



Appendix B

RF Test Data for BT (BLE) (Conducted Measurement)

Product Name: Wireless earphones

Trade Mark: N/A

Test Model: X-Smart

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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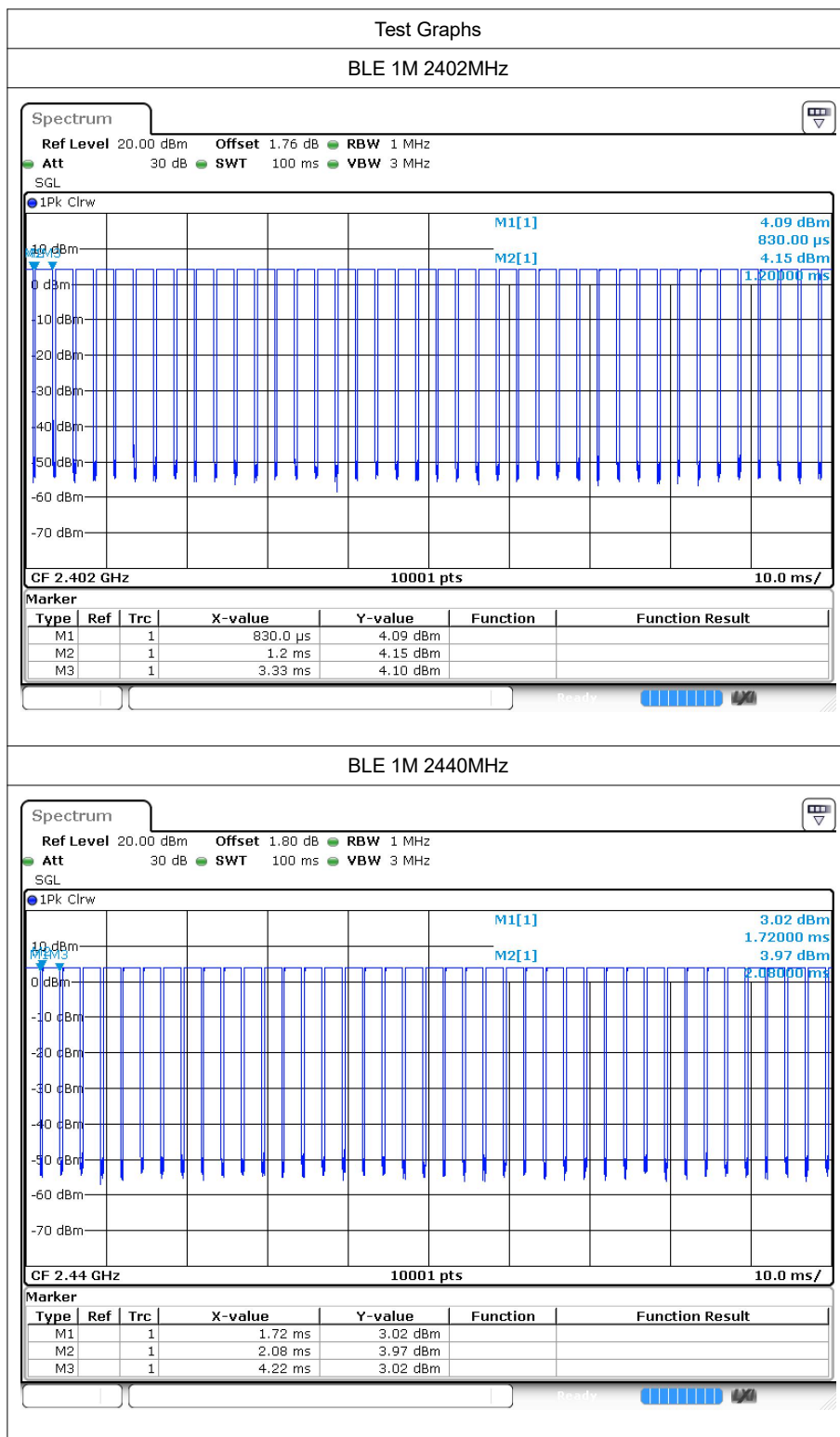
1 Duty Cycle

