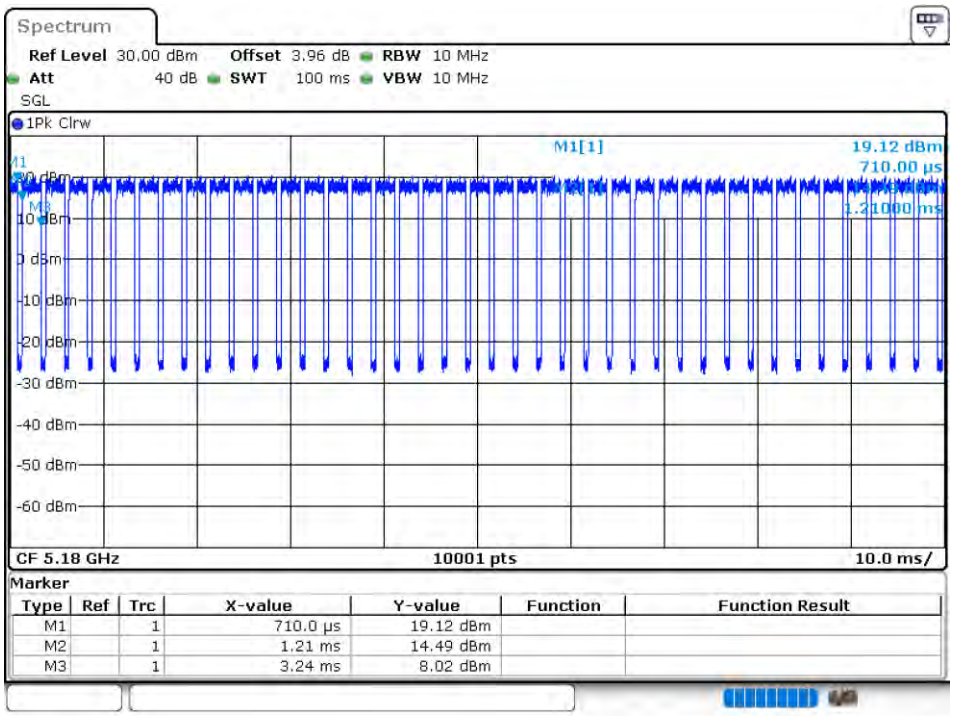
5.2G WIFI

Duty Cycle

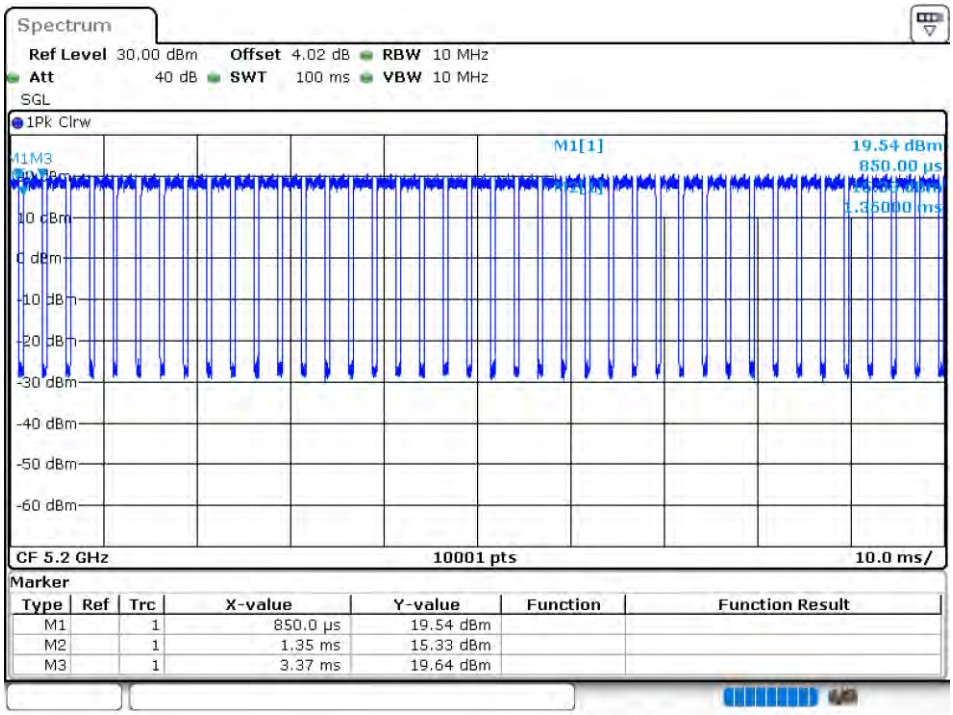
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	80.32	0.95	0.49
NVNT	a	5200	Ant1	80.32	0.95	0.5
NVNT	a	5240	Ant1	80.31	0.95	0.49
NVNT	n20	5180	Ant1	79.32	1.01	0.53
NVNT	n20	5200	Ant1	79.67	0.99	0.53
NVNT	n20	5240	Ant1	79.75	0.98	0.53
NVNT	n40	5190	Ant1	65.59	1.83	1.08
NVNT	n40	5230	Ant1	65.59	1.83	1.08

Test Graphs

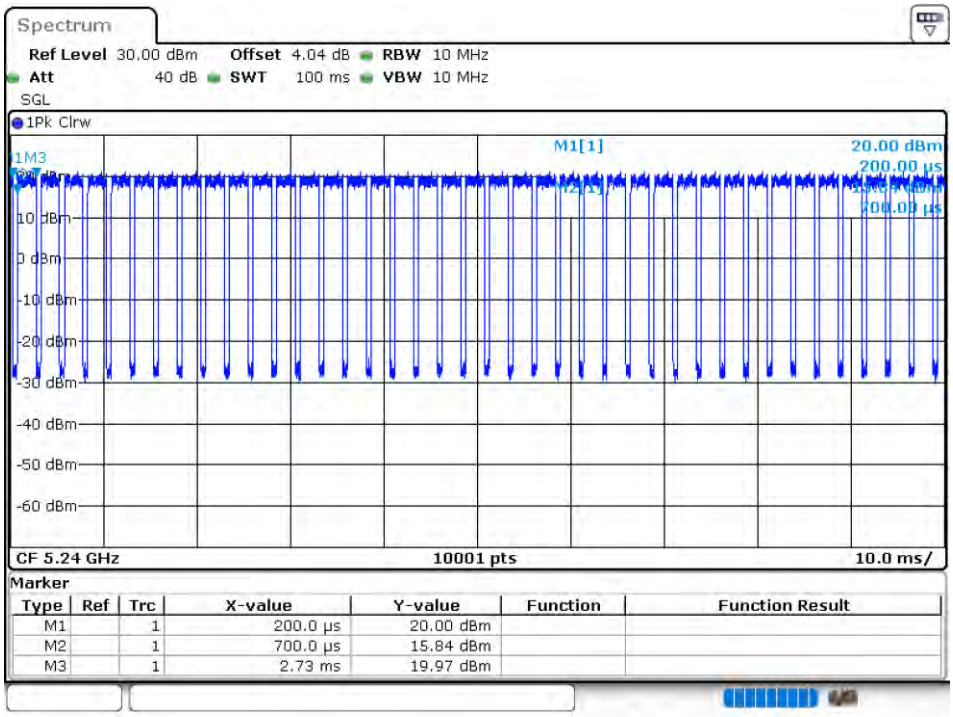
Duty Cycle NVNT a 5180MHz Ant1



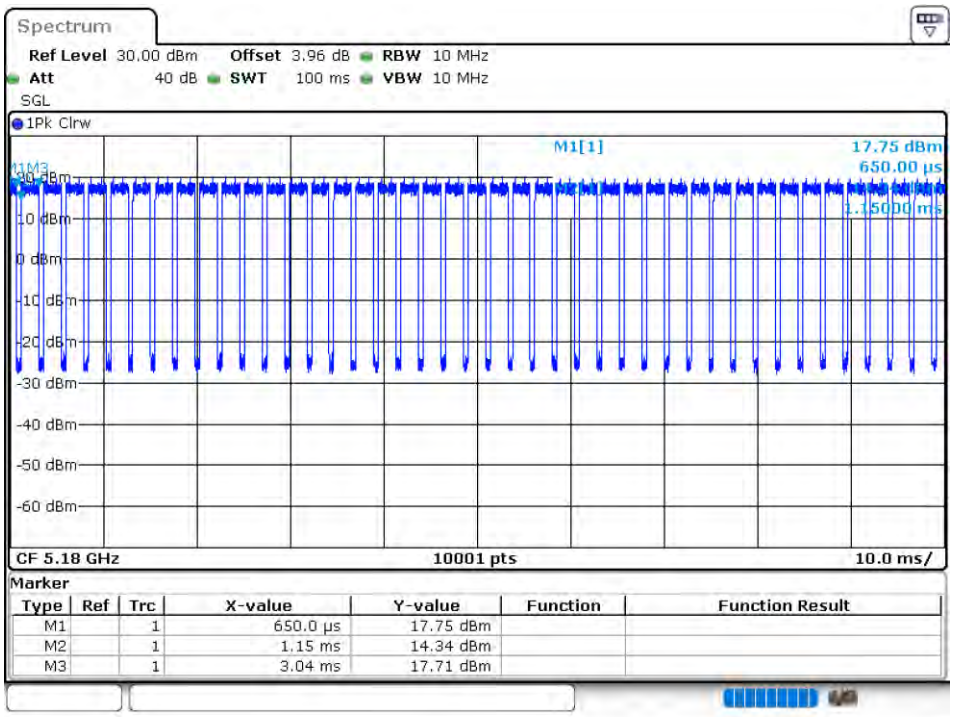
Duty Cycle NVNT a 5200MHz Ant1



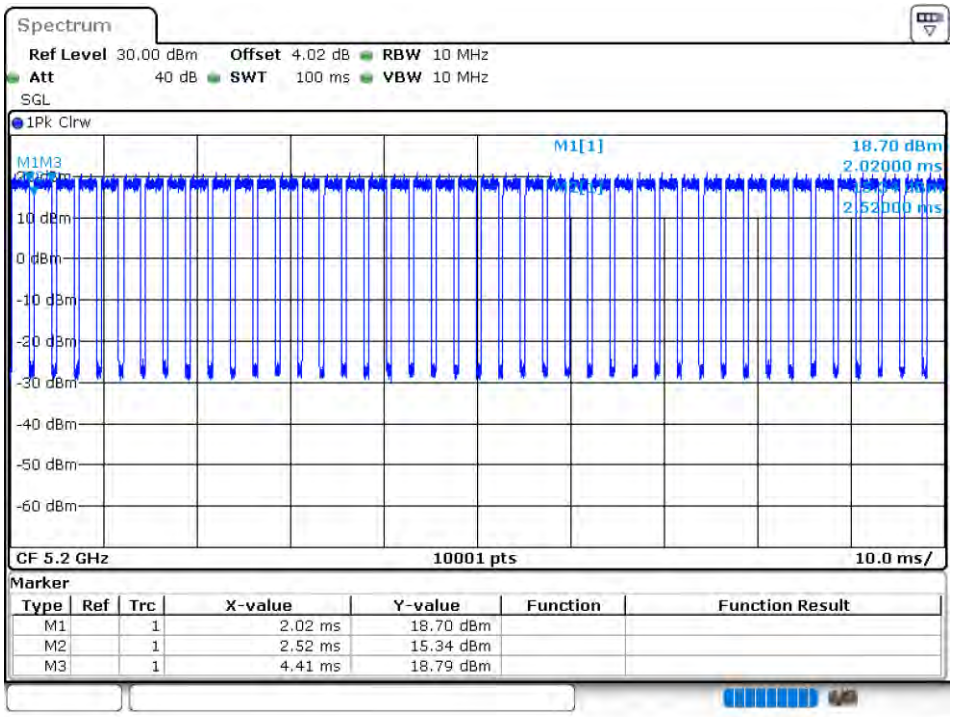
Duty Cycle NVNT a 5240MHz Ant1



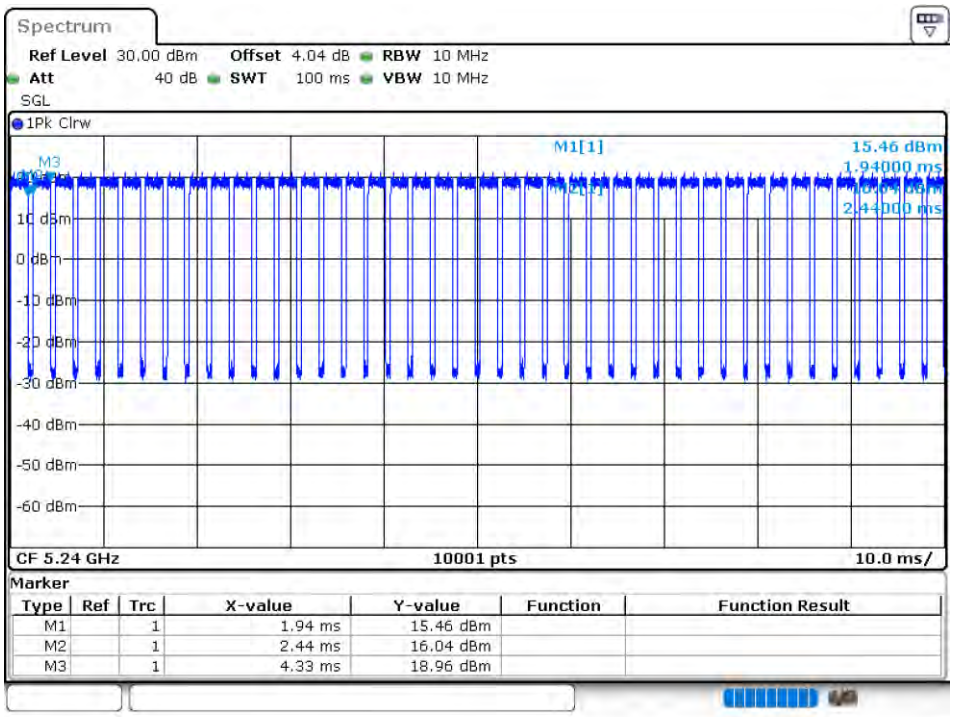
Duty Cycle NVNT n20 5180MHz Ant1



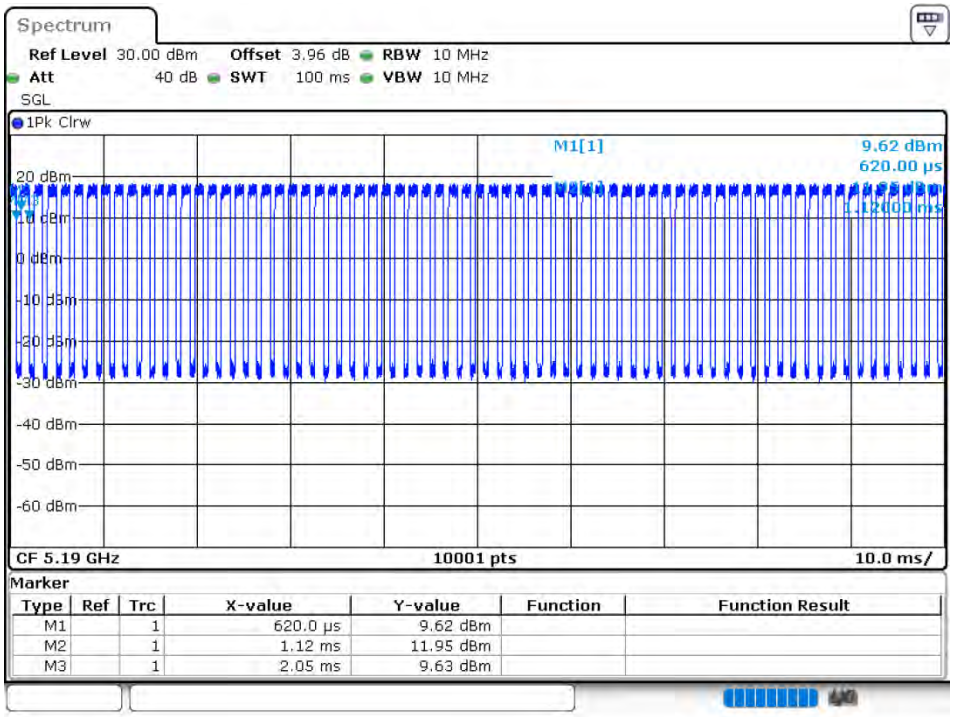
Duty Cycle NVNT n20 5200MHz Ant1



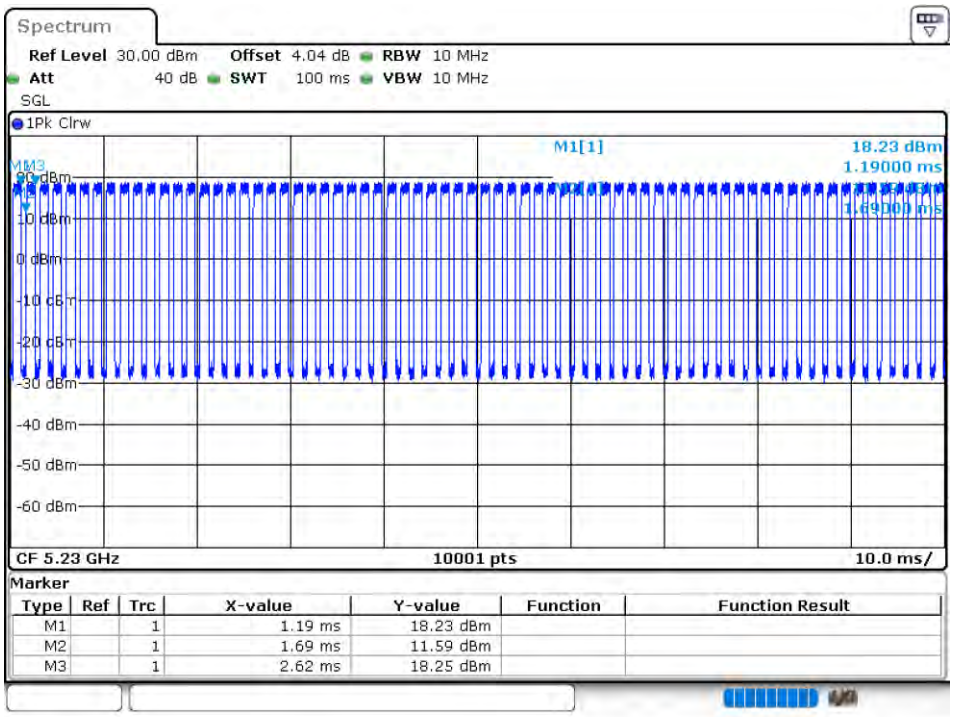
Duty Cycle NVNT n20 5240MHz Ant1



Duty Cycle NVNT n40 5190MHz Ant1



Duty Cycle NVNT n40 5230MHz Ant1



Maximum Conducted Output Power

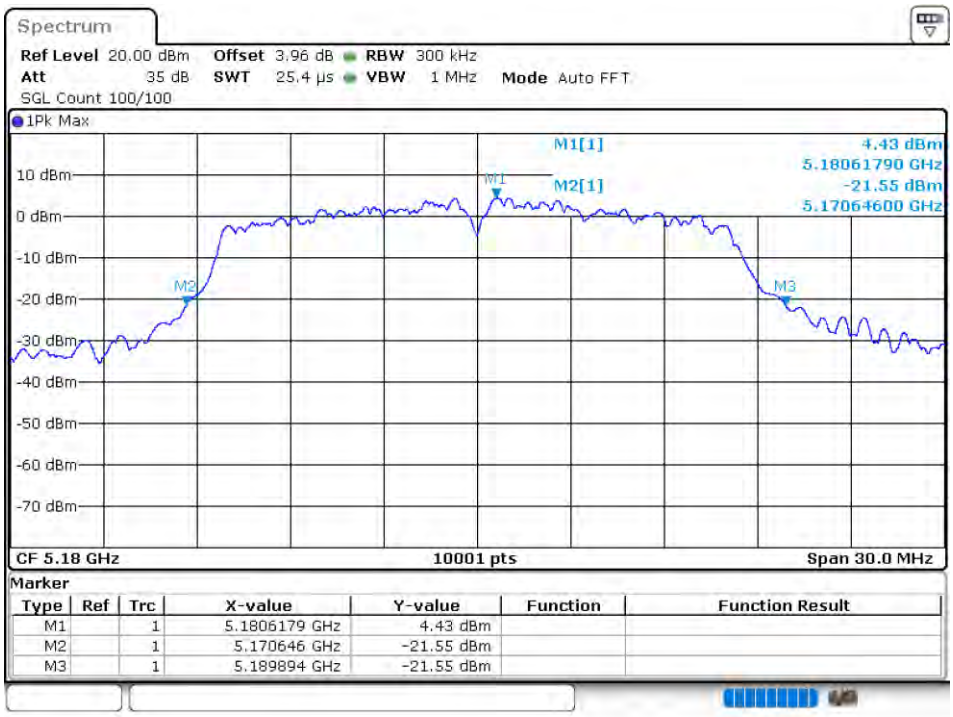
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	14.06	24	Pass
NVNT	a	5200	Ant1	14.15	24	Pass
NVNT	a	5240	Ant1	14.39	24	Pass
NVNT	n20	5180	Ant1	13.91	24	Pass
NVNT	n20	5200	Ant1	13.98	24	Pass
NVNT	n20	5240	Ant1	14.37	24	Pass
NVNT	n40	5190	Ant1	14.3	24	Pass
NVNT	n40	5230	Ant1	14.48	24	Pass

-26dB Bandwidth

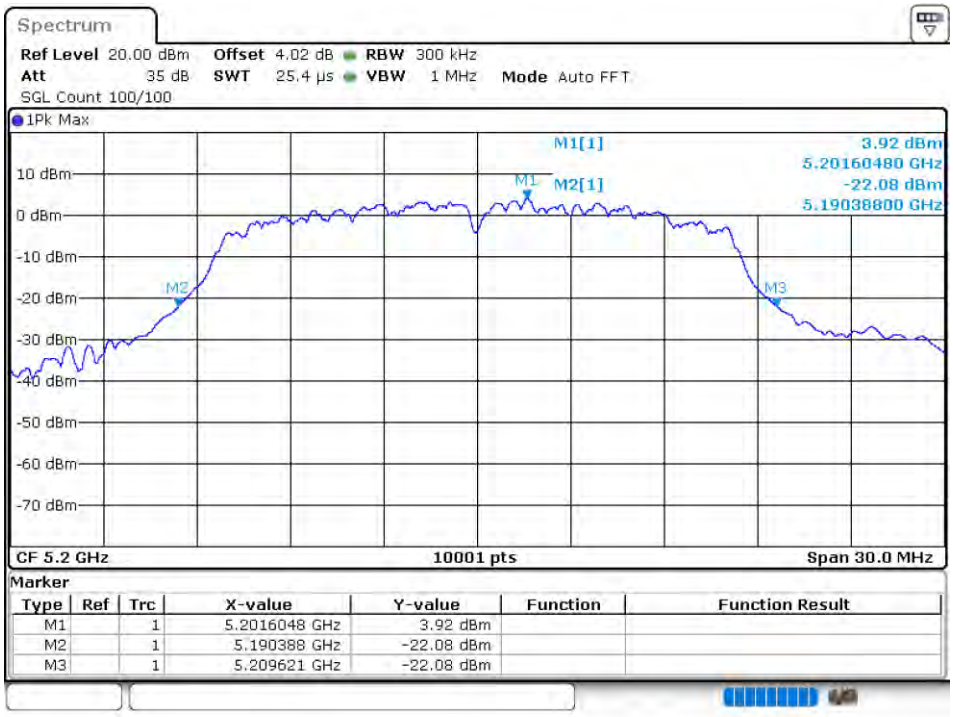
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.248	Pass
NVNT	a	5200	Ant1	19.233	Pass
NVNT	a	5240	Ant1	19.281	Pass
NVNT	n20	5180	Ant1	20.436	Pass
NVNT	n20	5200	Ant1	20.598	Pass
NVNT	n20	5240	Ant1	19.821	Pass
NVNT	n40	5190	Ant1	46.614	Pass
NVNT	n40	5230	Ant1	46.458	Pass

Test Graphs

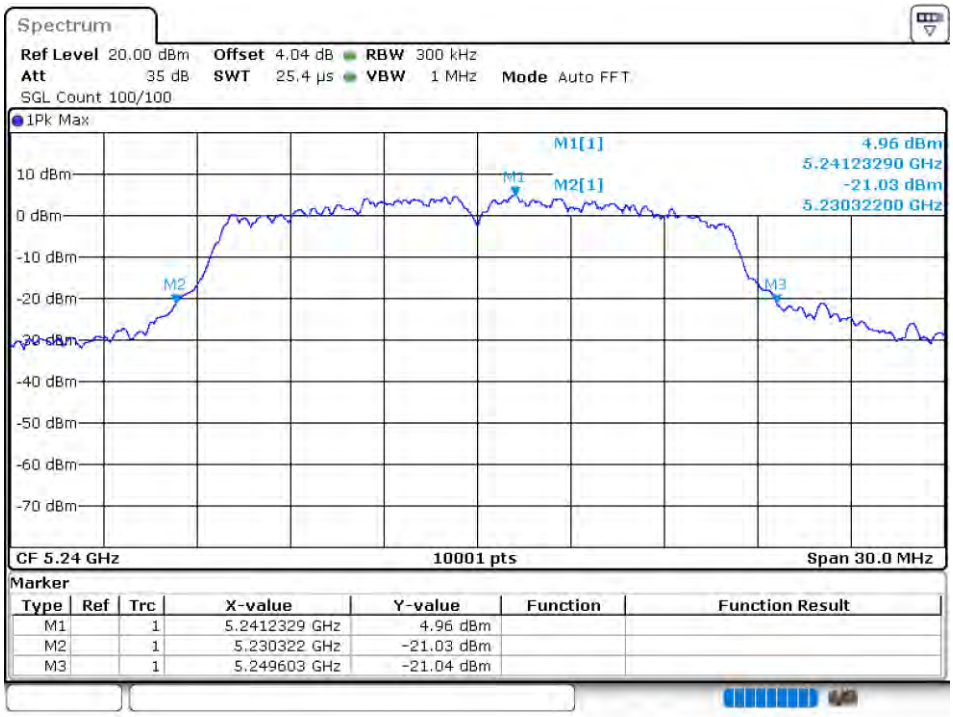
-26dB Bandwidth NVNT a 5180MHz Ant1



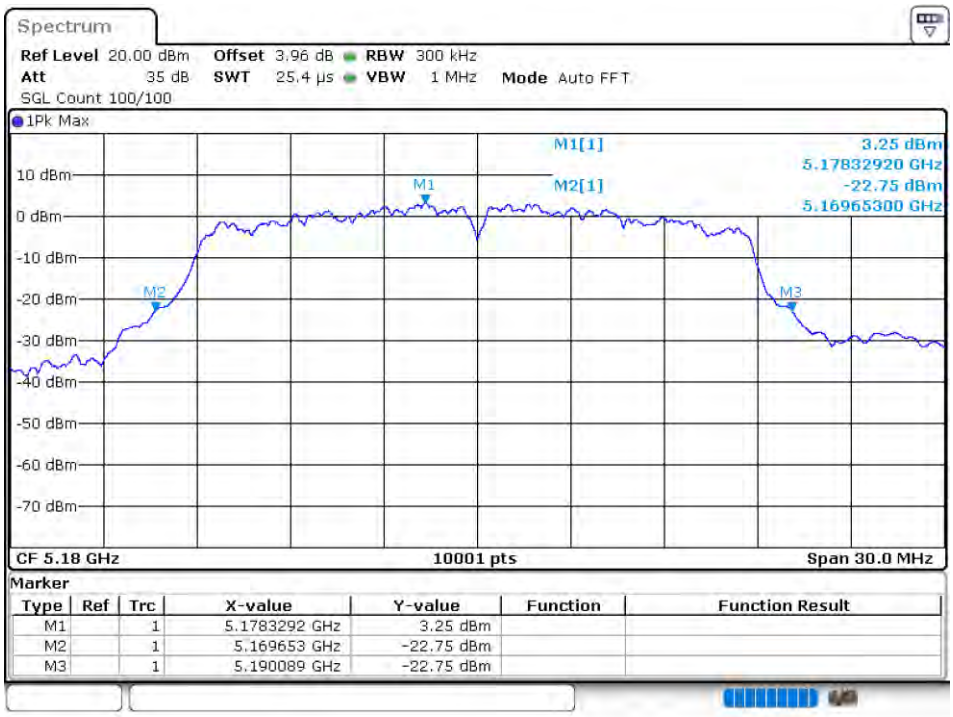
-26dB Bandwidth NVNT a 5200MHz Ant1



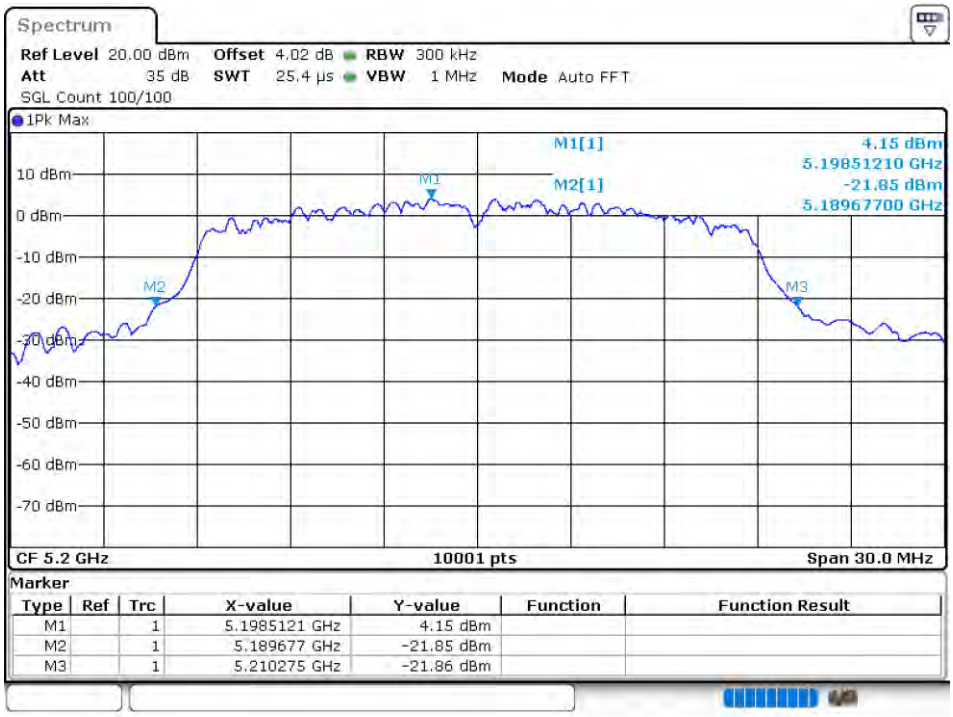
-26dB Bandwidth NVNT a 5240MHz Ant1



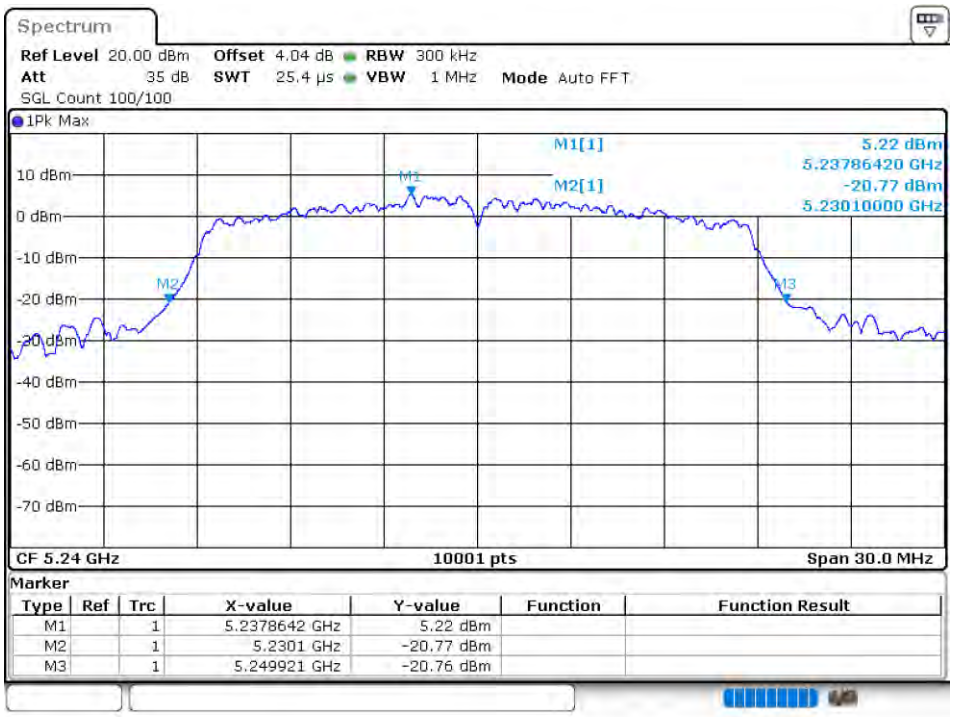
-26dB Bandwidth NVNT n20 5180MHz Ant1



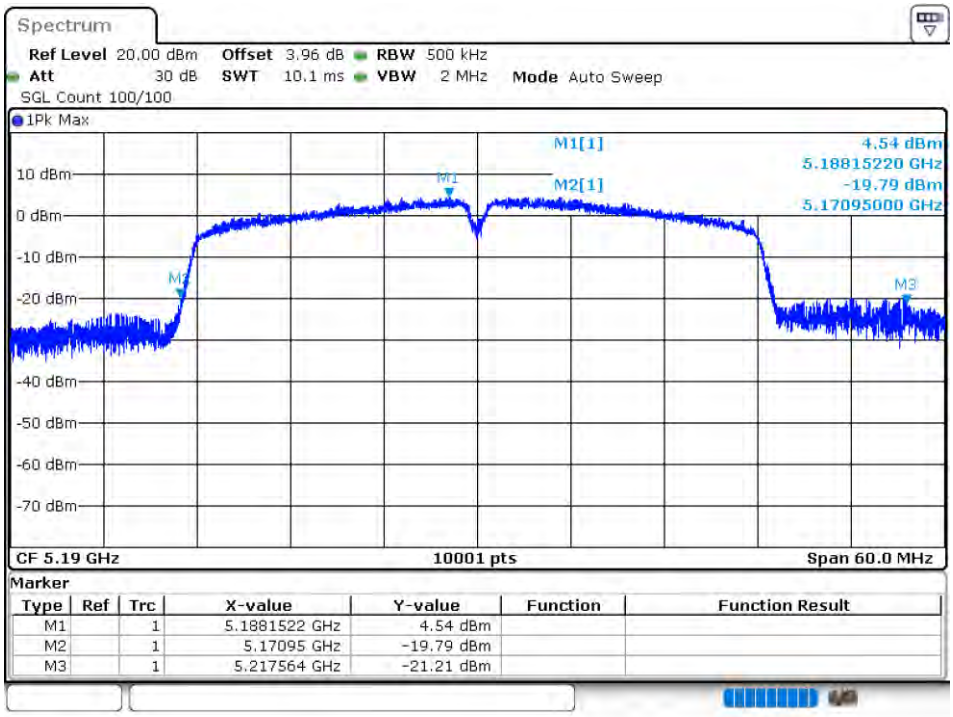
-26dB Bandwidth NVNT n20 5200MHz Ant1



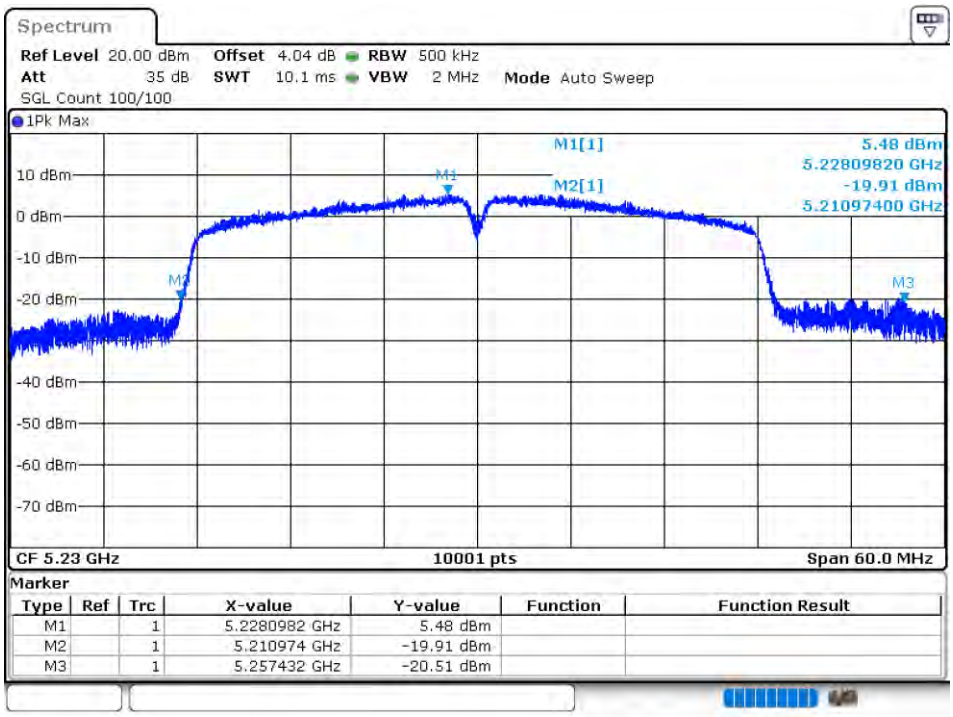
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



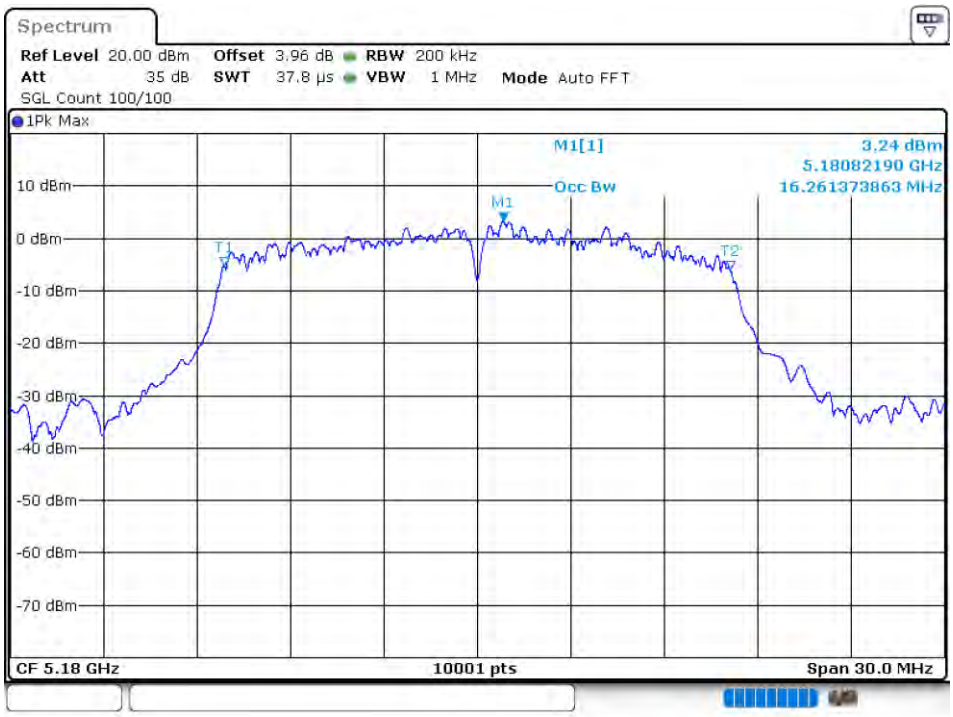
-26dB Bandwidth NVNT n40 5230MHz Ant1



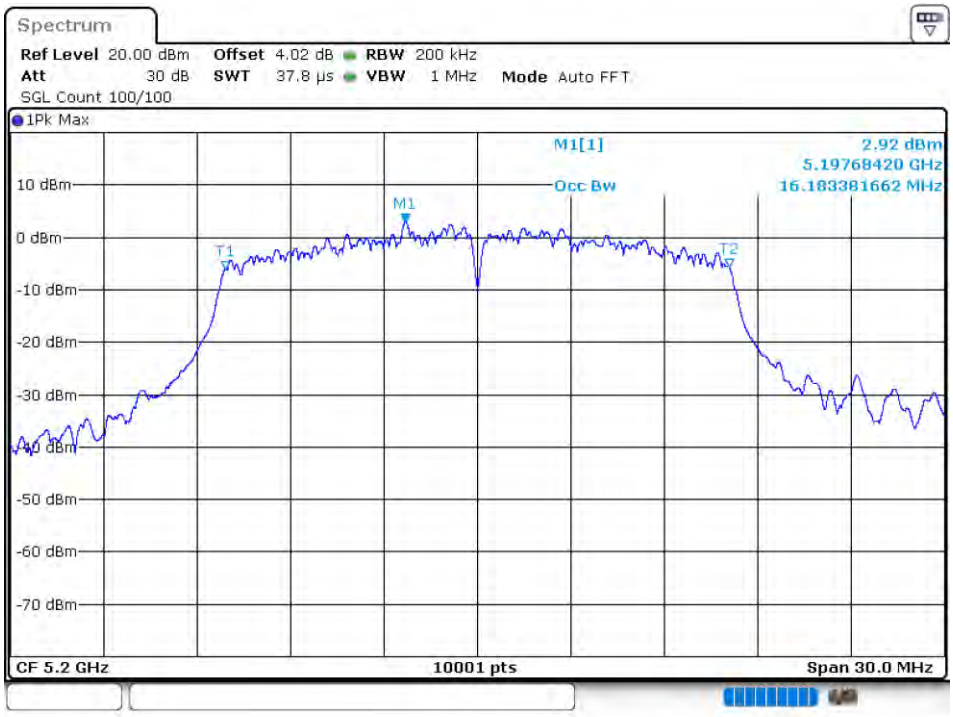
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.261
NVNT	a	5200	Ant1	16.183
NVNT	a	5240	Ant1	16.195
NVNT	n20	5180	Ant1	17.368
NVNT	n20	5200	Ant1	17.365
NVNT	n20	5240	Ant1	17.38
NVNT	n40	5190	Ant1	35.318
NVNT	n40	5230	Ant1	35.228

