

5.2G WIFI

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	88.3	0.54	0.72
NVNT	a	5200	Ant1	88.83	0.51	0.71
NVNT	a	5240	Ant1	88.74	0.52	0.72
NVNT	n20	5180	Ant1	86.69	0.62	0.85
NVNT	n20	5200	Ant1	87.23	0.59	0.85
NVNT	n20	5240	Ant1	87.45	0.58	0.85
NVNT	n40	5190	Ant1	76.61	1.16	1.72
NVNT	n40	5230	Ant1	76.17	1.18	1.69
NVNT	ac20	5180	Ant1	87.39	0.59	0.85
NVNT	ac20	5200	Ant1	87.17	0.6	0.84
NVNT	ac20	5240	Ant1	86.77	0.62	0.85
NVNT	ac40	5190	Ant1	76.58	1.16	1.69
NVNT	ac40	5230	Ant1	77.11	1.13	1.69
NVNT	ac80	5210	Ant1	63.61	1.96	3.33

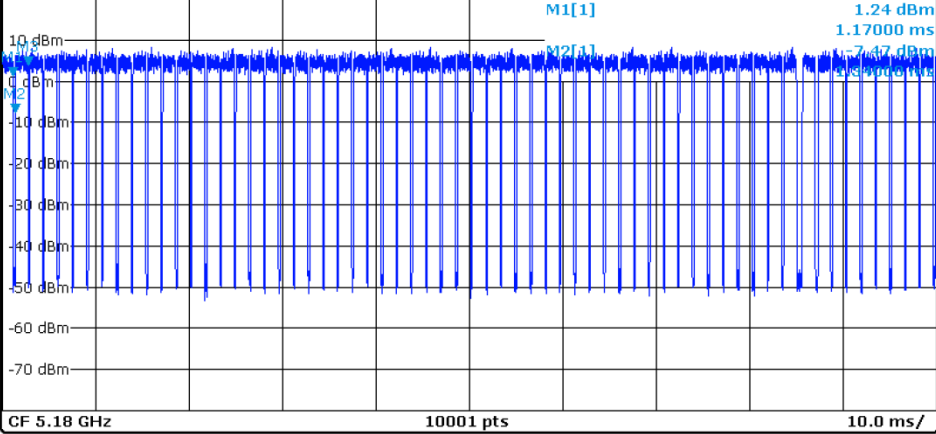
Test Graphs

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

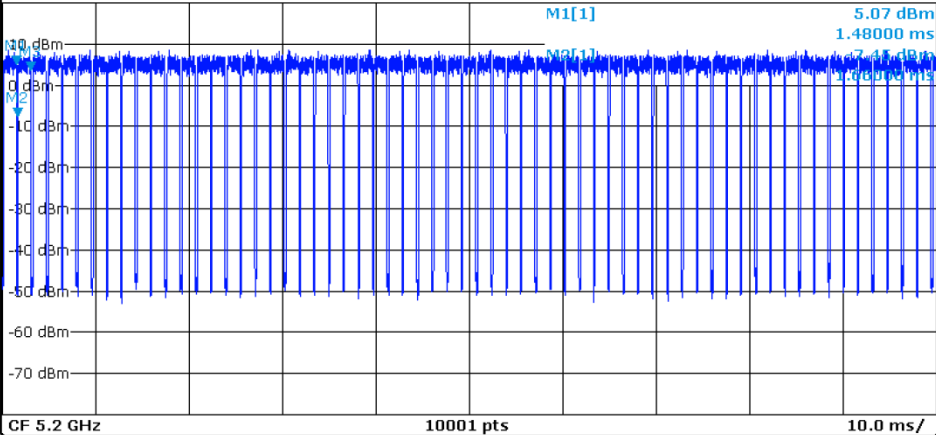
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		1.17 ms	1.24 dBm		
M2	1		1.34 ms	-7.47 dBm		
M3	1		2.73 ms	4.03 dBm		

Duty Cycle NVNT a 5200MHz Ant1

Spectrum

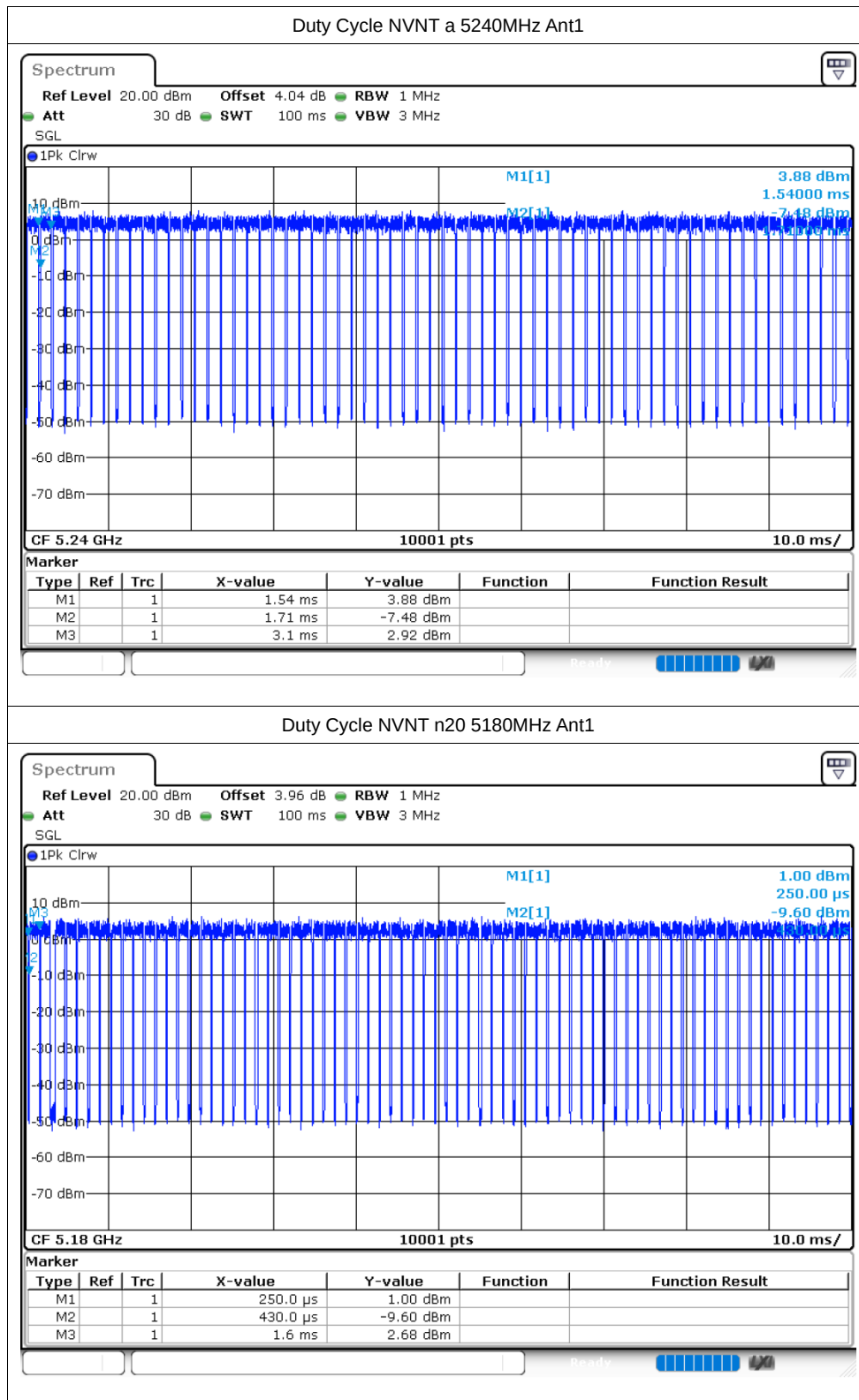
Ref Level 20.00 dBm Offset 4.02 dB RBW 1 MHz
Att 30 dB SWT 100 ms VBW 3 MHz
SGL

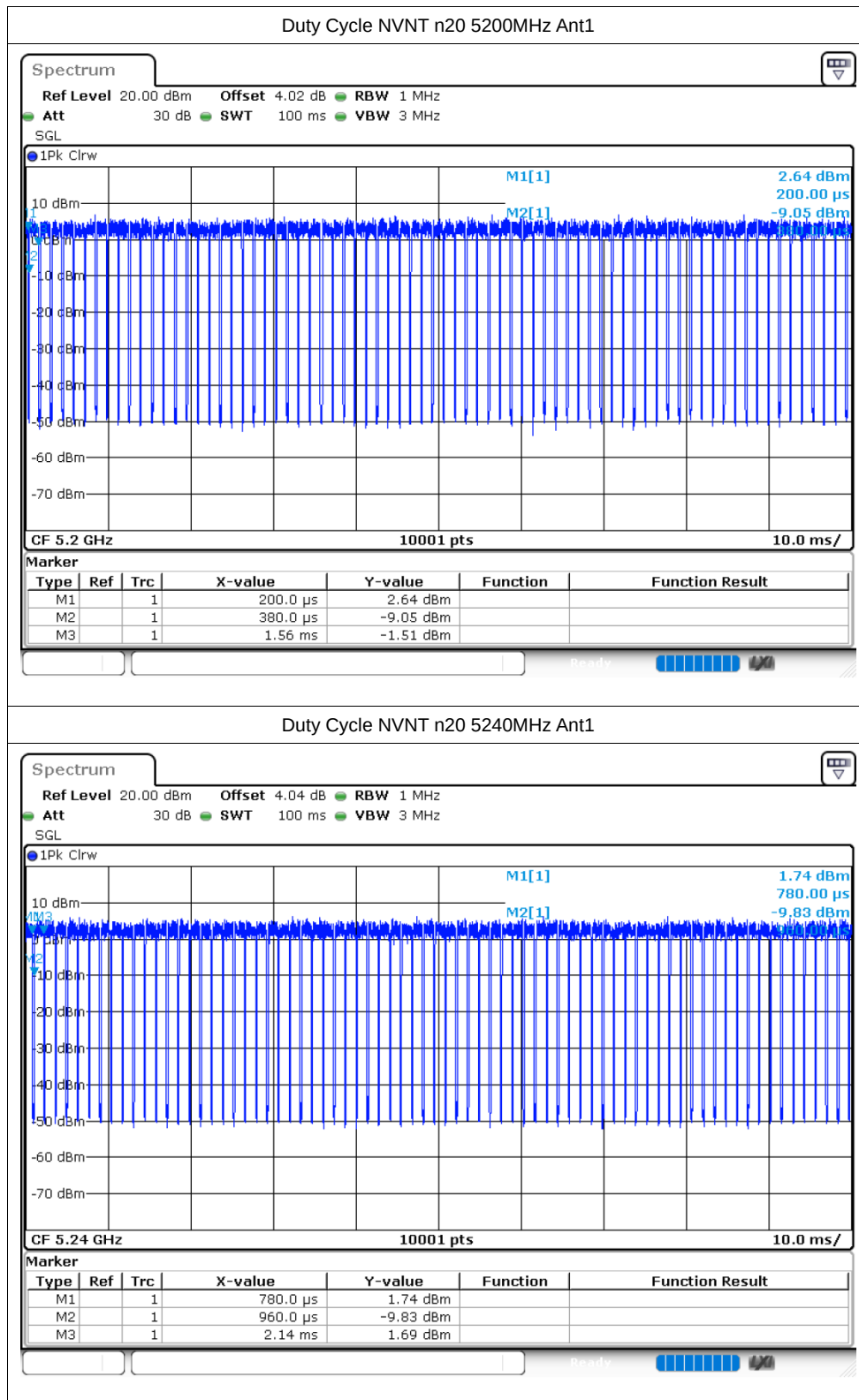
1Pk Clrw

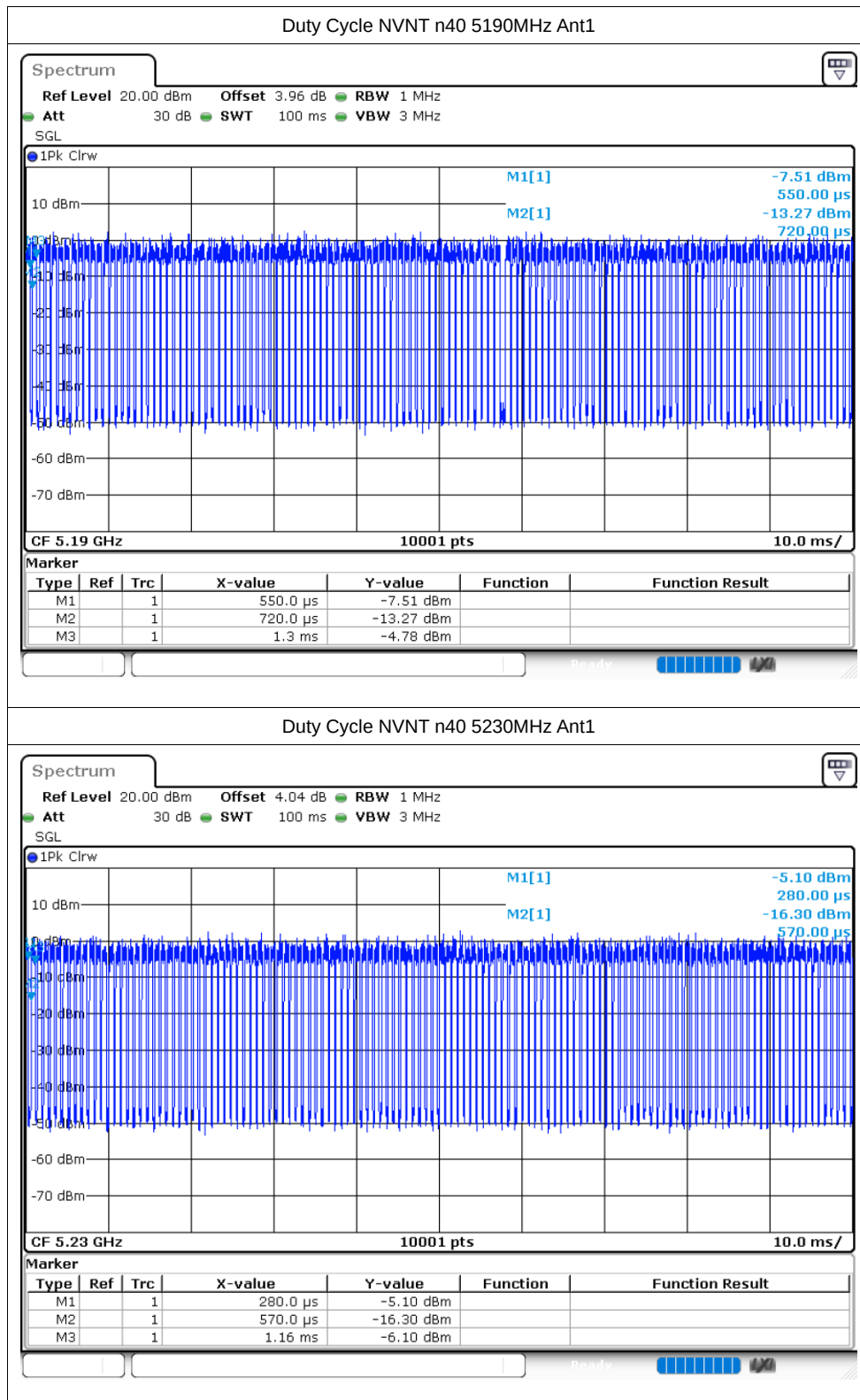


Marker

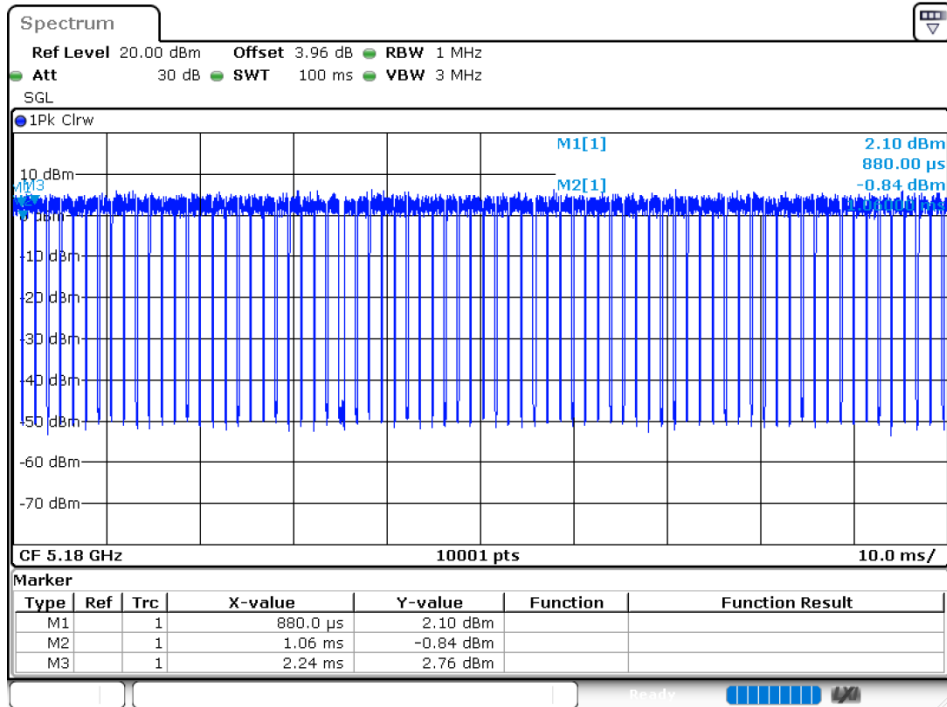
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		1.48 ms	5.07 dBm		
M2	1		1.66 ms	-7.45 dBm		
M3	1		3.06 ms	3.64 dBm		