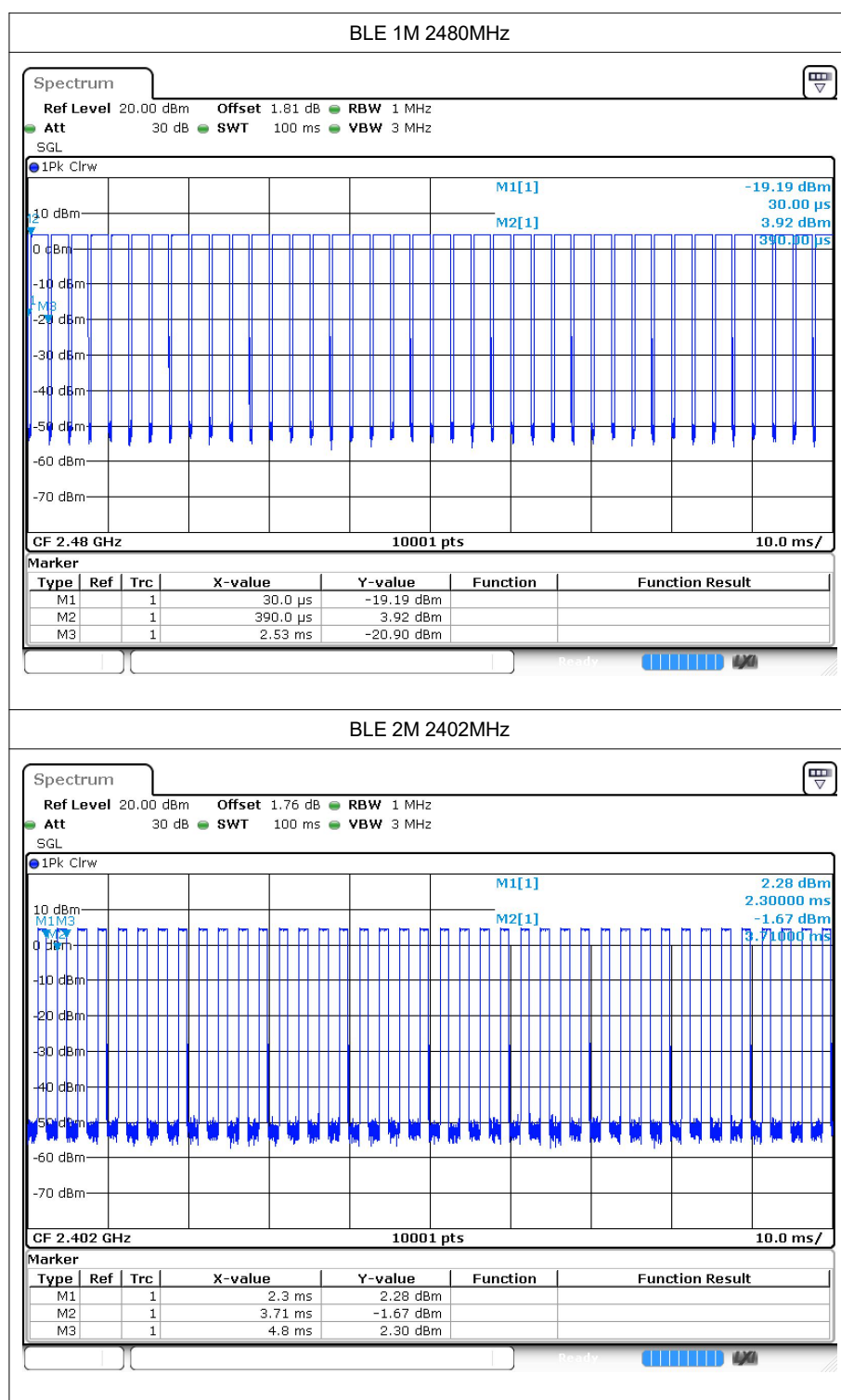
1.1 Test Result

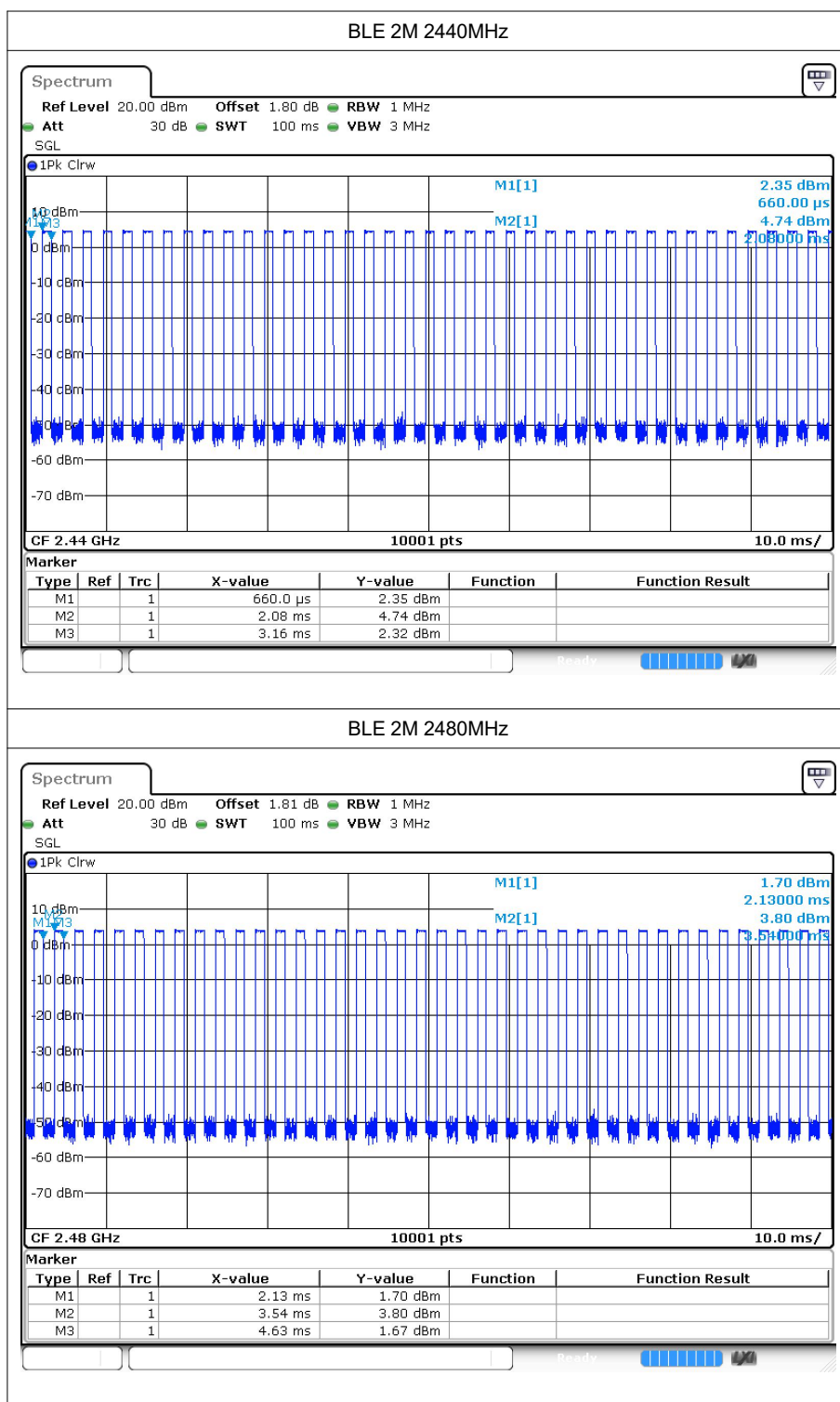
Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
BLE 1M	2402	85.6	0.68	0.47
BLE 1M	2440	86	0.65	0.47
BLE 1M	2480	85.9	0.66	0.47
BLE 2M	2402	44	3.57	0.92
BLE 2M	2440	43.61	3.6	0.93
BLE 2M	2480	44	3.57	0.92

Note: Left and right ear have been tested and the only shows the worst case mode.