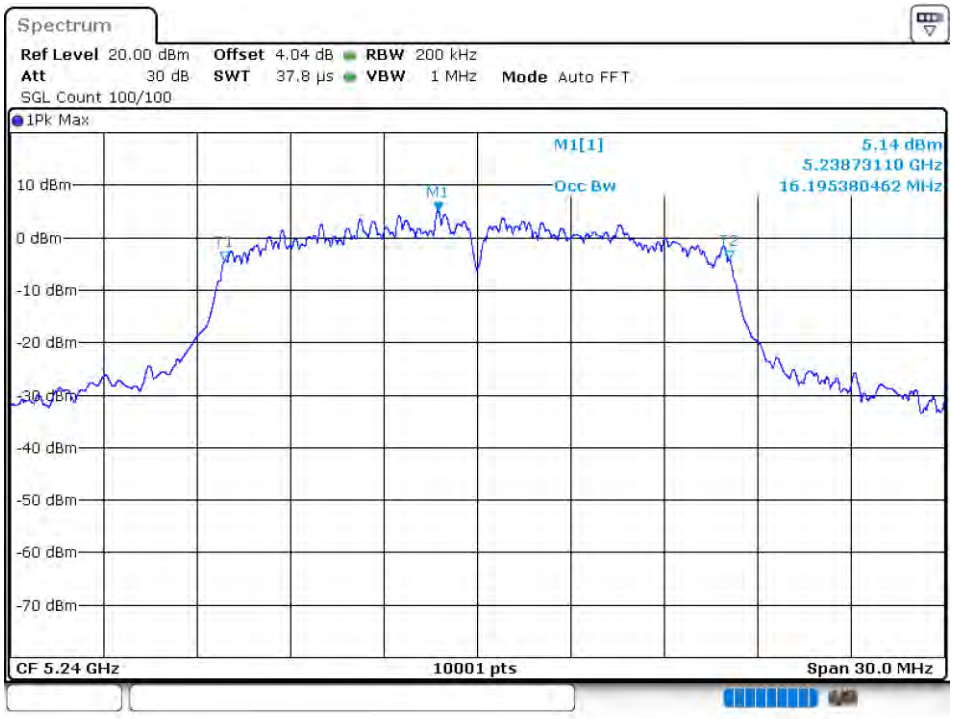
Test Graphs
OBW NVNT a 5180MHz Ant1



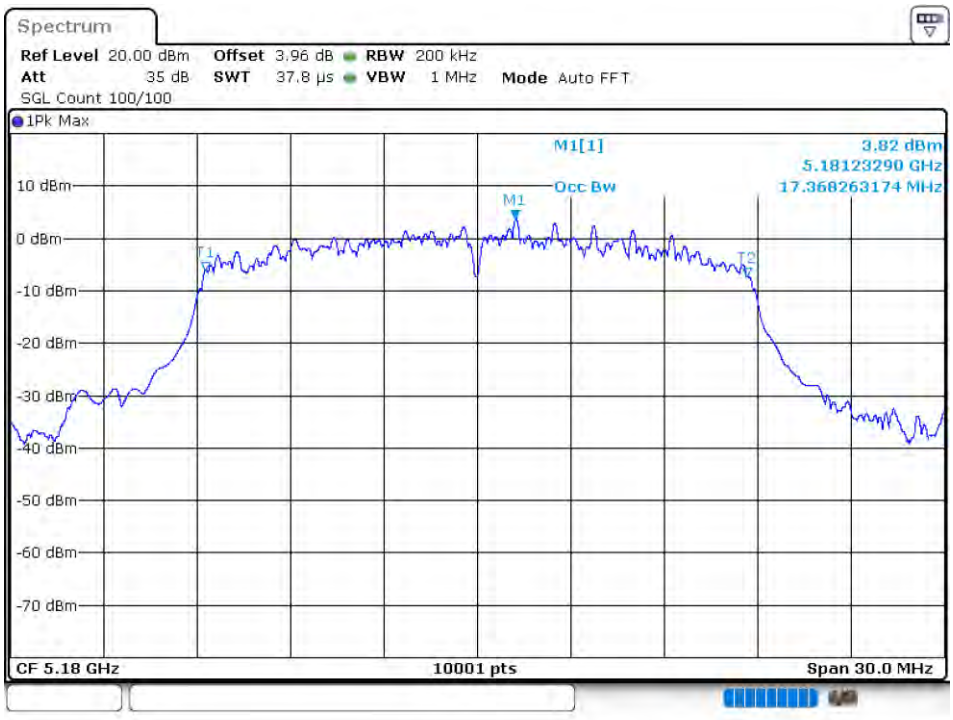
OBW NVNT a 5200MHz Ant1



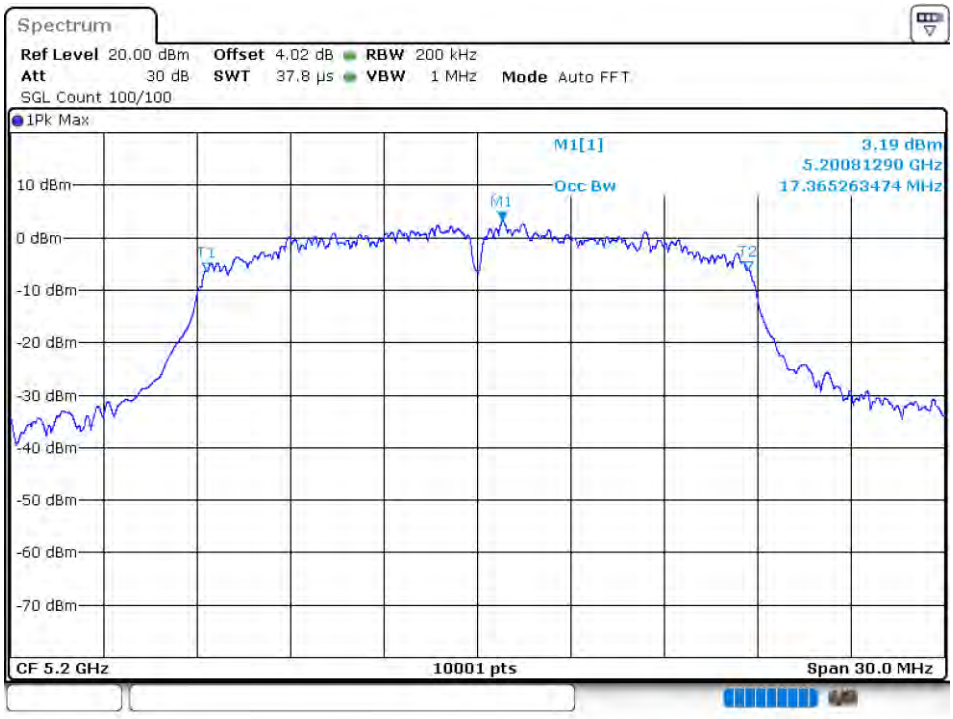
OBW NVNT a 5240MHz Ant1



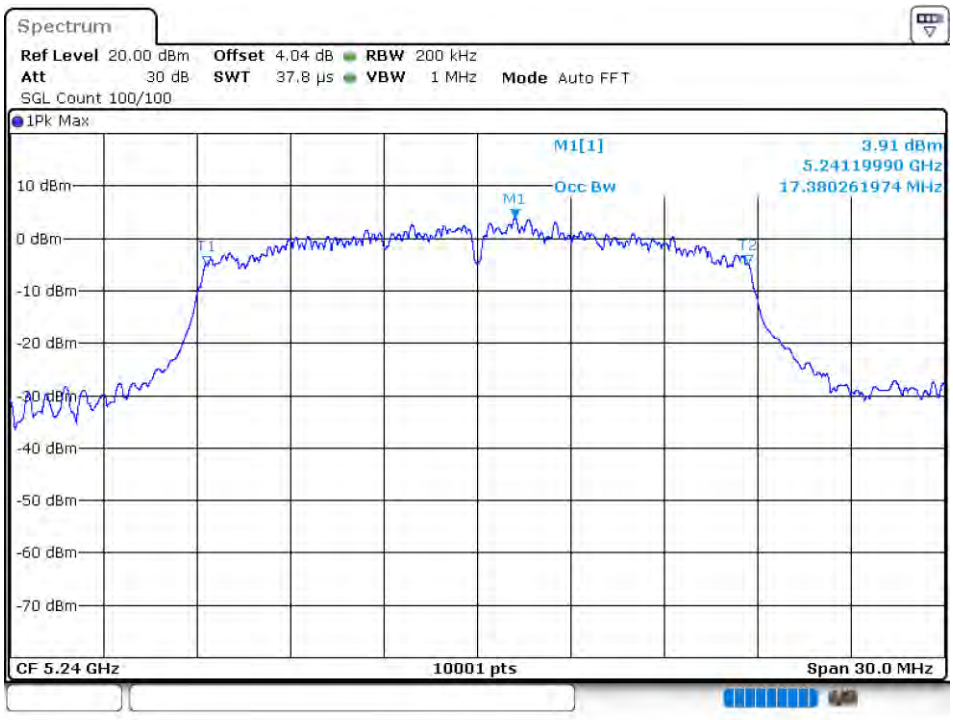
OBW NVNT n20 5180MHz Ant1



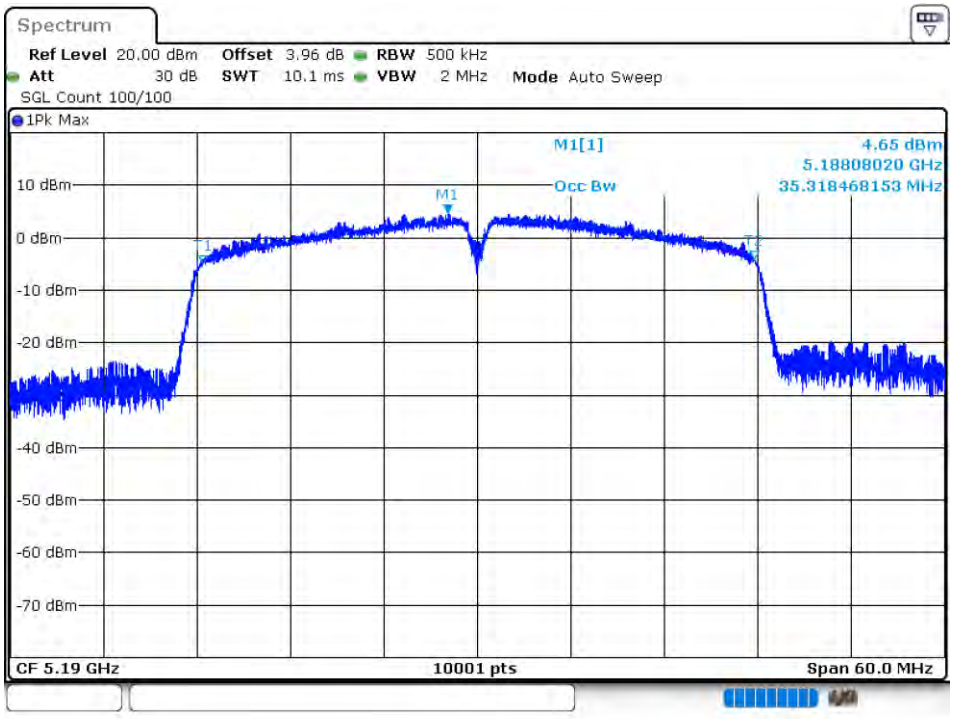
OBW NVNT n20 5200MHz Ant1



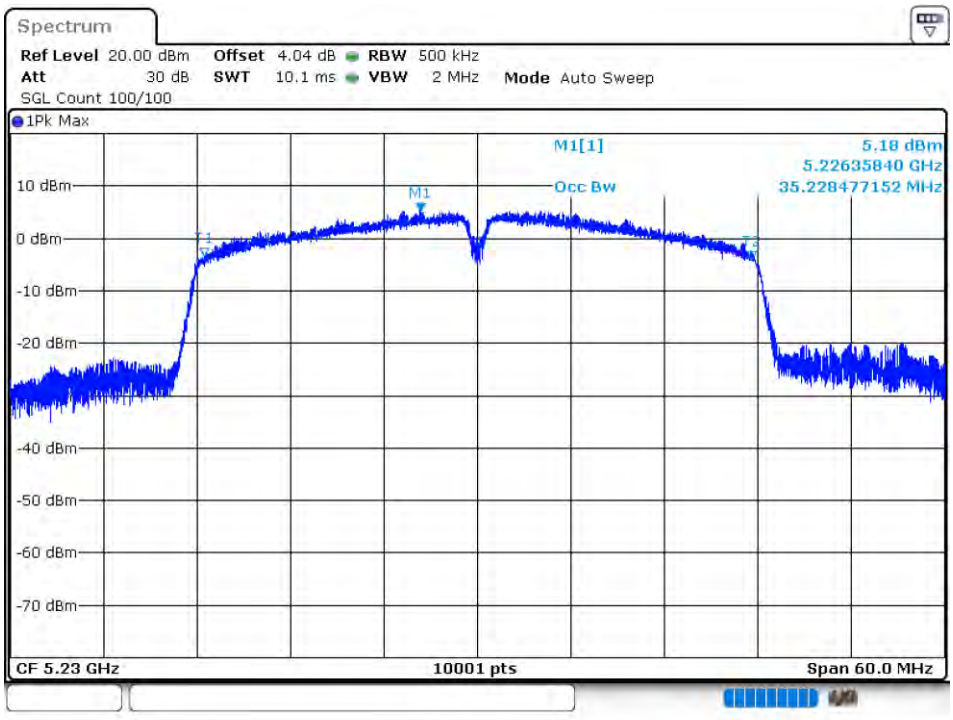
OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1

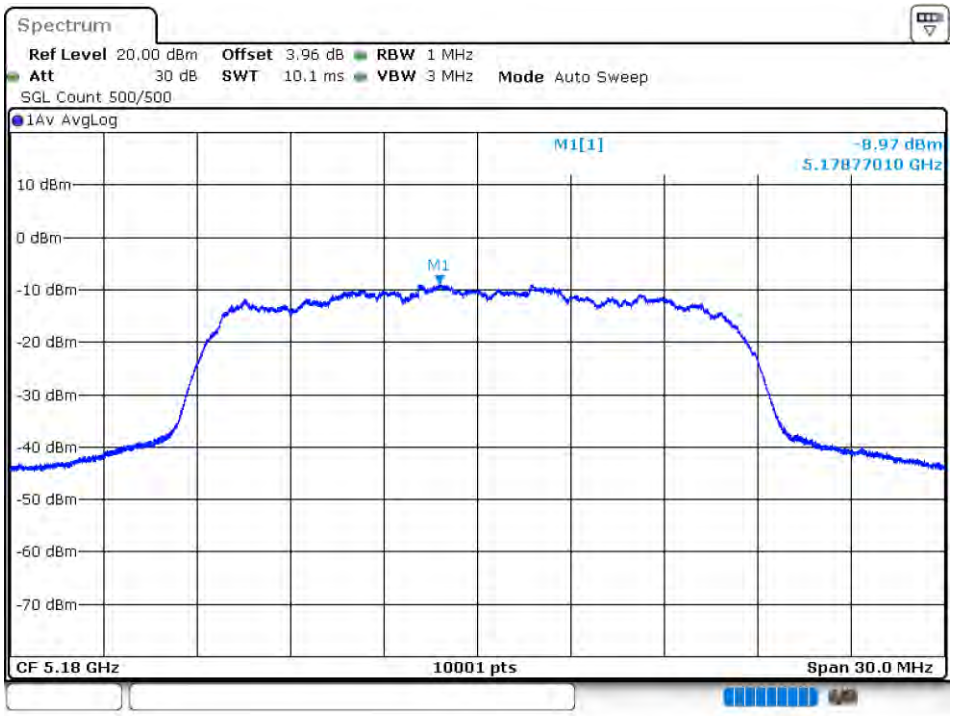


Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-8.97	0.95	-8.02	11	Pass
NVNT	a	5200	Ant1	-7.49	0.93	-6.56	11	Pass
NVNT	a	5240	Ant1	-7.21	0.95	-6.26	11	Pass
NVNT	n20	5180	Ant1	-8.05	1.01	-7.04	11	Pass
NVNT	n20	5200	Ant1	-6.74	0.99	-5.75	11	Pass
NVNT	n20	5240	Ant1	-6.69	0.98	-5.71	11	Pass
NVNT	n40	5190	Ant1	-19.78	1.83	-17.95	11	Pass
NVNT	n40	5230	Ant1	-16.78	1.83	-14.95	11	Pass

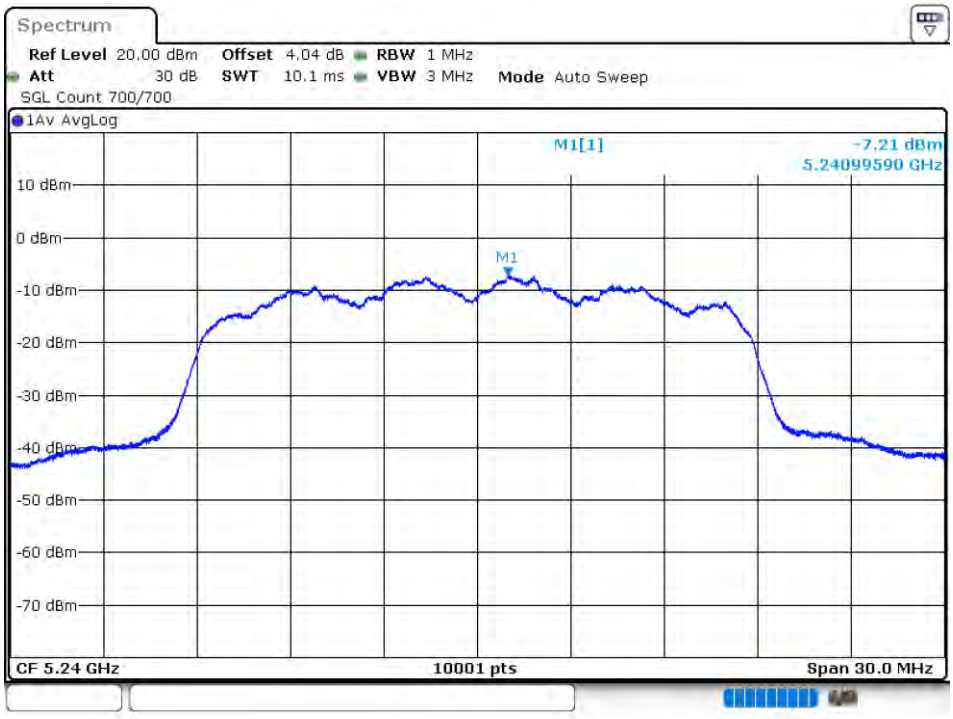
Test Graphs

PSD NVNT a 5180MHz Ant1

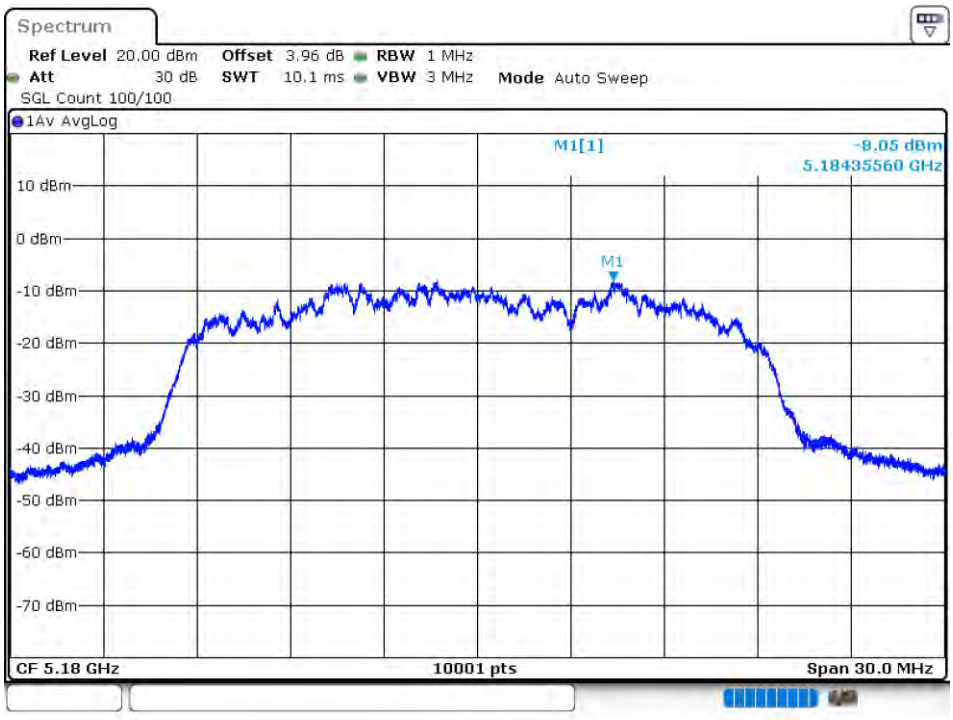


PSD NVNT a 5200MHz Ant1

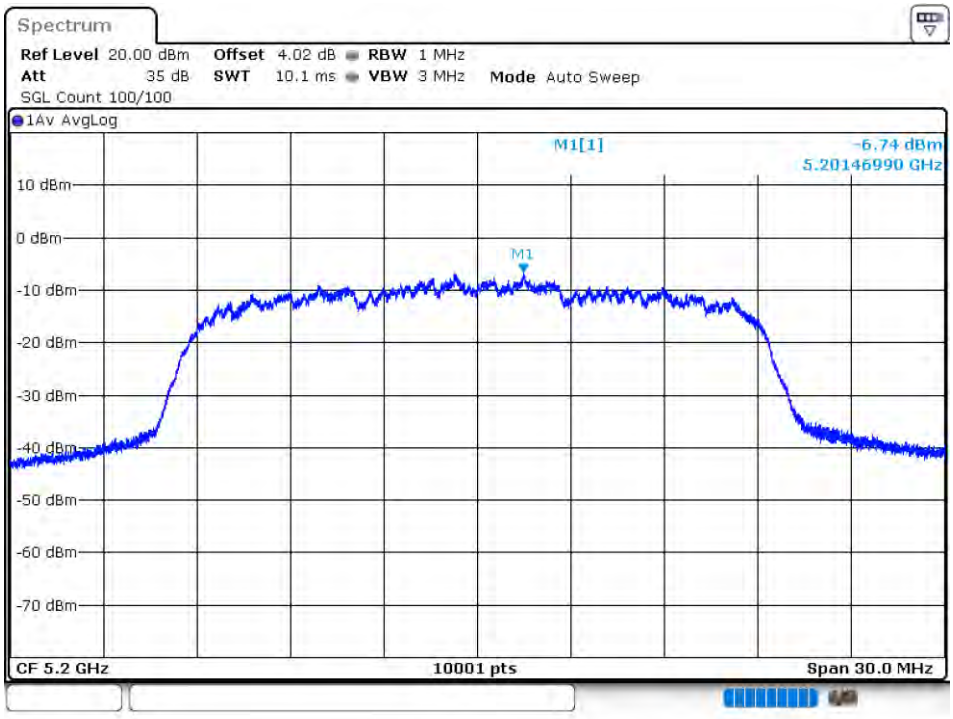
PSD NVNT a 5240MHz Ant1



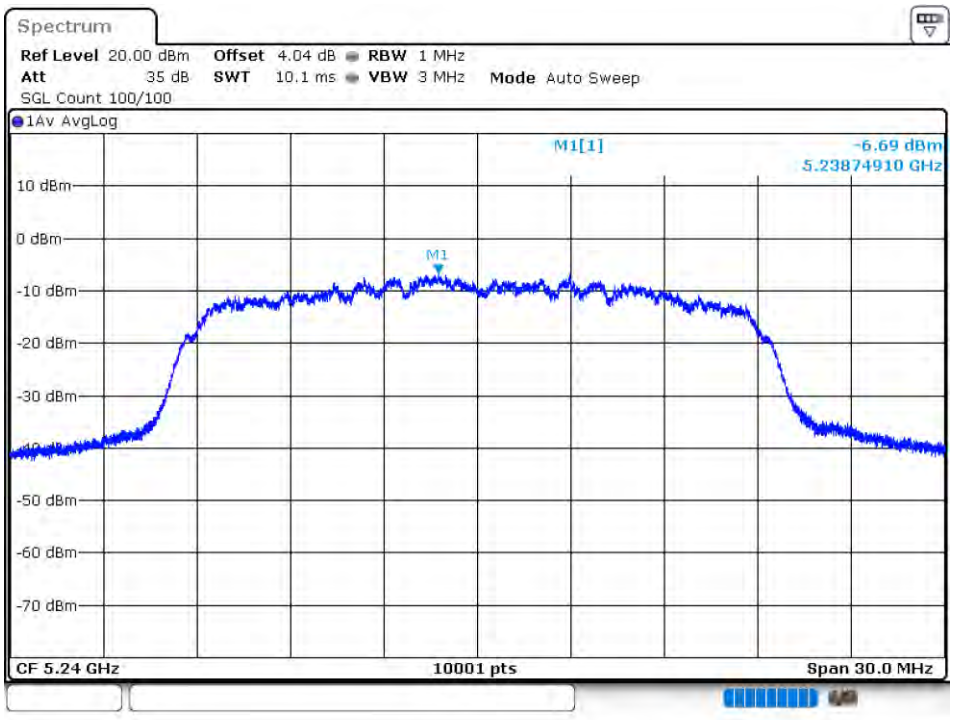
PSD NVNT n20 5180MHz Ant1



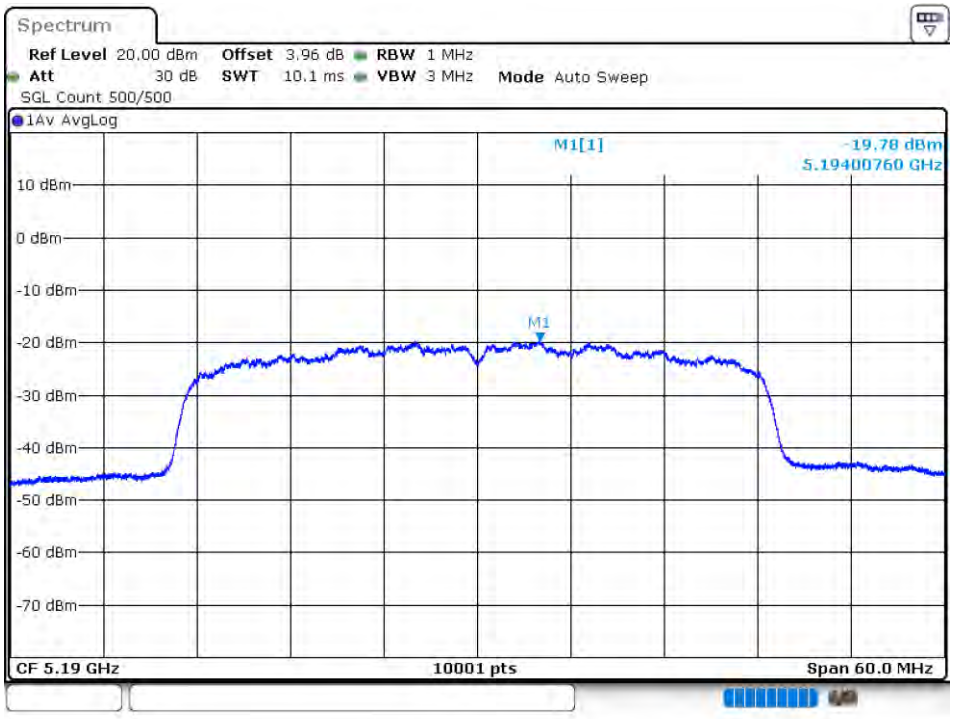
PSD NVNT n20 5200MHz Ant1



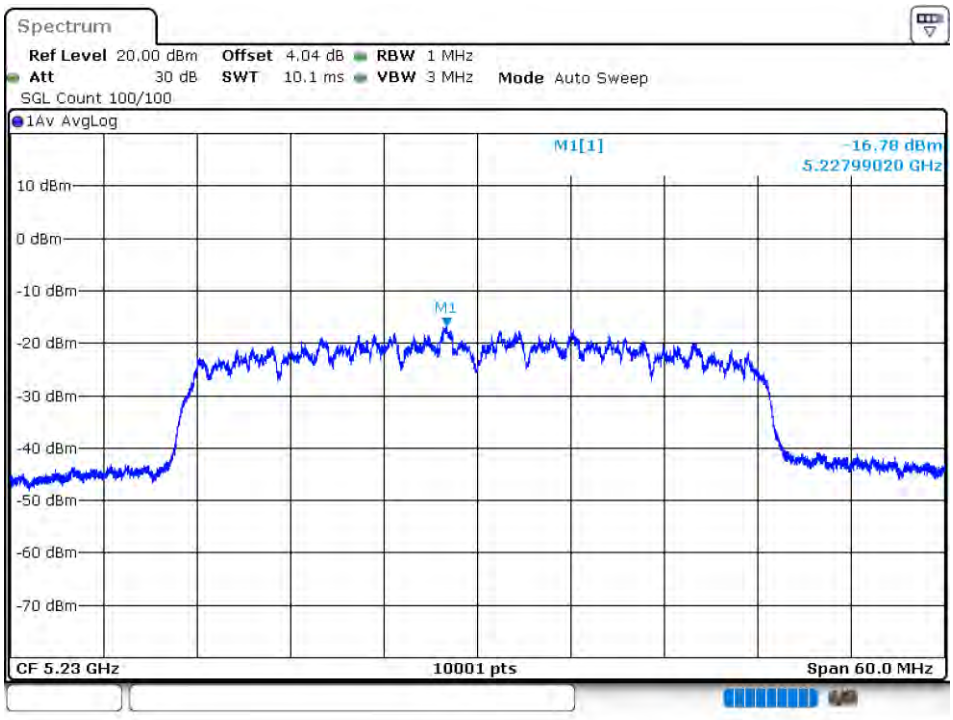
PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1



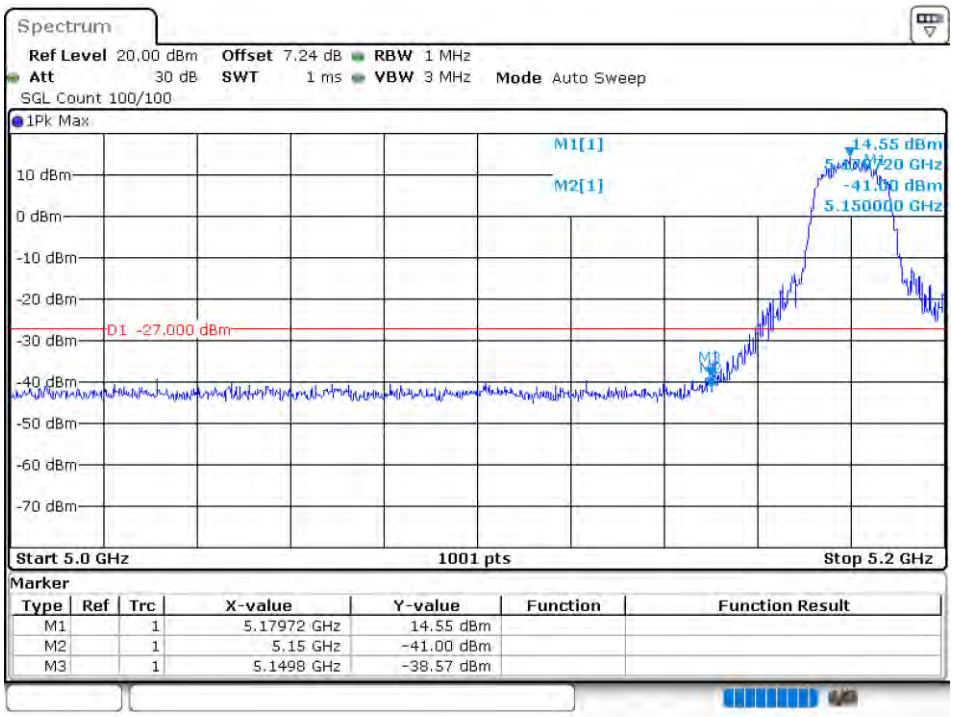
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-38.57	-27	Pass
NVNT	a	5240	Ant1	-40.16	-27	Pass
NVNT	n20	5180	Ant1	-39.87	-27	Pass
NVNT	n20	5240	Ant1	-39.36	-27	Pass
NVNT	n40	5190	Ant1	-29.1	-27	Pass
NVNT	n40	5230	Ant1	-39.91	-27	Pass

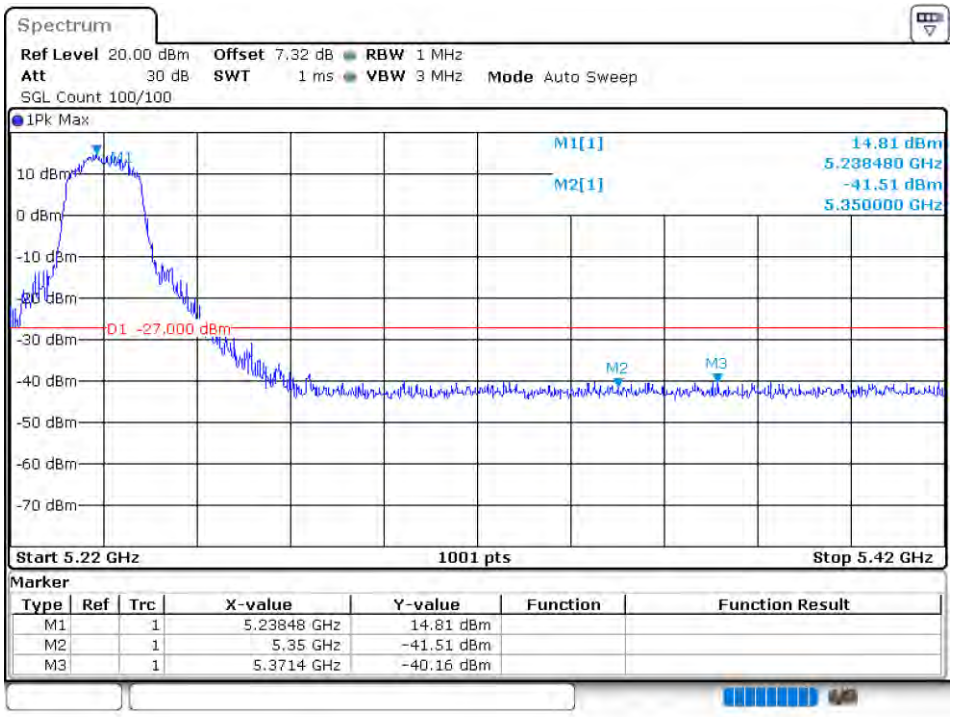
Note: Tested with increased antenna gain.

Test Graphs

Band Edge NVNT a 5180MHz Low Ant1

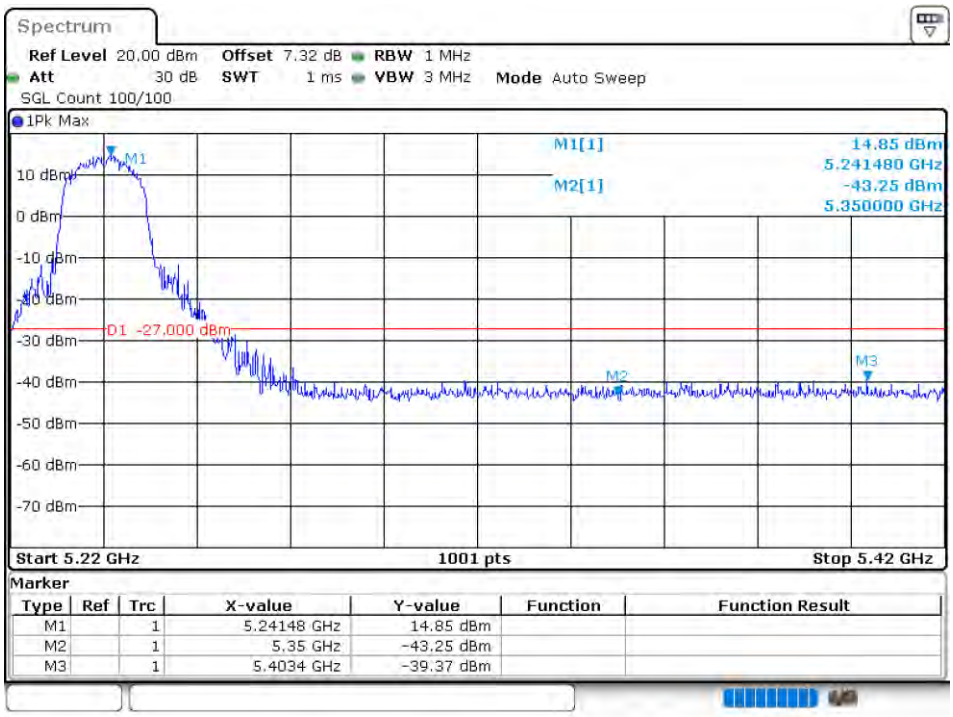


Band Edge NVNT a 5240MHz High Ant1

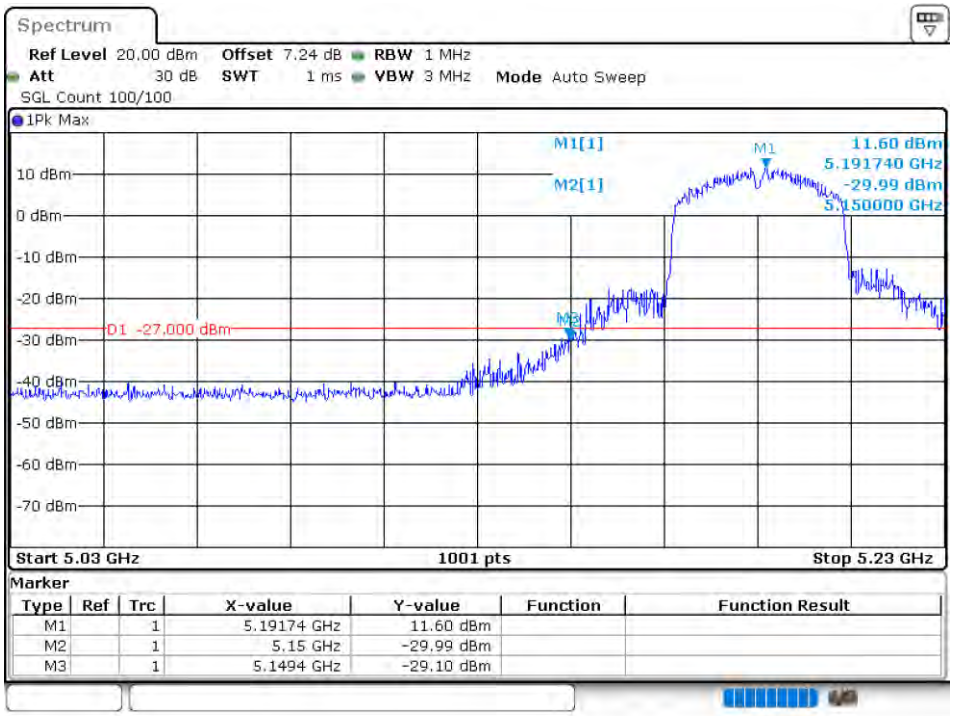


Band Edge NVNT n20 5180MHz Low Ant1

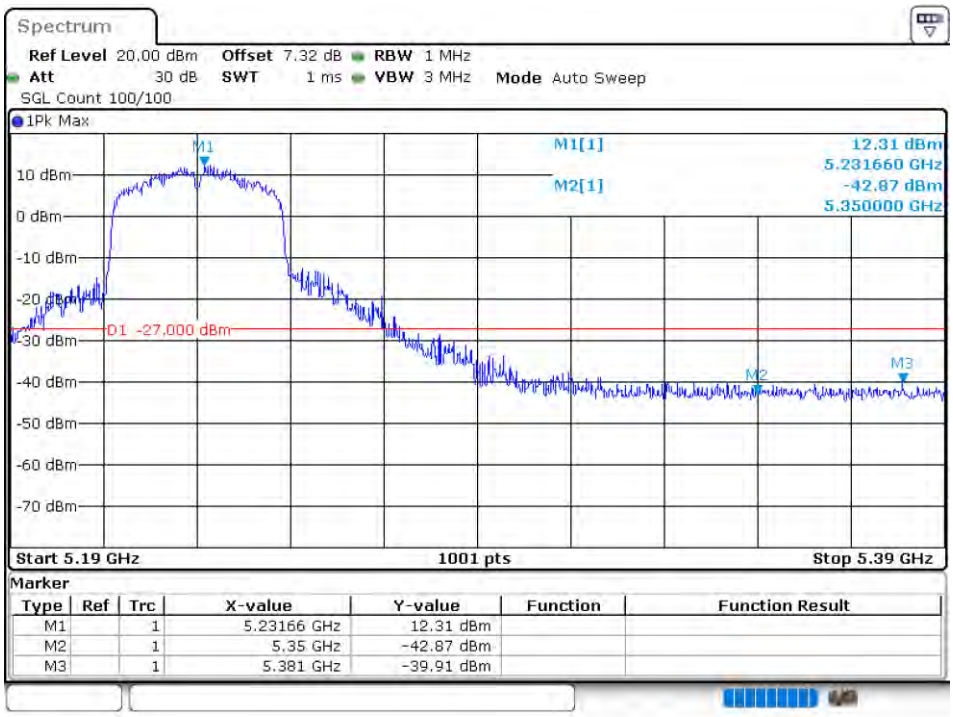
Band Edge NVNT n20 5240MHz High Ant1



Band Edge NVNT n40 5190MHz Low Ant1



Band Edge NVNT n40 5230MHz High Ant1



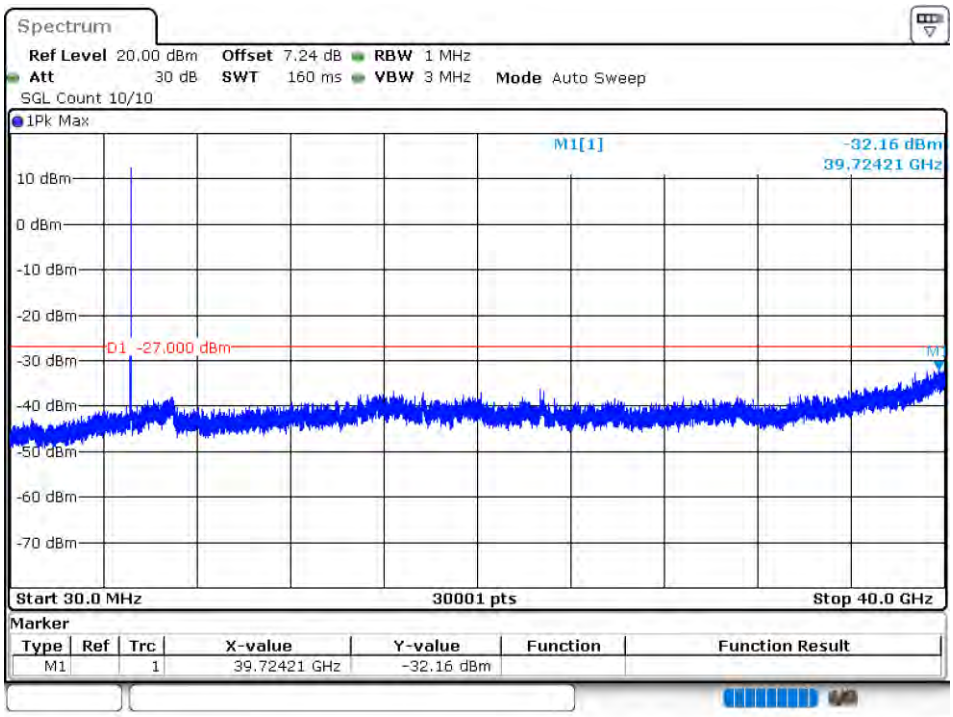
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-32.15	-27	Pass
NVNT	a	5200	Ant1	-31.17	-27	Pass
NVNT	a	5240	Ant1	-31	-27	Pass
NVNT	n20	5180	Ant1	-30.81	-27	Pass
NVNT	n20	5200	Ant1	-31.76	-27	Pass
NVNT	n20	5240	Ant1	-31.58	-27	Pass
NVNT	n40	5190	Ant1	-31.58	-27	Pass
NVNT	n40	5230	Ant1	-31.94	-27	Pass

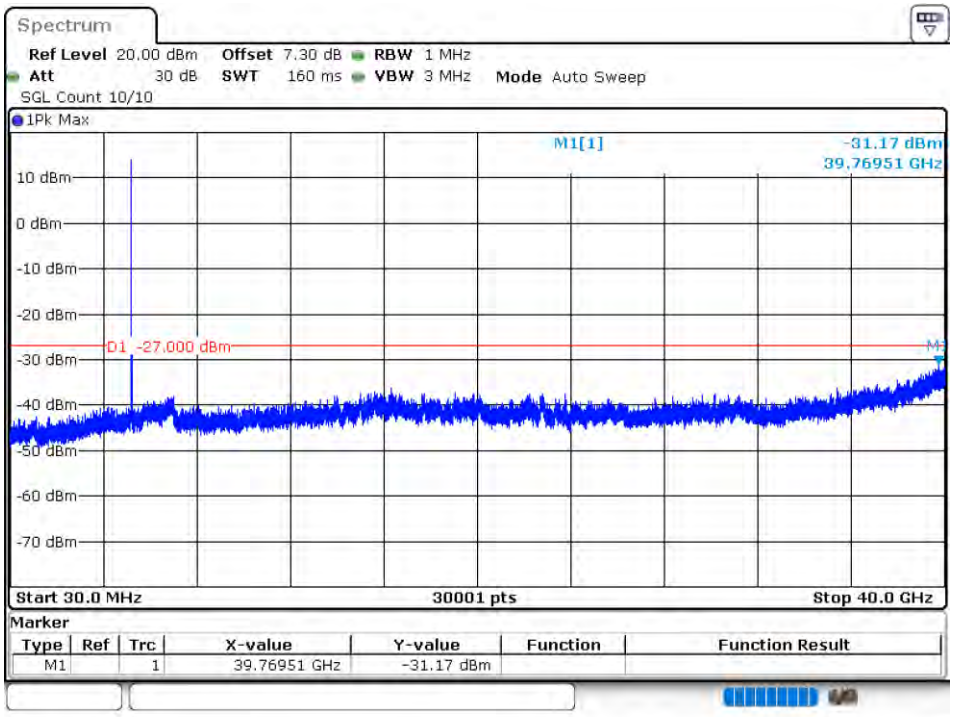
Note: Tested with increased antenna gain.

