

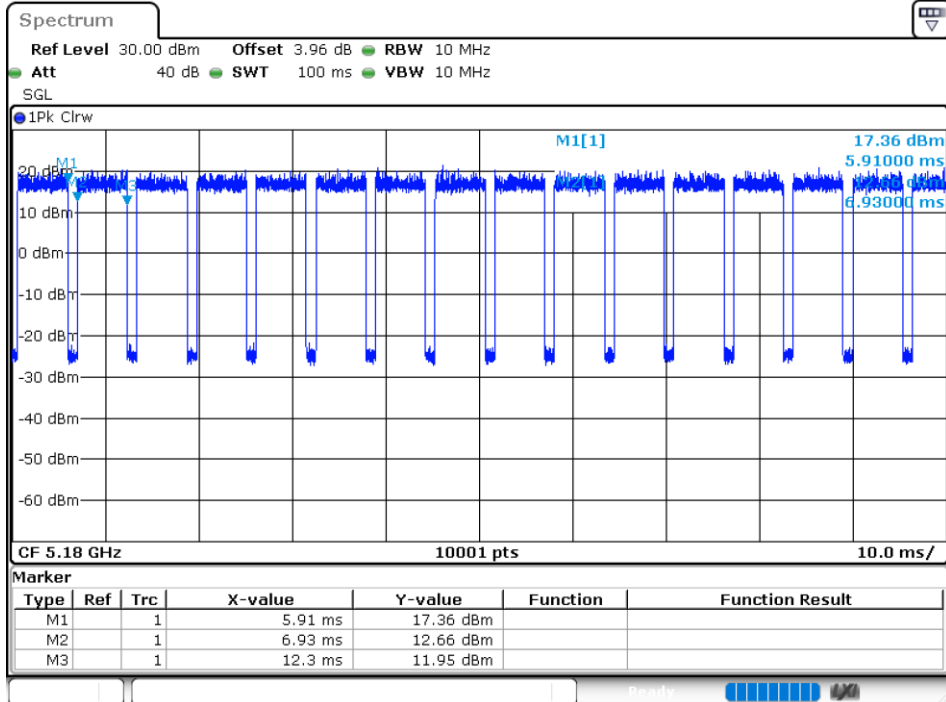
WIFI 5.2G:

Duty Cycle

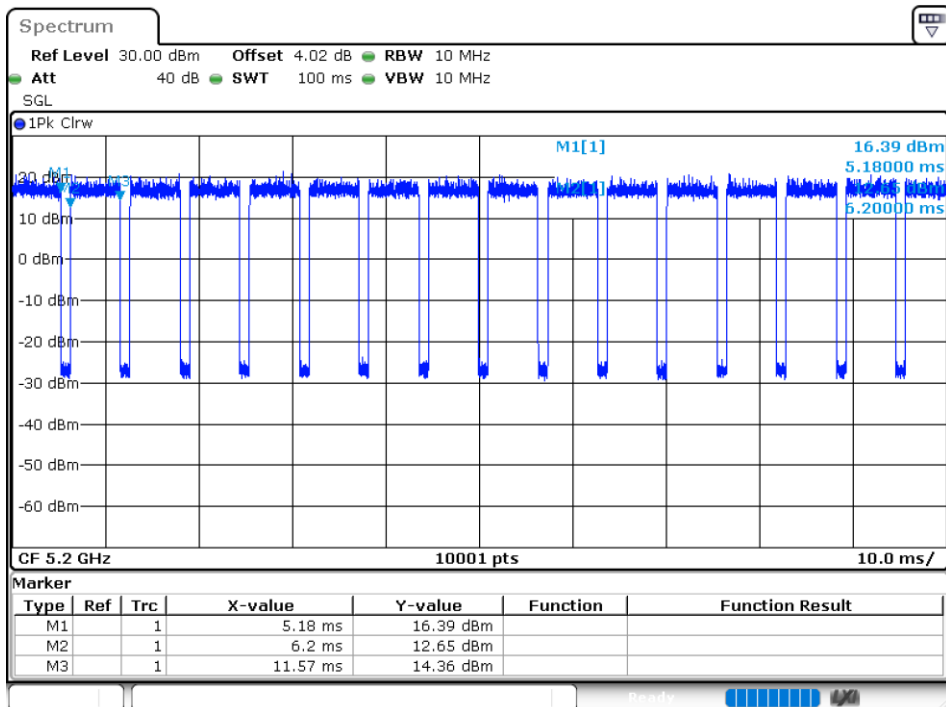
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	84.3	0.74	0.19
NVNT	a	5200	Ant1	84.82	0.71	0.19
NVNT	a	5240	Ant1	83.79	0.77	0.19
NVNT	n20	5180	Ant1	82.8	0.82	0.2
NVNT	n20	5200	Ant1	83.82	0.77	0.2
NVNT	n20	5240	Ant1	83.83	0.77	0.2
NVNT	n40	5190	Ant1	82.78	0.82	0.21
NVNT	n40	5230	Ant1	82.86	0.82	0.21
NVNT	ac20	5180	Ant1	82.82	0.82	0.2
NVNT	ac20	5200	Ant1	83.17	0.8	0.2
NVNT	ac20	5240	Ant1	82.81	0.82	0.2
NVNT	ac40	5190	Ant1	82.88	0.82	0.21
NVNT	ac40	5230	Ant1	82.89	0.81	0.21
NVNT	ax20	5180	Ant1	78.79	1.04	0.26
NVNT	ax20	5200	Ant1	79.68	0.99	0.26
NVNT	ax20	5240	Ant1	79.28	1.01	0.26
NVNT	ax40	5190	Ant1	78.88	1.03	0.26
NVNT	ax40	5230	Ant1	78.81	1.03	0.26

