

5.2G WIFI

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	66.99	1.74	5.56
NVNT	a	5200	Ant1	67.03	1.74	5.56
NVNT	a	5240	Ant1	67.02	1.74	5.88
NVNT	n20	5180	Ant1	65.39	1.84	6.25
NVNT	n20	5200	Ant1	65.4	1.84	6.25
NVNT	n20	5240	Ant1	65.4	1.84	6.25
NVNT	n40	5190	Ant1	81.53	0.89	8.33
NVNT	n40	5230	Ant1	81.47	0.89	7.69
NVNT	ac20	5180	Ant1	88.42	0.53	4.35
NVNT	ac20	5200	Ant1	88.33	0.54	4.35
NVNT	ac20	5240	Ant1	88.49	0.53	4.35
NVNT	ac40	5190	Ant1	92.32	0.35	7.69
NVNT	ac40	5230	Ant1	92.33	0.35	7.69
NVNT	ac80	5210	Ant1	89.13	0.5	12.5

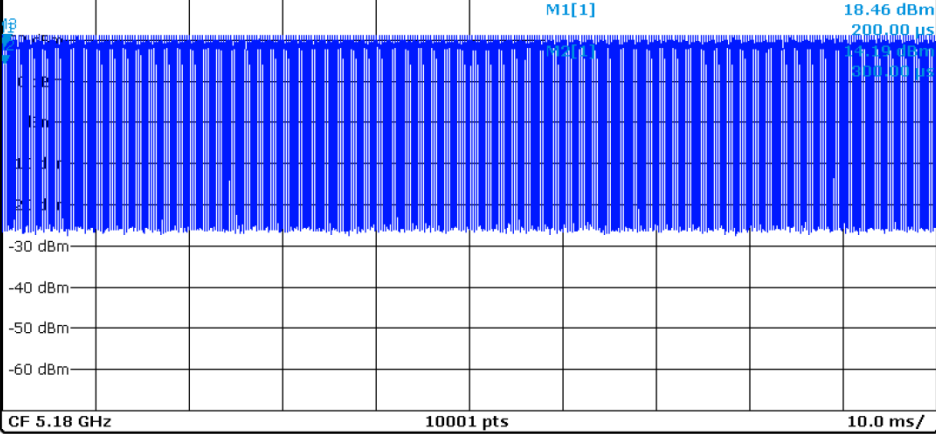
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

Spectrum

Ref Level 30.00 dBm Offset 3.96 dB RBW 10 MHz
 Att 40 dB SWT 100 ms VBW 10 MHz
 SGL

1Pk Clrw



Marker

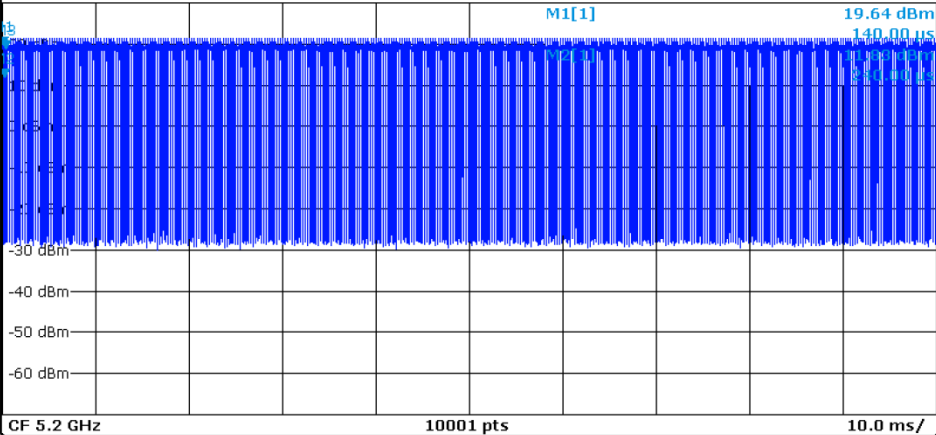
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	200.0 μ s	18.46 dBm		
M2		1	300.0 μ s	14.19 dBm		
M3		1	480.0 μ s	19.33 dBm		

Duty Cycle NVNT a 5200MHz Ant1

Spectrum

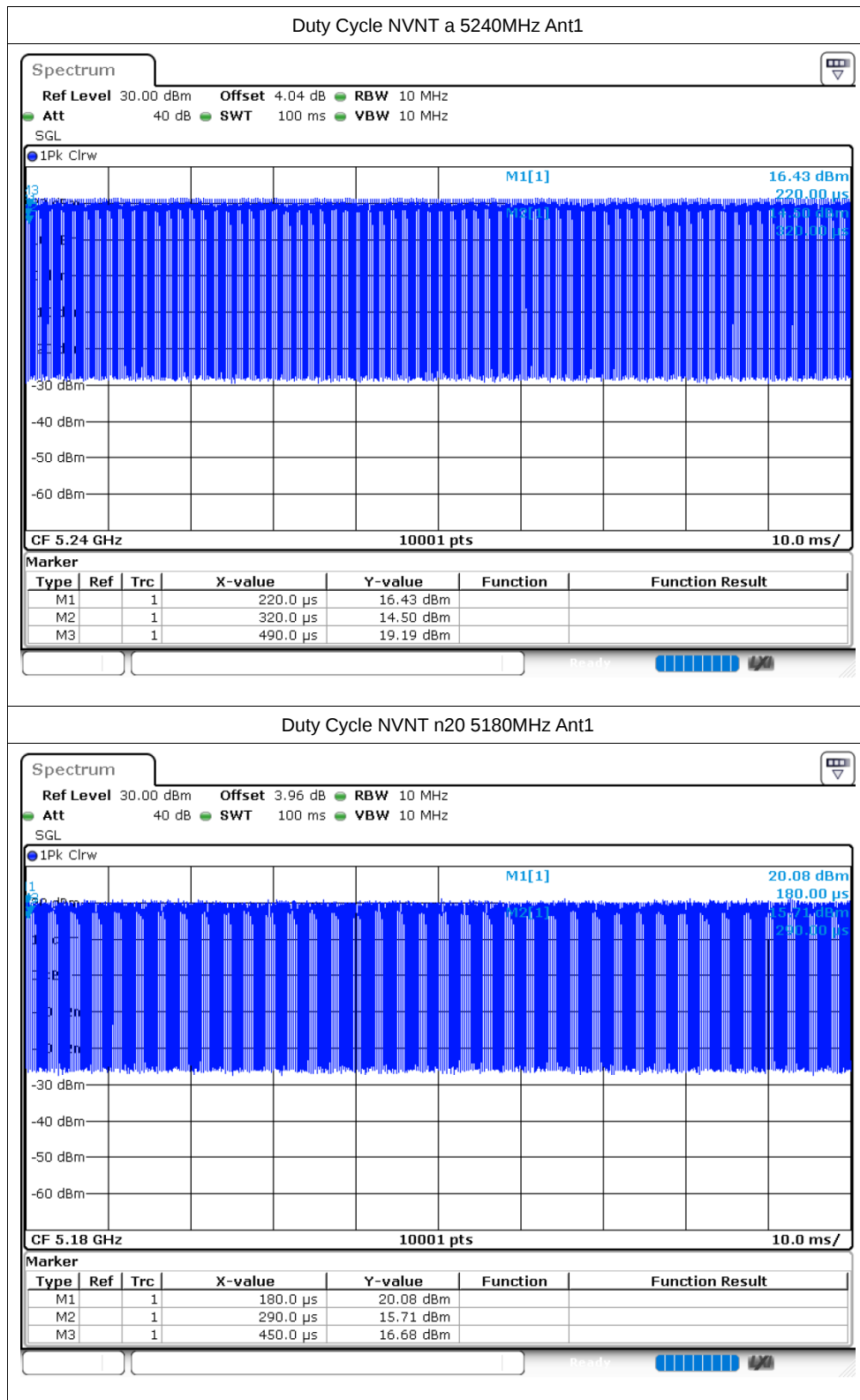
Ref Level 30.00 dBm Offset 4.02 dB RBW 10 MHz
 Att 40 dB SWT 100 ms VBW 10 MHz
 SGL

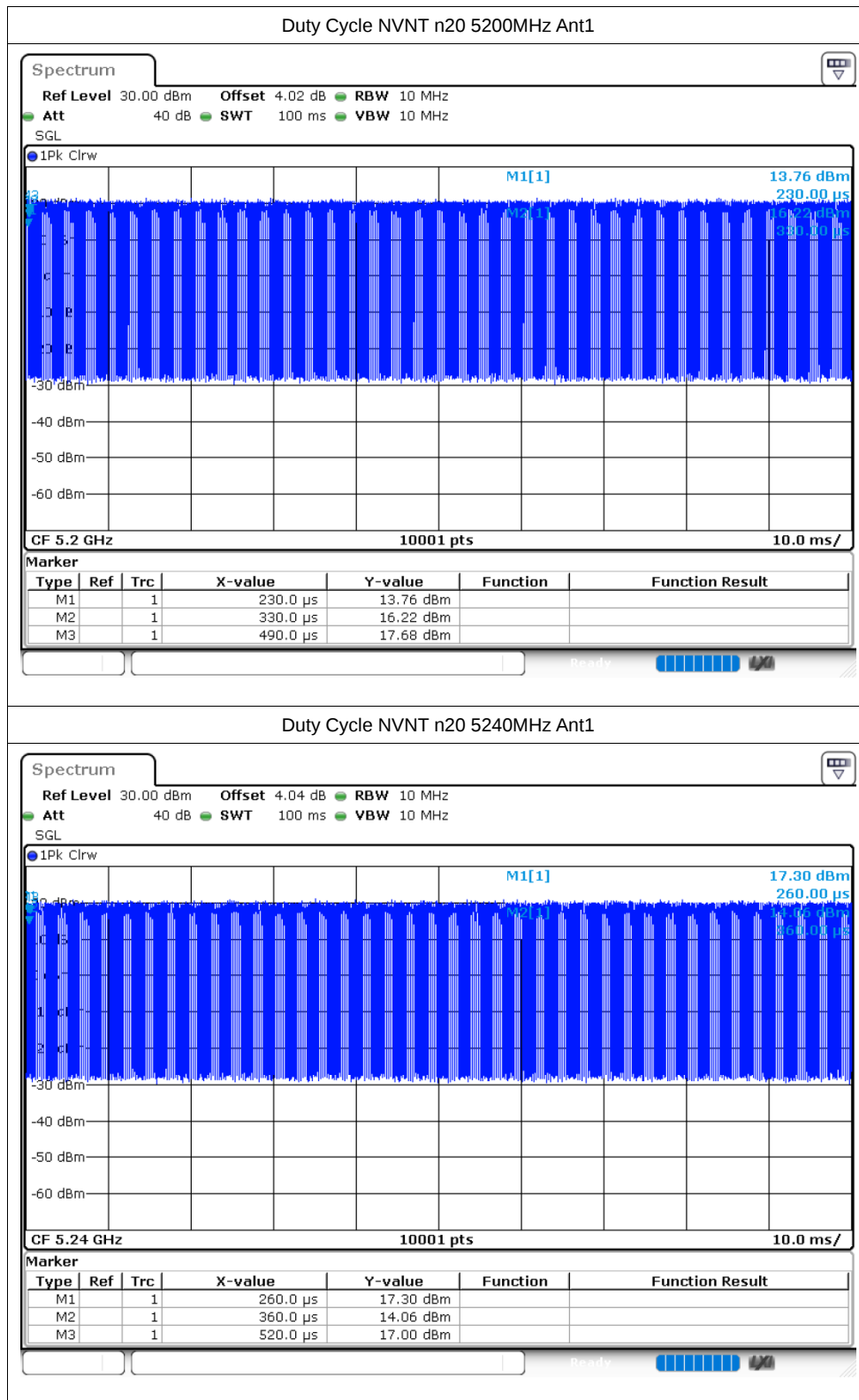
1Pk Clrw



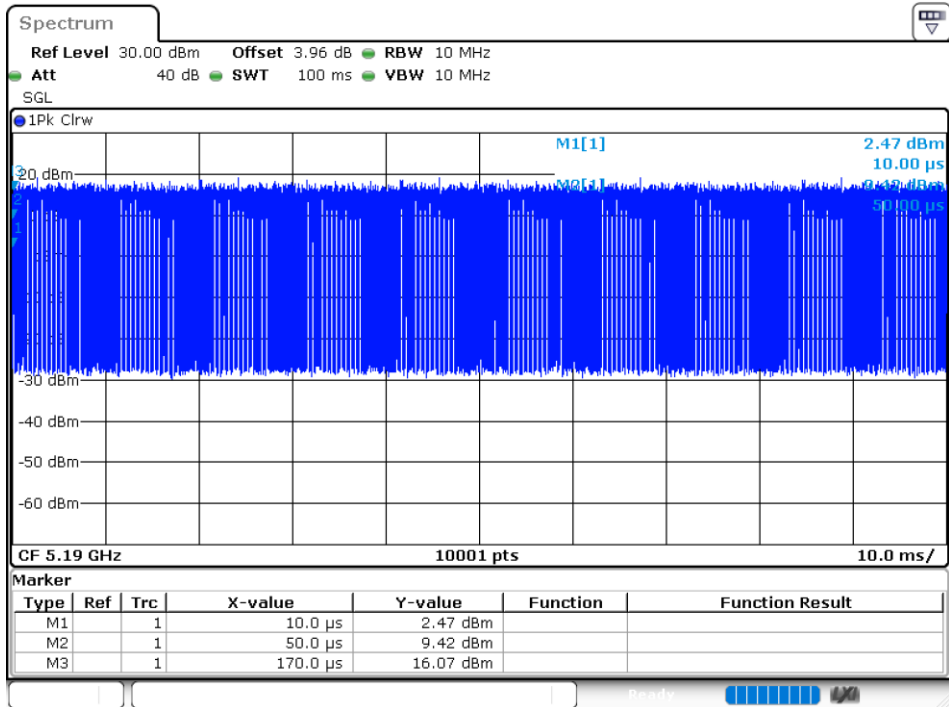
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	140.0 μ s	19.64 dBm		
M2		1	240.0 μ s	11.83 dBm		
M3		1	420.0 μ s	18.77 dBm		

