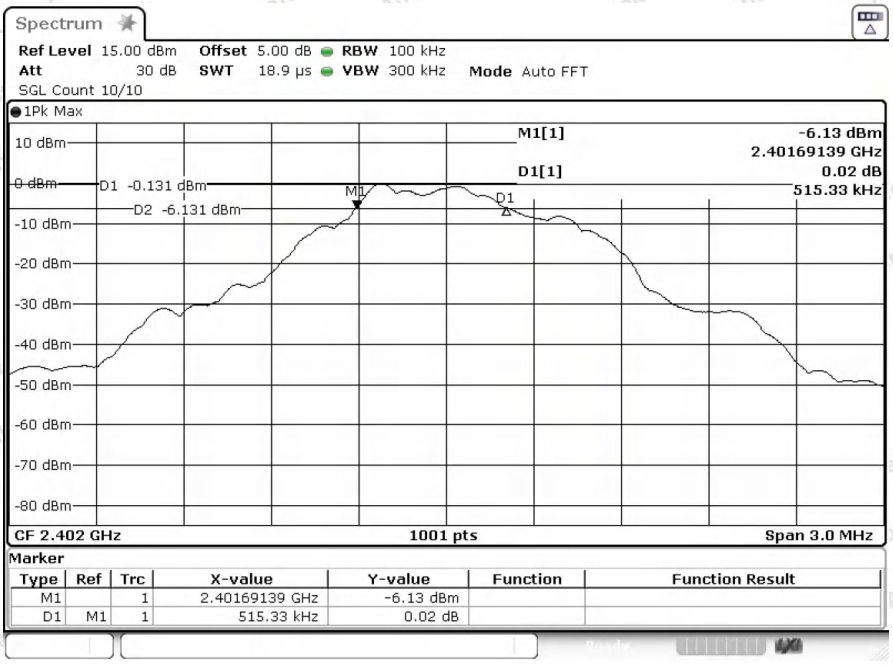
Appendix Test Data

Report No.:	18220WC40076102	Test Sample No.:	1-2-2
Start Test Date:	2024.4.22	Finish Test Date:	2024.4.22
Test Engineer:	Joker Huang	Auditor:	Justin Feng
Temperature:	25.5℃	Relative Humidity:	47%
Pressure:	101kPa		

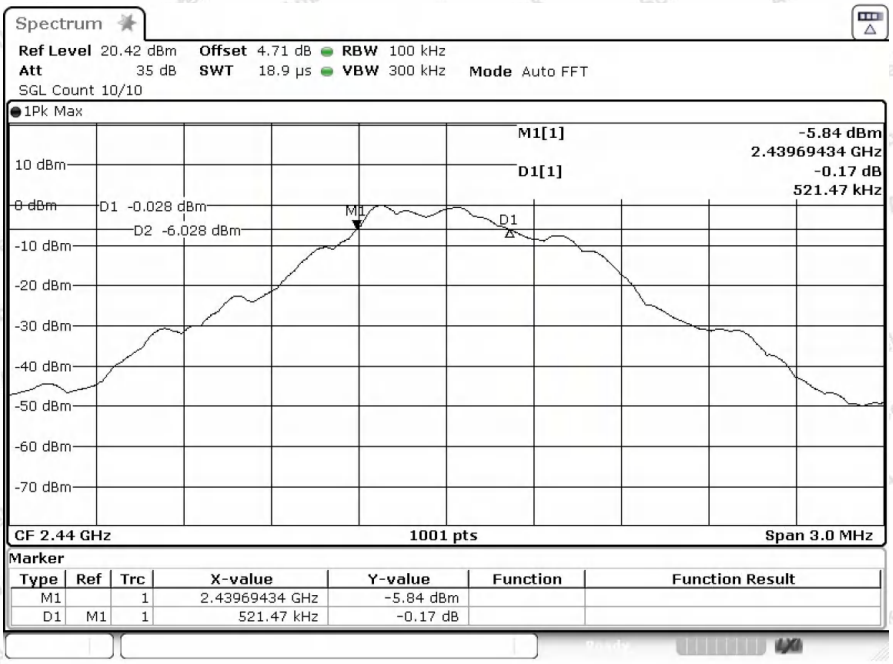
Appendix A: -6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402	515.33	500	Pass
NVNT	ANT1	1Mbps	2440.00	521.47	500	Pass
NVNT	ANT1	1Mbps	2480	530.69	500	Pass
NVNT	ANT1	2Mbps	2402	863.23	500	Pass
NVNT	ANT1	2Mbps	2440.00	851.20	500	Pass
NVNT	ANT1	2Mbps	2480	848.13	500	Pass

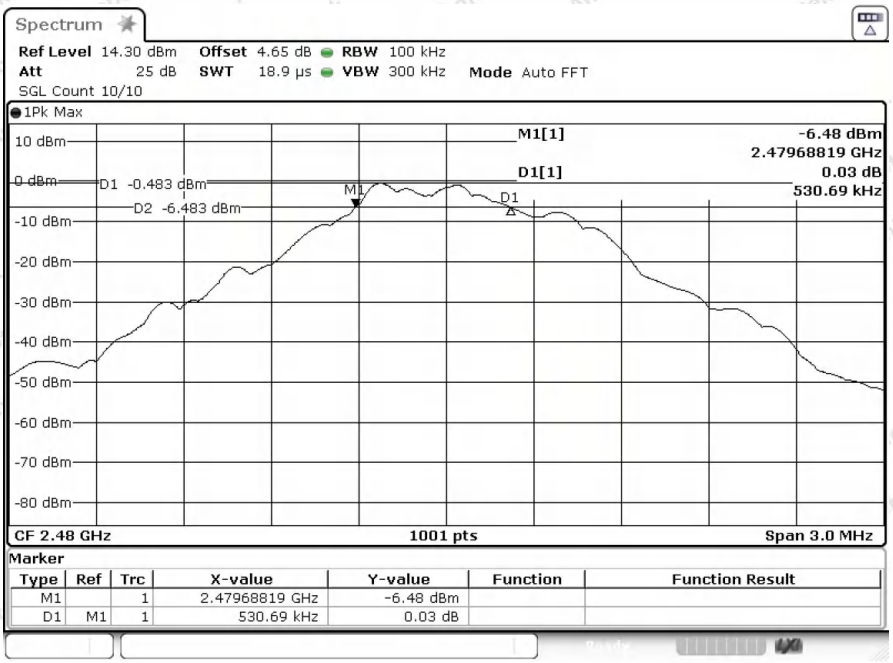
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2402



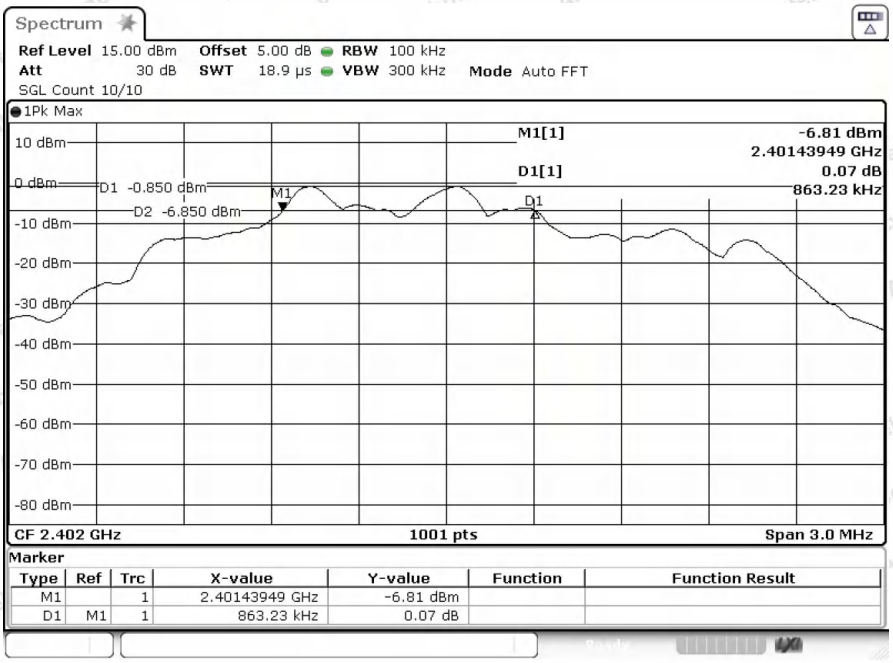
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2440



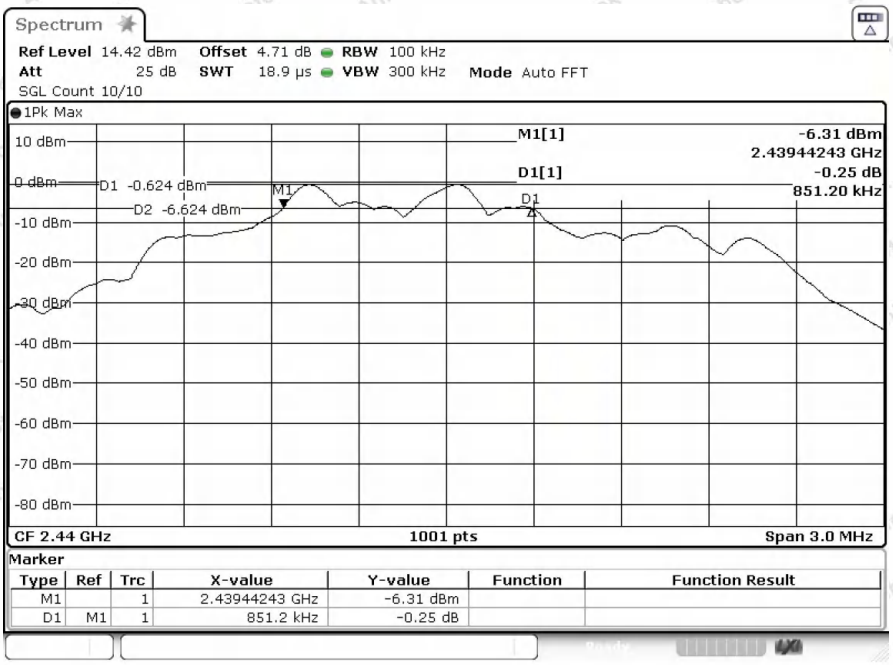
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2480



