



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: WIFI signal amplifier

Trade Mark: sunhans

Test Model: SHRC24G3W

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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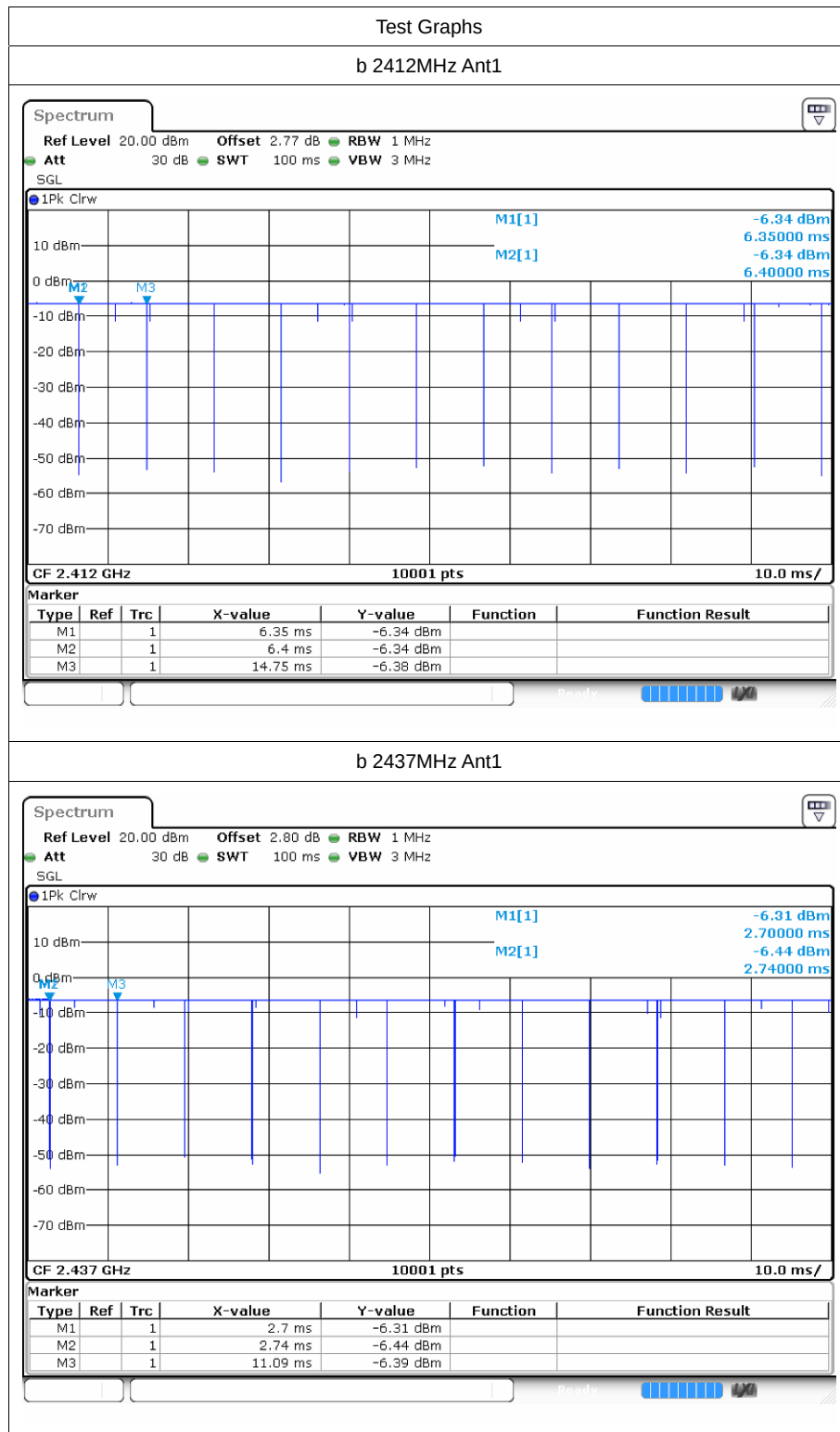


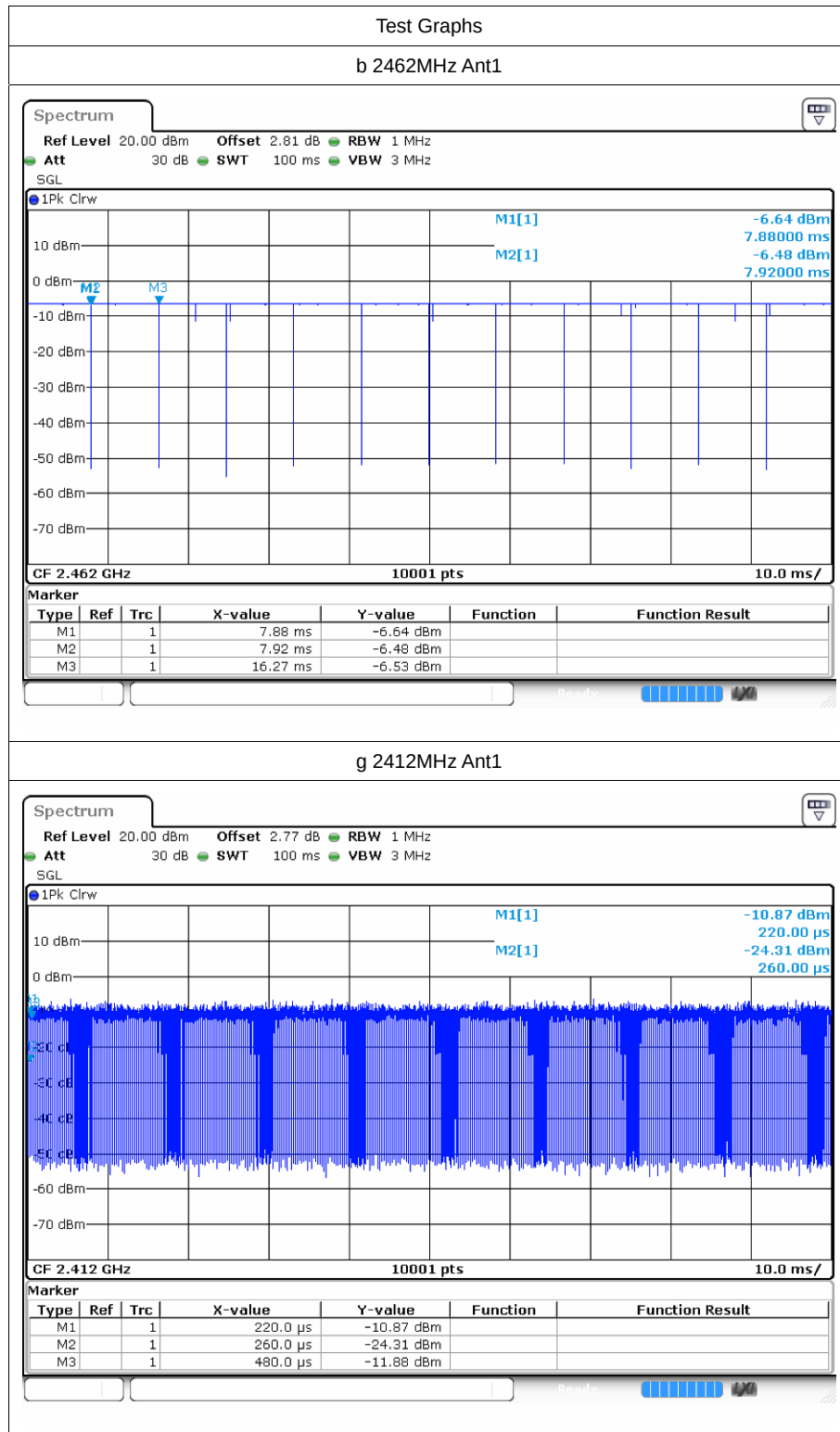
1 Duty Cycle

1.1 Test Result

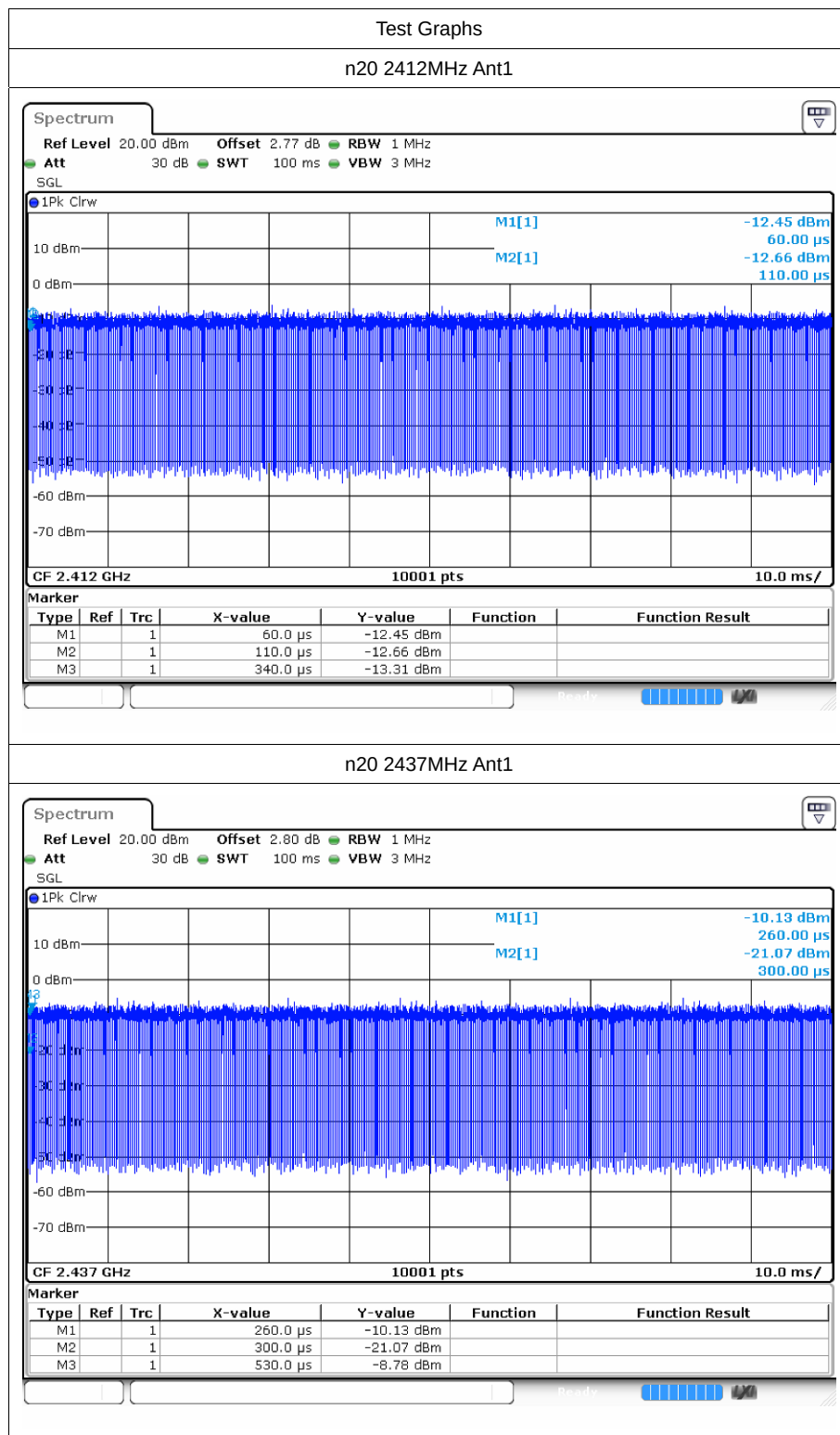
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.59	0.01
b	2437	Ant1	99.6	0.01
b	2462	Ant1	99.63	0.01
g	2412	Ant1	86.74	4.55
g	2437	Ant1	86.75	4.76
g	2462	Ant1	86.78	4.76
n20	2412	Ant1	87.41	4.35
n20	2437	Ant1	87.41	4.35
n20	2462	Ant1	87.48	4.17
n40	2422	Ant1	76.79	4.76
n40	2437	Ant1	76.97	4.55
n40	2452	Ant1	78.93	4.55

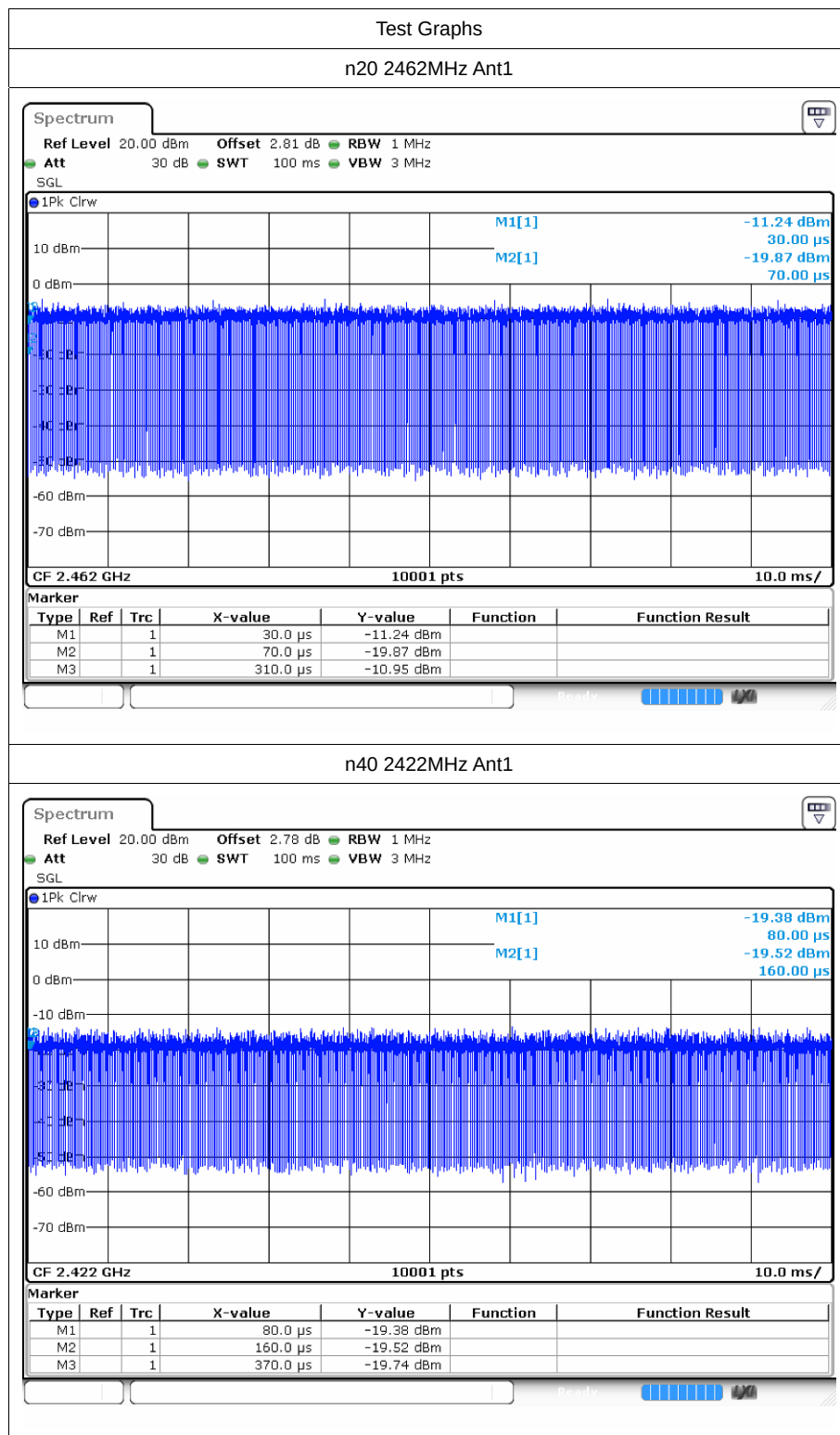
1.2 Test Graphs

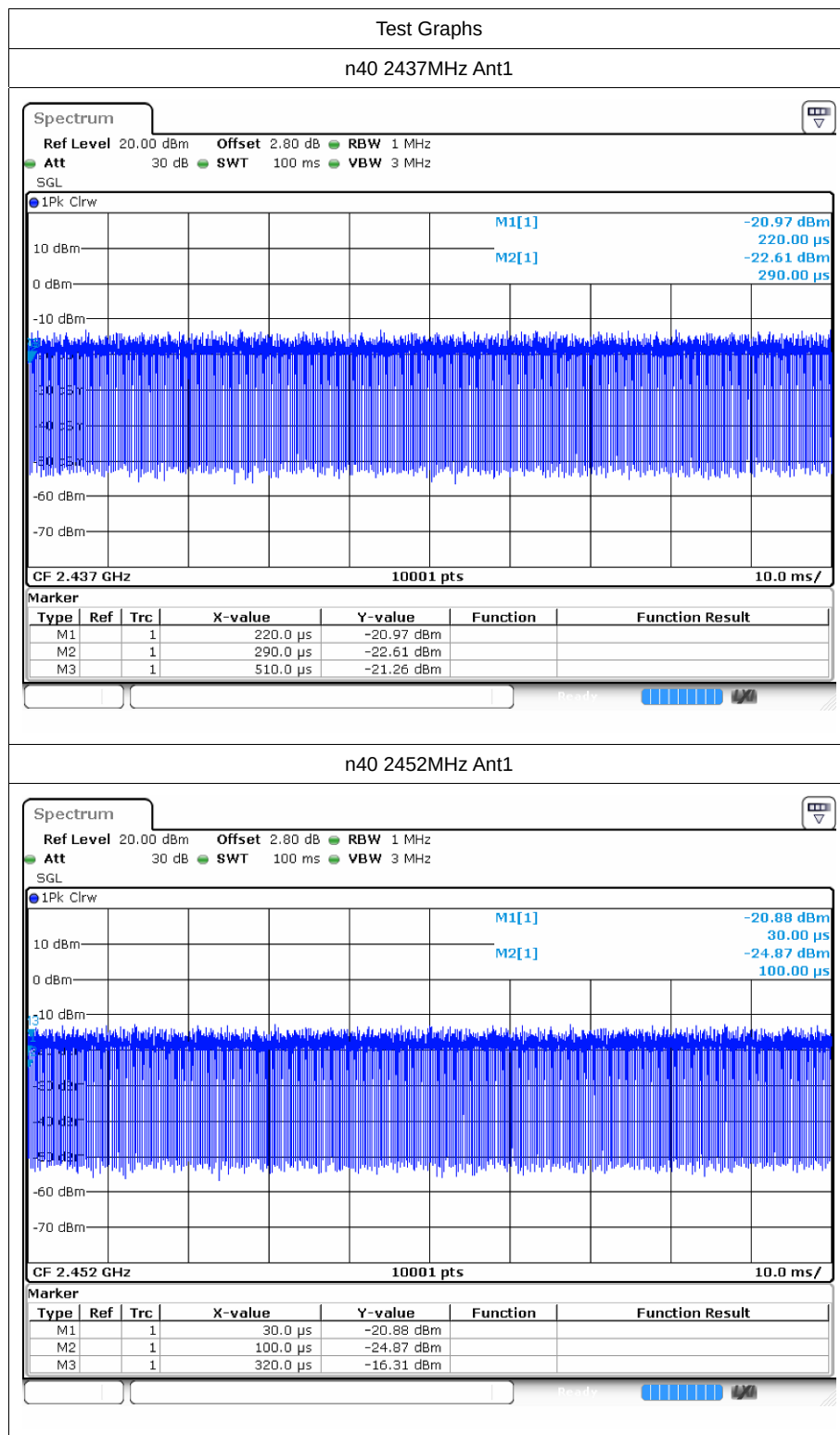












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	4.21	18	Pass
b	2437	Ant1	4.18	18	Pass
b	2462	Ant1	4.09	18	Pass
g	2412	Ant1	2.97	18	Pass
g	2437	Ant1	3.82	18	Pass
g	2462	Ant1	4.59	18	Pass
n20	2412	Ant1	2.84	18	Pass
n20	2437	Ant1	3.67	18	Pass
n20	2462	Ant1	4.46	18	Pass
n40	2422	Ant1	2.82	18	Pass
n40	2437	Ant1	3.38	18	Pass
n40	2452	Ant1	3.73	18	Pass

