

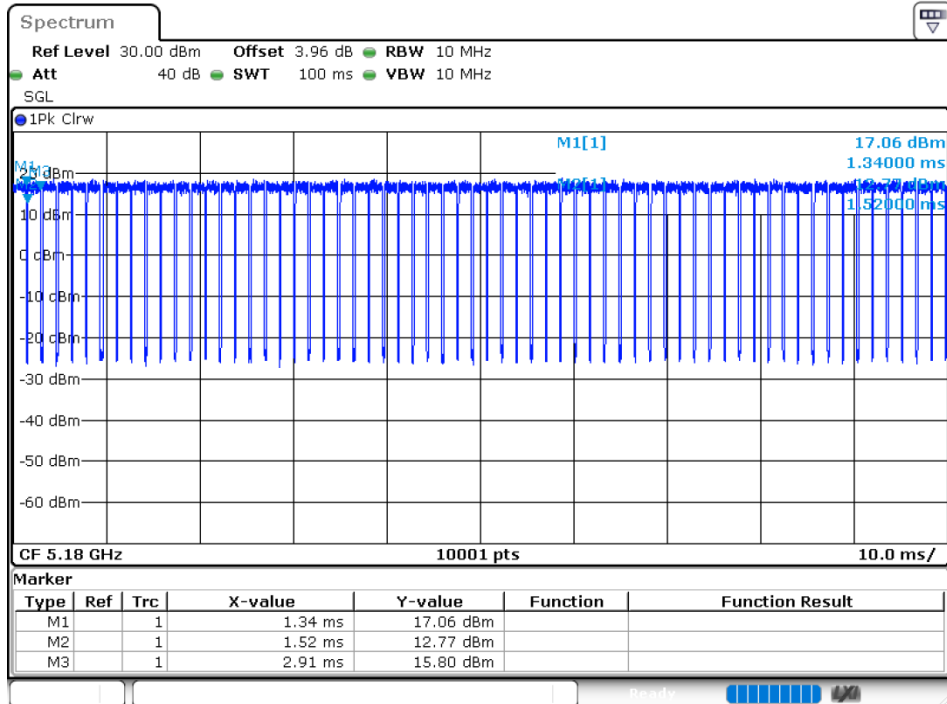
# WIFI 5.2G:

## Duty Cycle

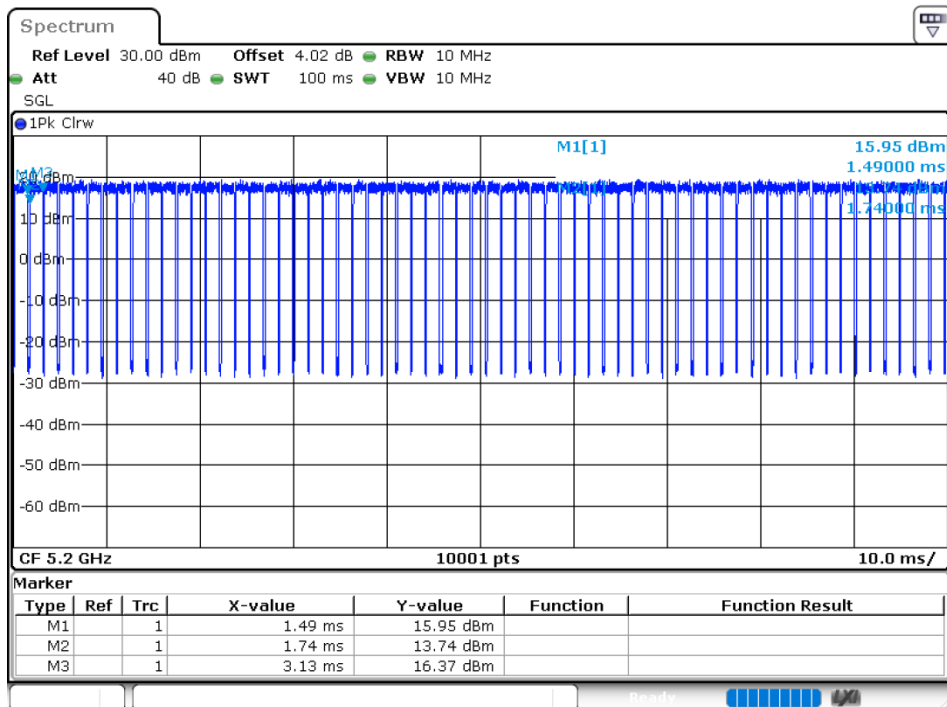
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	88.36	0.54	0.72
NVNT	a	5200	Ant1	88.55	0.53	0.72
NVNT	a	5240	Ant1	88.72	0.52	0.71
NVNT	n20	5180	Ant1	84.86	0.71	0.85
NVNT	n20	5200	Ant1	87.47	0.58	0.85
NVNT	n20	5240	Ant1	85	0.71	0.85
NVNT	n40	5190	Ant1	76.7	1.15	1.72
NVNT	n40	5230	Ant1	76.69	1.15	1.72
NVNT	ac20	5180	Ant1	87.38	0.59	0.84
NVNT	ac20	5200	Ant1	87.2	0.59	0.84
NVNT	ac20	5240	Ant1	87.3	0.59	0.85
NVNT	ac40	5190	Ant1	73.44	1.34	33.33
NVNT	ac40	5230	Ant1	76.98	1.14	1.67
NVNT	ac80	5210	Ant1	64	1.94	3.45

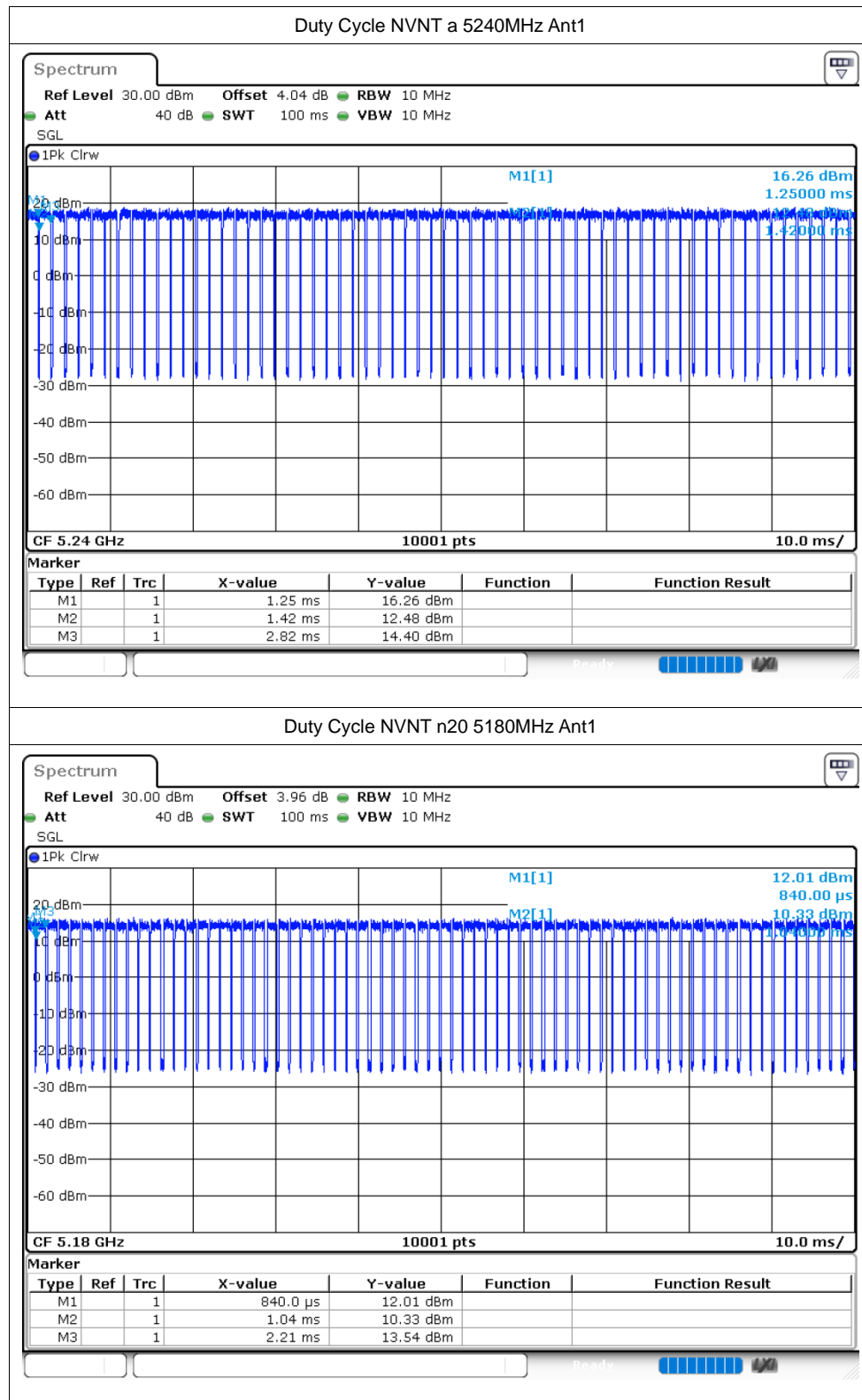
## Test Graphs

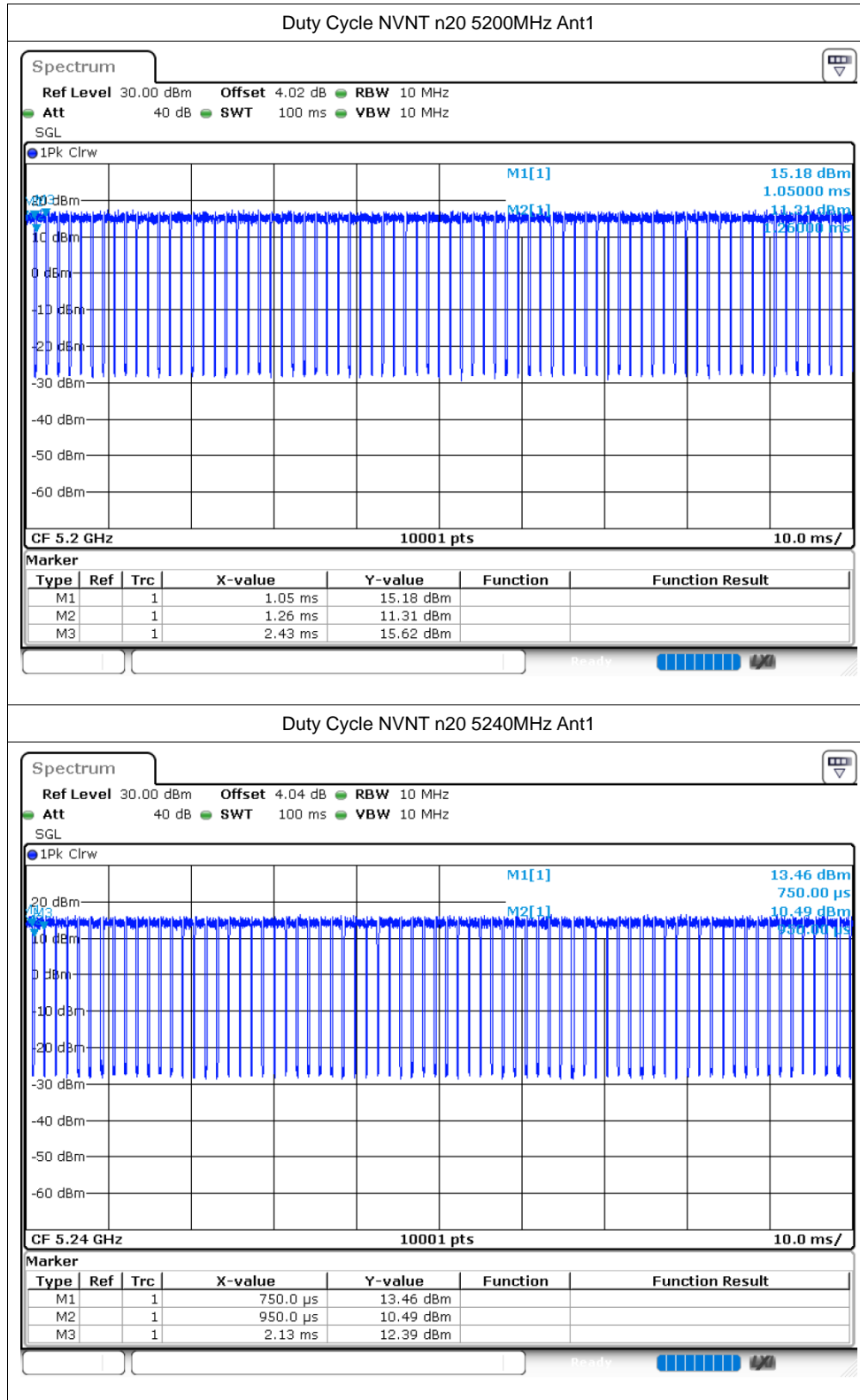
### Duty Cycle NVNT a 5180MHz Ant1



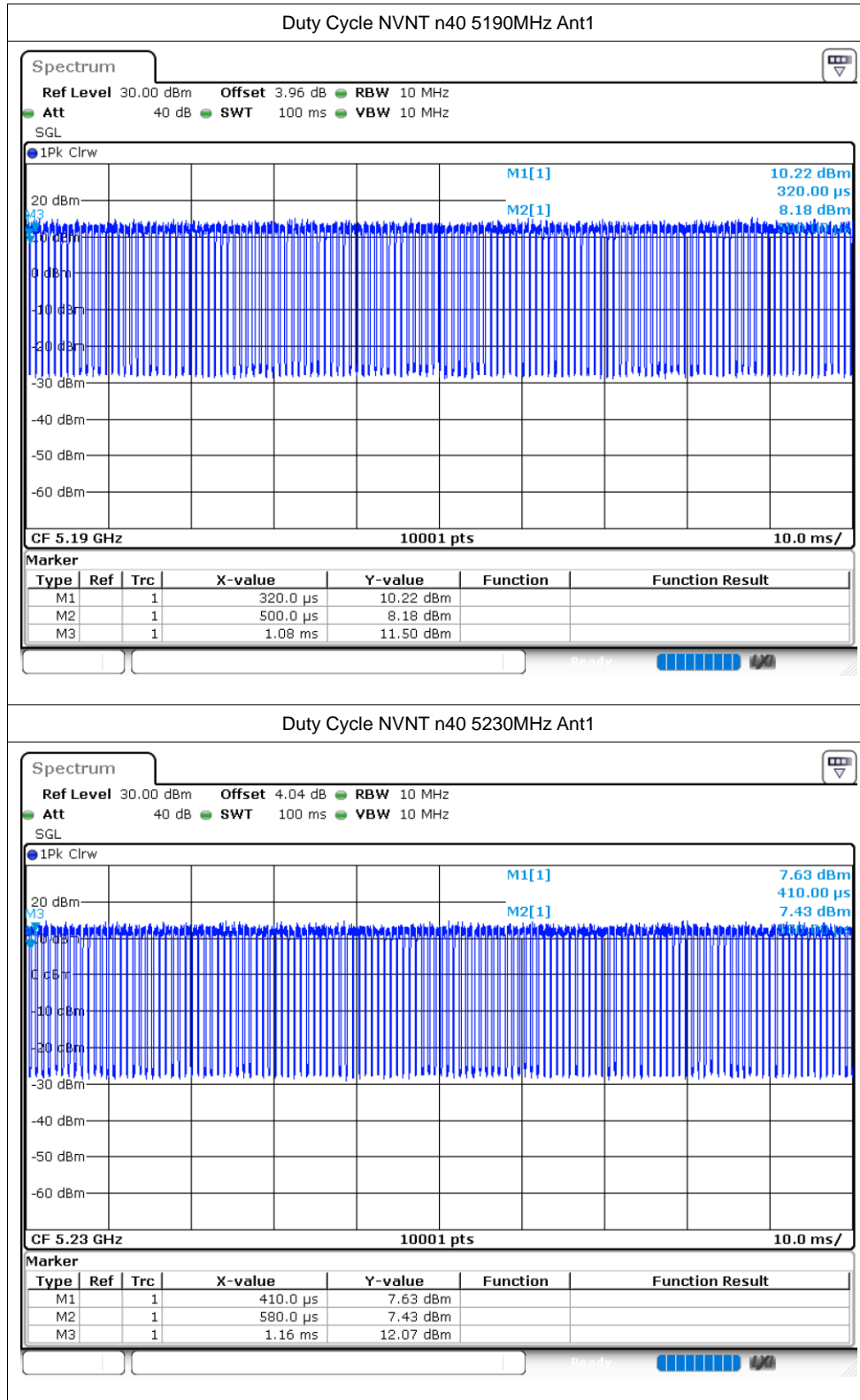
### Duty Cycle NVNT a 5200MHz Ant1

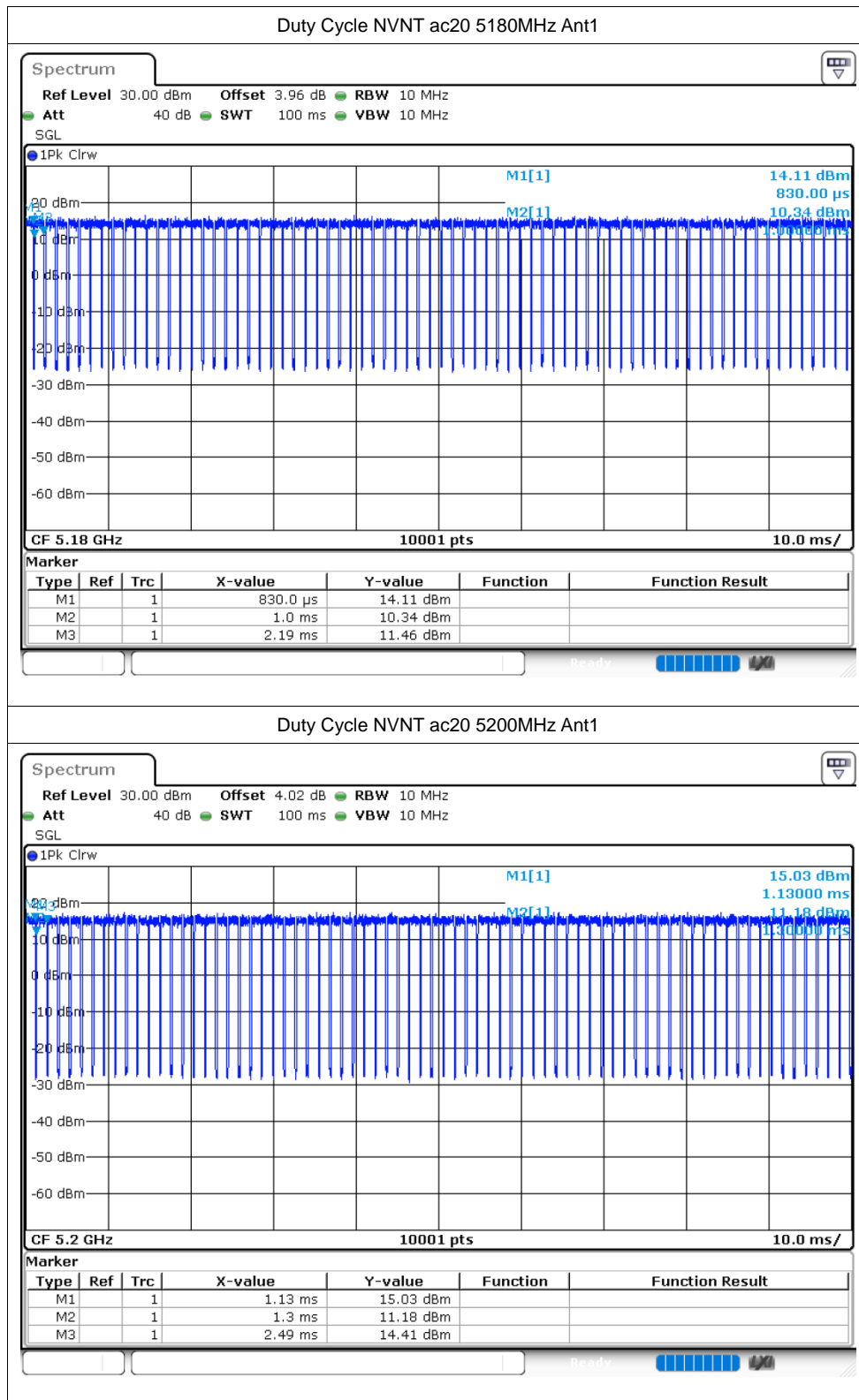


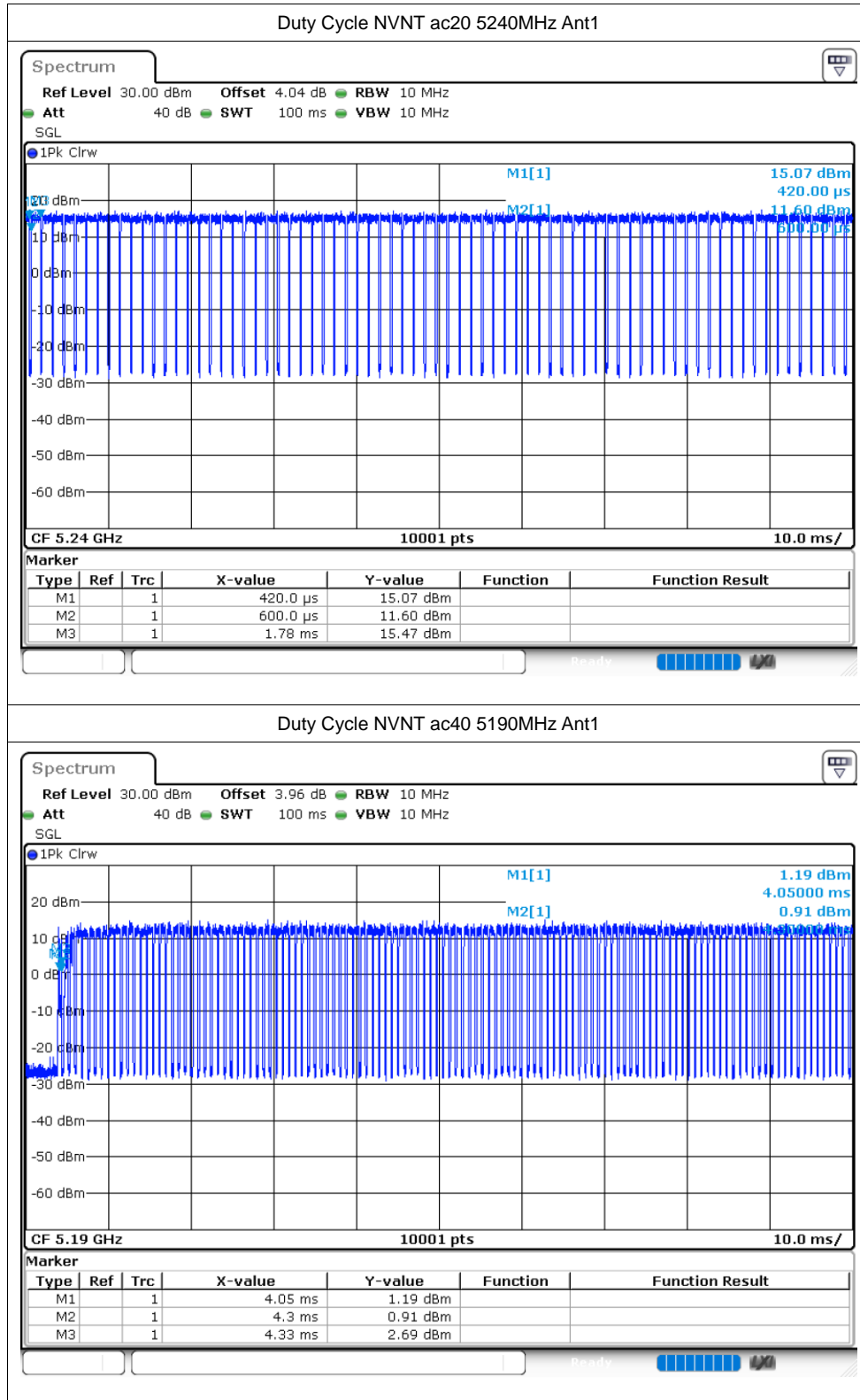


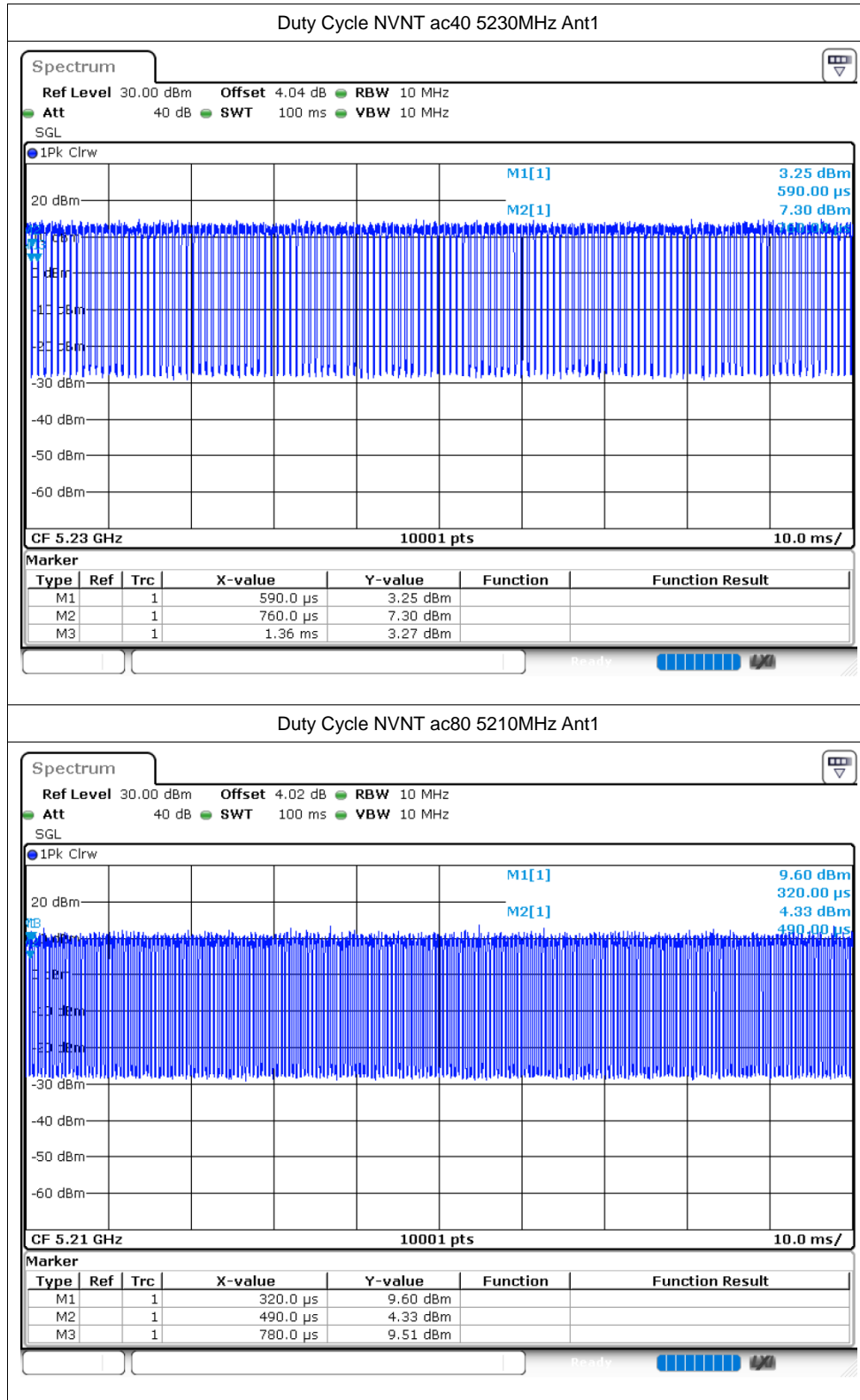












## Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.3	24	Pass
NVNT	a	5200	Ant1	12.09	24	Pass
NVNT	a	5240	Ant1	11.85	24	Pass
NVNT	n20	5180	Ant1	10.55	24	Pass
NVNT	n20	5200	Ant1	10.22	24	Pass
NVNT	n20	5240	Ant1	10.04	24	Pass
NVNT	n40	5190	Ant1	10.92	24	Pass
NVNT	n40	5230	Ant1	10.3	24	Pass
NVNT	ac20	5180	Ant1	10.61	24	Pass
NVNT	ac20	5200	Ant1	10.34	24	Pass
NVNT	ac20	5240	Ant1	10.9	24	Pass
NVNT	ac40	5190	Ant1	10.85	24	Pass
NVNT	ac40	5230	Ant1	10.25	24	Pass
NVNT	ac80	5210	Ant1	10.65	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	21.675	Pass
NVNT	a	5200	Ant1	22.332	Pass
NVNT	a	5240	Ant1	26.124	Pass
NVNT	n20	5180	Ant1	22.989	Pass
NVNT	n20	5200	Ant1	23.316	Pass
NVNT	n20	5240	Ant1	22.485	Pass
NVNT	n40	5190	Ant1	53.802	Pass
NVNT	n40	5230	Ant1	59.382	Pass
NVNT	ac20	5180	Ant1	23.79	Pass
NVNT	ac20	5200	Ant1	22.626	Pass
NVNT	ac20	5240	Ant1	22.989	Pass
NVNT	ac40	5190	Ant1	54.672	Pass
NVNT	ac40	5230	Ant1	58.236	Pass
NVNT	ac80	5210	Ant1	82.764	Pass

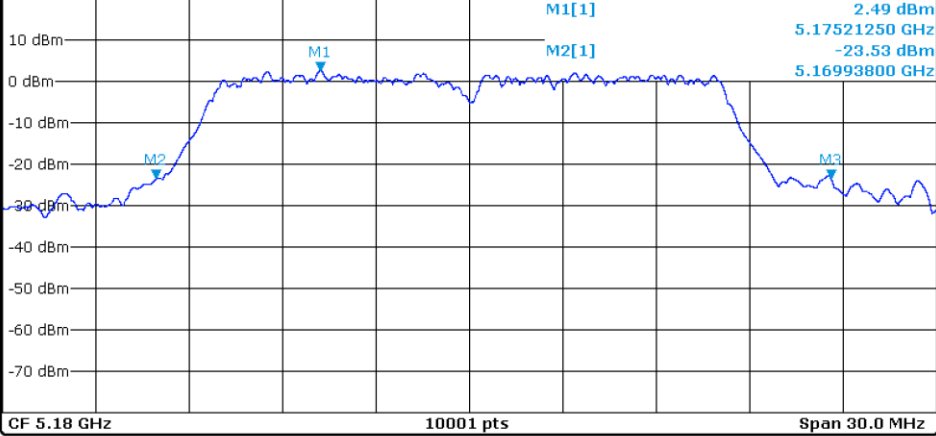
Test Graphs

-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  $\mu$ s VBW 1 MHz Mode Auto FFT  
 SGL Count 100/100

1Pk Max



Marker

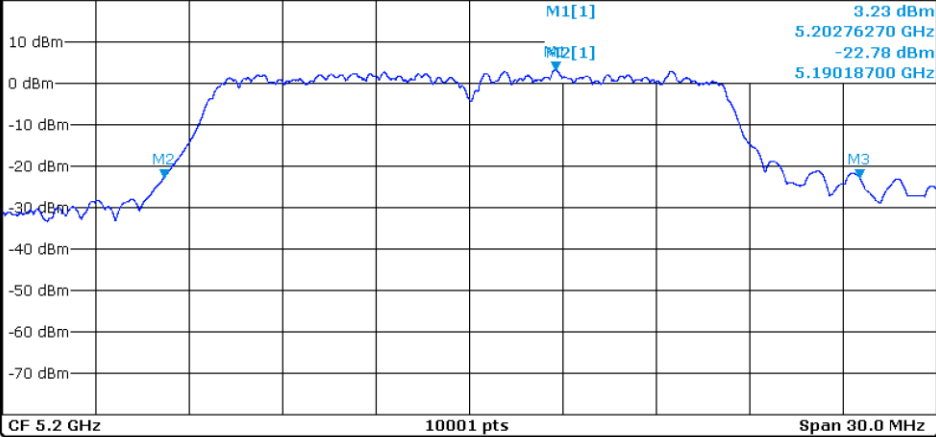
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.1752125 GHz	2.49 dBm		
M2		1	5.169938 GHz	-23.53 dBm		
M3		1	5.191613 GHz	-23.51 dBm		

-26dB Bandwidth NVNT a 5200MHz Ant1

Spectrum

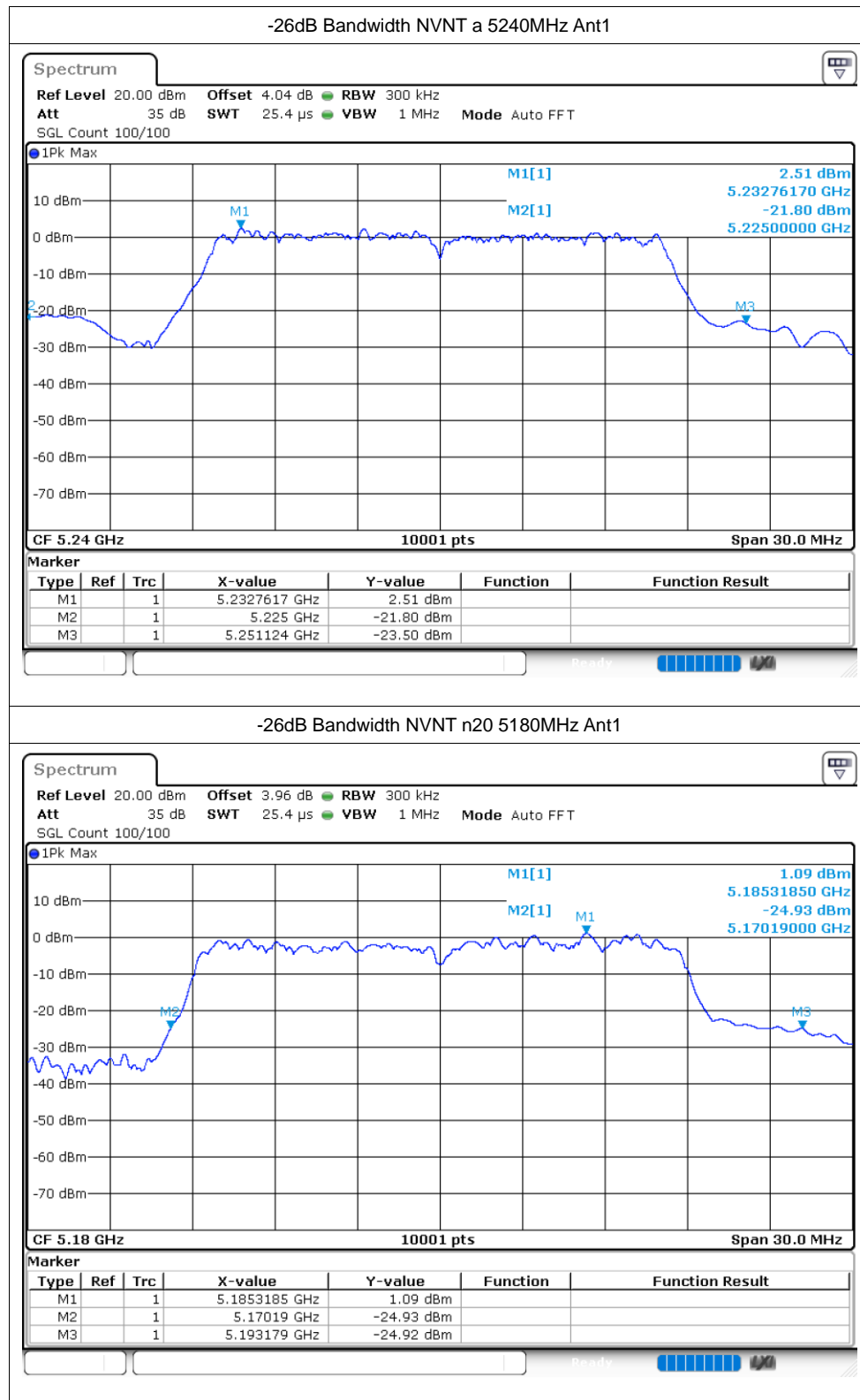
Ref Level 20.00 dBm Offset 4.02 dB RBW 300 kHz  
 Att 35 dB SWT 25.4  $\mu$ s VBW 1 MHz Mode Auto FFT  
 SGL Count 100/100