1.2 Test Graphs







2 Maximum Conducted Output Power

2.1 Test Result

Left:

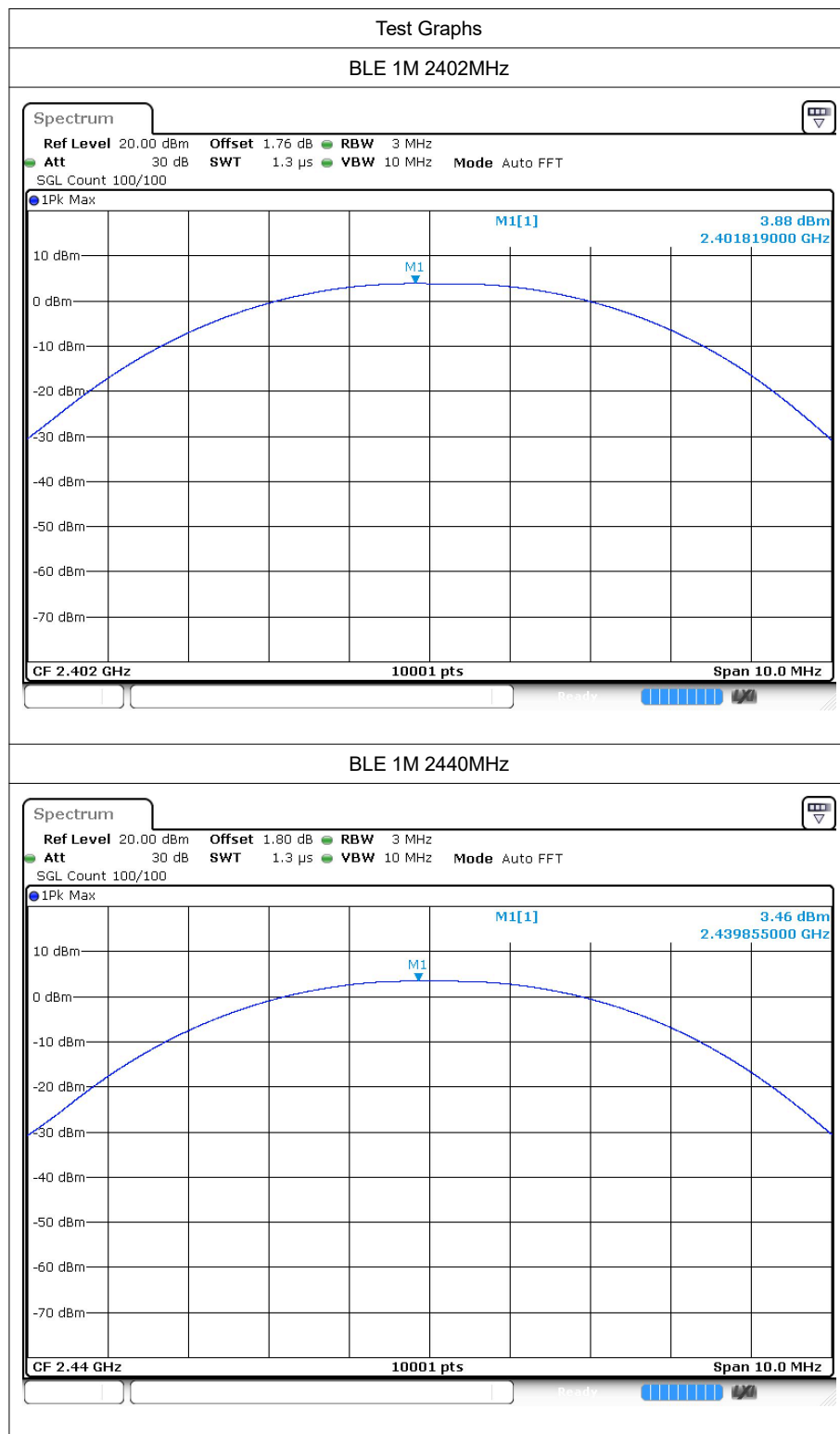
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	3.88	30	Pass
BLE 1M	2440	3.46	30	Pass
BLE 1M	2480	2.85	30	Pass
BLE 2M	2402	3.88	30	Pass
BLE 2M	2440	3.61	30	Pass
BLE 2M	2480	3.12	30	Pass

