

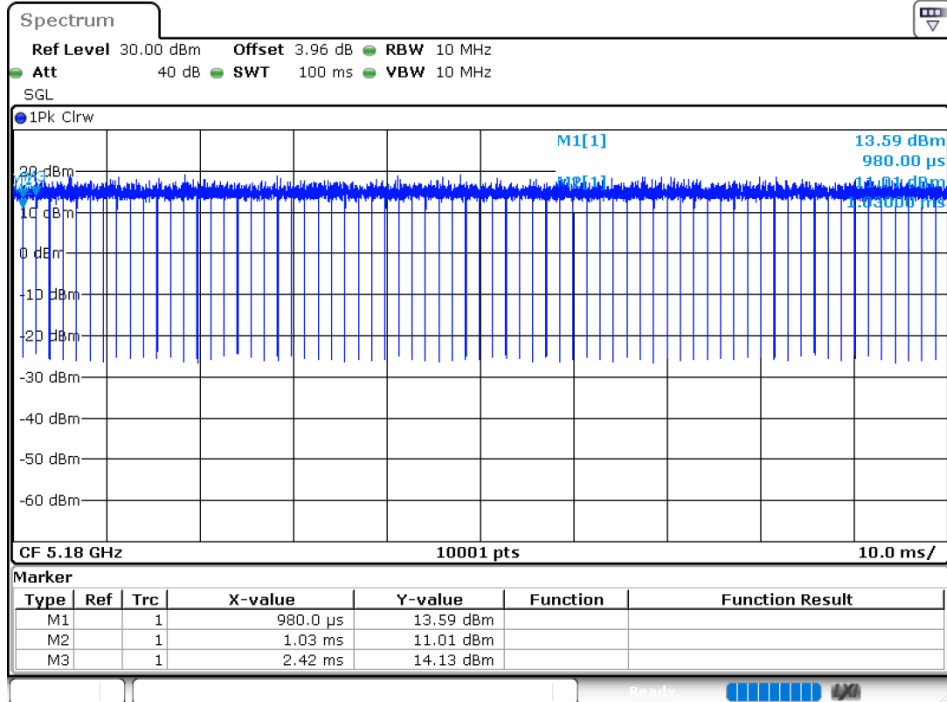
5.2G WIFI:

Duty Cycle

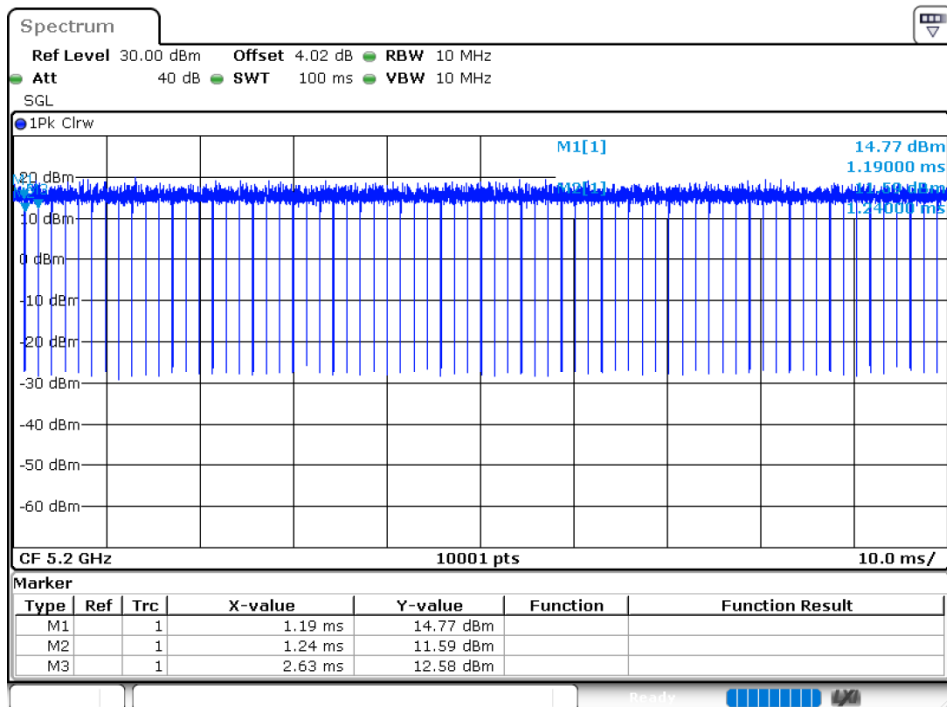
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.59	0.11	0.72
NVNT	a	5200	Ant1	97.62	0.1	0.72
NVNT	a	5240	Ant1	97.59	0.11	0.72
NVNT	n20	5180	Ant1	97.44	0.11	0.77
NVNT	n20	5200	Ant1	97.44	0.11	0.77
NVNT	n20	5240	Ant1	97.4	0.11	0.77
NVNT	n40	5190	Ant1	95.05	0.22	1.54
NVNT	n40	5230	Ant1	95.1	0.22	1.54
NVNT	ac20	5180	Ant1	97.46	0.11	0.76
NVNT	ac20	5200	Ant1	97.45	0.11	0.76
NVNT	ac20	5240	Ant1	97.43	0.11	0.76
NVNT	ac40	5190	Ant1	95.11	0.22	1.54
NVNT	ac40	5230	Ant1	95.11	0.22	1.54
NVNT	ac80	5210	Ant1	90.63	0.43	3.03

