



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Car dashcam

Trade Mark: N/A

Test Model: X20MAX

Environmental Conditions

Temperature:	24.4° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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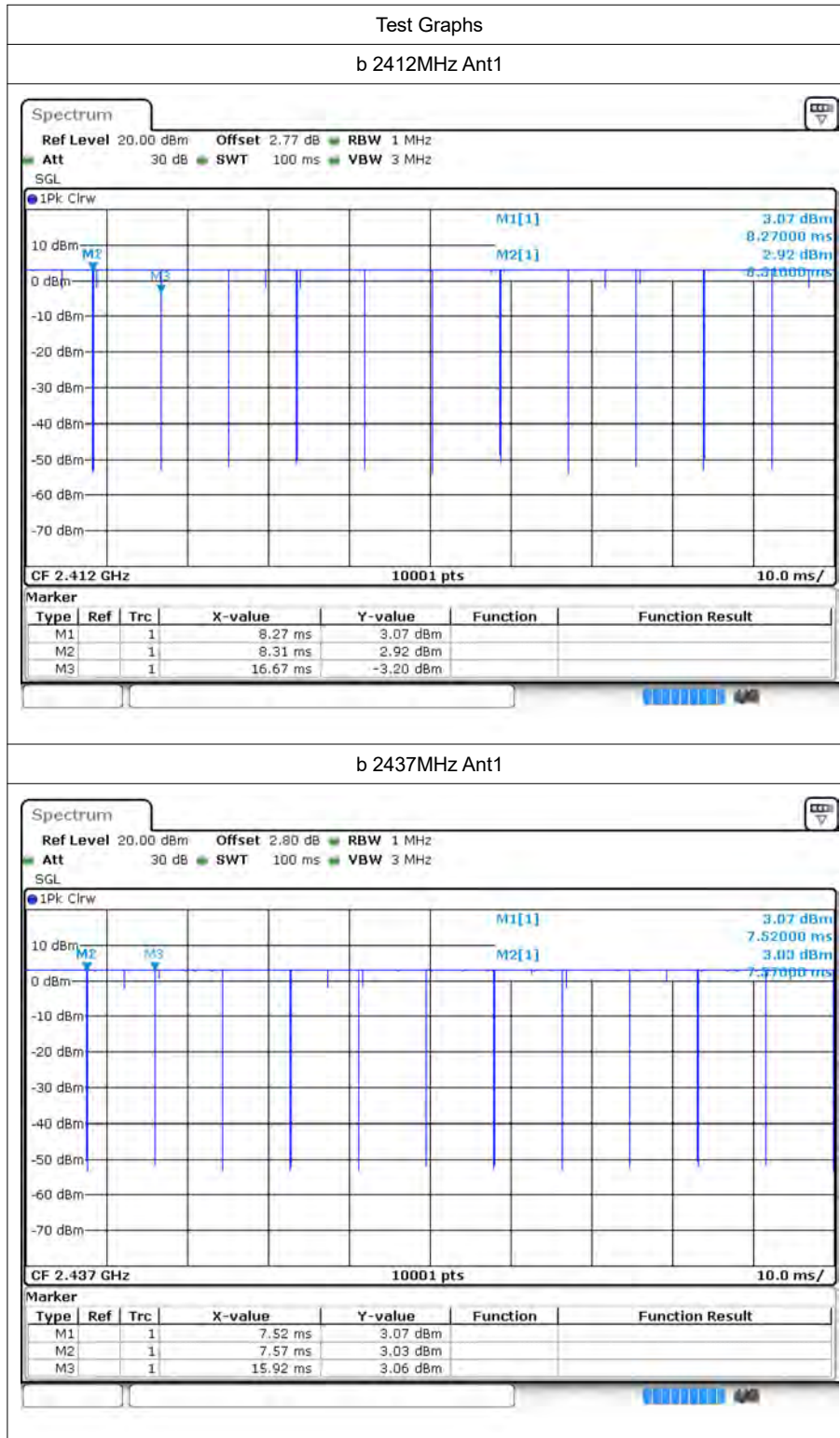
1 Duty Cycle

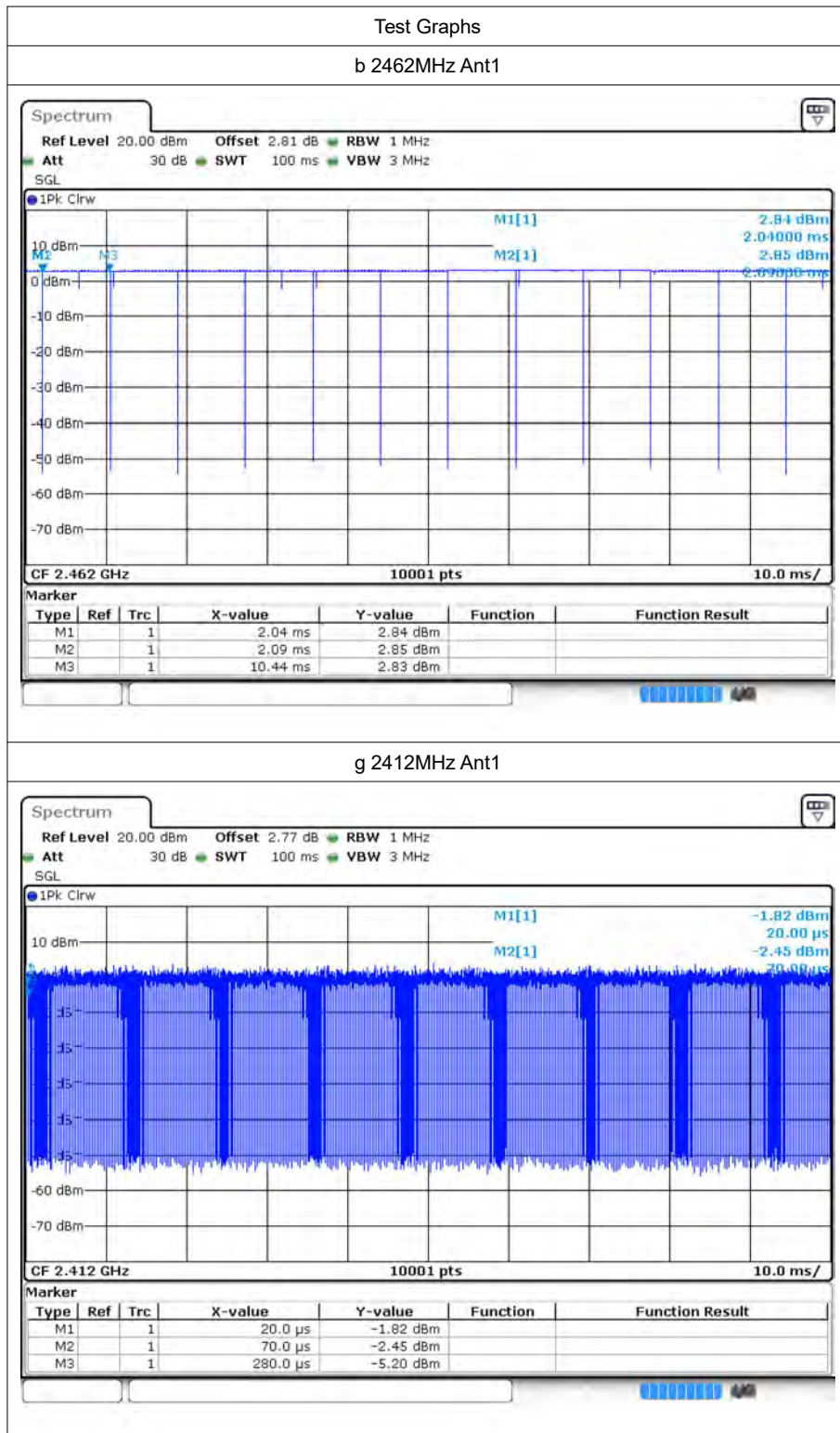
1.1 Test Result

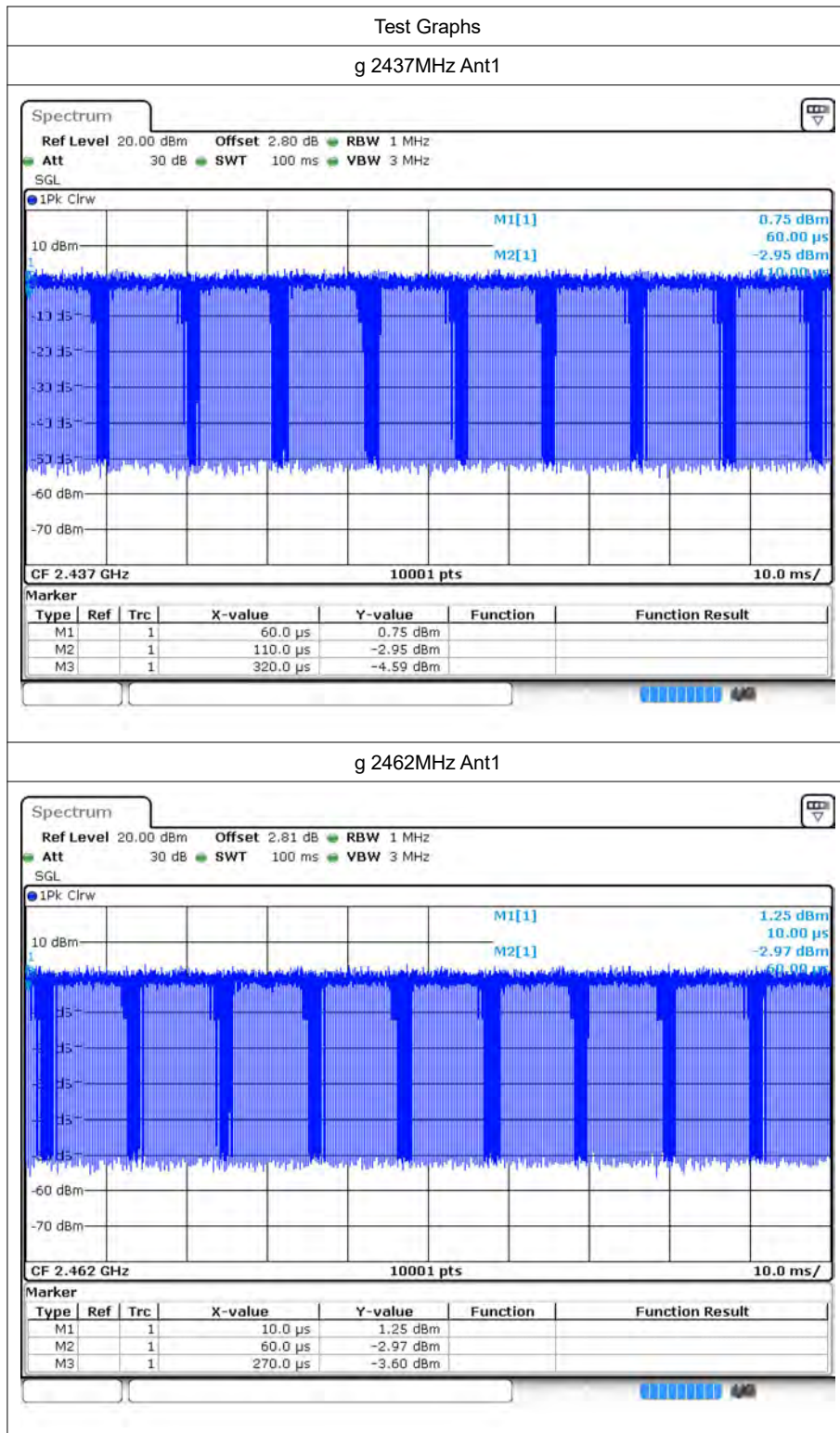
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.63	0.02	0.12
b	2437	Ant1	99.59	0.02	0.12
b	2462	Ant1	99.59	0.02	0.12
g	2412	Ant1	86.89	0.61	4.76
g	2437	Ant1	86.94	0.61	4.76
g	2462	Ant1	86.89	0.61	4.76
n20	2412	Ant1	87.56	0.58	4.35
n20	2437	Ant1	87.58	0.58	4.35
n20	2462	Ant1	87.58	0.58	4.17
n40	2422	Ant1	88.04	0.55	4
n40	2437	Ant1	88.03	0.55	4
n40	2452	Ant1	88.04	0.55	4

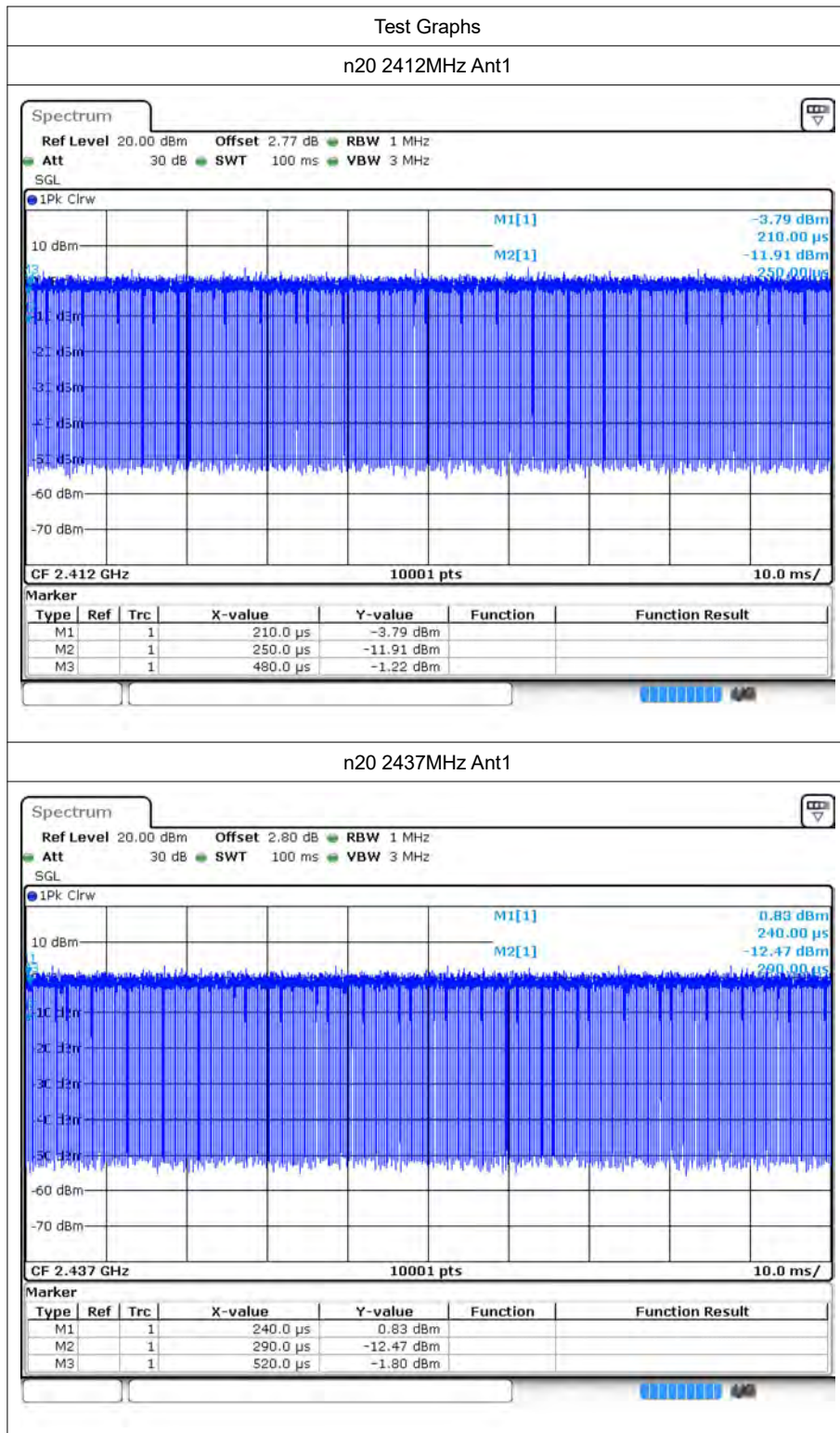


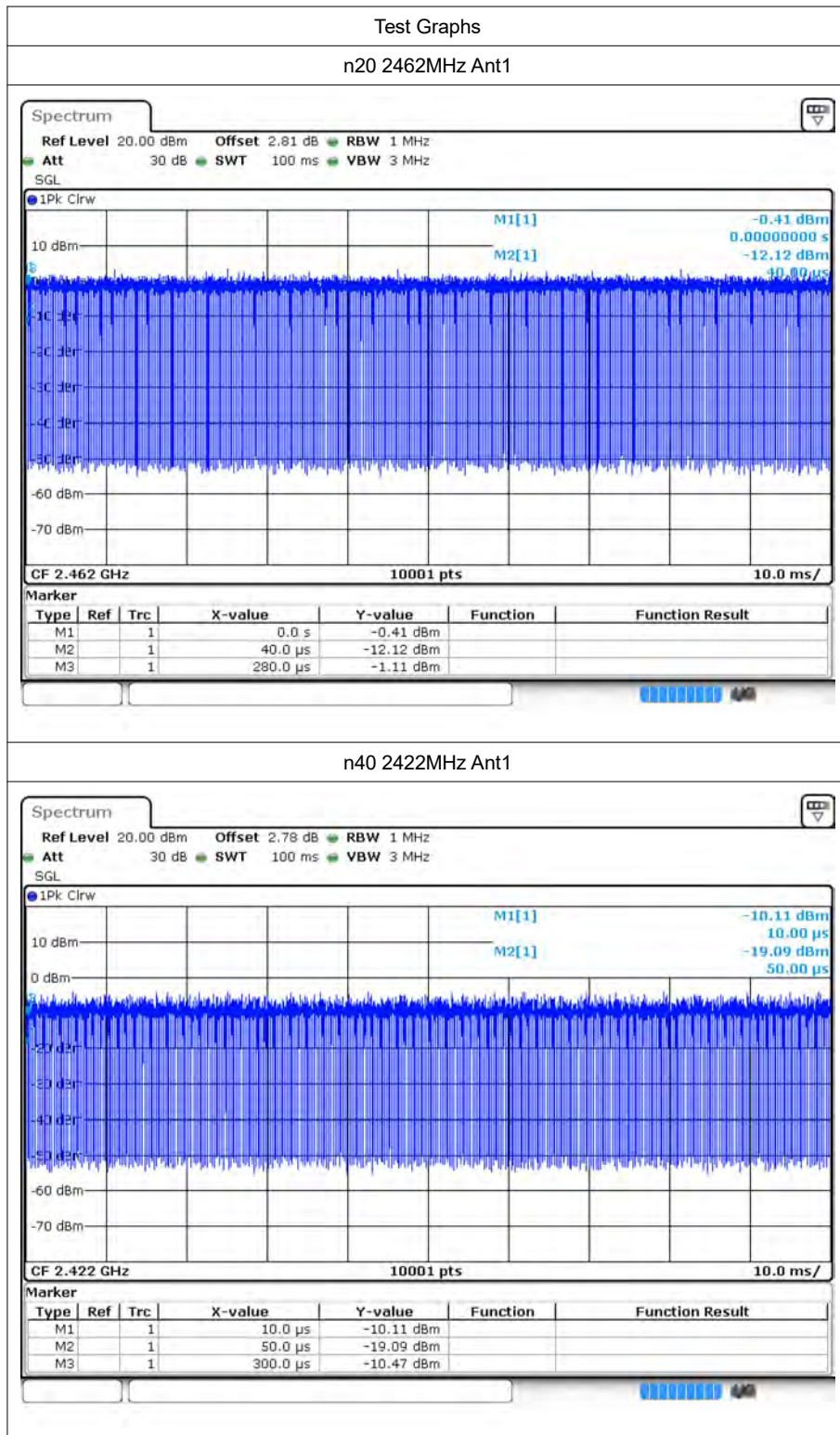
1.2 Test Graphs

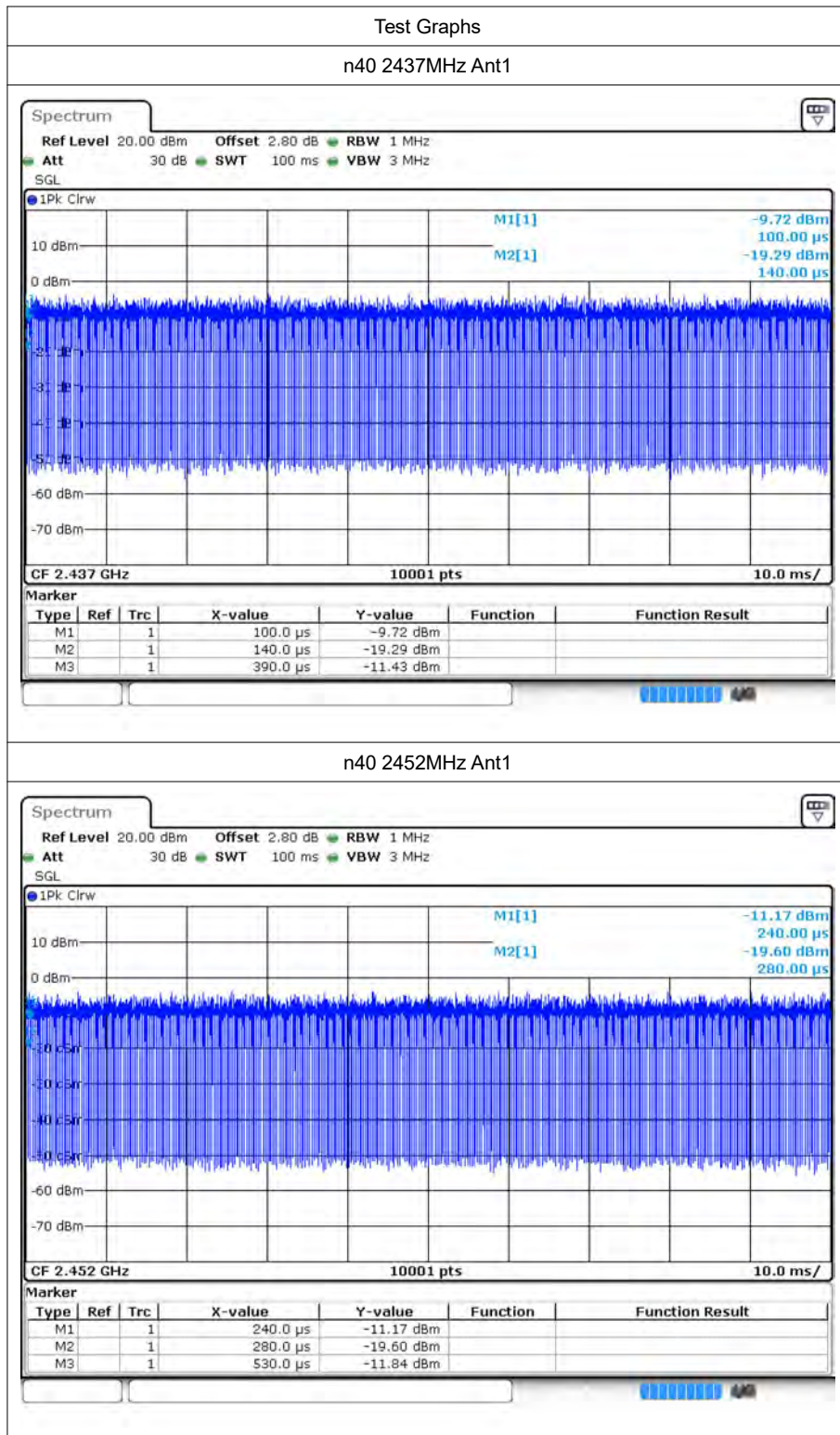














2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	13.42	30	Pass
b	2437	Ant1	13.47	30	Pass
b	2462	Ant1	13.39	30	Pass
g	2412	Ant1	12.98	30	Pass
g	2437	Ant1	12.97	30	Pass
g	2462	Ant1	12.9	30	Pass
n20	2412	Ant1	12.44	30	Pass
n20	2437	Ant1	12.44	30	Pass
n20	2462	Ant1	12.45	30	Pass
n40	2422	Ant1	12.35	30	Pass
n40	2437	Ant1	12.32	30	Pass
n40	2452	Ant1	12.31	30	Pass

