



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Action camera

Trade Mark: N/A

Test Model: F300AAR-G

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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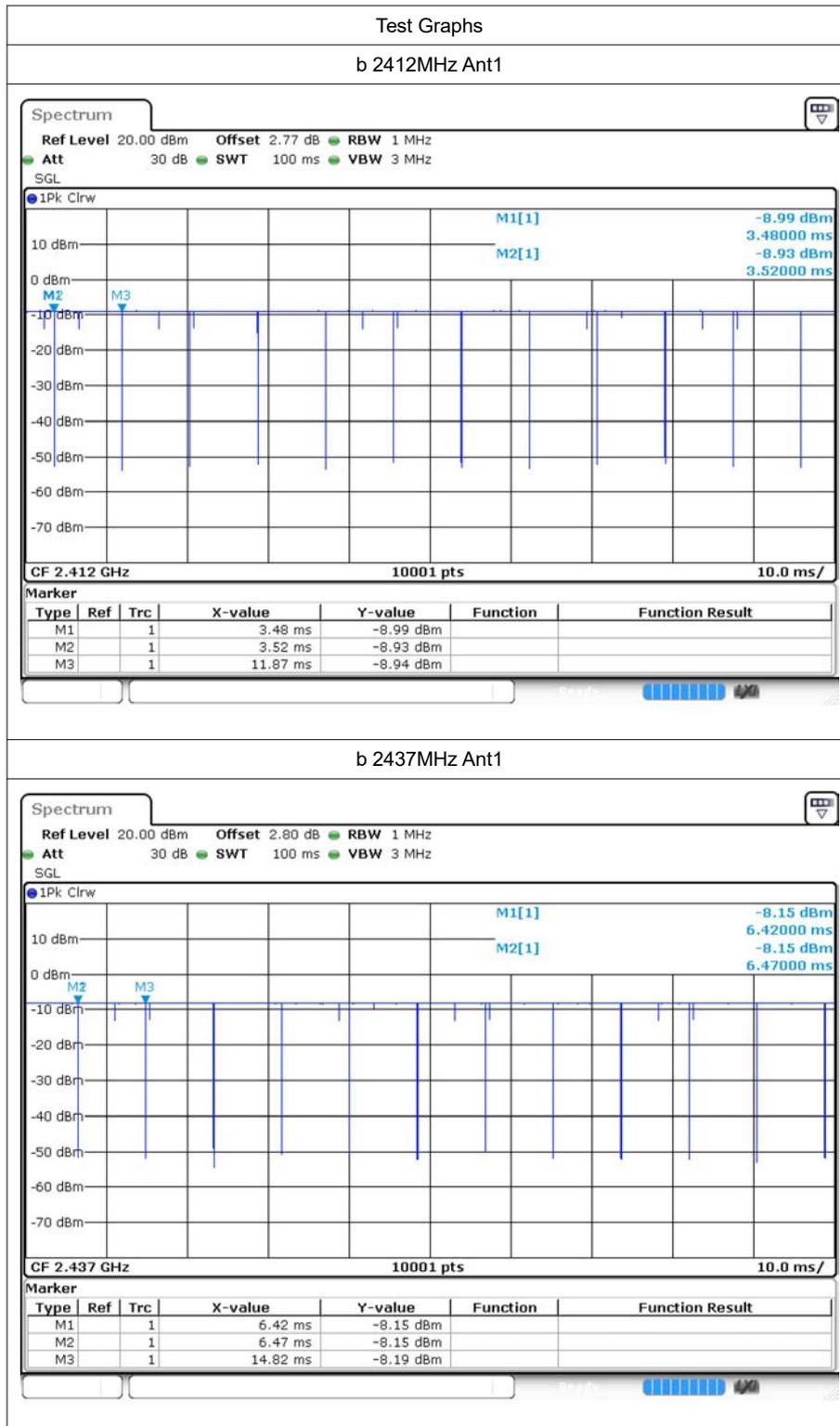
1 Duty Cycle

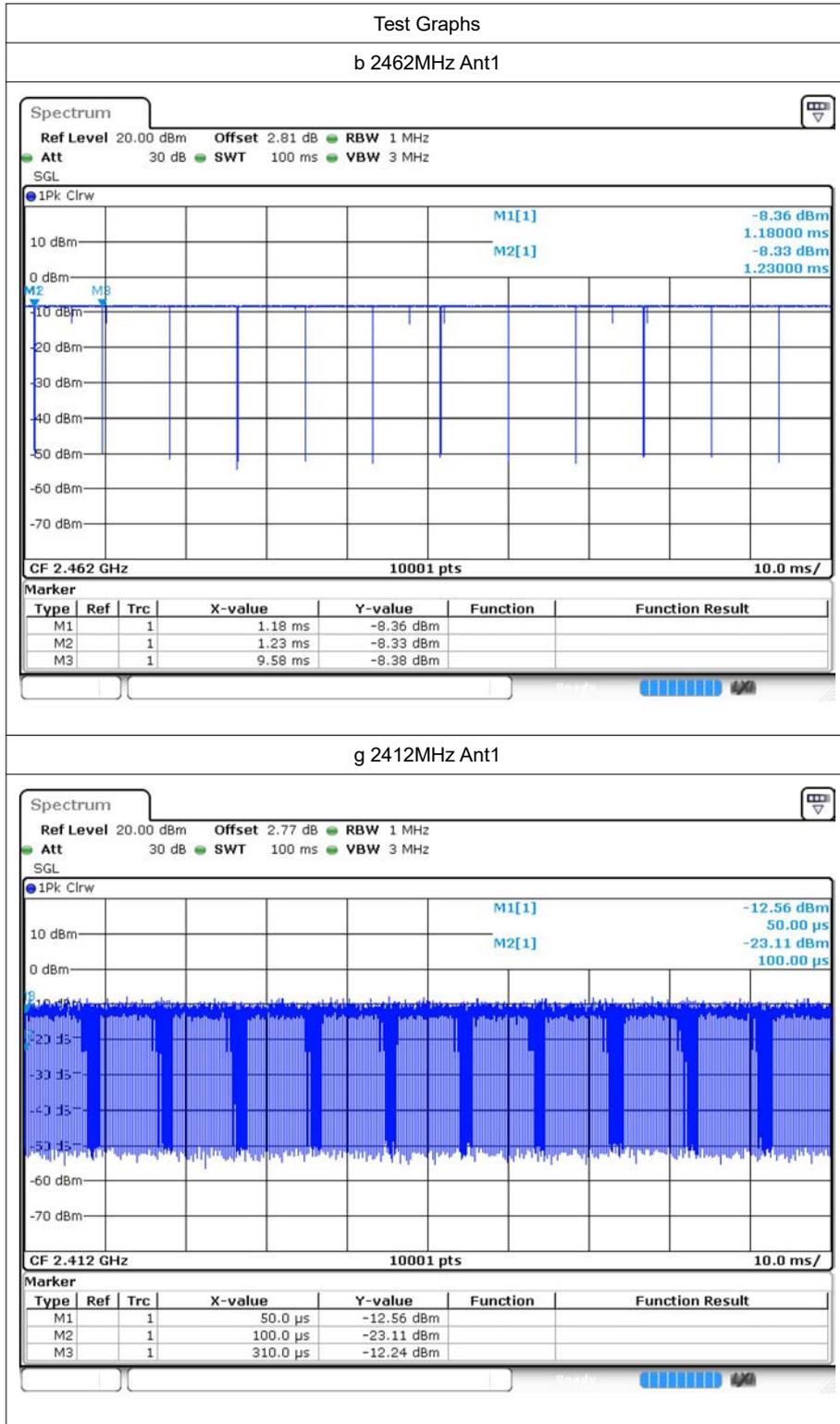
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.6	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	86.5	0.63	4.76
g	2437	Ant1	86.74	0.62	4.76
g	2462	Ant1	86.45	0.63	4.55
n20	2412	Ant1	87.37	0.59	4.35
n20	2437	Ant1	87.41	0.58	4.35
n20	2462	Ant1	87.42	0.58	4.35
n40	2422	Ant1	76.04	1.19	4.76
n40	2437	Ant1	76.41	1.17	4.76
n40	2452	Ant1	76.08	1.19	4.76

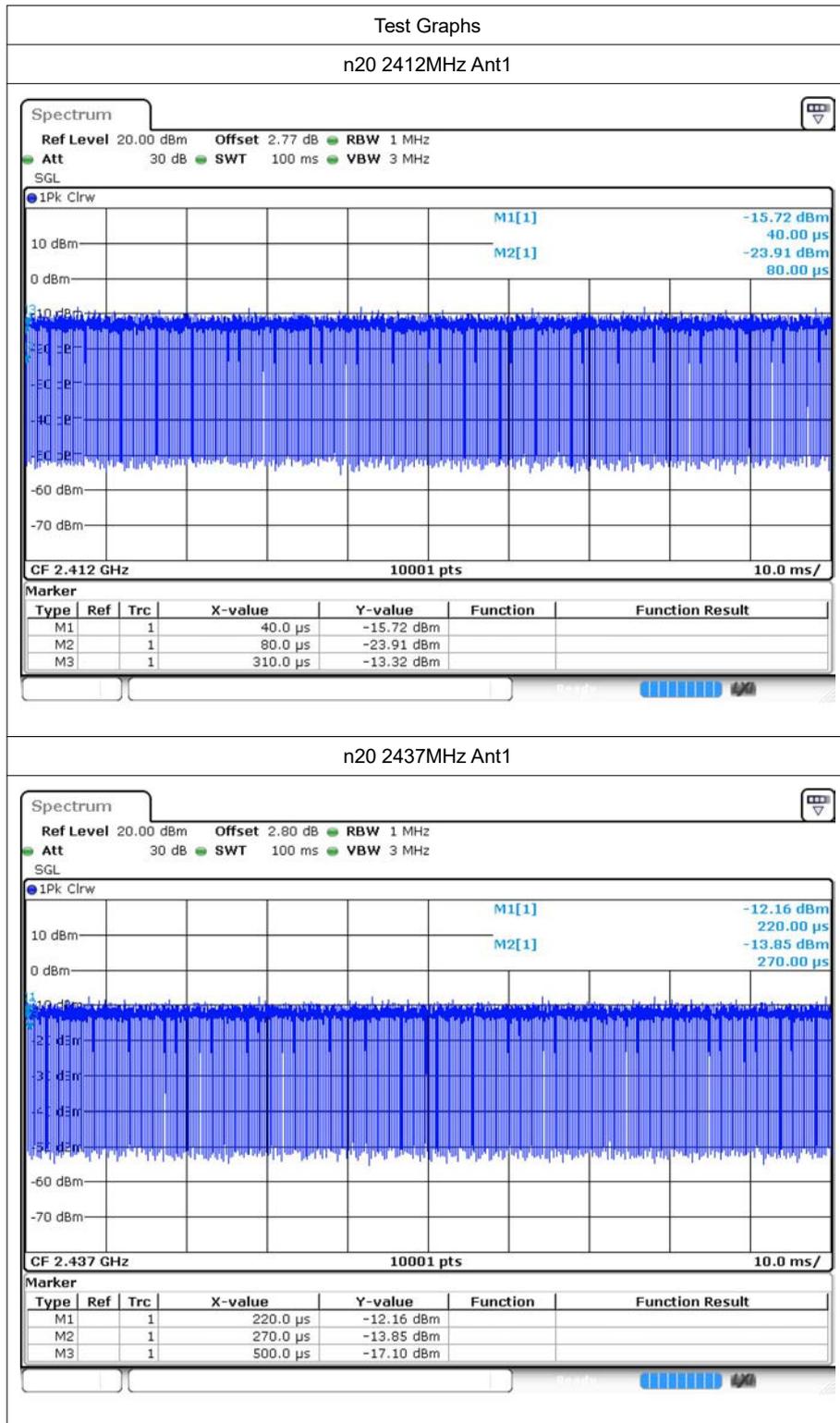


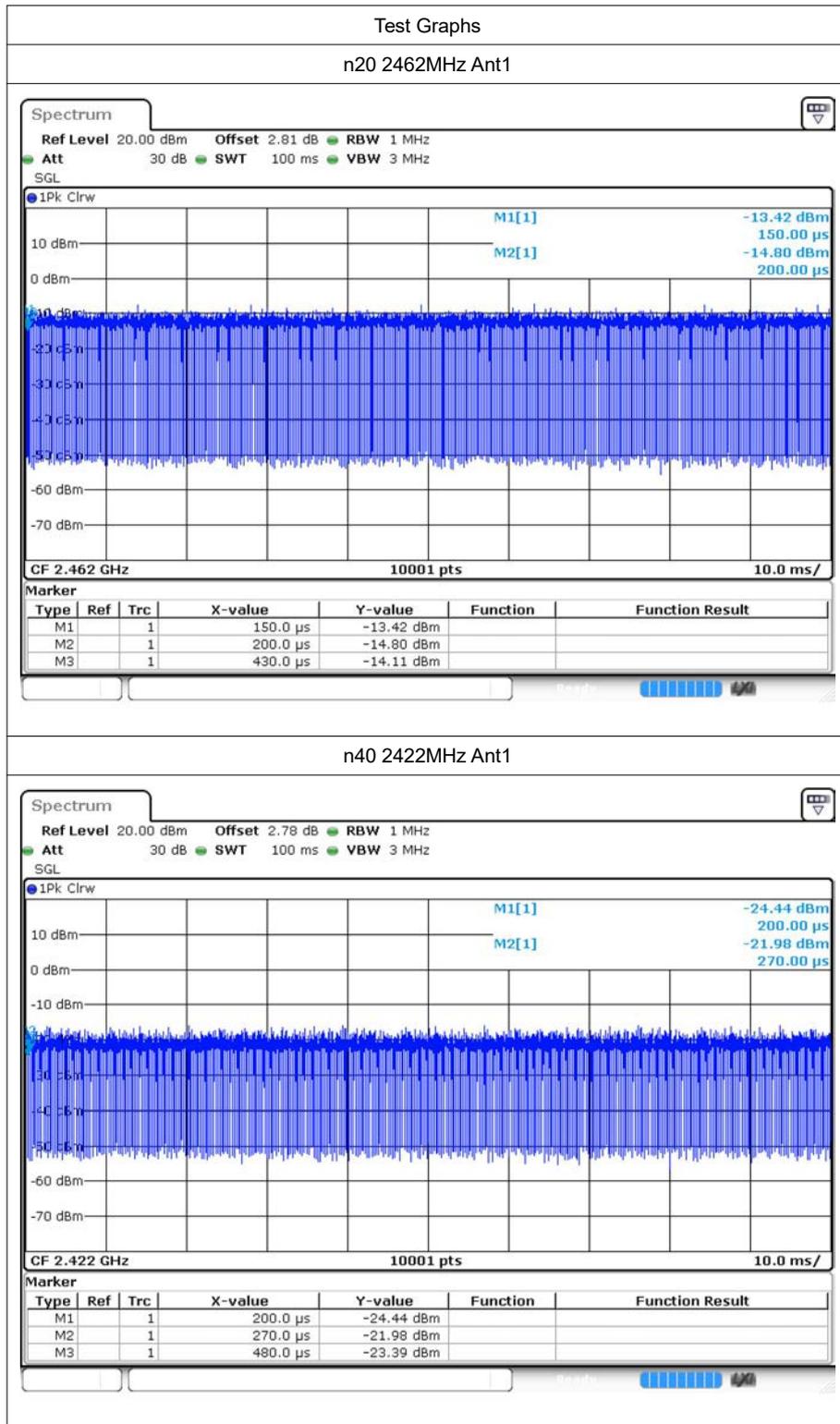
1.2 Test Graphs

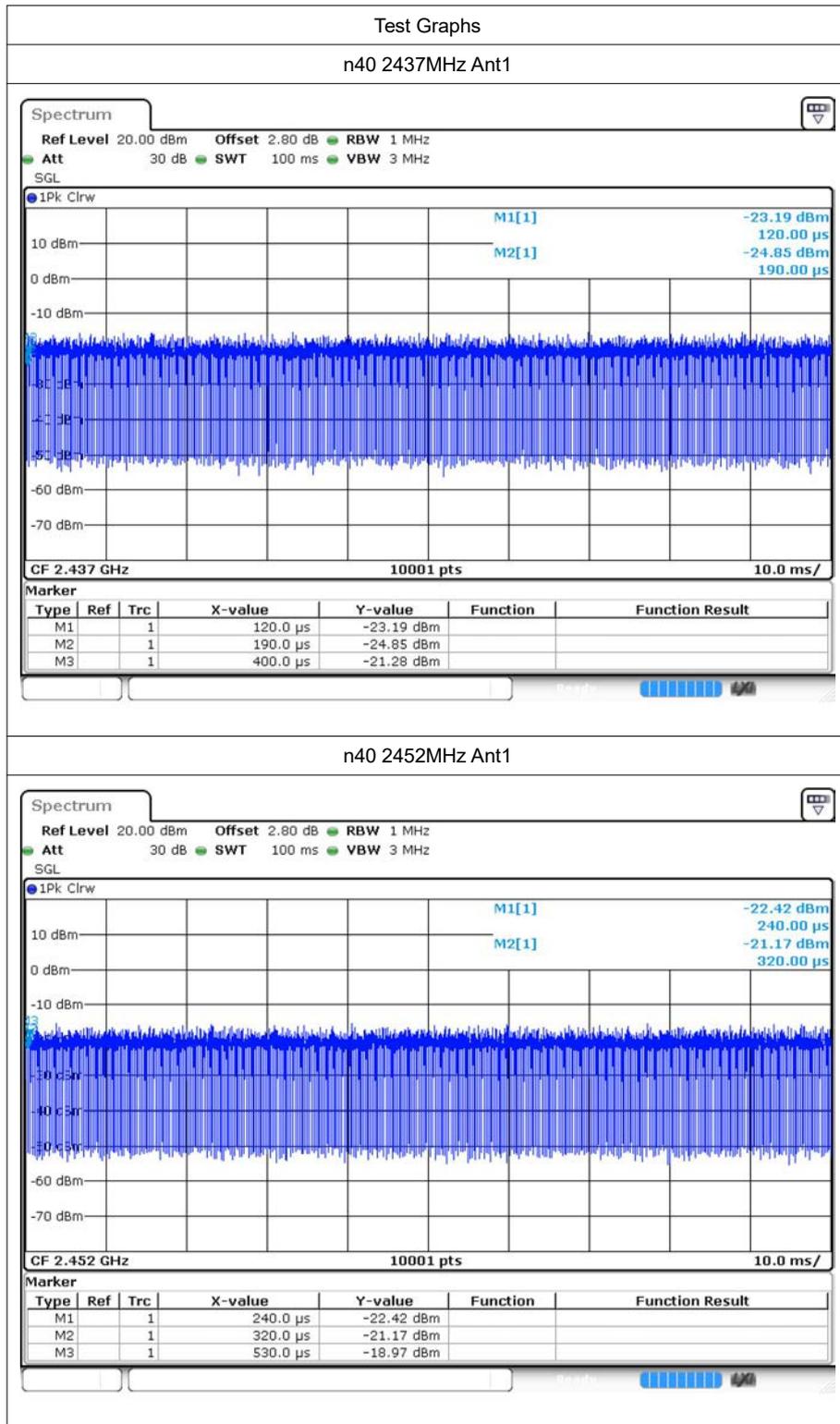












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	1.51	30	Pass
b	2437	Ant1	2.27	30	Pass
b	2462	Ant1	2.16	30	Pass
g	2412	Ant1	1.43	30	Pass
g	2437	Ant1	2.14	30	Pass
g	2462	Ant1	2.18	30	Pass
n20	2412	Ant1	0.77	30	Pass
n20	2437	Ant1	1.36	30	Pass
n20	2462	Ant1	1.48	30	Pass
n40	2422	Ant1	0.55	30	Pass
n40	2437	Ant1	0.89	30	Pass
n40	2452	Ant1	0.92	30	Pass

