

5.2G WIFI

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	89.83	0.47	0.74
NVNT	a	5200	Ant1	90.75	0.42	0.74
NVNT	a	5240	Ant1	90.8	0.42	0.74
NVNT	n20	5180	Ant1	88.88	0.51	0.87
NVNT	n20	5200	Ant1	89.48	0.48	0.87
NVNT	n20	5240	Ant1	89.35	0.49	0.87
NVNT	n40	5190	Ant1	81.11	0.91	1.72
NVNT	n40	5230	Ant1	81.23	0.9	1.75
NVNT	ac20	5180	Ant1	88.96	0.51	0.86
NVNT	ac20	5200	Ant1	89.5	0.48	0.86
NVNT	ac20	5240	Ant1	88.96	0.51	0.87
NVNT	ac40	5190	Ant1	80.12	0.96	1.72
NVNT	ac40	5230	Ant1	81.13	0.91	1.72
NVNT	ac80	5210	Ant1	67.71	1.69	3.45

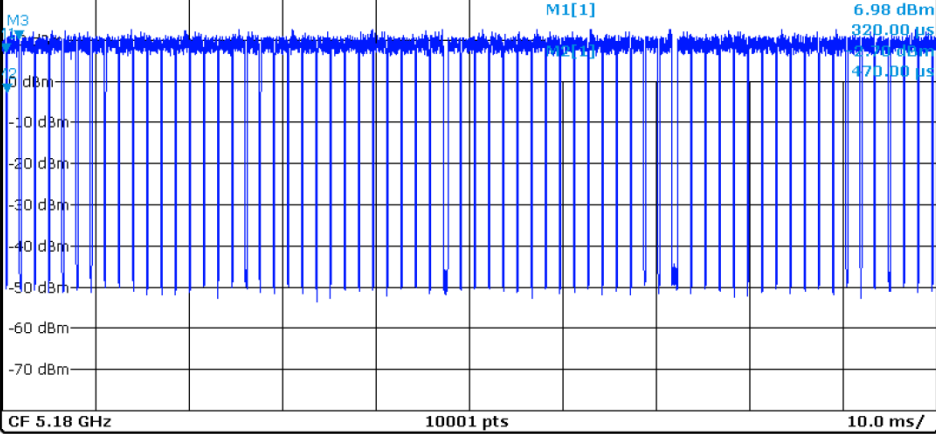
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 3.96 dB RBW 1 MHz
 Att 30 dB SWT 100 ms VBW 3 MHz
 SGL

1Pk Clrw



Marker

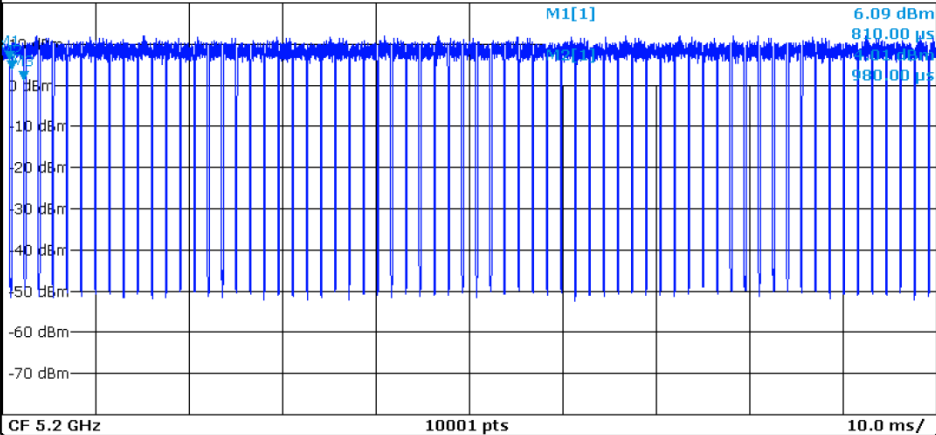
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		320.0 μ s	6.98 dBm		
M2	1		470.0 μ s	-2.70 dBm		
M3	1		1.83 ms	10.15 dBm		

Duty Cycle NVNT a 5200MHz Ant1

Spectrum

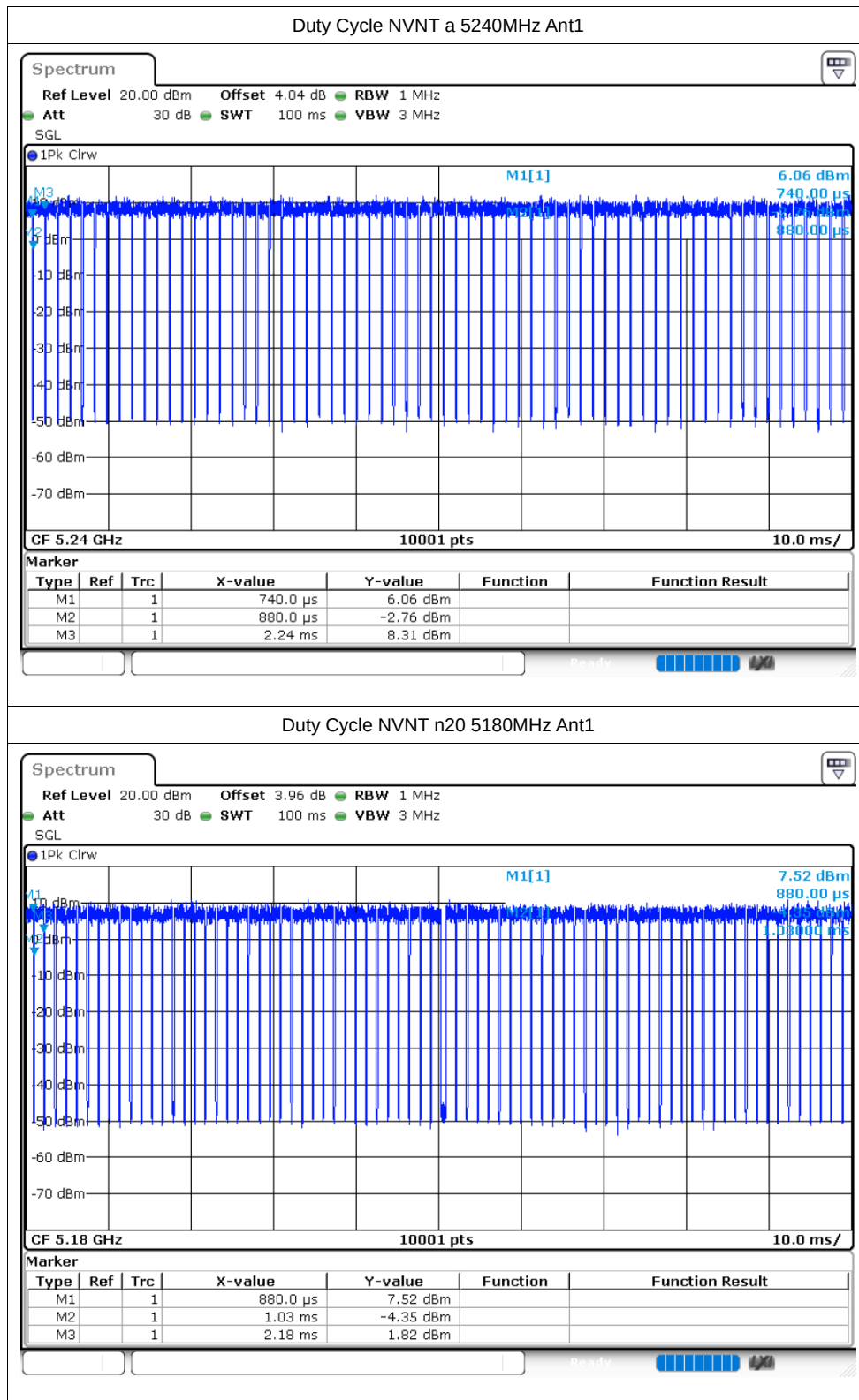
Ref Level 20.00 dBm Offset 4.02 dB RBW 1 MHz
 Att 30 dB SWT 100 ms VBW 3 MHz
 SGL