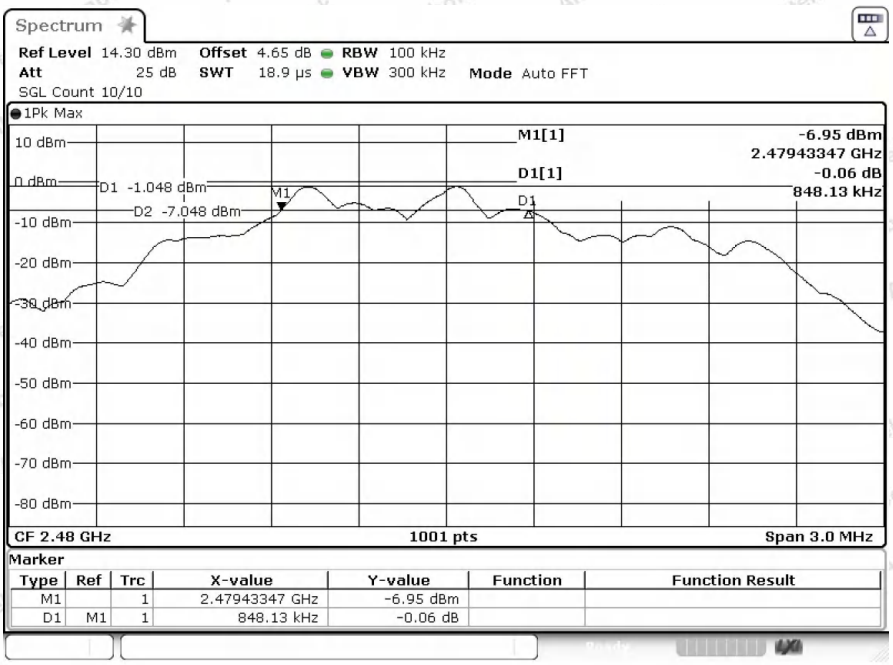
-6dB_Bandwidth_NVNT_ANT1_2Mbps_2402



-6dB_Bandwidth_NVNT_ANT1_2Mbps_2440



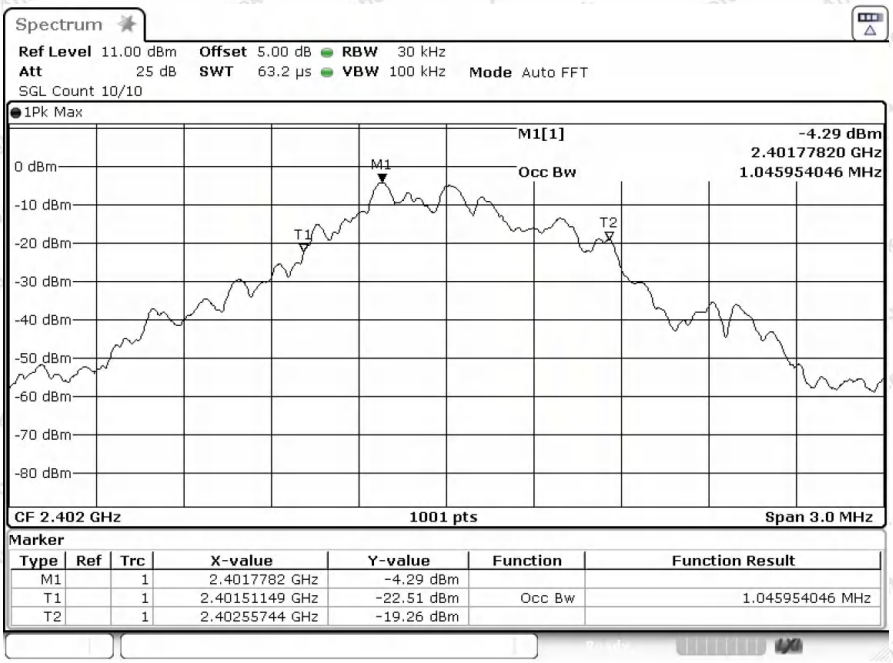
-6dB_Bandwidth_NVNT_ANT1_2Mbps_2480


Spectrum
Ref Level 14.30 dBm Offset 4.65 dB RBW 100 kHz
Att 25 dB SWT 18.9 µs VBW 300 kHz Mode Auto FFT
SGL Count 10/10
1Pk Max
M1[1] -6.95 dBm
2.47943347 GHz
D1[1] -0.06 dB
848.13 kHz
D1 -1.048 dBm
D2 -7.048 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.48 GHz
1001 pts
Span 3.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.47943347 GHz -6.95 dBm
D1 M1 1 848.13 kHz -0.06 dB

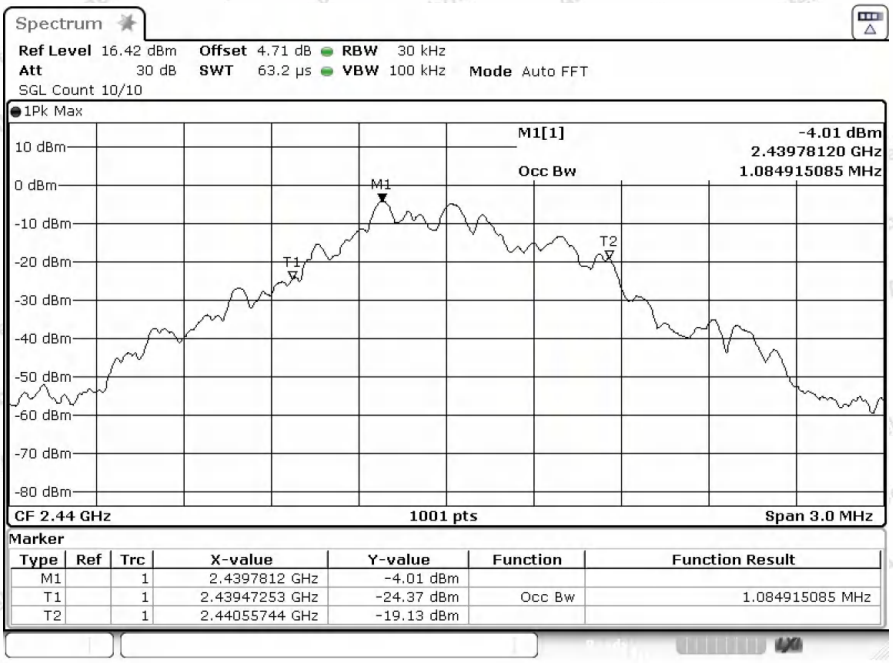
Appendix B: 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	1Mbps	2402	1.046
NVNT	ANT1	1Mbps	2440.00	1.085
NVNT	ANT1	1Mbps	2480	1.130
NVNT	ANT1	2Mbps	2402	2.035
NVNT	ANT1	2Mbps	2440.00	2.050
NVNT	ANT1	2Mbps	2480	2.068

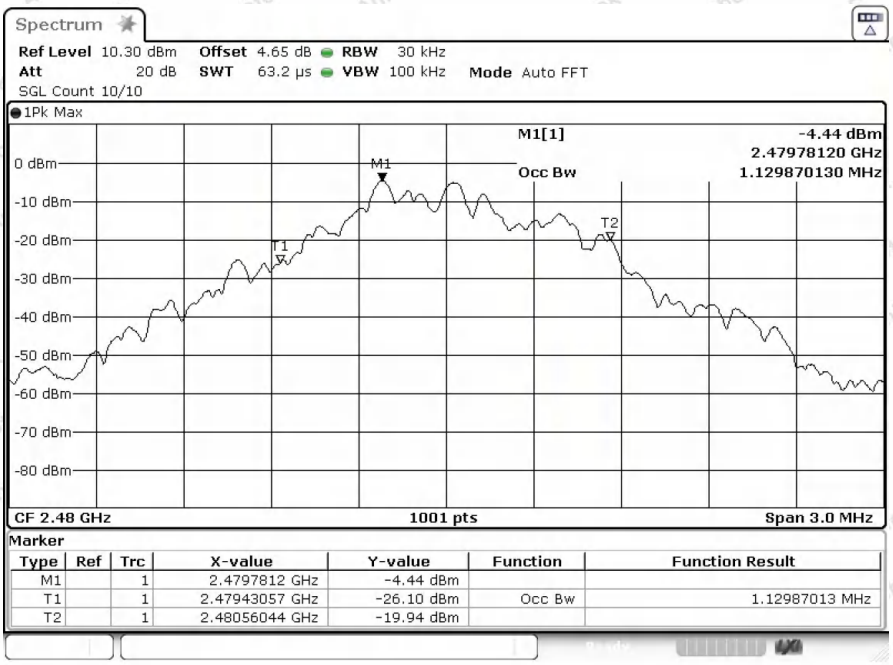
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2402



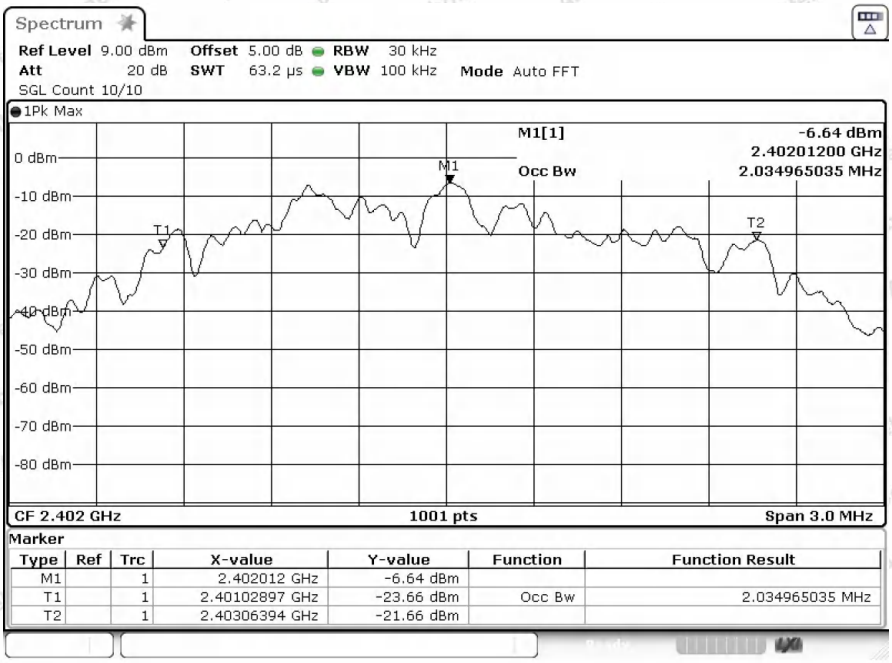
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2440



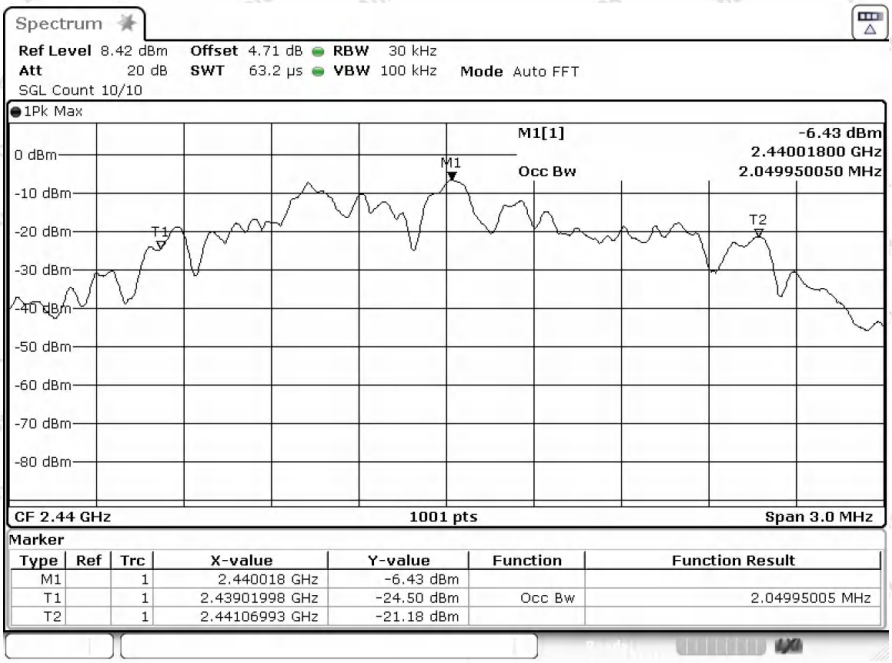
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2480



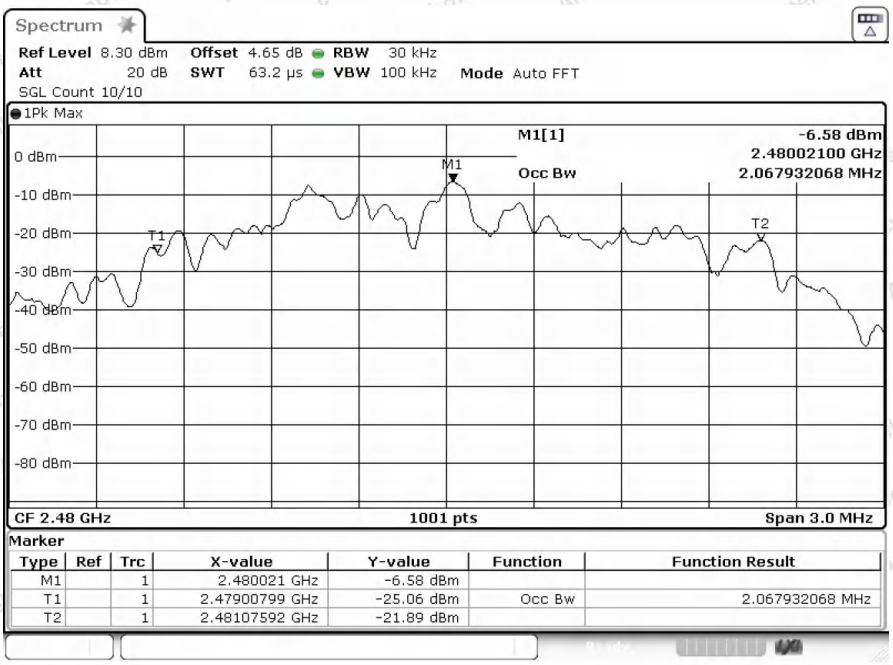
99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2402