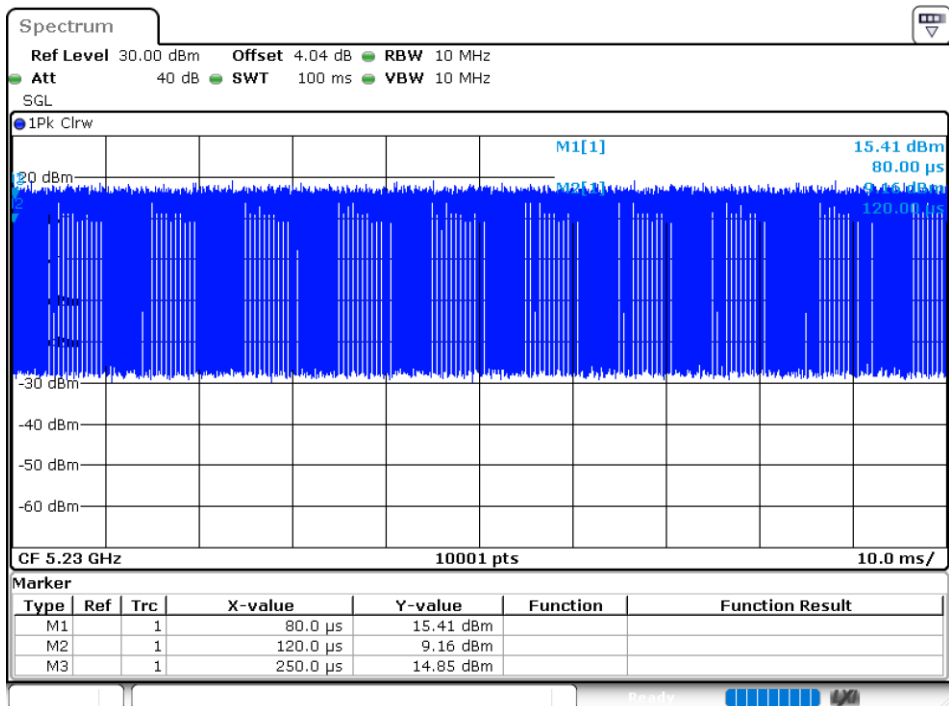


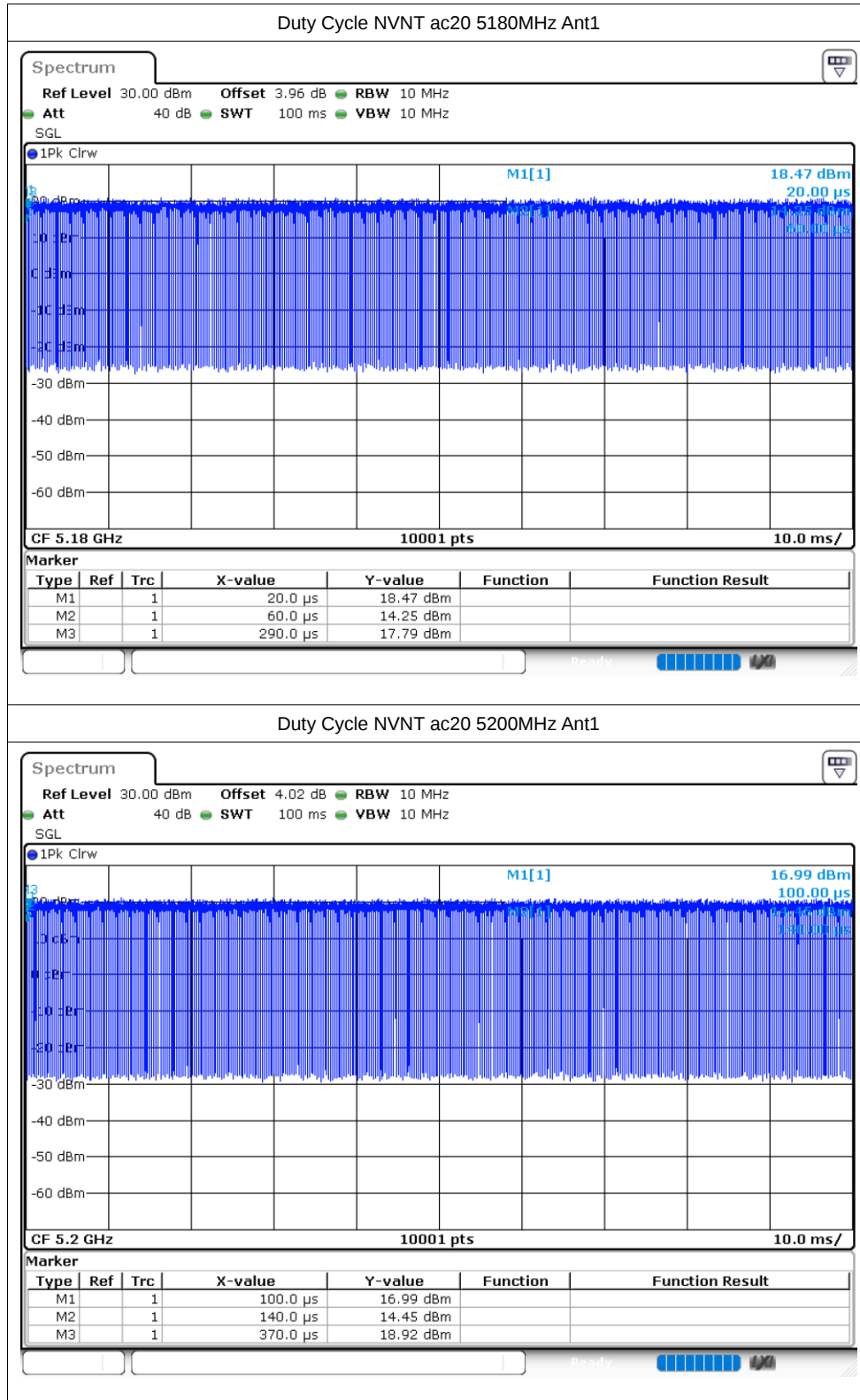


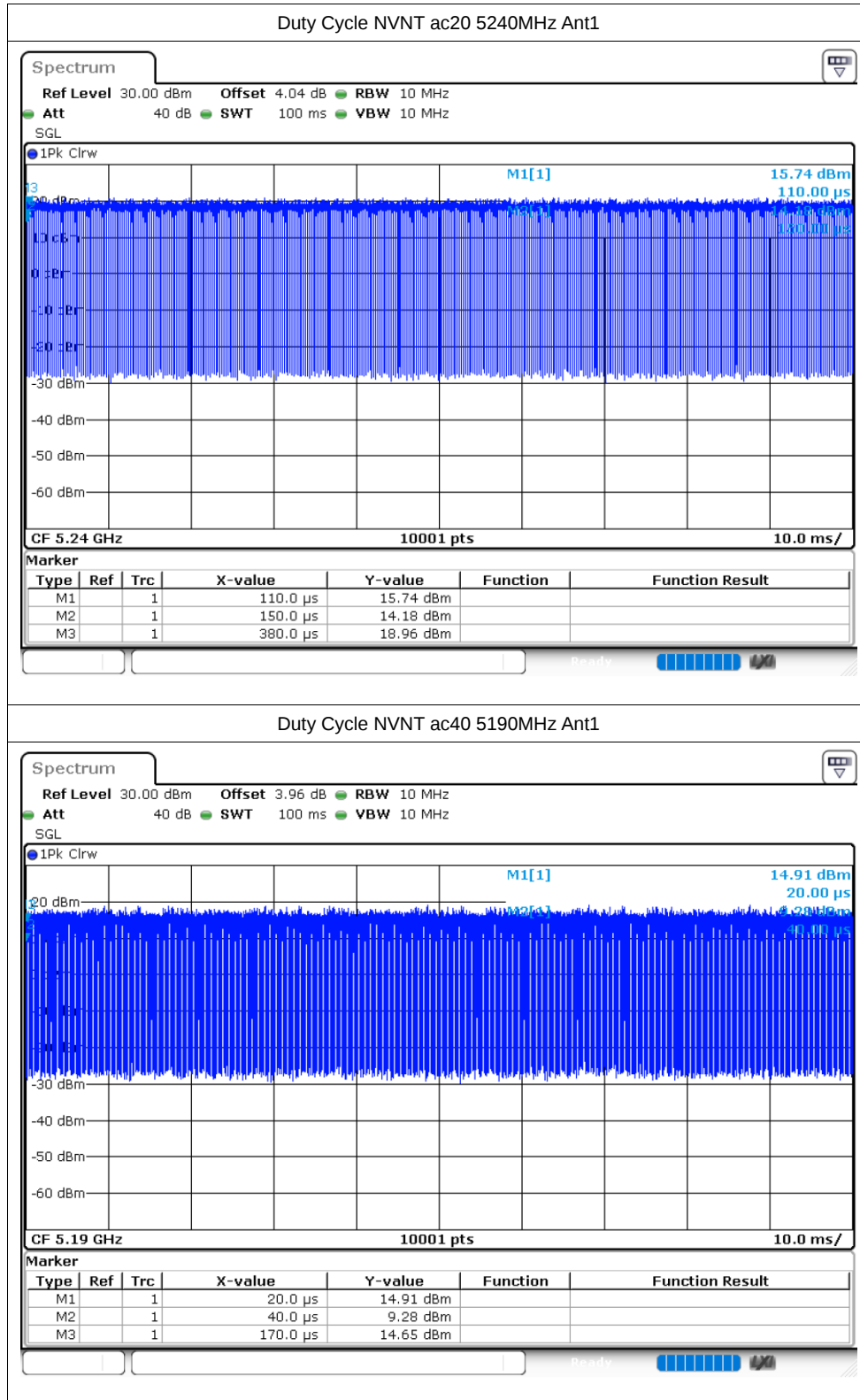
Duty Cycle NVNT n40 5190MHz Ant1

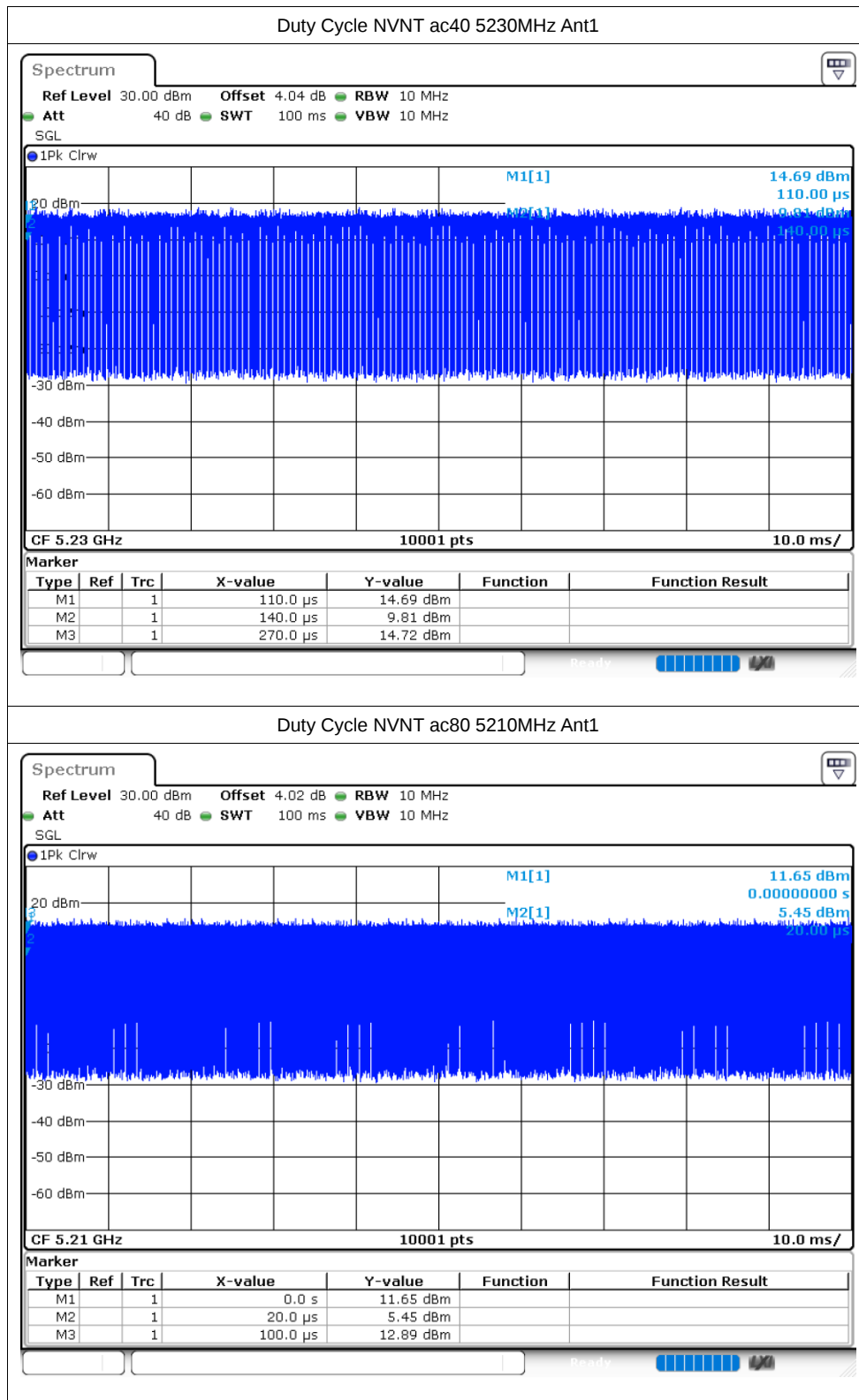


Duty Cycle NVNT n40 5230MHz Ant1









Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	14.74	24	Pass
NVNT	a	5200	Ant1	15.04	24	Pass
NVNT	a	5240	Ant1	14.88	24	Pass
NVNT	n20	5180	Ant1	14.79	24	Pass
NVNT	n20	5200	Ant1	14.61	24	Pass
NVNT	n20	5240	Ant1	14.45	24	Pass
NVNT	n40	5190	Ant1	13.48	24	Pass
NVNT	n40	5230	Ant1	13.26	24	Pass
NVNT	ac20	5180	Ant1	14.59	24	Pass
NVNT	ac20	5200	Ant1	14.28	24	Pass
NVNT	ac20	5240	Ant1	14.47	24	Pass
NVNT	ac40	5190	Ant1	13.3	24	Pass
NVNT	ac40	5230	Ant1	13.11	24	Pass
NVNT	ac80	5210	Ant1	12.89	24	Pass

-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.577	0.5	Pass
NVNT	a	5200	Ant1	20.454	0.5	Pass
NVNT	a	5240	Ant1	20.598	0.5	Pass
NVNT	n20	5180	Ant1	20.859	0.5	Pass
NVNT	n20	5200	Ant1	20.925	0.5	Pass
NVNT	n20	5240	Ant1	20.934	0.5	Pass
NVNT	n40	5190	Ant1	39.354	0.5	Pass
NVNT	n40	5230	Ant1	39.228	0.5	Pass
NVNT	ac20	5180	Ant1	21.171	0.5	Pass
NVNT	ac20	5200	Ant1	20.88	0.5	Pass
NVNT	ac20	5240	Ant1	21.258	0.5	Pass
NVNT	ac40	5190	Ant1	39.426	0.5	Pass
NVNT	ac40	5230	Ant1	39.186	0.5	Pass
NVNT	ac80	5210	Ant1	80.364	0.5	Pass

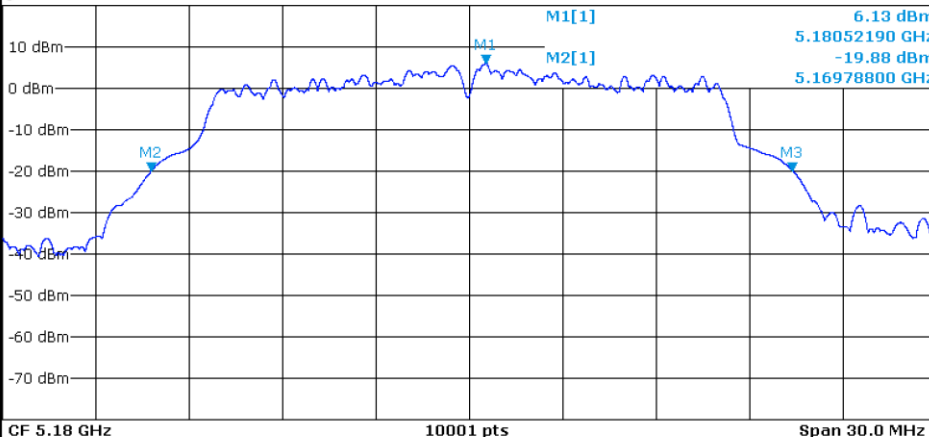
Test Graphs

-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

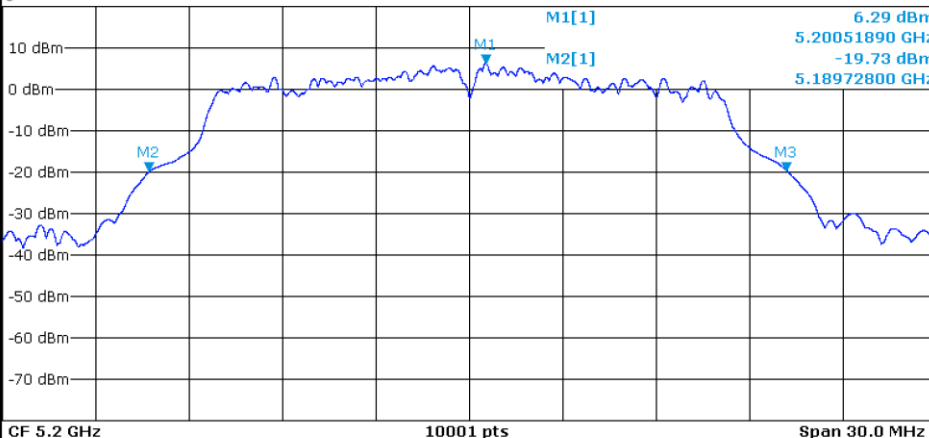
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.1805219 GHz	6.13 dBm		
M2	1		5.169788 GHz	-19.88 dBm		
M3	1		5.190365 GHz	-19.88 dBm		