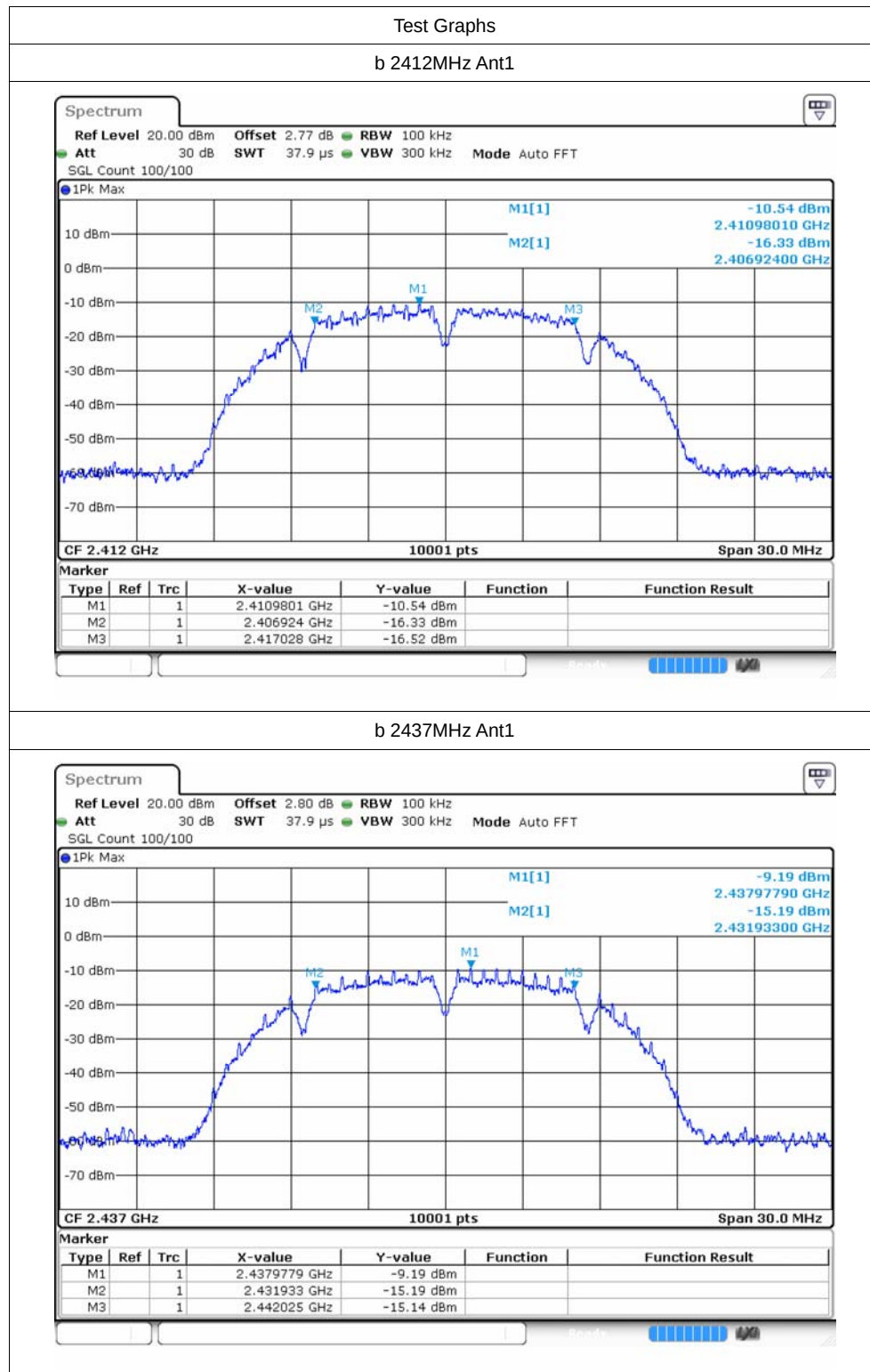


3 -6dB Bandwidth

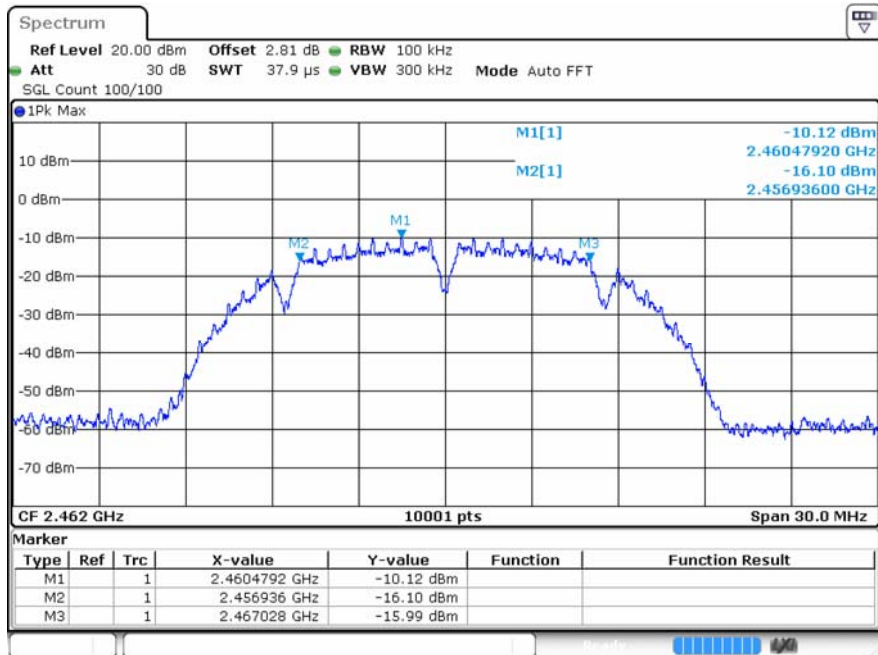
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.104	0.5	Pass
b	2437	Ant1	10.092	0.5	Pass
b	2462	Ant1	10.092	0.5	Pass
g	2412	Ant1	15.12	0.5	Pass
g	2437	Ant1	15.114	0.5	Pass
g	2462	Ant1	15.123	0.5	Pass
n20	2412	Ant1	15.078	0.5	Pass
n20	2437	Ant1	15.108	0.5	Pass
n20	2462	Ant1	15.111	0.5	Pass
n40	2422	Ant1	35.07	0.5	Pass
n40	2437	Ant1	35.046	0.5	Pass
n40	2452	Ant1	33.822	0.5	Pass