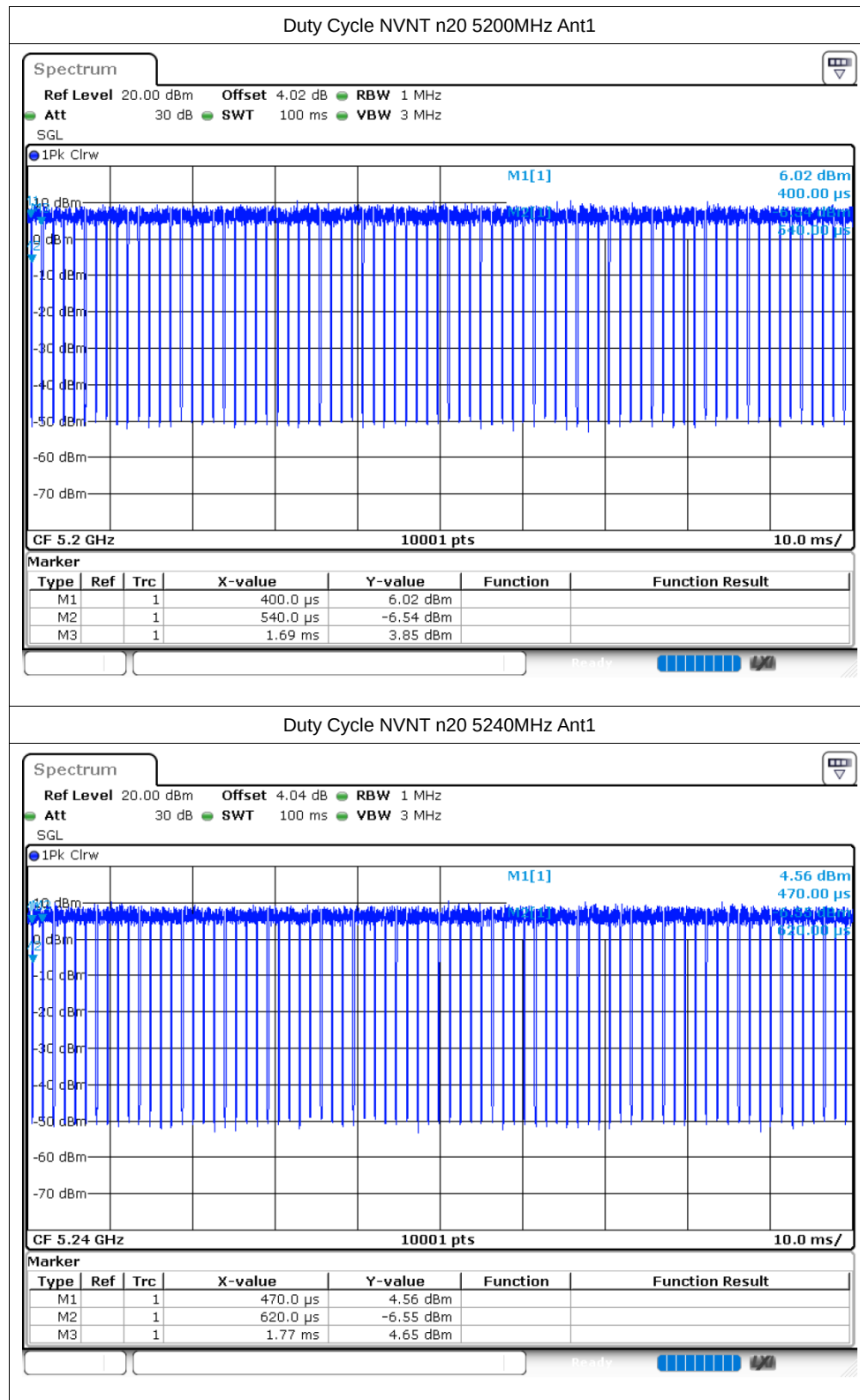
1Pk Clrw

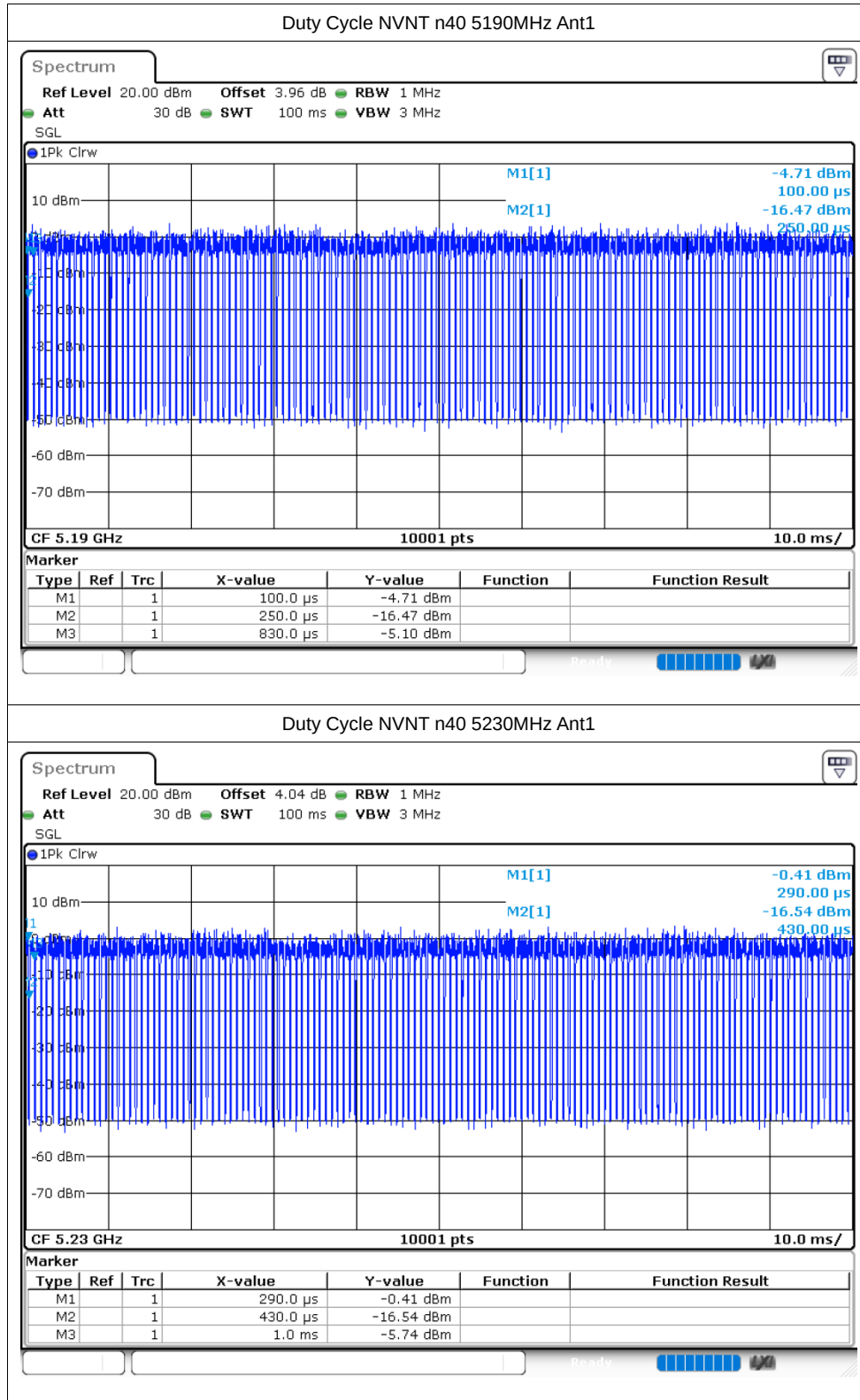


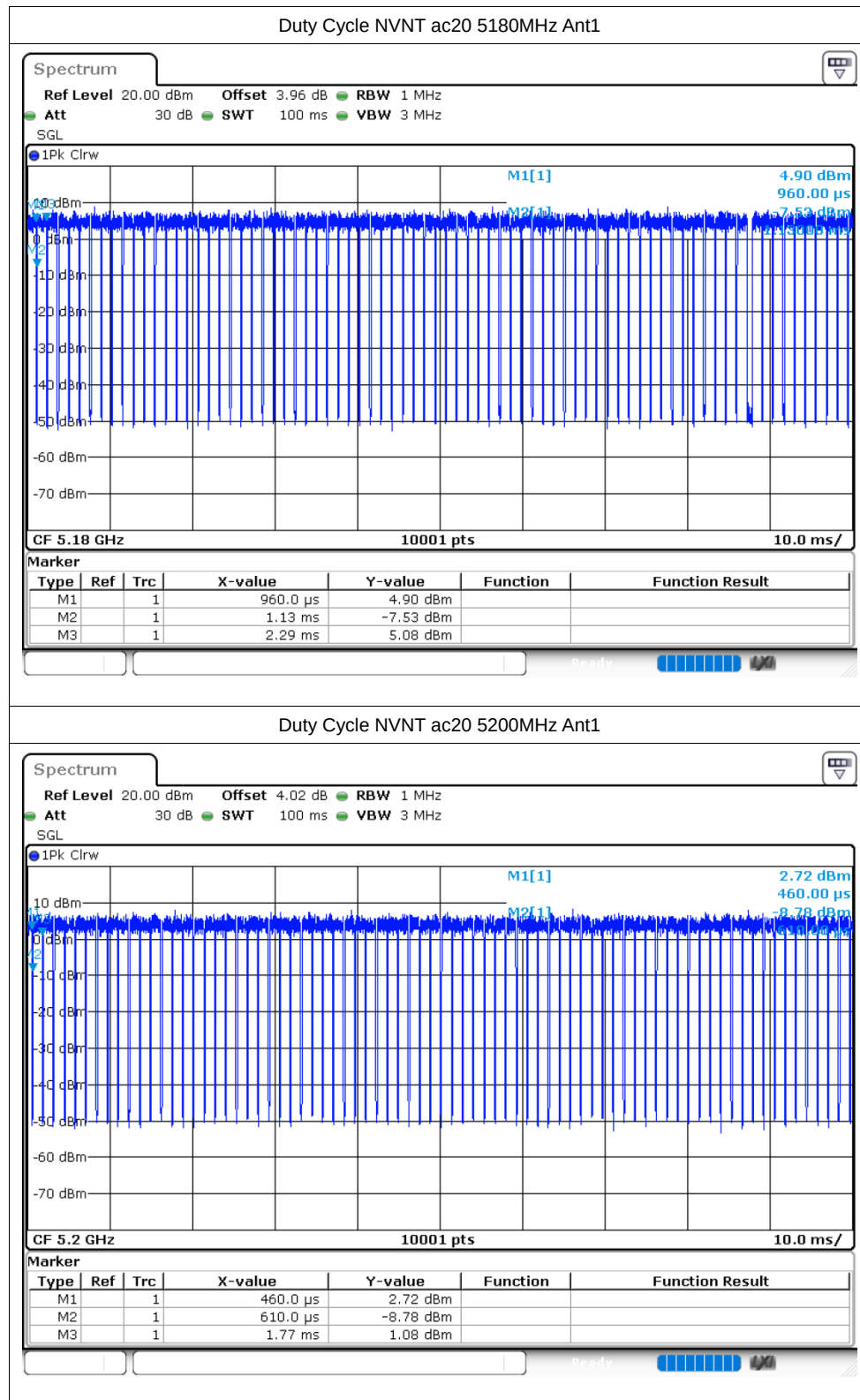
Marker

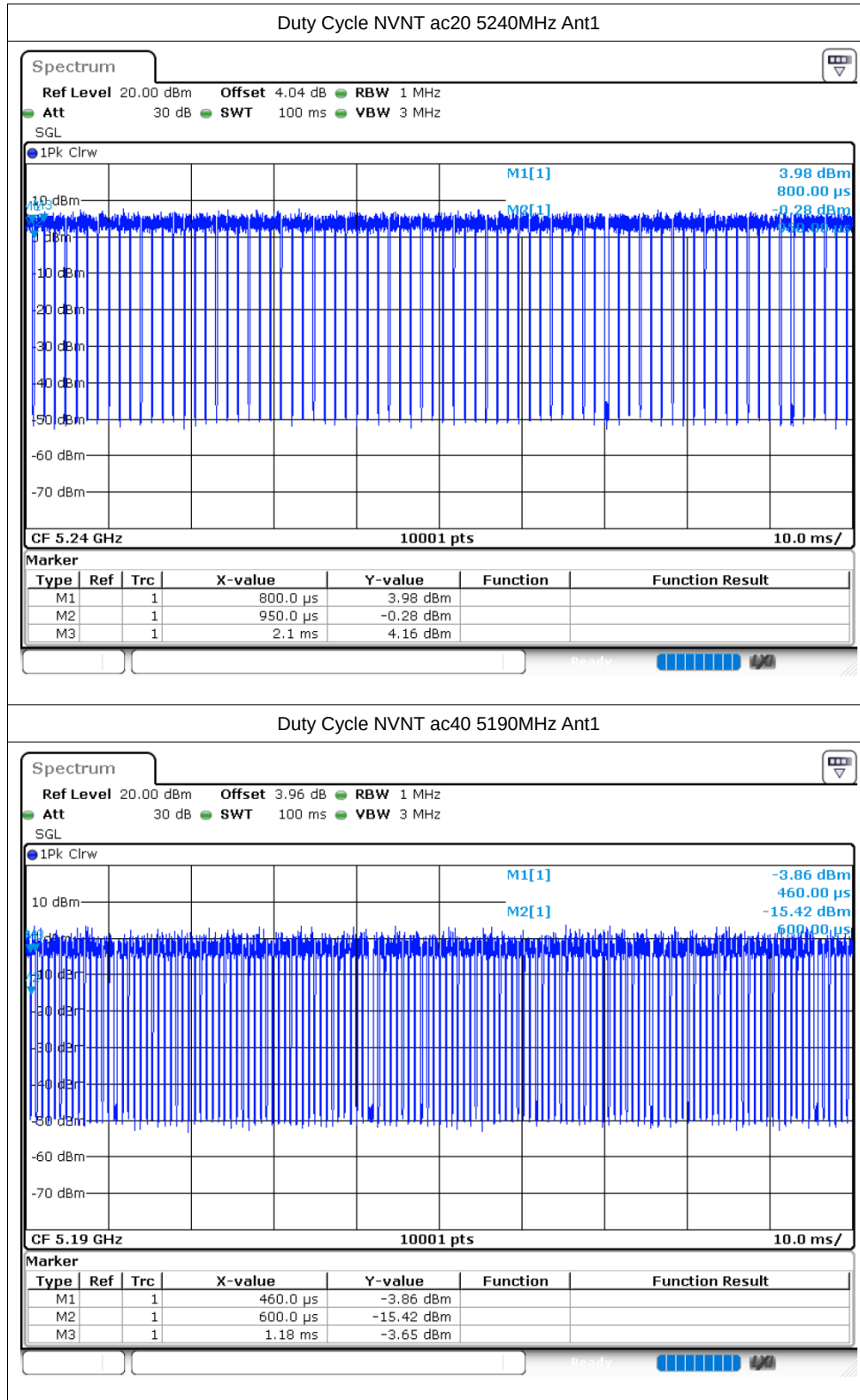
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		810.0 μ s	6.09 dBm		
M2	1		980.0 μ s	4.01 dBm		
M3	1		2.34 ms	1.37 dBm		

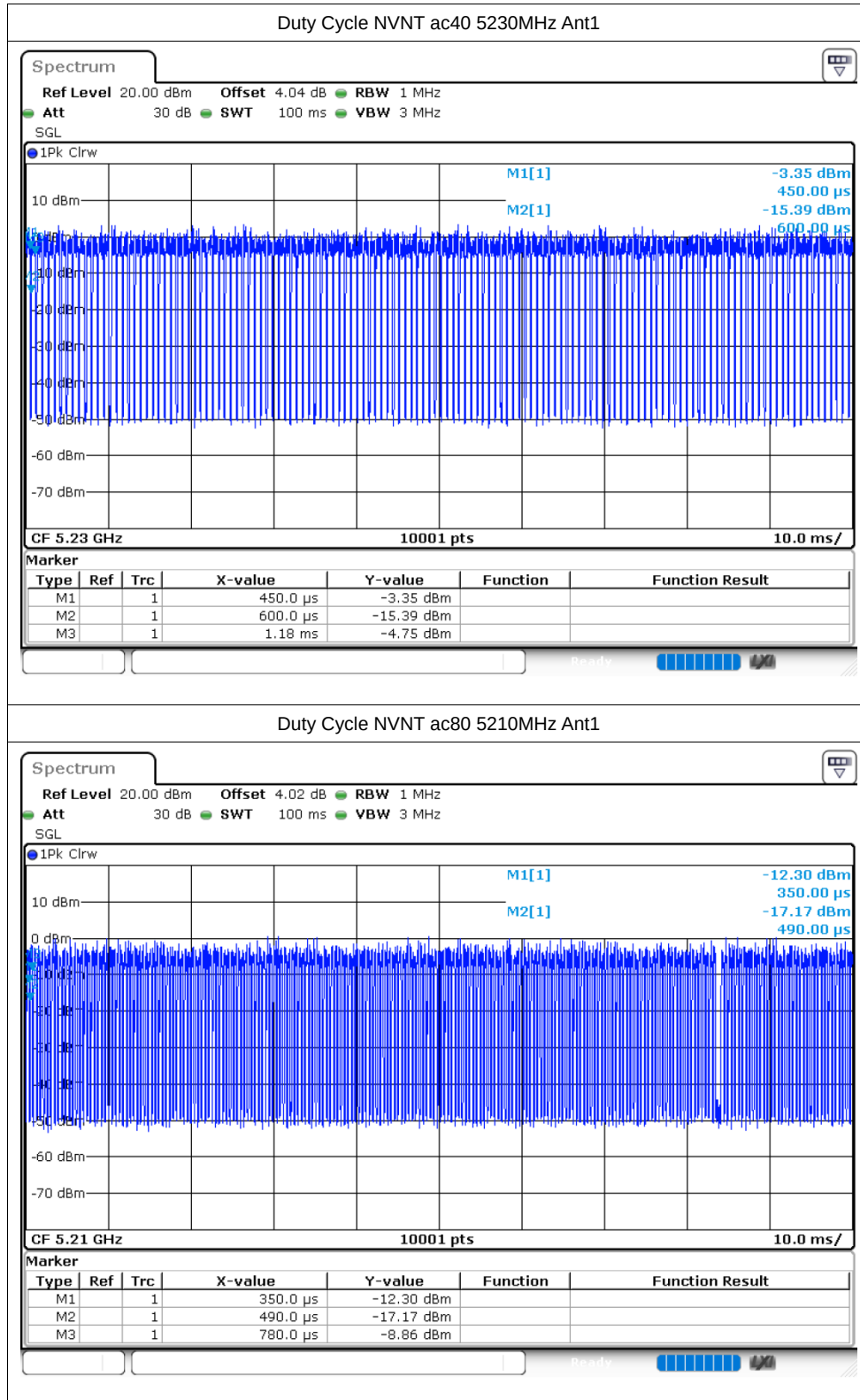












Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	17.57	24	Pass
NVNT	a	5200	Ant1	17.31	24	Pass
NVNT	a	5240	Ant1	16.84	24	Pass
NVNT	n20	5180	Ant1	15.53	24	Pass
NVNT	n20	5200	Ant1	15.52	24	Pass
NVNT	n20	5240	Ant1	15.15	24	Pass
NVNT	n40	5190	Ant1	13.83	24	Pass
NVNT	n40	5230	Ant1	13.26	24	Pass
NVNT	ac20	5180	Ant1	13.15	24	Pass
NVNT	ac20	5200	Ant1	13.18	24	Pass
NVNT	ac20	5240	Ant1	12.72	24	Pass
NVNT	ac40	5190	Ant1	13.8	24	Pass
NVNT	ac40	5230	Ant1	13.44	24	Pass
NVNT	ac80	5210	Ant1	13.26	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	29.2	Pass
NVNT	a	5200	Ant1	31.792	Pass
NVNT	a	5240	Ant1	26.232	Pass
NVNT	n20	5180	Ant1	20.34	Pass
NVNT	n20	5200	Ant1	19.881	Pass
NVNT	n20	5240	Ant1	20.403	Pass
NVNT	n40	5190	Ant1	52.446	Pass
NVNT	n40	5230	Ant1	56.94	Pass
NVNT	ac20	5180	Ant1	20.541	Pass
NVNT	ac20	5200	Ant1	20.199	Pass
NVNT	ac20	5240	Ant1	19.968	Pass
NVNT	ac40	5190	Ant1	56.244	Pass
NVNT	ac40	5230	Ant1	54.276	Pass
NVNT	ac80	5210	Ant1	84.132	Pass

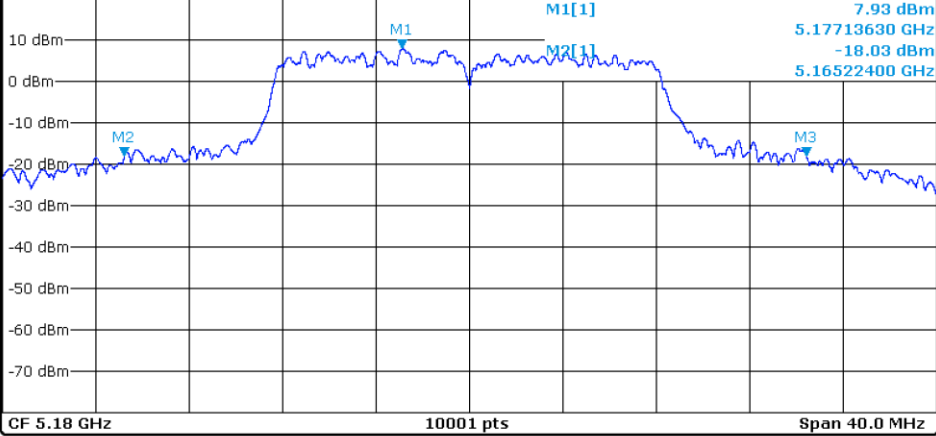
Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 3.96 dB RBW 300 kHz
Att 30 dB SWT 38.1 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

1Pk Max



Marker

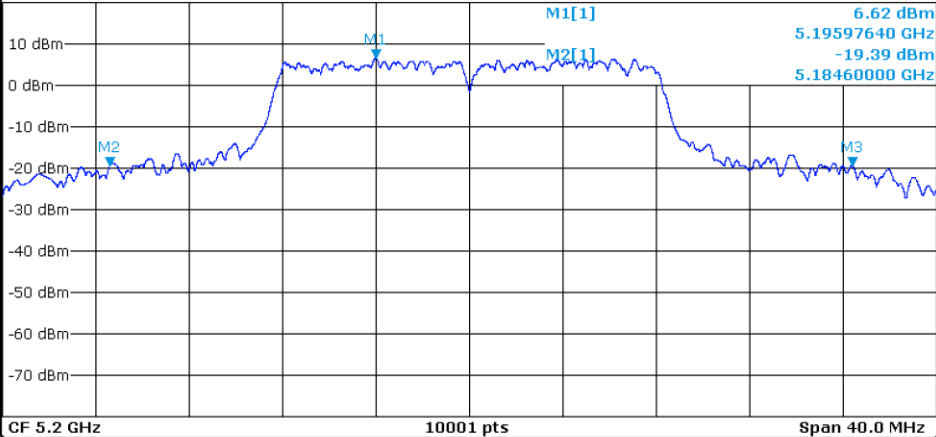
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.1771363 GHz	7.93 dBm		
M2	1		5.165224 GHz	-18.03 dBm		
M3	1		5.194424 GHz	-18.03 dBm		

-26dB Bandwidth NVNT a 5200MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.02 dB RBW 300 kHz
Att 30 dB SWT 38.1 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