Test Graphs

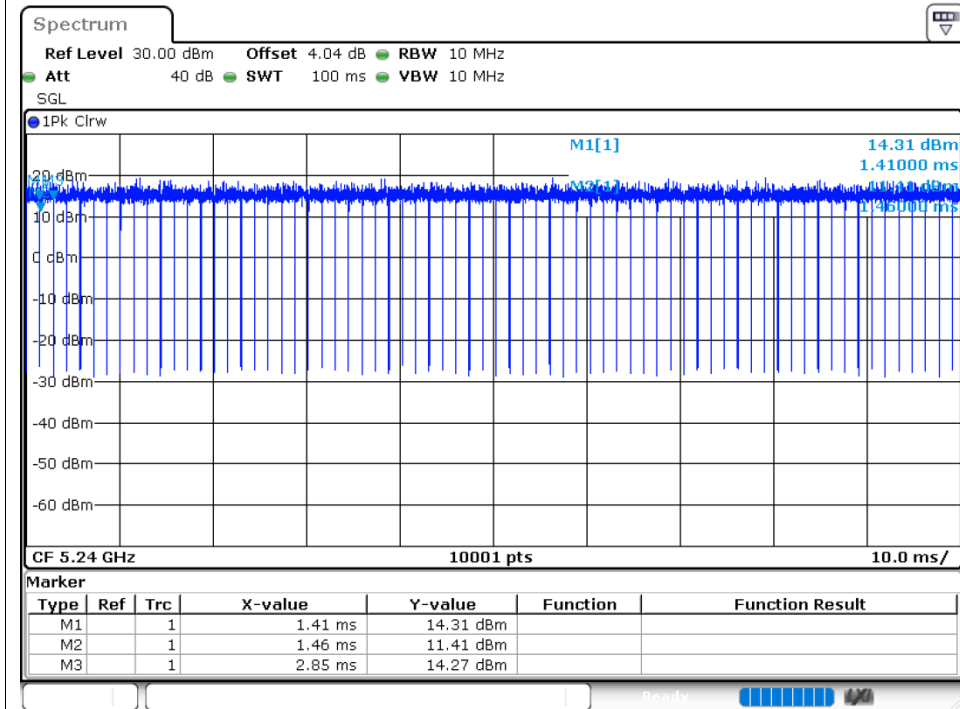
Duty Cycle NVNT a 5180MHz Ant1



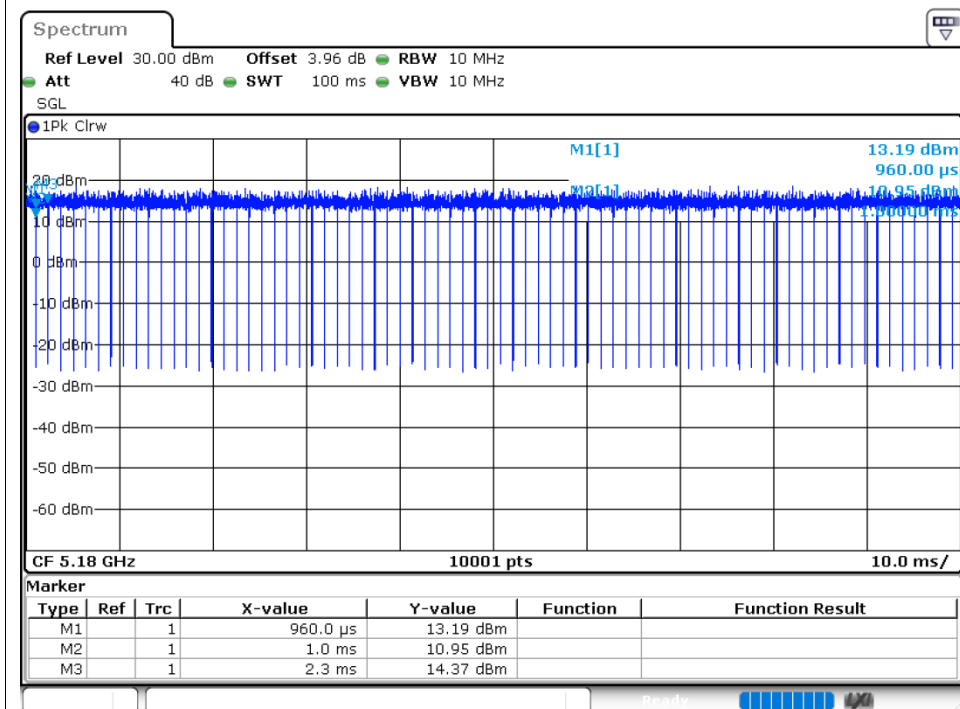
Duty Cycle NVNT a 5200MHz Ant1



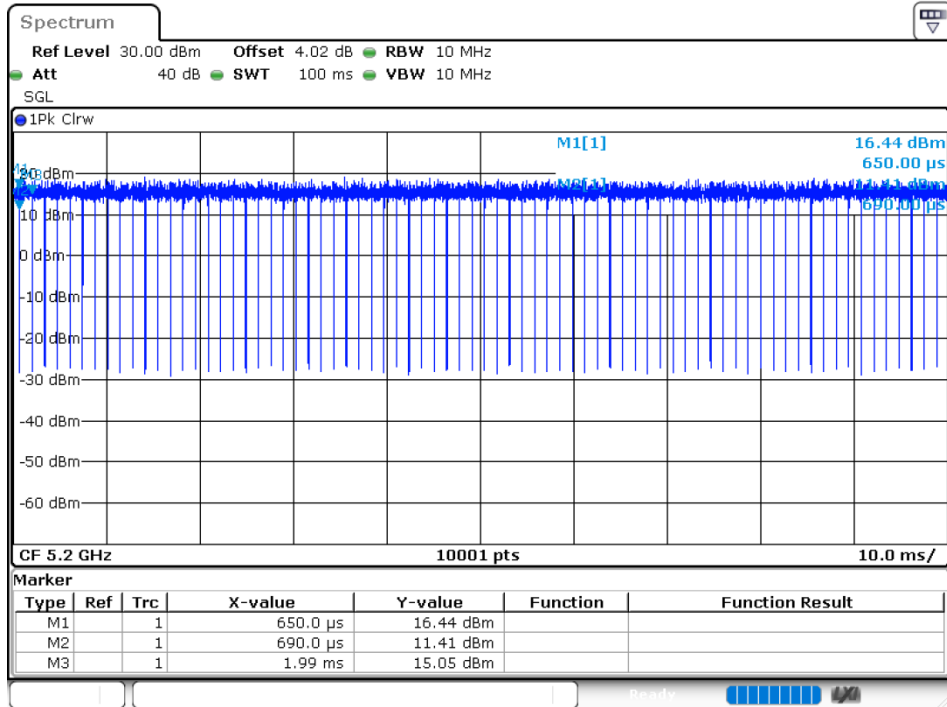
Duty Cycle NVNT a 5240MHz Ant1



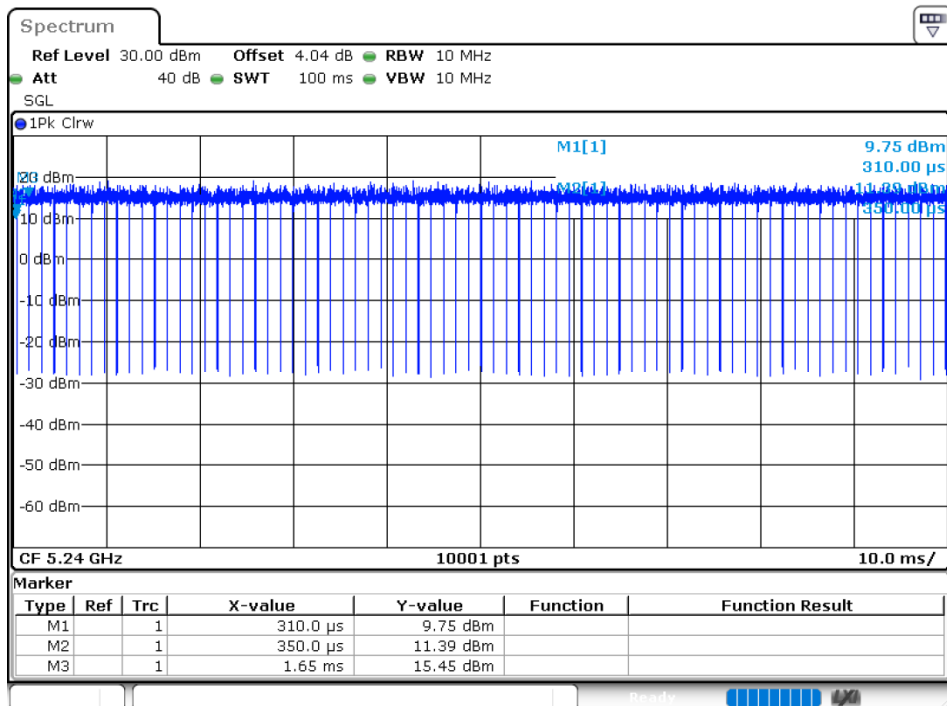
Duty Cycle NVNT n20 5180MHz Ant1



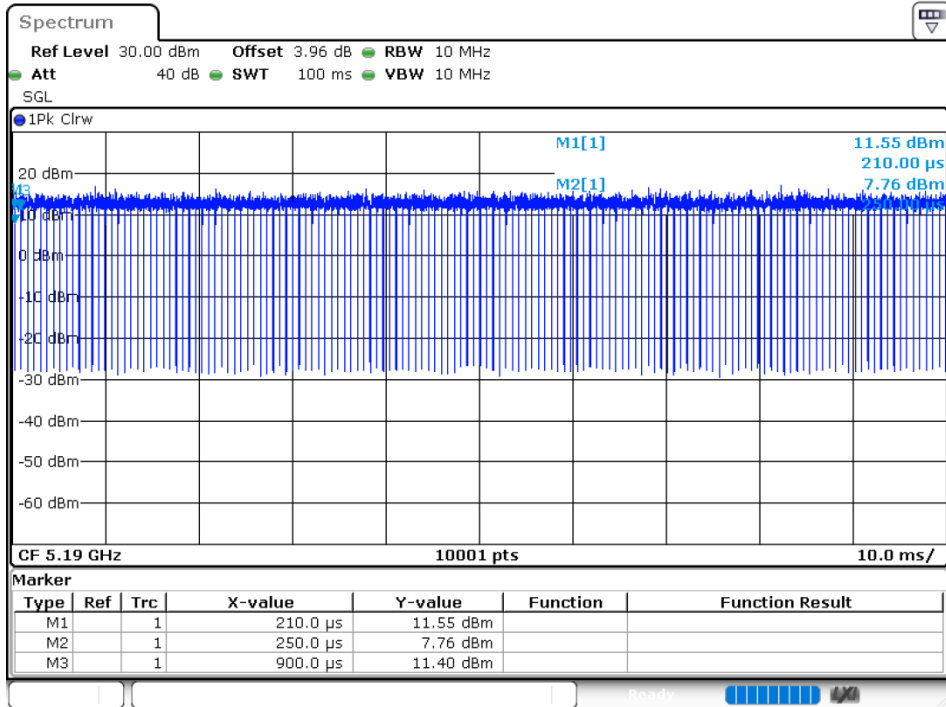
Duty Cycle NVNT n20 5200MHz Ant1



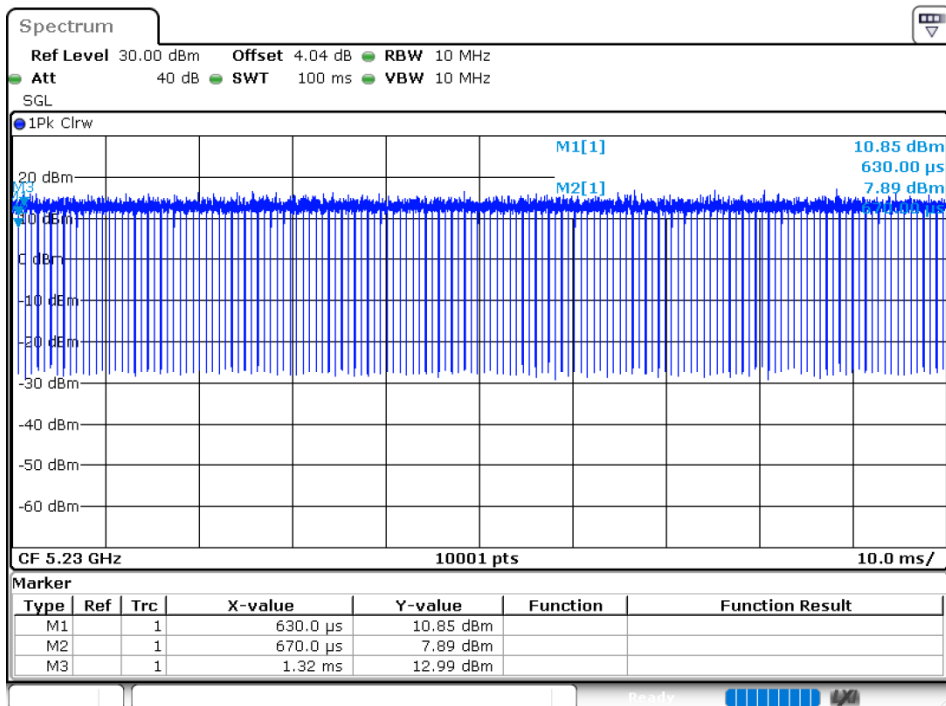
Duty Cycle NVNT n20 5240MHz Ant1



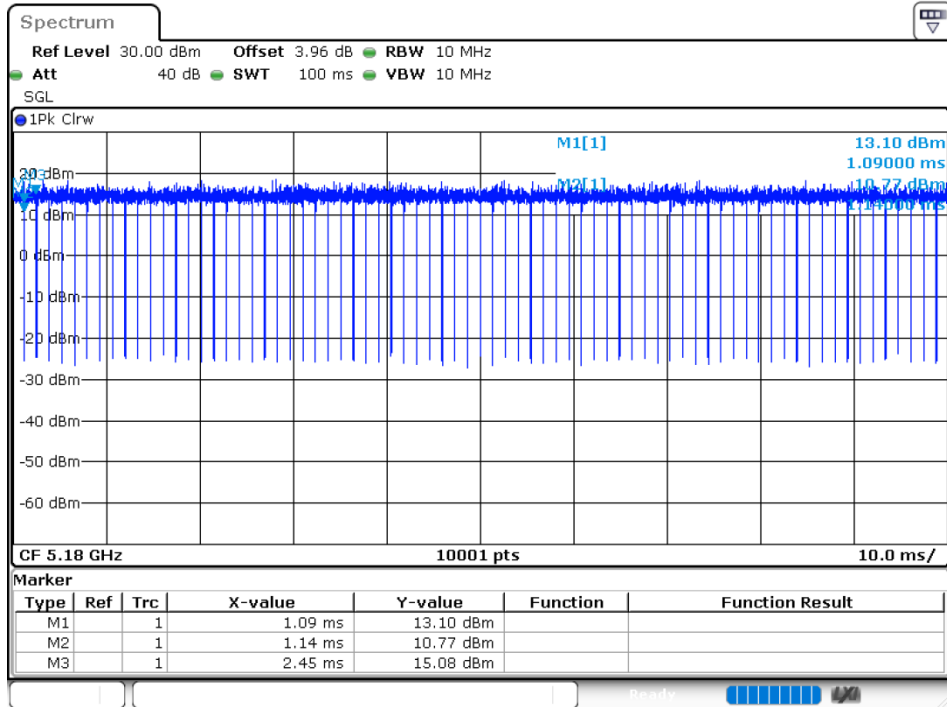
Duty Cycle NVNT n40 5190MHz Ant1



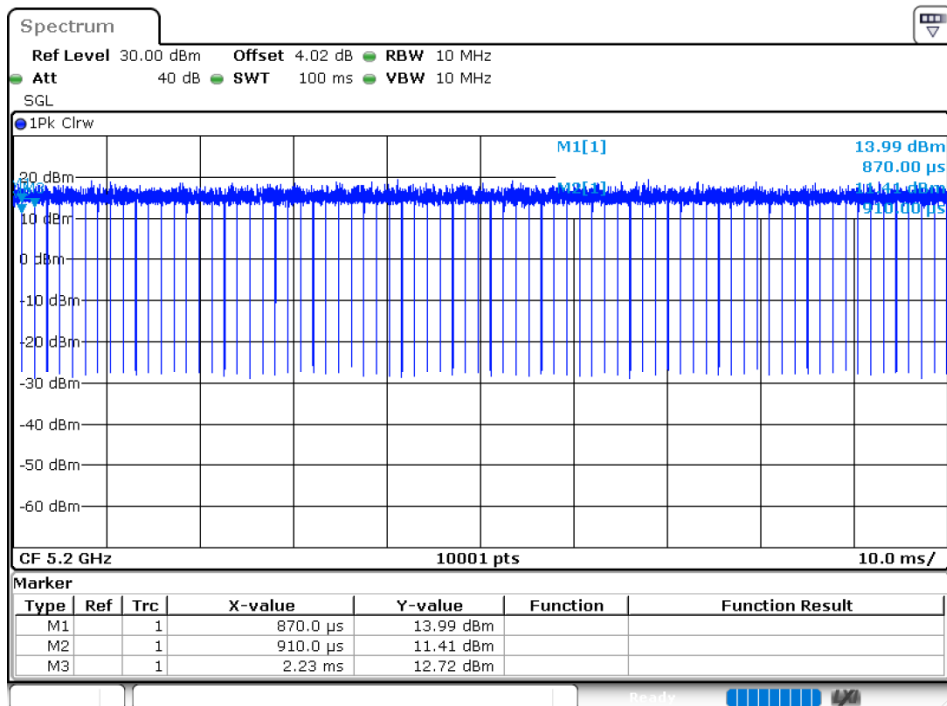
Duty Cycle NVNT n40 5230MHz Ant1



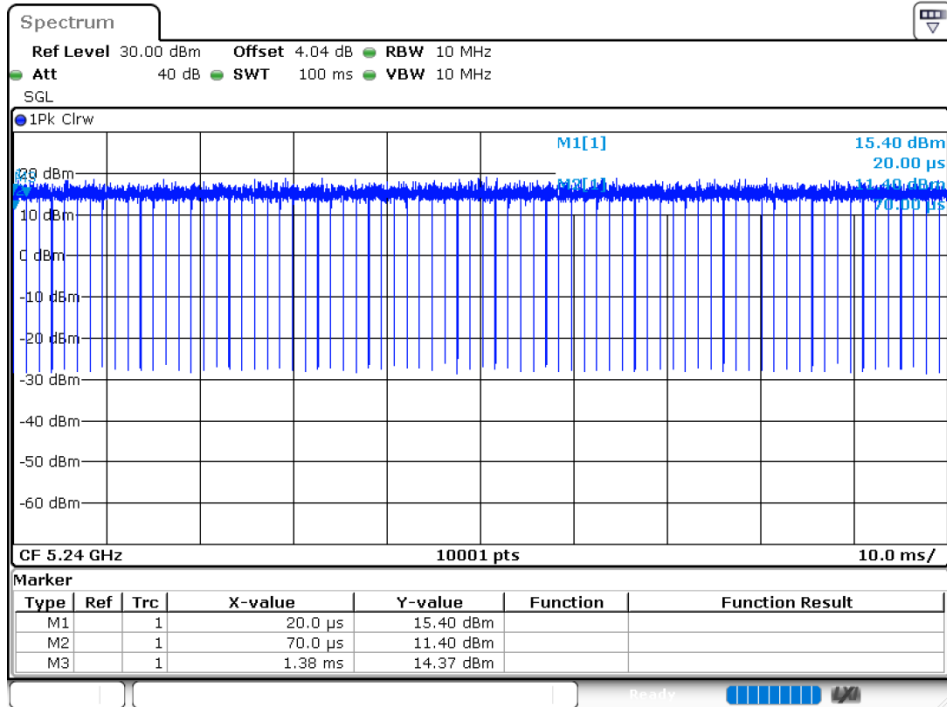
Duty Cycle NVNT ac20 5180MHz Ant1



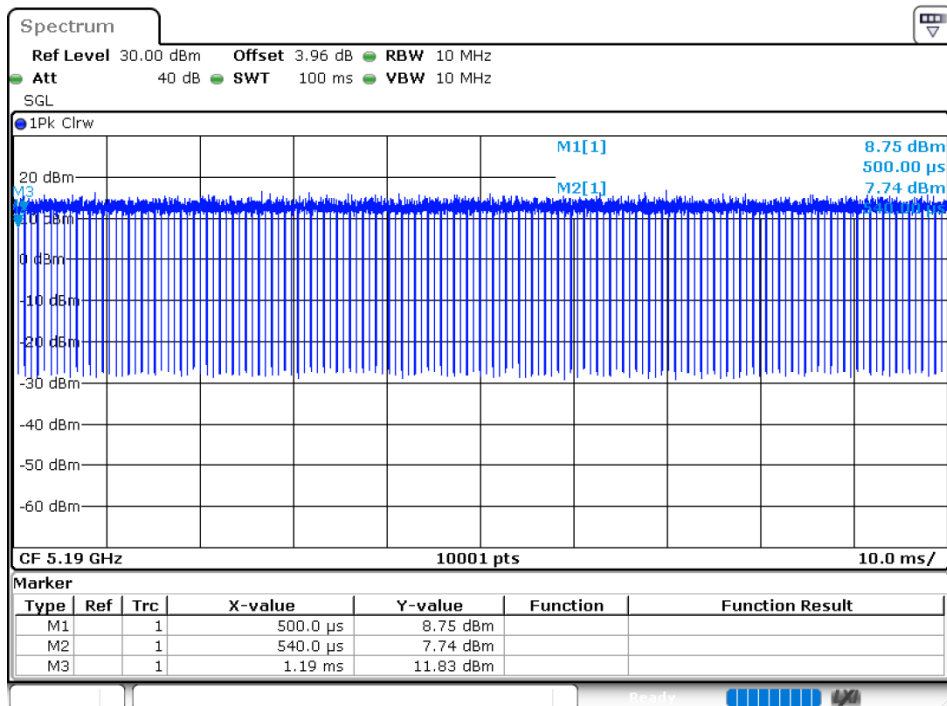
Duty Cycle NVNT ac20 5200MHz Ant1



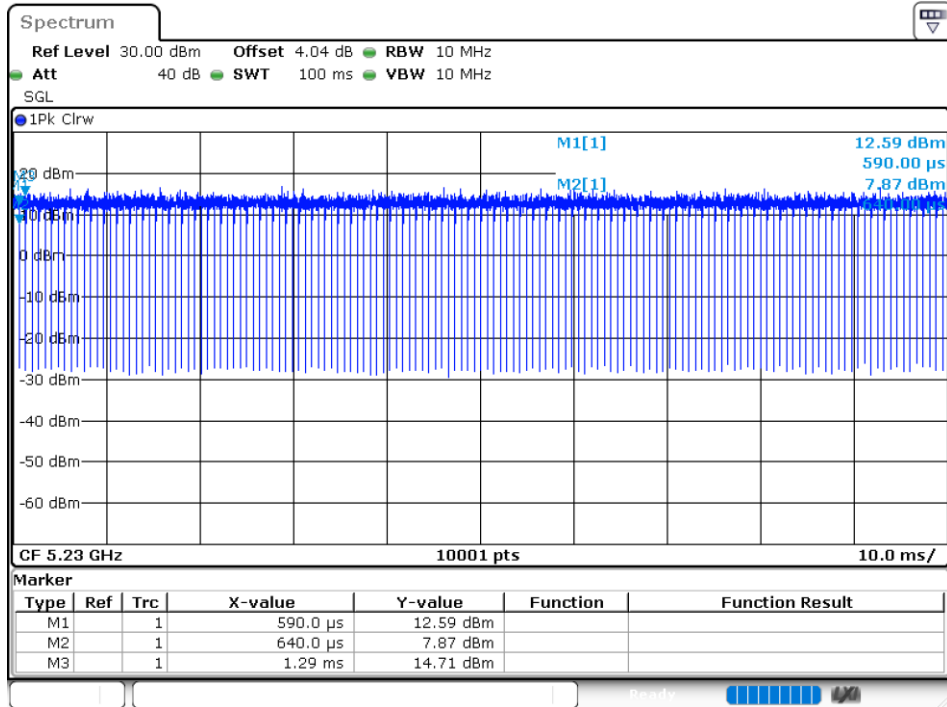
Duty Cycle NVNT ac20 5240MHz Ant1



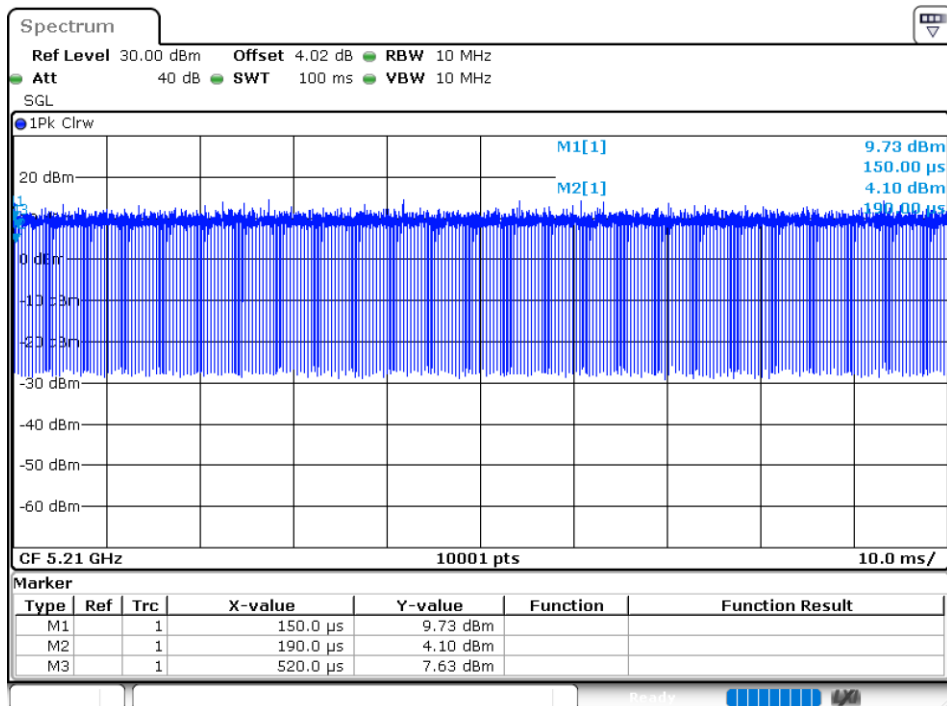
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1



Maximum Conducted Output Power

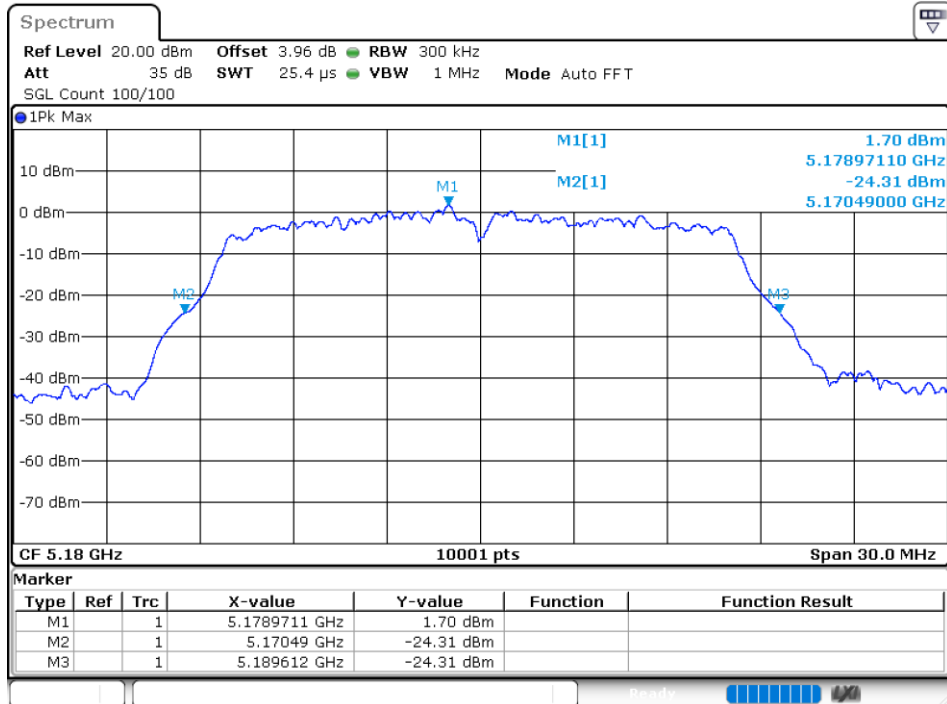
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	10.36	24	Pass
NVNT	a	5200	Ant1	10.73	24	Pass