99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2440



99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2480



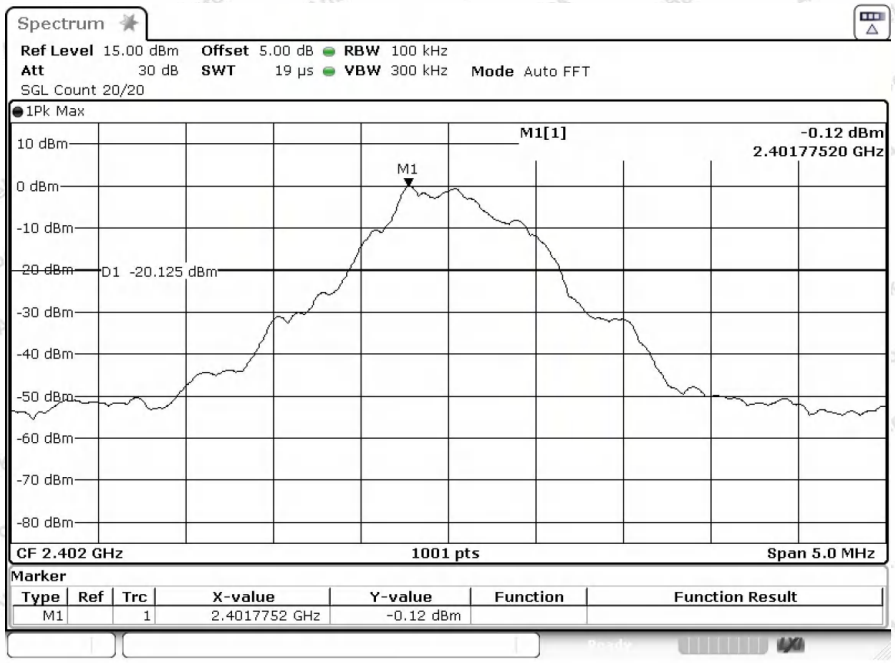
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.480021 GHz	-6.58 dBm		
T1		1	2.47900799 GHz	-25.06 dBm	Occ Bw	2.067932068 MHz
T2		1	2.48107592 GHz	-21.89 dBm		

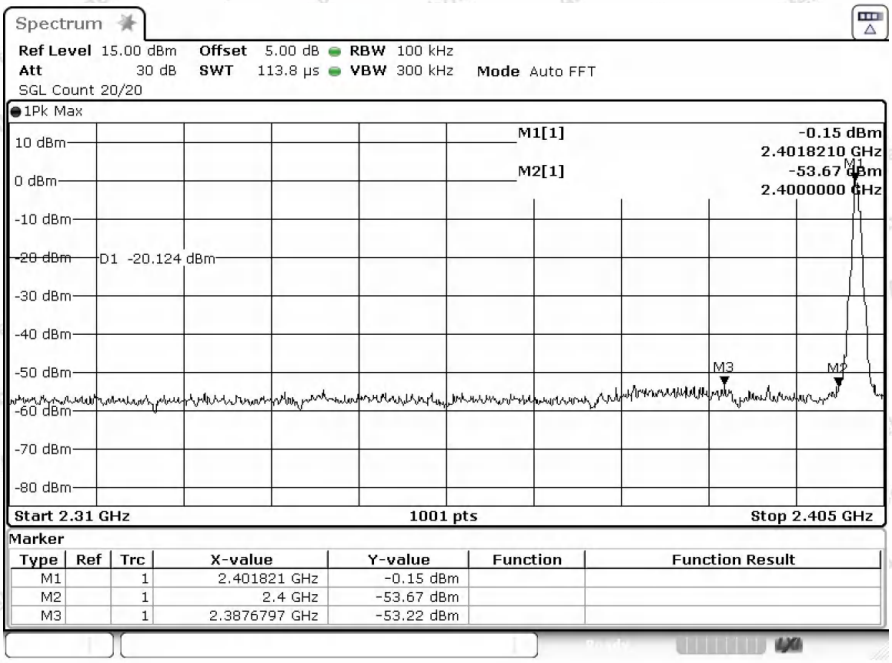
Appendix C: Bandedge

Condition	Antenna	Rate	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402	2387.680	-53.216	-20.124	Pass
NVNT	ANT1	1Mbps	2480	2495.642	-54.277	-20.486	Pass
NVNT	ANT1	2Mbps	2402	2399.923	-34.938	-20.828	Pass
NVNT	ANT1	2Mbps	2480	2485.577	-49.828	-21.039	Pass