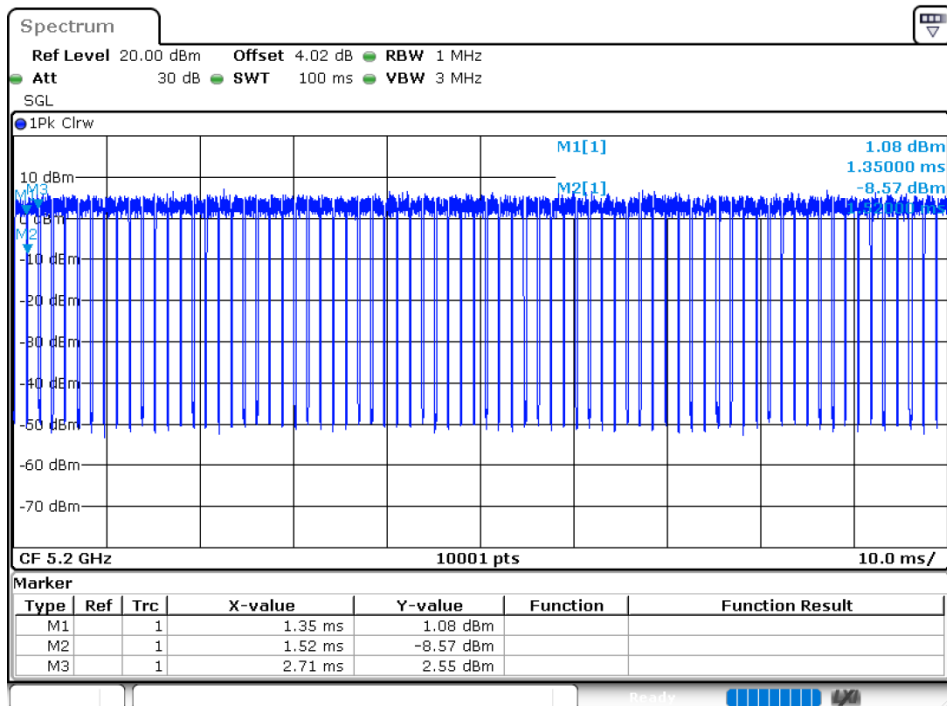


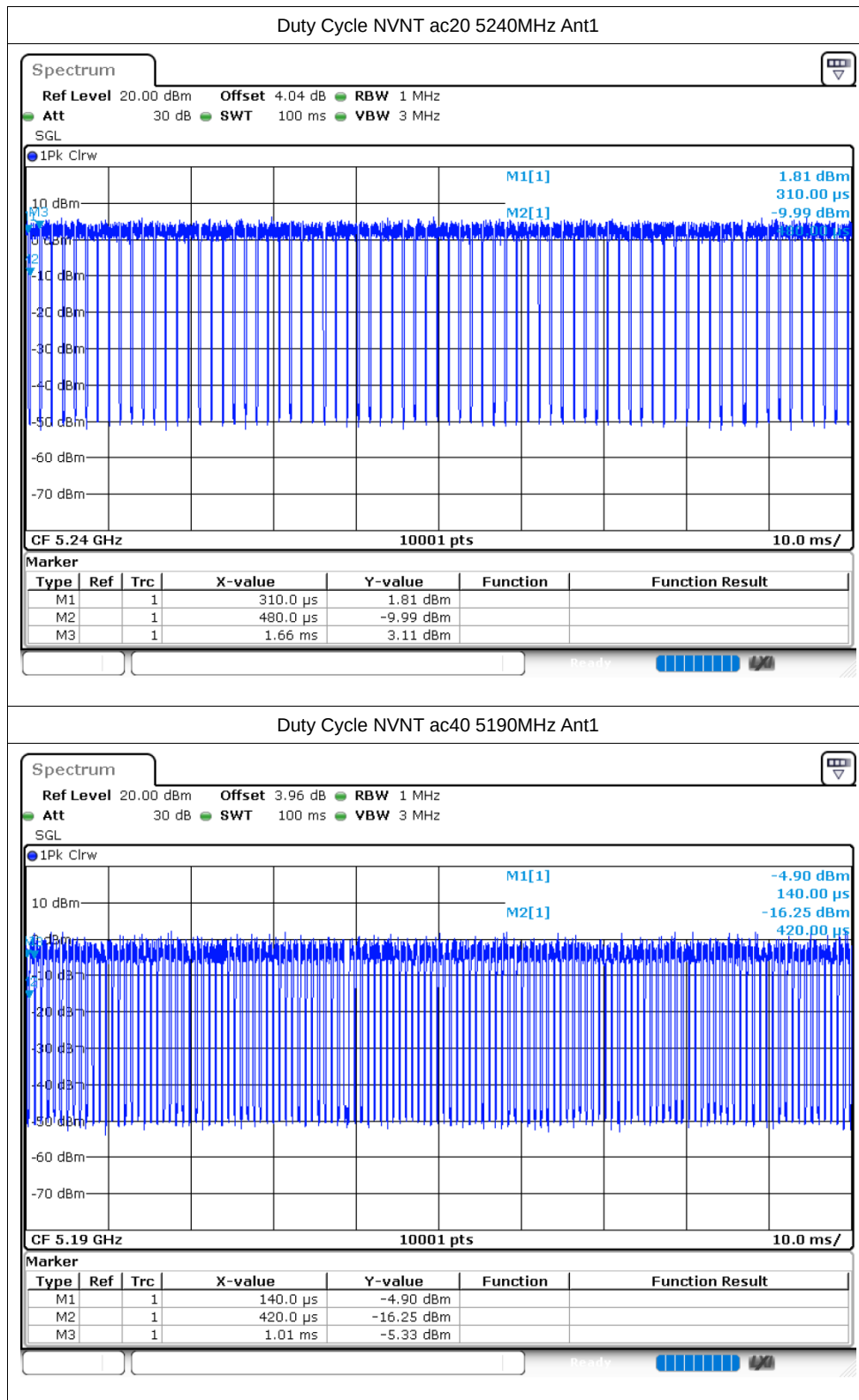


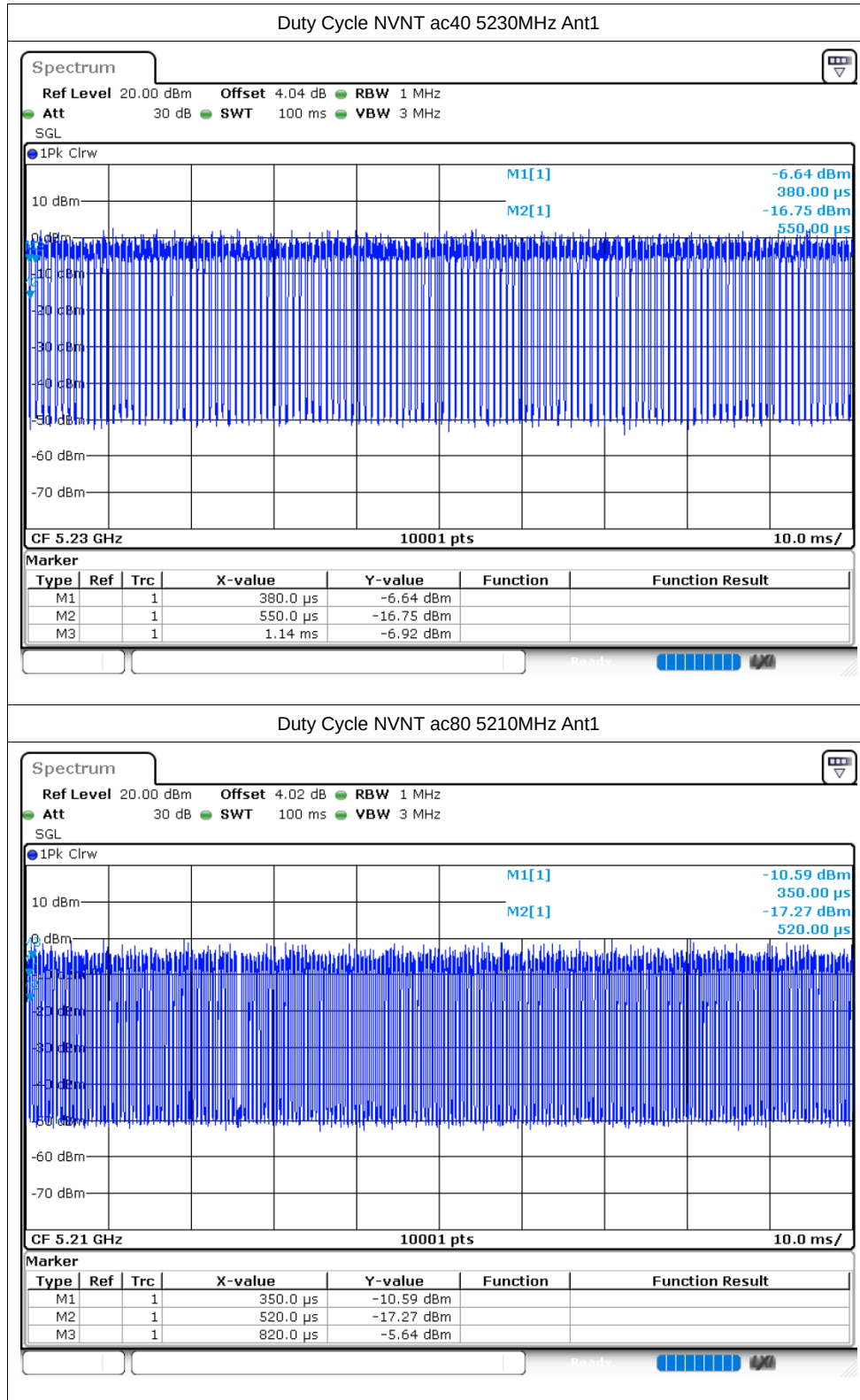
Duty Cycle NVNT ac20 5180MHz Ant1



Duty Cycle NVNT ac20 5200MHz Ant1







Maximum Conducted Output Power

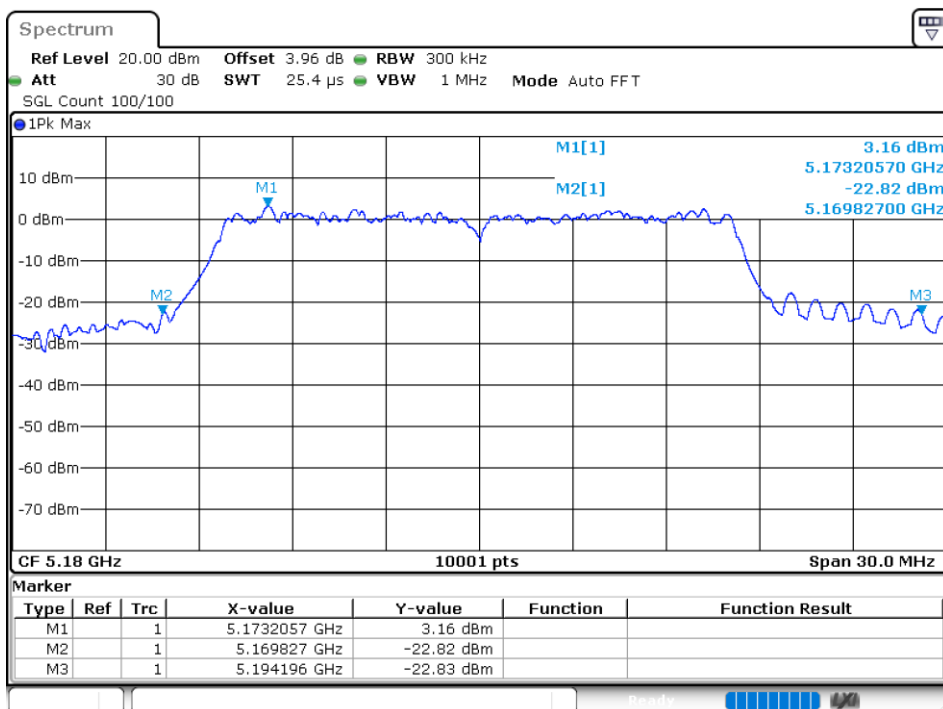
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.96	24	Pass
NVNT	a	5200	Ant1	13.17	24	Pass
NVNT	a	5240	Ant1	13.44	24	Pass
NVNT	n20	5180	Ant1	11.16	24	Pass
NVNT	n20	5200	Ant1	11.41	24	Pass
NVNT	n20	5240	Ant1	11.72	24	Pass
NVNT	n40	5190	Ant1	11.62	24	Pass
NVNT	n40	5230	Ant1	12.04	24	Pass
NVNT	ac20	5180	Ant1	11.22	24	Pass
NVNT	ac20	5200	Ant1	11.26	24	Pass
NVNT	ac20	5240	Ant1	11.55	24	Pass
NVNT	ac40	5190	Ant1	11.43	24	Pass
NVNT	ac40	5230	Ant1	11.87	24	Pass
NVNT	ac80	5210	Ant1	11.24	24	Pass

-26dB Bandwidth

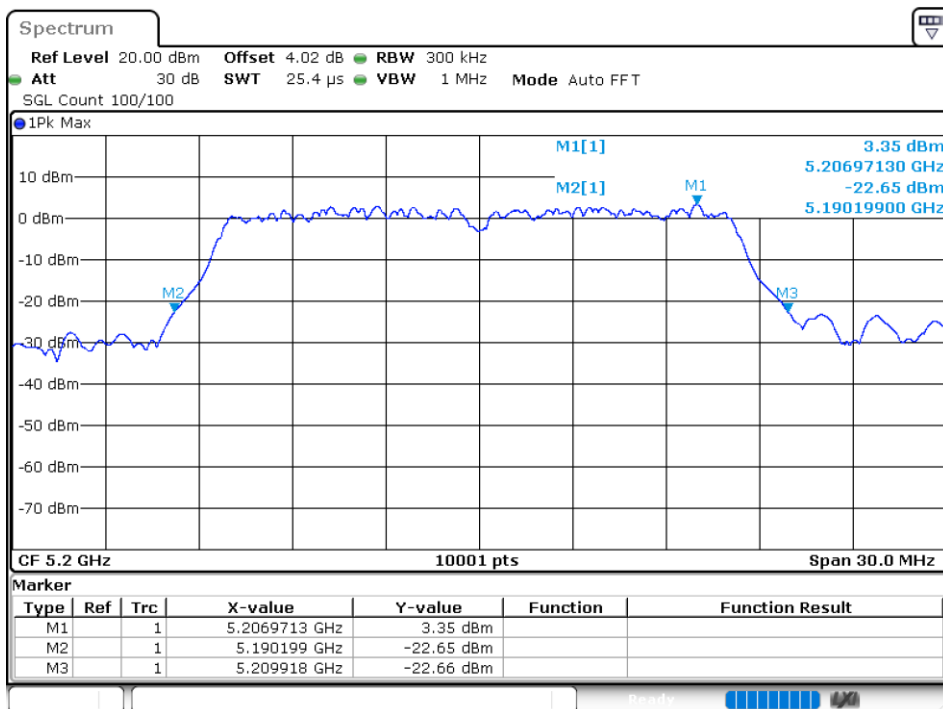
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	24.369	Pass
NVNT	a	5200	Ant1	19.719	Pass
NVNT	a	5240	Ant1	21.249	Pass
NVNT	n20	5180	Ant1	22.197	Pass
NVNT	n20	5200	Ant1	24.78	Pass
NVNT	n20	5240	Ant1	24.96	Pass
NVNT	n40	5190	Ant1	52.176	Pass
NVNT	n40	5230	Ant1	39.012	Pass
NVNT	ac20	5180	Ant1	24.768	Pass
NVNT	ac20	5200	Ant1	20.031	Pass
NVNT	ac20	5240	Ant1	20.496	Pass
NVNT	ac40	5190	Ant1	53.112	Pass
NVNT	ac40	5230	Ant1	50.64	Pass
NVNT	ac80	5210	Ant1	78.288	Pass

