

5.2G WIFI

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	80.42	0.95	0.49
NVNT	a	5200	Ant1	80.33	0.95	0.5
NVNT	a	5240	Ant1	80.62	0.94	0.49
NVNT	n20	5180	Ant1	79.32	1.01	0.53
NVNT	n20	5200	Ant1	79.34	1	0.53
NVNT	n20	5240	Ant1	79.7	0.99	0.53

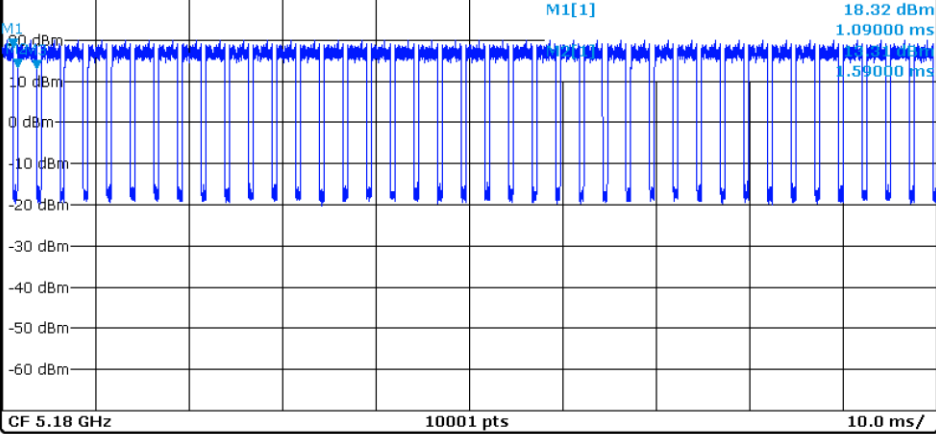
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

Spectrum

Ref Level 30.00 dBm Offset 4.72 dB RBW 10 MHz
 Att 45 dB SWT 100 ms VBW 10 MHz
 SGL

1Pk Clrw



Marker

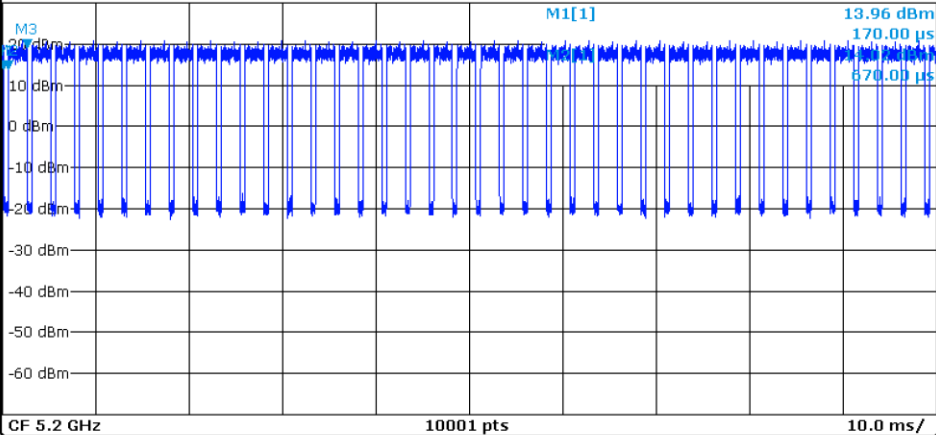
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.09 ms	18.32 dBm		
M2		1	1.59 ms	13.31 dBm		
M3		1	3.62 ms	13.17 dBm		

Duty Cycle NVNT a 5200MHz Ant1

Spectrum

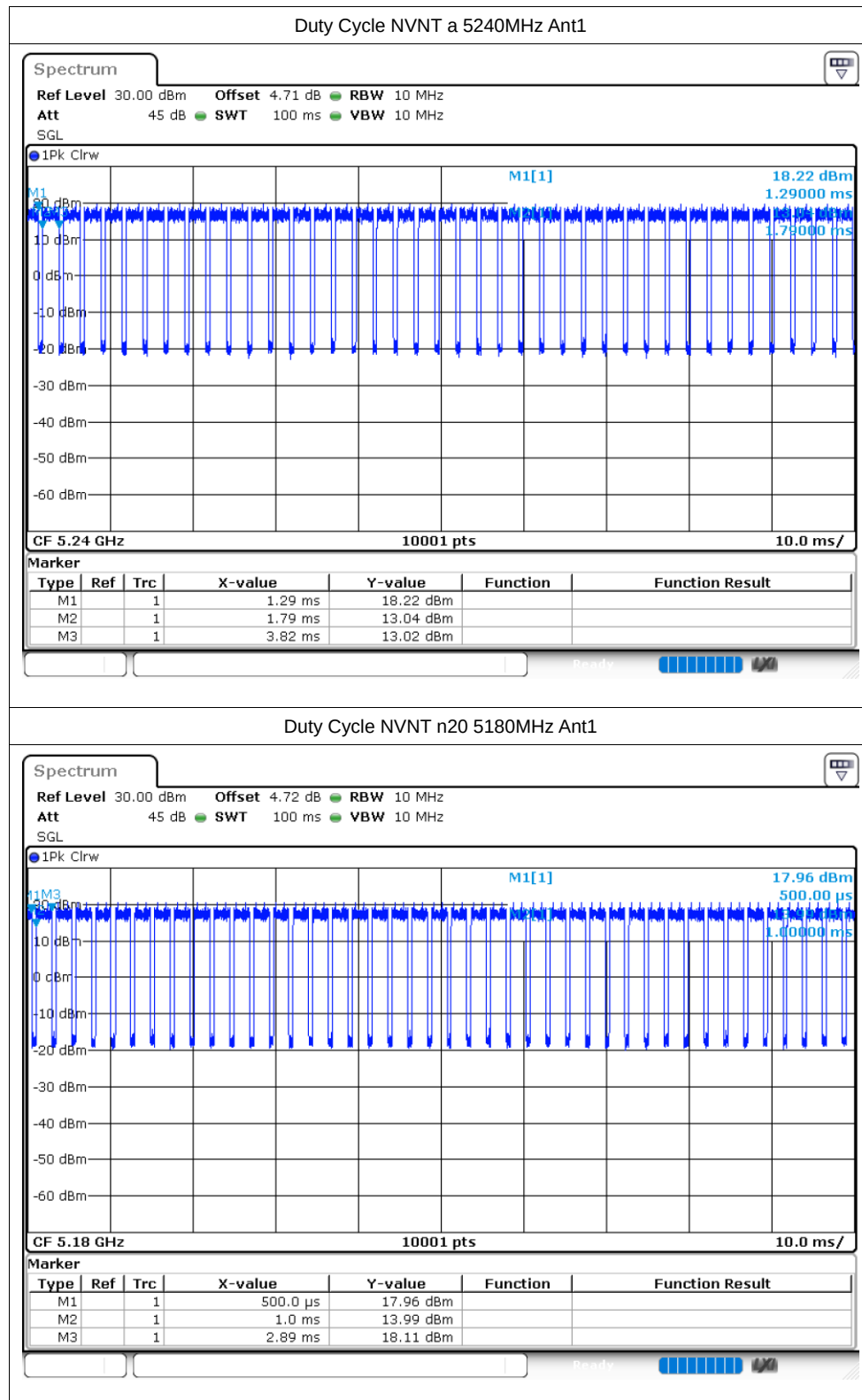
Ref Level 30.00 dBm Offset 4.73 dB RBW 10 MHz
 Att 45 dB SWT 100 ms VBW 10 MHz
 SGL

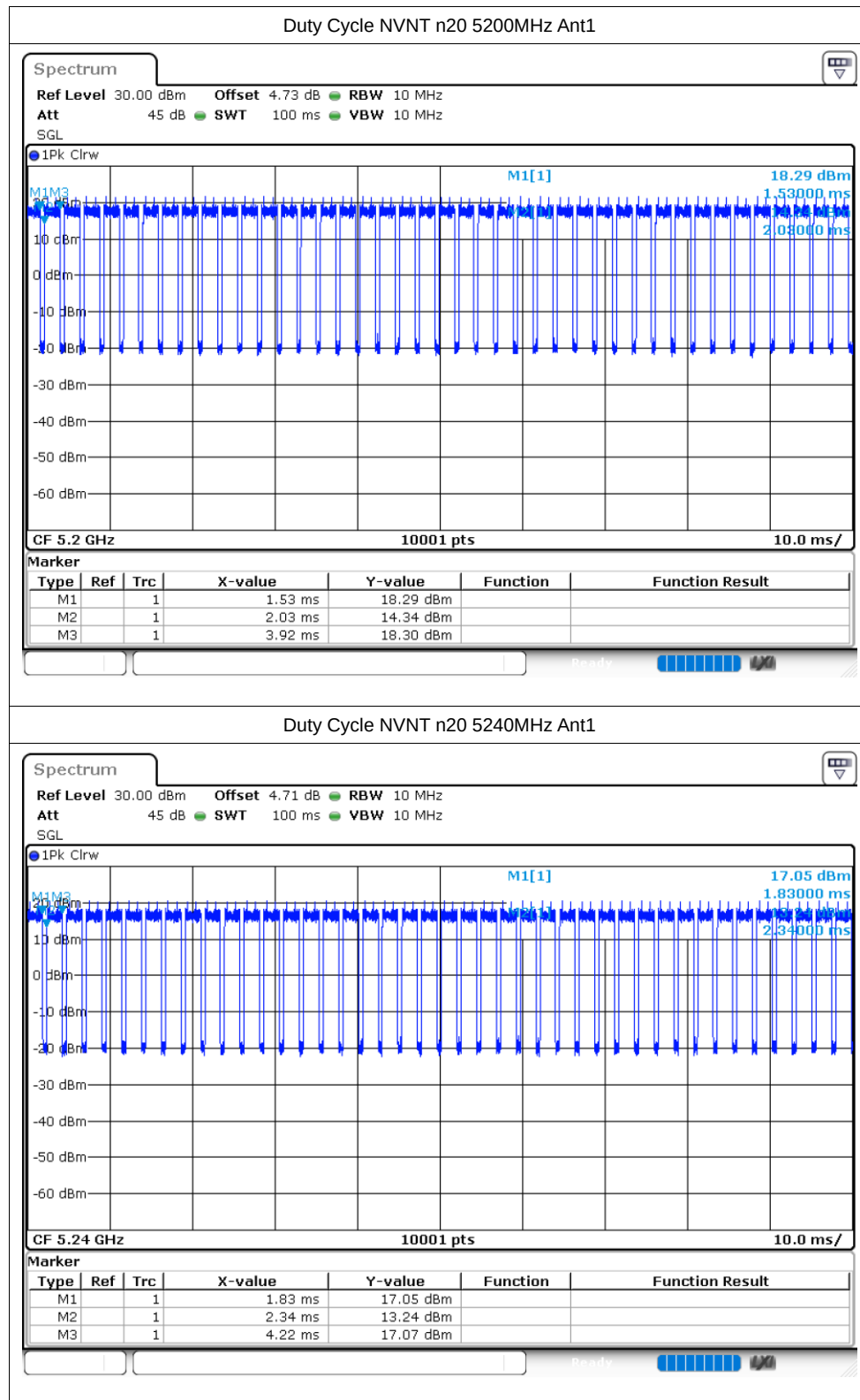
1Pk Clrw



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	170.0 μs	13.96 dBm		
M2		1	670.0 μs	14.02 dBm		
M3		1	2.69 ms	19.14 dBm		





Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted AVG Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.16	24	Pass
NVNT	a	5200	Ant1	11.77	24	Pass
NVNT	a	5240	Ant1	11.17	24	Pass
NVNT	n20	5180	Ant1	13.04	24	Pass
NVNT	n20	5200	Ant1	11.99	24	Pass
NVNT	n20	5240	Ant1	11.36	24	Pass

Note:

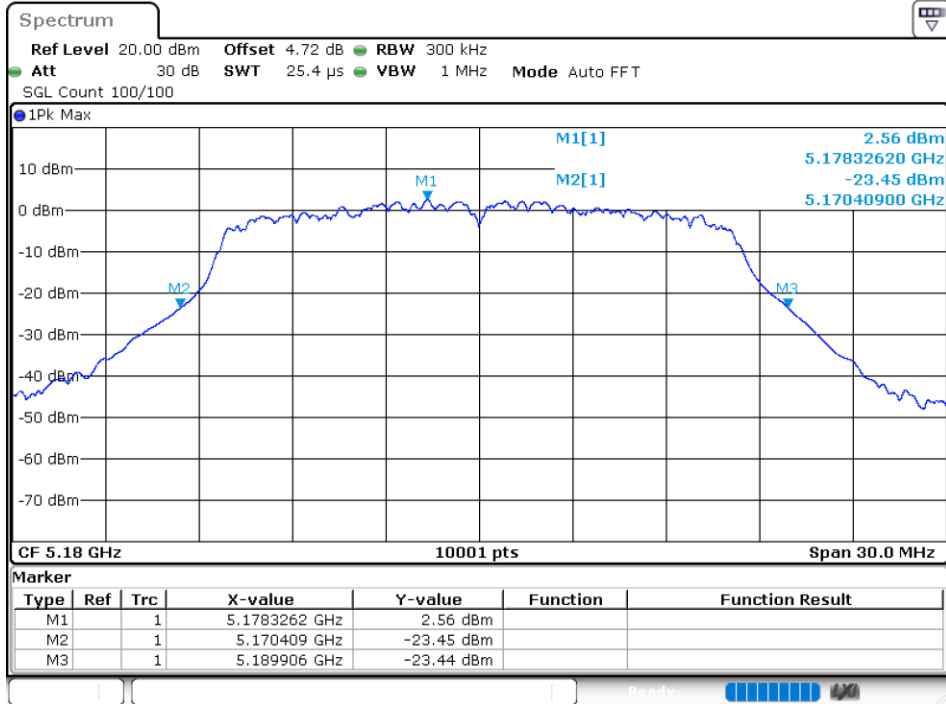
1. The conducted average power contains duty cycle factor.
2. Belong to Client device.

-26dB Bandwidth

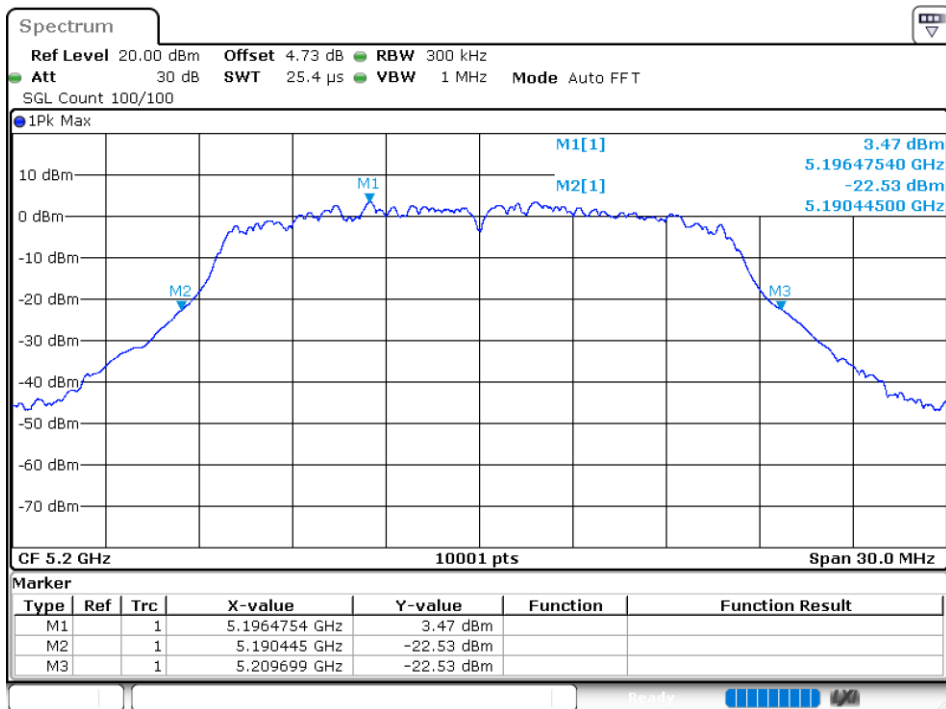
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.497	Report only
NVNT	a	5200	Ant1	19.254	Report only
NVNT	a	5240	Ant1	18.993	Report only
NVNT	n20	5180	Ant1	20.16	Report only
NVNT	n20	5200	Ant1	19.872	Report only
NVNT	n20	5240	Ant1	20.349	Report only

