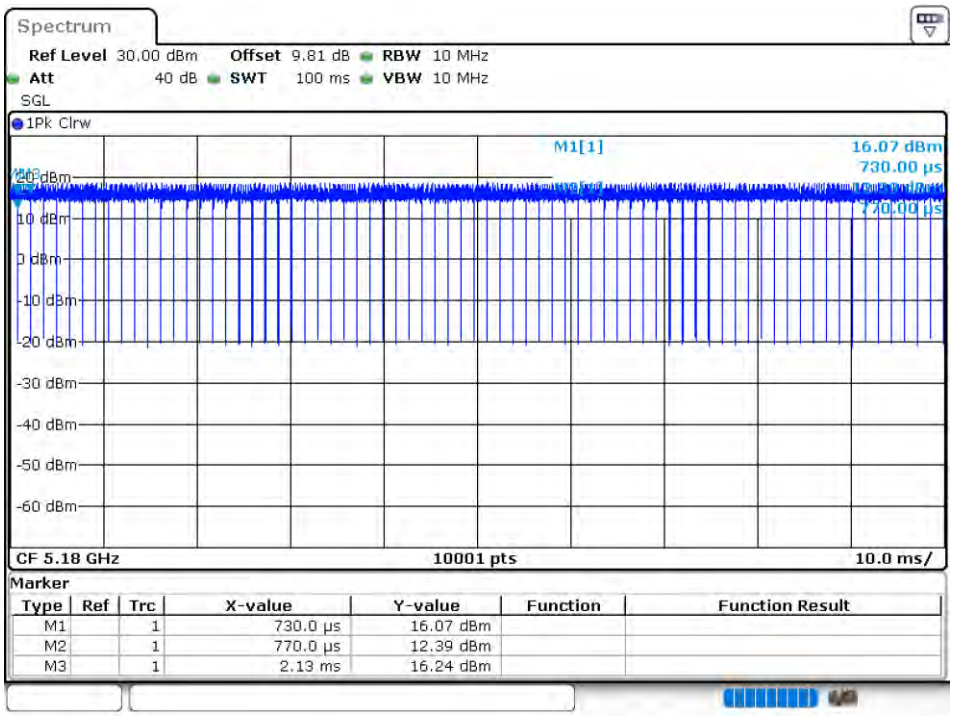
5.2G WIFI

Duty Cycle

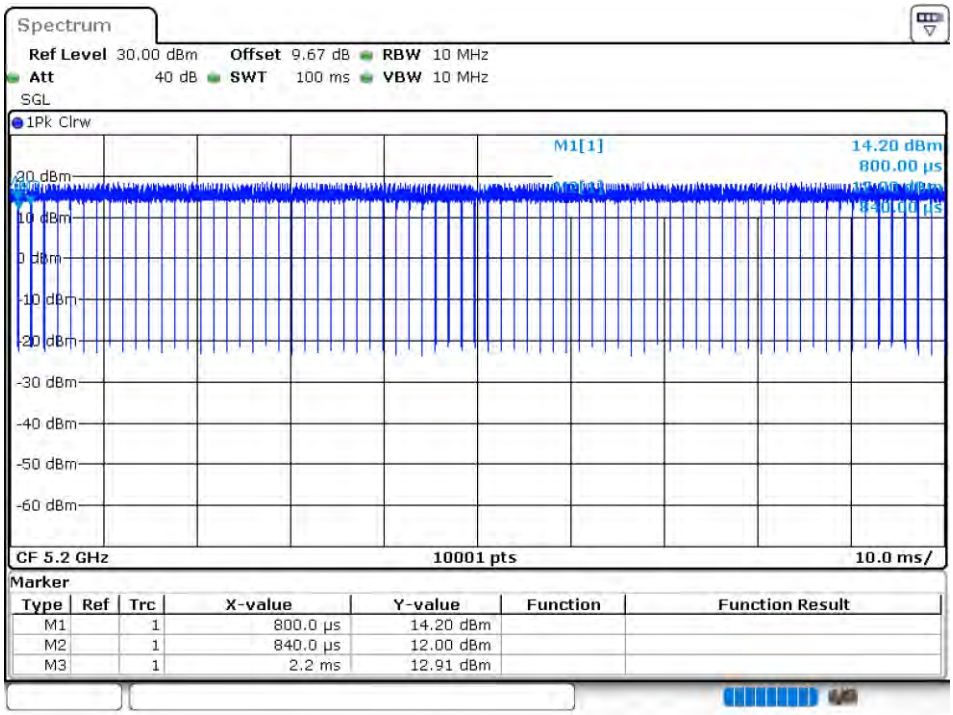
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	98.1	0.08	0.74
NVNT	a	5200	Ant1	98.11	0.08	0.74
NVNT	a	5240	Ant1	98.13	0.08	0.74
NVNT	n20	5180	Ant1	97.99	0.09	0.79
NVNT	n20	5200	Ant1	98	0.09	0.79
NVNT	n20	5240	Ant1	97.98	0.09	0.79
NVNT	n40	5190	Ant1	96.13	0.17	1.59
NVNT	n40	5230	Ant1	96.12	0.17	1.59
NVNT	ac20	5180	Ant1	98.01	0.09	0.78
NVNT	ac20	5200	Ant1	98	0.09	0.78
NVNT	ac20	5240	Ant1	98.01	0.09	0.78
NVNT	ac40	5190	Ant1	96.18	0.17	1.56
NVNT	ac40	5230	Ant1	96.19	0.17	1.56
NVNT	ac80	5210	Ant1	92.67	0.33	3.23

Test Graphs

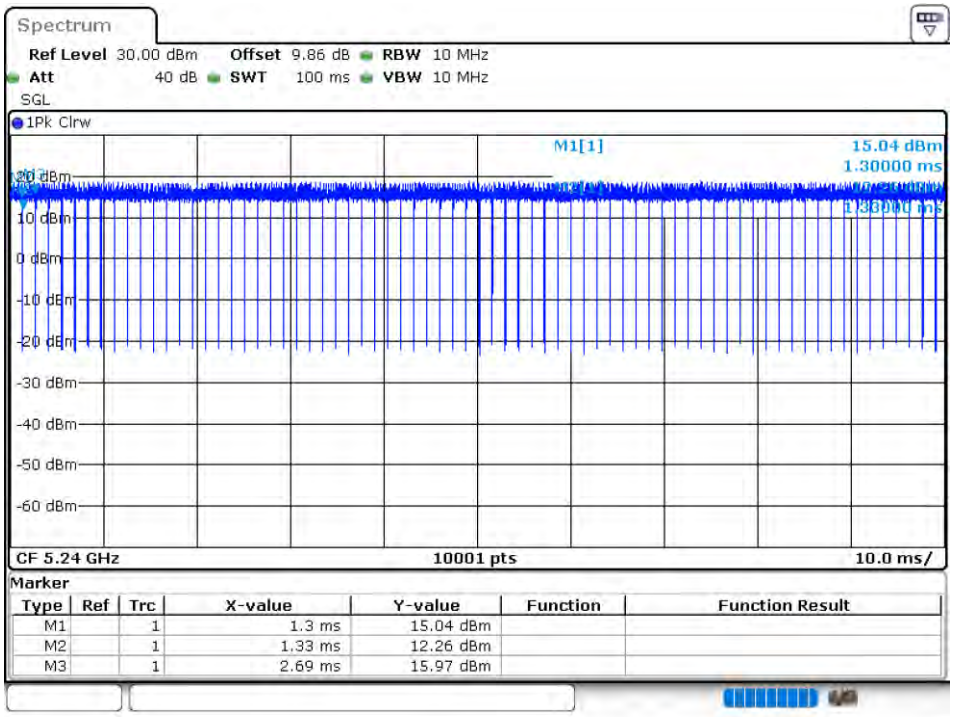
Duty Cycle NVNT a 5180MHz Ant1



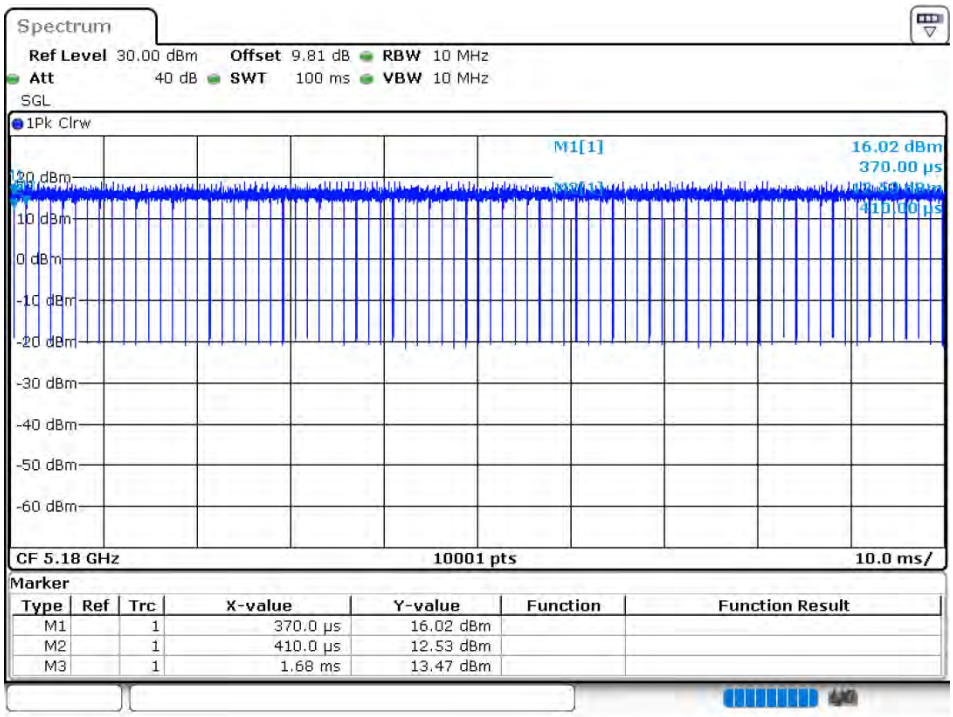
Duty Cycle NVNT a 5200MHz Ant1



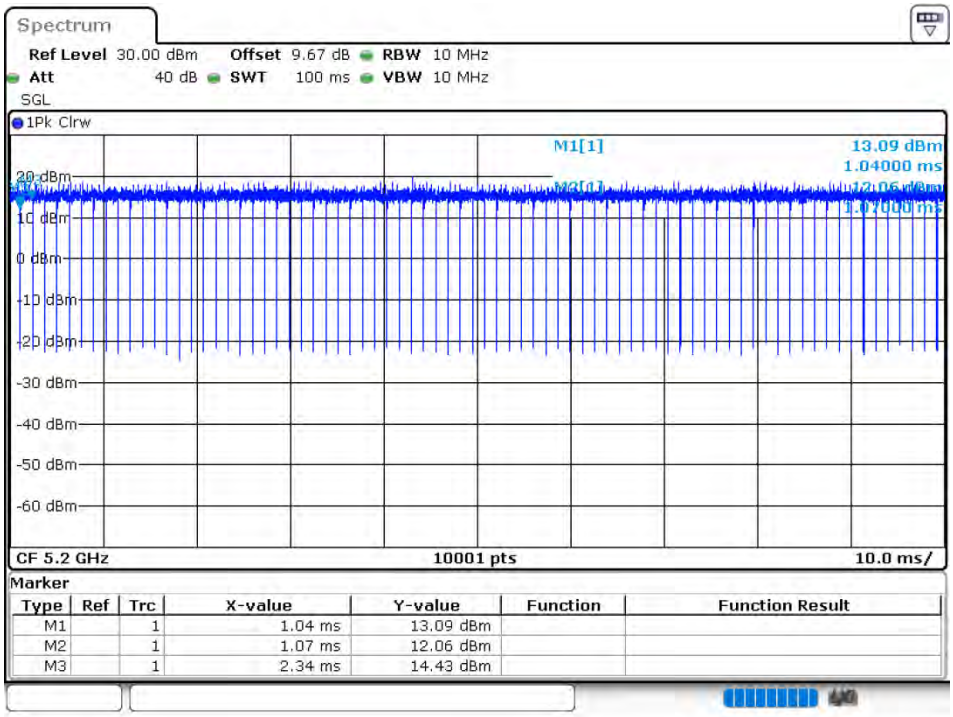
Duty Cycle NVNT a 5240MHz Ant1



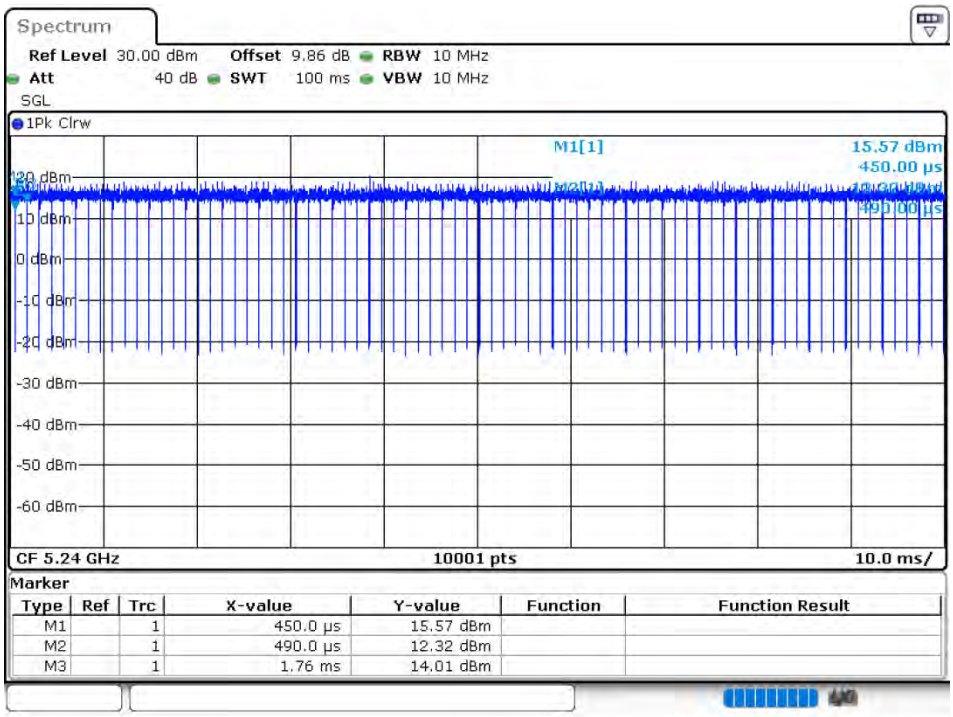
Duty Cycle NVNT n20 5180MHz Ant1



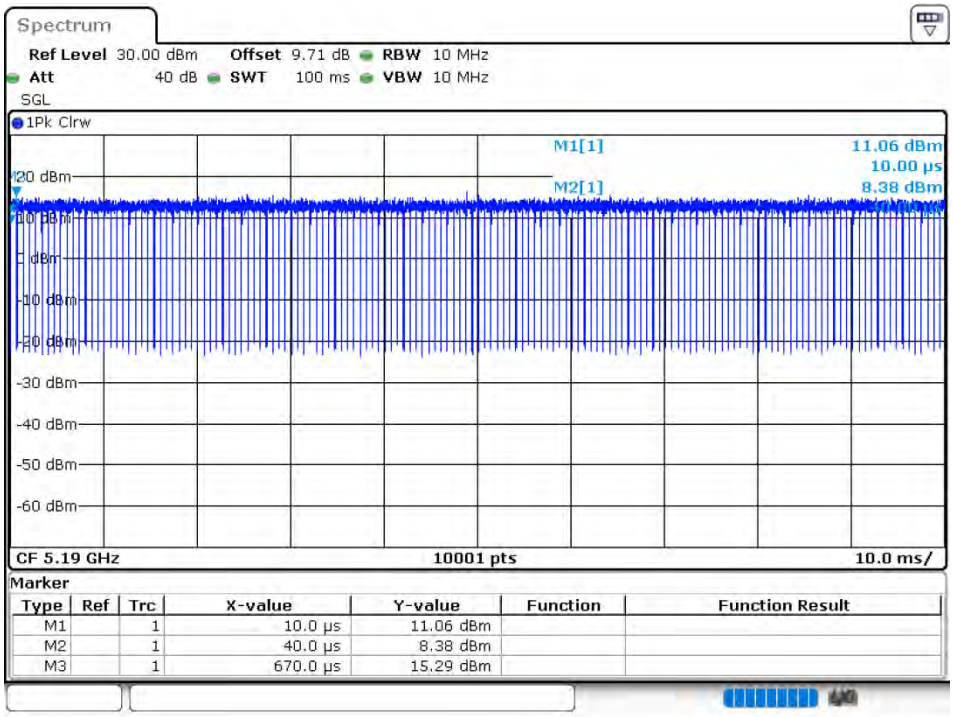
Duty Cycle NVNT n20 5200MHz Ant1



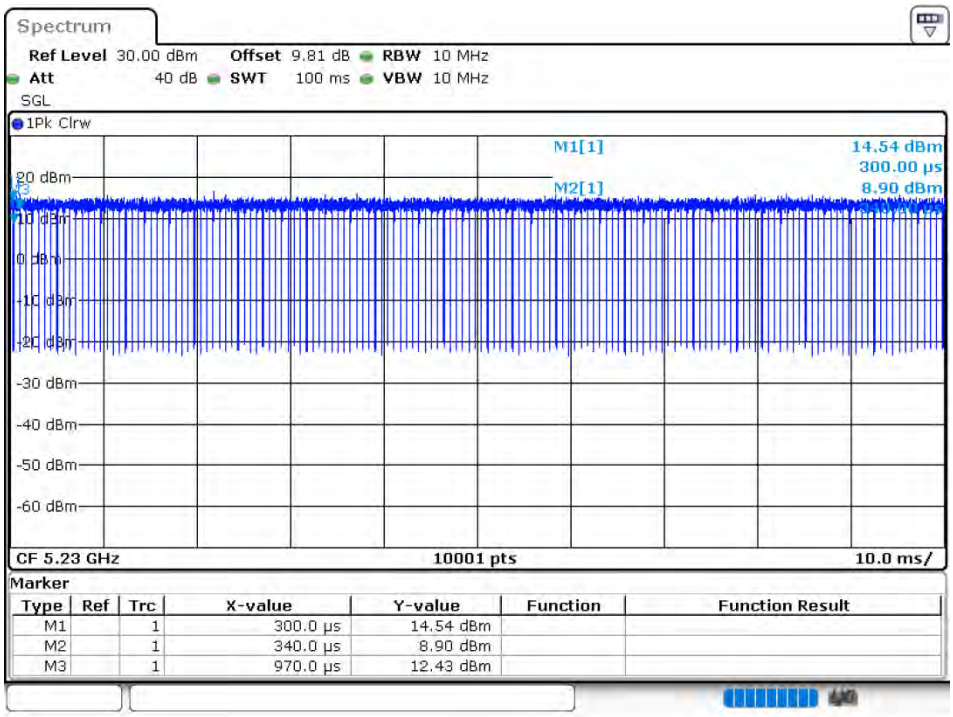
Duty Cycle NVNT n20 5240MHz Ant1



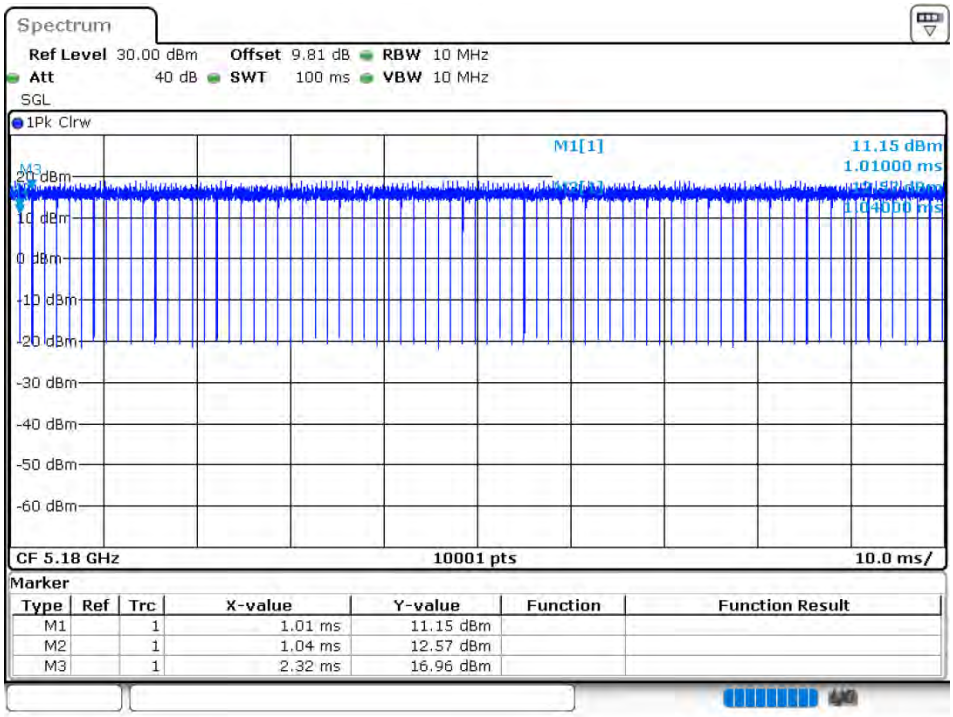
Duty Cycle NVNT n40 5190MHz Ant1



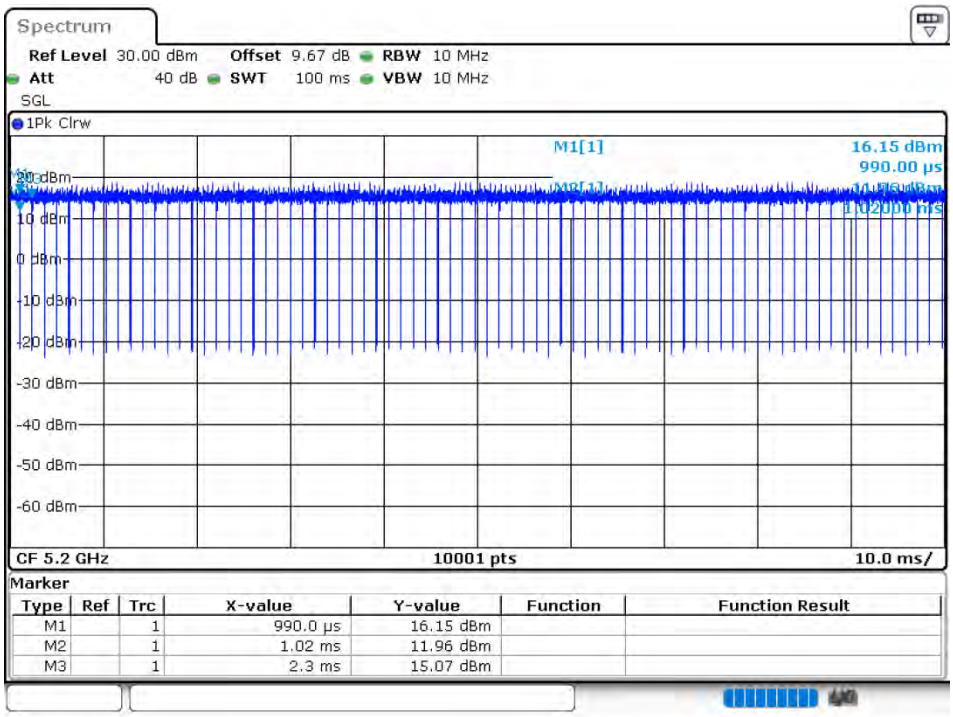
Duty Cycle NVNT n40 5230MHz Ant1



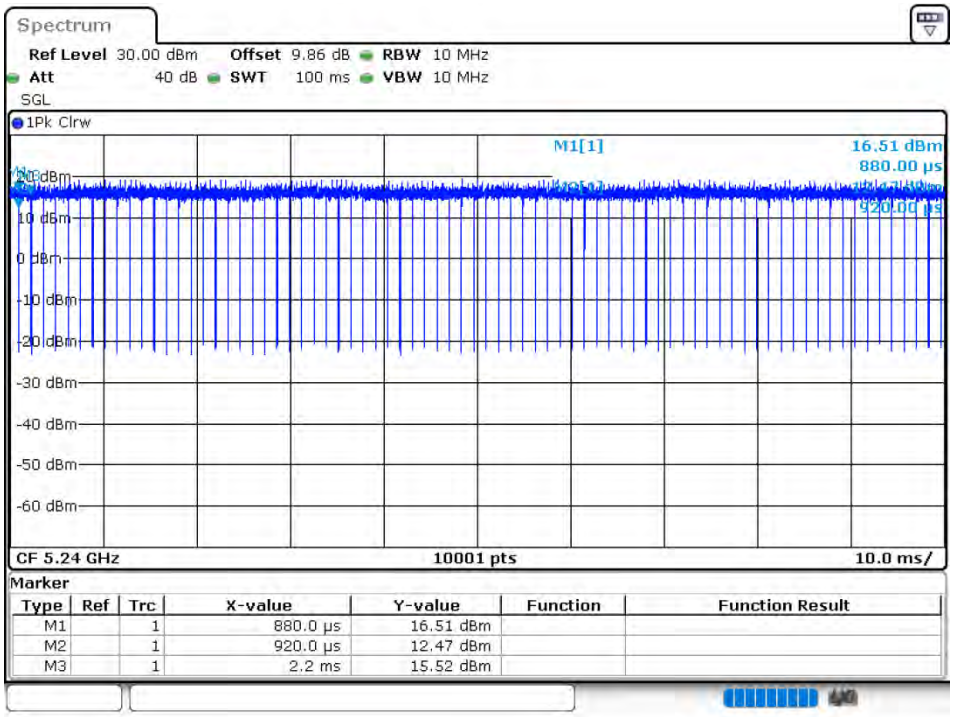
Duty Cycle NVNT ac20 5180MHz Ant1



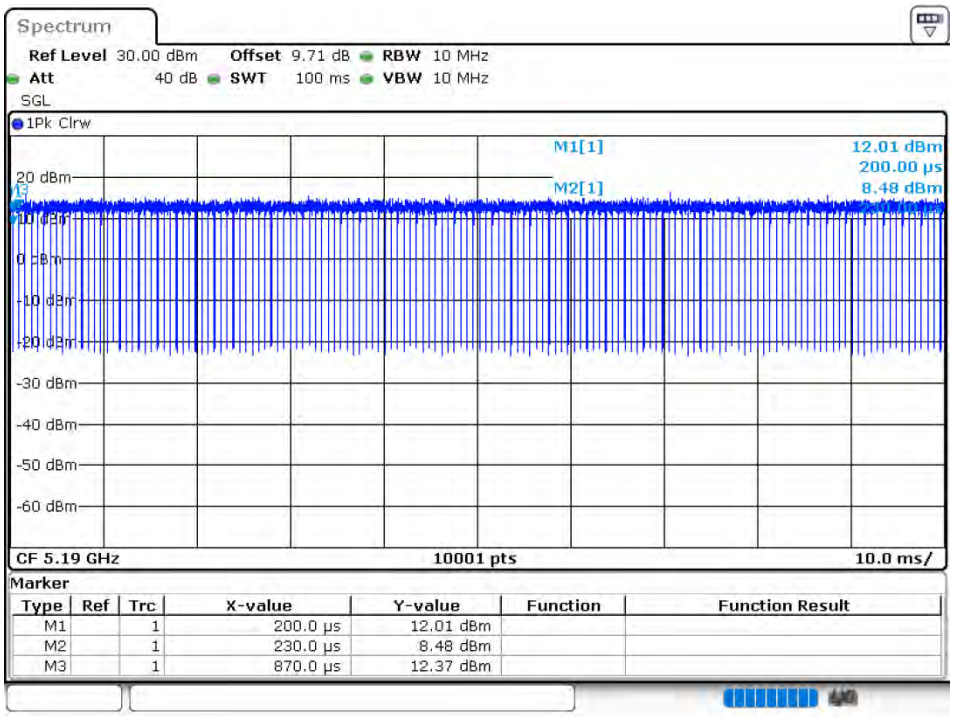
Duty Cycle NVNT ac20 5200MHz Ant1



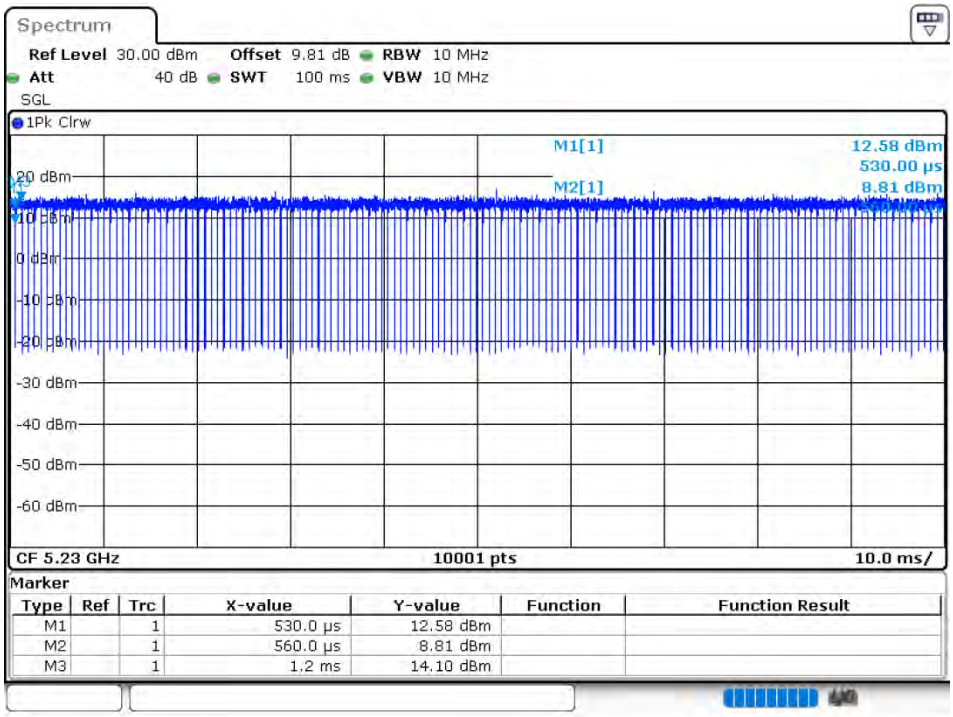
Duty Cycle NVNT ac20 5240MHz Ant1



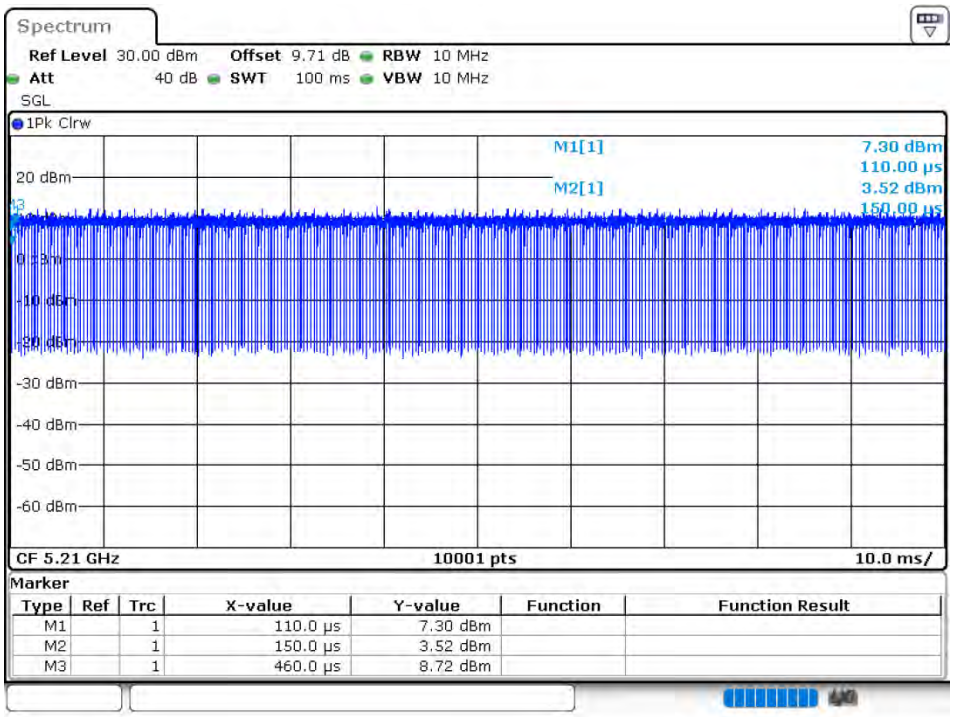
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1



Maximum Conducted Output Power

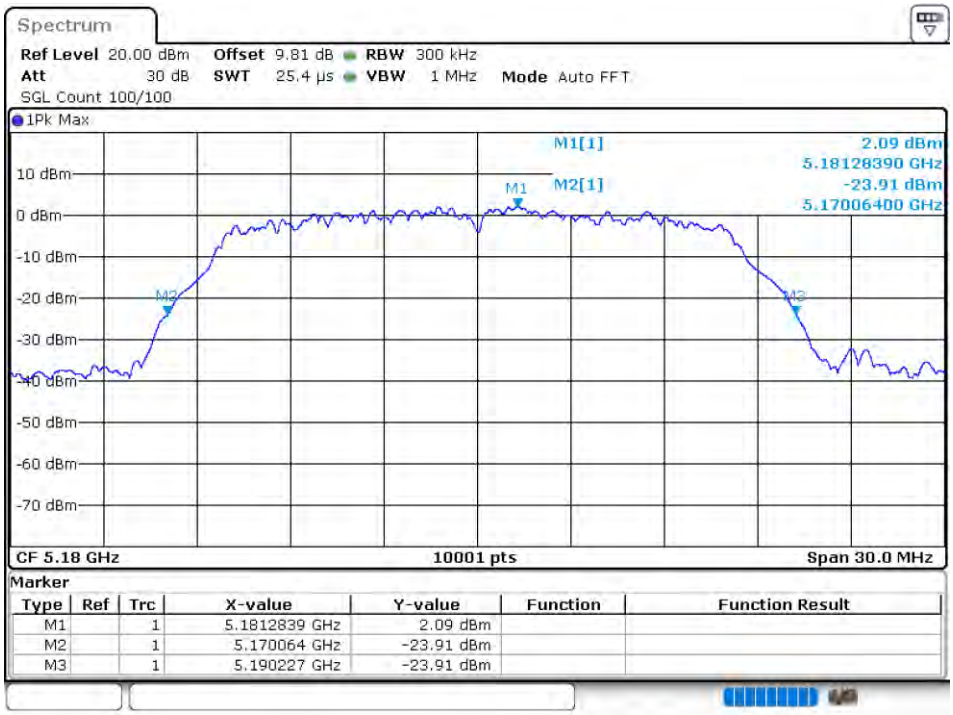
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	9.66	0.08	9.74	24	Pass
NVNT	a	5200	Ant1	9.77	0.08	9.85	24	Pass
NVNT	a	5240	Ant1	9.58	0.08	9.66	24	Pass
NVNT	n20	5180	Ant1	9.52	0.09	9.61	24	Pass
NVNT	n20	5200	Ant1	9.65	0.09	9.74	24	Pass
NVNT	n20	5240	Ant1	9.45	0.09	9.54	24	Pass
NVNT	n40	5190	Ant1	9.29	0.17	9.46	24	Pass
NVNT	n40	5230	Ant1	9.45	0.17	9.62	24	Pass
NVNT	ac20	5180	Ant1	9.52	0.09	9.61	24	Pass
NVNT	ac20	5200	Ant1	9.61	0.09	9.7	24	Pass
NVNT	ac20	5240	Ant1	9.83	0.09	9.92	24	Pass
NVNT	ac40	5190	Ant1	9.11	0.17	9.28	24	Pass
NVNT	ac40	5230	Ant1	9.46	0.17	9.63	24	Pass
NVNT	ac80	5210	Ant1	8.78	0.33	9.11	24	Pass

-26dB Bandwidth

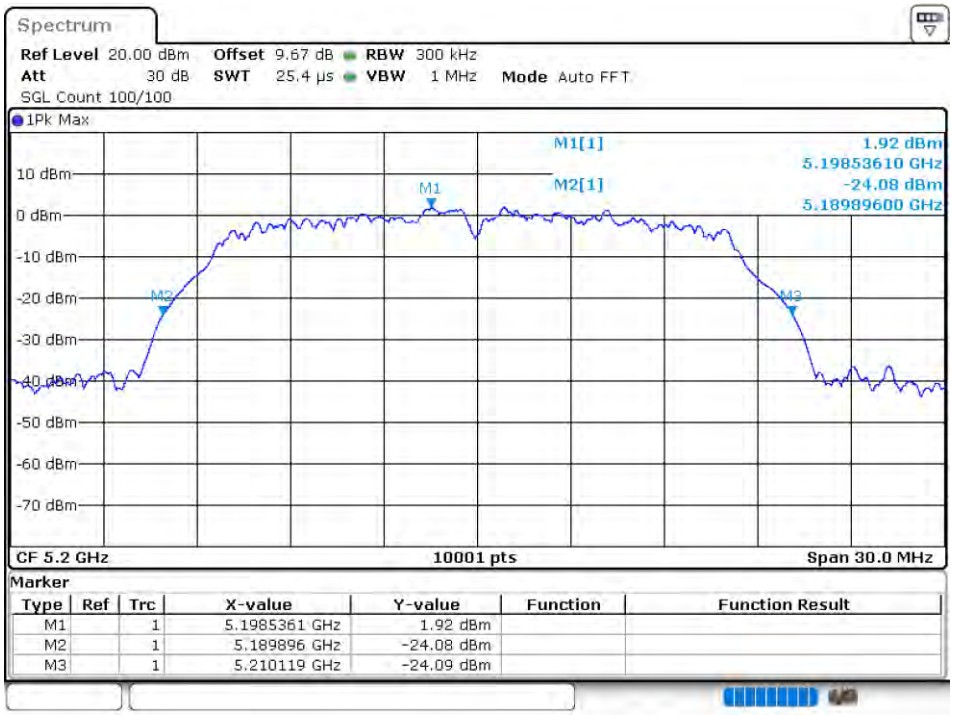
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.163	Pass
NVNT	a	5200	Ant1	20.223	Pass
NVNT	a	5240	Ant1	19.803	Pass
NVNT	n20	5180	Ant1	19.998	Pass
NVNT	n20	5200	Ant1	19.98	Pass
NVNT	n20	5240	Ant1	20.04	Pass
NVNT	n40	5190	Ant1	40.728	Pass
NVNT	n40	5230	Ant1	40.422	Pass
NVNT	ac20	5180	Ant1	20.286	Pass
NVNT	ac20	5200	Ant1	20.139	Pass
NVNT	ac20	5240	Ant1	20.175	Pass
NVNT	ac40	5190	Ant1	40.722	Pass
NVNT	ac40	5230	Ant1	40.668	Pass
NVNT	ac80	5210	Ant1	81.636	Pass