Test Graphs

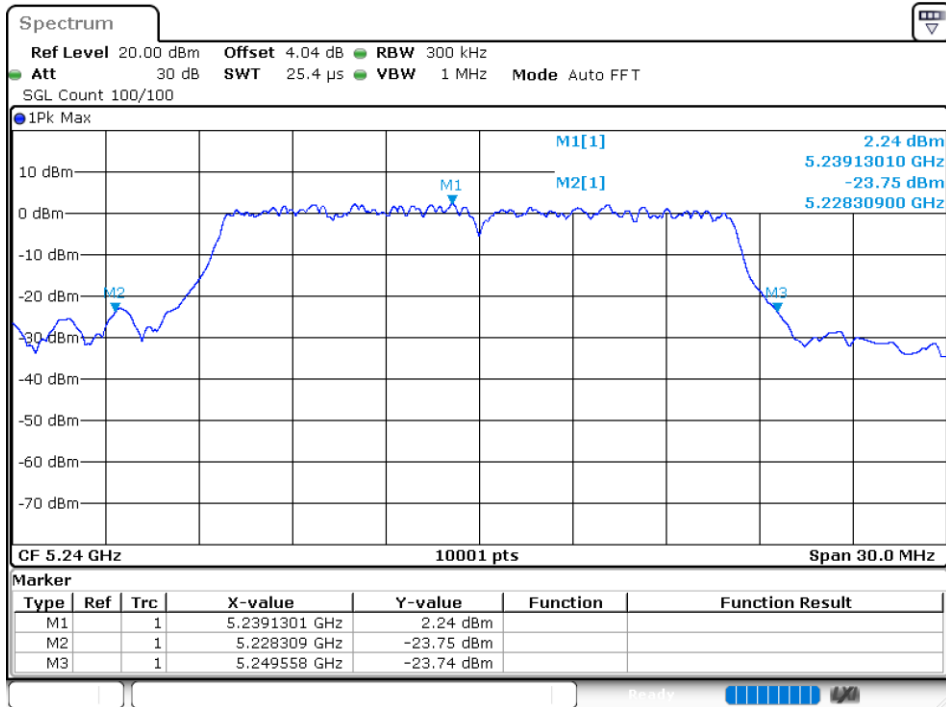
-26dB Bandwidth NVNT a 5180MHz Ant1



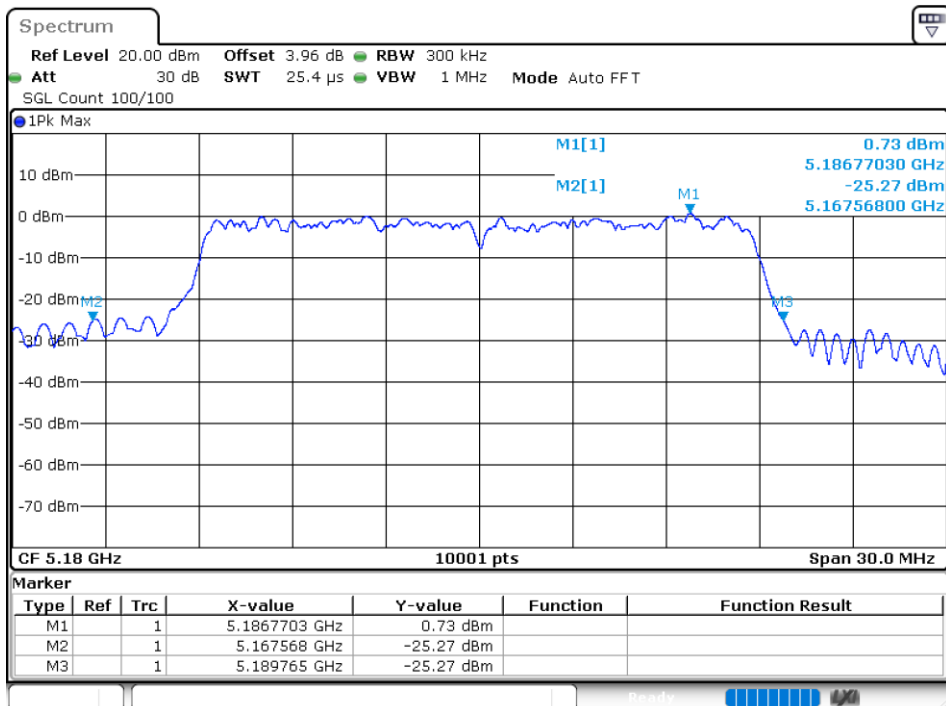
-26dB Bandwidth NVNT a 5200MHz Ant1

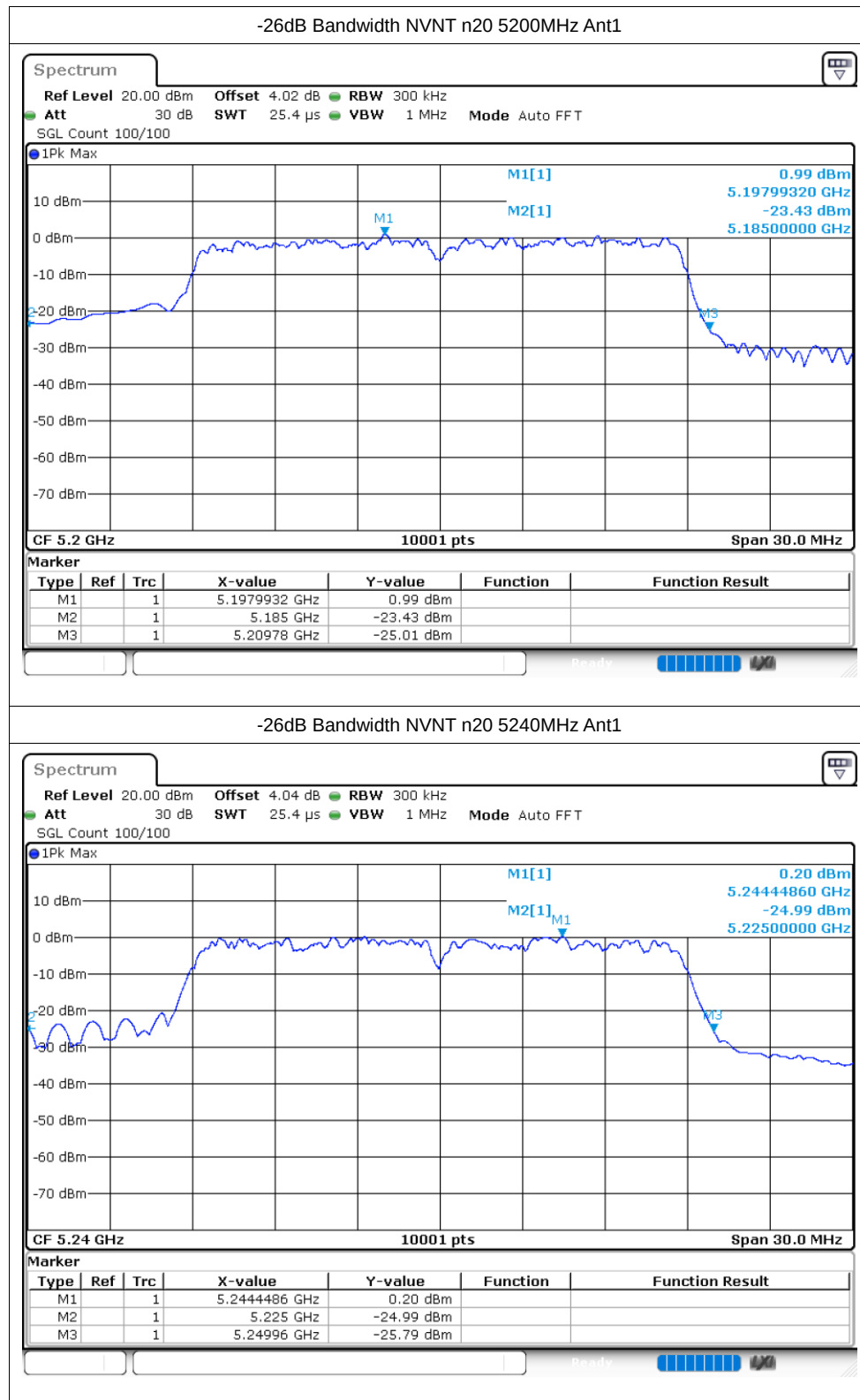


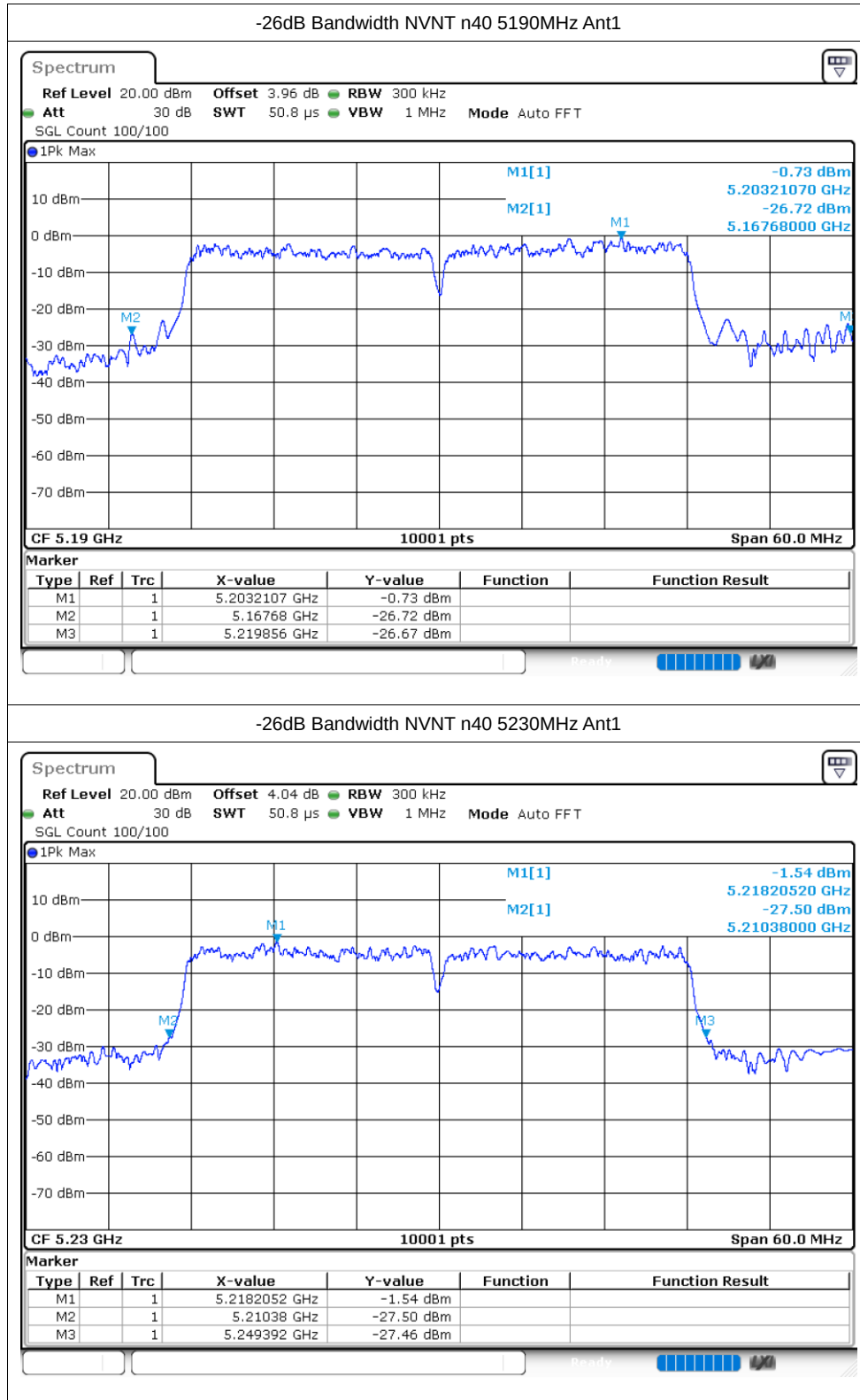
-26dB Bandwidth NVNT a 5240MHz Ant1

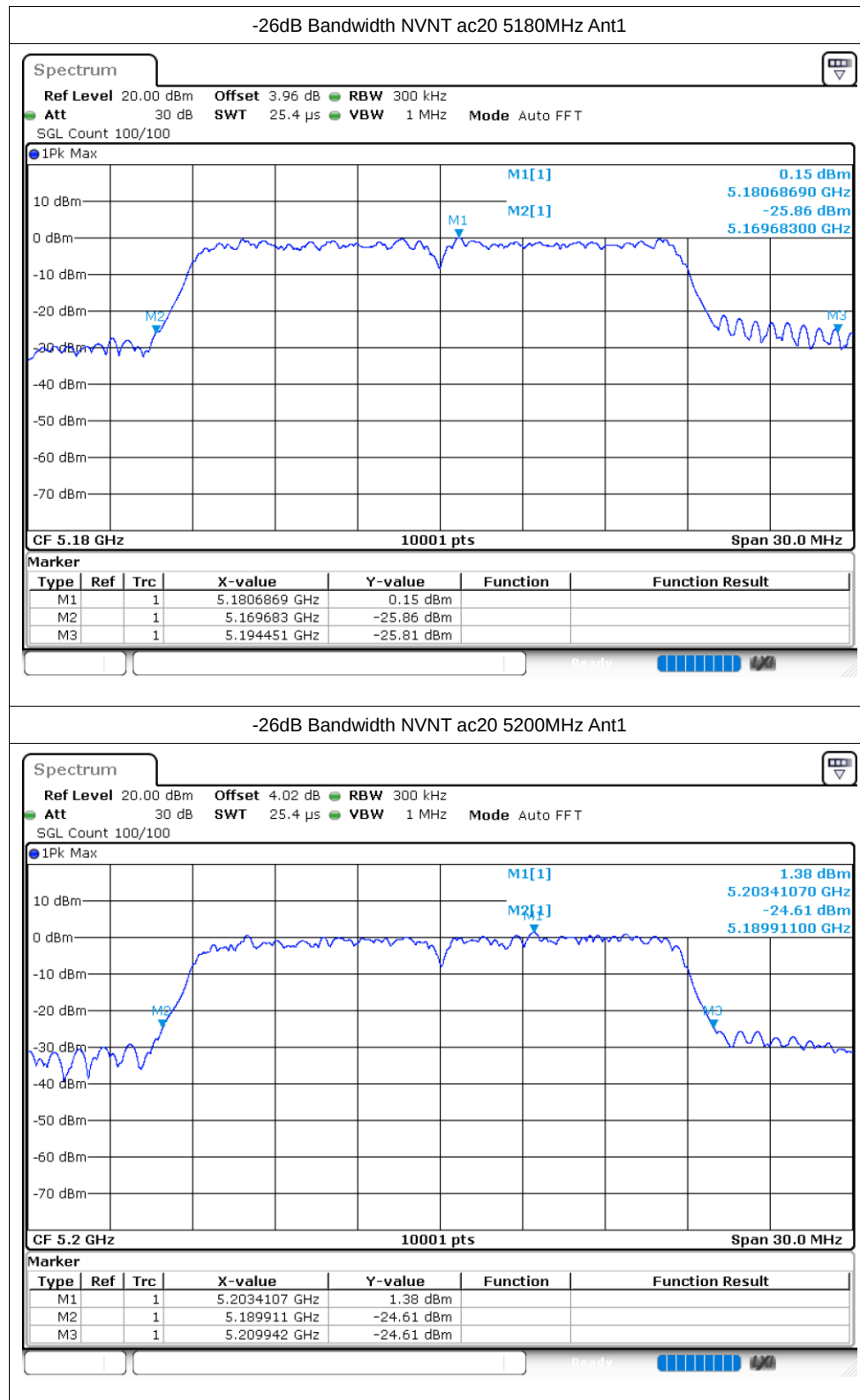


-26dB Bandwidth NVNT n20 5180MHz Ant1

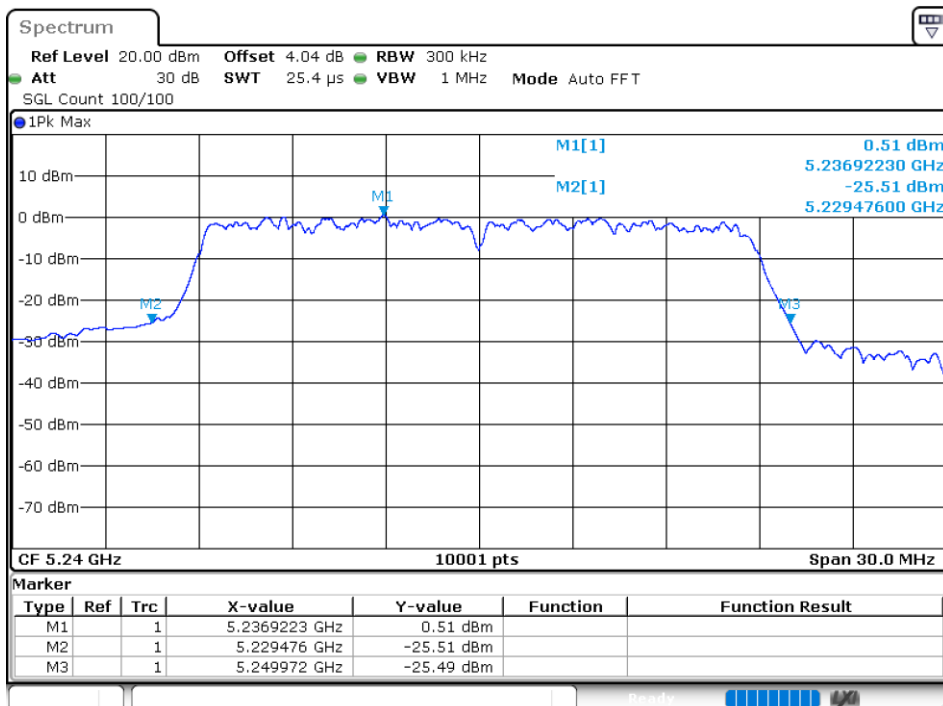




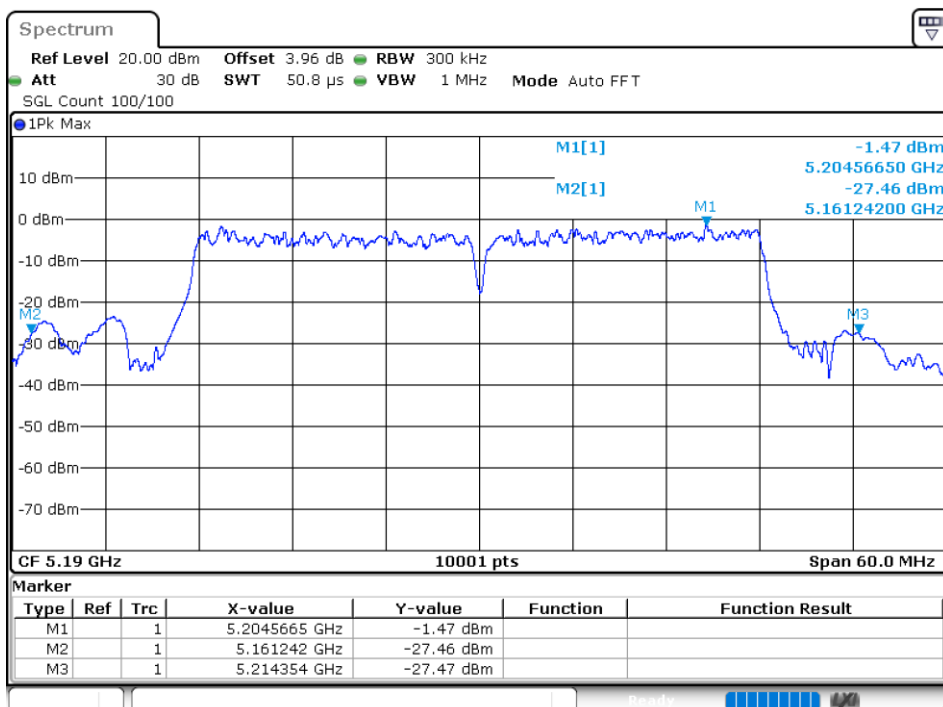




-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1

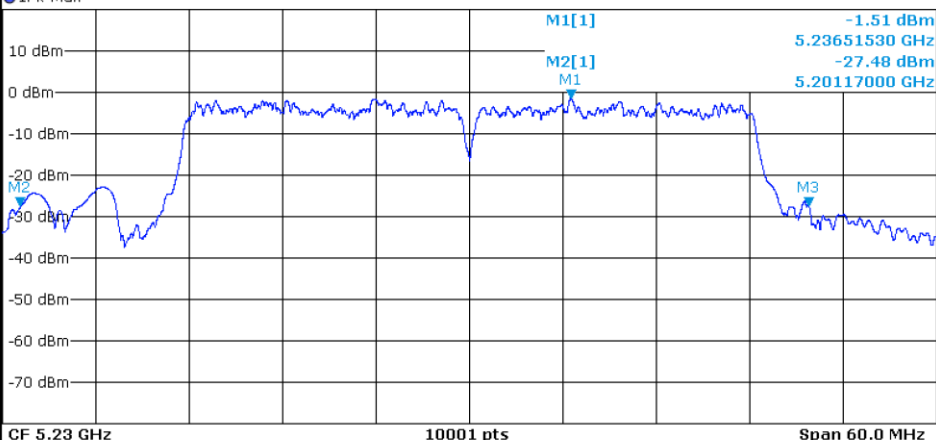


-26dB Bandwidth NVNT ac40 5230MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.04 dB RBW 300 kHz
Att 30 dB SWT 50.8 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

1Pk Max



Marker

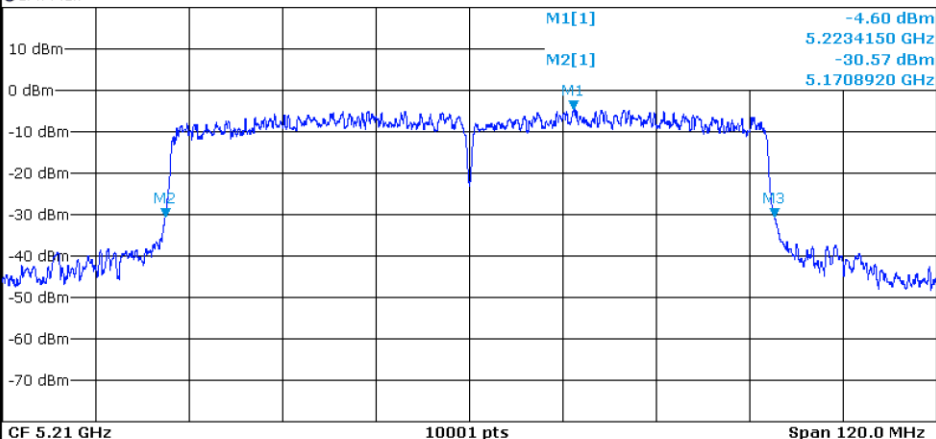
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1	1	5.2365153 GHz	-1.51 dBm		
M2	1	1	5.20117 GHz	-27.48 dBm		