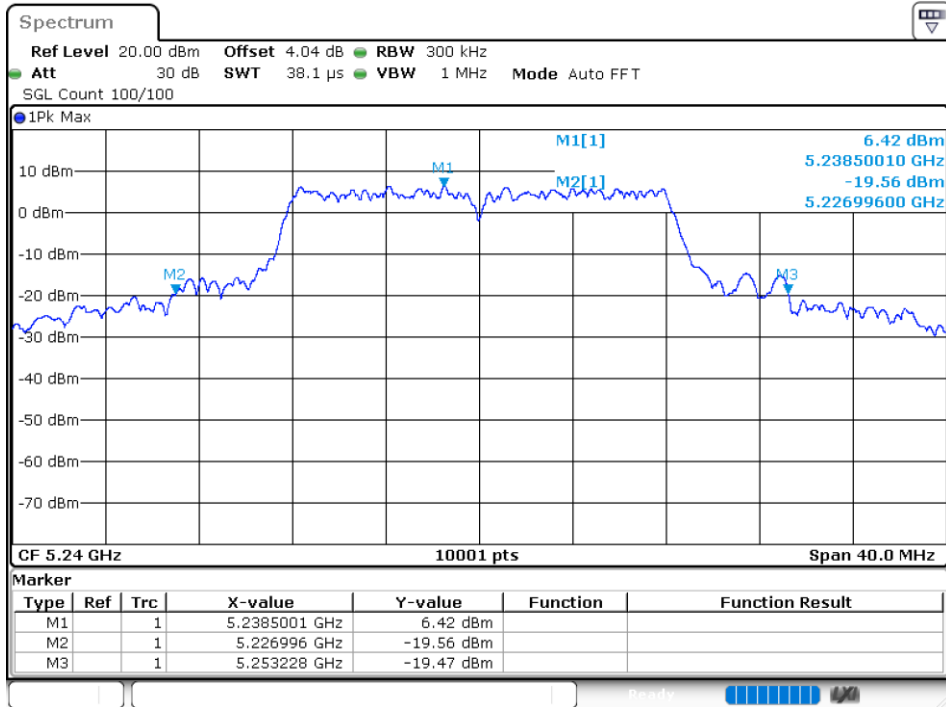
1Pk Max



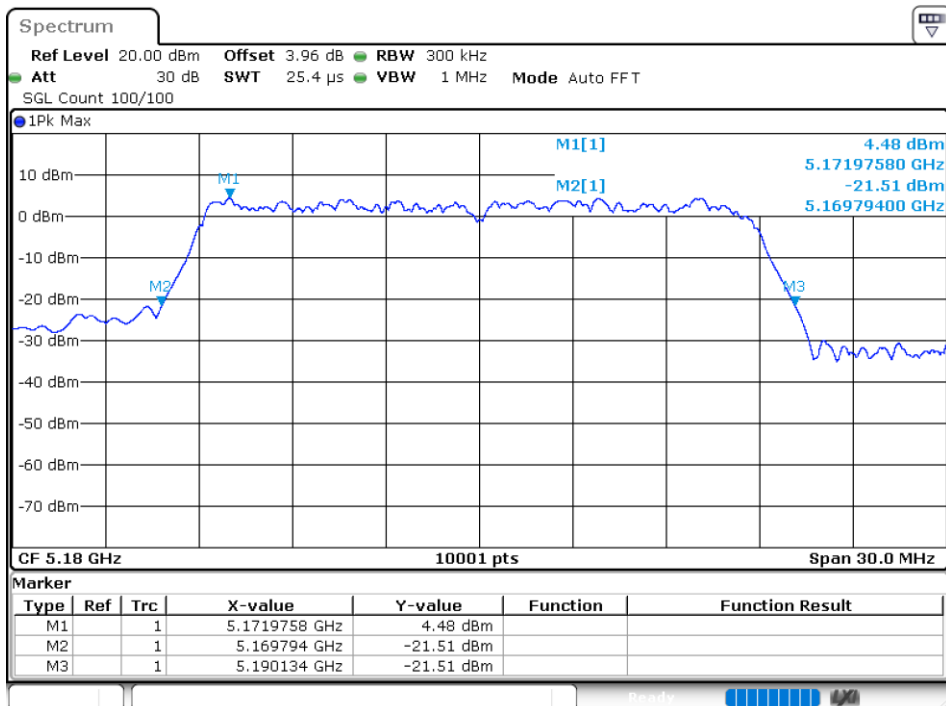
Marker

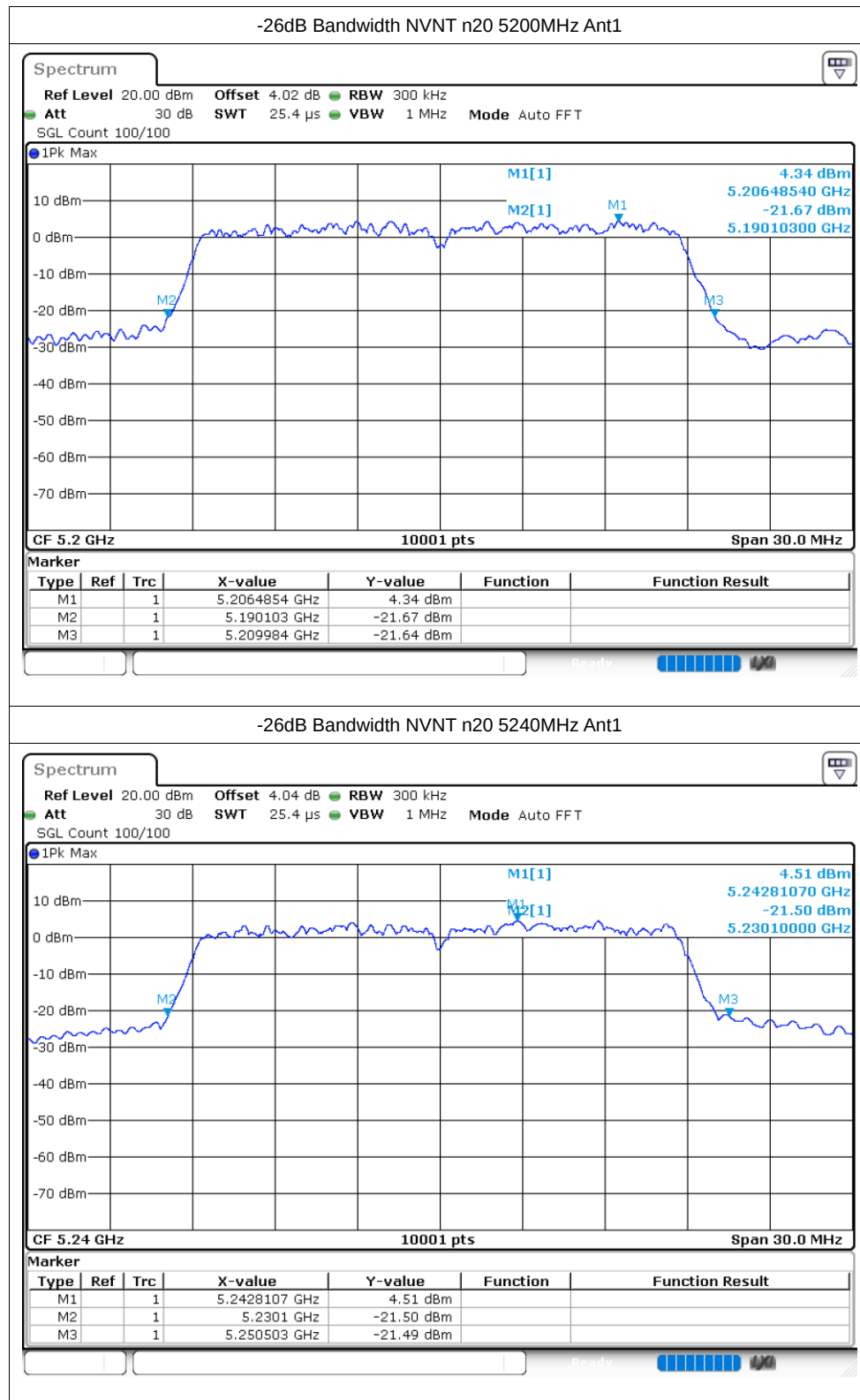
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.1959764 GHz	6.62 dBm		
M2	1		5.1846 GHz	-19.39 dBm		
M3	1		5.216392 GHz	-19.39 dBm		

