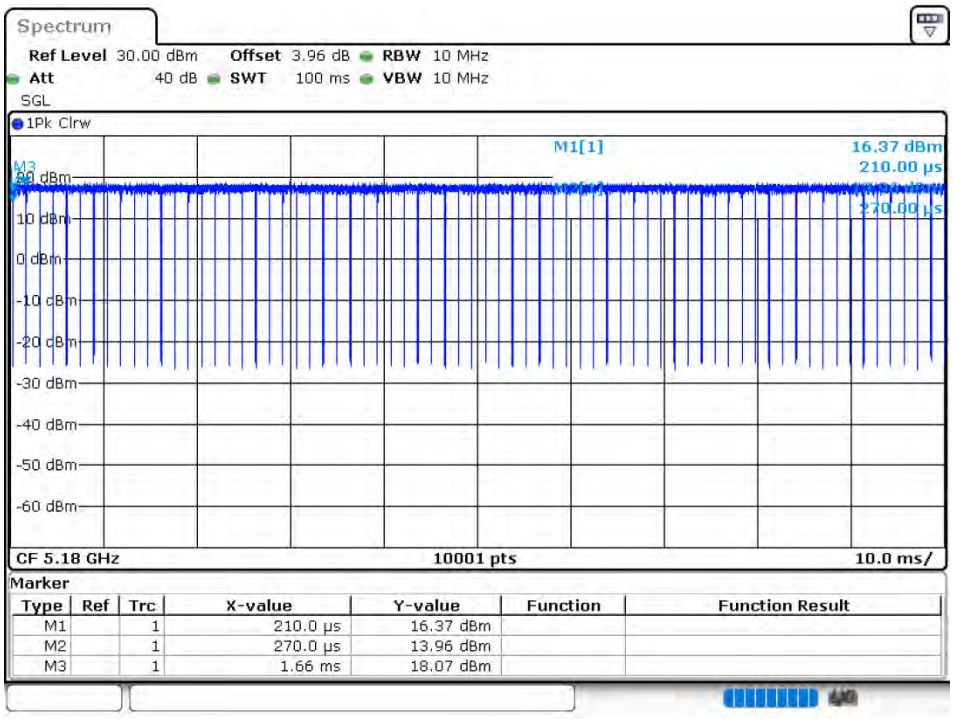
5.2G WIFI

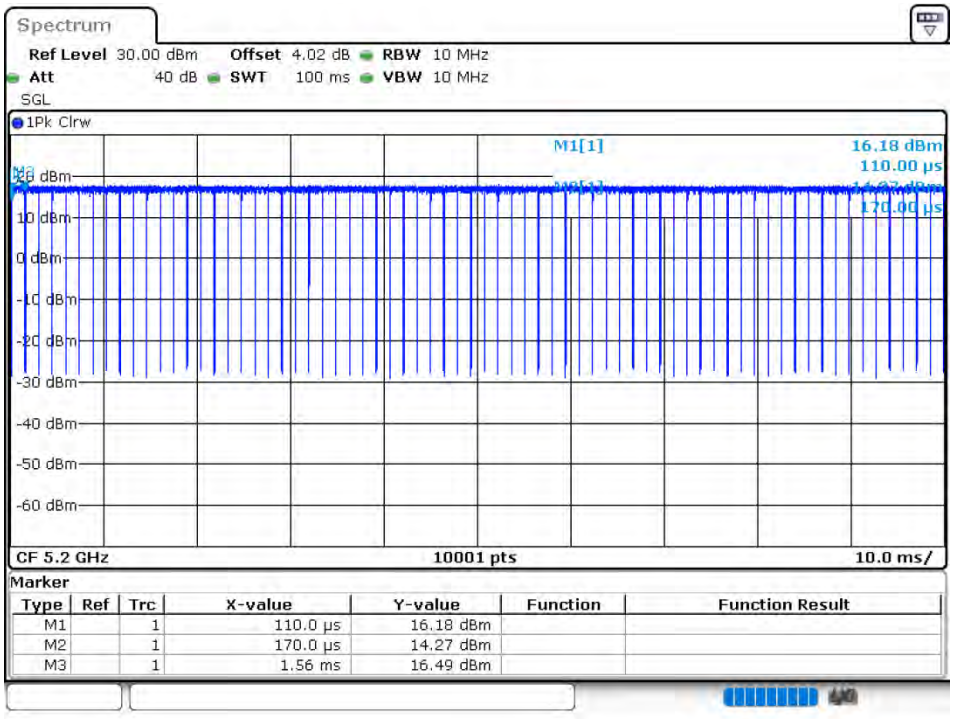
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	96.96	0.13	0.72
NVNT	a	5200	Ant1	96.93	0.14	0.72
NVNT	a	5240	Ant1	96.97	0.13	0.72
NVNT	a	5180	Ant2	96.98	0.13	0.72
NVNT	a	5200	Ant2	96.96	0.13	0.72
NVNT	a	5240	Ant2	96.97	0.13	0.72
NVNT	n20	5180	Ant1	96.76	0.14	0.77
NVNT	n20	5200	Ant1	96.74	0.14	0.77
NVNT	n20	5240	Ant1	96.75	0.14	0.77
NVNT	n20	5180	Ant2	96.76	0.14	0.77
NVNT	n20	5200	Ant2	96.77	0.14	0.77
NVNT	n20	5240	Ant2	96.75	0.14	0.77
NVNT	n40	5190	Ant1	93.89	0.27	1.54
NVNT	n40	5230	Ant1	93.9	0.27	1.54
NVNT	n40	5190	Ant2	93.86	0.28	1.54
NVNT	n40	5230	Ant2	93.87	0.27	1.54
NVNT	ac20	5180	Ant1	96.79	0.14	0.76
NVNT	ac20	5200	Ant1	96.79	0.14	0.76
NVNT	ac20	5240	Ant1	96.79	0.14	0.76
NVNT	ac20	5180	Ant2	96.79	0.14	0.76
NVNT	ac20	5200	Ant2	96.81	0.14	0.76
NVNT	ac20	5240	Ant2	96.81	0.14	0.76
NVNT	ac40	5190	Ant1	94.31	0.25	1.54
NVNT	ac40	5230	Ant1	94.32	0.25	1.54
NVNT	ac40	5190	Ant2	94.32	0.25	1.54
NVNT	ac40	5230	Ant2	93.61	0.29	1.54
NVNT	ac80	5210	Ant1	88.7	0.52	3.12
NVNT	ac80	5210	Ant2	88.7	0.52	3.12

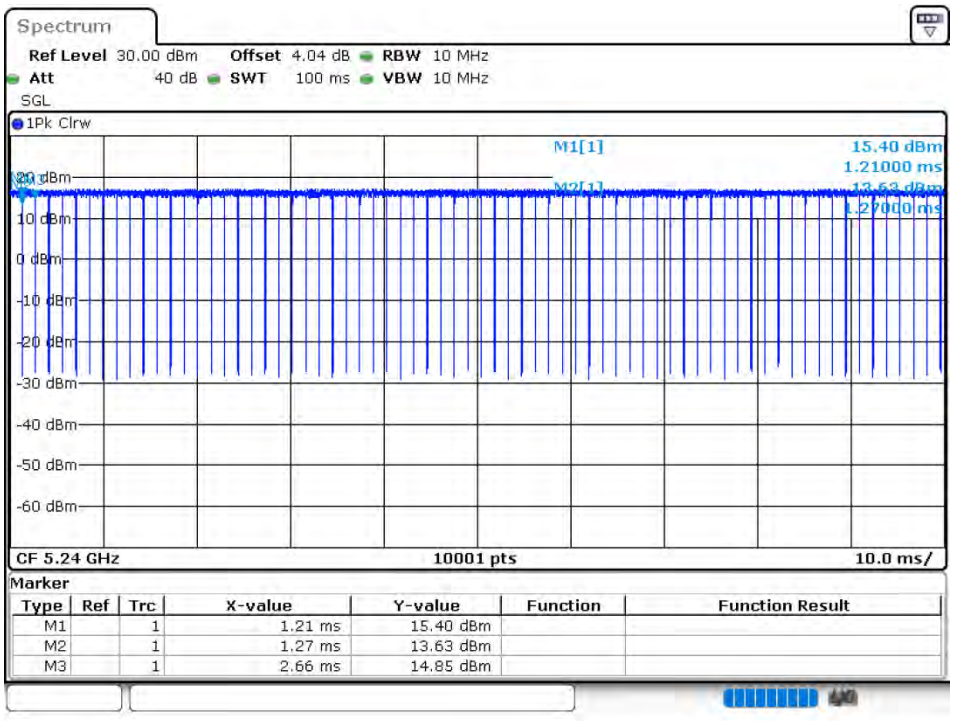
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



