



Appendix B

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

Product Name: Wireless Audio Glasses

Trade Mark: N/A

Test Model: BG02

Environmental Conditions

Temperature:	24.9° C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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1 Duty Cycle

1.1 Test Result

Left:

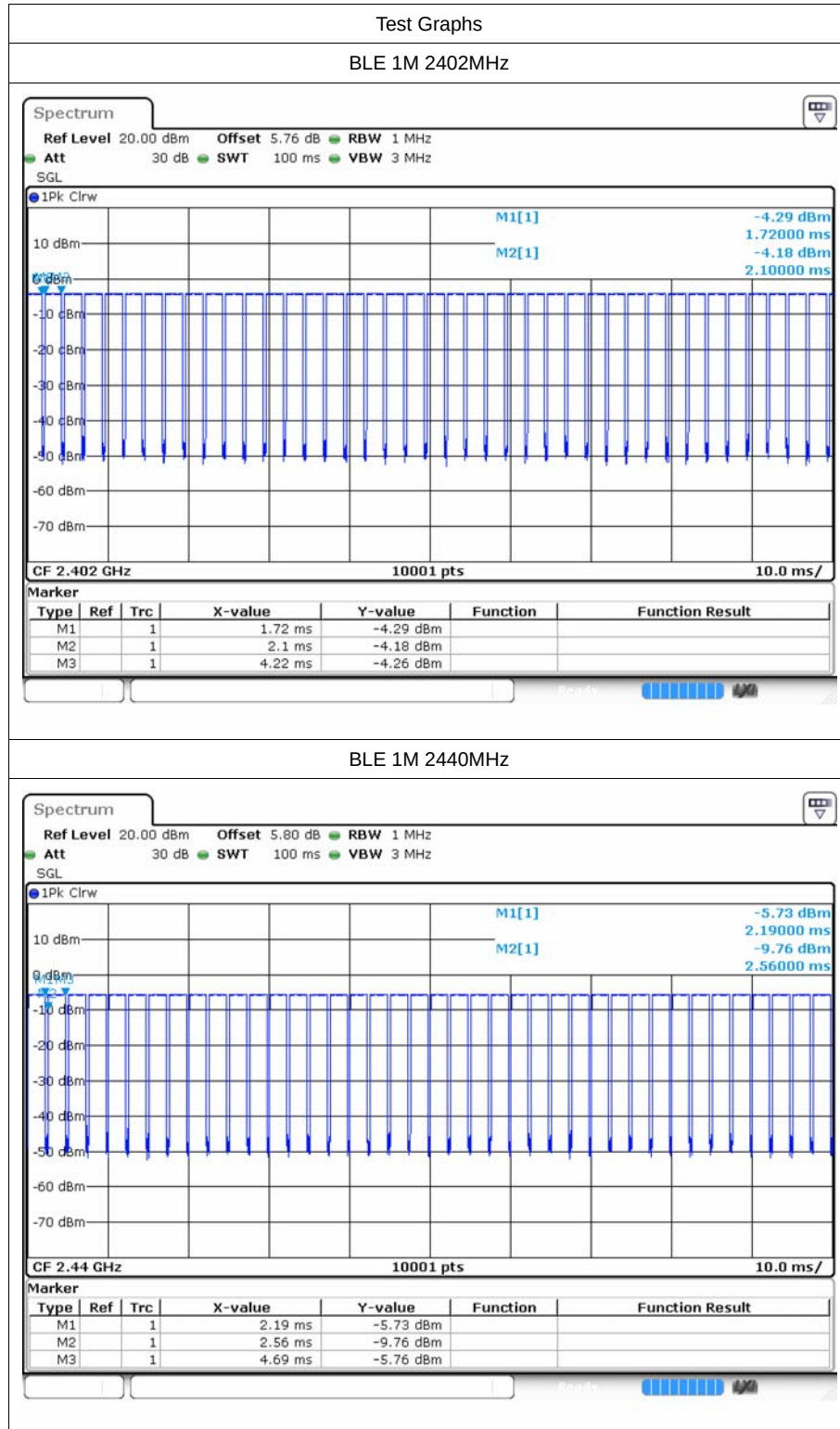
Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
BLE 1M	2402	85.2	0.47
BLE 1M	2440	85.59	0.47
BLE 1M	2480	85.2	0.47
BLE 2M	2402	43.6	0.93
BLE 2M	2440	43.21	0.93
BLE 2M	2480	43.61	0.93

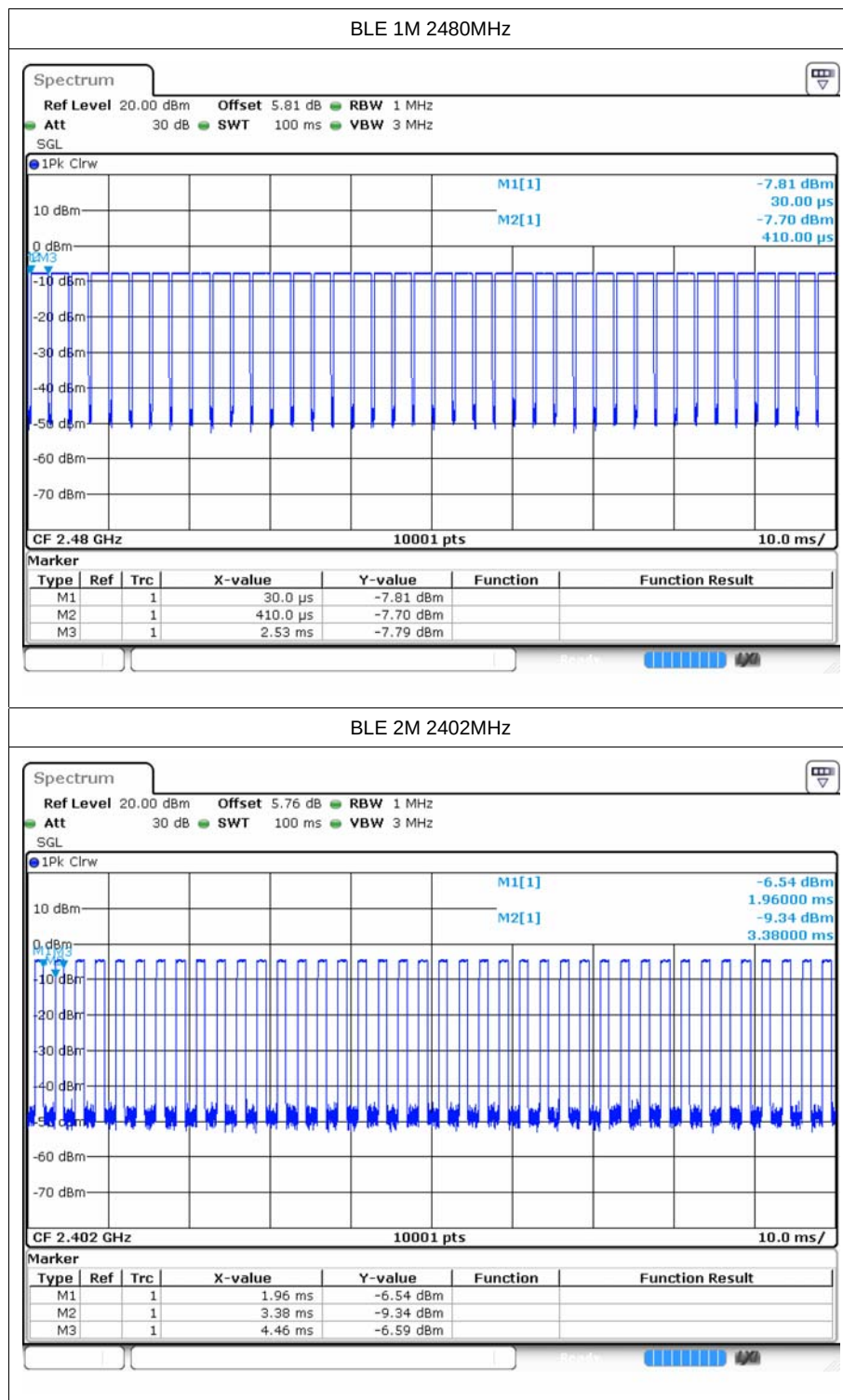
Right:

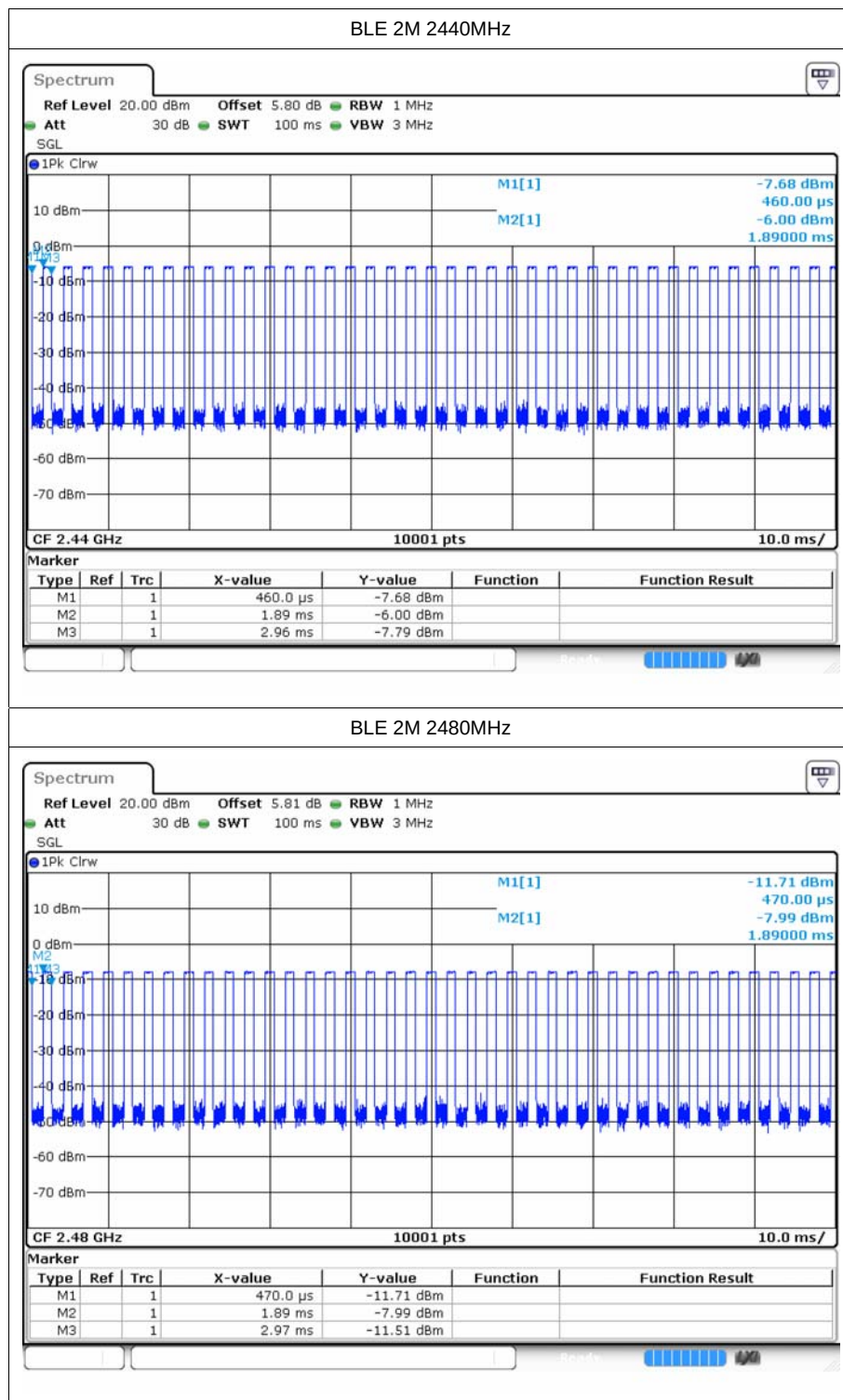
Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
BLE 1M	2402	85.6	0.47
BLE 1M	2440	85.19	0.47
BLE 1M	2480	85.6	0.47
BLE 2M	2402	43.61	0.93
BLE 2M	2440	43.2	0.93
BLE 2M	2480	43.6	0.93

1.2 Test Graphs

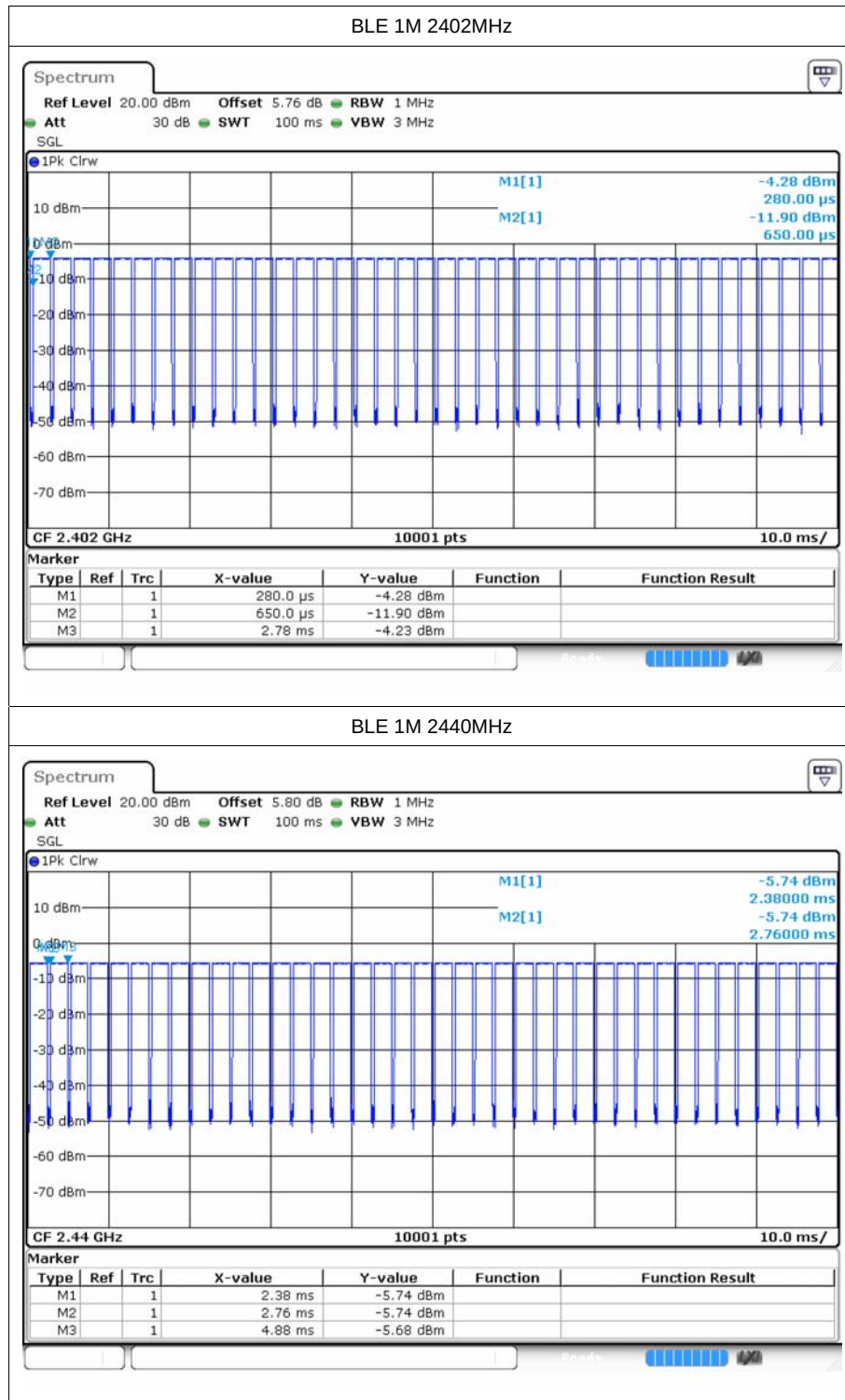
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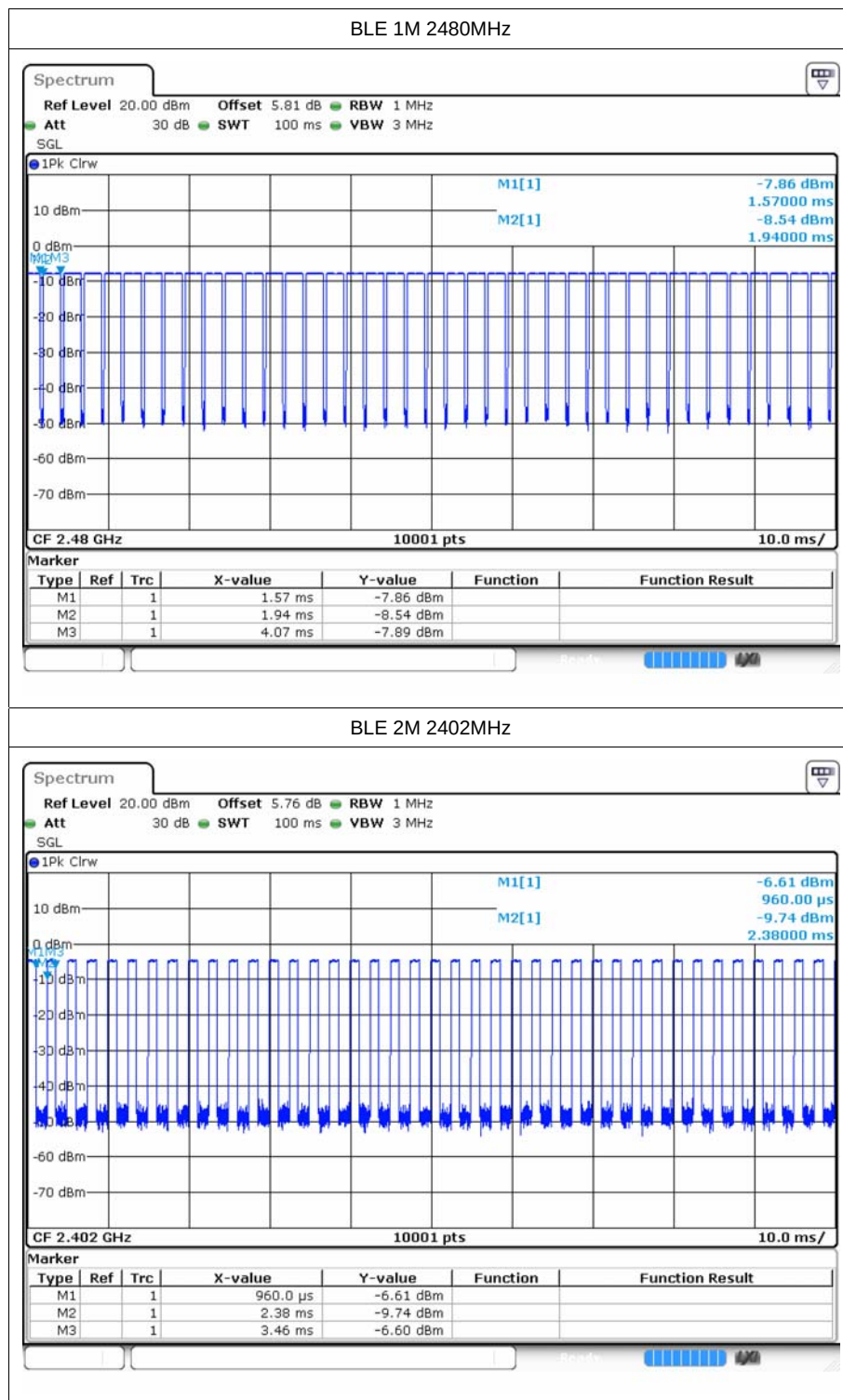