1Pk Max

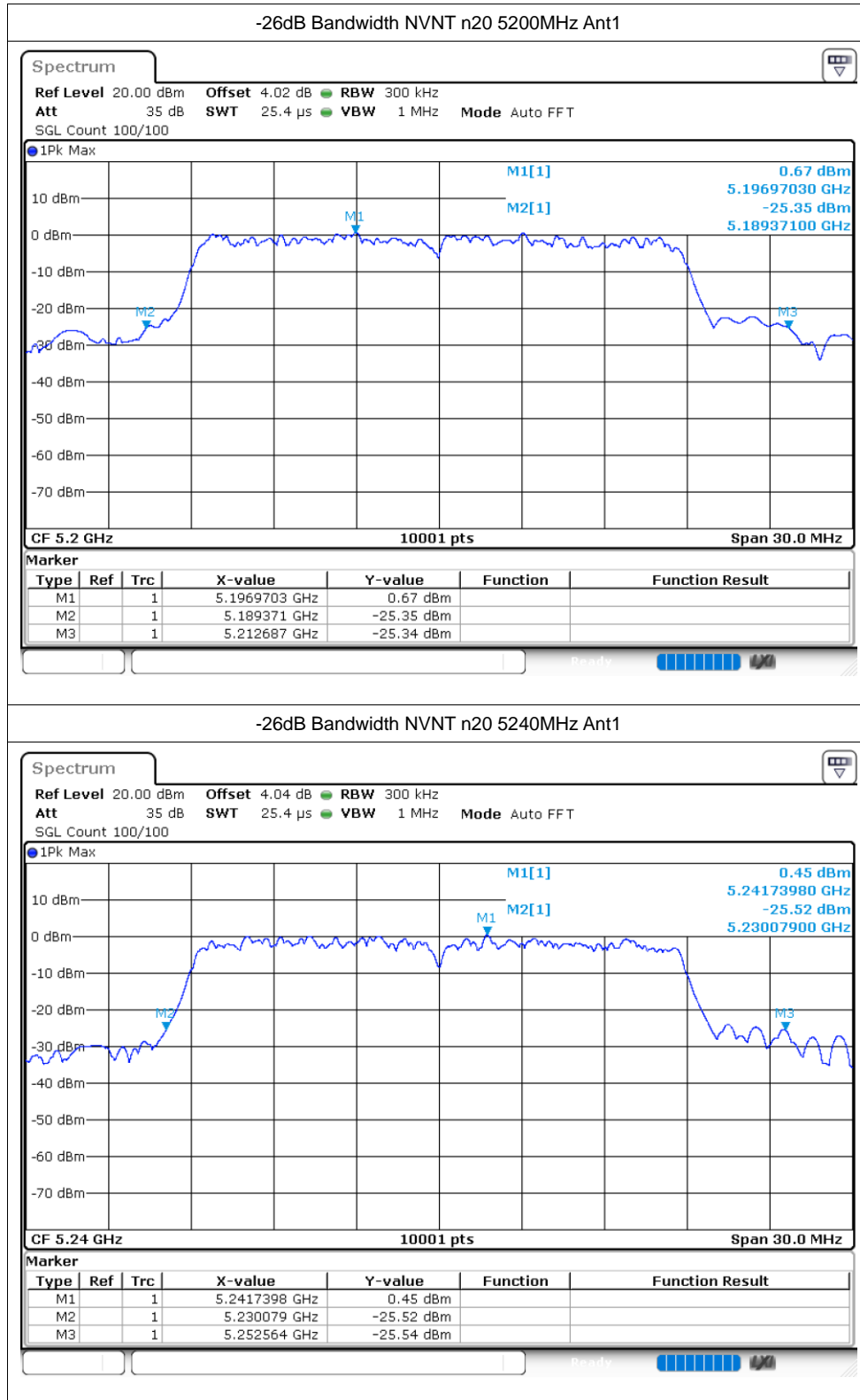


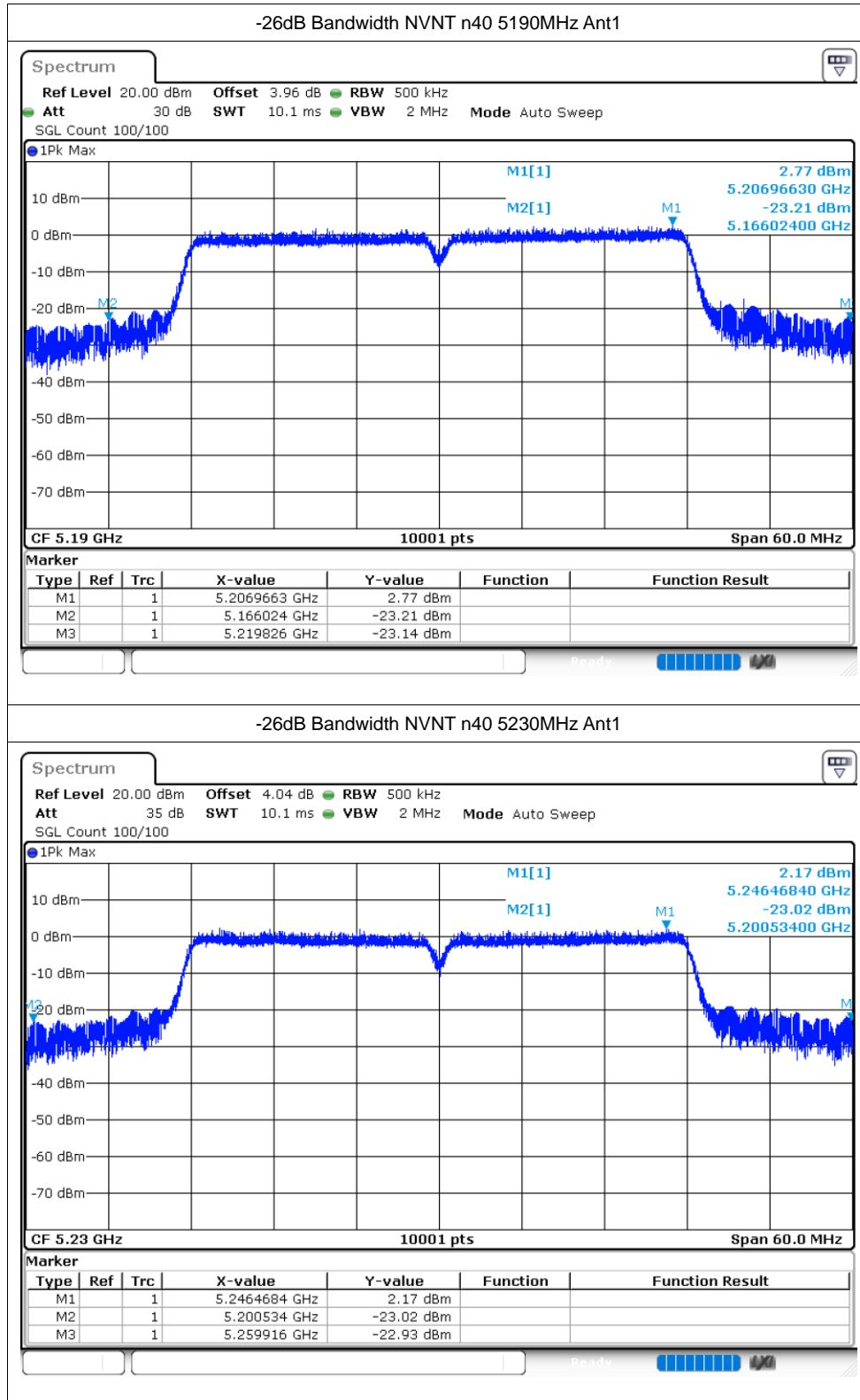
Marker

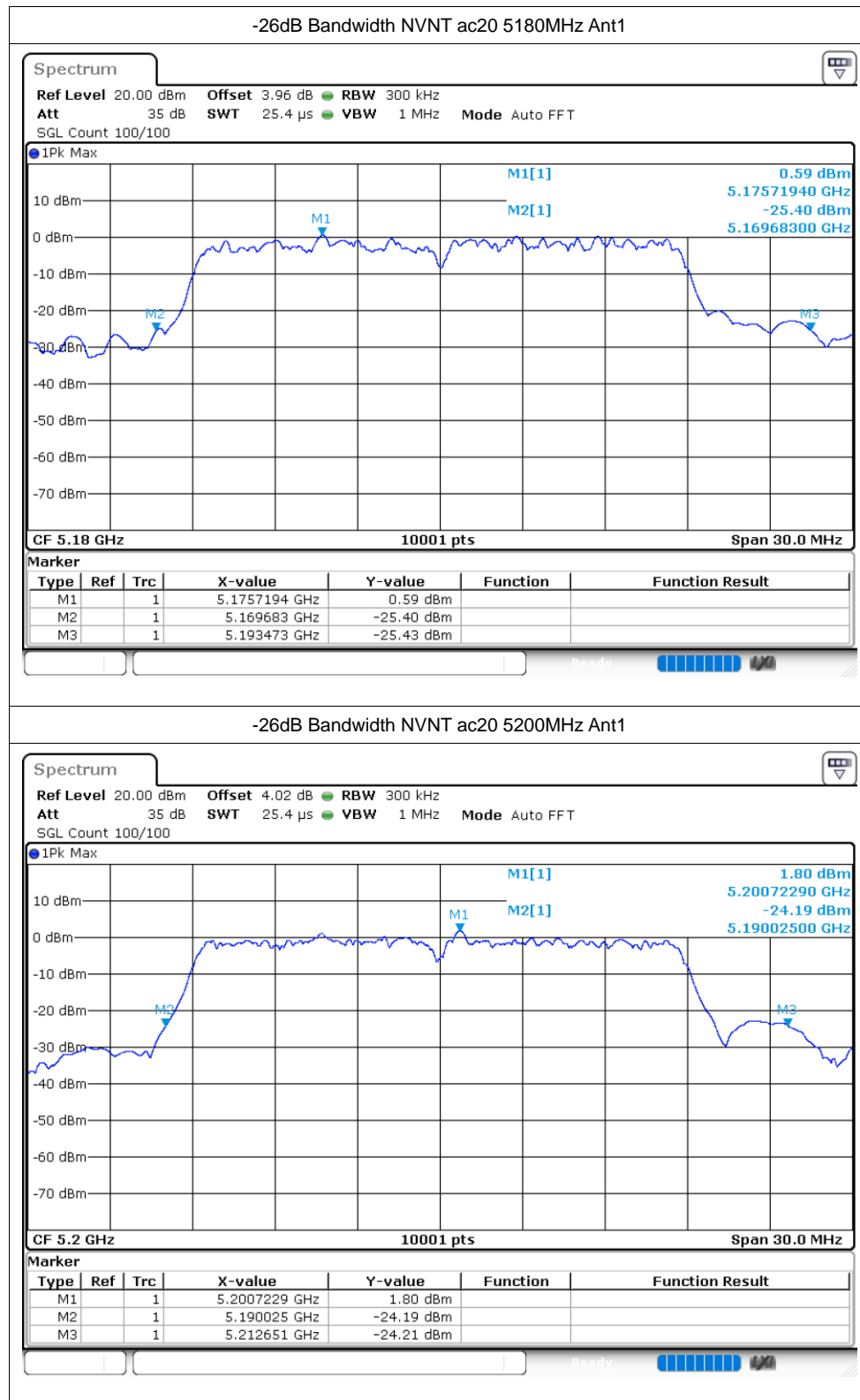
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.2027627 GHz	3.23 dBm		
M2		1	5.190187 GHz	-22.78 dBm		
M3		1	5.212519 GHz	-22.77 dBm		

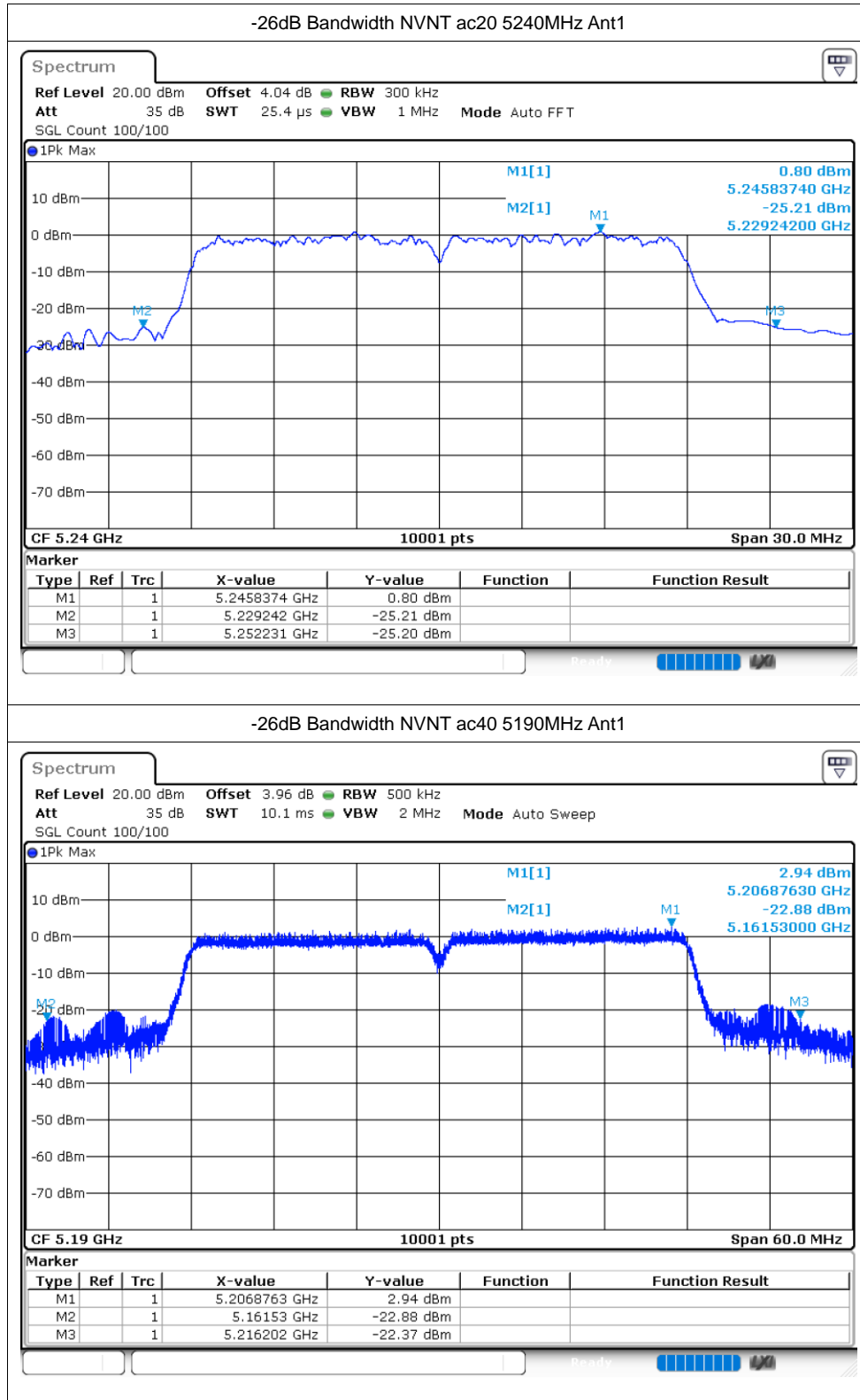


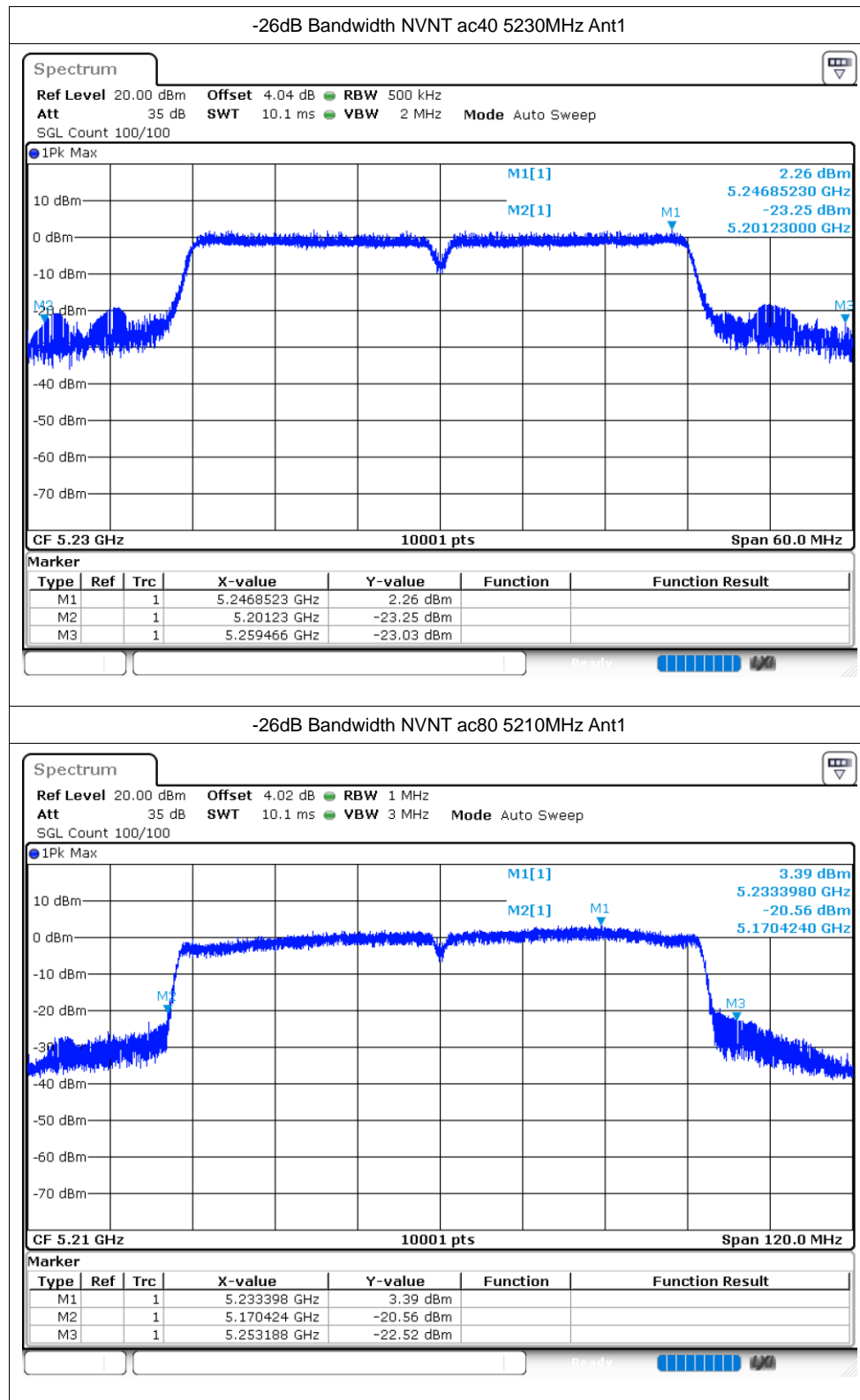










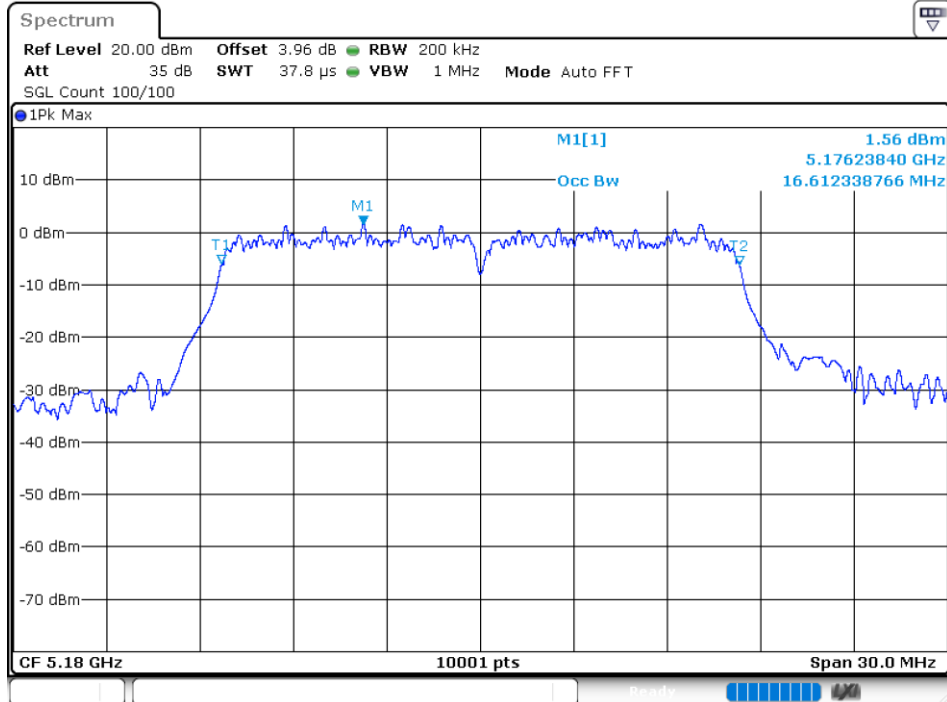


## Occupied Channel Bandwidth

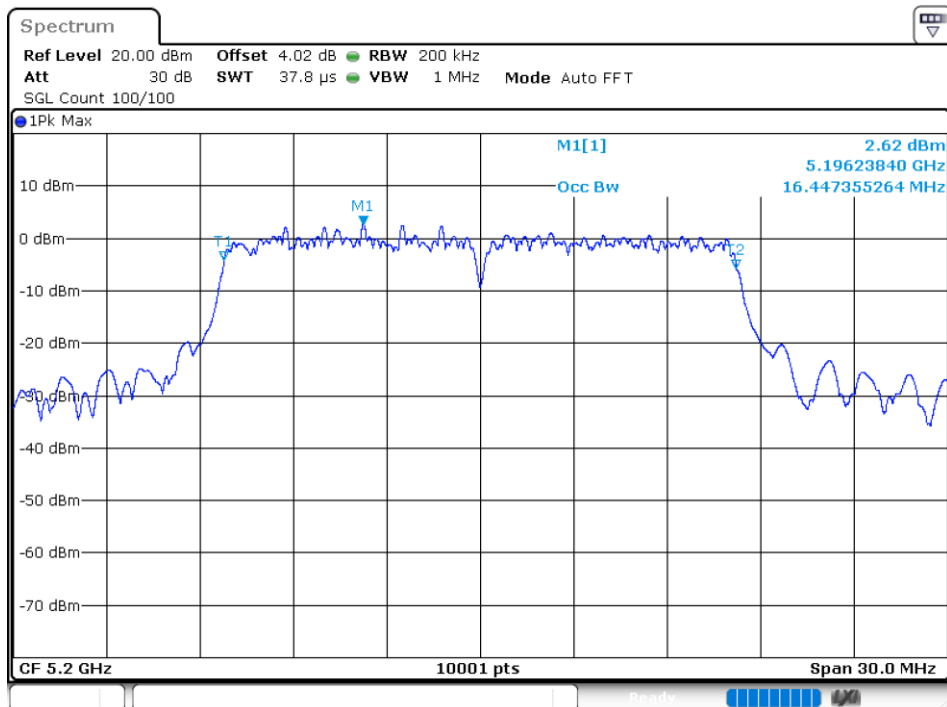
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.612
NVNT	a	5200	Ant1	16.447
NVNT	a	5240	Ant1	16.528
NVNT	n20	5180	Ant1	17.722
NVNT	n20	5200	Ant1	17.641
NVNT	n20	5240	Ant1	17.725
NVNT	n40	5190	Ant1	36.356
NVNT	n40	5230	Ant1	36.458
NVNT	ac20	5180	Ant1	17.629
NVNT	ac20	5200	Ant1	17.611
NVNT	ac20	5240	Ant1	17.599
NVNT	ac40	5190	Ant1	36.344
NVNT	ac40	5230	Ant1	36.44
NVNT	ac80	5210	Ant1	75.256

