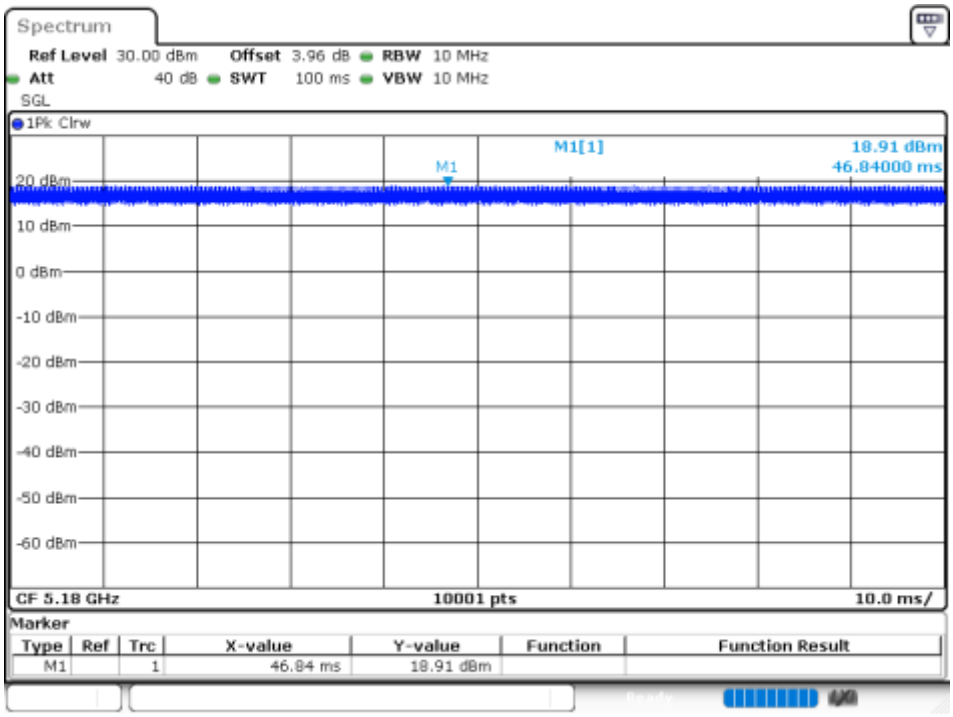
5.2GWIFI

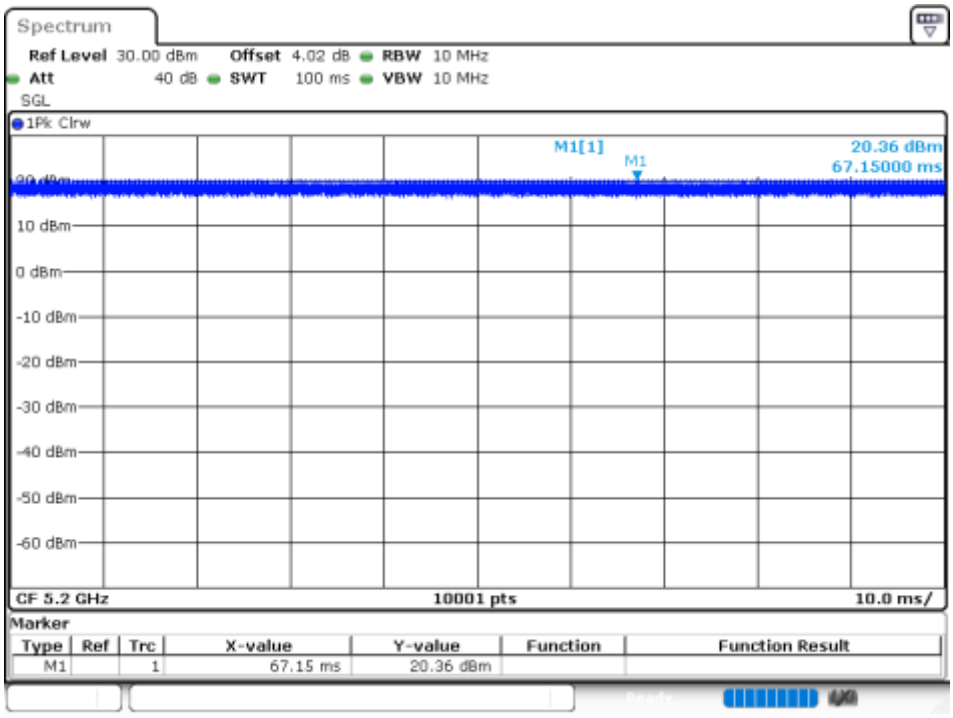
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	100	0	0
NVNT	a	5200	Ant1	100	0	0
NVNT	a	5240	Ant1	100	0	0
NVNT	n20	5180	Ant1	100	0	0
NVNT	n20	5200	Ant1	100	0	0
NVNT	n20	5240	Ant1	100	0	0
NVNT	n40	5190	Ant1	100	0	0
NVNT	n40	5230	Ant1	100	0	0
NVNT	ac20	5180	Ant1	100	0	0
NVNT	ac20	5200	Ant1	100	0	0
NVNT	ac20	5240	Ant1	100	0	0
NVNT	ac40	5190	Ant1	100	0	0
NVNT	ac40	5230	Ant1	100	0	0
NVNT	ac80	5210	Ant1	100	0	0

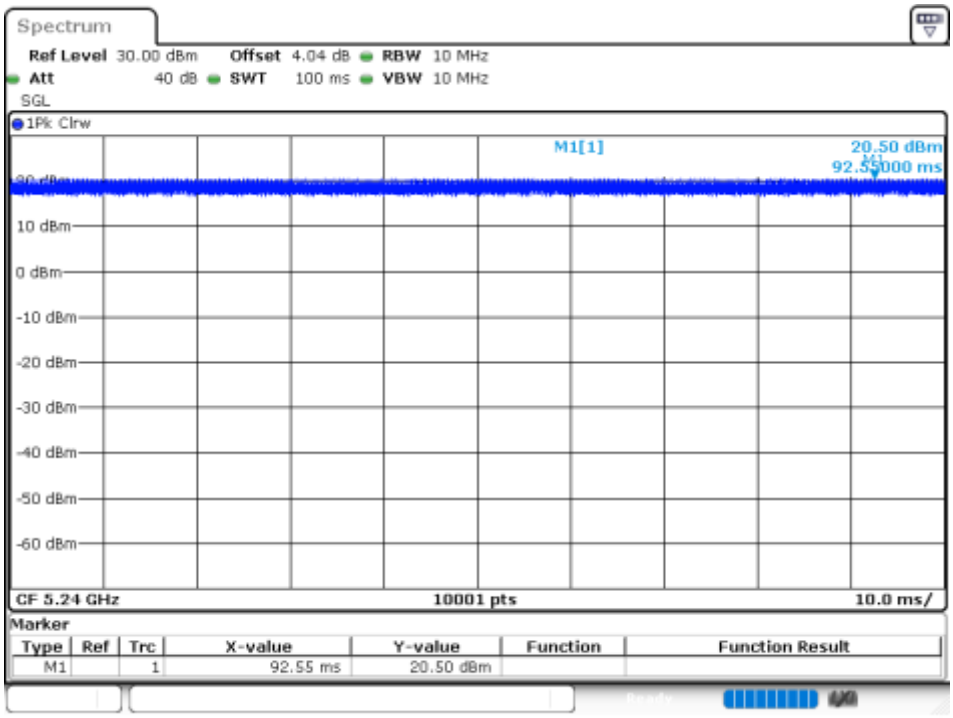
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



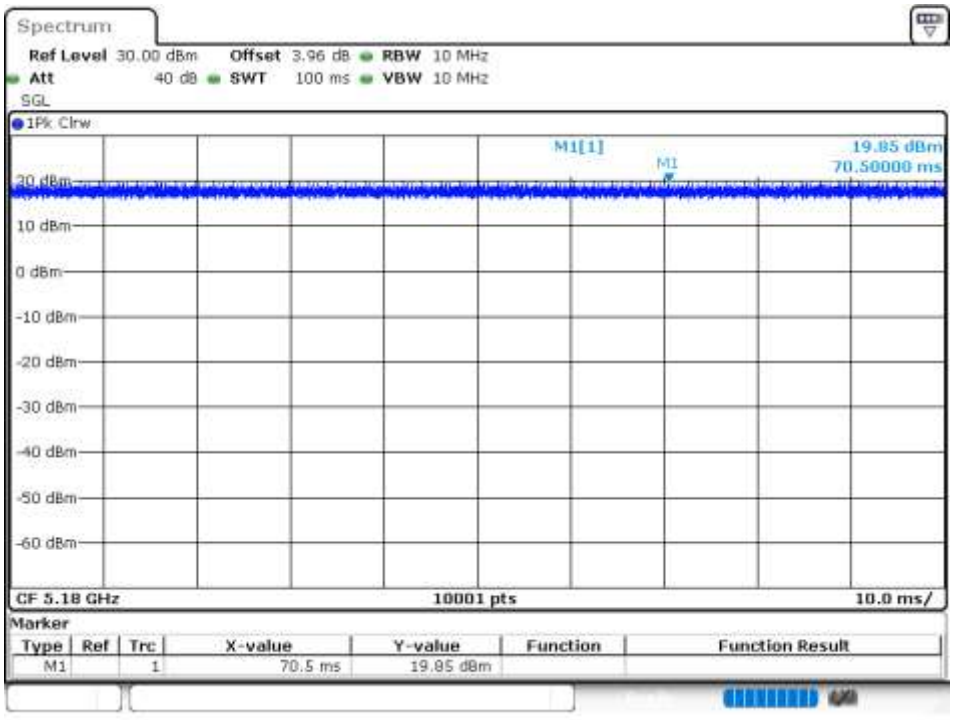
Duty Cycle NVNT a 5200MHz Ant1



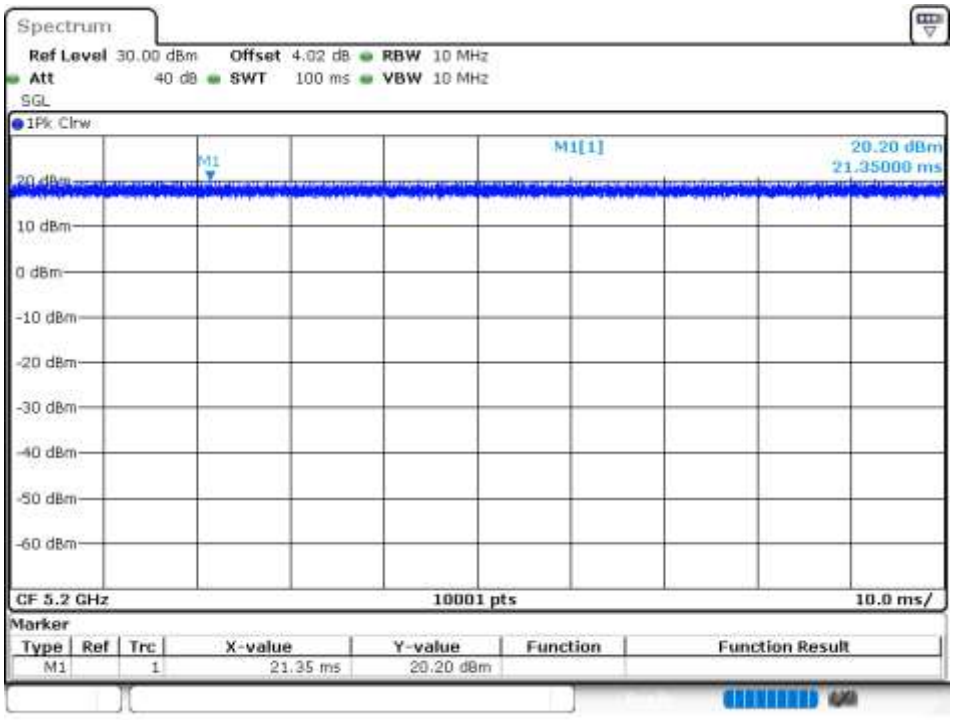
Duty Cycle NVNT a 5240MHz Ant1



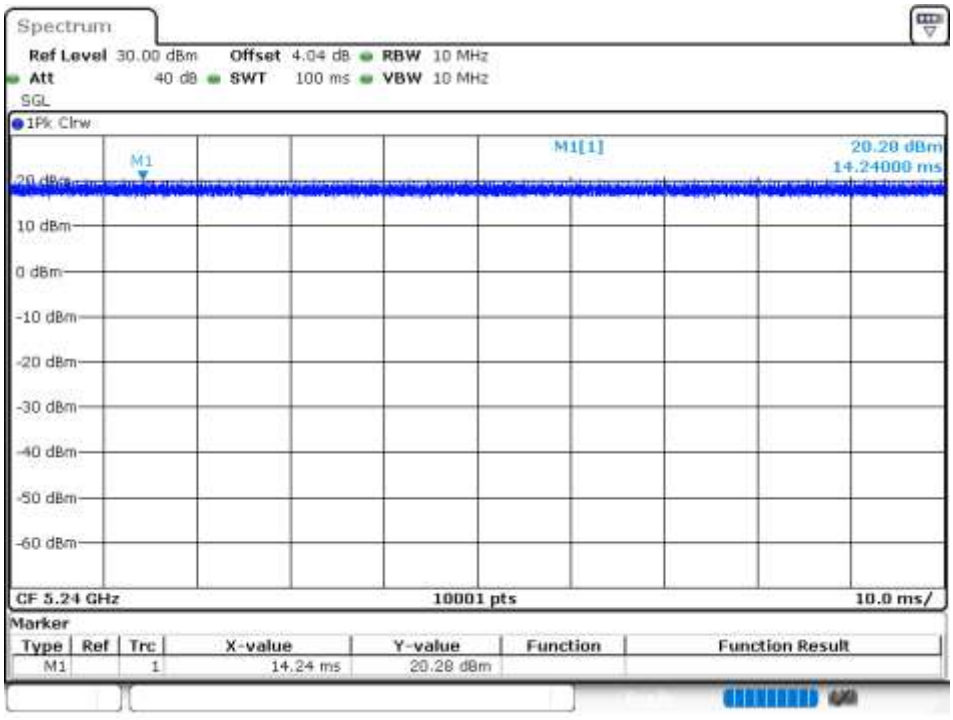
Duty Cycle NVNT n20 5180MHz Ant1



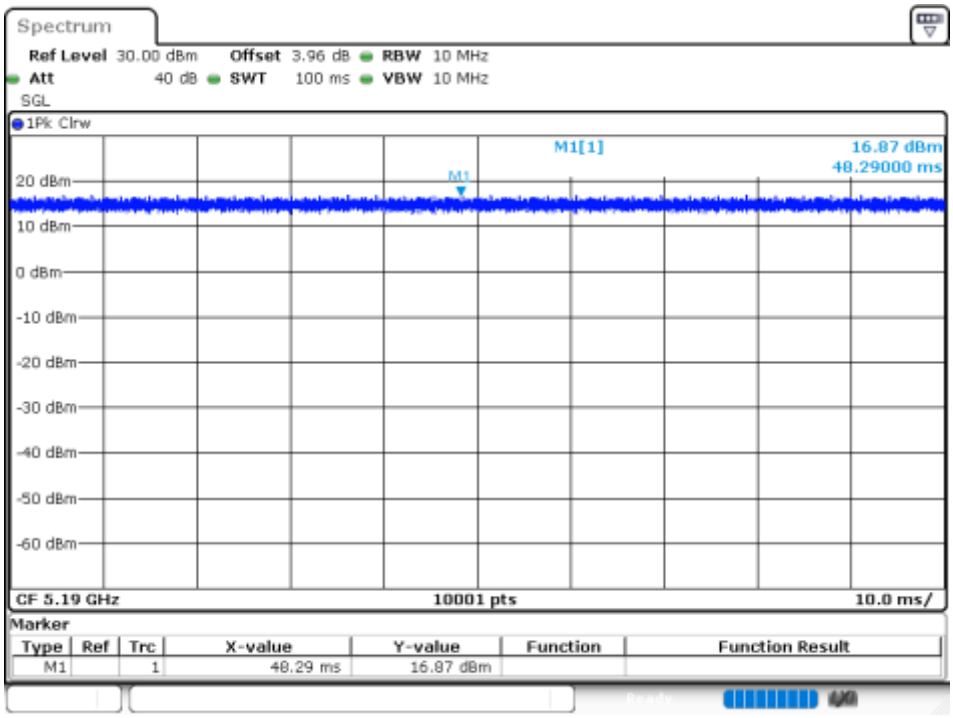
Duty Cycle NVNT n20 5200MHz Ant1



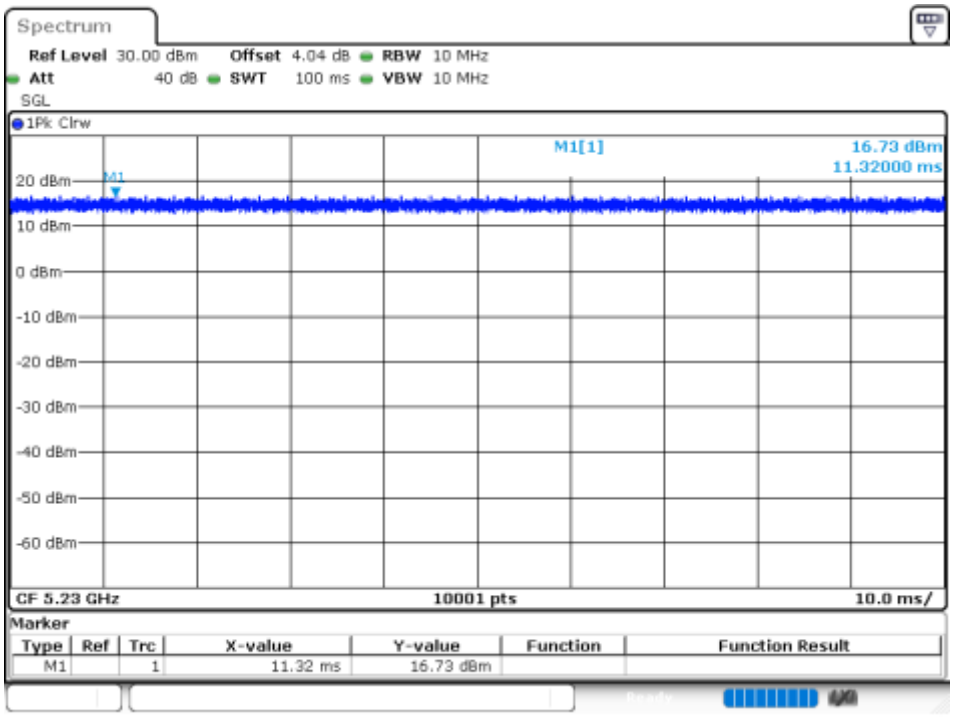
Duty Cycle NVNT n20 5240MHz Ant1



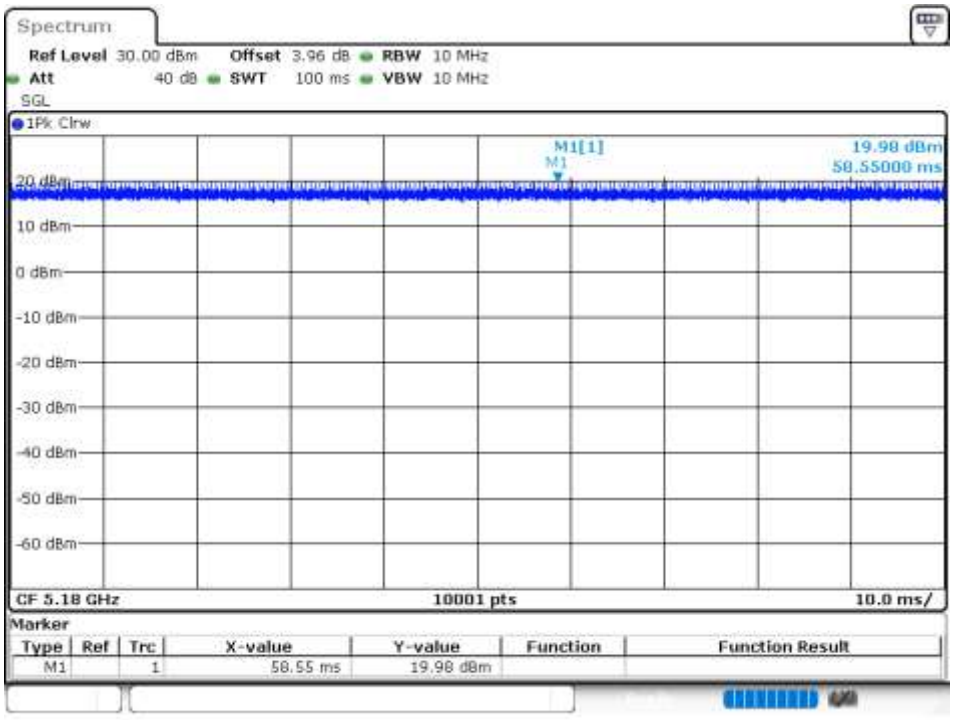
Duty Cycle NVNT n40 5190MHz Ant1



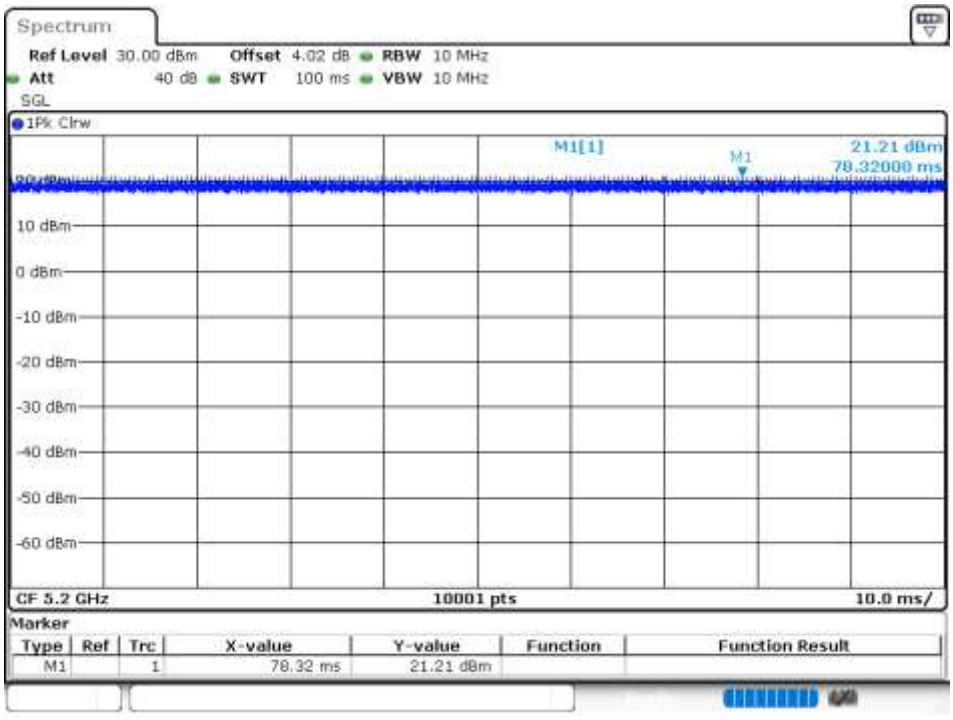
Duty Cycle NVNT n40 5230MHz Ant1



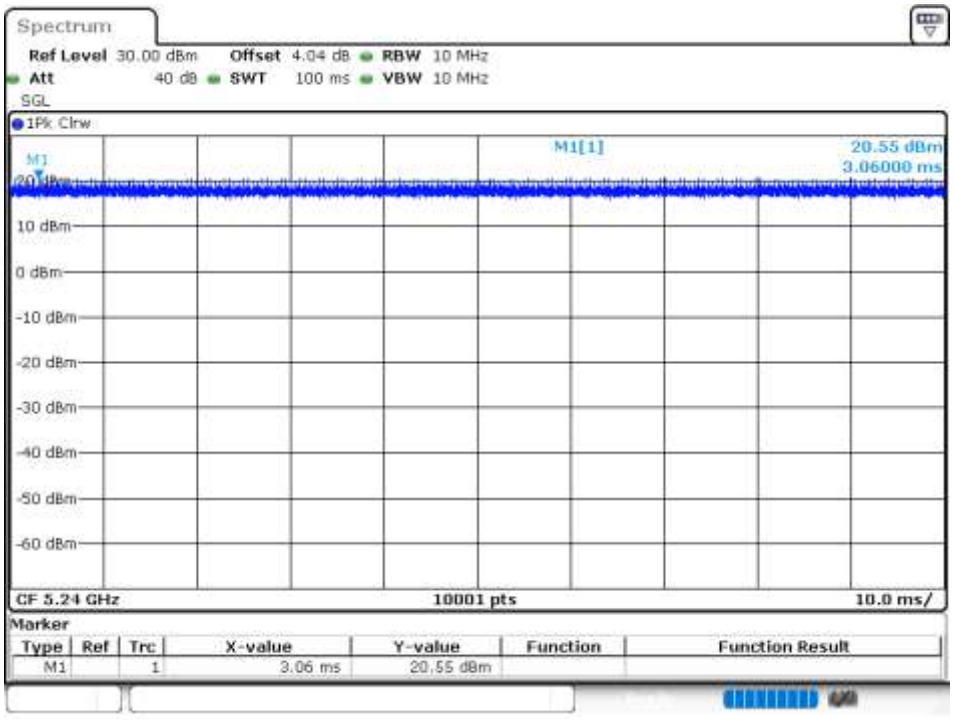
Duty Cycle NVNT ac20 5180MHz Ant1



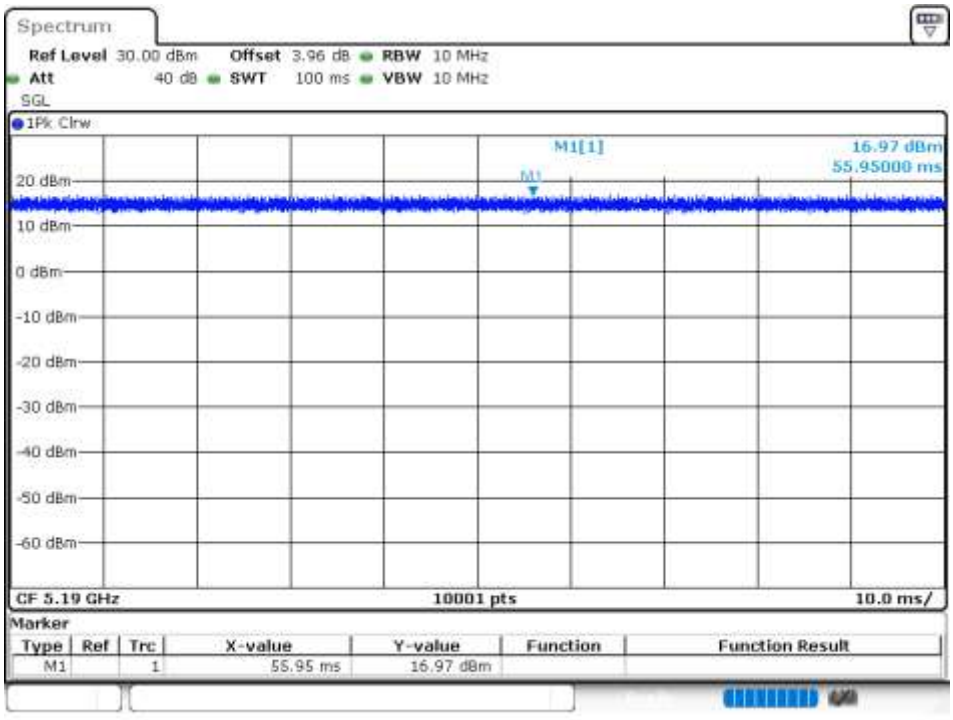
Duty Cycle NVNT ac20 5200MHz Ant1

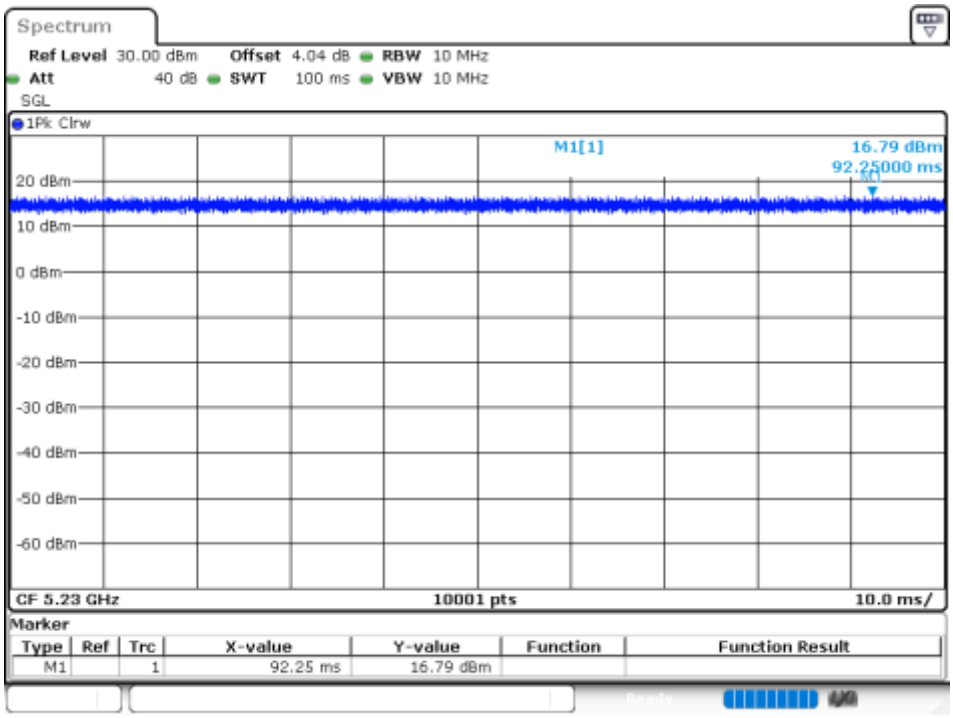


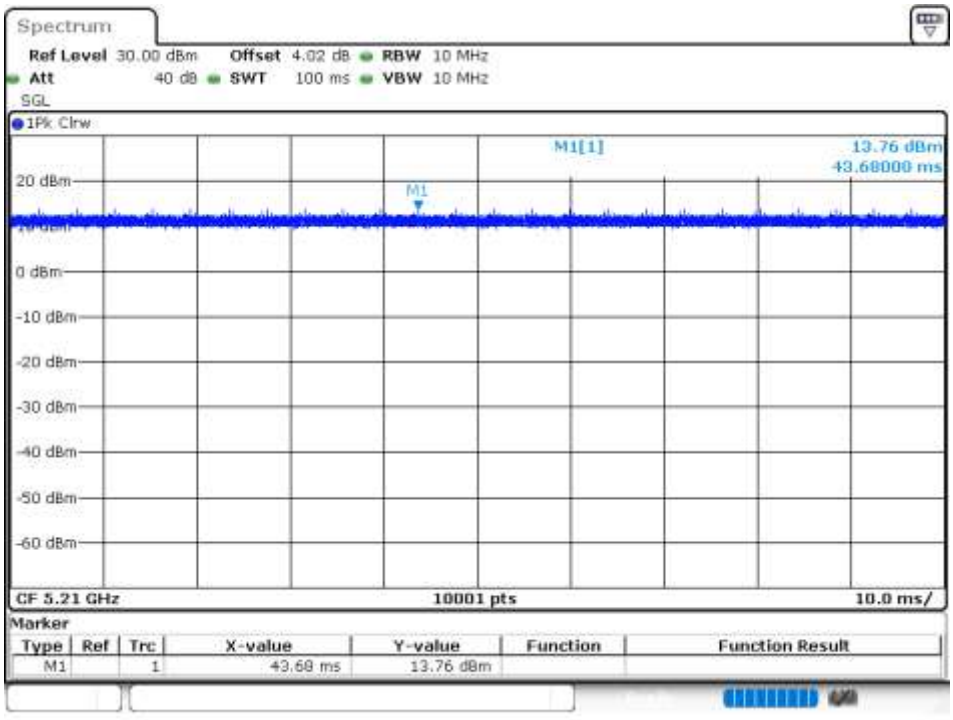
Duty Cycle NVNT ac20 5240MHz Ant1



Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1


Duty Cycle NVNT ac80 5210MHz Ant1


Maximum Conducted Output Power

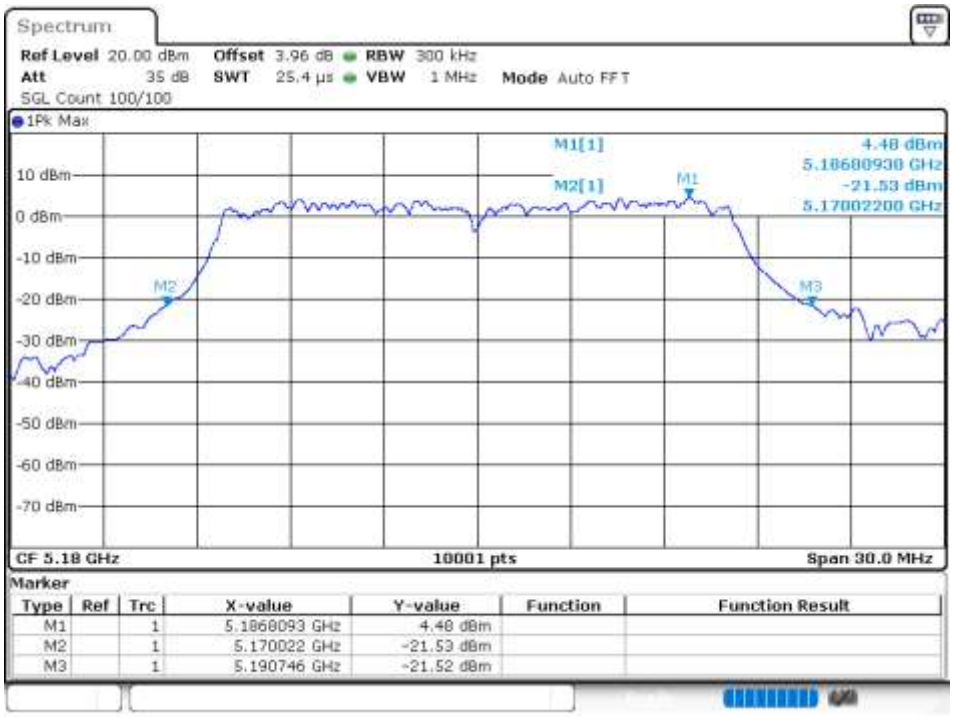
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	15.12	24	Pass
NVNT	a	5200	Ant1	15.22	24	Pass
NVNT	a	5240	Ant1	15.43	24	Pass
NVNT	n20	5180	Ant1	15.19	24	Pass
NVNT	n20	5200	Ant1	15.16	24	Pass
NVNT	n20	5240	Ant1	15.33	24	Pass
NVNT	n40	5190	Ant1	13.3	24	Pass
NVNT	n40	5230	Ant1	13.32	24	Pass
NVNT	ac20	5180	Ant1	15.17	24	Pass
NVNT	ac20	5200	Ant1	15.41	24	Pass
NVNT	ac20	5240	Ant1	15.25	24	Pass
NVNT	ac40	5190	Ant1	13.13	24	Pass
NVNT	ac40	5230	Ant1	13.32	24	Pass
NVNT	ac80	5210	Ant1	11.06	24	Pass

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

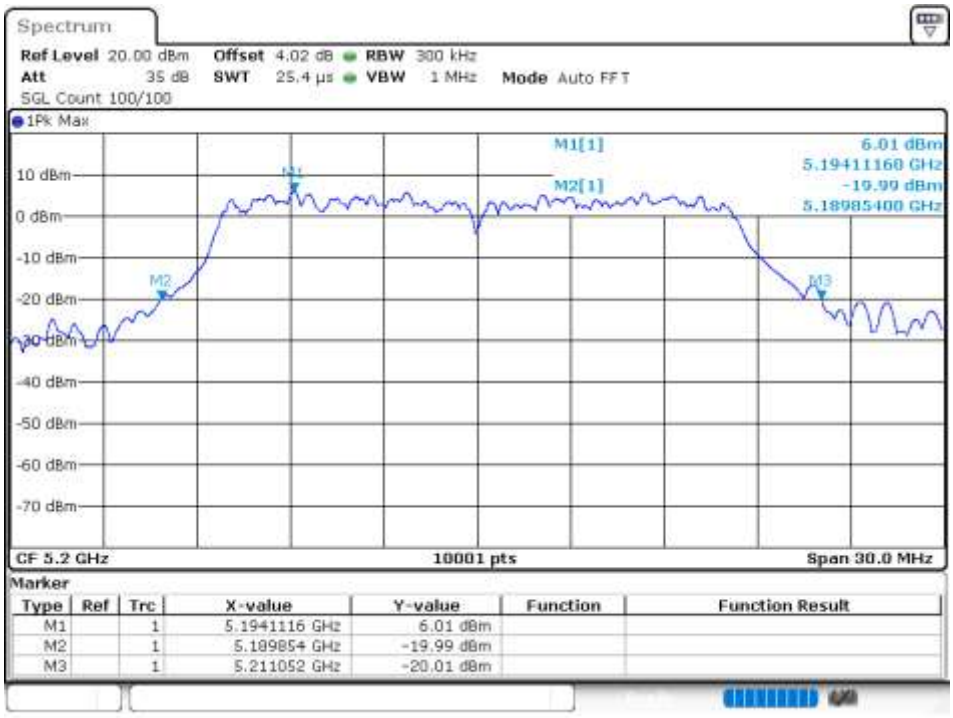
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.724	Pass
NVNT	a	5200	Ant1	21.198	Pass
NVNT	a	5240	Ant1	20.193	Pass
NVNT	n20	5180	Ant1	22.041	Pass
NVNT	n20	5200	Ant1	20.796	Pass
NVNT	n20	5240	Ant1	21.171	Pass
NVNT	n40	5190	Ant1	50.646	Pass
NVNT	n40	5230	Ant1	50.868	Pass
NVNT	ac20	5180	Ant1	20.733	Pass
NVNT	ac20	5200	Ant1	20.937	Pass
NVNT	ac20	5240	Ant1	20.769	Pass
NVNT	ac40	5190	Ant1	48.33	Pass
NVNT	ac40	5230	Ant1	42.912	Pass
NVNT	ac80	5210	Ant1	82.908	Pass

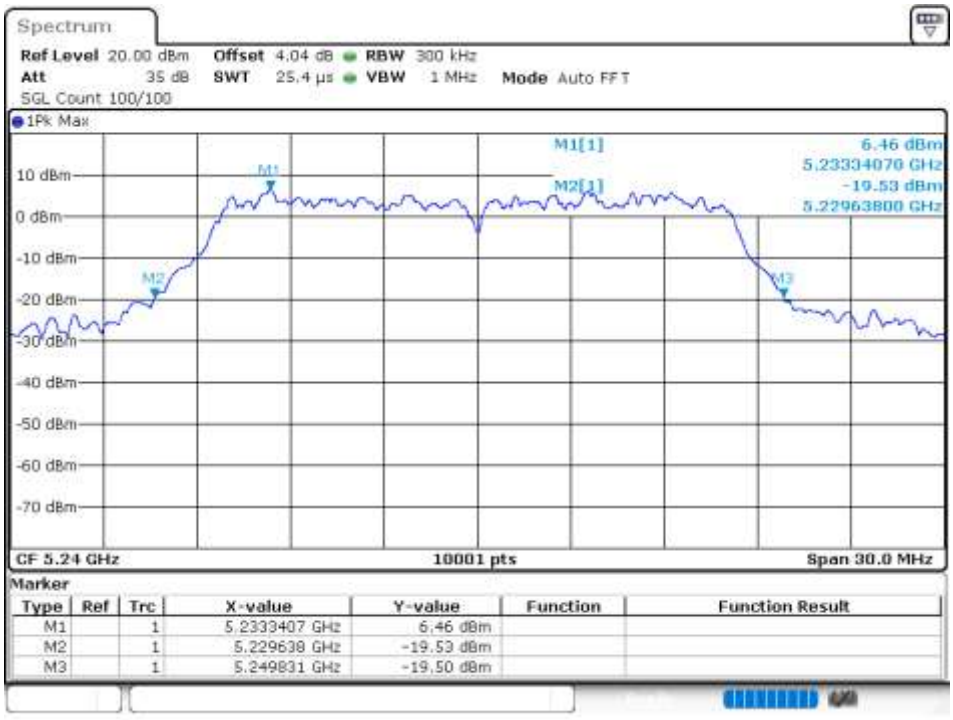
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1