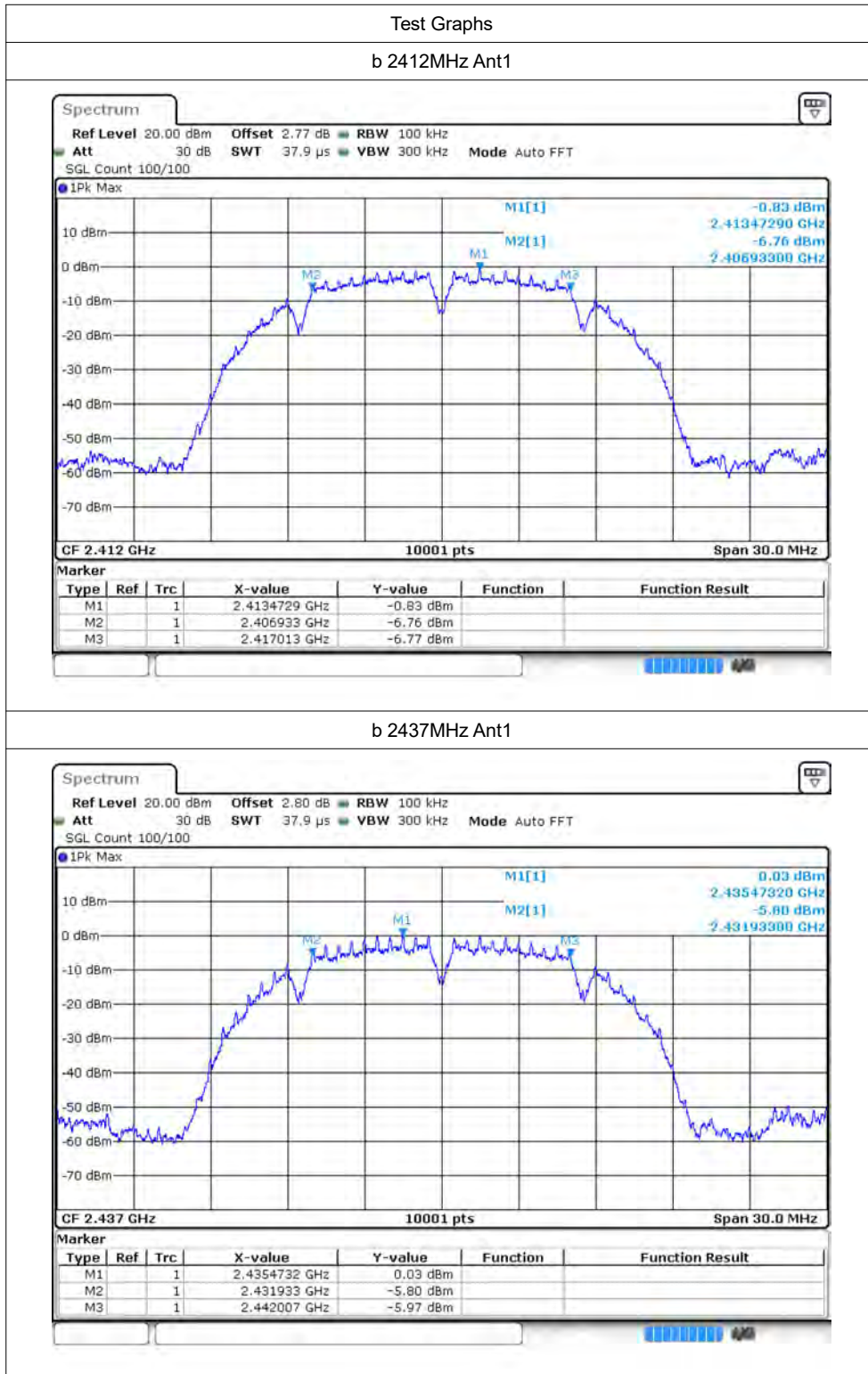


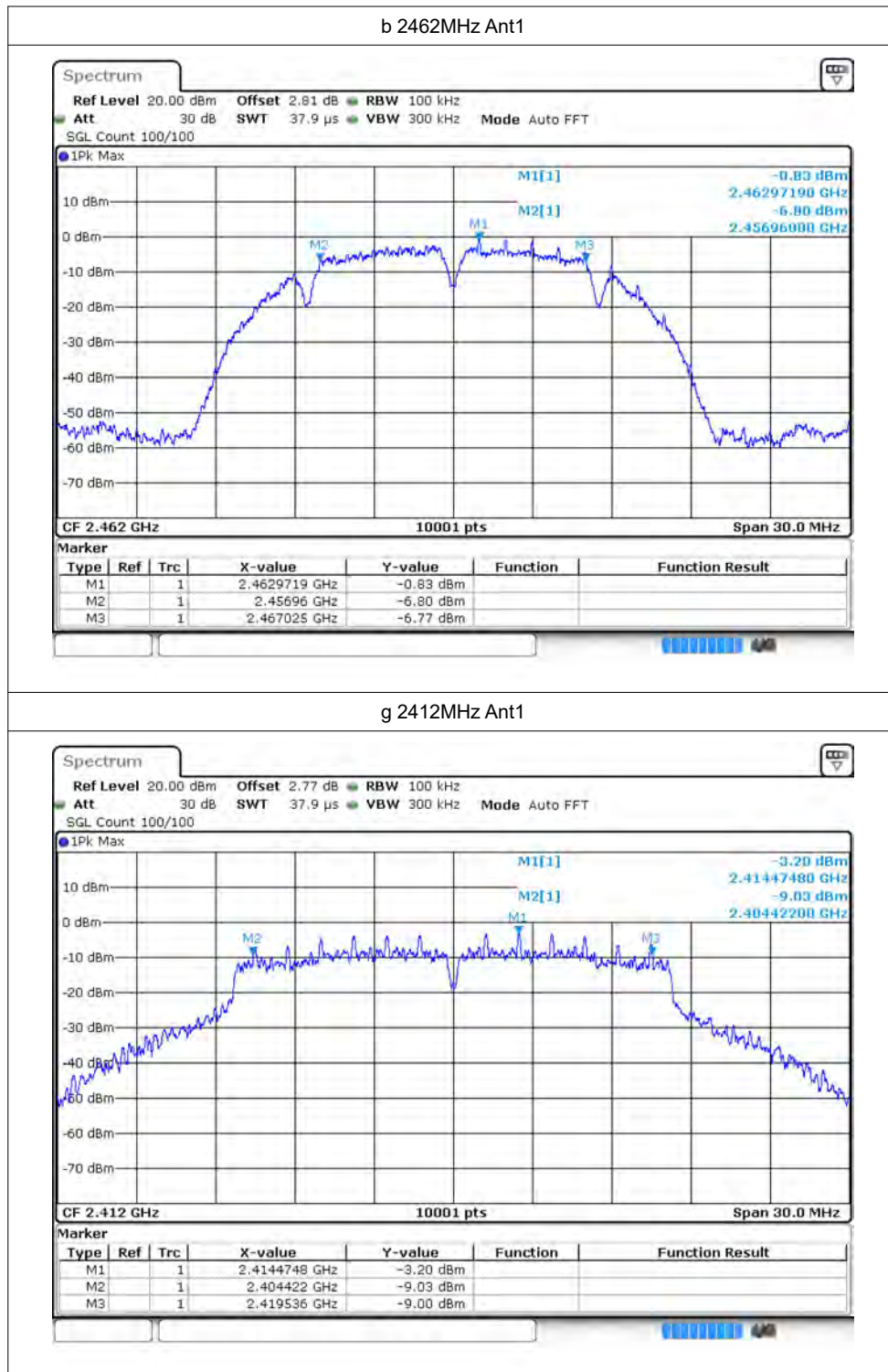
3 -6dB Bandwidth

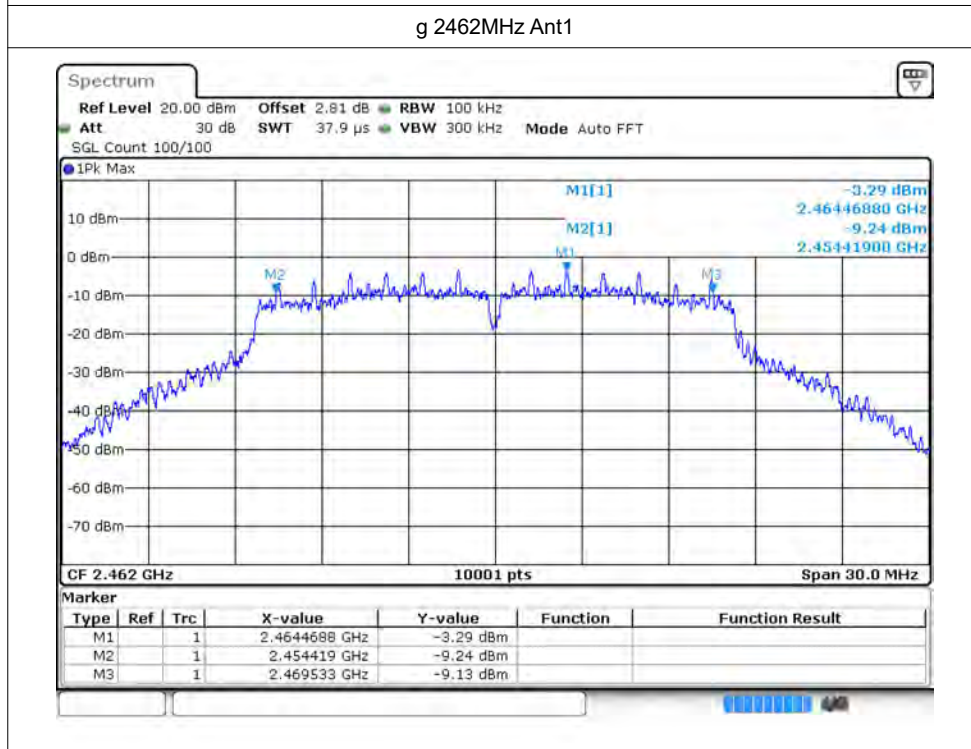
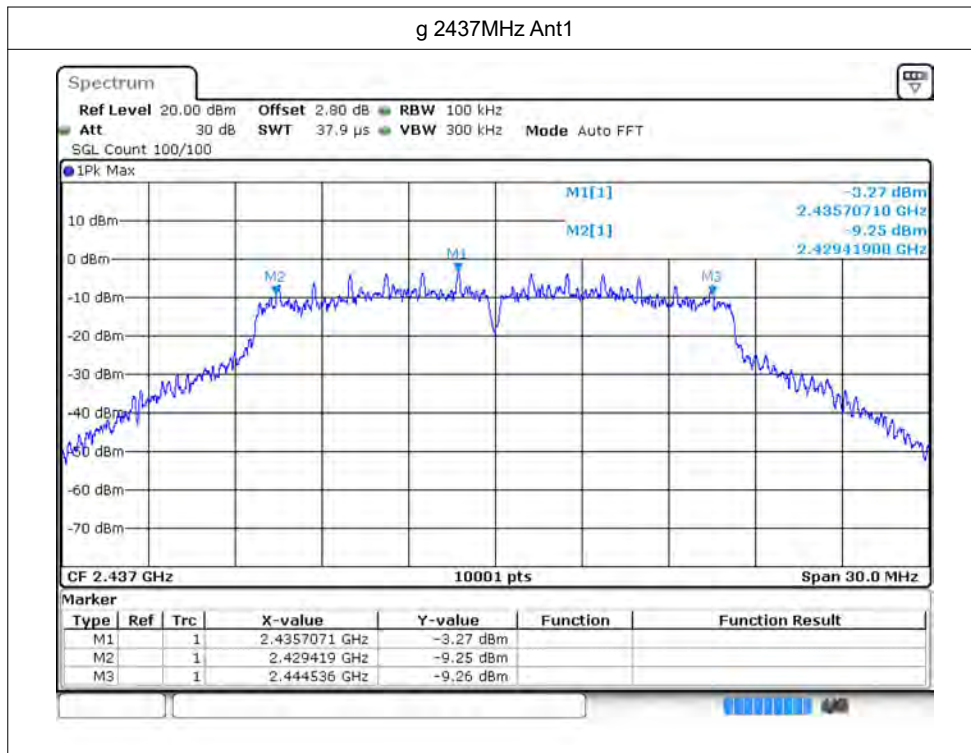
3.1 Test Result

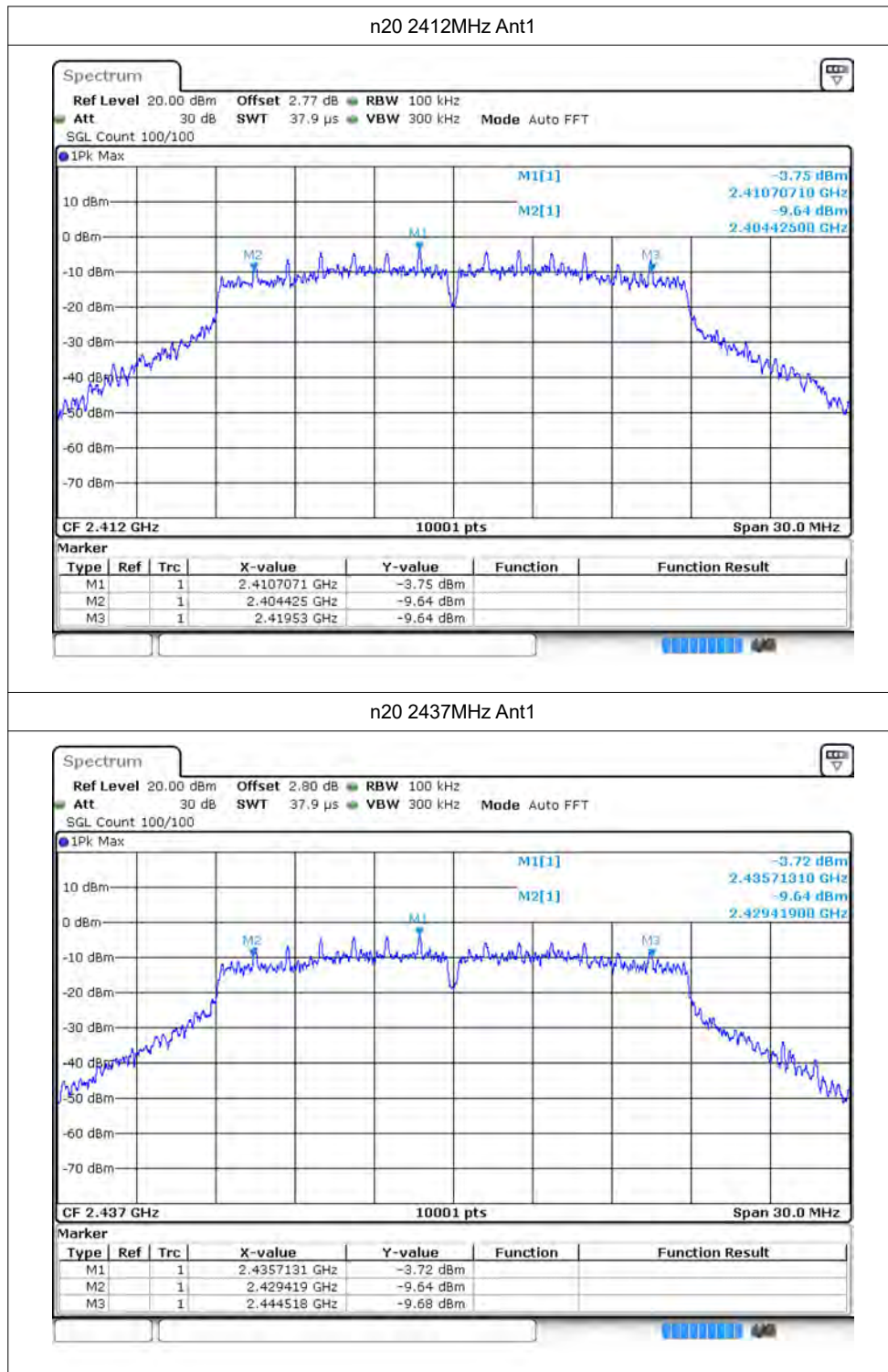
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.08	0.5	Pass
b	2437	Ant1	10.074	0.5	Pass
b	2462	Ant1	10.065	0.5	Pass
g	2412	Ant1	15.114	0.5	Pass
g	2437	Ant1	15.117	0.5	Pass
g	2462	Ant1	15.114	0.5	Pass
n20	2412	Ant1	15.105	0.5	Pass
n20	2437	Ant1	15.099	0.5	Pass
n20	2462	Ant1	15.084	0.5	Pass
n40	2422	Ant1	35.1	0.5	Pass
n40	2437	Ant1	33.792	0.5	Pass
n40	2452	Ant1	35.088	0.5	Pass

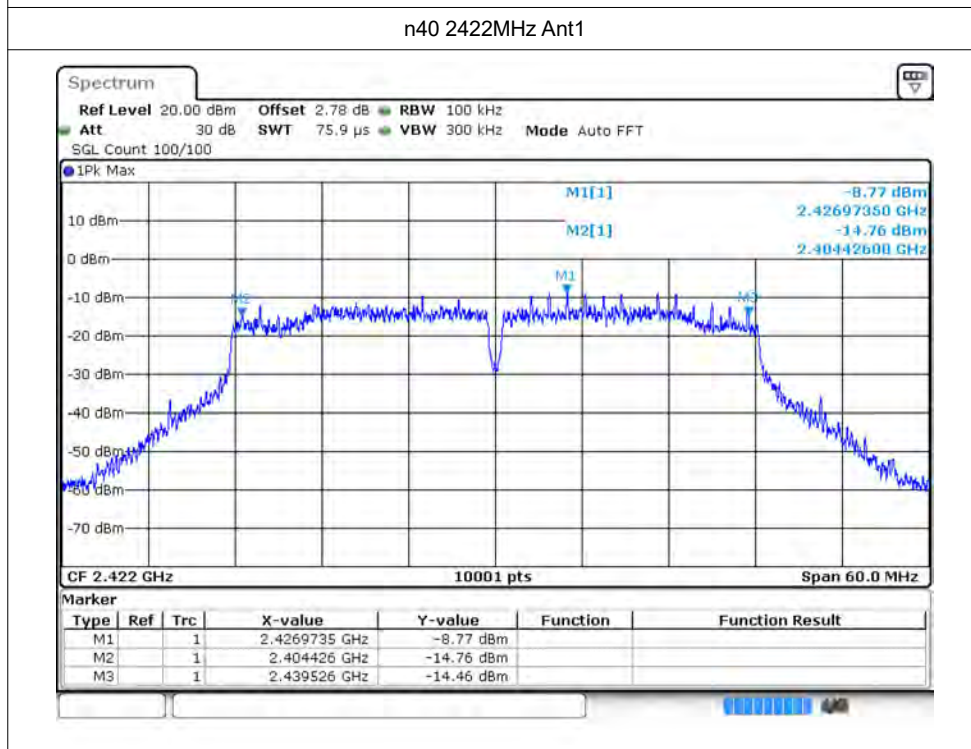
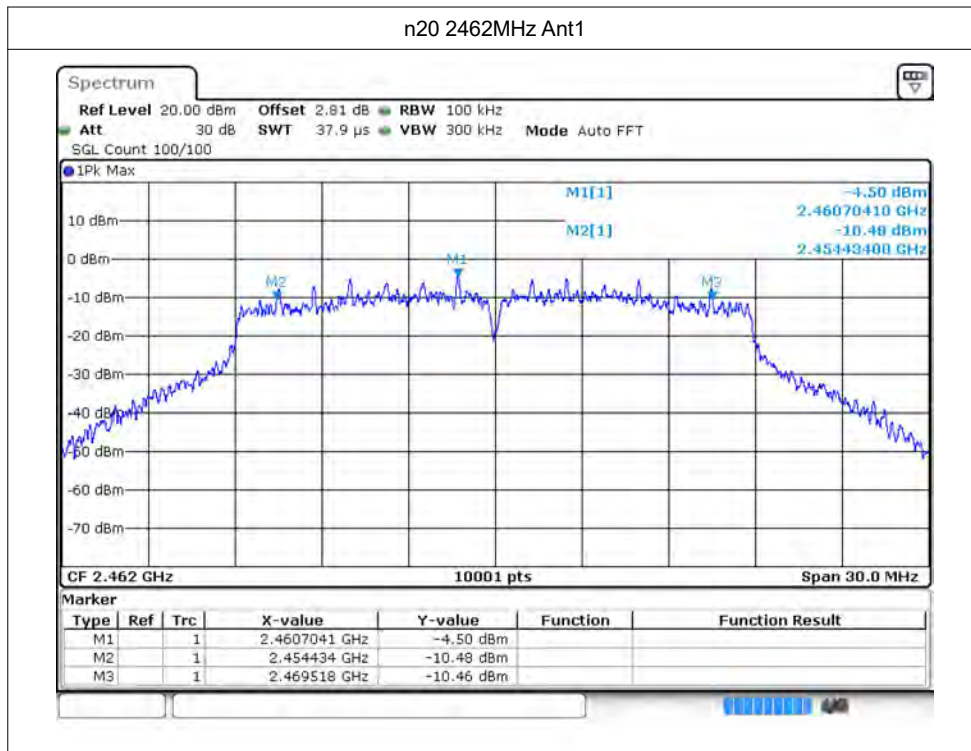
3.2 Test Graphs

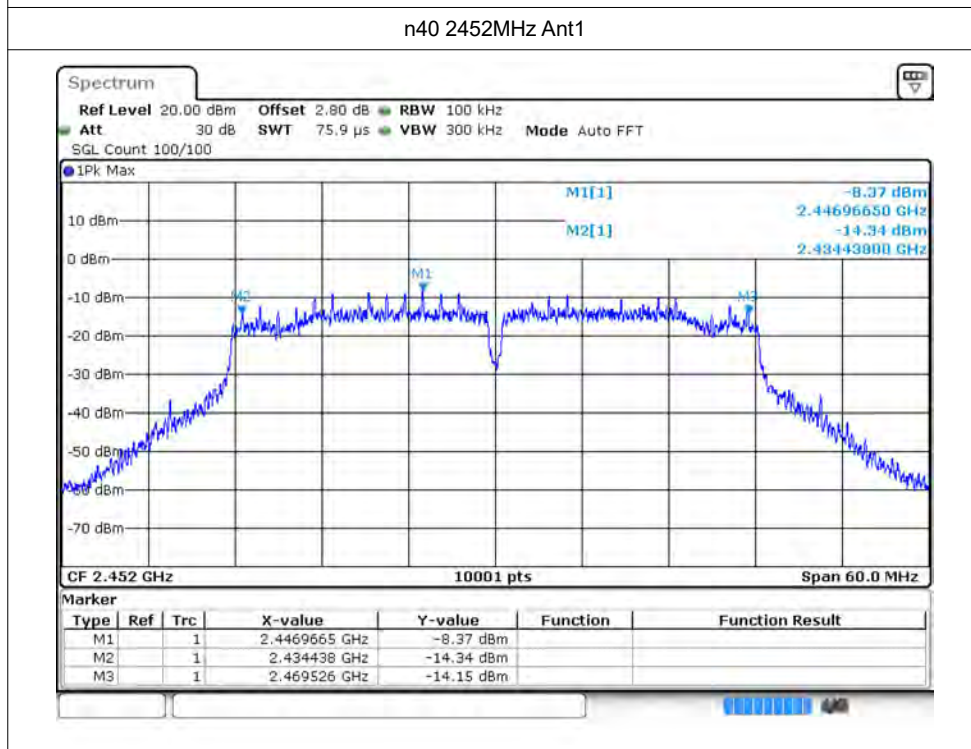
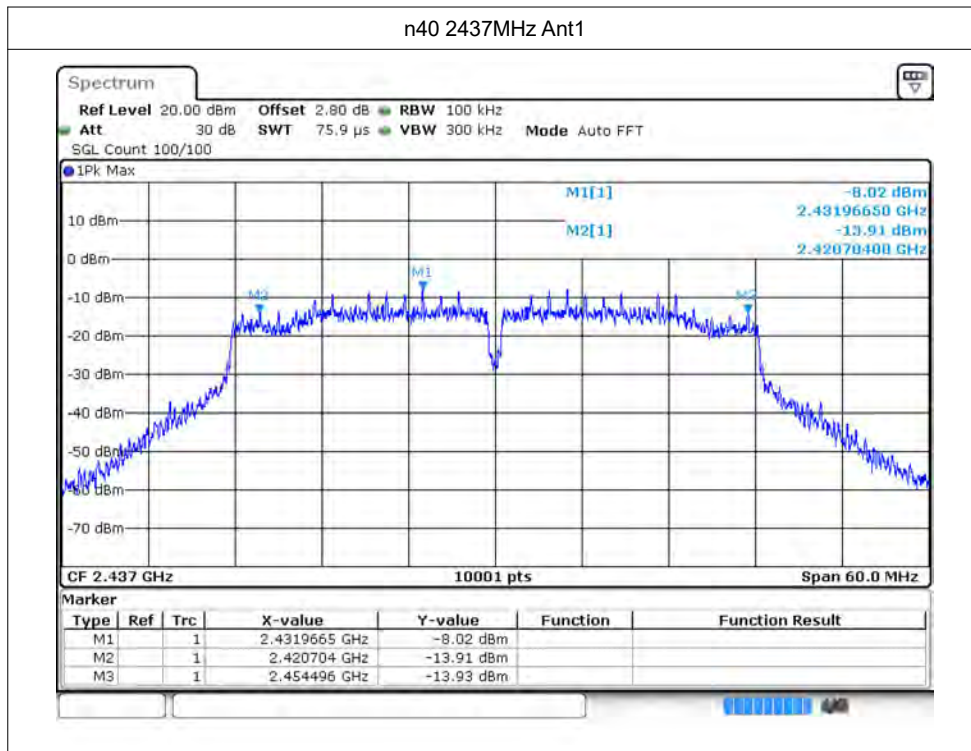












