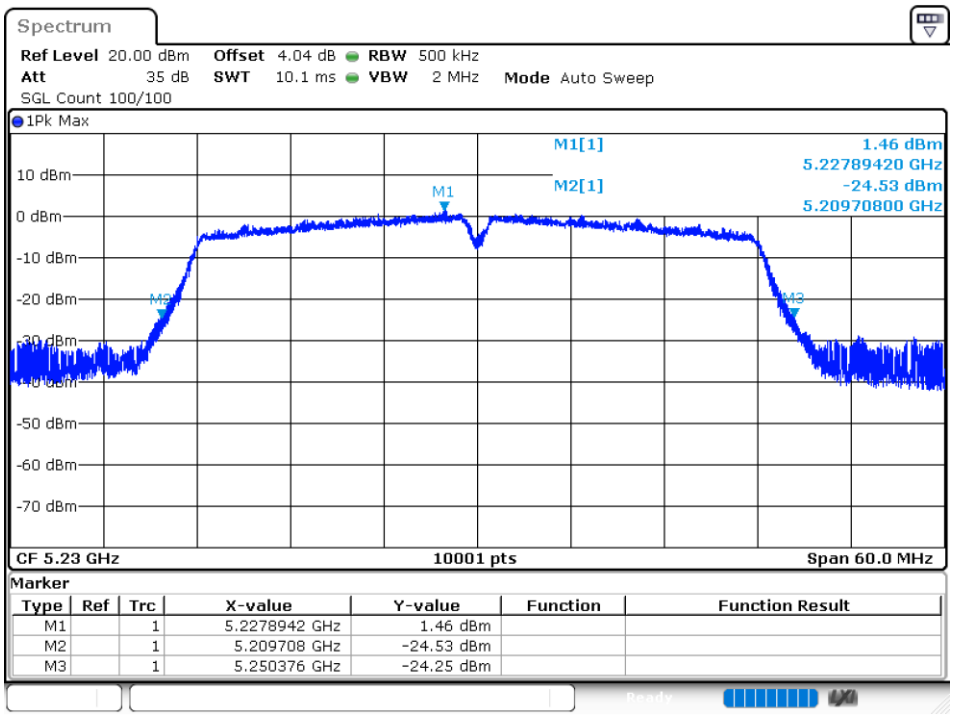
-26dB Bandwidth NVNT n20 5240MHz Ant1



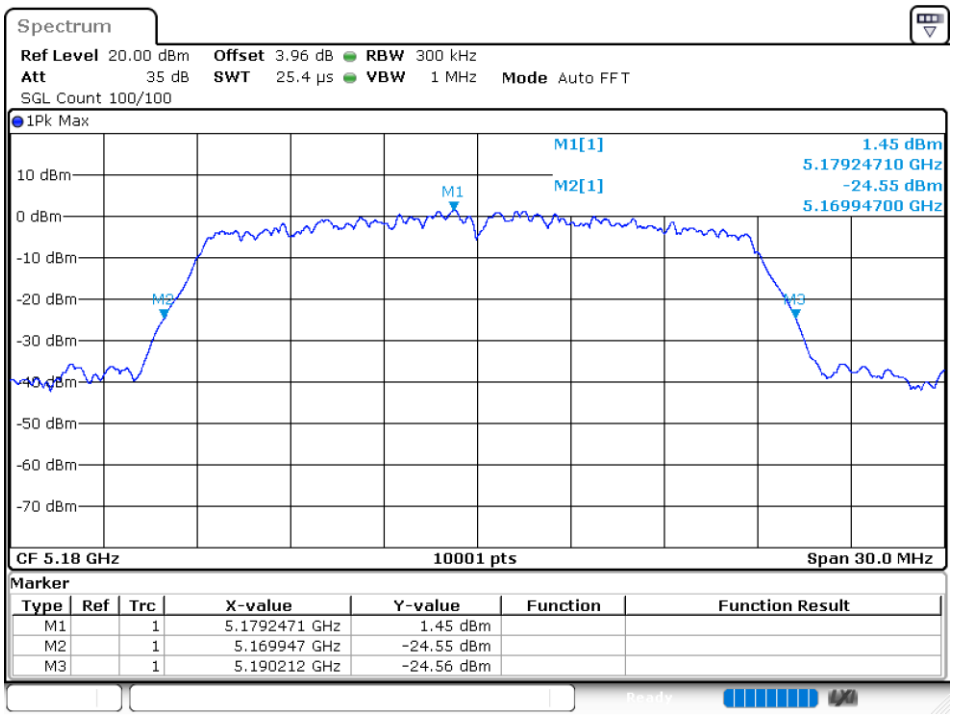
-26dB Bandwidth NVNT n40 5190MHz Ant1



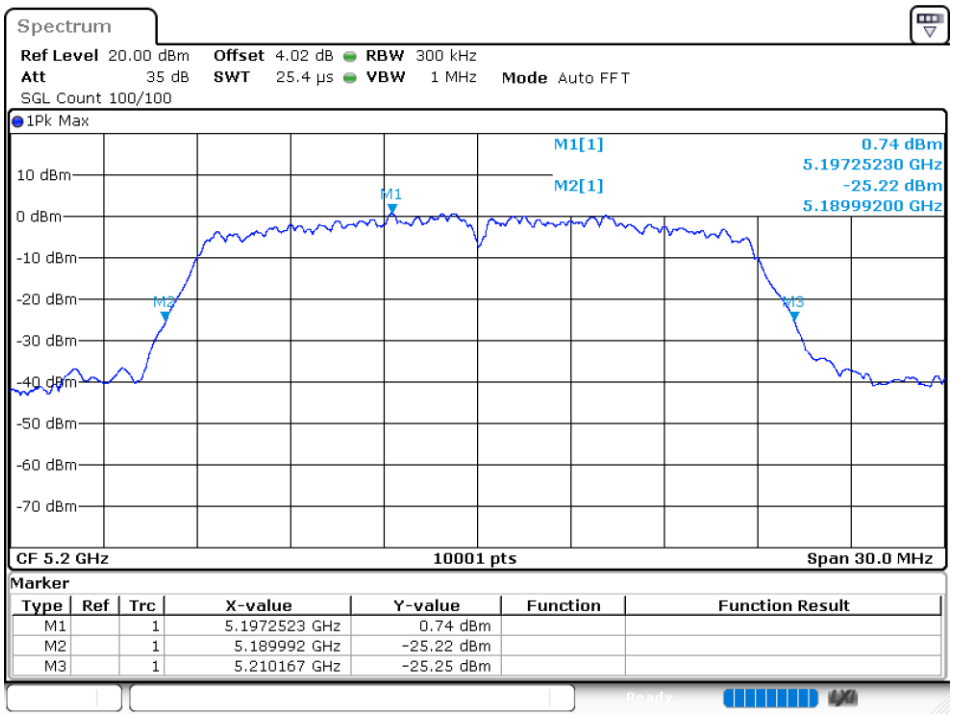
-26dB Bandwidth NVNT n40 5230MHz Ant1



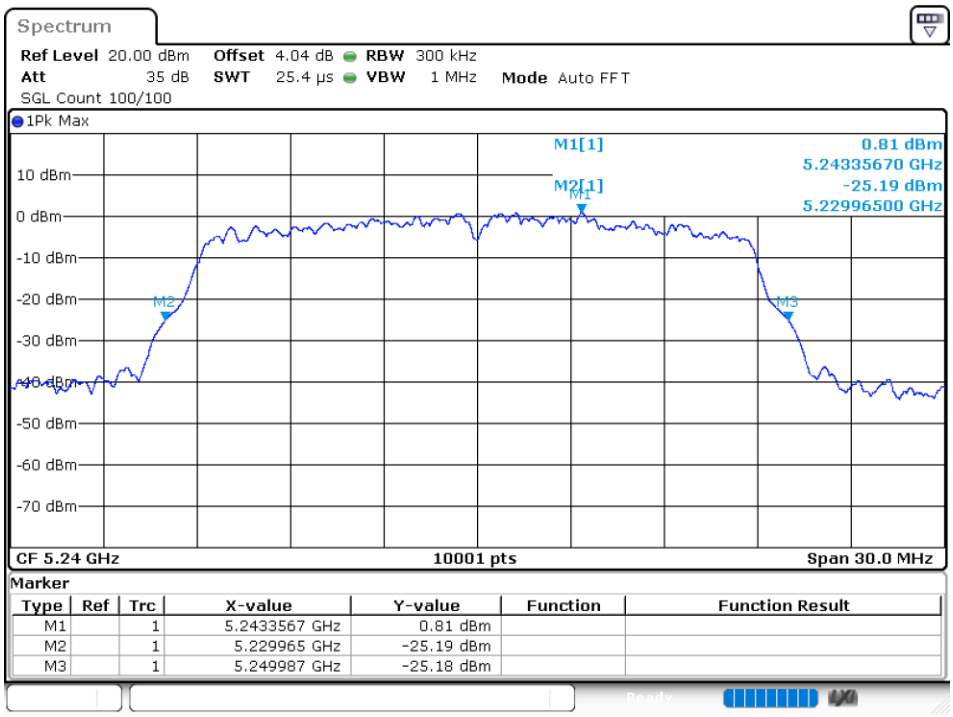
-26dB Bandwidth NVNT ac20 5180MHz Ant1



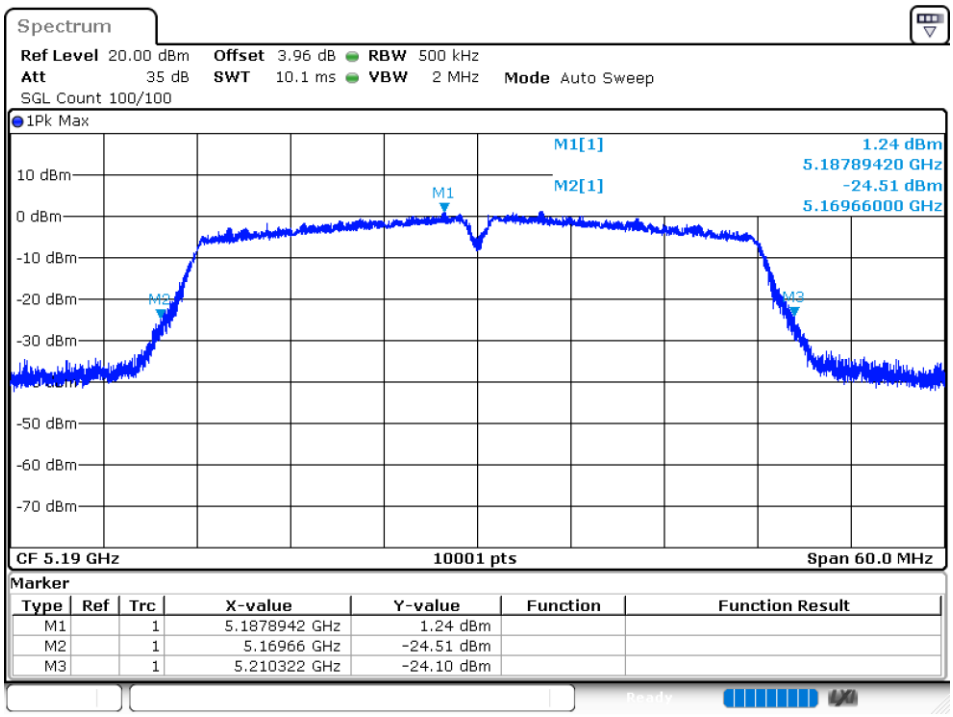
-26dB Bandwidth NVNT ac20 5200MHz Ant1



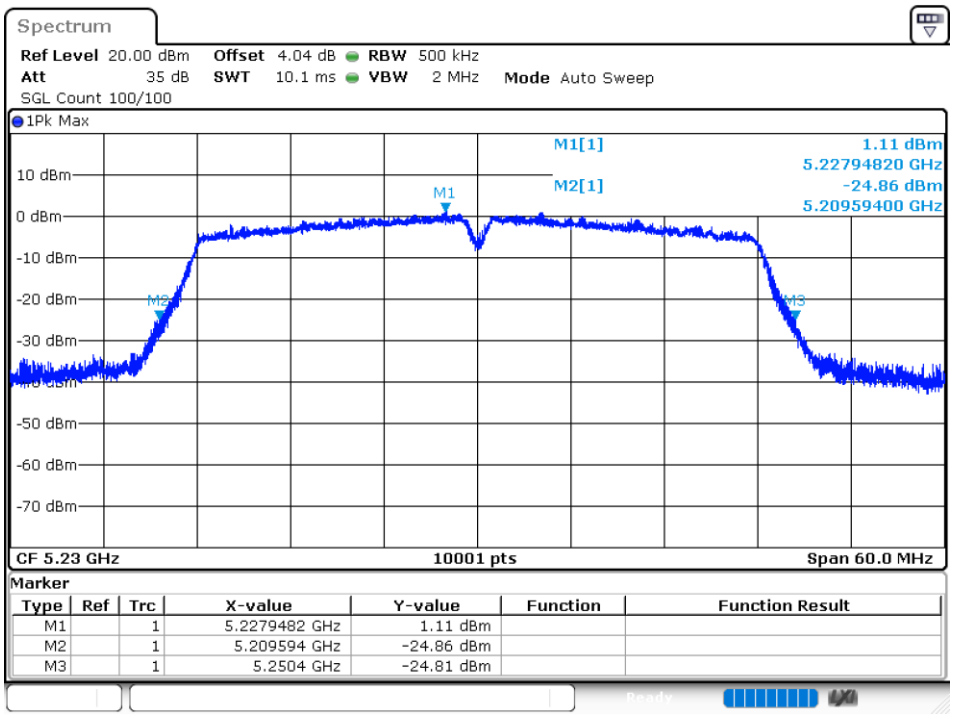
-26dB Bandwidth NVNT ac20 5240MHz Ant1



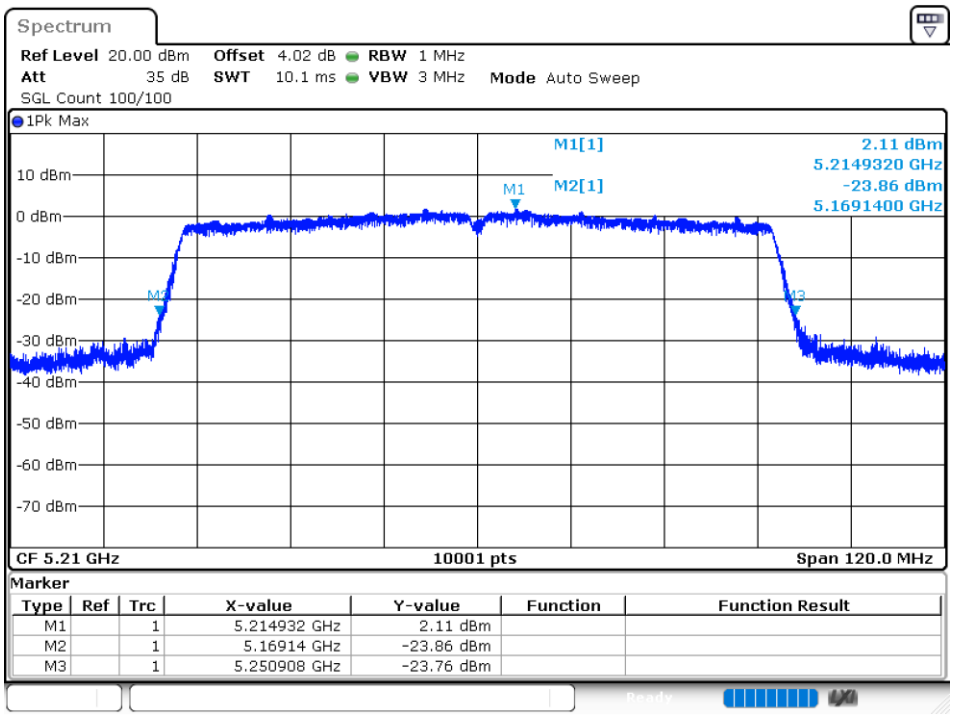
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