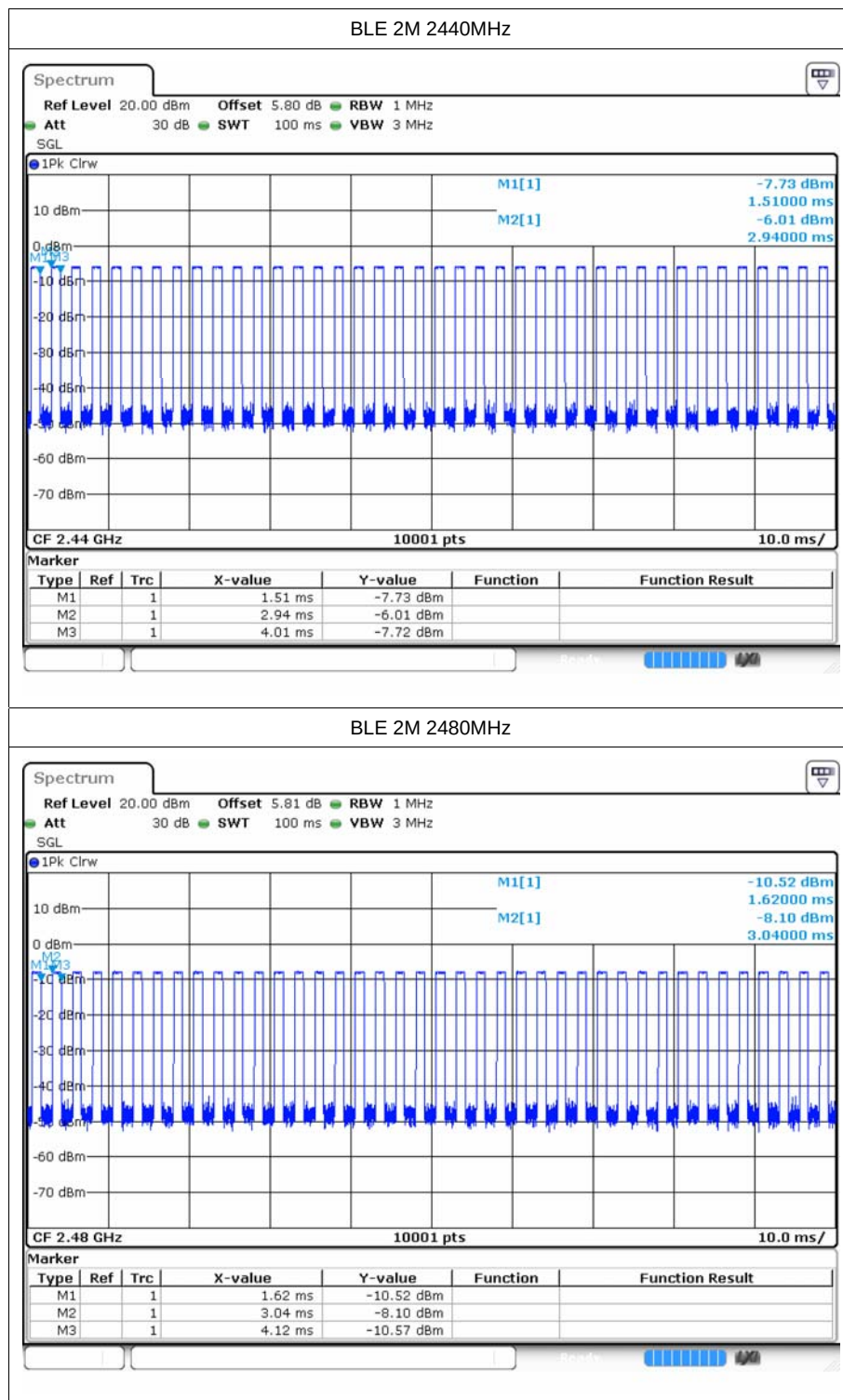




Right:









2 Maximum Conducted Output Power

2.1 Test Result

Left:

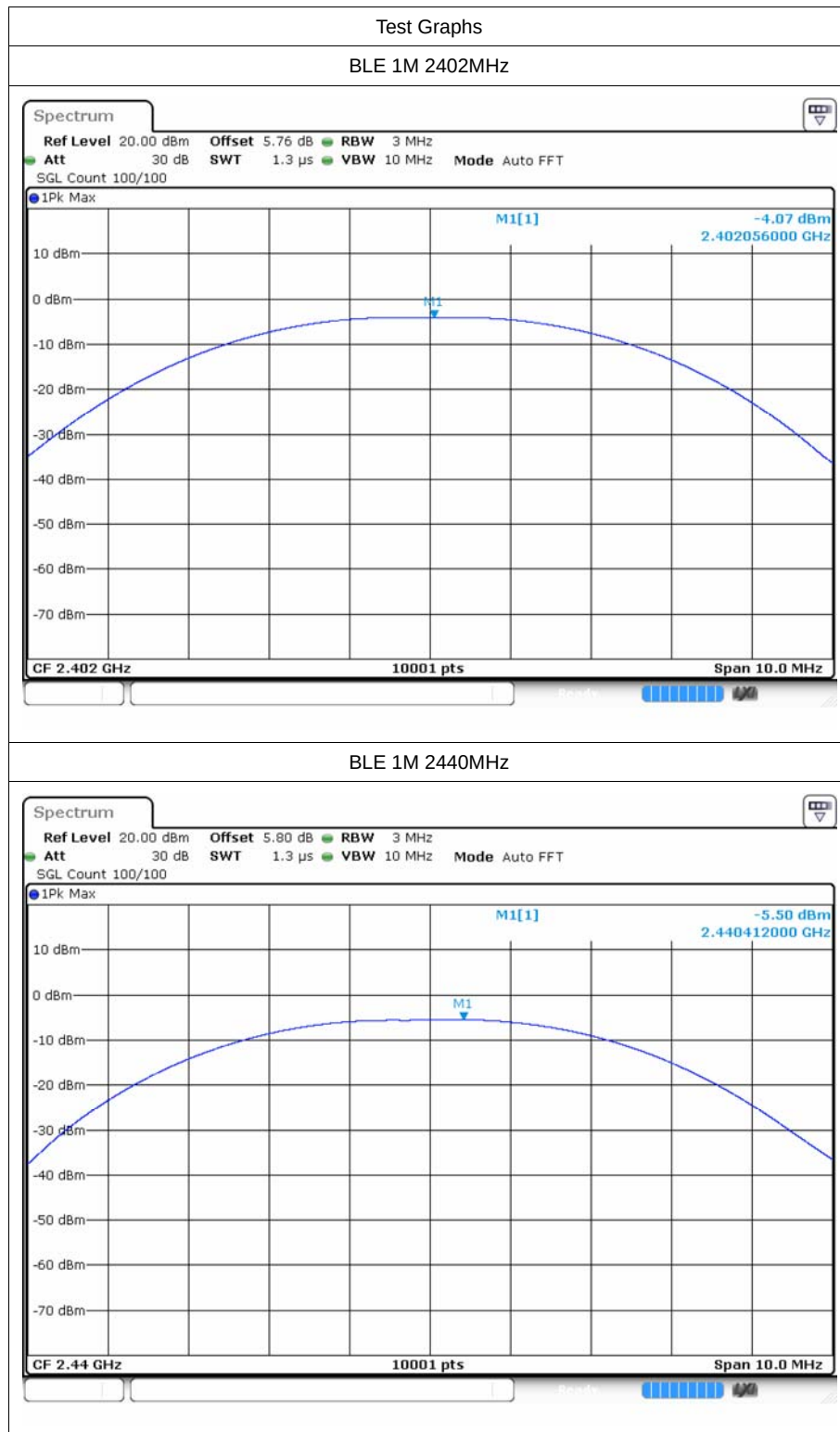
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	-4.07	30	Pass
BLE 1M	2440	-5.5	30	Pass
BLE 1M	2480	-7.57	30	Pass
BLE 2M	2402	-4.13	30	Pass
BLE 2M	2440	-5.43	30	Pass
BLE 2M	2480	-7.5	30	Pass

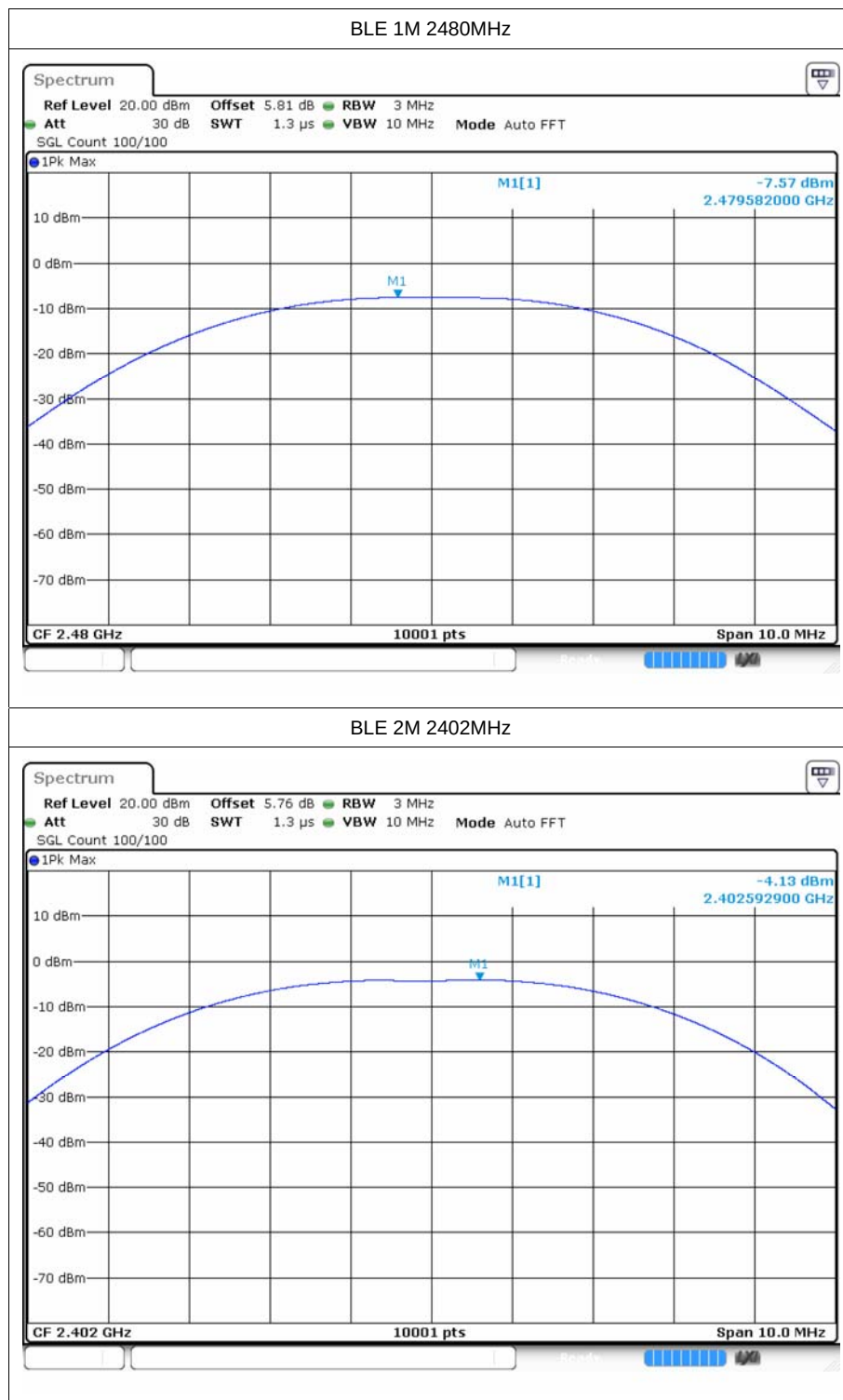
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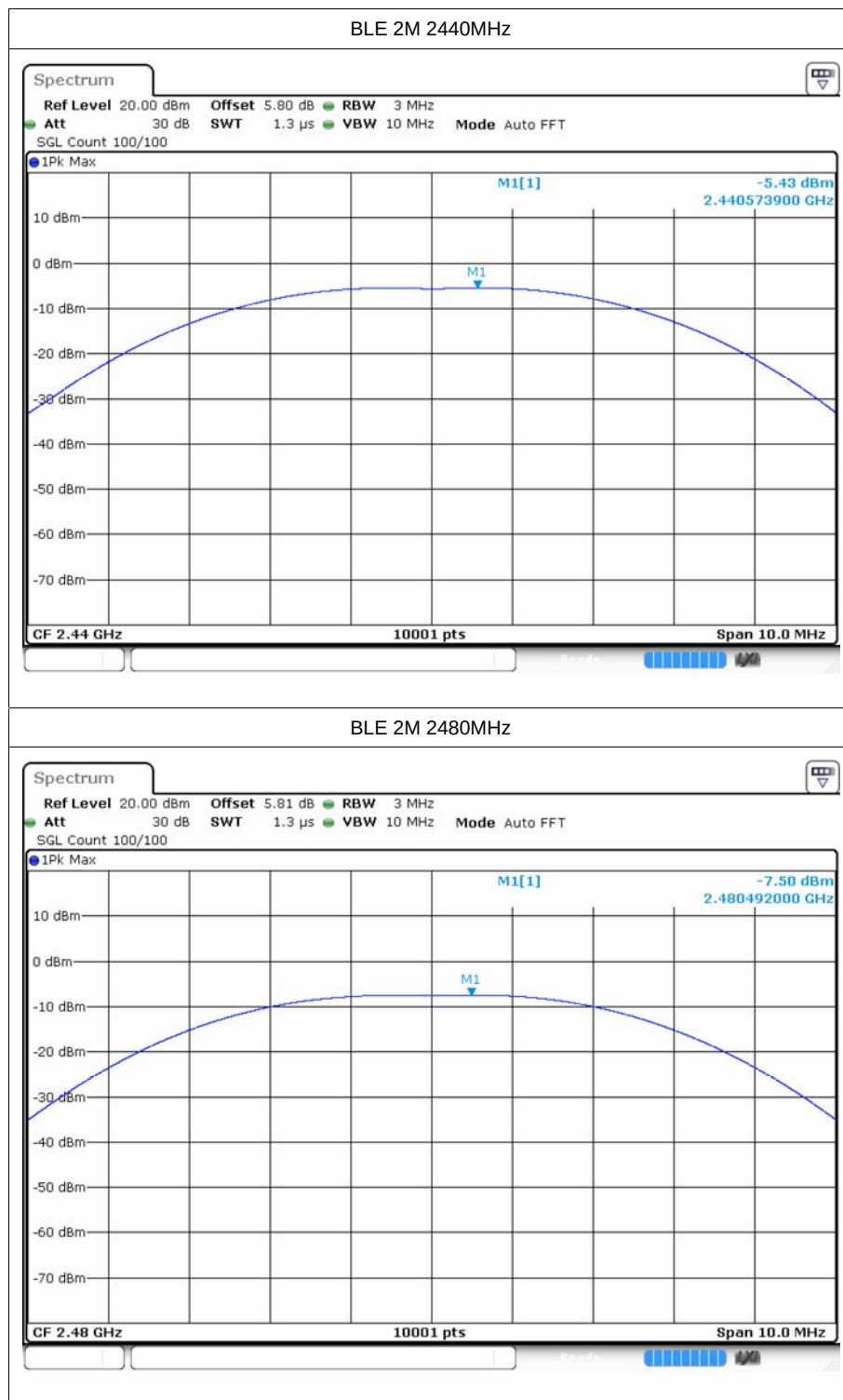
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	-4.05	30	Pass
BLE 1M	2440	-5.55	30	Pass
BLE 1M	2480	-7.48	30	Pass
BLE 2M	2402	-4.16	30	Pass
BLE 2M	2440	-5.46	30	Pass
BLE 2M	2480	-7.47	30	Pass