-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

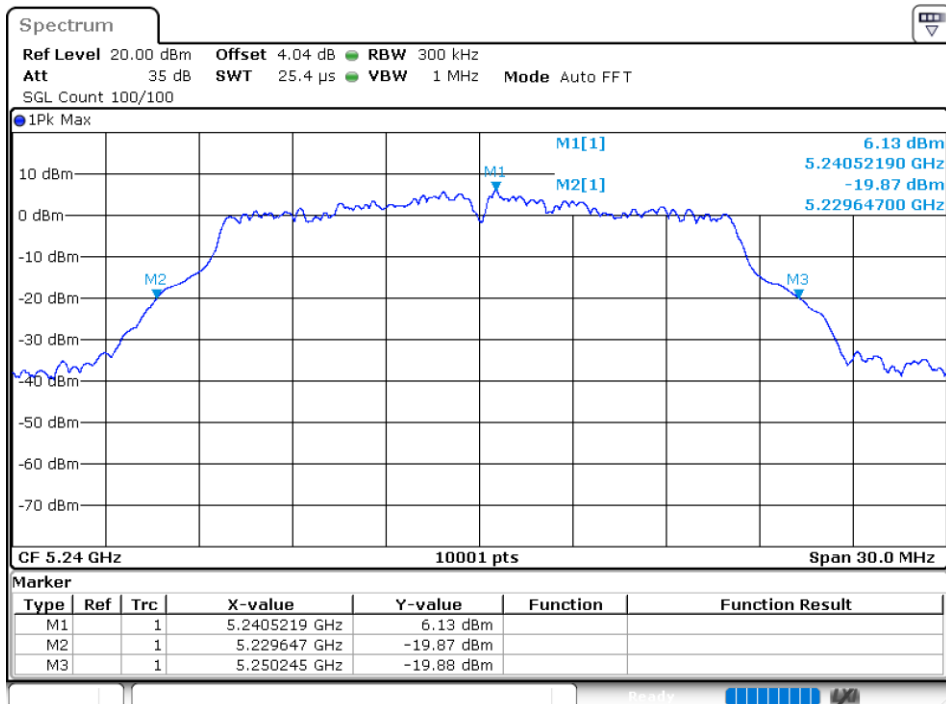
1Pk Max



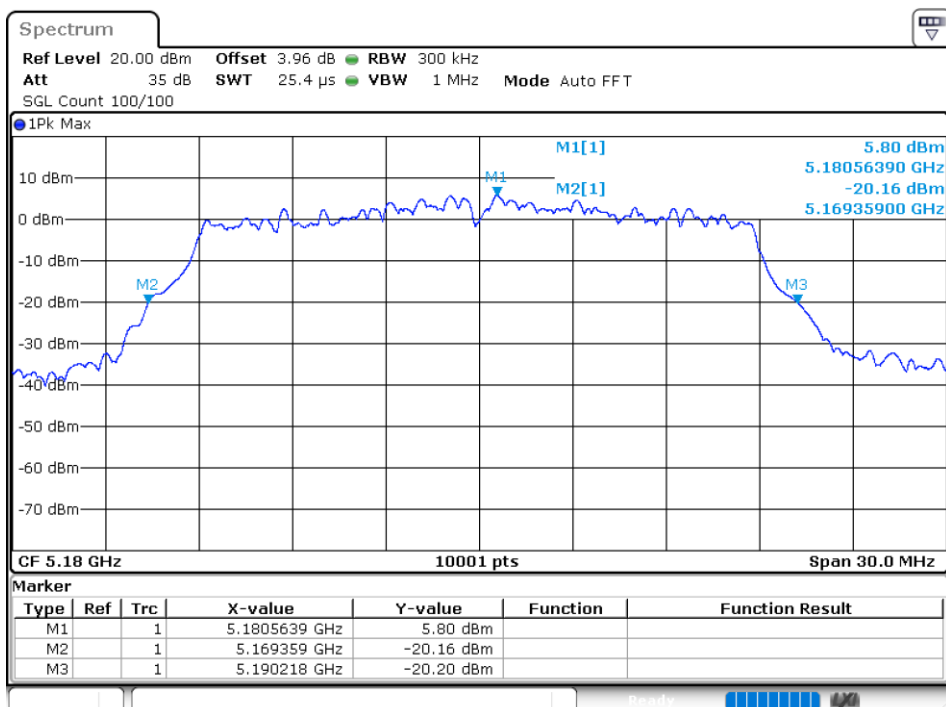
Marker

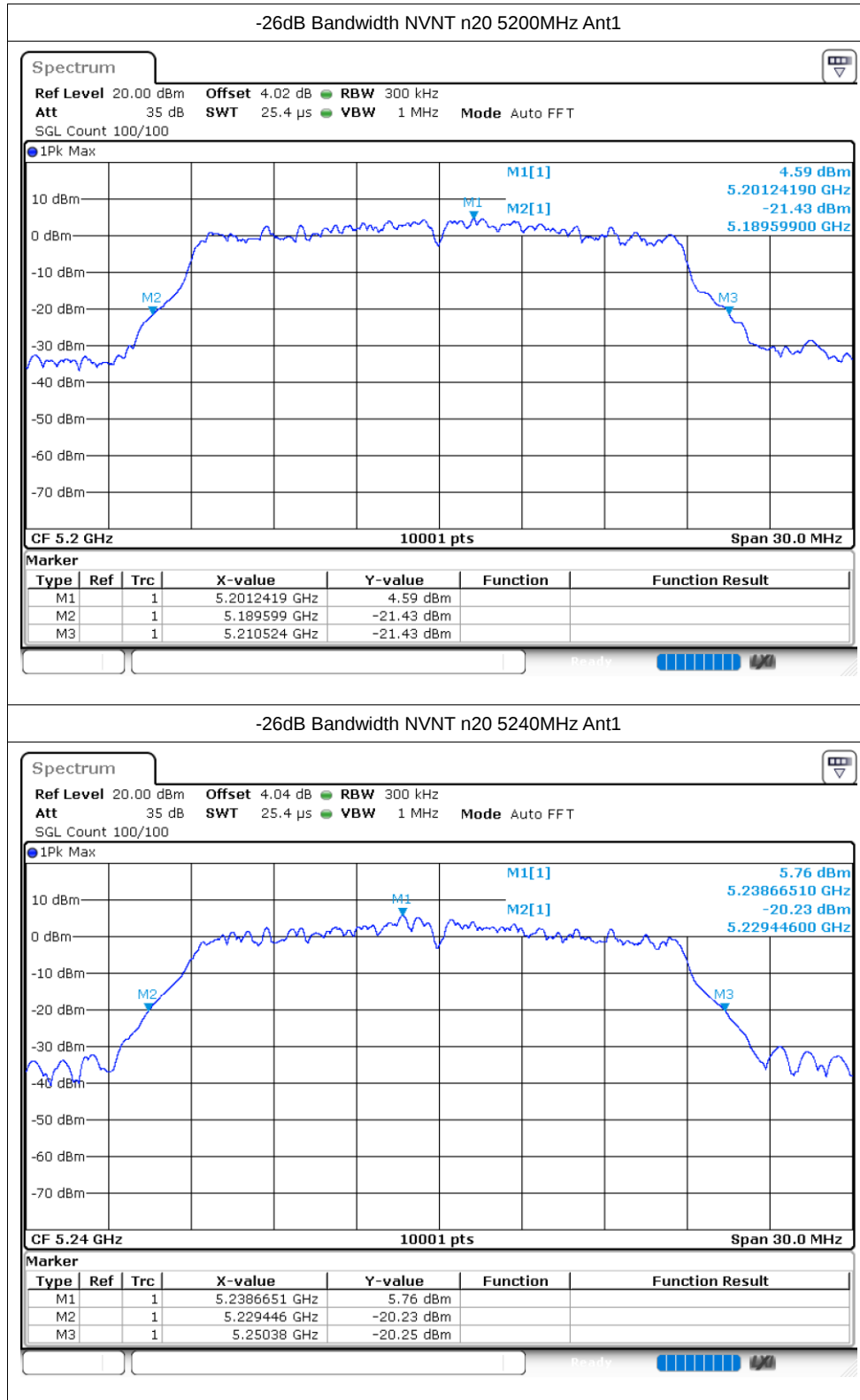
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.2005189 GHz	6.29 dBm		
M2	1		5.189728 GHz	-19.73 dBm		
M3	1		5.210182 GHz	-19.72 dBm		