Test Graphs

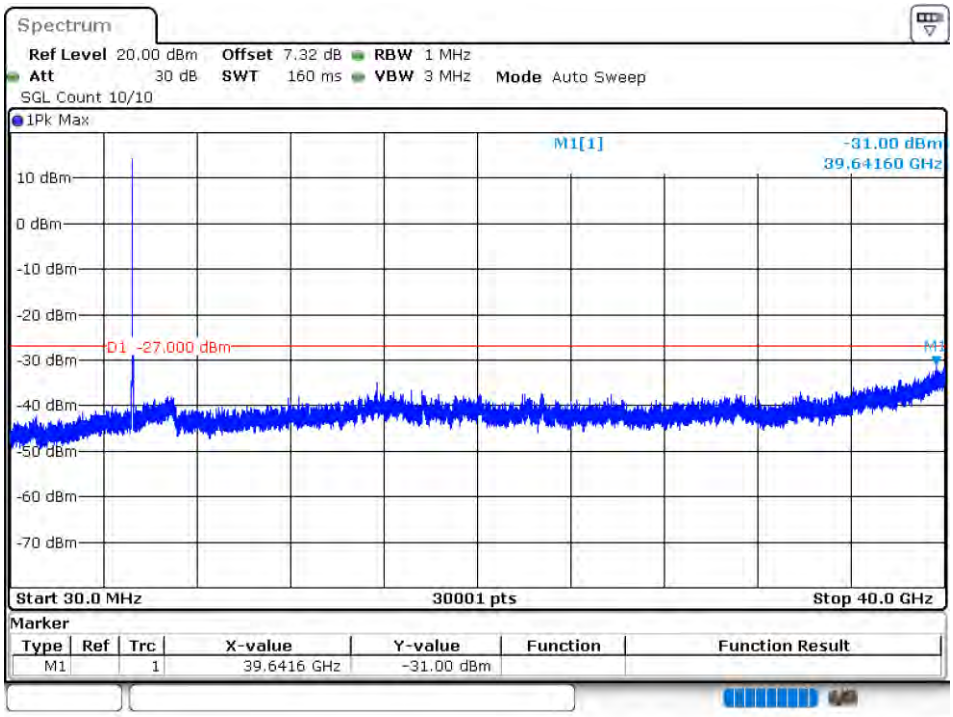
Tx. Spurious NVNT a 5180MHz Ant1 Emission



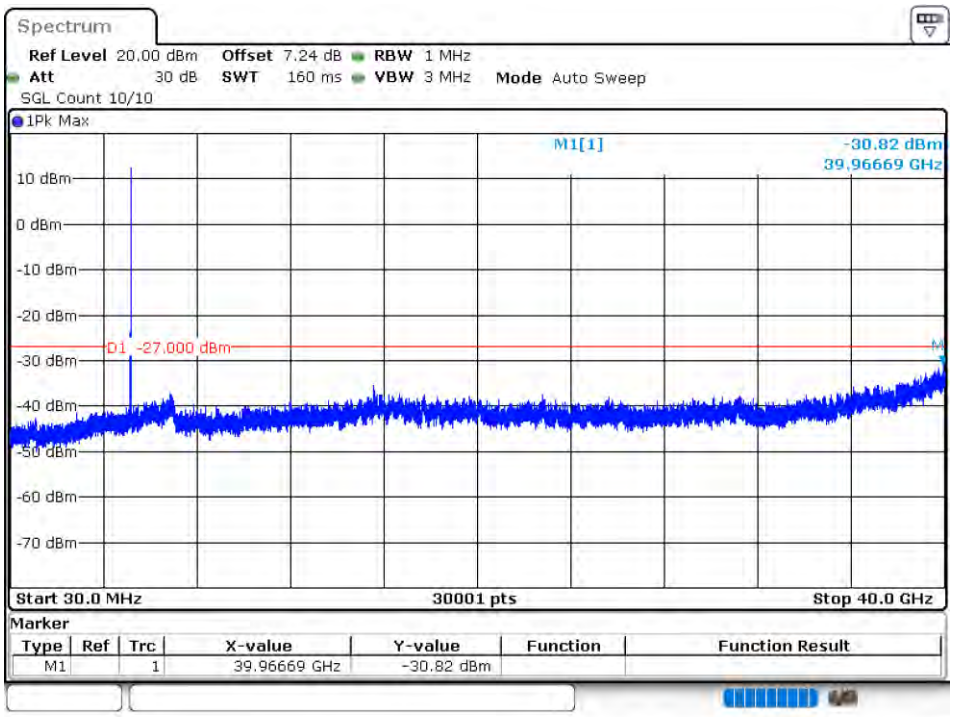
Tx. Spurious NVNT a 5200MHz Ant1 Emission



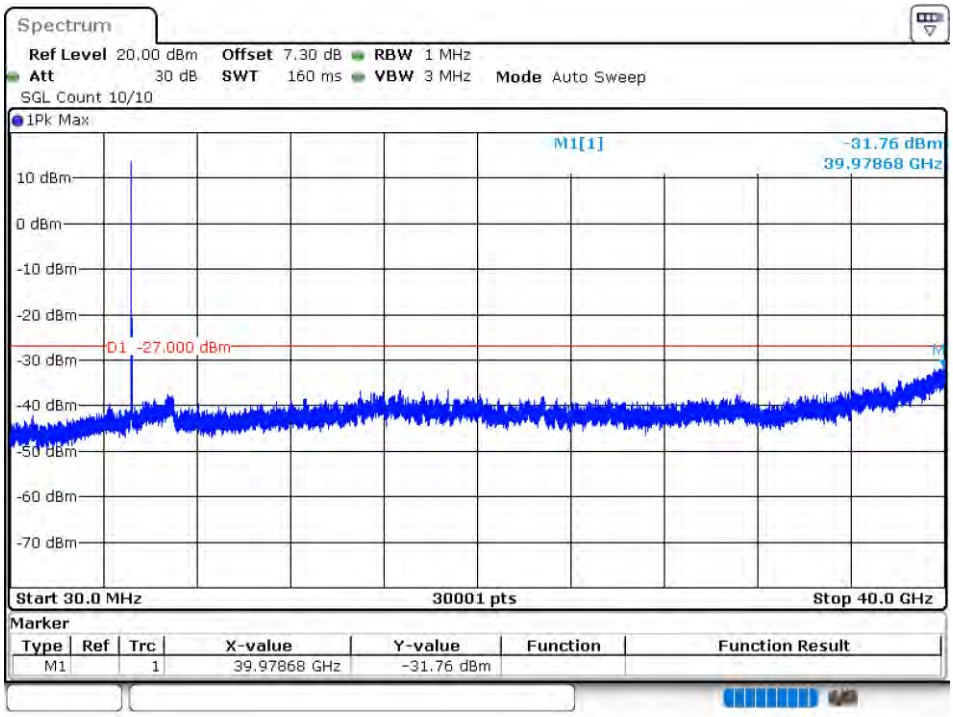
Tx. Spurious NVNT a 5240MHz Ant1 Emission



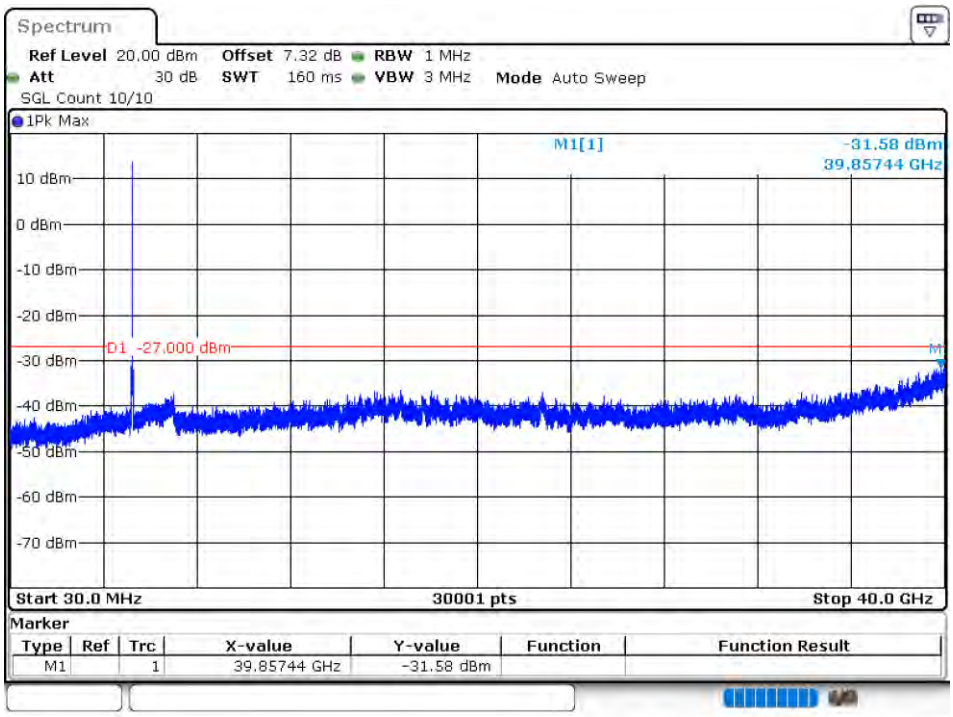
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



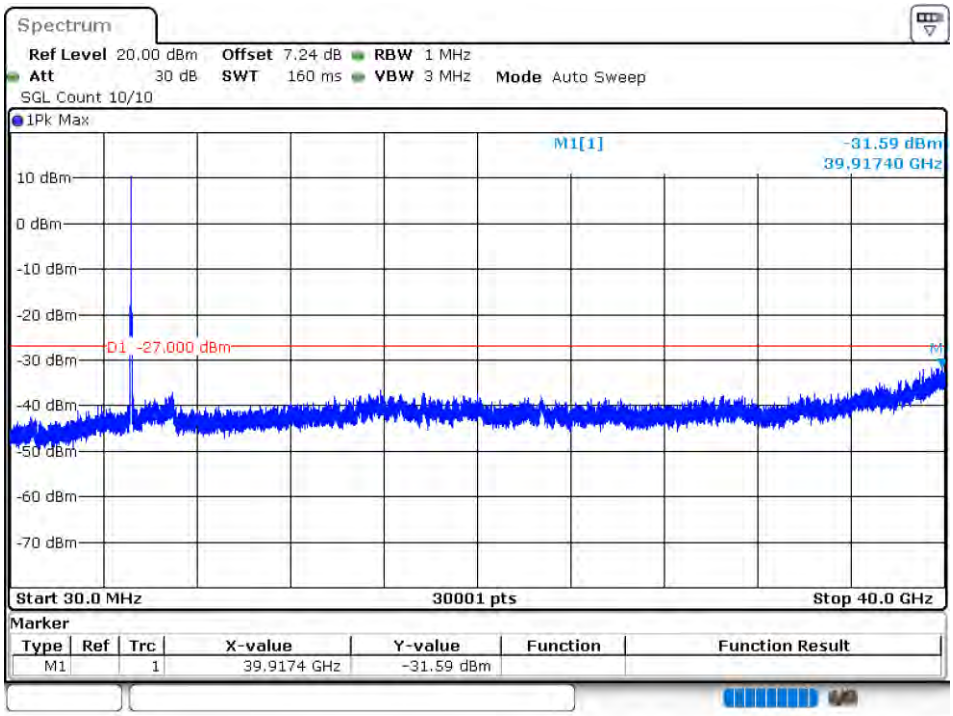
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



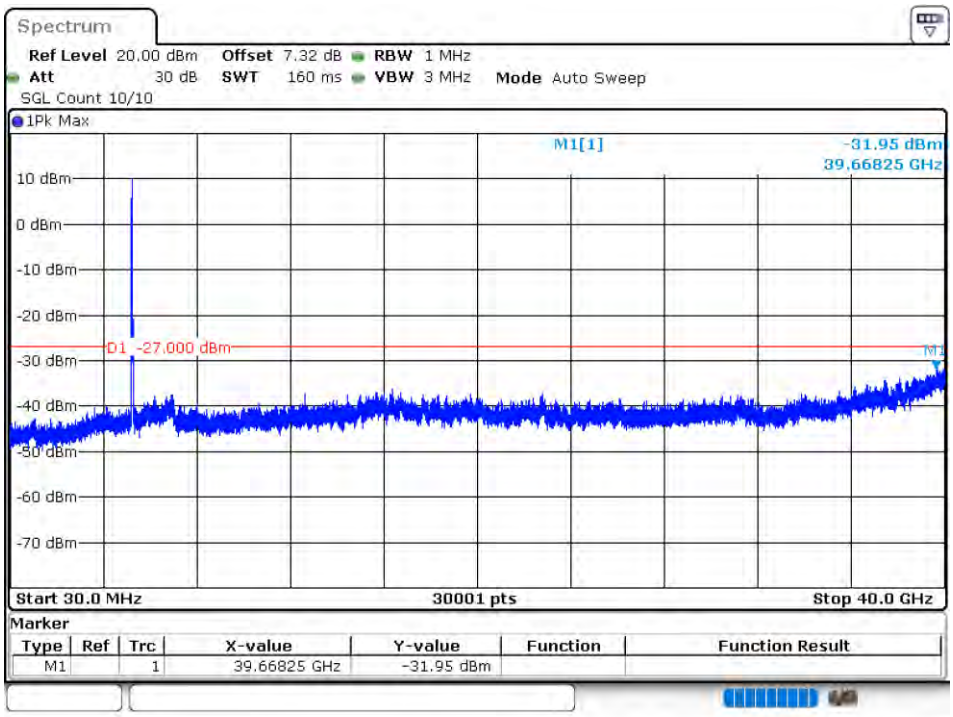
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



Tx. Spurious NVNT n40 5190MHz Ant1 Emission



Tx. Spurious NVNT n40 5230MHz Ant1 Emission



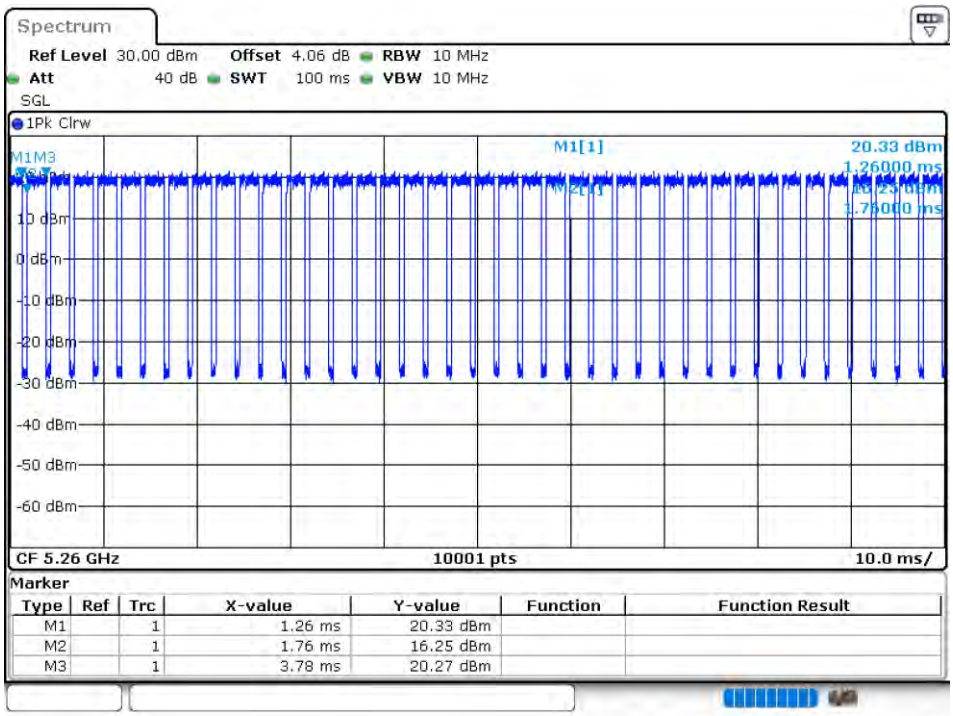
5.3G WIFI

Duty Cycle

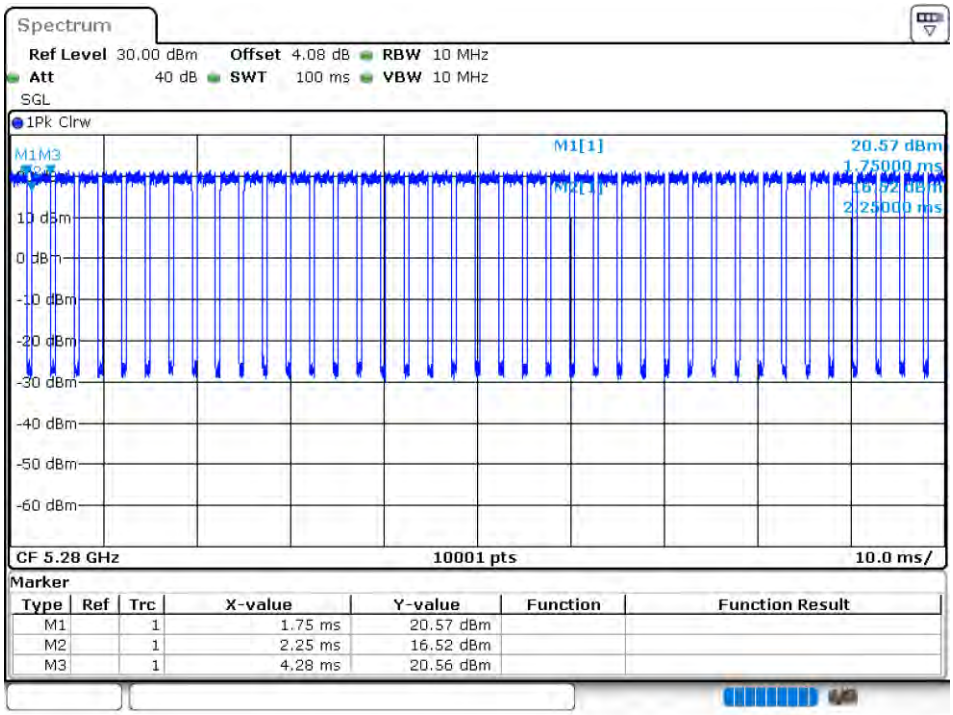
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	80.58	0.94	0.5
NVNT	a	5280	Ant1	80.81	0.93	0.49
NVNT	a	5320	Ant1	80.32	0.95	0.49
NVNT	n20	5260	Ant1	79.31	1.01	0.53
NVNT	n20	5280	Ant1	79.31	1.01	0.53
NVNT	n20	5320	Ant1	79.63	0.99	0.53
NVNT	n40	5270	Ant1	65.52	1.84	1.08
NVNT	n40	5310	Ant1	65.48	1.84	1.08

Test Graphs

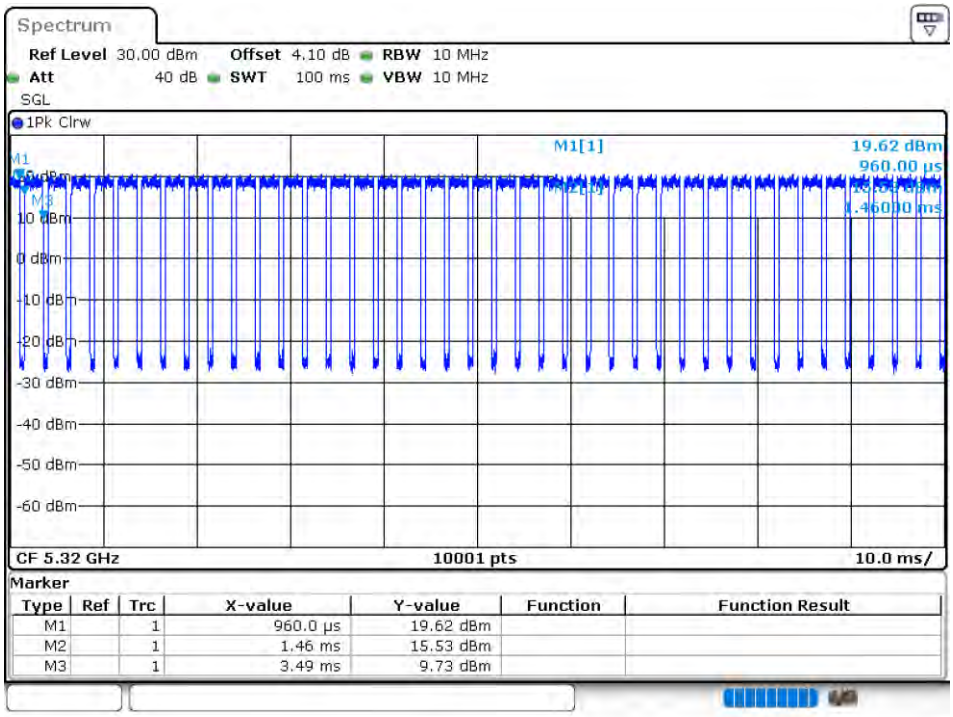
Duty Cycle NVNT a 5260MHz Ant1



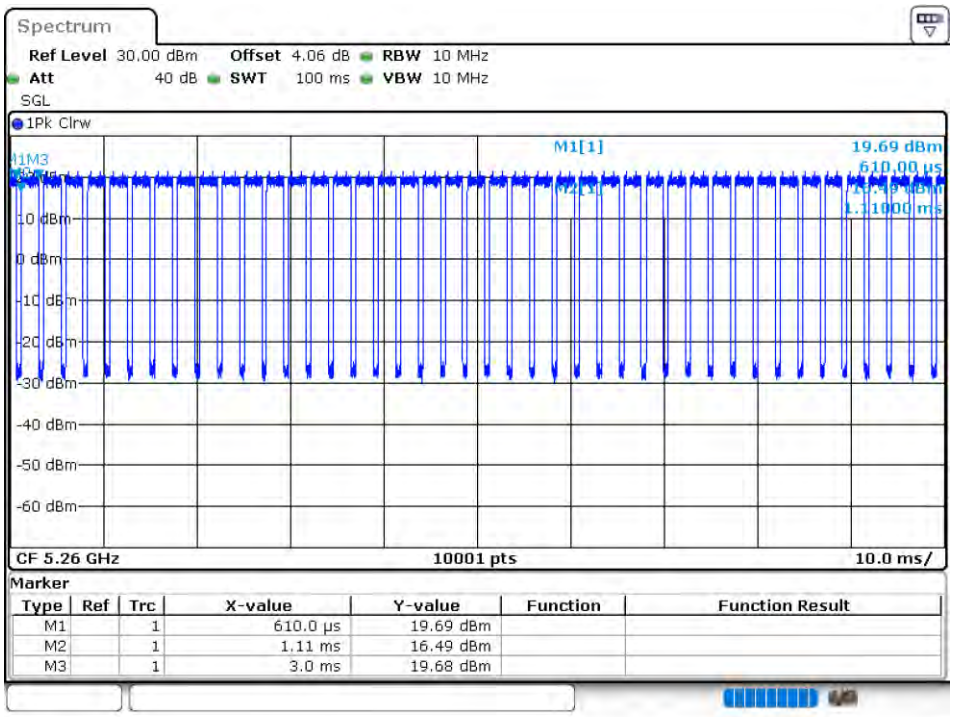
Duty Cycle NVNT a 5280MHz Ant1



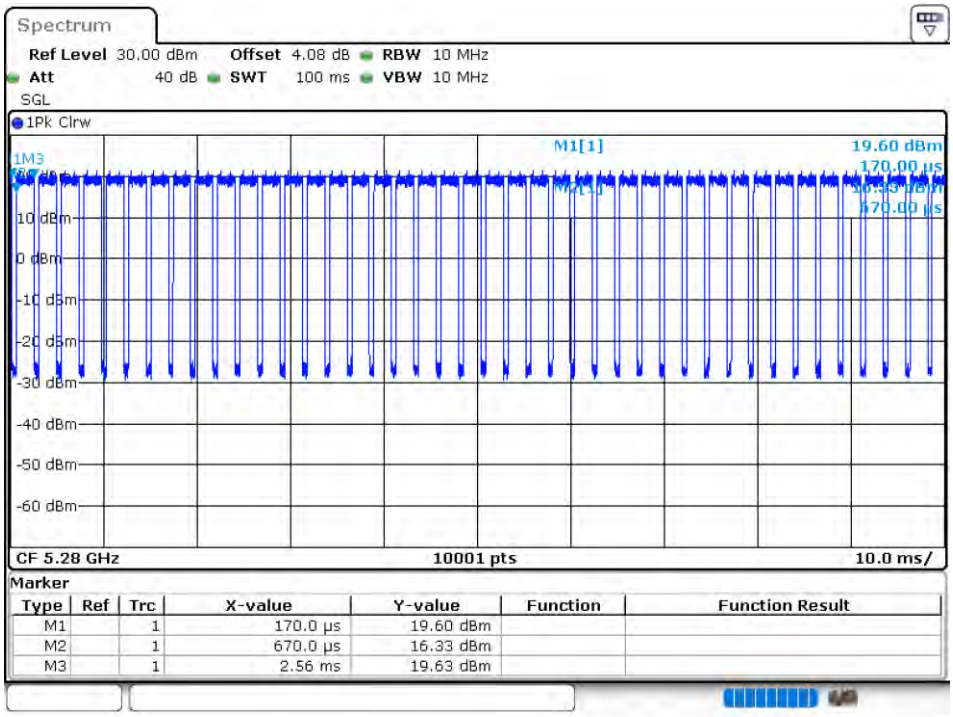
Duty Cycle NVNT a 5320MHz Ant1



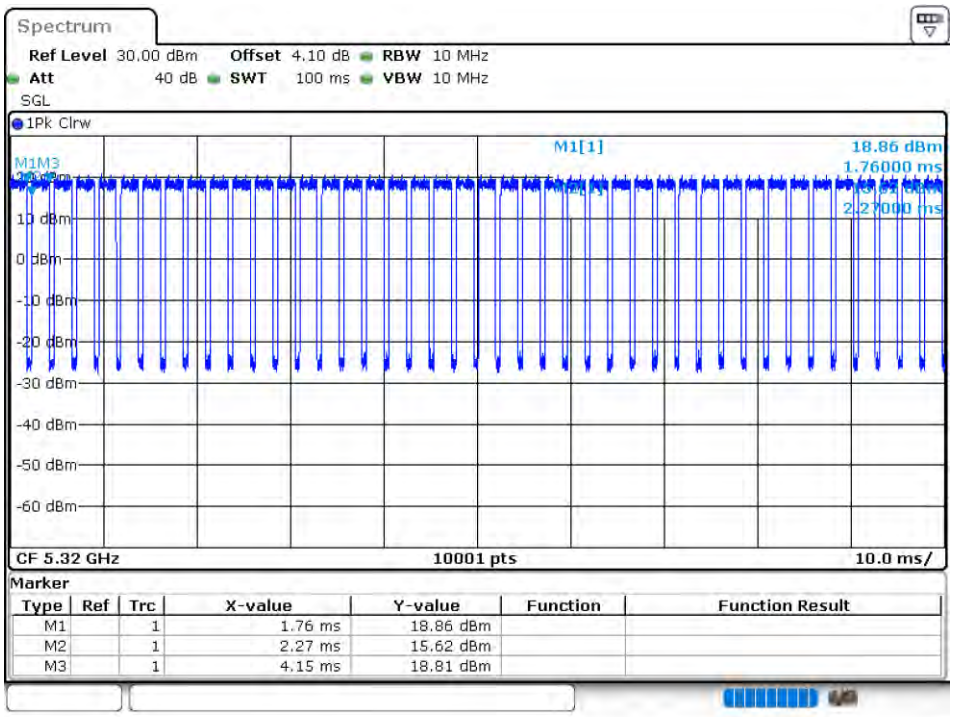
Duty Cycle NVNT n20 5260MHz Ant1



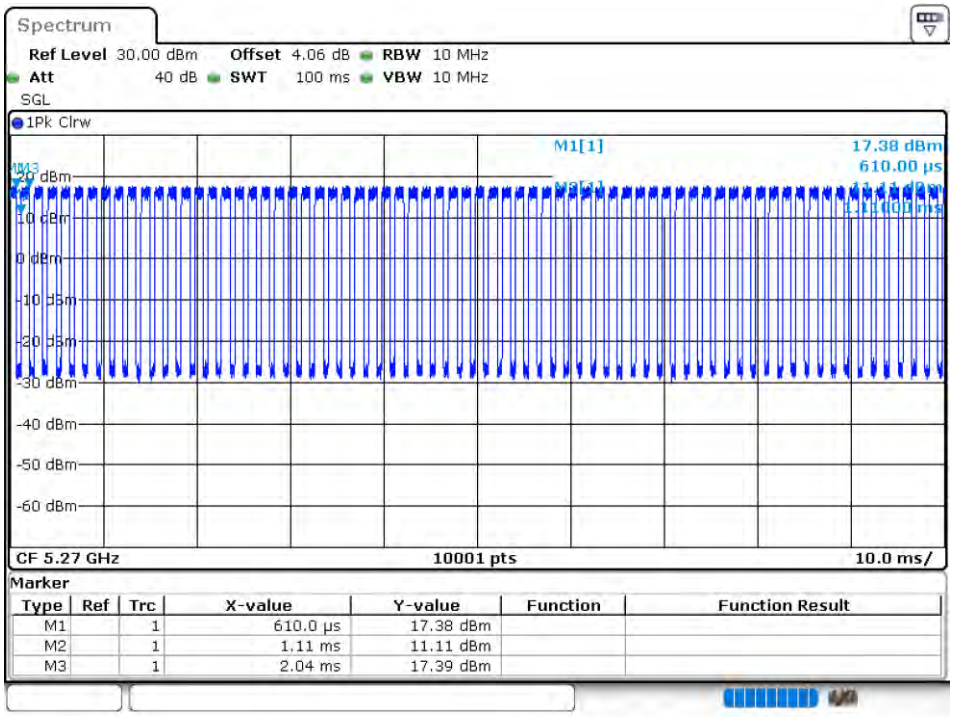
Duty Cycle NVNT n20 5280MHz Ant1



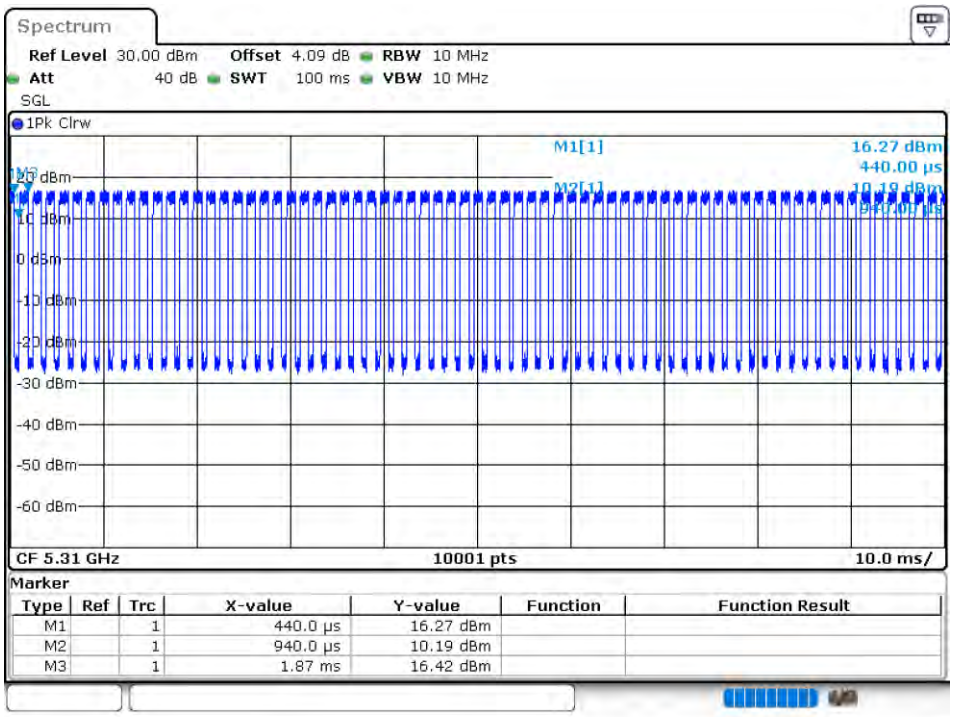
Duty Cycle NVNT n20 5320MHz Ant1



Duty Cycle NVNT n40 5270MHz Ant1



Duty Cycle NVNT n40 5310MHz Ant1



Maximum Conducted Output Power

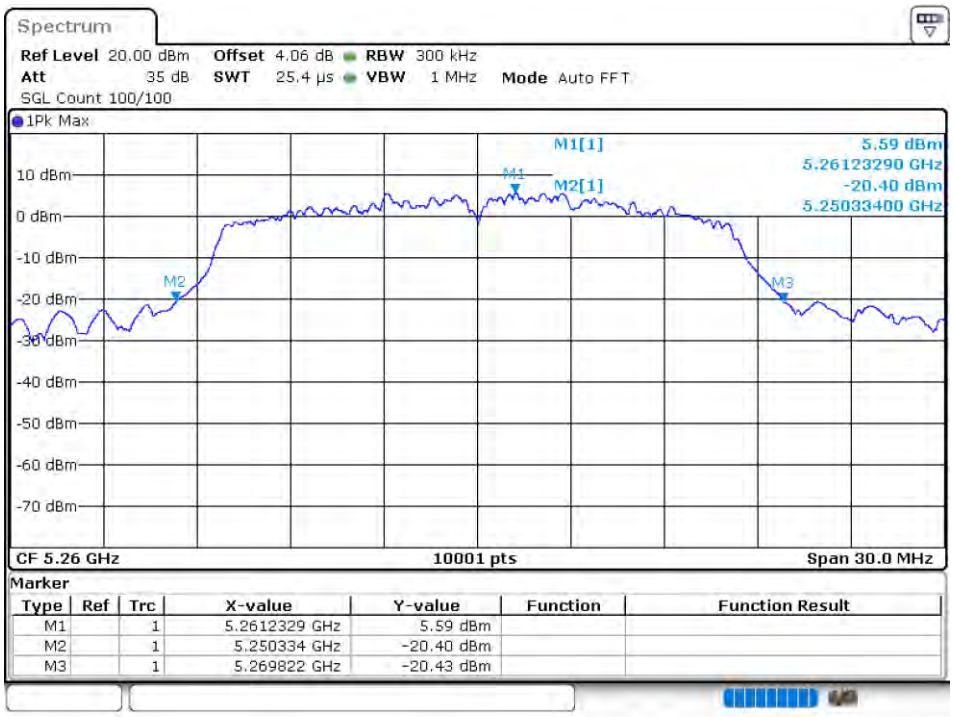
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	14.81	24	Pass
NVNT	a	5280	Ant1	15.12	24	Pass
NVNT	a	5320	Ant1	14.9	24	Pass
NVNT	n20	5260	Ant1	14.83	24	Pass
NVNT	n20	5280	Ant1	14.8	24	Pass
NVNT	n20	5320	Ant1	14.72	24	Pass
NVNT	n40	5270	Ant1	13.2	24	Pass
NVNT	n40	5310	Ant1	12.87	24	Pass

-26dB Bandwidth

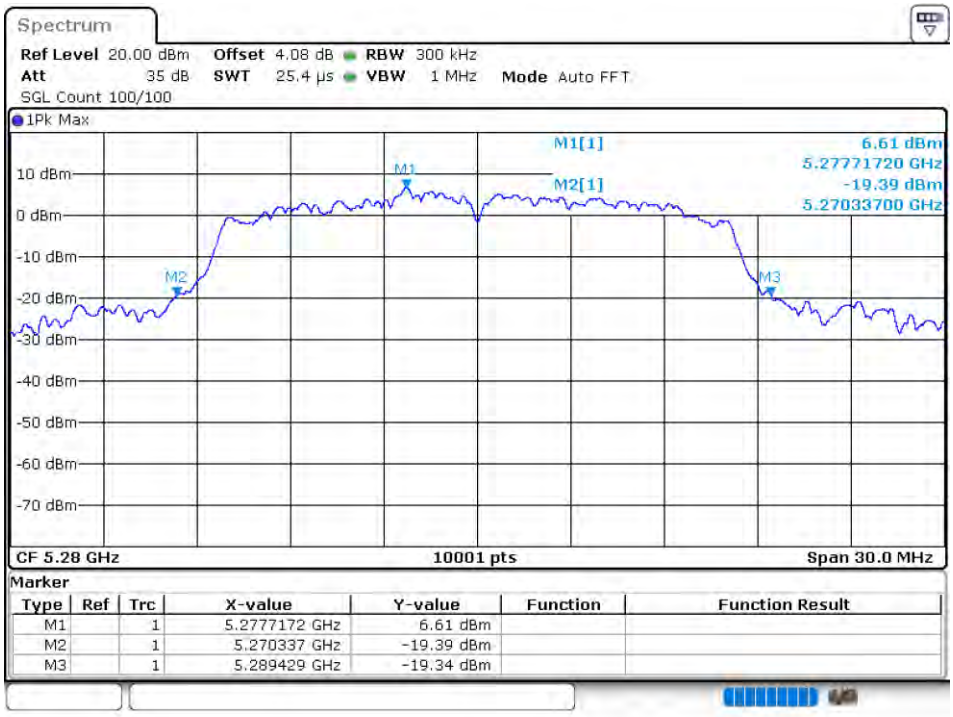
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	19.488	Pass
NVNT	a	5280	Ant1	19.092	Pass
NVNT	a	5320	Ant1	21.882	Pass
NVNT	n20	5260	Ant1	20.373	Pass
NVNT	n20	5280	Ant1	20.475	Pass
NVNT	n20	5320	Ant1	19.686	Pass
NVNT	n40	5270	Ant1	38.208	Pass
NVNT	n40	5310	Ant1	38.13	Pass