NVNT	a	5240	Ant1	11.04	24	Pass
NVNT	n20	5180	Ant1	10.37	24	Pass
NVNT	n20	5200	Ant1	10.81	24	Pass
NVNT	n20	5240	Ant1	11.08	24	Pass
NVNT	n40	5190	Ant1	10.62	24	Pass
NVNT	n40	5230	Ant1	10.96	24	Pass
NVNT	ac20	5180	Ant1	10.26	24	Pass
NVNT	ac20	5200	Ant1	10.76	24	Pass
NVNT	ac20	5240	Ant1	11.09	24	Pass
NVNT	ac40	5190	Ant1	10.59	24	Pass
NVNT	ac40	5230	Ant1	11.01	24	Pass
NVNT	ac80	5210	Ant1	10.74	24	Pass

-26dB Bandwidth

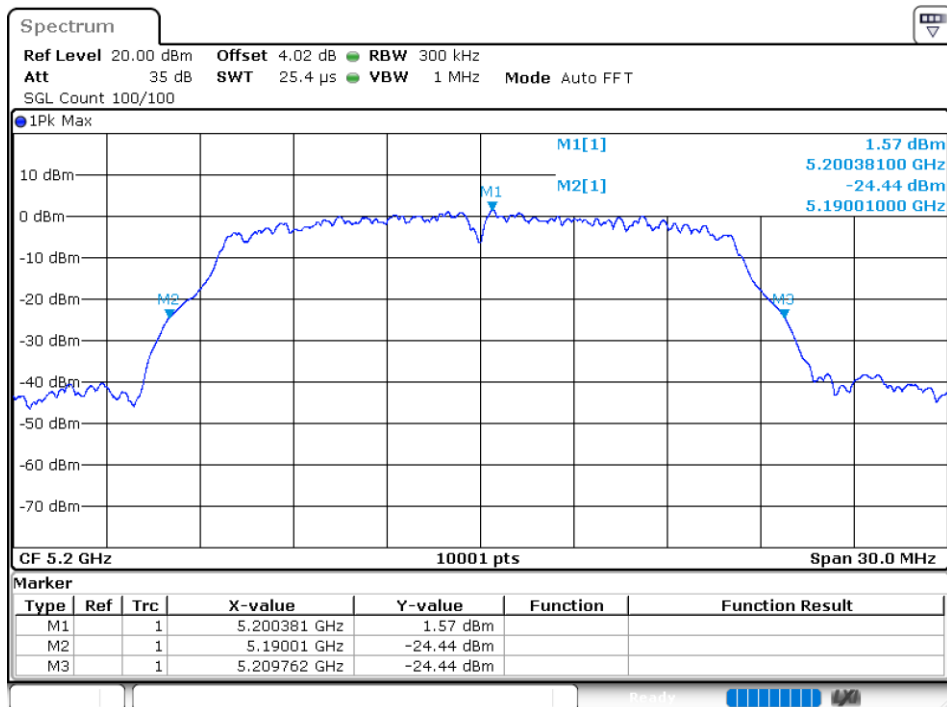
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.122	Pass
NVNT	a	5200	Ant1	19.752	Pass
NVNT	a	5240	Ant1	19.635	Pass
NVNT	n20	5180	Ant1	20.229	Pass
NVNT	n20	5200	Ant1	20.142	Pass
NVNT	n20	5240	Ant1	20.223	Pass
NVNT	n40	5190	Ant1	40.878	Pass
NVNT	n40	5230	Ant1	40.896	Pass
NVNT	ac20	5180	Ant1	20.472	Pass
NVNT	ac20	5200	Ant1	20.151	Pass
NVNT	ac20	5240	Ant1	19.968	Pass
NVNT	ac40	5190	Ant1	40.554	Pass
NVNT	ac40	5230	Ant1	40.848	Pass
NVNT	ac80	5210	Ant1	81.132	Pass

Test Graphs

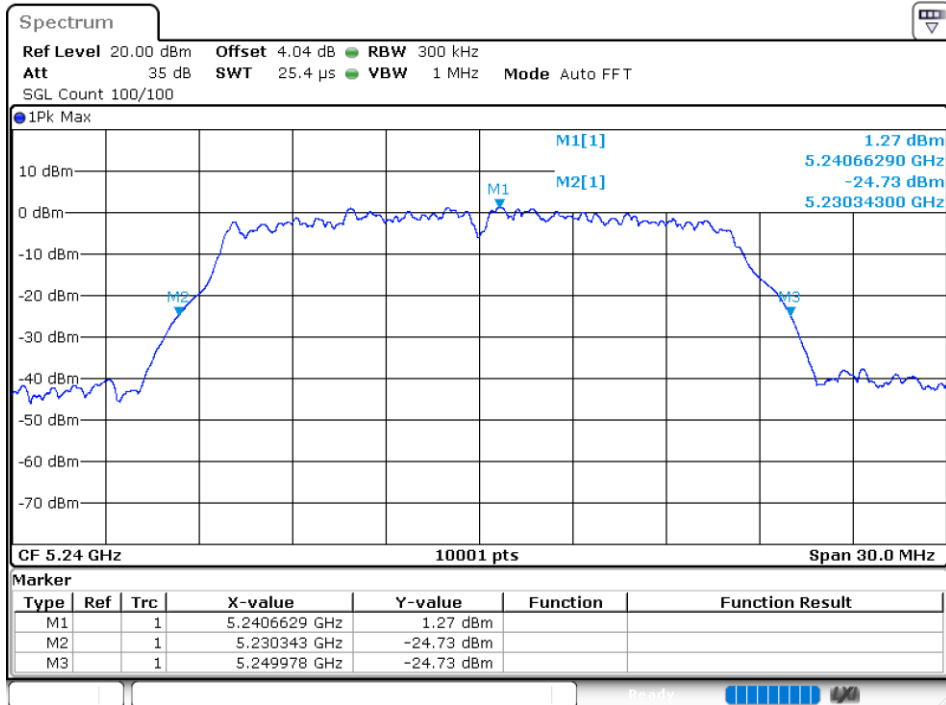
-26dB Bandwidth NVNT a 5180MHz Ant1



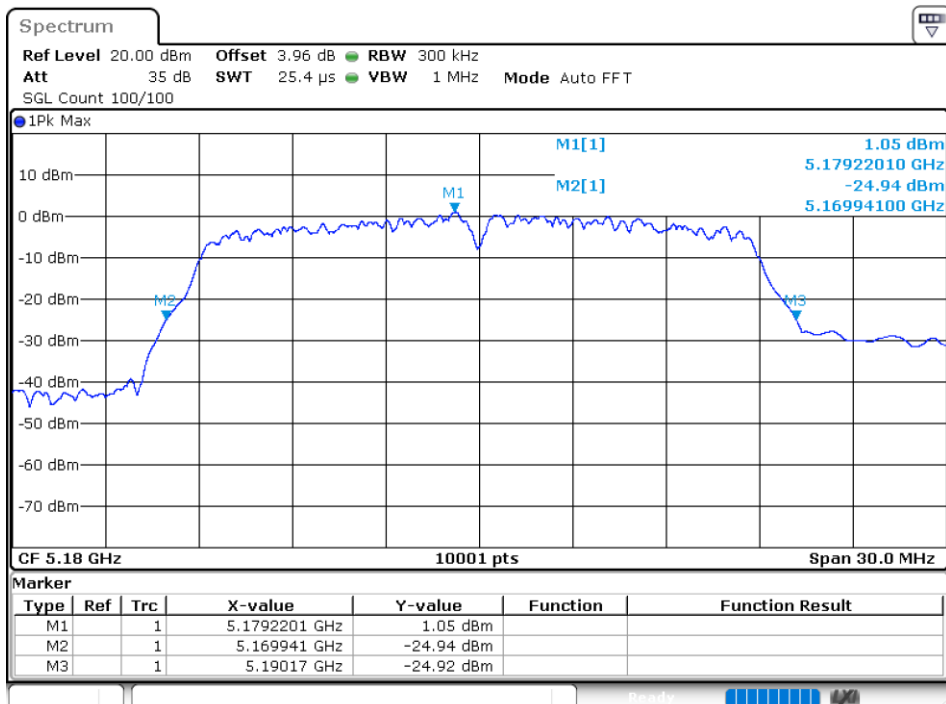
-26dB Bandwidth NVNT a 5200MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1