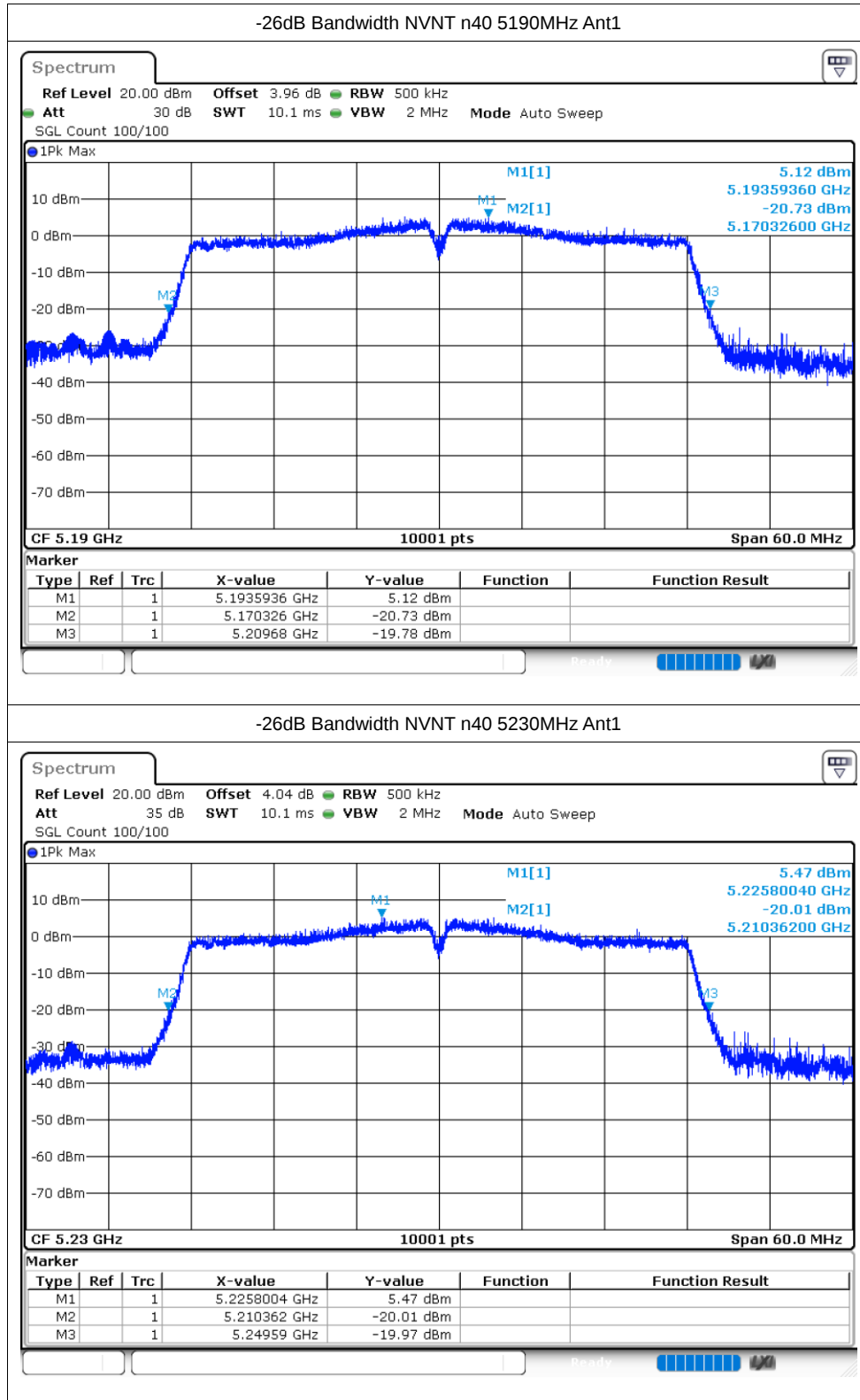
-26dB Bandwidth NVNT a 5240MHz Ant1

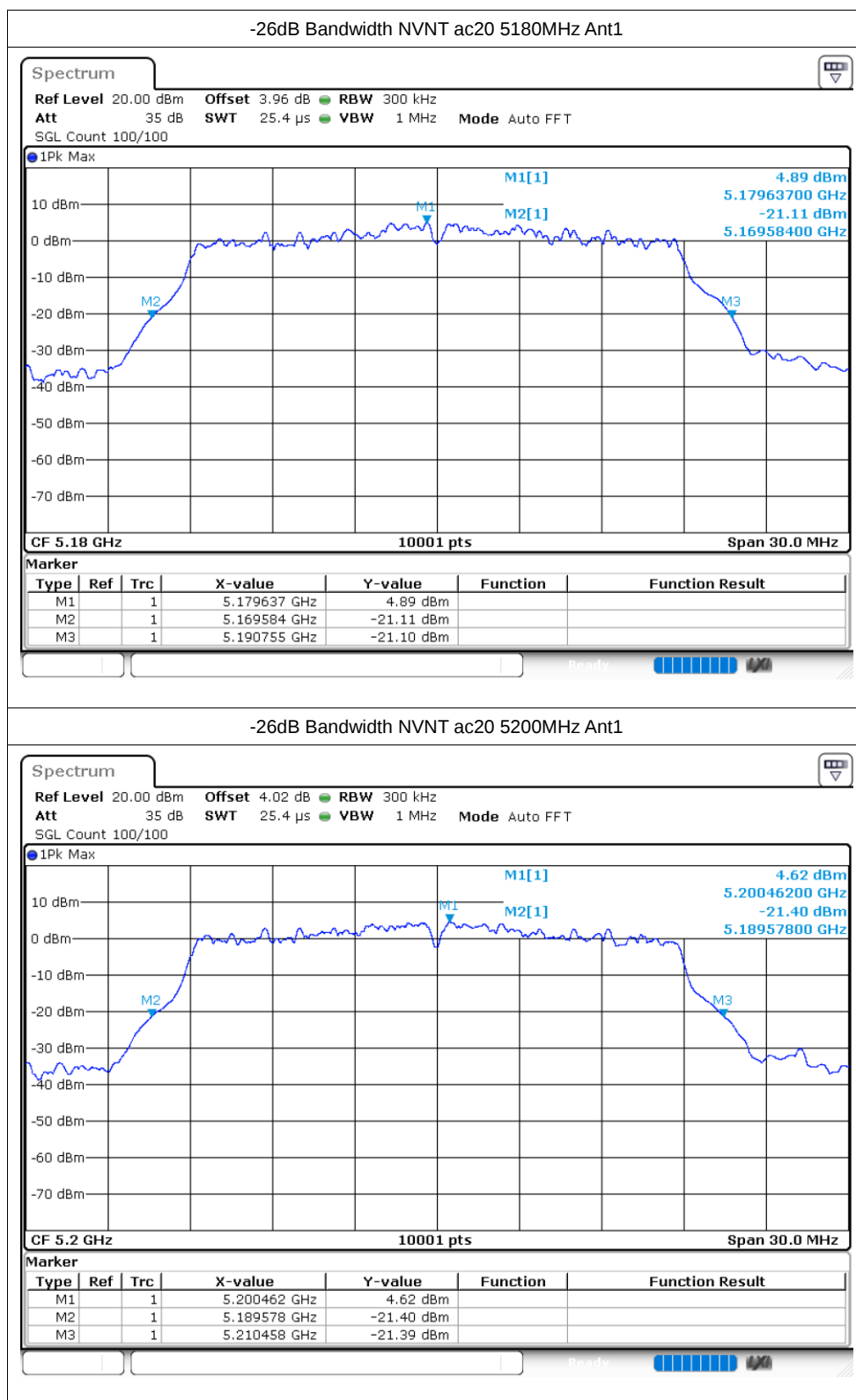


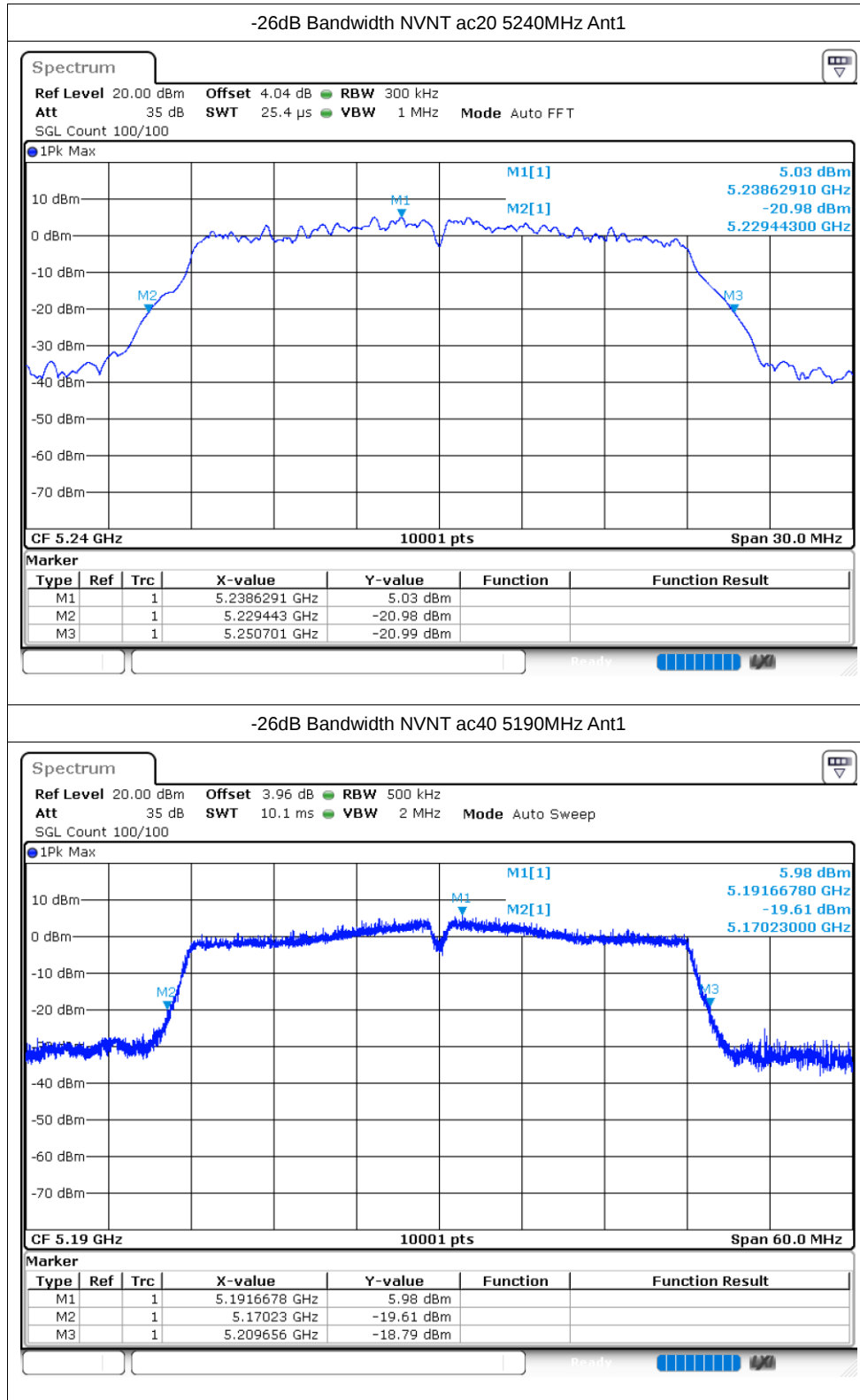
-26dB Bandwidth NVNT n20 5180MHz Ant1

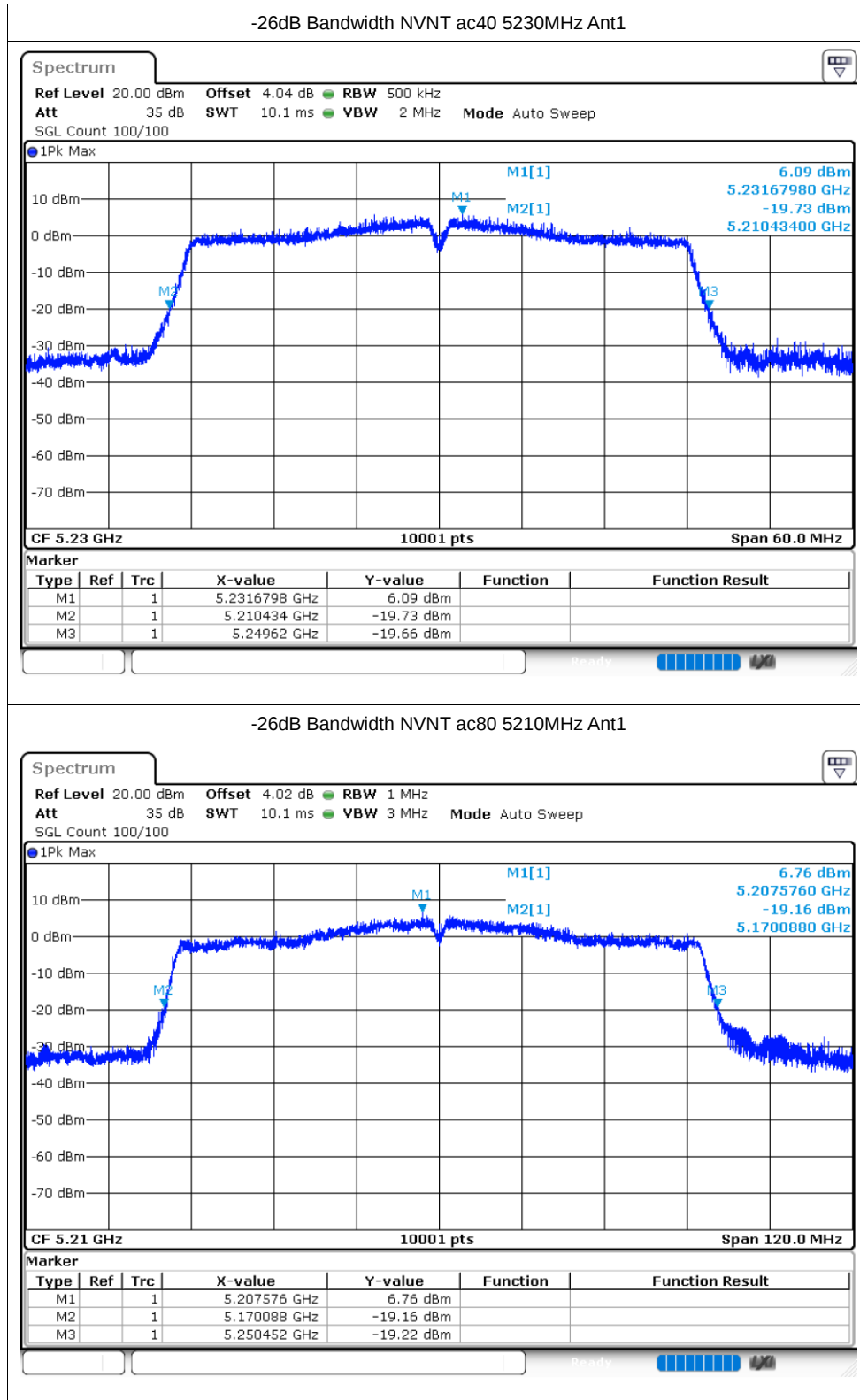










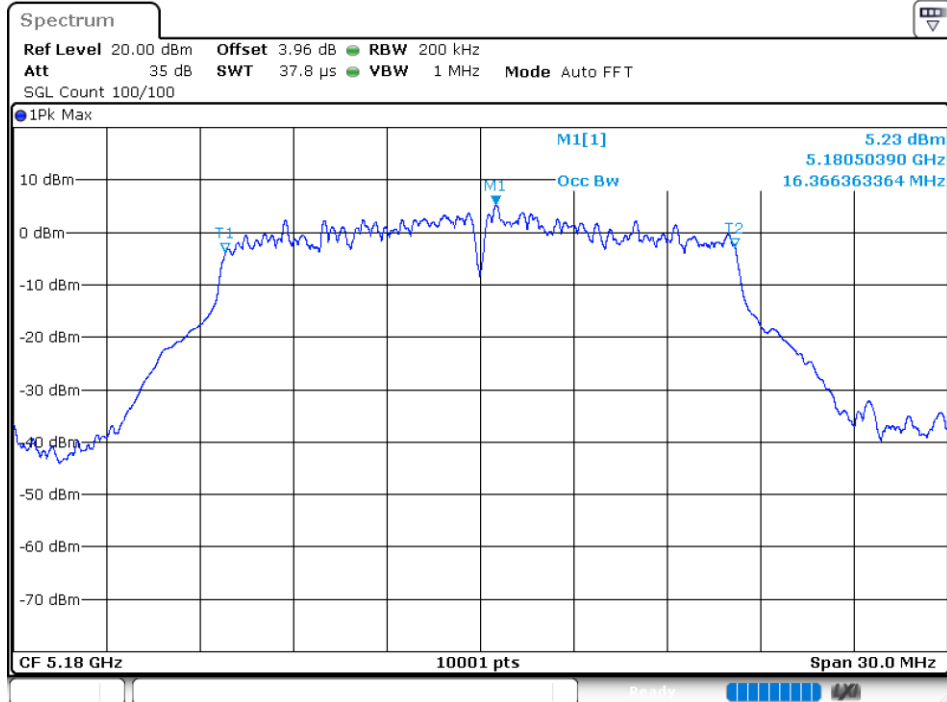


Occupied Channel Bandwidth

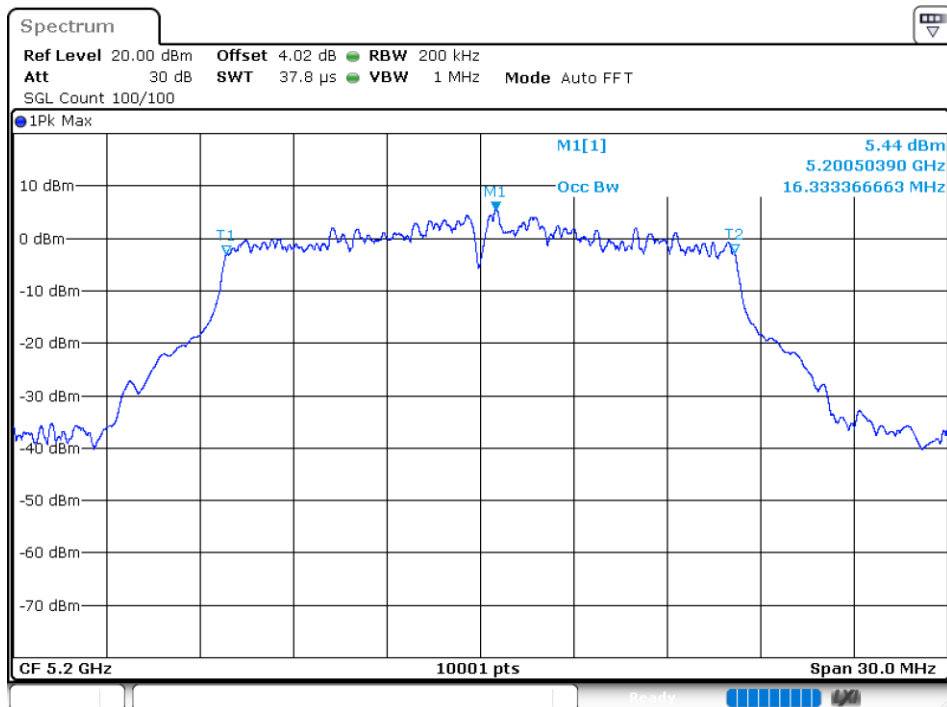
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.366
NVNT	a	5200	Ant1	16.333
NVNT	a	5240	Ant1	16.408
NVNT	n20	5180	Ant1	17.587
NVNT	n20	5200	Ant1	17.584
NVNT	n20	5240	Ant1	17.59
NVNT	n40	5190	Ant1	36.062
NVNT	n40	5230	Ant1	36.044
NVNT	ac20	5180	Ant1	17.692
NVNT	ac20	5200	Ant1	17.689
NVNT	ac20	5240	Ant1	17.572
NVNT	ac40	5190	Ant1	36.05
NVNT	ac40	5230	Ant1	36.056
NVNT	ac80	5210	Ant1	75.256