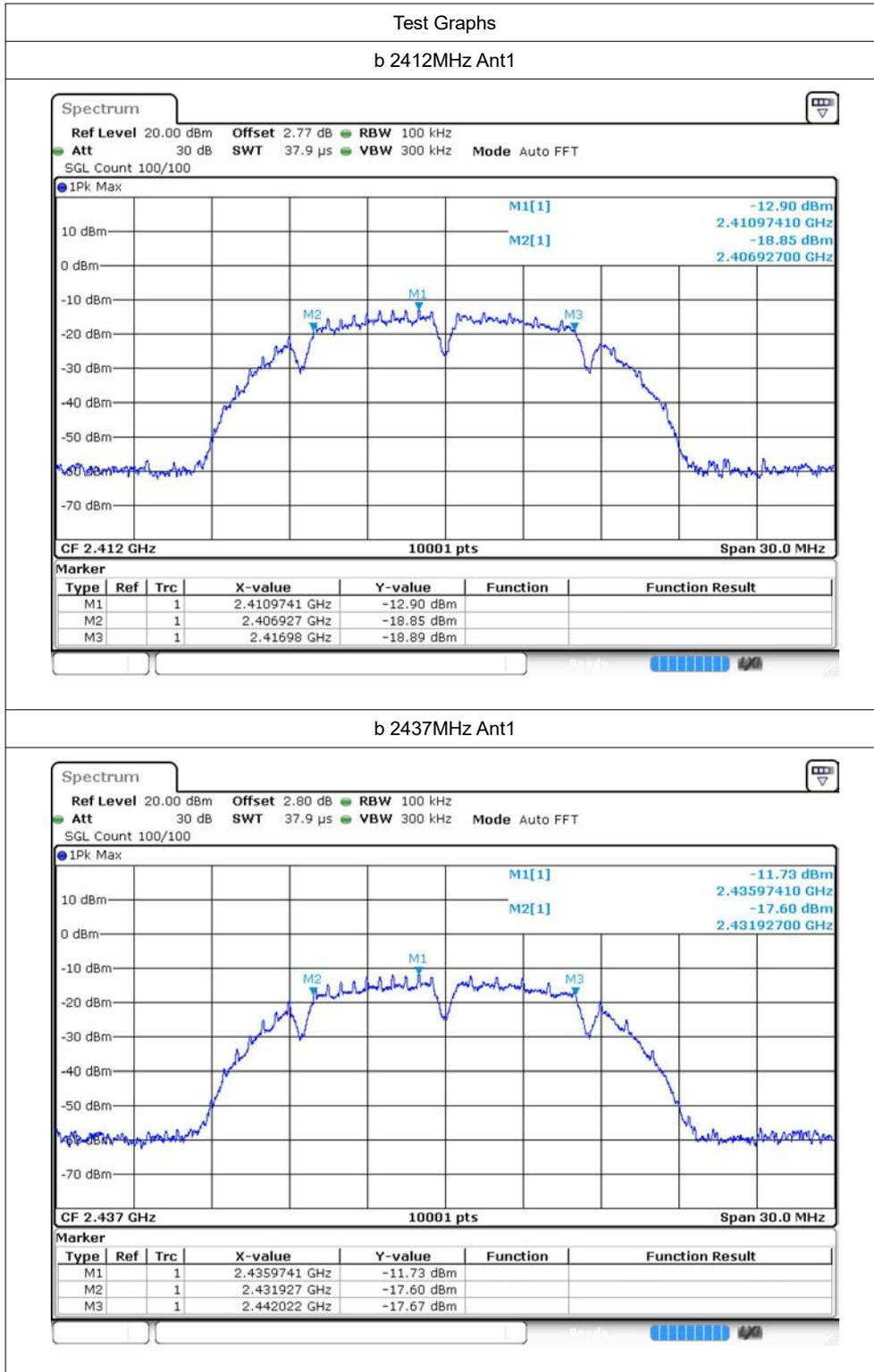


3 -6dB Bandwidth

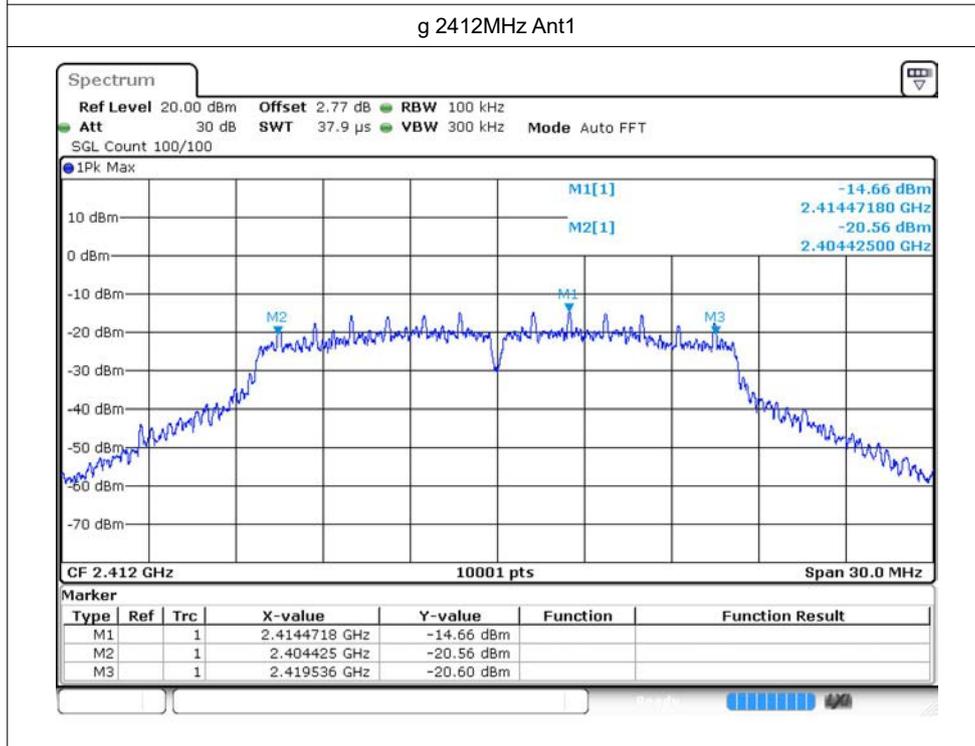
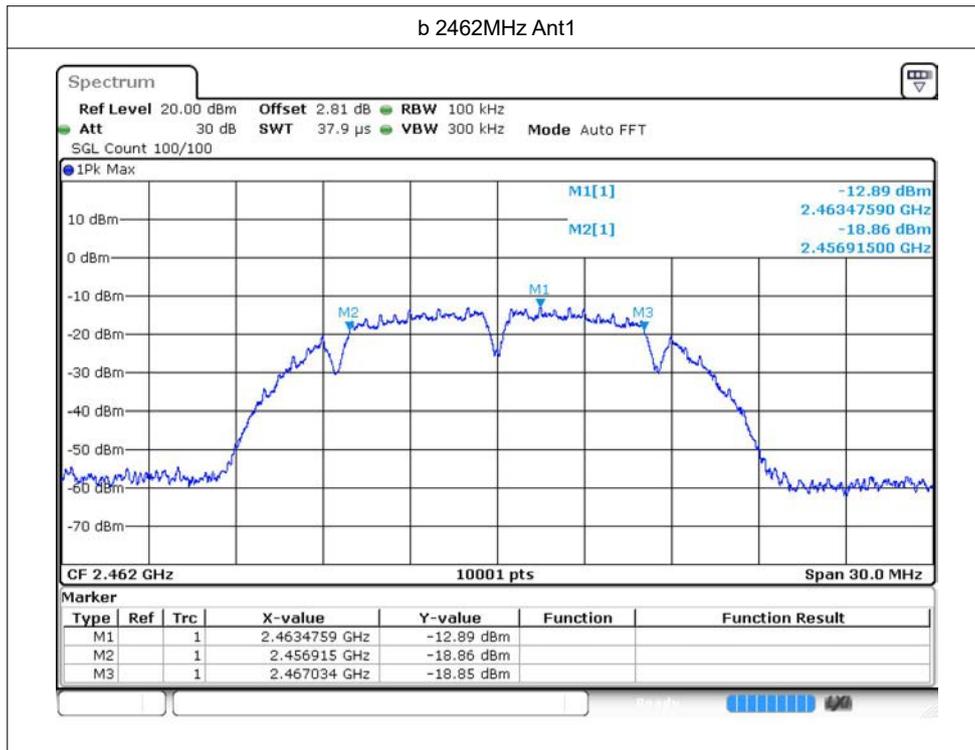
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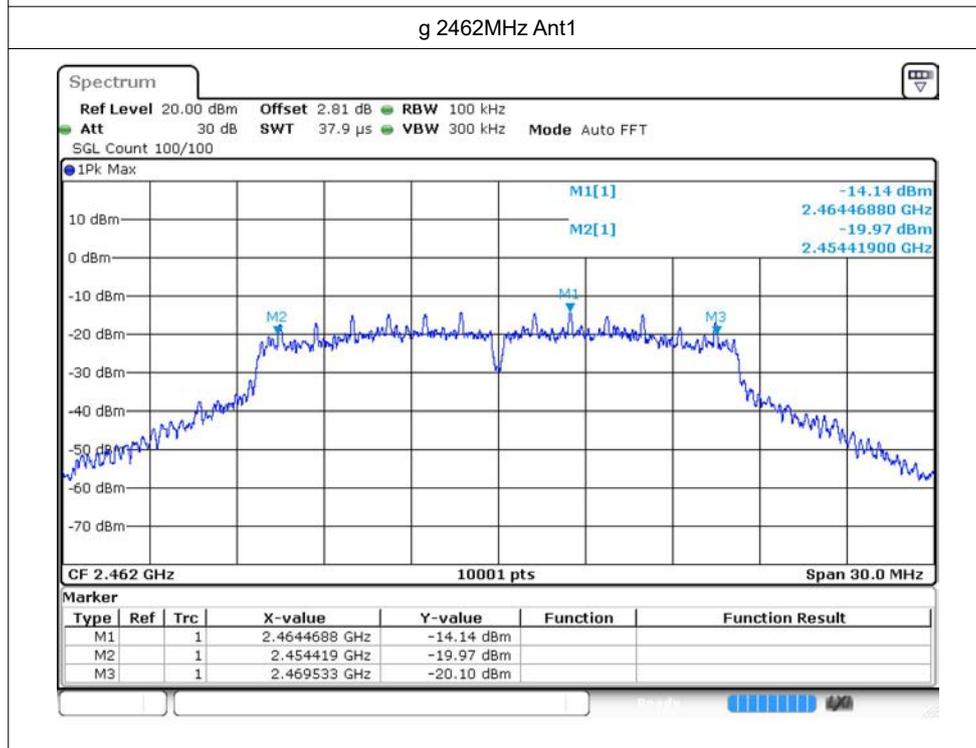
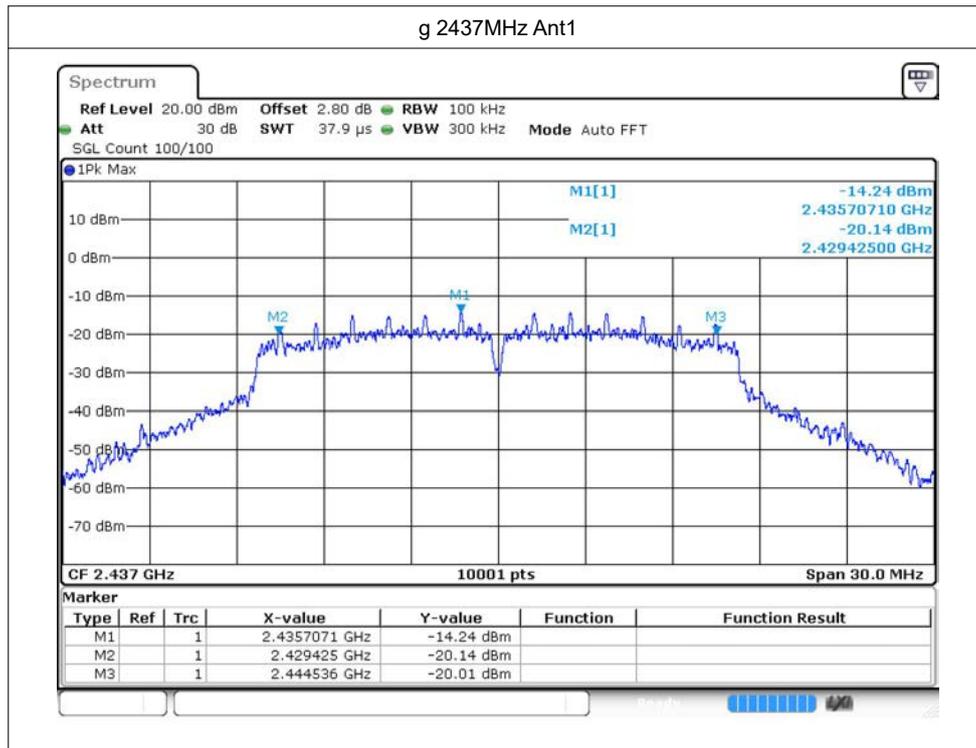
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.053	0.5	Pass
b	2437	Ant1	10.095	0.5	Pass
b	2462	Ant1	10.119	0.5	Pass
g	2412	Ant1	15.111	0.5	Pass
g	2437	Ant1	15.111	0.5	Pass
g	2462	Ant1	15.114	0.5	Pass
n20	2412	Ant1	15.099	0.5	Pass
n20	2437	Ant1	15.072	0.5	Pass
n20	2462	Ant1	15.108	0.5	Pass
n40	2422	Ant1	35.052	0.5	Pass
n40	2437	Ant1	35.076	0.5	Pass
n40	2452	Ant1	35.082	0.5	Pass