-26dB Bandwidth NVNT n20 5180MHz Ant1

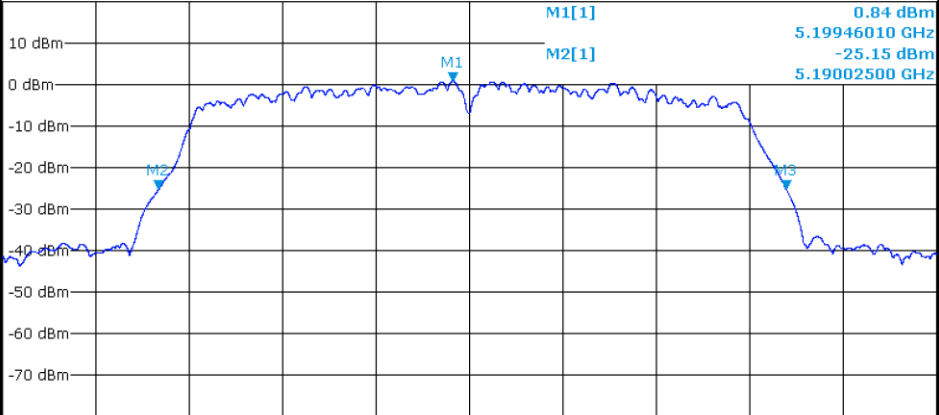


-26dB Bandwidth NVNT n20 5200MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.02 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

1Pk Max



Marker

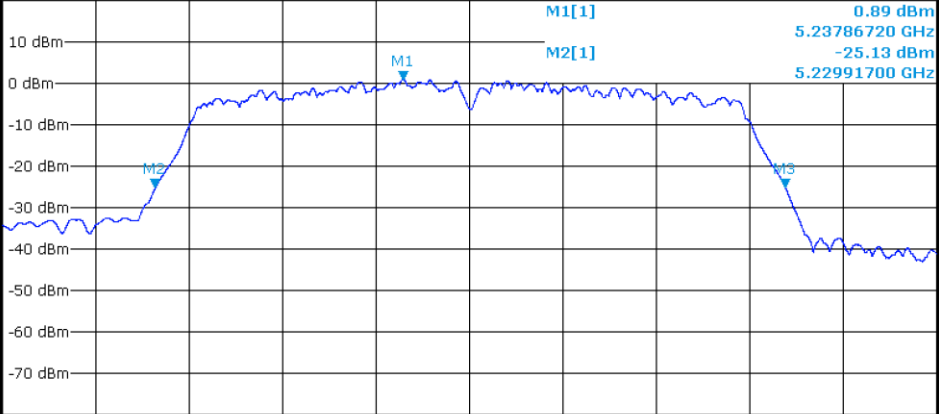
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.1994601 GHz	0.84 dBm		
M2		1	5.190025 GHz	-25.15 dBm		
M3		1	5.210167 GHz	-25.16 dBm		

-26dB Bandwidth NVNT n20 5240MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.04 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

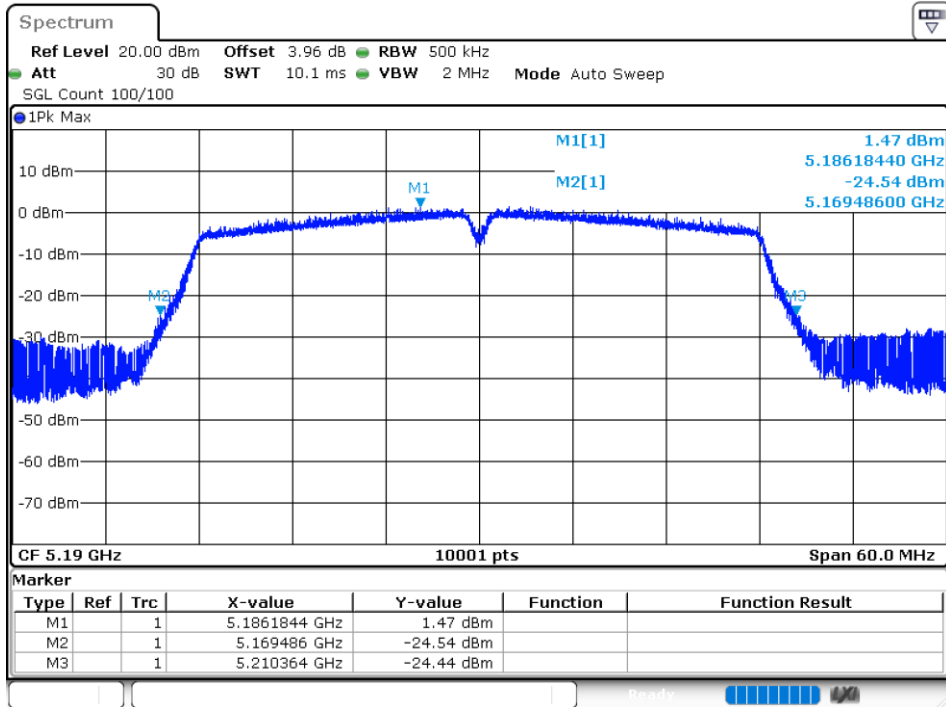
1Pk Max



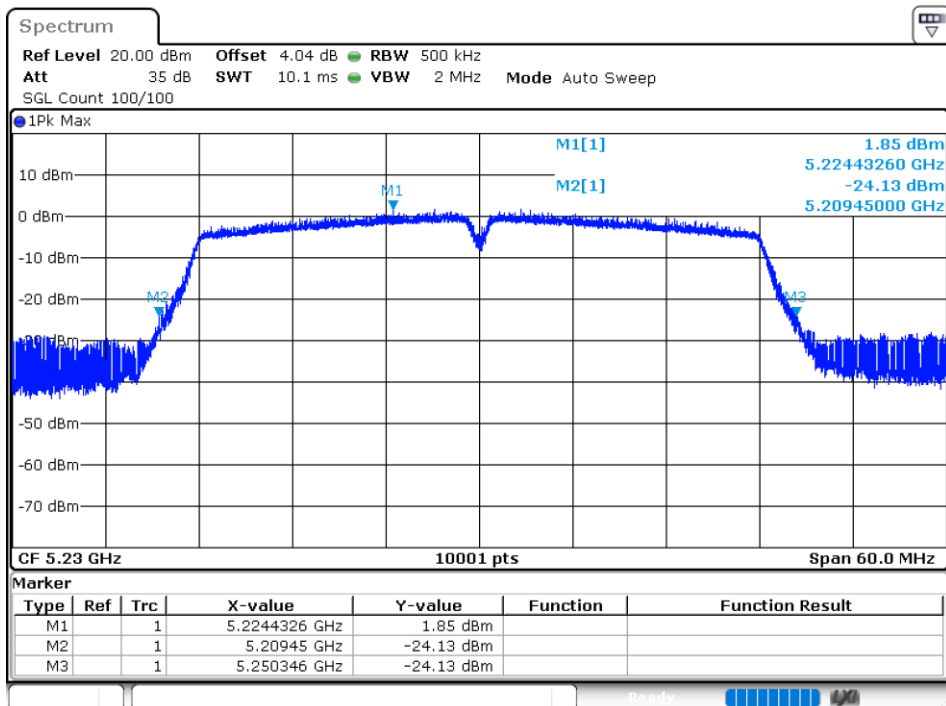
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.2378672 GHz	0.89 dBm		
M2		1	5.229917 GHz	-25.13 dBm		
M3		1	5.25014 GHz	-25.12 dBm		

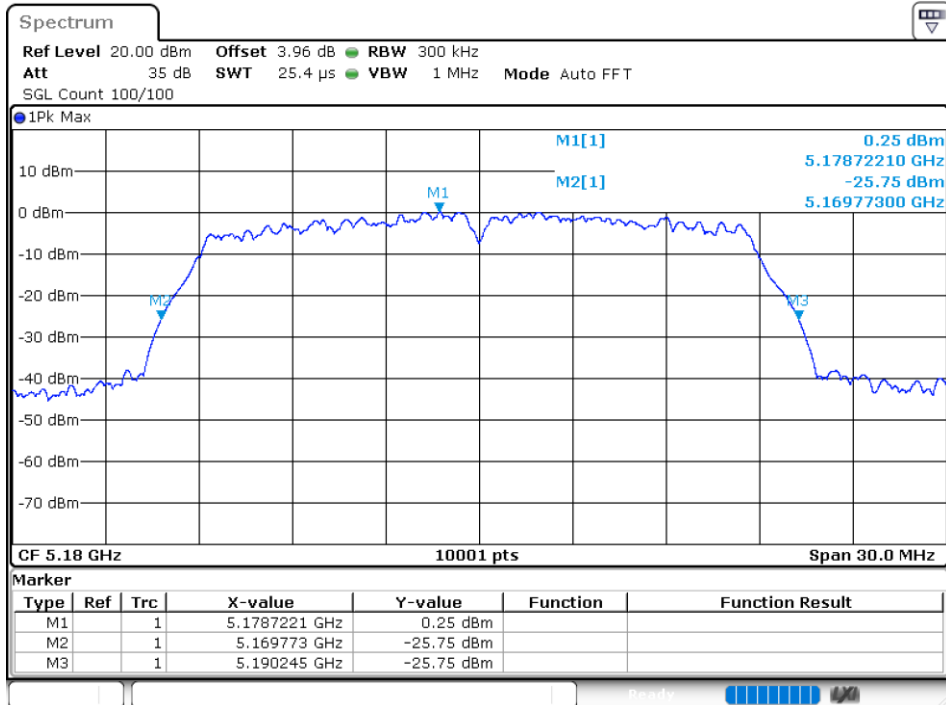
-26dB Bandwidth NVNT n40 5190MHz Ant1



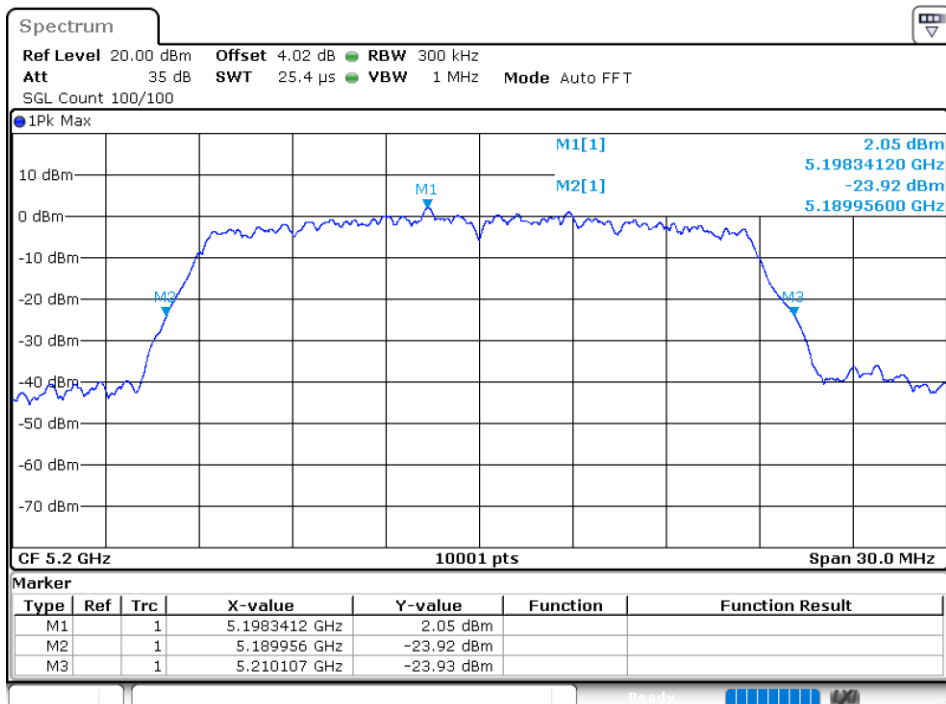
-26dB Bandwidth NVNT n40 5230MHz Ant1



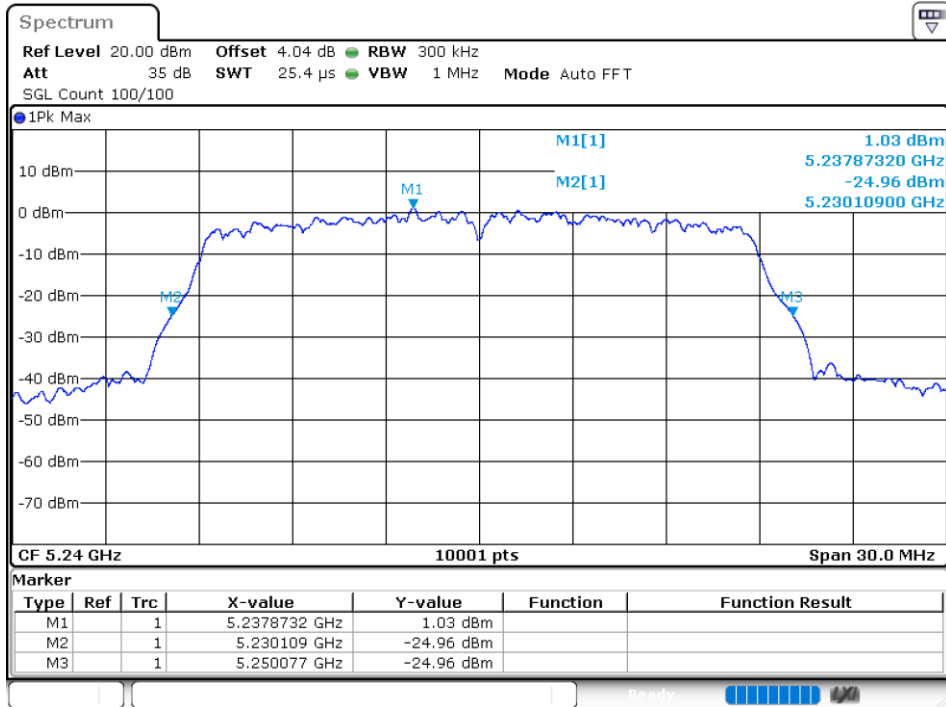
-26dB Bandwidth NVNT ac20 5180MHz Ant1



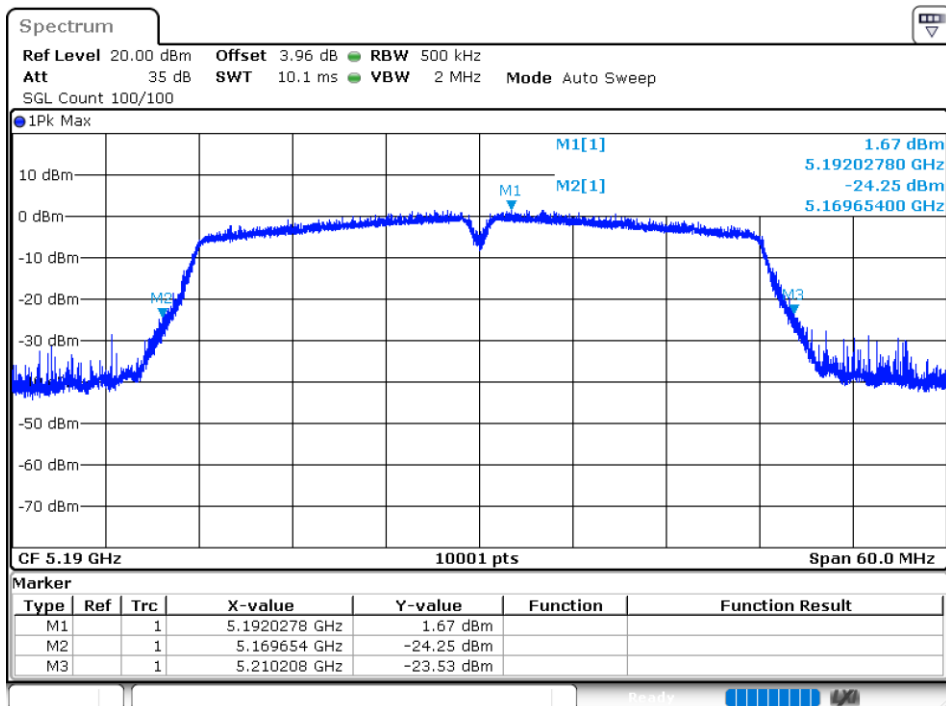
-26dB Bandwidth NVNT ac20 5200MHz Ant1



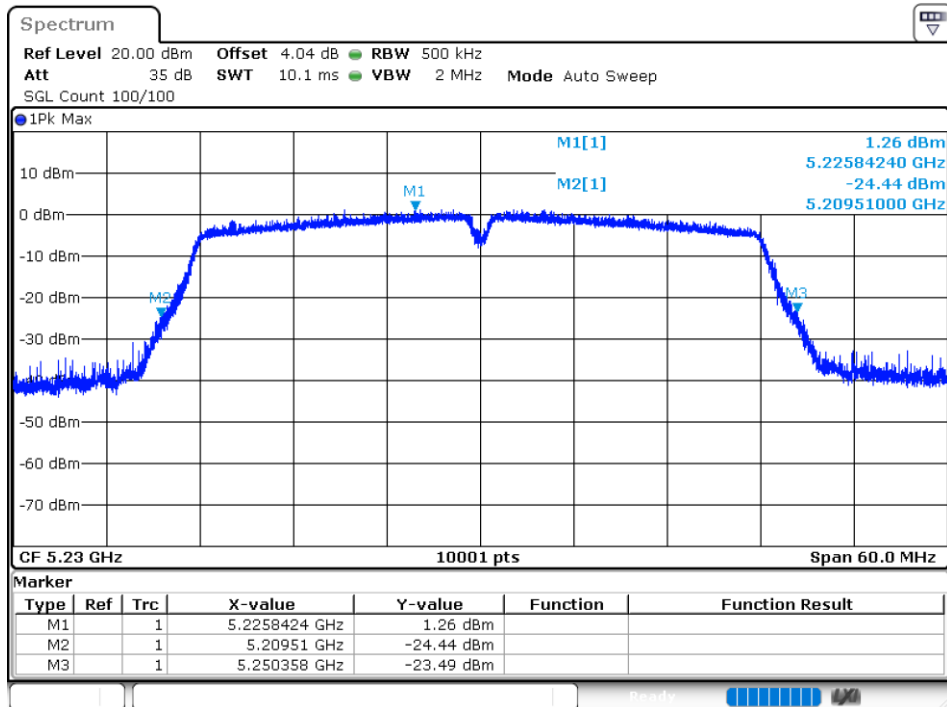
-26dB Bandwidth NVNT ac20 5240MHz Ant1



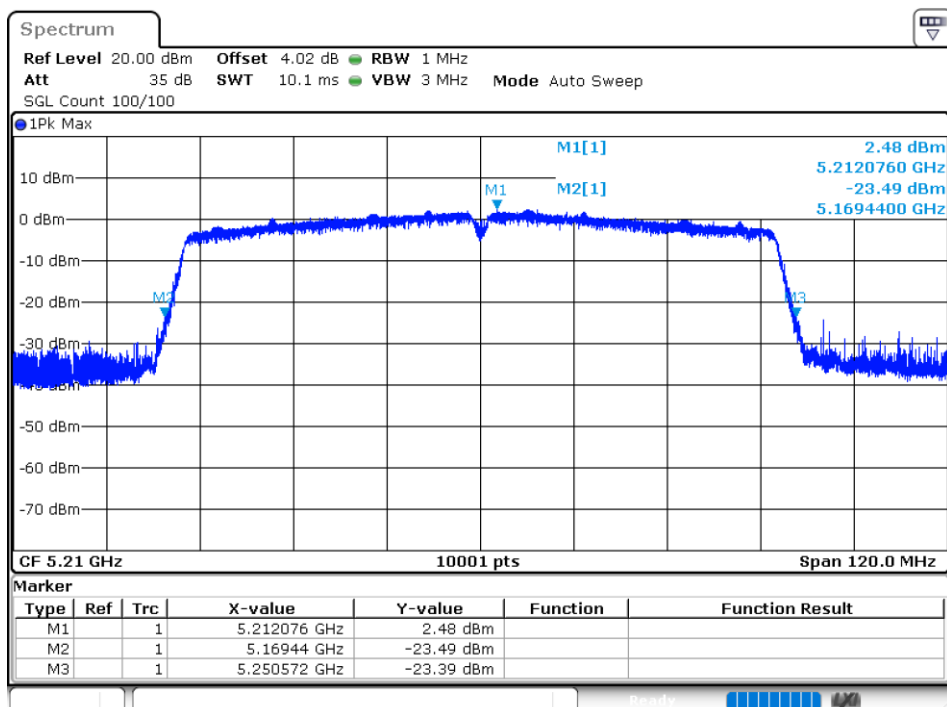
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1