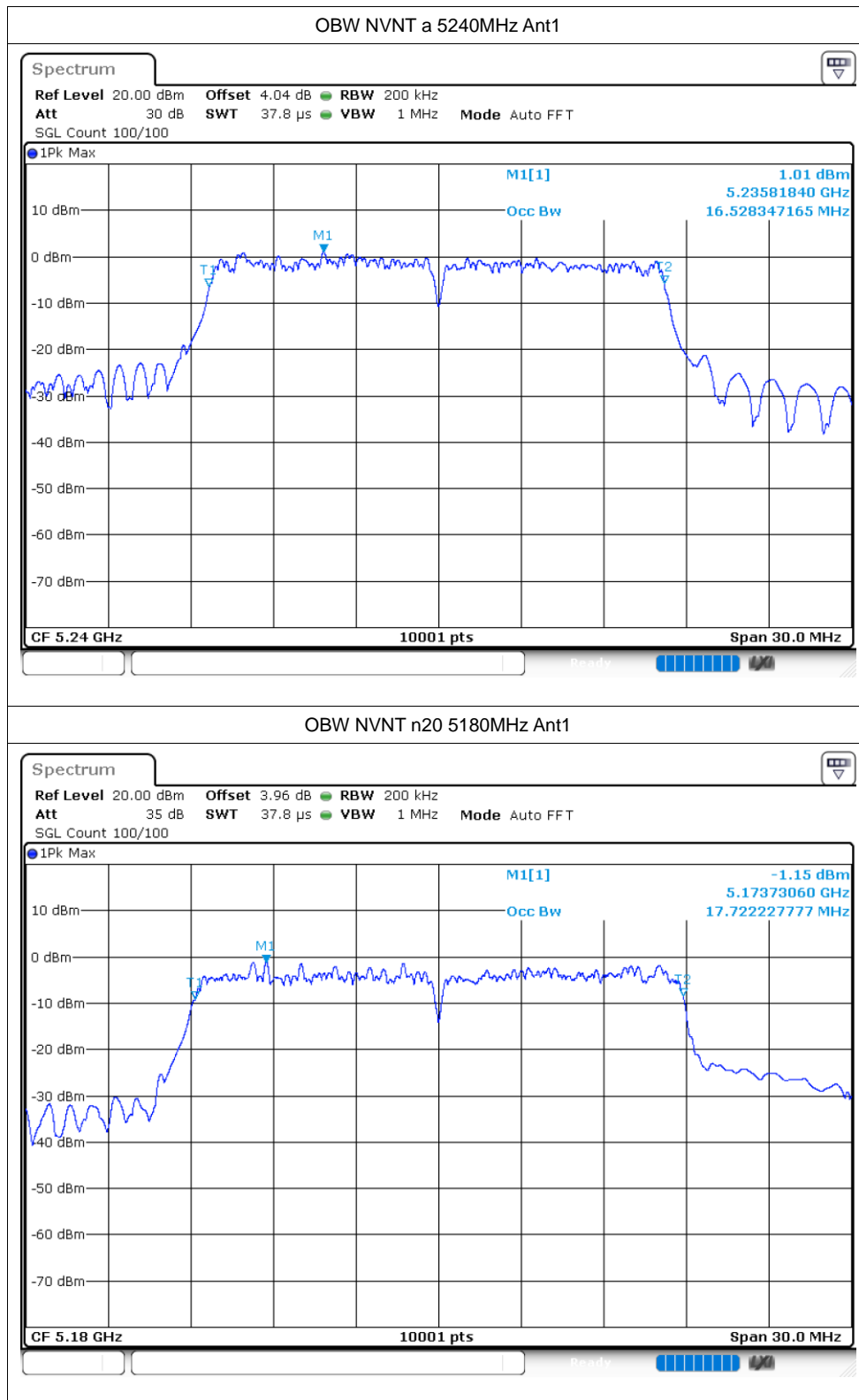
Test Graphs

OBW NVNT a 5180MHz Ant1

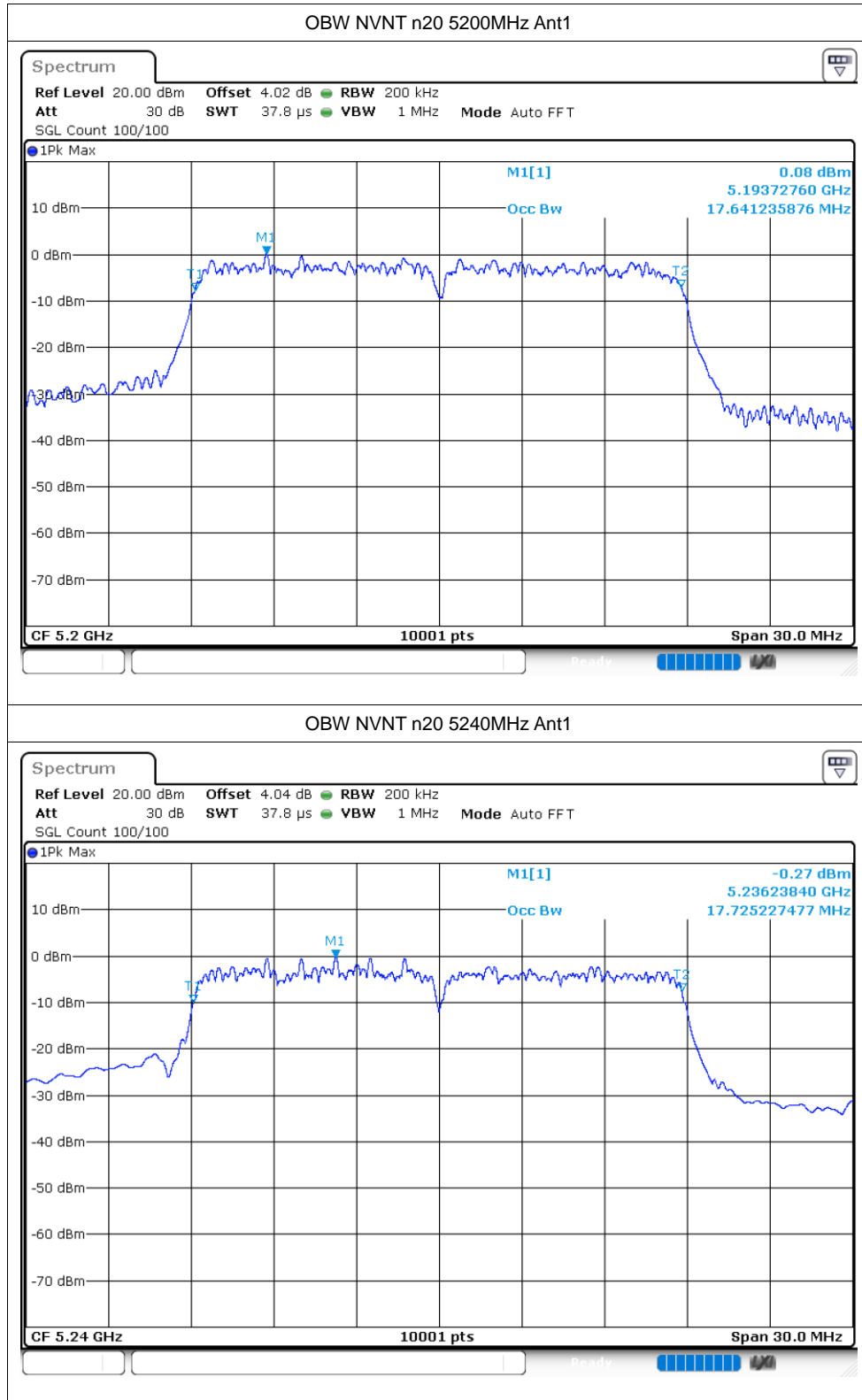


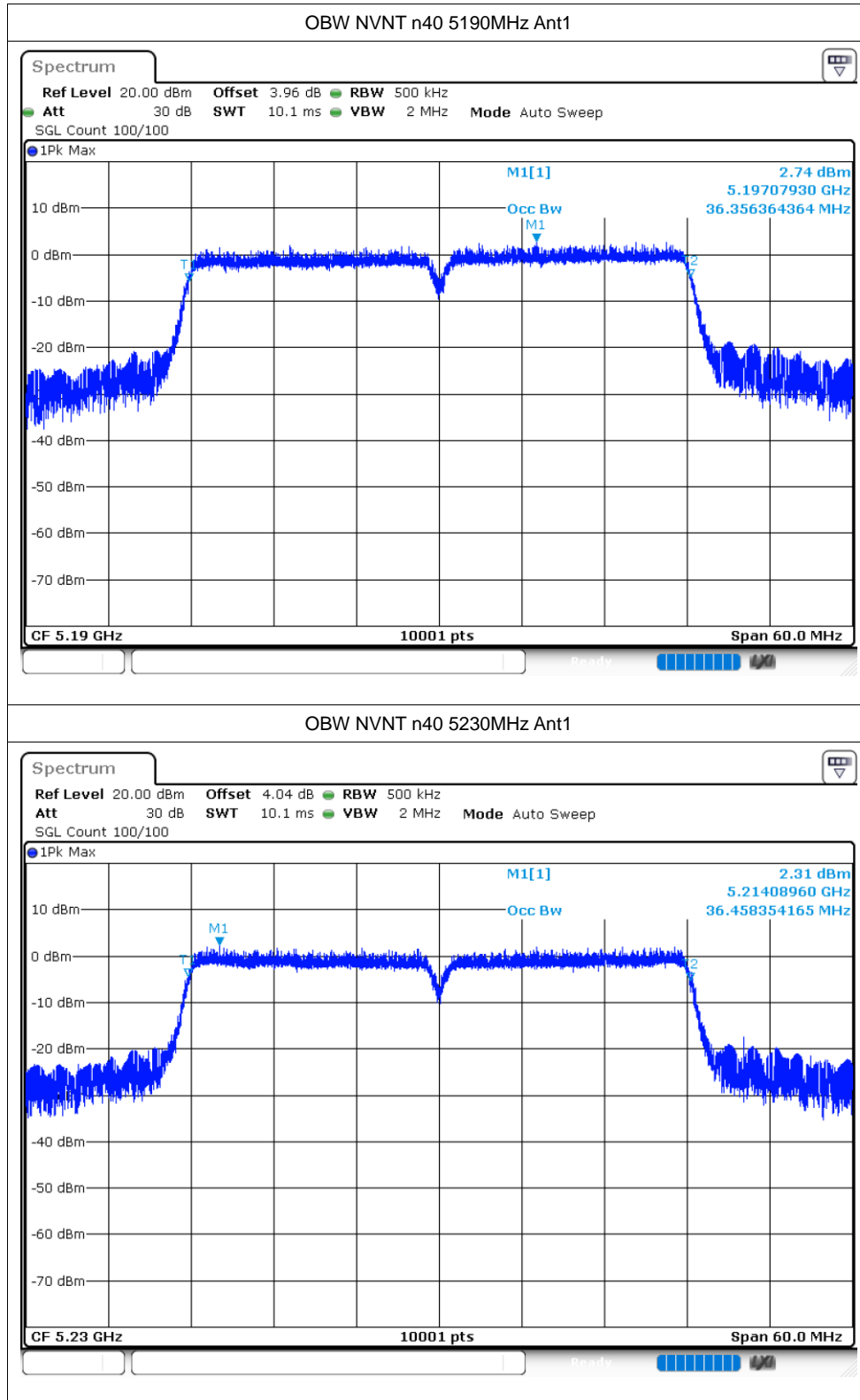
OBW NVNT a 5200MHz Ant1

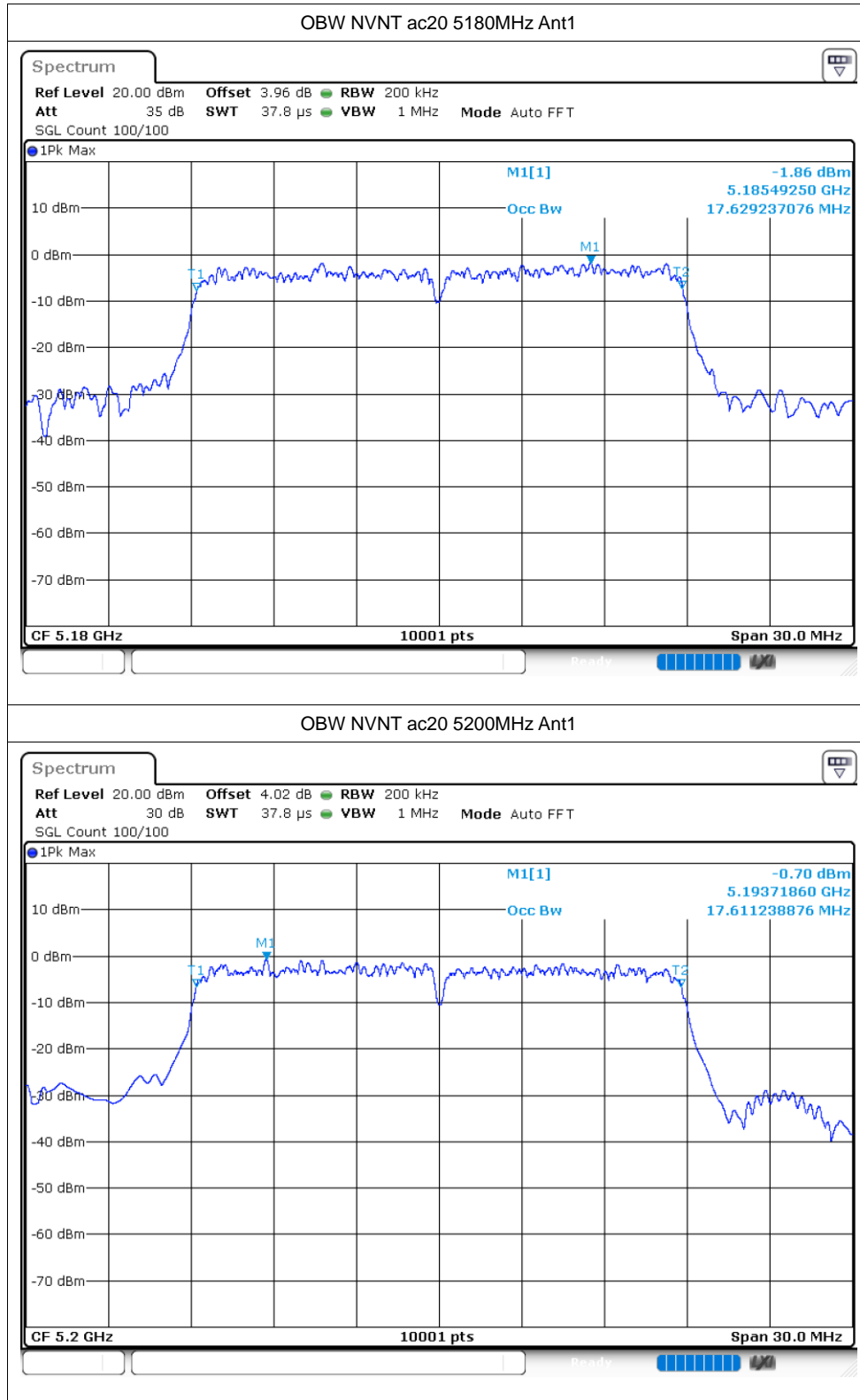


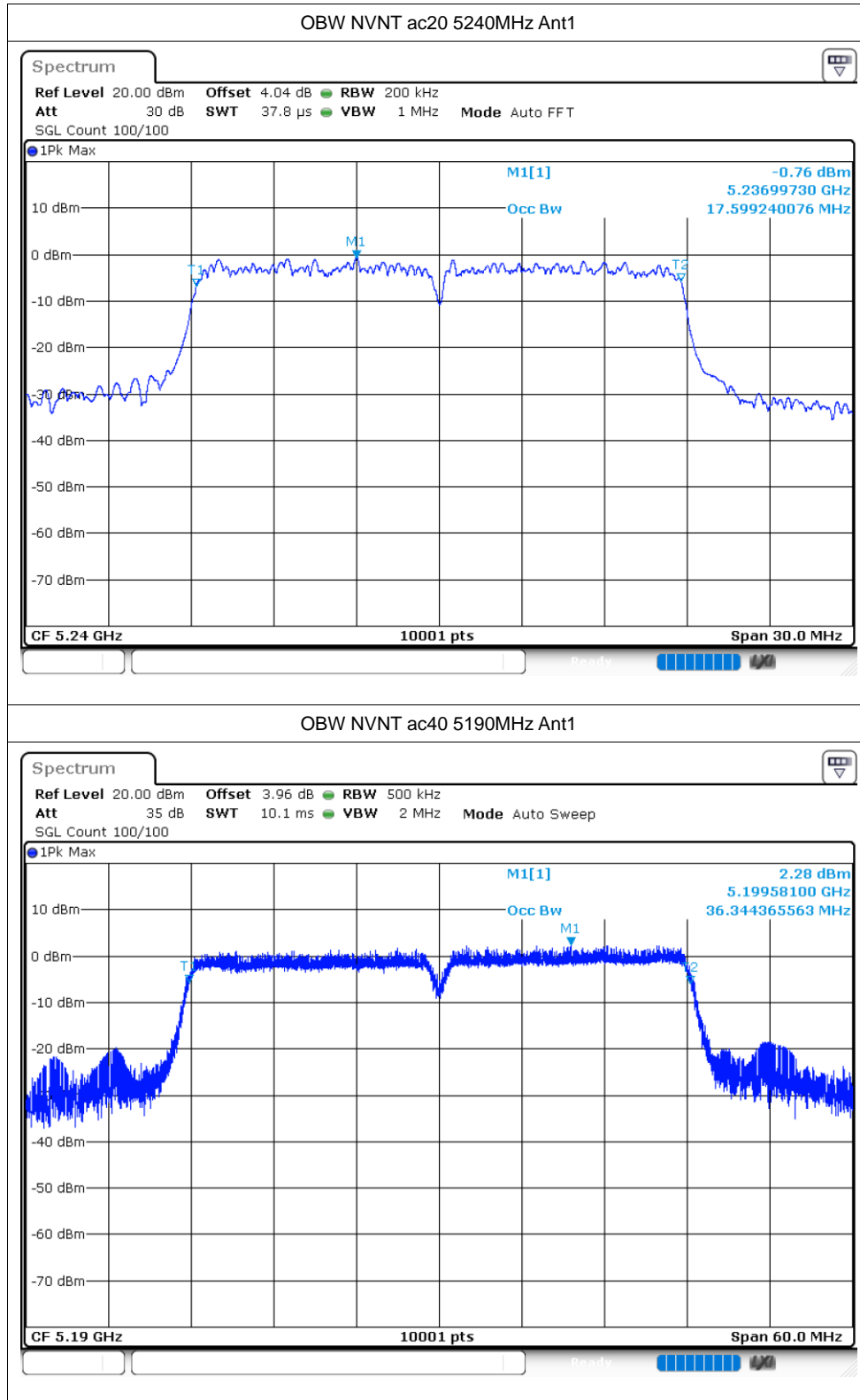


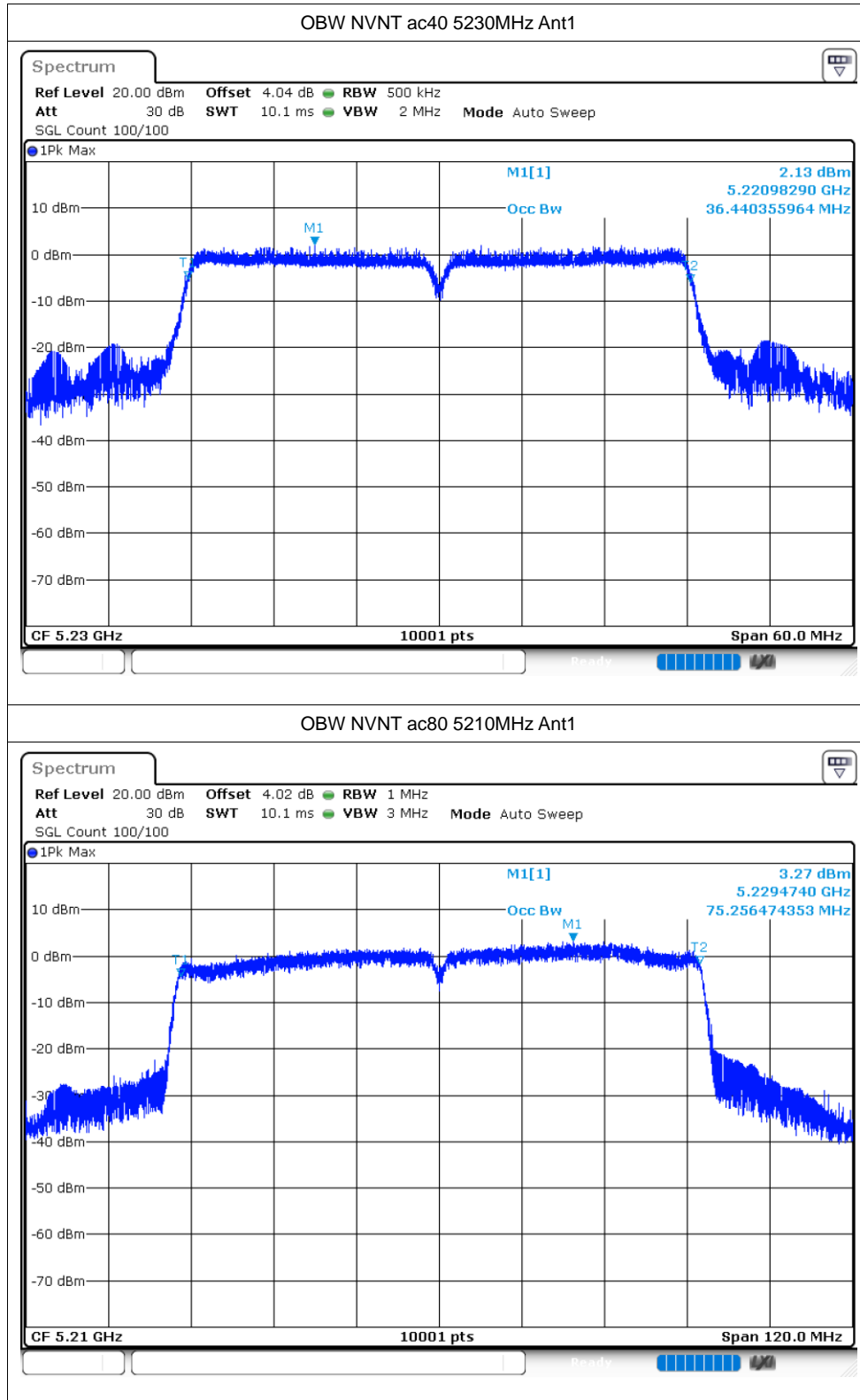










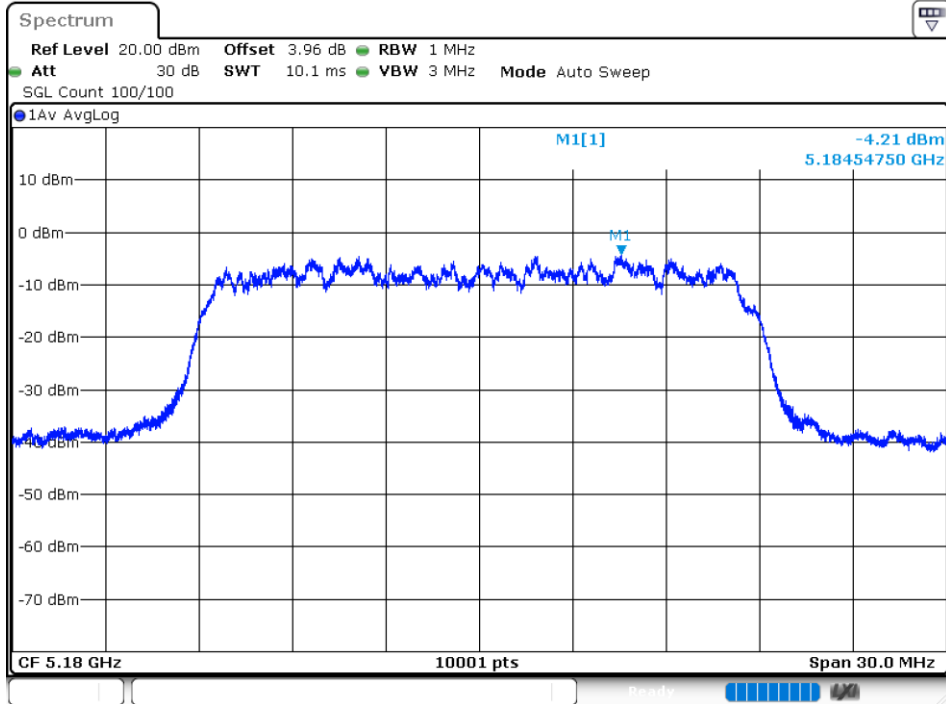


## Maximum Power Spectral Density Level

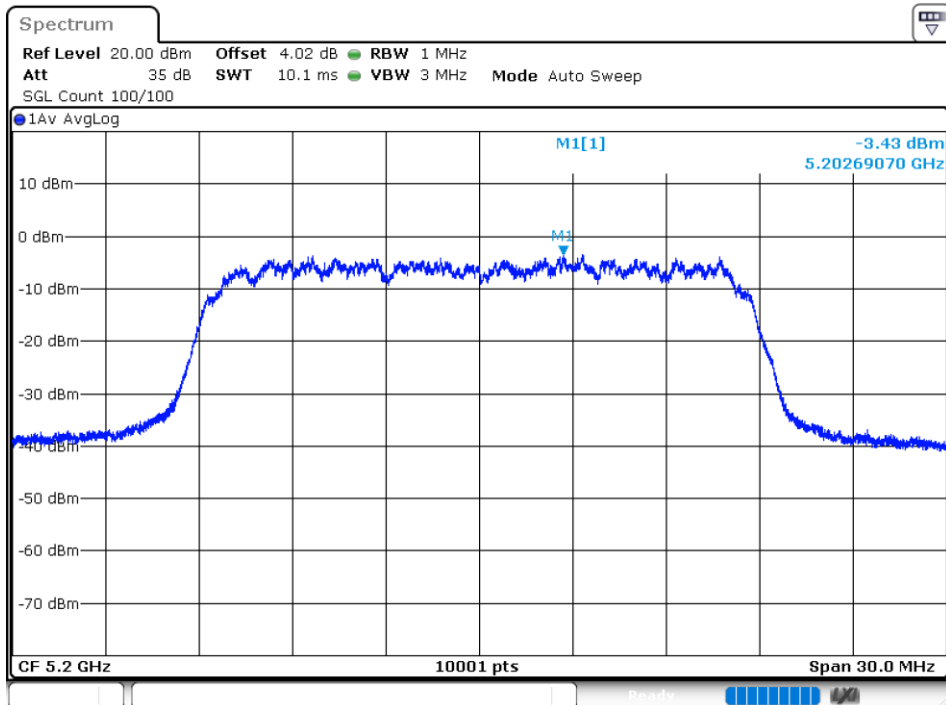
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-4.21	0.54	-3.67	11	Pass
NVNT	a	5200	Ant1	-3.43	0.53	-2.9	11	Pass
NVNT	a	5240	Ant1	-4.31	0.52	-3.79	11	Pass
NVNT	n20	5180	Ant1	-5.93	0.71	-5.22	11	Pass
NVNT	n20	5200	Ant1	-5.46	0.58	-4.88	11	Pass
NVNT	n20	5240	Ant1	-5.5	0.71	-4.79	11	Pass
NVNT	n40	5190	Ant1	-13.96	1.15	-12.81	11	Pass
NVNT	n40	5230	Ant1	-12.27	1.15	-11.12	11	Pass
NVNT	ac20	5180	Ant1	-6.13	0.59	-5.54	11	Pass
NVNT	ac20	5200	Ant1	-5.77	0.59	-5.18	11	Pass
NVNT	ac20	5240	Ant1	-5.58	0.59	-4.99	11	Pass
NVNT	ac40	5190	Ant1	-13.29	1.34	-11.95	11	Pass
NVNT	ac40	5230	Ant1	-14.09	1.14	-12.95	11	Pass
NVNT	ac80	5210	Ant1	-18.07	1.94	-16.13	11	Pass

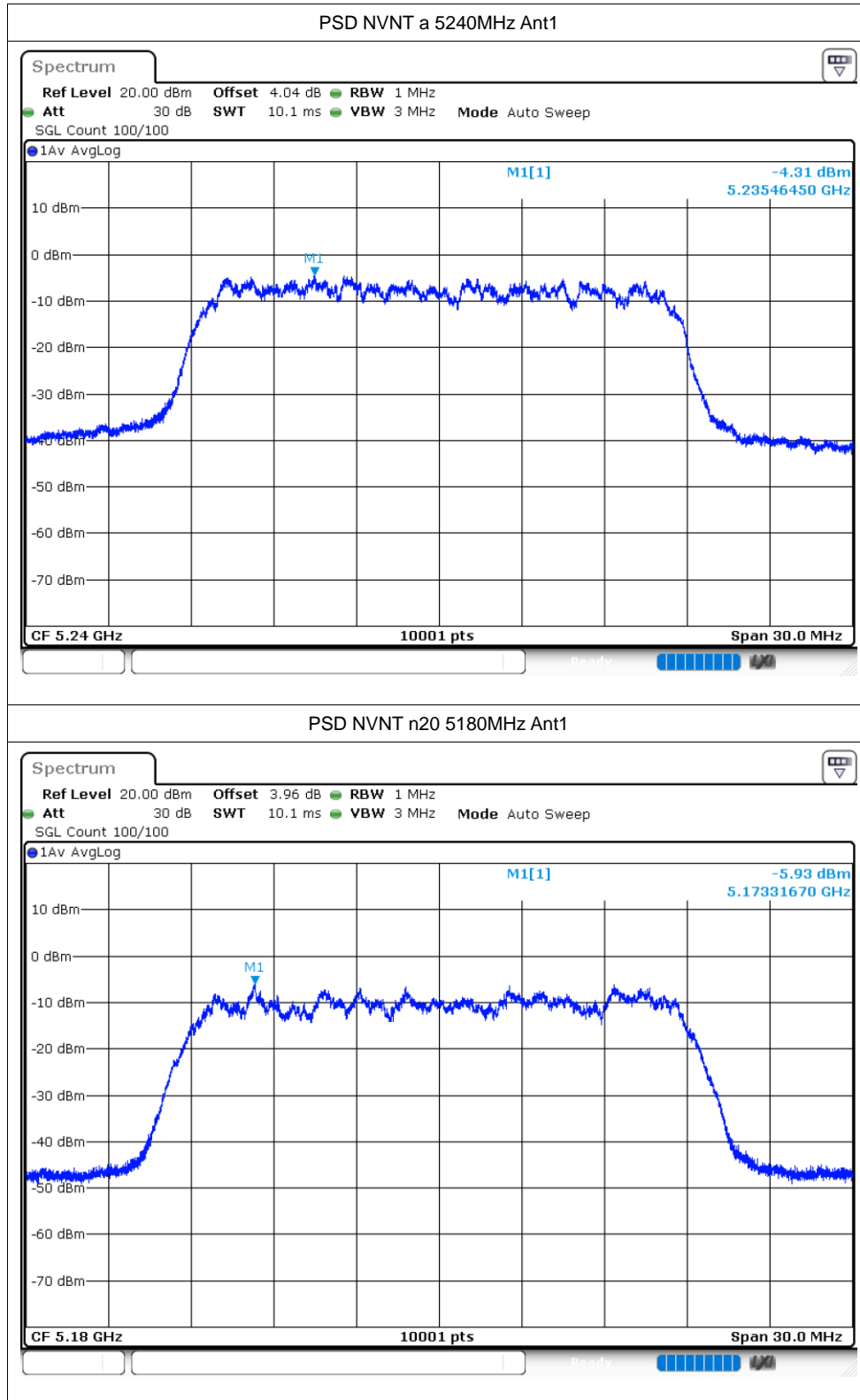
Test Graphs

PSD NVNT a 5180MHz Ant1

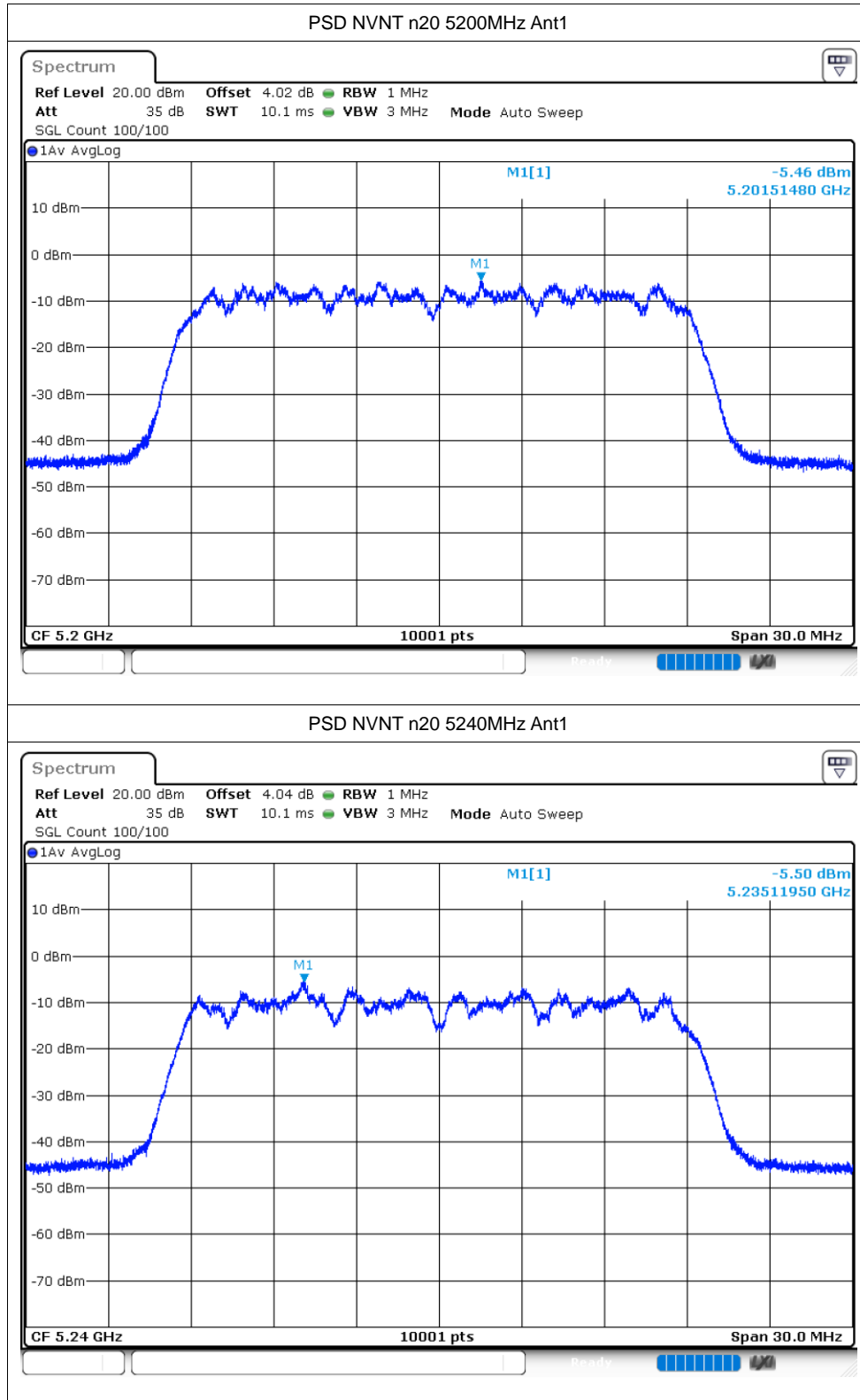


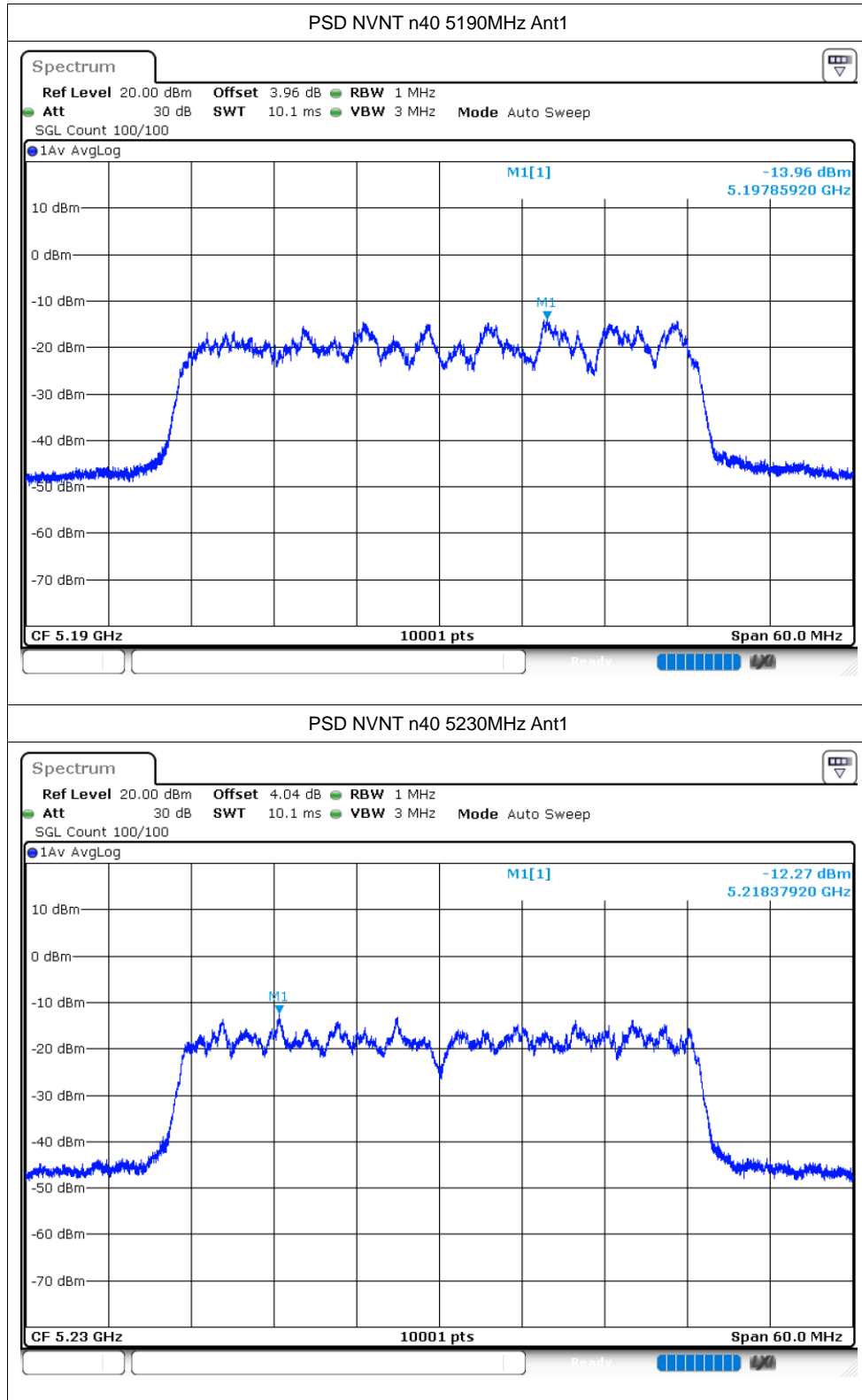
PSD NVNT a 5200MHz Ant1

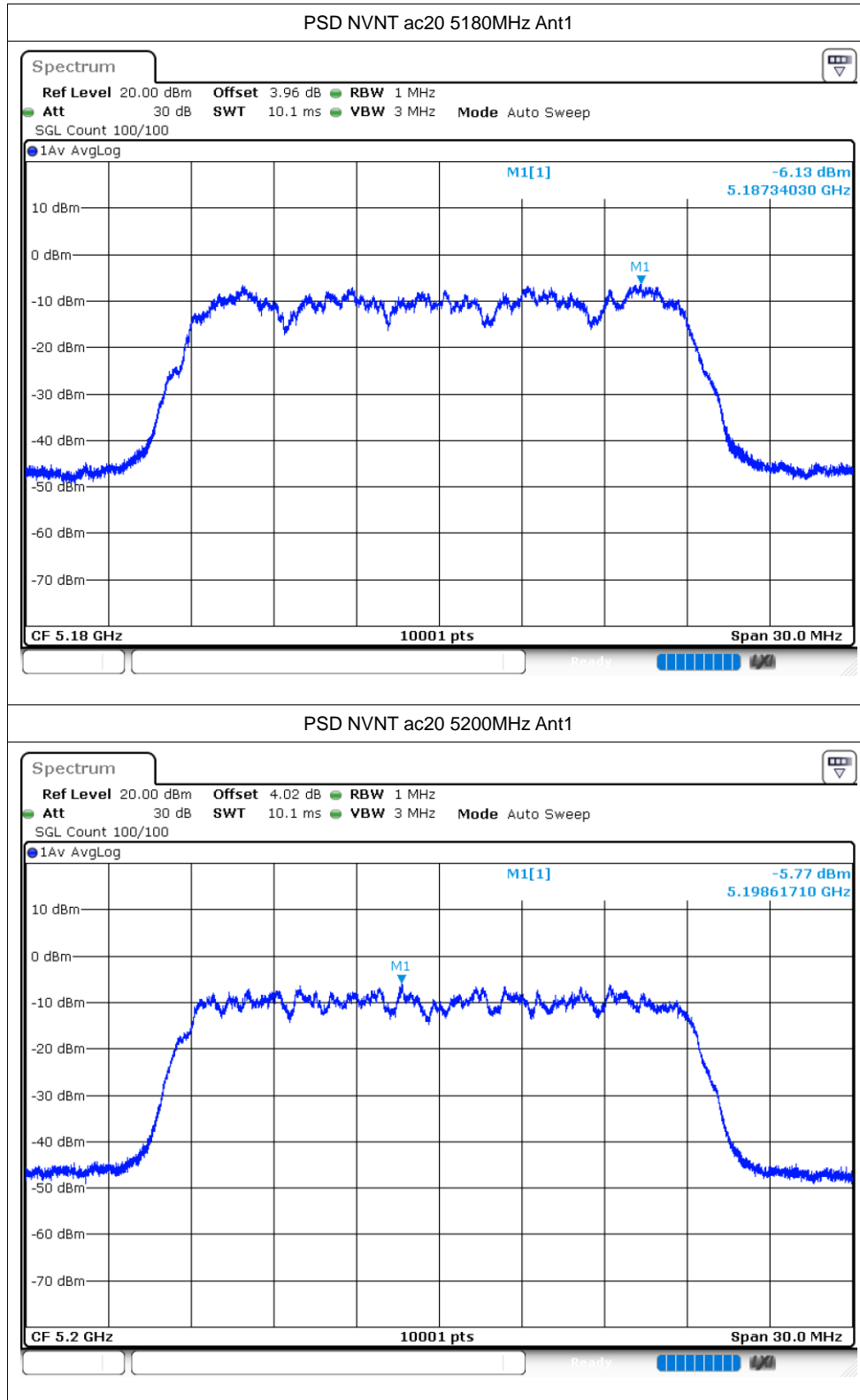


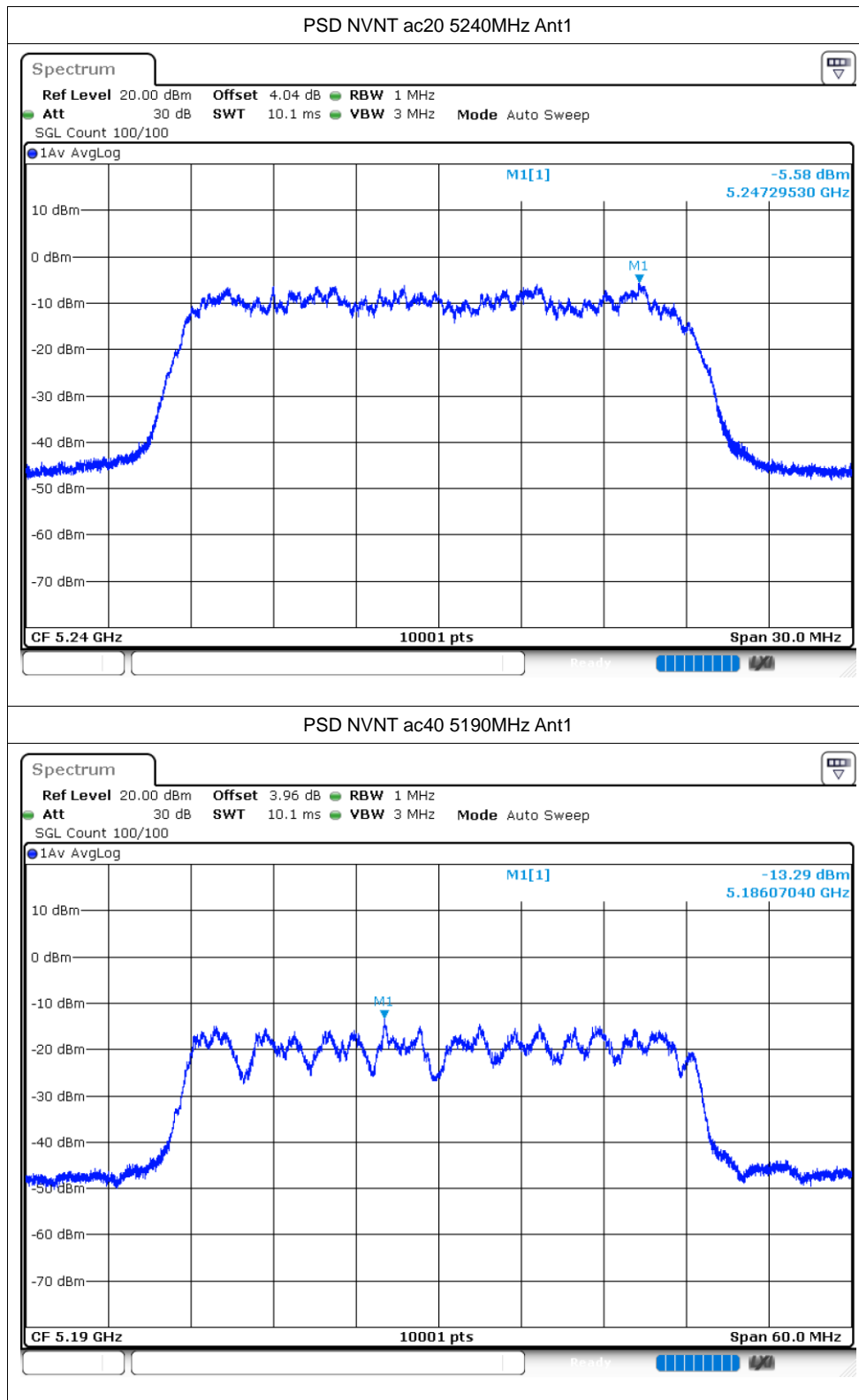


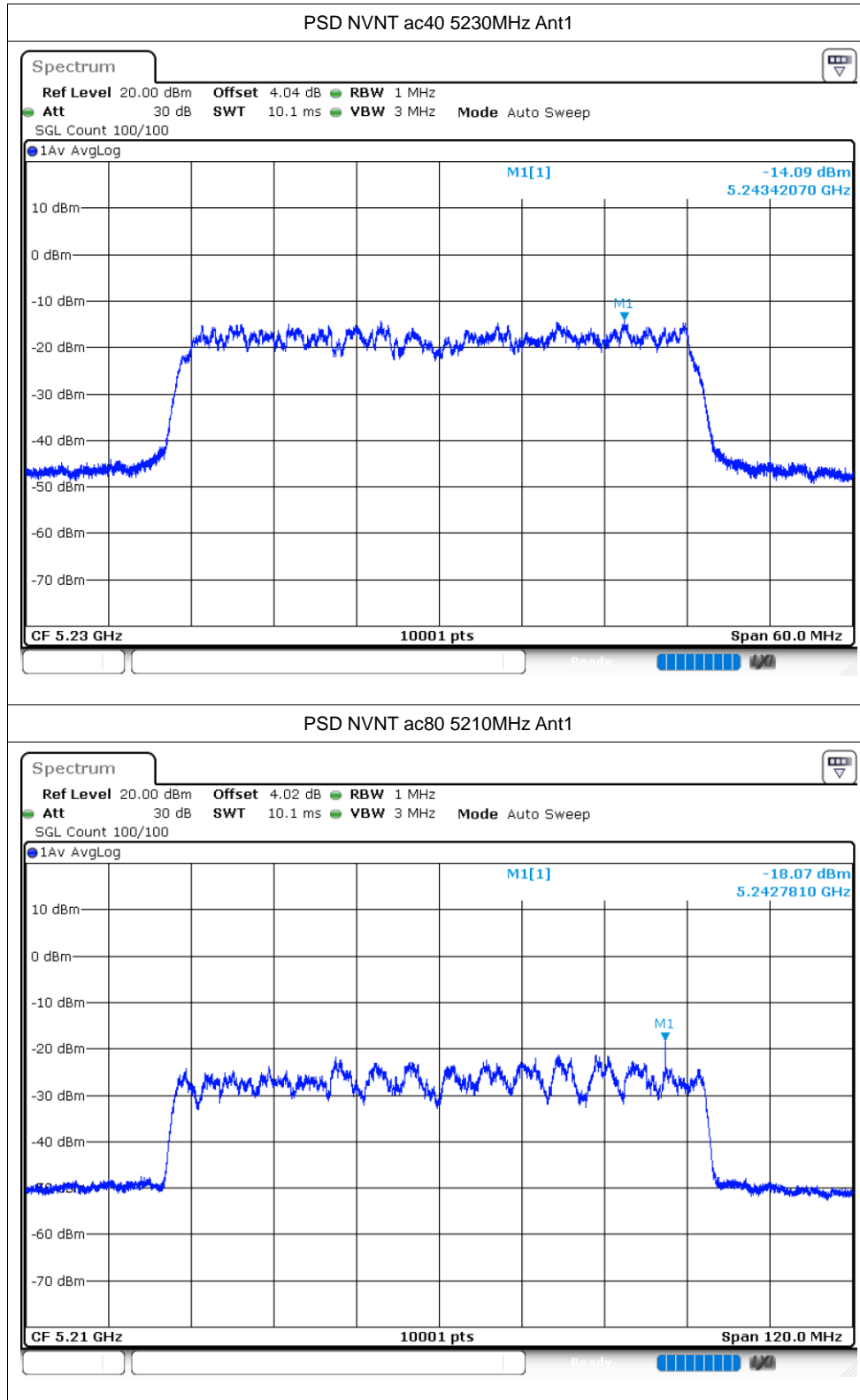










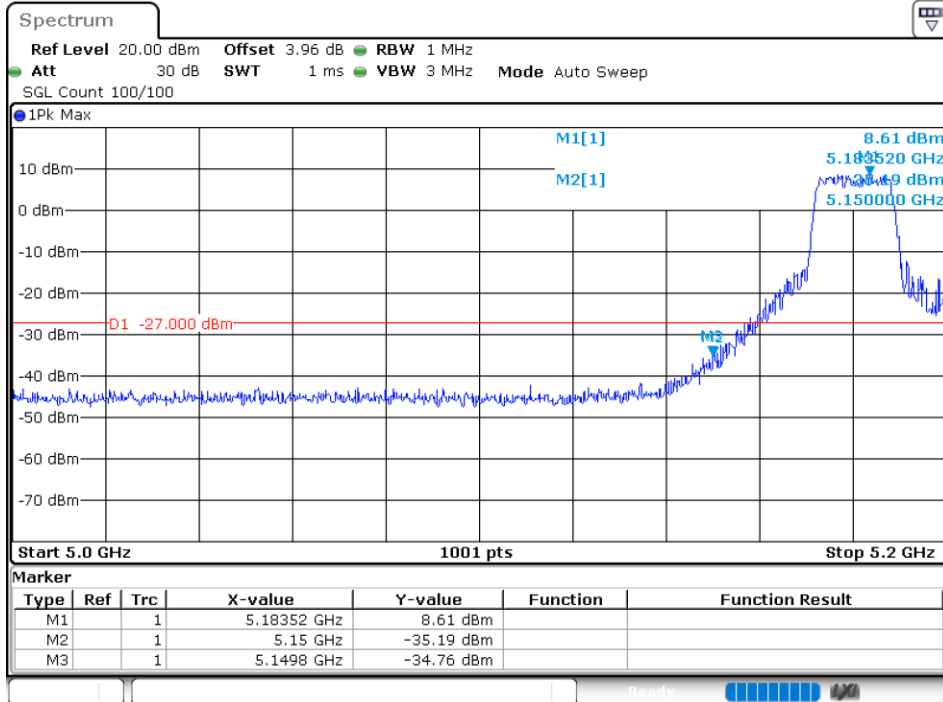


## Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-34.75	-27	Pass
NVNT	a	5240	Ant1	-41.8	-27	Pass
NVNT	n20	5180	Ant1	-37.48	-27	Pass
NVNT	n20	5240	Ant1	-42.13	-27	Pass
NVNT	n40	5190	Ant1	-37.3	-27	Pass
NVNT	n40	5230	Ant1	-42.79	-27	Pass
NVNT	ac20	5180	Ant1	-36.93	-27	Pass
NVNT	ac20	5240	Ant1	-42.1	-27	Pass
NVNT	ac40	5190	Ant1	-34.99	-27	Pass
NVNT	ac40	5230	Ant1	-43	-27	Pass
NVNT	ac80	5210	Ant1	-43.08	-27	Pass
NVNT	ac80	5210	Ant1	-34.12	-27	Pass