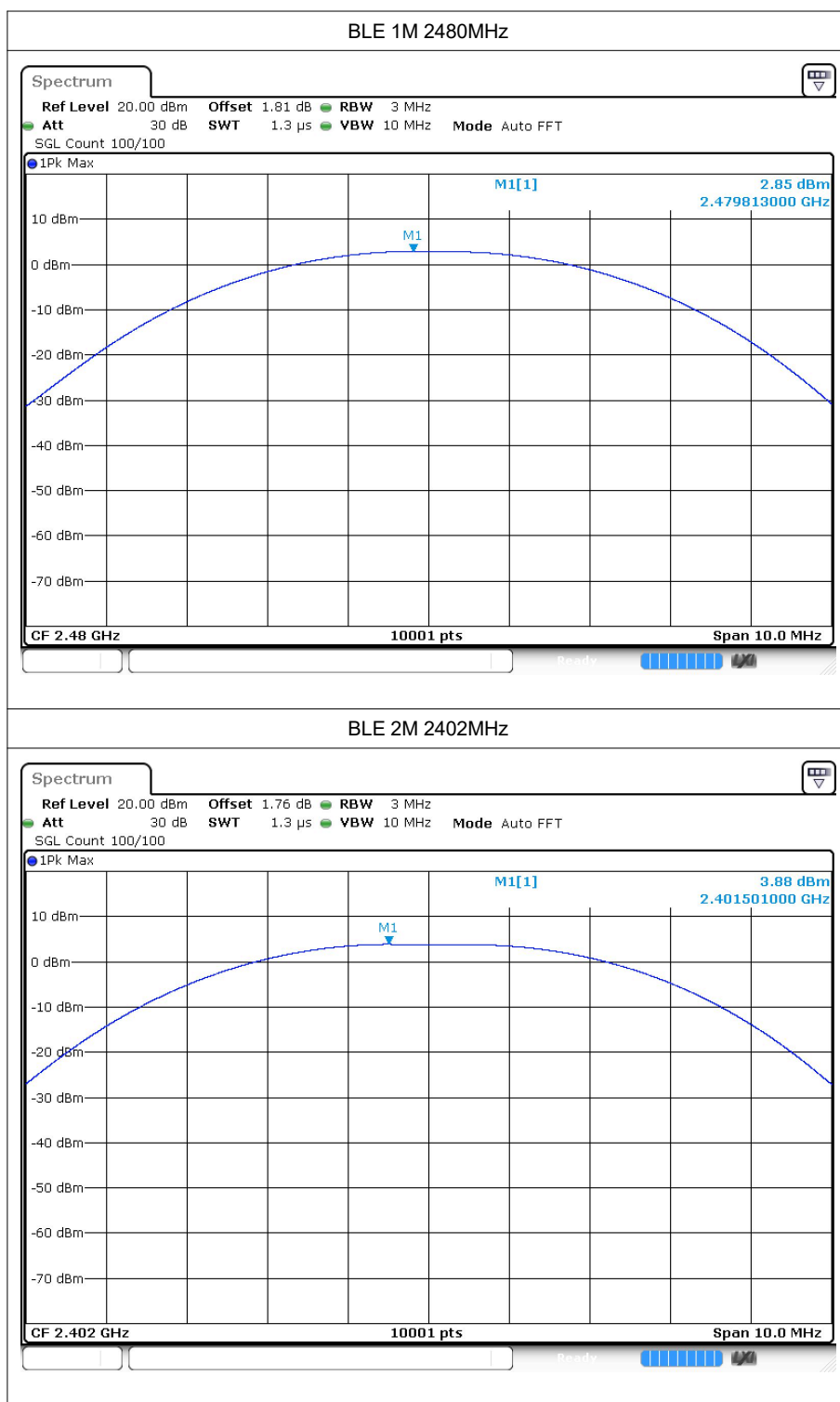
Right:

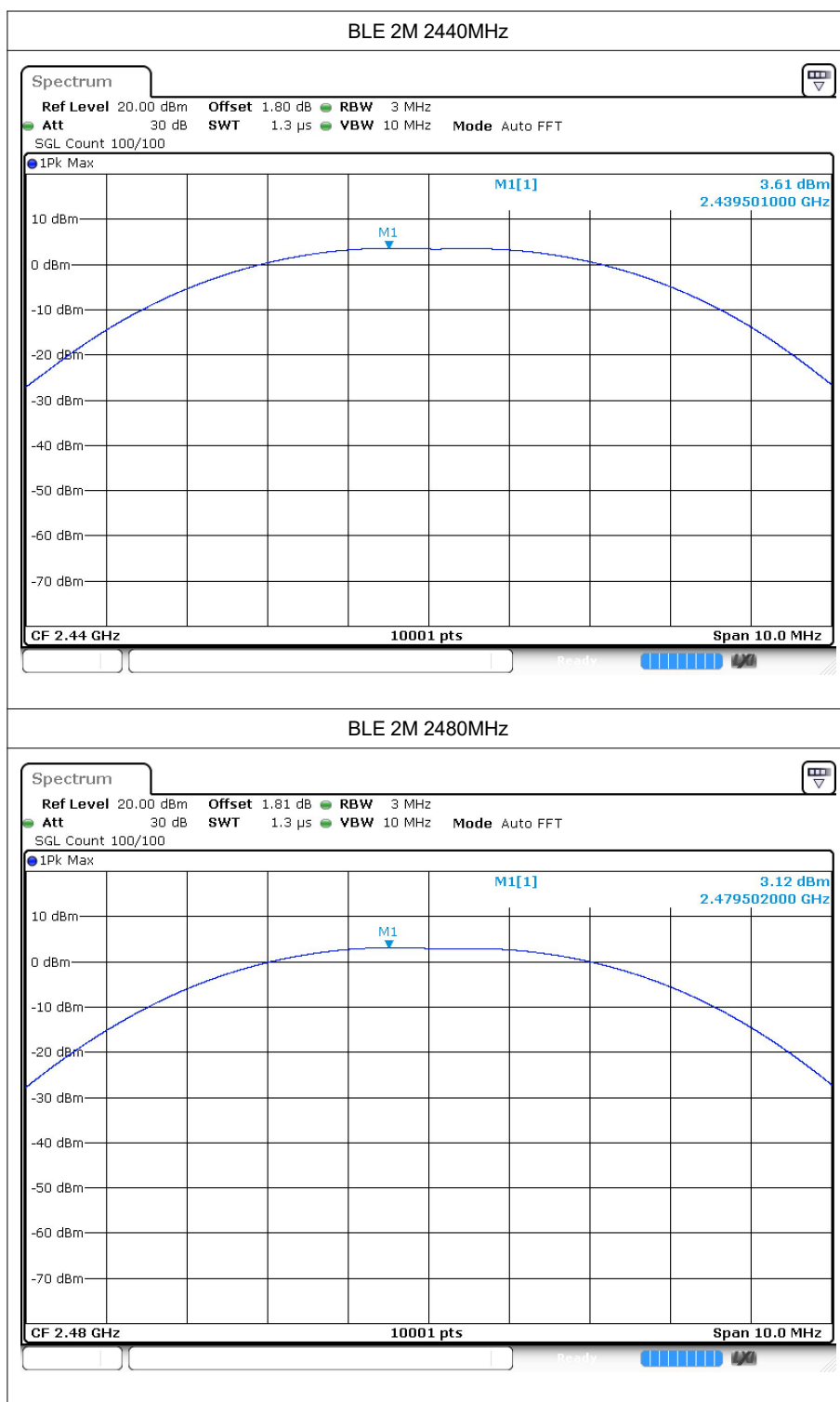
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	4.86	30	Pass
BLE 1M	2440	4.72	30	Pass
BLE 1M	2480	4.02	30	Pass
BLE 2M	2402	4.93	30	Pass
BLE 2M	2440	4.91	30	Pass
BLE 2M	2480	4.29	30	Pass