-26dB Bandwidth NVNT a 5240MHz Ant1

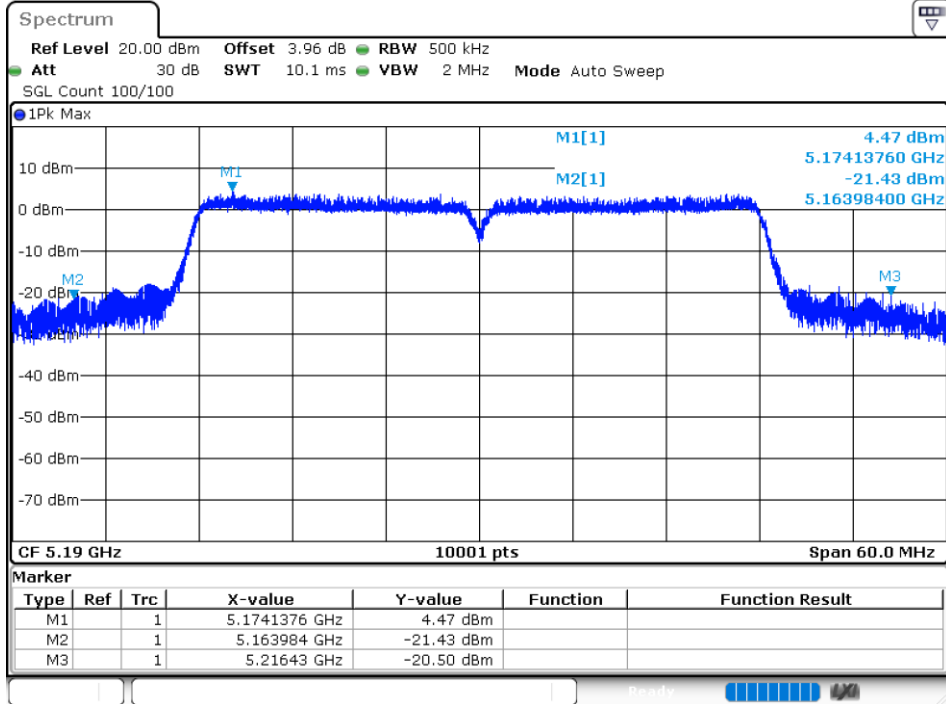


-26dB Bandwidth NVNT n20 5180MHz Ant1

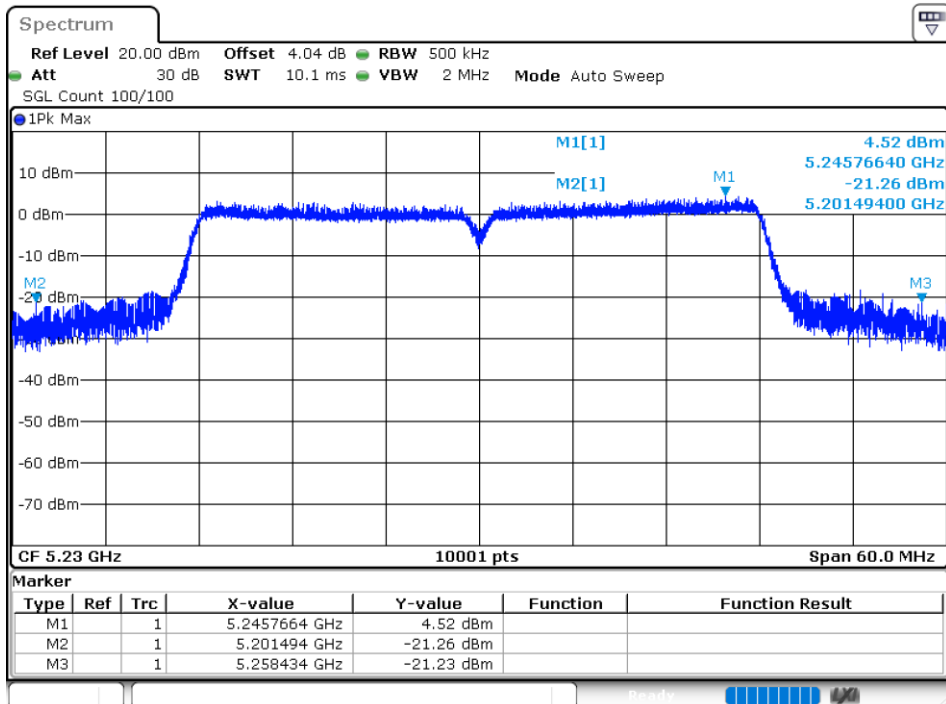


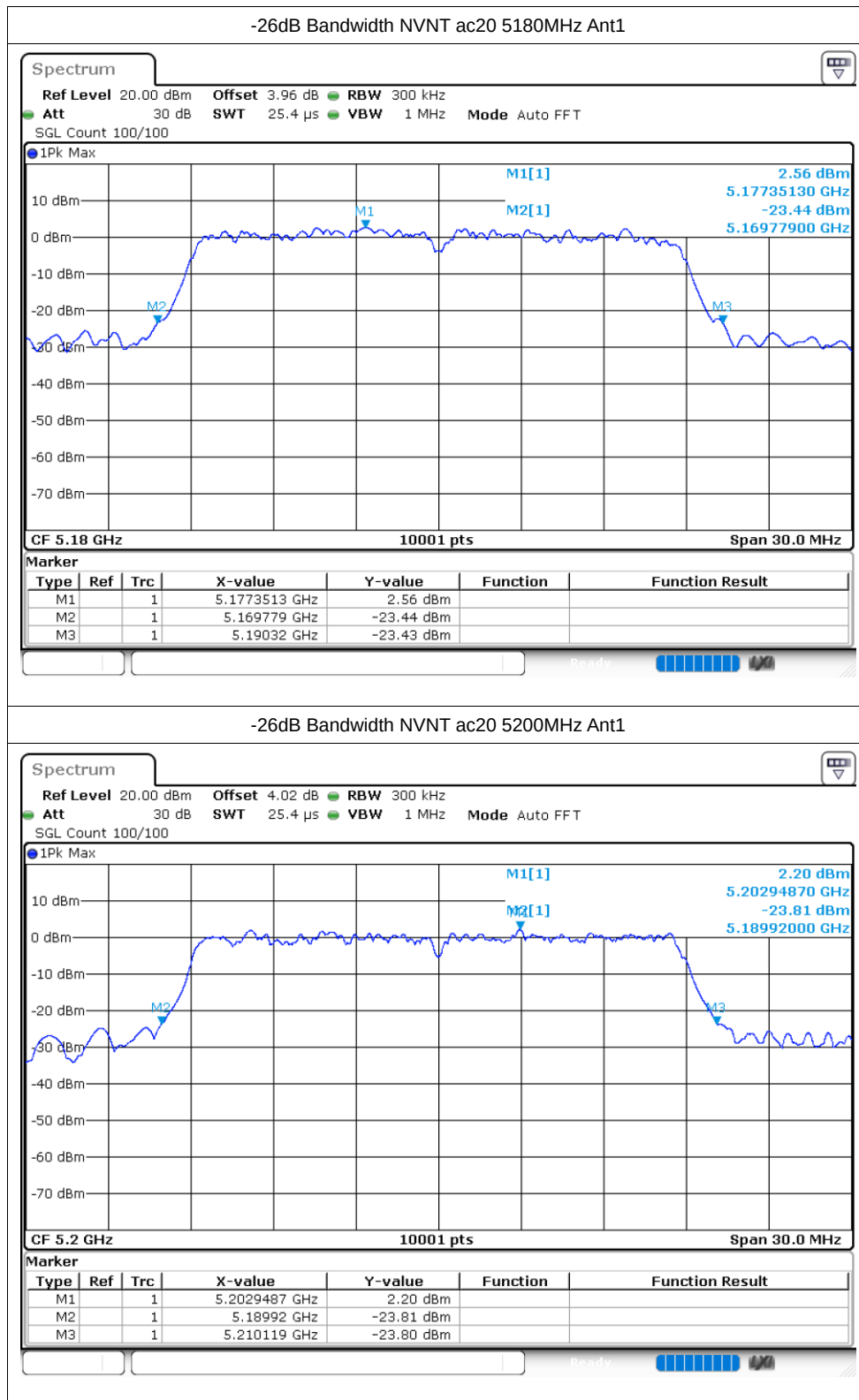


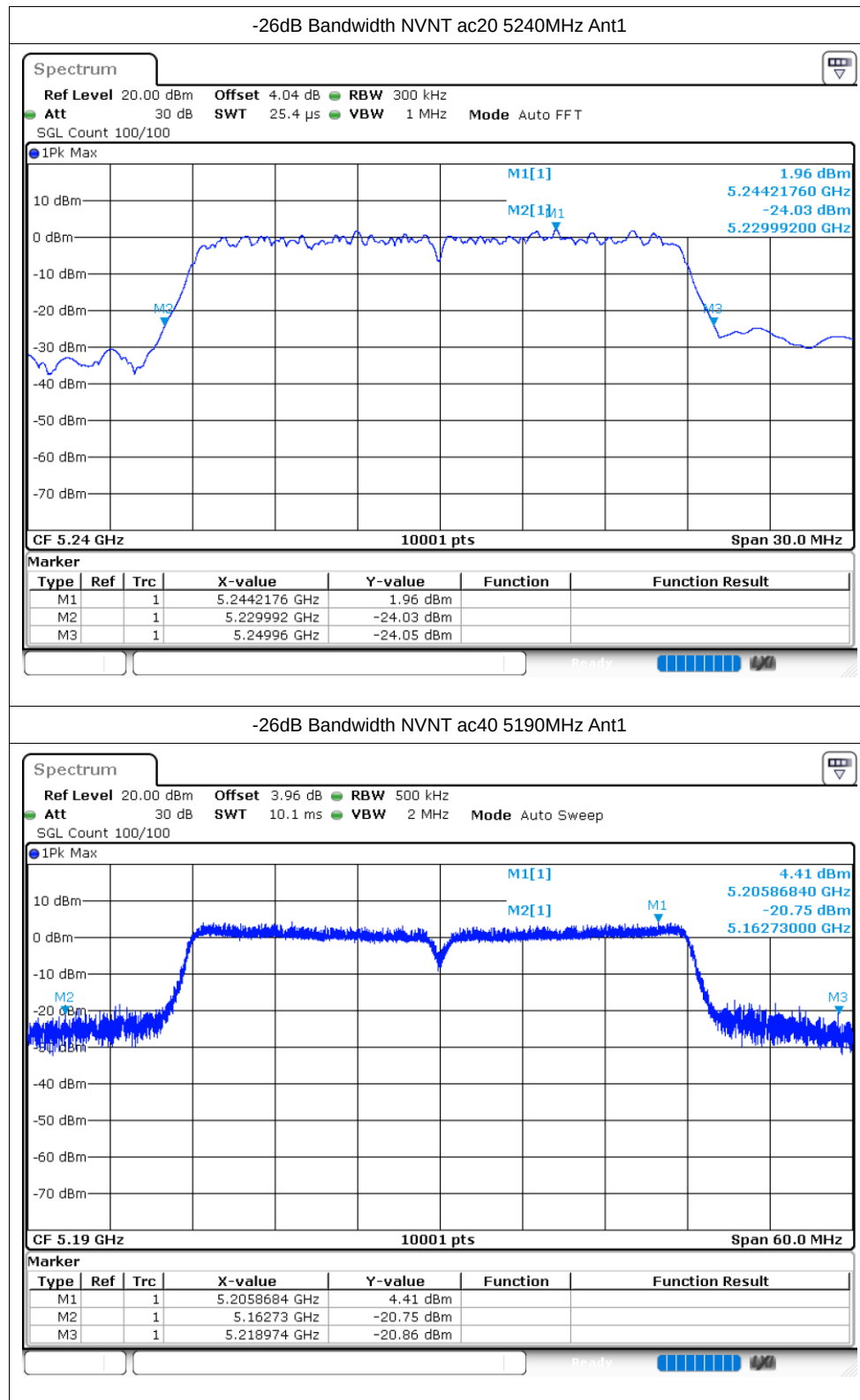
-26dB Bandwidth NVNT n40 5190MHz Ant1

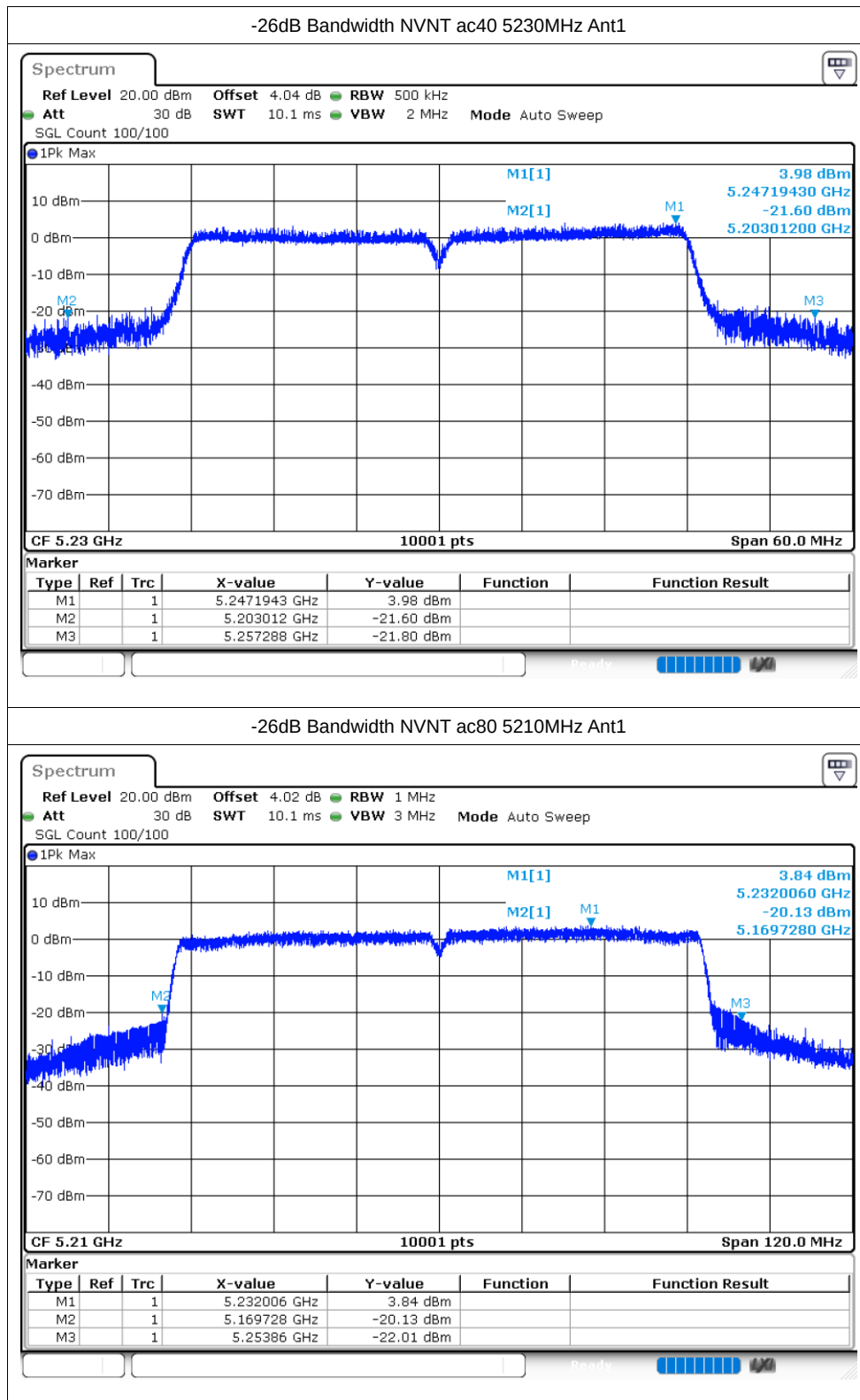


-26dB Bandwidth NVNT n40 5230MHz Ant1







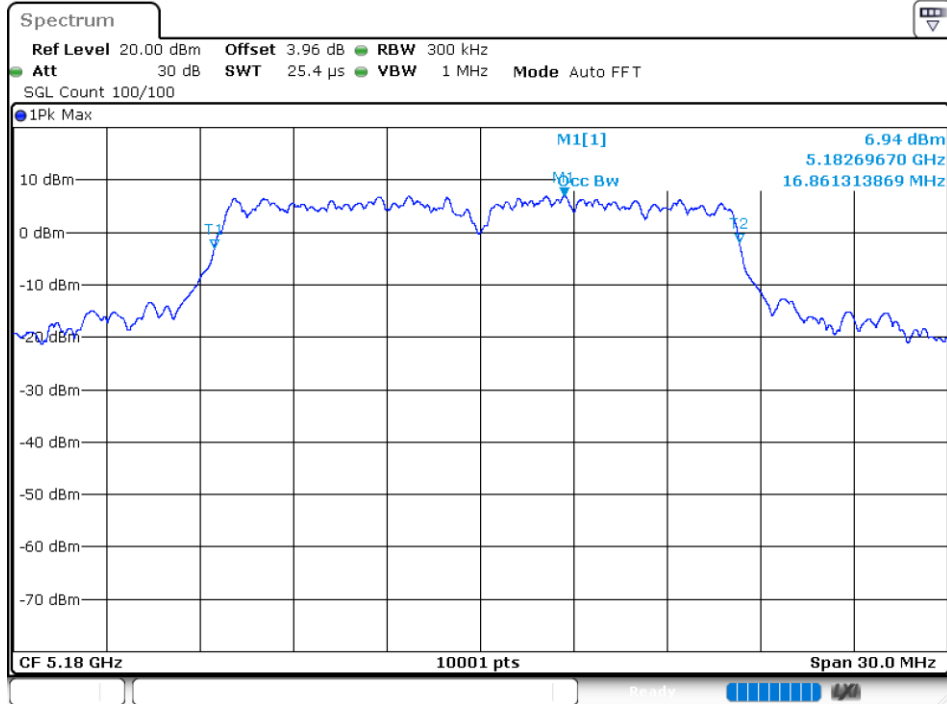


Occupied Channel Bandwidth

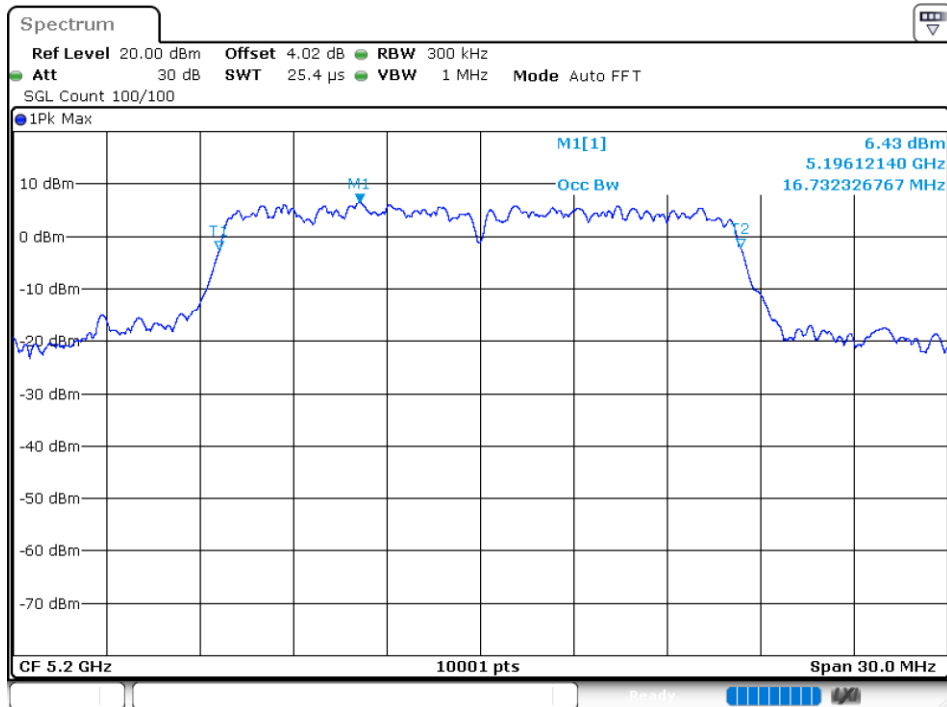
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.861
NVNT	a	5200	Ant1	16.732
NVNT	a	5240	Ant1	16.786
NVNT	n20	5180	Ant1	17.662
NVNT	n20	5200	Ant1	17.638
NVNT	n20	5240	Ant1	17.53
NVNT	n40	5190	Ant1	36.452
NVNT	n40	5230	Ant1	36.494
NVNT	ac20	5180	Ant1	17.65
NVNT	ac20	5200	Ant1	17.671
NVNT	ac20	5240	Ant1	17.731
NVNT	ac40	5190	Ant1	36.542
NVNT	ac40	5230	Ant1	36.458
NVNT	ac80	5210	Ant1	75.508