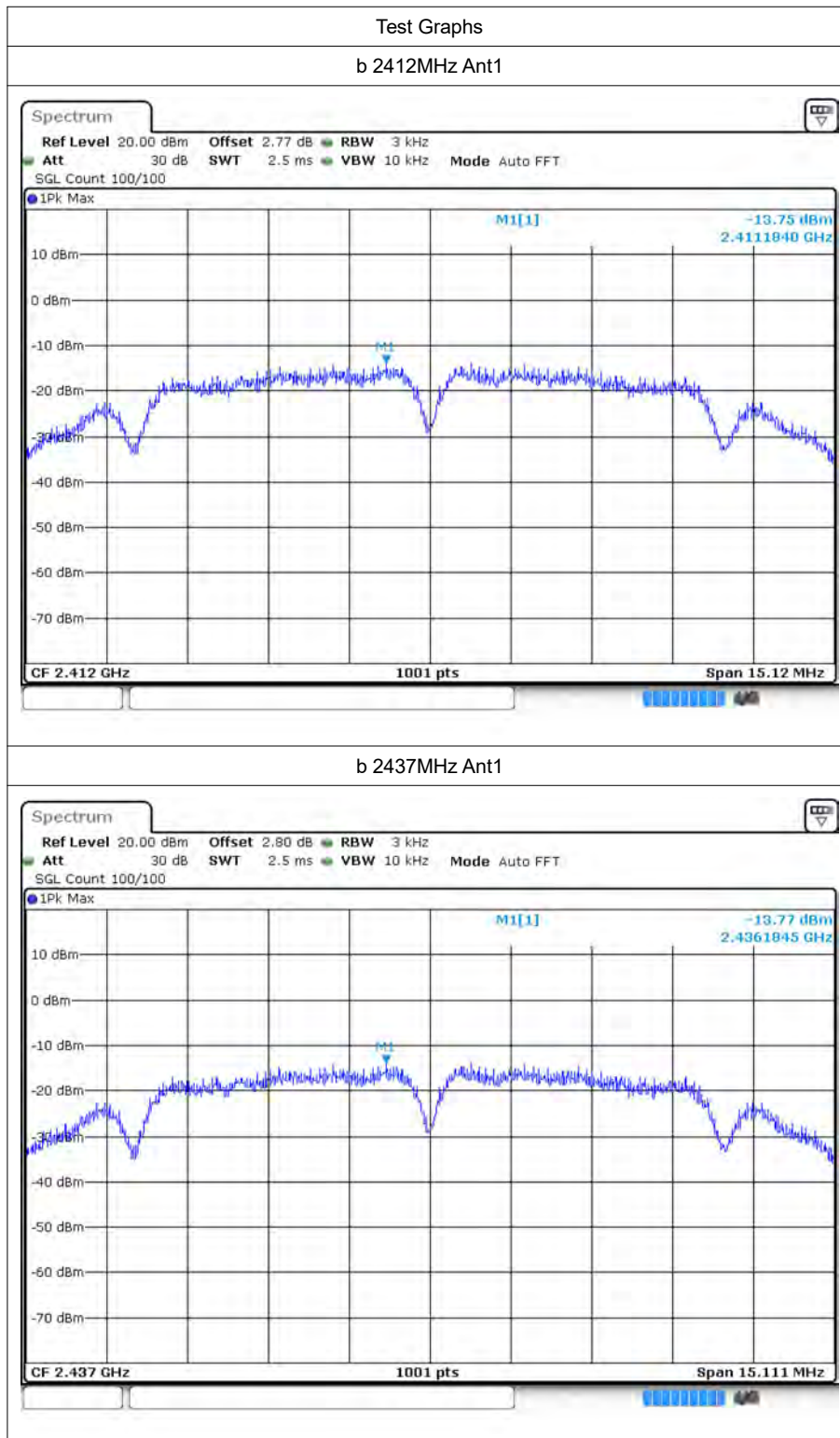


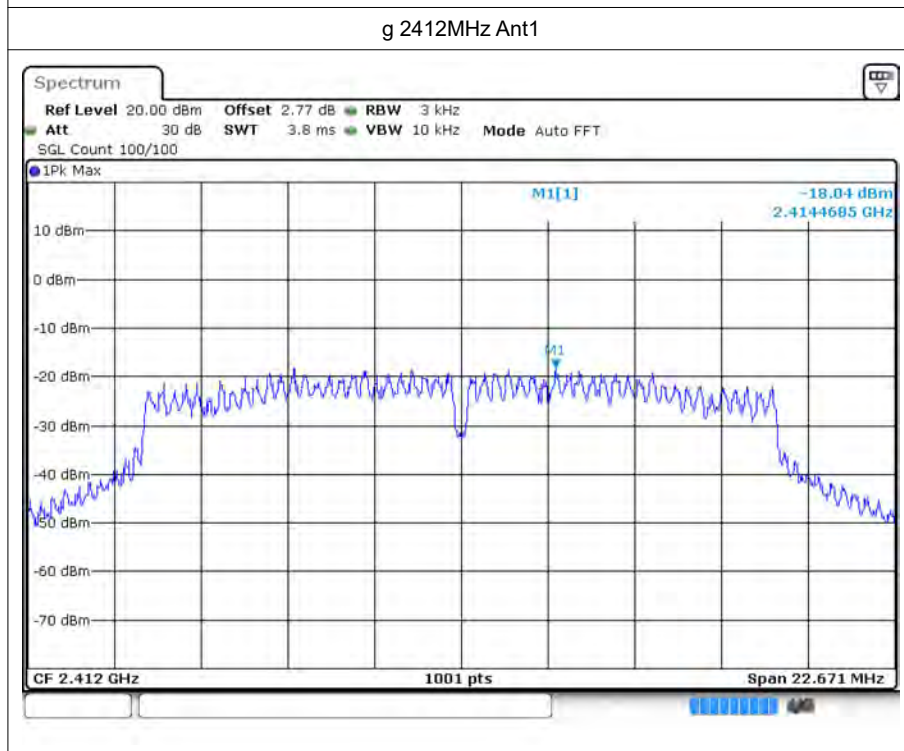
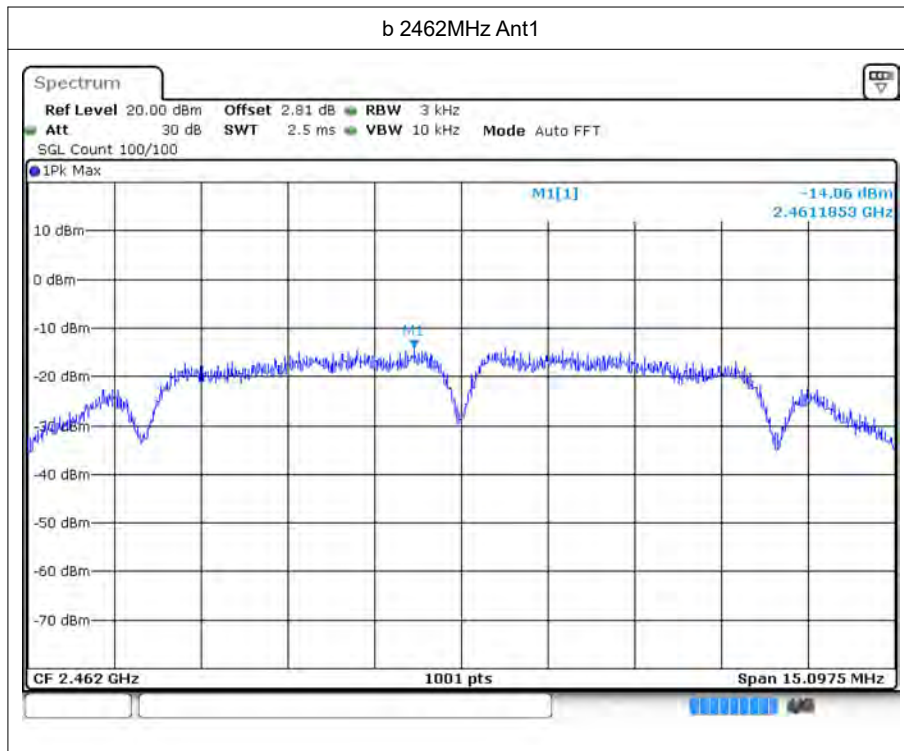
4 Maximum Power Spectral Density Level

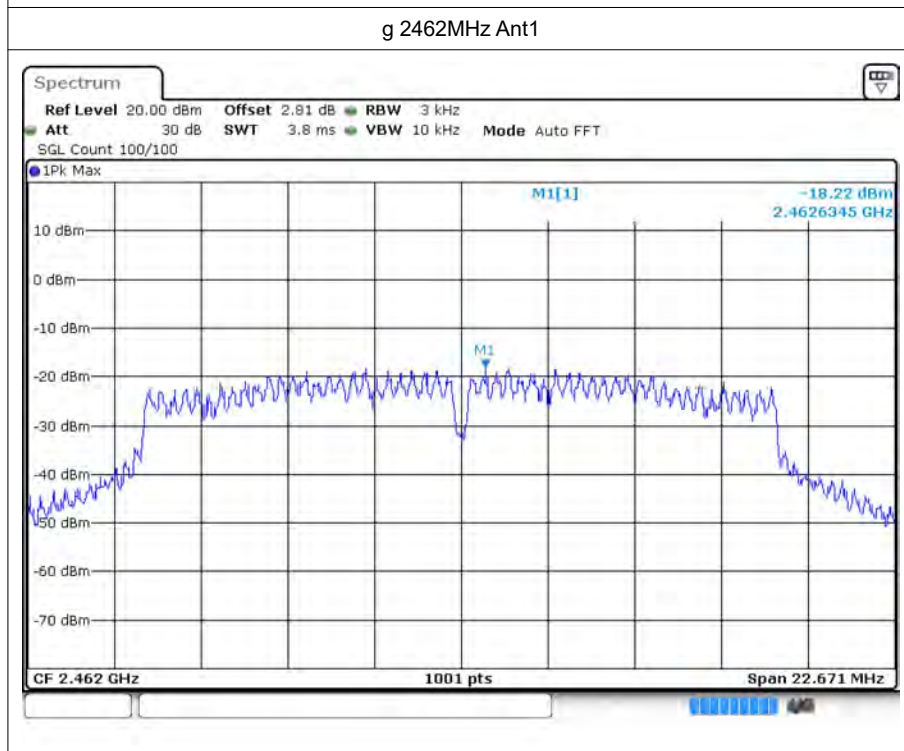
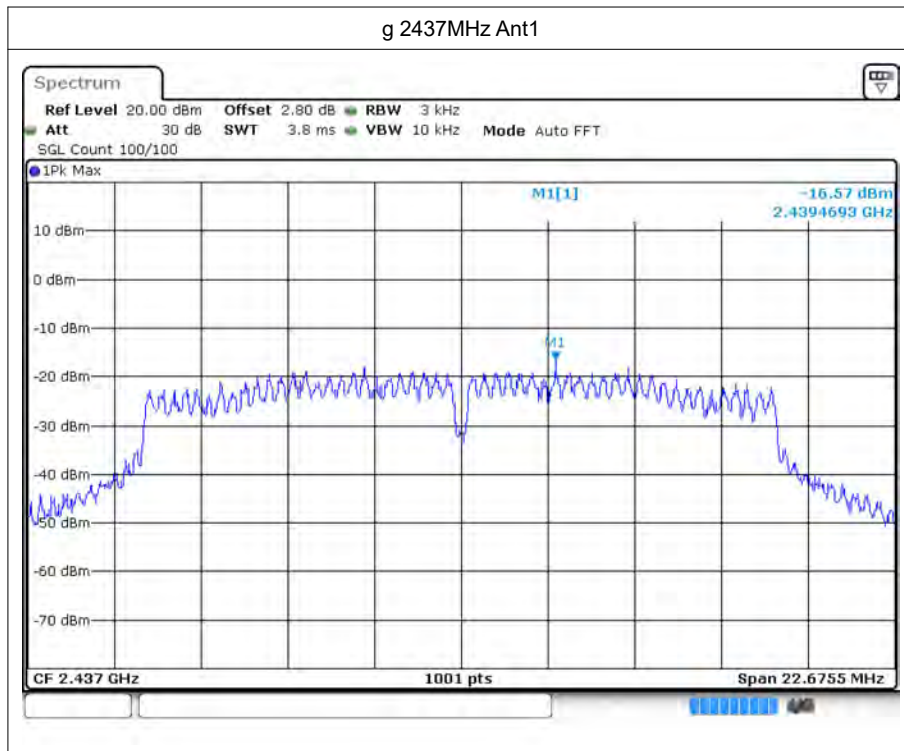
4.1 Test Result

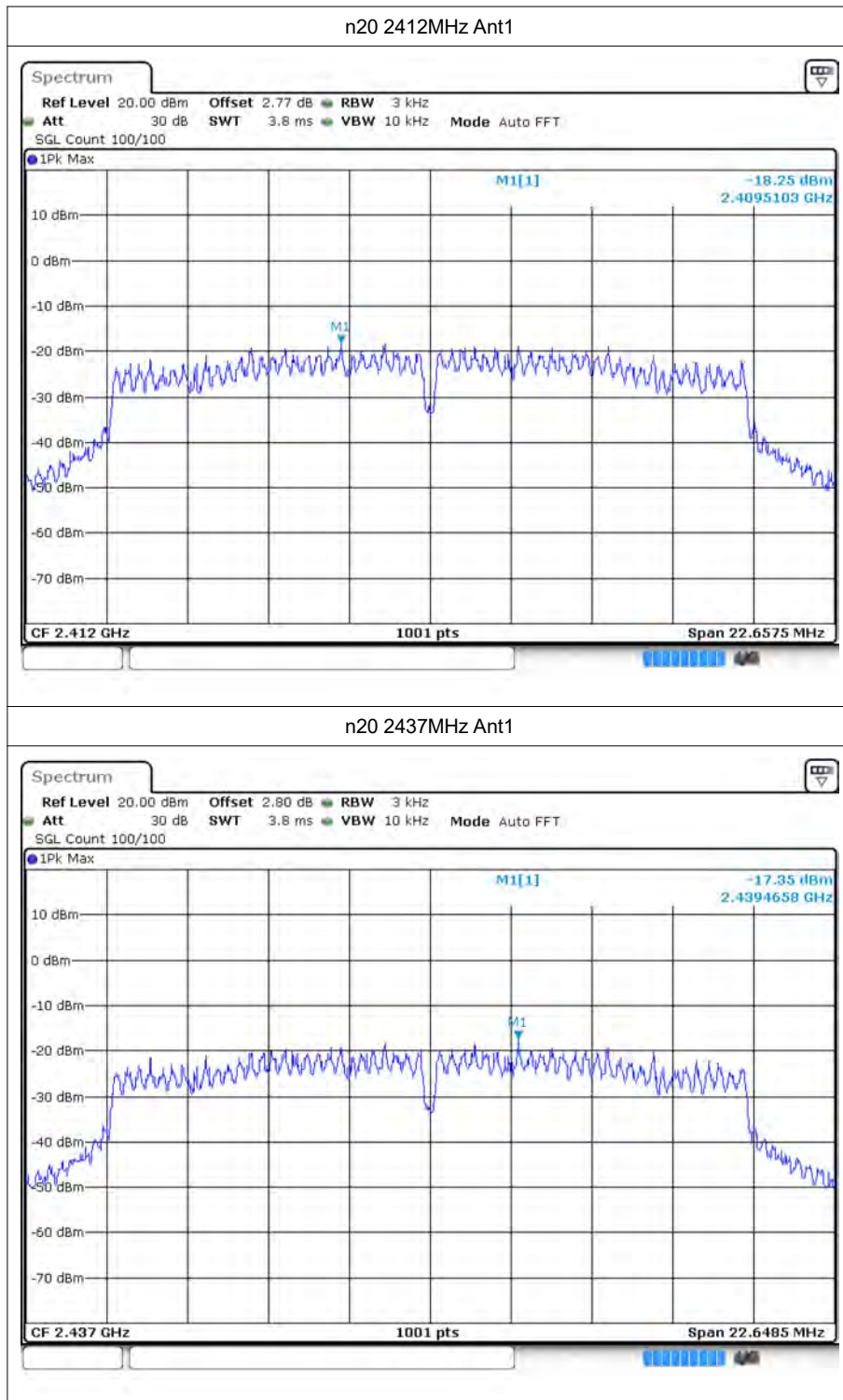
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-13.75	≤8	Pass
b	2437	Ant1	-13.77	≤8	Pass
b	2462	Ant1	-14.06	≤8	Pass
g	2412	Ant1	-18.04	≤8	Pass
g	2437	Ant1	-16.57	≤8	Pass
g	2462	Ant1	-18.22	≤8	Pass
n20	2412	Ant1	-18.25	≤8	Pass
n20	2437	Ant1	-17.35	≤8	Pass
n20	2462	Ant1	-17.99	≤8	Pass
n40	2422	Ant1	-22.72	≤8	Pass
n40	2437	Ant1	-22.36	≤8	Pass
n40	2452	Ant1	-22.13	≤8	Pass

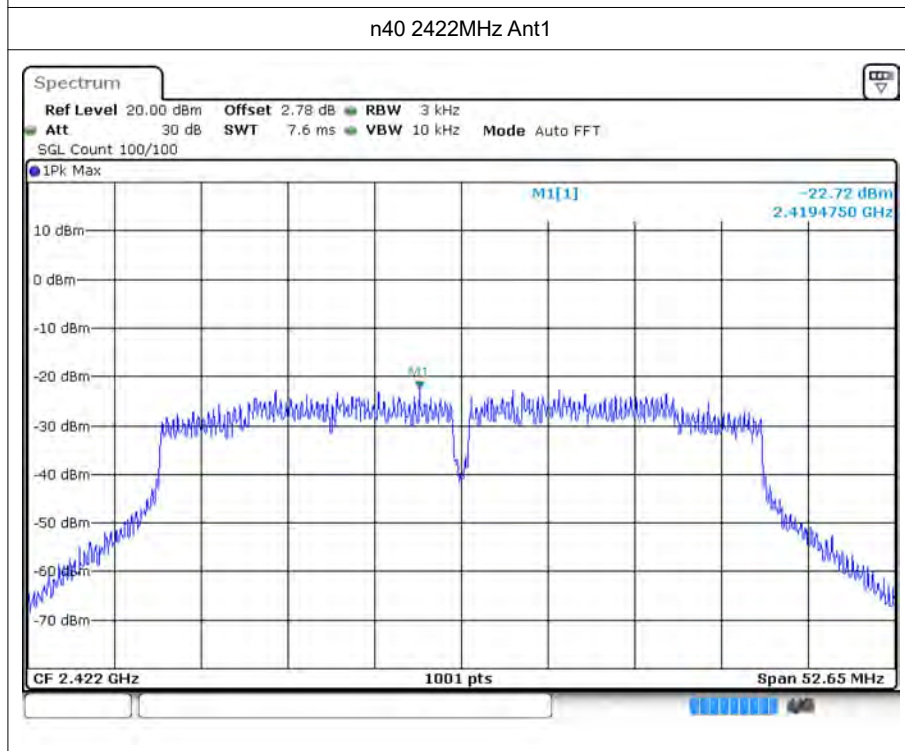
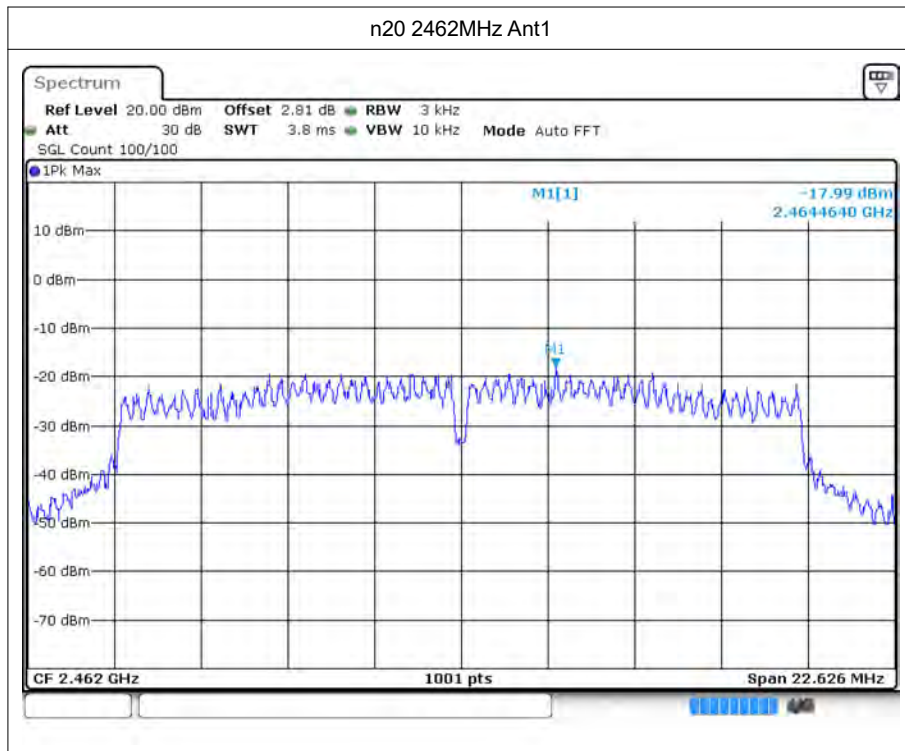
4.2 Test Graphs