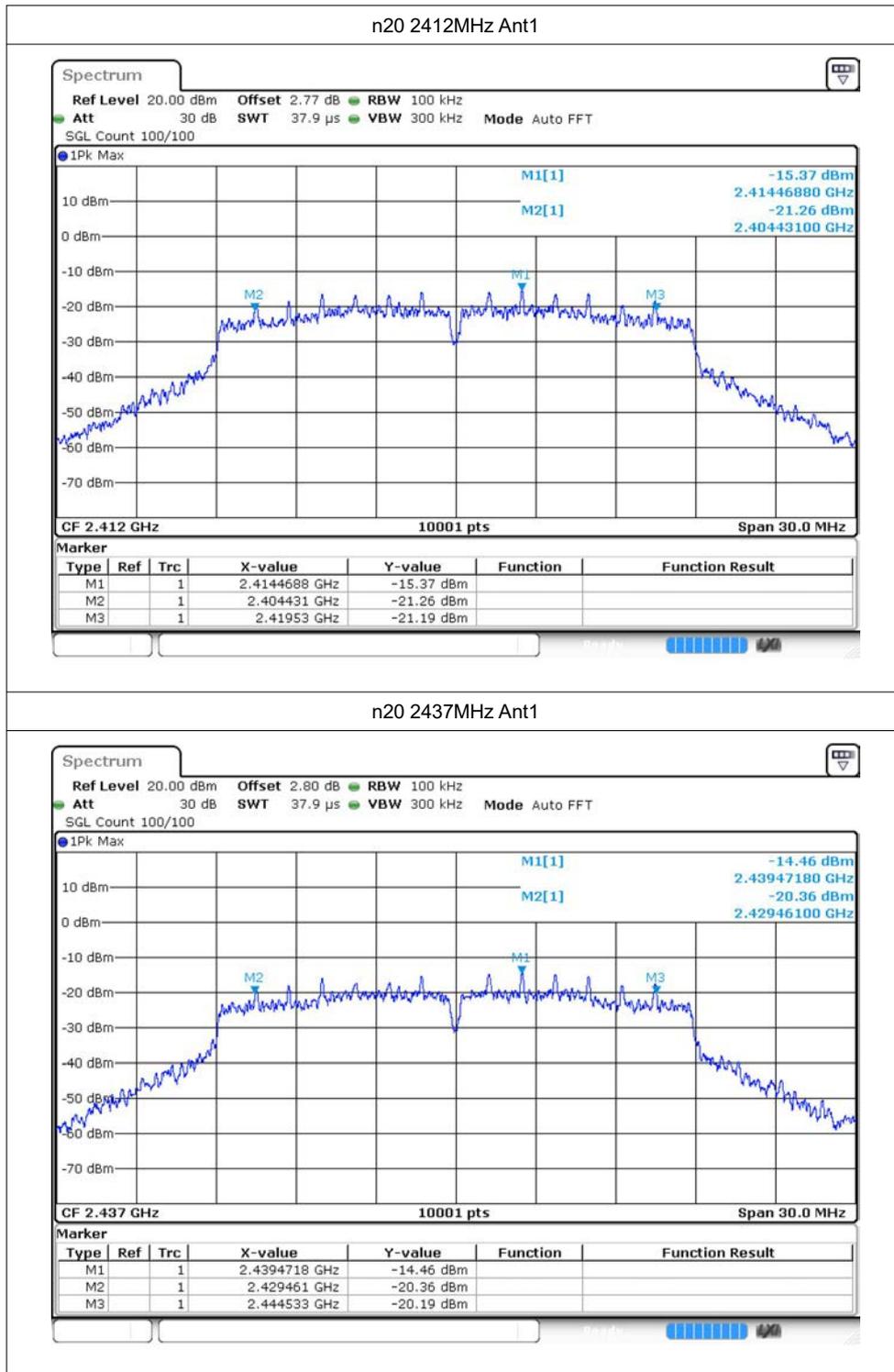
3.2 Test Graphs



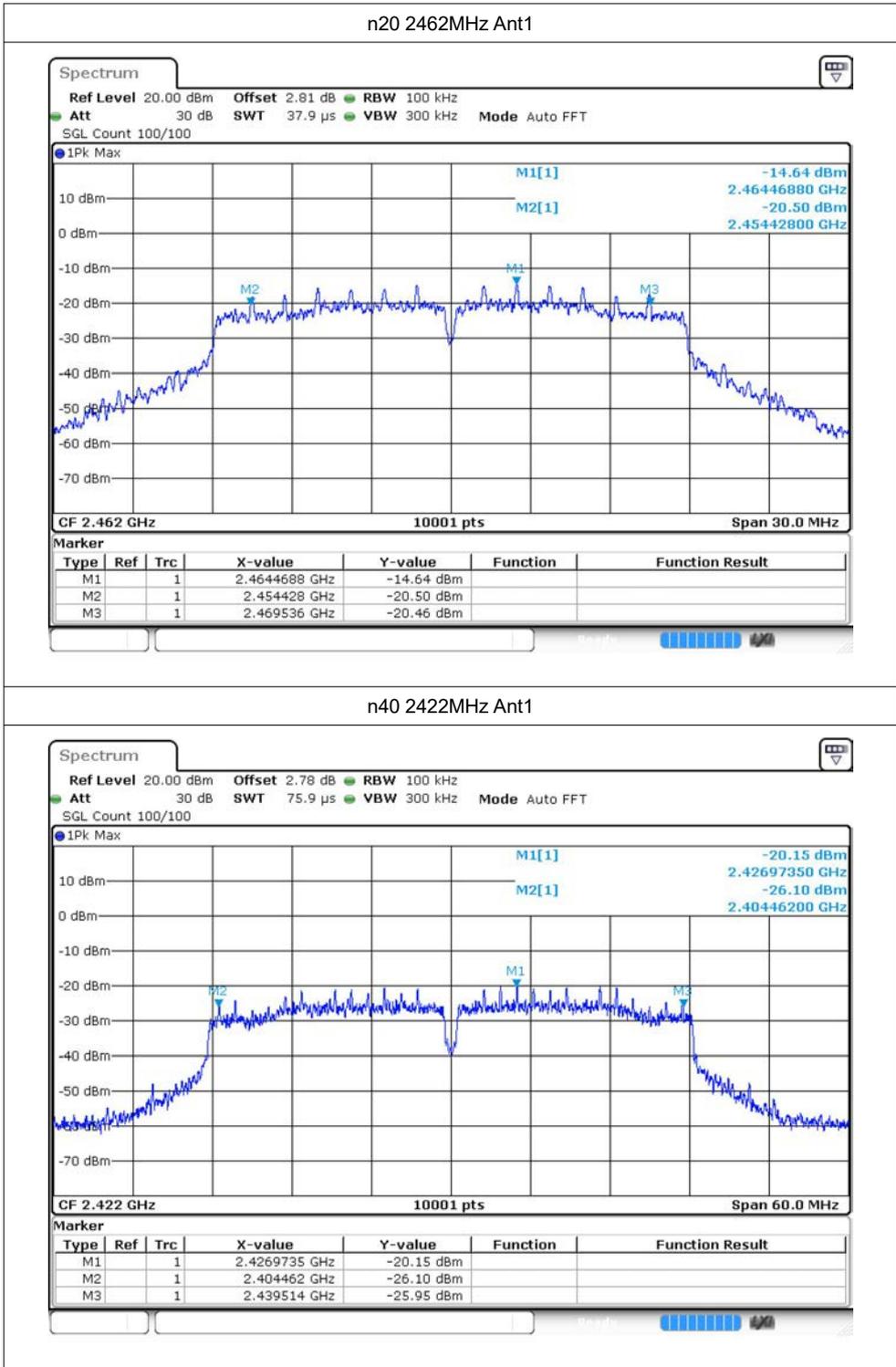
b 2437MHz Ant1



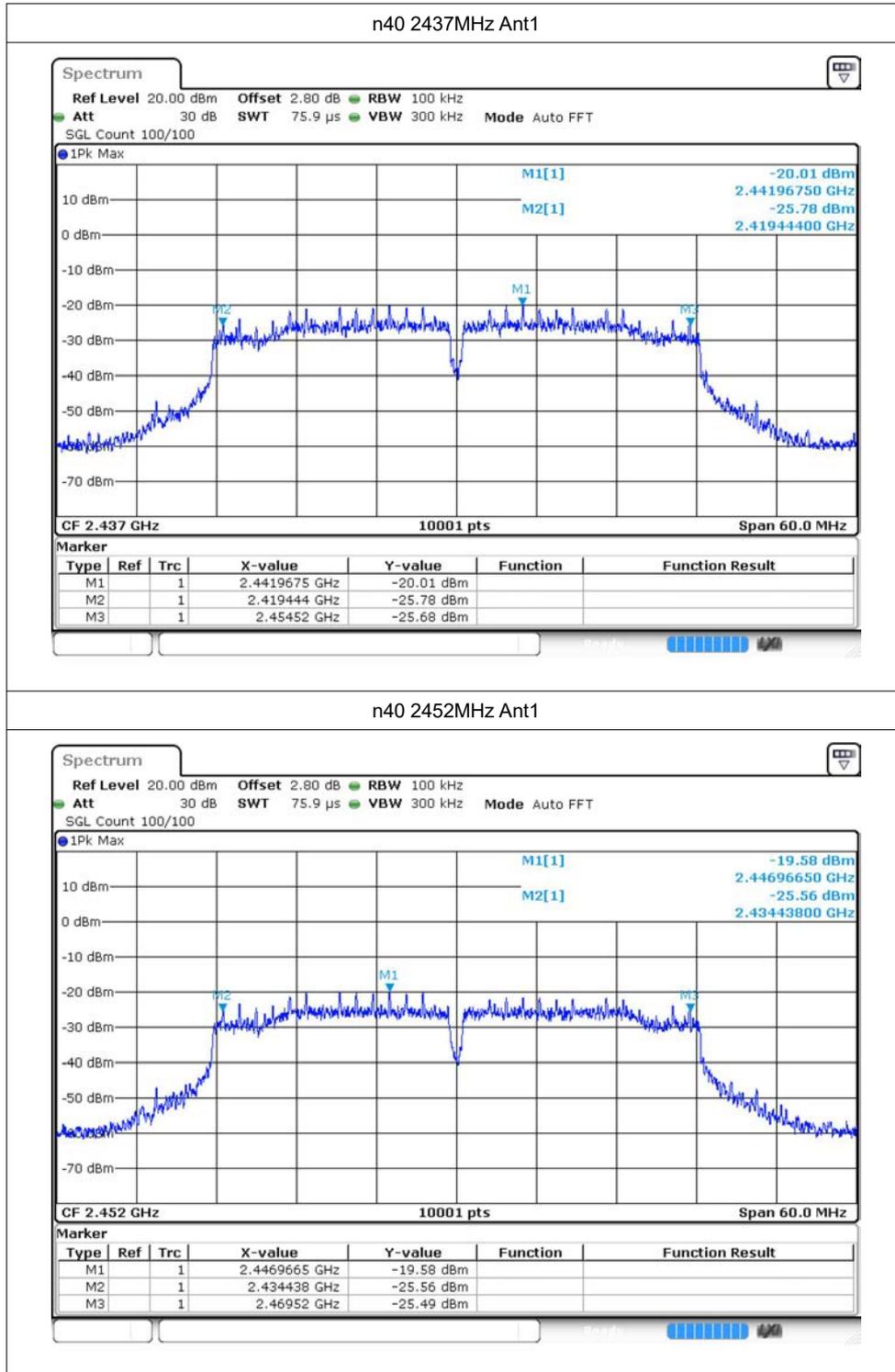




n20 2437MHz Ant1



n40 2422MHz Ant1

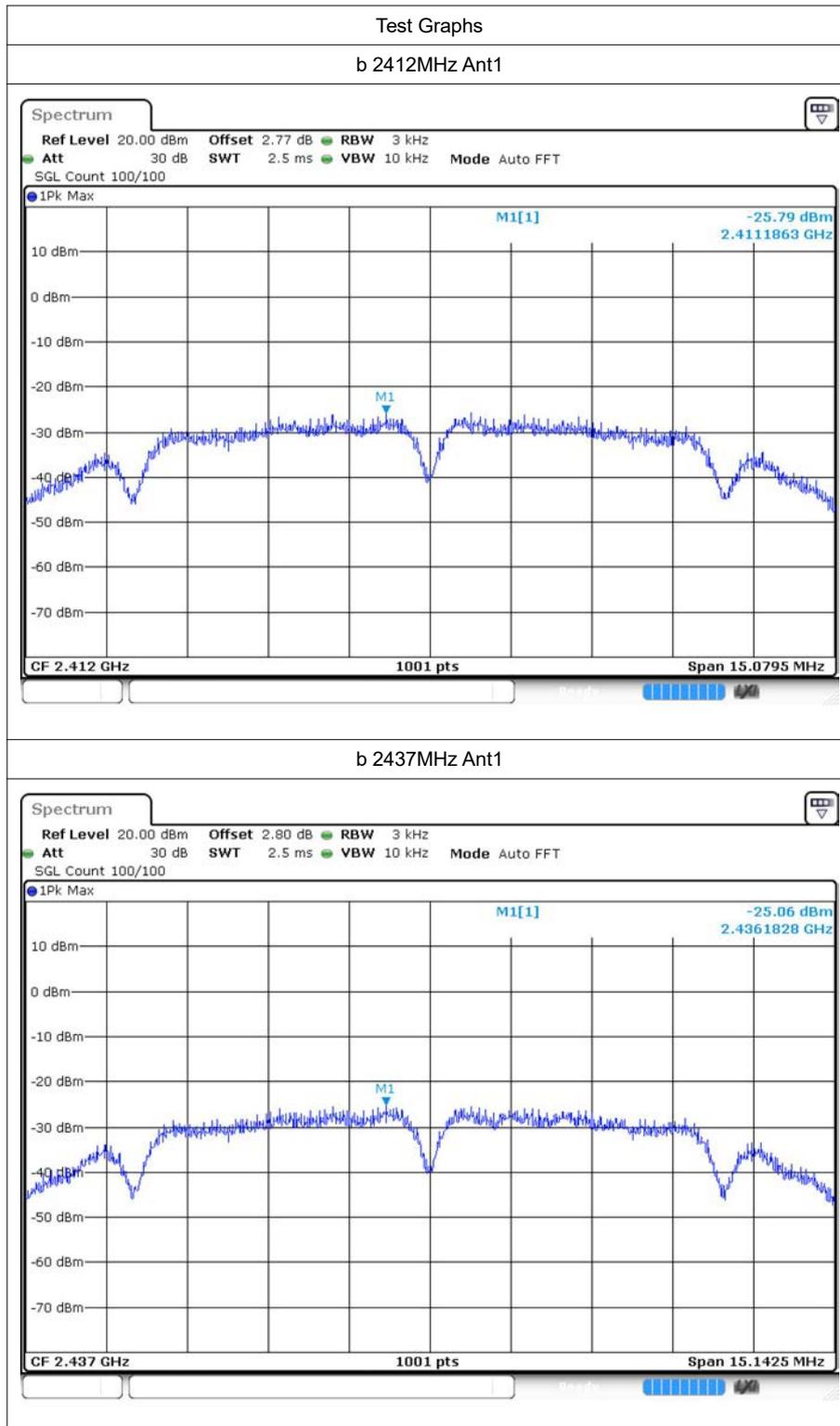


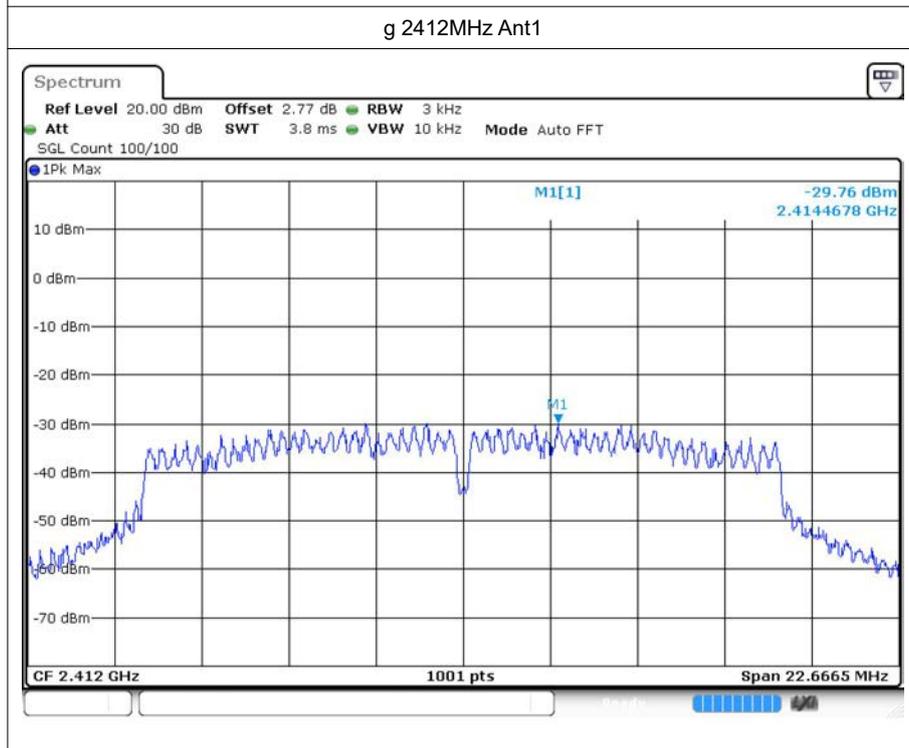
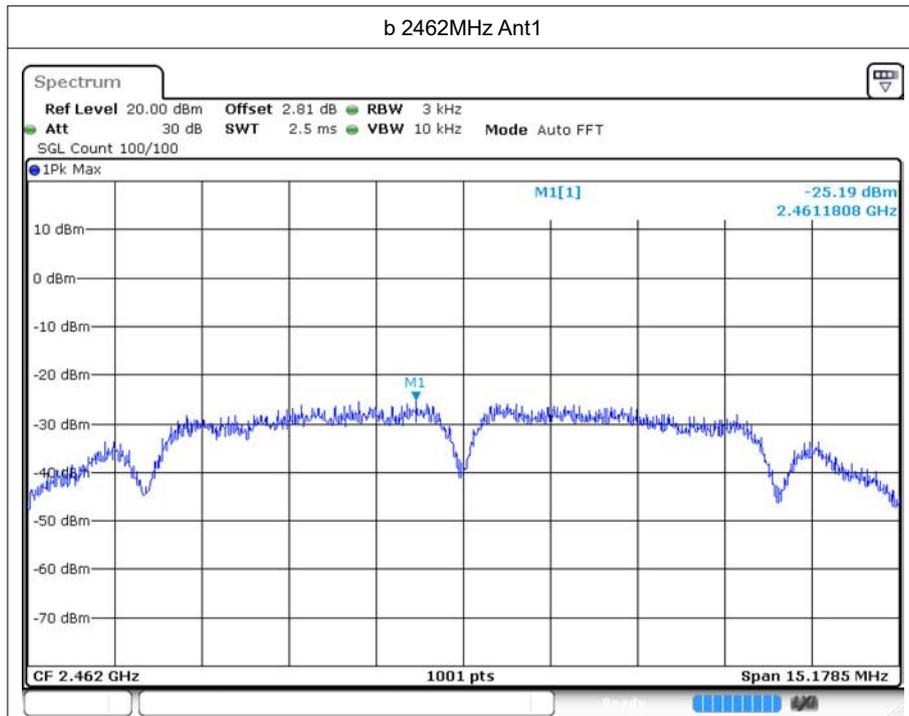
4 Maximum Power Spectral Density Level

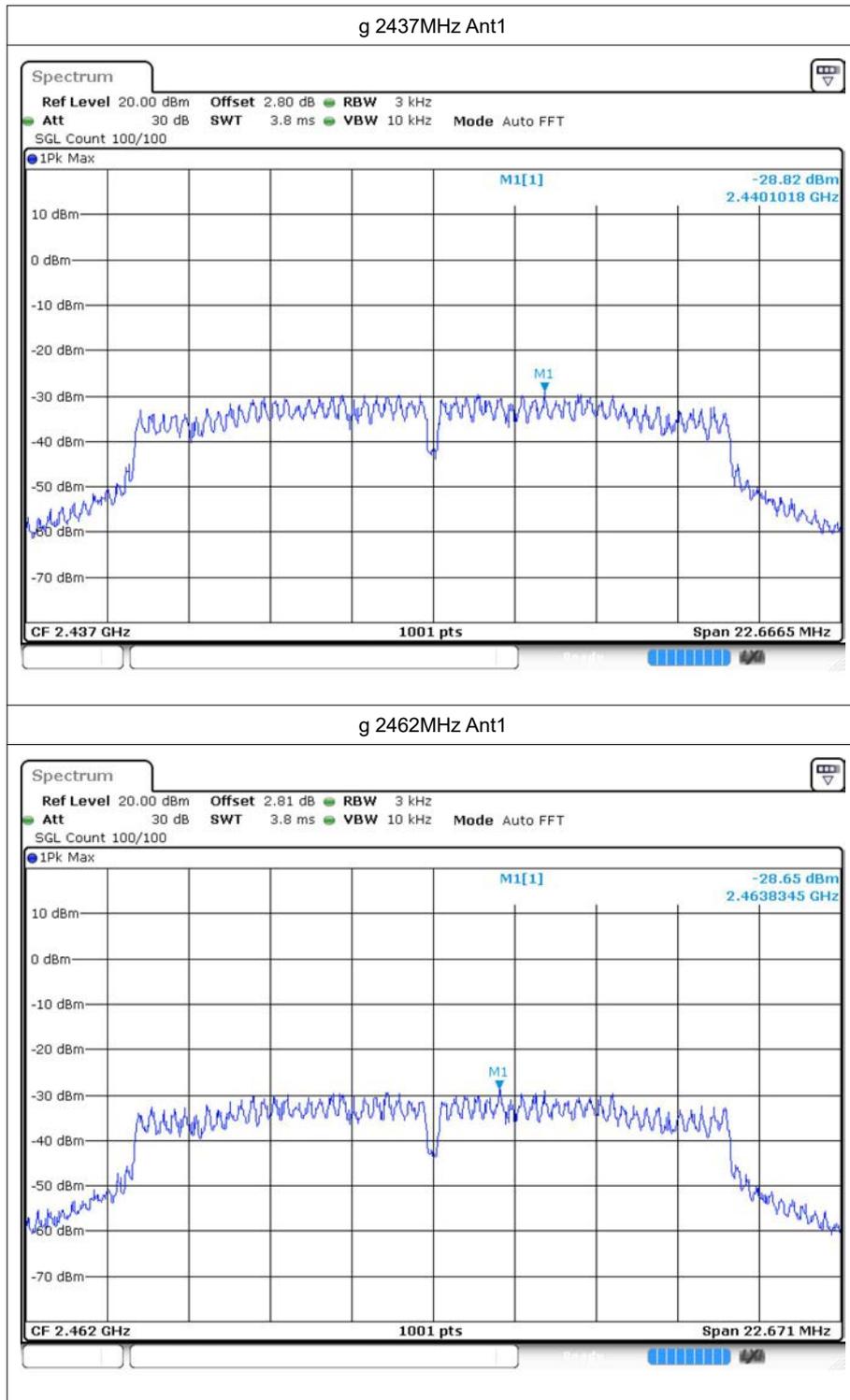
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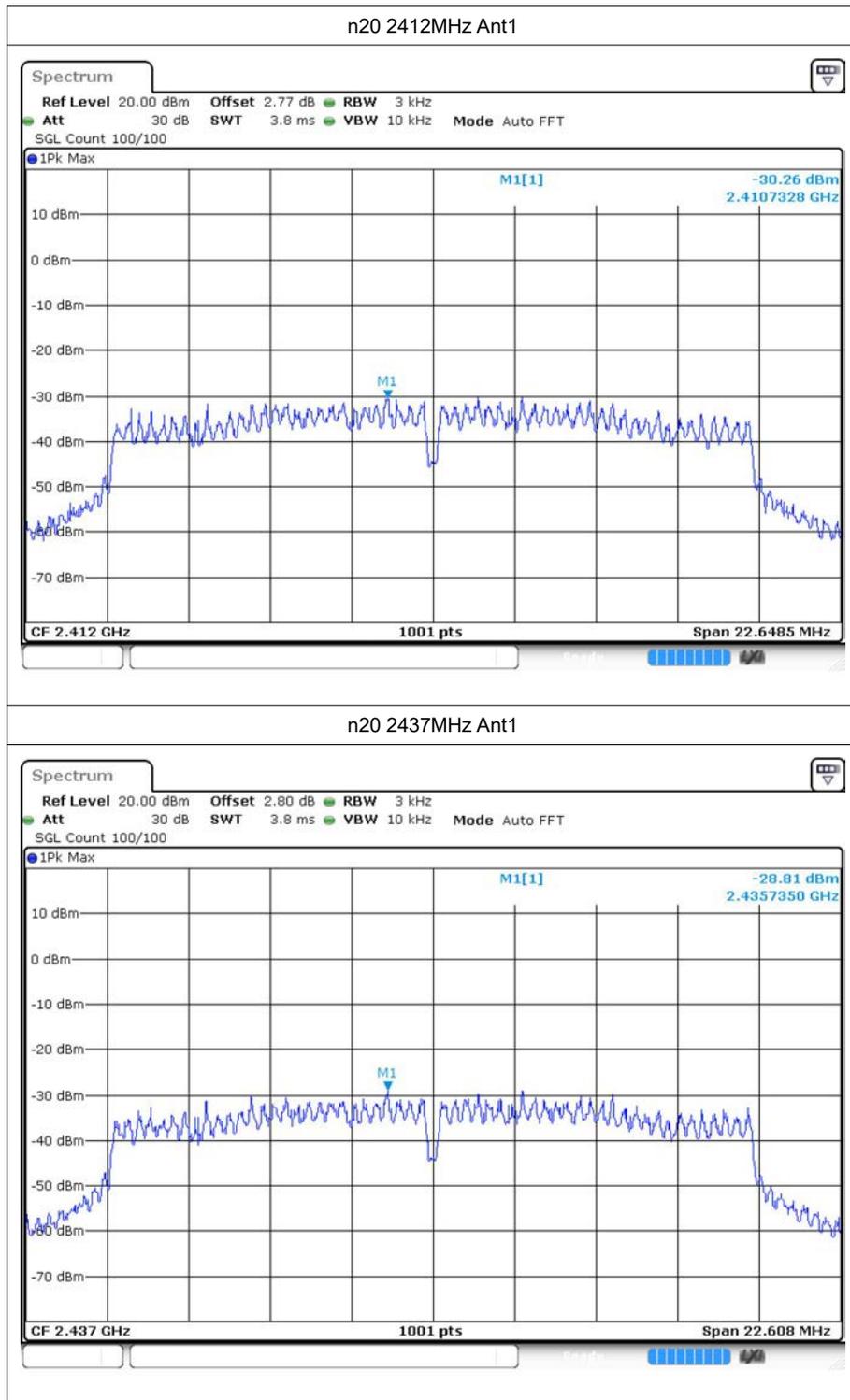
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-25.79	≤8	Pass
b	2437	Ant1	-25.06	≤8	Pass
b	2462	Ant1	-25.19	≤8	Pass
g	2412	Ant1	-29.76	≤8	Pass
g	2437	Ant1	-28.82	≤8	Pass
g	2462	Ant1	-28.65	≤8	Pass
n20	2412	Ant1	-30.26	≤8	Pass
n20	2437	Ant1	-28.81	≤8	Pass
n20	2462	Ant1	-28.75	≤8	Pass
n40	2422	Ant1	-33.81	≤8	Pass
n40	2437	Ant1	-34.15	≤8	Pass
n40	2452	Ant1	-34.39	≤8	Pass