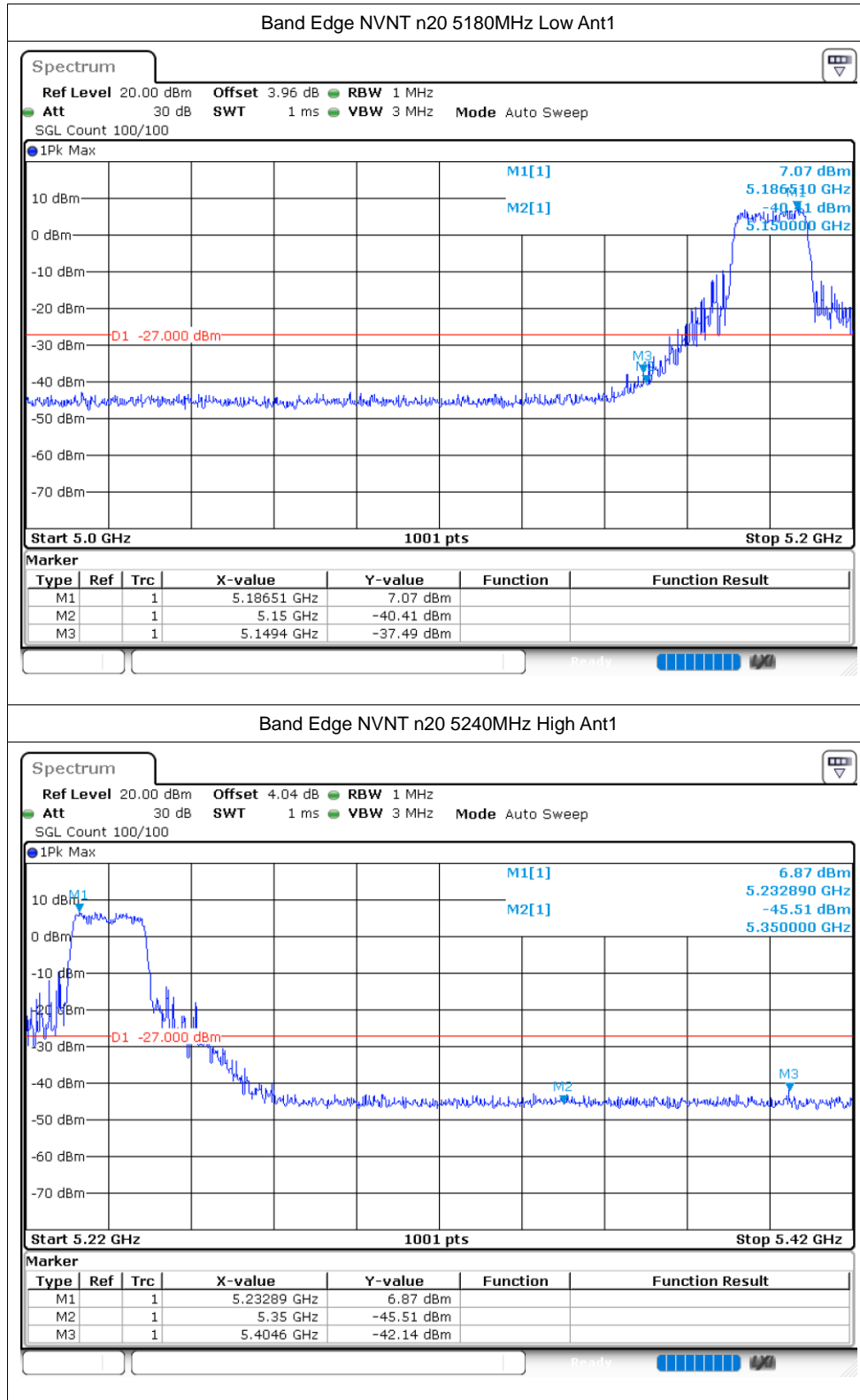
### Test Graphs

#### Band Edge NVNT a 5180MHz Low Ant1

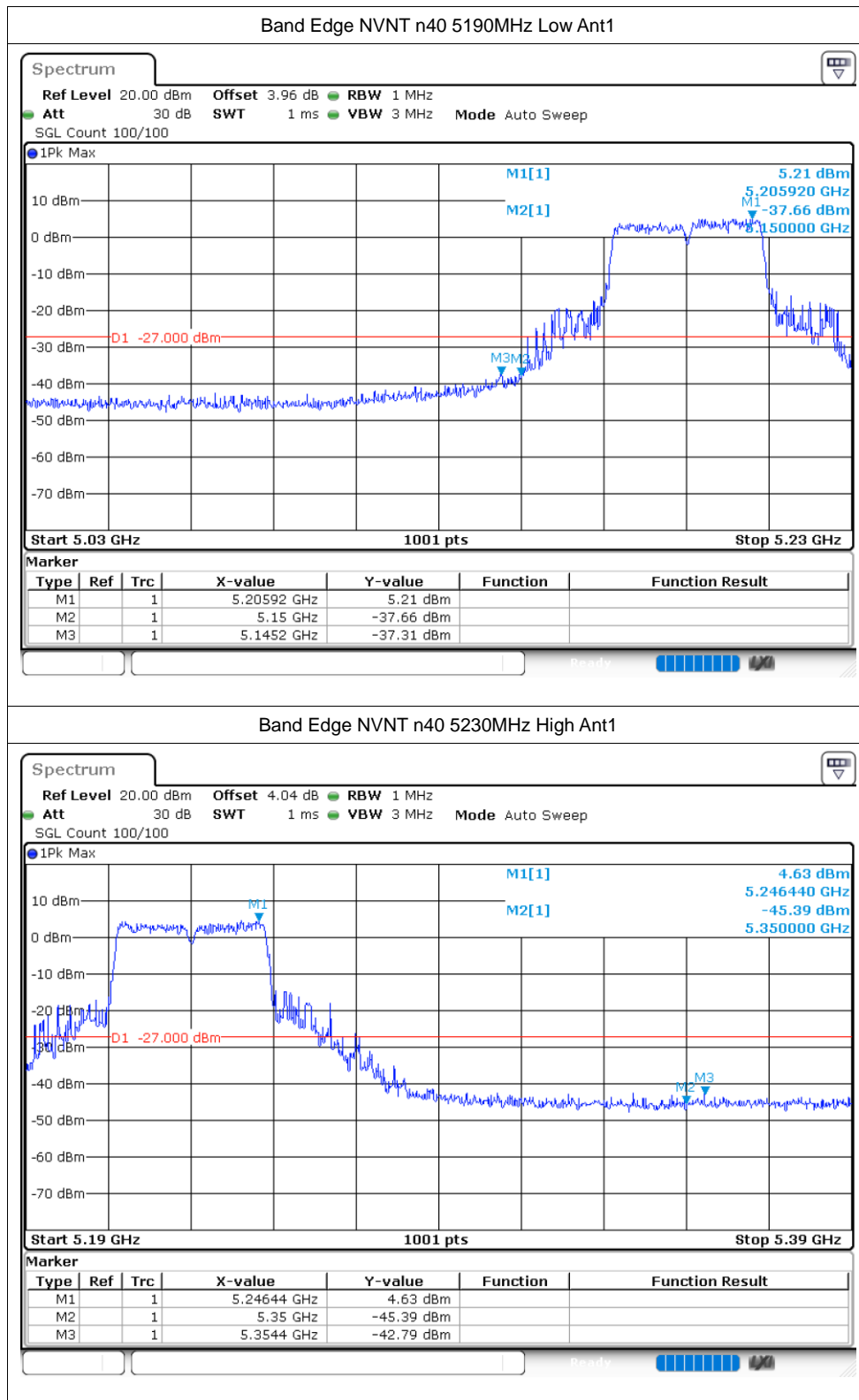


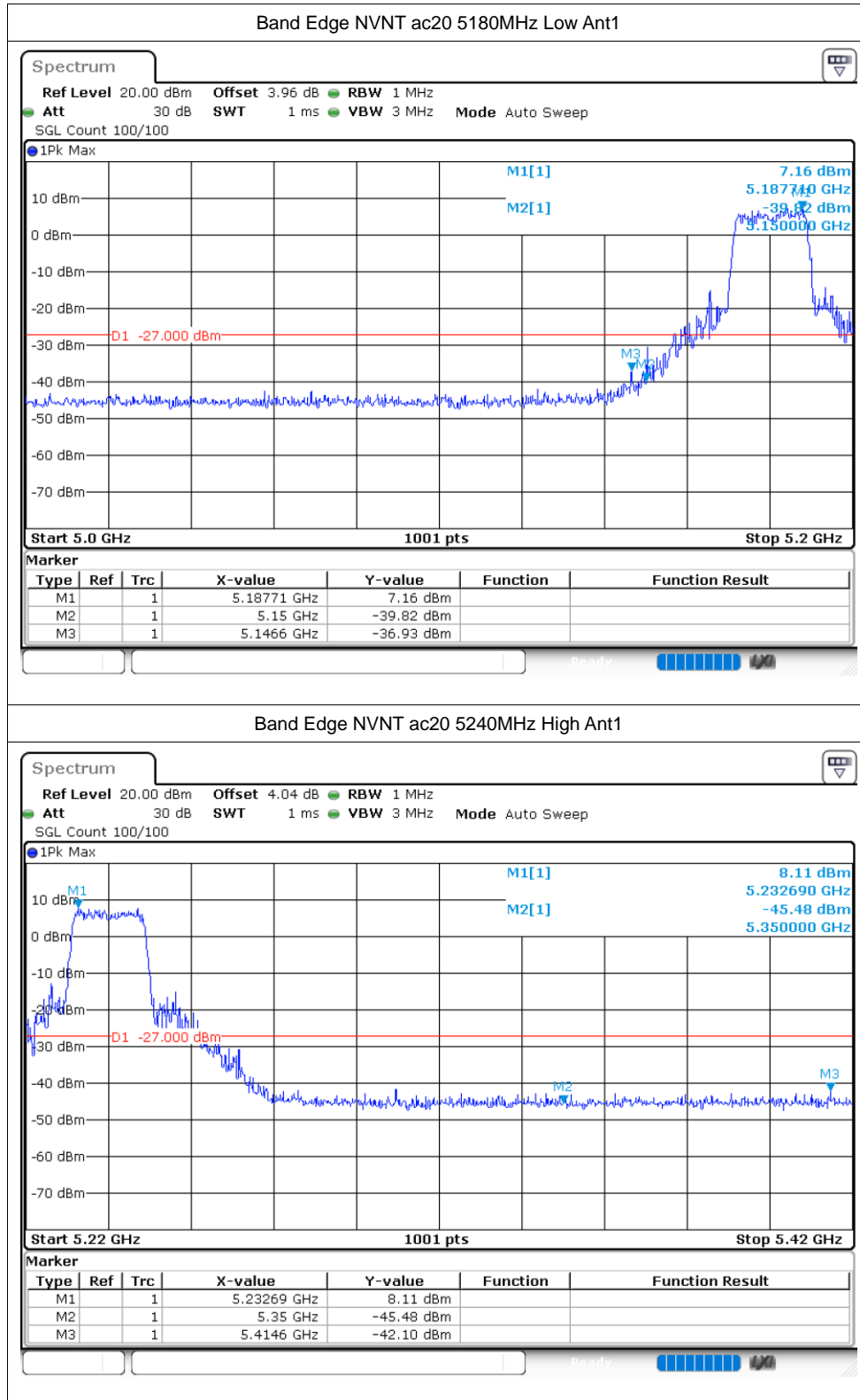
#### Band Edge NVNT a 5240MHz High Ant1

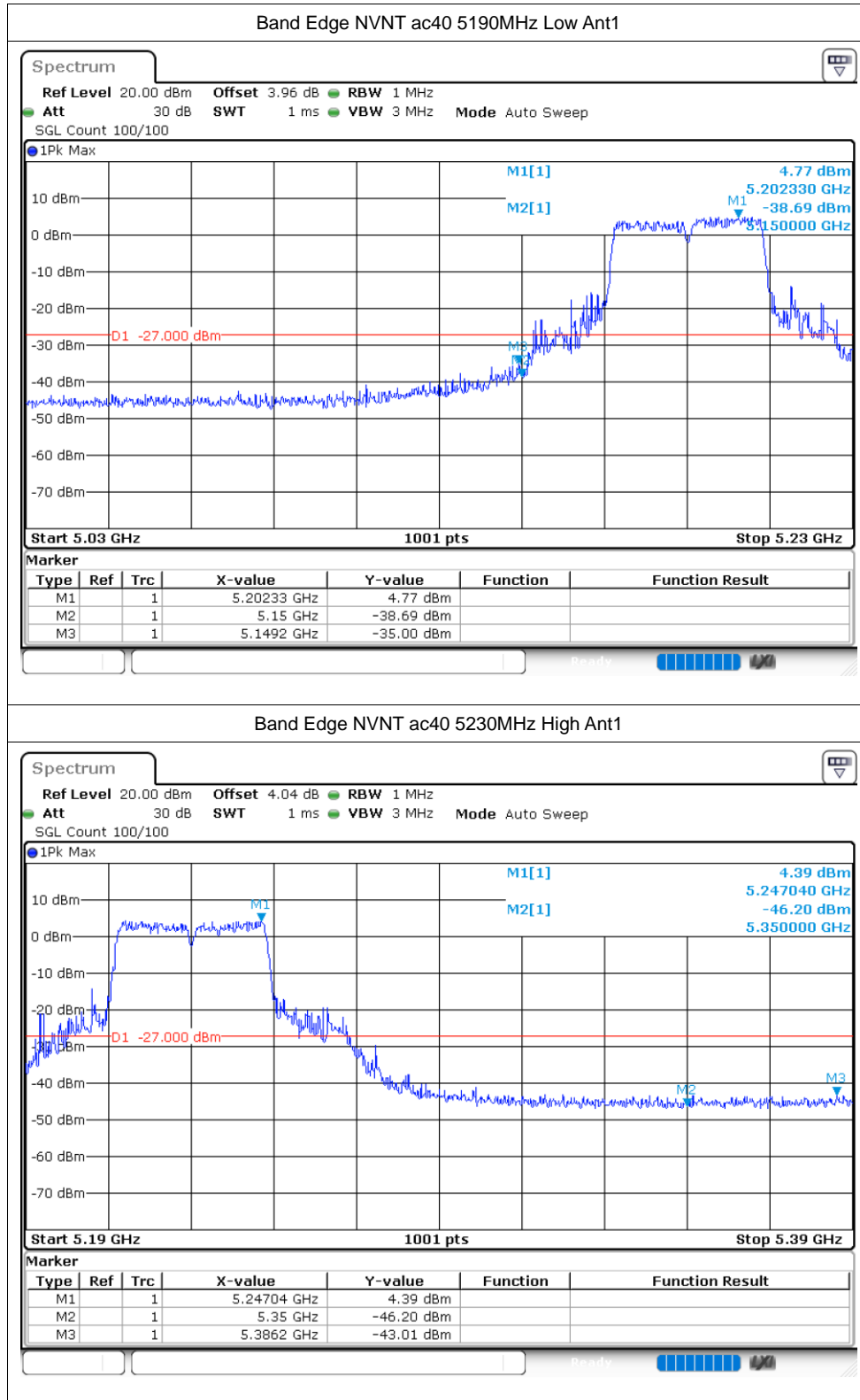


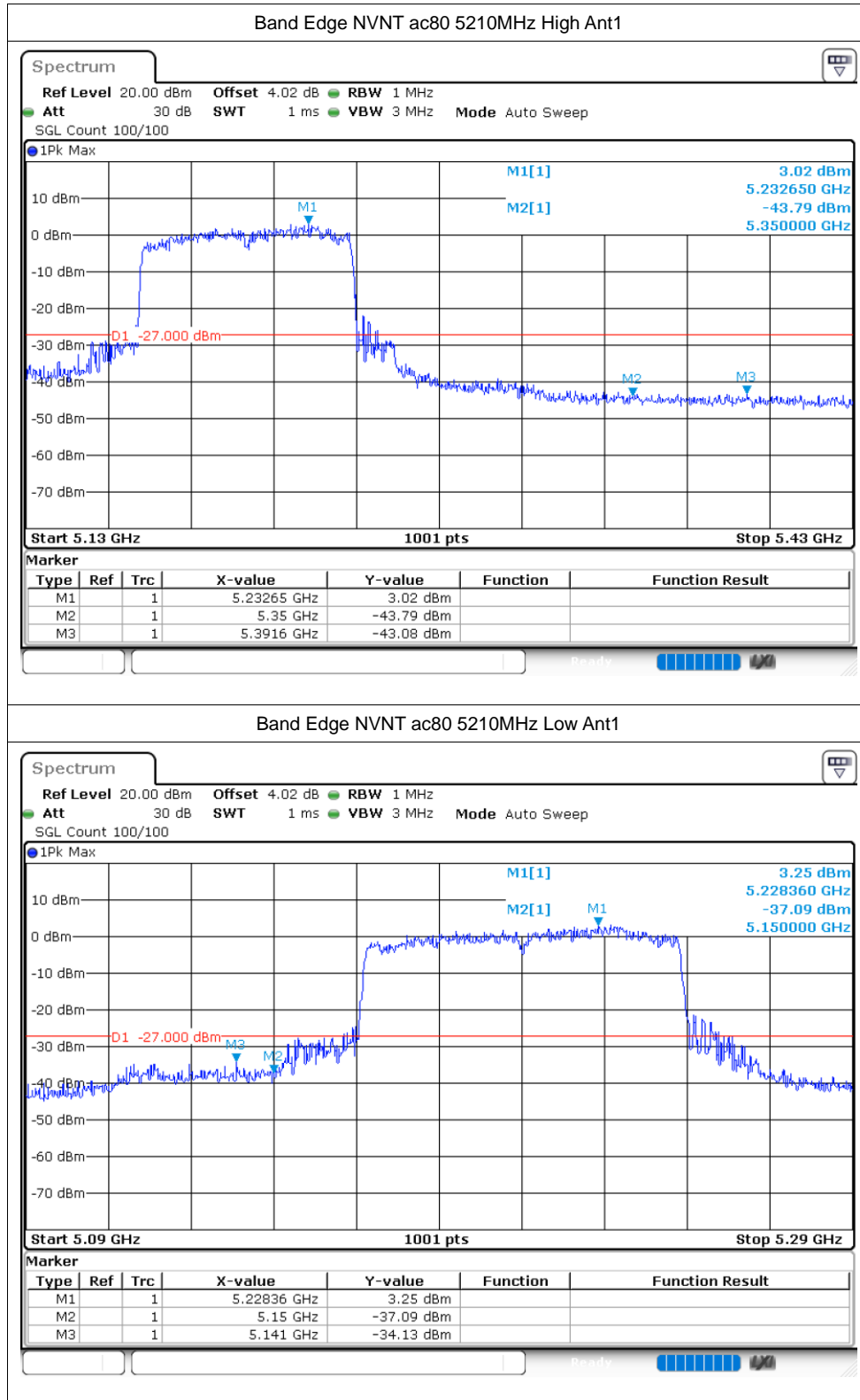










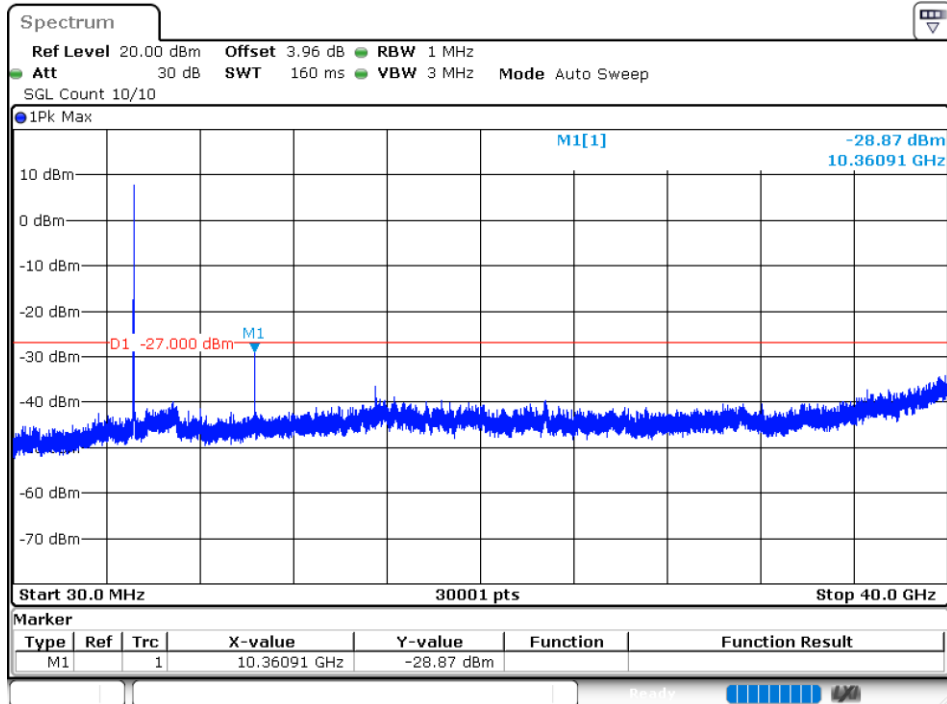


## Conducted RF Spurious Emission

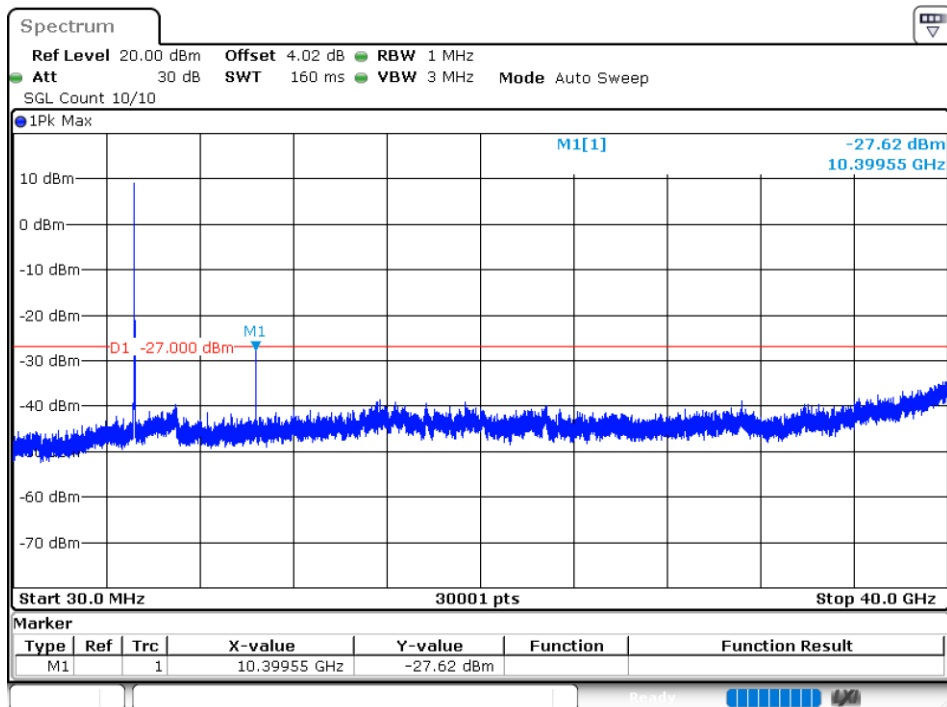
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-28.87	-27	Pass
NVNT	a	5200	Ant1	-27.61	-27	Pass
NVNT	a	5240	Ant1	-28.58	-27	Pass
NVNT	n20	5180	Ant1	-30.02	-27	Pass
NVNT	n20	5200	Ant1	-28.45	-27	Pass
NVNT	n20	5240	Ant1	-29.98	-27	Pass
NVNT	n40	5190	Ant1	-32.35	-27	Pass
NVNT	n40	5230	Ant1	-32.01	-27	Pass
NVNT	ac20	5180	Ant1	-30.12	-27	Pass
NVNT	ac20	5200	Ant1	-29.95	-27	Pass
NVNT	ac20	5240	Ant1	-29.5	-27	Pass
NVNT	ac40	5190	Ant1	-31.62	-27	Pass
NVNT	ac40	5230	Ant1	-32.64	-27	Pass
NVNT	ac80	5210	Ant1	-33.28	-27	Pass

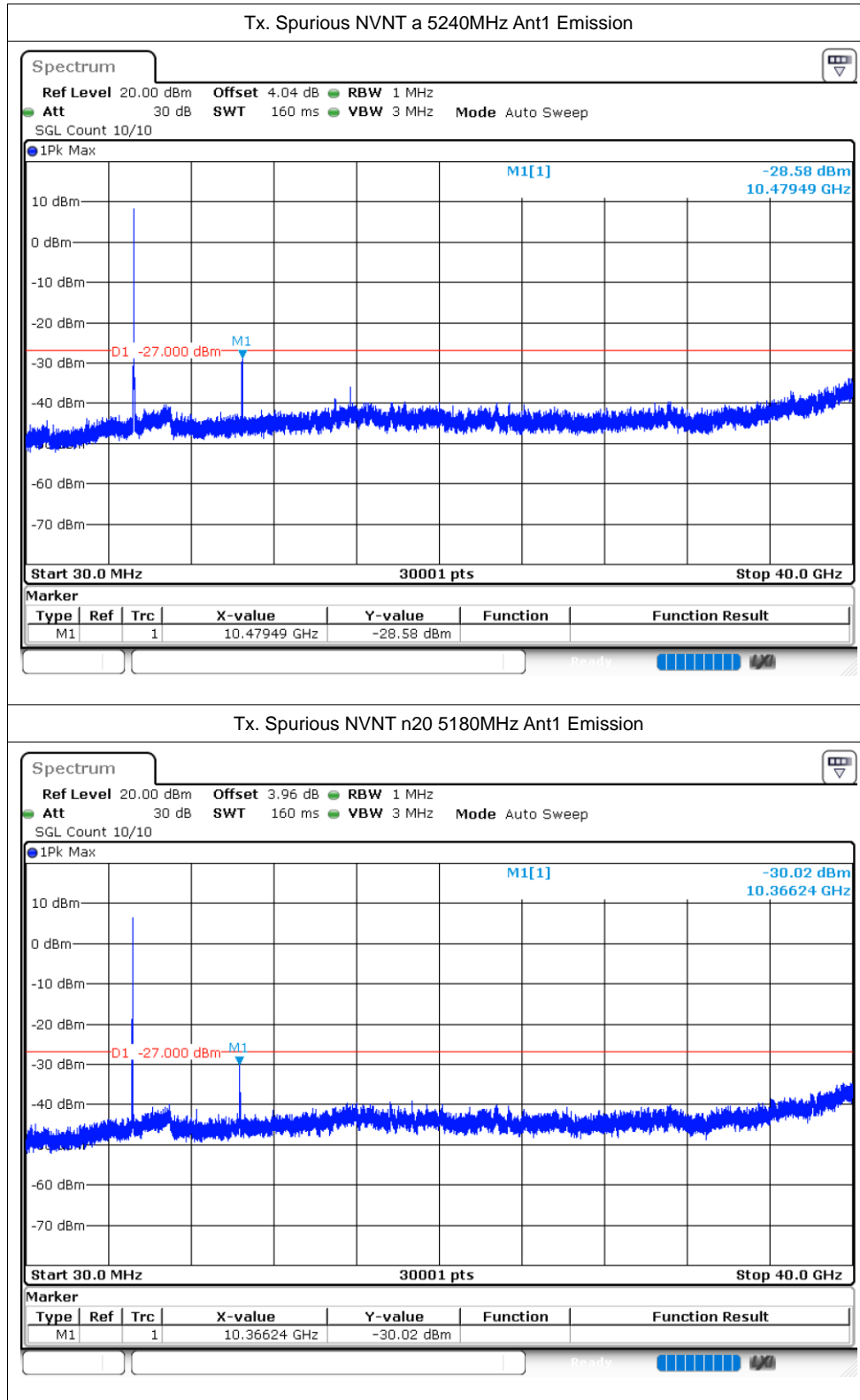
# Test Graphs

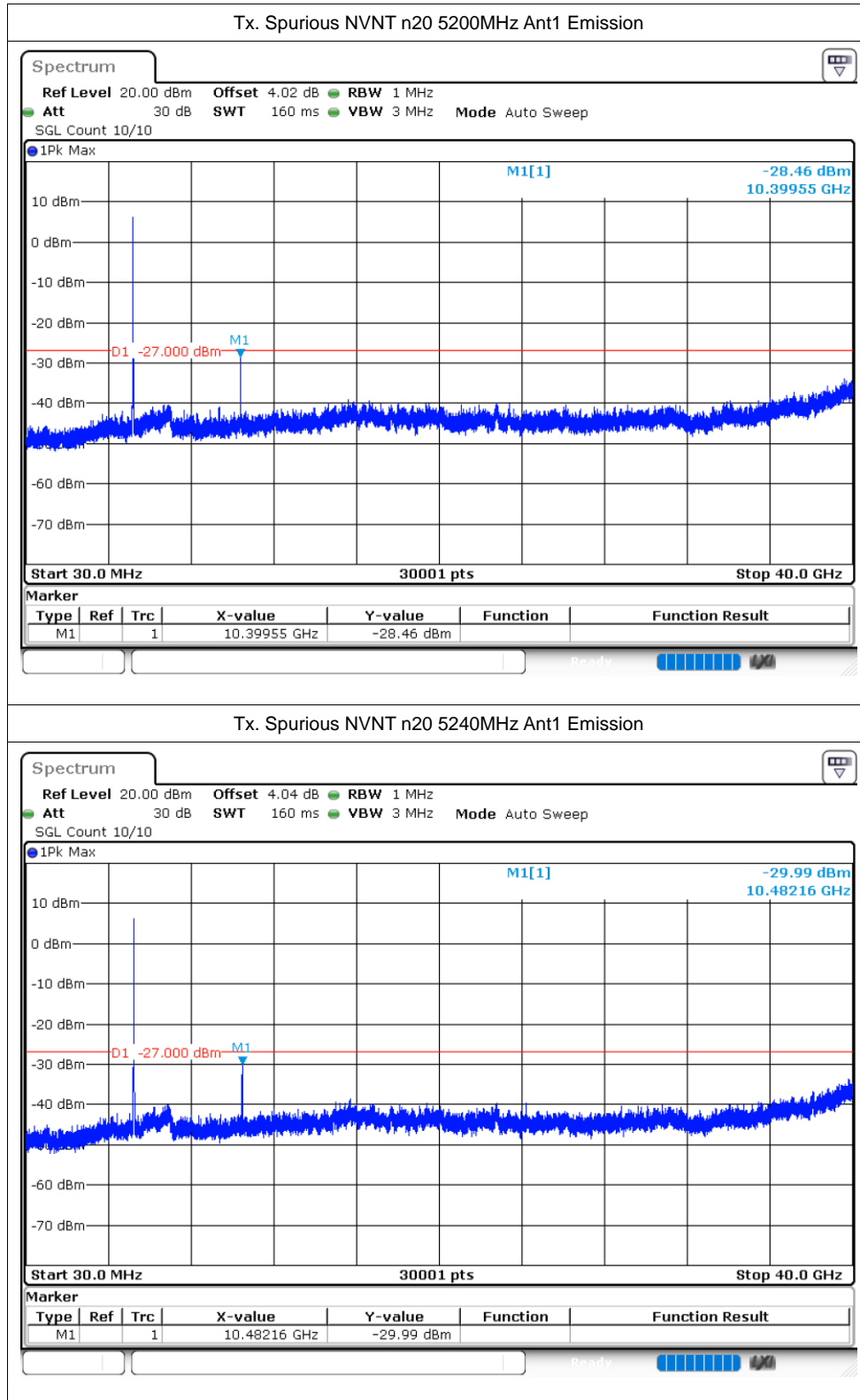
## Tx. Spurious NVNT a 5180MHz Ant1 Emission



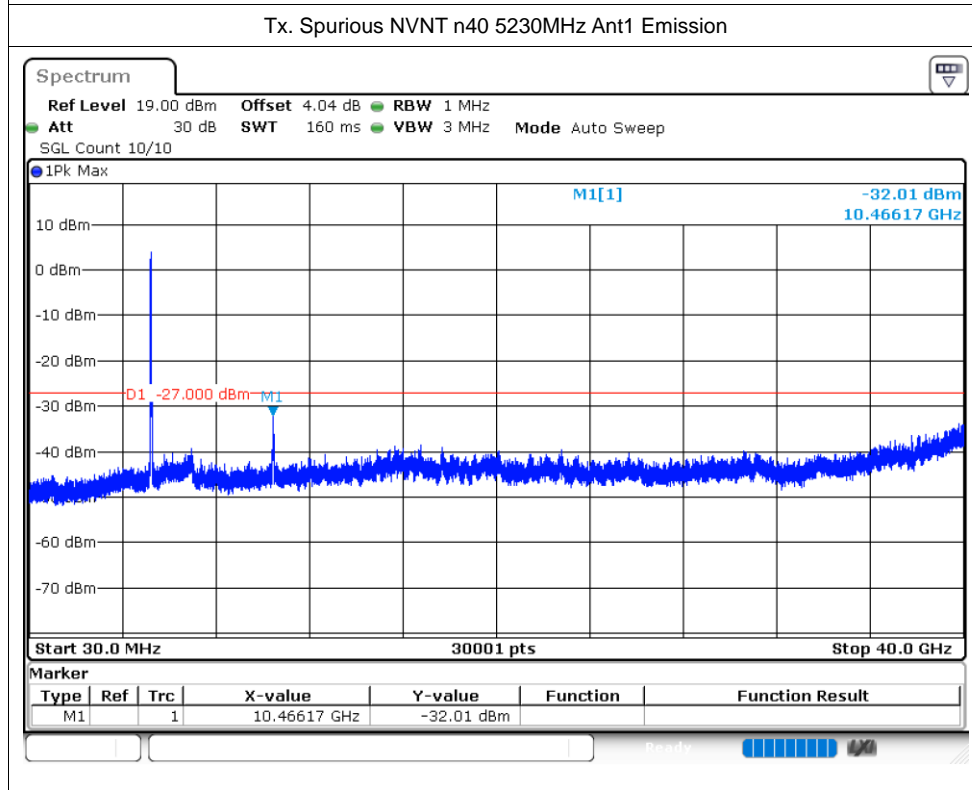
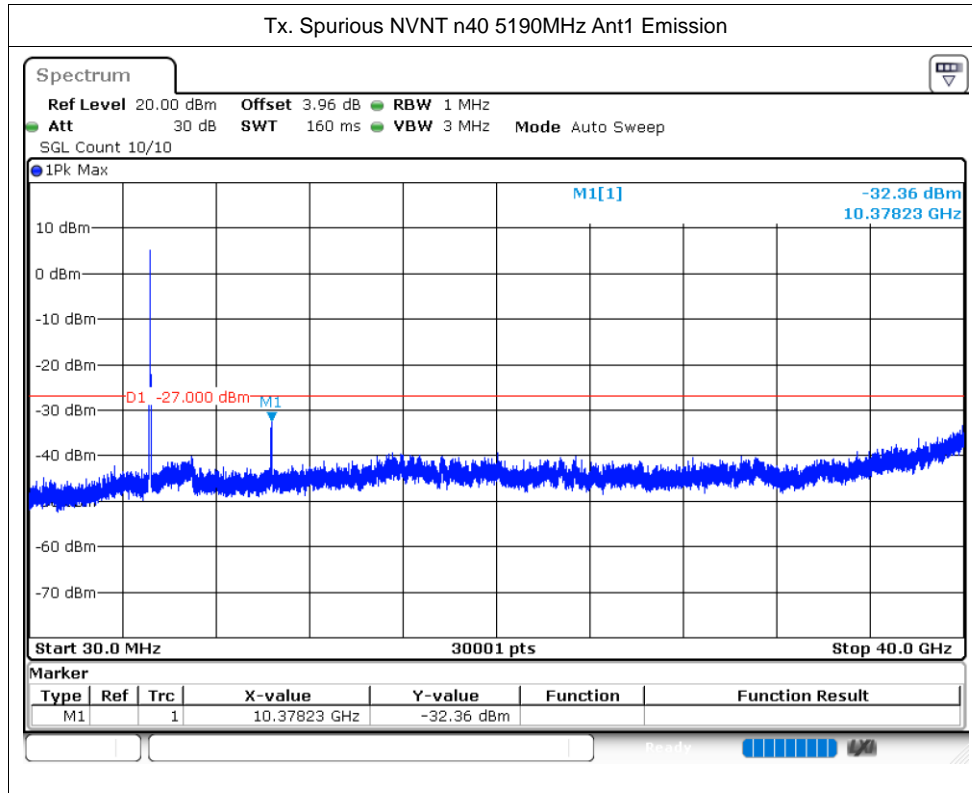
## Tx. Spurious NVNT a 5200MHz Ant1 Emission