Test Graphs

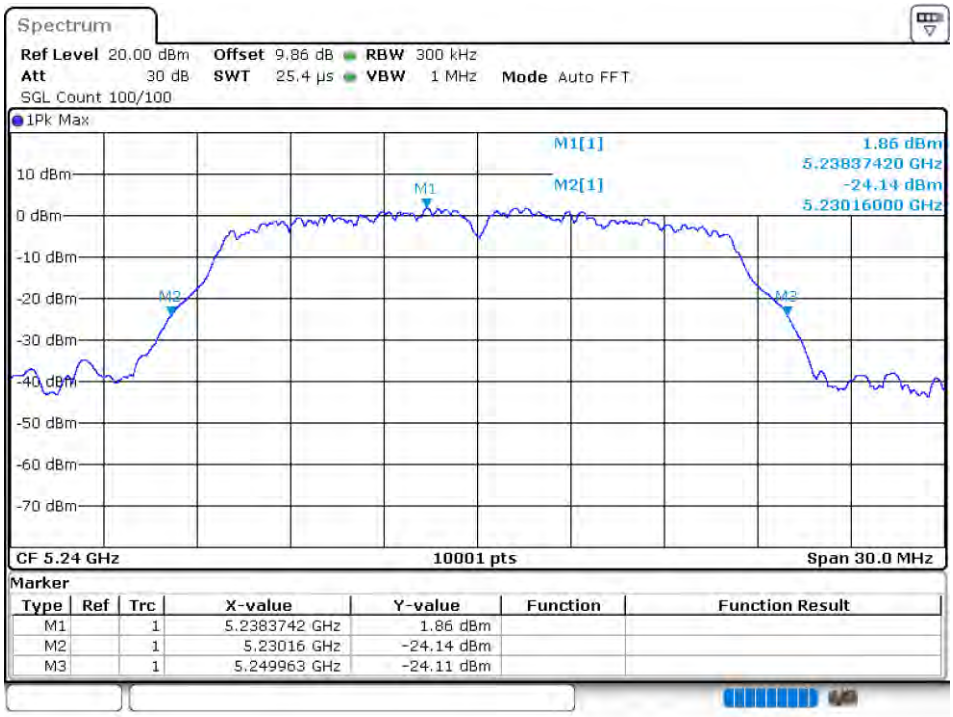
-26dB Bandwidth NVNT a 5180MHz Ant1



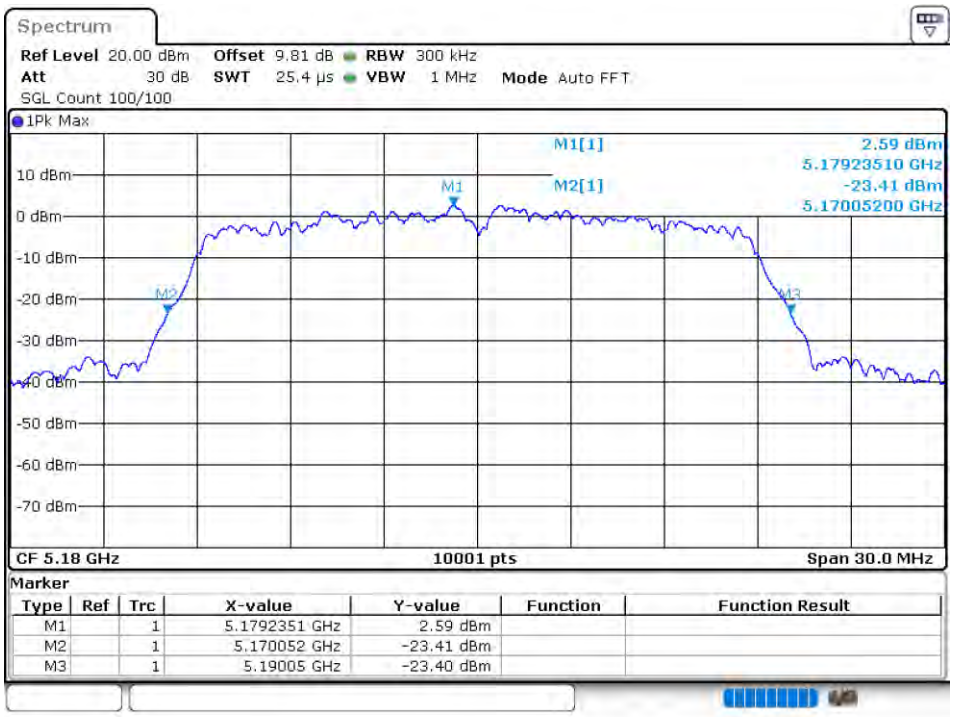
-26dB Bandwidth NVNT a 5200MHz Ant1



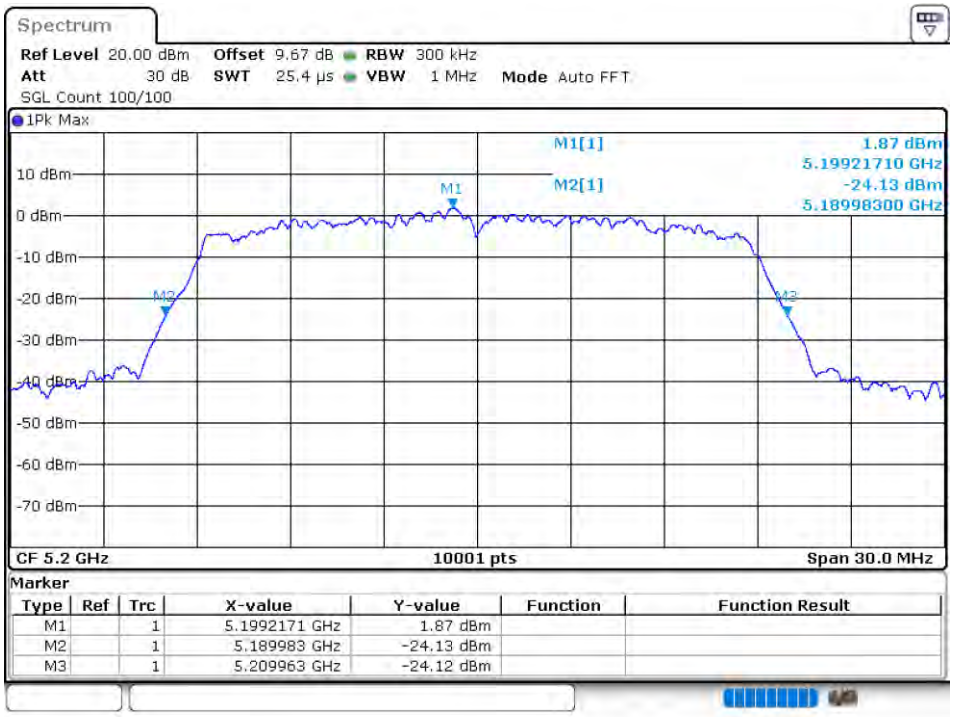
-26dB Bandwidth NVNT a 5240MHz Ant1



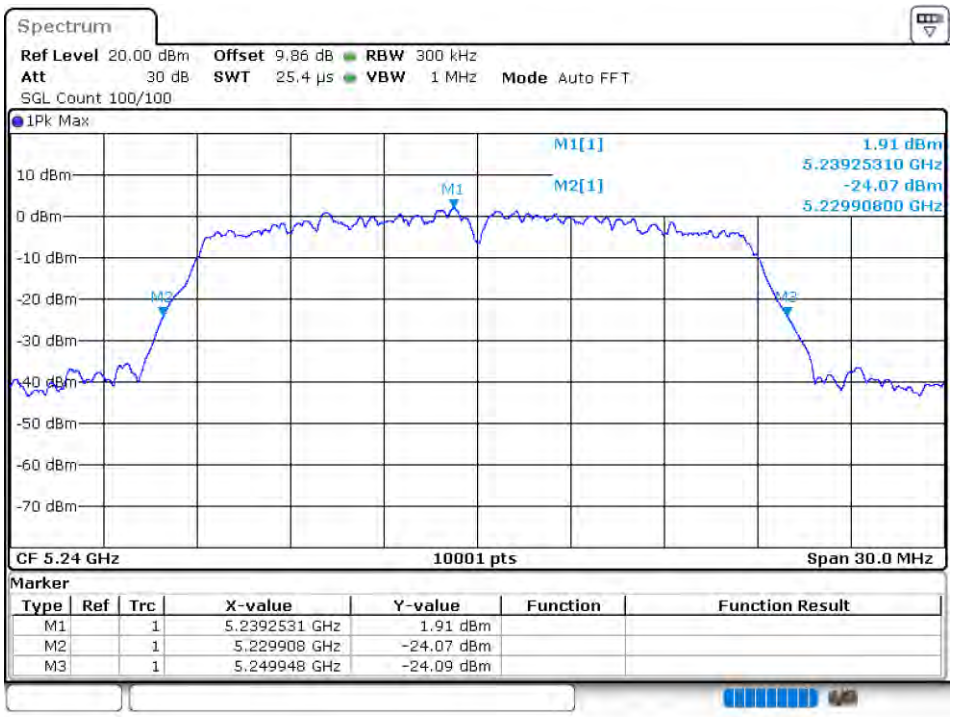
-26dB Bandwidth NVNT n20 5180MHz Ant1



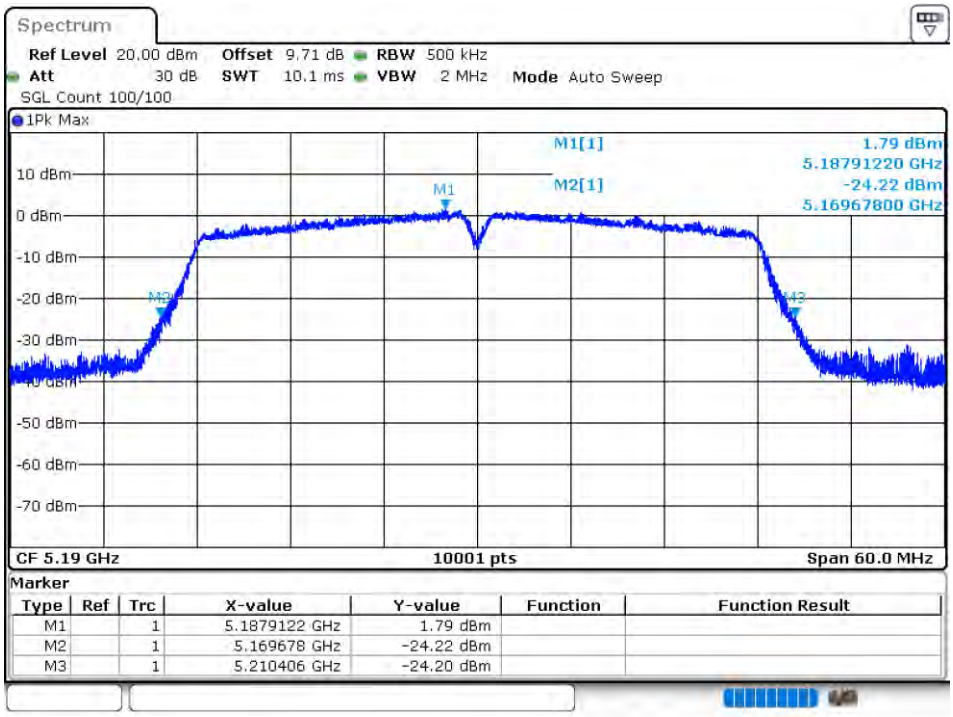
-26dB Bandwidth NVNT n20 5200MHz Ant1



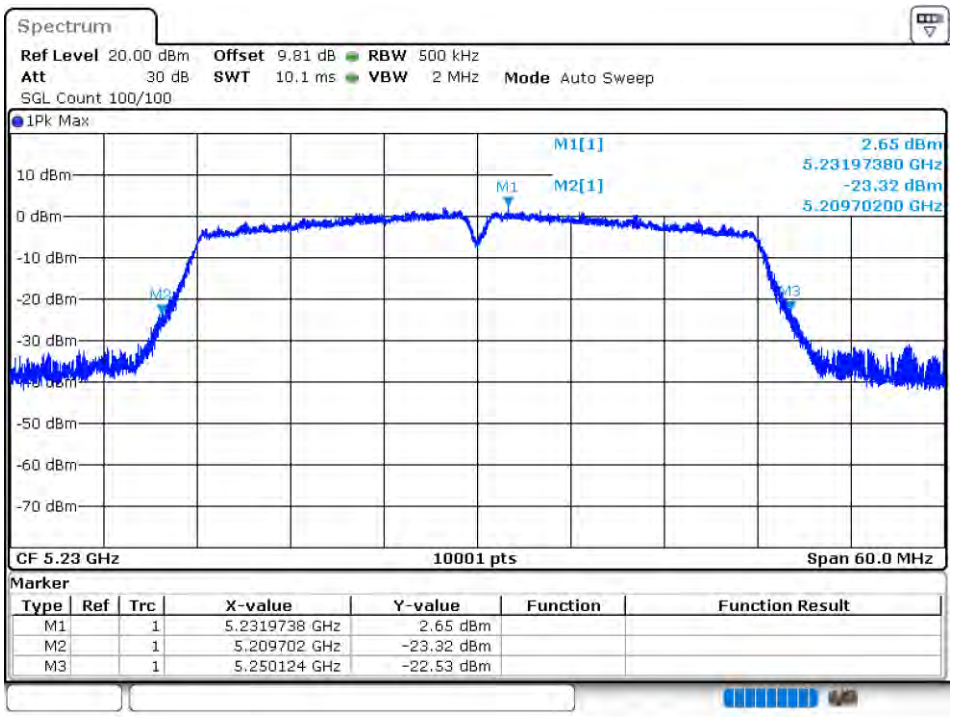
-26dB Bandwidth NVNT n20 5240MHz Ant1



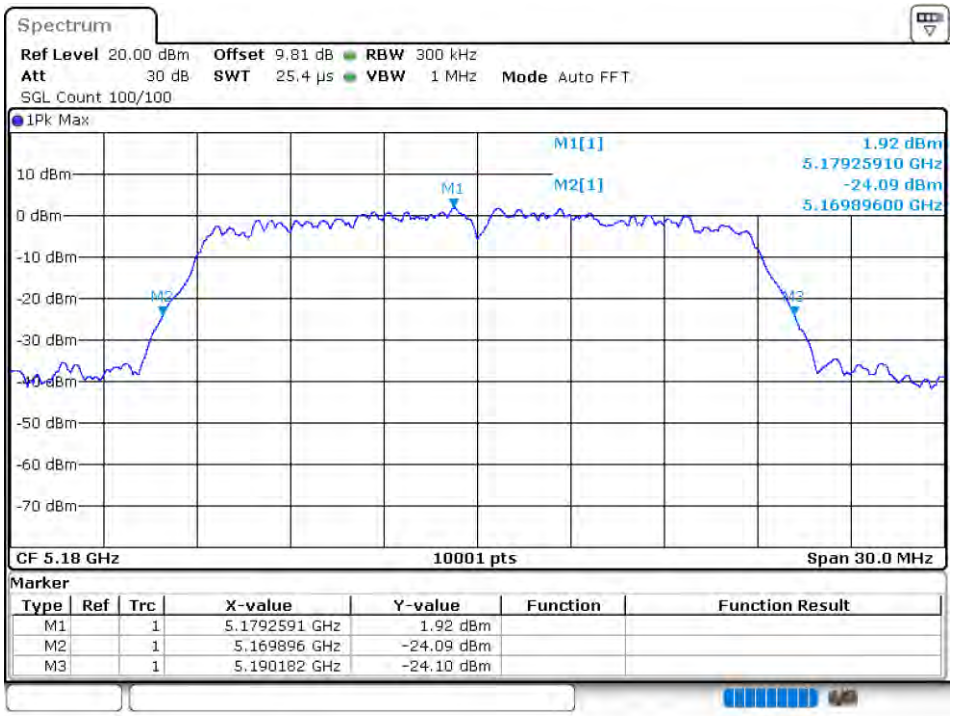
-26dB Bandwidth NVNT n40 5190MHz Ant1



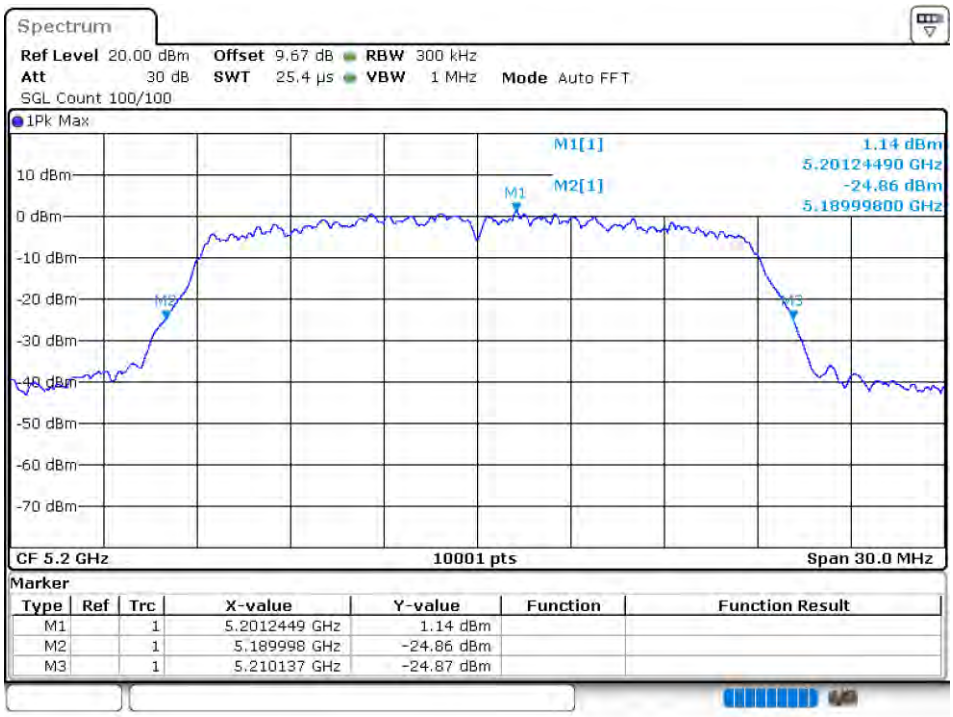
-26dB Bandwidth NVNT n40 5230MHz Ant1



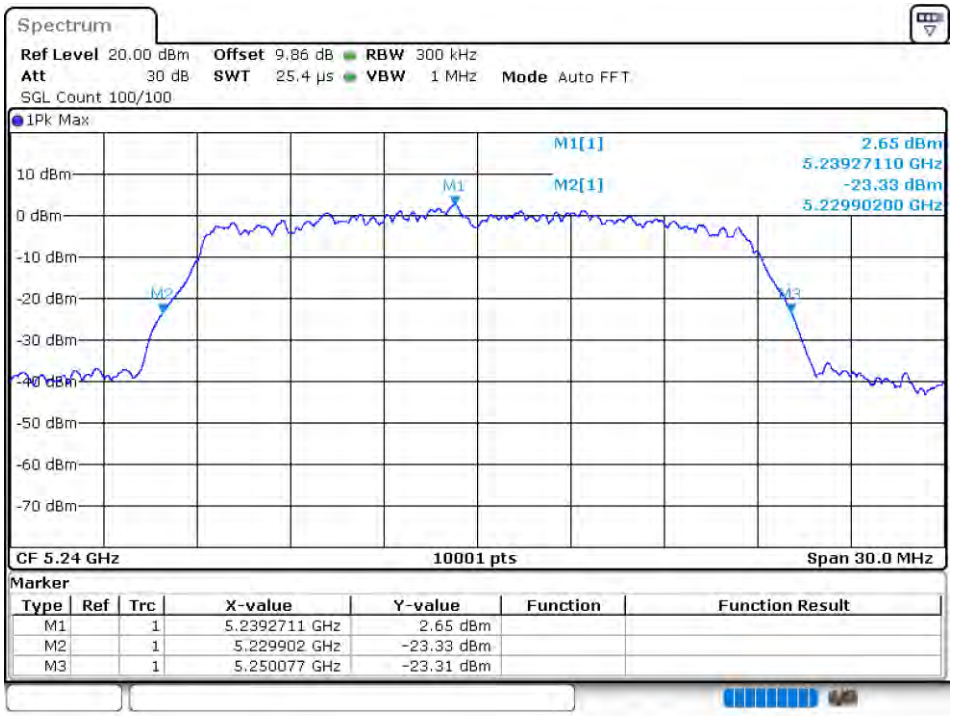
-26dB Bandwidth NVNT ac20 5180MHz Ant1



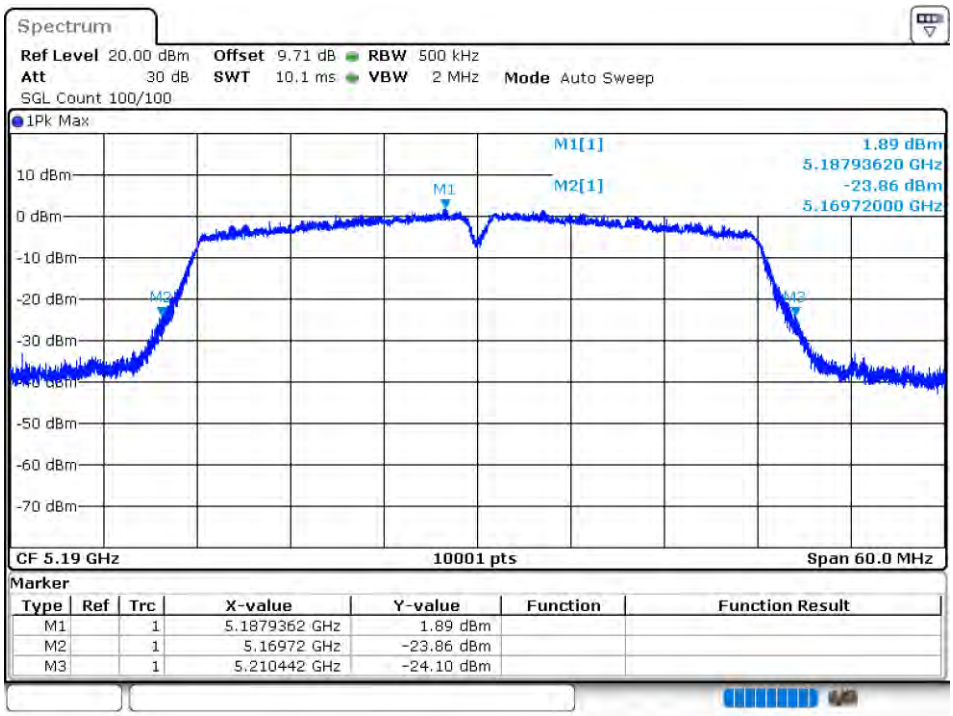
-26dB Bandwidth NVNT ac20 5200MHz Ant1



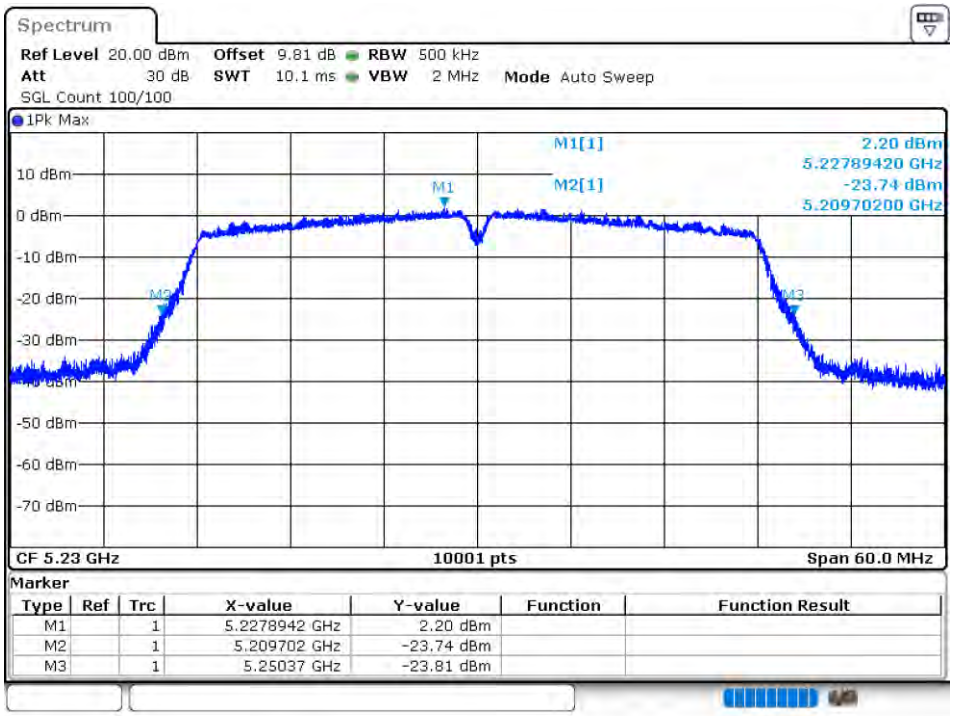
-26dB Bandwidth NVNT ac20 5240MHz Ant1



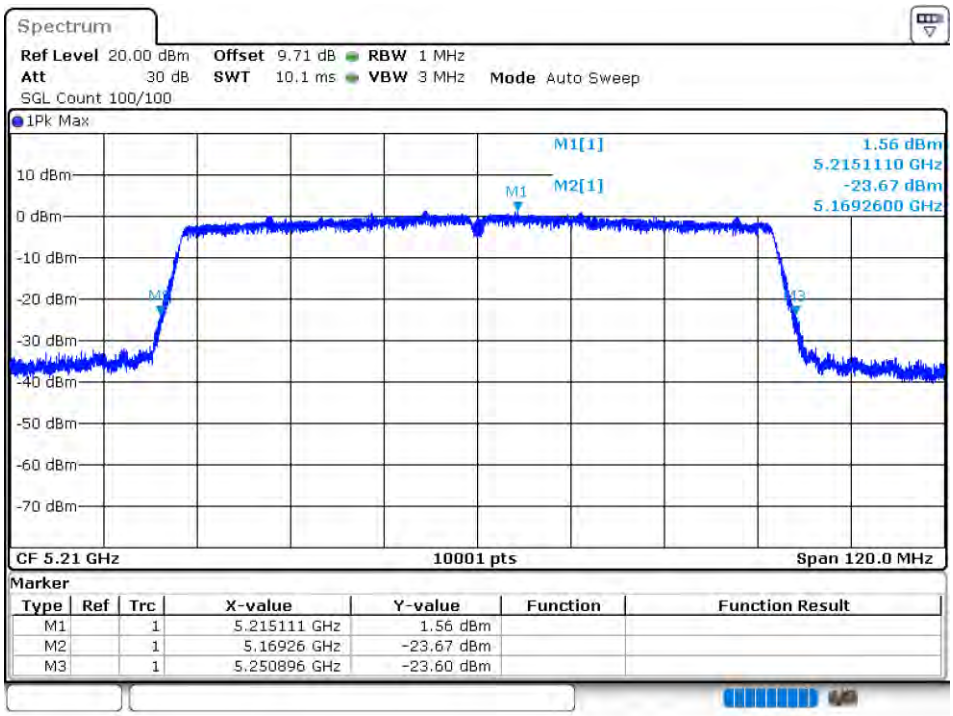
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



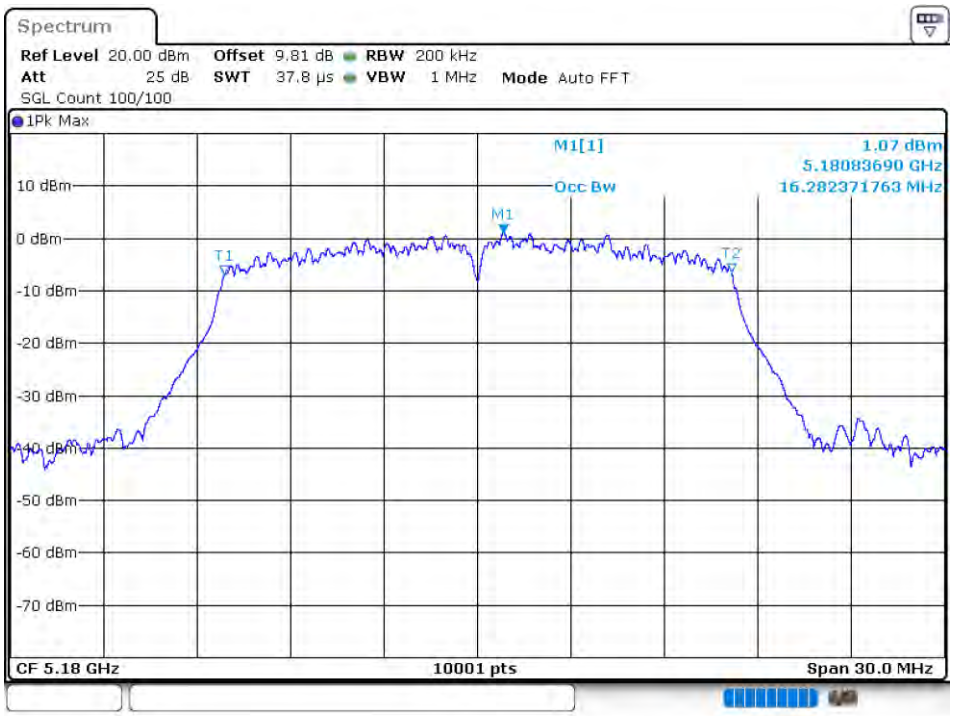
-26dB Bandwidth NVNT ac80 5210MHz Ant1



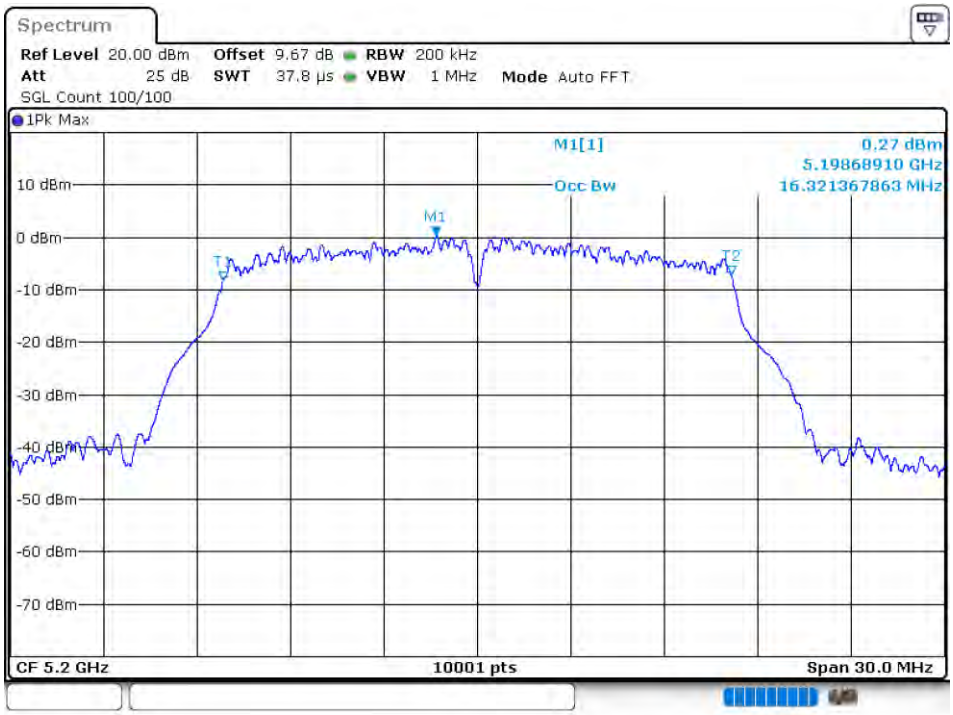
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.282
NVNT	a	5200	Ant1	16.321
NVNT	a	5240	Ant1	16.324
NVNT	n20	5180	Ant1	17.536
NVNT	n20	5200	Ant1	17.491
NVNT	n20	5240	Ant1	17.491
NVNT	n40	5190	Ant1	35.9
NVNT	n40	5230	Ant1	35.936
NVNT	ac20	5180	Ant1	17.518
NVNT	ac20	5200	Ant1	17.53
NVNT	ac20	5240	Ant1	17.53
NVNT	ac40	5190	Ant1	35.894
NVNT	ac40	5230	Ant1	35.924
NVNT	ac80	5210	Ant1	75.604