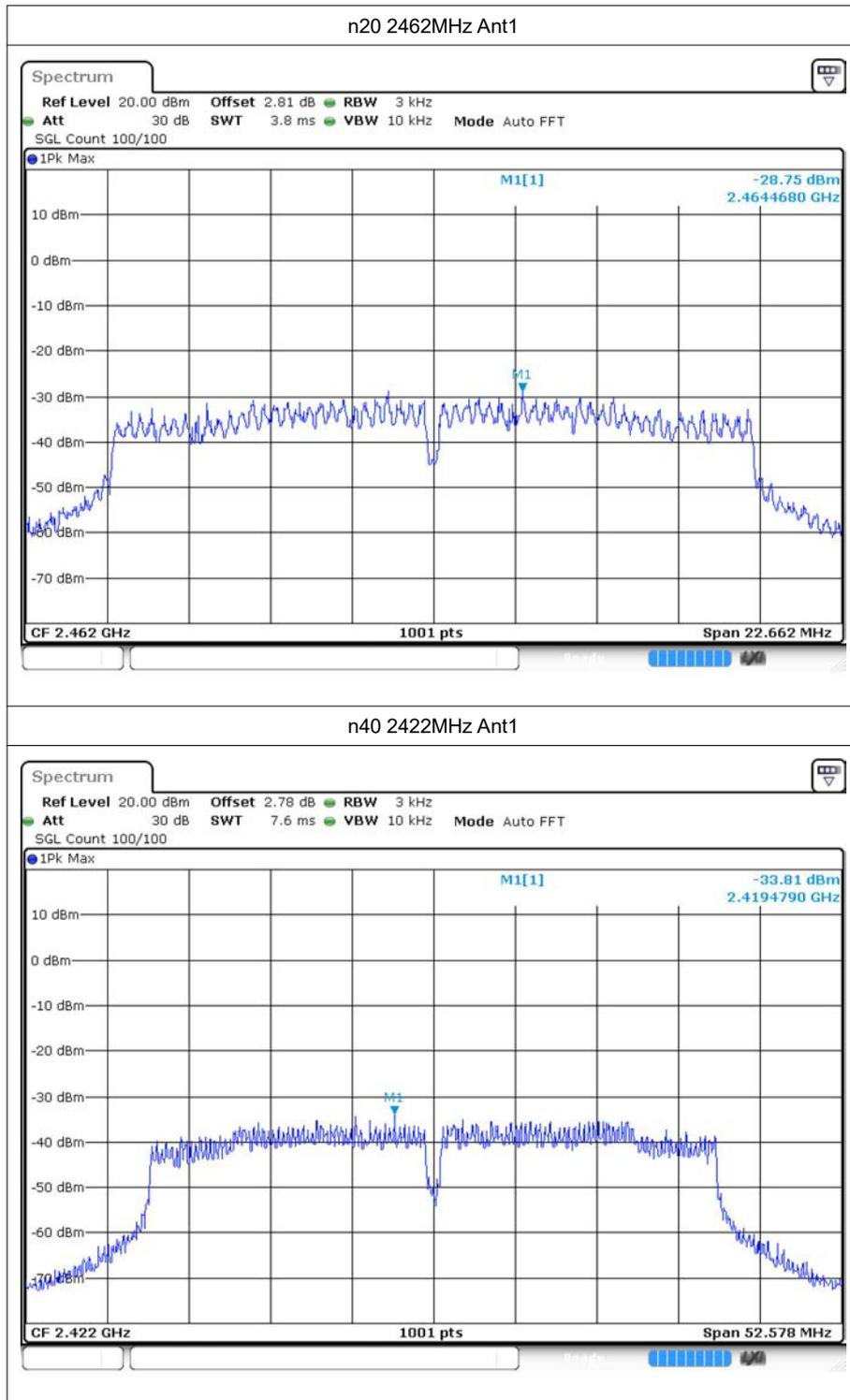
4.2 Test Graphs

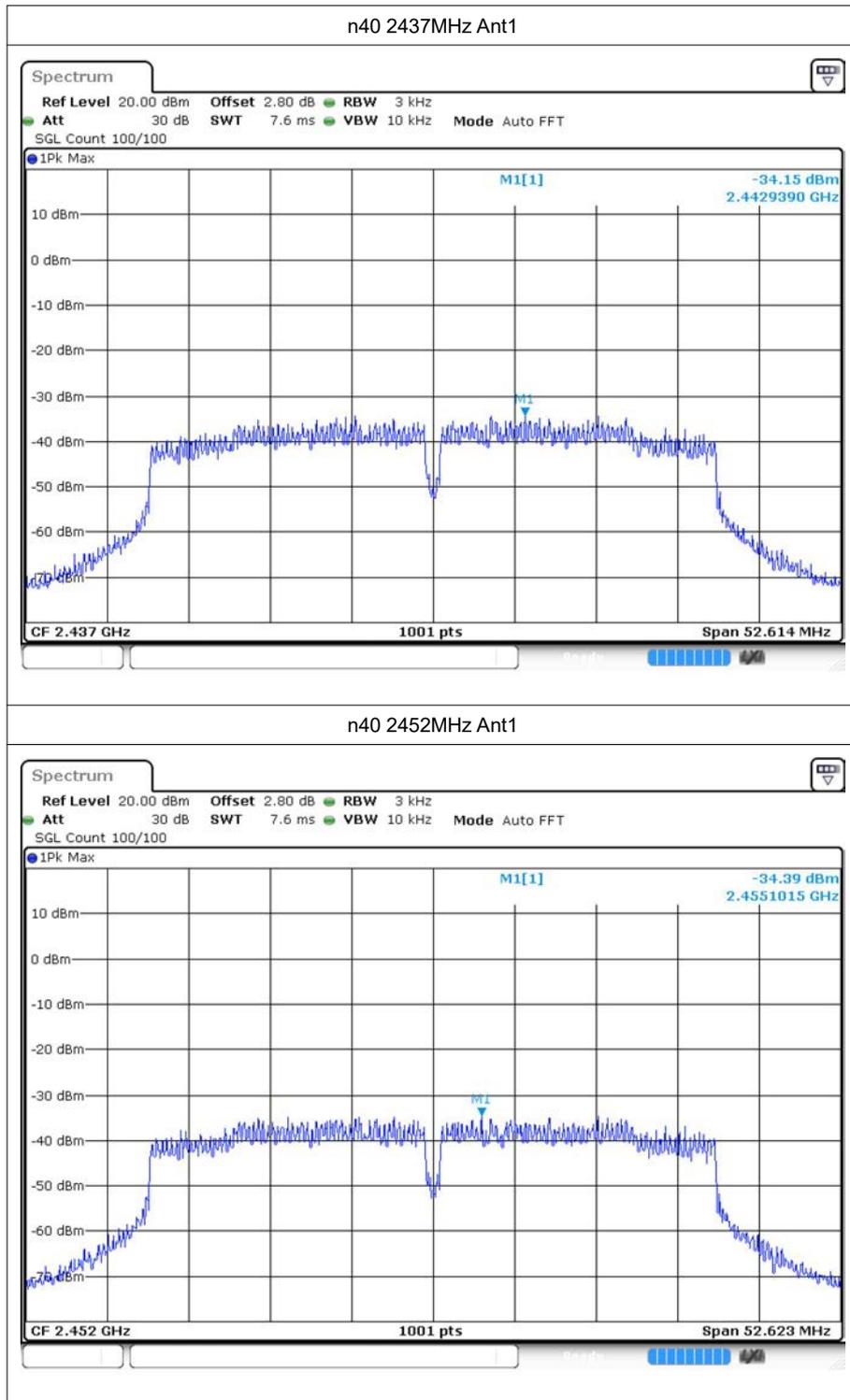












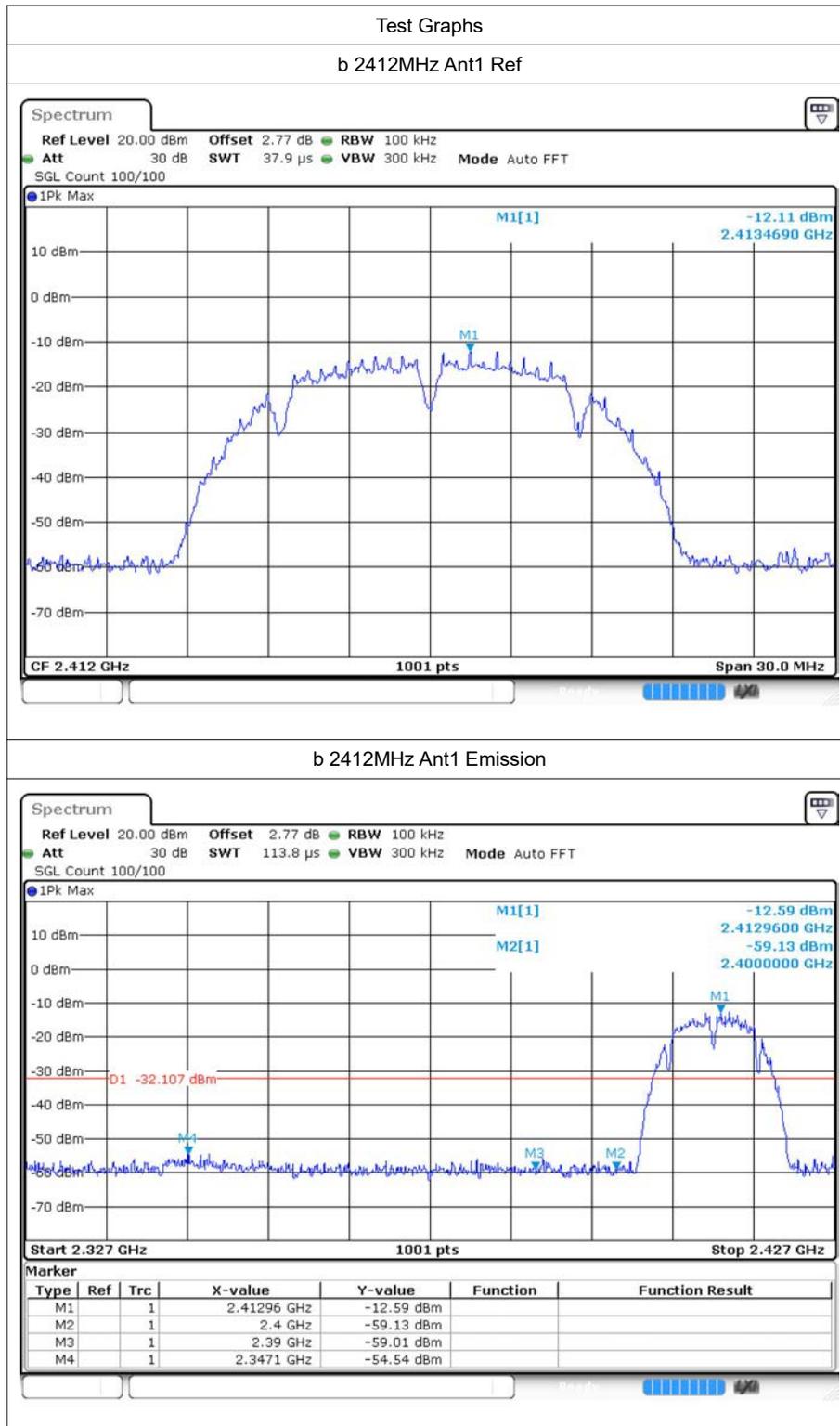


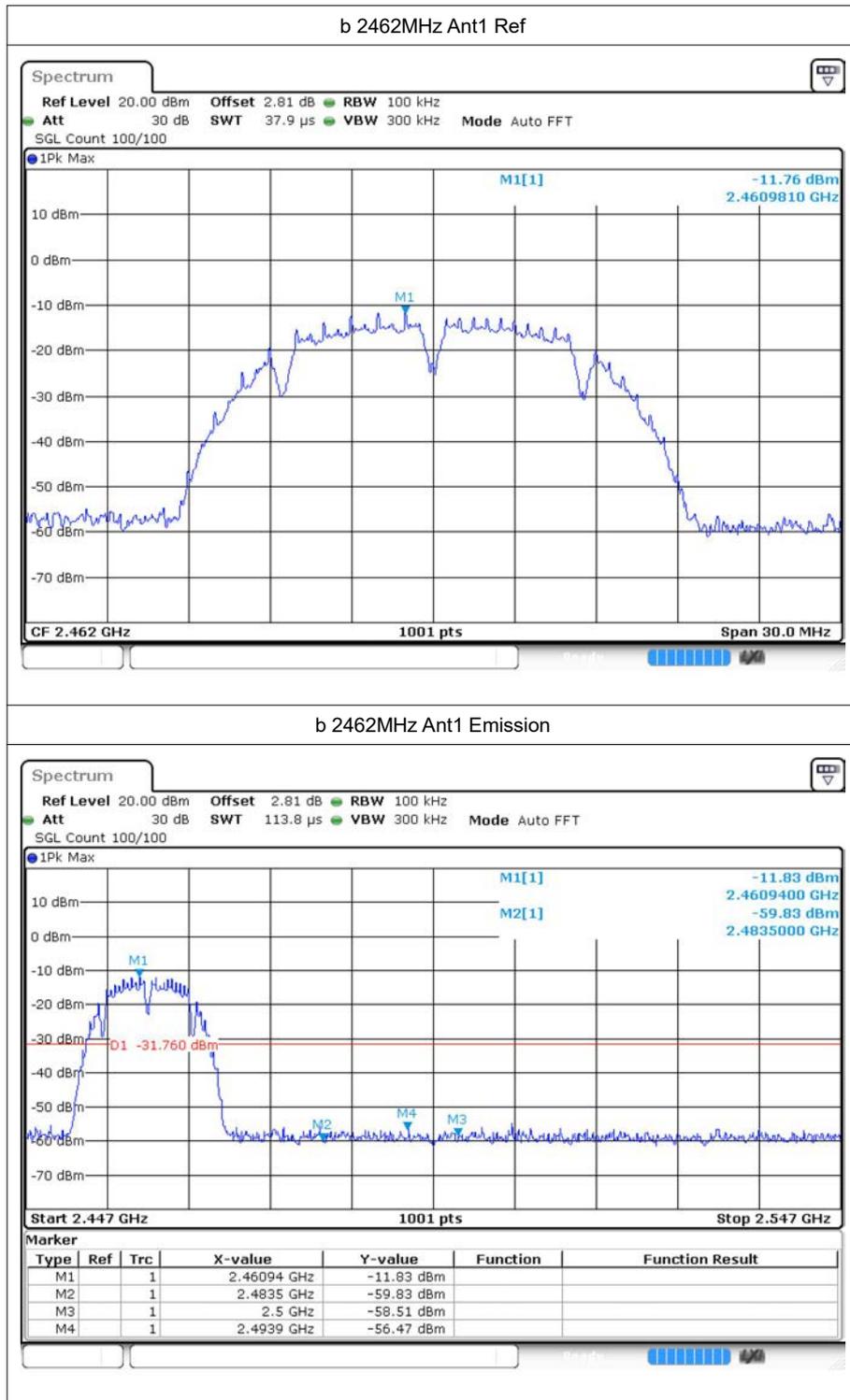
5 Band Edge

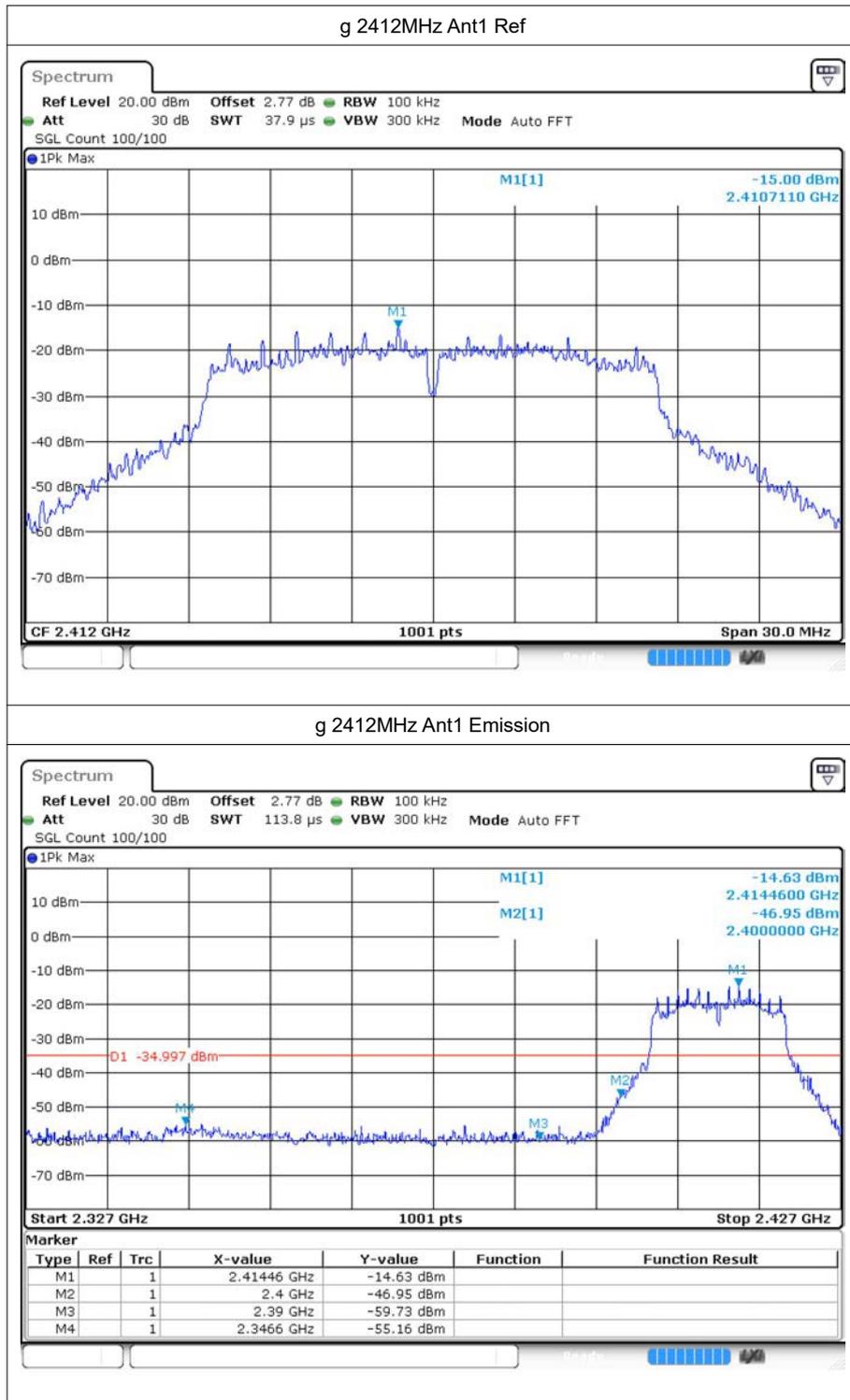
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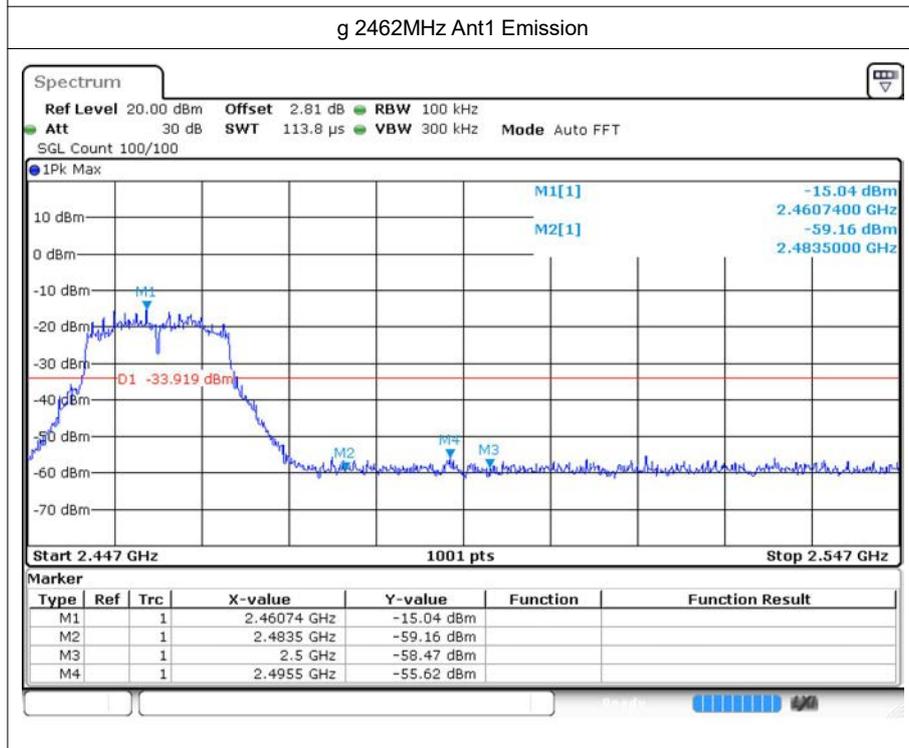
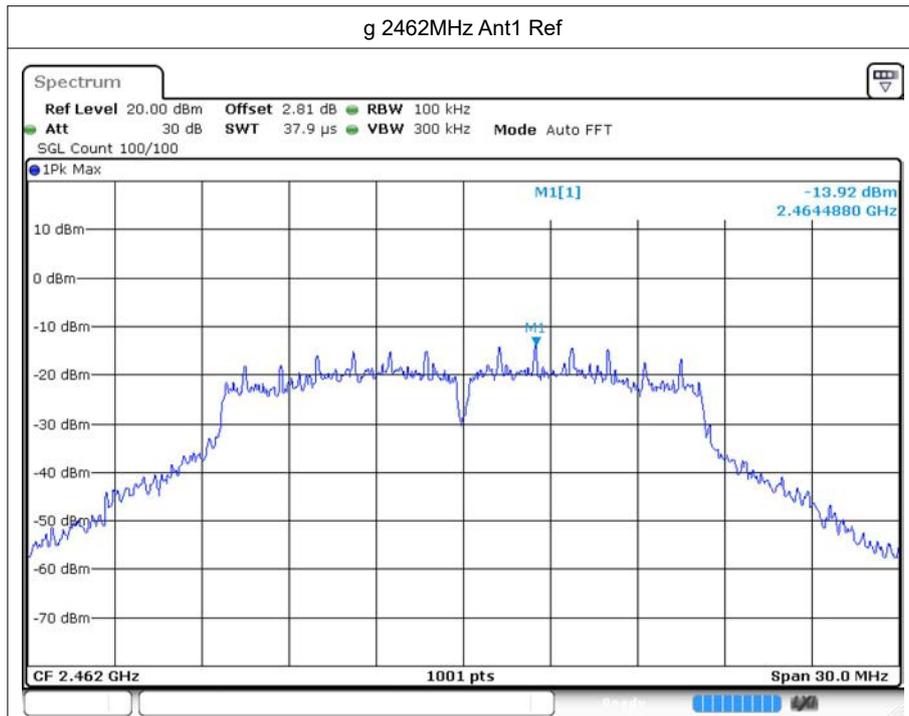
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-42.43	-20	Pass
b	2462	Ant1	-44.71	-20	Pass
g	2412	Ant1	-40.15	-20	Pass
g	2462	Ant1	-41.69	-20	Pass
n20	2412	Ant1	-38.83	-20	Pass
n20	2462	Ant1	-41.55	-20	Pass
n40	2422	Ant1	-35.76	-20	Pass
n40	2452	Ant1	-36.5	-20	Pass

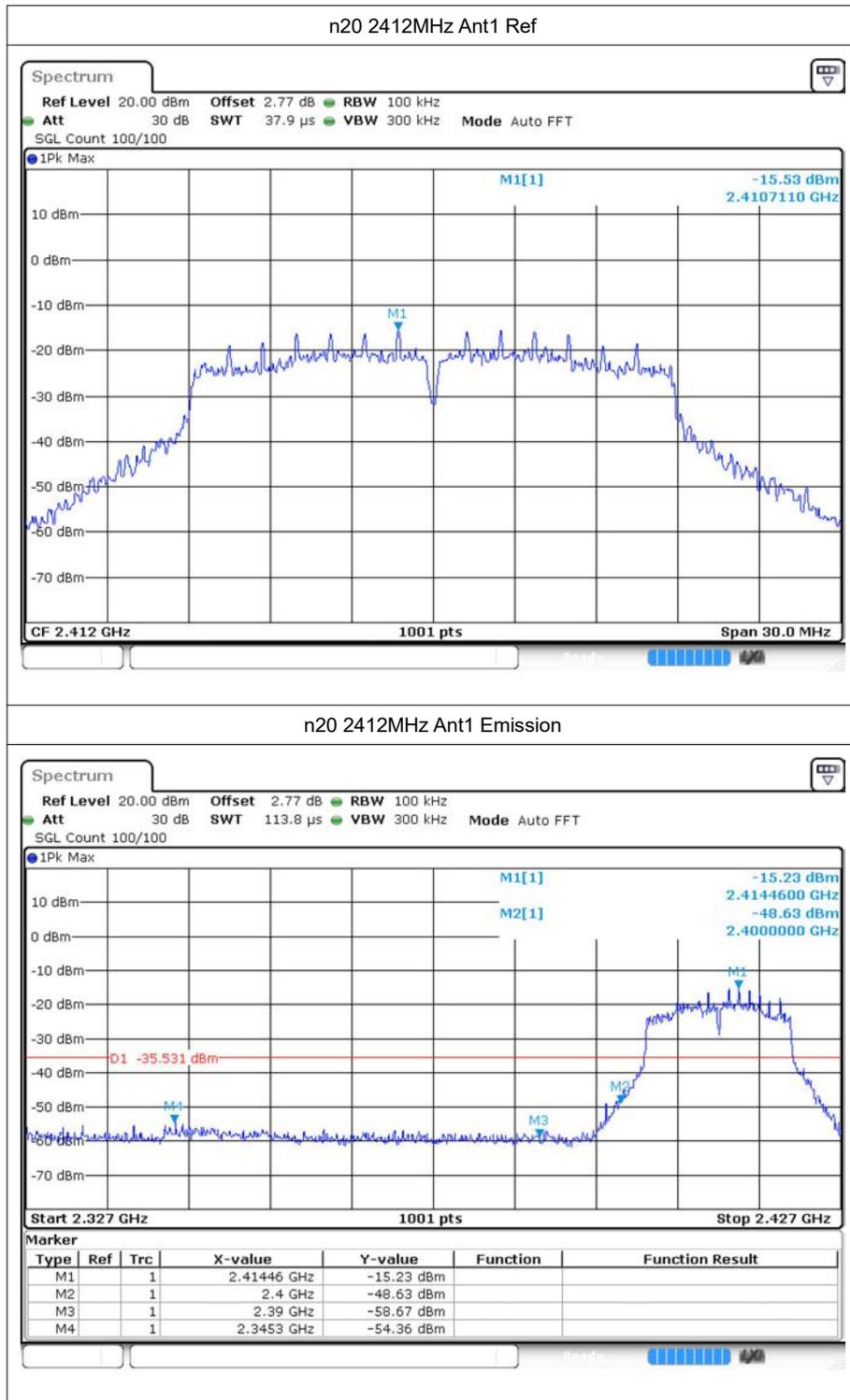
5.2 Test Graphs

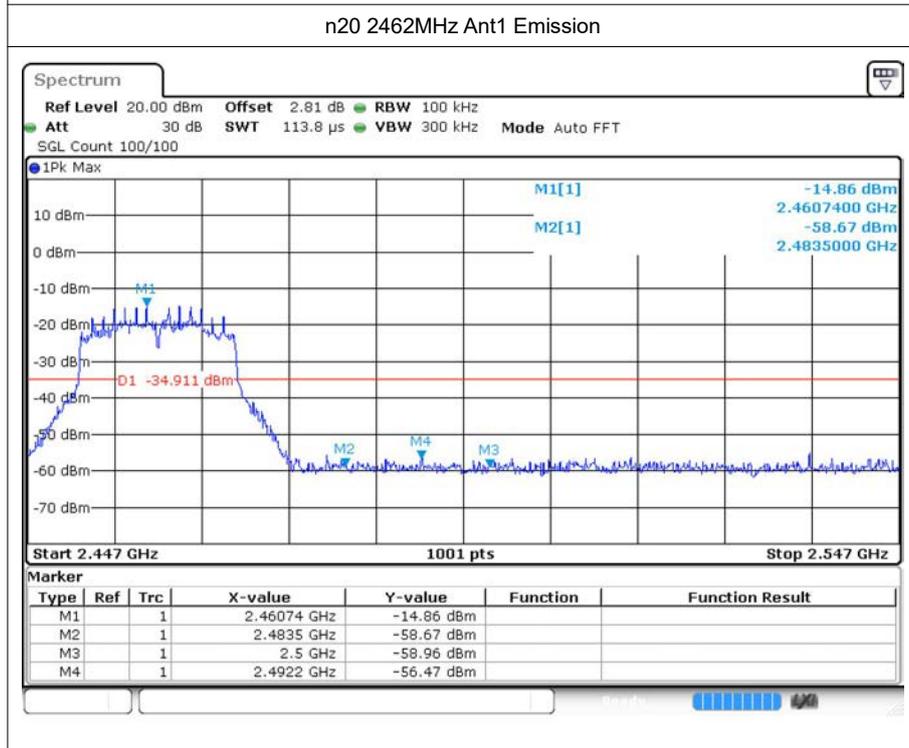
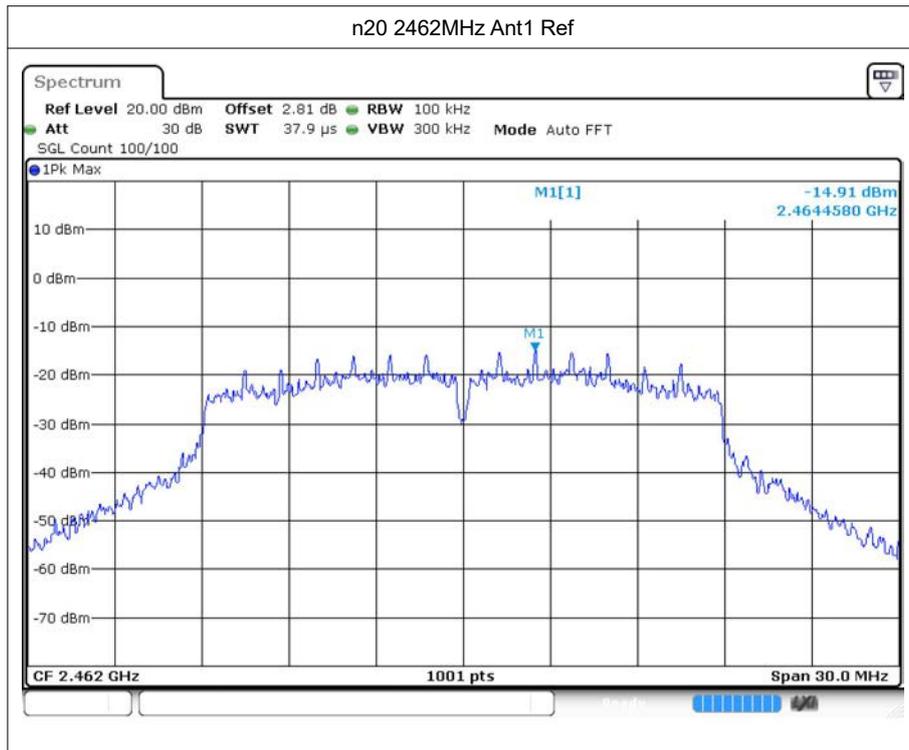