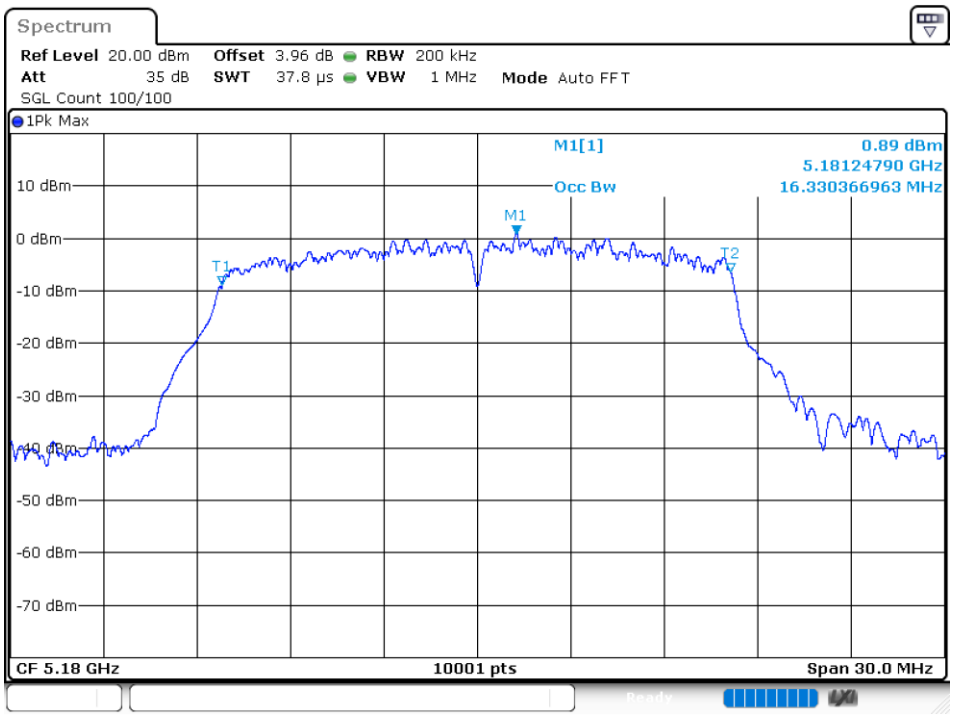
-26dB Bandwidth NVNT ac80 5210MHz Ant1



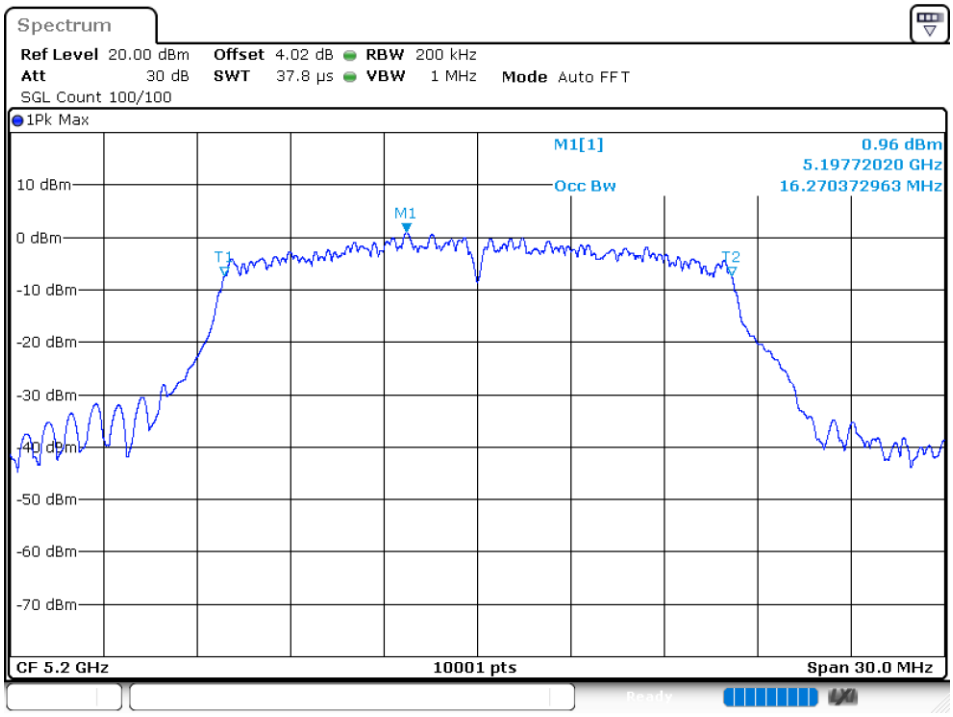
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.33
NVNT	a	5200	Ant1	16.27
NVNT	a	5240	Ant1	16.435
NVNT	n20	5180	Ant1	17.536
NVNT	n20	5200	Ant1	17.491
NVNT	n20	5240	Ant1	17.506
NVNT	n40	5190	Ant1	35.948
NVNT	n40	5230	Ant1	36.008
NVNT	ac20	5180	Ant1	17.533
NVNT	ac20	5200	Ant1	17.512
NVNT	ac20	5240	Ant1	17.506
NVNT	ac40	5190	Ant1	35.9
NVNT	ac40	5230	Ant1	35.954
NVNT	ac80	5210	Ant1	75.556