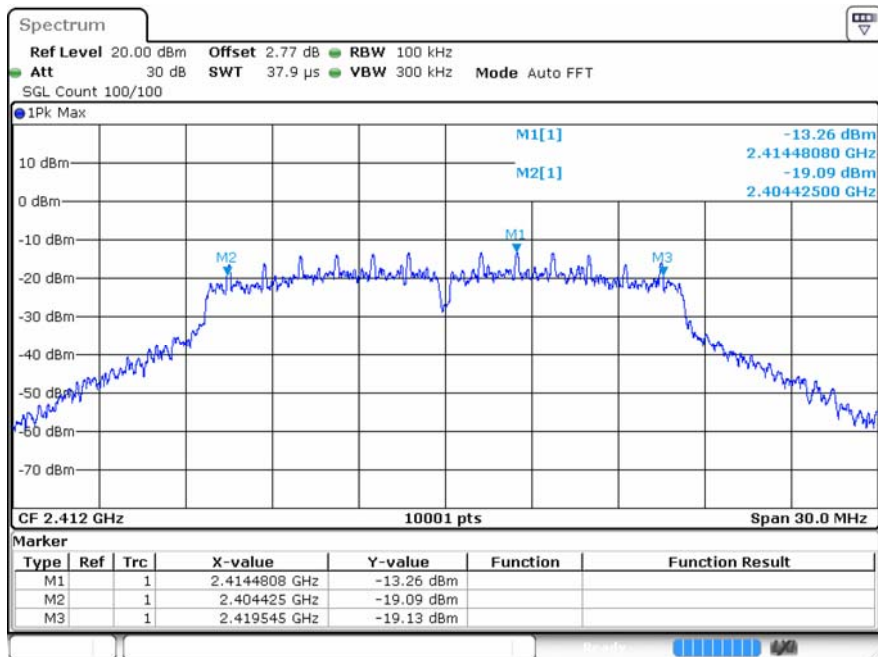
3.2 Test Graphs



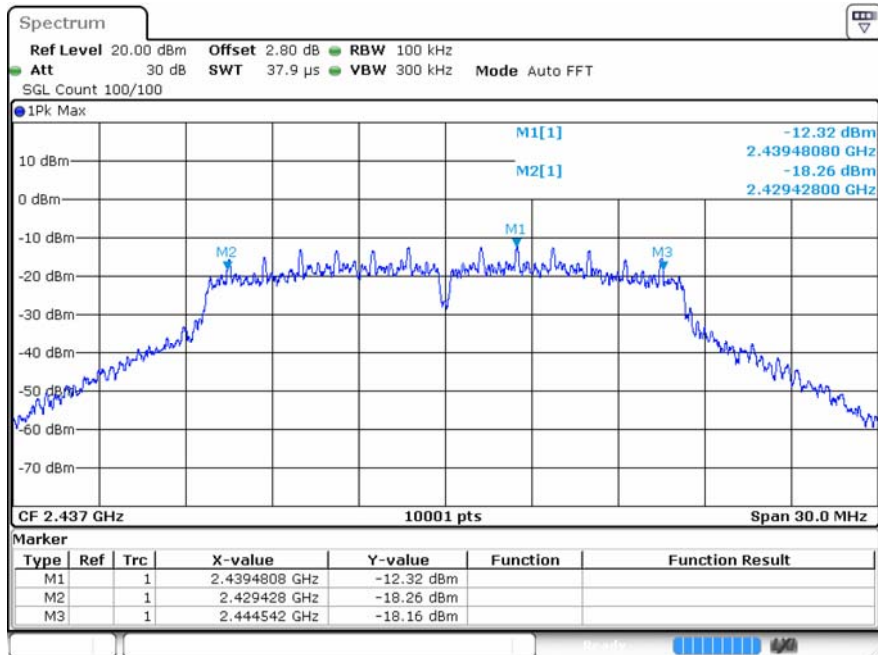
b 2462MHz Ant1



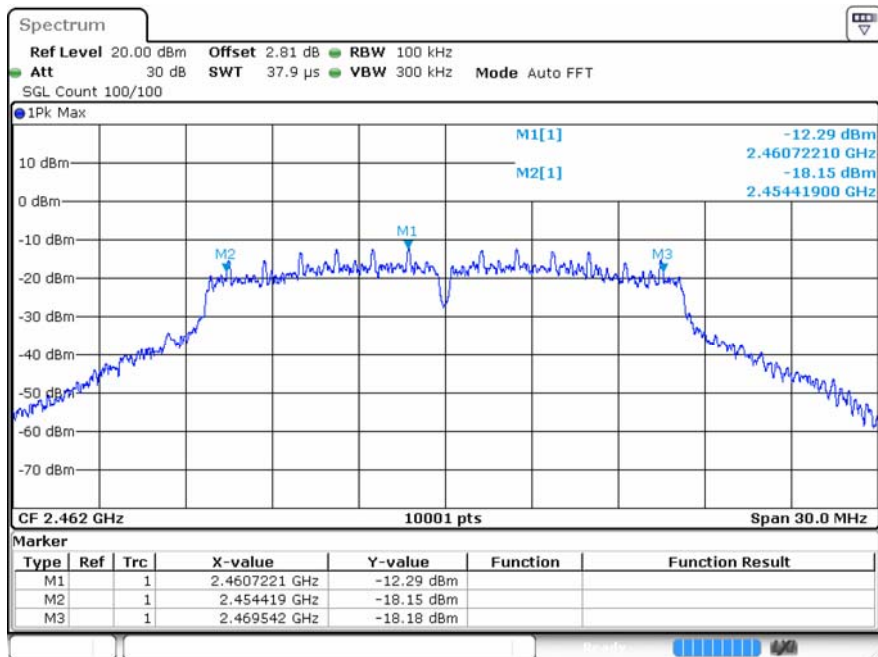
g 2412MHz Ant1



g 2437MHz Ant1

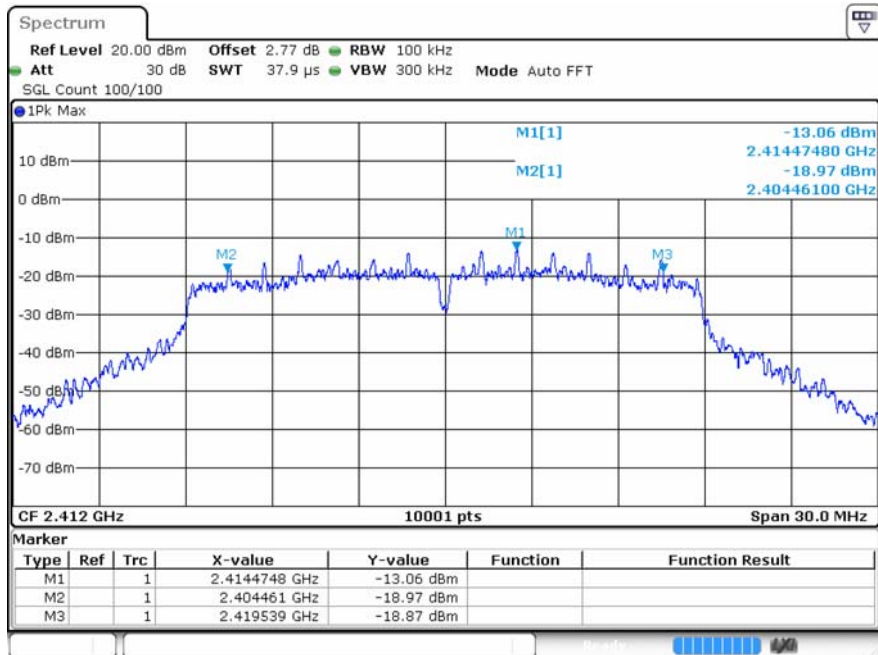


g 2462MHz Ant1

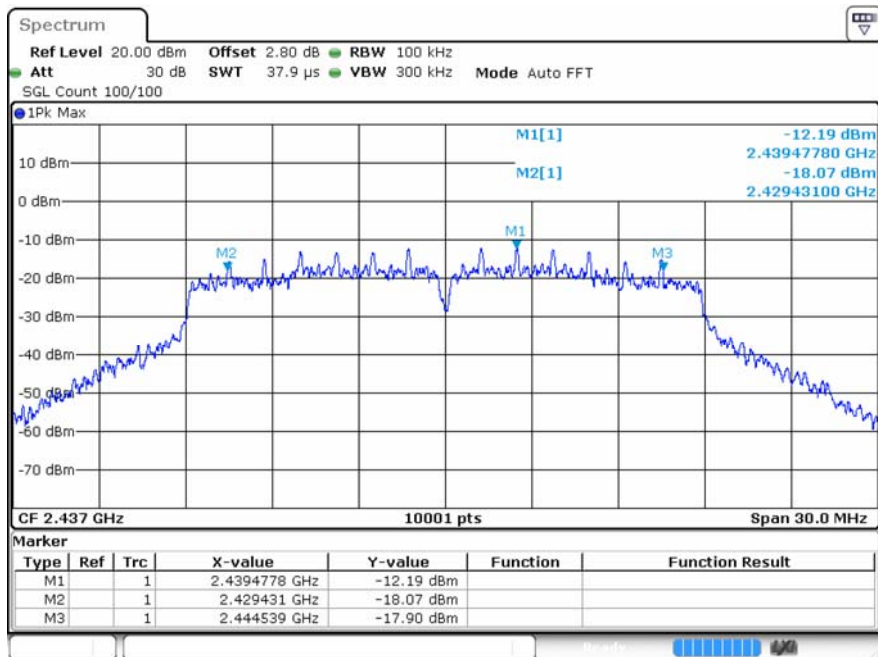




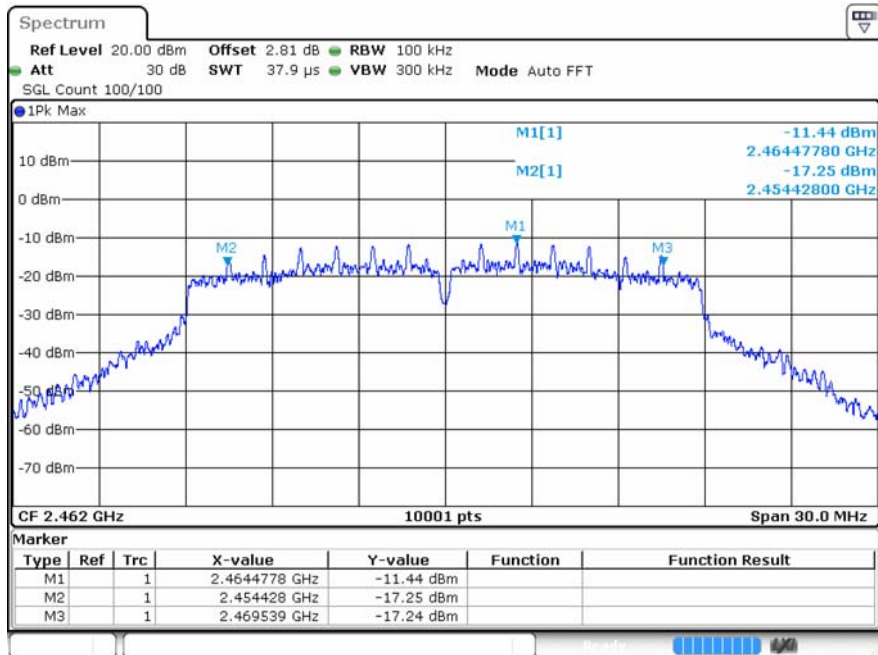
n20 2412MHz Ant1



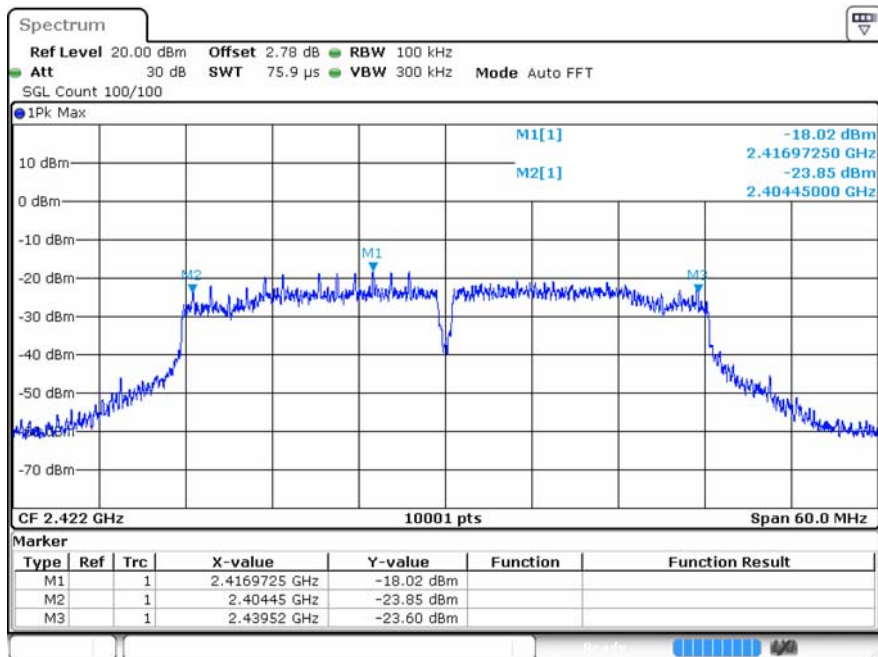
n20 2437MHz Ant1



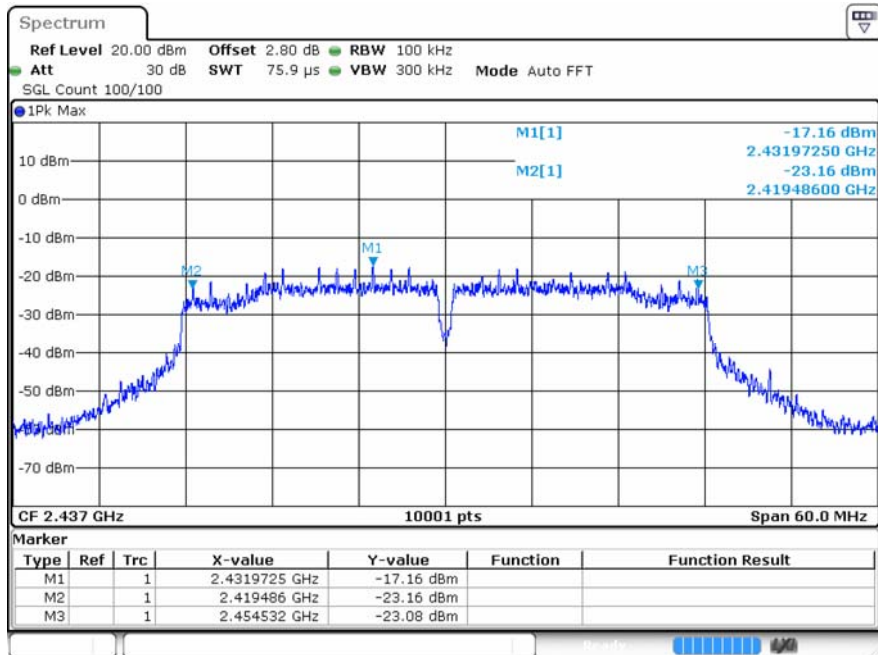
n20 2462MHz Ant1



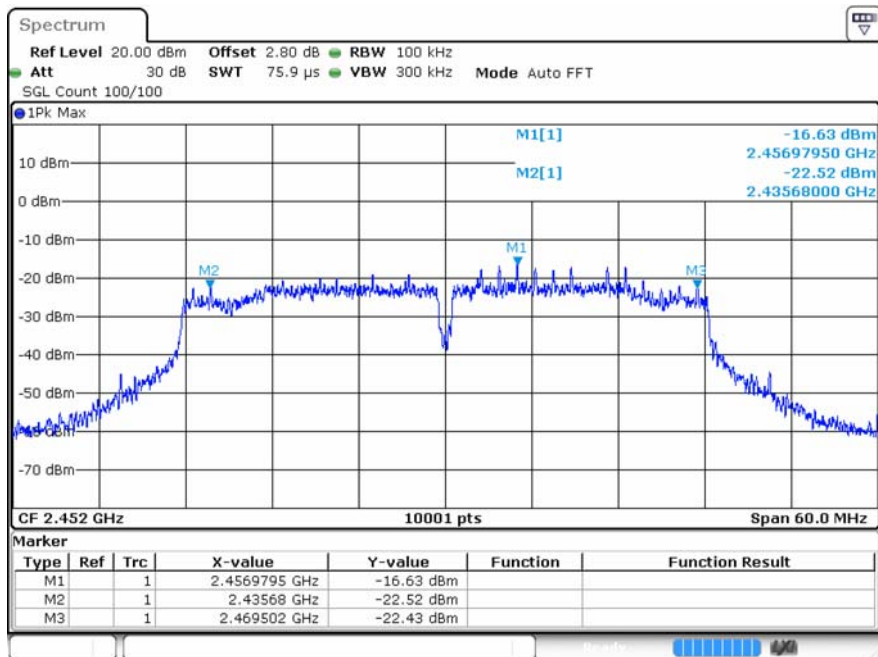
n40 2422MHz Ant1



n40 2437MHz Ant1



n40 2452MHz Ant1

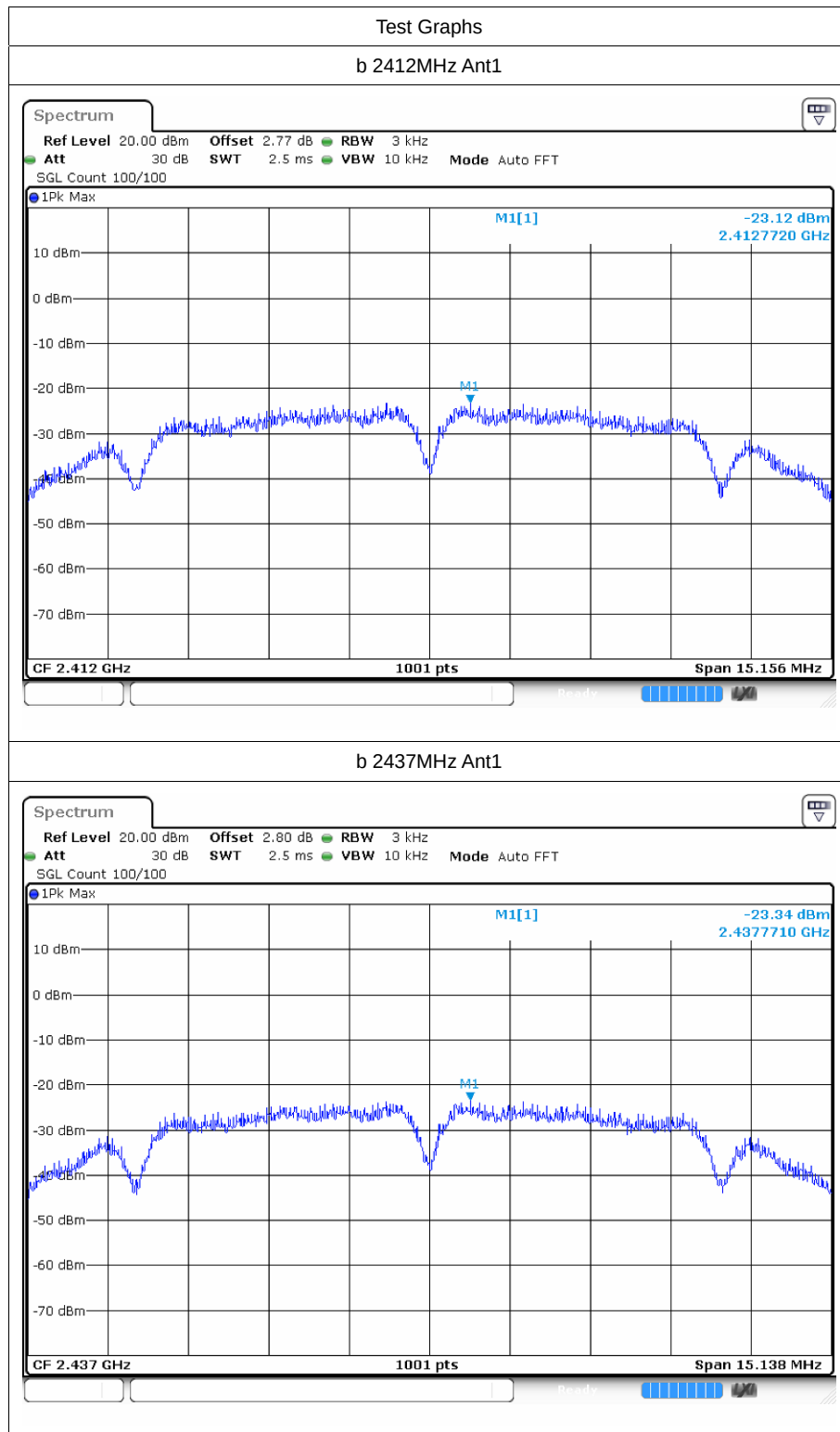


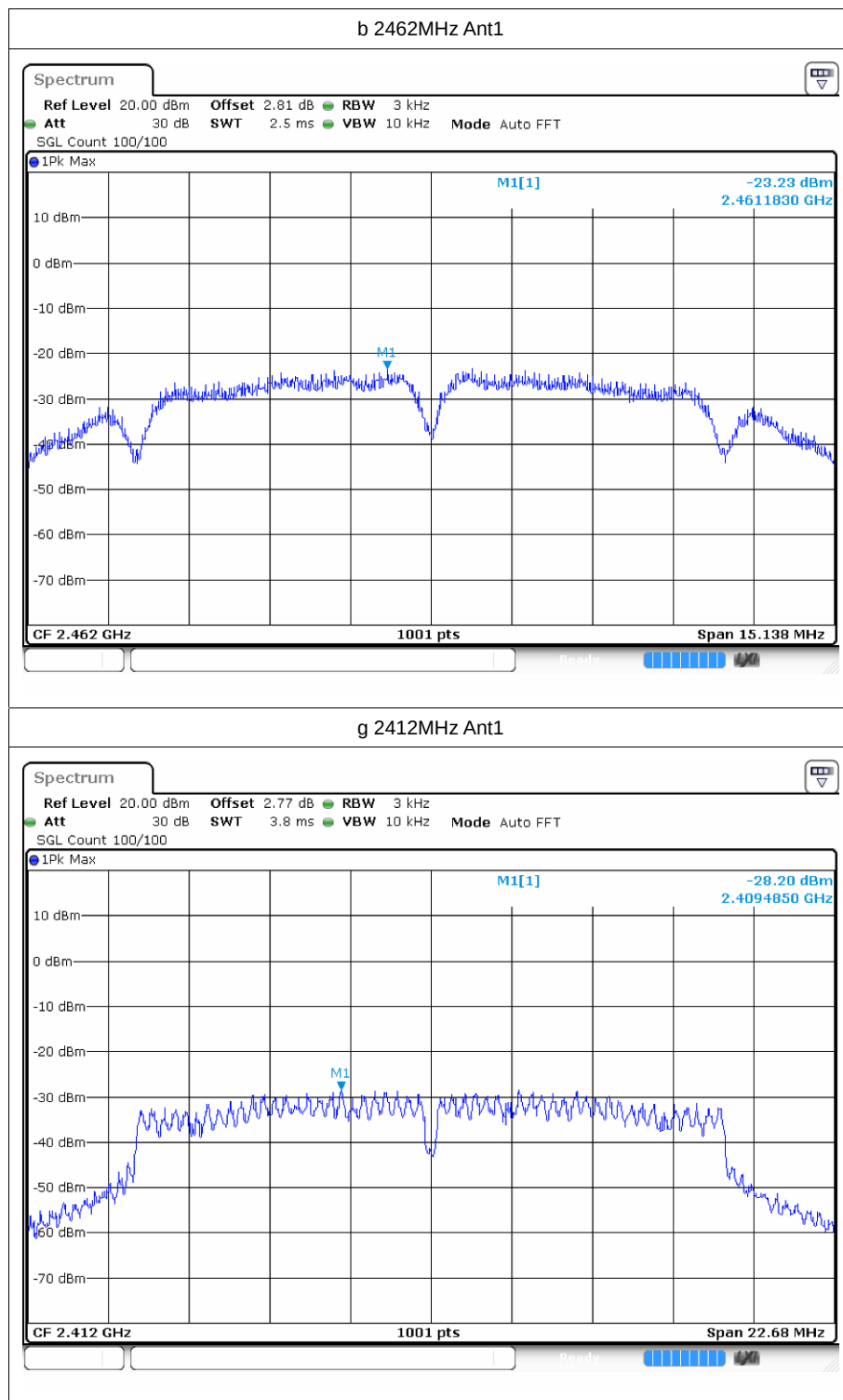
4 Maximum Power Spectral Density Level

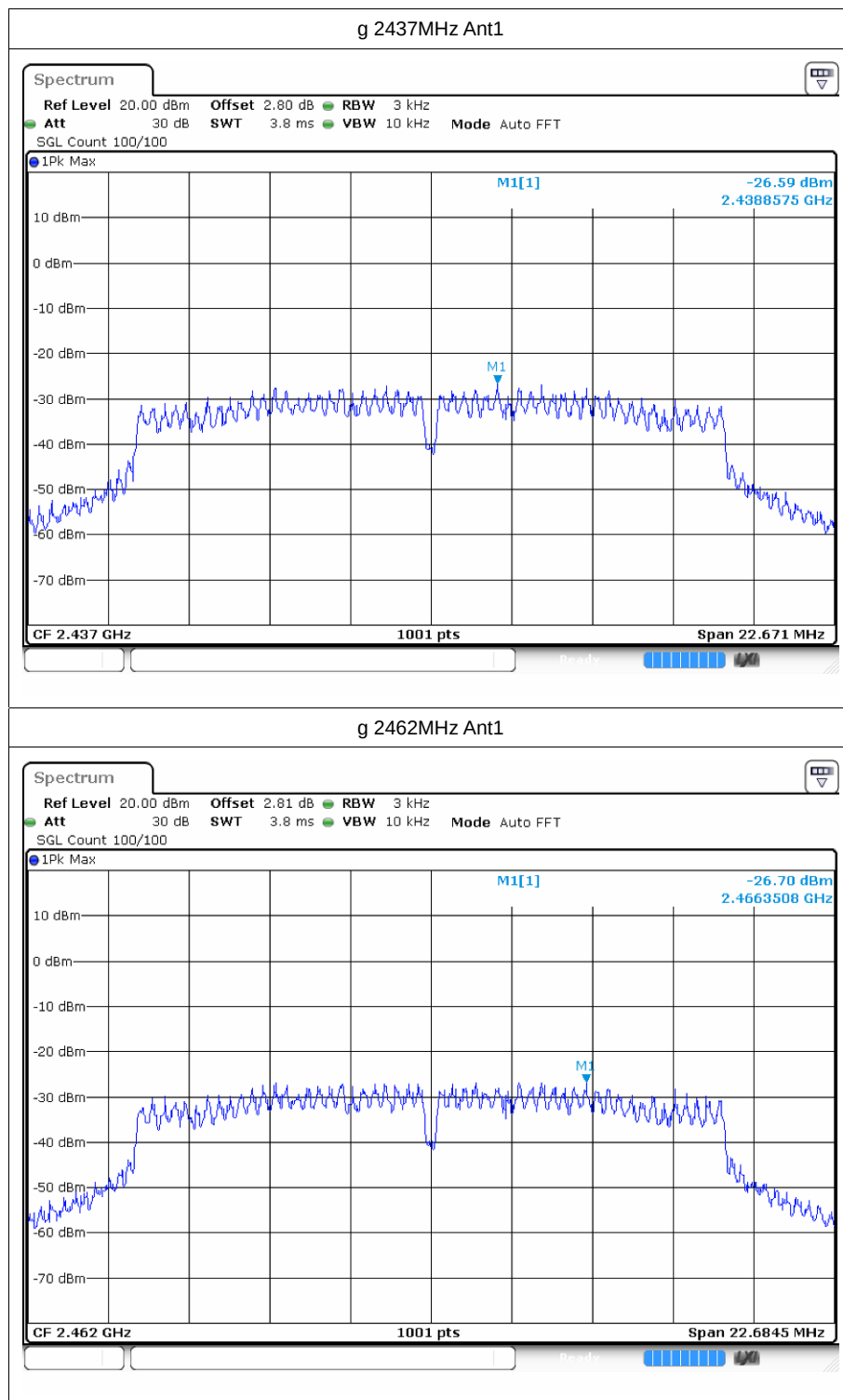
4.1 Test Result

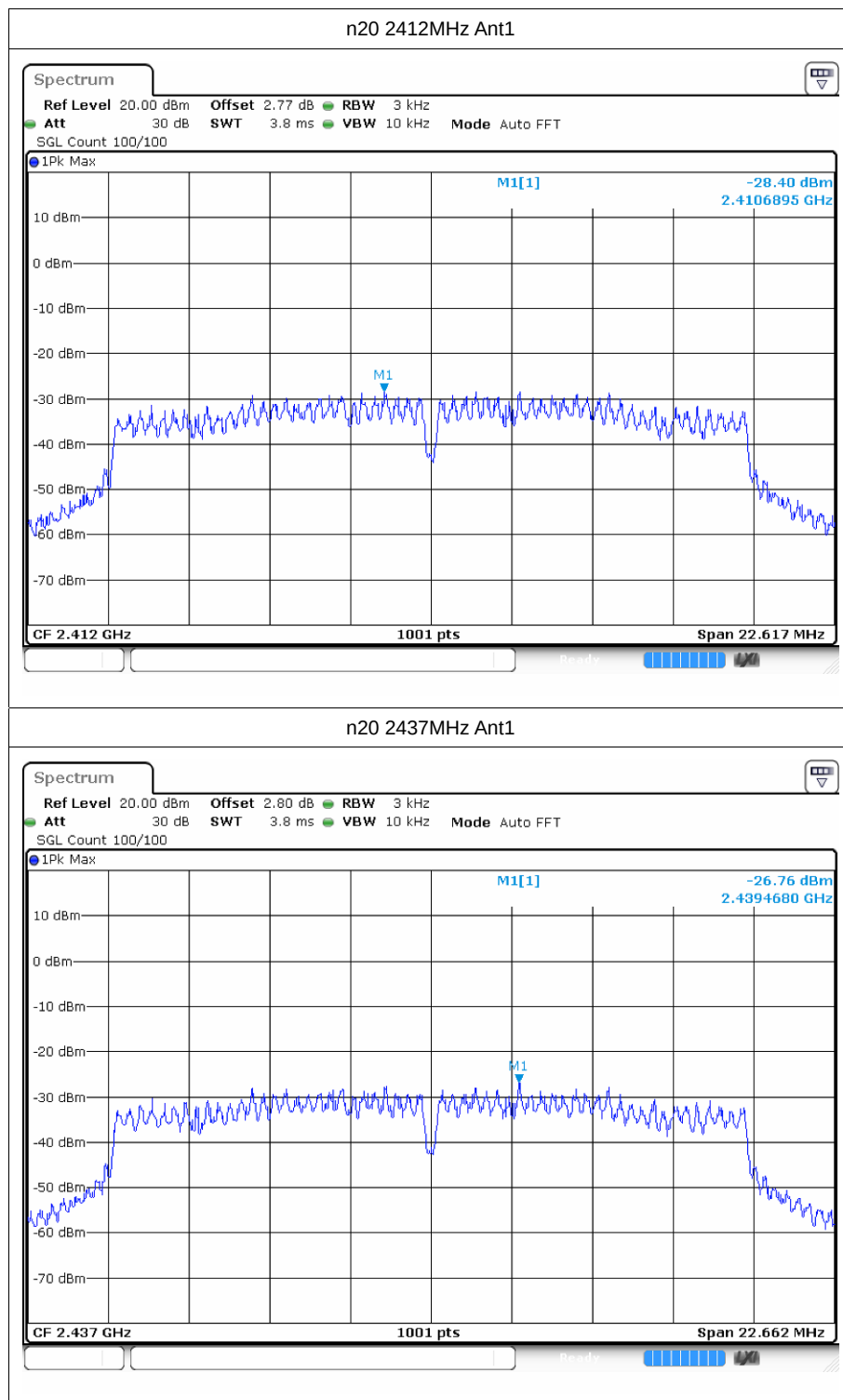
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-23.12	≤ -4	Pass
b	2437	Ant1	-23.34	≤ -4	Pass
b	2462	Ant1	-23.23	≤ -4	Pass
g	2412	Ant1	-28.2	≤ -4	Pass
g	2437	Ant1	-26.59	≤ -4	Pass
g	2462	Ant1	-26.7	≤ -4	Pass
n20	2412	Ant1	-28.4	≤ -4	Pass
n20	2437	Ant1	-26.76	≤ -4	Pass
n20	2462	Ant1	-25.55	≤ -4	Pass
n40	2422	Ant1	-31.98	≤ -4	Pass
n40	2437	Ant1	-31.61	≤ -4	Pass
n40	2452	Ant1	-31.09	≤ -4	Pass