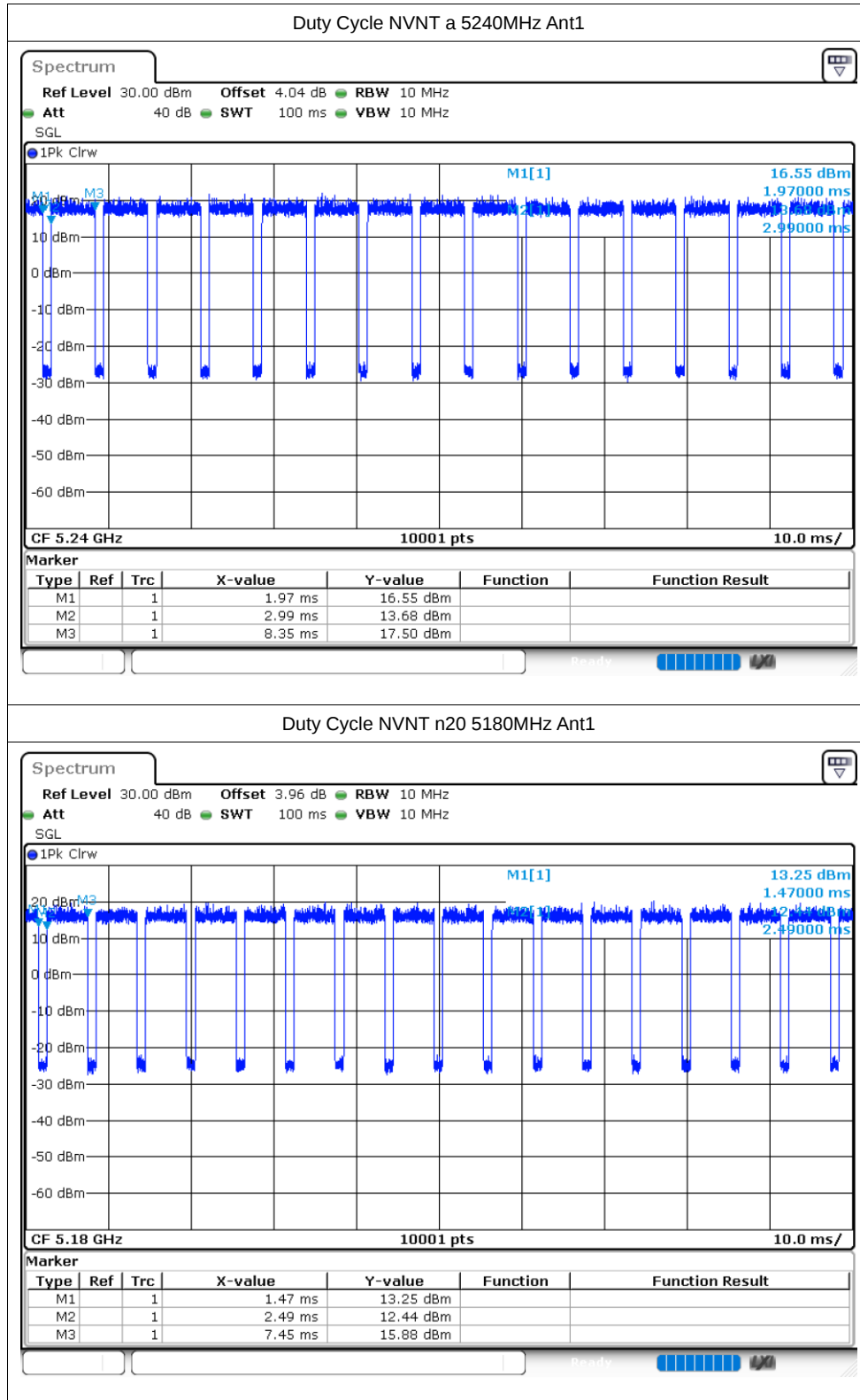
Test Graphs

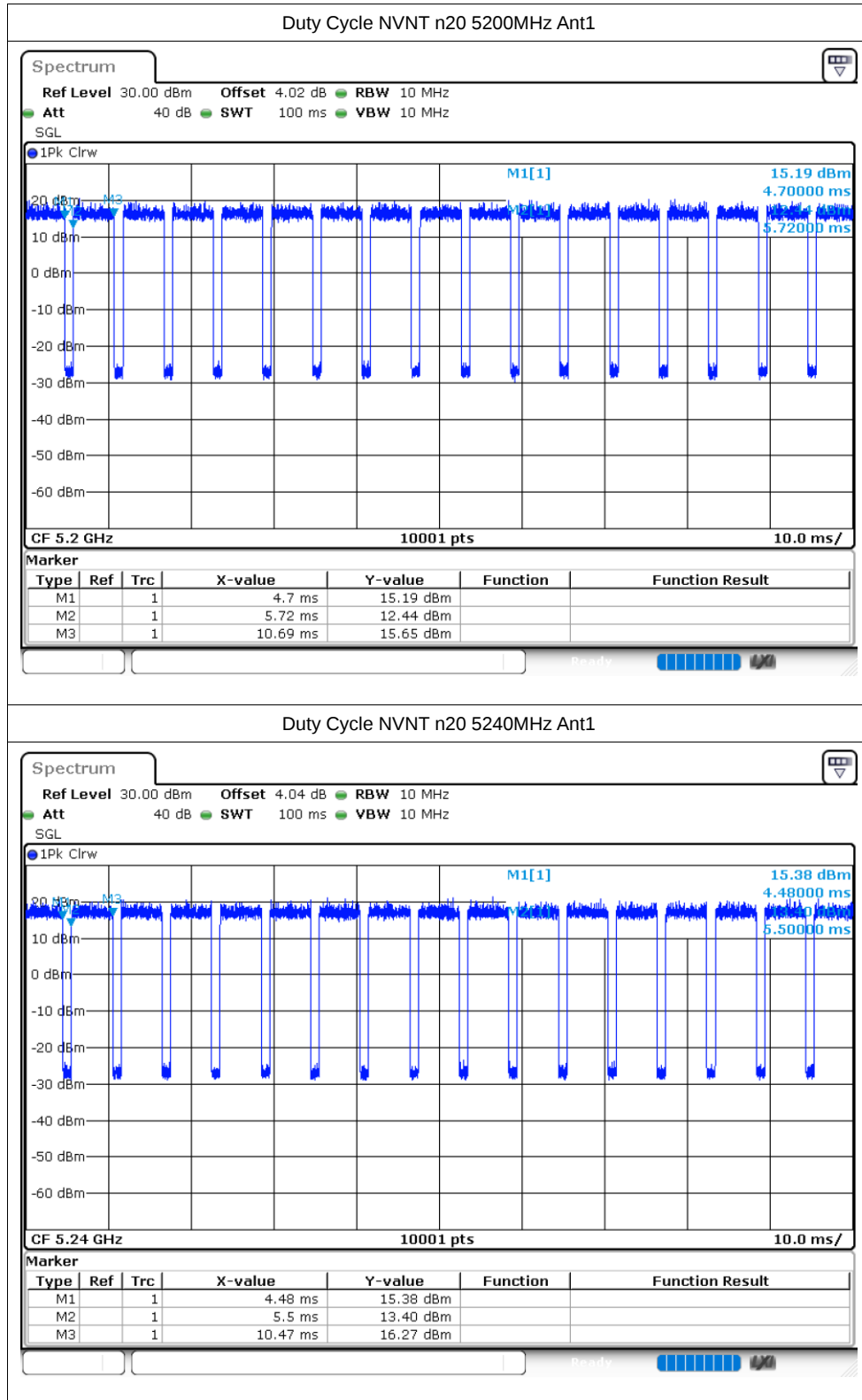
Duty Cycle NVNT a 5180MHz Ant1

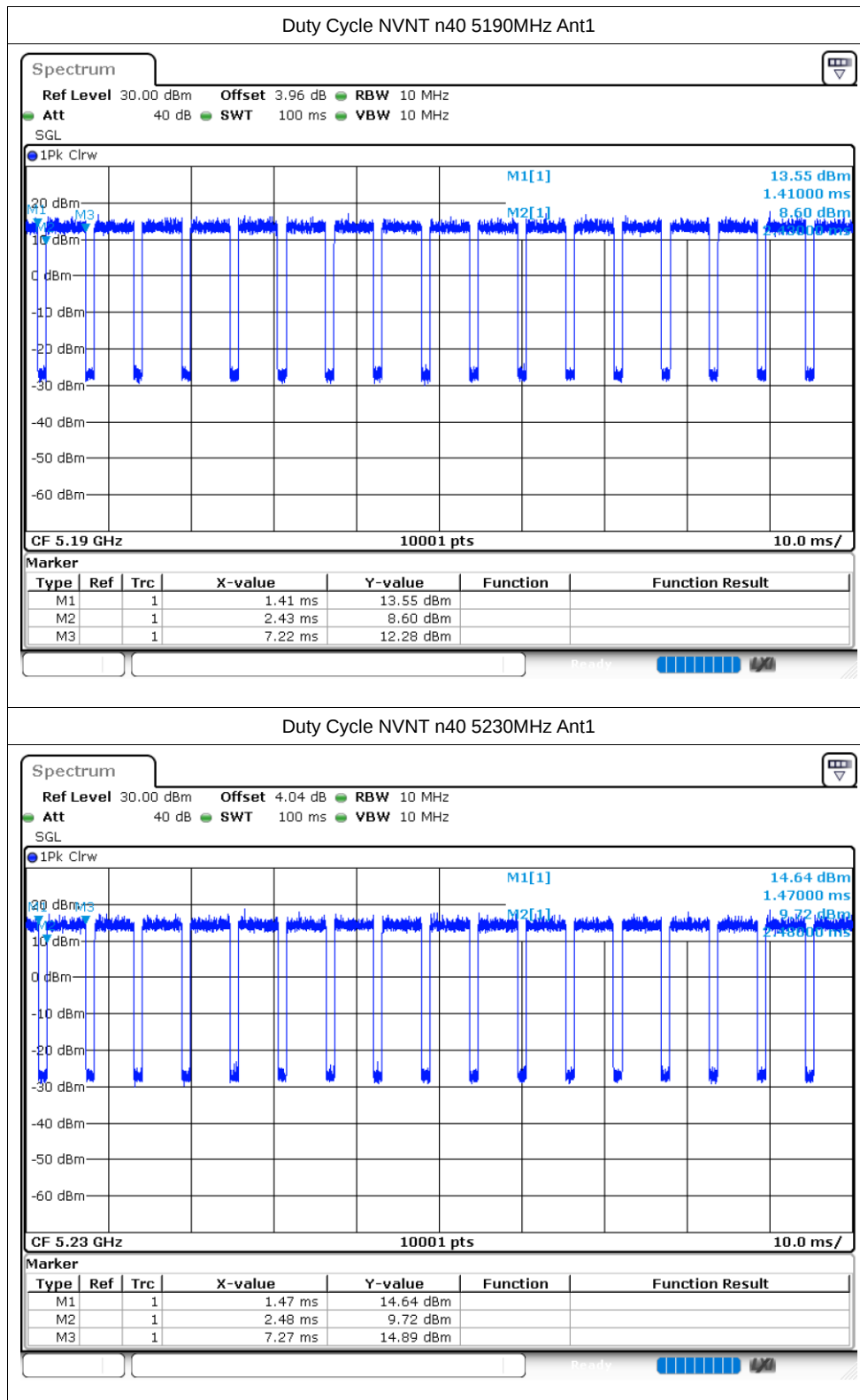


Duty Cycle NVNT a 5200MHz Ant1

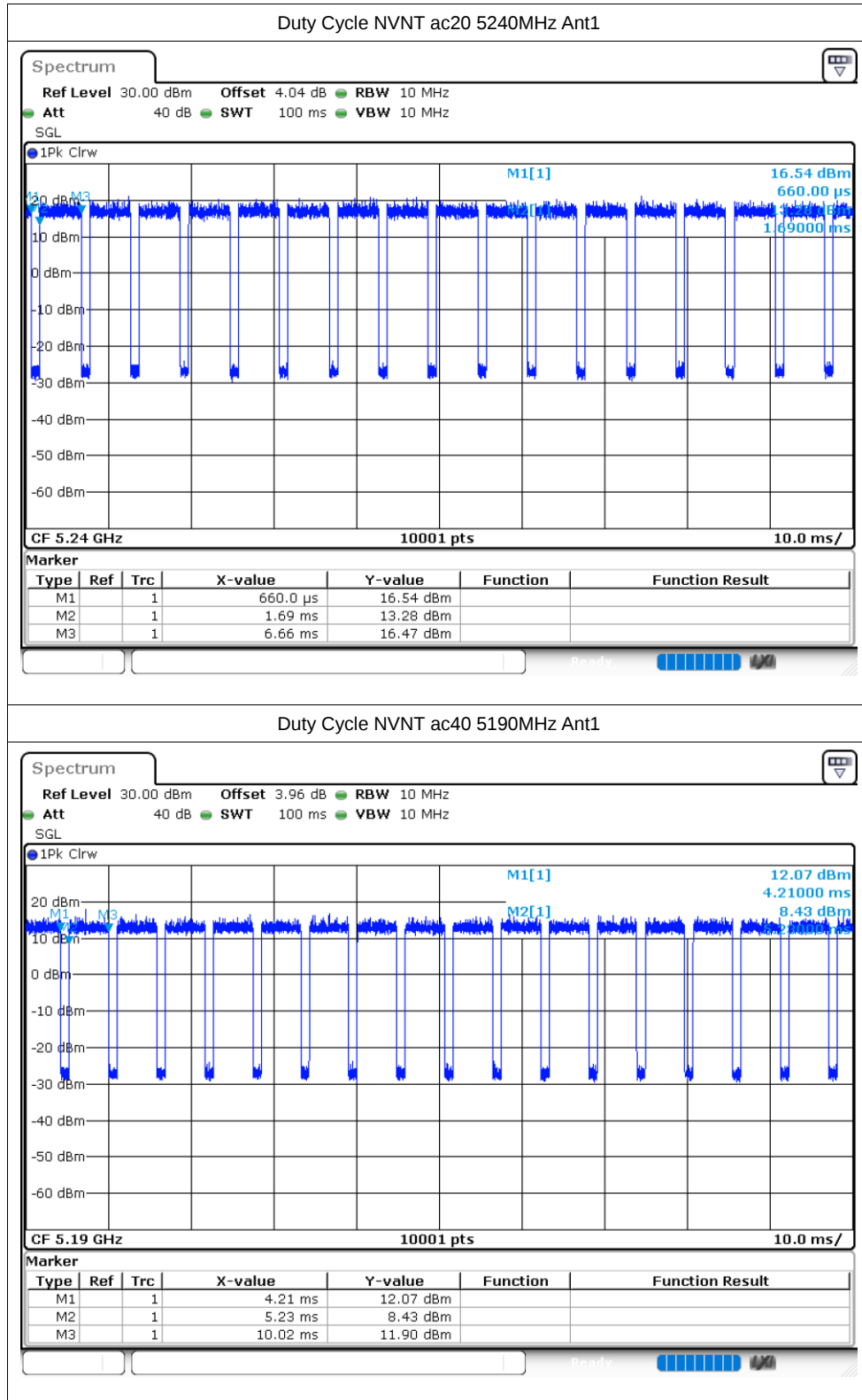


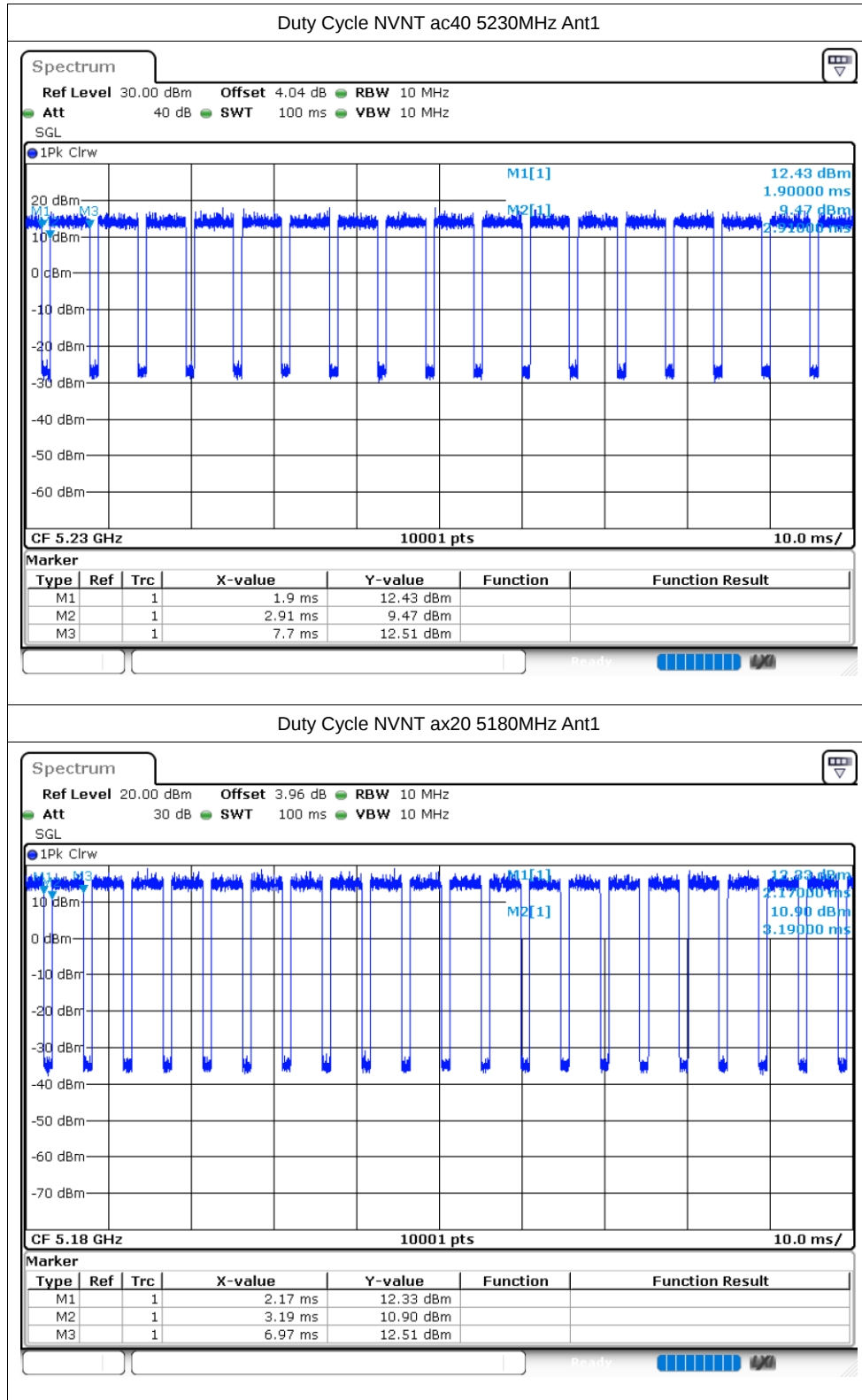


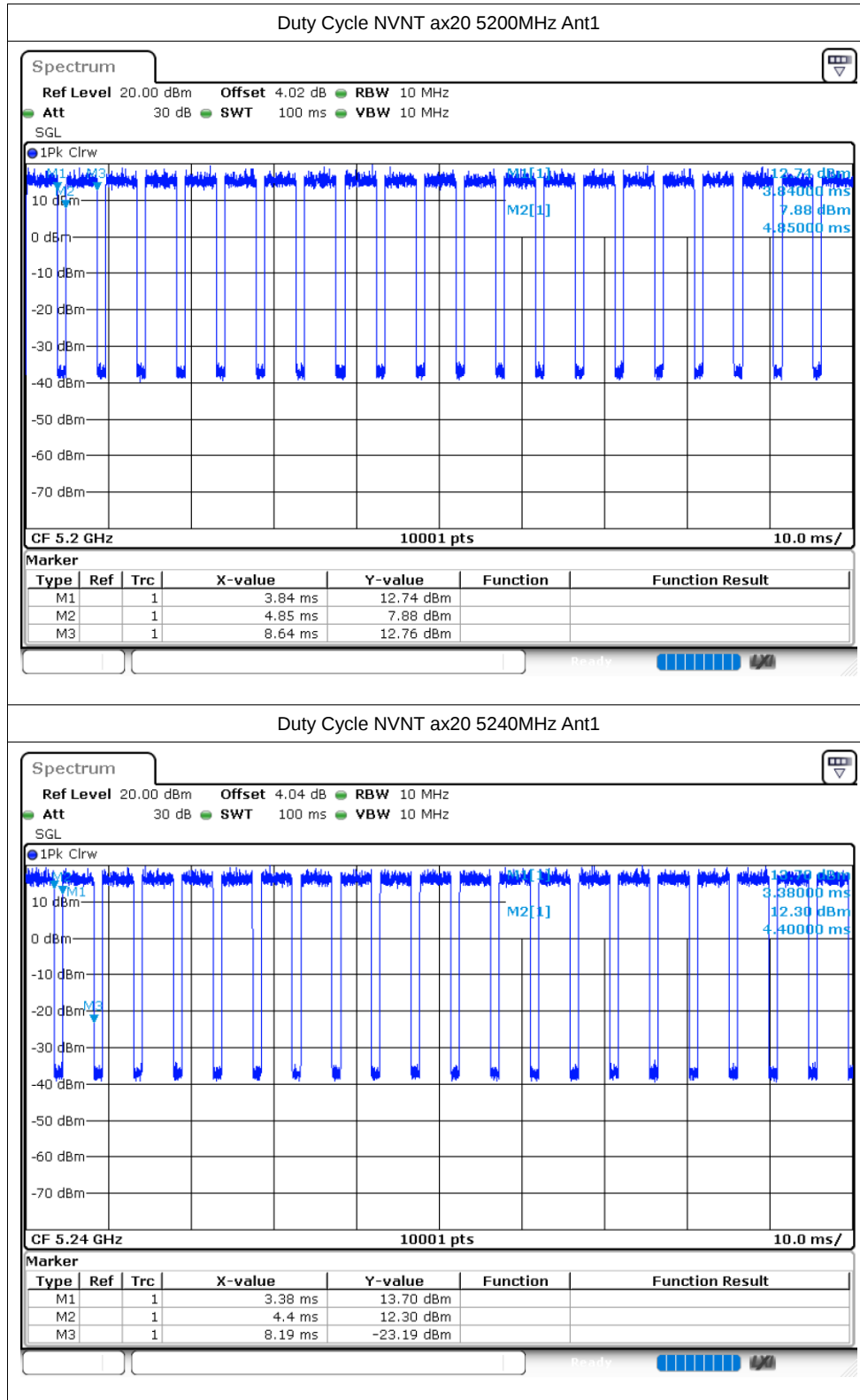


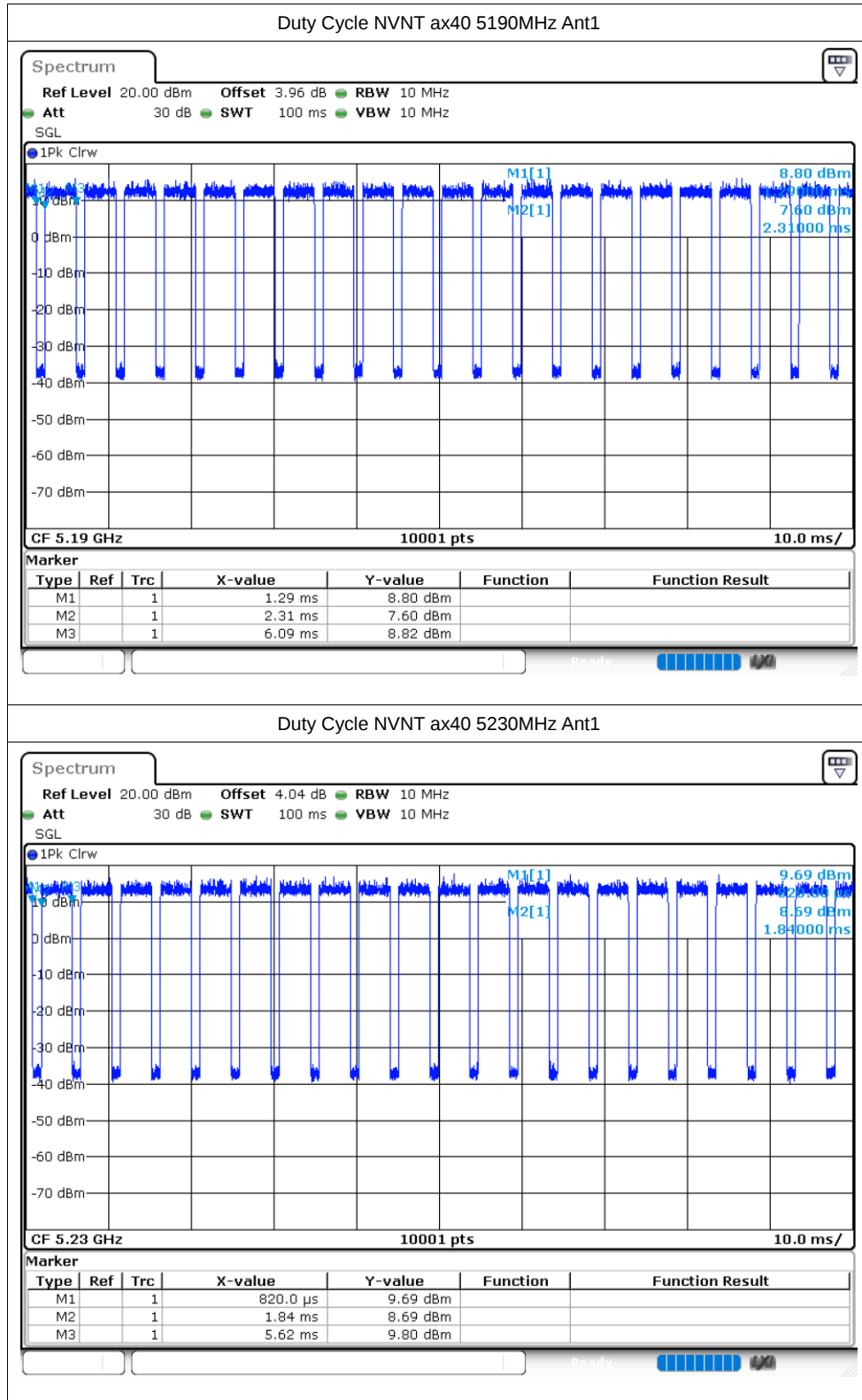












Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.24	24	Pass
NVNT	a	5200	Ant1	12.16	24	Pass
NVNT	a	5240	Ant1	12.35	24	Pass
NVNT	n20	5180	Ant1	11.73	24	Pass
NVNT	n20	5200	Ant1	12.1	24	Pass
NVNT	n20	5240	Ant1	12.24	24	Pass
NVNT	n40	5190	Ant1	12.35	24	Pass
NVNT	n40	5230	Ant1	12.51	24	Pass
NVNT	ac20	5180	Ant1	12.07	24	Pass
NVNT	ac20	5200	Ant1	12.5	24	Pass
NVNT	ac20	5240	Ant1	12.57	24	Pass
NVNT	ac40	5190	Ant1	12.26	24	Pass
NVNT	ac40	5230	Ant1	12.5	24	Pass
NVNT	ax20	5180	Ant1	11.49	24	Pass
NVNT	ax20	5200	Ant1	11.63	24	Pass
NVNT	ax20	5240	Ant1	11.85	24	Pass
NVNT	ax40	5190	Ant1	11.73	24	Pass
NVNT	ax40	5230	Ant1	12.05	24	Pass

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

-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	23.028	0.5	Pass
NVNT	a	5200	Ant1	22.77	0.5	Pass
NVNT	a	5240	Ant1	22.305	0.5	Pass
NVNT	n20	5180	Ant1	24.816	0.5	Pass
NVNT	n20	5200	Ant1	25.08	0.5	Pass
NVNT	n20	5240	Ant1	24.888	0.5	Pass
NVNT	n40	5190	Ant1	47.352	0.5	Pass
NVNT	n40	5230	Ant1	46.146	0.5	Pass
NVNT	ac20	5180	Ant1	25.347	0.5	Pass
NVNT	ac20	5200	Ant1	23.04	0.5	Pass
NVNT	ac20	5240	Ant1	23.661	0.5	Pass
NVNT	ac40	5190	Ant1	47.886	0.5	Pass
NVNT	ac40	5230	Ant1	46.848	0.5	Pass
NVNT	ax20	5180	Ant1	25.353	0.5	Pass
NVNT	ax20	5200	Ant1	23.658	0.5	Pass
NVNT	ax20	5240	Ant1	23.097	0.5	Pass
NVNT	ax40	5190	Ant1	45.228	0.5	Pass
NVNT	ax40	5230	Ant1	45.222	0.5	Pass

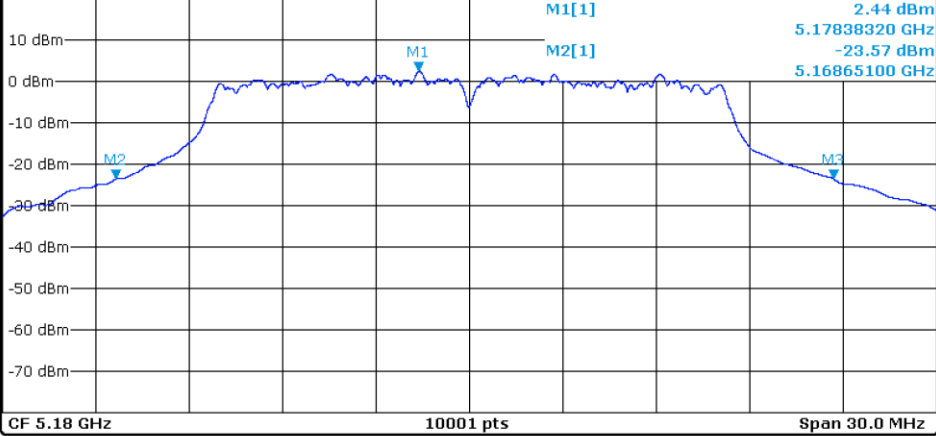
Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 3.96 dB RBW 300 kHz
 Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
 SGL Count 100/100