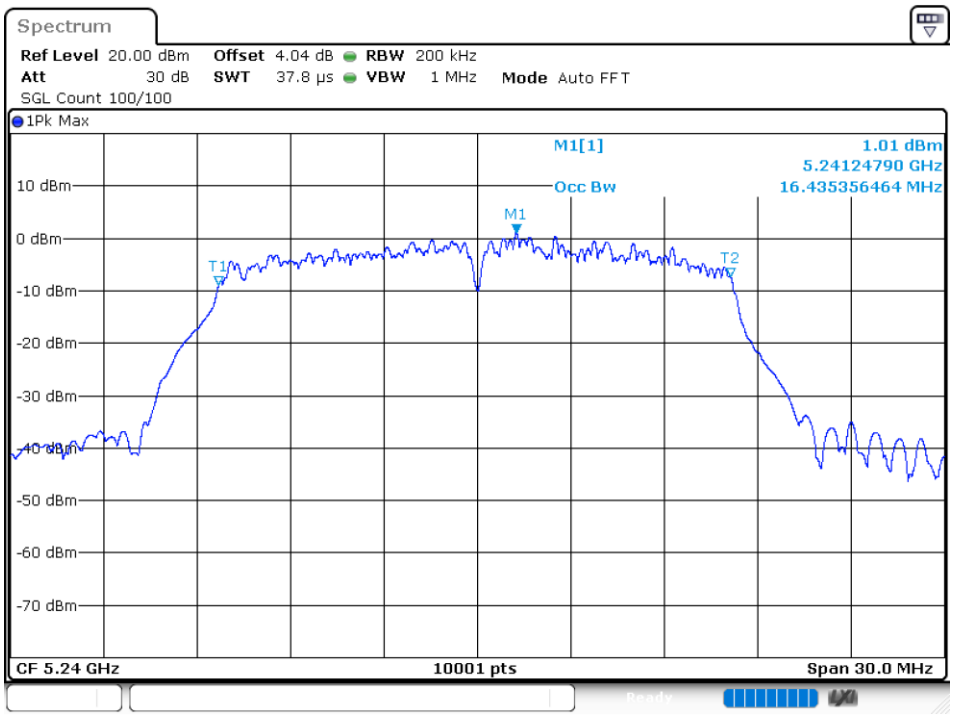
Test Graphs
OBW NVNT a 5180MHz Ant1



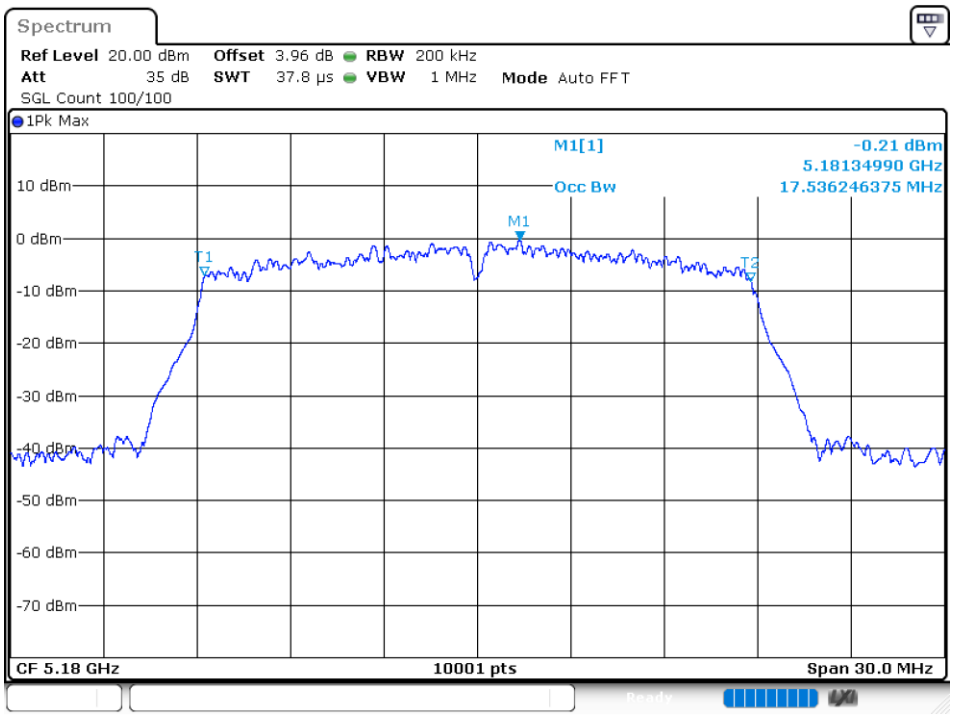
OBW NVNT a 5200MHz Ant1



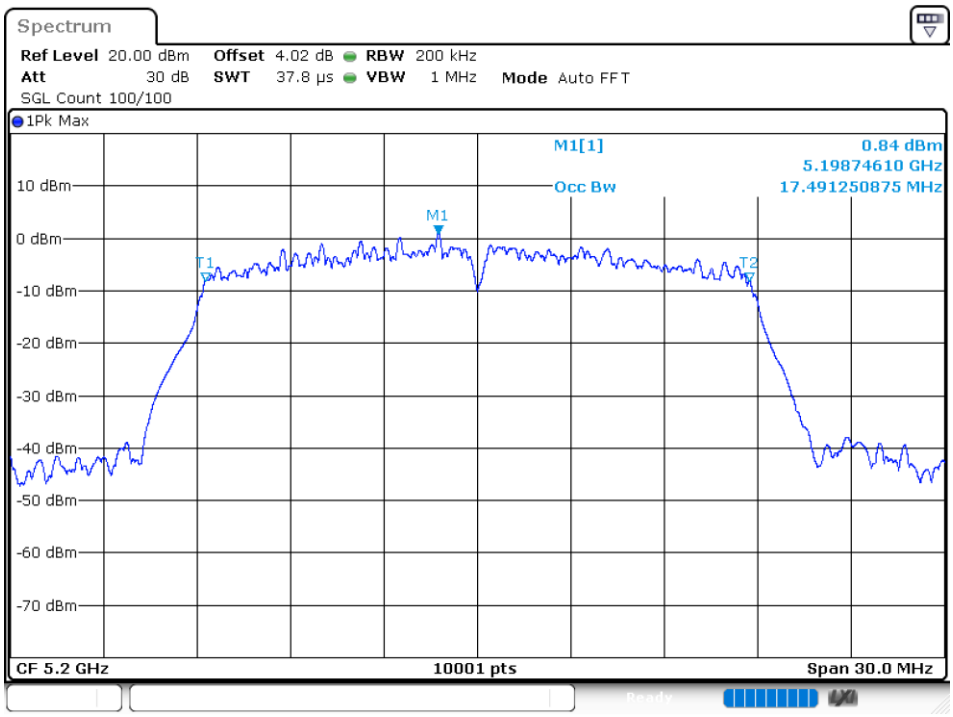
OBW NVNT a 5240MHz Ant1



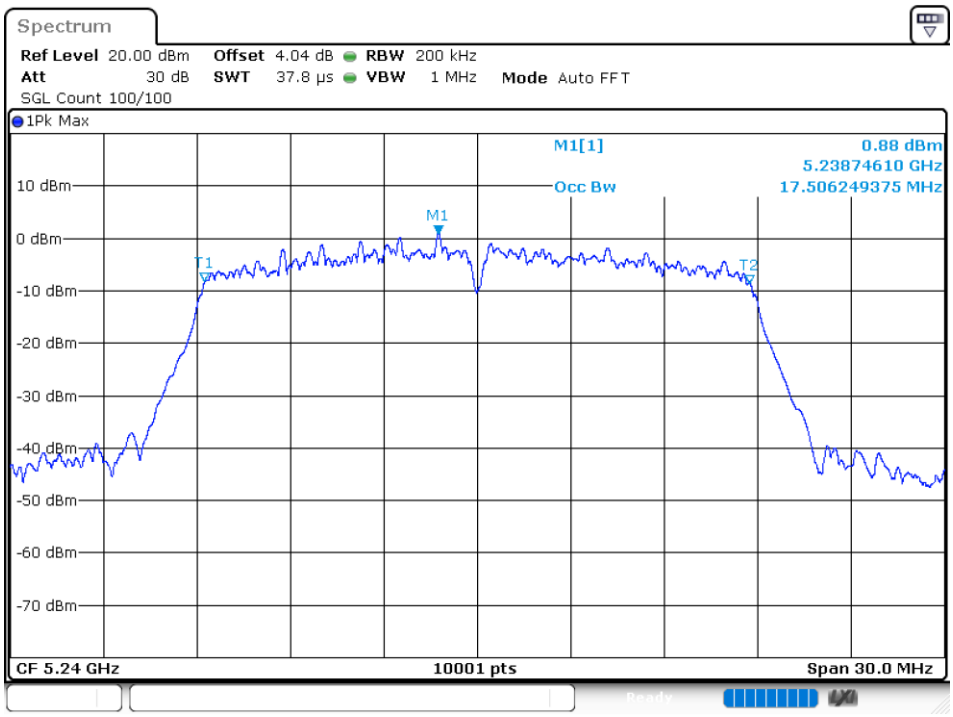
OBW NVNT n20 5180MHz Ant1



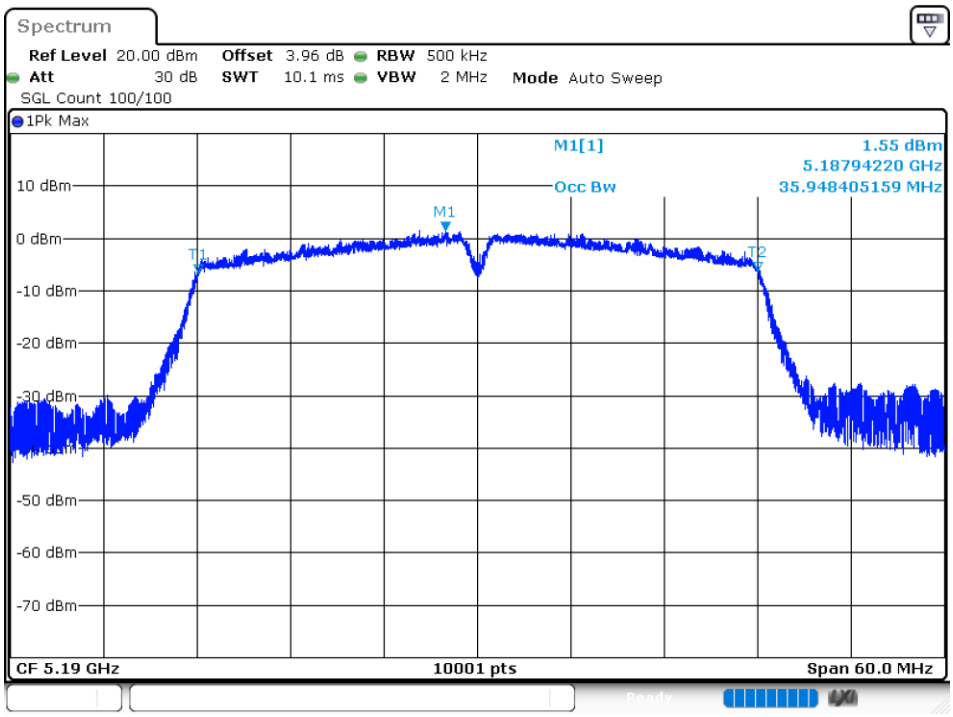
OBW NVNT n20 5200MHz Ant1



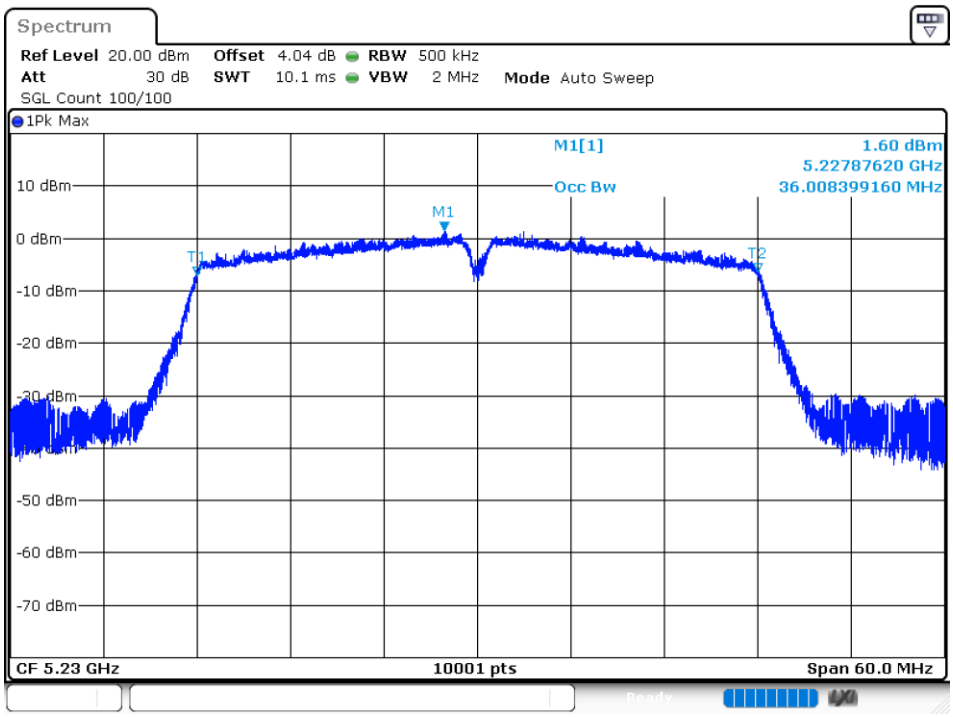
OBW NVNT n20 5240MHz Ant1



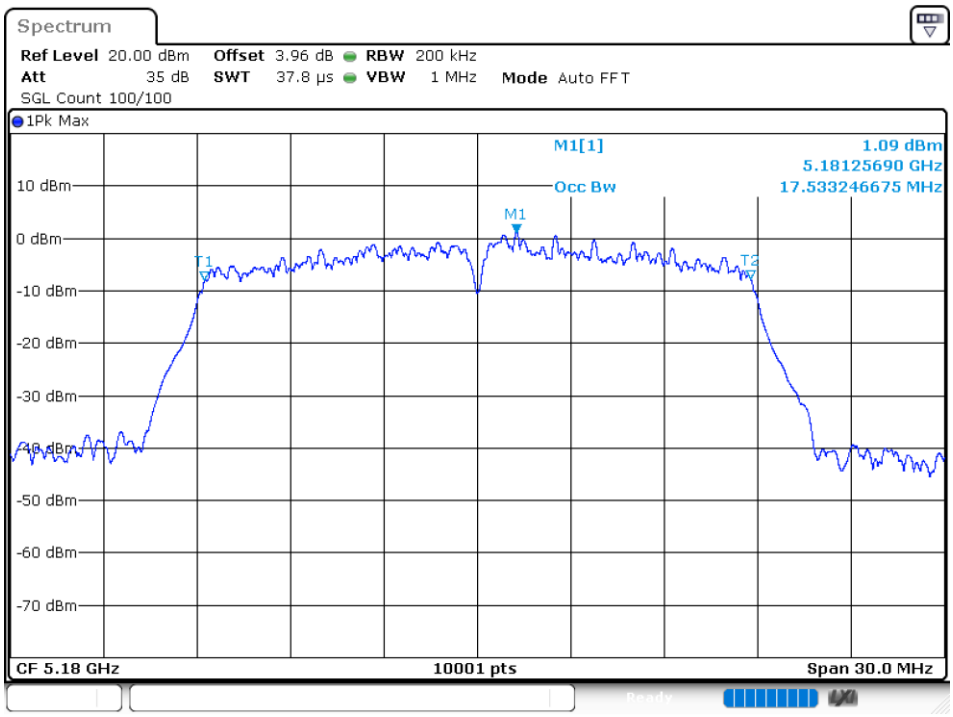
OBW NVNT n40 5190MHz Ant1



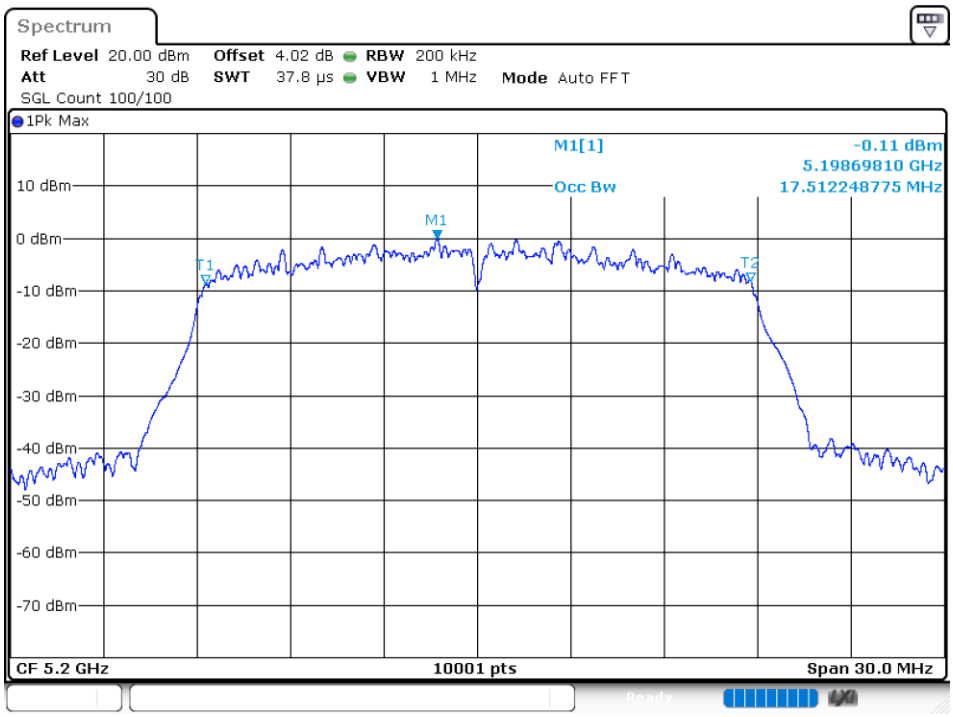
OBW NVNT n40 5230MHz Ant1



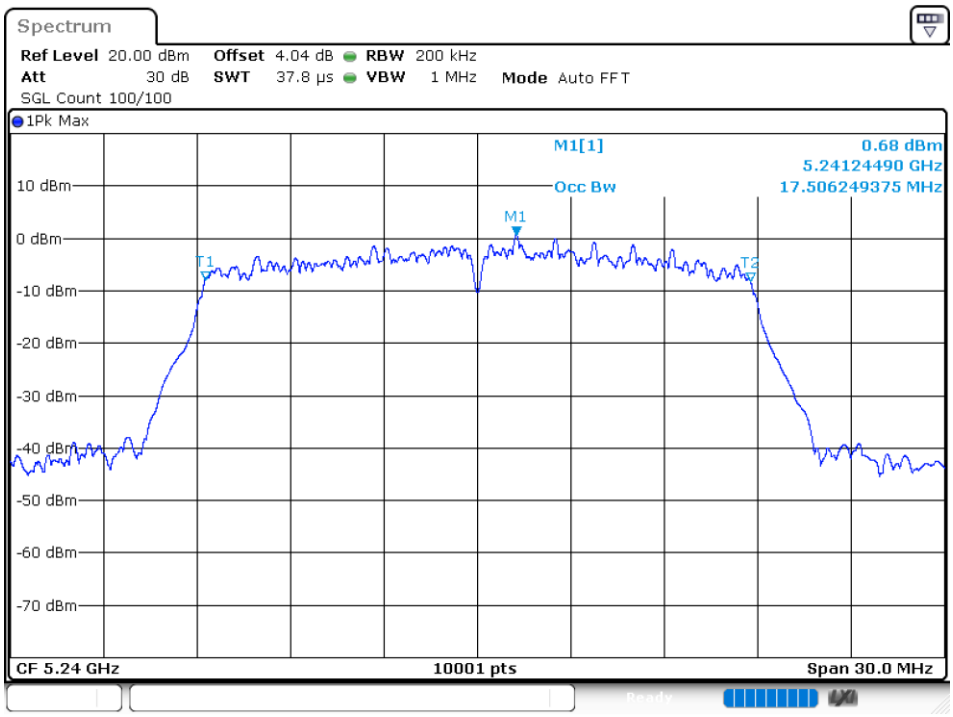
OBW NVNT ac20 5180MHz Ant1



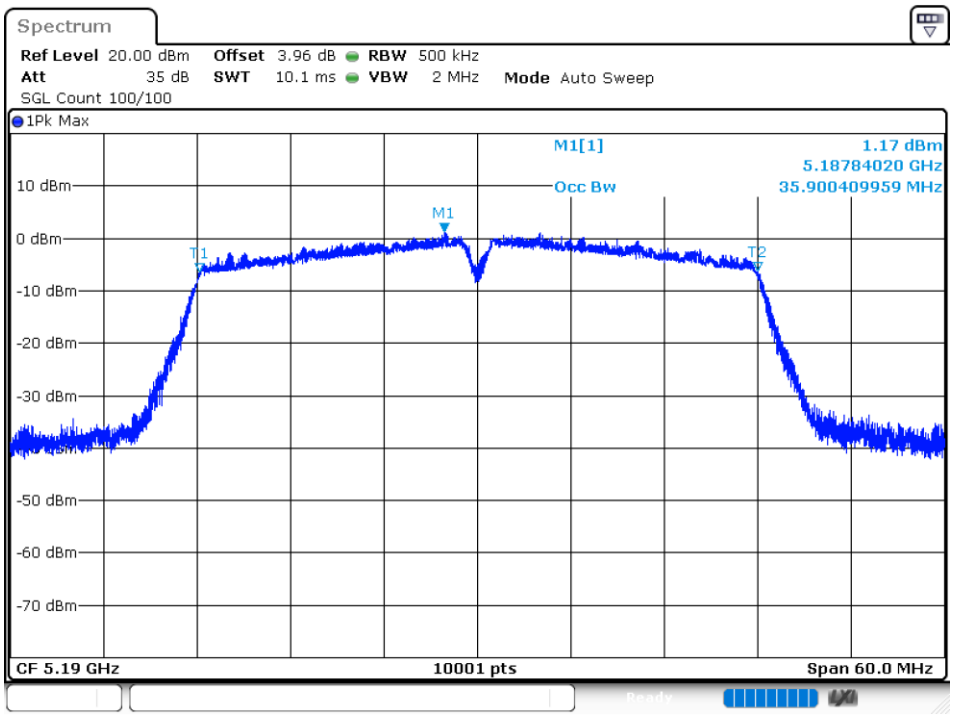
OBW NVNT ac20 5200MHz Ant1



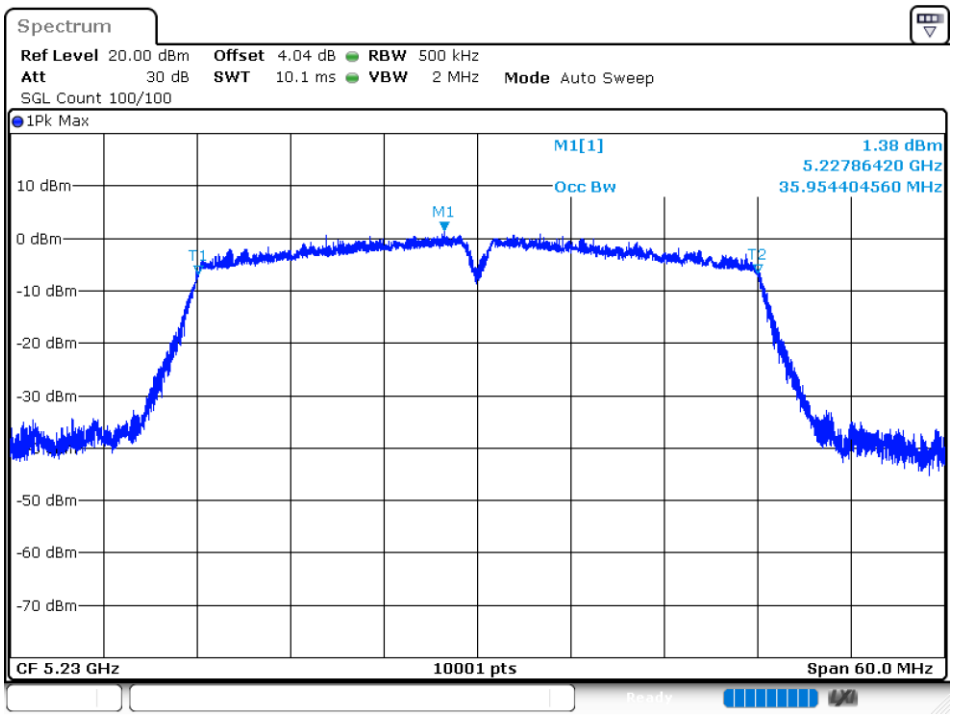
OBW NVNT ac20 5240MHz Ant1



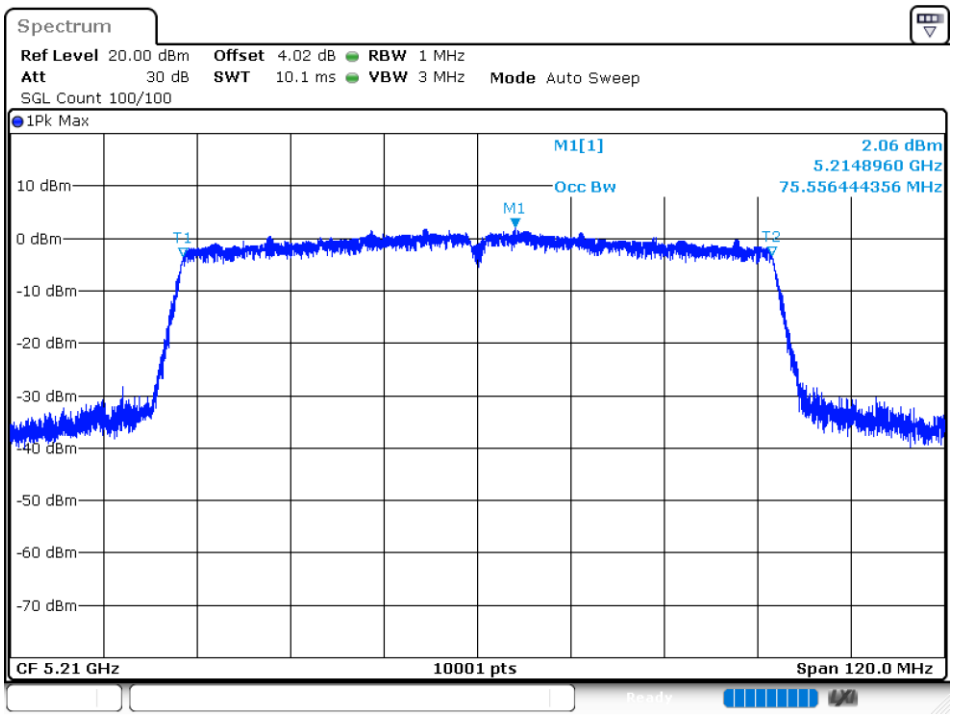
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1

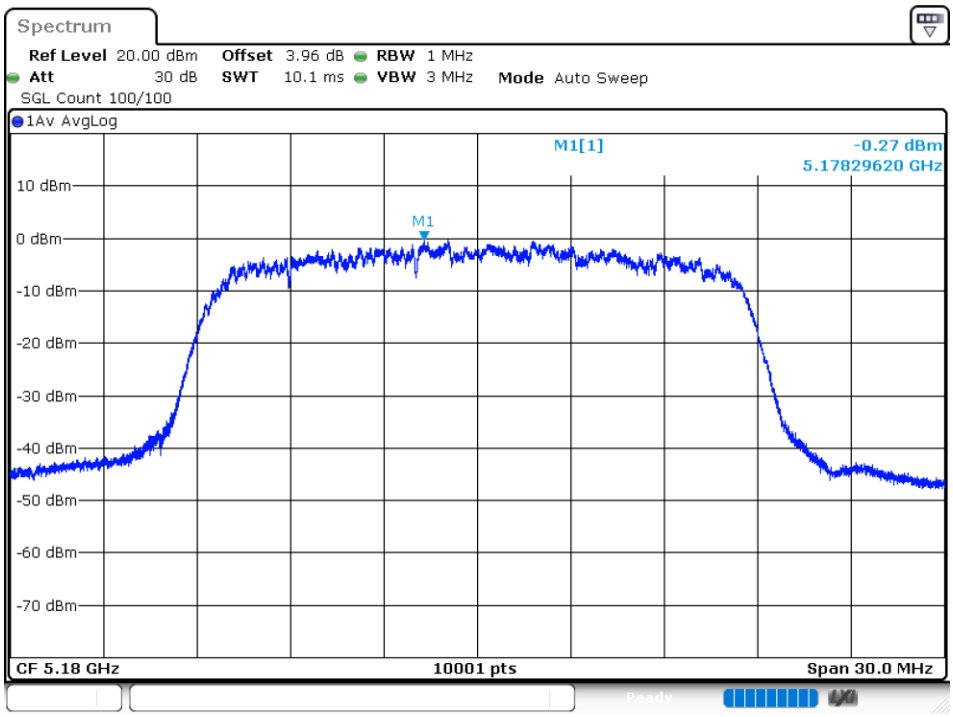


Maximum Power Spectral Density Level

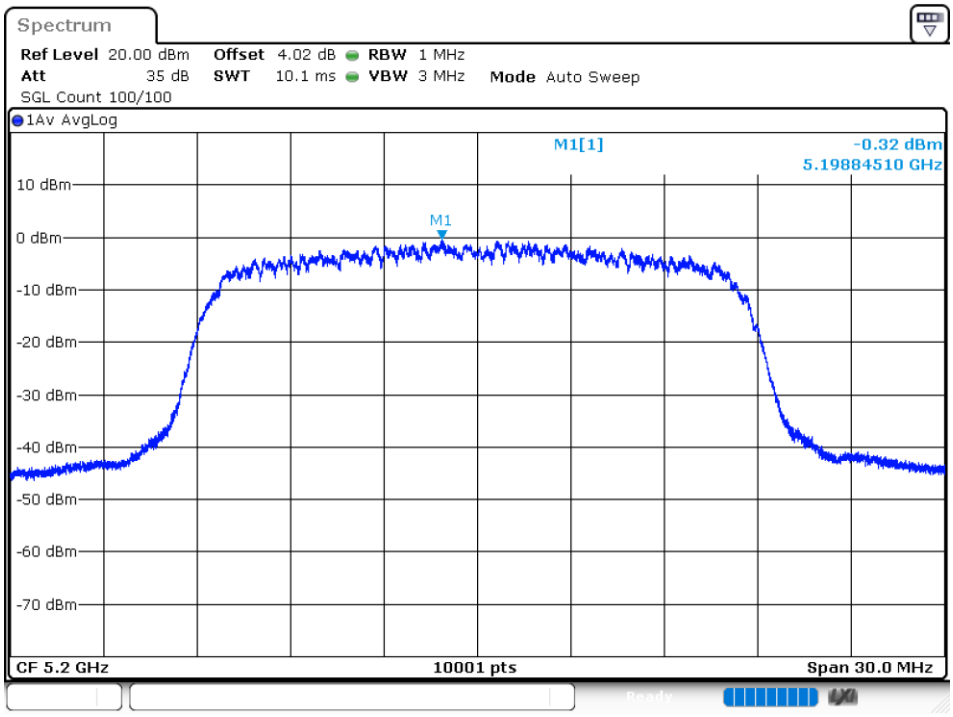
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-0.19	11	Pass
NVNT	a	5200	Ant1	-0.24	11	Pass
NVNT	a	5240	Ant1	-0.97	11	Pass
NVNT	n20	5180	Ant1	-1.34	11	Pass
NVNT	n20	5200	Ant1	-1.89	11	Pass
NVNT	n20	5240	Ant1	-1.82	11	Pass
NVNT	n40	5190	Ant1	-3.94	11	Pass
NVNT	n40	5230	Ant1	-5.04	11	Pass
NVNT	ac20	5180	Ant1	-1.29	11	Pass
NVNT	ac20	5200	Ant1	-1.63	11	Pass
NVNT	ac20	5240	Ant1	-1.9	11	Pass
NVNT	ac40	5190	Ant1	-5.4	11	Pass
NVNT	ac40	5230	Ant1	-4.65	11	Pass
NVNT	ac80	5210	Ant1	-10.14	11	Pass