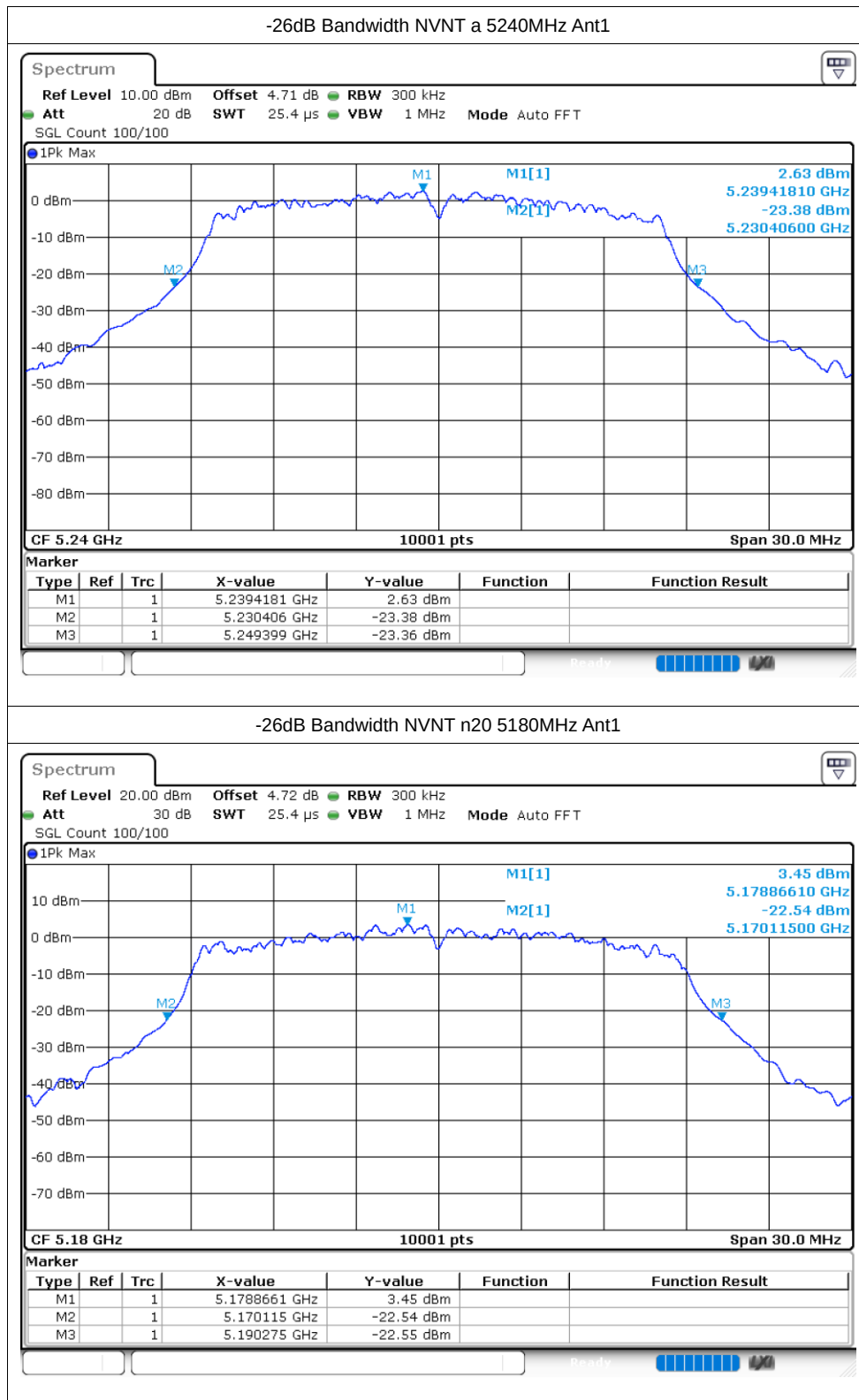
Test Graphs

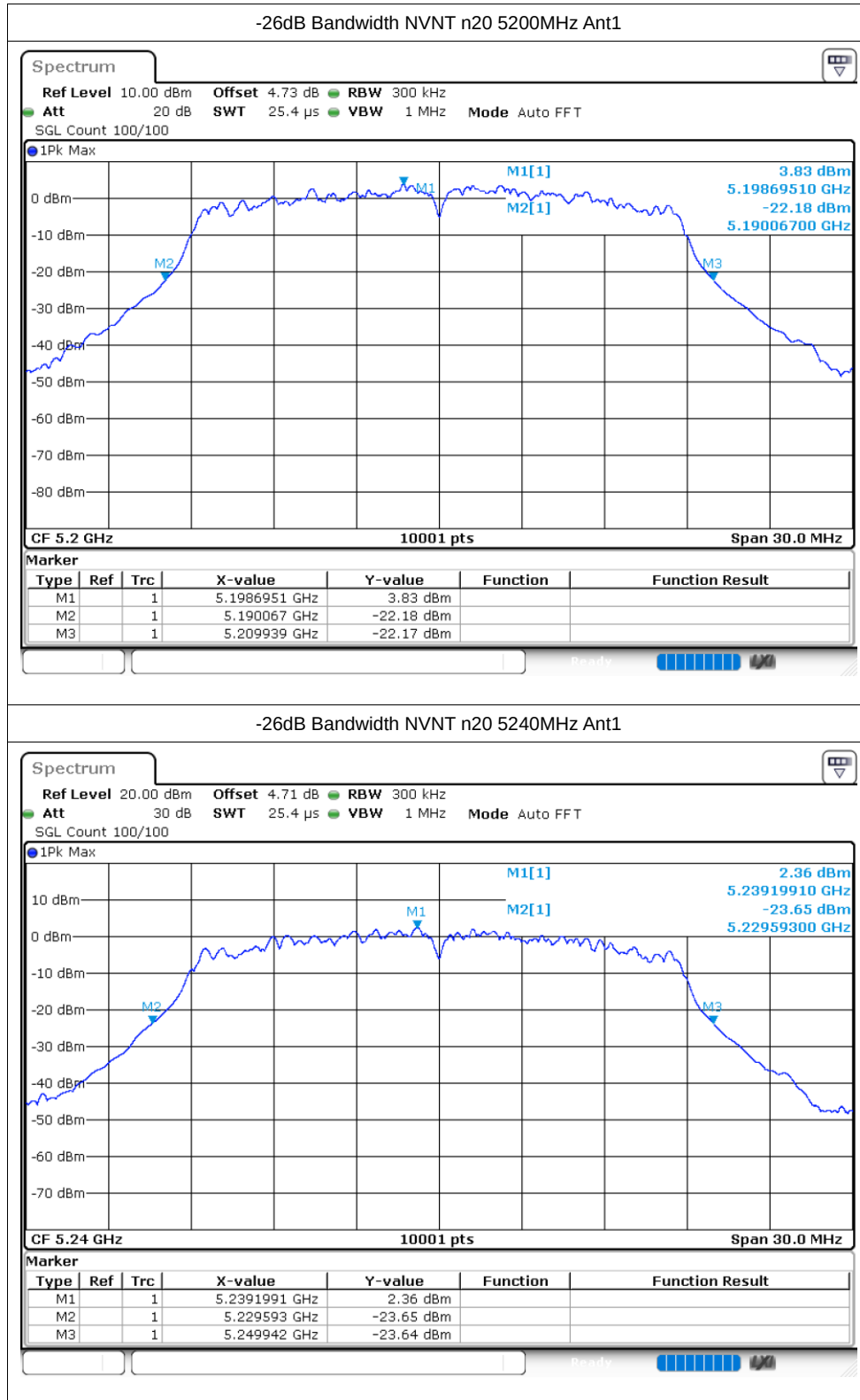
-26dB Bandwidth NVNT a 5180MHz Ant1



-26dB Bandwidth NVNT a 5200MHz Ant1





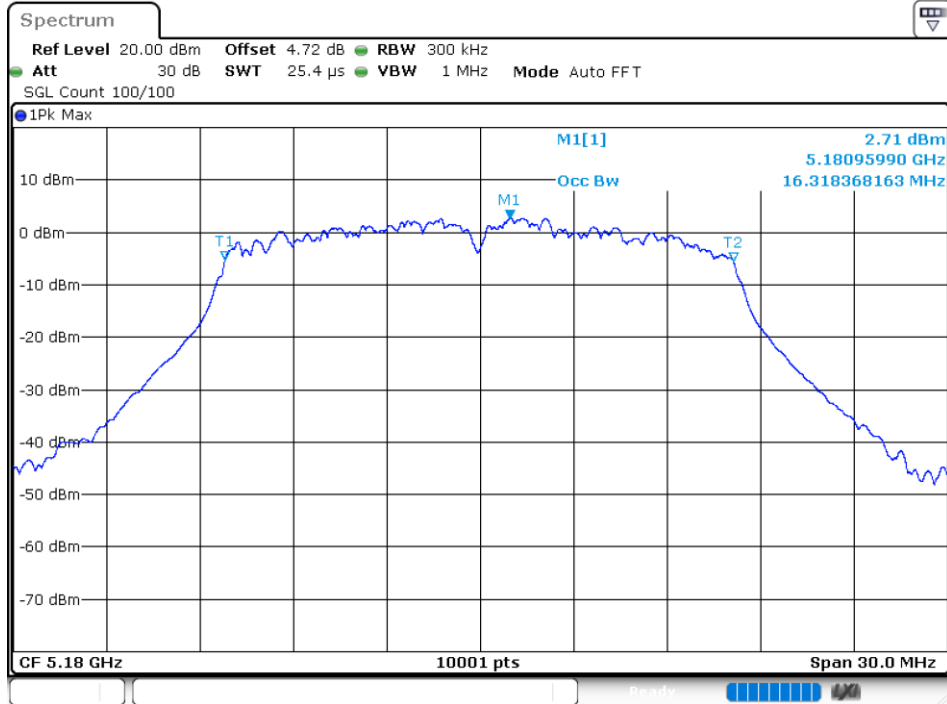


Occupied Channel Bandwidth

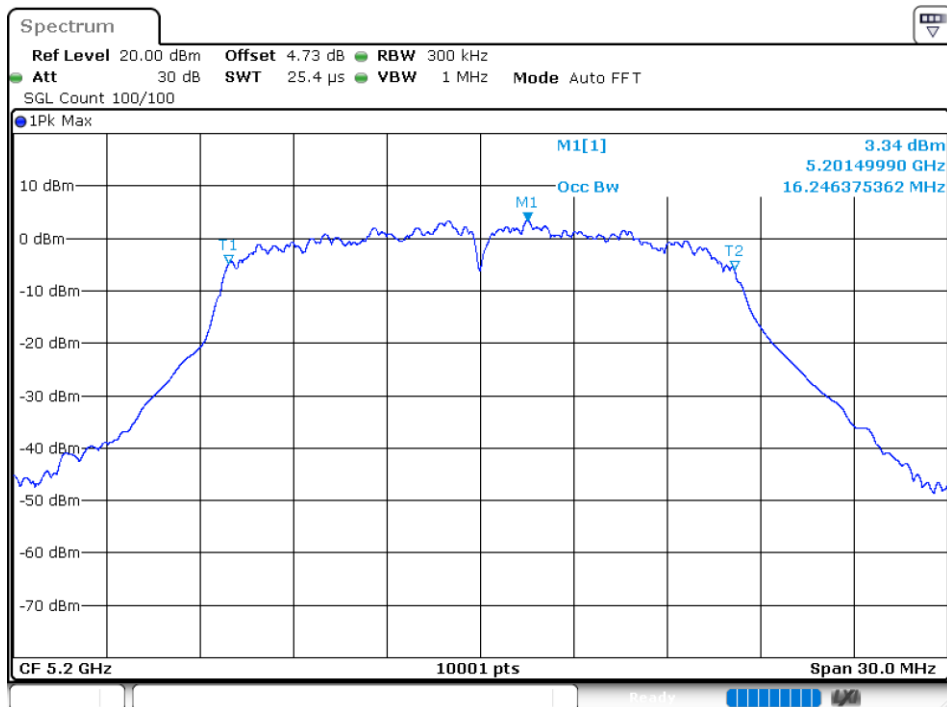
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.318
NVNT	a	5200	Ant1	16.246
NVNT	a	5240	Ant1	16.207
NVNT	n20	5180	Ant1	17.326
NVNT	n20	5200	Ant1	17.242
NVNT	n20	5240	Ant1	17.41

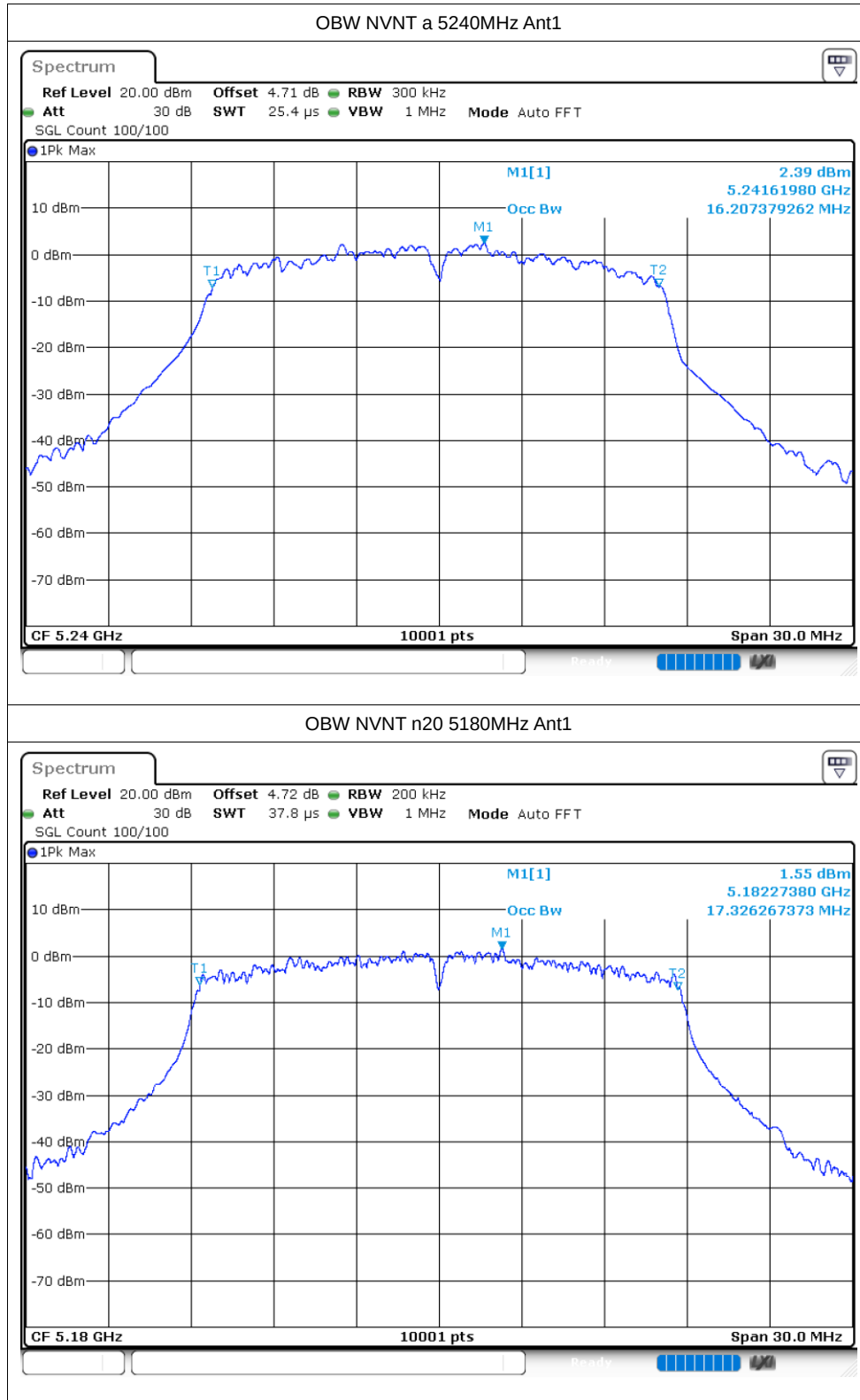
Test Graphs

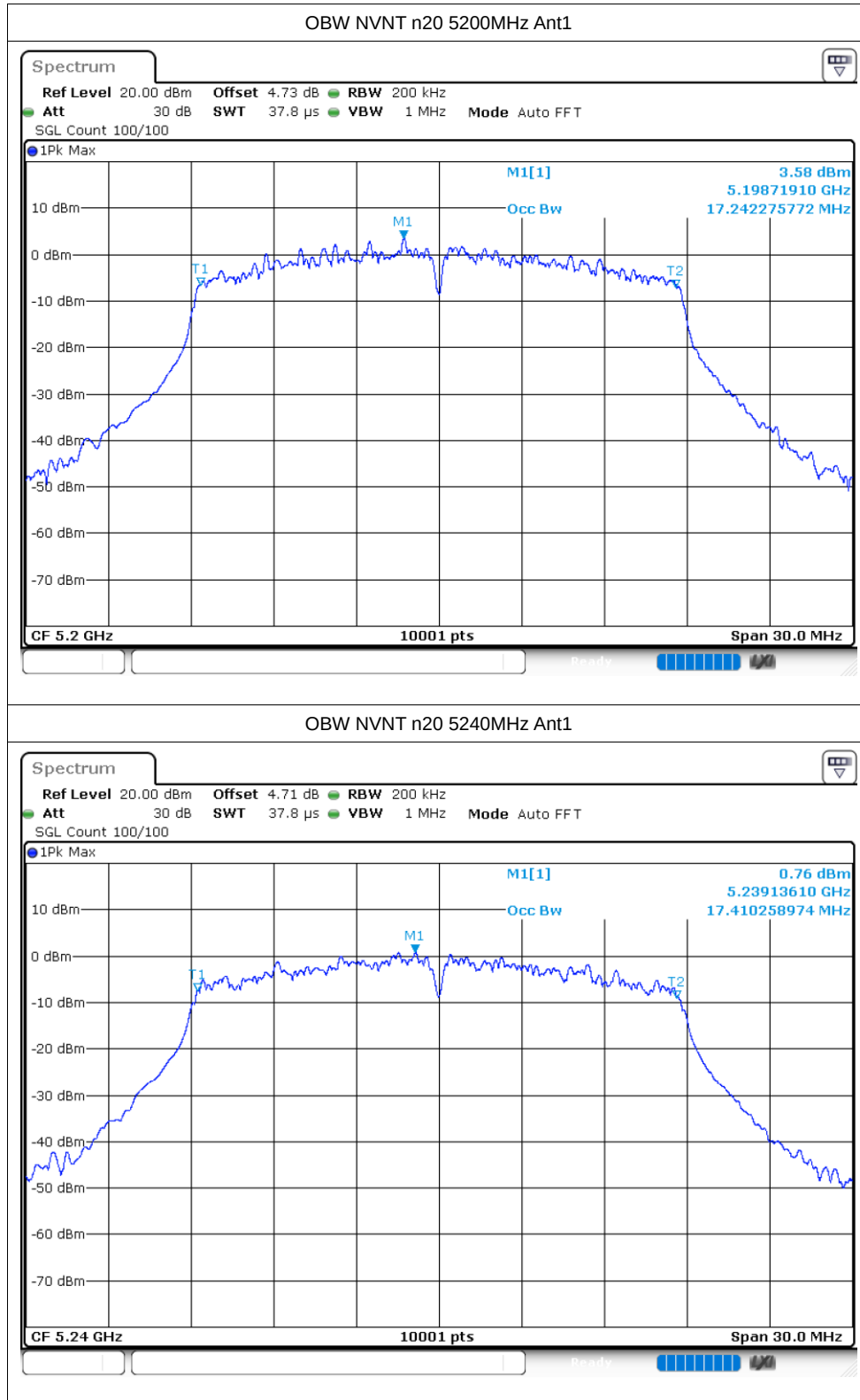
OBW NVNT a 5180MHz Ant1



OBW NVNT a 5200MHz Ant1







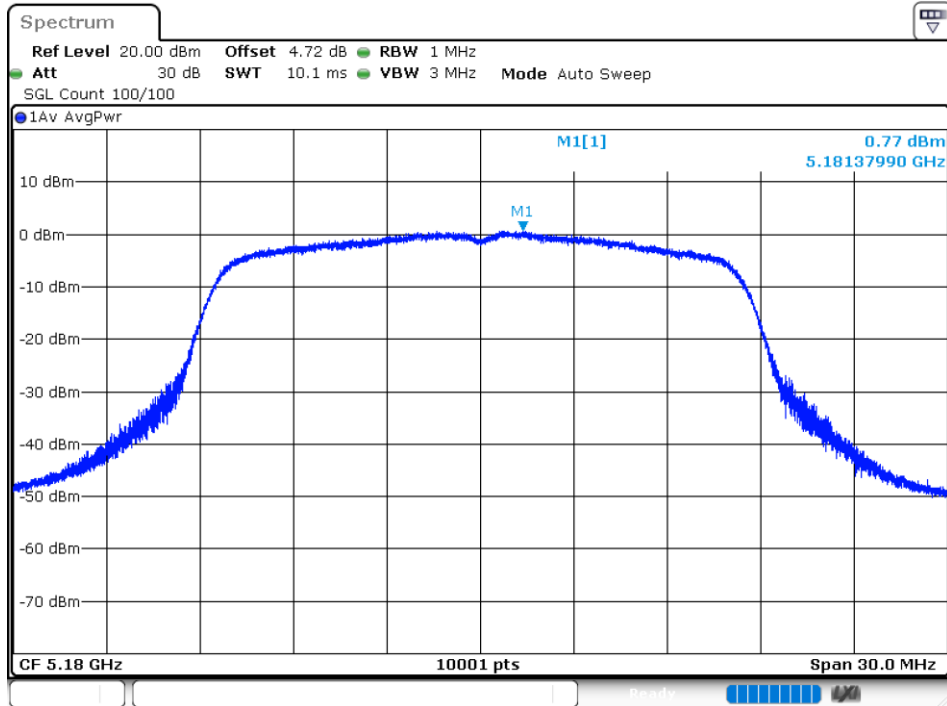
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	0.77	0.95	1.72	11	Pass
NVNT	a	5200	Ant1	1.21	0.95	2.16	11	Pass
NVNT	a	5240	Ant1	-0.27	0.94	0.67	11	Pass
NVNT	n20	5180	Ant1	0.51	1.01	1.52	11	Pass
NVNT	n20	5200	Ant1	1.07	1	2.07	11	Pass
NVNT	n20	5240	Ant1	-0.5	0.99	0.49	11	Pass