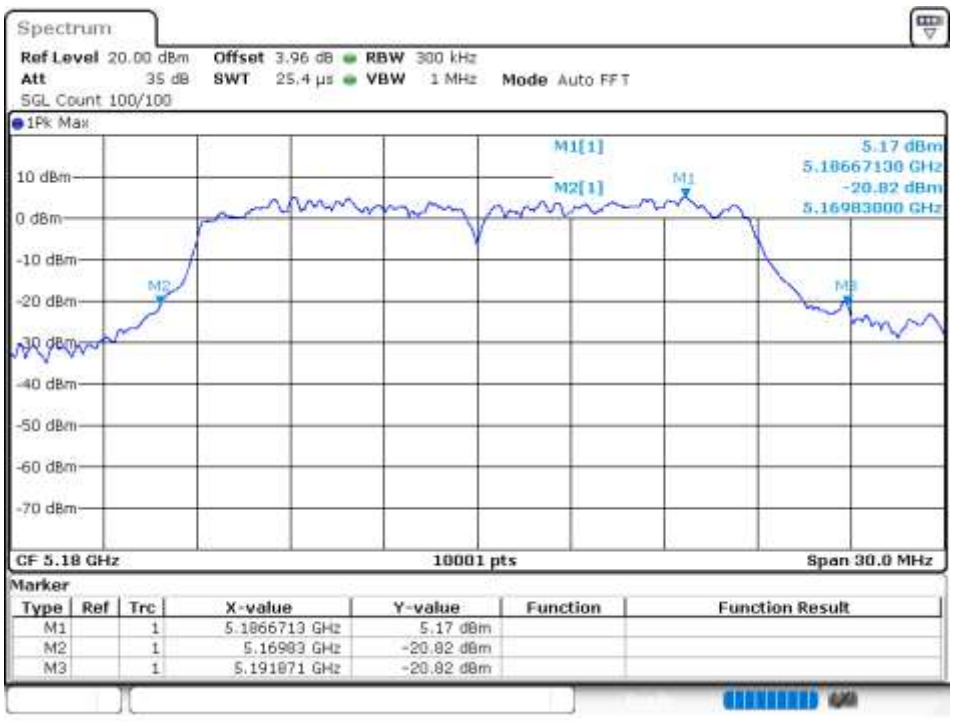
-26dB Bandwidth NVNT a 5200MHz Ant1



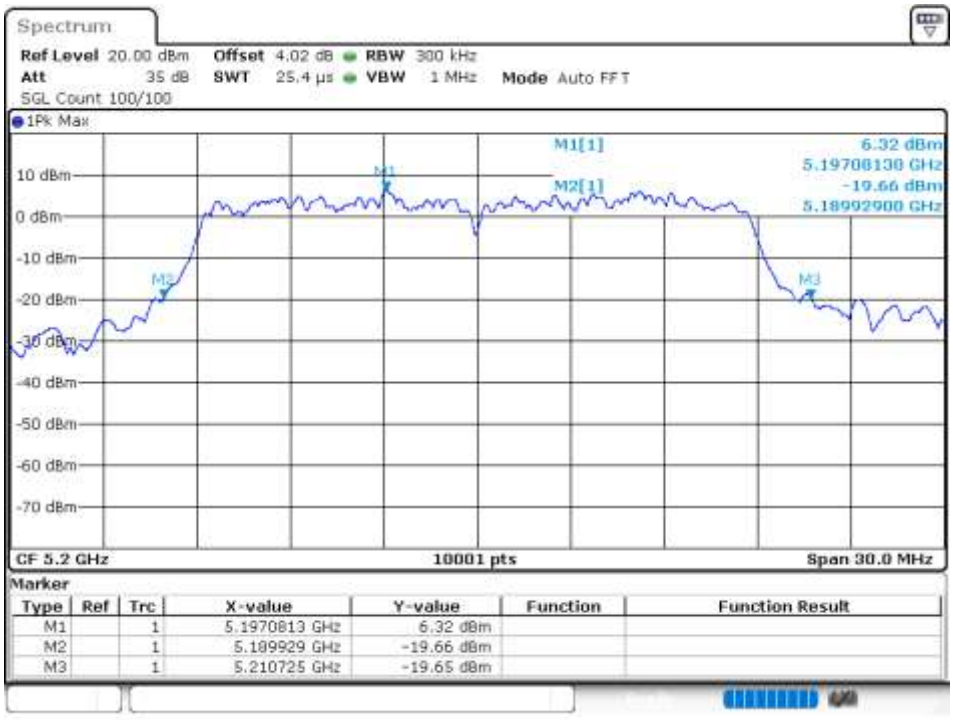
-26dB Bandwidth NVNT a 5240MHz Ant1



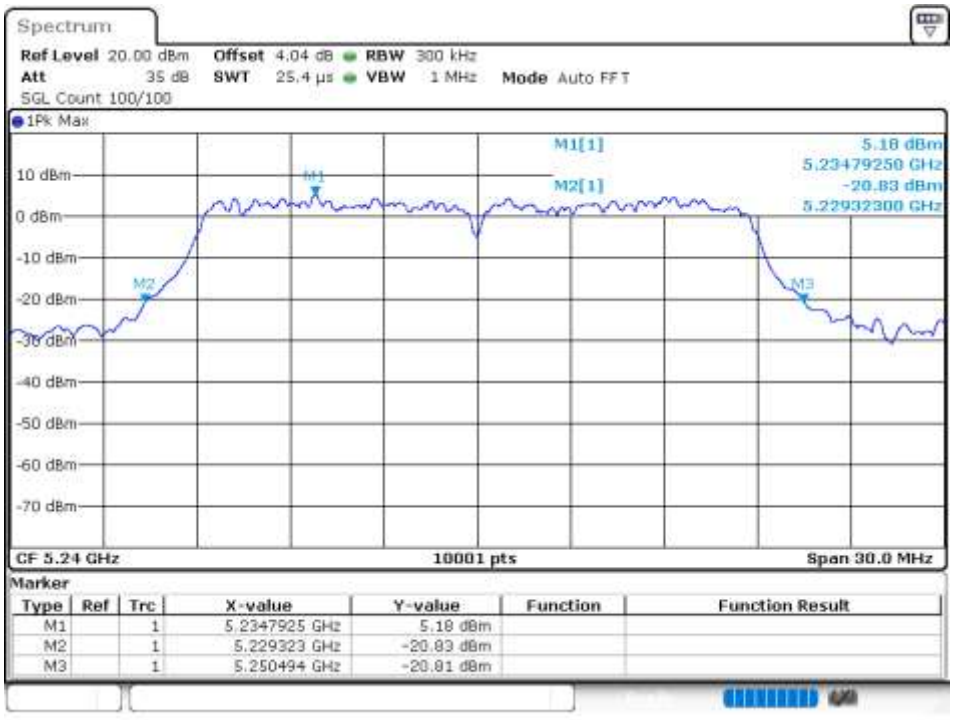
-26dB Bandwidth NVNT n20 5180MHz Ant1



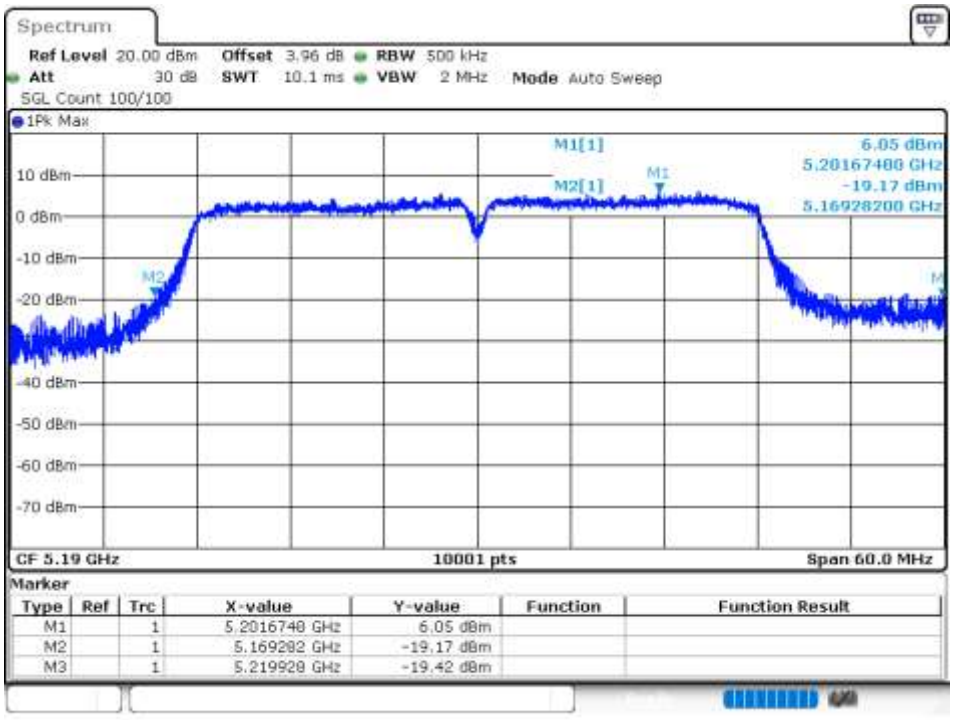
-26dB Bandwidth NVNT n20 5200MHz Ant1



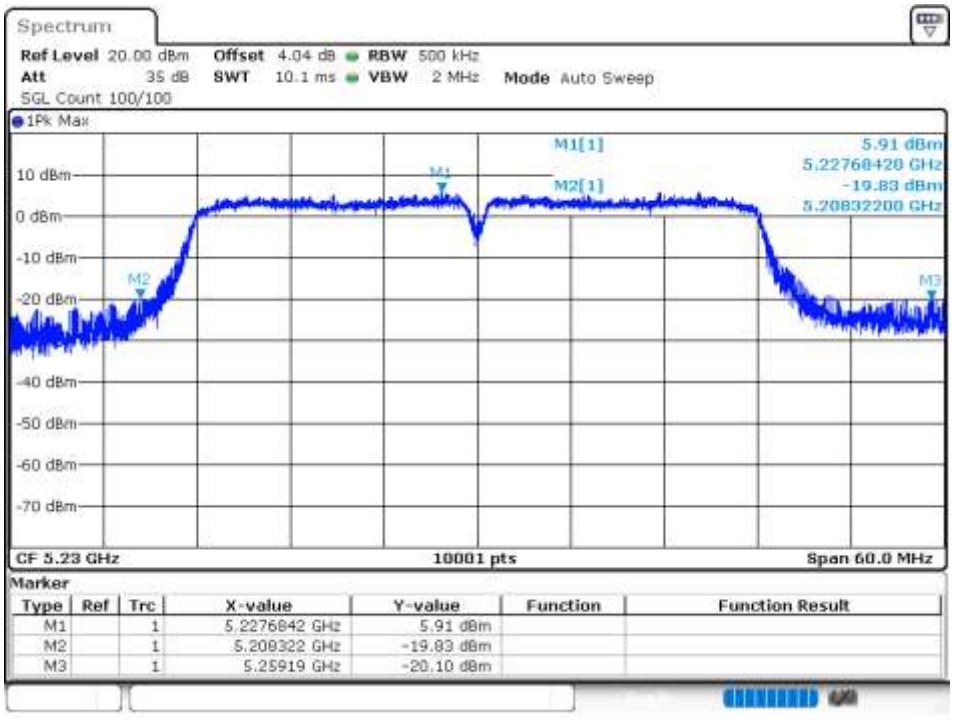
-26dB Bandwidth NVNT n20 5240MHz Ant1



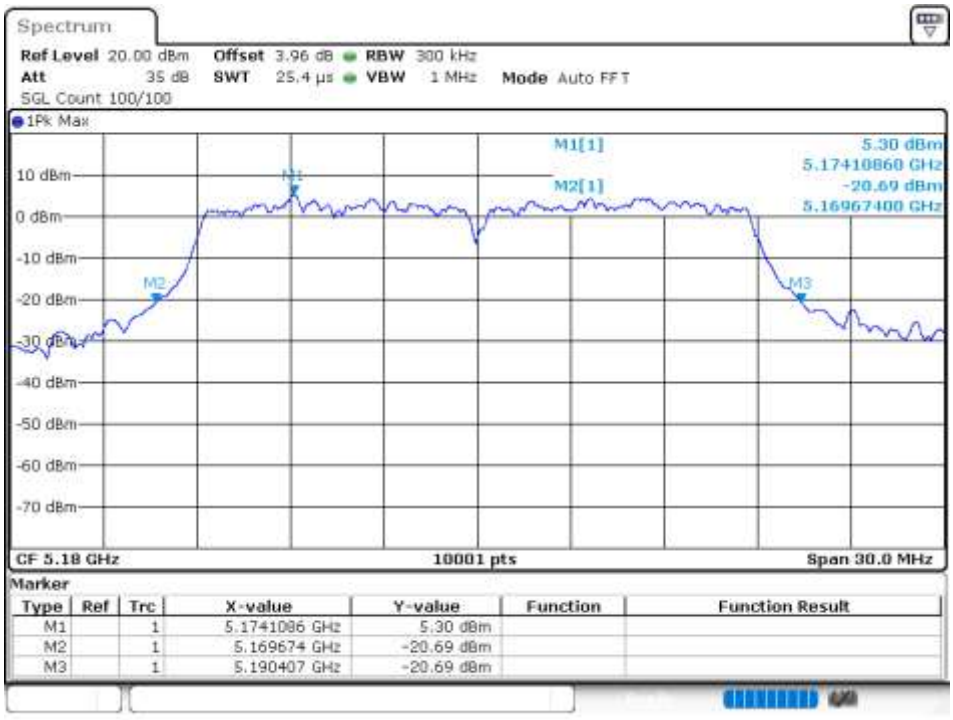
-26dB Bandwidth NVNT n40 5190MHz Ant1



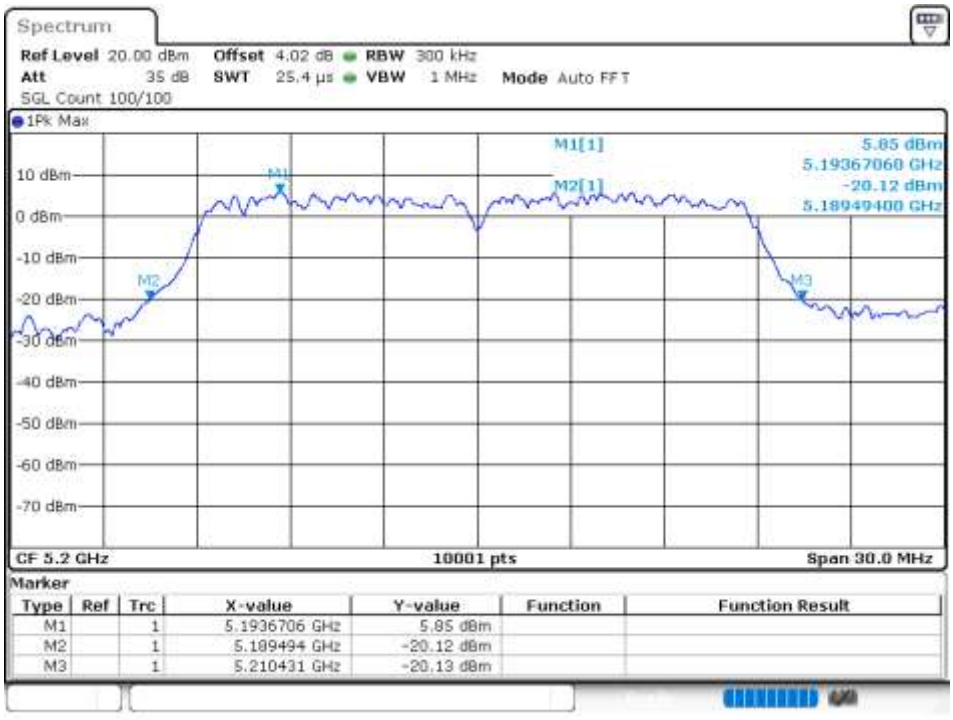
-26dB Bandwidth NVNT n40 5230MHz Ant1



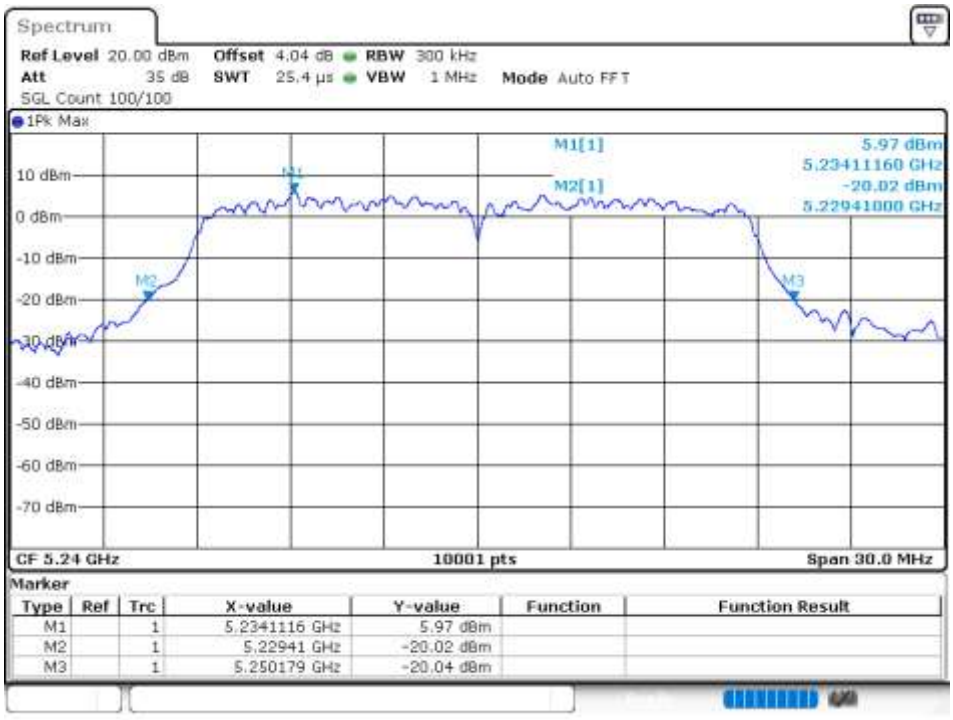
-26dB Bandwidth NVNT ac20 5180MHz Ant1



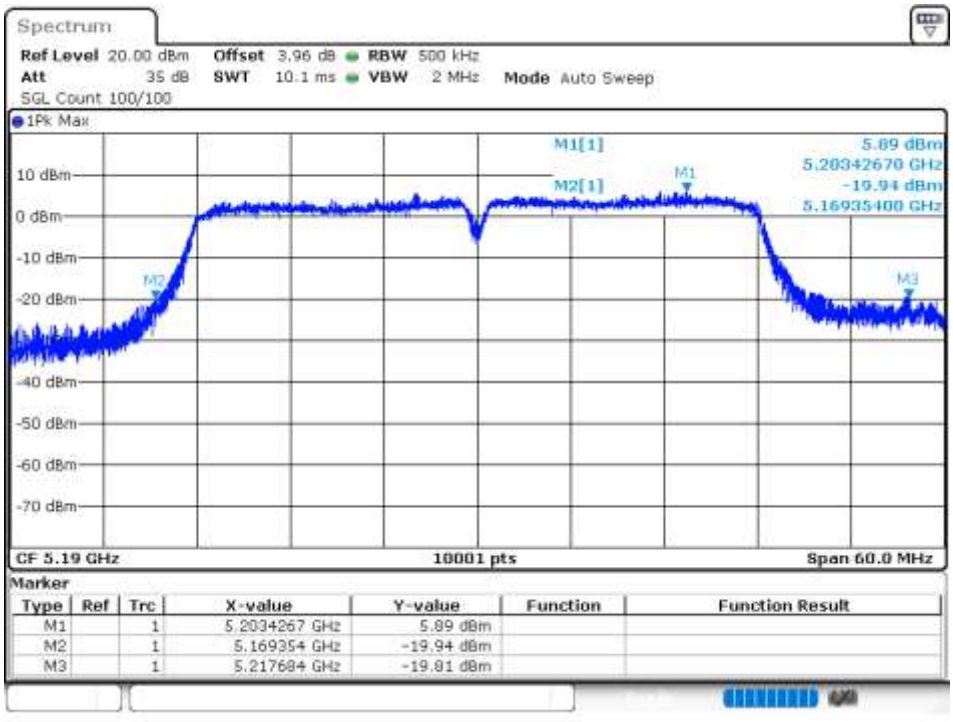
-26dB Bandwidth NVNT ac20 5200MHz Ant1



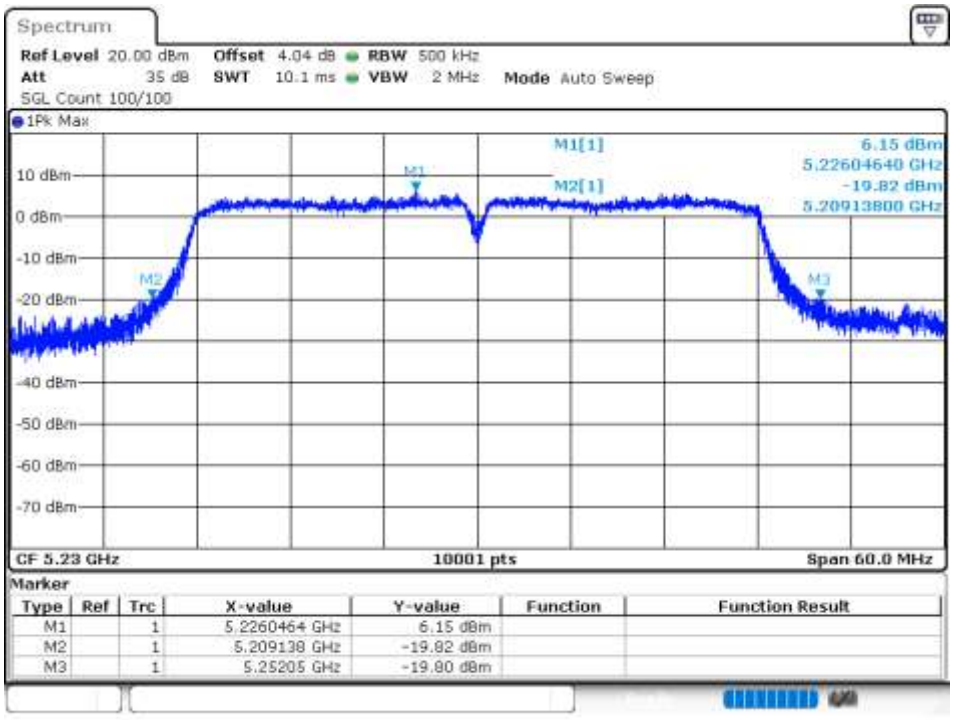
-26dB Bandwidth NVNT ac20 5240MHz Ant1



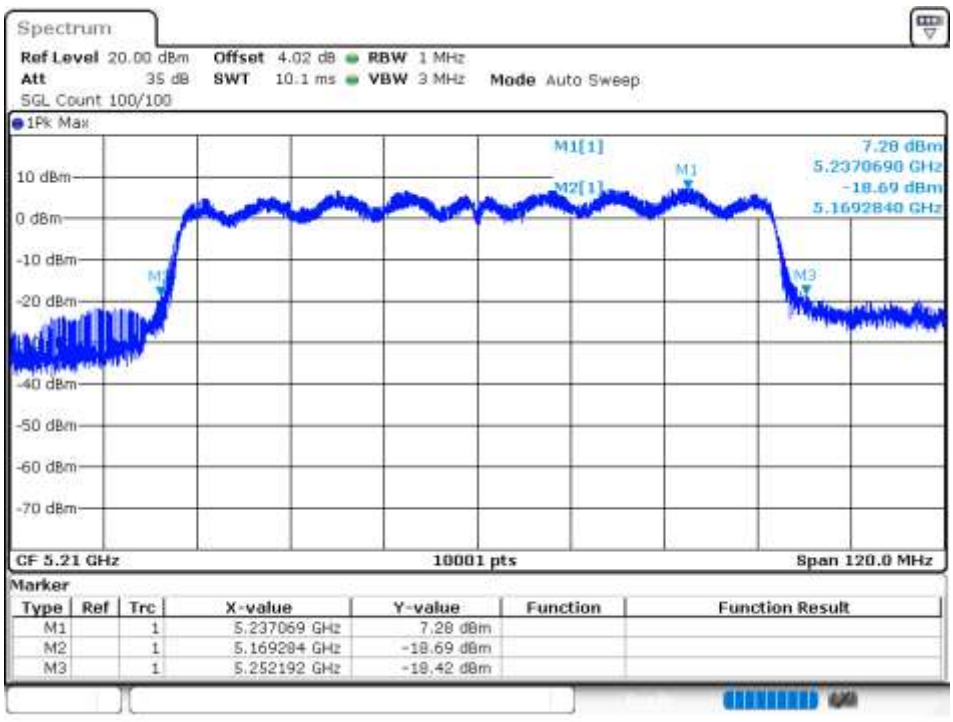
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1

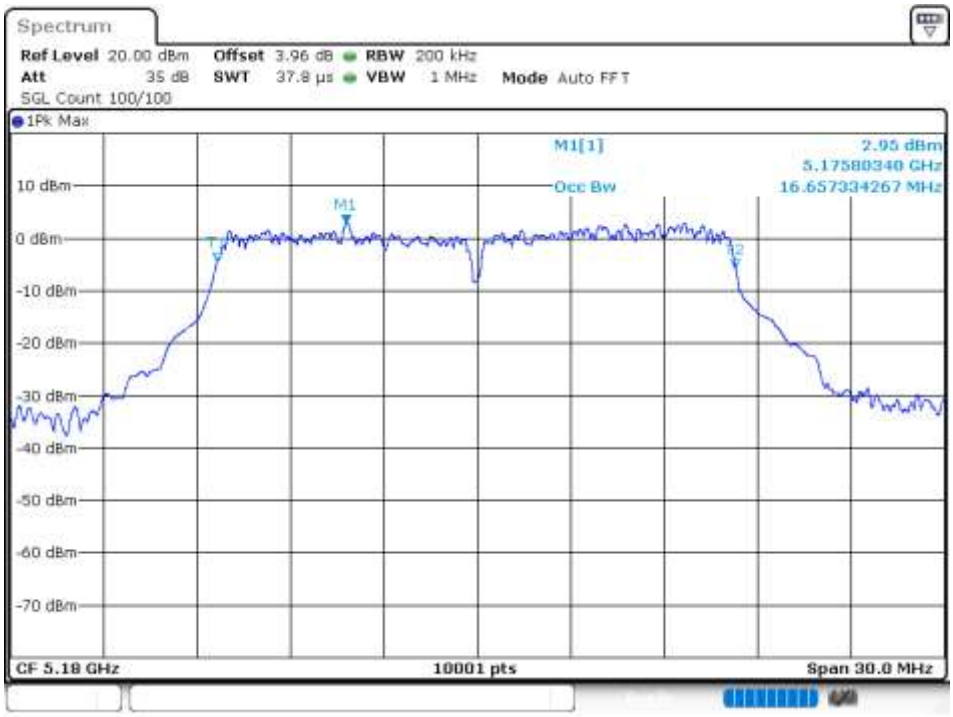
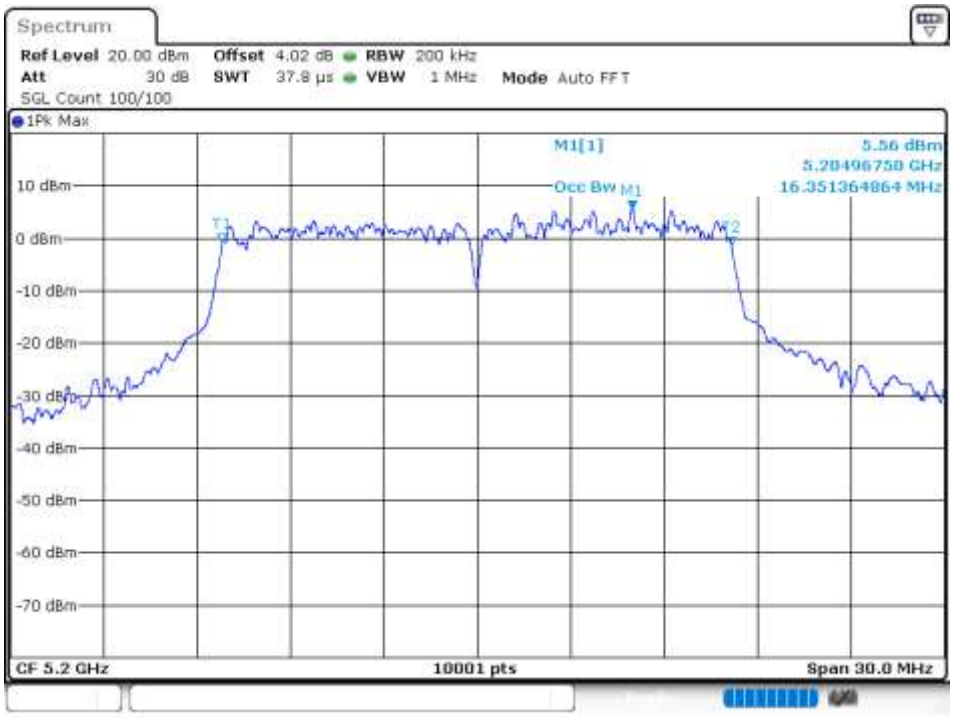


-26dB Bandwidth NVNT ac80 5210MHz Ant1

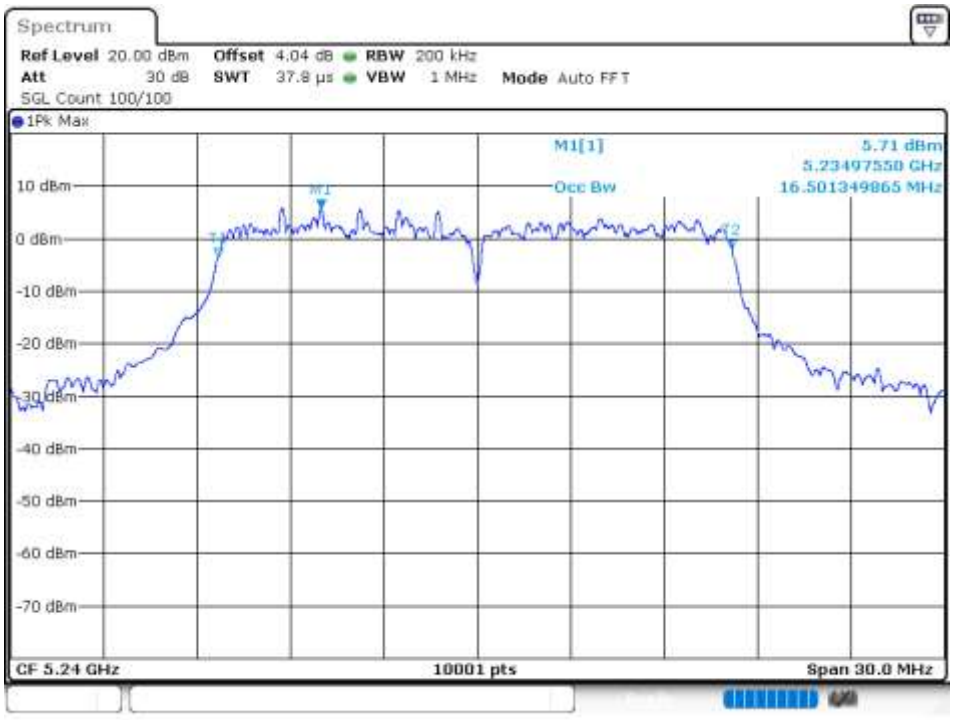


Occupied Channel Bandwidth

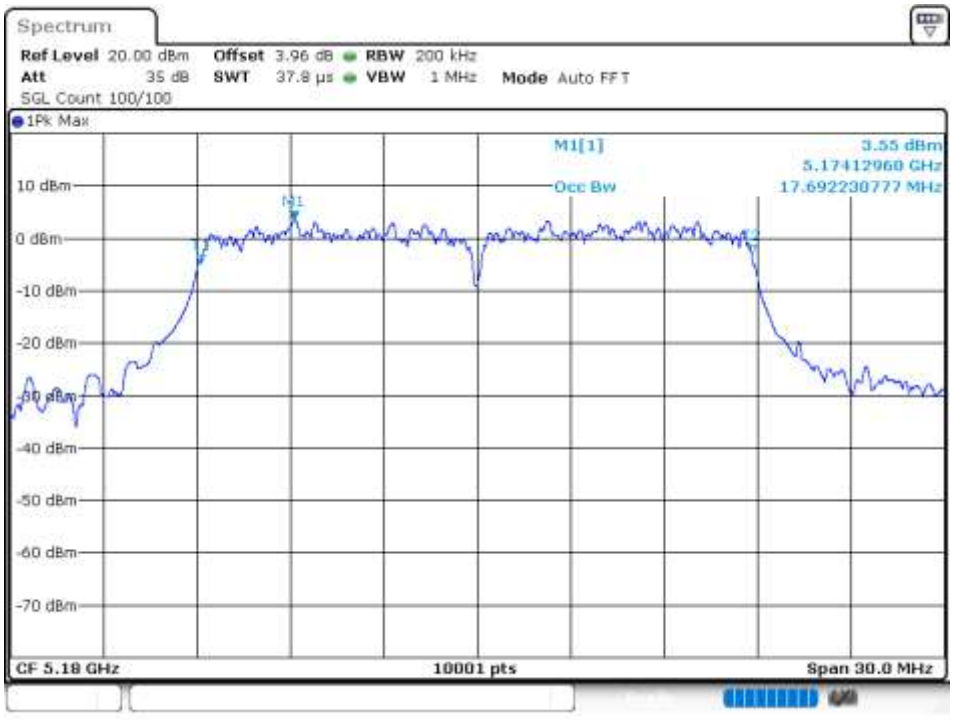
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.657
NVNT	a	5200	Ant1	16.351
NVNT	a	5240	Ant1	16.501
NVNT	n20	5180	Ant1	17.692
NVNT	n20	5200	Ant1	17.629
NVNT	n20	5240	Ant1	17.614
NVNT	n40	5190	Ant1	36.272
NVNT	n40	5230	Ant1	36.224
NVNT	ac20	5180	Ant1	17.659
NVNT	ac20	5200	Ant1	17.557
NVNT	ac20	5240	Ant1	17.641
NVNT	ac40	5190	Ant1	36.26
NVNT	ac40	5230	Ant1	36.164
NVNT	ac80	5210	Ant1	75.4