Note: The average power value already includes the duty cycle factor

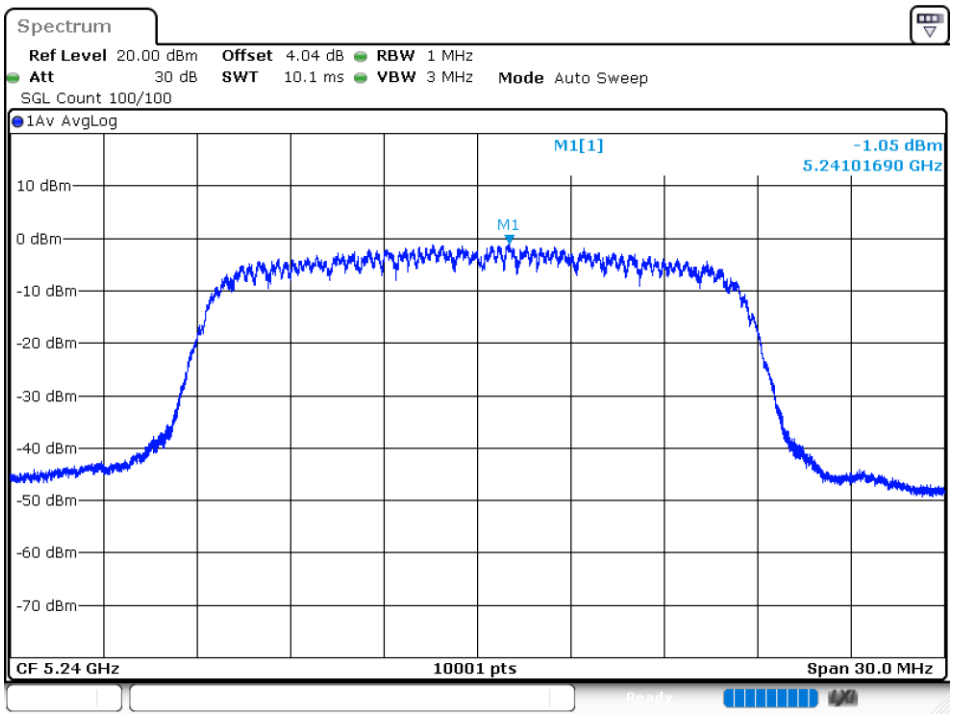
Test Graphs
PSD NVNT a 5180MHz Ant1



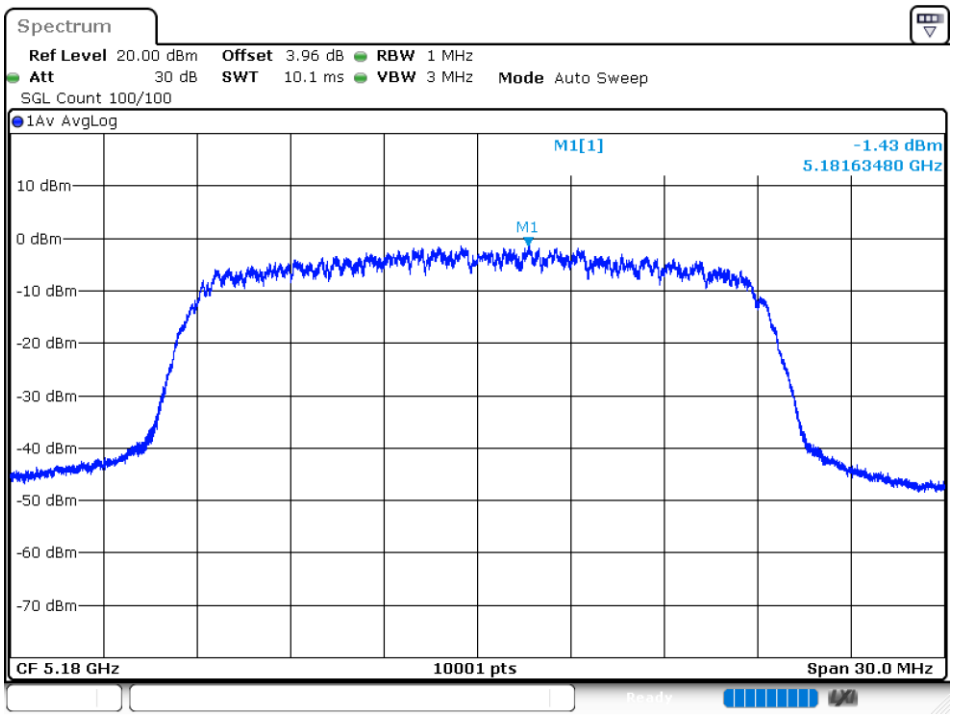
PSD NVNT a 5200MHz Ant1



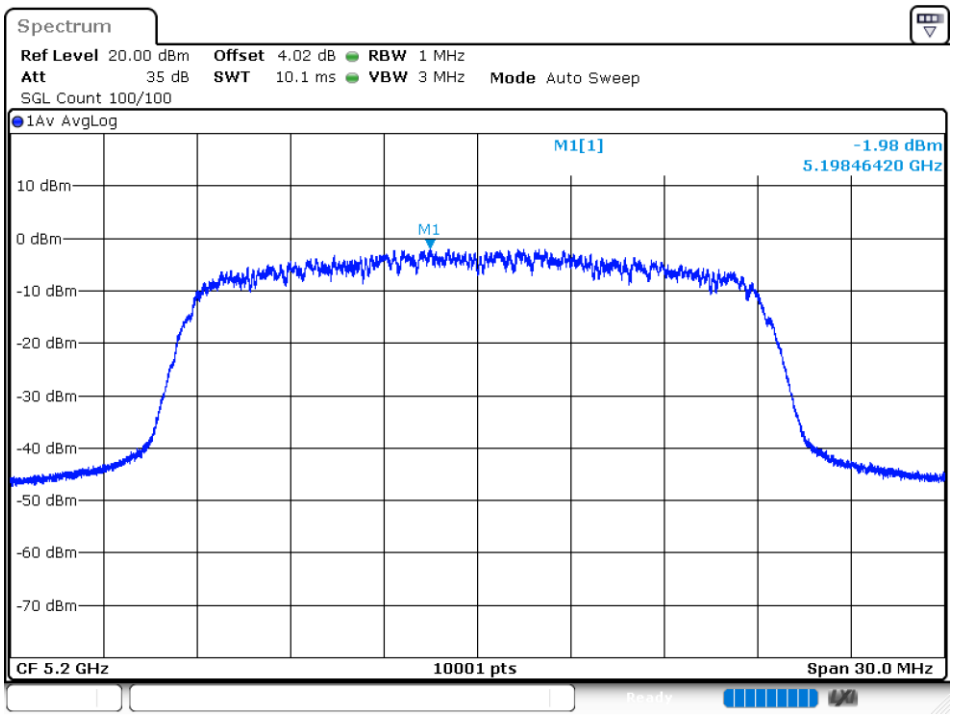
PSD NVNT a 5240MHz Ant1



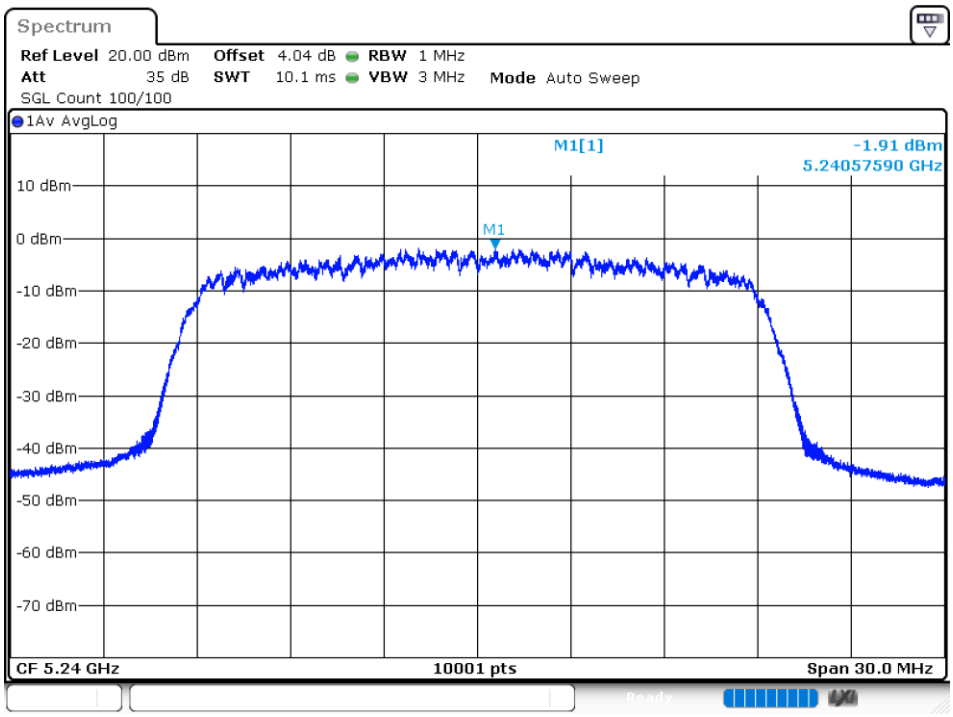
PSD NVNT n20 5180MHz Ant1



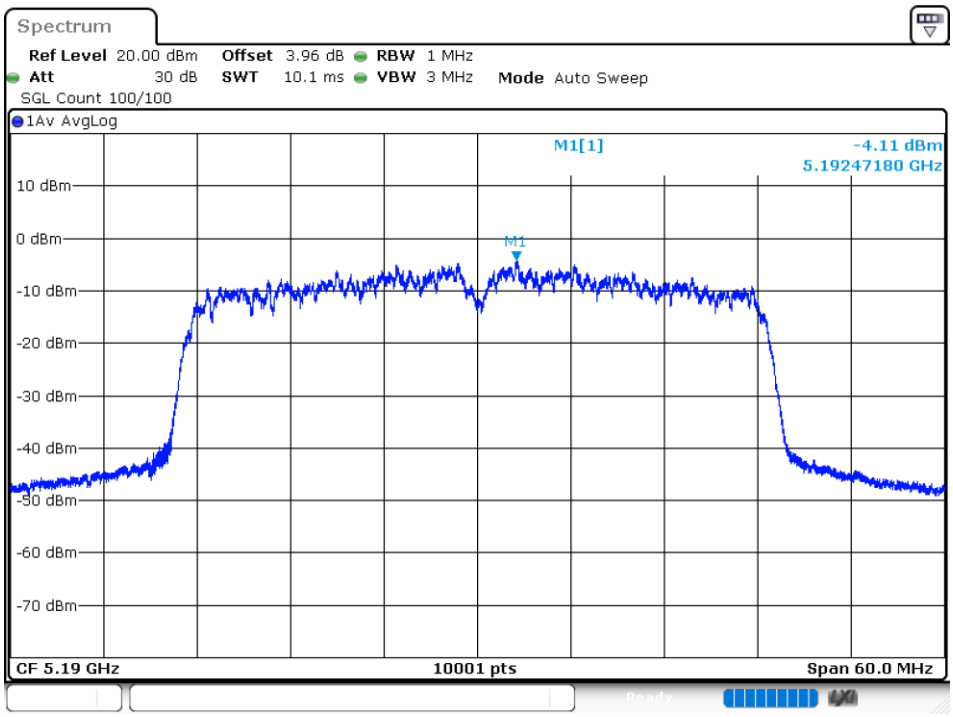
PSD NVNT n20 5200MHz Ant1



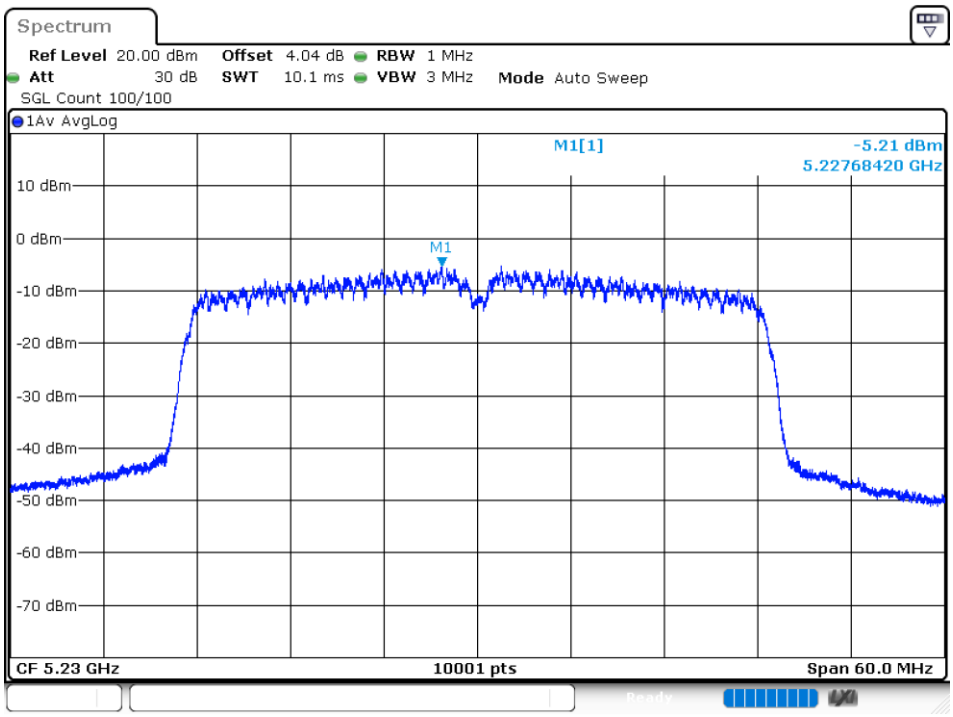
PSD NVNT n20 5240MHz Ant1



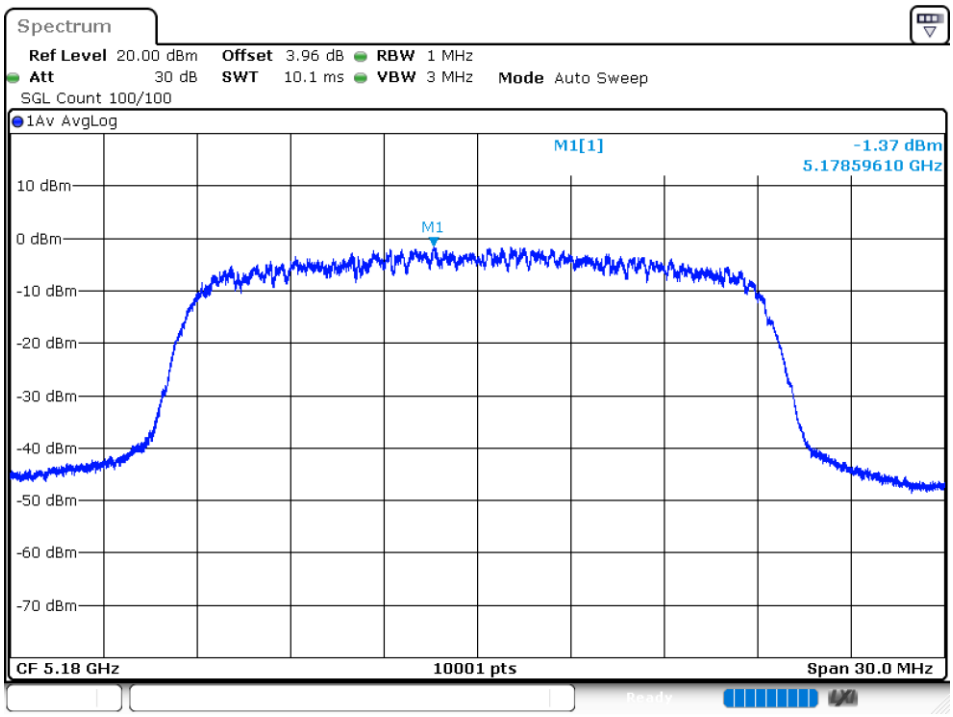
PSD NVNT n40 5190MHz Ant1



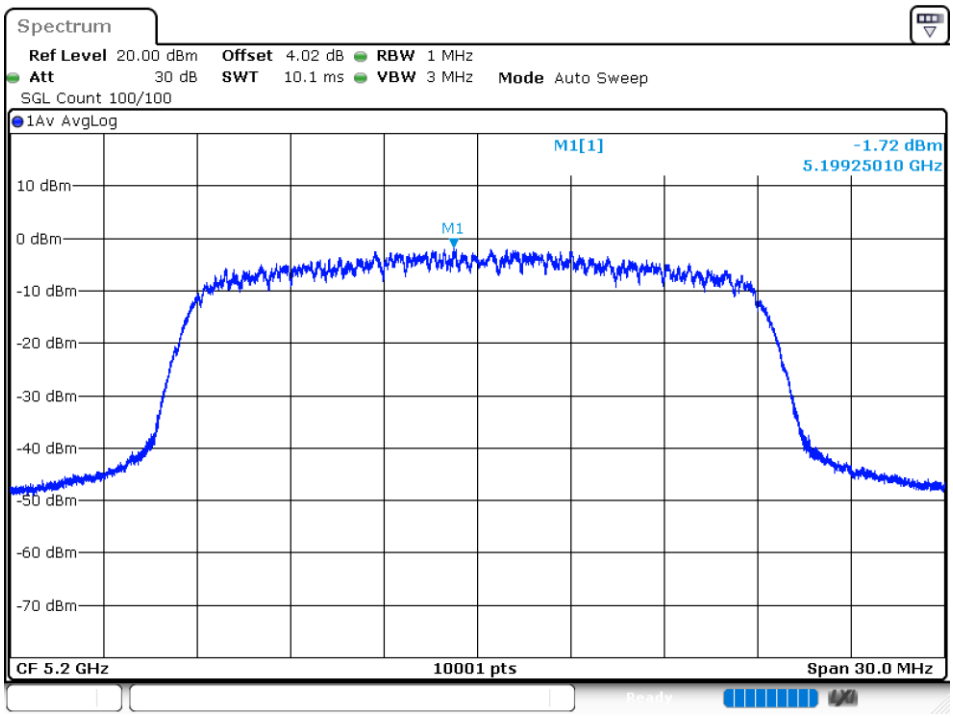
PSD NVNT n40 5230MHz Ant1



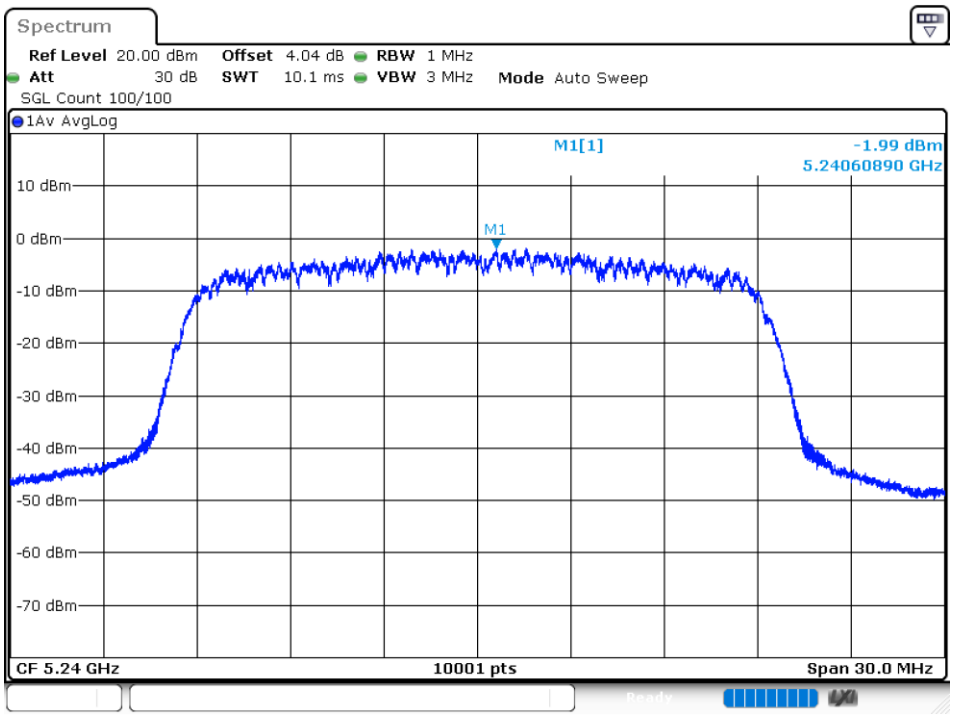
PSD NVNT ac20 5180MHz Ant1



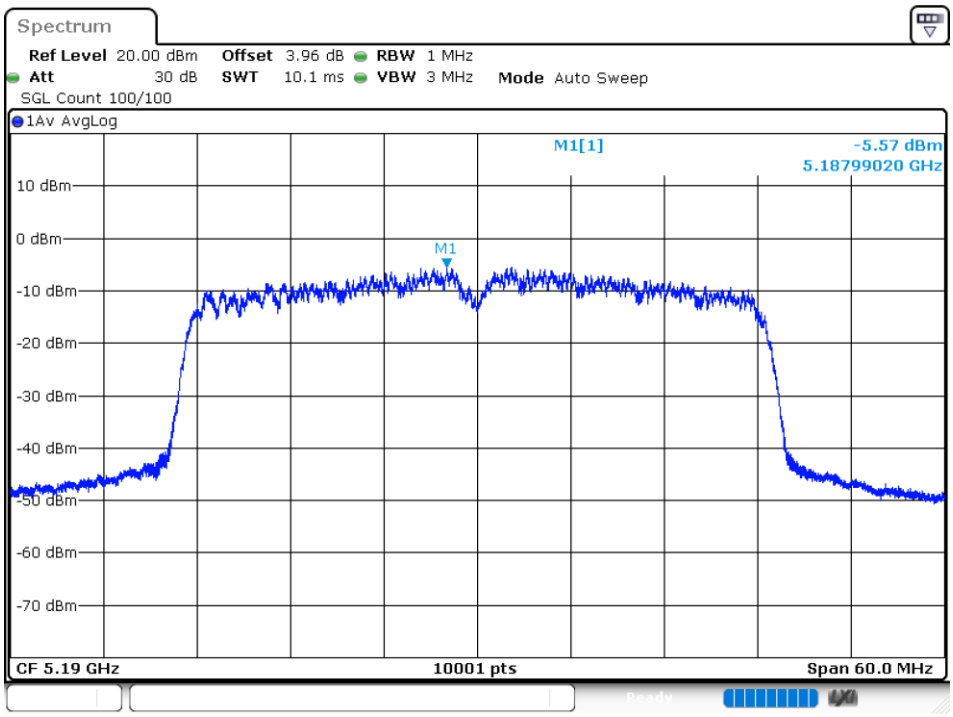
PSD NVNT ac20 5200MHz Ant1



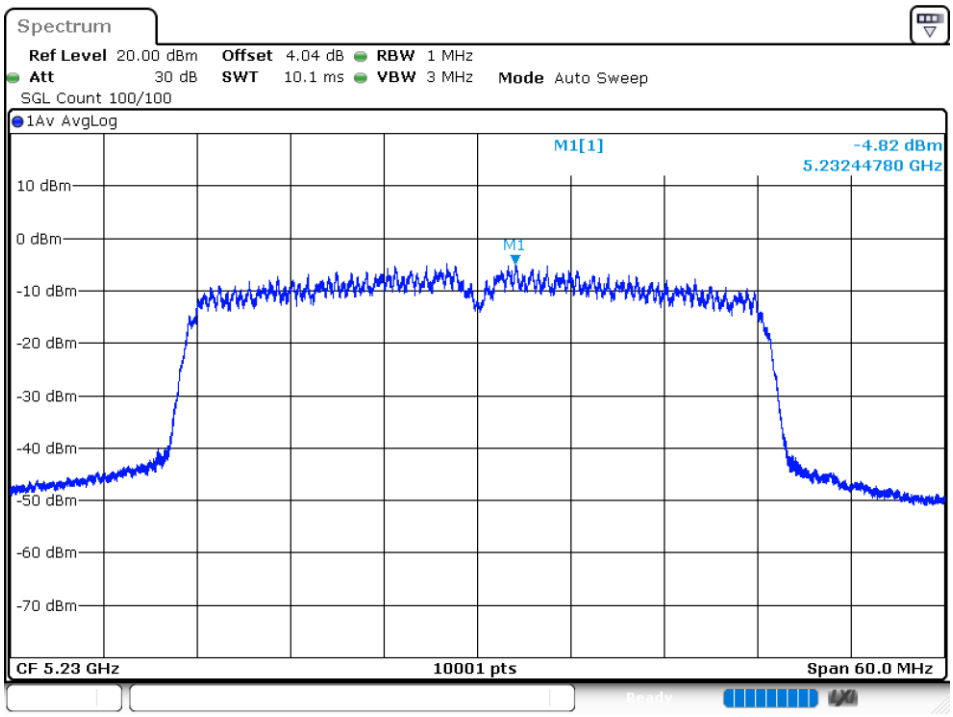
PSD NVNT ac20 5240MHz Ant1



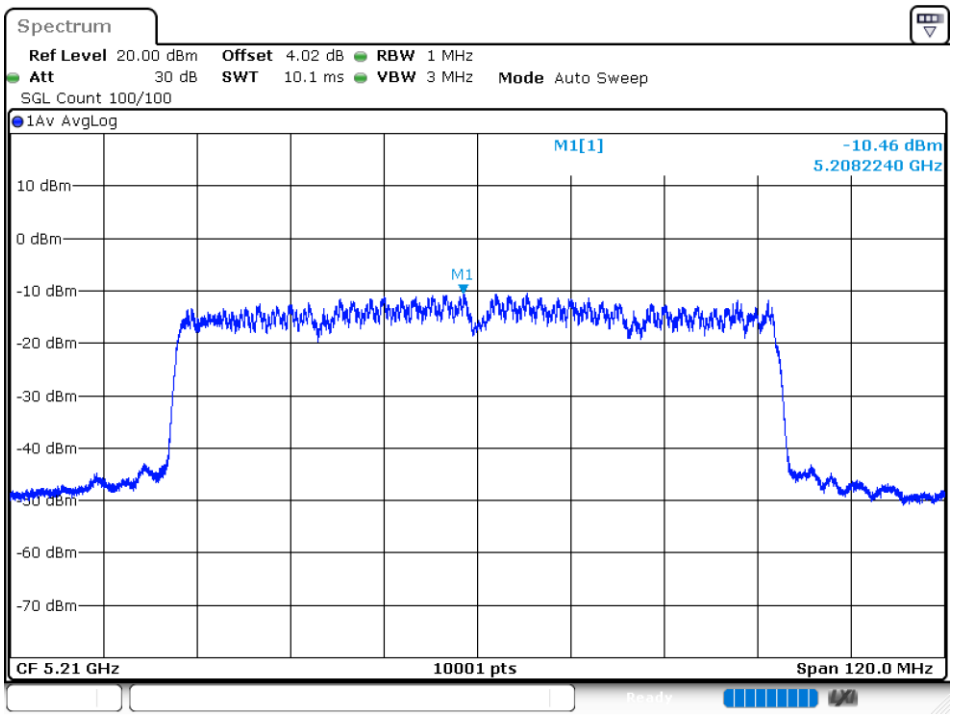
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1



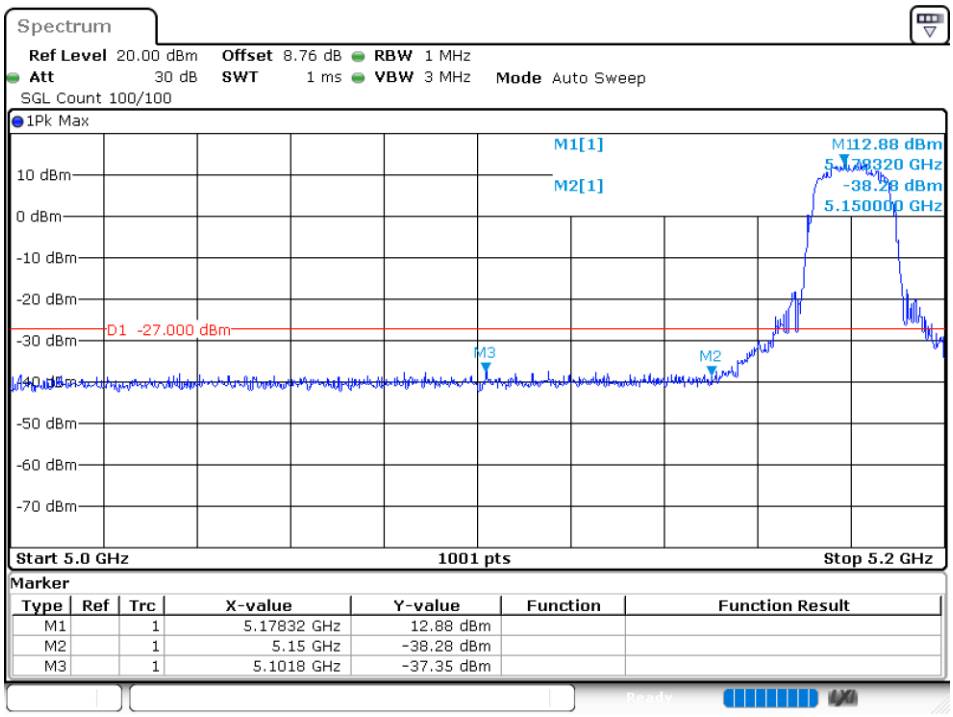