Test Graphs

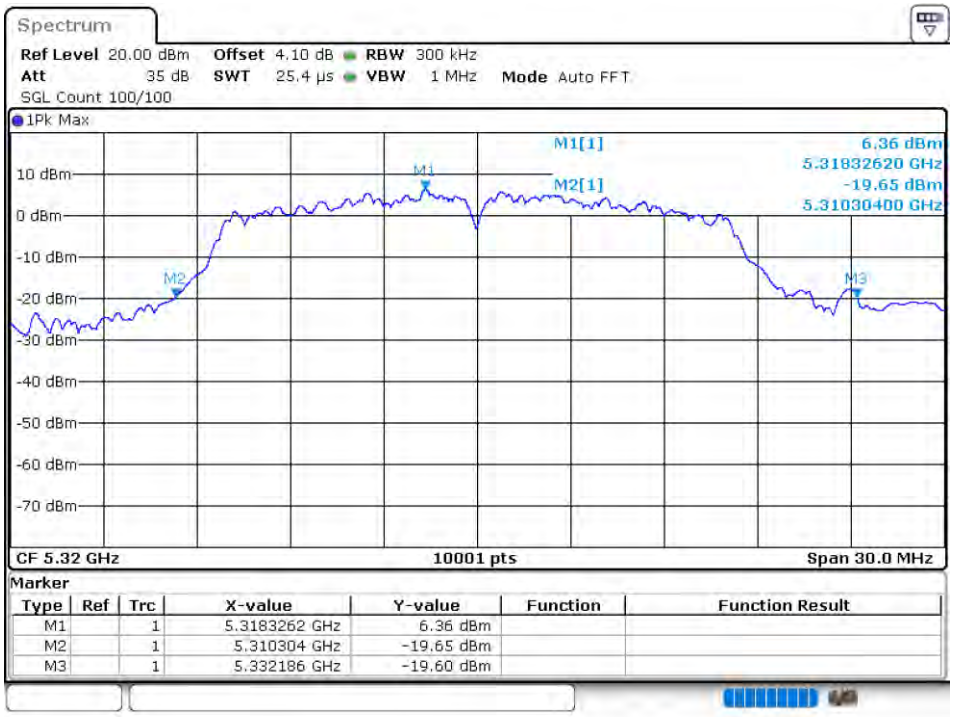
-26dB Bandwidth NVNT a 5260MHz Ant1



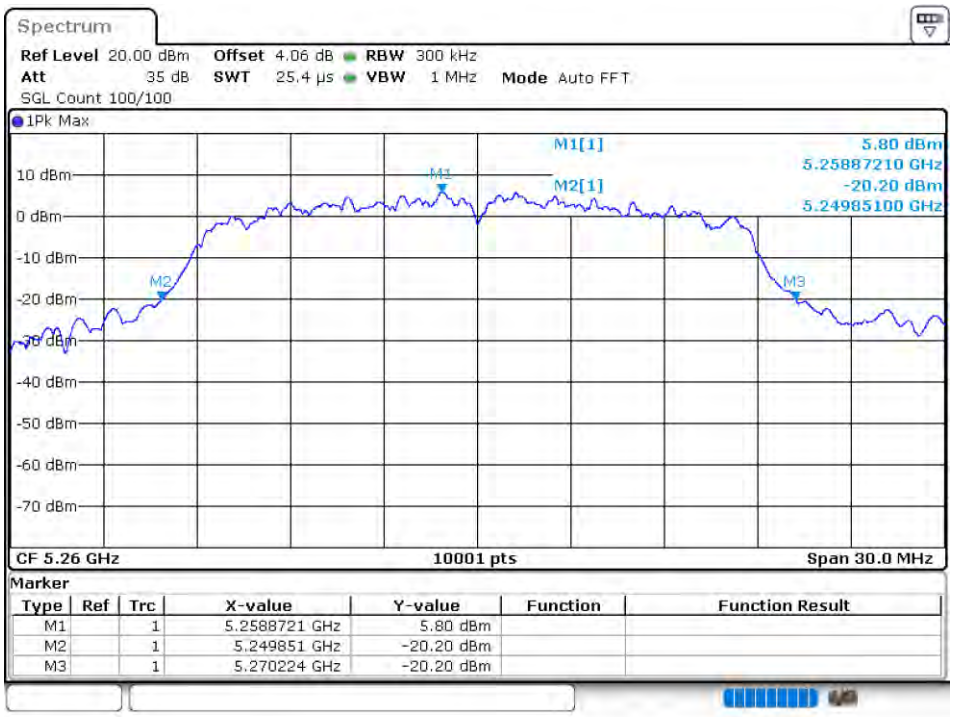
-26dB Bandwidth NVNT a 5280MHz Ant1



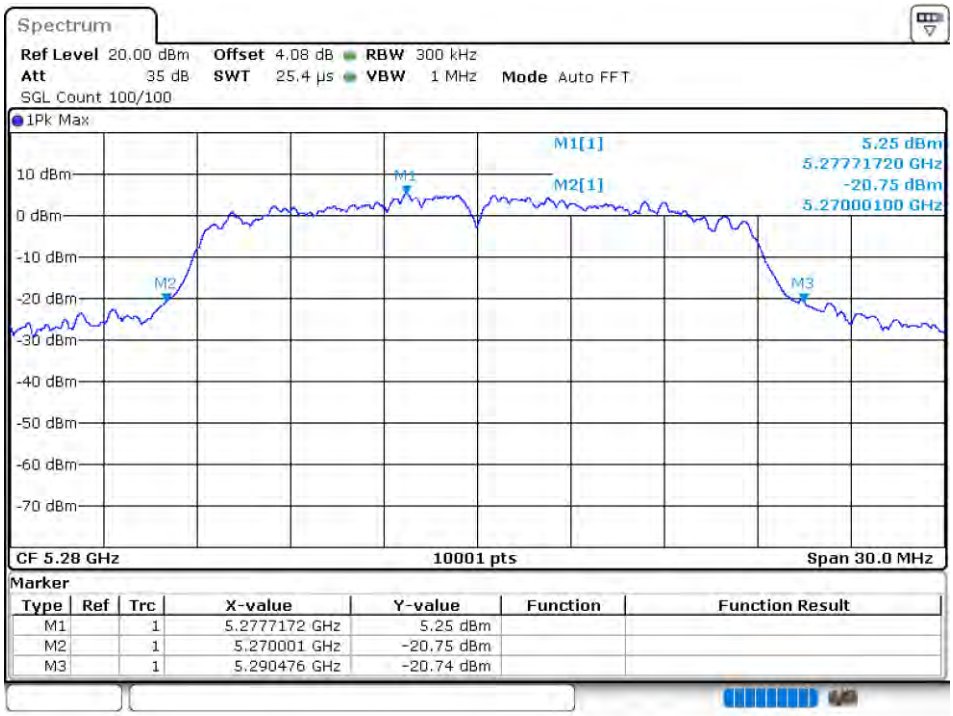
-26dB Bandwidth NVNT a 5320MHz Ant1



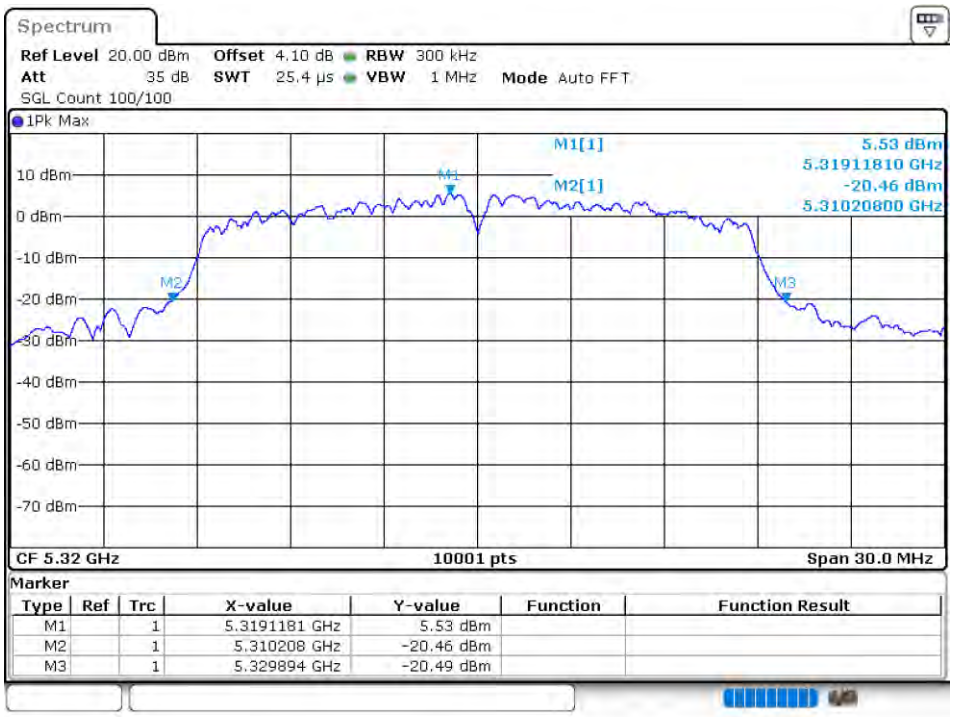
-26dB Bandwidth NVNT n20 5260MHz Ant1



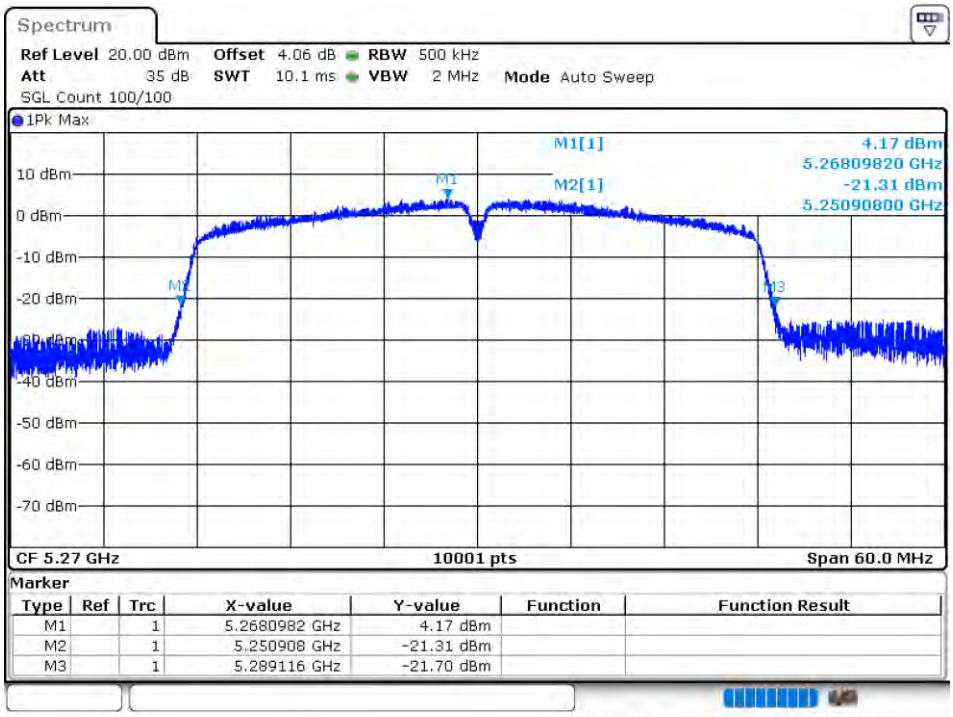
-26dB Bandwidth NVNT n20 5280MHz Ant1



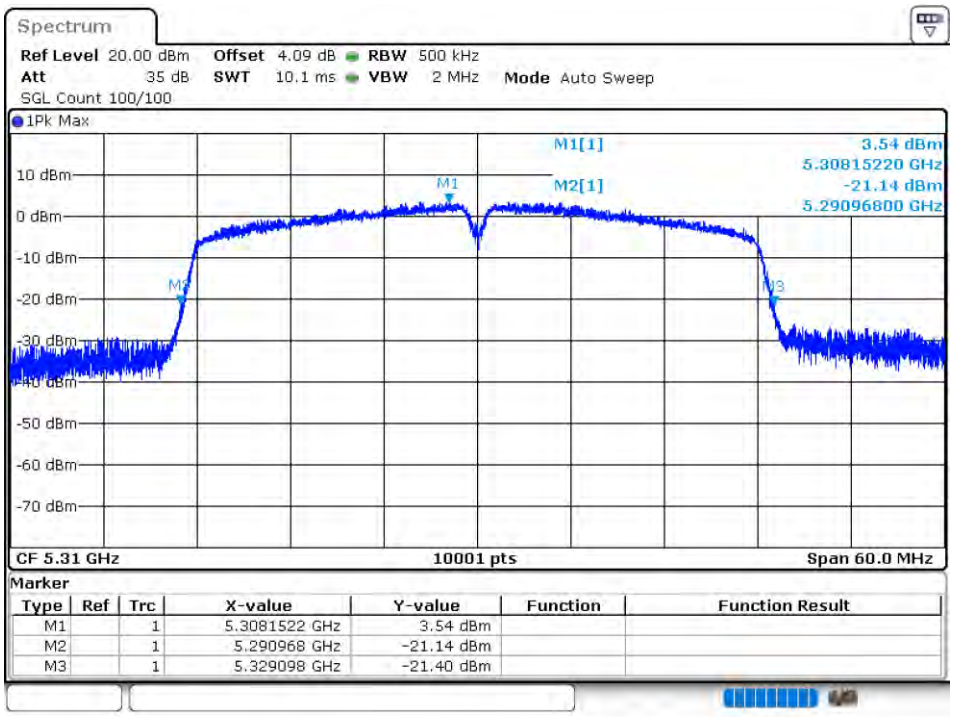
-26dB Bandwidth NVNT n20 5320MHz Ant1



-26dB Bandwidth NVNT n40 5270MHz Ant1



-26dB Bandwidth NVNT n40 5310MHz Ant1

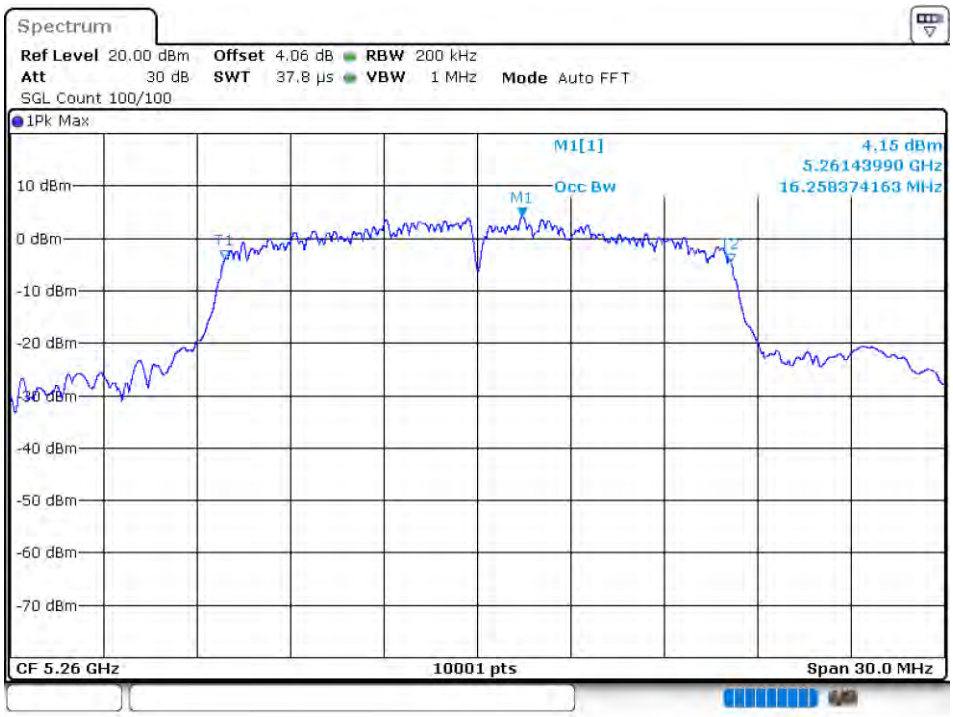


Occupied Channel Bandwidth

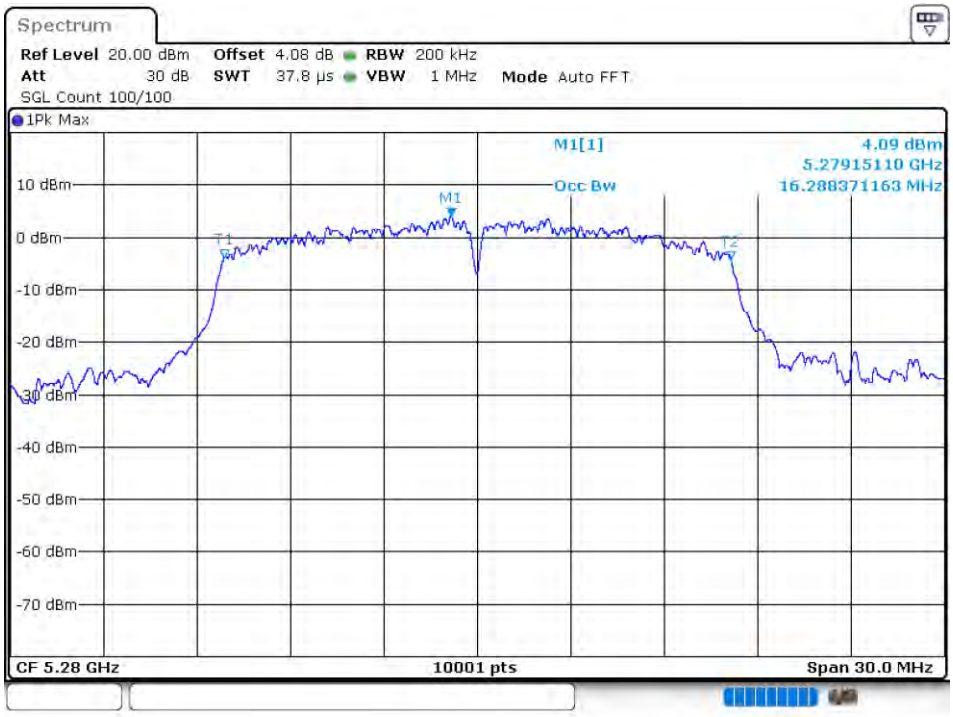
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.258
NVNT	a	5280	Ant1	16.288
NVNT	a	5320	Ant1	16.285
NVNT	n20	5260	Ant1	17.356
NVNT	n20	5280	Ant1	17.389
NVNT	n20	5320	Ant1	17.389
NVNT	n40	5270	Ant1	35.156
NVNT	n40	5310	Ant1	35.15

Test Graphs

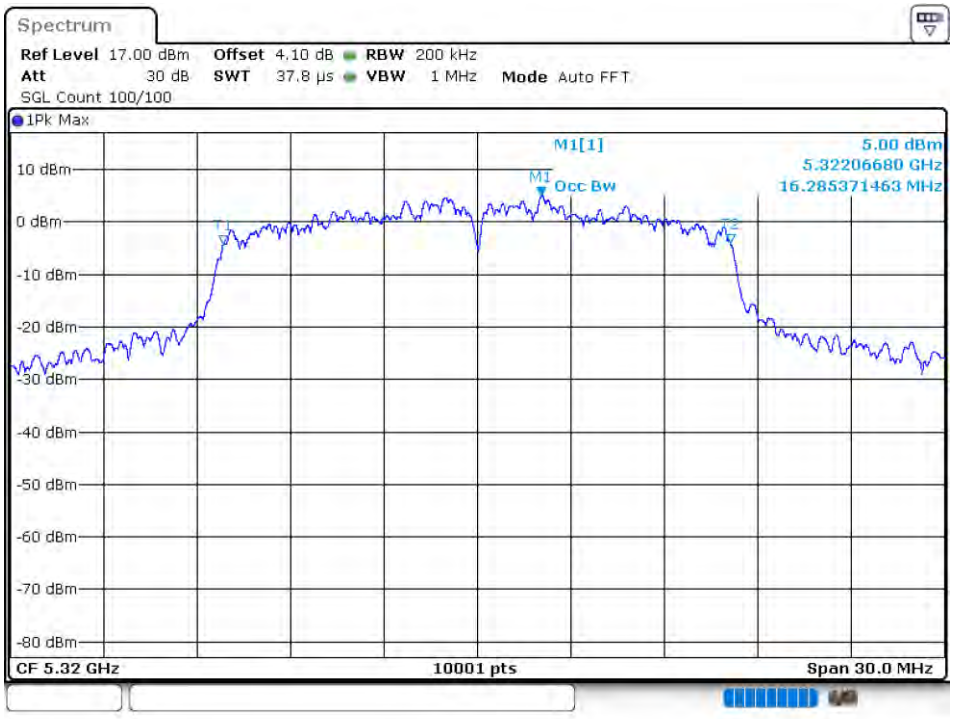
OBW NVNT a 5260MHz Ant1



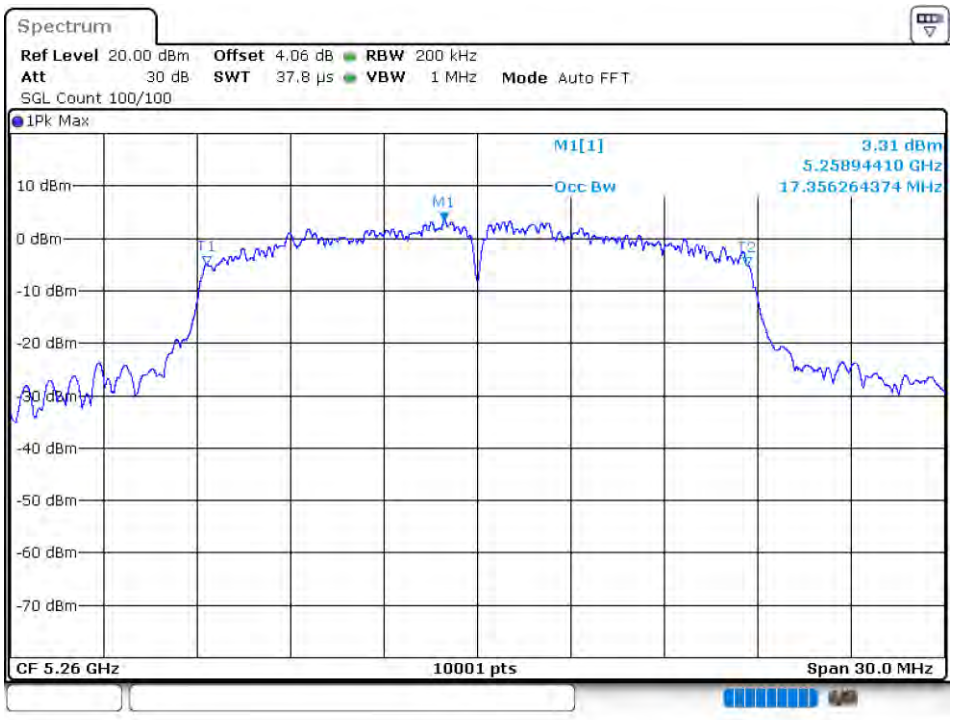
OBW NVNT a 5280MHz Ant1



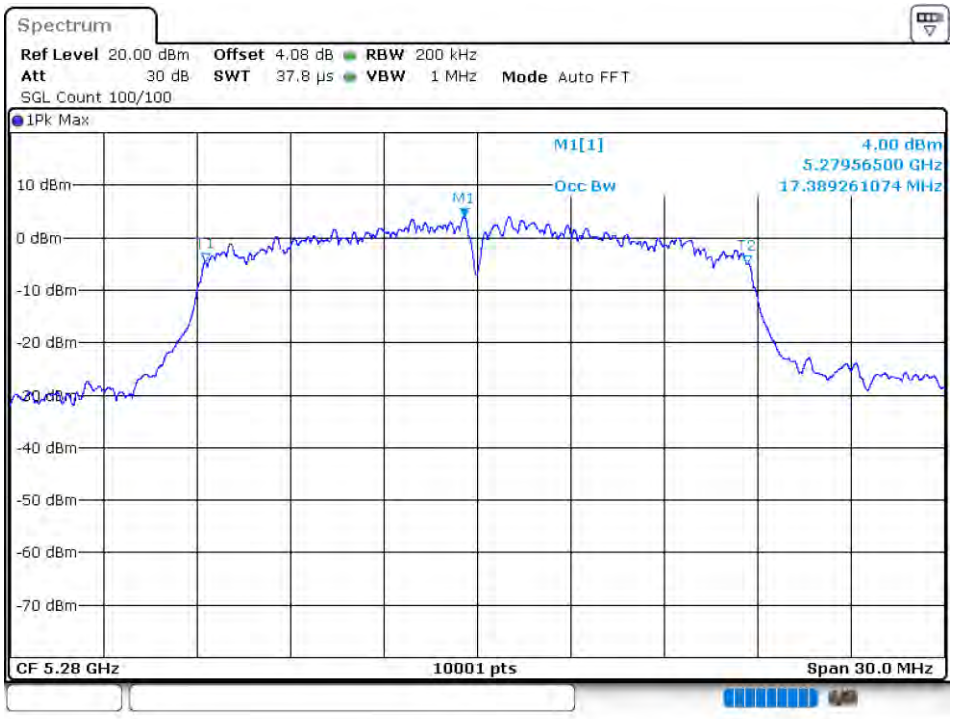
OBW NVNT a 5320MHz Ant1



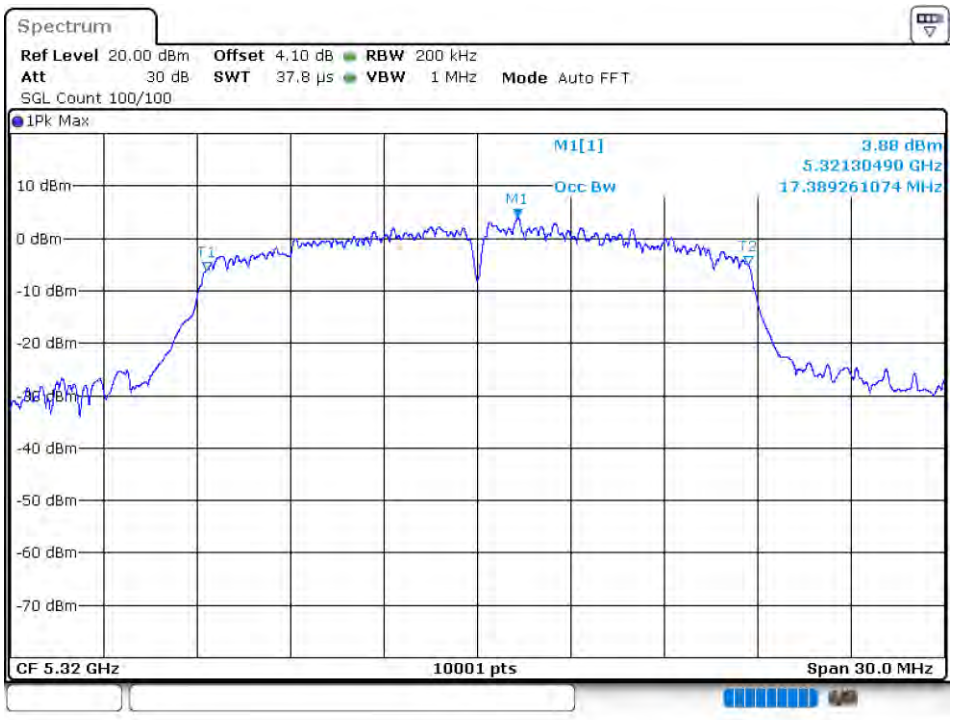
OBW NVNT n20 5260MHz Ant1



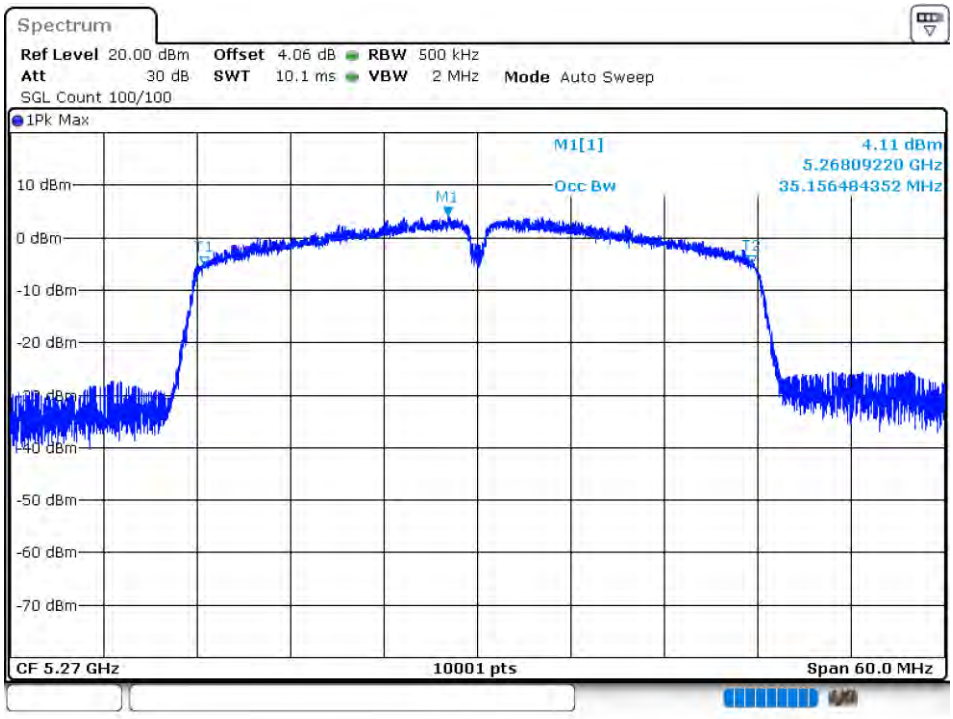
OBW NVNT n20 5280MHz Ant1



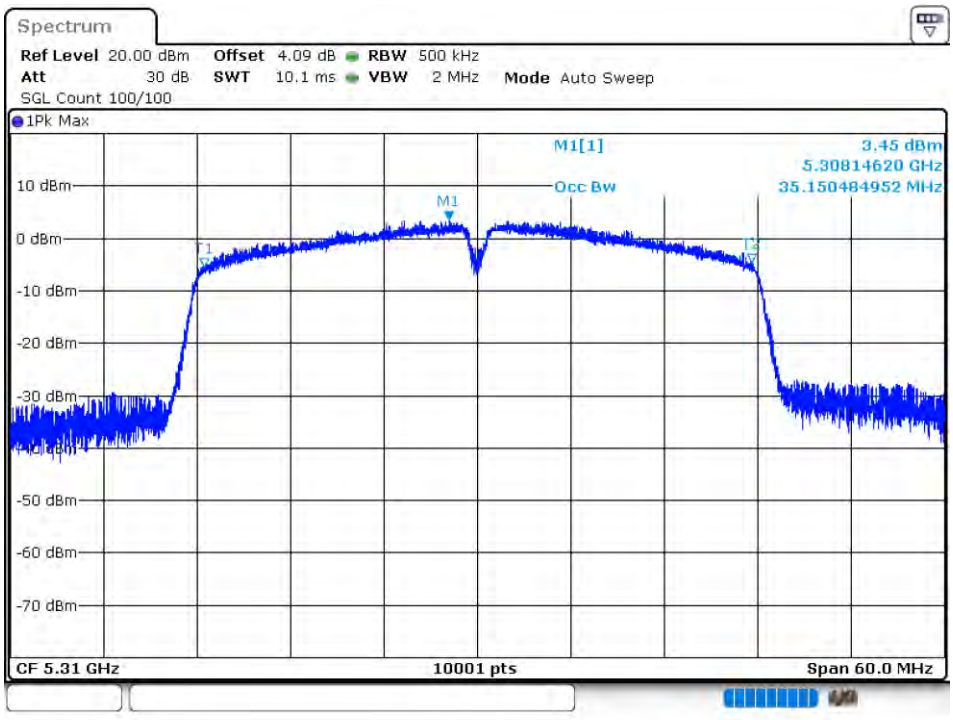
OBW NVNT n20 5320MHz Ant1



OBW NVNT n40 5270MHz Ant1



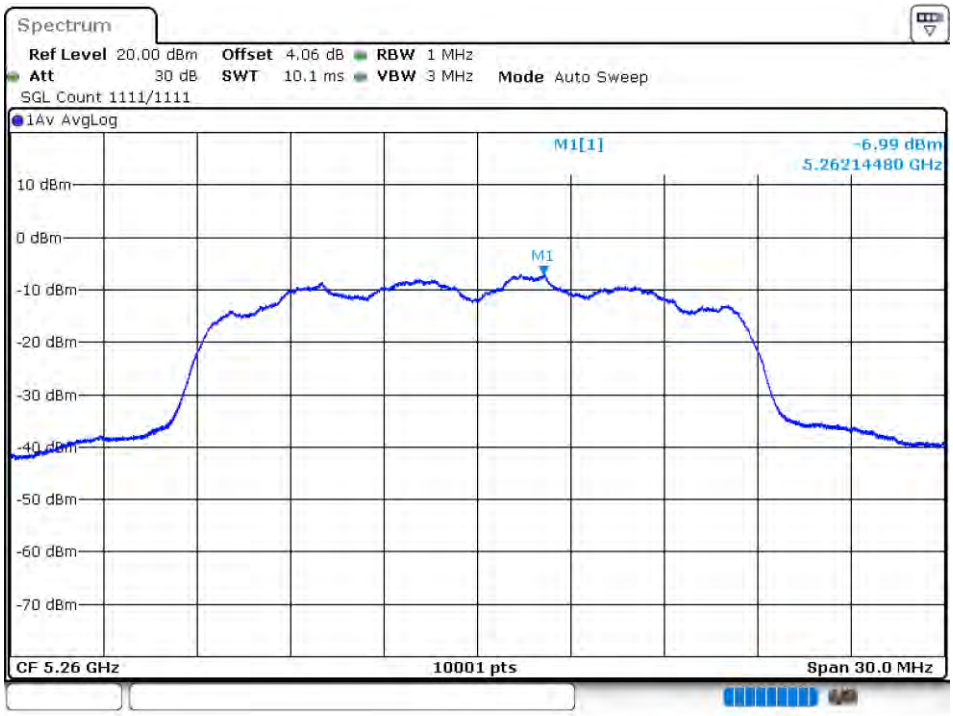
OBW NVNT n40 5310MHz Ant1



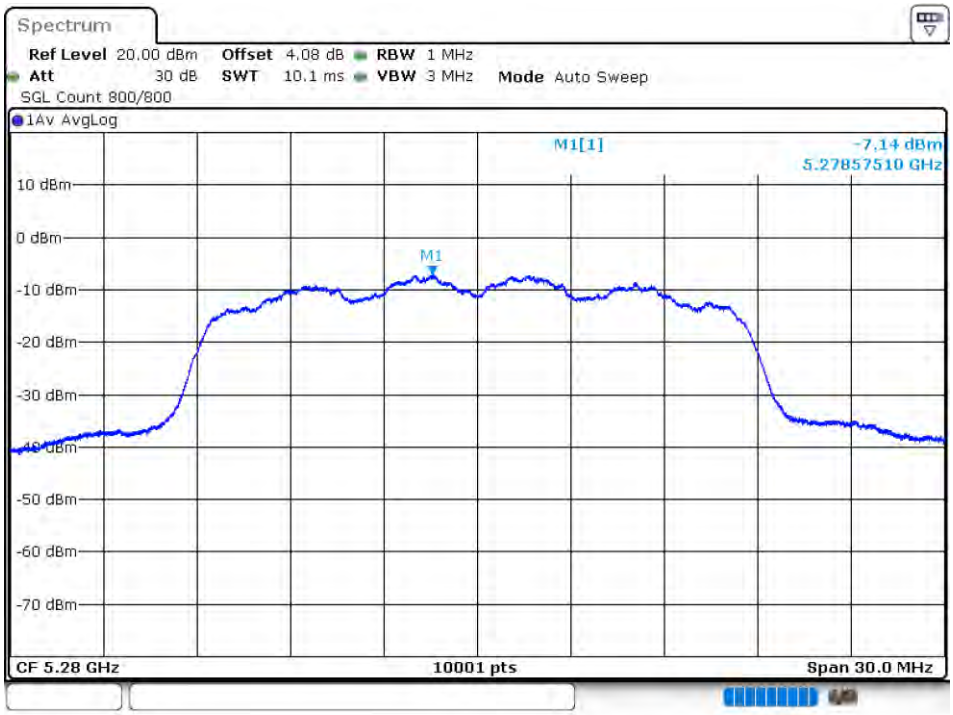
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-6.99	0.95	-6.04	11	Pass
NVNT	a	5280	Ant1	-7.14	0.93	-6.21	11	Pass
NVNT	a	5320	Ant1	-3.77	0.93	-2.84	11	Pass
NVNT	n20	5260	Ant1	-8.73	1.01	-7.72	11	Pass
NVNT	n20	5280	Ant1	-8.89	1.01	-7.88	11	Pass
NVNT	n20	5320	Ant1	-9.11	0.99	-8.12	11	Pass
NVNT	n40	5270	Ant1	-20.12	1.84	-18.28	11	Pass
NVNT	n40	5310	Ant1	-19.89	1.84	-18.05	11	Pass