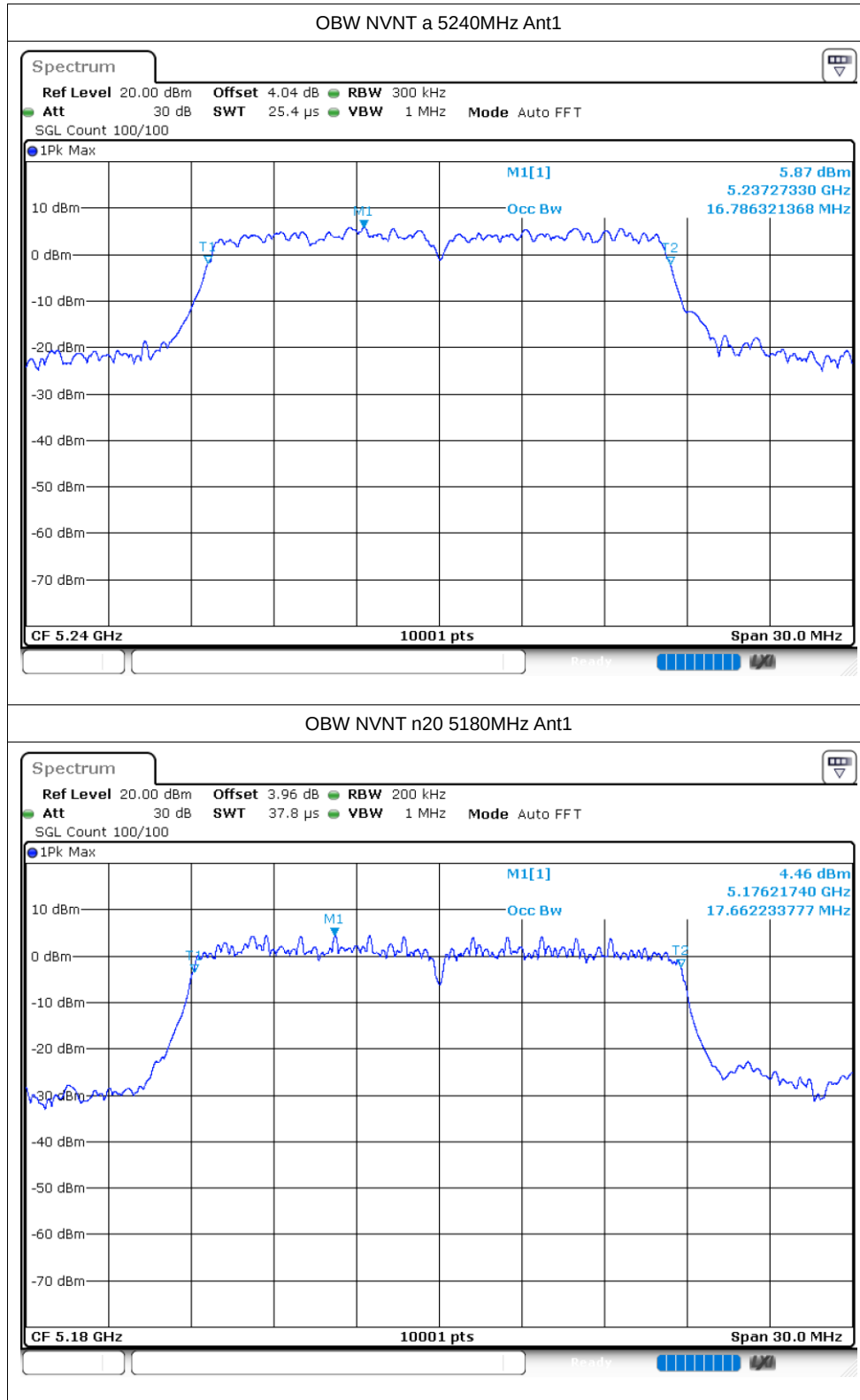
Test Graphs

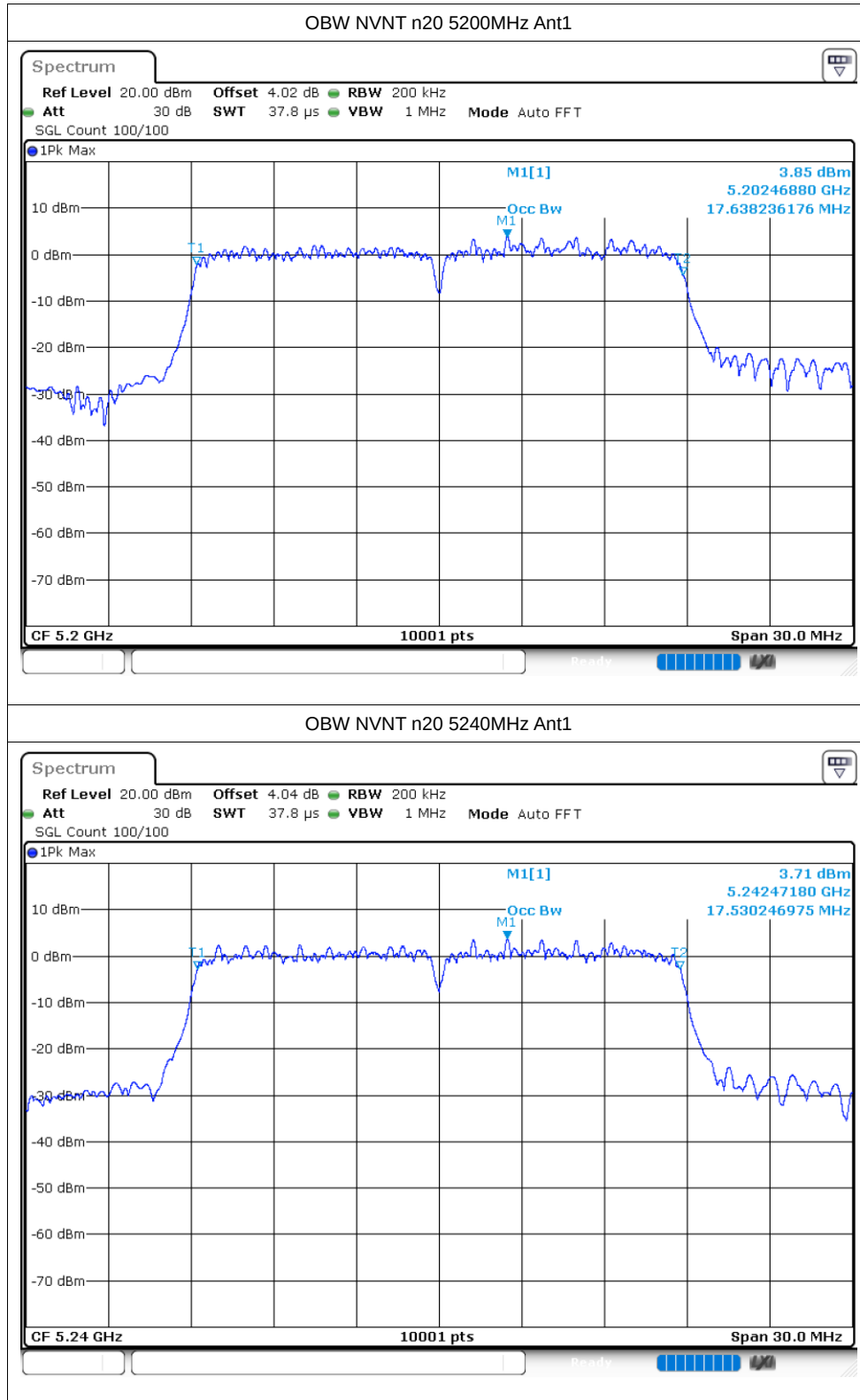
OBW NVNT a 5180MHz Ant1

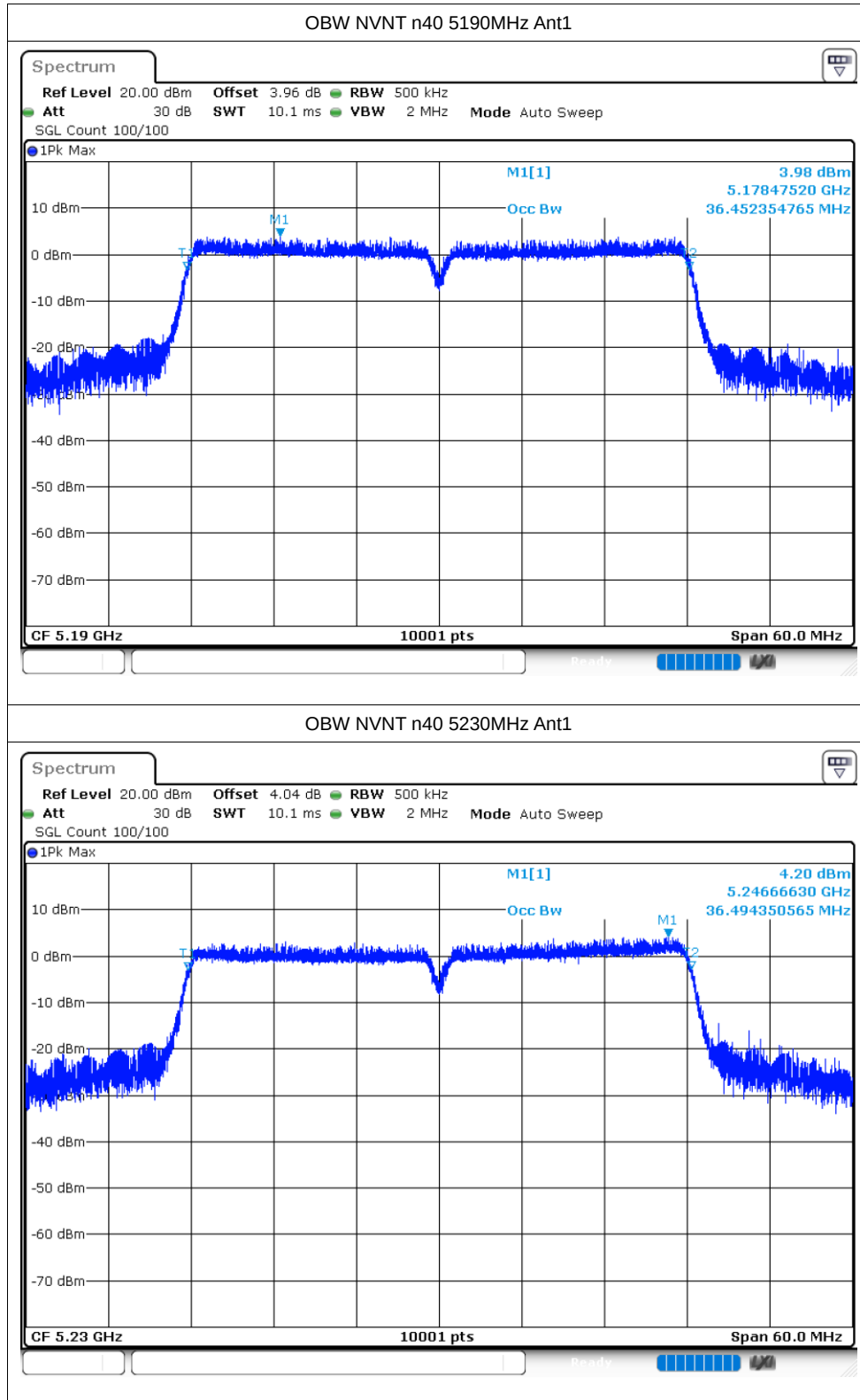


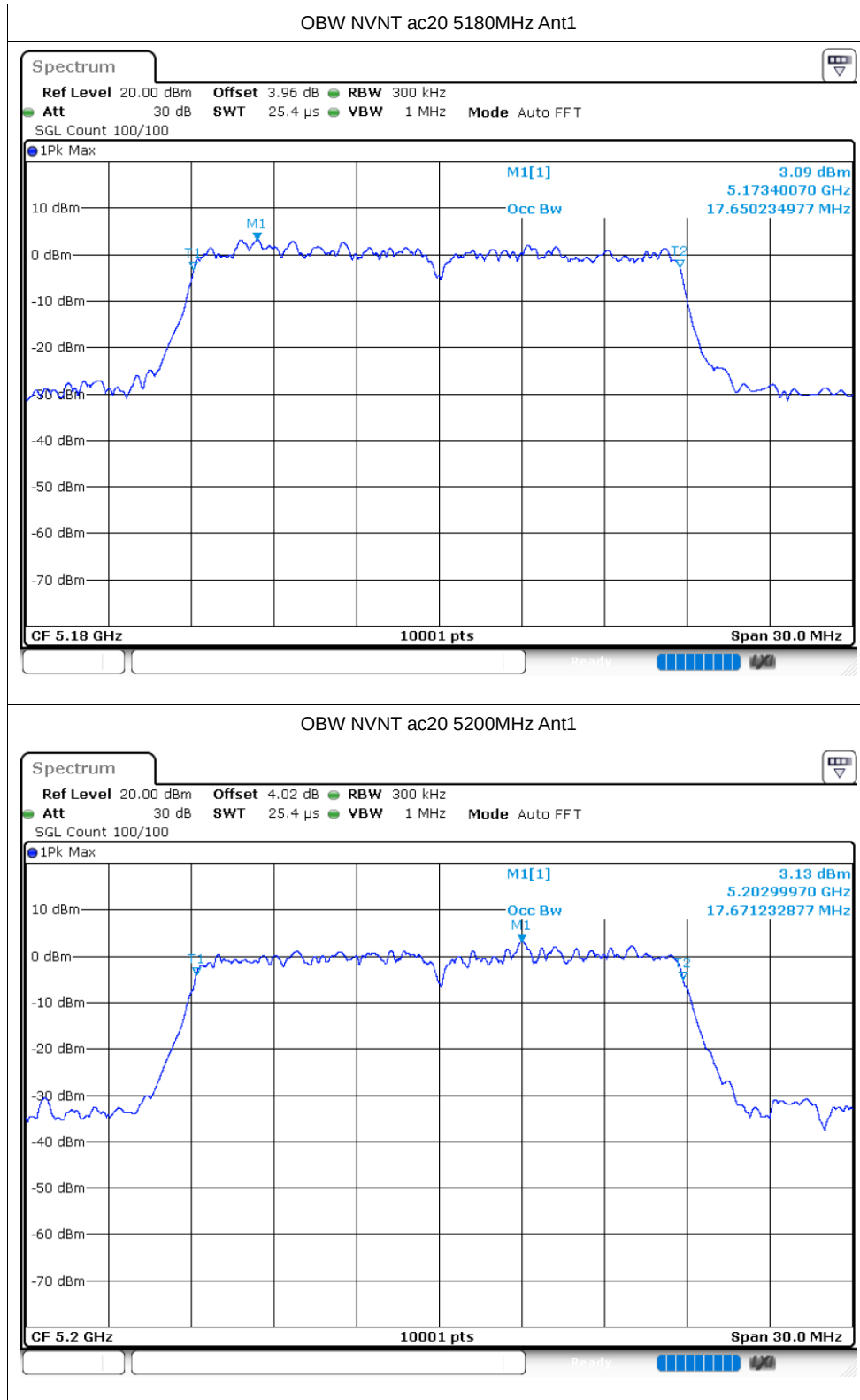
OBW NVNT a 5200MHz Ant1

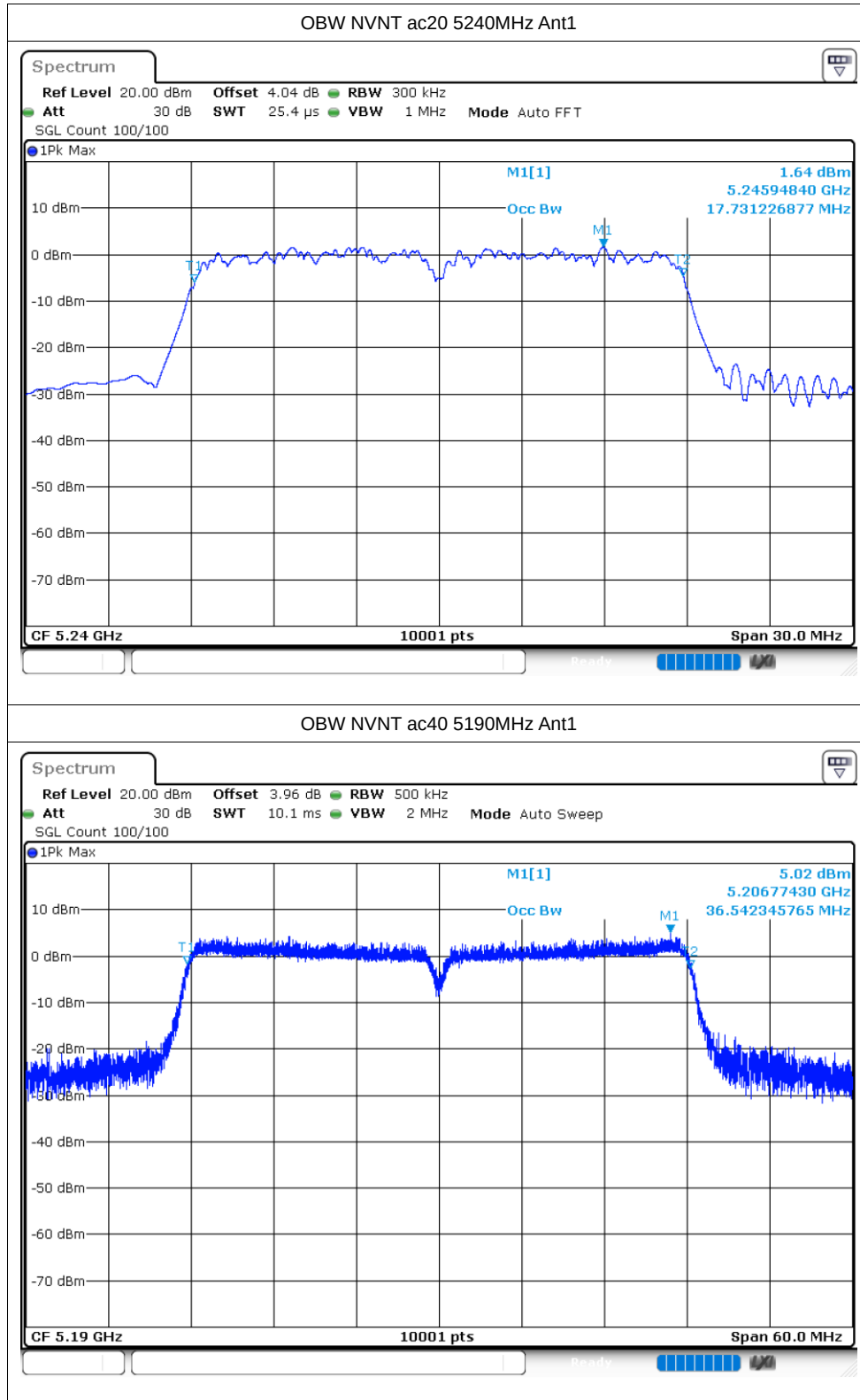


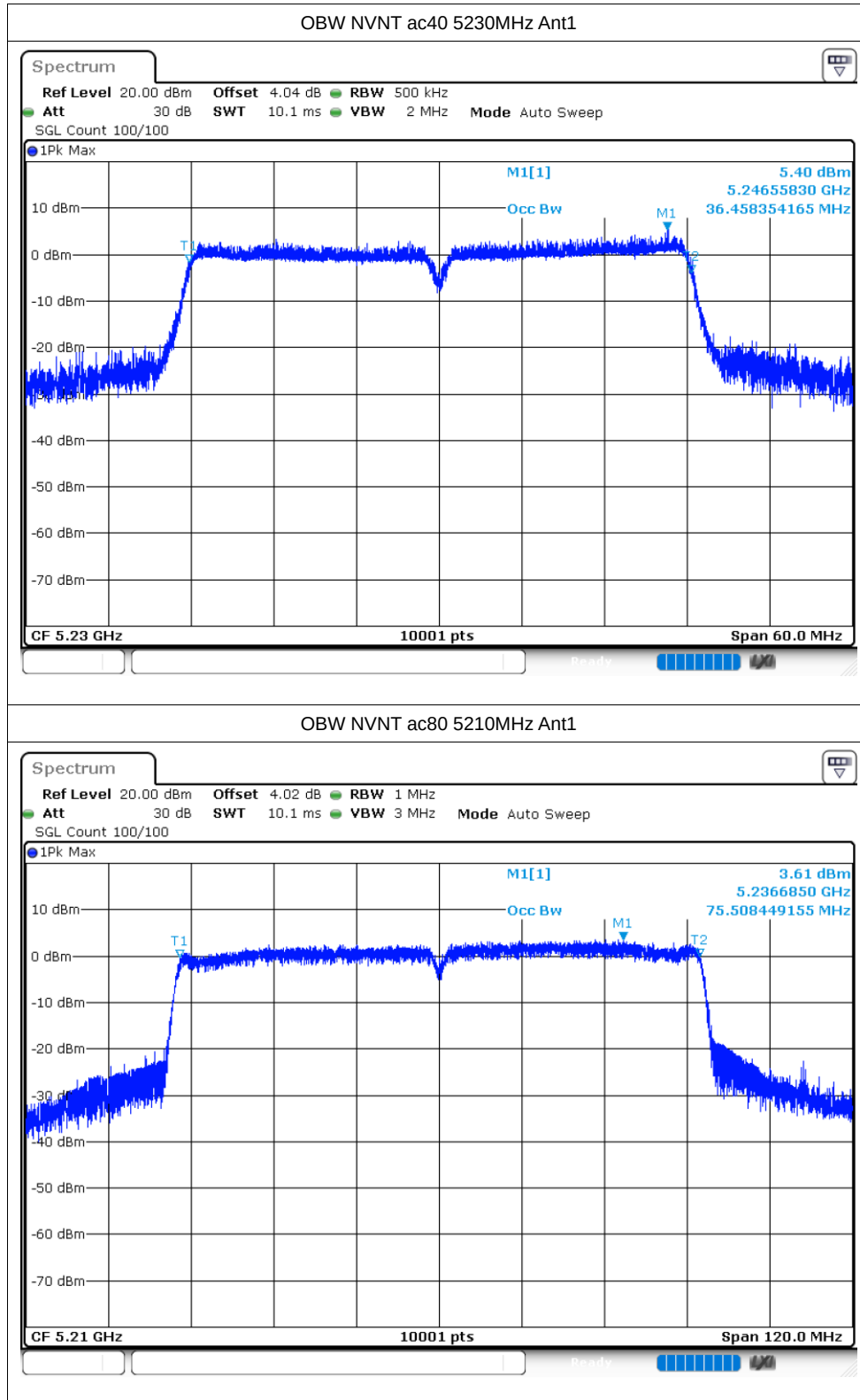










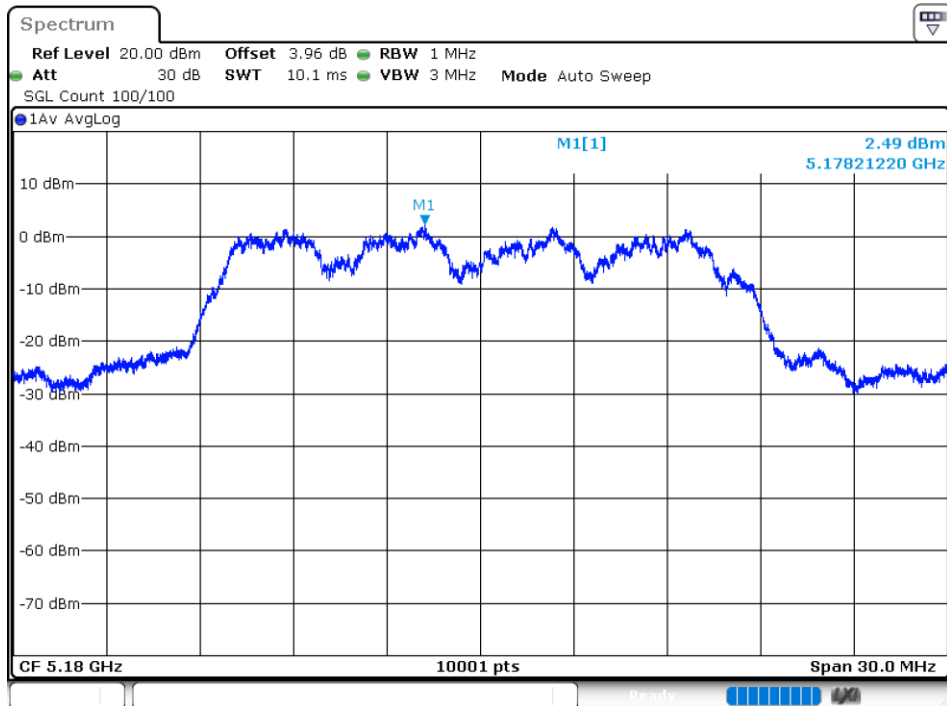


Maximum Power Spectral Density Level

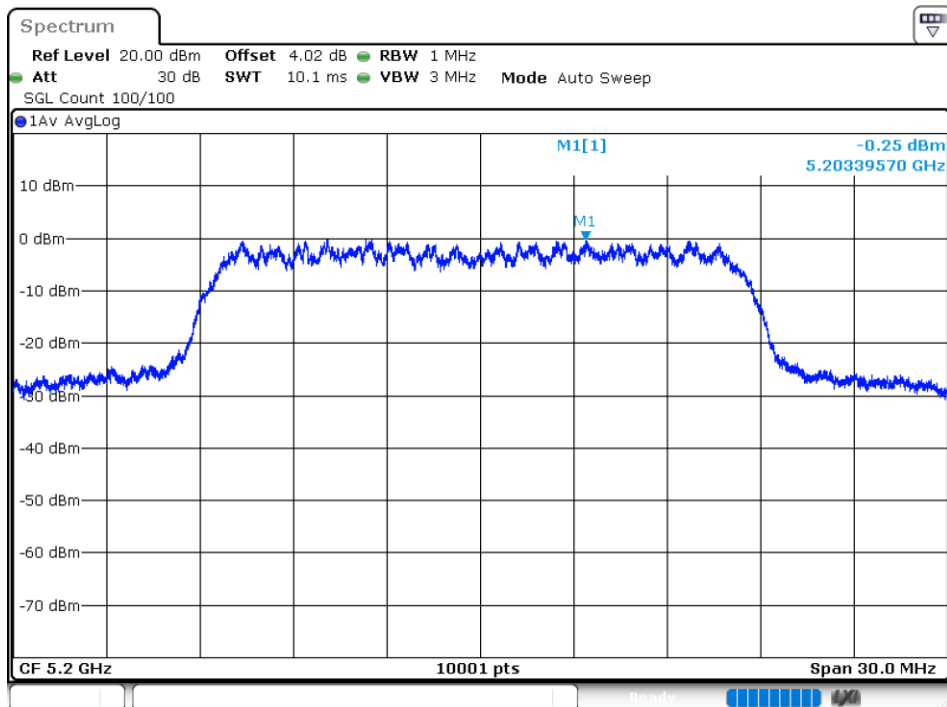
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	2.49	0.47	2.96	11	Pass
NVNT	a	5200	Ant1	-0.25	0.42	0.17	11	Pass
NVNT	a	5240	Ant1	1.29	0.42	1.71	11	Pass
NVNT	n20	5180	Ant1	-1.14	0.51	-0.63	11	Pass
NVNT	n20	5200	Ant1	-0.96	0.48	-0.48	11	Pass
NVNT	n20	5240	Ant1	-1.42	0.49	-0.93	11	Pass
NVNT	n40	5190	Ant1	-12.49	0.91	-11.58	11	Pass
NVNT	n40	5230	Ant1	-7.98	0.9	-7.08	11	Pass
NVNT	ac20	5180	Ant1	-3.51	0.51	-3	11	Pass
NVNT	ac20	5200	Ant1	-3.59	0.48	-3.11	11	Pass
NVNT	ac20	5240	Ant1	-4.28	0.51	-3.77	11	Pass
NVNT	ac40	5190	Ant1	-10.14	0.96	-9.18	11	Pass
NVNT	ac40	5230	Ant1	-8.1	0.91	-7.19	11	Pass
NVNT	ac80	5210	Ant1	-14.96	1.69	-13.27	11	Pass