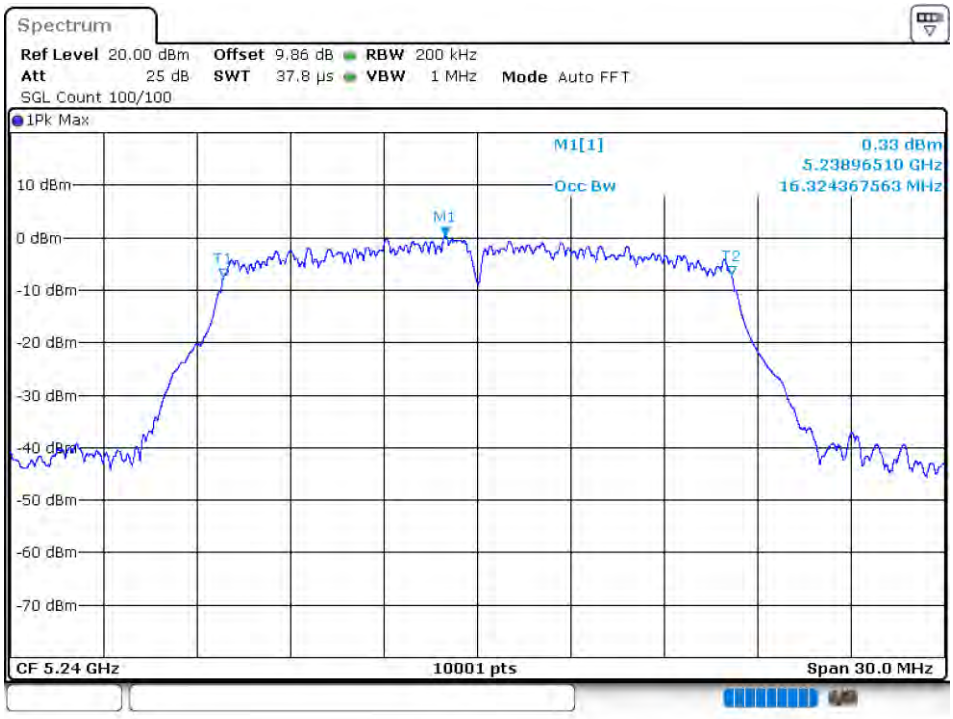
Test Graphs
OBW NVNT a 5180MHz Ant1



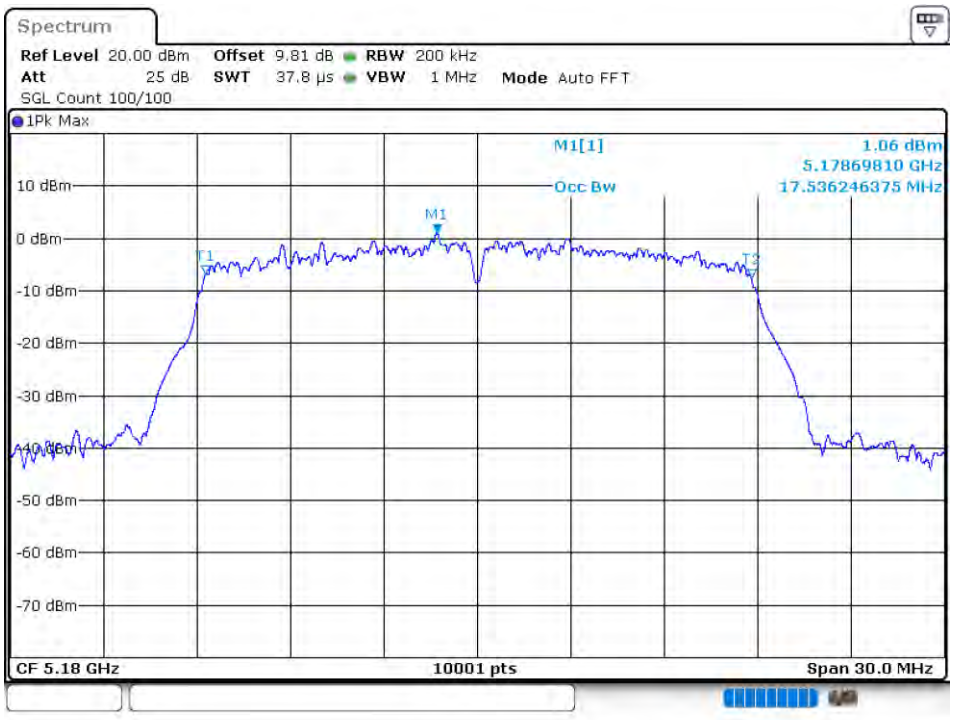
OBW NVNT a 5200MHz Ant1



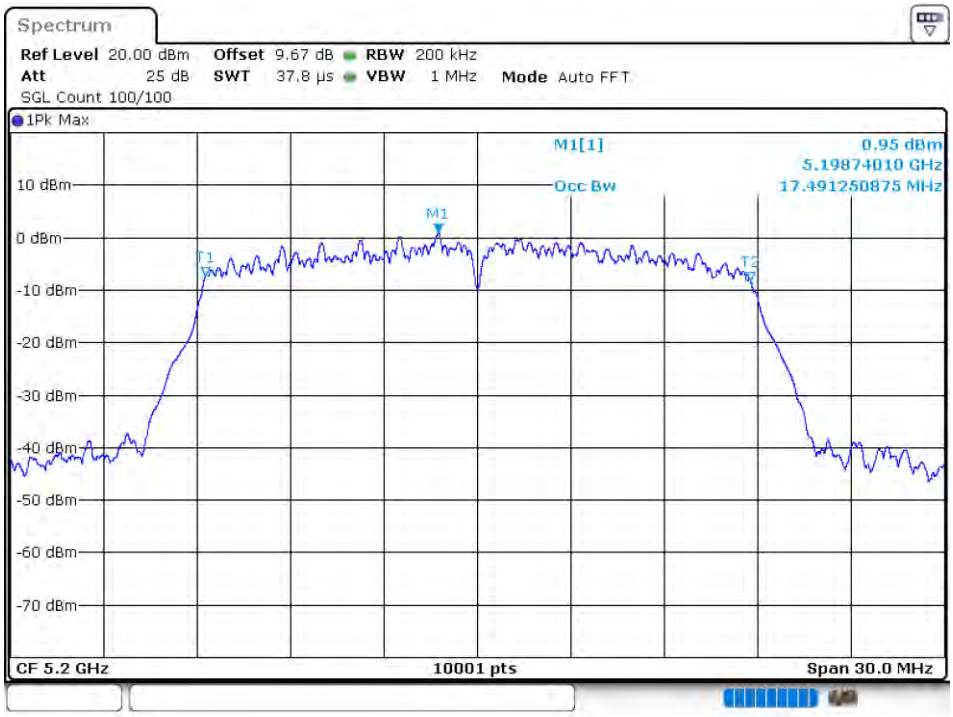
OBW NVNT a 5240MHz Ant1



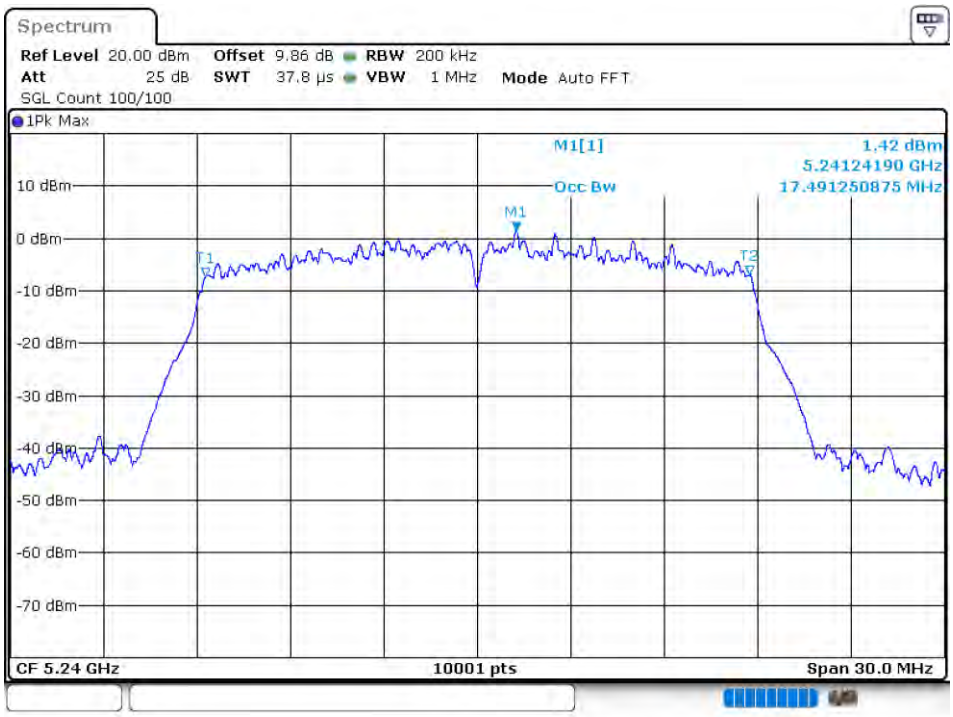
OBW NVNT n20 5180MHz Ant1



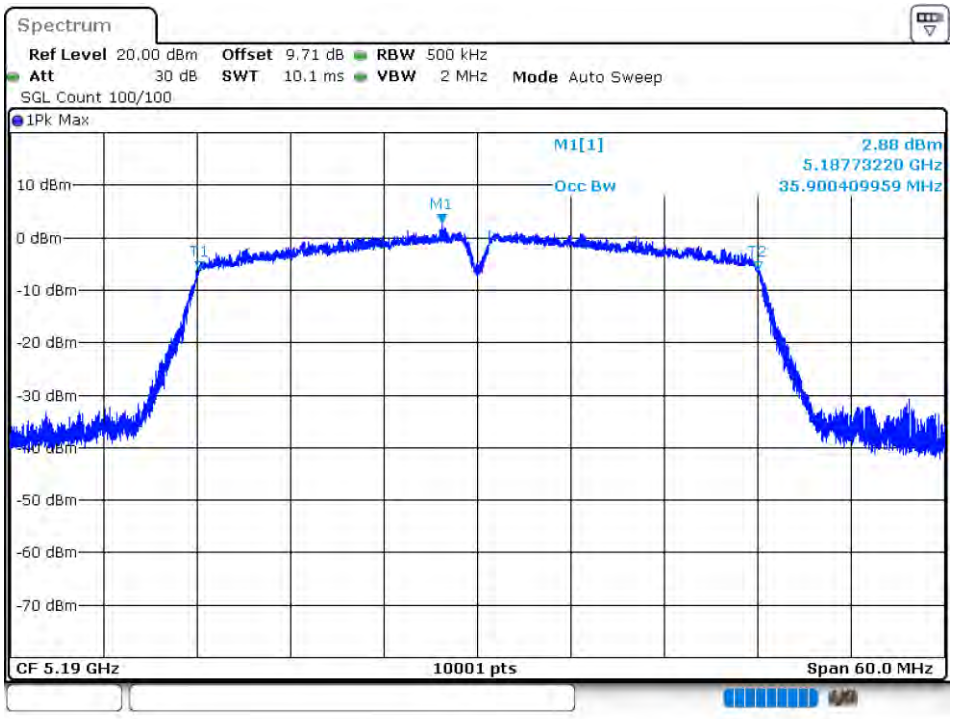
OBW NVNT n20 5200MHz Ant1



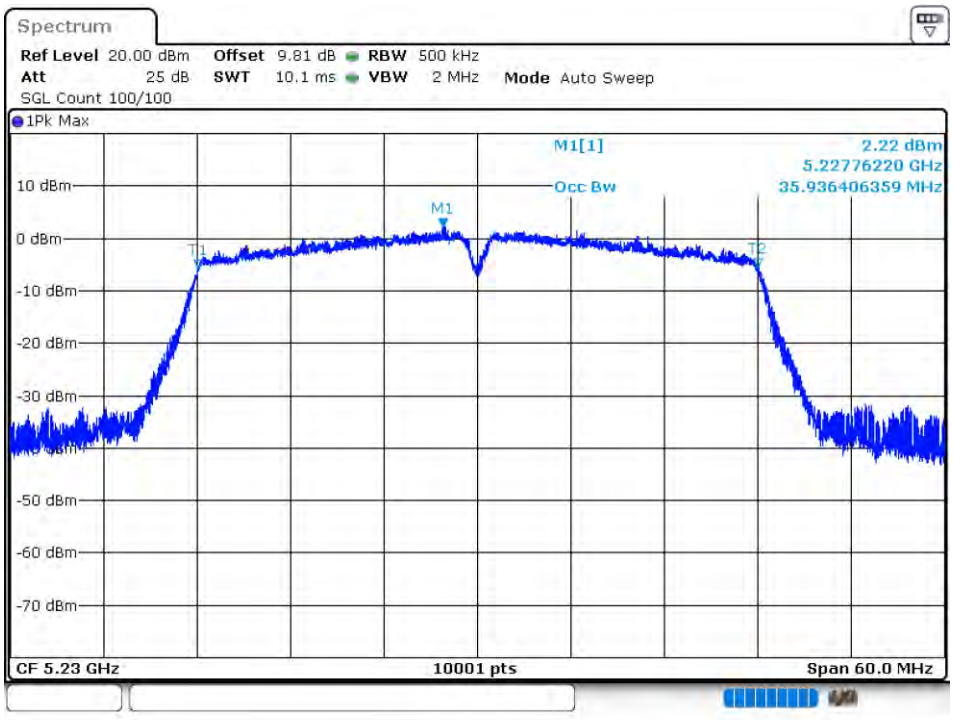
OBW NVNT n20 5240MHz Ant1



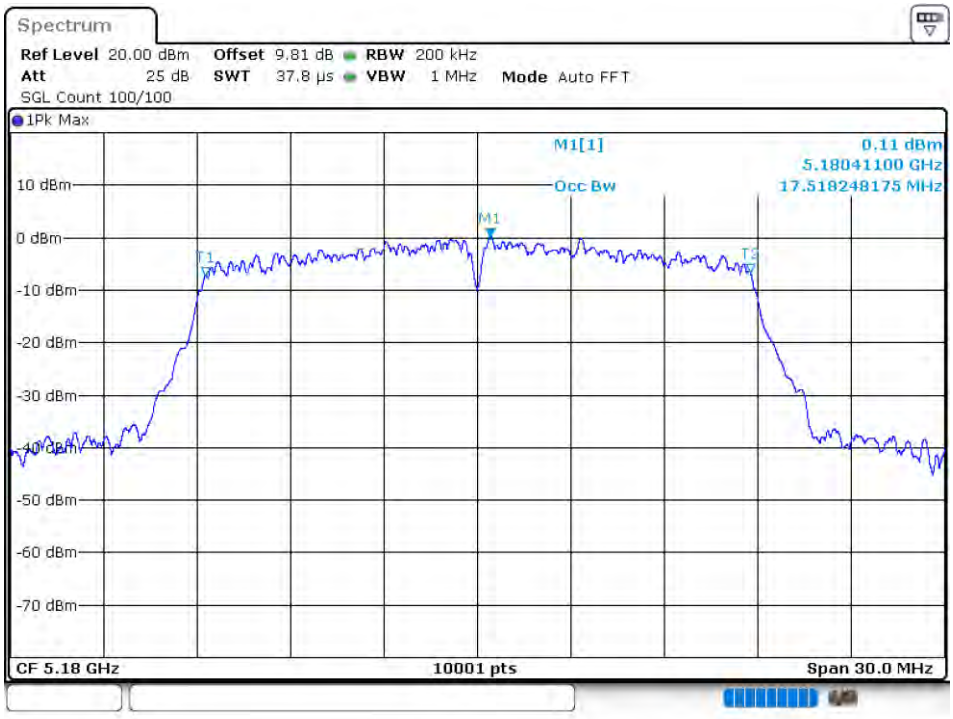
OBW NVNT n40 5190MHz Ant1



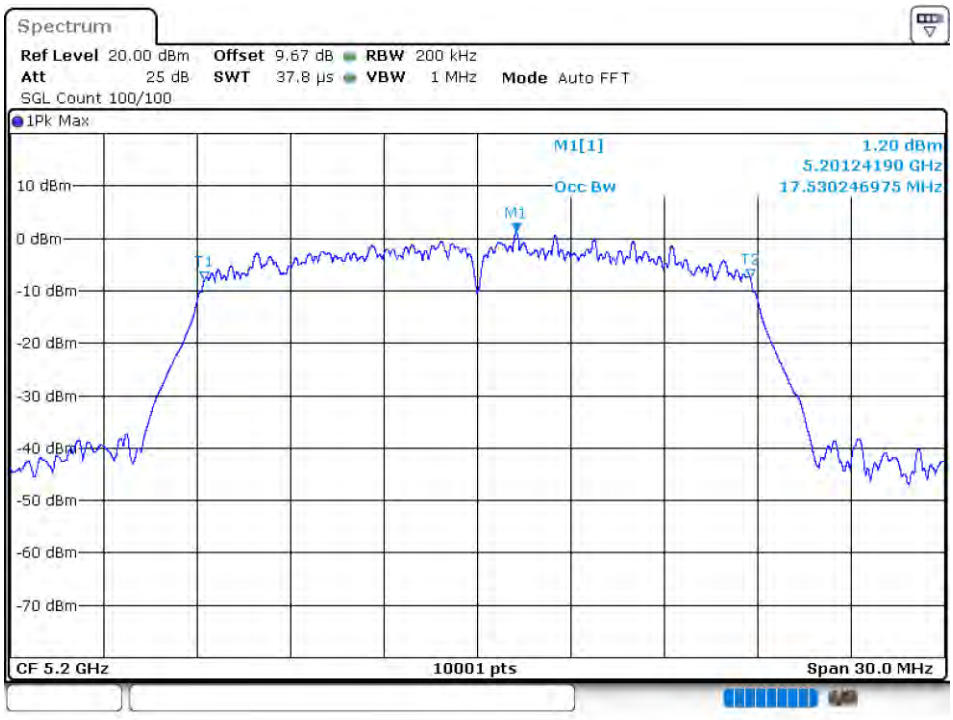
OBW NVNT n40 5230MHz Ant1



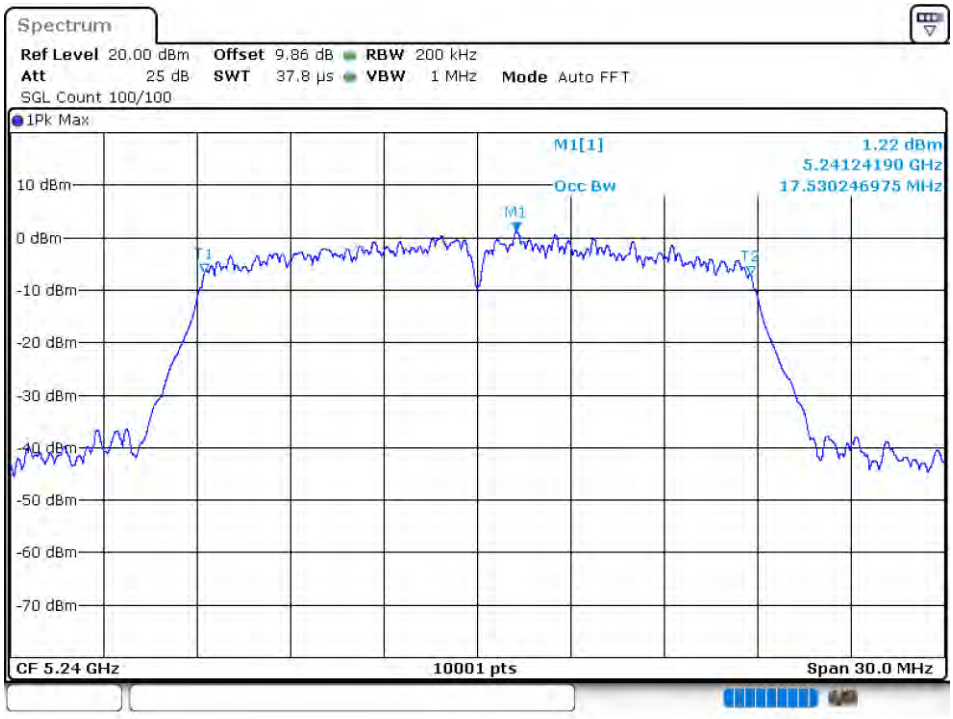
OBW NVNT ac20 5180MHz Ant1



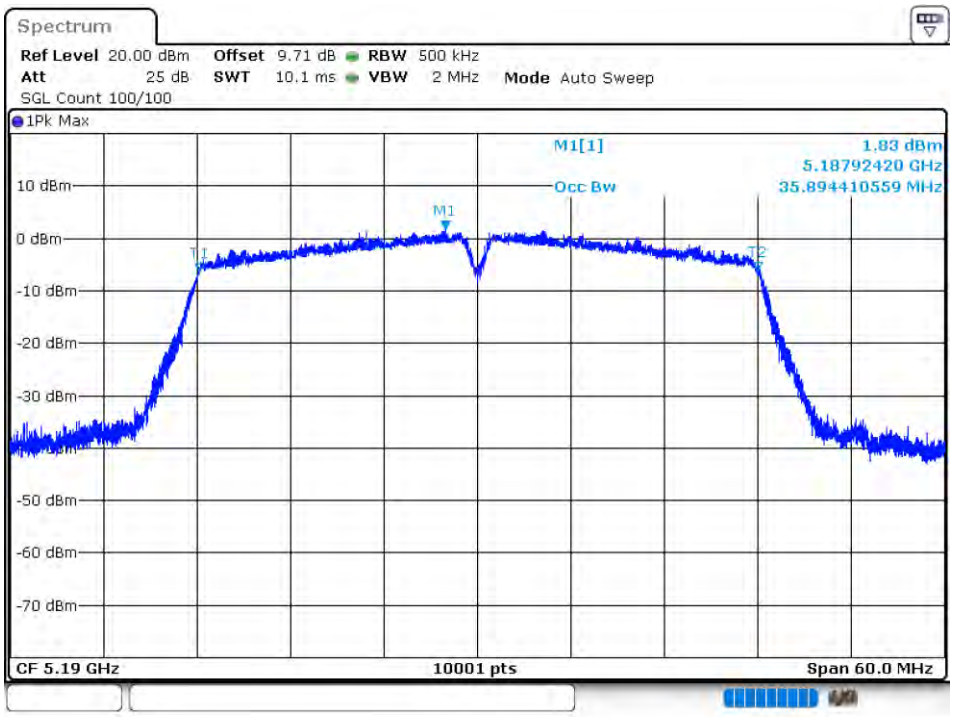
OBW NVNT ac20 5200MHz Ant1



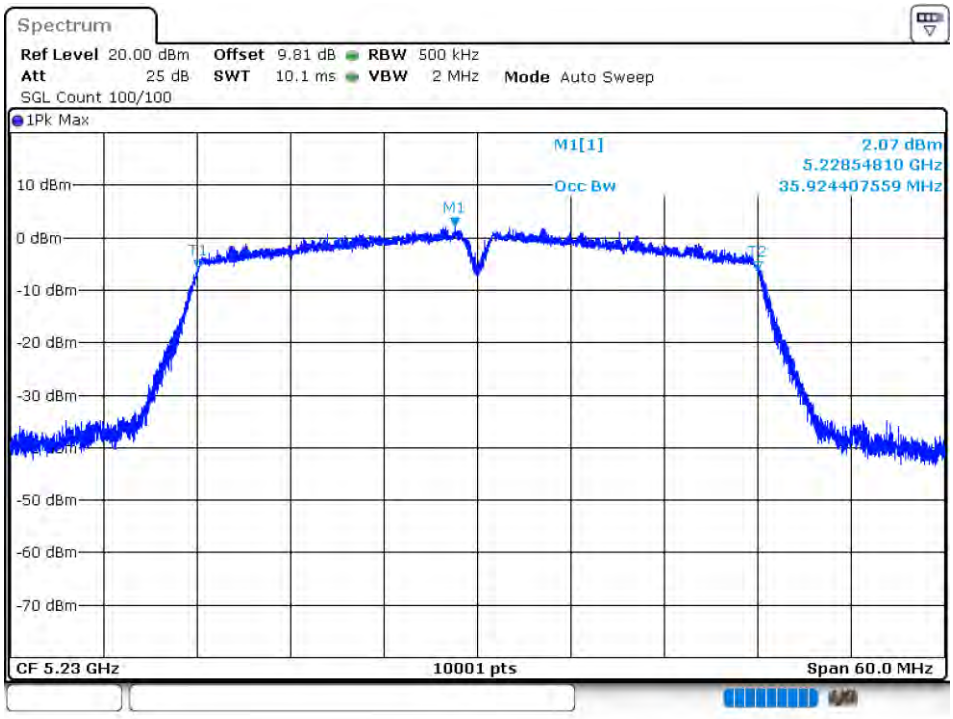
OBW NVNT ac20 5240MHz Ant1



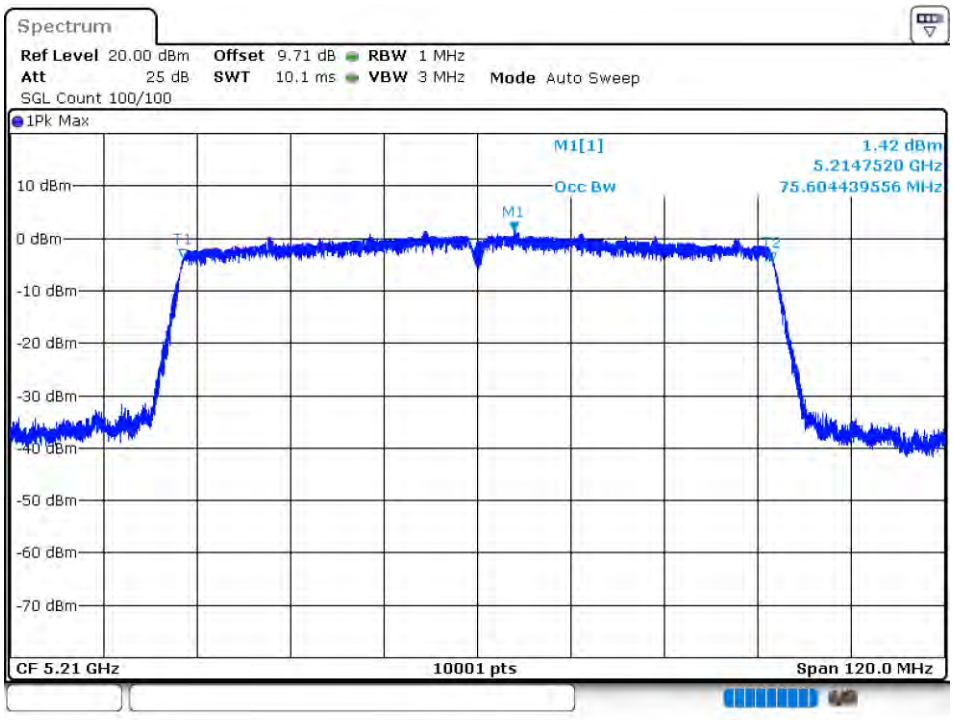
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



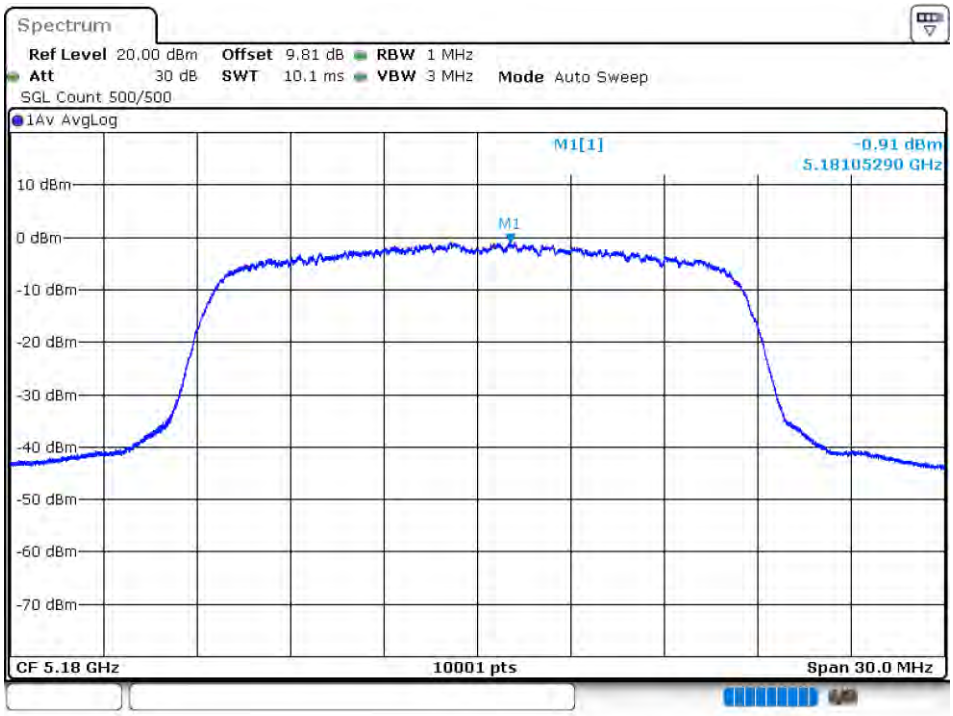
OBW NVNT ac80 5210MHz Ant1



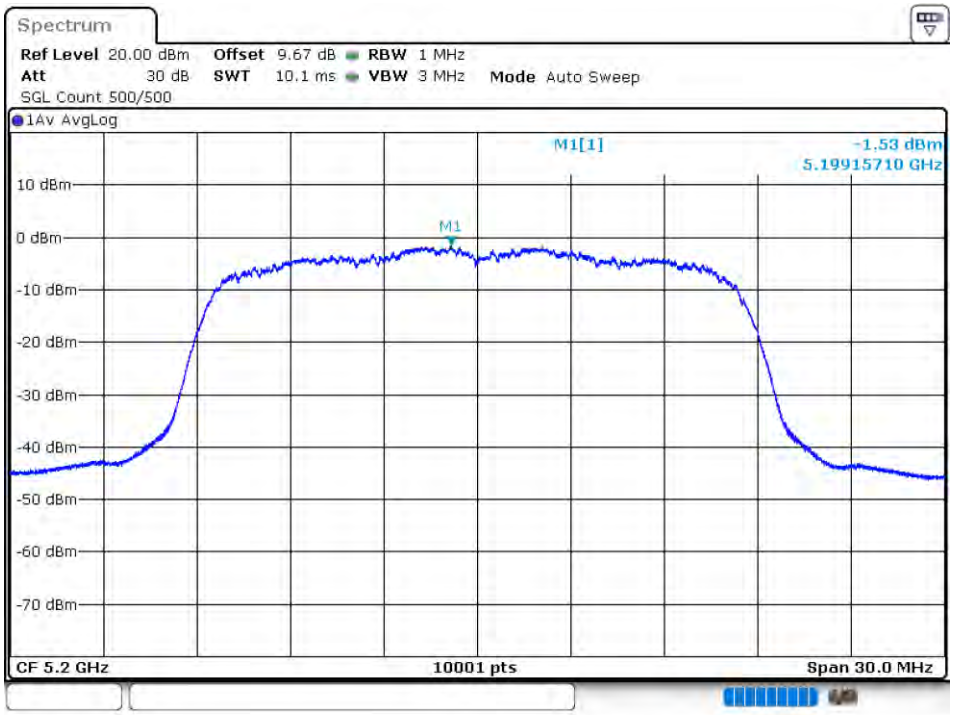
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-0.91	0.08	-0.83	11	Pass
NVNT	a	5200	Ant1	-1.53	0.08	-1.45	11	Pass
NVNT	a	5240	Ant1	-1.56	0.08	-1.48	11	Pass
NVNT	n20	5180	Ant1	-1.56	0.09	-1.47	11	Pass
NVNT	n20	5200	Ant1	-2.65	0.09	-2.56	11	Pass
NVNT	n20	5240	Ant1	-2.31	0.09	-2.22	11	Pass
NVNT	n40	5190	Ant1	-5.54	0.17	-5.37	11	Pass
NVNT	n40	5230	Ant1	-4.25	0.17	-4.08	11	Pass
NVNT	ac20	5180	Ant1	-1.46	0.09	-1.37	11	Pass
NVNT	ac20	5200	Ant1	-2.28	0.09	-2.19	11	Pass
NVNT	ac20	5240	Ant1	-0.62	0.09	-0.53	11	Pass
NVNT	ac40	5190	Ant1	-6.14	0.17	-5.97	11	Pass
NVNT	ac40	5230	Ant1	-5.07	0.17	-4.9	11	Pass
NVNT	ac80	5210	Ant1	-11.07	0.33	-10.74	11	Pass