Test Graphs
OBW NVNT a 5180MHz Ant1

OBW NVNT a 5200MHz Ant1


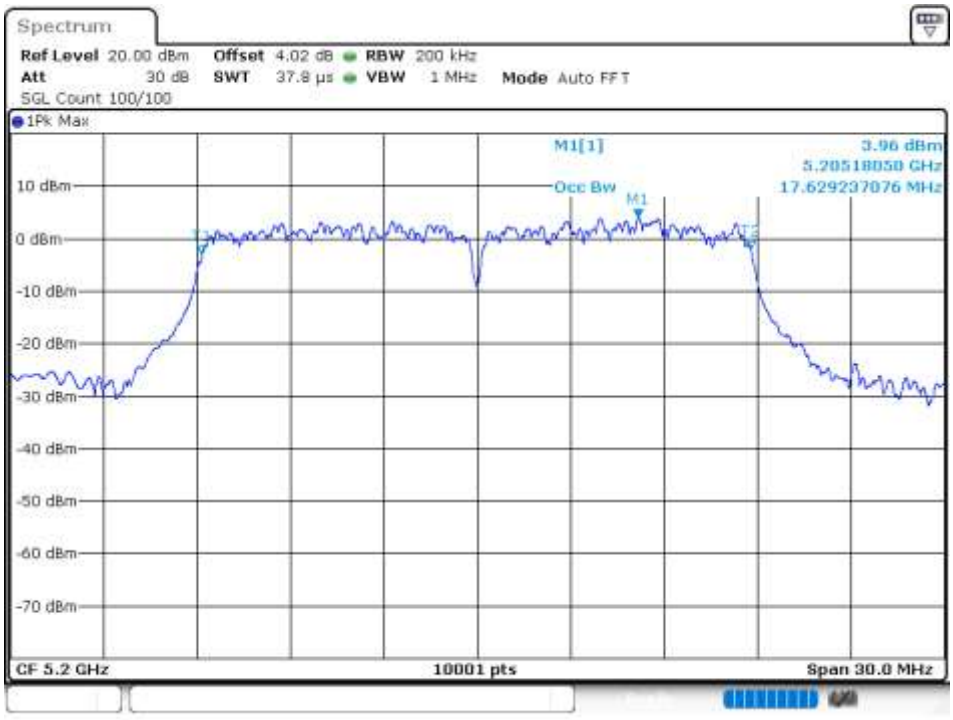
OBW NVNT a 5240MHz Ant1



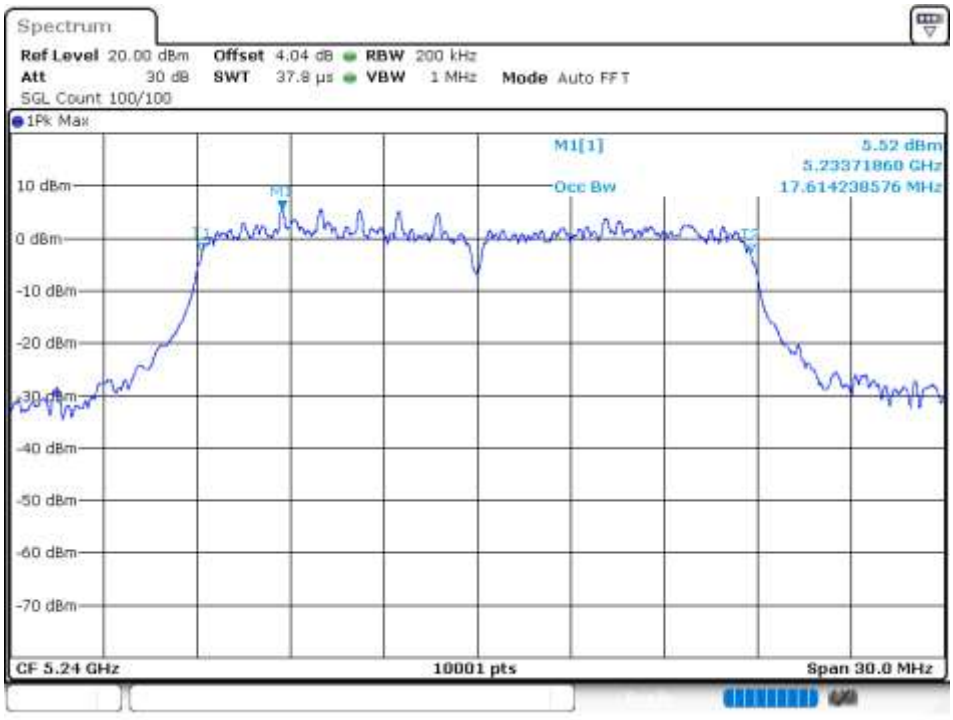
OBW NVNT n20 5180MHz Ant1



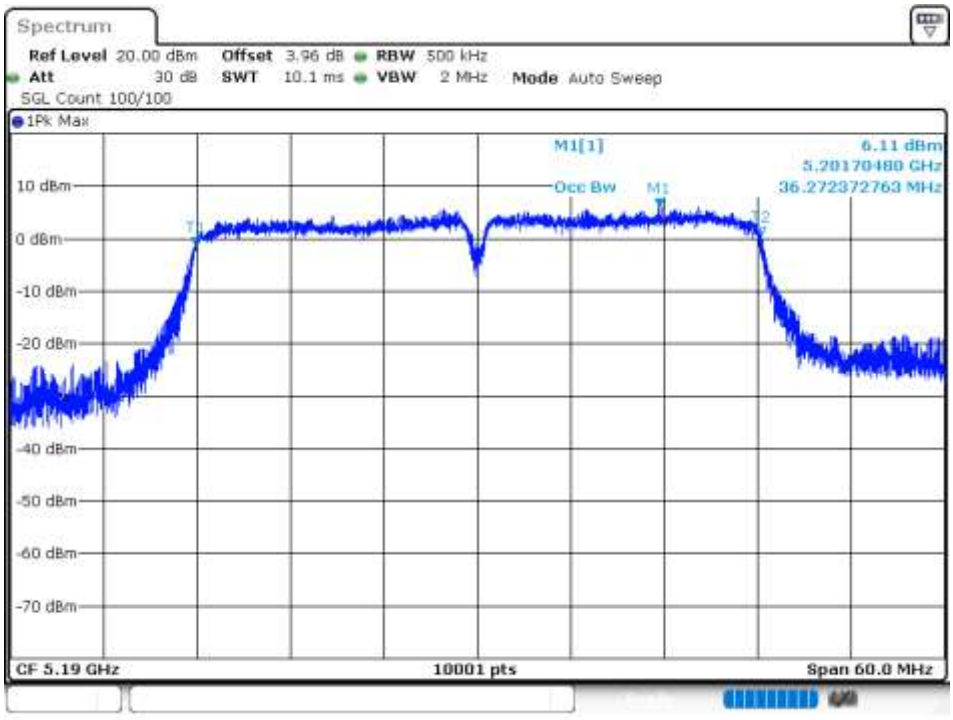
OBW NVNT n20 5200MHz Ant1



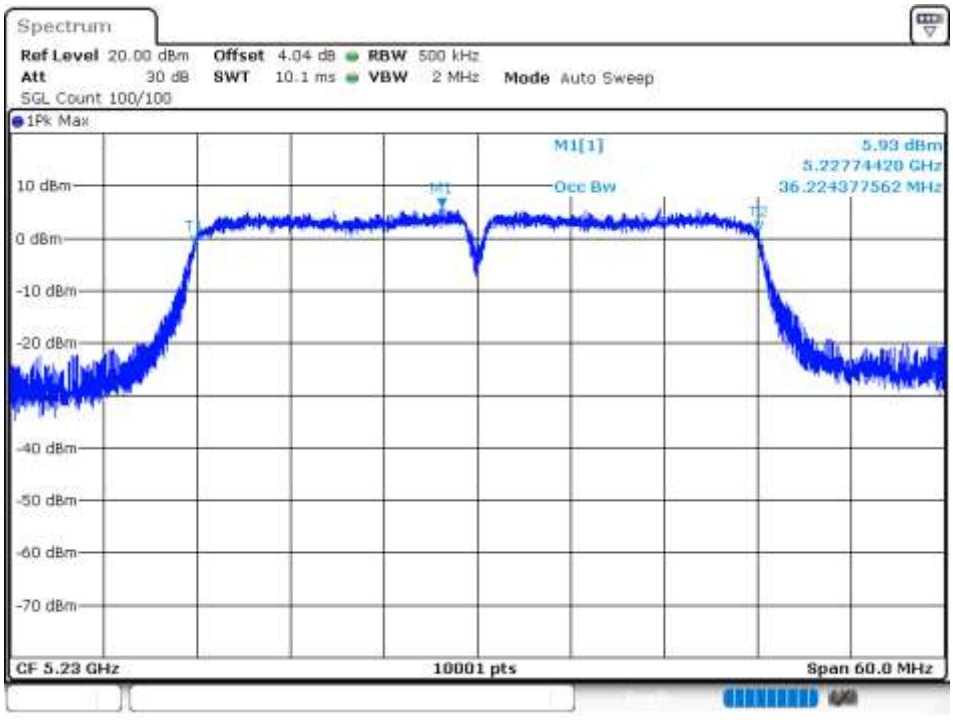
OBW NVNT n20 5240MHz Ant1



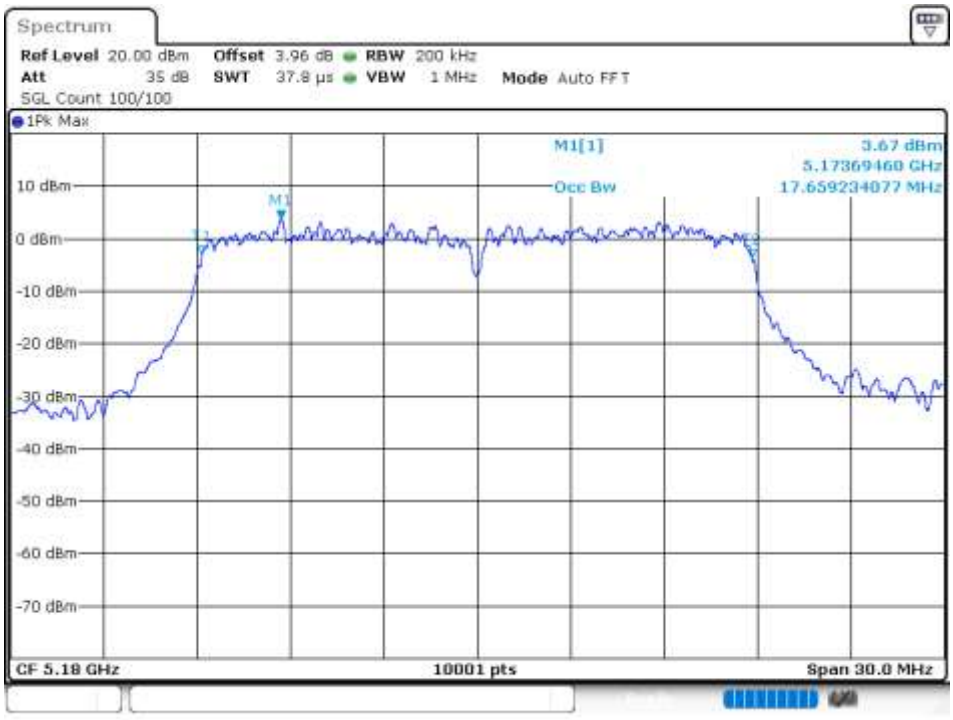
OBW NVNT n40 5190MHz Ant1



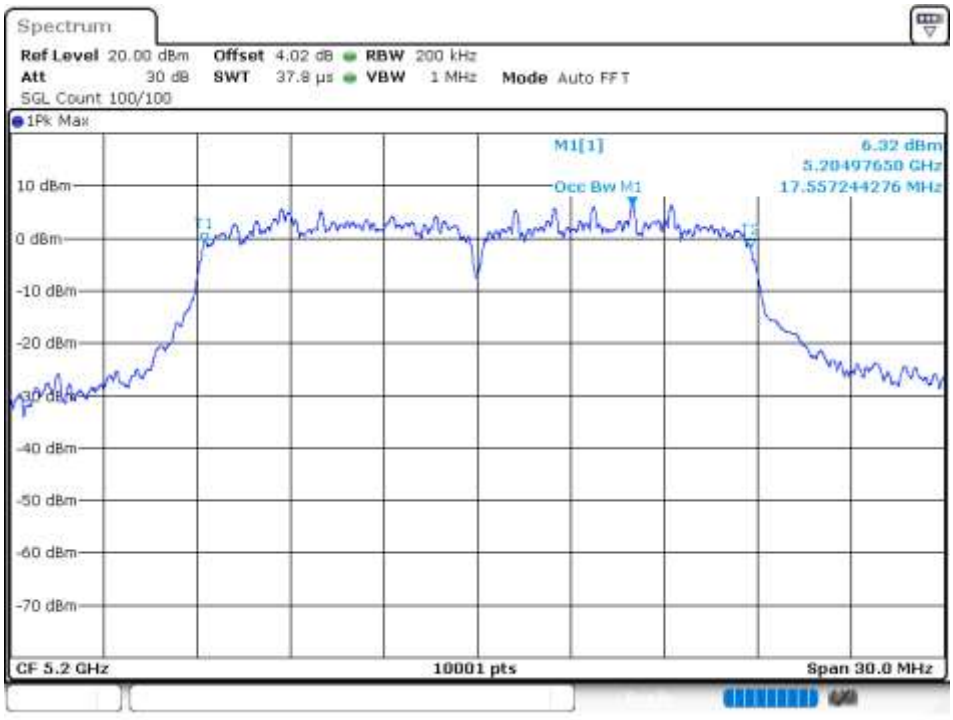
OBW NVNT n40 5230MHz Ant1



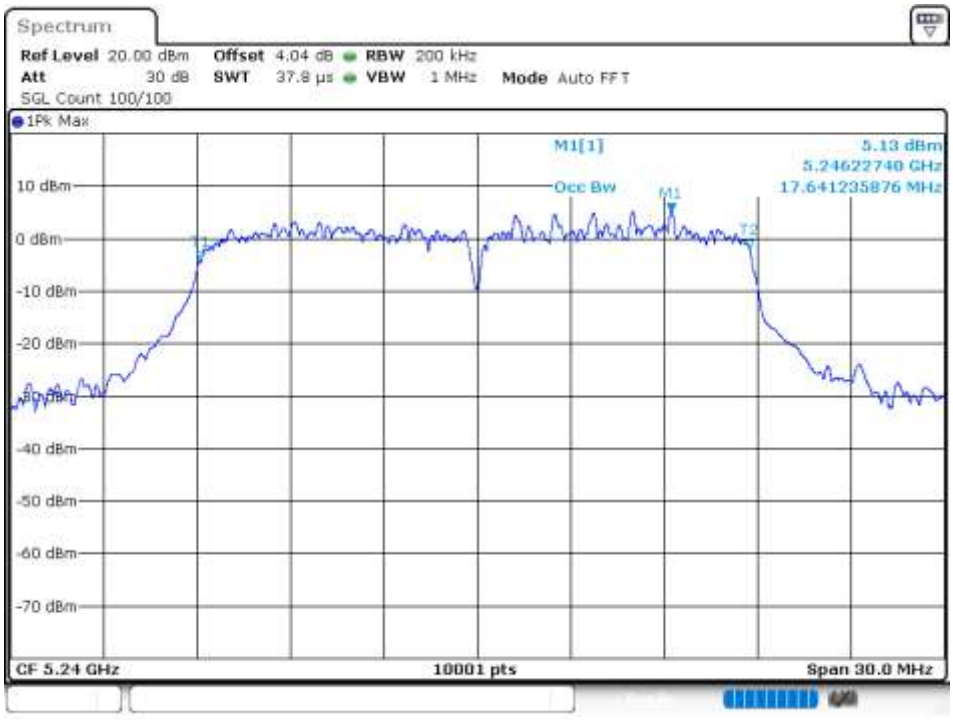
OBW NVNT ac20 5180MHz Ant1



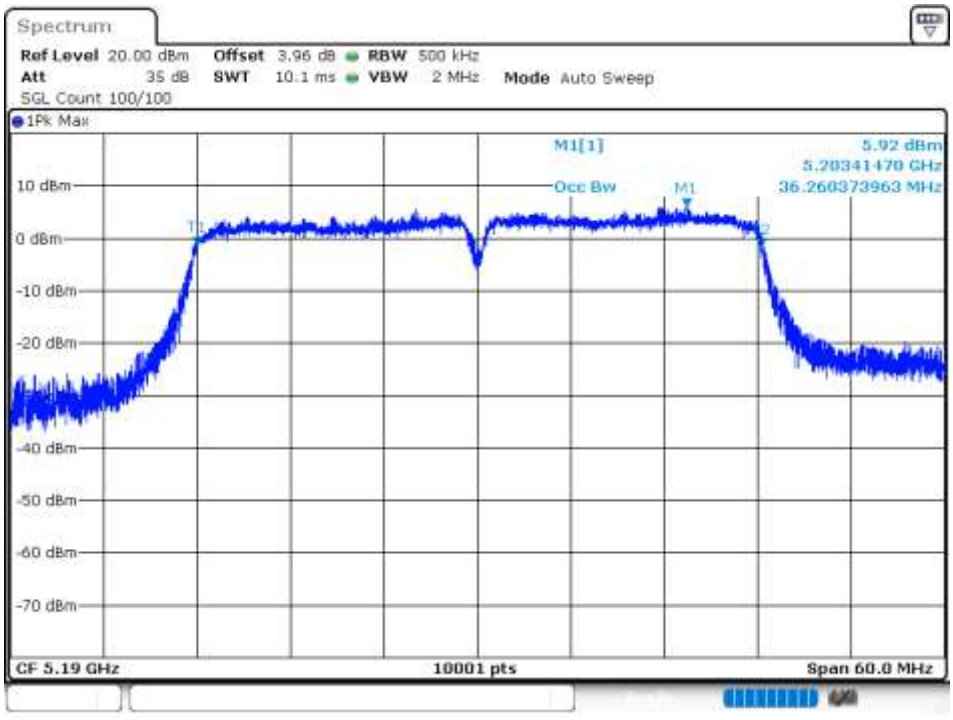
OBW NVNT ac20 5200MHz Ant1



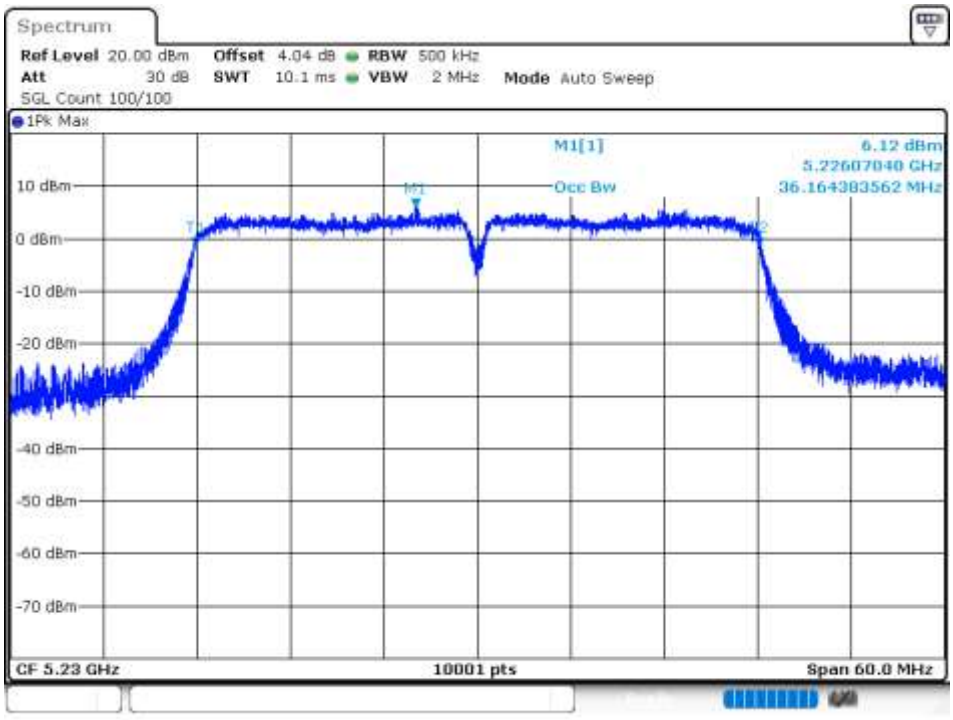
OBW NVNT ac20 5240MHz Ant1



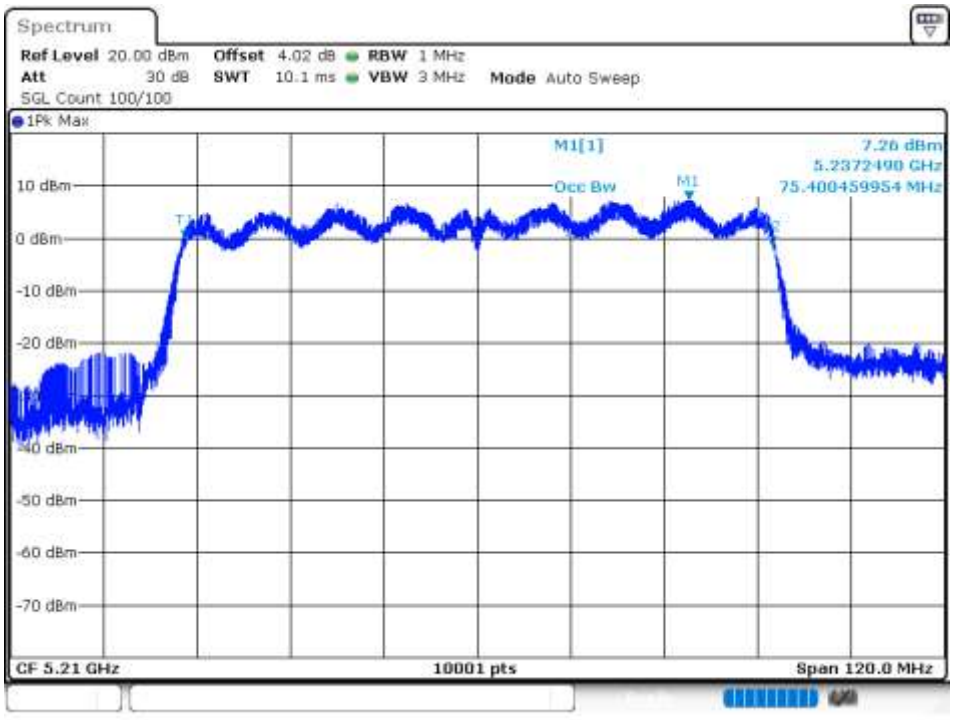
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1

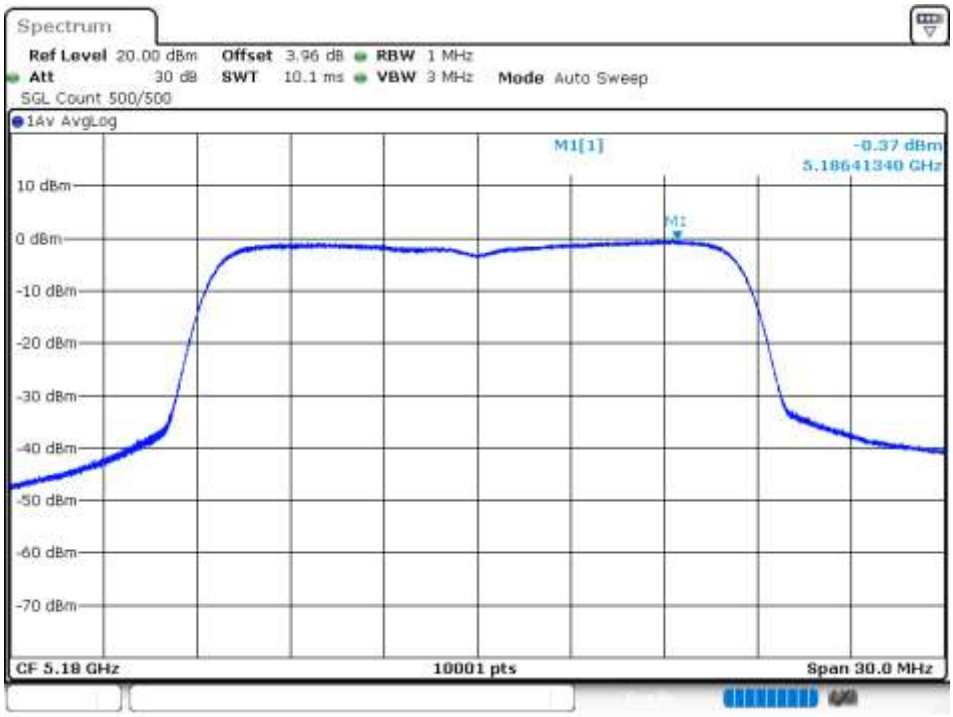
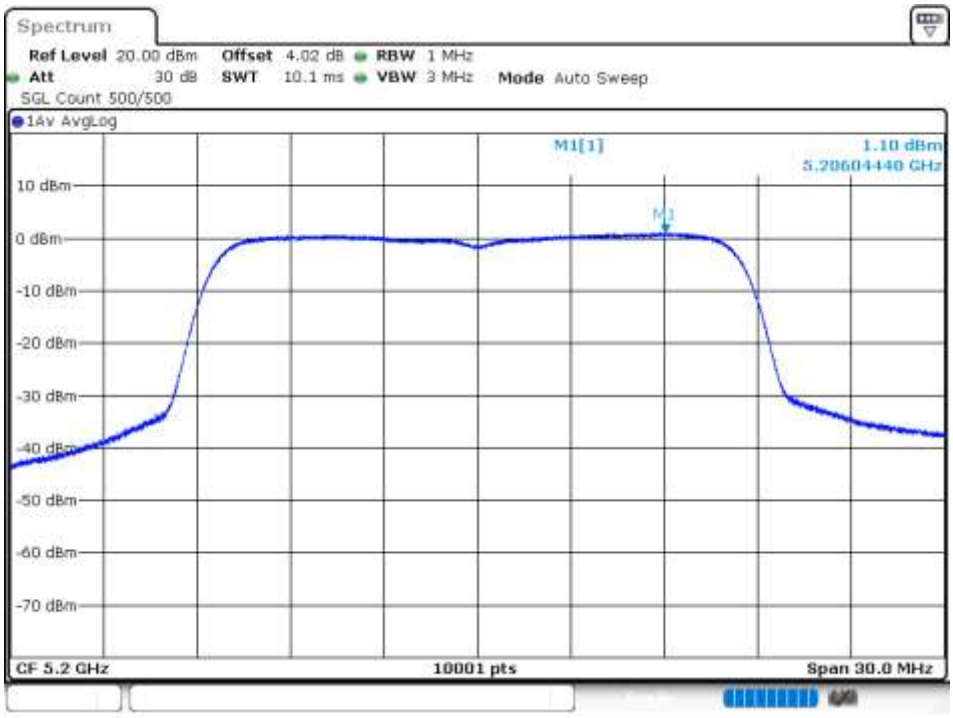


OBW NVNT ac80 5210MHz Ant1

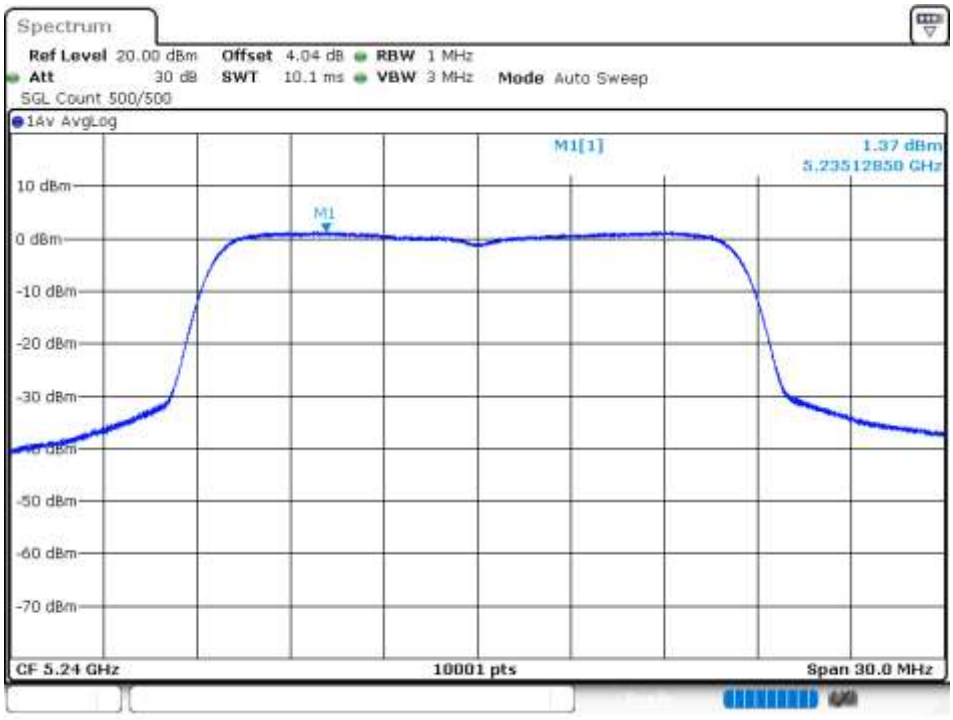


Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-0.37	0	-0.37	11	Pass
NVNT	a	5200	Ant1	1.1	0	1.1	11	Pass
NVNT	a	5240	Ant1	1.37	0	1.37	11	Pass
NVNT	n20	5180	Ant1	0.62	0	0.62	11	Pass
NVNT	n20	5200	Ant1	0.61	0	0.61	11	Pass
NVNT	n20	5240	Ant1	0.68	0	0.68	11	Pass
NVNT	n40	5190	Ant1	-2.44	0	-2.44	11	Pass
NVNT	n40	5230	Ant1	-2.94	0	-2.94	11	Pass
NVNT	ac20	5180	Ant1	0.77	0	0.77	11	Pass
NVNT	ac20	5200	Ant1	2.01	0	2.01	11	Pass
NVNT	ac20	5240	Ant1	1.15	0	1.15	11	Pass
NVNT	ac40	5190	Ant1	-2.34	0	-2.34	11	Pass
NVNT	ac40	5230	Ant1	-2.87	0	-2.87	11	Pass
NVNT	ac80	5210	Ant1	-5.02	0	-5.02	11	Pass

Test Graphs
PSD NVNT a 5180MHz Ant1

PSD NVNT a 5200MHz Ant1


PSD NVNT a 5240MHz Ant1



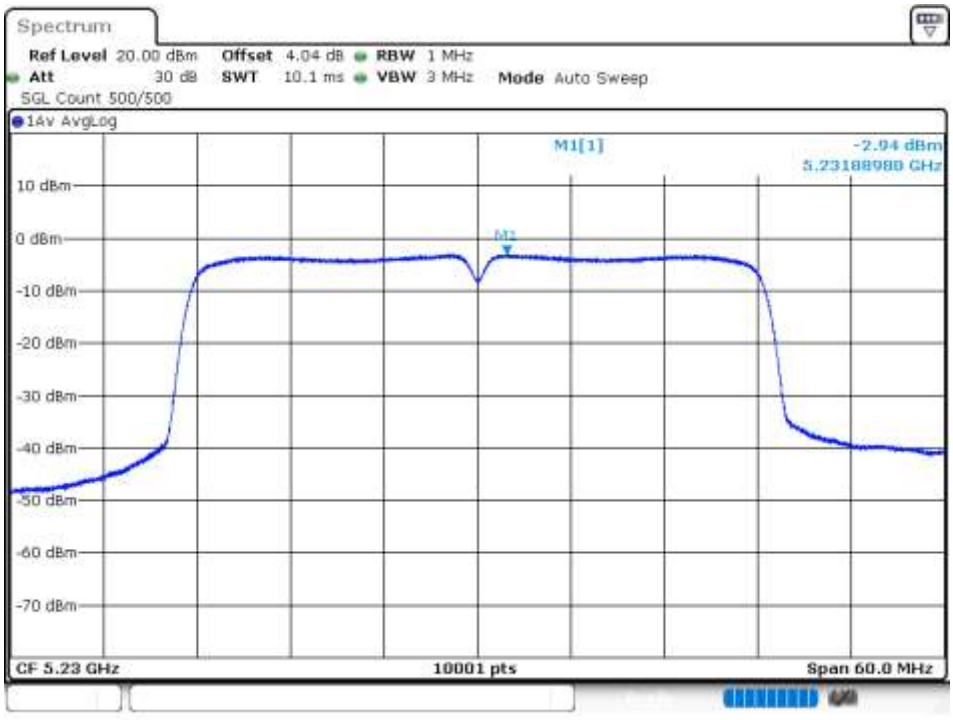
PSD NVNT n20 5180MHz Ant1

PSD NVNT n20 5200MHz Ant1

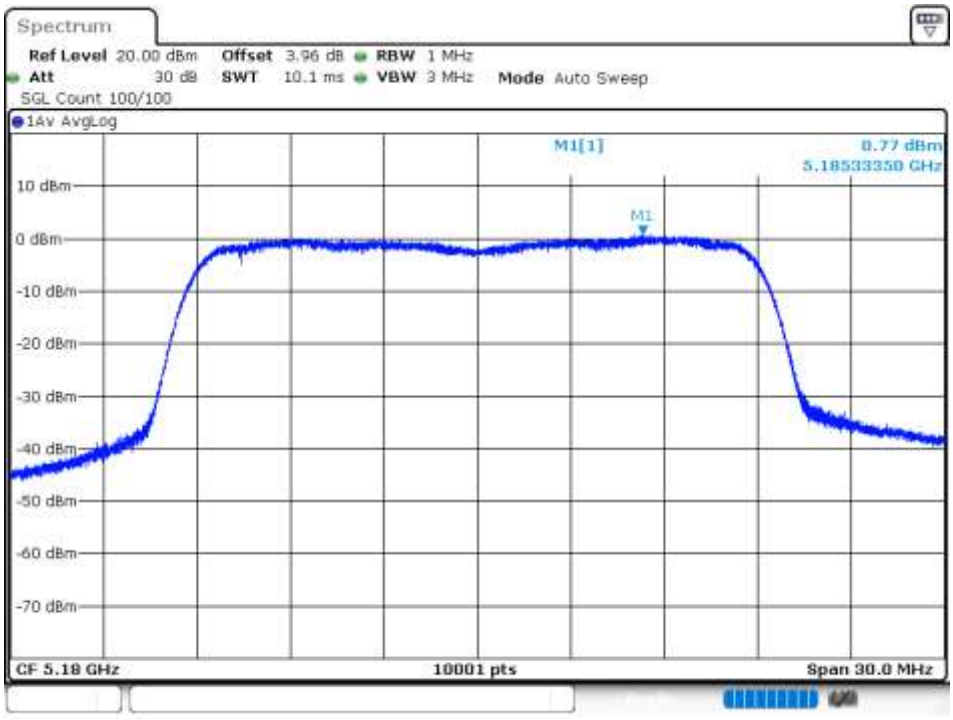
PSD NVNT n20 5240MHz Ant1

PSD NVNT n40 5190MHz Ant1

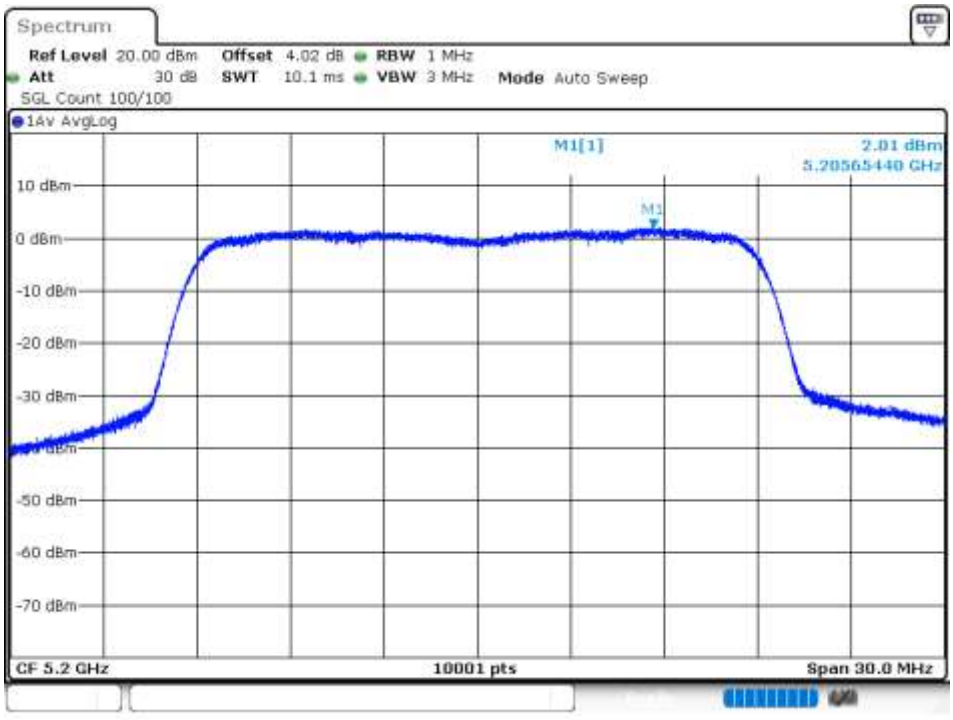
PSD NVNT n40 5230MHz Ant1



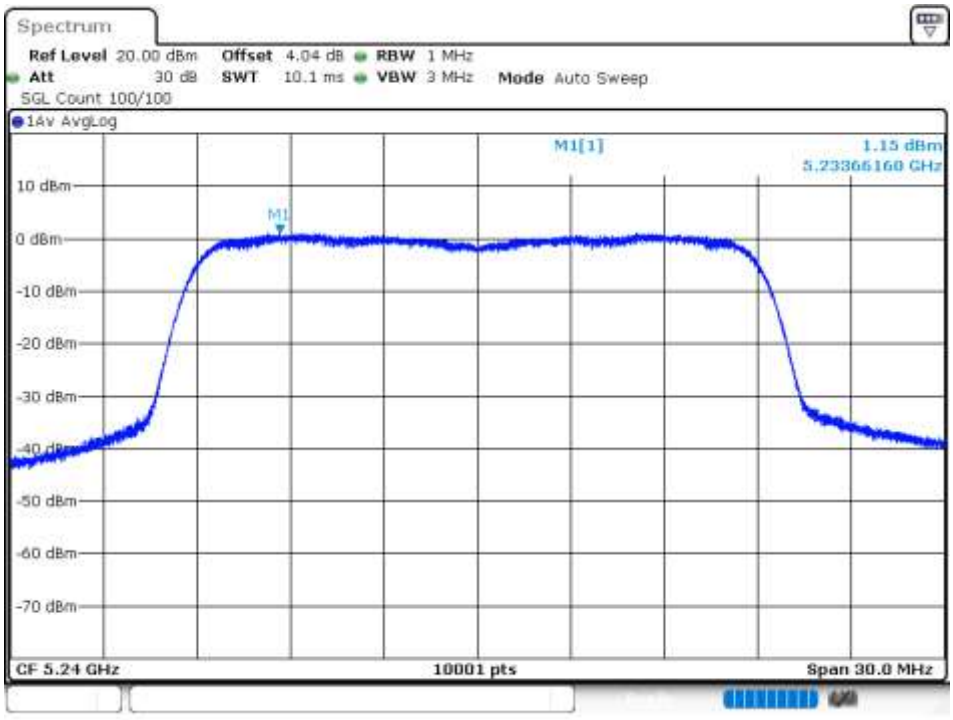
PSD NVNT ac20 5180MHz Ant1



PSD NVNT ac20 5200MHz Ant1



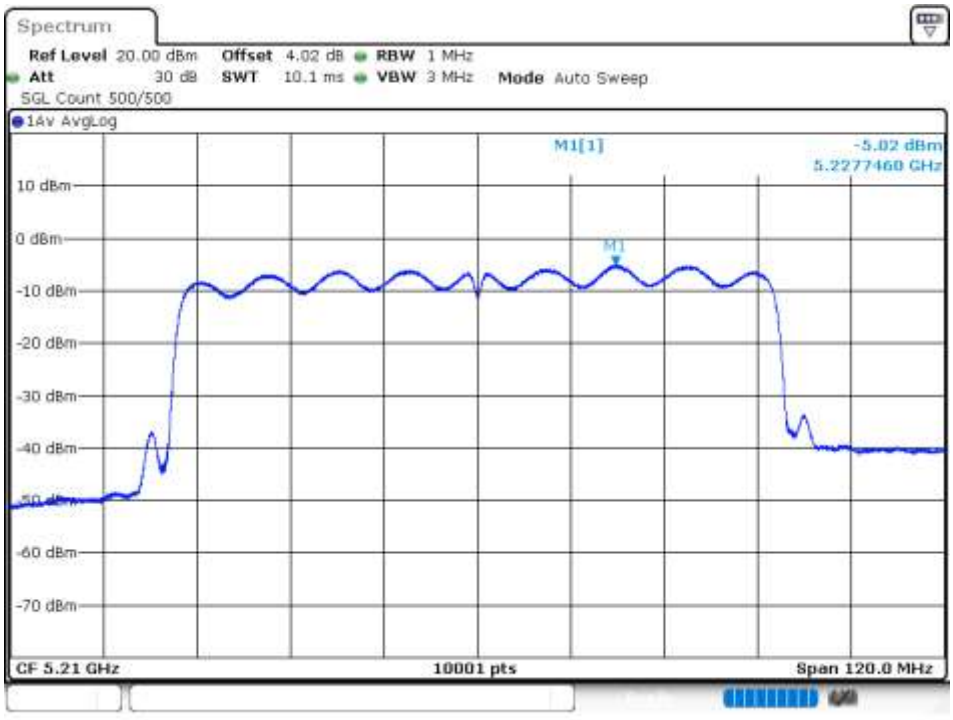
PSD NVNT ac20 5240MHz Ant1



PSD NVNT ac40 5190MHz Ant1

PSD NVNT ac40 5230MHz Ant1

PSD NVNT ac80 5210MHz Ant1

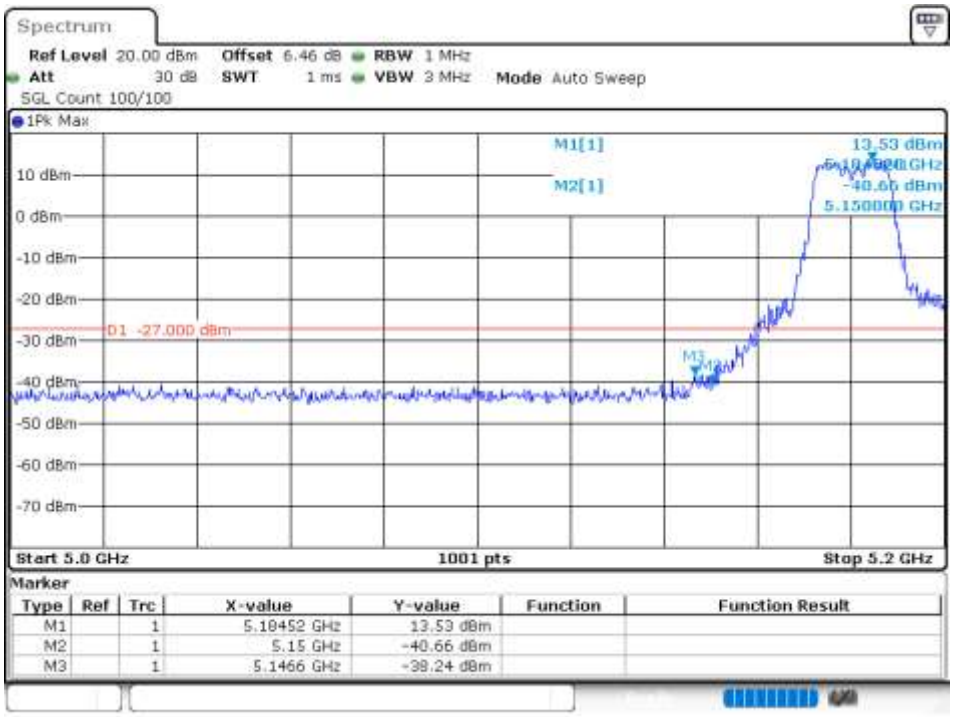


Band Edge

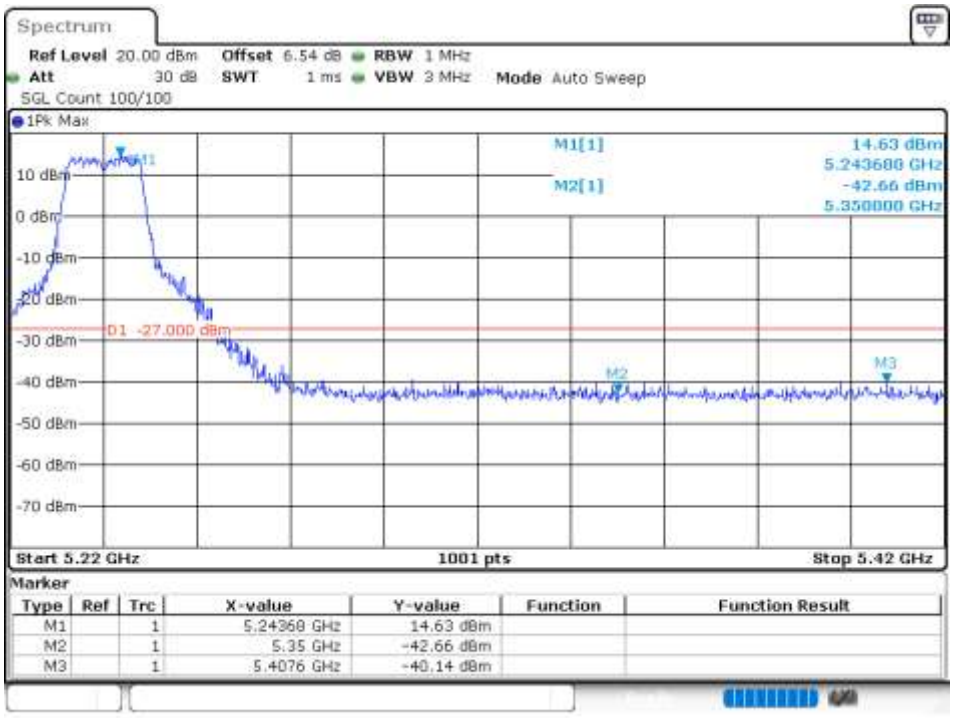
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-38.24	-27	Pass
NVNT	a	5240	Ant1	-40.13	-27	Pass
NVNT	n20	5180	Ant1	-34.47	-27	Pass
NVNT	n20	5240	Ant1	-40.31	-27	Pass
NVNT	n40	5190	Ant1	-27.05	-27	Pass
NVNT	n40	5230	Ant1	-40.92	-27	Pass
NVNT	ac20	5180	Ant1	-34.17	-27	Pass
NVNT	ac20	5240	Ant1	-40.5	-27	Pass
NVNT	ac40	5190	Ant1	-27.25	-27	Pass
NVNT	ac40	5230	Ant1	-40.92	-27	Pass
NVNT	ac80	5210	Ant1	-33.69	-27	Pass
NVNT	ac80	5210	Ant1	-37.36	-27	Pass

Note: This test has increased antenna gain .

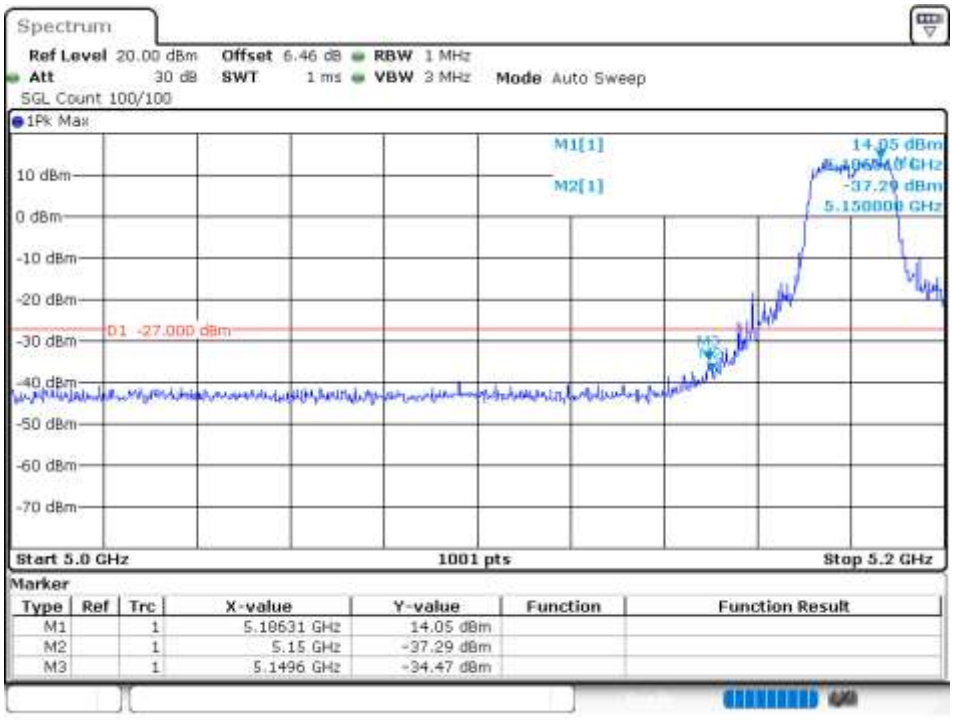
Test Graphs
Band Edge NVNT a 5180MHz Low Ant1