2.2 Test Graphs

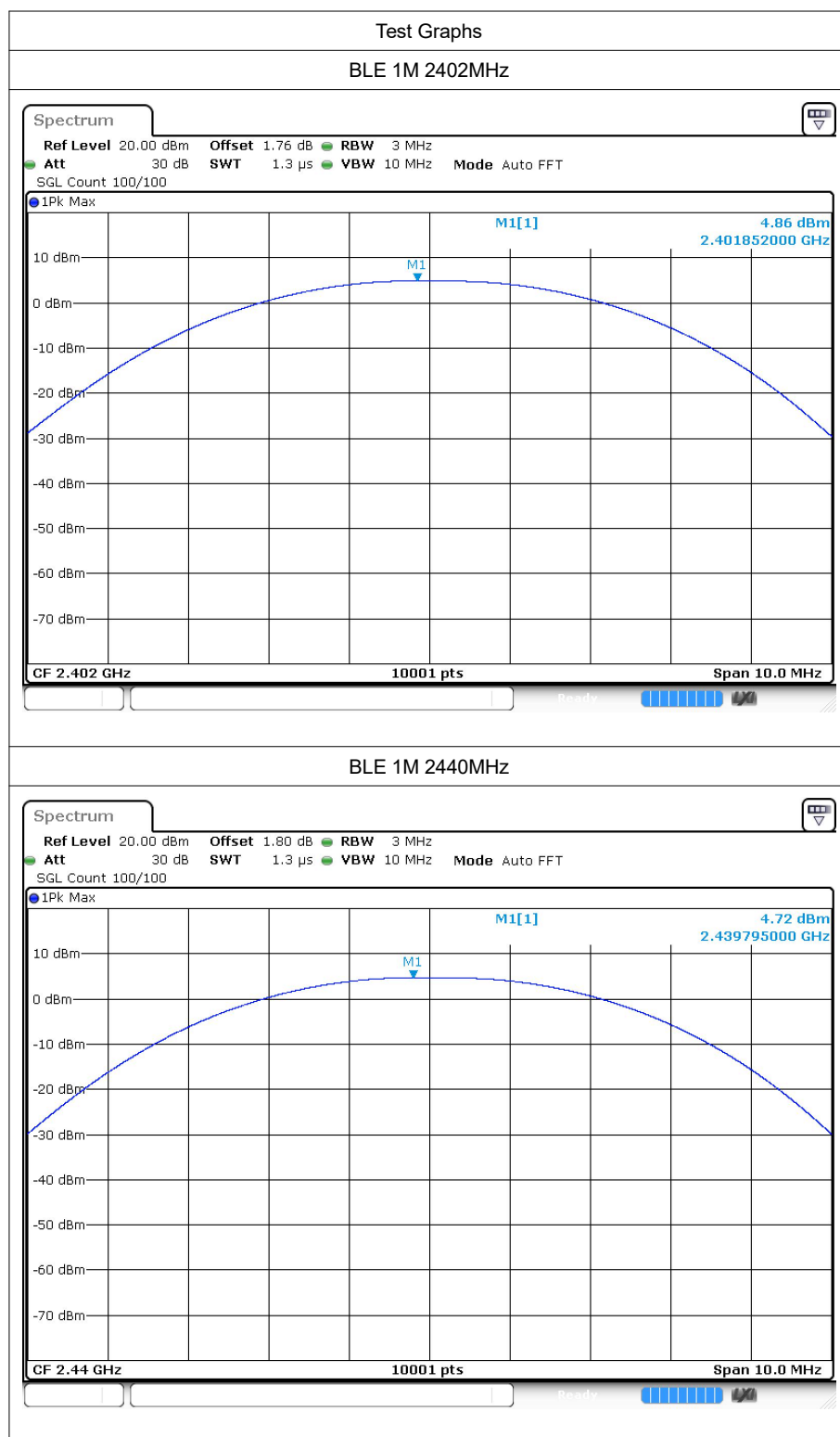
Left:

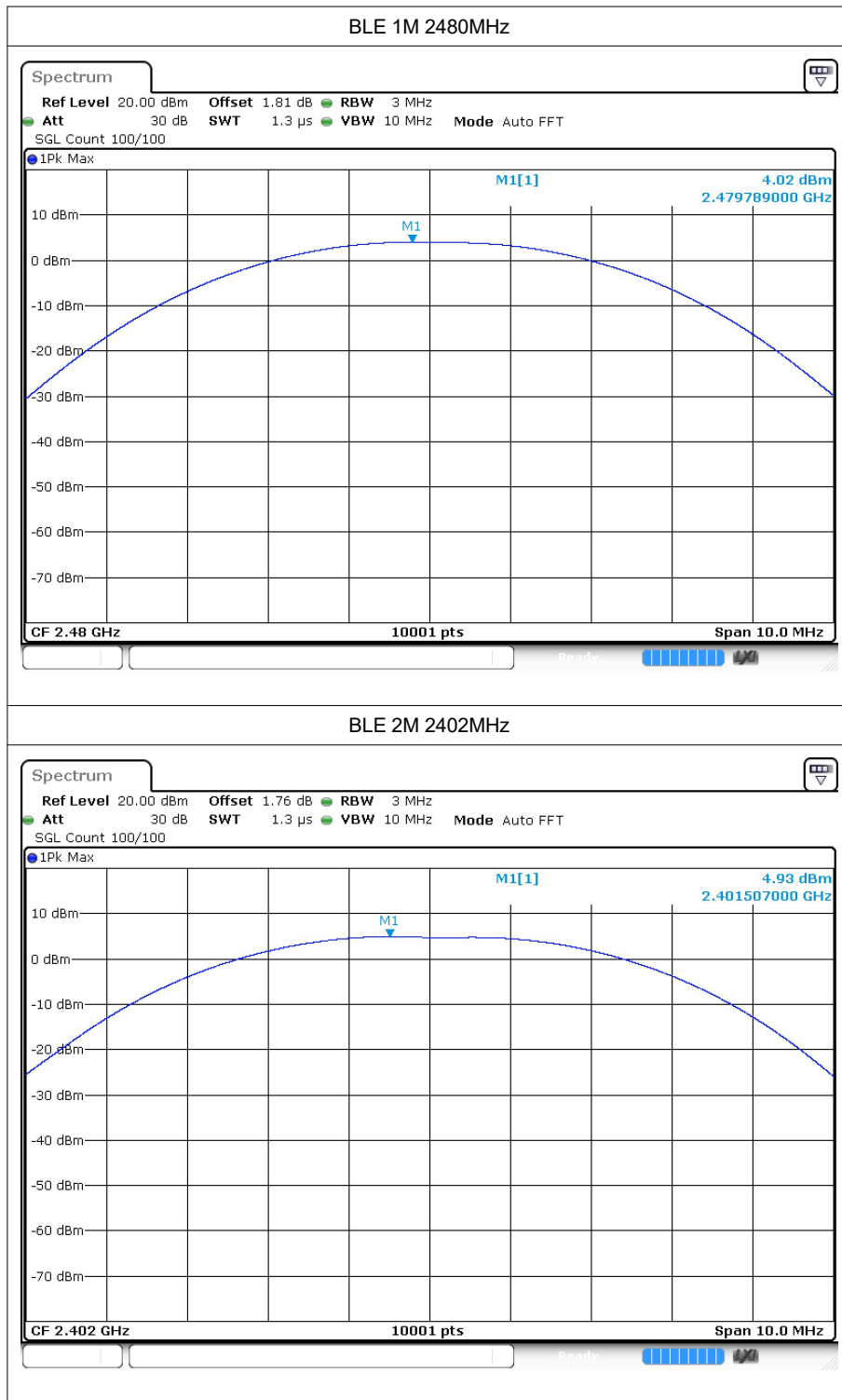


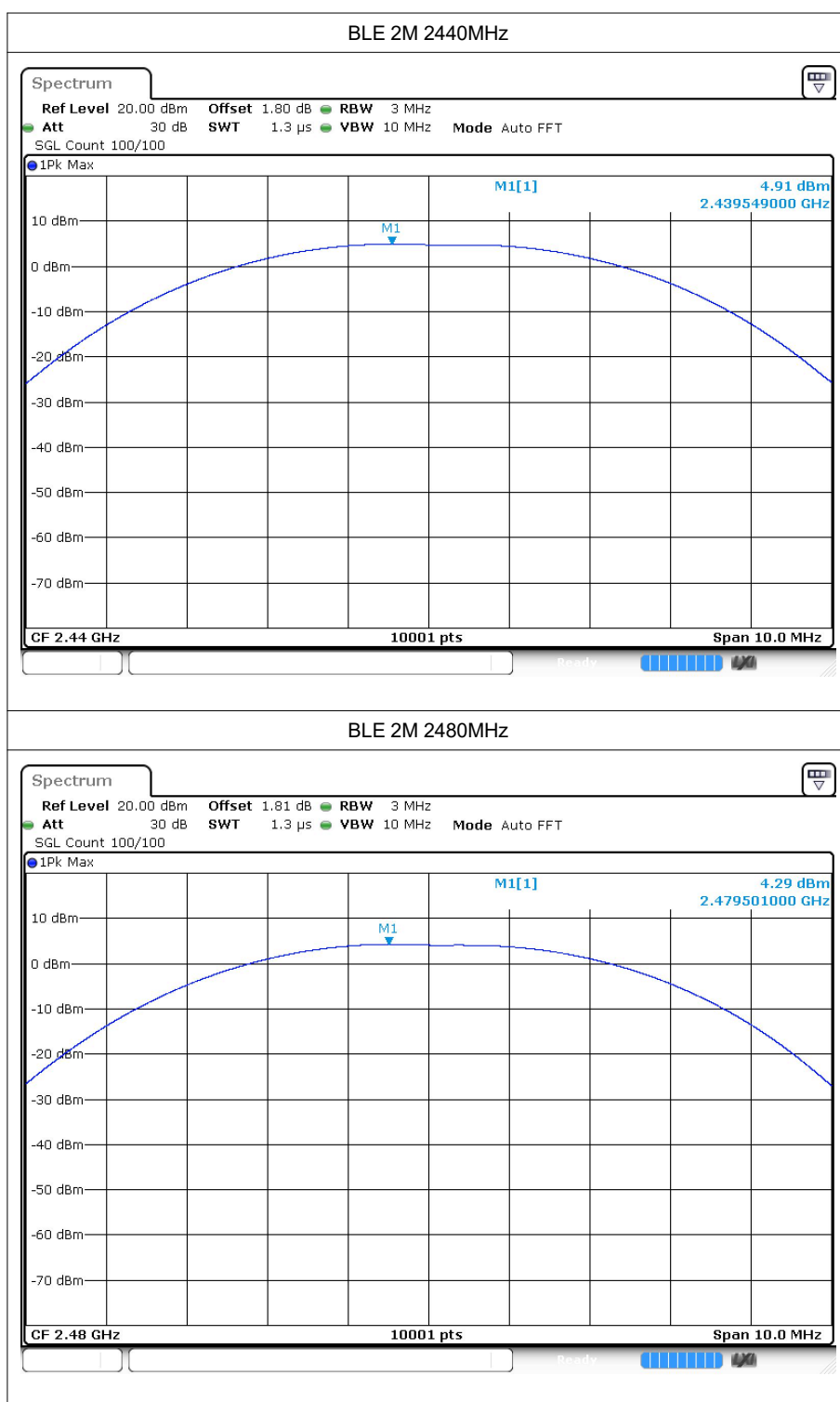




Right:









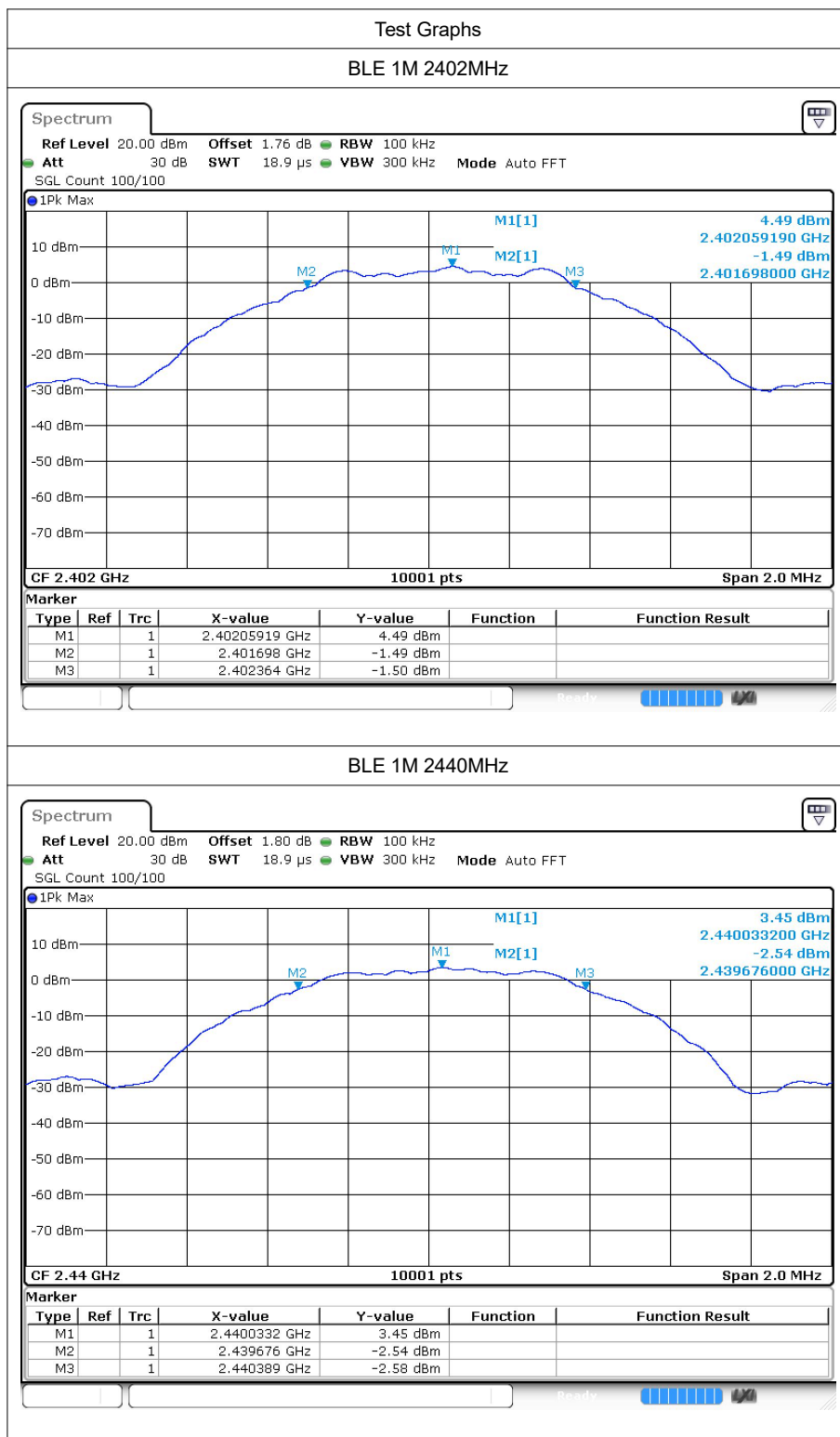
3 -6dB Bandwidth

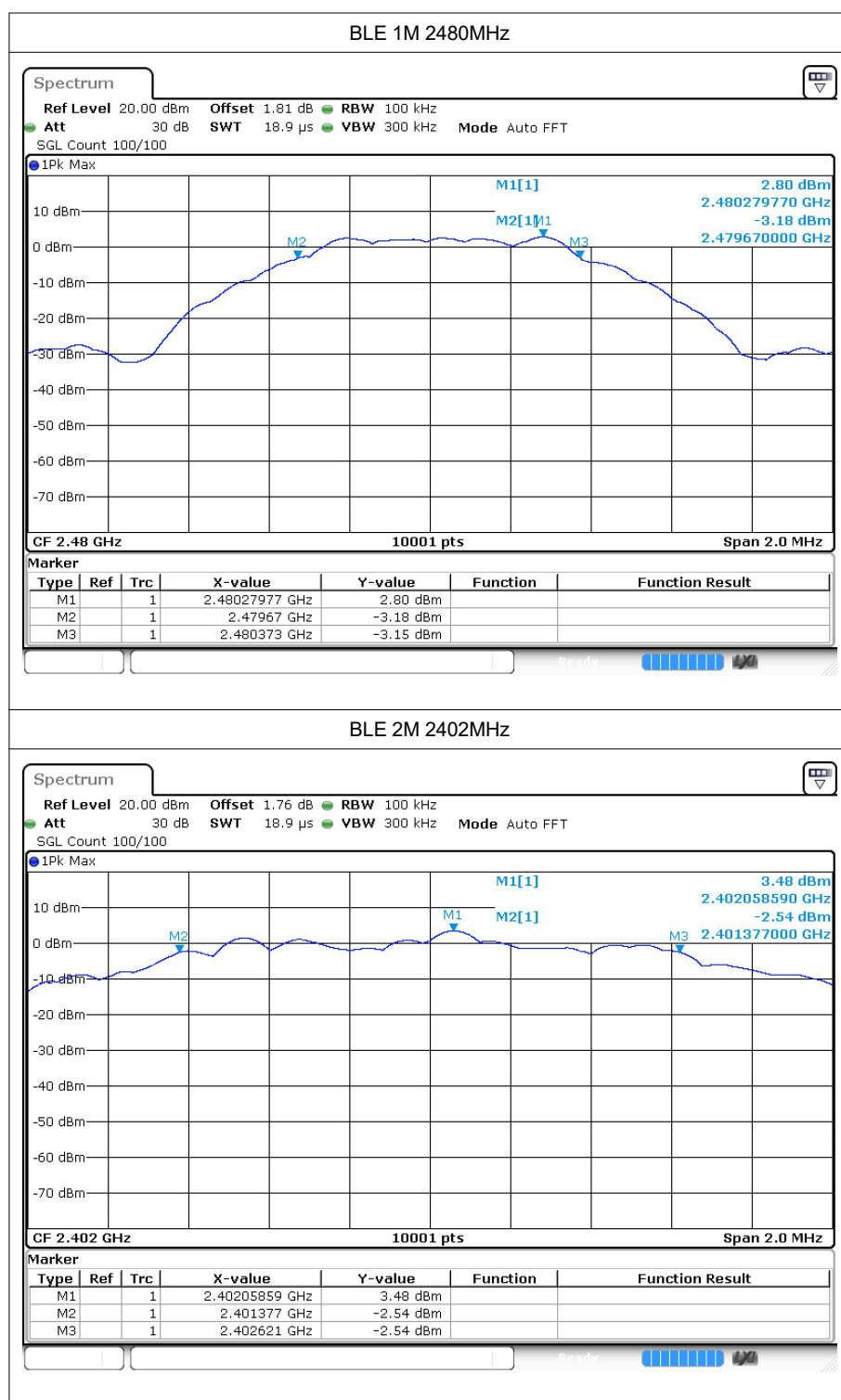
3.1 Test Result

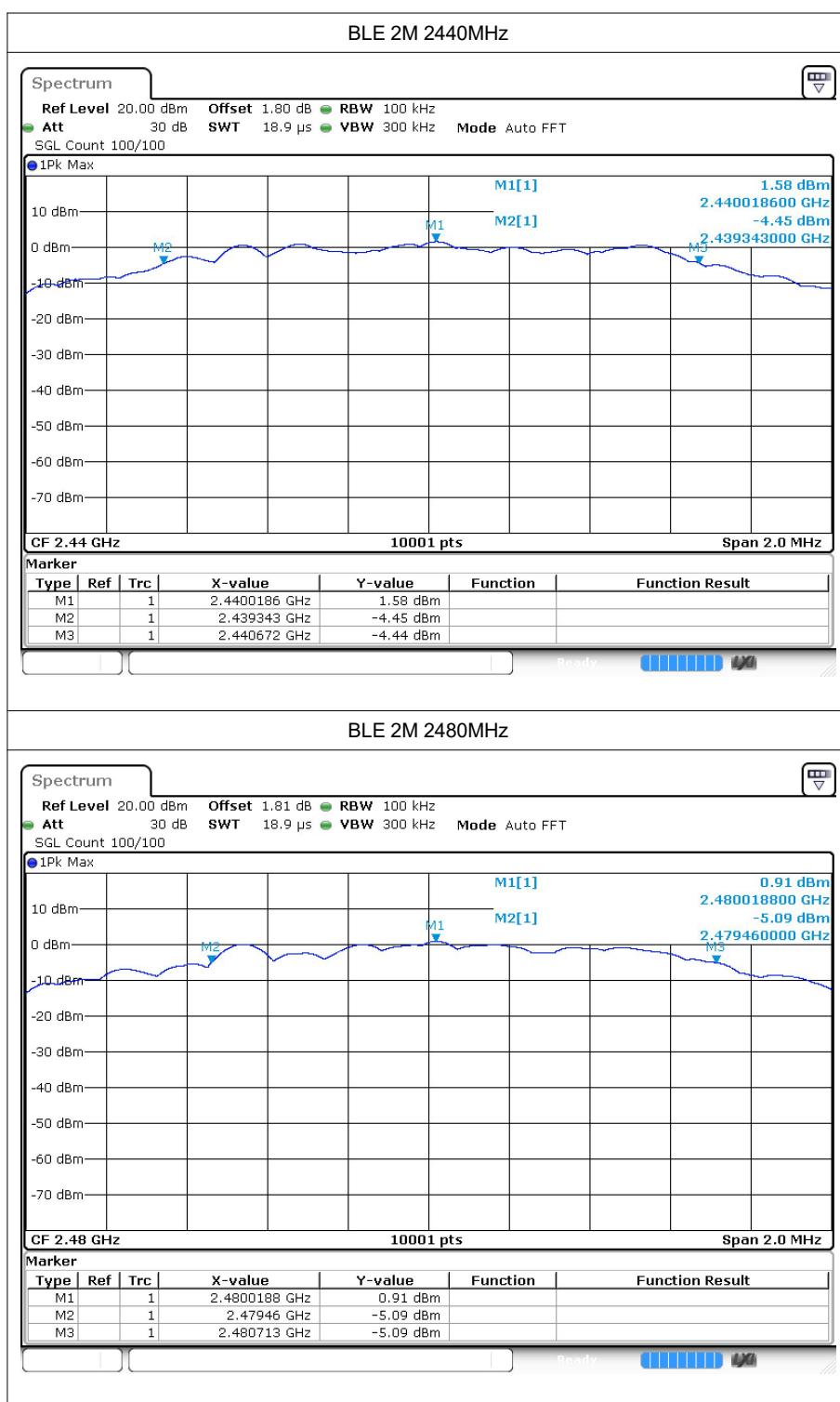
Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.667	0.5	Pass
BLE 1M	2440	0.713	0.5	Pass
BLE 1M	2480	0.704	0.5	Pass
BLE 2M	2402	1.243	0.5	Pass
BLE 2M	2440	1.328	0.5	Pass
BLE 2M	2480	1.253	0.5	Pass

Note: Left and right ear have been tested and the only shows the worst case mode.