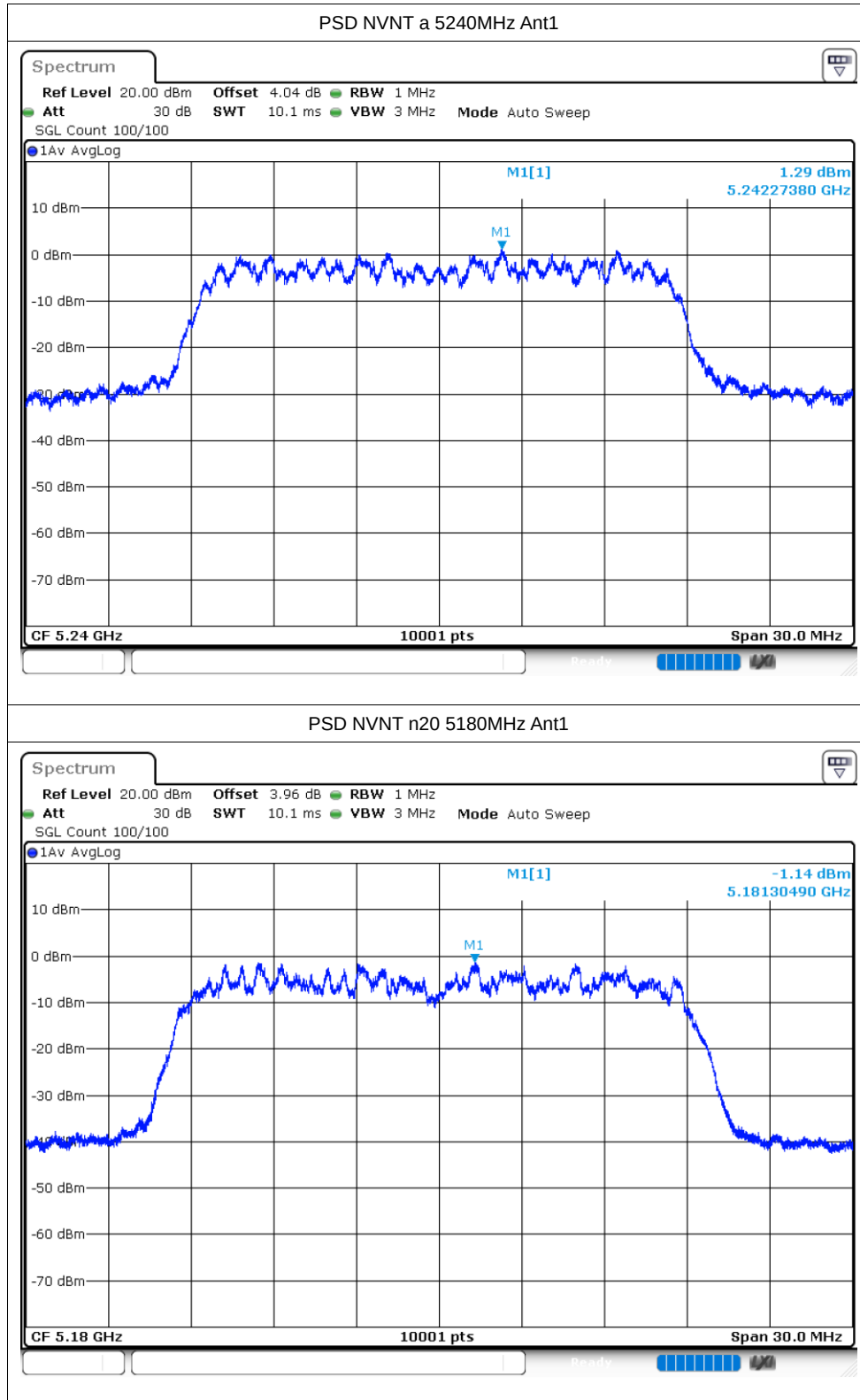
Test Graphs

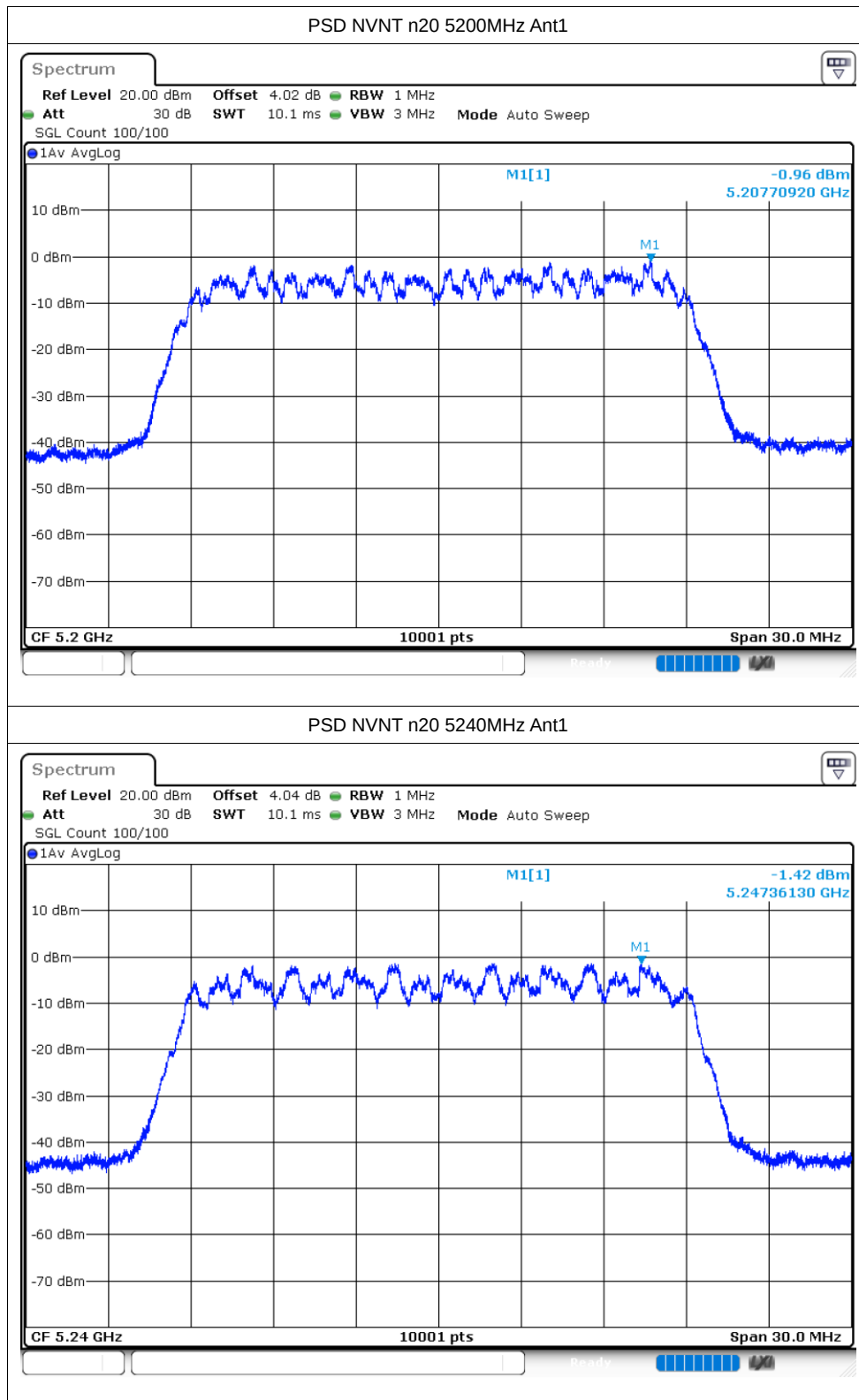
PSD NVNT a 5180MHz Ant1

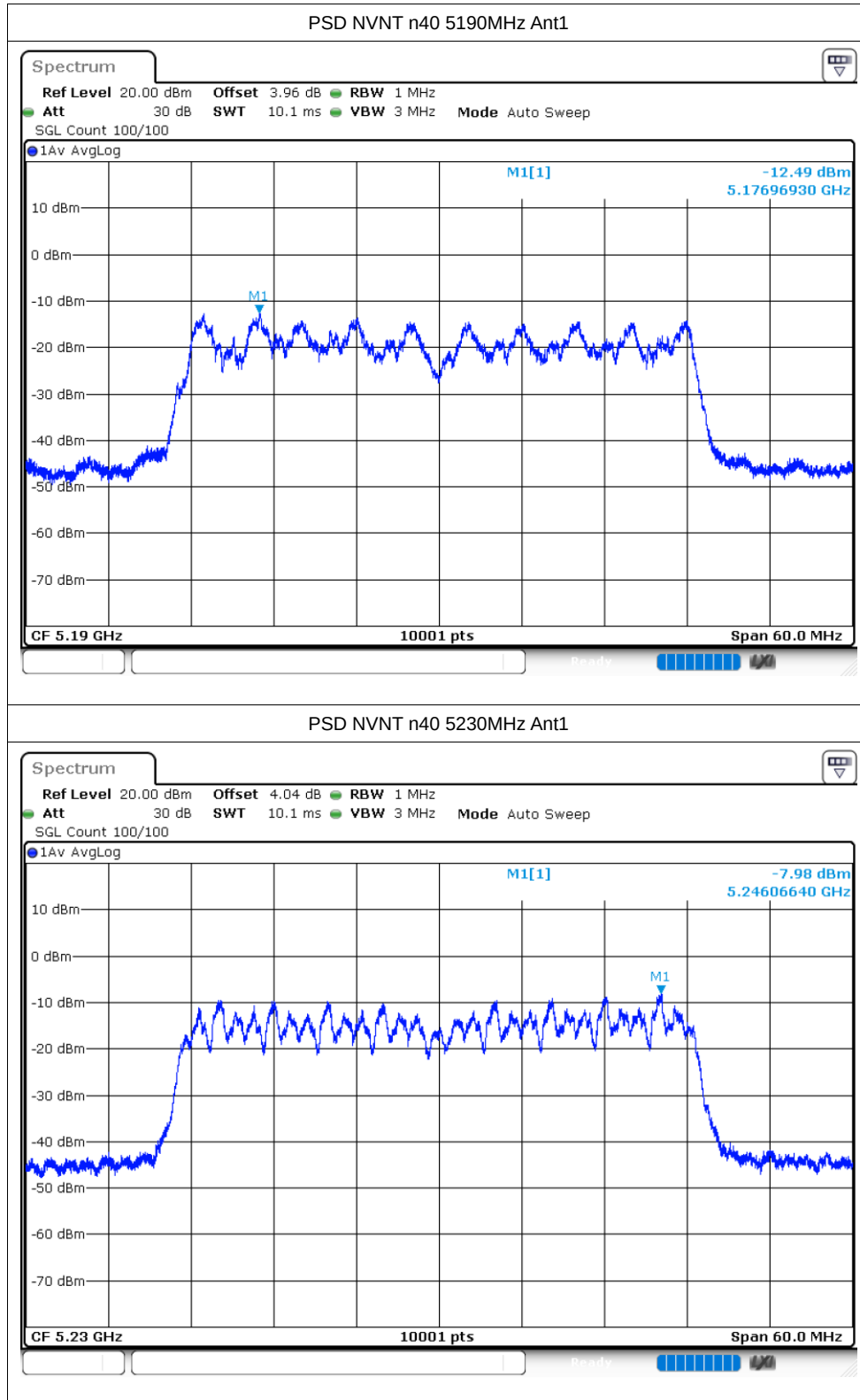


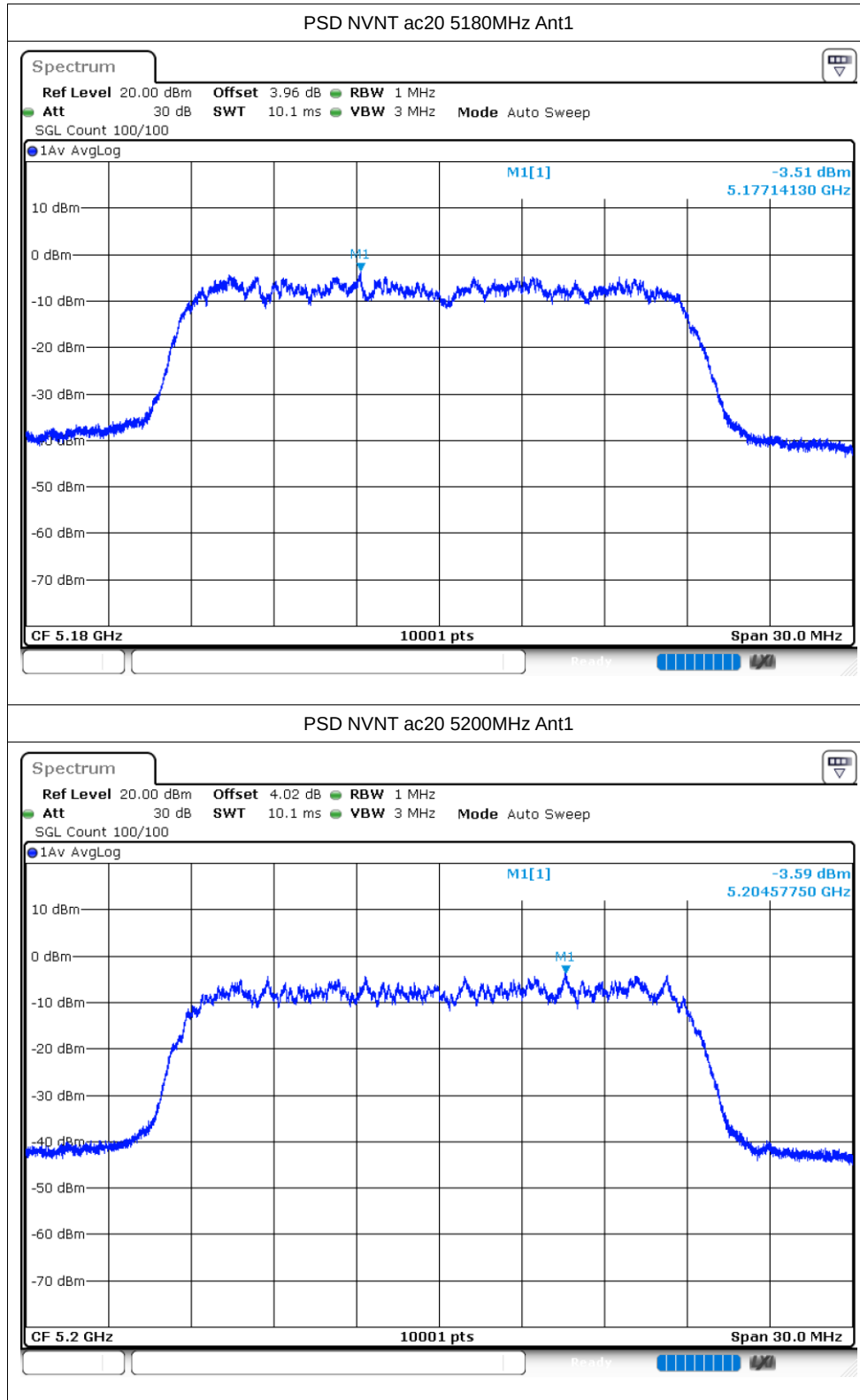
PSD NVNT a 5200MHz Ant1

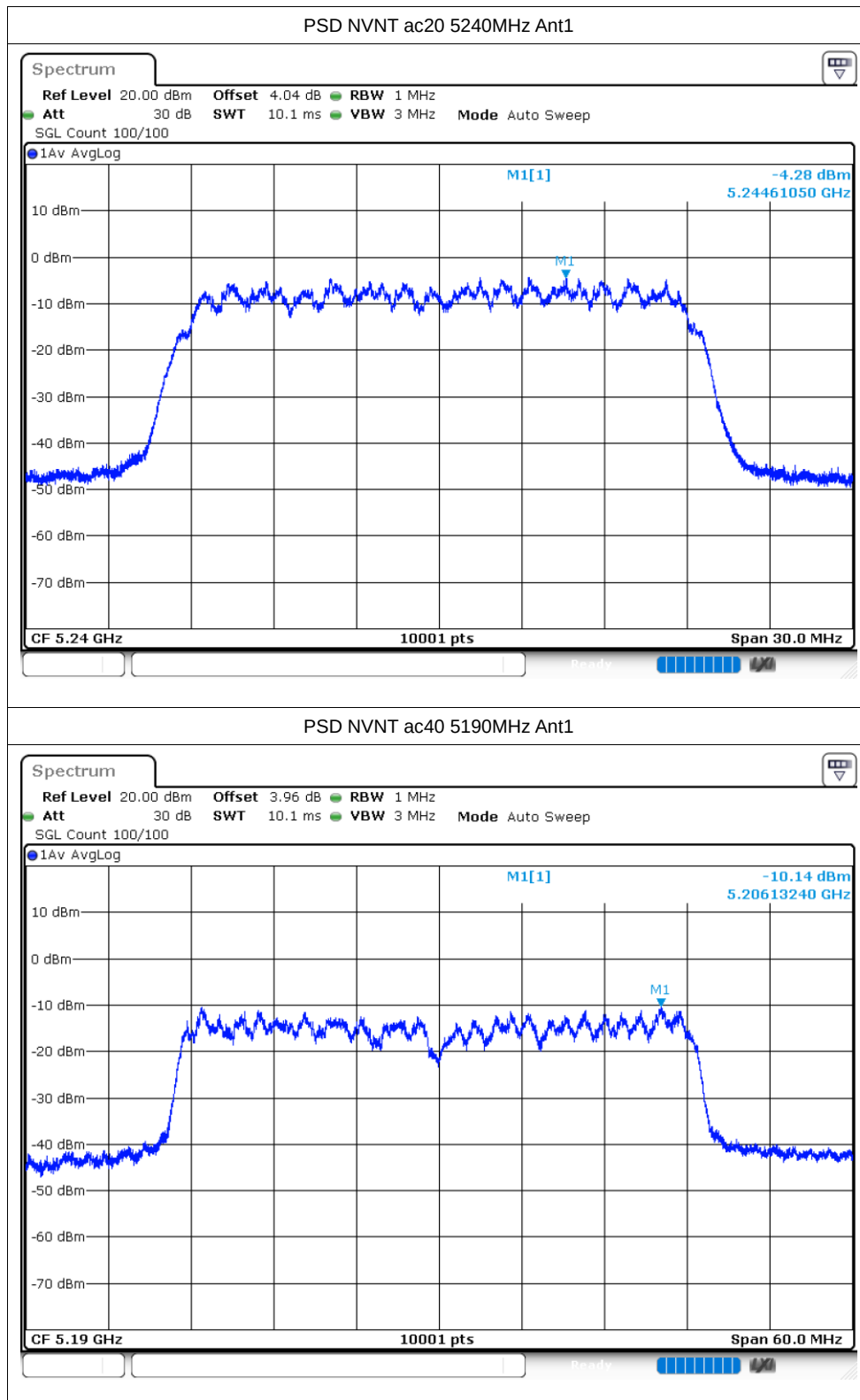


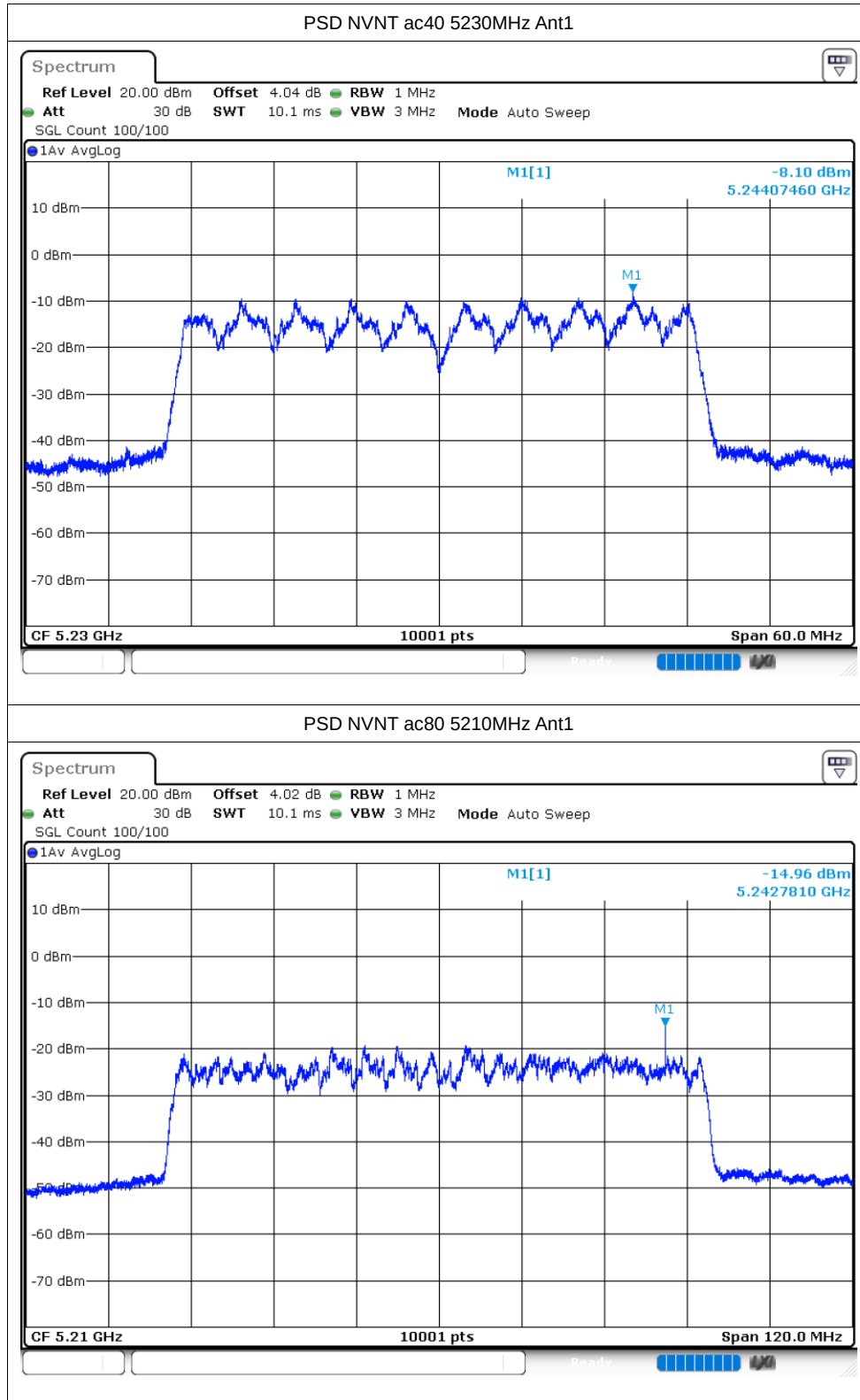










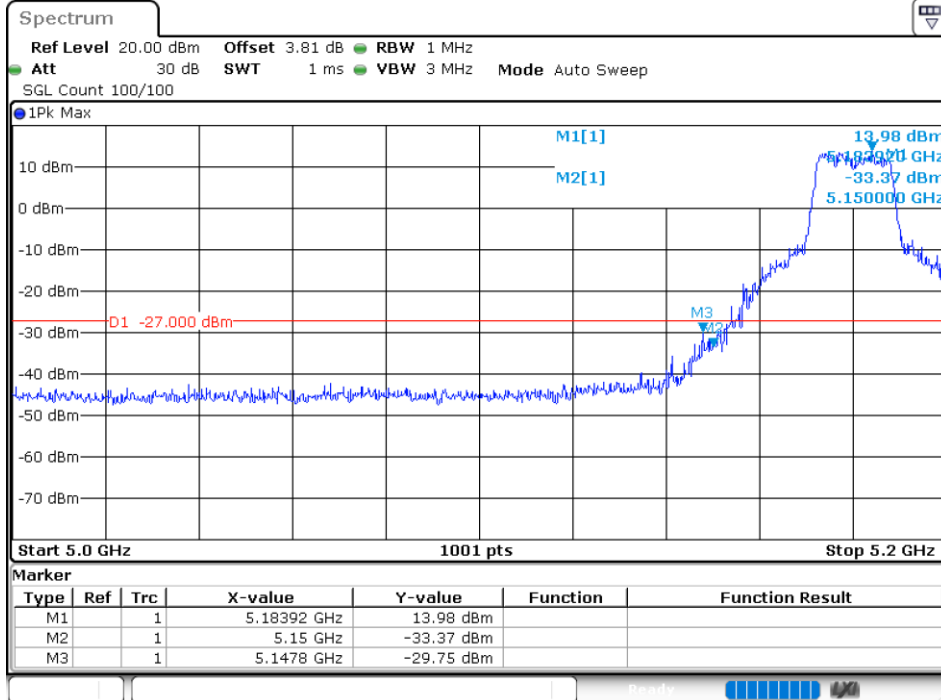


Band Edge

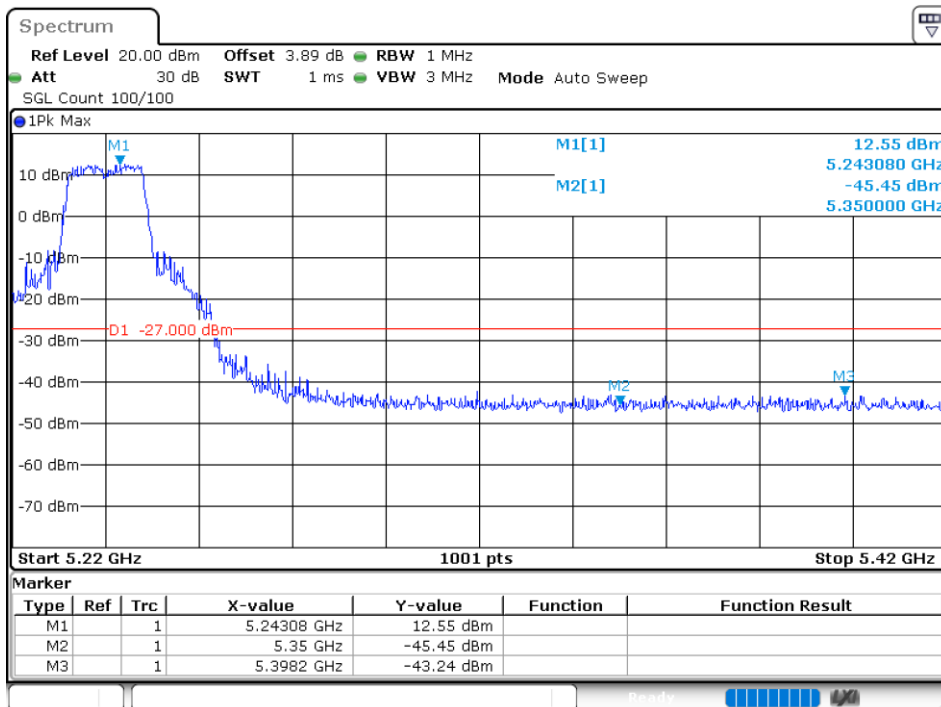
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-29.75	-27	Pass
NVNT	a	5240	Ant1	-43.23	-27	Pass
NVNT	n20	5180	Ant1	-31.6	-27	Pass
NVNT	n20	5240	Ant1	-43.18	-27	Pass
NVNT	n40	5190	Ant1	-28.79	-27	Pass
NVNT	n40	5230	Ant1	-41.78	-27	Pass
NVNT	ac20	5180	Ant1	-28.96	-27	Pass
NVNT	ac20	5240	Ant1	-43.2	-27	Pass
NVNT	ac40	5190	Ant1	-28.52	-27	Pass
NVNT	ac40	5230	Ant1	-42.82	-27	Pass
NVNT	ac80	5210	Ant1	-43.52	-27	Pass
NVNT	ac80	5210	Ant1	-34.33	-27	Pass