Test Graphs
PSD NVNT a 5260MHz Ant1

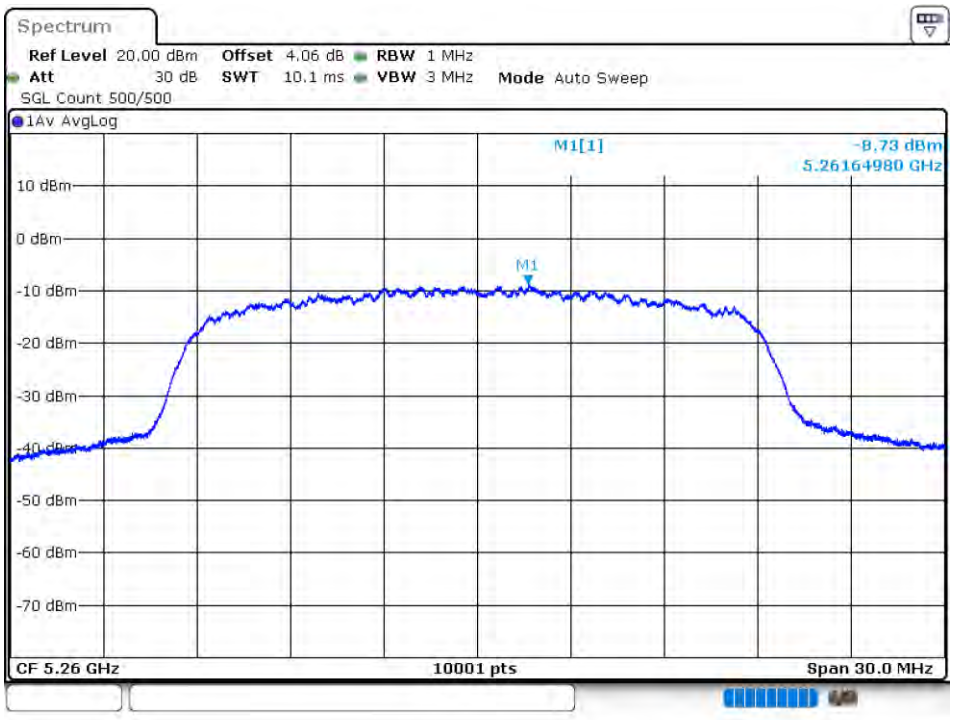


PSD NVNT a 5280MHz Ant1

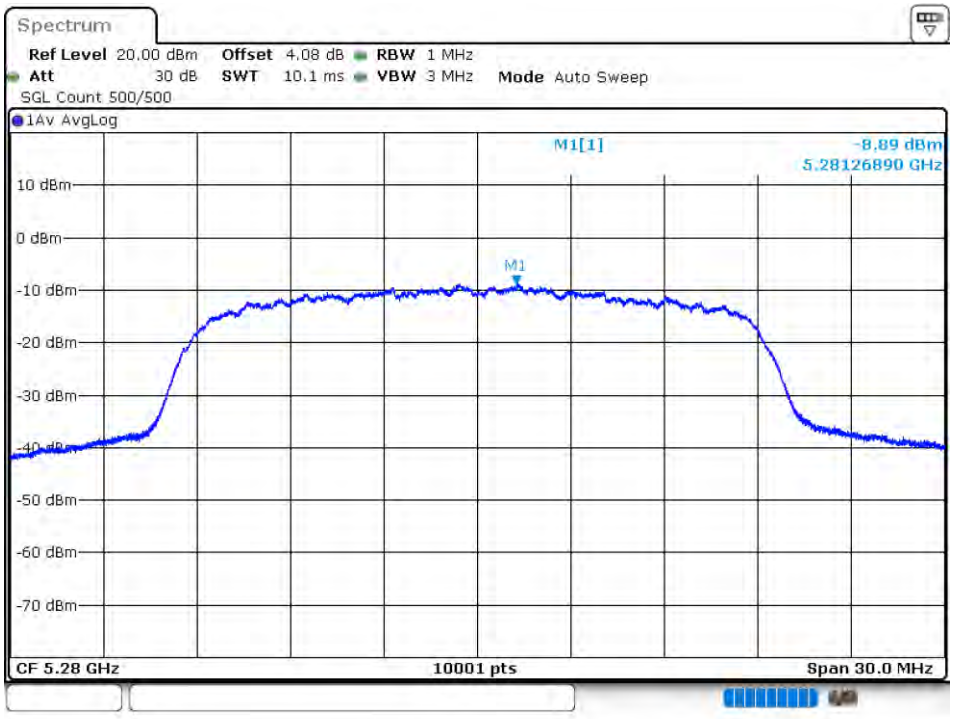


PSD NVNT a 5320MHz Ant1

PSD NVNT n20 5260MHz Ant1

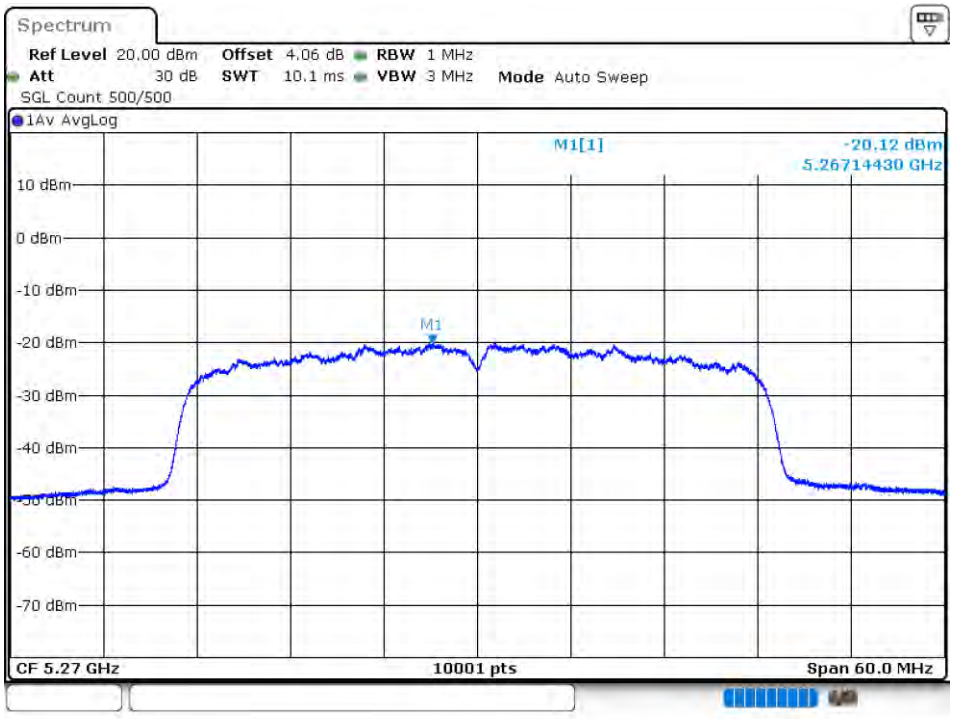


PSD NVNT n20 5280MHz Ant1

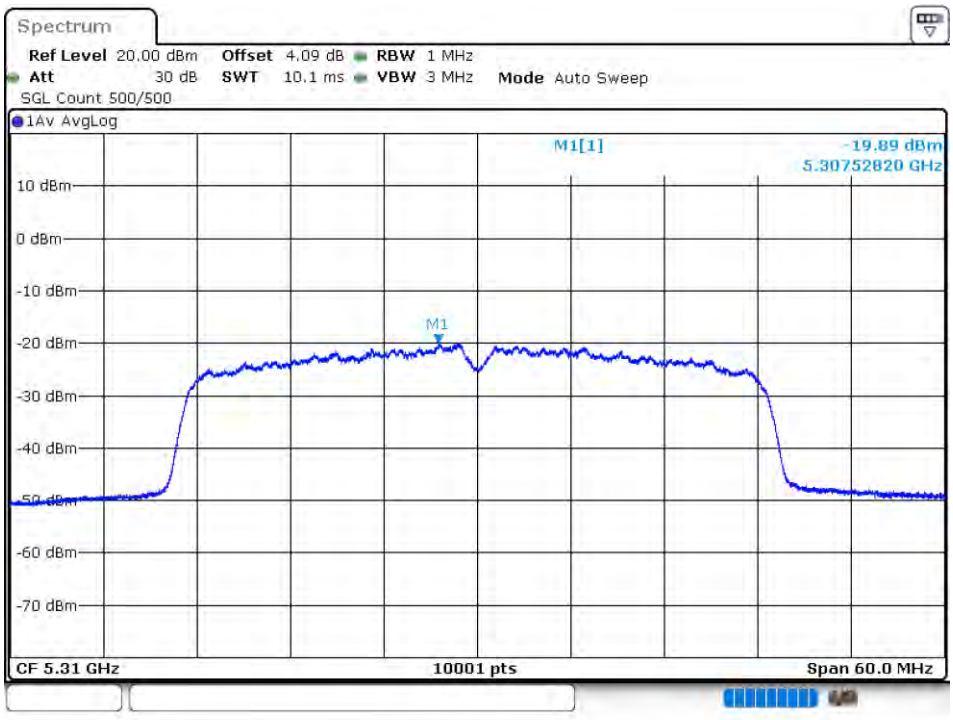


PSD NVNT n20 5320MHz Ant1

PSD NVNT n40 5270MHz Ant1



PSD NVNT n40 5310MHz Ant1



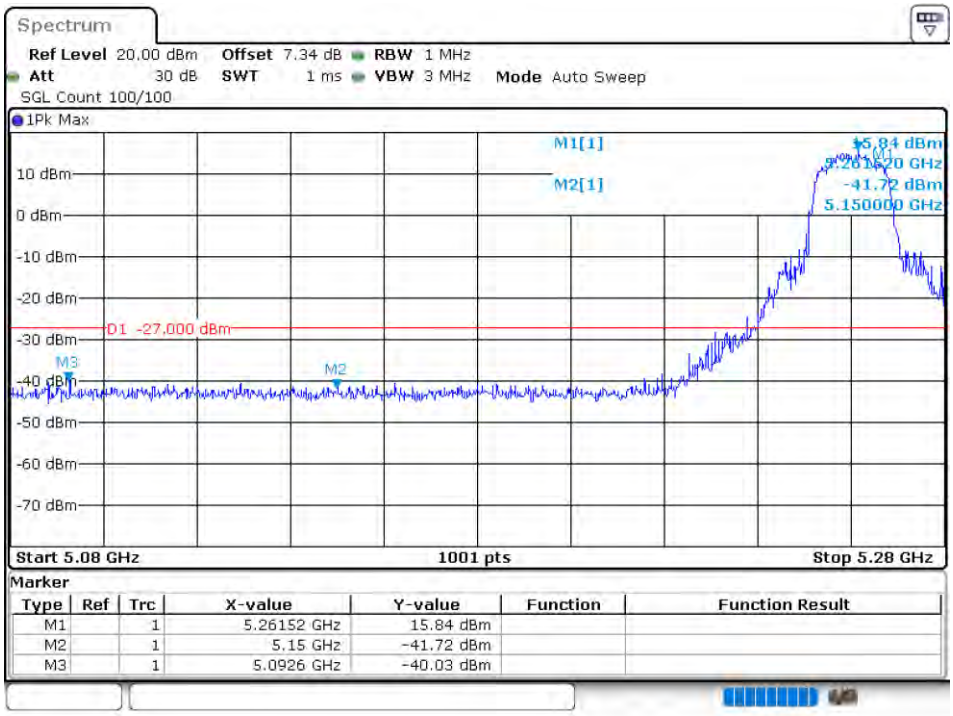
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-40.03	-27	Pass
NVNT	a	5320	Ant1	-29.3	-27	Pass
NVNT	n20	5260	Ant1	-40.34	-27	Pass
NVNT	n20	5320	Ant1	-30.16	-27	Pass
NVNT	n40	5270	Ant1	-40.86	-27	Pass
NVNT	n40	5310	Ant1	-29.16	-27	Pass

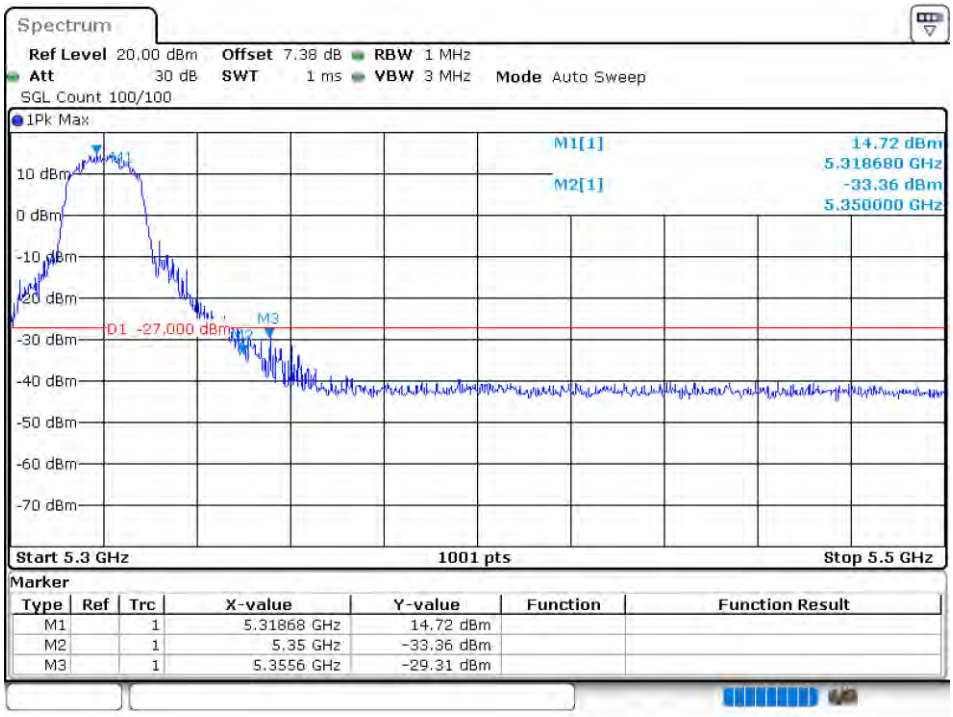
Note: Tested with increased antenna gain.

Test Graphs

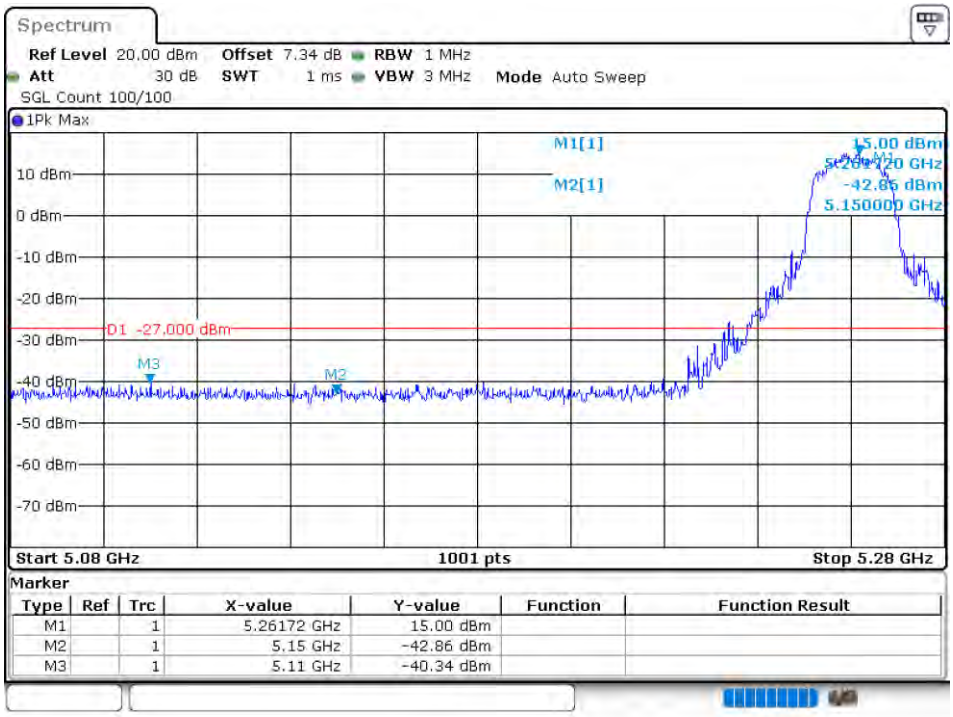
Band Edge NVNT a 5260MHz Low Ant1



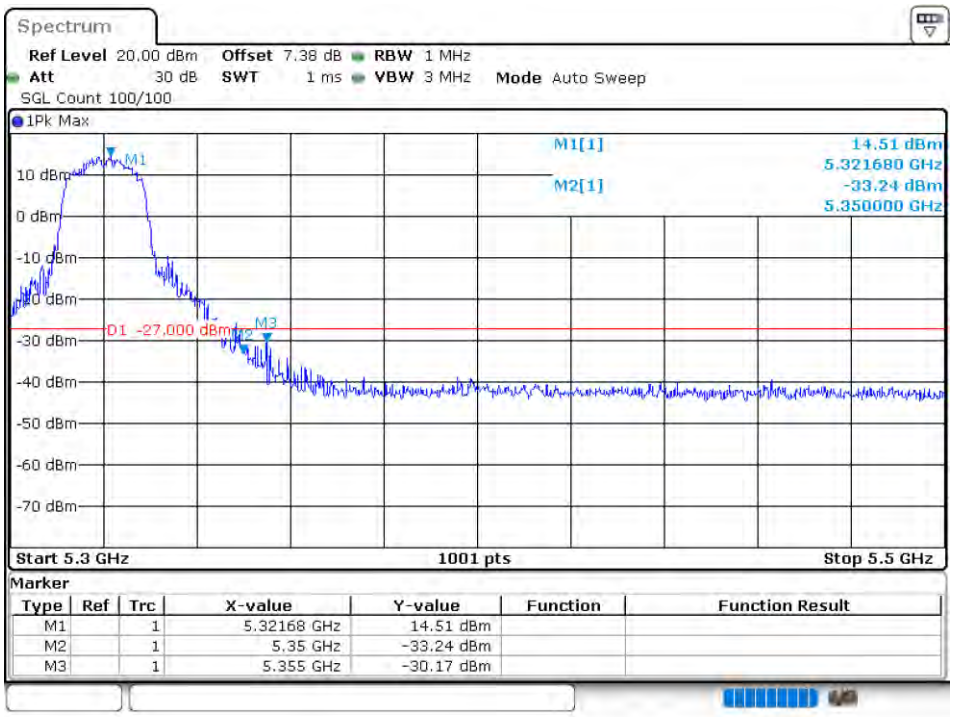
Band Edge NVNT a 5320MHz High Ant1



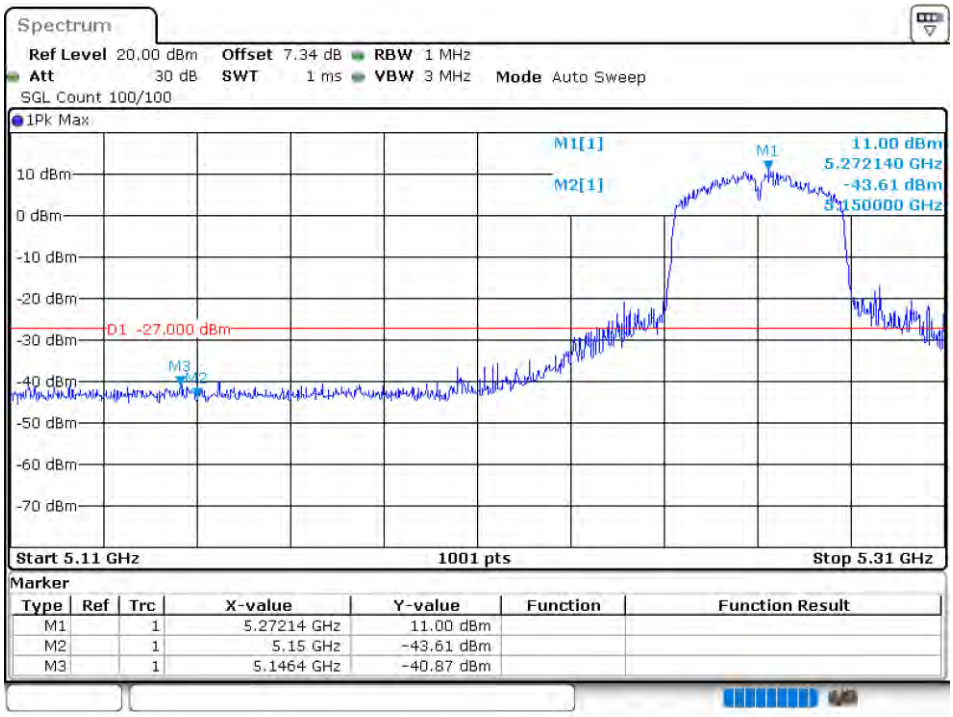
Band Edge NVNT n20 5260MHz Low Ant1



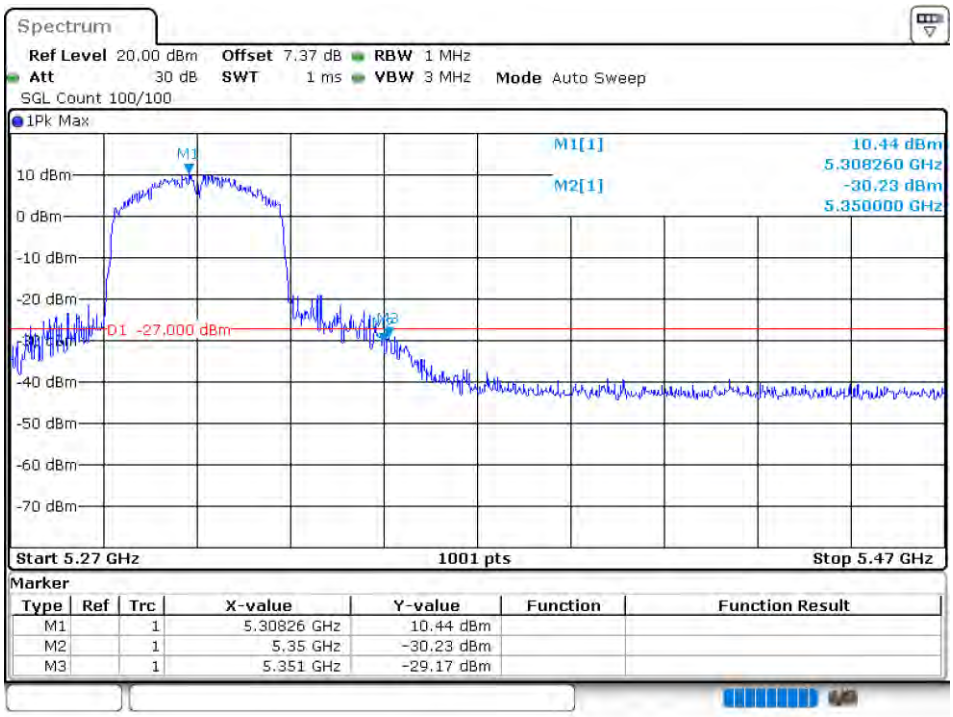
Band Edge NVNT n20 5320MHz High Ant1



Band Edge NVNT n40 5270MHz Low Ant1



Band Edge NVNT n40 5310MHz High Ant1



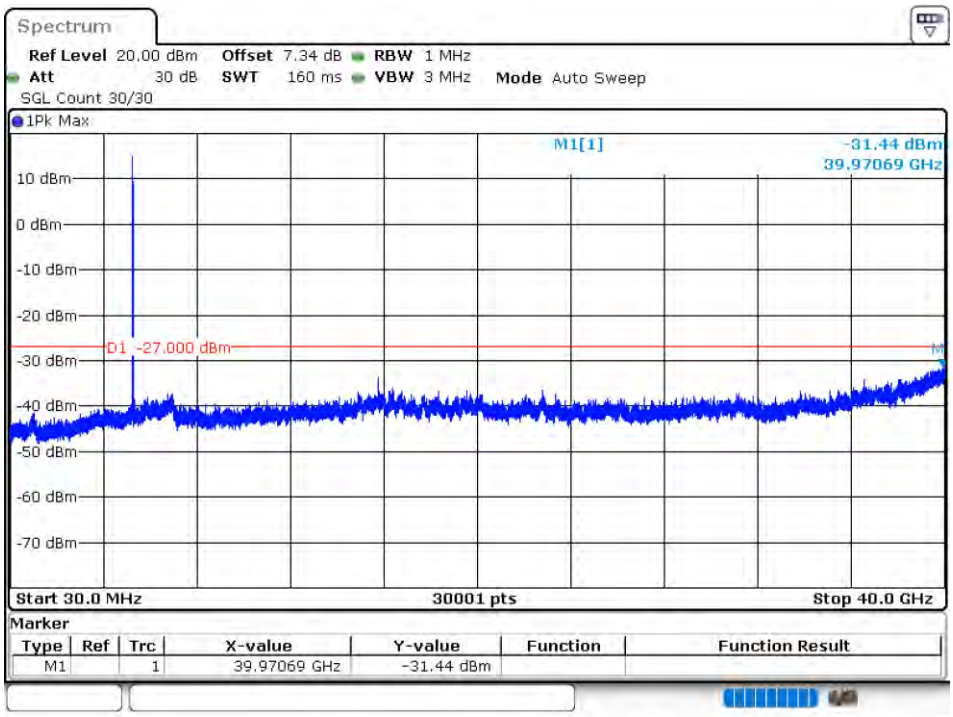
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-31.43	-27	Pass
NVNT	a	5280	Ant1	-31.04	-27	Pass
NVNT	a	5320	Ant1	-31.72	-27	Pass
NVNT	n20	5260	Ant1	-30.72	-27	Pass
NVNT	n20	5280	Ant1	-31.29	-27	Pass
NVNT	n20	5320	Ant1	-31.23	-27	Pass
NVNT	n40	5270	Ant1	-31.02	-27	Pass
NVNT	n40	5310	Ant1	-30.81	-27	Pass

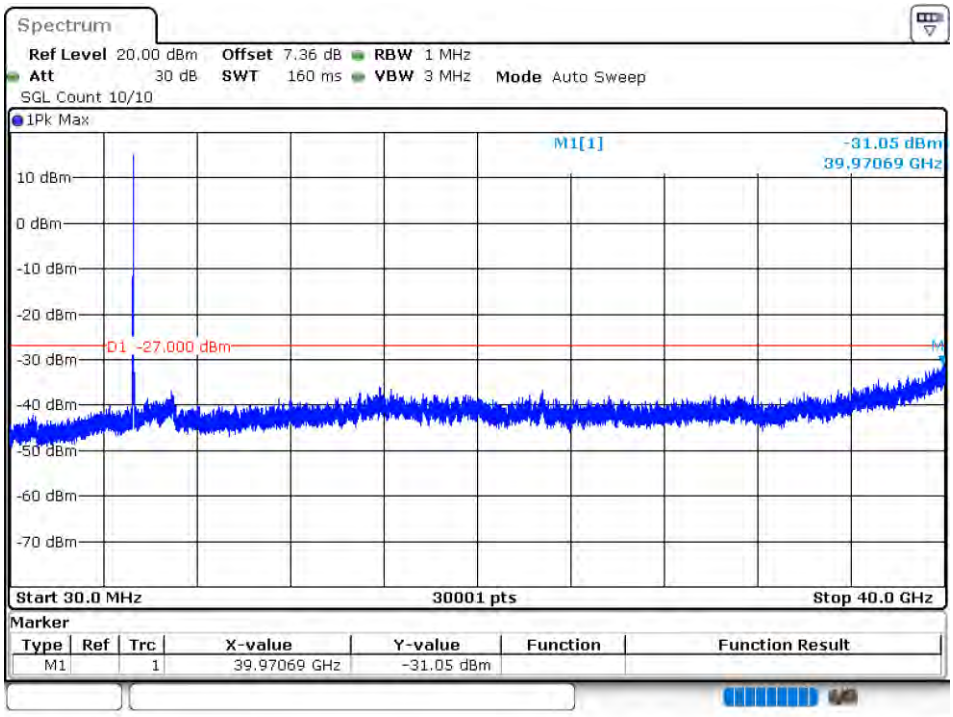
Note: Tested with increased antenna gain.

Test Graphs

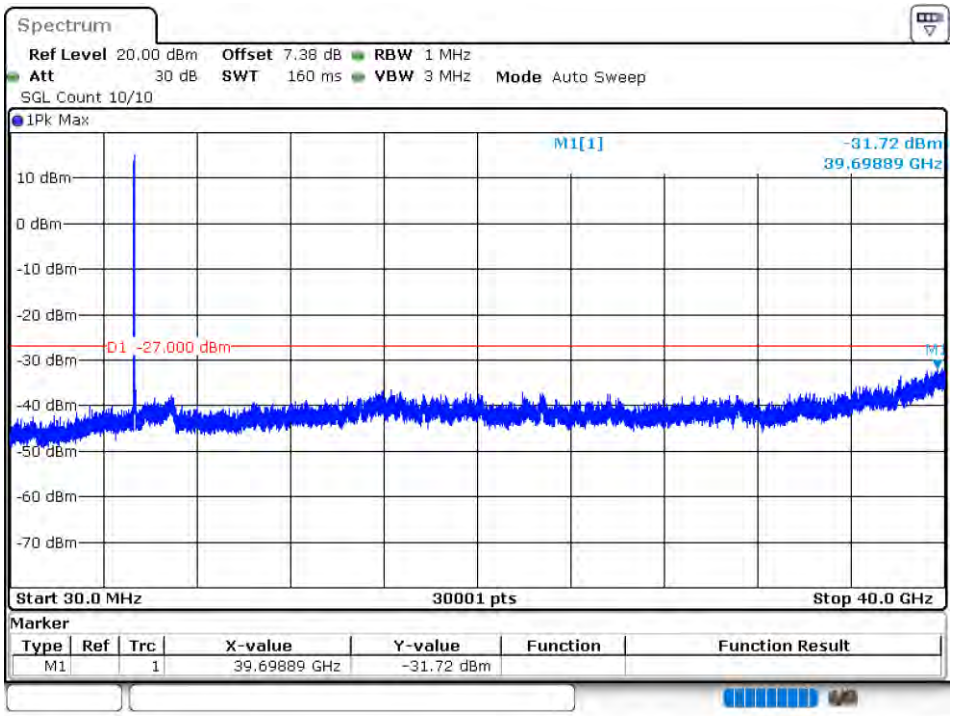
Tx. Spurious NVNT a 5260MHz Ant1 Emission



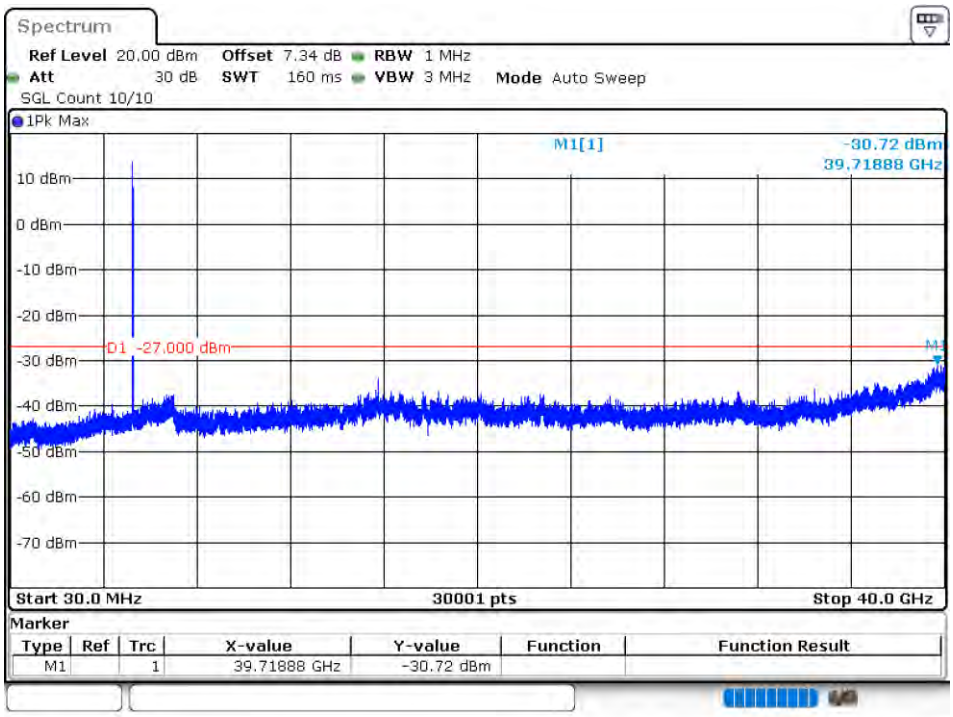
Tx. Spurious NVNT a 5280MHz Ant1 Emission



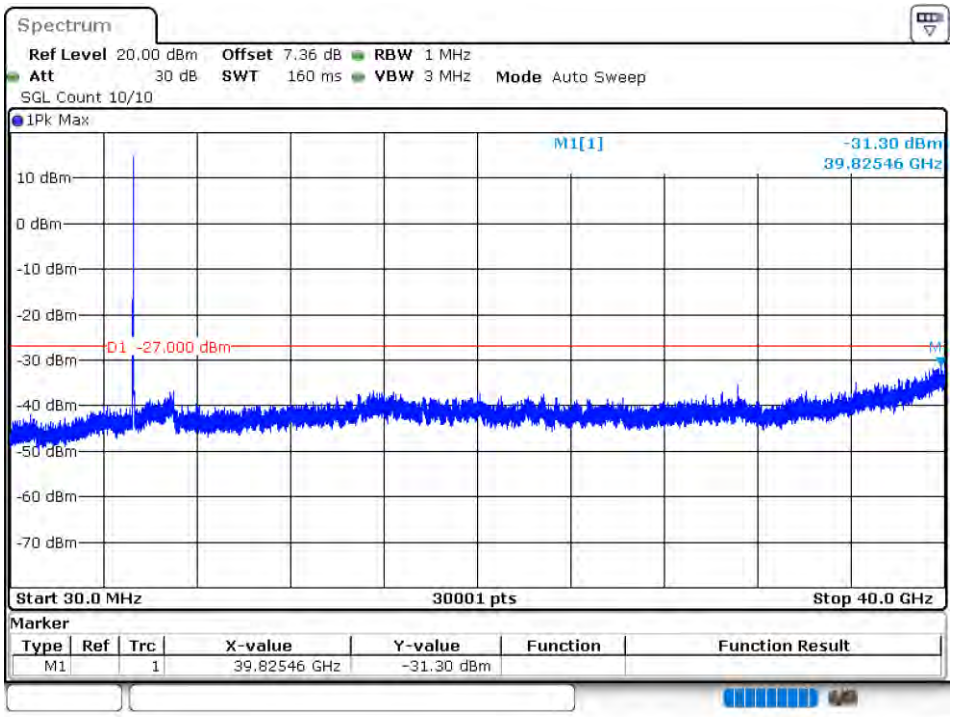
Tx. Spurious NVNT a 5320MHz Ant1 Emission



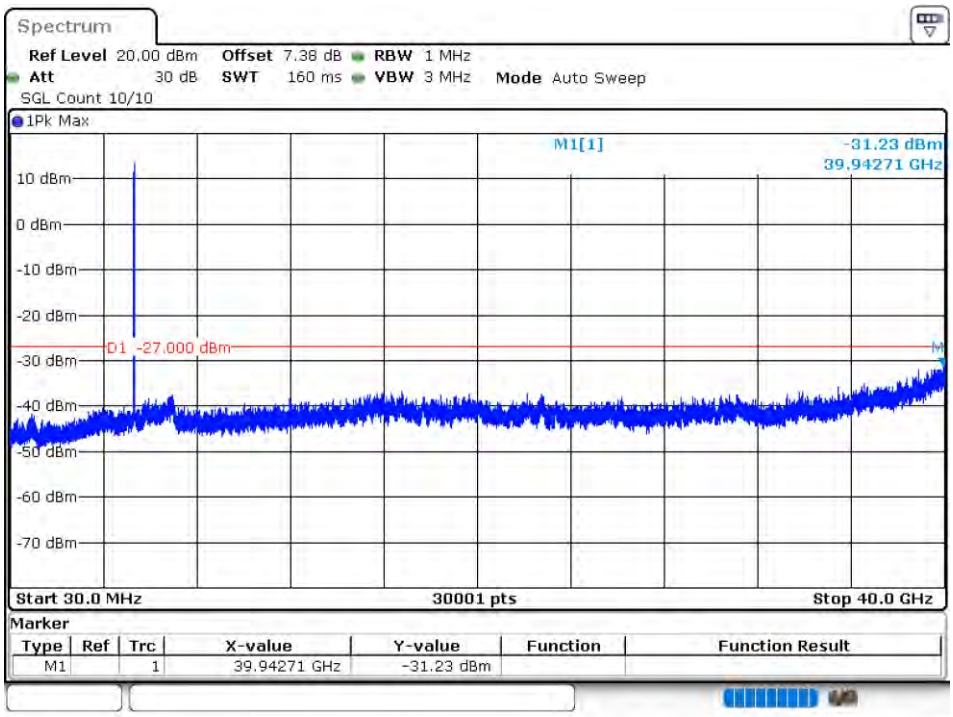
Tx. Spurious NVNT n20 5260MHz Ant1 Emission



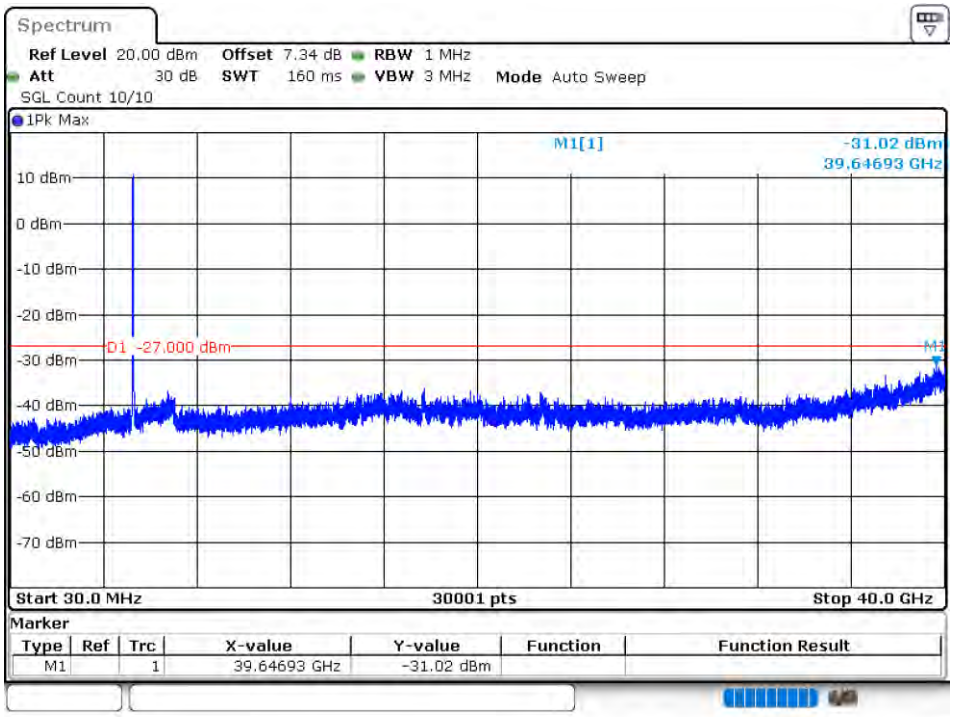
Tx. Spurious NVNT n20 5280MHz Ant1 Emission



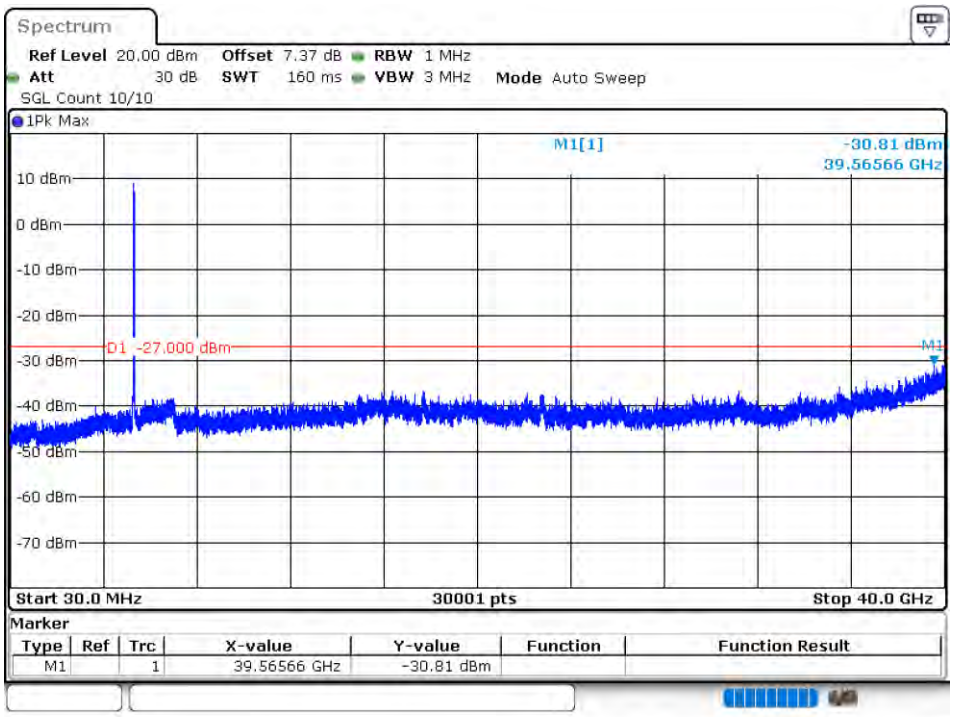
Tx. Spurious NVNT n20 5320MHz Ant1 Emission



Tx. Spurious NVNT n40 5270MHz Ant1 Emission



Tx. Spurious NVNT n40 5310MHz Ant1 Emission



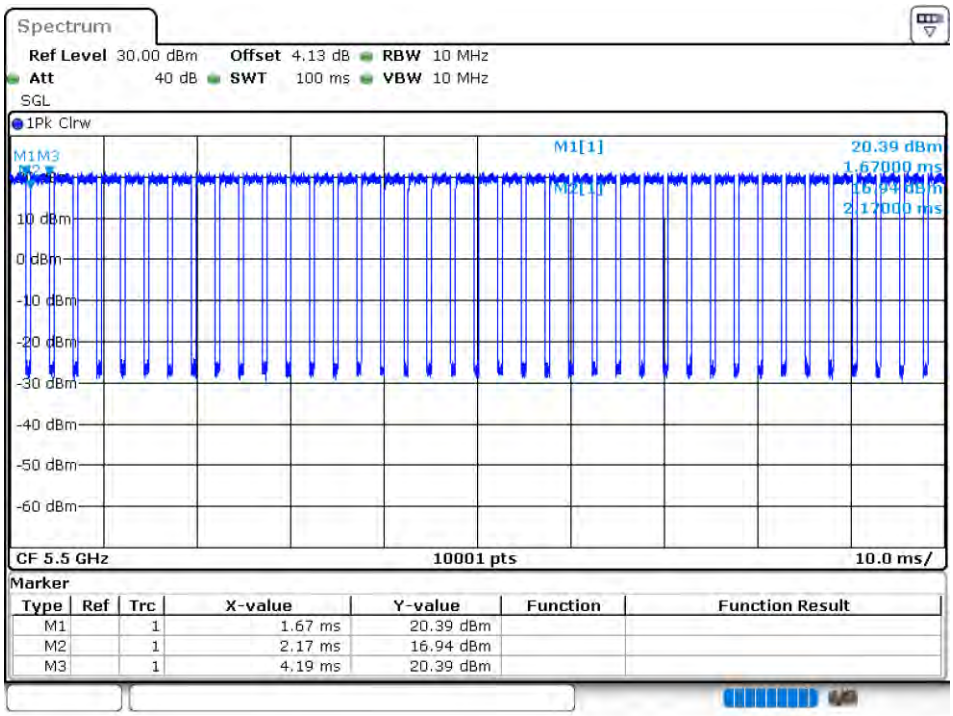
5.6G WIFI

Duty Cycle

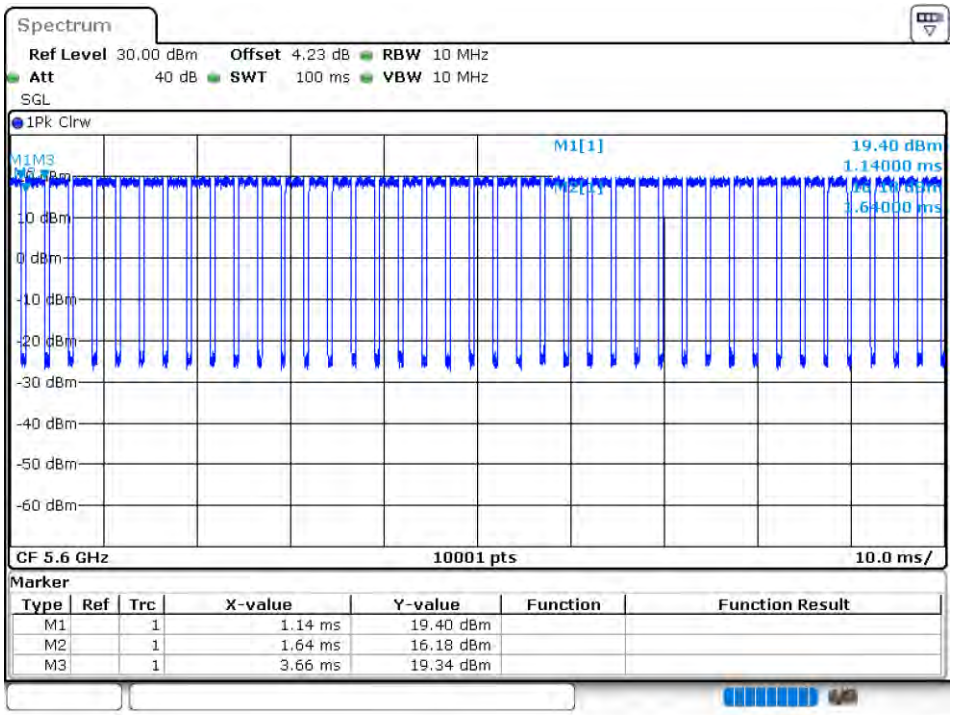
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant1	80.79	0.93	0.5
NVNT	a	5600	Ant1	80.45	0.94	0.5
NVNT	a	5700	Ant1	80.32	0.95	0.49
NVNT	n20	5500	Ant1	79.52	1	0.53
NVNT	n20	5600	Ant1	79.61	0.99	0.53
NVNT	n20	5700	Ant1	79.38	1	0.53
NVNT	n40	5510	Ant1	65.59	1.83	1.08
NVNT	n40	5590	Ant1	65.48	1.84	1.09
NVNT	n40	5670	Ant1	65.58	1.83	1.08