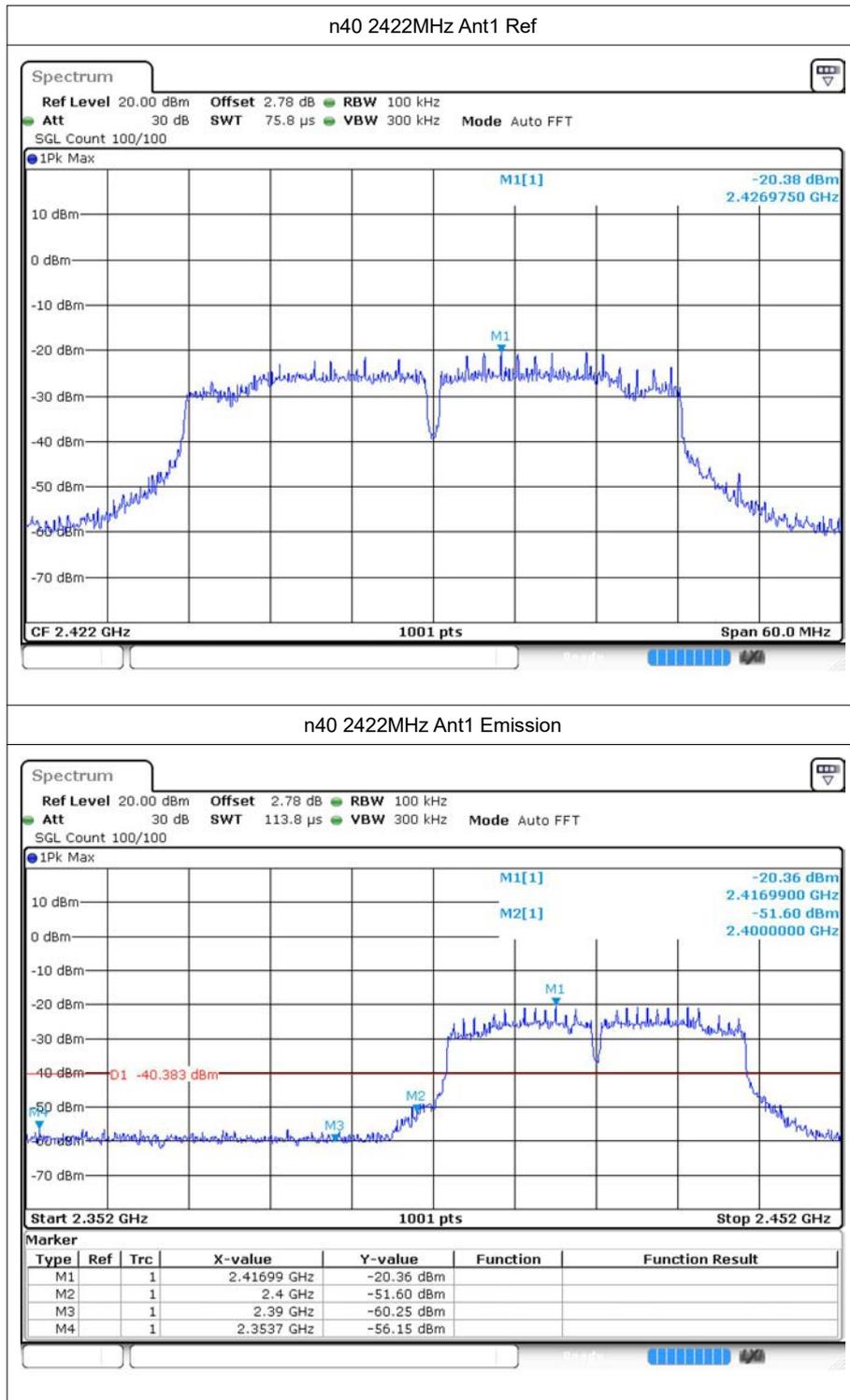


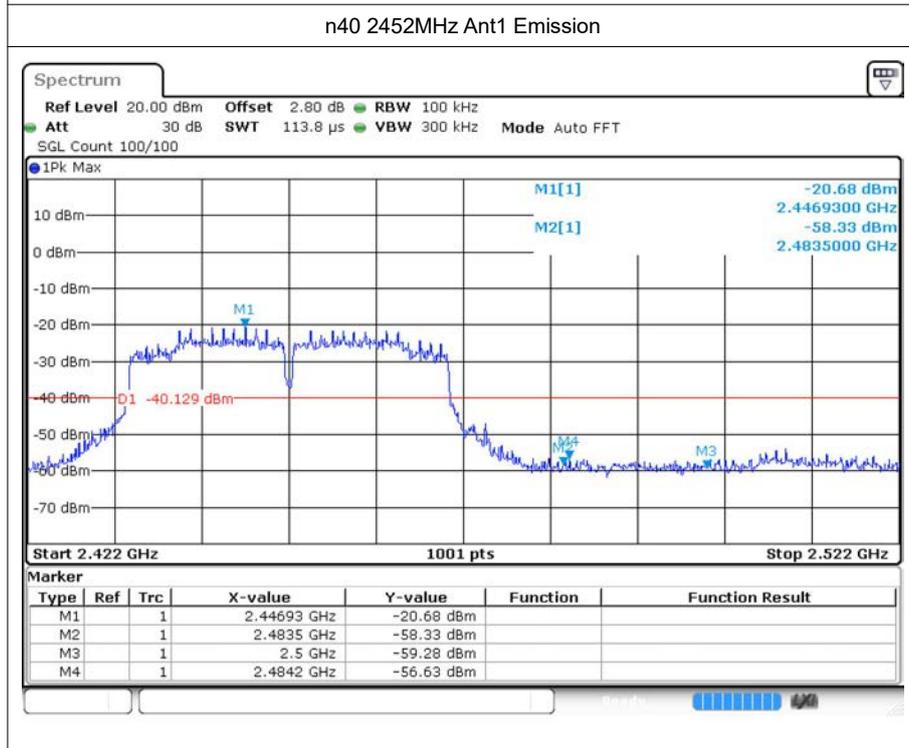
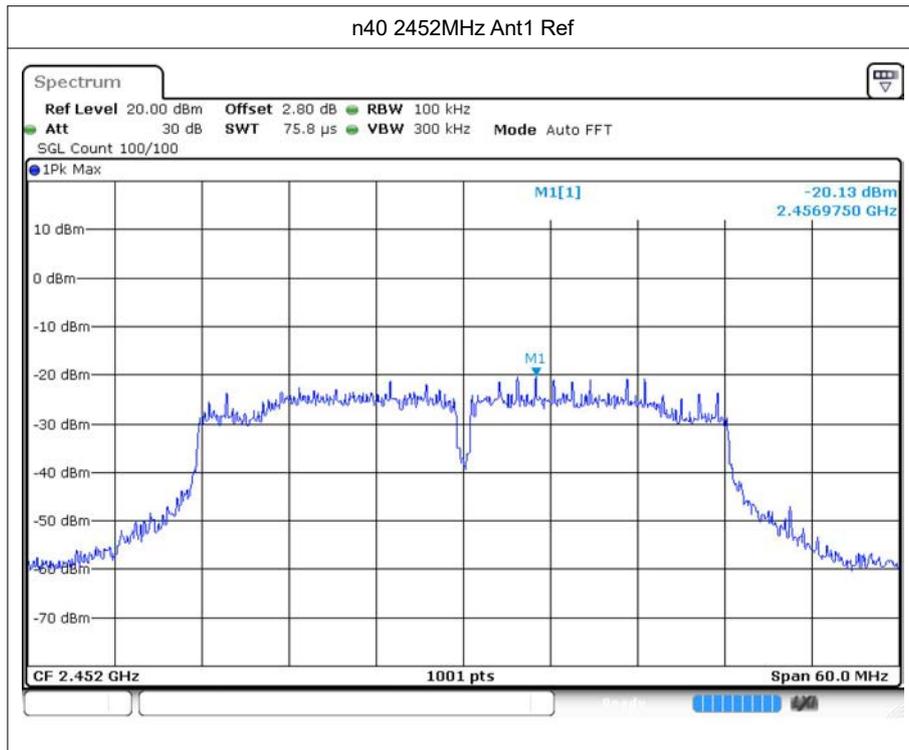












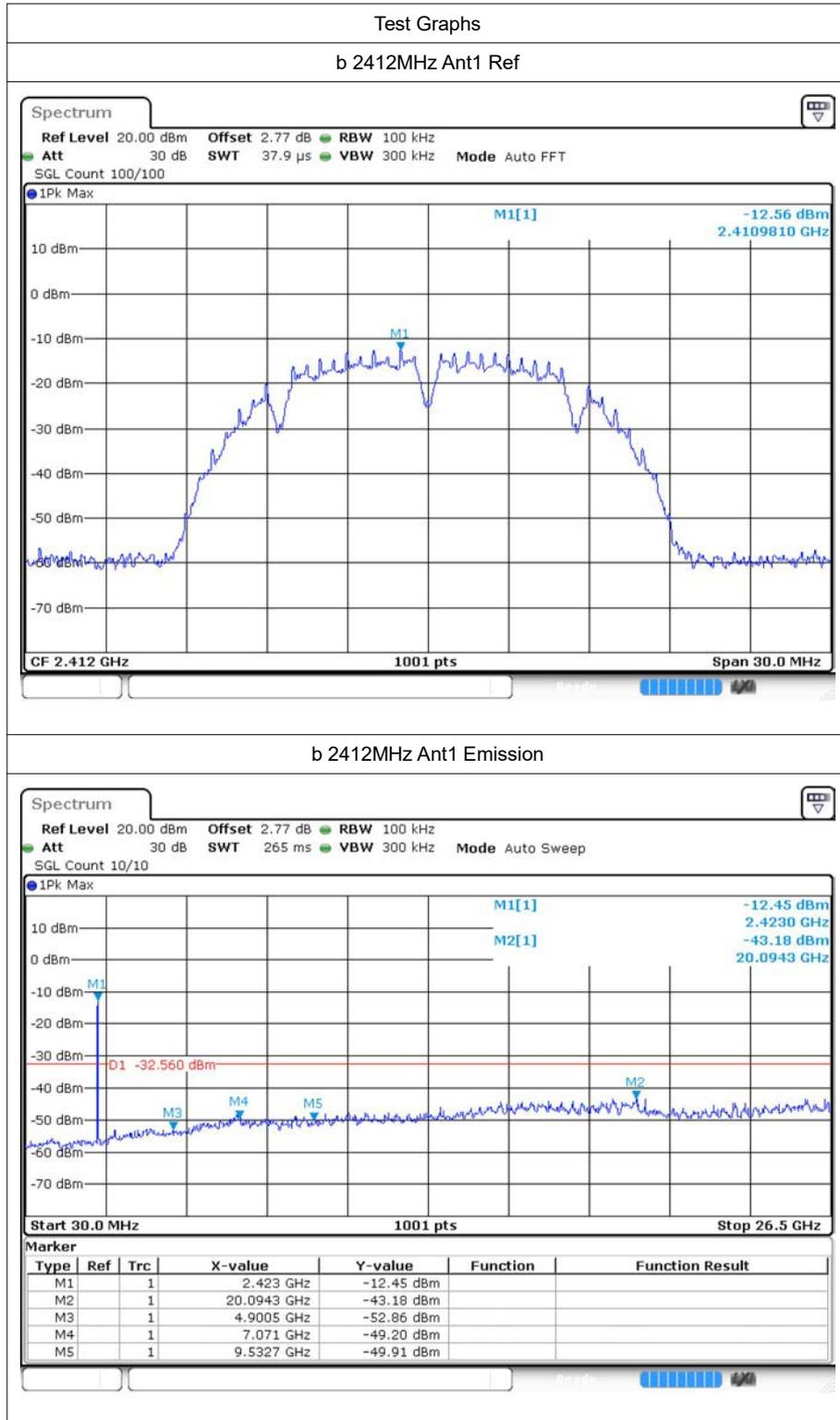


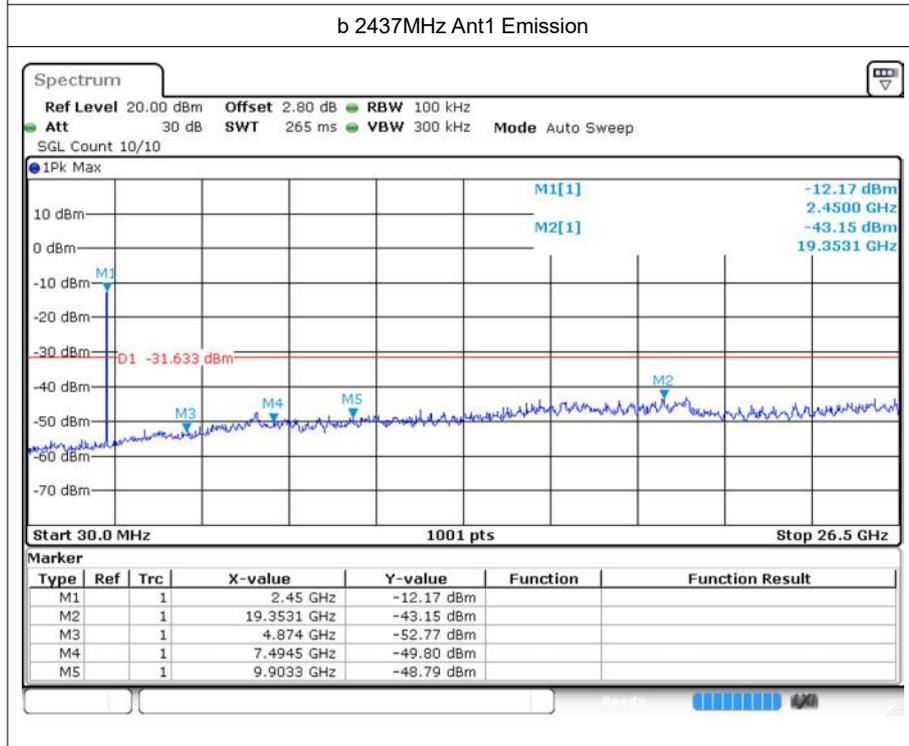
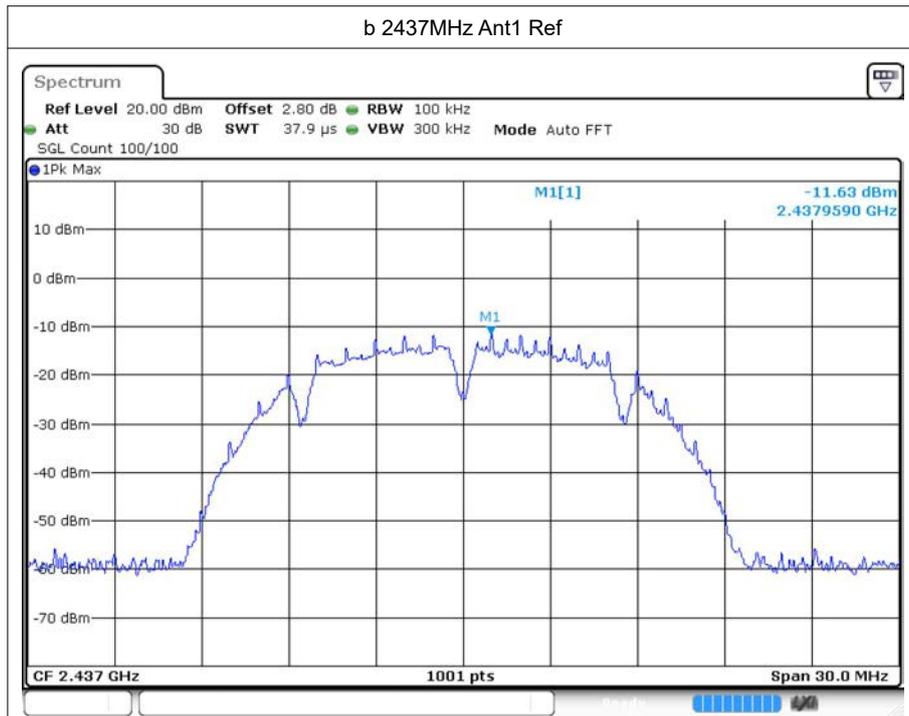
6 Conducted RF Spurious Emission

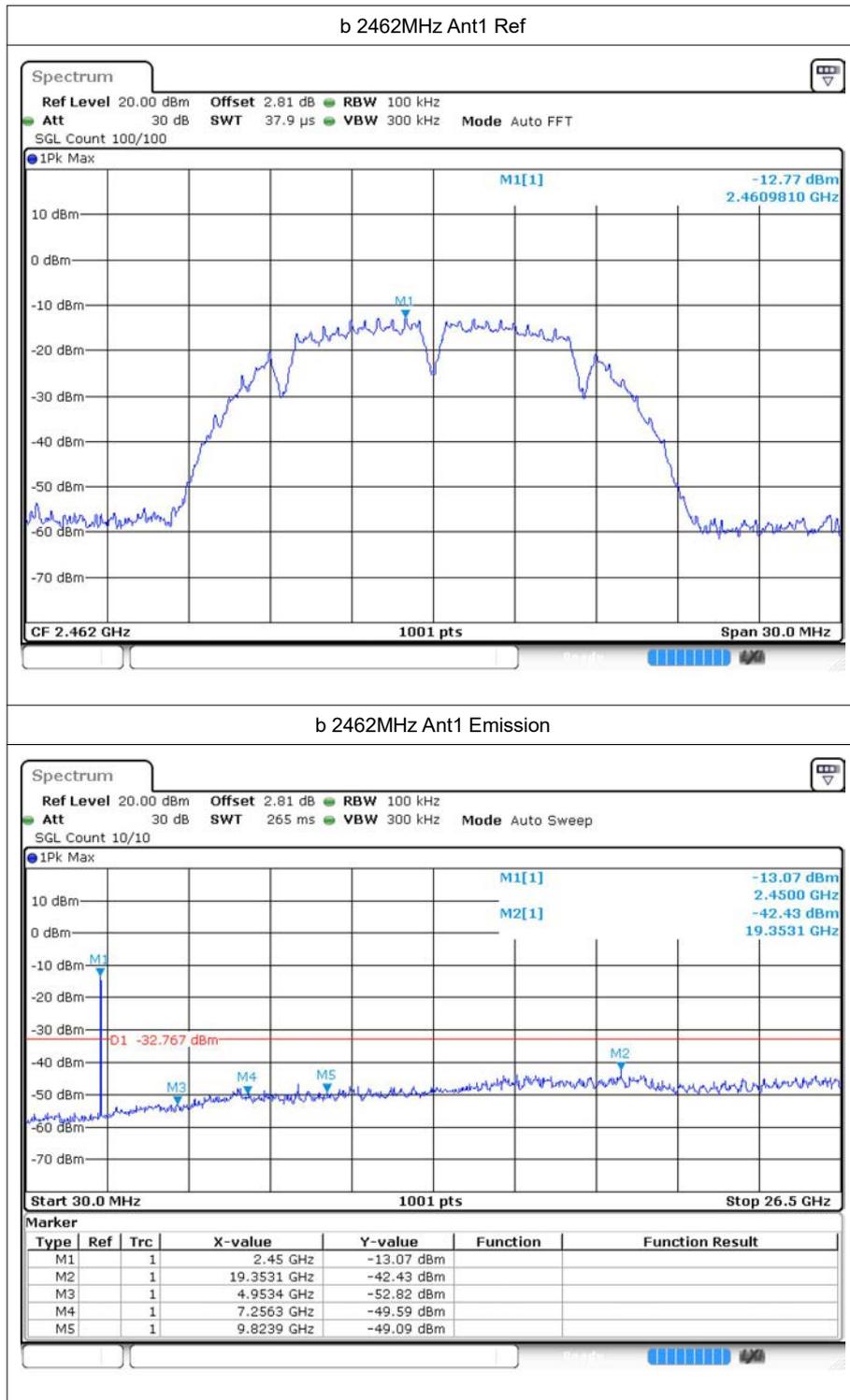
6.1 Test Result

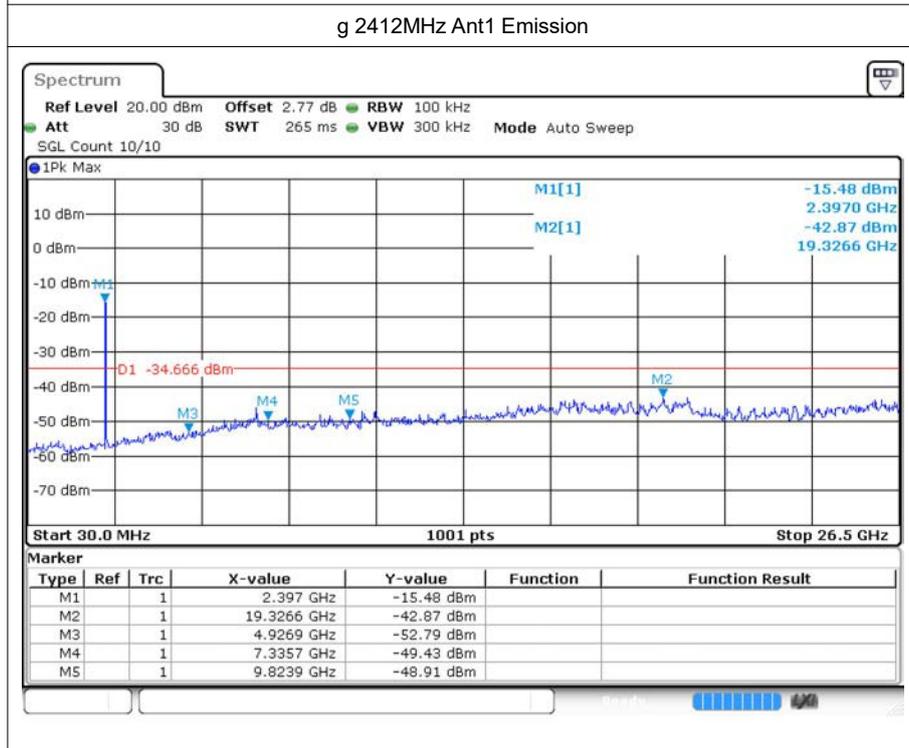
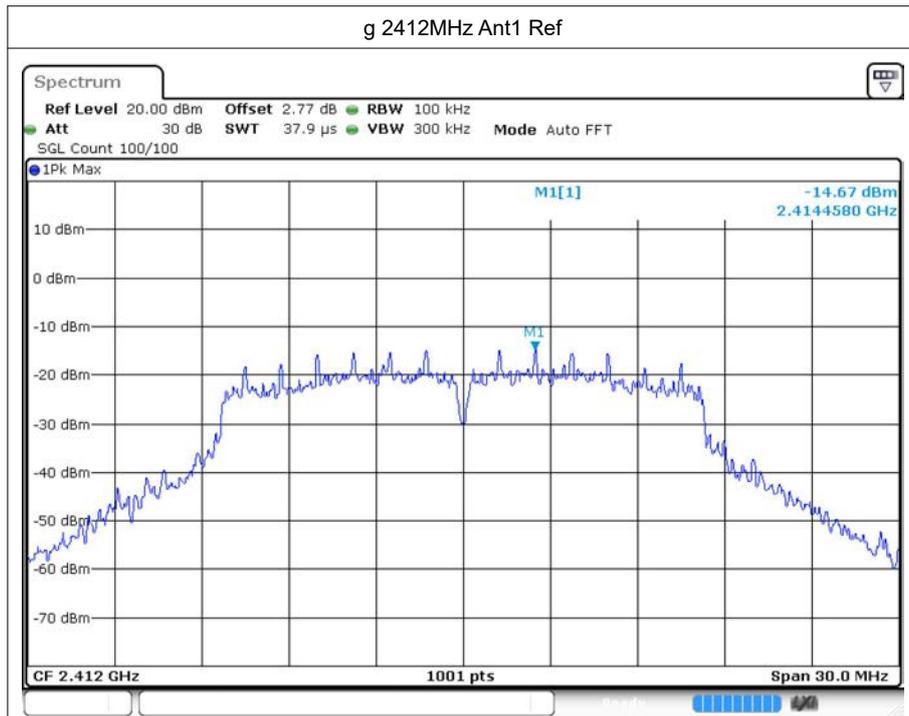
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-30.61	-20	Pass
b	2437	Ant1	-31.51	-20	Pass
b	2462	Ant1	-29.66	-20	Pass
g	2412	Ant1	-28.19	-20	Pass
g	2437	Ant1	-29.25	-20	Pass
g	2462	Ant1	-29.01	-20	Pass
n20	2412	Ant1	-27.67	-20	Pass
n20	2437	Ant1	-28.57	-20	Pass
n20	2462	Ant1	-28.42	-20	Pass
n40	2422	Ant1	-22.67	-20	Pass
n40	2437	Ant1	-23.23	-20	Pass
n40	2452	Ant1	-22.77	-20	Pass