1Pk Max



Marker

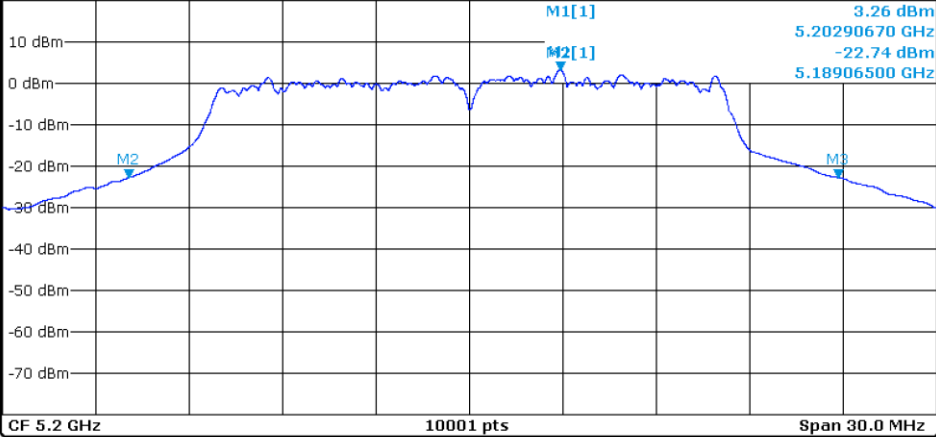
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1	1	5.1783832 GHz	2.44 dBm		
M2	1	1	5.168651 GHz	-23.57 dBm		
M3	1	1	5.191679 GHz	-23.57 dBm		

-26dB Bandwidth NVNT a 5200MHz Ant1

Spectrum

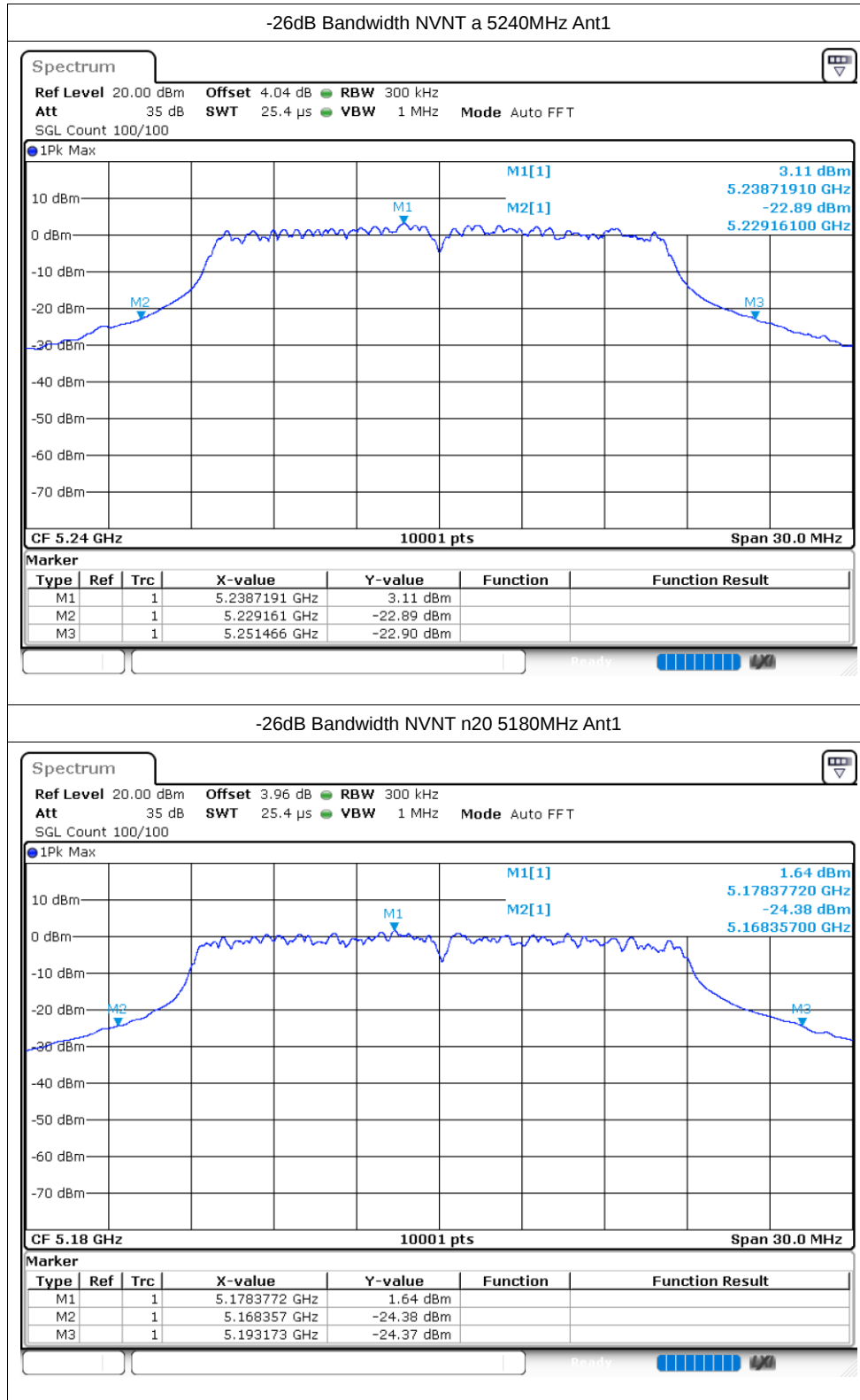
Ref Level 20.00 dBm Offset 4.02 dB RBW 300 kHz
 Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
 SGL Count 100/100