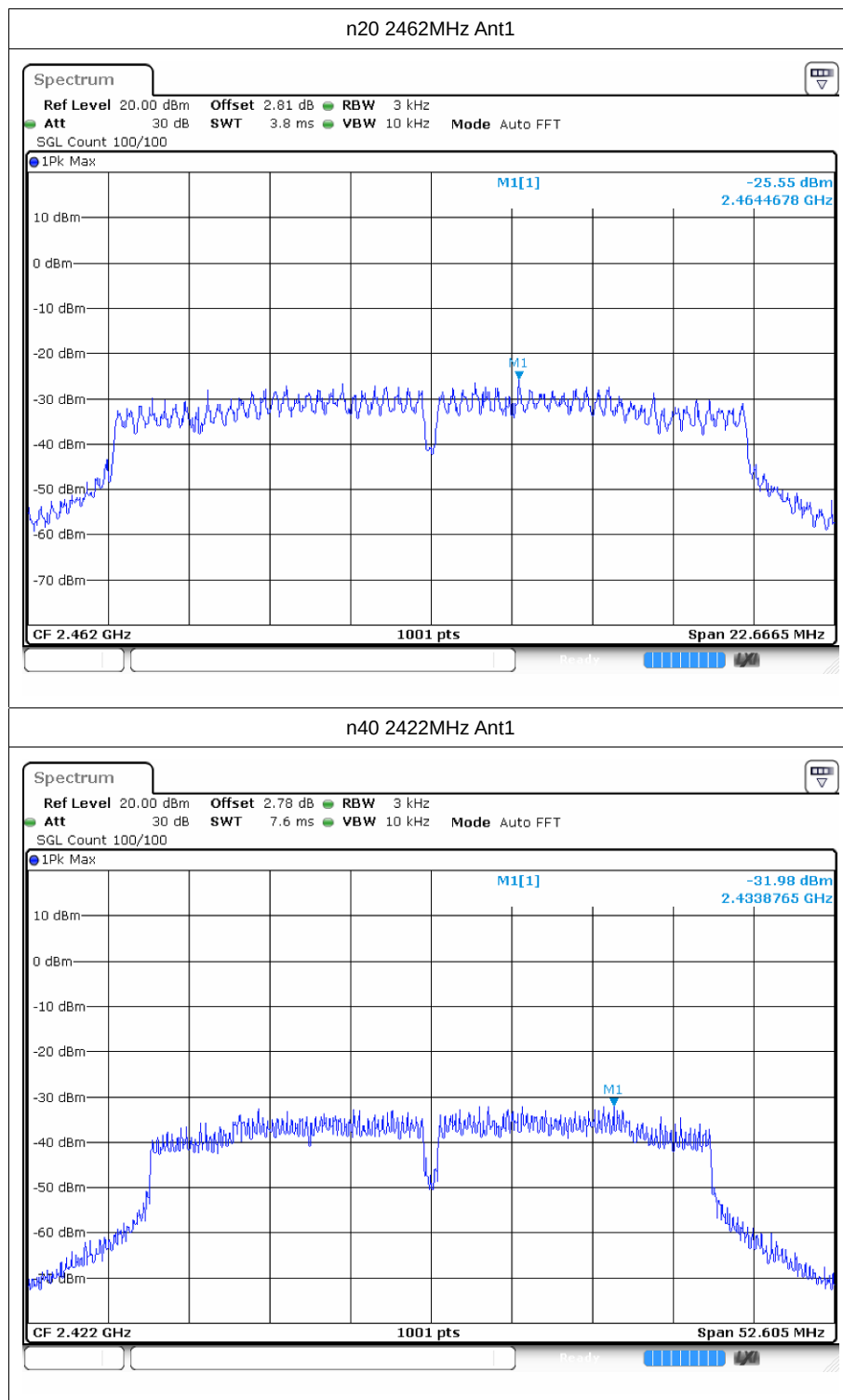
4.2 Test Graphs

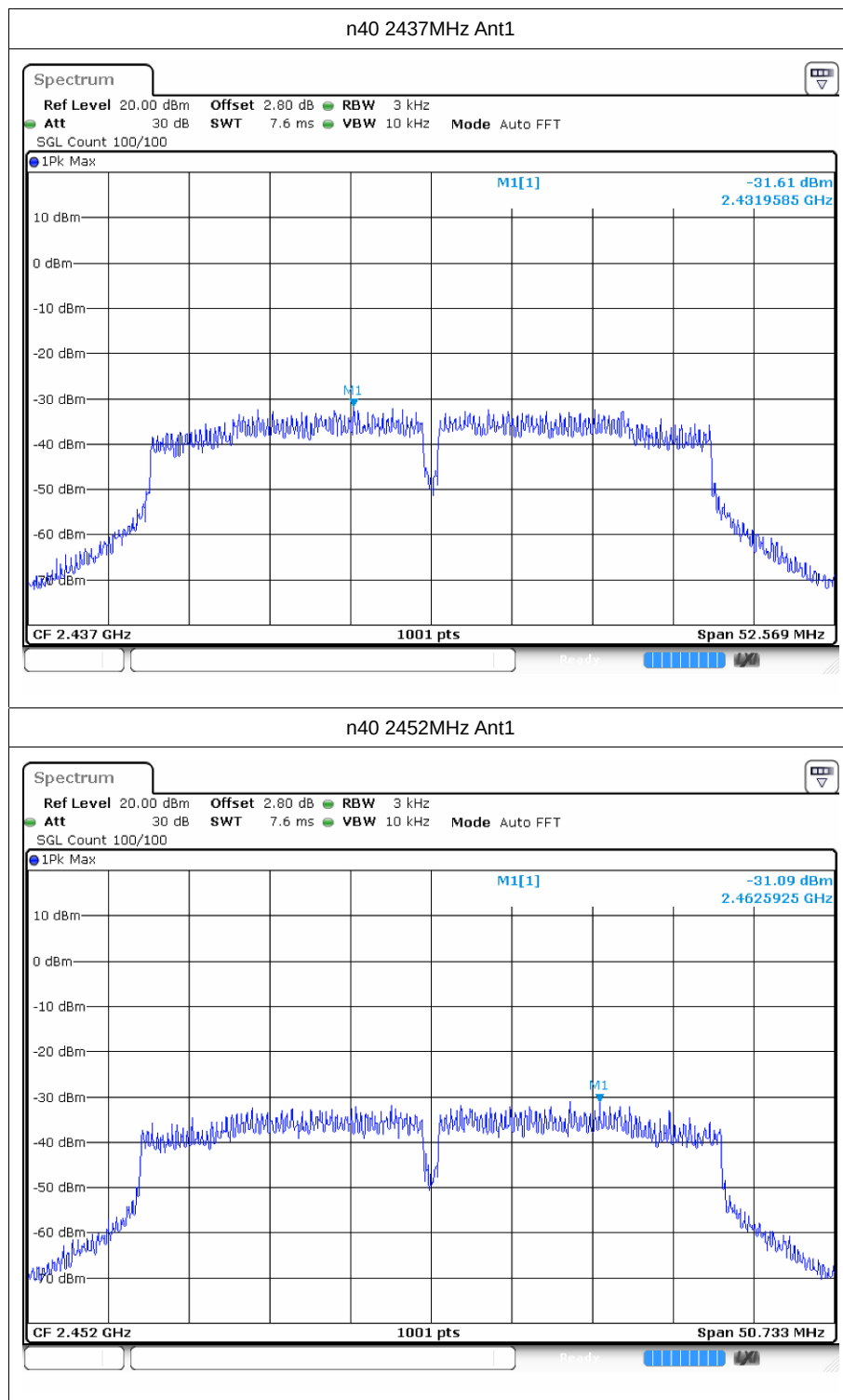












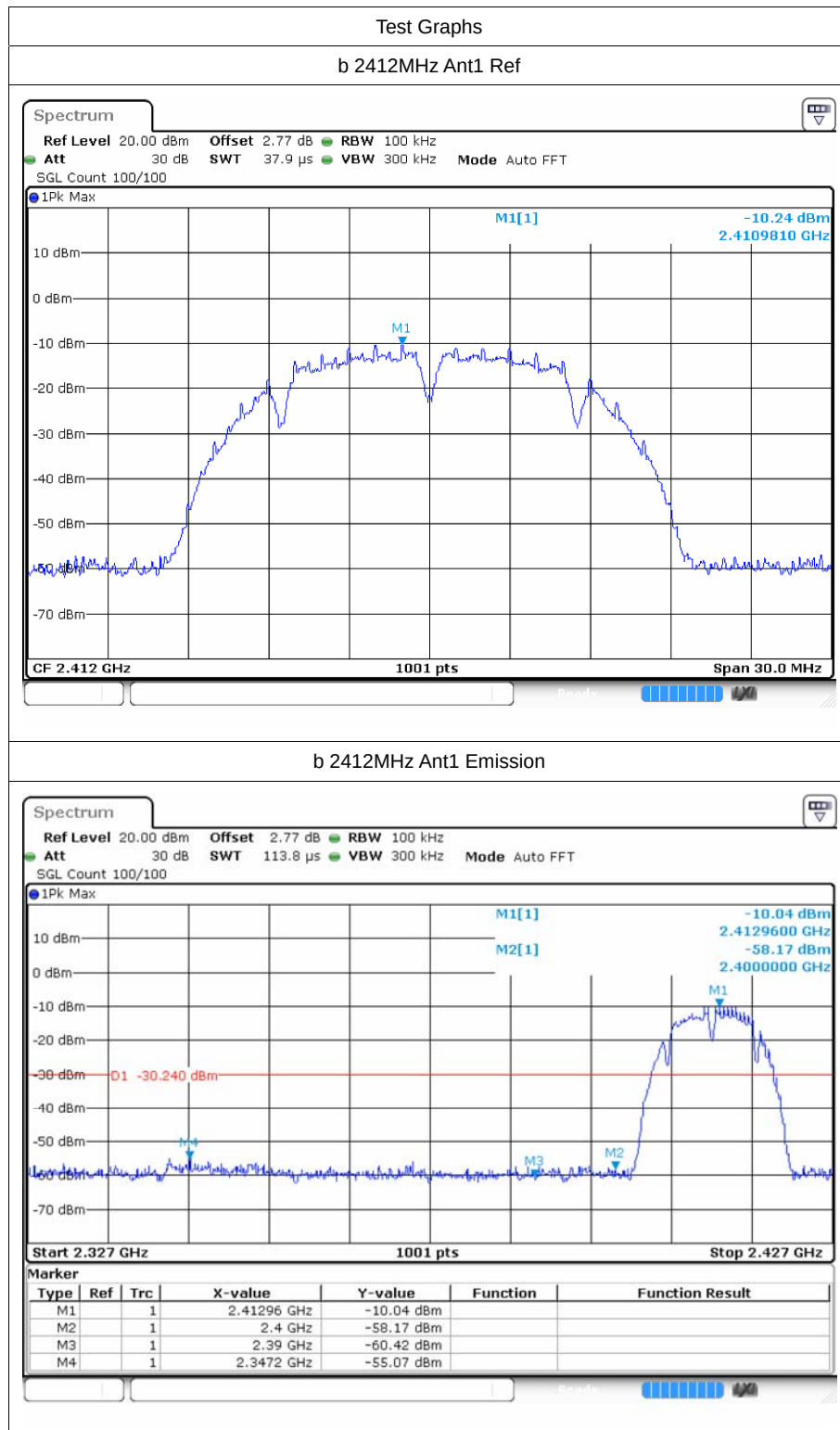


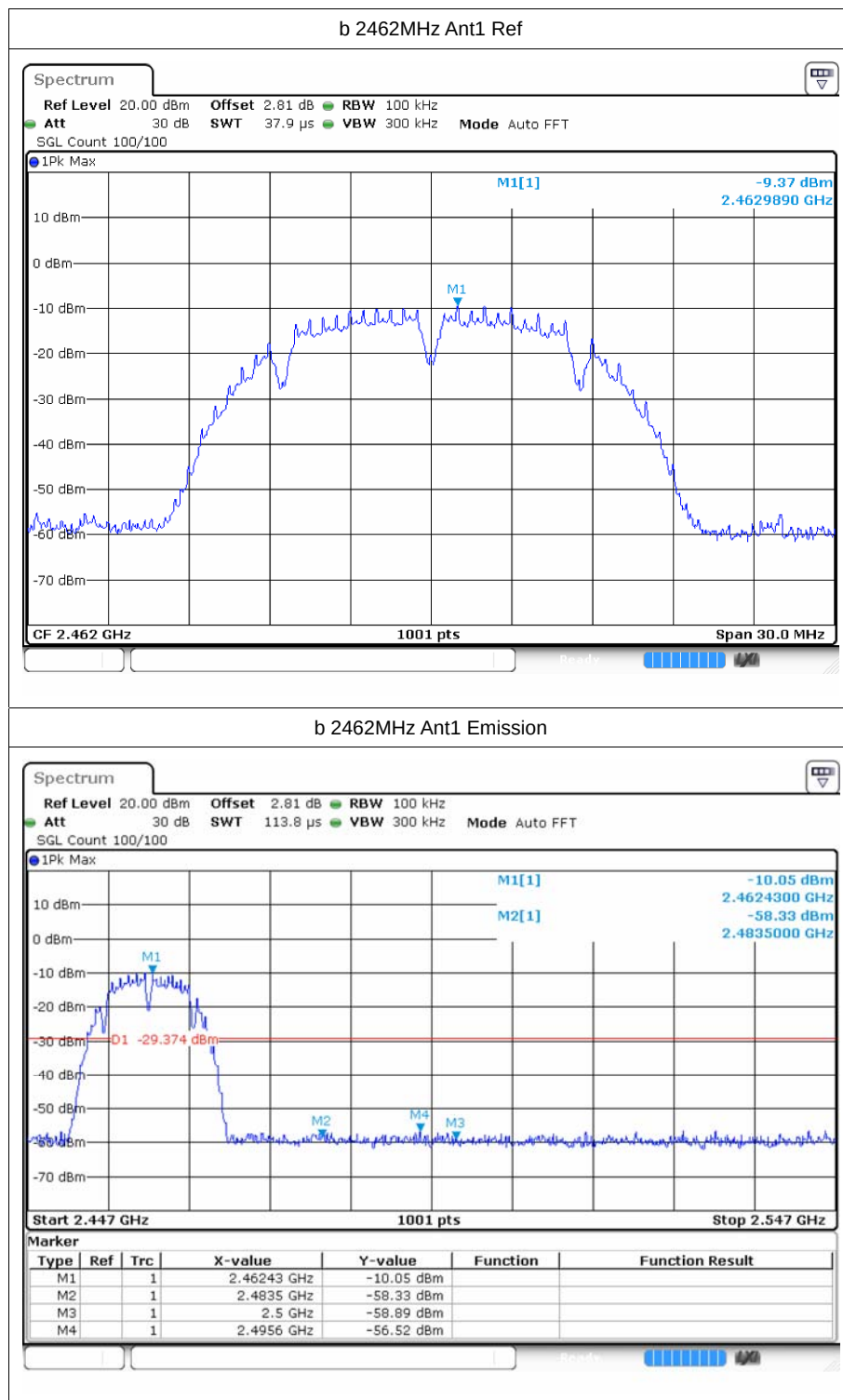
5 Band Edge

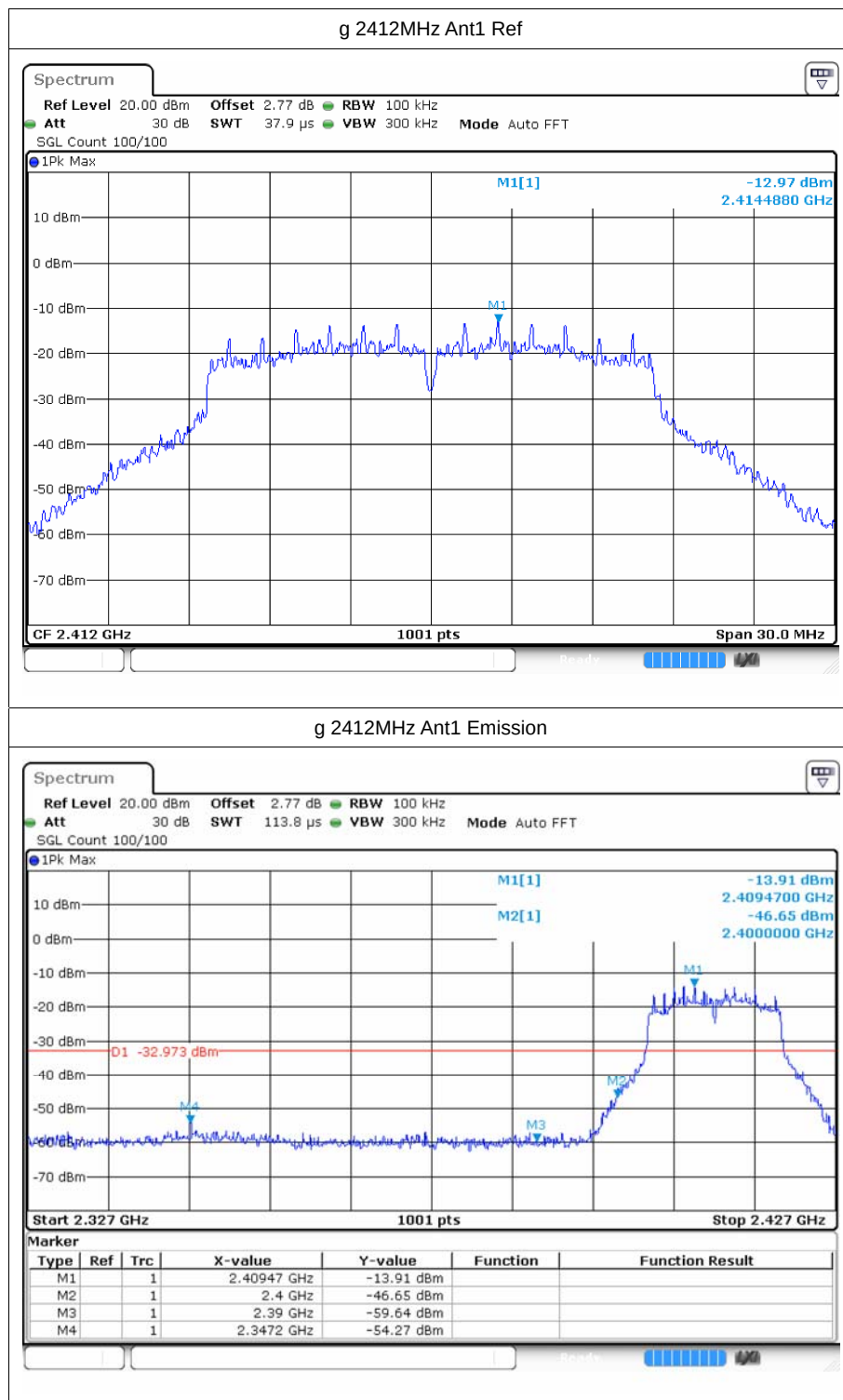
5.1 Test Result

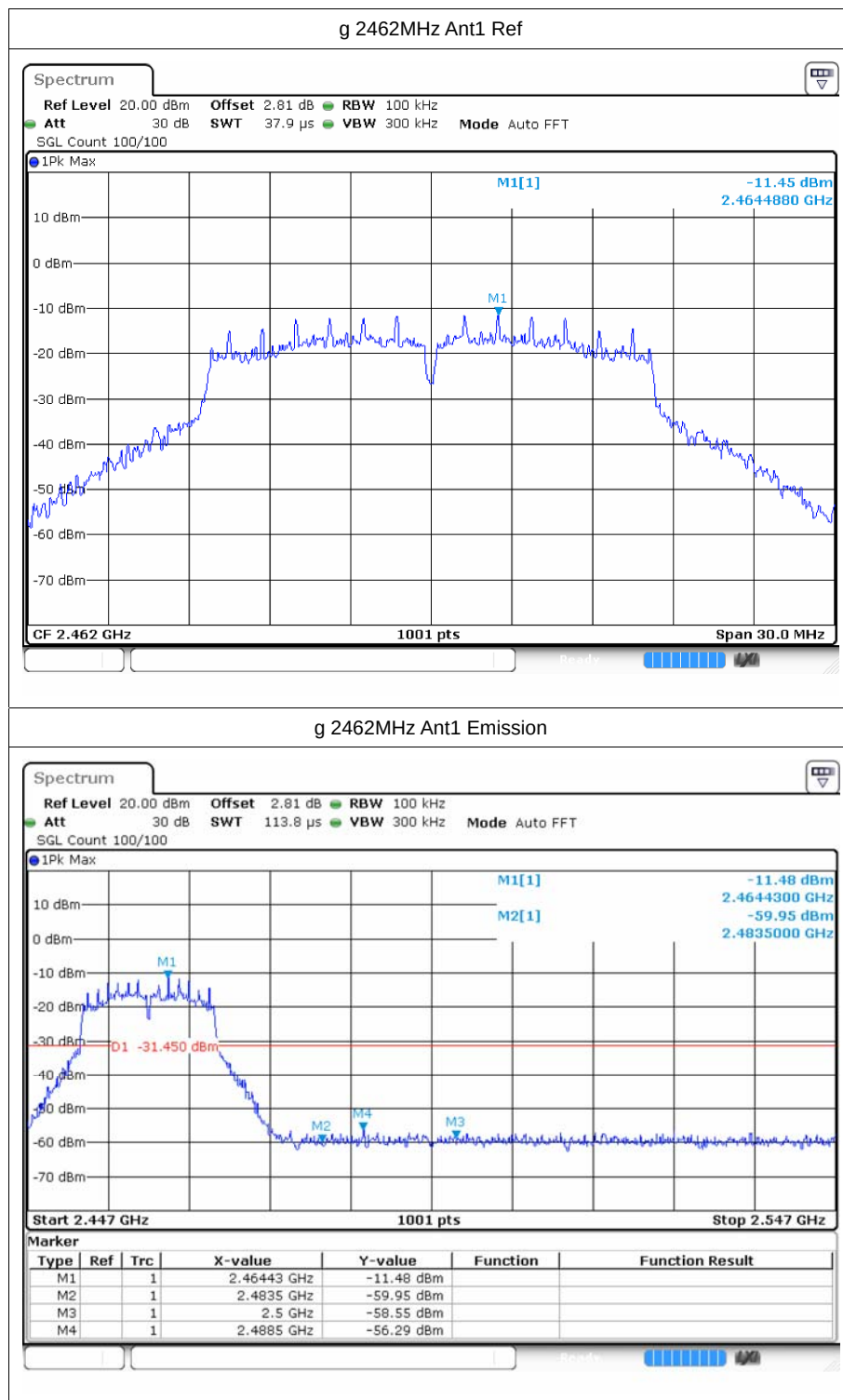
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-44.82	-20	Pass
b	2462	Ant1	-47.14	-20	Pass
g	2412	Ant1	-41.3	-20	Pass
g	2462	Ant1	-44.84	-20	Pass
n20	2412	Ant1	-42.39	-20	Pass
n20	2462	Ant1	-44.3	-20	Pass
n40	2422	Ant1	-39.49	-20	Pass
n40	2452	Ant1	-38.74	-20	Pass