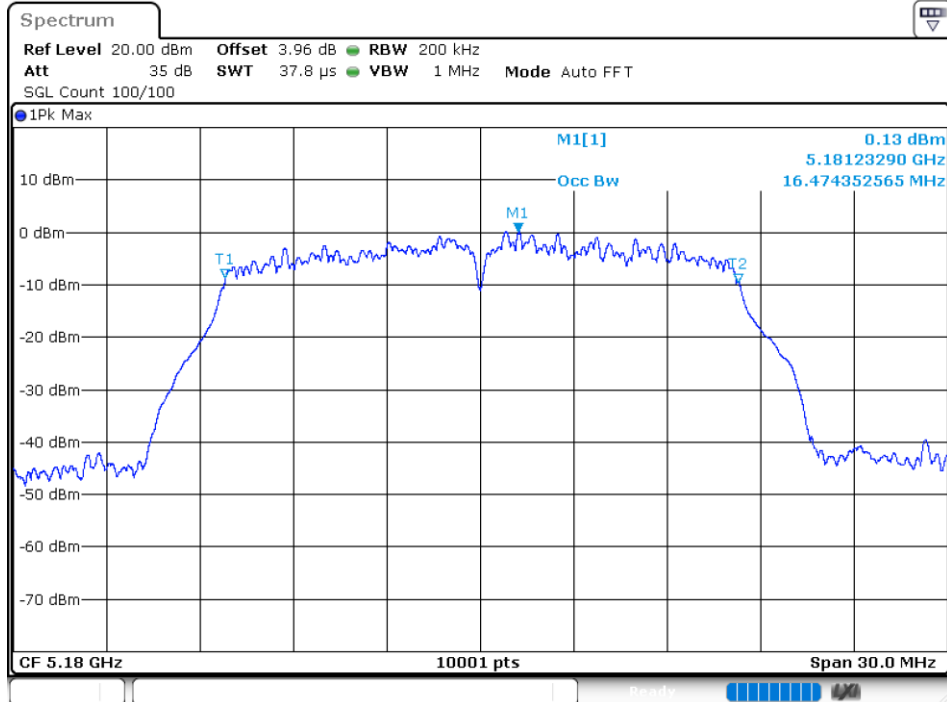


Occupied Channel Bandwidth

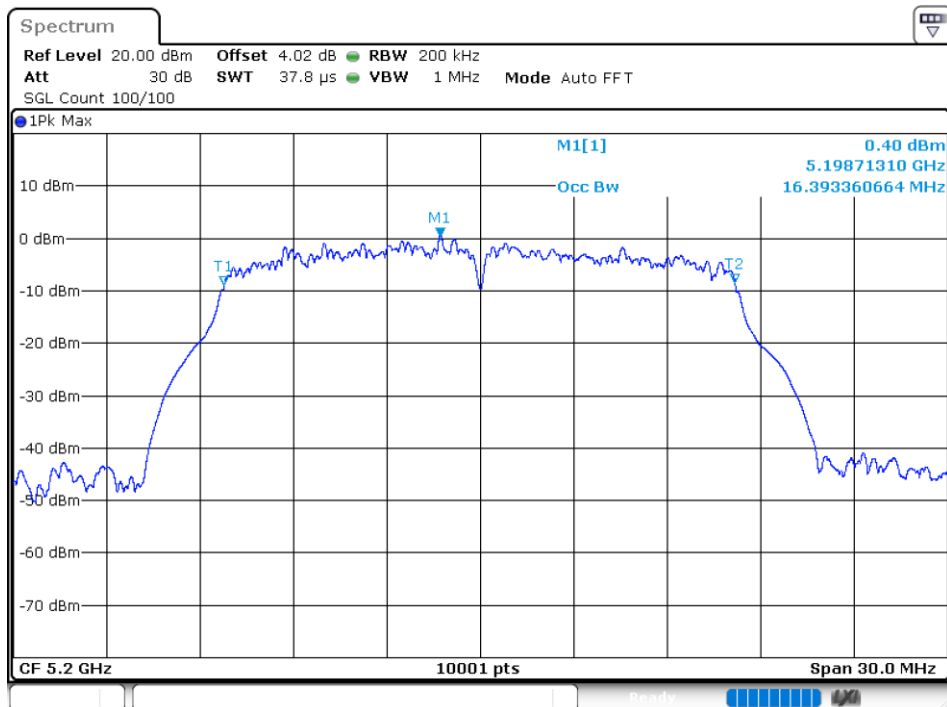
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.474
NVNT	a	5200	Ant1	16.393
NVNT	a	5240	Ant1	16.333
NVNT	n20	5180	Ant1	17.554
NVNT	n20	5200	Ant1	17.533
NVNT	n20	5240	Ant1	17.539
NVNT	n40	5190	Ant1	35.96
NVNT	n40	5230	Ant1	36.032
NVNT	ac20	5180	Ant1	17.485
NVNT	ac20	5200	Ant1	17.602
NVNT	ac20	5240	Ant1	17.539
NVNT	ac40	5190	Ant1	35.954
NVNT	ac40	5230	Ant1	36.008
NVNT	ac80	5210	Ant1	75.016