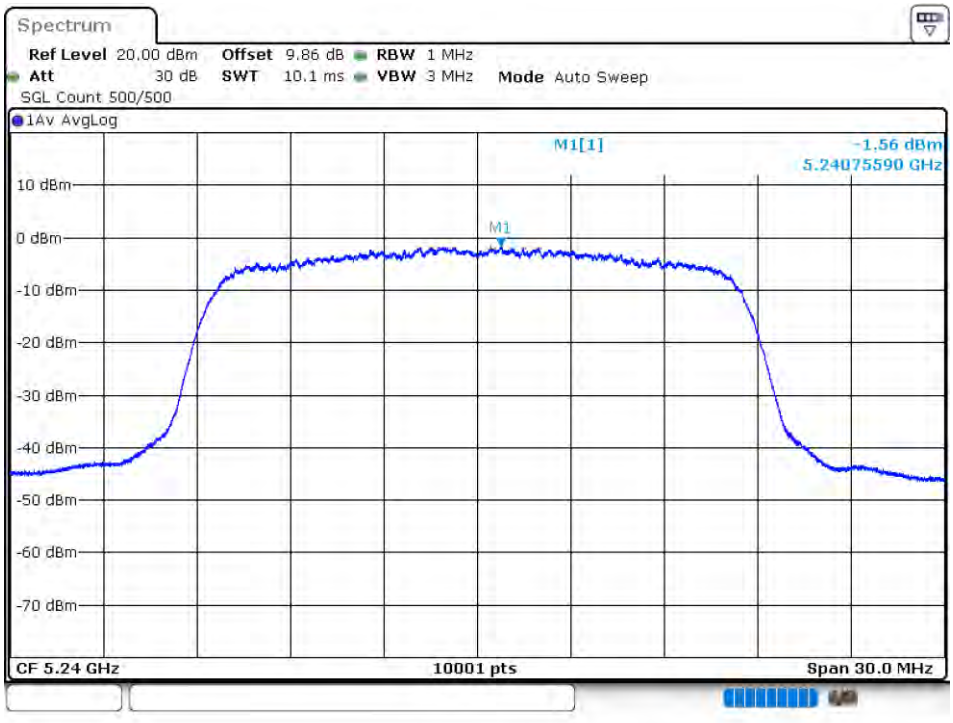
Test Graphs
PSD NVNT a 5180MHz Ant1



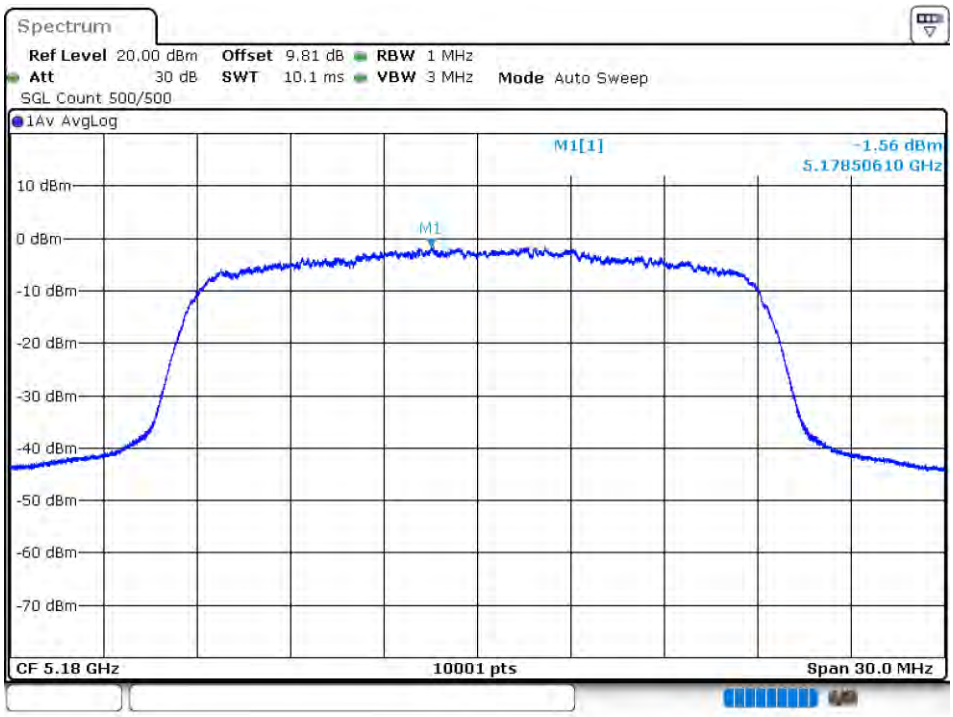
PSD NVNT a 5200MHz Ant1



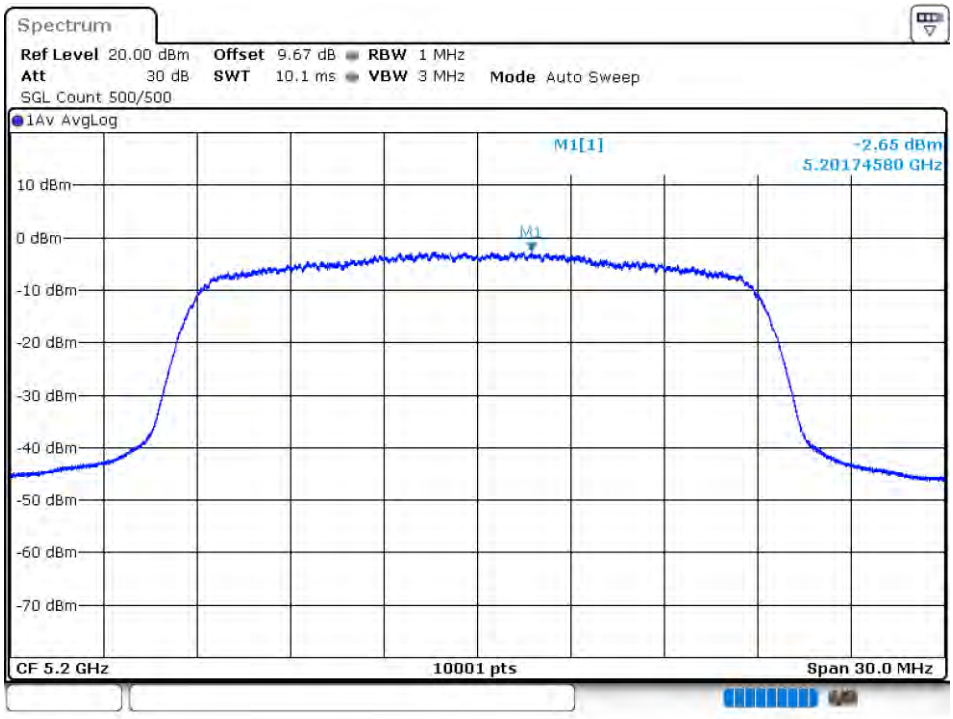
PSD NVNT a 5240MHz Ant1



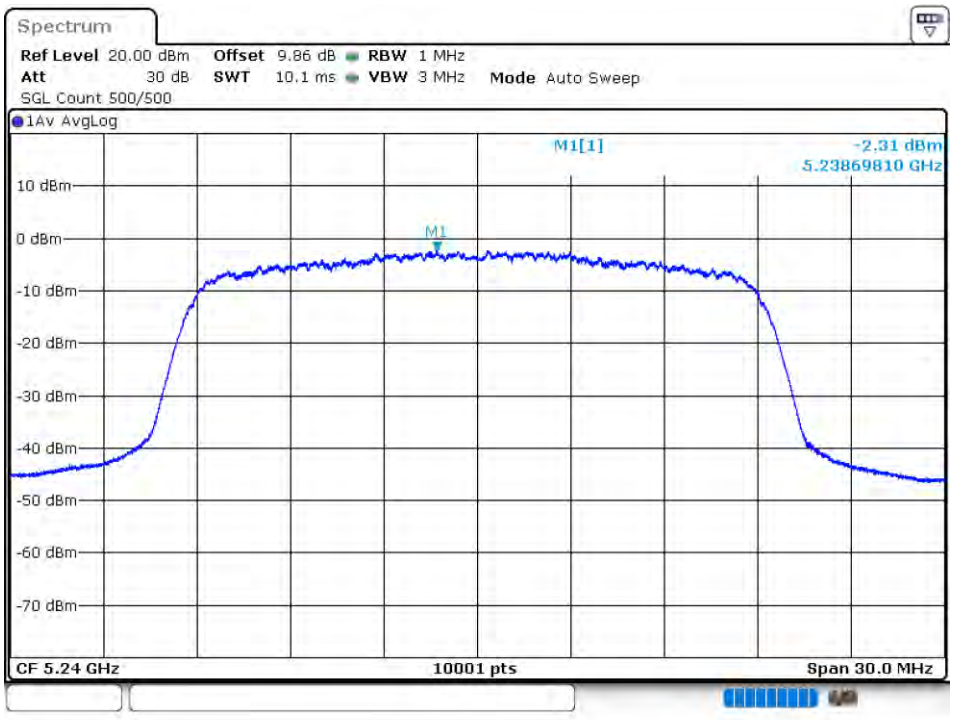
PSD NVNT n20 5180MHz Ant1



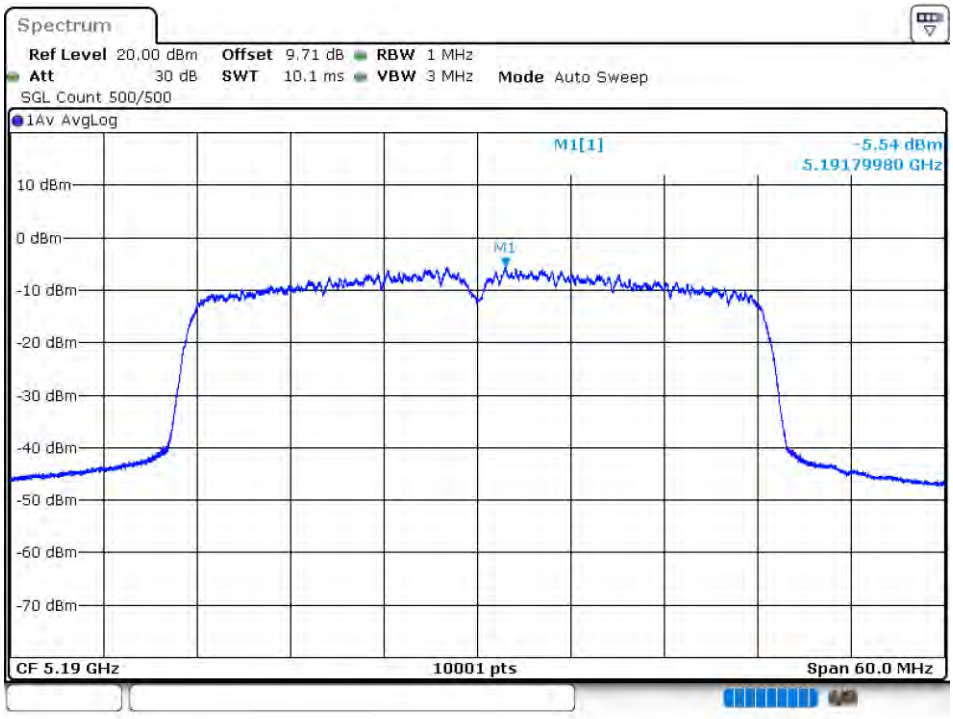
PSD NVNT n20 5200MHz Ant1



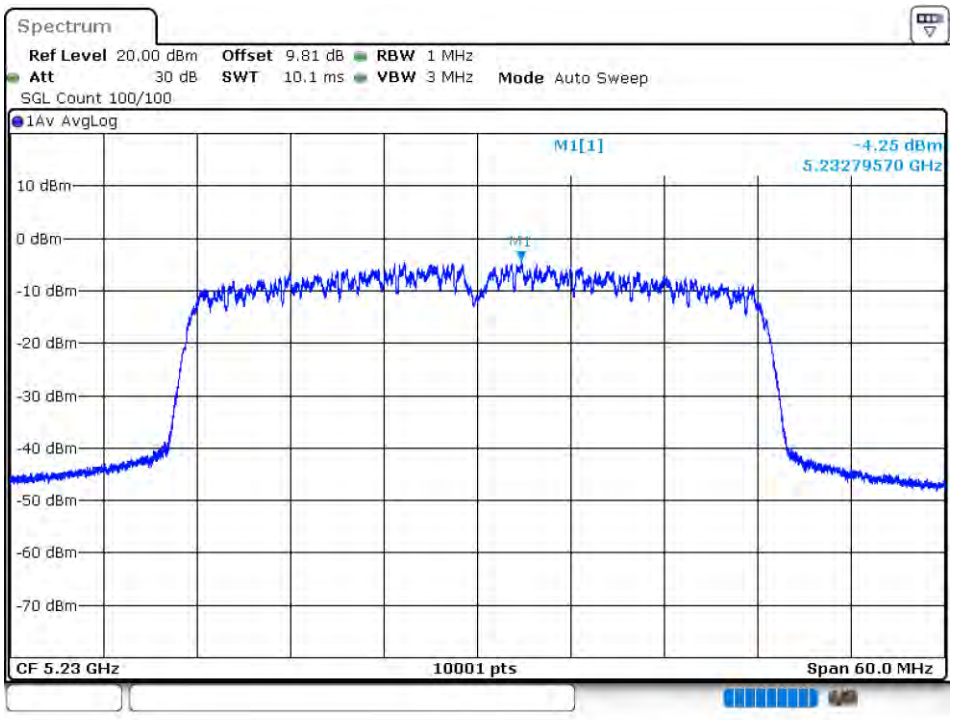
PSD NVNT n20 5240MHz Ant1



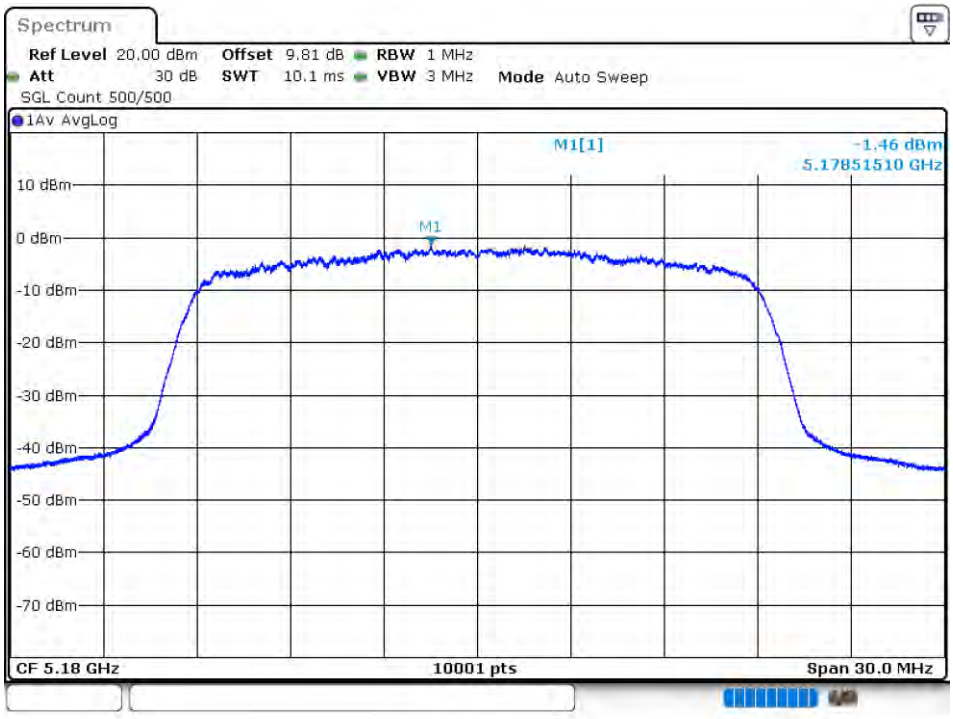
PSD NVNT n40 5190MHz Ant1



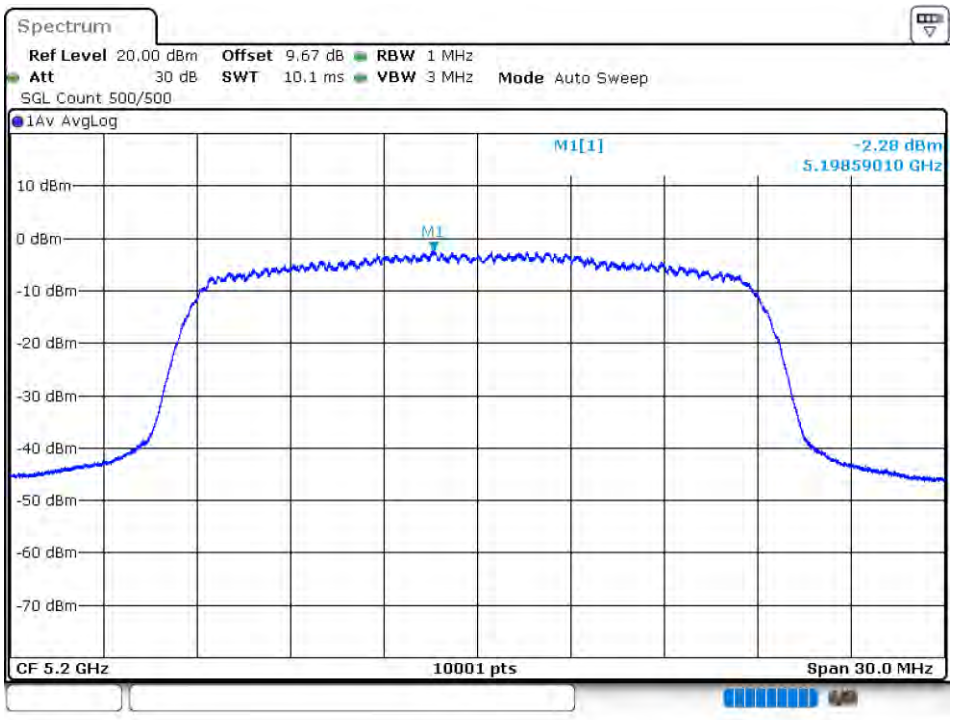
PSD NVNT n40 5230MHz Ant1



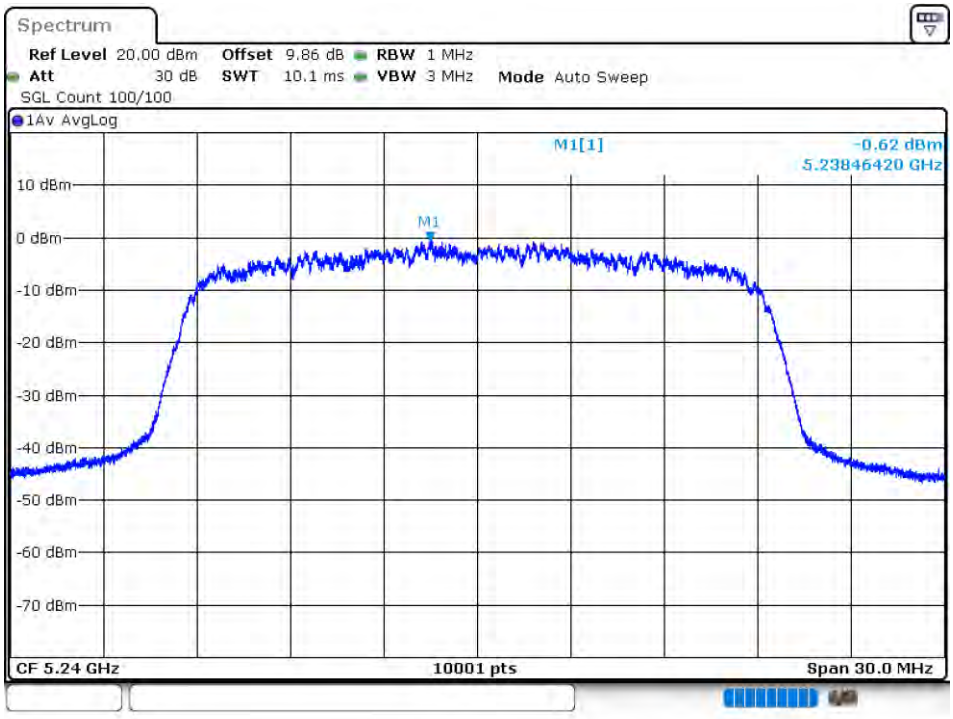
PSD NVNT ac20 5180MHz Ant1



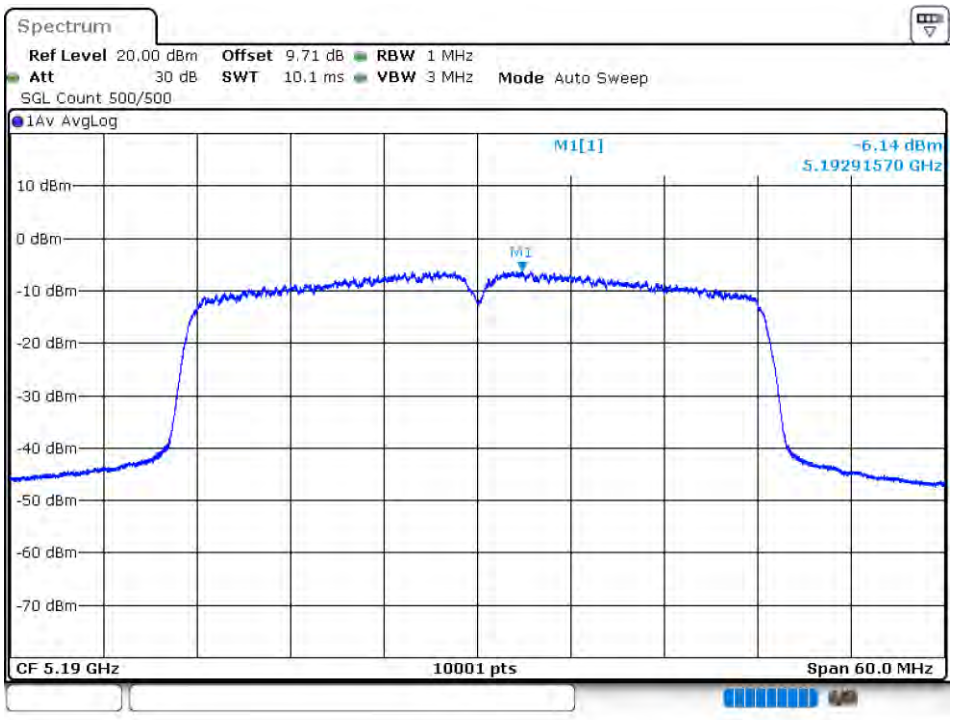
PSD NVNT ac20 5200MHz Ant1



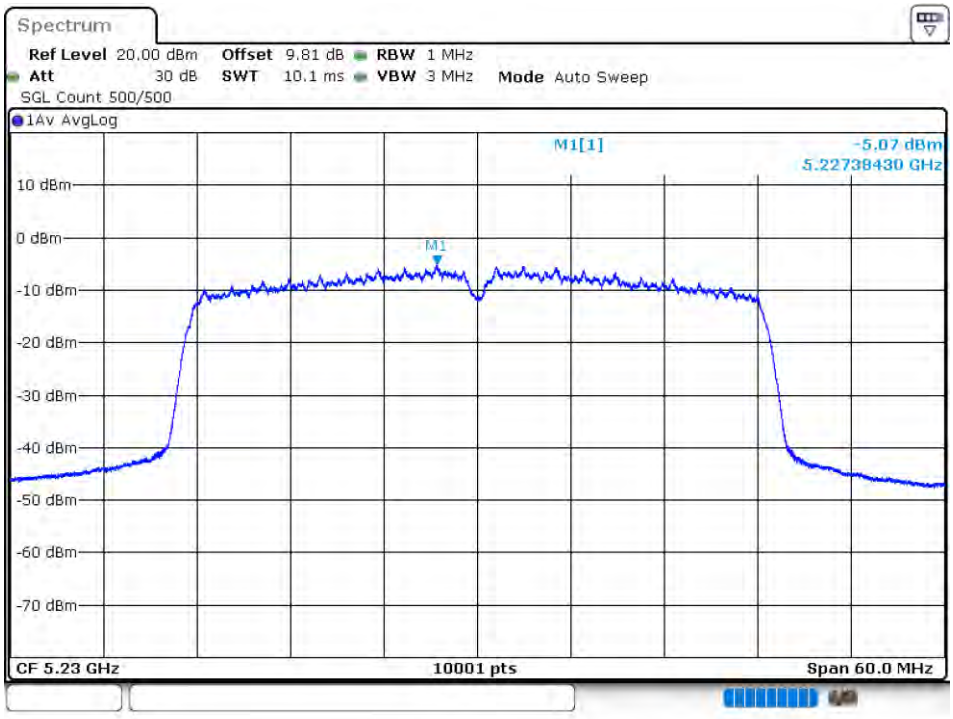
PSD NVNT ac20 5240MHz Ant1



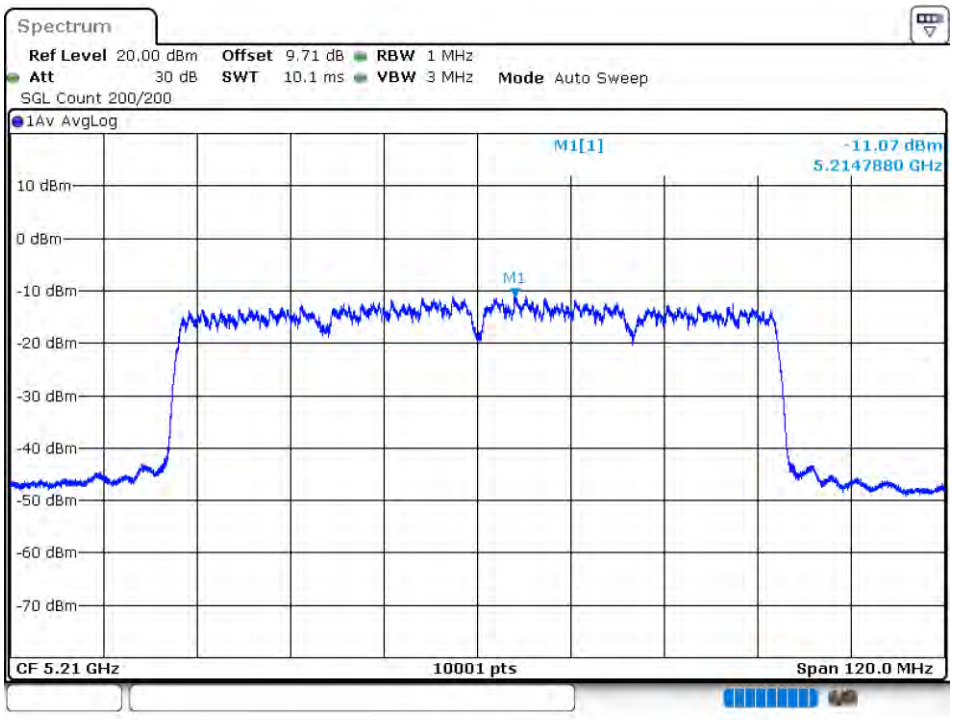
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1

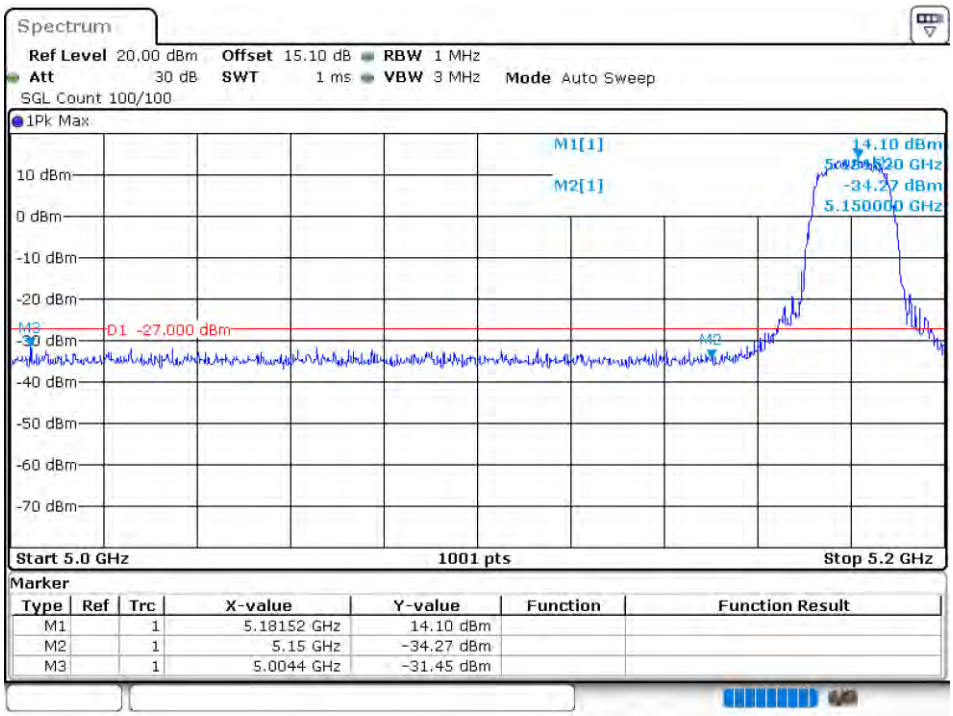


Band Edge

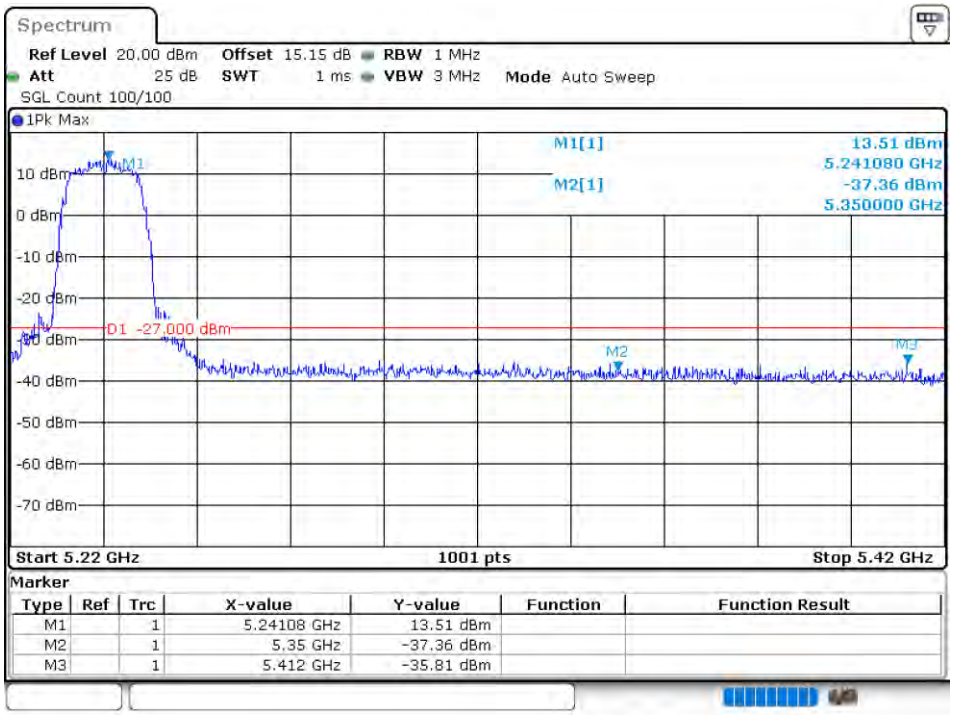
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-31.45	-27	Pass
NVNT	a	5240	Ant1	-35.8	-27	Pass
NVNT	n20	5180	Ant1	-35.68	-27	Pass
NVNT	n20	5240	Ant1	-36.22	-27	Pass
NVNT	n40	5190	Ant1	-33.31	-27	Pass
NVNT	n40	5230	Ant1	-31.47	-27	Pass
NVNT	ac20	5180	Ant1	-35.02	-27	Pass
NVNT	ac20	5240	Ant1	-35.52	-27	Pass
NVNT	ac40	5190	Ant1	-34.97	-27	Pass
NVNT	ac40	5230	Ant1	-35.67	-27	Pass
NVNT	ac80	5210	Ant1	-36.3	-27	Pass

Test Graphs

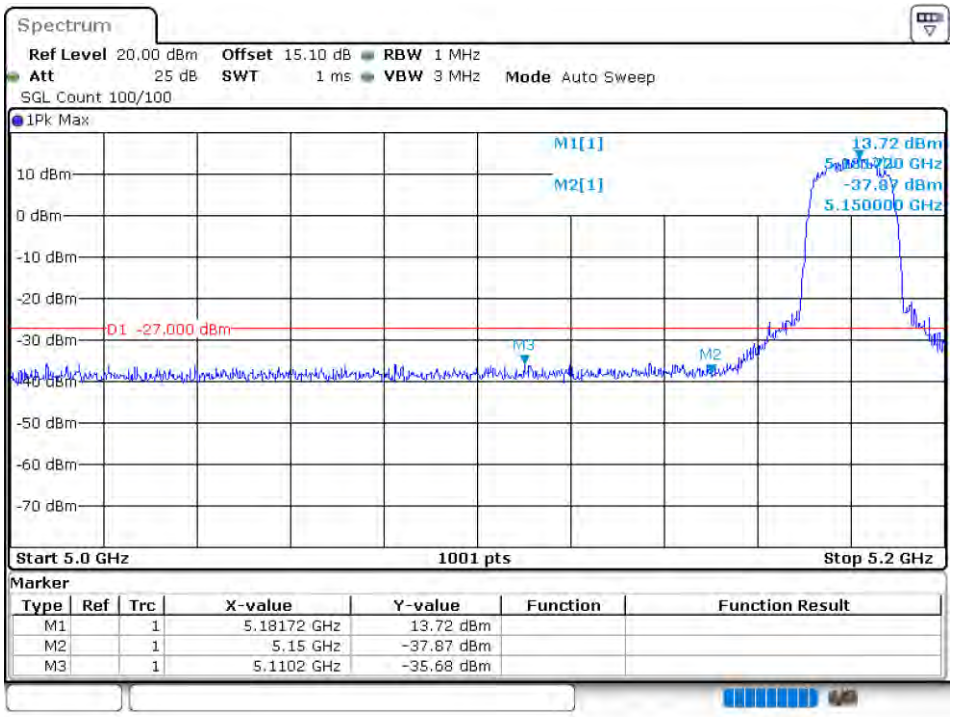
Band Edge NVNT a 5180MHz Low Ant1



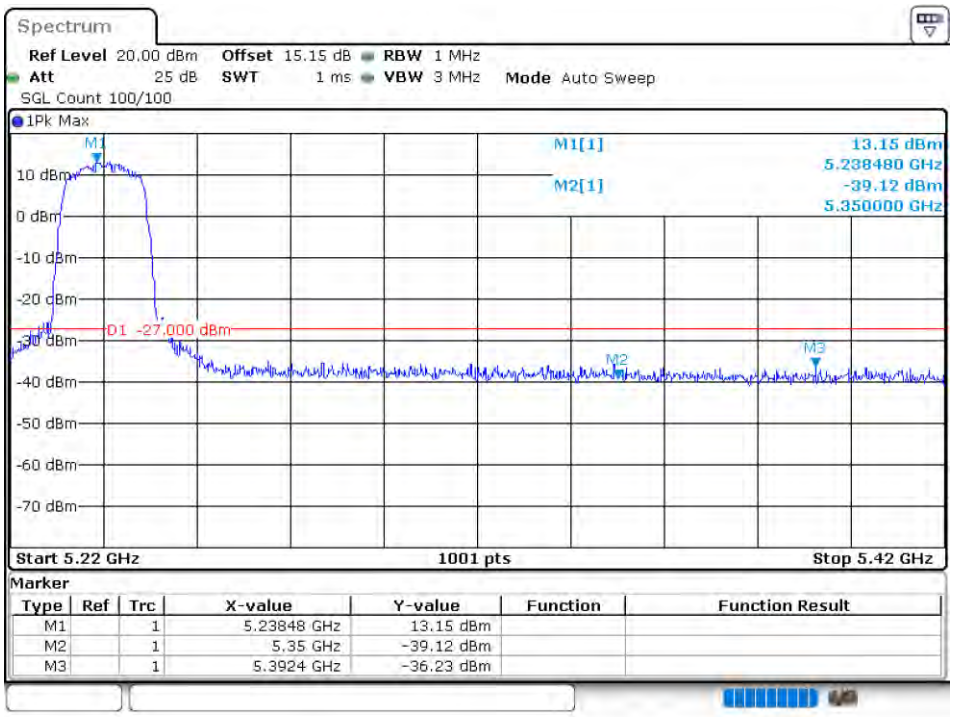
Band Edge NVNT a 5240MHz High Ant1



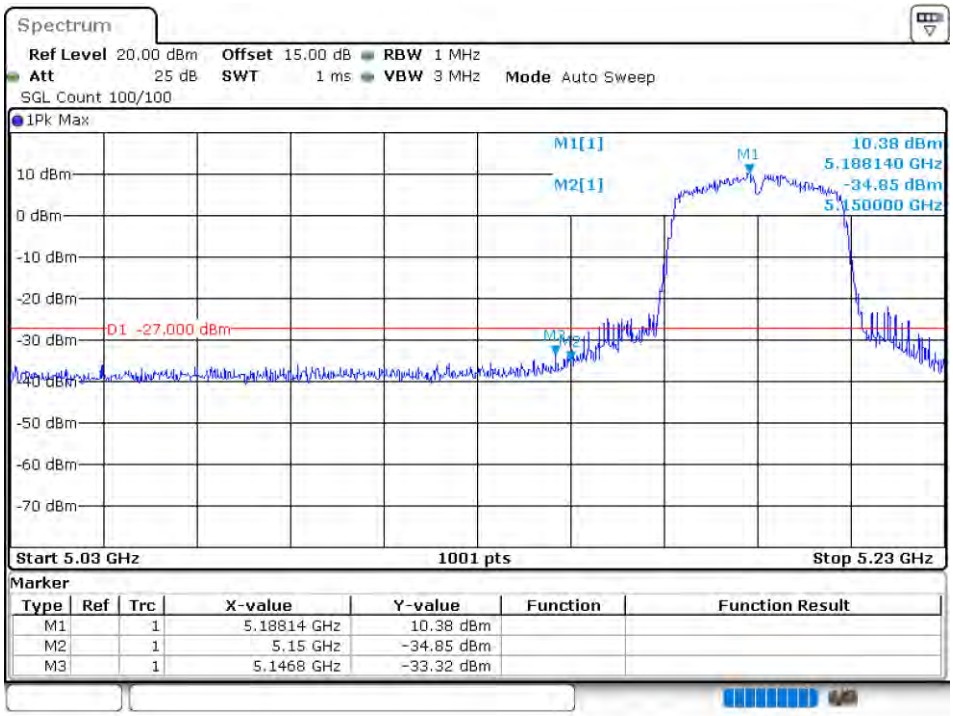
Band Edge NVNT n20 5180MHz Low Ant1



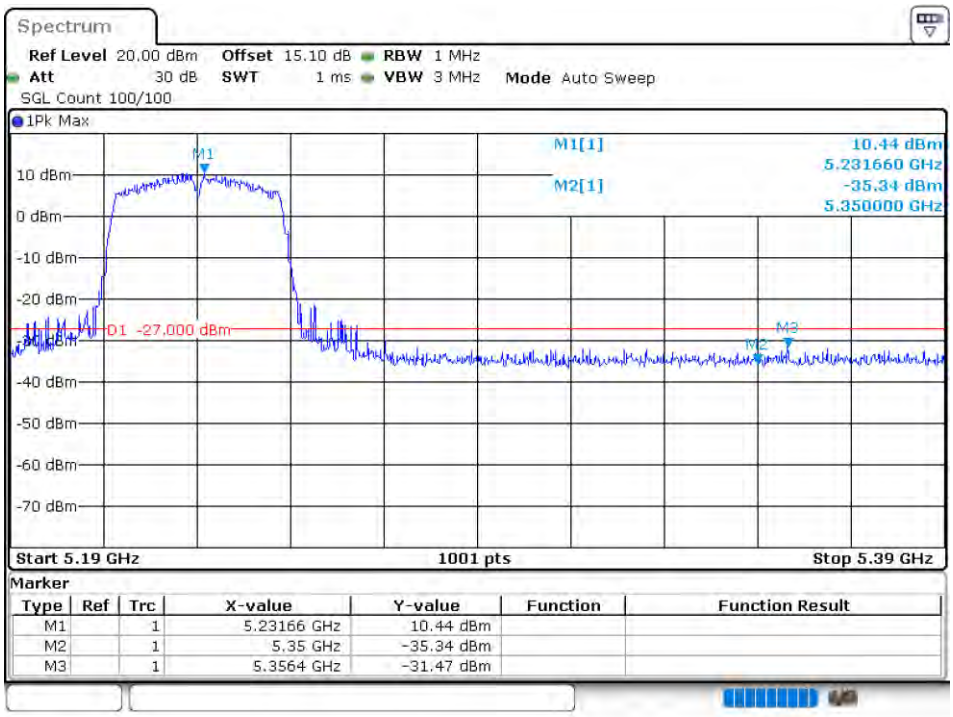
Band Edge NVNT n20 5240MHz High Ant1



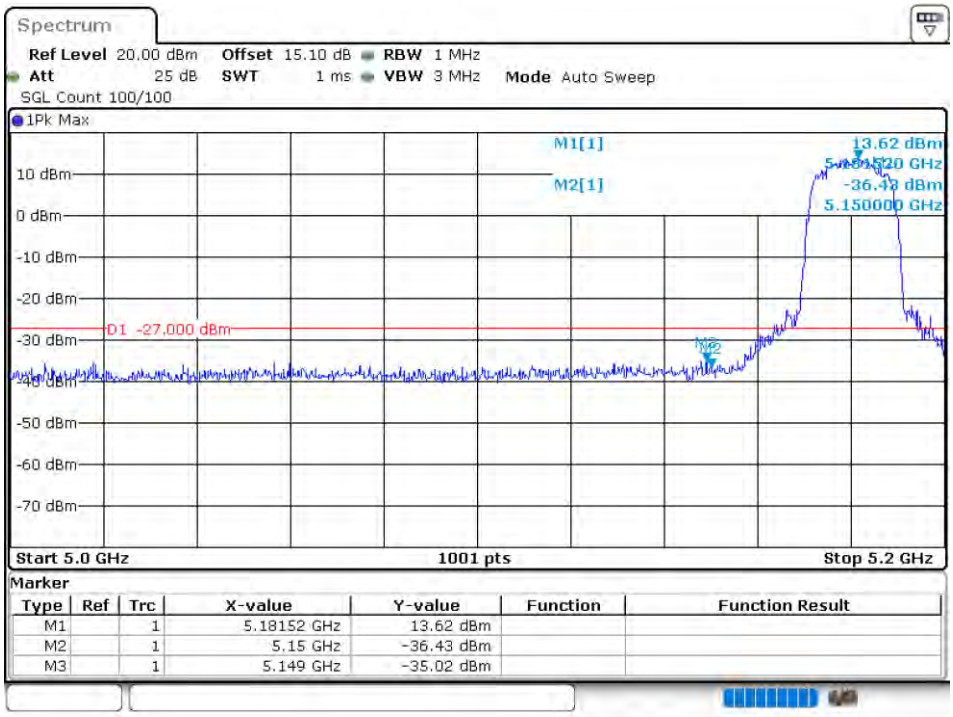
Band Edge NVNT n40 5190MHz Low Ant1



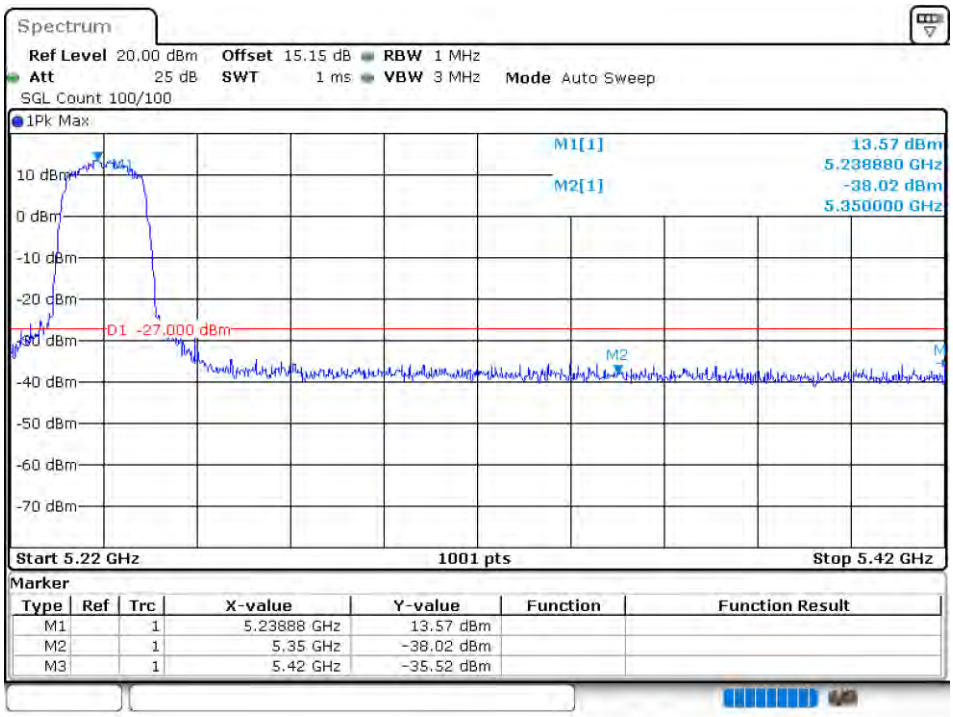
Band Edge NVNT n40 5230MHz High Ant1



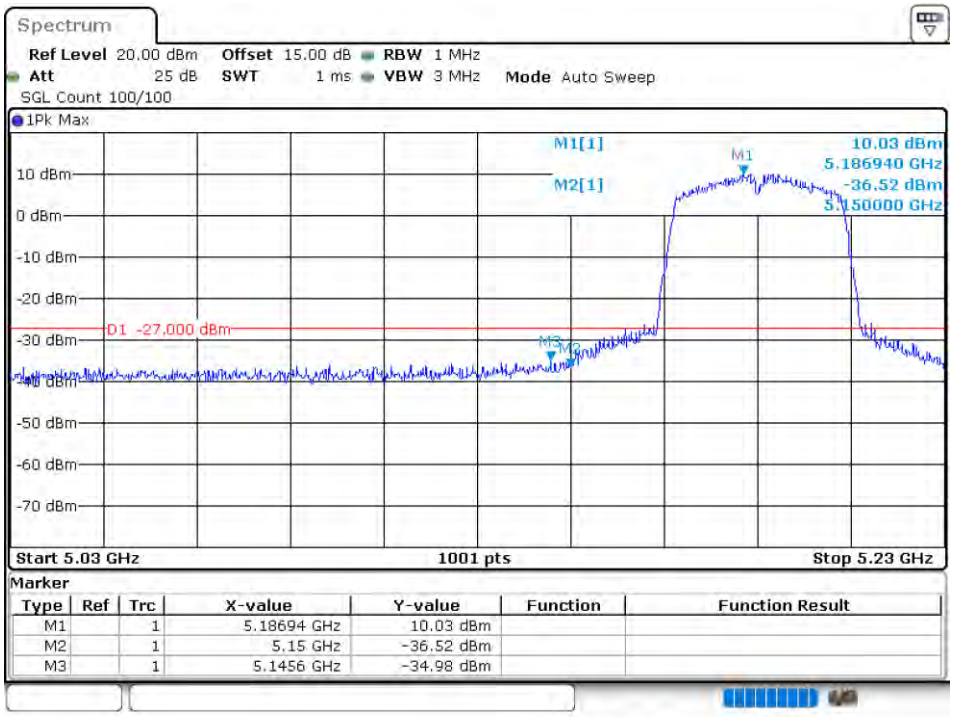
Band Edge NVNT ac20 5180MHz Low Ant1



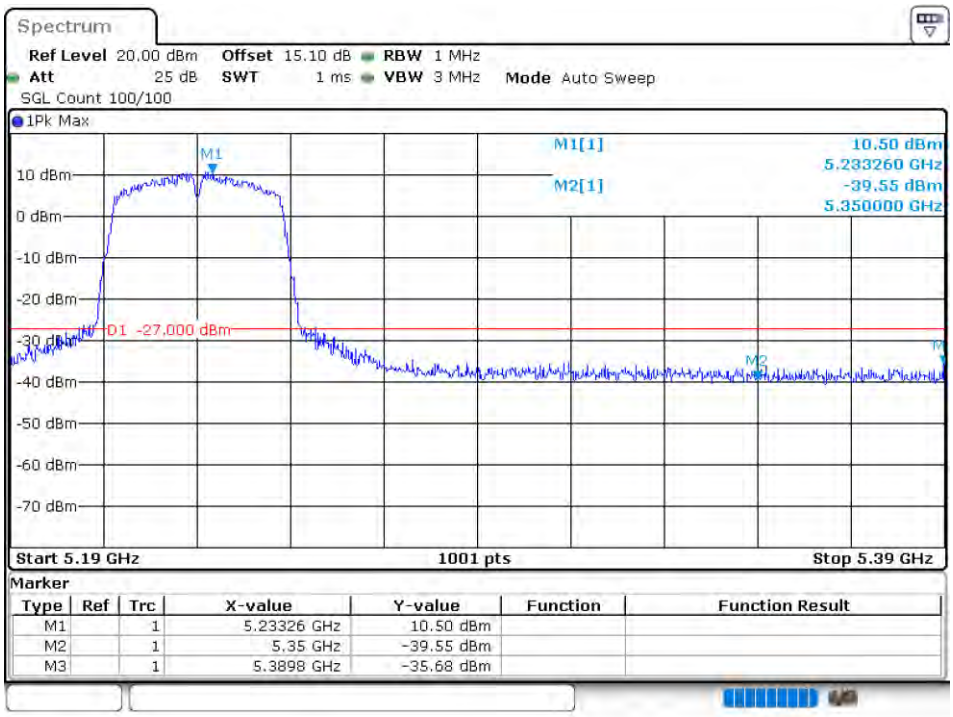
Band Edge NVNT ac20 5240MHz High Ant1



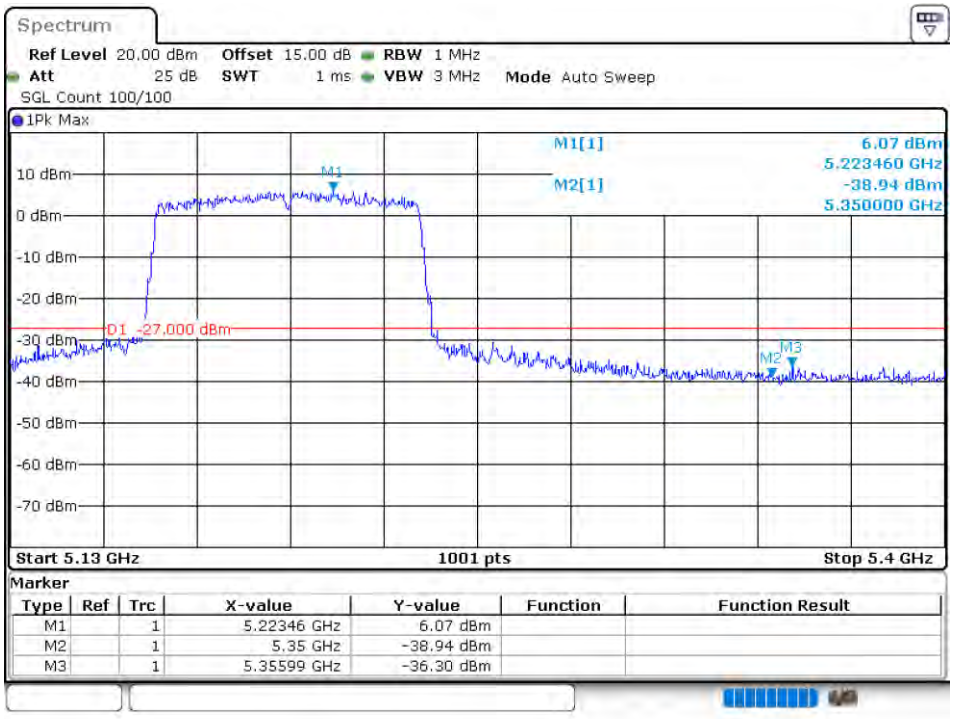
Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1



Band Edge NVNT ac80 5210MHz High Ant1



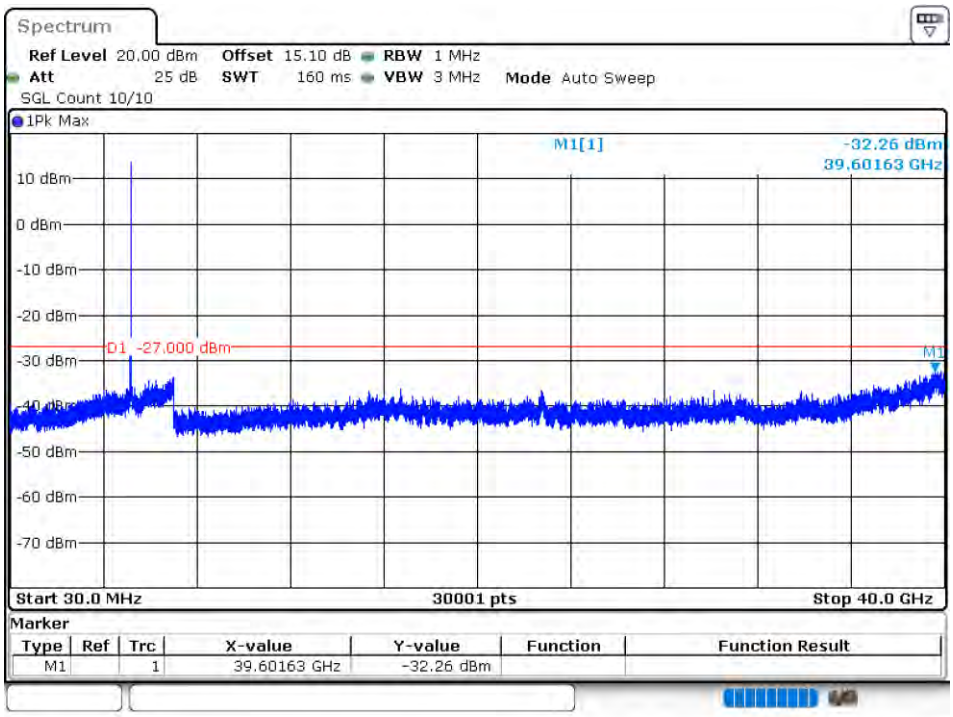
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.22346 GHz	6.07 dBm		
M2		1	5.35 GHz	-38.94 dBm		
M3		1	5.35599 GHz	-36.30 dBm		

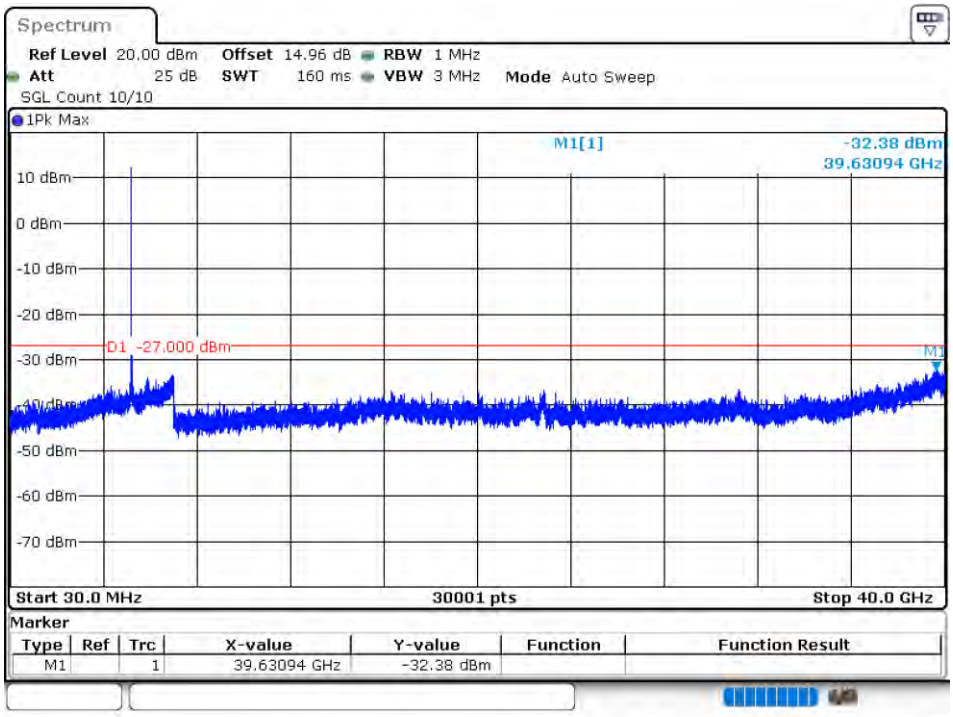
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-32.26	-27	Pass
NVNT	a	5200	Ant1	-32.37	-27	Pass
NVNT	a	5240	Ant1	-31.03	-27	Pass
NVNT	n20	5180	Ant1	-32.02	-27	Pass
NVNT	n20	5200	Ant1	-31.25	-27	Pass
NVNT	n20	5240	Ant1	-31.42	-27	Pass
NVNT	n40	5190	Ant1	-31.88	-27	Pass
NVNT	n40	5230	Ant1	-31.87	-27	Pass
NVNT	ac20	5180	Ant1	-32.7	-27	Pass
NVNT	ac20	5200	Ant1	-32.38	-27	Pass
NVNT	ac20	5240	Ant1	-31.37	-27	Pass
NVNT	ac40	5190	Ant1	-31.93	-27	Pass
NVNT	ac40	5230	Ant1	-31.97	-27	Pass
NVNT	ac80	5210	Ant1	-31.66	-27	Pass