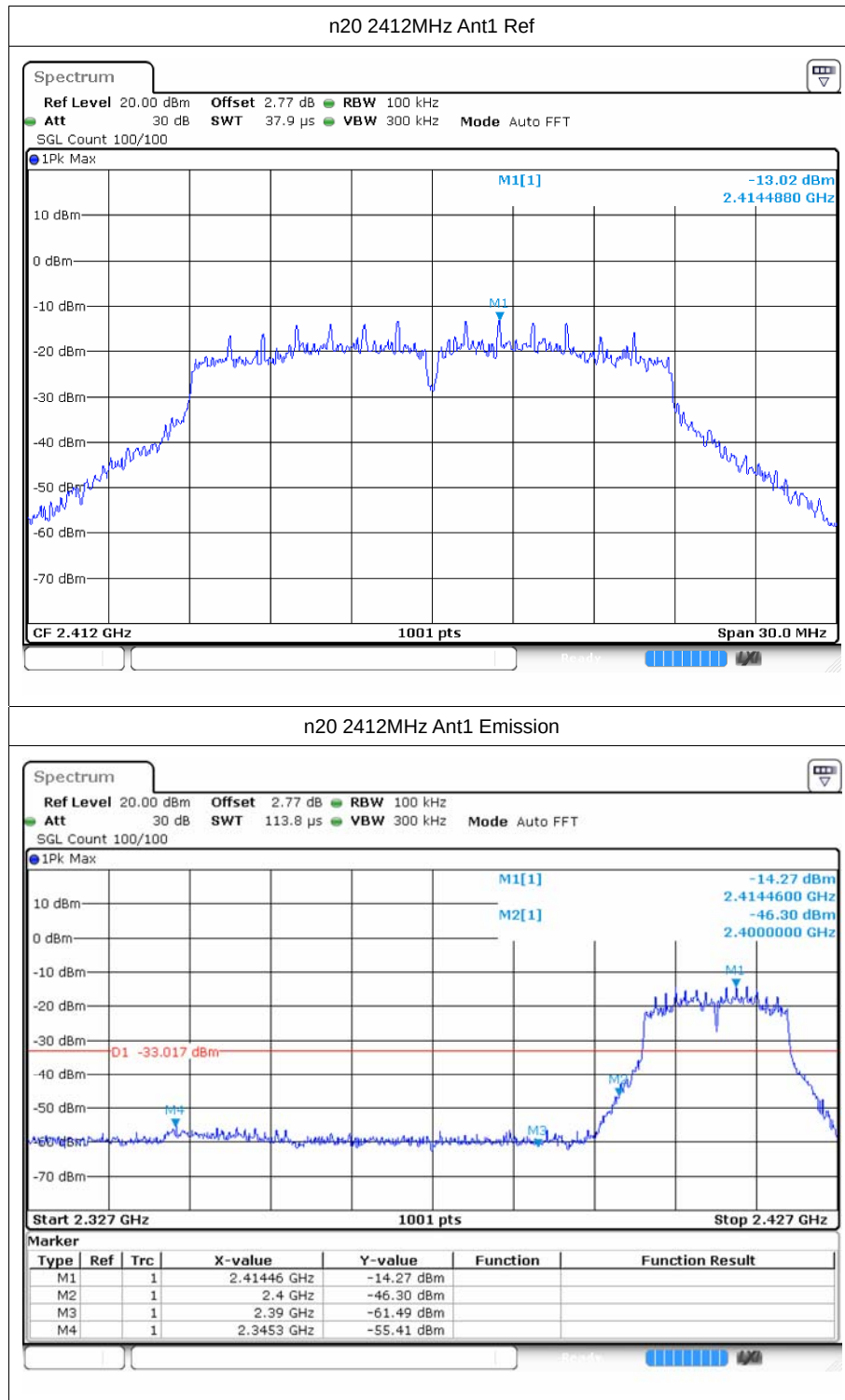
5.2 Test Graphs

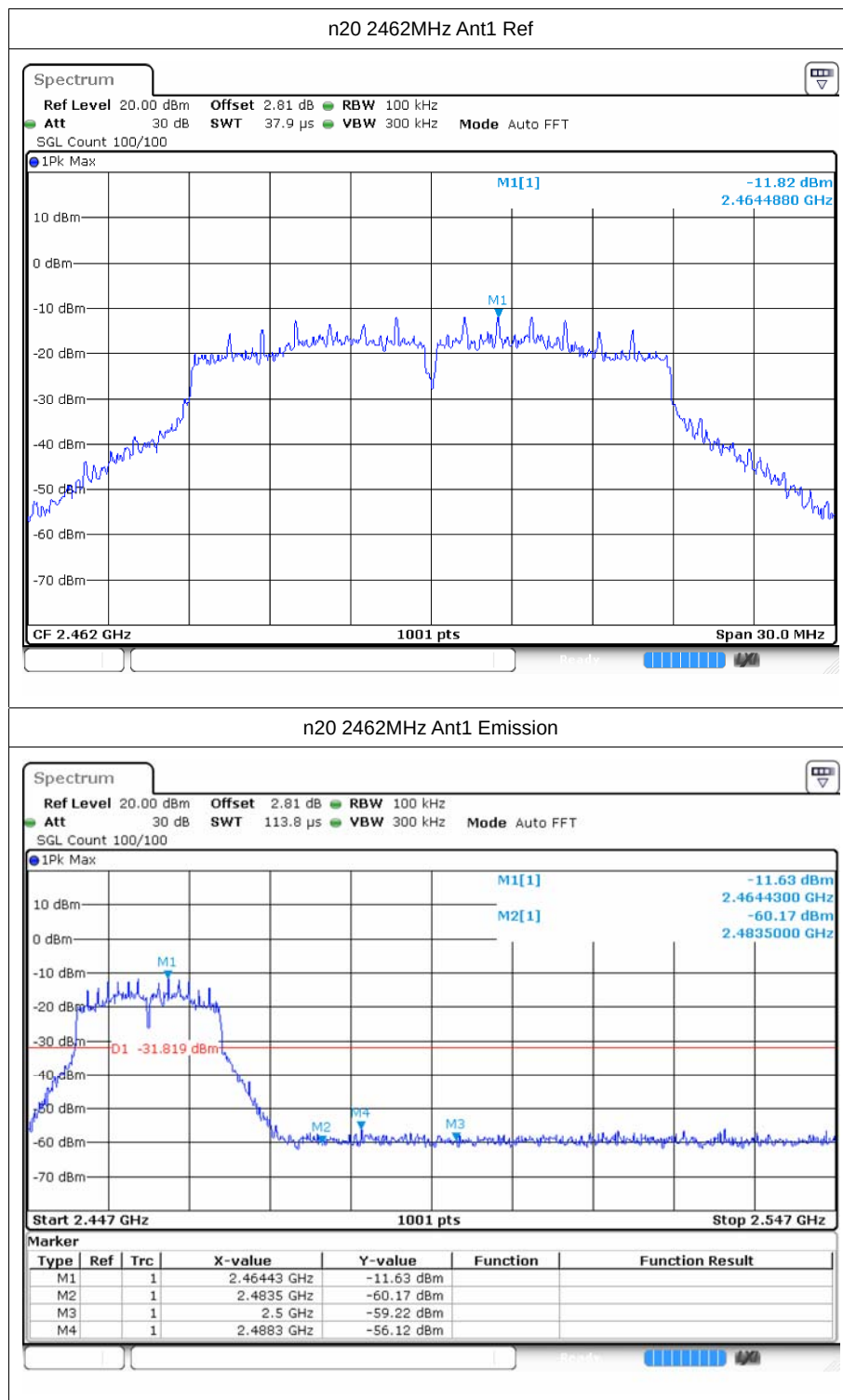


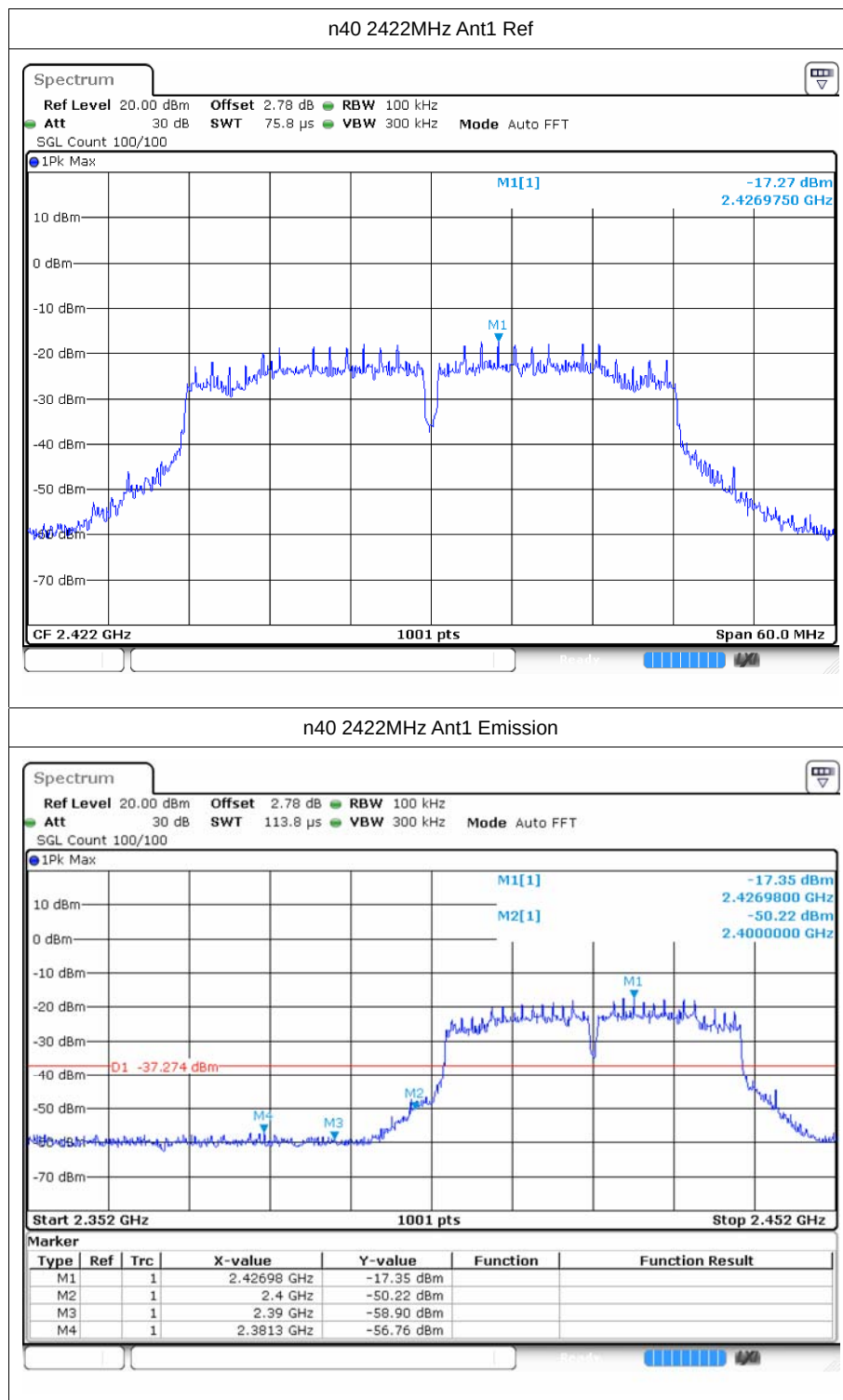


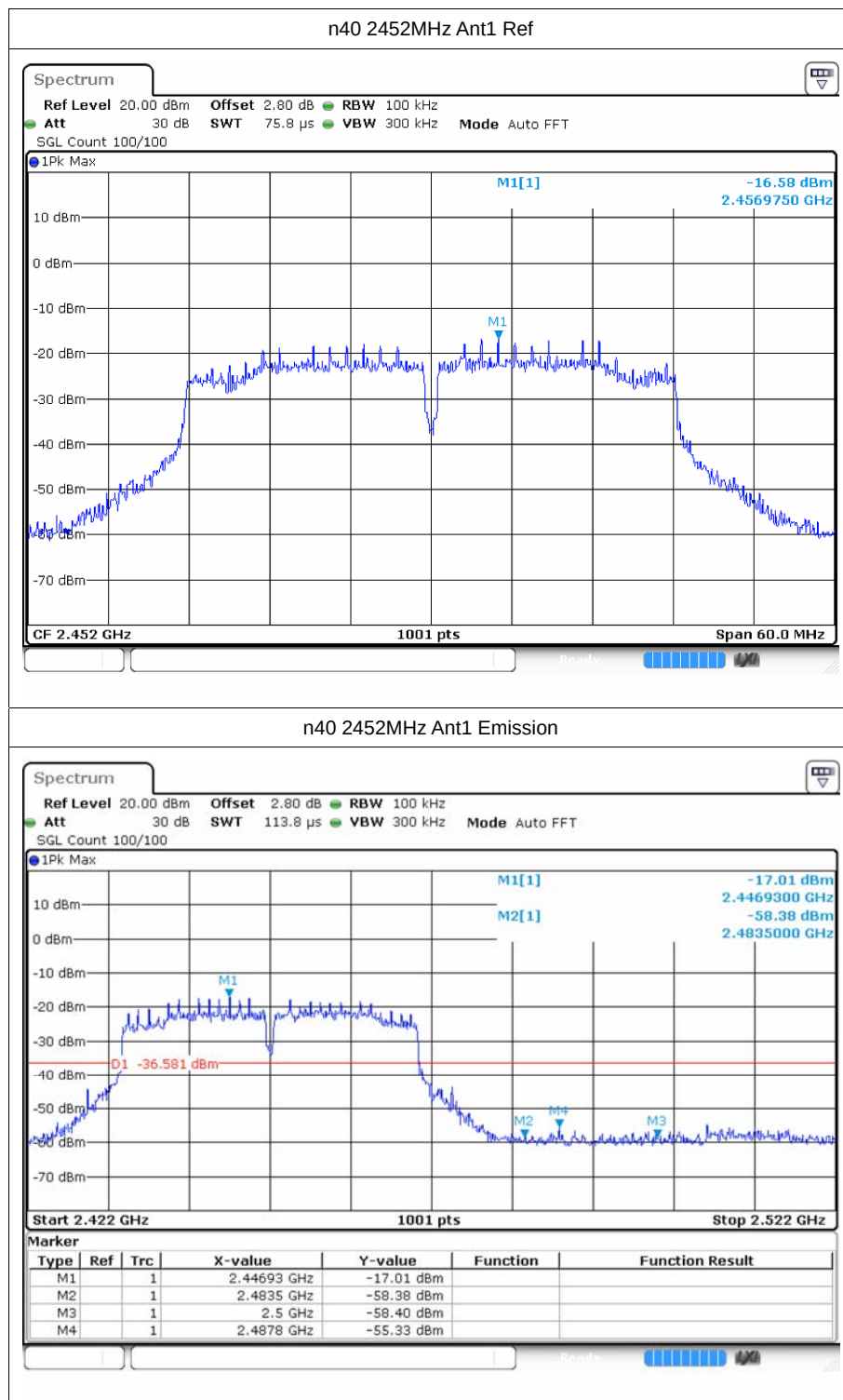












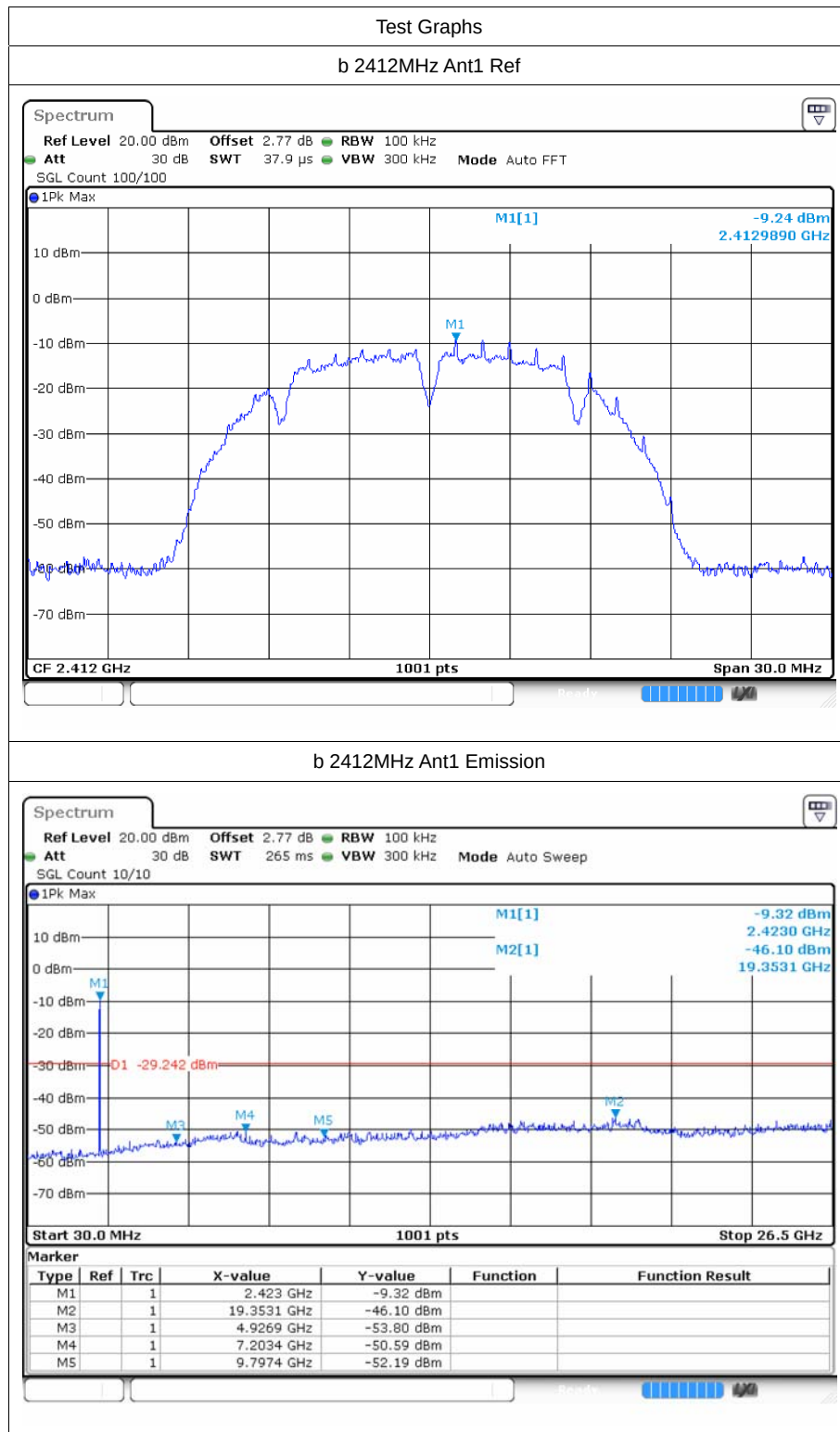


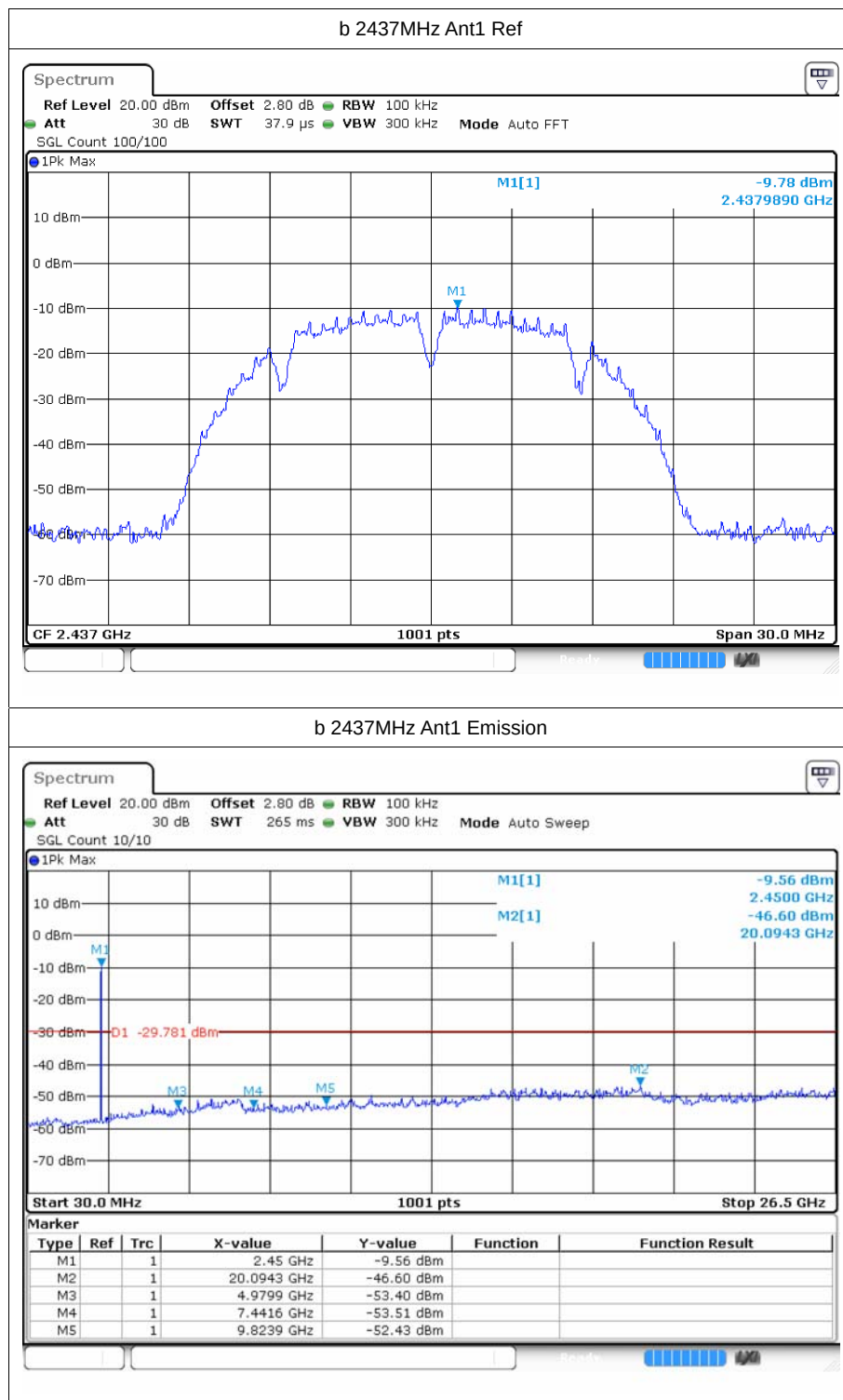
6 Conducted RF Spurious Emission

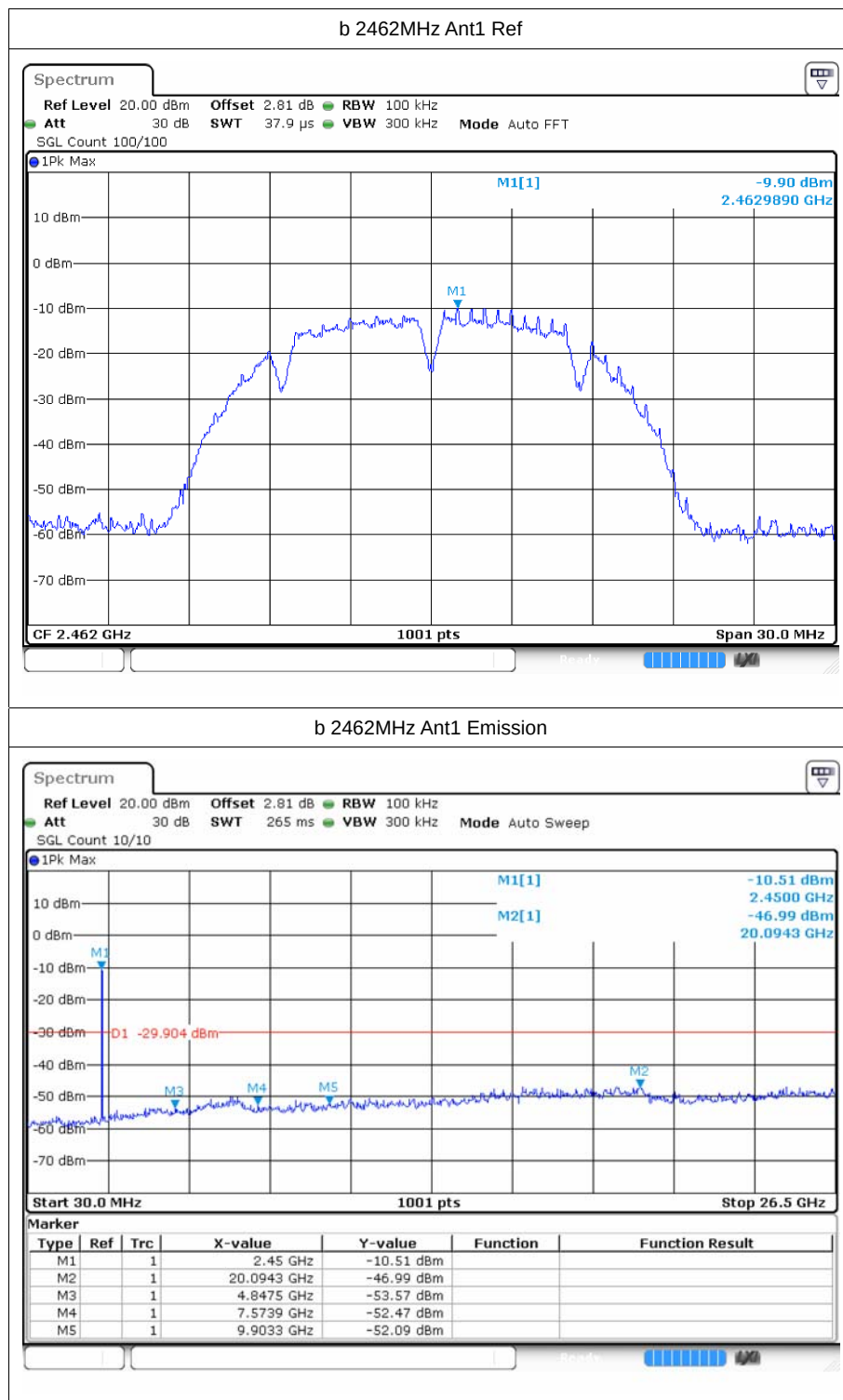
6.1 Test Result

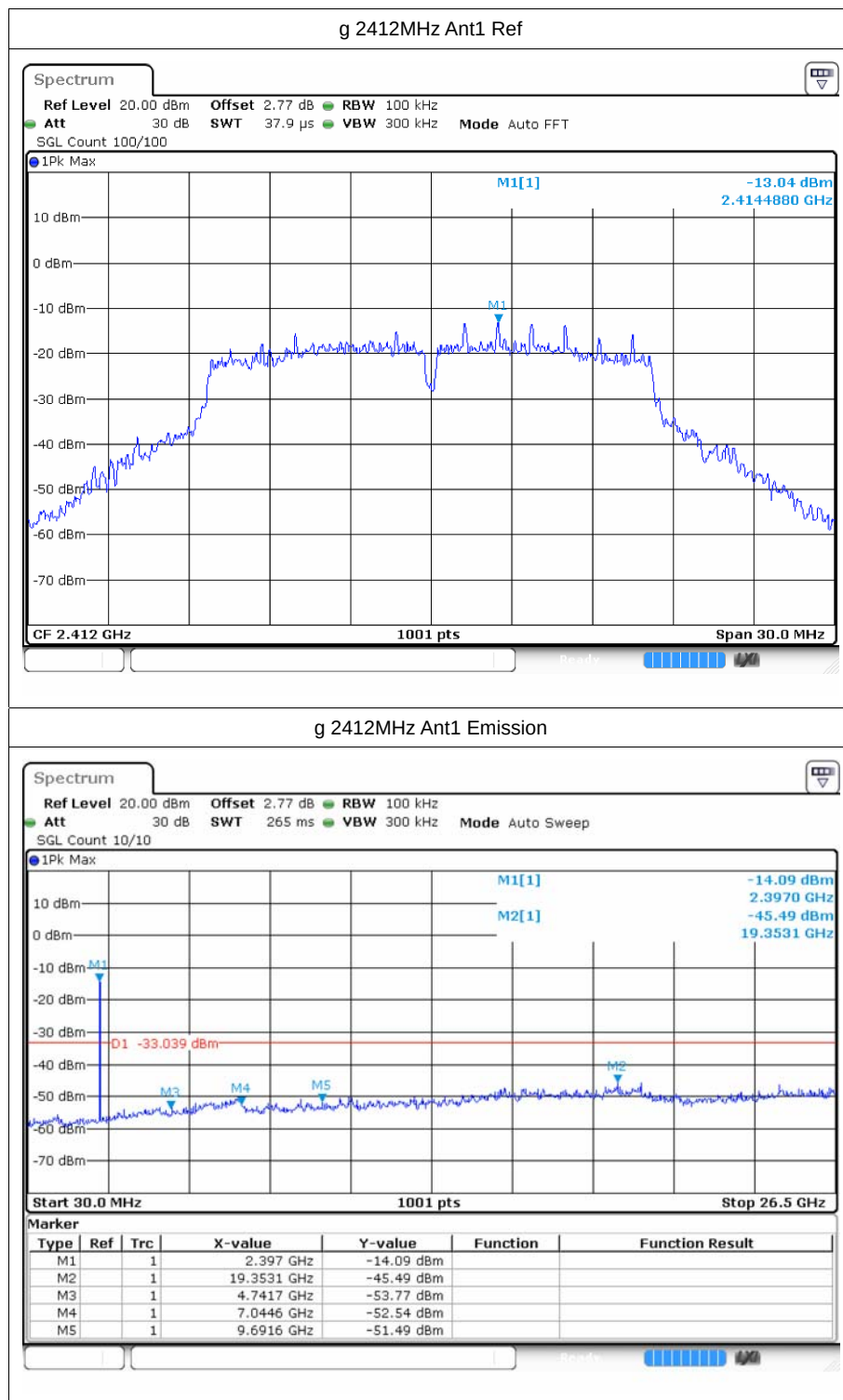
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-36.85	-20	Pass
b	2437	Ant1	-36.81	-20	Pass
b	2462	Ant1	-37.09	-20	Pass
g	2412	Ant1	-32.44	-20	Pass
g	2437	Ant1	-34.02	-20	Pass
g	2462	Ant1	-35.18	-20	Pass
n20	2412	Ant1	-32.99	-20	Pass
n20	2437	Ant1	-33.02	-20	Pass
n20	2462	Ant1	-35.25	-20	Pass
n40	2422	Ant1	-28.93	-20	Pass
n40	2437	Ant1	-30.05	-20	Pass
n40	2452	Ant1	-29.47	-20	Pass