2.2 Test Graphs

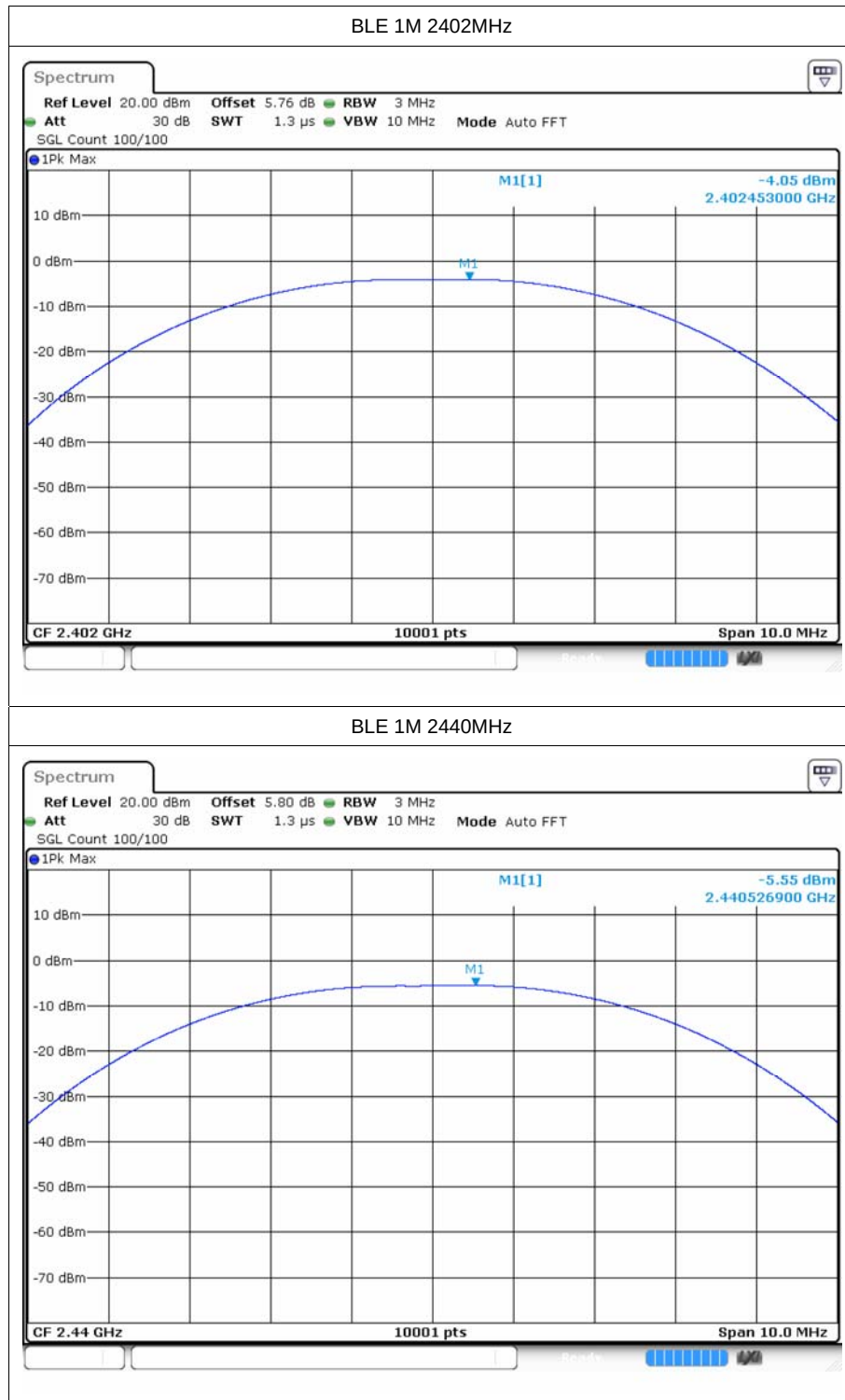
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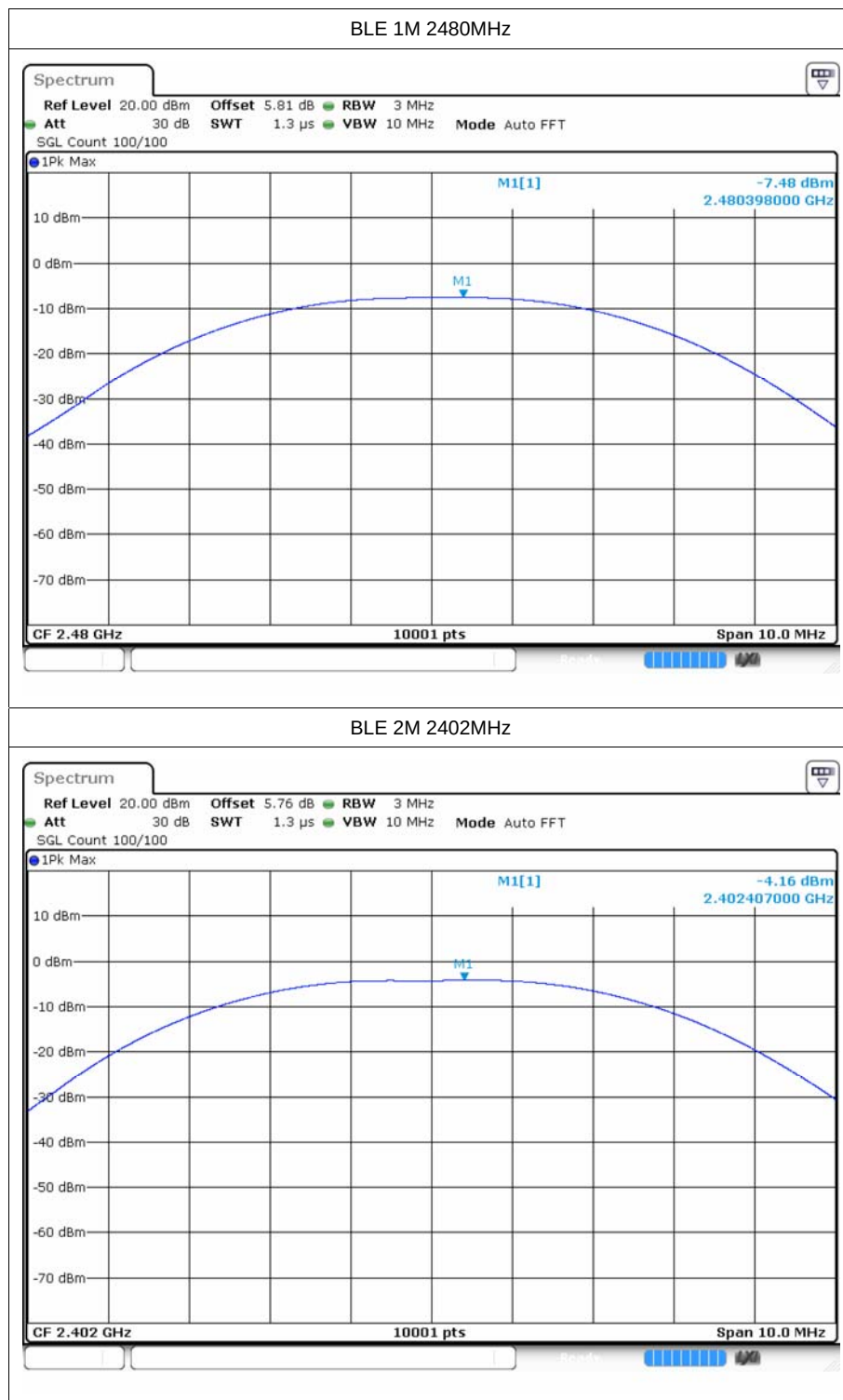


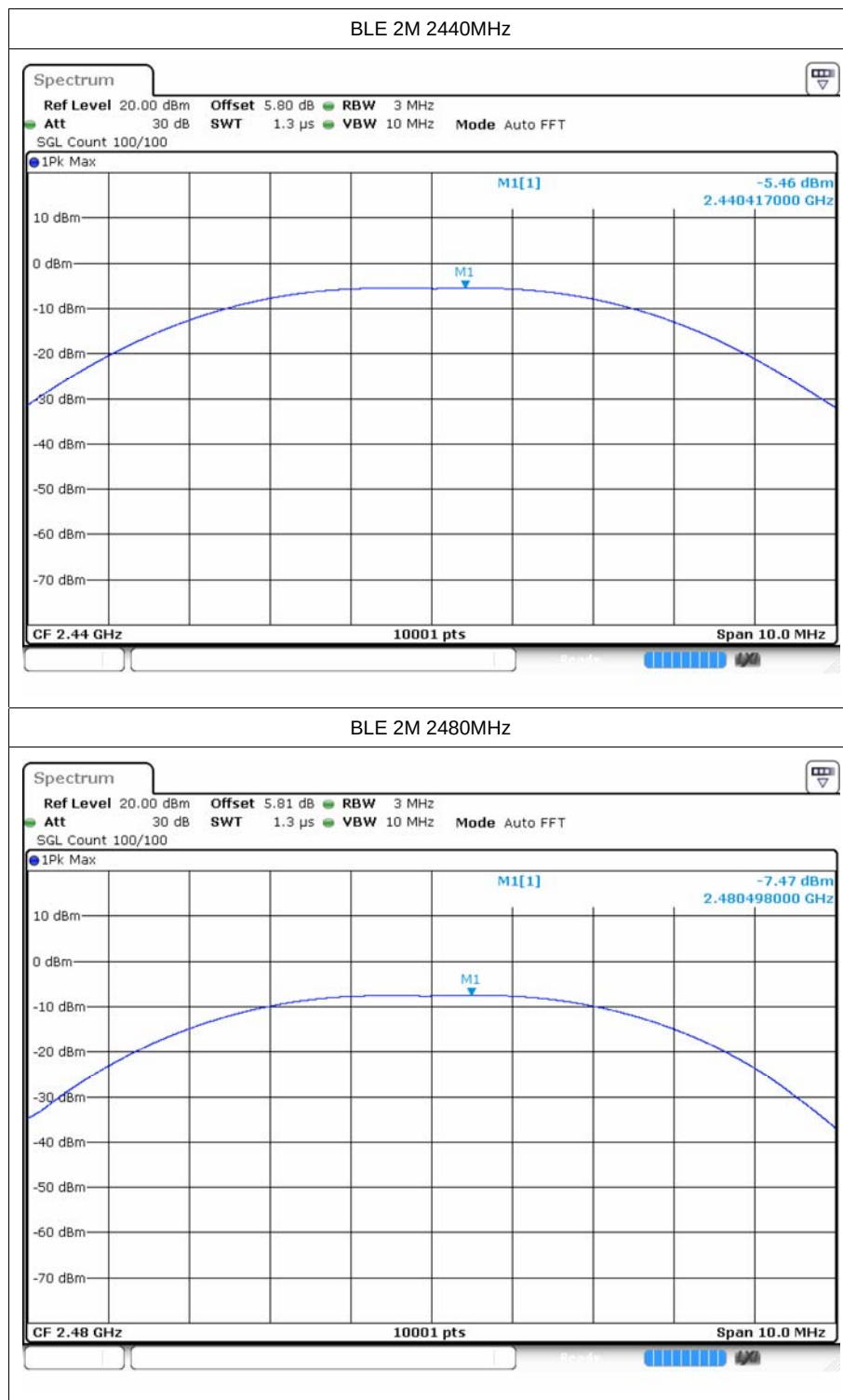




Right:







3 -6dB Bandwidth

3.1 Test Result

Left:

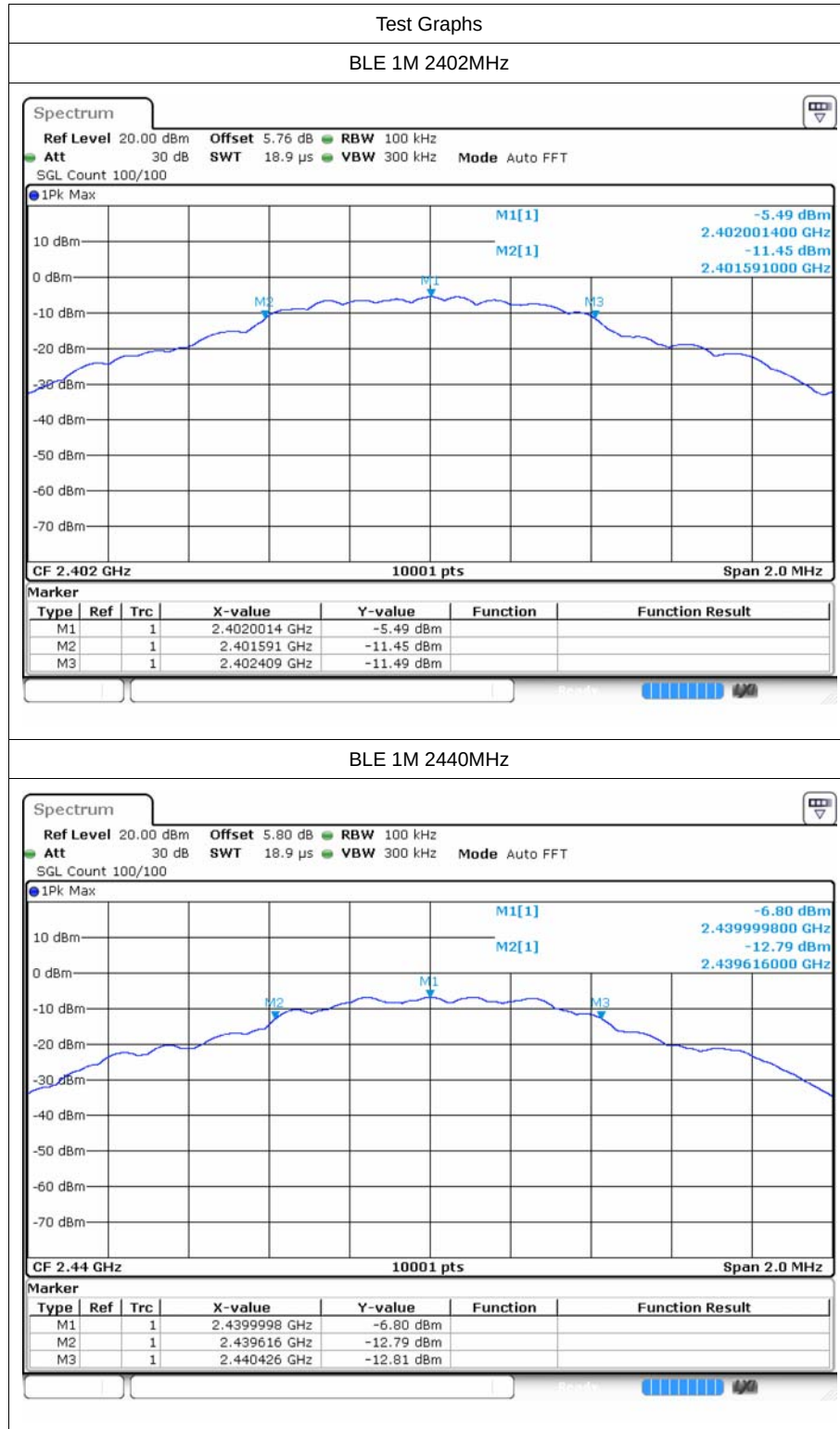
Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.818	0.5	Pass
BLE 1M	2440	0.81	0.5	Pass
BLE 1M	2480	0.831	0.5	Pass
BLE 2M	2402	1.354	0.5	Pass
BLE 2M	2440	1.319	0.5	Pass
BLE 2M	2480	1.349	0.5	Pass