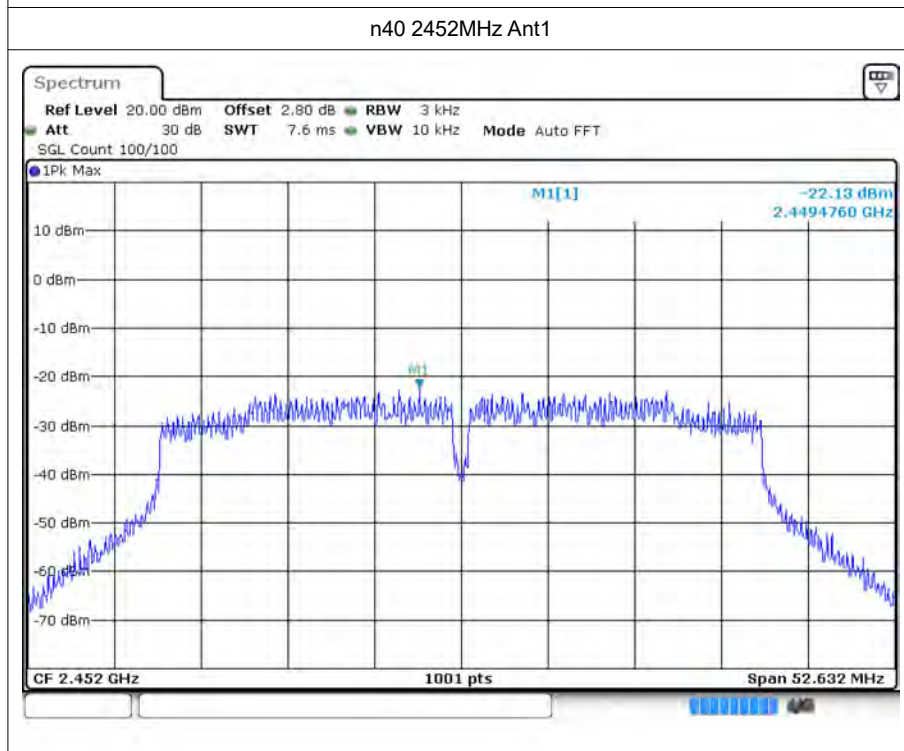
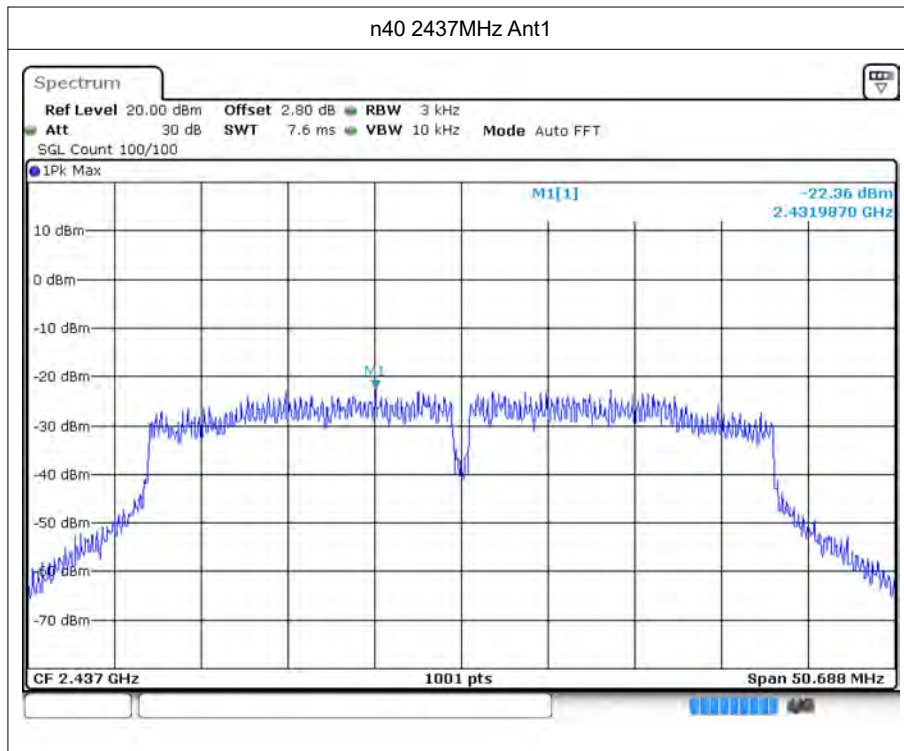












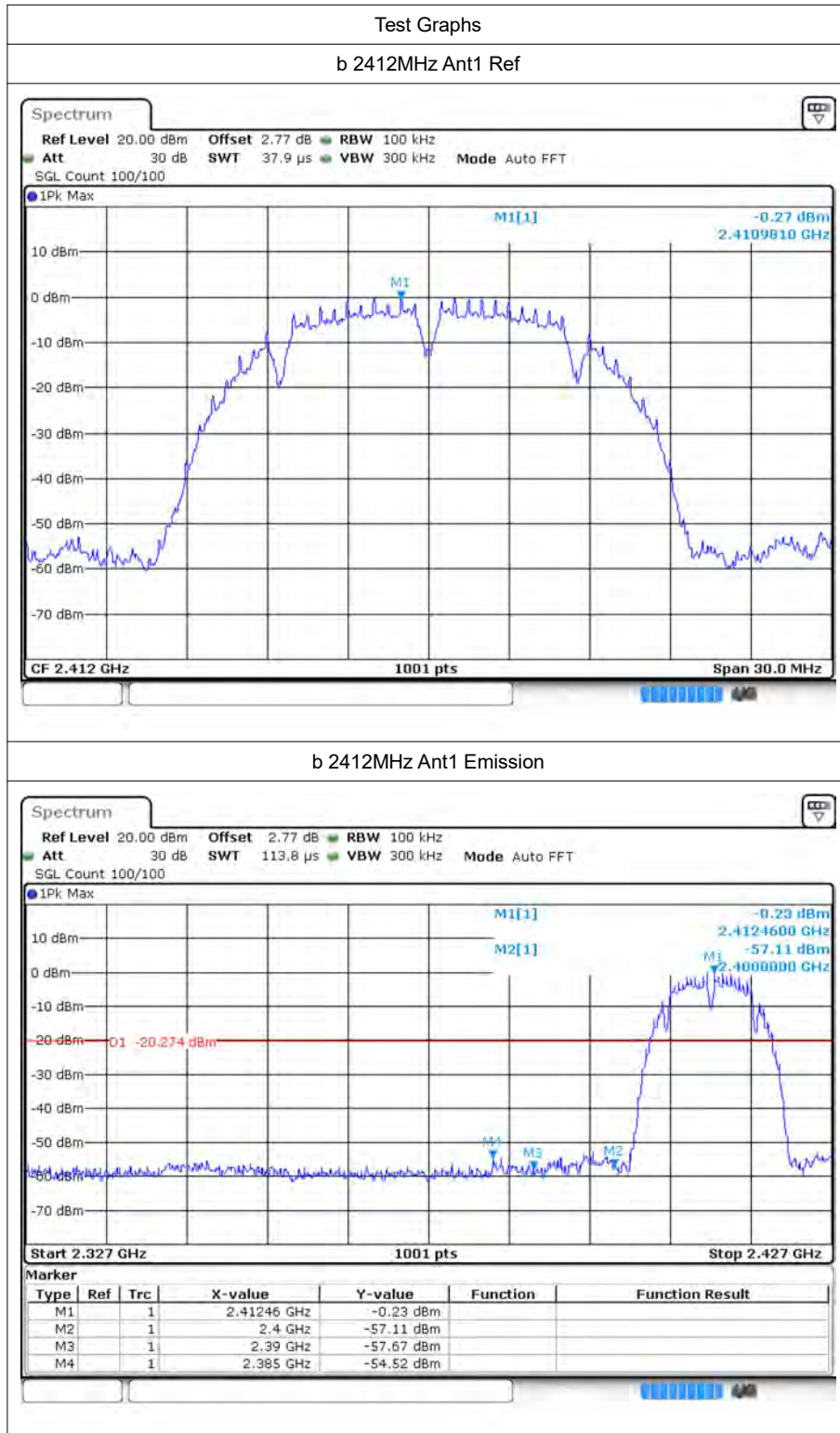


5 Band Edge

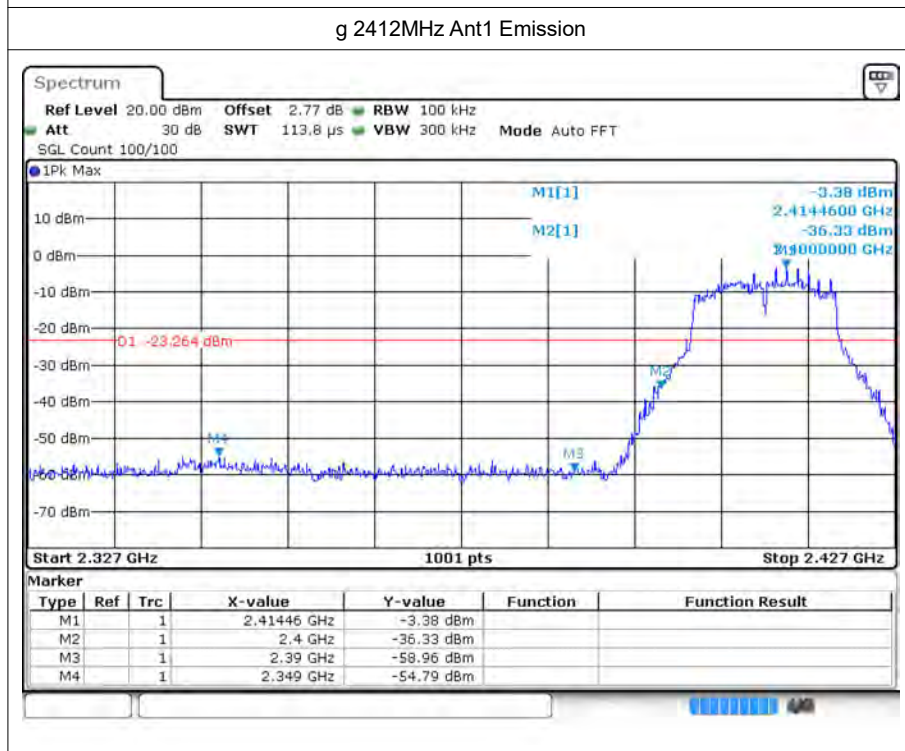
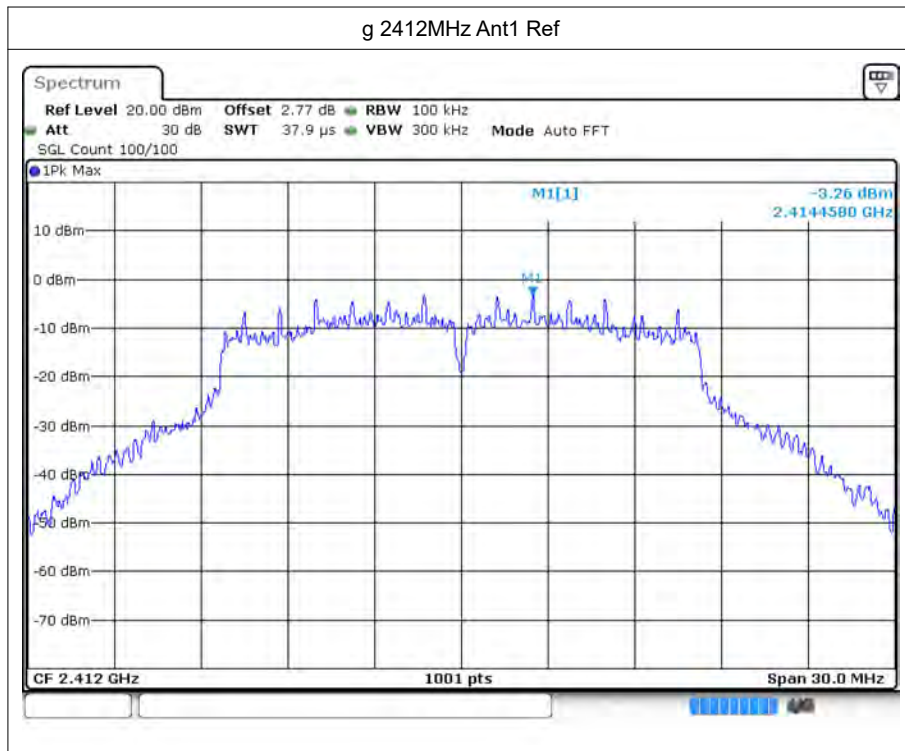
5.1 Test Result

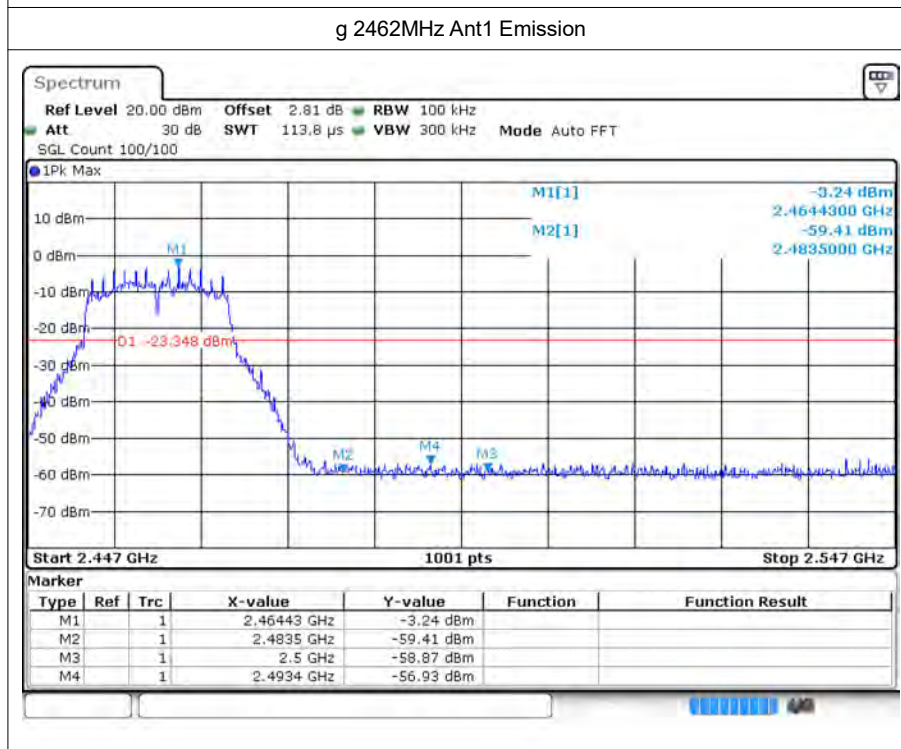
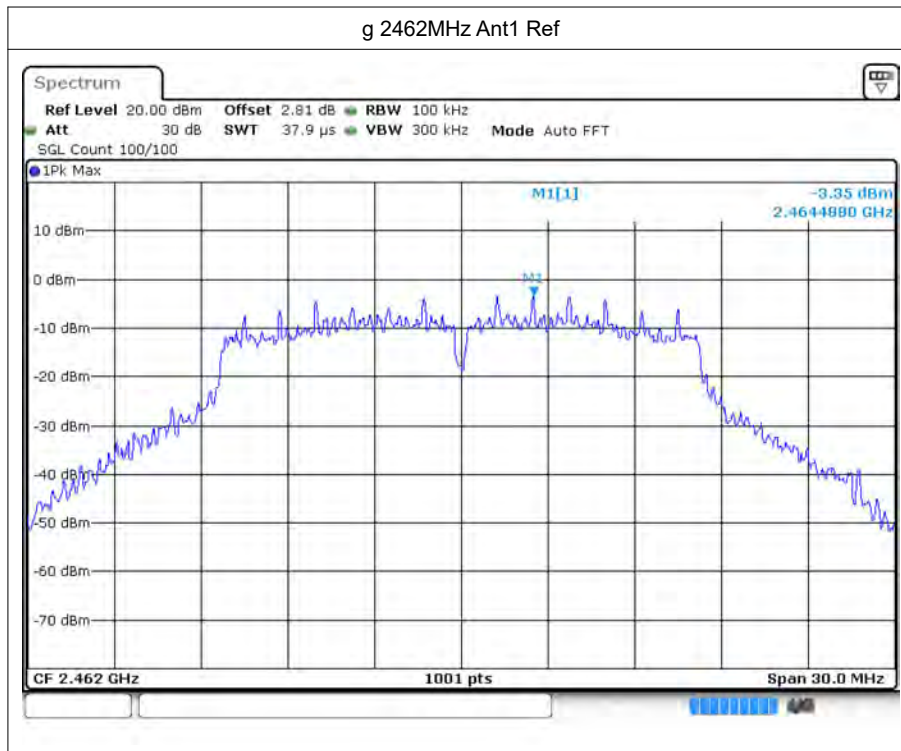
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-54.25	-20	Pass
b	2462	Ant1	-53.62	-20	Pass
g	2412	Ant1	-51.53	-20	Pass
g	2462	Ant1	-53.58	-20	Pass
n20	2412	Ant1	-51.21	-20	Pass
n20	2462	Ant1	-52.71	-20	Pass
n40	2422	Ant1	-47.6	-20	Pass
n40	2452	Ant1	-45.66	-20	Pass

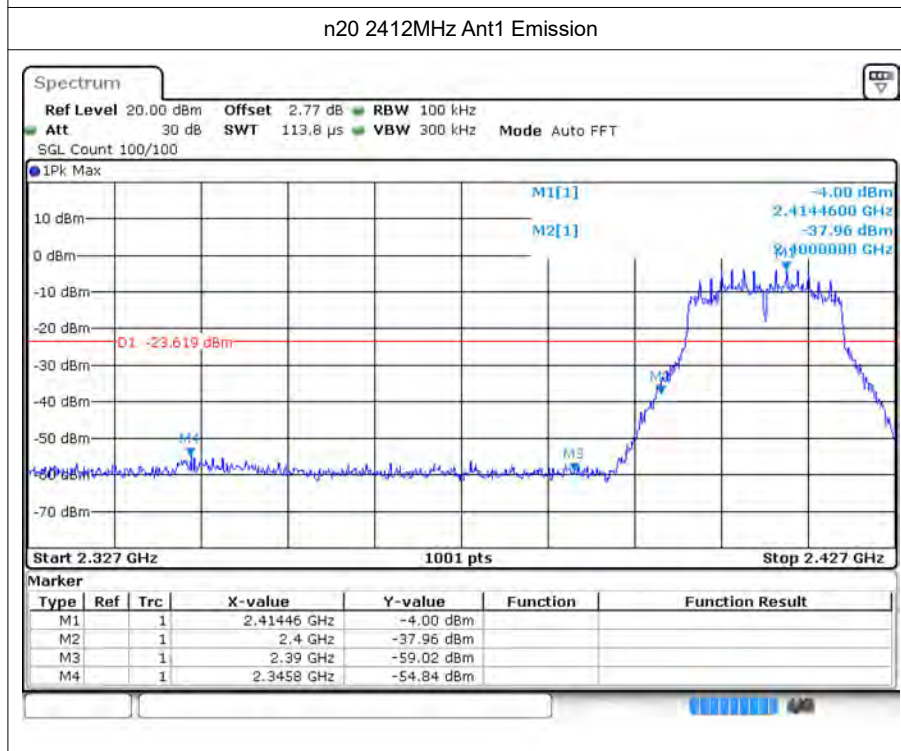
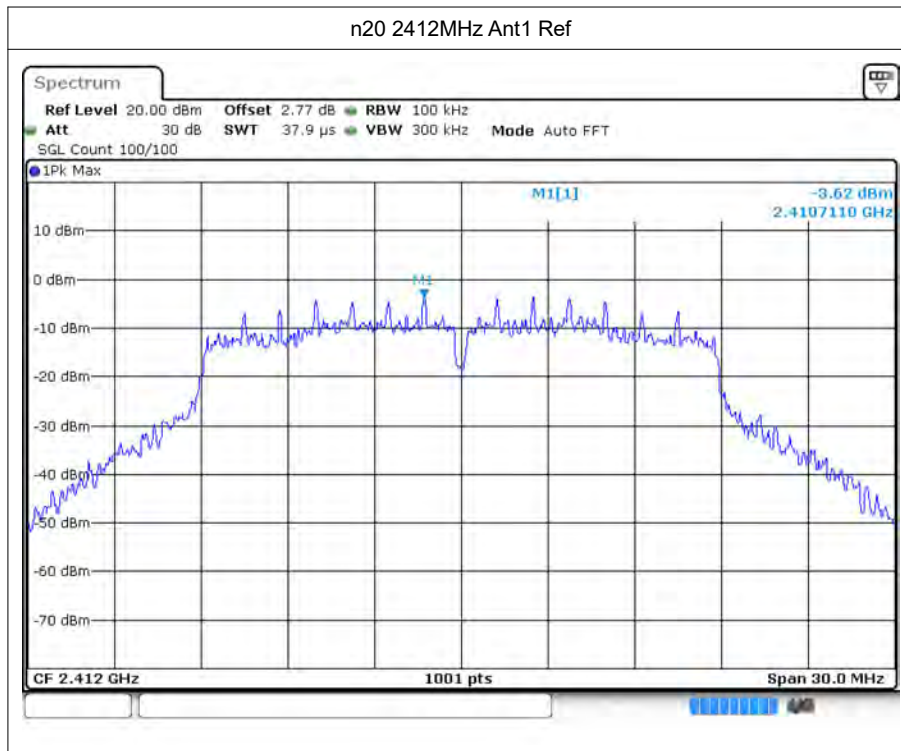
5.2 Test Graphs

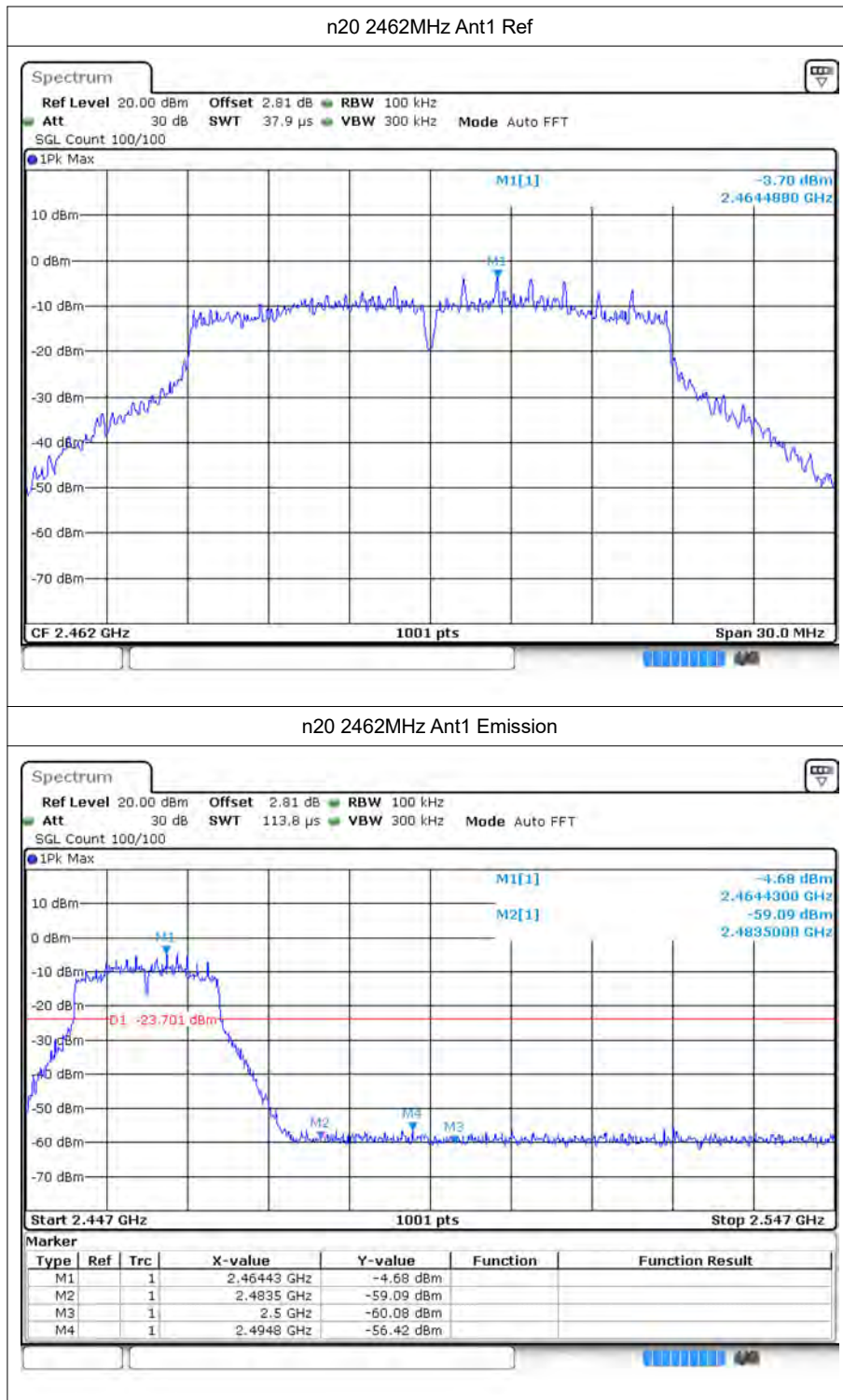


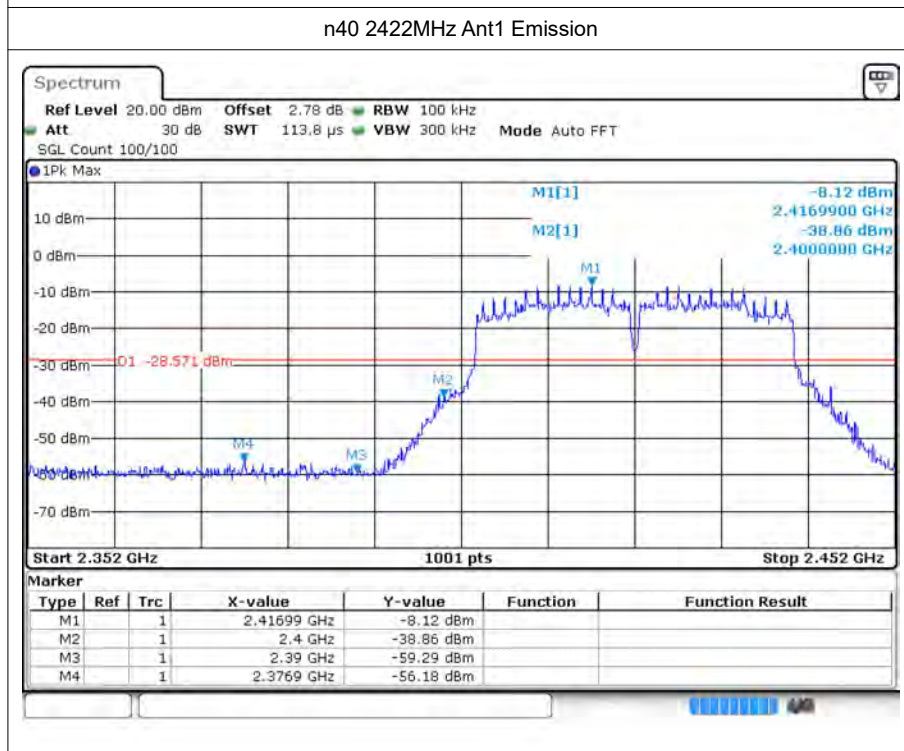
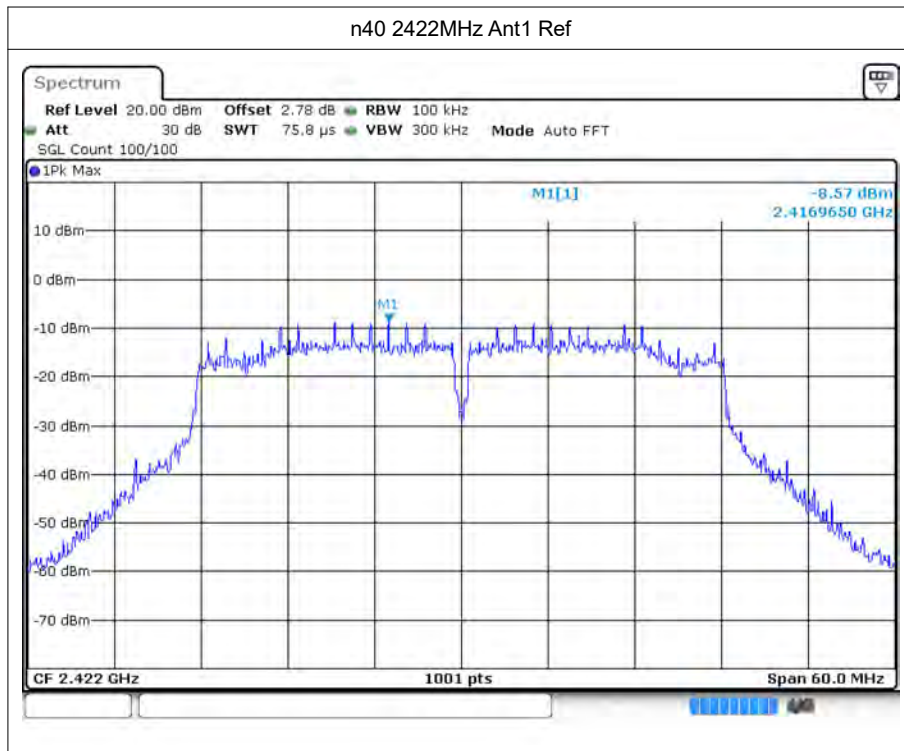