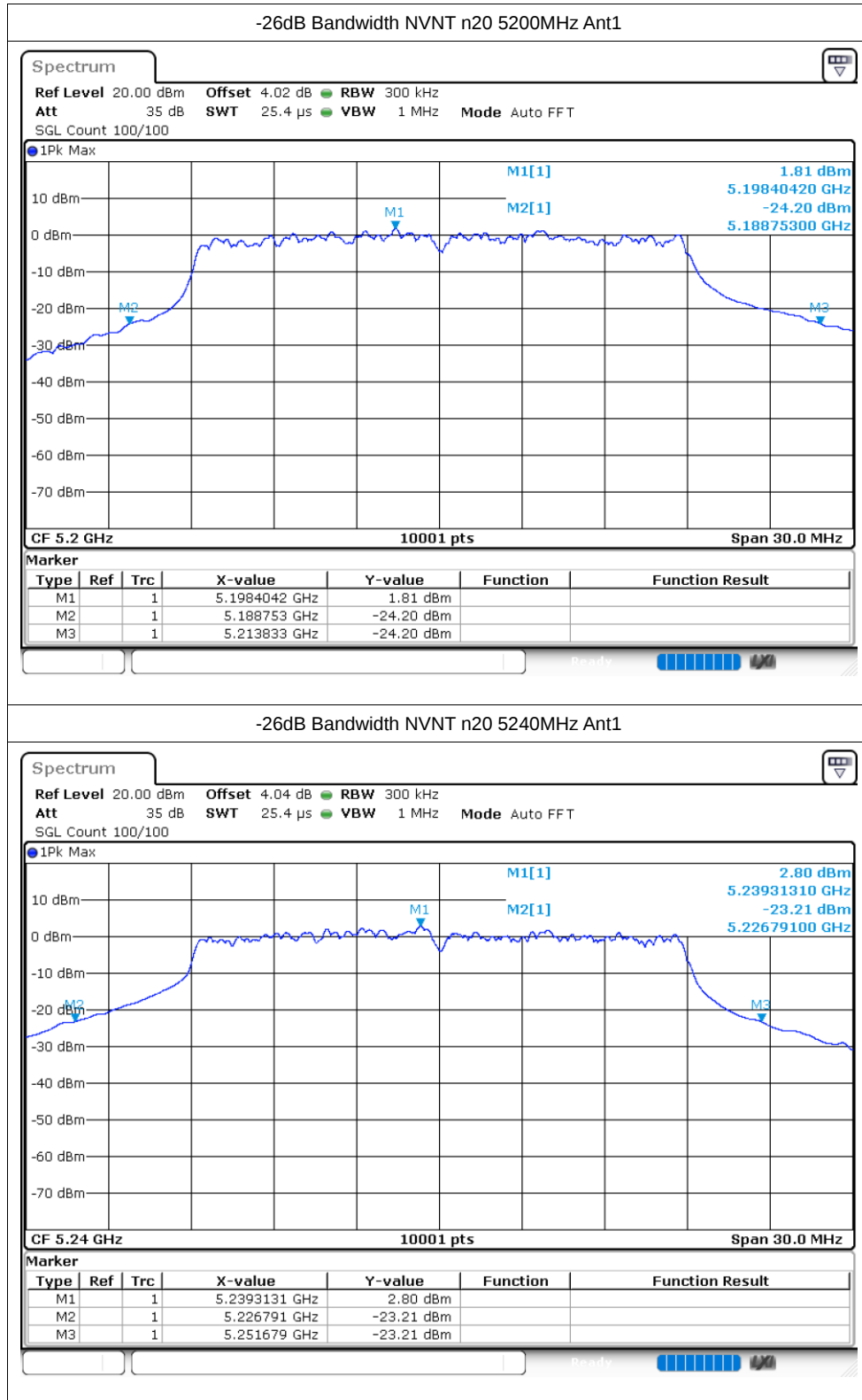
1Pk Max

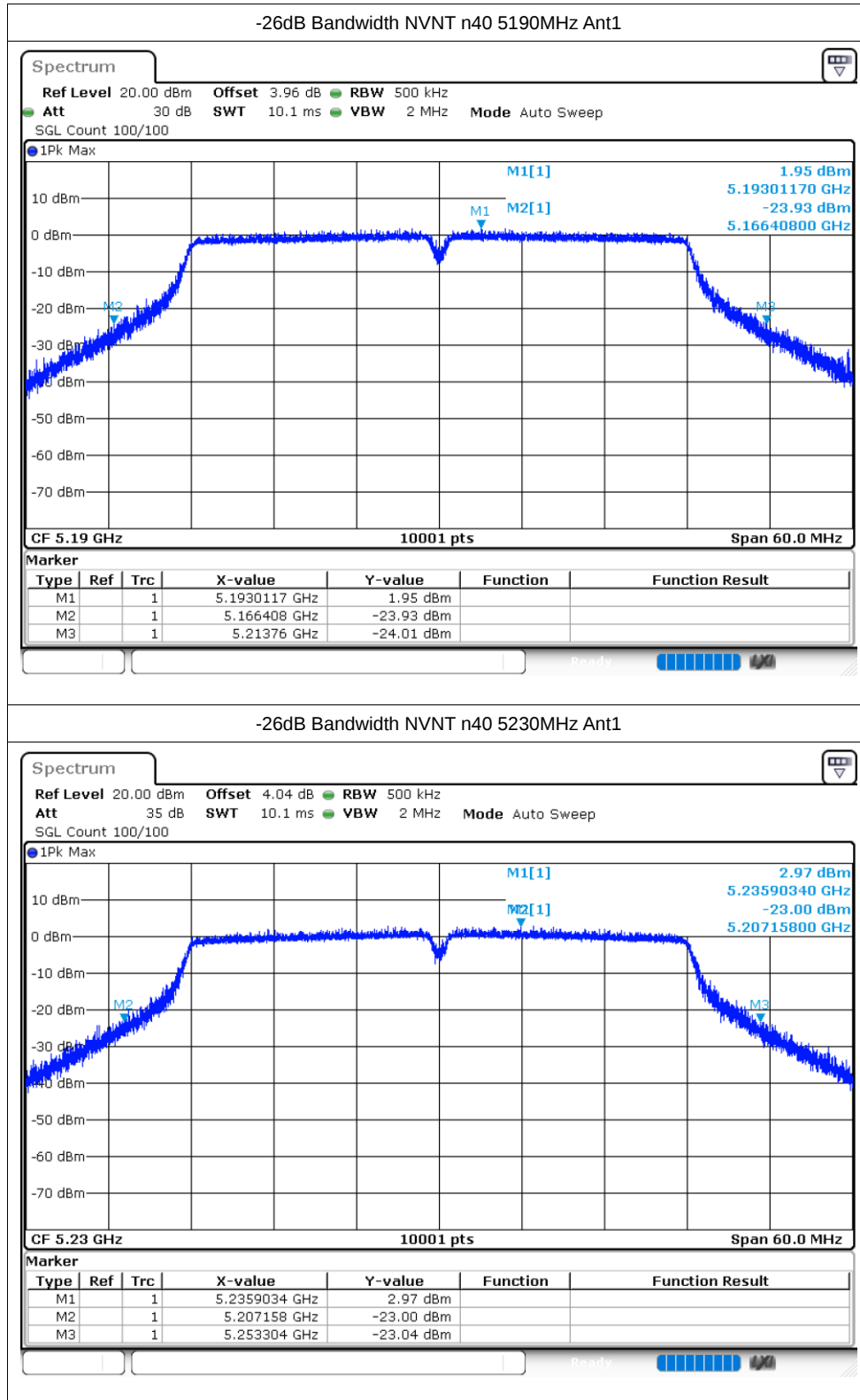


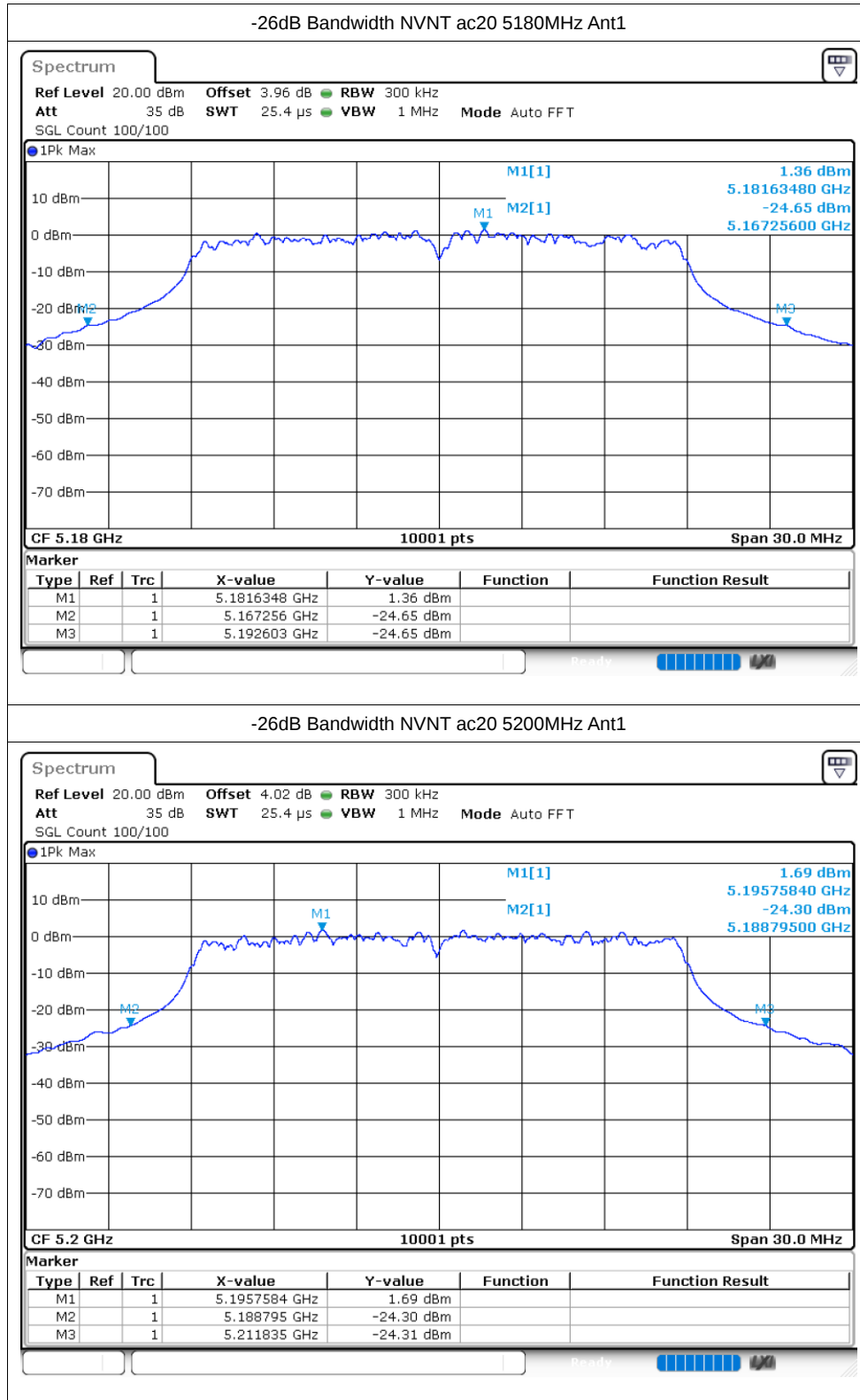
Marker

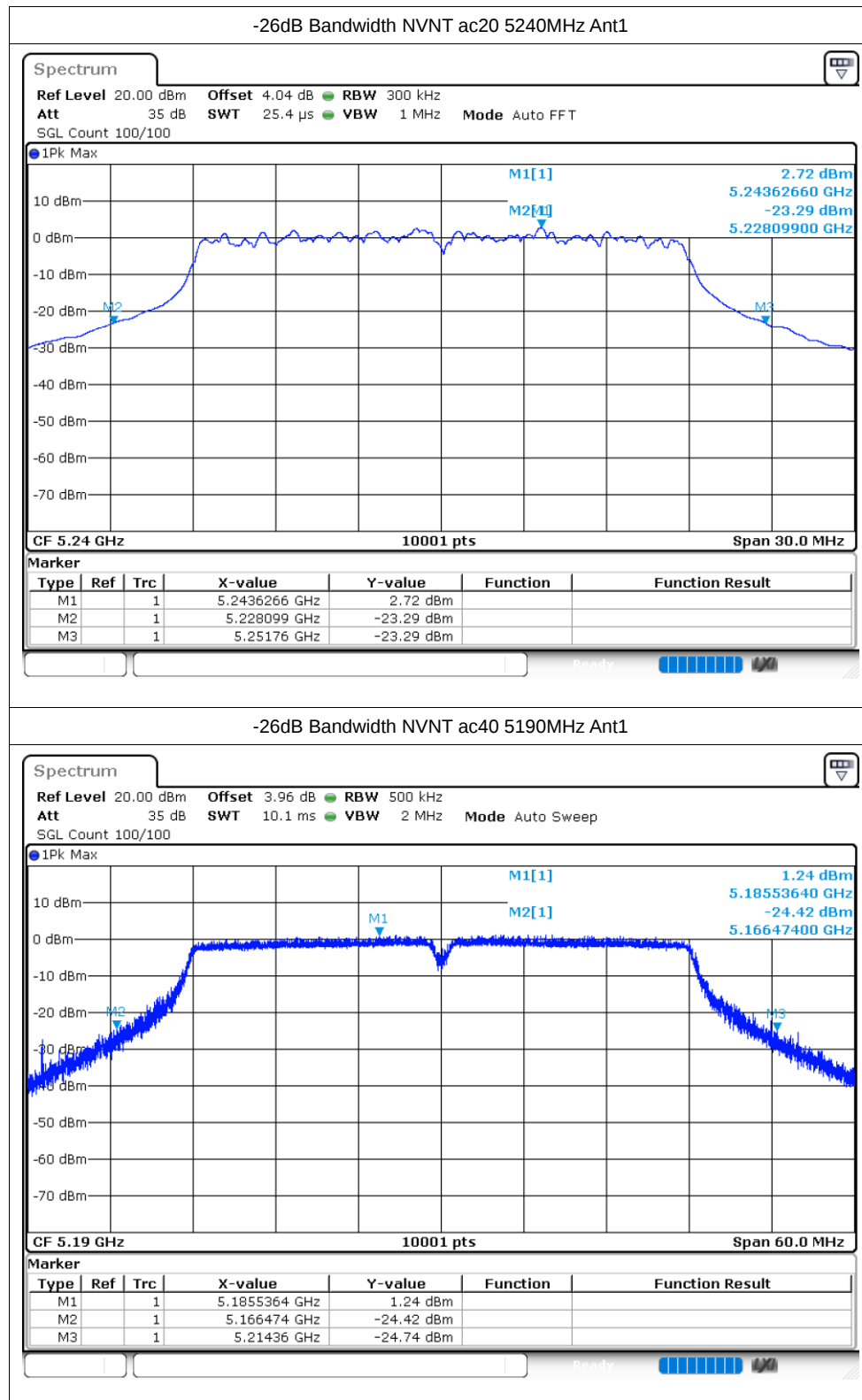
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1	1	5.2029067 GHz	3.26 dBm		
M2	1	1	5.189065 GHz	-22.74 dBm		
M3	1	1	5.211835 GHz	-22.74 dBm		

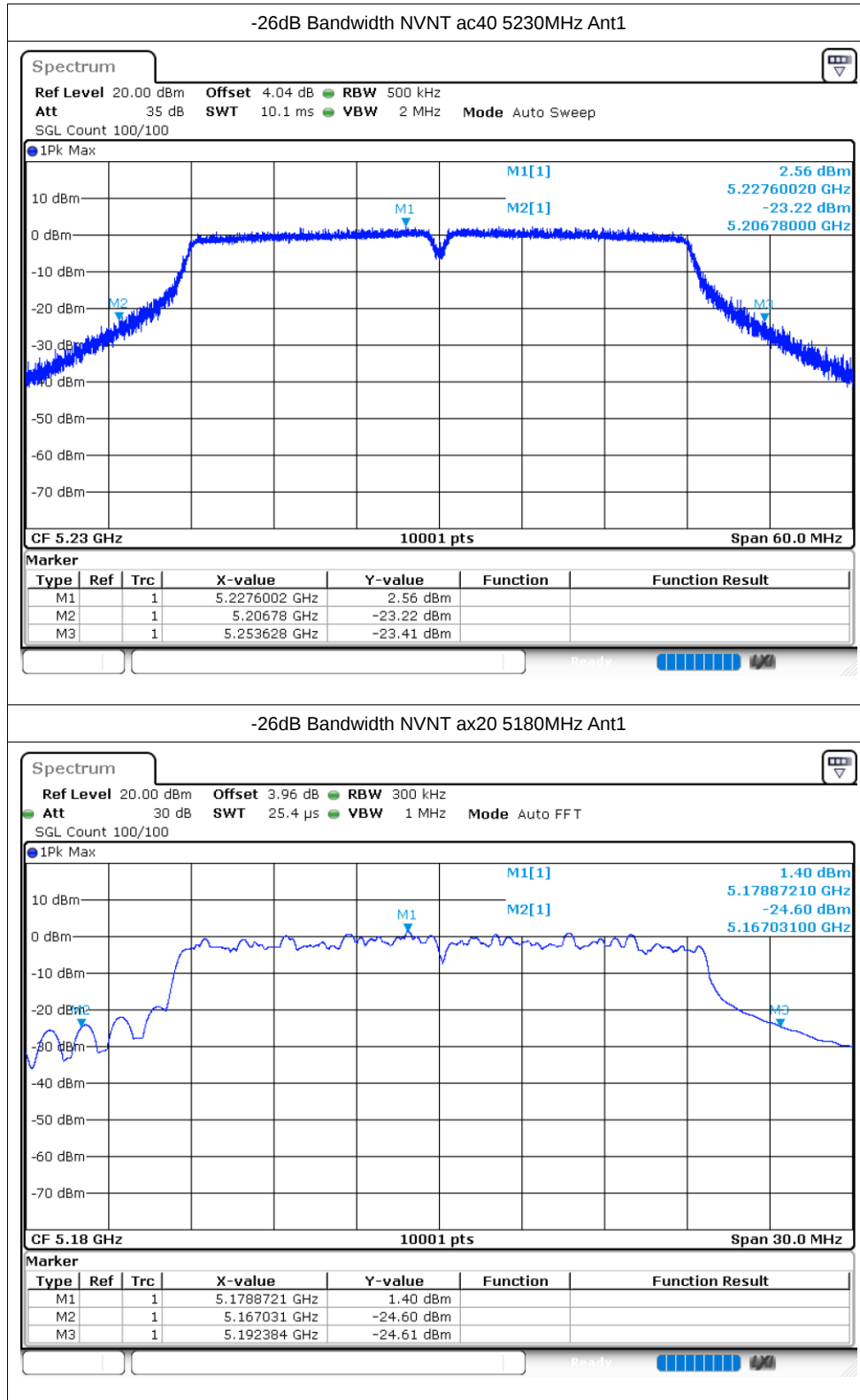


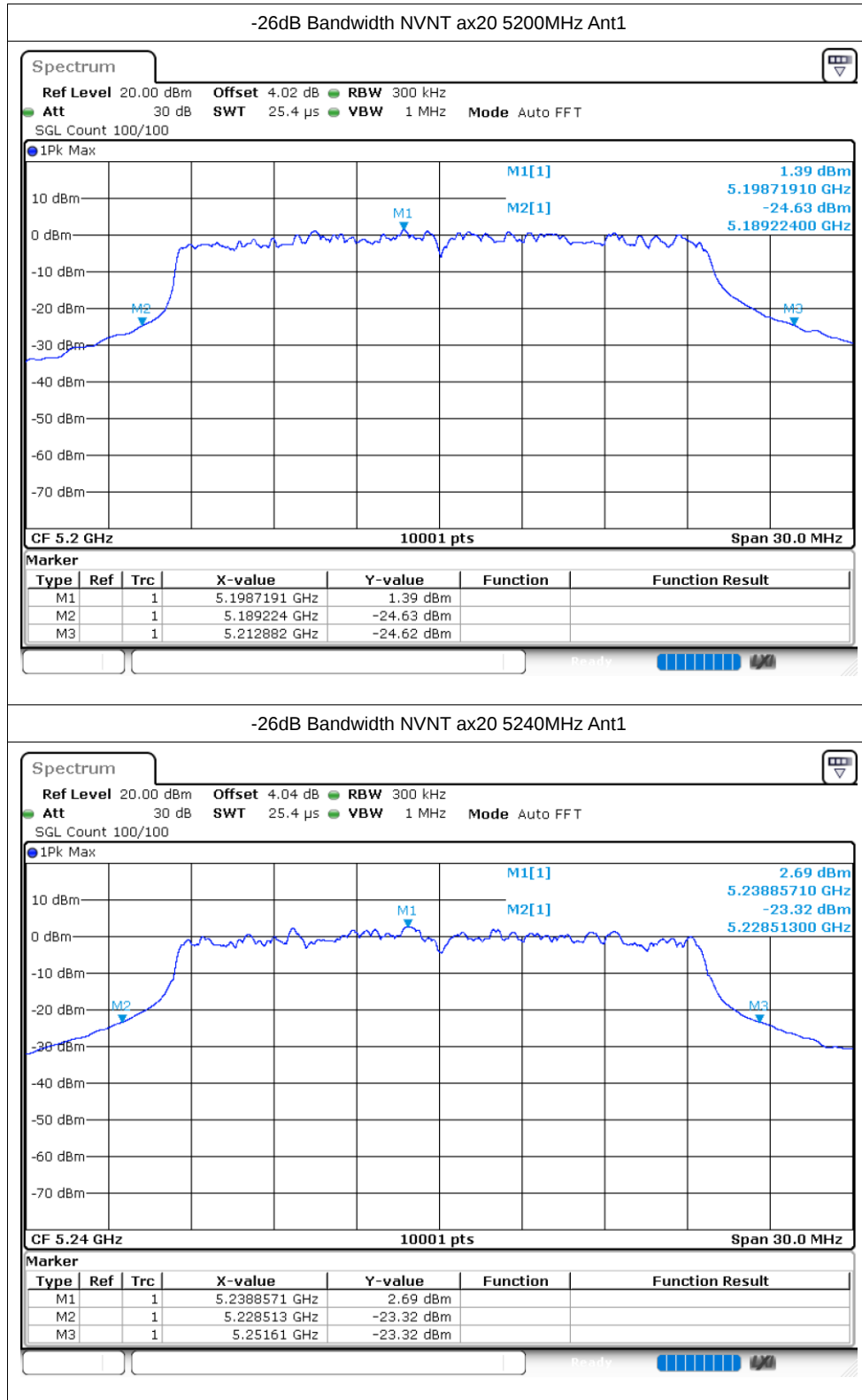


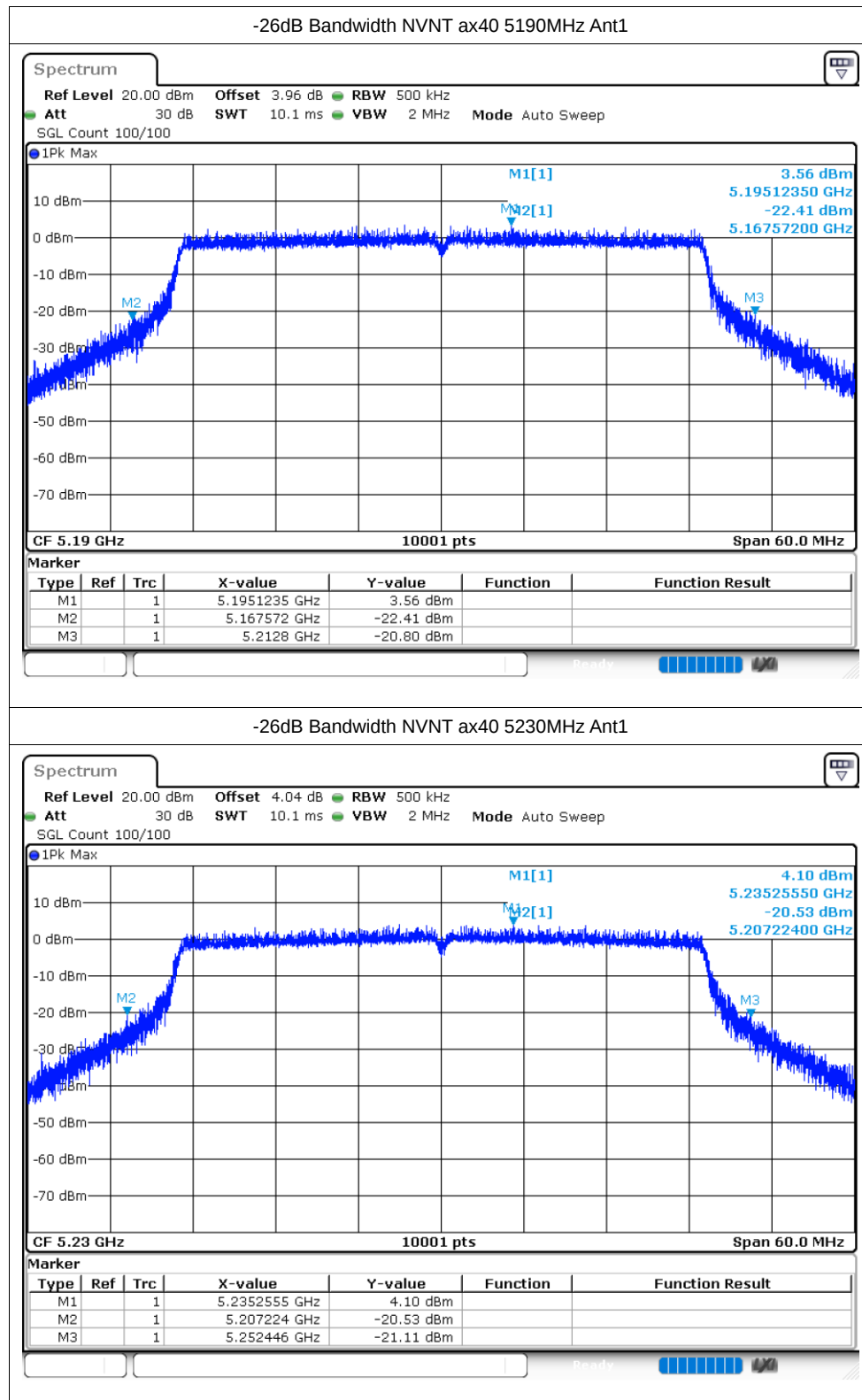










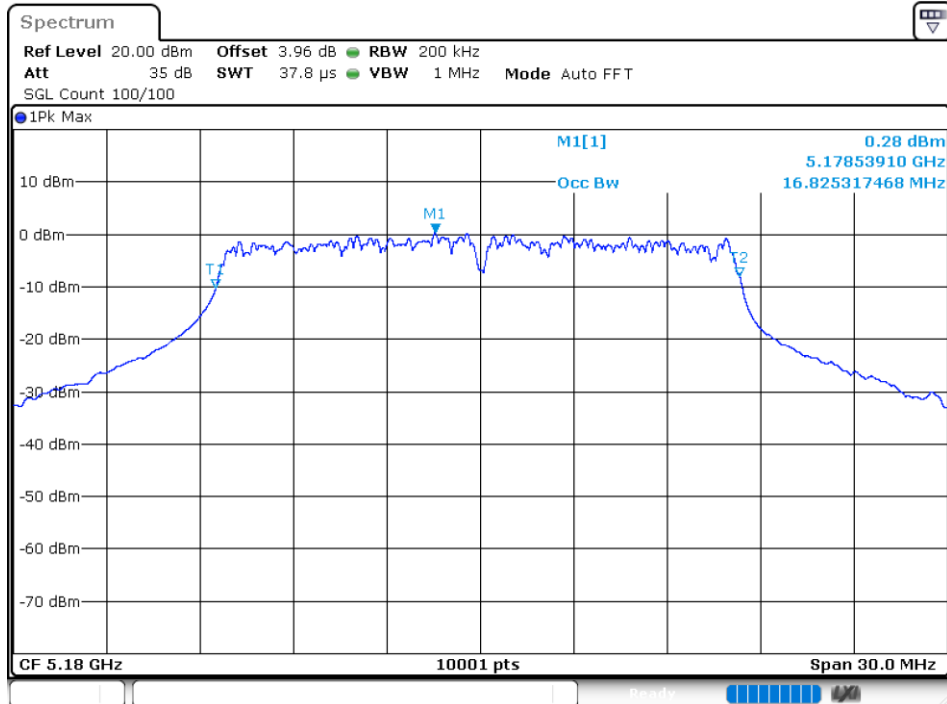


Occupied Channel Bandwidth

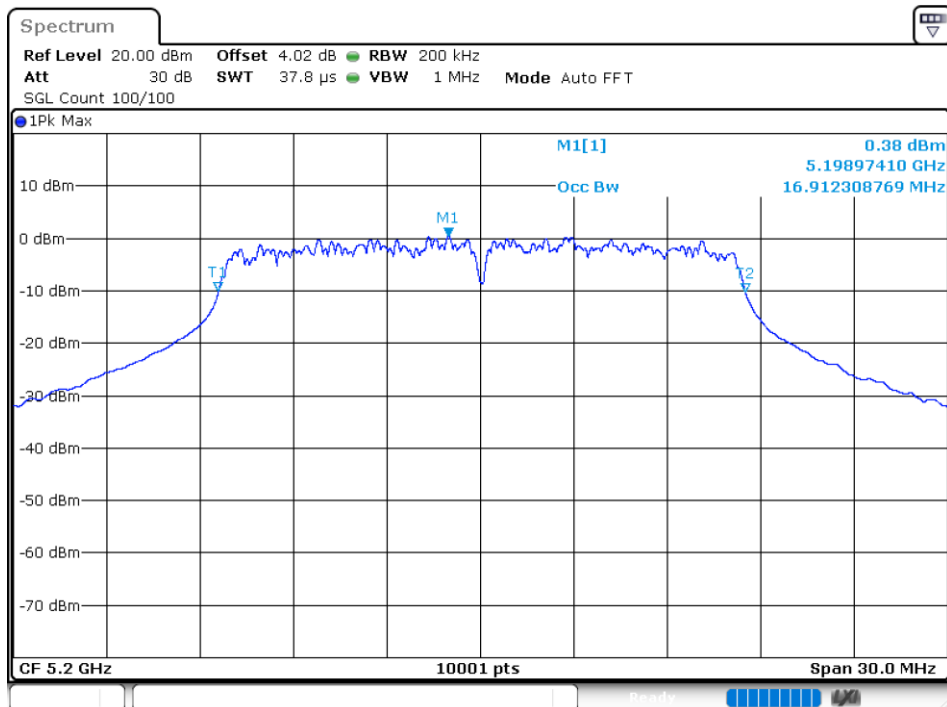
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.825
NVNT	a	5200	Ant1	16.912
NVNT	a	5240	Ant1	16.636
NVNT	n20	5180	Ant1	17.989
NVNT	n20	5200	Ant1	17.983
NVNT	n20	5240	Ant1	17.857
NVNT	n40	5190	Ant1	36.656
NVNT	n40	5230	Ant1	36.554
NVNT	ac20	5180	Ant1	17.929
NVNT	ac20	5200	Ant1	17.782
NVNT	ac20	5240	Ant1	17.812
NVNT	ac40	5190	Ant1	36.668
NVNT	ac40	5230	Ant1	36.536
NVNT	ax20	5180	Ant1	18.973
NVNT	ax20	5200	Ant1	19.123
NVNT	ax20	5240	Ant1	18.991
NVNT	ax40	5190	Ant1	38
NVNT	ax40	5230	Ant1	37.85