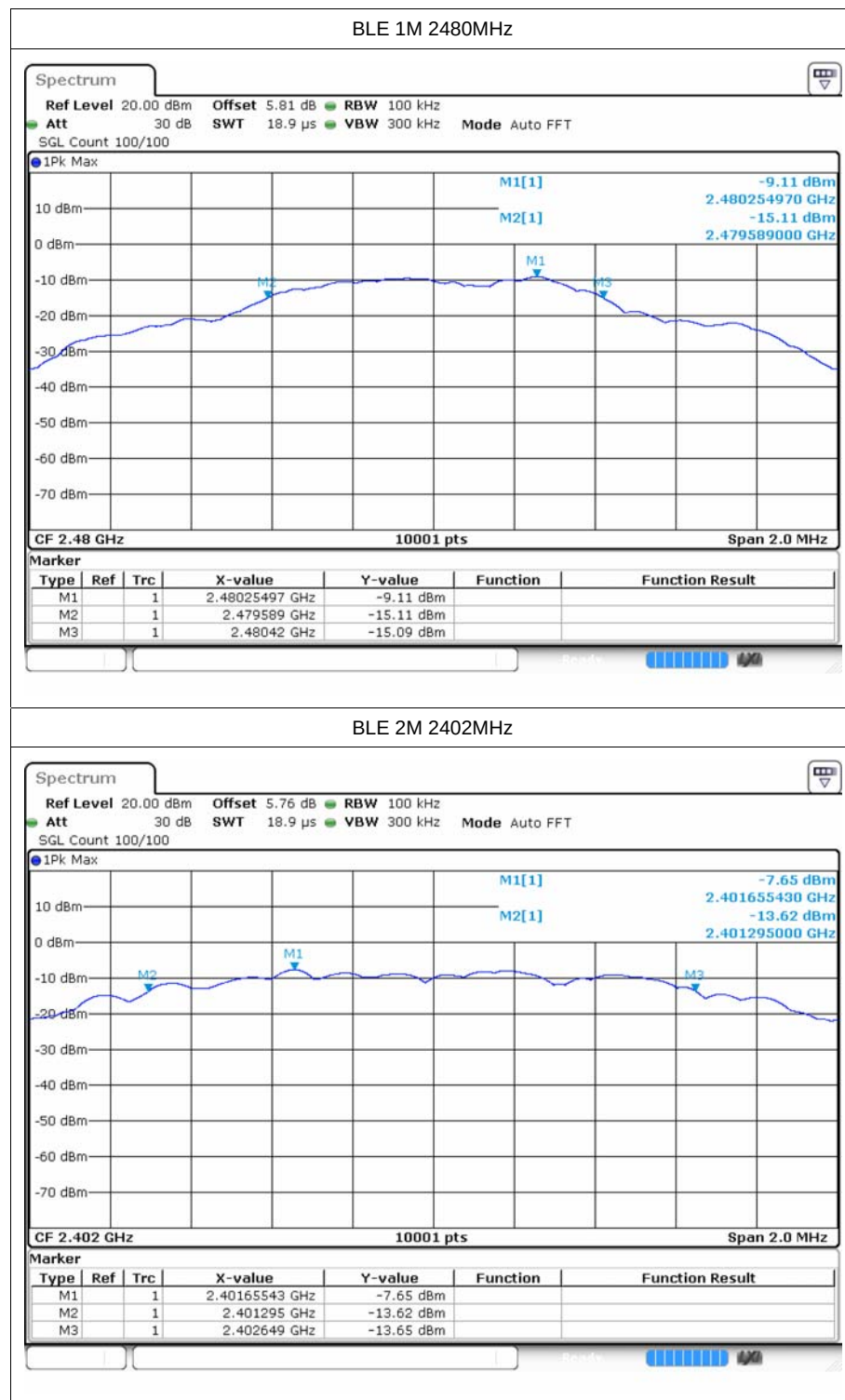
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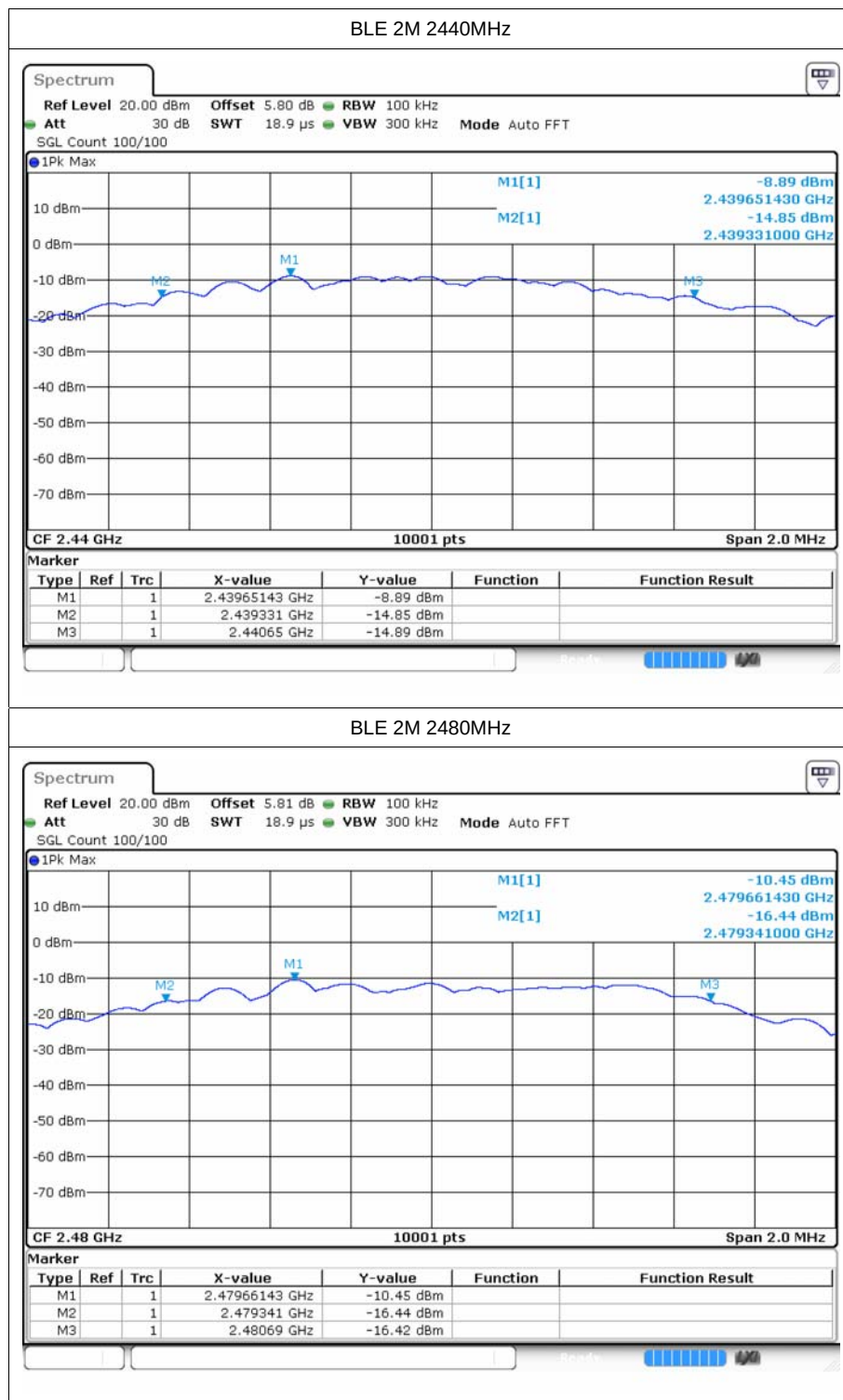
Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.832	0.5	Pass
BLE 1M	2440	0.78	0.5	Pass
BLE 1M	2480	0.774	0.5	Pass
BLE 2M	2402	1.322	0.5	Pass
BLE 2M	2440	1.124	0.5	Pass
BLE 2M	2480	1.419	0.5	Pass

3.2 Test Graphs

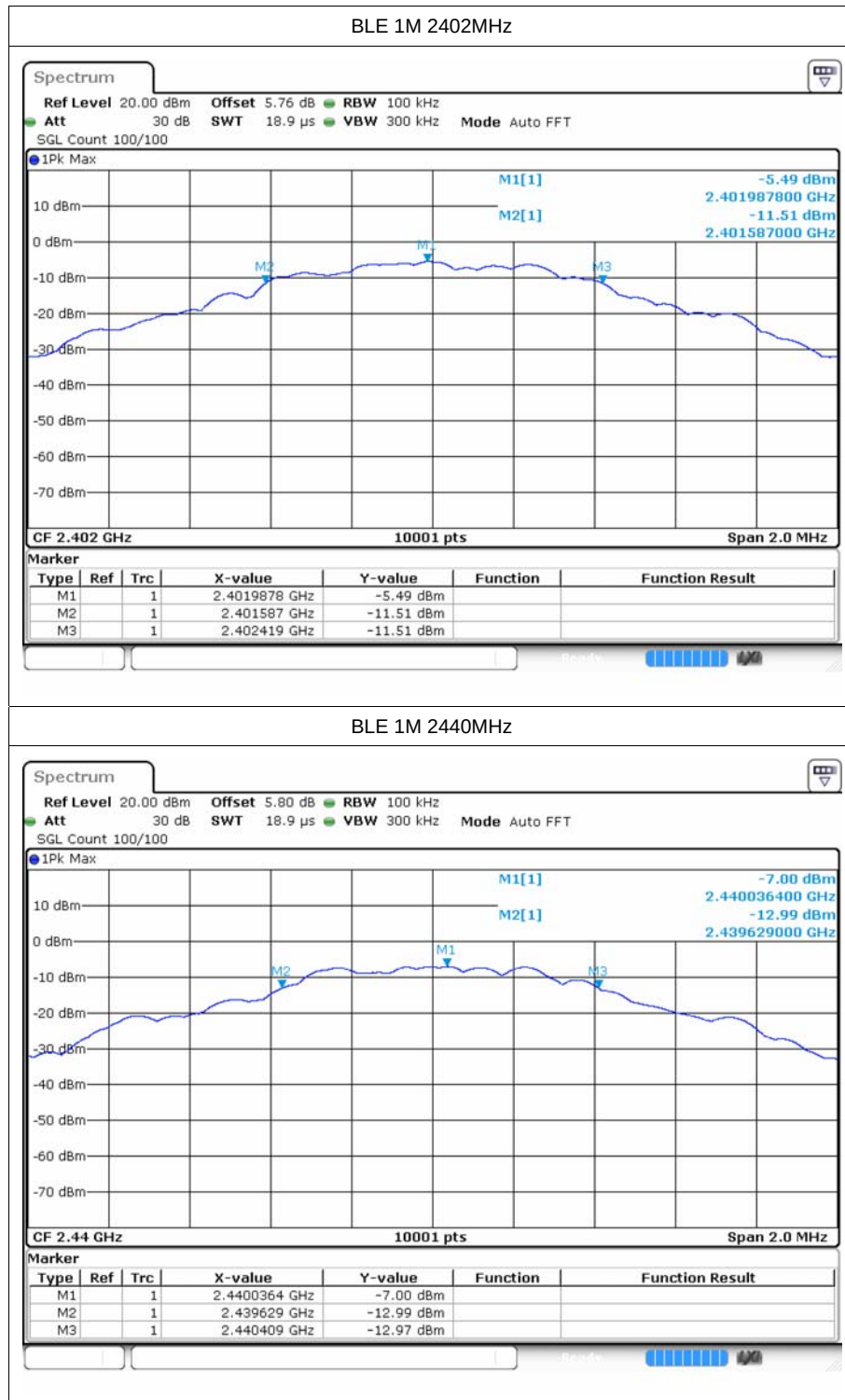
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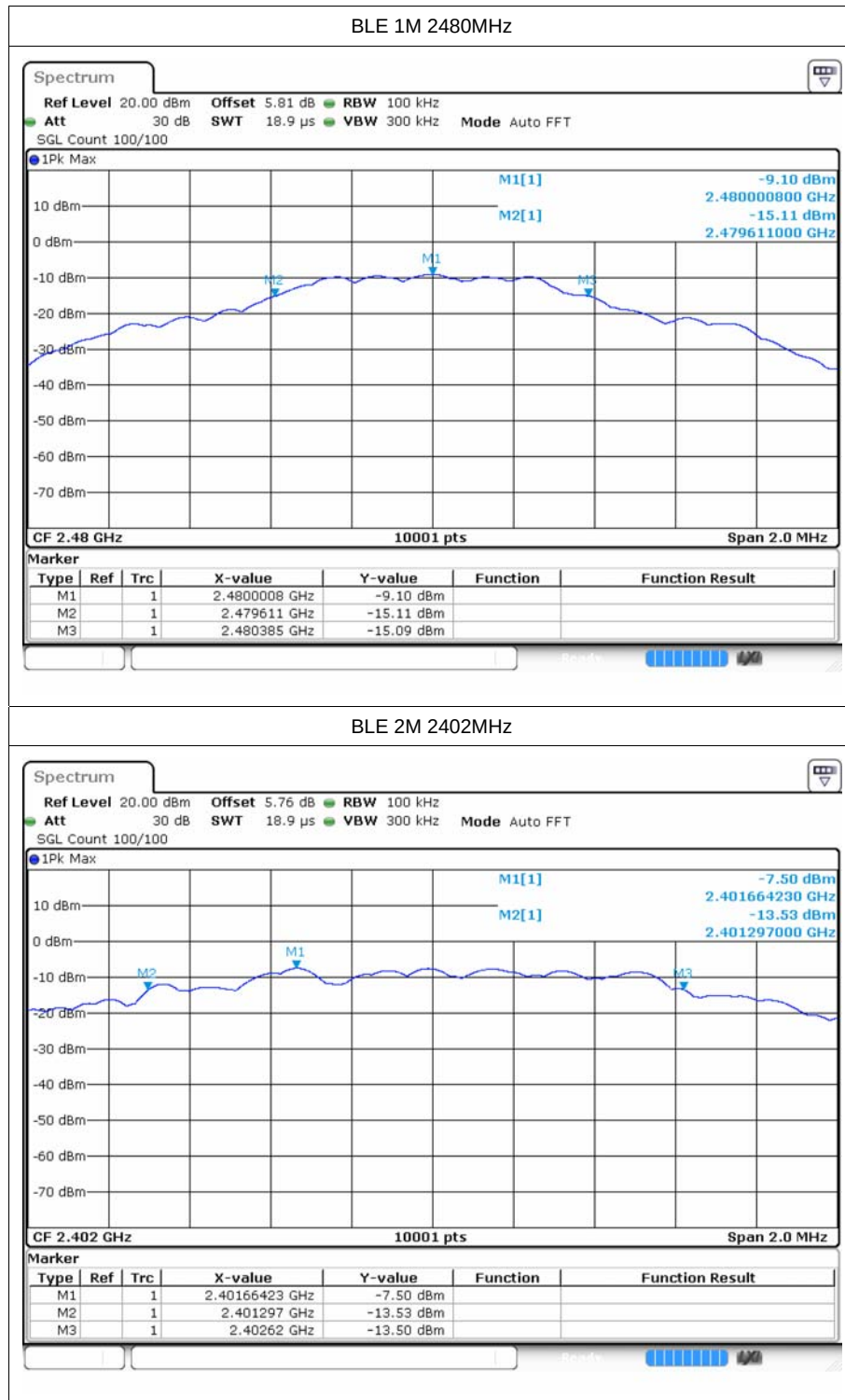


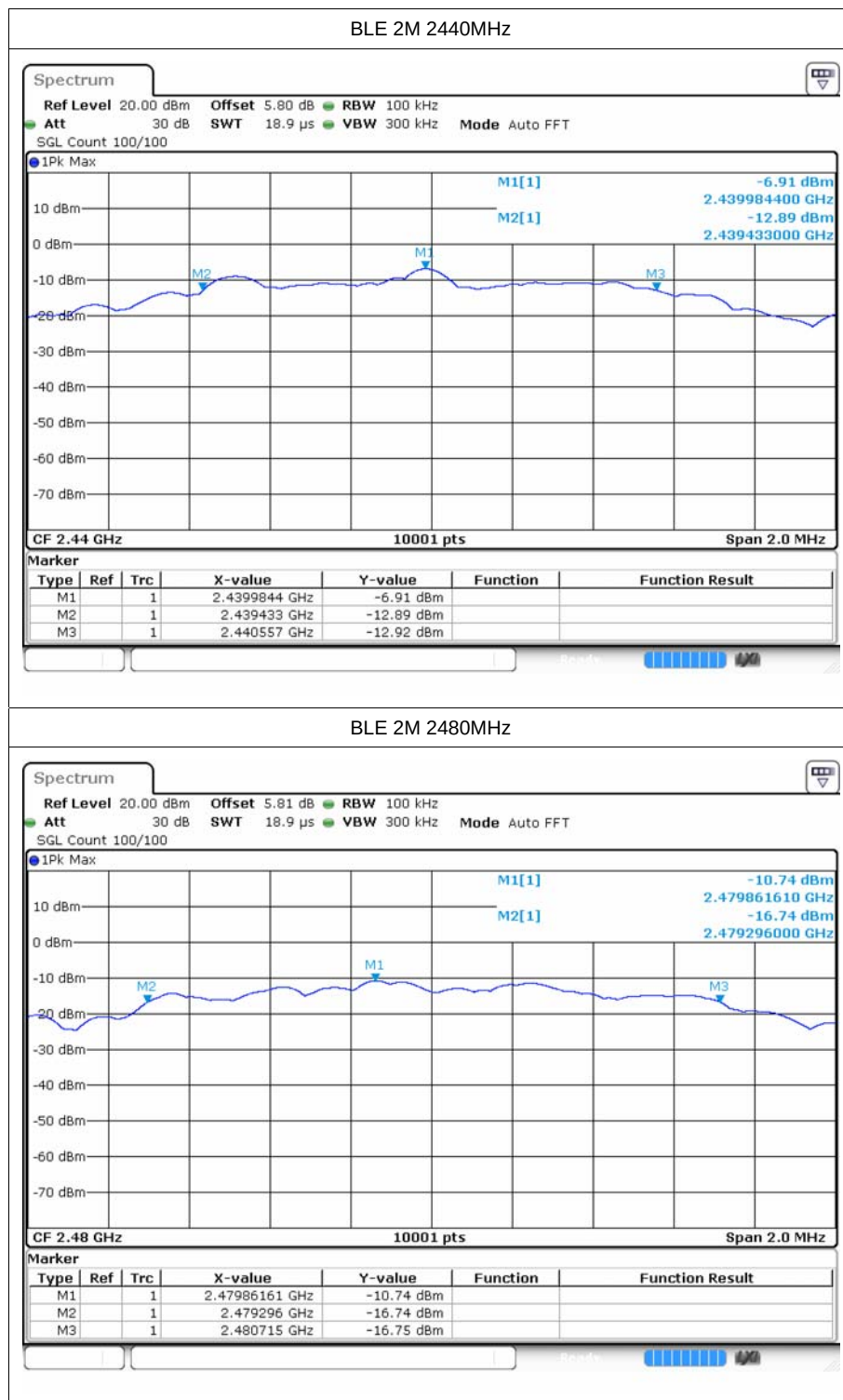




Right:







4 Maximum Power Spectral Density Level

4.1 Test Result

Left:

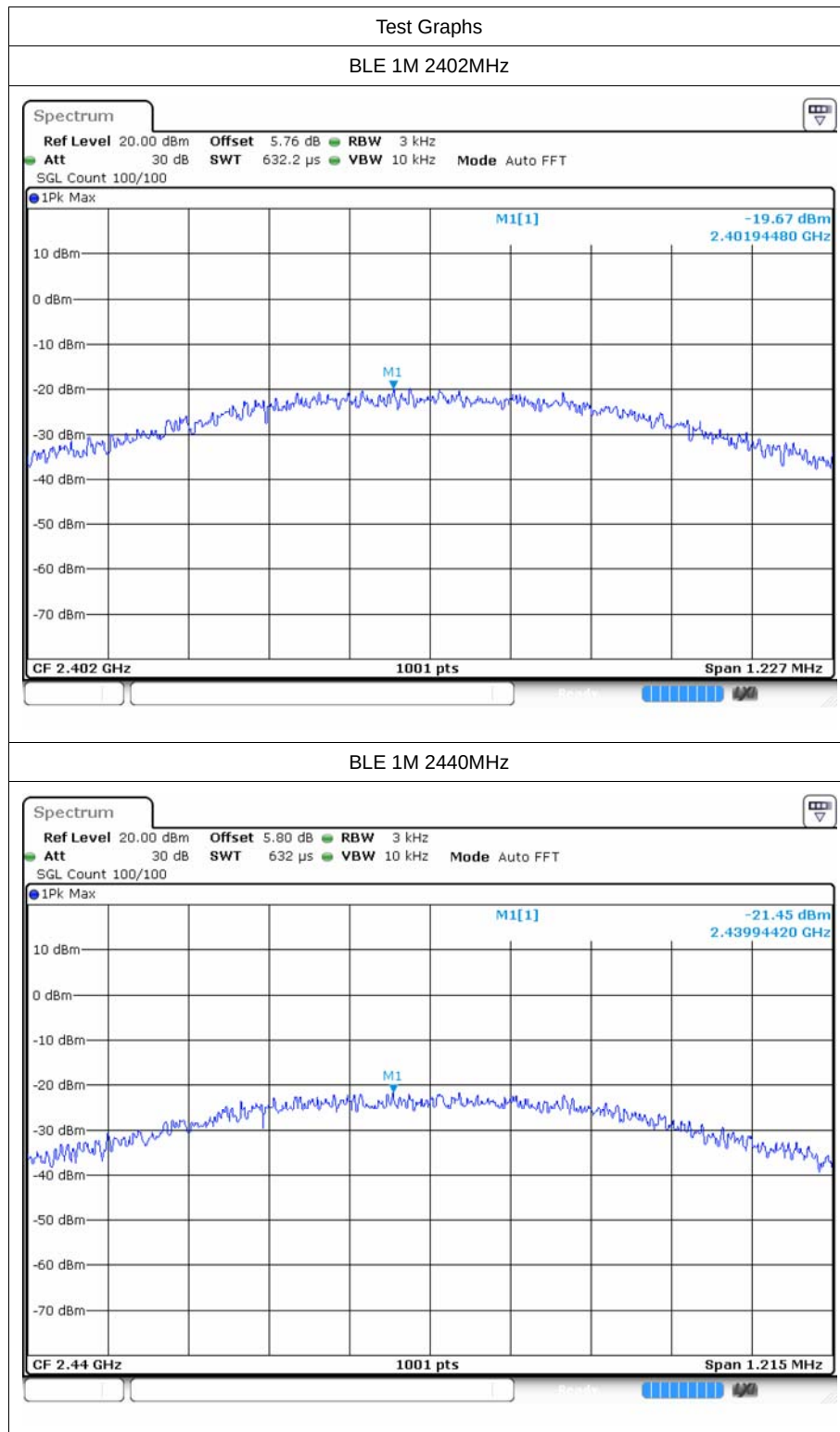
Mode	Frequency (MHz)	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-19.67	≤ 8	Pass
BLE 1M	2440	-21.45	≤ 8	Pass
BLE 1M	2480	-23.26	≤ 8	Pass
BLE 2M	2402	-23.24	≤ 8	Pass
BLE 2M	2440	-24.13	≤ 8	Pass
BLE 2M	2480	-26.66	≤ 8	Pass

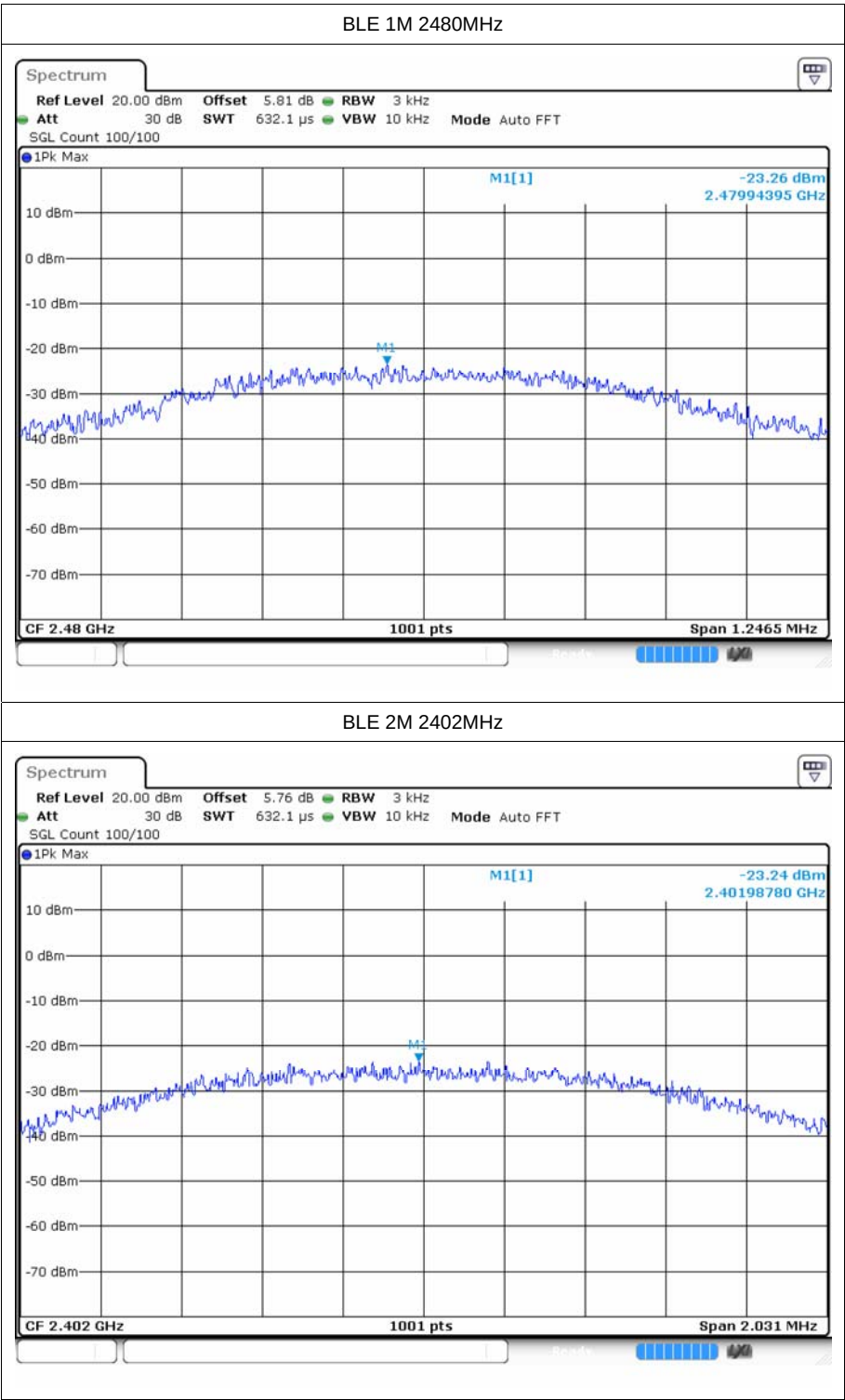
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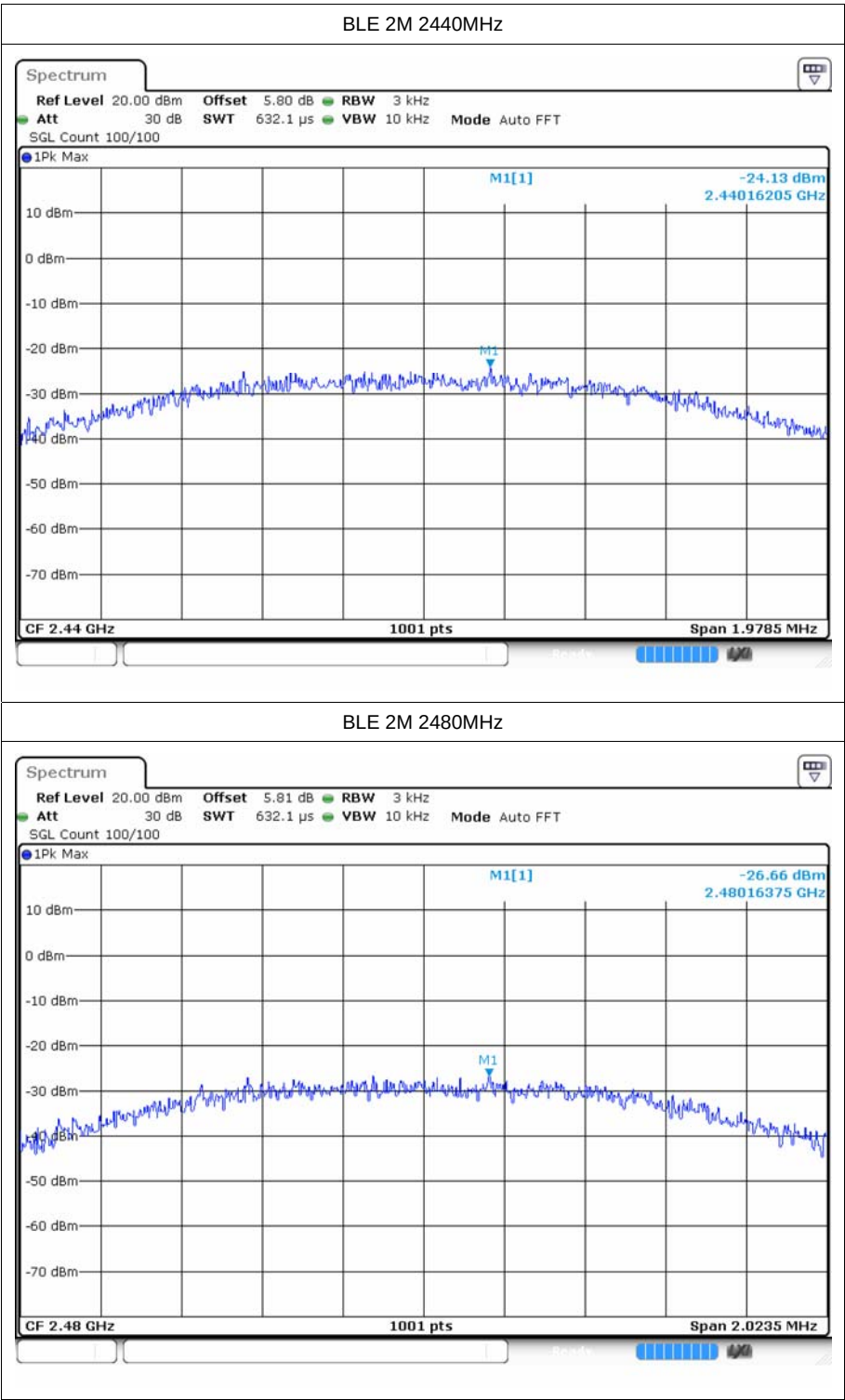
Mode	Frequency (MHz)	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-19.63	≤ 8	Pass
BLE 1M	2440	-21.72	≤ 8	Pass
BLE 1M	2480	-23.45	≤ 8	Pass
BLE 2M	2402	-23.39	≤ 8	Pass
BLE 2M	2440	-24.12	≤ 8	Pass
BLE 2M	2480	-26.31	≤ 8	Pass

4.2 Test Graphs

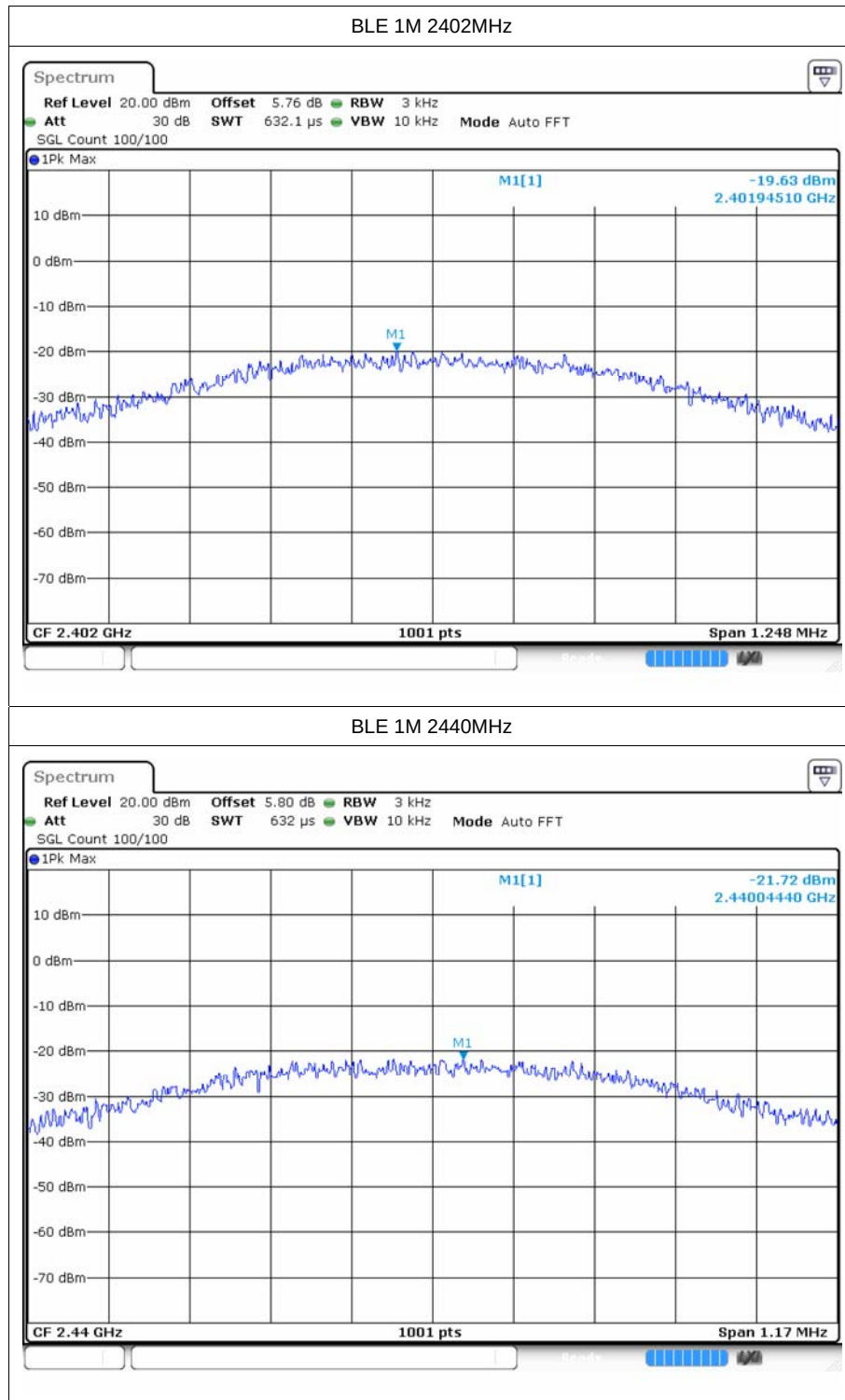
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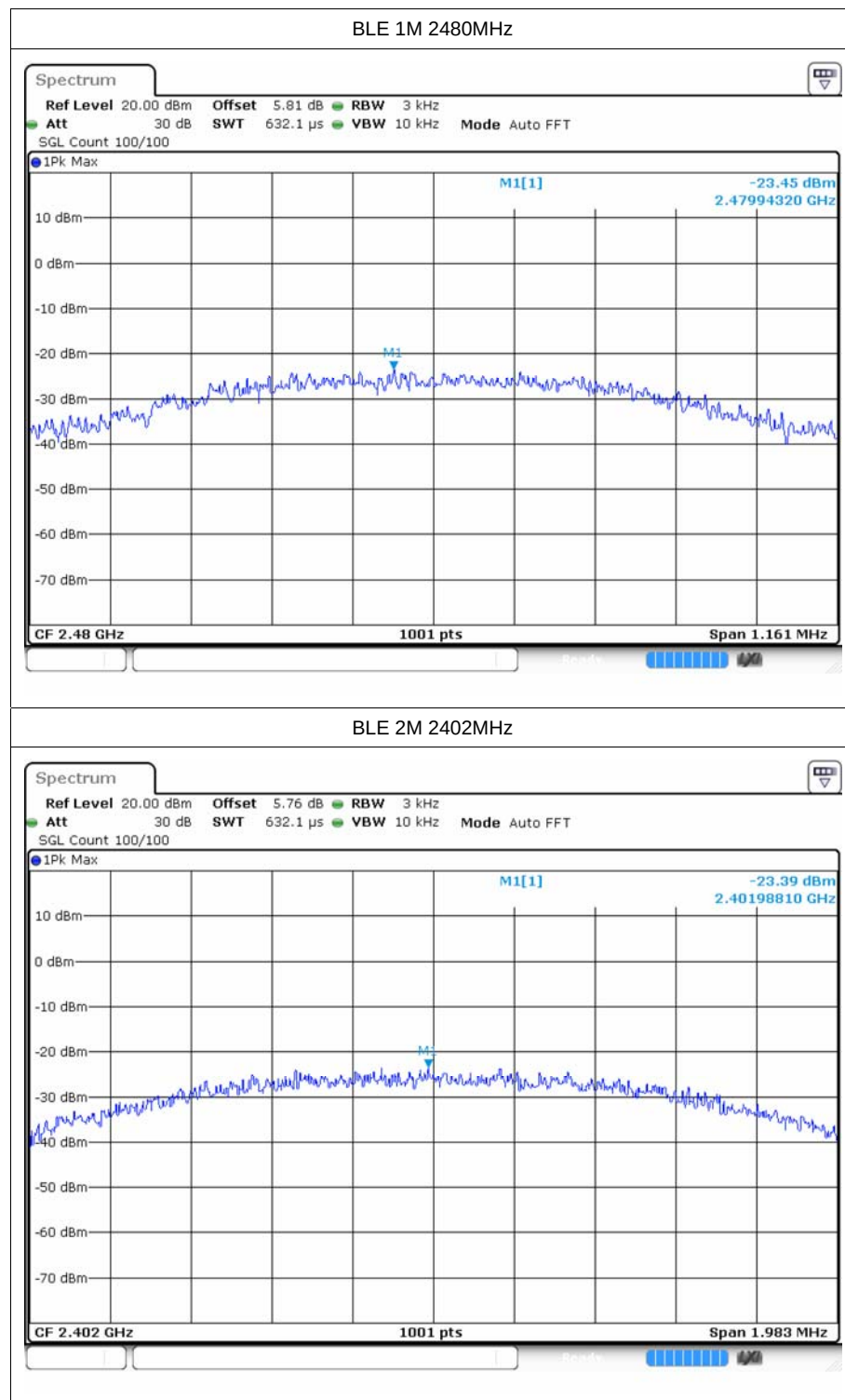