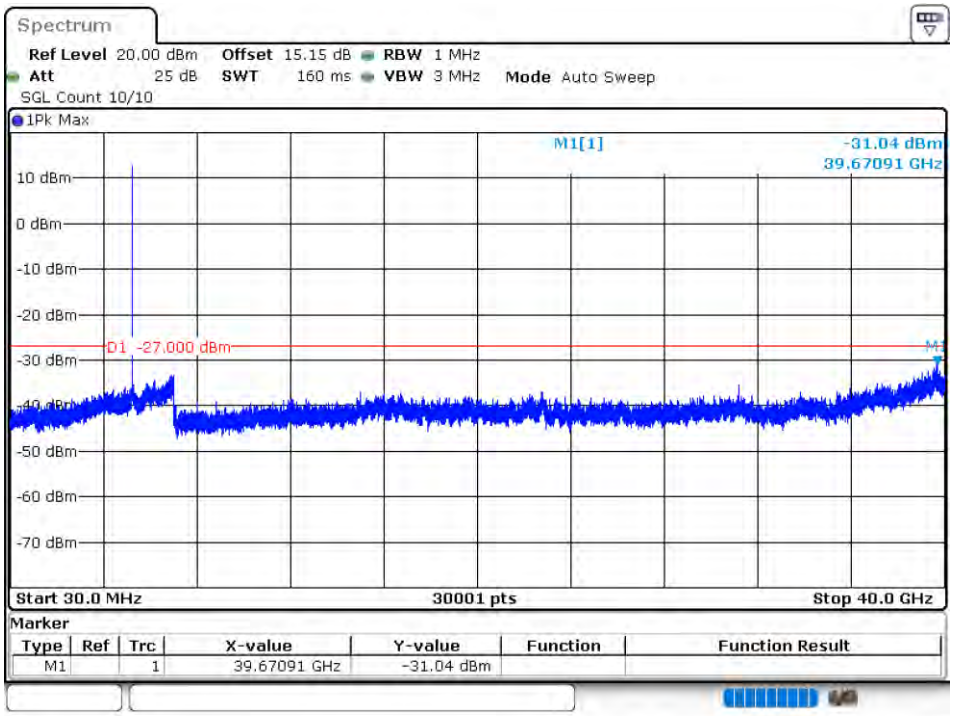
Test Graphs
Tx. Spurious NVNT a 5180MHz Ant1 Emission



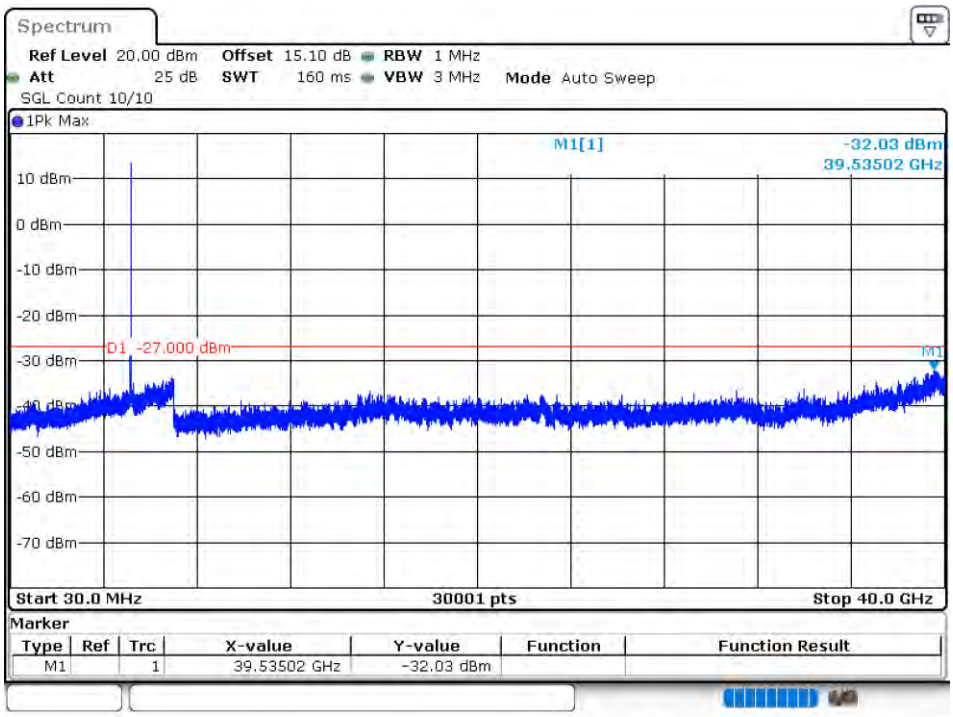
Tx. Spurious NVNT a 5200MHz Ant1 Emission



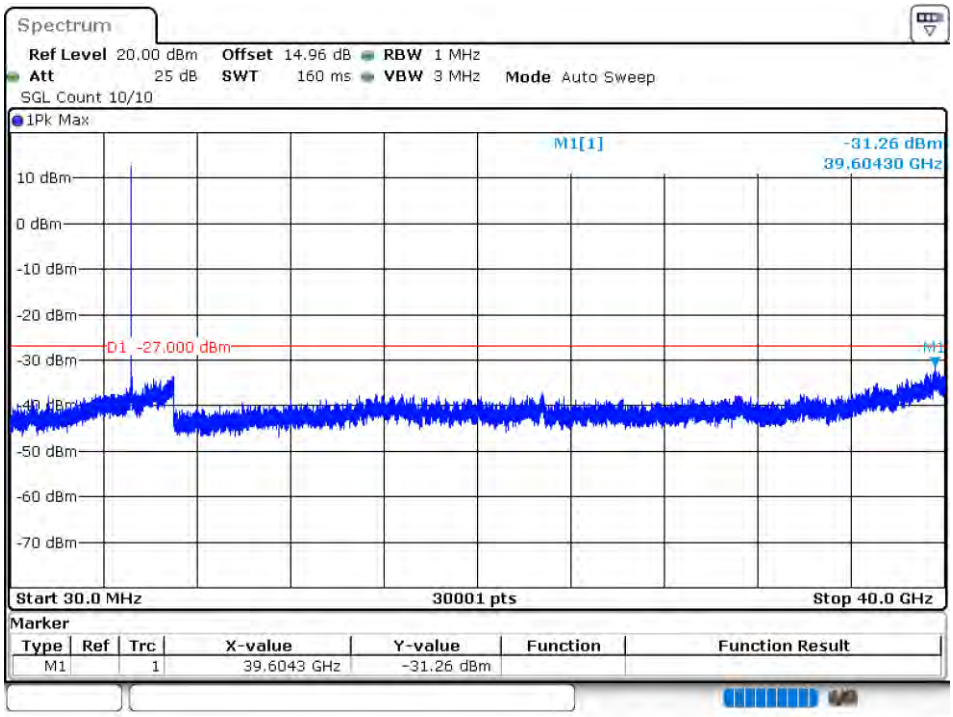
Tx. Spurious NVNT a 5240MHz Ant1 Emission



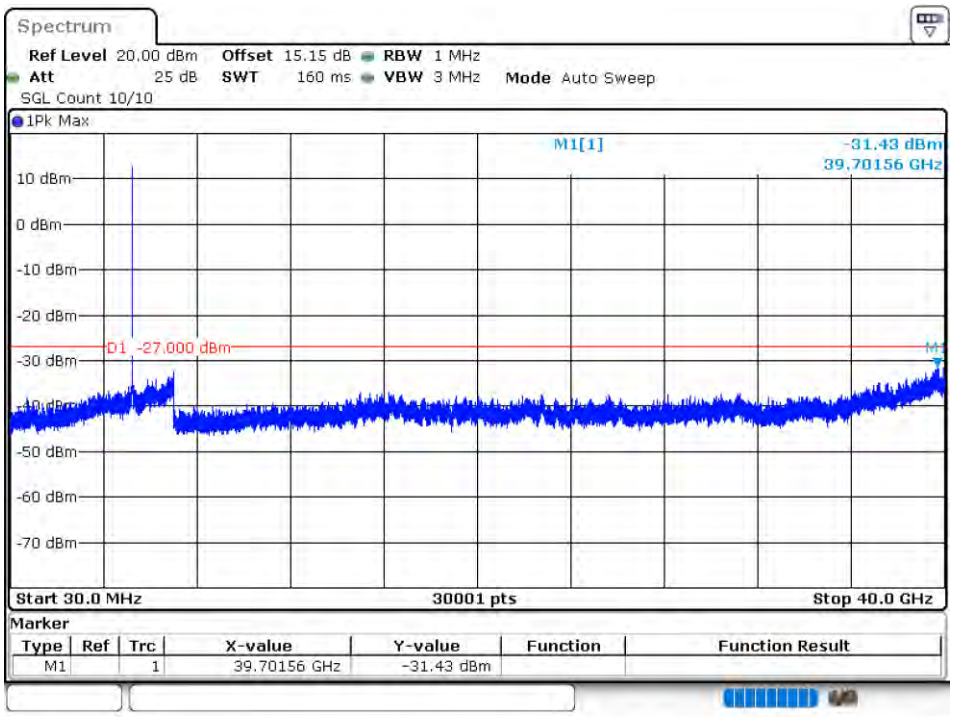
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



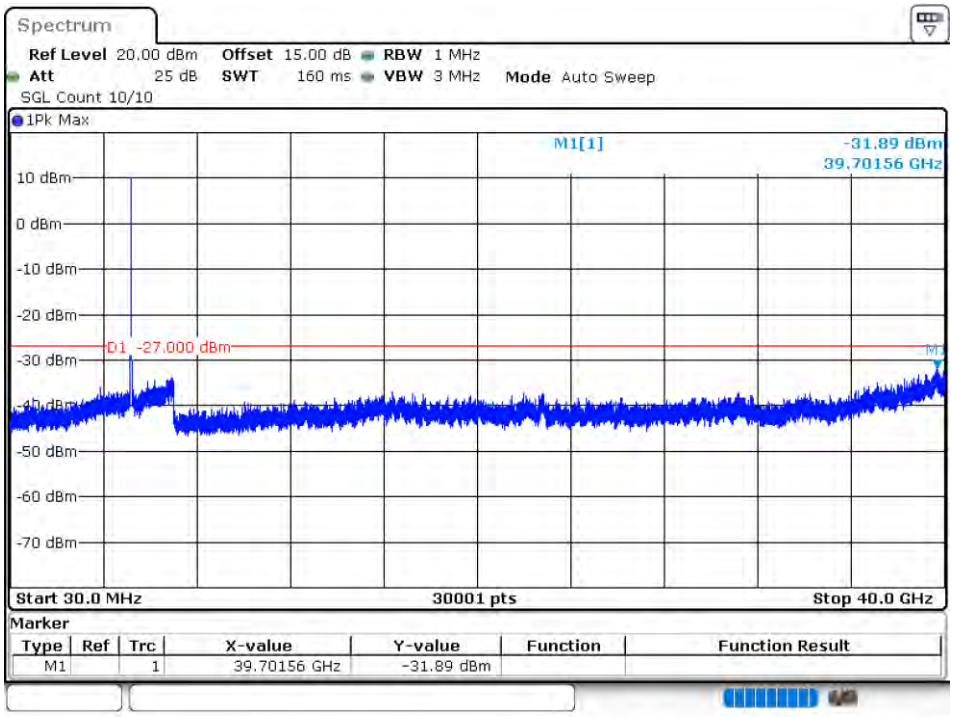
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



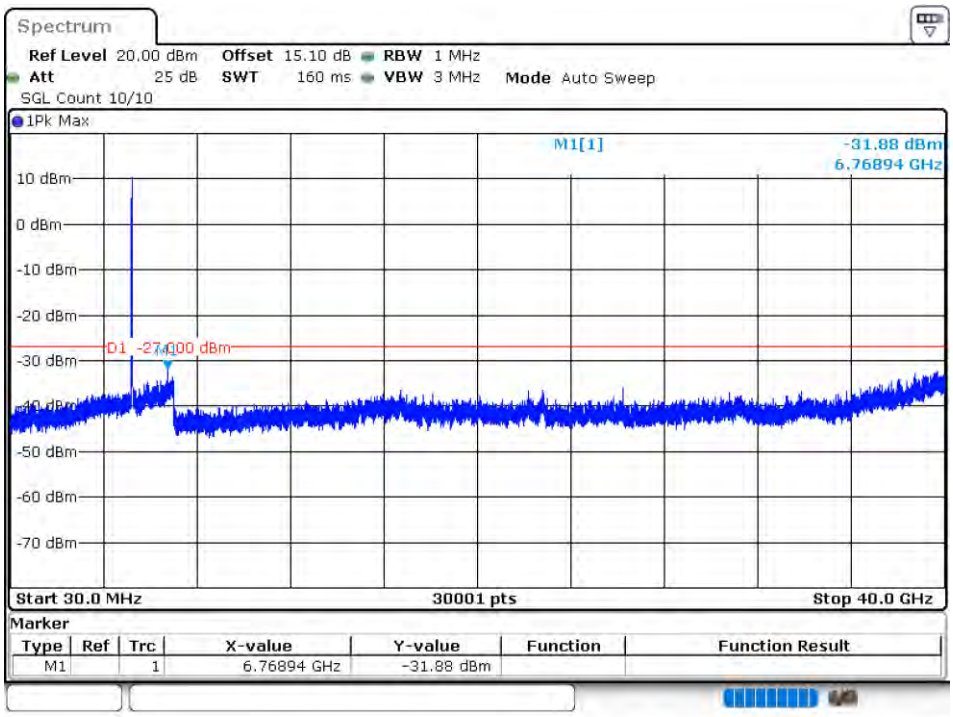
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



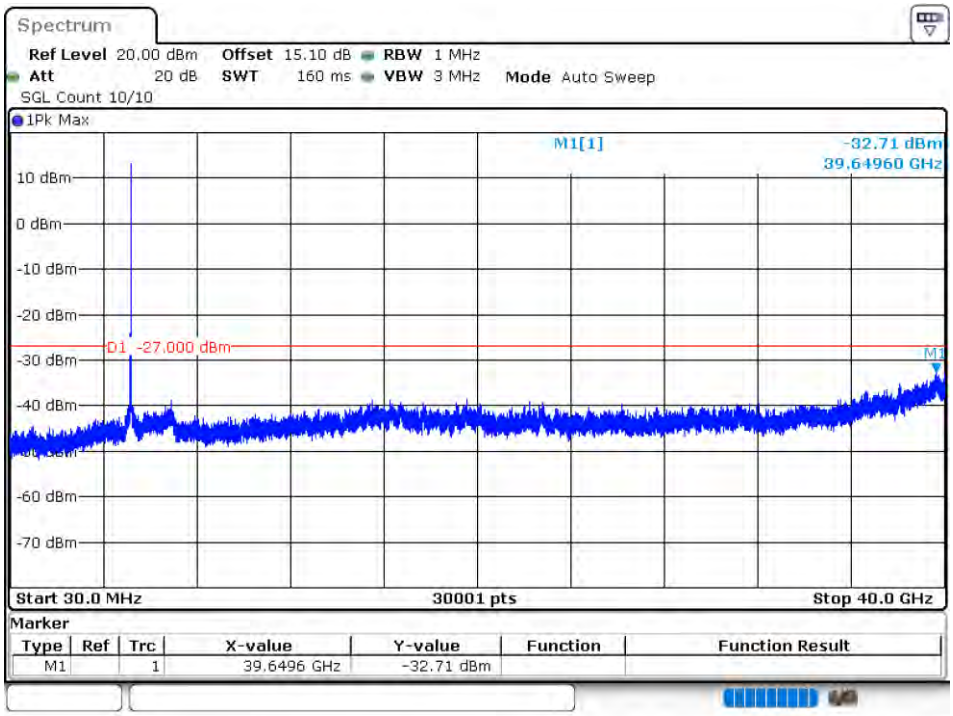
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



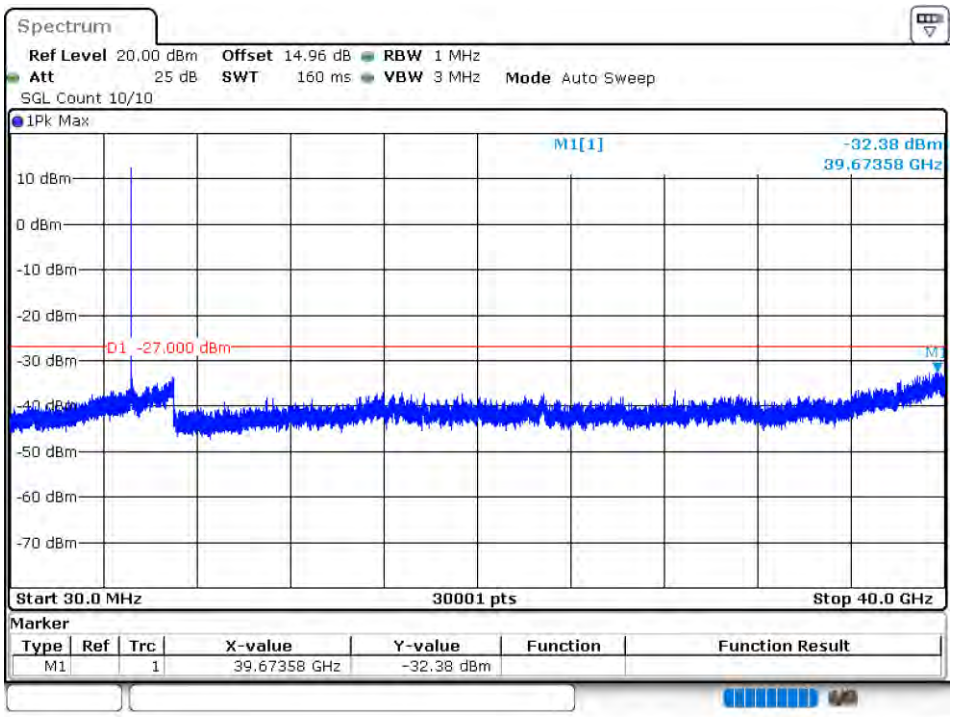
Tx. Spurious NVNT n40 5230MHz Ant1 Emission



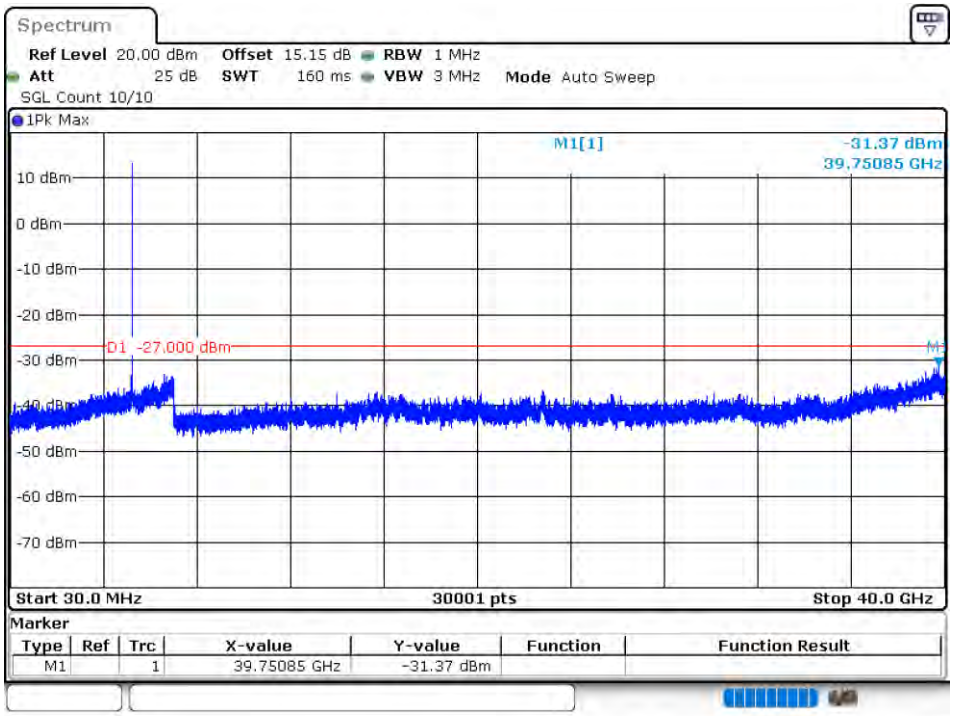
Tx. Spurious NVNT ac20 5180MHz Ant1 Emission



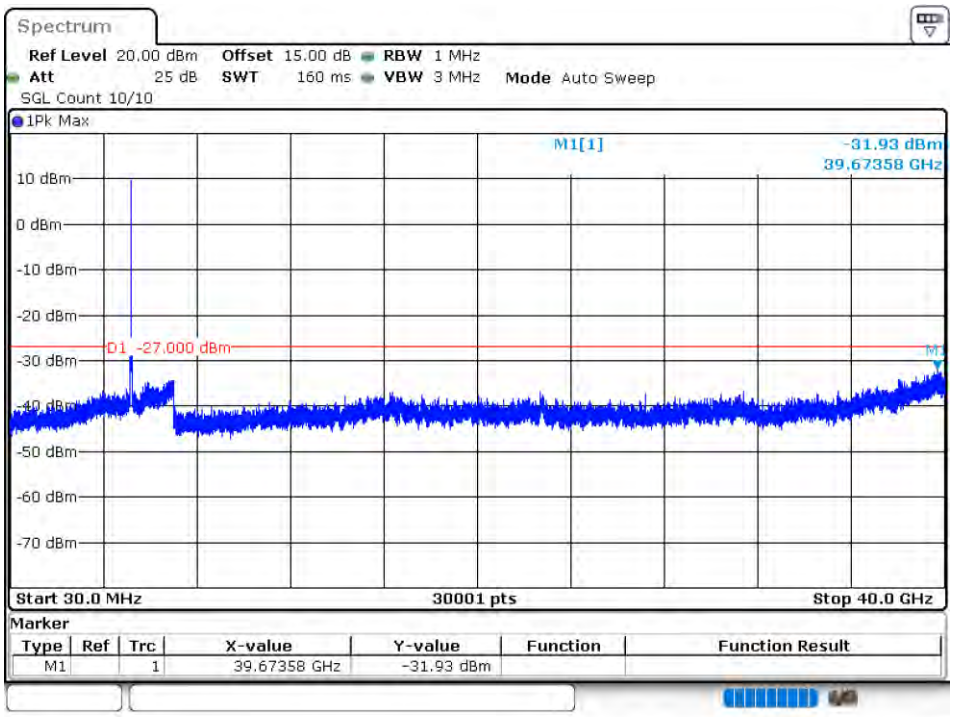
Tx. Spurious NVNT ac20 5200MHz Ant1 Emission



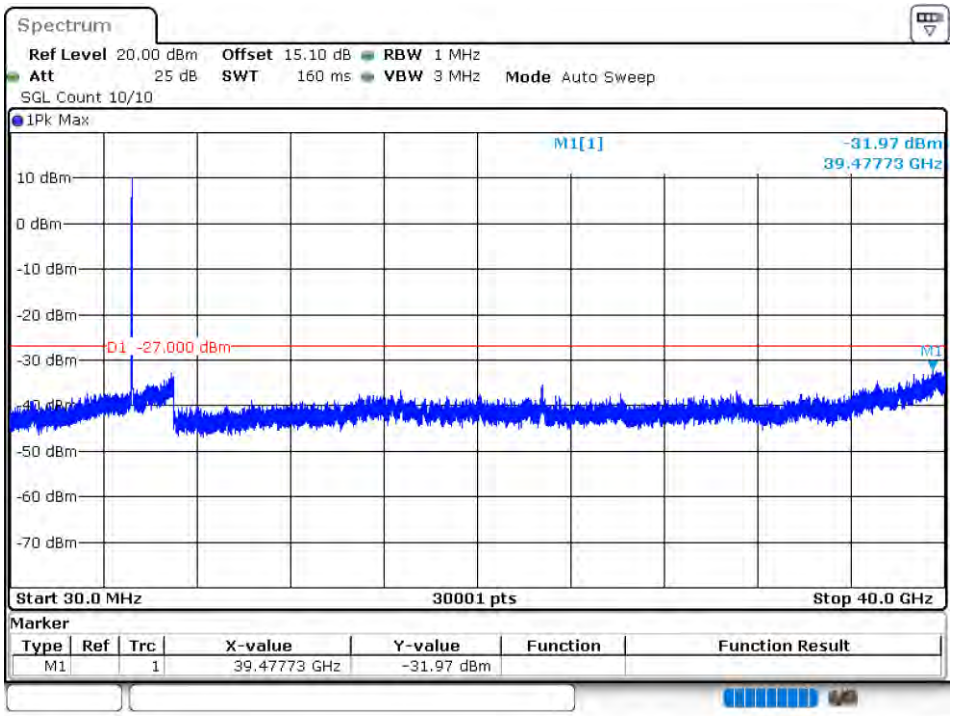
Tx. Spurious NVNT ac20 5240MHz Ant1 Emission



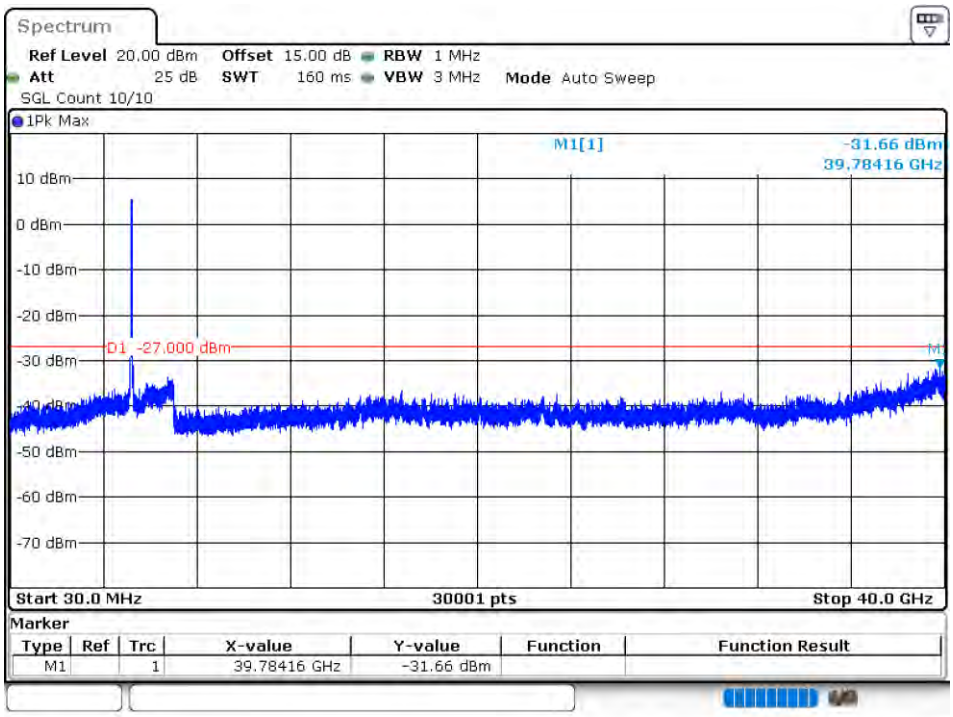
Tx. Spurious NVNT ac40 5190MHz Ant1 Emission



Tx. Spurious NVNT ac40 5230MHz Ant1 Emission



Tx. Spurious NVNT ac80 5210MHz Ant1 Emission



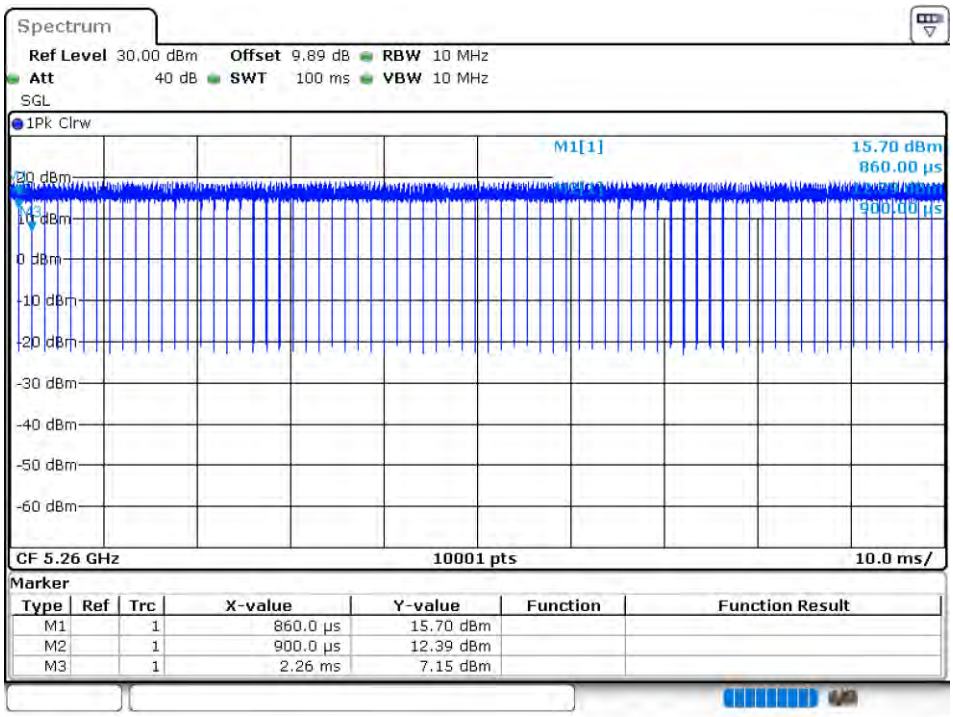
5.3G WIFI

Duty Cycle

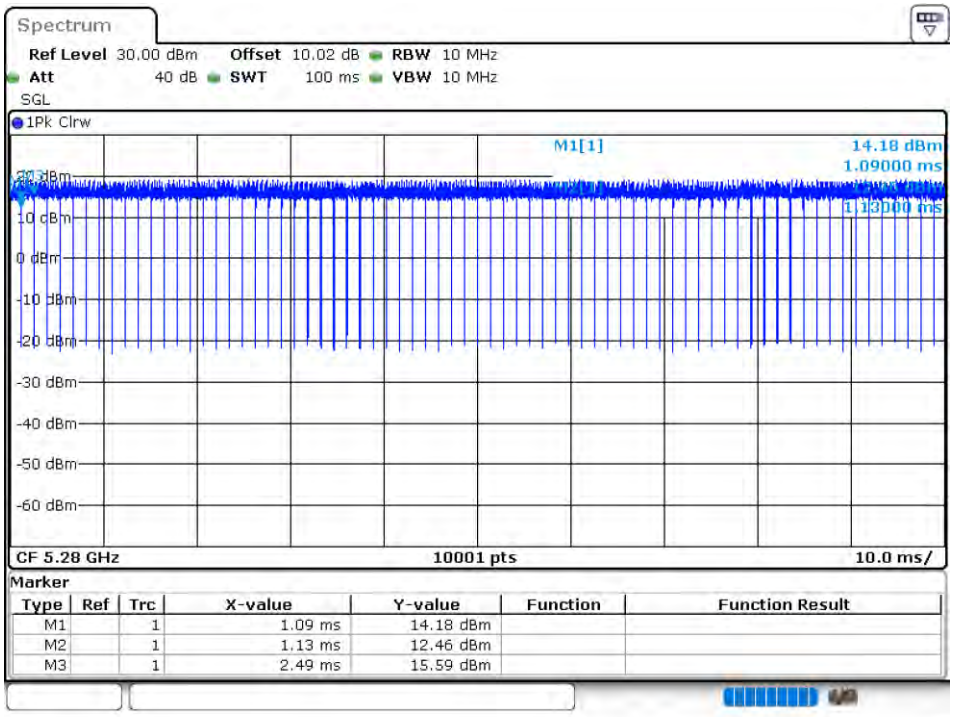
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	98.13	0.08	0.74
NVNT	a	5280	Ant1	98.14	0.08	0.74
NVNT	a	5320	Ant1	98.13	0.08	0.74
NVNT	n20	5260	Ant1	98.01	0.09	0.79
NVNT	n20	5280	Ant1	98	0.09	0.79
NVNT	n20	5320	Ant1	97.99	0.09	0.79
NVNT	n40	5270	Ant1	96.16	0.17	1.59
NVNT	n40	5310	Ant1	96.14	0.17	1.59
NVNT	ac20	5260	Ant1	97.99	0.09	0.78
NVNT	ac20	5280	Ant1	98.01	0.09	0.78
NVNT	ac20	5320	Ant1	98	0.09	0.78
NVNT	ac40	5270	Ant1	96.18	0.17	1.56
NVNT	ac40	5310	Ant1	96.19	0.17	1.56
NVNT	ac80	5290	Ant1	92.74	0.33	3.12