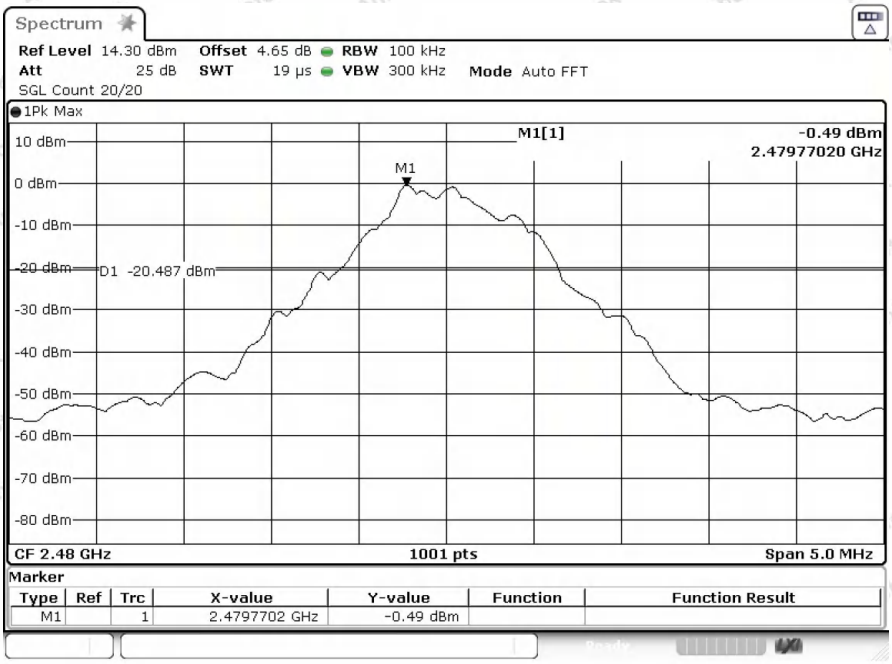
1_Reference_Level_NVNT_ANT1_1Mbps_2402



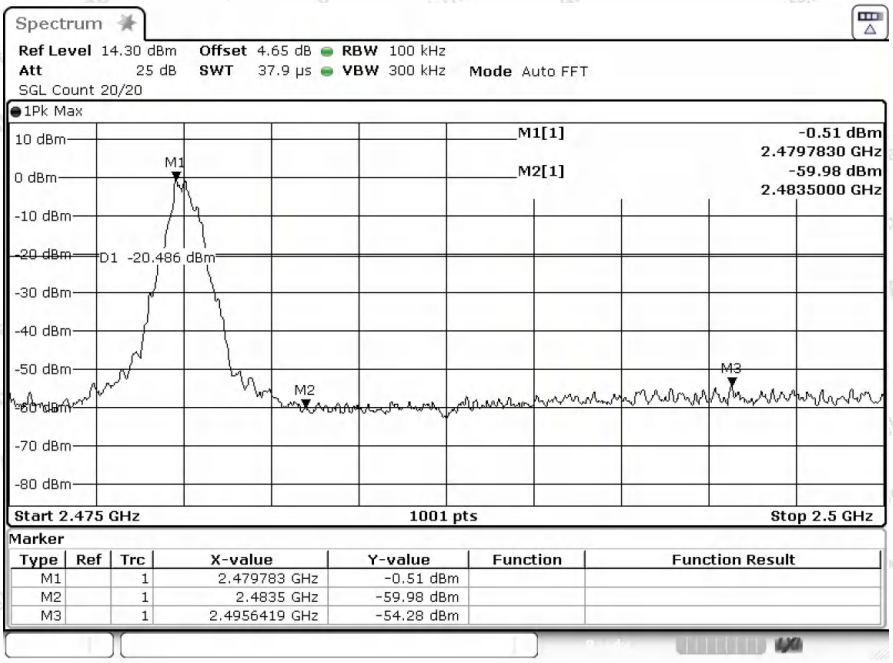
2_Bandedge_NVNT_ANT1_1Mbps_2402



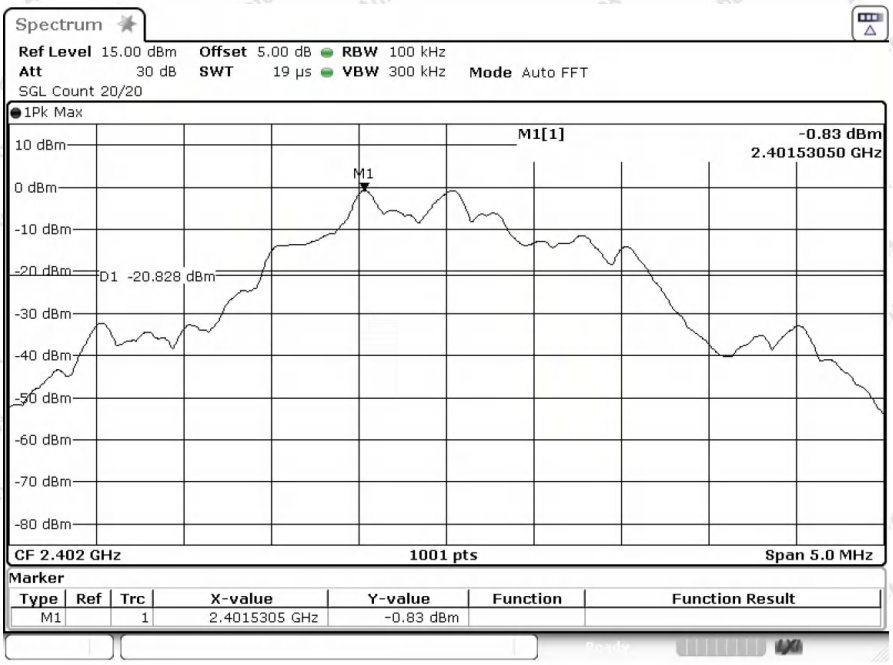
1_Reference_Level_NVNT_ANT1_1Mbps_2480



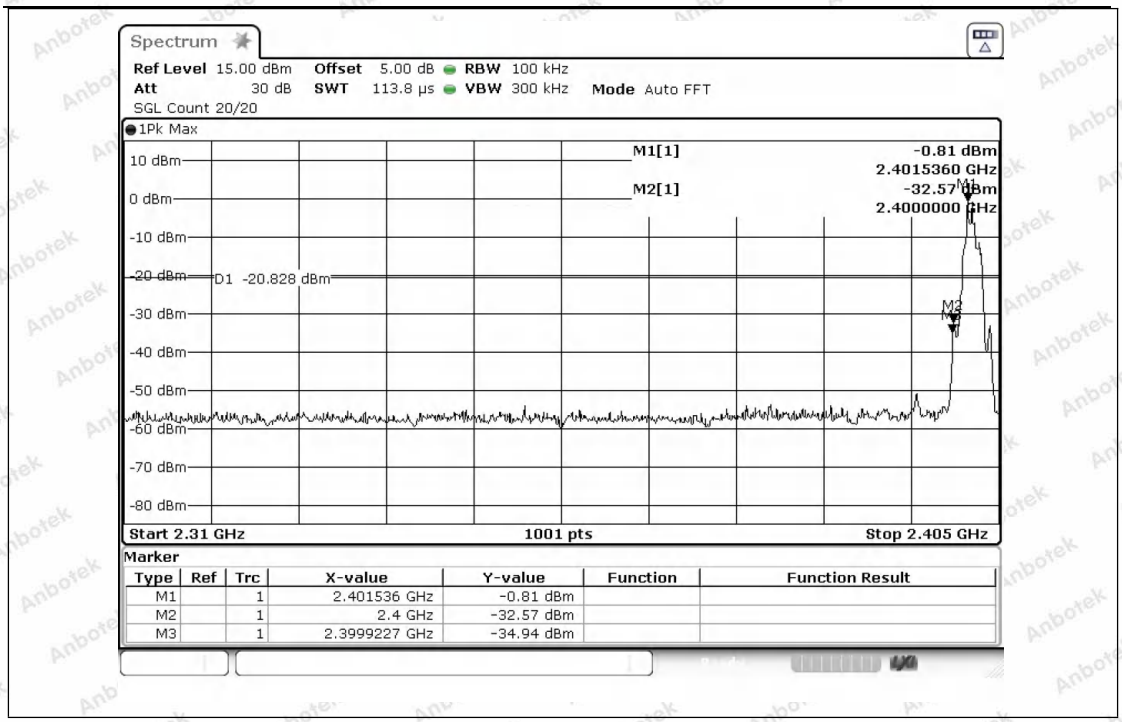
2_Bandedge_NVNT_ANT1_1Mbps_2480



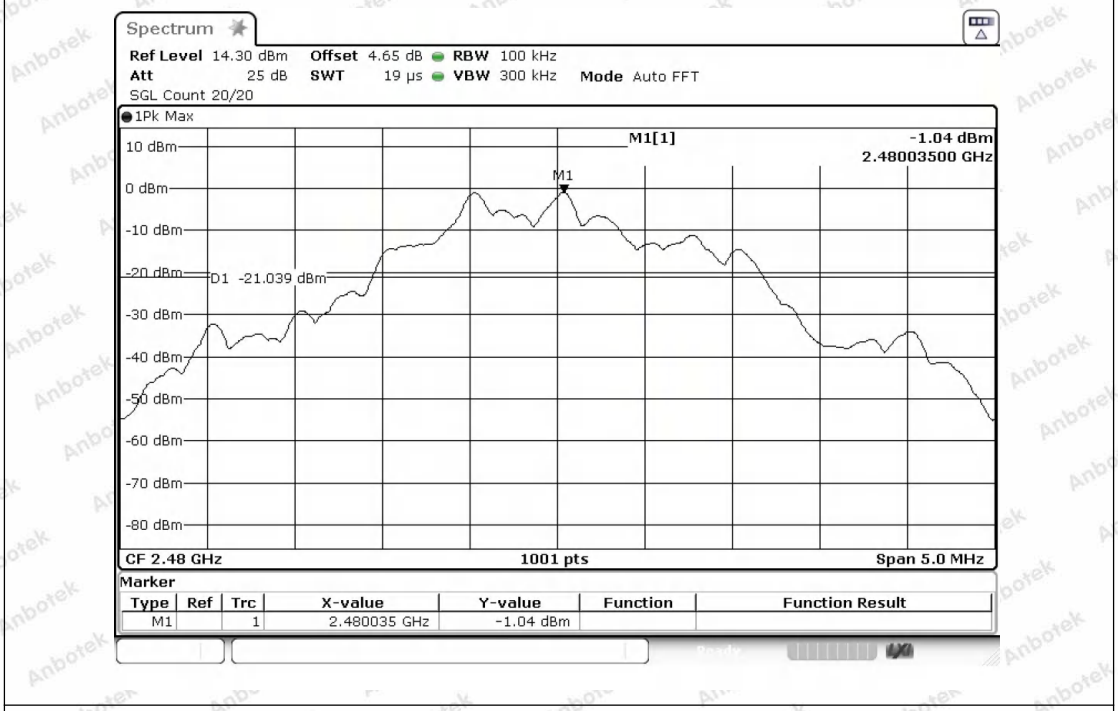
1_Reference_Level_NVNT_ANT1_2Mbps_2402



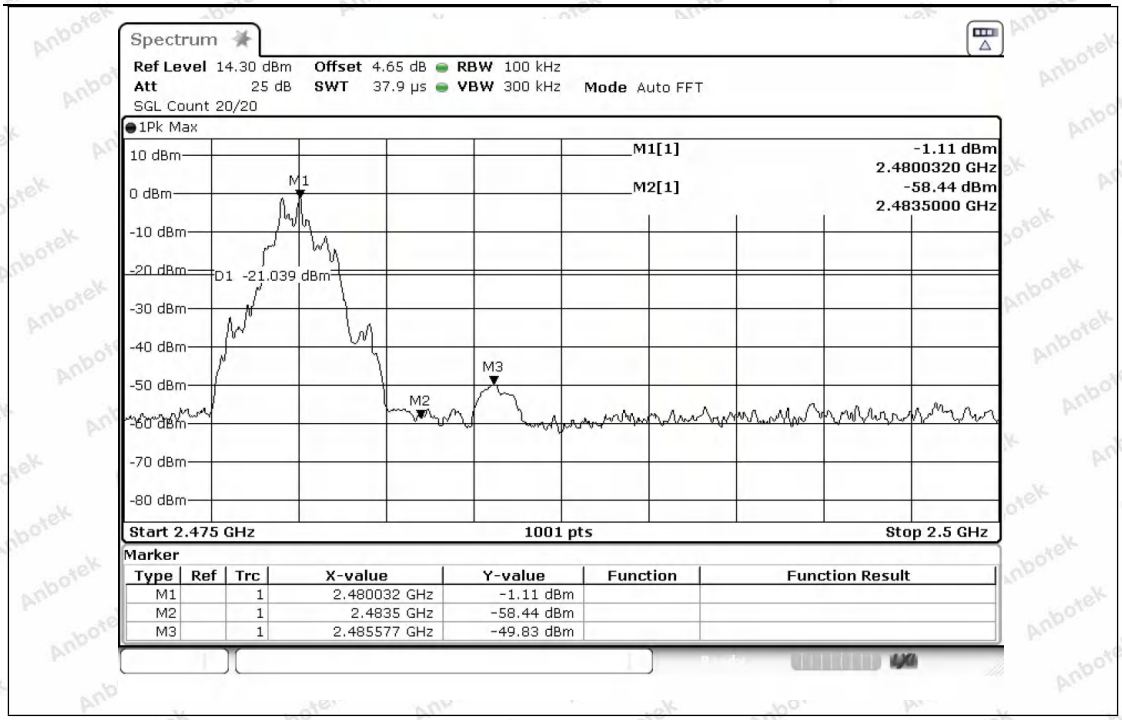
2_Bandedge_NVNT_ANT1_2Mbps_2402



1_Reference_Level_NVNT_ANT1_2Mbps_2480



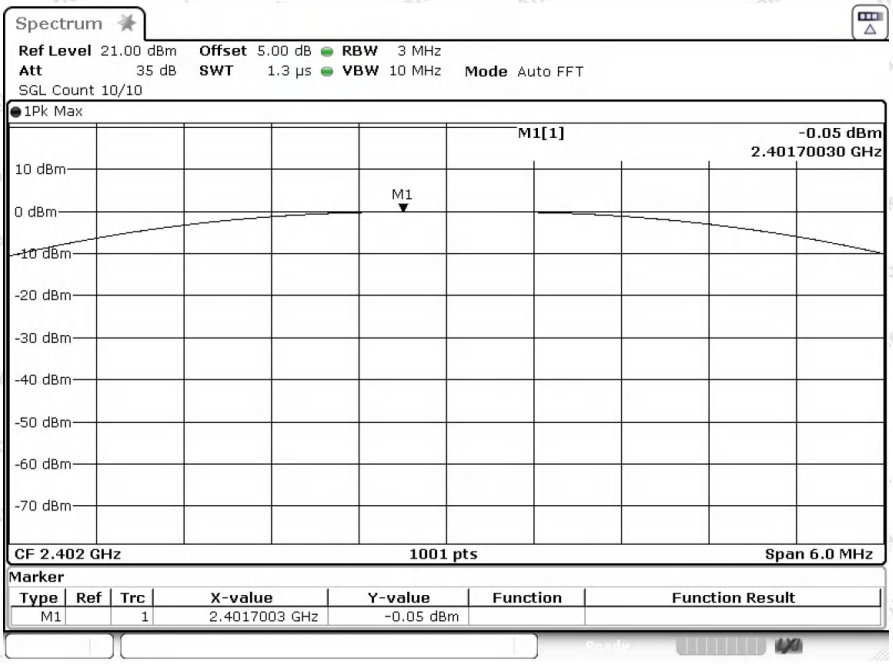
2_Bandedge_NVNT_ANT1_2Mbps_2480


Spectrum
Ref Level 14.30 dBm Offset 4.65 dB RBW 100 kHz
Att 25 dB SWT 37.9 µs VBW 300 kHz Mode Auto FFT
SGL Count 20/20
1Pk Max
M1[1] -1.11 dBm 2.4800320 GHz
M2[1] -58.44 dBm 2.4835000 GHz
D1 -21.039 dBm
M1
M2
M3
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
Start 2.475 GHz
1001 pts
Stop 2.5 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.480032 GHz -1.11 dBm
M2 1 2.4835 GHz -58.44 dBm
M3 1 2.485577 GHz -49.83 dBm

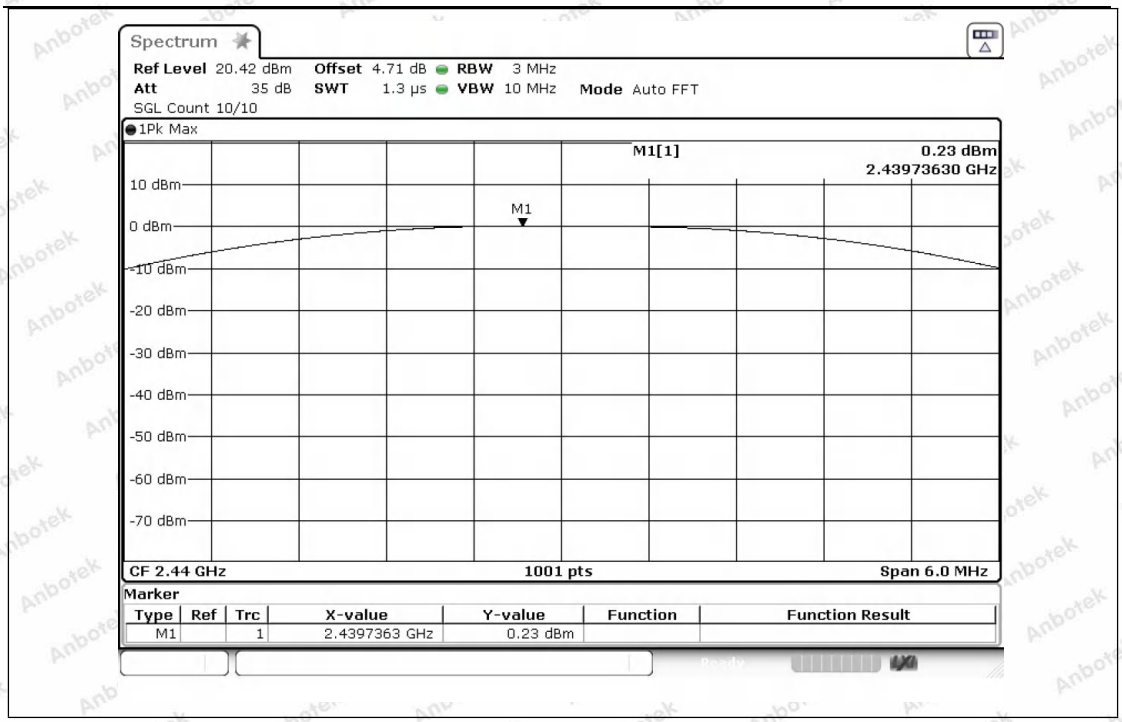
Appendix D: Peak Output Power

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402	-0.05	0.99	1000	Pass
NVNT	ANT1	1Mbps	2440.00	**0.23**	1.05	1000	Pass
NVNT	ANT1	1Mbps	2480	-0.29	0.93	1000	Pass
NVNT	ANT1	2Mbps	2402	-0.15	0.97	1000	Pass
NVNT	ANT1	2Mbps	2440.00	0.11	1.03	1000	Pass
NVNT	ANT1	2Mbps	2480	-0.39	0.91	1000	Pass