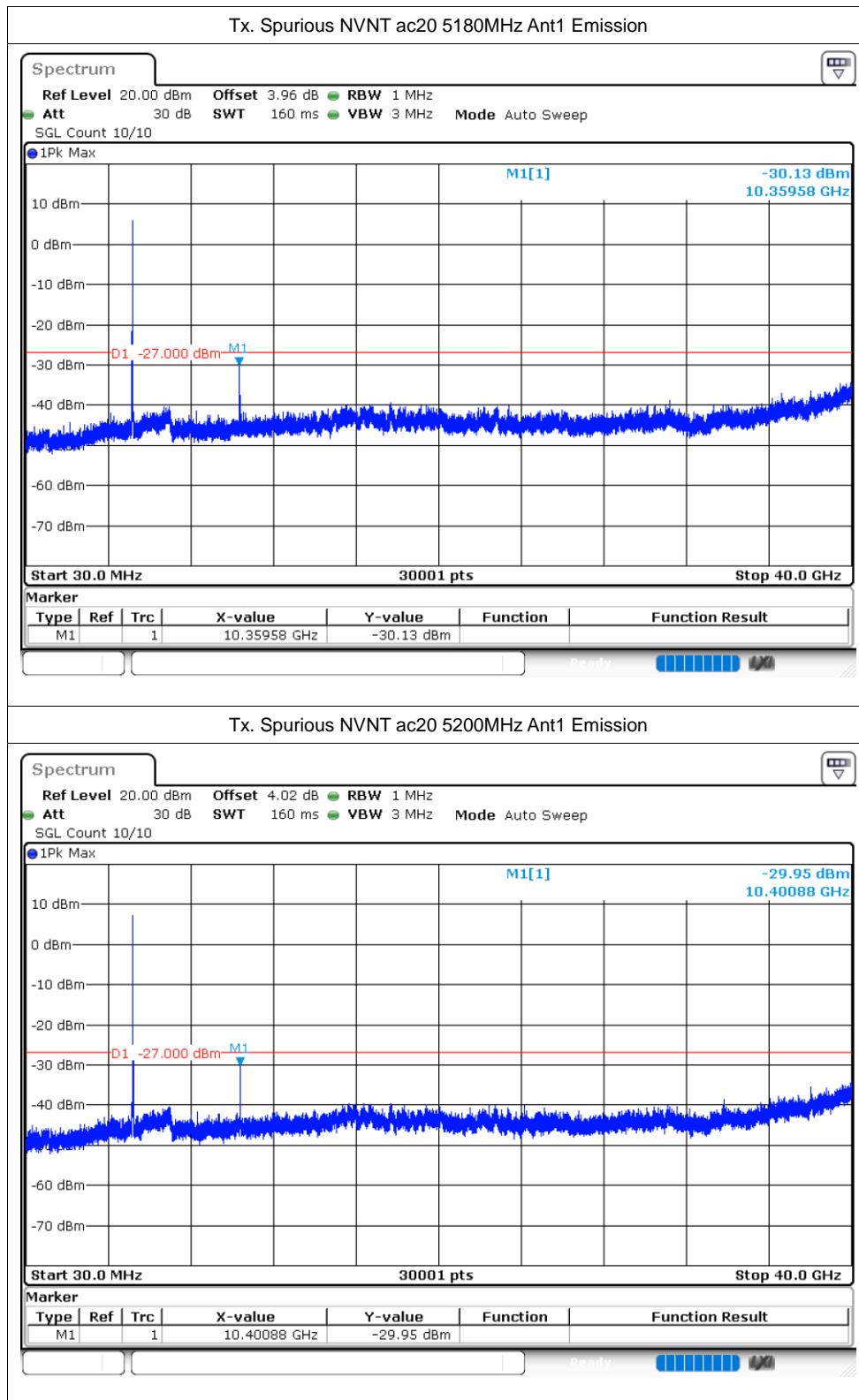


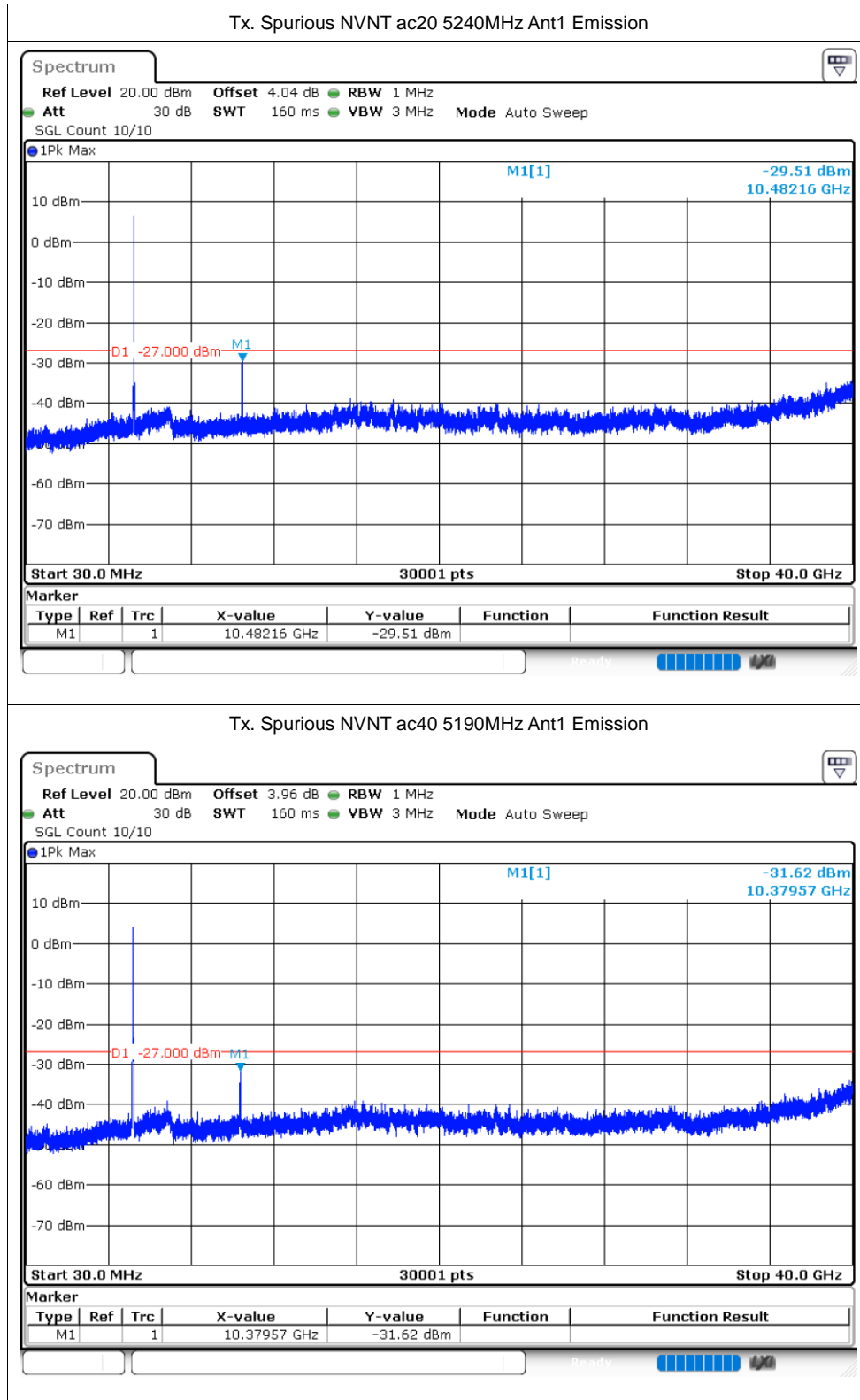


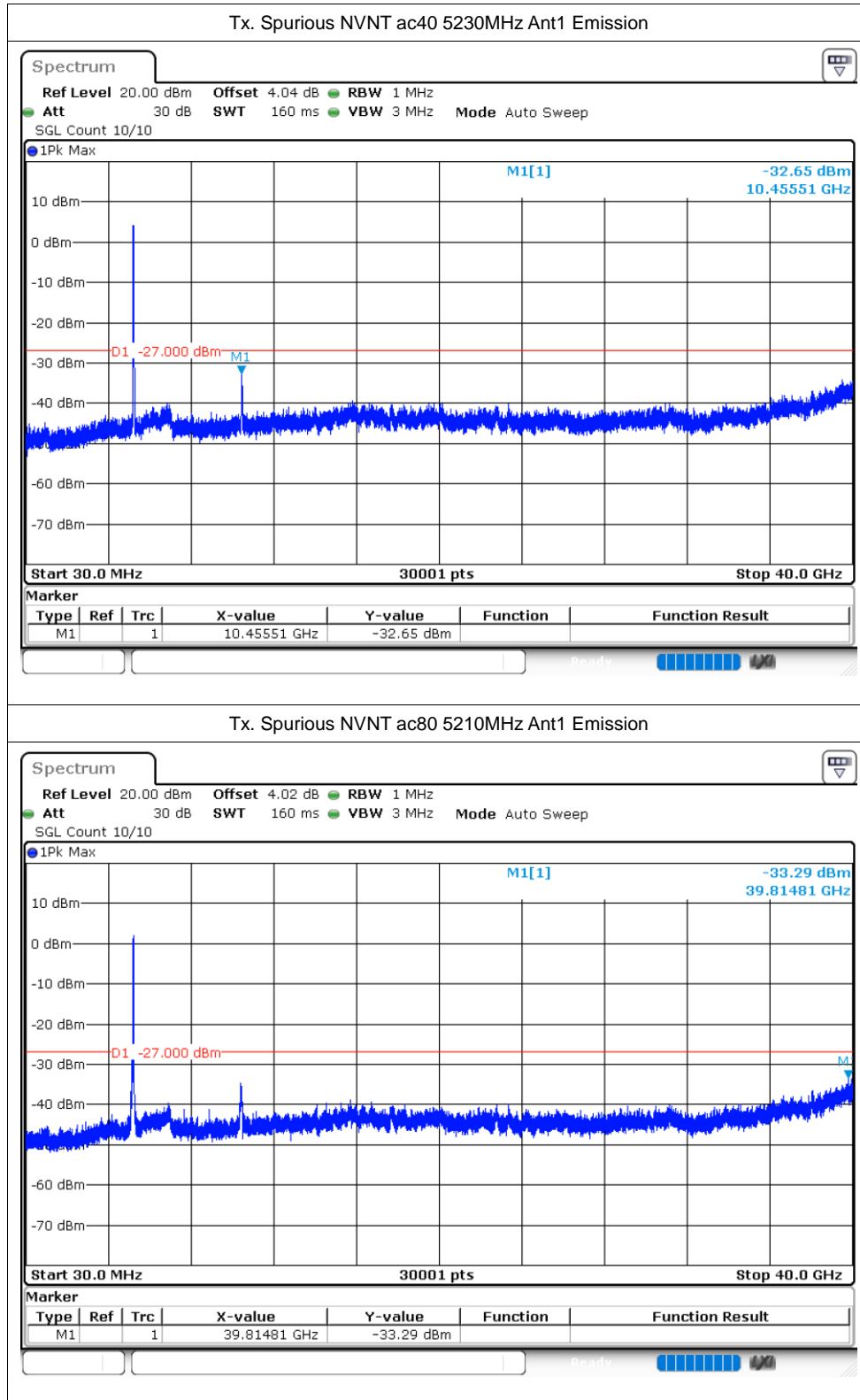












# WIFI 5.8G

## Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	88.66	0.52	0.72
NVNT	a	5785	Ant1	88.79	0.52	0.72
NVNT	a	5825	Ant1	96.71	0.15	∞
NVNT	n20	5745	Ant1	87.16	0.6	0.85
NVNT	n20	5785	Ant1	86.77	0.62	0.85
NVNT	n20	5825	Ant1	96.18	0.17	∞
NVNT	n40	5755	Ant1	90.49	0.43	33.33
NVNT	n40	5795	Ant1	92.75	0.33	25
NVNT	ac20	5745	Ant1	87.22	0.59	0.84
NVNT	ac20	5785	Ant1	87.36	0.59	0.85
NVNT	ac20	5825	Ant1	87.28	0.59	0.85
NVNT	ac40	5755	Ant1	76.69	1.15	1.69
NVNT	ac40	5795	Ant1	76.76	1.15	1.69
NVNT	ac80	5775	Ant1	63.76	1.95	3.33

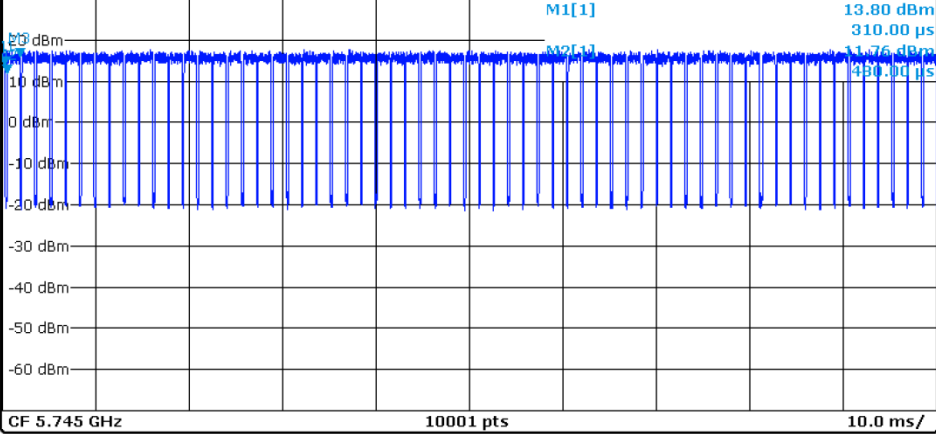
## Test Graphs

### Duty Cycle NVNT a 5745MHz Ant1

#### Spectrum

Ref Level 30.00 dBm Offset 4.25 dB RBW 10 MHz  
 Att 45 dB SWT 100 ms VBW 10 MHz  
 SGL

1Pk Clrw



#### Marker

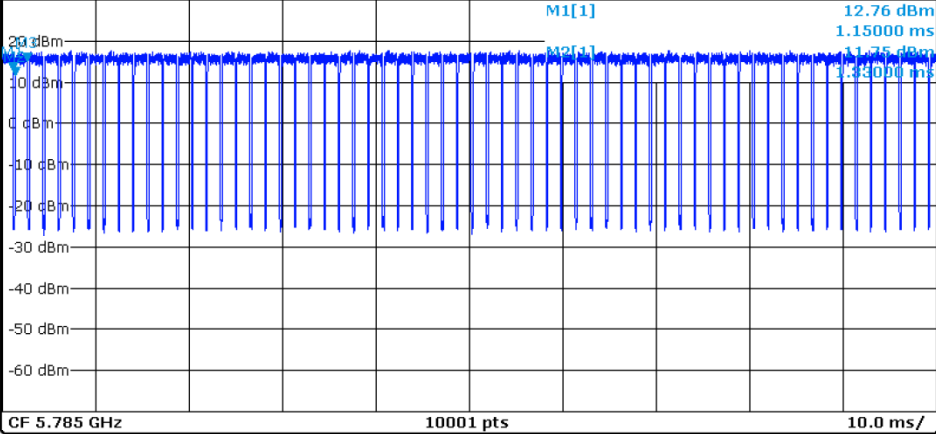
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	310.0 $\mu$ s	13.80 dBm		
M2		1	480.0 $\mu$ s	11.76 dBm		
M3		1	1.87 ms	15.80 dBm		

### Duty Cycle NVNT a 5785MHz Ant1

#### Spectrum

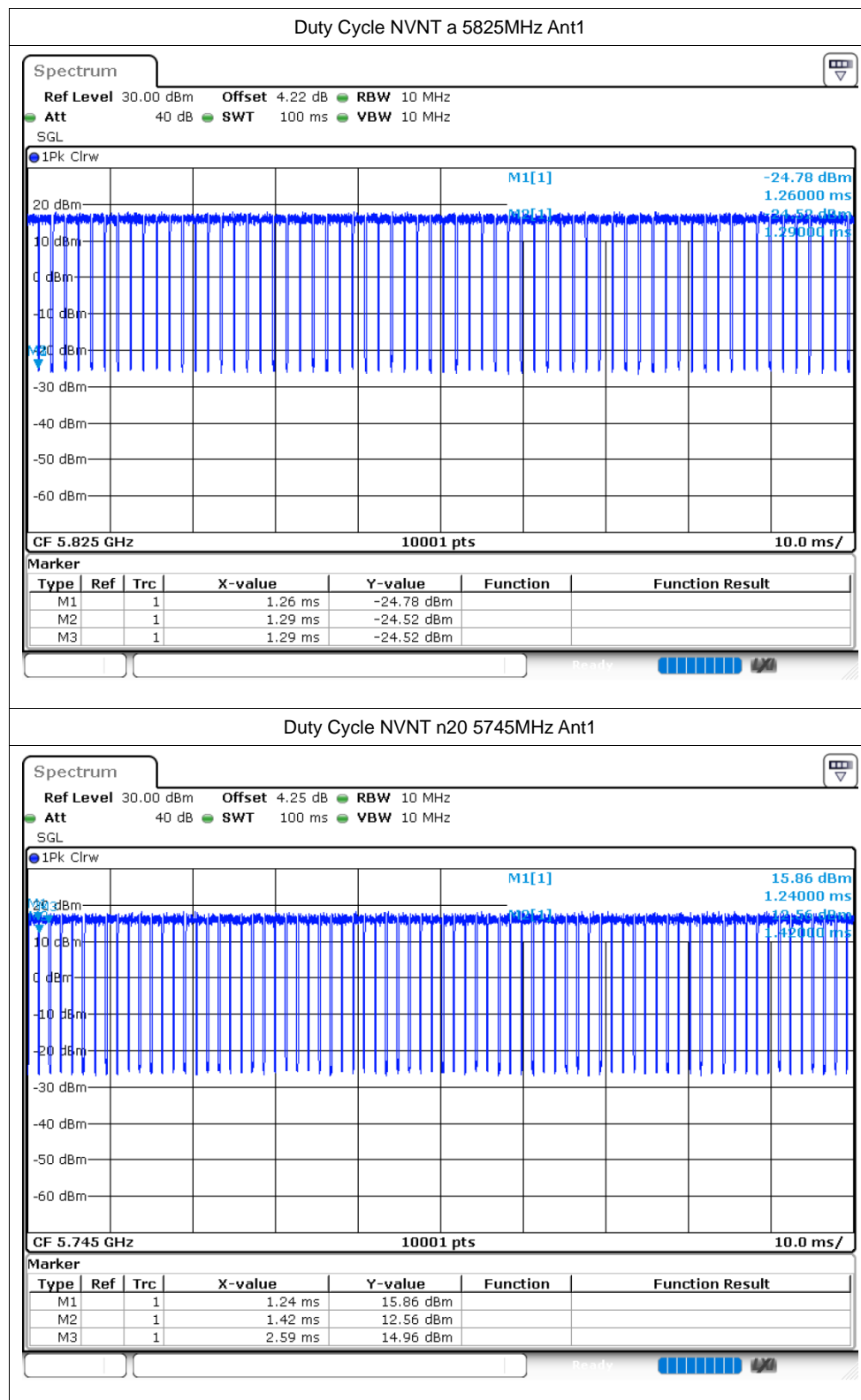
Ref Level 30.00 dBm Offset 4.24 dB RBW 10 MHz  
 Att 40 dB SWT 100 ms VBW 10 MHz  
 SGL

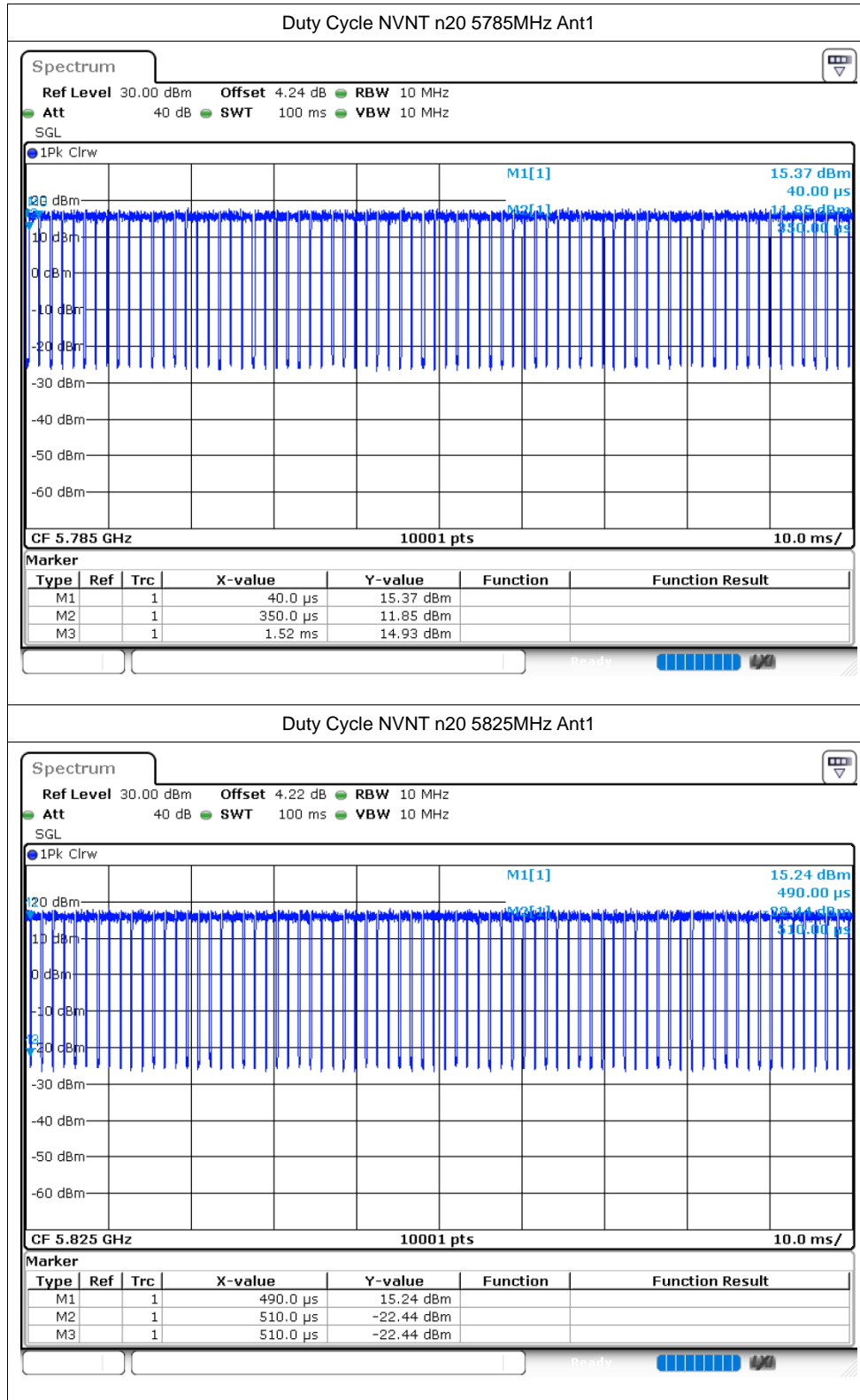
1Pk Clrw



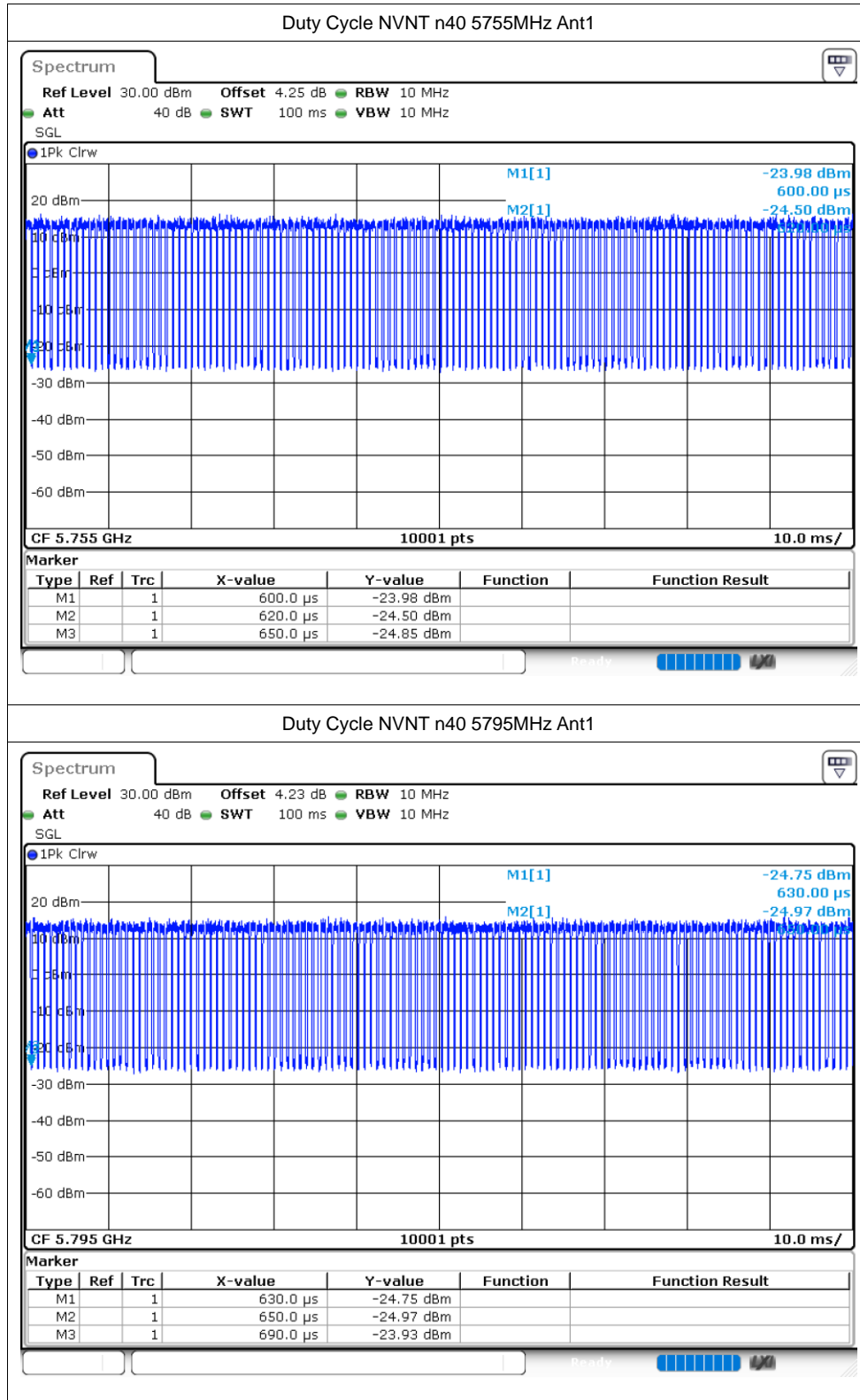
#### Marker

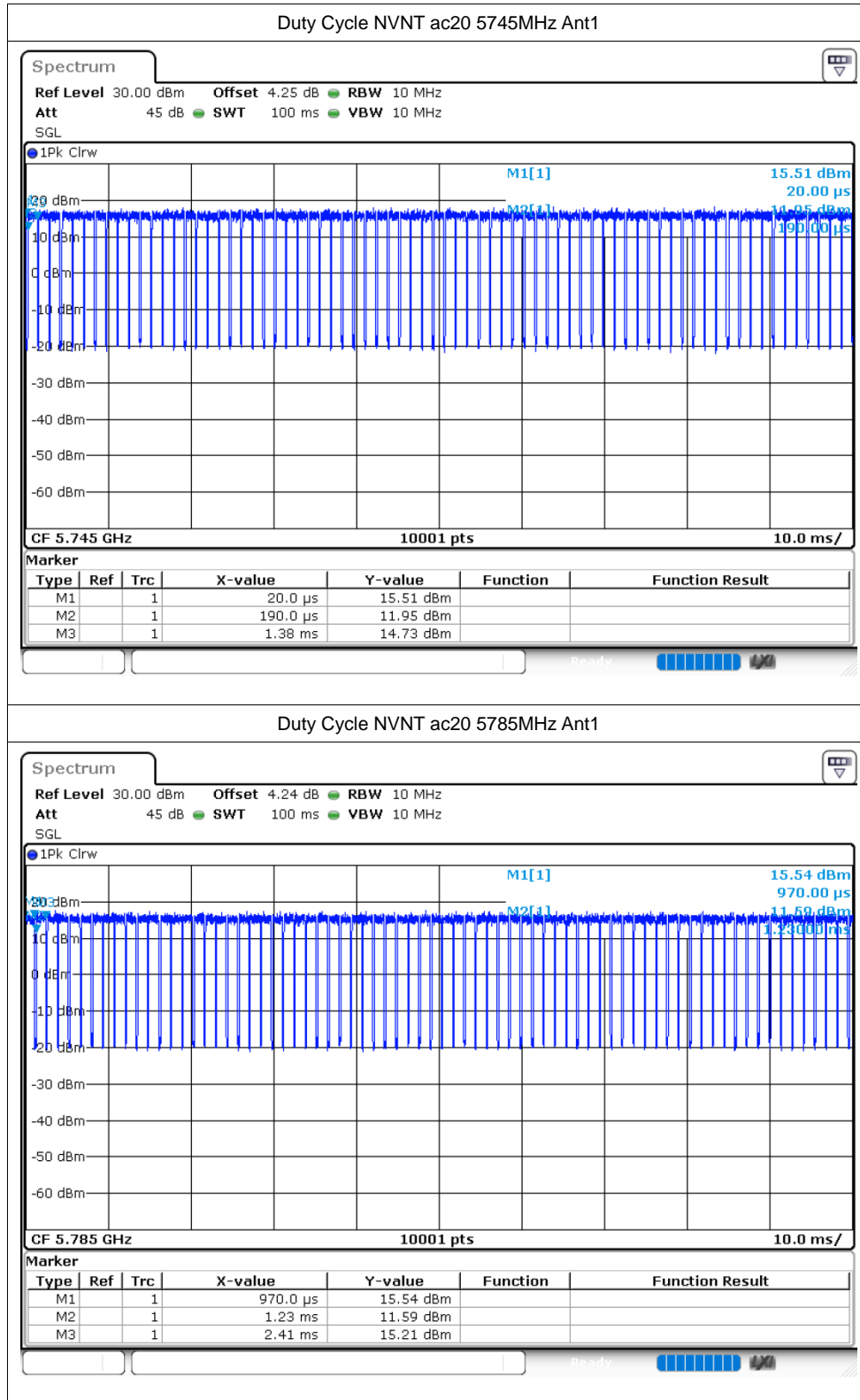
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.15 ms	12.76 dBm		
M2		1	1.33 ms	11.75 dBm		
M3		1	2.72 ms	15.16 dBm		

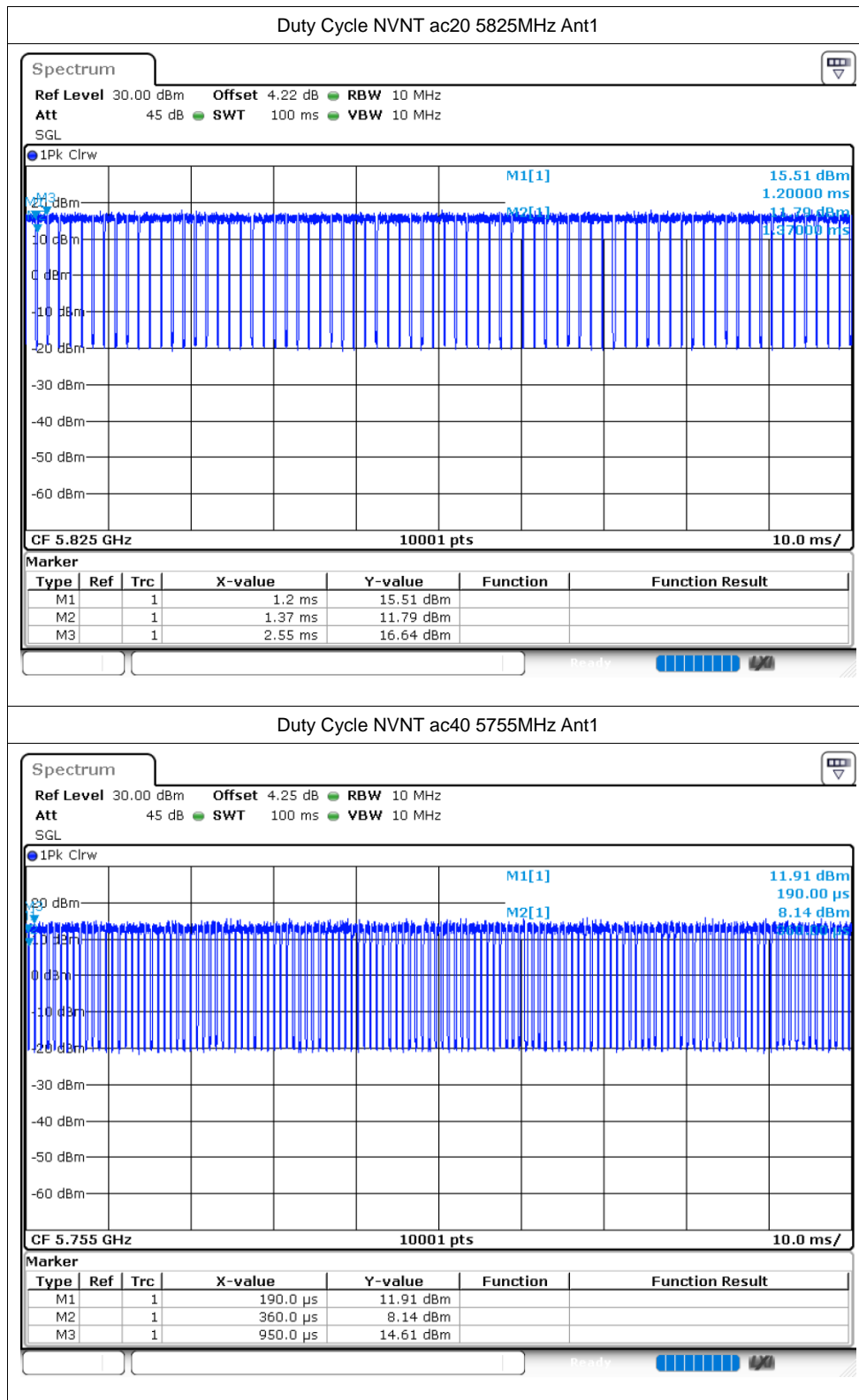


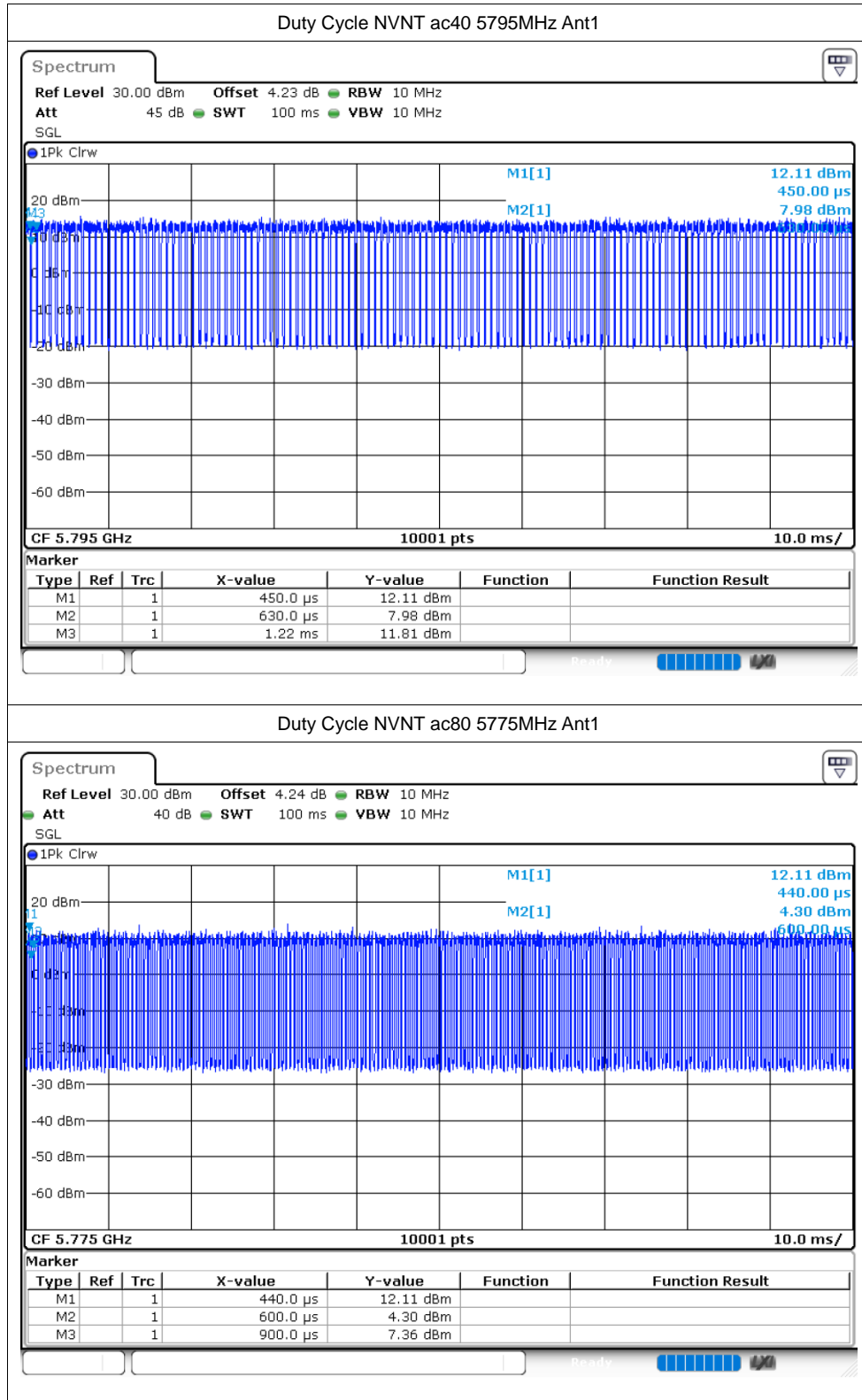












## Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	11.93	30	Pass
NVNT	a	5785	Ant1	12.23	30	Pass
NVNT	a	5825	Ant1	12.22	30	Pass
NVNT	n20	5745	Ant1	11.89	30	Pass
NVNT	n20	5785	Ant1	12.41	30	Pass
NVNT	n20	5825	Ant1	12.32	30	Pass
NVNT	n40	5755	Ant1	12.24	30	Pass
NVNT	n40	5795	Ant1	12.69	30	Pass
NVNT	ac20	5745	Ant1	11.99	30	Pass
NVNT	ac20	5785	Ant1	12.23	30	Pass
NVNT	ac20	5825	Ant1	12.25	30	Pass
NVNT	ac40	5755	Ant1	12.51	30	Pass
NVNT	ac40	5795	Ant1	12.82	30	Pass
NVNT	ac80	5775	Ant1	12.09	30	Pass