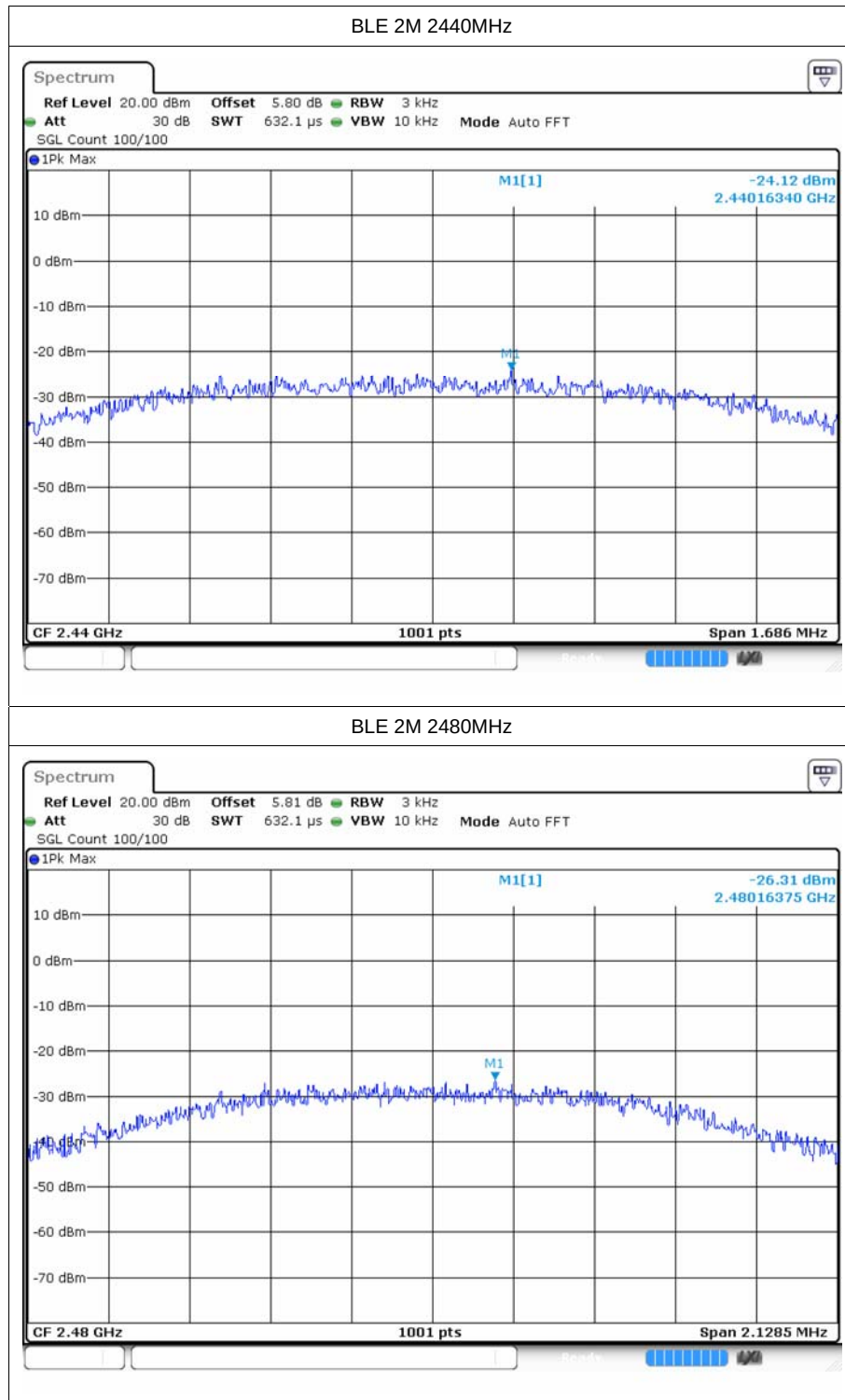




Right:









5 Band Edge

5.1 Test Result

Left:

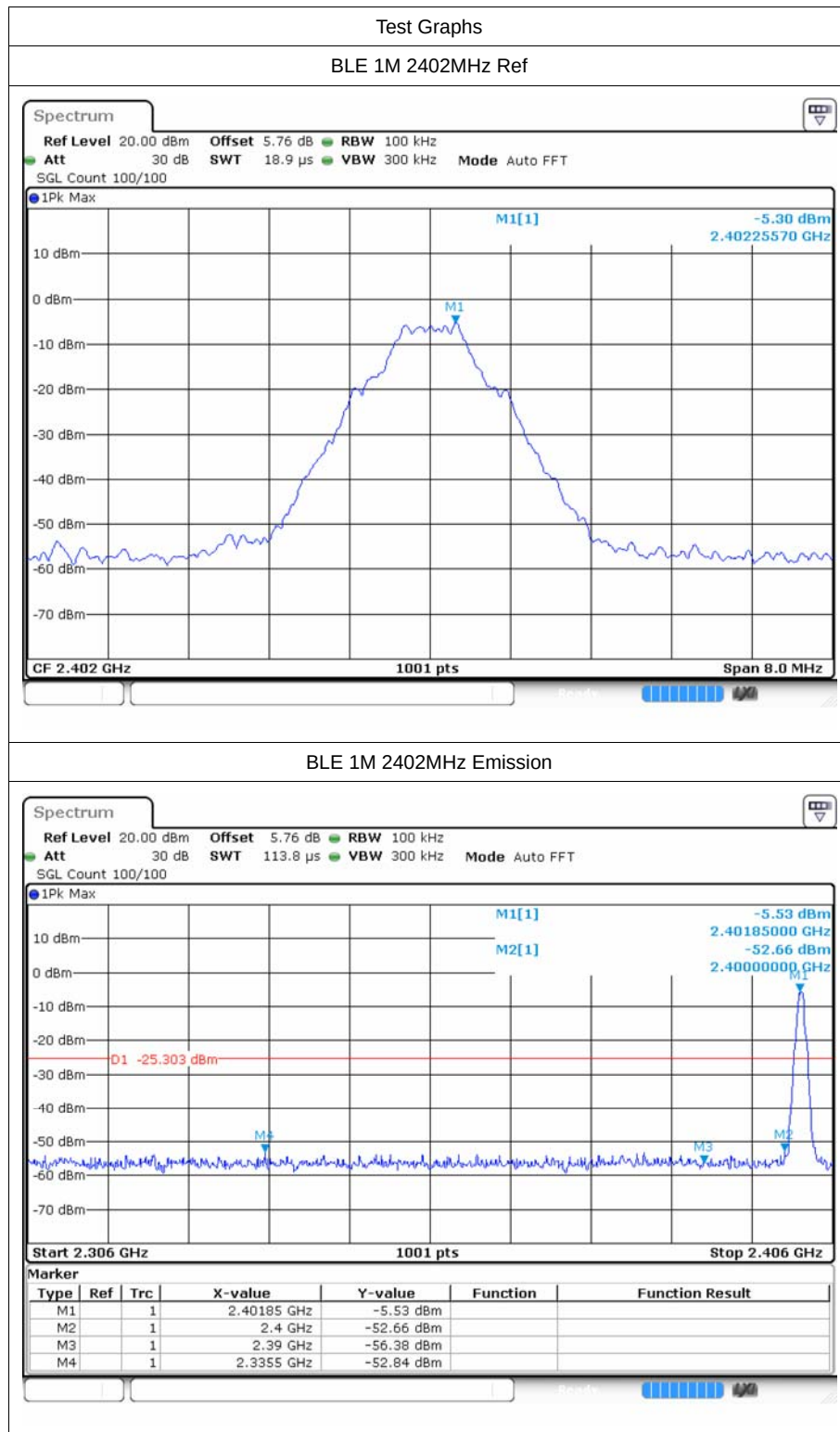
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-47.53	-20	Pass
BLE 1M	2480	-44.31	-20	Pass
BLE 2M	2402	-44.66	-20	Pass
BLE 2M	2480	-42.78	-20	Pass

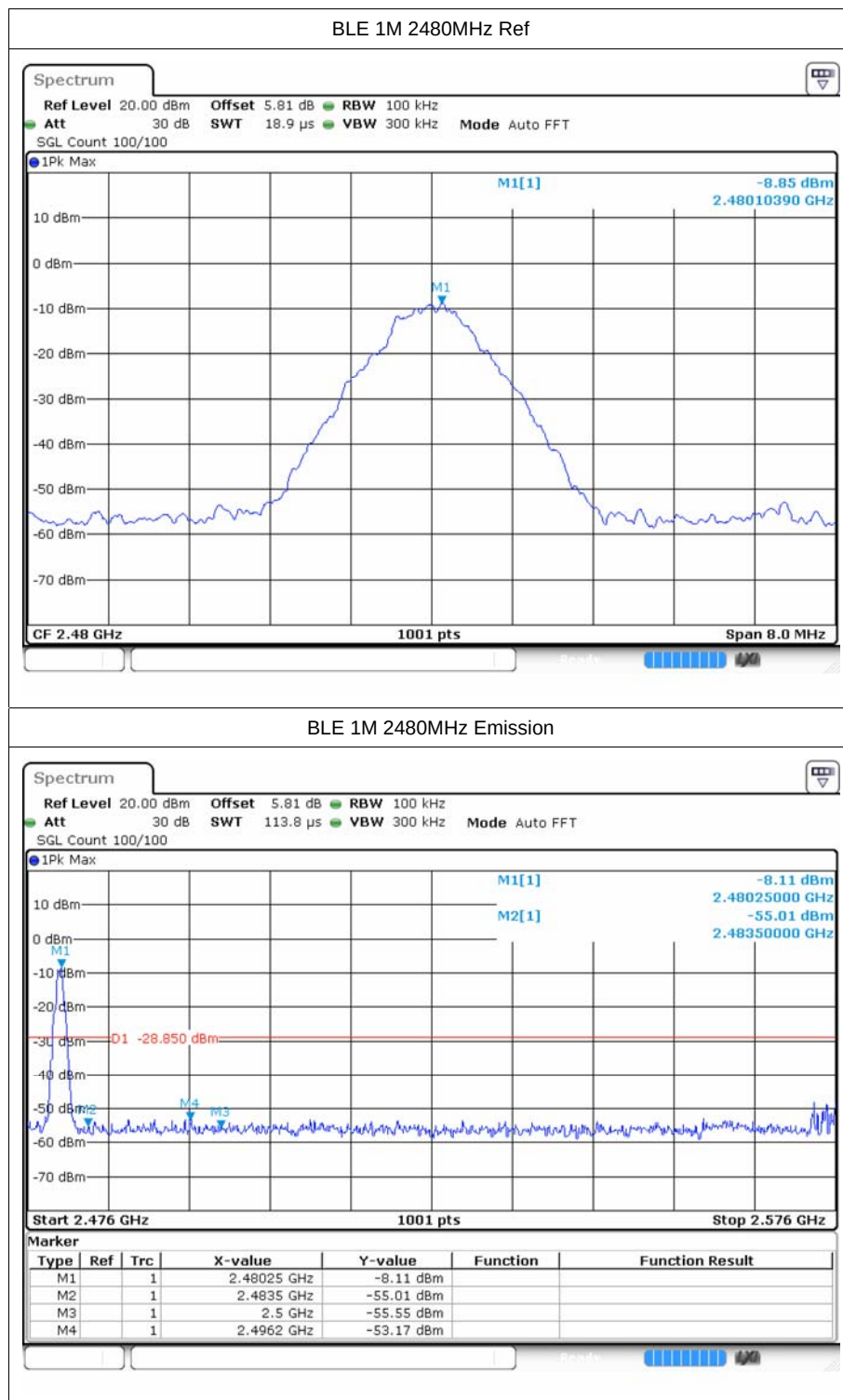
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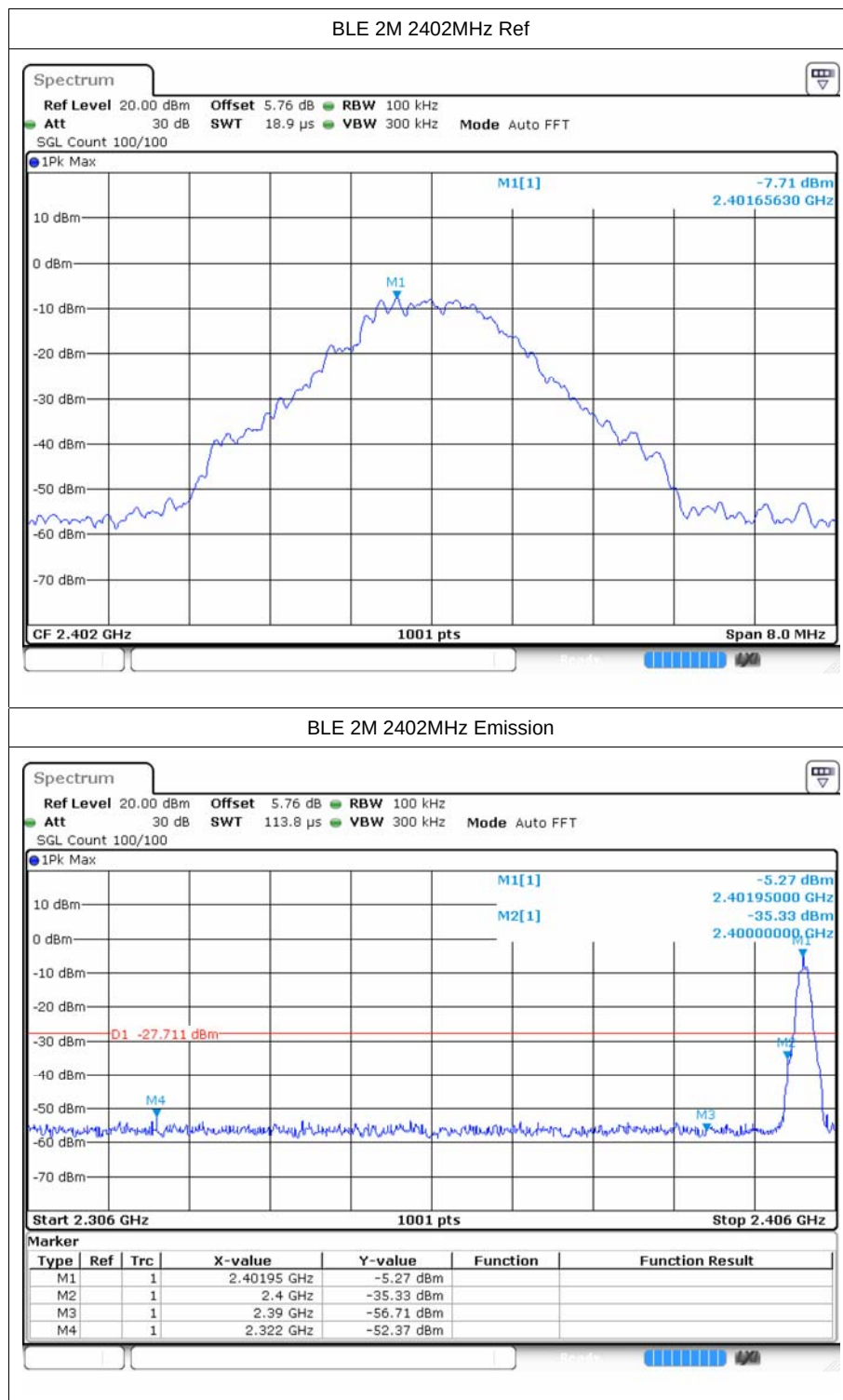
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-48.32	-20	Pass
BLE 1M	2480	-44.52	-20	Pass
BLE 2M	2402	-45.82	-20	Pass
BLE 2M	2480	-44.38	-20	Pass