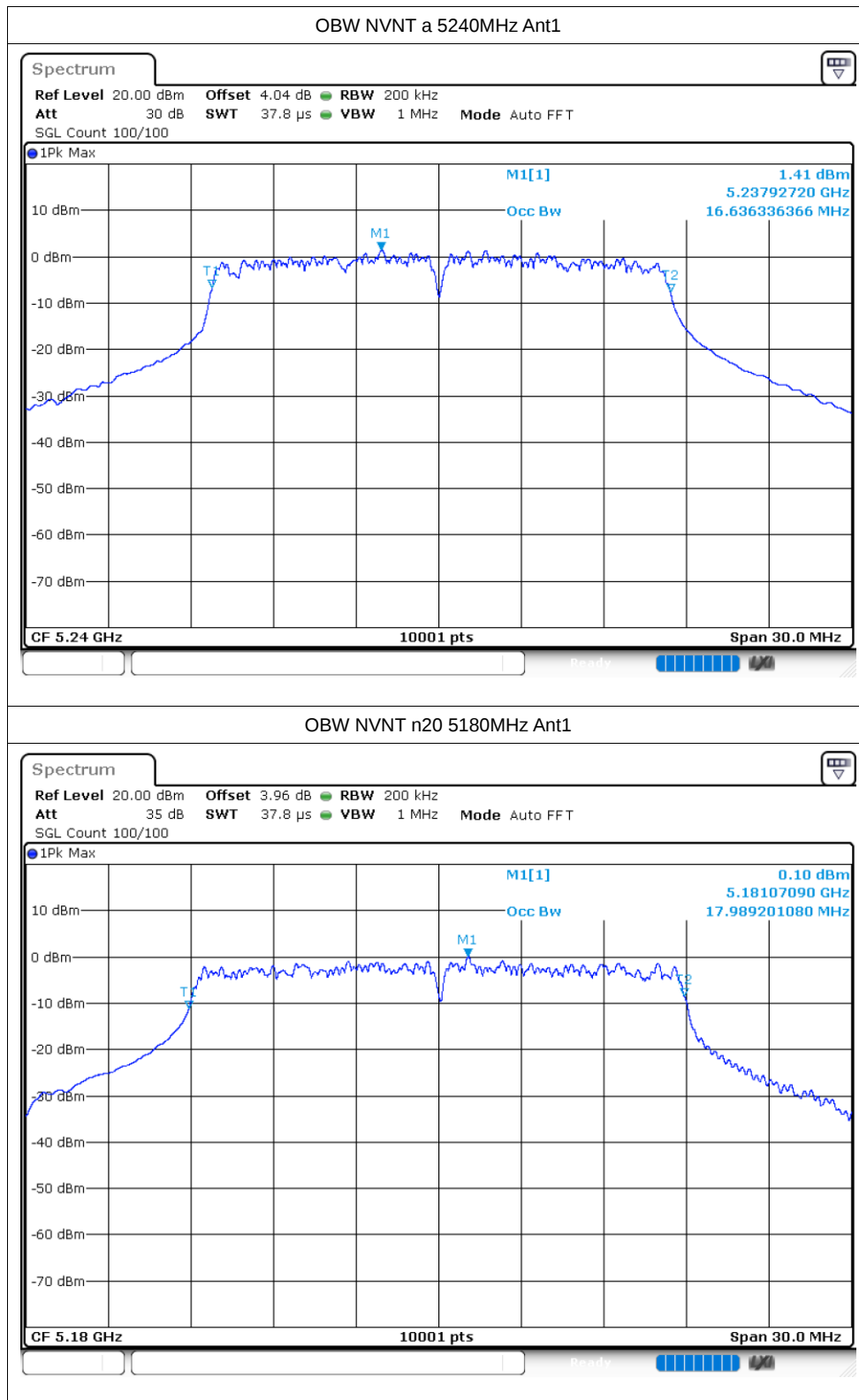
Test Graphs

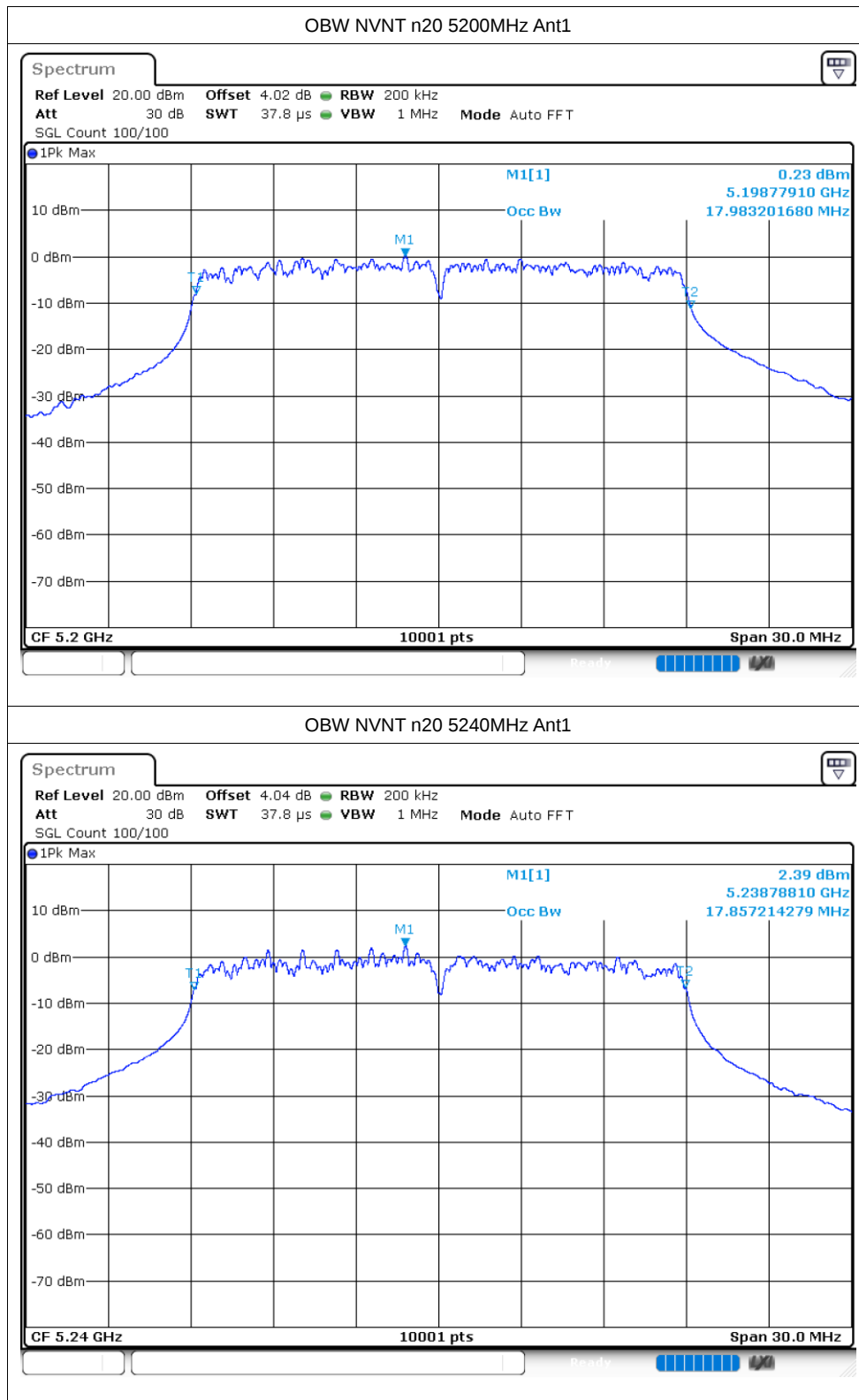
OBW NVNT a 5180MHz Ant1

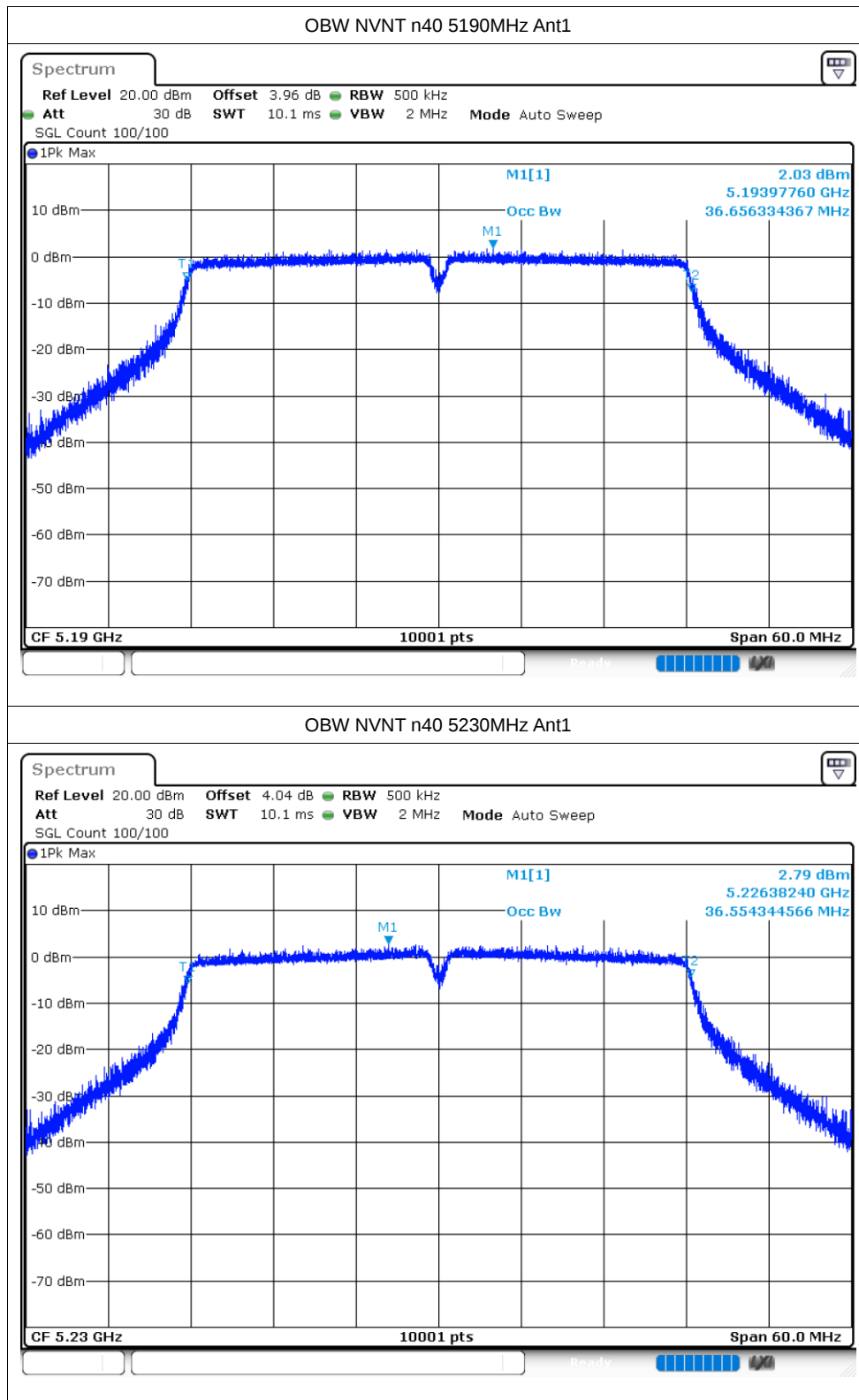


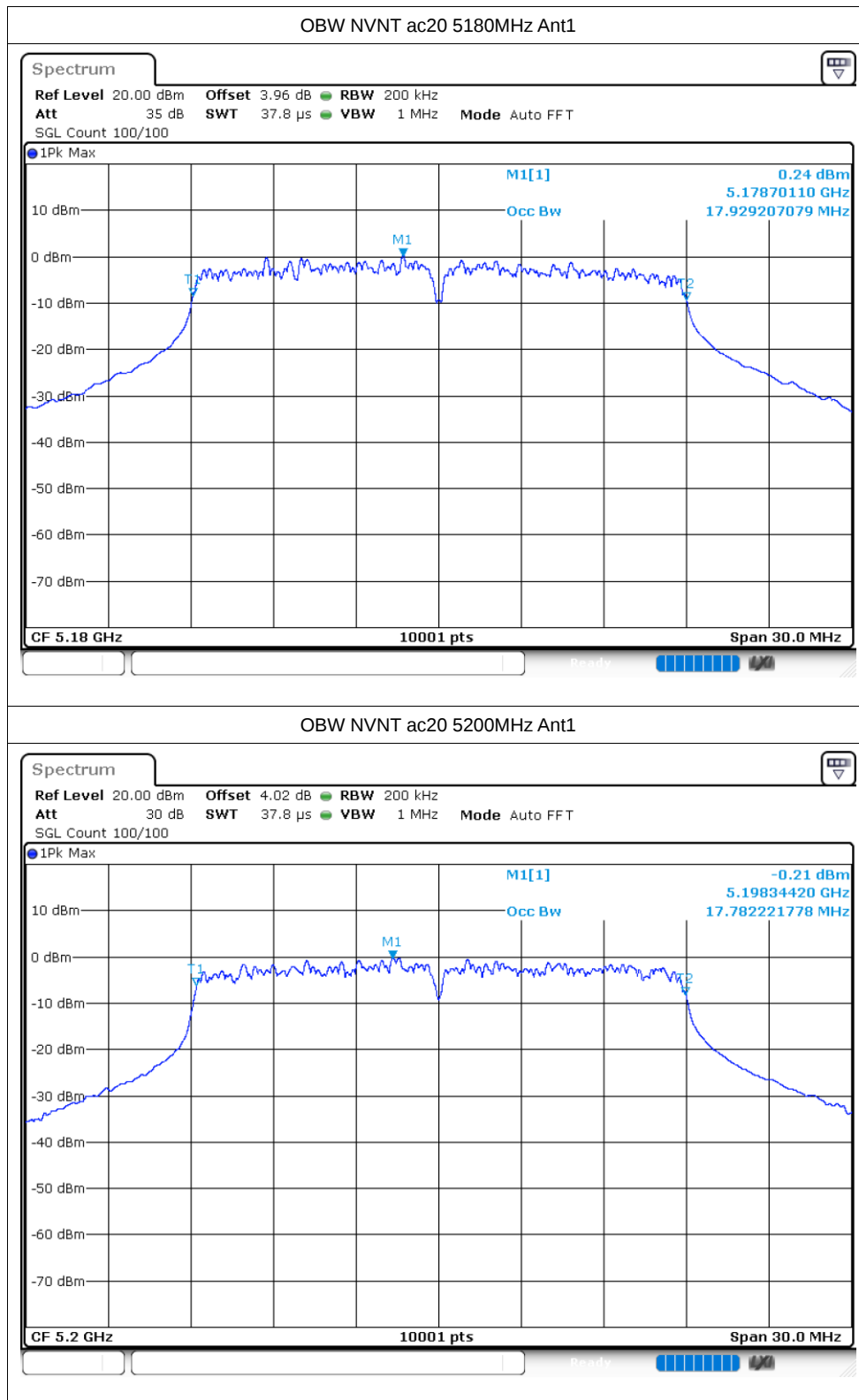
OBW NVNT a 5200MHz Ant1

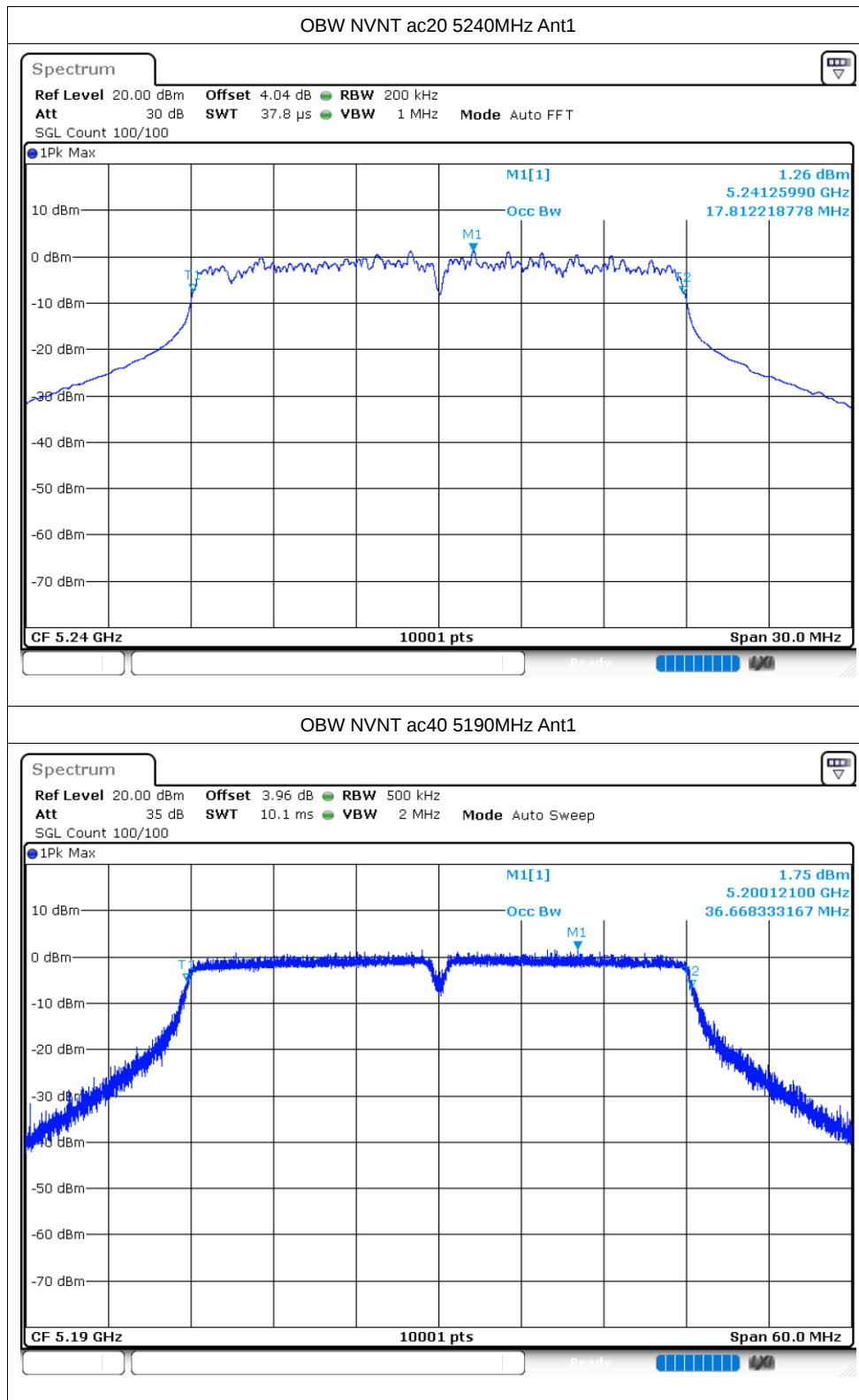


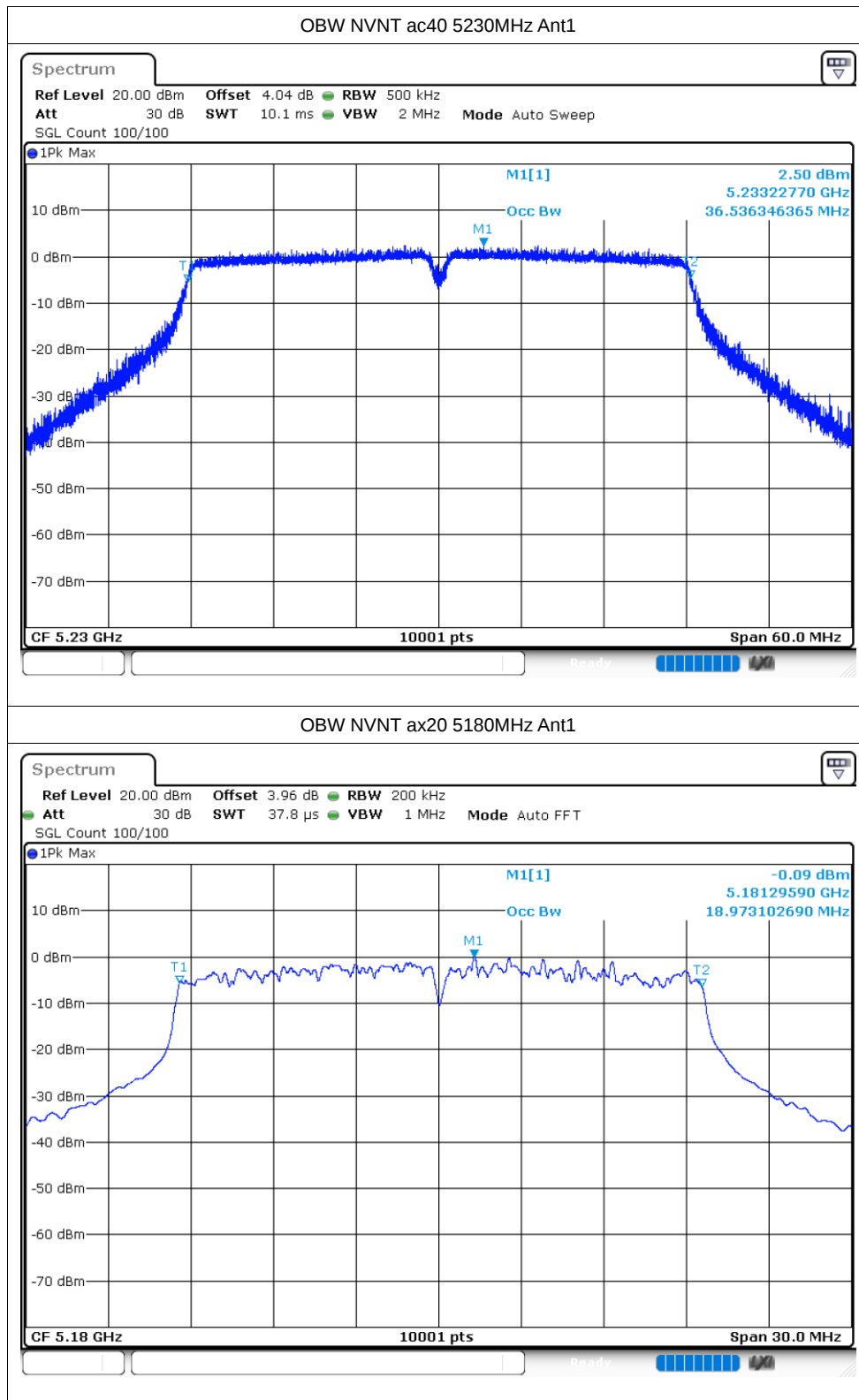


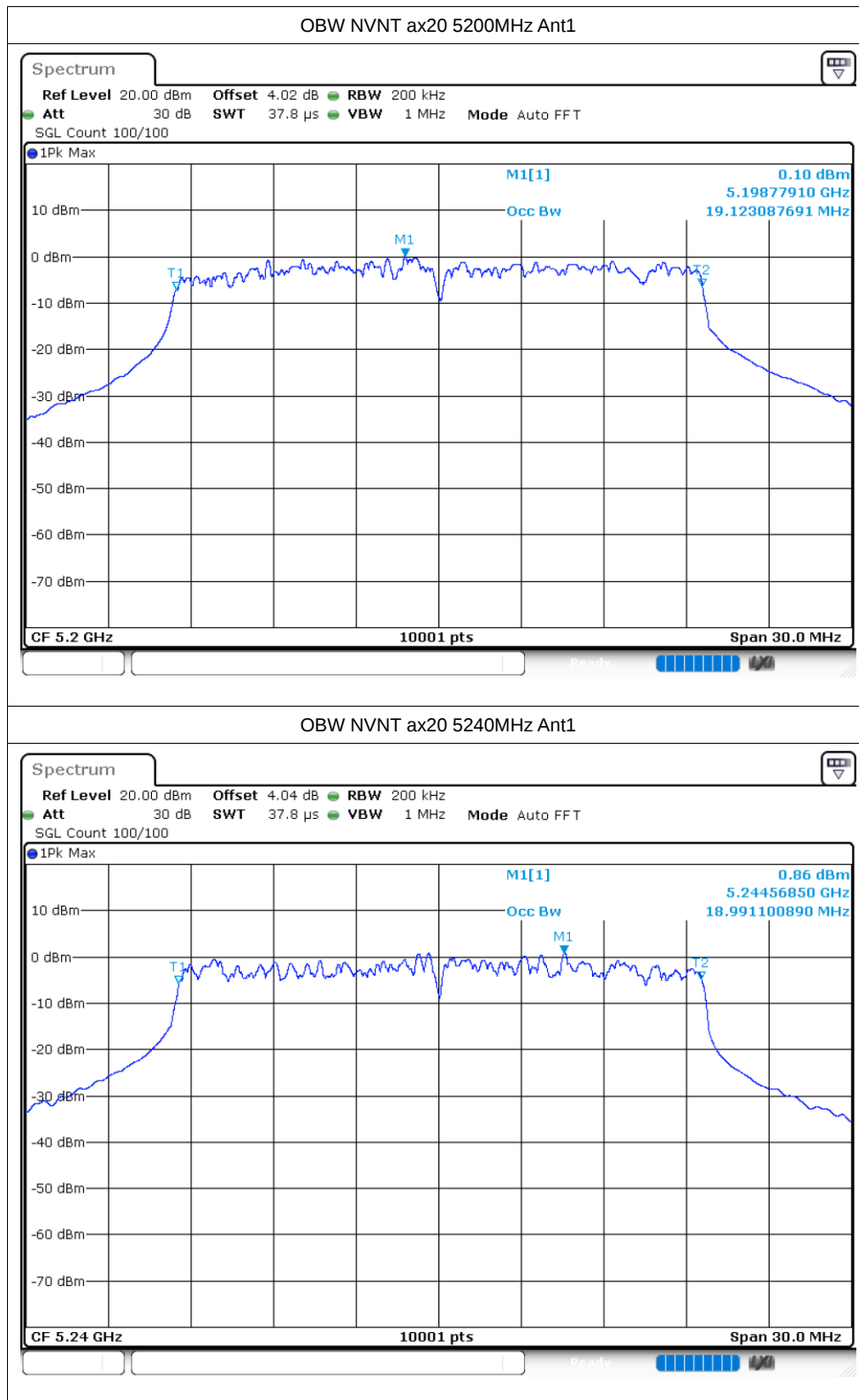


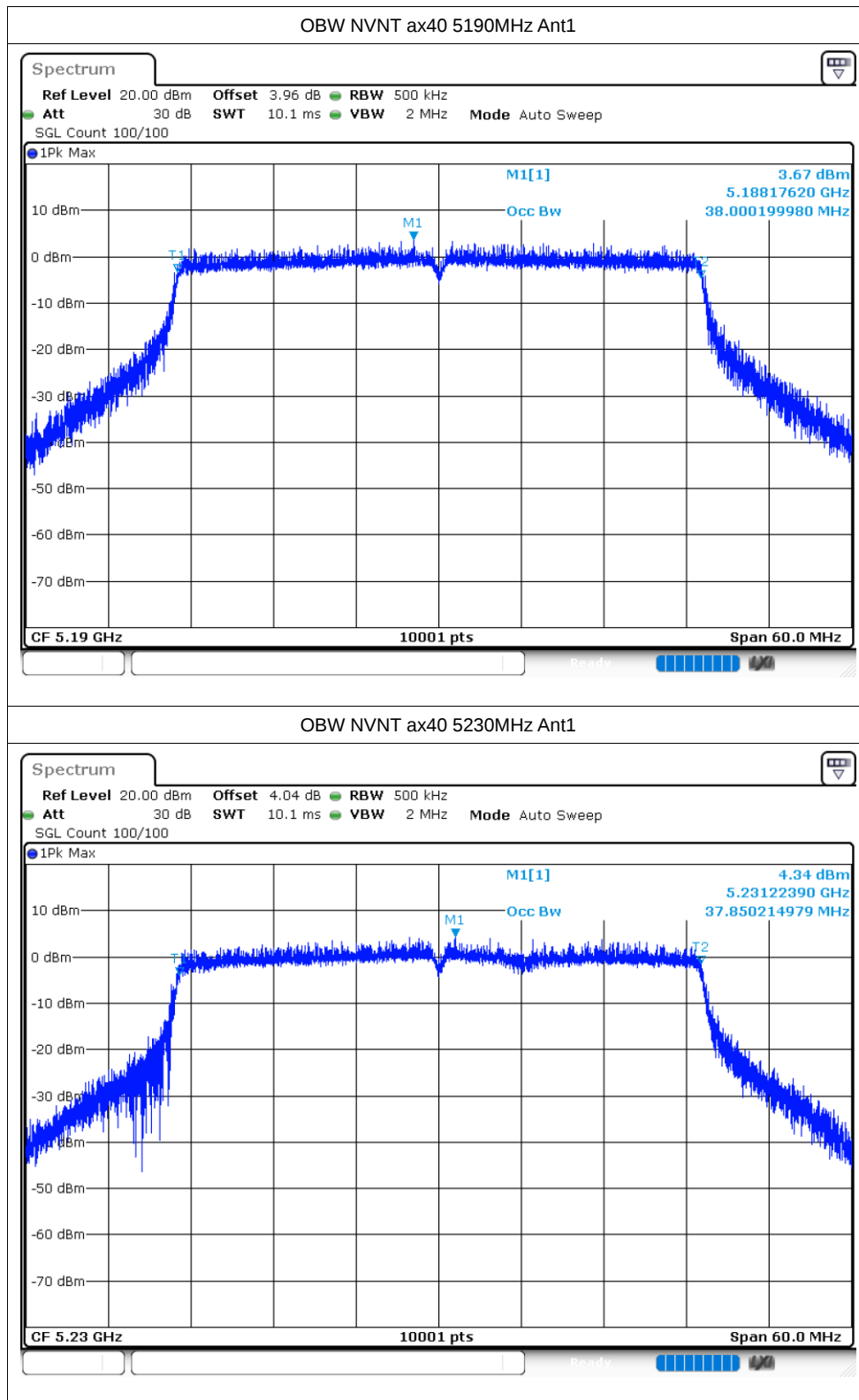










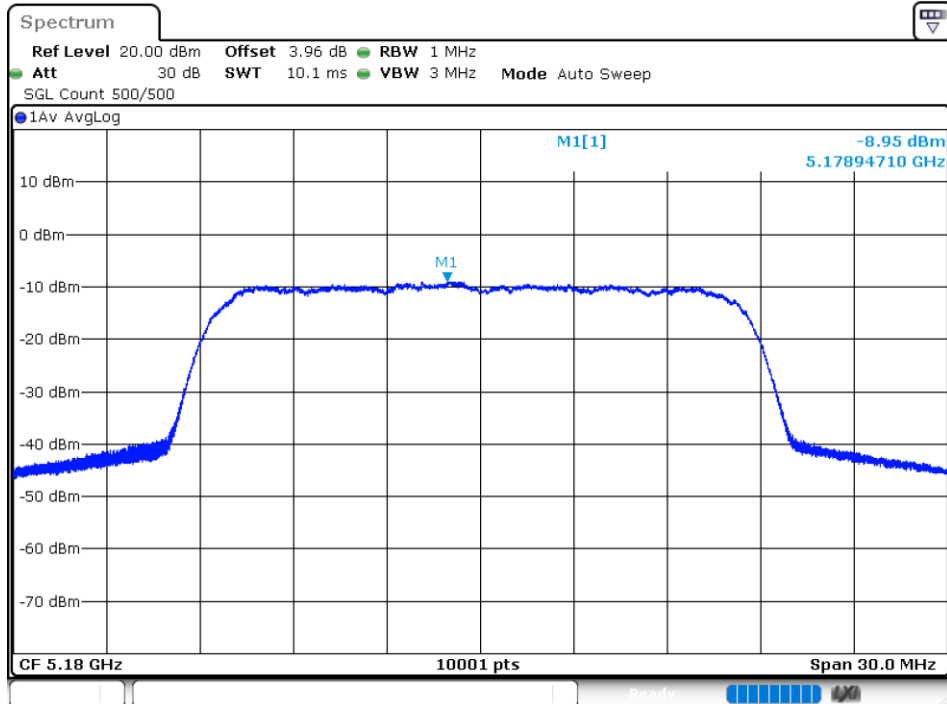


Maximum Power Spectral Density Level

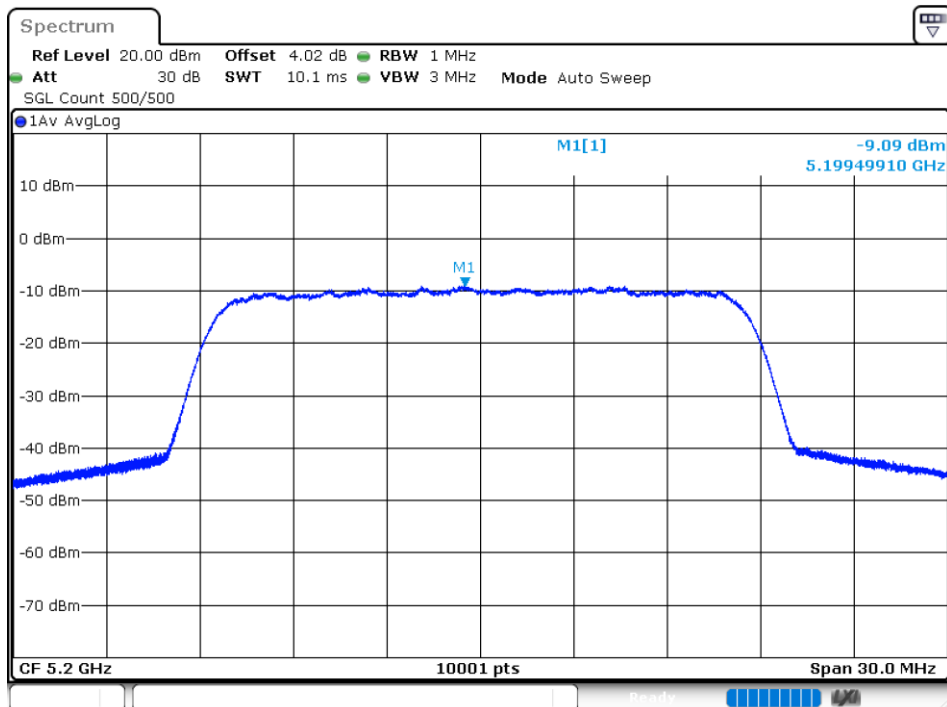
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-8.95	0.74	-8.21	11	Pass
NVNT	a	5200	Ant1	-9.09	0.71	-8.38	11	Pass
NVNT	a	5240	Ant1	-8.27	0.77	-7.5	11	Pass