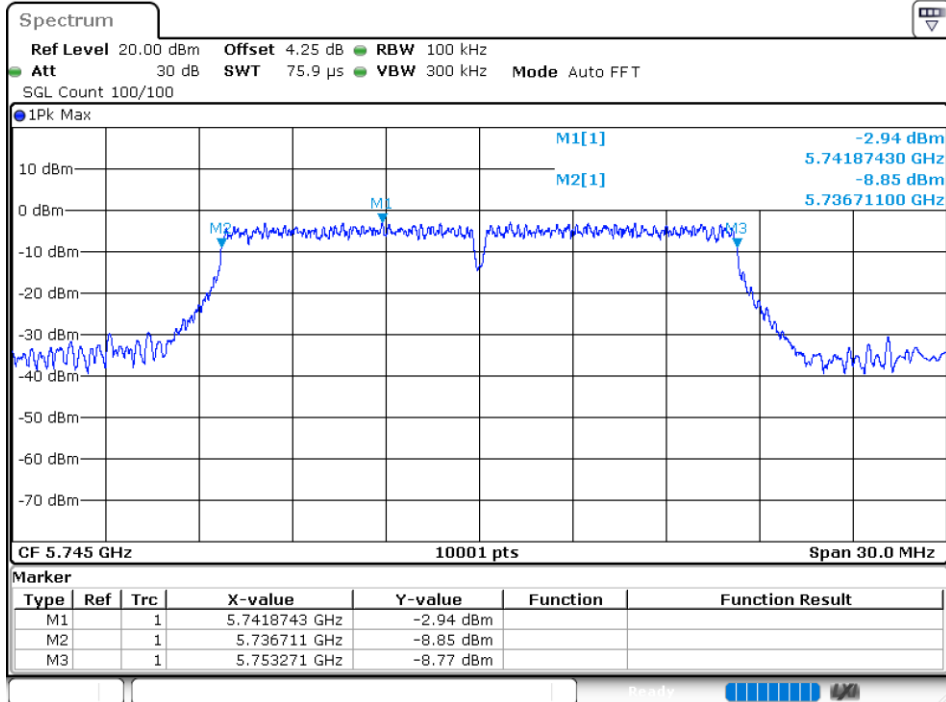
Note: The average power value already includes the duty cycle factor

## -6dB Bandwidth

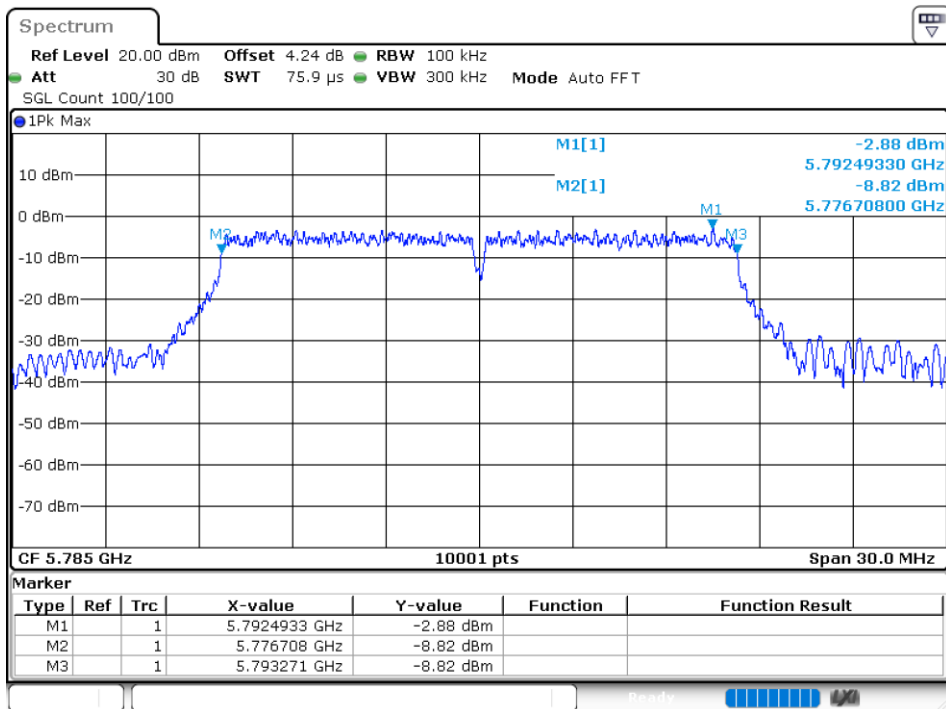
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.56	0.5	Pass
NVNT	a	5785	Ant1	16.563	0.5	Pass
NVNT	a	5825	Ant1	16.446	0.5	Pass
NVNT	n20	5745	Ant1	17.601	0.5	Pass
NVNT	n20	5785	Ant1	17.412	0.5	Pass
NVNT	n20	5825	Ant1	17.58	0.5	Pass
NVNT	n40	5755	Ant1	35.85	0.5	Pass
NVNT	n40	5795	Ant1	36.156	0.5	Pass
NVNT	ac20	5745	Ant1	17.523	0.5	Pass
NVNT	ac20	5785	Ant1	17.595	0.5	Pass
NVNT	ac20	5825	Ant1	17.736	0.5	Pass
NVNT	ac40	5755	Ant1	36.15	0.5	Pass
NVNT	ac40	5795	Ant1	35.88	0.5	Pass
NVNT	ac80	5775	Ant1	75.36	0.5	Pass

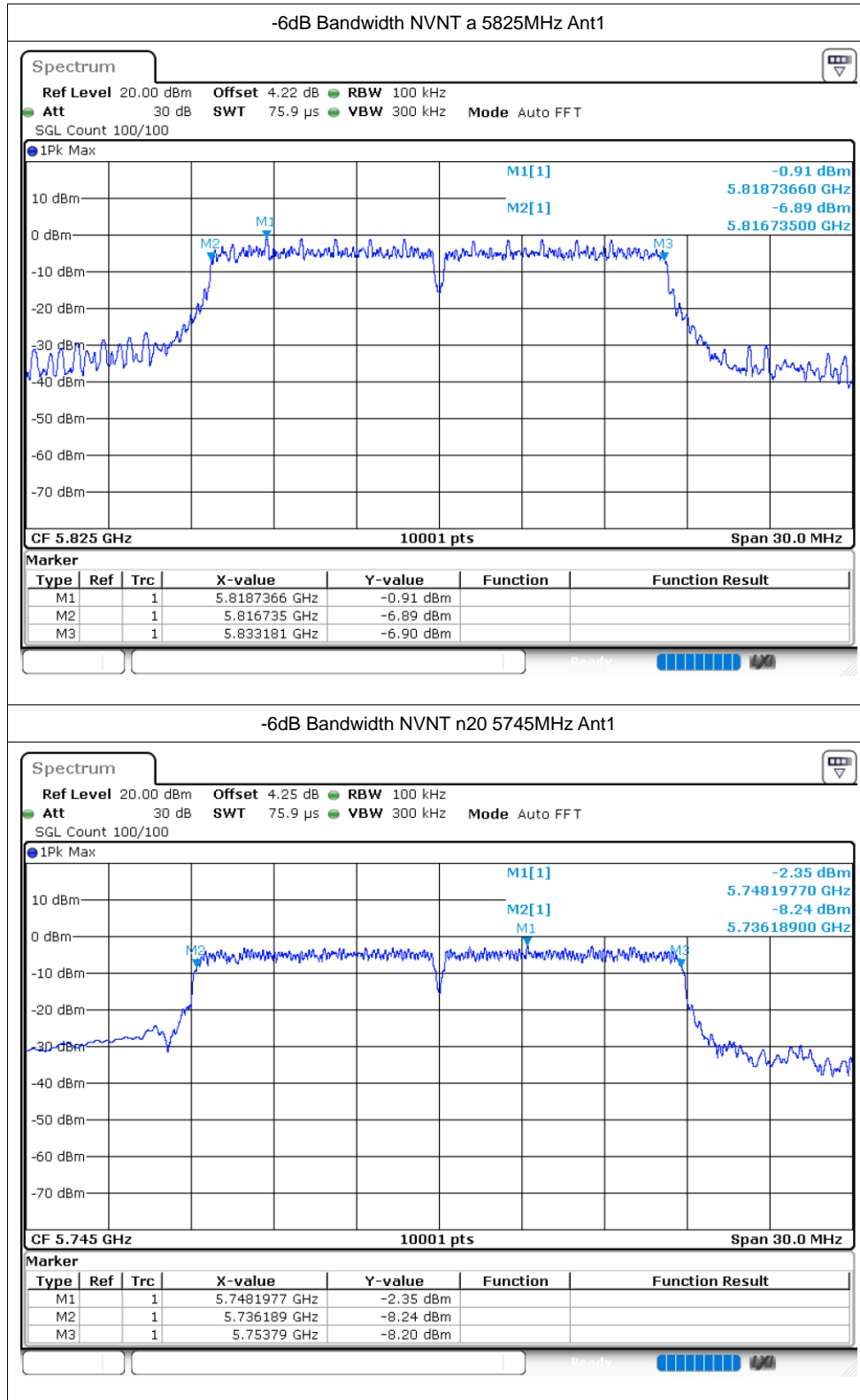
Test Graphs

-6dB Bandwidth NVNT a 5745MHz Ant1

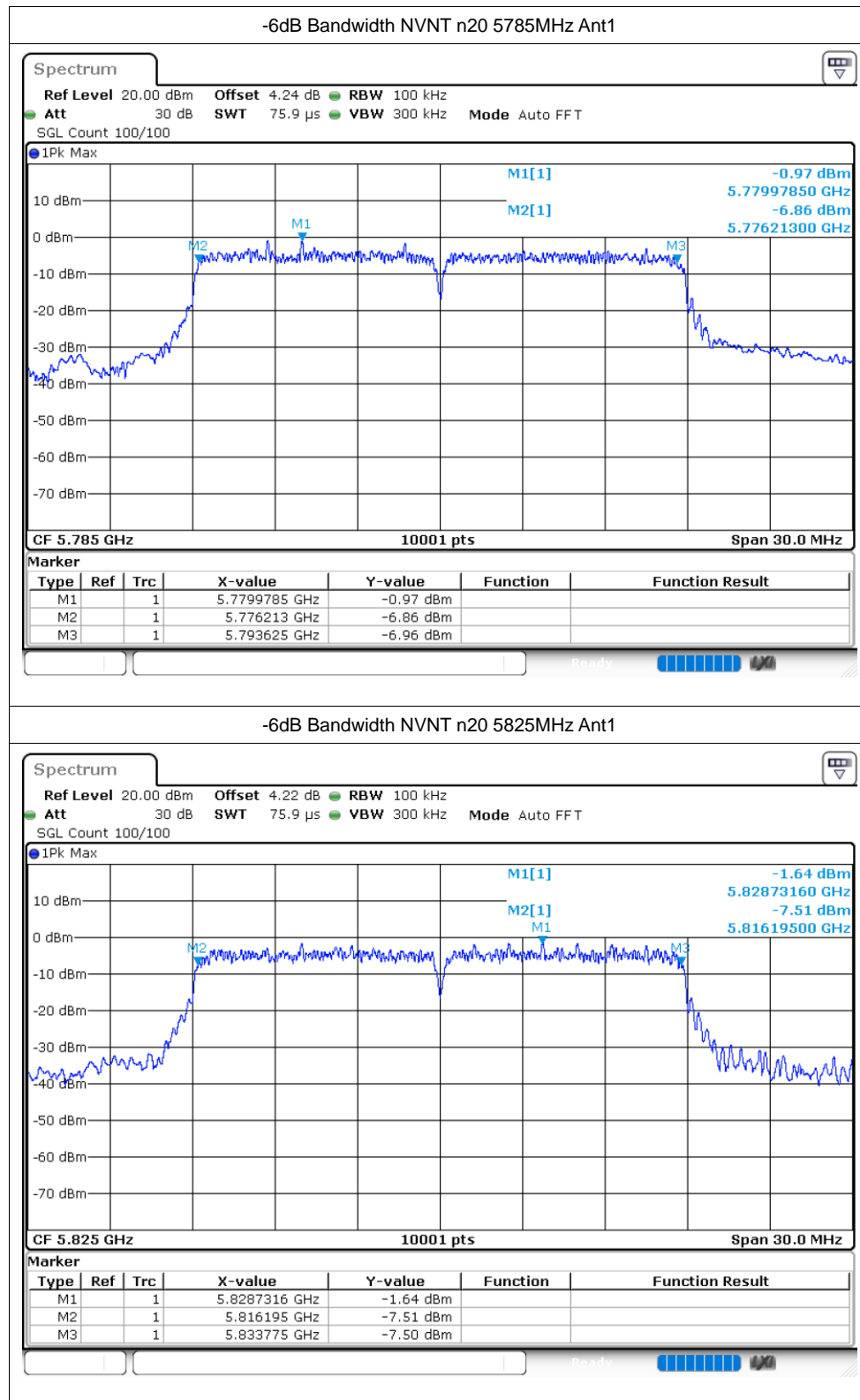


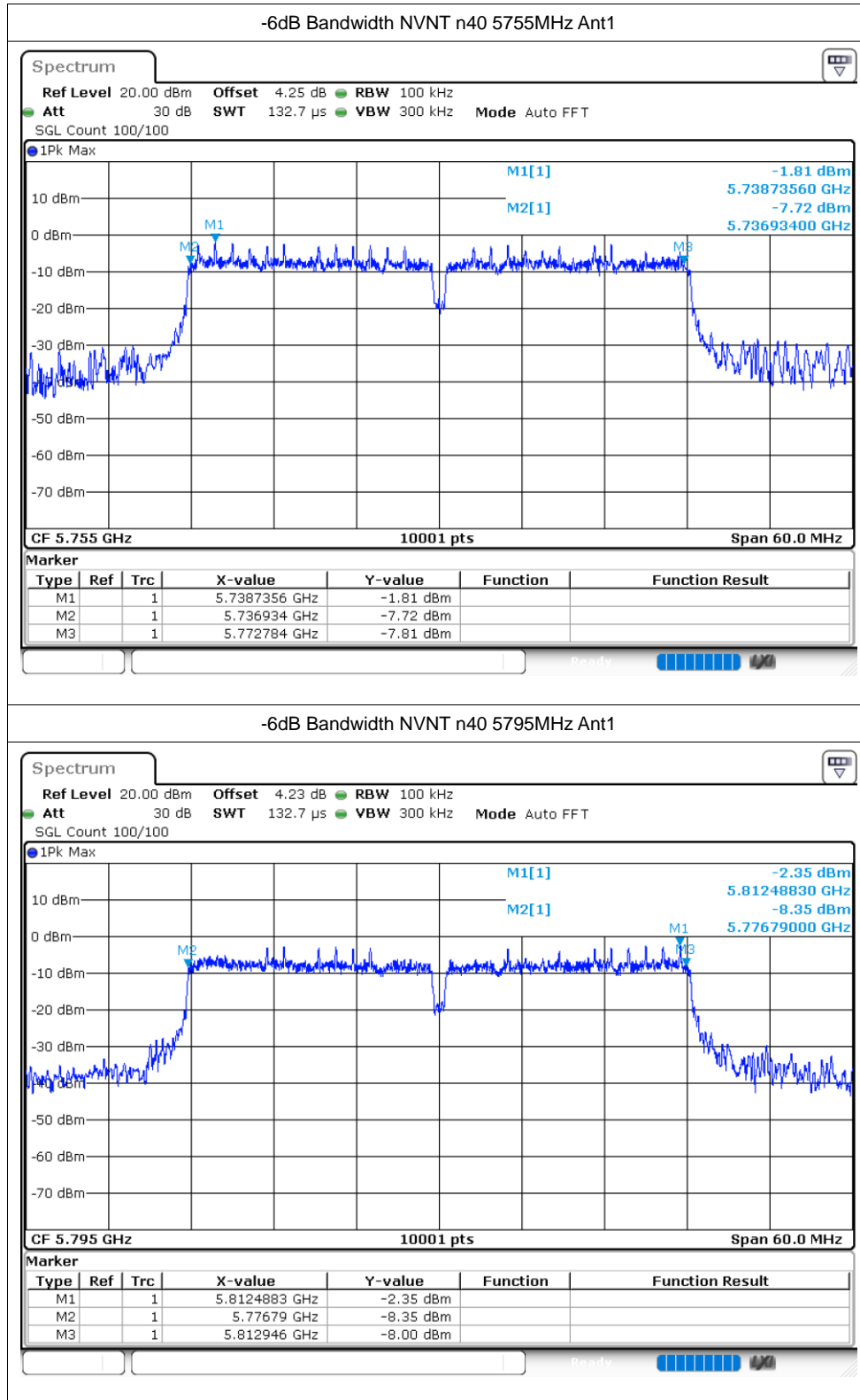
-6dB Bandwidth NVNT a 5785MHz Ant1

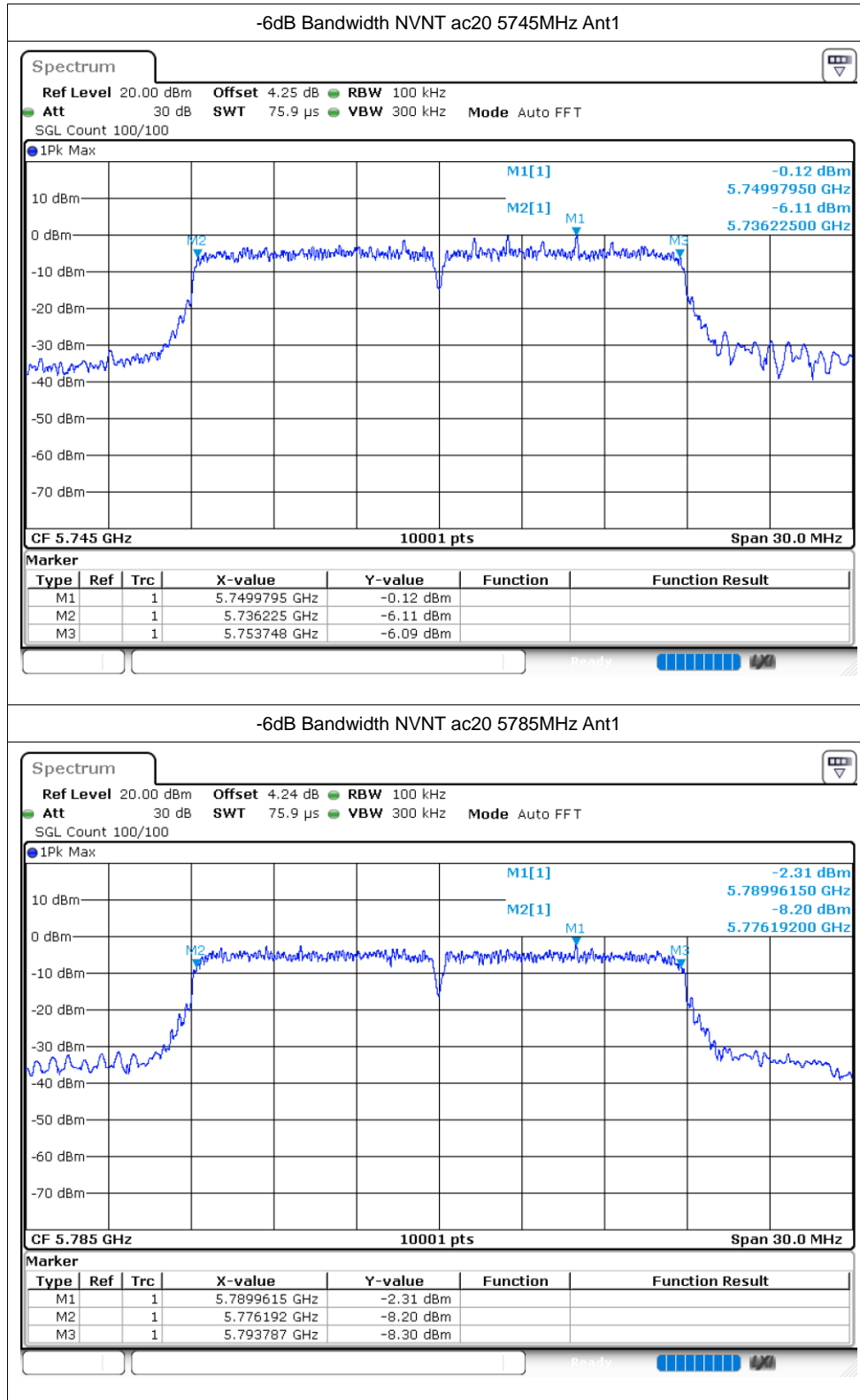


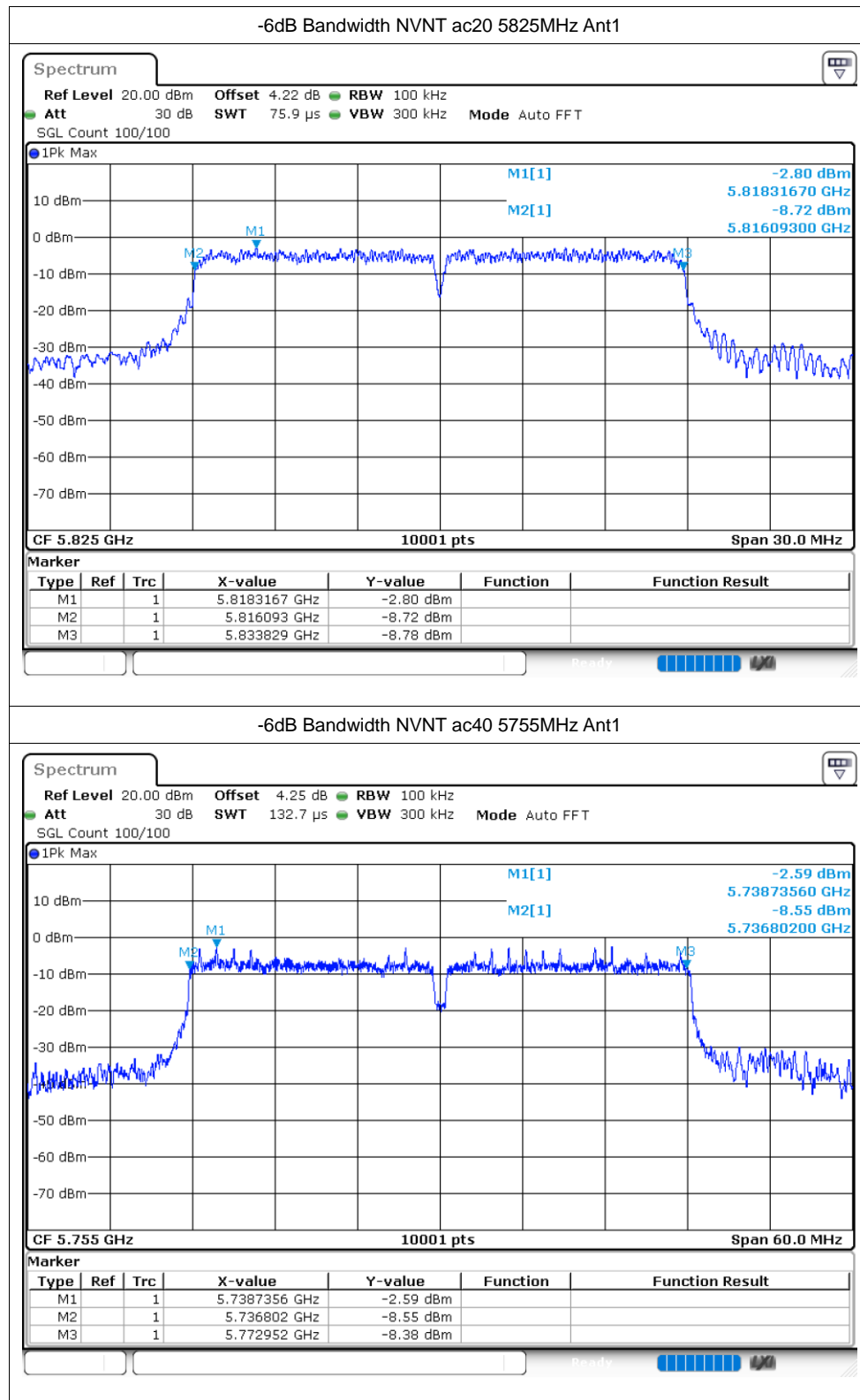


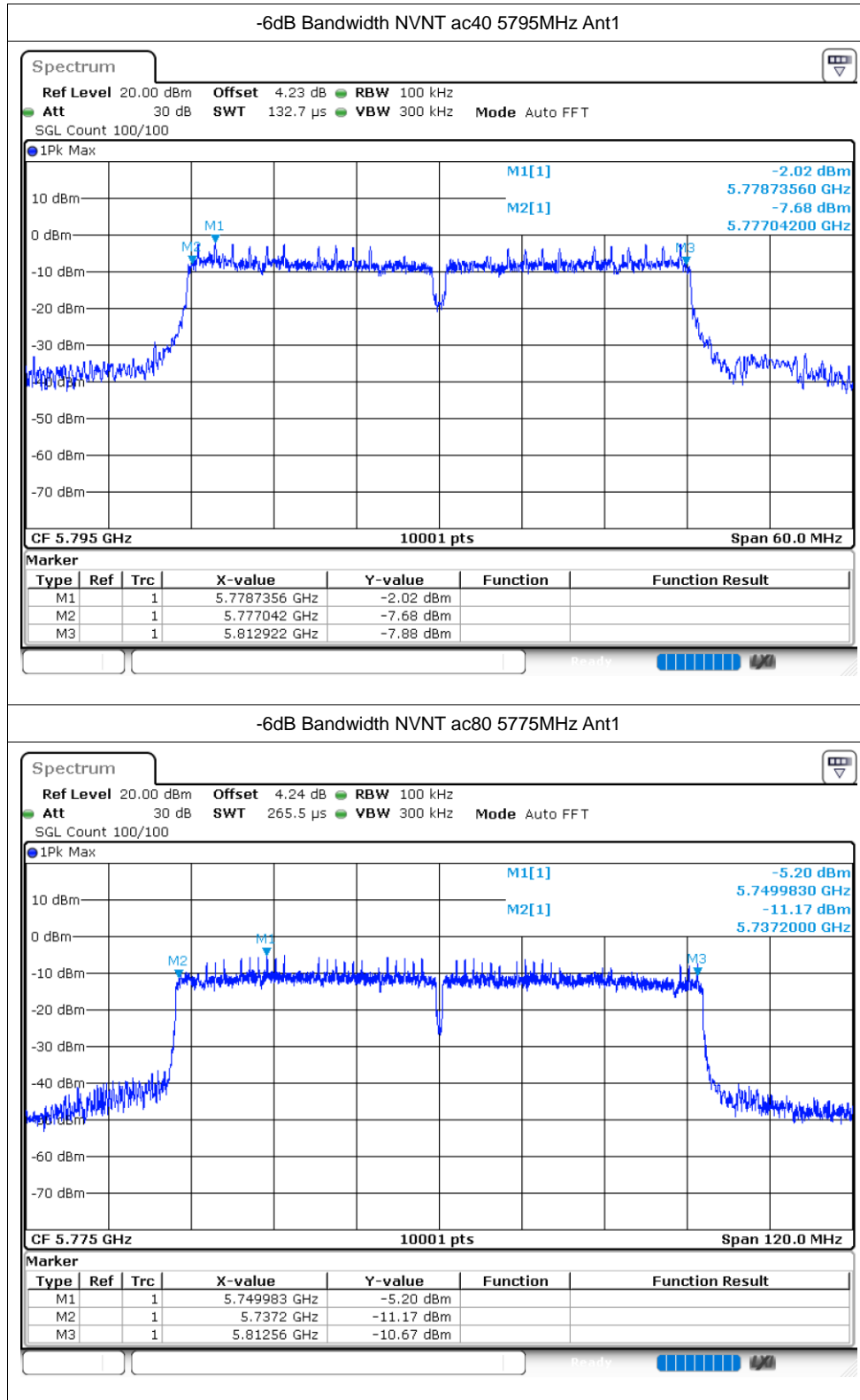










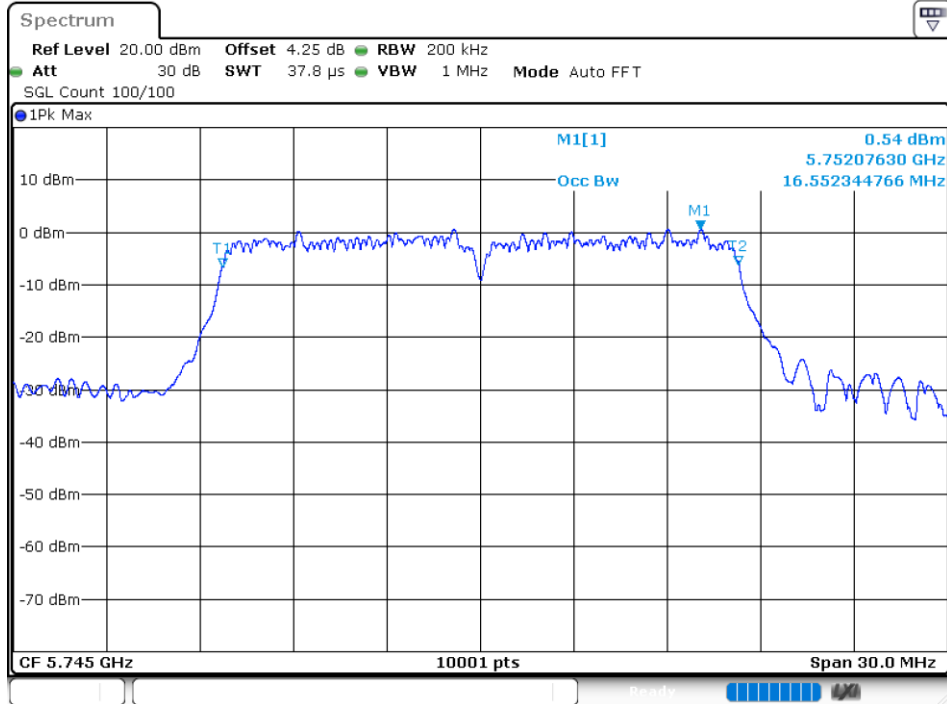


## Occupied Channel Bandwidth

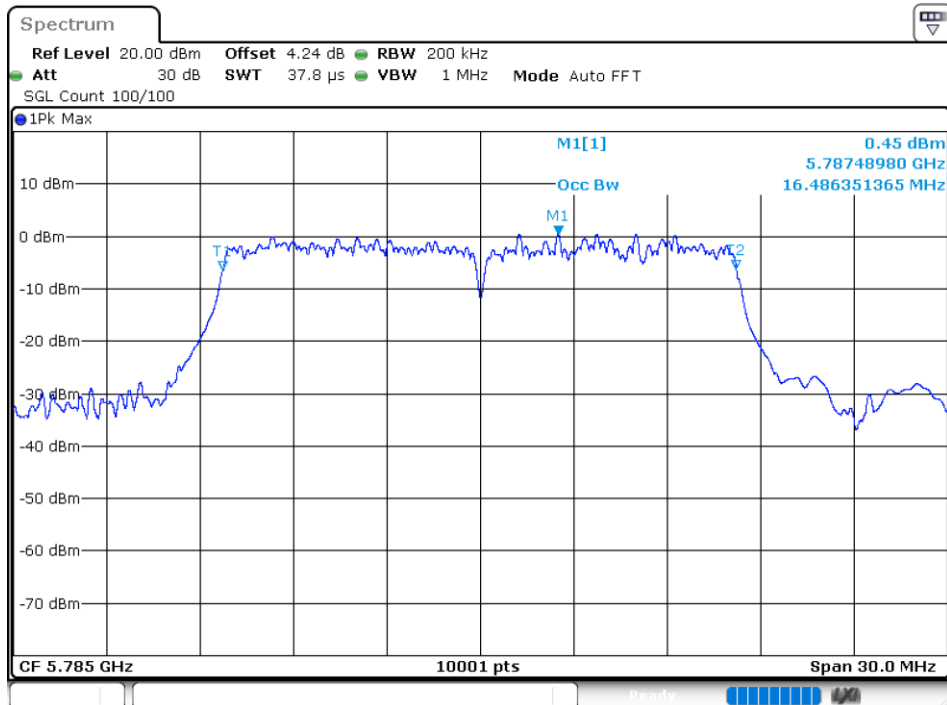
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.552
NVNT	a	5785	Ant1	16.486
NVNT	a	5825	Ant1	16.612
NVNT	n20	5745	Ant1	17.611
NVNT	n20	5785	Ant1	17.782
NVNT	n20	5825	Ant1	17.68
NVNT	n40	5755	Ant1	36.398
NVNT	n40	5795	Ant1	36.488
NVNT	ac20	5745	Ant1	17.611
NVNT	ac20	5785	Ant1	17.674
NVNT	ac20	5825	Ant1	17.701
NVNT	ac40	5755	Ant1	36.368
NVNT	ac40	5795	Ant1	36.5
NVNT	ac80	5775	Ant1	75.472