Test Graphs

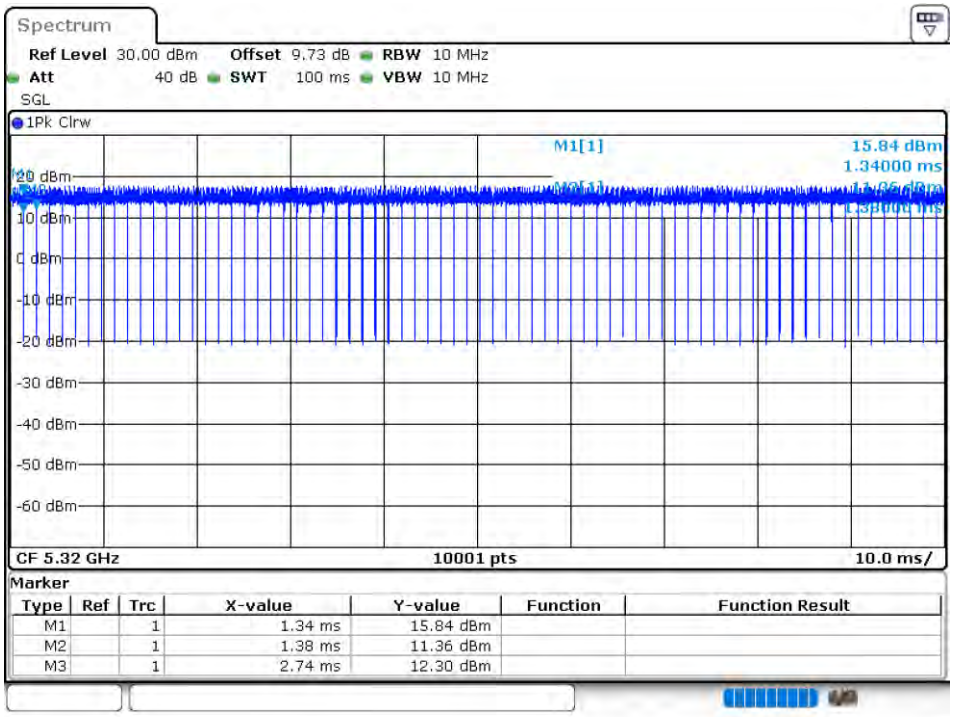
Duty Cycle NVNT a 5260MHz Ant1



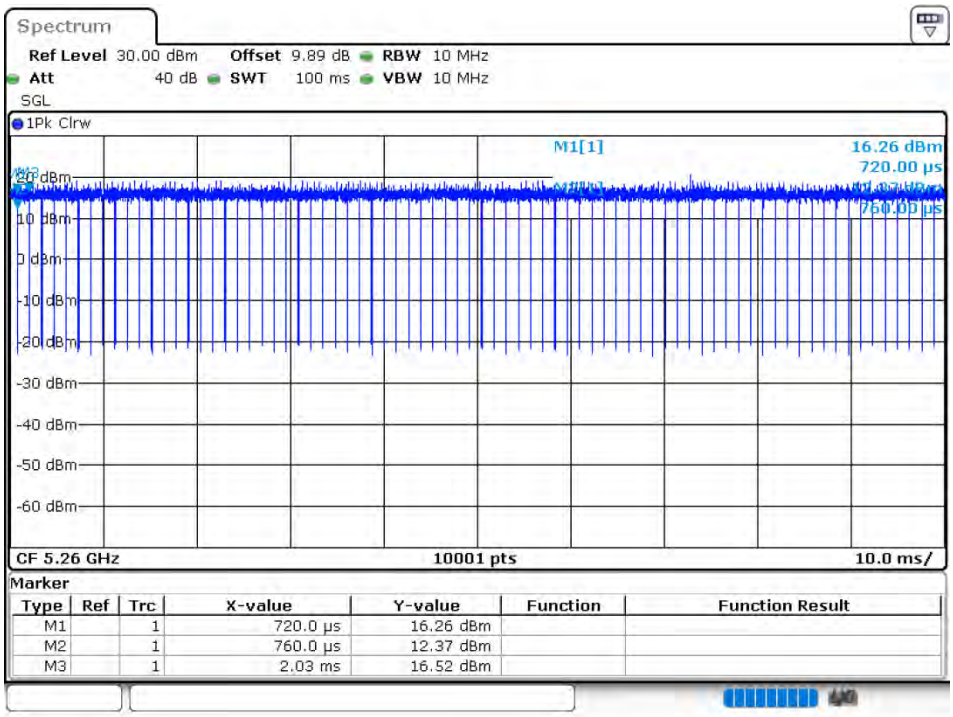
Duty Cycle NVNT a 5280MHz Ant1



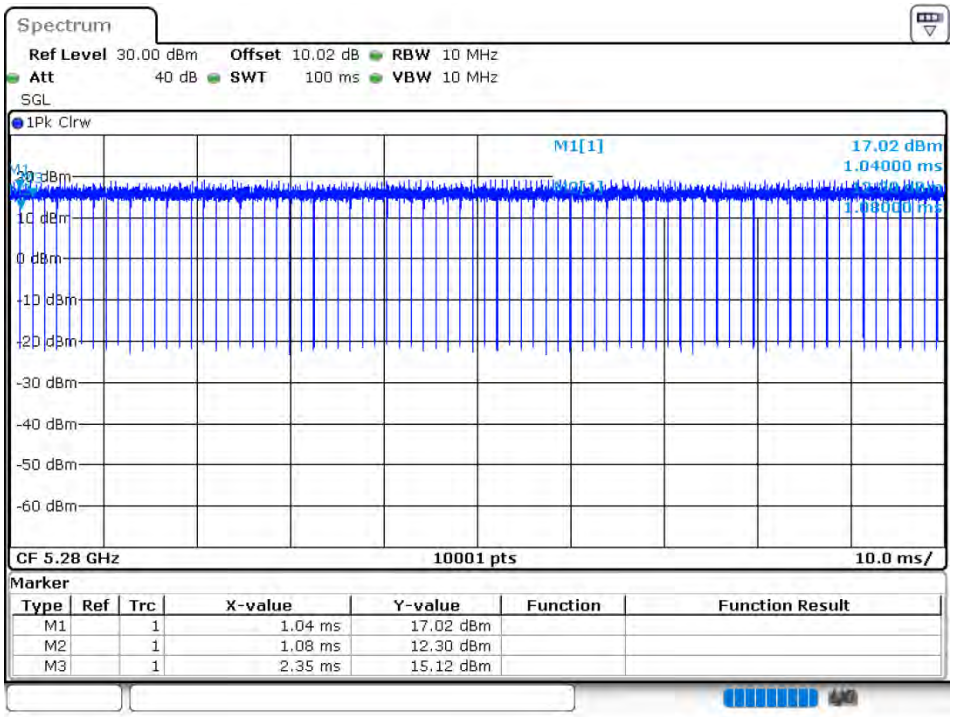
Duty Cycle NVNT a 5320MHz Ant1



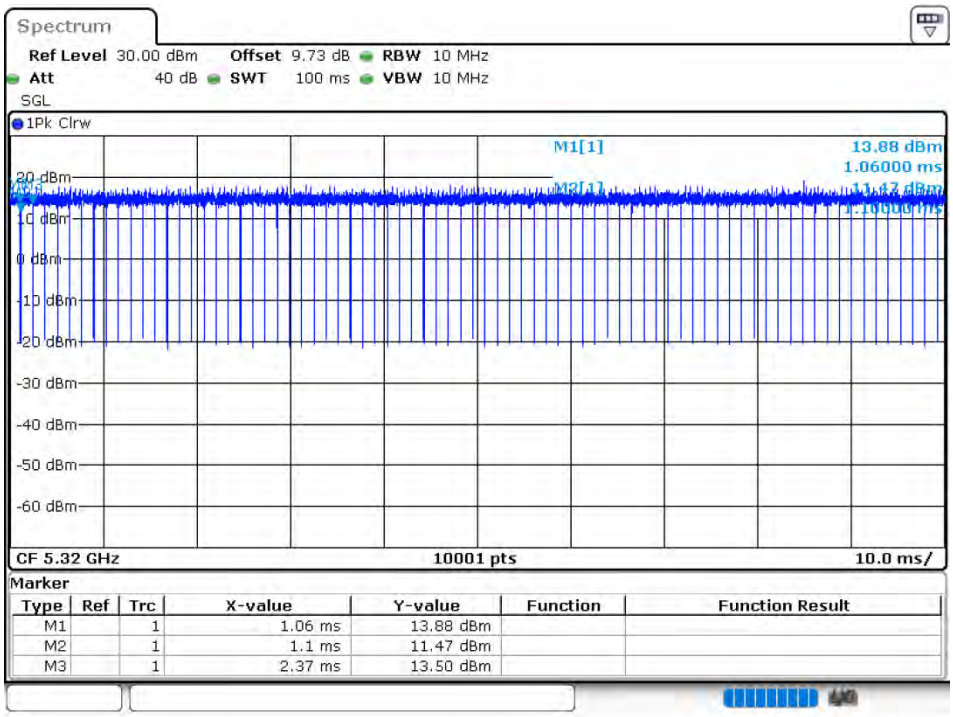
Duty Cycle NVNT n20 5260MHz Ant1



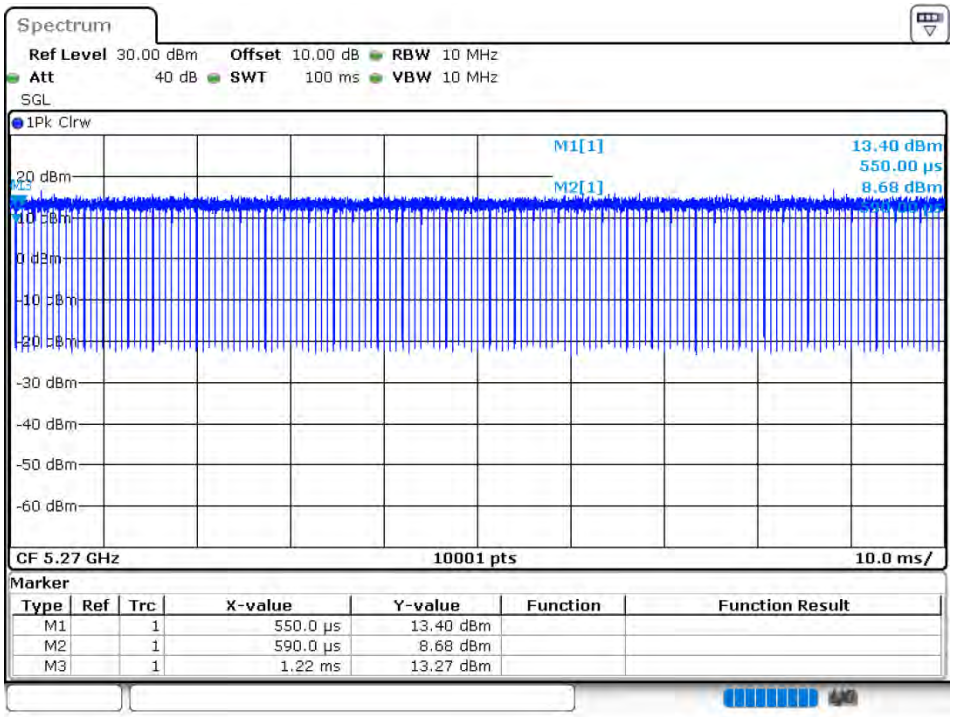
Duty Cycle NVNT n20 5280MHz Ant1



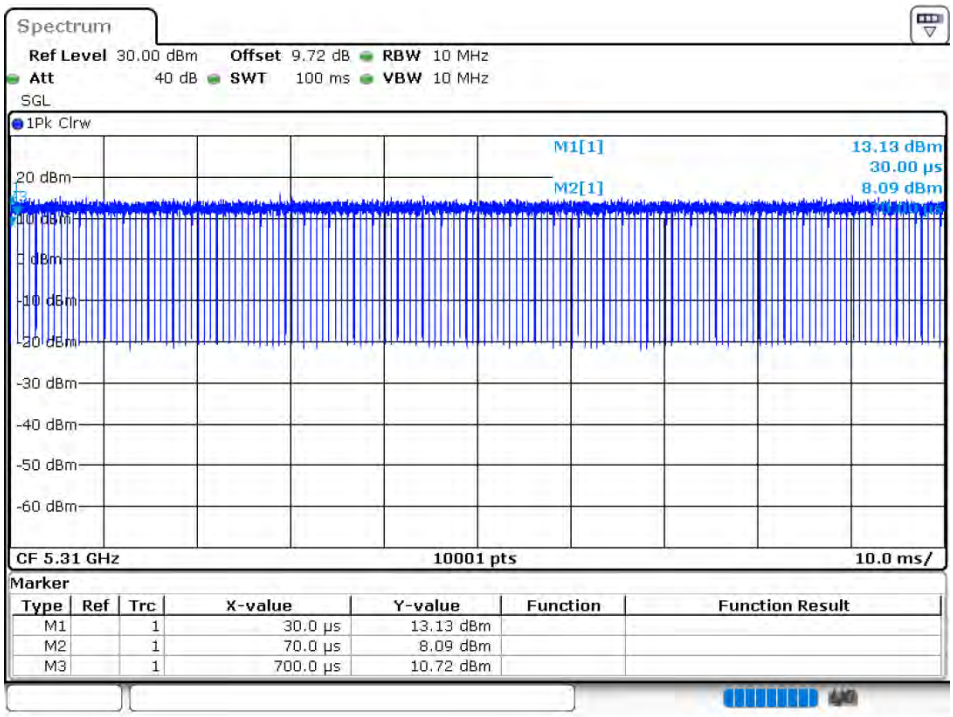
Duty Cycle NVNT n20 5320MHz Ant1



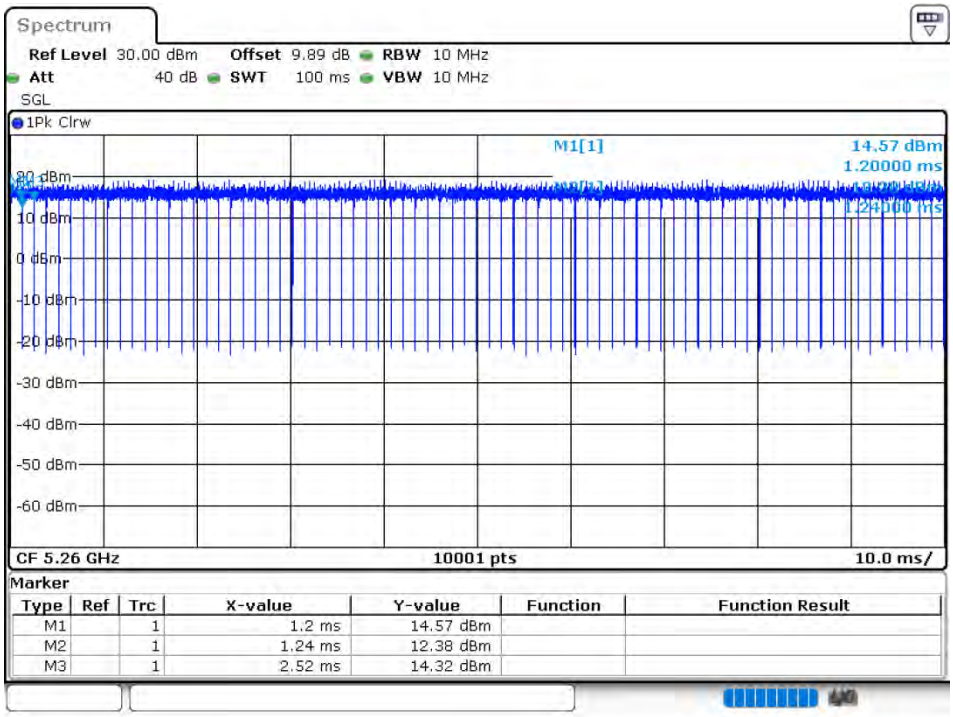
Duty Cycle NVNT n40 5270MHz Ant1



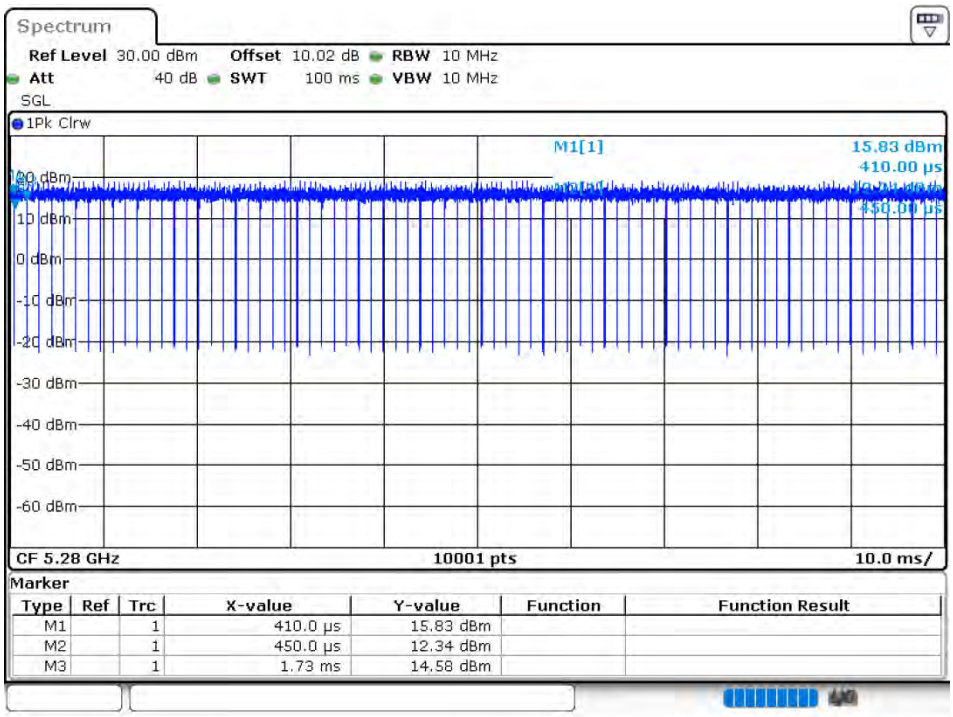
Duty Cycle NVNT n40 5310MHz Ant1



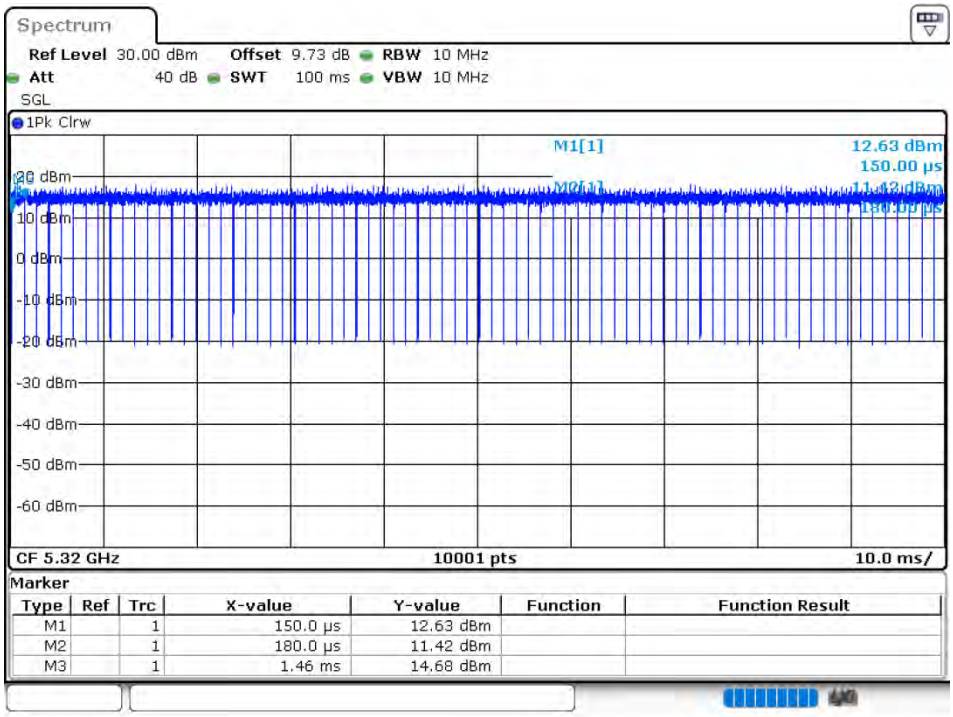
Duty Cycle NVNT ac20 5260MHz Ant1



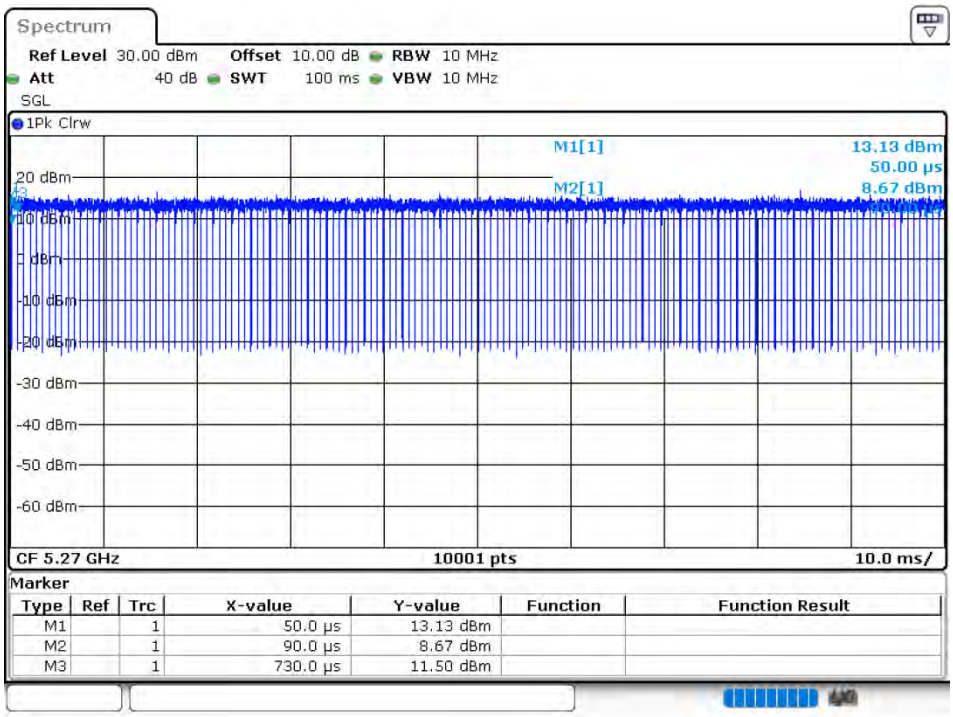
Duty Cycle NVNT ac20 5280MHz Ant1



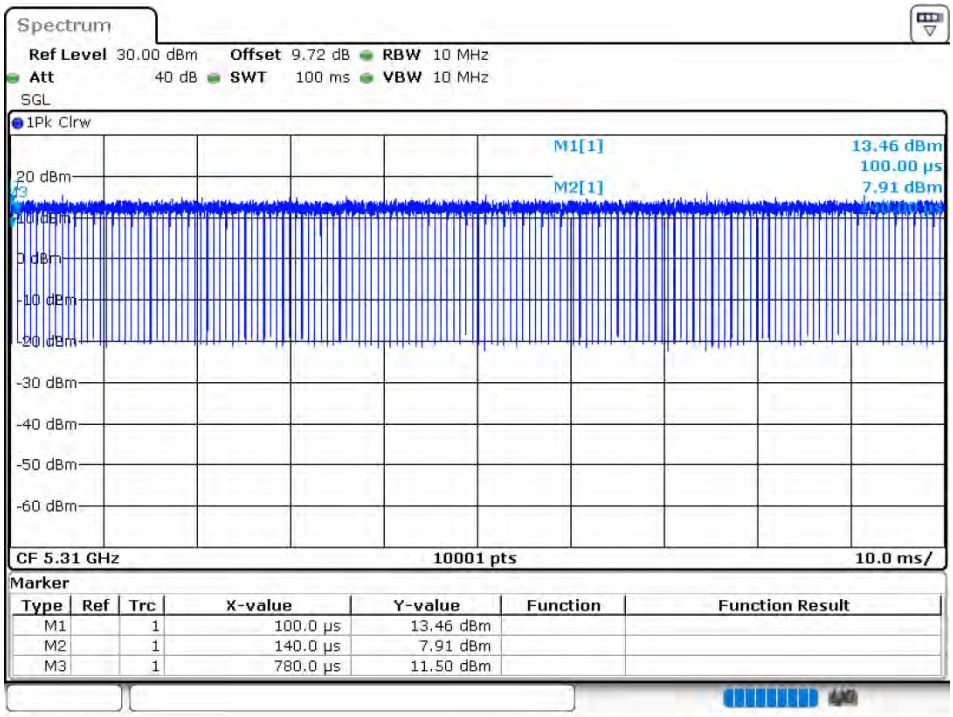
Duty Cycle NVNT ac20 5320MHz Ant1



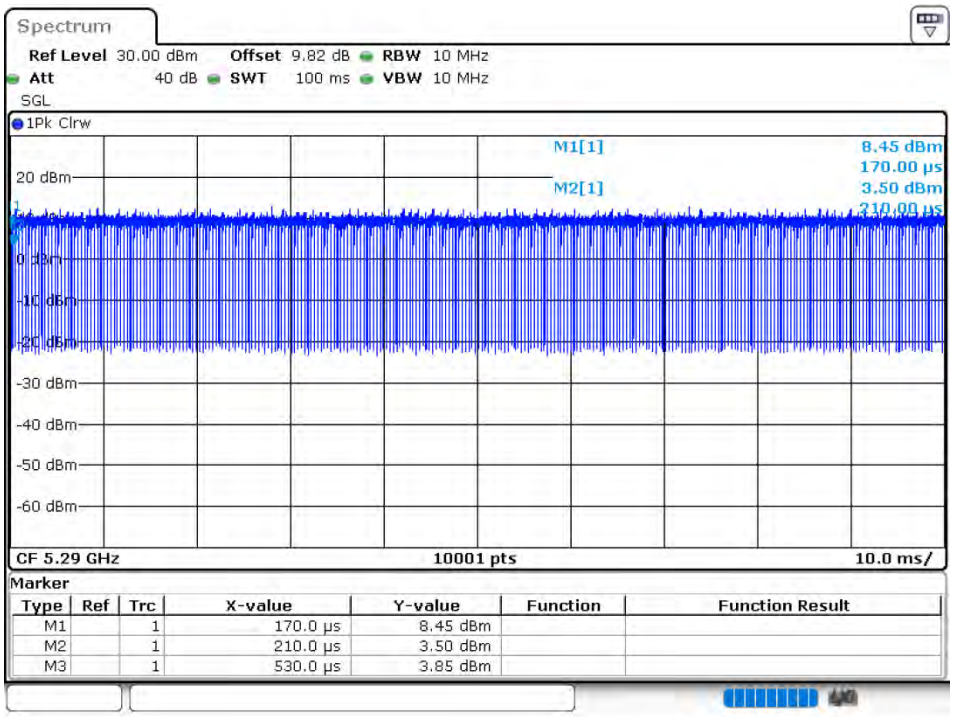
Duty Cycle NVNT ac40 5270MHz Ant1



Duty Cycle NVNT ac40 5310MHz Ant1



Duty Cycle NVNT ac80 5290MHz Ant1



Maximum Conducted Output Power

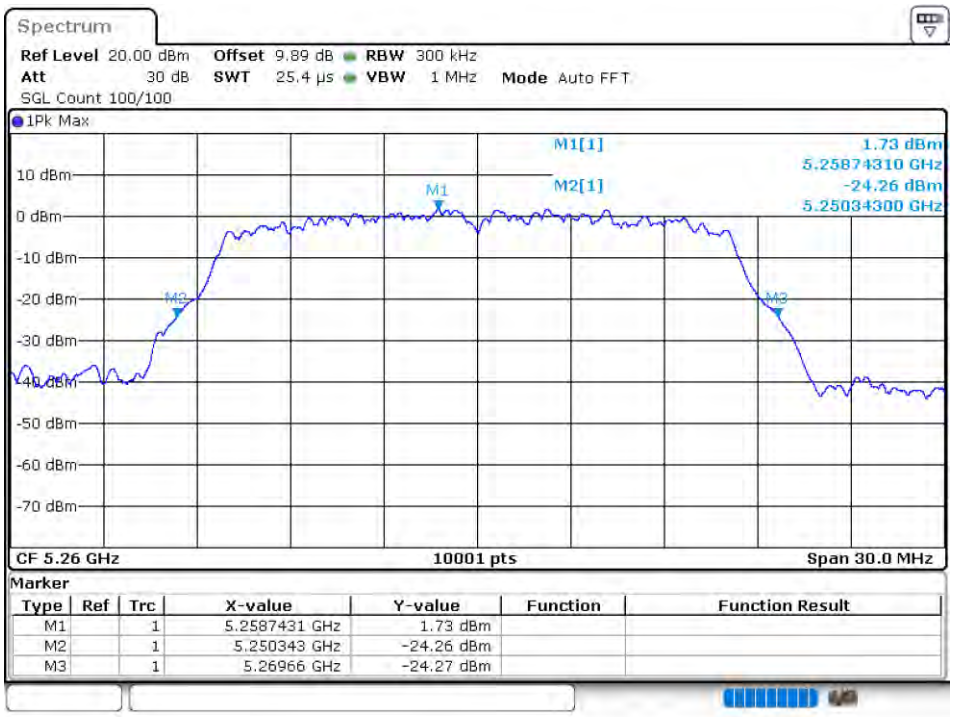
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	10.24	0.08	10.32	24	Pass
NVNT	a	5280	Ant1	9.83	0.08	9.91	24	Pass
NVNT	a	5320	Ant1	10.08	0.08	10.16	24	Pass
NVNT	n20	5260	Ant1	10.12	0.09	10.21	24	Pass
NVNT	n20	5280	Ant1	9.73	0.09	9.82	24	Pass
NVNT	n20	5320	Ant1	9.94	0.09	10.03	24	Pass
NVNT	n40	5270	Ant1	9.75	0.17	9.92	24	Pass
NVNT	n40	5310	Ant1	10.26	0.17	10.43	24	Pass
NVNT	ac20	5260	Ant1	10.13	0.09	10.22	24	Pass
NVNT	ac20	5280	Ant1	9.73	0.09	9.82	24	Pass
NVNT	ac20	5320	Ant1	9.95	0.09	10.04	24	Pass
NVNT	ac40	5270	Ant1	9.77	0.17	9.94	24	Pass
NVNT	ac40	5310	Ant1	10.3	0.17	10.47	24	Pass
NVNT	ac80	5290	Ant1	9.48	0.33	9.81	24	Pass

-26dB Bandwidth

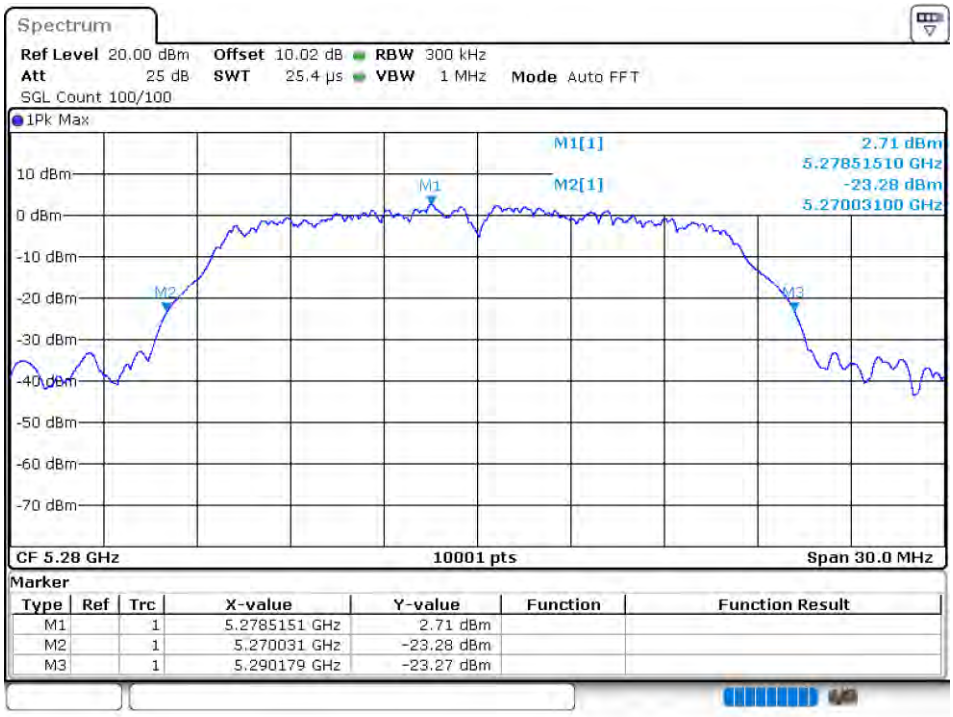
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	19.317	Pass
NVNT	a	5280	Ant1	20.148	Pass
NVNT	a	5320	Ant1	19.155	Pass
NVNT	n20	5260	Ant1	19.851	Pass
NVNT	n20	5280	Ant1	20.034	Pass
NVNT	n20	5320	Ant1	20.037	Pass
NVNT	n40	5270	Ant1	40.644	Pass
NVNT	n40	5310	Ant1	40.506	Pass
NVNT	ac20	5260	Ant1	19.998	Pass
NVNT	ac20	5280	Ant1	20.124	Pass
NVNT	ac20	5320	Ant1	19.935	Pass
NVNT	ac40	5270	Ant1	40.734	Pass
NVNT	ac40	5310	Ant1	40.572	Pass
NVNT	ac80	5290	Ant1	81.78	Pass