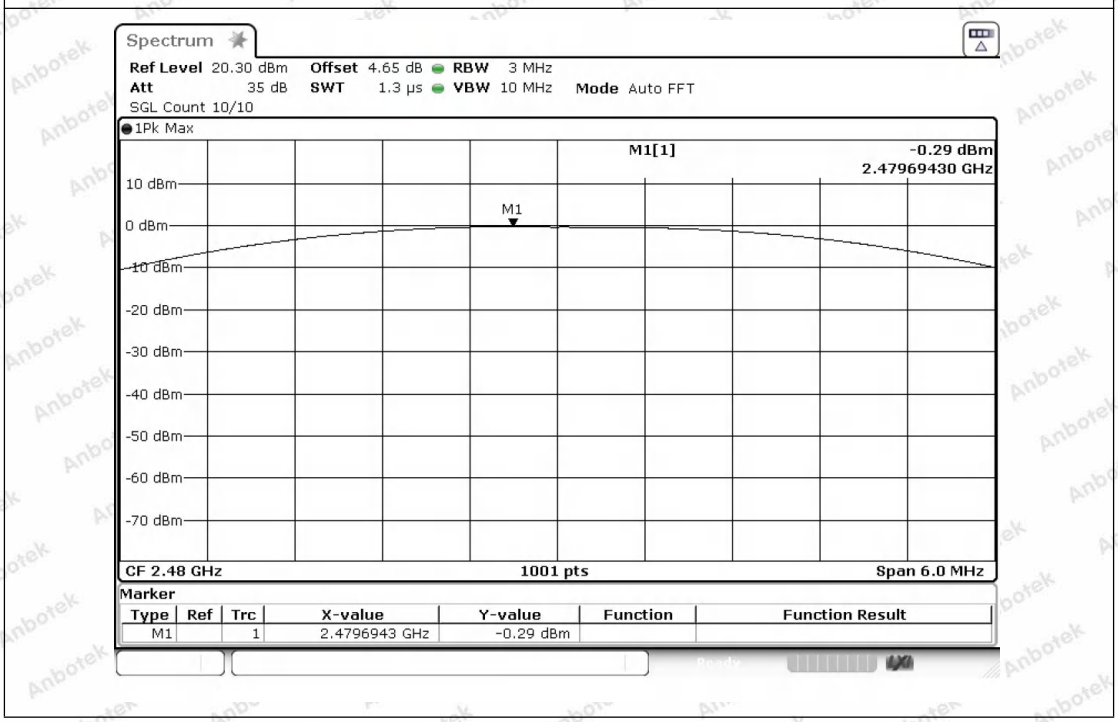
Peak_Output_Power_NVNT_ANT1_1Mbps_2402



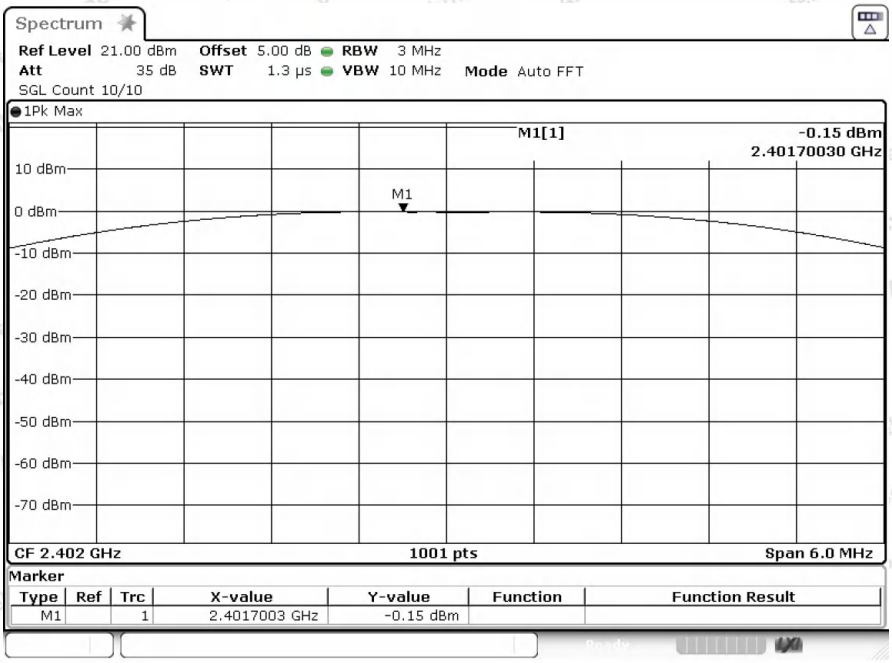
Peak_Output_Power_NVNT_ANT1_1Mbps_2440



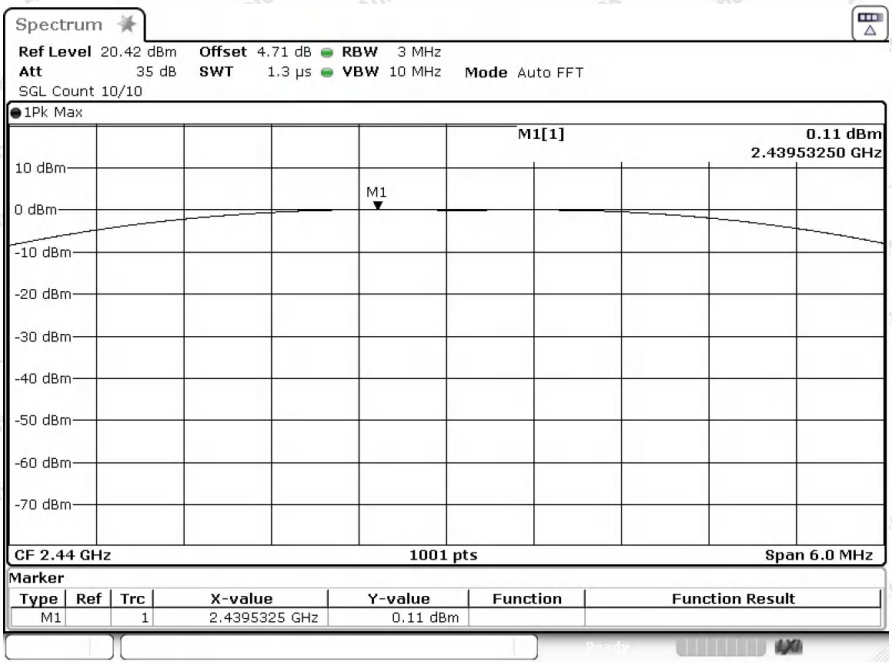
Peak_Output_Power_NVNT_ANT1_1Mbps_2480



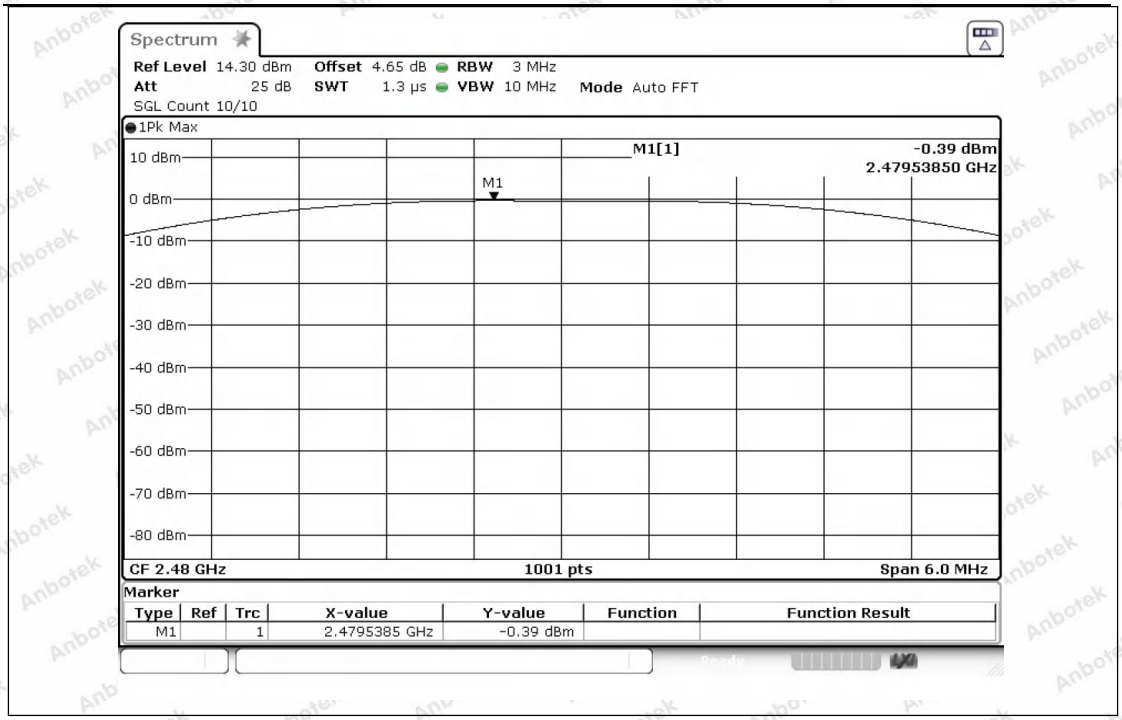
Peak_Output_Power_NVNT_ANT1_2Mbps_2402



Peak_Output_Power_NVNT_ANT1_2Mbps_2440



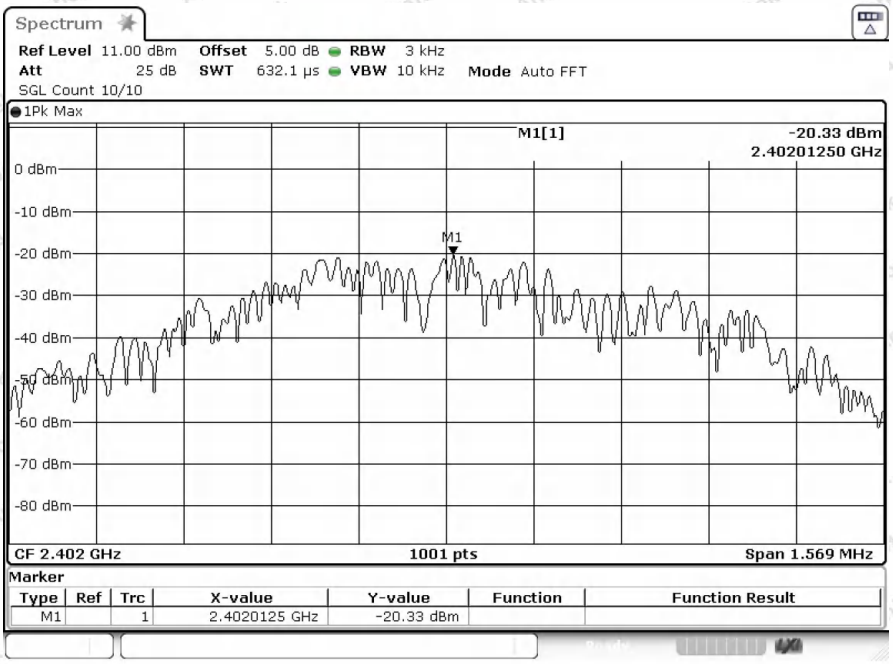
Peak_Output_Power_NVNT_ANT1_2Mbps_2480


Spectrum
Ref Level 14.30 dBm Offset 4.65 dB RBW 3 MHz
Att 25 dB SWT 1.3 µs VBW 10 MHz Mode Auto FFT
SGL Count 10/10
1Pk Max
M1[1] -0.39 dBm
2.47953850 GHz
M1
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.48 GHz
1001 pts
Span 6.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.4795385 GHz -0.39 dBm