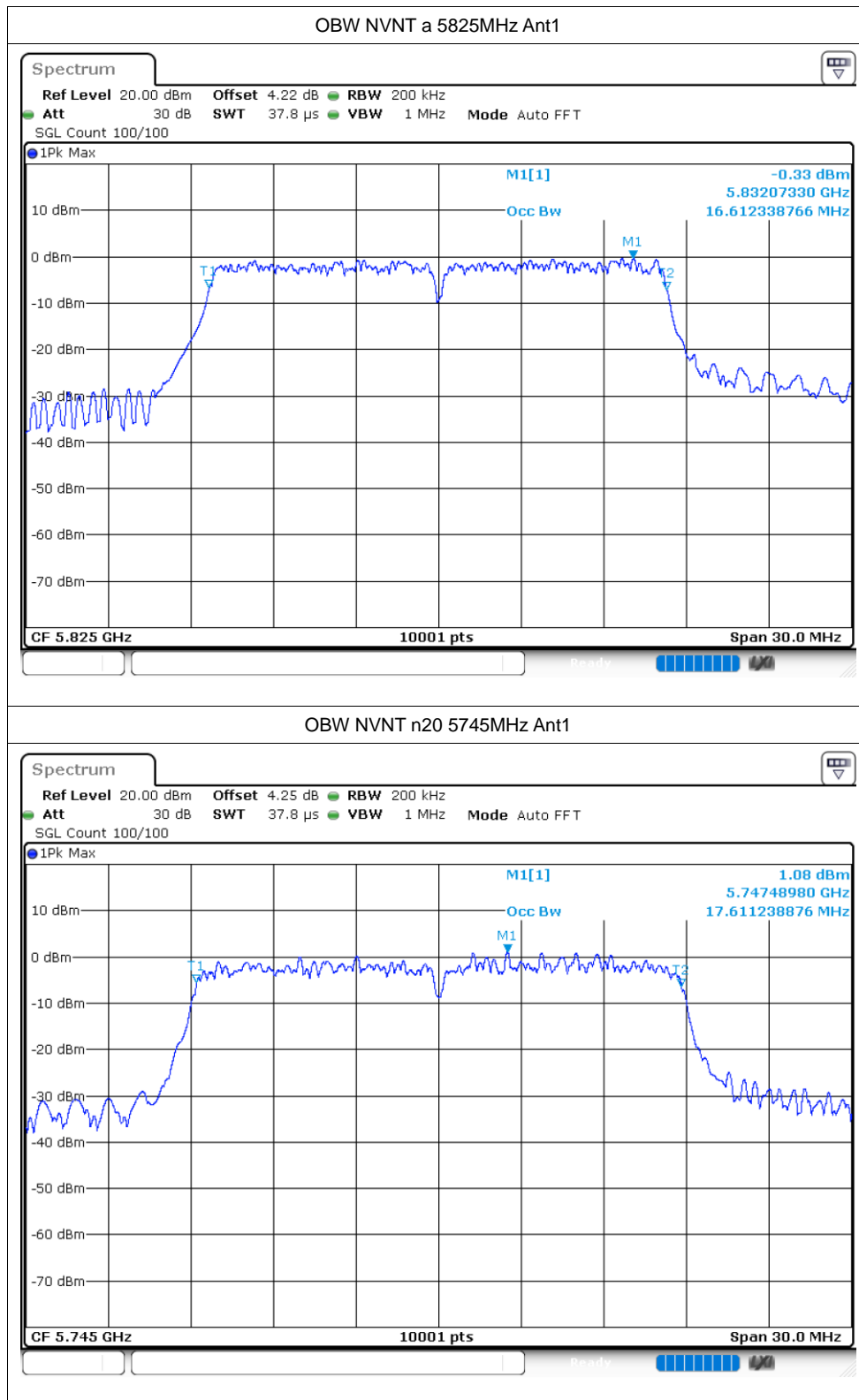
Test Graphs

OBW NVNT a 5745MHz Ant1

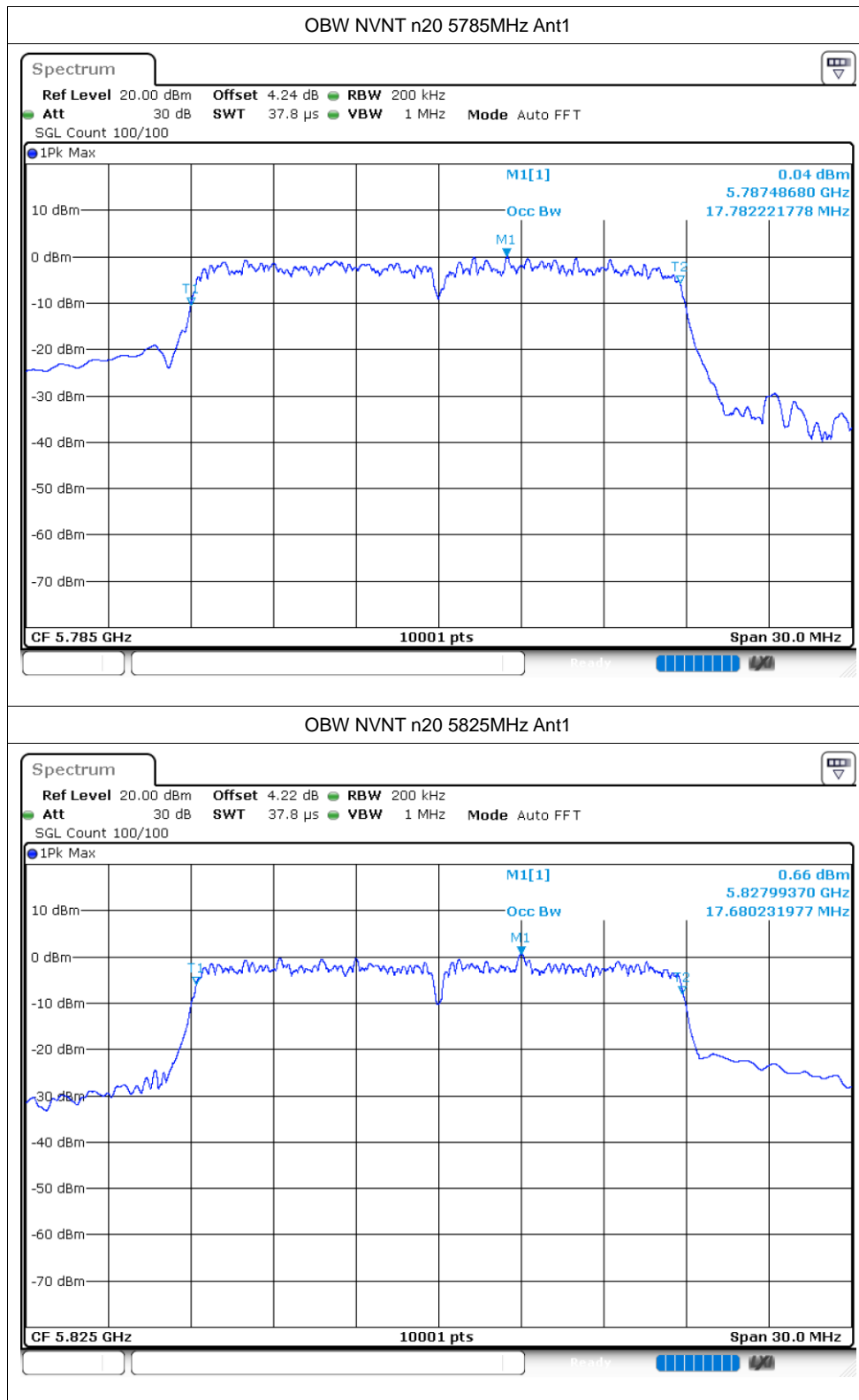


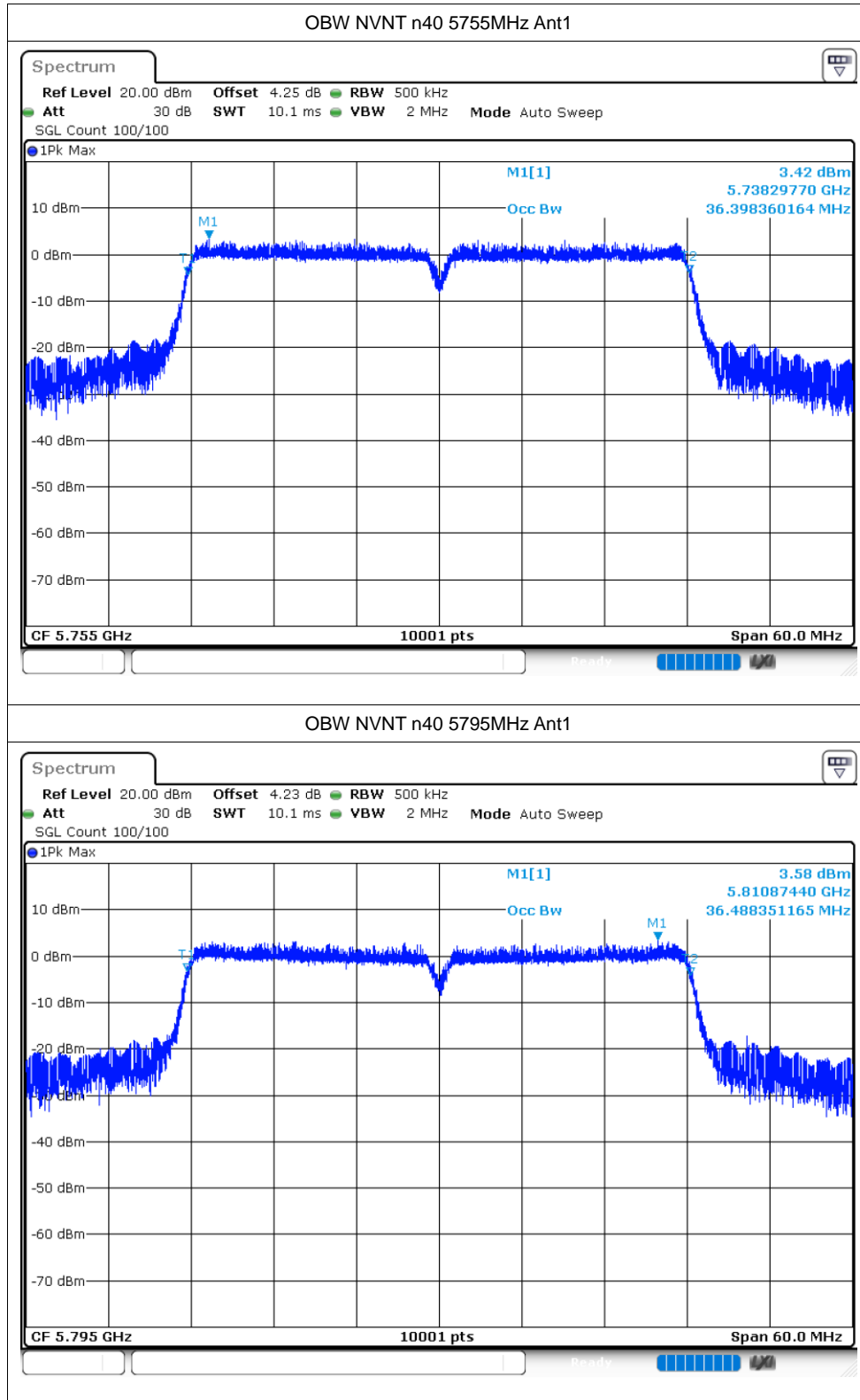
OBW NVNT a 5785MHz Ant1

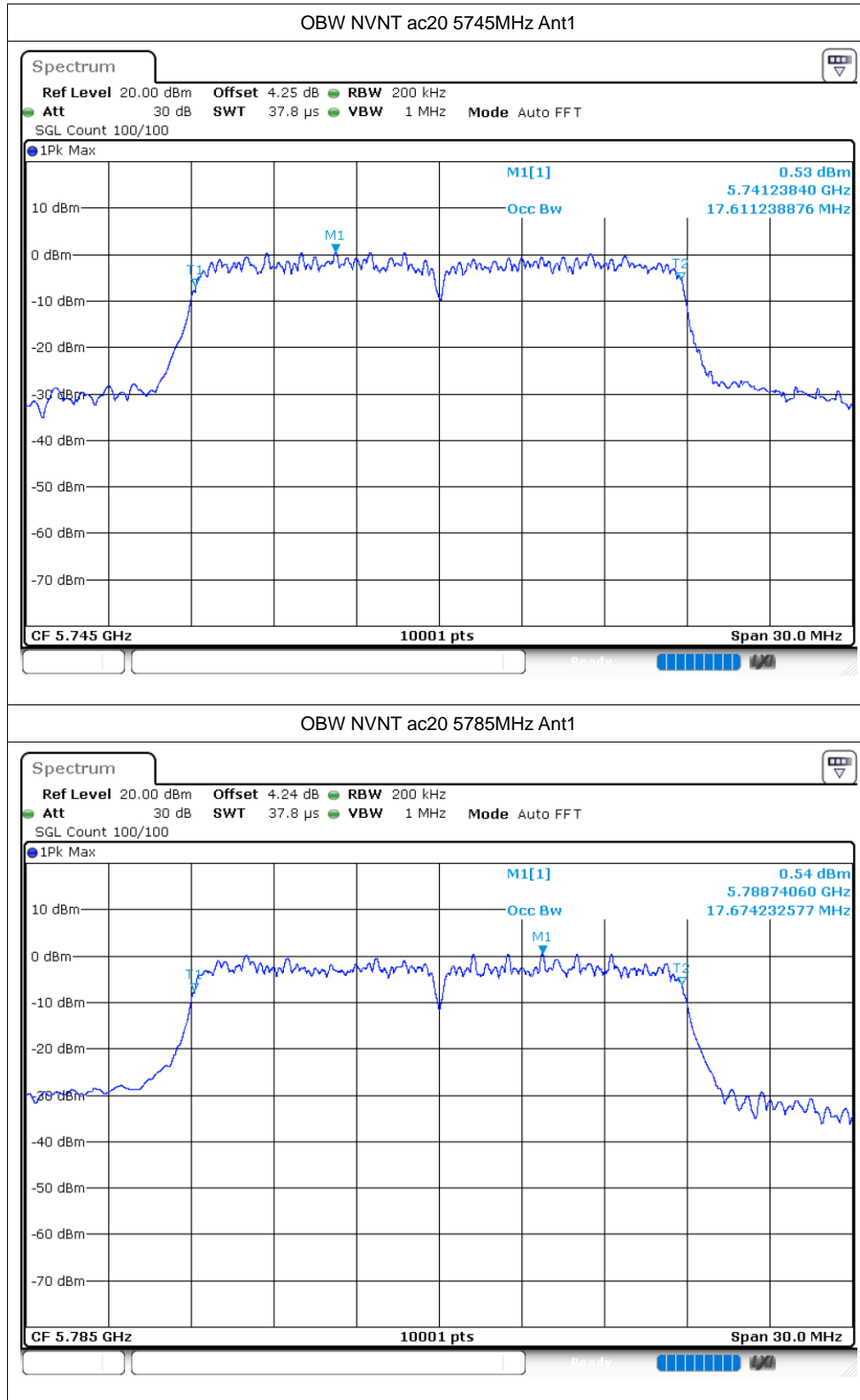


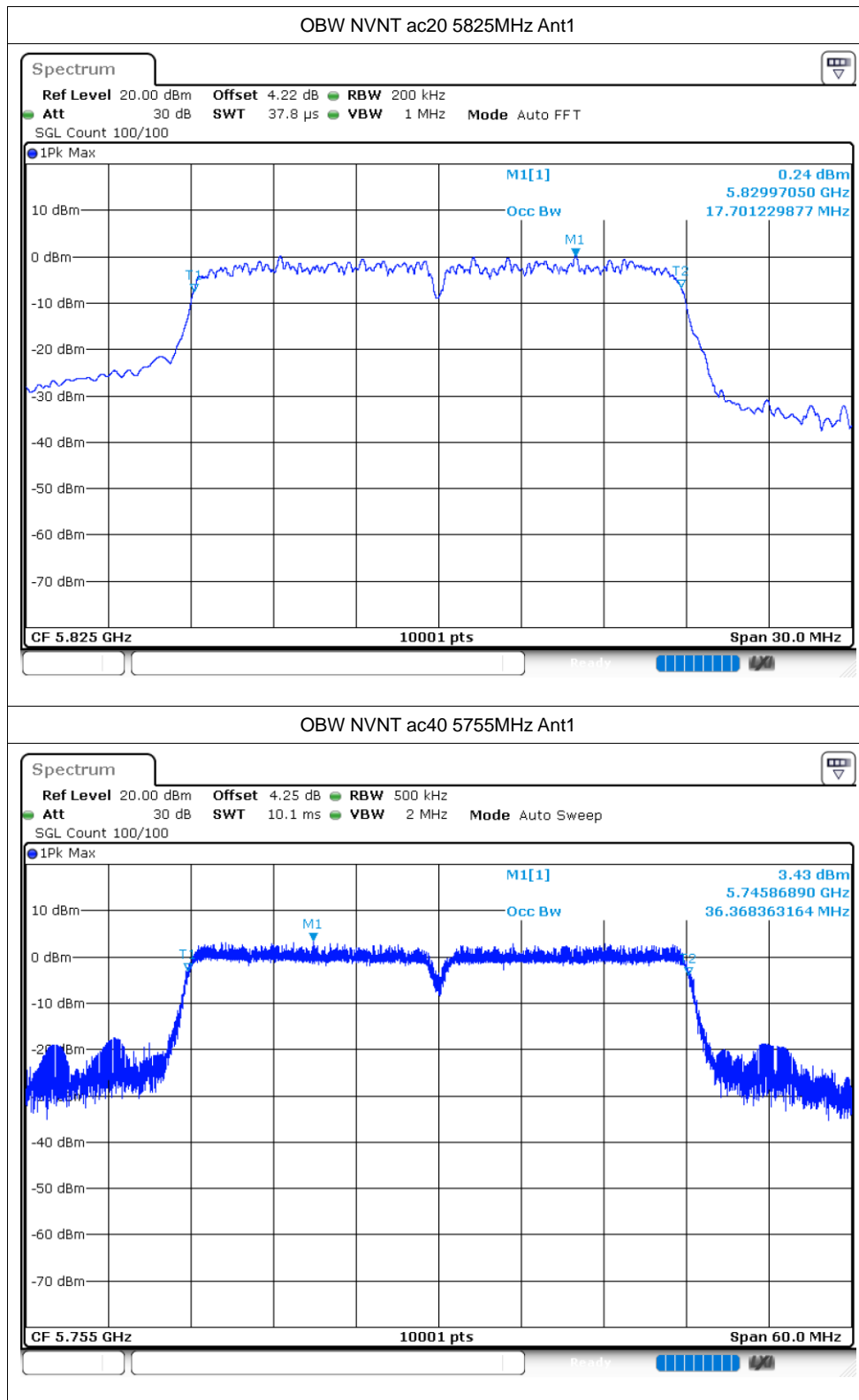


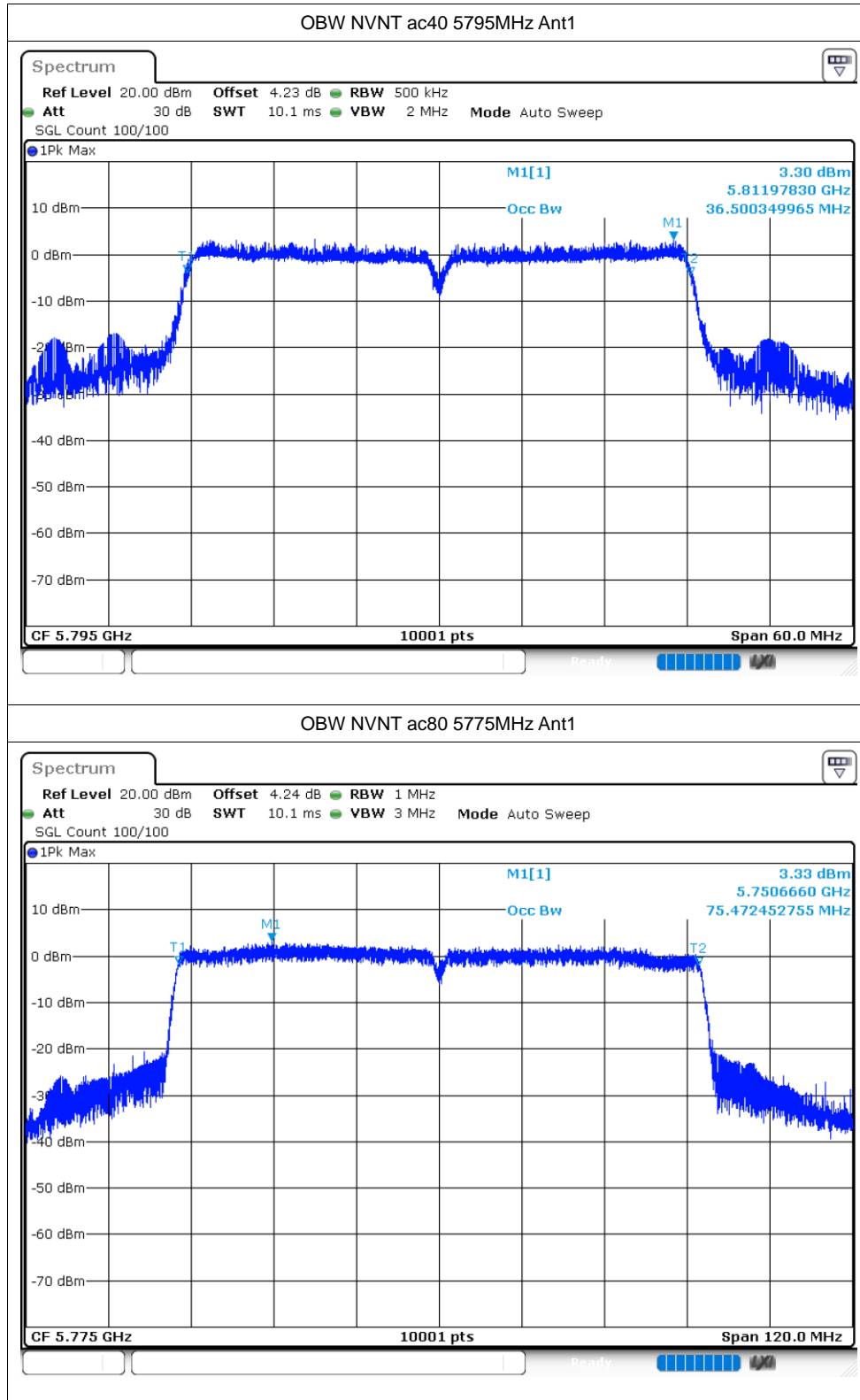










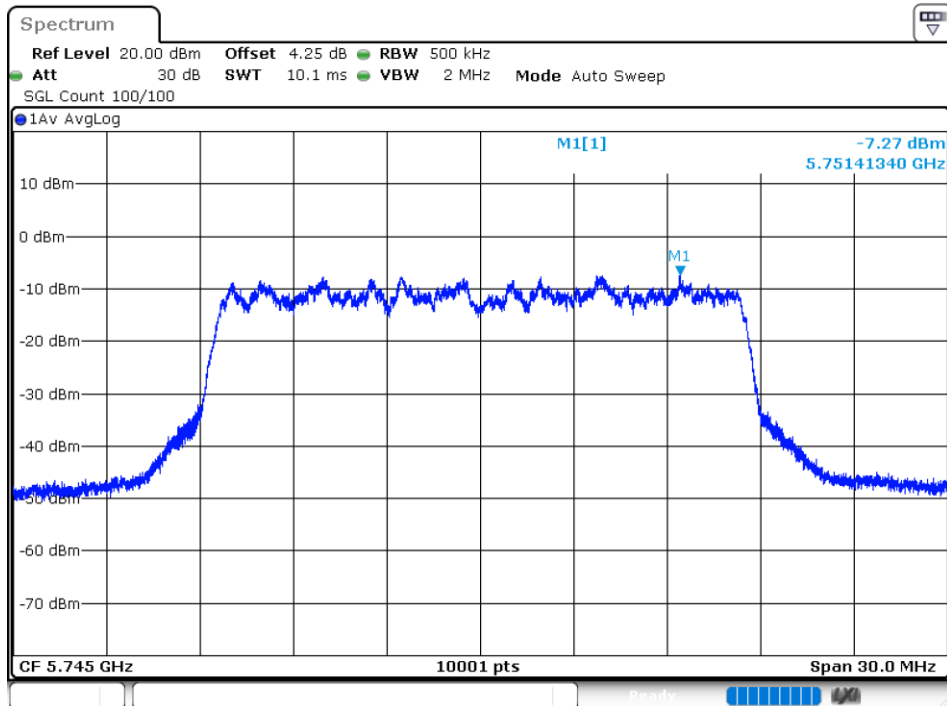


## Maximum Power Spectral Density Level

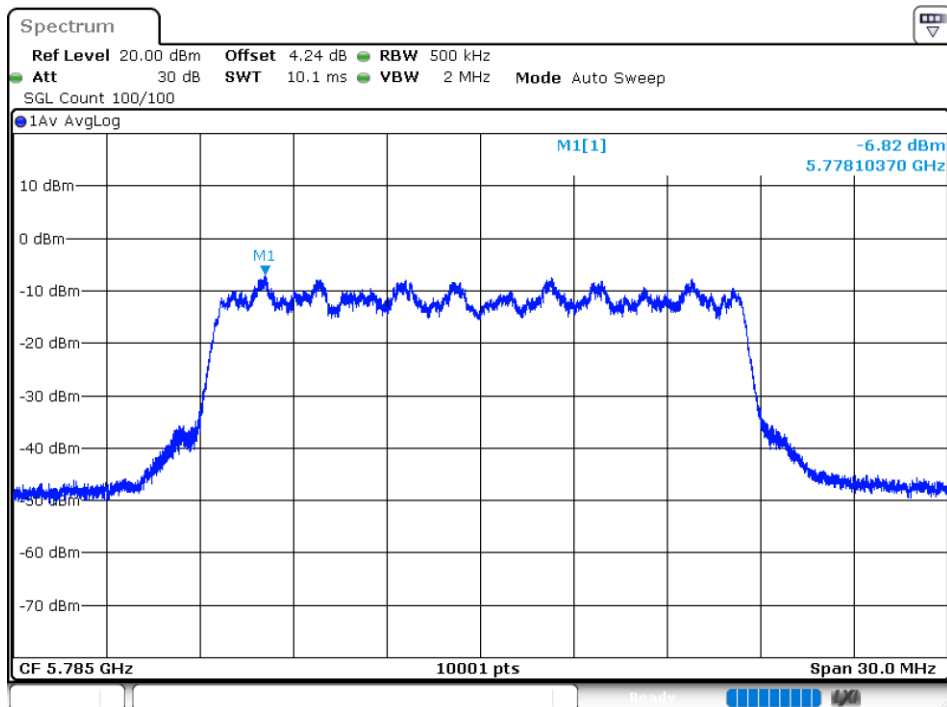
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-7.27	0.52	-6.75	30	Pass
NVNT	a	5785	Ant1	-6.82	0.52	-6.3	30	Pass
NVNT	a	5825	Ant1	-7.45	0.15	-7.3	30	Pass
NVNT	n20	5745	Ant1	-7.45	0.6	-6.85	30	Pass
NVNT	n20	5785	Ant1	-8.42	0.62	-7.8	30	Pass
NVNT	n20	5825	Ant1	-6.64	0.17	-6.47	30	Pass
NVNT	n40	5755	Ant1	-15.41	0.43	-14.98	30	Pass
NVNT	n40	5795	Ant1	-13.92	0.33	-13.59	30	Pass
NVNT	ac20	5745	Ant1	-6.74	0.59	-6.15	30	Pass
NVNT	ac20	5785	Ant1	-6.32	0.59	-5.73	30	Pass
NVNT	ac20	5825	Ant1	-6.33	0.59	-5.74	30	Pass
NVNT	ac40	5755	Ant1	-15.29	1.15	-14.14	30	Pass
NVNT	ac40	5795	Ant1	-14.87	1.15	-13.72	30	Pass
NVNT	ac80	5775	Ant1	-23.19	1.95	-21.24	30	Pass