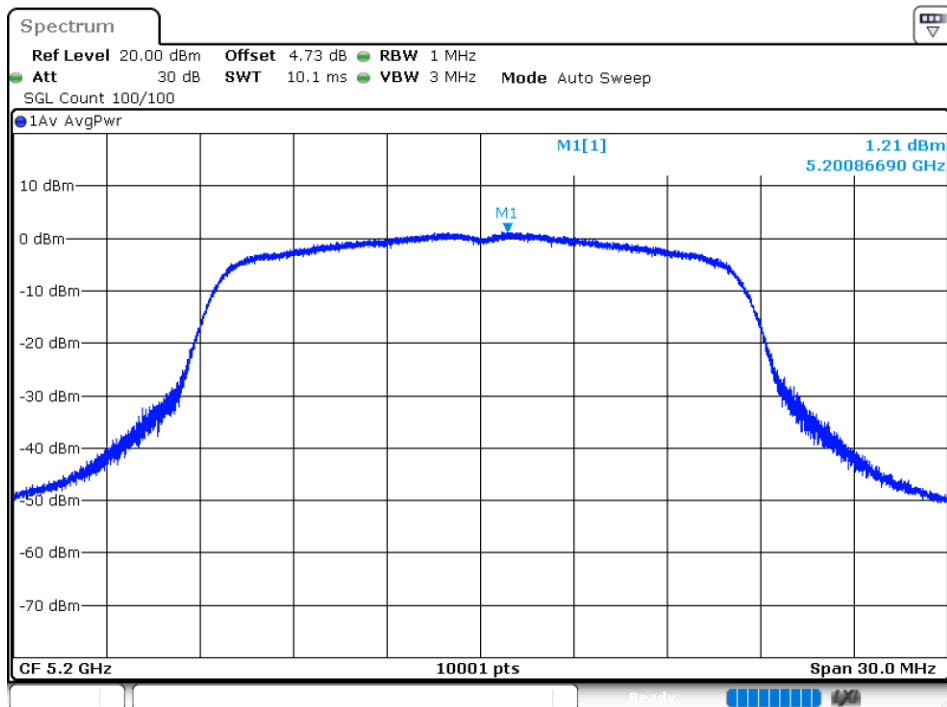
Note: Client devices

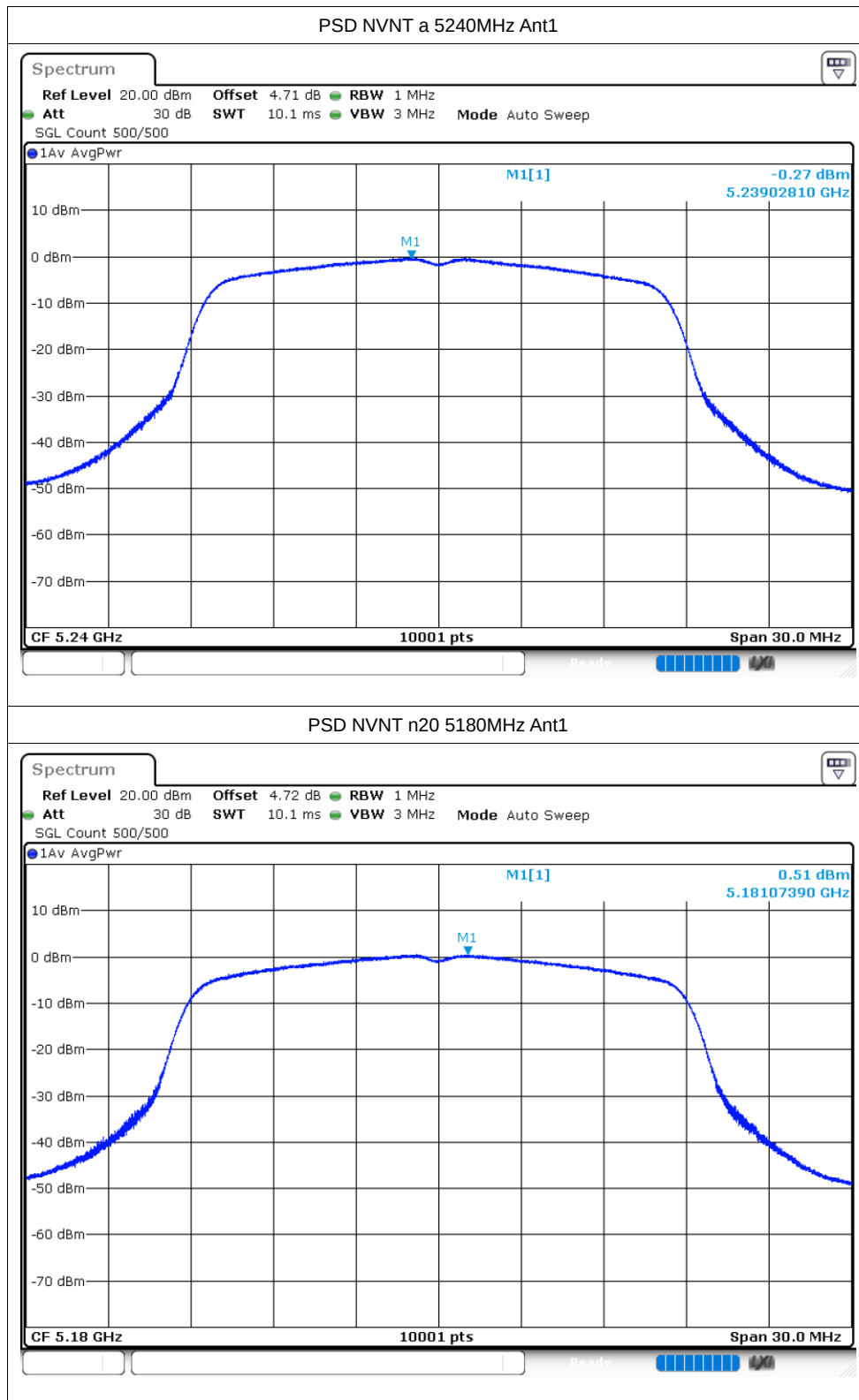
Test Graphs

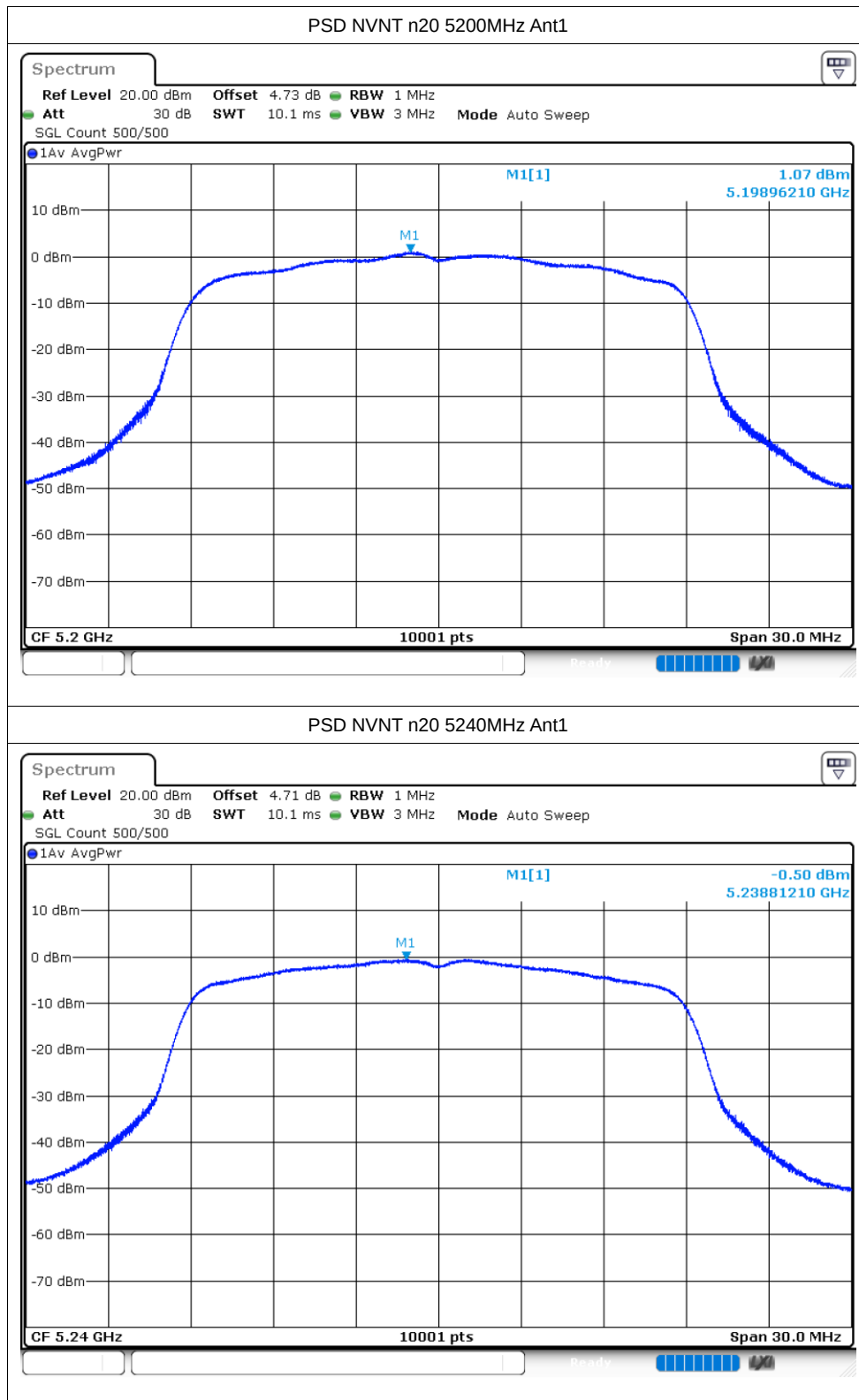
PSD NVNT a 5180MHz Ant1



PSD NVNT a 5200MHz Ant1





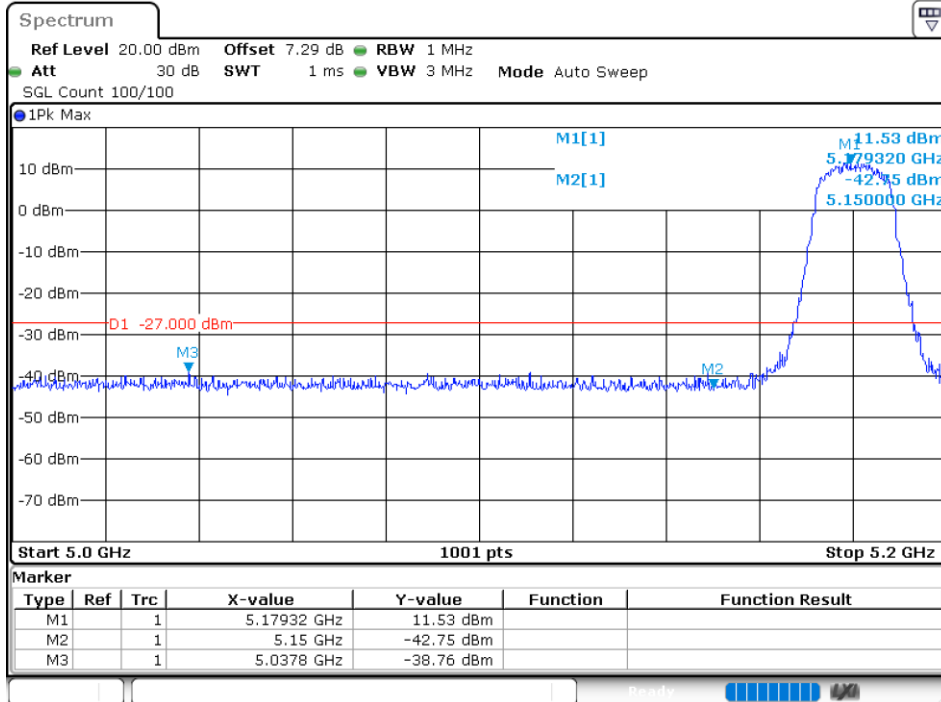


Band Edge

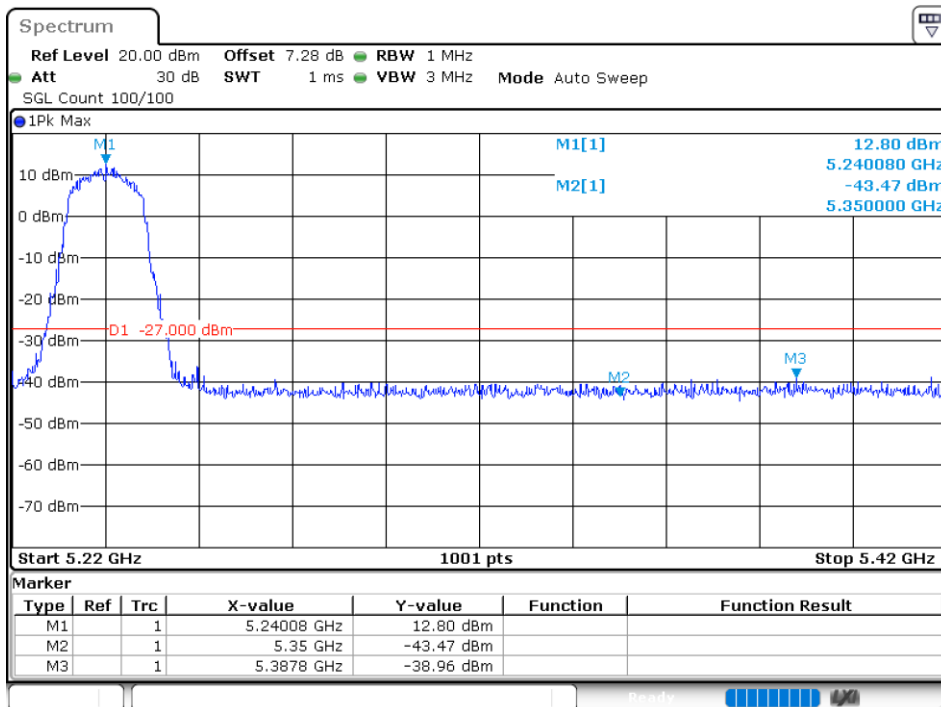
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-38.75	-27	Pass
NVNT	a	5240	Ant1	-38.95	-27	Pass
NVNT	n20	5180	Ant1	-38.94	-27	Pass
NVNT	n20	5240	Ant1	-38.98	-27	Pass

Test Graphs

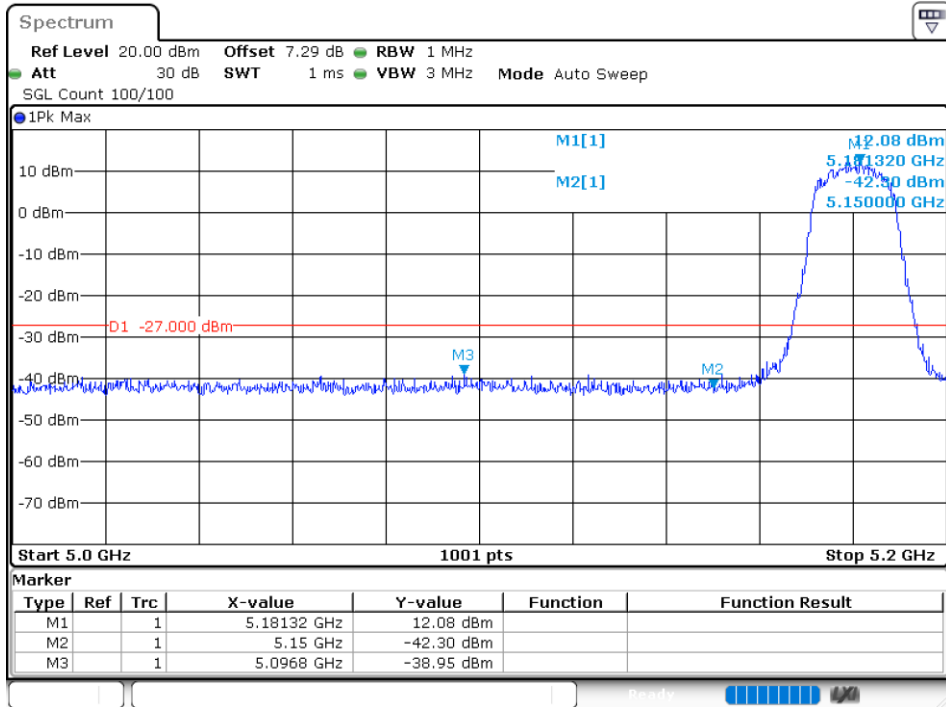
Band Edge NVNT a 5180MHz Low Ant1



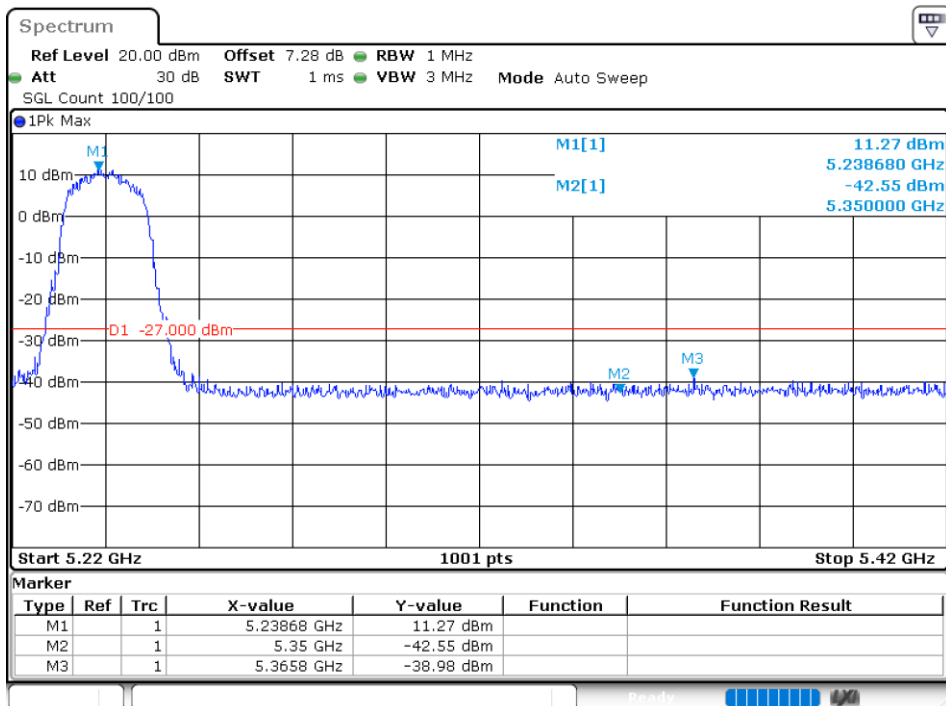
Band Edge NVNT a 5240MHz High Ant1



Band Edge NVNT n20 5180MHz Low Ant1



Band Edge NVNT n20 5240MHz High Ant1

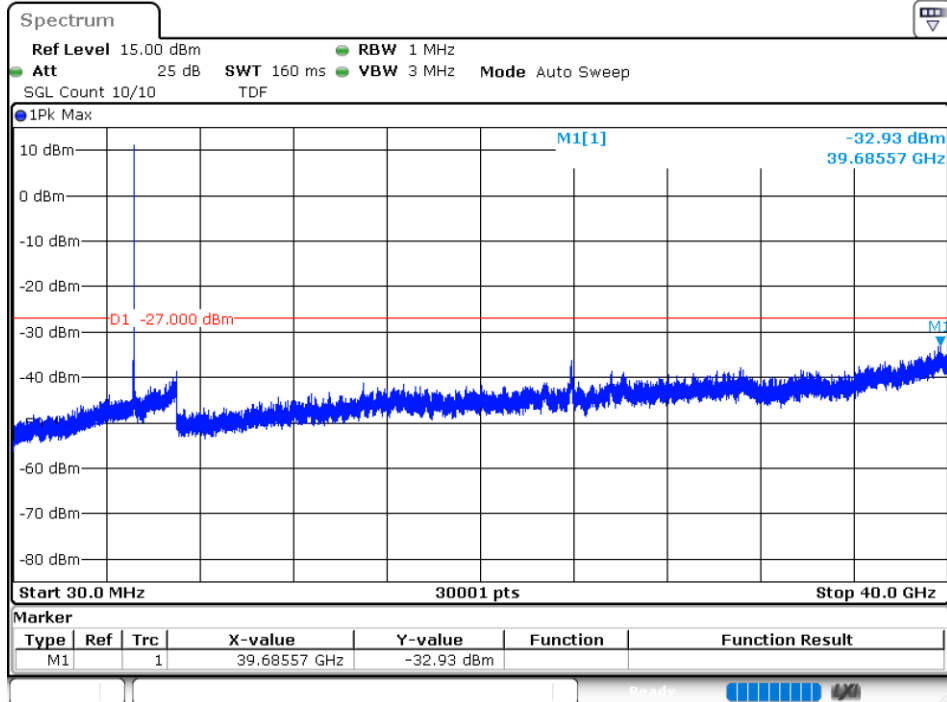


Conducted RF Spurious Emission

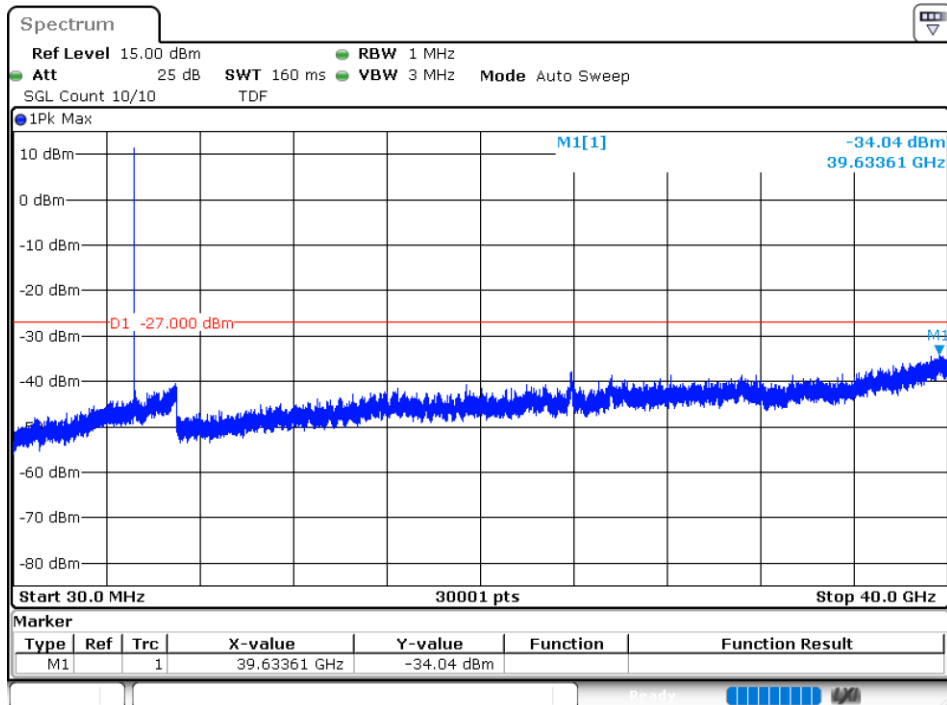
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-32.93	-27	Pass
NVNT	a	5200	Ant1	-34.04	-27	Pass
NVNT	a	5240	Ant1	-33.15	-27	Pass
NVNT	n20	5180	Ant1	-33.91	-27	Pass
NVNT	n20	5200	Ant1	-33.4	-27	Pass
NVNT	n20	5240	Ant1	-32.94	-27	Pass