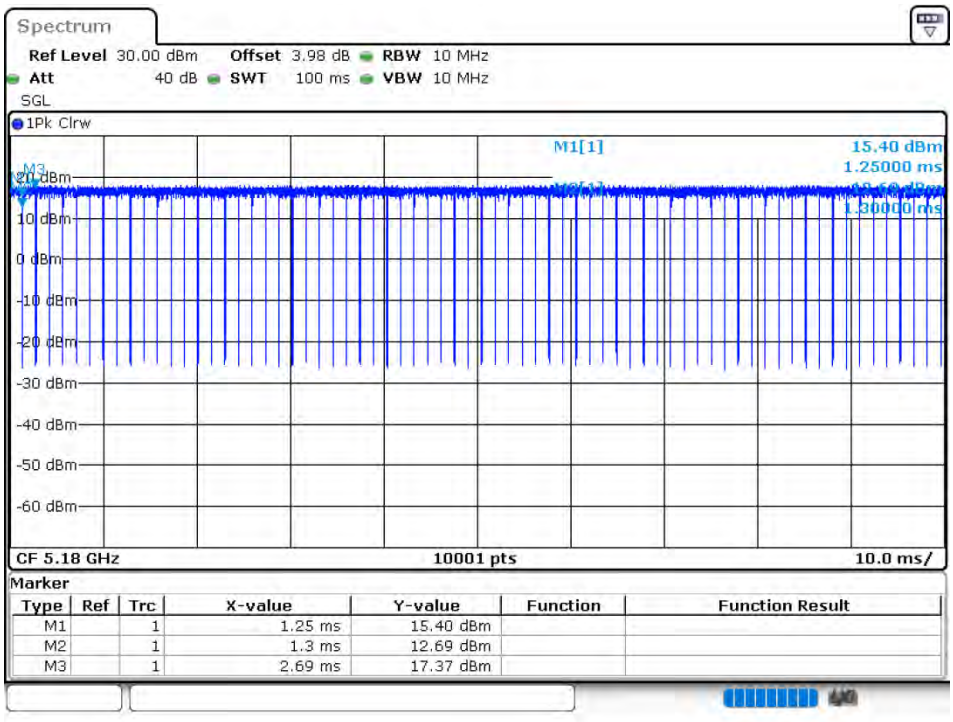
Duty Cycle NVNT a 5200MHz Ant1



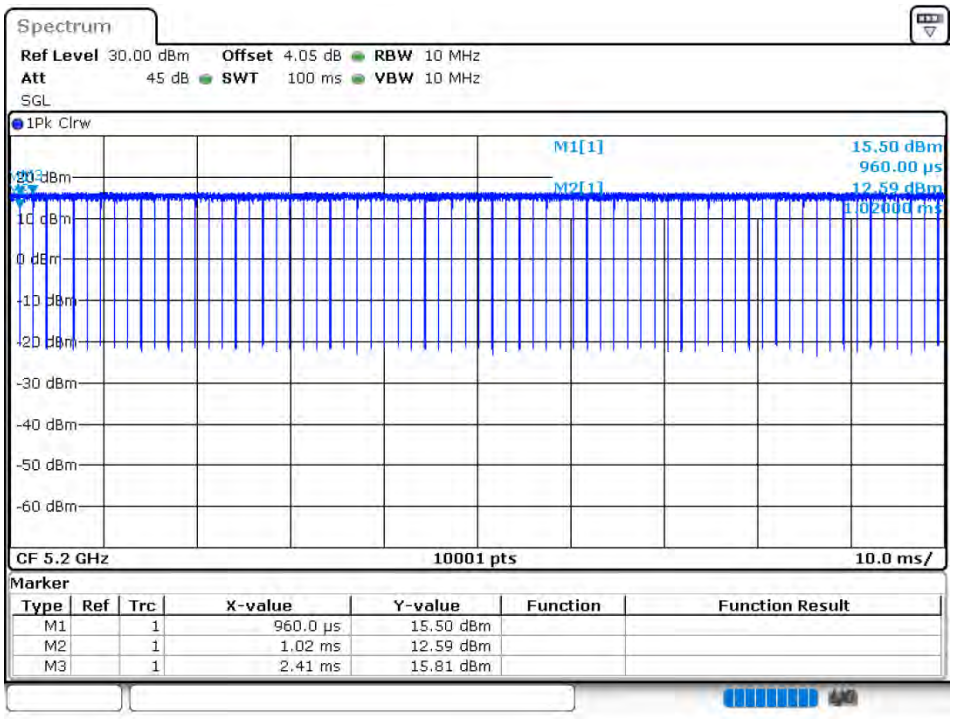
Duty Cycle NVNT a 5240MHz Ant1



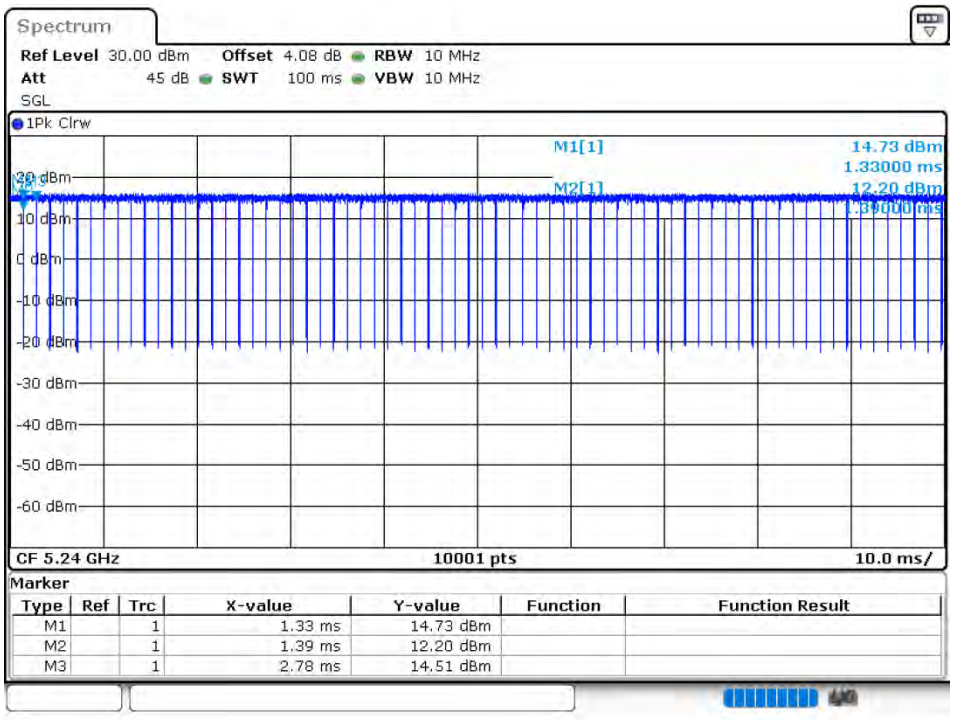
Duty Cycle NVNT a 5180MHz Ant2



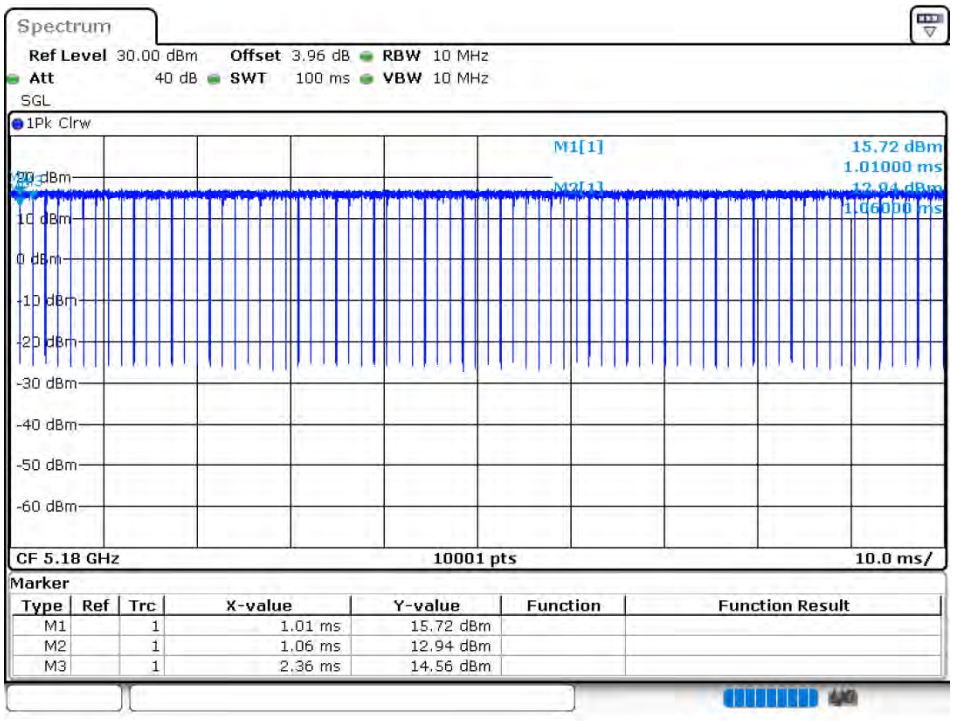
Duty Cycle NVNT a 5200MHz Ant2



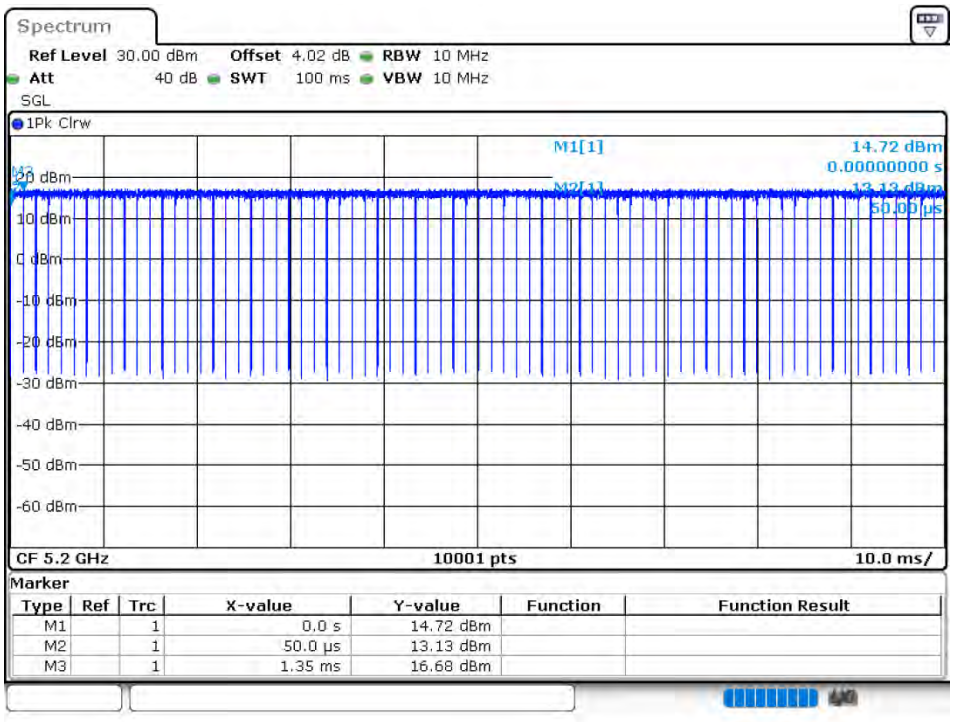
Duty Cycle NVNT a 5240MHz Ant2



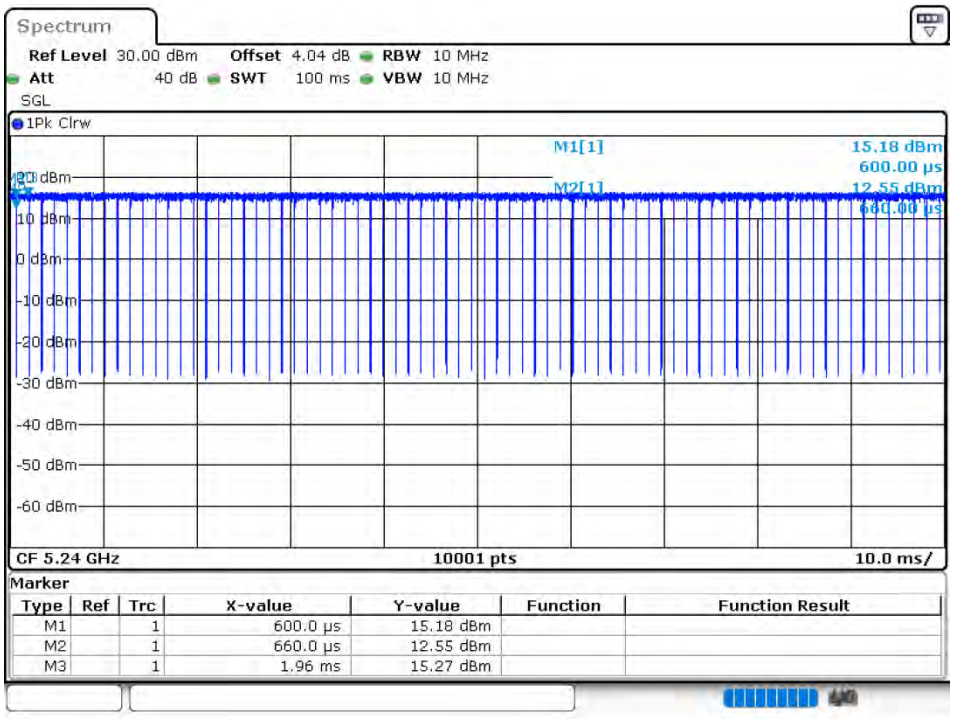
Duty Cycle NVNT n20 5180MHz Ant1



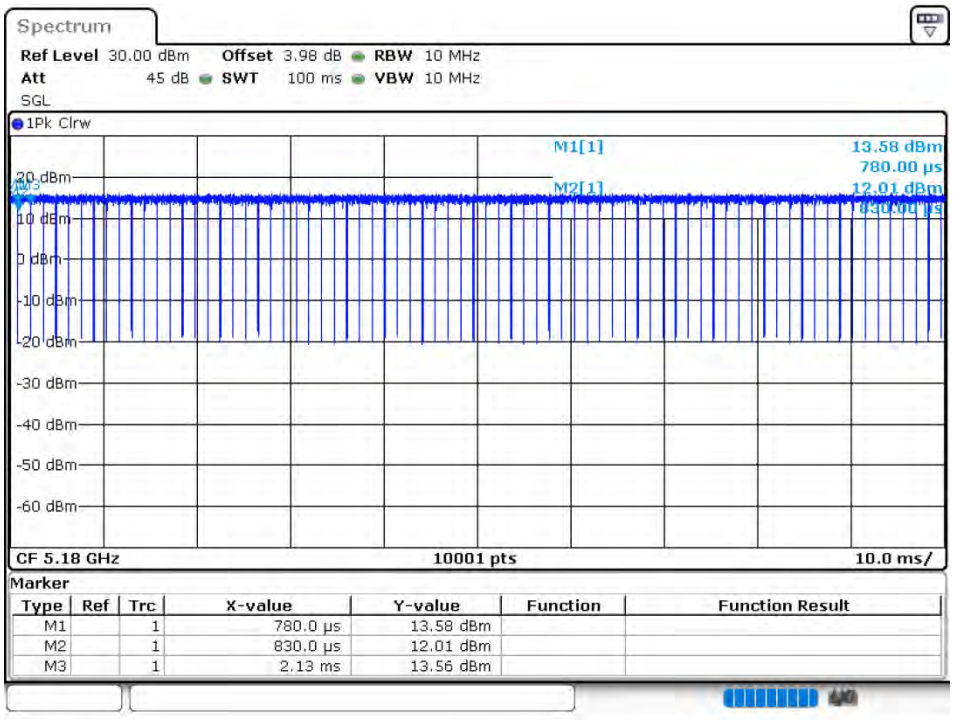
Duty Cycle NVNT n20 5200MHz Ant1



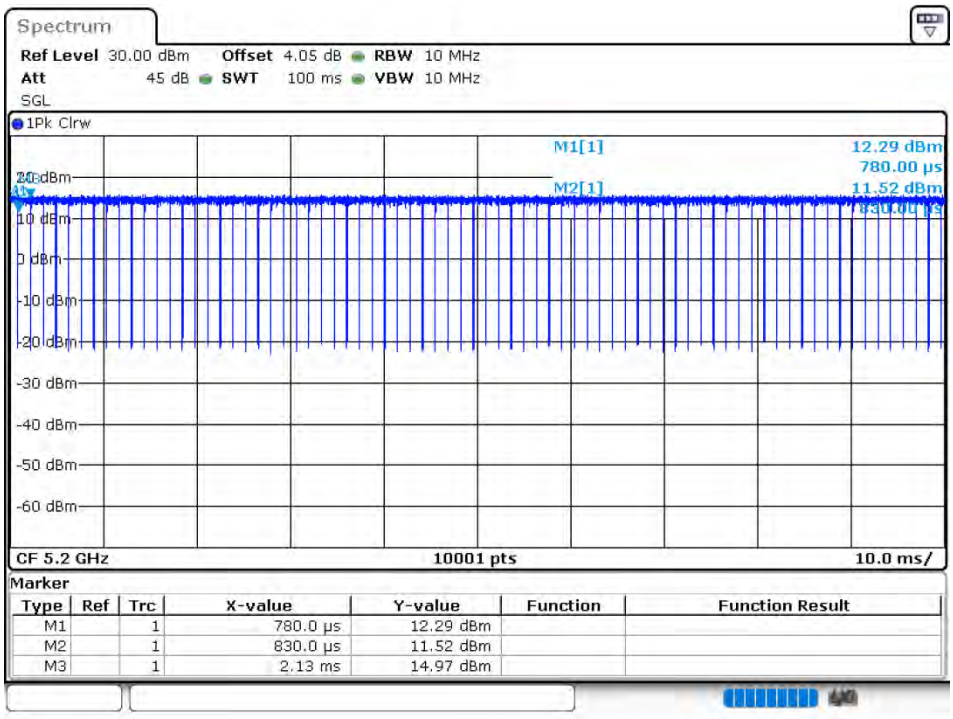
Duty Cycle NVNT n20 5240MHz Ant1



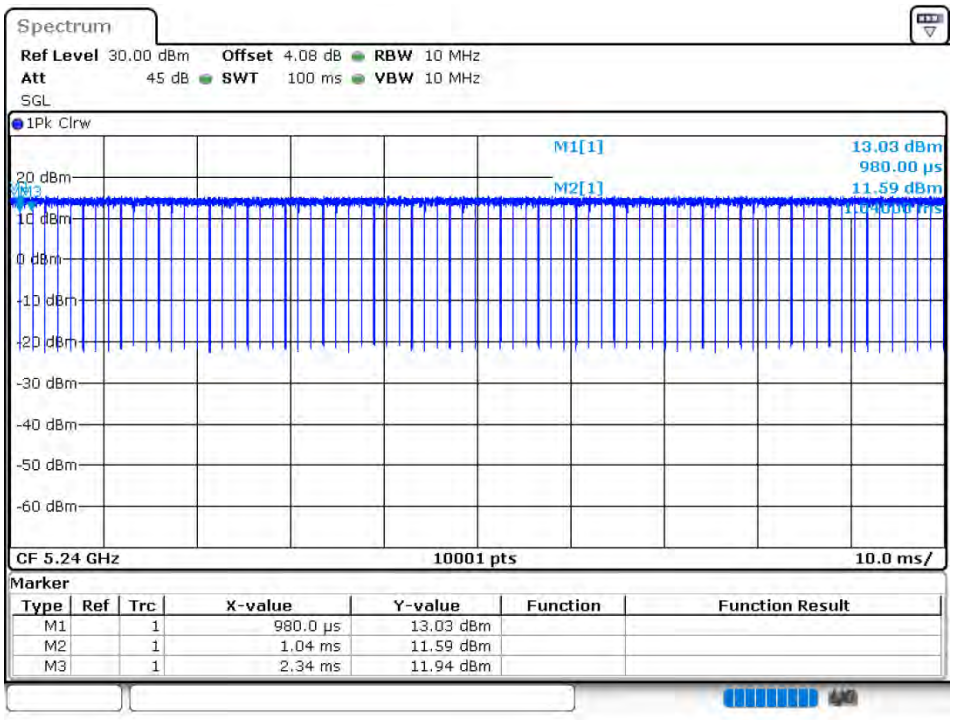
Duty Cycle NVNT n20 5180MHz Ant2



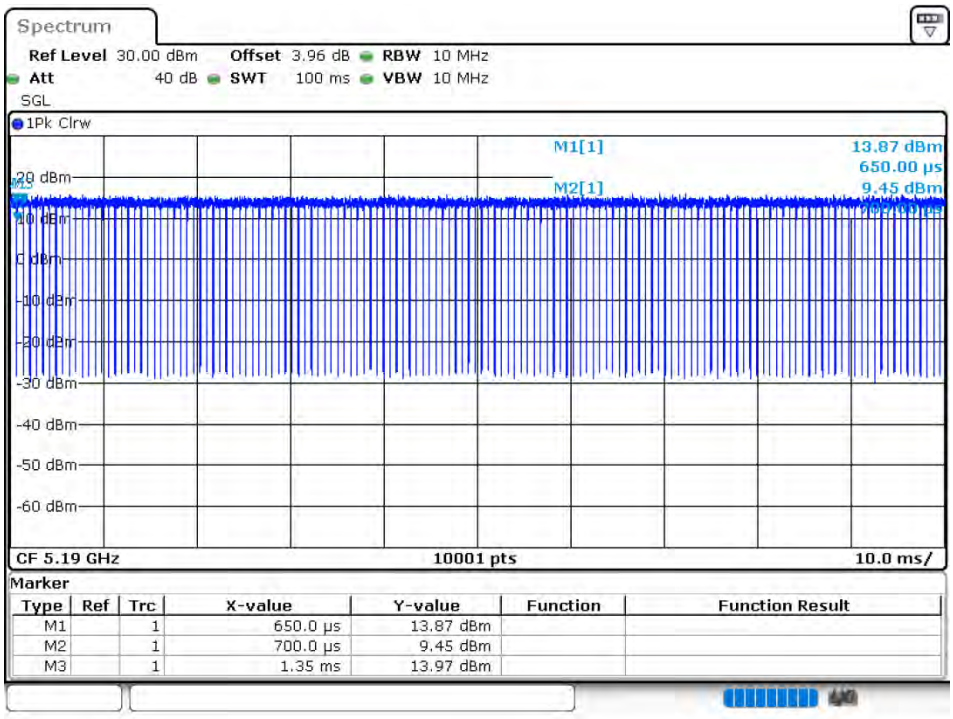
Duty Cycle NVNT n20 5200MHz Ant2



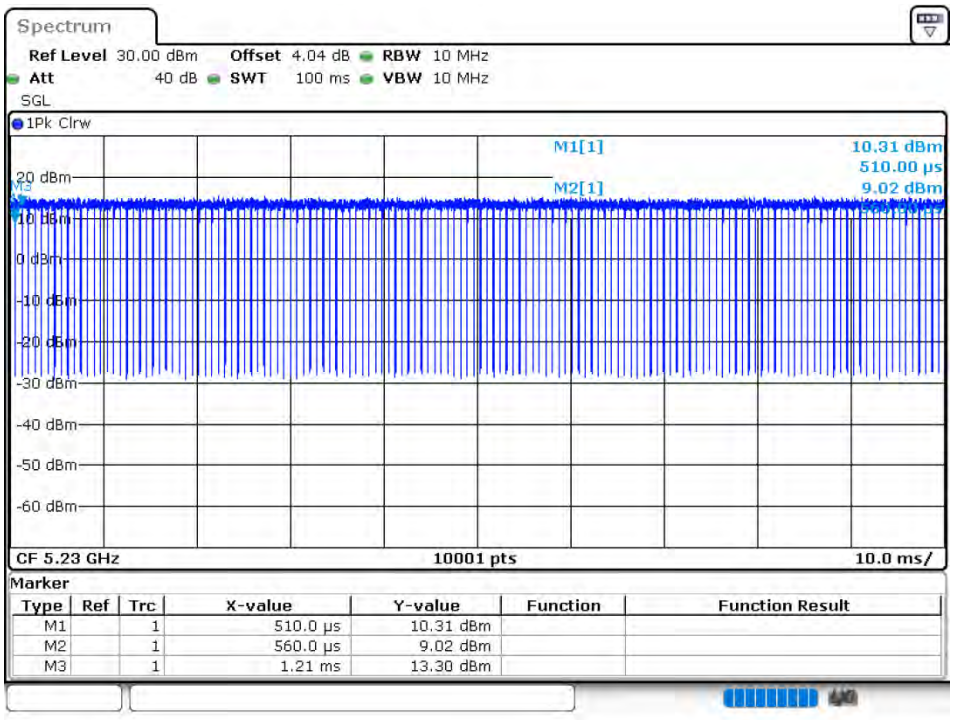
Duty Cycle NVNT n20 5240MHz Ant2



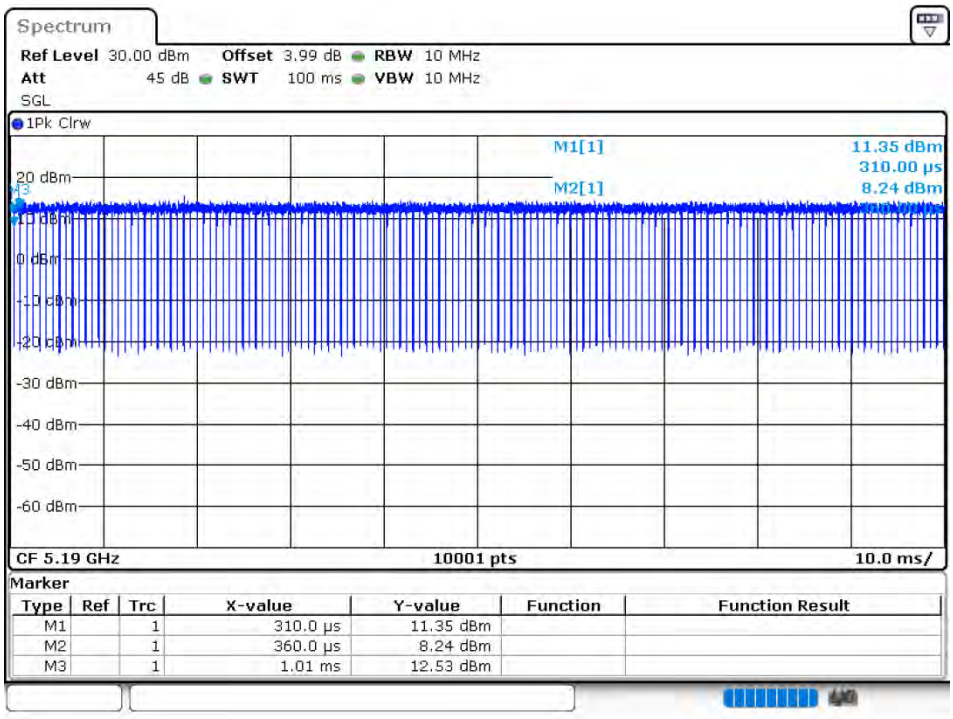
Duty Cycle NVNT n40 5190MHz Ant1



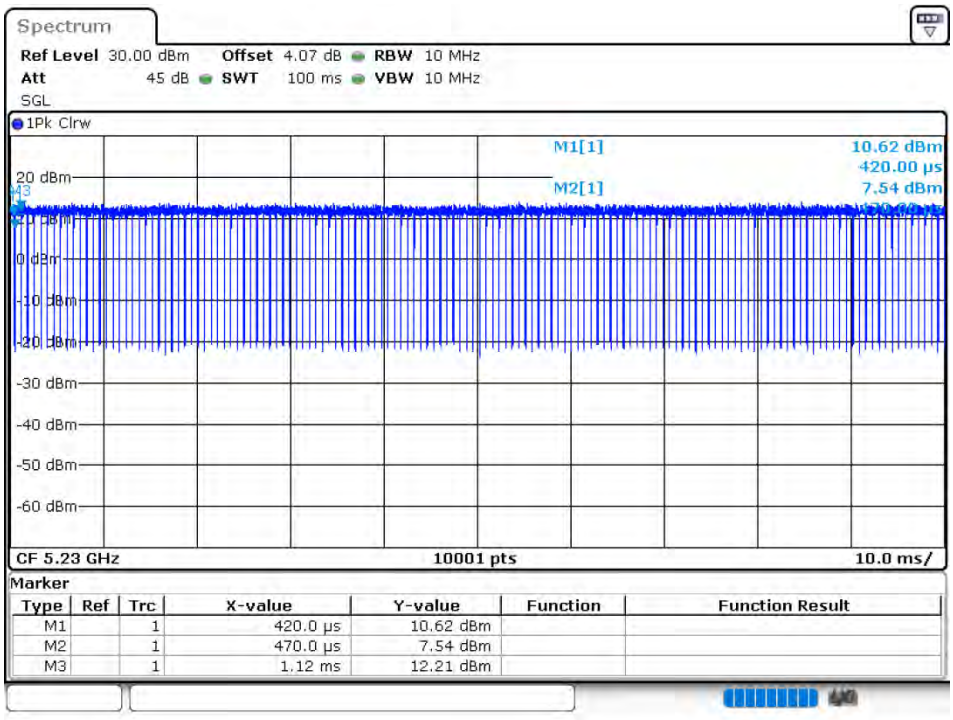
Duty Cycle NVNT n40 5230MHz Ant1



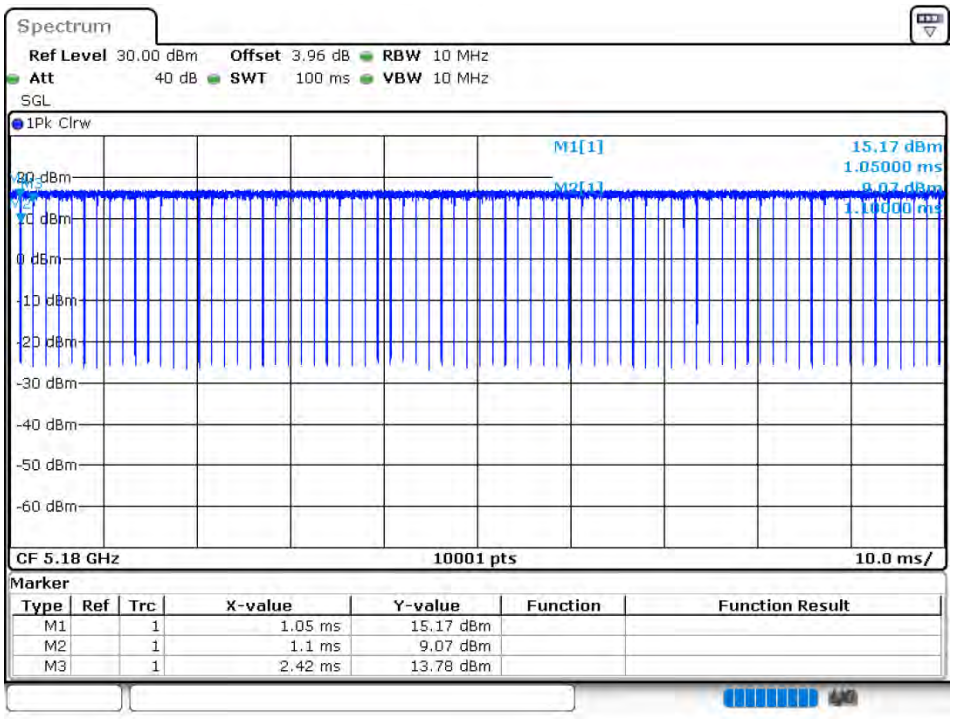
Duty Cycle NVNT n40 5190MHz Ant2



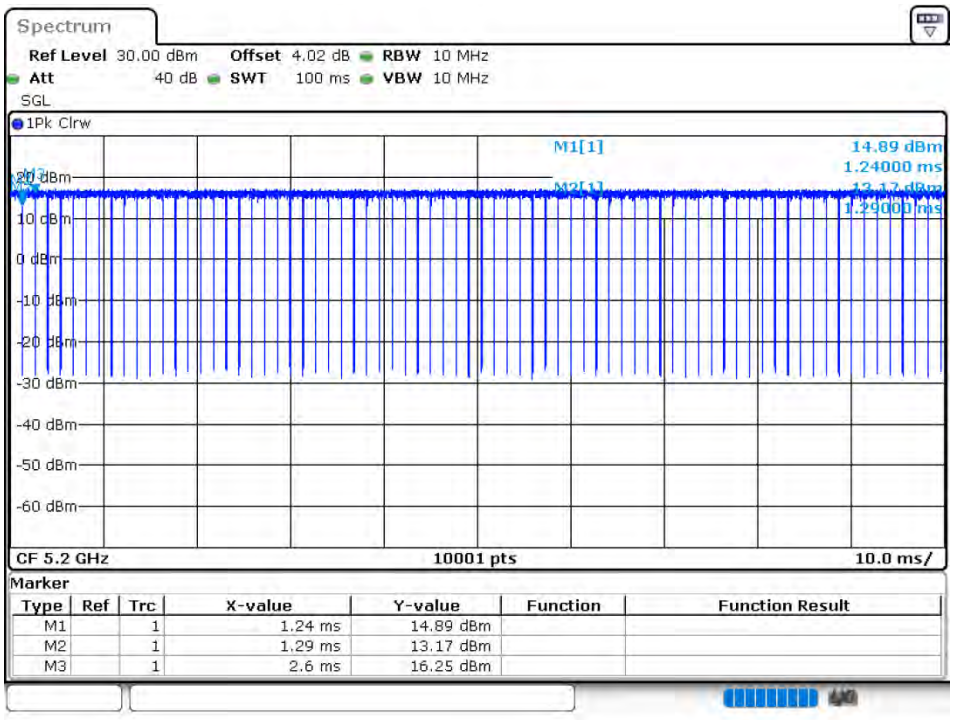
Duty Cycle NVNT n40 5230MHz Ant2



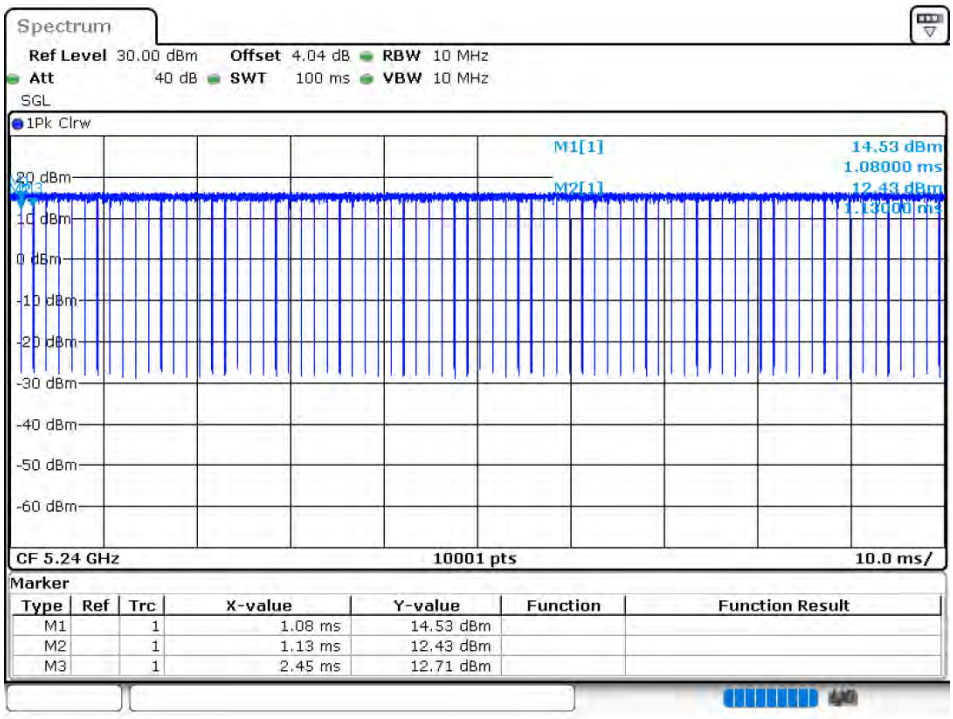
Duty Cycle NVNT ac20 5180MHz Ant1



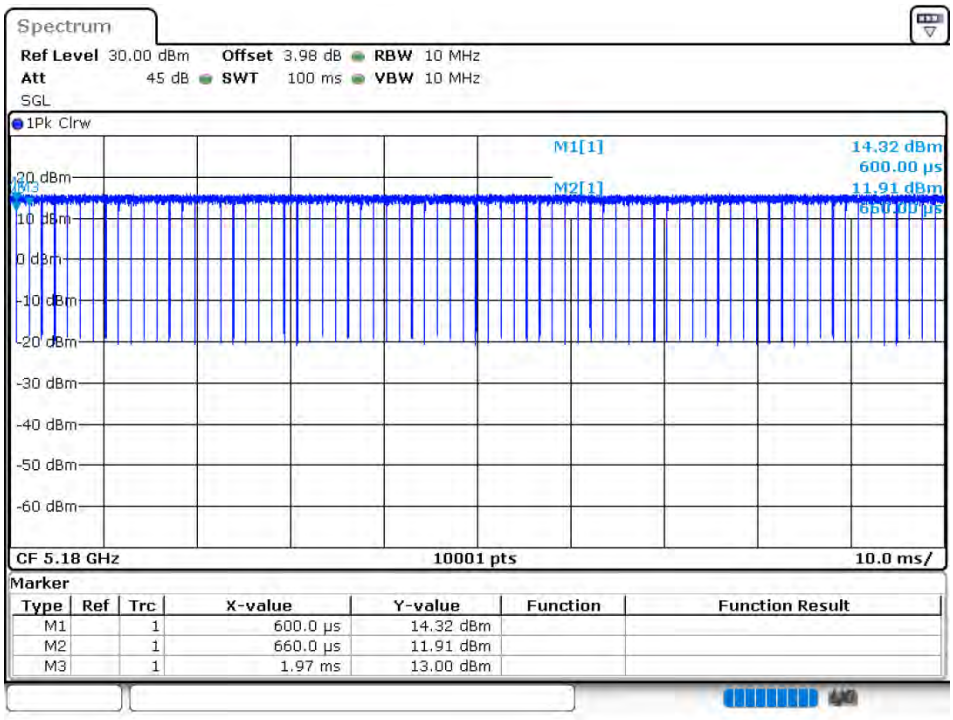
Duty Cycle NVNT ac20 5200MHz Ant1



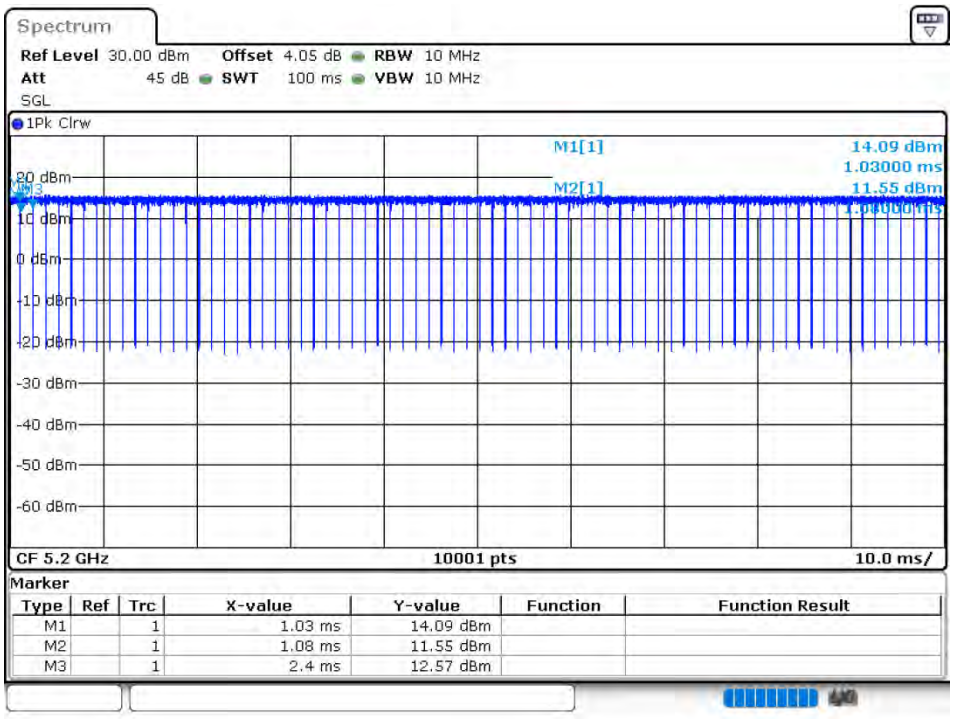
Duty Cycle NVNT ac20 5240MHz Ant1



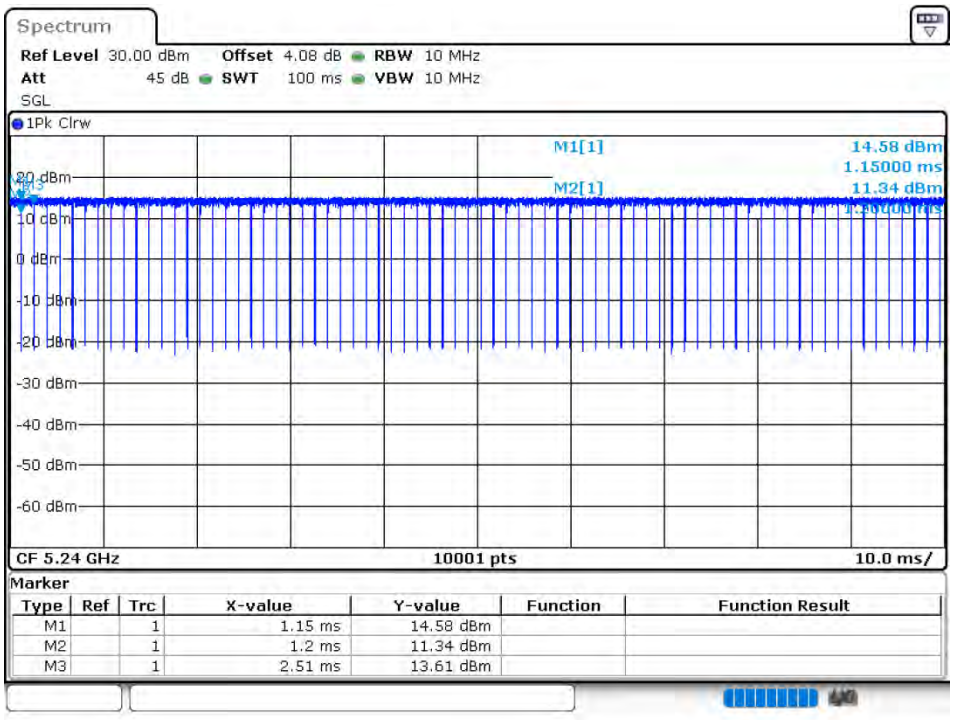
Duty Cycle NVNT ac20 5180MHz Ant2



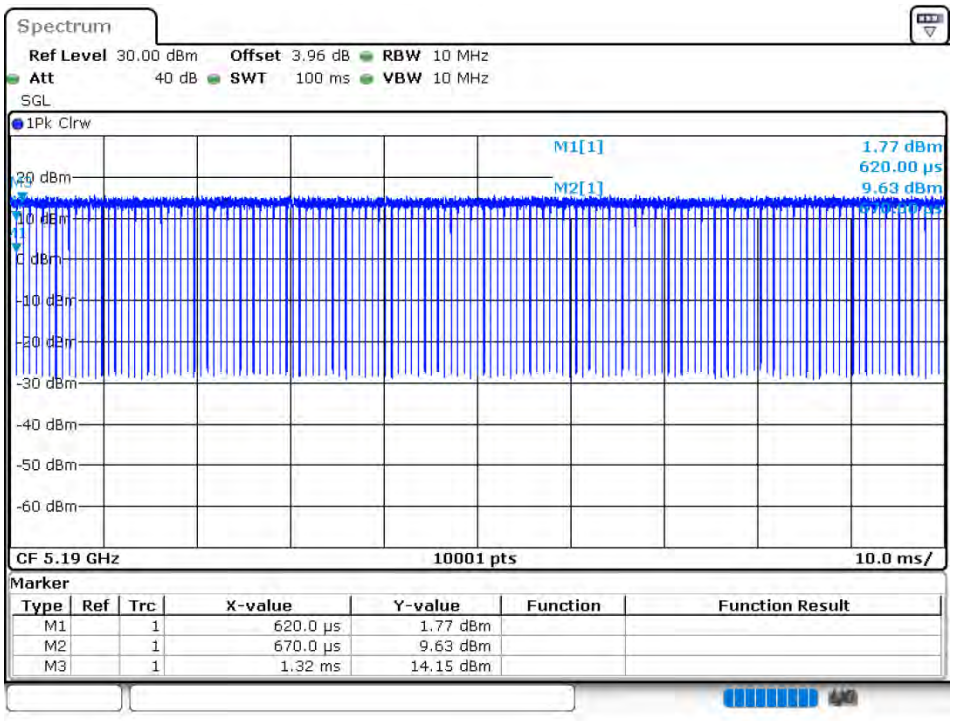
Duty Cycle NVNT ac20 5200MHz Ant2



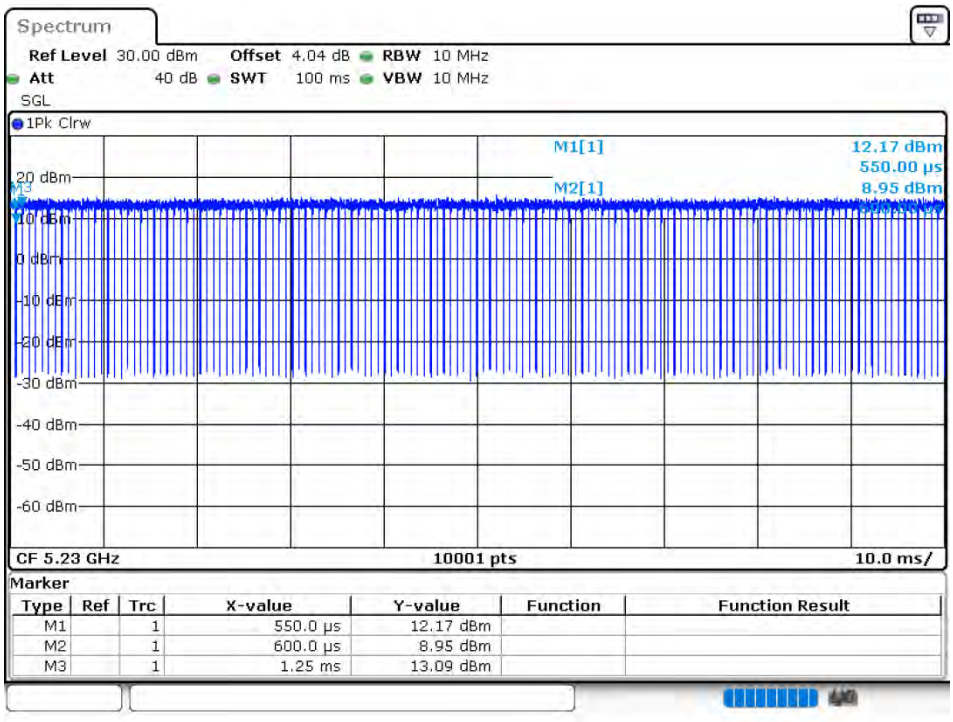
Duty Cycle NVNT ac20 5240MHz Ant2



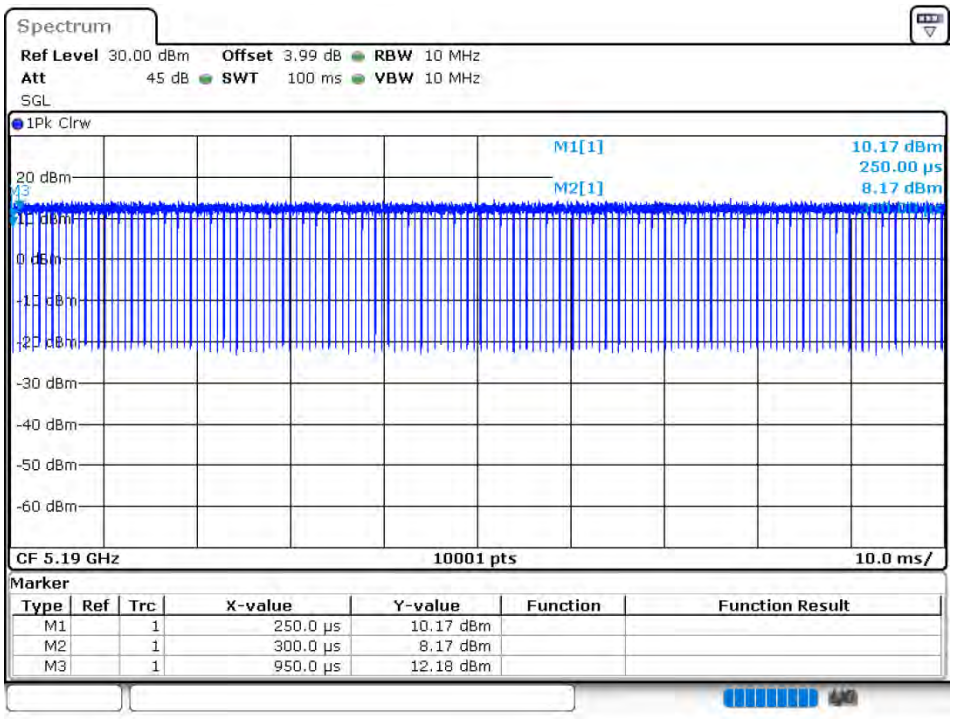
Duty Cycle NVNT ac40 5190MHz Ant1



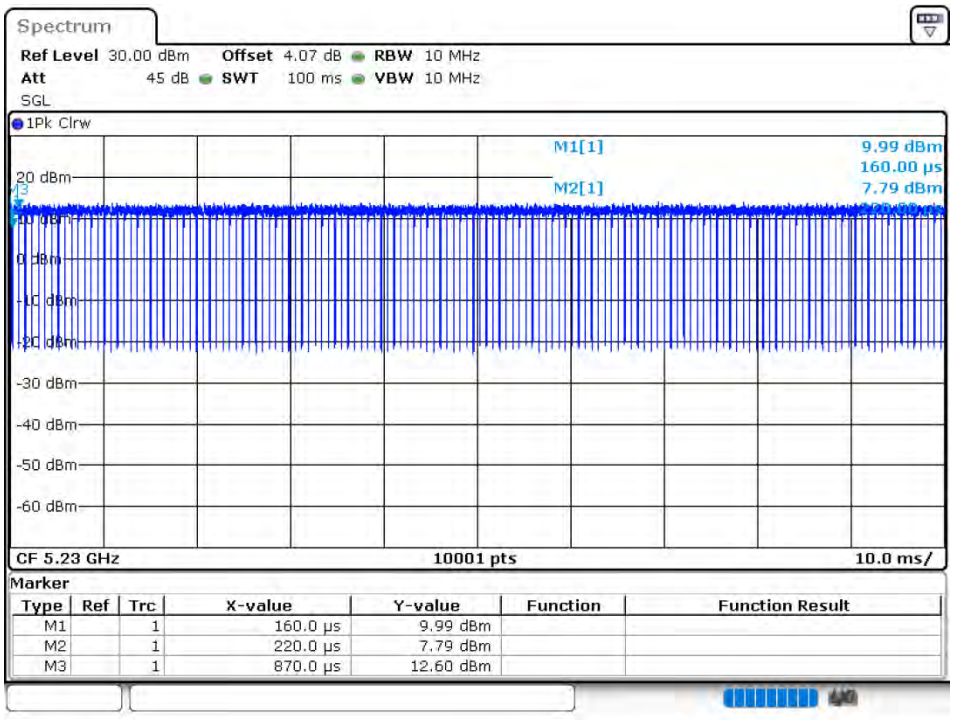
Duty Cycle NVNT ac40 5230MHz Ant1



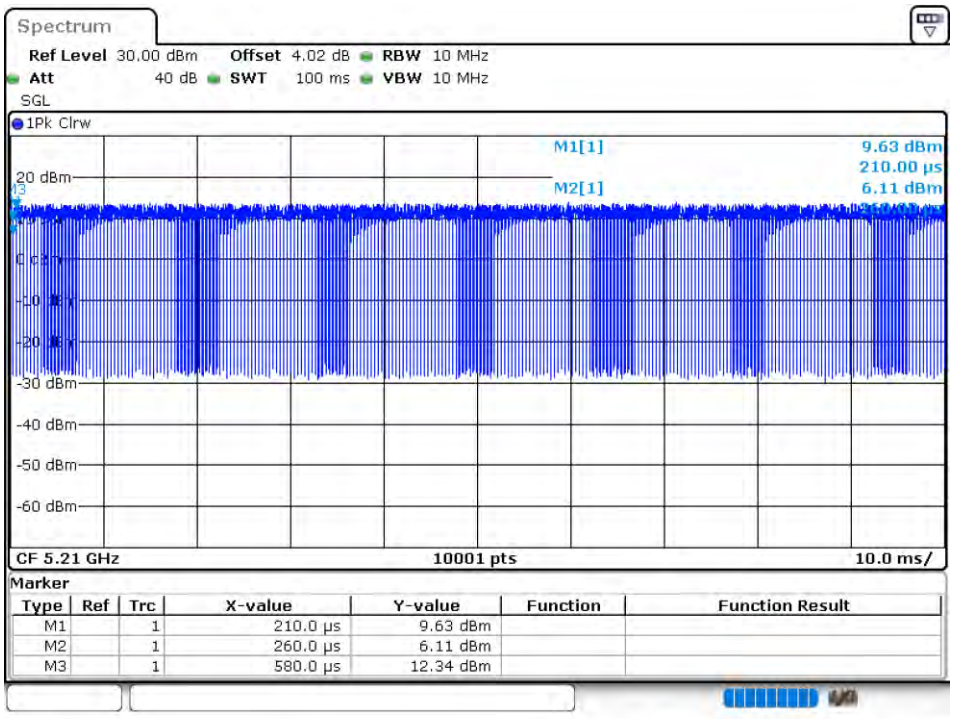
Duty Cycle NVNT ac40 5190MHz Ant2



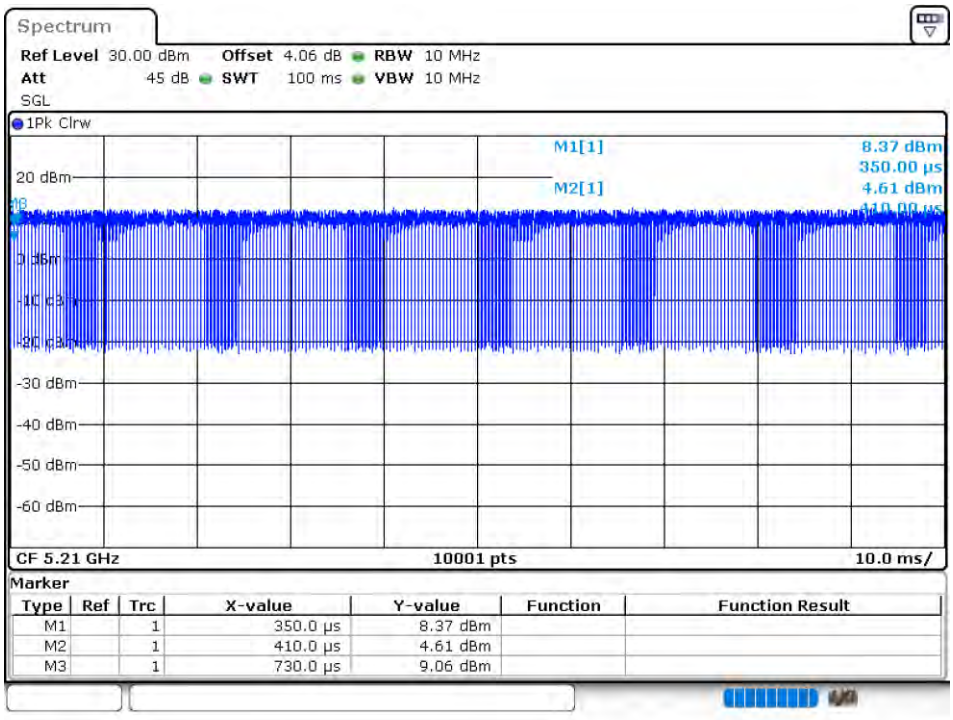
Duty Cycle NVNT ac40 5230MHz Ant2



Duty Cycle NVNT ac80 5210MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant2