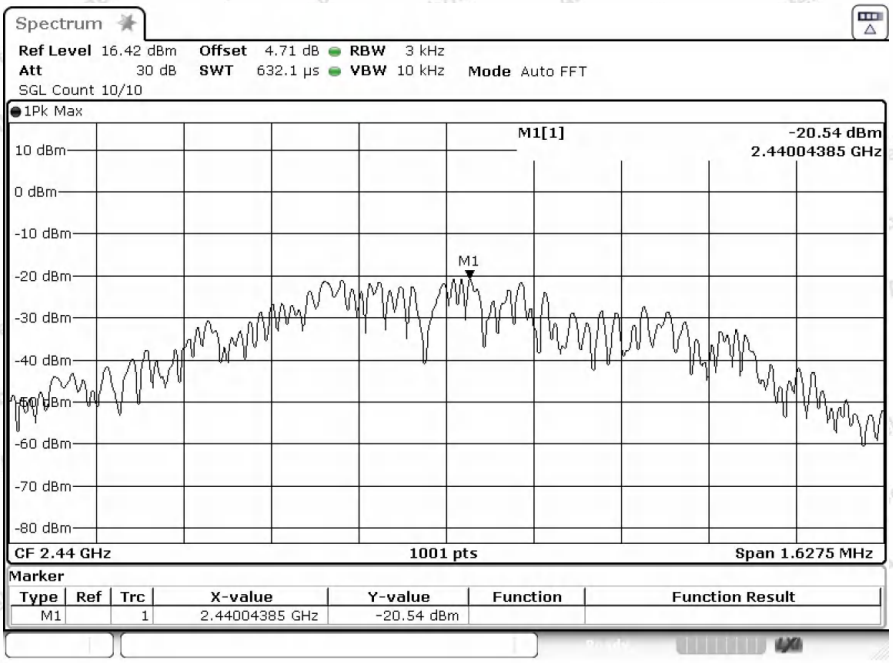
Appendix E: Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402	-20.33	8	Pass
NVNT	ANT1	1Mbps	2440.00	-20.54	8	Pass
NVNT	ANT1	1Mbps	2480	-20.99	8	Pass
NVNT	ANT1	2Mbps	2402	-22.98	8	Pass
NVNT	ANT1	2Mbps	2440.00	-22.74	8	Pass
NVNT	ANT1	2Mbps	2480	-23.19	8	Pass

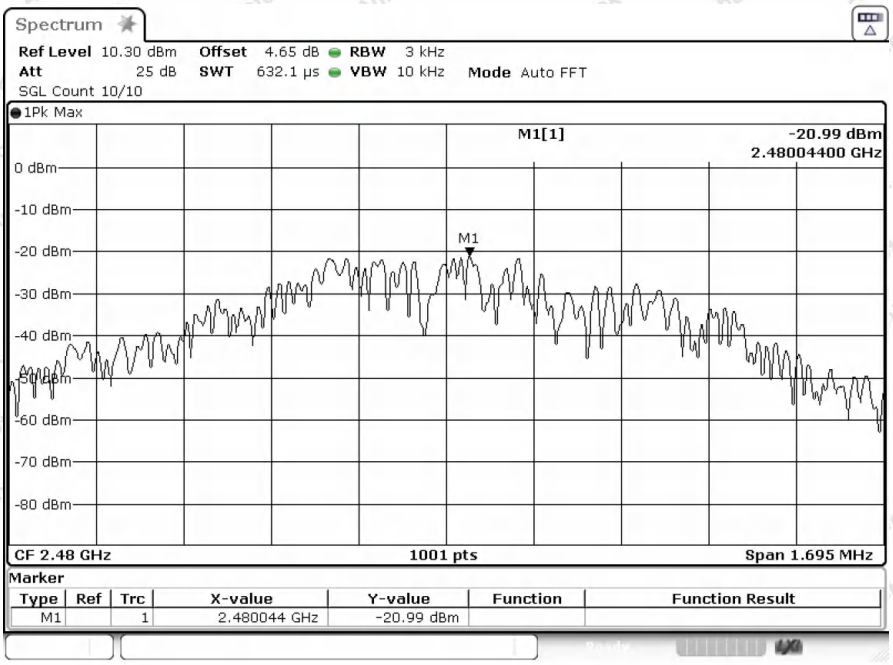
Power_Spectral_Density_NVNT_ANT1_1Mbps_2402



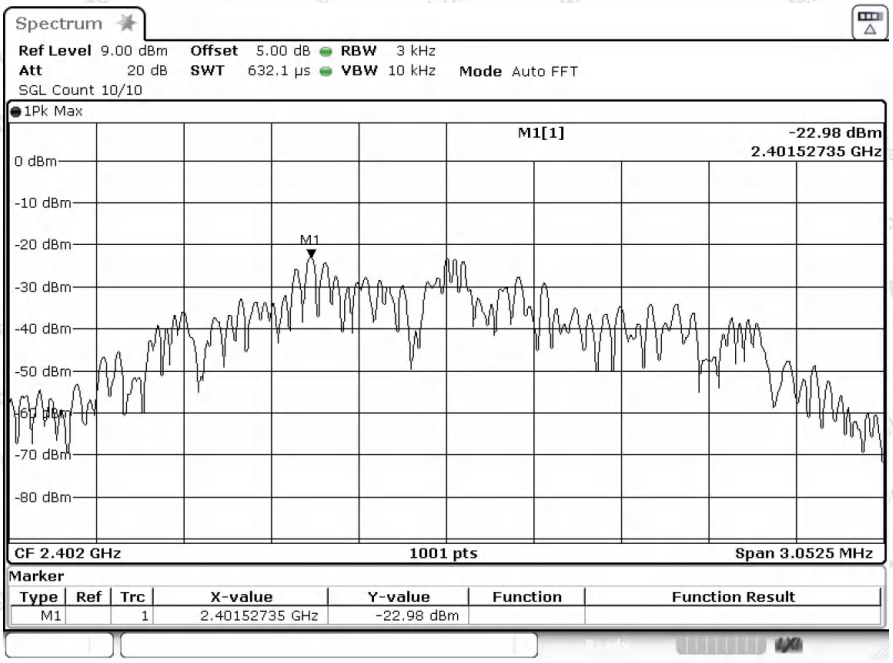
Power_Spectral_Density_NVNT_ANT1_1Mbps_2440



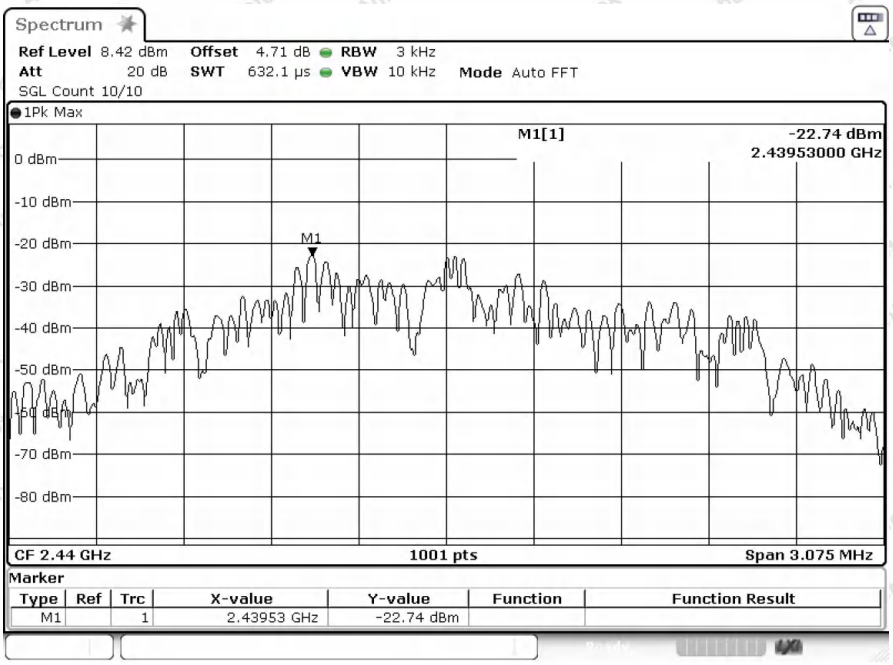
Power_Spectral_Density_NVNT_ANT1_1Mbps_2480



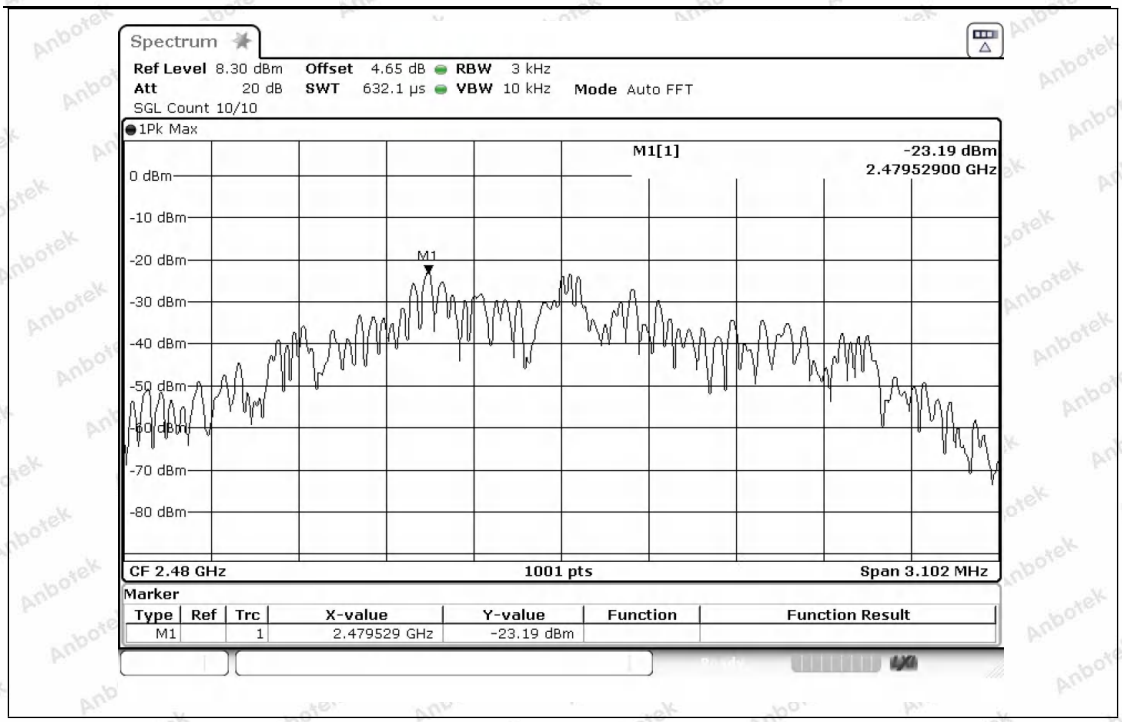
Power_Spectral_Density_NVNT_ANT1_2Mbps_2402



Power_Spectral_Density_NVNT_ANT1_2Mbps_2440



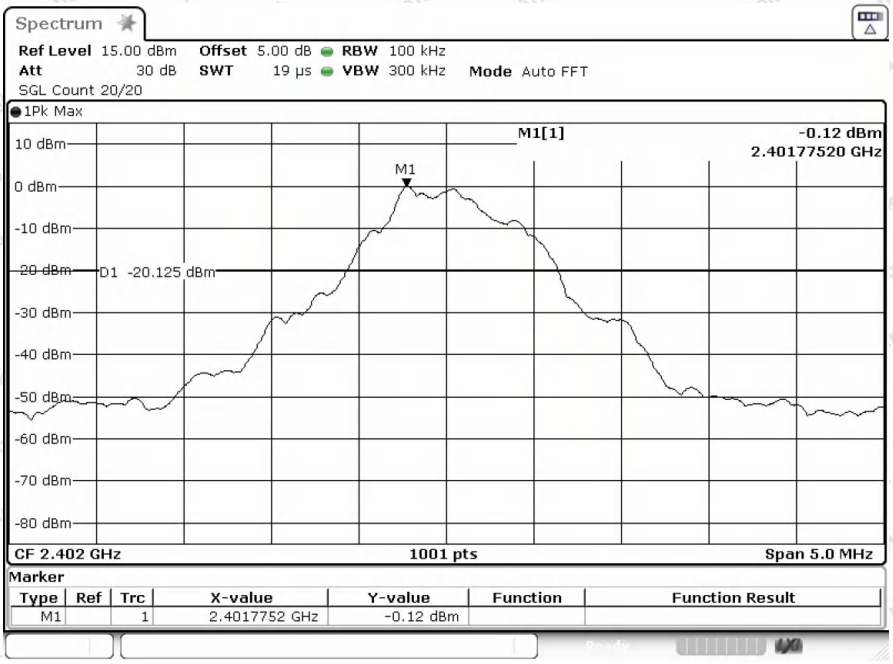
Power_Spectral_Density_NVNT_ANT1_2Mbps_2480