Test Graphs

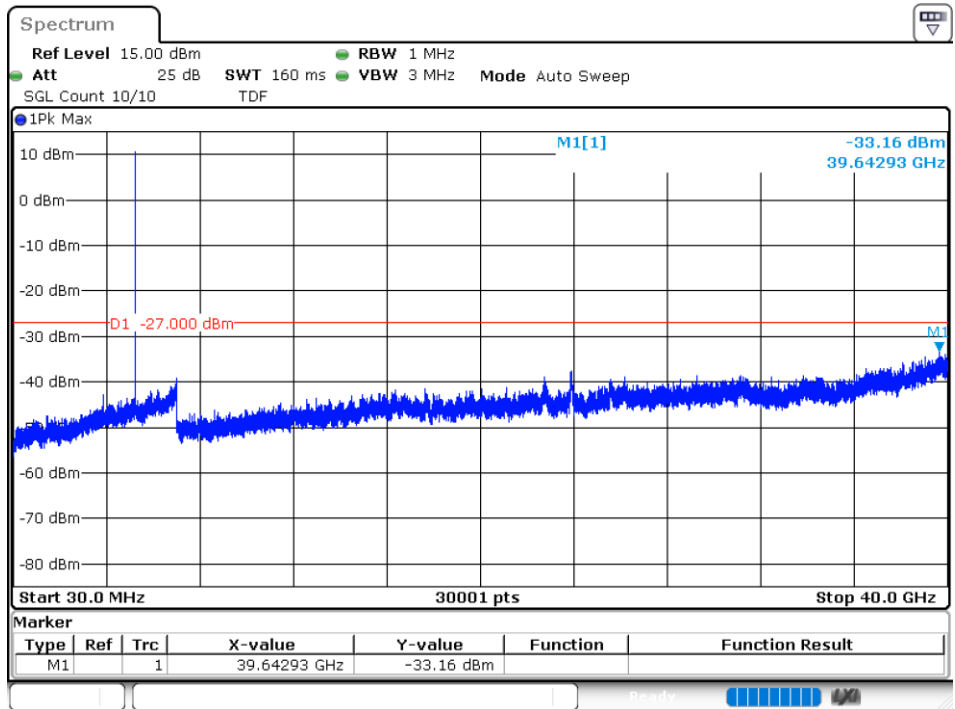
Tx. Spurious NVNT a 5180MHz Ant1 Emission



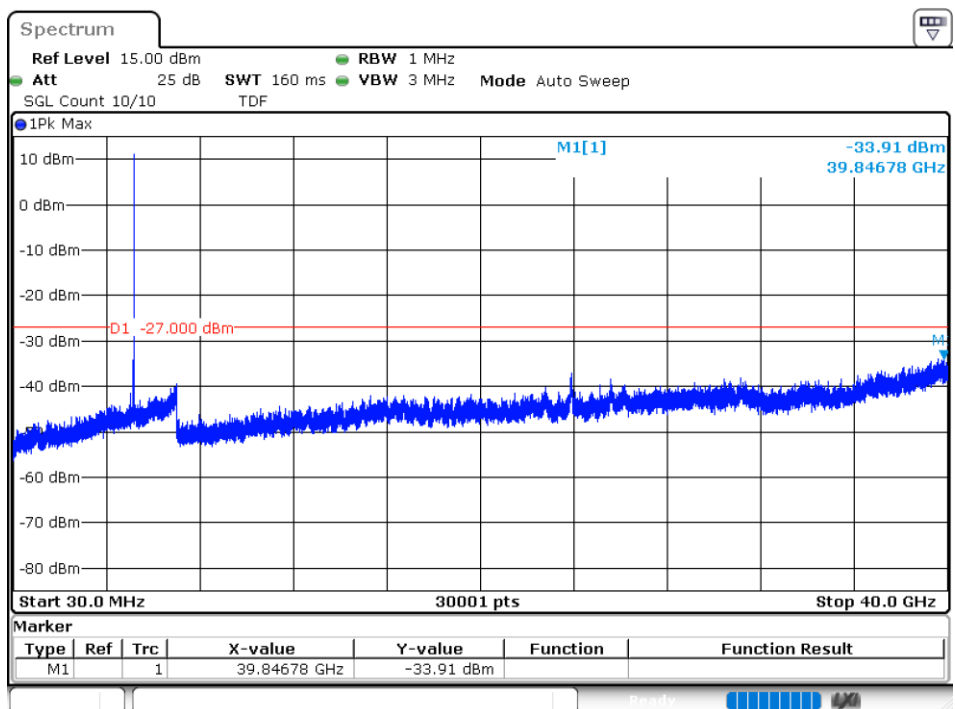
Tx. Spurious NVNT a 5200MHz Ant1 Emission

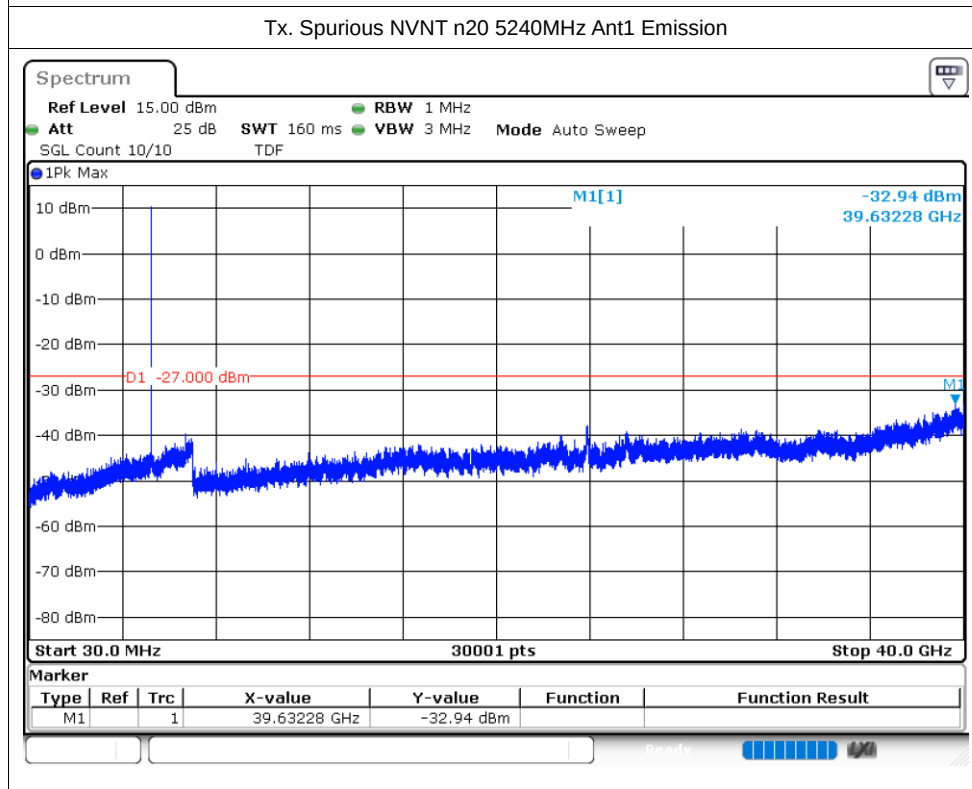
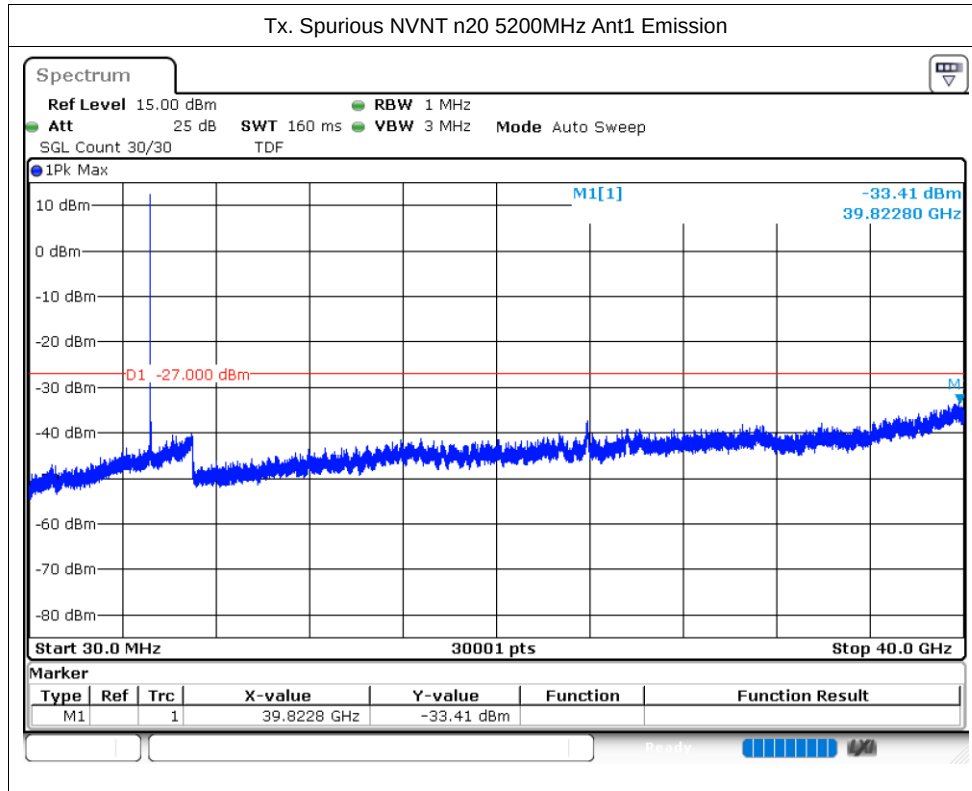


Tx. Spurious NVNT a 5240MHz Ant1 Emission



Tx. Spurious NVNT n20 5180MHz Ant1 Emission





5.3G WIFI

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	80.34	0.95	0.5
NVNT	a	5280	Ant1	80.31	0.95	0.49
NVNT	a	5320	Ant1	80.8	0.93	0.5
NVNT	n20	5260	Ant1	79.32	1.01	0.53
NVNT	n20	5280	Ant1	79.32	1.01	0.53
NVNT	n20	5320	Ant1	79.35	1	0.53

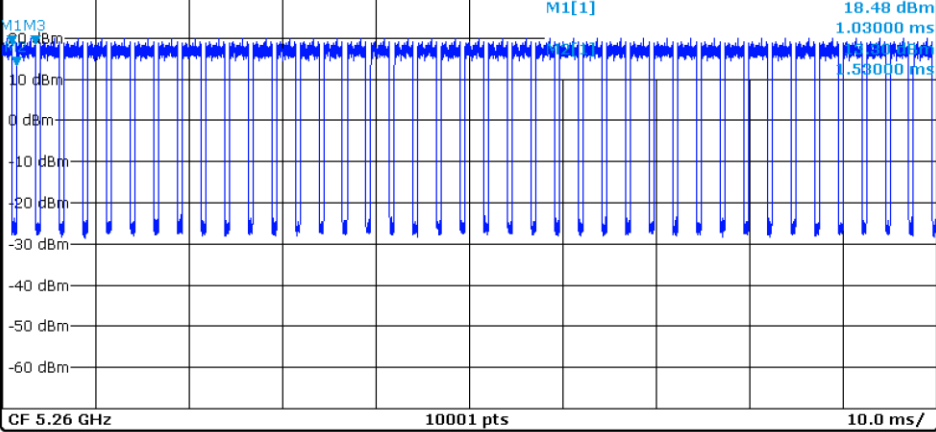
Test Graphs

Duty Cycle NVNT a 5260MHz Ant1

Spectrum

Ref Level 30.00 dBm Offset 4.59 dB RBW 10 MHz
Att 40 dB SWT 100 ms VBW 10 MHz
SGL

1Pk Clrw



Marker

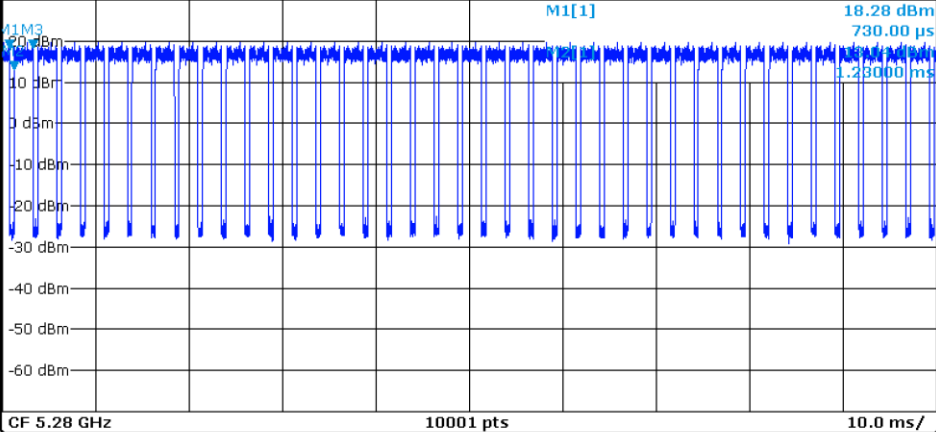
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.03 ms	18.48 dBm		
M2		1	1.53 ms	13.30 dBm		
M3		1	3.55 ms	18.49 dBm		

Duty Cycle NVNT a 5280MHz Ant1

Spectrum

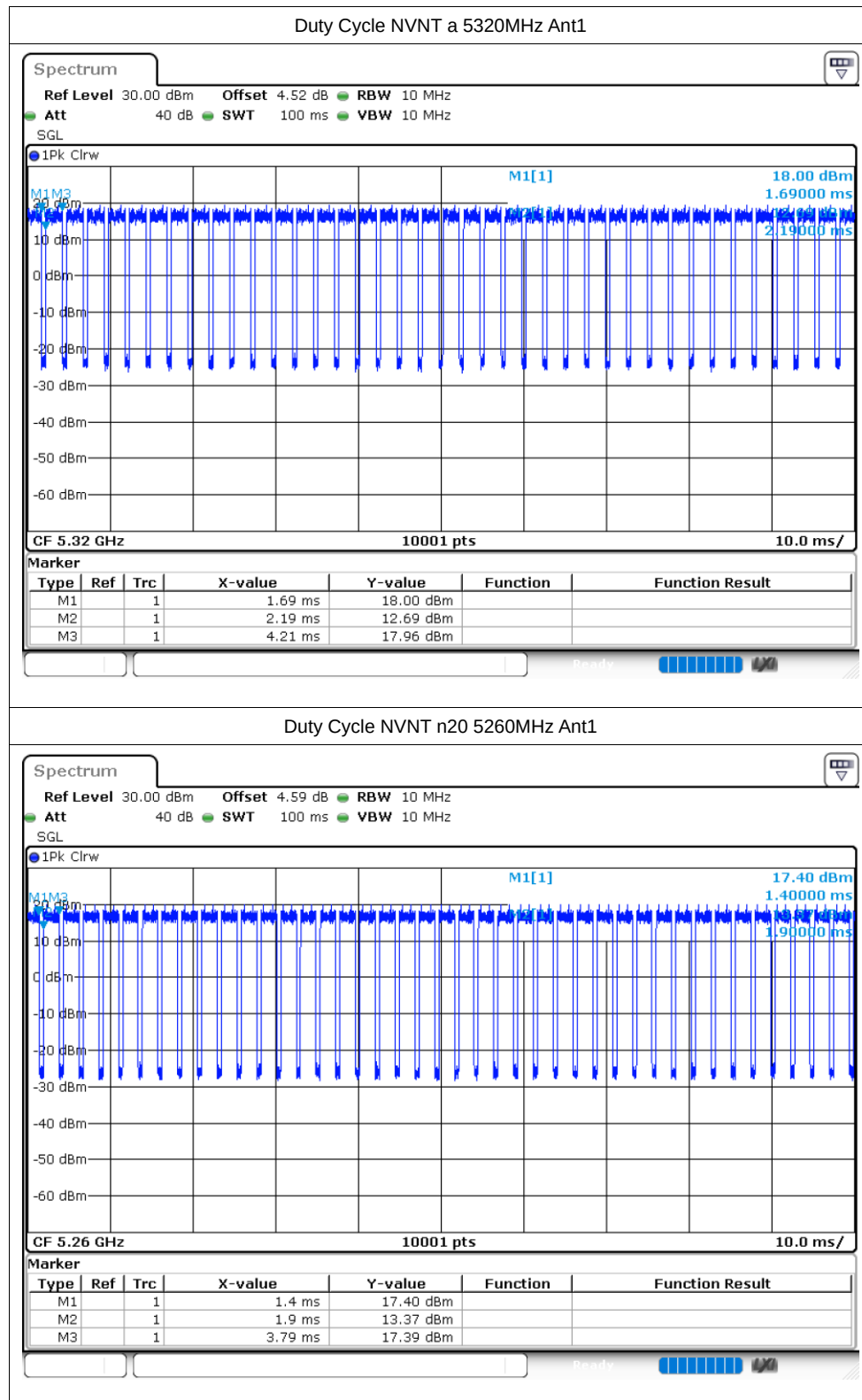
Ref Level 30.00 dBm Offset 4.56 dB RBW 10 MHz
Att 40 dB SWT 100 ms VBW 10 MHz
SGL

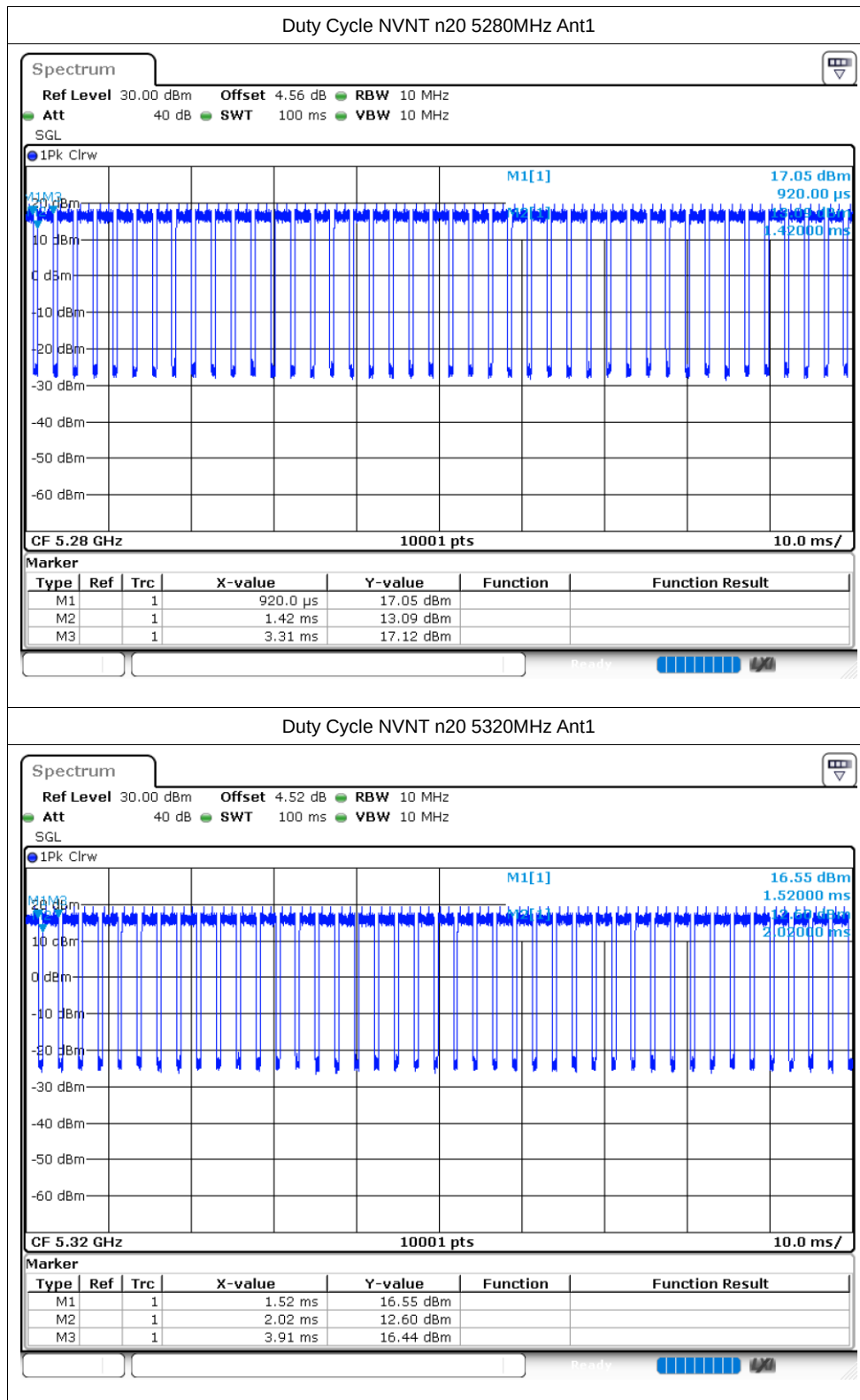
1Pk Clrw



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	730.0 μs	18.28 dBm		
M2		1	1.23 ms	13.04 dBm		
M3		1	3.26 ms	18.31 dBm		





Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	12.25	24	Pass
NVNT	a	5280	Ant1	12.17	24	Pass
NVNT	a	5320	Ant1	12.39	24	Pass
NVNT	n20	5260	Ant1	12.05	24	Pass
NVNT	n20	5280	Ant1	12.3	24	Pass
NVNT	n20	5320	Ant1	12.31	24	Pass

Note:

1. The conducted average power contains duty cycle factor.
2. The limit base lesser of 250 mW or $11 + 10 \log B$, dBm
where B is the 26 dB emission bandwidth in megahertz