Test Graphs

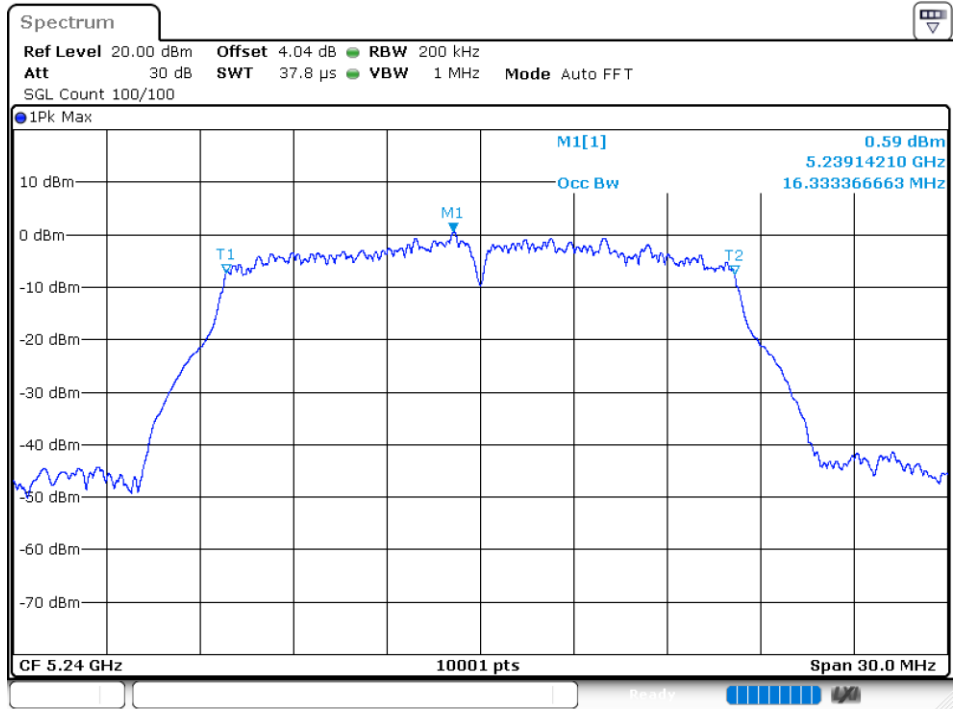
OBW NVNT a 5180MHz Ant1



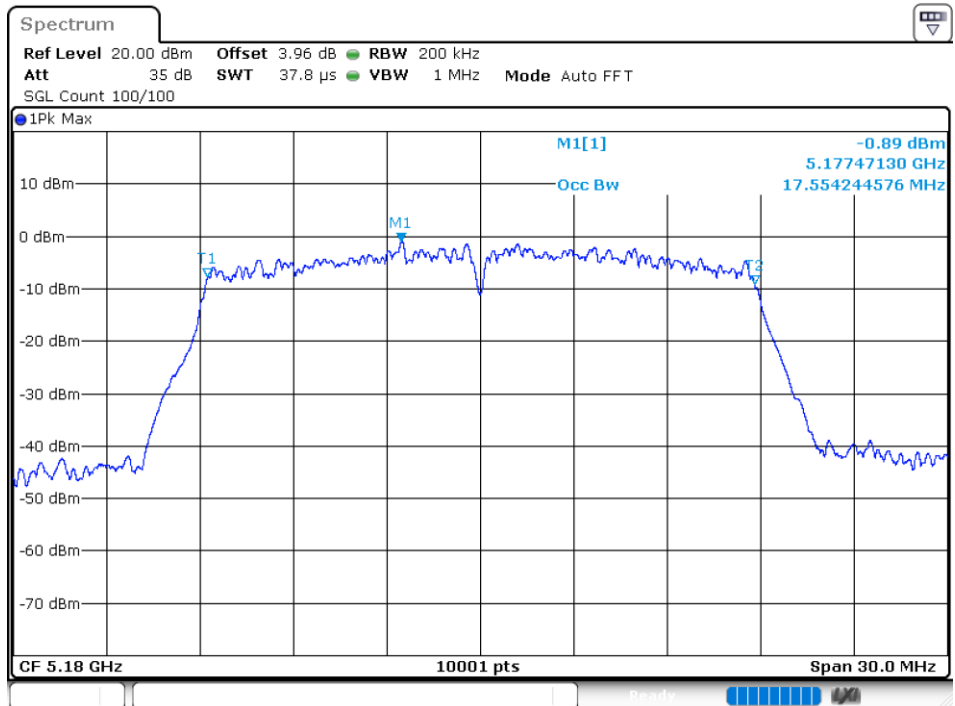
OBW NVNT a 5200MHz Ant1



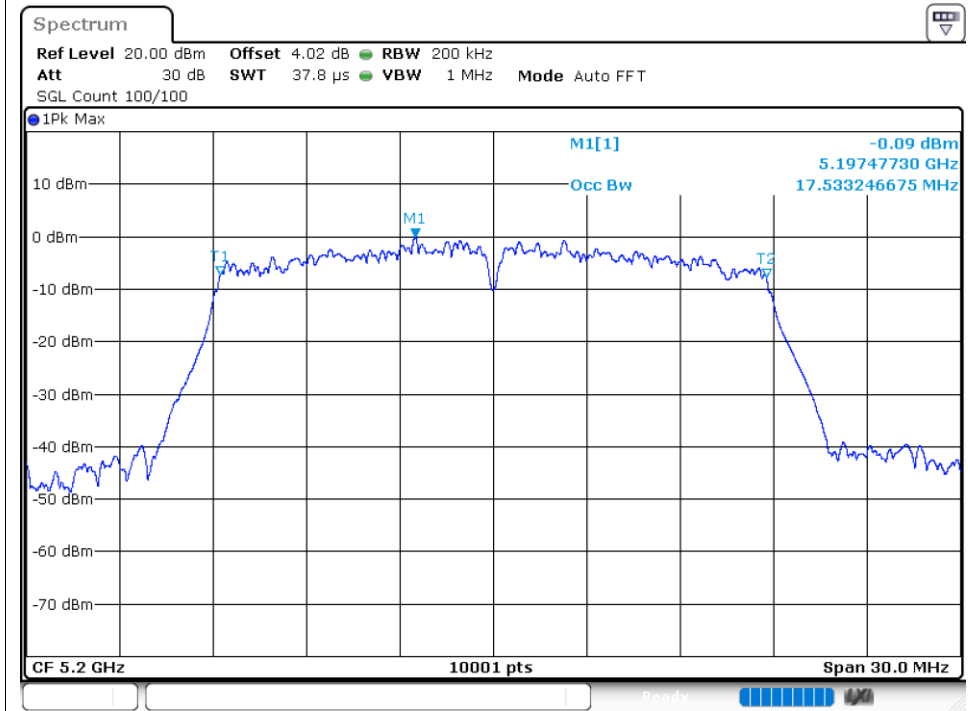
OBW NVNT a 5240MHz Ant1



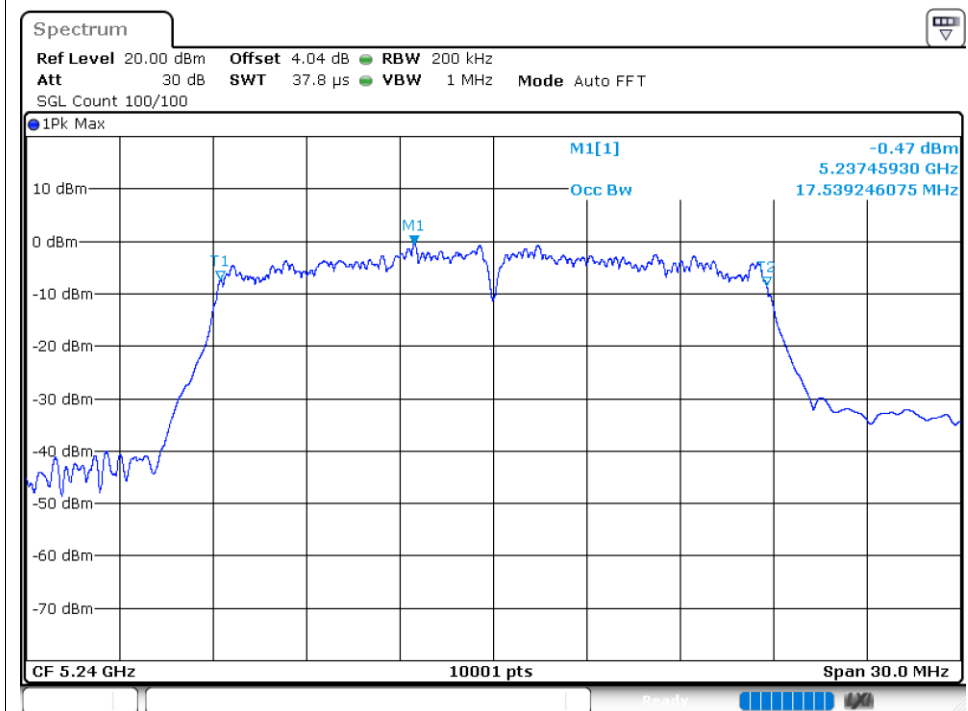
OBW NVNT n20 5180MHz Ant1



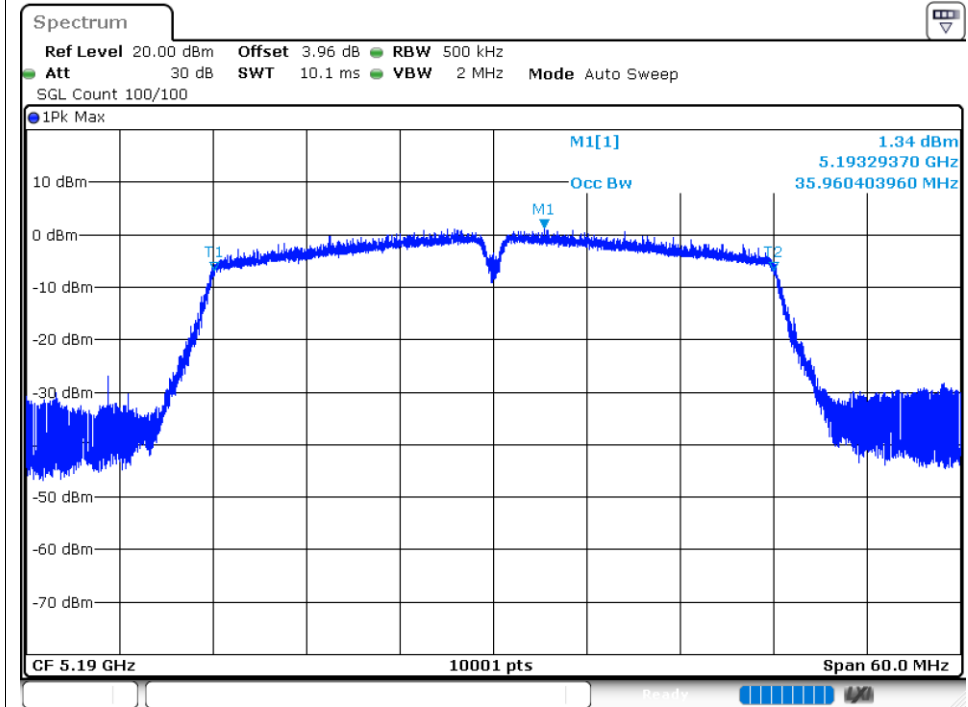
OBW NVNT n20 5200MHz Ant1



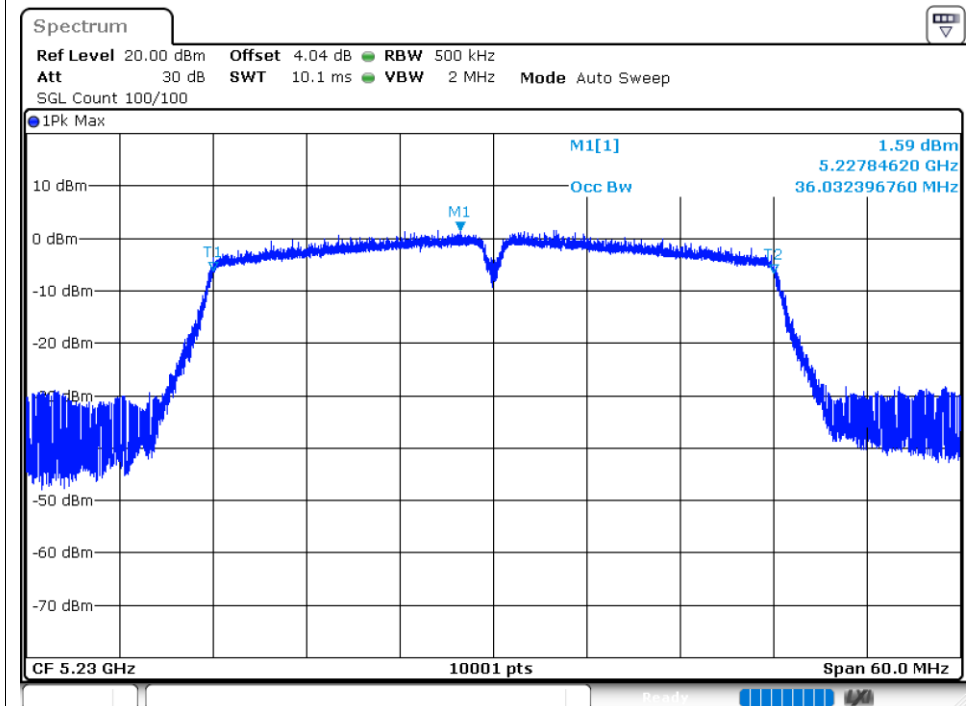
OBW NVNT n20 5240MHz Ant1



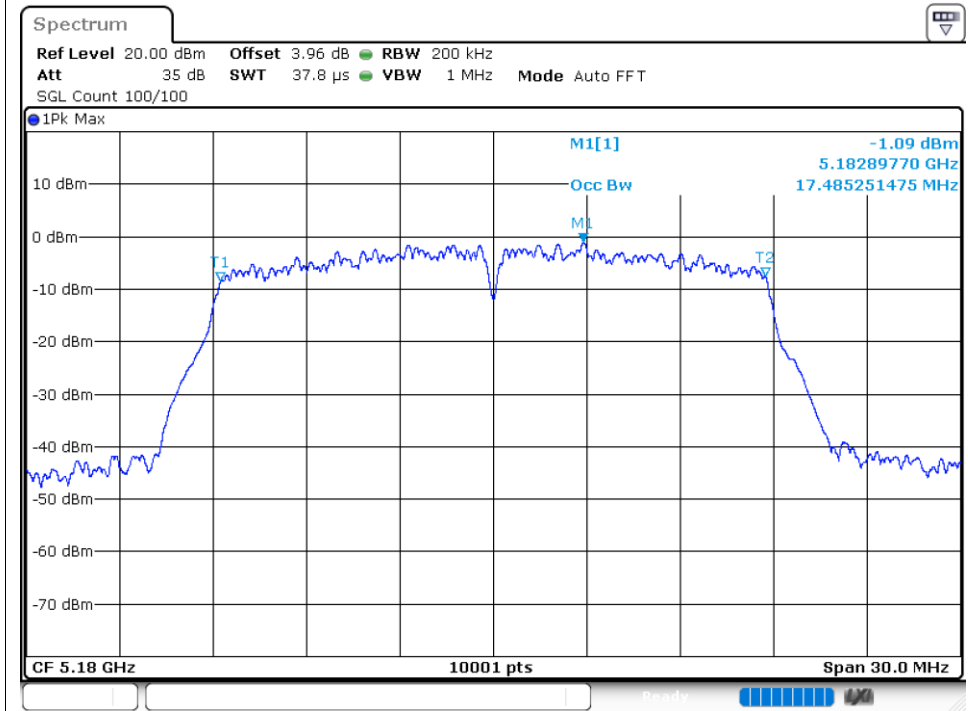
OBW NVNT n40 5190MHz Ant1



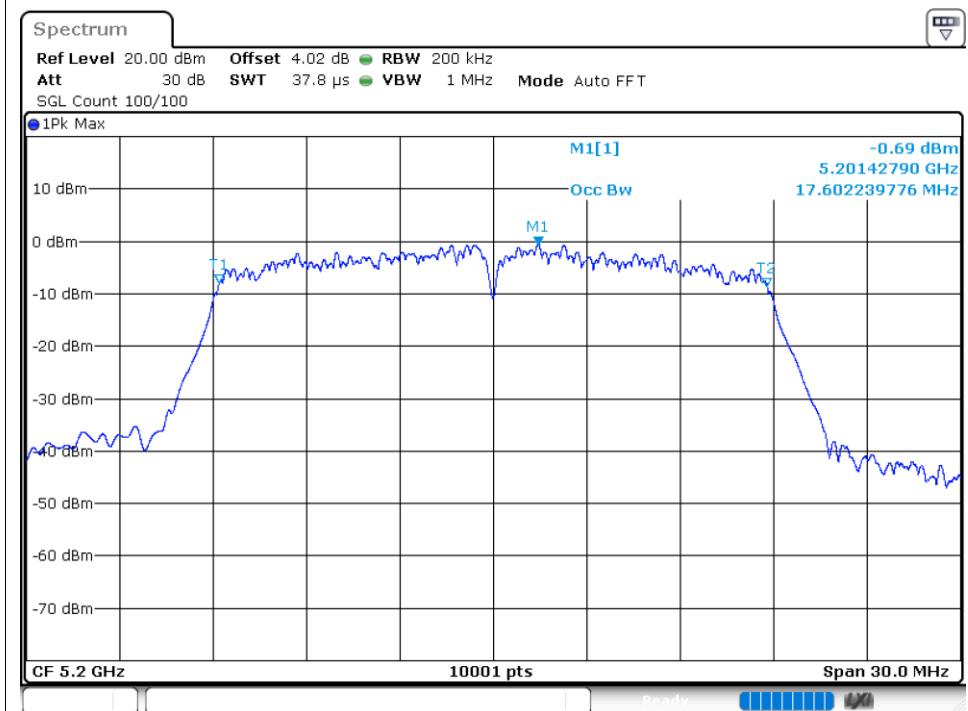
OBW NVNT n40 5230MHz Ant1



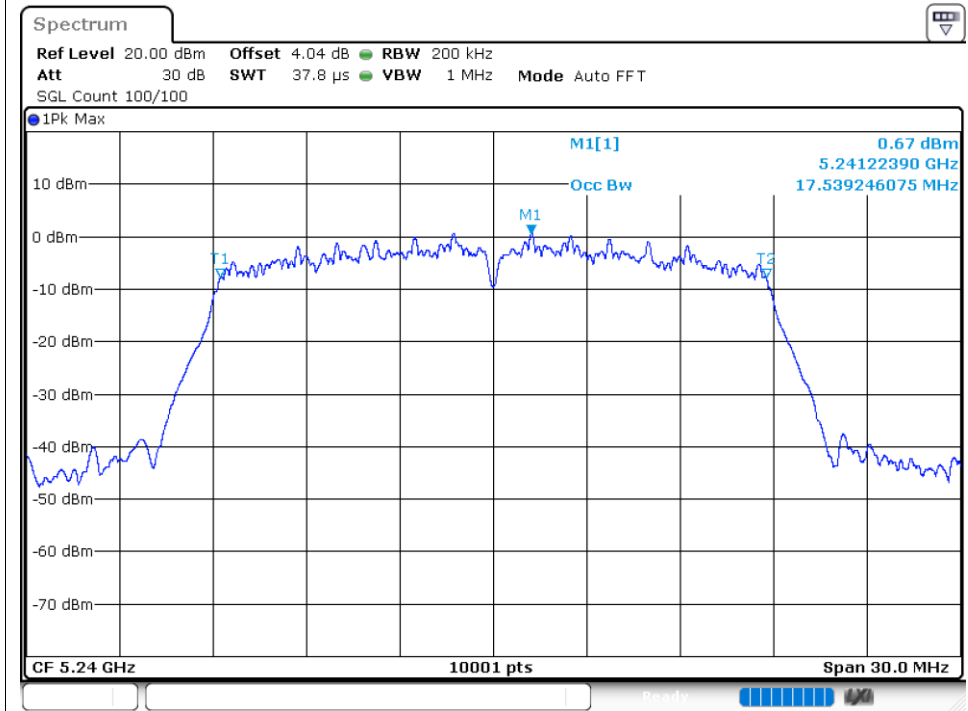
OBW NVNT ac20 5180MHz Ant1



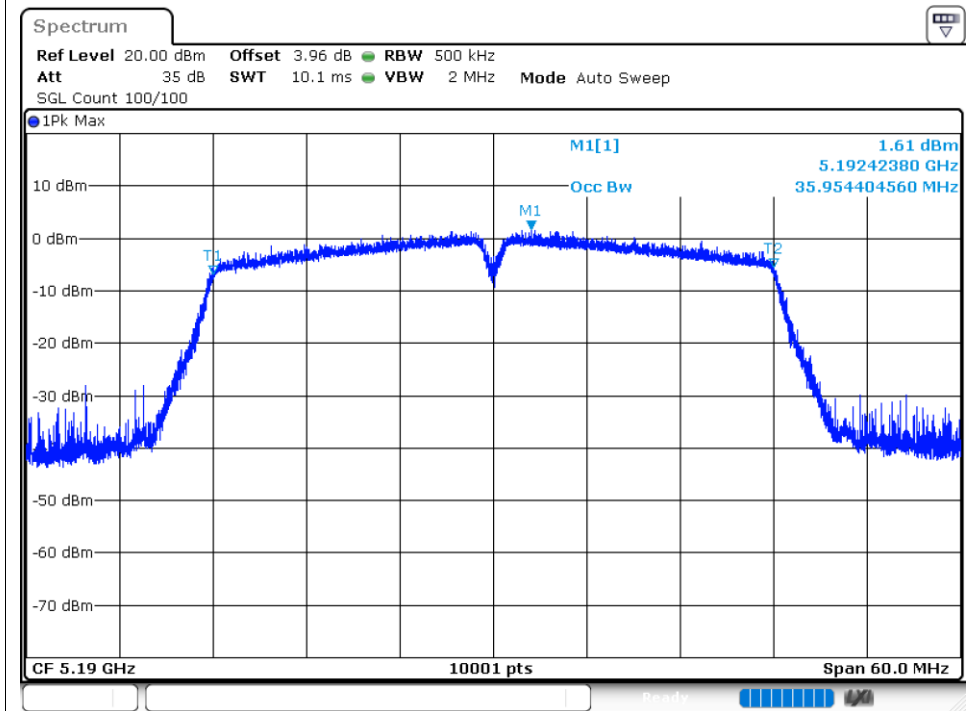
OBW NVNT ac20 5200MHz Ant1



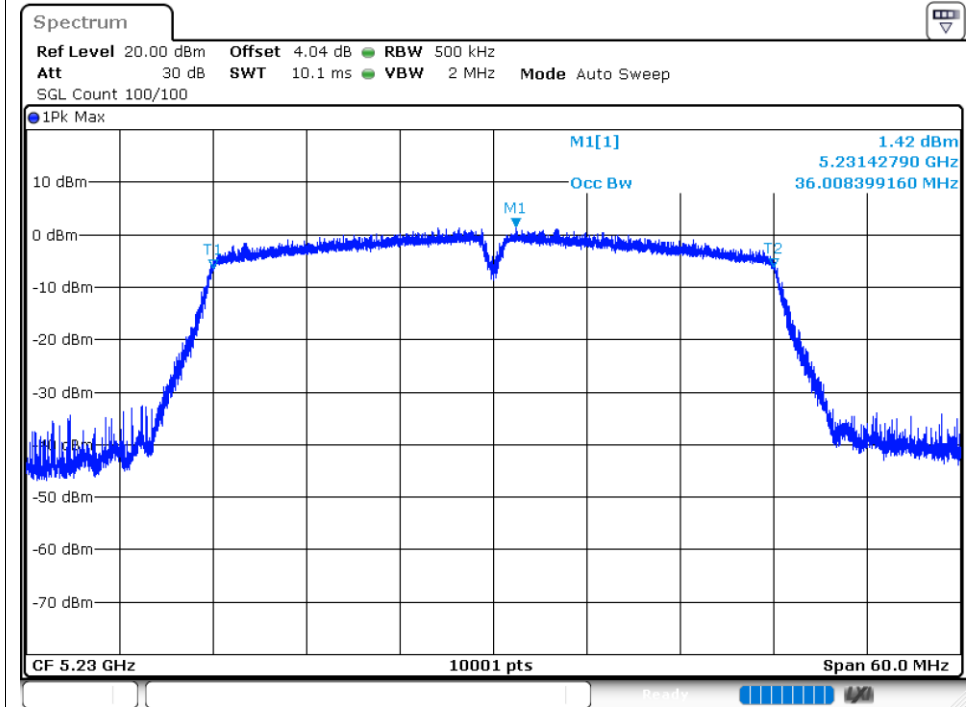
OBW NVNT ac20 5240MHz Ant1



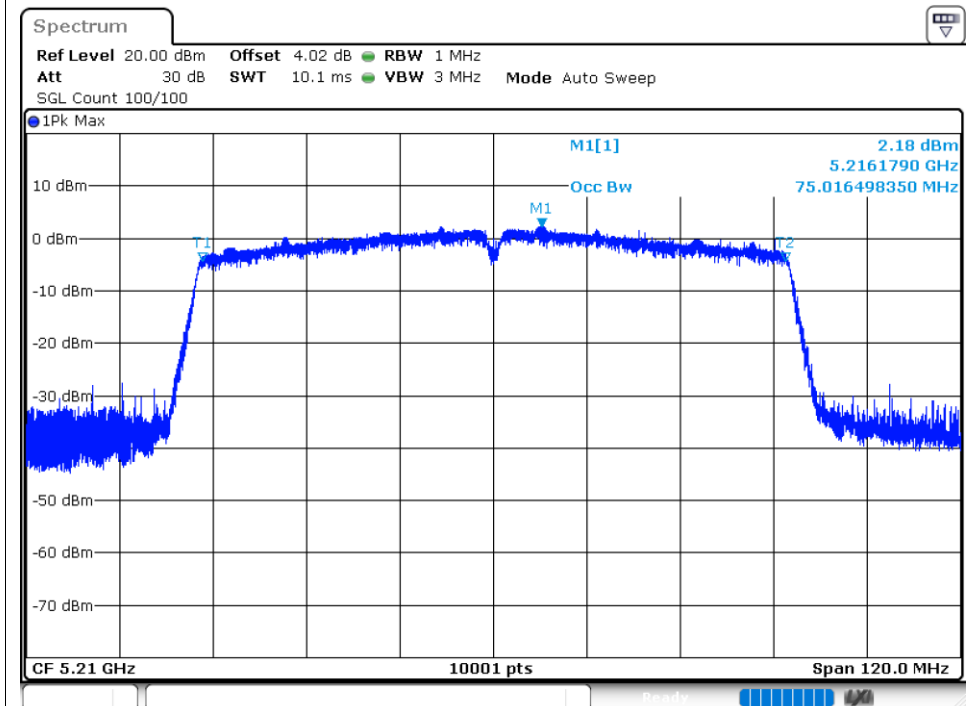
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1

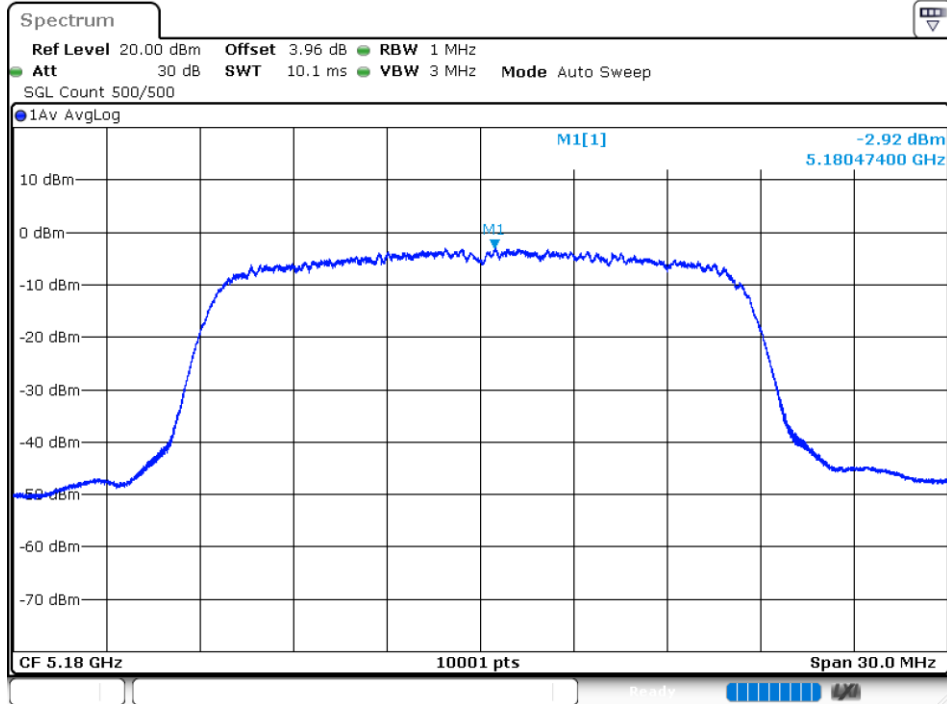


Maximum Power Spectral Density Level

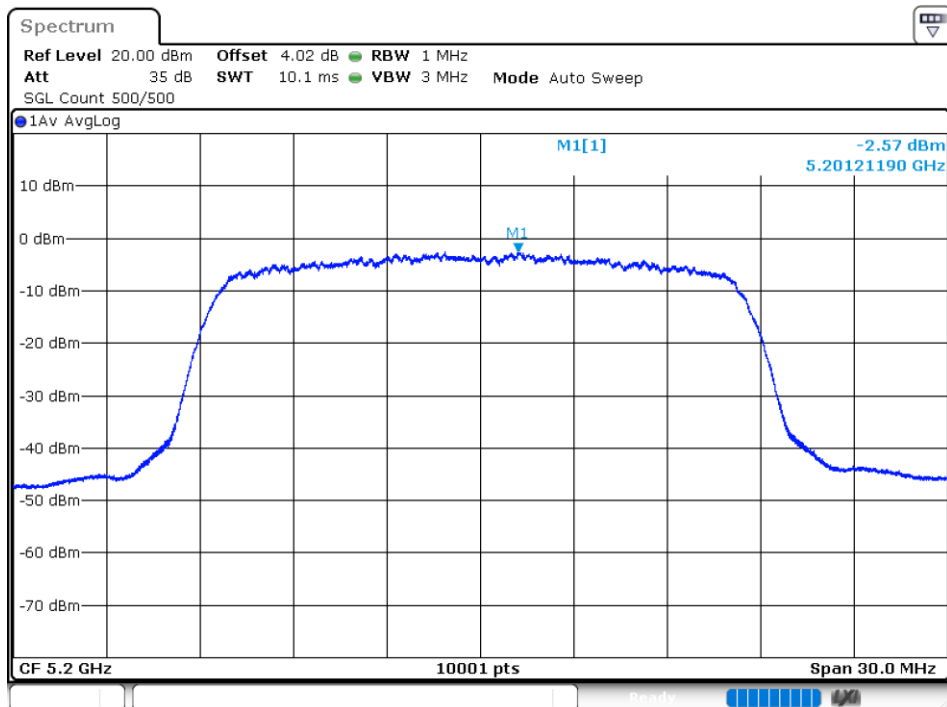
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-2.92	0.11	-2.81	11	Pass
NVNT	a	5200	Ant1	-2.57	0.1	-2.47	11	Pass
NVNT	a	5240	Ant1	-2.49	0.11	-2.38	11	Pass
NVNT	n20	5180	Ant1	-2.07	0.11	-1.96	11	Pass
NVNT	n20	5200	Ant1	-1.57	0.11	-1.46	11	Pass
NVNT	n20	5240	Ant1	-1.82	0.11	-1.71	11	Pass
NVNT	n40	5190	Ant1	-6.97	0.22	-6.75	11	Pass
NVNT	n40	5230	Ant1	-5.25	0.22	-5.03	11	Pass
NVNT	ac20	5180	Ant1	-2.5	0.11	-2.39	11	Pass
NVNT	ac20	5200	Ant1	-1.73	0.11	-1.62	11	Pass
NVNT	ac20	5240	Ant1	-2.33	0.11	-2.22	11	Pass
NVNT	ac40	5190	Ant1	-5.3	0.22	-5.08	11	Pass
NVNT	ac40	5230	Ant1	-5.66	0.22	-5.44	11	Pass
NVNT	ac80	5210	Ant1	-10.26	0.43	-9.83	11	Pass