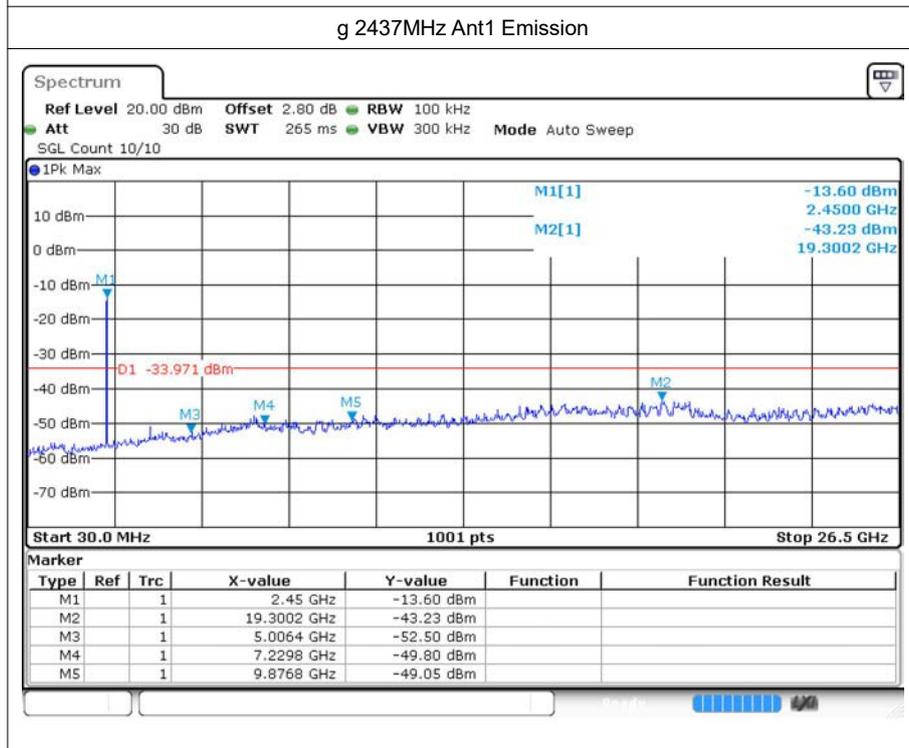
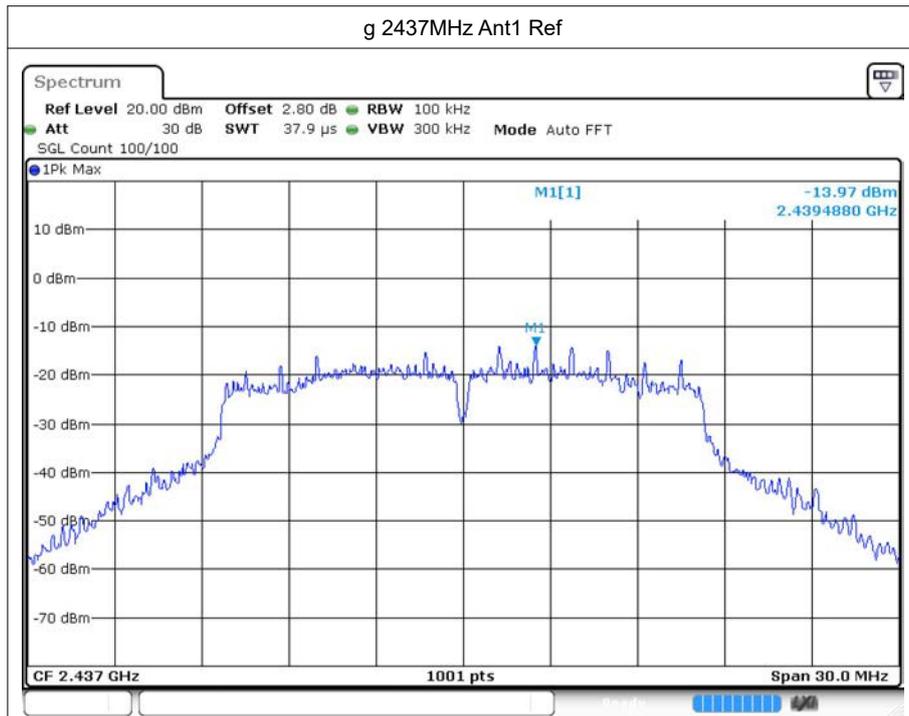
6.2 Test Graphs

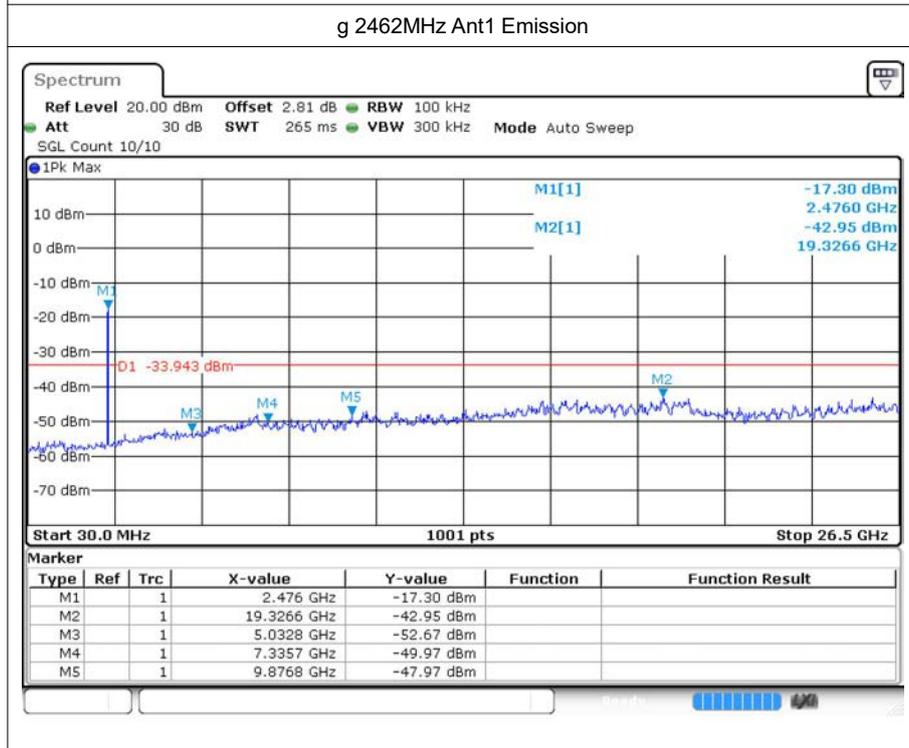
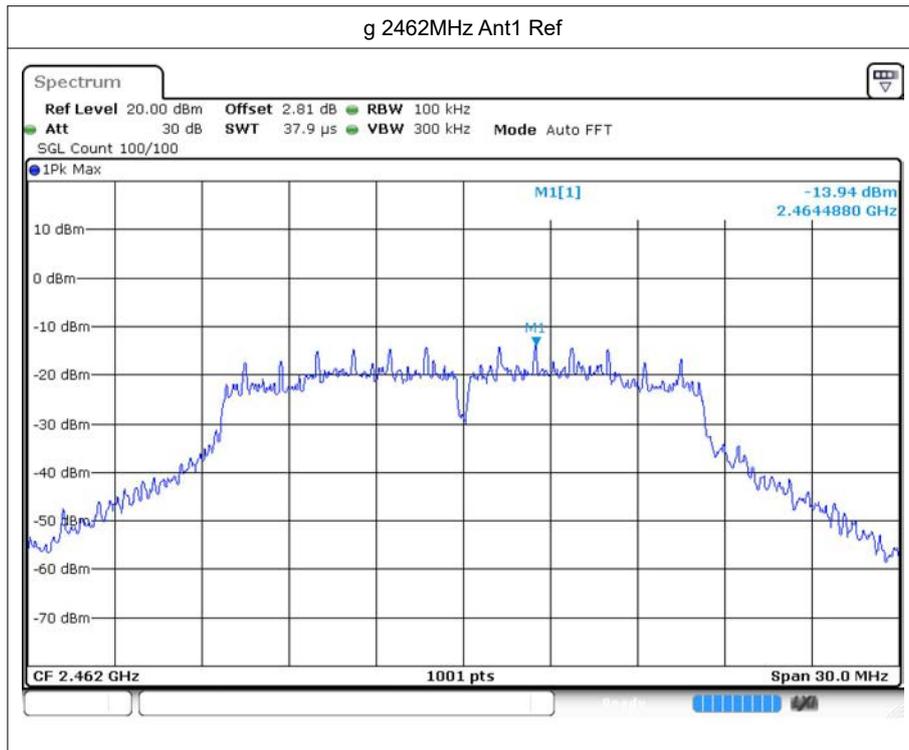


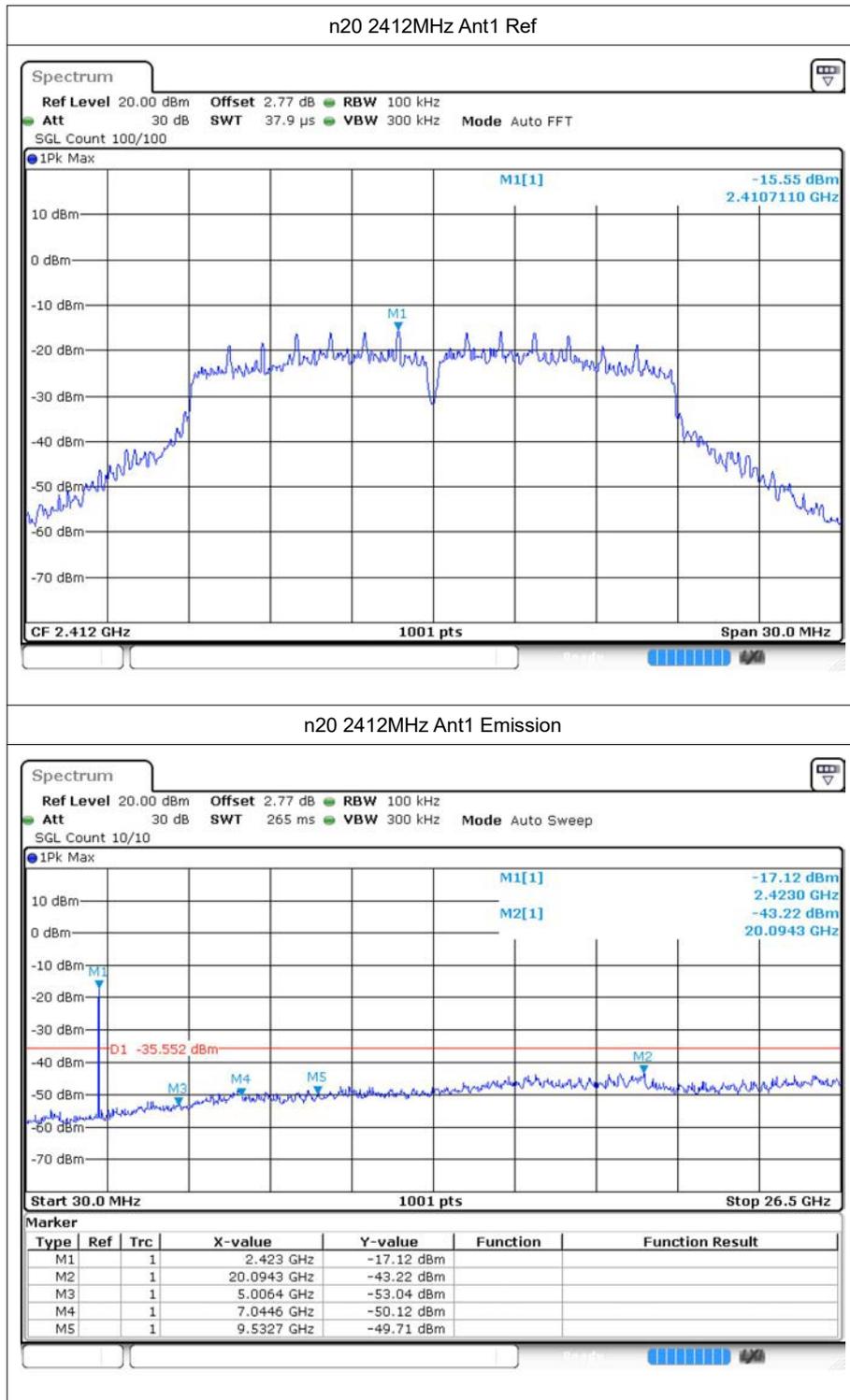


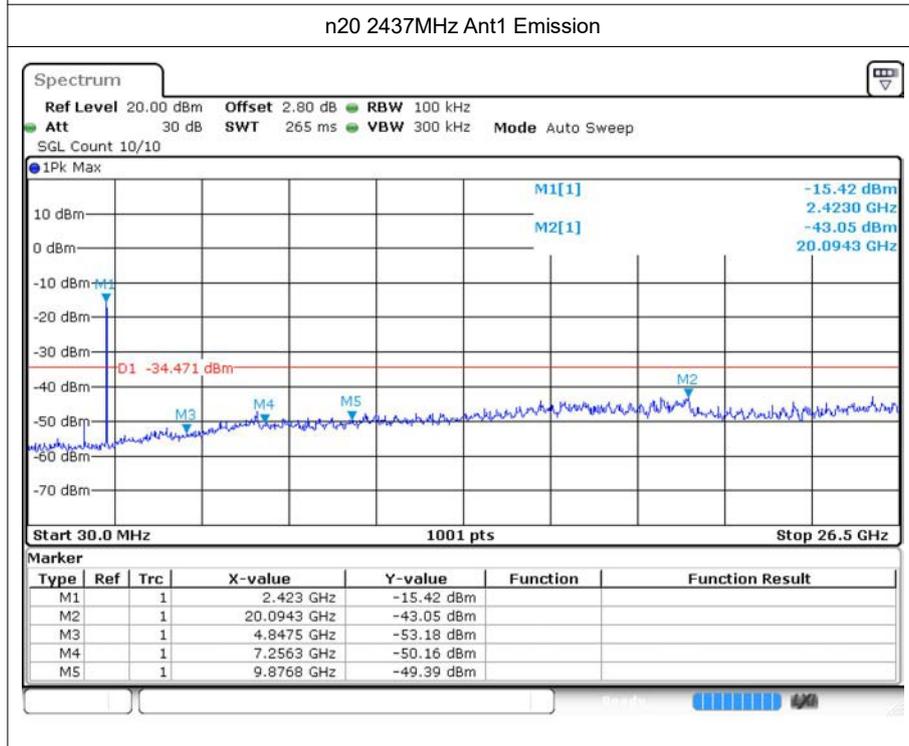
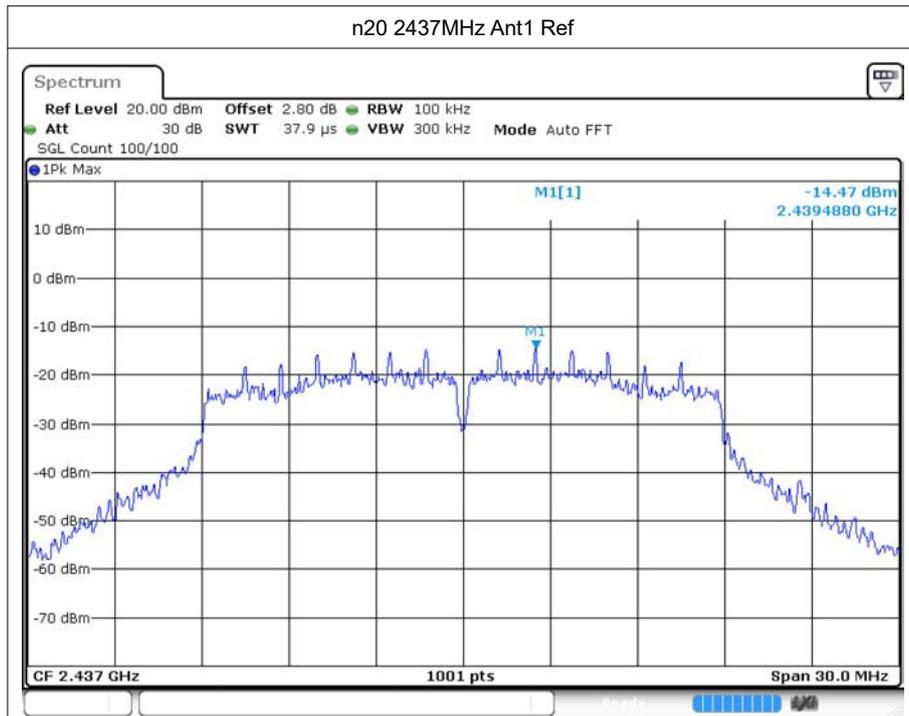


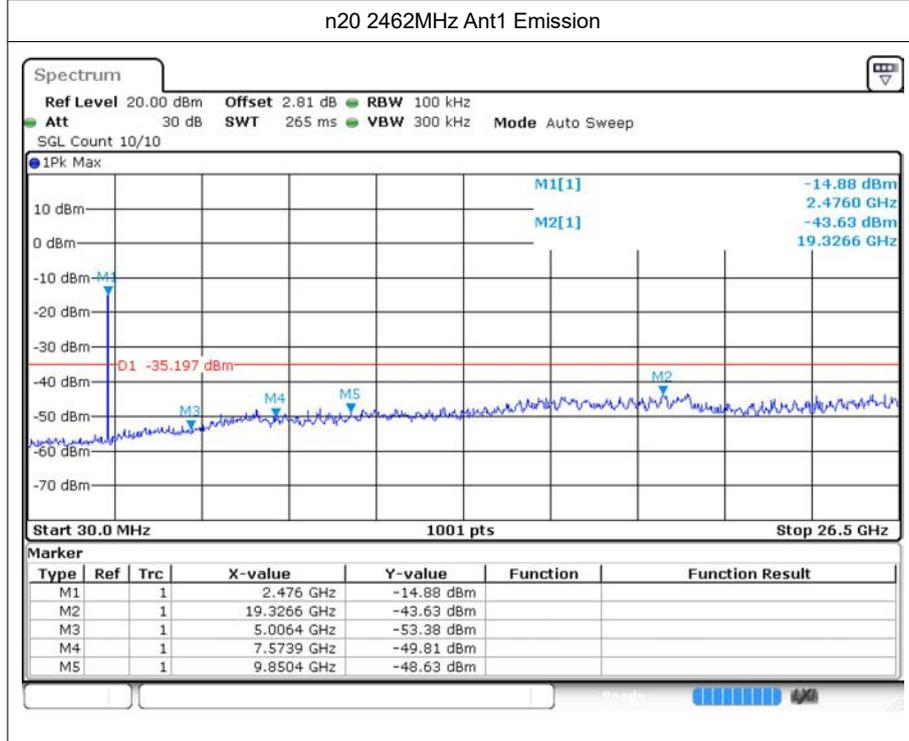
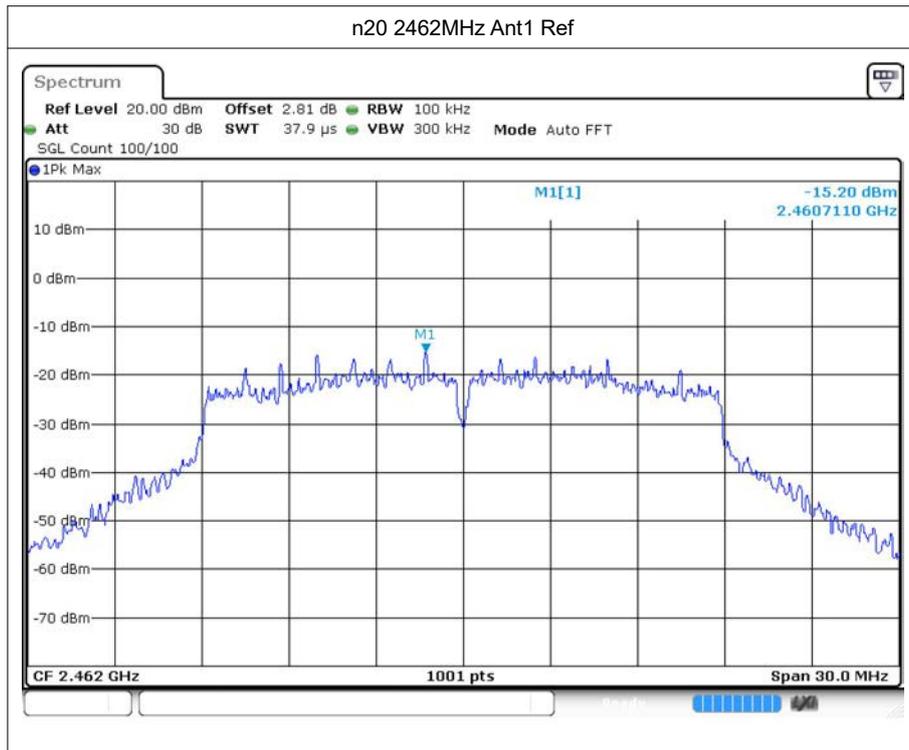