Test Graphs

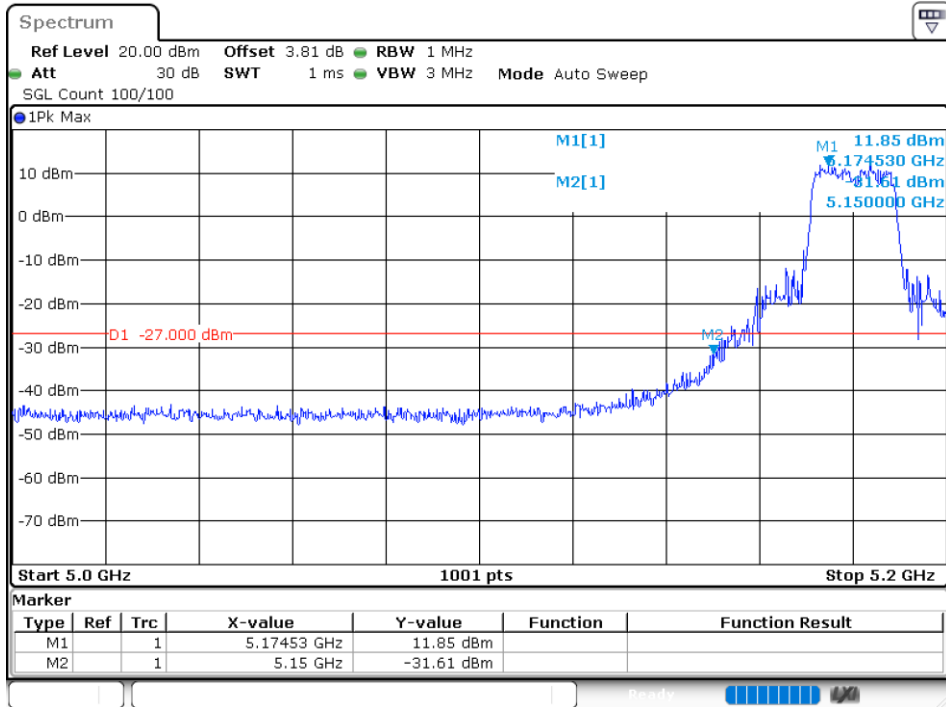
Band Edge NVNT a 5180MHz Low Ant1



Band Edge NVNT a 5240MHz High Ant1



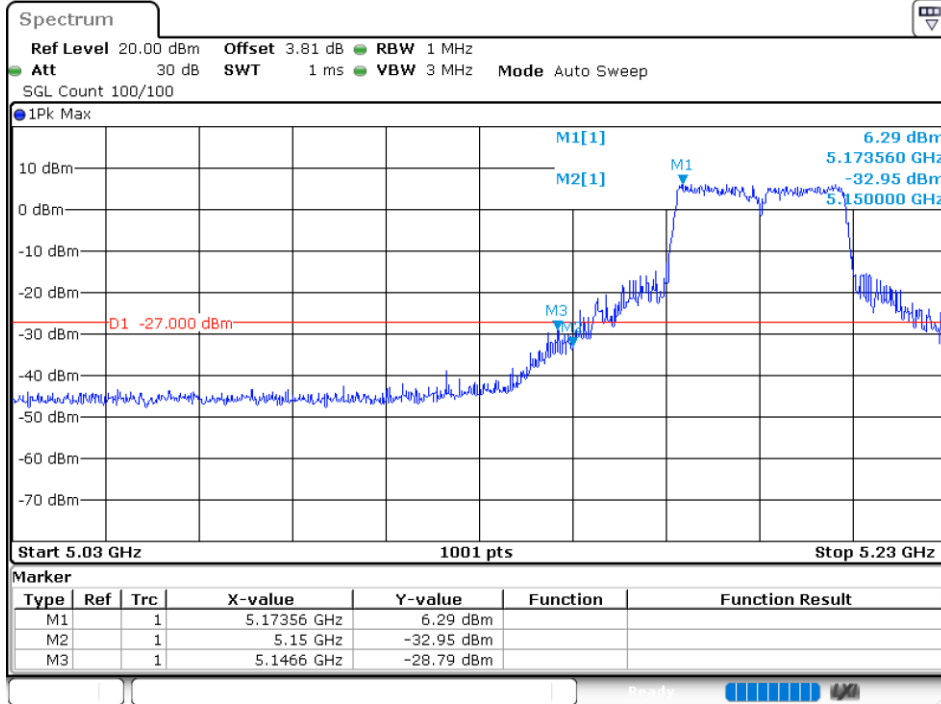
Band Edge NVNT n20 5180MHz Low Ant1



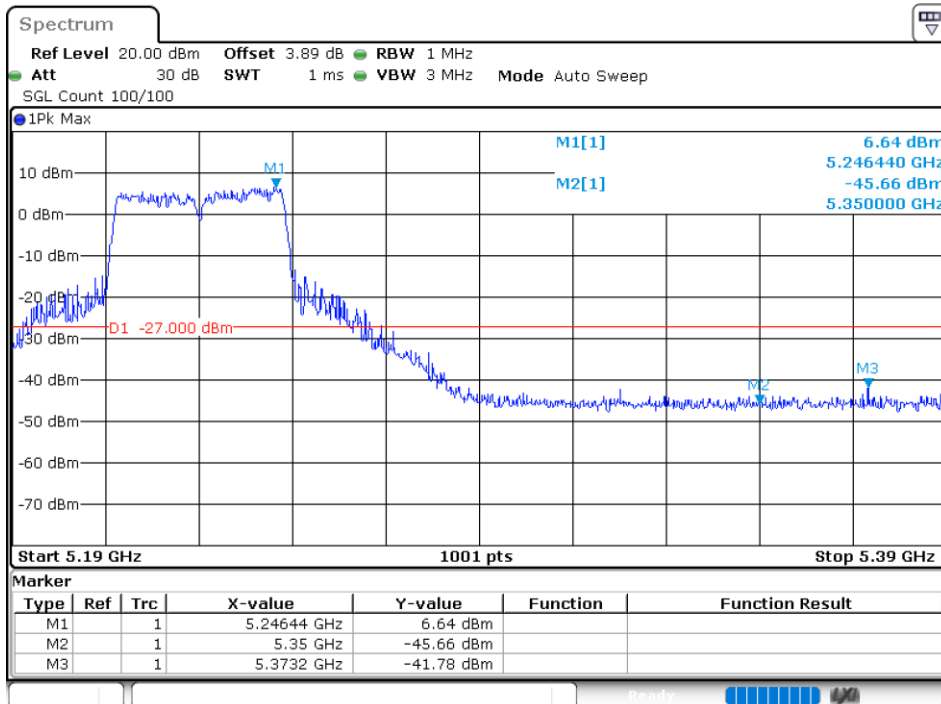
Band Edge NVNT n20 5240MHz High Ant1

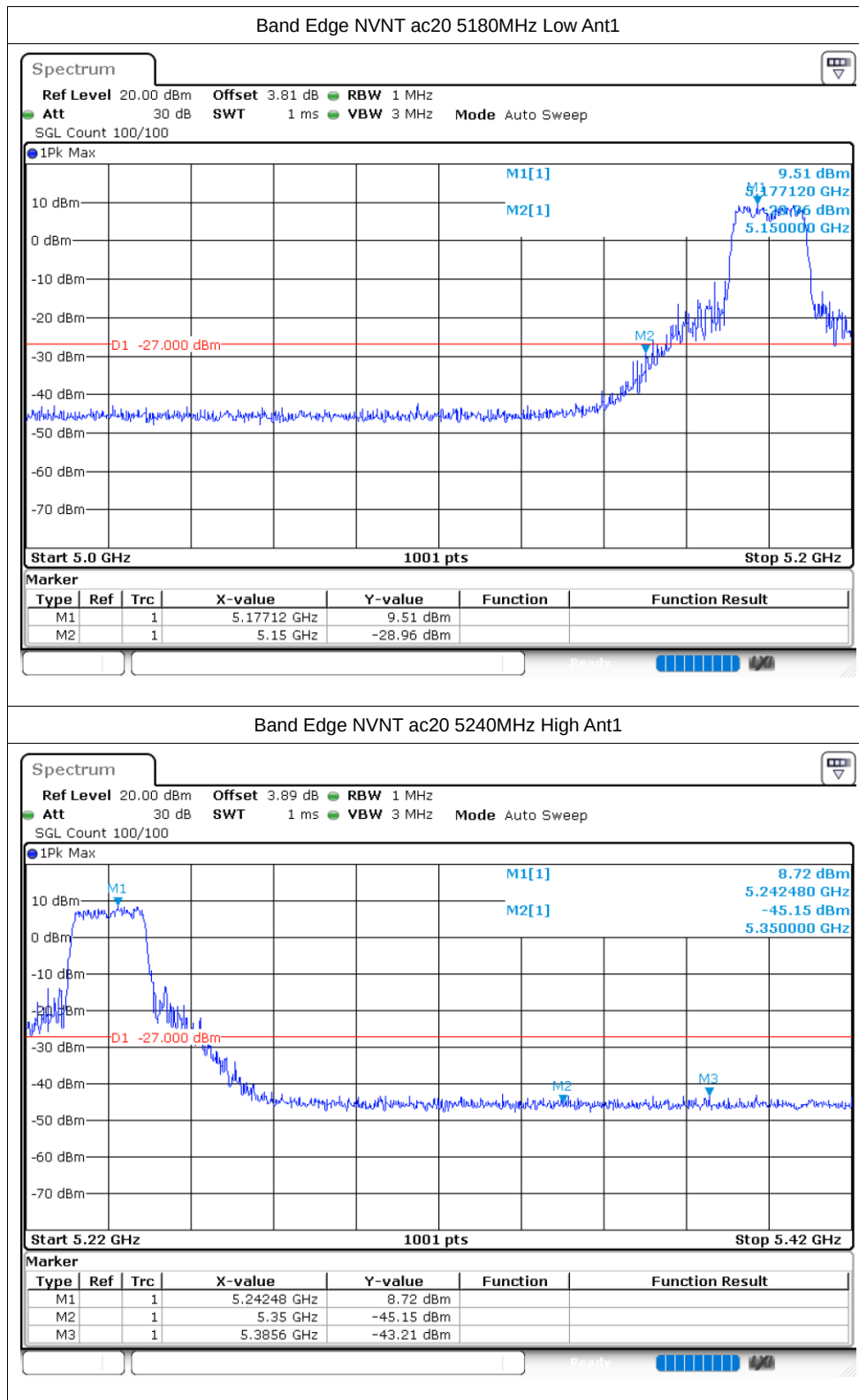


Band Edge NVNT n40 5190MHz Low Ant1

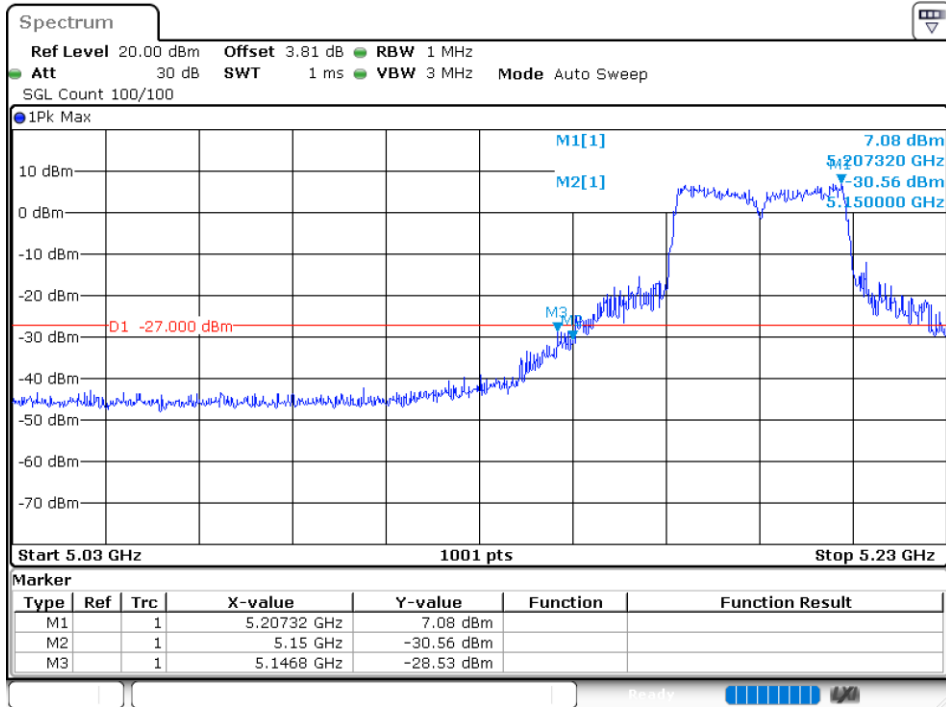


Band Edge NVNT n40 5230MHz High Ant1



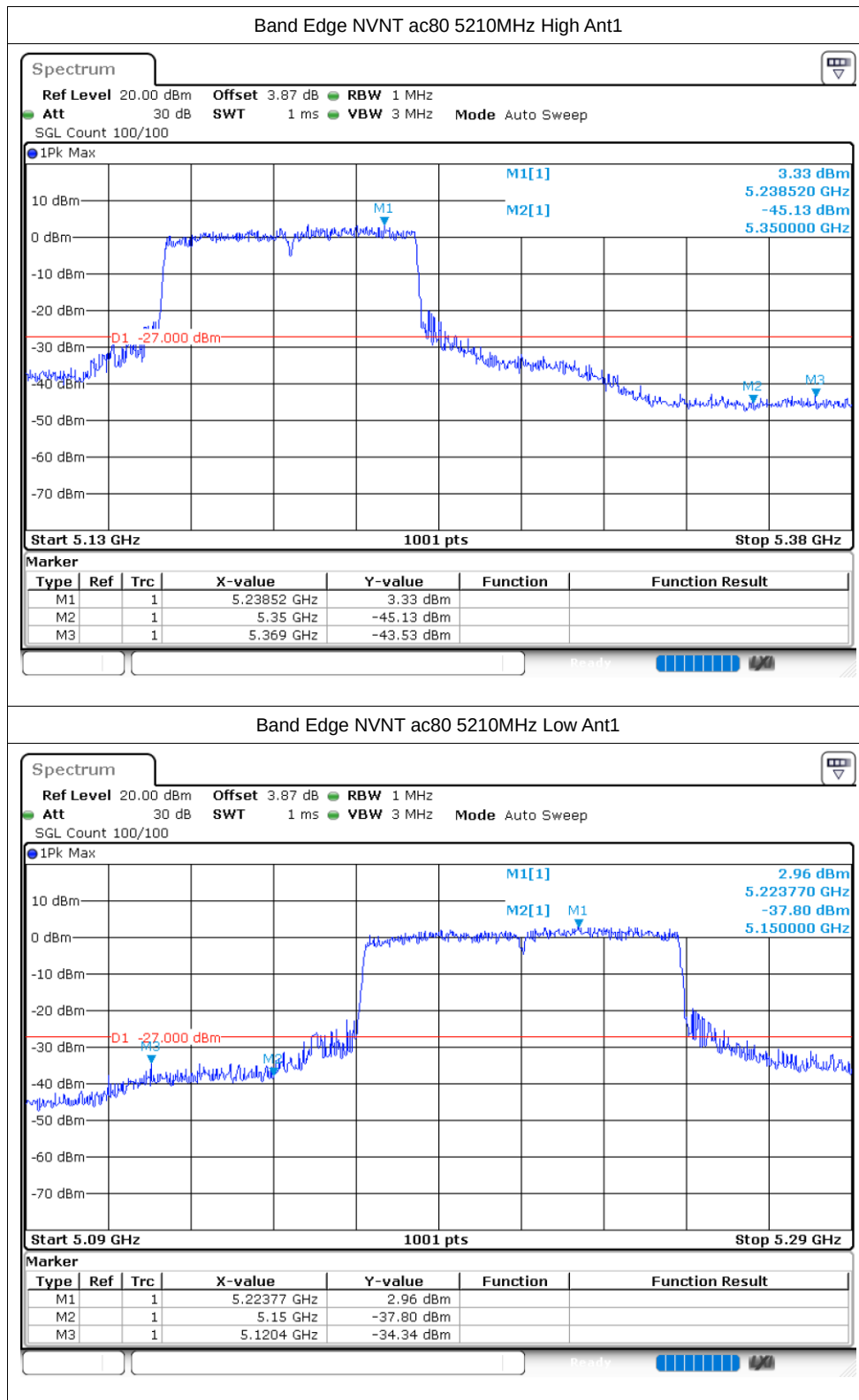


Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1



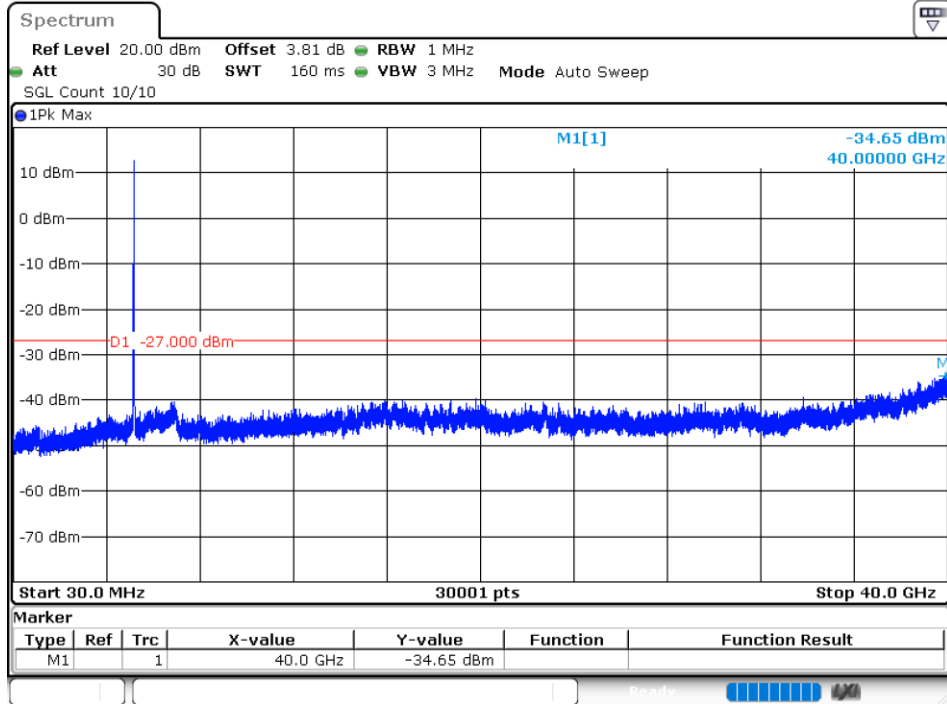


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-34.64	-27	Pass
NVNT	a	5200	Ant1	-34.39	-27	Pass
NVNT	a	5240	Ant1	-35	-27	Pass
NVNT	n20	5180	Ant1	-34.86	-27	Pass
NVNT	n20	5200	Ant1	-34.32	-27	Pass
NVNT	n20	5240	Ant1	-33.98	-27	Pass
NVNT	n40	5190	Ant1	-34.38	-27	Pass
NVNT	n40	5230	Ant1	-34.52	-27	Pass
NVNT	ac20	5180	Ant1	-34.62	-27	Pass
NVNT	ac20	5200	Ant1	-33.82	-27	Pass
NVNT	ac20	5240	Ant1	-34.72	-27	Pass
NVNT	ac40	5190	Ant1	-34.57	-27	Pass
NVNT	ac40	5230	Ant1	-34.59	-27	Pass
NVNT	ac80	5210	Ant1	-34.2	-27	Pass

Test Graphs

Tx. Spurious NVNT a 5180MHz Ant1 Emission



Tx. Spurious NVNT a 5200MHz Ant1 Emission