Test Graphs

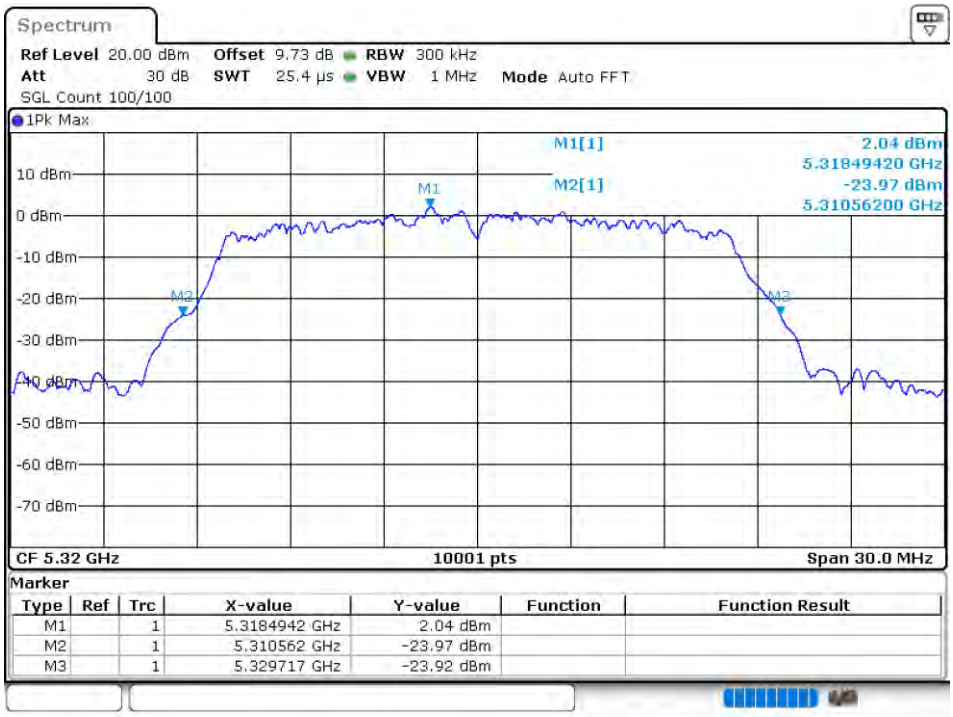
-26dB Bandwidth NVNT a 5260MHz Ant1



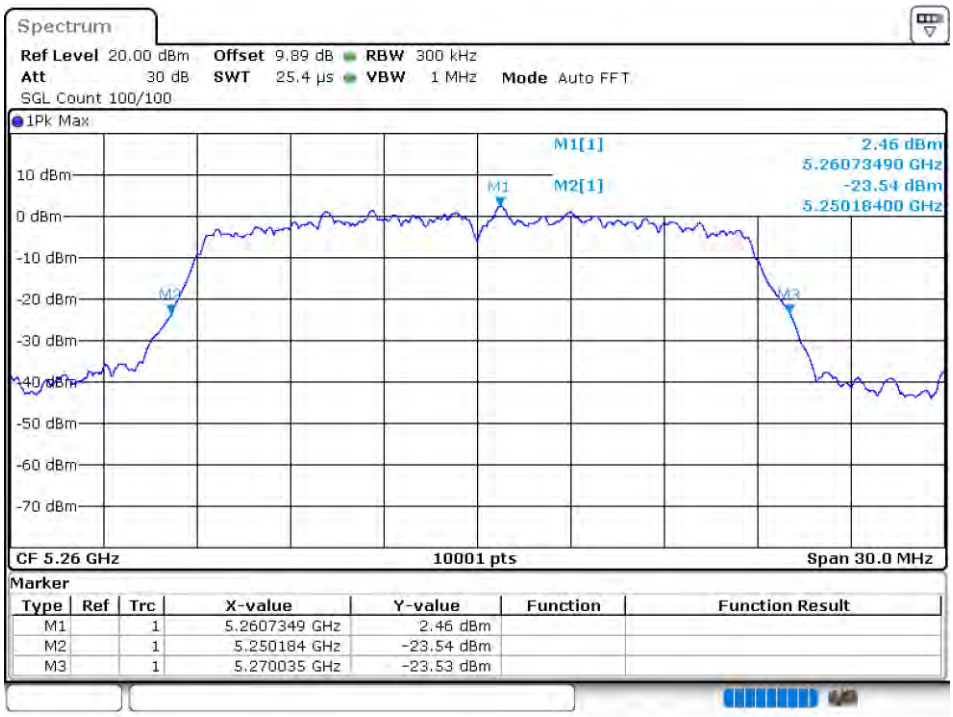
-26dB Bandwidth NVNT a 5280MHz Ant1



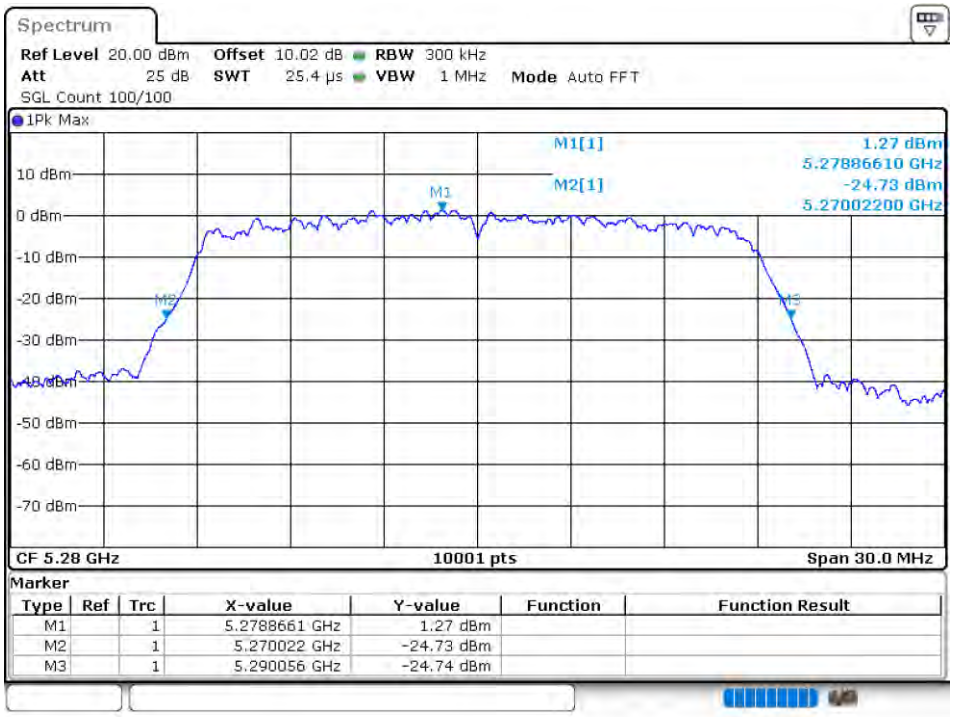
-26dB Bandwidth NVNT a 5320MHz Ant1



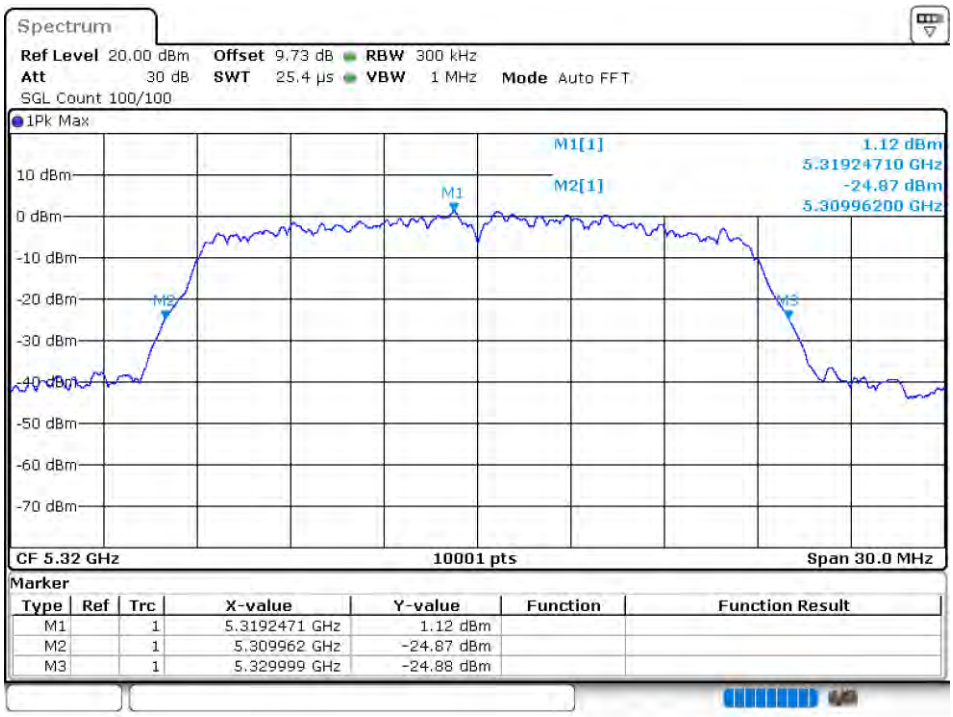
-26dB Bandwidth NVNT n20 5260MHz Ant1



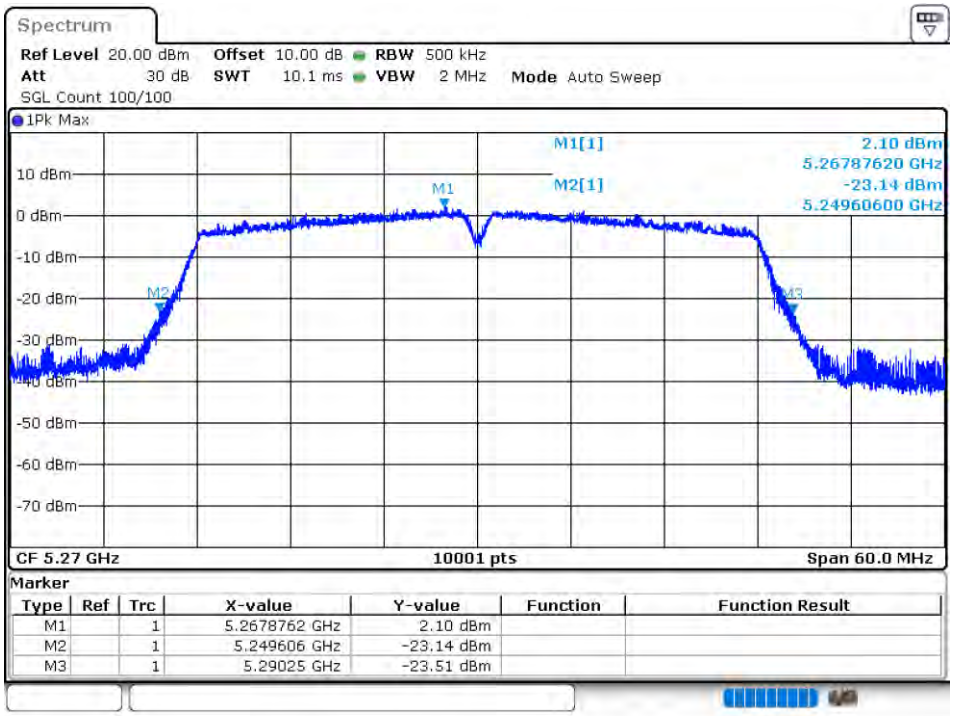
-26dB Bandwidth NVNT n20 5280MHz Ant1



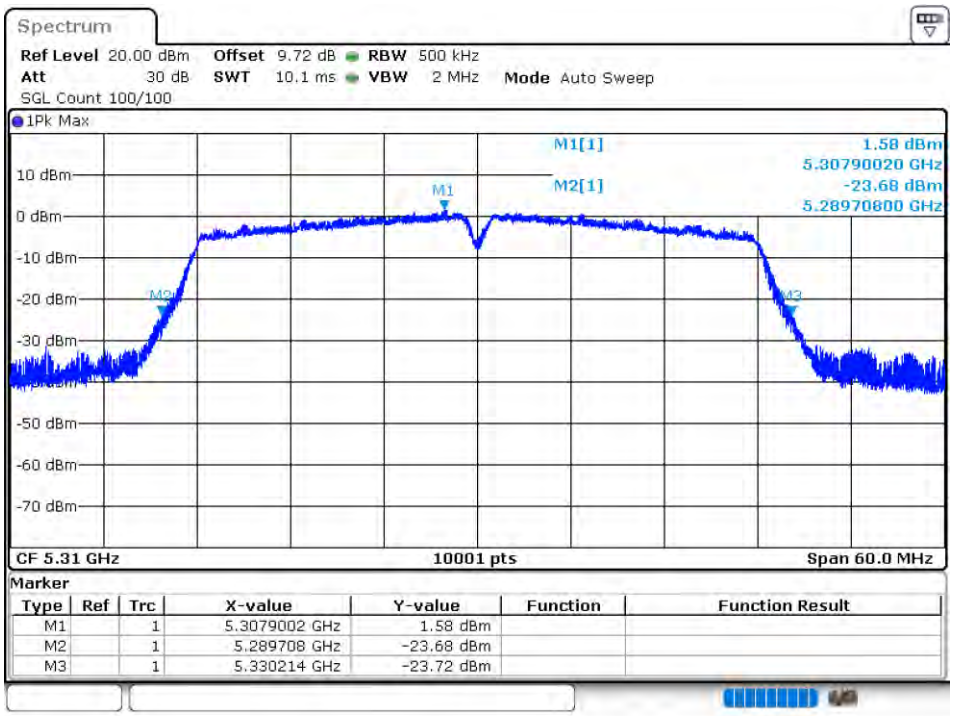
-26dB Bandwidth NVNT n20 5320MHz Ant1



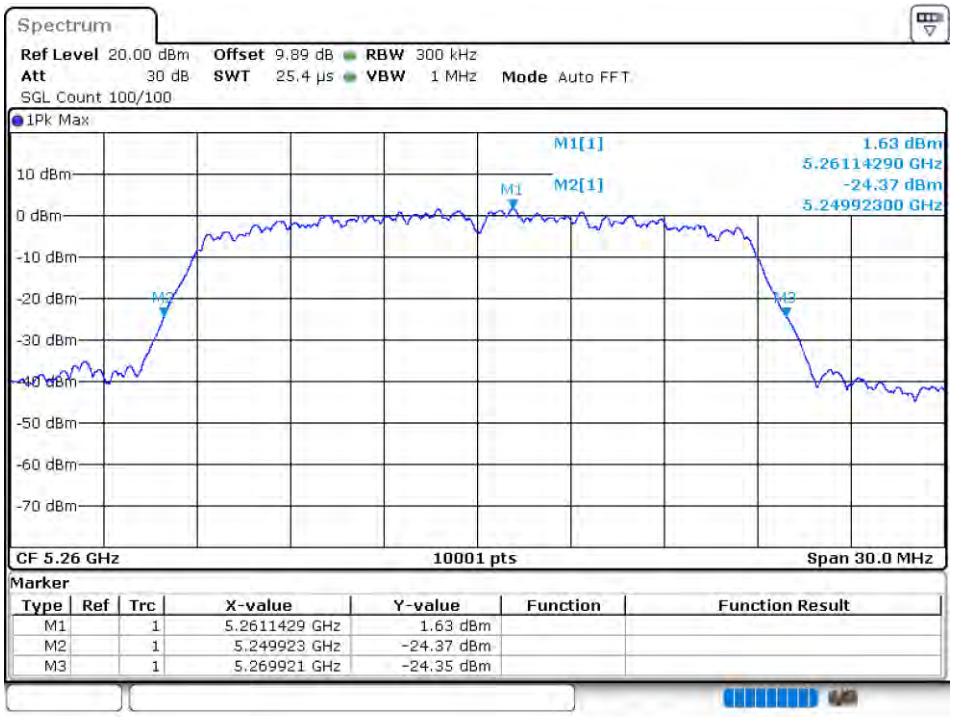
-26dB Bandwidth NVNT n40 5270MHz Ant1



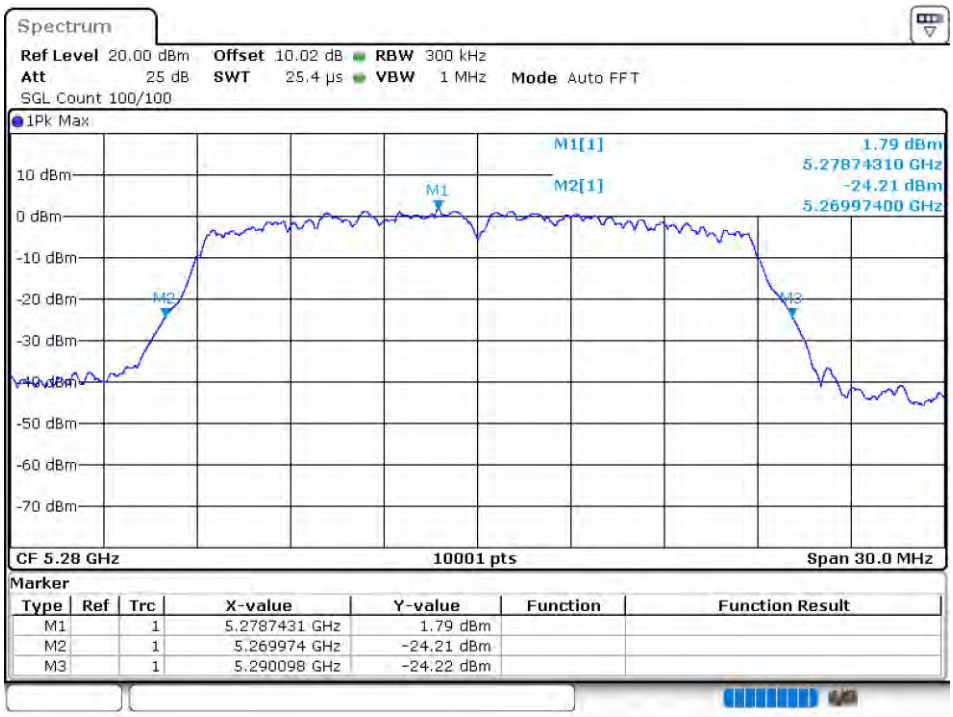
-26dB Bandwidth NVNT n40 5310MHz Ant1



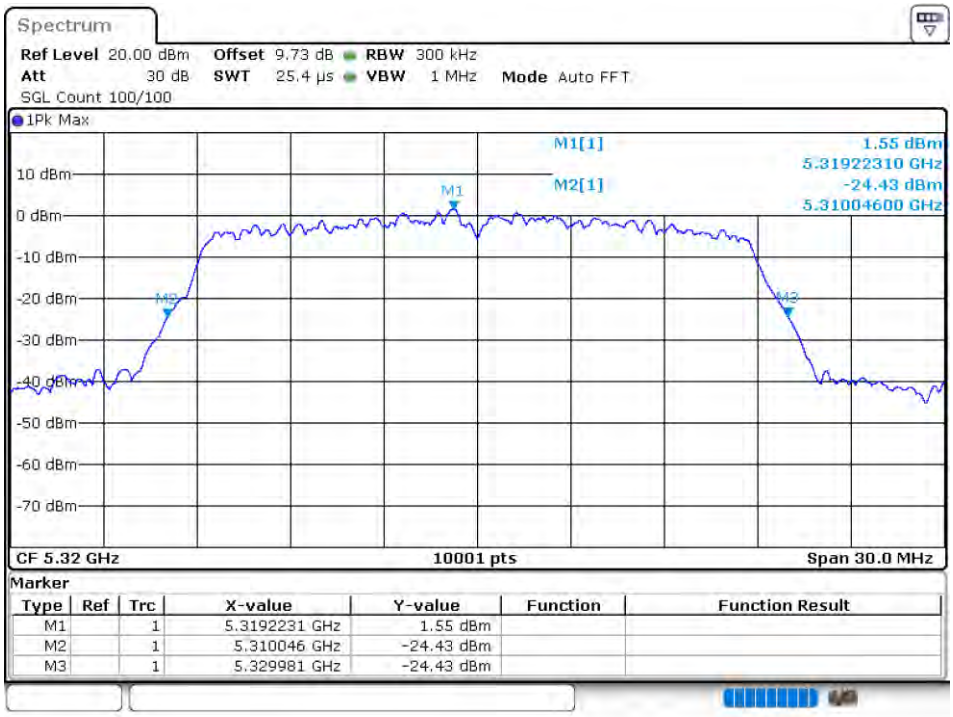
-26dB Bandwidth NVNT ac20 5260MHz Ant1



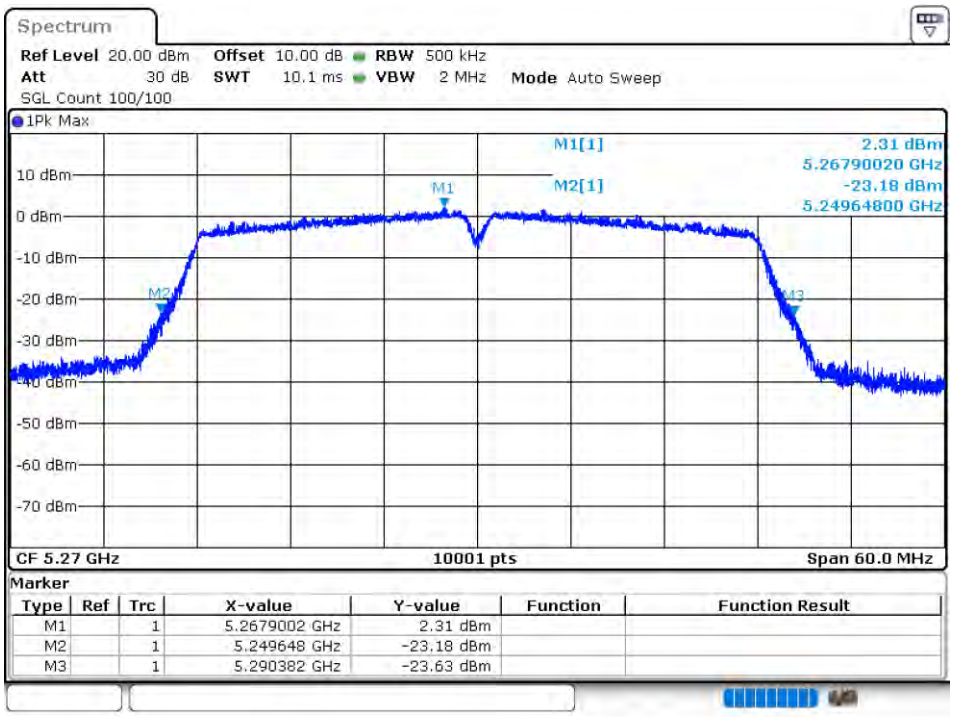
-26dB Bandwidth NVNT ac20 5280MHz Ant1



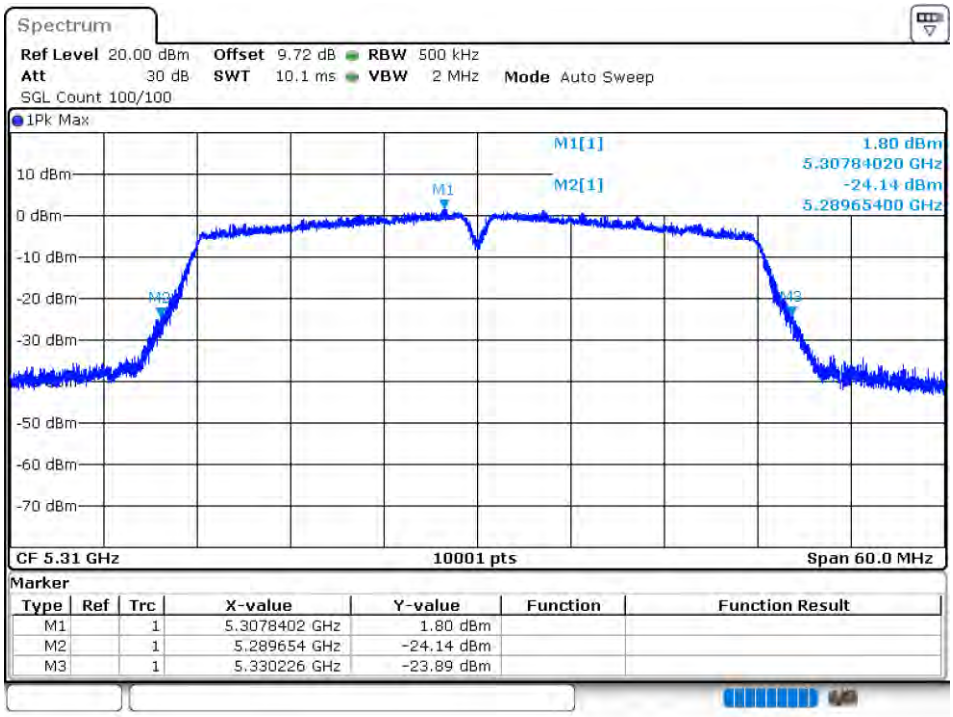
-26dB Bandwidth NVNT ac20 5320MHz Ant1



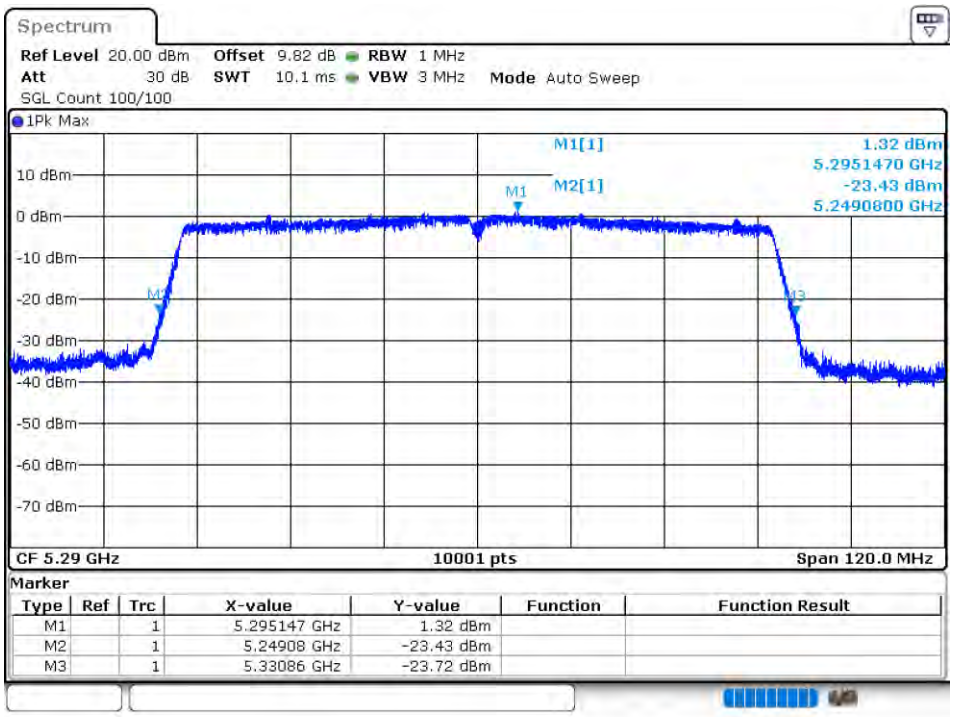
-26dB Bandwidth NVNT ac40 5270MHz Ant1



-26dB Bandwidth NVNT ac40 5310MHz Ant1



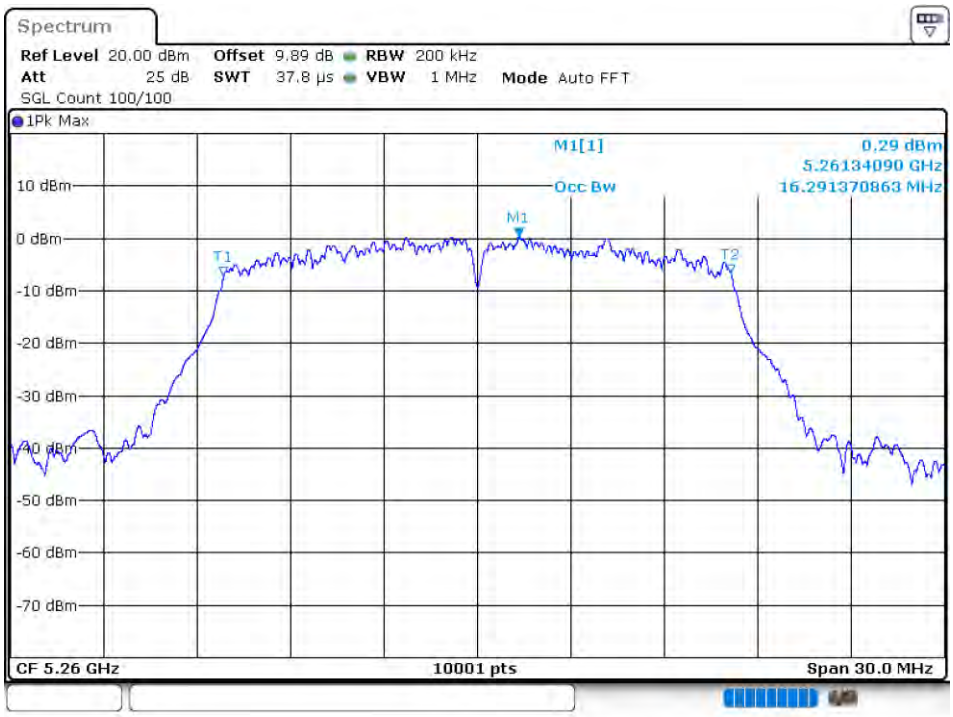
-26dB Bandwidth NVNT ac80 5290MHz Ant1



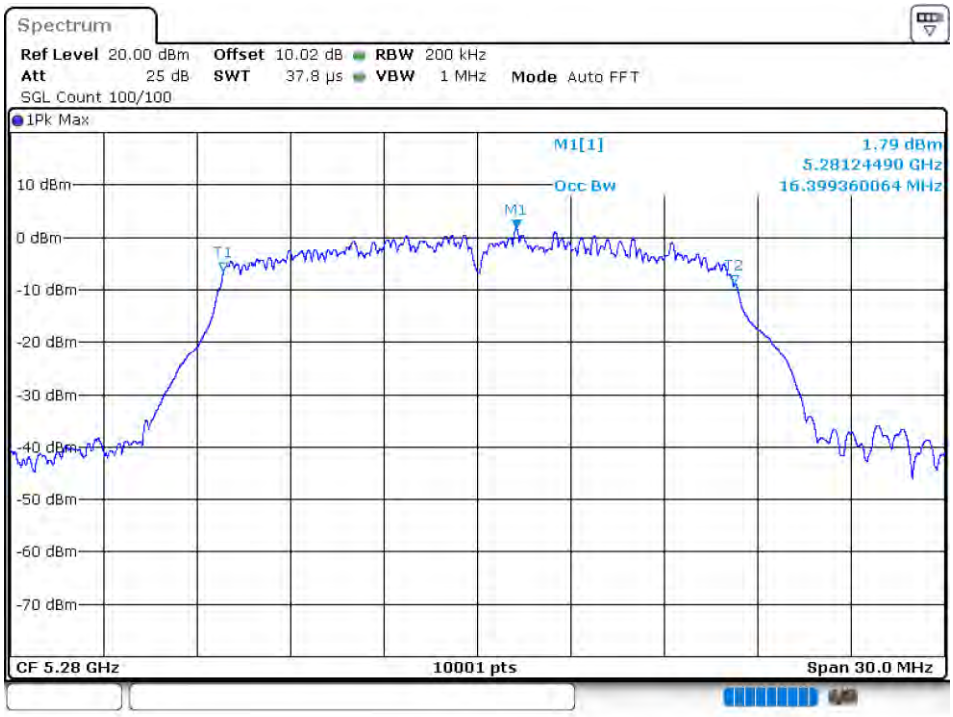
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.291
NVNT	a	5280	Ant1	16.399
NVNT	a	5320	Ant1	16.408
NVNT	n20	5260	Ant1	17.473
NVNT	n20	5280	Ant1	17.512
NVNT	n20	5320	Ant1	17.53
NVNT	n40	5270	Ant1	35.948
NVNT	n40	5310	Ant1	35.906
NVNT	ac20	5260	Ant1	17.524
NVNT	ac20	5280	Ant1	17.518
NVNT	ac20	5320	Ant1	17.467
NVNT	ac40	5270	Ant1	35.942
NVNT	ac40	5310	Ant1	35.87
NVNT	ac80	5290	Ant1	75.616