M3	1	1	5.25181 GHz	-27.50 dBm		

-26dB Bandwidth NVNT ac80 5210MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.02 dB RBW 300 kHz
Att 30 dB SWT 101.6 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

1Pk Max



Marker

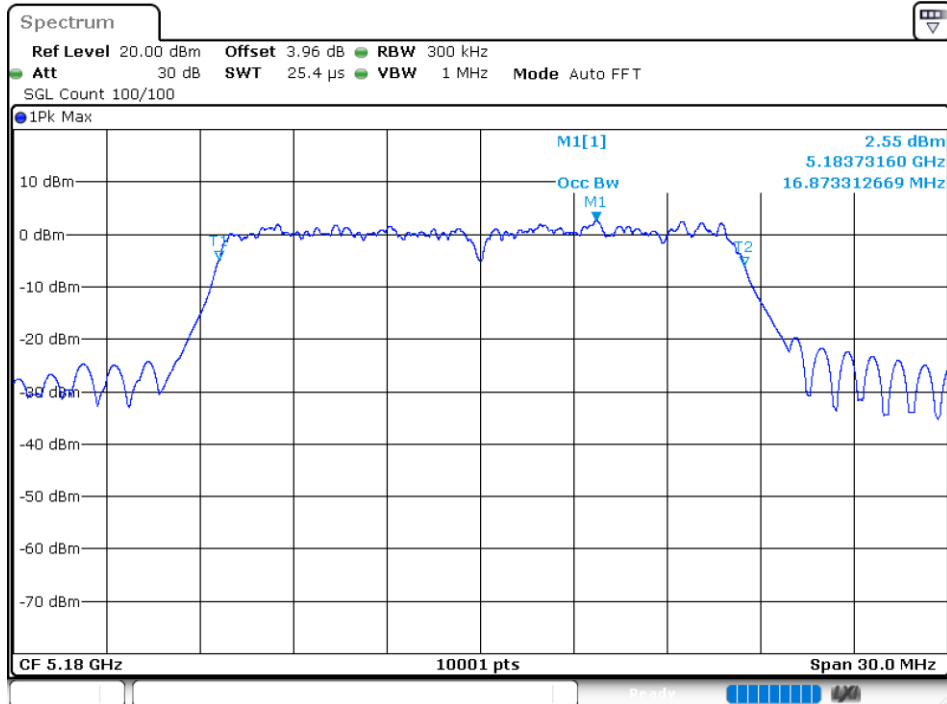
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1	1	5.223415 GHz	-4.60 dBm		
M2	1	1	5.170892 GHz	-30.57 dBm		
M3	1	1	5.24918 GHz	-30.58 dBm		

Occupied Channel Bandwidth

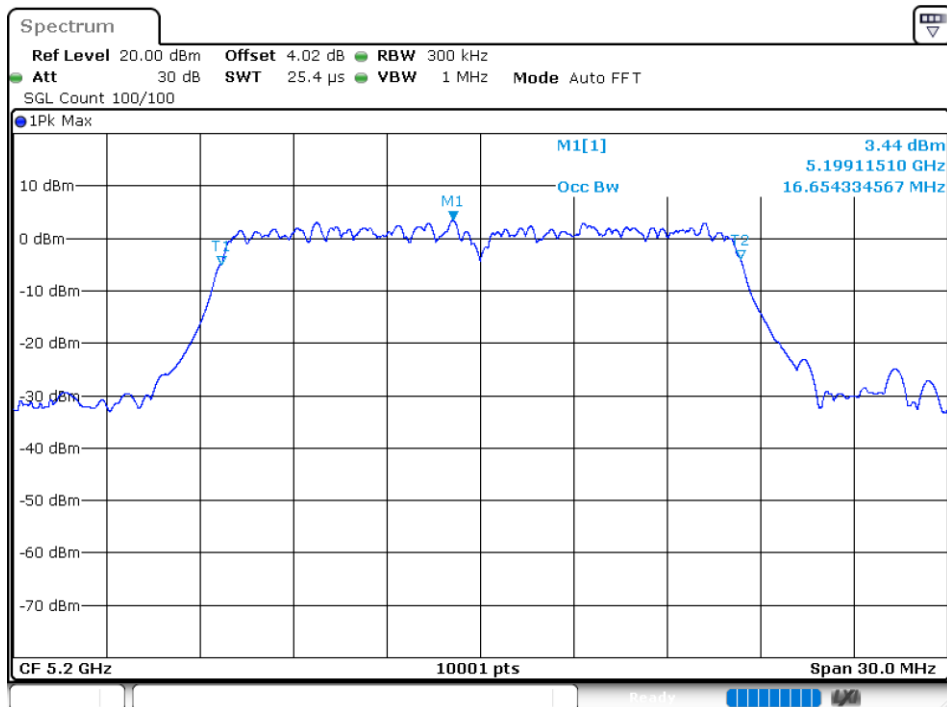
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.873
NVNT	a	5200	Ant1	16.654
NVNT	a	5240	Ant1	16.672
NVNT	n20	5180	Ant1	17.656
NVNT	n20	5200	Ant1	17.62
NVNT	n20	5240	Ant1	17.665
NVNT	n40	5190	Ant1	36.242
NVNT	n40	5230	Ant1	36.134
NVNT	ac20	5180	Ant1	17.848
NVNT	ac20	5200	Ant1	17.704
NVNT	ac20	5240	Ant1	17.608
NVNT	ac40	5190	Ant1	36.284
NVNT	ac40	5230	Ant1	36.128
NVNT	ac80	5210	Ant1	75.304