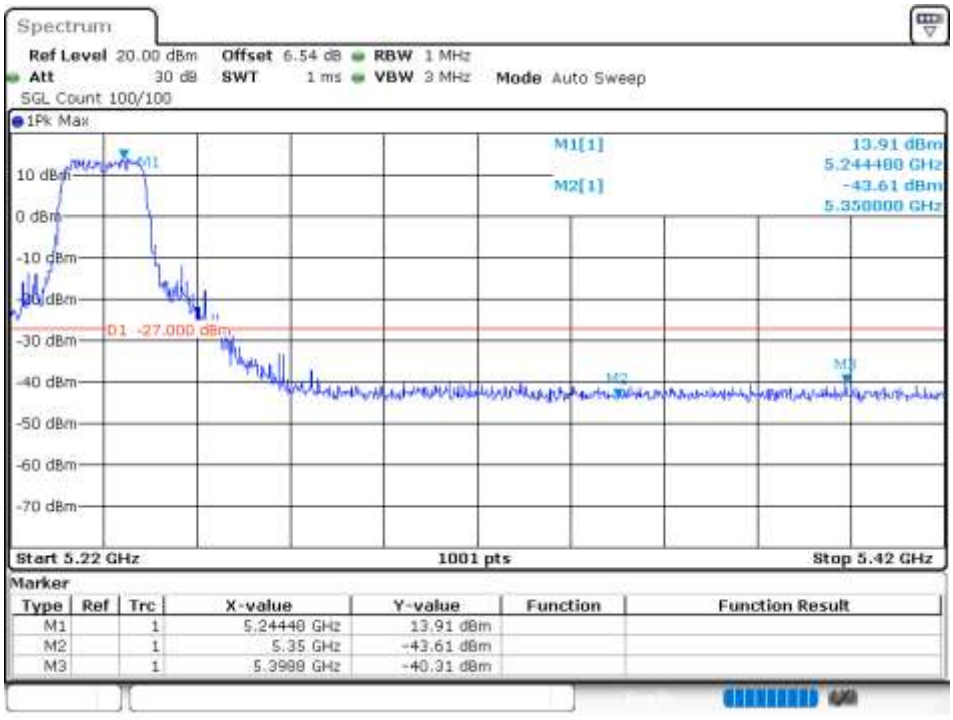
Band Edge NVNT a 5240MHz High Ant1



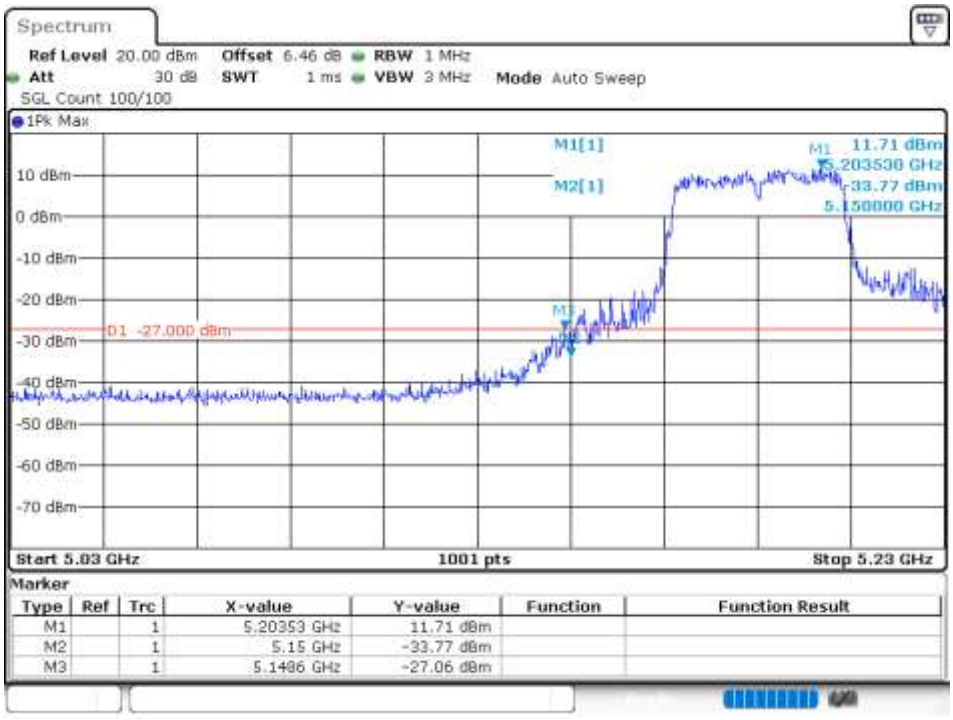
Band Edge NVNT n20 5180MHz Low Ant1



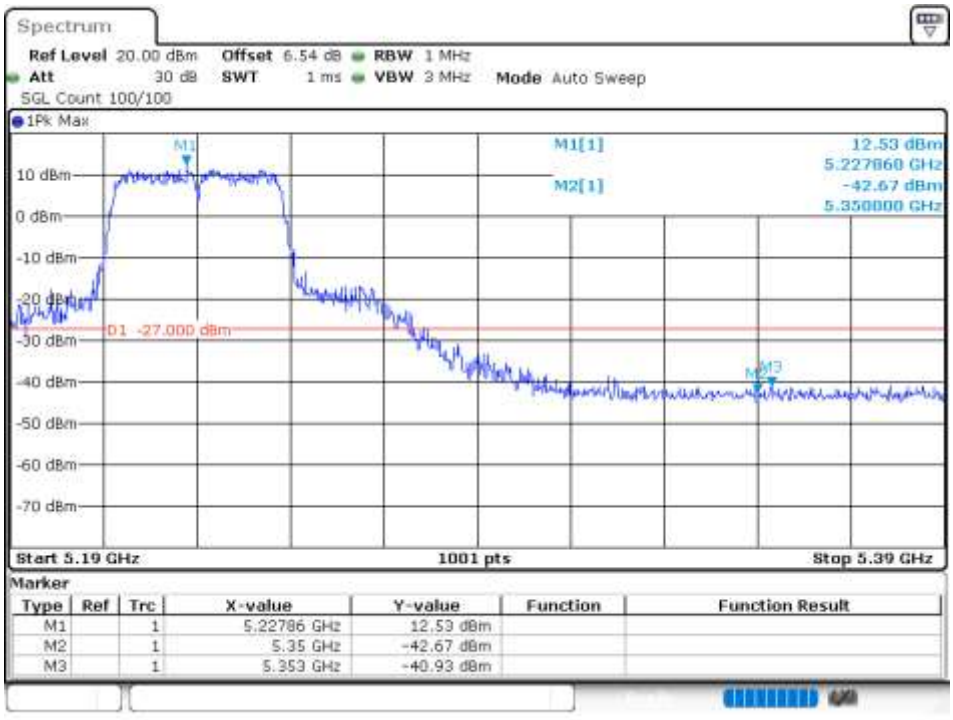
Band Edge NVNT n20 5240MHz High Ant1

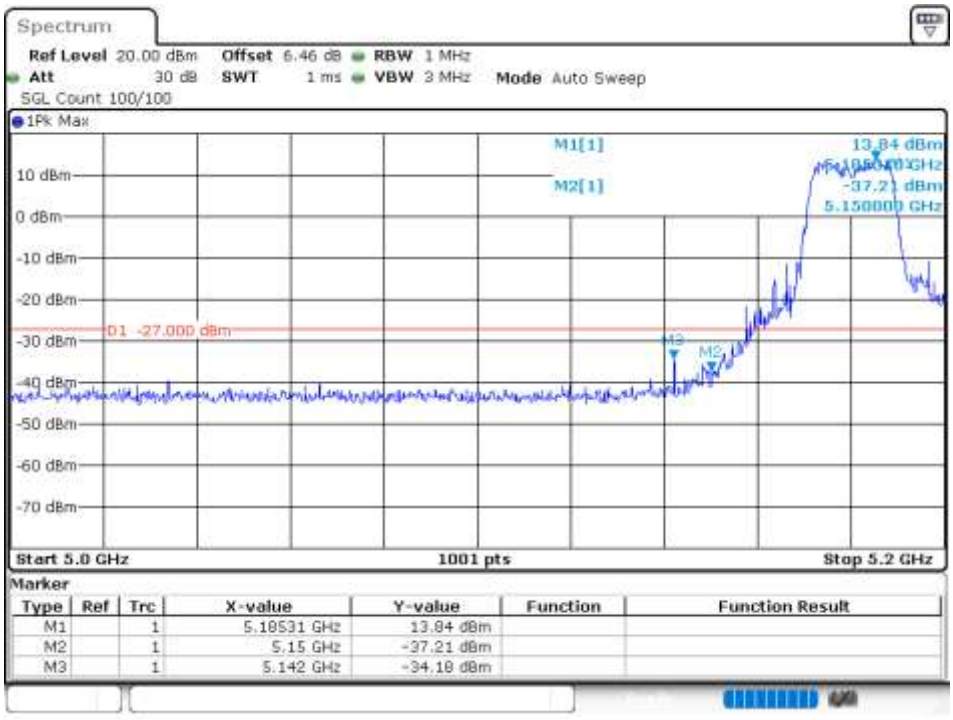


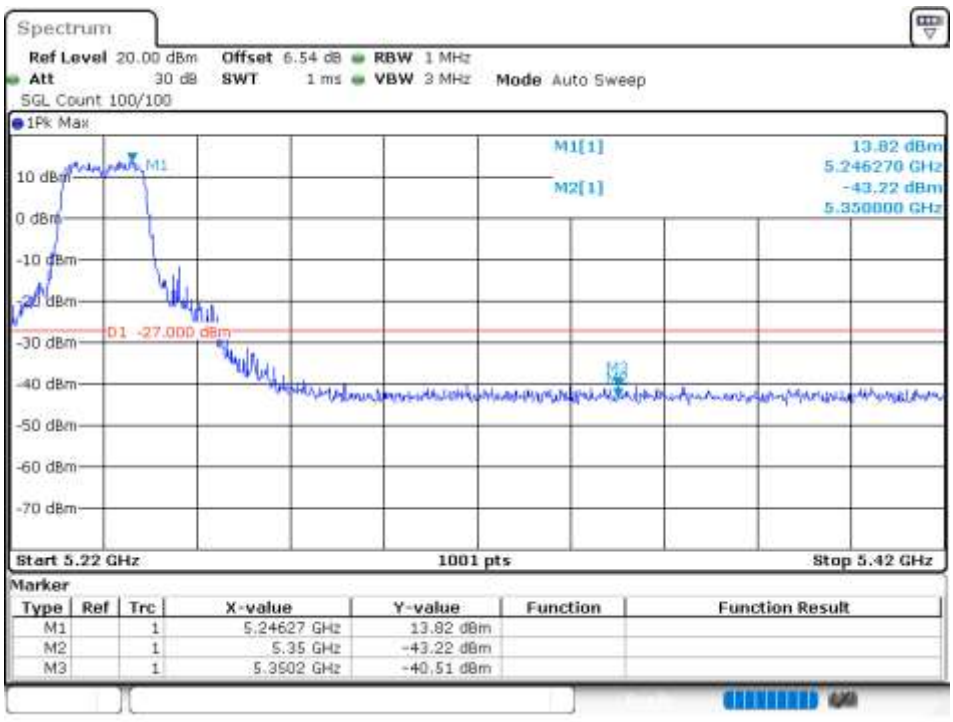
Band Edge NVNT n40 5190MHz Low Ant1



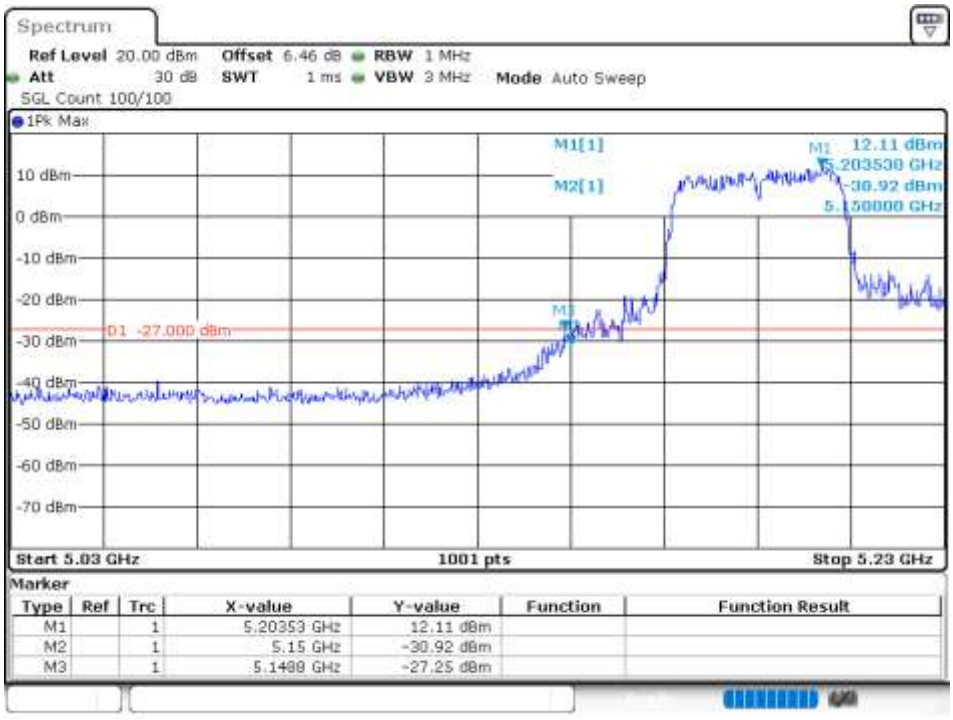
Band Edge NVNT n40 5230MHz High Ant1



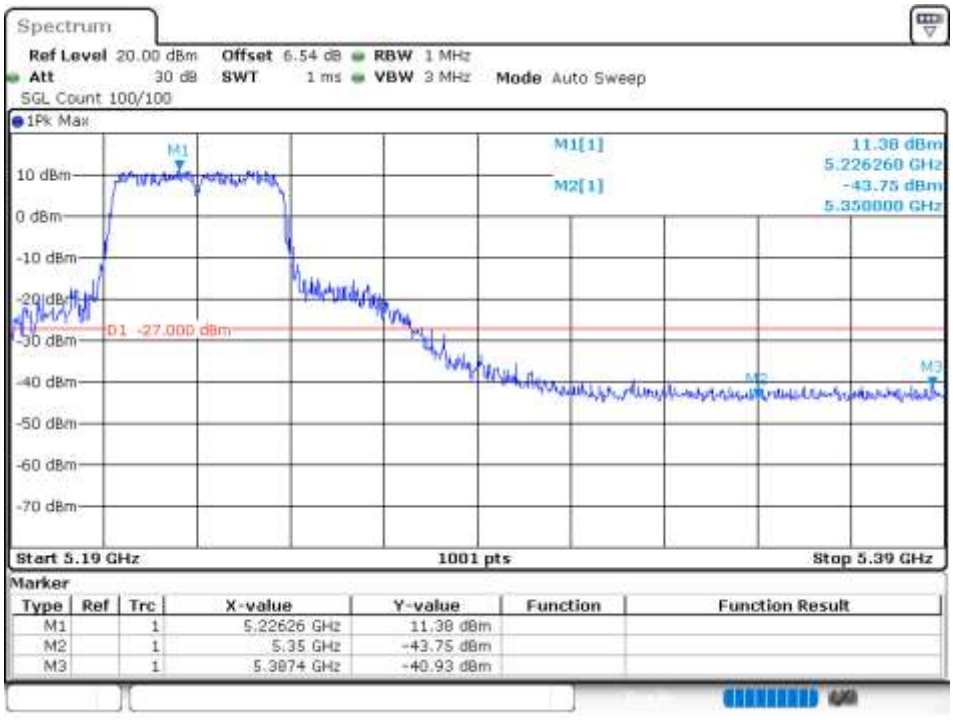
Band Edge NVNT ac20 5180MHz Low Ant1


Band Edge NVNT ac20 5240MHz High Ant1


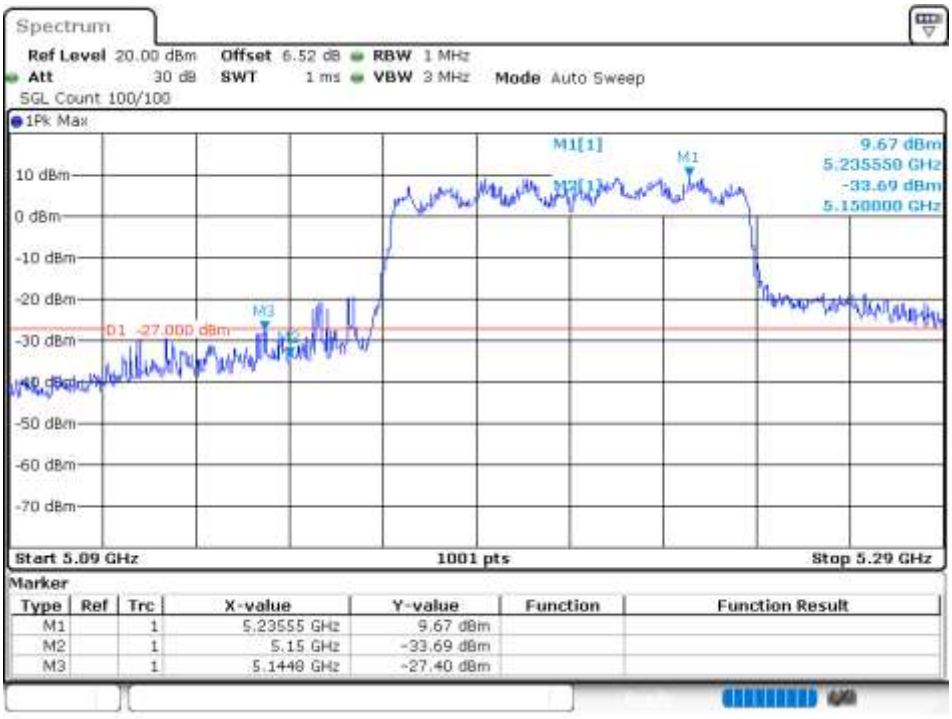
Band Edge NVNT ac40 5190MHz Low Ant1



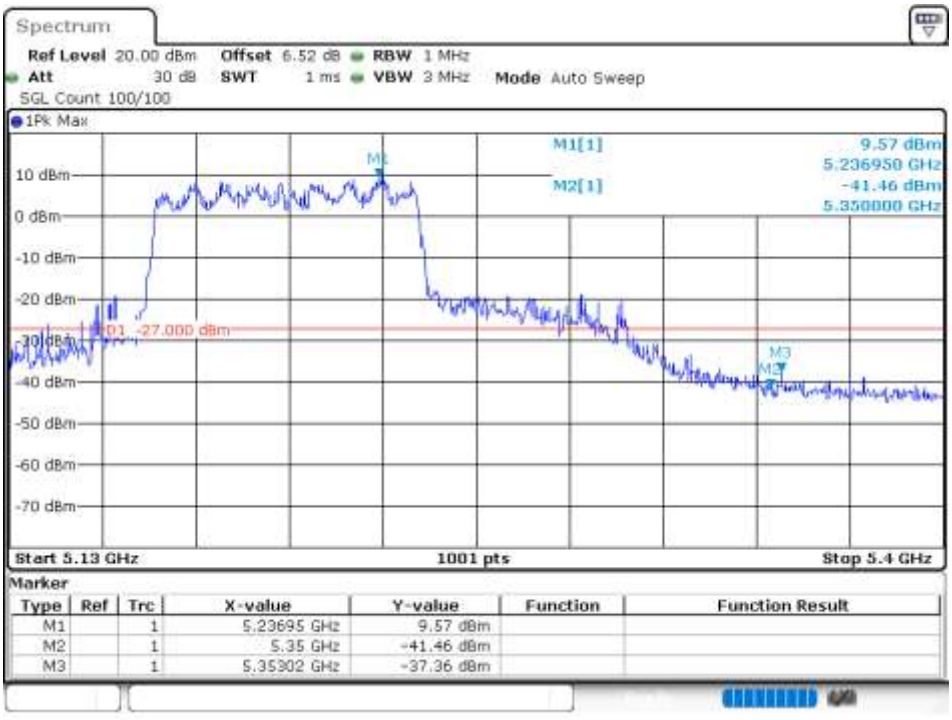
Band Edge NVNT ac40 5230MHz High Ant1



Band Edge NVNT ac80 5210MHz High Ant1



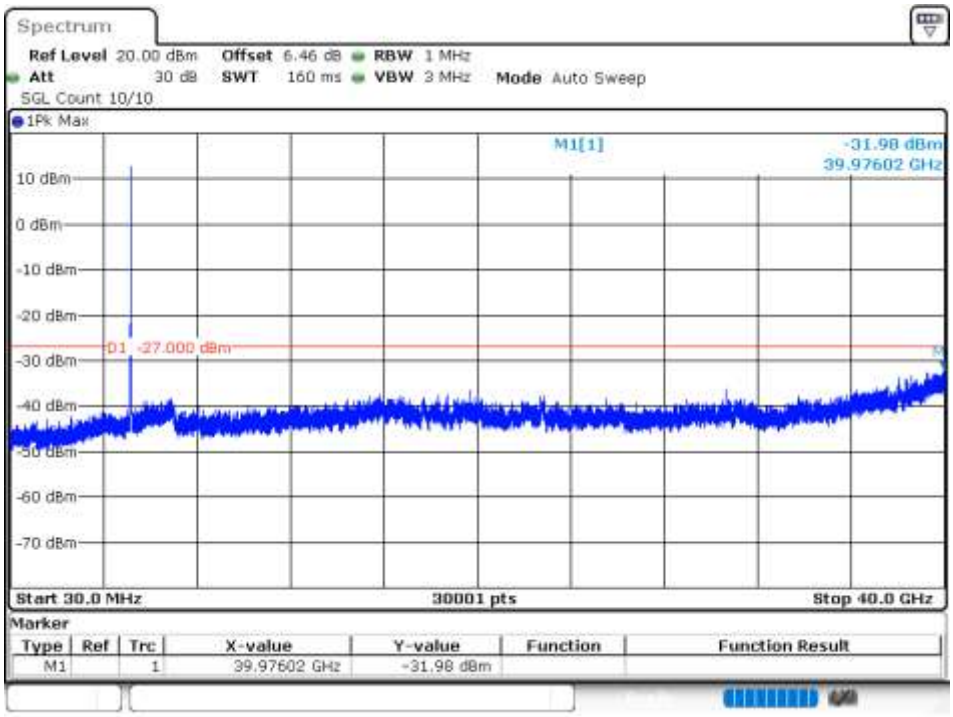
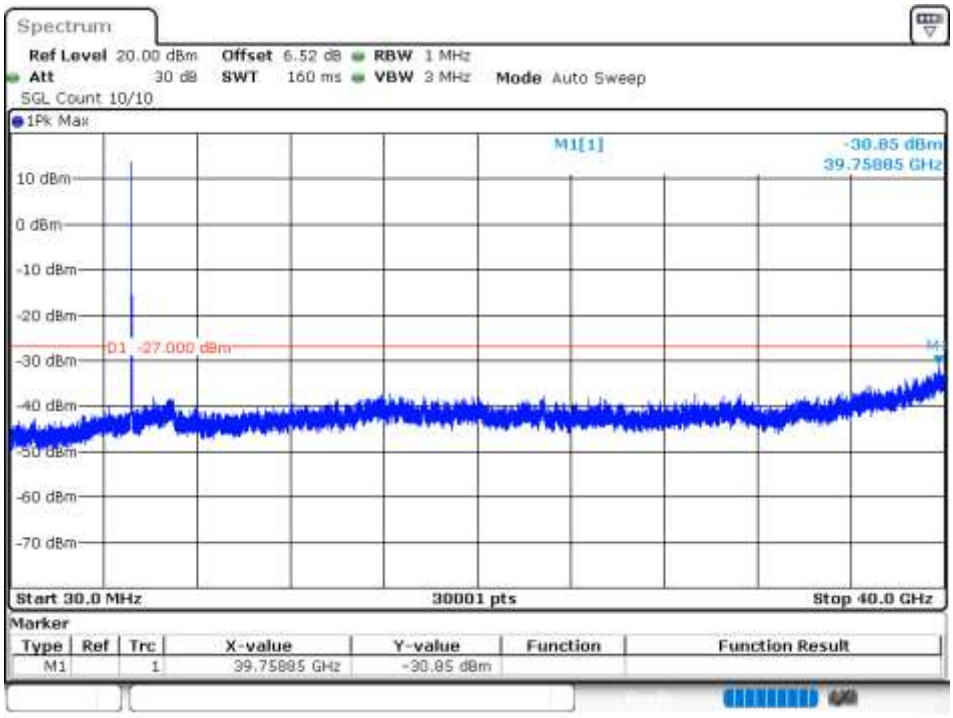
Band Edge NVNT ac80 5210MHz High Ant1



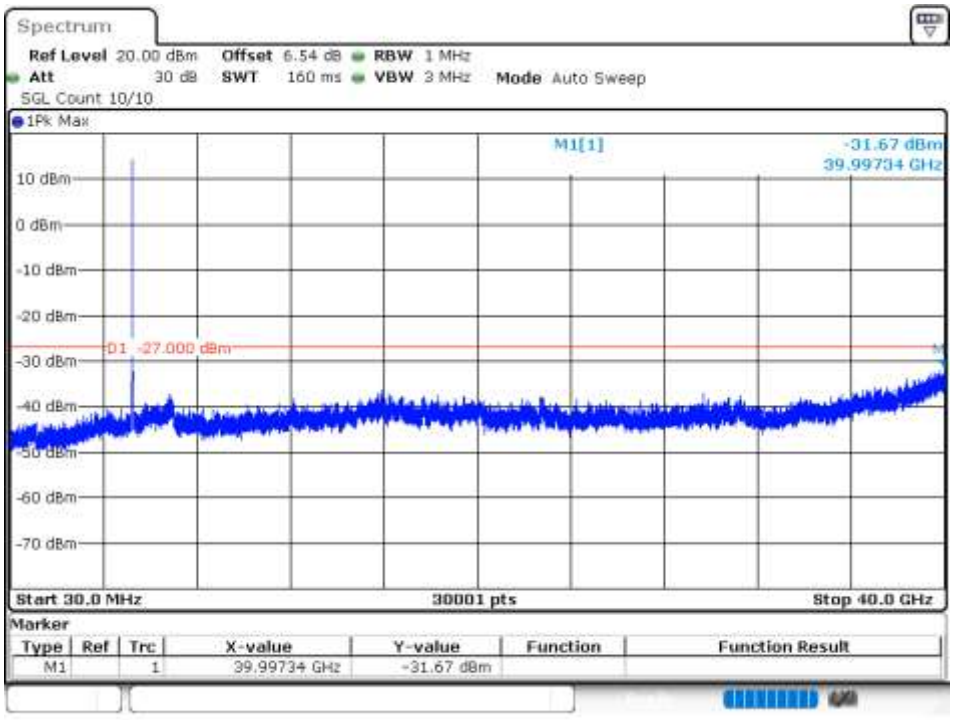
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-31.97	-27	Pass
NVNT	a	5200	Ant1	-30.85	-27	Pass
NVNT	a	5240	Ant1	-31.66	-27	Pass
NVNT	n20	5180	Ant1	-31.77	-27	Pass
NVNT	n20	5200	Ant1	-32.23	-27	Pass
NVNT	n20	5240	Ant1	-31.29	-27	Pass
NVNT	n40	5190	Ant1	-31.58	-27	Pass
NVNT	n40	5230	Ant1	-32.3	-27	Pass
NVNT	ac20	5180	Ant1	-31.9	-27	Pass
NVNT	ac20	5200	Ant1	-31.83	-27	Pass
NVNT	ac20	5240	Ant1	-31.76	-27	Pass
NVNT	ac40	5190	Ant1	-32.03	-27	Pass
NVNT	ac40	5230	Ant1	-32.13	-27	Pass
NVNT	ac80	5210	Ant1	-31.61	-27	Pass

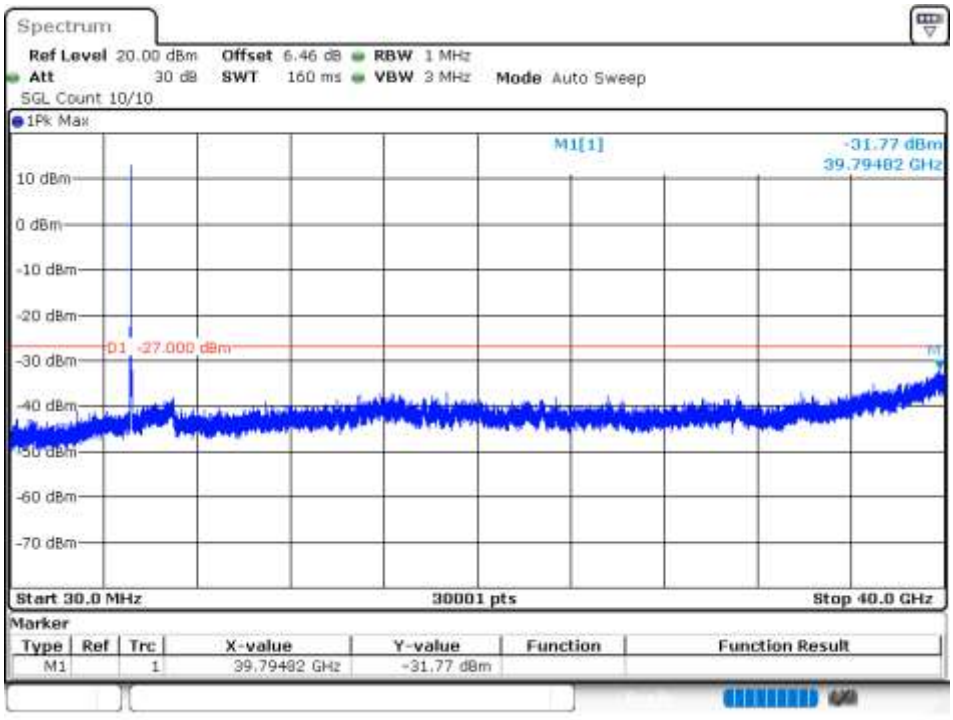
Note: This test has increased antenna gain .

Test Graphs
Tx. Spurious NVNT a 5180MHz Ant1 Emission

Tx. Spurious NVNT a 5200MHz Ant1 Emission


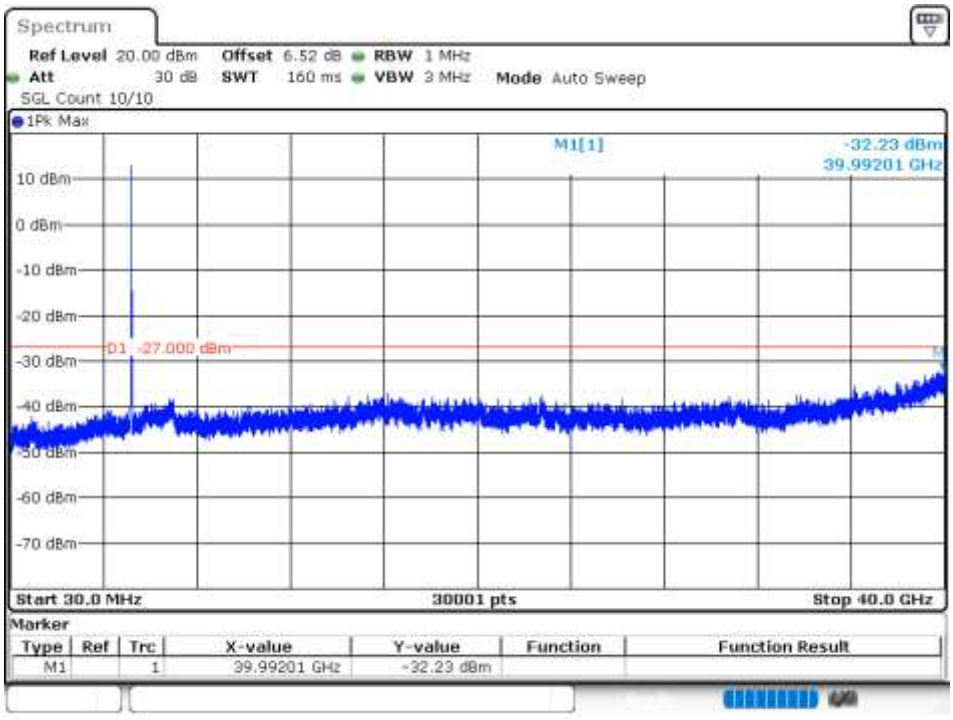
Tx. Spurious NVNT a 5240MHz Ant1 Emission



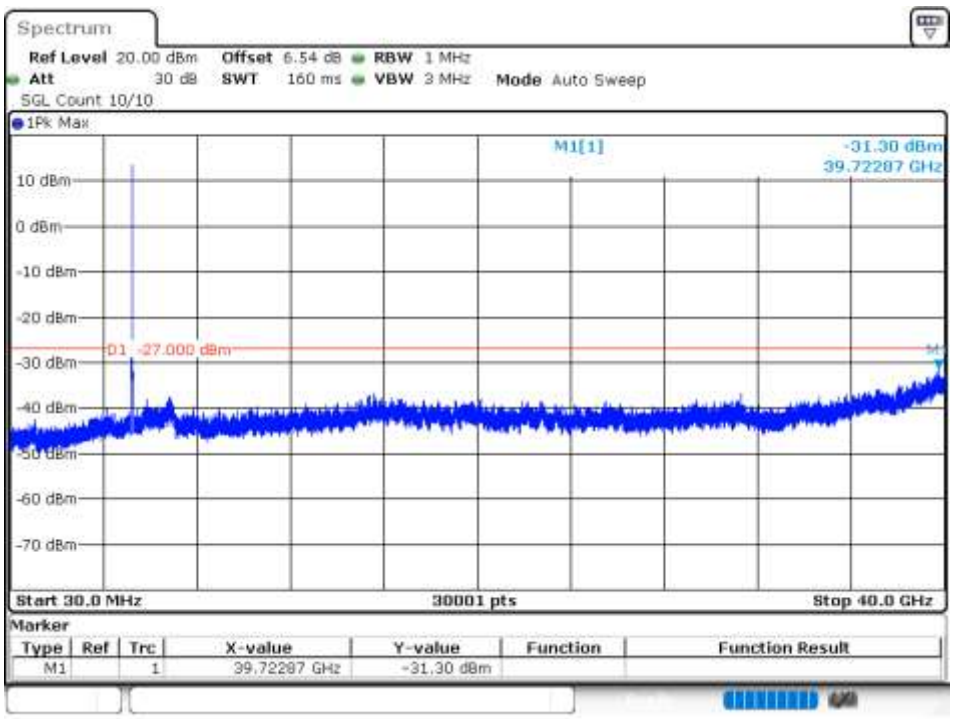
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



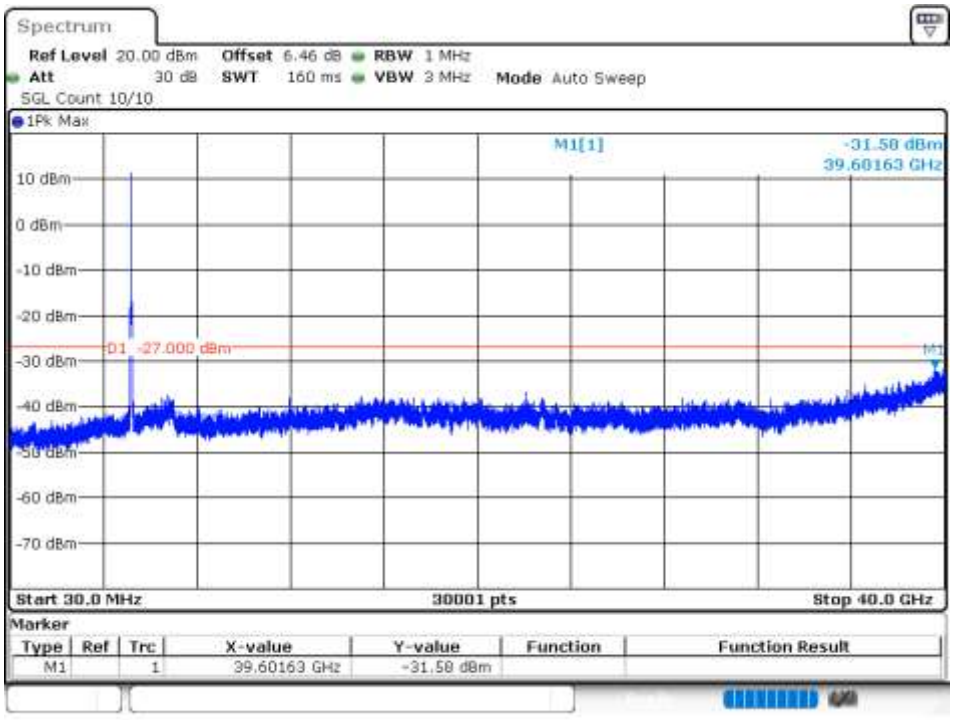
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



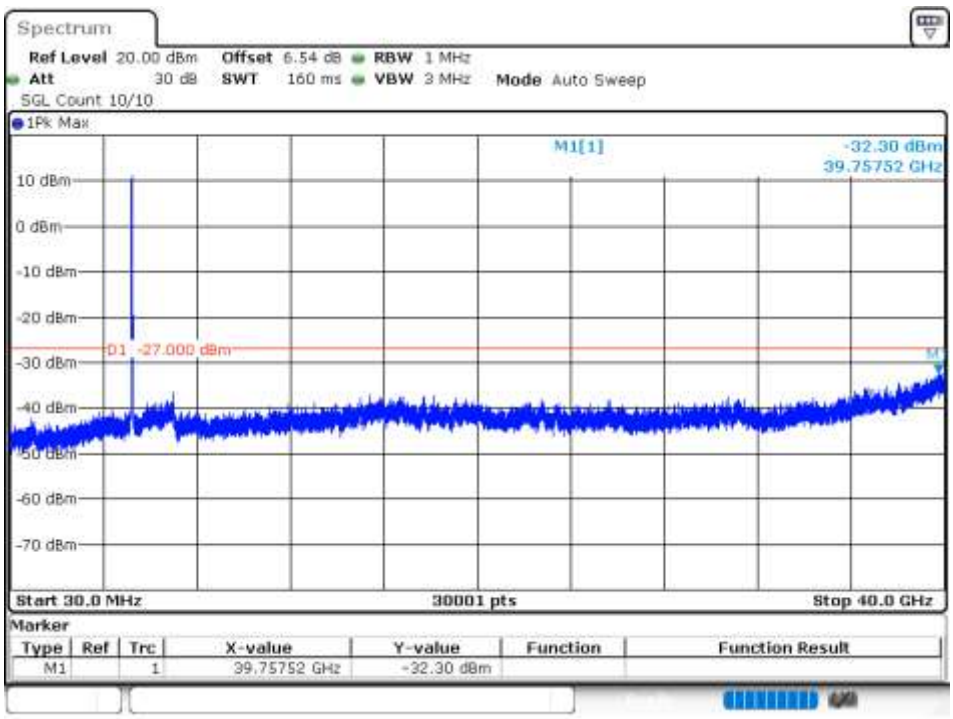
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



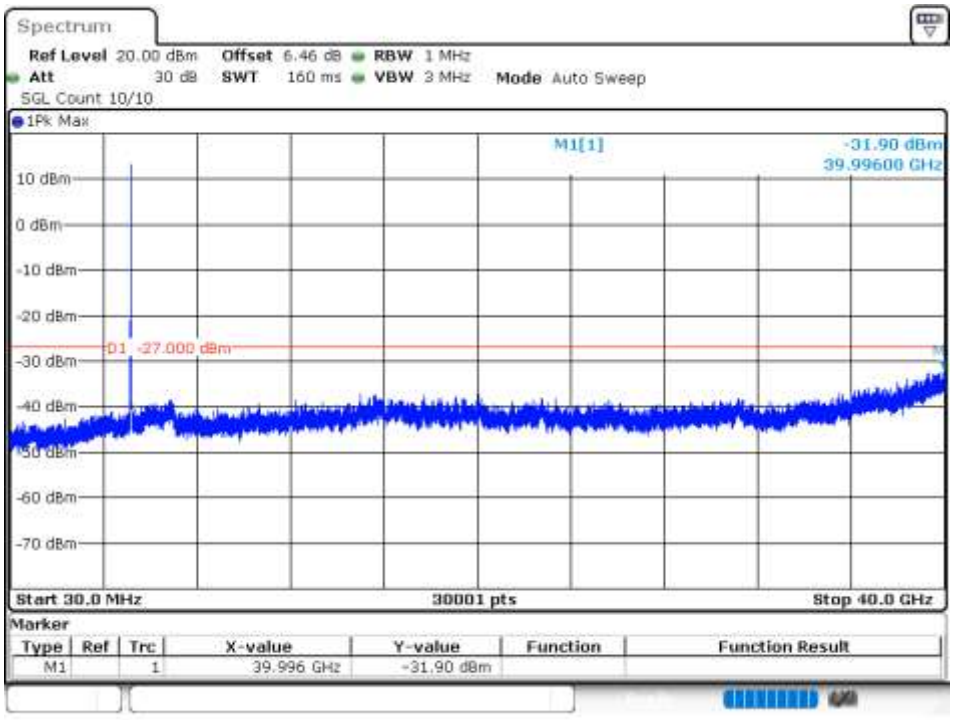
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



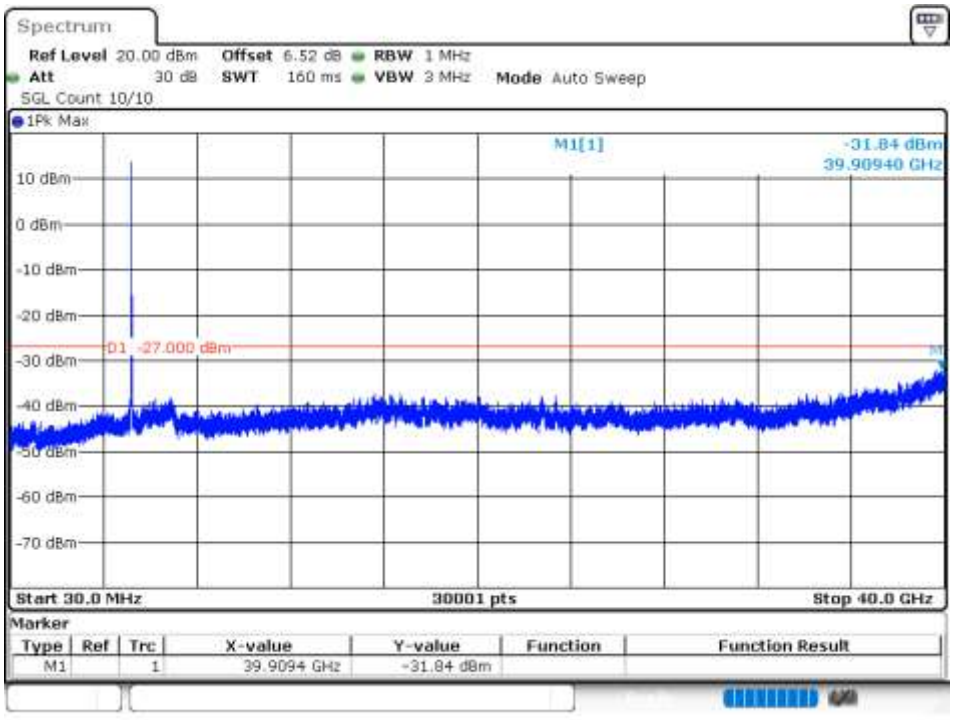
Tx. Spurious NVNT n40 5230MHz Ant1 Emission

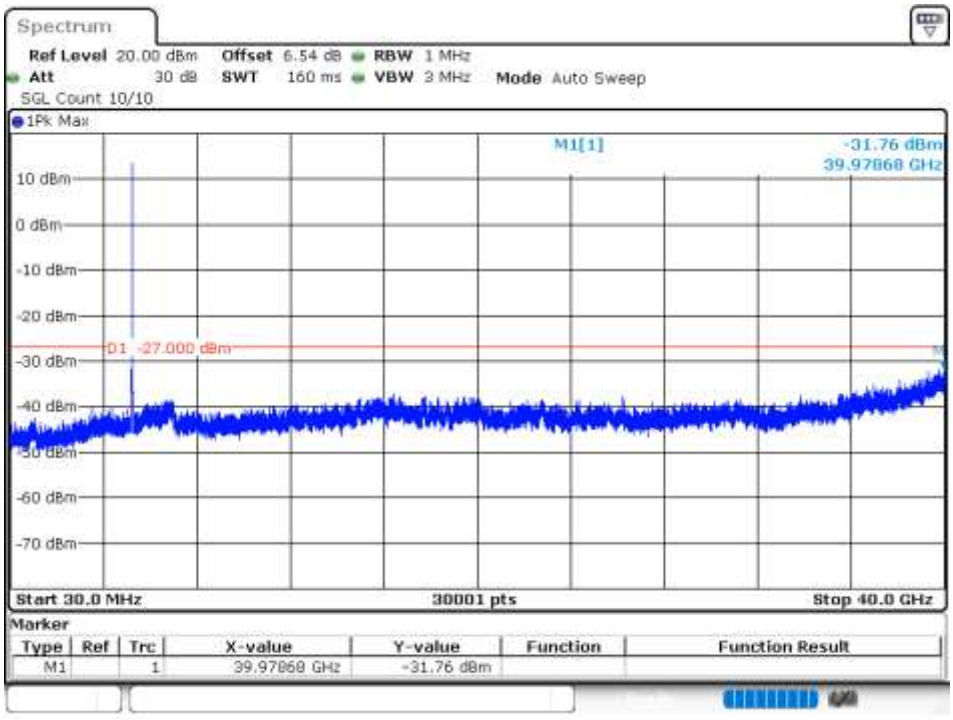


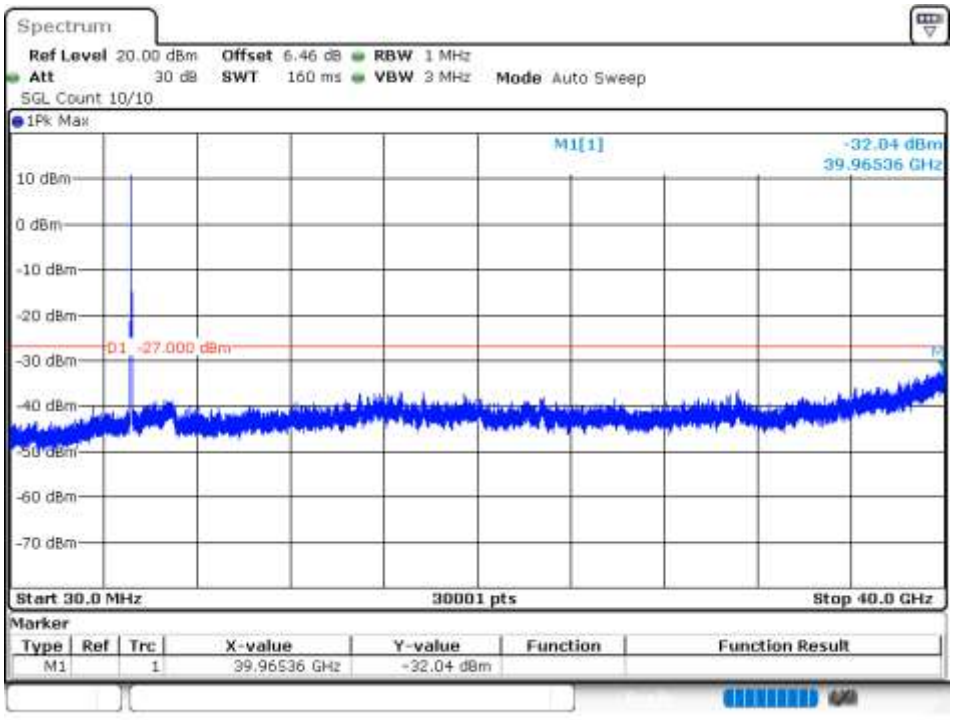
Tx. Spurious NVNT ac20 5180MHz Ant1 Emission



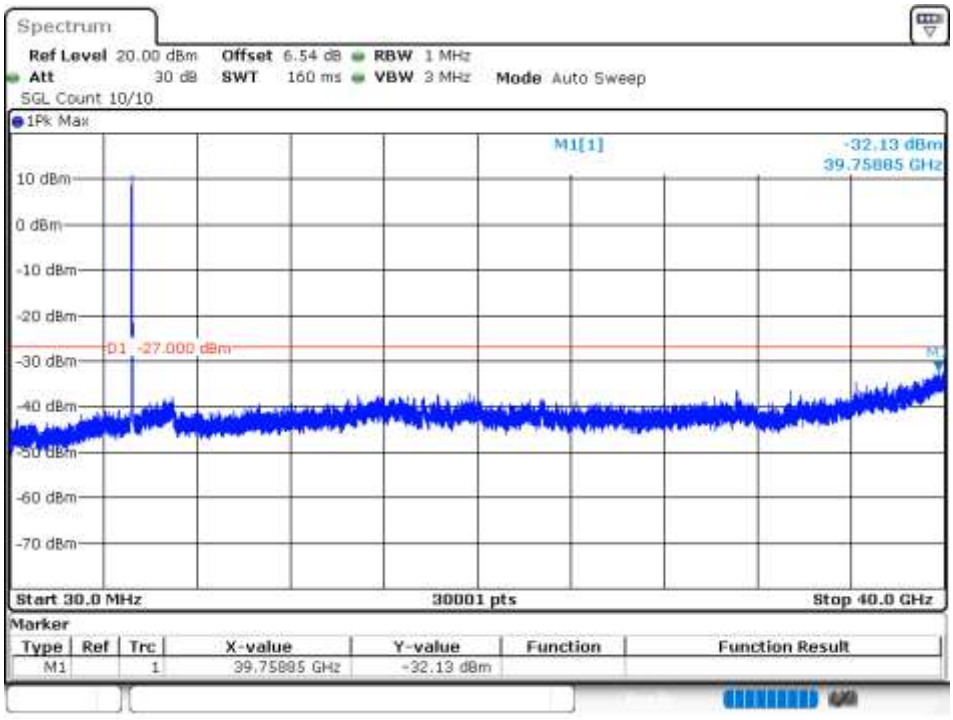
Tx. Spurious NVNT ac20 5200MHz Ant1 Emission



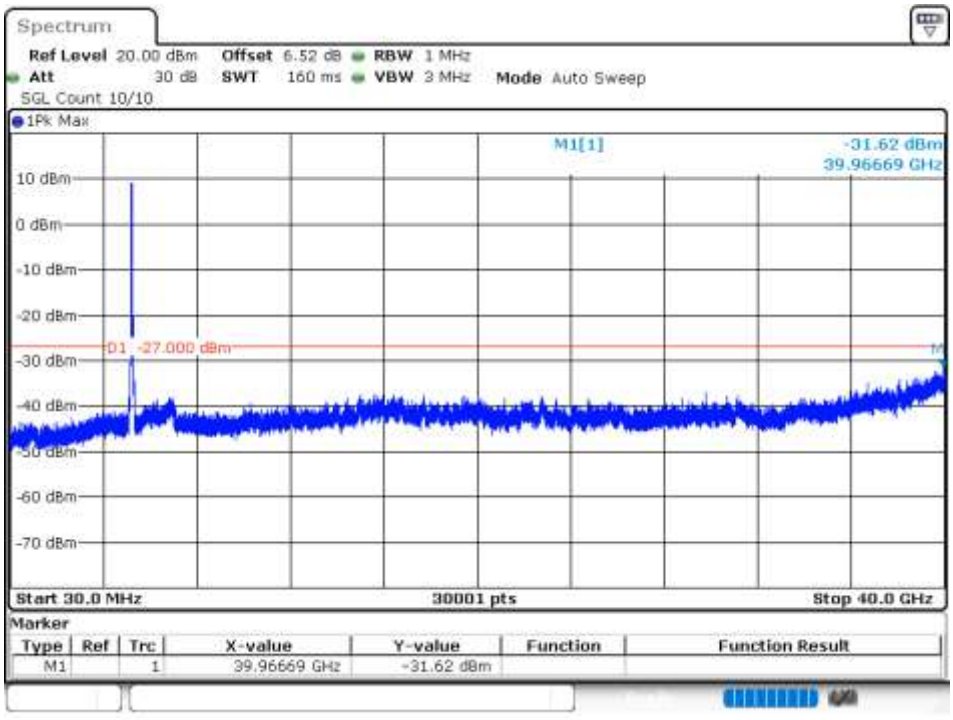
Tx. Spurious NVNT ac20 5240MHz Ant1 Emission


Tx. Spurious NVNT ac40 5190MHz Ant1 Emission


Tx. Spurious NVNT ac40 5230MHz Ant1 Emission



Tx. Spurious NVNT ac80 5210MHz Ant1 Emission

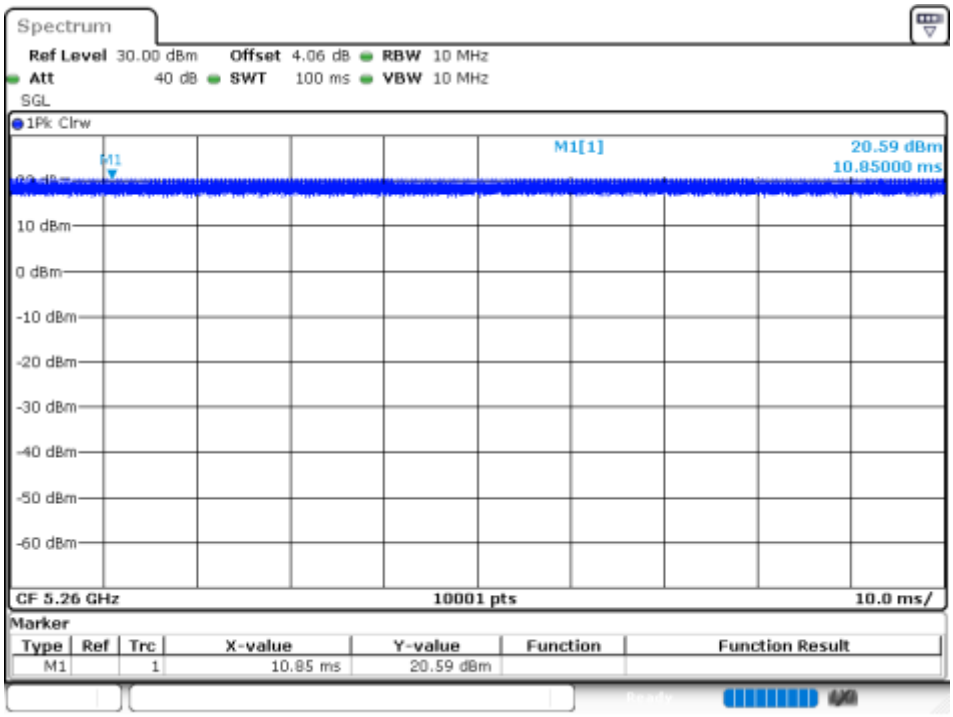


5.3GWIFI

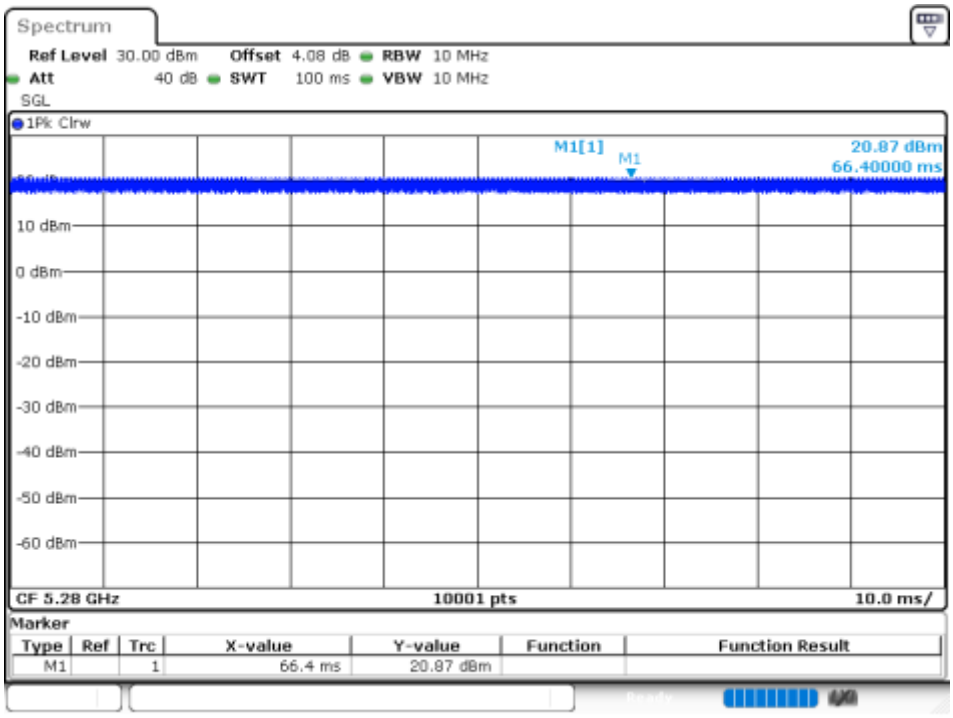
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	100	0	0
NVNT	a	5280	Ant1	100	0	0
NVNT	a	5320	Ant1	100	0	0
NVNT	n20	5260	Ant1	100	0	0
NVNT	n20	5280	Ant1	100	0	0
NVNT	n20	5320	Ant1	100	0	0
NVNT	n40	5270	Ant1	100	0	0
NVNT	n40	5310	Ant1	100	0	0
NVNT	ac20	5260	Ant1	100	0	0
NVNT	ac20	5280	Ant1	100	0	0
NVNT	ac20	5320	Ant1	100	0	0
NVNT	ac40	5270	Ant1	100	0	0
NVNT	ac40	5310	Ant1	100	0	0
NVNT	ac80	5290	Ant1	100	0	0