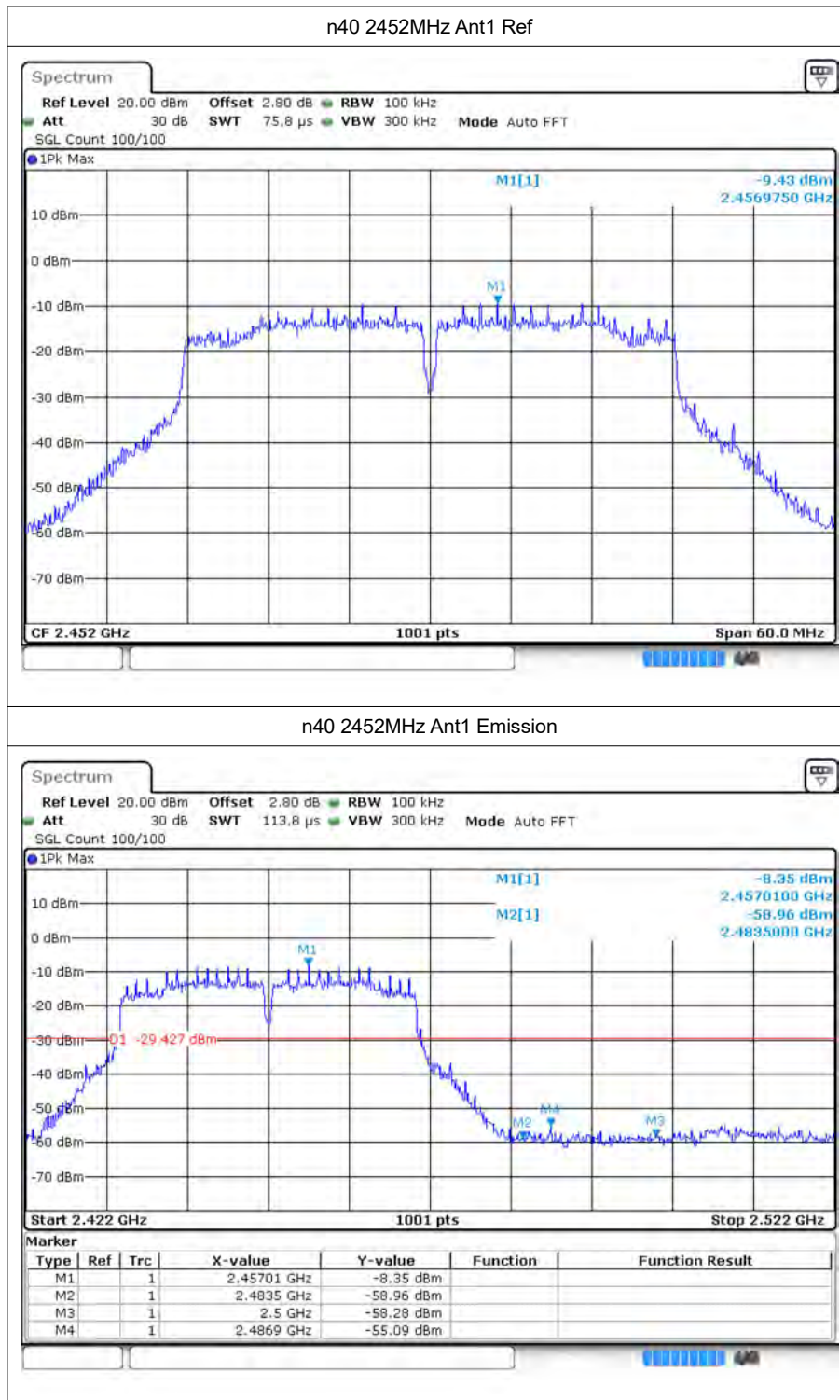












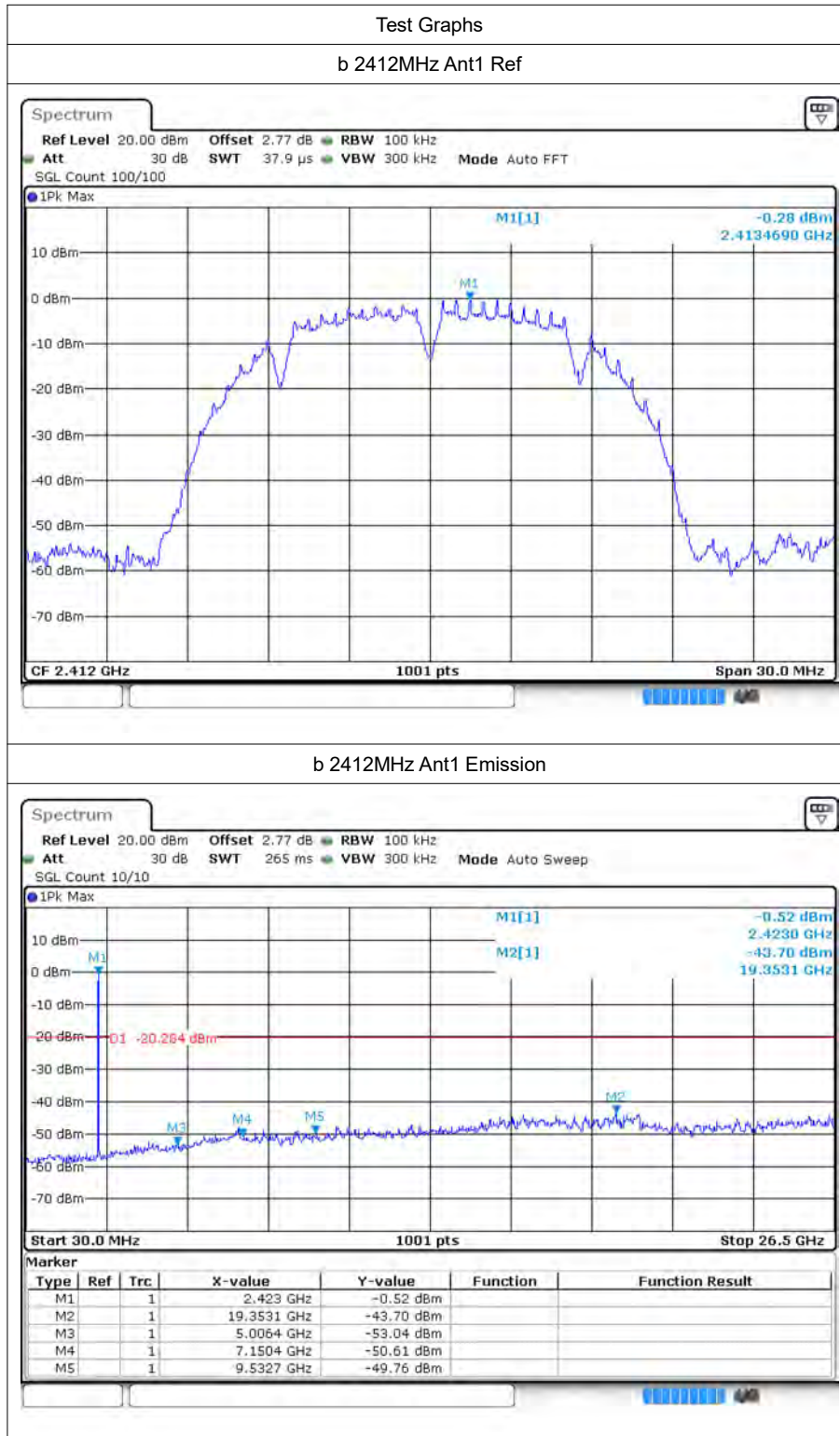


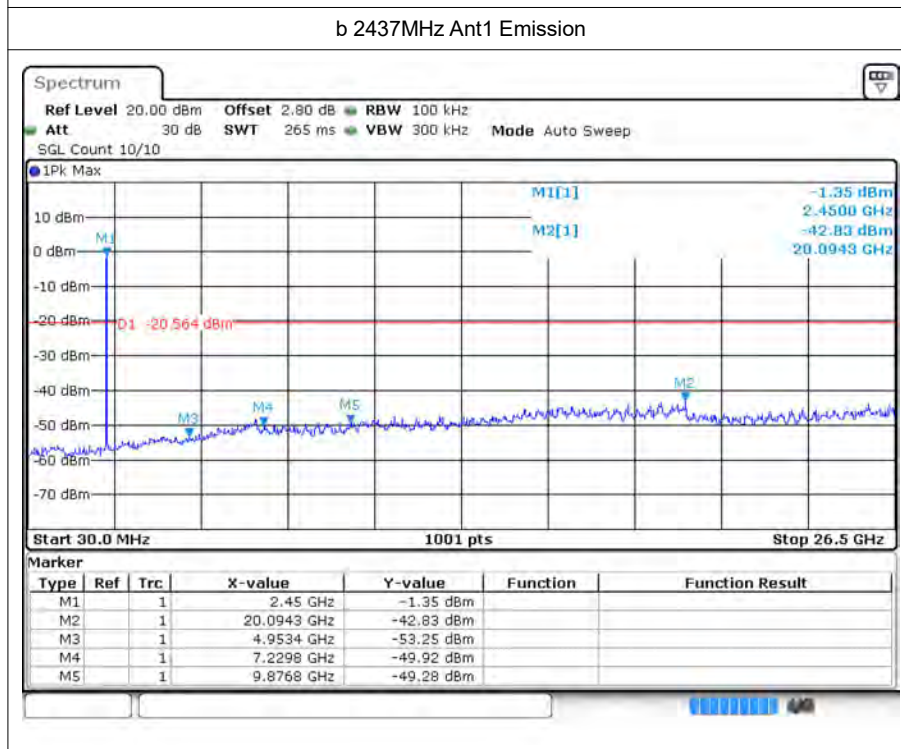
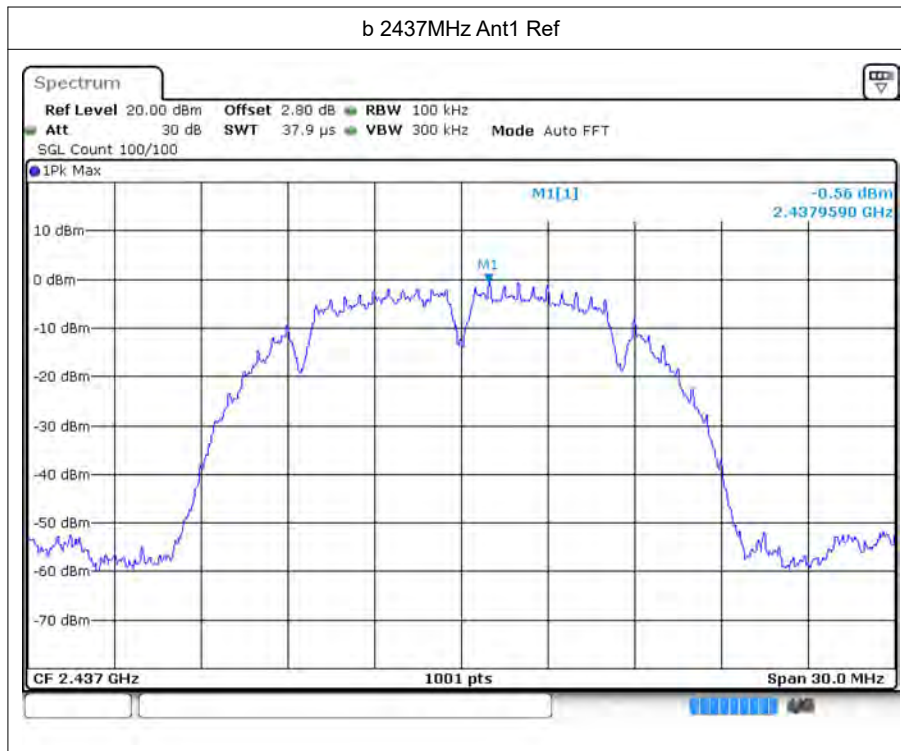
6 Conducted RF Spurious Emission

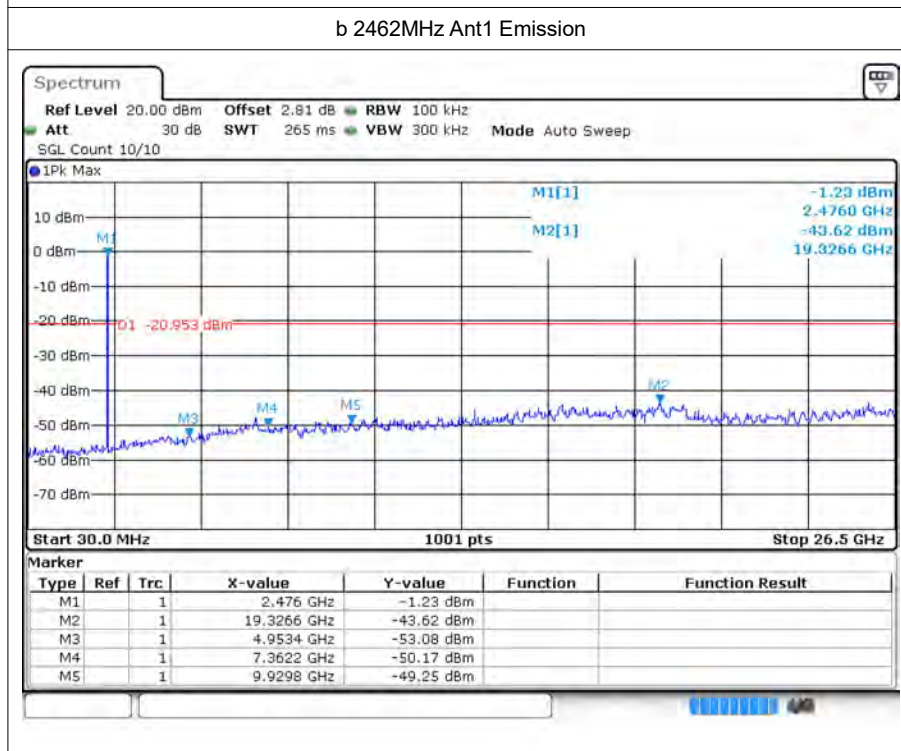
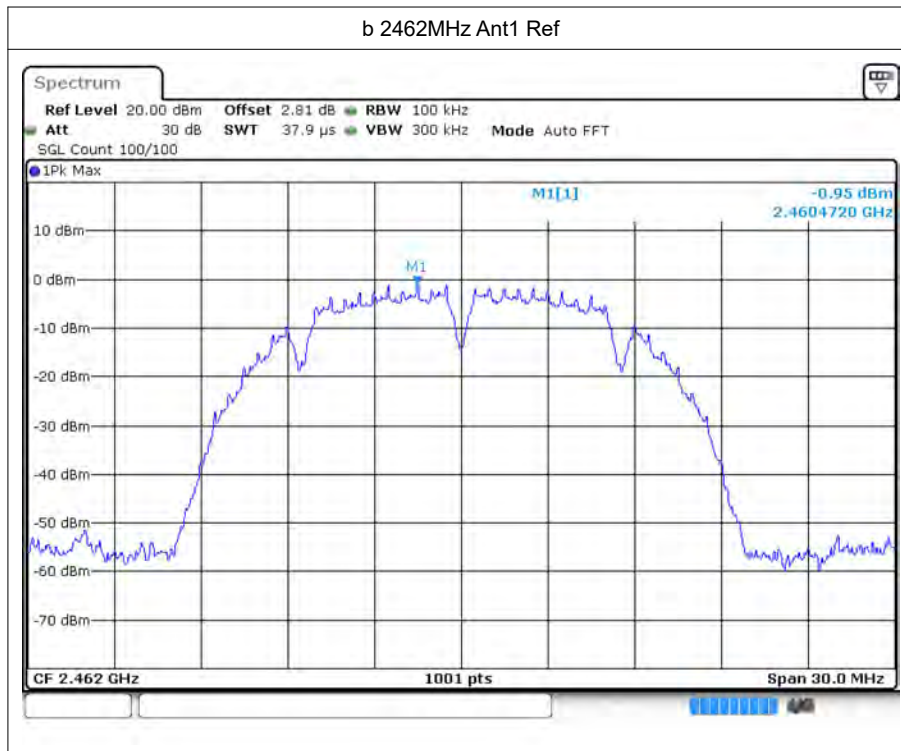
6.1 Test Result

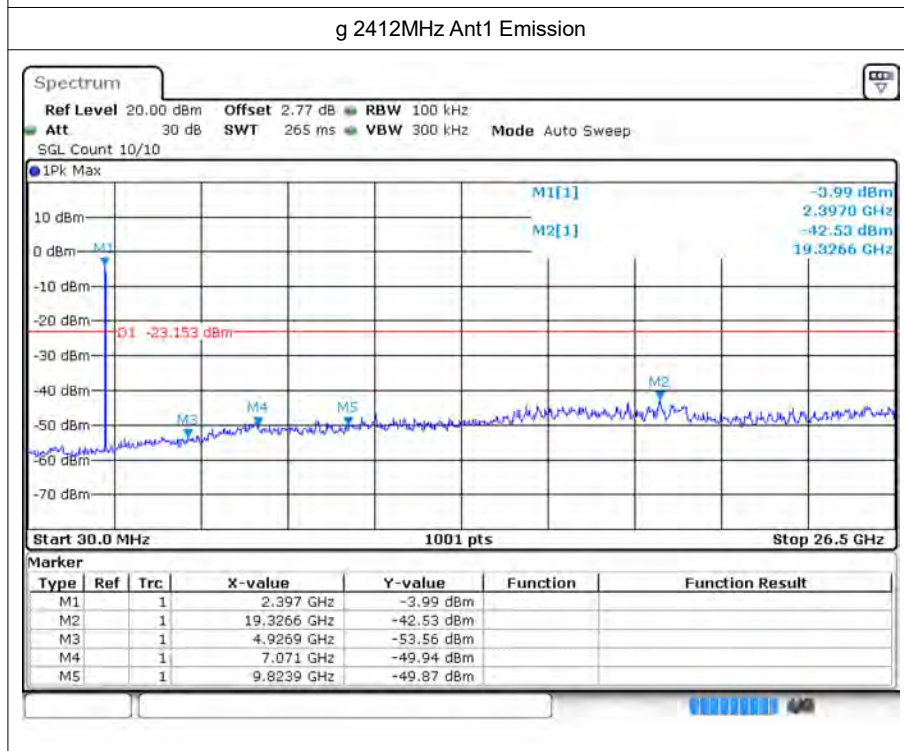
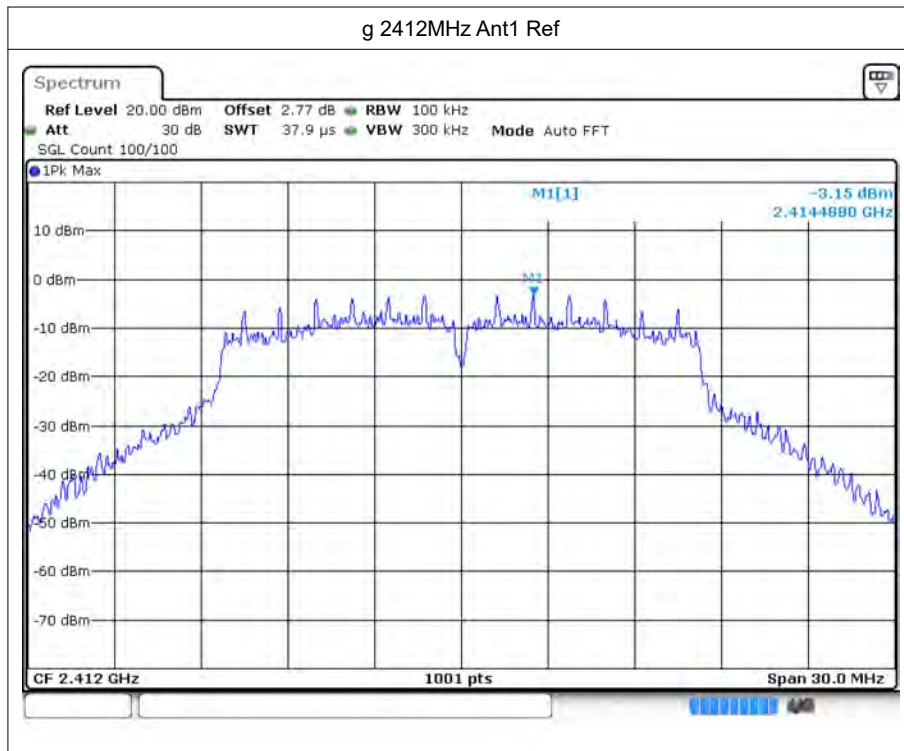
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-43.41	-20	Pass
b	2437	Ant1	-42.27	-20	Pass
b	2462	Ant1	-42.66	-20	Pass
g	2412	Ant1	-39.37	-20	Pass
g	2437	Ant1	-39.36	-20	Pass
g	2462	Ant1	-39.54	-20	Pass
n20	2412	Ant1	-39.7	-20	Pass
n20	2437	Ant1	-40.07	-20	Pass
n20	2462	Ant1	-39.55	-20	Pass
n40	2422	Ant1	-34.81	-20	Pass
n40	2437	Ant1	-35.34	-20	Pass
n40	2452	Ant1	-35	-20	Pass