-26dB Bandwidth

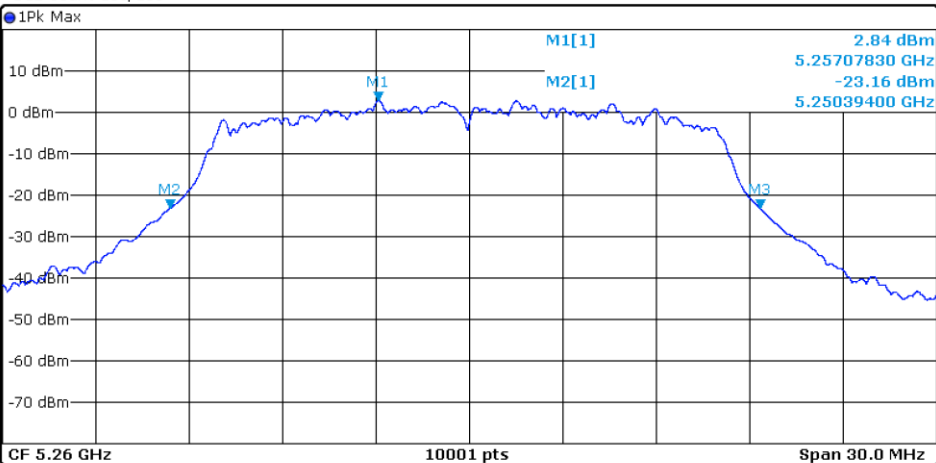
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	18.936	Report only
NVNT	a	5280	Ant1	19.128	Report only
NVNT	a	5320	Ant1	19.704	Report only
NVNT	n20	5260	Ant1	19.602	Report only
NVNT	n20	5280	Ant1	20.01	Report only
NVNT	n20	5320	Ant1	19.899	Report only

Test Graphs

-26dB Bandwidth NVNT a 5260MHz Ant1

Spectrum

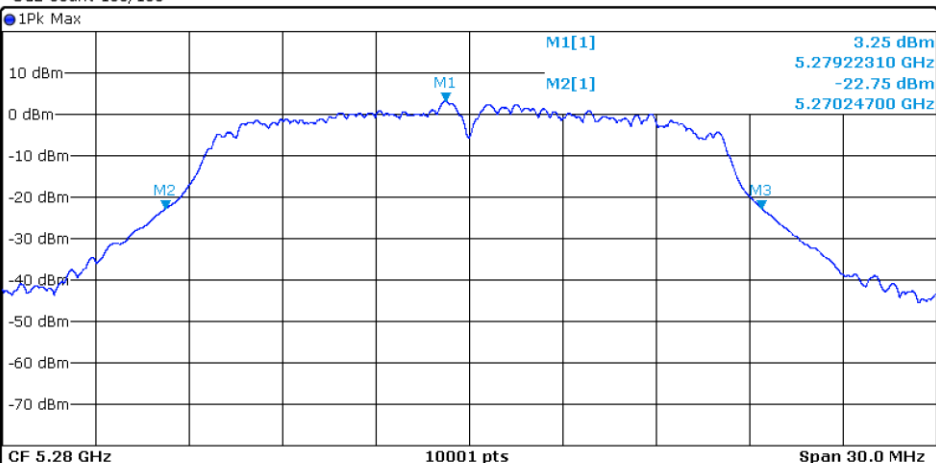
Ref Level 20.00 dBm Offset 4.59 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100



-26dB Bandwidth NVNT a 5280MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.56 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

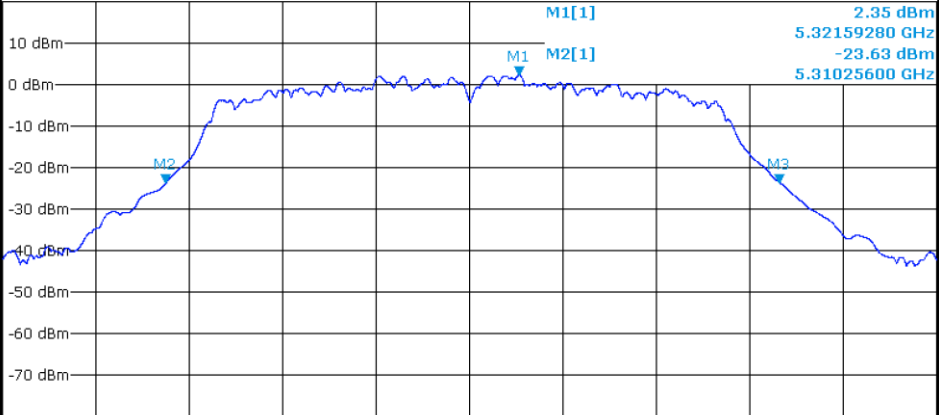


-26dB Bandwidth NVNT a 5320MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.52 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

1Pk Max



CF 5.32 GHz 10001 pts Span 30.0 MHz

Marker

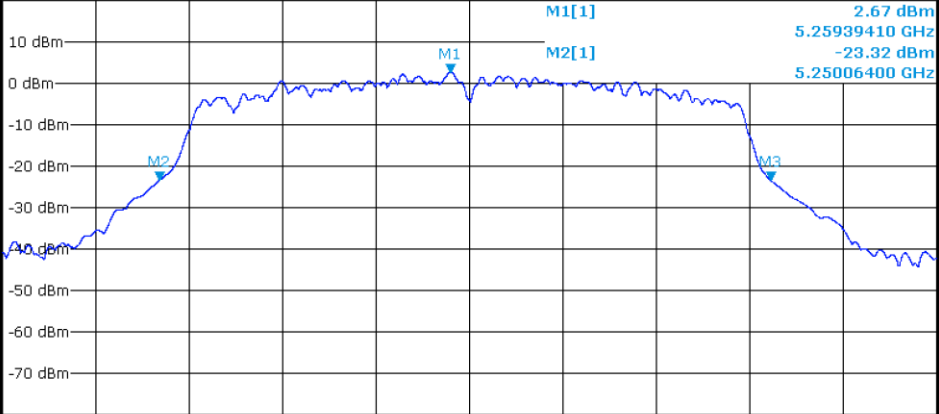
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.3215928 GHz	2.35 dBm		
M2		1	5.310256 GHz	-23.63 dBm		
M3		1	5.32996 GHz	-23.64 dBm		

-26dB Bandwidth NVNT n20 5260MHz Ant1

Spectrum

Ref Level 20.00 dBm Offset 4.59 dB RBW 300 kHz
Att 35 dB SWT 25.4 μ s VBW 1 MHz Mode Auto FFT
SGL Count 100/100

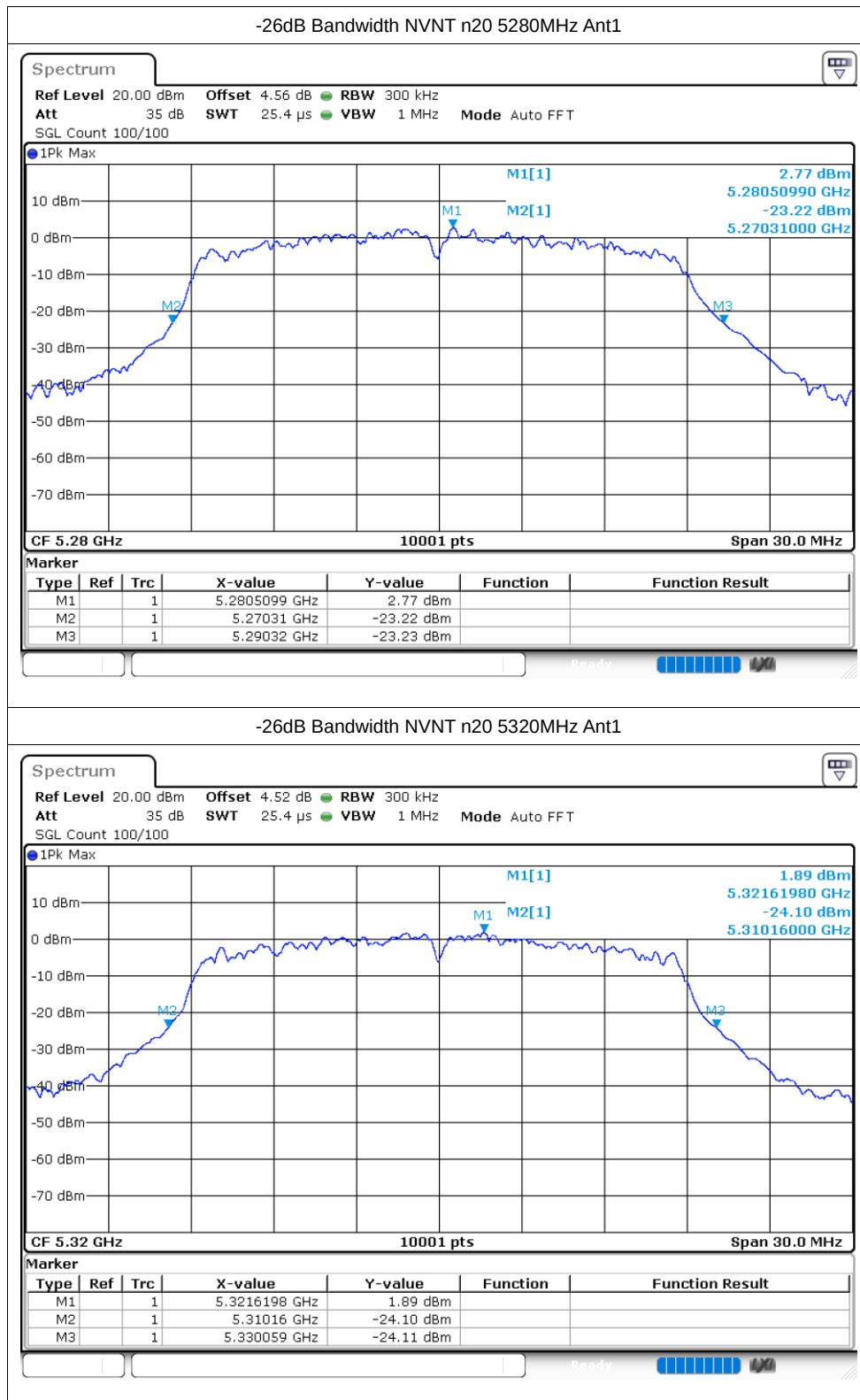
1Pk Max



CF 5.26 GHz 10001 pts Span 30.0 MHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.2593941 GHz	2.67 dBm		
M2		1	5.250064 GHz	-23.32 dBm		
M3		1	5.269666 GHz	-23.32 dBm		

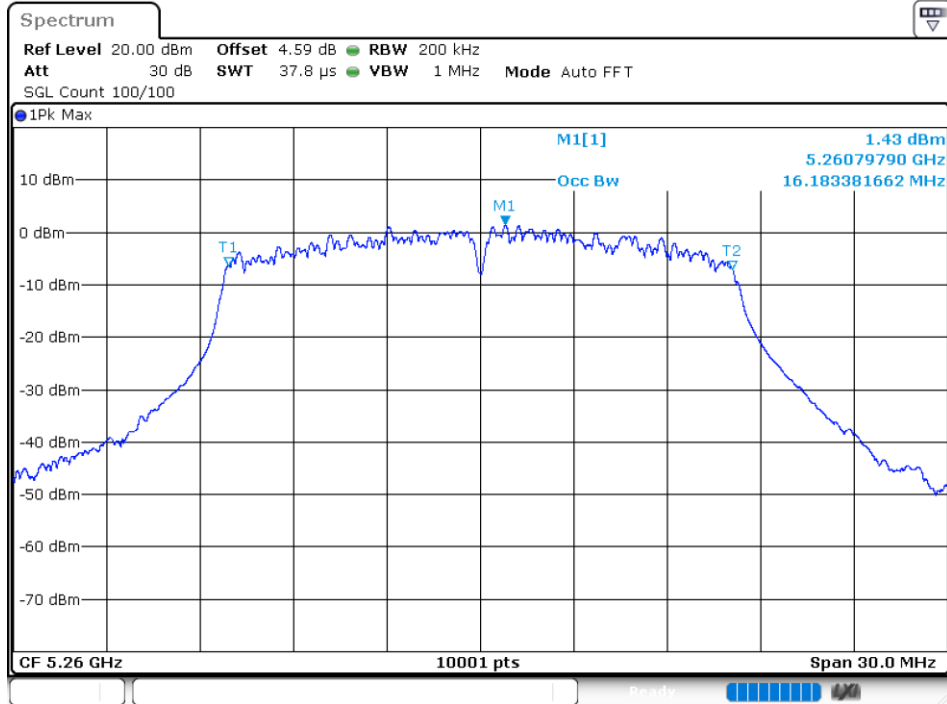


Occupied Channel Bandwidth

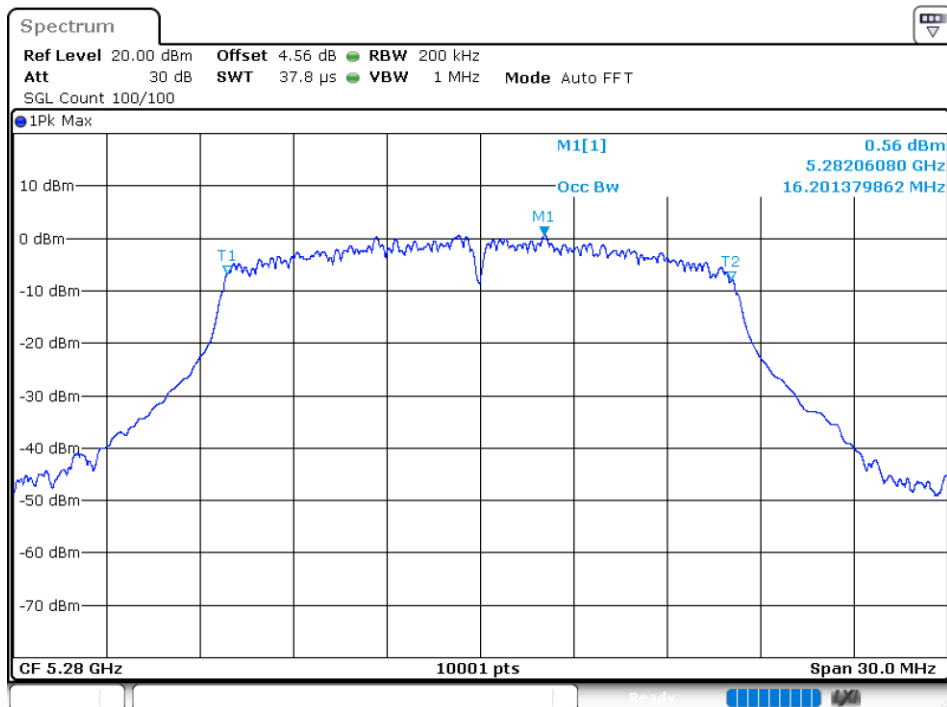
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.183
NVNT	a	5280	Ant1	16.201
NVNT	a	5320	Ant1	16.183
NVNT	n20	5260	Ant1	17.281
NVNT	n20	5280	Ant1	17.323
NVNT	n20	5320	Ant1	17.413