Spectrum
Ref Level 8.30 dBm Offset 4.65 dB RBW 3 kHz
Att 20 dB SWT 632.1 µs VBW 10 kHz Mode Auto FFT
SGL Count 10/10
1Pk Max
M1[1] -23.19 dBm
2.47952900 GHz
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
CF 2.48 GHz
1001 pts
Span 3.102 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.479529 GHz -23.19 dBm

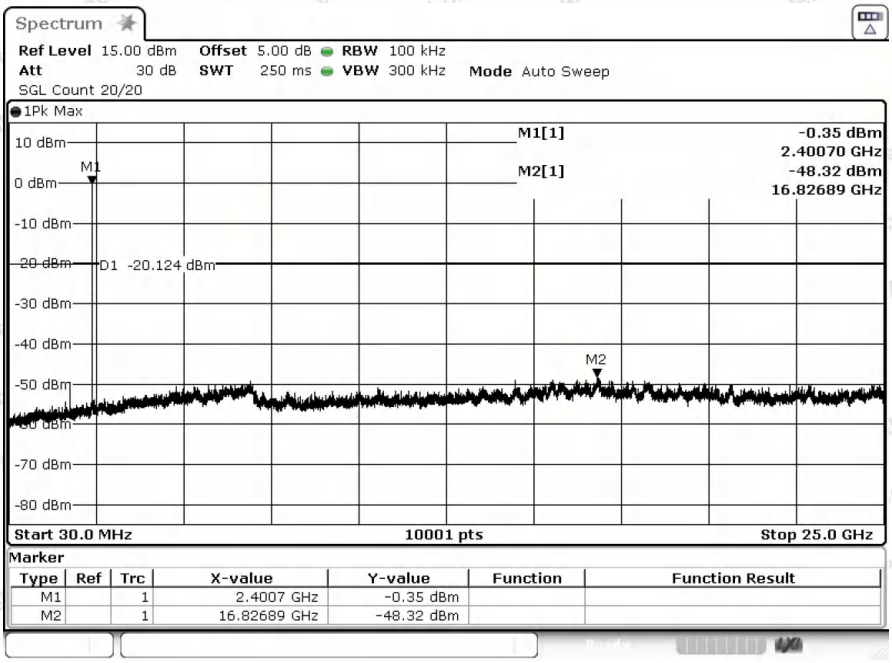
Appendix F: Spurious Emission

Condition	Antenna	Rate	TX_Frequency(MHz)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1Mbps	2402	-48.319	-20.124	Pass
NVNT	ANT1	1Mbps	2440.00	-43.213	-20.026	Pass
NVNT	ANT1	1Mbps	2480	-50.059	-20.486	Pass
NVNT	ANT1	2Mbps	2402	-48.079	-20.828	Pass
NVNT	ANT1	2Mbps	2440.00	-52.014	-20.651	Pass
NVNT	ANT1	2Mbps	2480	-53.225	-21.039	Pass

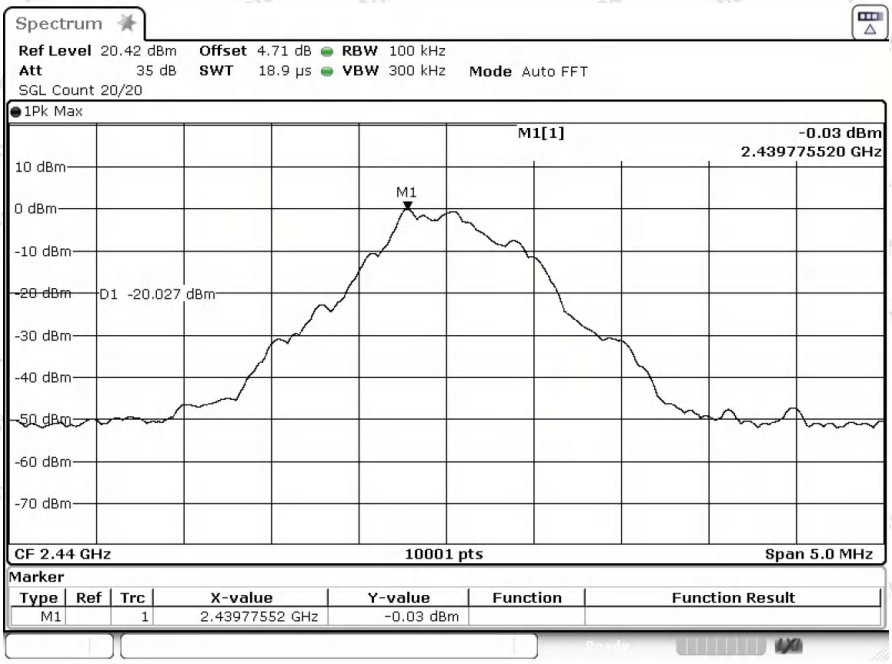
1_Reference_Level_NVNT_ANT1_1Mbps_2402



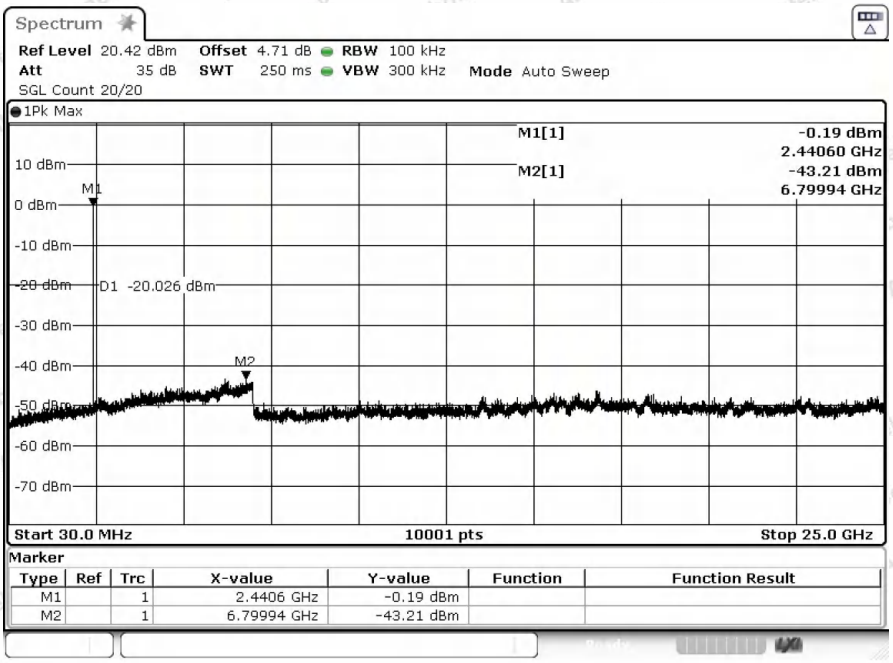
2_Spurious_Emission_NVNT_ANT1_1Mbps_2402



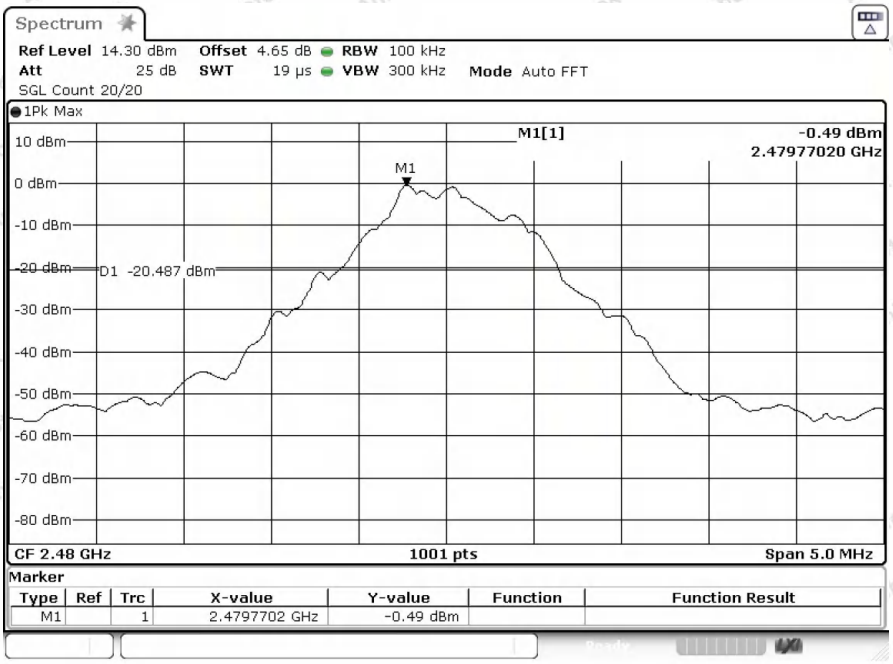
1_Reference_Level_NVNT_ANT1_1Mbps_2440



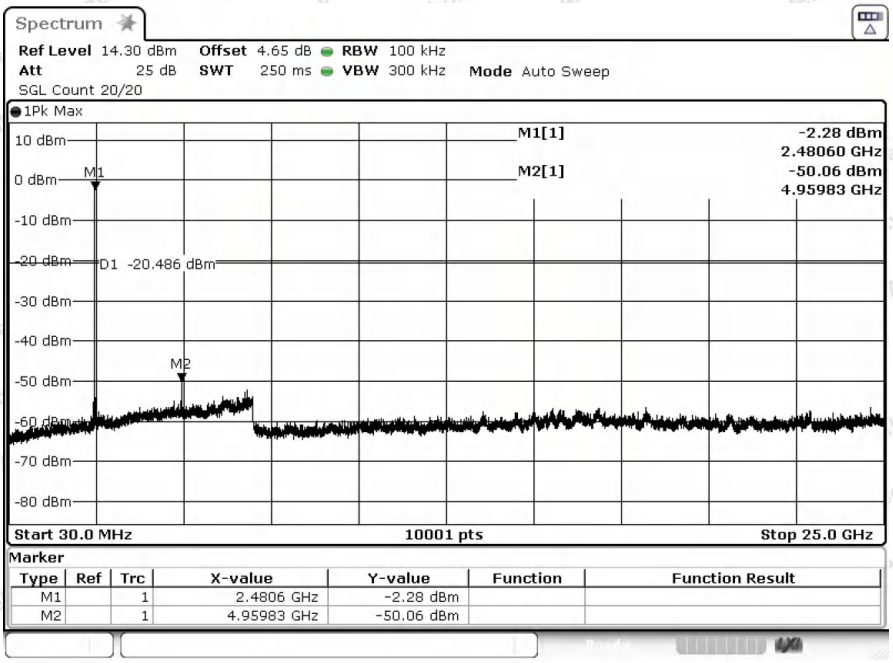
2_Spurious_Emission_NVNT_ANT1_1Mbps_2440