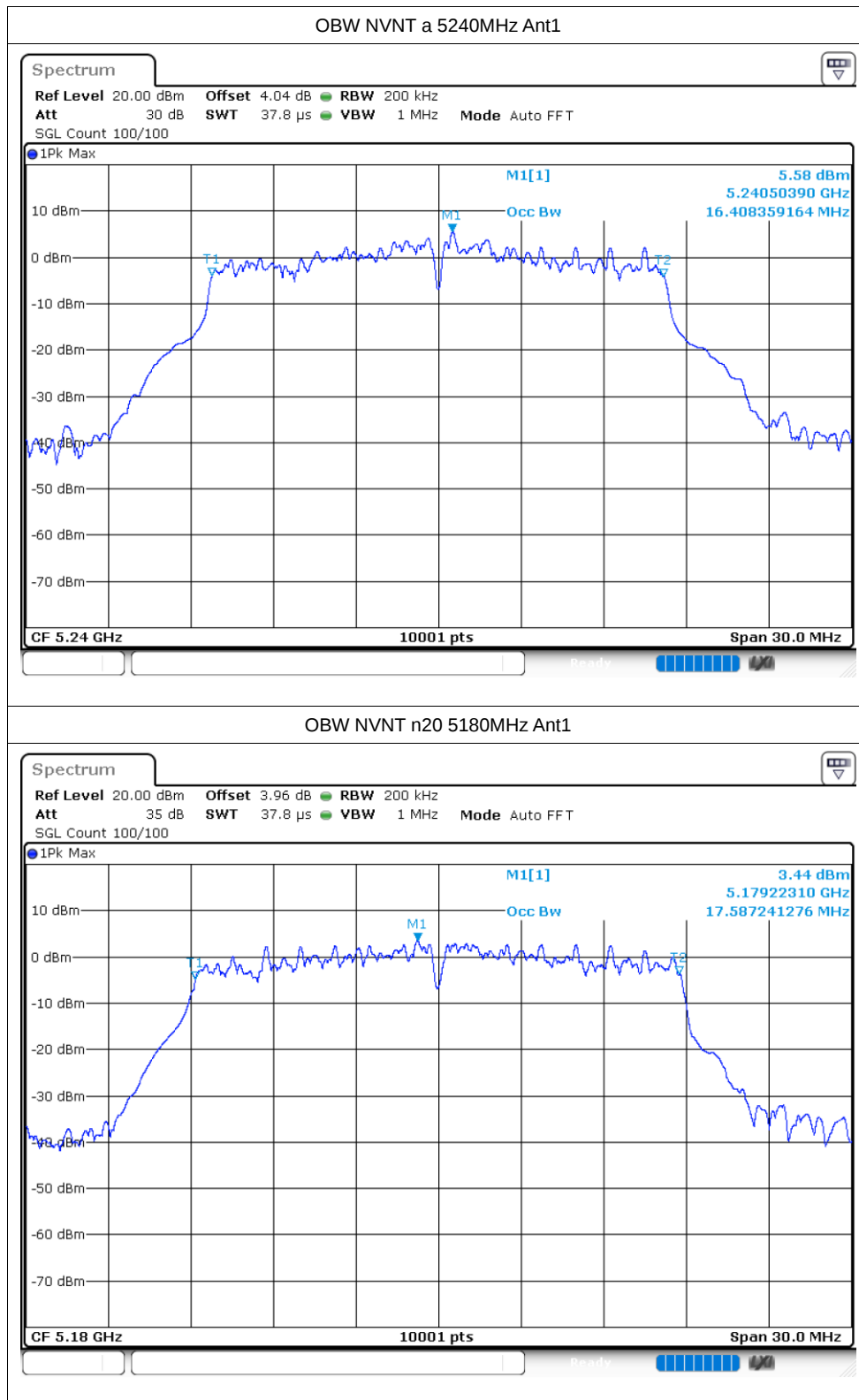
Test Graphs

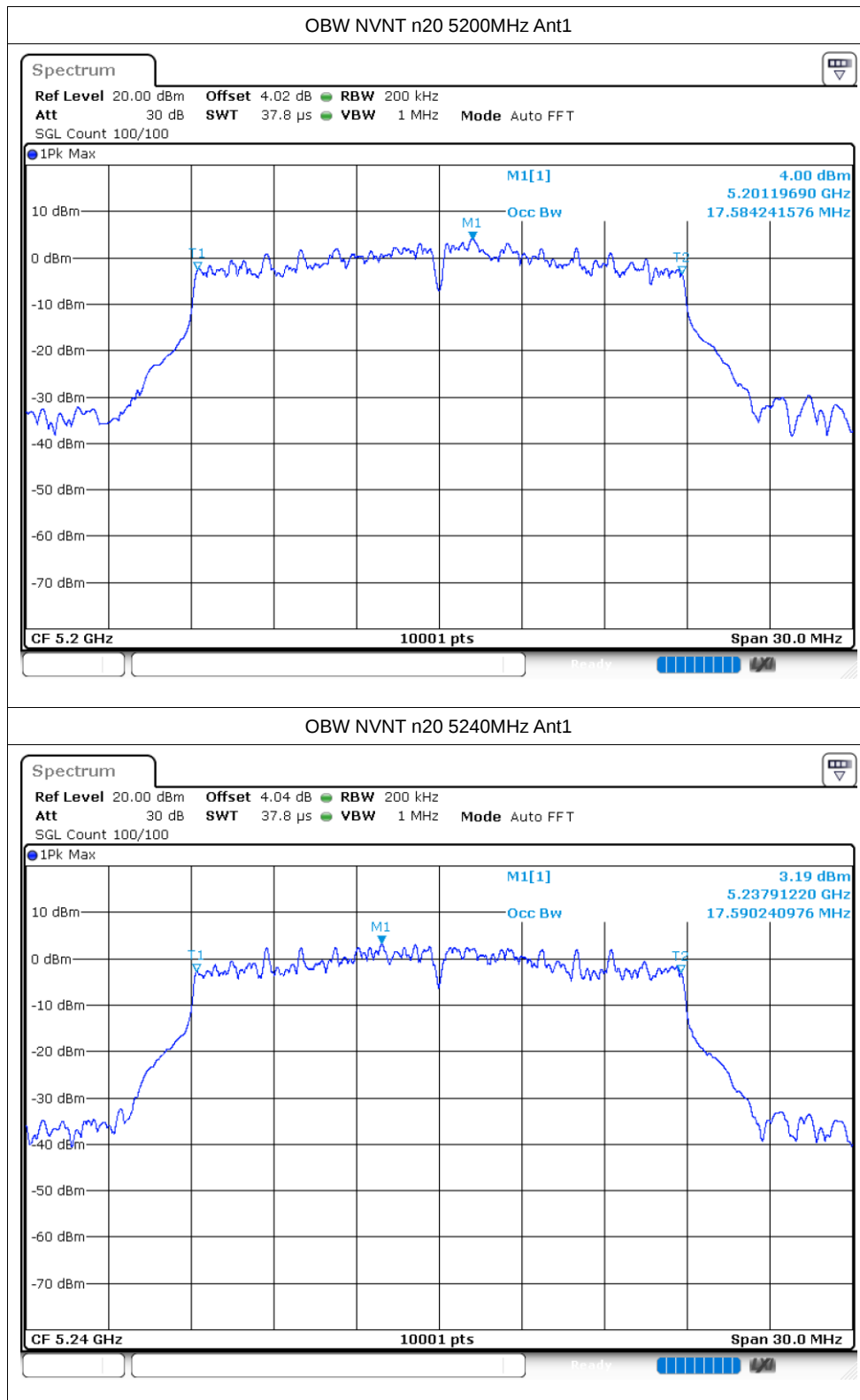
OBW NVNT a 5180MHz Ant1

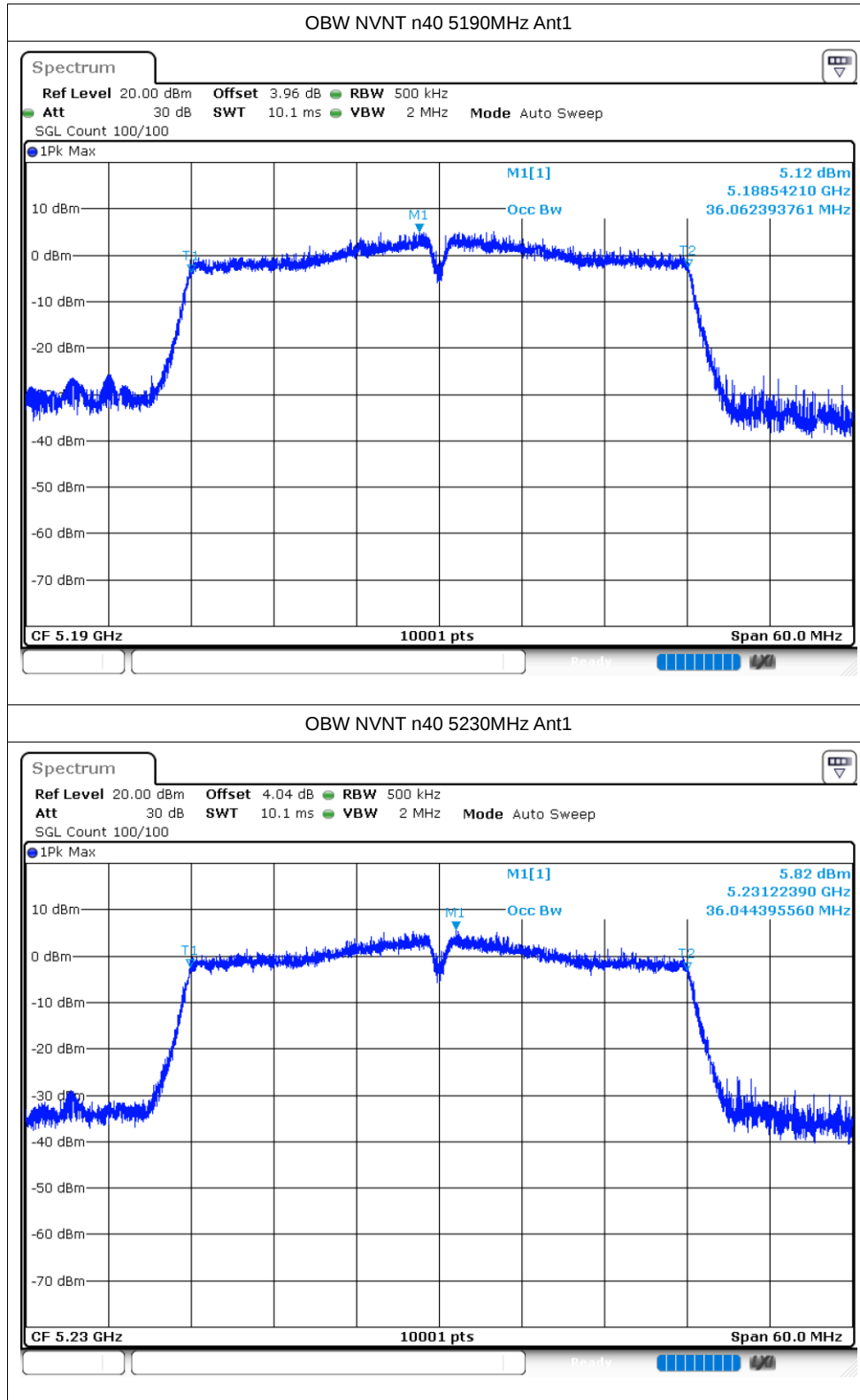


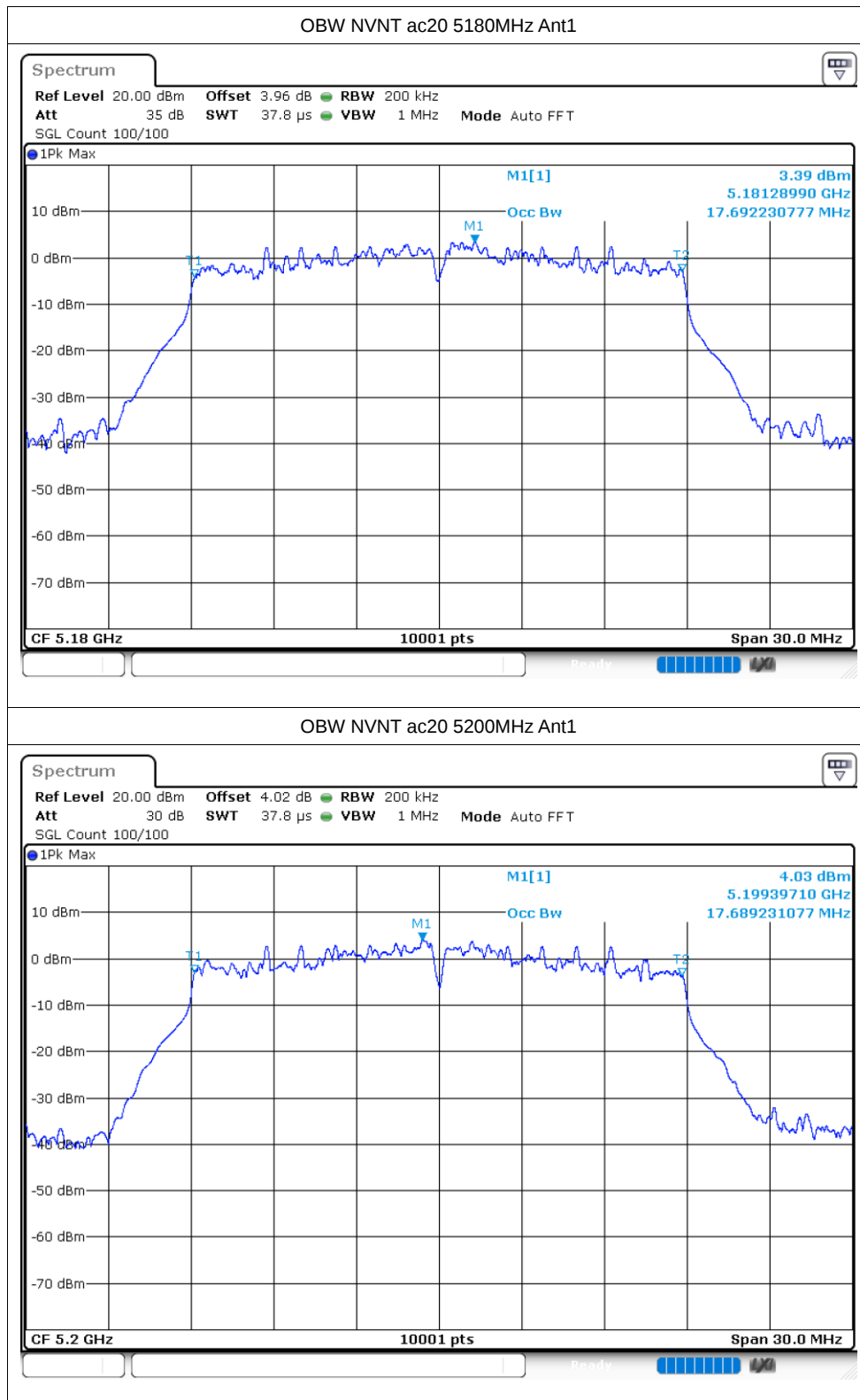
OBW NVNT a 5200MHz Ant1

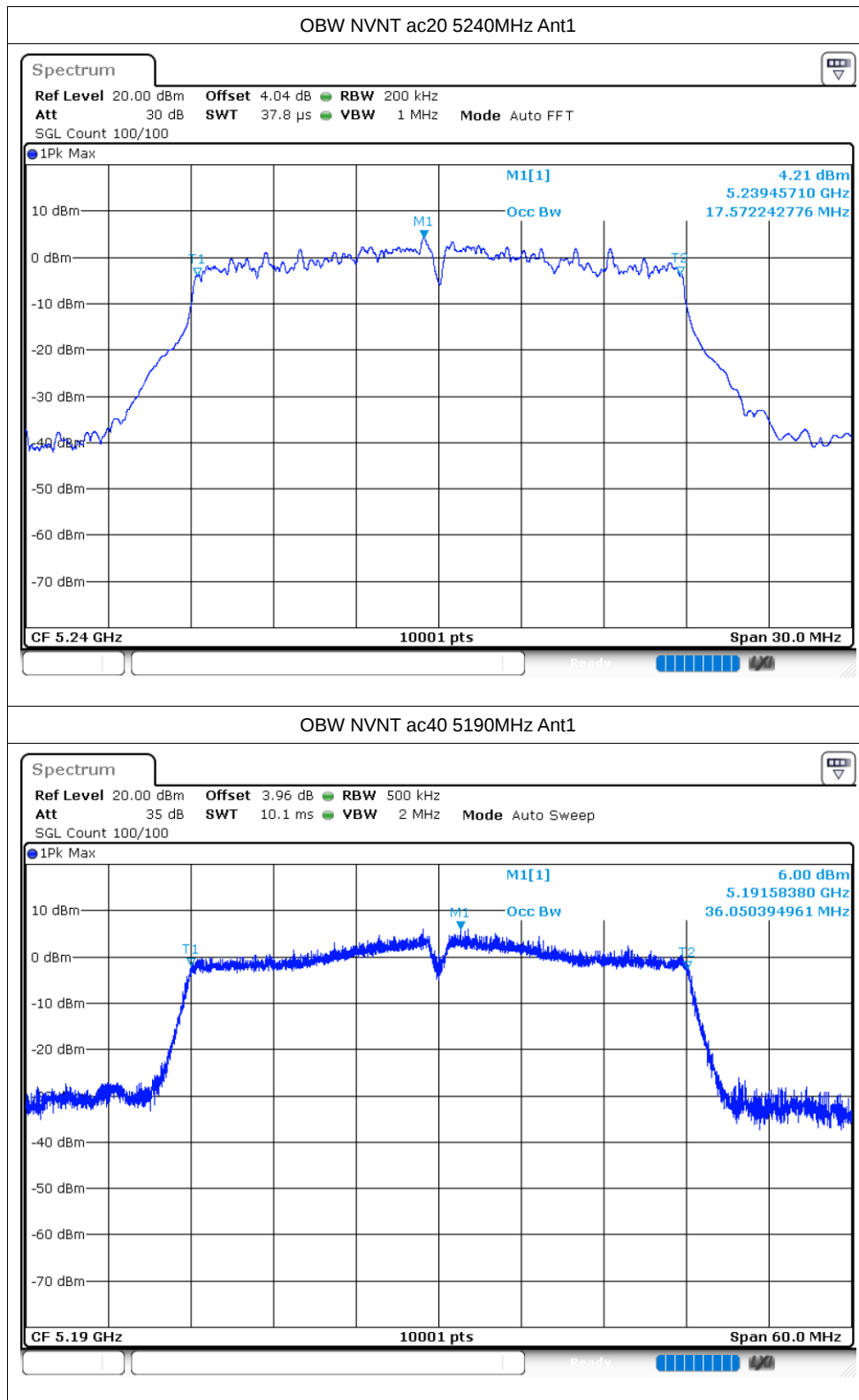


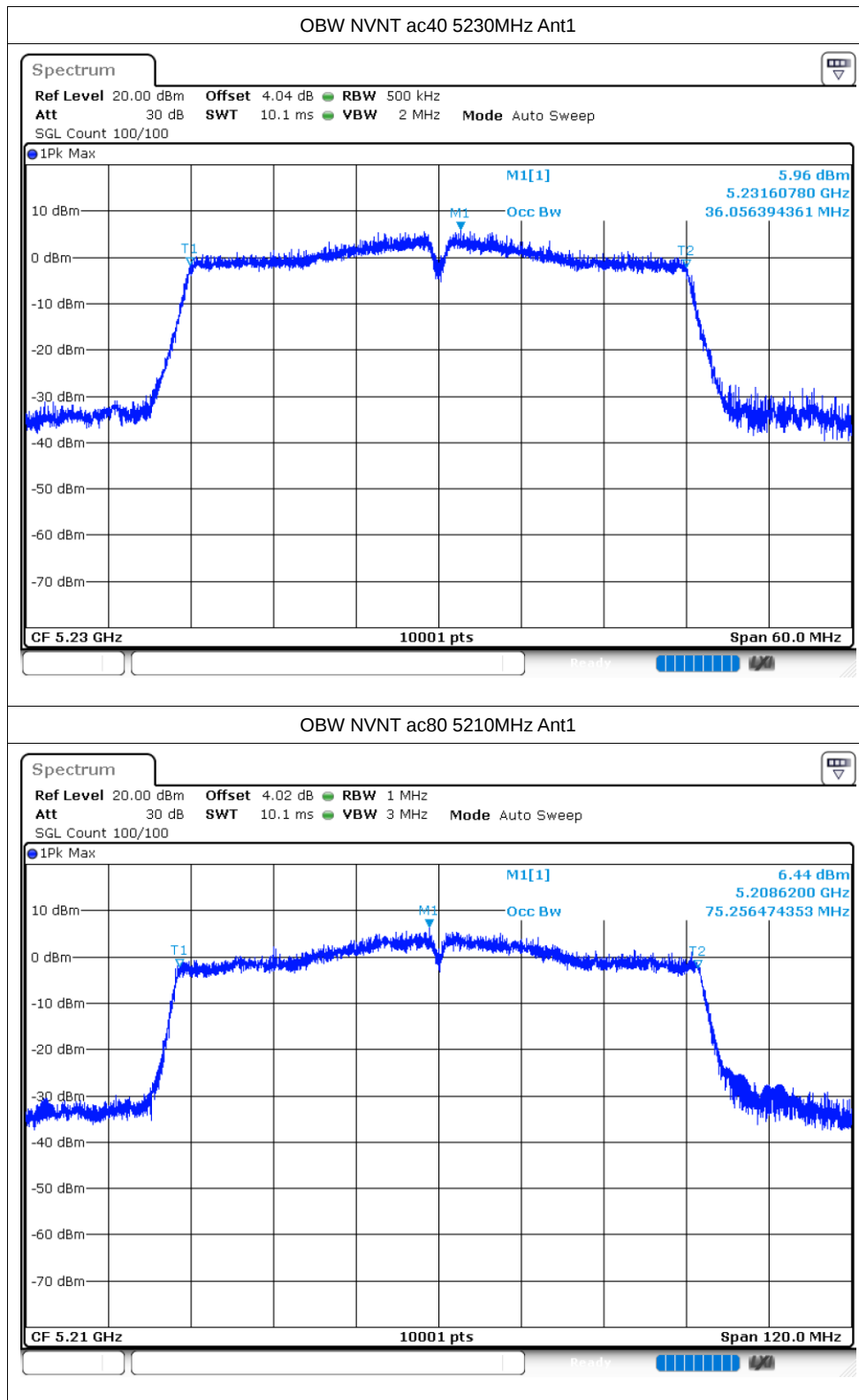










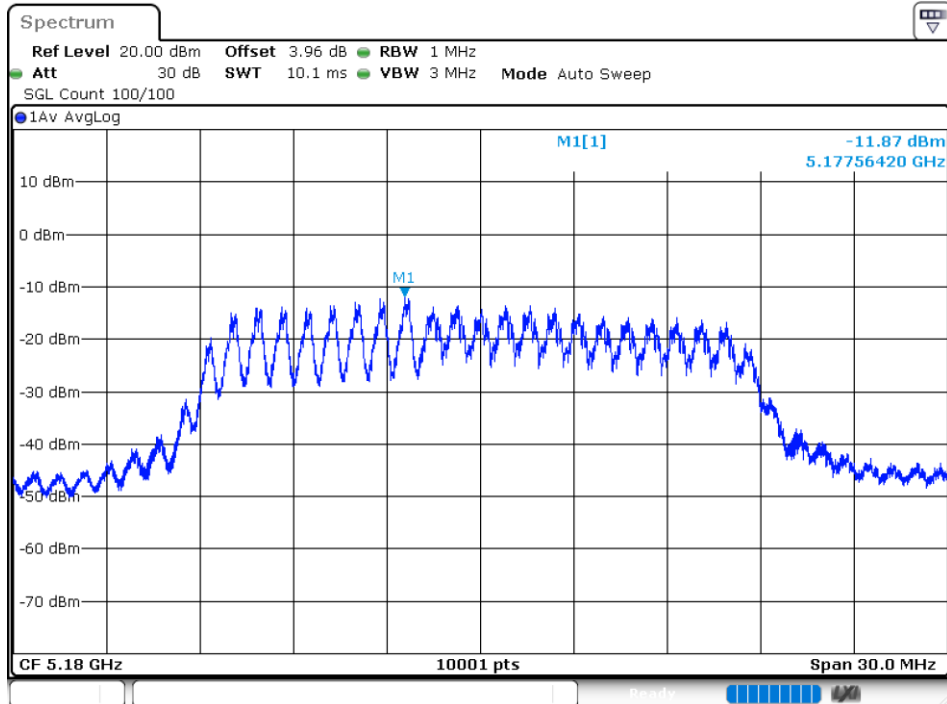


Maximum Power Spectral Density Level

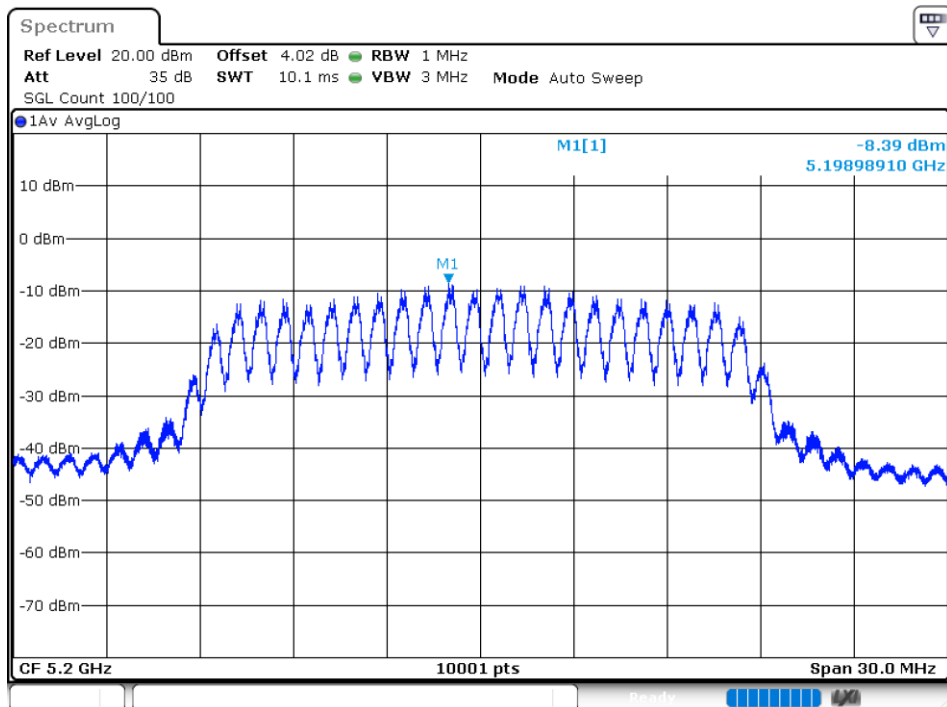
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-11.87	1.74	-10.13	11	Pass
NVNT	a	5200	Ant1	-8.39	1.74	-6.65	11	Pass
NVNT	a	5240	Ant1	-8.75	1.74	-7.01	11	Pass
NVNT	n20	5180	Ant1	-16.22	1.84	-14.38	11	Pass
NVNT	n20	5200	Ant1	-13.66	1.84	-11.82	11	Pass
NVNT	n20	5240	Ant1	-15.68	1.84	-13.84	11	Pass
NVNT	n40	5190	Ant1	-9.81	0.89	-8.92	11	Pass
NVNT	n40	5230	Ant1	-12.29	0.89	-11.4	11	Pass
NVNT	ac20	5180	Ant1	-2.38	0.53	-1.85	11	Pass
NVNT	ac20	5200	Ant1	-2.35	0.54	-1.81	11	Pass
NVNT	ac20	5240	Ant1	-3.37	0.53	-2.84	11	Pass
NVNT	ac40	5190	Ant1	-4.8	0.35	-4.45	11	Pass
NVNT	ac40	5230	Ant1	-6.54	0.35	-6.19	11	Pass
NVNT	ac80	5210	Ant1	-10.89	0.5	-10.39	11	Pass