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-37.35	-27	Pass
NVNT	a	5240	Ant1	-38.1	-27	Pass
NVNT	n20	5180	Ant1	-33.48	-27	Pass
NVNT	n20	5240	Ant1	-37.71	-27	Pass
NVNT	n40	5190	Ant1	-32.24	-27	Pass
NVNT	n40	5230	Ant1	-38.22	-27	Pass
NVNT	ac20	5180	Ant1	-37.29	-27	Pass
NVNT	ac20	5240	Ant1	-38.17	-27	Pass
NVNT	ac40	5190	Ant1	-36.05	-27	Pass
NVNT	ac40	5230	Ant1	-38.29	-27	Pass
NVNT	ac80	5210	Ant1	-31.74	-27	Pass
NVNT	ac80	5210	Ant1	-38.75	-27	Pass

Note:This test has Increased antenna gain.

Test Graphs

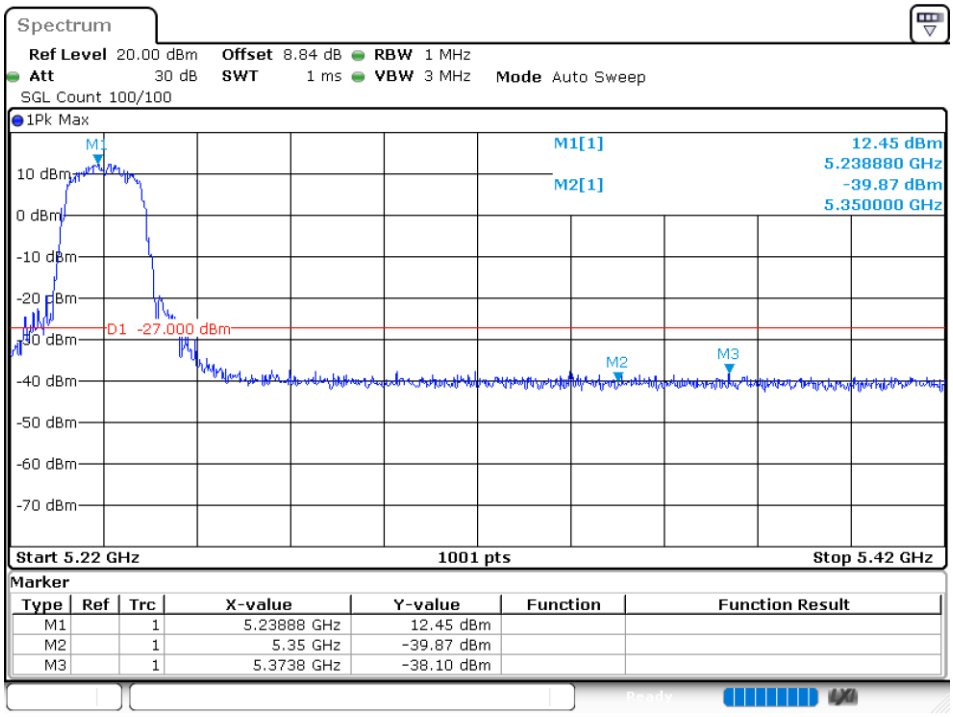
Band Edge NVNT a 5180MHz Low Ant1



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.17832 GHz	12.88 dBm		
M2		1	5.15 GHz	-38.28 dBm		
M3		1	5.1018 GHz	-37.35 dBm		

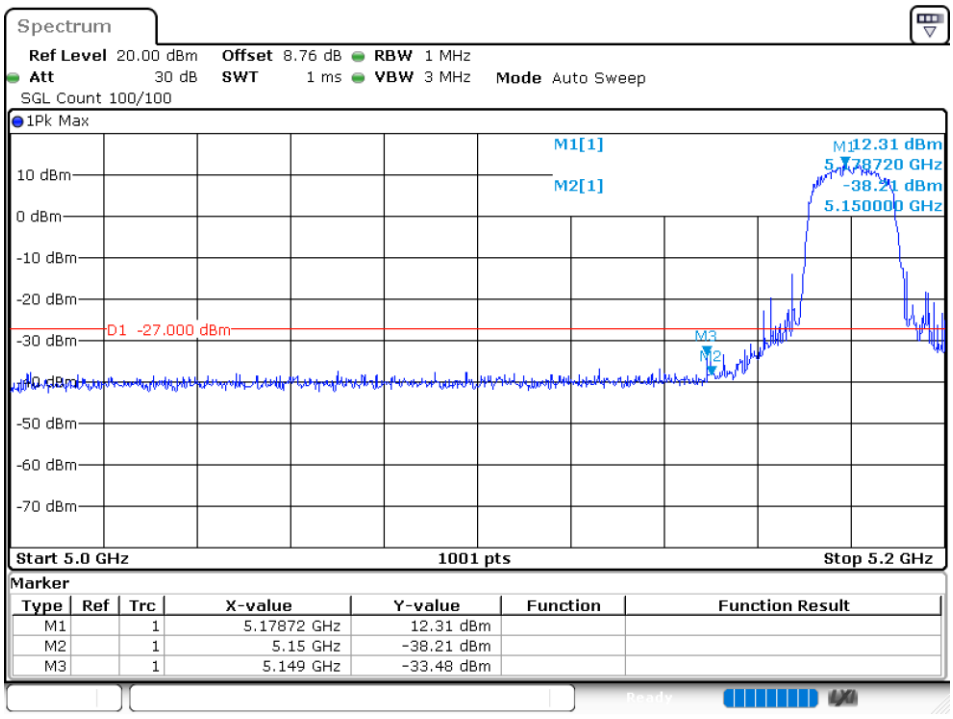
Band Edge NVNT a 5240MHz High Ant1



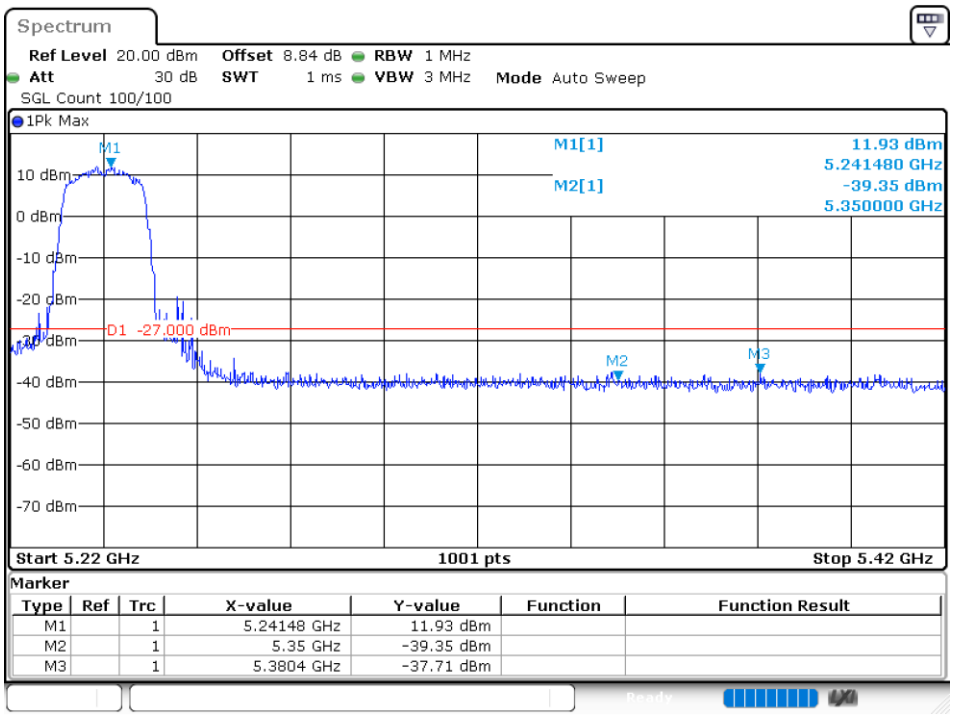
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.23888 GHz	12.45 dBm		
M2		1	5.35 GHz	-39.87 dBm		
M3		1	5.3738 GHz	-38.10 dBm		