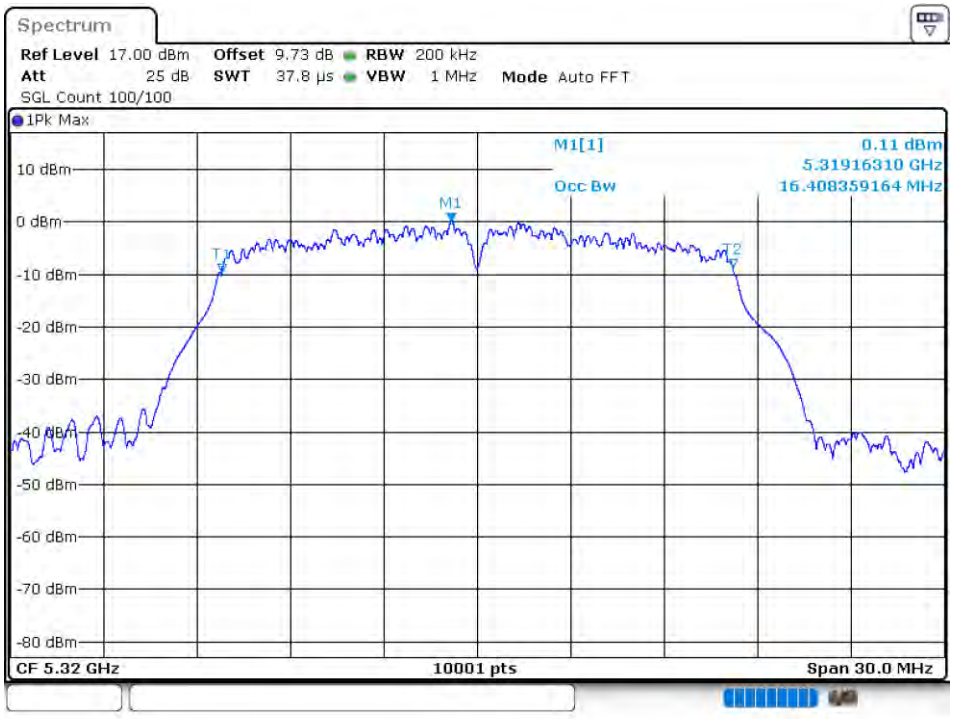
Test Graphs
OBW NVNT a 5260MHz Ant1



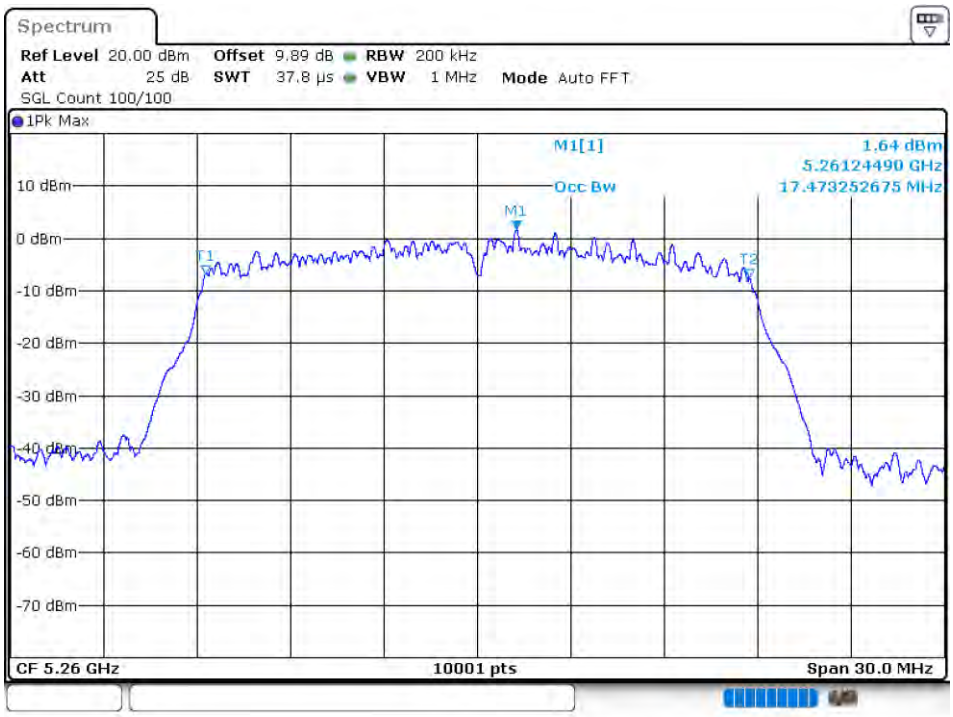
OBW NVNT a 5280MHz Ant1



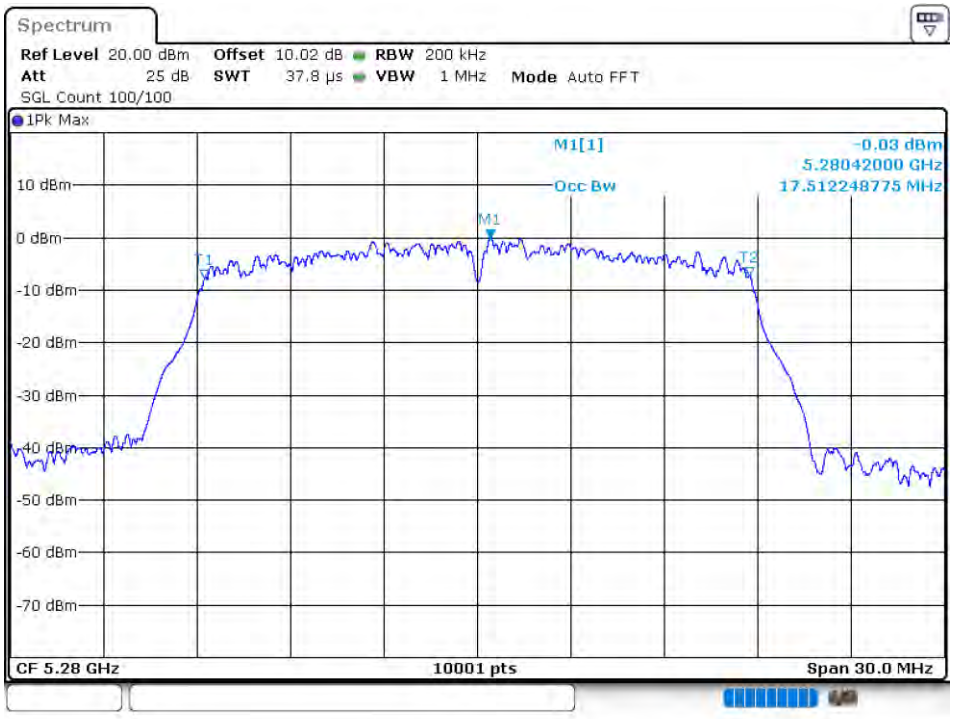
OBW NVNT a 5320MHz Ant1



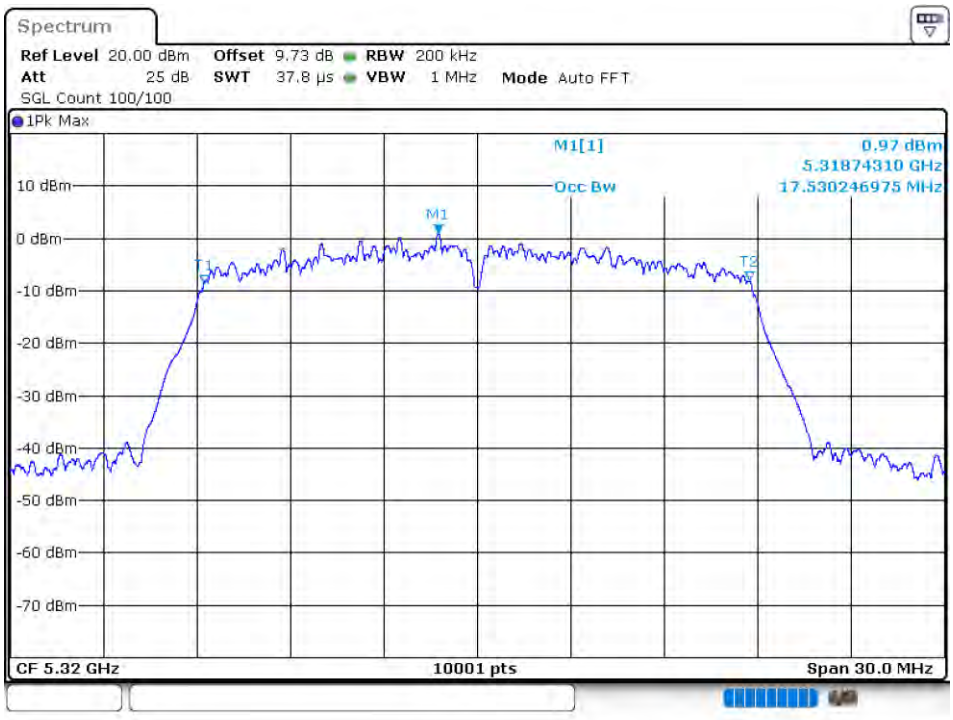
OBW NVNT n20 5260MHz Ant1



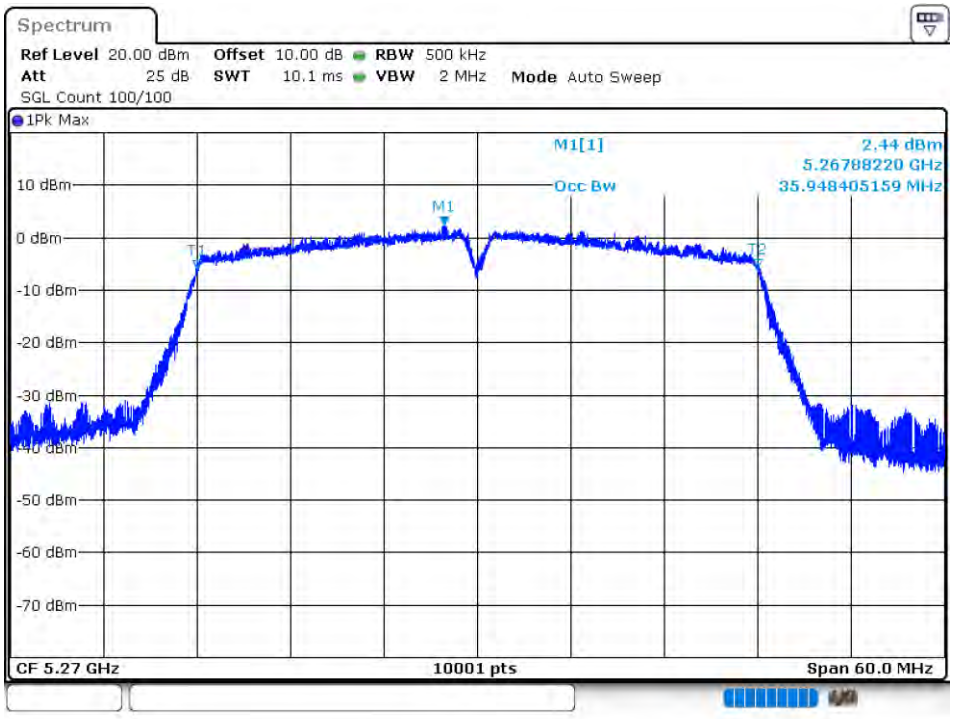
OBW NVNT n20 5280MHz Ant1



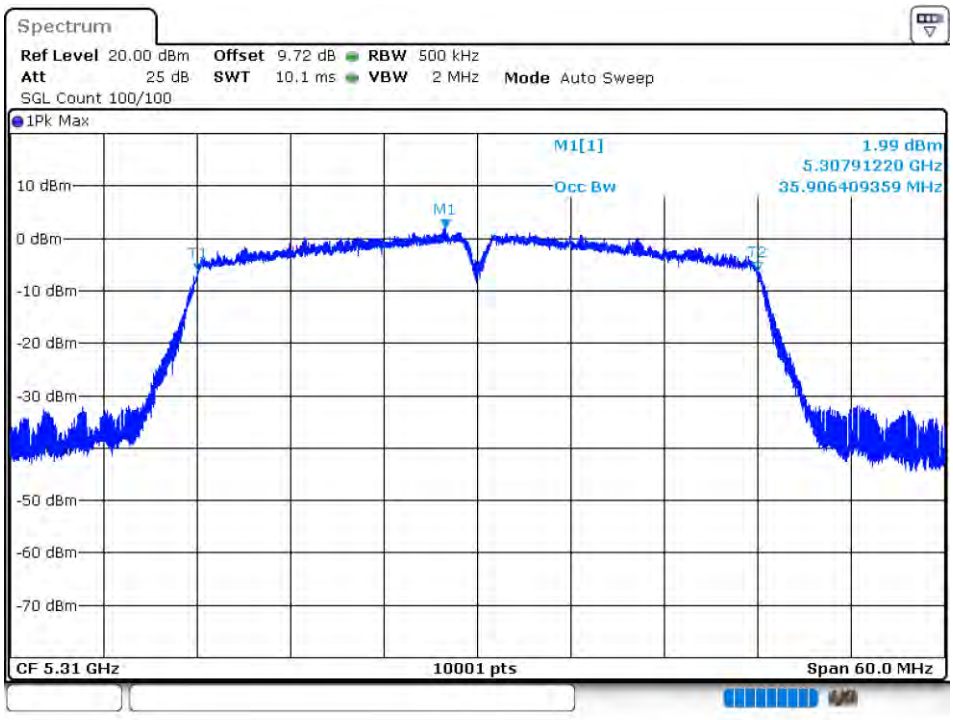
OBW NVNT n20 5320MHz Ant1



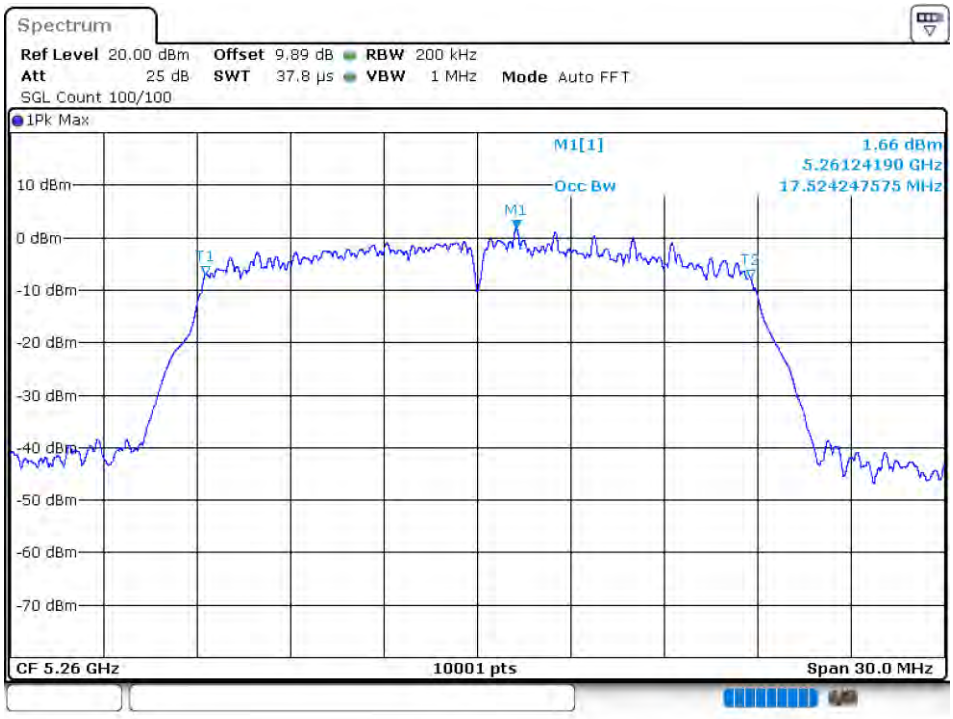
OBW NVNT n40 5270MHz Ant1



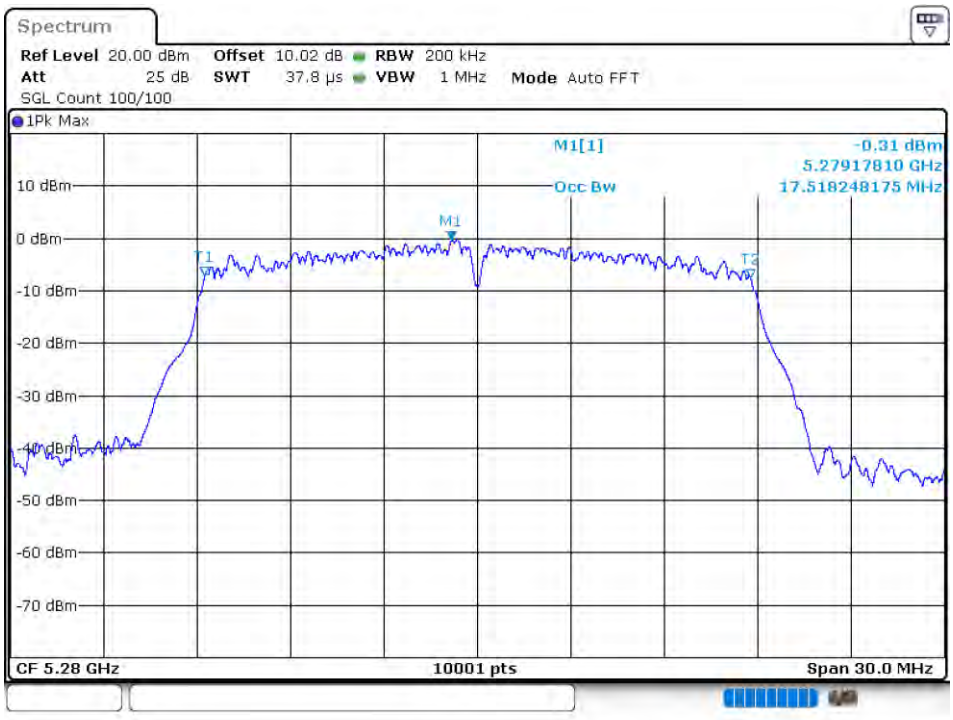
OBW NVNT n40 5310MHz Ant1



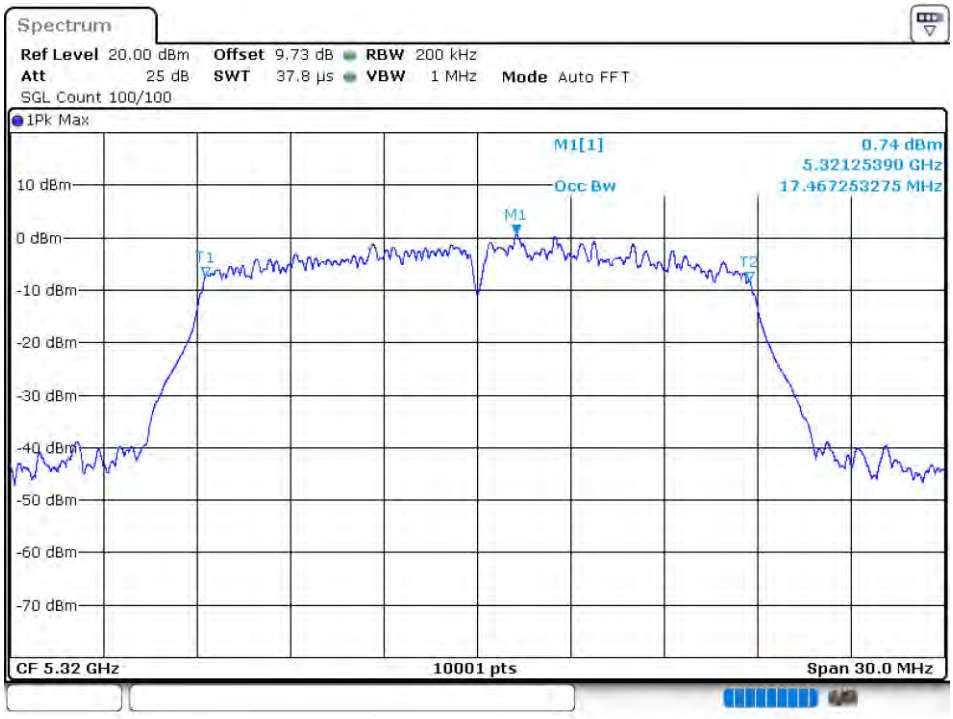
OBW NVNT ac20 5260MHz Ant1



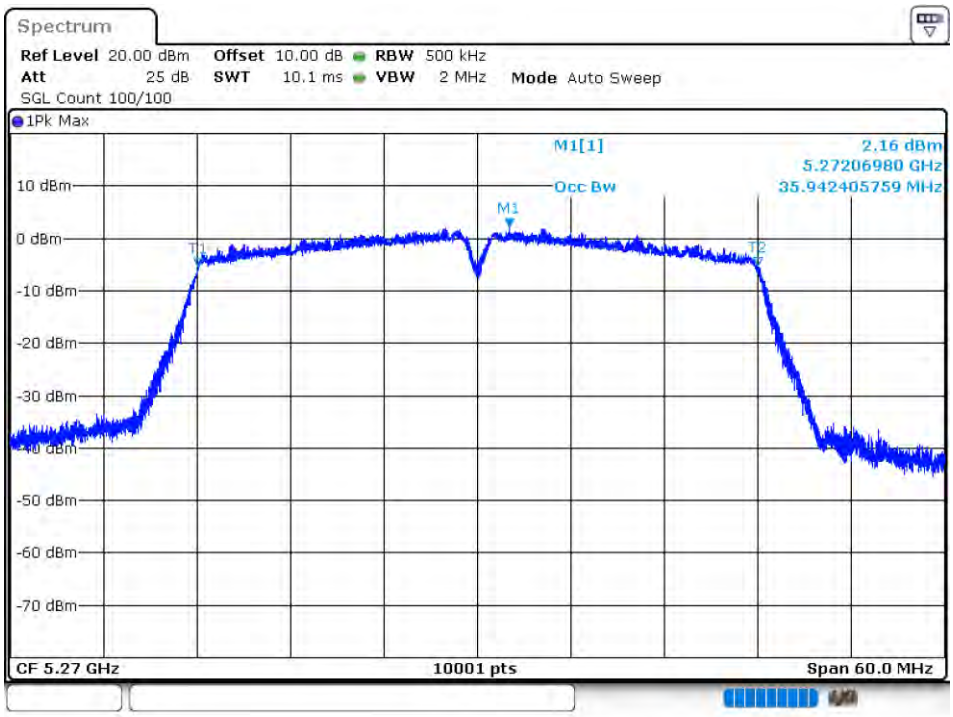
OBW NVNT ac20 5280MHz Ant1



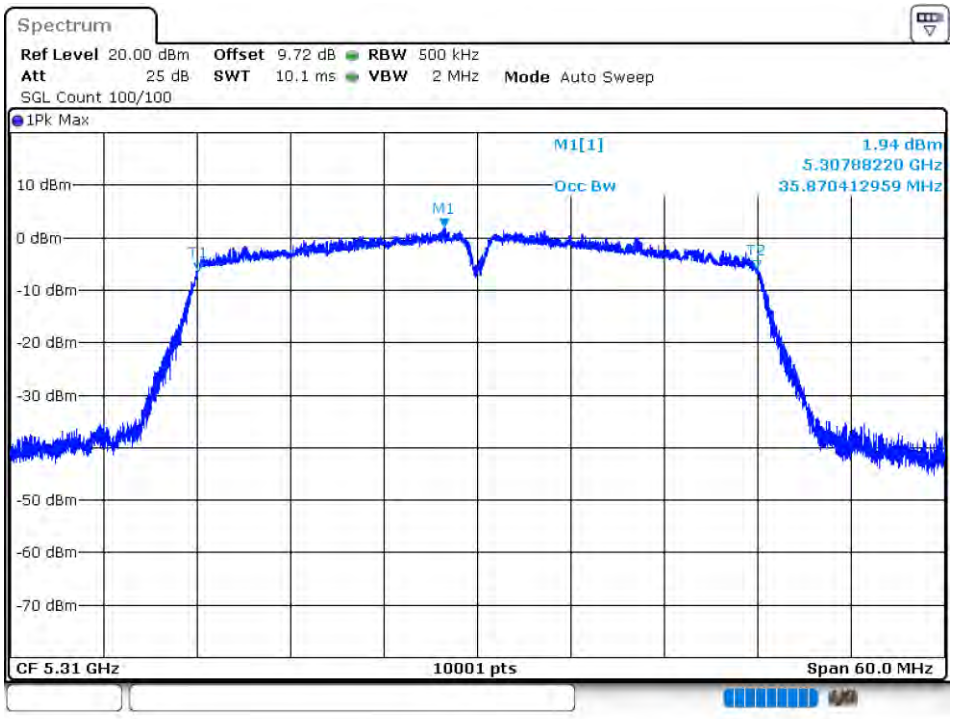
OBW NVNT ac20 5320MHz Ant1



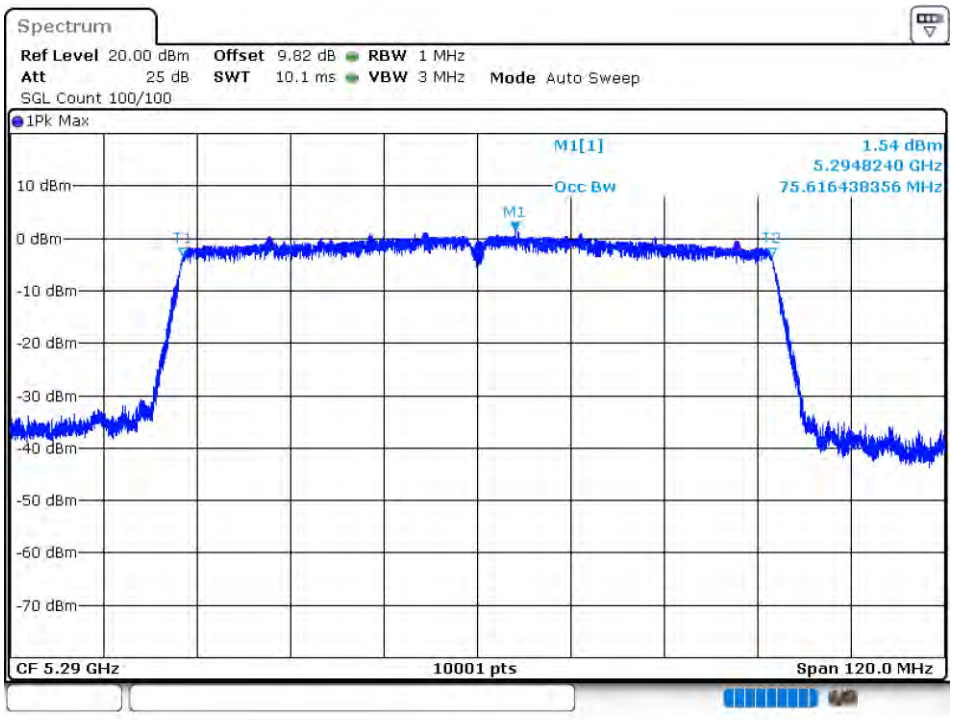
OBW NVNT ac40 5270MHz Ant1



OBW NVNT ac40 5310MHz Ant1



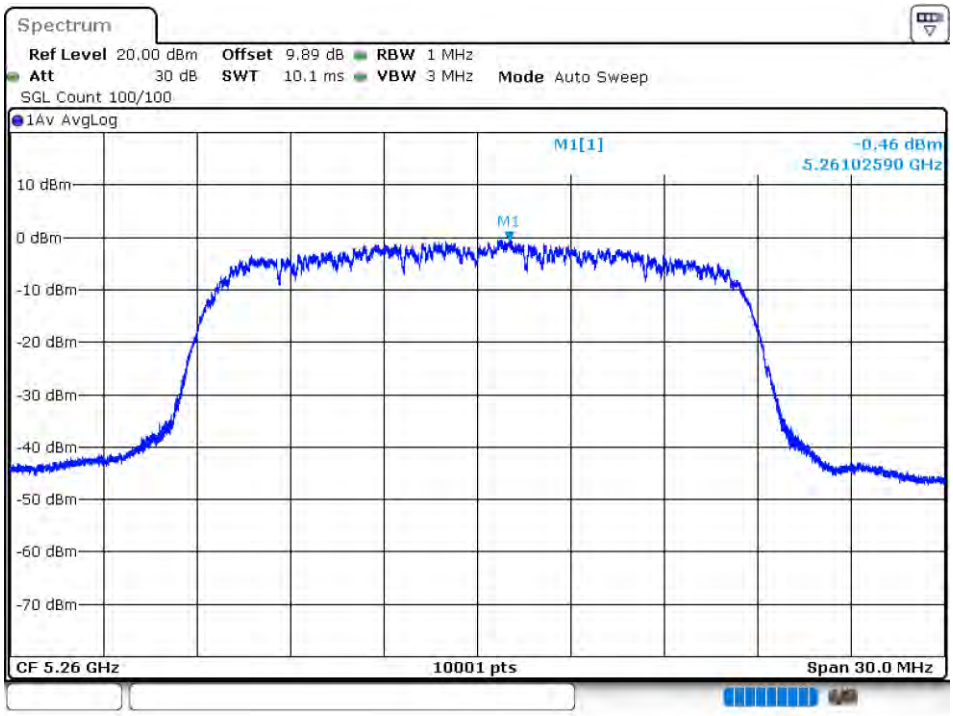
OBW NVNT ac80 5290MHz Ant1



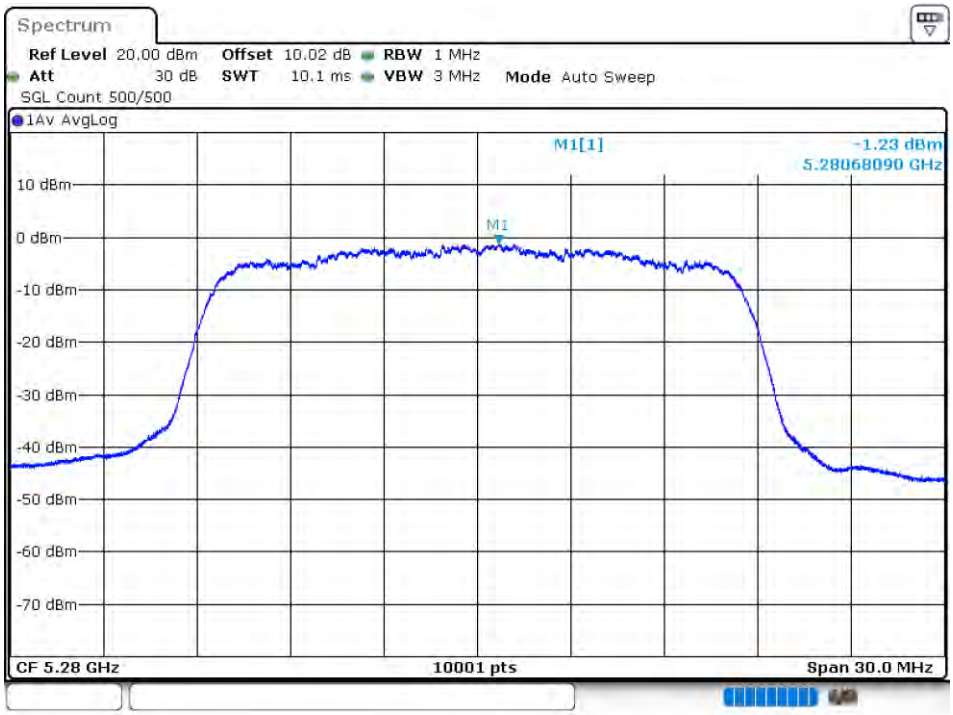
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-0.46	0.08	-0.38	11	Pass
NVNT	a	5280	Ant1	-1.23	0.08	-1.15	11	Pass
NVNT	a	5320	Ant1	-2.36	0.08	-2.28	11	Pass
NVNT	n20	5260	Ant1	-2.01	0.09	-1.92	11	Pass
NVNT	n20	5280	Ant1	-1.97	0.09	-1.88	11	Pass
NVNT	n20	5320	Ant1	-2.79	0.09	-2.7	11	Pass
NVNT	n40	5270	Ant1	-5.89	0.17	-5.72	11	Pass
NVNT	n40	5310	Ant1	-6.09	0.17	-5.92	11	Pass
NVNT	ac20	5260	Ant1	-1.97	0.09	-1.88	11	Pass
NVNT	ac20	5280	Ant1	-2.43	0.09	-2.34	11	Pass
NVNT	ac20	5320	Ant1	-2.91	0.09	-2.82	11	Pass
NVNT	ac40	5270	Ant1	-5.28	0.17	-5.11	11	Pass
NVNT	ac40	5310	Ant1	-5.89	0.17	-5.72	11	Pass
NVNT	ac80	5290	Ant1	-10.53	0.33	-10.2	11	Pass

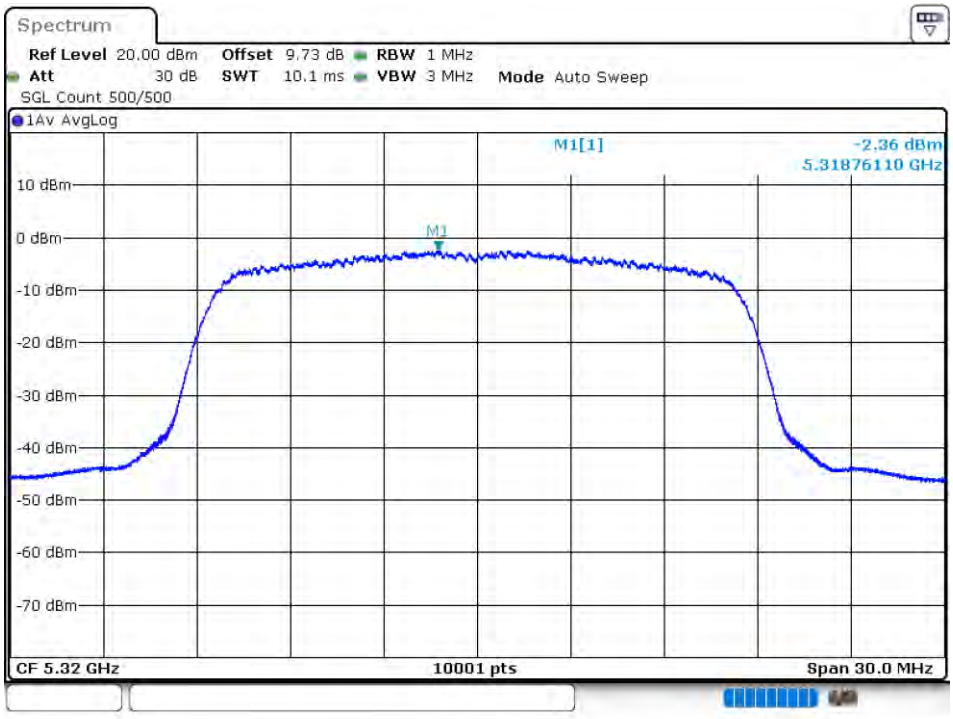
Test Graphs
PSD NVNT a 5260MHz Ant1



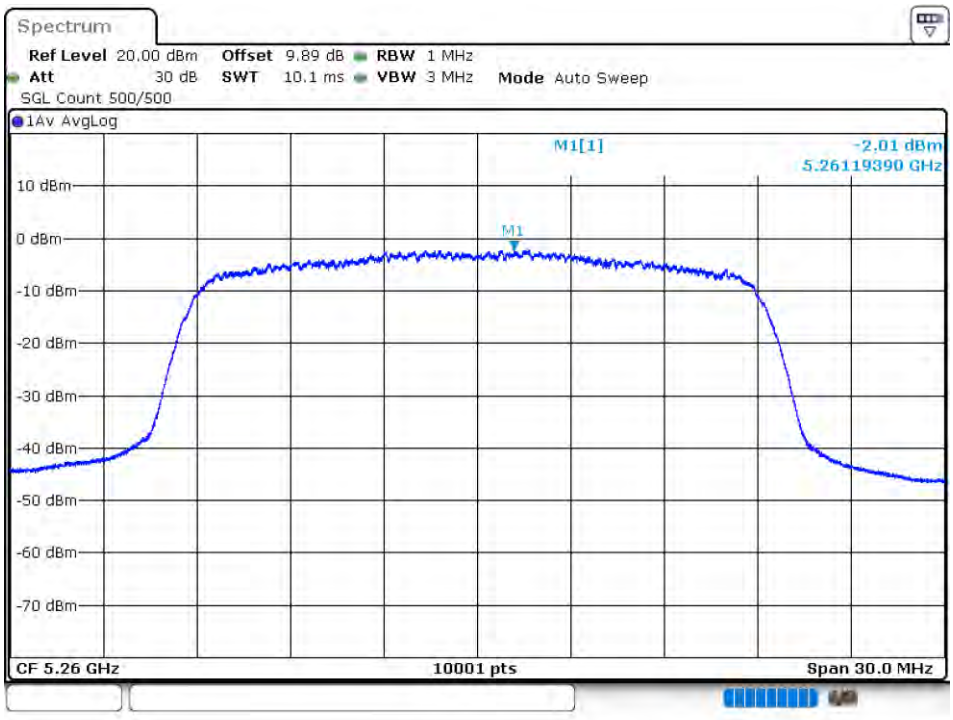
PSD NVNT a 5280MHz Ant1



PSD NVNT a 5320MHz Ant1



PSD NVNT n20 5260MHz Ant1



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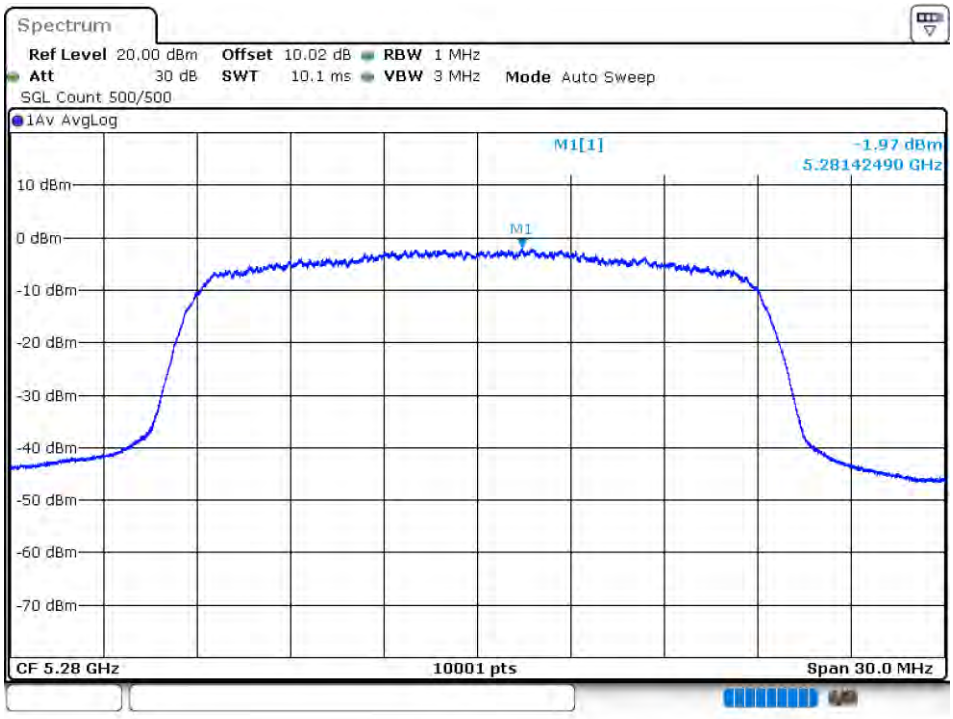

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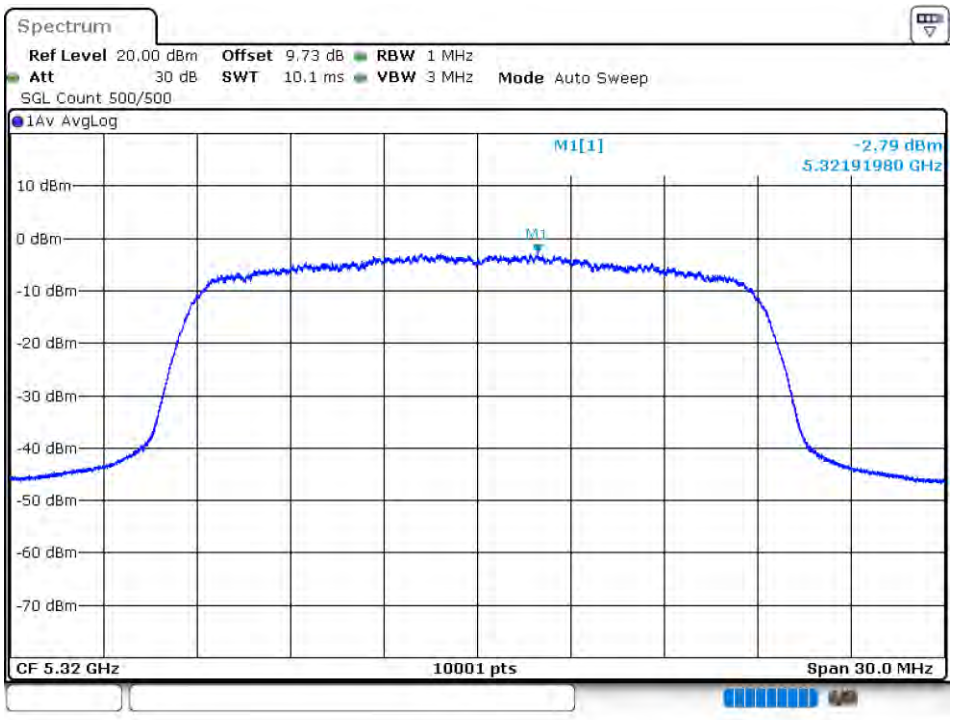

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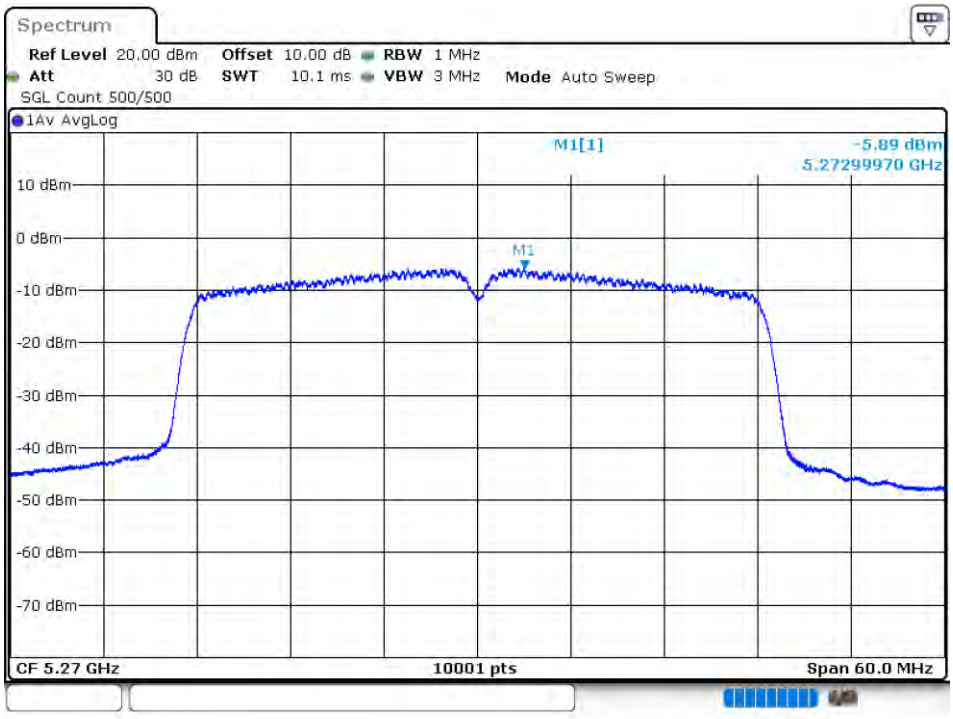

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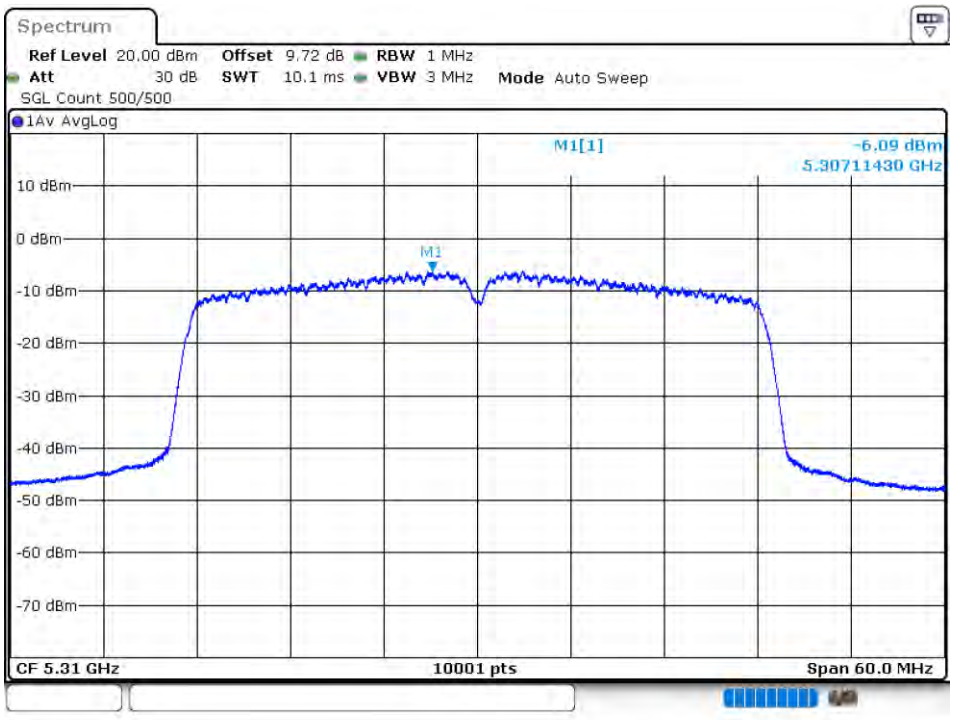
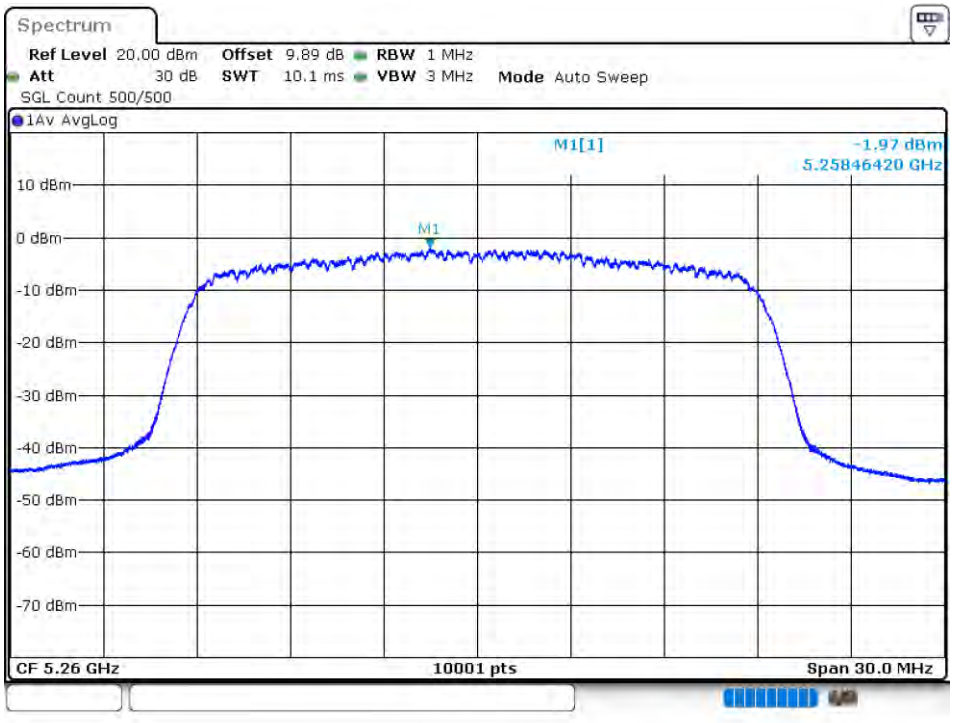


PSD NVNT ac20 5260MHz Ant1



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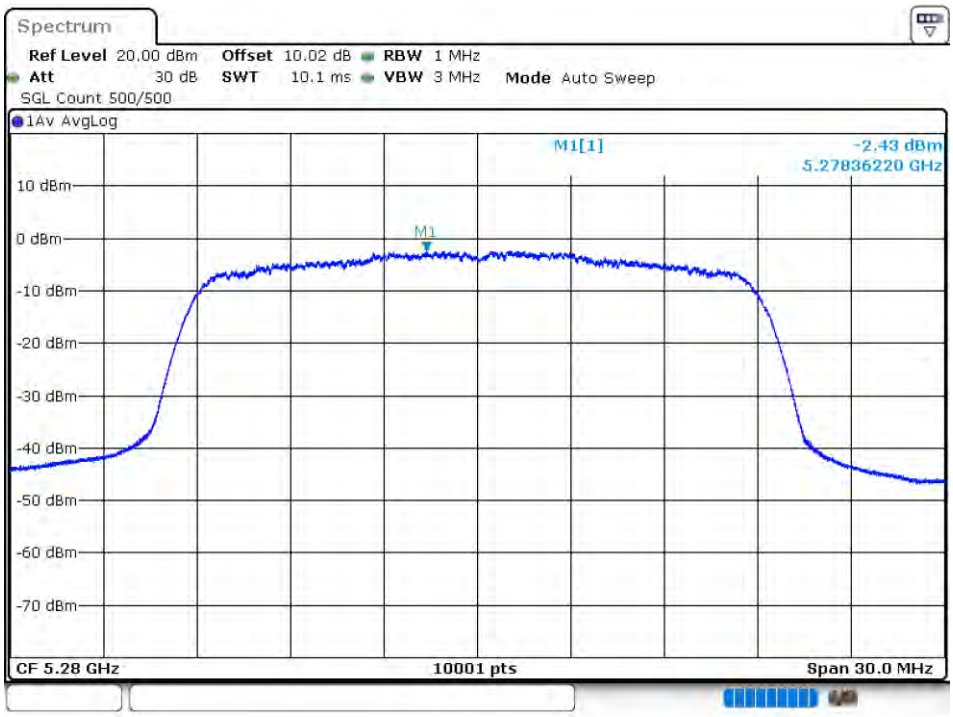

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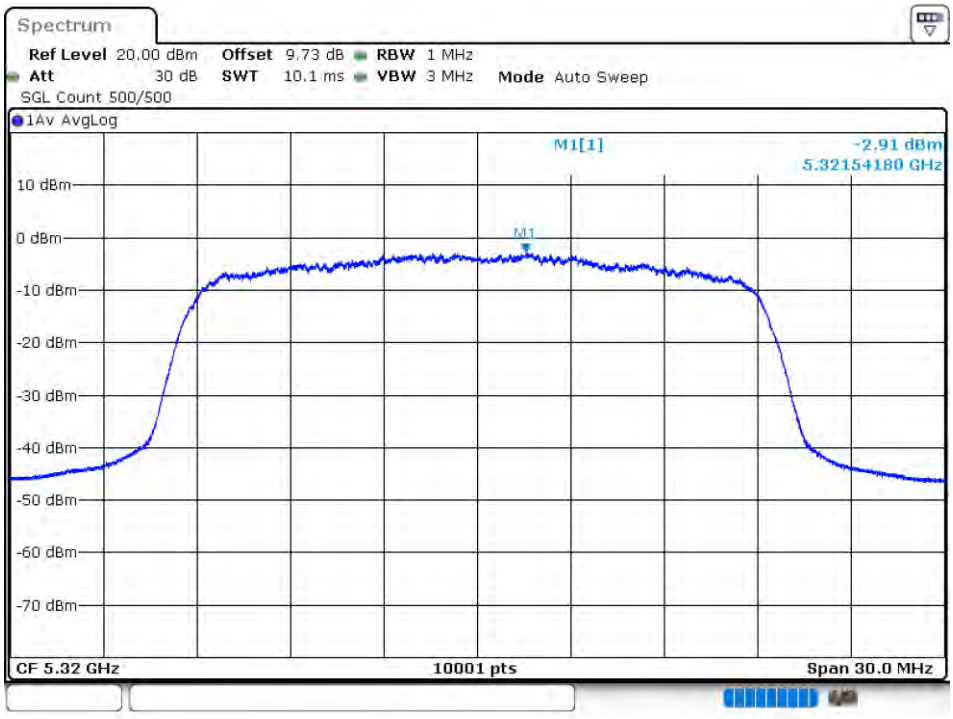

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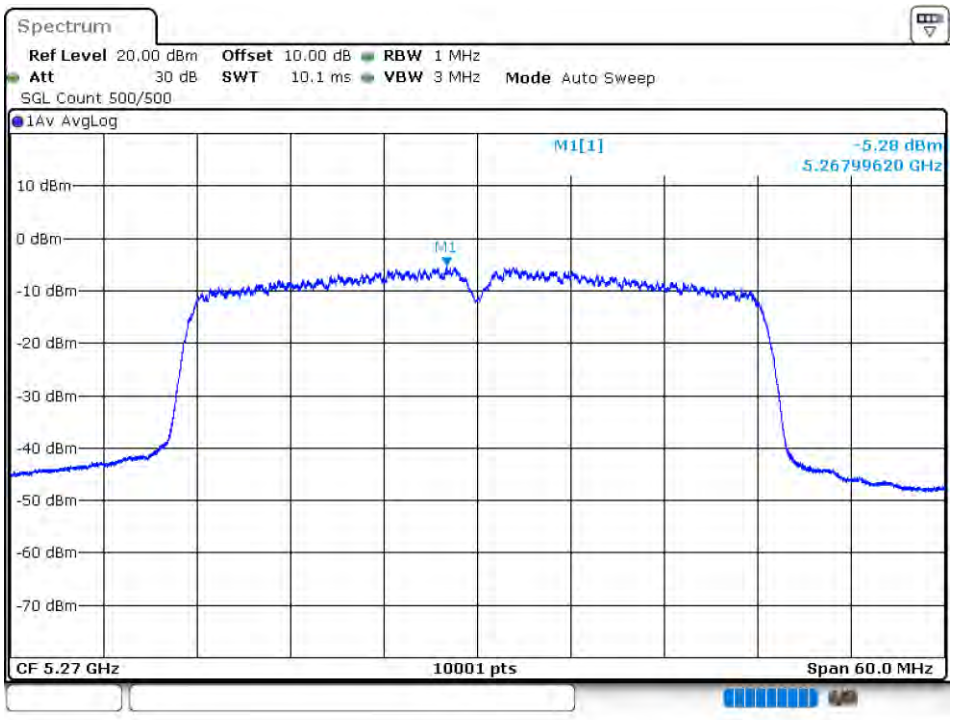
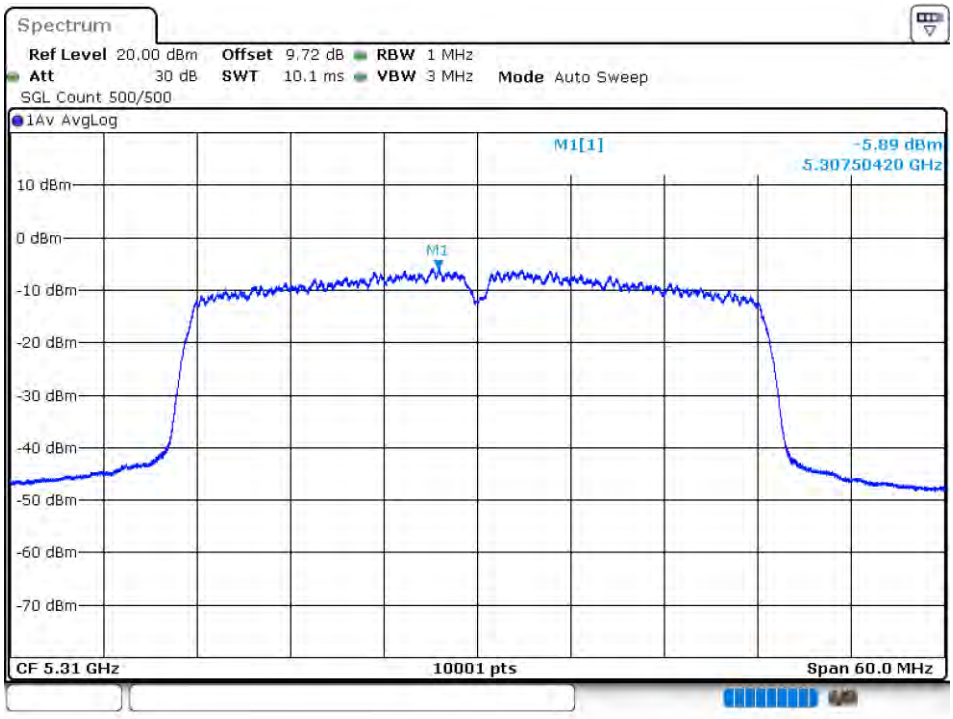


PSD NVNT ac40 5310MHz Ant1



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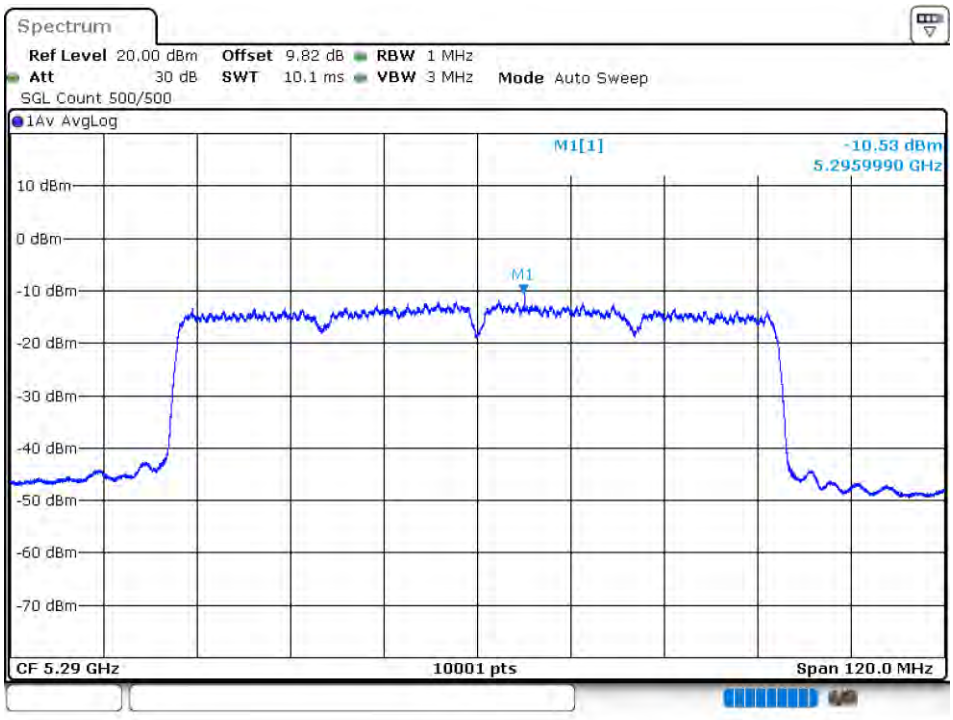

Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5260	Ant1	-43.54	-27	Pass
NVNT	a	5320	Ant1	-41.89	-27	Pass
NVNT	n20	5260	Ant1	-44.08	-27	Pass
NVNT	n20	5320	Ant1	-43.09	-27	Pass
NVNT	n40	5270	Ant1	-43.6	-27	Pass
NVNT	n40	5310	Ant1	-39.67	-27	Pass
NVNT	ac20	5260	Ant1	-43.69	-27	Pass
NVNT	ac20	5320	Ant1	-43.43	-27	Pass
NVNT	ac40	5270	Ant1	-44.25	-27	Pass
NVNT	ac40	5310	Ant1	-40.61	-27	Pass
NVNT	ac80	5290	Ant1	-44.94	-27	Pass