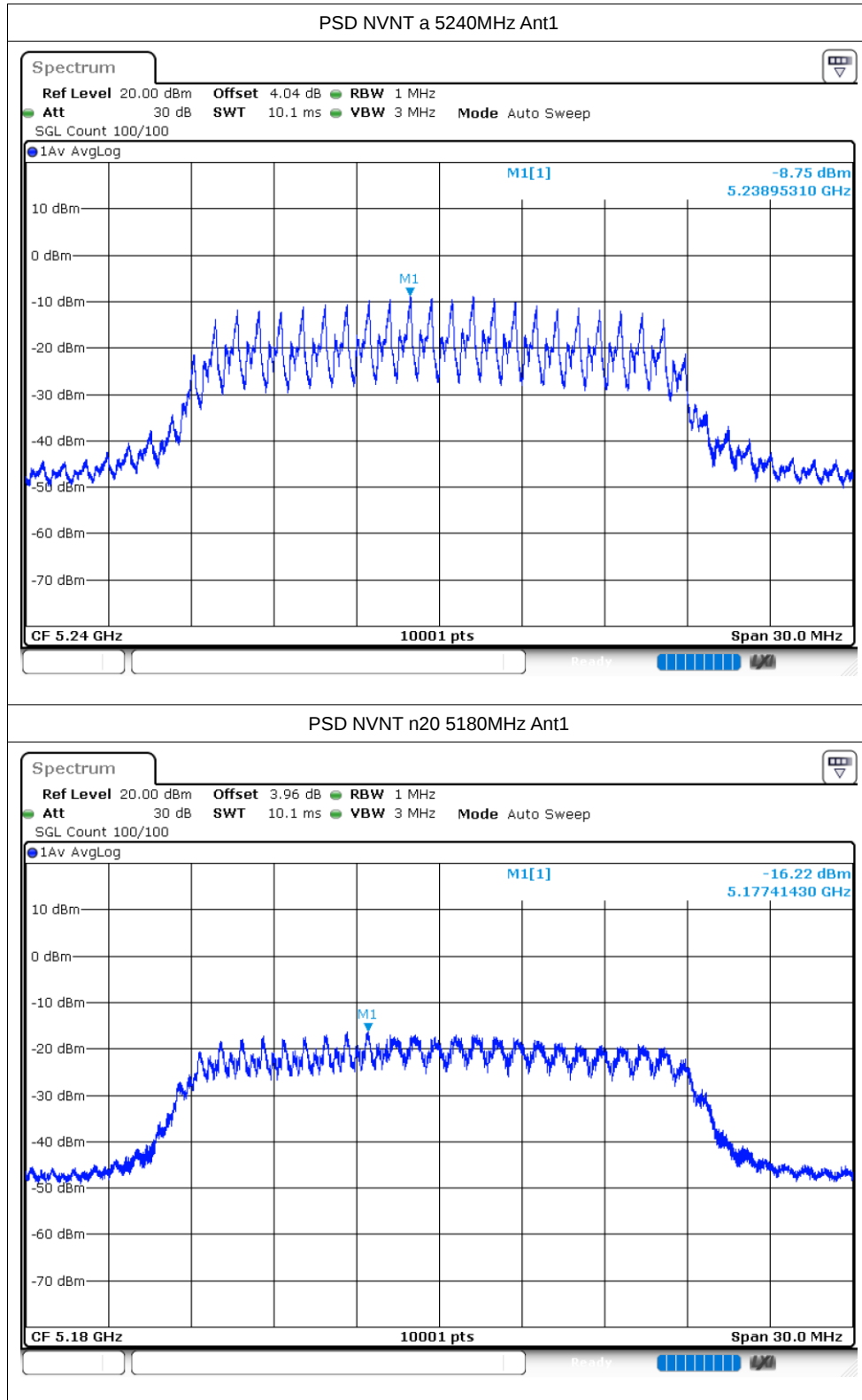
Test Graphs

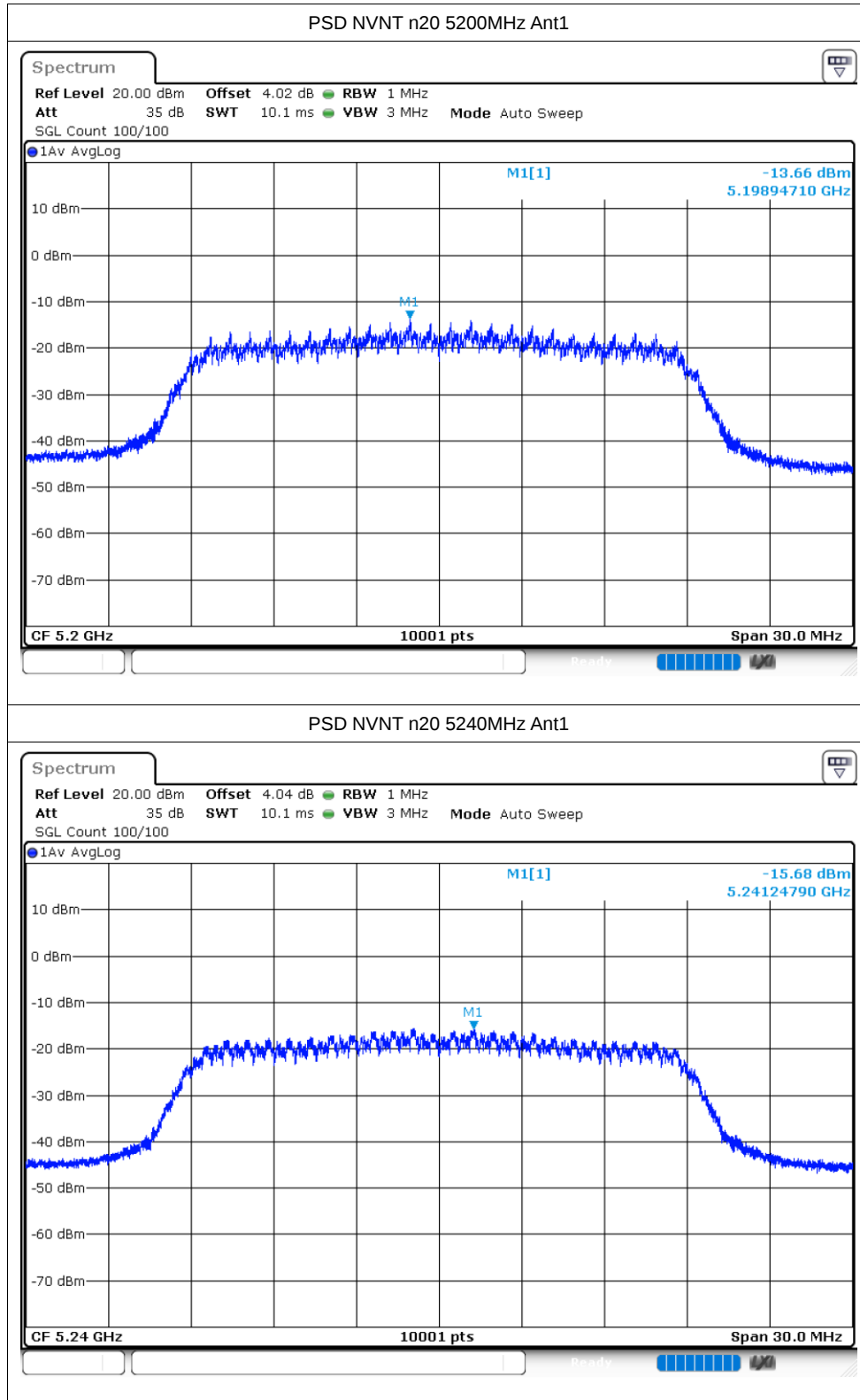
PSD NVNT a 5180MHz Ant1

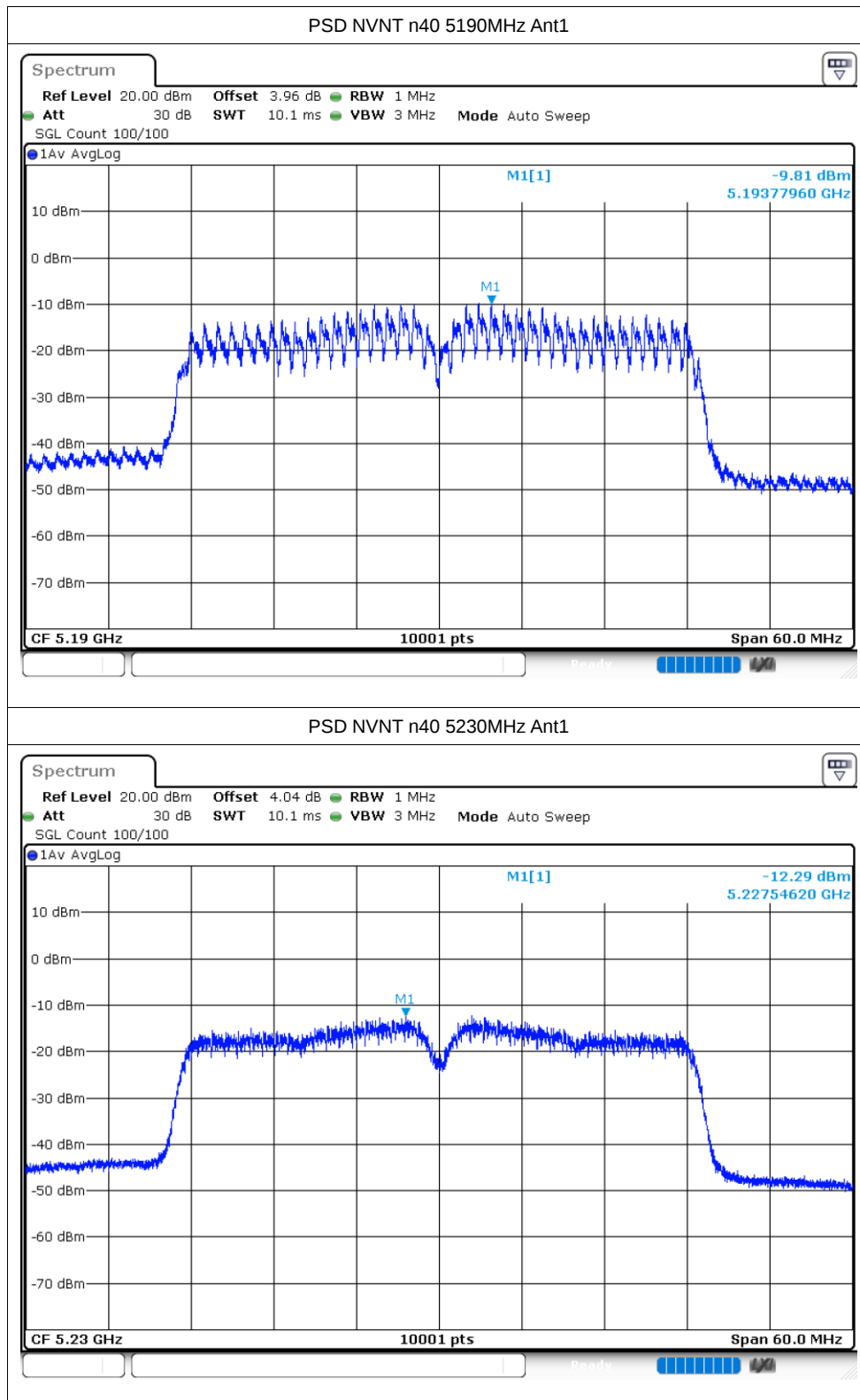


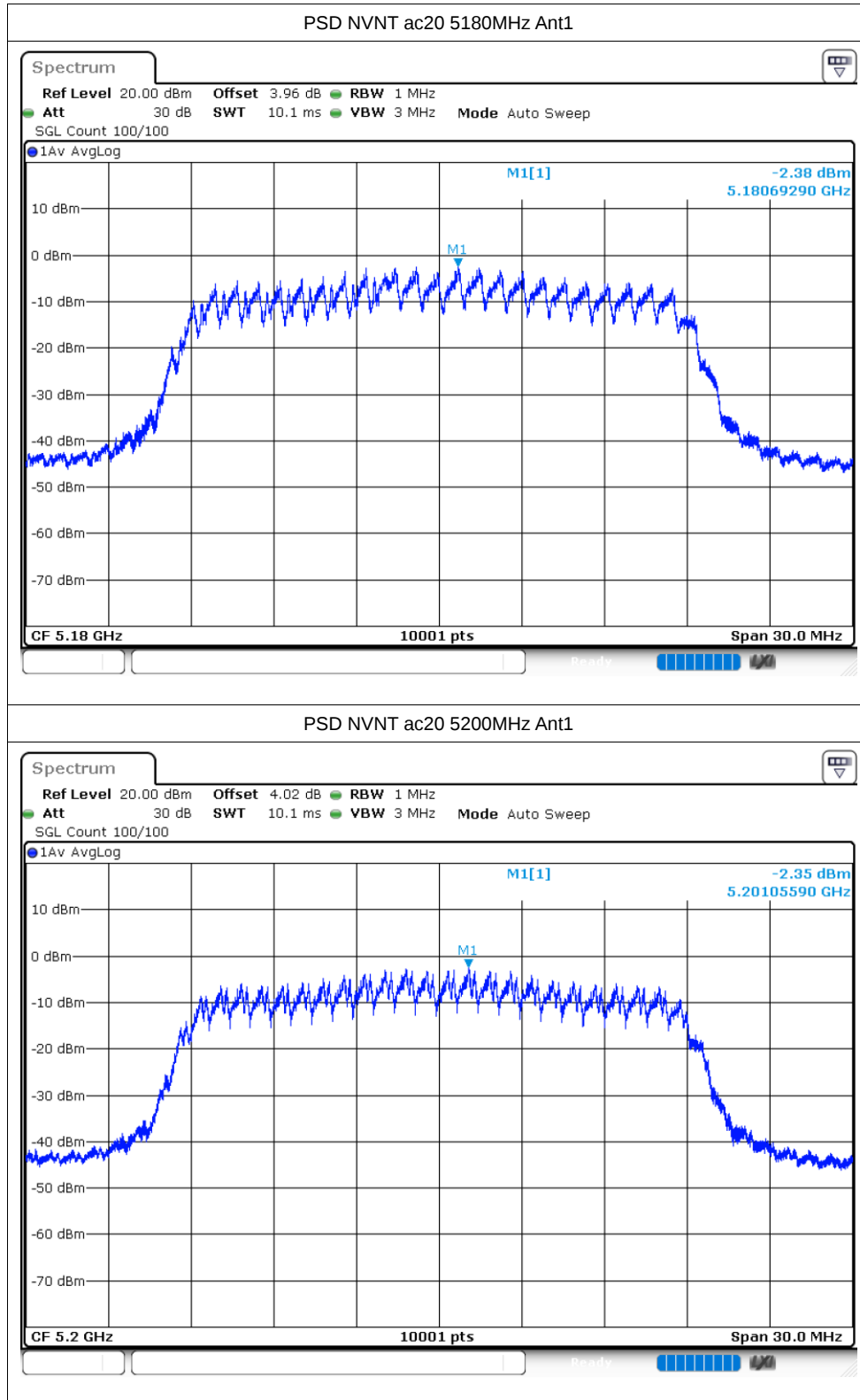
PSD NVNT a 5200MHz Ant1

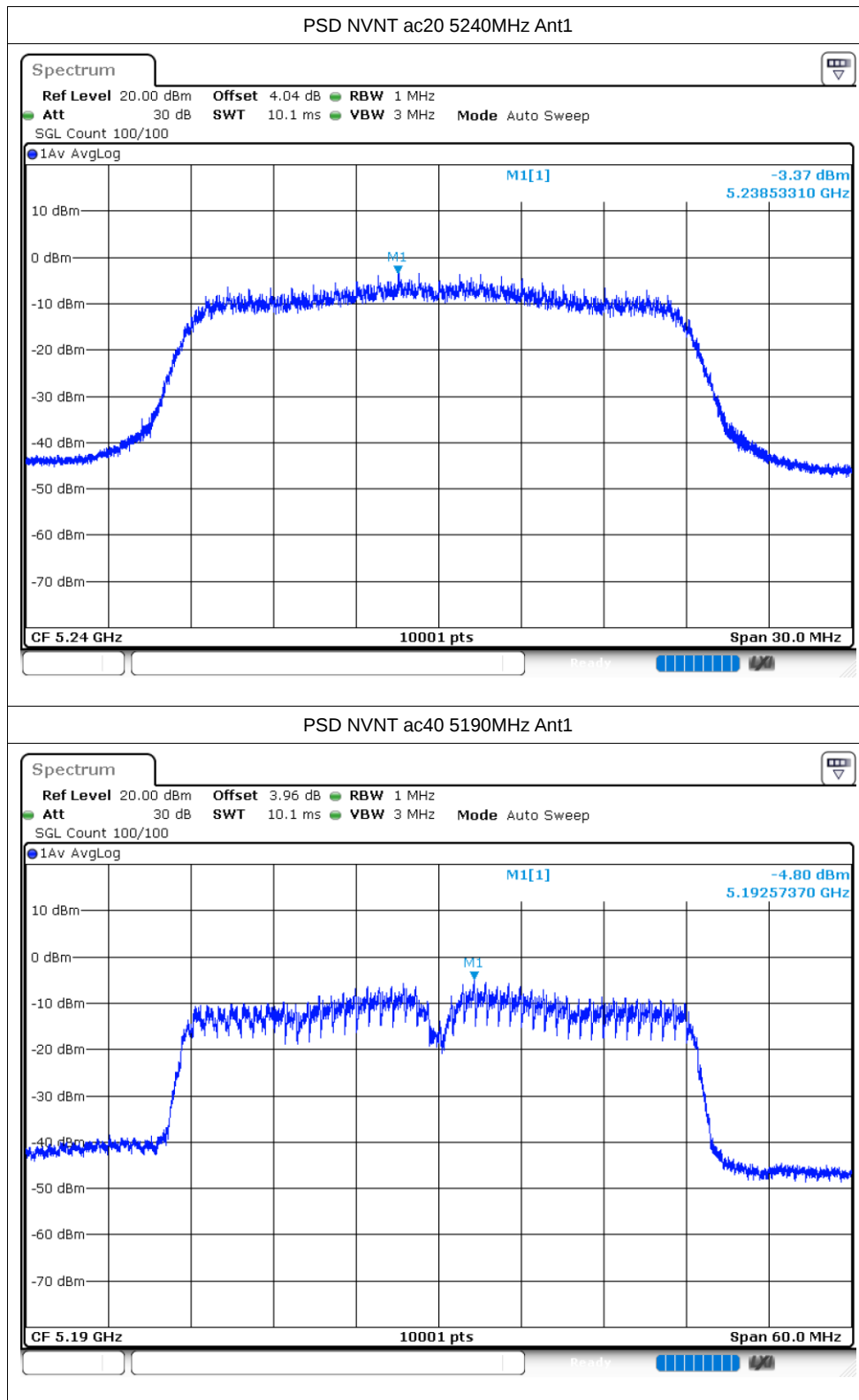


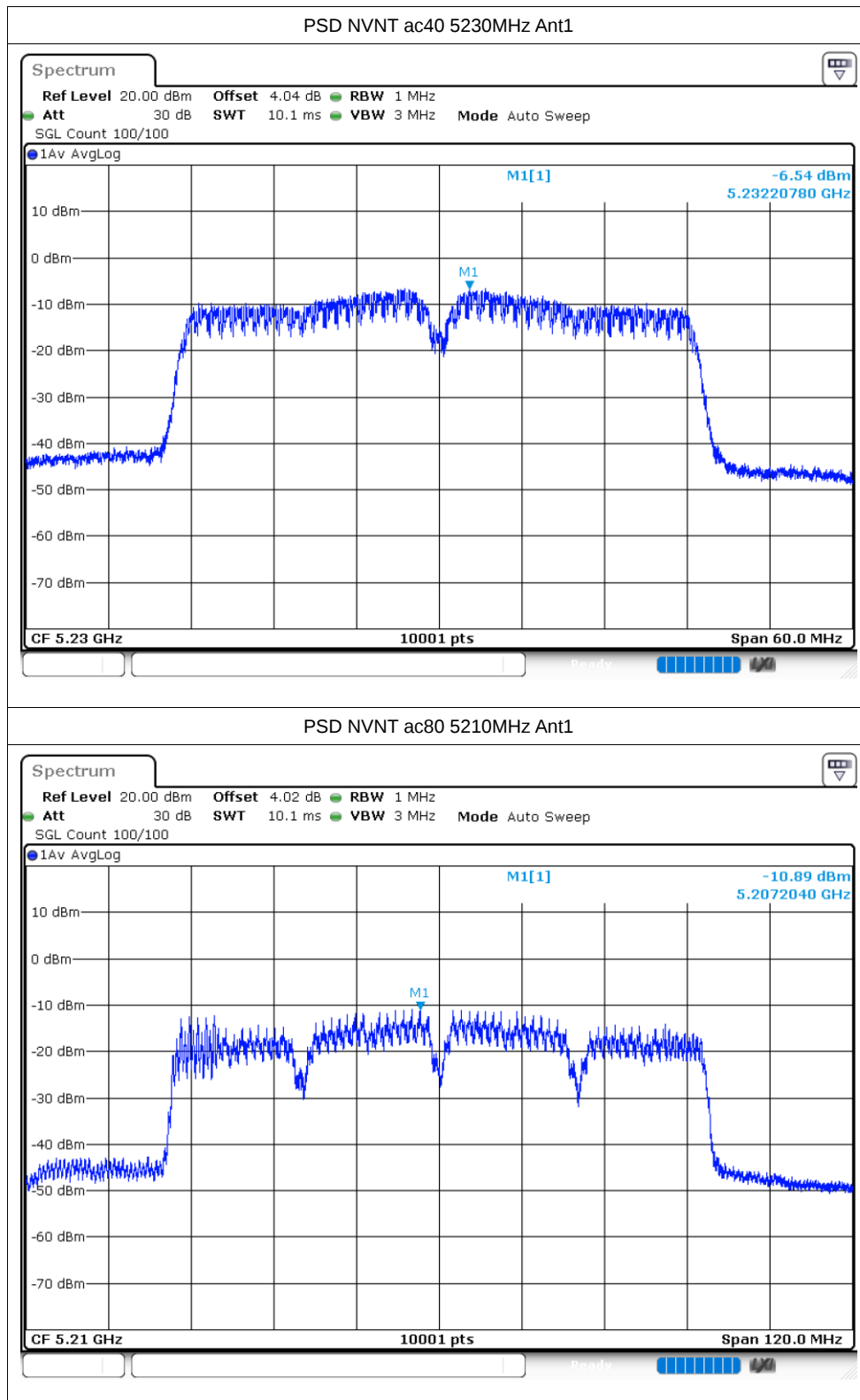










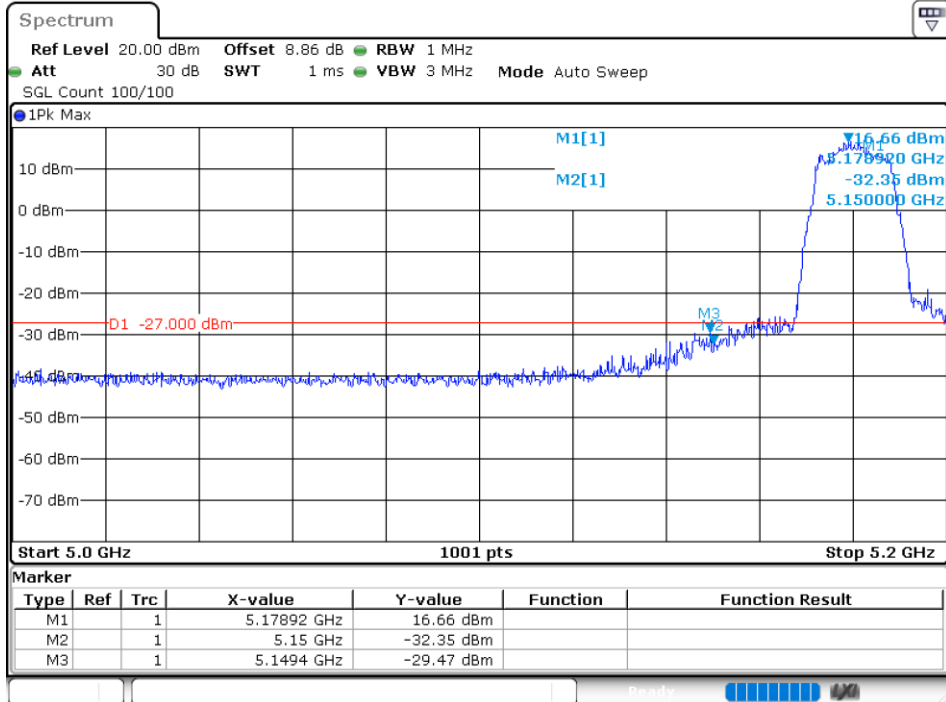


Band Edge

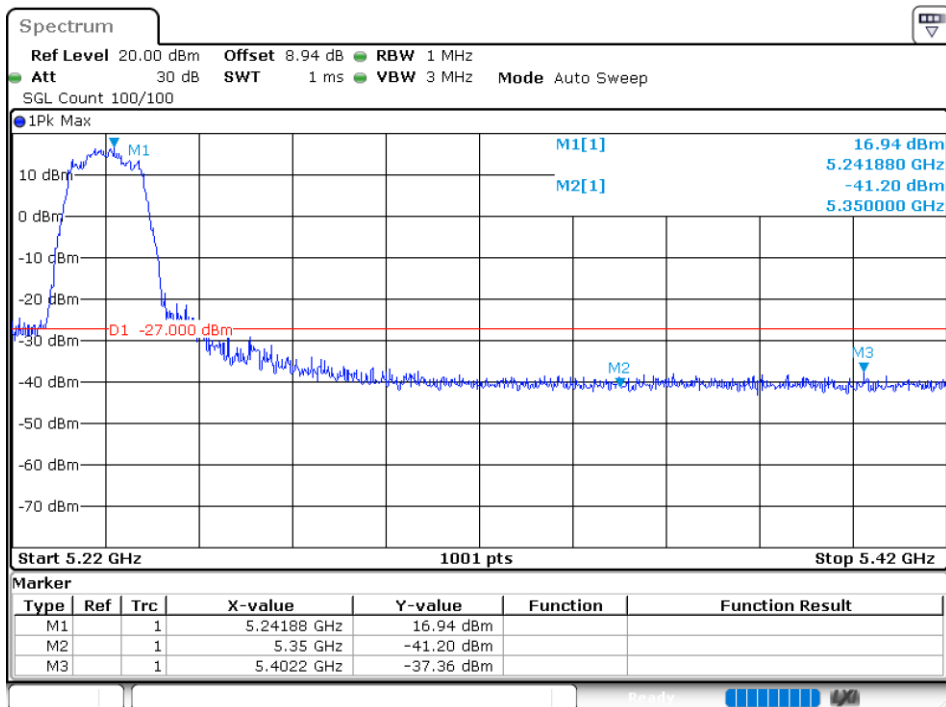
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-29.46	-27	Pass
NVNT	a	5240	Ant1	-37.35	-27	Pass
NVNT	n20	5180	Ant1	-27.86	-27	Pass
NVNT	n20	5240	Ant1	-37.62	-27	Pass
NVNT	n40	5190	Ant1	-27.87	-27	Pass
NVNT	n40	5230	Ant1	-37.76	-27	Pass
NVNT	ac20	5180	Ant1	-28.28	-27	Pass
NVNT	ac20	5240	Ant1	-38.28	-27	Pass
NVNT	ac40	5190	Ant1	-27.93	-27	Pass
NVNT	ac40	5230	Ant1	-37.32	-27	Pass
NVNT	ac80	5210	Ant1	-28.71	-27	Pass
NVNT	ac80	5210	Ant1	-35.86	-27	Pass