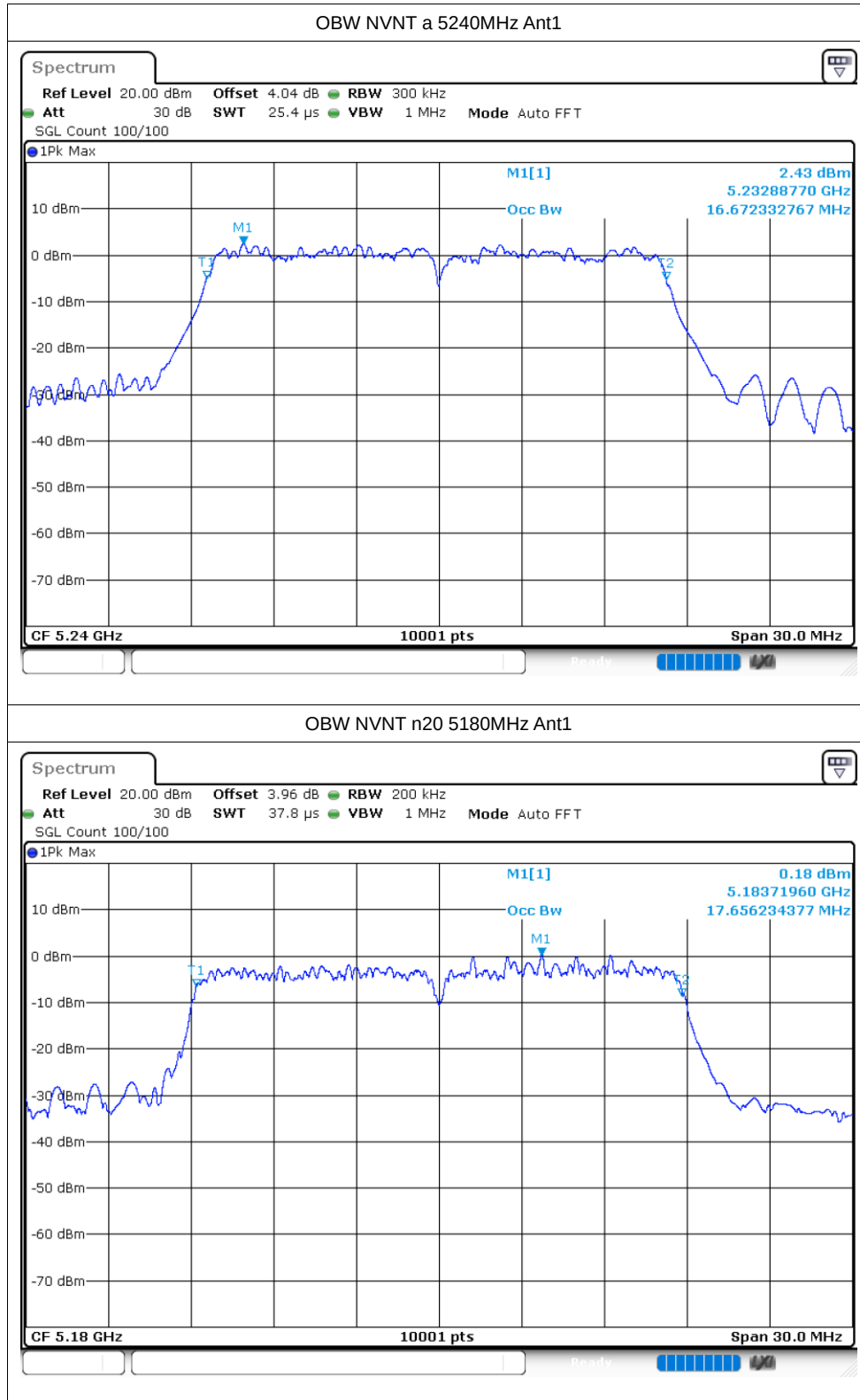
Test Graphs

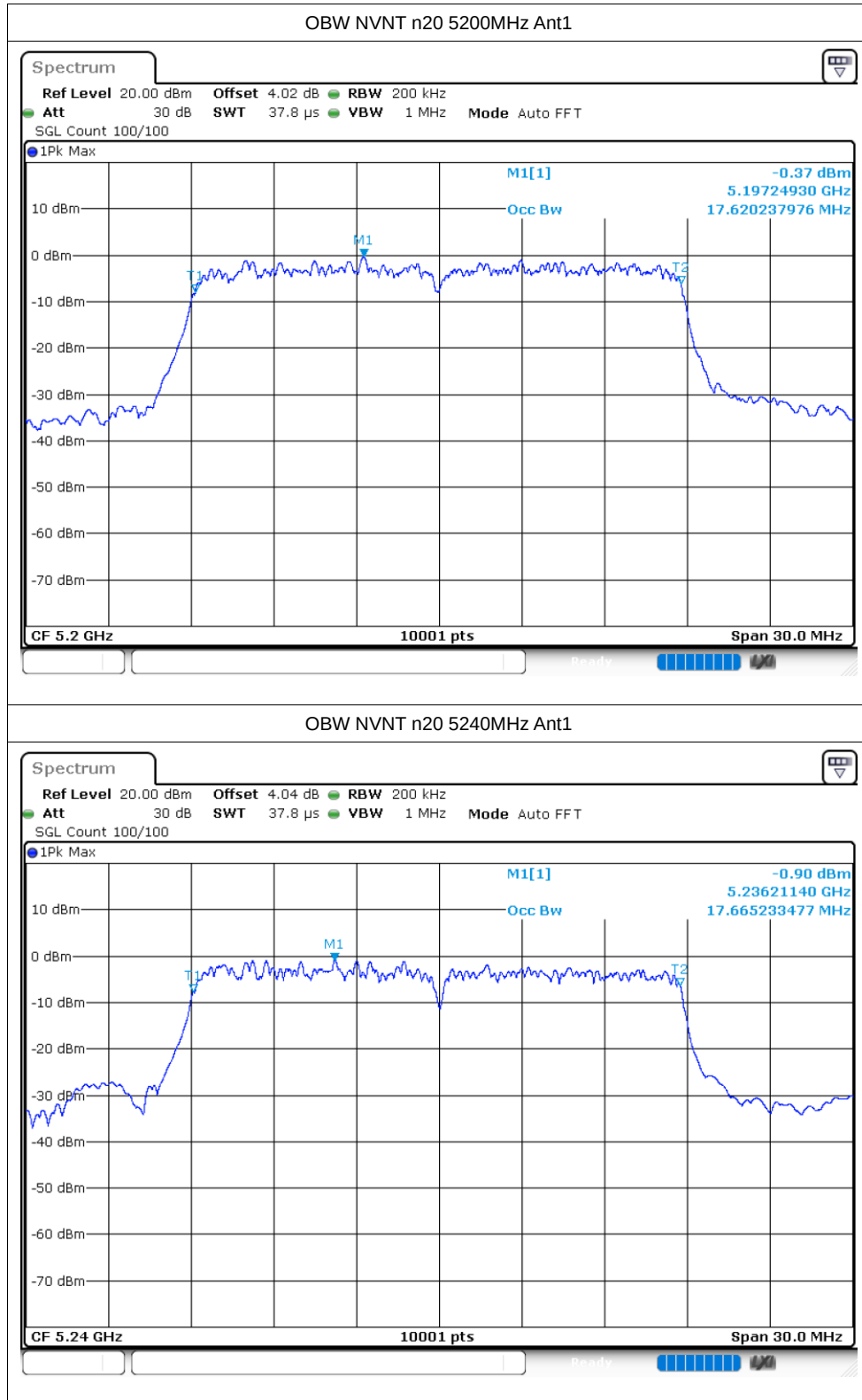
OBW NVNT a 5180MHz Ant1

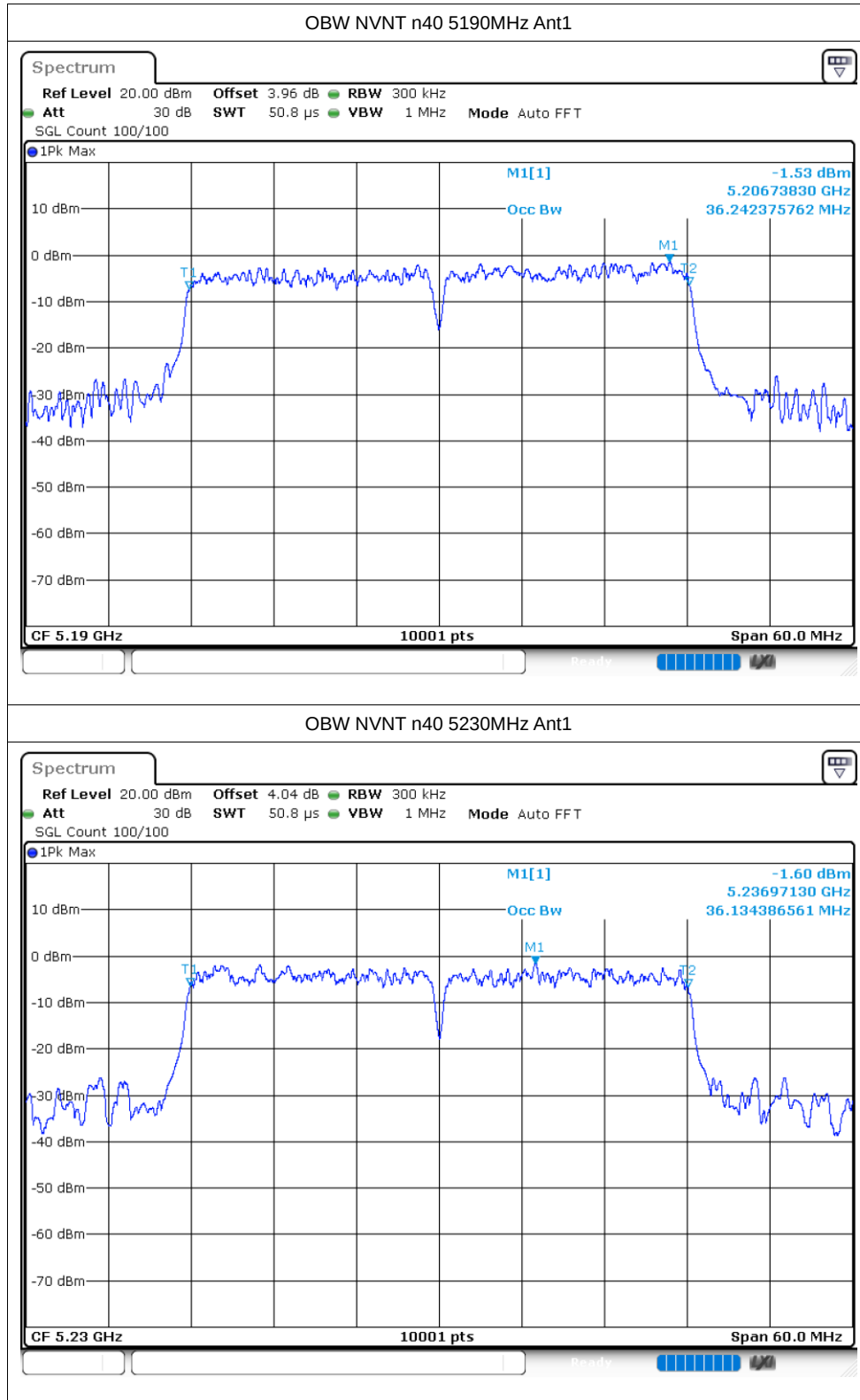


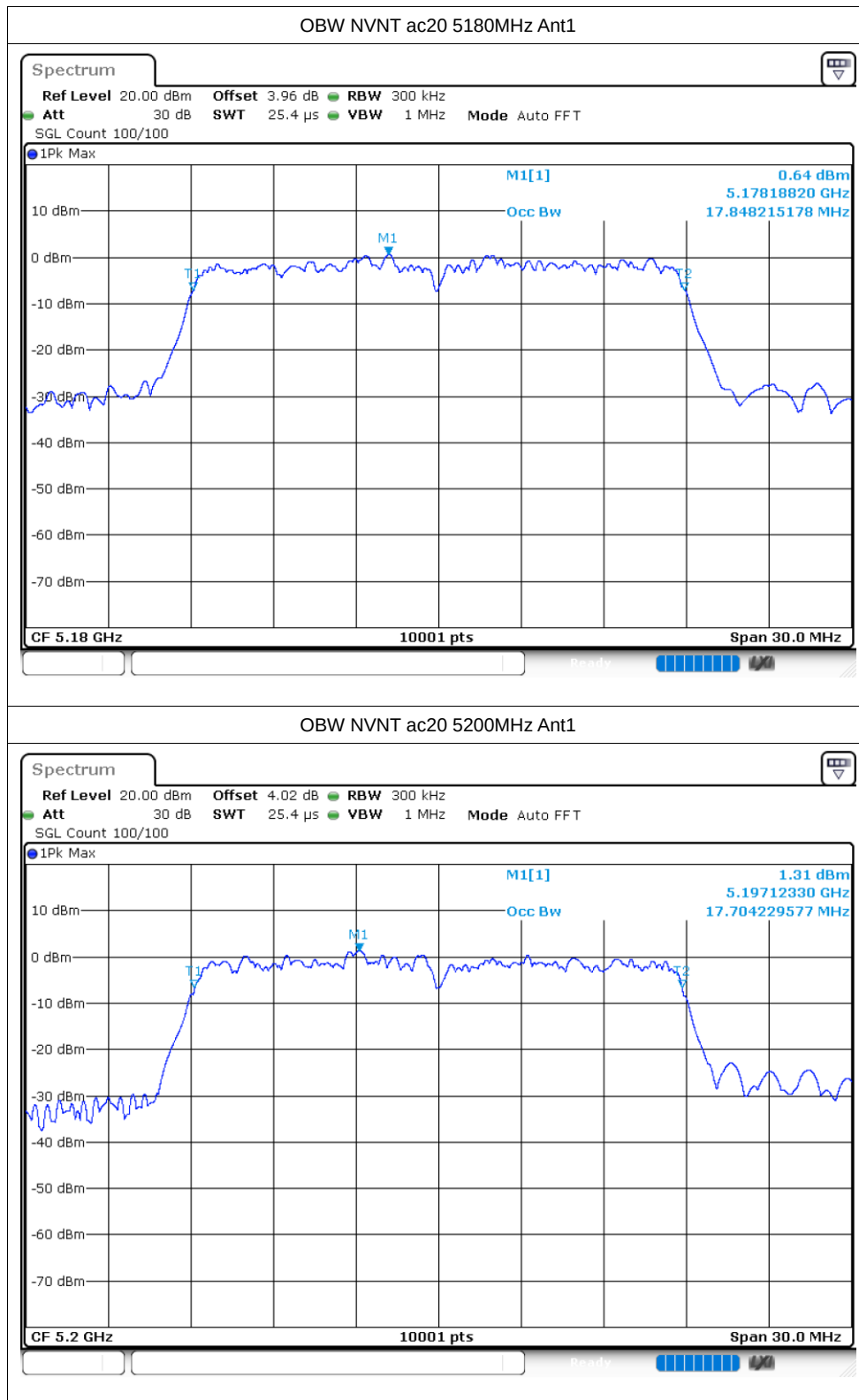
OBW NVNT a 5200MHz Ant1

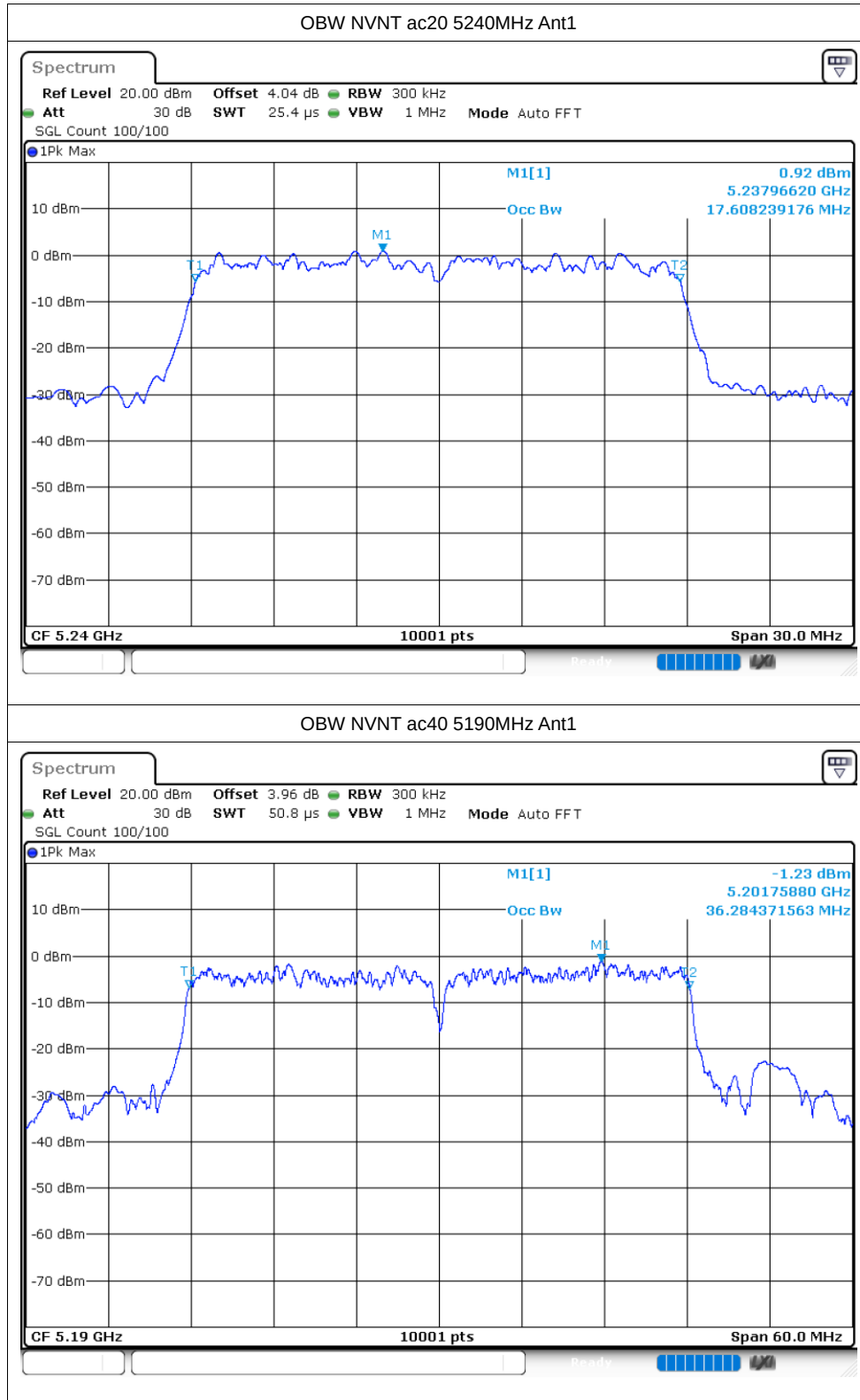


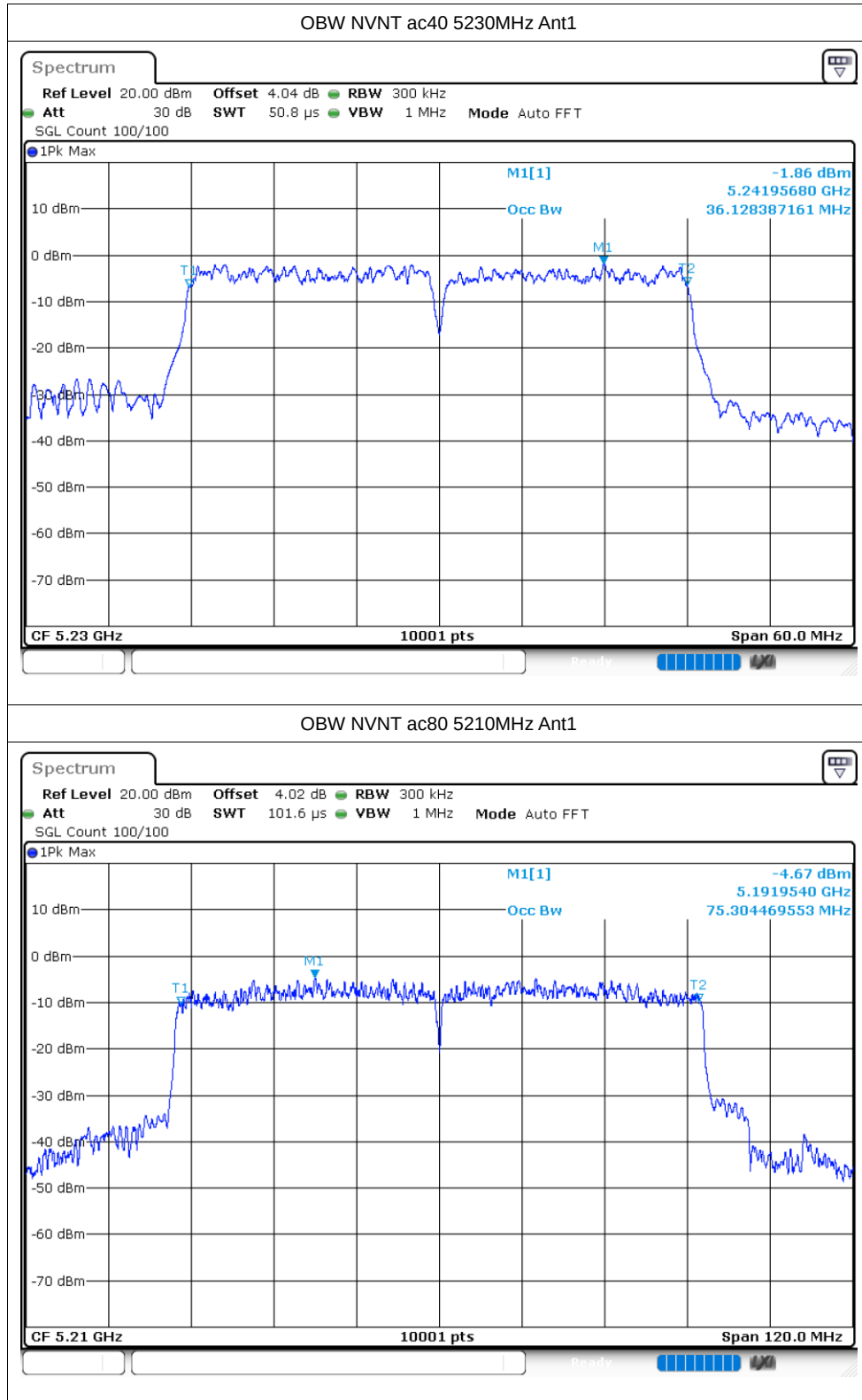










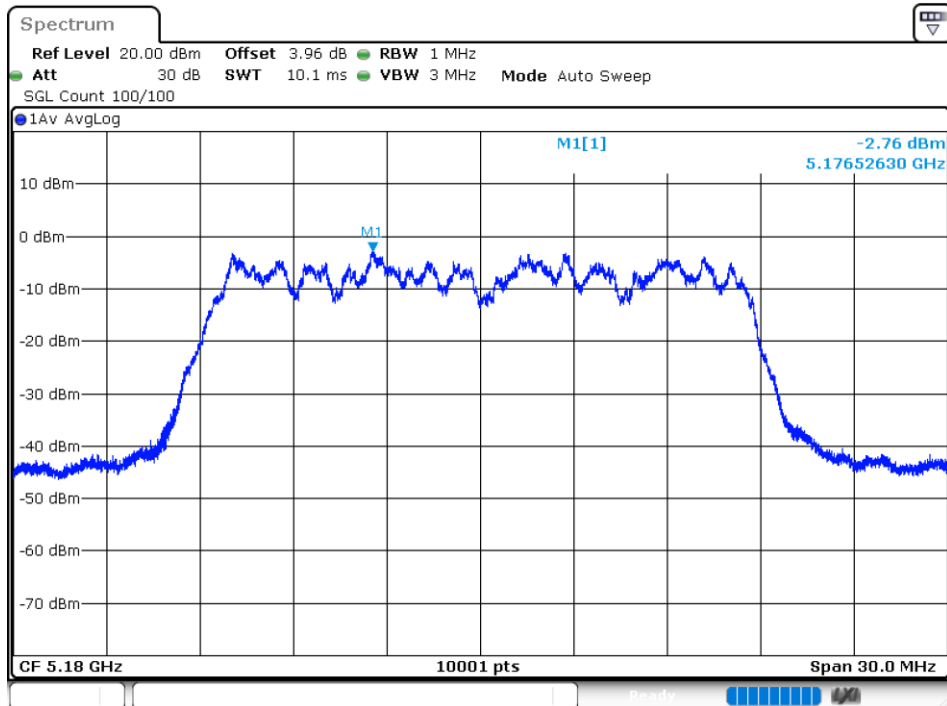


Maximum Power Spectral Density Level

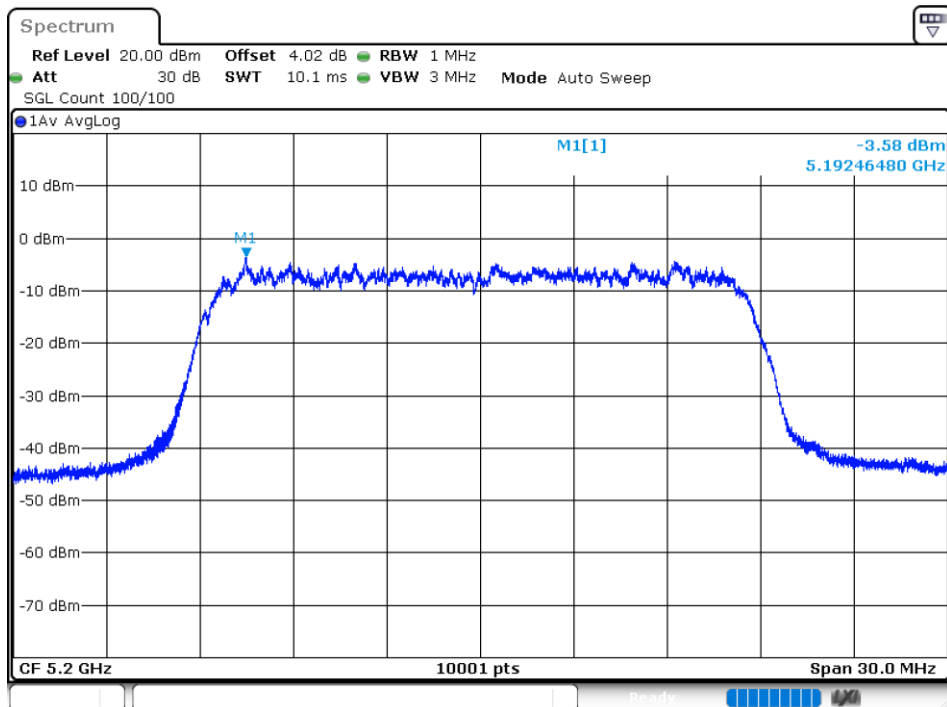
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-2.76	0.54	-2.22	11	Pass
NVNT	a	5200	Ant1	-3.58	0.51	-3.07	11	Pass
NVNT	a	5240	Ant1	-2.41	0.52	-1.89	11	Pass
NVNT	n20	5180	Ant1	-5.47	0.62	-4.85	11	Pass
NVNT	n20	5200	Ant1	-5.53	0.59	-4.94	11	Pass
NVNT	n20	5240	Ant1	-6.84	0.58	-6.26	11	Pass
NVNT	n40	5190	Ant1	-12.57	1.16	-11.41	11	Pass
NVNT	n40	5230	Ant1	-12.07	1.18	-10.89	11	Pass
NVNT	ac20	5180	Ant1	-4.02	0.59	-3.43	11	Pass
NVNT	ac20	5200	Ant1	-4.94	0.6	-4.34	11	Pass
NVNT	ac20	5240	Ant1	-5.21	0.62	-4.59	11	Pass
NVNT	ac40	5190	Ant1	-11.24	1.16	-10.08	11	Pass
NVNT	ac40	5230	Ant1	-13.13	1.13	-12	11	Pass
NVNT	ac80	5210	Ant1	-18.36	1.96	-16.4	11	Pass