Test Graphs

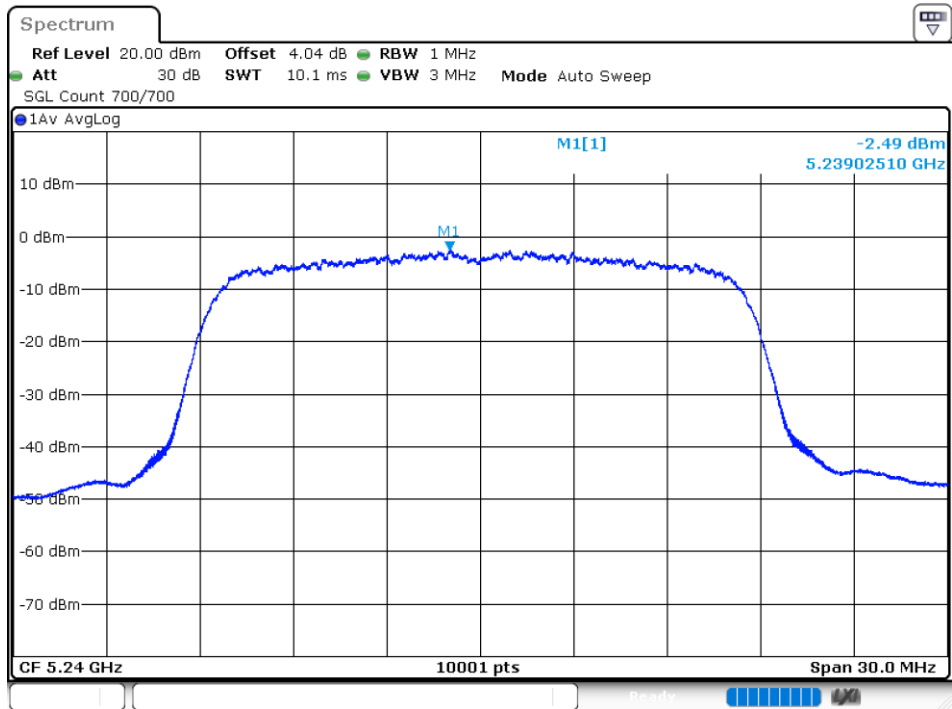
PSD NVNT a 5180MHz Ant1



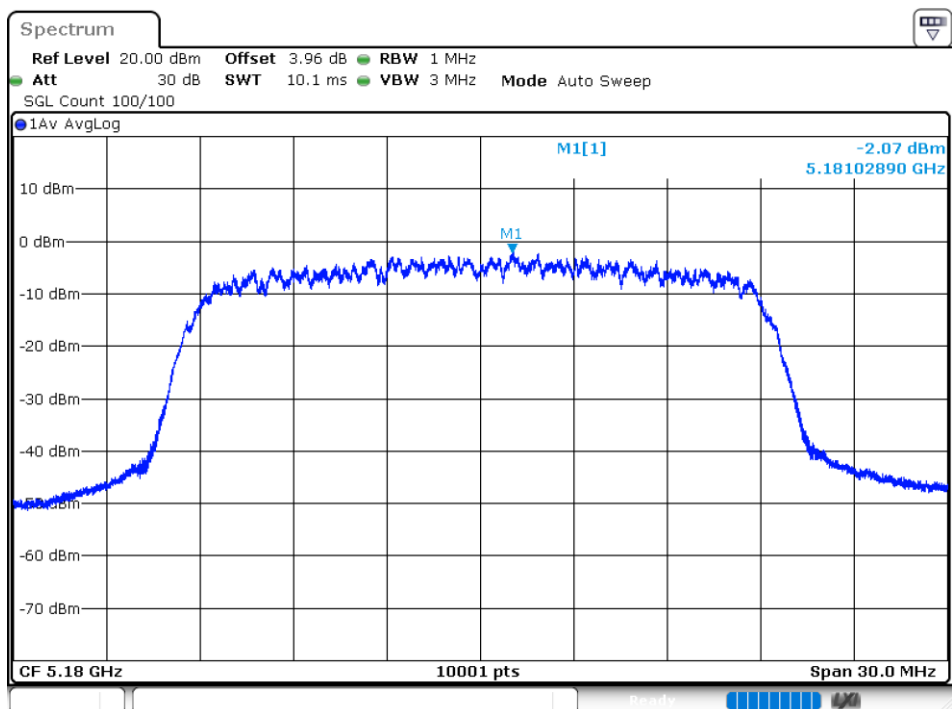
PSD NVNT a 5200MHz Ant1



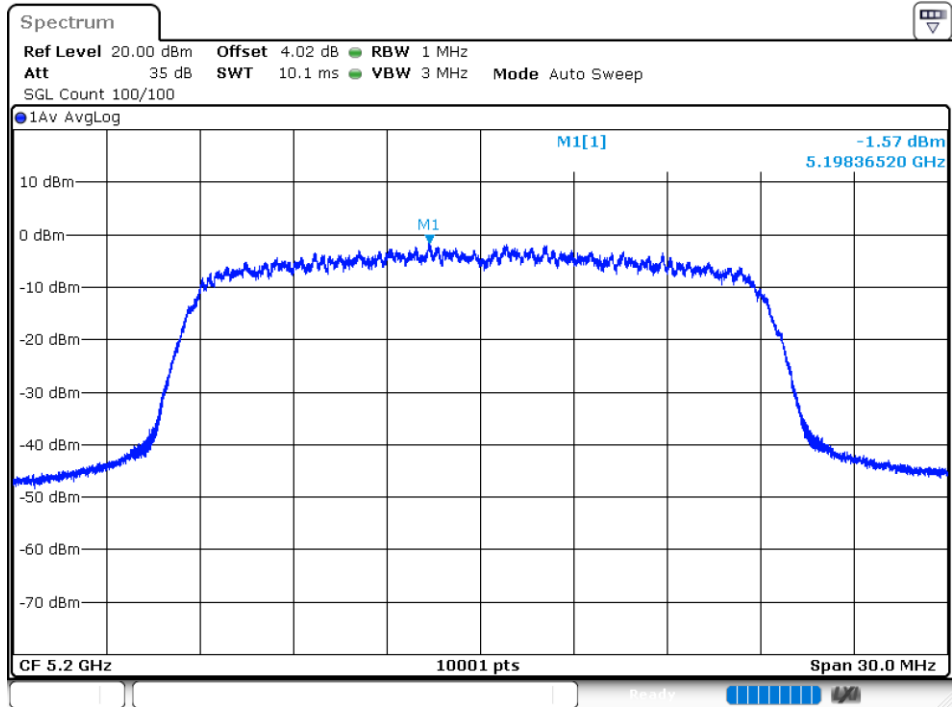
PSD NVNT a 5240MHz Ant1



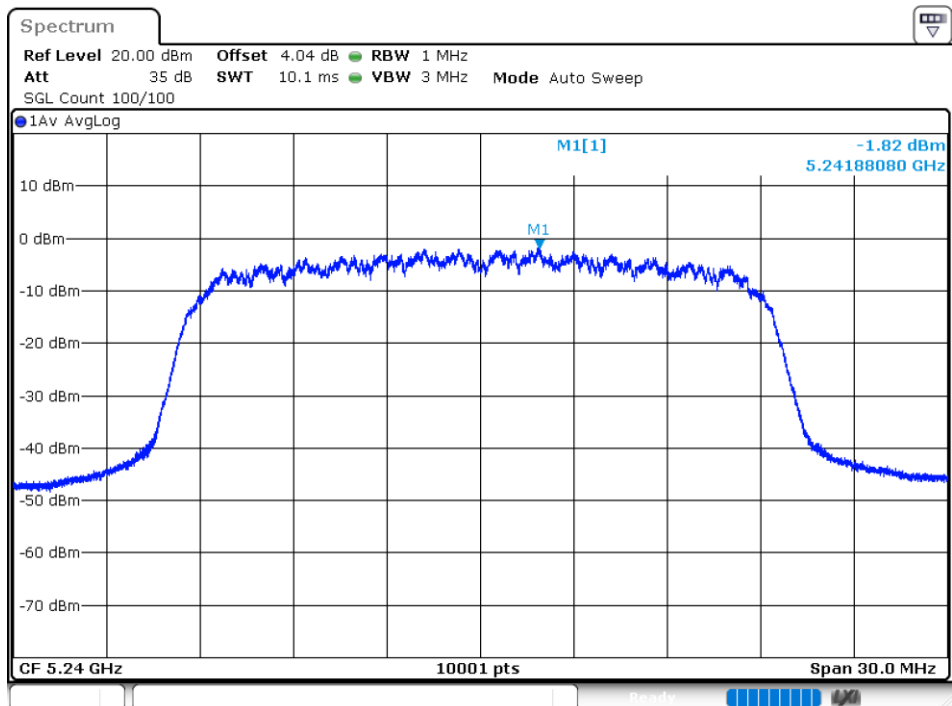
PSD NVNT n20 5180MHz Ant1



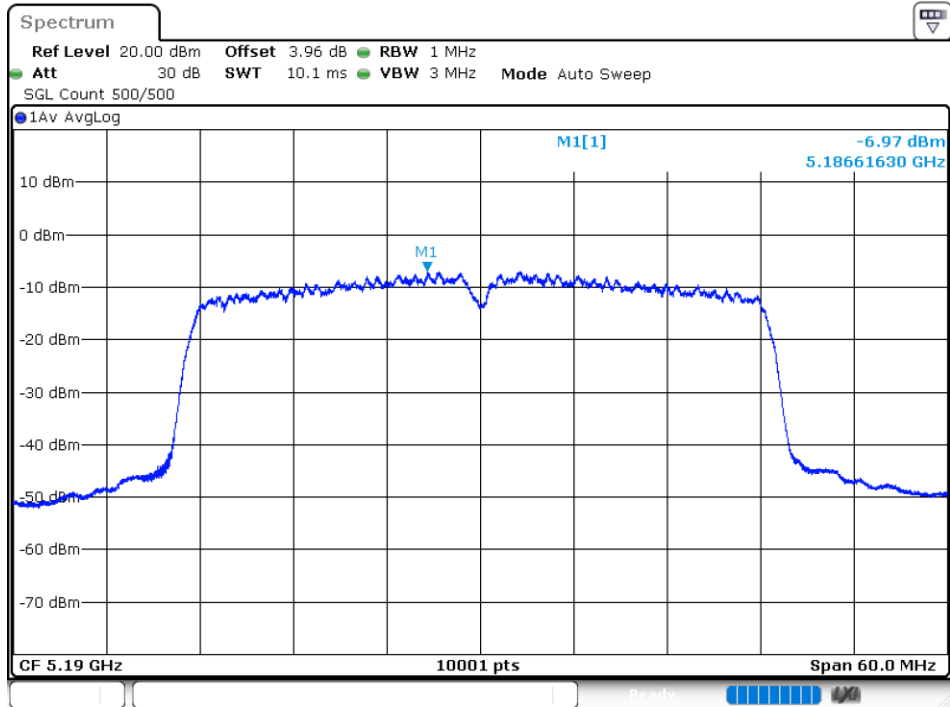
PSD NVNT n20 5200MHz Ant1



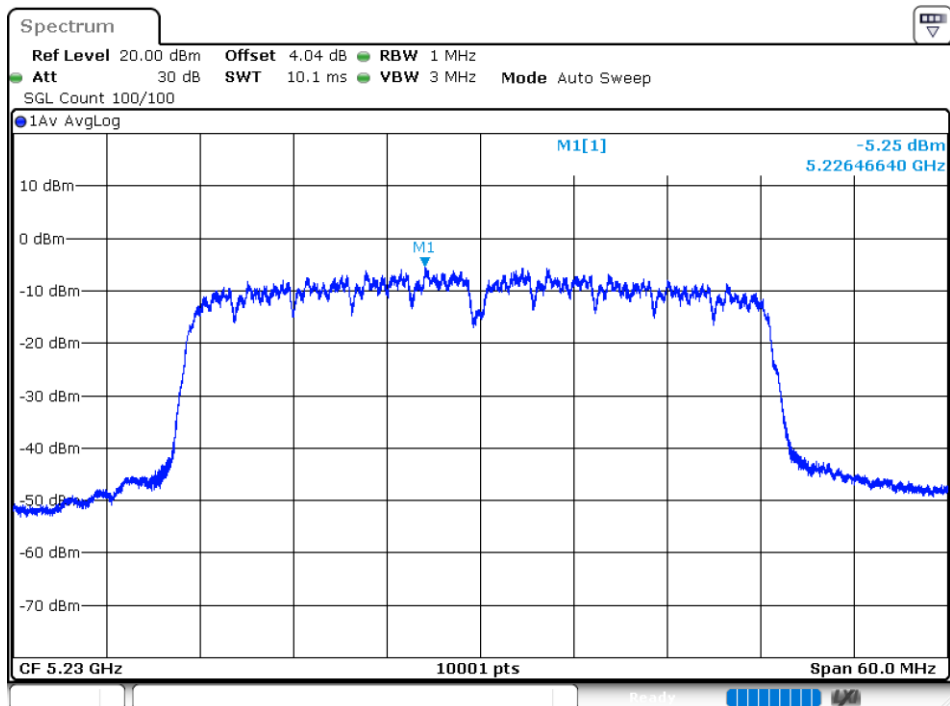
PSD NVNT n20 5240MHz Ant1



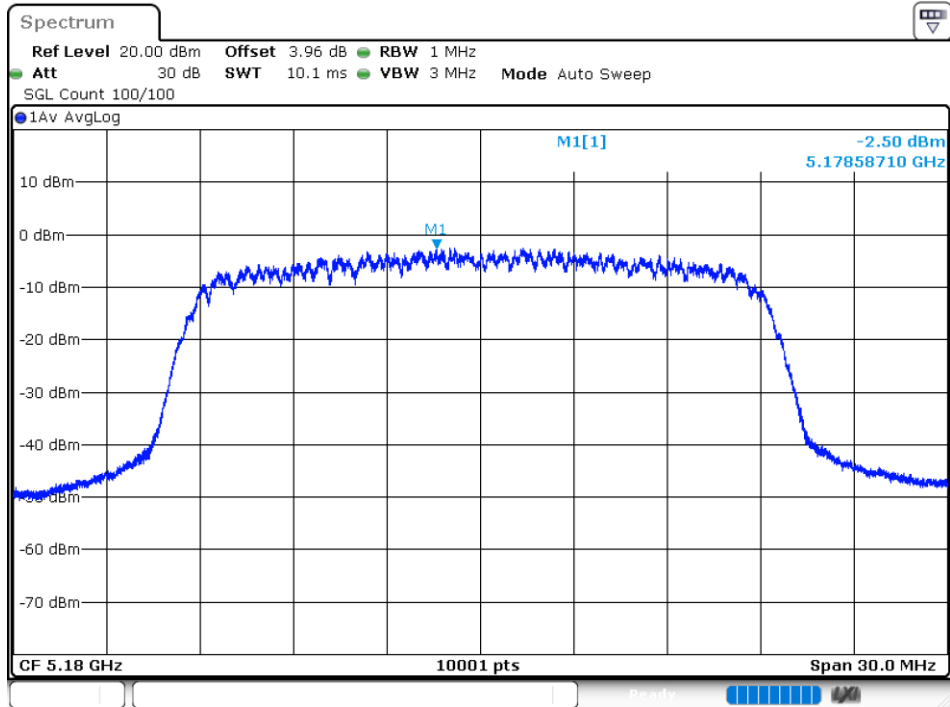
PSD NVNT n40 5190MHz Ant1



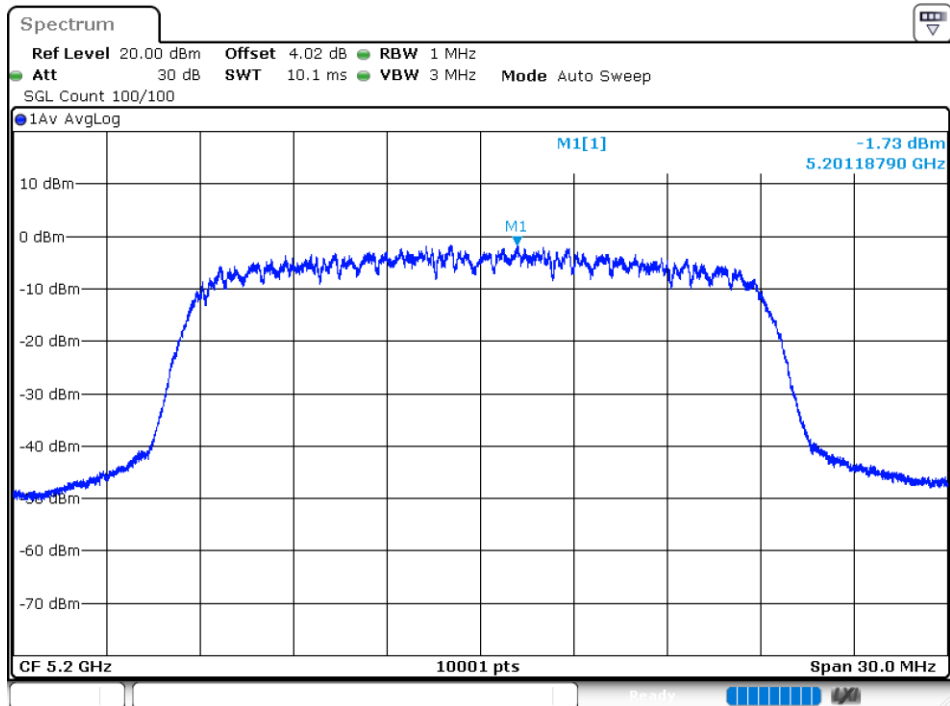
PSD NVNT n40 5230MHz Ant1



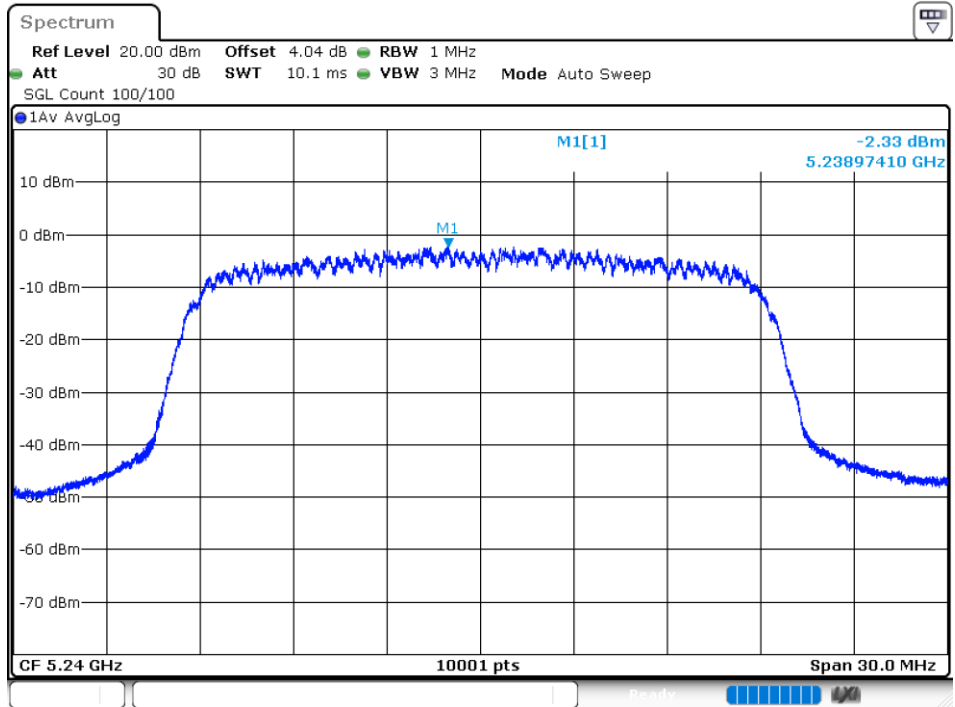
PSD NVNT ac20 5180MHz Ant1



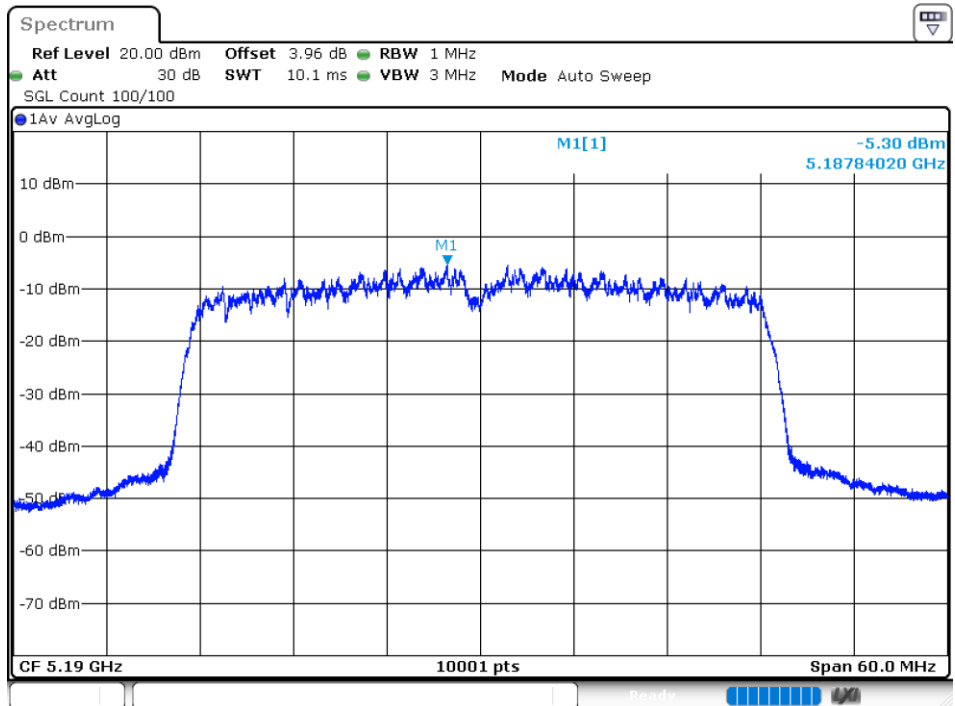
PSD NVNT ac20 5200MHz Ant1



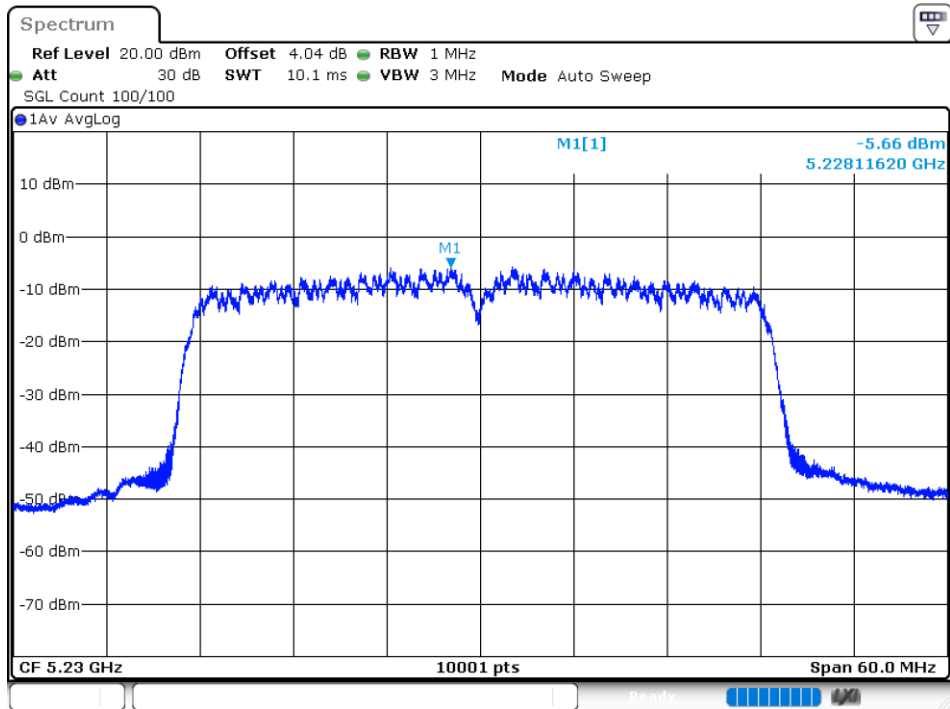
PSD NVNT ac20 5240MHz Ant1



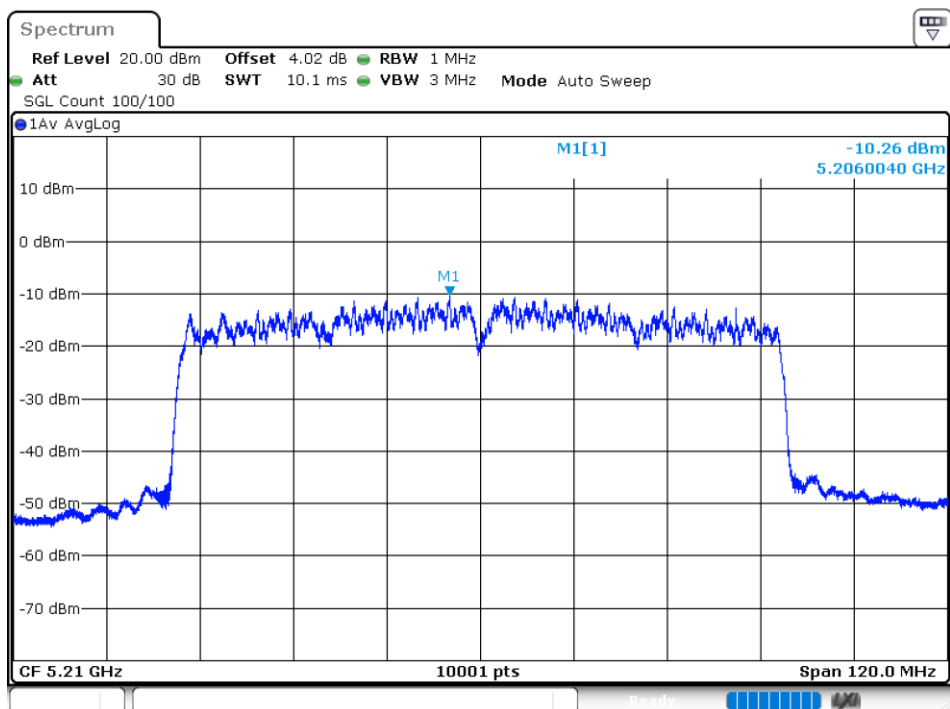
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1



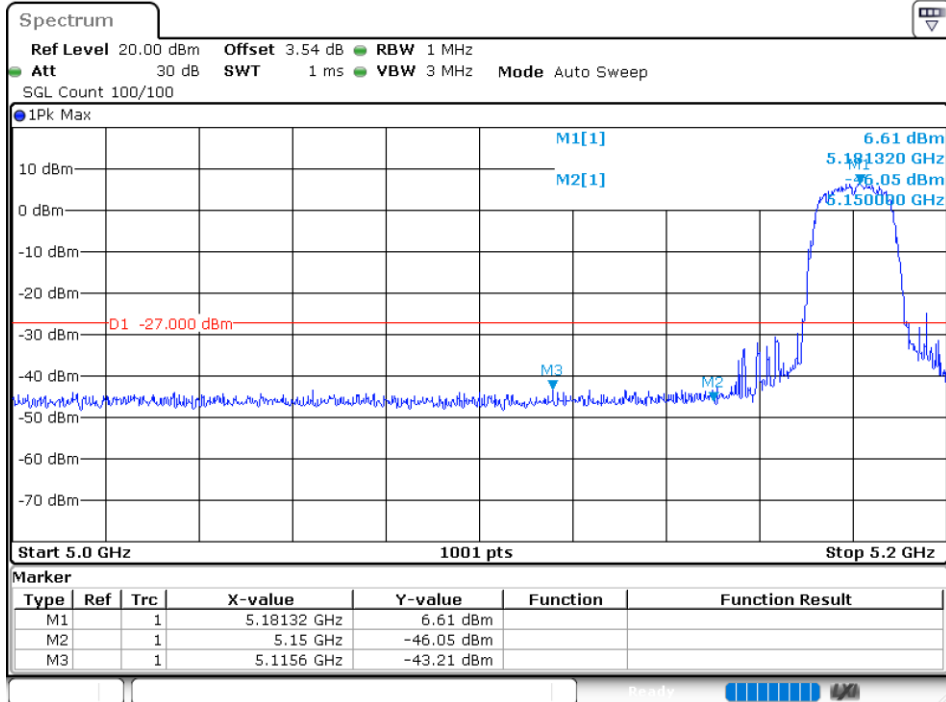
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-43.2	-27	Pass
NVNT	a	5240	Ant1	-37.88	-27	Pass
NVNT	n20	5180	Ant1	-39.62	-27	Pass
NVNT	n20	5240	Ant1	-42.21	-27	Pass
NVNT	n40	5190	Ant1	-31.61	-27	Pass
NVNT	n40	5230	Ant1	-43.59	-27	Pass
NVNT	ac20	5180	Ant1	-36.68	-27	Pass
NVNT	ac20	5240	Ant1	-42.87	-27	Pass
NVNT	ac40	5190	Ant1	-37.73	-27	Pass
NVNT	ac40	5230	Ant1	-43.51	-27	Pass
NVNT	ac80	5210	Ant1	-43.29	-27	Pass

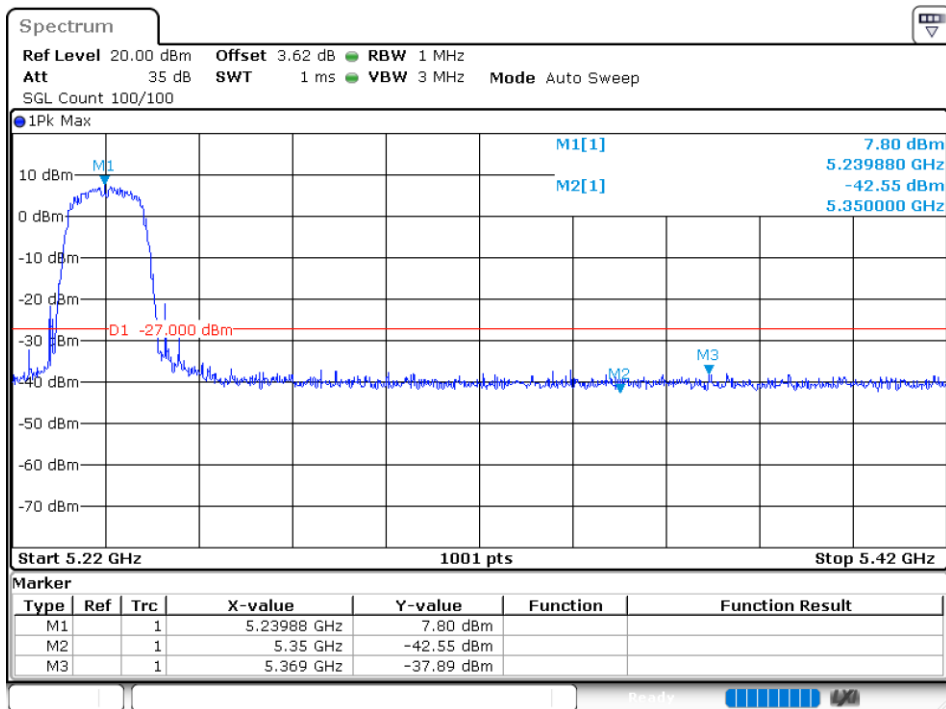
Note: This test has increased antenna gain .