NVNT	n20	5180	Ant1	-9.53	0.82	-8.71	11	Pass
NVNT	n20	5200	Ant1	-8.92	0.77	-8.15	11	Pass
NVNT	n20	5240	Ant1	-7.57	0.77	-6.8	11	Pass
NVNT	n40	5190	Ant1	-13.19	0.82	-12.37	11	Pass
NVNT	n40	5230	Ant1	-12.26	0.82	-11.44	11	Pass
NVNT	ac20	5180	Ant1	-7.8	0.82	-6.98	11	Pass
NVNT	ac20	5200	Ant1	-8.12	0.8	-7.32	11	Pass
NVNT	ac20	5240	Ant1	-8.25	0.82	-7.43	11	Pass
NVNT	ac40	5190	Ant1	-13.25	0.82	-12.43	11	Pass
NVNT	ac40	5230	Ant1	-12.29	0.81	-11.48	11	Pass
NVNT	ax20	5180	Ant1	-12.57	1.04	-11.53	11	Pass
NVNT	ax20	5200	Ant1	-13.24	0.99	-12.25	11	Pass
NVNT	ax20	5240	Ant1	-12.22	1.01	-11.21	11	Pass
NVNT	ax40	5190	Ant1	-15.58	1.03	-14.55	11	Pass
NVNT	ax40	5230	Ant1	-15.01	1.03	-13.98	11	Pass