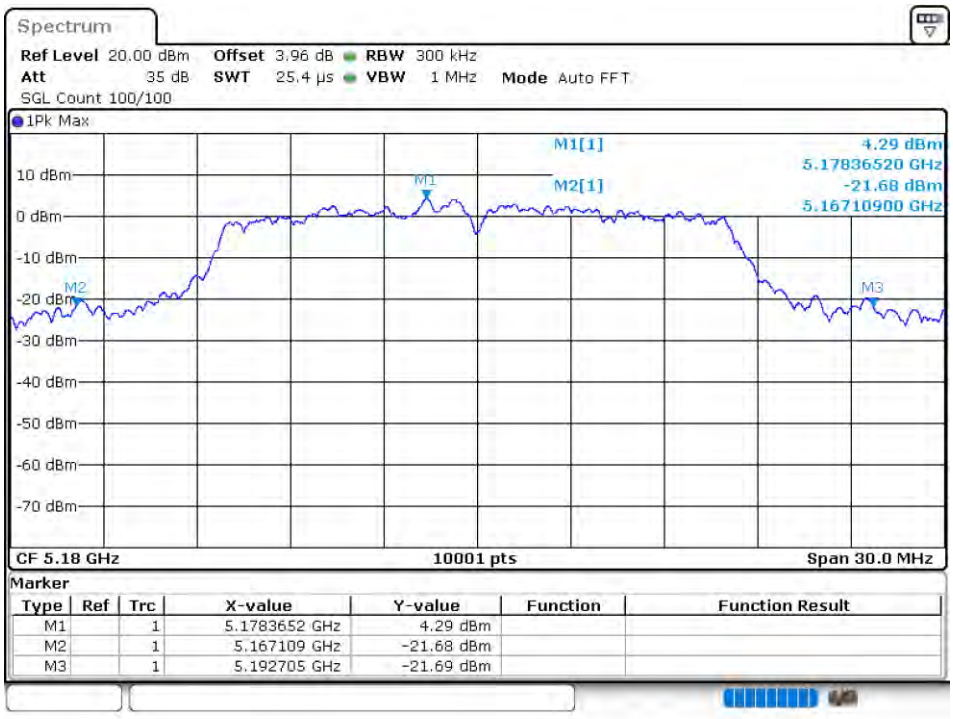
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.76	24	Pass
NVNT	a	5200	Ant1	12.7	24	Pass
NVNT	a	5240	Ant1	13.14	24	Pass
NVNT	a	5180	Ant2	12.12	24	Pass
NVNT	a	5200	Ant2	11.96	24	Pass
NVNT	a	5240	Ant2	11.61	24	Pass
NVNT	n20	5180	Ant1	11.64	24	Pass
NVNT	n20	5200	Ant1	11.61	24	Pass
NVNT	n20	5240	Ant1	11.89	24	Pass
NVNT	n20	5180	Ant2	10.88	24	Pass
NVNT	n20	5200	Ant2	10.85	24	Pass
NVNT	n20	5240	Ant2	10.49	24	Pass
NVNT	n40	5190	Ant1	11.58	24	Pass
NVNT	n40	5230	Ant1	11.93	24	Pass
NVNT	n40	5190	Ant2	10.9	24	Pass
NVNT	n40	5230	Ant2	10.67	24	Pass
NVNT	ac20	5180	Ant1	11.55	24	Pass
NVNT	ac20	5200	Ant1	11.62	24	Pass
NVNT	ac20	5240	Ant1	11.94	24	Pass
NVNT	ac20	5180	Ant2	10.91	24	Pass
NVNT	ac20	5200	Ant2	10.83	24	Pass
NVNT	ac20	5240	Ant2	10.54	24	Pass
NVNT	ac40	5190	Ant1	11.67	24	Pass
NVNT	ac40	5230	Ant1	11.88	24	Pass
NVNT	ac40	5190	Ant2	10.87	24	Pass
NVNT	ac40	5230	Ant2	10.68	24	Pass
NVNT	ac80	5210	Ant1	11.63	24	Pass
NVNT	ac80	5210	Ant2	10.62	24	Pass

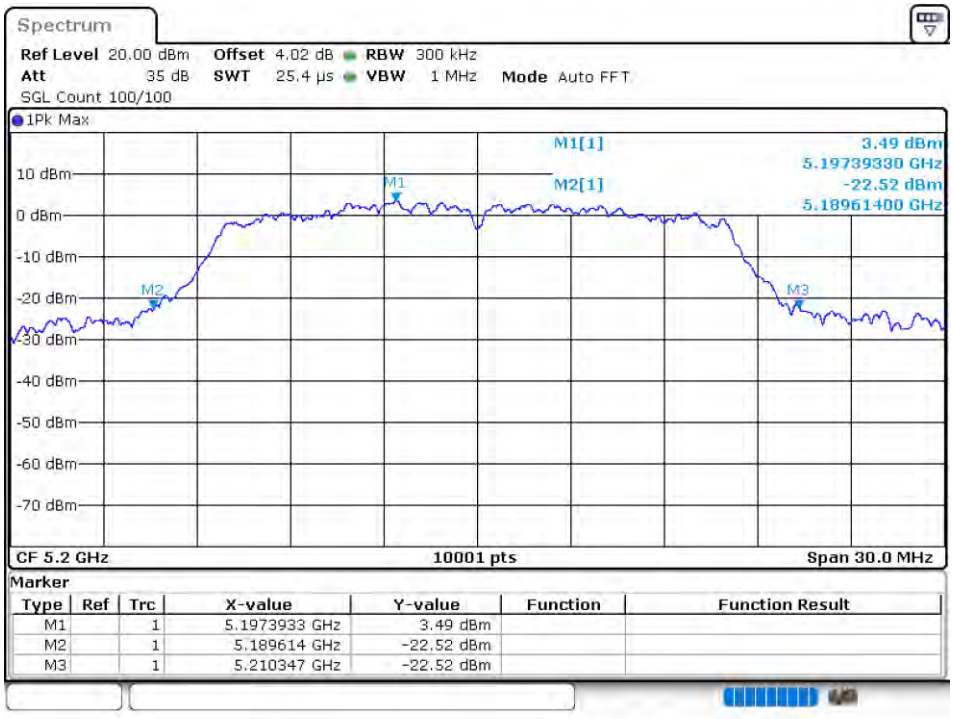
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	25.596	Pass
NVNT	a	5200	Ant1	20.733	Pass
NVNT	a	5240	Ant1	26.28	Pass
NVNT	a	5180	Ant2	28.857	Pass
NVNT	a	5200	Ant2	22.476	Pass
NVNT	a	5240	Ant2	20.43	Pass
NVNT	n20	5180	Ant1	20.31	Pass
NVNT	n20	5200	Ant1	20.73	Pass
NVNT	n20	5240	Ant1	21.156	Pass
NVNT	n20	5180	Ant2	20.187	Pass
NVNT	n20	5200	Ant2	20.382	Pass
NVNT	n20	5240	Ant2	20.415	Pass
NVNT	n40	5190	Ant1	40.47	Pass
NVNT	n40	5230	Ant1	53.292	Pass
NVNT	n40	5190	Ant2	41.07	Pass
NVNT	n40	5230	Ant2	42.738	Pass
NVNT	ac20	5180	Ant1	20.235	Pass
NVNT	ac20	5200	Ant1	20.532	Pass
NVNT	ac20	5240	Ant1	22.287	Pass
NVNT	ac20	5180	Ant2	19.989	Pass
NVNT	ac20	5200	Ant2	20.451	Pass
NVNT	ac20	5240	Ant2	20.463	Pass
NVNT	ac40	5190	Ant1	40.446	Pass
NVNT	ac40	5230	Ant1	58.206	Pass
NVNT	ac40	5190	Ant2	40.584	Pass
NVNT	ac40	5230	Ant2	45.918	Pass
NVNT	ac80	5210	Ant1	81.636	Pass
NVNT	ac80	5210	Ant2	81.624	Pass

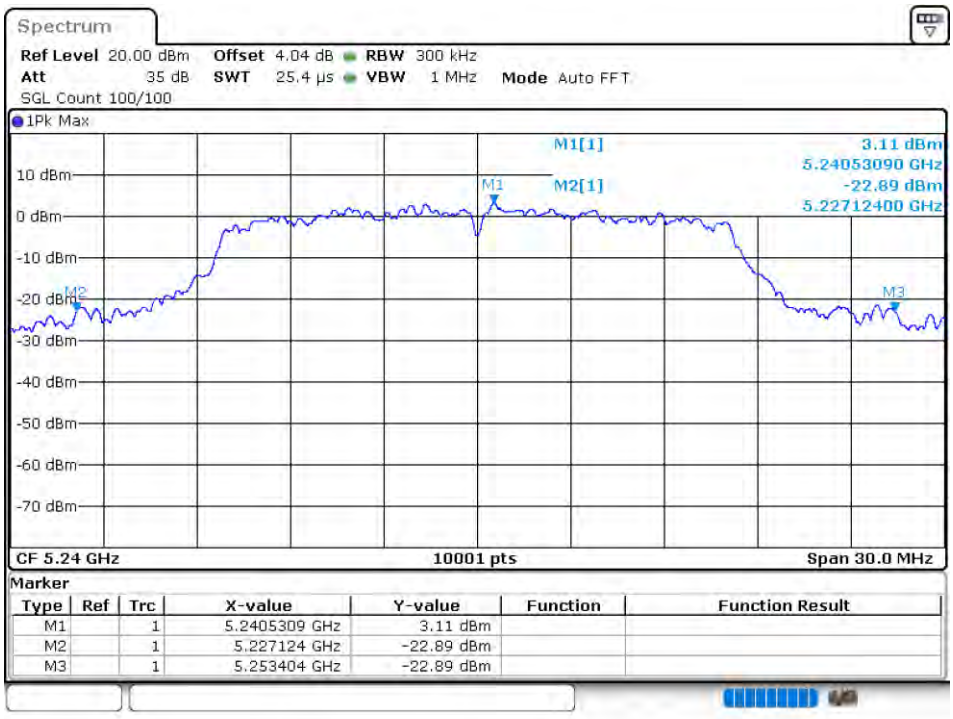
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1