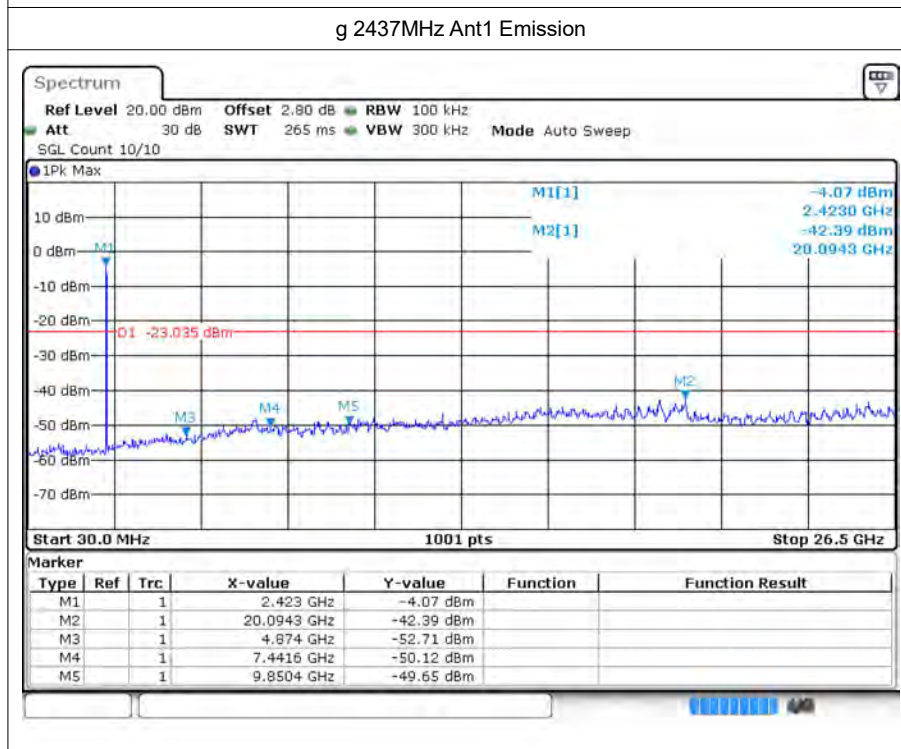
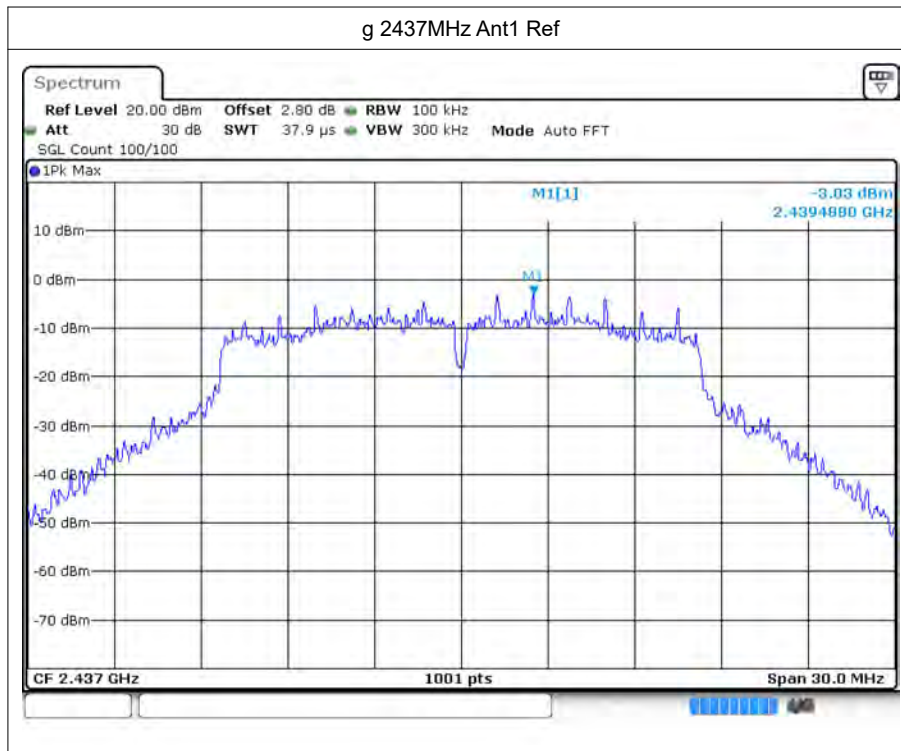
6.2 Test Graphs

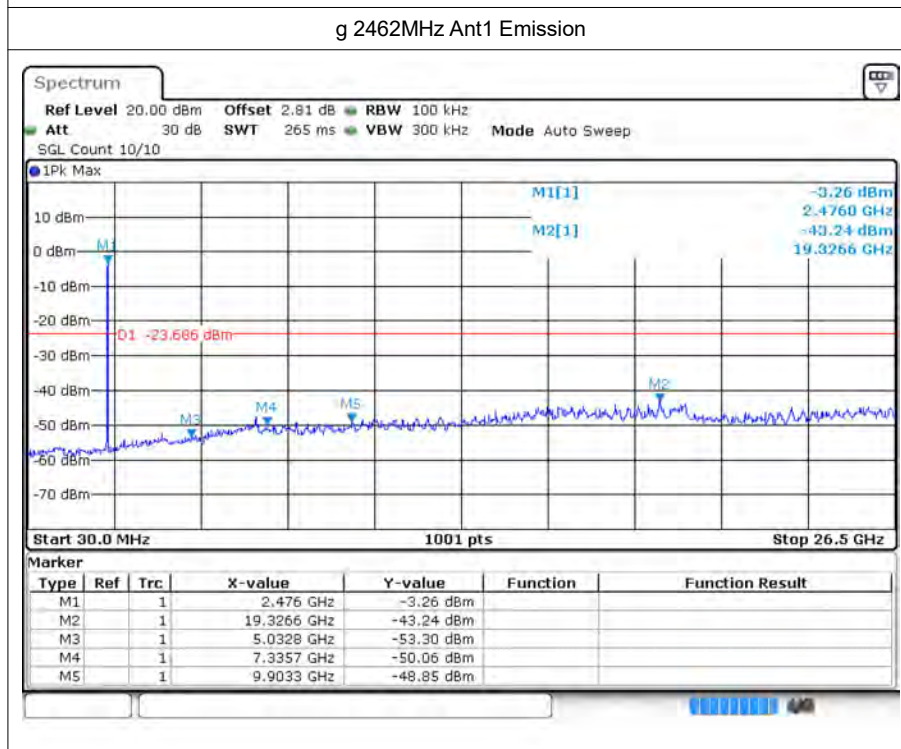
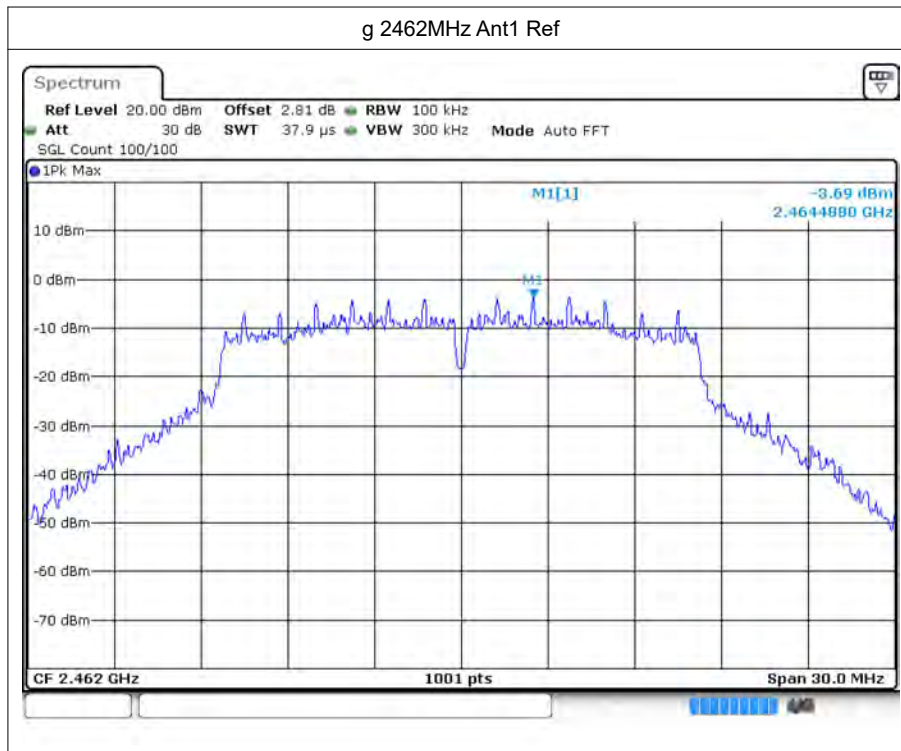


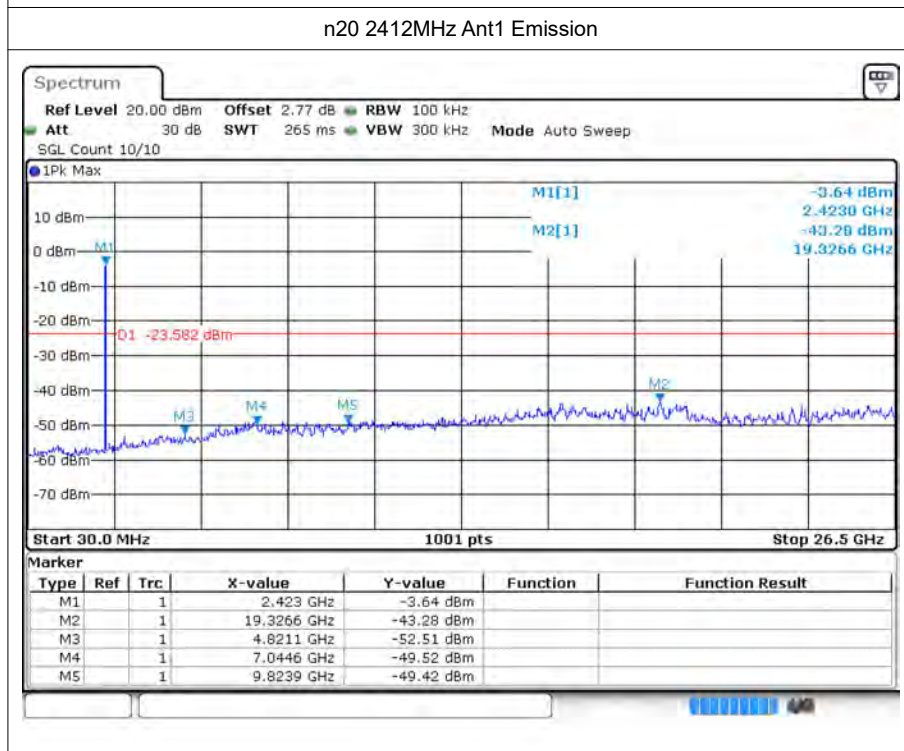
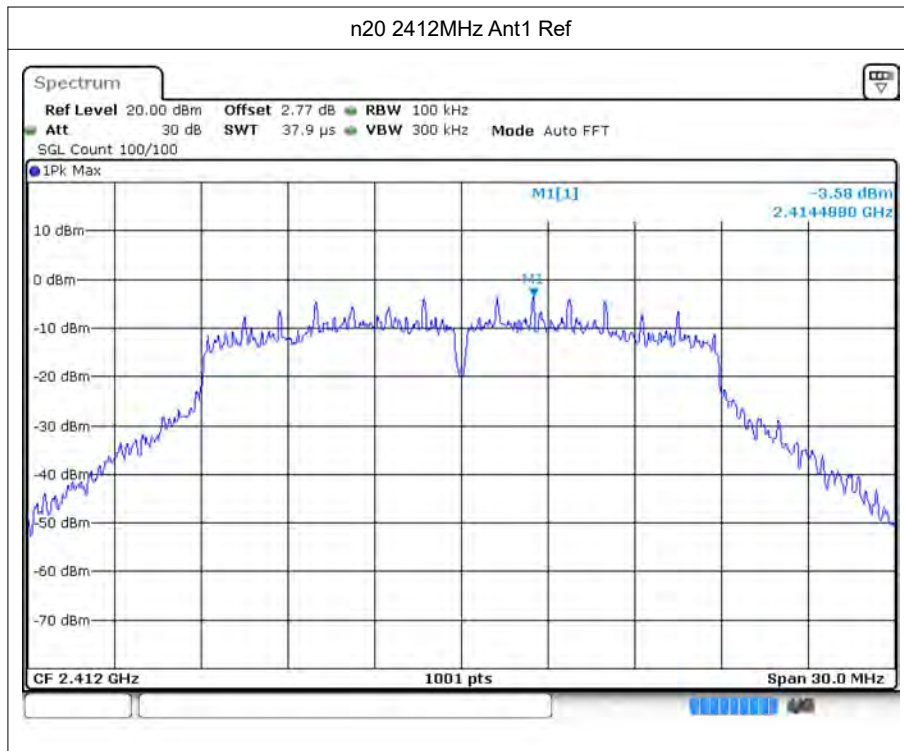


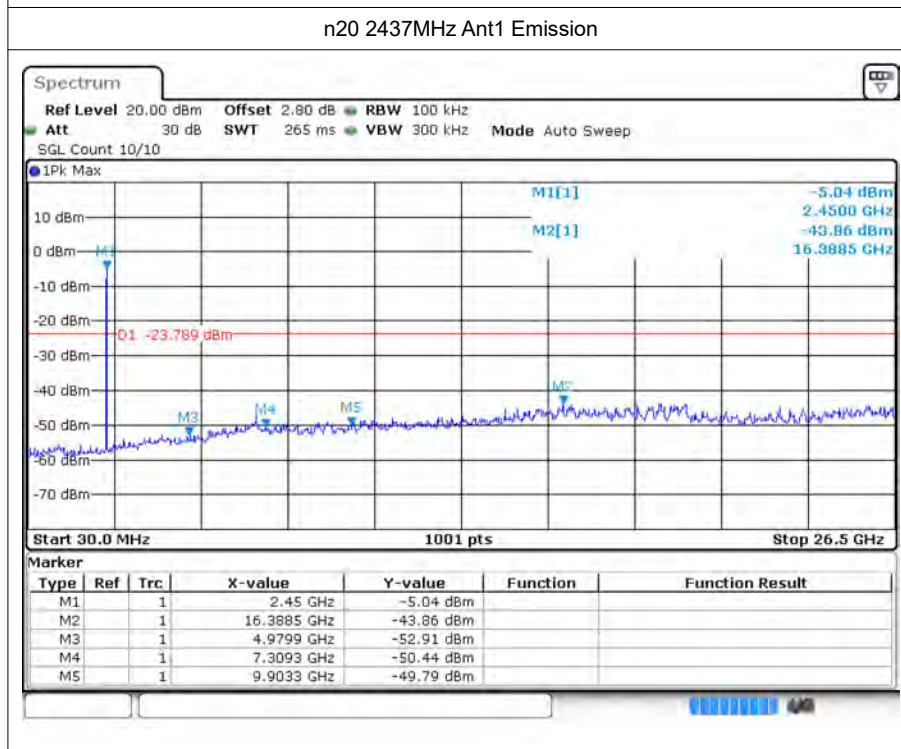
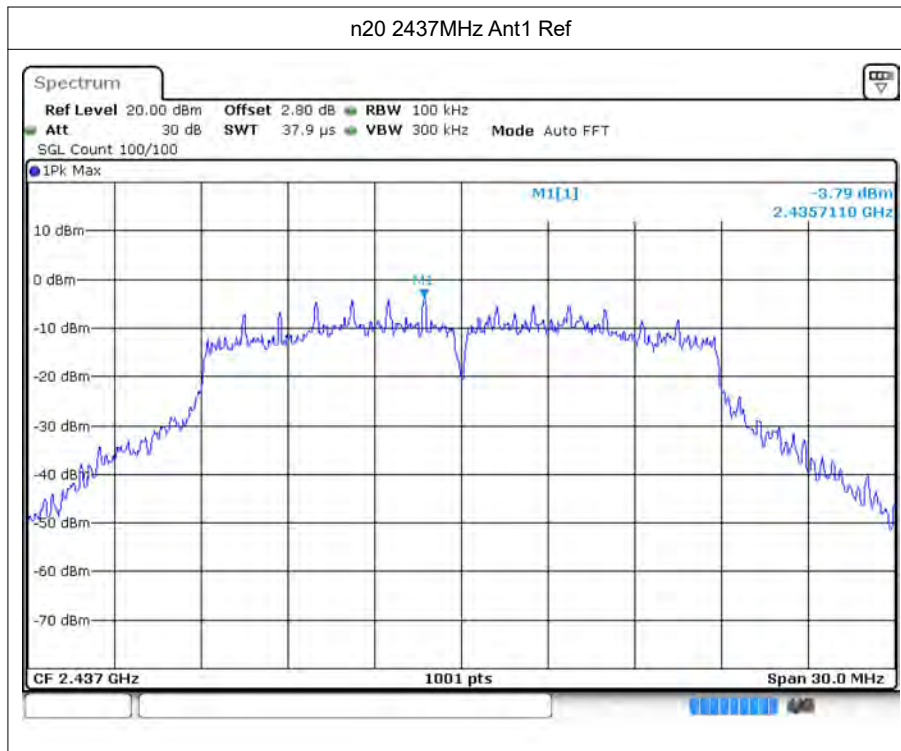


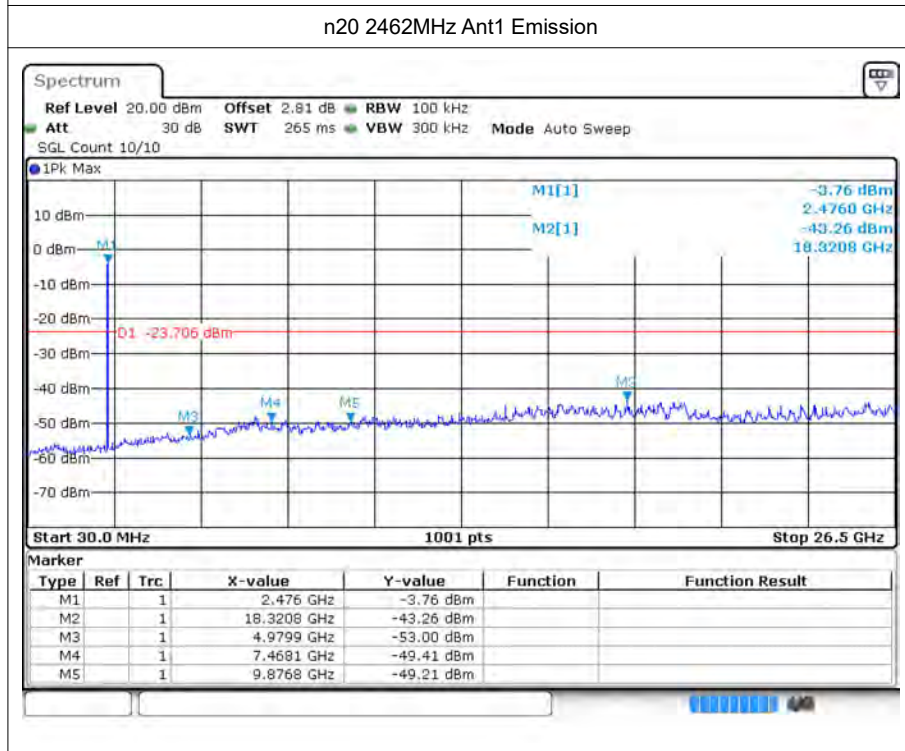
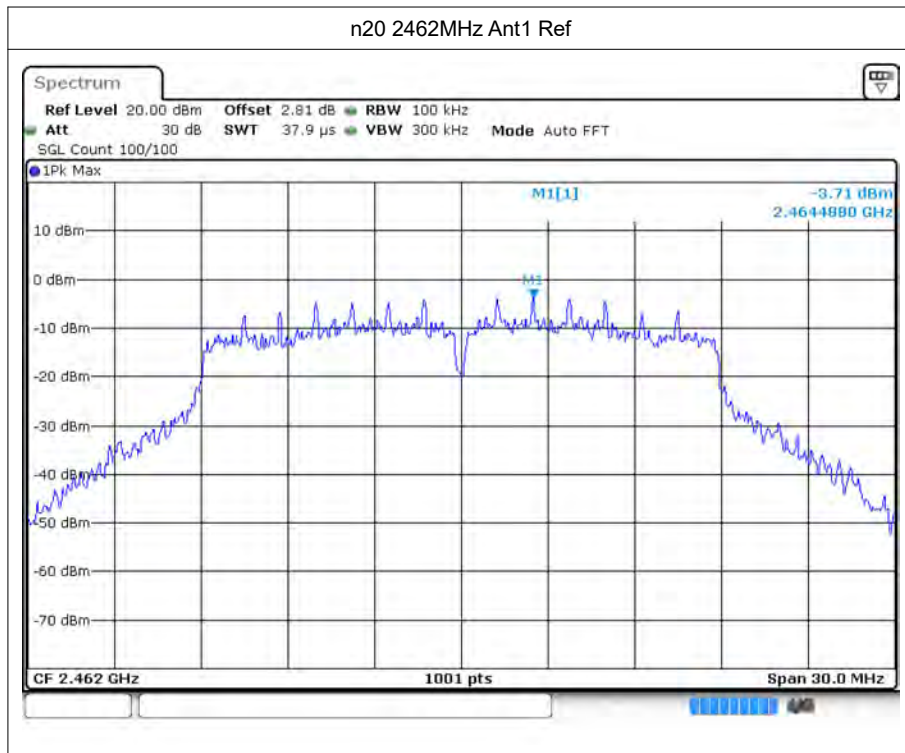


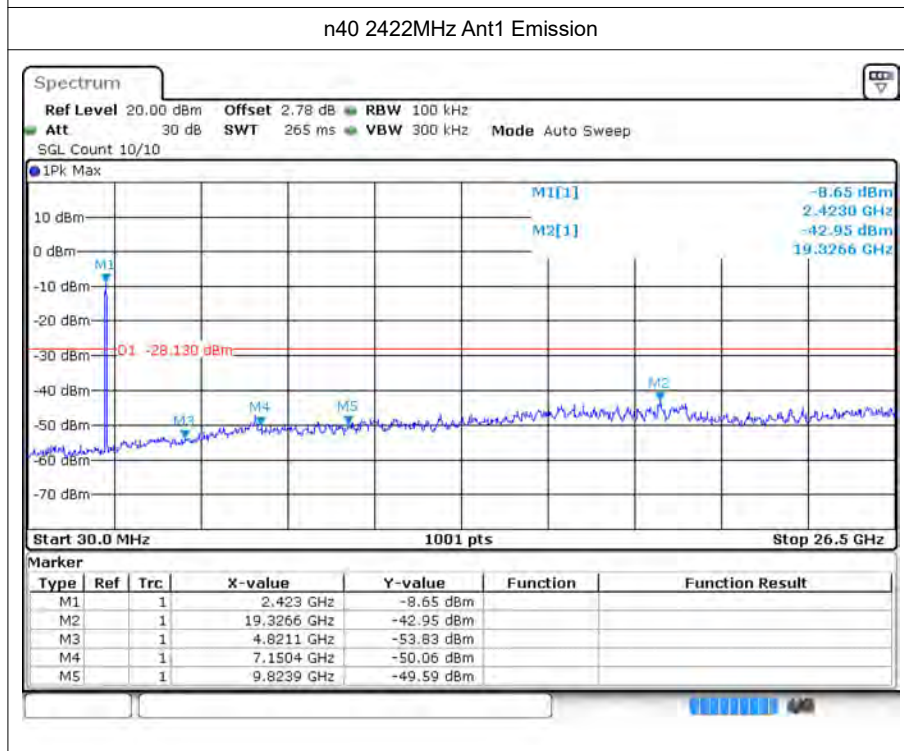
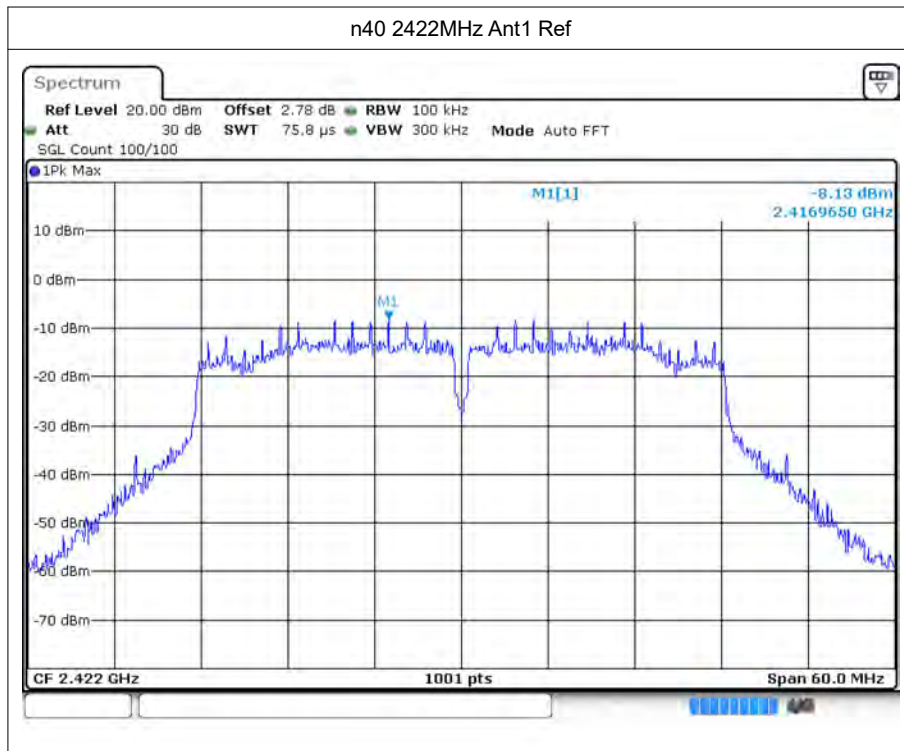