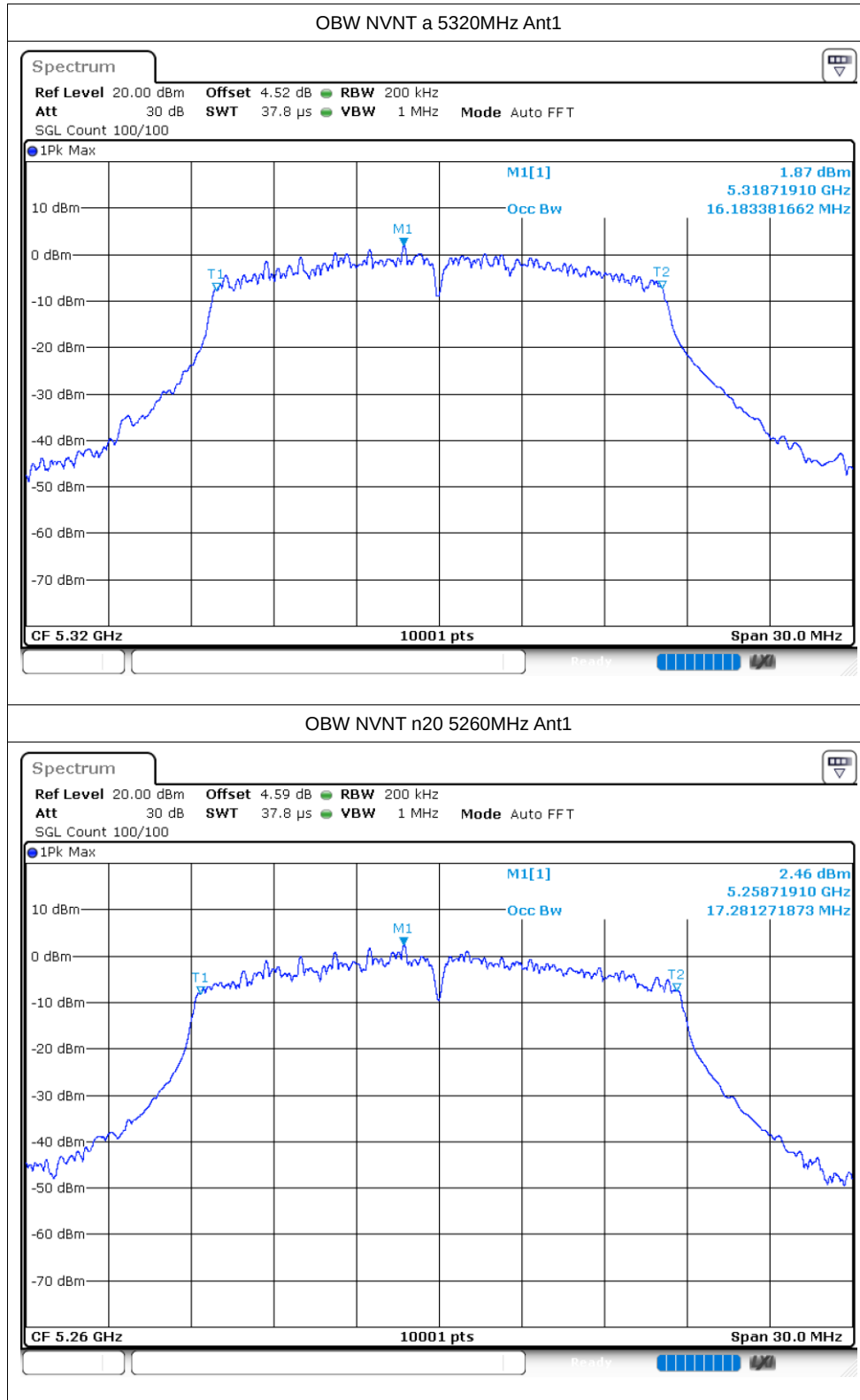
Test Graphs

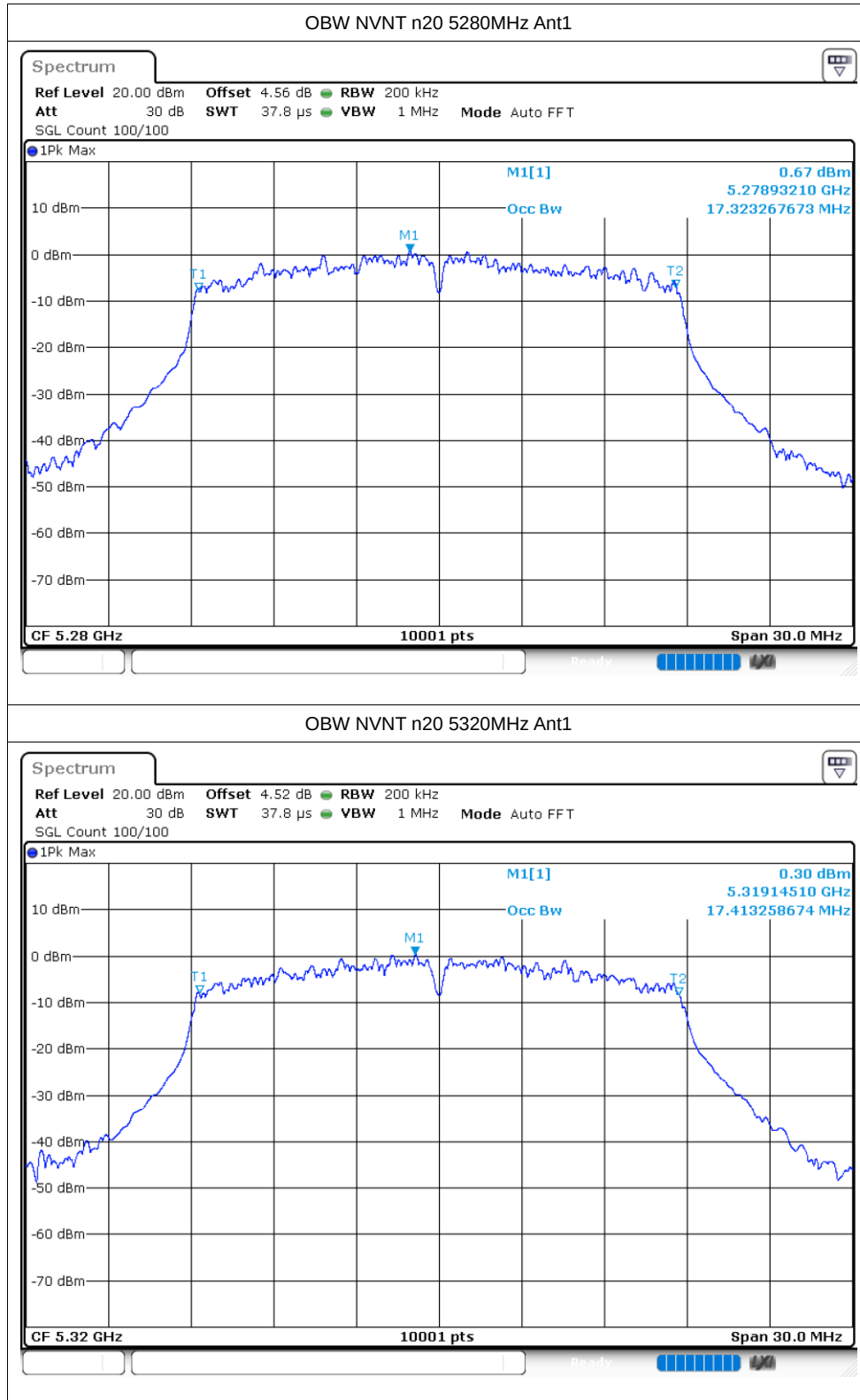
OBW NVNT a 5260MHz Ant1



OBW NVNT a 5280MHz Ant1





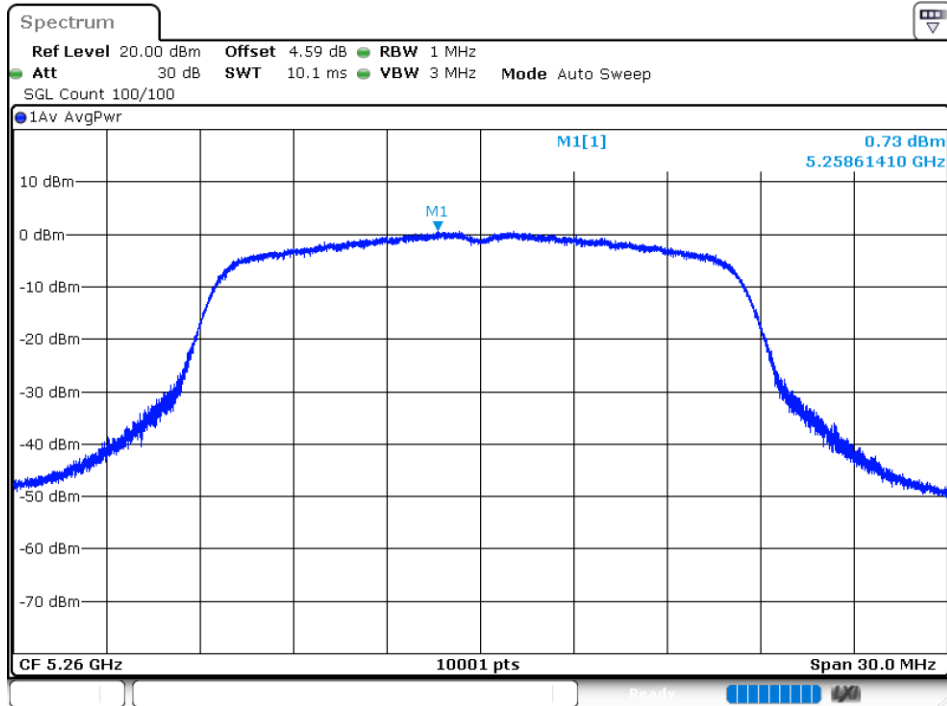


Maximum Power Spectral Density Level

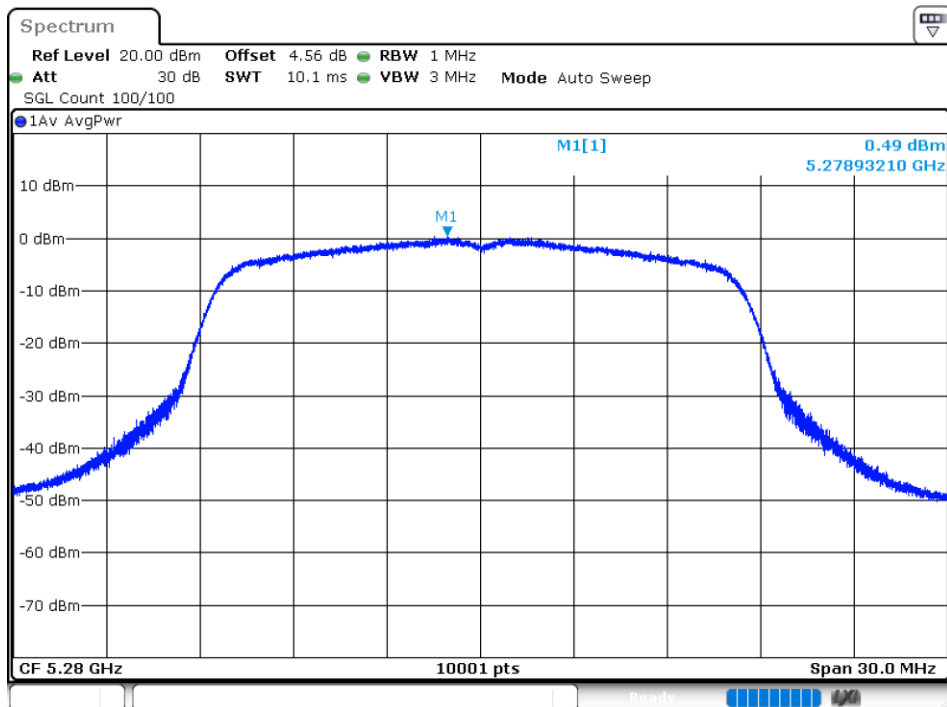
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant1	0.73	0.95	1.68	11	Pass
NVNT	a	5280	Ant1	0.49	0.95	1.44	11	Pass
NVNT	a	5320	Ant1	-0.01	0.93	0.92	11	Pass
NVNT	n20	5260	Ant1	0.48	1.01	1.49	11	Pass
NVNT	n20	5280	Ant1	0.23	1.01	1.24	11	Pass
NVNT	n20	5320	Ant1	-0.46	1	0.54	11	Pass

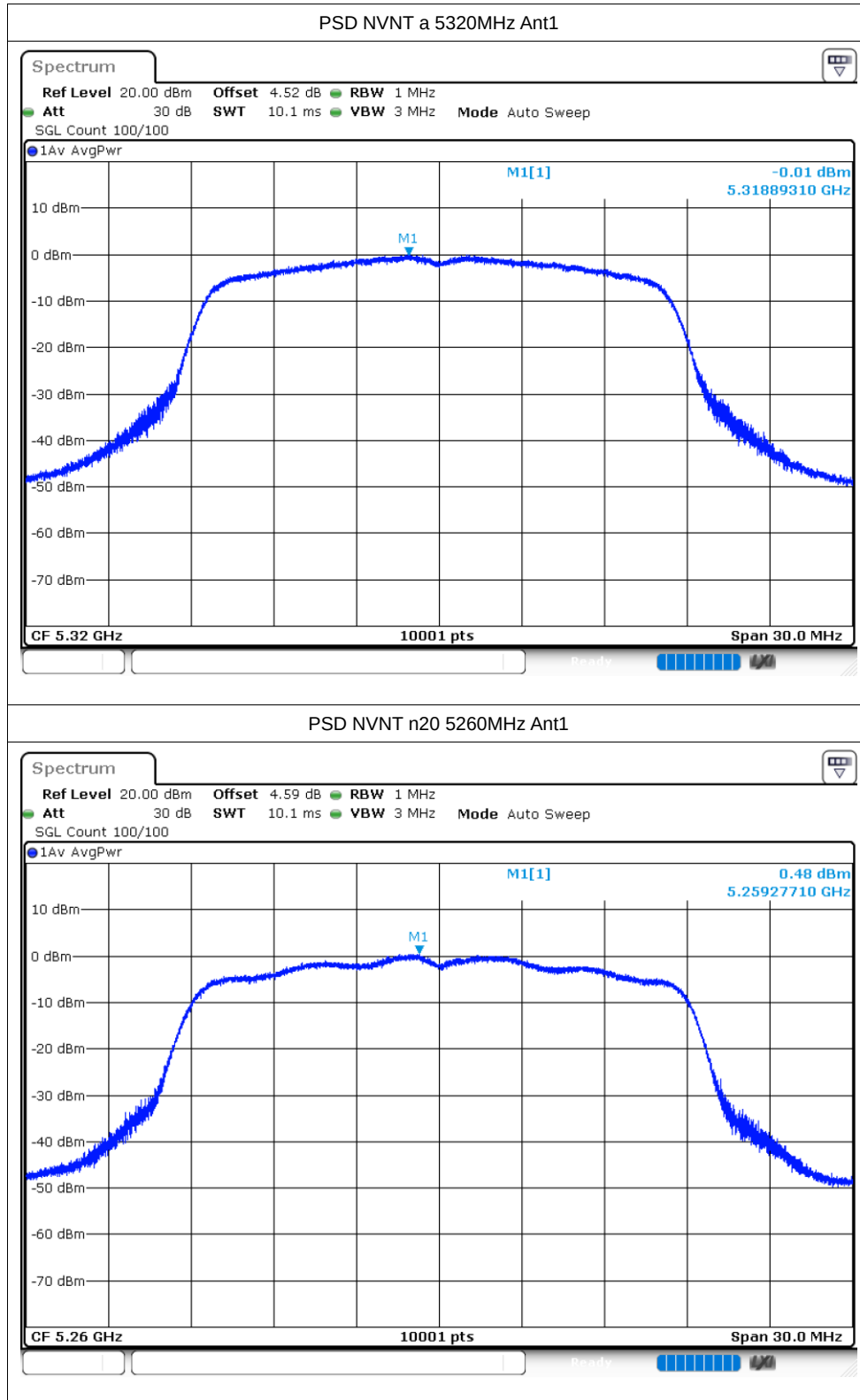
Test Graphs

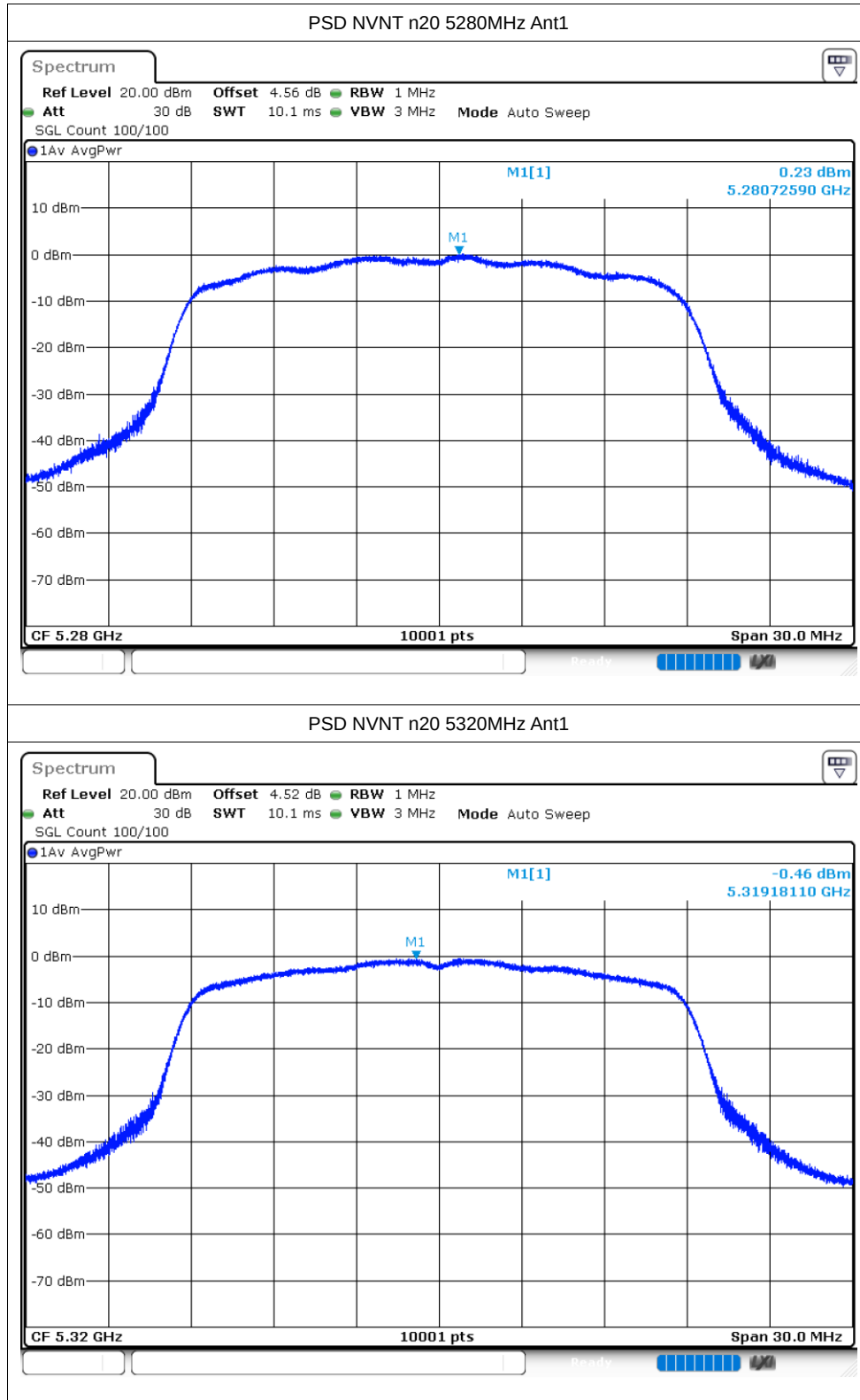
PSD NVNT a 5260MHz Ant1



PSD NVNT a 5280MHz Ant1







Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-40.04	-27	Pass
NVNT	a	5320	Ant1	-38.39	-27	Pass
NVNT	n20	5260	Ant1	-39.76	-27	Pass
NVNT	n20	5320	Ant1	-39.16	-27	Pass

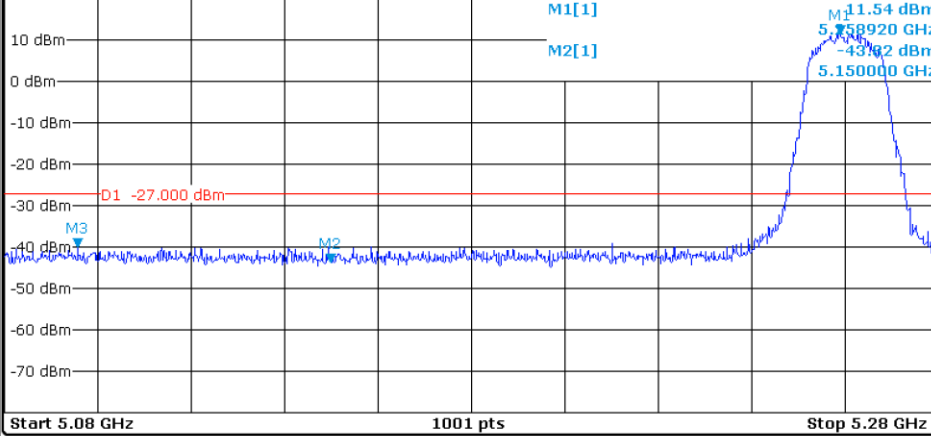
Test Graphs

Band Edge NVNT a 5260MHz Low Ant1

Spectrum

Ref Level 20.00 dBm Offset 7.14 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

1Pk Max



Marker

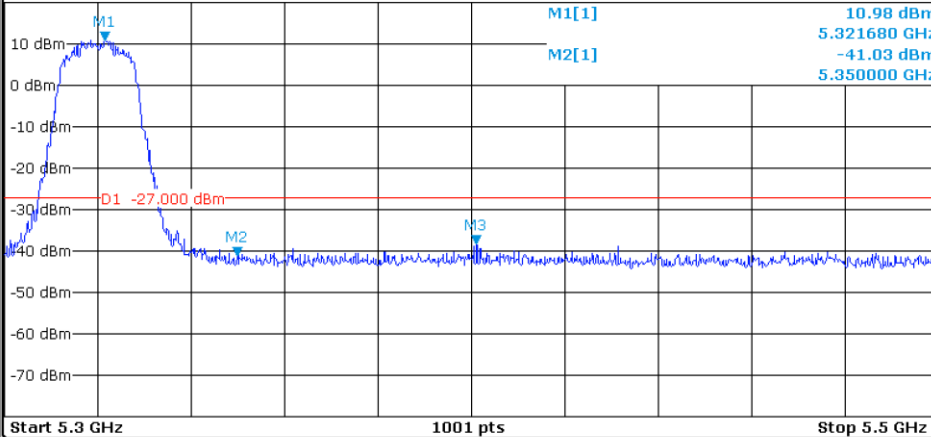
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.25892 GHz	-11.54 dBm		
M2	1		5.15 GHz	-43.82 dBm		
M3	1		5.0958 GHz	-40.04 dBm		

Band Edge NVNT a 5320MHz High Ant1

Spectrum

Ref Level 20.00 dBm Offset 7.07 dB RBW 1 MHz
Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 100/100

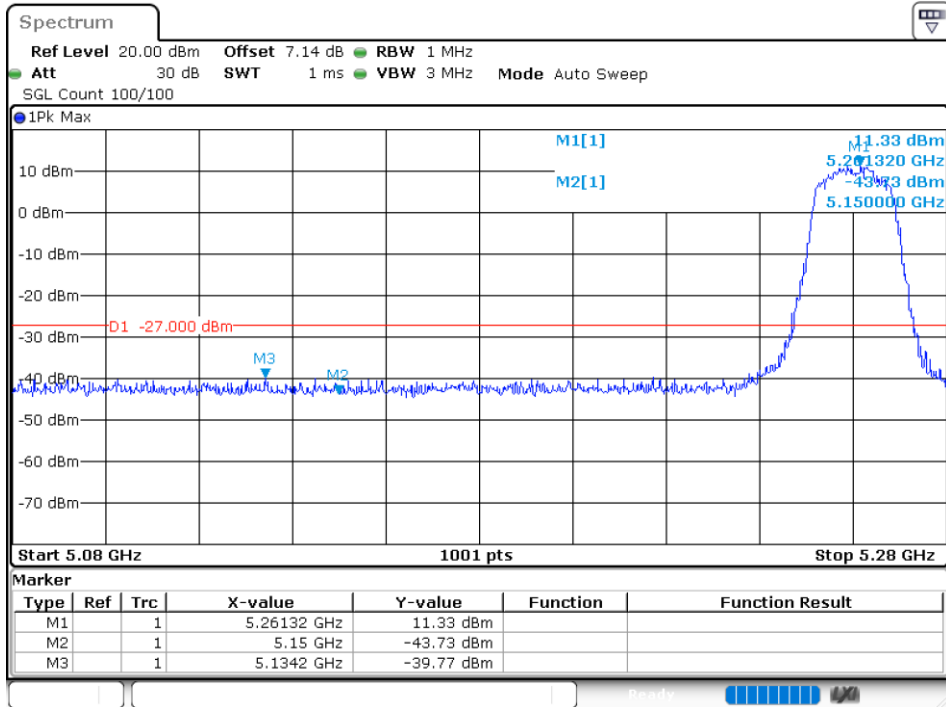
1Pk Max



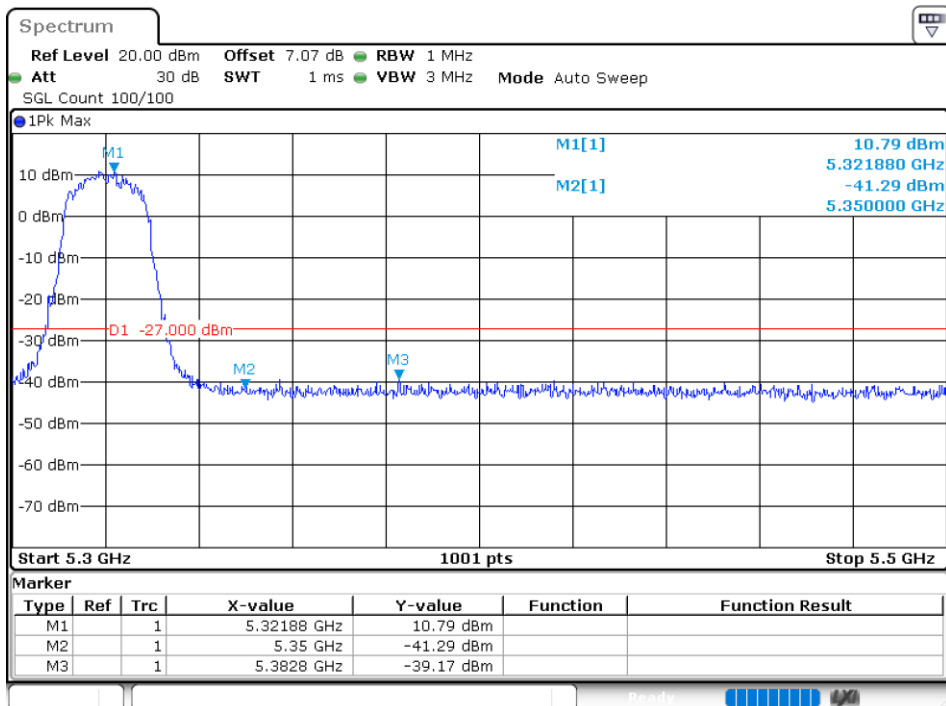
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.32168 GHz	-10.98 dBm		
M2	1		5.35 GHz	-41.03 dBm		
M3	1		5.401 GHz	-38.39 dBm		