Test Graphs

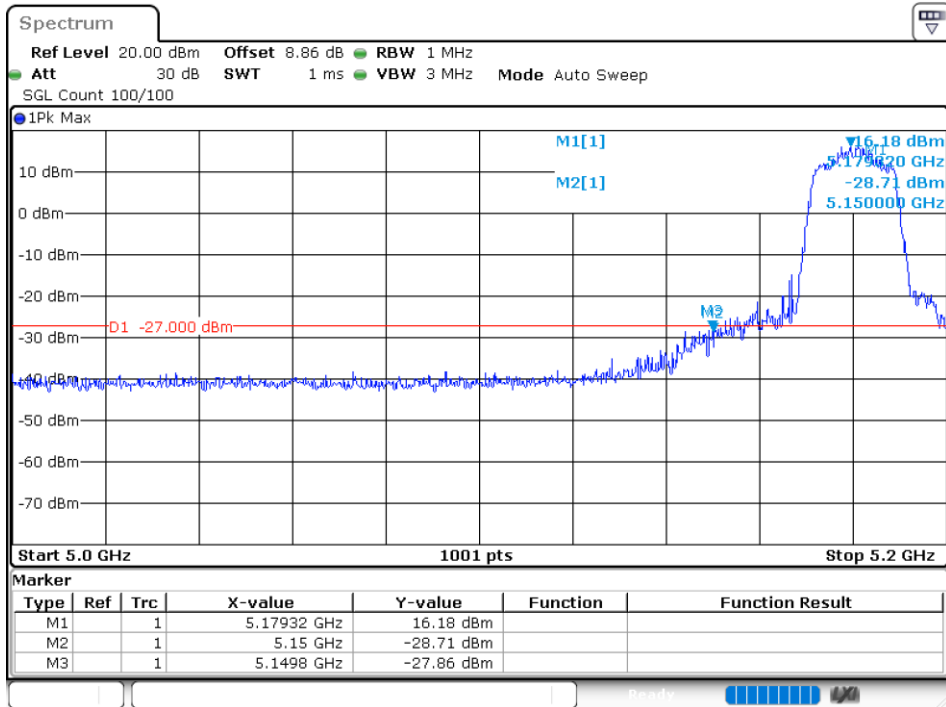
Band Edge NVNT a 5180MHz Low Ant1



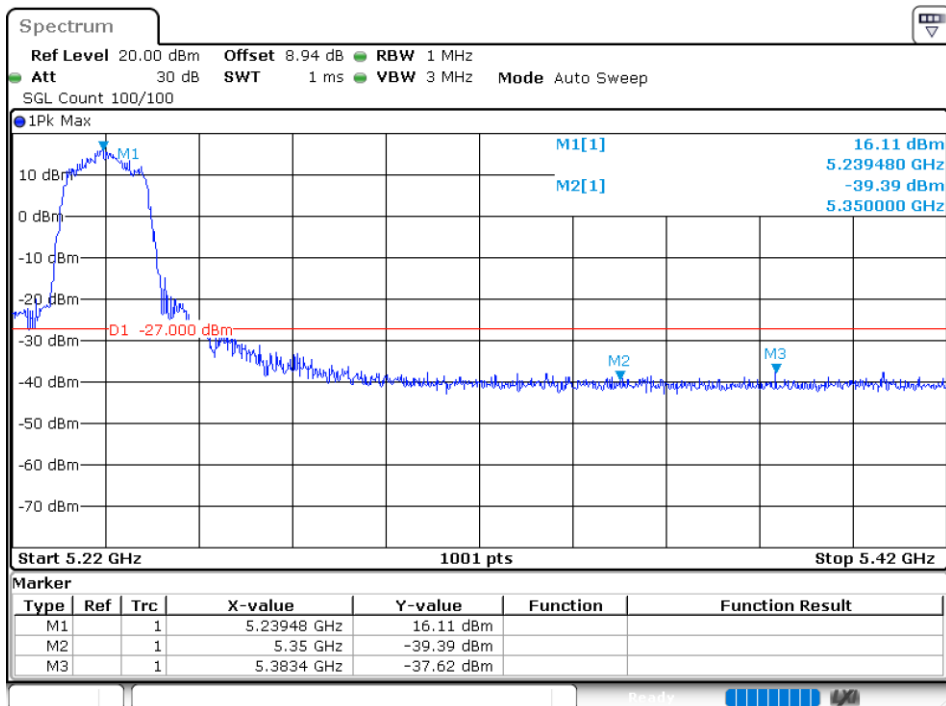
Band Edge NVNT a 5240MHz High Ant1



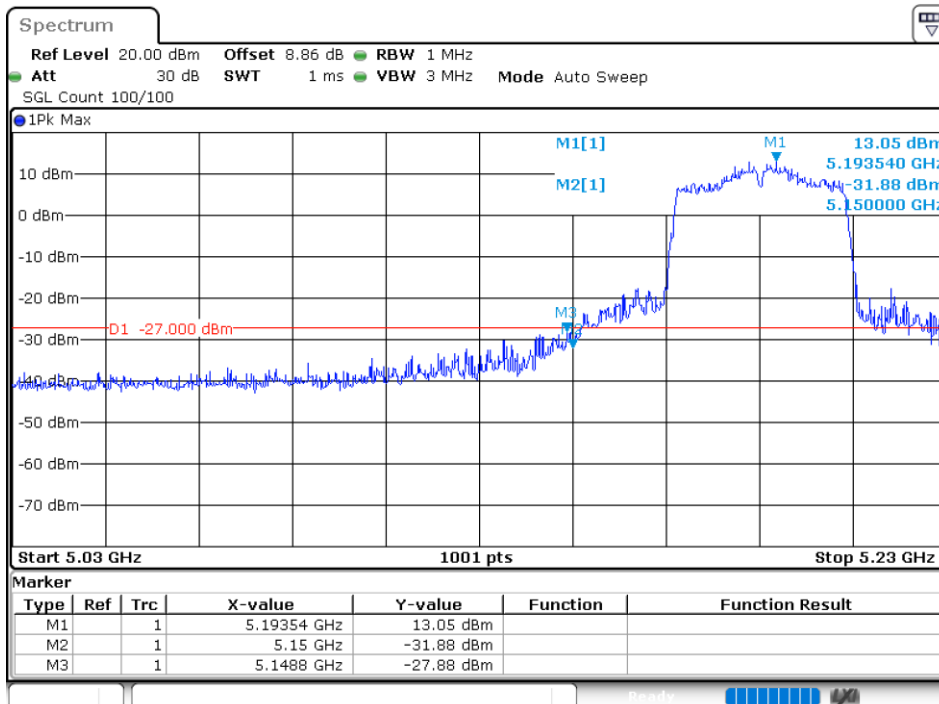
Band Edge NVNT n20 5180MHz Low Ant1



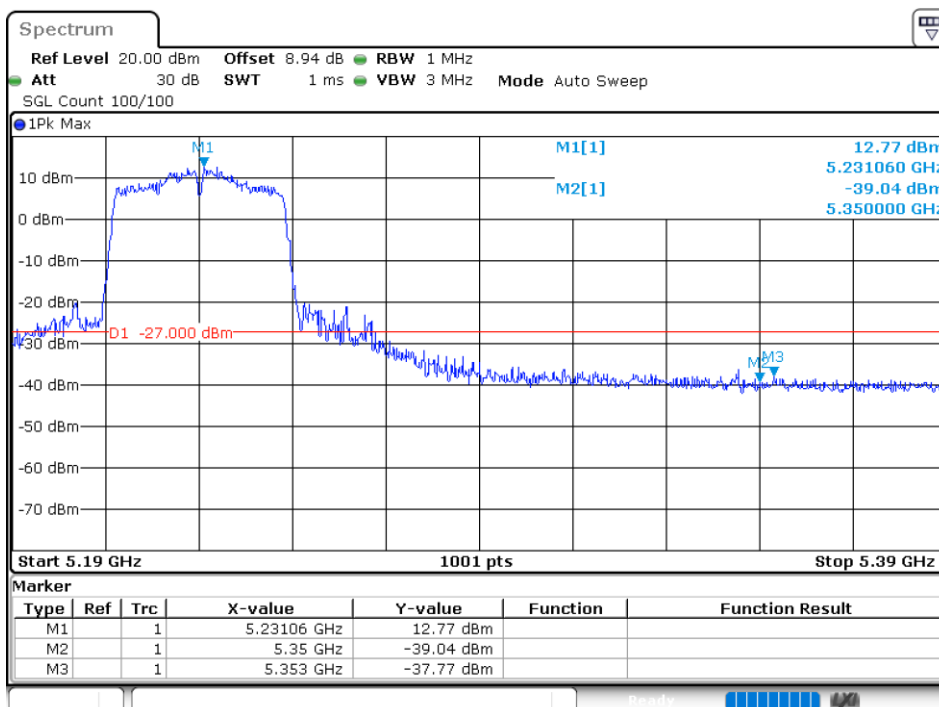
Band Edge NVNT n20 5240MHz High Ant1



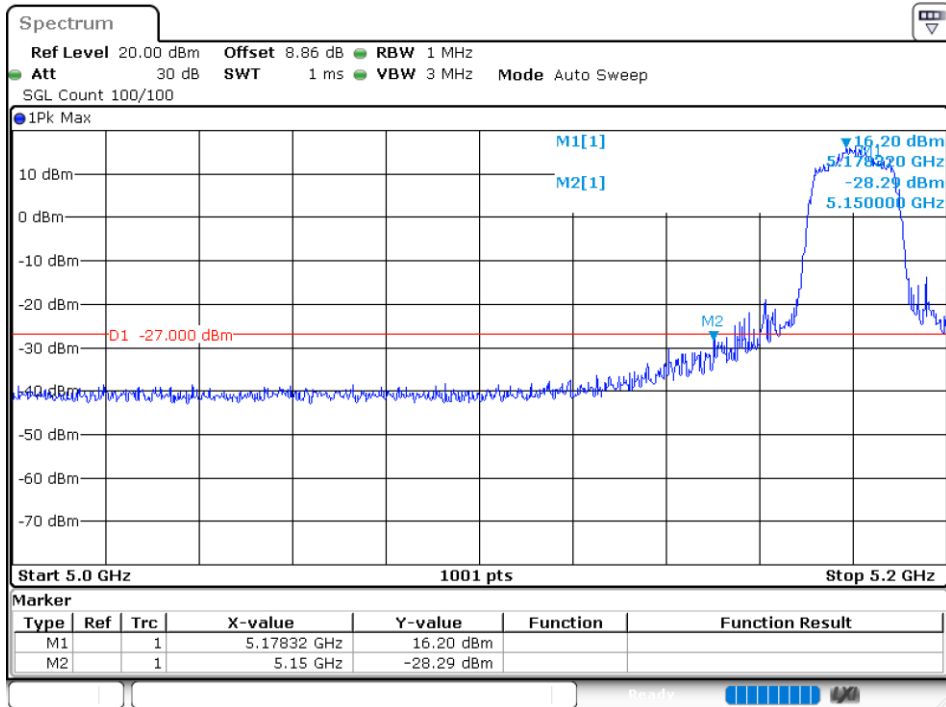
Band Edge NVNT n40 5190MHz Low Ant1



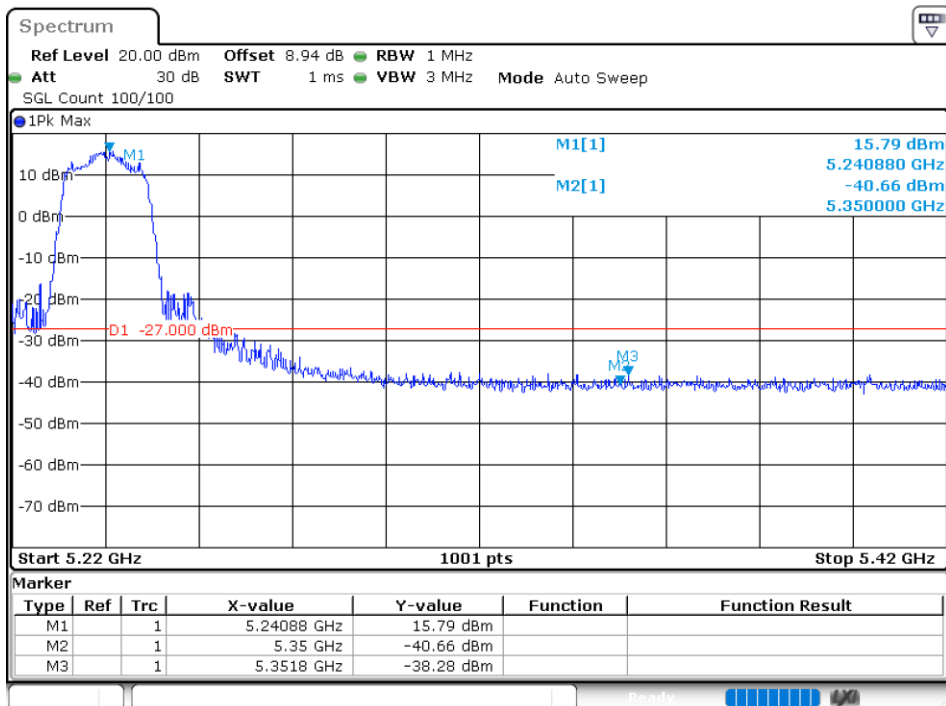
Band Edge NVNT n40 5230MHz High Ant1



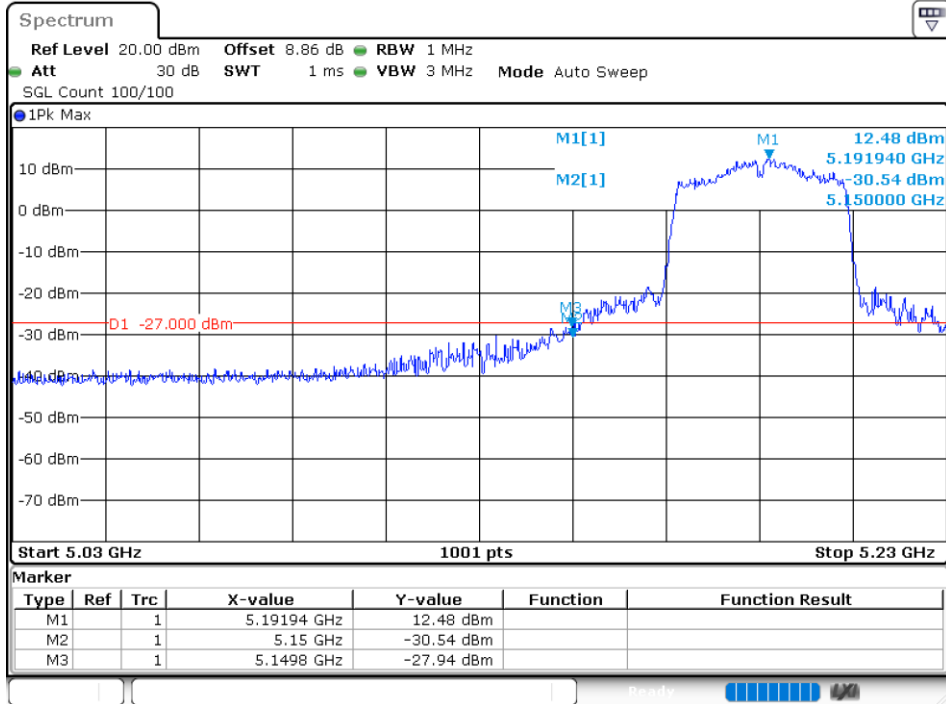
Band Edge NVNT ac20 5180MHz Low Ant1



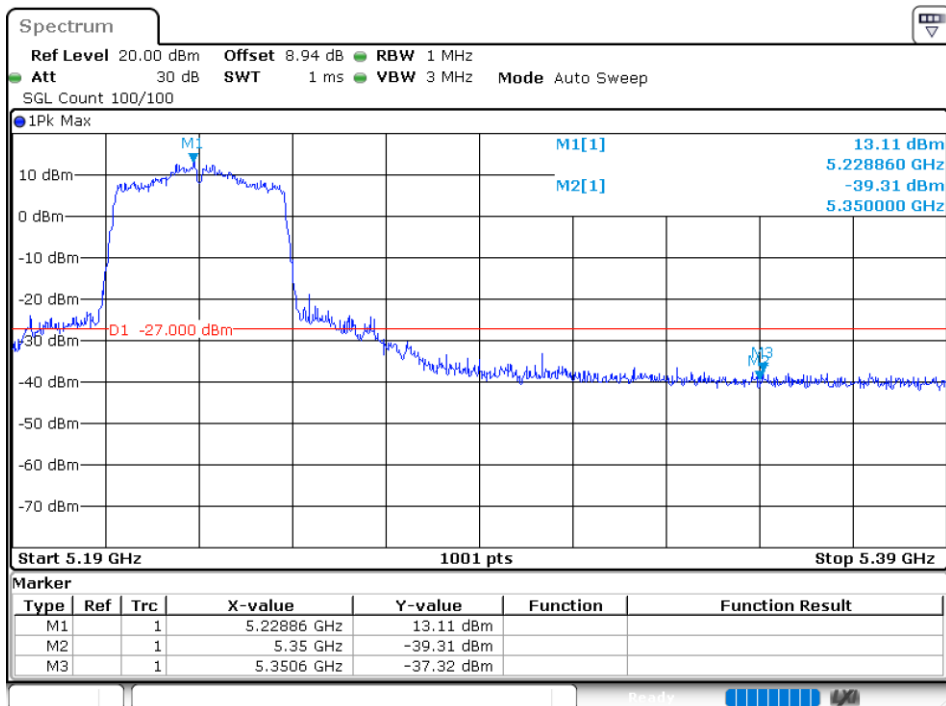
Band Edge NVNT ac20 5240MHz High Ant1



Band Edge NVNT ac40 5190MHz Low Ant1



Band Edge NVNT ac40 5230MHz High Ant1

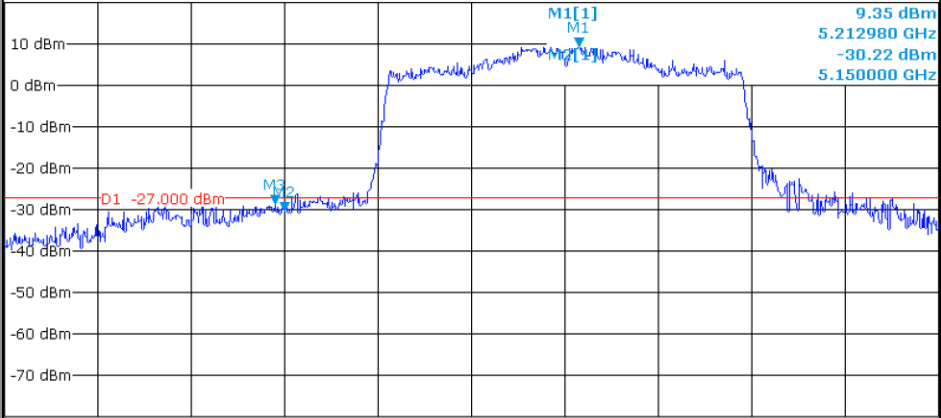


Band Edge NVNT ac80 5210MHz Low Ant1

Spectrum

Ref Level 20.00 dBm Offset 8.92 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

1Pk Max



Start 5.09 GHz 1001 pts Stop 5.29 GHz

Marker

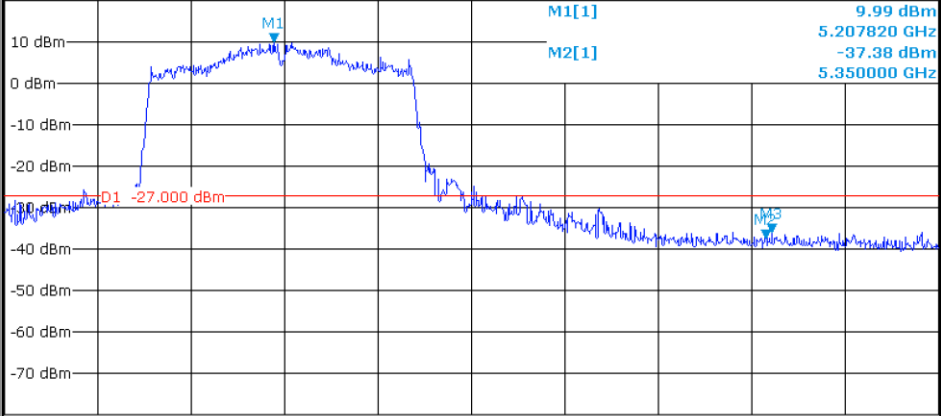
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.21298 GHz	9.35 dBm		
M2		1	5.15 GHz	-30.22 dBm		
M3		1	5.148 GHz	-28.71 dBm		

Band Edge NVNT ac80 5210MHz High Ant1

Spectrum

Ref Level 20.00 dBm Offset 8.92 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

1Pk Max



Start 5.13 GHz 1001 pts Stop 5.4 GHz

Marker

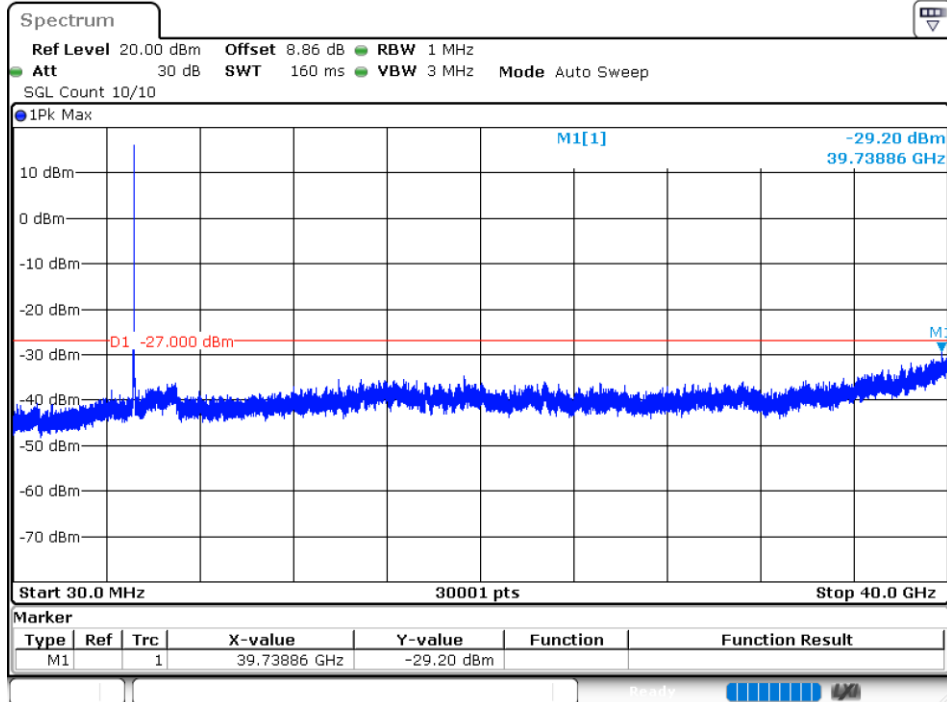
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.20782 GHz	9.99 dBm		
M2		1	5.35 GHz	-37.38 dBm		
M3		1	5.35167 GHz	-35.87 dBm		

Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-29.2	-27	Pass
NVNT	a	5200	Ant1	-29.72	-27	Pass
NVNT	a	5240	Ant1	-29.58	-27	Pass
NVNT	n20	5180	Ant1	-30.35	-27	Pass
NVNT	n20	5200	Ant1	-29.77	-27	Pass
NVNT	n20	5240	Ant1	-28.61	-27	Pass
NVNT	n40	5190	Ant1	-30.07	-27	Pass
NVNT	n40	5230	Ant1	-29.51	-27	Pass
NVNT	ac20	5180	Ant1	-29.13	-27	Pass
NVNT	ac20	5200	Ant1	-30.08	-27	Pass
NVNT	ac20	5240	Ant1	-29.02	-27	Pass
NVNT	ac40	5190	Ant1	-29.76	-27	Pass
NVNT	ac40	5230	Ant1	-29.82	-27	Pass
NVNT	ac80	5210	Ant1	-29.86	-27	Pass

Test Graphs

Tx. Spurious NVNT a 5180MHz Ant1 Emission



Tx. Spurious NVNT a 5200MHz Ant1 Emission