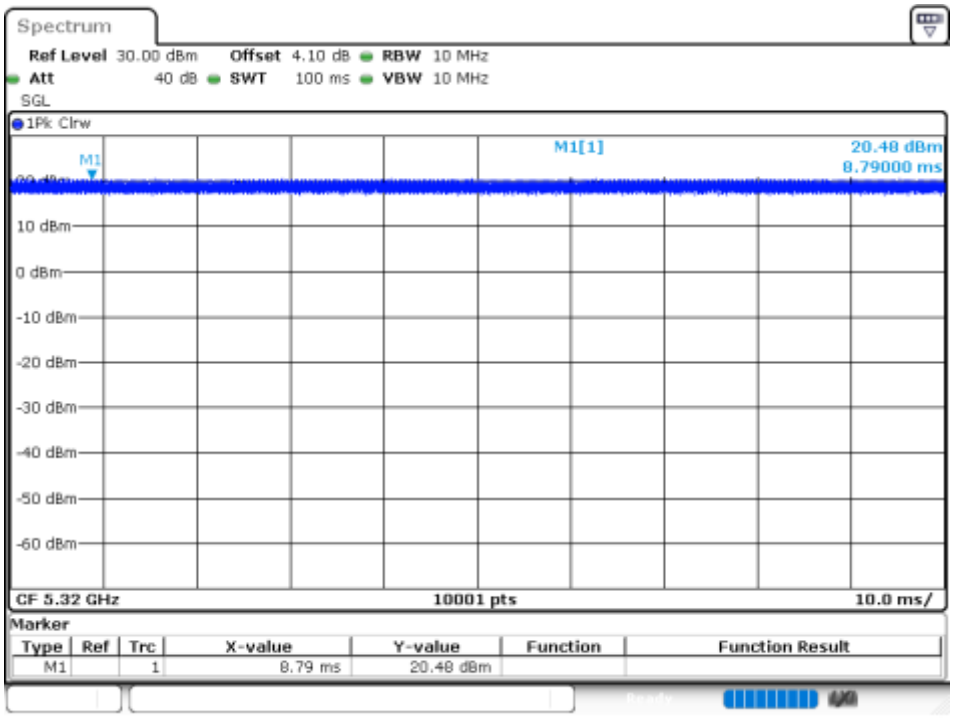
Test Graphs
Duty Cycle NVNT a 5260MHz Ant1



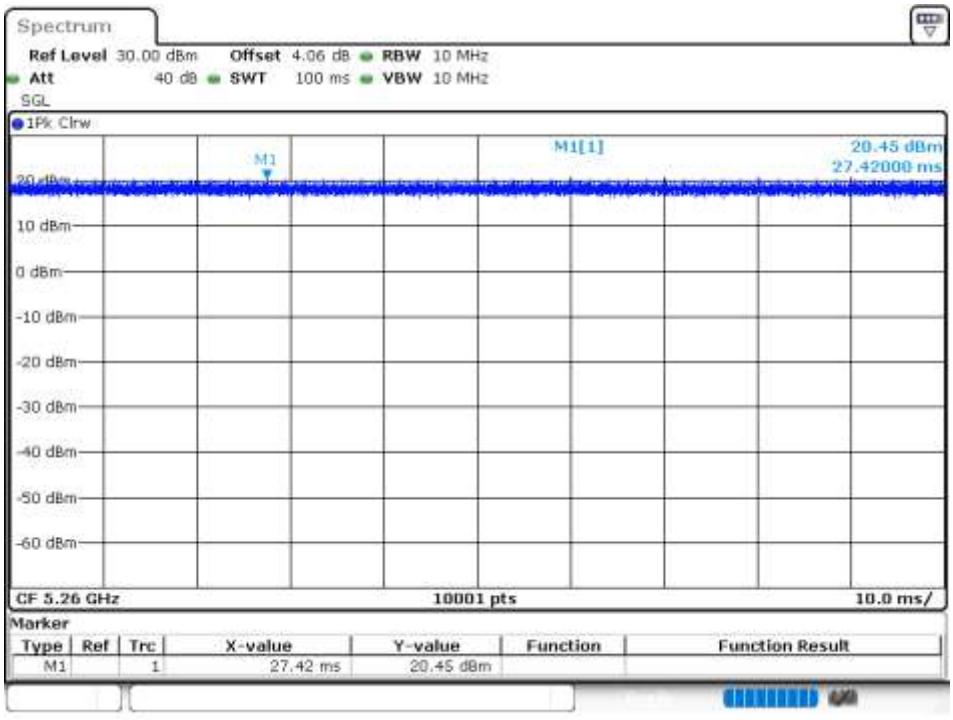
Duty Cycle NVNT a 5280MHz Ant1



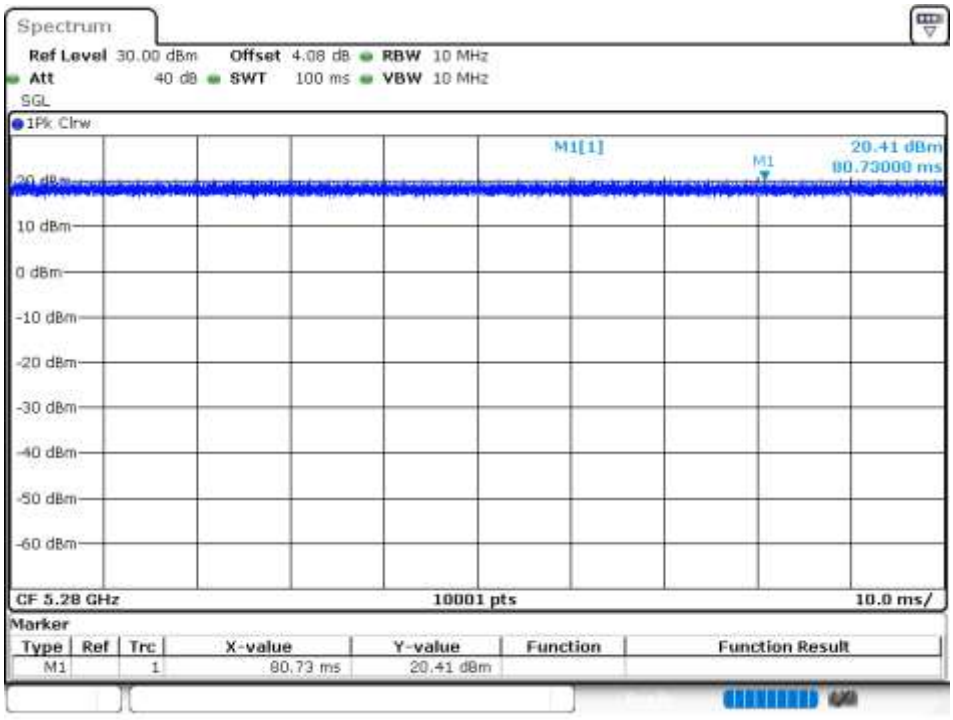
Duty Cycle NVNT a 5320MHz Ant1



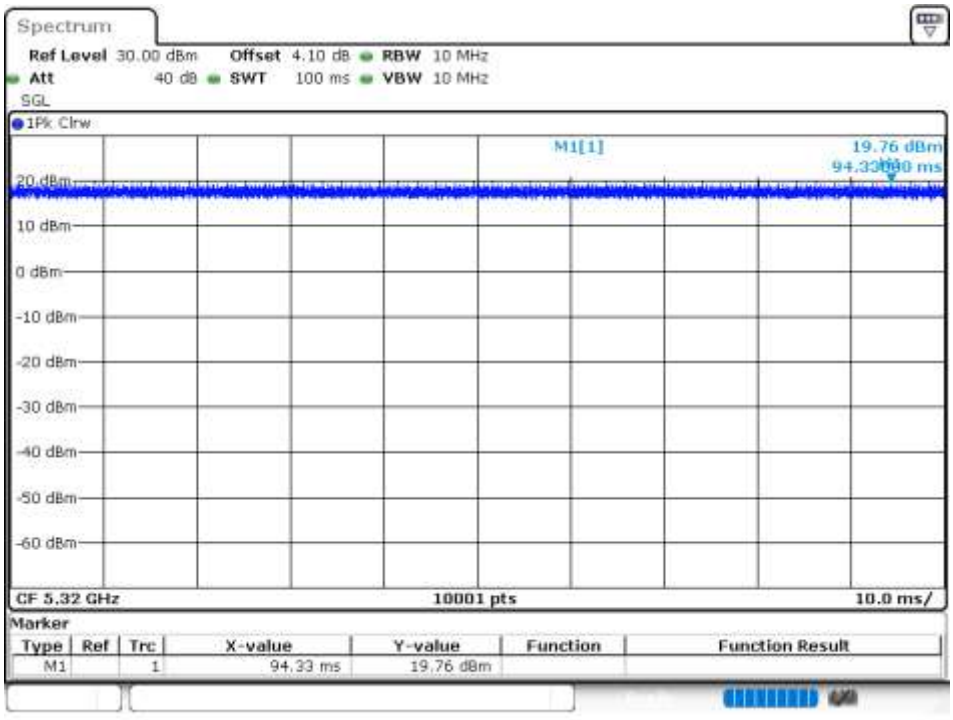
Duty Cycle NVNT n20 5260MHz Ant1



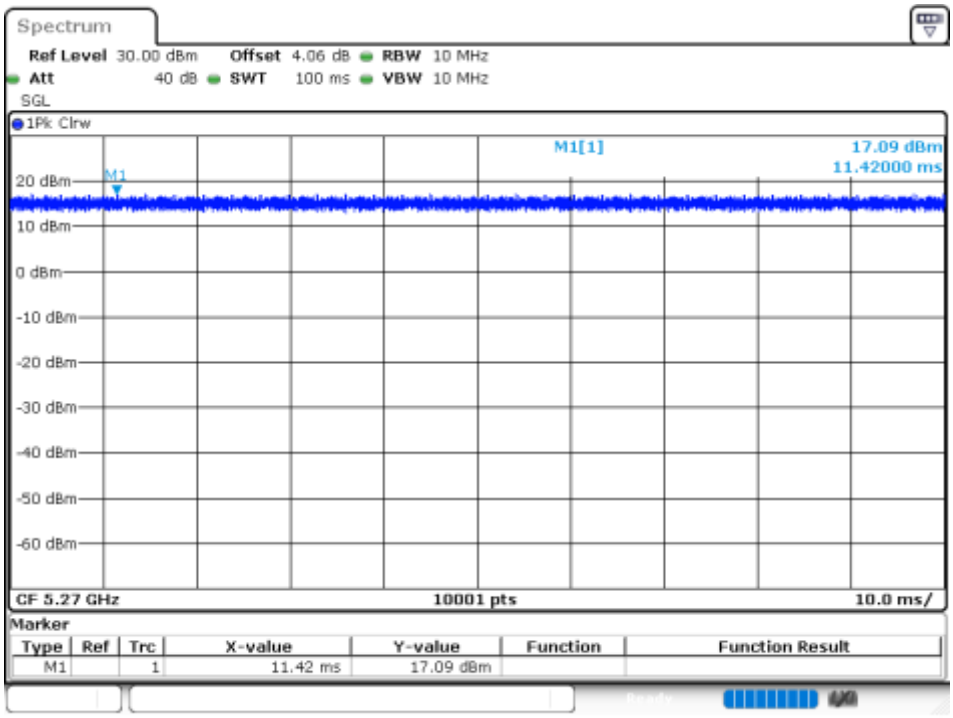
Duty Cycle NVNT n20 5280MHz Ant1



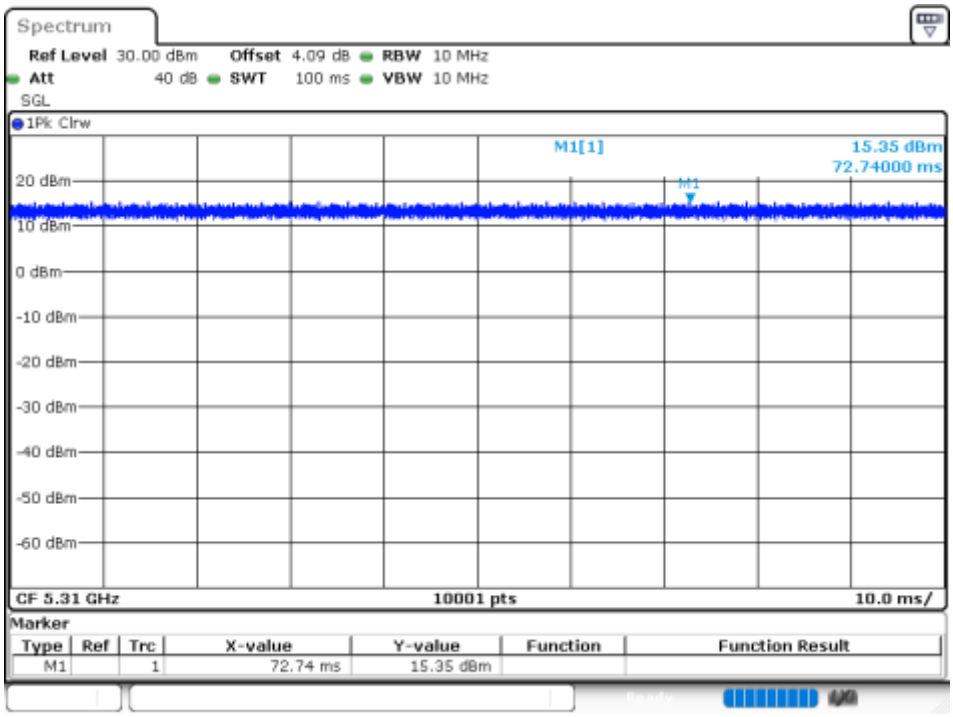
Duty Cycle NVNT n20 5320MHz Ant1



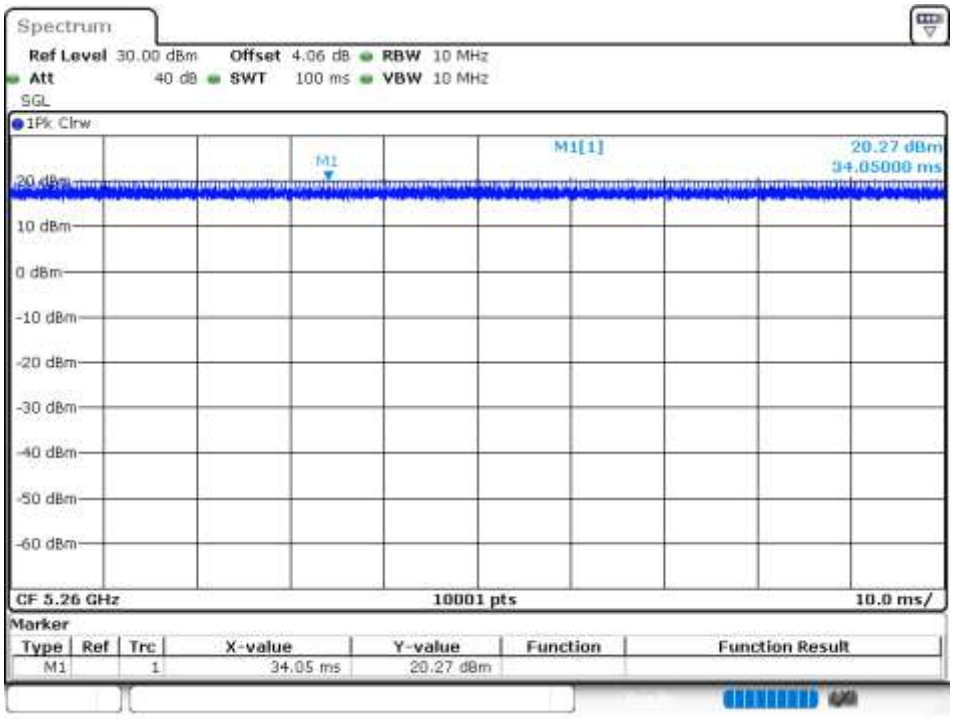
Duty Cycle NVNT n40 5270MHz Ant1



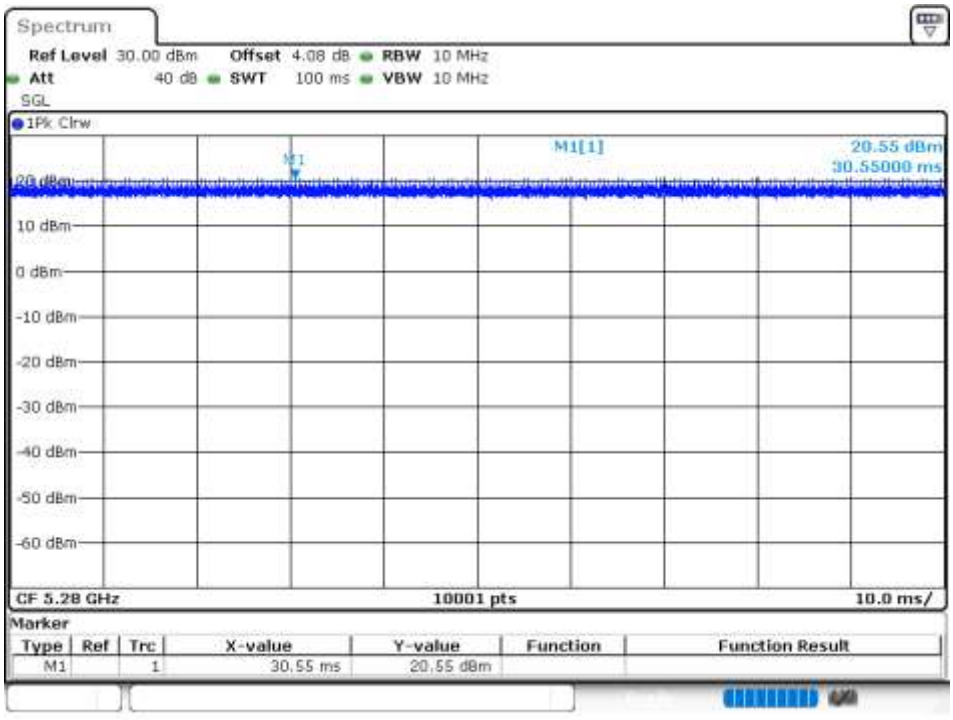
Duty Cycle NVNT n40 5310MHz Ant1



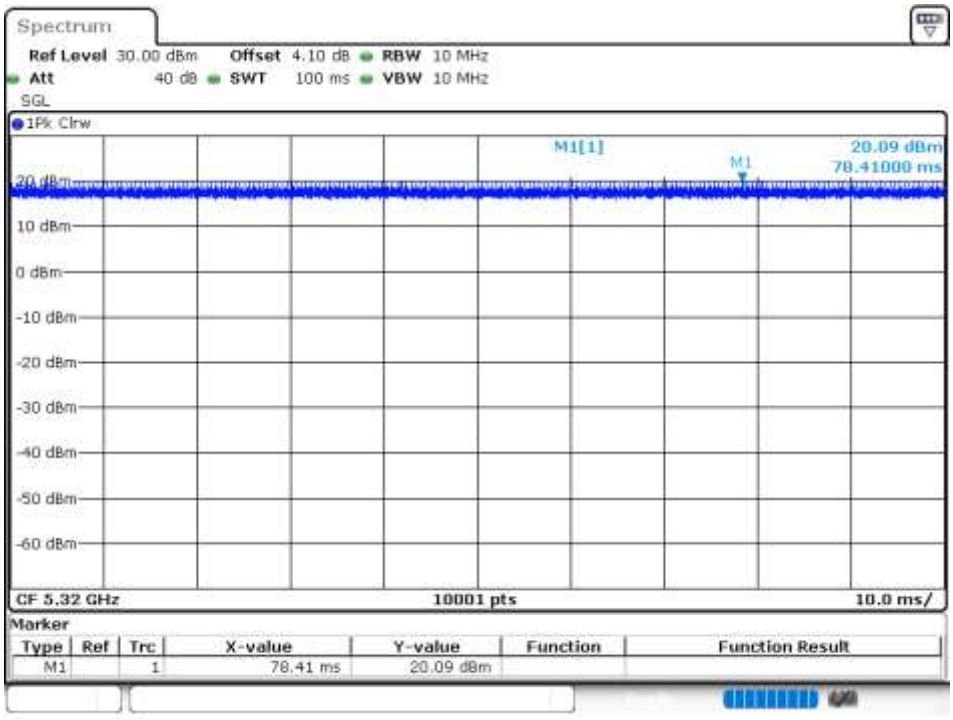
Duty Cycle NVNT ac20 5260MHz Ant1



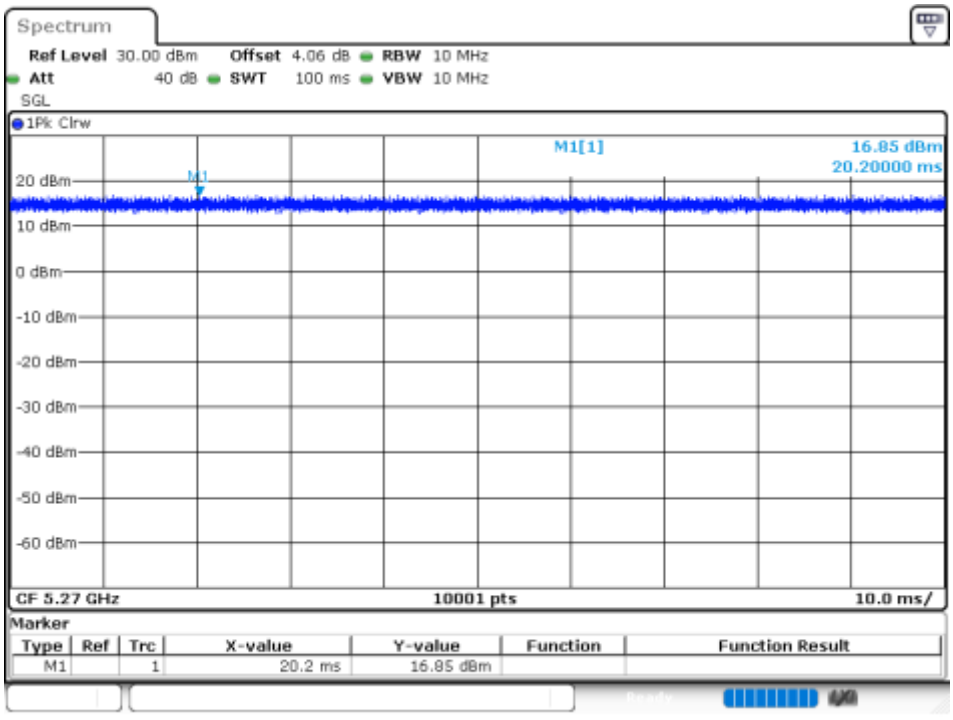
Duty Cycle NVNT ac20 5280MHz Ant1



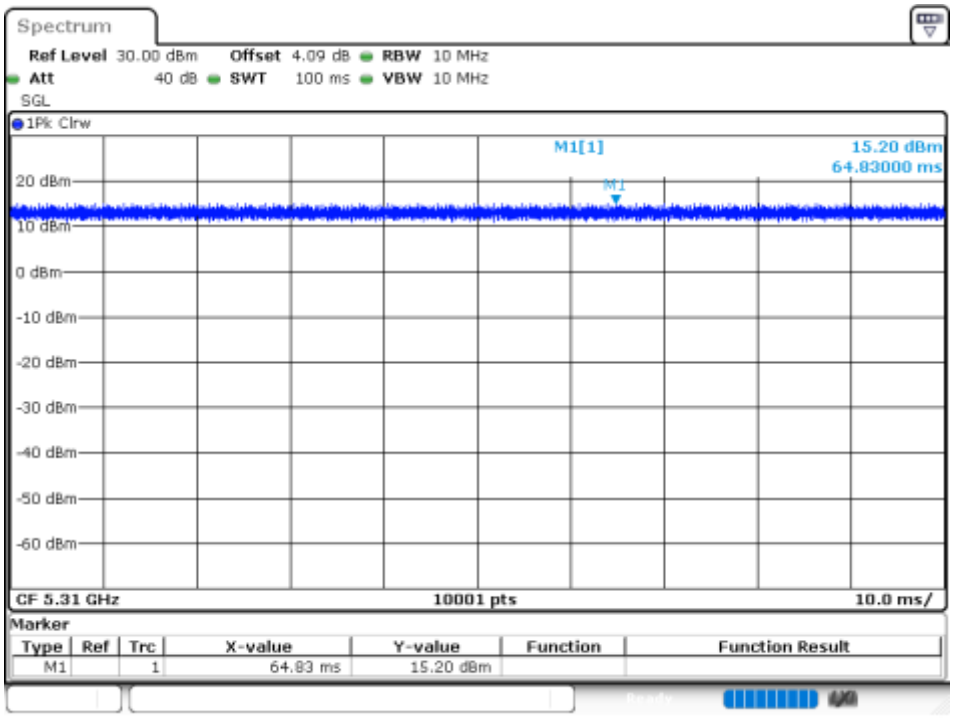
Duty Cycle NVNT ac20 5320MHz Ant1



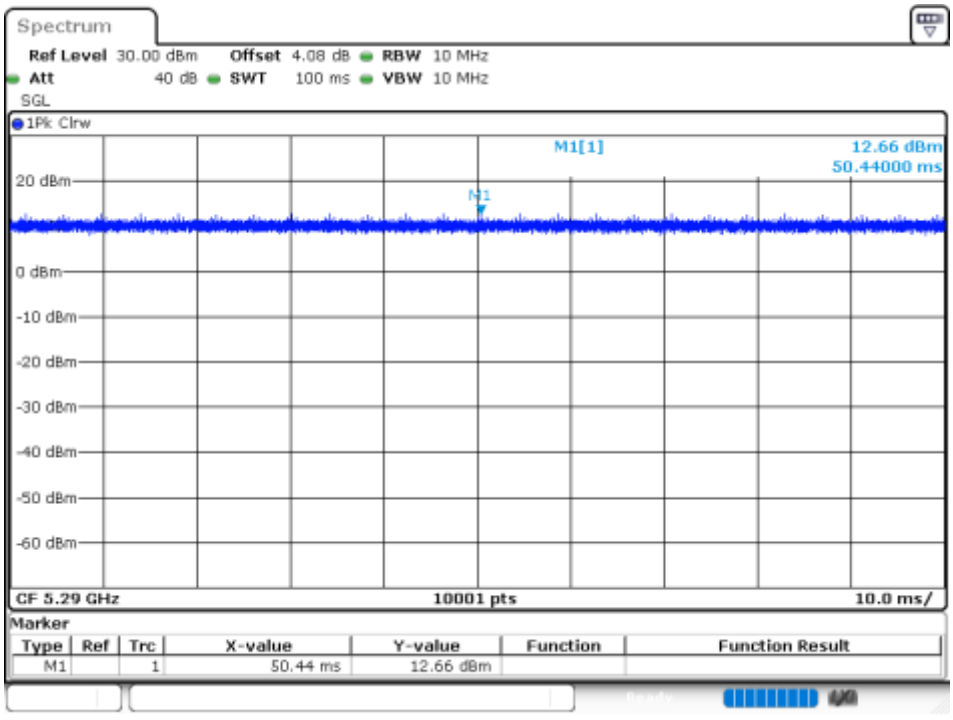
Duty Cycle NVNT ac40 5270MHz Ant1



Duty Cycle NVNT ac40 5310MHz Ant1



Duty Cycle NVNT ac80 5290MHz Ant1



Maximum Conducted Output Power

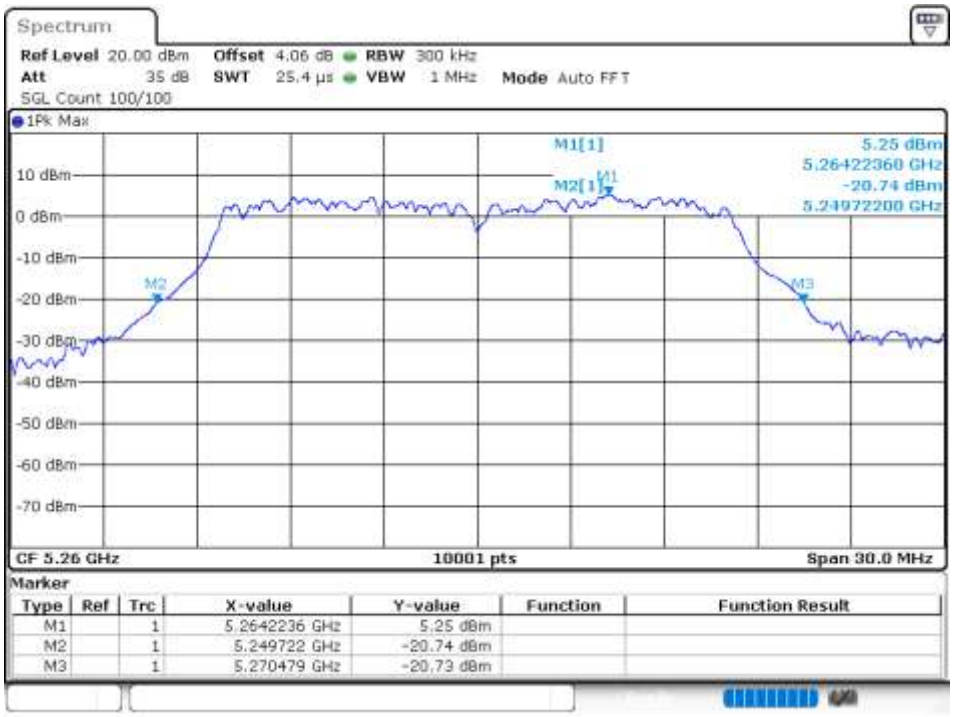
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	15.23	24	Pass
NVNT	a	5280	Ant1	15.37	24	Pass
NVNT	a	5300	Ant1	15.09	24	Pass
NVNT	n20	5260	Ant1	15.2	24	Pass
NVNT	n20	5280	Ant1	15.34	24	Pass
NVNT	n20	5320	Ant1	15.28	24	Pass
NVNT	n40	5270	Ant1	13.08	24	Pass
NVNT	n40	5310	Ant1	13.74	24	Pass
NVNT	ac20	5260	Ant1	15.05	24	Pass
NVNT	ac20	5280	Ant1	15.18	24	Pass
NVNT	ac20	5320	Ant1	15.07	24	Pass
NVNT	ac40	5270	Ant1	13.14	24	Pass
NVNT	ac40	5310	Ant1	13.71	24	Pass
NVNT	ac80	5290	Ant1	13.17	24	Pass

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

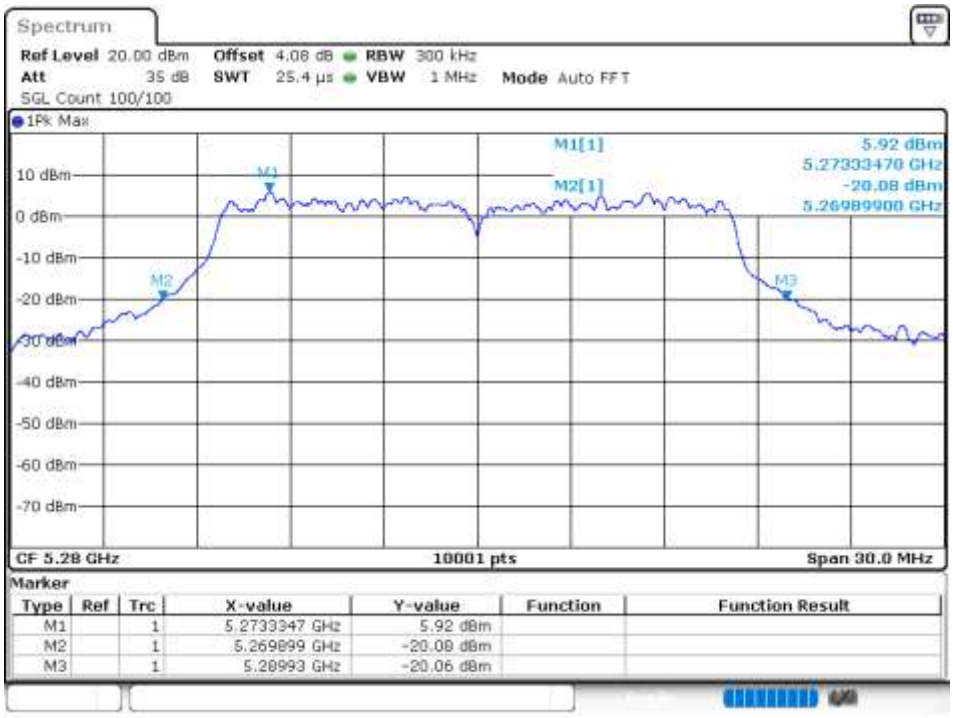
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	20.757	Pass
NVNT	a	5280	Ant1	20.031	Pass
NVNT	a	5320	Ant1	20.805	Pass
NVNT	n20	5260	Ant1	21.105	Pass
NVNT	n20	5280	Ant1	20.616	Pass
NVNT	n20	5320	Ant1	21.486	Pass
NVNT	n40	5270	Ant1	42.642	Pass
NVNT	n40	5310	Ant1	42.63	Pass
NVNT	ac20	5260	Ant1	21.381	Pass
NVNT	ac20	5280	Ant1	20.883	Pass
NVNT	ac20	5320	Ant1	21.399	Pass
NVNT	ac40	5270	Ant1	41.832	Pass
NVNT	ac40	5310	Ant1	41.64	Pass
NVNT	ac80	5290	Ant1	81.696	Pass

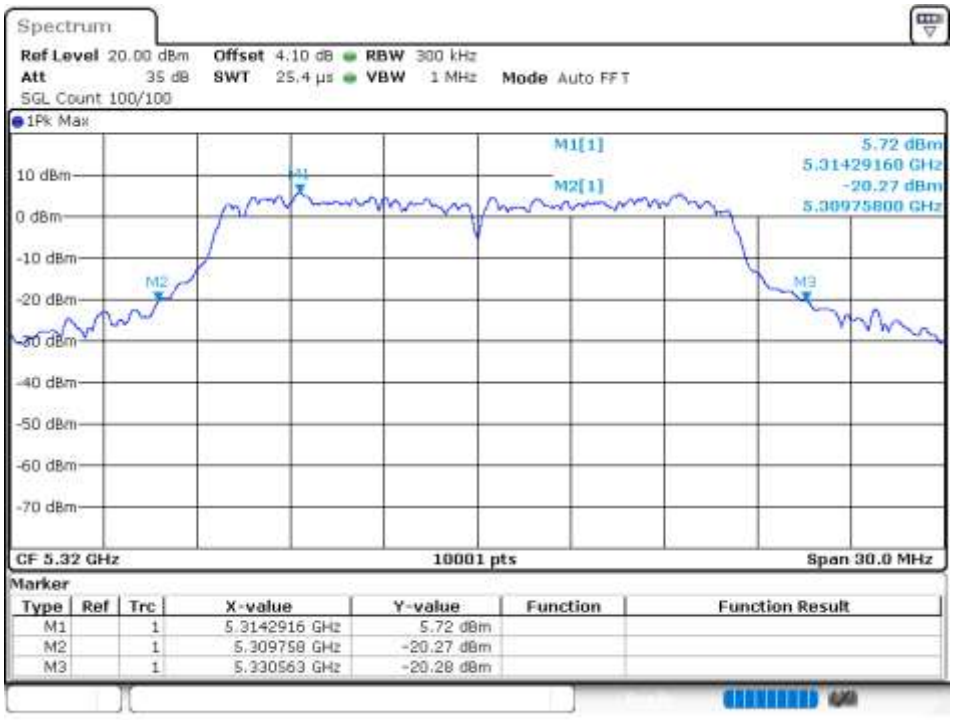
Test Graphs
-26dB Bandwidth NVNT a 5260MHz Ant1