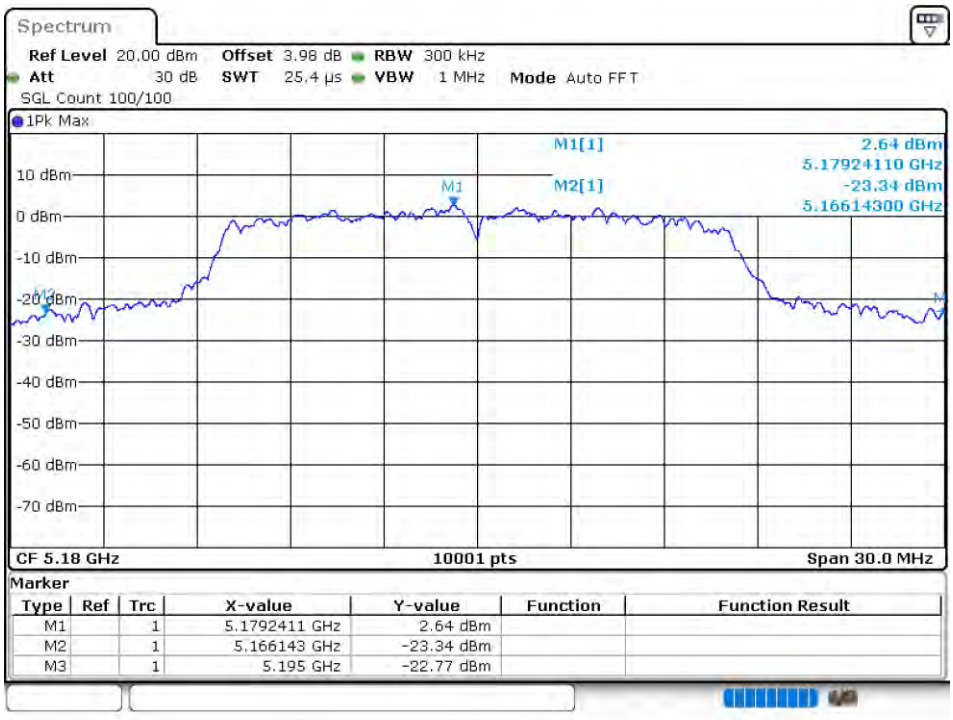
-26dB Bandwidth NVNT a 5200MHz Ant1



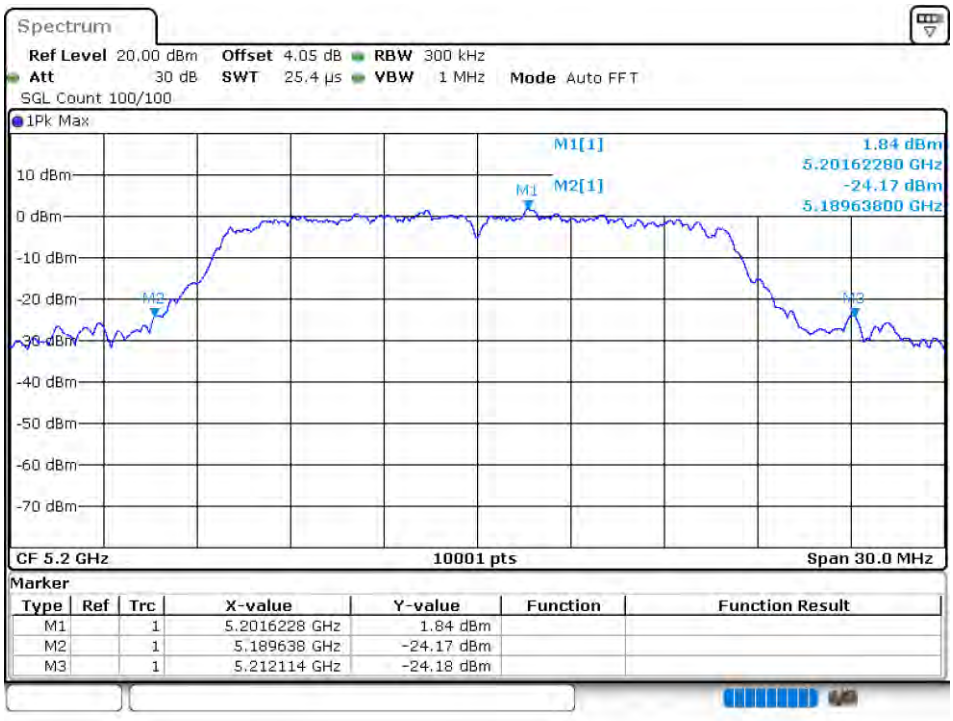
-26dB Bandwidth NVNT a 5240MHz Ant1



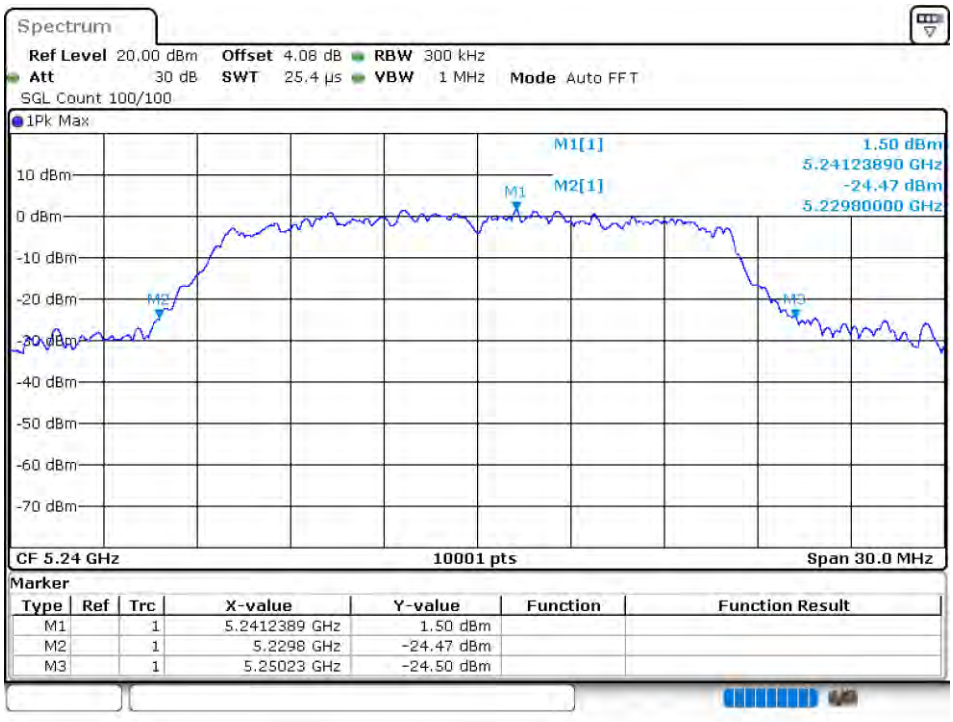
-26dB Bandwidth NVNT a 5180MHz Ant2



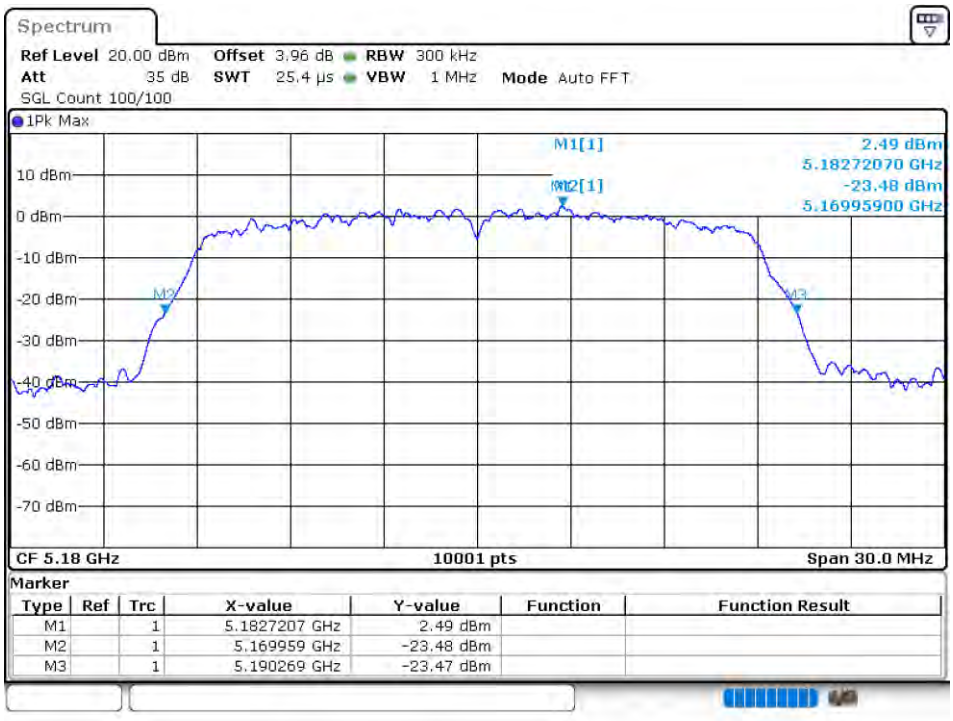
-26dB Bandwidth NVNT a 5200MHz Ant2



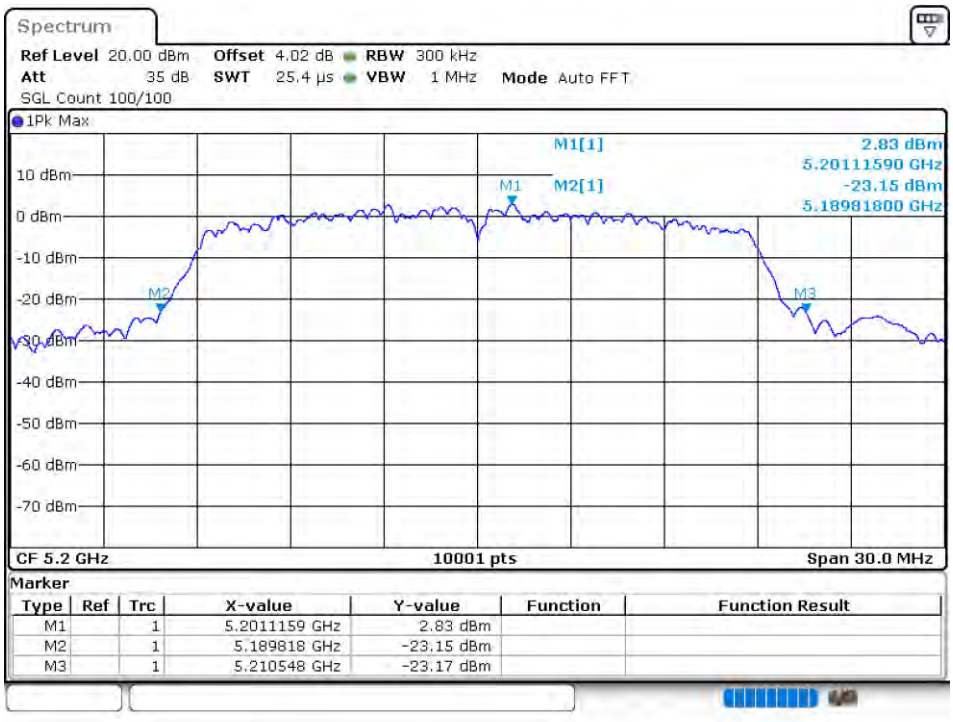
-26dB Bandwidth NVNT a 5240MHz Ant2



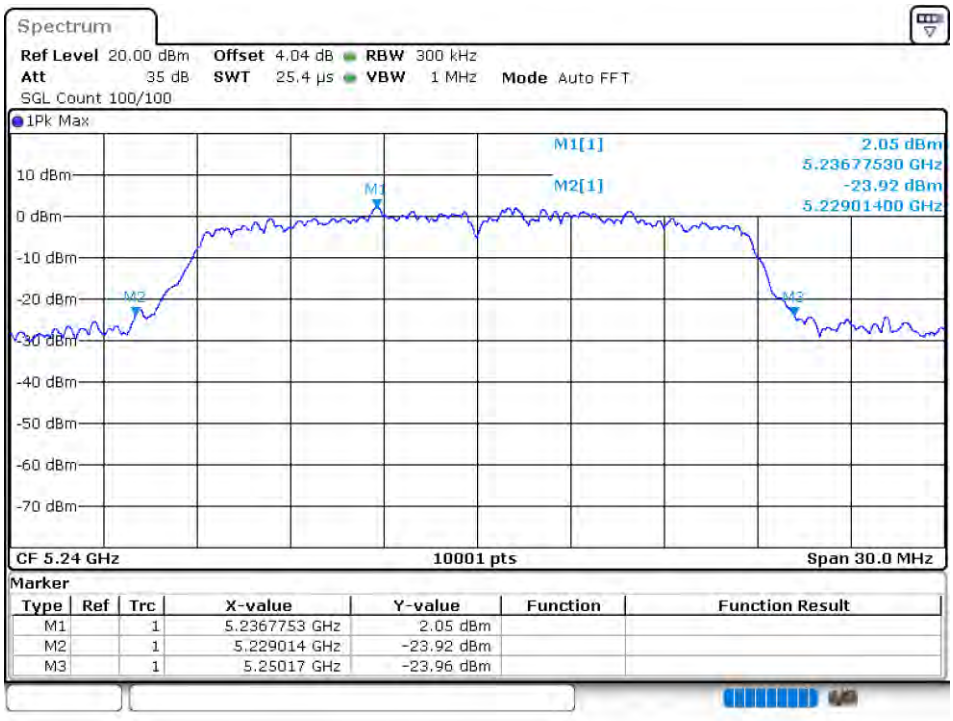
-26dB Bandwidth NVNT n20 5180MHz Ant1



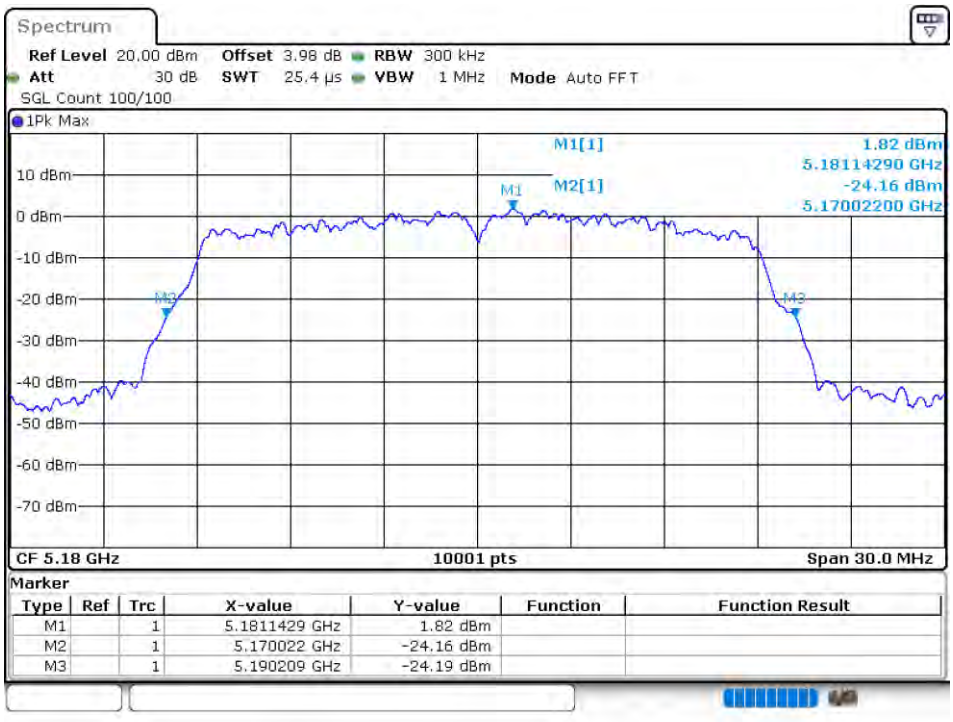
-26dB Bandwidth NVNT n20 5200MHz Ant1



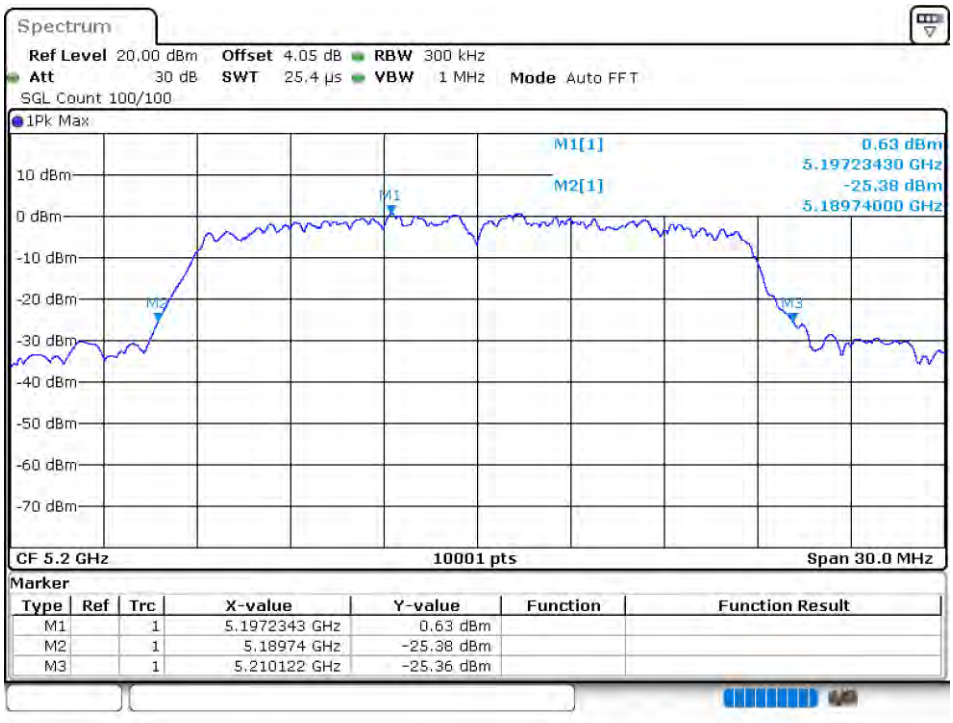
-26dB Bandwidth NVNT n20 5240MHz Ant1



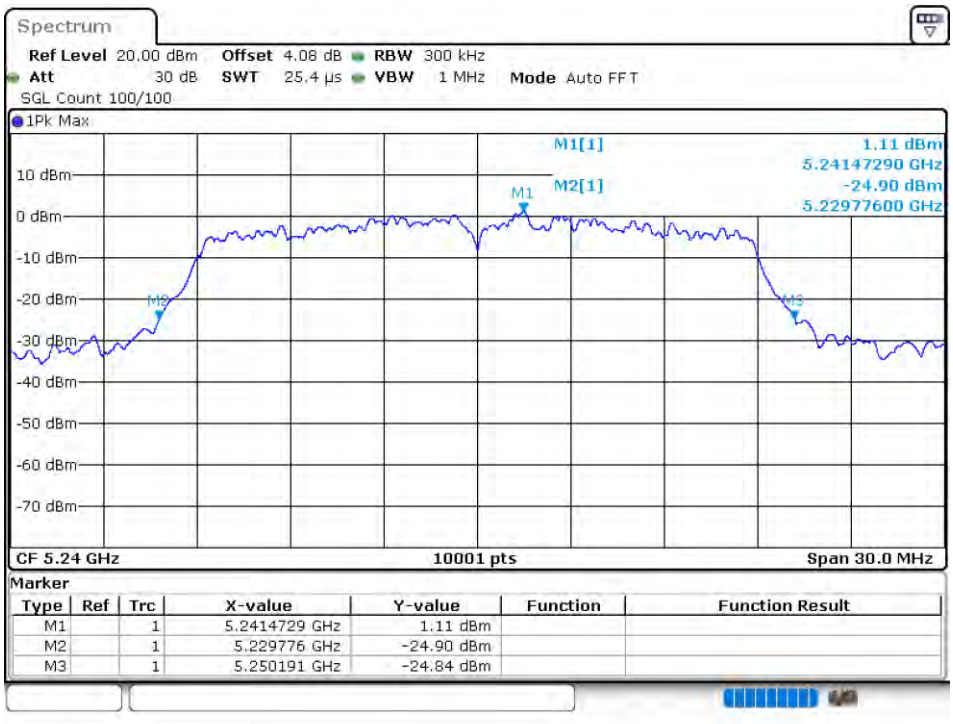
-26dB Bandwidth NVNT n20 5180MHz Ant2



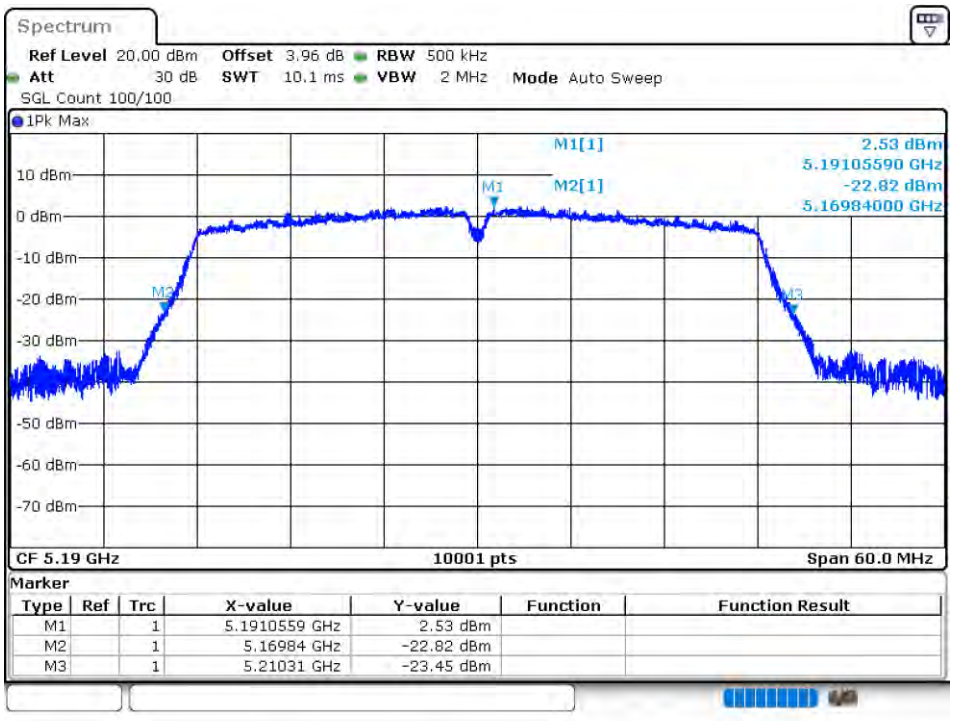
-26dB Bandwidth NVNT n20 5200MHz Ant2



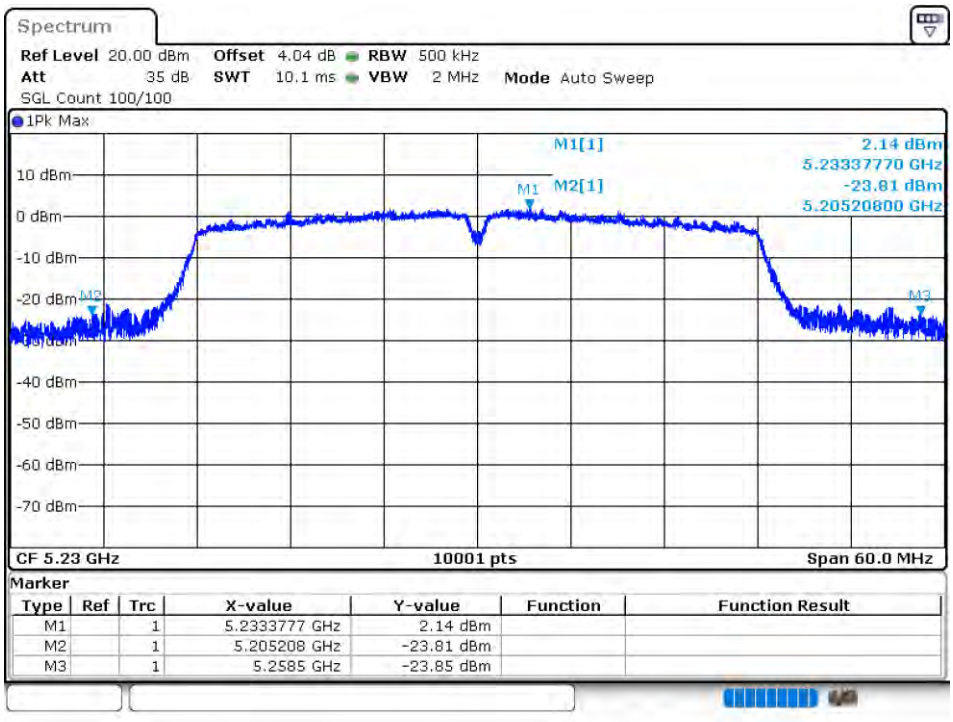
-26dB Bandwidth NVNT n20 5240MHz Ant2



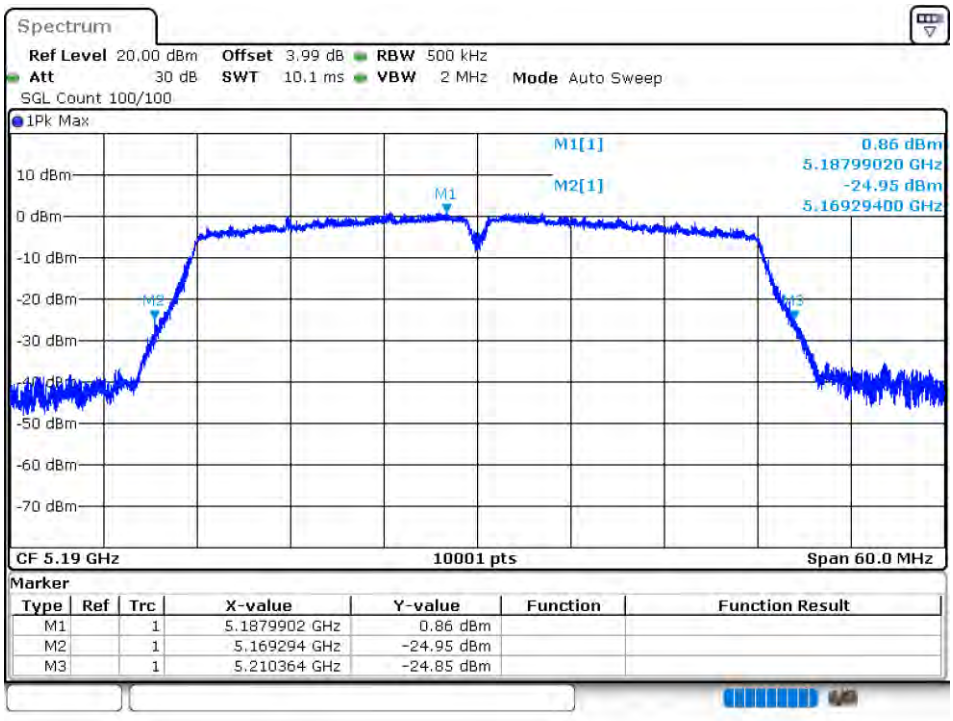
-26dB Bandwidth NVNT n40 5190MHz Ant1



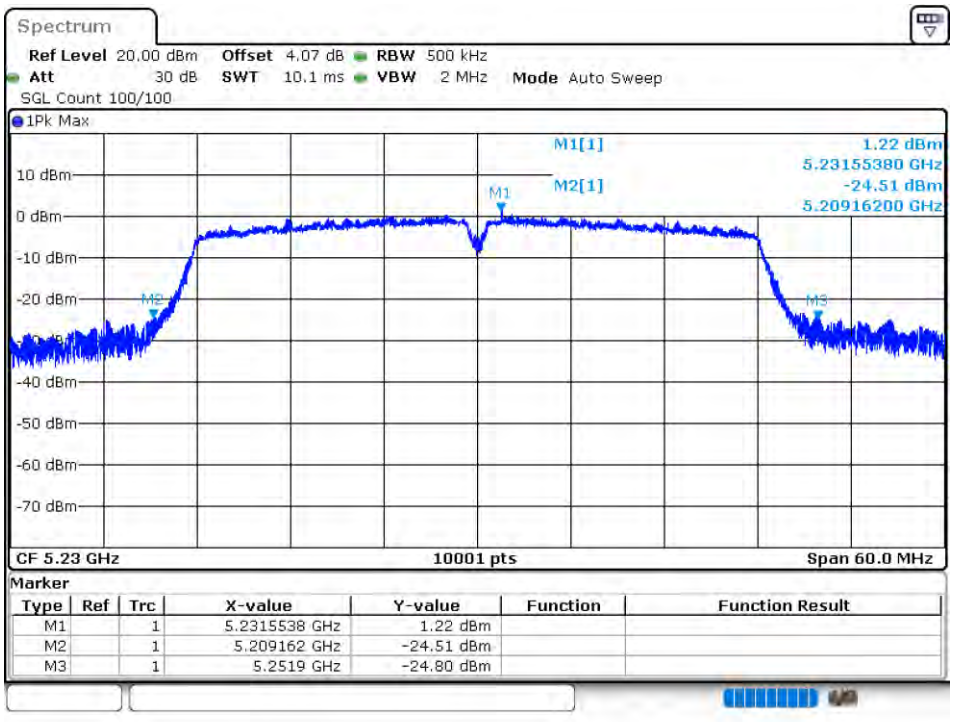
-26dB Bandwidth NVNT n40 5230MHz Ant1



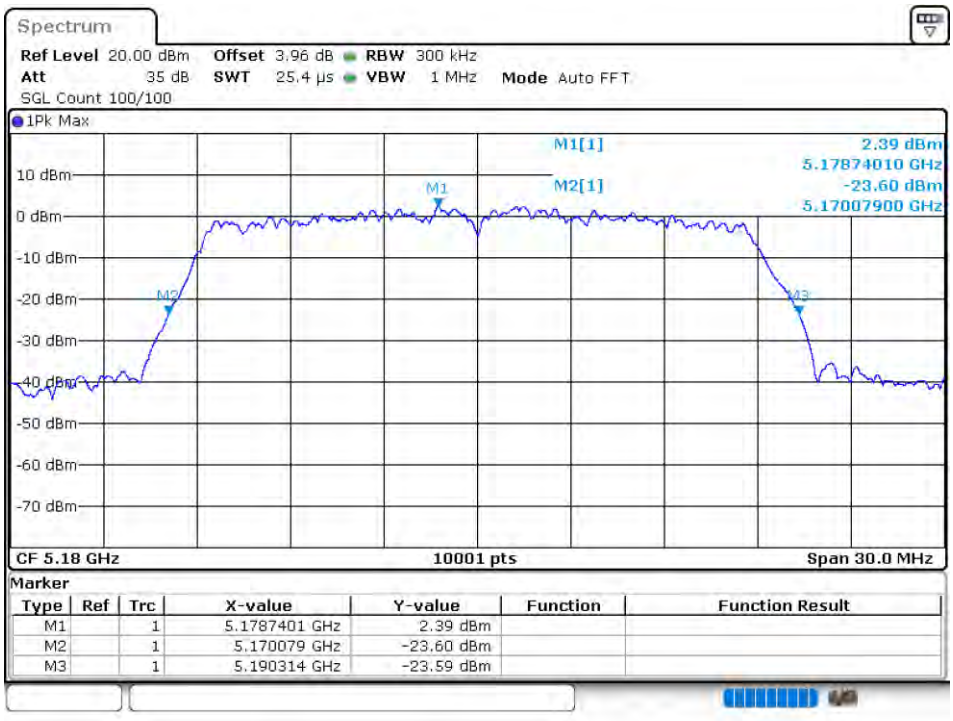
-26dB Bandwidth NVNT n40 5190MHz Ant2



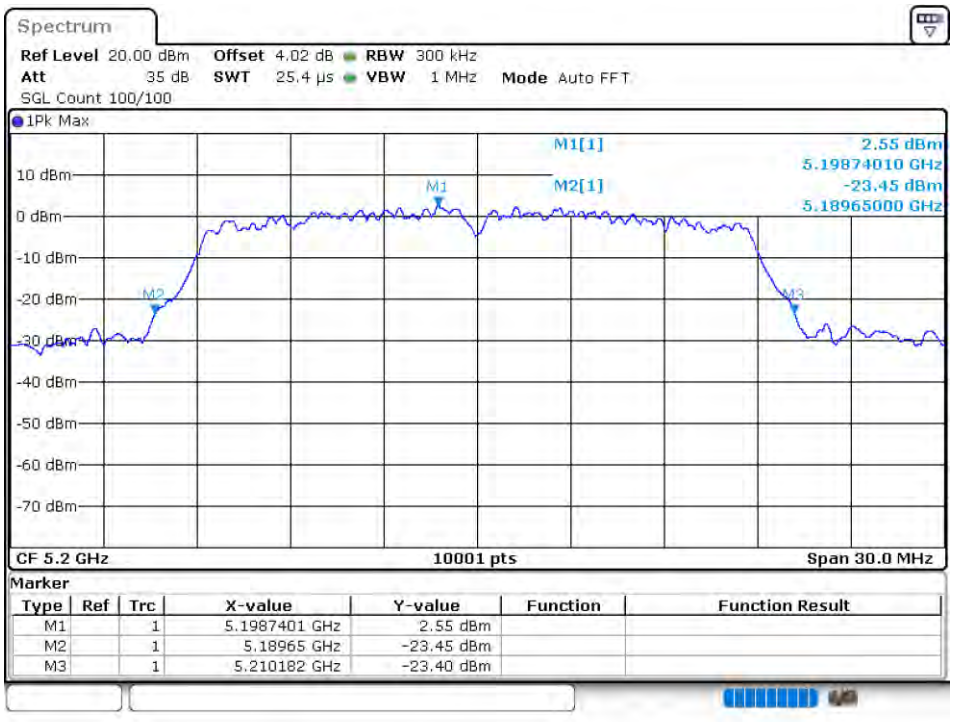
-26dB Bandwidth NVNT n40 5230MHz Ant2



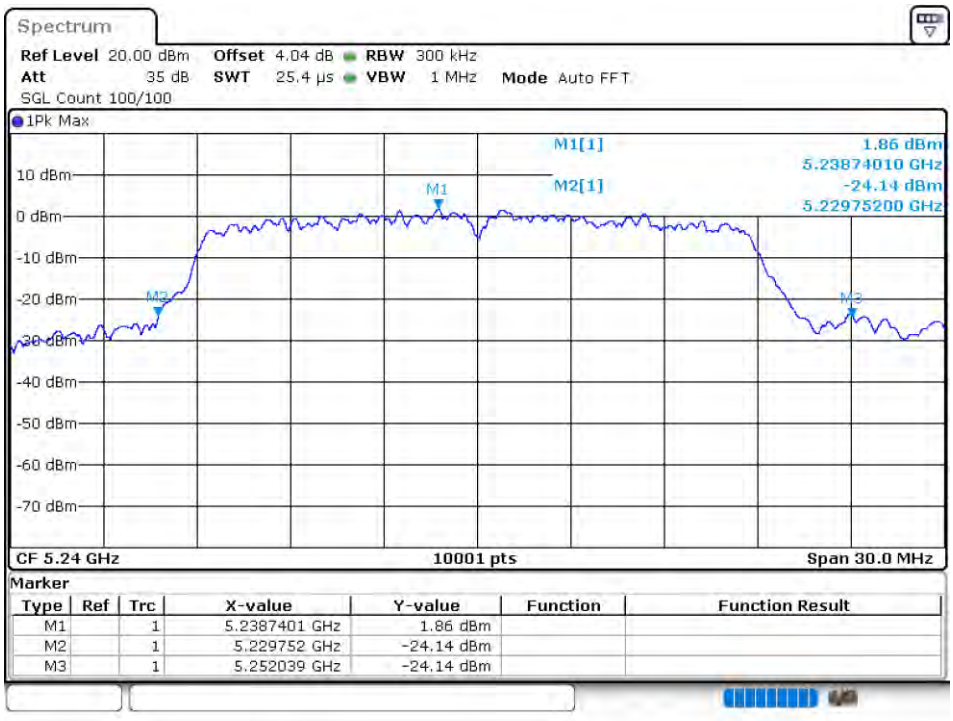
-26dB Bandwidth NVNT ac20 5180MHz Ant1



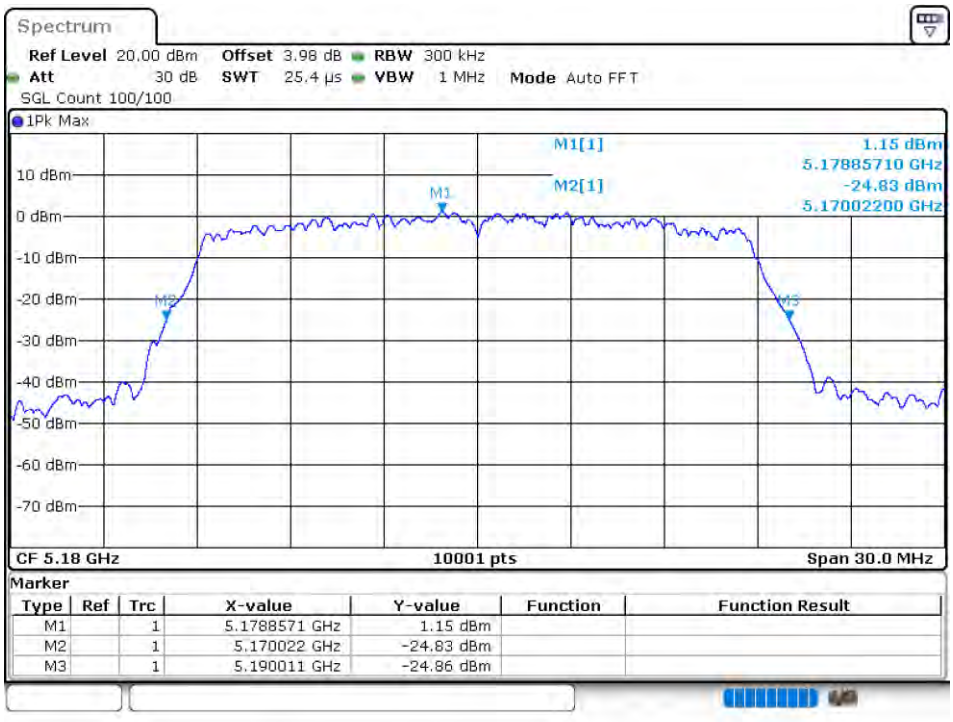
-26dB Bandwidth NVNT ac20 5200MHz Ant1



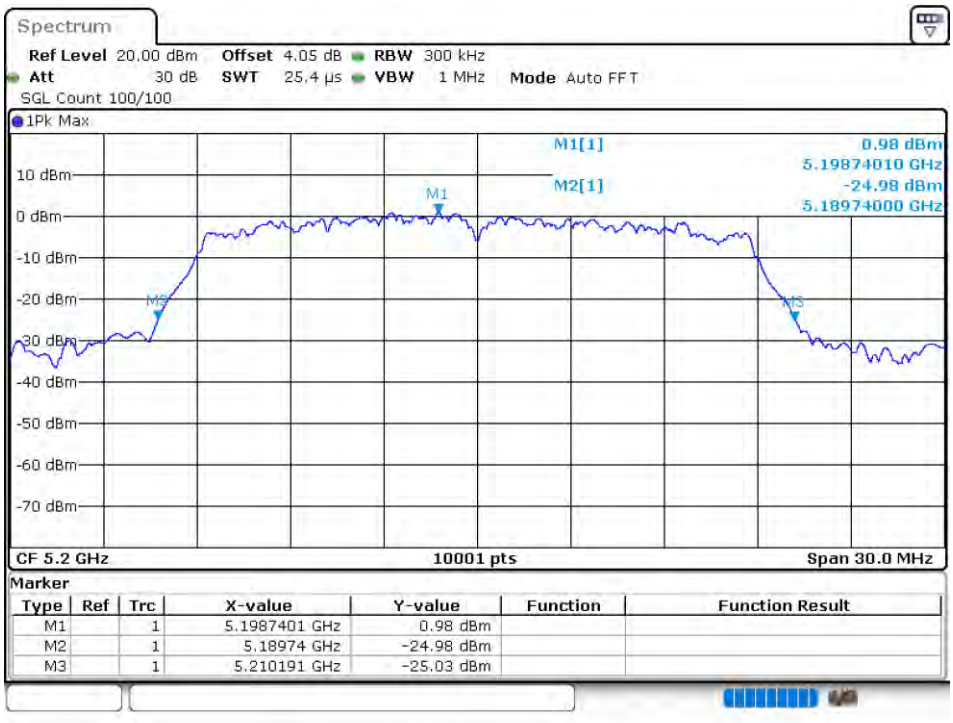
-26dB Bandwidth NVNT ac20 5240MHz Ant1



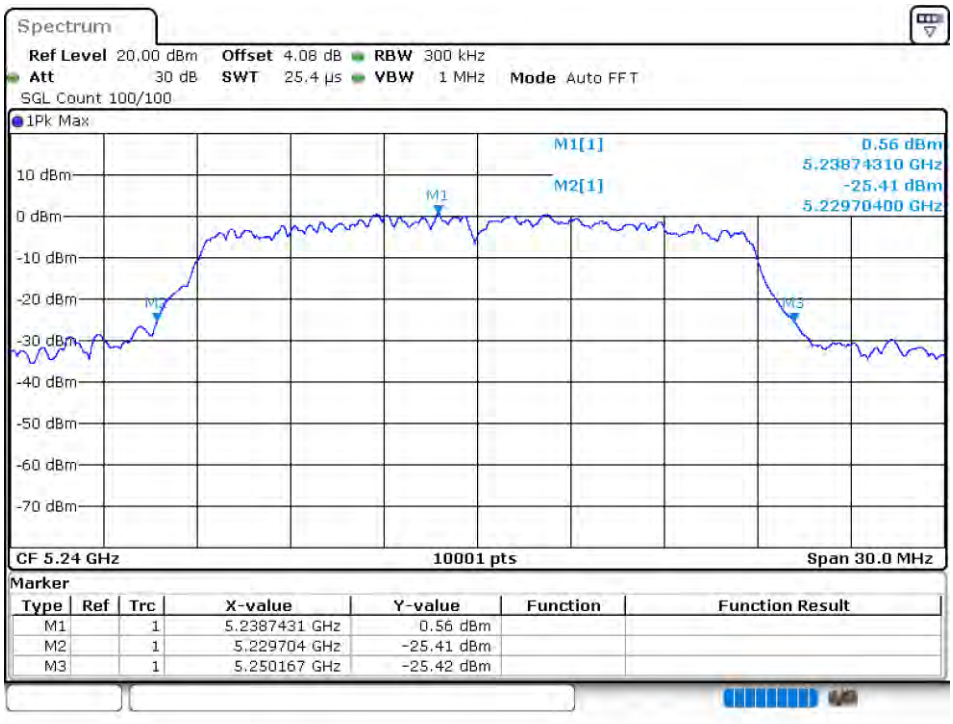
-26dB Bandwidth NVNT ac20 5180MHz Ant2



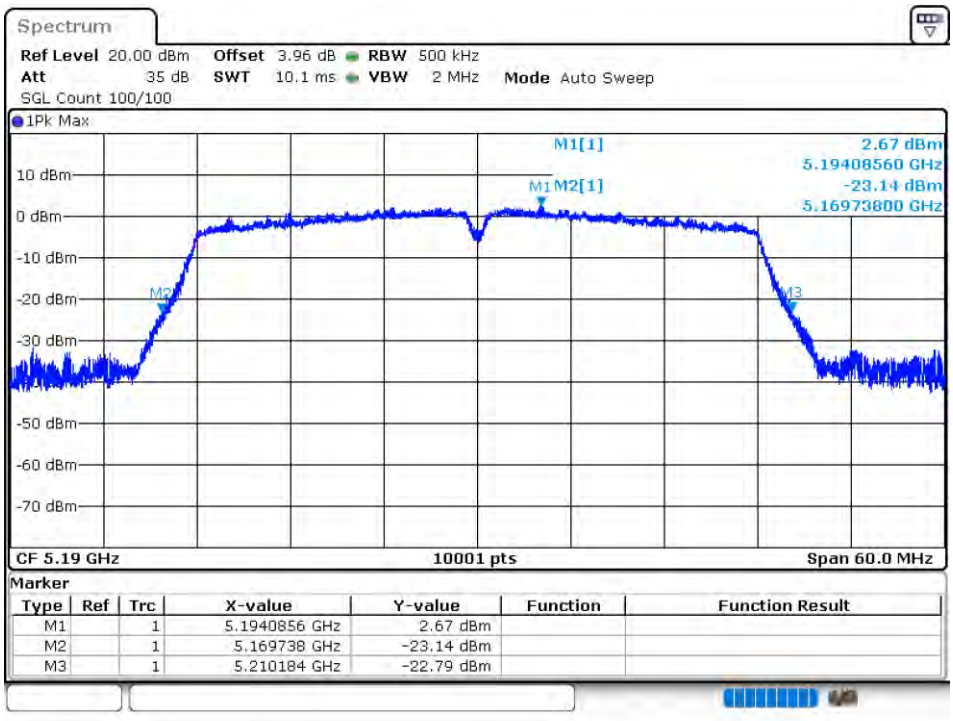
-26dB Bandwidth NVNT ac20 5200MHz Ant2



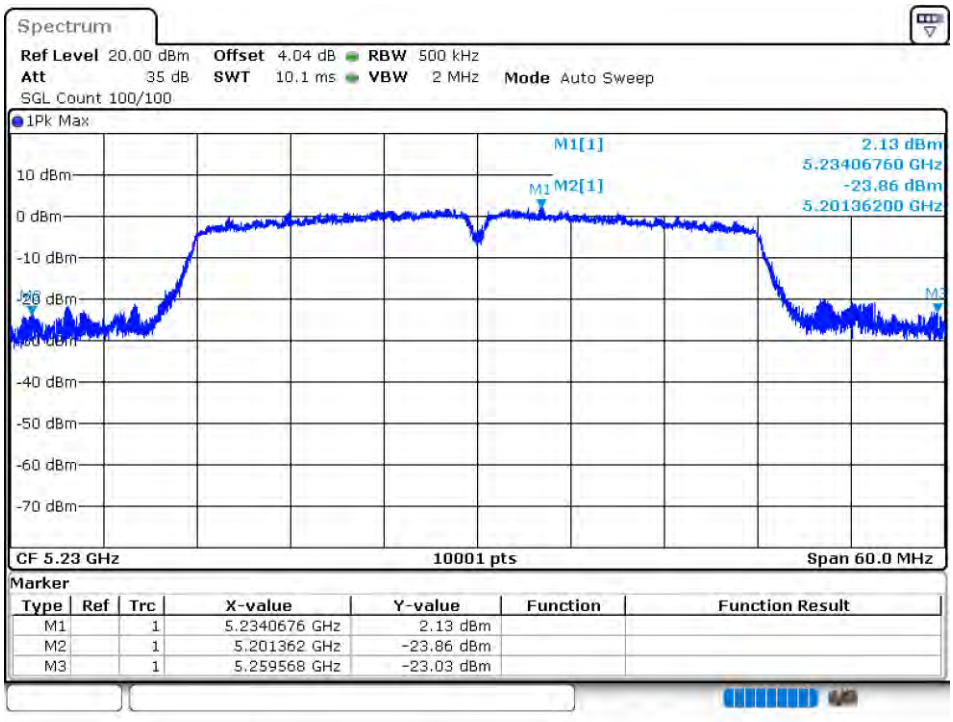
-26dB Bandwidth NVNT ac20 5240MHz Ant2



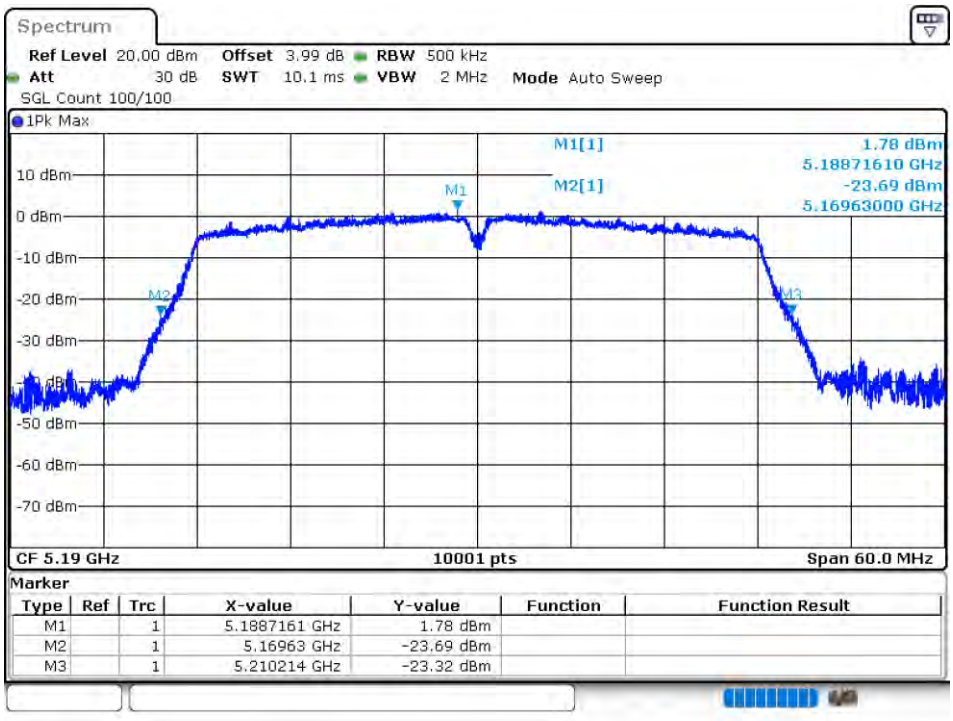
-26dB Bandwidth NVNT ac40 5190MHz Ant1



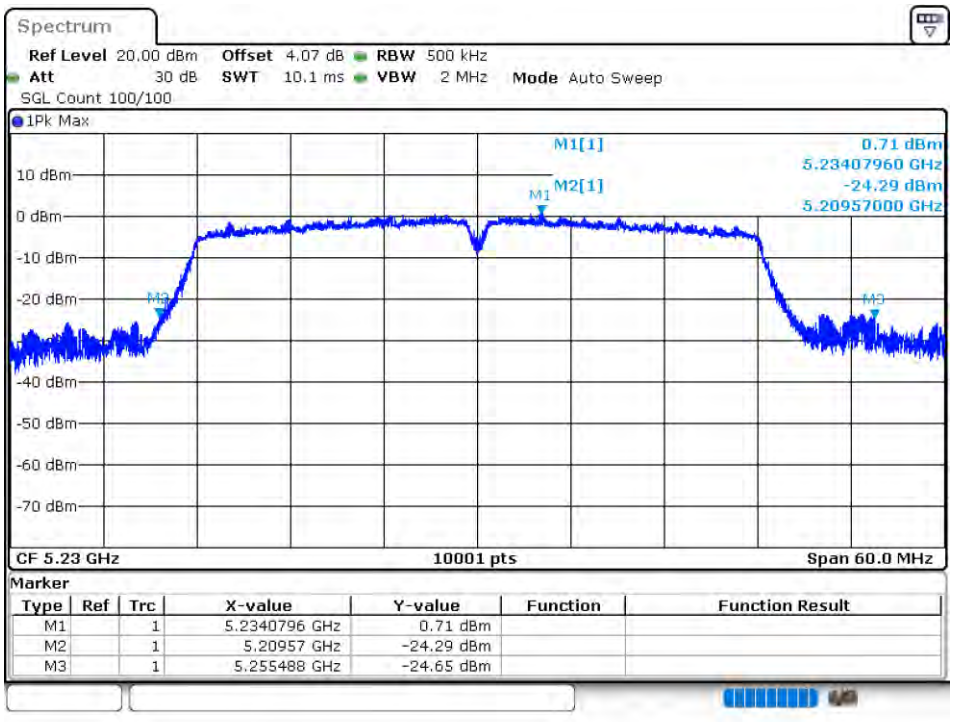
-26dB Bandwidth NVNT ac40 5230MHz Ant1



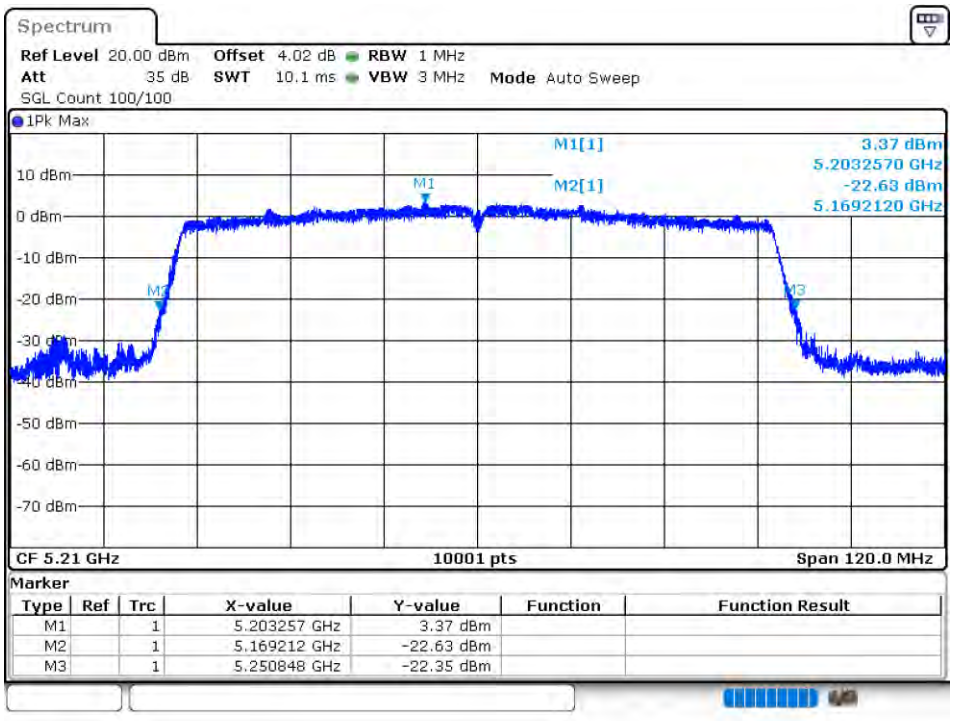
-26dB Bandwidth NVNT ac40 5190MHz Ant2



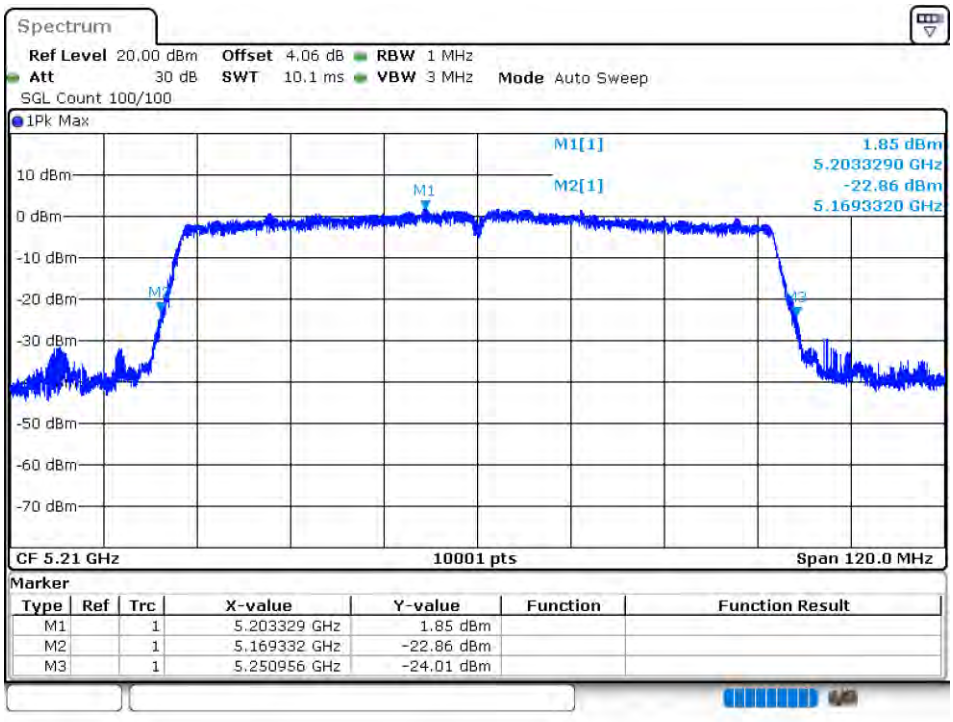
-26dB Bandwidth NVNT ac40 5230MHz Ant2



-26dB Bandwidth NVNT ac80 5210MHz Ant1



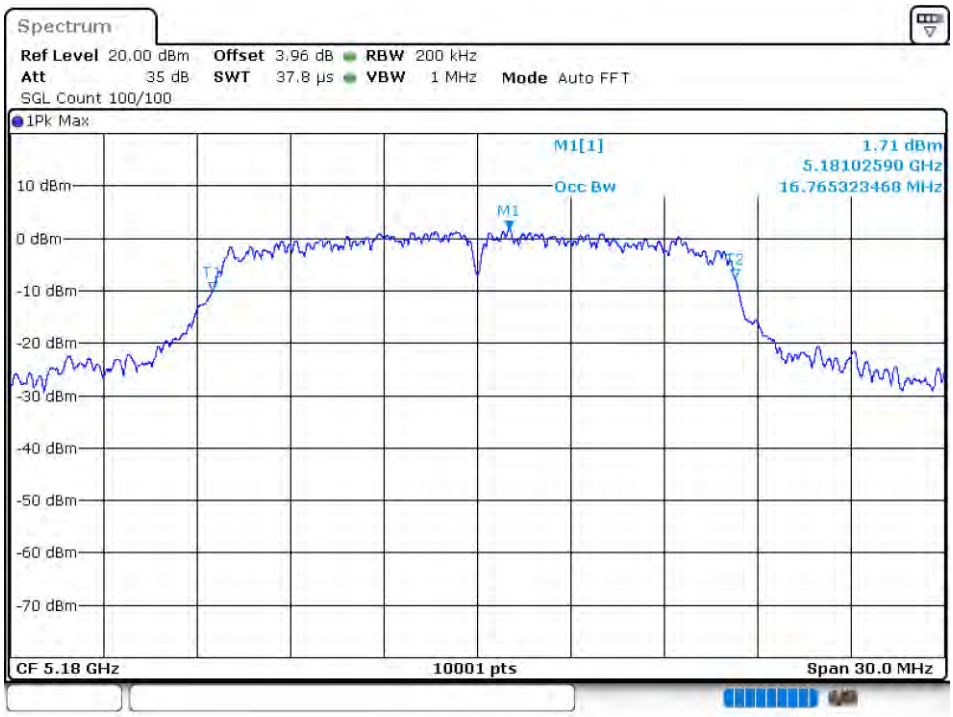
-26dB Bandwidth NVNT ac80 5210MHz Ant2



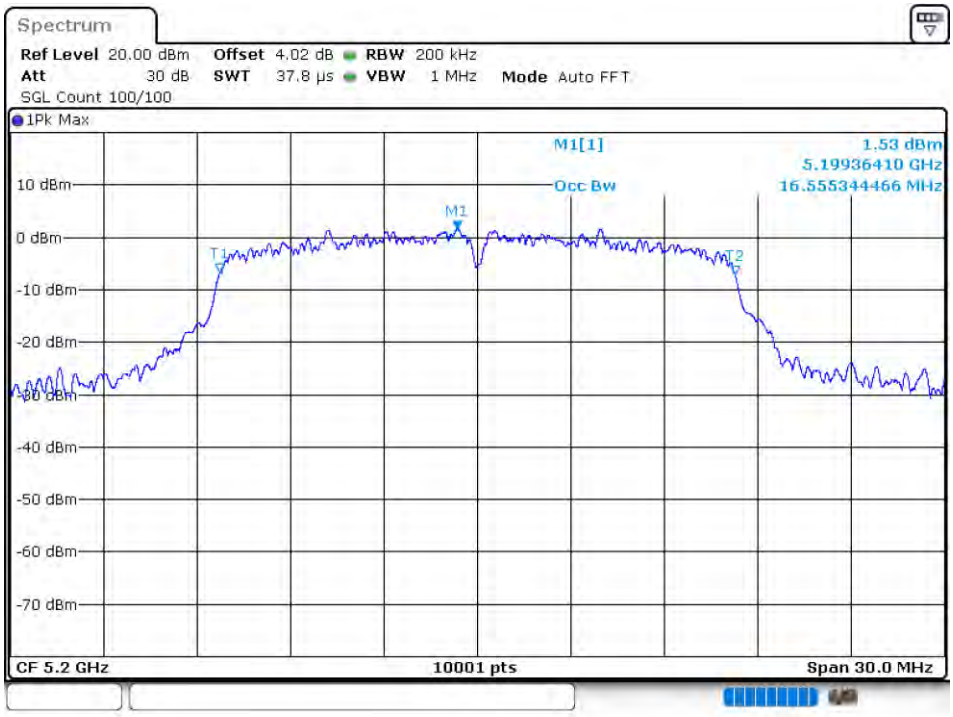
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.765
NVNT	a	5200	Ant1	16.555
NVNT	a	5240	Ant1	16.816
NVNT	a	5180	Ant2	16.642
NVNT	a	5200	Ant2	16.675
NVNT	a	5240	Ant2	16.516
NVNT	n20	5180	Ant1	17.557
NVNT	n20	5200	Ant1	17.653
NVNT	n20	5240	Ant1	17.647
NVNT	n20	5180	Ant2	17.542
NVNT	n20	5200	Ant2	17.59
NVNT	n20	5240	Ant2	17.653
NVNT	n40	5190	Ant1	35.984
NVNT	n40	5230	Ant1	36.188
NVNT	n40	5190	Ant2	35.996
NVNT	n40	5230	Ant2	36.158
NVNT	ac20	5180	Ant1	17.602
NVNT	ac20	5200	Ant1	17.62
NVNT	ac20	5240	Ant1	17.629
NVNT	ac20	5180	Ant2	17.509
NVNT	ac20	5200	Ant2	17.497
NVNT	ac20	5240	Ant2	17.611
NVNT	ac40	5190	Ant1	35.972
NVNT	ac40	5230	Ant1	36.176
NVNT	ac40	5190	Ant2	35.984
NVNT	ac40	5230	Ant2	36.152
NVNT	ac80	5210	Ant1	75.364
NVNT	ac80	5210	Ant2	75.46