Test Graphs

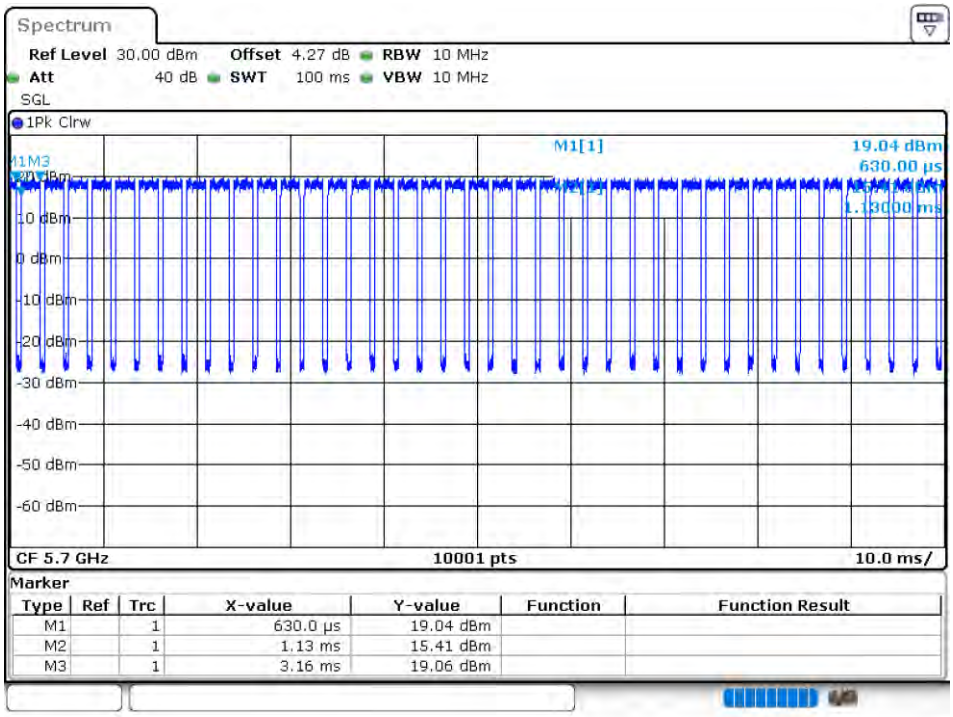
Duty Cycle NVNT a 5500MHz Ant1



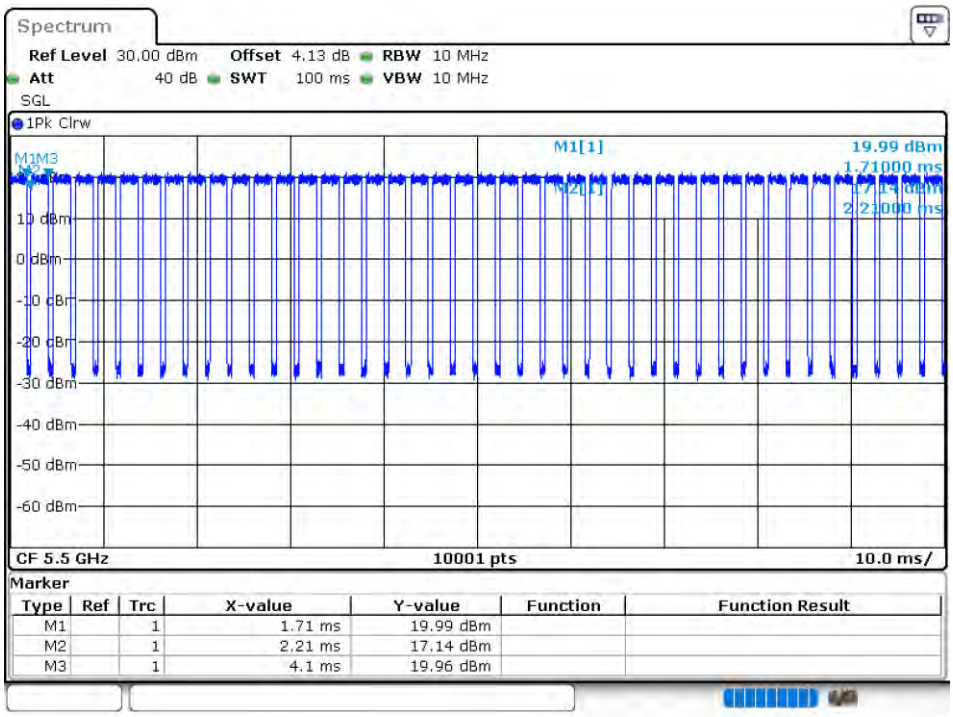
Duty Cycle NVNT a 5600MHz Ant1



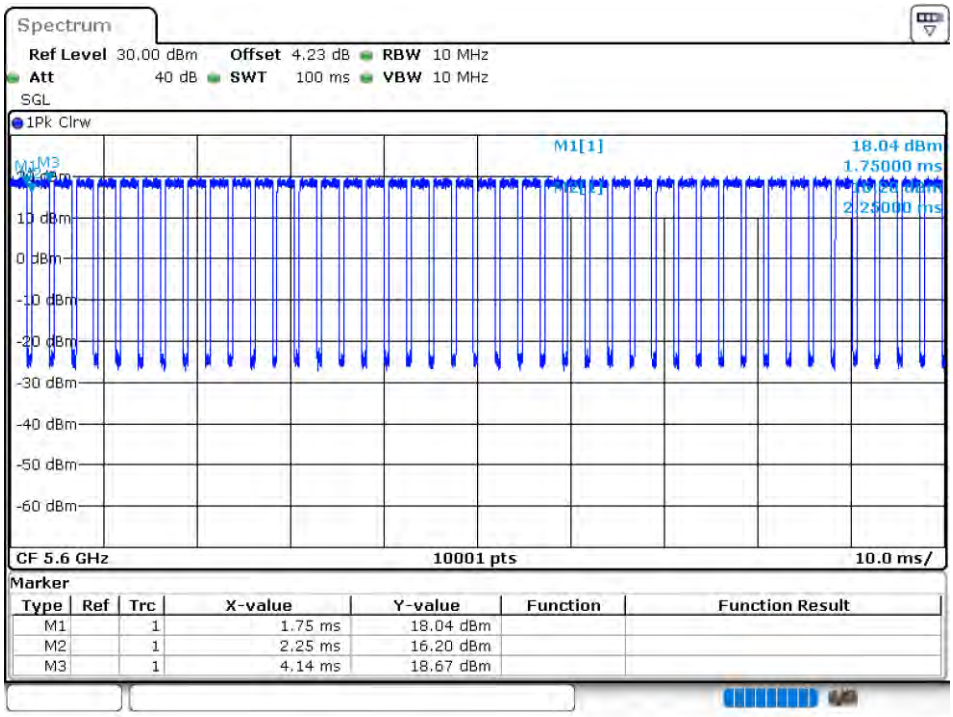
Duty Cycle NVNT a 5700MHz Ant1



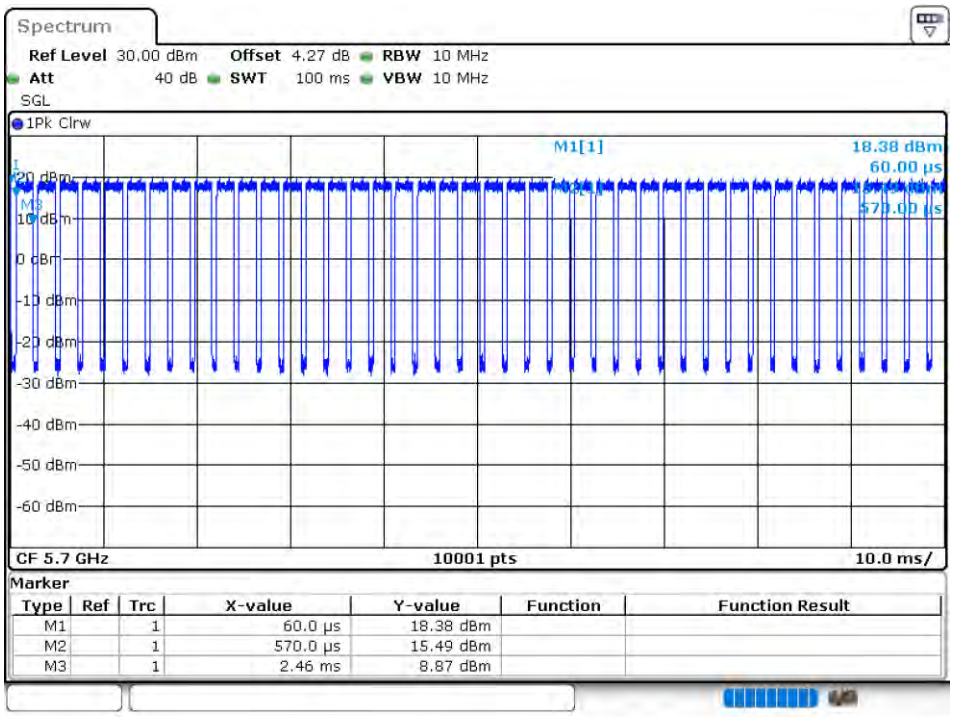
Duty Cycle NVNT n20 5500MHz Ant1



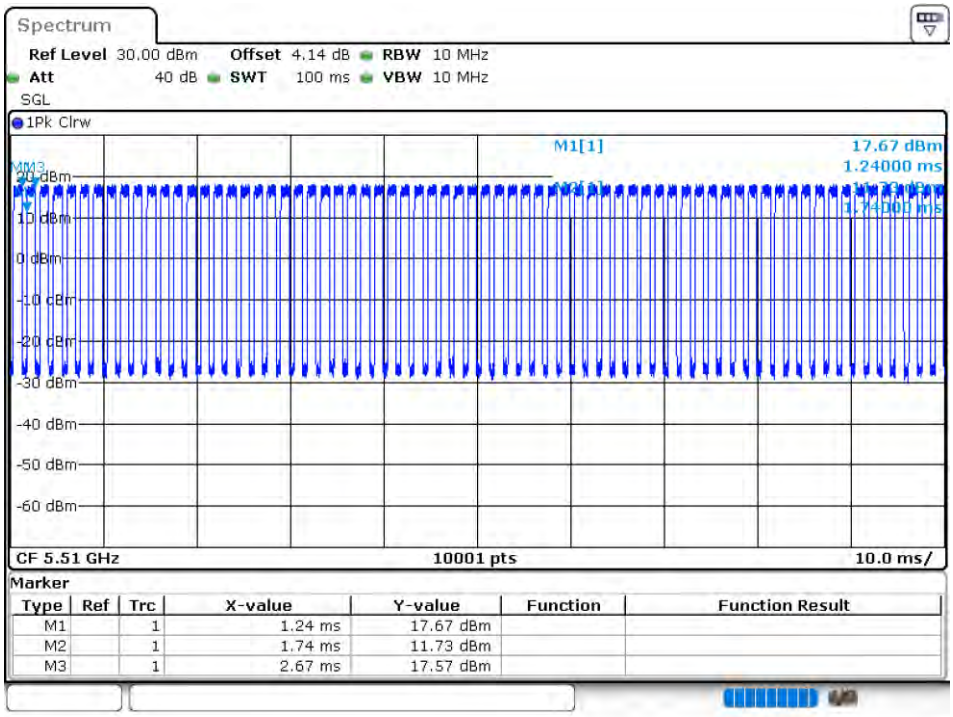
Duty Cycle NVNT n20 5600MHz Ant1



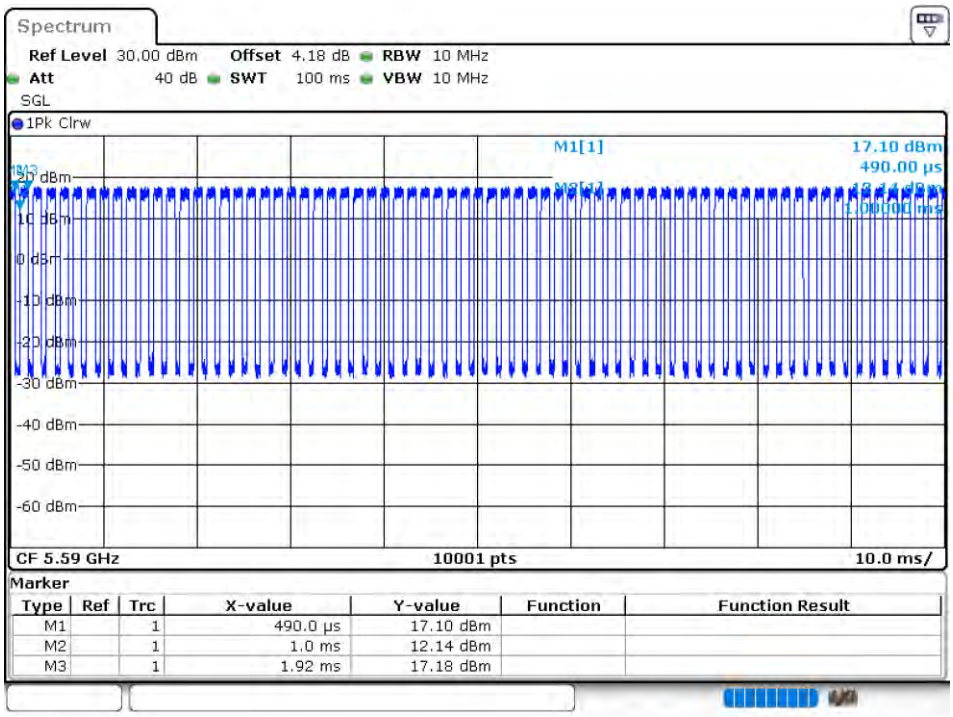
Duty Cycle NVNT n20 5700MHz Ant1



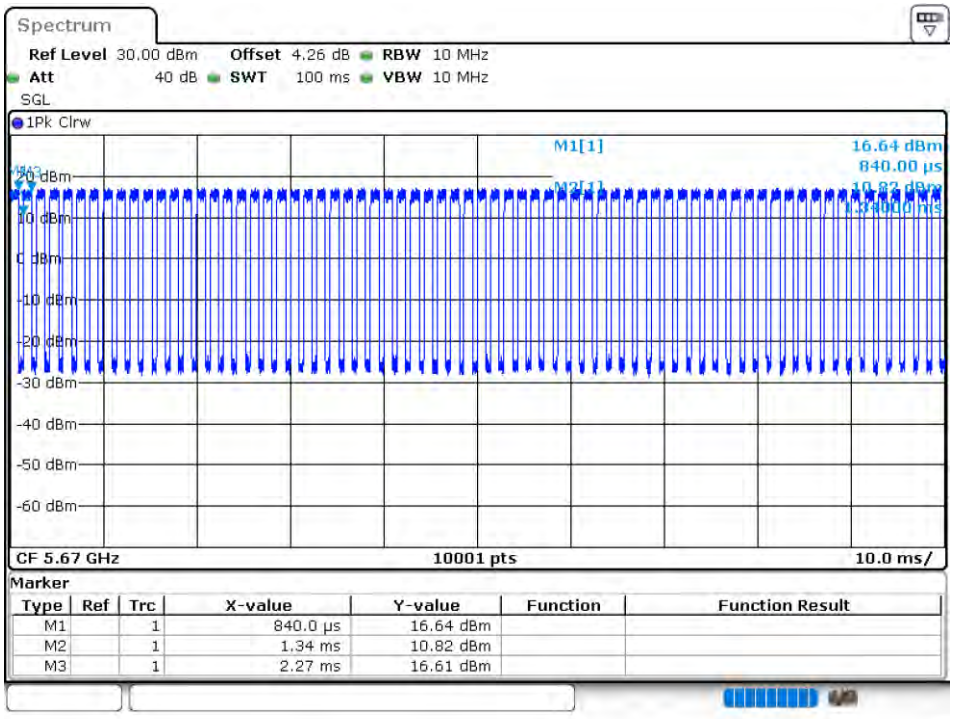
Duty Cycle NVNT n40 5510MHz Ant1



Duty Cycle NVNT n40 5590MHz Ant1



Duty Cycle NVNT n40 5670MHz Ant1



Maximum Conducted Output Power

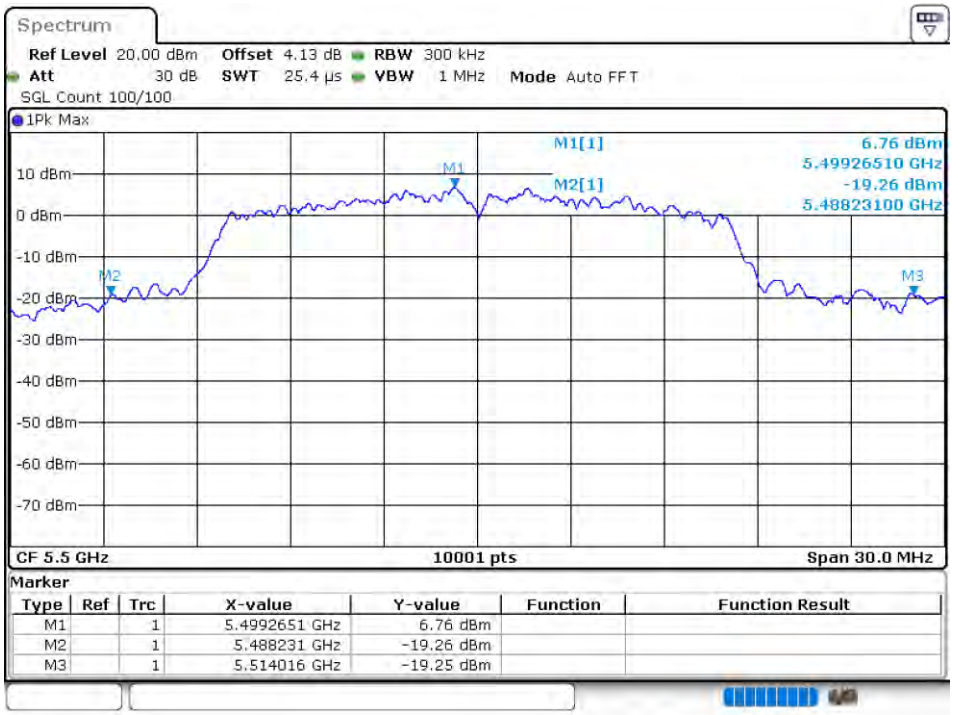
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	15.6	24	Pass
NVNT	a	5600	Ant1	15.23	24	Pass
NVNT	a	5700	Ant1	14.12	24	Pass
NVNT	n20	5500	Ant1	15.69	24	Pass
NVNT	n20	5600	Ant1	15.04	24	Pass
NVNT	n20	5700	Ant1	14	24	Pass
NVNT	n40	5510	Ant1	14.02	24	Pass
NVNT	n40	5590	Ant1	13.85	24	Pass
NVNT	n40	5670	Ant1	13.21	24	Pass

-26dB Bandwidth

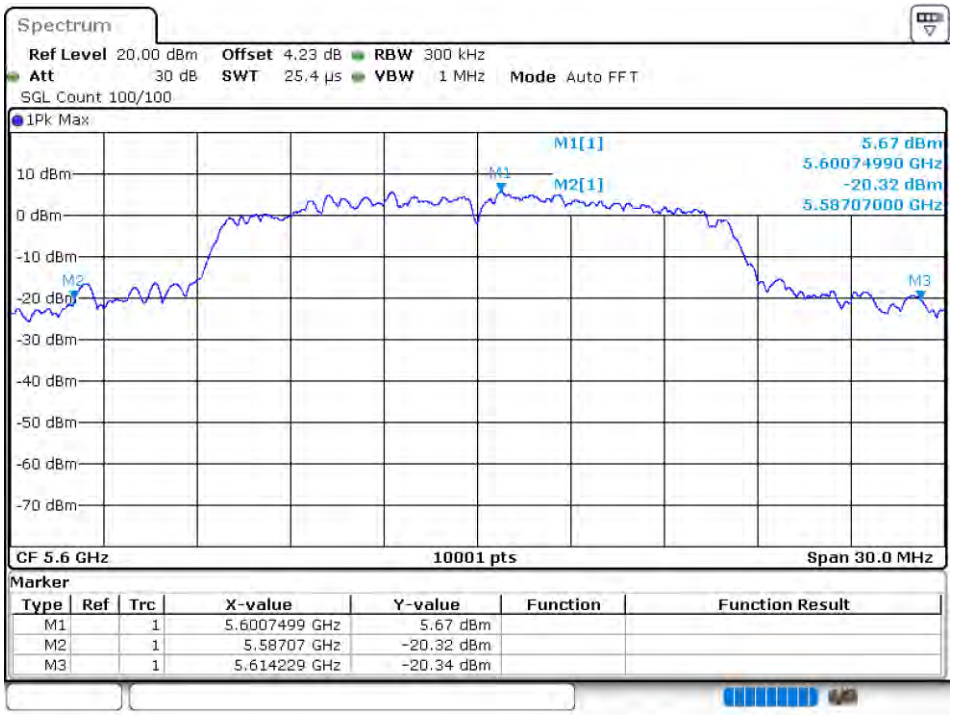
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	25.785	Pass
NVNT	a	5600	Ant1	27.159	Pass
NVNT	a	5700	Ant1	22.977	Pass
NVNT	n20	5500	Ant1	27.438	Pass
NVNT	n20	5600	Ant1	26.301	Pass
NVNT	n20	5700	Ant1	21.951	Pass
NVNT	n40	5510	Ant1	46.602	Pass
NVNT	n40	5590	Ant1	51.39	Pass
NVNT	n40	5670	Ant1	38.238	Pass

Test Graphs

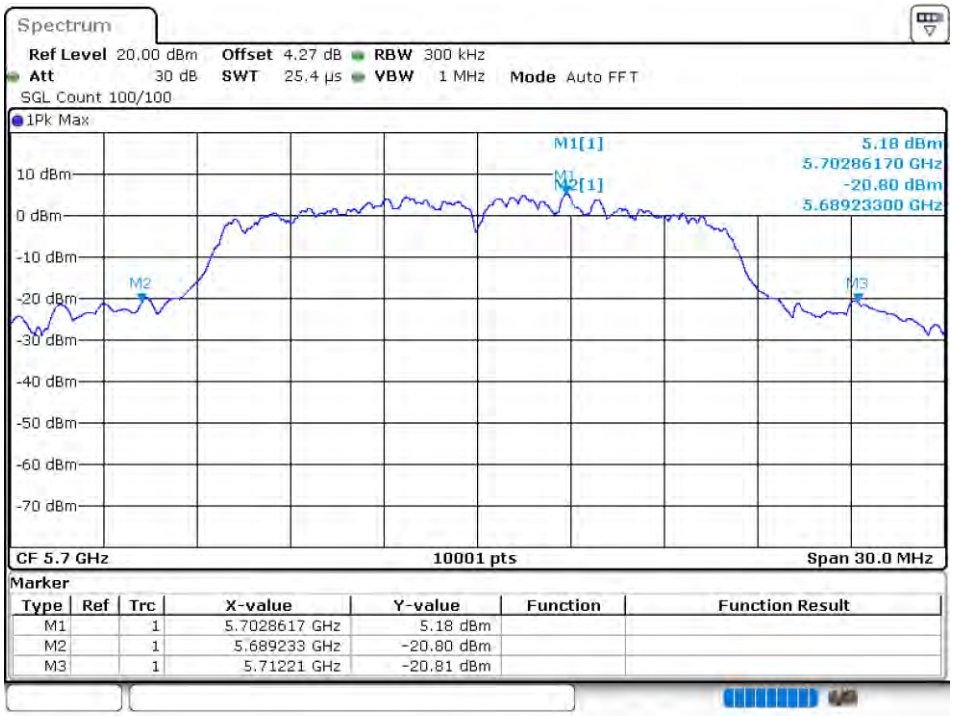
-26dB Bandwidth NVNT a 5500MHz Ant1



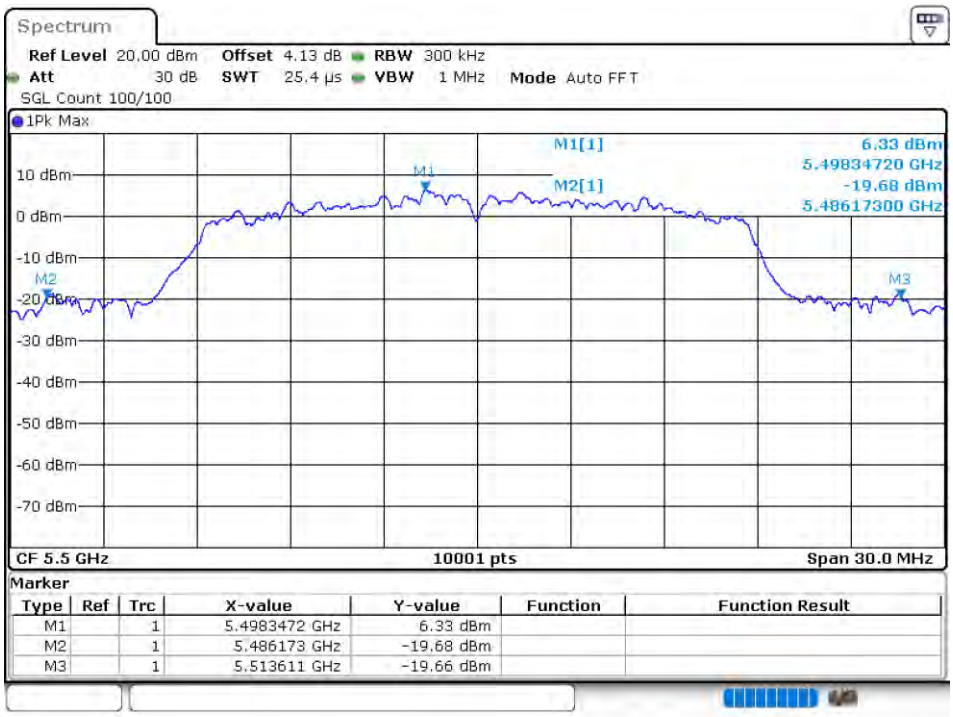
-26dB Bandwidth NVNT a 5600MHz Ant1



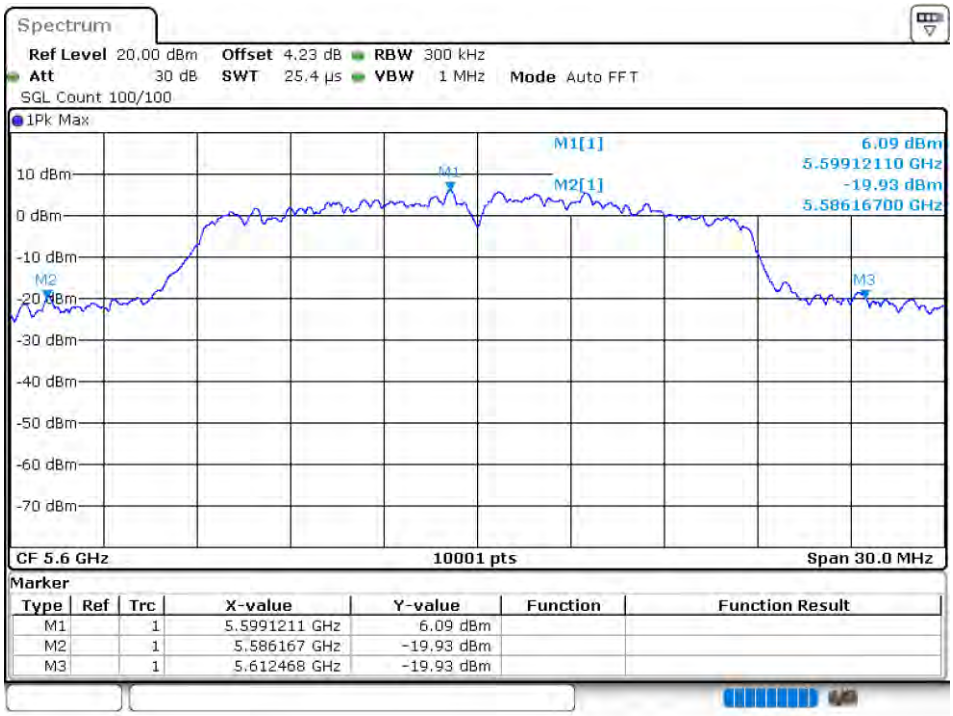
-26dB Bandwidth NVNT a 5700MHz Ant1



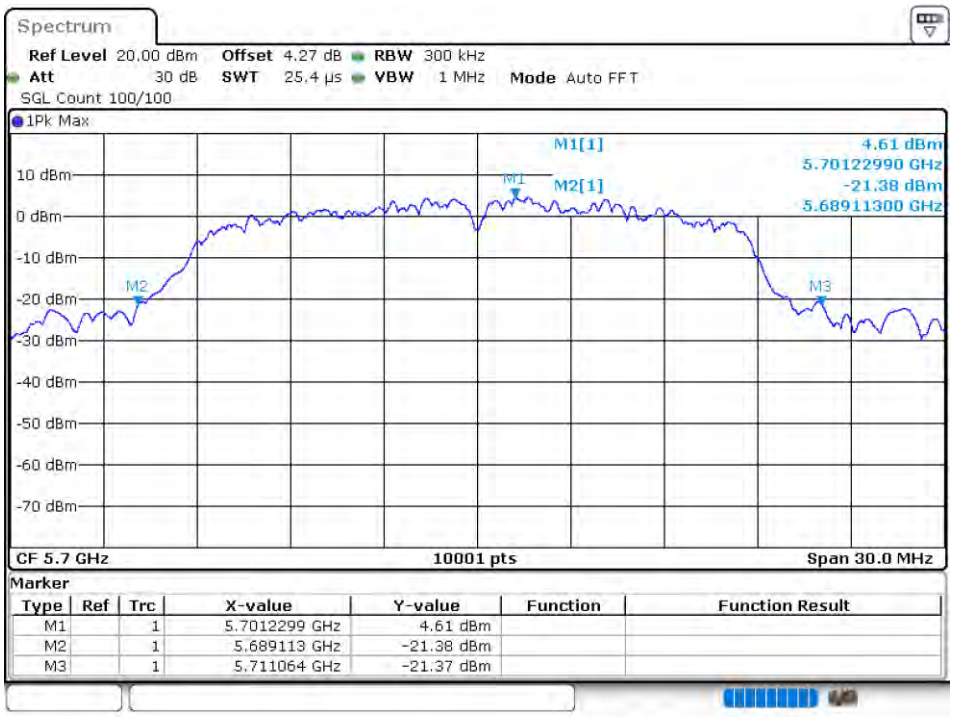
-26dB Bandwidth NVNT n20 5500MHz Ant1



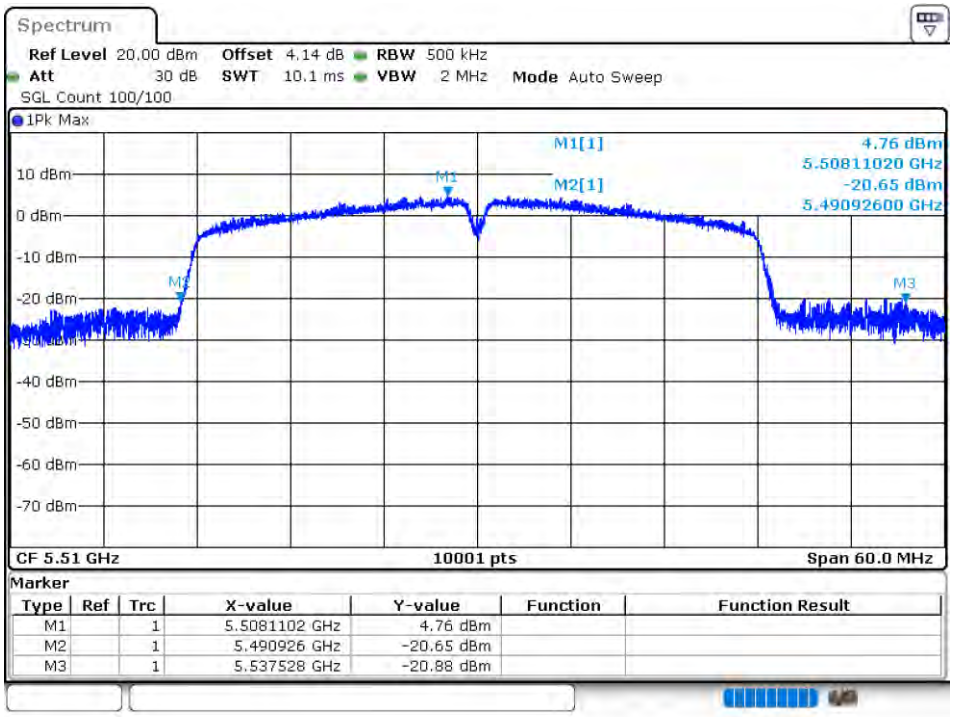
-26dB Bandwidth NVNT n20 5600MHz Ant1



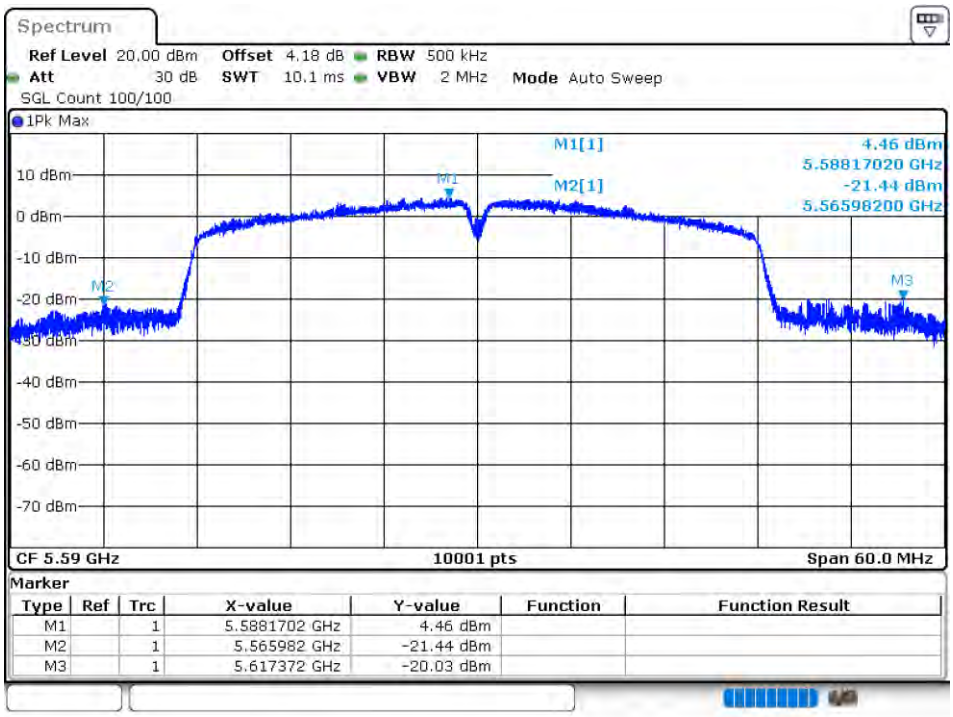
-26dB Bandwidth NVNT n20 5700MHz Ant1



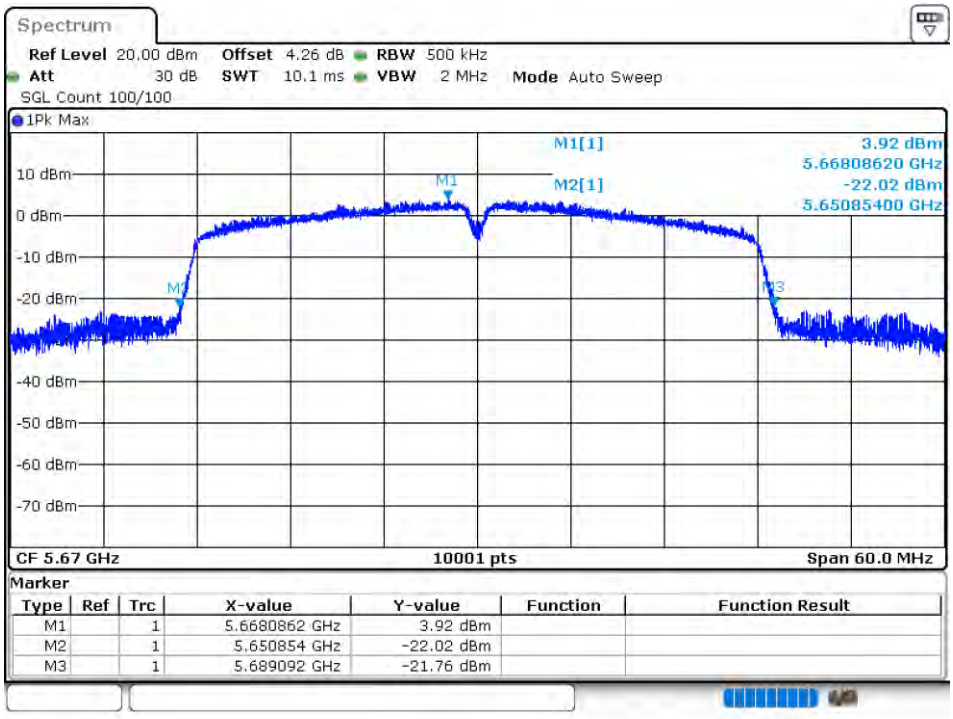
-26dB Bandwidth NVNT n40 5510MHz Ant1



-26dB Bandwidth NVNT n40 5590MHz Ant1



-26dB Bandwidth NVNT n40 5670MHz Ant1

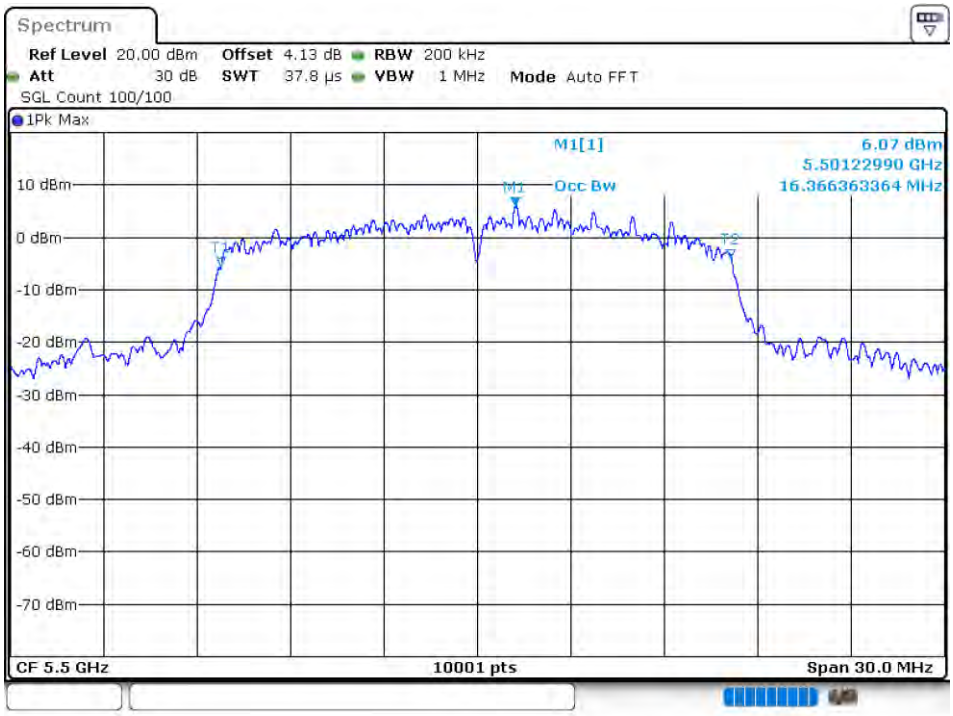


Occupied Channel Bandwidth

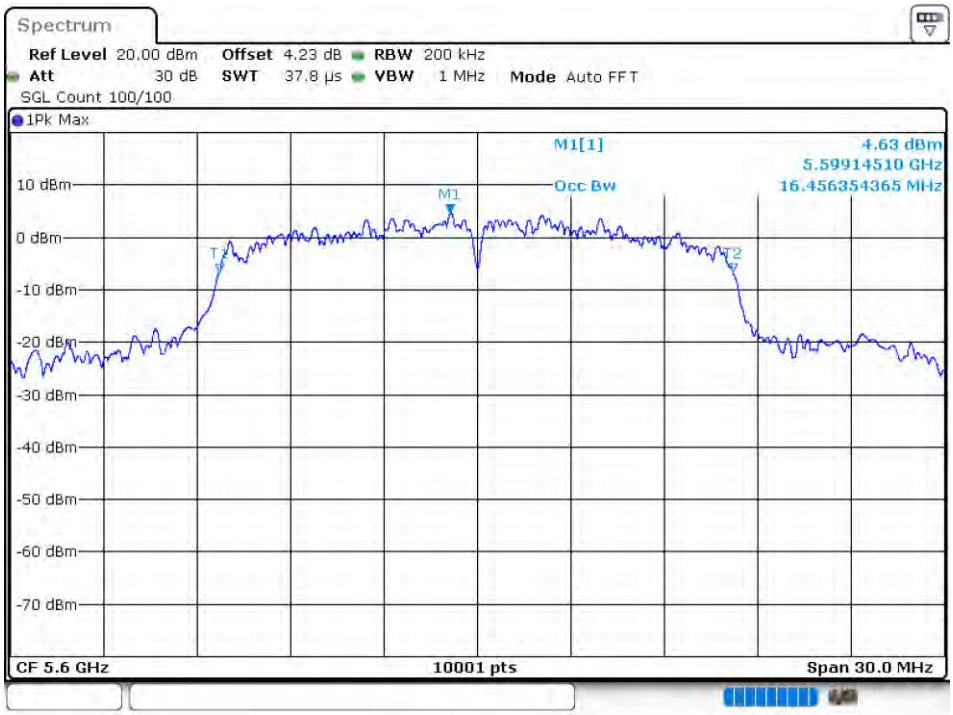
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.366
NVNT	a	5600	Ant1	16.456
NVNT	a	5700	Ant1	16.366
NVNT	n20	5500	Ant1	17.494
NVNT	n20	5600	Ant1	17.503
NVNT	n20	5700	Ant1	17.359
NVNT	n40	5510	Ant1	35.294
NVNT	n40	5590	Ant1	35.324
NVNT	n40	5670	Ant1	35.24