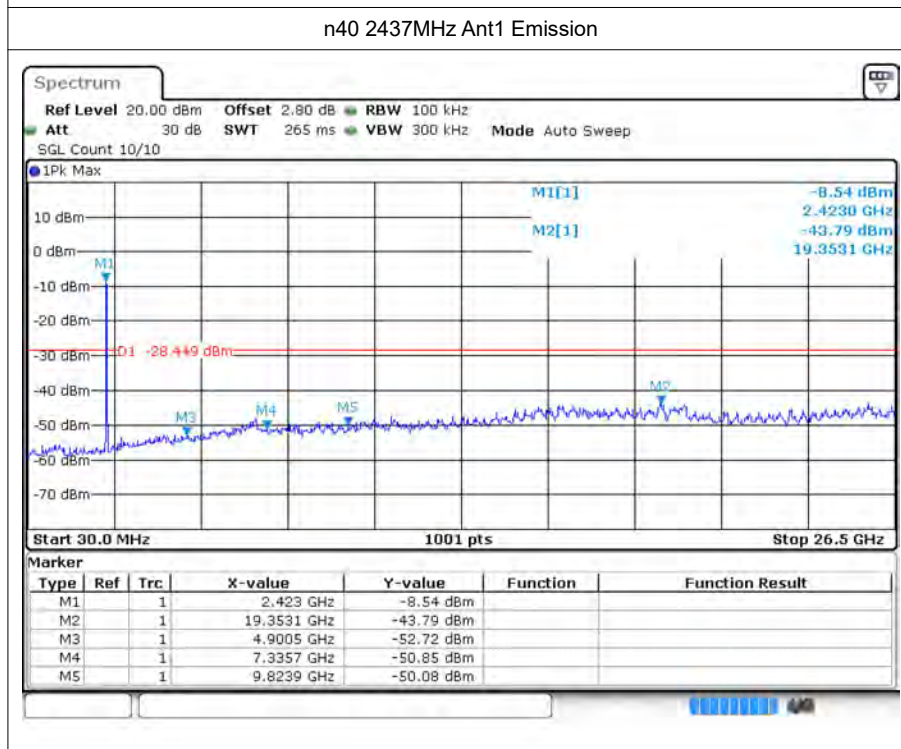
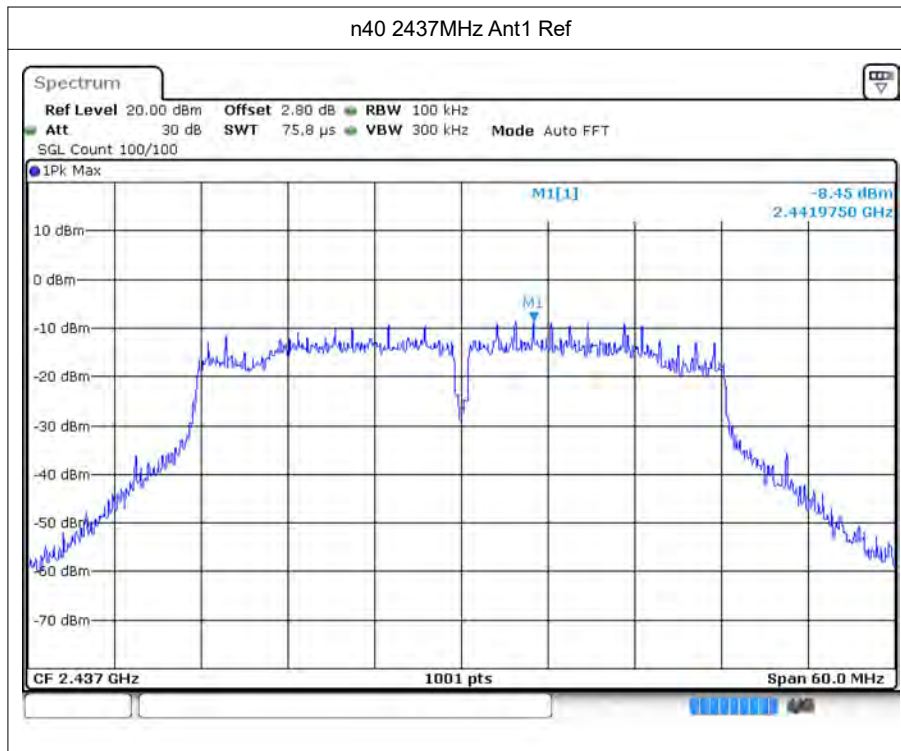


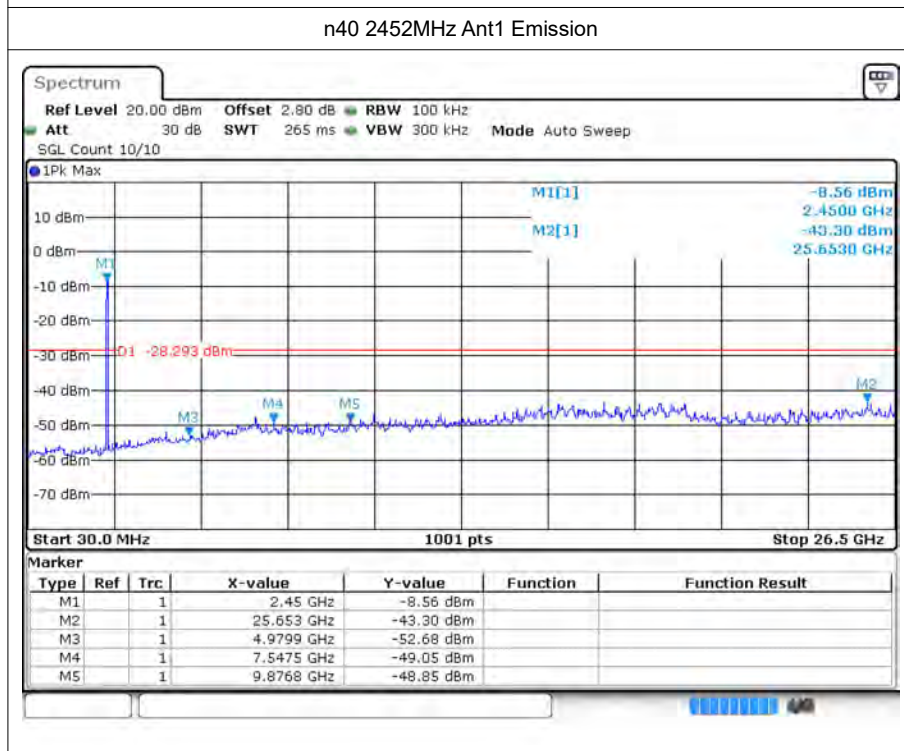
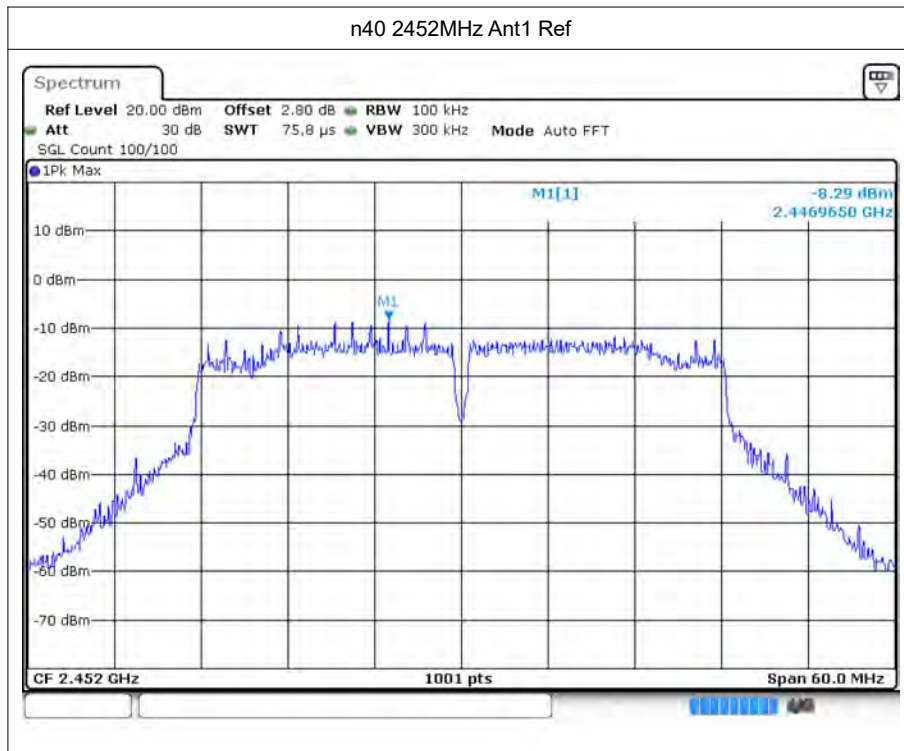














7 Restrict Band

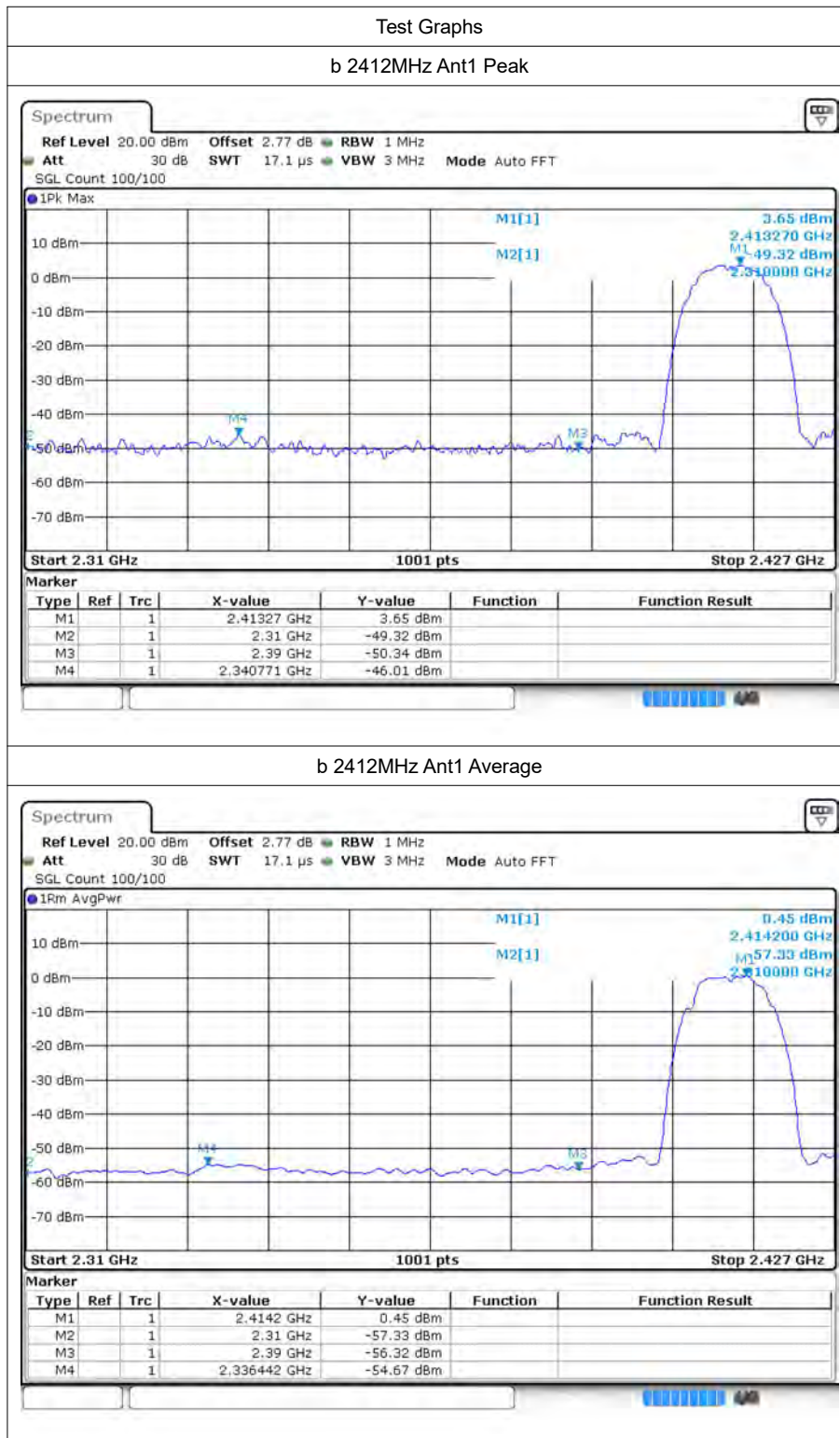
7.1 Test Result

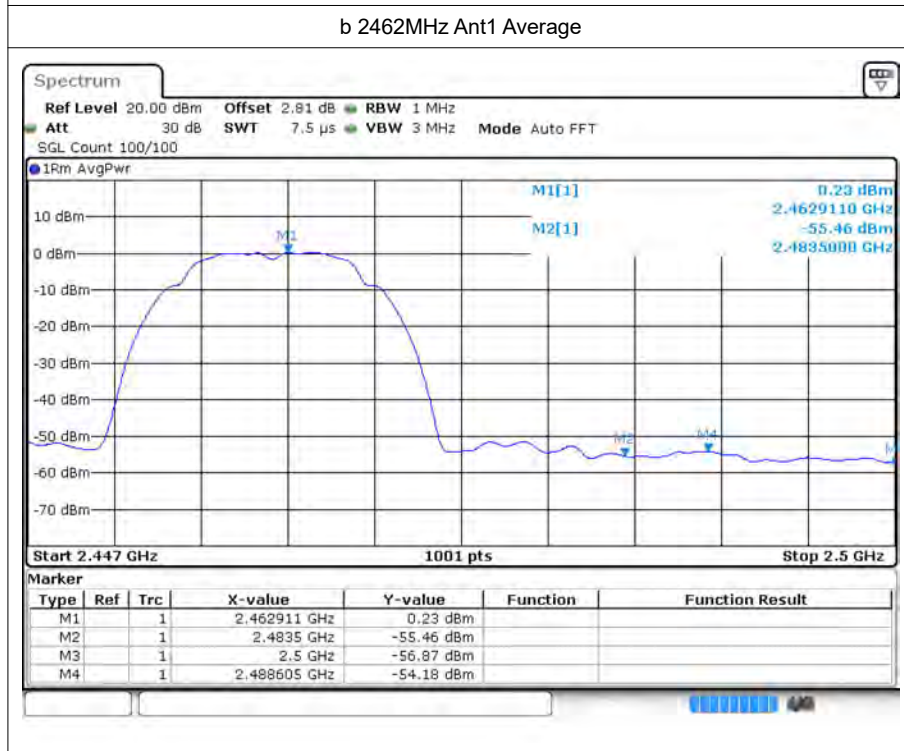
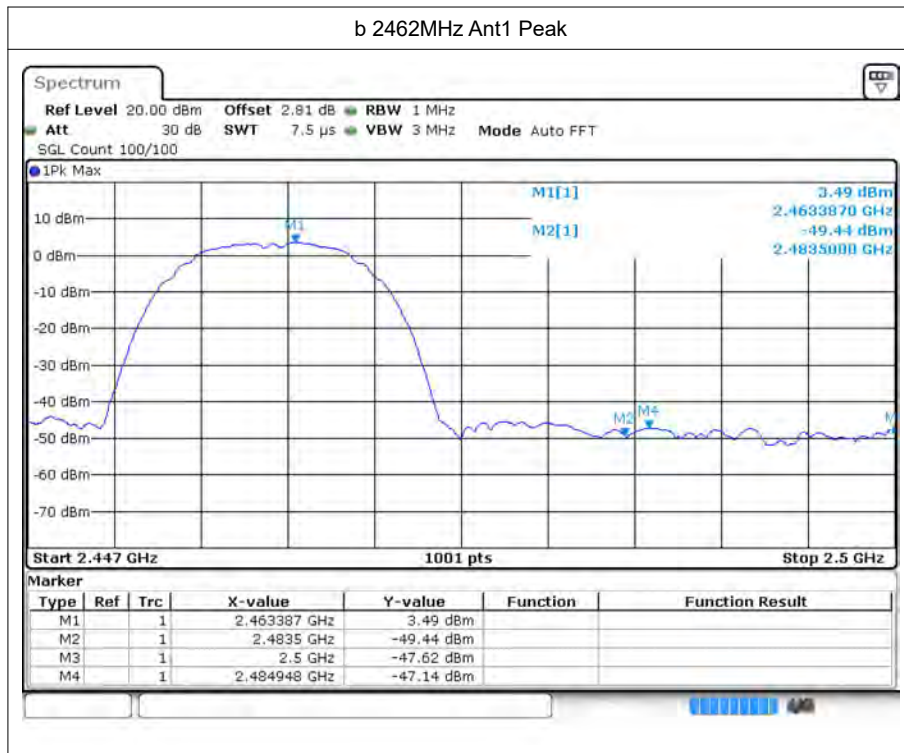
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-49.32	2.24	-	48.18	Peak	74	Pass
b	2412	Ant1	2310	-57.33	2.24	0	40.17	Average	54	Pass
b	2412	Ant1	2340.771	-46	2.24	-	51.5	Peak	74	Pass
b	2412	Ant1	2336.442	-54.67	2.24	0	42.83	Average	54	Pass
b	2412	Ant1	2390	-50.34	2.24	-	47.16	Peak	74	Pass
b	2412	Ant1	2390	-56.32	2.24	0	41.18	Average	54	Pass
b	2462	Ant1	2483.5	-49.44	2.24	-	48.06	Peak	74	Pass
b	2462	Ant1	2483.5	-55.46	2.24	0	42.04	Average	54	Pass
b	2462	Ant1	2484.948	-47.13	2.24	-	50.37	Peak	74	Pass
b	2462	Ant1	2488.605	-54.17	2.24	0	43.33	Average	54	Pass
b	2462	Ant1	2500	-47.62	2.24	-	49.88	Peak	74	Pass
b	2462	Ant1	2500	-56.87	2.24	0	40.63	Average	54	Pass
g	2412	Ant1	2310	-50.96	2.24	-	46.54	Peak	74	Pass
g	2412	Ant1	2310	-56.4	2.24	0.61	41.71	Average	54	Pass
g	2412	Ant1	2336.559	-45.99	2.24	-	51.51	Peak	74	Pass
g	2412	Ant1	2339.016	-54.85	2.24	0.61	43.26	Average	54	Pass
g	2412	Ant1	2390	-50.09	2.24	-	47.16	Peak	74	Pass
g	2412	Ant1	2390	-57.07	2.24	0.61	41.04	Average	54	Pass
g	2462	Ant1	2483.5	-48.91	2.24	-	48.59	Peak	74	Pass
g	2462	Ant1	2483.5	-56.89	2.24	0.61	41.22	Average	54	Pass
g	2462	Ant1	2484.948	-48.41	2.24	-	49.09	Peak	74	Pass
g	2462	Ant1	2498.145	-55.89	2.24	0.61	42.22	Average	54	Pass
g	2462	Ant1	2500	-49.87	2.24	-	49.88	Peak	74	Pass
g	2462	Ant1	2500	-57.01	2.24	0.61	41.1	Average	54	Pass
n20	2412	Ant1	2310	-47.09	2.24	-	50.41	Peak	74	Pass
n20	2412	Ant1	2310	-57.17	2.24	0.58	40.91	Average	54	Pass
n20	2412	Ant1	2339.133	-46.37	2.24	-	51.13	Peak	74	Pass
n20	2412	Ant1	2338.314	-54.43	2.24	0.58	43.65	Average	54	Pass
n20	2412	Ant1	2390	-49.4	2.24	-	48.1	Peak	74	Pass
n20	2412	Ant1	2390	-57.1	2.24	0.58	40.98	Average	54	Pass
n20	2462	Ant1	2483.5	-50.75	2.24	-	46.75	Peak	74	Pass
n20	2462	Ant1	2483.5	-56.28	2.24	0.58	41.8	Average	54	Pass
n20	2462	Ant1	2494.806	-47.32	2.24	-	50.18	Peak	74	Pass
n20	2462	Ant1	2485.425	-55.79	2.24	0.58	42.29	Average	54	Pass

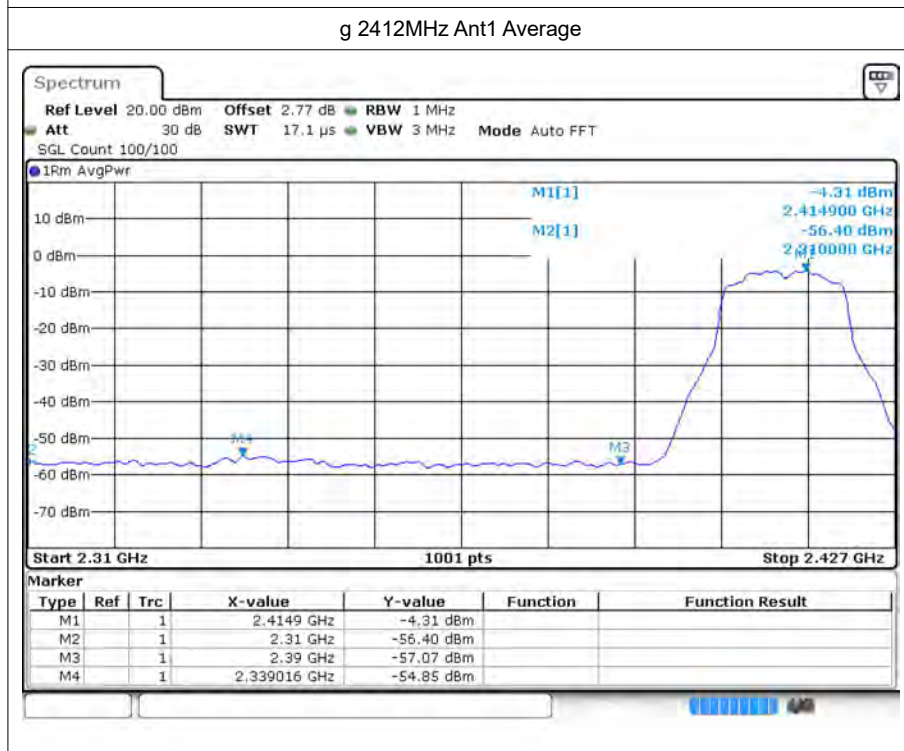
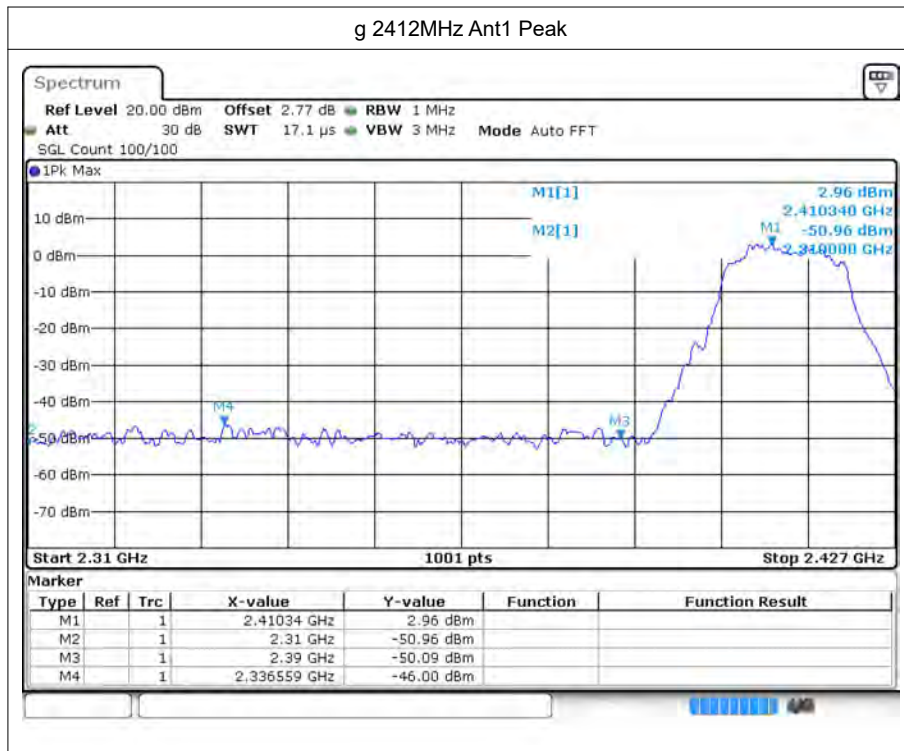