3.2 Test Graphs







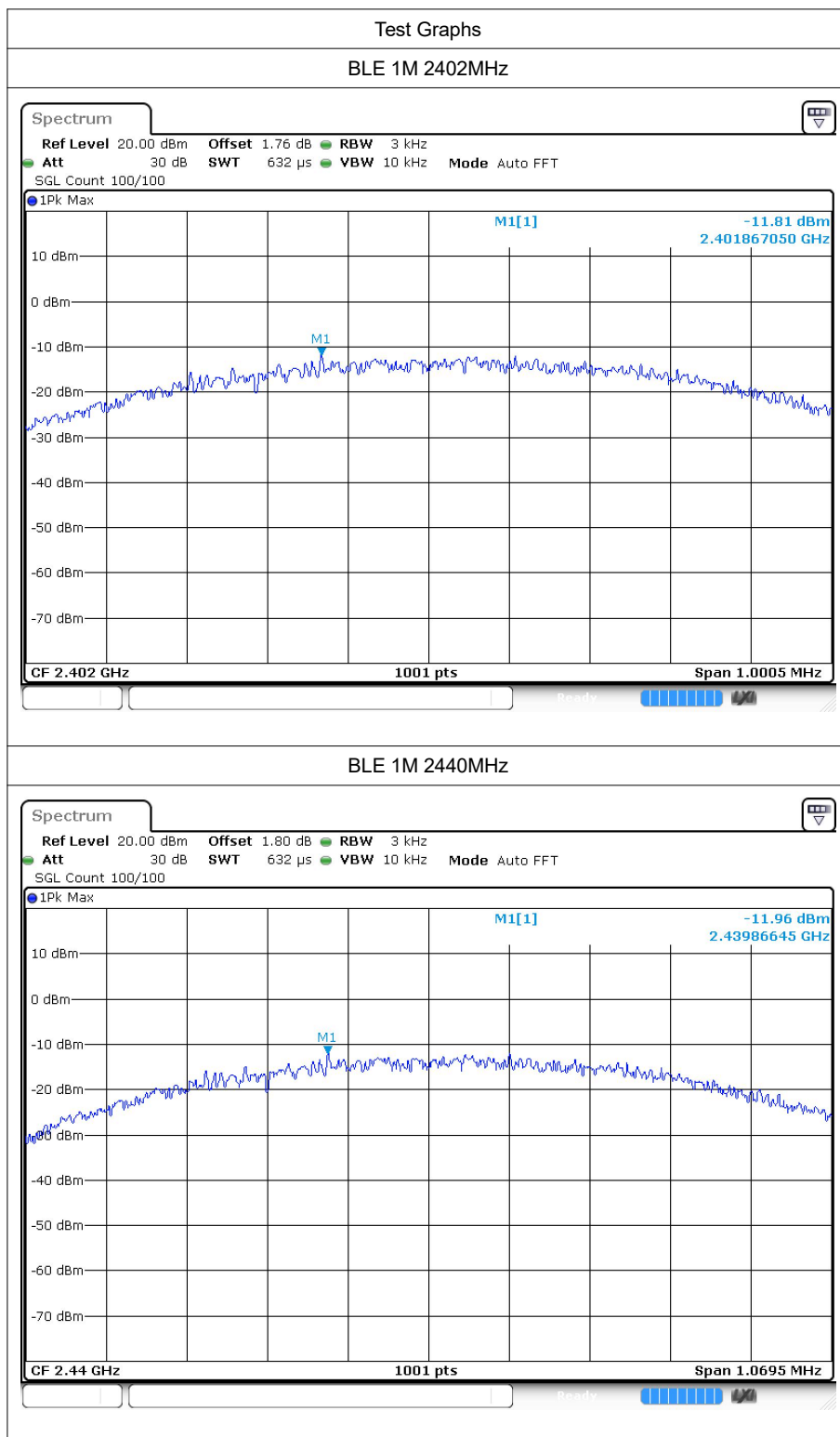
4 Maximum Power Spectral Density Level

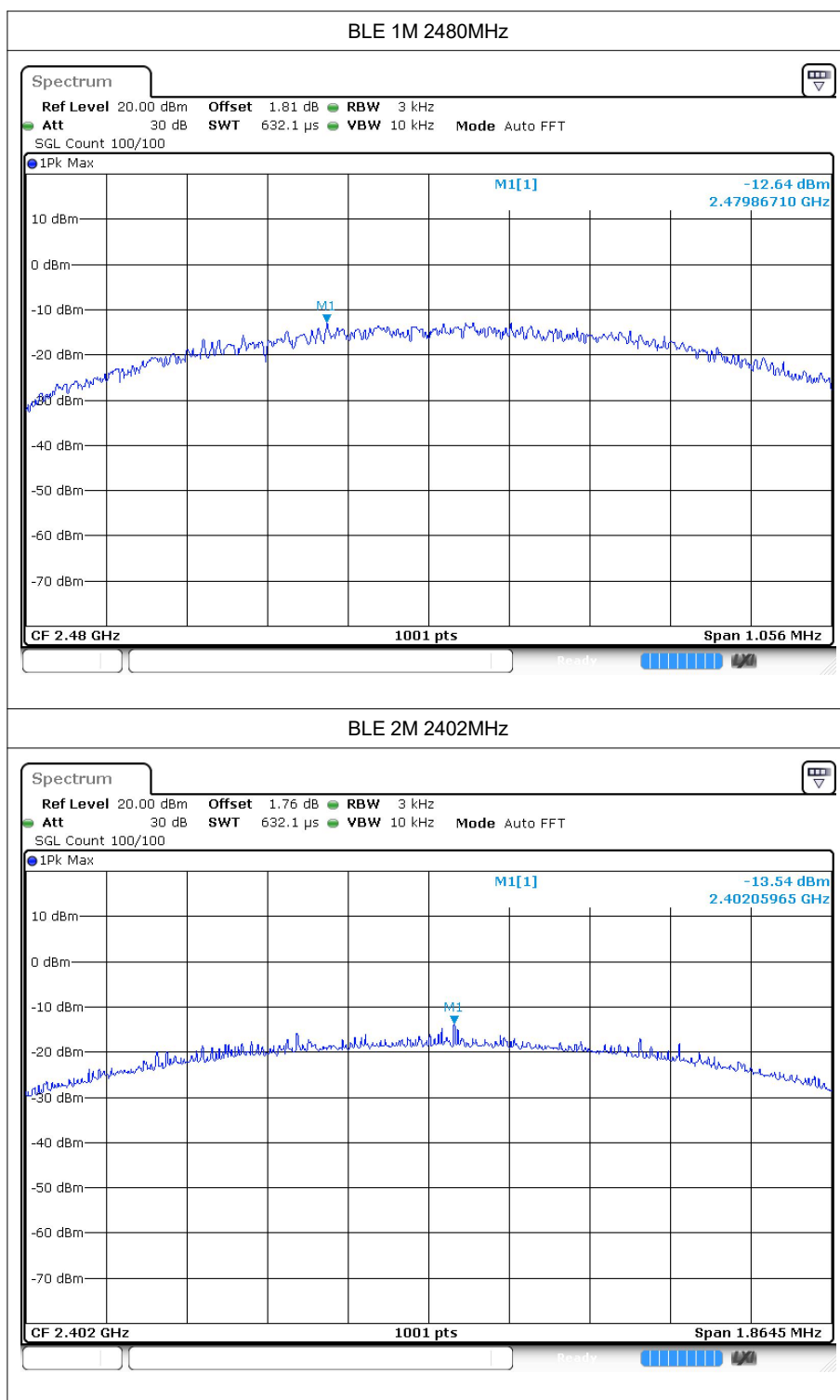
4.1 Test Result

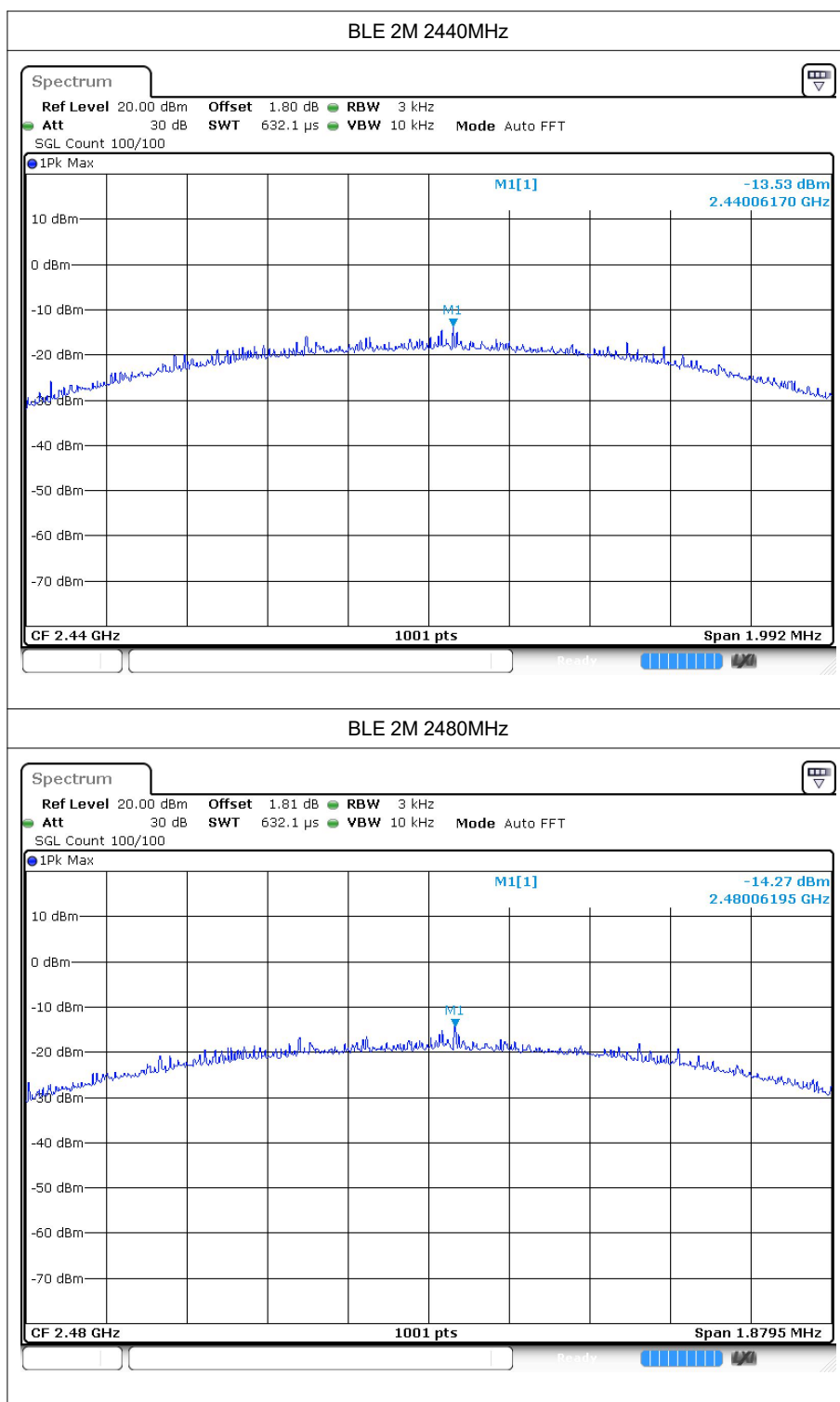
Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-11.81	≤8	Pass
BLE 1M	2440	-11.96	≤8	Pass
BLE 1M	2480	-12.64	≤8	Pass
BLE 2M	2402	-13.54	≤8	Pass
BLE 2M	2440	-13.53	≤8	Pass
BLE 2M	2480	-14.27	≤8	Pass

Note: Left and right ear have been tested and the only shows the worst case mode.

4.2 Test Graphs









5 Band Edge

5.1 Test Result

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-57.13	-20	Pass
BLE 1M	2480	-50.38	-20	Pass
BLE 2M	2402	-59.28	-20	Pass
BLE 2M	2480	-50.45	-20	Pass

Note: Left and right ear have been tested and the only shows the worst case mode.

5.2 Test Graphs