Test Graphs

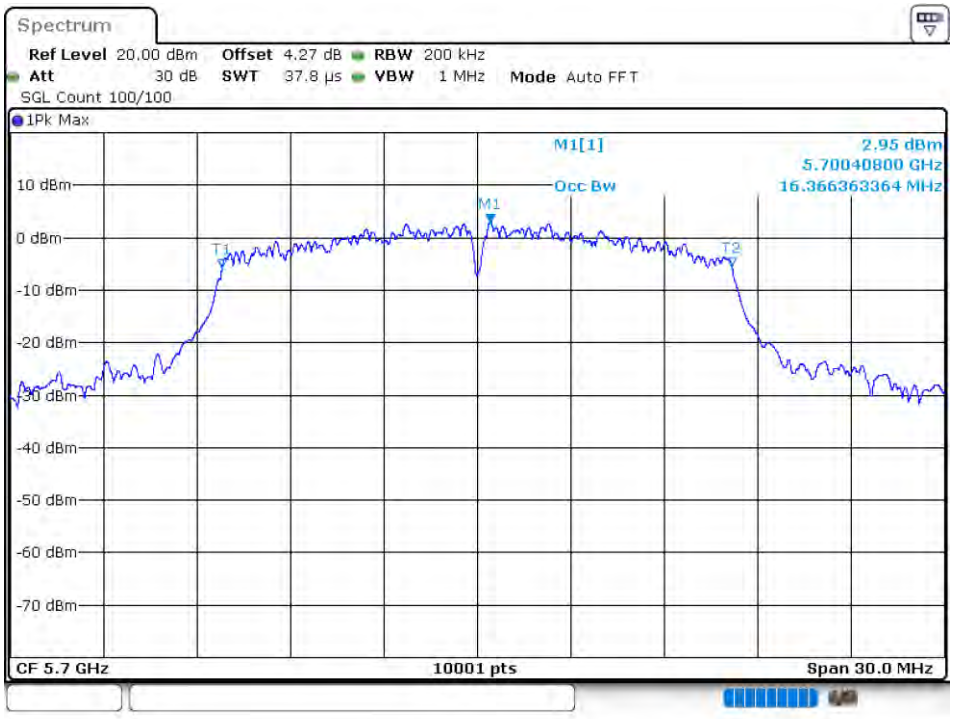
OBW NVNT a 5500MHz Ant1



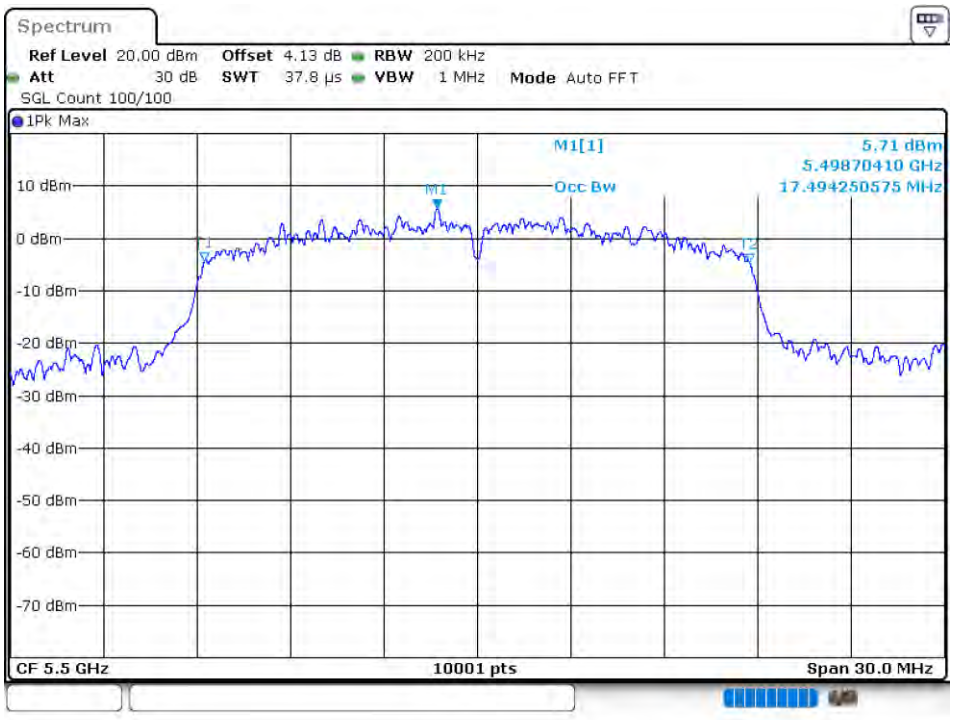
OBW NVNT a 5600MHz Ant1



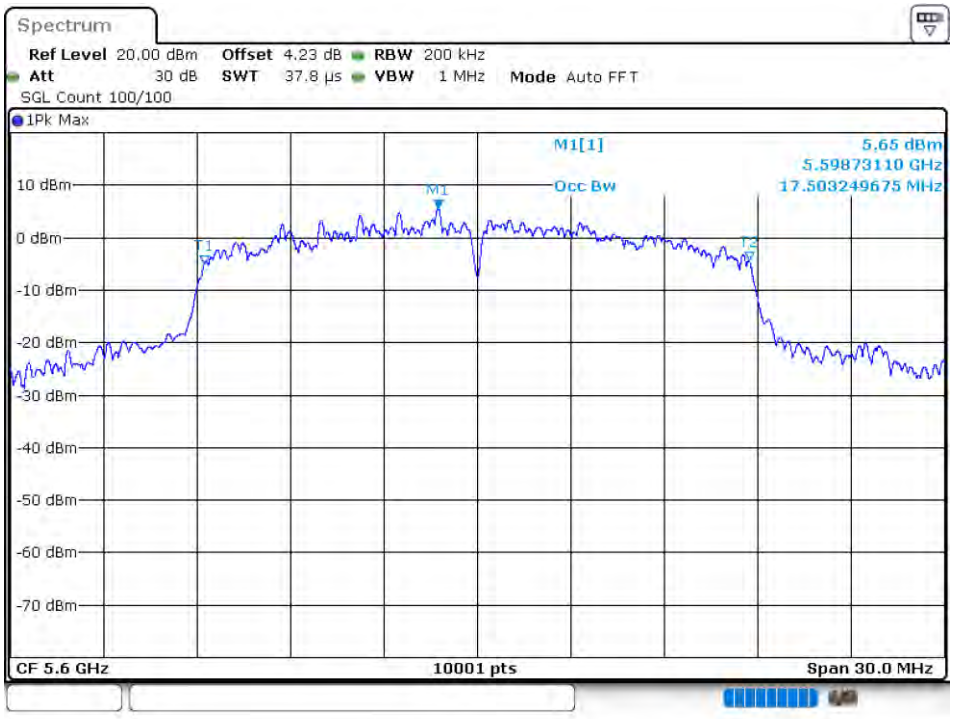
OBW NVNT a 5700MHz Ant1



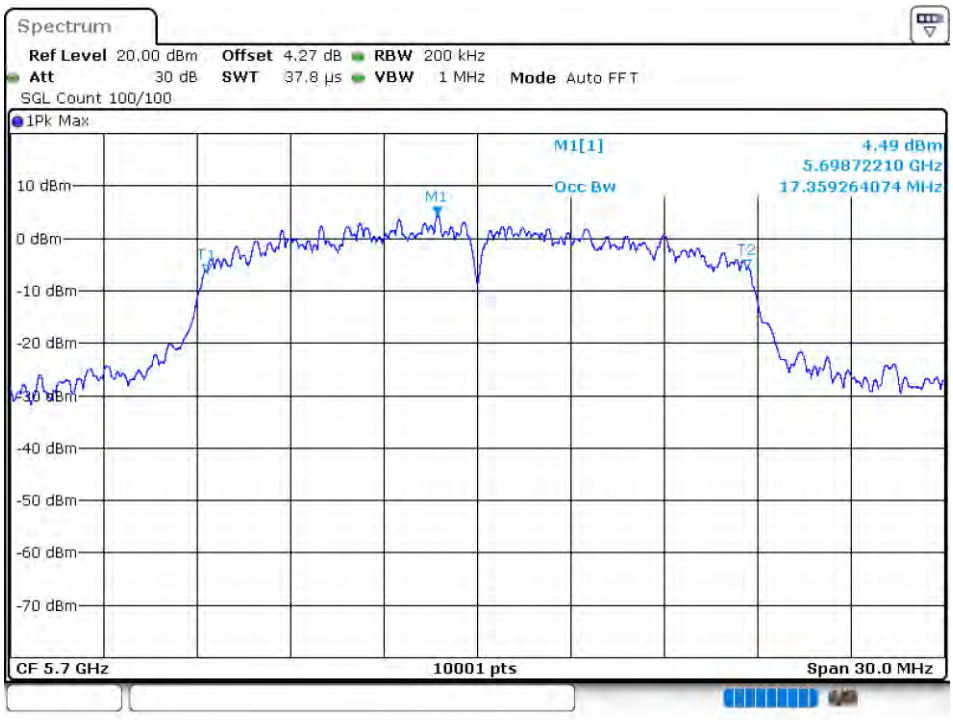
OBW NVNT n20 5500MHz Ant1



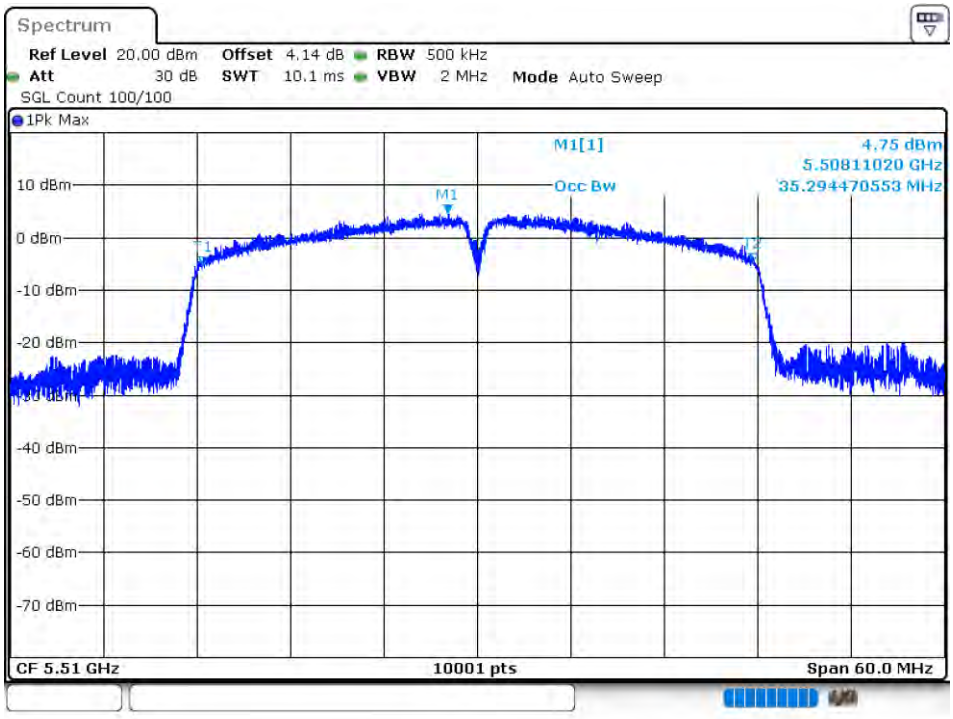
OBW NVNT n20 5600MHz Ant1



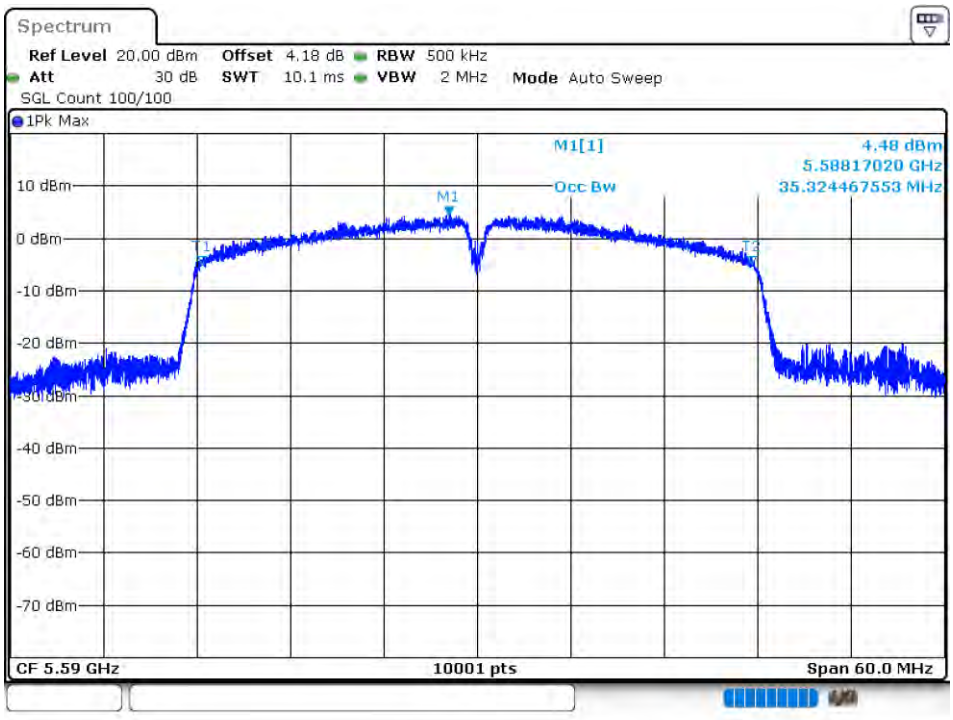
OBW NVNT n20 5700MHz Ant1



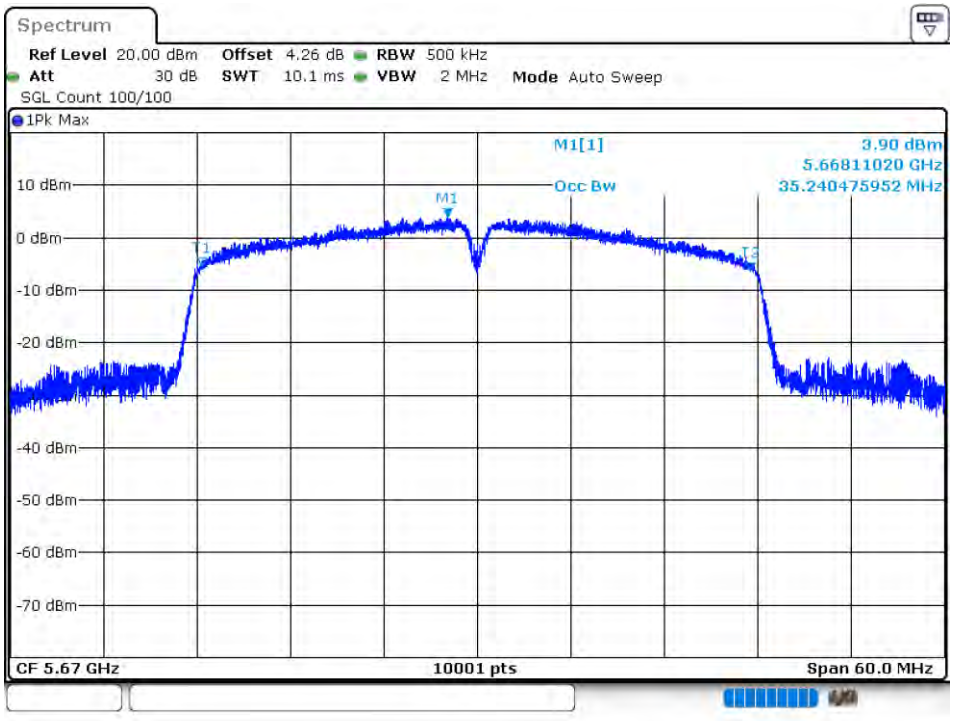
OBW NVNT n40 5510MHz Ant1



OBW NVNT n40 5590MHz Ant1



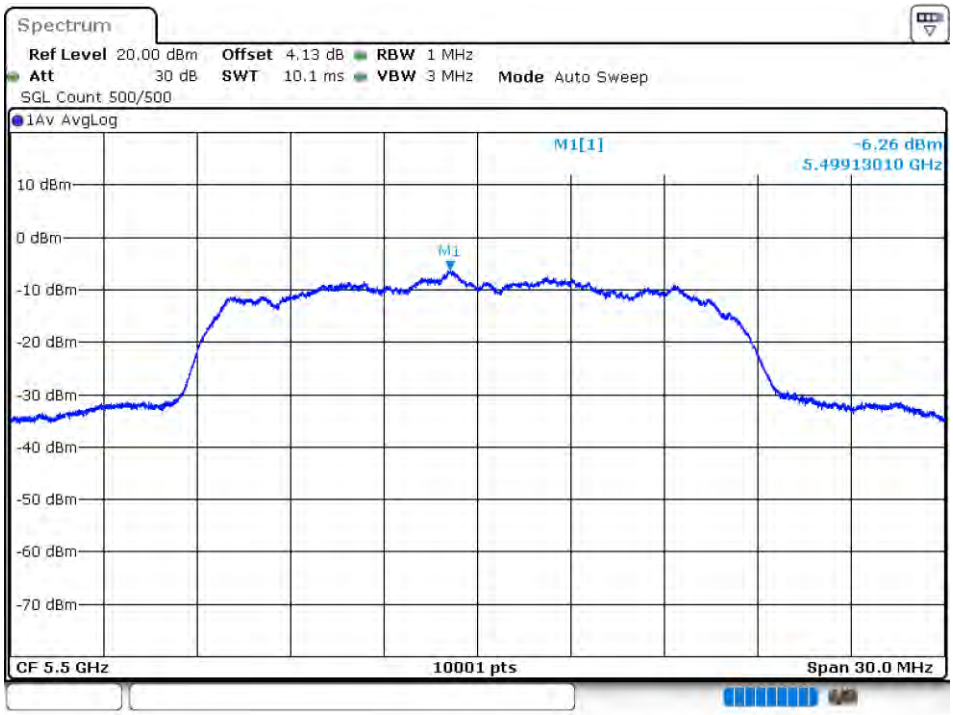
OBW NVNT n40 5670MHz Ant1



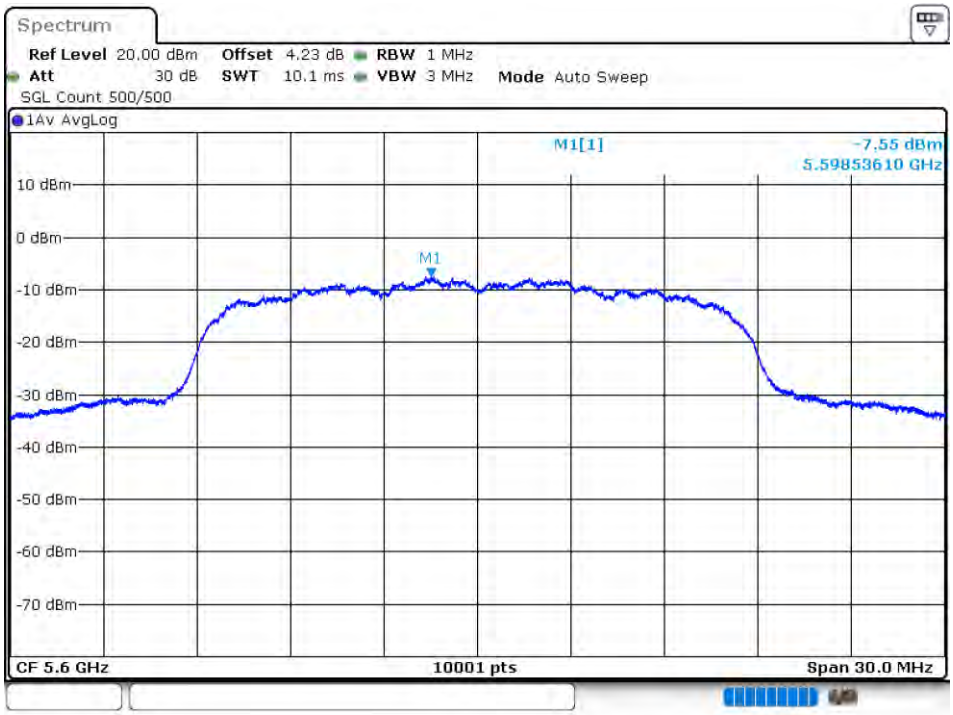
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	-6.26	0.93	-5.33	11	Pass
NVNT	a	5600	Ant1	-7.55	0.94	-6.61	11	Pass
NVNT	a	5700	Ant1	-8.67	0.95	-7.72	11	Pass
NVNT	n20	5500	Ant1	-7.87	1	-6.87	11	Pass
NVNT	n20	5600	Ant1	-8.38	0.99	-7.39	11	Pass
NVNT	n20	5700	Ant1	-8.76	1	-7.76	11	Pass
NVNT	n40	5510	Ant1	-18.54	1.83	-16.71	11	Pass
NVNT	n40	5590	Ant1	-19.54	1.84	-17.7	11	Pass
NVNT	n40	5670	Ant1	-19.59	1.83	-17.76	11	Pass

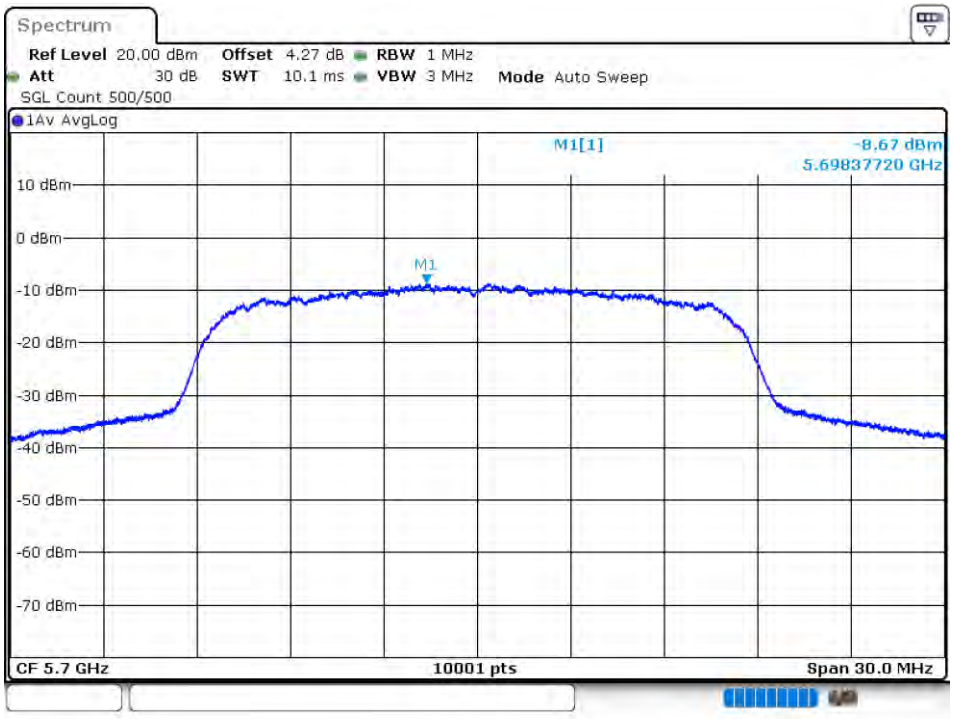
Test Graphs
PSD NVNT a 5500MHz Ant1



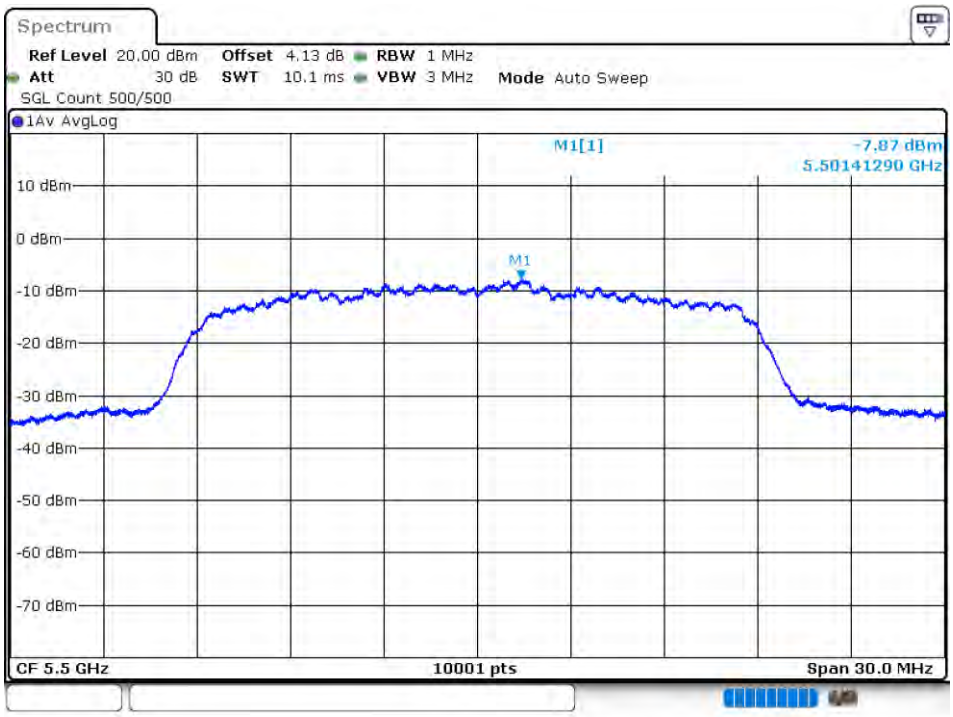
PSD NVNT a 5600MHz Ant1



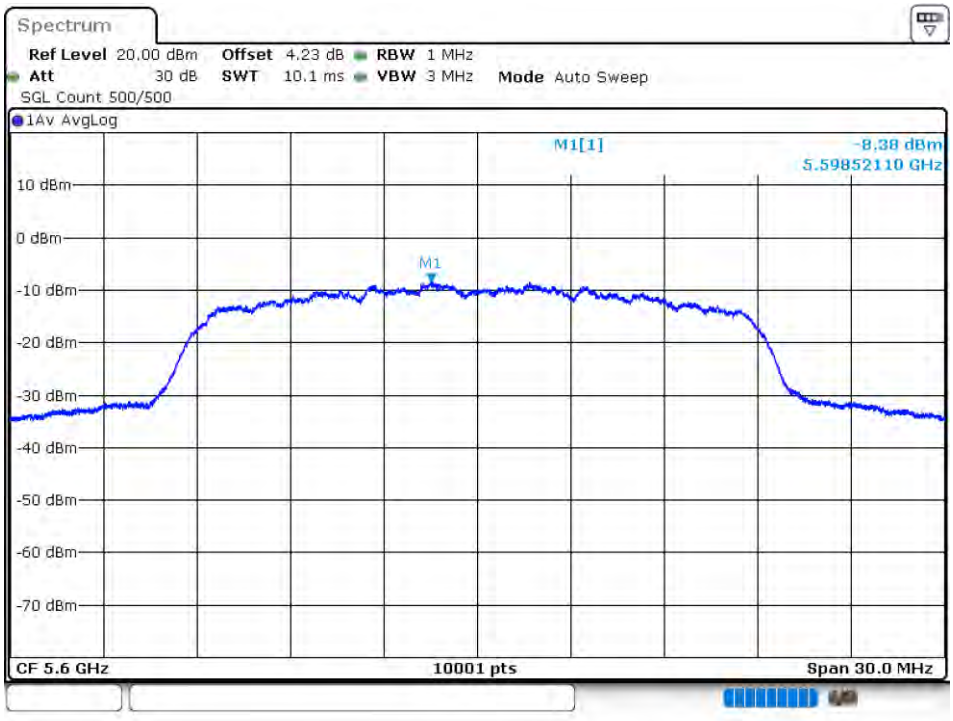
PSD NVNT a 5700MHz Ant1



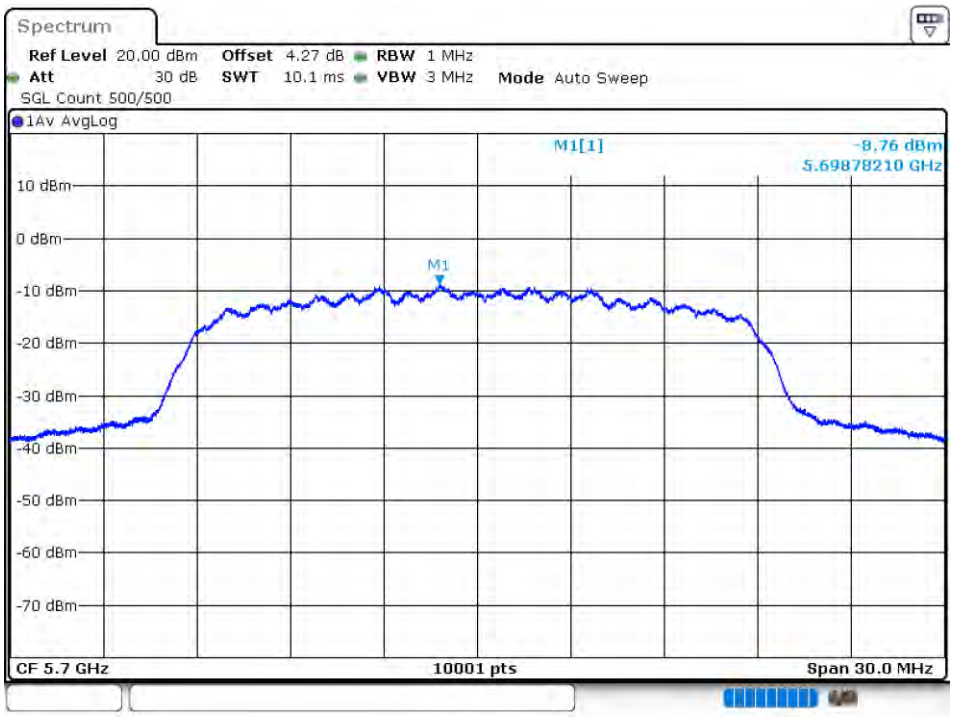
PSD NVNT n20 5500MHz Ant1



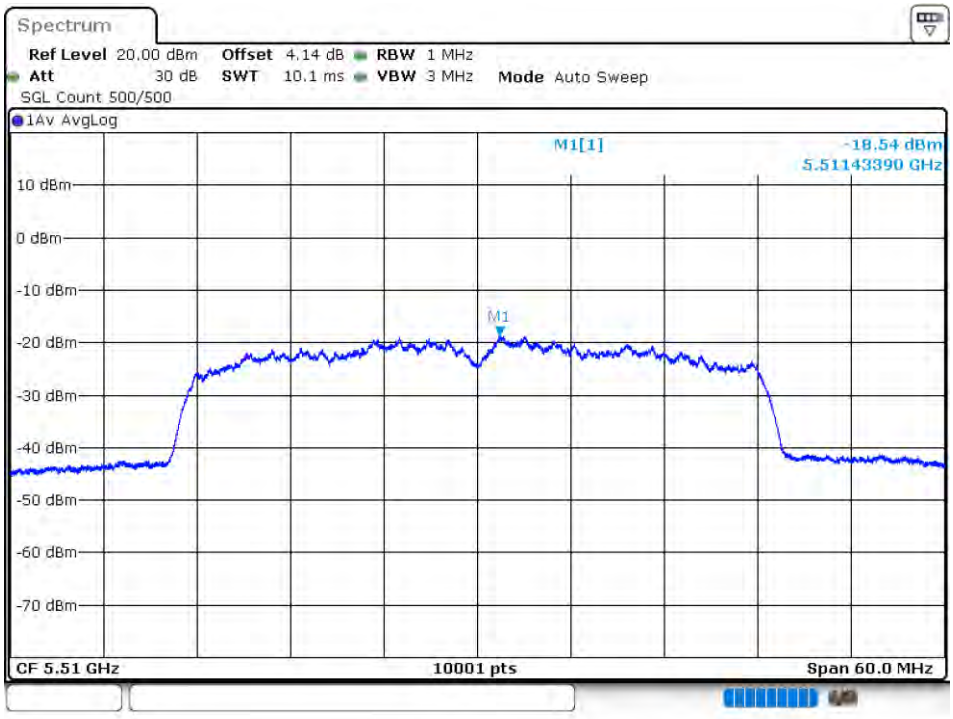
PSD NVNT n20 5600MHz Ant1



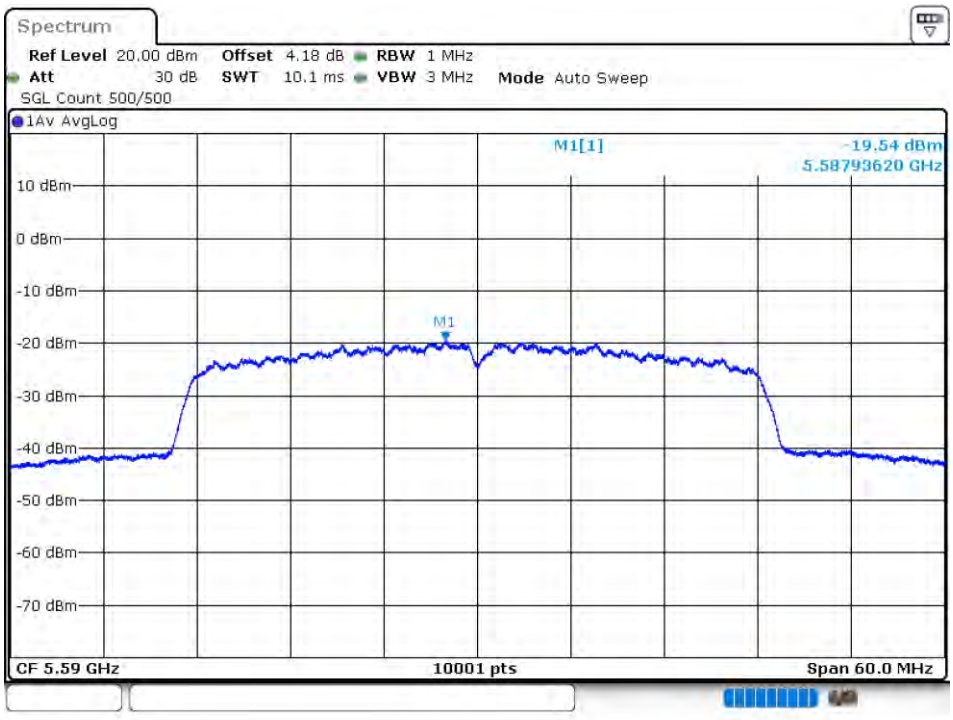
PSD NVNT n20 5700MHz Ant1



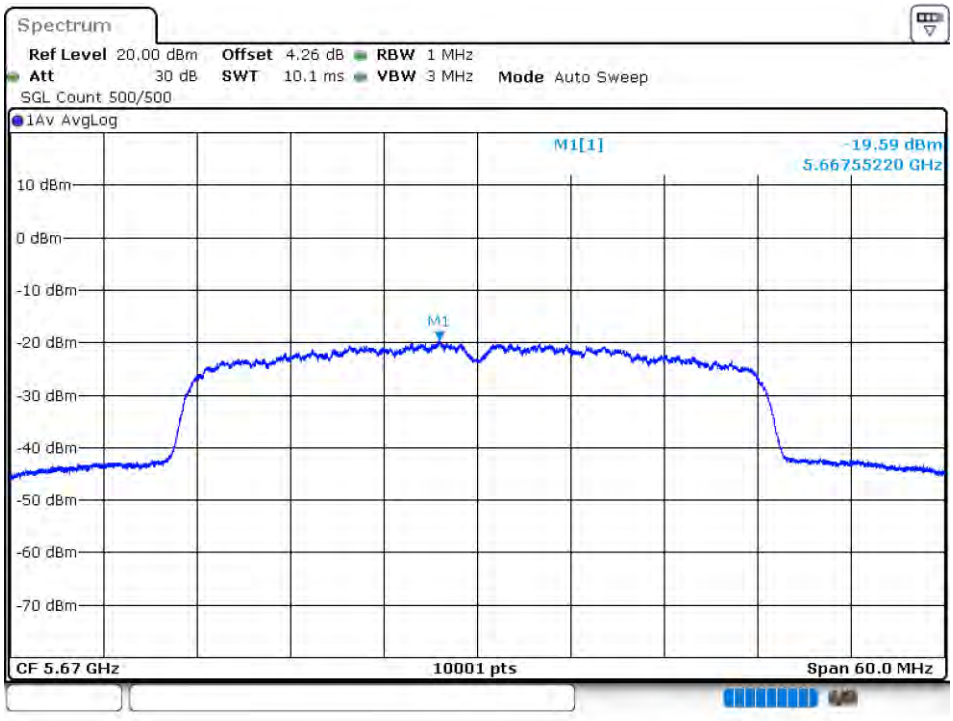
PSD NVNT n40 5510MHz Ant1



PSD NVNT n40 5590MHz Ant1



PSD NVNT n40 5670MHz Ant1



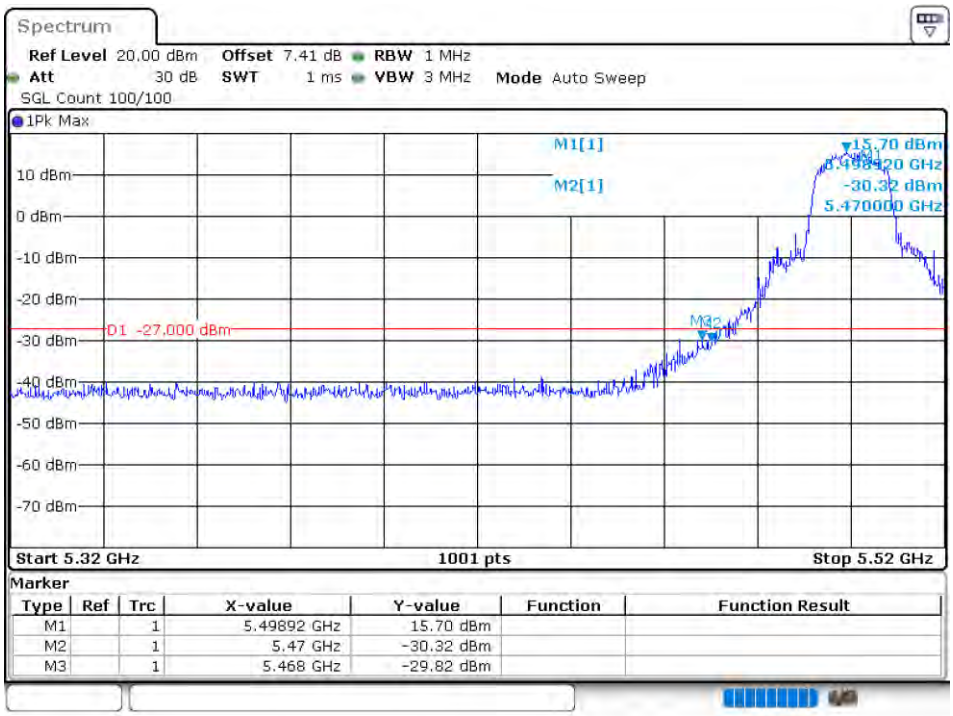
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	-29.81	-27	Pass
NVNT	a	5700	Ant1	-28.98	-27	Pass
NVNT	n20	5500	Ant1	-29.44	-27	Pass
NVNT	n20	5700	Ant1	-27.47	-27	Pass
NVNT	n40	5510	Ant1	-27.41	-27	Pass
NVNT	n40	5670	Ant1	-37.48	-27	Pass

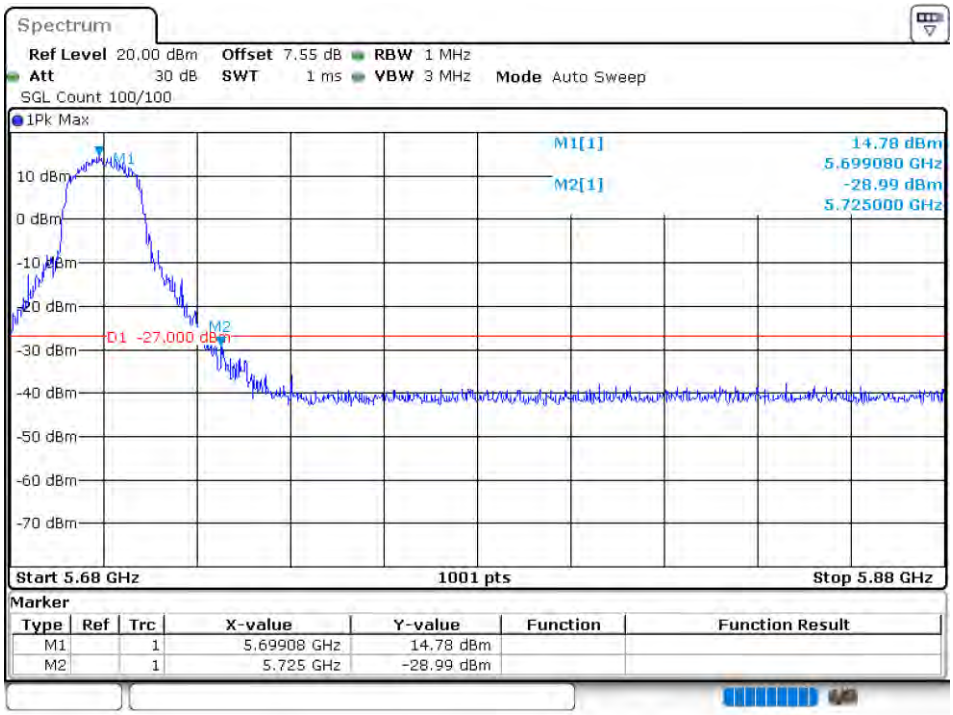
Note: Tested with increased antenna gain.