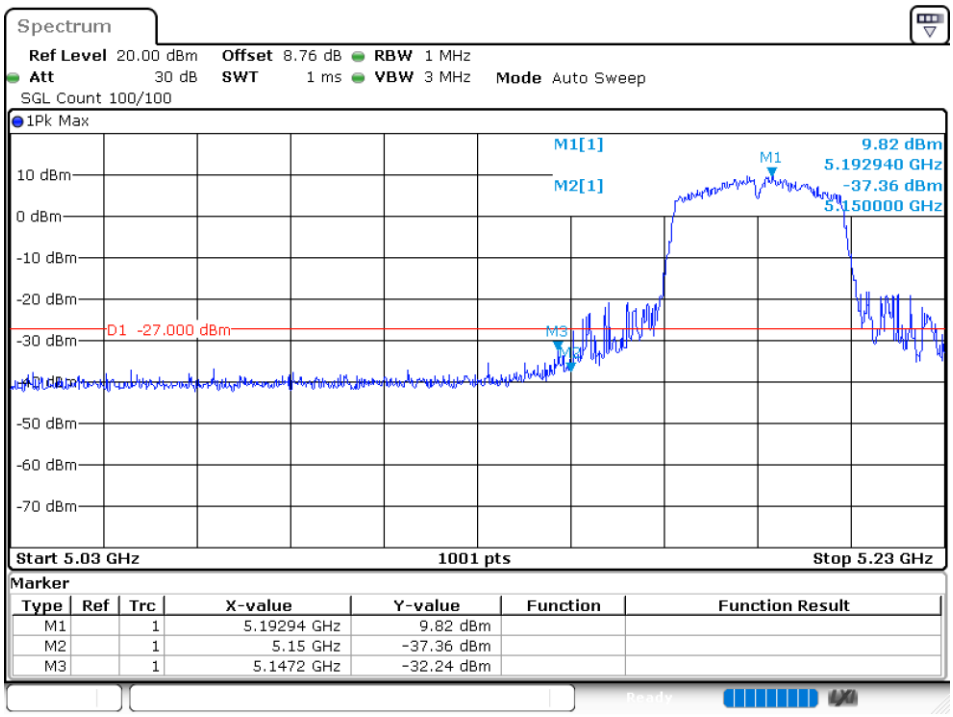
Band Edge NVNT n20 5180MHz Low Ant1



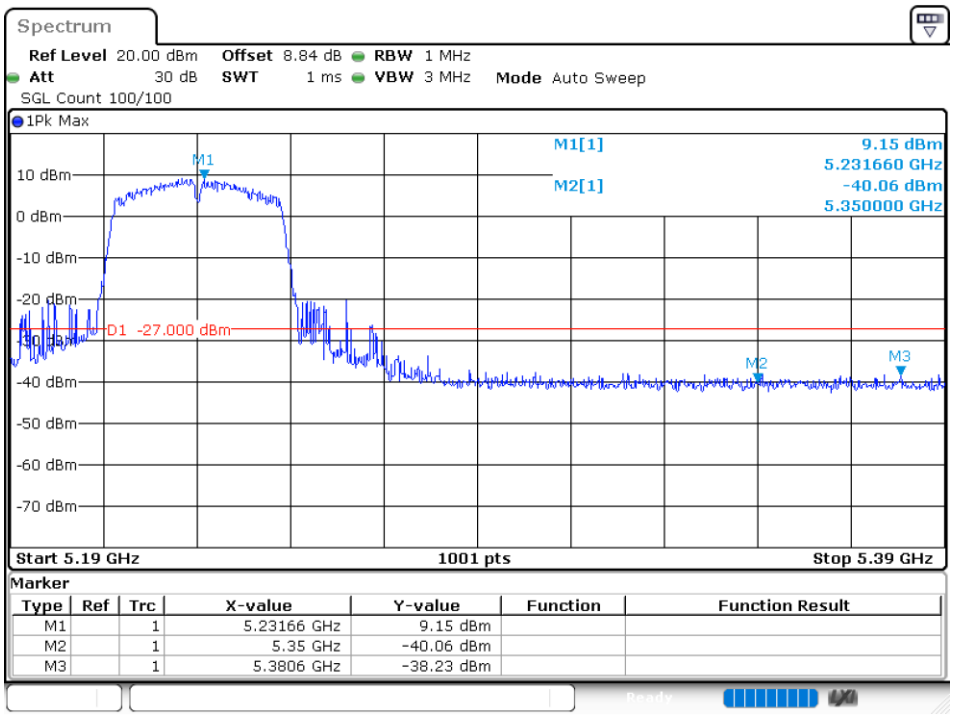
Band Edge NVNT n20 5240MHz High Ant1



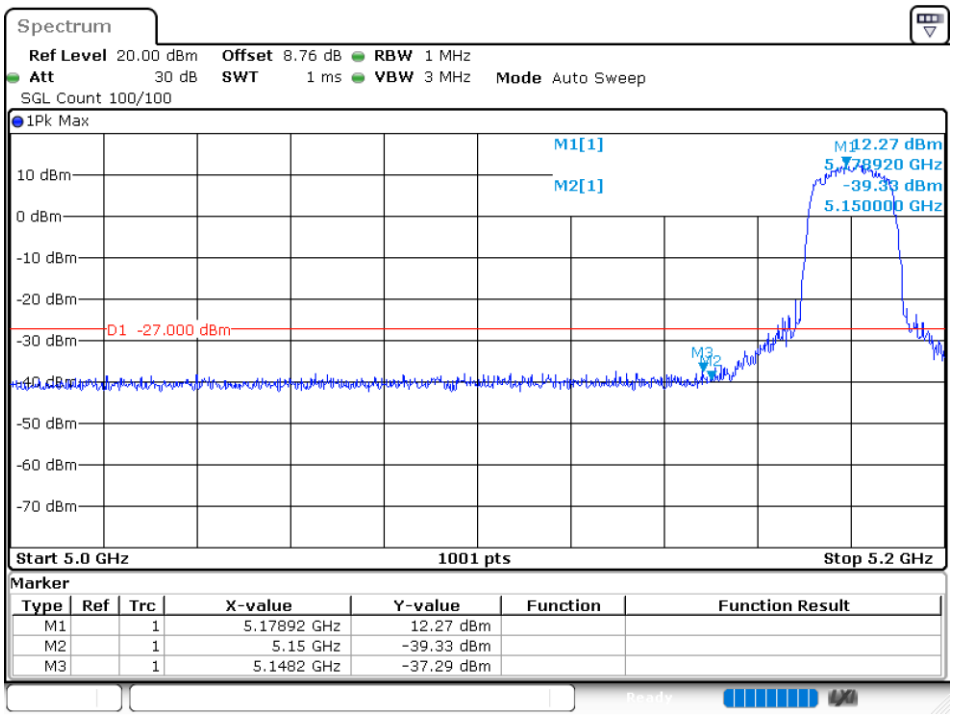
Band Edge NVNT n40 5190MHz Low Ant1



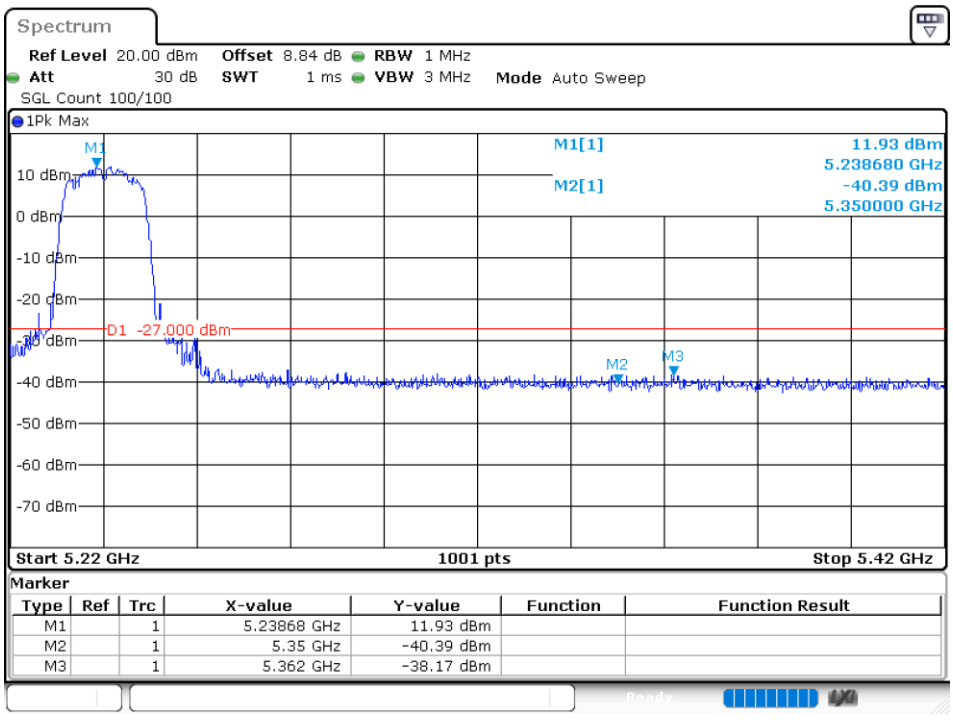
Band Edge NVNT n40 5230MHz High Ant1



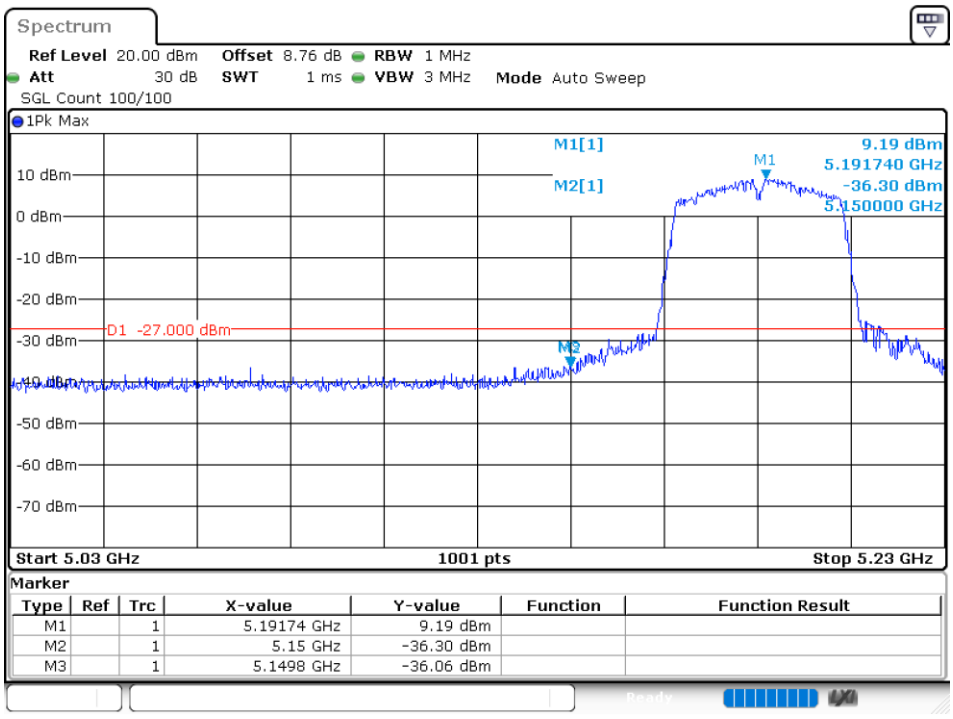
Band Edge NVNT ac20 5180MHz Low Ant1



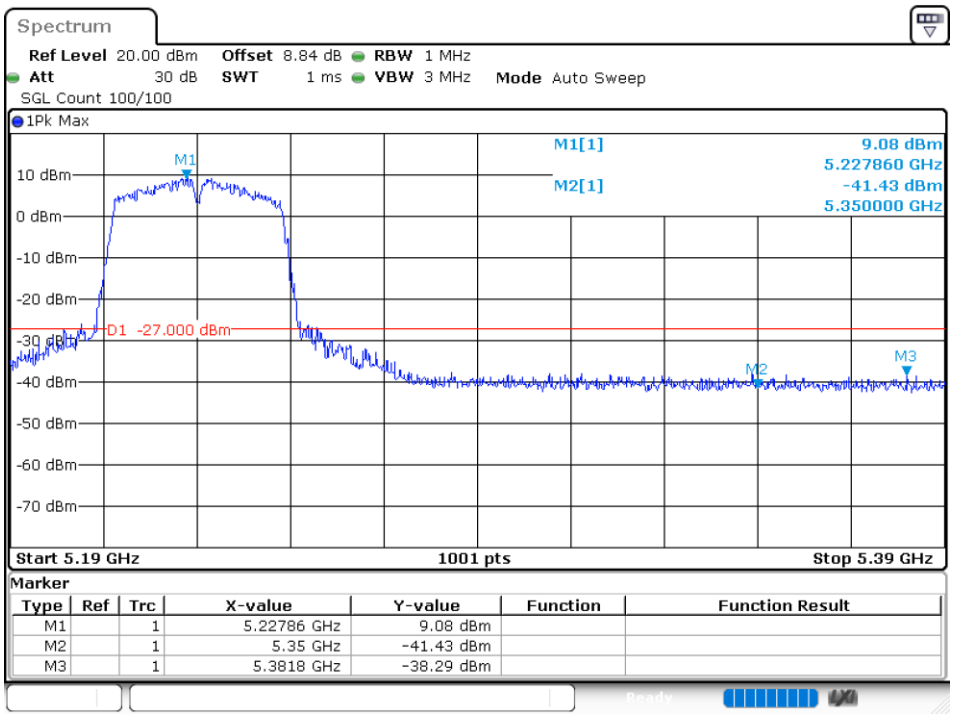
Band Edge NVNT ac20 5240MHz High Ant1



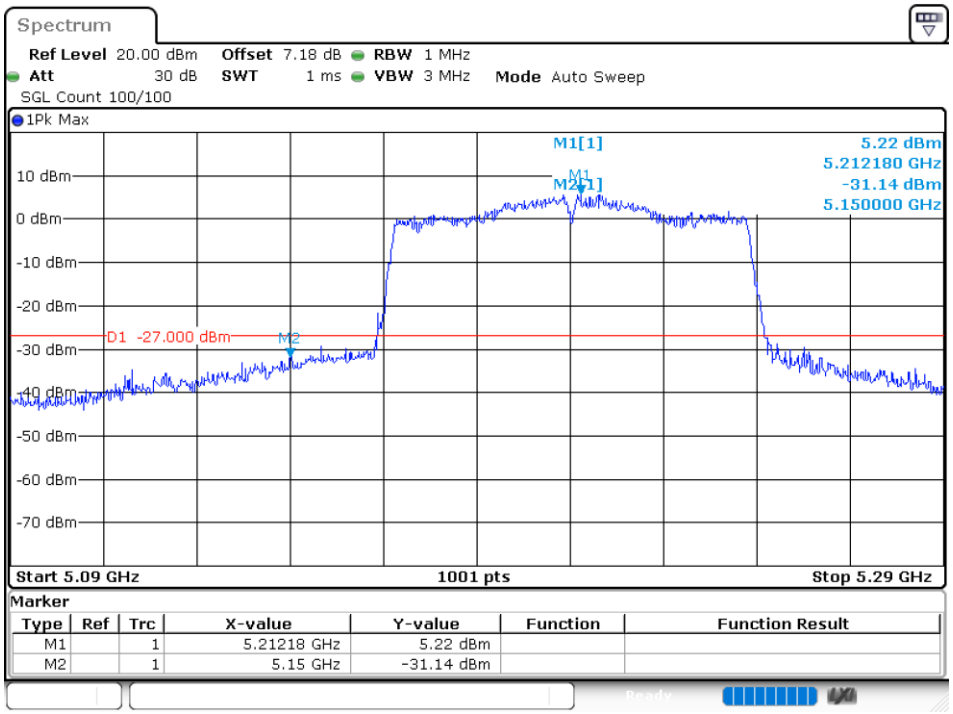
Band Edge NVNT ac40 5190MHz Low Ant1



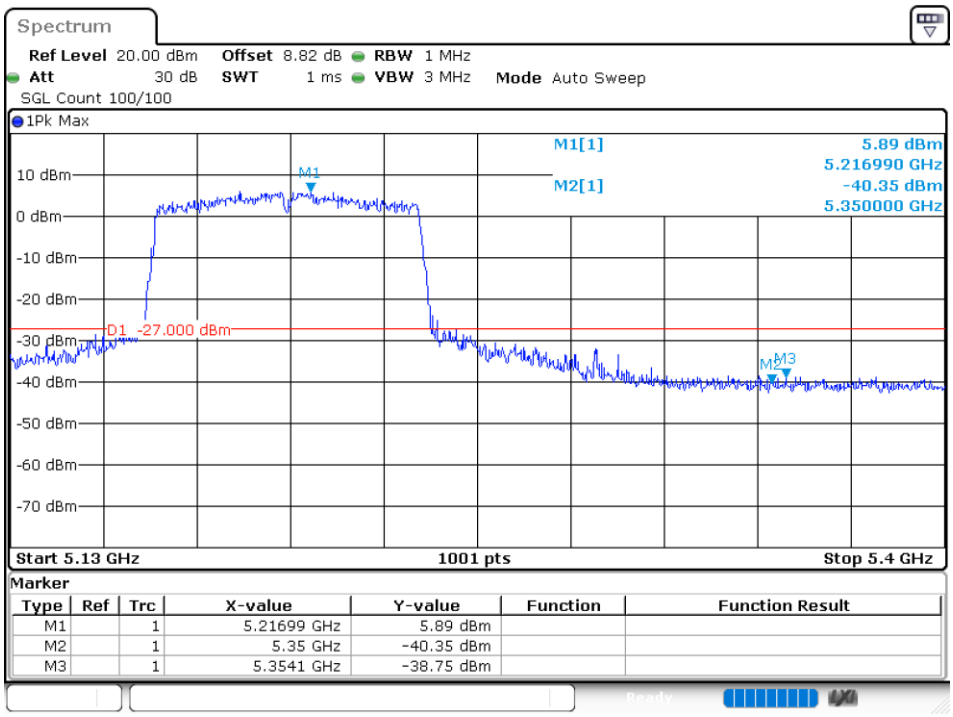
Band Edge NVNT ac40 5230MHz High Ant1



Band Edge NVNT ac80 5210MHz Low Ant1



Band Edge NVNT ac80 5210MHz High Ant1



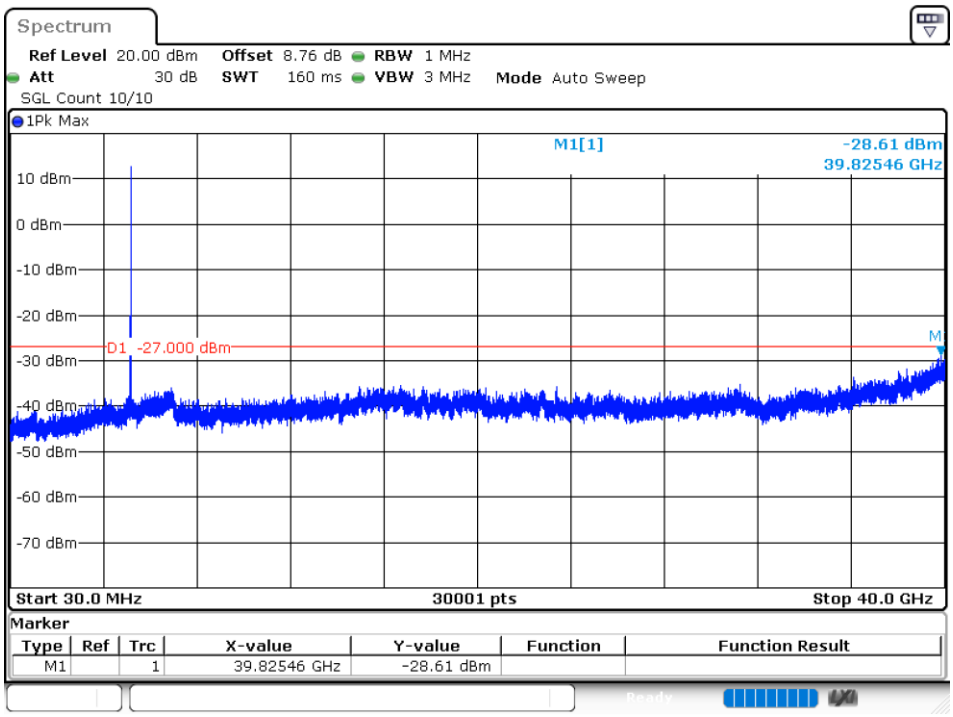
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-28.61	-27	Pass
NVNT	a	5200	Ant1	-30.34	-27	Pass
NVNT	a	5240	Ant1	-29.76	-27	Pass
NVNT	n20	5180	Ant1	-29.07	-27	Pass
NVNT	n20	5200	Ant1	-29.20	-27	Pass