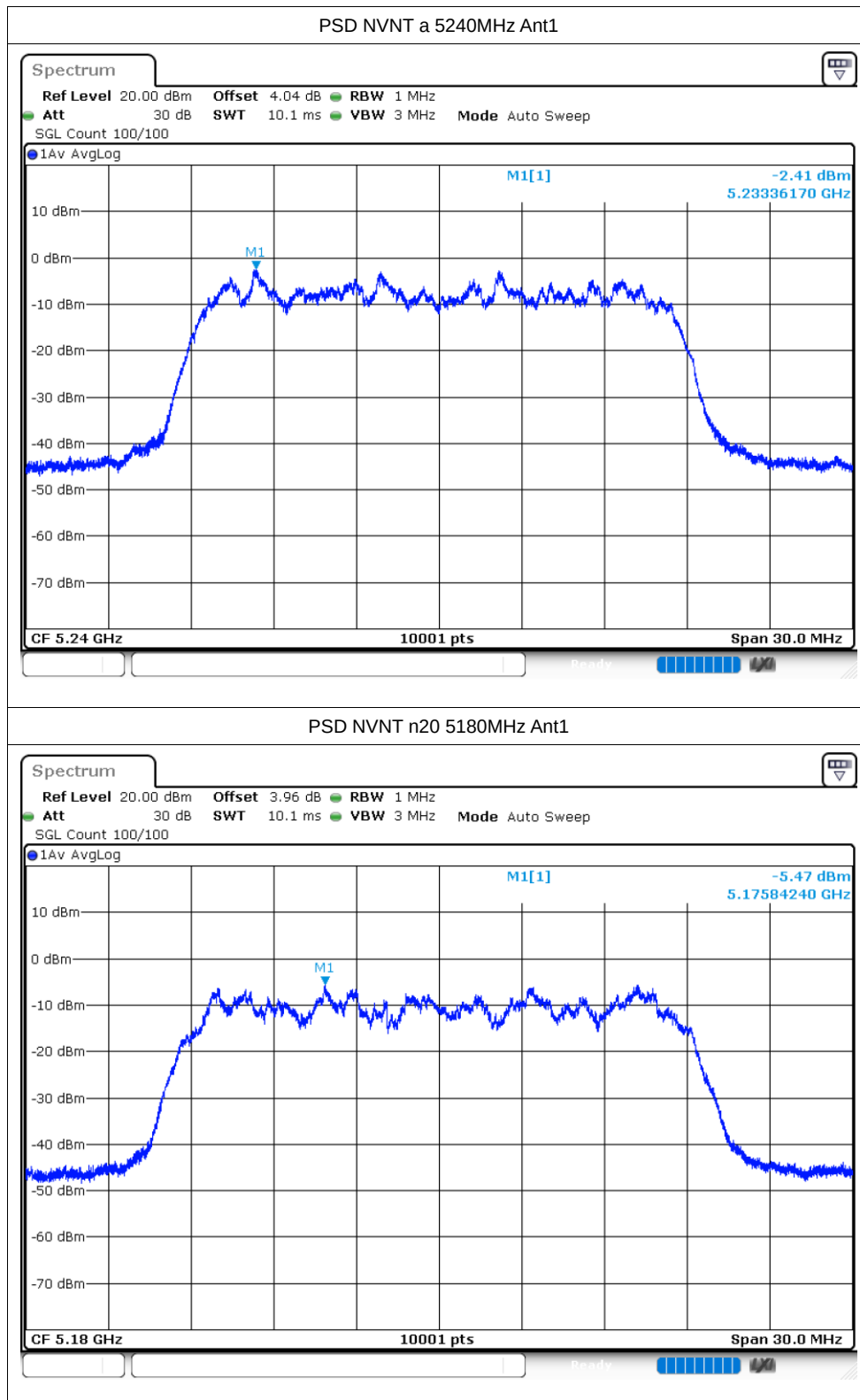
Test Graphs

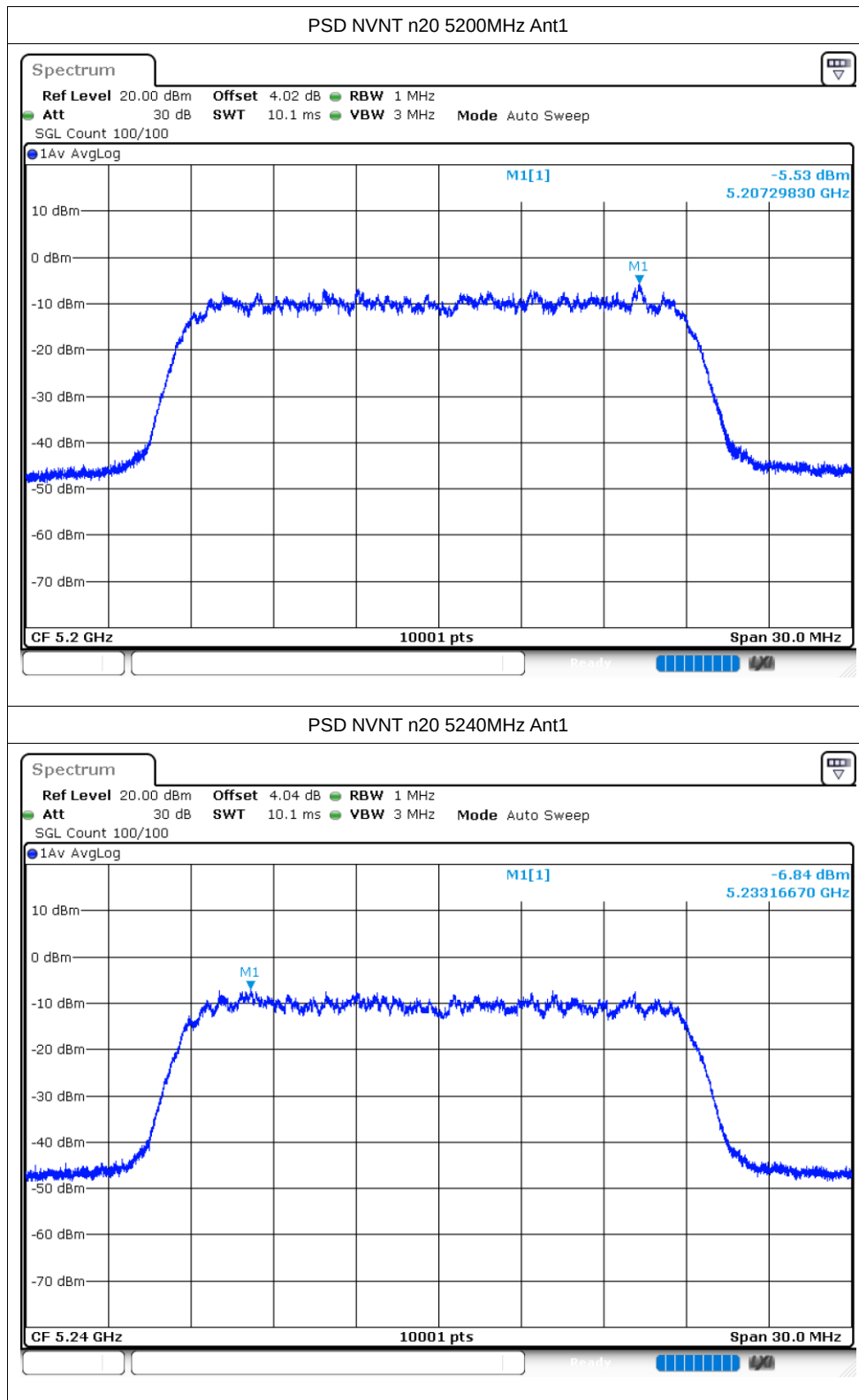
PSD NVNT a 5180MHz Ant1

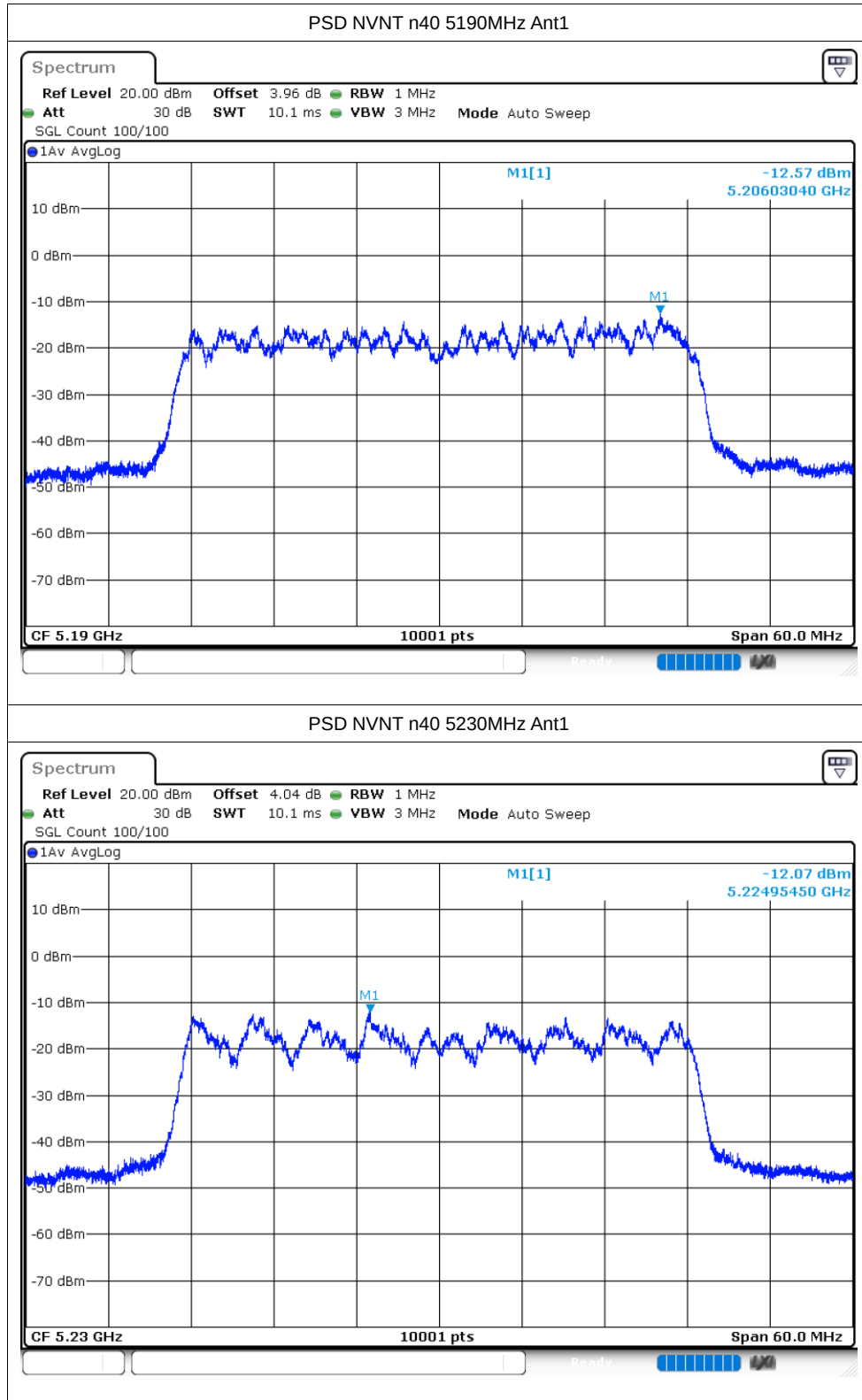


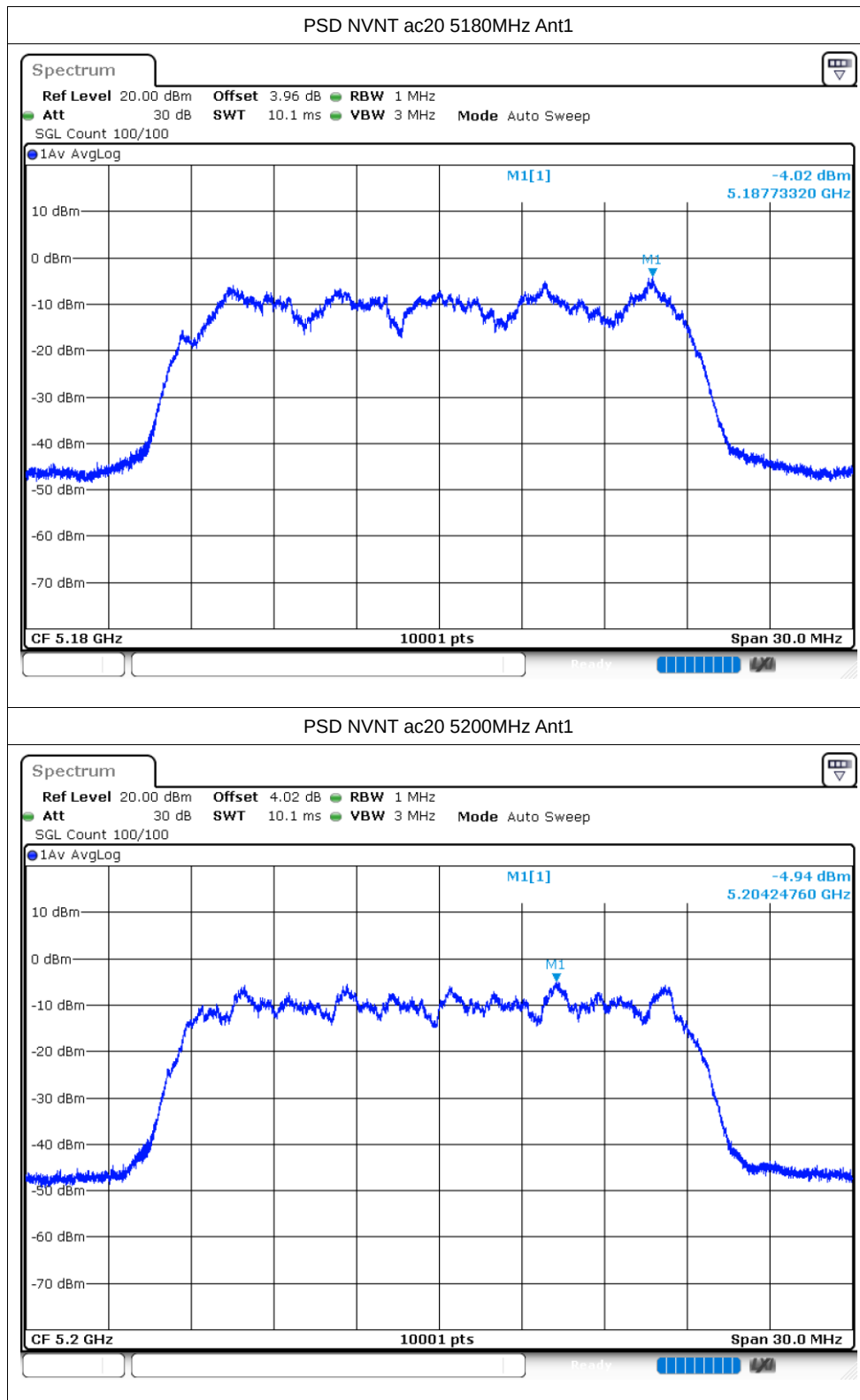
PSD NVNT a 5200MHz Ant1

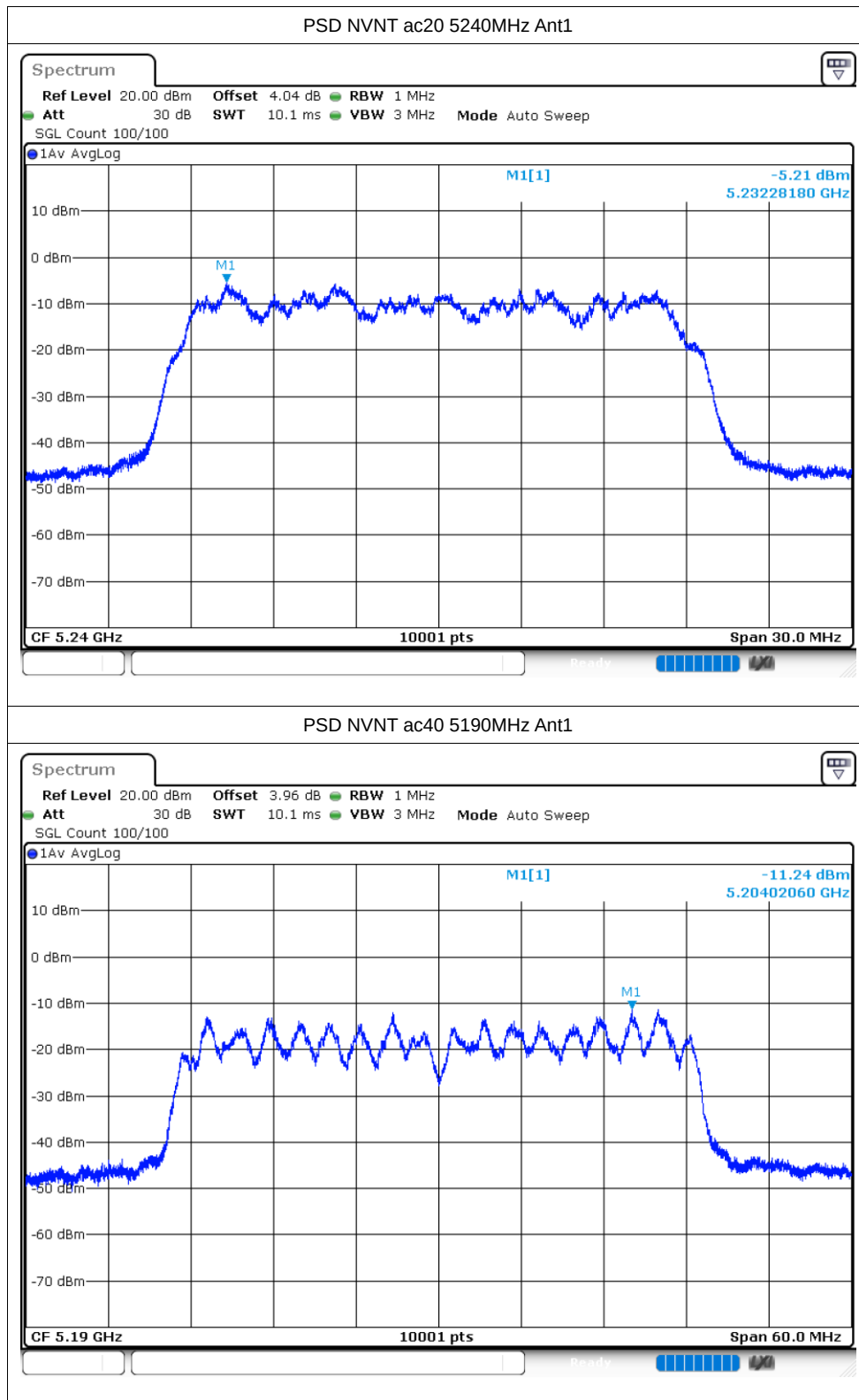


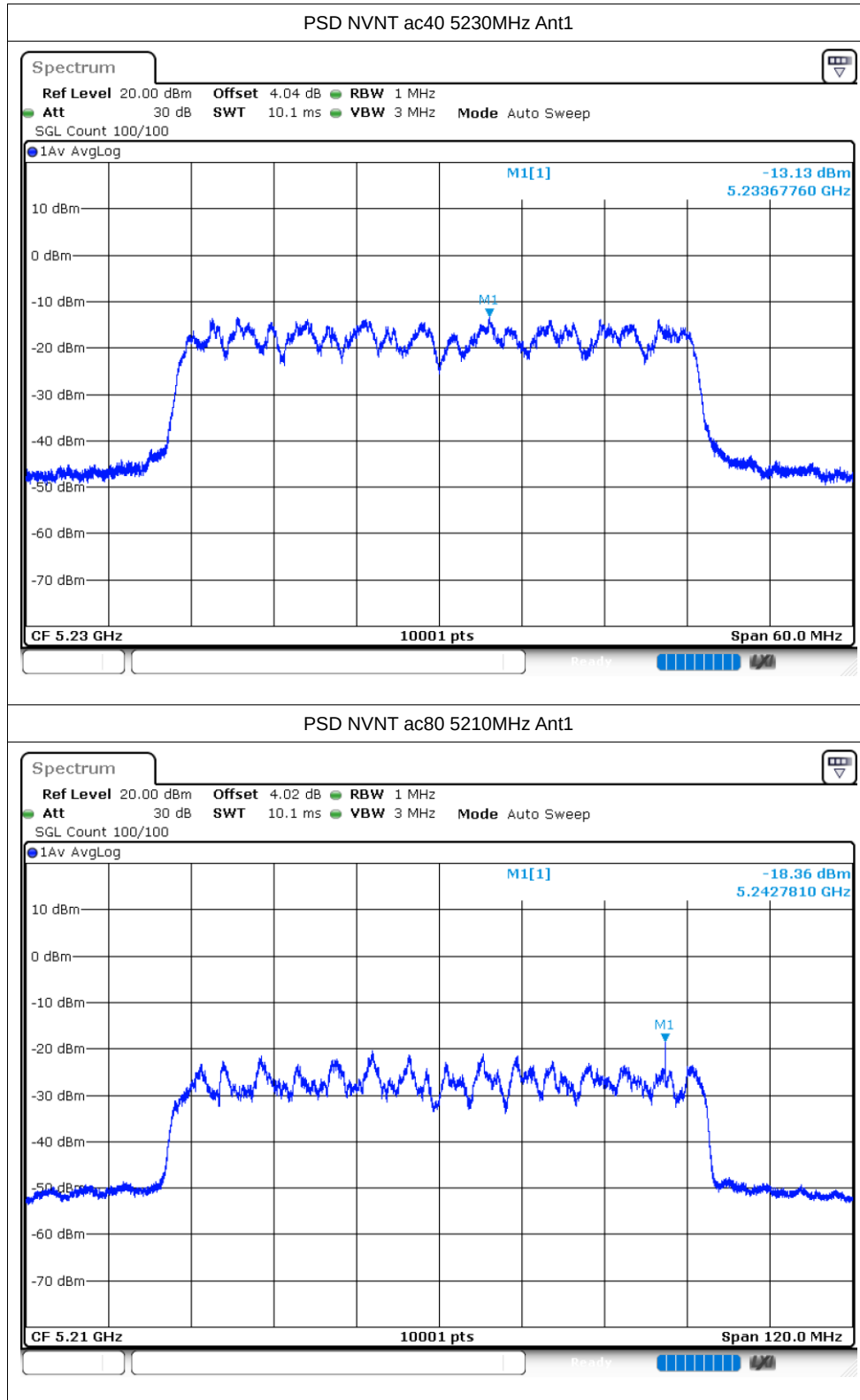










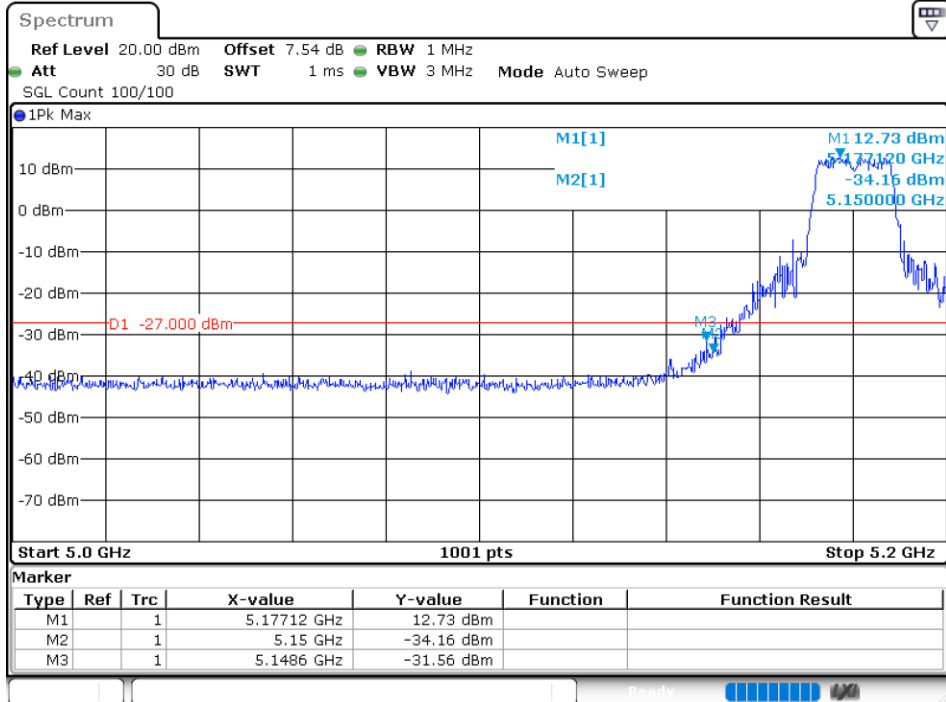


Band Edge

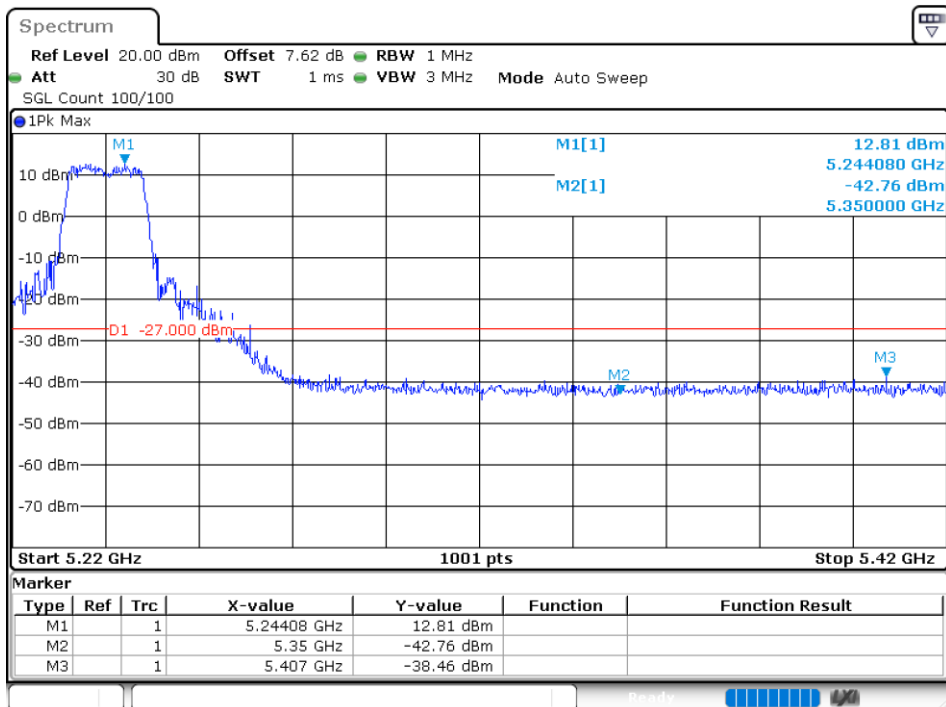
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-31.56	-27	Pass
NVNT	a	5240	Ant1	-38.46	-27	Pass
NVNT	n20	5180	Ant1	-27.92	-27	Pass
NVNT	n20	5240	Ant1	-38.76	-27	Pass
NVNT	n40	5190	Ant1	-27.43	-27	Pass
NVNT	n40	5230	Ant1	-39.65	-27	Pass
NVNT	ac20	5180	Ant1	-29.62	-27	Pass
NVNT	ac20	5240	Ant1	-39.36	-27	Pass
NVNT	ac40	5190	Ant1	-27.02	-27	Pass
NVNT	ac40	5230	Ant1	-39.31	-27	Pass
NVNT	ac80	5210	Ant1	-33.16	-27	Pass
NVNT	ac80	5210	Ant1	-38.91	-27	Pass