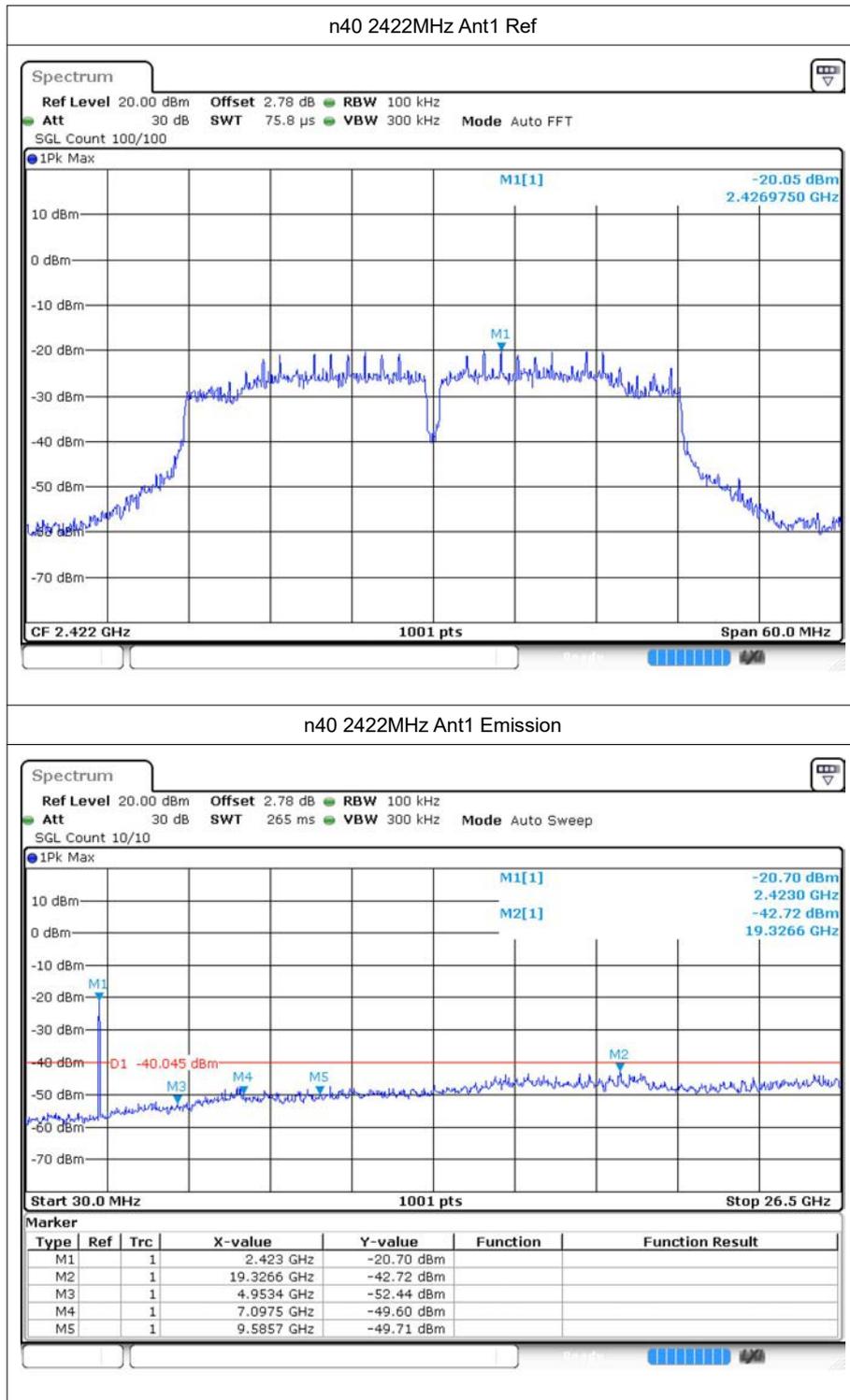


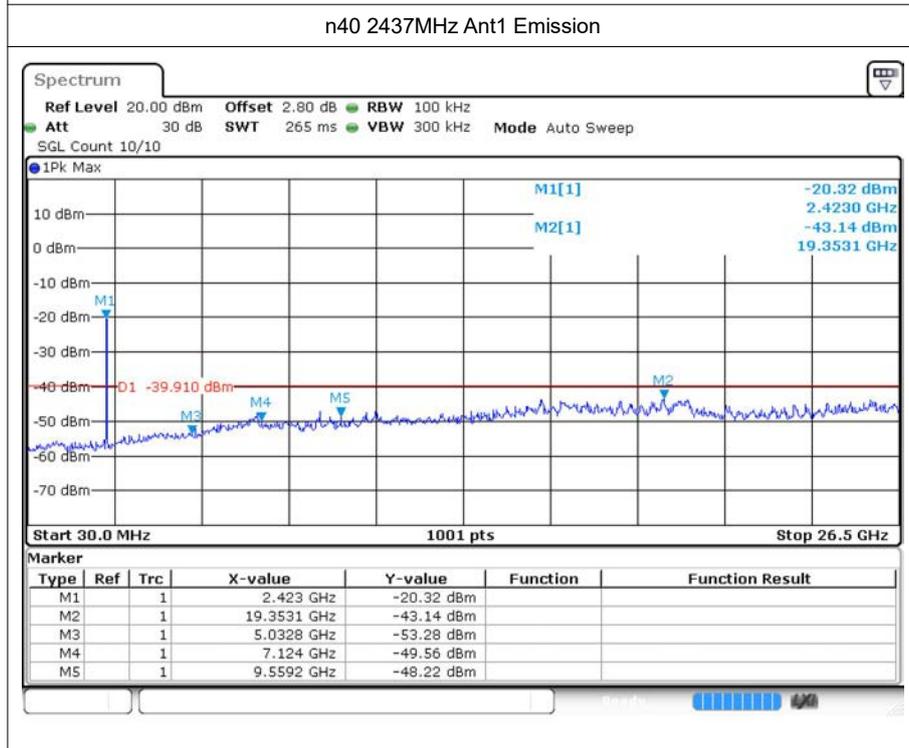
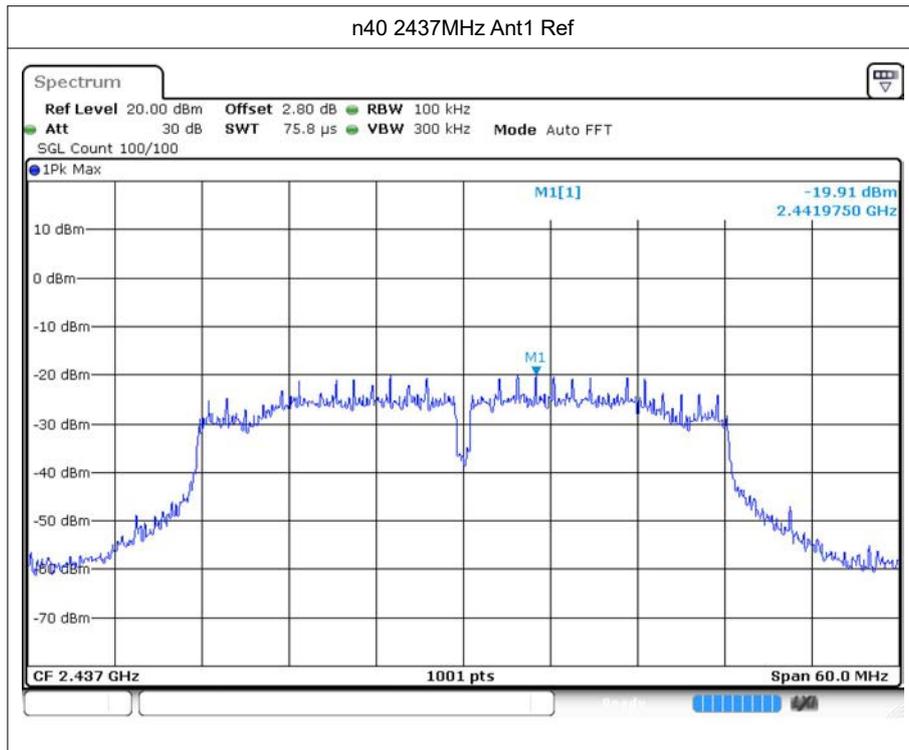


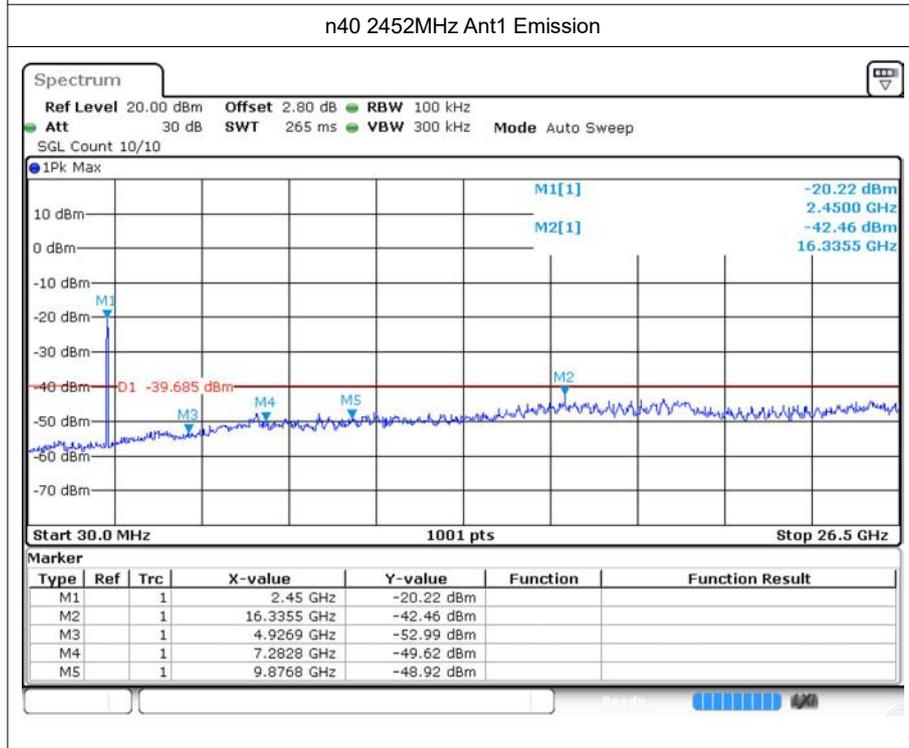
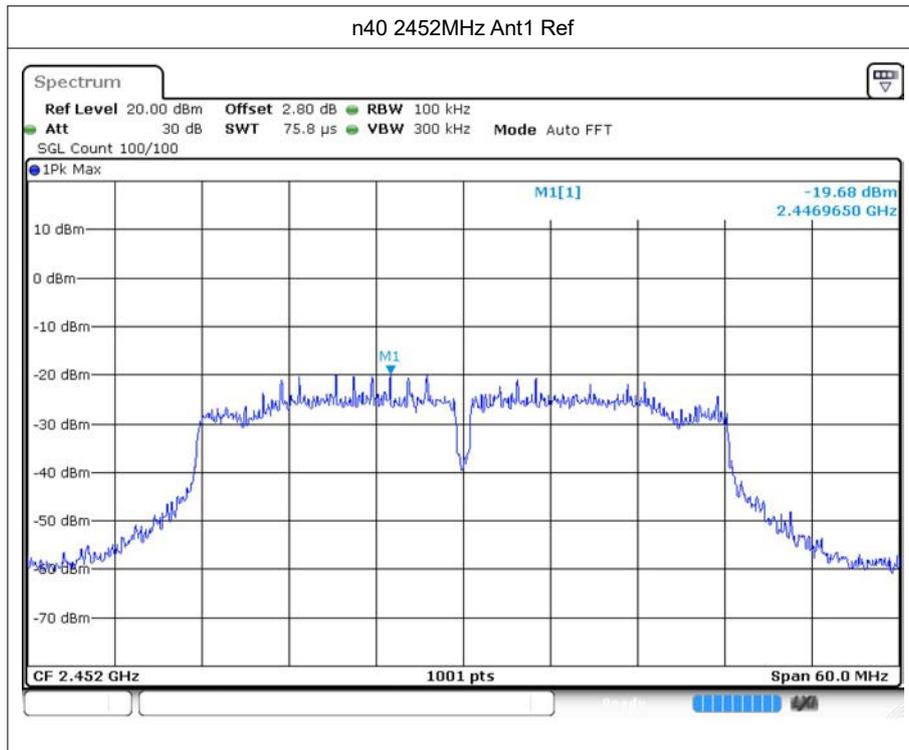














7 Restrict Band

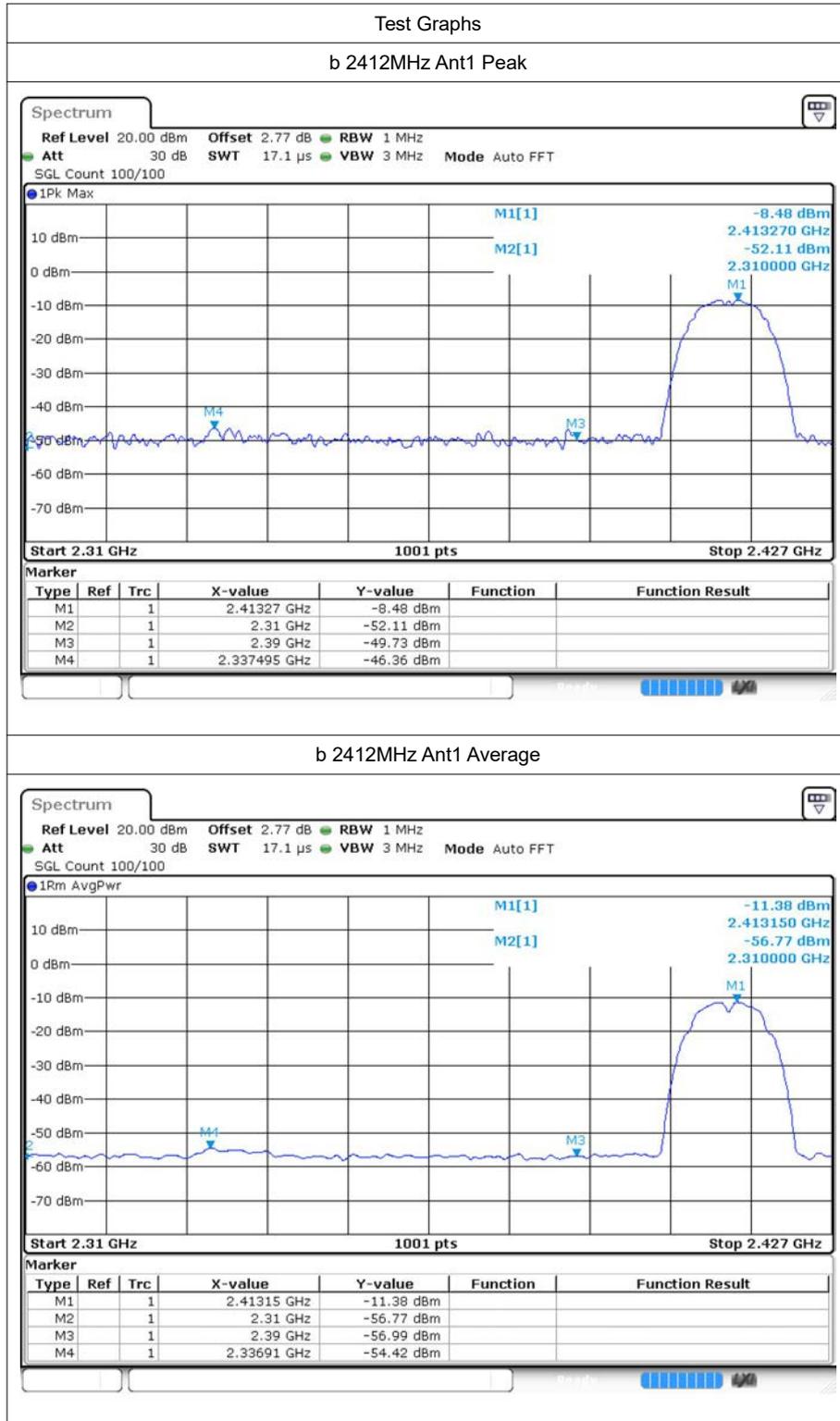
7.1 Test Result

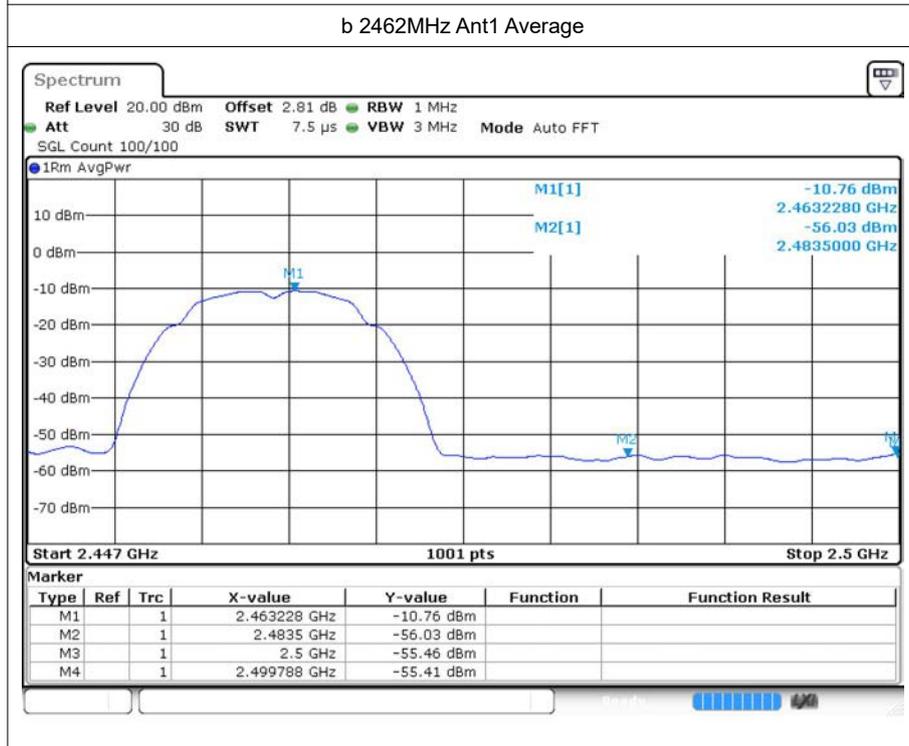
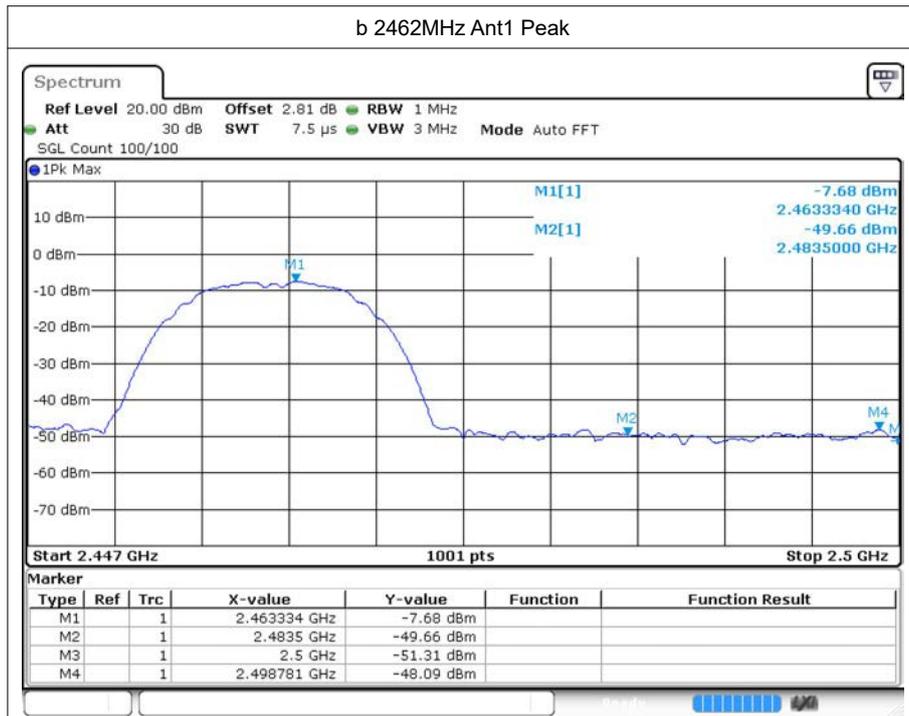
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-52.11	1.64	-	44.76	Peak	74	Pass
b	2412	Ant1	2310	-56.77	1.64	0	40.1	Average	54	Pass
b	2412	Ant1	2337.495	-46.35	1.64	-	50.52	Peak	74	Pass
b	2412	Ant1	2336.91	-54.41	1.64	0	42.46	Average	54	Pass
b	2412	Ant1	2390	-49.73	1.64	-	47.14	Peak	74	Pass
b	2412	Ant1	2390	-56.99	1.64	0	39.88	Average	54	Pass
b	2462	Ant1	2483.5	-49.66	1.64	-	47.21	Peak	74	Pass
b	2462	Ant1	2483.5	-56.03	1.64	0	40.84	Average	54	Pass
b	2462	Ant1	2498.781	-48.08	1.64	-	48.79	Peak	74	Pass
b	2462	Ant1	2499.788	-55.4	1.64	0	41.47	Average	54	Pass
b	2462	Ant1	2500	-51.31	1.64	-	45.56	Peak	74	Pass
b	2462	Ant1	2500	-55.46	1.64	0	41.41	Average	54	Pass
g	2412	Ant1	2310	-51.31	1.64	-	45.56	Peak	74	Pass
g	2412	Ant1	2310	-56.59	1.64	0.63	40.91	Average	54	Pass
g	2412	Ant1	2343.93	-46.26	1.64	-	50.61	Peak	74	Pass
g	2412	Ant1	2338.314	-54.19	1.64	0.63	43.31	Average	54	Pass
g	2412	Ant1	2390	-50.2	1.64	-	46.67	Peak	74	Pass
g	2412	Ant1	2390	-57.24	1.64	0.63	40.26	Average	54	Pass
g	2462	Ant1	2483.5	-50.86	1.64	-	46.01	Peak	74	Pass
g	2462	Ant1	2483.5	-55.98	1.64	0.63	41.52	Average	54	Pass
g	2462	Ant1	2498.781	-46.49	1.64	-	50.38	Peak	74	Pass
g	2462	Ant1	2484.577	-55.57	1.64	0.63	41.93	Average	54	Pass
g	2462	Ant1	2500	-49.85	1.64	-	47.02	Peak	74	Pass
g	2462	Ant1	2500	-56.43	1.64	0.63	41.07	Average	54	Pass
n20	2412	Ant1	2310	-50.3	1.64	-	46.57	Peak	74	Pass
n20	2412	Ant1	2310	-56.9	1.64	0.59	40.56	Average	54	Pass
n20	2412	Ant1	2337.846	-46.06	1.64	-	50.81	Peak	74	Pass
n20	2412	Ant1	2336.676	-54.42	1.64	0.59	43.04	Average	54	Pass
n20	2412	Ant1	2390	-51.04	1.64	-	45.83	Peak	74	Pass
n20	2412	Ant1	2390	-57.03	1.64	0.59	40.43	Average	54	Pass
n20	2462	Ant1	2483.5	-49.51	1.64	-	47.36	Peak	74	Pass
n20	2462	Ant1	2483.5	-56.39	1.64	0.58	41.06	Average	54	Pass
n20	2462	Ant1	2487.492	-46.68	1.64	-	50.19	Peak	74	Pass
n20	2462	Ant1	2491.997	-55.62	1.64	0.58	41.83	Average	54	Pass

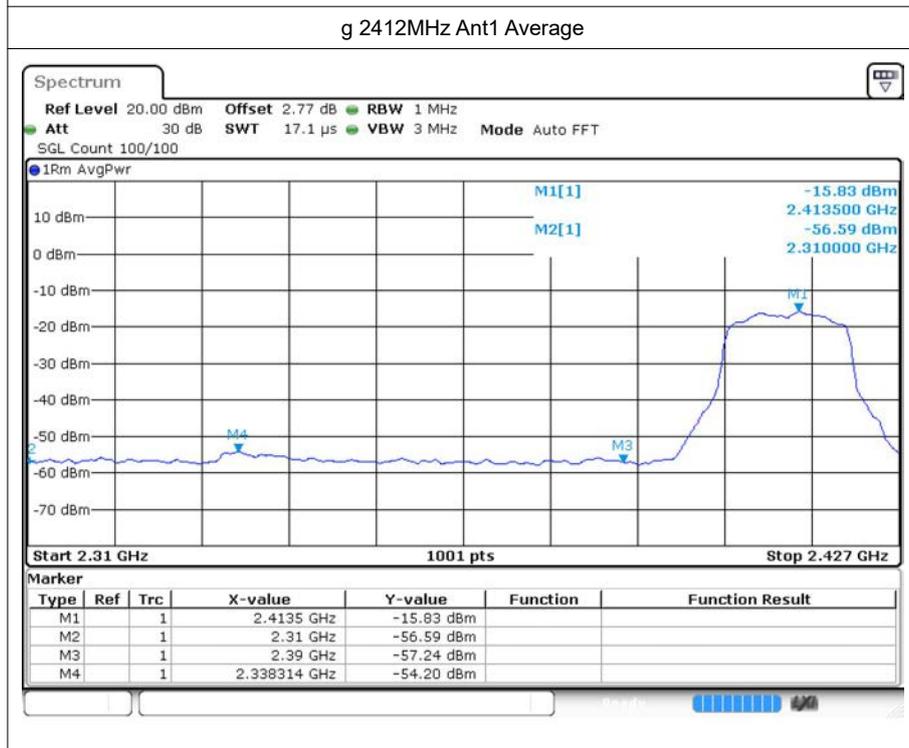
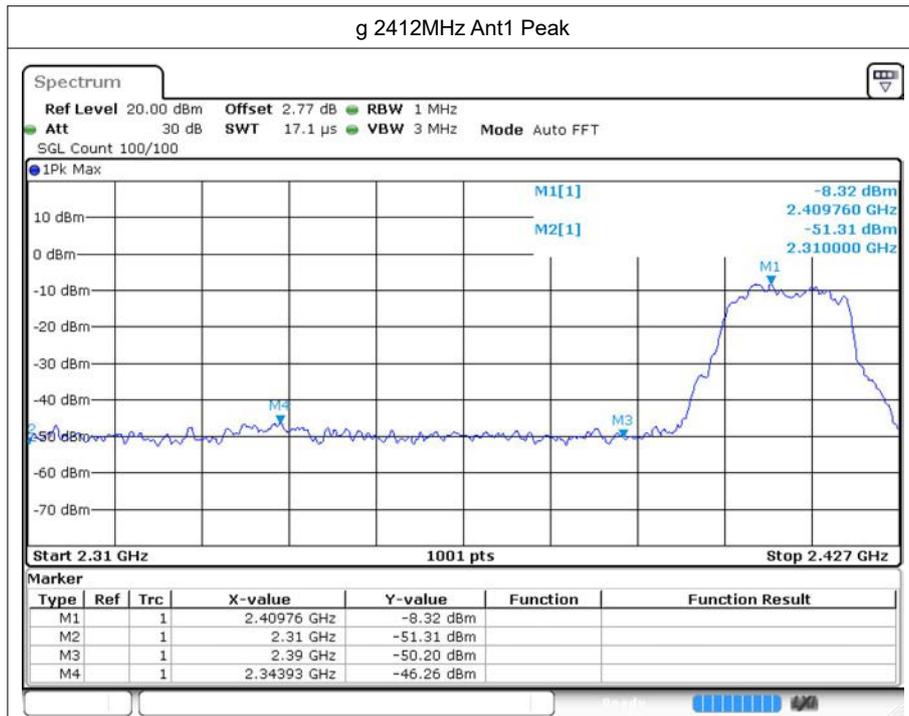