Band Edge NVNT n20 5260MHz Low Ant1



Band Edge NVNT n20 5320MHz High Ant1

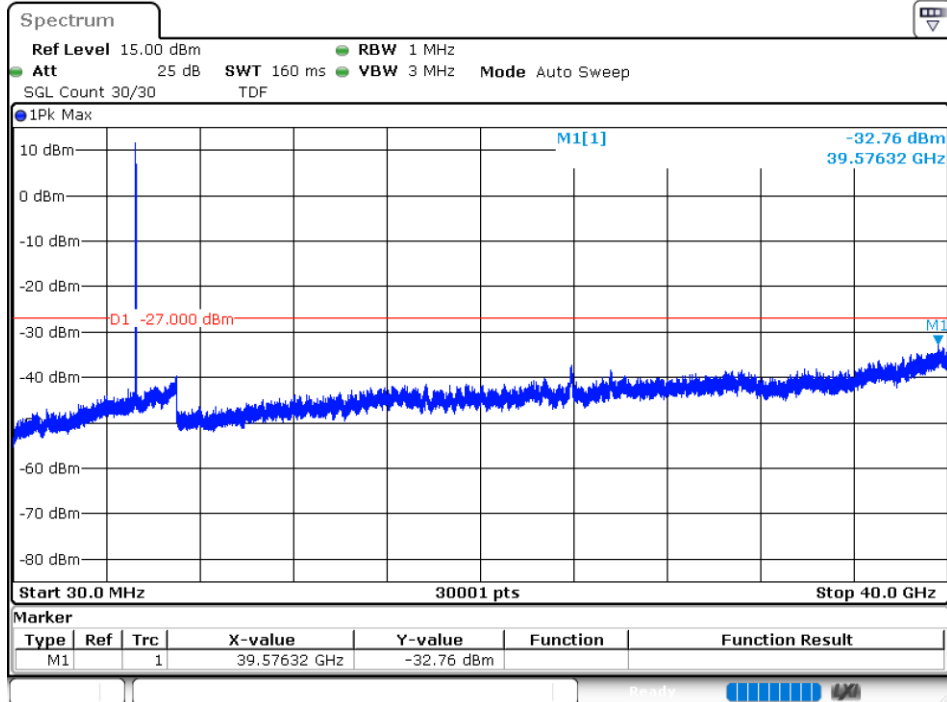


Conducted RF Spurious Emission

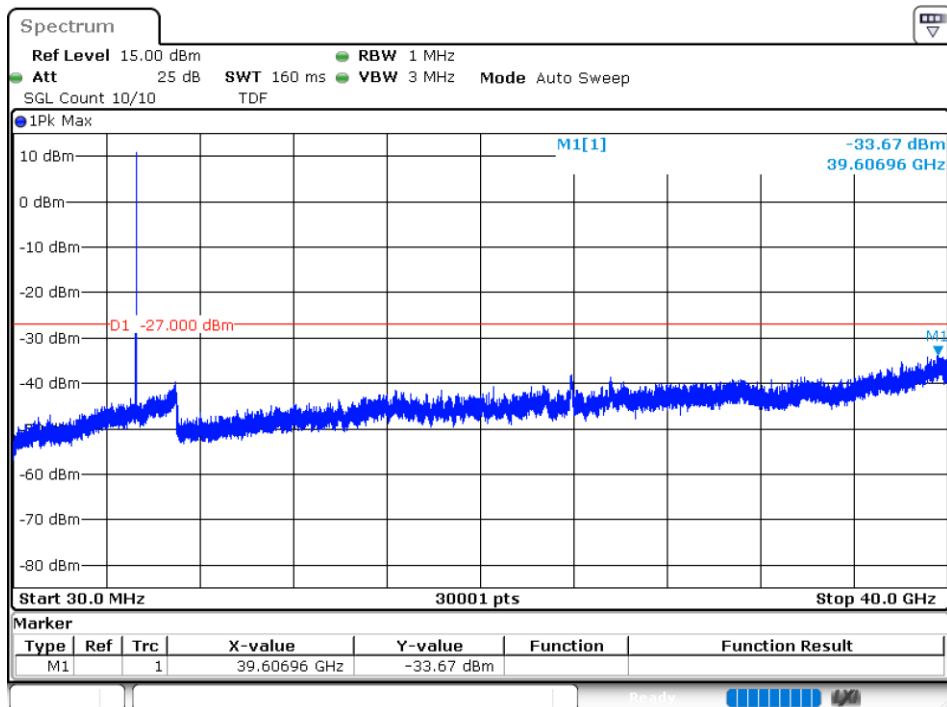
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	-32.75	-27	Pass
NVNT	a	5280	Ant1	-33.67	-27	Pass
NVNT	a	5320	Ant1	-32.59	-27	Pass
NVNT	n20	5260	Ant1	-33.52	-27	Pass
NVNT	n20	5280	Ant1	-33.22	-27	Pass
NVNT	n20	5320	Ant1	-33.85	-27	Pass

Test Graphs

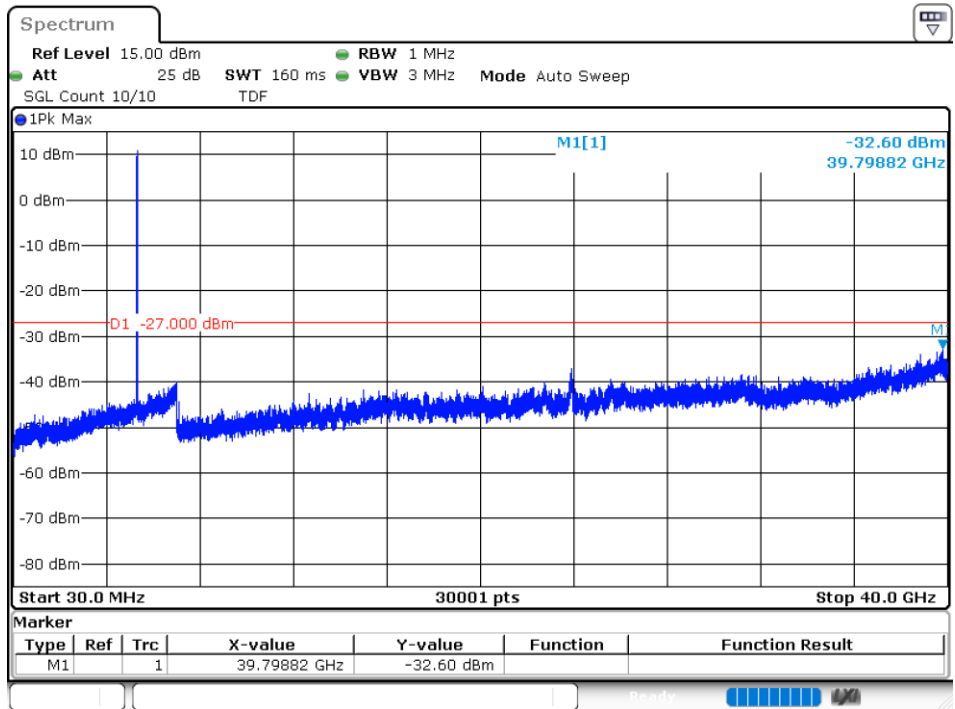
Tx. Spurious NVNT a 5260MHz Ant1 Emission



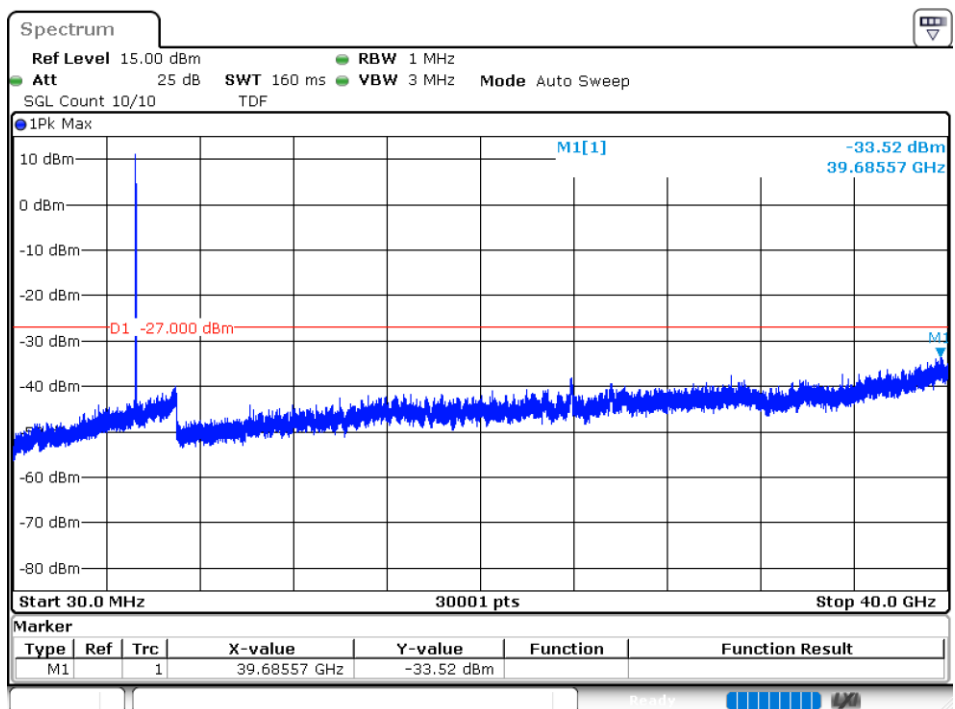
Tx. Spurious NVNT a 5280MHz Ant1 Emission

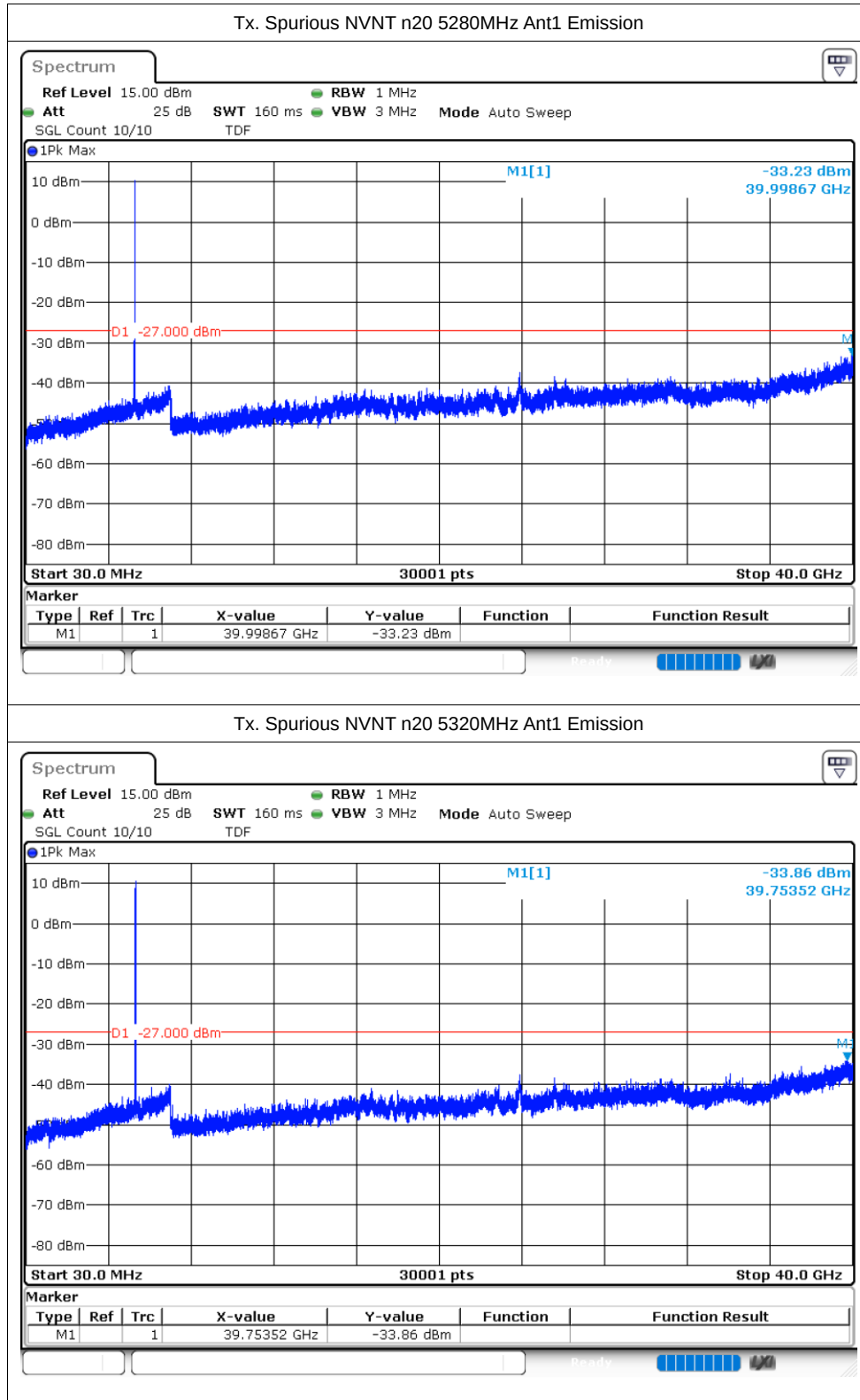


Tx. Spurious NVNT a 5320MHz Ant1 Emission



Tx. Spurious NVNT n20 5260MHz Ant1 Emission





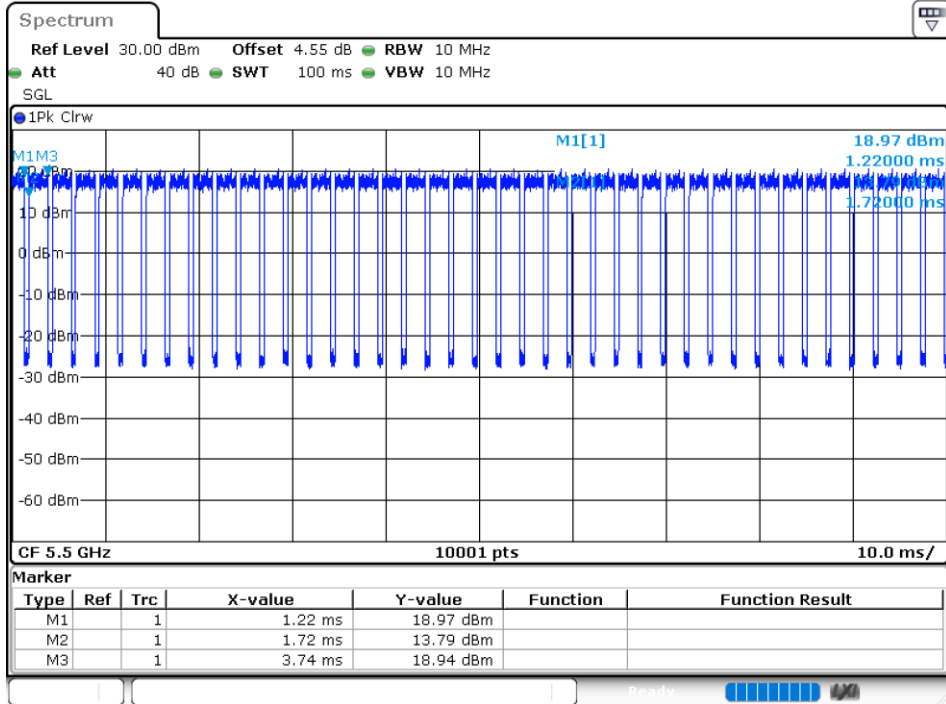
5.6G WIFI

Duty Cycle

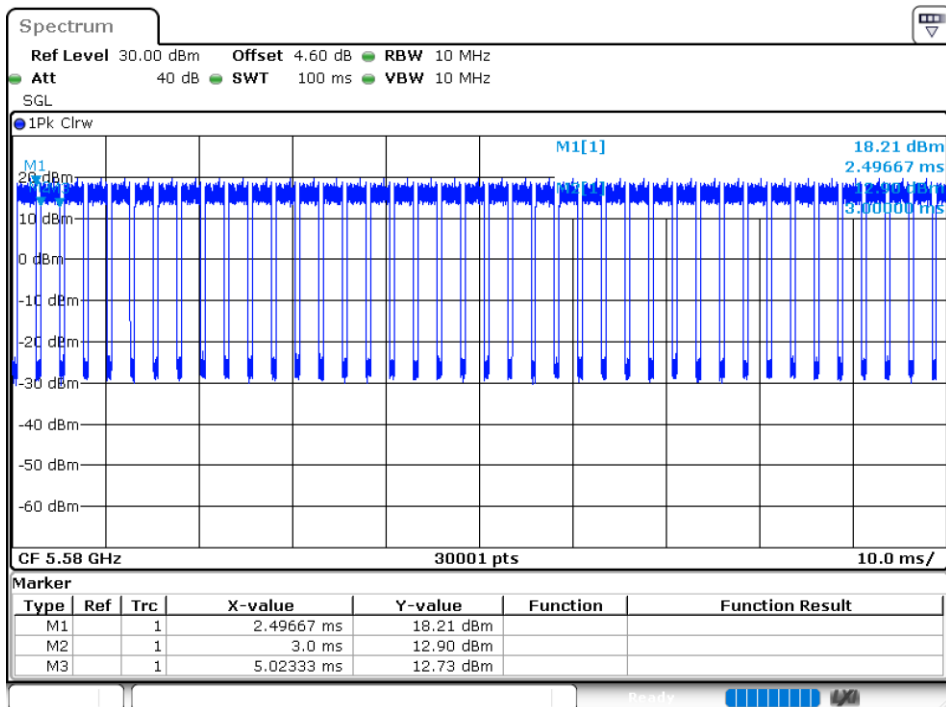
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant1	80.54	0.94	0.5
NVNT	a	5580	Ant1	80.08	0.96	0.49
NVNT	a	5700	Ant1	80.72	0.93	0.49
NVNT	n20	5500	Ant1	79.31	1.01	0.53
NVNT	n20	5580	Ant1	79.07	1.02	0.53
NVNT	n20	5700	Ant1	79.31	1.01	0.53