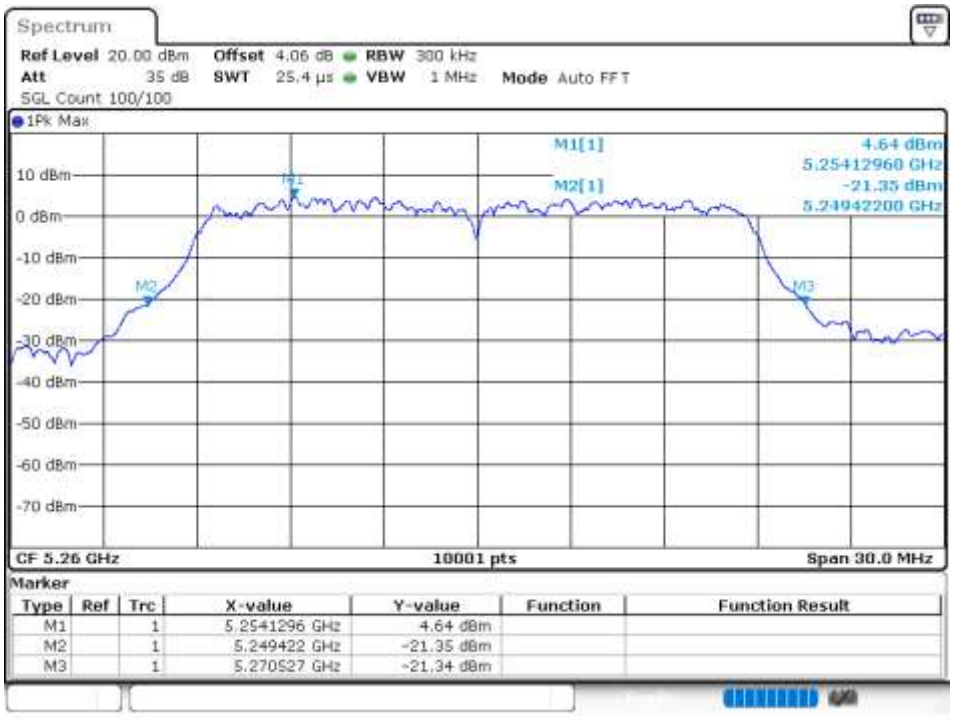
-26dB Bandwidth NVNT a 5280MHz Ant1



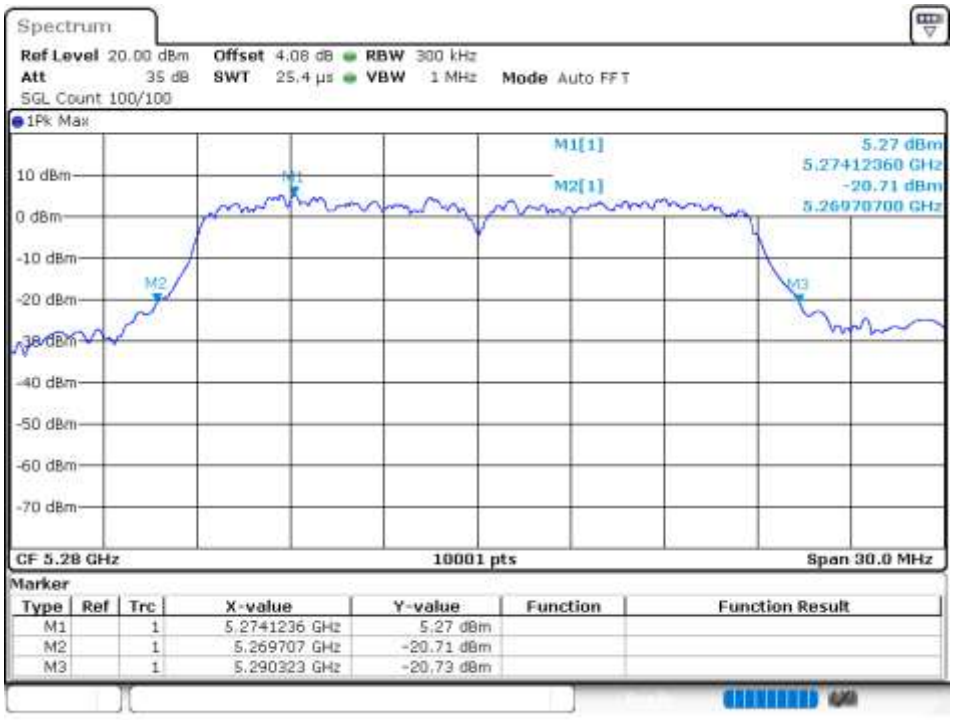
-26dB Bandwidth NVNT a 5320MHz Ant1



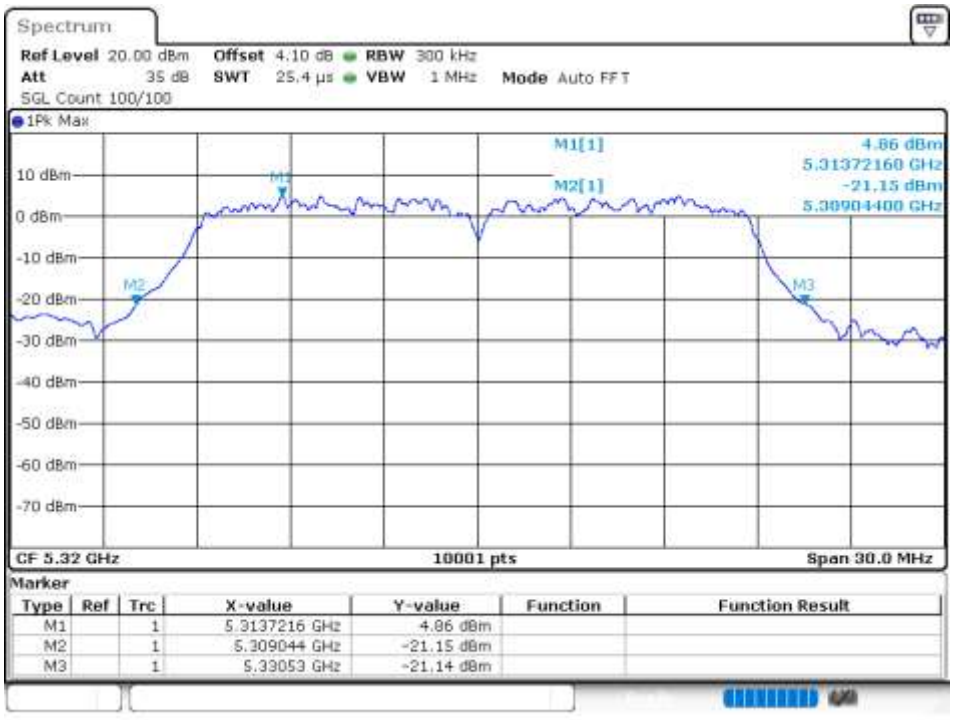
-26dB Bandwidth NVNT n20 5260MHz Ant1



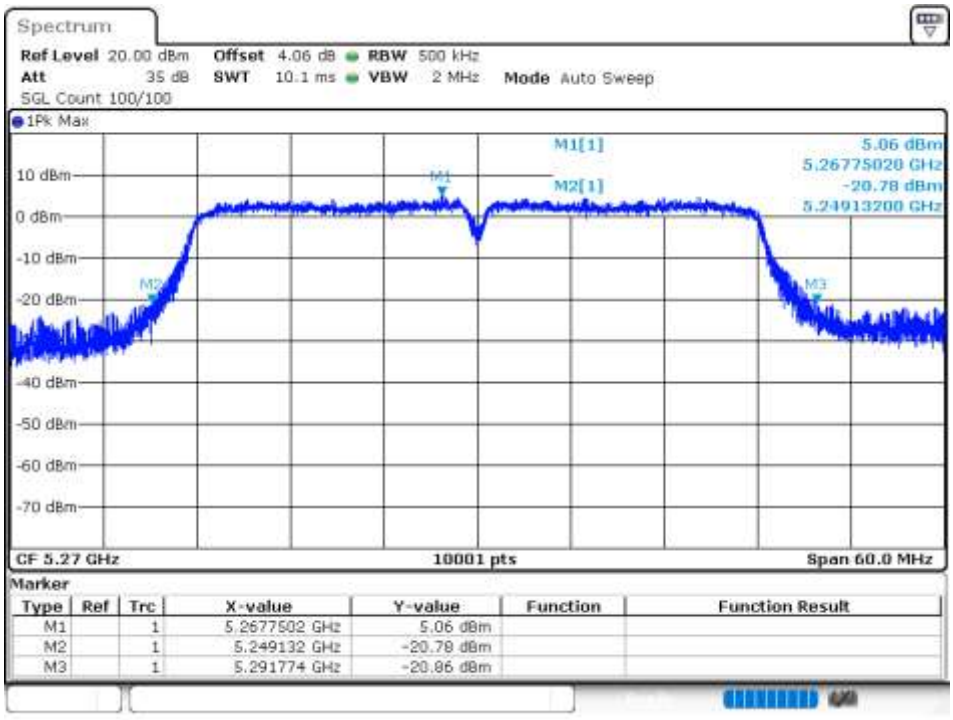
-26dB Bandwidth NVNT n20 5280MHz Ant1



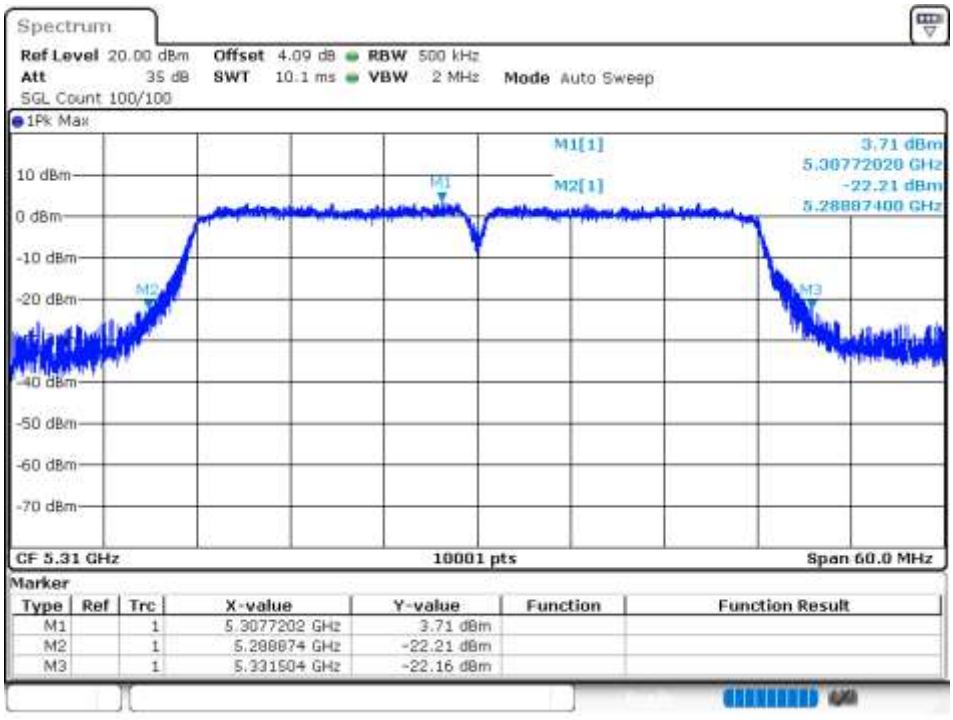
-26dB Bandwidth NVNT n20 5320MHz Ant1



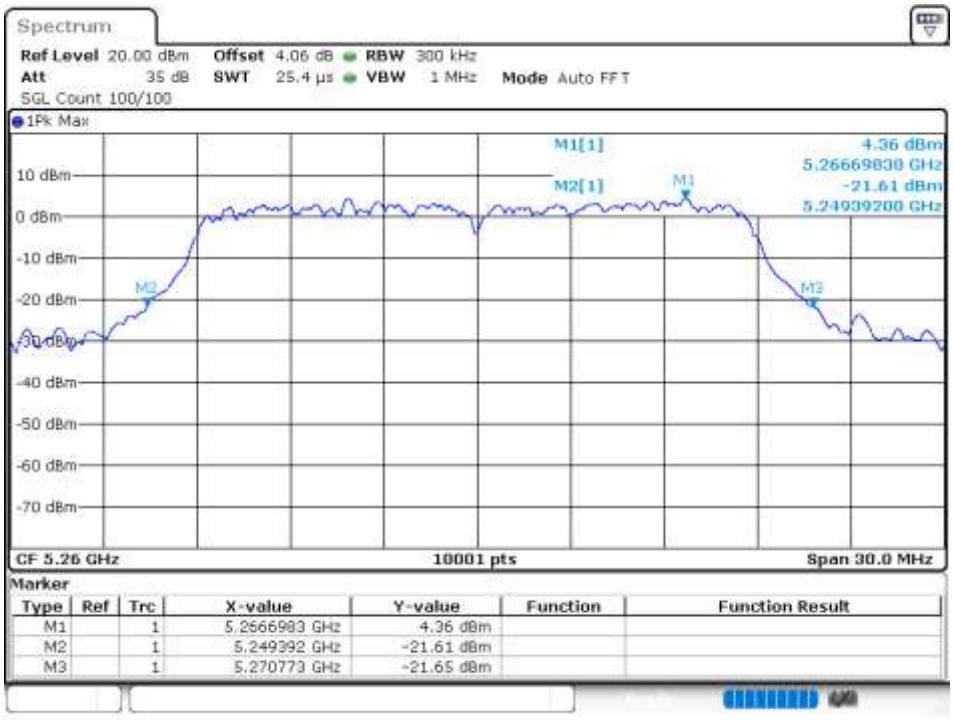
-26dB Bandwidth NVNT n40 5270MHz Ant1



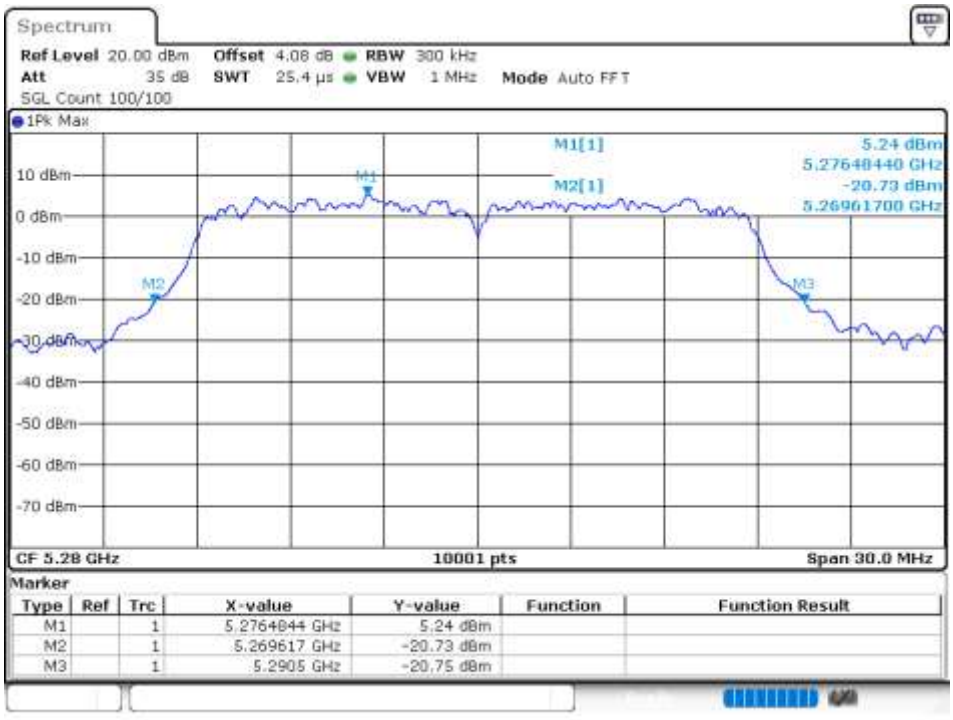
-26dB Bandwidth NVNT n40 5310MHz Ant1



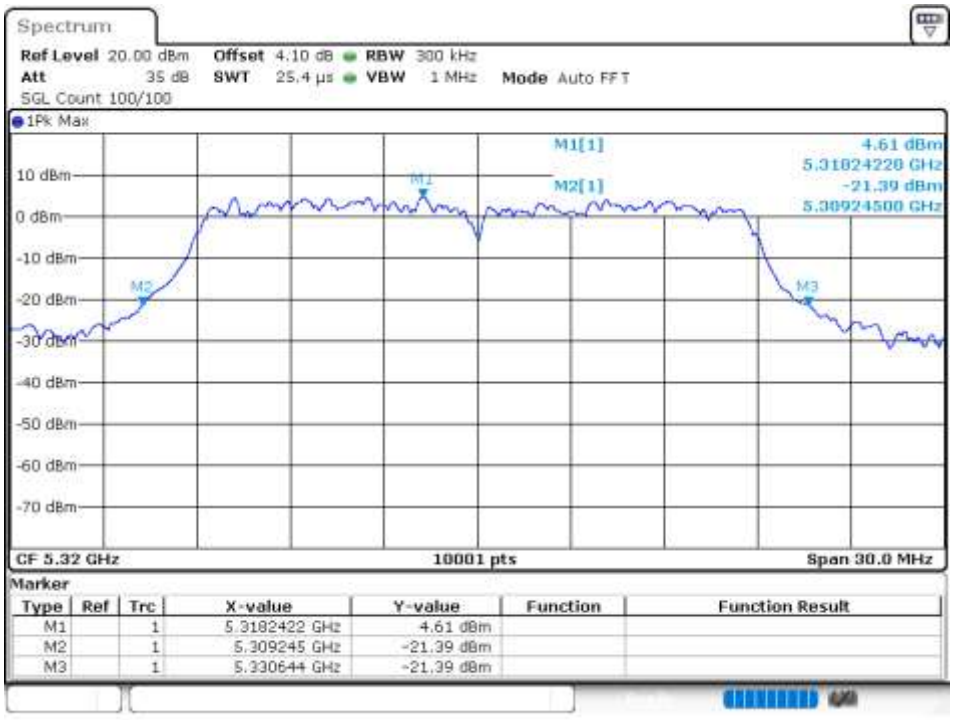
-26dB Bandwidth NVNT ac20 5260MHz Ant1



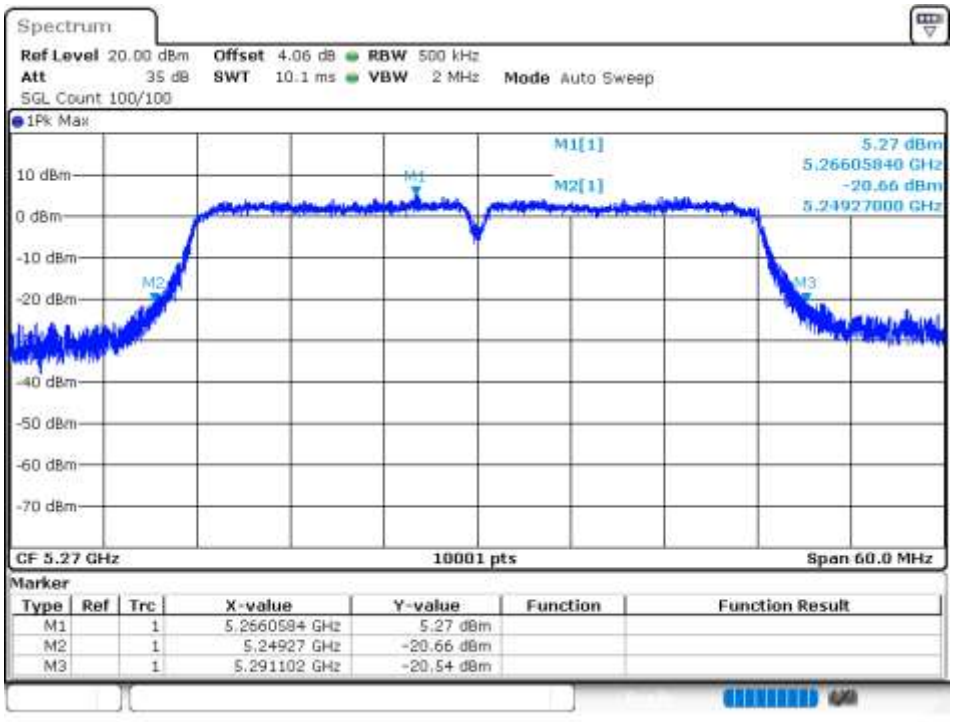
-26dB Bandwidth NVNT ac20 5280MHz Ant1



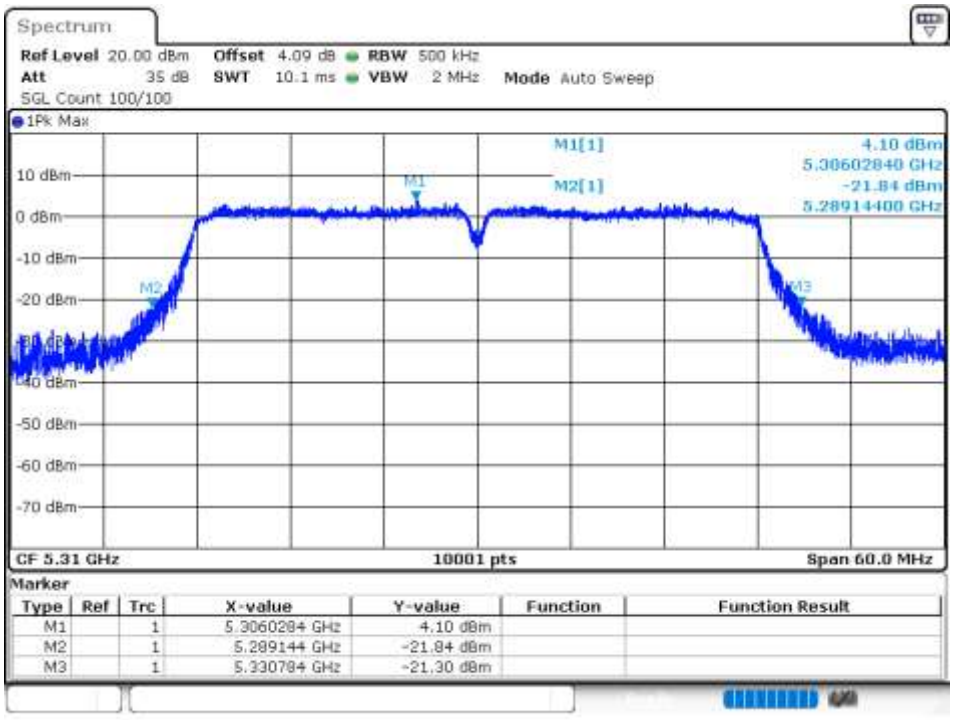
-26dB Bandwidth NVNT ac20 5320MHz Ant1



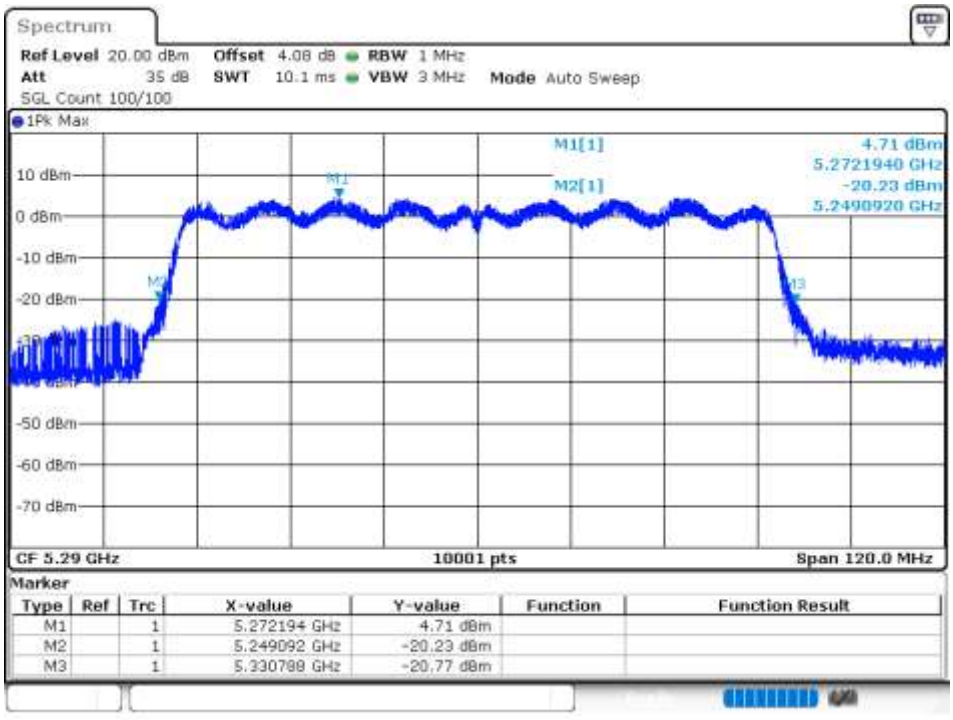
-26dB Bandwidth NVNT ac40 5270MHz Ant1



-26dB Bandwidth NVNT ac40 5310MHz Ant1

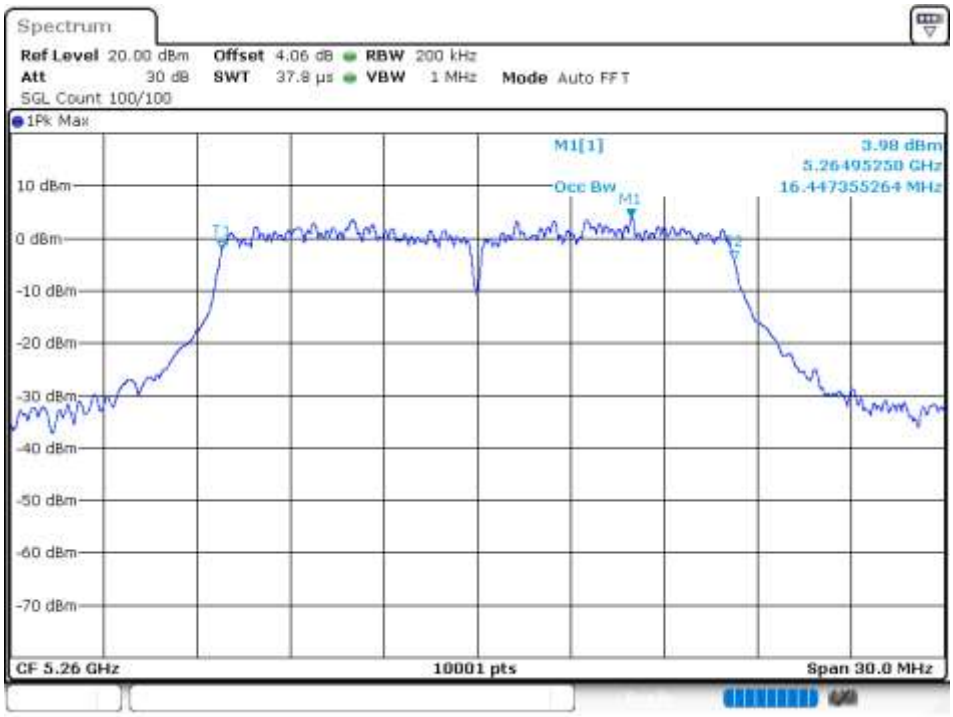
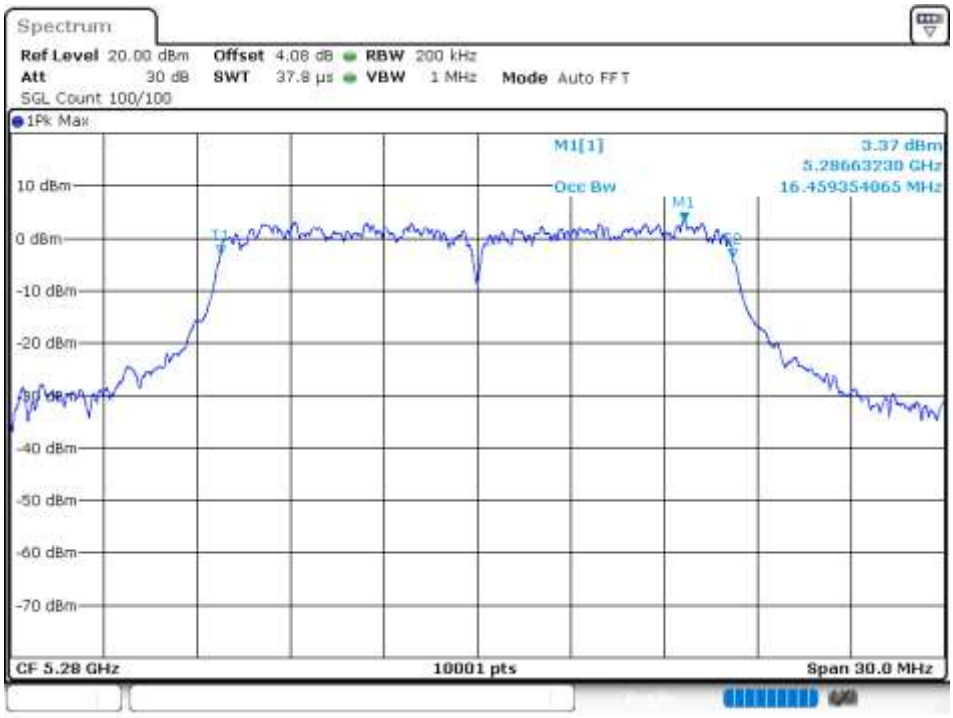


-26dB Bandwidth NVNT ac80 5290MHz Ant1

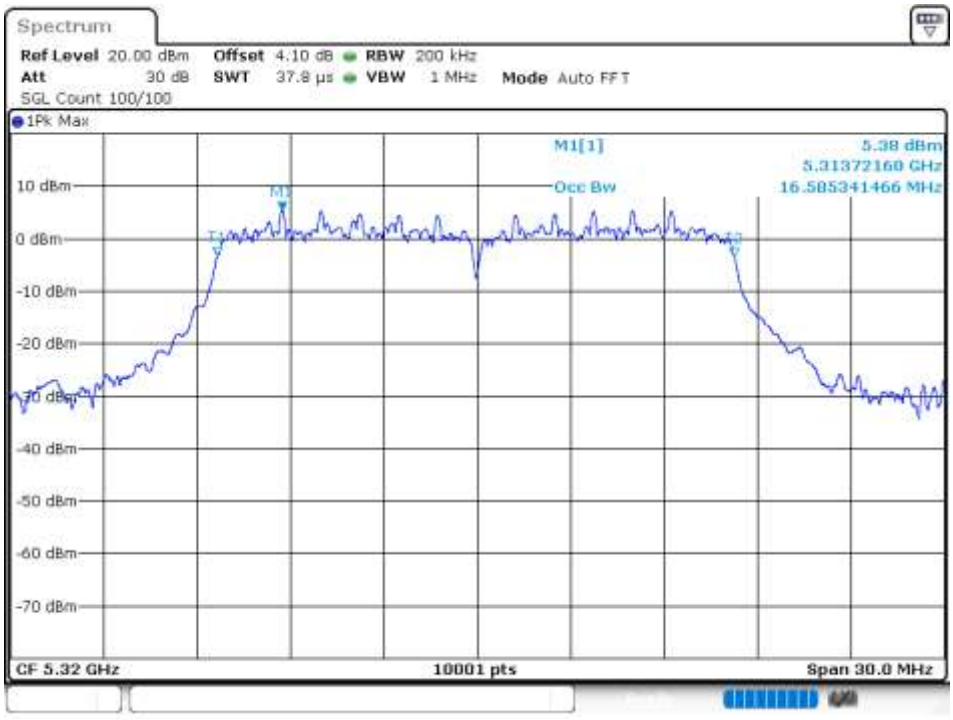


Occupied Channel Bandwidth

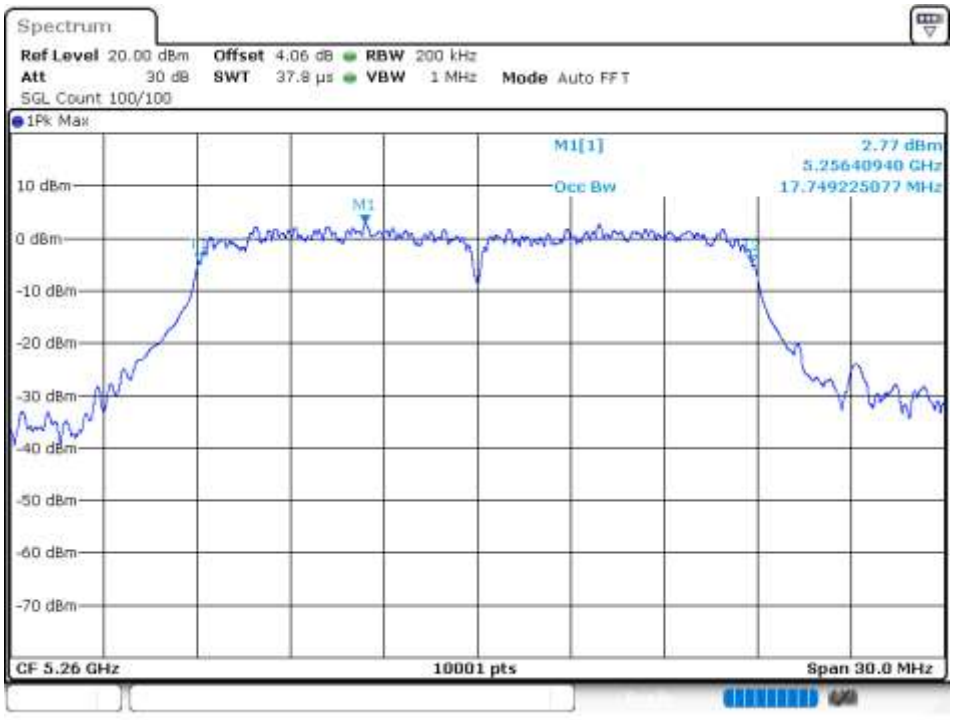
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.447
NVNT	a	5280	Ant1	16.459
NVNT	a	5320	Ant1	16.585
NVNT	n20	5260	Ant1	17.749
NVNT	n20	5280	Ant1	17.656
NVNT	n20	5320	Ant1	17.674
NVNT	n40	5270	Ant1	36.2
NVNT	n40	5310	Ant1	36.224
NVNT	ac20	5260	Ant1	17.704
NVNT	ac20	5280	Ant1	17.638
NVNT	ac20	5320	Ant1	17.593
NVNT	ac40	5270	Ant1	36.194
NVNT	ac40	5310	Ant1	36.17
NVNT	ac80	5290	Ant1	75.412