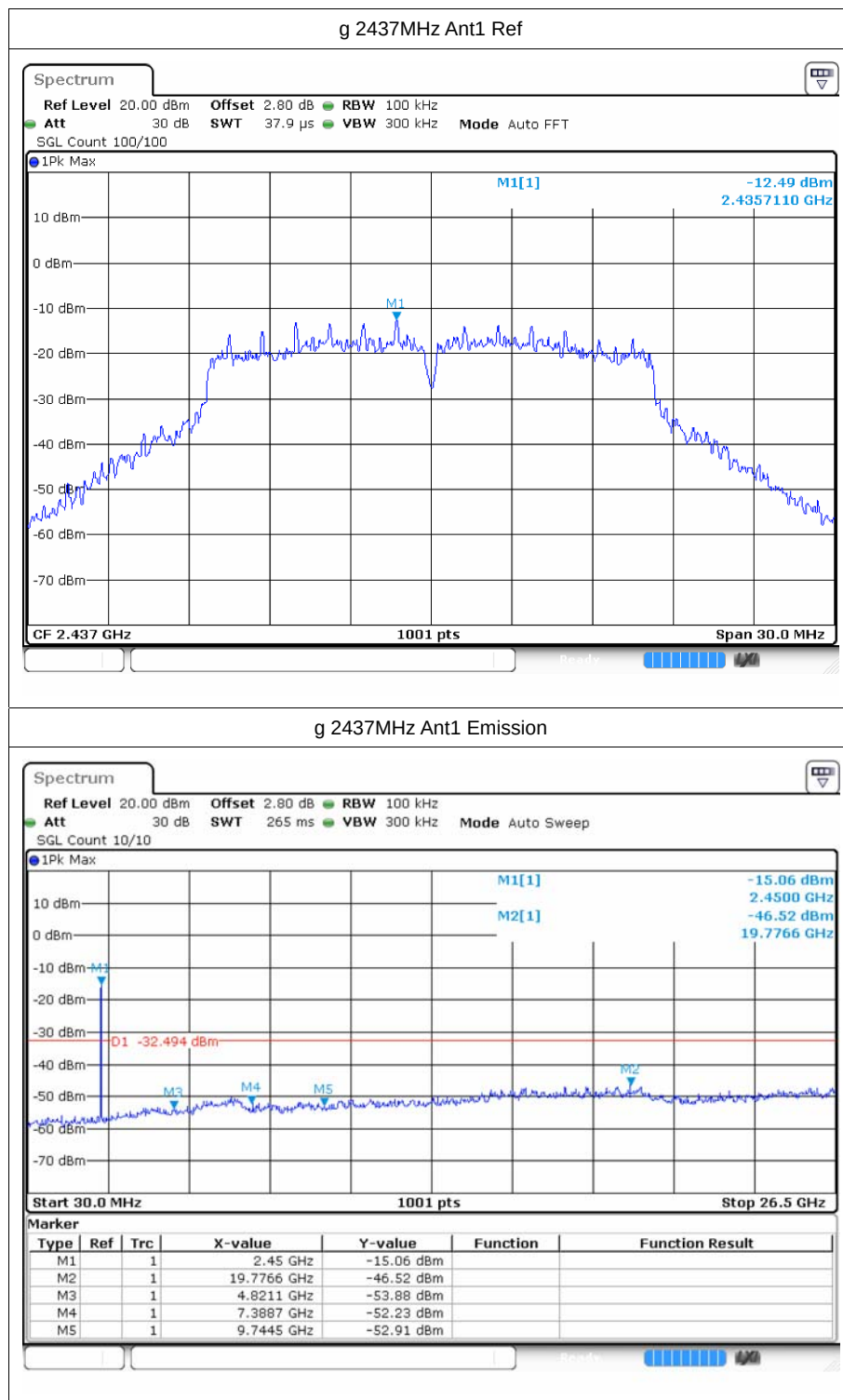
6.2 Test Graphs

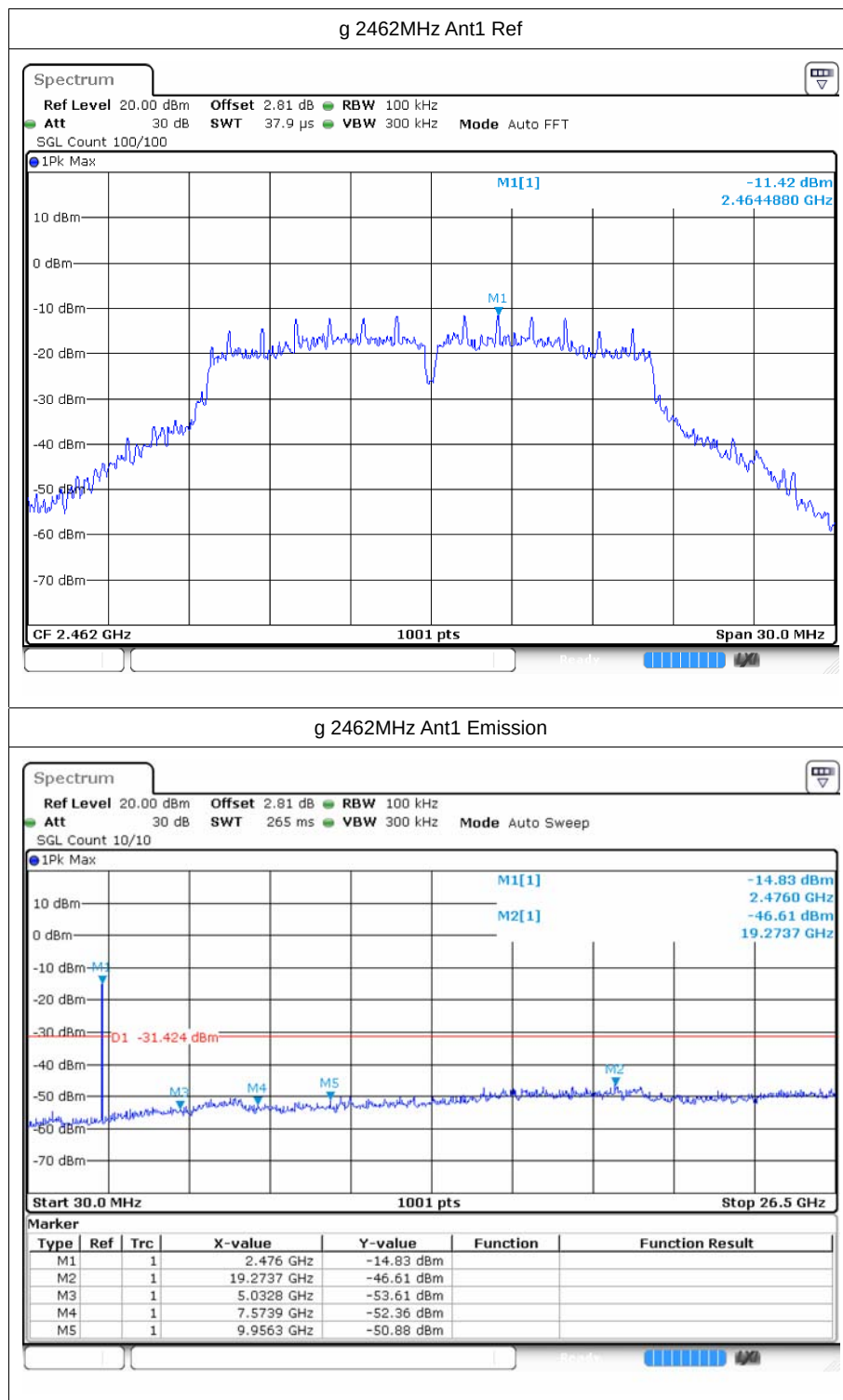


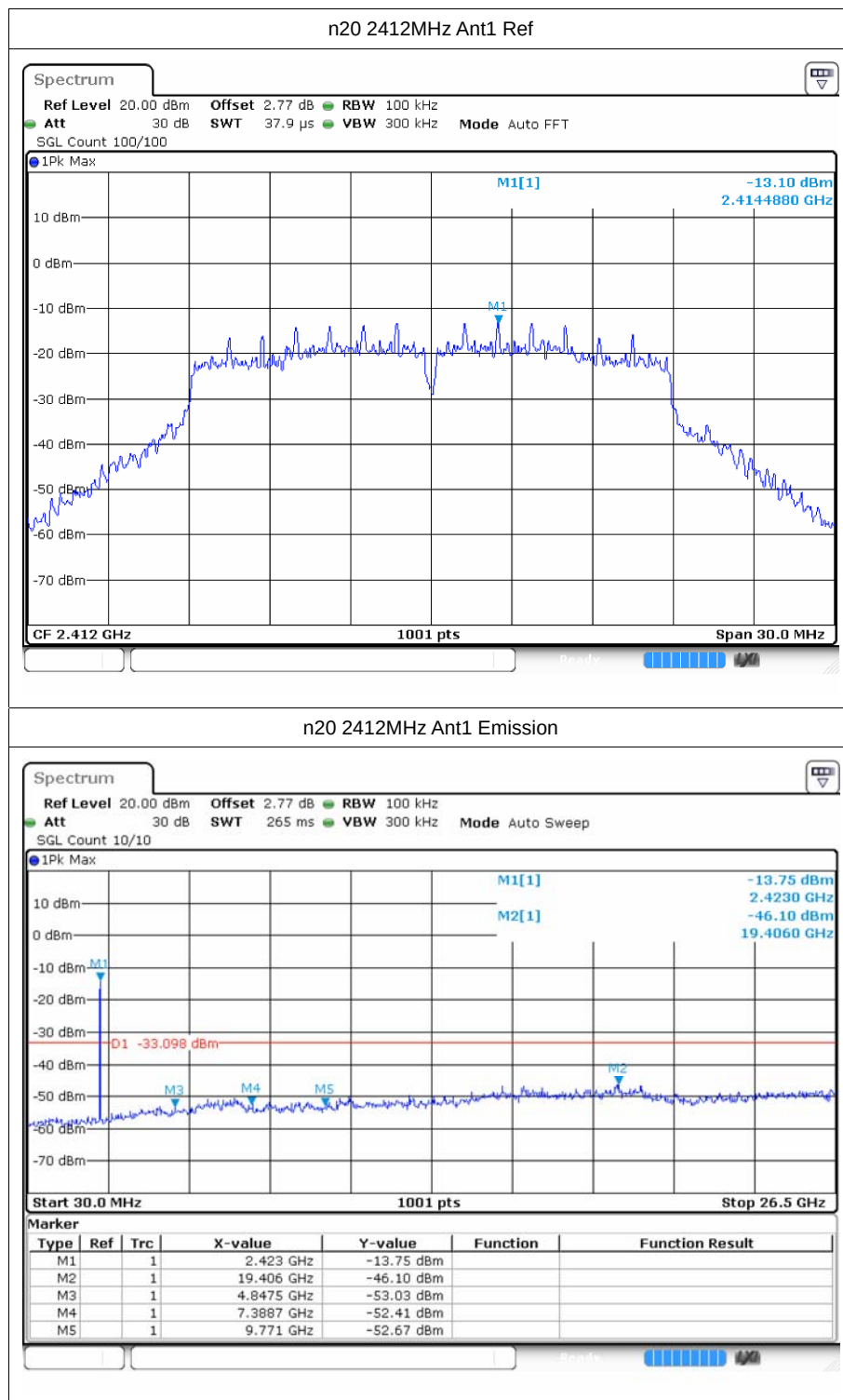


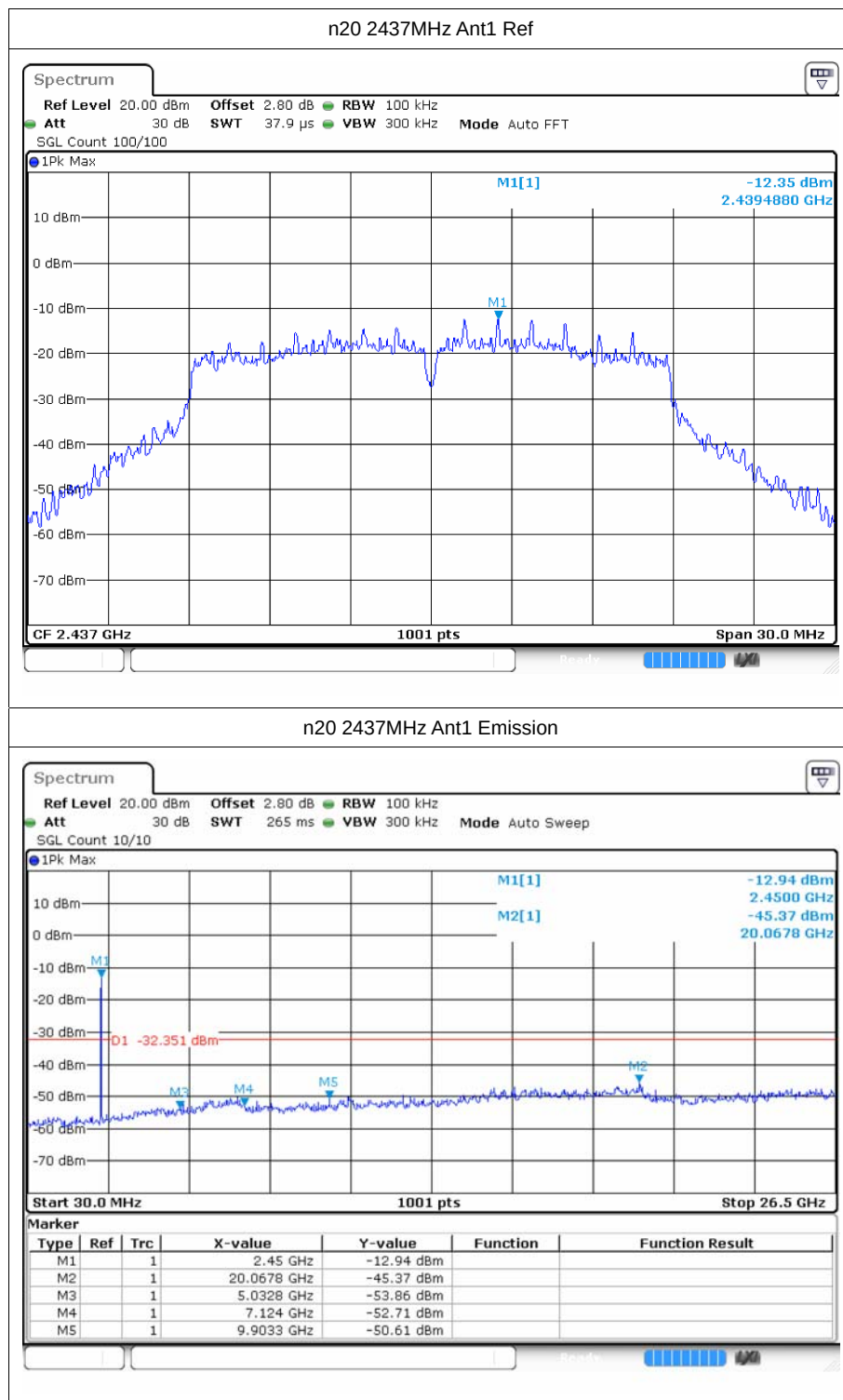


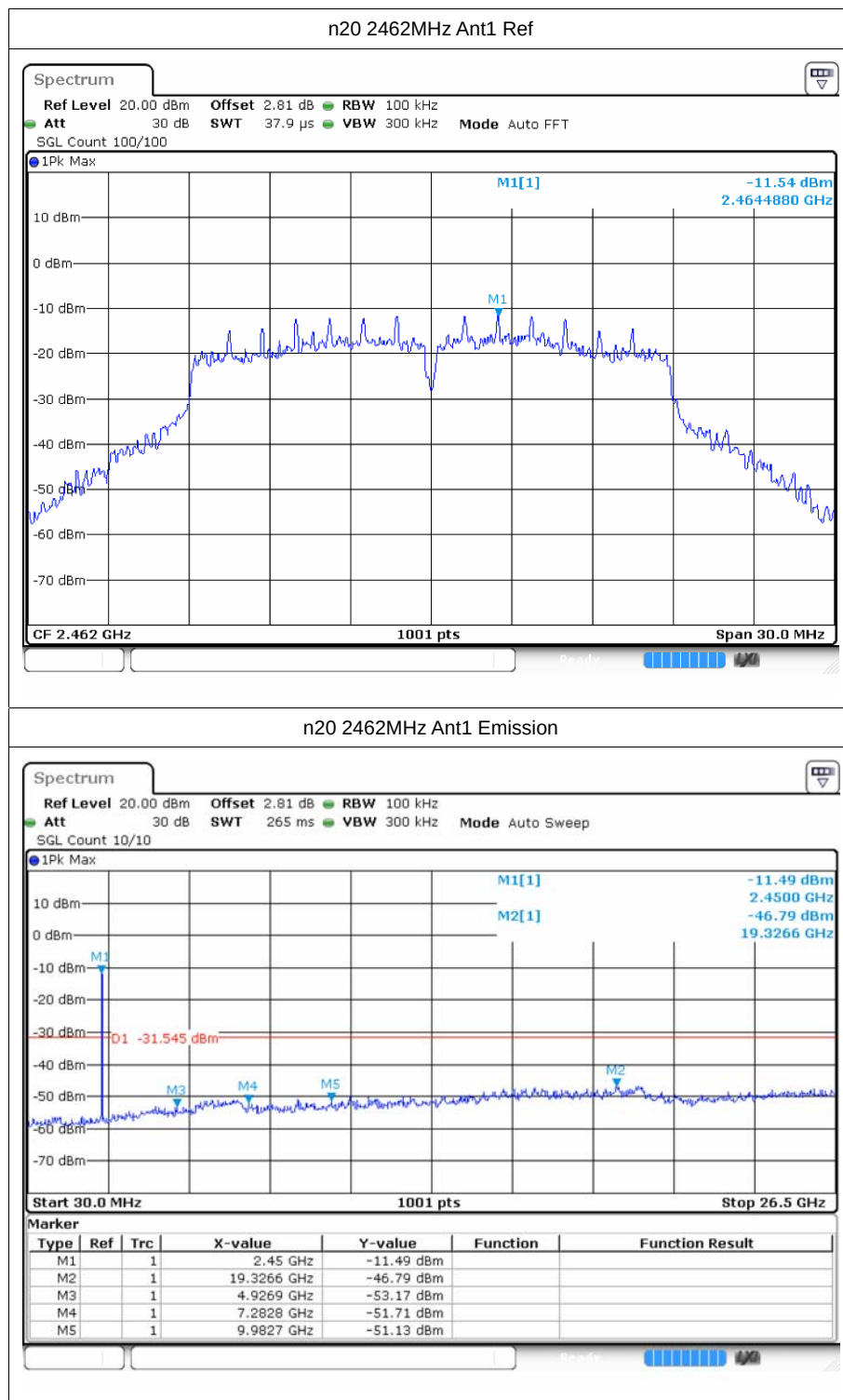


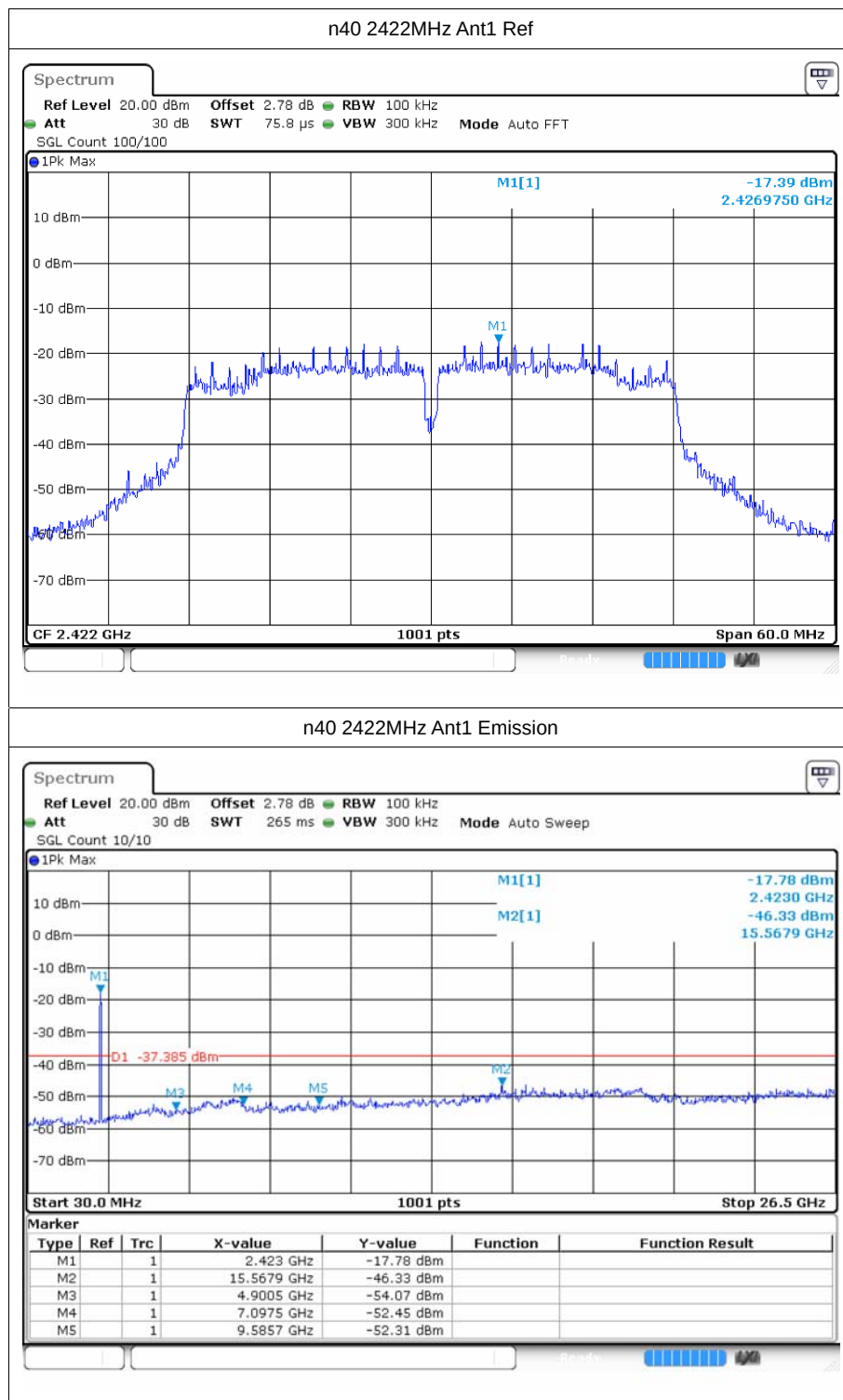


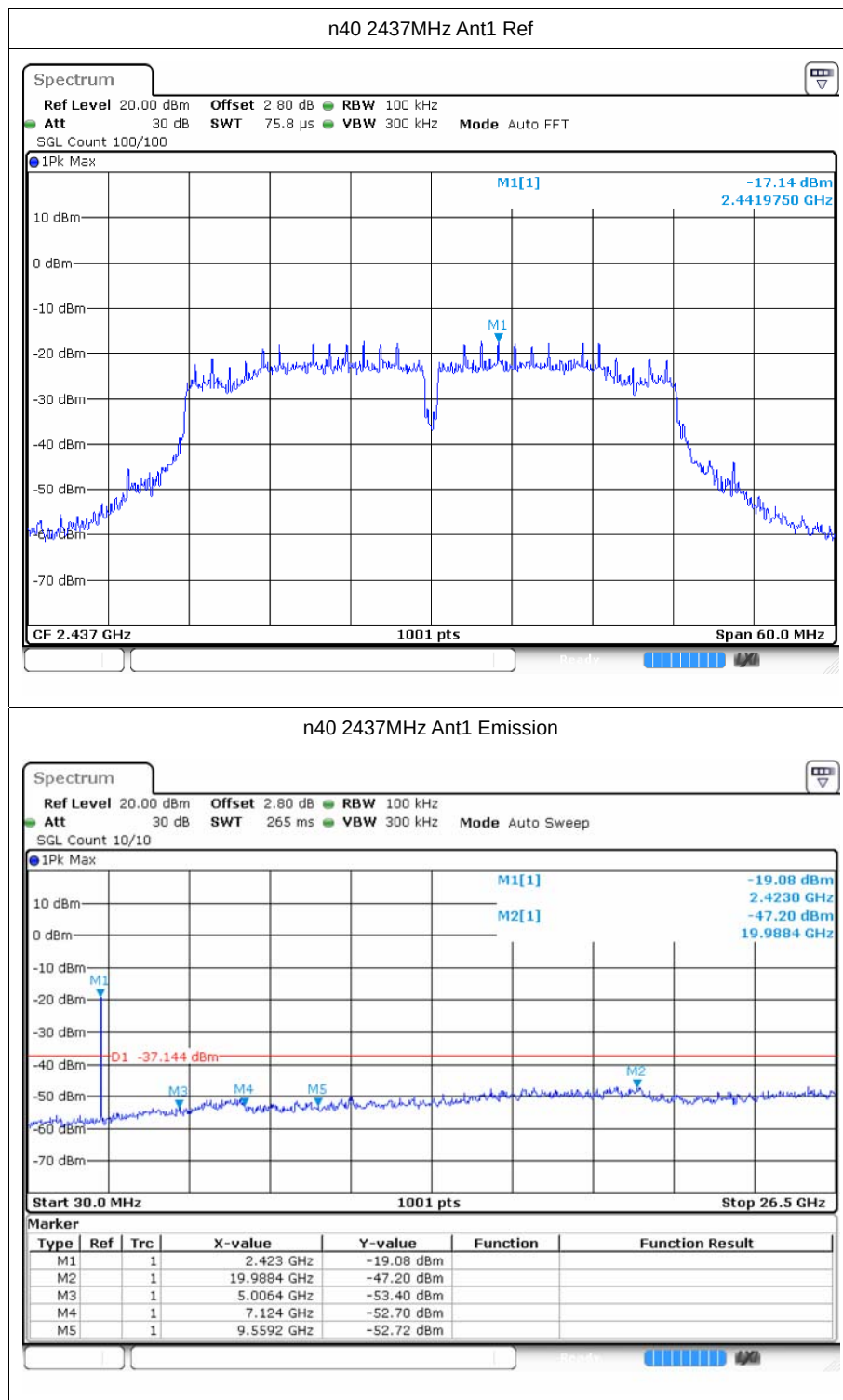


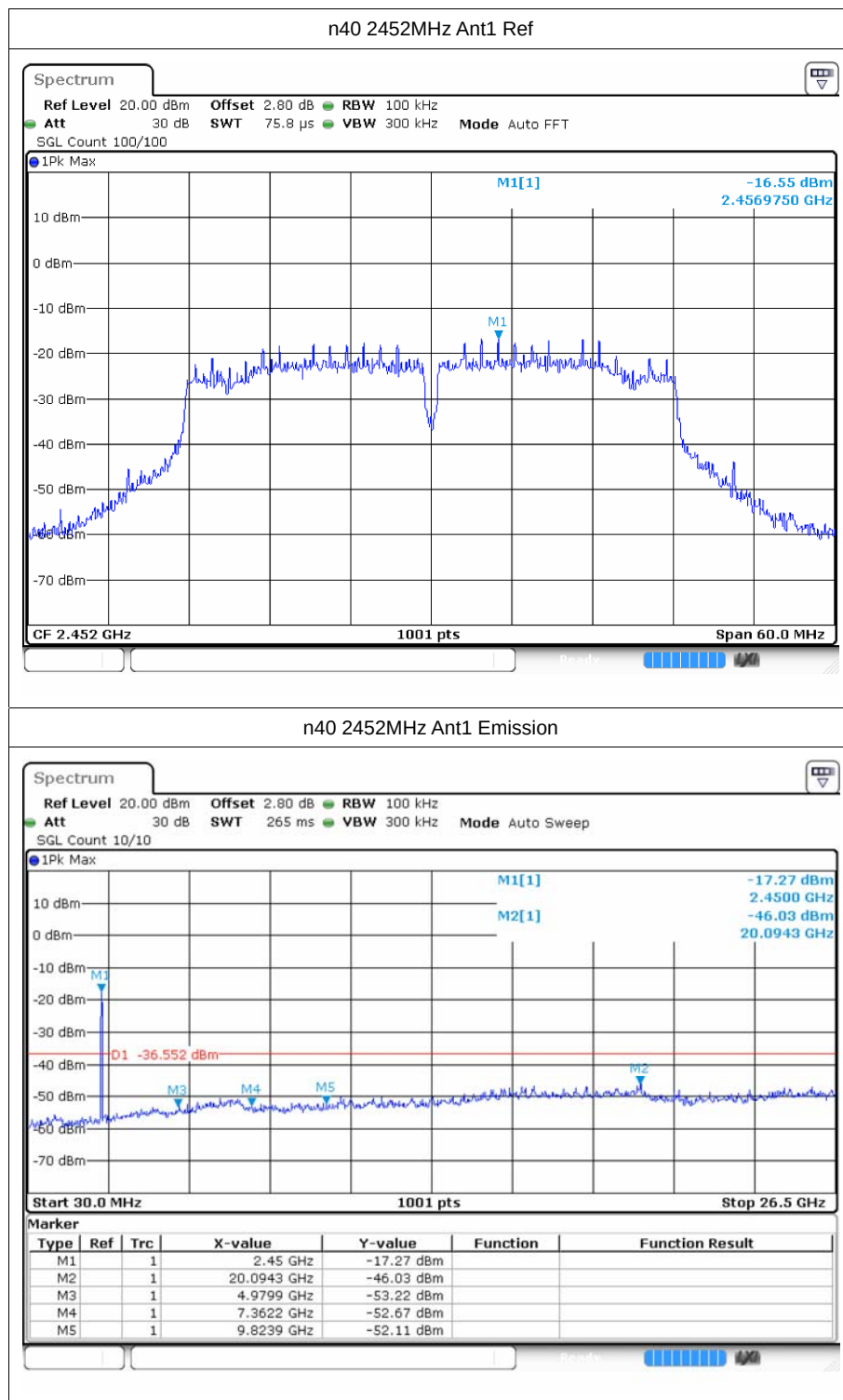














7 Restrict Band

7.1 Test Result

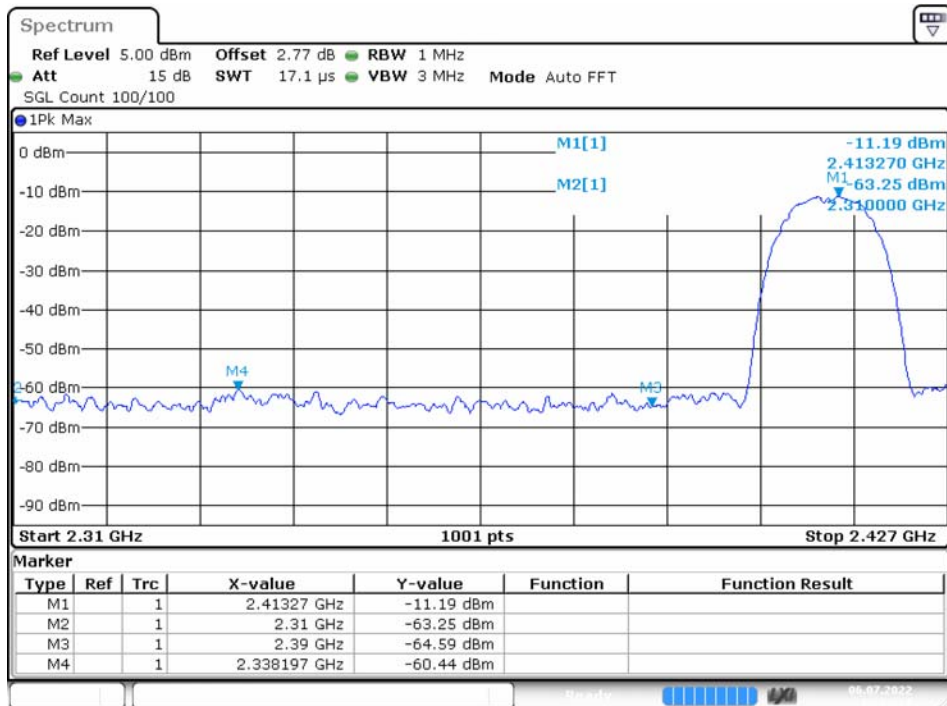
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-63.24	18	49.99	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-73.57	18	39.66	Average	54	Pass
NVNT	b	2412	Ant1	2338.197	-60.43	18	52.8	Peak	74	Pass
NVNT	b	2412	Ant1	2336.676	-71.73	18	41.5	Average	54	Pass
NVNT	b	2412	Ant1	2390	-64.58	18	48.65	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-73.31	18	39.92	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-62.8	18	50.43	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-72.3	18	40.93	Average	54	Pass
NVNT	b	2462	Ant1	2495.495	-60.44	18	52.79	Peak	74	Pass
NVNT	b	2462	Ant1	2484.153	-72.22	18	41.01	Average	54	Pass
NVNT	b	2462	Ant1	2500	-62.97	18	50.26	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-72.81	18	40.42	Average	54	Pass
NVNT	g	2412	Ant1	2310	-62.95	18	50.28	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-72.55	18	40.68	Average	54	Pass
NVNT	g	2412	Ant1	2334.219	-61.25	18	51.98	Peak	74	Pass
NVNT	g	2412	Ant1	2337.144	-70.56	18	42.67	Average	54	Pass
NVNT	g	2412	Ant1	2390	-64.22	18	49.01	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-72.13	18	41.1	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-61.96	18	51.27	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-71.58	18	41.65	Average	54	Pass
NVNT	g	2462	Ant1	2497.456	-60.79	18	52.44	Peak	74	Pass