NVNT	n20	5240	Ant1	-29.16	-27	Pass
NVNT	n40	5190	Ant1	-29.66	-27	Pass
NVNT	n40	5230	Ant1	-29.81	-27	Pass
NVNT	ac20	5180	Ant1	-30.18	-27	Pass
NVNT	ac20	5200	Ant1	-29.55	-27	Pass
NVNT	ac20	5240	Ant1	-29.98	-27	Pass
NVNT	ac40	5190	Ant1	-28.79	-27	Pass
NVNT	ac40	5230	Ant1	-29.35	-27	Pass
NVNT	ac80	5210	Ant1	-30.05	-27	Pass

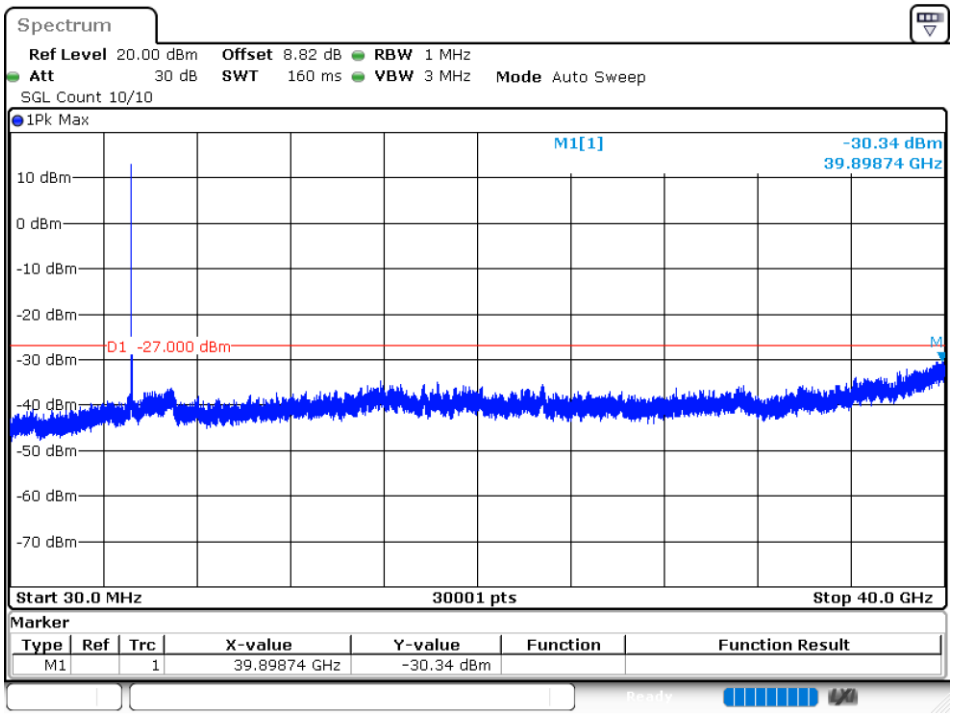
Note:This test has Increased antenna gain.

Test Graphs

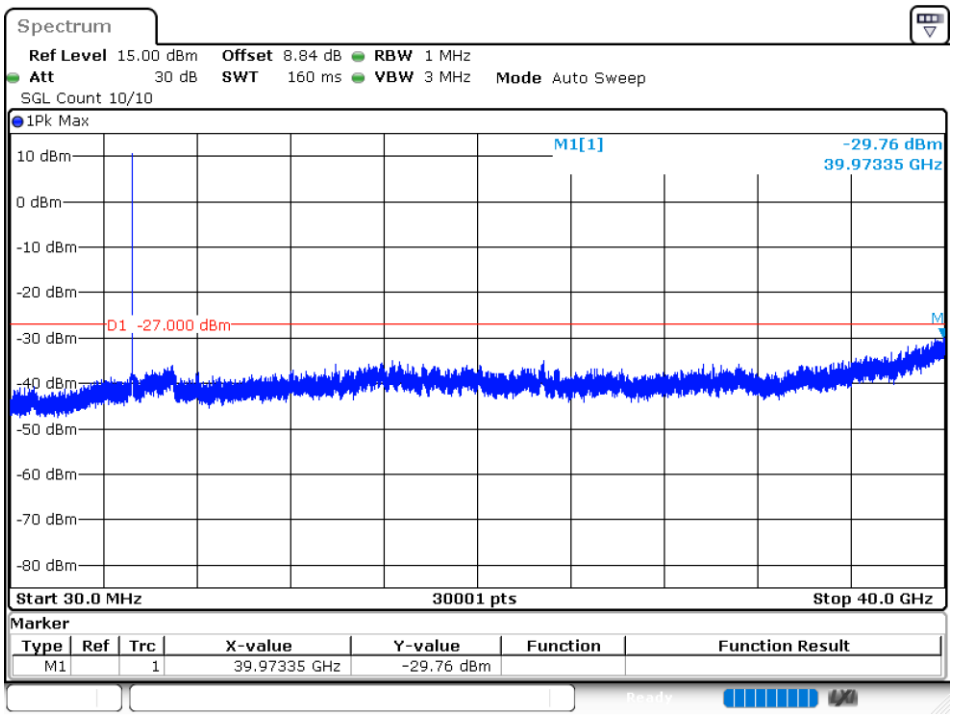
Tx. Spurious NVNT a 5180MHz Ant1 Emission



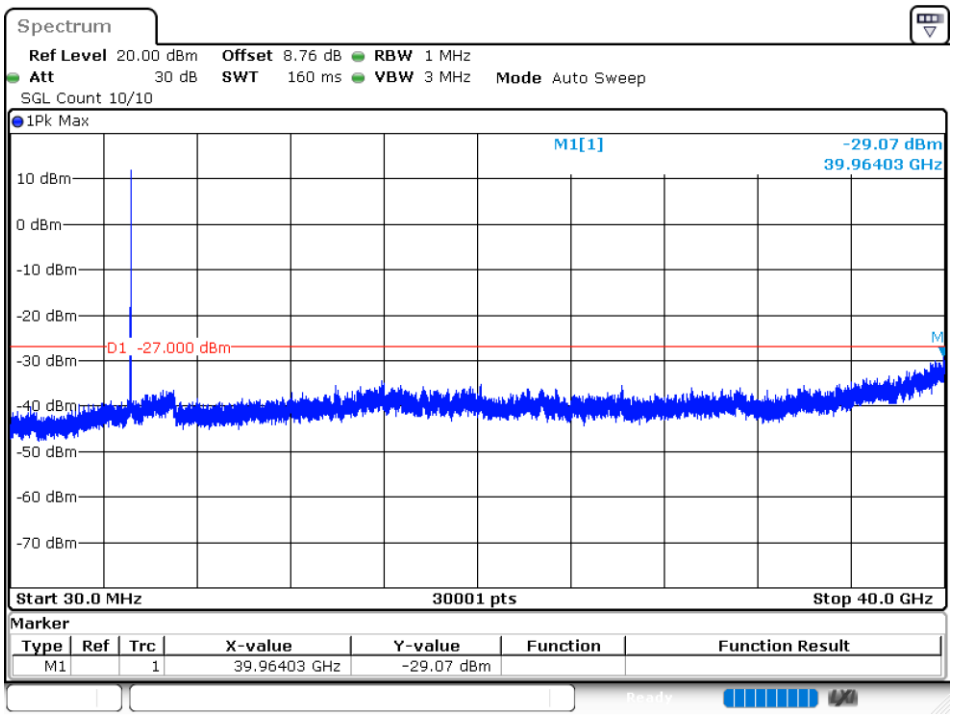
Tx. Spurious NVNT a 5200MHz Ant1 Emission



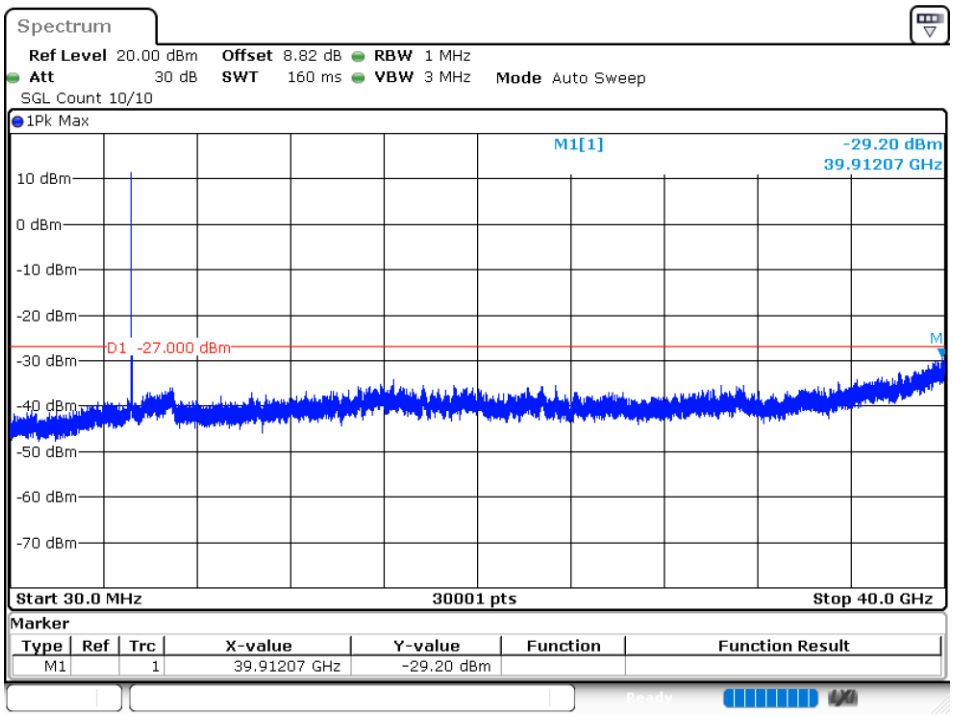
Tx. Spurious NVNT a 5240MHz Ant1 Emission



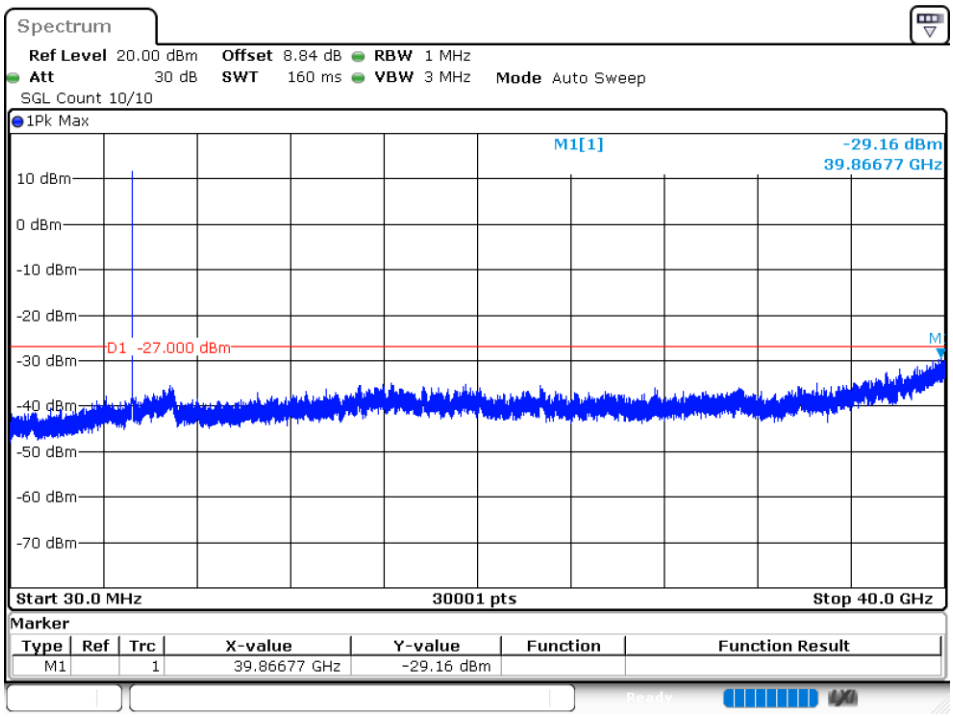
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



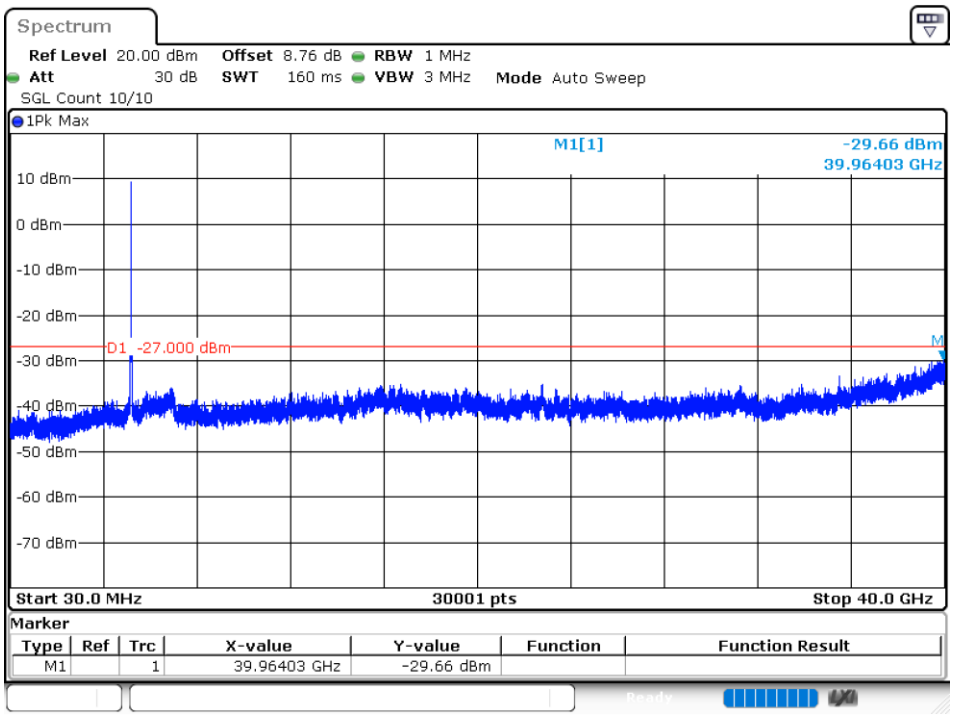
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



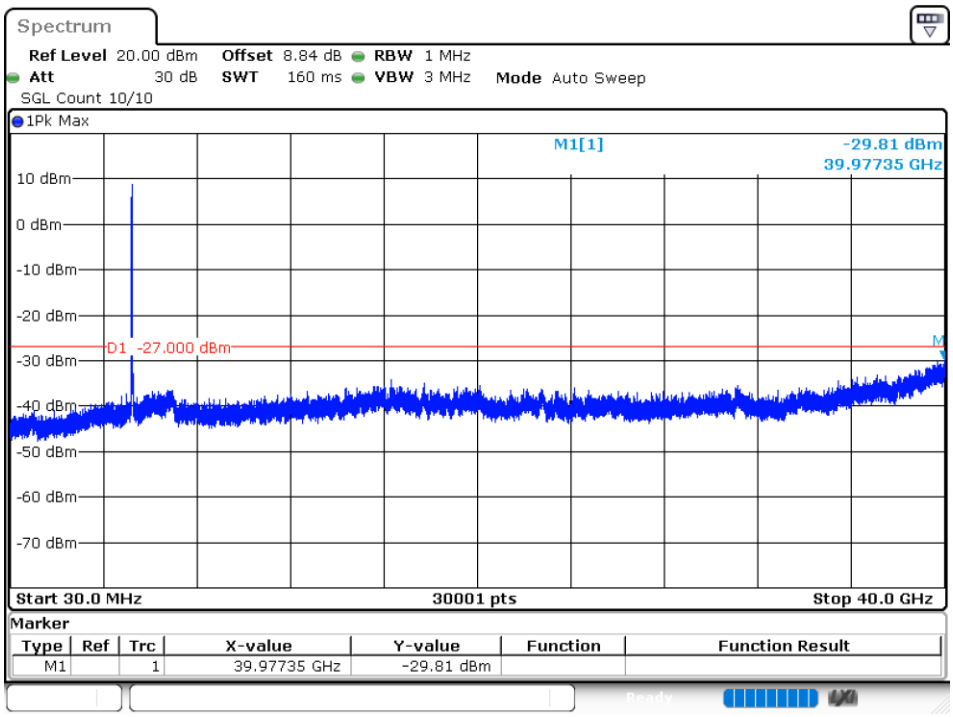
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