Test Graphs
OBW NVNT a 5260MHz Ant1

OBW NVNT a 5280MHz Ant1


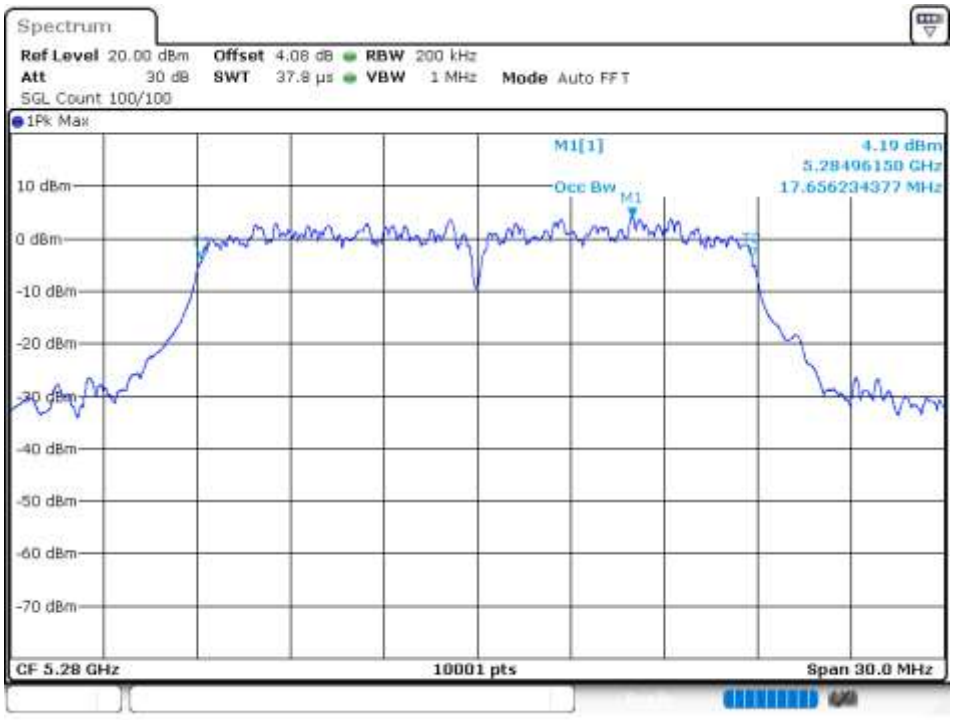
OBW NVNT a 5320MHz Ant1



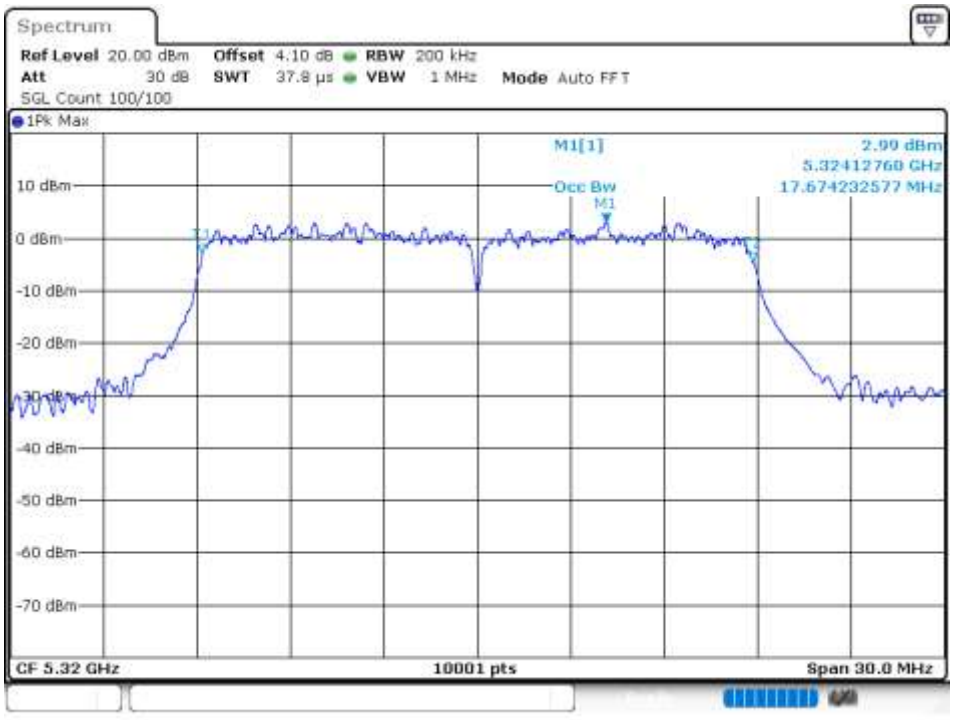
OBW NVNT n20 5260MHz Ant1



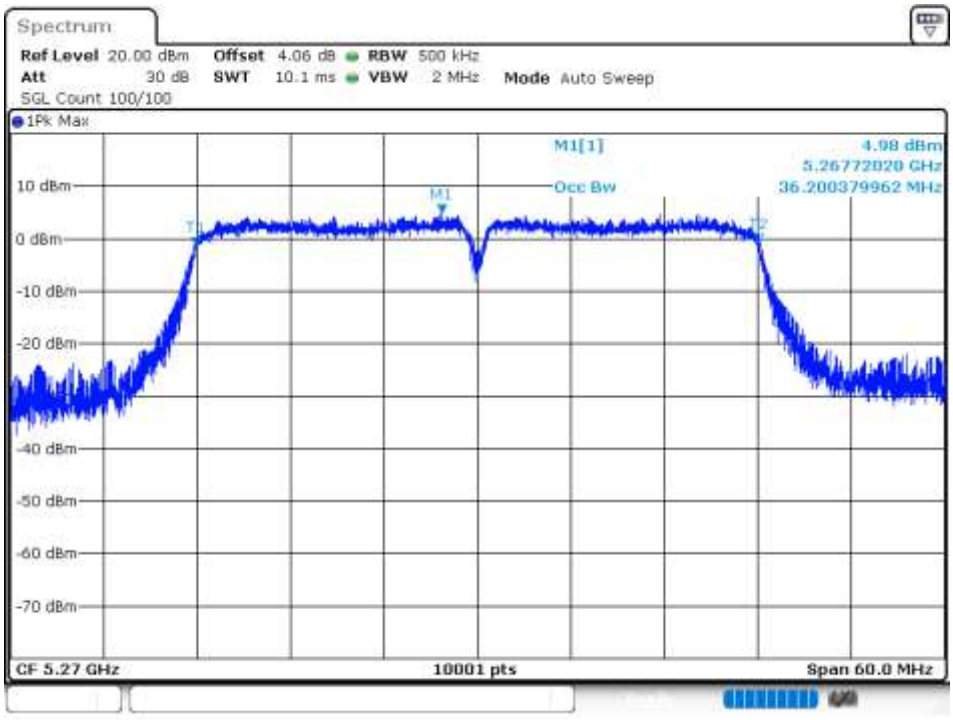
OBW NVNT n20 5280MHz Ant1



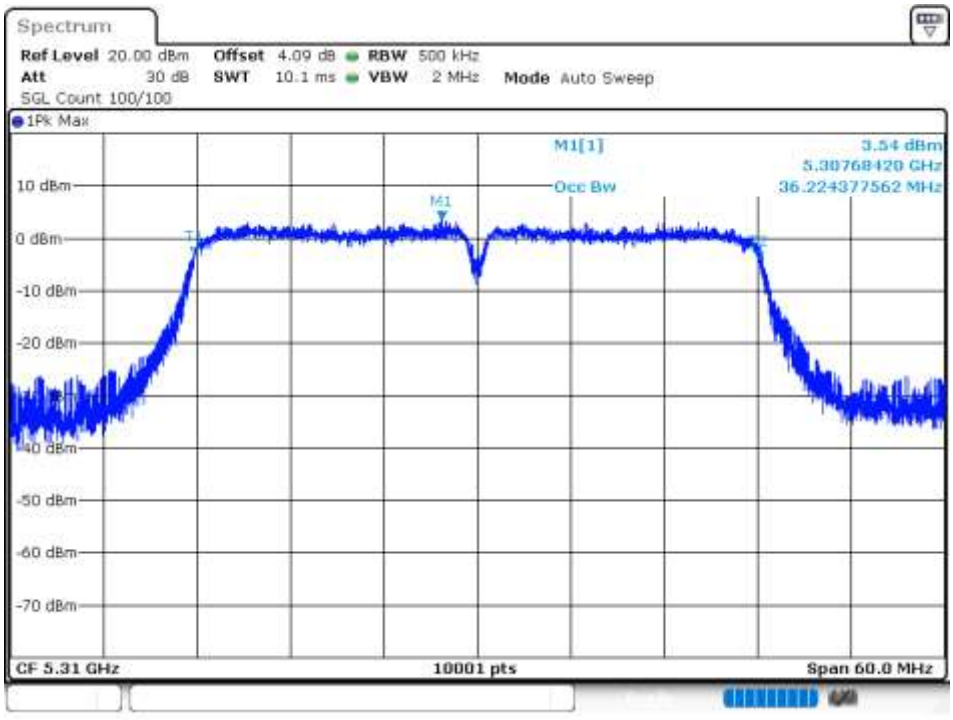
OBW NVNT n20 5320MHz Ant1



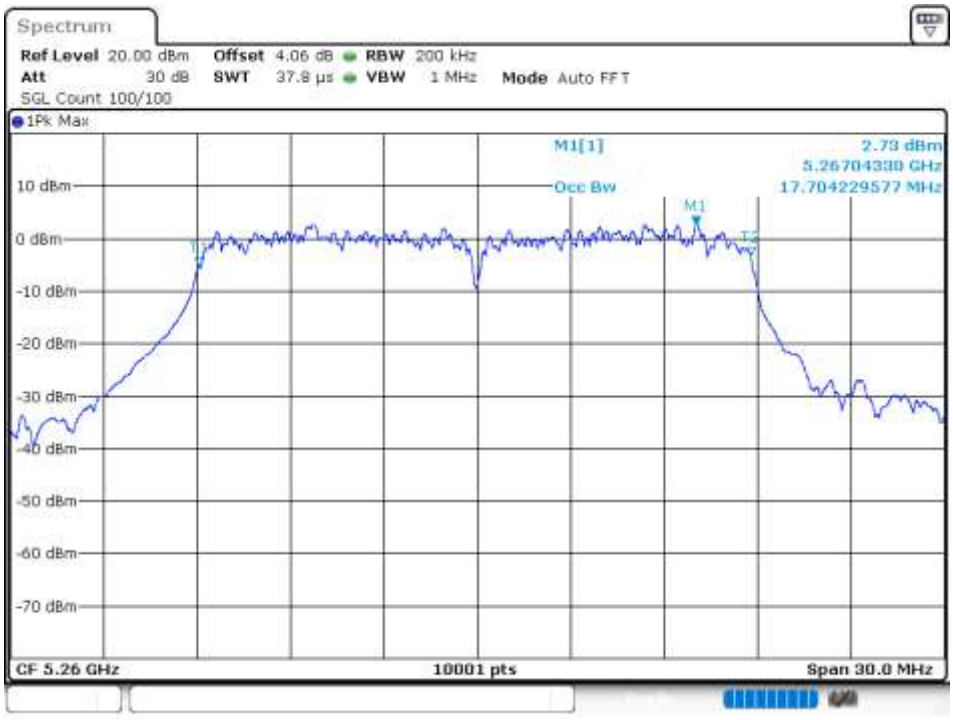
OBW NVNT n40 5270MHz Ant1



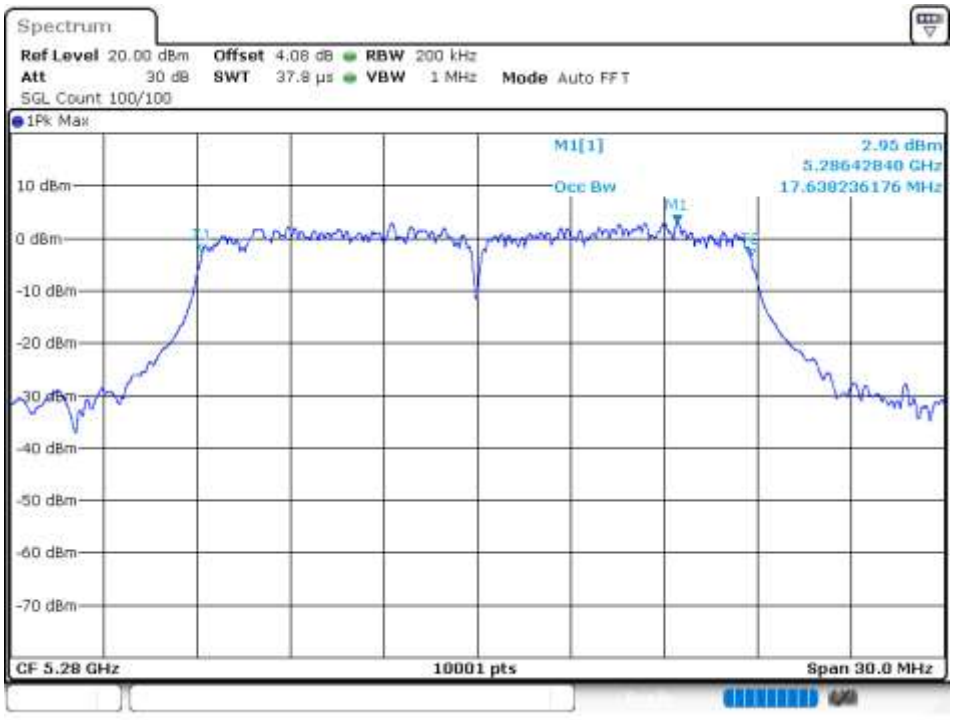
OBW NVNT n40 5310MHz Ant1



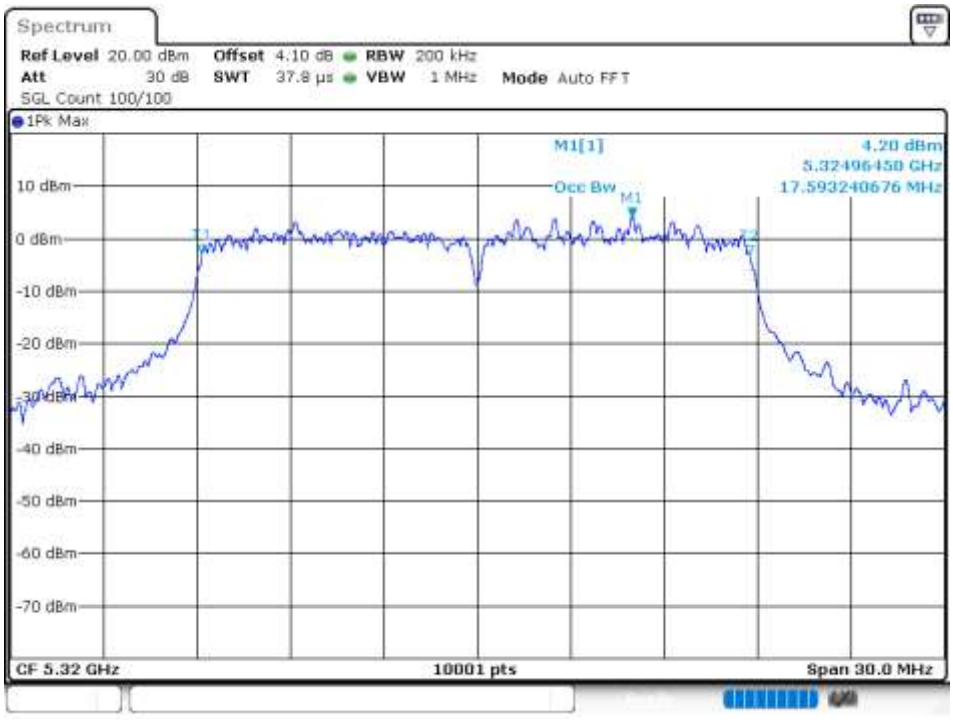
OBW NVNT ac20 5260MHz Ant1



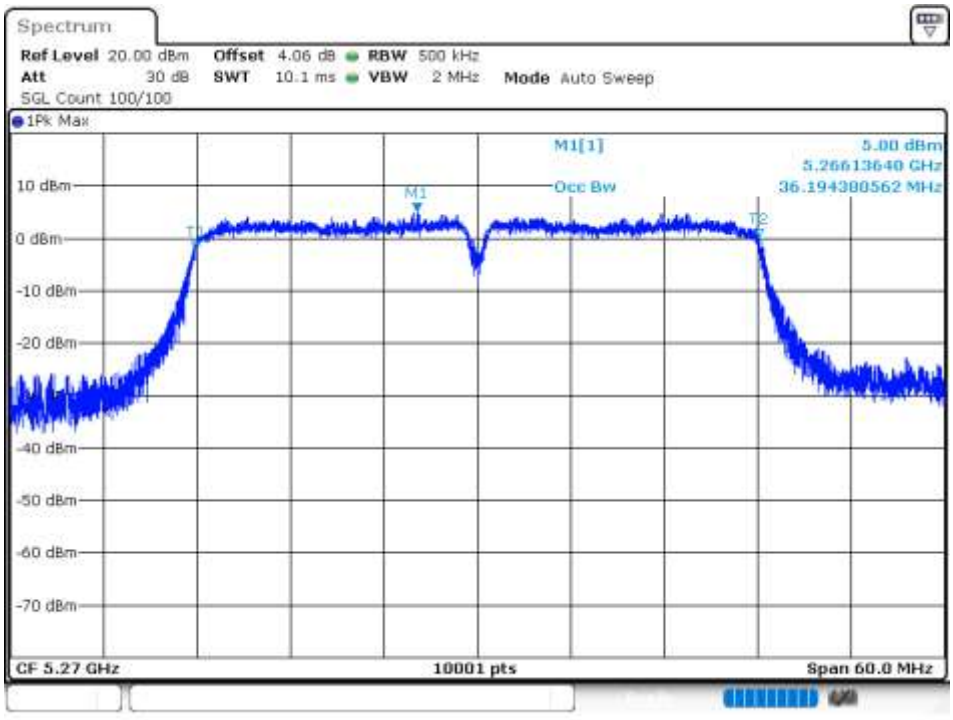
OBW NVNT ac20 5280MHz Ant1



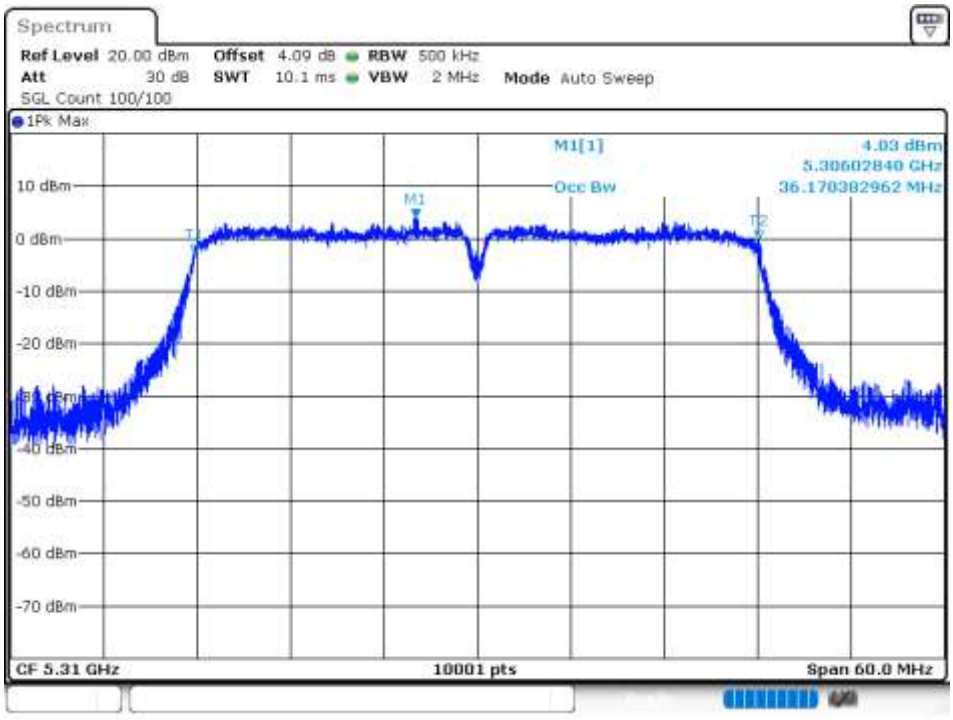
OBW NVNT ac20 5320MHz Ant1



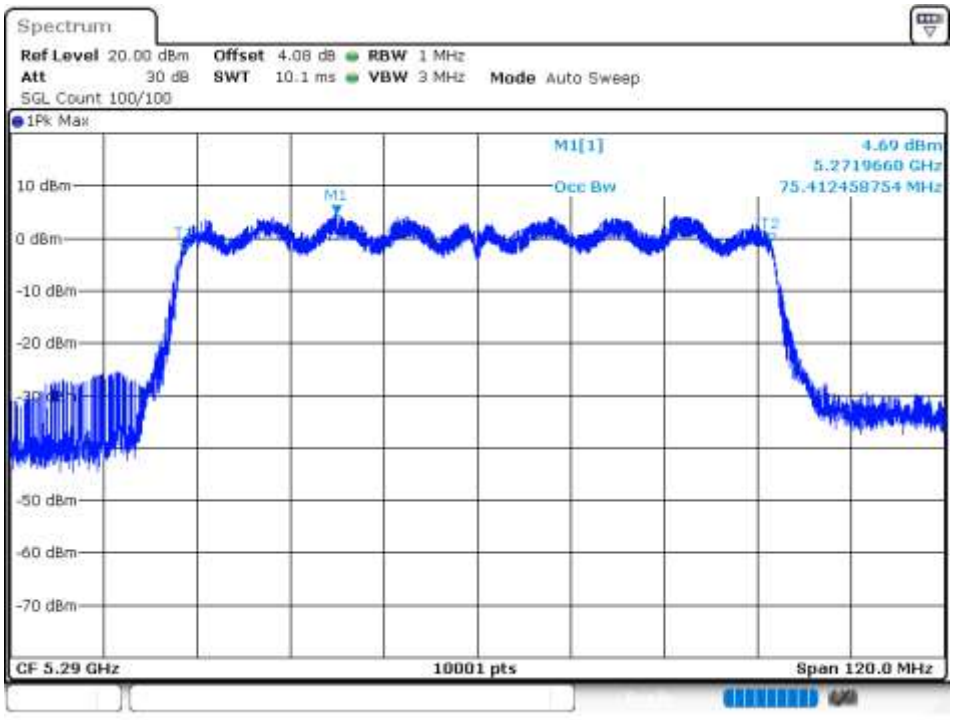
OBW NVNT ac40 5270MHz Ant1



OBW NVNT ac40 5310MHz Ant1

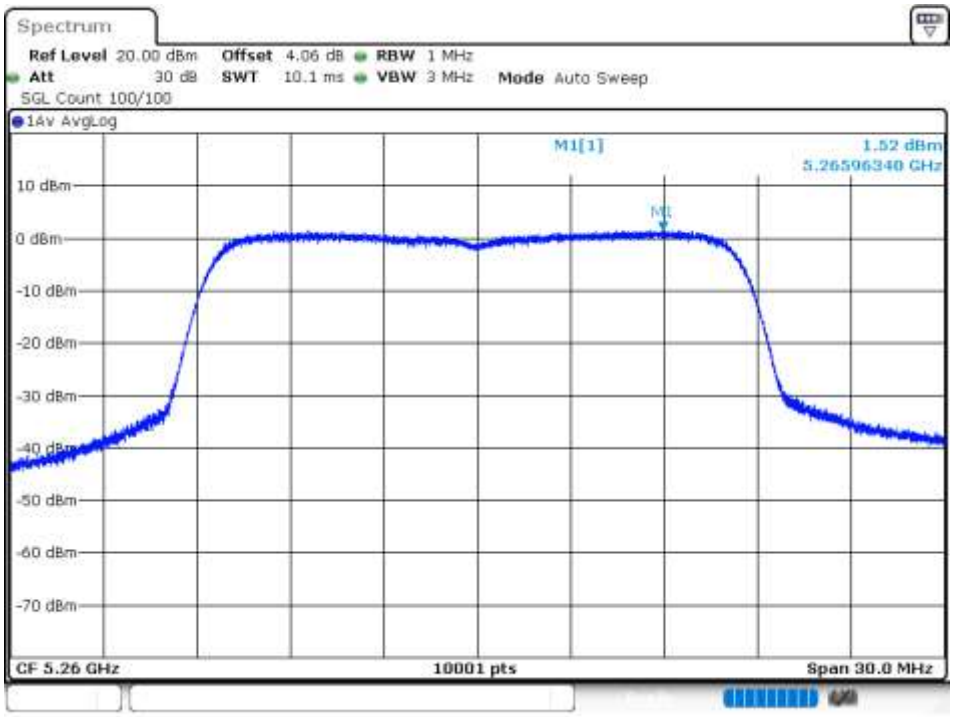
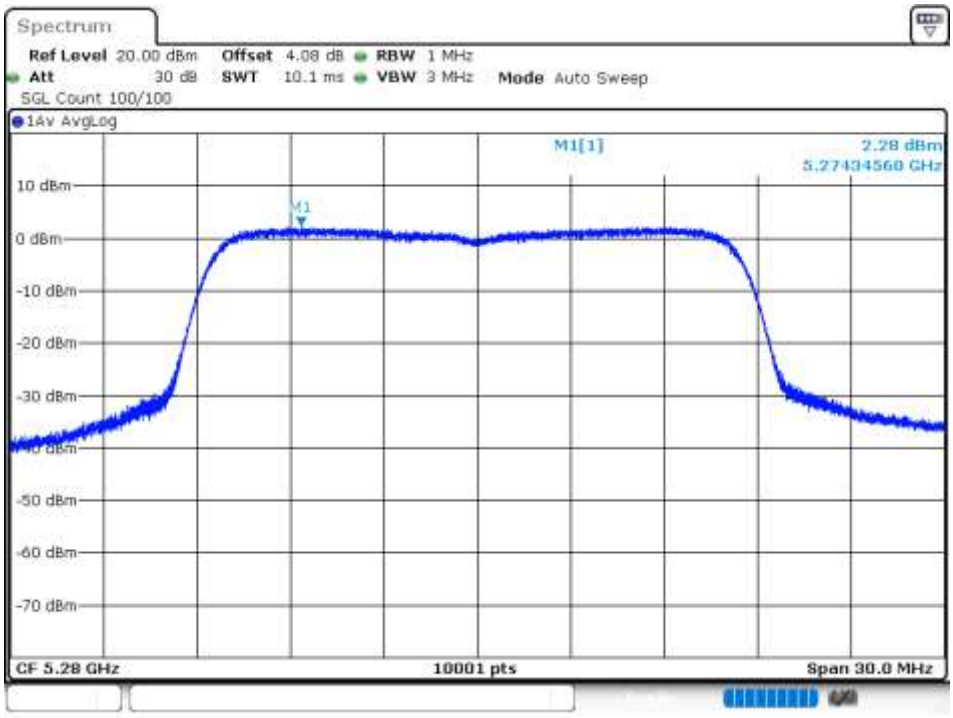


OBW NVNT ac80 5290MHz Ant1

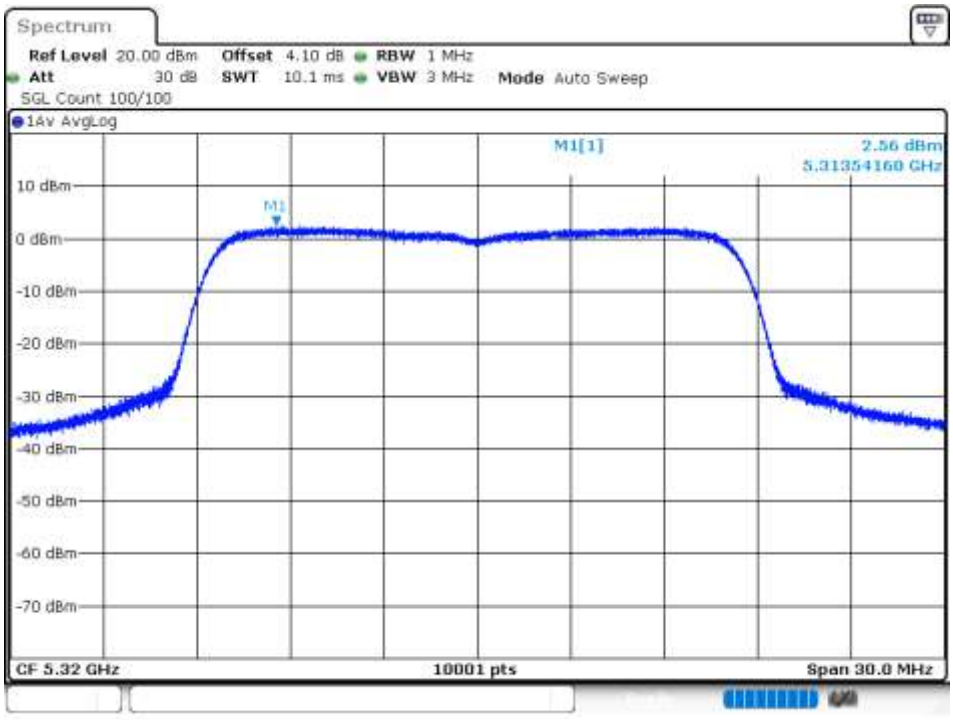


Maximum Power Spectral Density Level

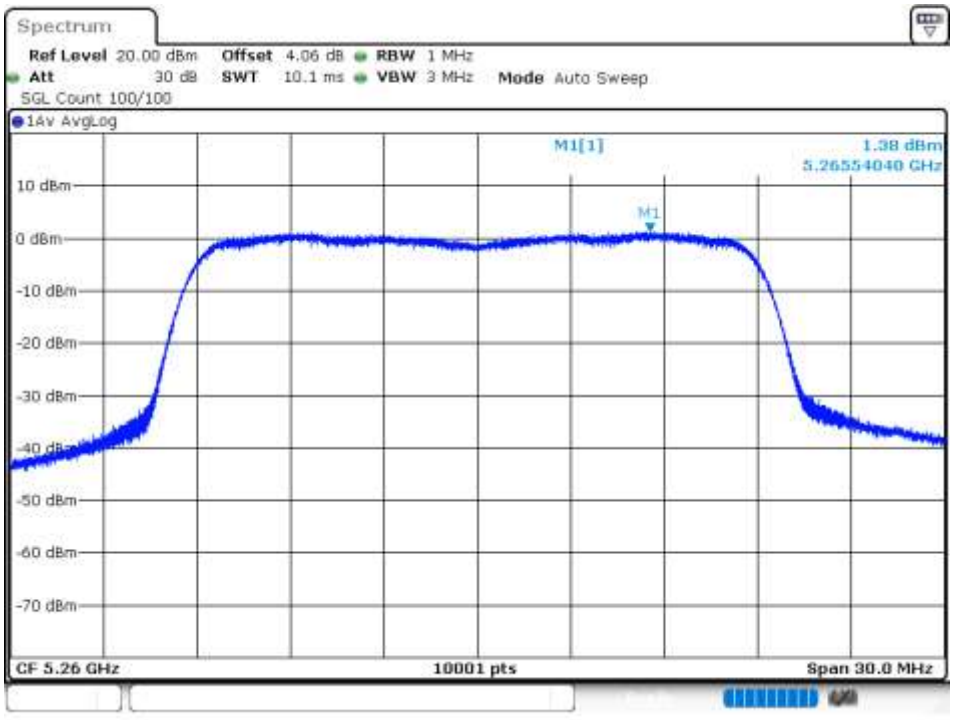
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	1.52	0	1.52	11	Pass
NVNT	a	5280	Ant1	2.28	0	2.28	11	Pass
NVNT	a	5320	Ant1	2.56	0	2.56	11	Pass
NVNT	n20	5260	Ant1	1.38	0	1.38	11	Pass
NVNT	n20	5280	Ant1	1.35	0	1.35	11	Pass
NVNT	n20	5320	Ant1	1.3	0	1.3	11	Pass
NVNT	n40	5270	Ant1	-2.16	0	-2.16	11	Pass
NVNT	n40	5310	Ant1	-3.52	0	-3.52	11	Pass
NVNT	ac20	5260	Ant1	0.5	0	0.5	11	Pass
NVNT	ac20	5280	Ant1	1.04	0	1.04	11	Pass
NVNT	ac20	5320	Ant1	1.04	0	1.04	11	Pass
NVNT	ac40	5270	Ant1	-2.57	0	-2.57	11	Pass
NVNT	ac40	5310	Ant1	-3.94	0	-3.94	11	Pass
NVNT	ac80	5290	Ant1	-6.32	0	-6.32	11	Pass

Test Graphs
PSD NVNT a 5260MHz Ant1

PSD NVNT a 5280MHz Ant1


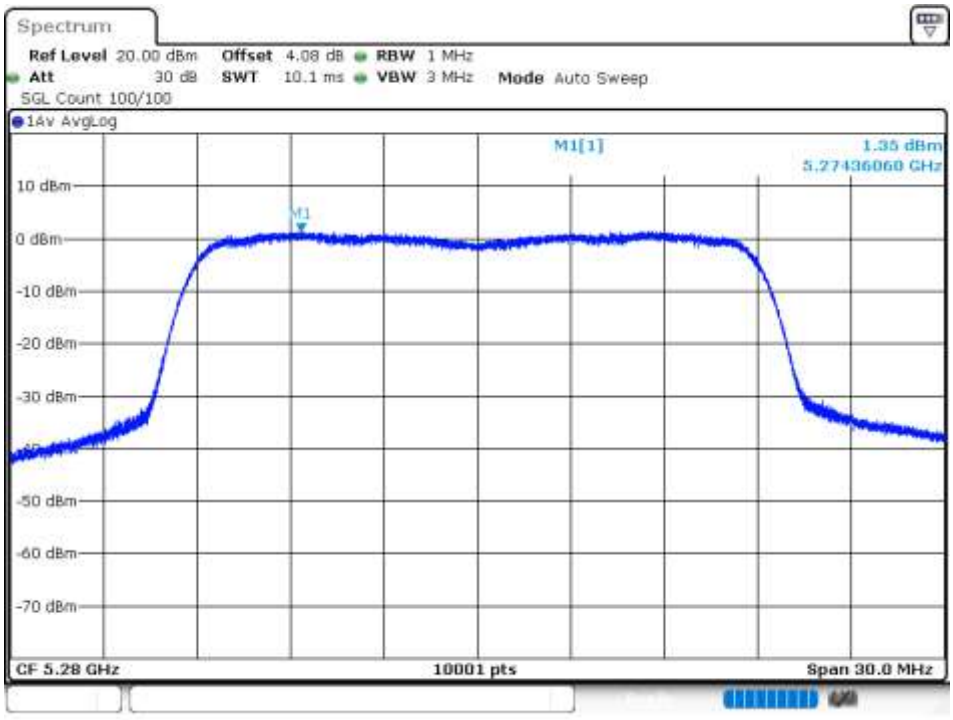
PSD NVNT a 5320MHz Ant1



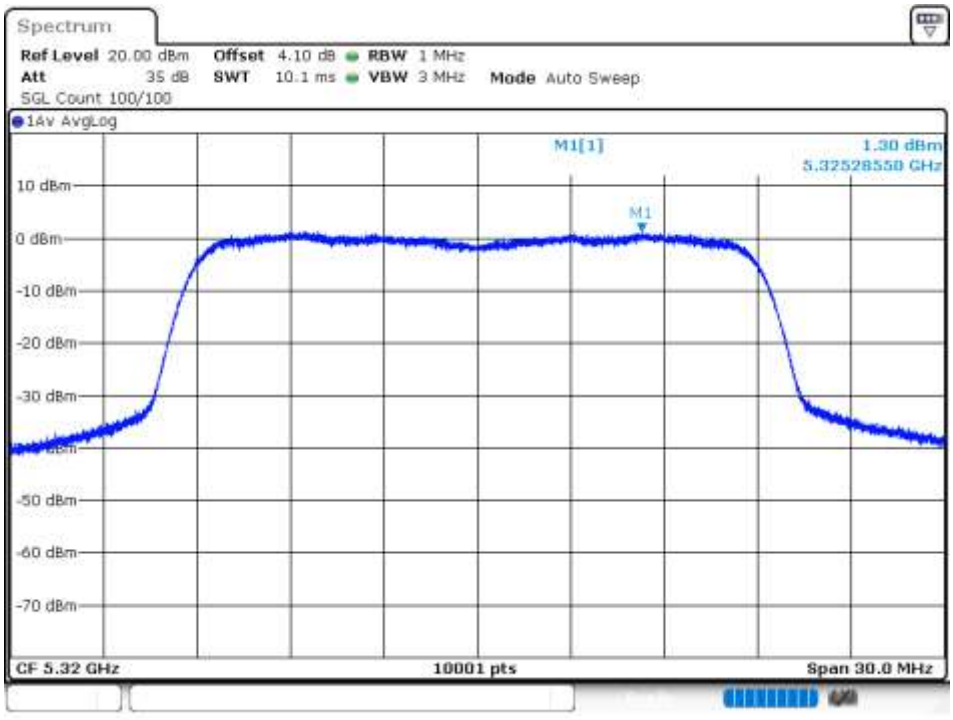
PSD NVNT n20 5260MHz Ant1



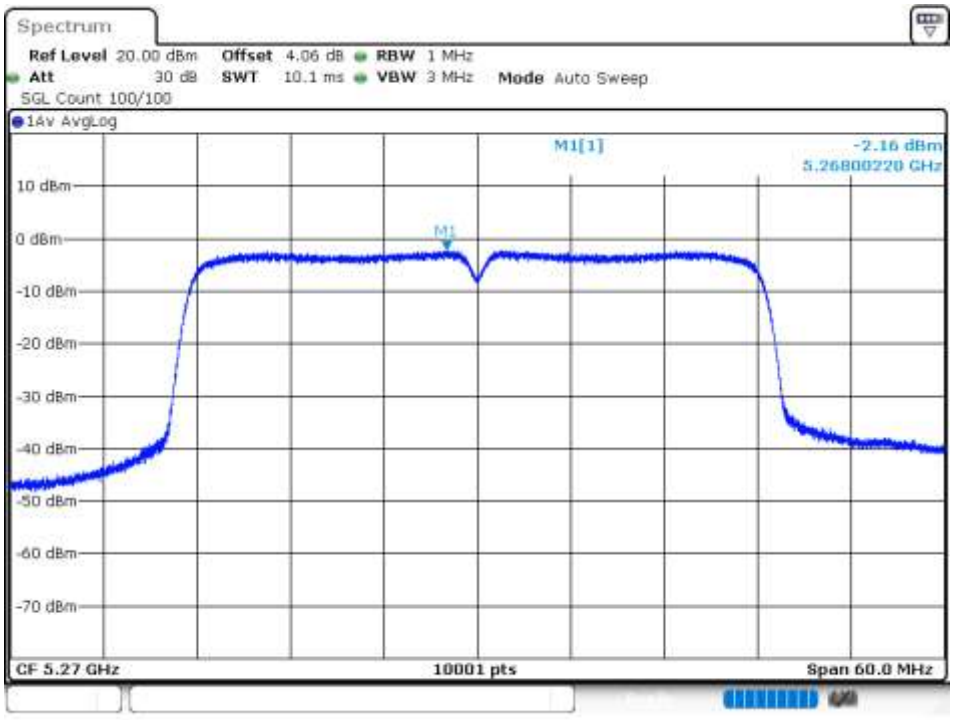
PSD NVNT n20 5280MHz Ant1



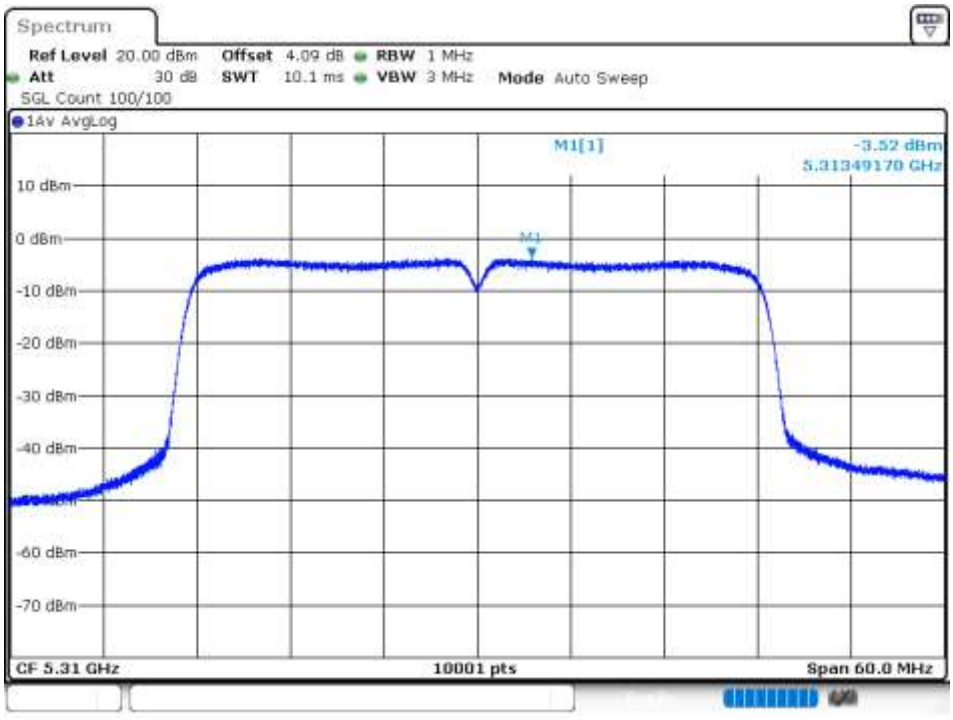
PSD NVNT n20 5320MHz Ant1



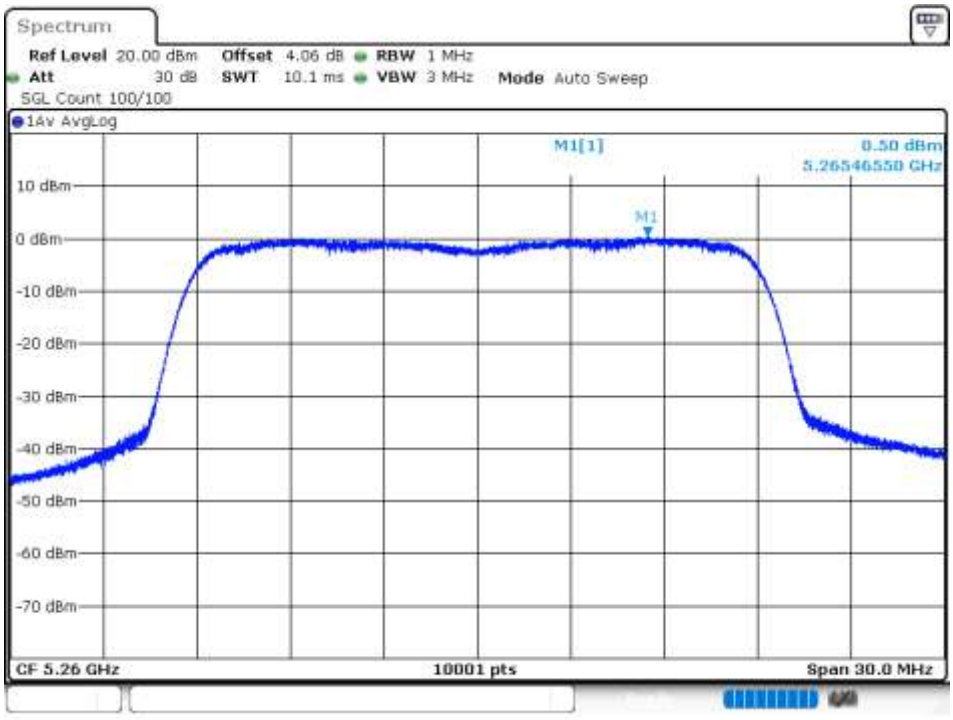
PSD NVNT n40 5270MHz Ant1



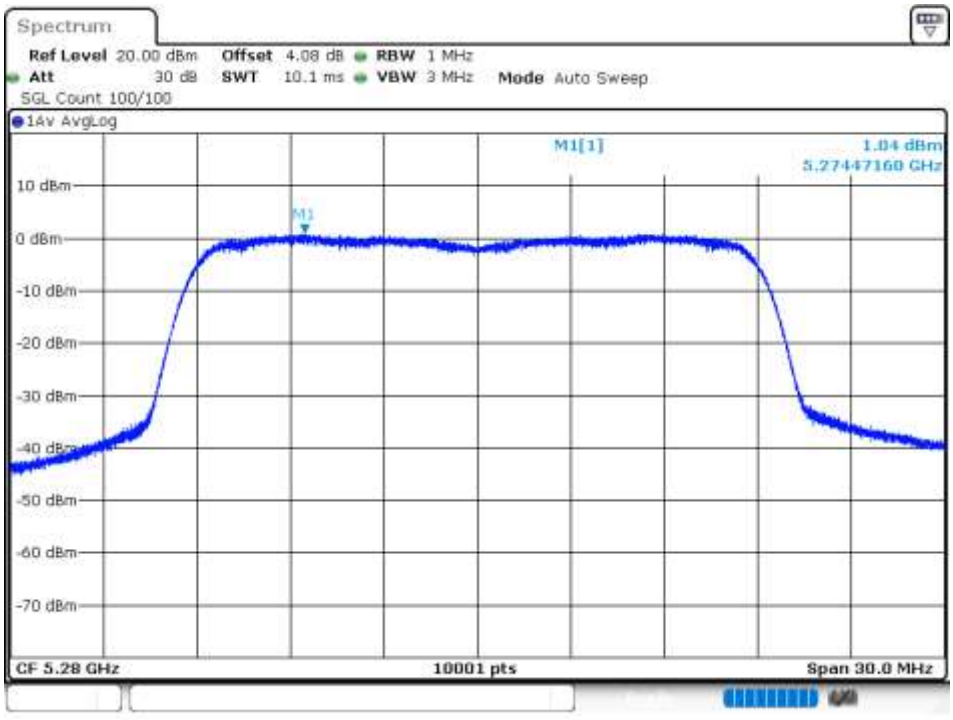
PSD NVNT n40 5310MHz Ant1



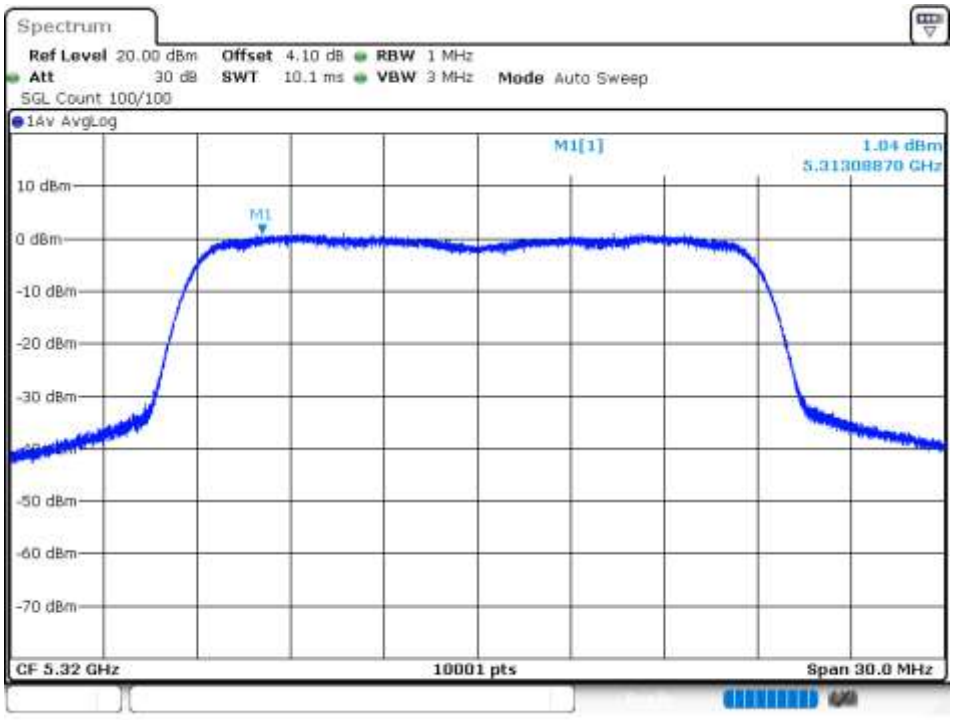
PSD NVNT ac20 5260MHz Ant1



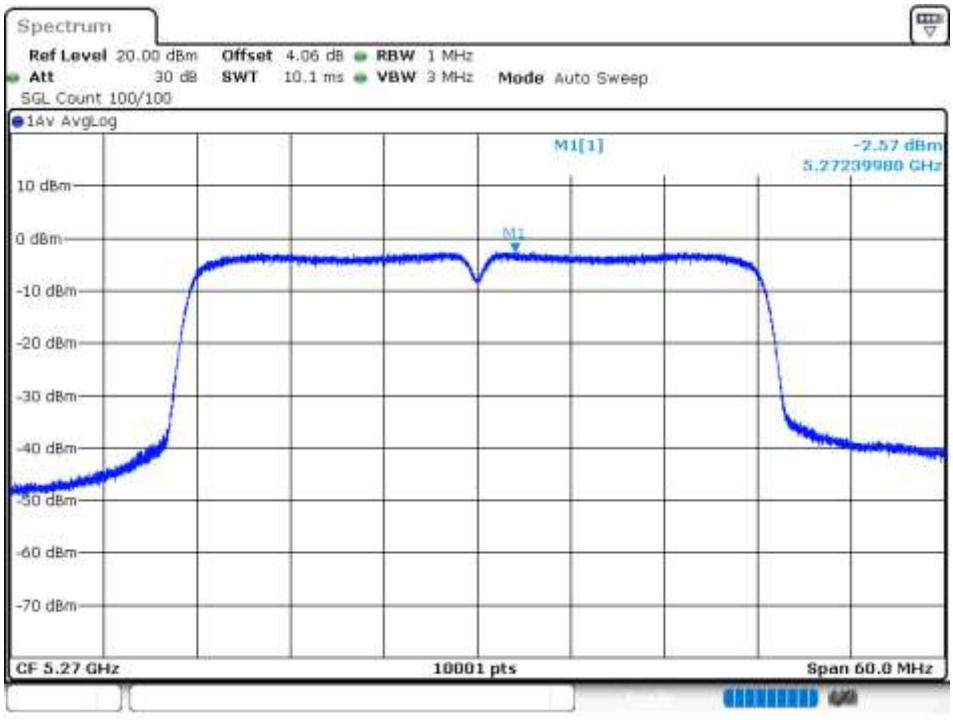
PSD NVNT ac20 5280MHz Ant1



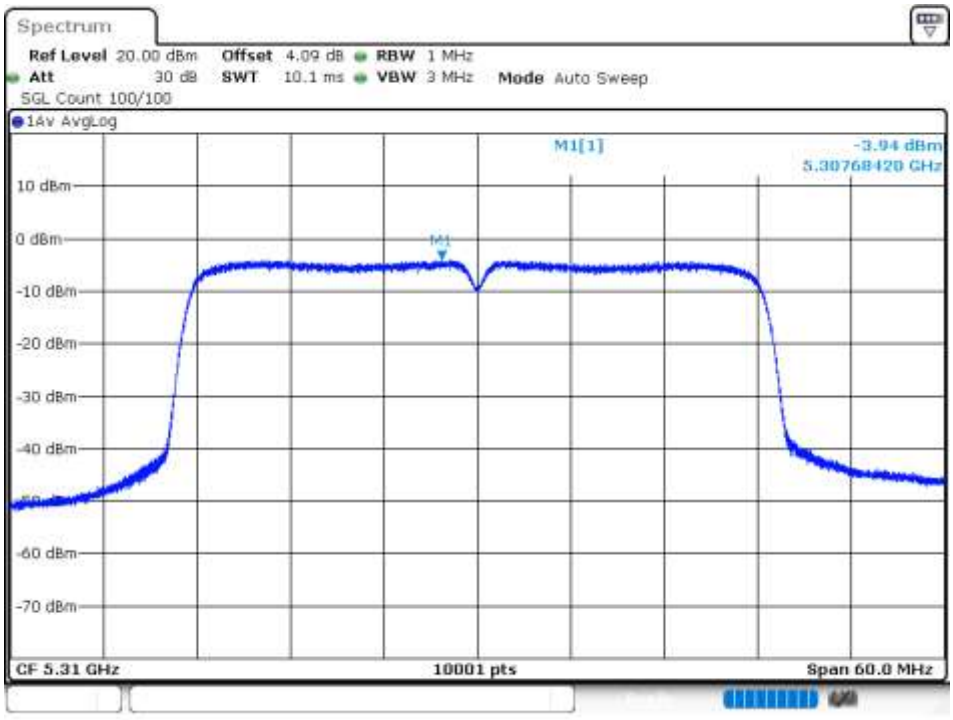
PSD NVNT ac20 5320MHz Ant1



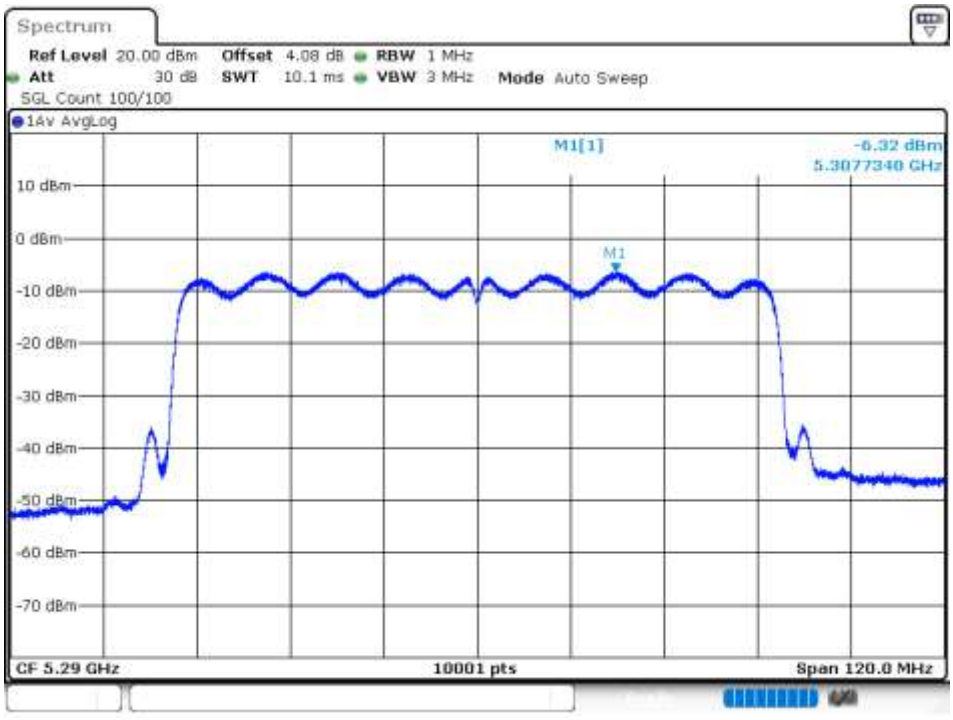
PSD NVNT ac40 5270MHz Ant1



PSD NVNT ac40 5310MHz Ant1



PSD NVNT ac80 5290MHz Ant1

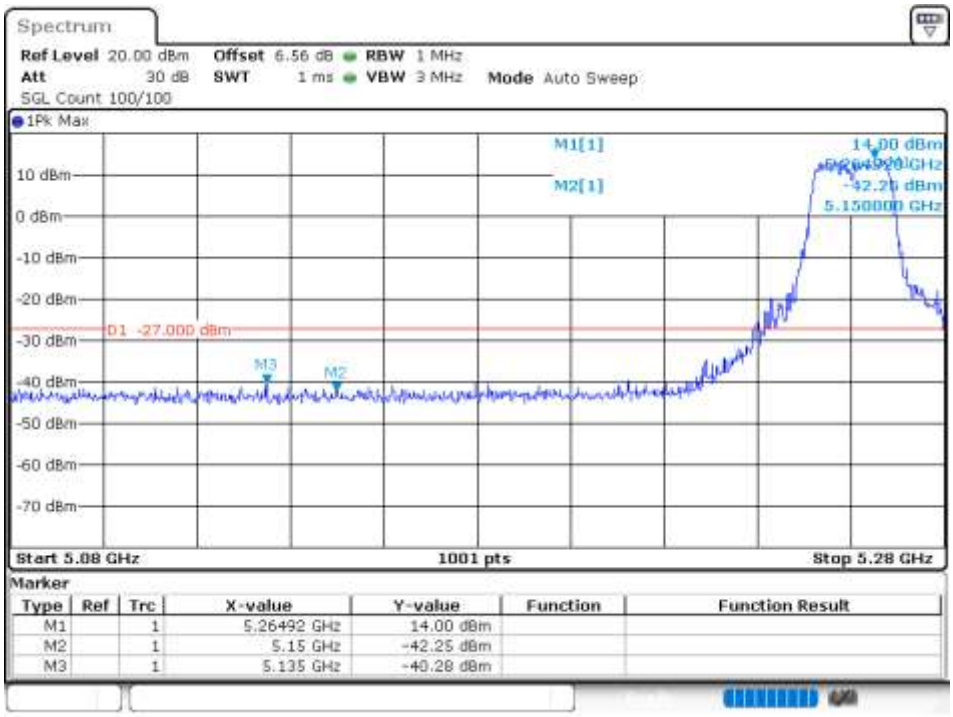


Band Edge

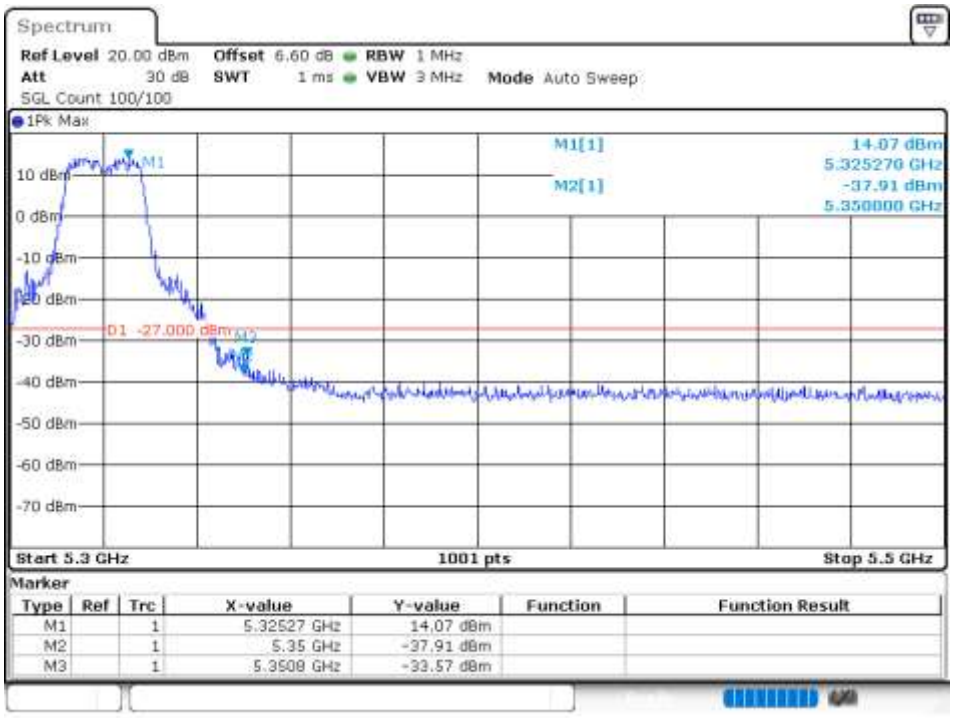
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-40.27	-27	Pass
NVNT	a	5320	Ant1	-33.57	-27	Pass
NVNT	n20	5260	Ant1	-40.59	-27	Pass
NVNT	n20	5320	Ant1	-34.98	-27	Pass
NVNT	n40	5270	Ant1	-40.9	-27	Pass
NVNT	n40	5310	Ant1	-28.09	-27	Pass
NVNT	ac20	5260	Ant1	-40.76	-27	Pass
NVNT	ac20	5320	Ant1	-34.78	-27	Pass
NVNT	ac40	5270	Ant1	-41.27	-27	Pass
NVNT	ac40	5310	Ant1	-28.87	-27	Pass
NVNT	ac80	5290	Ant1	-41.55	-27	Pass
NVNT	ac80	5290	Ant1	-30.85	-27	Pass

Note: This test has increased antenna gain .