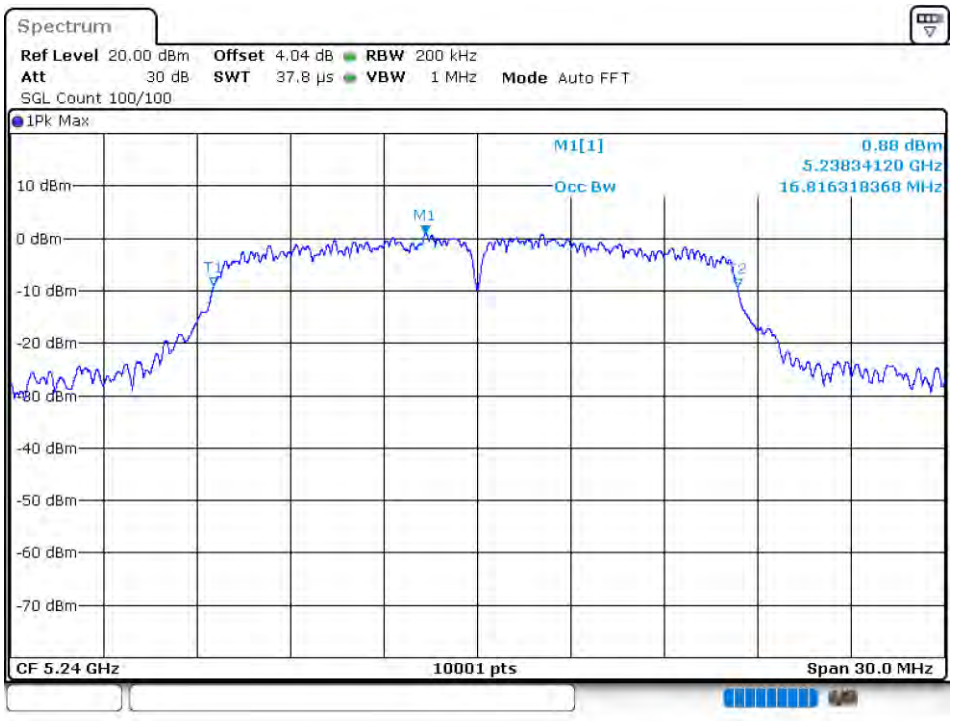
Test Graphs
OBW NVNT a 5180MHz Ant1



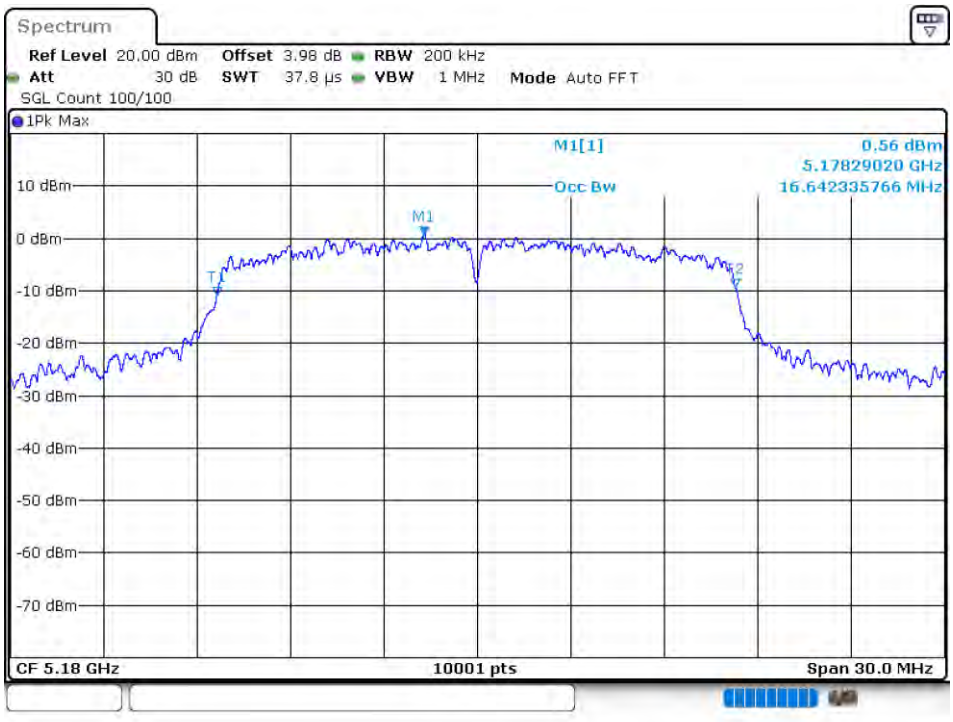
OBW NVNT a 5200MHz Ant1



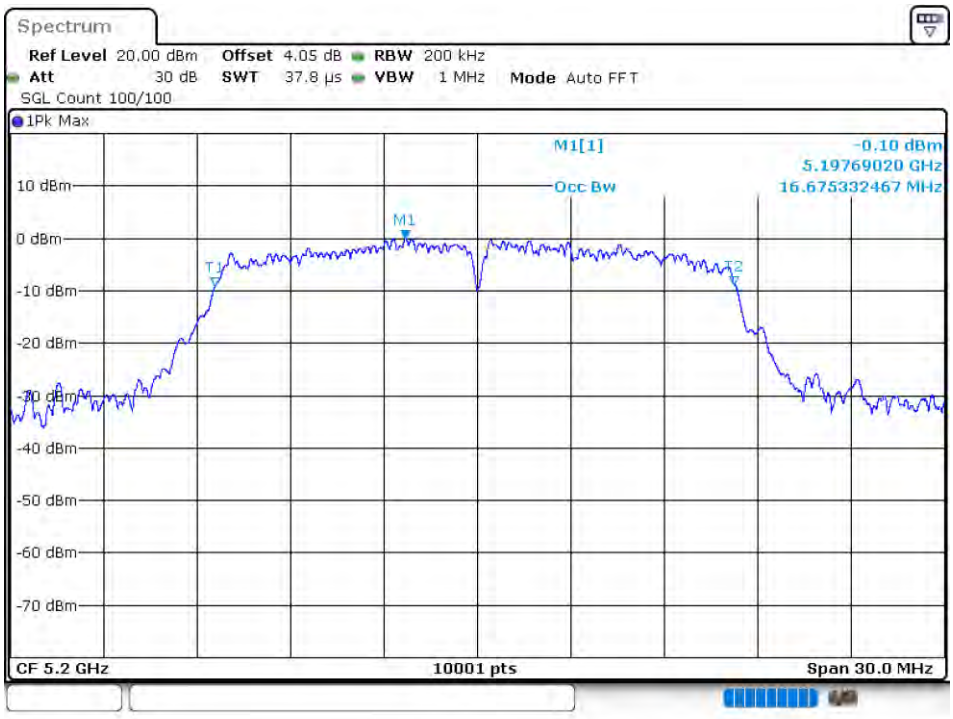
OBW NVNT a 5240MHz Ant1



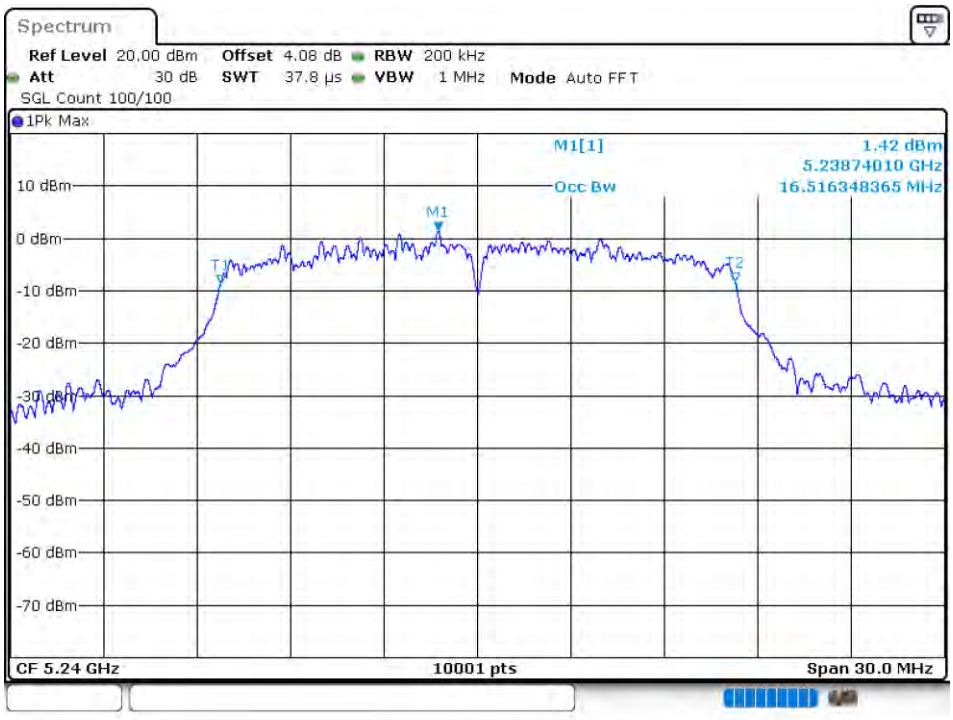
OBW NVNT a 5180MHz Ant2



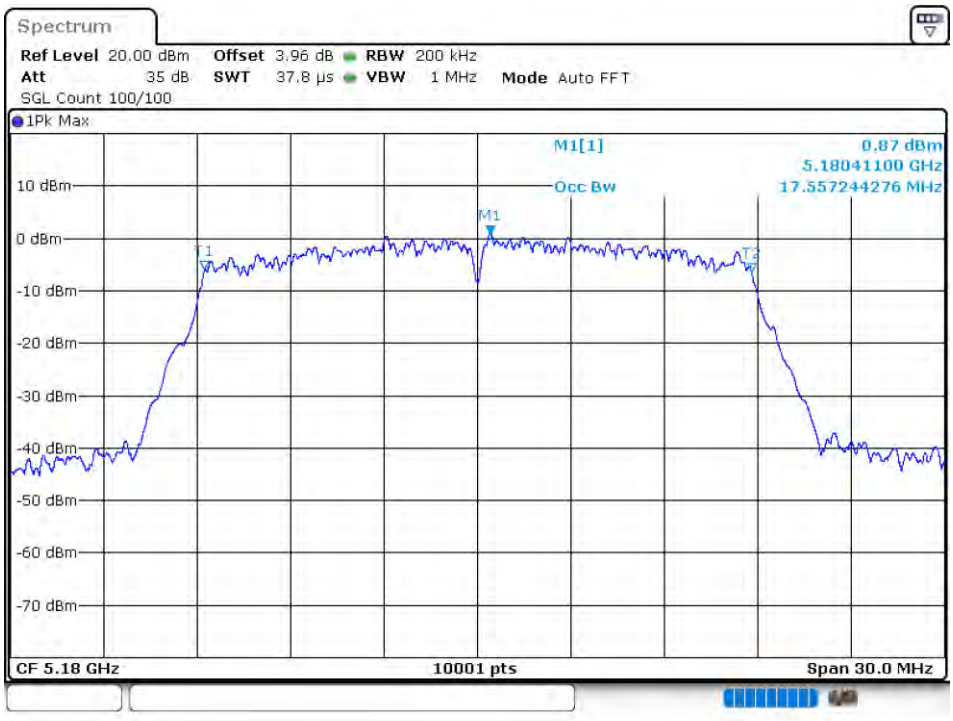
OBW NVNT a 5200MHz Ant2



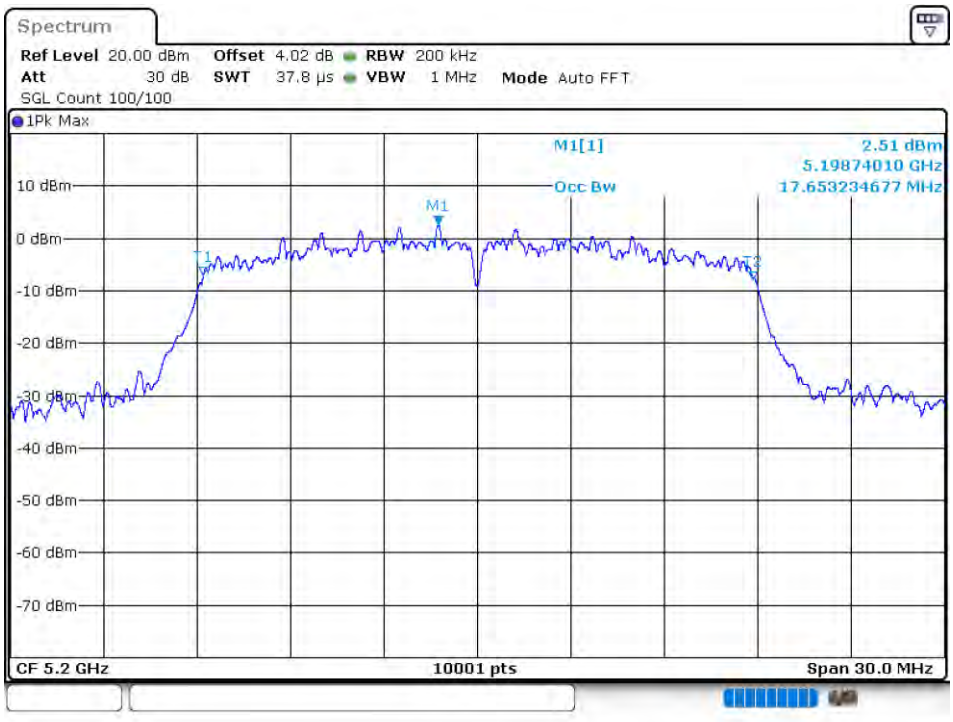
OBW NVNT a 5240MHz Ant2



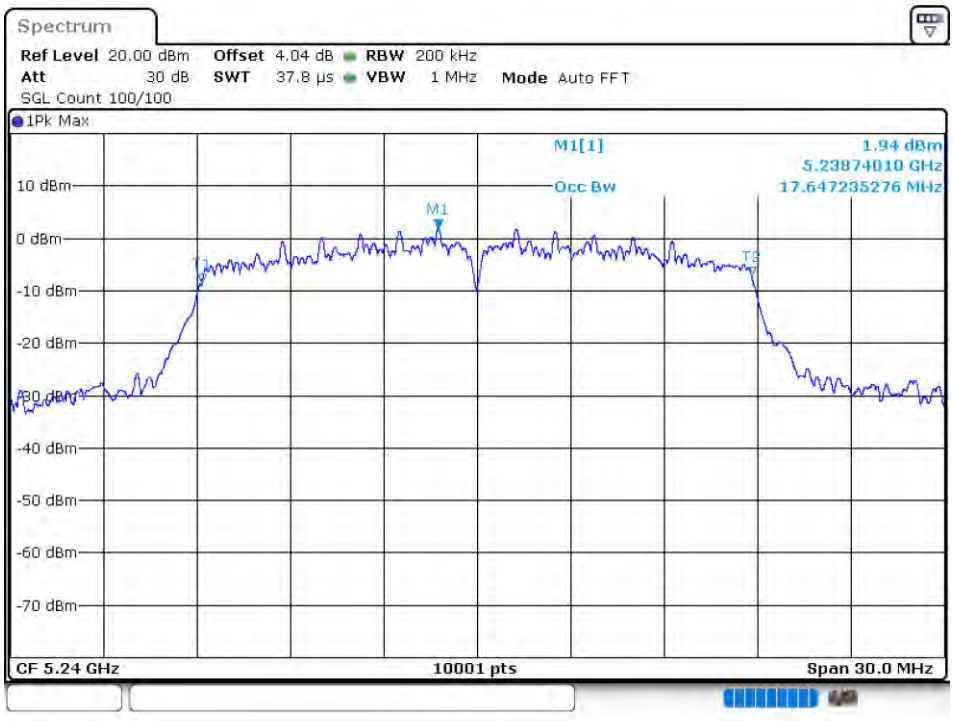
OBW NVNT n20 5180MHz Ant1



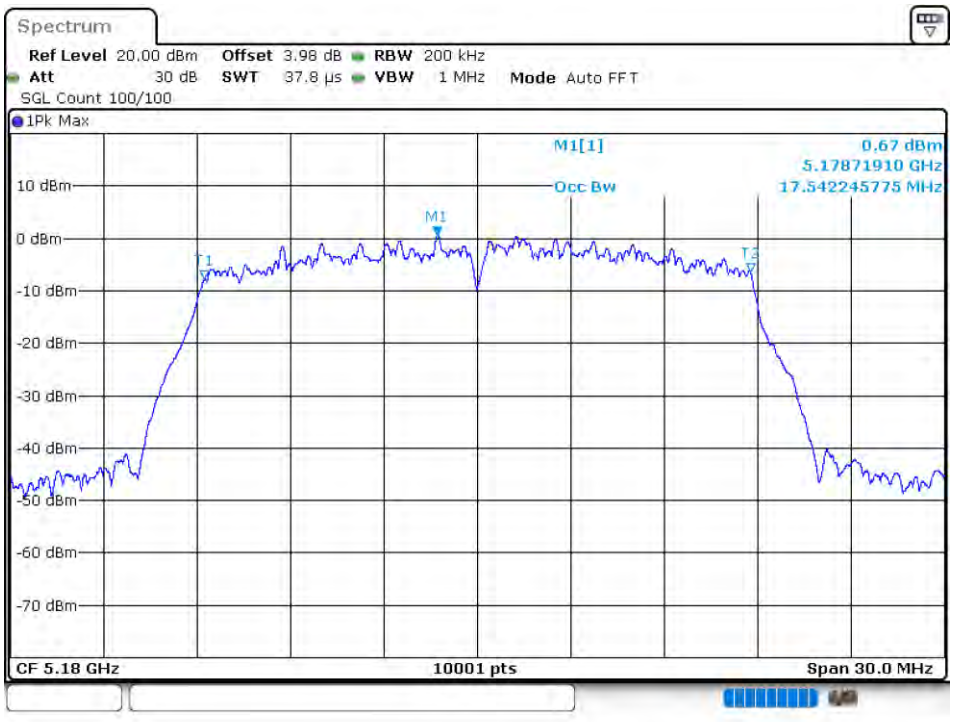
OBW NVNT n20 5200MHz Ant1



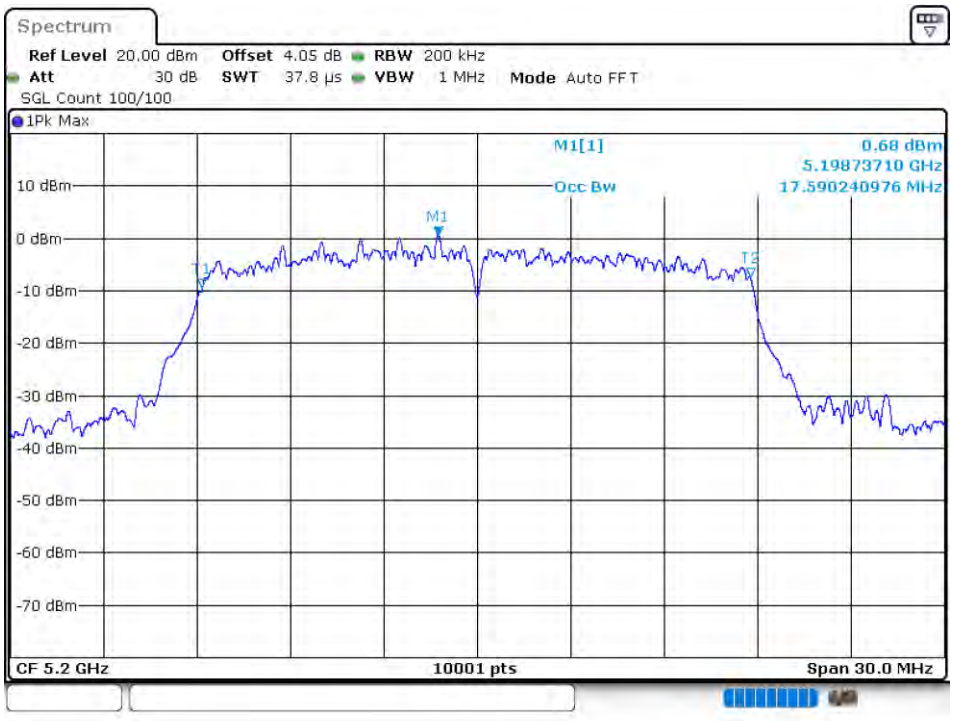
OBW NVNT n20 5240MHz Ant1



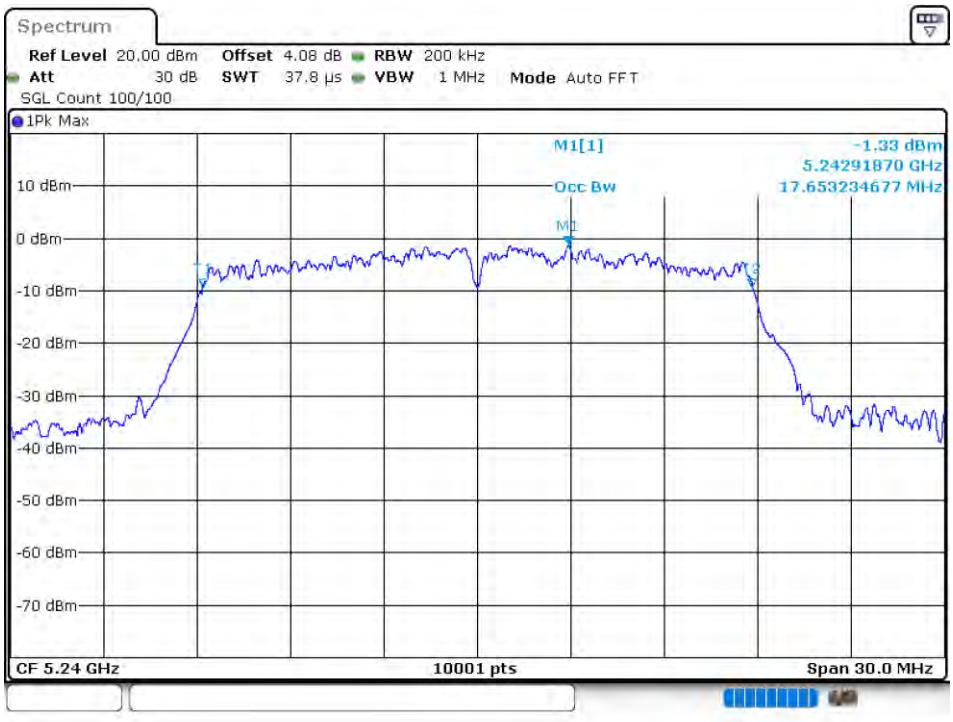
OBW NVNT n20 5180MHz Ant2



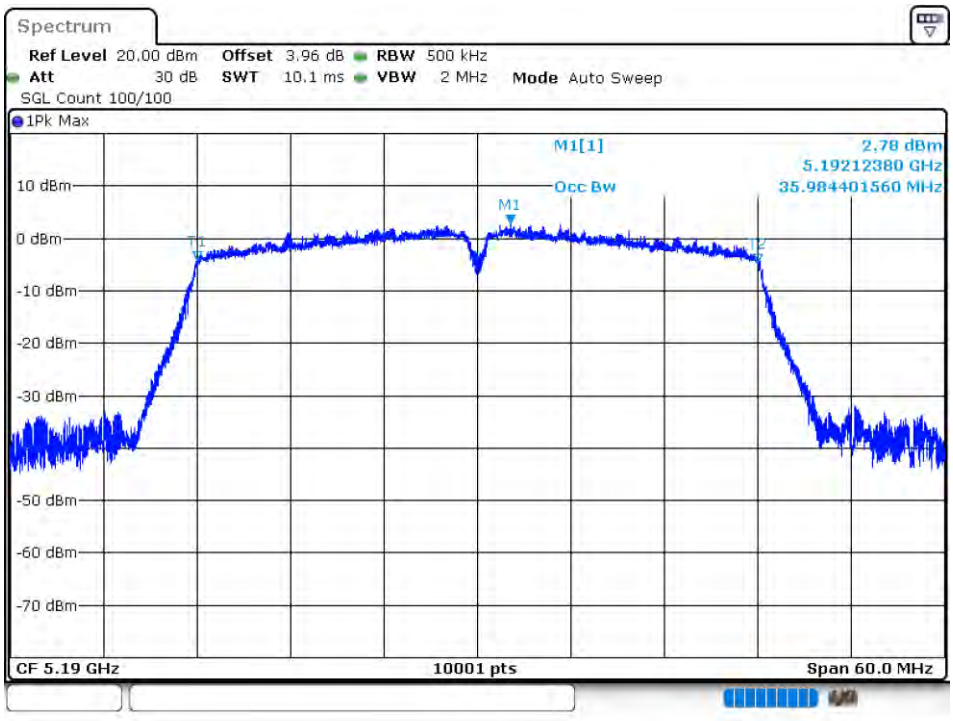
OBW NVNT n20 5200MHz Ant2



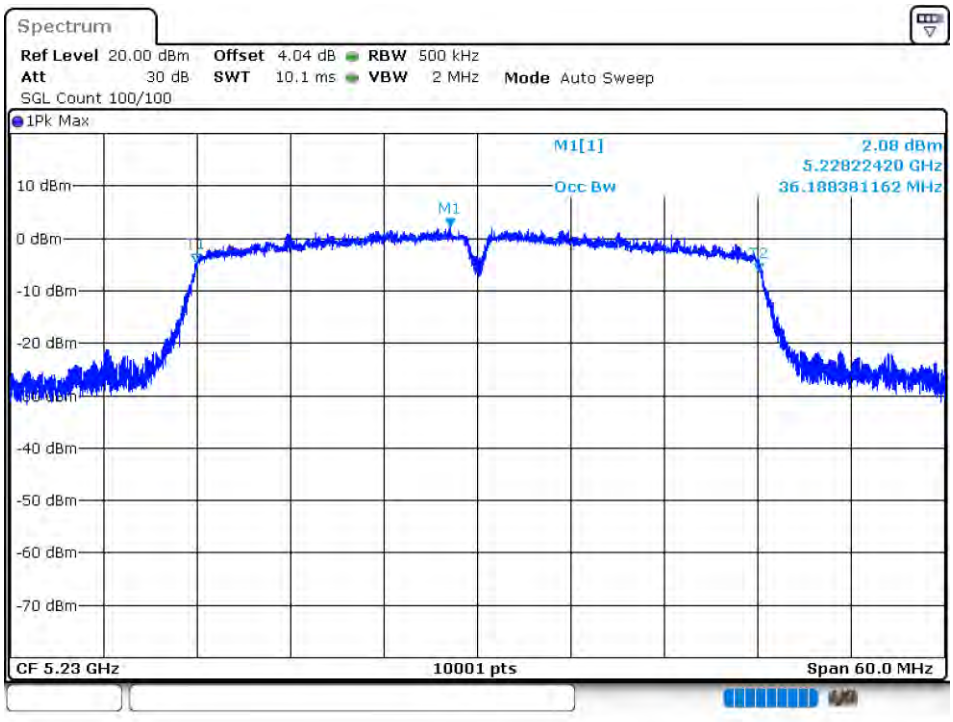
OBW NVNT n20 5240MHz Ant2



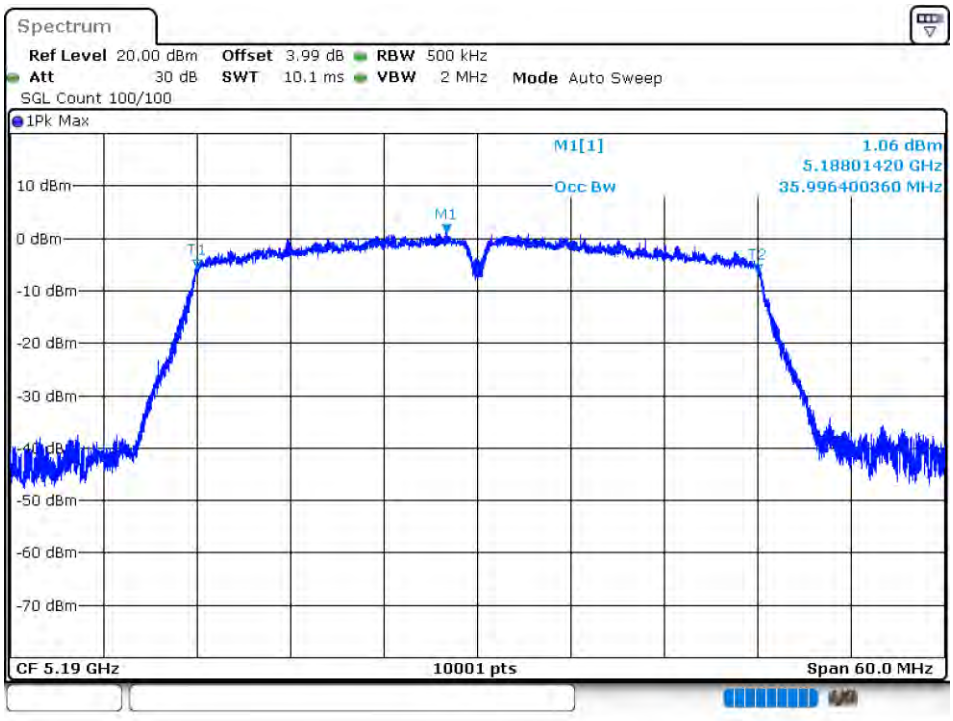
OBW NVNT n40 5190MHz Ant1



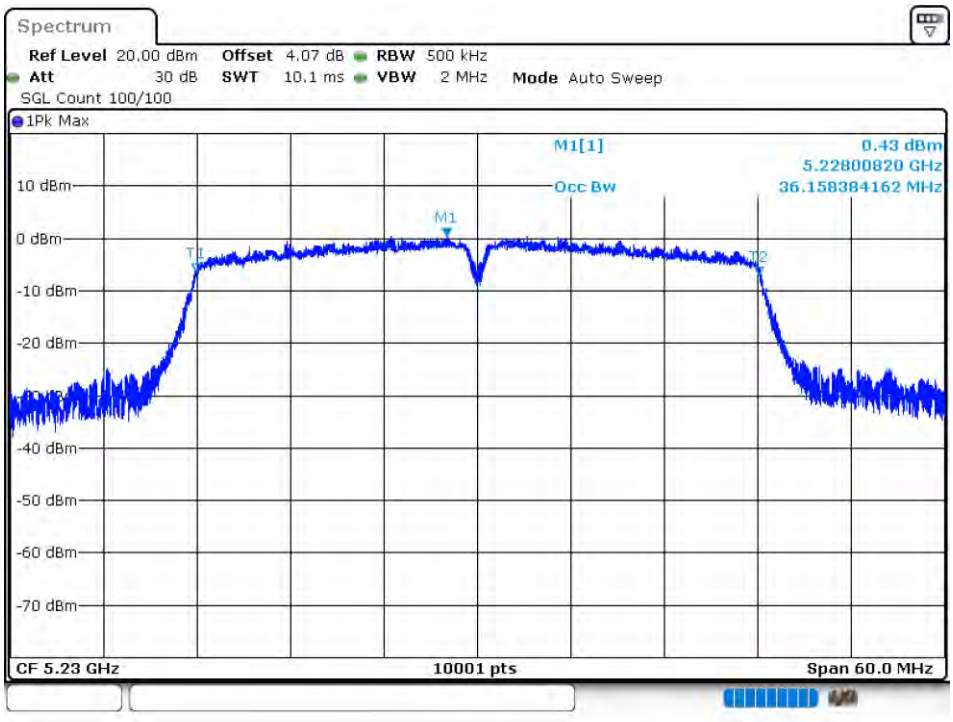
OBW NVNT n40 5230MHz Ant1



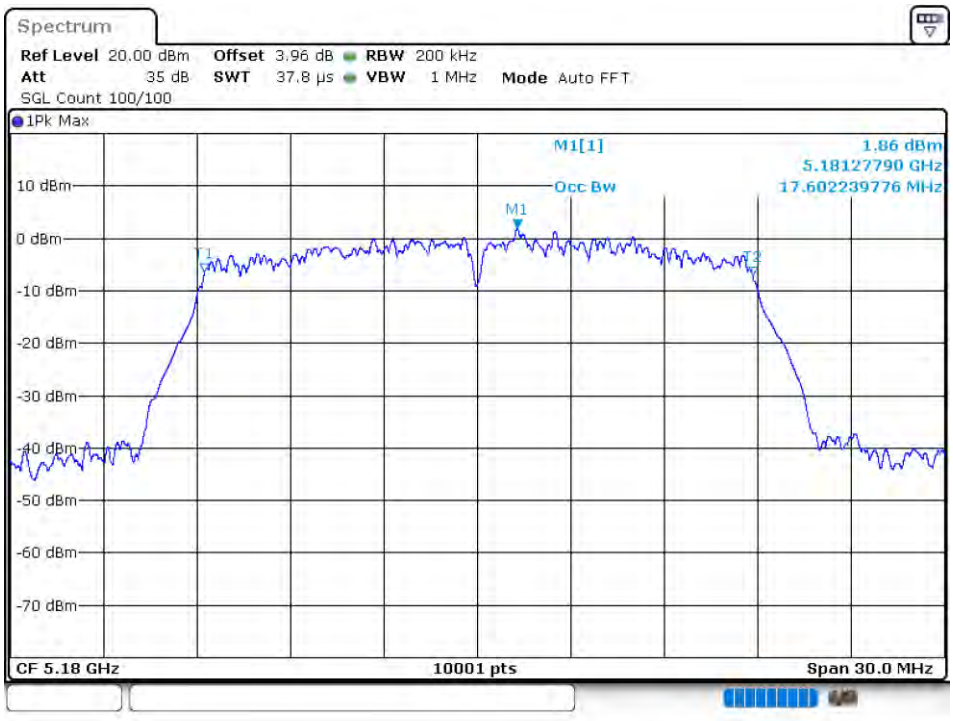
OBW NVNT n40 5190MHz Ant2



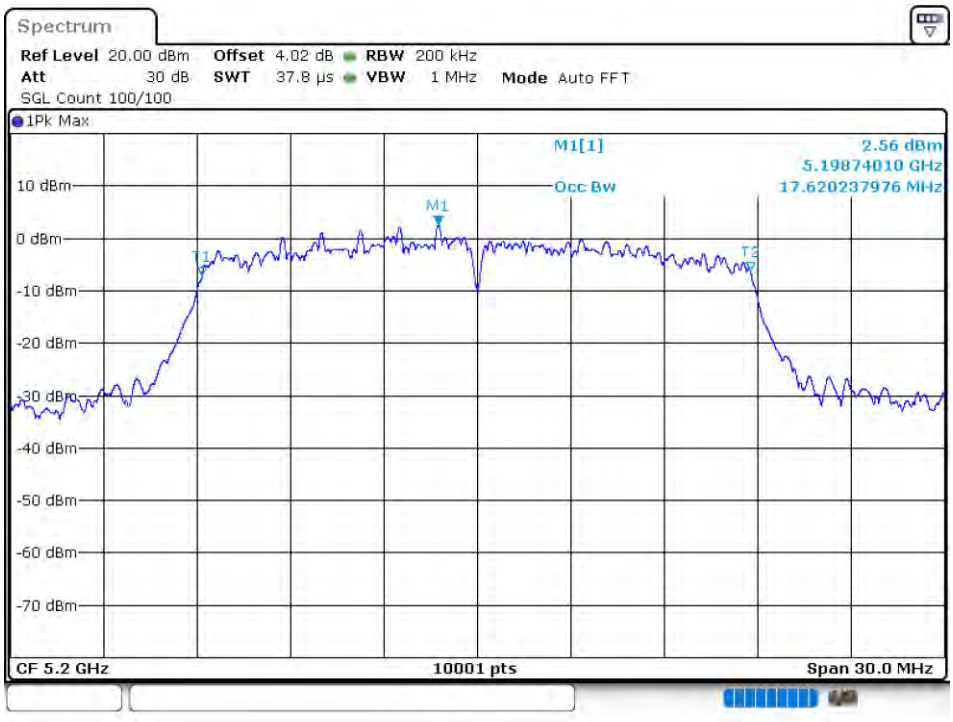
OBW NVNT n40 5230MHz Ant2



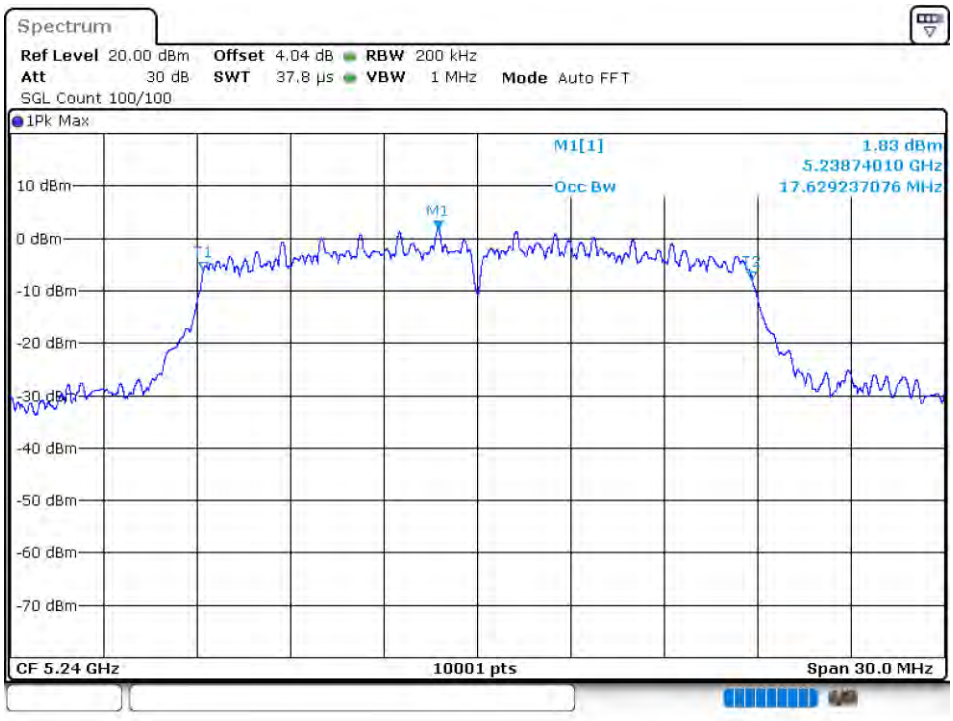
OBW NVNT ac20 5180MHz Ant1



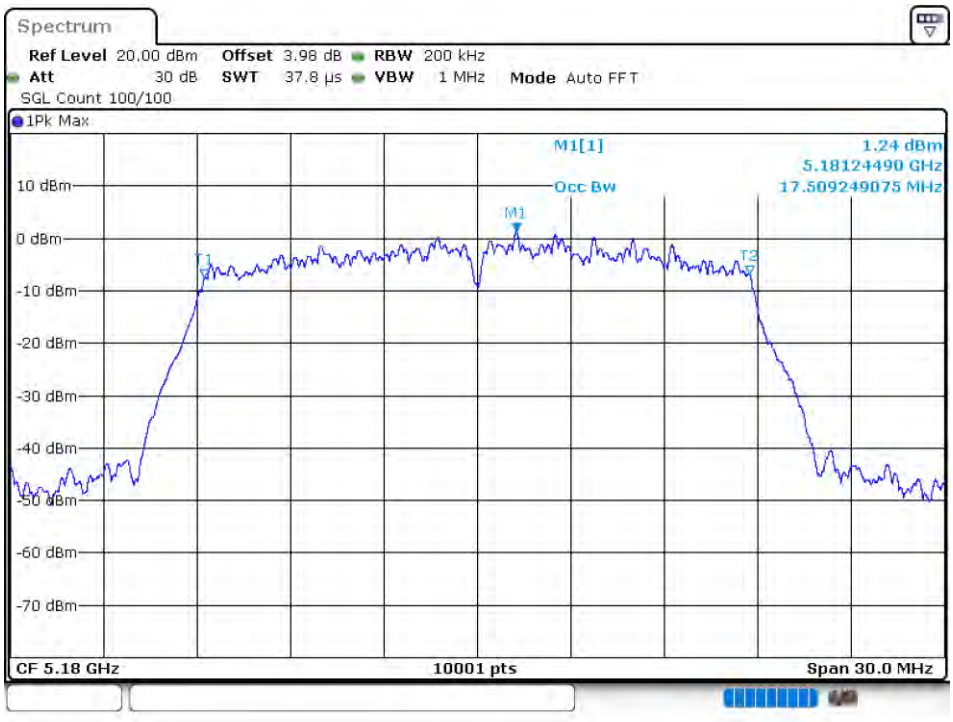
OBW NVNT ac20 5200MHz Ant1



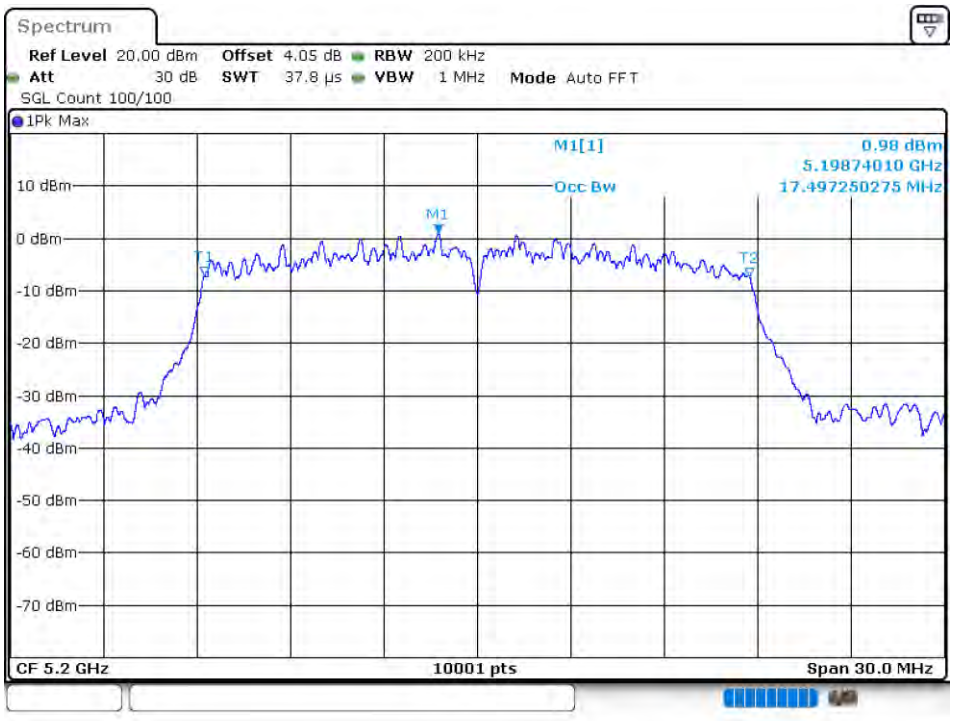
OBW NVNT ac20 5240MHz Ant1



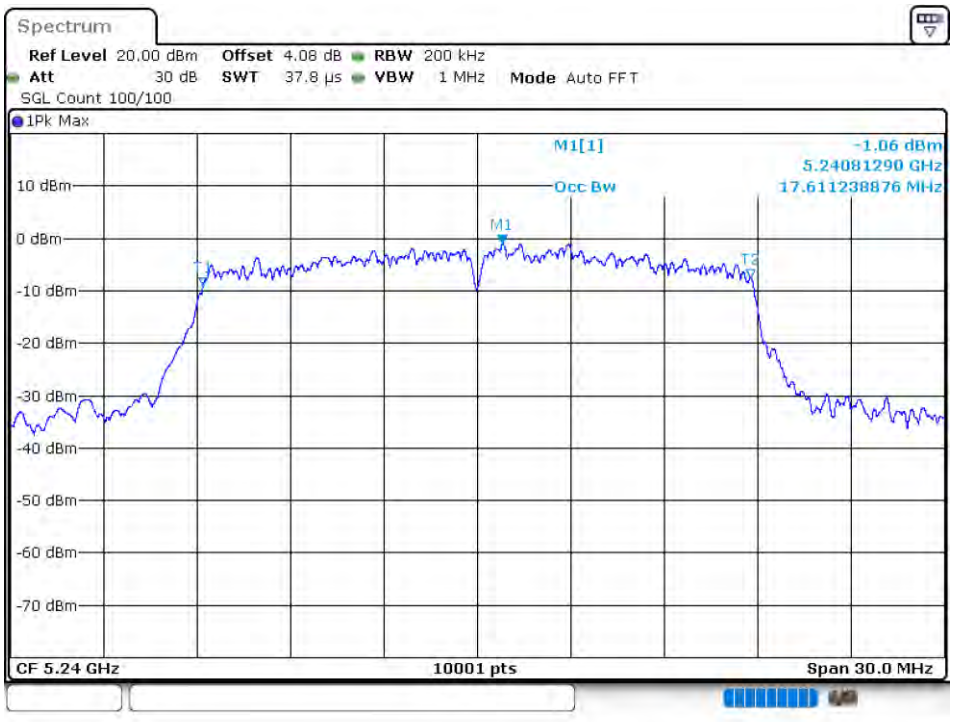
OBW NVNT ac20 5180MHz Ant2



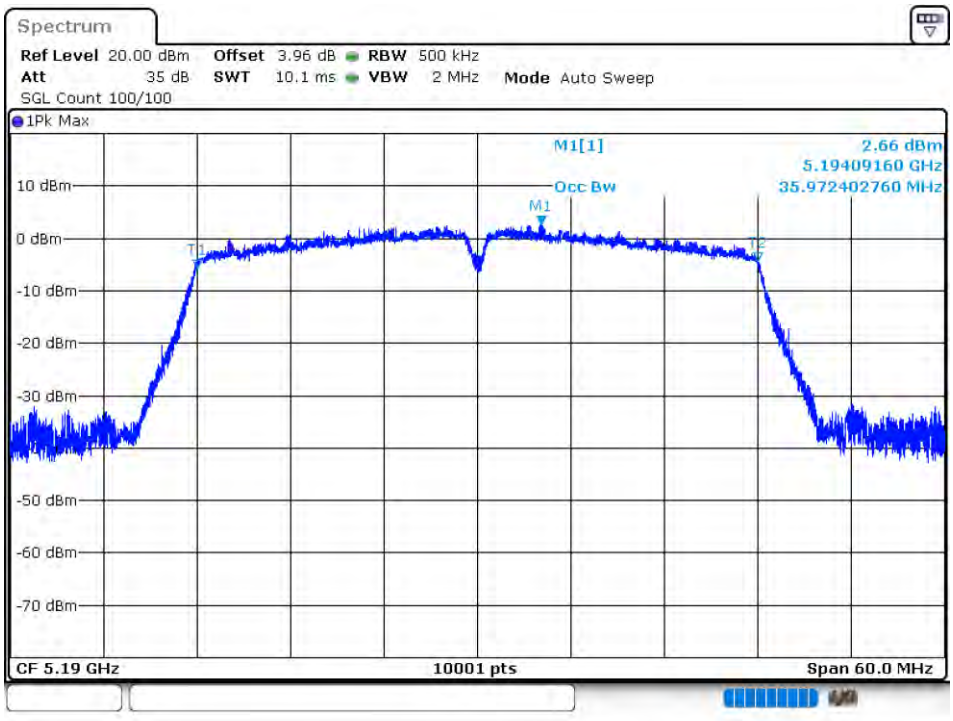
OBW NVNT ac20 5200MHz Ant2



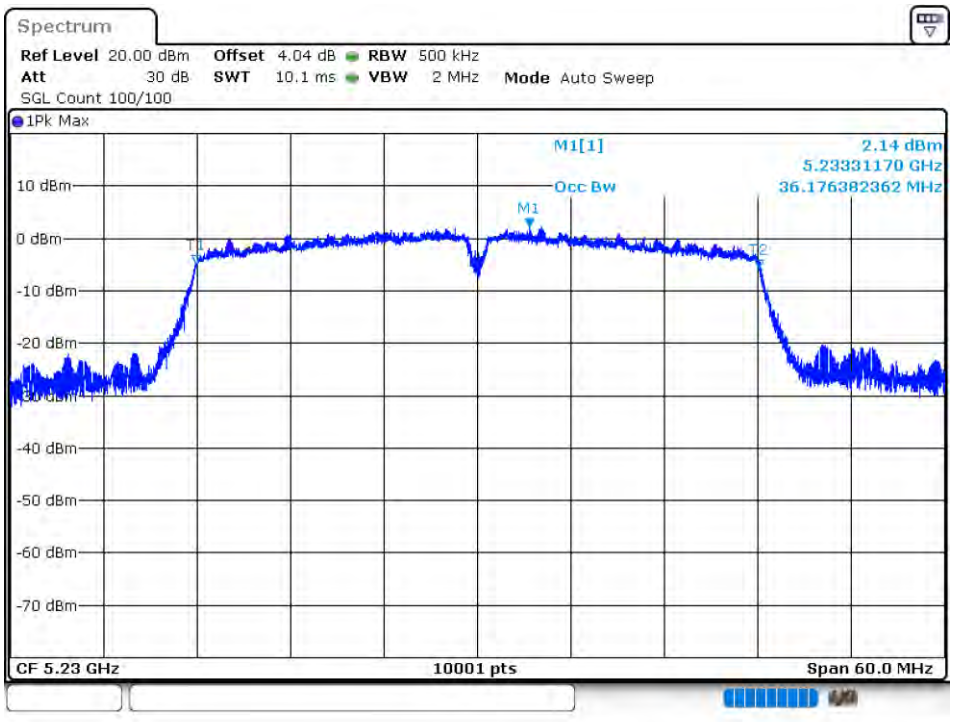
OBW NVNT ac20 5240MHz Ant2



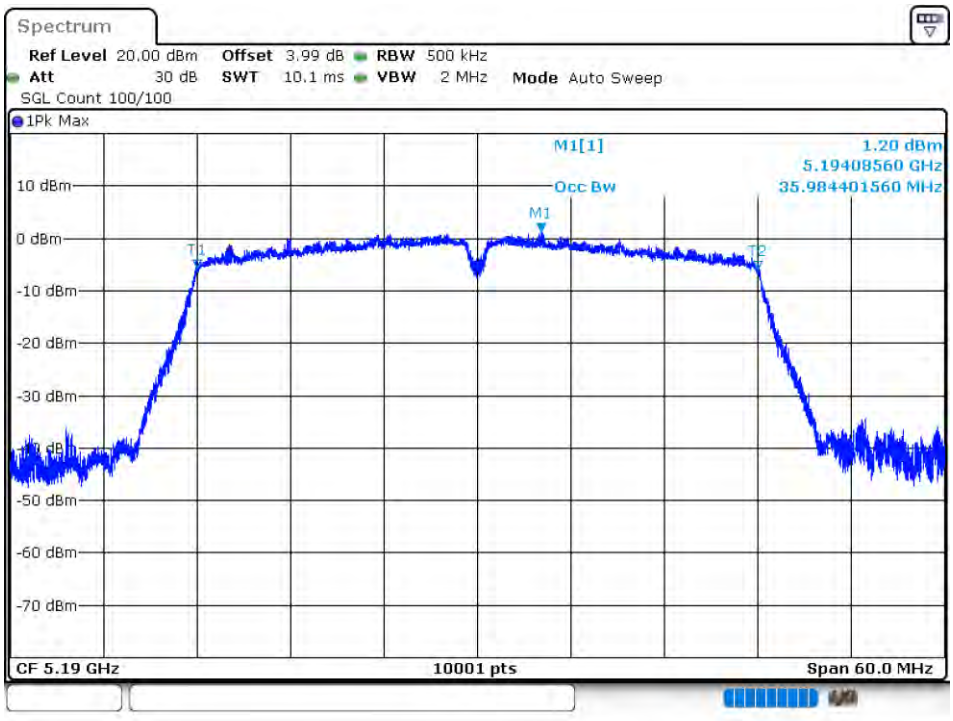
OBW NVNT ac40 5190MHz Ant1



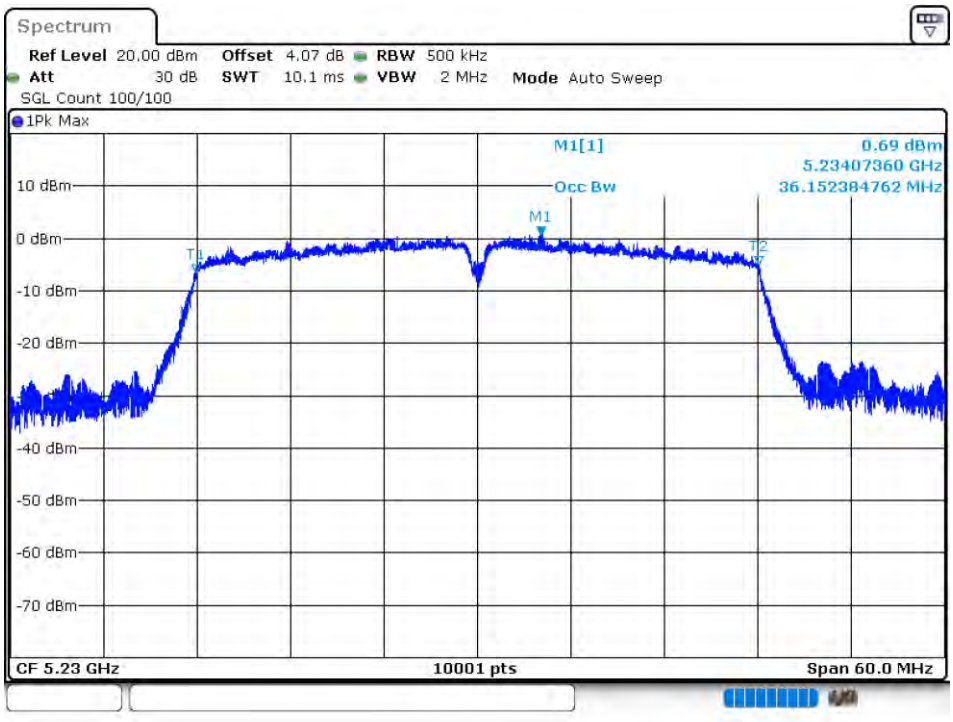
OBW NVNT ac40 5230MHz Ant1



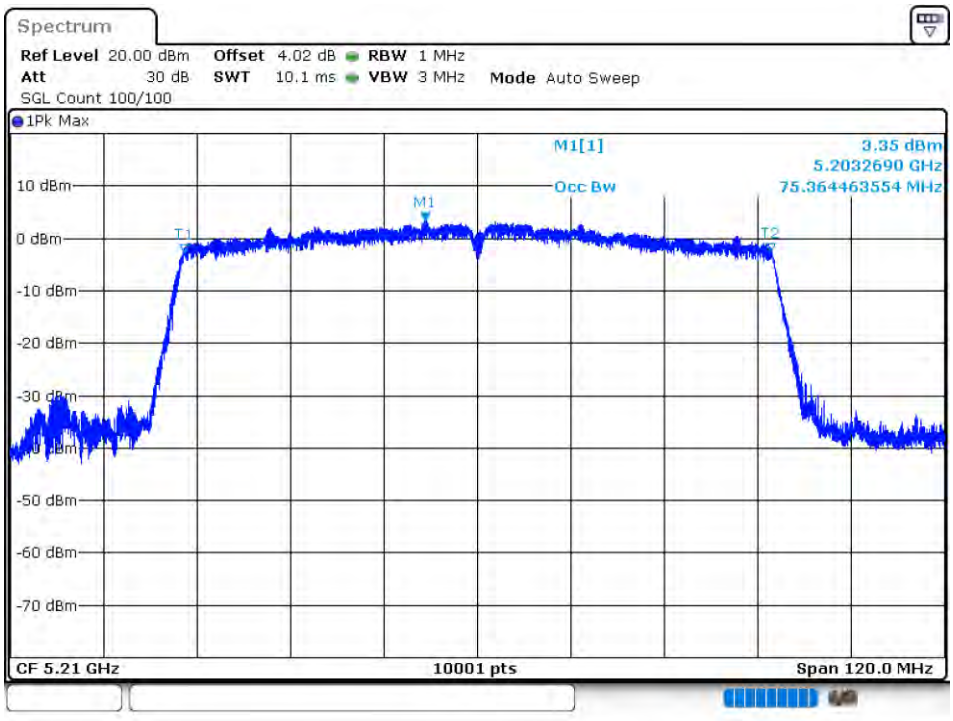
OBW NVNT ac40 5190MHz Ant2



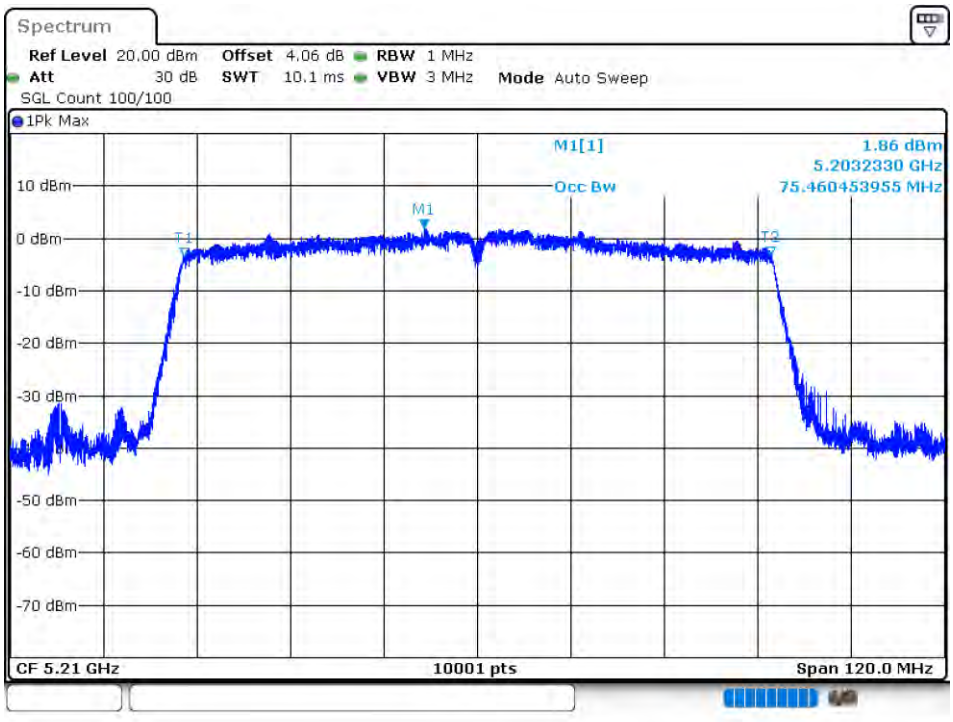
OBW NVNT ac40 5230MHz Ant2



OBW NVNT ac80 5210MHz Ant1

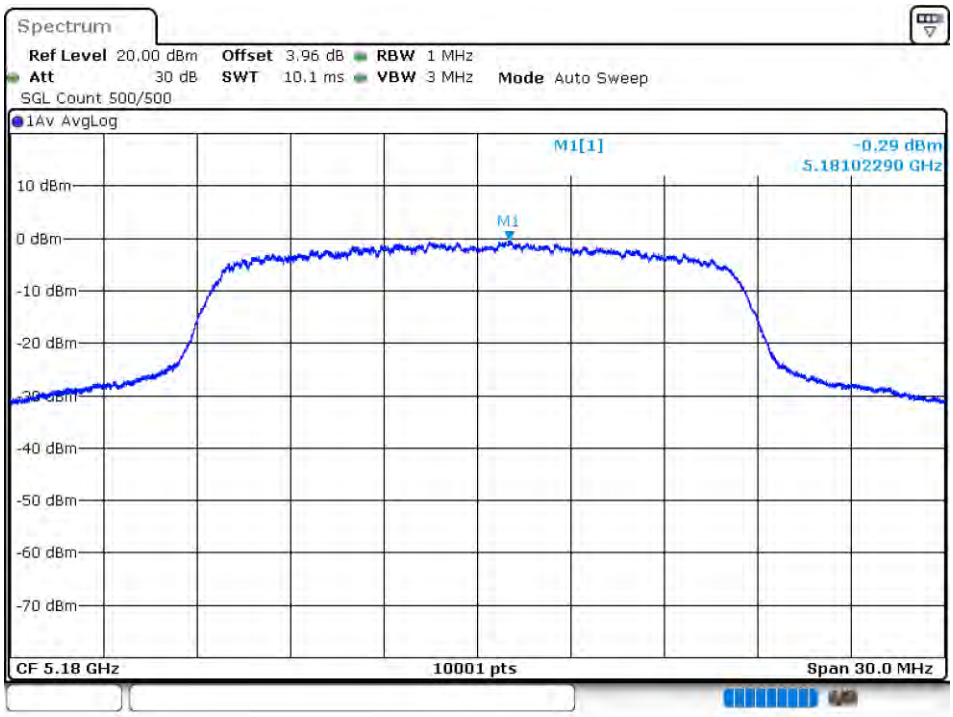
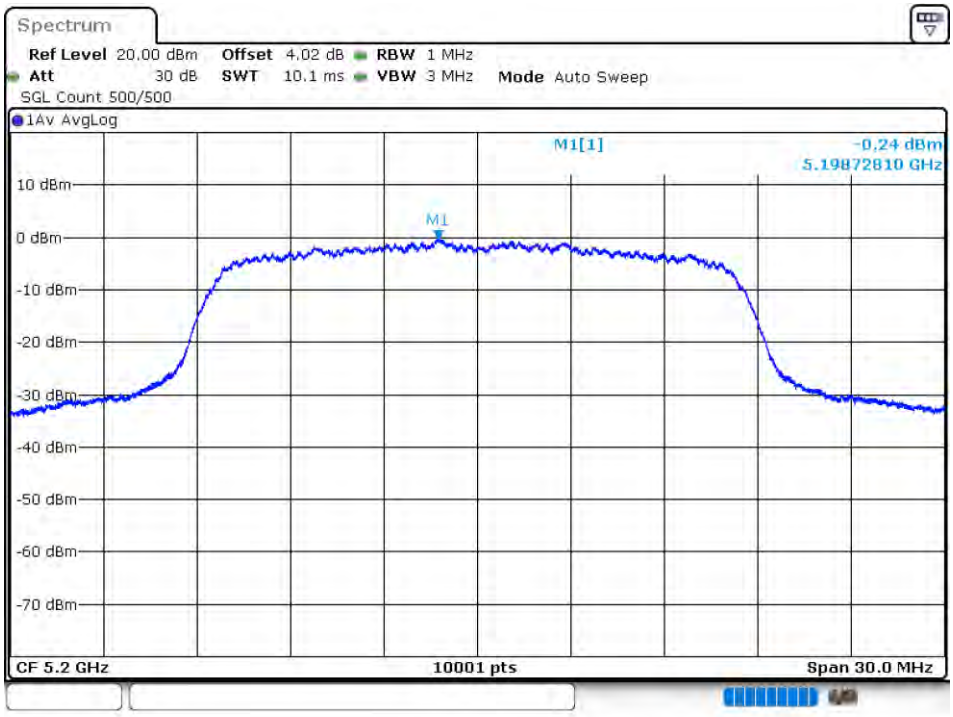