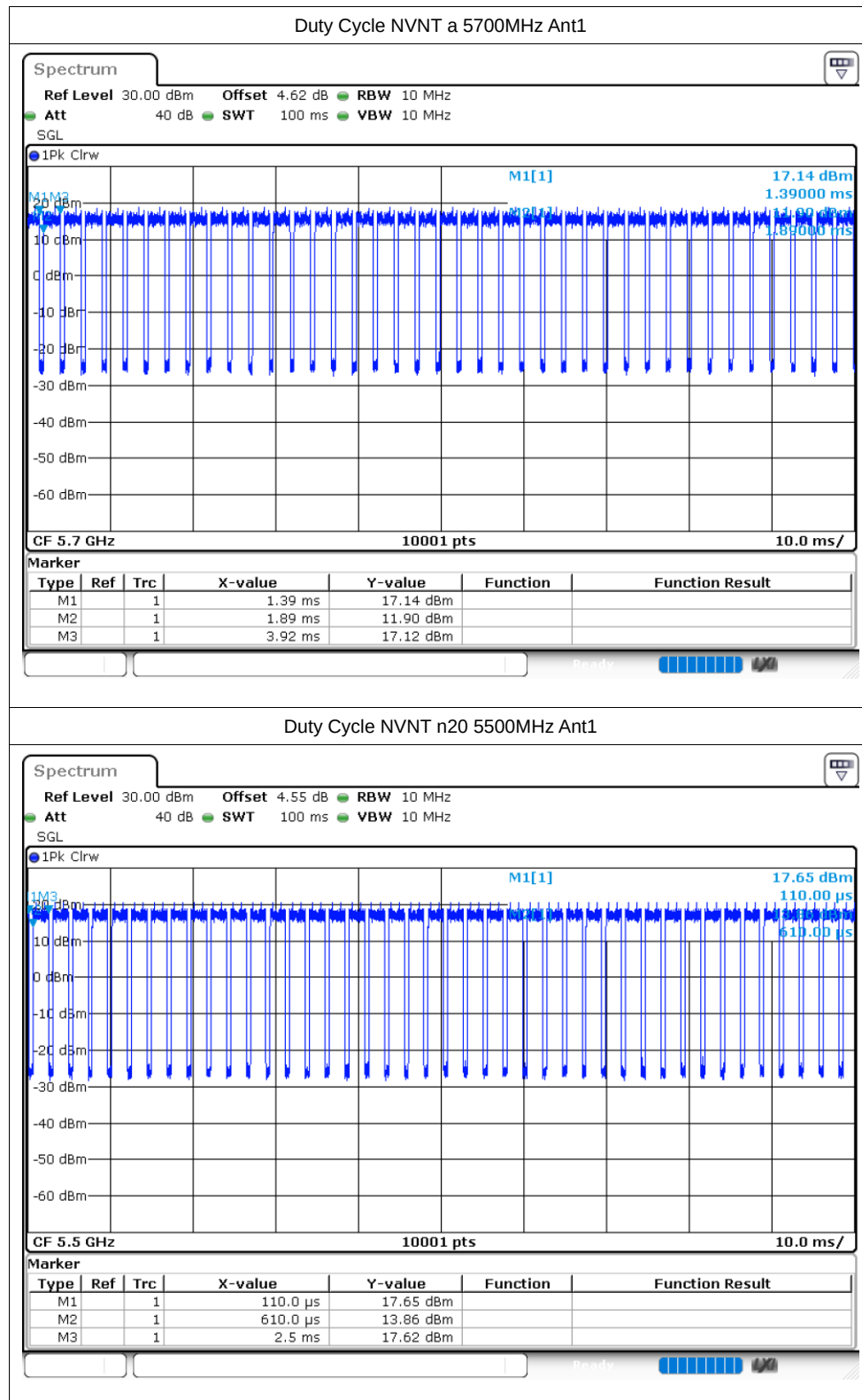
Test Graphs

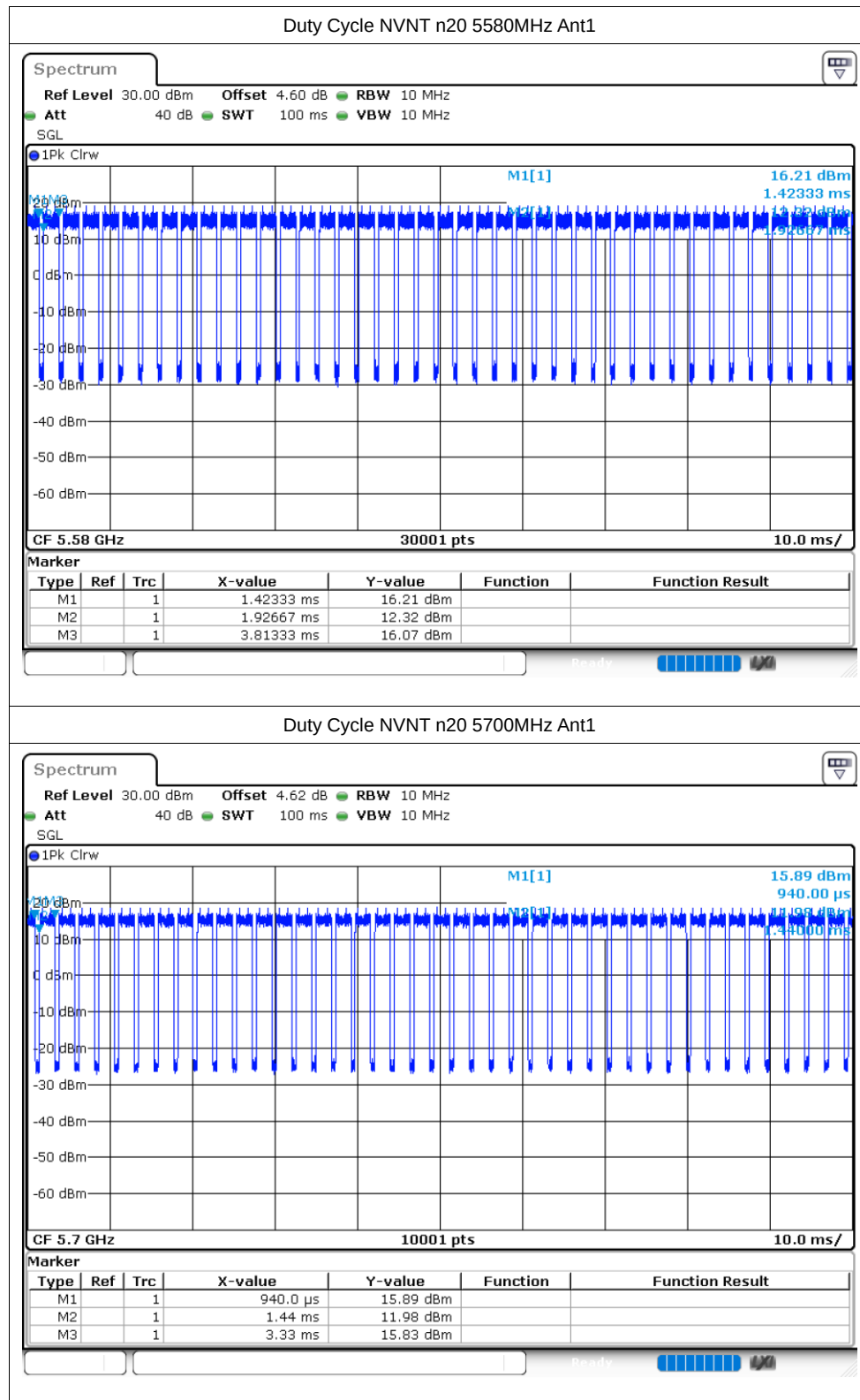
Duty Cycle NVNT a 5500MHz Ant1



Duty Cycle NVNT a 5580MHz Ant1







Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	12.44	24	Pass
NVNT	a	5580	Ant1	11.55	24	Pass
NVNT	a	5700	Ant1	11.29	24	Pass
NVNT	n20	5500	Ant1	12.44	24	Pass
NVNT	n20	5580	Ant1	11.34	24	Pass
NVNT	n20	5700	Ant1	11.54	24	Pass

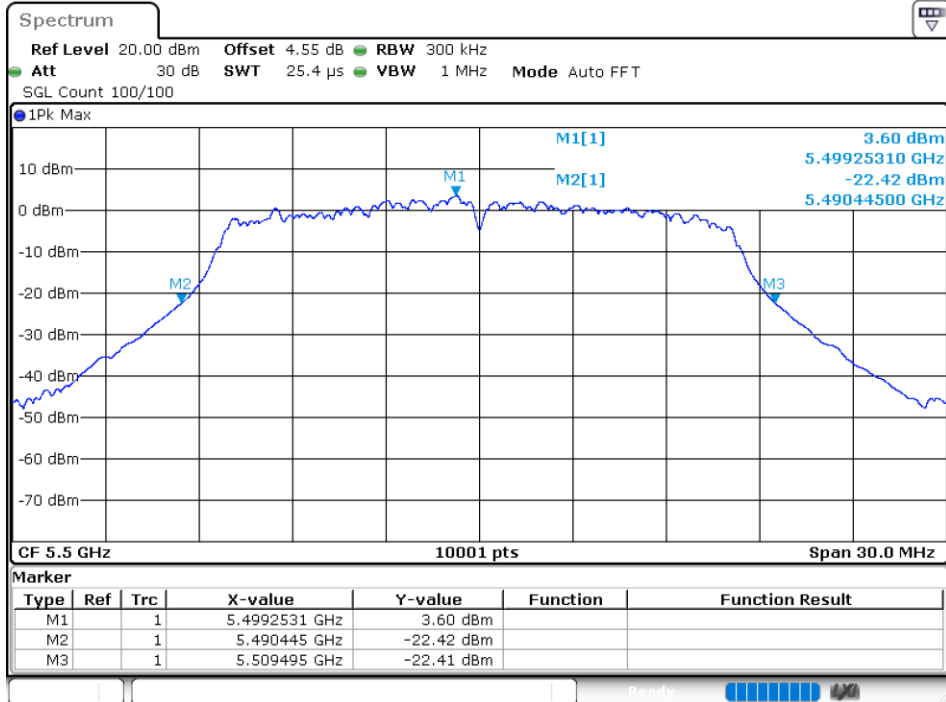
3. The conducted average power contains duty cycle factor.
4. The limit base lesser of 250 mW or $11 \text{ dBm} + 10 \log B$
where B is the 26 dB emission bandwidth in megahertz

-26dB Bandwidth

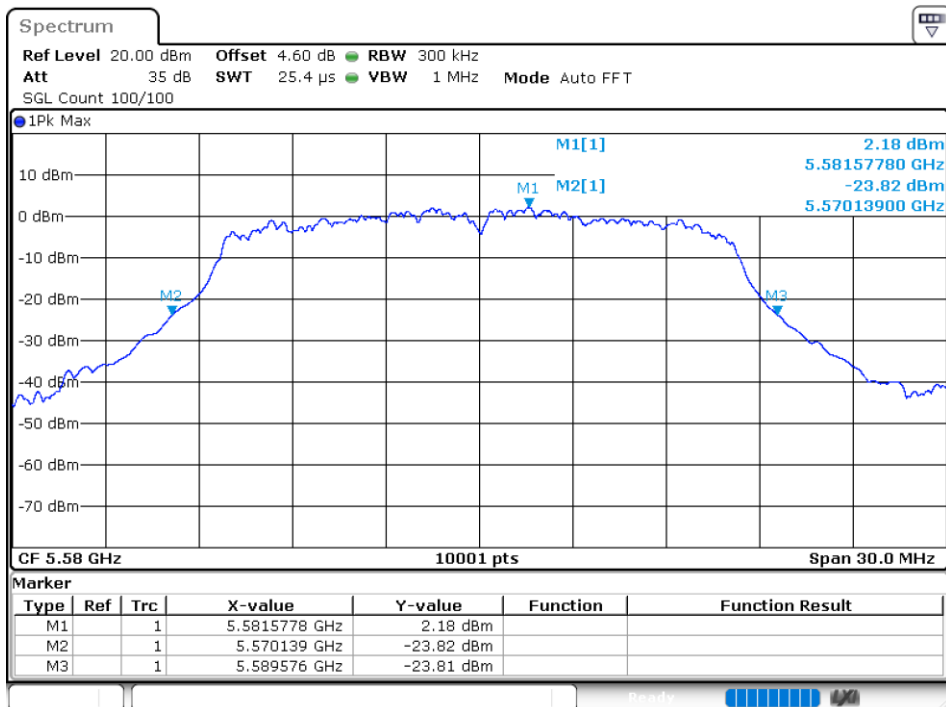
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	19.05	Report only
NVNT	a	5580	Ant1	19.437	Report only
NVNT	a	5700	Ant1	19.224	Report only
NVNT	n20	5500	Ant1	20.676	Report only
NVNT	n20	5580	Ant1	19.983	Report only
NVNT	n20	5700	Ant1	19.869	Report only

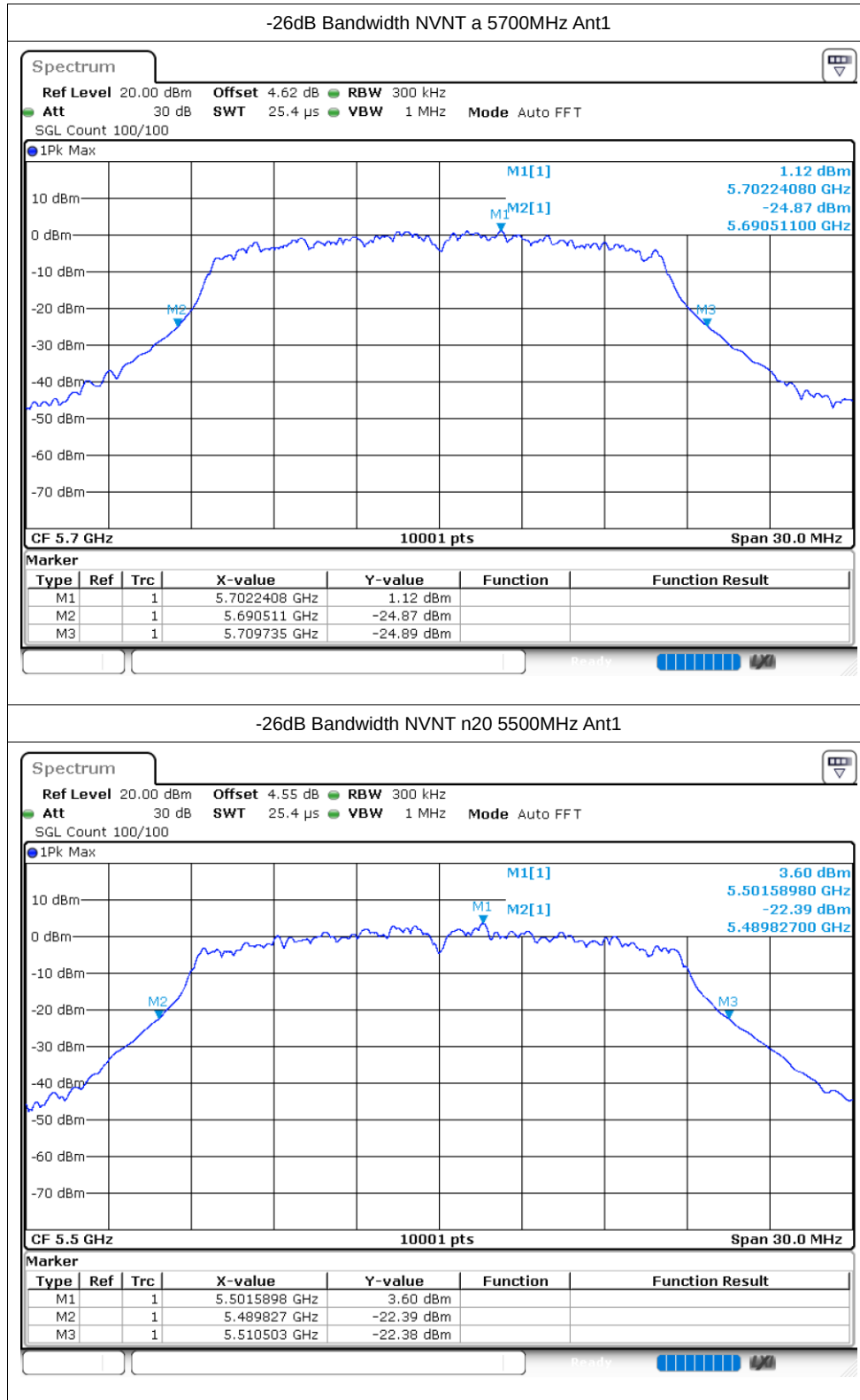
Test Graphs

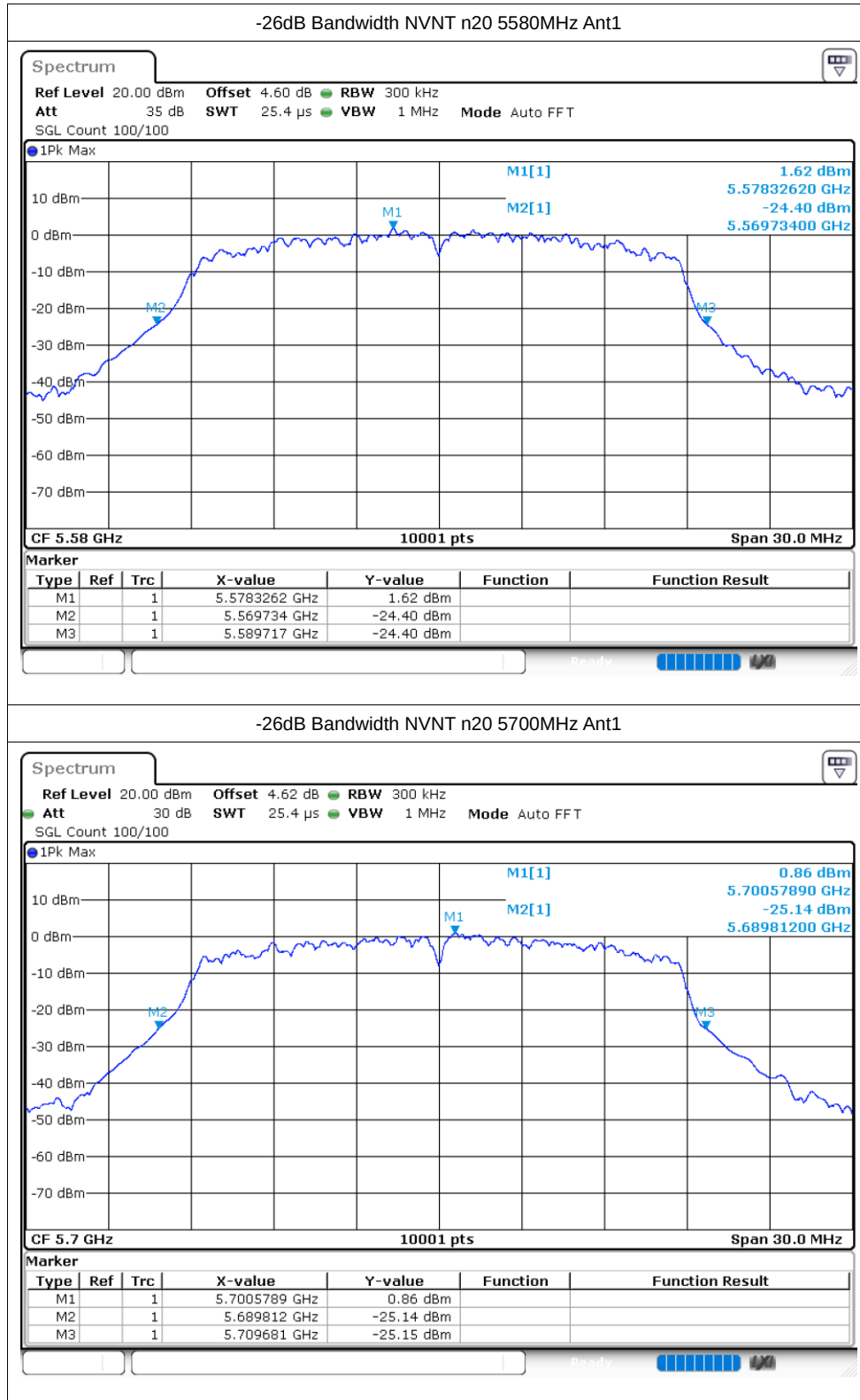
-26dB Bandwidth NVNT a 5500MHz Ant1



-26dB Bandwidth NVNT a 5580MHz Ant1





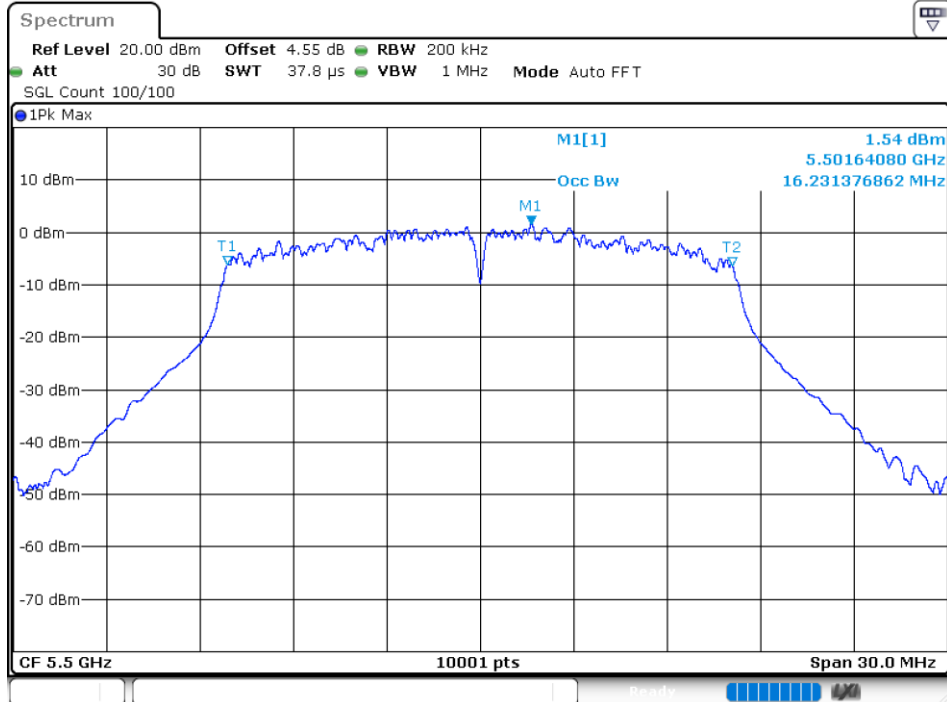


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.231
NVNT	a	5580	Ant1	16.186
NVNT	a	5700	Ant1	16.288
NVNT	n20	5500	Ant1	17.437
NVNT	n20	5580	Ant1	17.416
NVNT	n20	5700	Ant1	17.302

Test Graphs

OBW NVNT a 5500MHz Ant1



OBW NVNT a 5580MHz Ant1