Test Graphs
Band Edge NVNT a 5260MHz Low Ant1

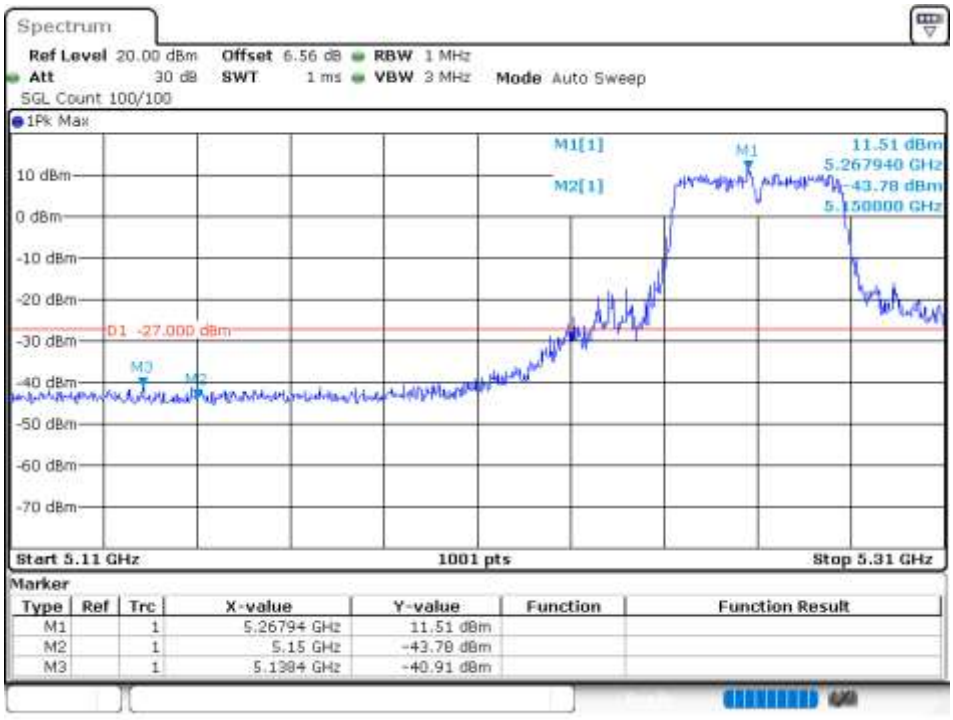


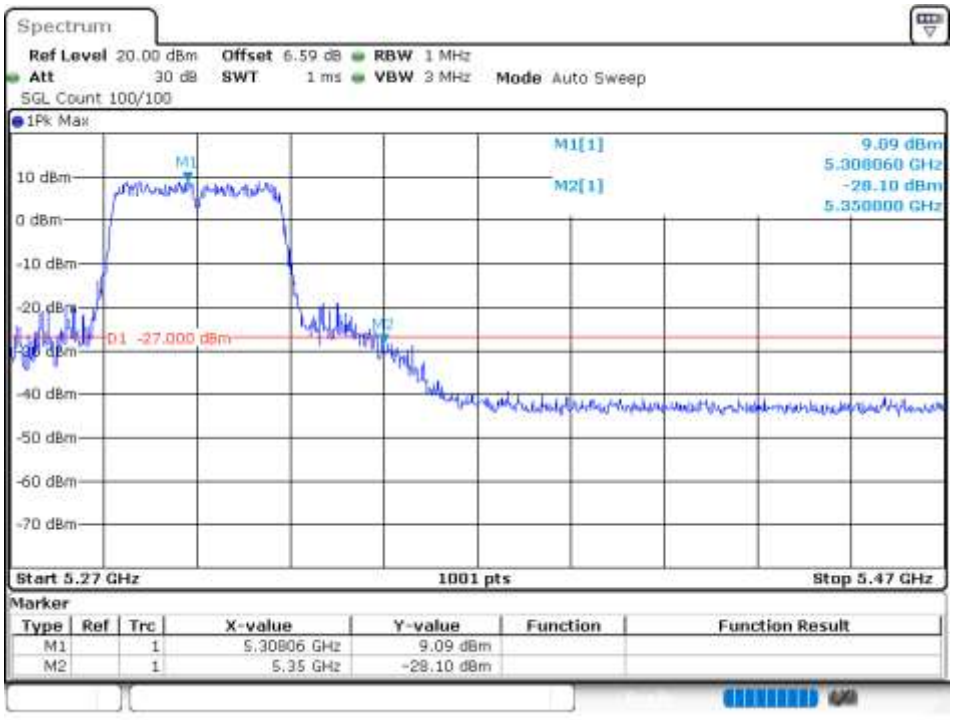
Band Edge NVNT a 5320MHz High Ant1



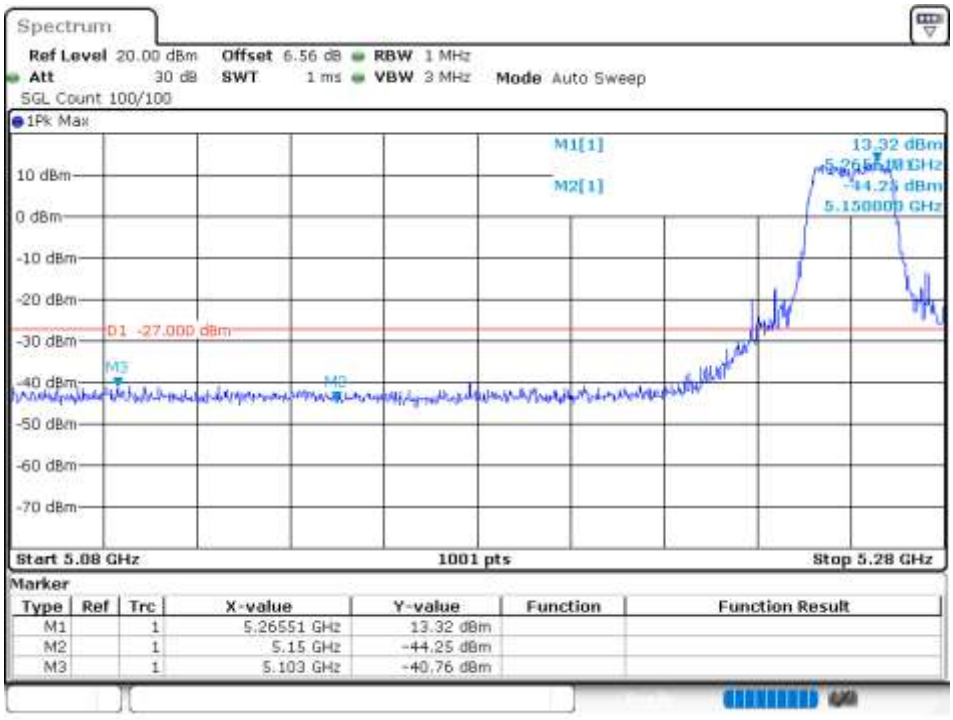
Band Edge NVNT n20 5260MHz Low Ant1

Band Edge NVNT n20 5320MHz High Ant1

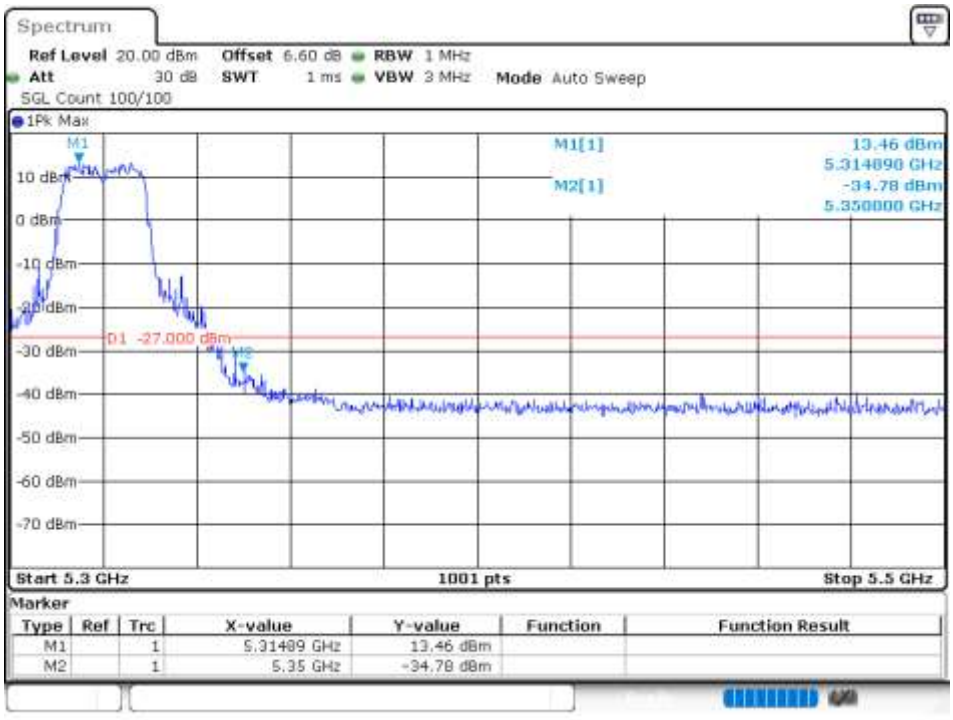
Band Edge NVNT n40 5270MHz Low Ant1


Band Edge NVNT n40 5310MHz High Ant1


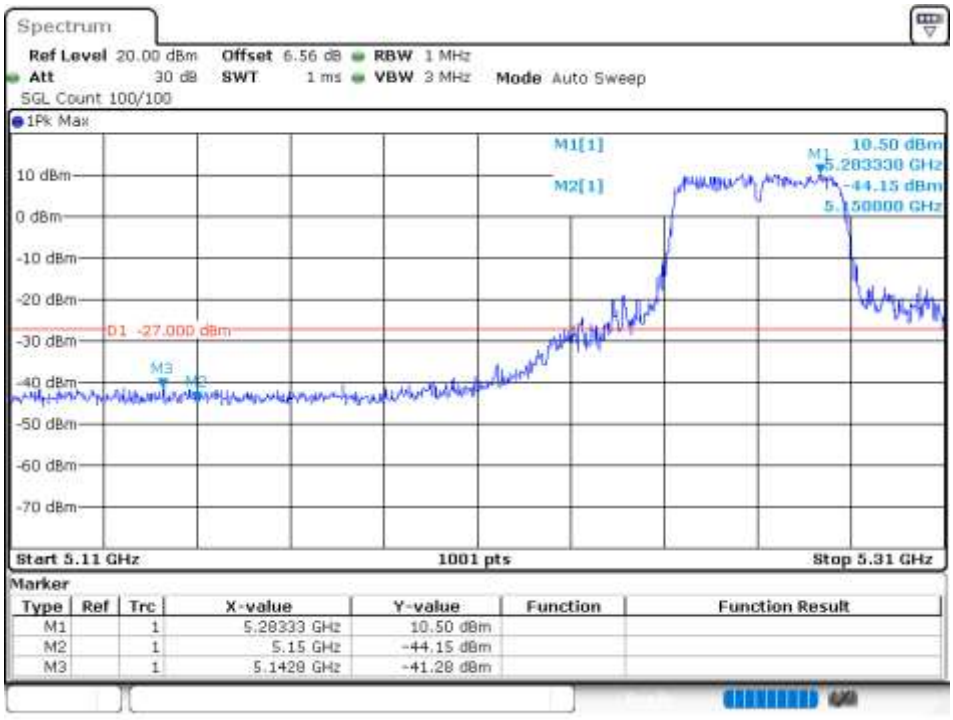
Band Edge NVNT ac20 5260MHz Low Ant1



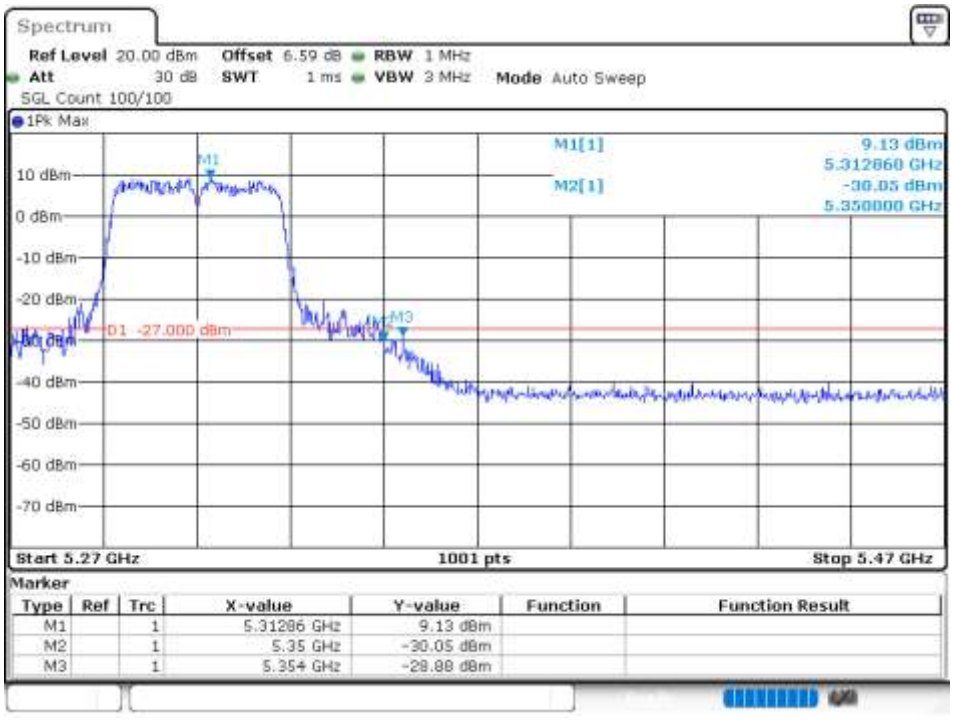
Band Edge NVNT ac20 5320MHz High Ant1



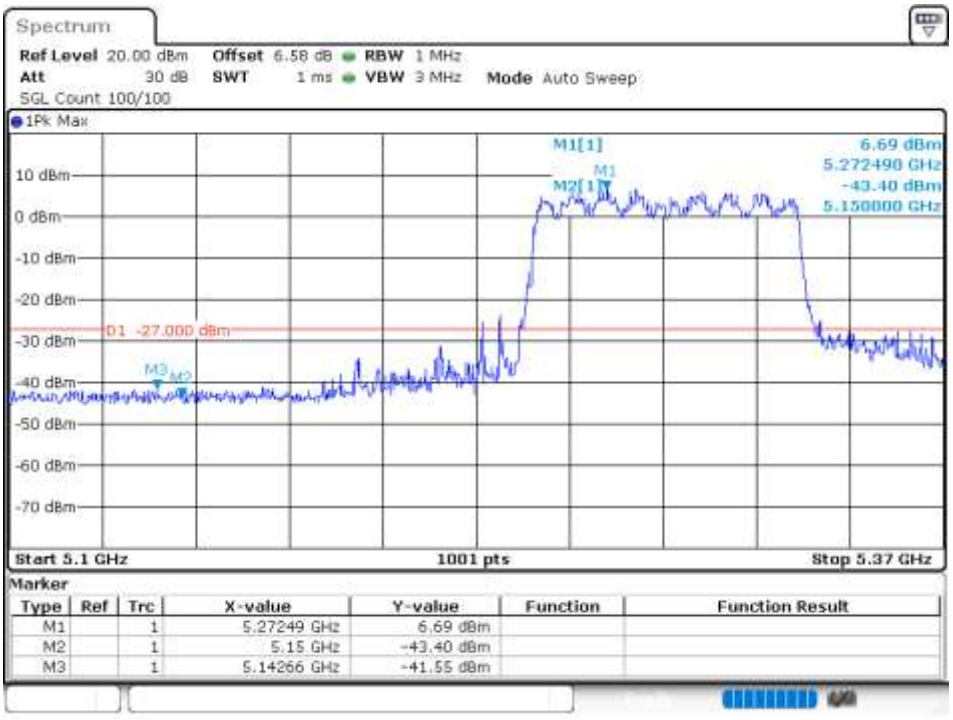
Band Edge NVNT ac40 5270MHz Low Ant1



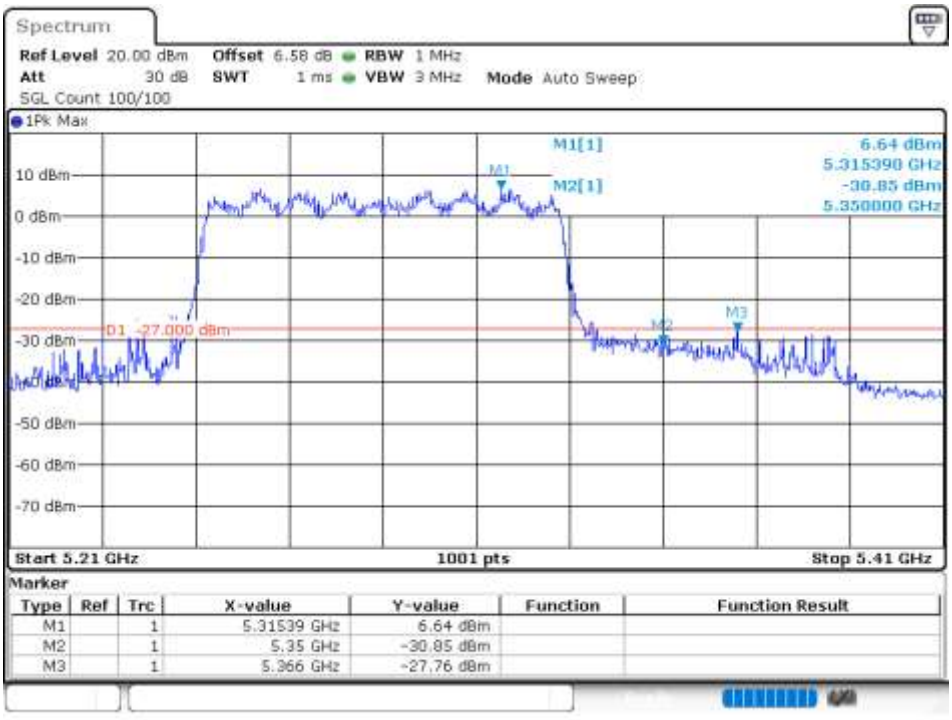
Band Edge NVNT ac40 5310MHz High Ant1



Band Edge NVNT ac80 5290MHz Low Ant1



Band Edge NVNT ac80 5290MHz High Ant1

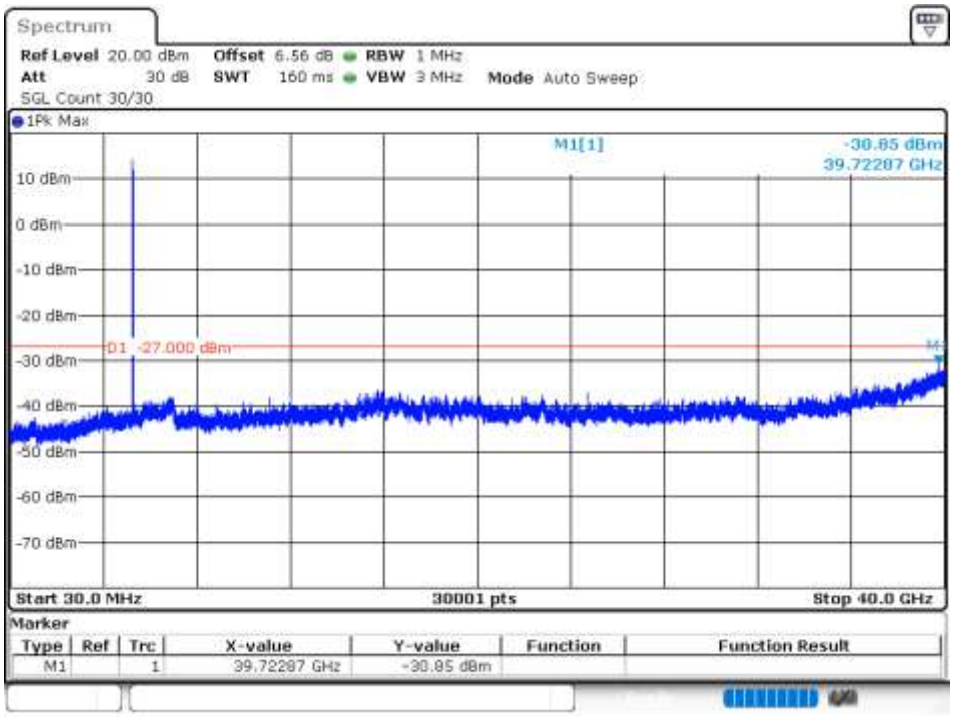


Conducted RF Spurious Emission

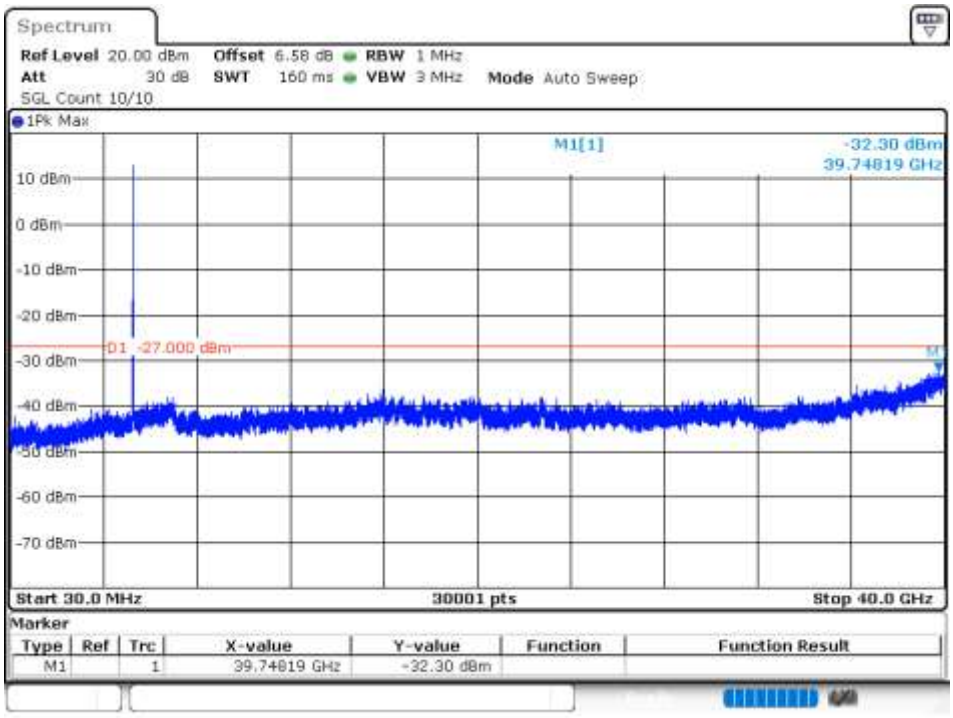
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-30.84	-27	Pass
NVNT	a	5280	Ant1	-32.3	-27	Pass
NVNT	a	5320	Ant1	-31.74	-27	Pass
NVNT	n20	5260	Ant1	-32.29	-27	Pass
NVNT	n20	5280	Ant1	-31.3	-27	Pass
NVNT	n20	5320	Ant1	-31.61	-27	Pass
NVNT	n40	5270	Ant1	-31.69	-27	Pass
NVNT	n40	5310	Ant1	-31.9	-27	Pass
NVNT	ac20	5260	Ant1	-32.29	-27	Pass
NVNT	ac20	5280	Ant1	-31.99	-27	Pass
NVNT	ac20	5320	Ant1	-31.57	-27	Pass
NVNT	ac40	5270	Ant1	-31.97	-27	Pass
NVNT	ac40	5310	Ant1	-32.19	-27	Pass
NVNT	ac80	5290	Ant1	-40.97	-27	Pass
NVNT	ac80	5290	Ant1	-40.97	-27	Pass

Note: This test has increased antenna gain .

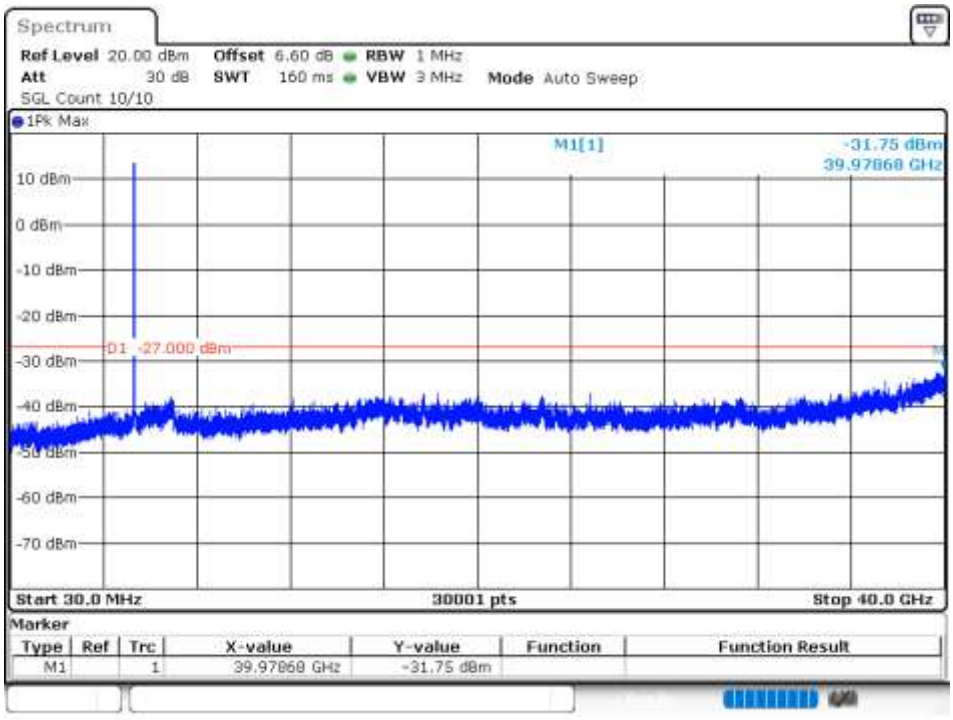
Test Graphs
Tx. Spurious NVNT a 5260MHz Ant1 Emission



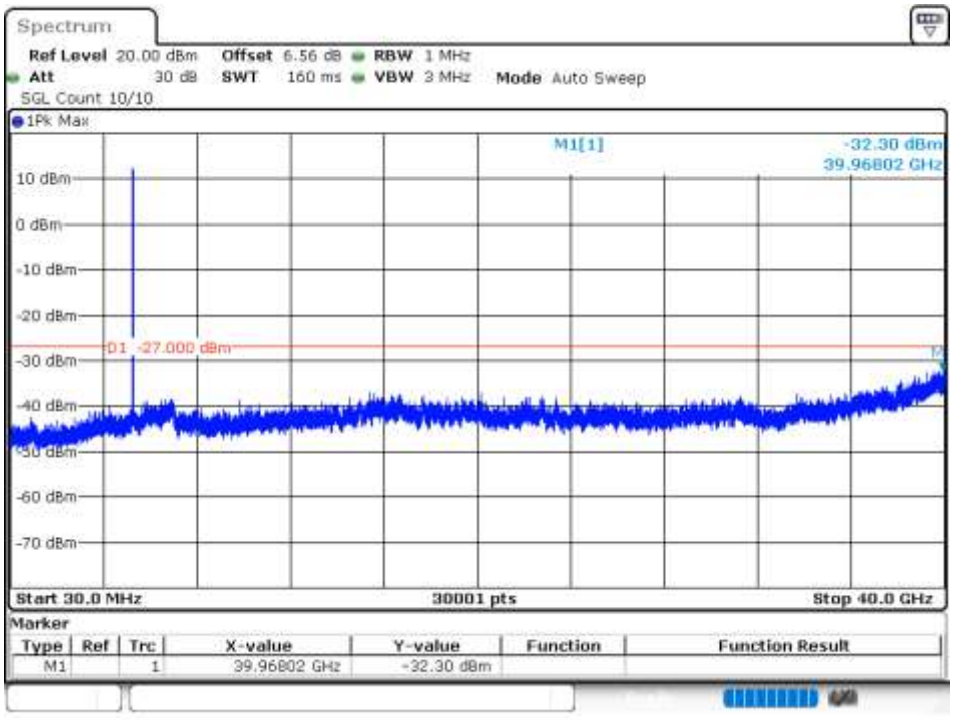
Tx. Spurious NVNT a 5280MHz Ant1 Emission



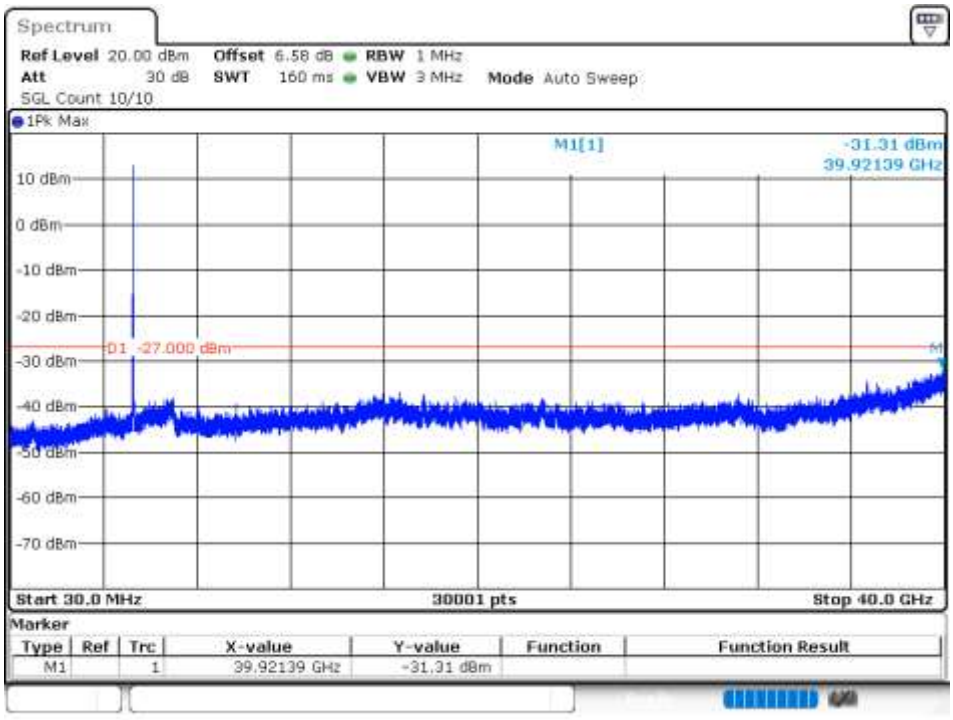
Tx. Spurious NVNT a 5320MHz Ant1 Emission



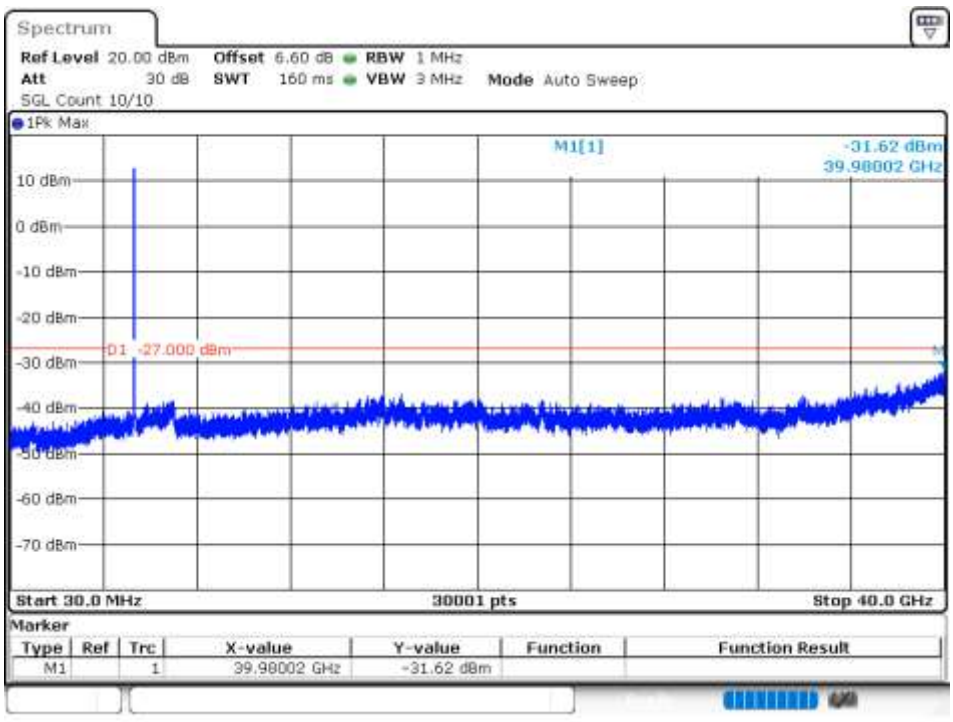
Tx. Spurious NVNT n20 5260MHz Ant1 Emission



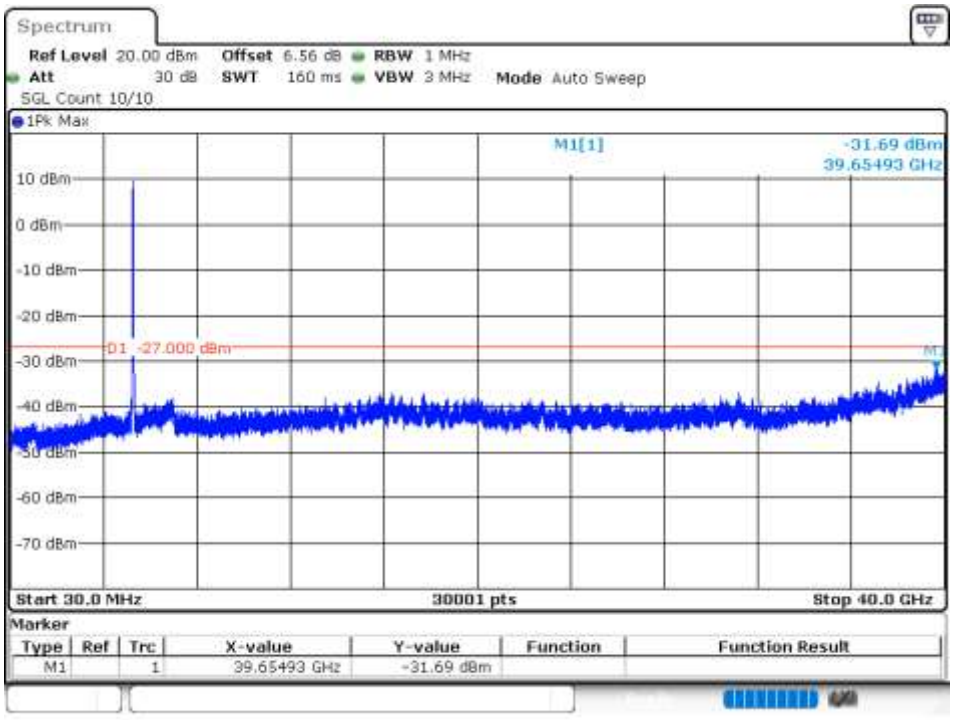
Tx. Spurious NVNT n20 5280MHz Ant1 Emission



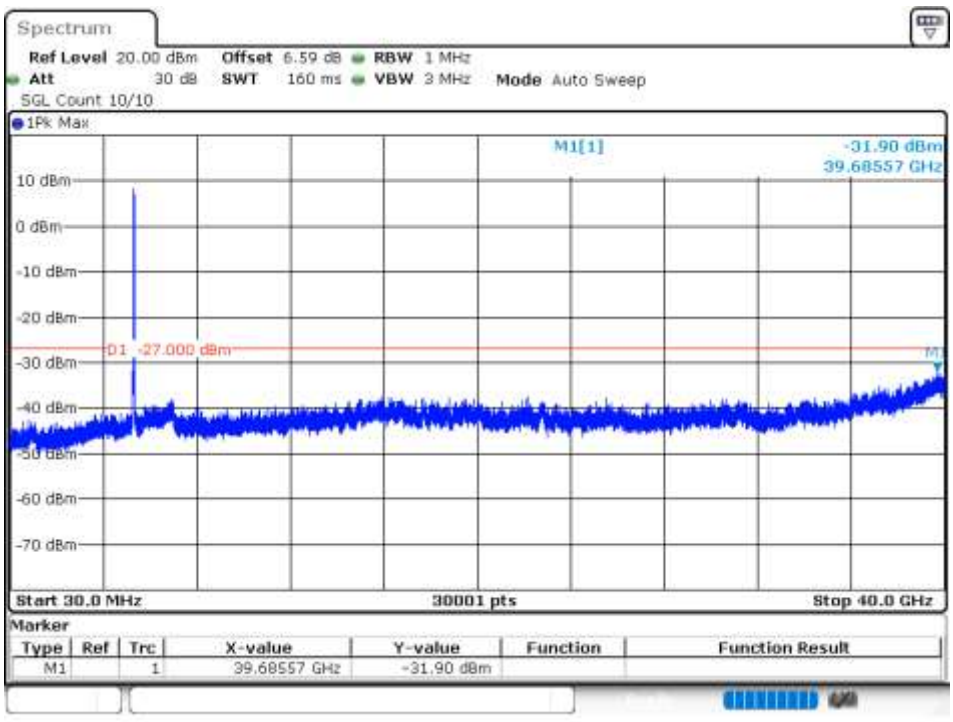
Tx. Spurious NVNT n20 5320MHz Ant1 Emission



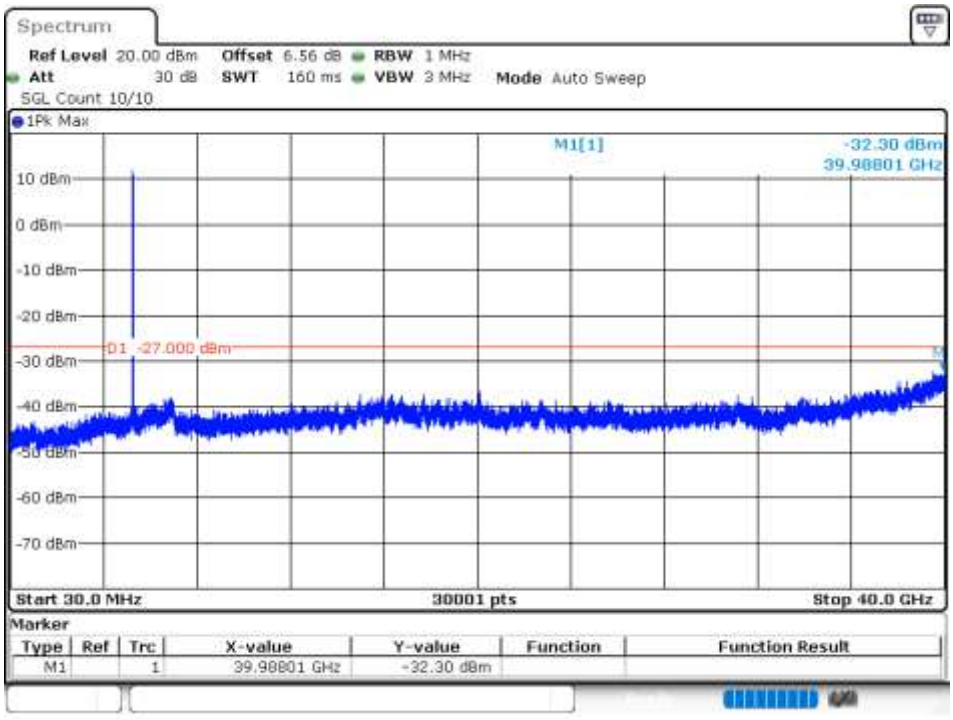
Tx. Spurious NVNT n40 5270MHz Ant1 Emission



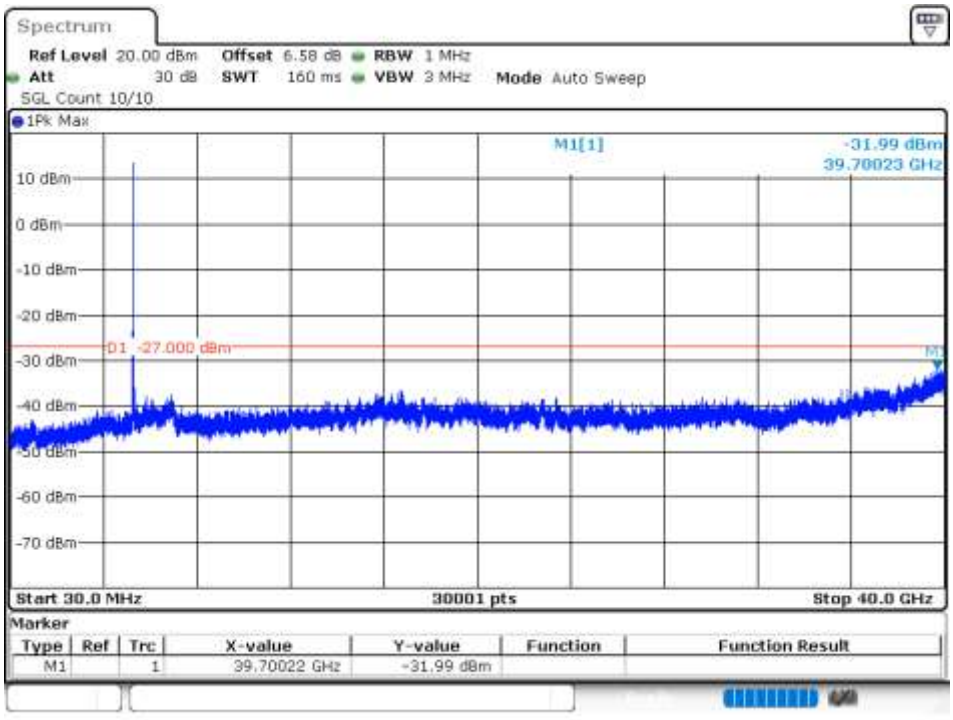
Tx. Spurious NVNT n40 5310MHz Ant1 Emission



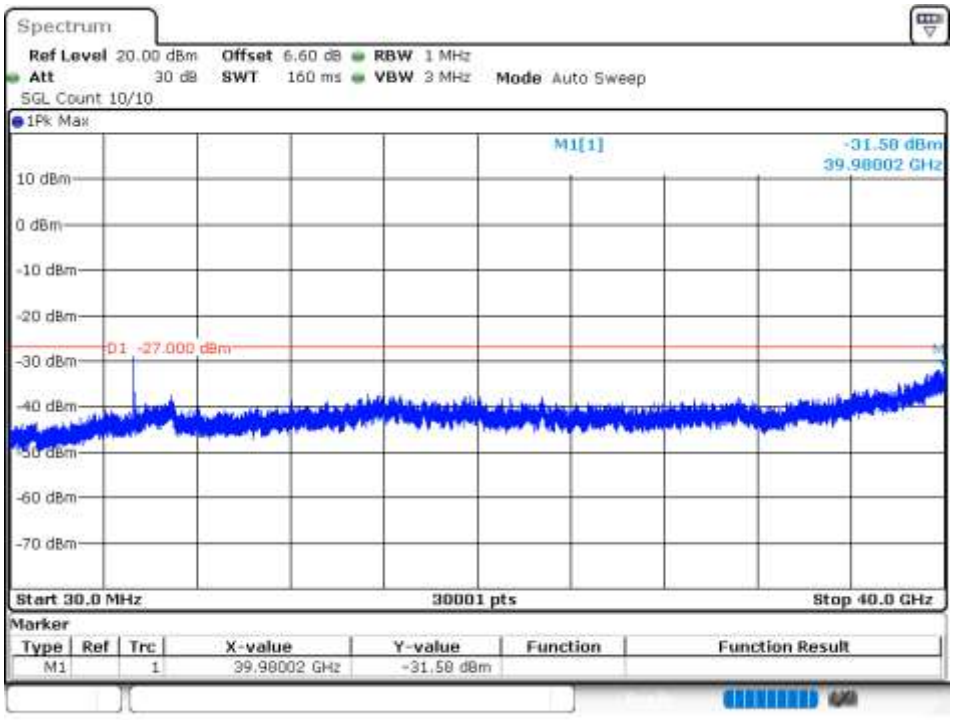
Tx. Spurious NVNT ac20 5260MHz Ant1 Emission



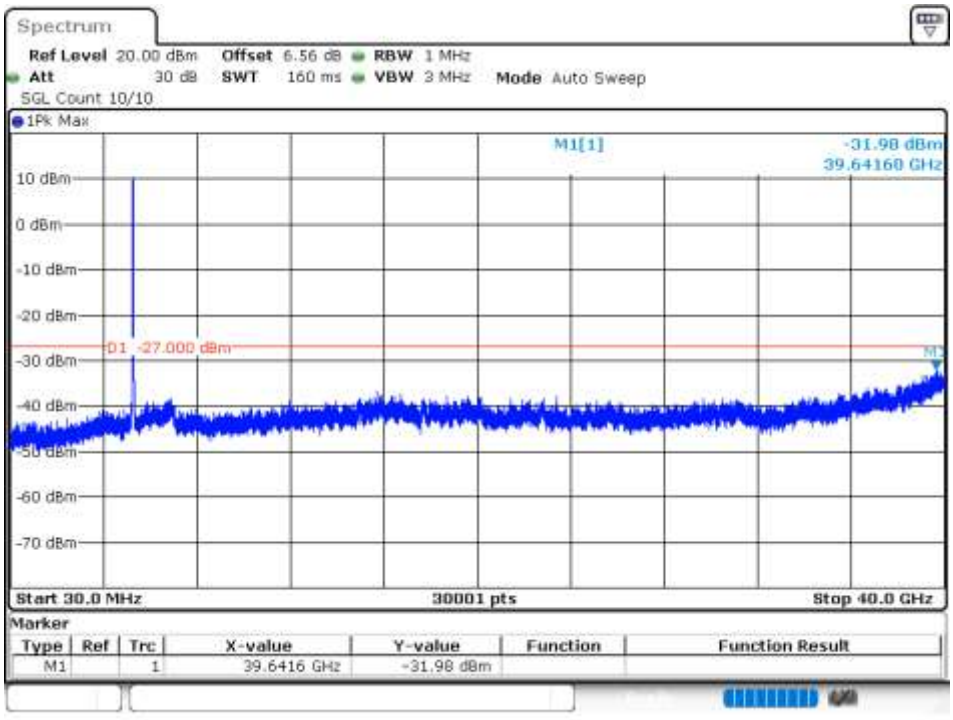
Tx. Spurious NVNT ac20 5280MHz Ant1 Emission



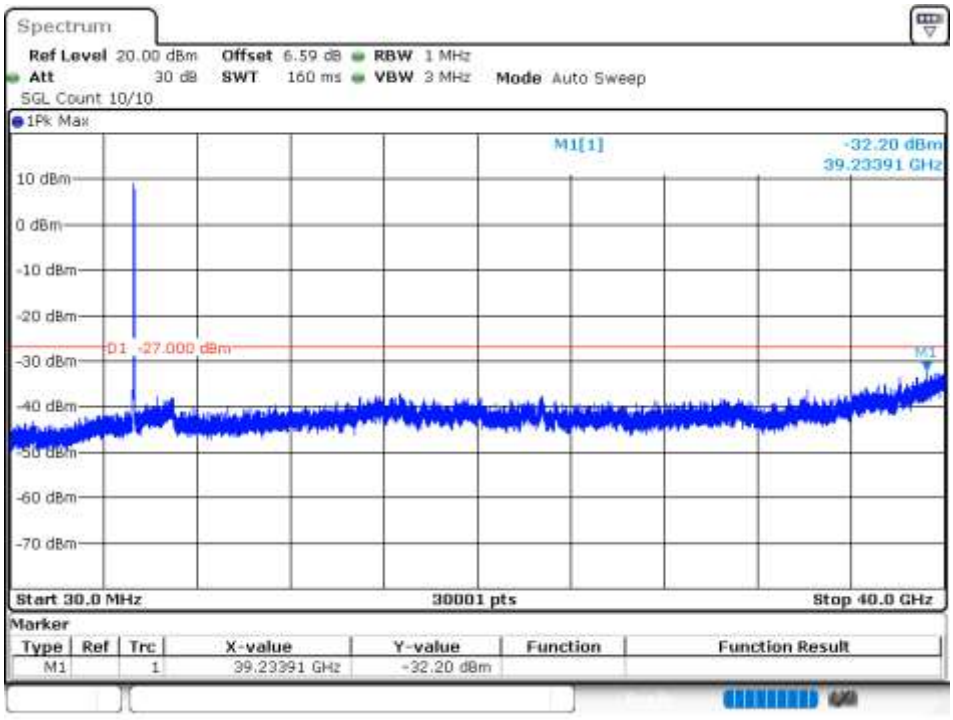
Tx. Spurious NVNT ac20 5320MHz Ant1 Emission



Tx. Spurious NVNT ac40 5270MHz Ant1 Emission



Tx. Spurious NVNT ac40 5310MHz Ant1 Emission



Tx. Spurious NVNT ac80 5290MHz Ant1 Emission