Test Graphs

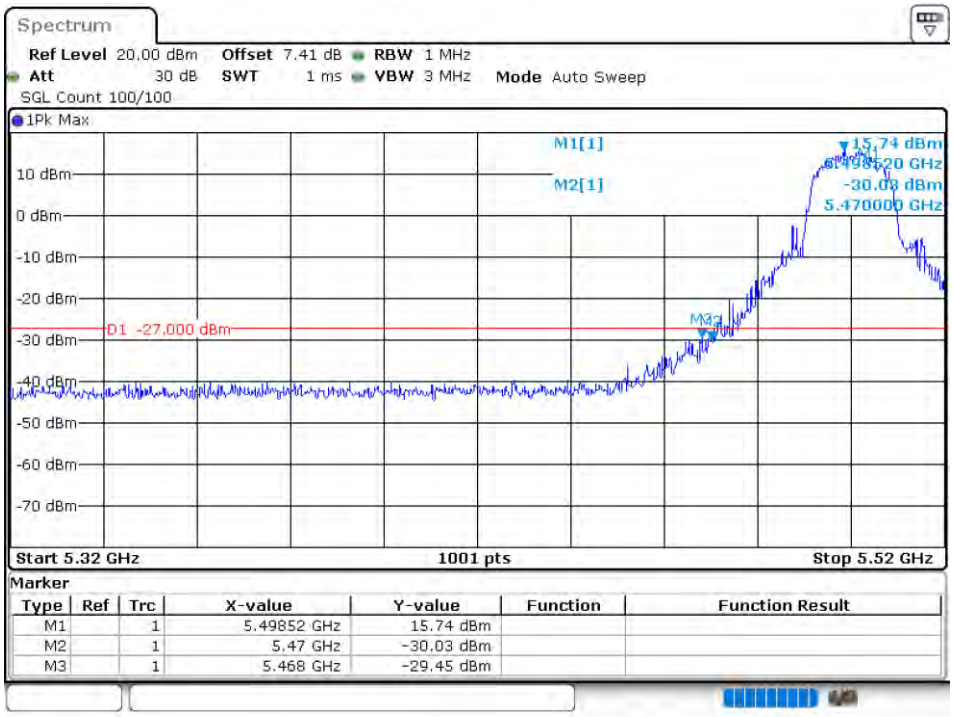
Band Edge NVNT a 5500MHz Low Ant1



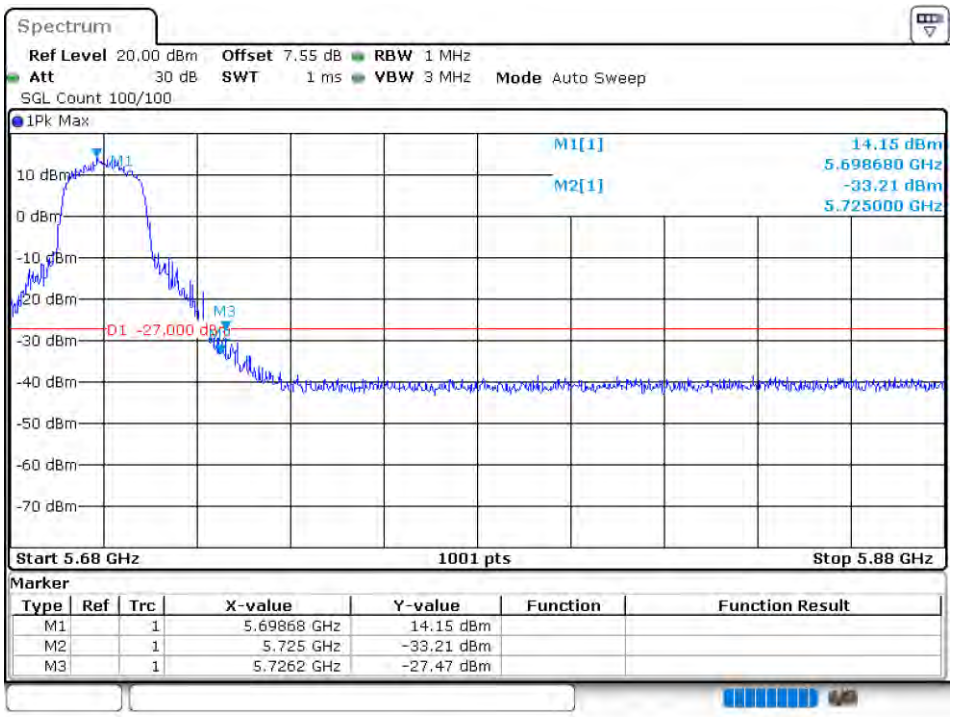
Band Edge NVNT a 5700MHz High Ant1



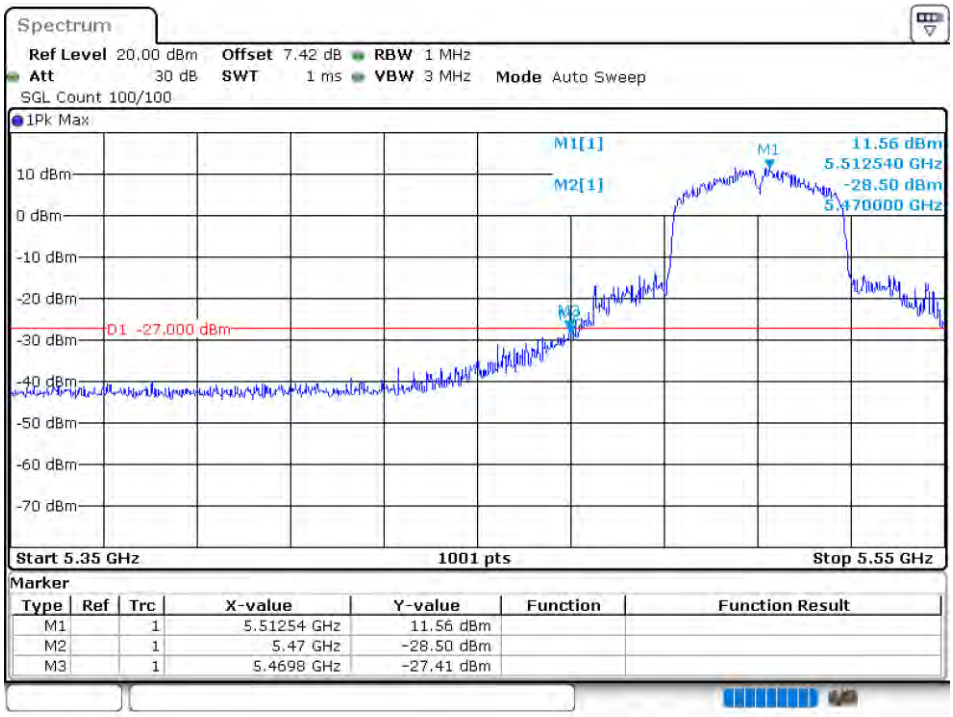
Band Edge NVNT n20 5500MHz Low Ant1



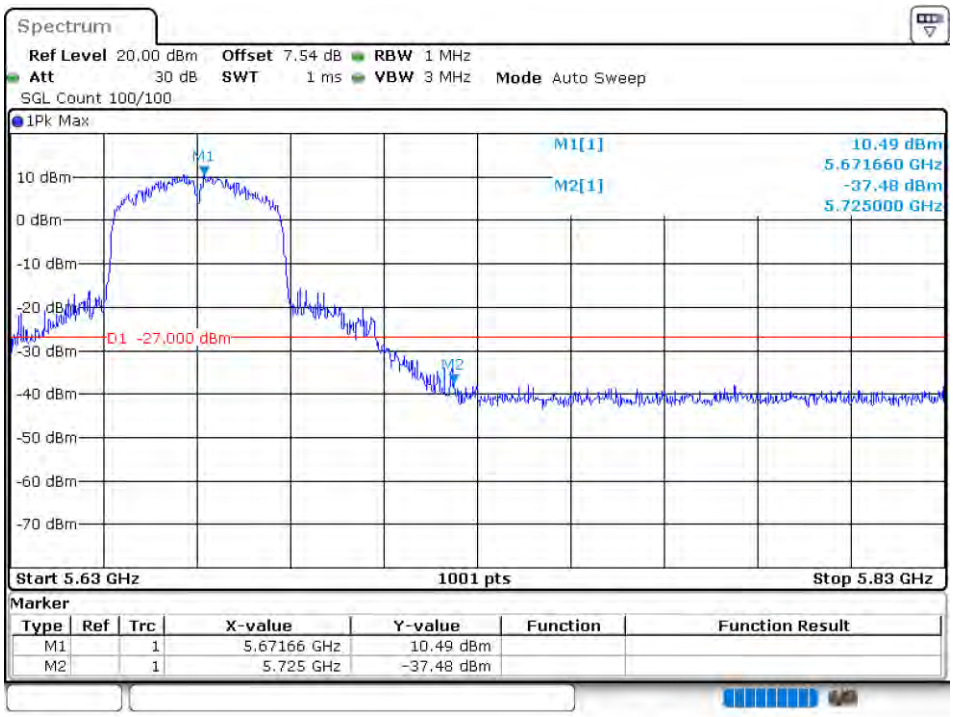
Band Edge NVNT n20 5700MHz High Ant1



Band Edge NVNT n40 5510MHz Low Ant1



Band Edge NVNT n40 5670MHz High Ant1



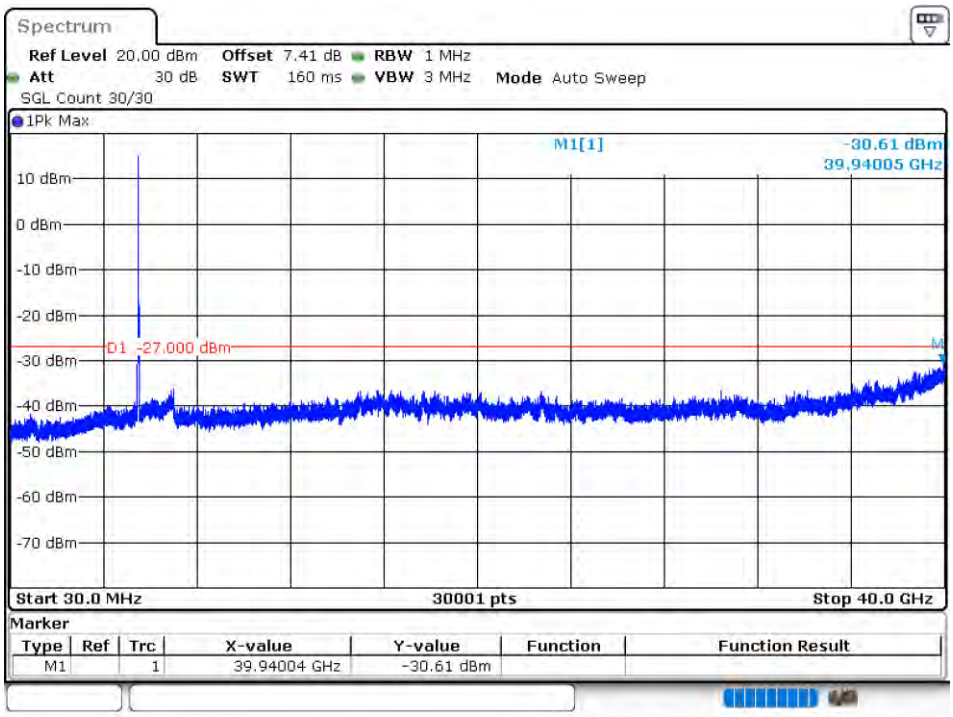
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	-30.61	-27	Pass
NVNT	a	5600	Ant1	-31.25	-27	Pass
NVNT	a	5700	Ant1	-31.54	-27	Pass
NVNT	n20	5500	Ant1	-31.09	-27	Pass
NVNT	n20	5600	Ant1	-30.7	-27	Pass
NVNT	n20	5700	Ant1	-31.33	-27	Pass
NVNT	n40	5510	Ant1	-30.68	-27	Pass
NVNT	n40	5590	Ant1	-31.22	-27	Pass
NVNT	n40	5670	Ant1	-29.85	-27	Pass

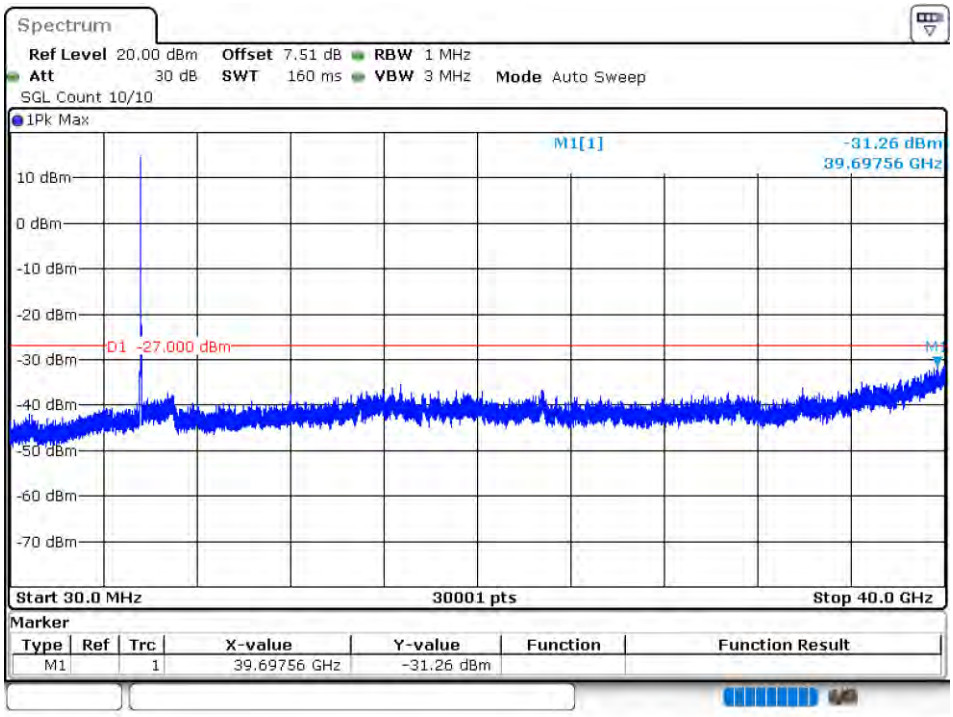
Note: Tested with increased antenna gain.

Test Graphs

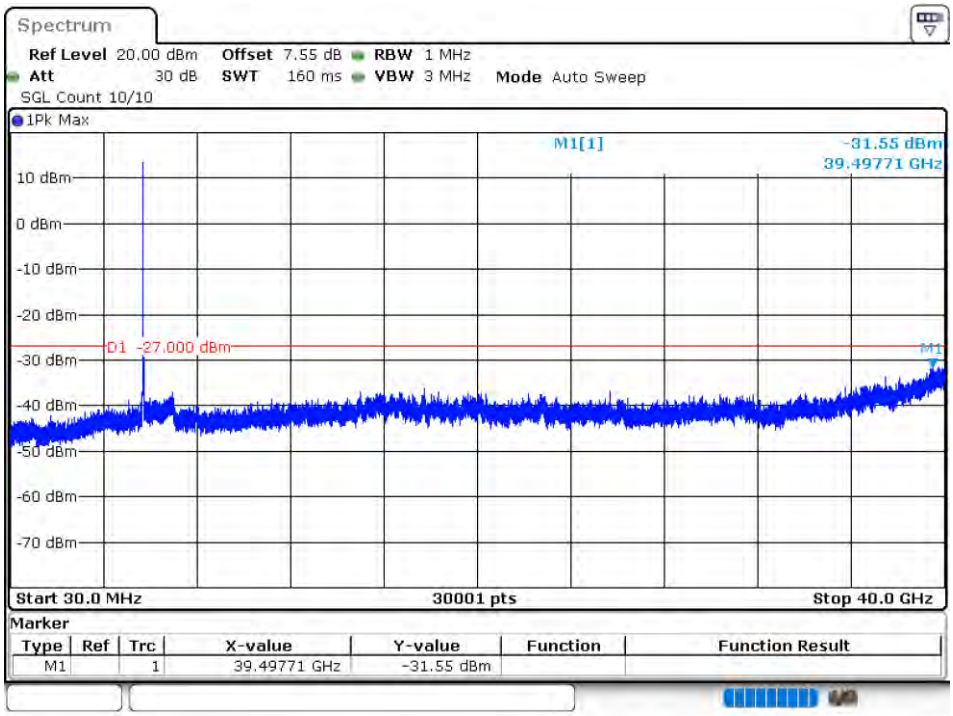
Tx. Spurious NVNT a 5500MHz Ant1 Emission



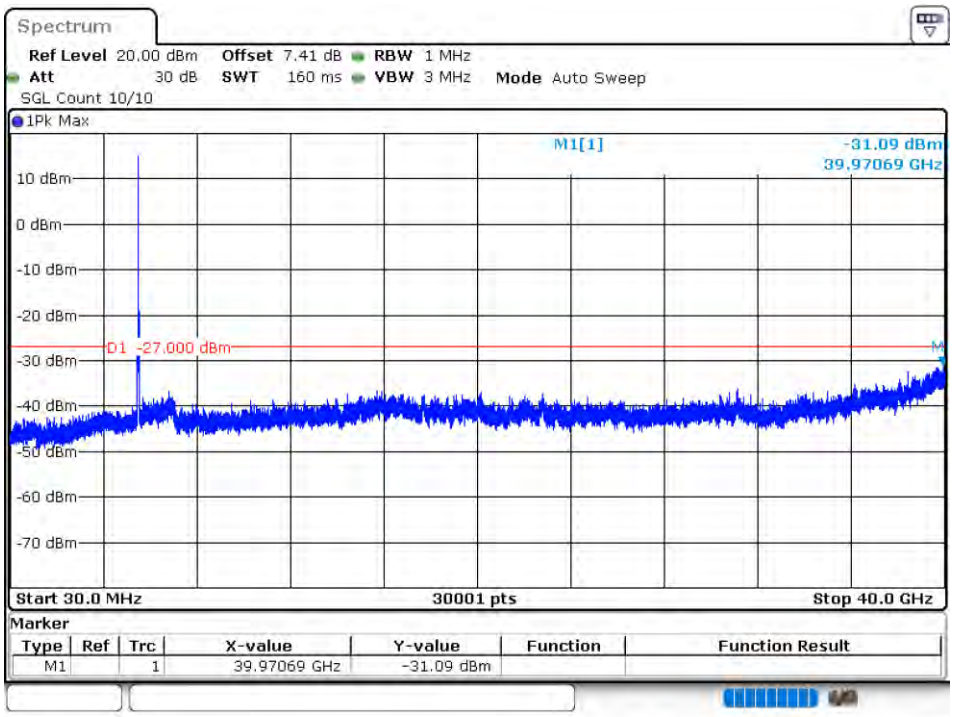
Tx. Spurious NVNT a 5600MHz Ant1 Emission



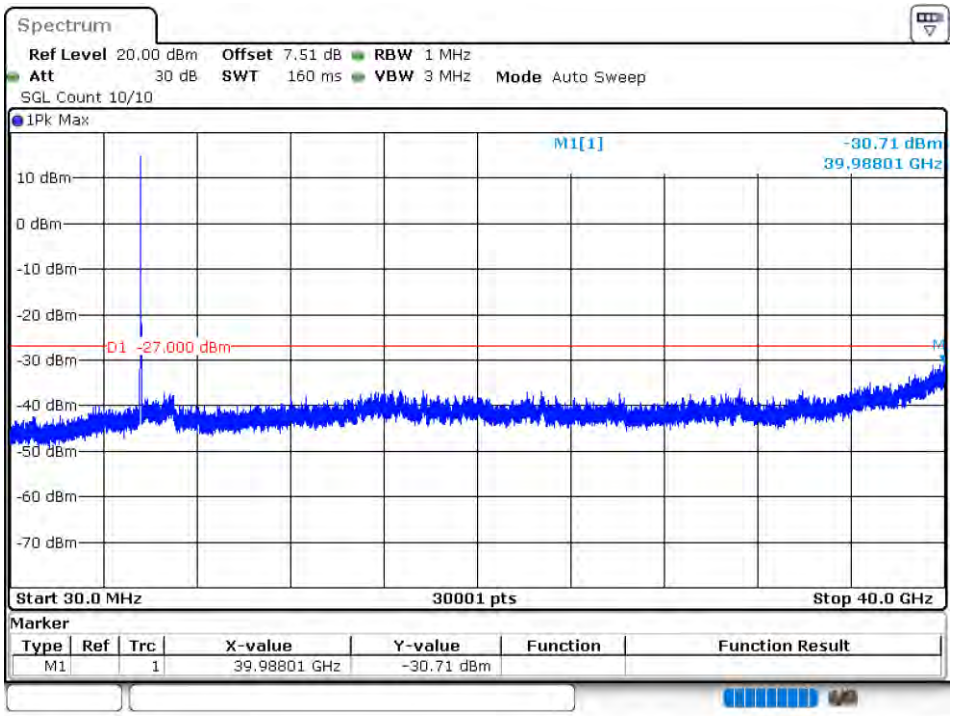
Tx. Spurious NVNT a 5700MHz Ant1 Emission



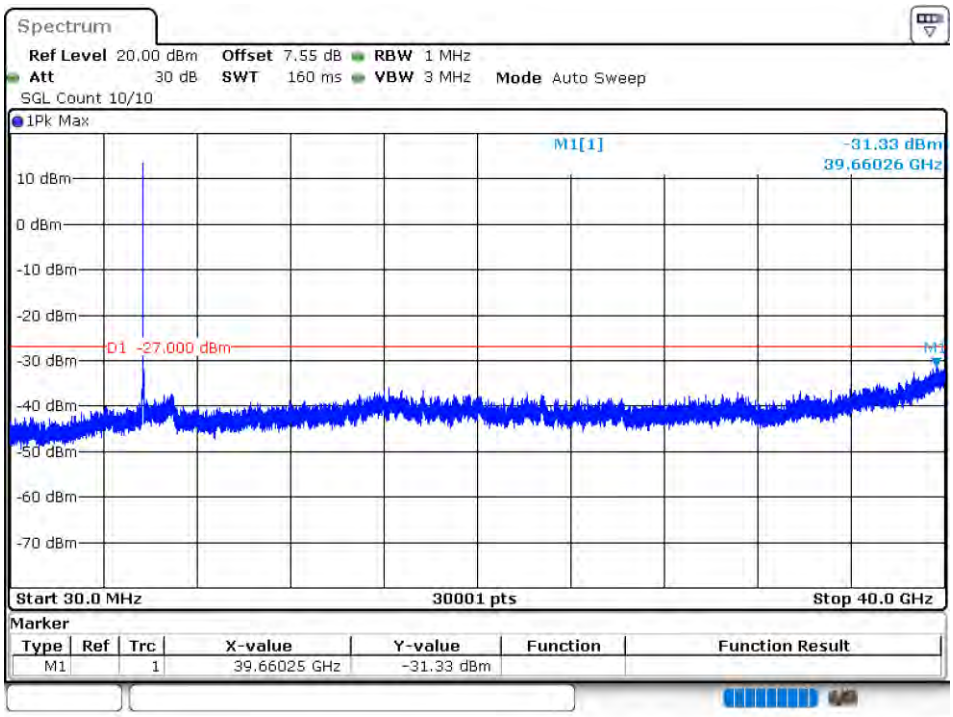
Tx. Spurious NVNT n20 5500MHz Ant1 Emission



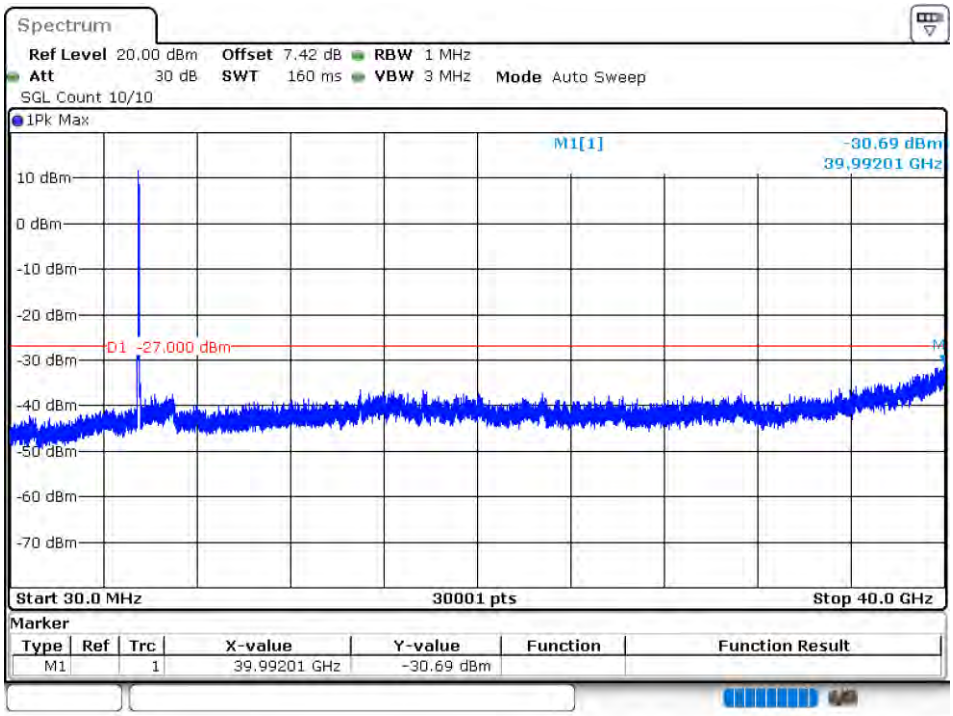
Tx. Spurious NVNT n20 5600MHz Ant1 Emission



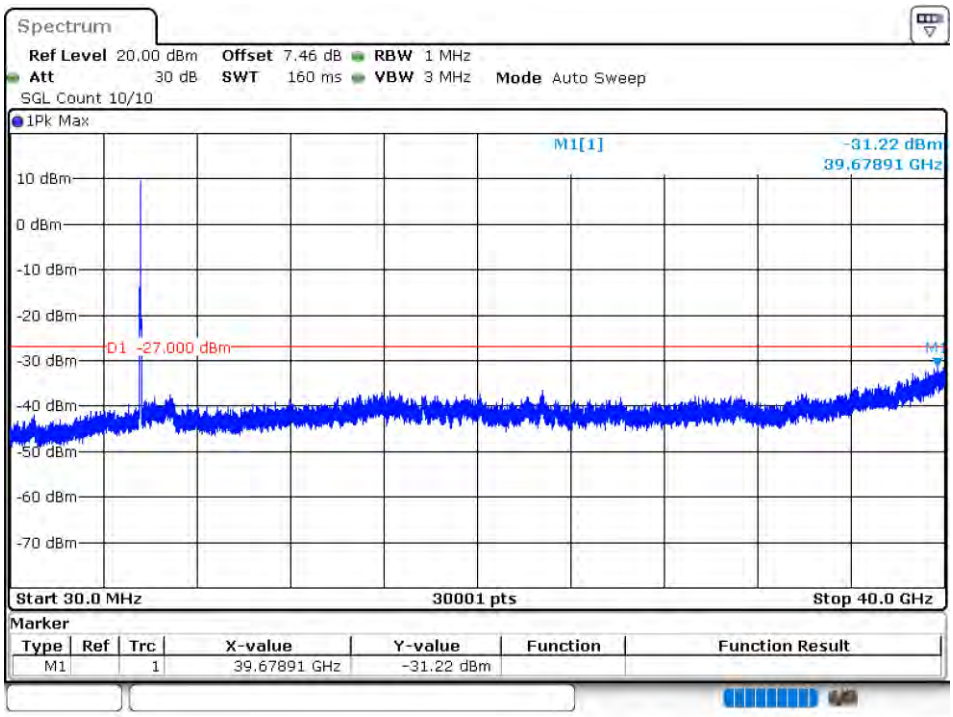
Tx. Spurious NVNT n20 5700MHz Ant1 Emission



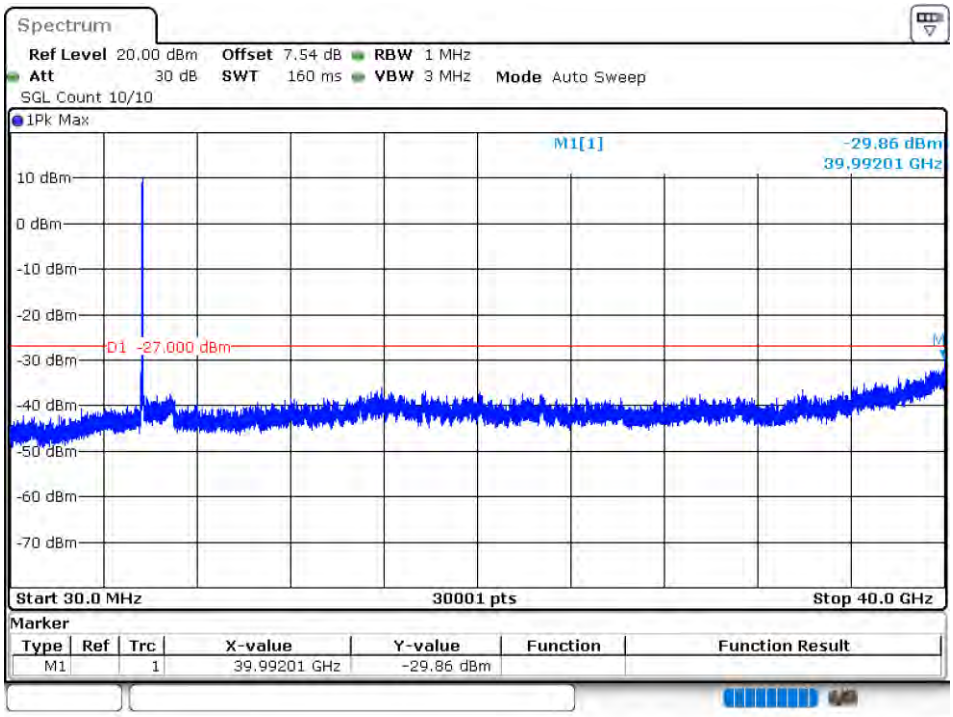
Tx. Spurious NVNT n40 5510MHz Ant1 Emission



Tx. Spurious NVNT n40 5590MHz Ant1 Emission



Tx. Spurious NVNT n40 5670MHz Ant1 Emission



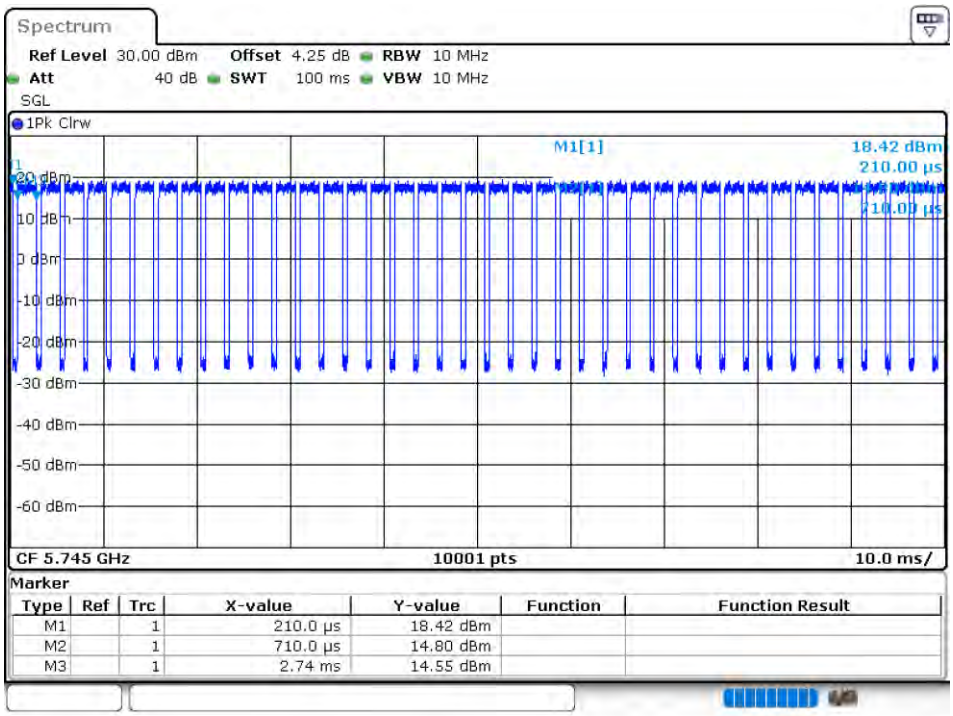
5.8G WIFI

Duty Cycle

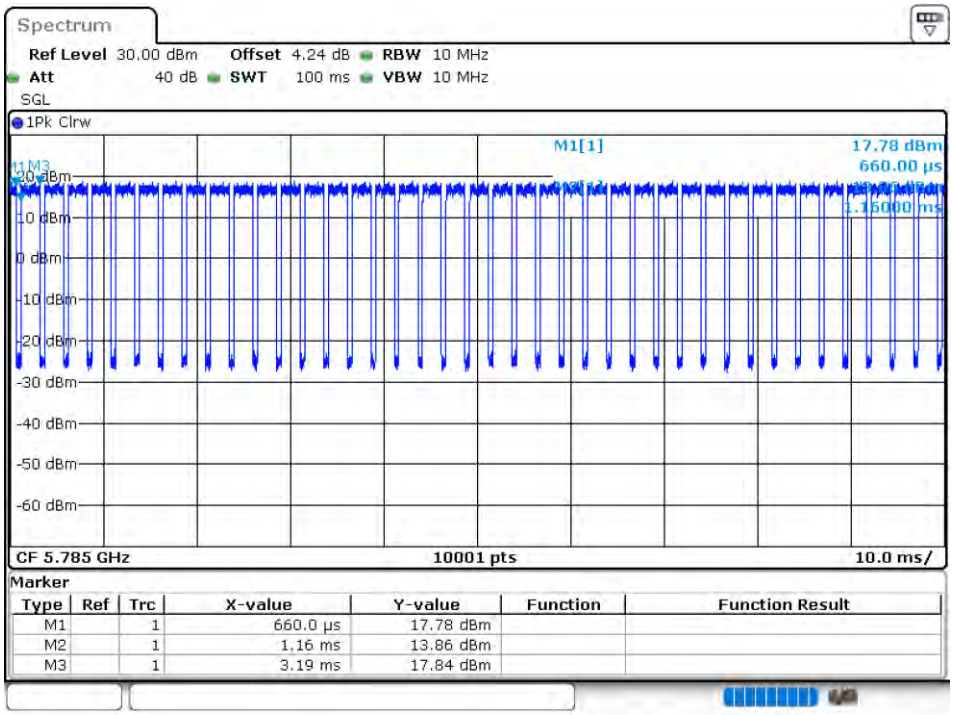
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	80.33	0.95	0.49
NVNT	a	5785	Ant1	80.3	0.95	0.49
NVNT	a	5825	Ant1	80.33	0.95	0.49
NVNT	n20	5745	Ant1	79.31	1.01	0.53
NVNT	n20	5785	Ant1	79.35	1	0.53
NVNT	n20	5825	Ant1	79.37	1	0.53

Test Graphs

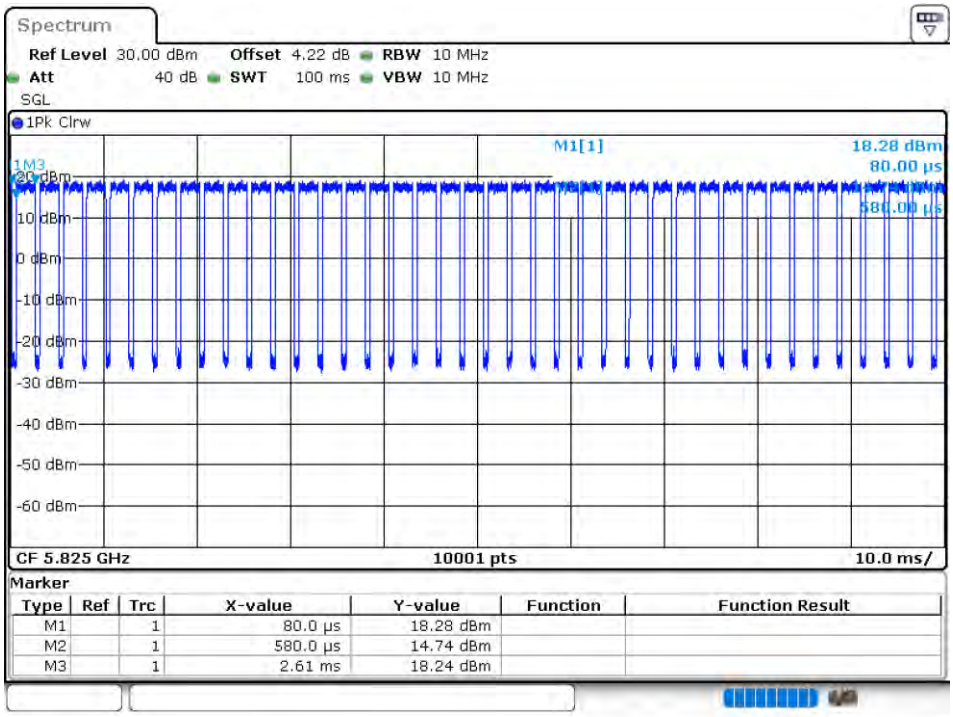
Duty Cycle NVNT a 5745MHz Ant1



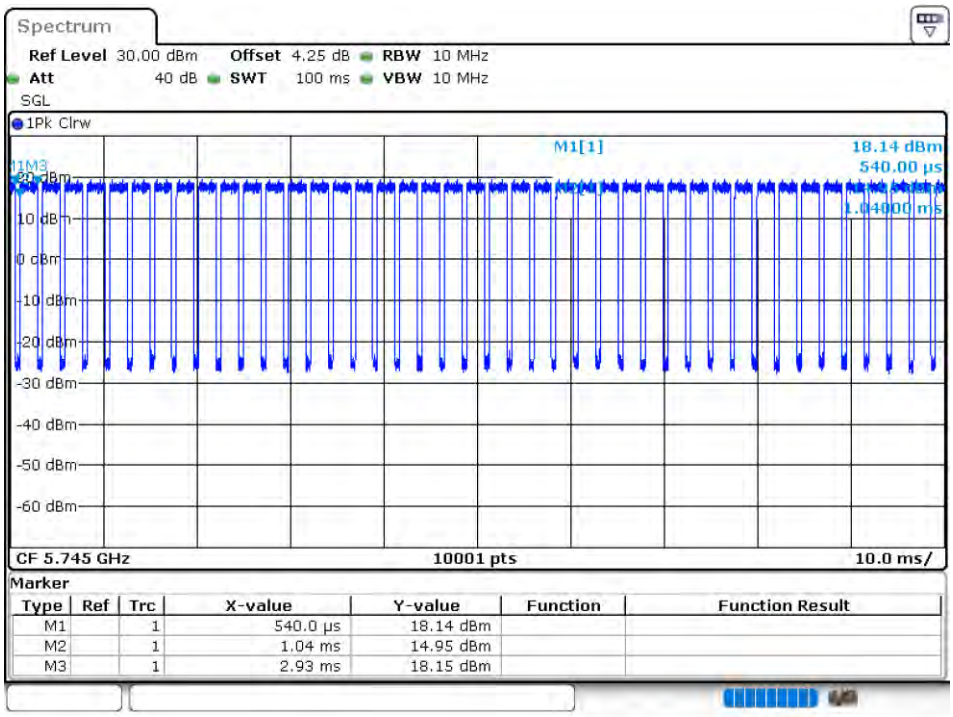
Duty Cycle NVNT a 5785MHz Ant1



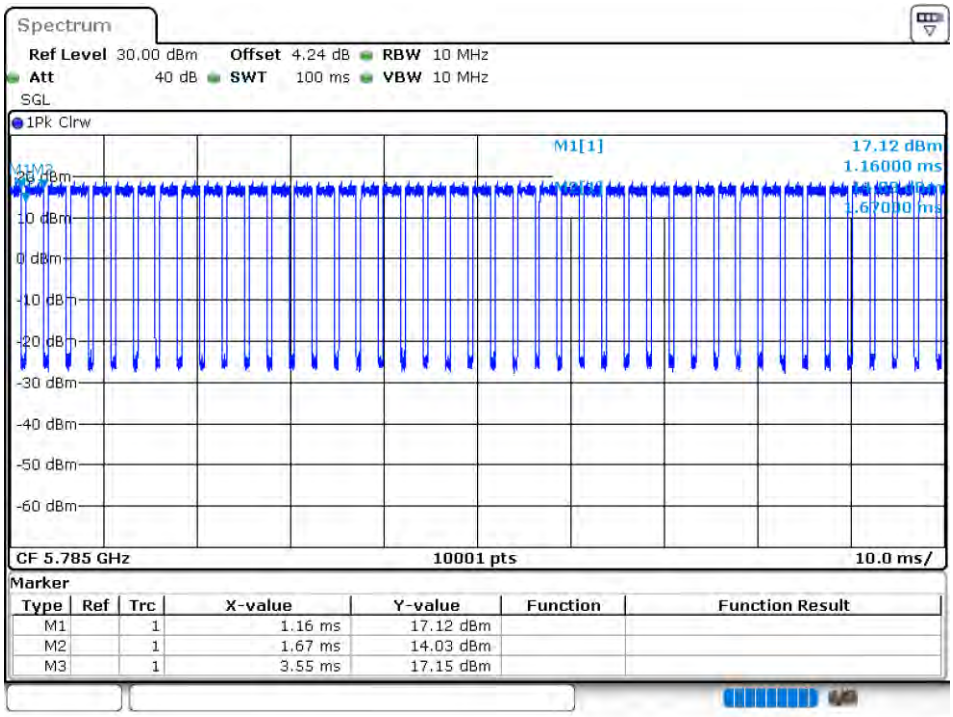
Duty Cycle NVNT a 5825MHz Ant1



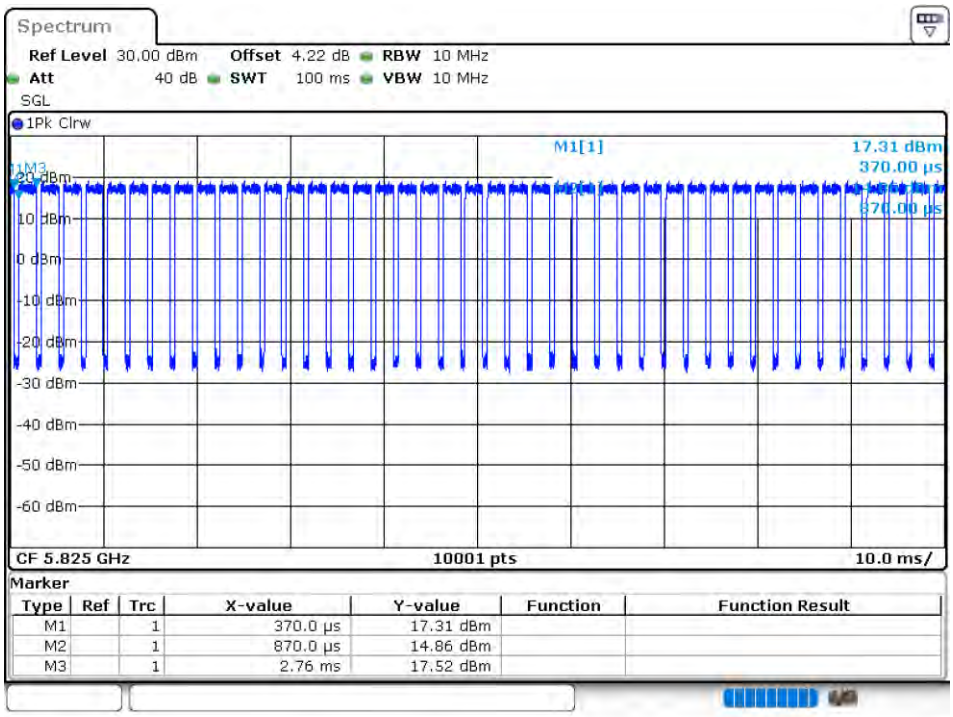
Duty Cycle NVNT n20 5745MHz Ant1



Duty Cycle NVNT n20 5785MHz Ant1



Duty Cycle NVNT n20 5825MHz Ant1



Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	13.38	30	Pass
NVNT	a	5785	Ant1	13.16	30	Pass
NVNT	a	5825	Ant1	13.75	30	Pass
NVNT	n20	5745	Ant1	13.55	30	Pass
NVNT	n20	5785	Ant1	13.05	30	Pass
NVNT	n20	5825	Ant1	13.7	30	Pass