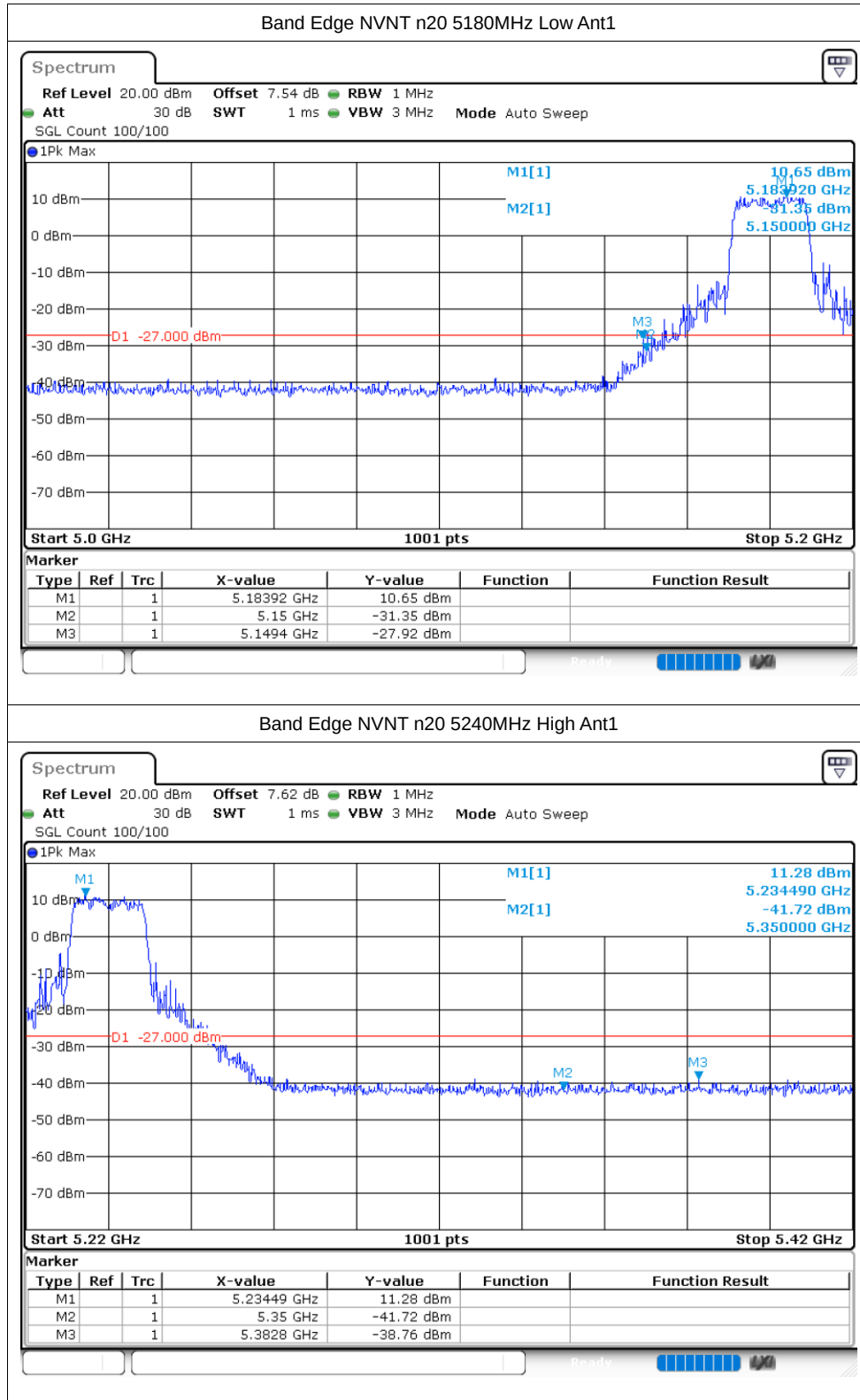
Test Graphs

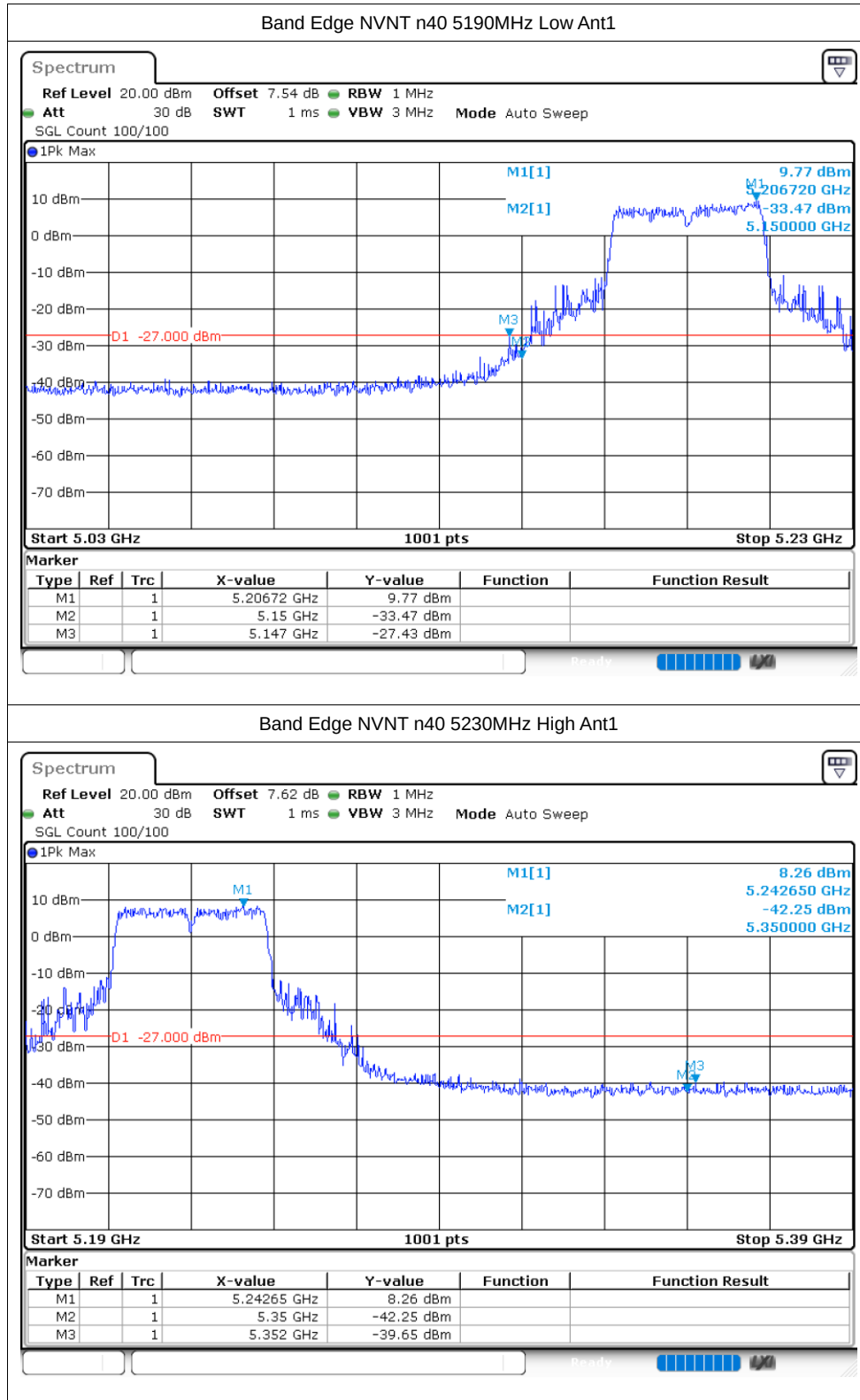
Band Edge NVNT a 5180MHz Low Ant1



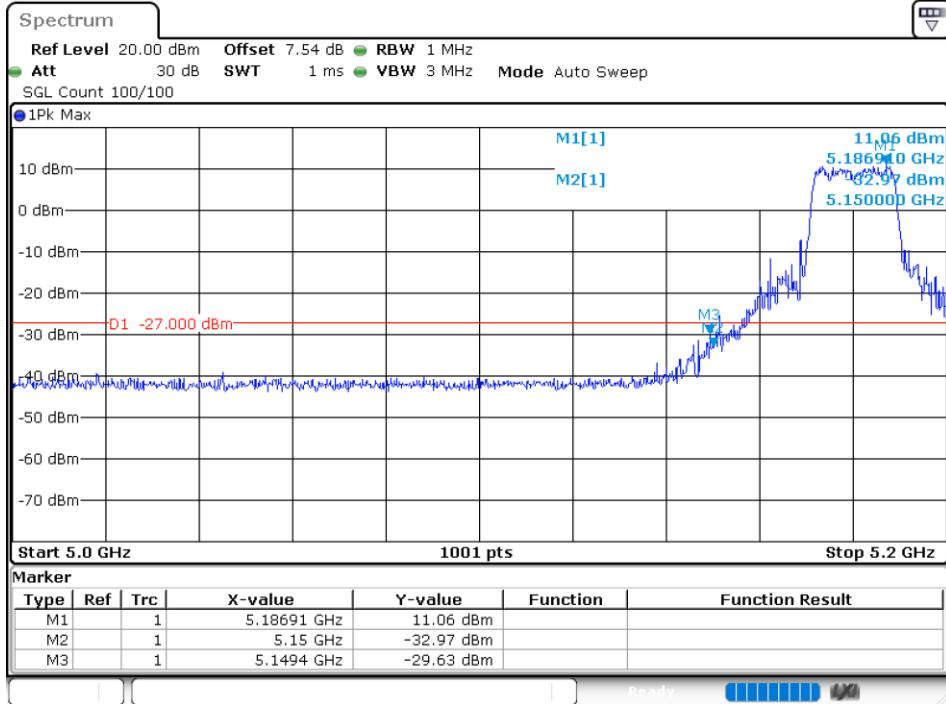
Band Edge NVNT a 5240MHz High Ant1



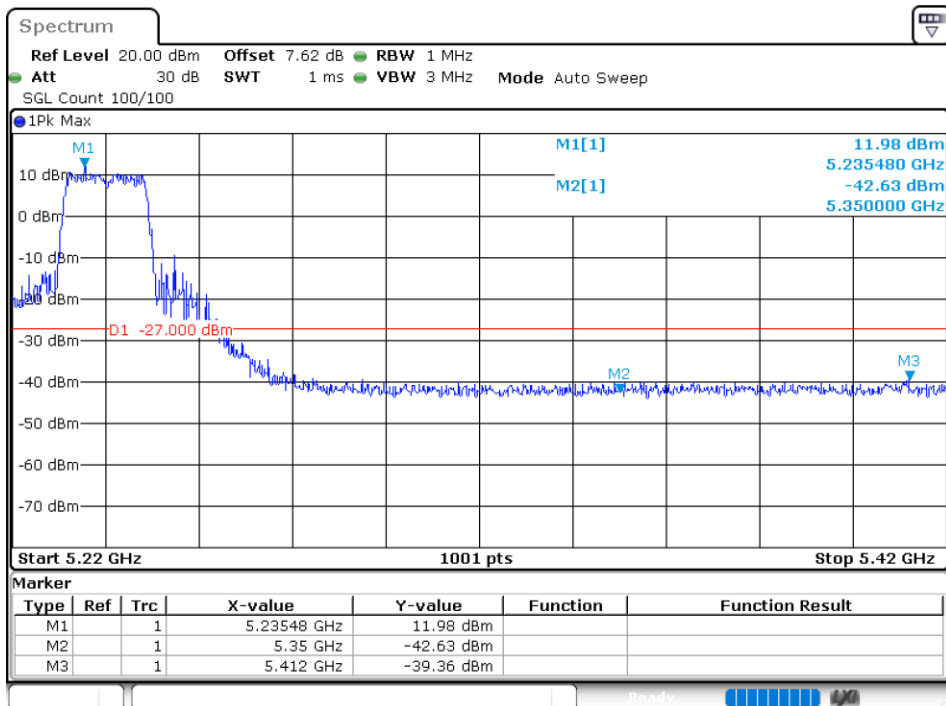




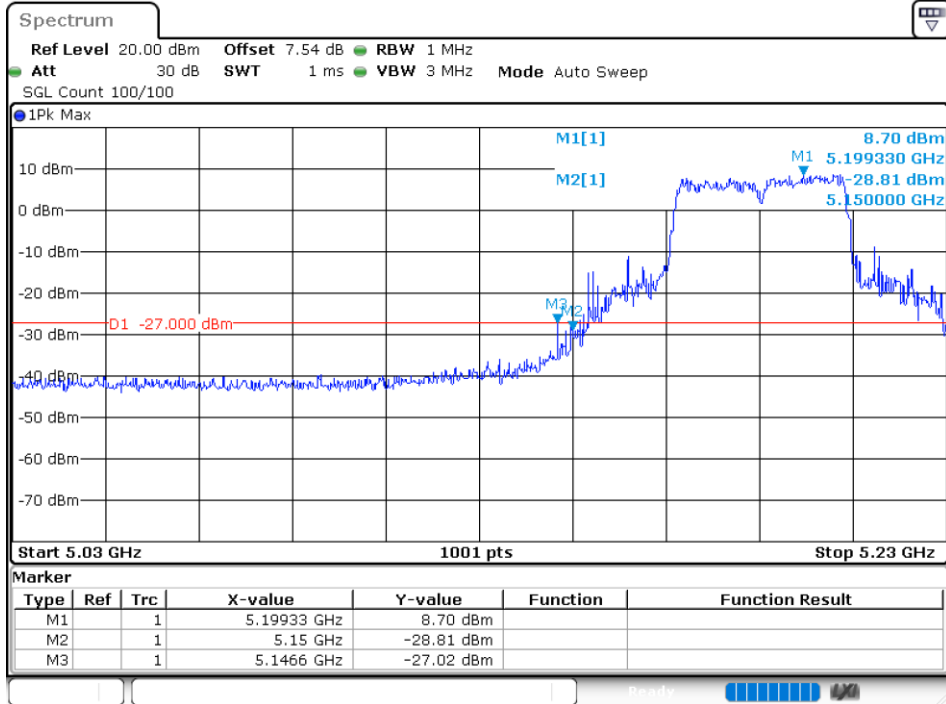
Band Edge NVNT ac20 5180MHz Low Ant1



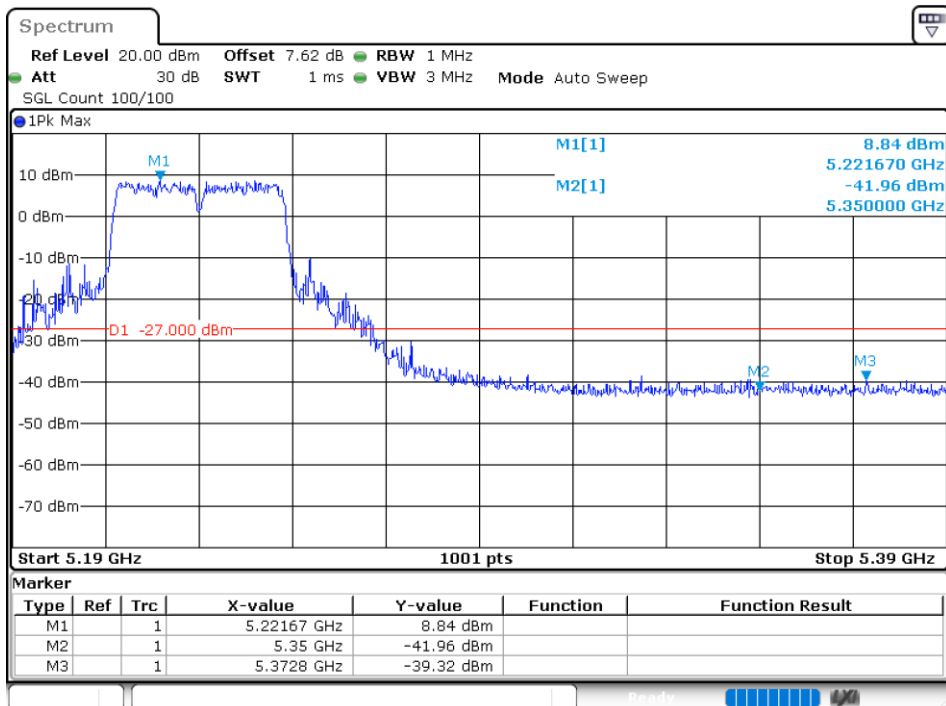
Band Edge NVNT ac20 5240MHz High Ant1



Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1

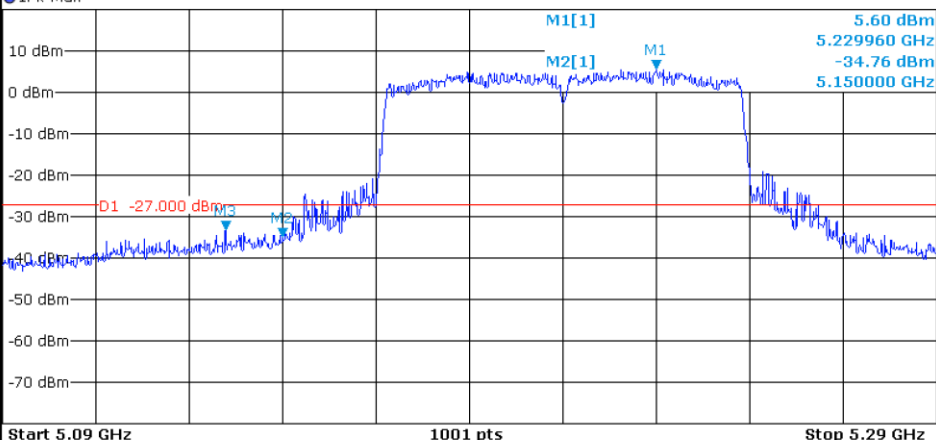


Band Edge NVNT ac80 5210MHz Low Ant1

Spectrum

Ref Level 20.00 dBm Offset 7.60 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

1Pk Max



Marker

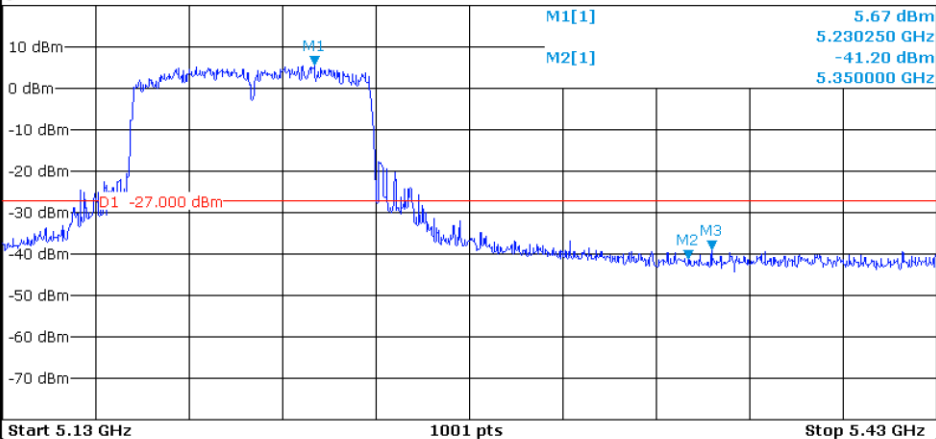
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.22996 GHz	5.60 dBm		
M2		1	5.15 GHz	-34.76 dBm		
M3		1	5.1378 GHz	-33.17 dBm		

Band Edge NVNT ac80 5210MHz High Ant1

Spectrum

Ref Level 20.00 dBm Offset 7.60 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

1Pk Max



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.23025 GHz	5.67 dBm		
M2		1	5.35 GHz	-41.20 dBm		
M3		1	5.3577 GHz	-38.91 dBm		

Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-29.95	-27	Pass
NVNT	a	5200	Ant1	-29.72	-27	Pass
NVNT	a	5240	Ant1	-29.35	-27	Pass
NVNT	n20	5180	Ant1	-30.18	-27	Pass
NVNT	n20	5200	Ant1	-30.1	-27	Pass
NVNT	n20	5240	Ant1	-29.98	-27	Pass
NVNT	n40	5190	Ant1	-30.21	-27	Pass
NVNT	n40	5230	Ant1	-29.35	-27	Pass
NVNT	ac20	5180	Ant1	-29.54	-27	Pass
NVNT	ac20	5200	Ant1	-29.54	-27	Pass
NVNT	ac20	5240	Ant1	-29.78	-27	Pass
NVNT	ac40	5190	Ant1	-29.88	-27	Pass
NVNT	ac40	5230	Ant1	-29.09	-27	Pass
NVNT	ac80	5210	Ant1	-28.93	-27	Pass