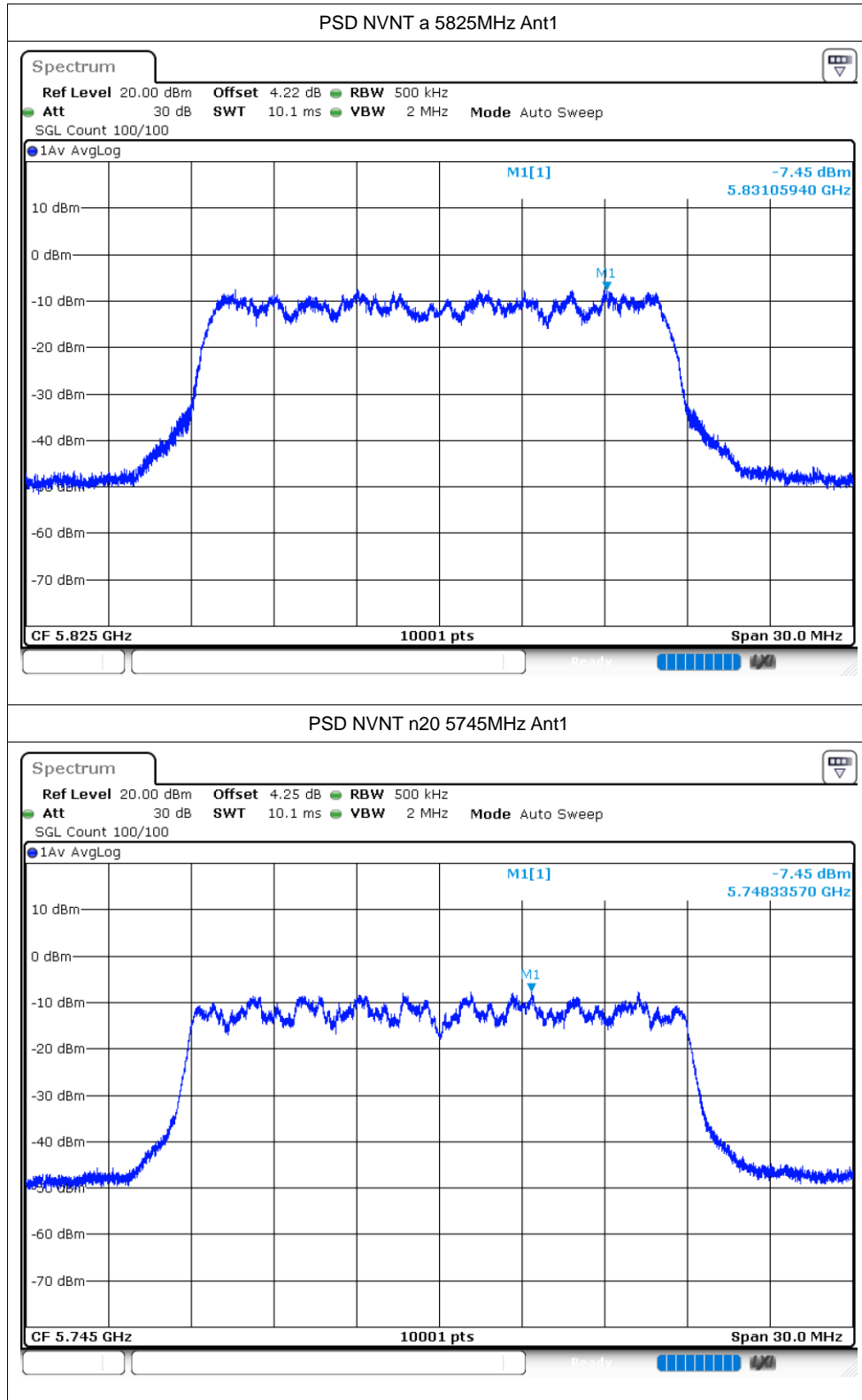
# Test Graphs

## PSD NVNT a 5745MHz Ant1

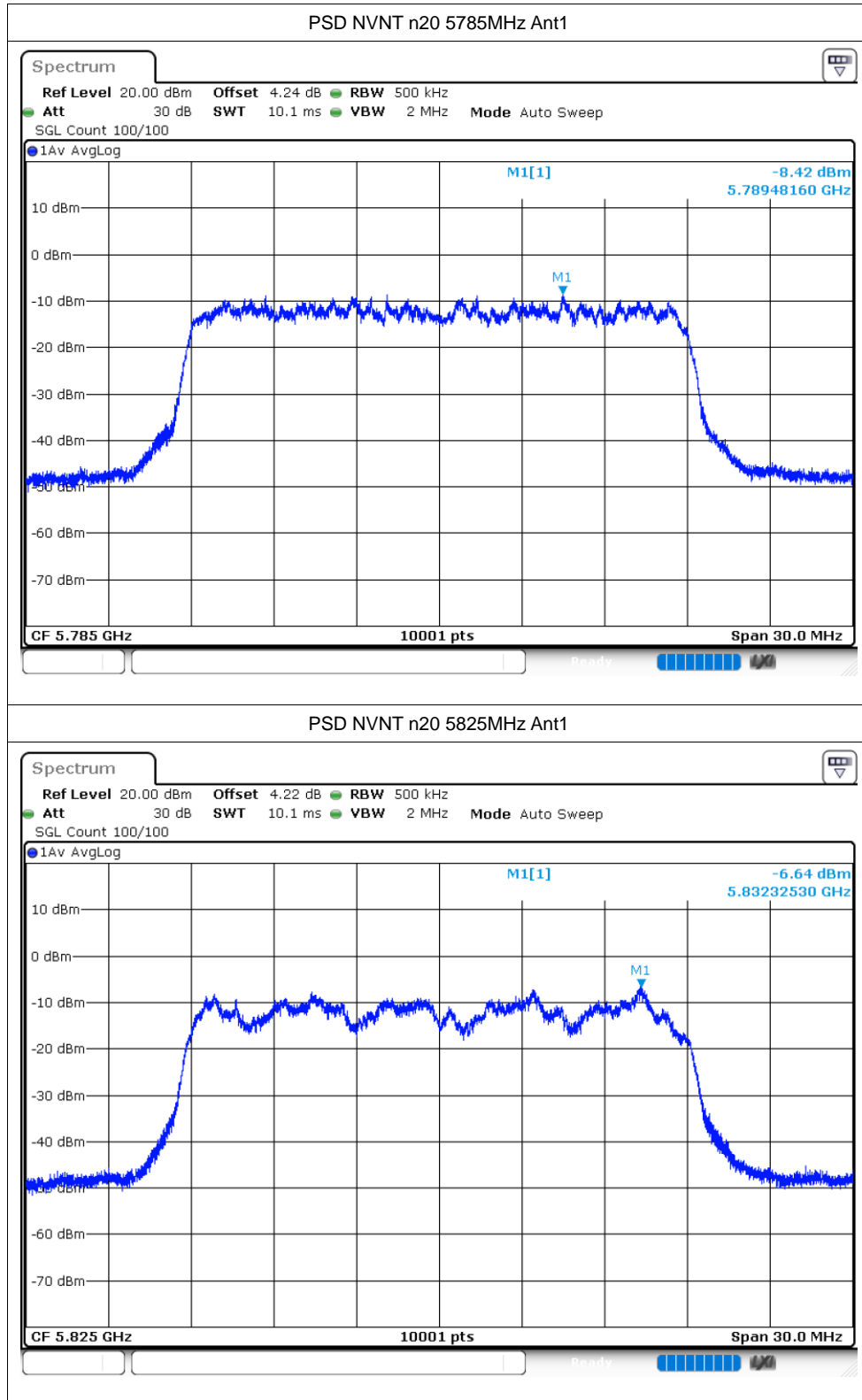


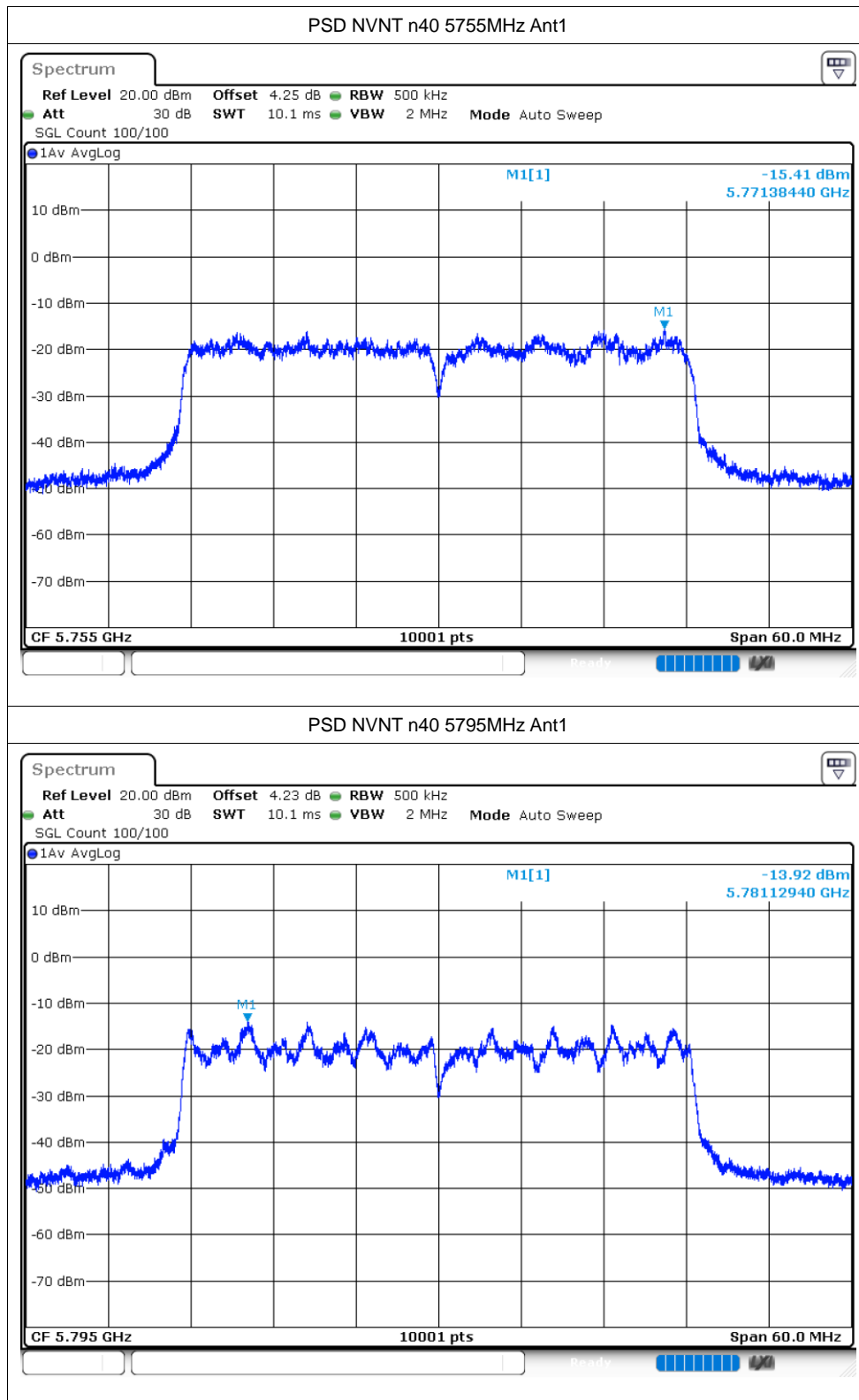
## PSD NVNT a 5785MHz Ant1

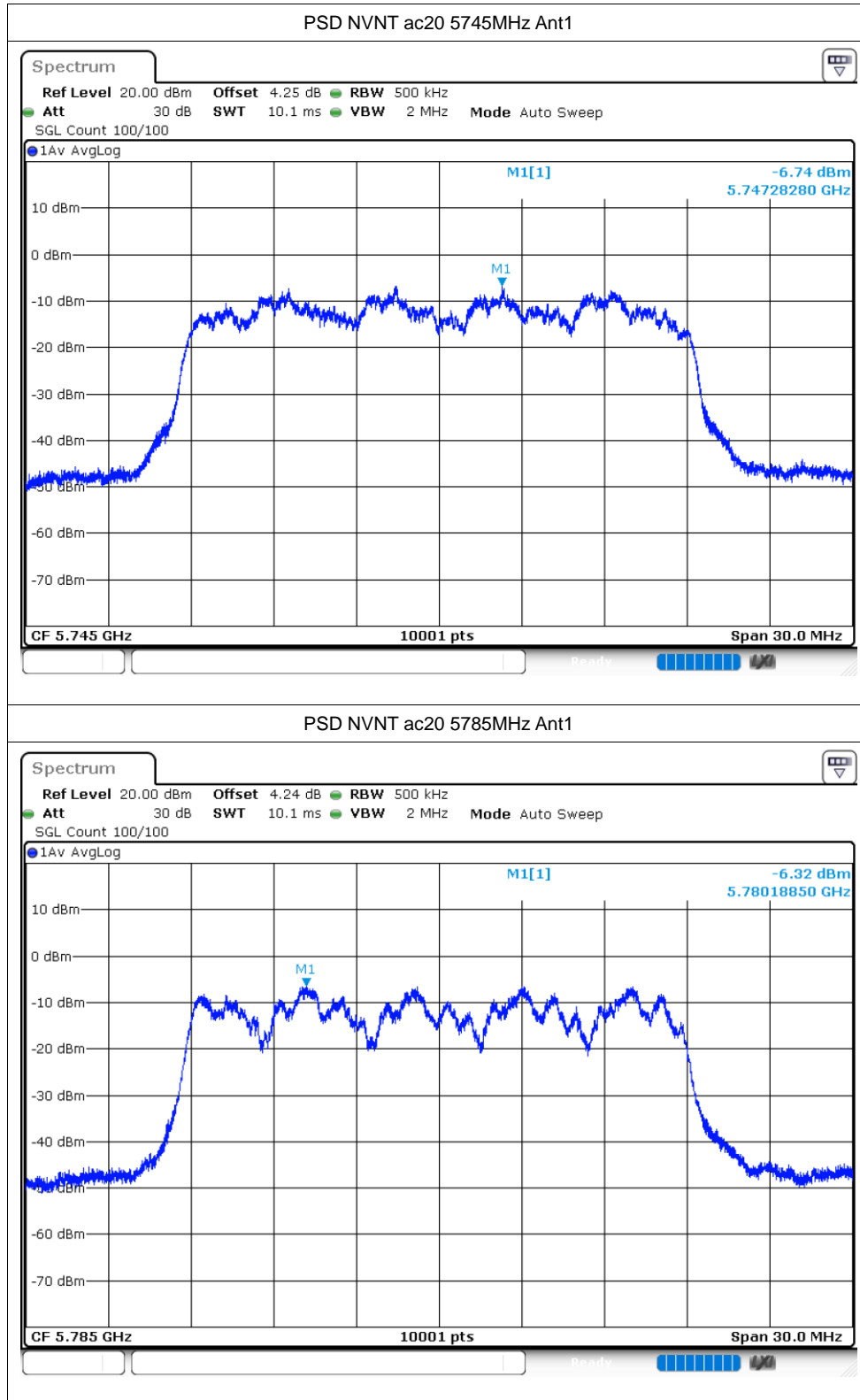


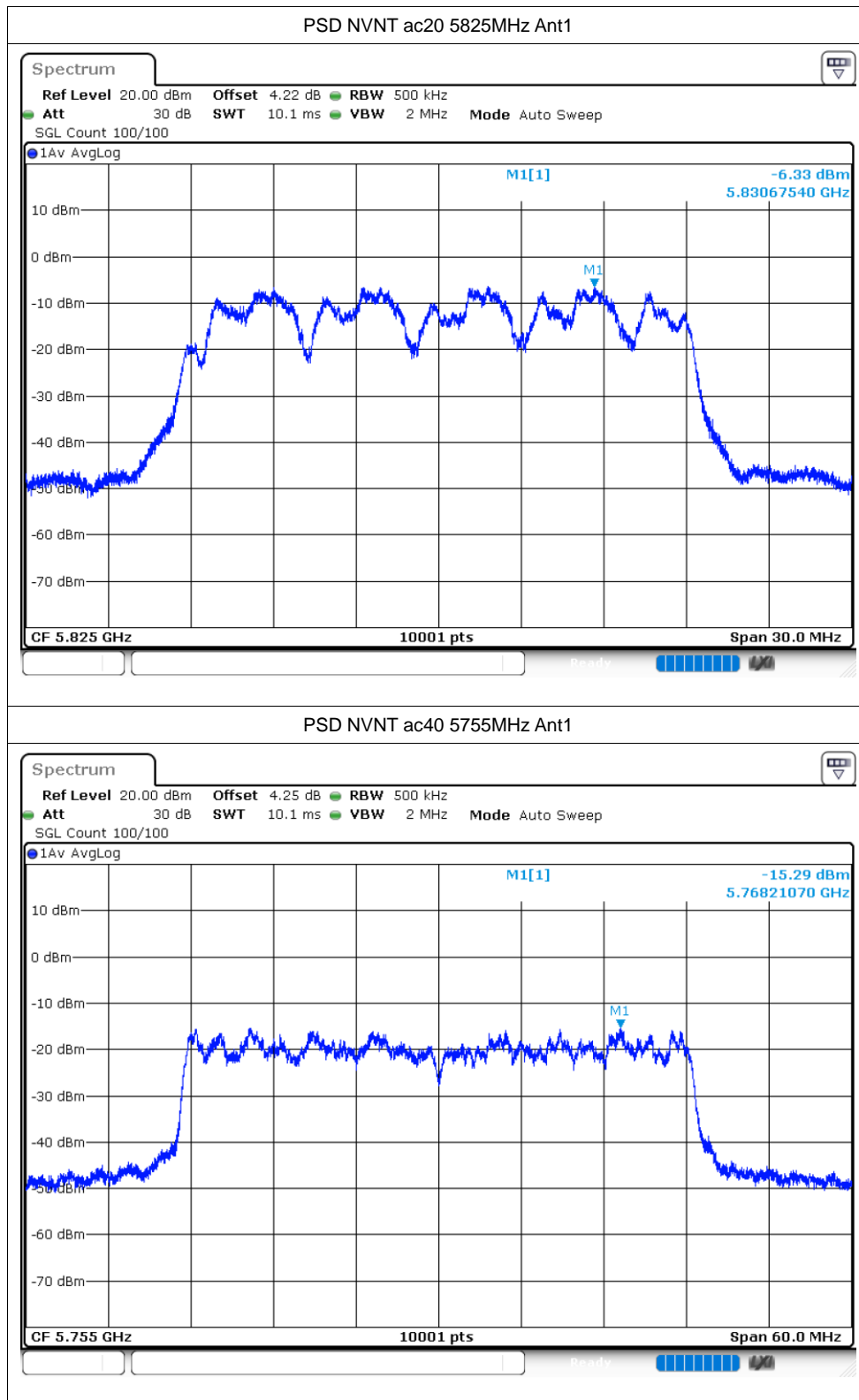


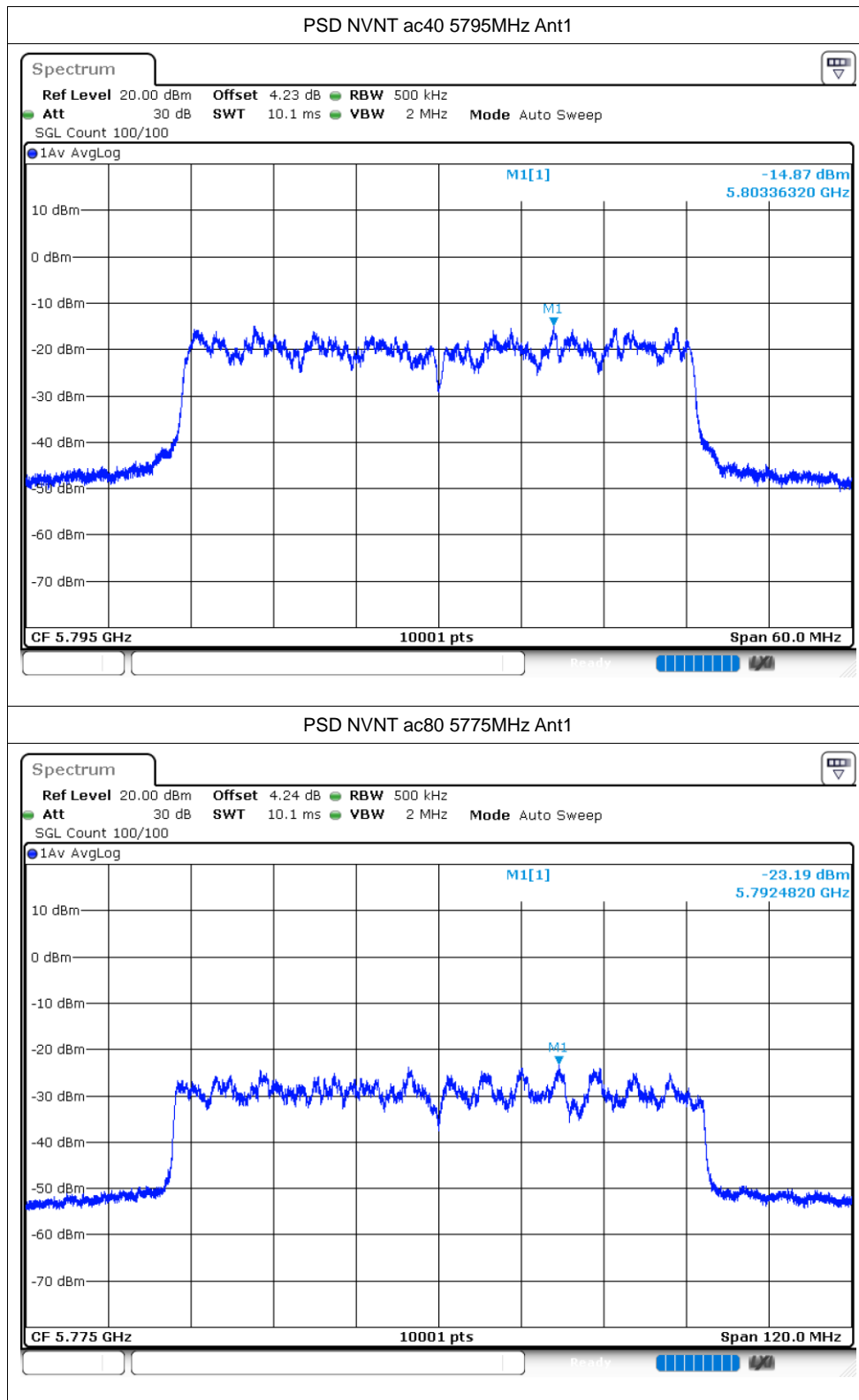










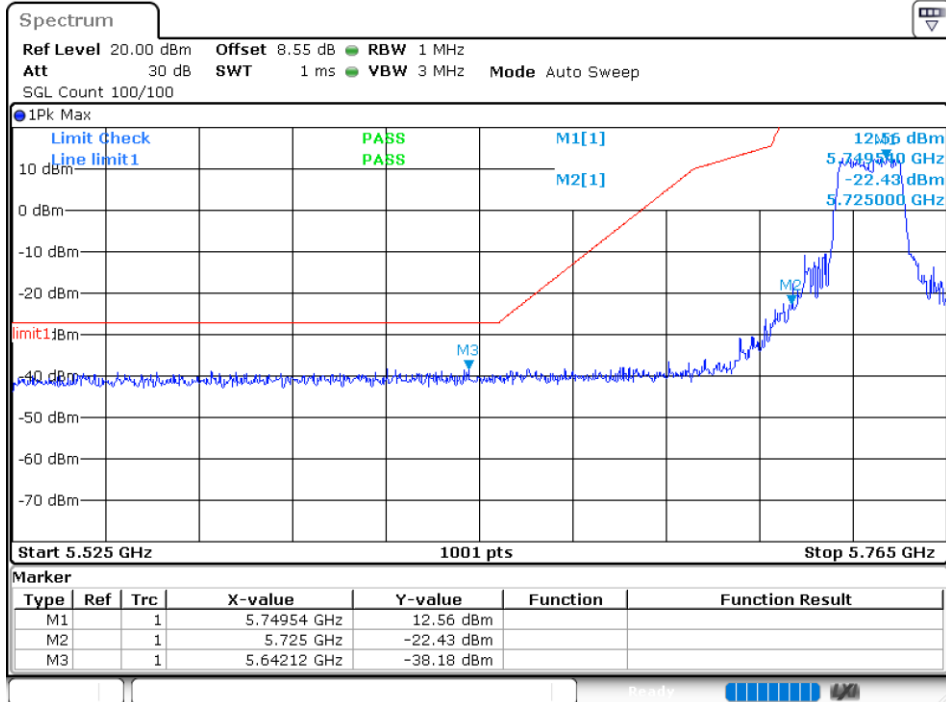


## Band Edge

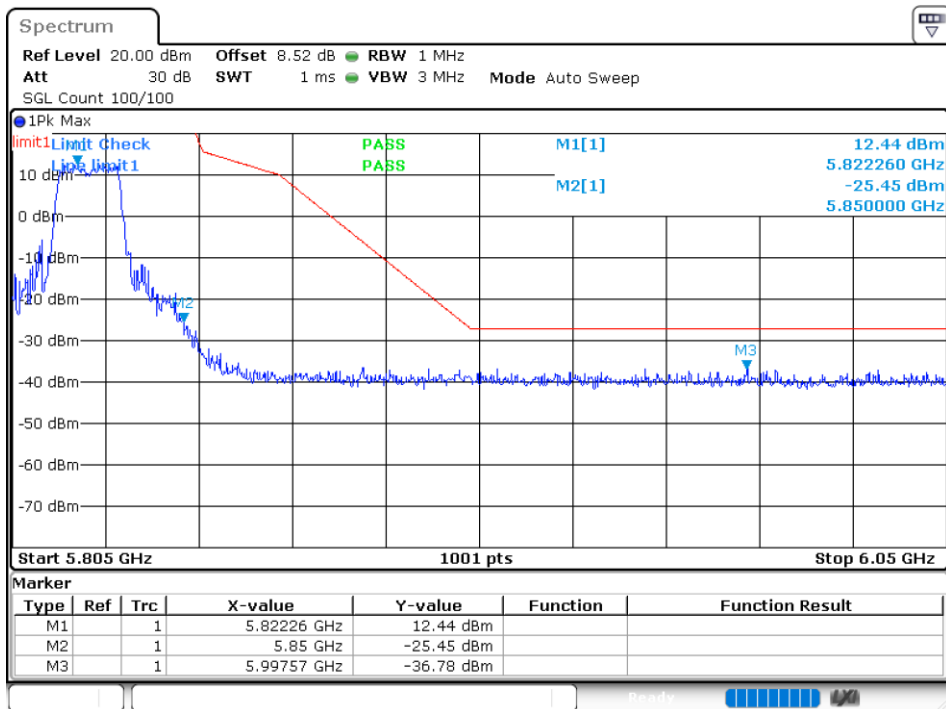
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-38.17	-27	Pass
NVNT	a	5825	Ant1	-36.77	-27	Pass
NVNT	n20	5745	Ant1	-36.4	-27	Pass
NVNT	n20	5825	Ant1	-36.18	-27	Pass
NVNT	n40	5755	Ant1	-38.11	-27	Pass
NVNT	n40	5795	Ant1	-36.75	-27	Pass
NVNT	ac20	5745	Ant1	-37.18	-27	Pass
NVNT	ac20	5825	Ant1	-36.79	-27	Pass
NVNT	ac40	5755	Ant1	-38.05	-27	Pass
NVNT	ac40	5795	Ant1	-36.41	-26.94	Pass
NVNT	ac80	5755	Ant1	-36.93	-27	Pass
NVNT	ac80	5755	Ant1	-37.62	-27	Pass

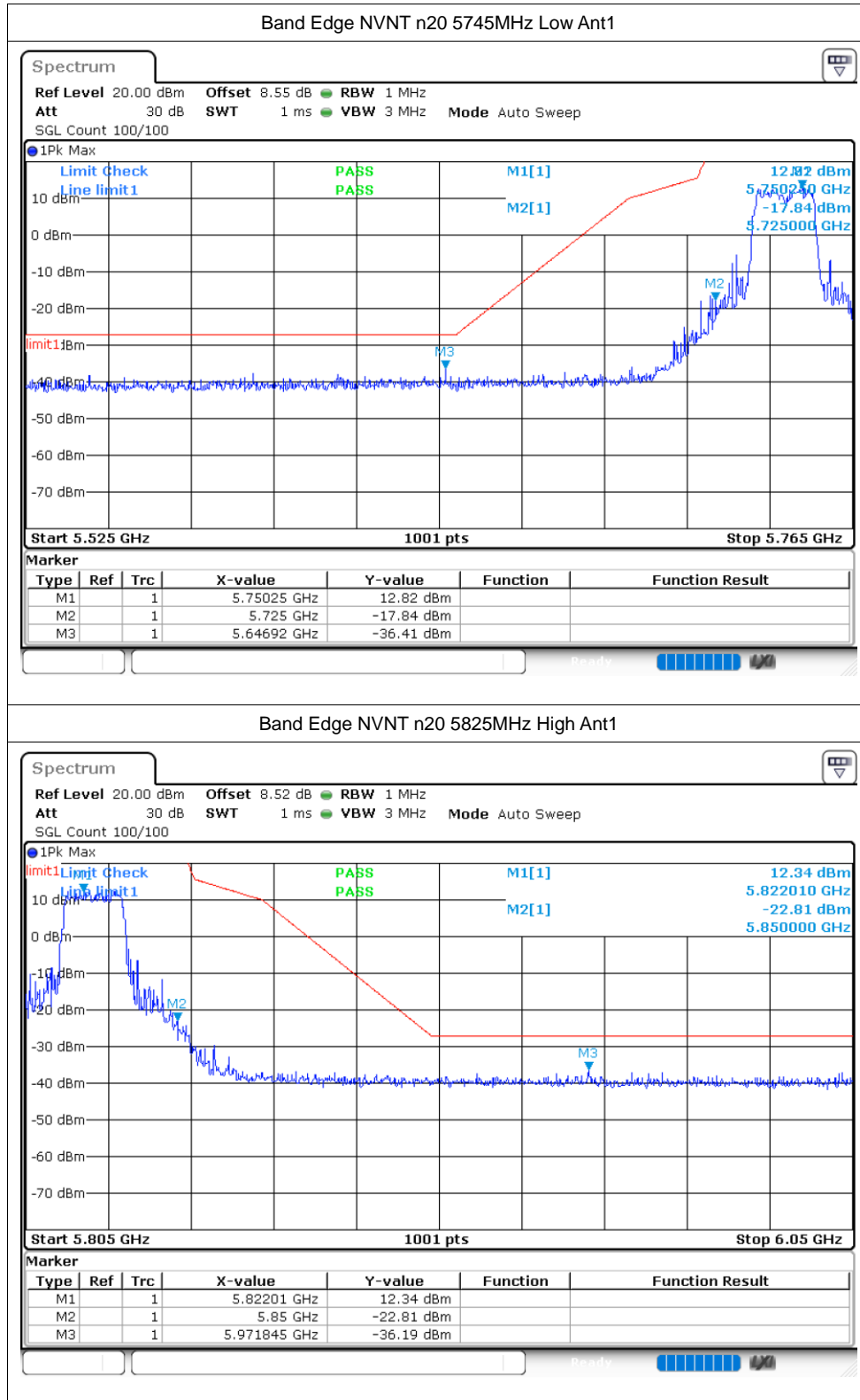
## Test Graphs

### Band Edge NVNT a 5745MHz Low Ant1

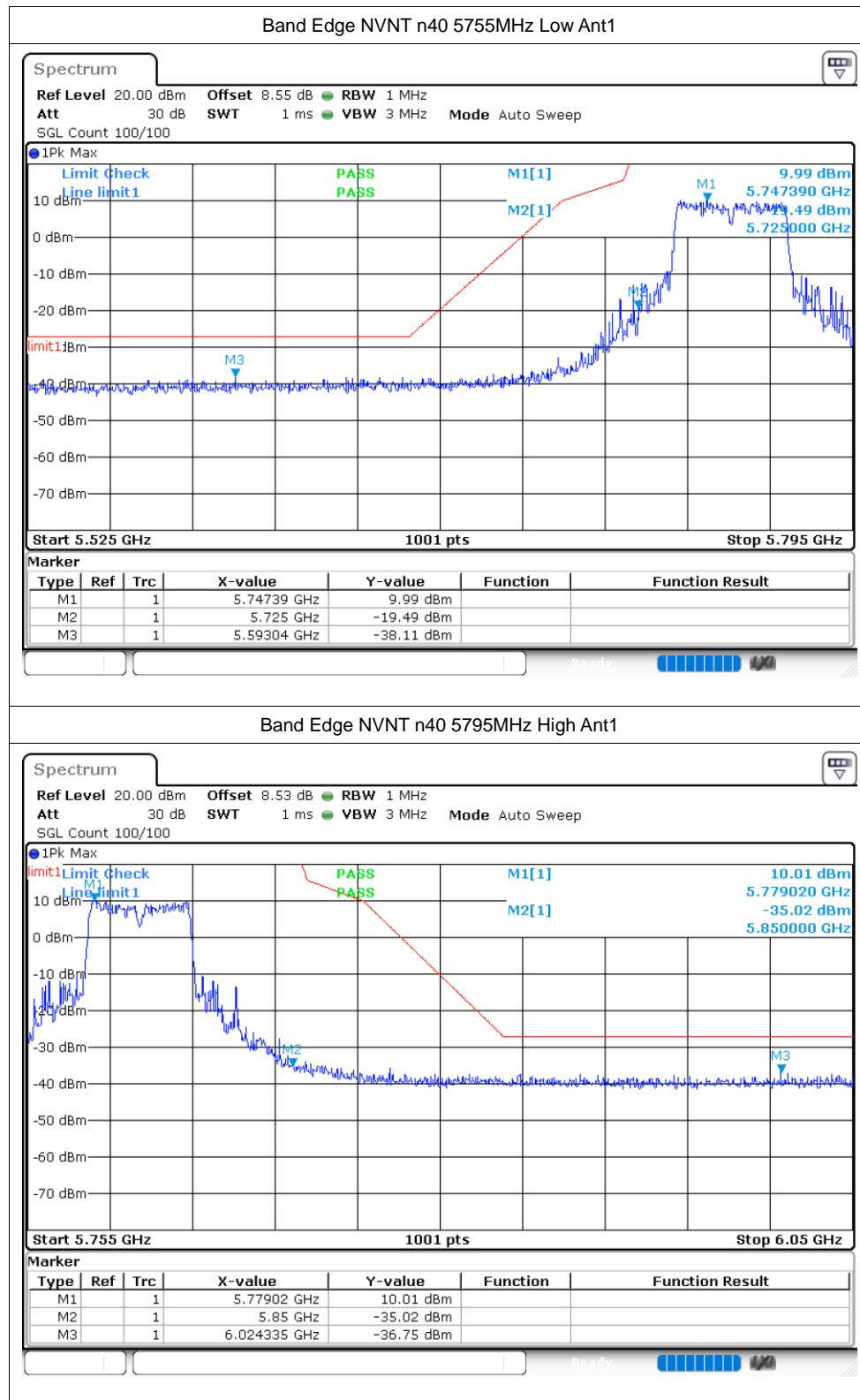


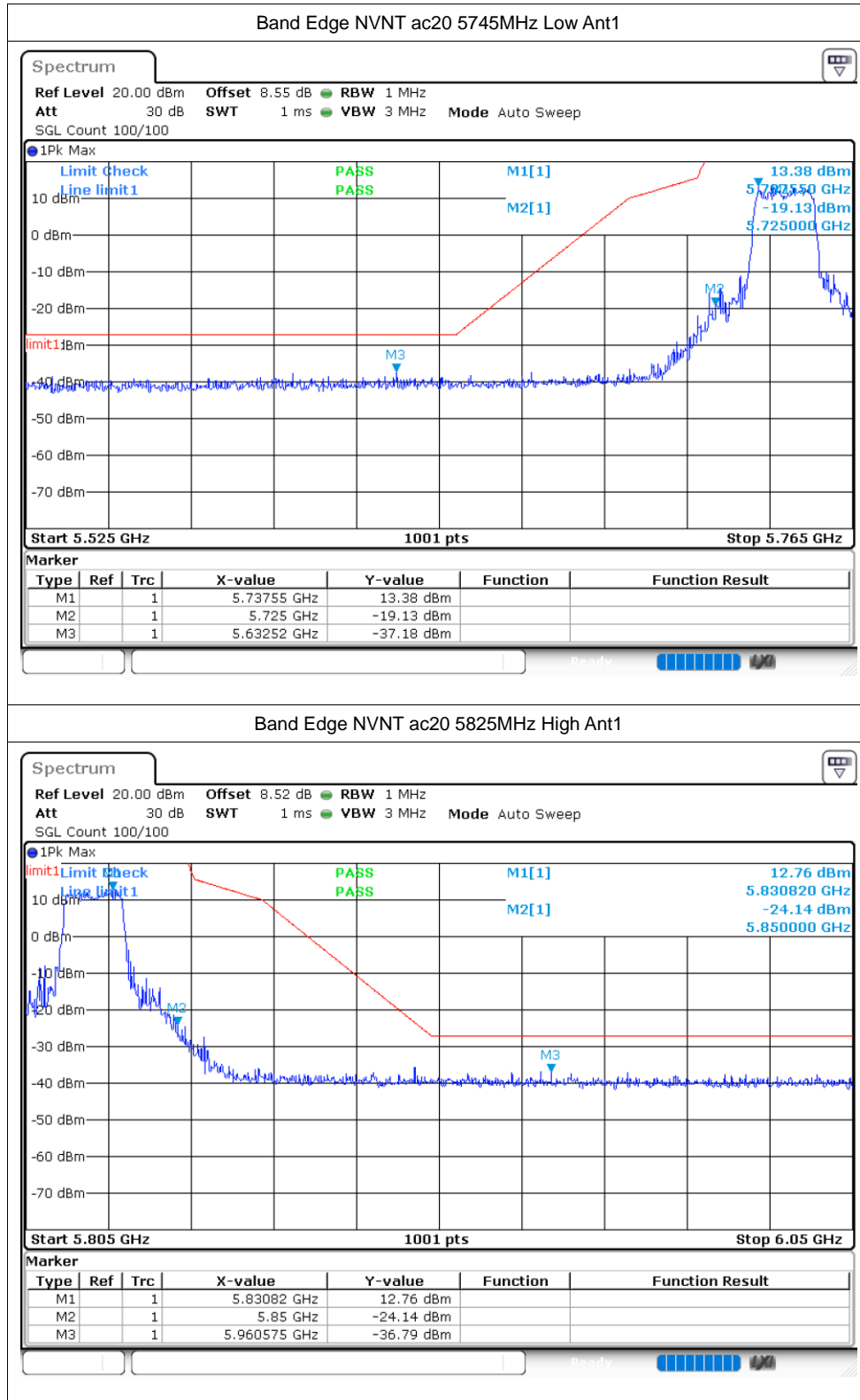
### Band Edge NVNT a 5825MHz High Ant1

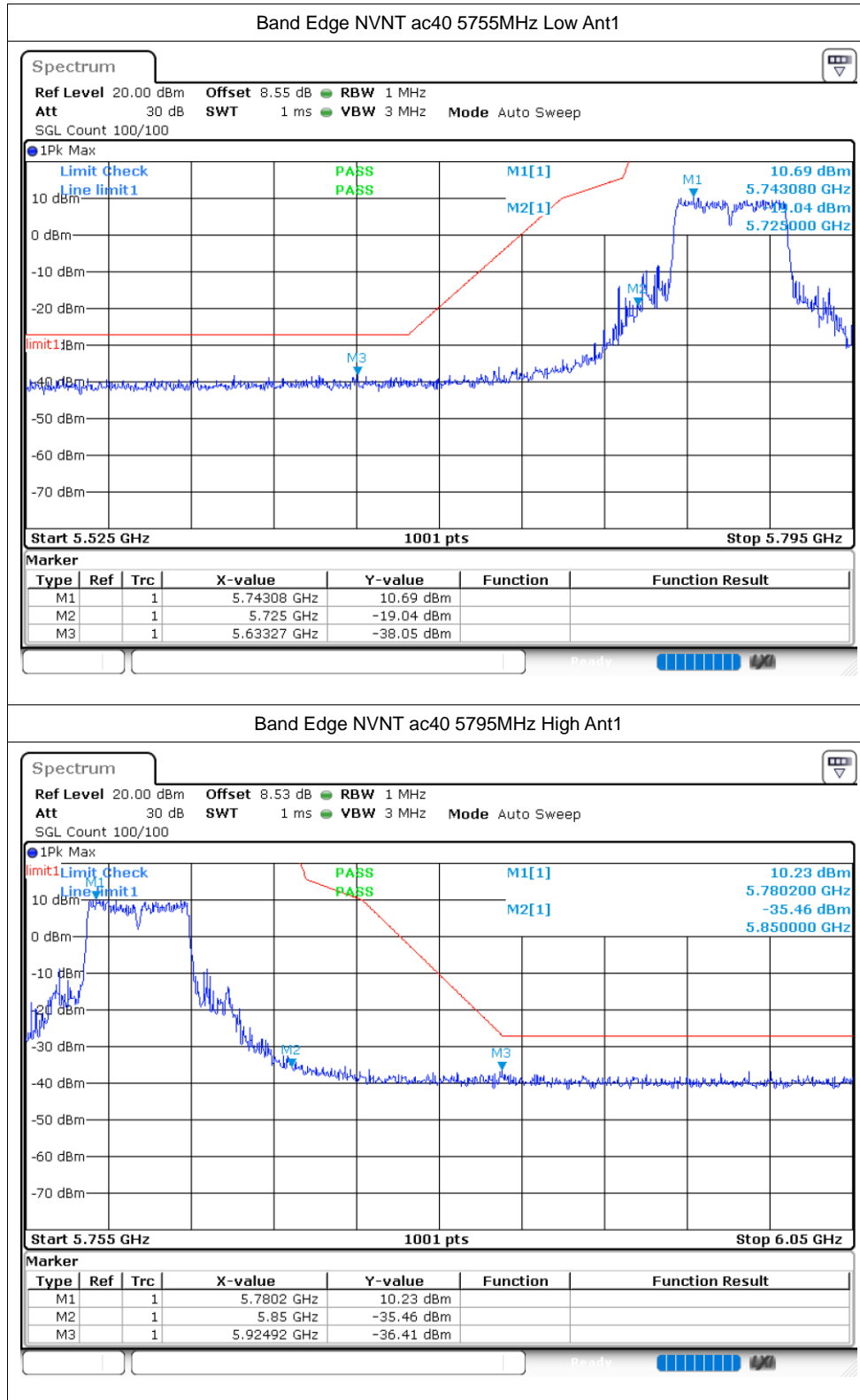


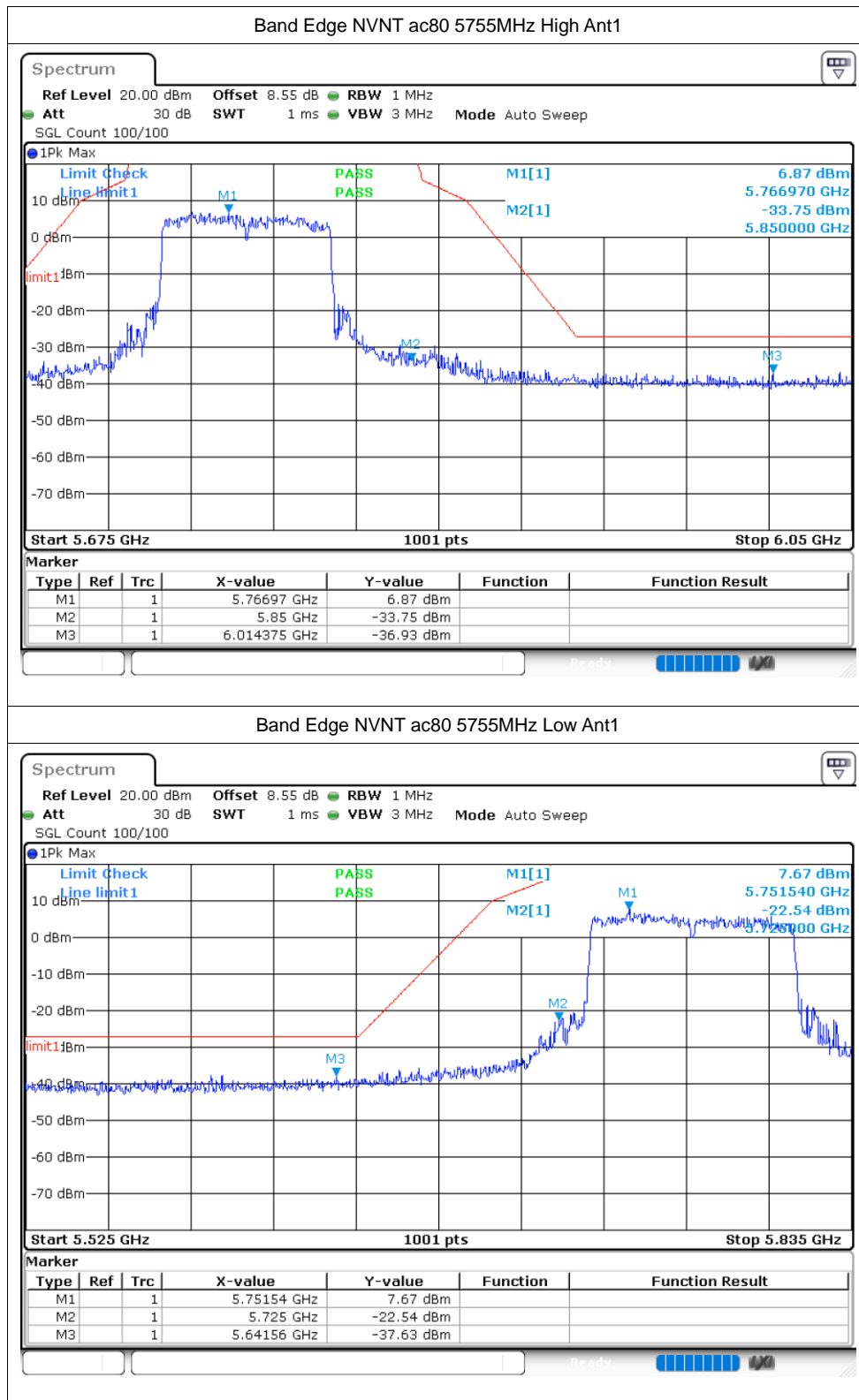










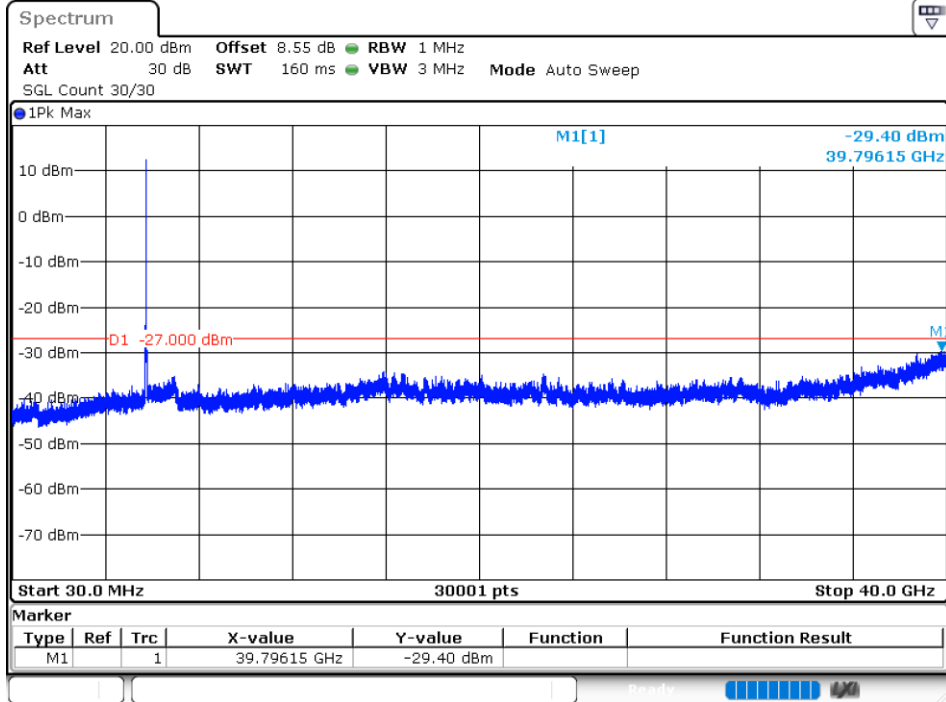


## Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5745	Ant1	-29.39	-27	Pass
NVNT	a	5785	Ant1	-29.18	-27	Pass
NVNT	a	5825	Ant1	-29.59	-27	Pass
NVNT	n20	5745	Ant1	-29.35	-27	Pass
NVNT	n20	5785	Ant1	-29.33	-27	Pass
NVNT	n20	5825	Ant1	-29.07	-27	Pass
NVNT	n40	5755	Ant1	-29.9	-27	Pass
NVNT	n40	5795	Ant1	-30.03	-27	Pass
NVNT	ac20	5745	Ant1	-30.26	-27	Pass
NVNT	ac20	5785	Ant1	-29.89	-27	Pass
NVNT	ac20	5825	Ant1	-28.9	-27	Pass
NVNT	ac40	5755	Ant1	-29.43	-27	Pass
NVNT	ac40	5795	Ant1	-30	-27	Pass
NVNT	ac80	5775	Ant1	-29.1	-27	Pass

Test Graphs

Tx. Spurious NVNT a 5745MHz Ant1 Emission



Tx. Spurious NVNT a 5785MHz Ant1 Emission