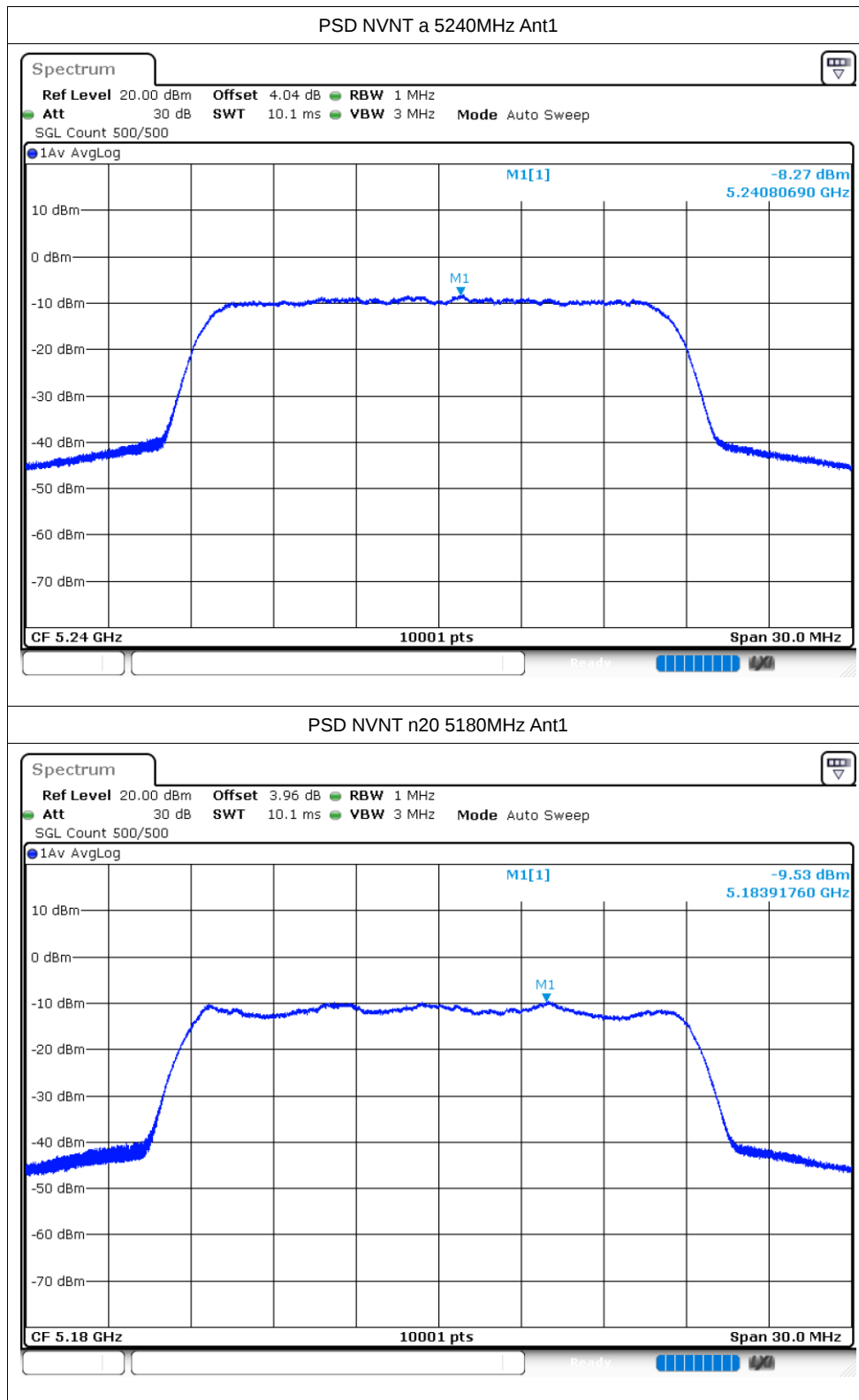
Test Graphs

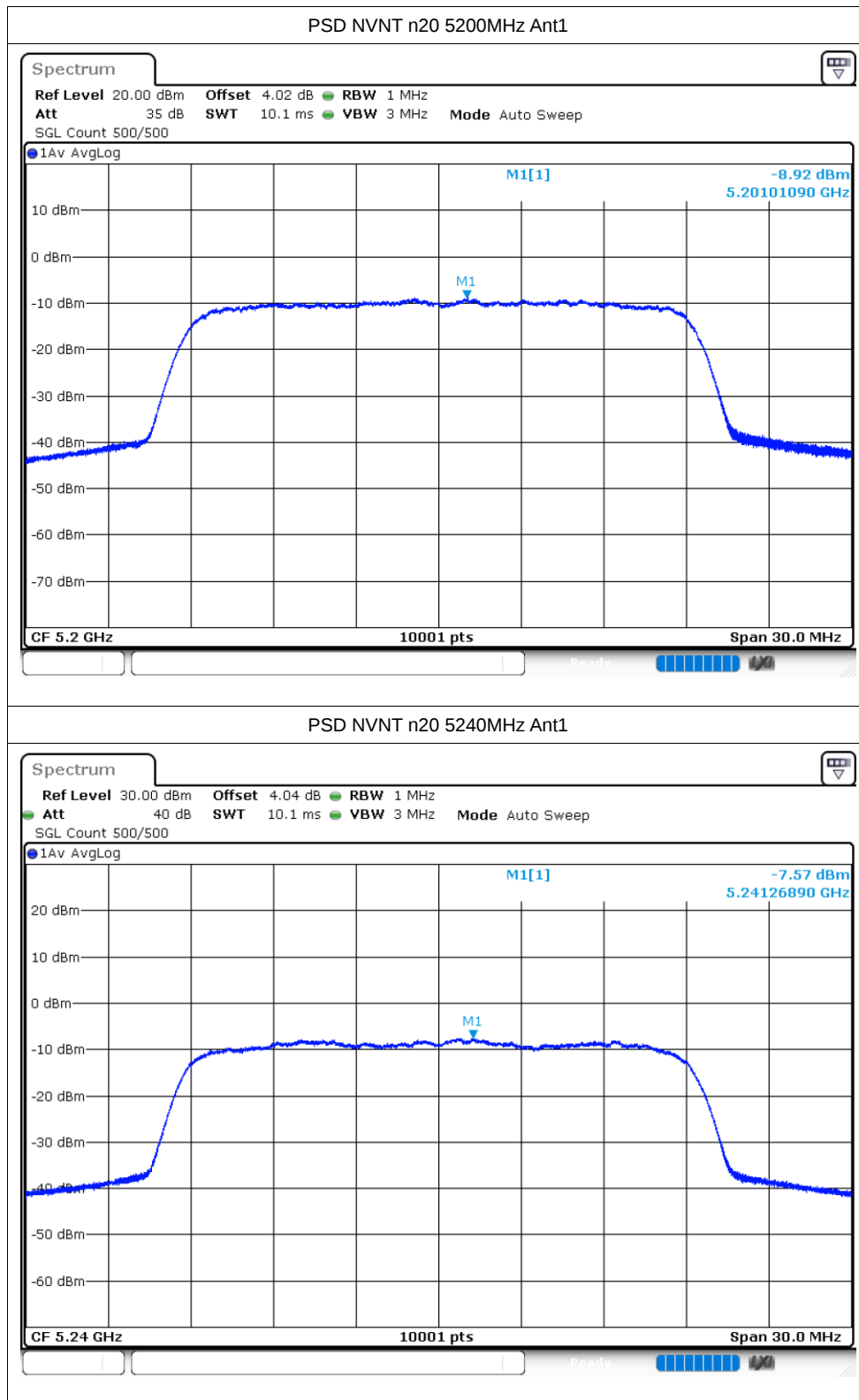
PSD NVNT a 5180MHz Ant1

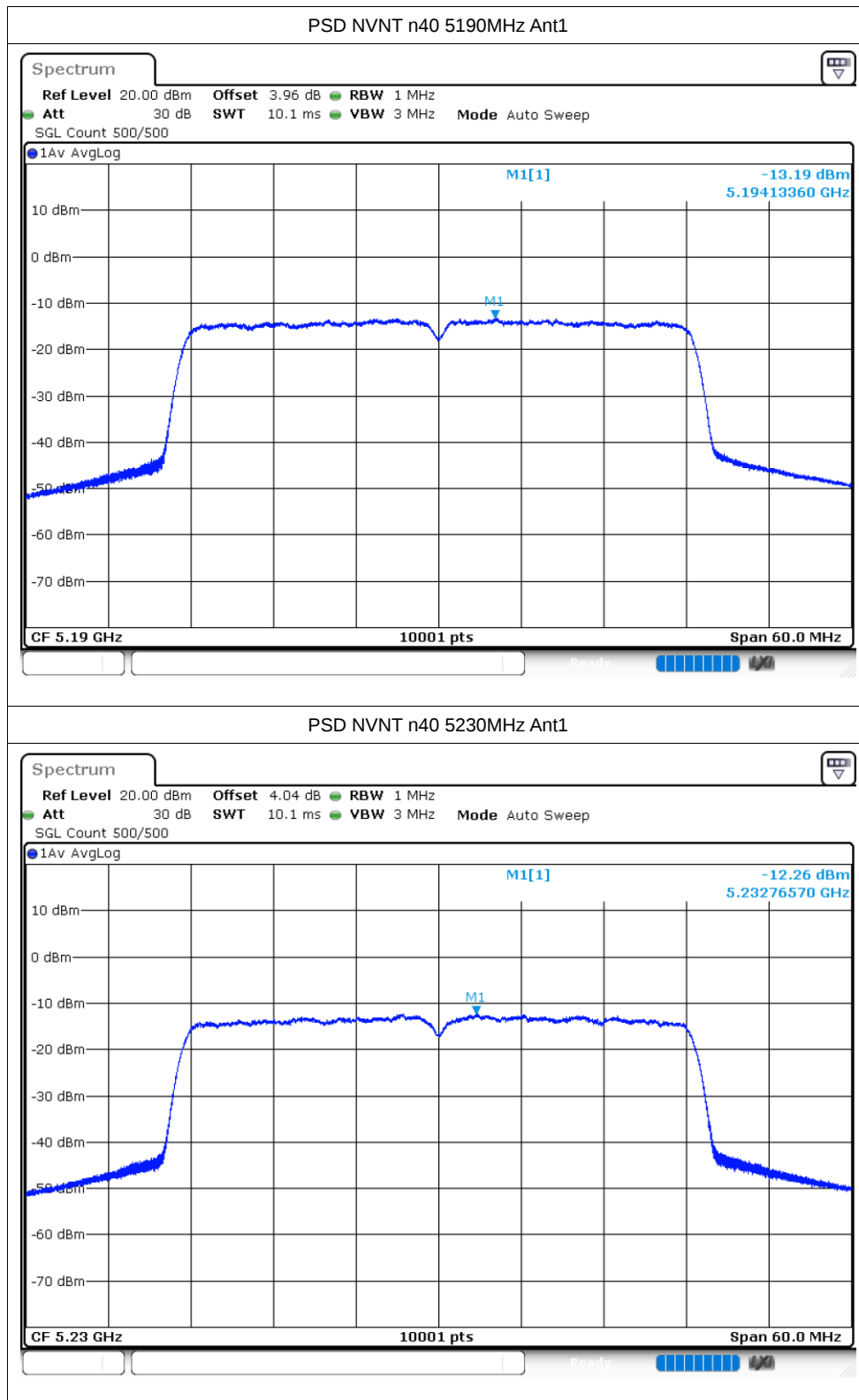


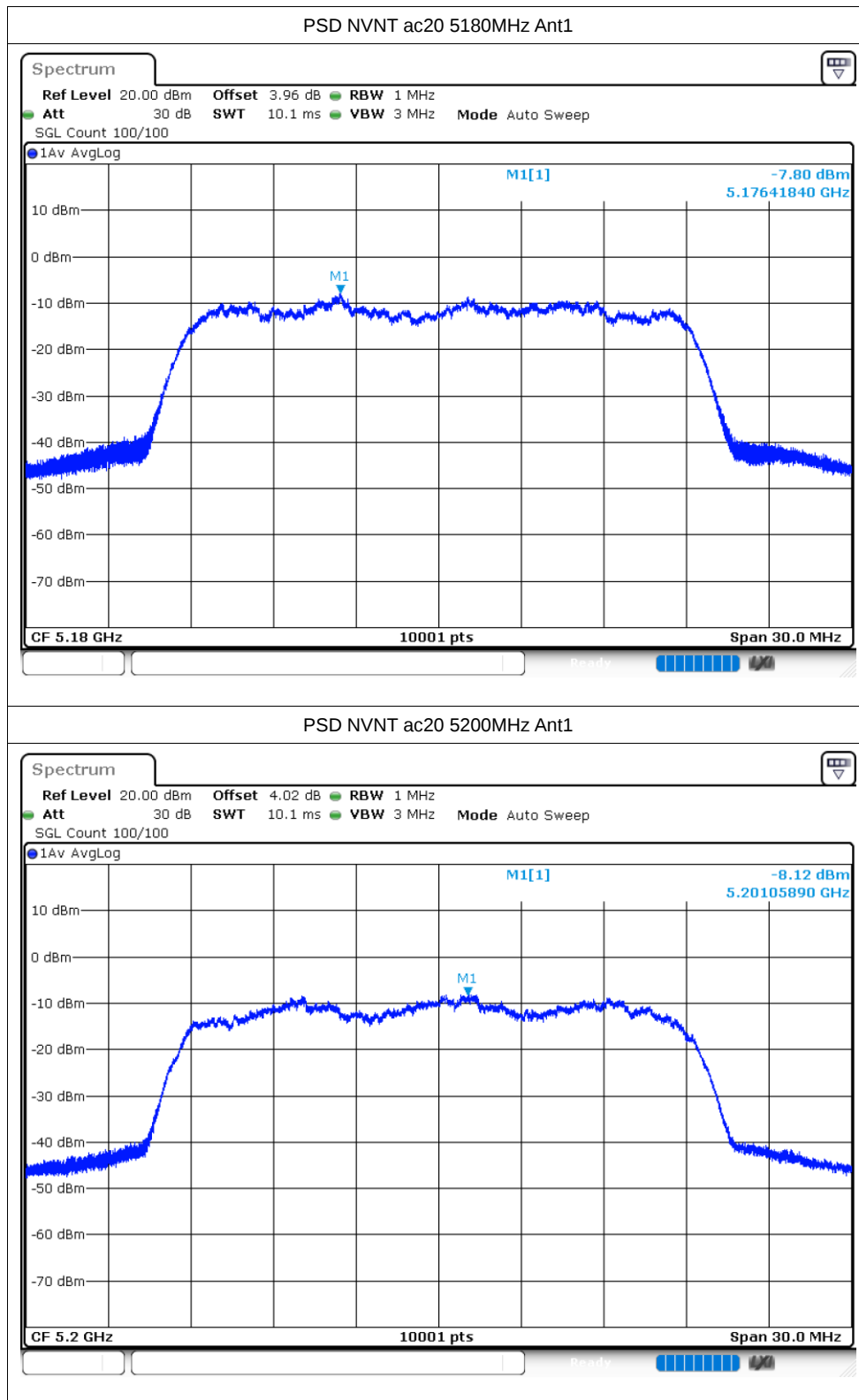
PSD NVNT a 5200MHz Ant1

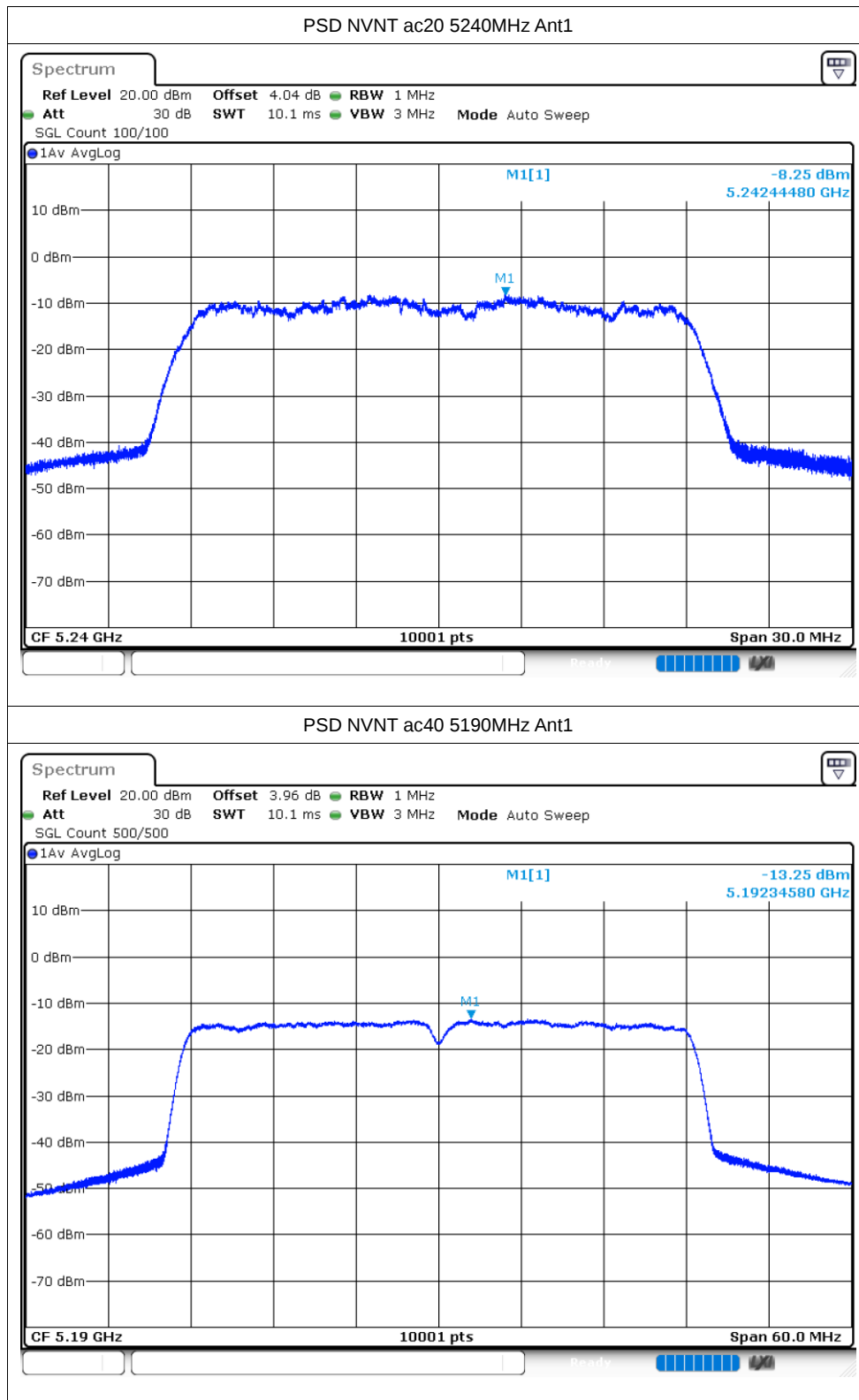


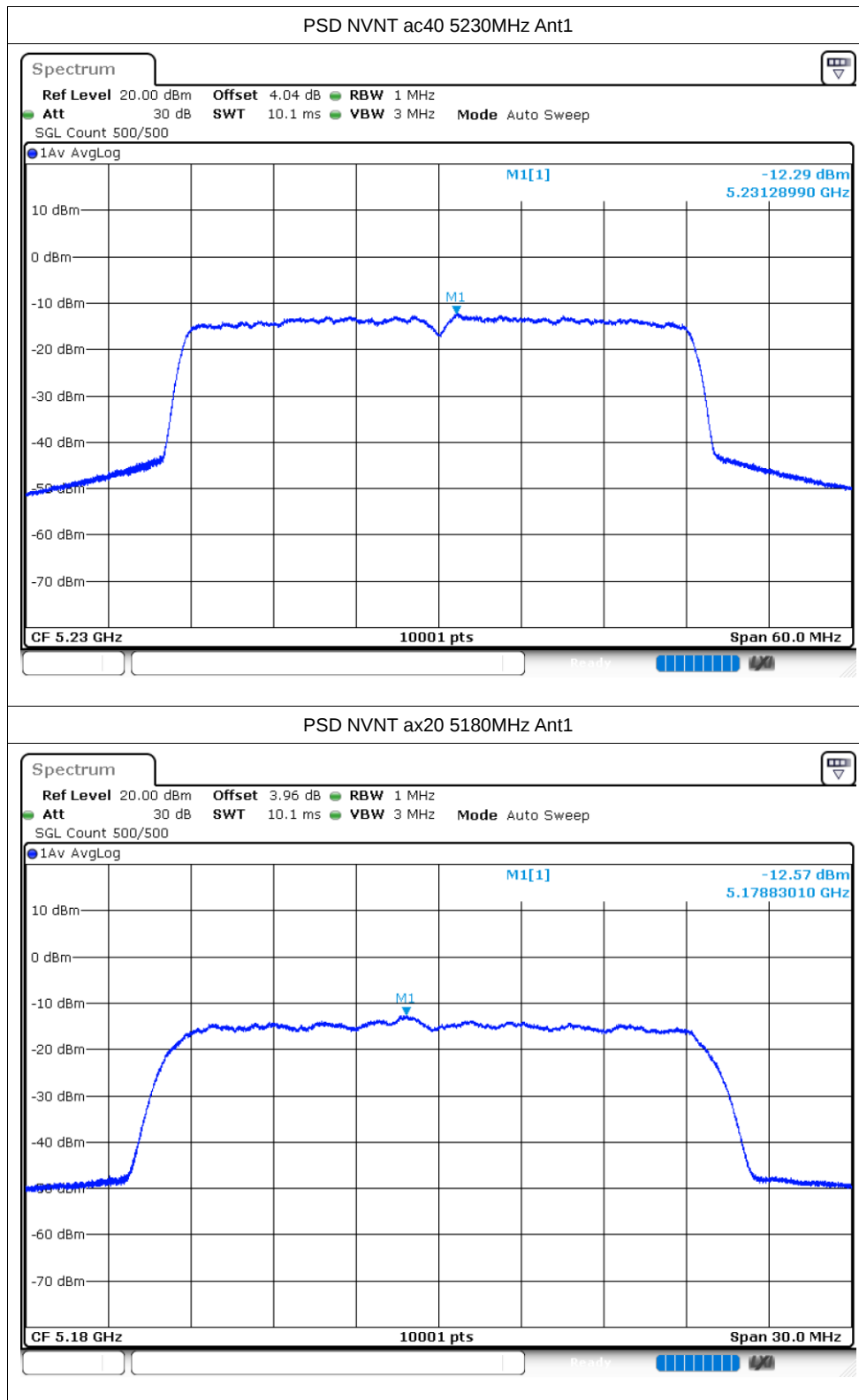


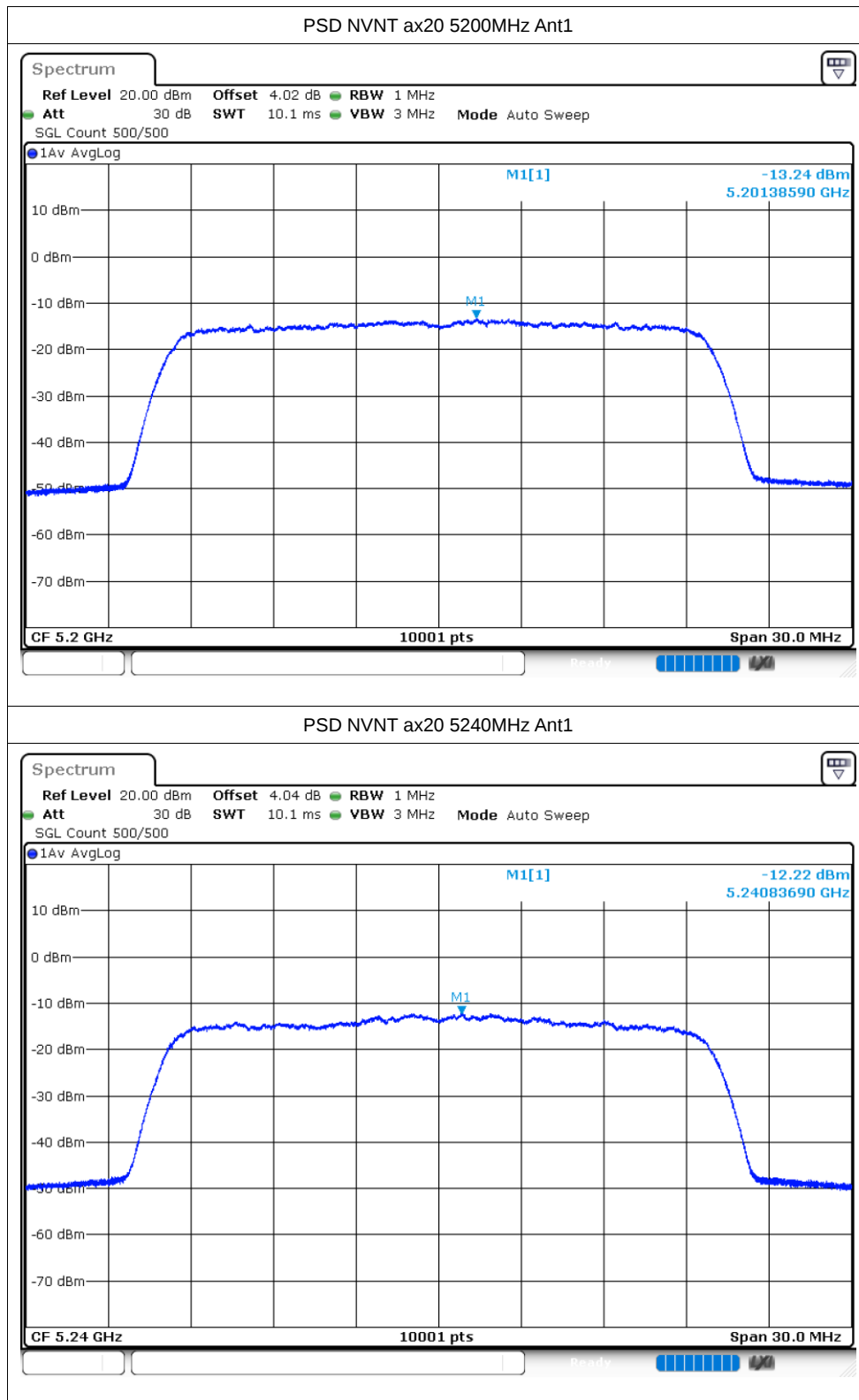


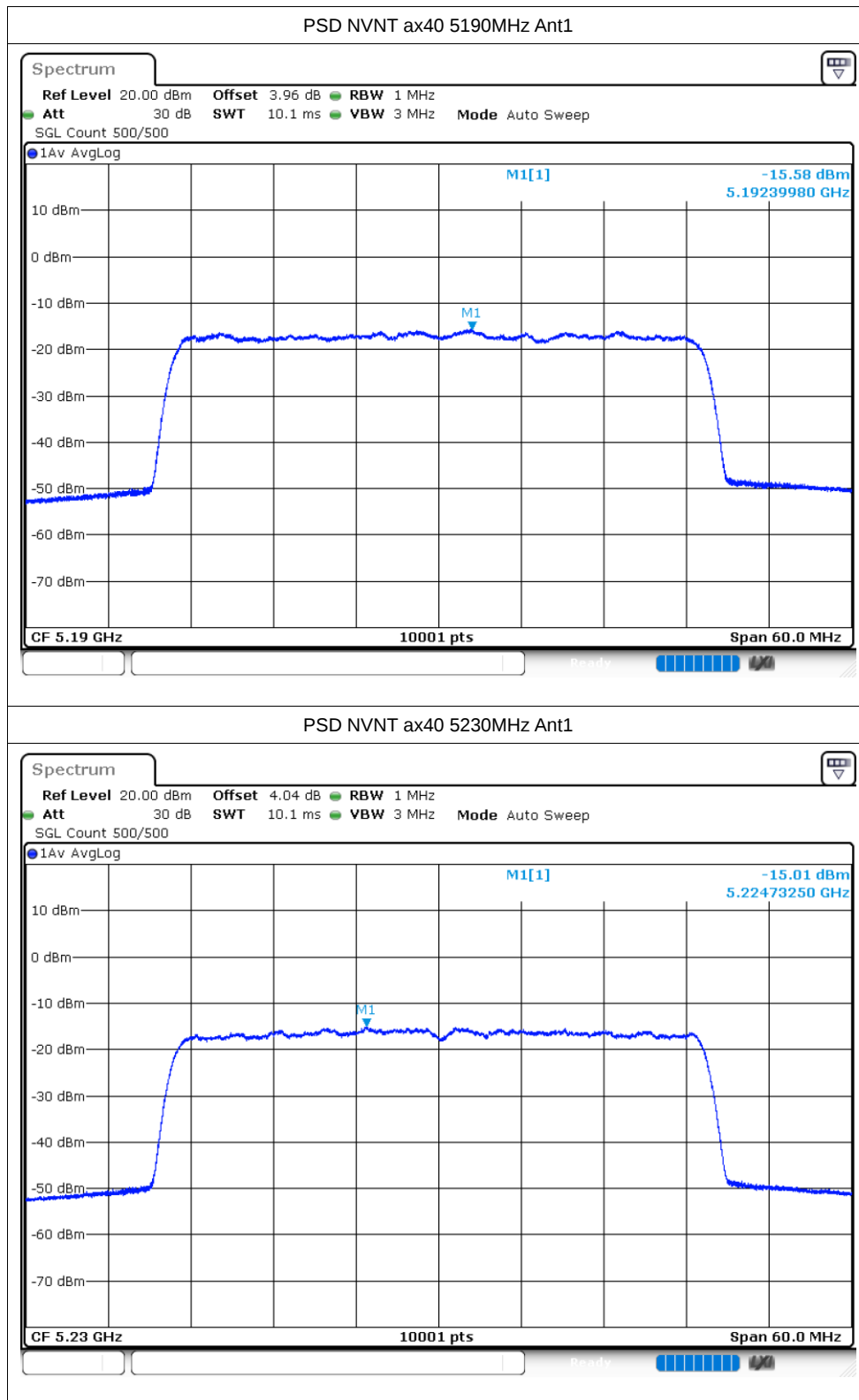












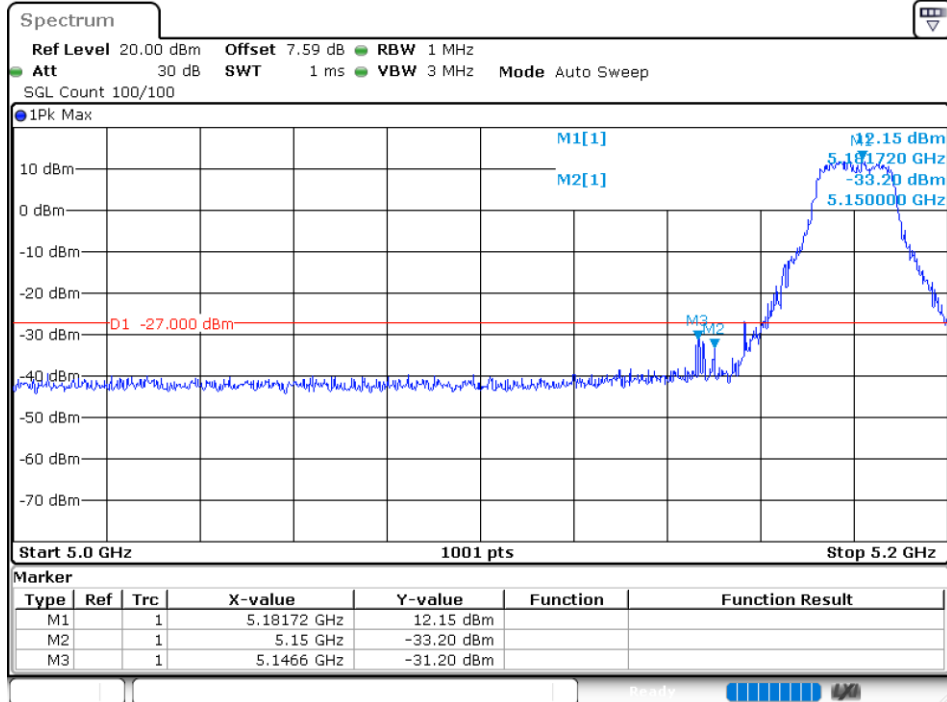
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-31.19	-27	Pass
NVNT	a	5240	Ant1	-38.95	-27	Pass
NVNT	n20	5180	Ant1	-34.62	-27	Pass
NVNT	n20	5240	Ant1	-39.53	-27	Pass
NVNT	n40	5190	Ant1	-33.17	-27	Pass
NVNT	n40	5230	Ant1	-39.56	-27	Pass
NVNT	ac20	5180	Ant1	-32.71	-27	Pass
NVNT	ac20	5240	Ant1	-39.56	-27	Pass
NVNT	ac40	5190	Ant1	-33.69	-27	Pass
NVNT	ac40	5230	Ant1	-39.45	-27	Pass
NVNT	ax20	5180	Ant1	-38.68	-27	Pass
NVNT	ax20	5240	Ant1	-38.76	-27	Pass
NVNT	ax40	5190	Ant1	-30.36	-27	Pass
NVNT	ax40	5230	Ant1	-39.34	-27	Pass

Note: Tested with increased antenna gain.

Test Graphs

Band Edge NVNT a 5180MHz Low Ant1



Band Edge NVNT a 5240MHz High Ant1