NVNT	g	2462	Ant1	2486.061	-71.02	18	42.21	Average	54	Pass
NVNT	g	2462	Ant1	2500	-61.69	18	51.54	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-71.92	18	41.31	Average	54	Pass
NVNT	n20	2412	Ant1	2310	-63.57	18	49.66	Peak	74	Pass
NVNT	n20	2412	Ant1	2310	-72.57	18	40.66	Average	54	Pass
NVNT	n20	2412	Ant1	2333.166	-61.36	18	51.87	Peak	74	Pass
NVNT	n20	2412	Ant1	2339.835	-70.17	18	43.06	Average	54	Pass
NVNT	n20	2412	Ant1	2390	-63.43	18	49.8	Peak	74	Pass
NVNT	n20	2412	Ant1	2390	-72.62	18	40.61	Average	54	Pass
NVNT	n20	2462	Ant1	2483.5	-62.77	18	50.46	Peak	74	Pass
NVNT	n20	2462	Ant1	2483.5	-70.16	18	43.07	Average	54	Pass
NVNT	n20	2462	Ant1	2494.859	-61.78	18	51.45	Peak	74	Pass
NVNT	n20	2462	Ant1	2483.517	-70.16	18	43.07	Average	54	Pass



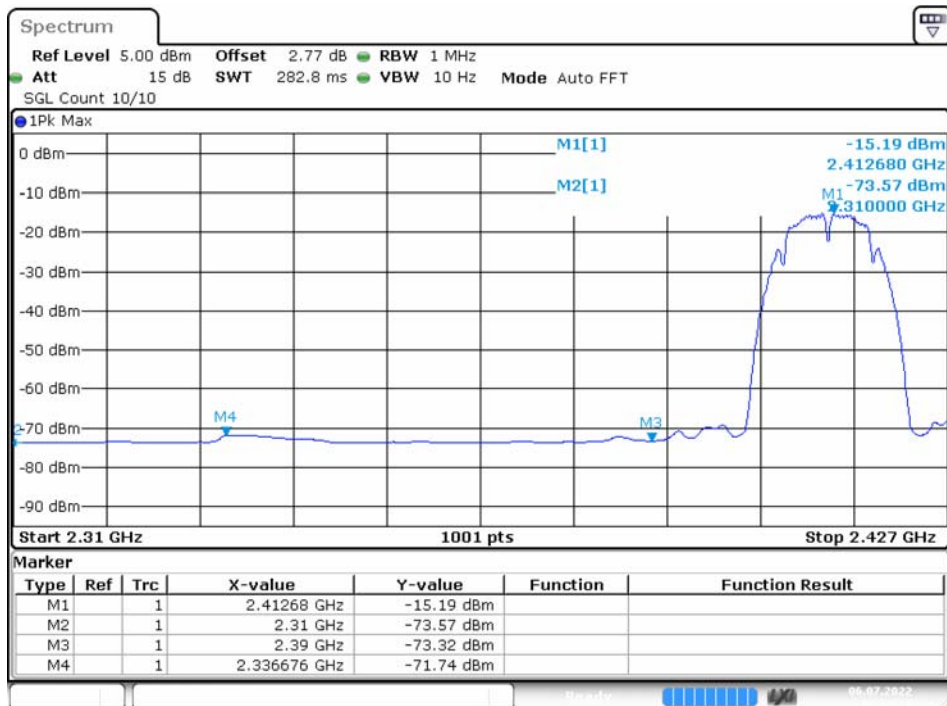
NVNT	n20	2462	Ant1	2500	-61.8	18	51.43	Peak	74	Pass
NVNT	n20	2462	Ant1	2500	-72.01	18	41.22	Average	54	Pass
NVNT	n40	2422	Ant1	2310	-64.67	18	48.56	Peak	74	Pass
NVNT	n40	2422	Ant1	2310	-72.24	18	40.99	Average	54	Pass
NVNT	n40	2422	Ant1	2364.244	-60.84	18	52.39	Peak	74	Pass
NVNT	n40	2422	Ant1	2343.228	-70.22	18	43.01	Average	54	Pass
NVNT	n40	2422	Ant1	2390	-63.09	18	50.14	Peak	74	Pass
NVNT	n40	2422	Ant1	2390	-70.26	18	42.97	Average	54	Pass
NVNT	n40	2452	Ant1	2483.5	-62.85	18	50.38	Peak	74	Pass
NVNT	n40	2452	Ant1	2483.5	-71.43	18	41.8	Average	54	Pass
NVNT	n40	2452	Ant1	2492.824	-60.88	18	52.35	Peak	74	Pass
NVNT	n40	2452	Ant1	2486.194	-69.59	18	43.64	Average	54	Pass
NVNT	n40	2452	Ant1	2500	-65.7	18	47.53	Peak	74	Pass
NVNT	n40	2452	Ant1	2500	-72.25	18	40.98	Average	54	Pass

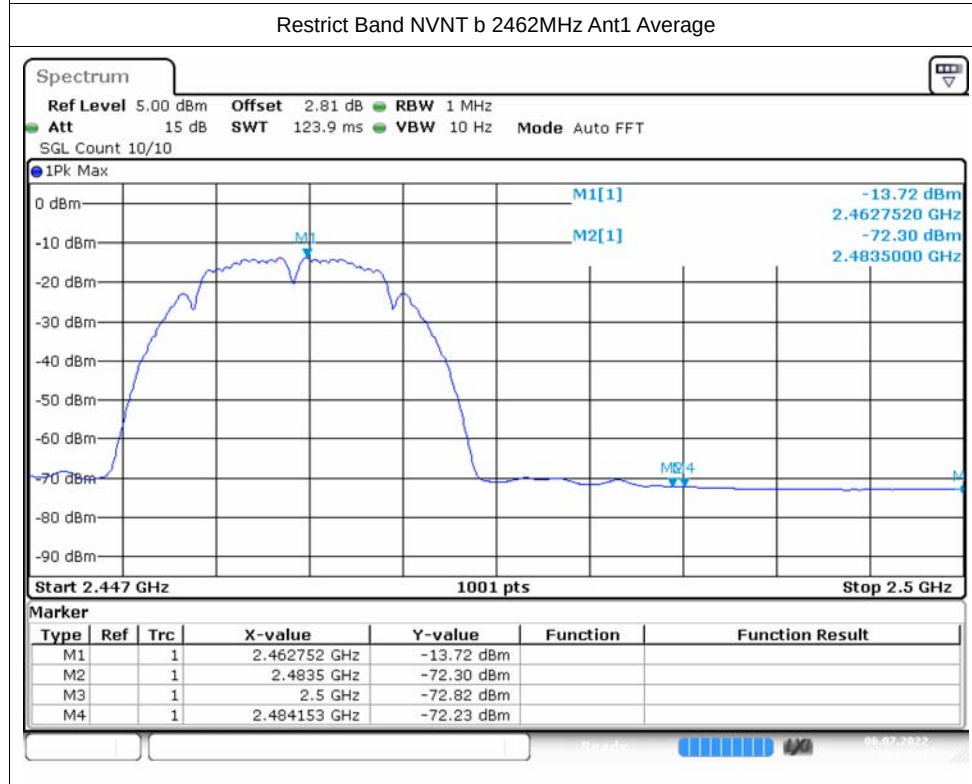
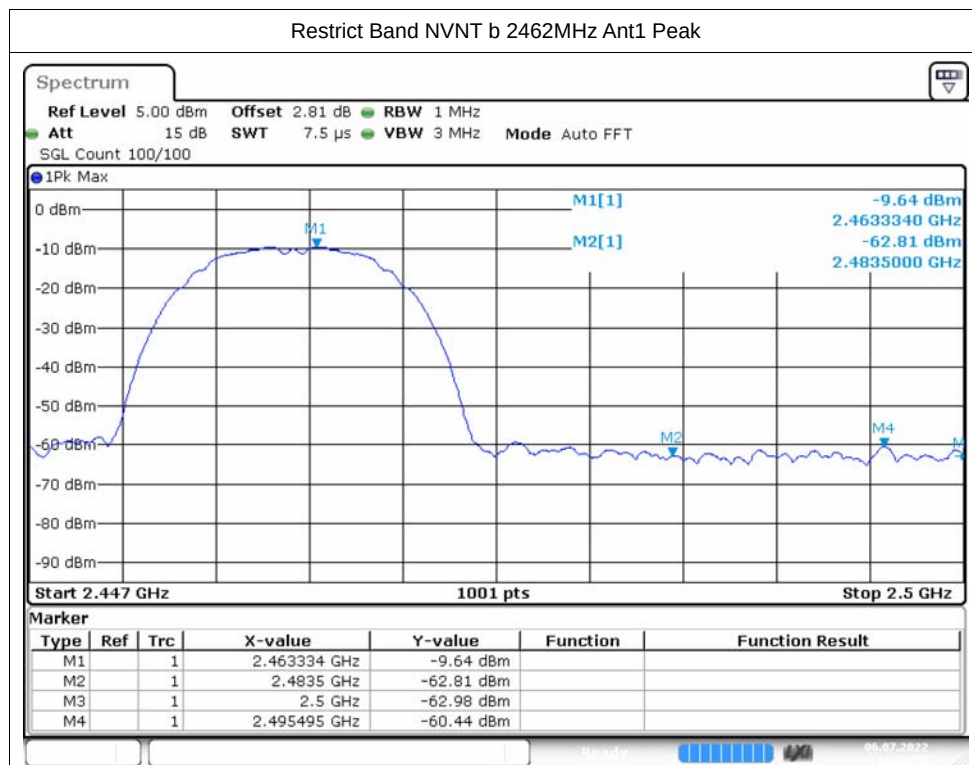
Test Graphs

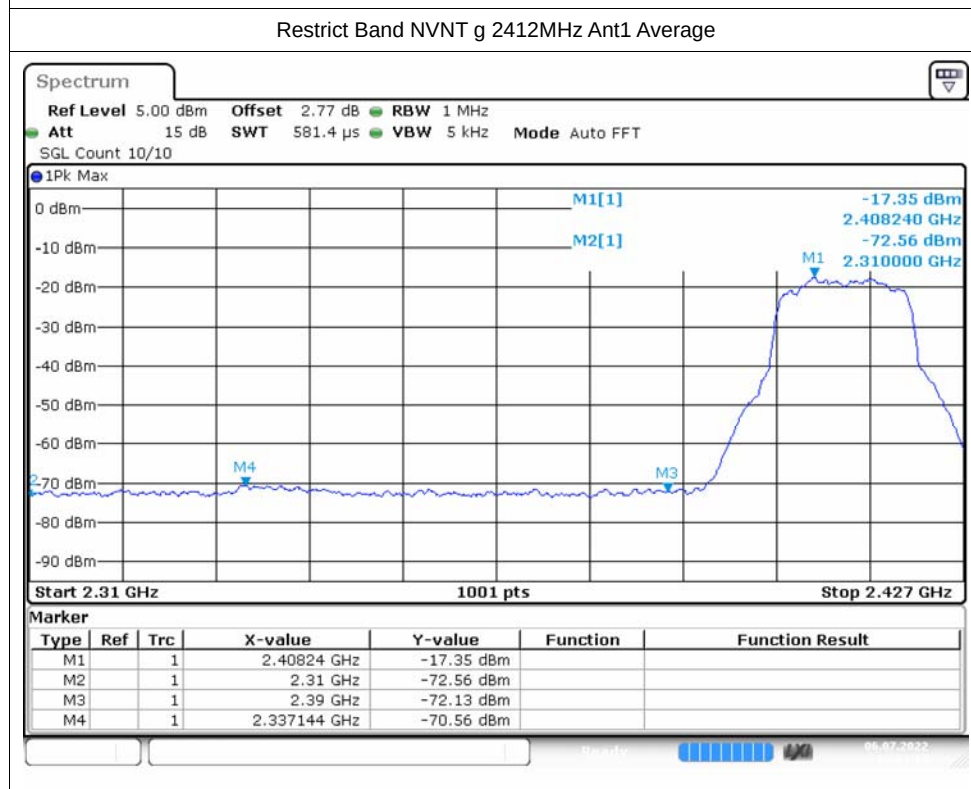
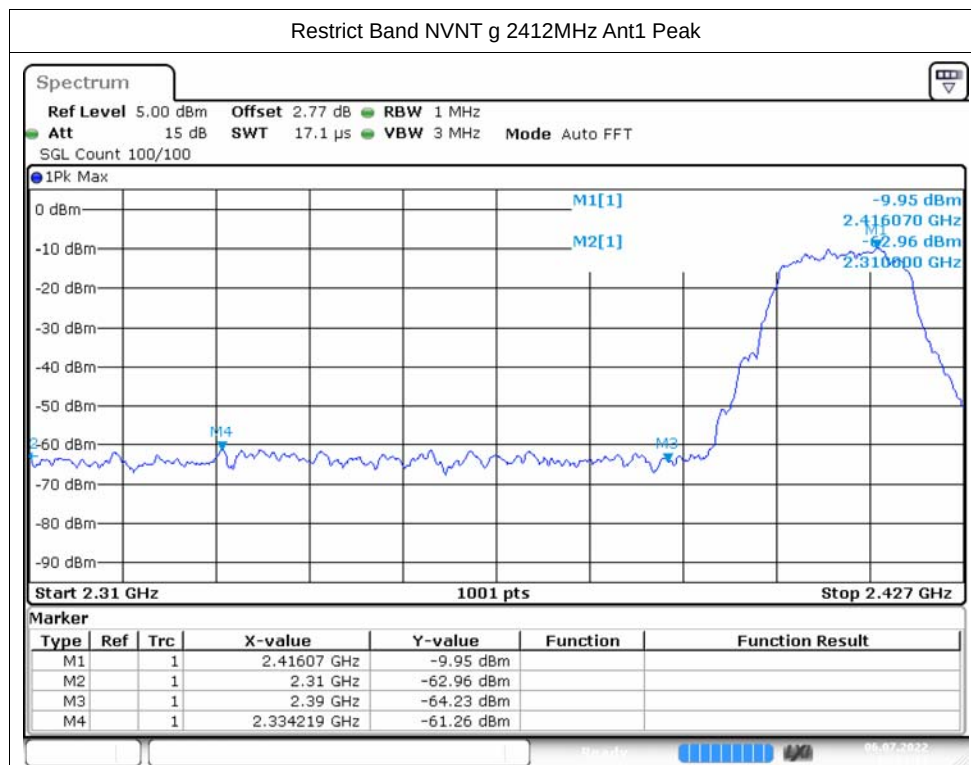
Restrict Band NVNT b 2412MHz Ant1 Peak