OBW NVNT ac80 5210MHz Ant2

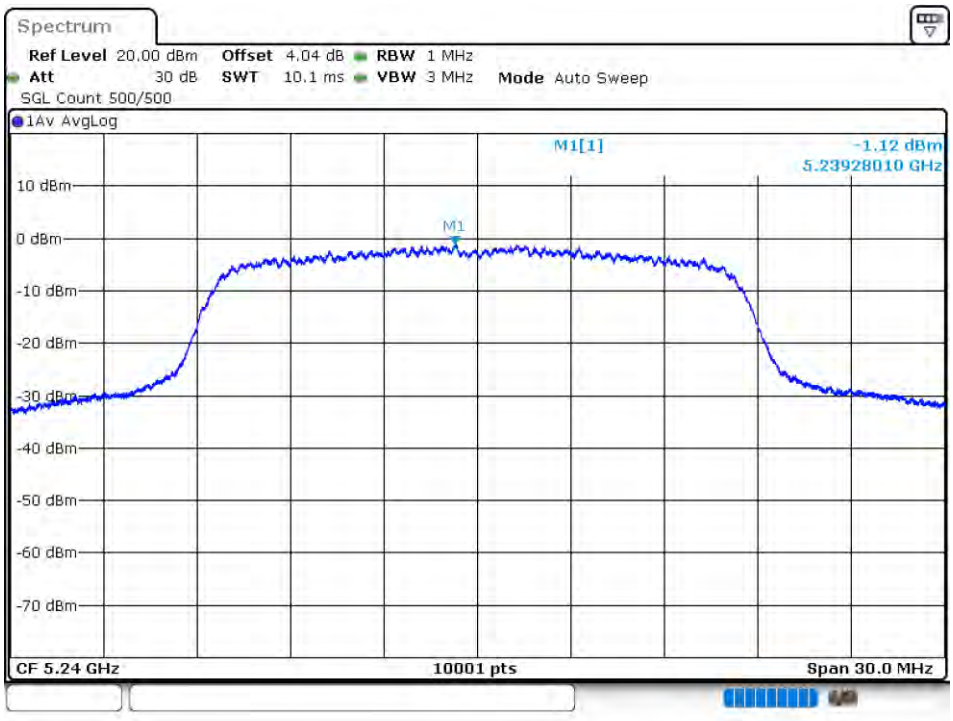


Maximum Power Spectral Density Level

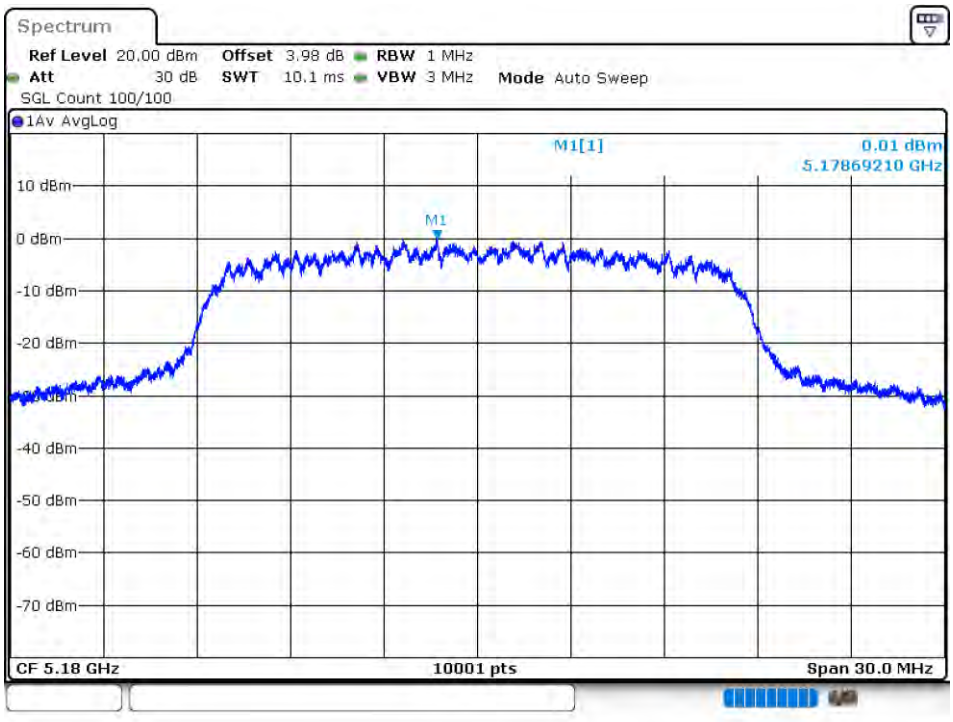
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-0.29	0.13	-0.16	11	Pass
NVNT	a	5200	Ant1	-0.24	0.14	-0.1	11	Pass
NVNT	a	5240	Ant1	-1.12	0.13	-0.99	11	Pass
NVNT	a	5180	Ant2	0.01	0.13	0.14	11	Pass
NVNT	a	5200	Ant2	-0.56	0.13	-0.43	11	Pass
NVNT	a	5240	Ant2	-0.86	0.13	-0.73	11	Pass
NVNT	n20	5180	Ant1	-2.09	0.14	-1.95	11	Pass
NVNT	n20	5200	Ant1	-1.98	0.14	-1.84	11	Pass
NVNT	n20	5240	Ant1	-2.29	0.14	-2.15	11	Pass
NVNT	n20	5180	Ant2	-1.91	0.14	-1.77	11	Pass
NVNT	n20	5200	Ant2	-2.54	0.14	-2.4	11	Pass
NVNT	n20	5240	Ant2	-2.36	0.14	-2.22	11	Pass
NVNT	n40	5190	Ant1	-6.1	0.27	-5.83	11	Pass
NVNT	n40	5230	Ant1	-6.51	0.27	-6.24	11	Pass
NVNT	n40	5190	Ant2	-5.96	0.28	-5.68	11	Pass
NVNT	n40	5230	Ant2	-6.75	0.27	-6.48	11	Pass
NVNT	ac20	5180	Ant1	-0.53	0.14	-0.39	11	Pass
NVNT	ac20	5200	Ant1	-0.96	0.14	-0.82	11	Pass
NVNT	ac20	5240	Ant1	-0.94	0.14	-0.8	11	Pass
NVNT	ac20	5180	Ant2	-1.05	0.14	-0.91	11	Pass
NVNT	ac20	5200	Ant2	-2.18	0.14	-2.04	11	Pass
NVNT	ac20	5240	Ant2	-2.69	0.14	-2.55	11	Pass
NVNT	ac40	5190	Ant1	-6.16	0.25	-5.91	11	Pass
NVNT	ac40	5230	Ant1	-6.35	0.25	-6.1	11	Pass
NVNT	ac40	5190	Ant2	-6.12	0.25	-5.87	11	Pass
NVNT	ac40	5230	Ant2	-5.92	0.29	-5.63	11	Pass
NVNT	ac80	5210	Ant1	-12.31	0.52	-11.79	11	Pass
NVNT	ac80	5210	Ant2	-12.6	0.52	-12.08	11	Pass