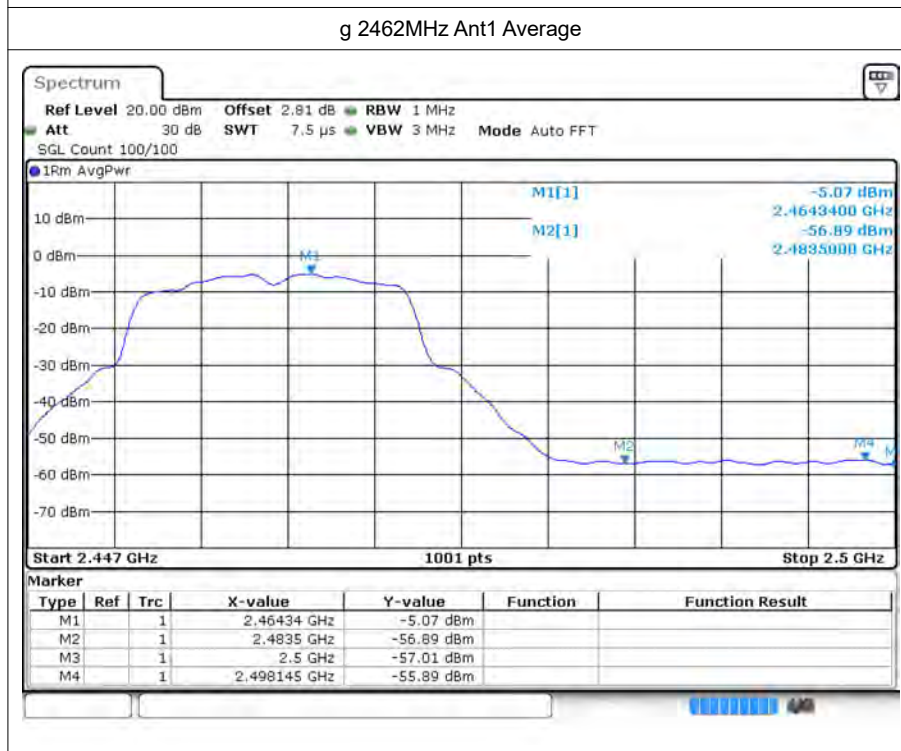
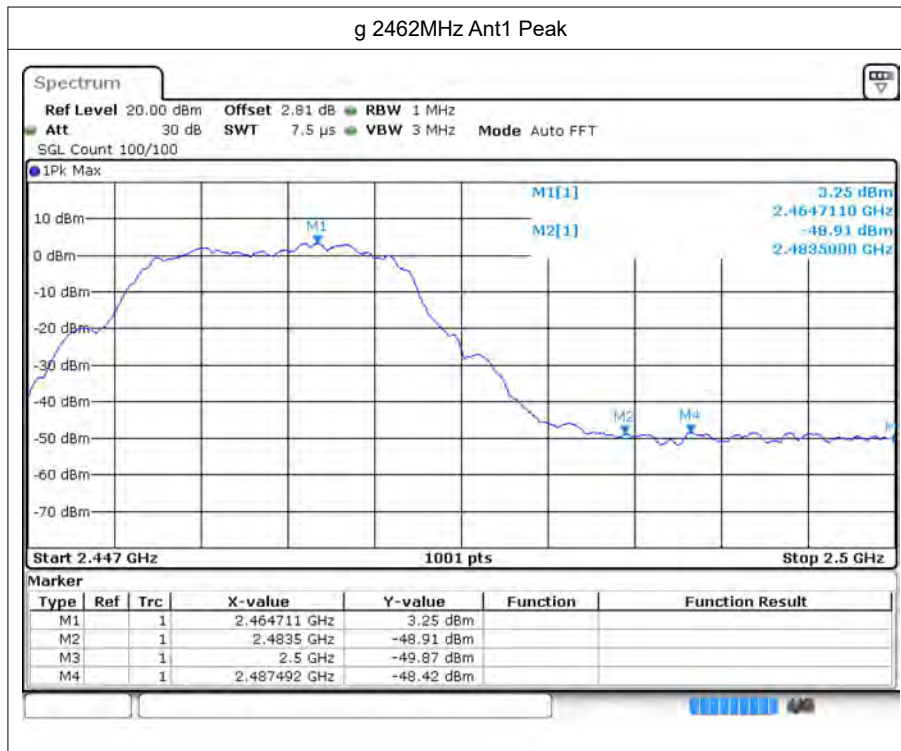
n20	2462	Ant1	2500	-50	2.24	-	47.5	Peak	74	Pass
n20	2462	Ant1	2500	-56.73	2.24	0.58	41.35	Average	54	Pass
n40	2422	Ant1	2310	-49.49	2.24	-	48.01	Peak	74	Pass
n40	2422	Ant1	2310	-56.83	2.24	0.55	41.22	Average	54	Pass
n40	2422	Ant1	2339.82	-46.67	2.24	-	50.83	Peak	74	Pass
n40	2422	Ant1	2339.678	-54.74	2.24	0.55	43.31	Average	54	Pass
n40	2422	Ant1	2390	-48.87	2.24	-	48.63	Peak	74	Pass
n40	2422	Ant1	2390	-57.48	2.24	0.55	40.57	Average	54	Pass
n40	2452	Ant1	2483.5	-47.77	2.24	-	49.73	Peak	74	Pass
n40	2452	Ant1	2483.5	-56.05	2.24	0.55	42	Average	54	Pass
n40	2452	Ant1	2497.972	-46.67	2.24	-	50.83	Peak	74	Pass
n40	2452	Ant1	2491.186	-55.5	2.24	0.55	42.55	Average	54	Pass
n40	2452	Ant1	2500	-49	2.24	-	48.5	Peak	74	Pass
n40	2452	Ant1	2500	-56.8	2.24	0.55	41.25	Average	54	Pass

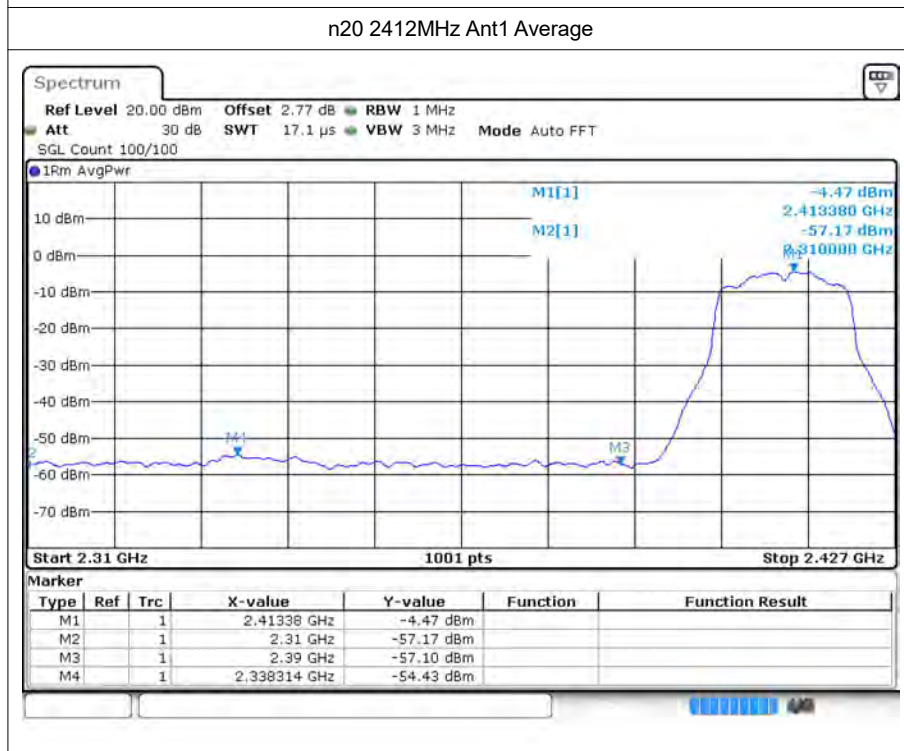
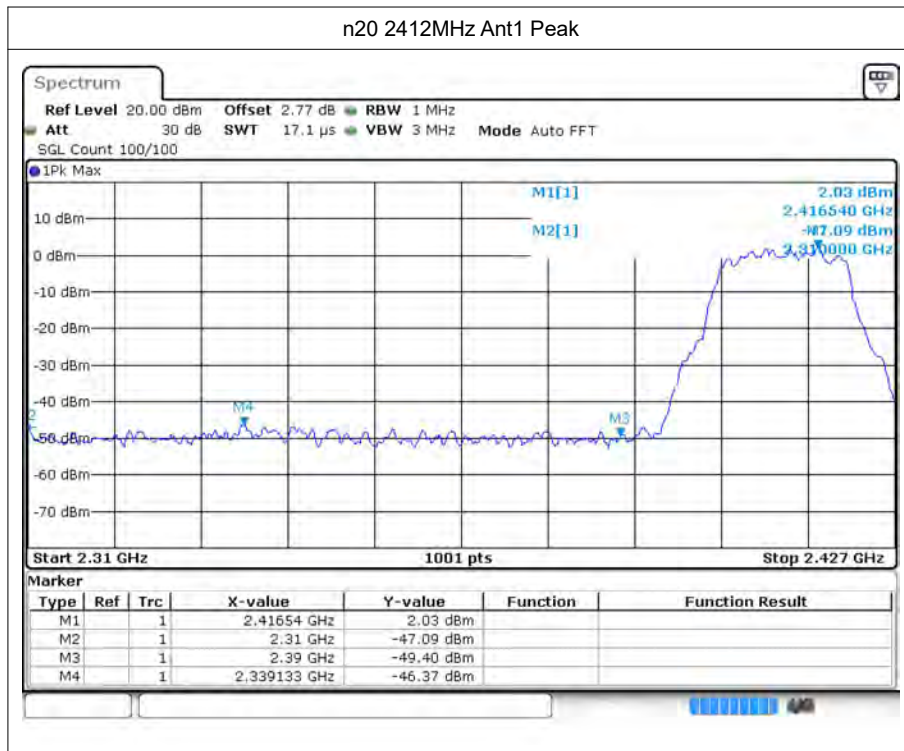
7.2 Test Graphs

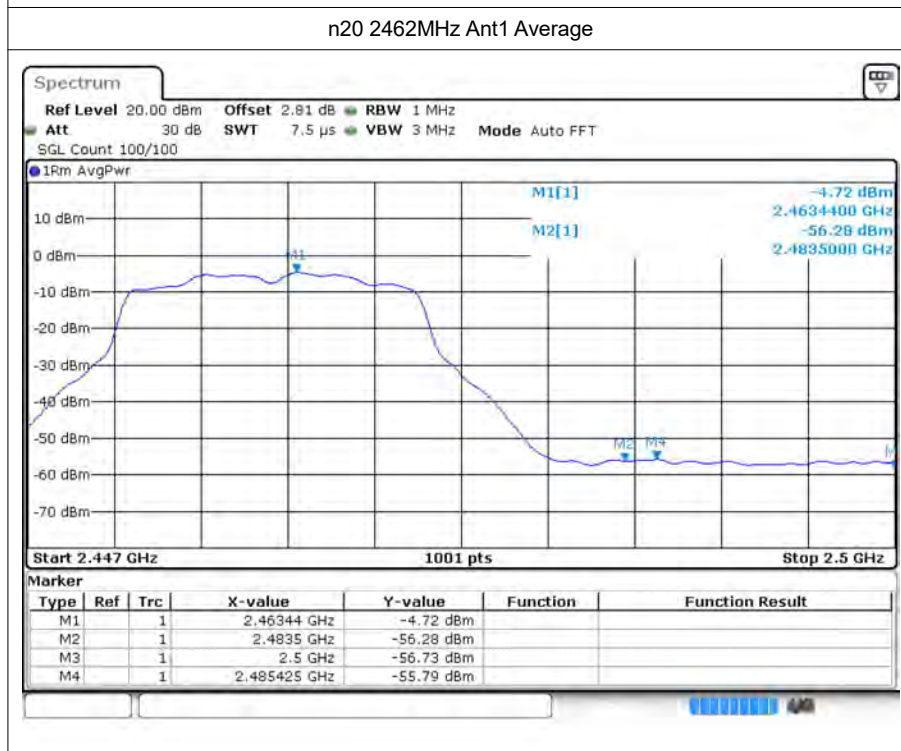
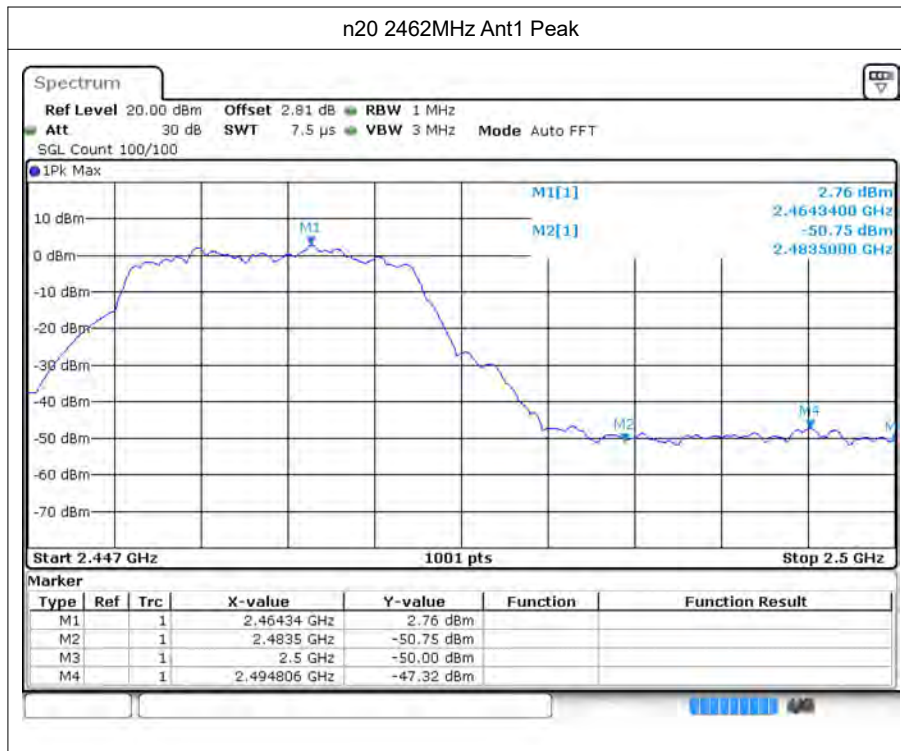


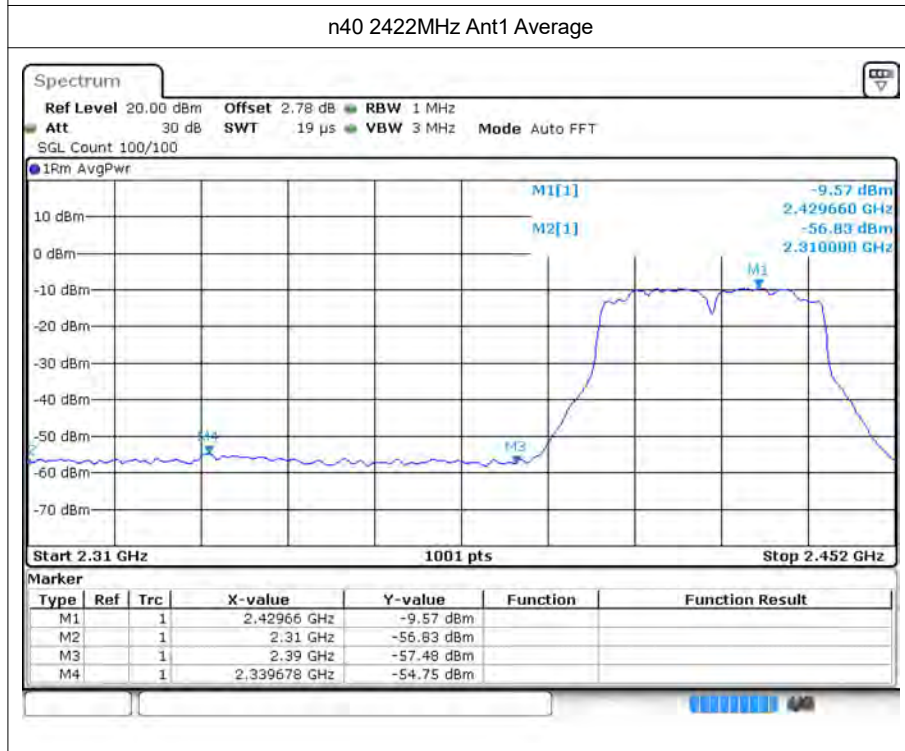
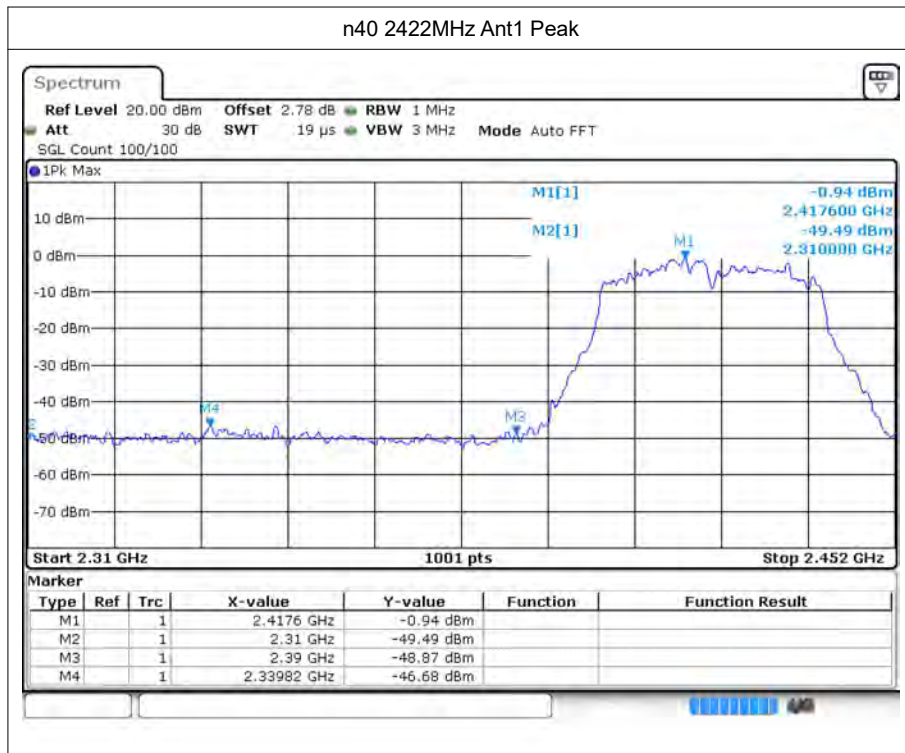


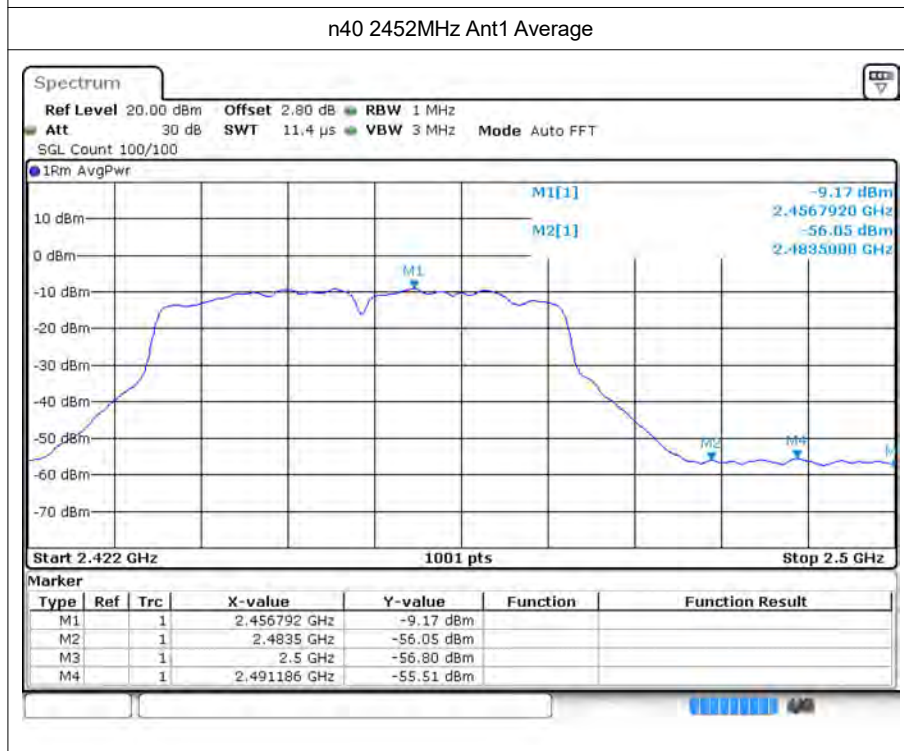
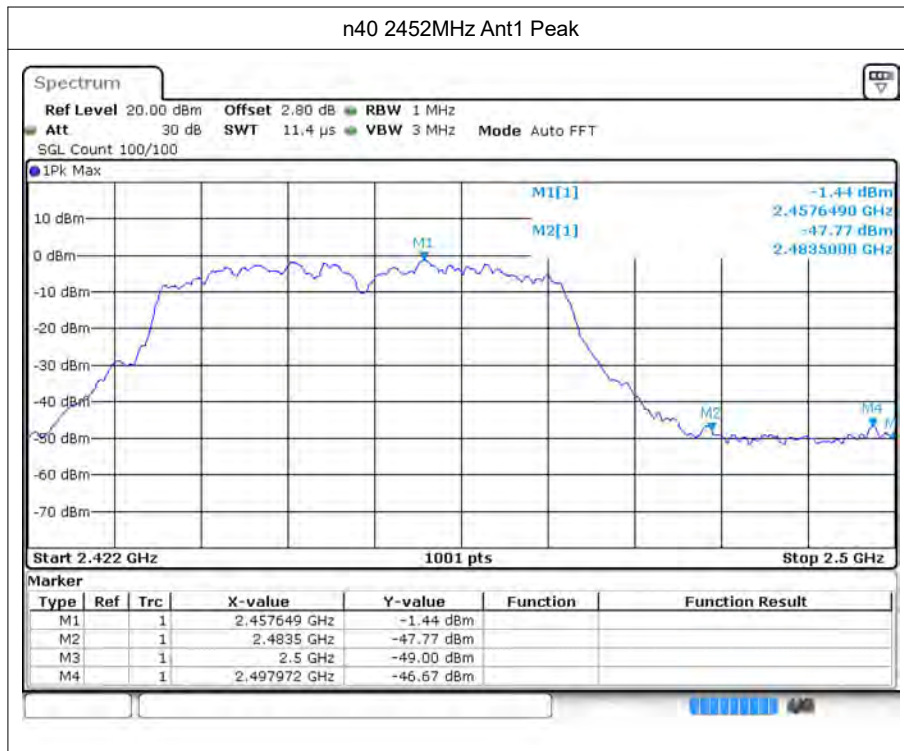












---The End---