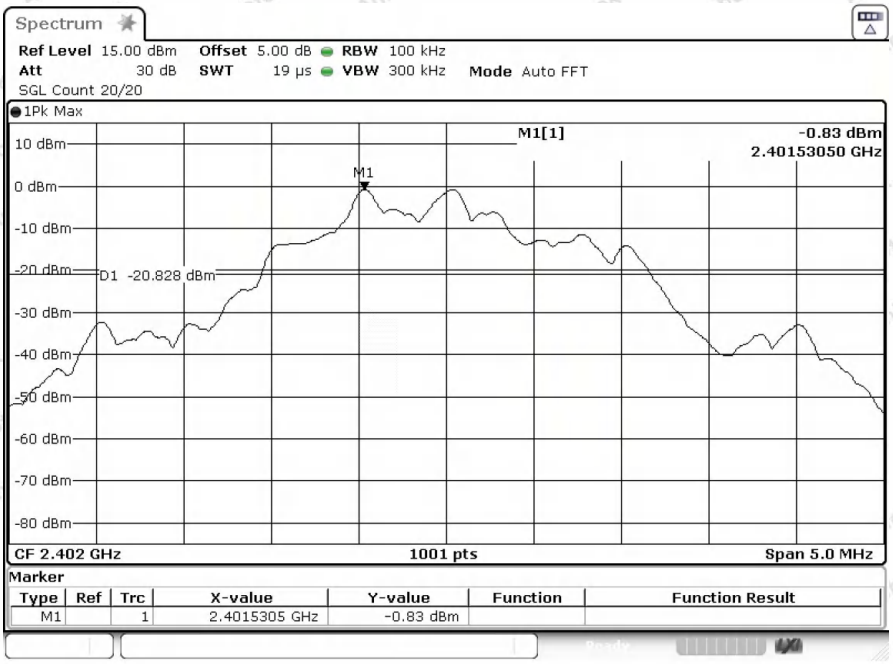
1_Reference_Level_NVNT_ANT1_1Mbps_2480



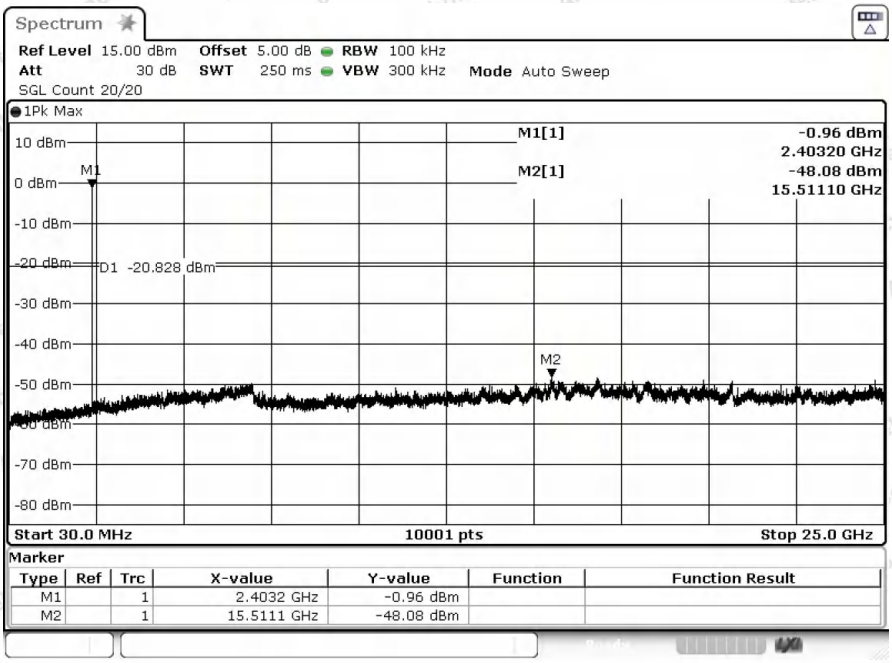
2_Spurious_Emission_NVNT_ANT1_1Mbps_2480



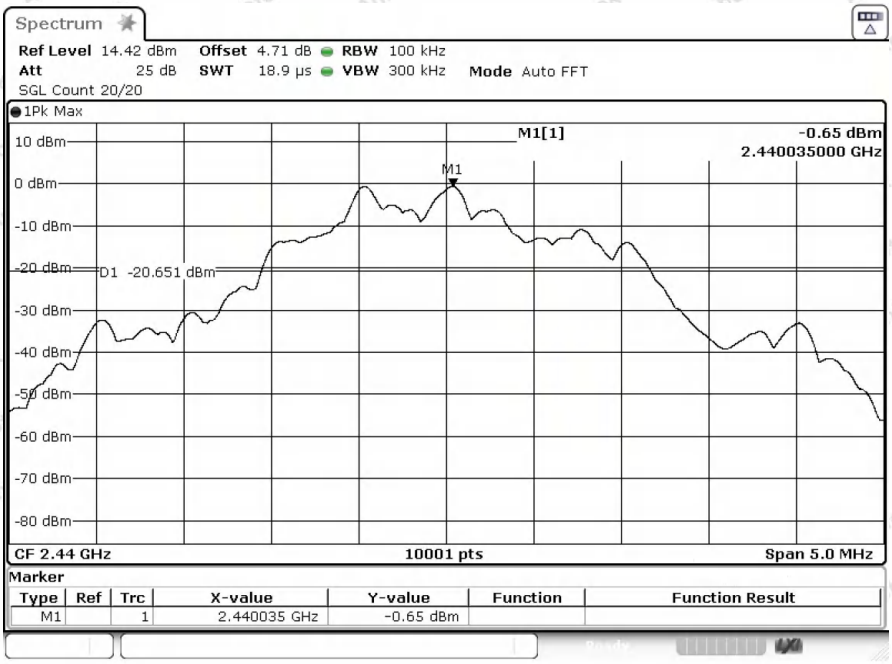
1_Reference_Level_NVNT_ANT1_2Mbps_2402



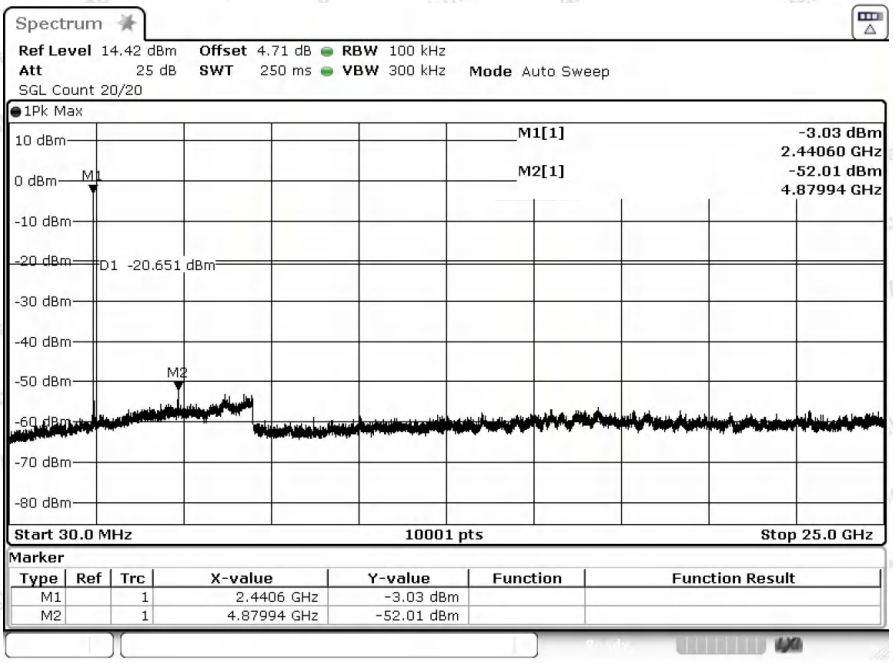
2_Spurious_Emission_NVNT_ANT1_2Mbps_2402



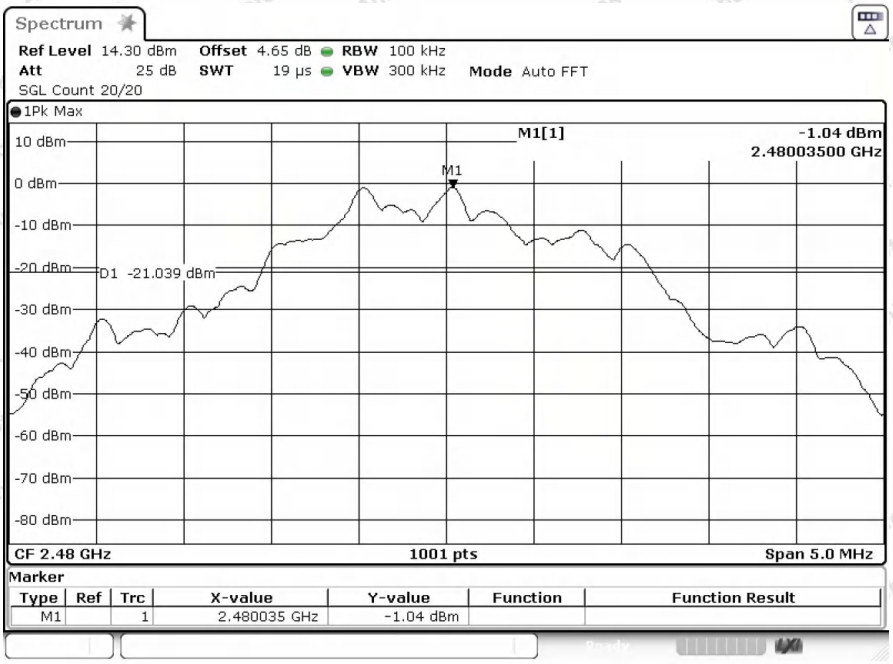
1_Reference_Level_NVNT_ANT1_2Mbps_2440



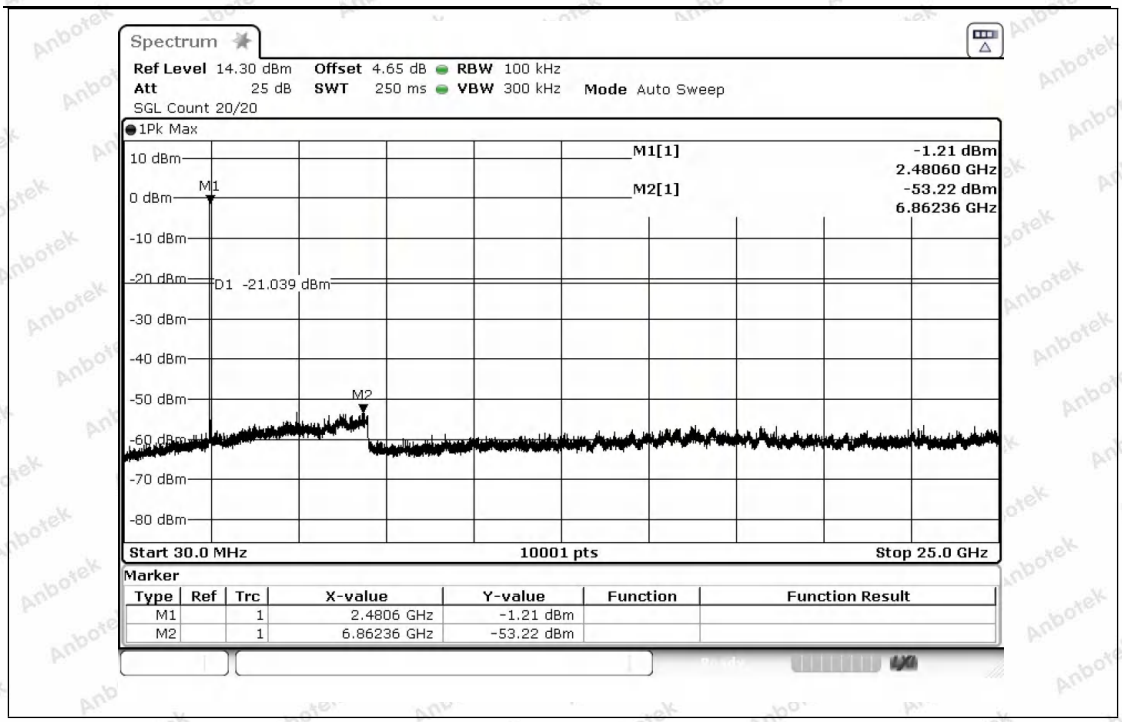
2_Spurious_Emission_NVNT_ANT1_2Mbps_2440



1_Reference_Level_NVNT_ANT1_2Mbps_2480



2_Spurious_Emission_NVNT_ANT1_2Mbps_2480


Spectrum
Ref Level 14.30 dBm Offset 4.65 dB RBW 100 kHz
Att 25 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep
SGL Count 20/20
1Pk Max
M1[1] -1.21 dBm 2.48060 GHz
M2[1] -53.22 dBm 6.86236 GHz
D1 -21.039 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
Start 30.0 MHz 10001 pts Stop 25.0 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.4806 GHz -1.21 dBm
M2 1 6.86236 GHz -53.22 dBm

---End---