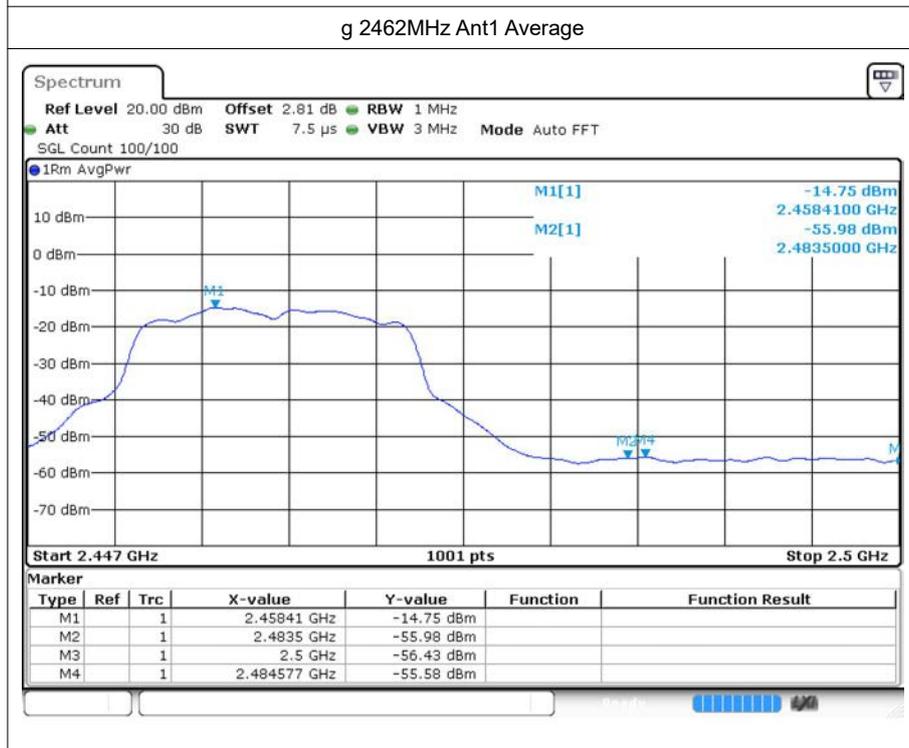
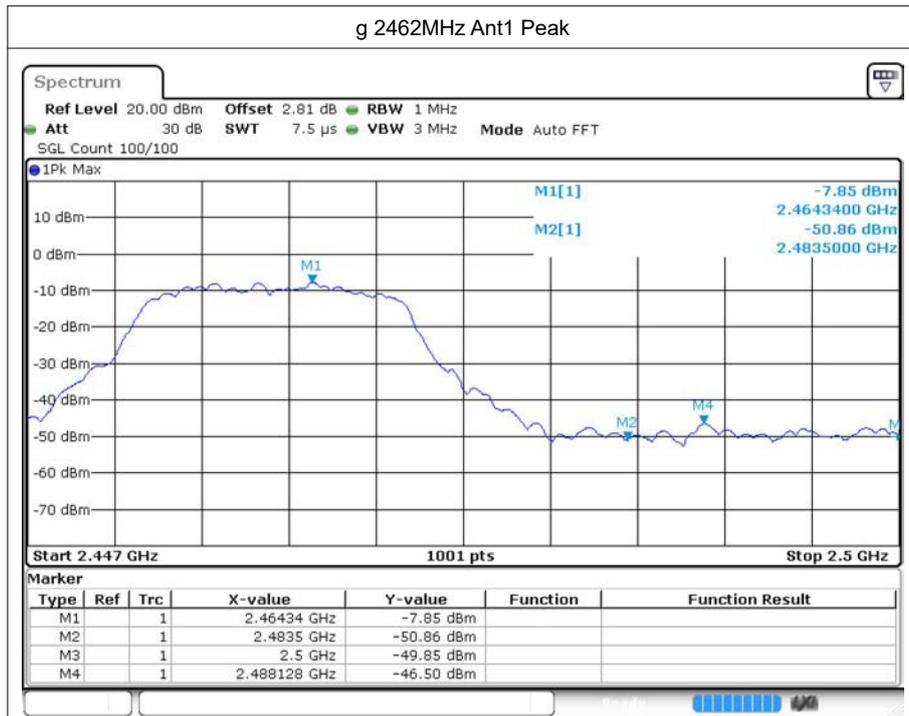
n20	2462	Ant1	2500	-50.25	1.64	-	46.62	Peak	74	Pass
n20	2462	Ant1	2500	-56.07	1.64	0.58	41.38	Average	54	Pass
n40	2422	Ant1	2310	-49.88	1.64	-	46.99	Peak	74	Pass
n40	2422	Ant1	2310	-56.34	1.64	1.19	41.72	Average	54	Pass
n40	2422	Ant1	2345.216	-46.54	1.64	-	44.76	Peak	74	Pass
n40	2422	Ant1	2342.234	-54.45	1.64	1.19	40.1	Average	54	Pass
n40	2422	Ant1	2390	-49.34	1.64	-	50.52	Peak	74	Pass
n40	2422	Ant1	2390	-56.75	1.64	1.19	42.46	Average	54	Pass
n40	2452	Ant1	2483.5	-49.48	1.64	-	47.14	Peak	74	Pass
n40	2452	Ant1	2483.5	-57.11	1.64	1.19	39.88	Average	54	Pass
n40	2452	Ant1	2487.91	-47	1.64	-	47.21	Peak	74	Pass
n40	2452	Ant1	2488.378	-55.54	1.64	1.19	40.84	Average	54	Pass
n40	2452	Ant1	2500	-50.45	1.64	-	48.79	Peak	74	Pass
n40	2452	Ant1	2500	-56.75	1.64	1.19	41.47	Average	54	Pass

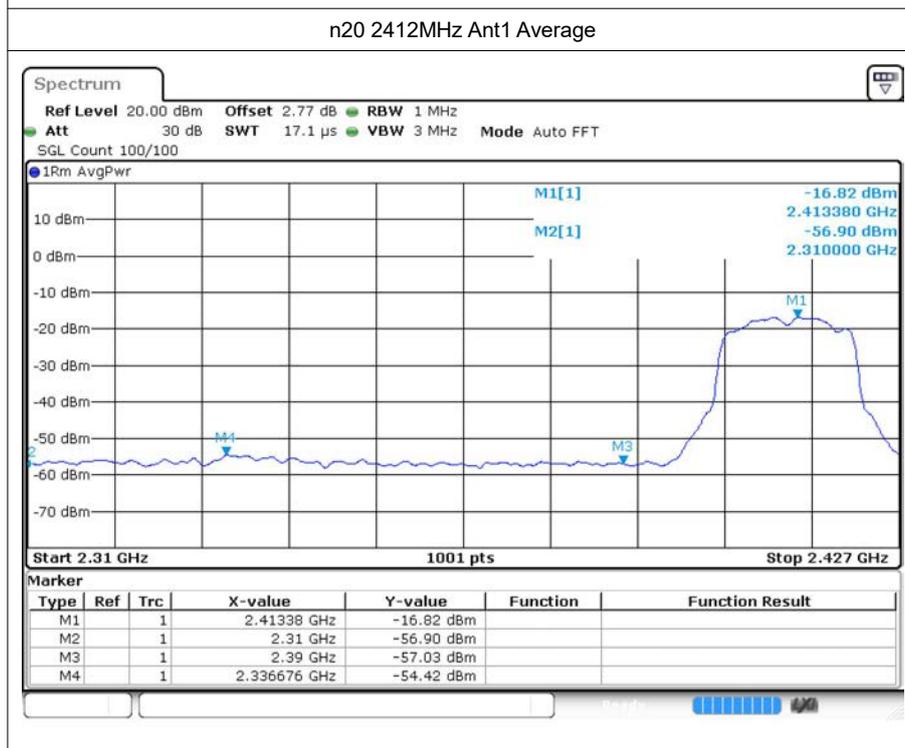
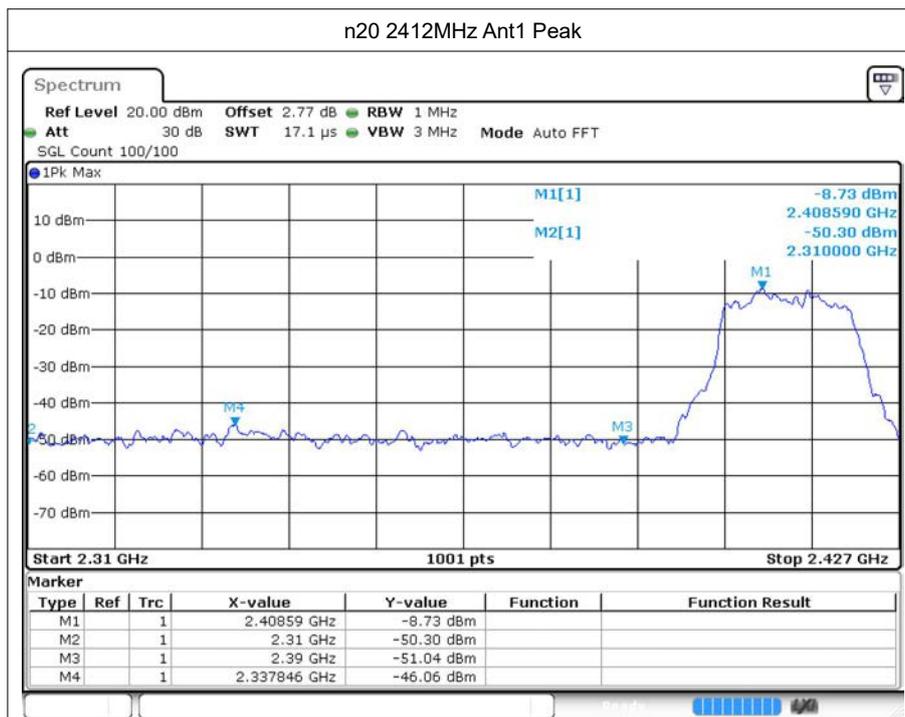
7.2 Test Graphs

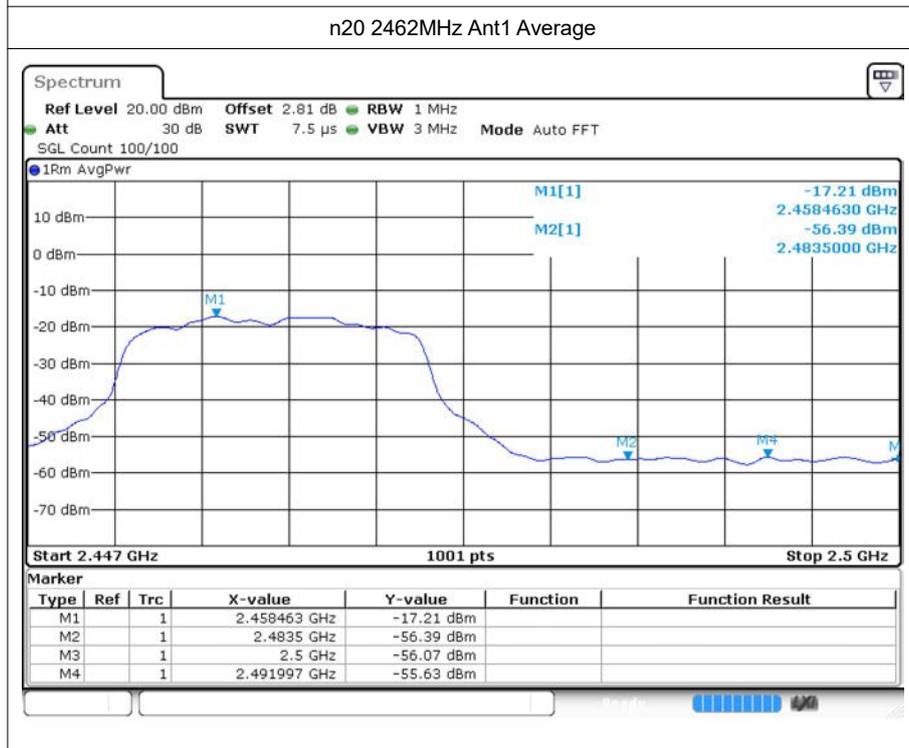
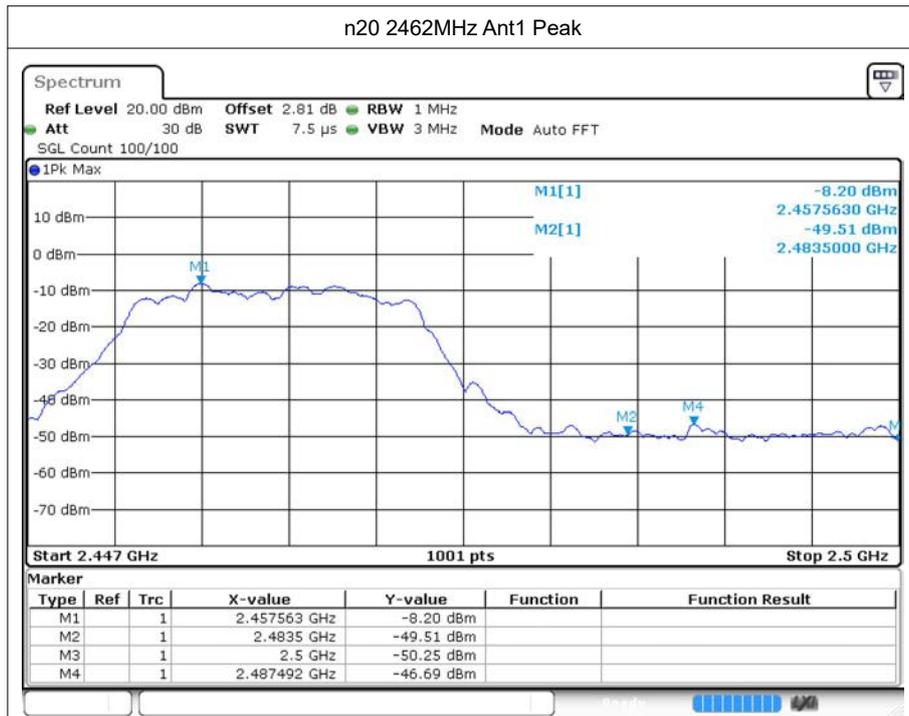


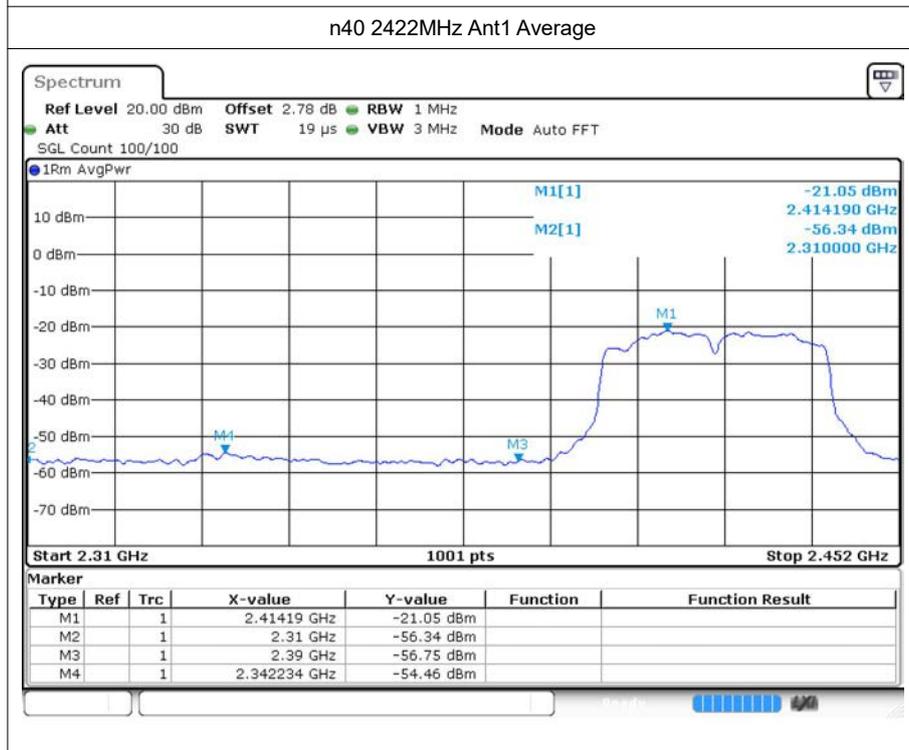
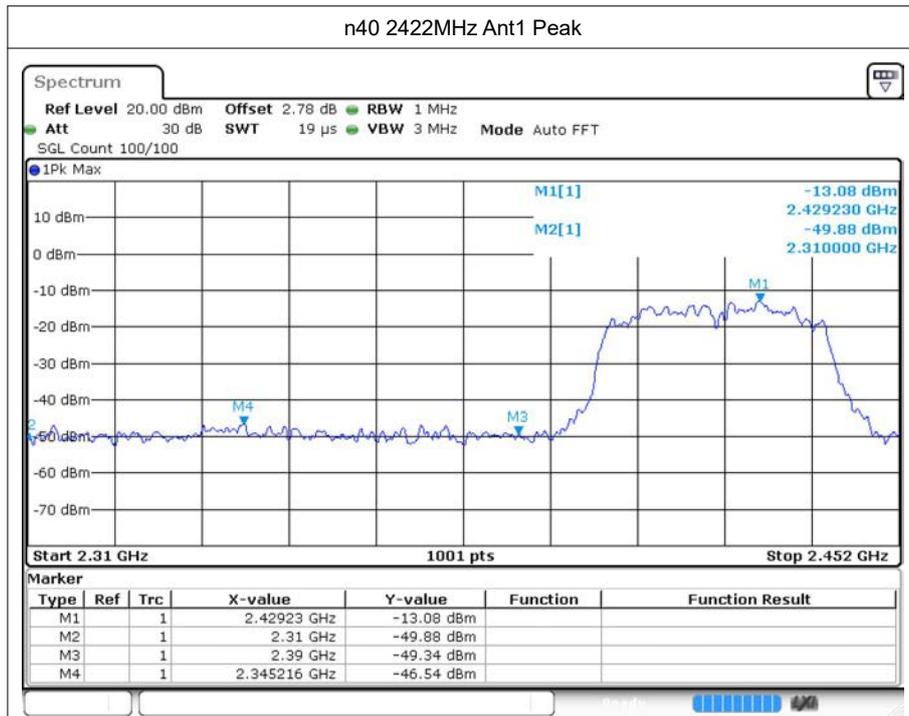


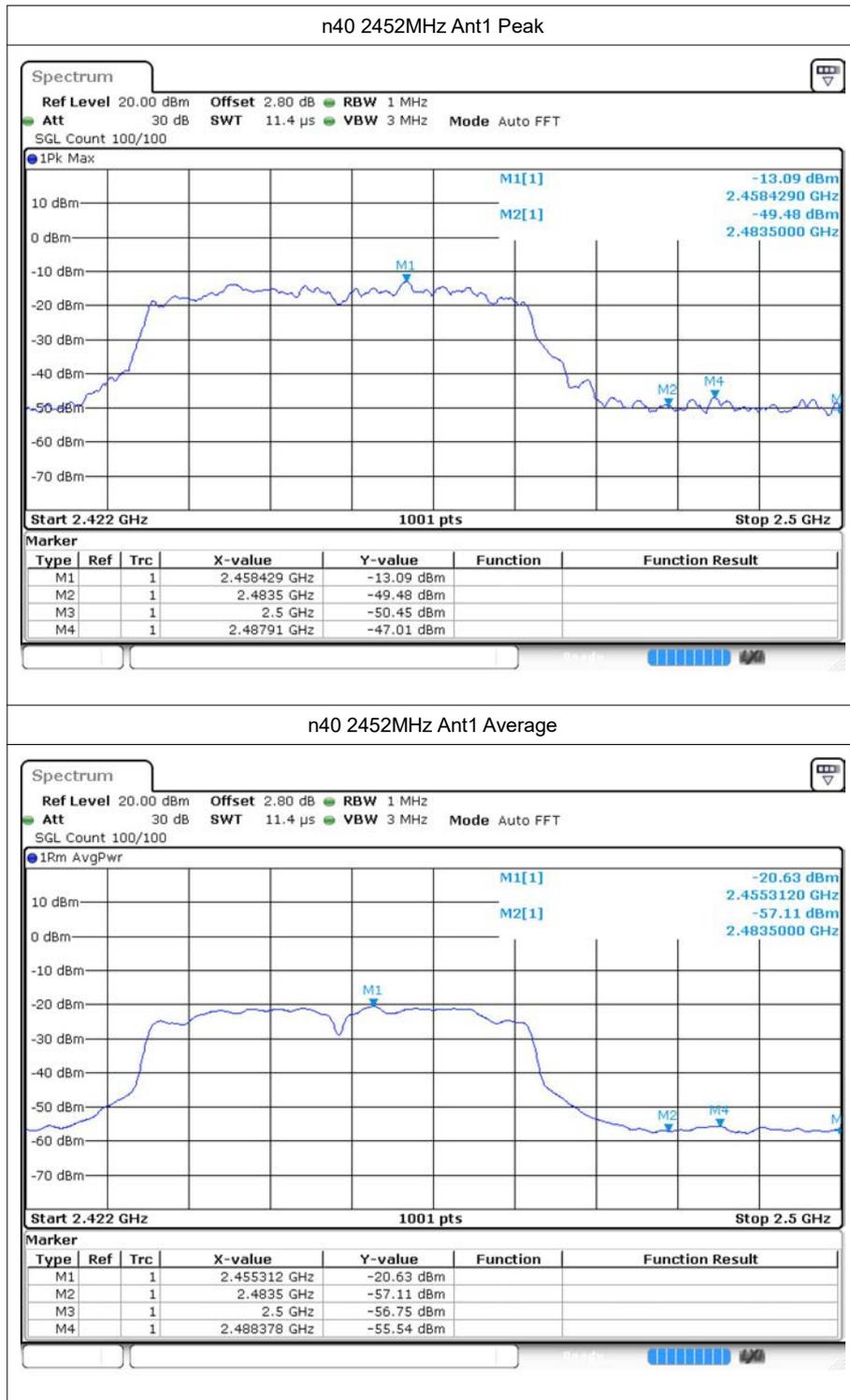












---The End---