Test Graphs
PSD NVNT a 5180MHz Ant1

PSD NVNT a 5200MHz Ant1


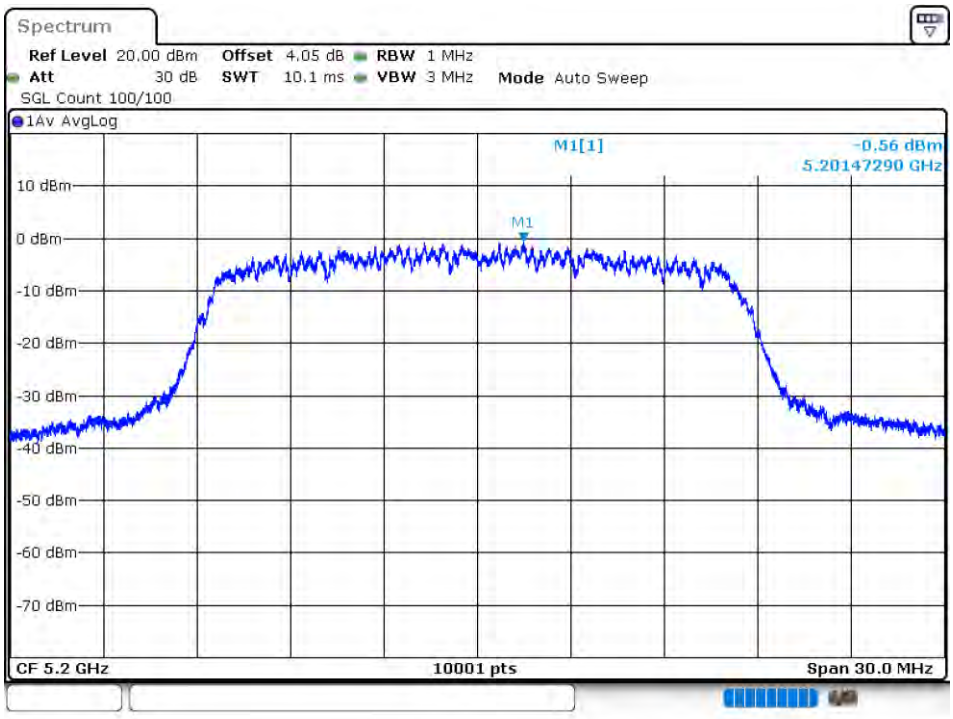
PSD NVNT a 5240MHz Ant1



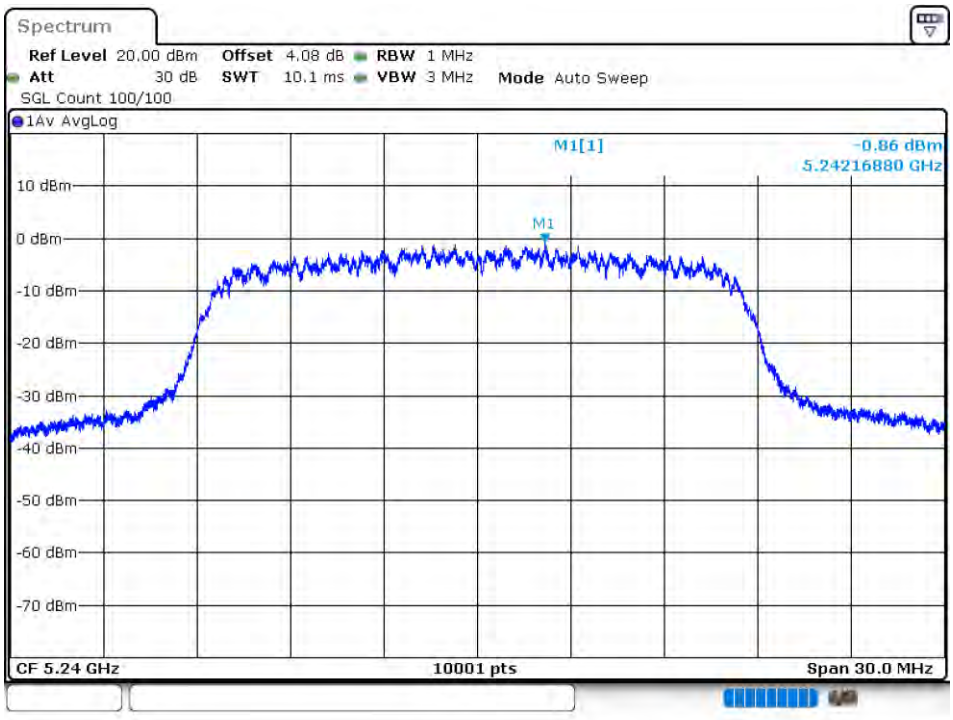
PSD NVNT a 5180MHz Ant2



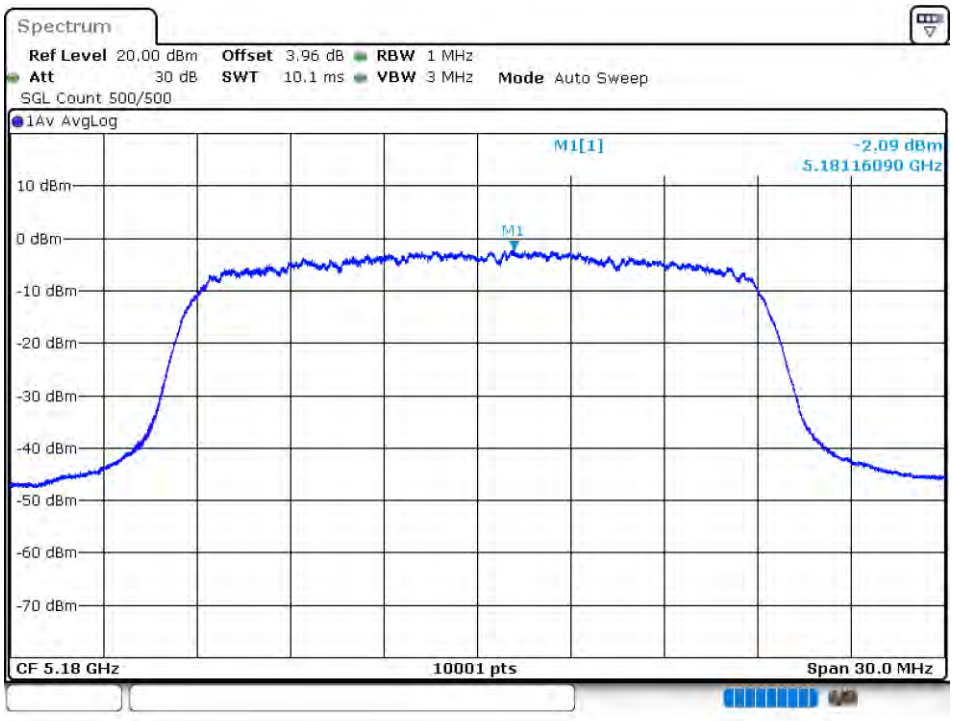
PSD NVNT a 5200MHz Ant2



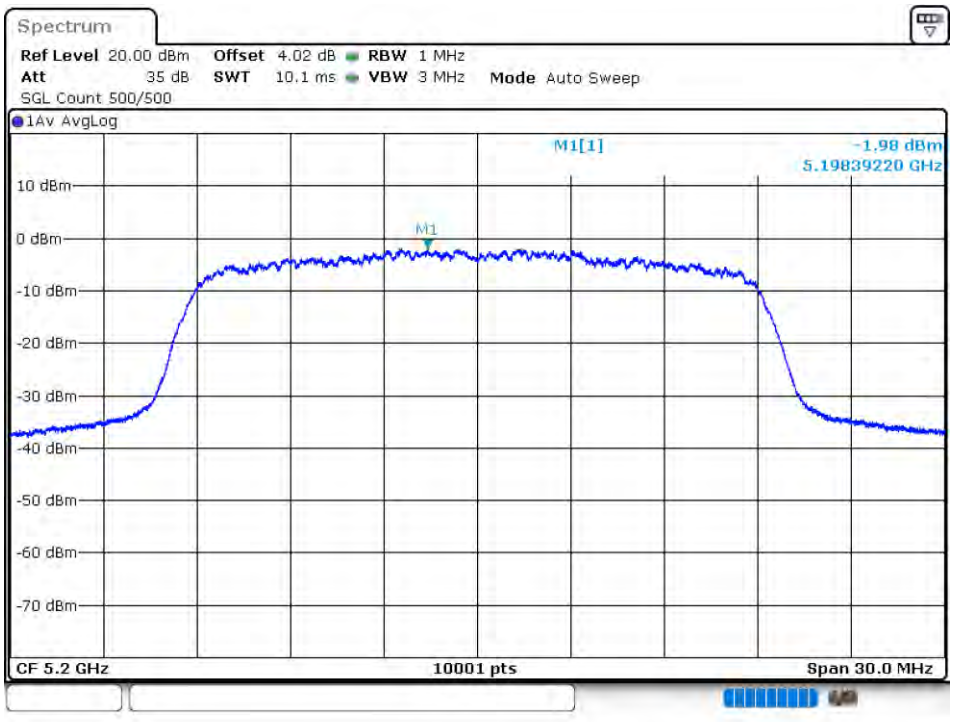
PSD NVNT a 5240MHz Ant2



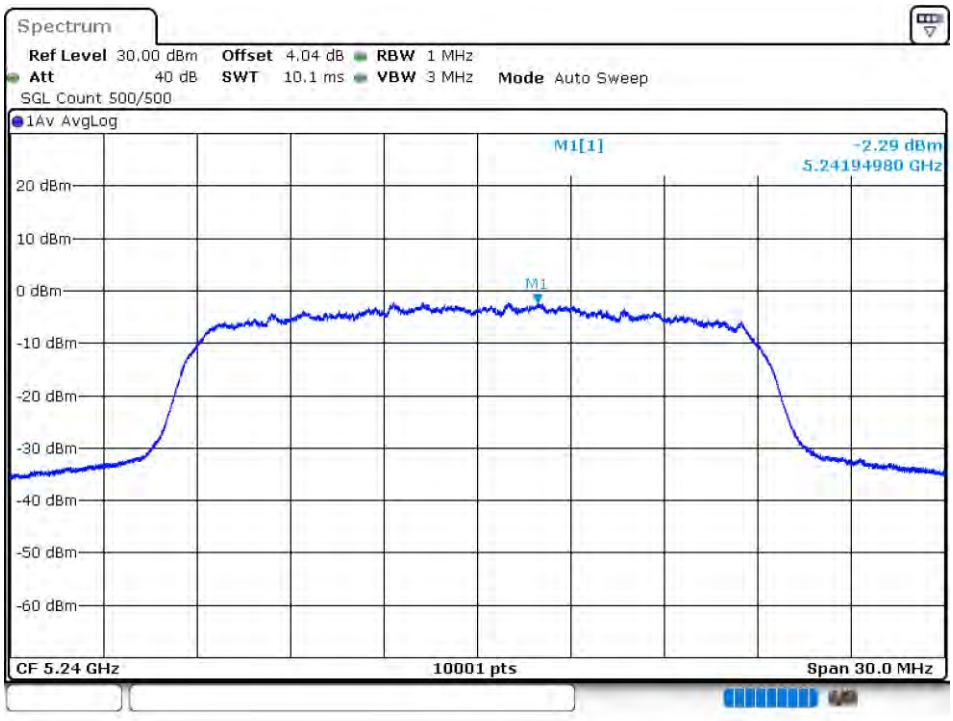
PSD NVNT n20 5180MHz Ant1



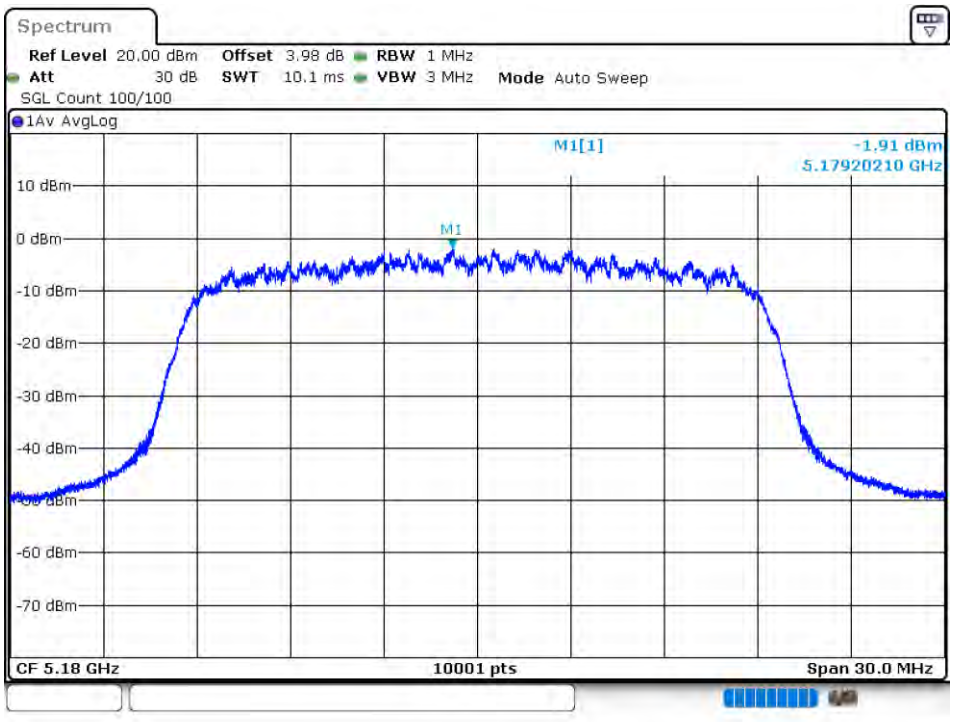
PSD NVNT n20 5200MHz Ant1



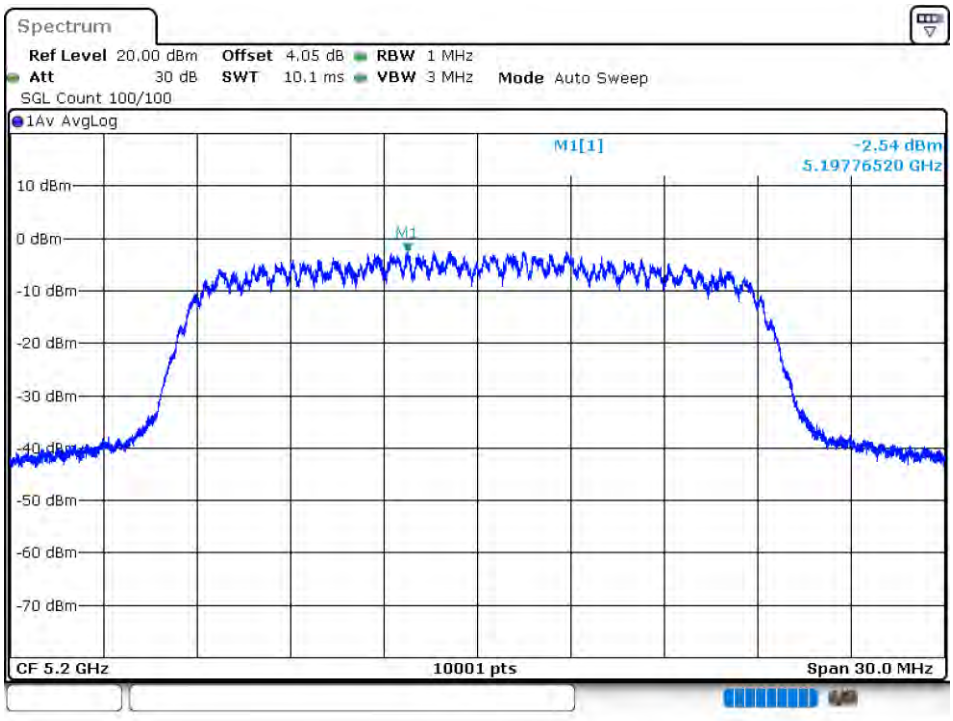
PSD NVNT n20 5240MHz Ant1



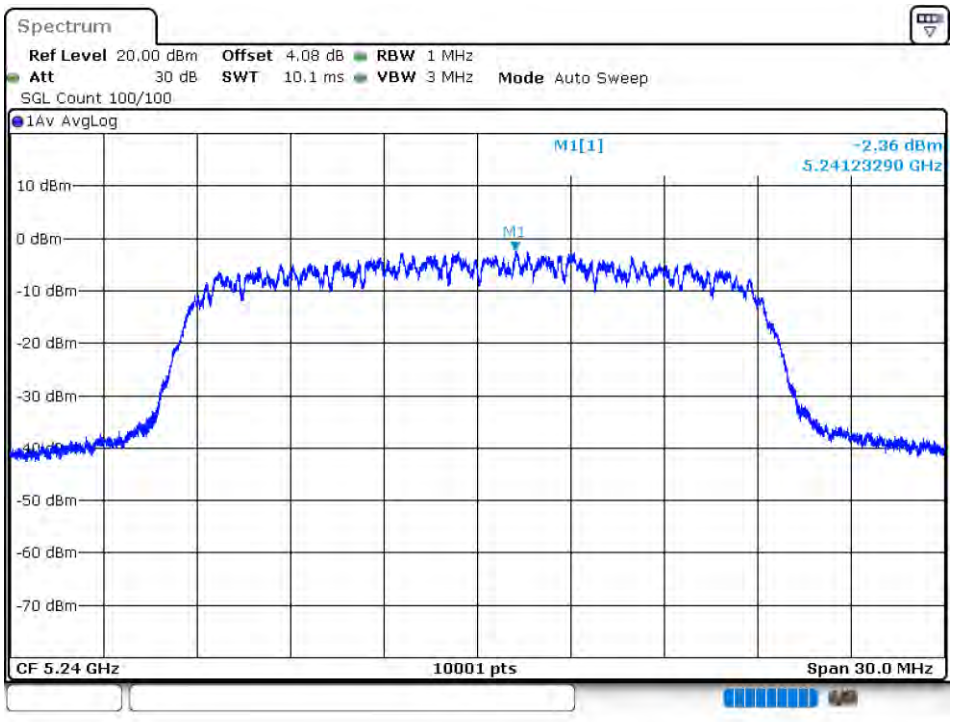
PSD NVNT n20 5180MHz Ant2



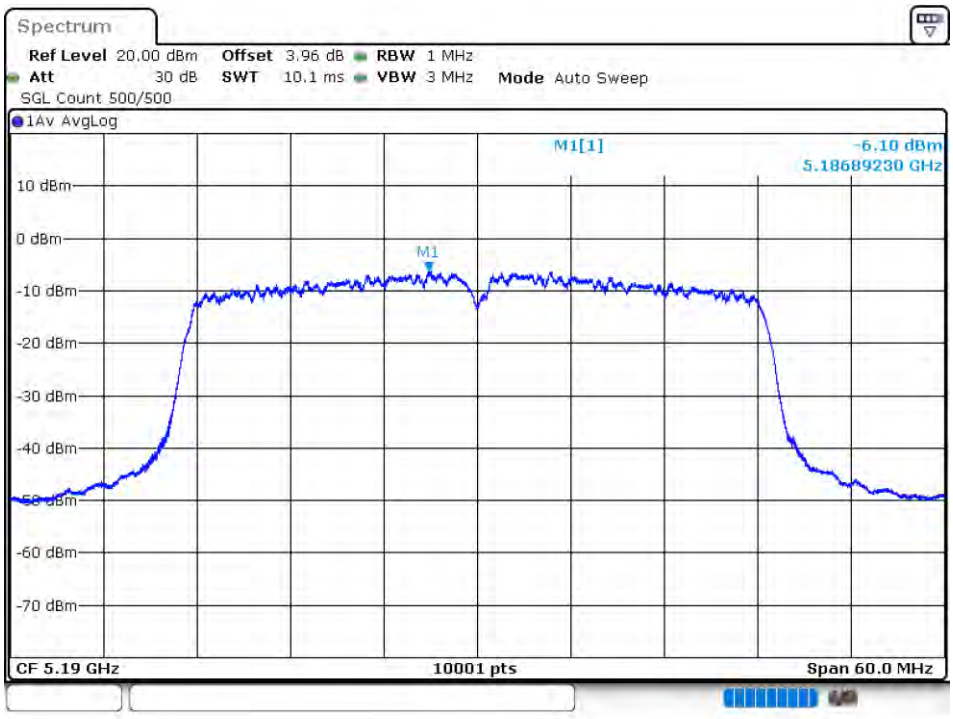
PSD NVNT n20 5200MHz Ant2



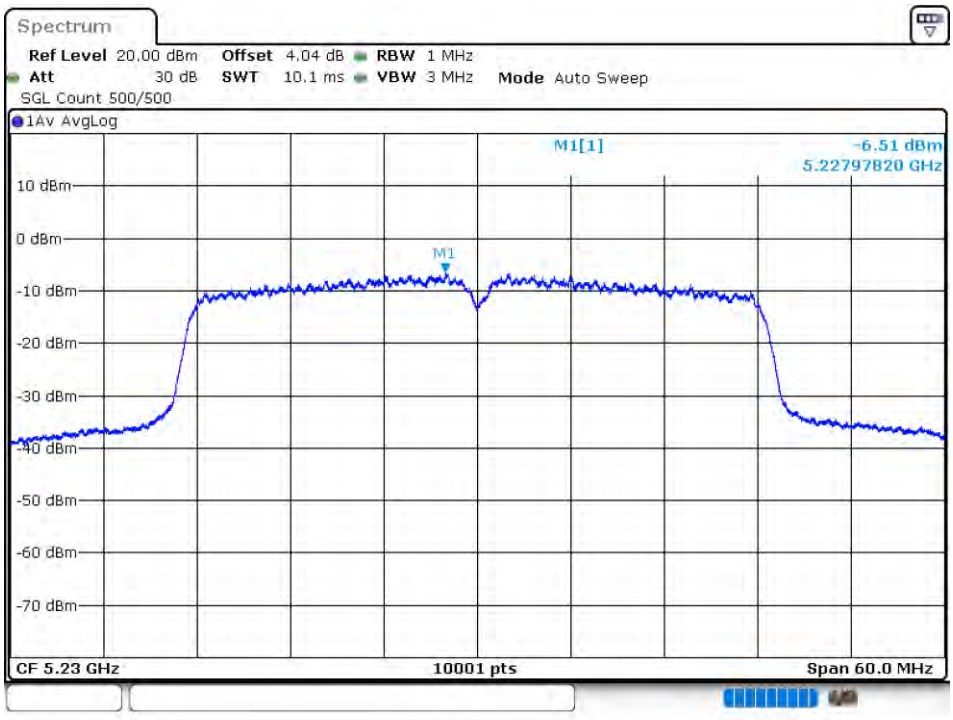
PSD NVNT n20 5240MHz Ant2



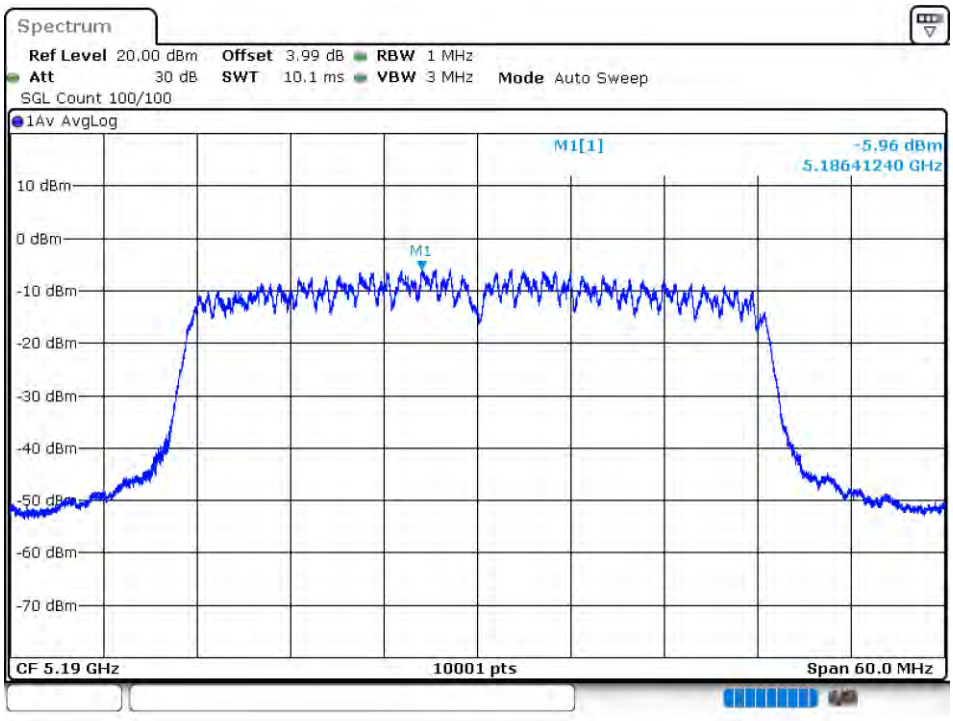
PSD NVNT n40 5190MHz Ant1



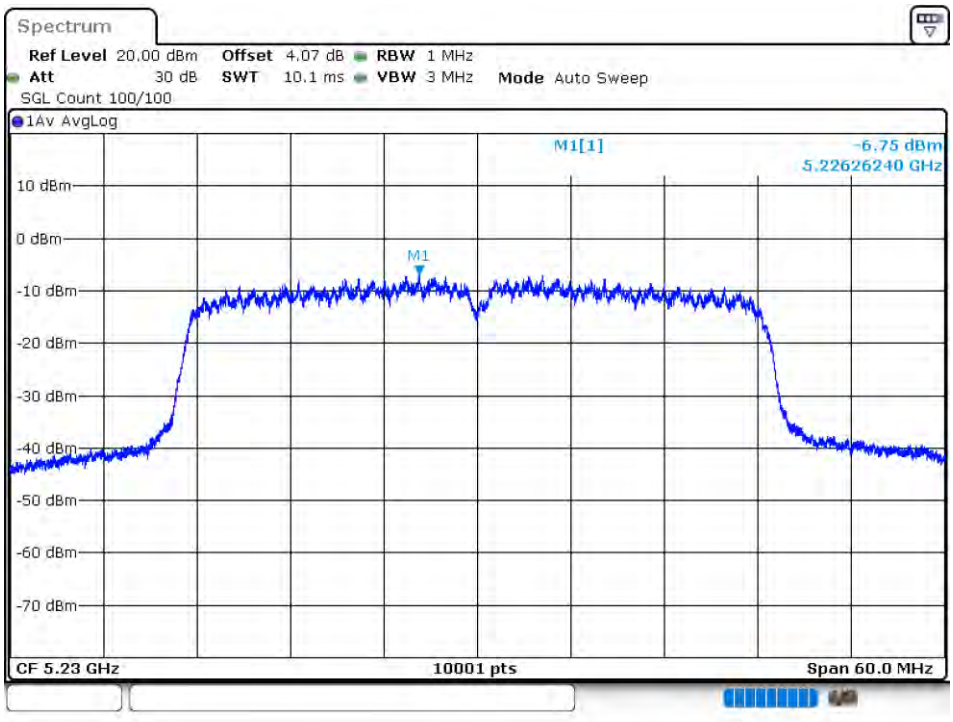
PSD NVNT n40 5230MHz Ant1



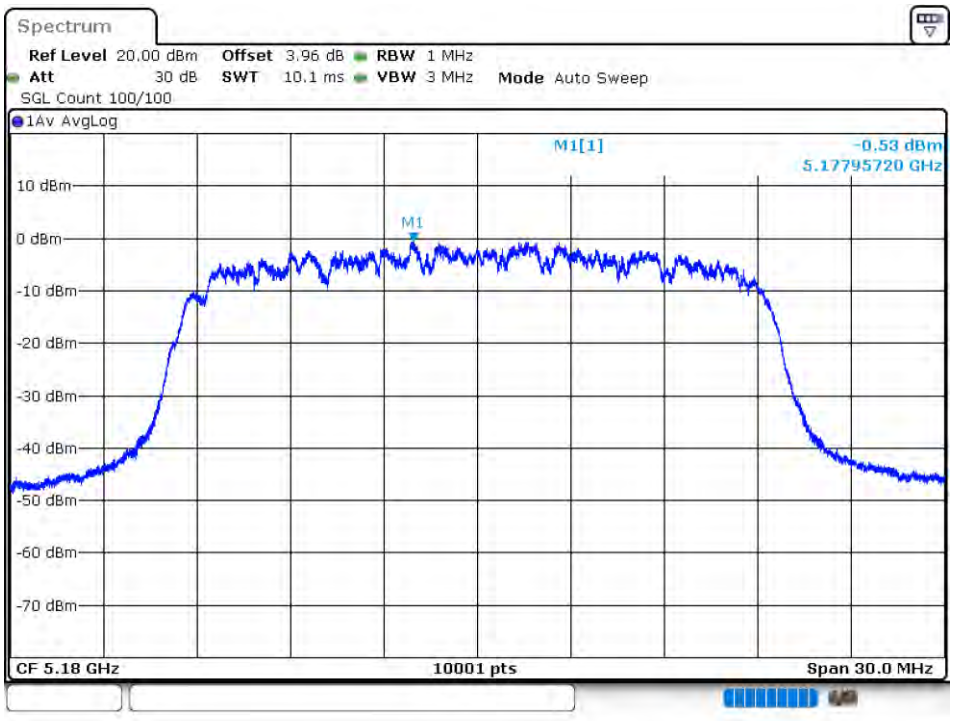
PSD NVNT n40 5190MHz Ant2



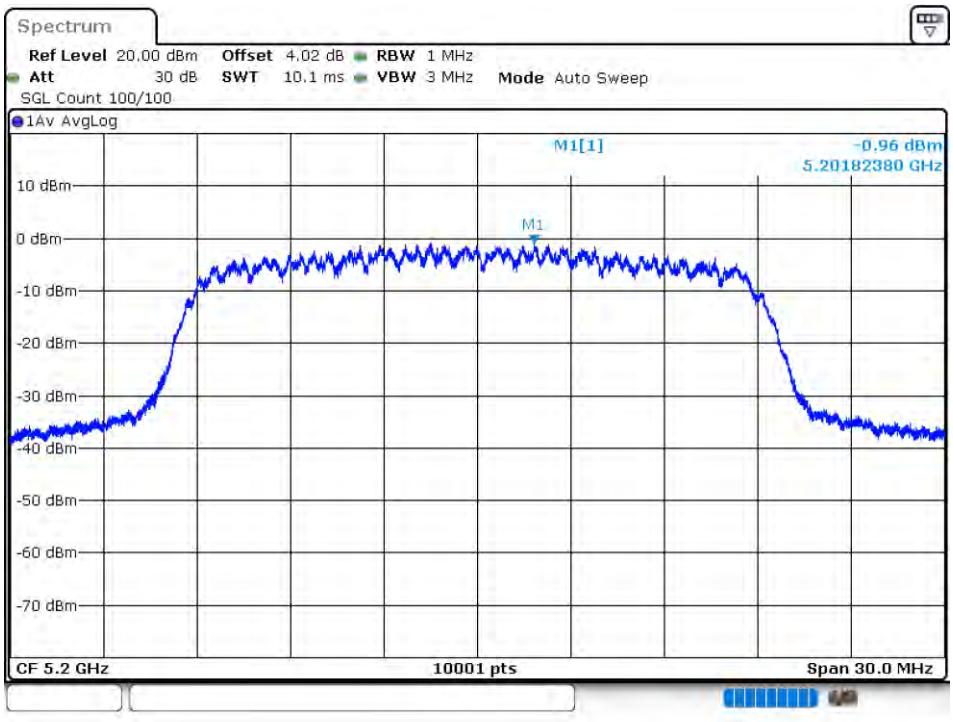
PSD NVNT n40 5230MHz Ant2



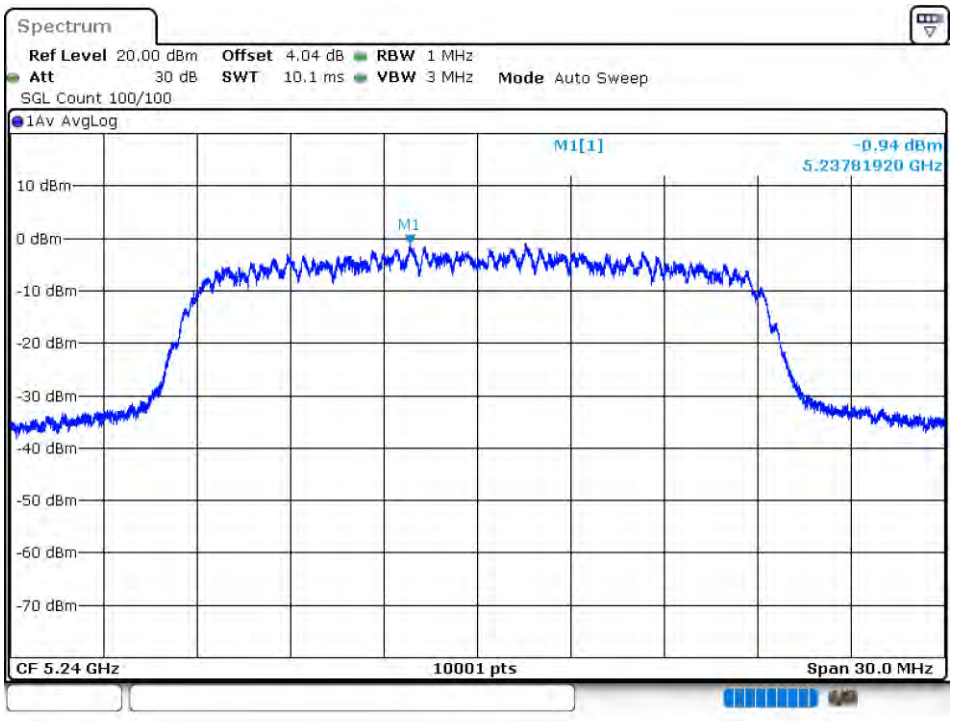
PSD NVNT ac20 5180MHz Ant1



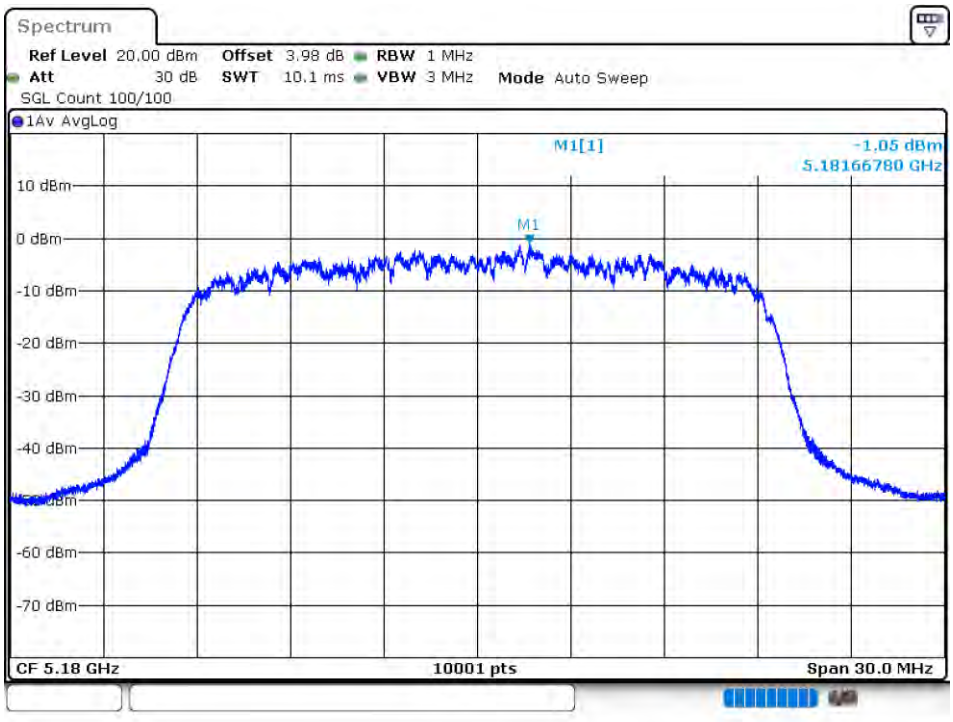
PSD NVNT ac20 5200MHz Ant1



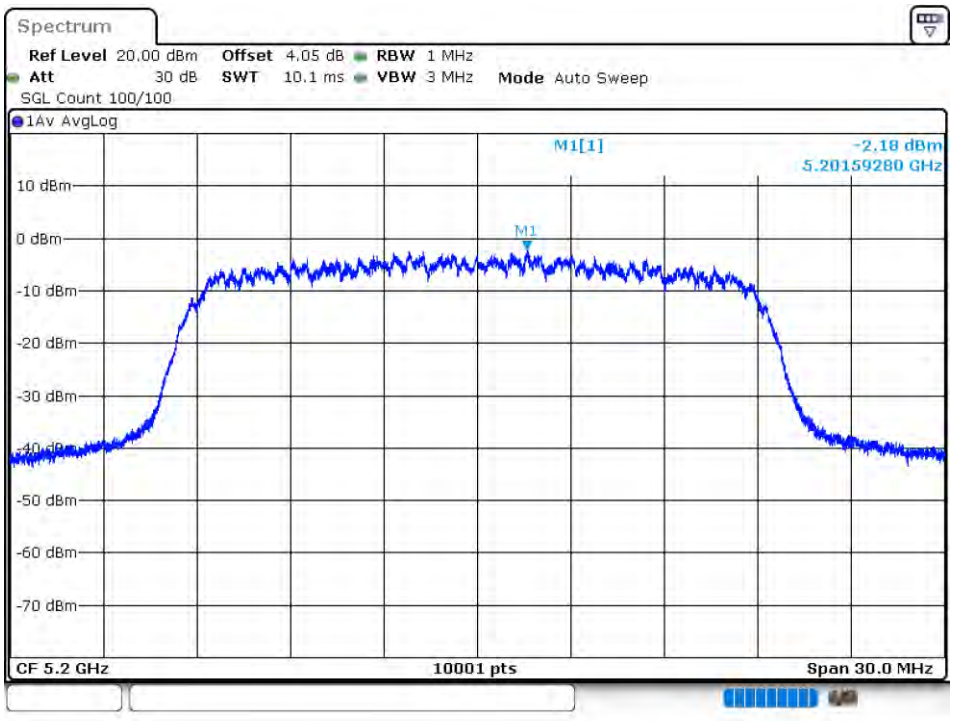
PSD NVNT ac20 5240MHz Ant1



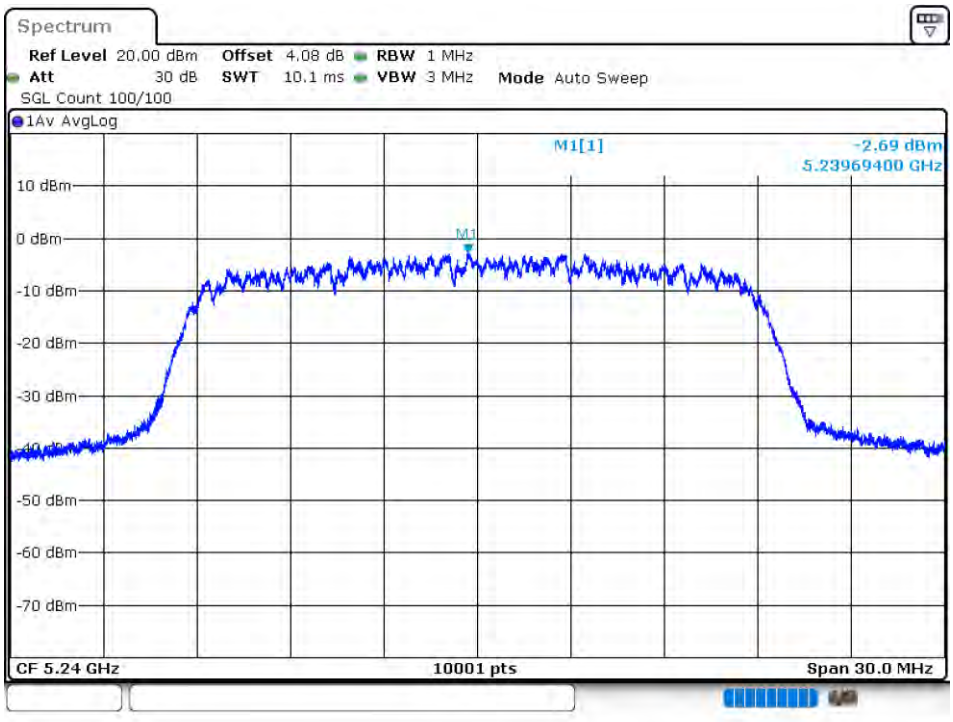
PSD NVNT ac20 5180MHz Ant2



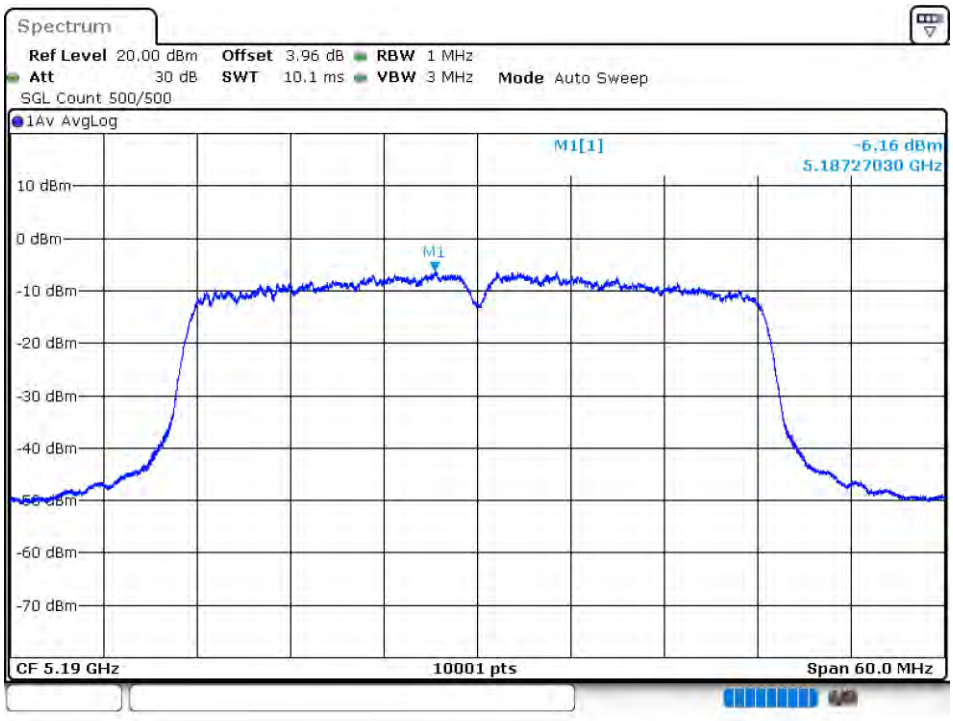
PSD NVNT ac20 5200MHz Ant2



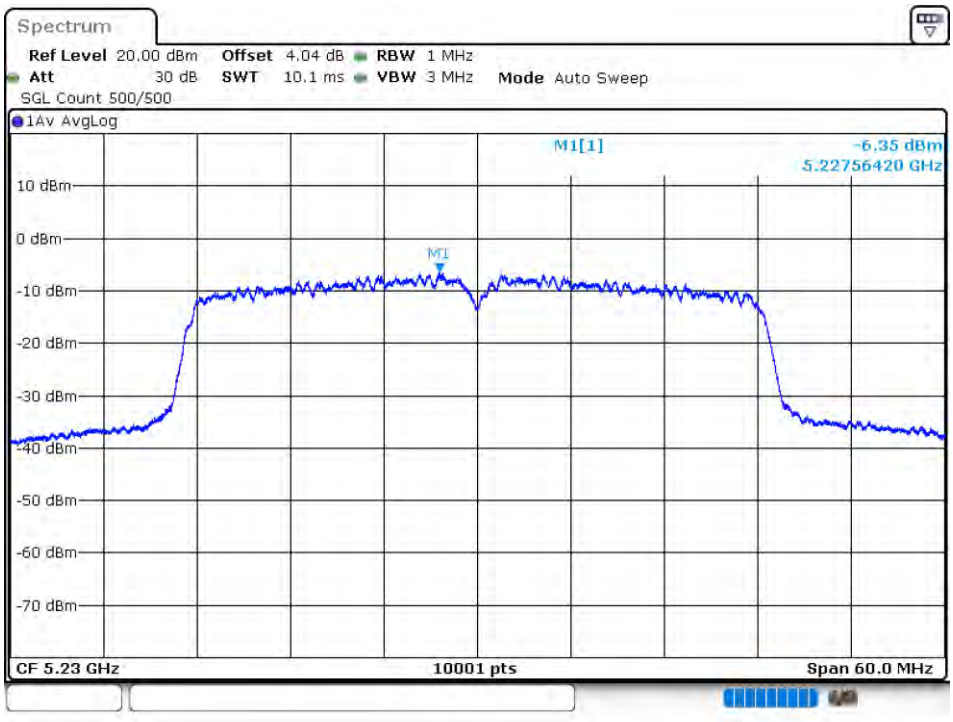
PSD NVNT ac20 5240MHz Ant2



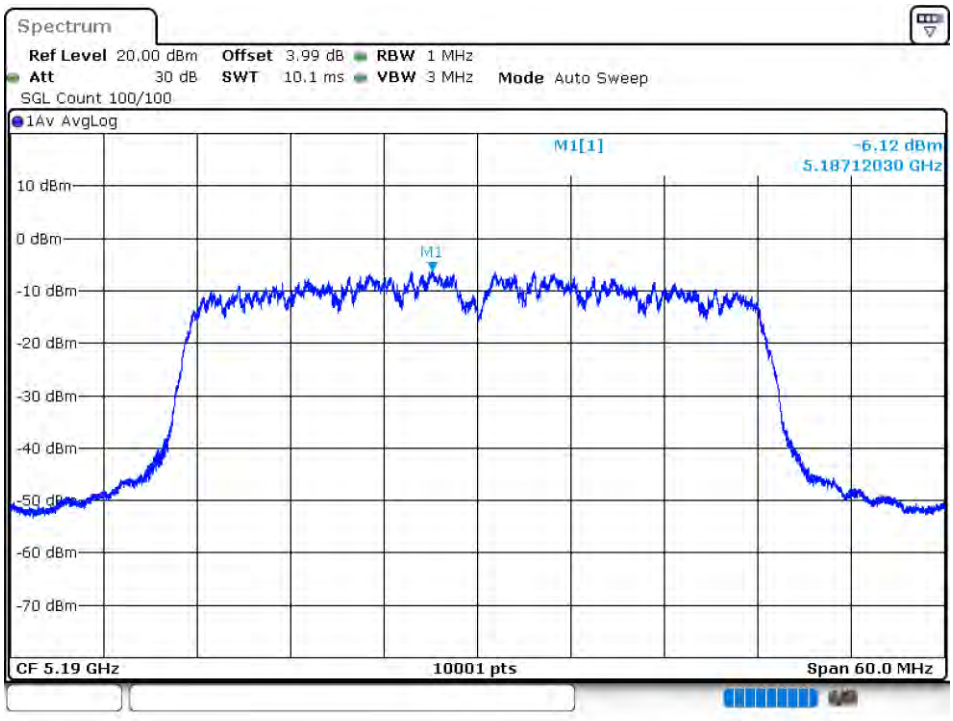
PSD NVNT ac40 5190MHz Ant1



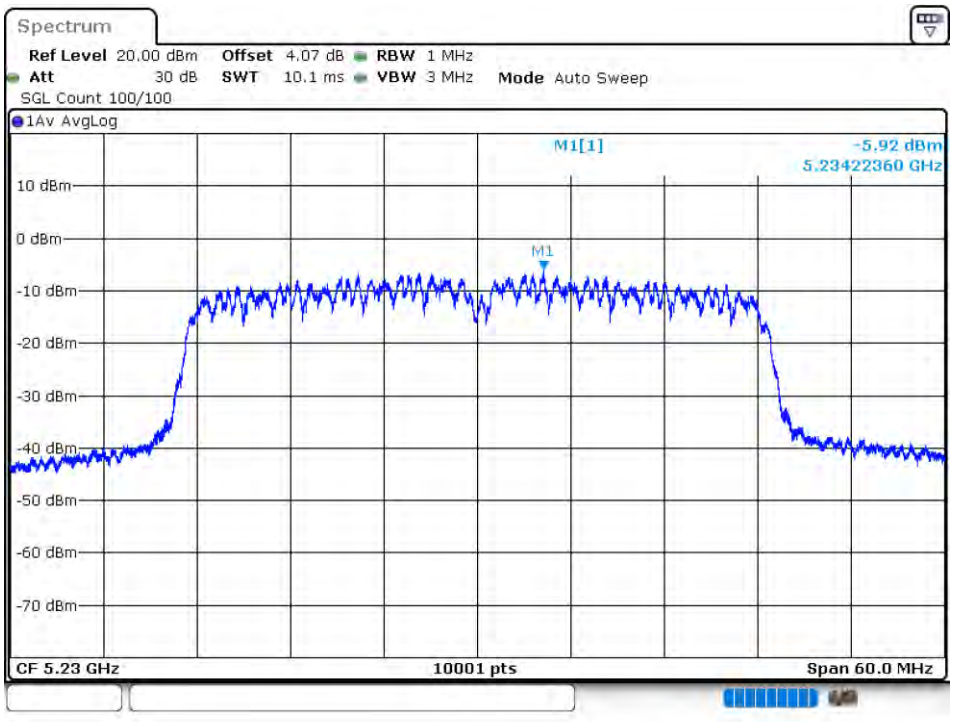
PSD NVNT ac40 5230MHz Ant1



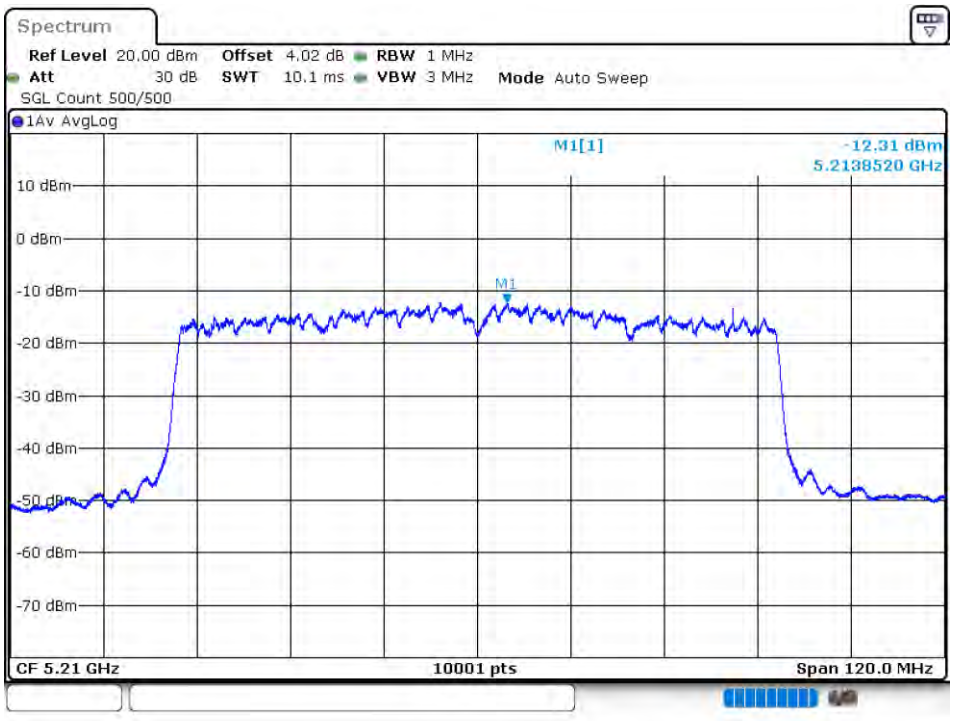
PSD NVNT ac40 5190MHz Ant2



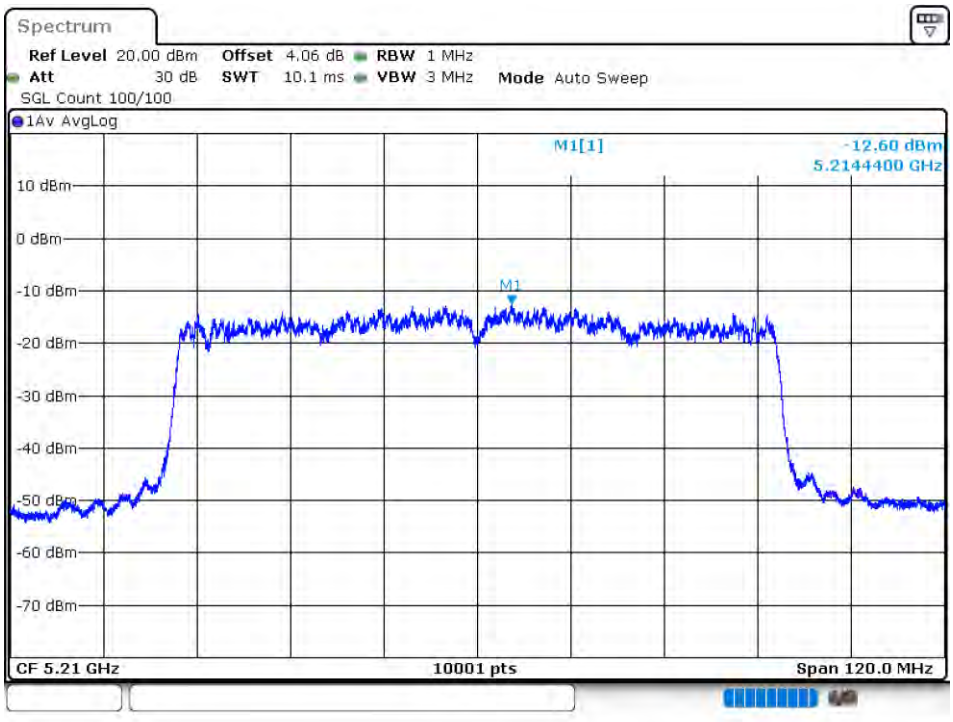
PSD NVNT ac40 5230MHz Ant2



PSD NVNT ac80 5210MHz Ant1



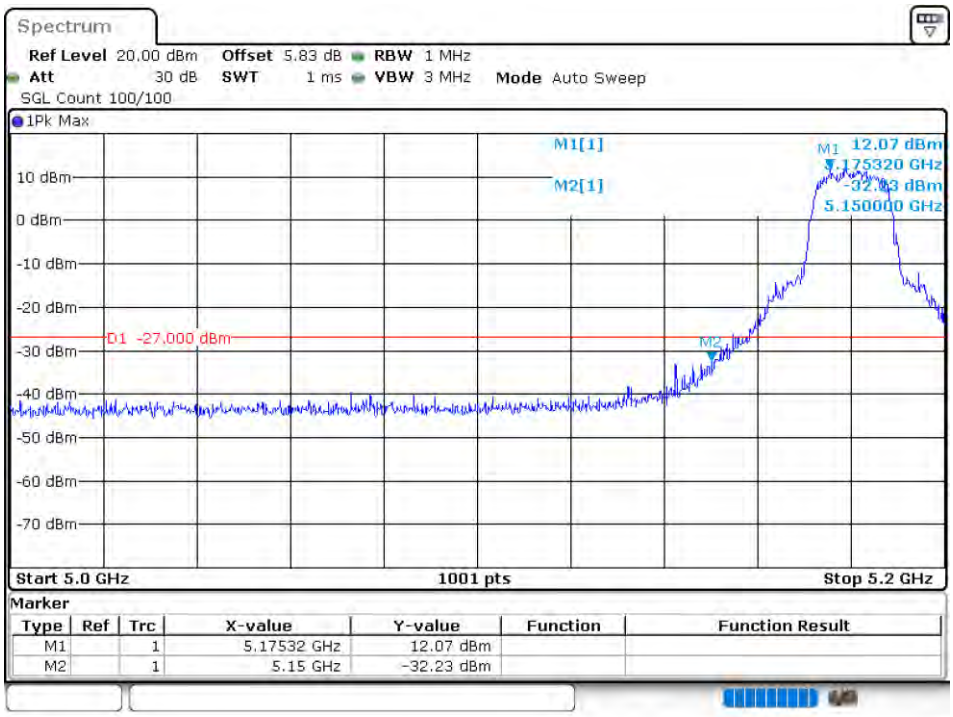
PSD NVNT ac80 5210MHz Ant2



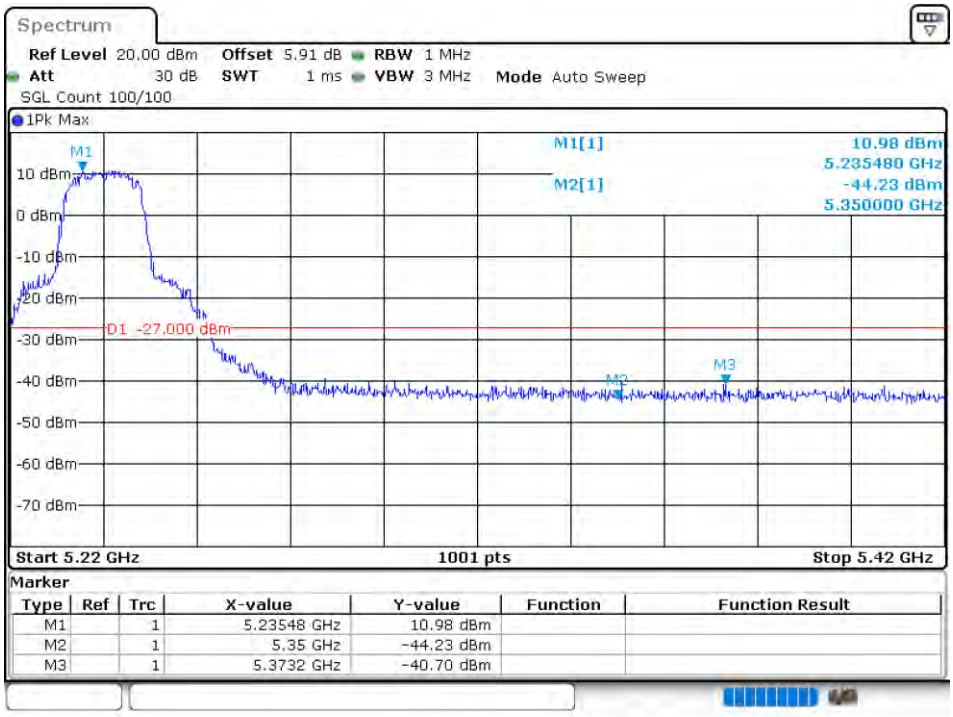
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-32.23	-27	Pass
NVNT	a	5240	Ant1	-40.69	-27	Pass
NVNT	a	5180	Ant2	-30.6	-27	Pass
NVNT	a	5240	Ant2	-40.73	-27	Pass
NVNT	n20	5180	Ant1	-38.88	-27	Pass
NVNT	n20	5240	Ant1	-40.71	-27	Pass
NVNT	n20	5180	Ant2	-40.61	-27	Pass
NVNT	n20	5240	Ant2	-40.75	-27	Pass
NVNT	n40	5190	Ant1	-37.65	-27	Pass
NVNT	n40	5230	Ant1	-40.57	-27	Pass
NVNT	n40	5190	Ant2	-40.27	-27	Pass
NVNT	n40	5230	Ant2	-40.71	-27	Pass
NVNT	ac20	5180	Ant1	-39.93	-27	Pass
NVNT	ac20	5240	Ant1	-40.58	-27	Pass
NVNT	ac20	5180	Ant2	-39.81	-27	Pass
NVNT	ac20	5240	Ant2	-40.85	-27	Pass
NVNT	ac40	5190	Ant1	-36.71	-27	Pass
NVNT	ac40	5230	Ant1	-41.41	-27	Pass
NVNT	ac40	5190	Ant2	-39.4	-27	Pass
NVNT	ac40	5230	Ant2	-39.1	-27	Pass
NVNT	ac80	5210	Ant1	-43.76	-27	Pass
NVNT	ac80	5210	Ant2	-43.13	-27	Pass

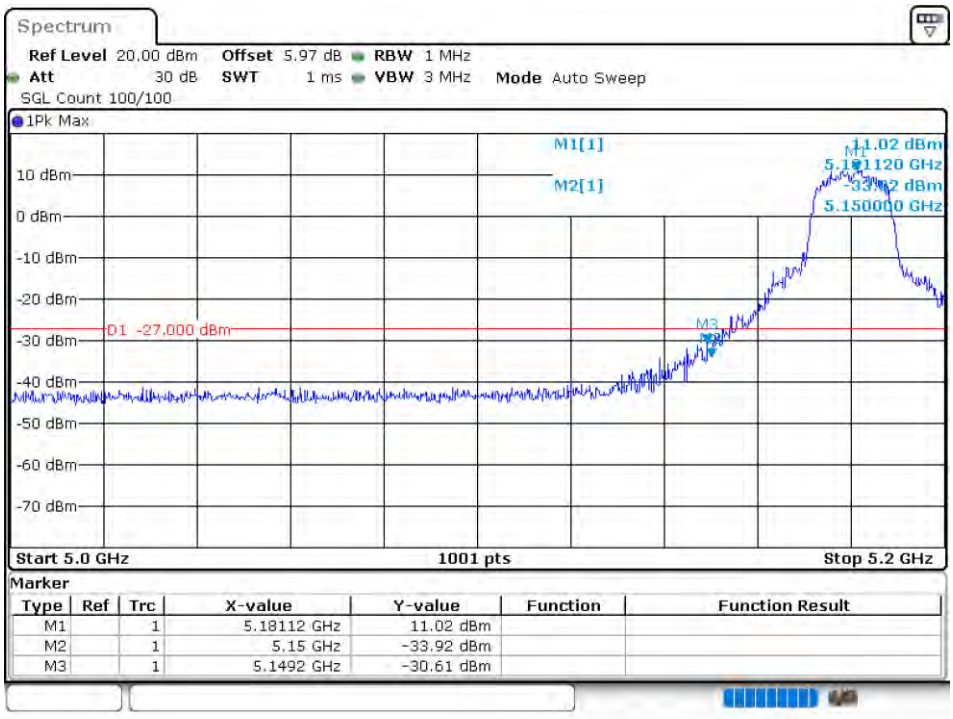
Test Graphs
Band Edge NVNT a 5180MHz Low Ant1