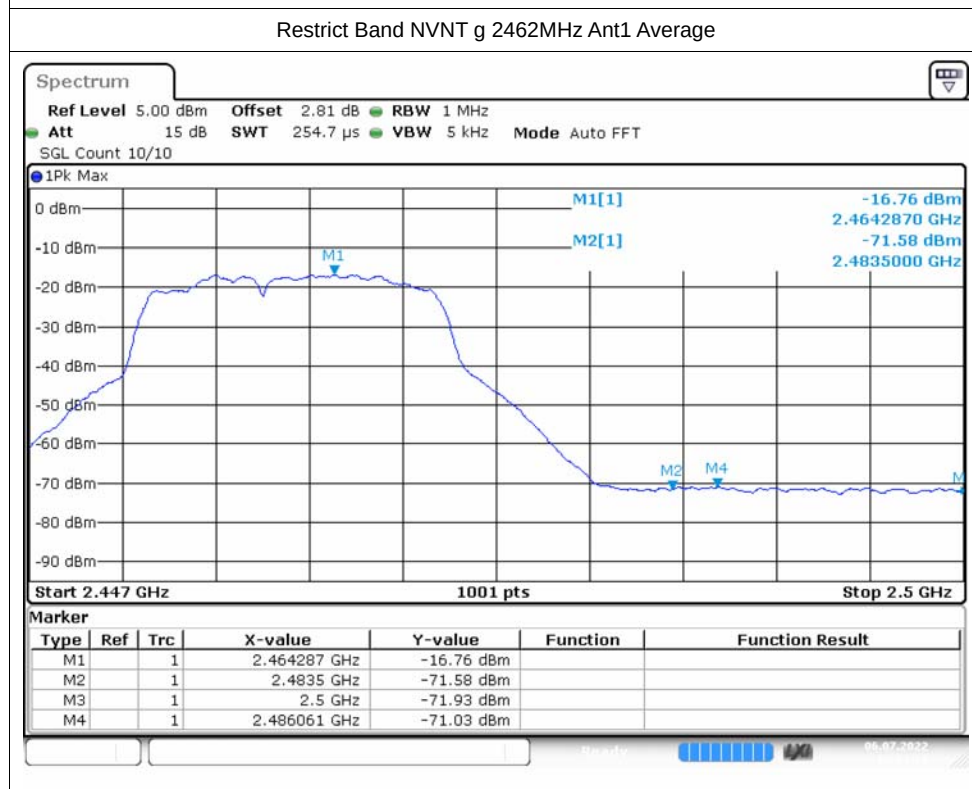
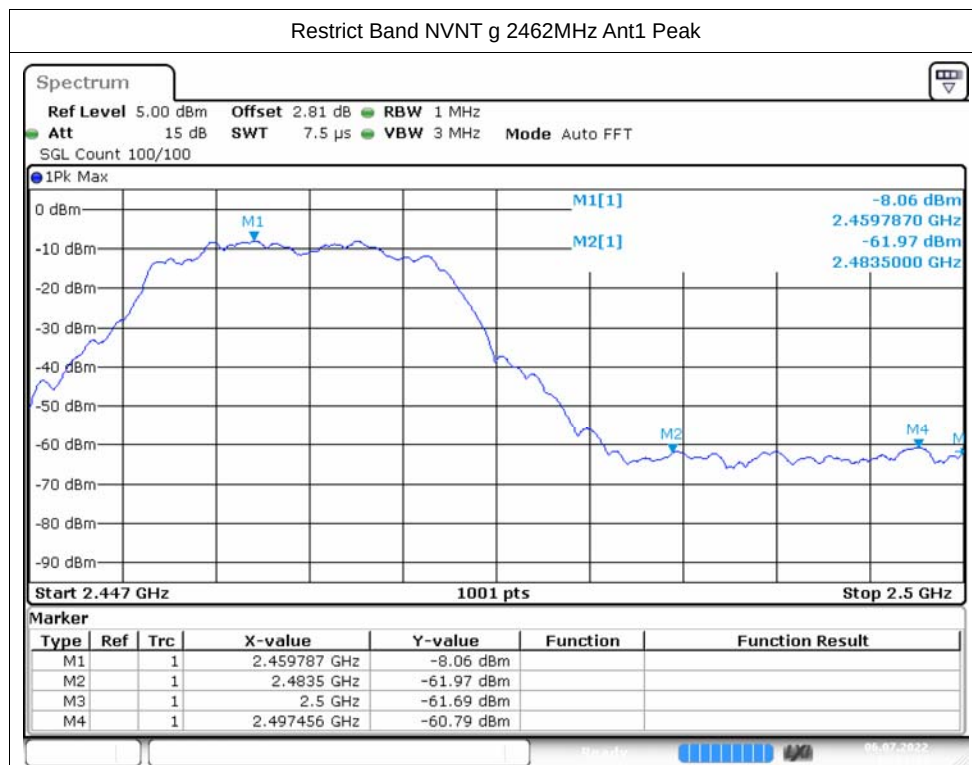


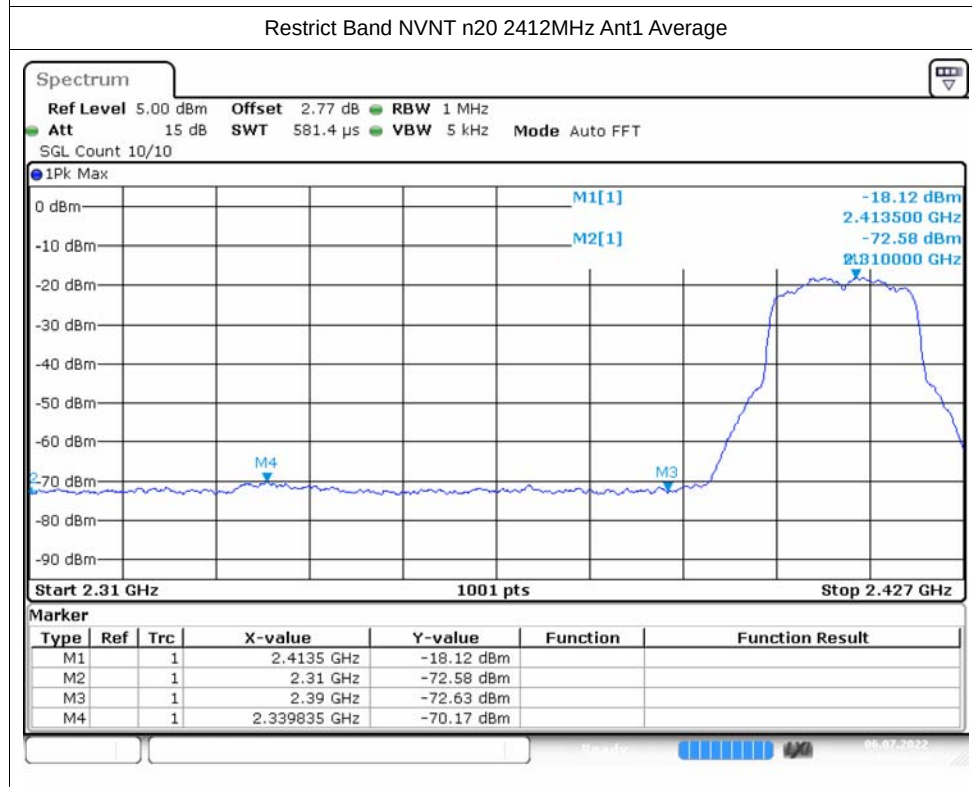
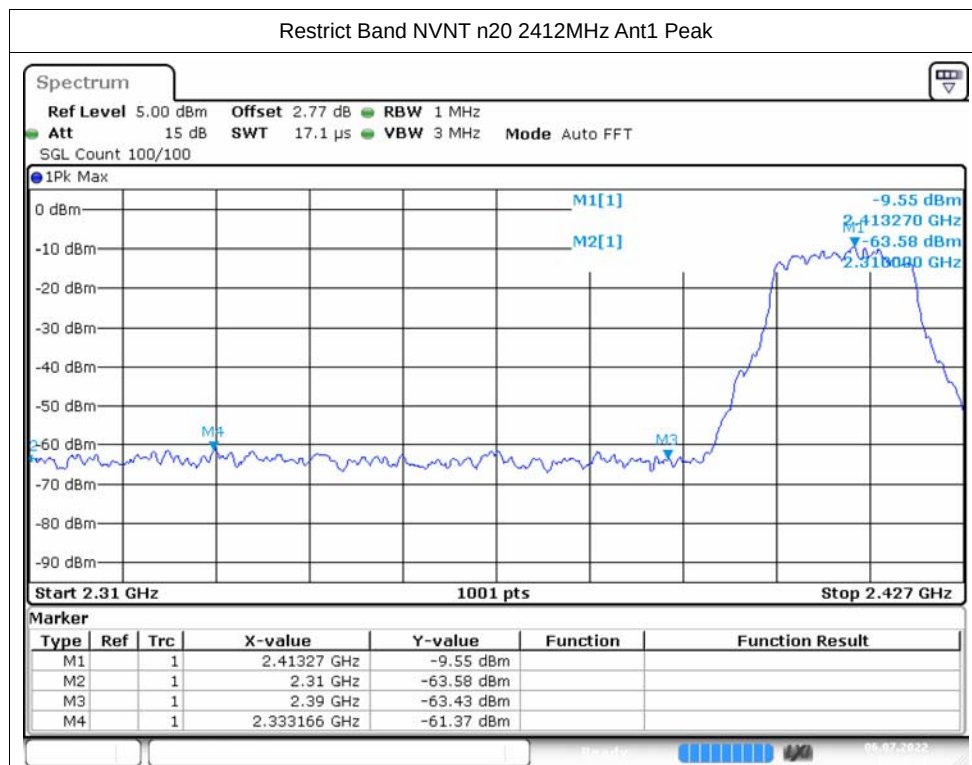
Restrict Band NVNT b 2412MHz Ant1 Average

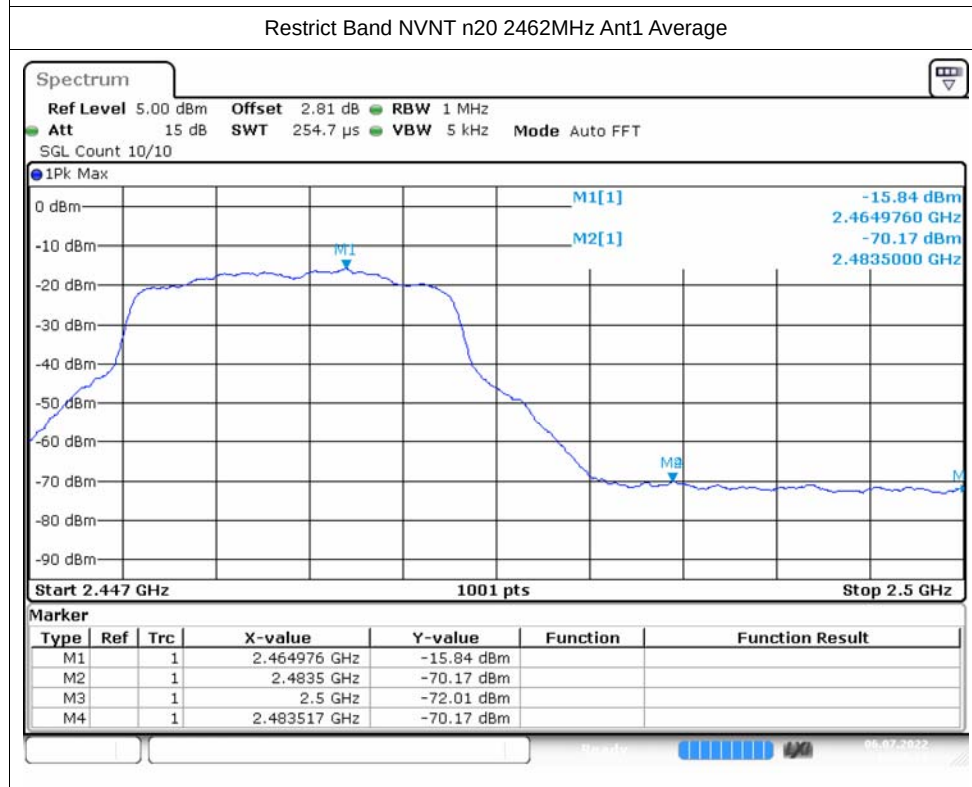
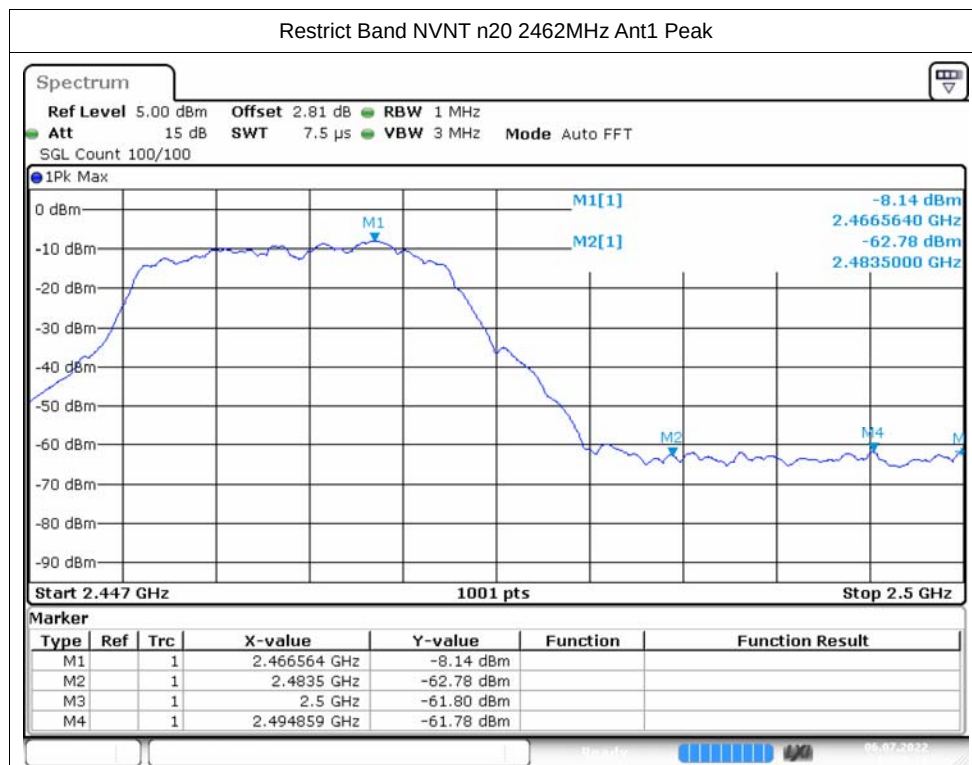


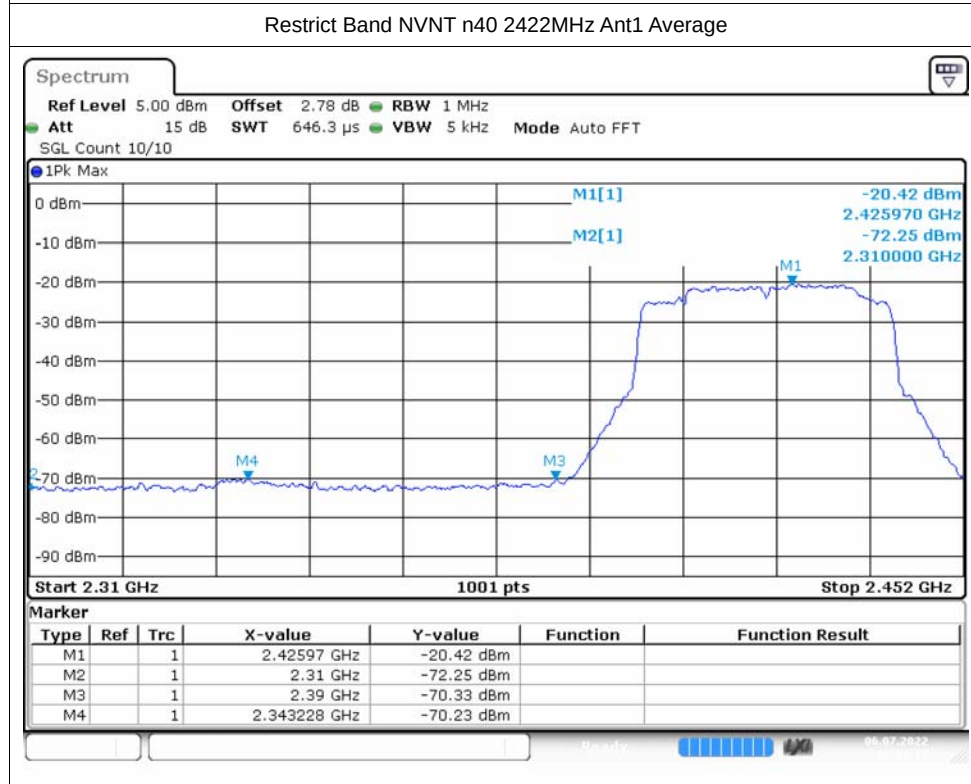
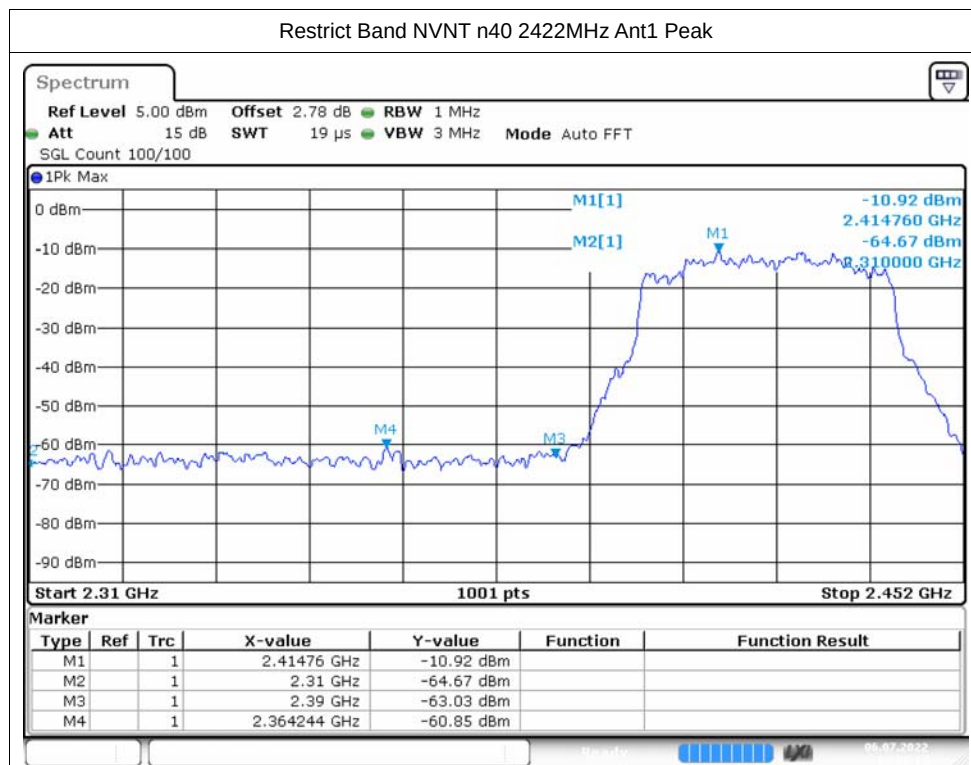


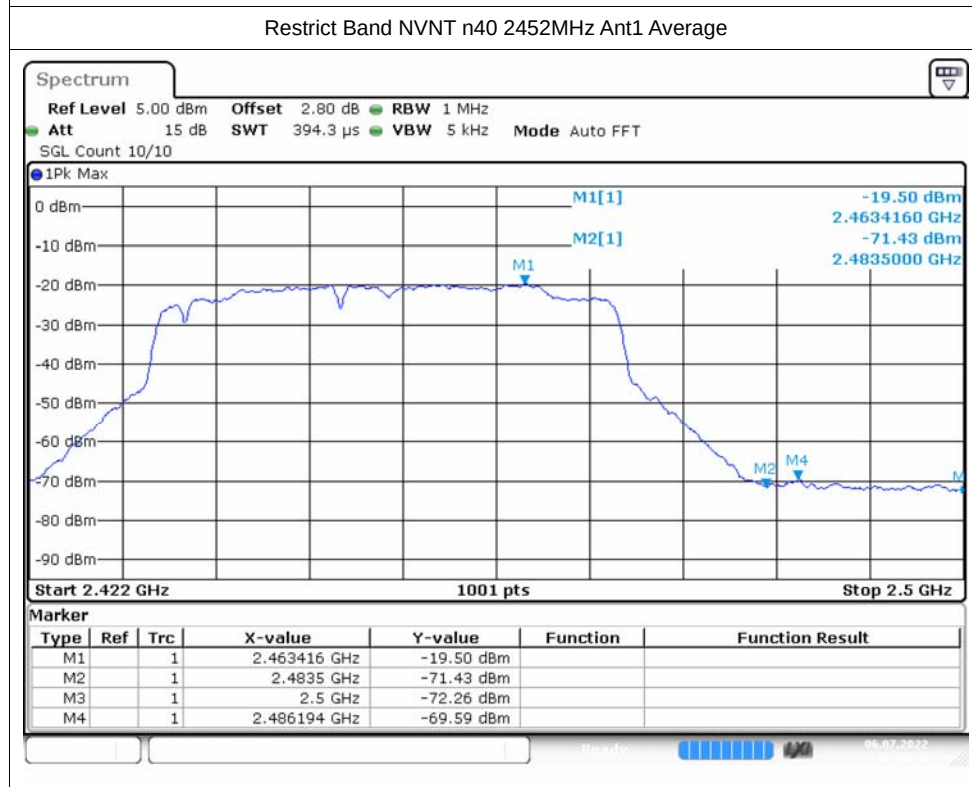
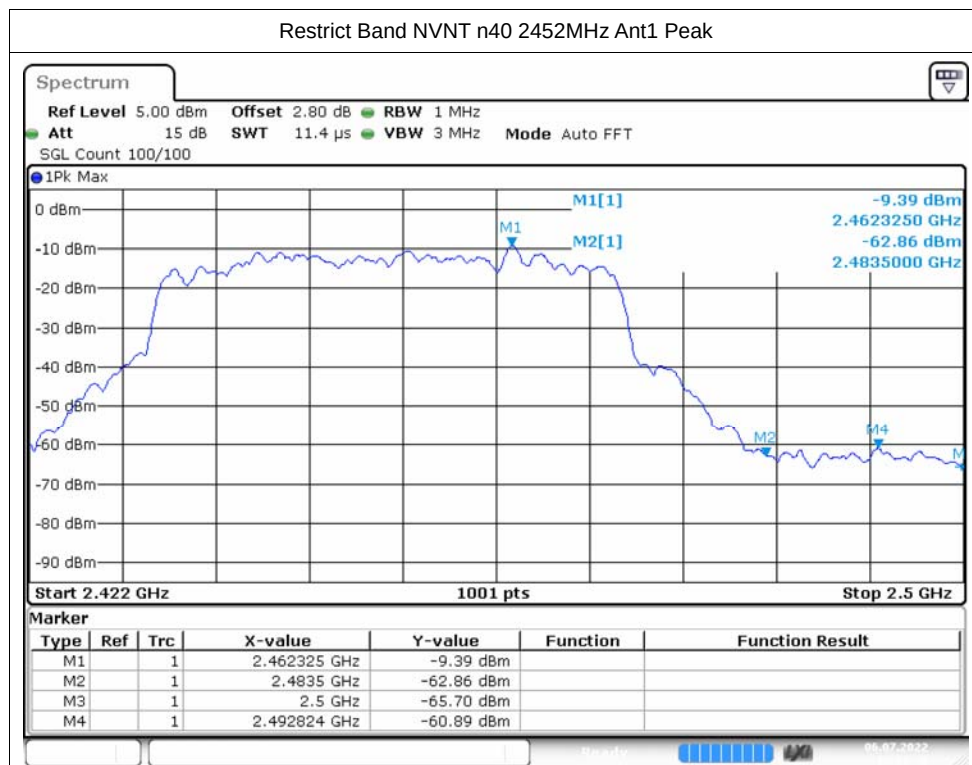












---The End---