Test Graphs

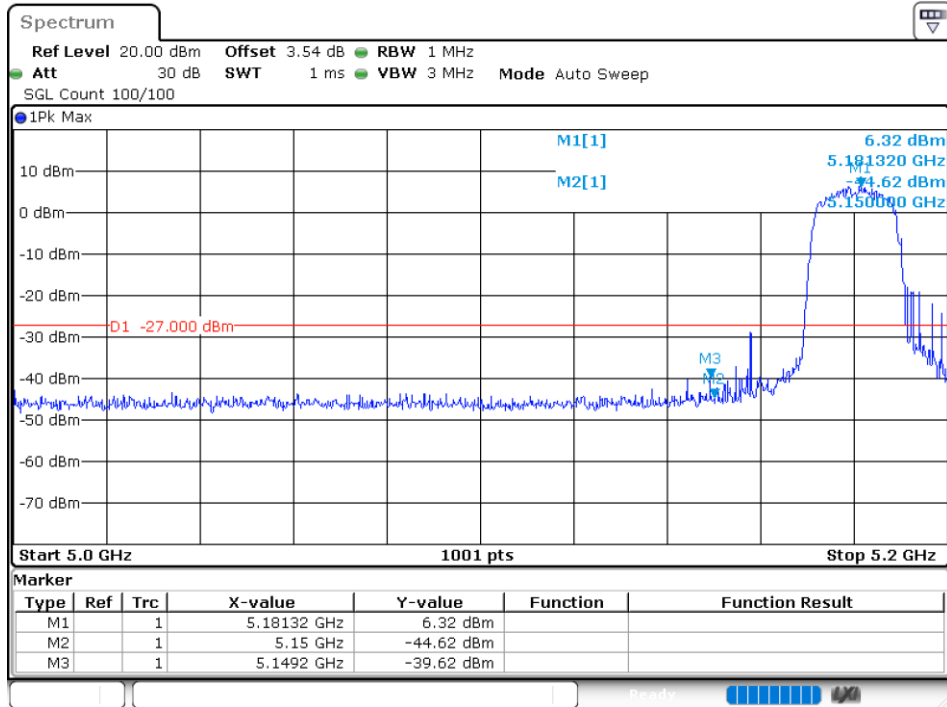
Band Edge NVNT a 5180MHz Low Ant1



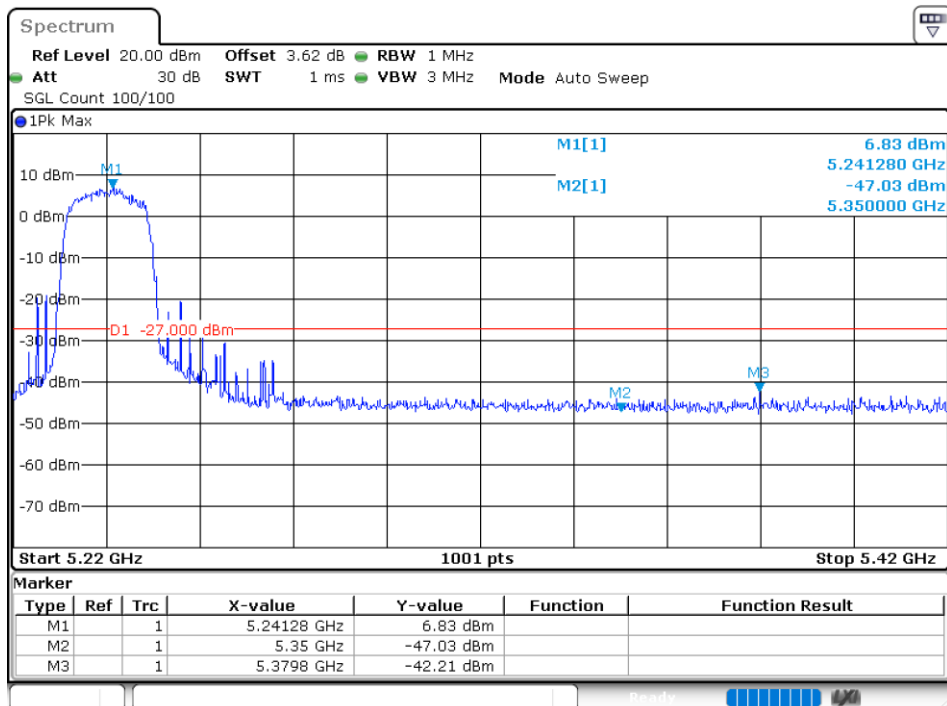
Band Edge NVNT a 5240MHz High Ant1



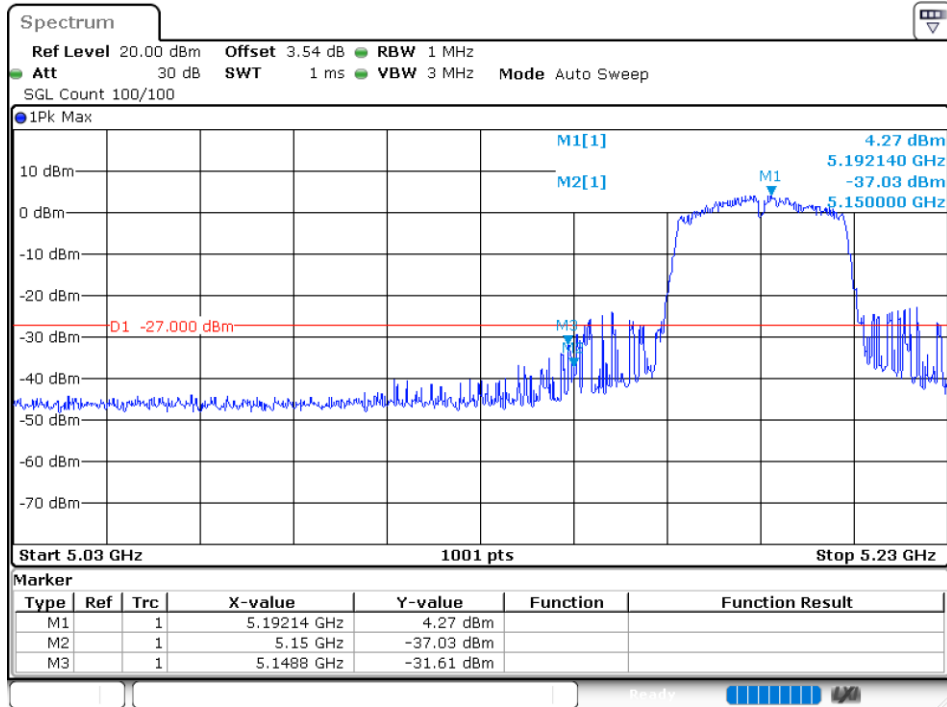
Band Edge NVNT n20 5180MHz Low Ant1



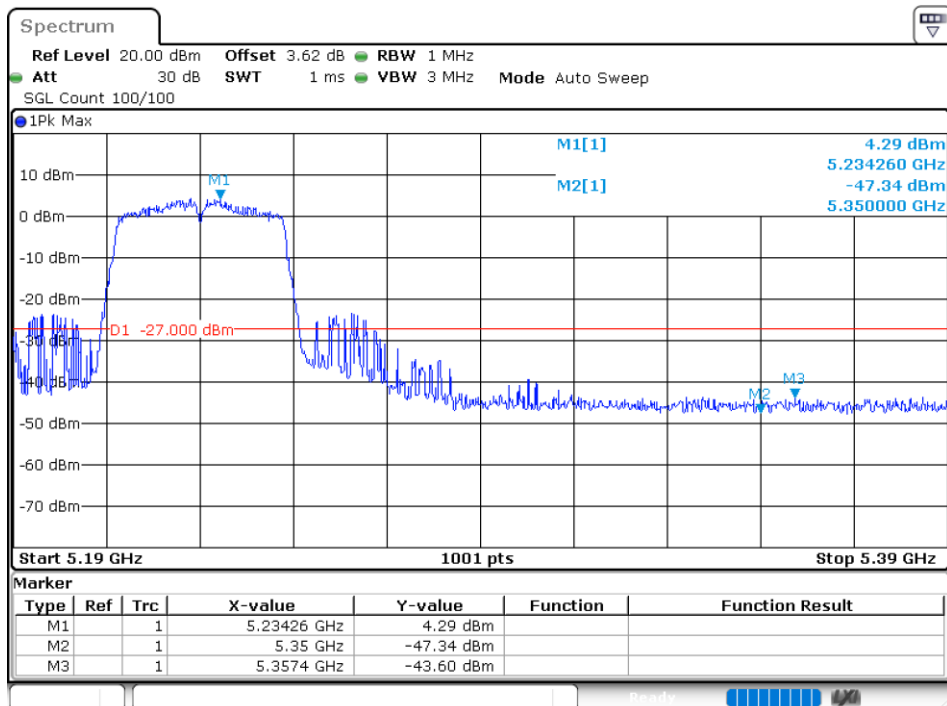
Band Edge NVNT n20 5240MHz High Ant1



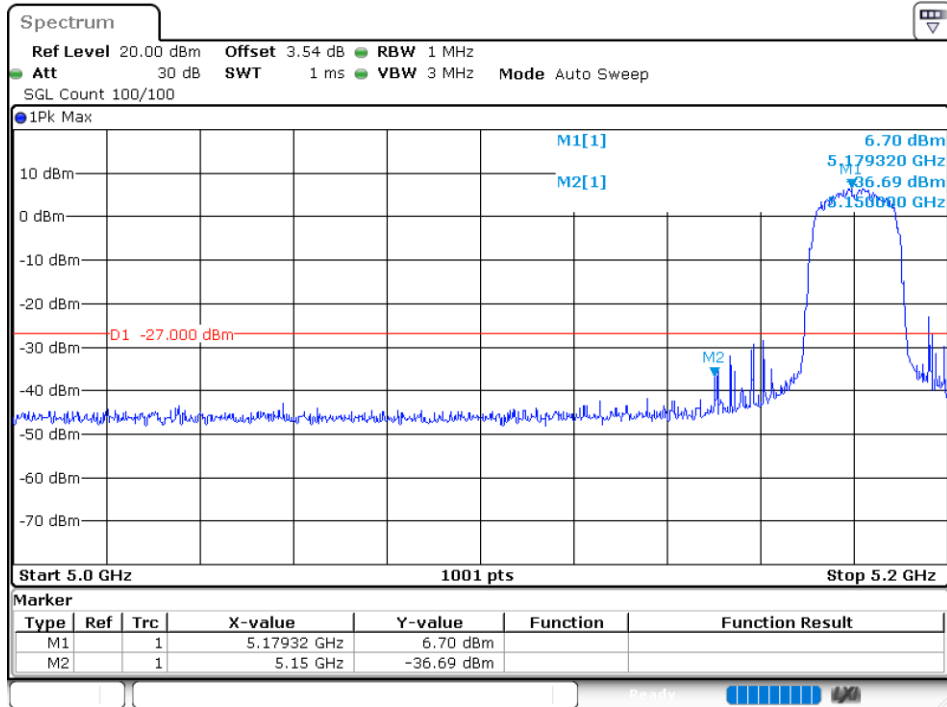
Band Edge NVNT n40 5190MHz Low Ant1



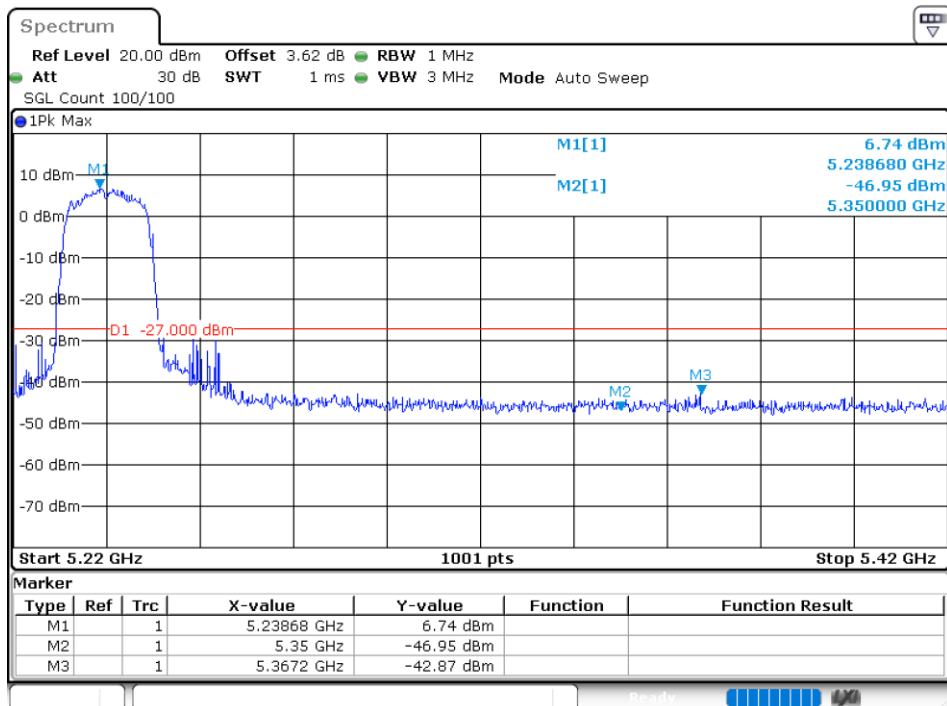
Band Edge NVNT n40 5230MHz High Ant1



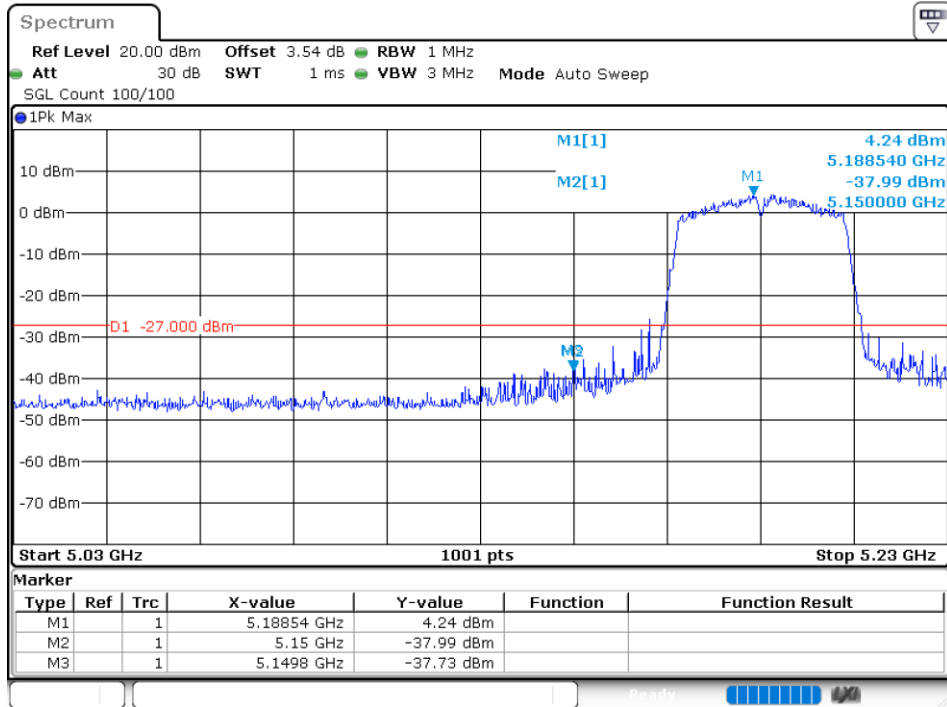
Band Edge NVNT ac20 5180MHz Low Ant1



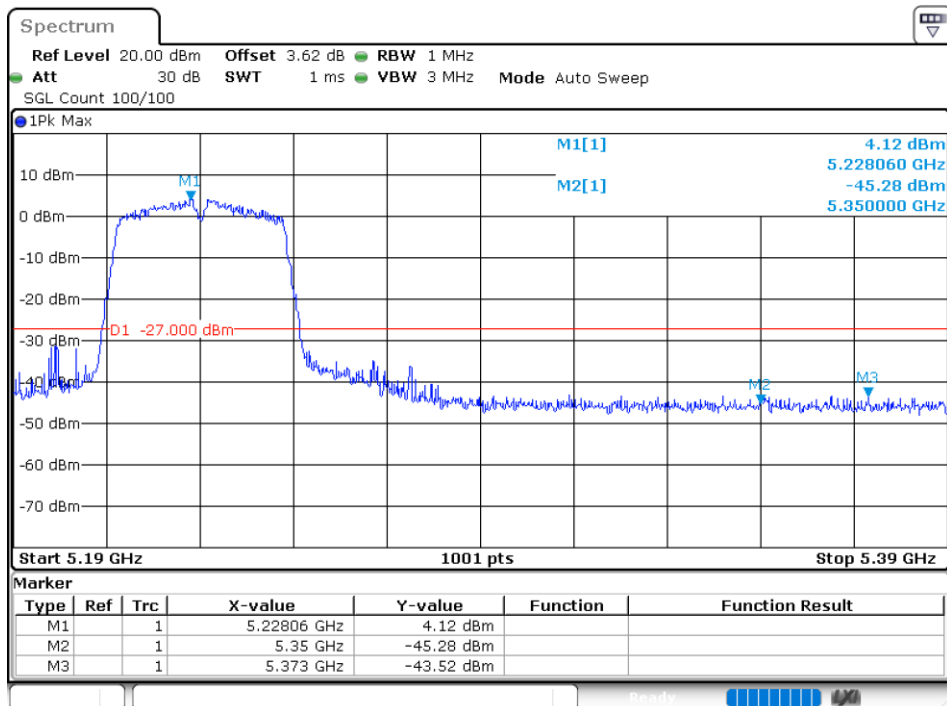
Band Edge NVNT ac20 5240MHz High Ant1

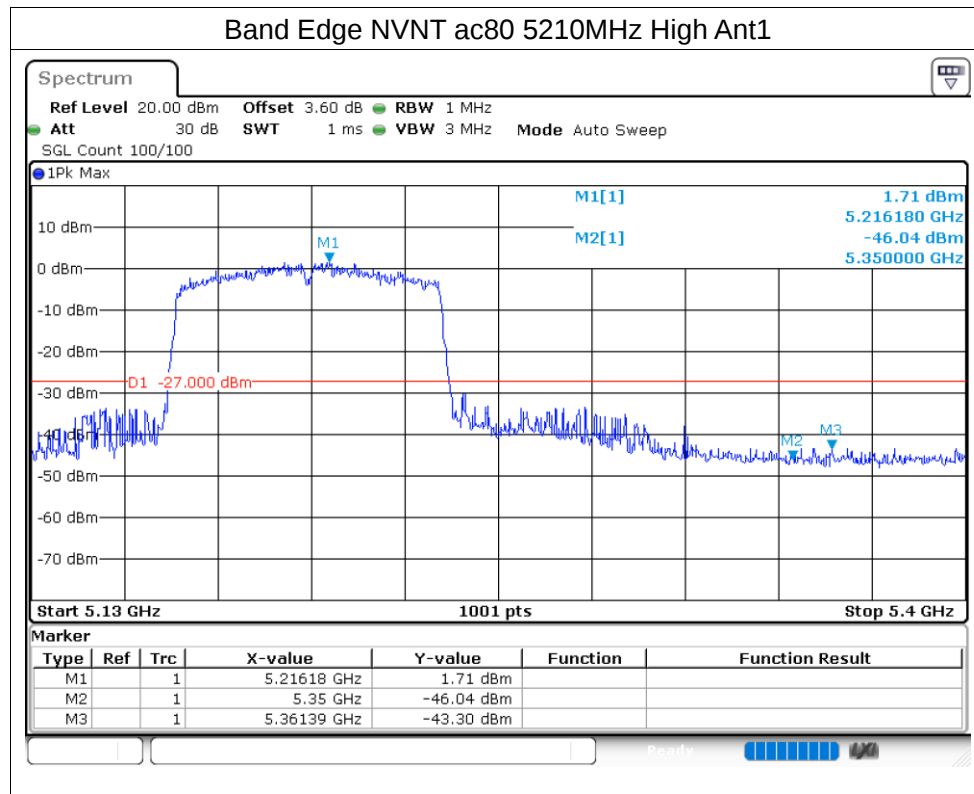


Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1



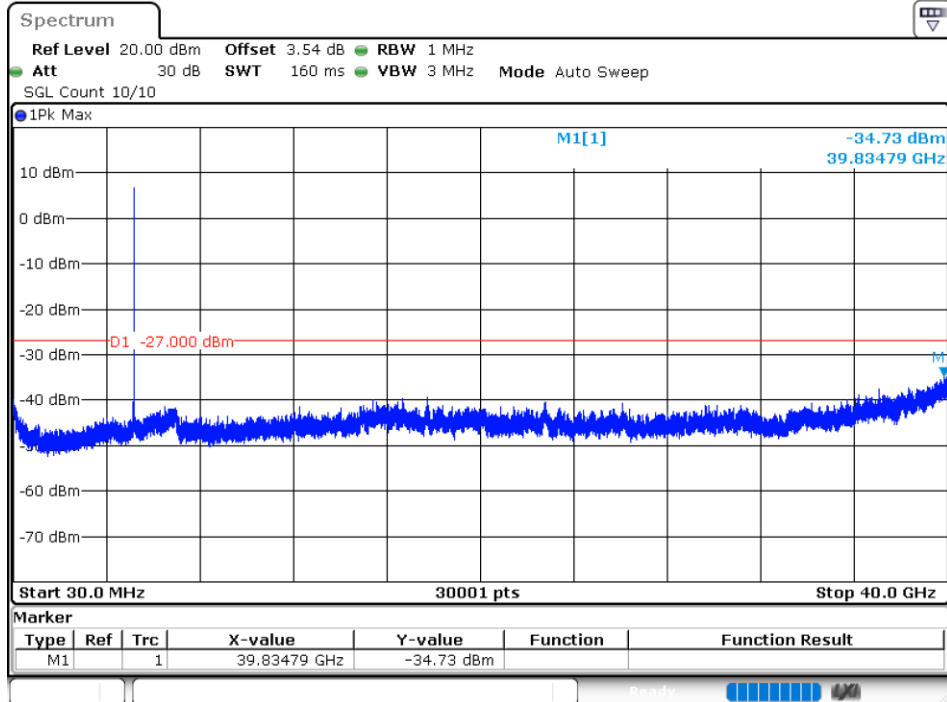


Conducted RF Spurious Emission

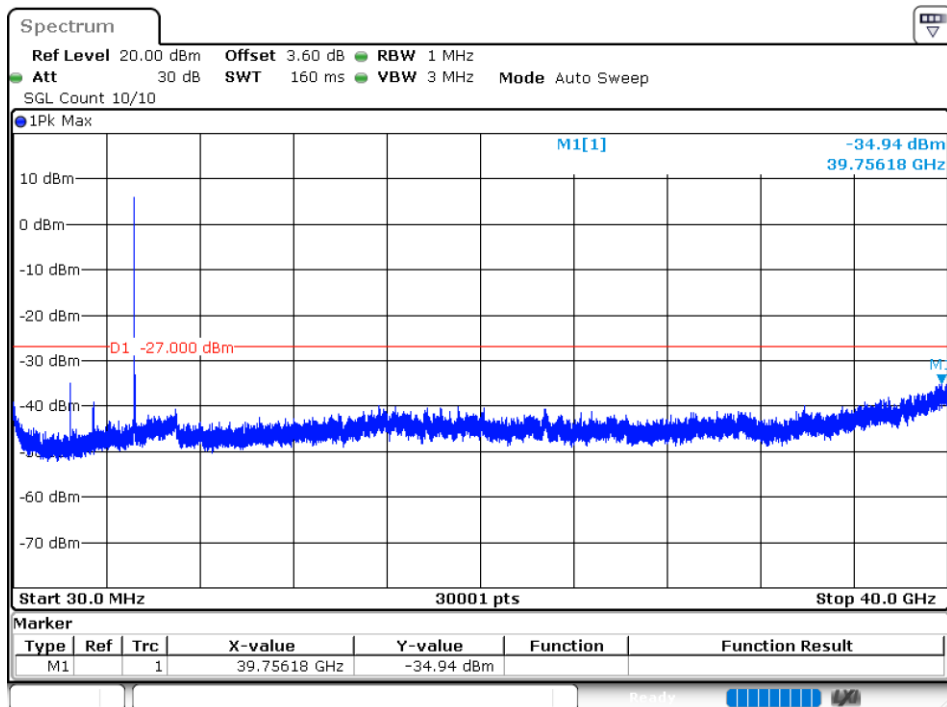
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-34.72	-27	Pass
NVNT	a	5200	Ant1	-34.94	-27	Pass
NVNT	a	5240	Ant1	-34.37	-27	Pass
NVNT	n20	5180	Ant1	-34.99	-27	Pass
NVNT	n20	5200	Ant1	-32.85	-27	Pass
NVNT	n20	5240	Ant1	-34.85	-27	Pass
NVNT	n40	5190	Ant1	-35.14	-27	Pass
NVNT	n40	5230	Ant1	-34.56	-27	Pass
NVNT	ac20	5180	Ant1	-34.13	-27	Pass
NVNT	ac20	5200	Ant1	-34.19	-27	Pass
NVNT	ac20	5240	Ant1	-35.01	-27	Pass
NVNT	ac40	5190	Ant1	-32.56	-27	Pass
NVNT	ac40	5230	Ant1	-33.94	-27	Pass
NVNT	ac80	5210	Ant1	-35.18	-27	Pass

Test Graphs

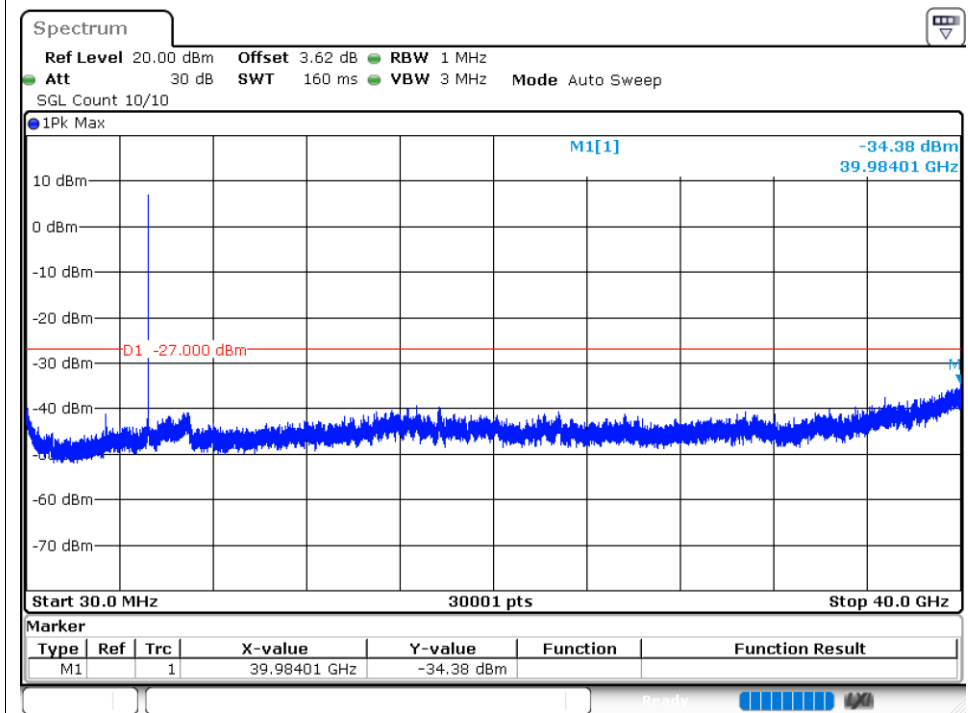
Tx. Spurious NVNT a 5180MHz Ant1 Emission



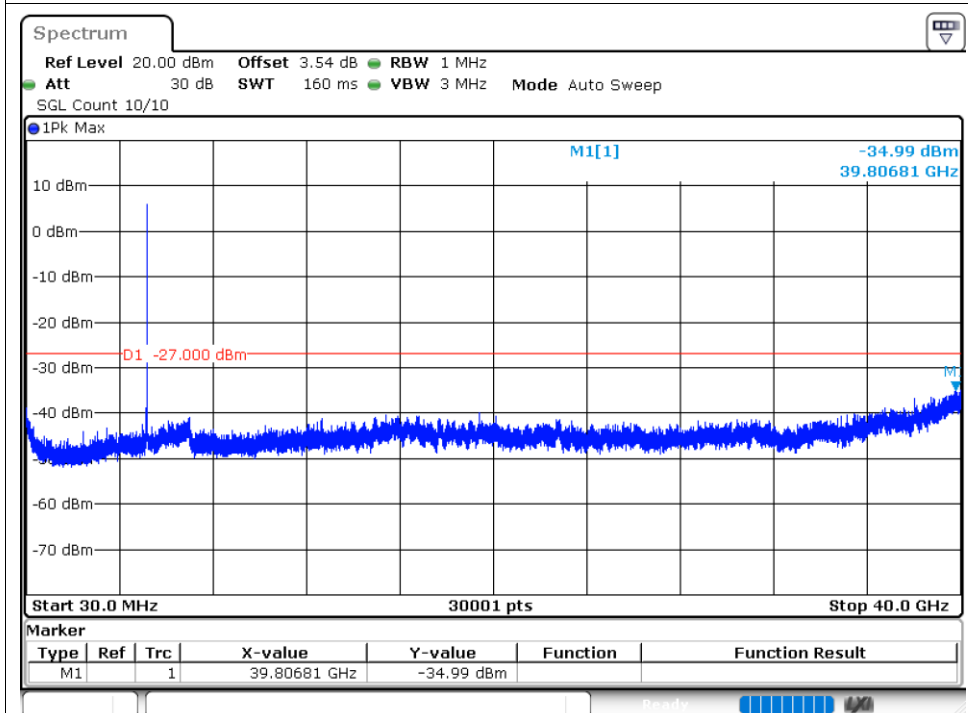
Tx. Spurious NVNT a 5200MHz Ant1 Emission



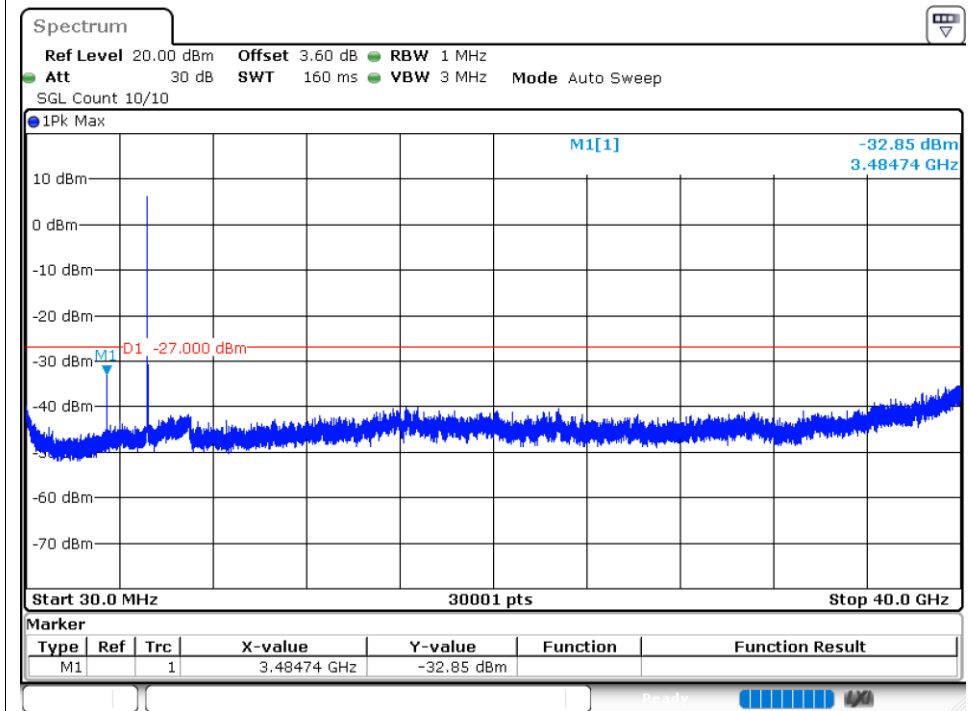
Tx. Spurious NVNT a 5240MHz Ant1 Emission



Tx. Spurious NVNT n20 5180MHz Ant1 Emission



Tx. Spurious NVNT n20 5200MHz Ant1 Emission



Tx. Spurious NVNT n20 5240MHz Ant1 Emission