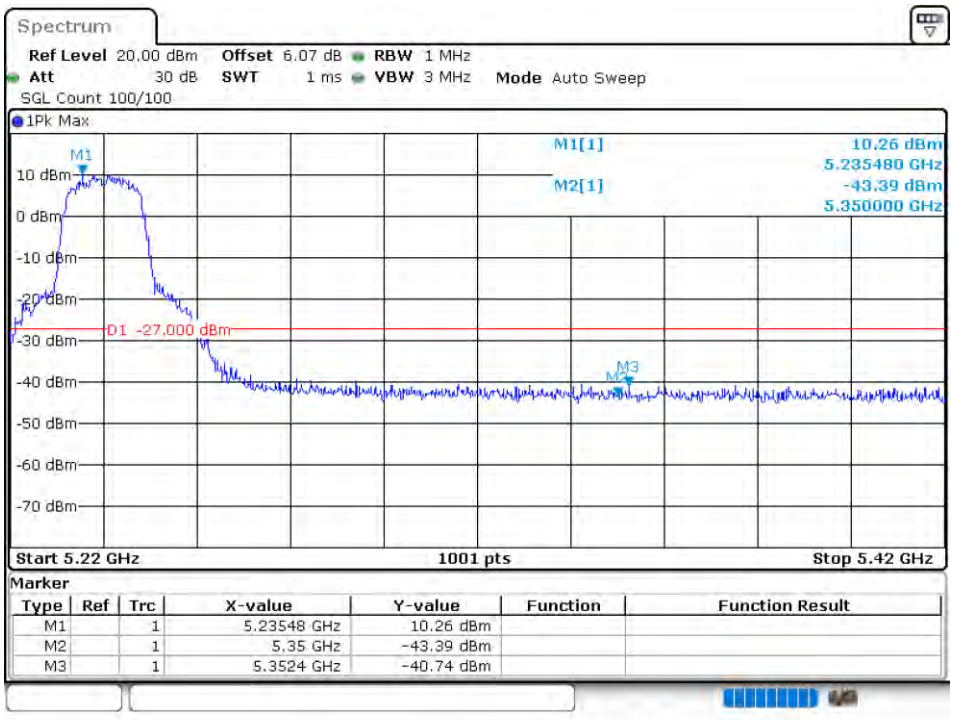
Band Edge NVNT a 5240MHz High Ant1



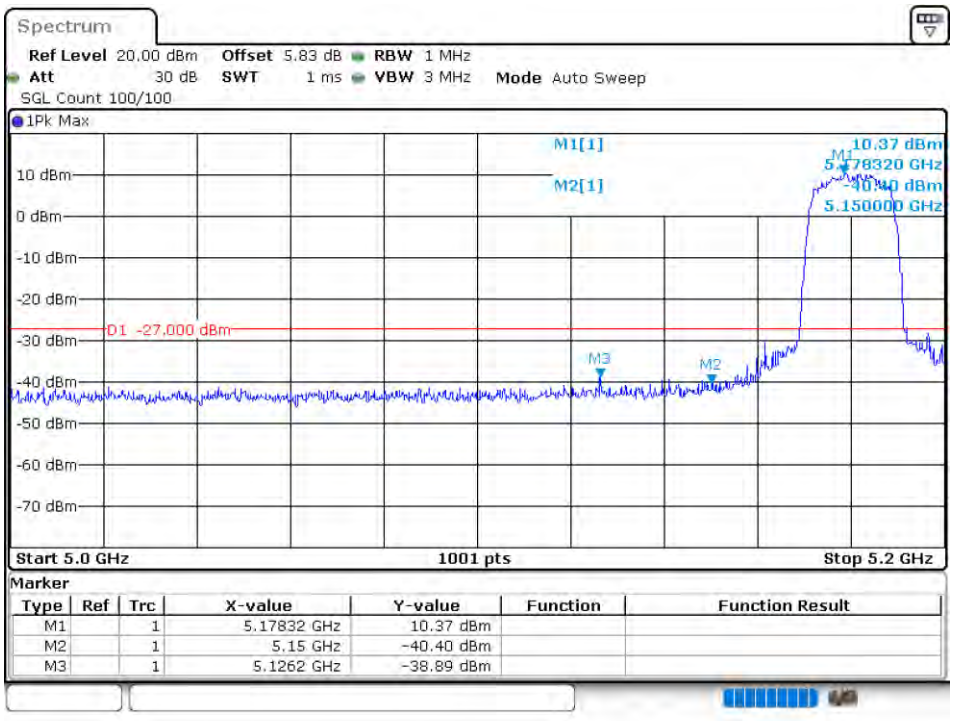
Band Edge NVNT a 5180MHz Low Ant2



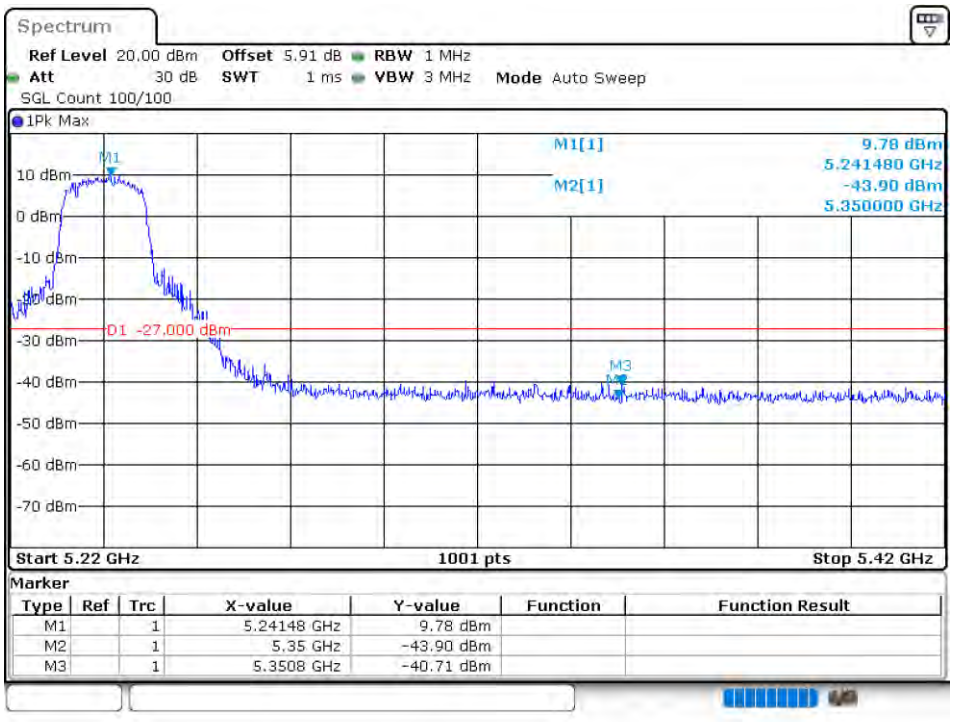
Band Edge NVNT a 5240MHz High Ant2



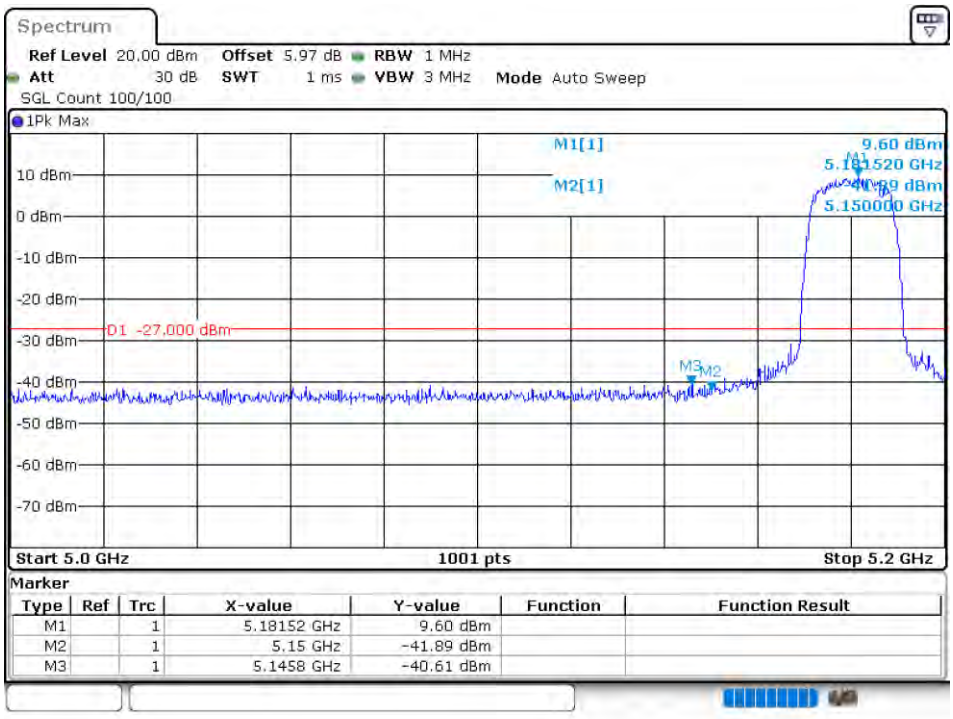
Band Edge NVNT n20 5180MHz Low Ant1



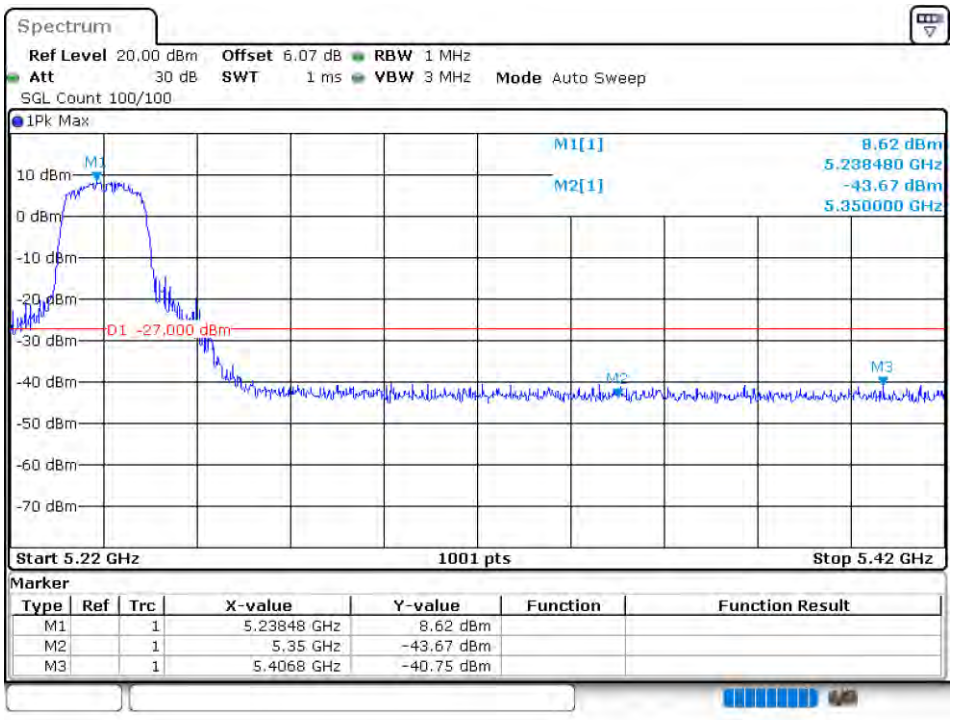
Band Edge NVNT n20 5240MHz High Ant1



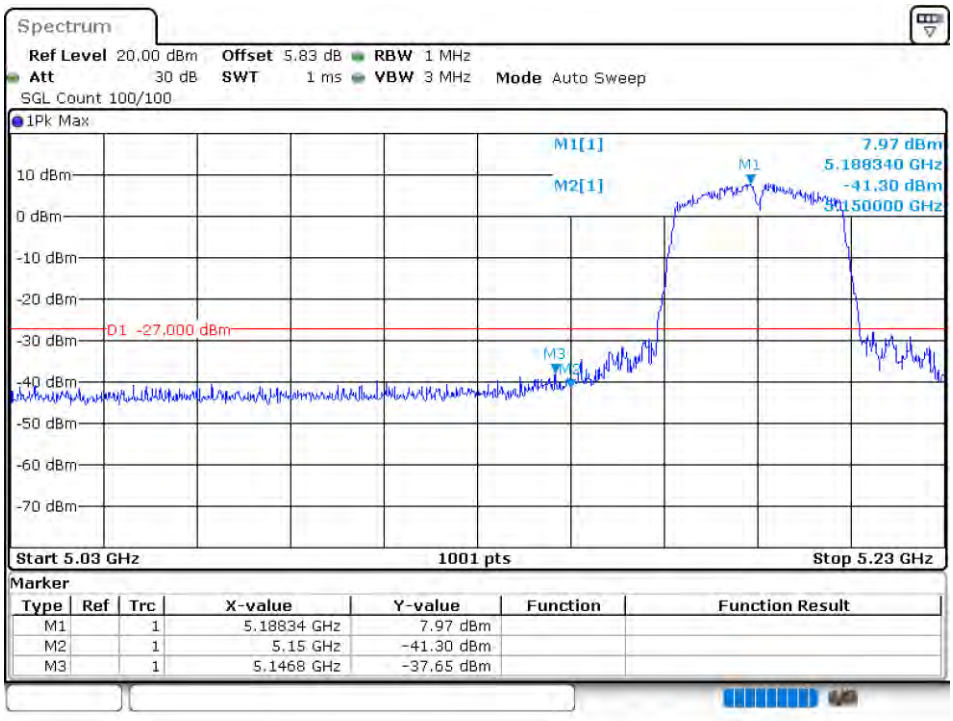
Band Edge NVNT n20 5180MHz Low Ant2



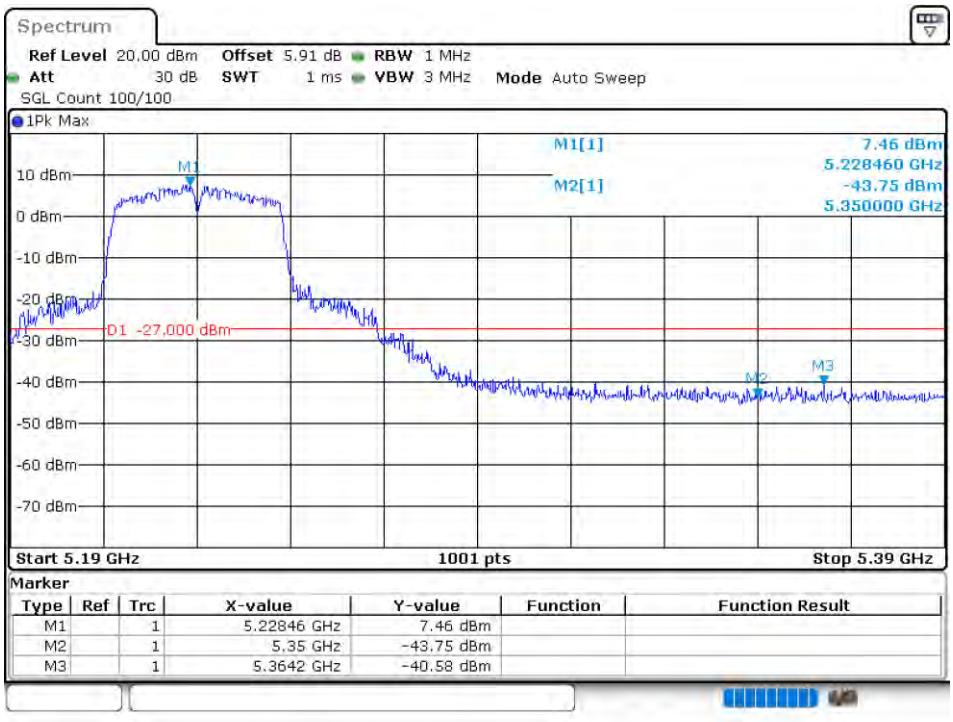
Band Edge NVNT n20 5240MHz High Ant2



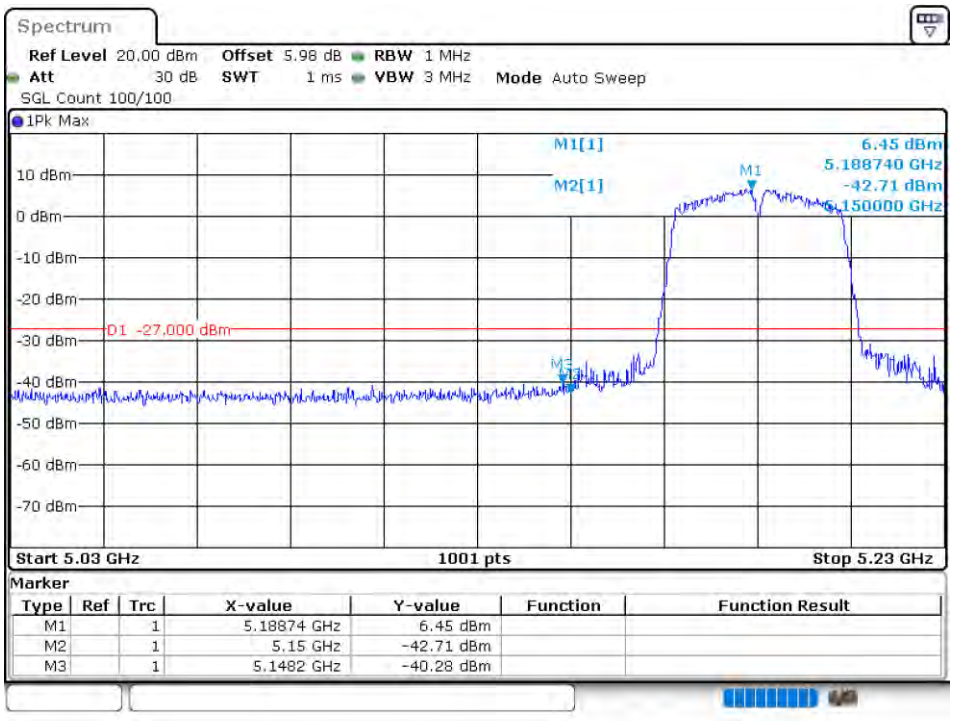
Band Edge NVNT n40 5190MHz Low Ant1



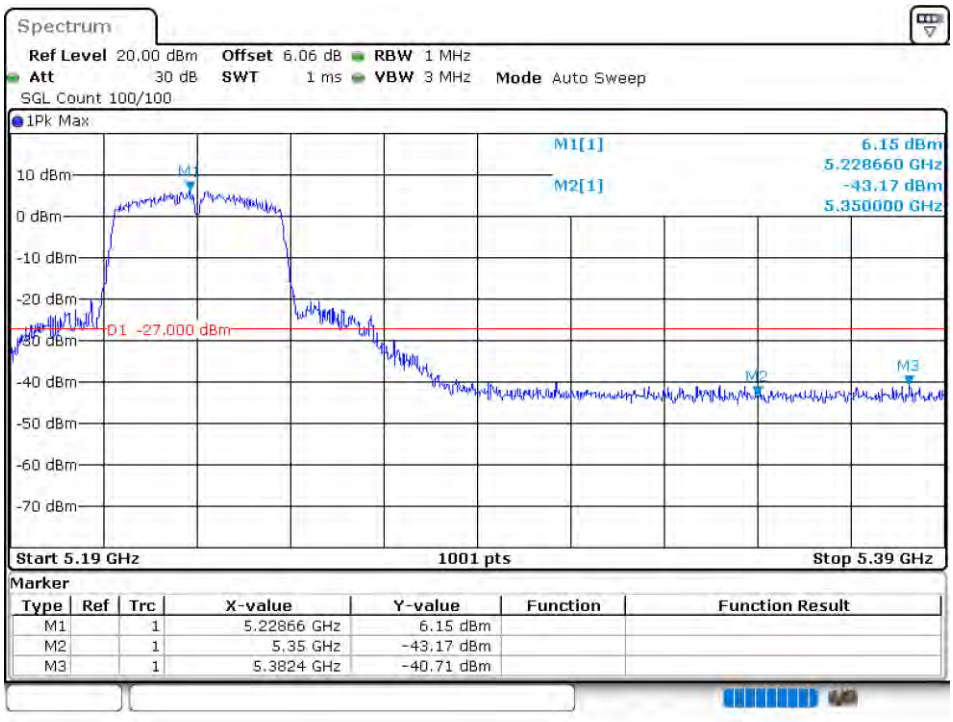
Band Edge NVNT n40 5230MHz High Ant1

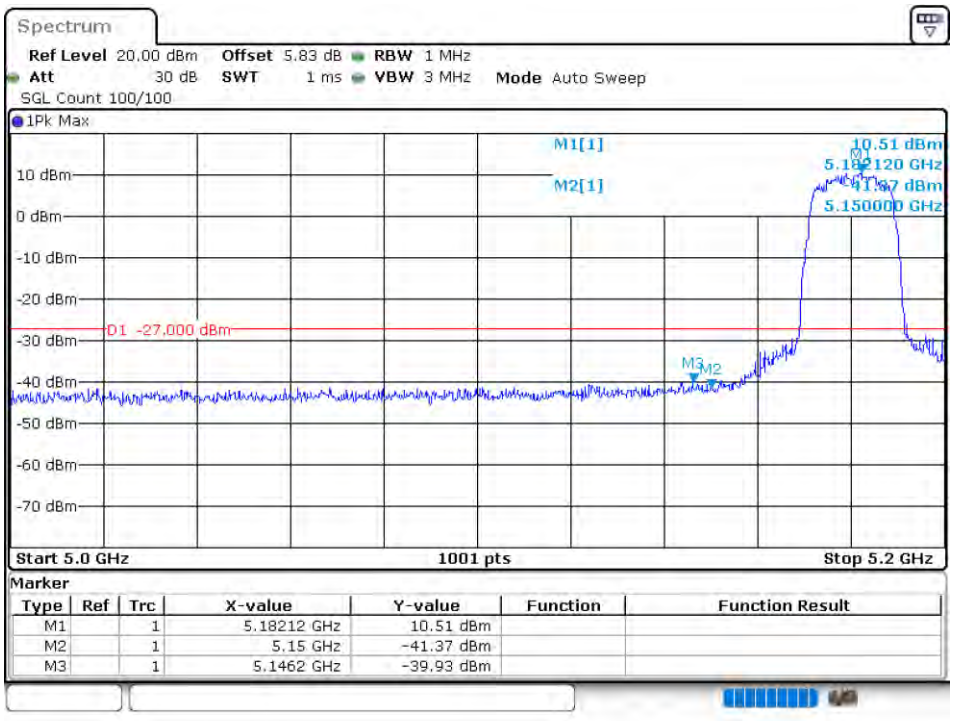


Band Edge NVNT n40 5190MHz Low Ant2



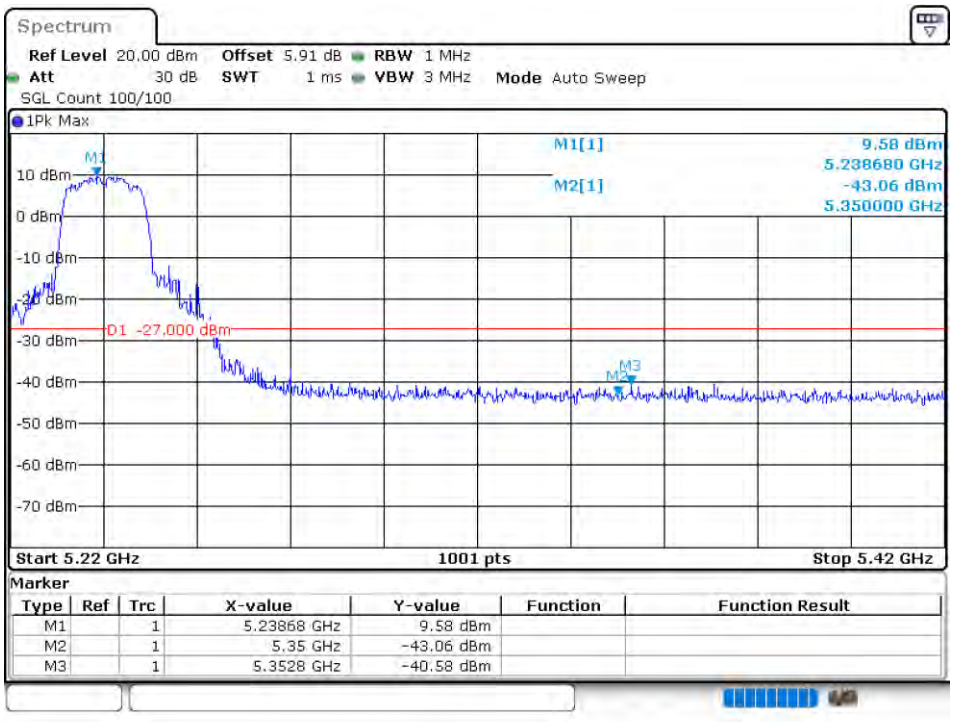
Band Edge NVNT n40 5230MHz High Ant2



Band Edge NVNT ac20 5180MHz Low Ant1


Marker

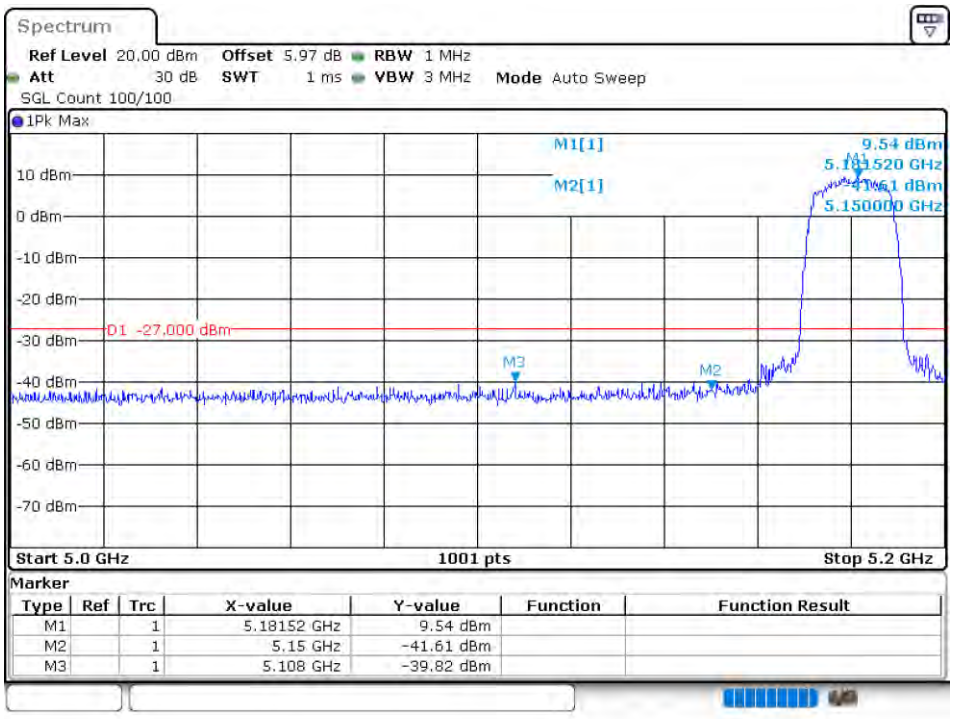
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.18212 GHz	10.51 dBm		
M2		1	5.15 GHz	-41.37 dBm		
M3		1	5.1462 GHz	-39.93 dBm		

Band Edge NVNT ac20 5240MHz High Ant1


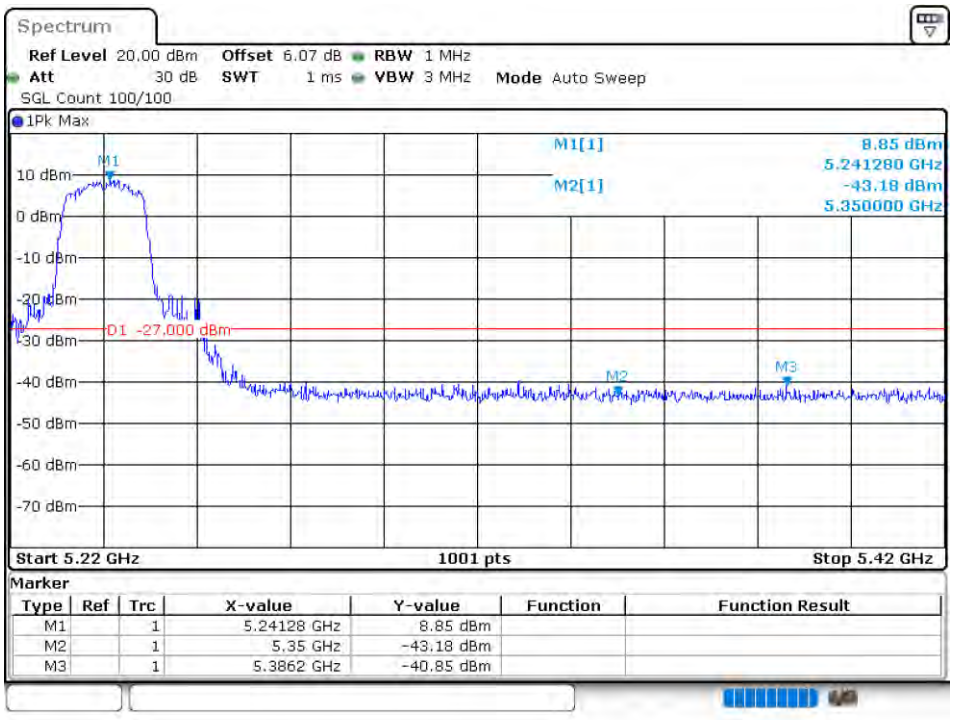
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.23868 GHz	9.58 dBm		
M2		1	5.35 GHz	-43.06 dBm		
M3		1	5.3528 GHz	-40.58 dBm		

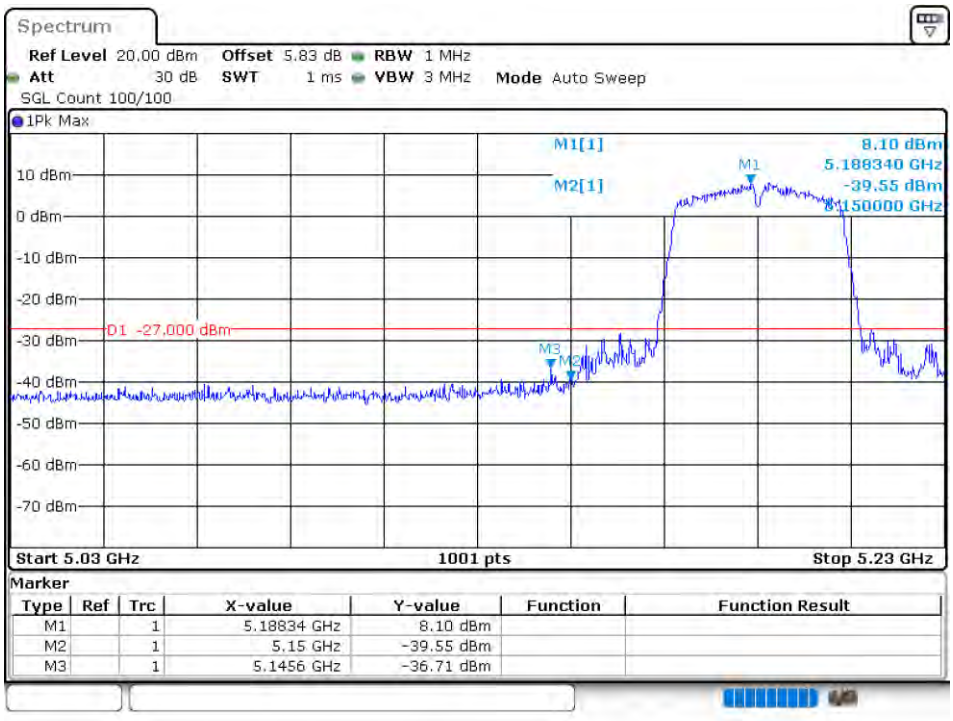
Band Edge NVNT ac20 5180MHz Low Ant2



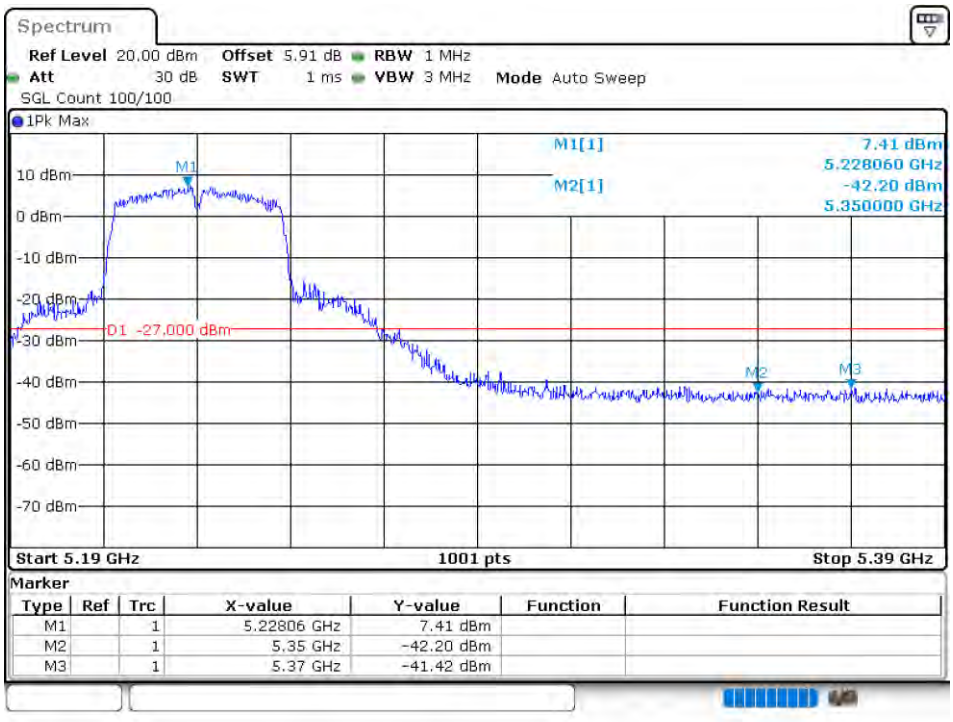
Band Edge NVNT ac20 5240MHz High Ant2



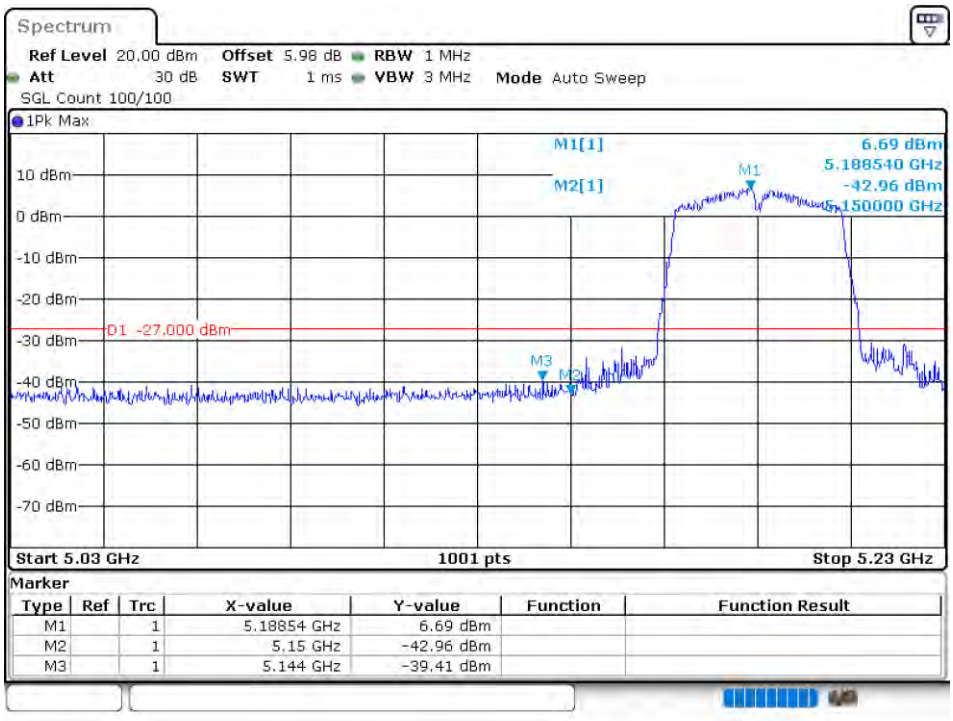
Band Edge NVNT ac40 5190MHz Low Ant1



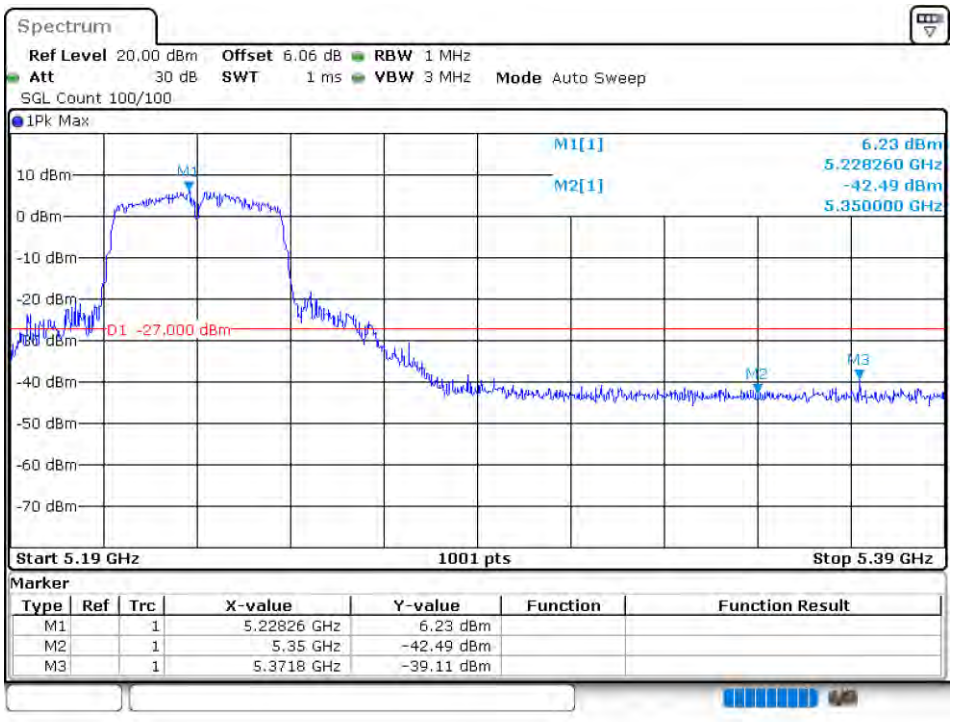
Band Edge NVNT ac40 5230MHz High Ant1



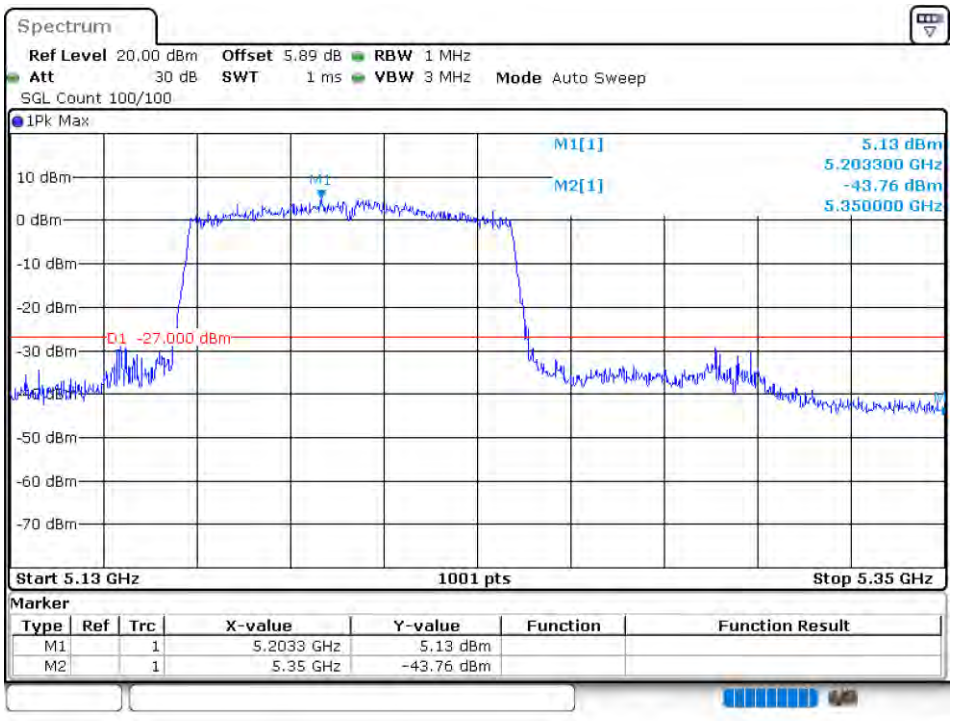
Band Edge NVNT ac40 5190MHz Low Ant2



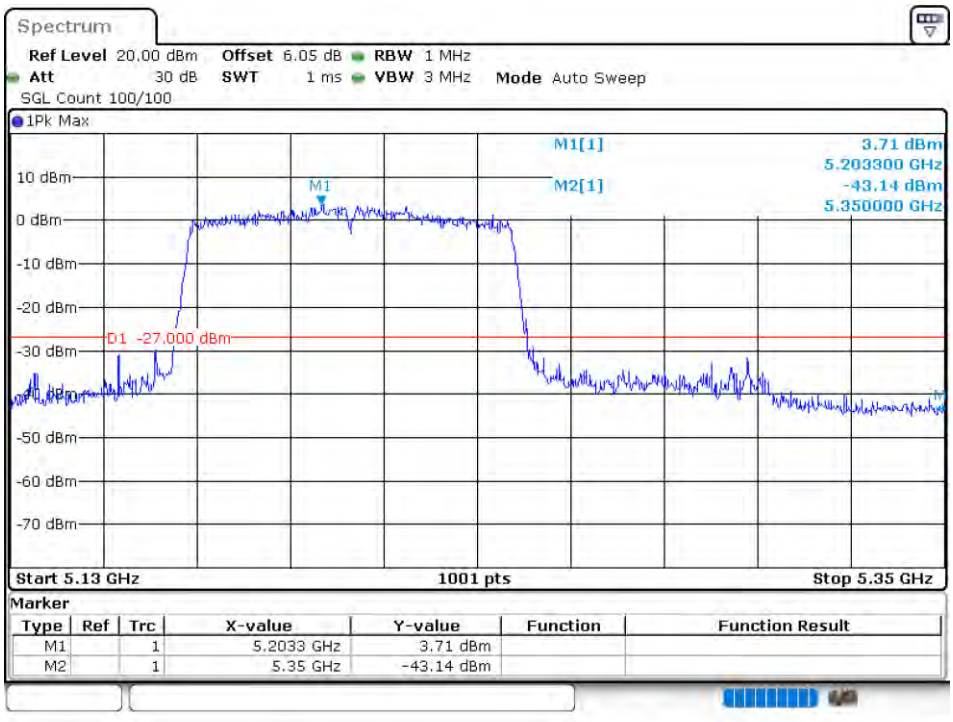
Band Edge NVNT ac40 5230MHz High Ant2



Band Edge NVNT ac80 5210MHz High Ant1



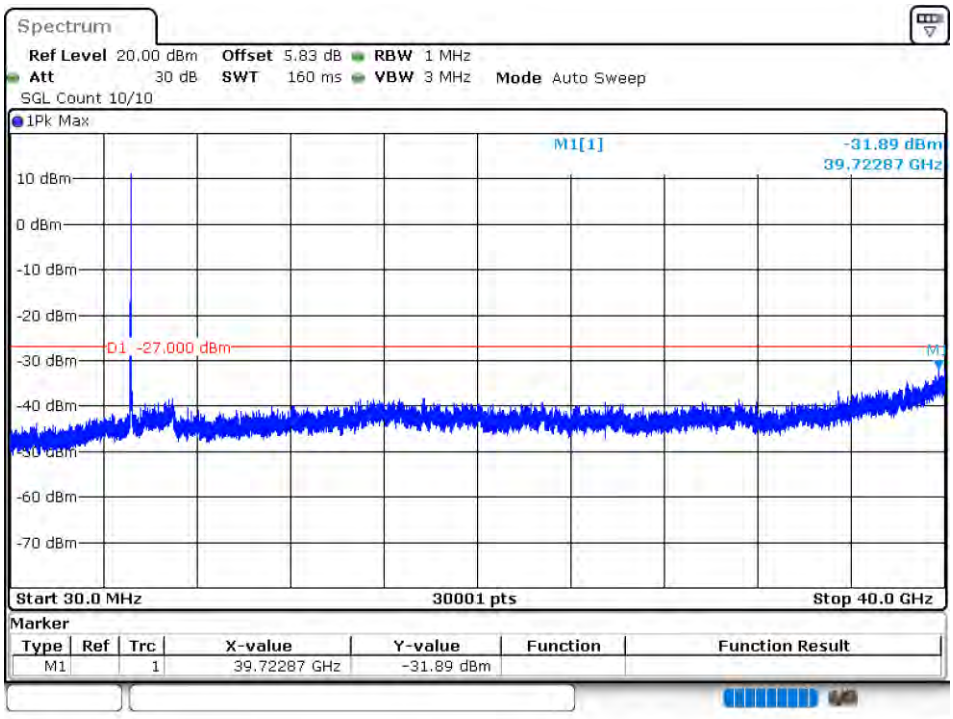
Band Edge NVNT ac80 5210MHz High Ant2



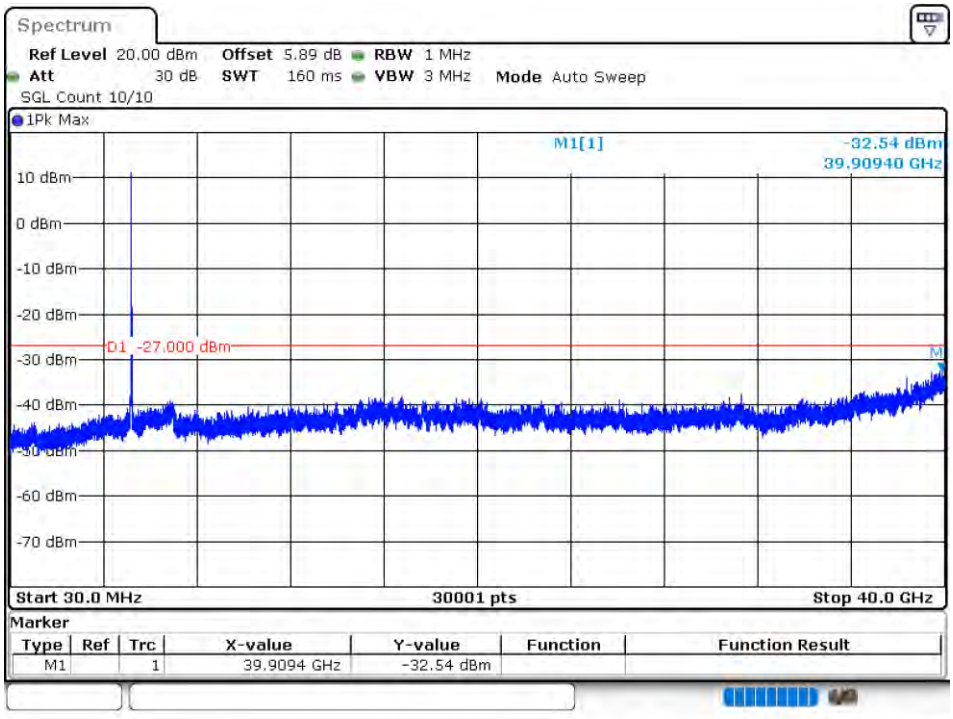
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-31.88	-27	Pass
NVNT	a	5200	Ant1	-32.54	-27	Pass
NVNT	a	5240	Ant1	-32.51	-27	Pass
NVNT	a	5180	Ant2	-32.45	-27	Pass
NVNT	a	5200	Ant2	-33.1	-27	Pass
NVNT	a	5240	Ant2	-32.89	-27	Pass
NVNT	n20	5180	Ant1	-31.65	-27	Pass
NVNT	n20	5200	Ant1	-31.57	-27	Pass
NVNT	n20	5240	Ant1	-31.86	-27	Pass
NVNT	n20	5180	Ant2	-32.15	-27	Pass
NVNT	n20	5200	Ant2	-32.57	-27	Pass
NVNT	n20	5240	Ant2	-32.86	-27	Pass
NVNT	n40	5190	Ant1	-32.7	-27	Pass
NVNT	n40	5230	Ant1	-32.59	-27	Pass
NVNT	n40	5190	Ant2	-32.19	-27	Pass
NVNT	n40	5230	Ant2	-31.09	-27	Pass
NVNT	ac20	5180	Ant1	-31.83	-27	Pass
NVNT	ac20	5200	Ant1	-32.84	-27	Pass
NVNT	ac20	5240	Ant1	-32.48	-27	Pass
NVNT	ac20	5180	Ant2	-32.07	-27	Pass
NVNT	ac20	5200	Ant2	-32.66	-27	Pass
NVNT	ac20	5240	Ant2	-32.32	-27	Pass
NVNT	ac40	5190	Ant1	-32.69	-27	Pass
NVNT	ac40	5230	Ant1	-33.05	-27	Pass
NVNT	ac40	5190	Ant2	-32.57	-27	Pass
NVNT	ac40	5230	Ant2	-32.31	-27	Pass
NVNT	ac80	5210	Ant1	-32.72	-27	Pass
NVNT	ac80	5210	Ant2	-32.42	-27	Pass

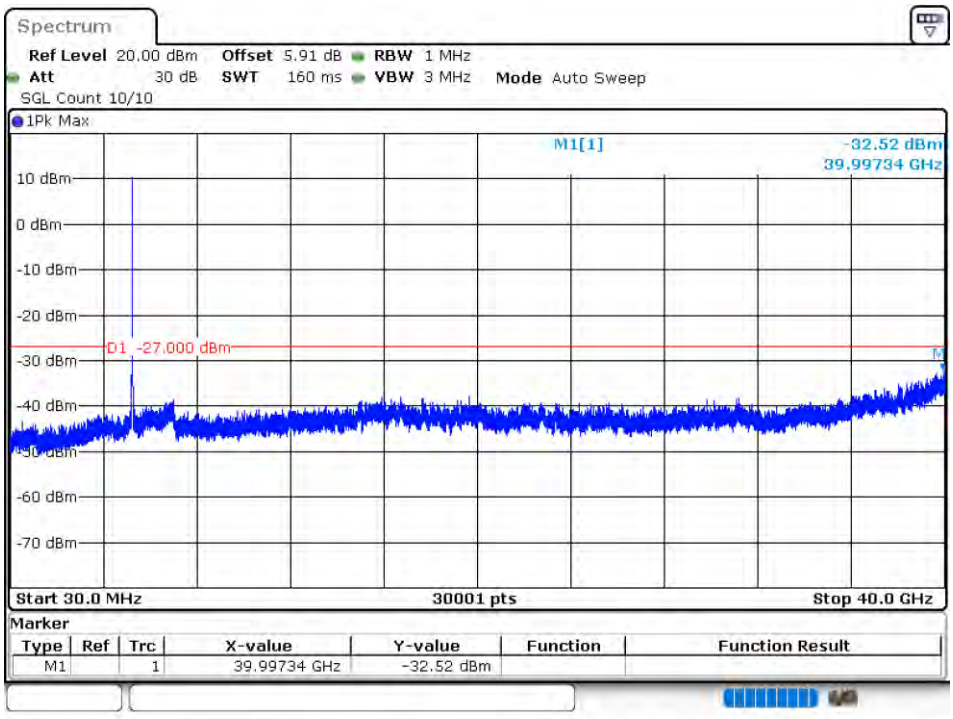
Test Graphs
Tx. Spurious NVNT a 5180MHz Ant1 Emission



Tx. Spurious NVNT a 5200MHz Ant1 Emission



Tx. Spurious NVNT a 5240MHz Ant1 Emission



Tx. Spurious NVNT a 5180MHz Ant2 Emission