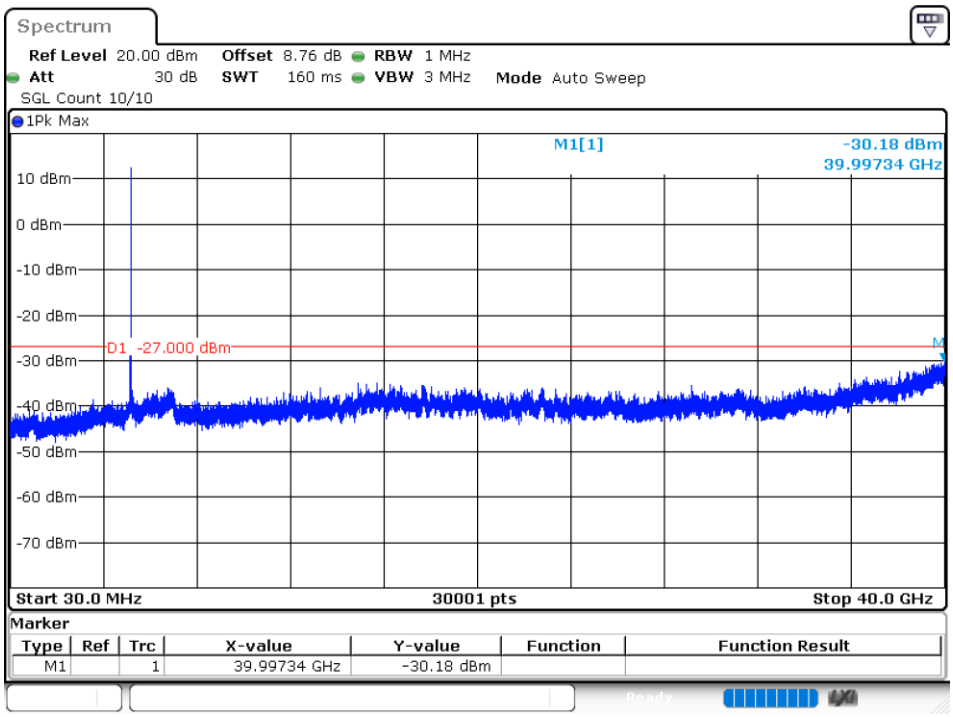
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



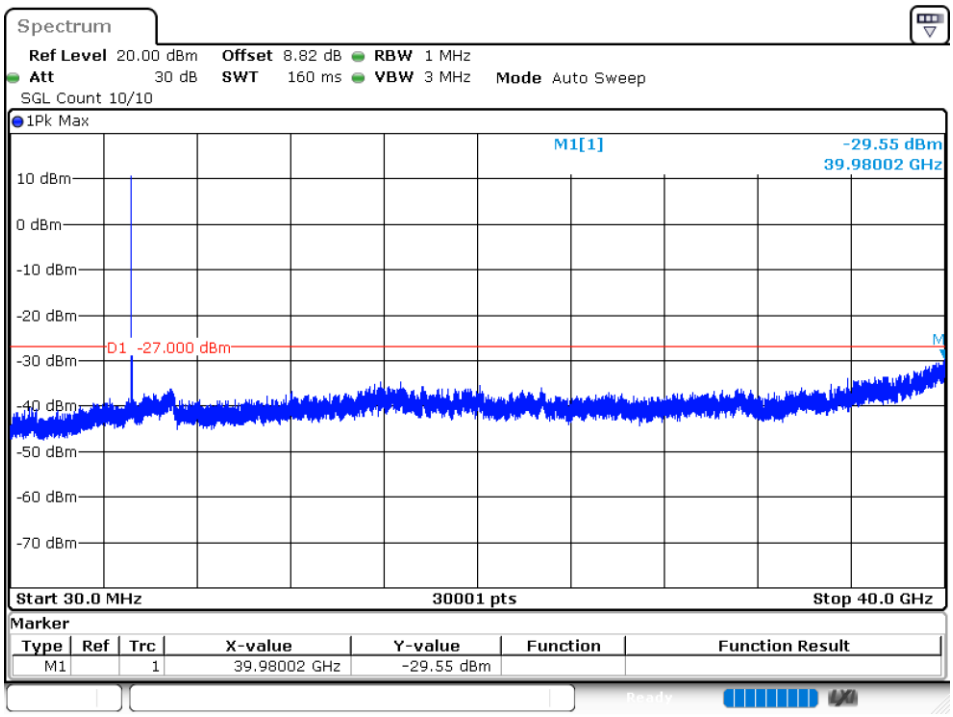
Tx. Spurious NVNT n40 5230MHz Ant1 Emission



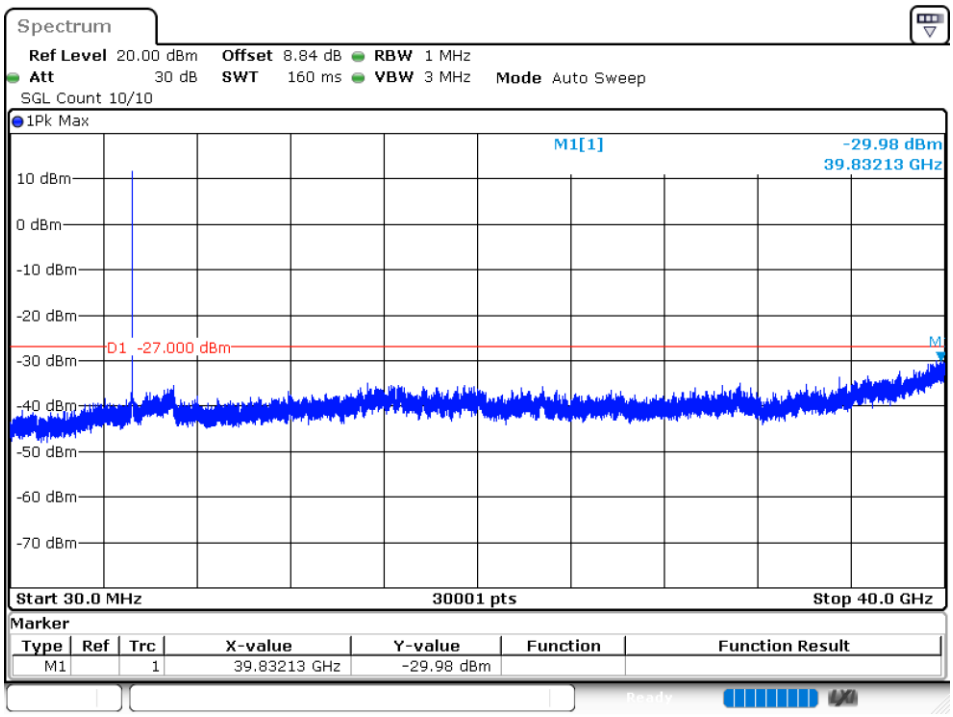
Tx. Spurious NVNT ac20 5180MHz Ant1 Emission



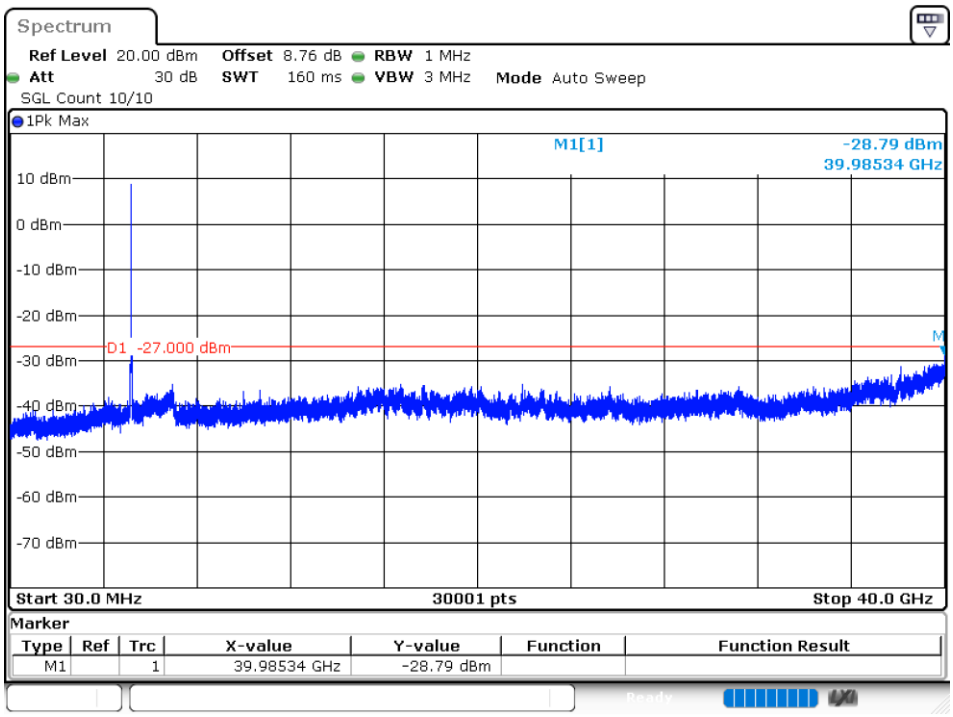
Tx. Spurious NVNT ac20 5200MHz Ant1 Emission



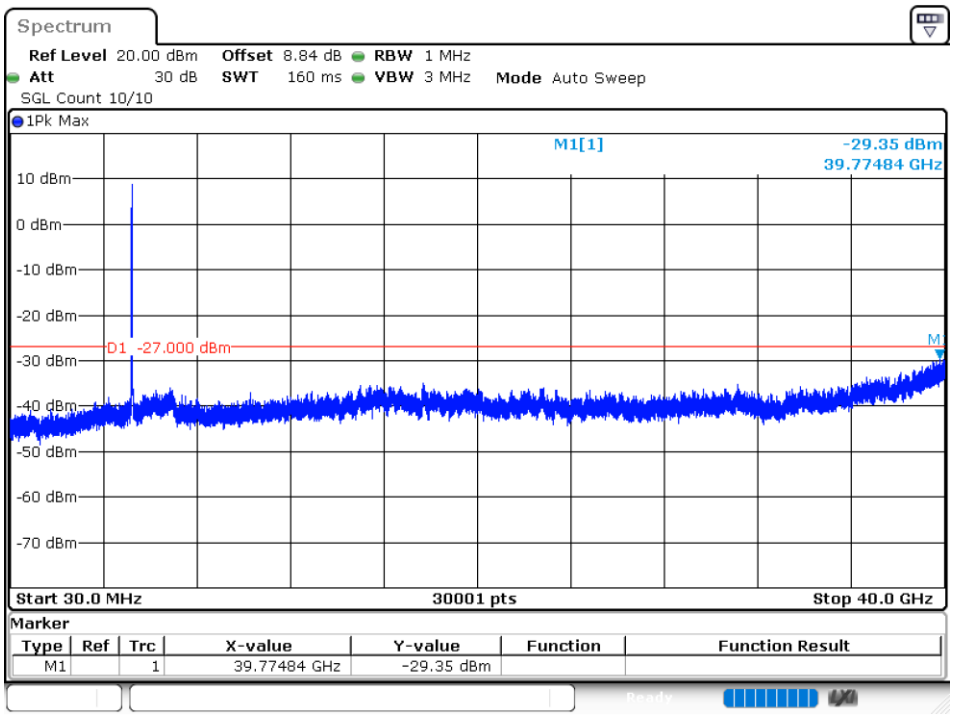
Tx. Spurious NVNT ac20 5240MHz Ant1 Emission



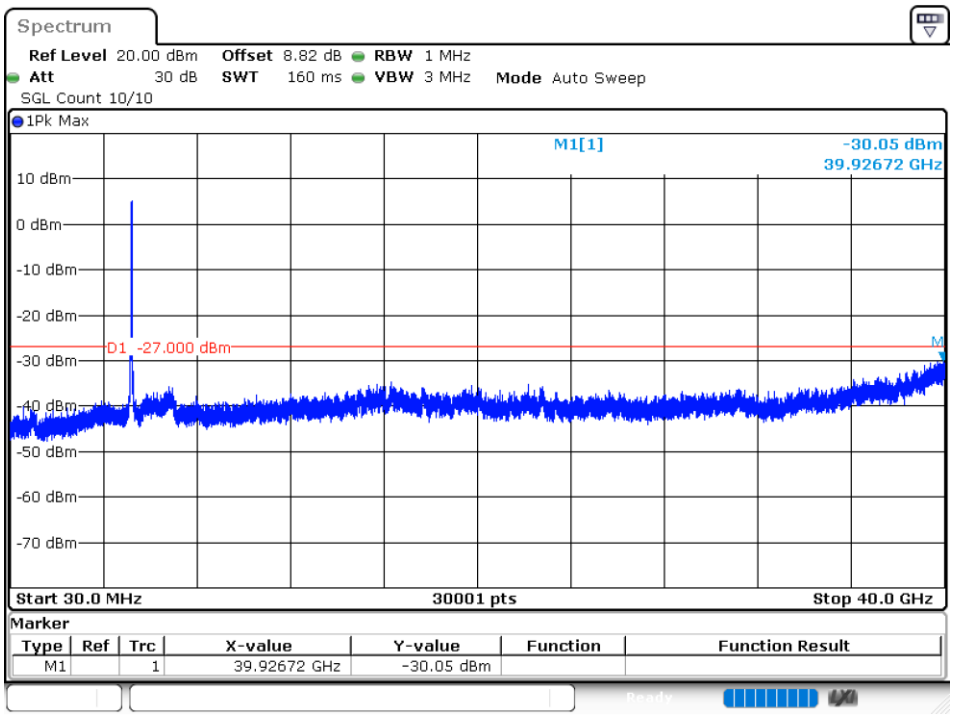
Tx. Spurious NVNT ac40 5190MHz Ant1 Emission



Tx. Spurious NVNT ac40 5230MHz Ant1 Emission



Tx. Spurious NVNT ac80 5210MHz Ant1 Emission

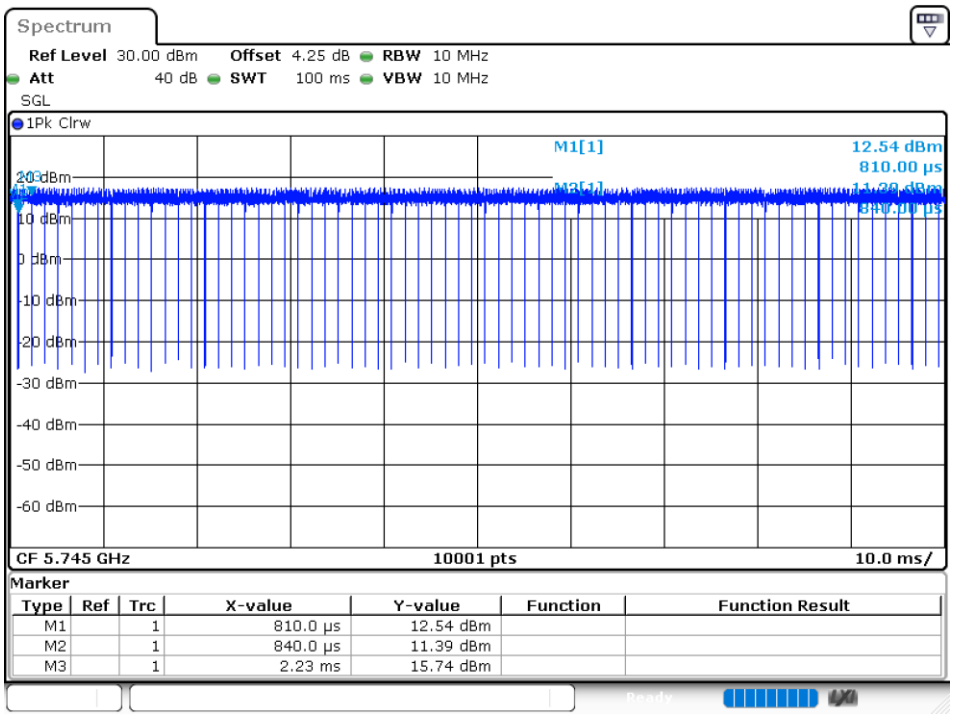


5.8G:

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	98.17	0.08	0.72
NVNT	a	5785	Ant1	98.14	0.08	0.71
NVNT	a	5825	Ant1	98.2	0.08	0.72
NVNT	n20	5745	Ant1	98.04	0.09	0.77
NVNT	n20	5785	Ant1	98.06	0.09	0.77
NVNT	n20	5825	Ant1	98.07	0.08	0.77
NVNT	n40	5755	Ant1	96.27	0.17	1.54
NVNT	n40	5795	Ant1	96.31	0.16	1.54
NVNT	ac20	5745	Ant1	98.08	0.08	0.76
NVNT	ac20	5785	Ant1	98.06	0.09	0.76
NVNT	ac20	5825	Ant1	98.09	0.08	0.76
NVNT	ac40	5755	Ant1	96.32	0.16	1.54
NVNT	ac40	5795	Ant1	96.34	0.16	1.52
NVNT	ac80	5775	Ant1	92.89	0.32	3.13

Test Graphs
Duty Cycle NVNT a 5745MHz Ant1



Duty Cycle NVNT a 5785MHz Ant1