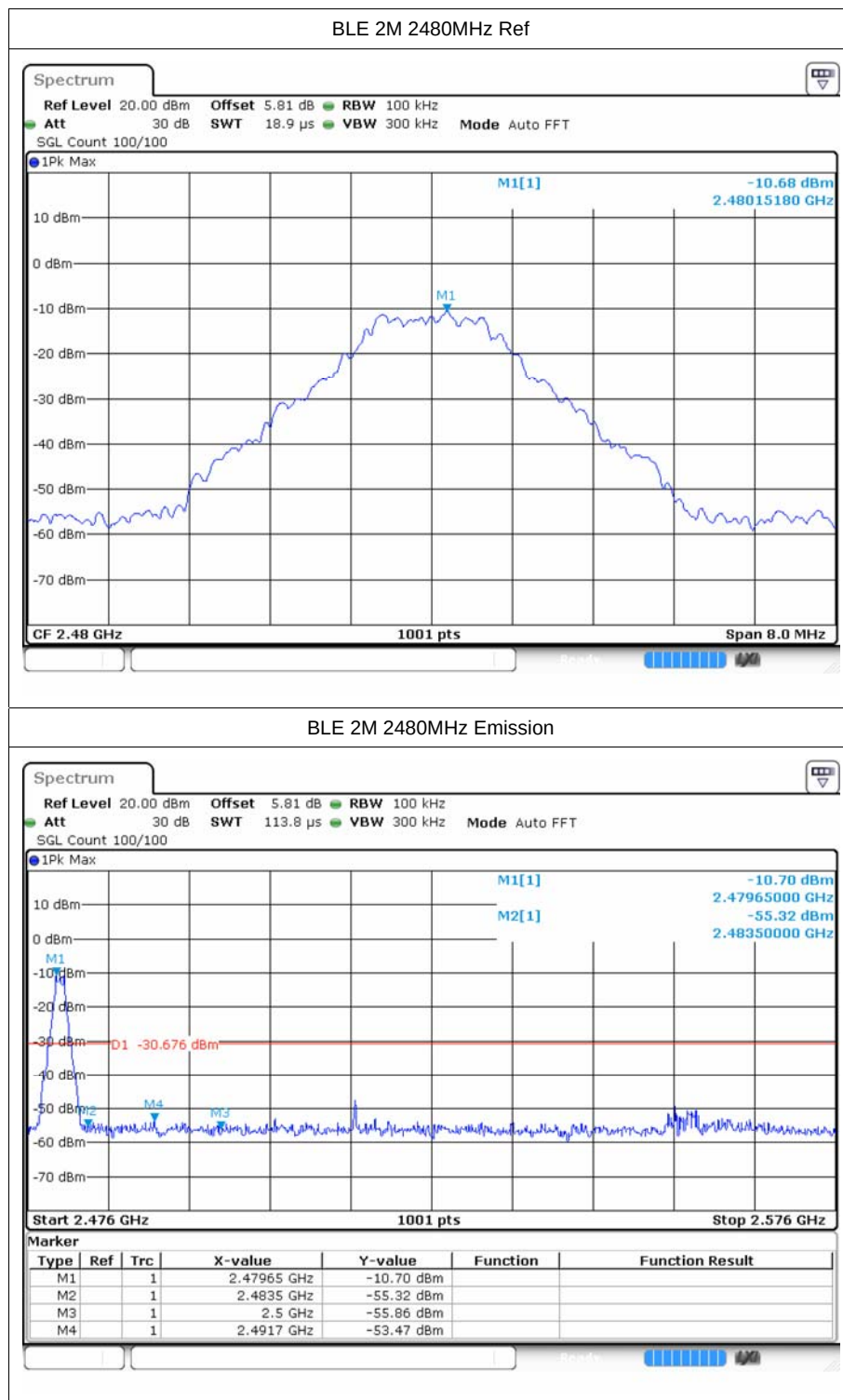
5.2 Test Graphs

Left:

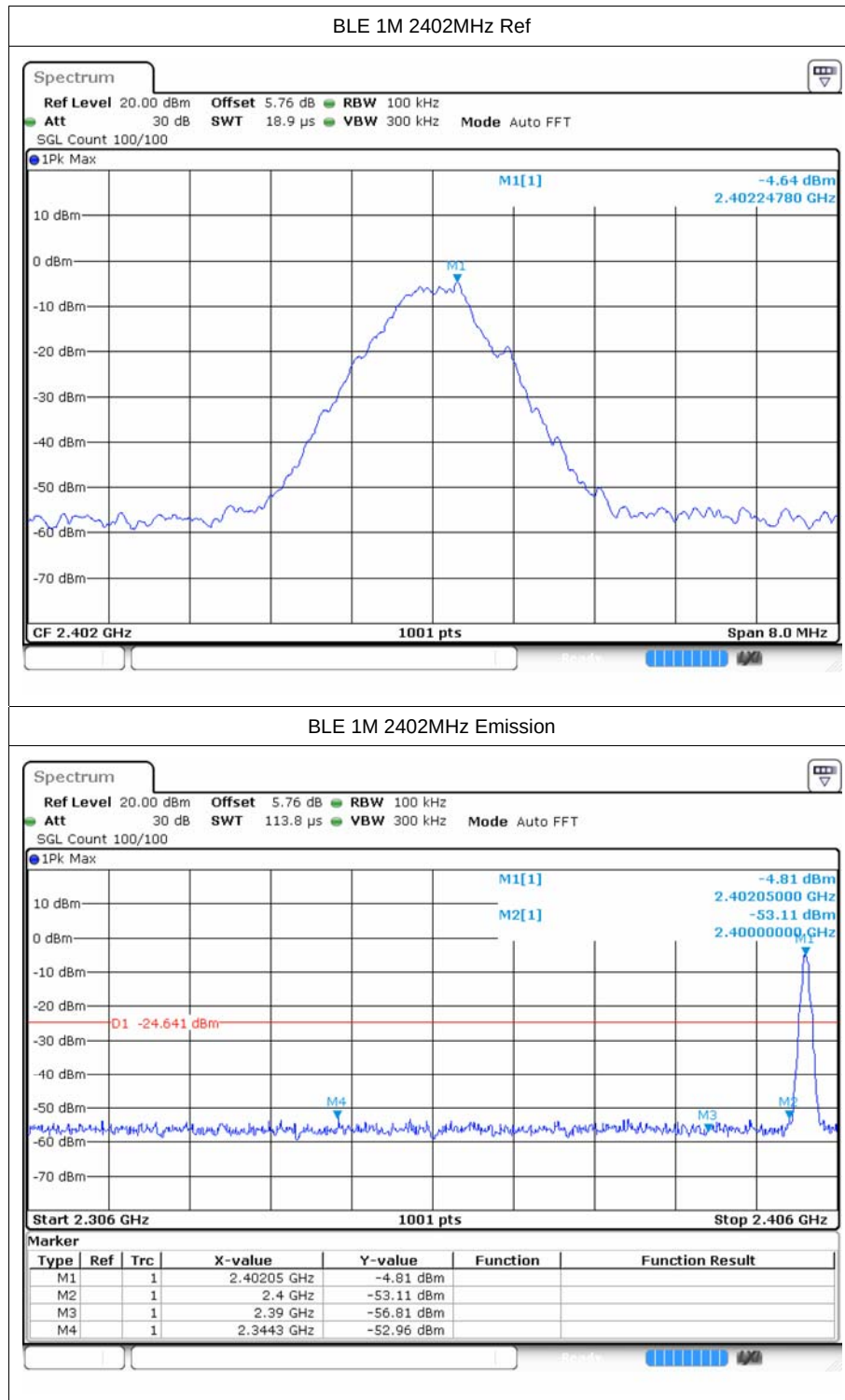


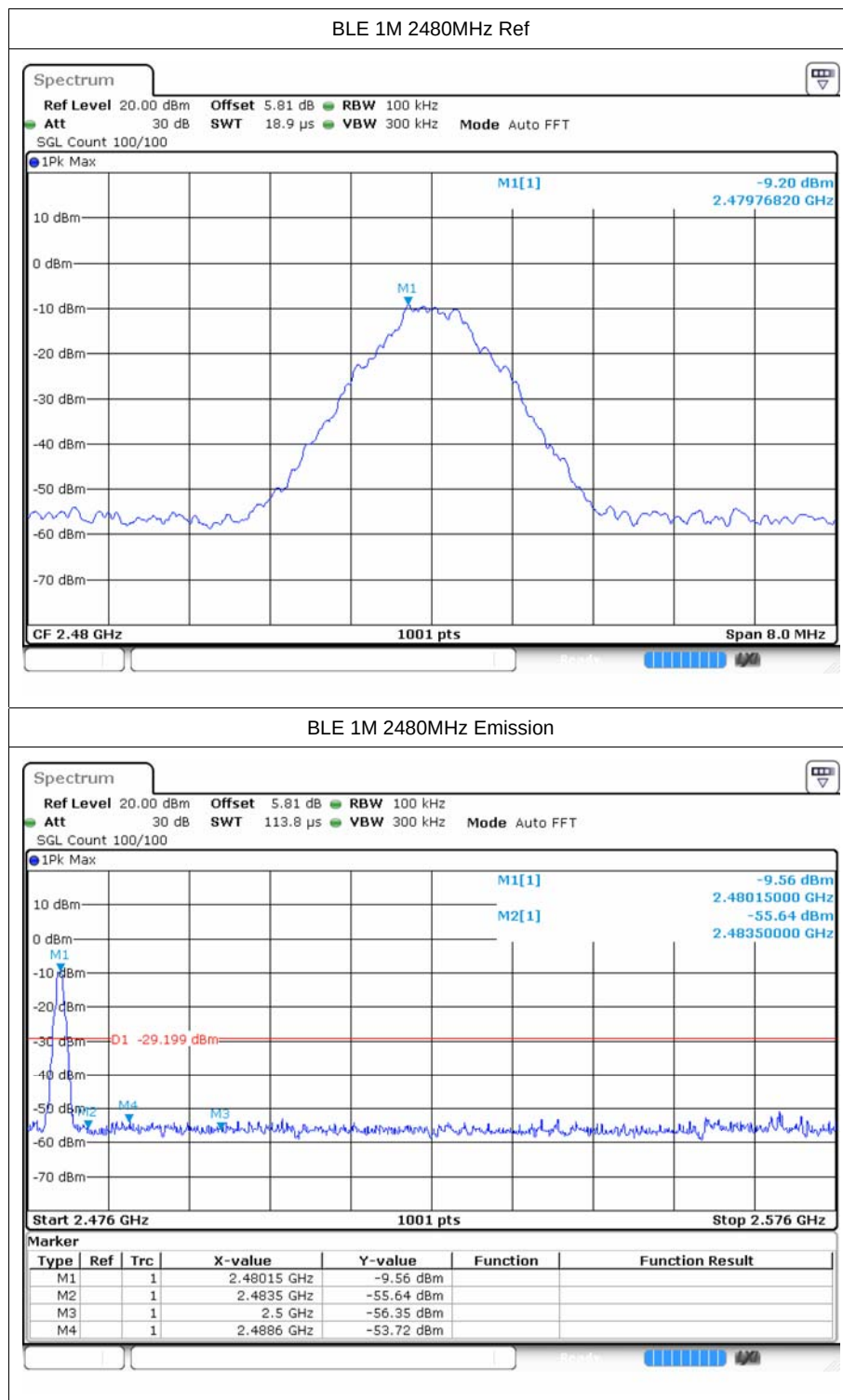


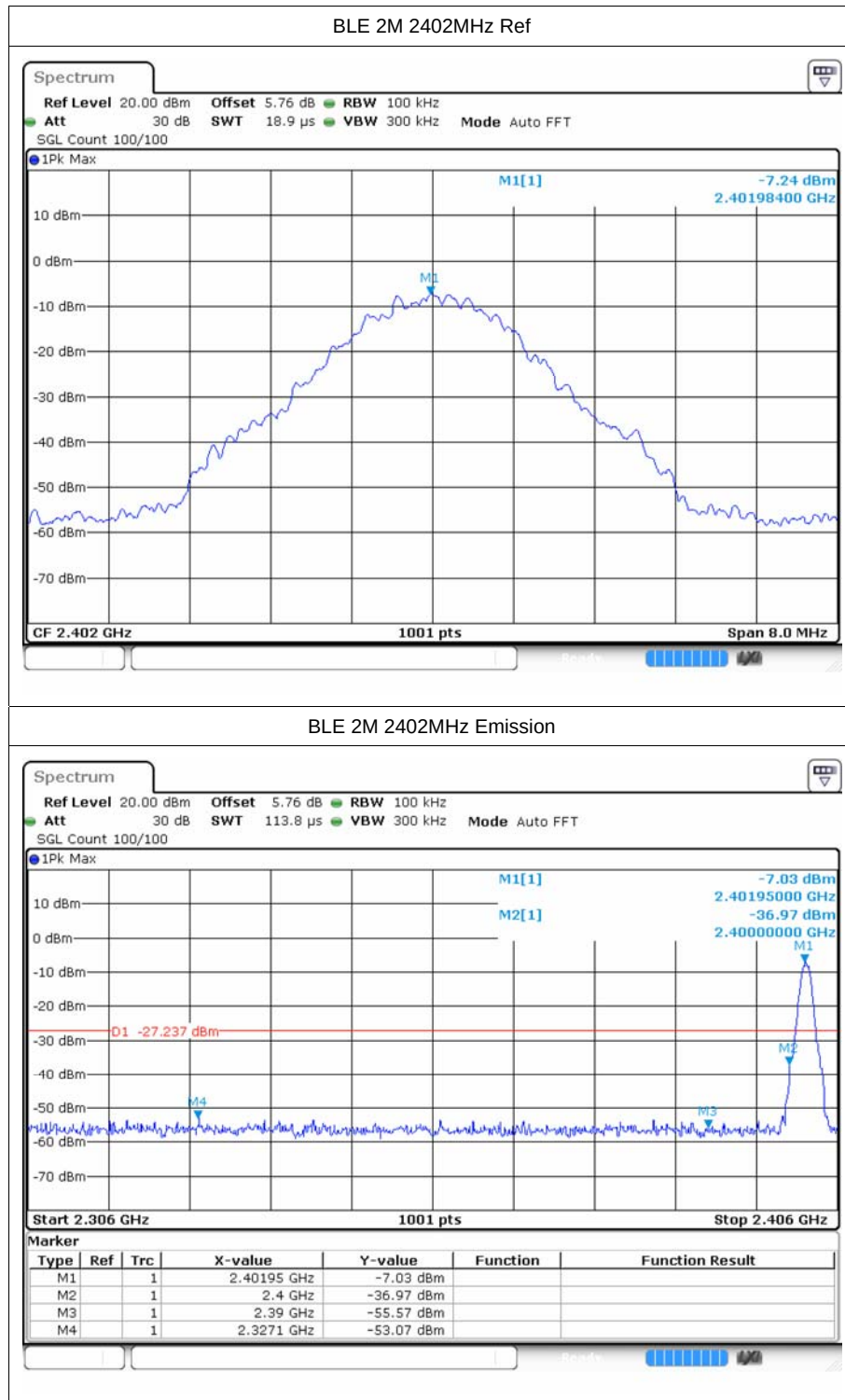


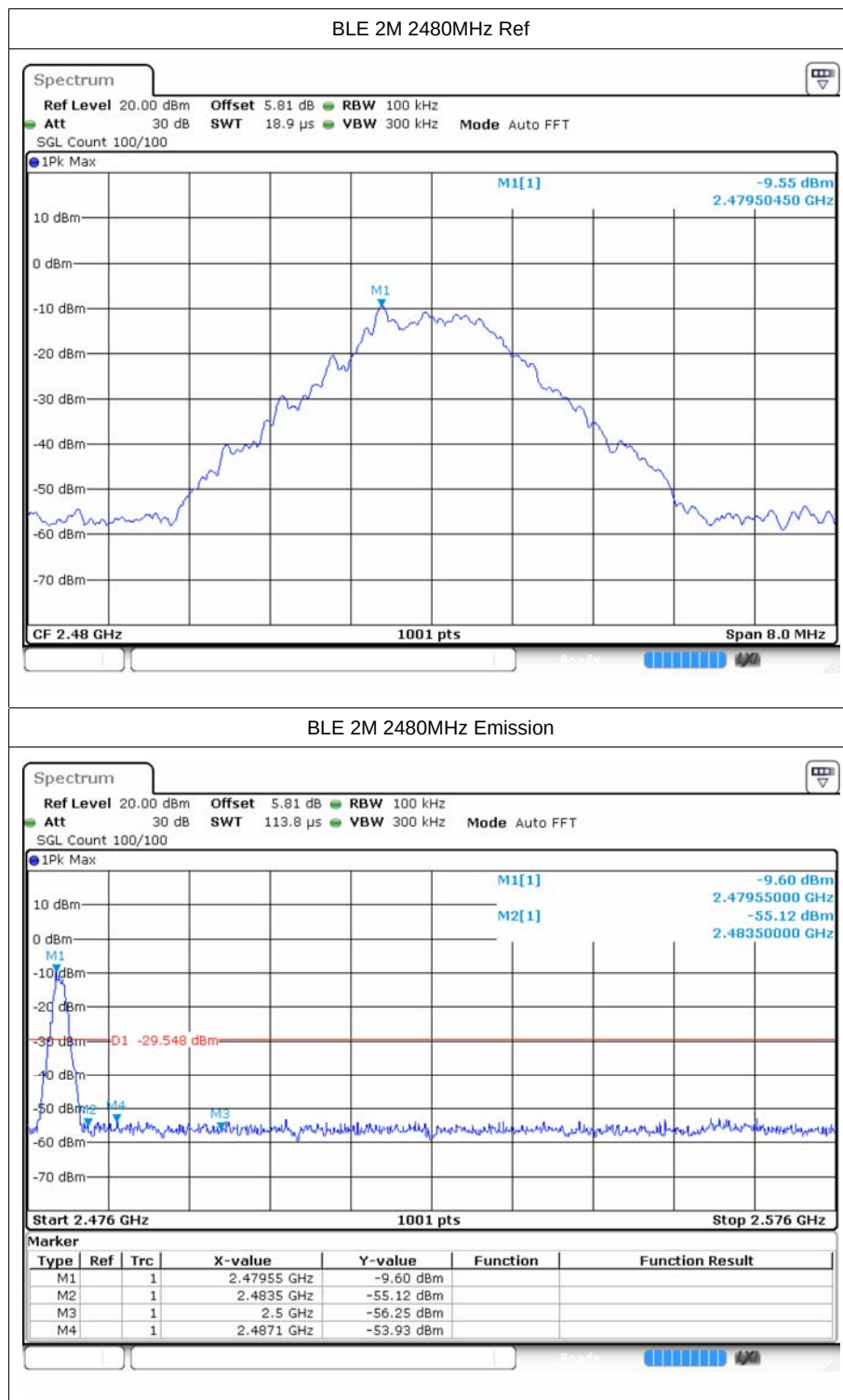


Right:









6 Conducted RF Spurious Emission

6.1 Test Result

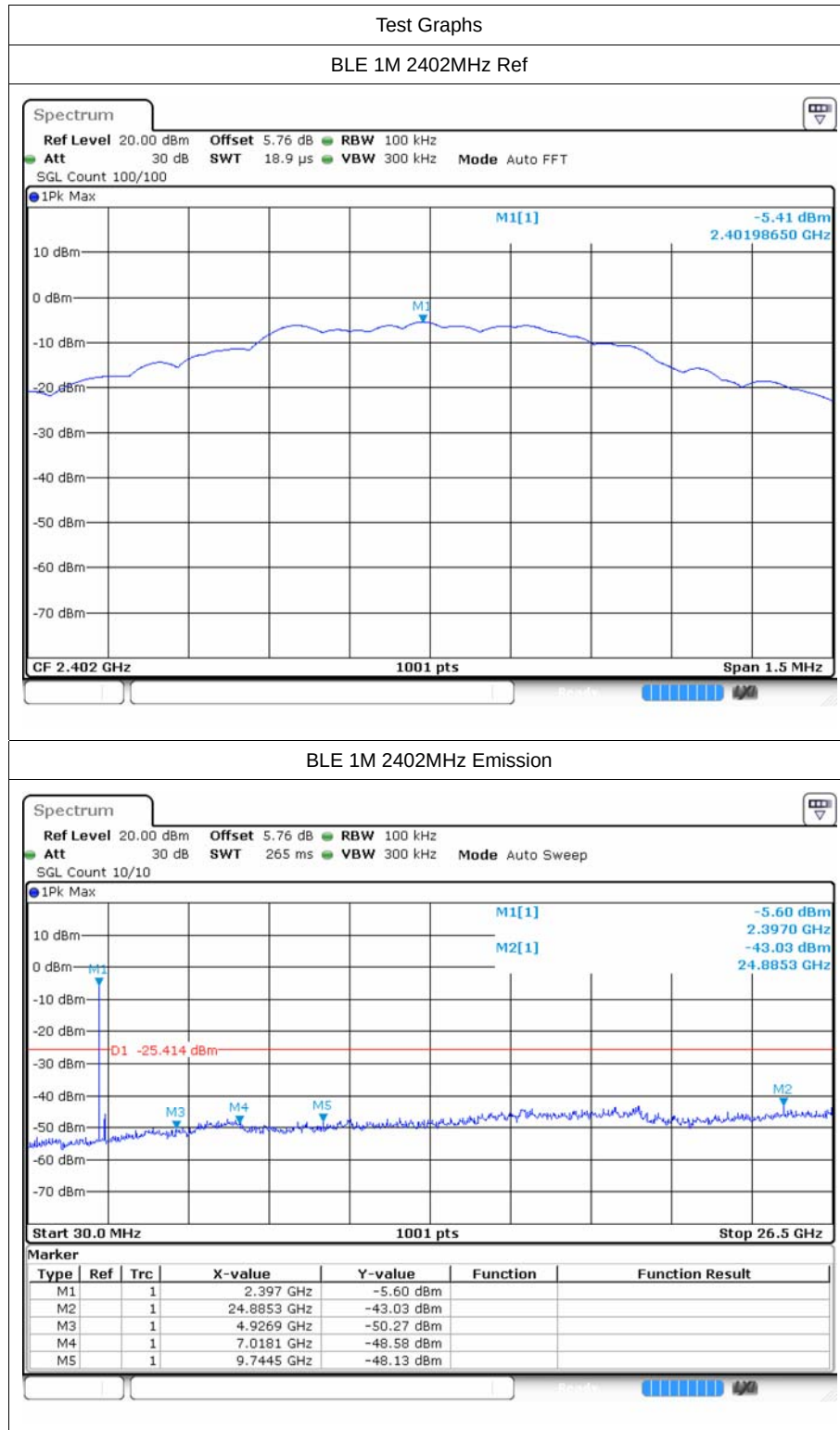
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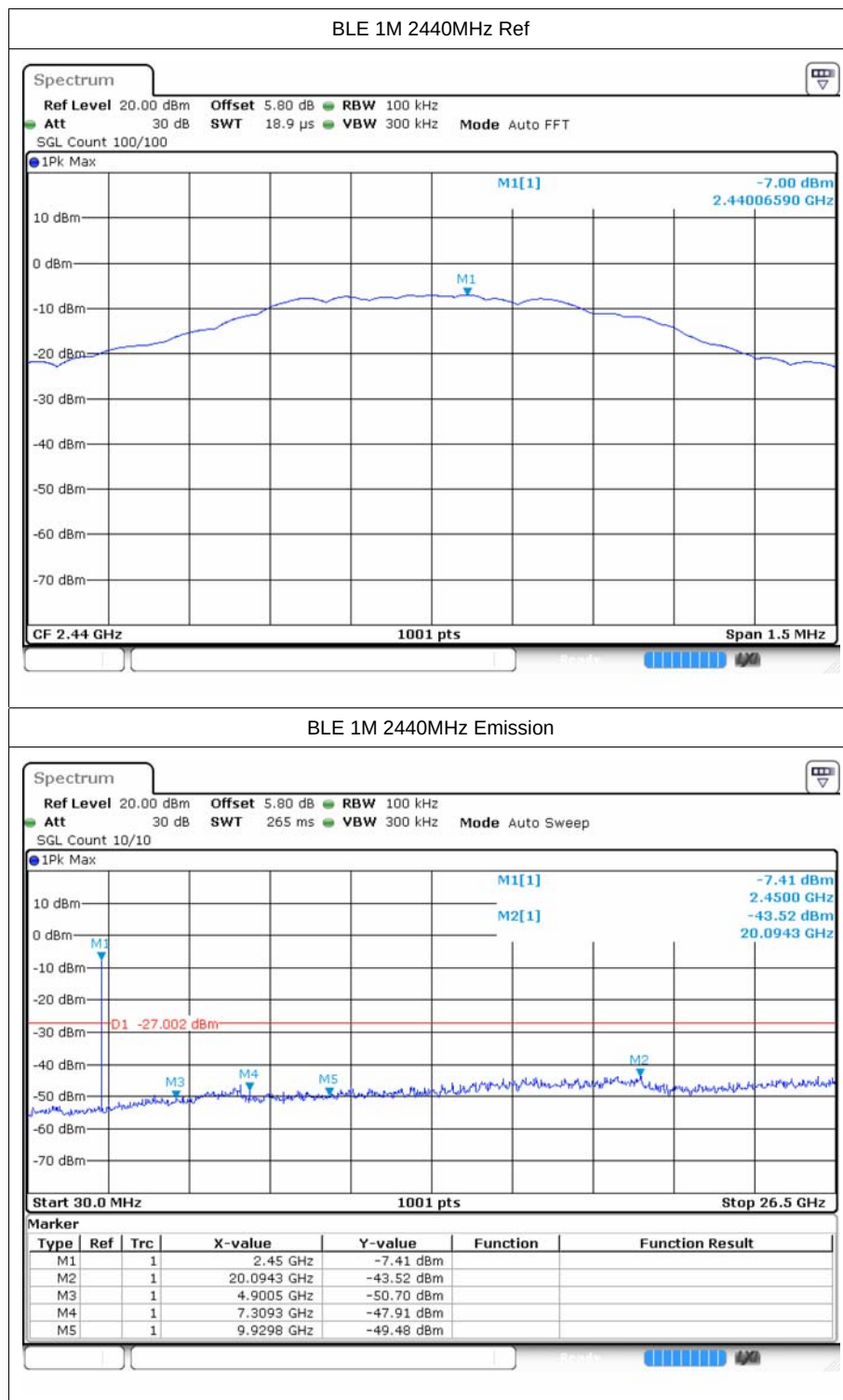
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-37.62	-20	Pass
BLE 1M	2440	-36.52	-20	Pass
BLE 1M	2480	-35.55	-20	Pass
BLE 2M	2402	-35.84	-20	Pass
BLE 2M	2440	-35.12	-20	Pass
BLE 2M	2480	-32.36	-20	Pass

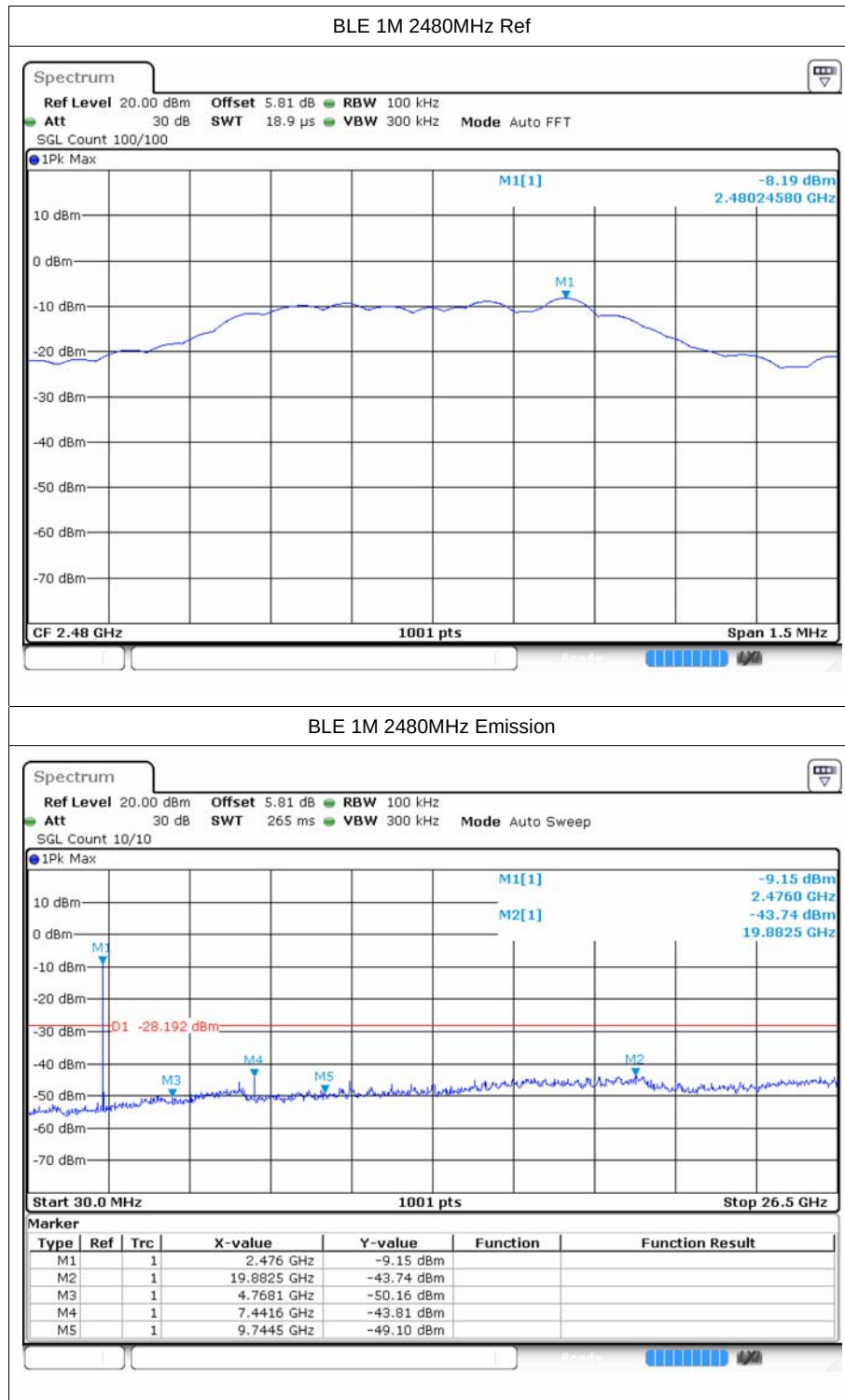
Right:

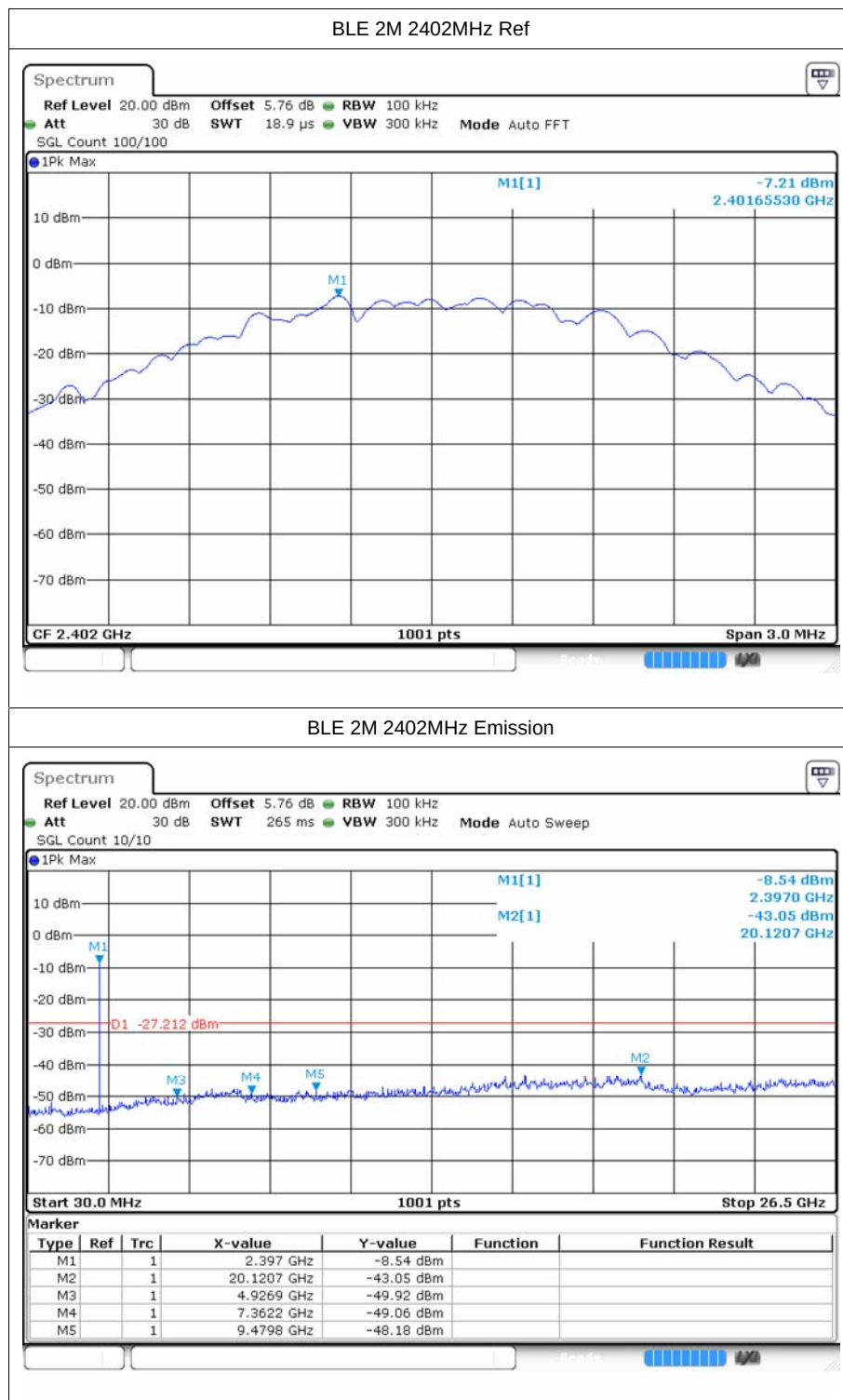
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-38.8	-20	Pass
BLE 1M	2440	-36.73	-20	Pass
BLE 1M	2480	-34.63	-20	Pass
BLE 2M	2402	-36.93	-20	Pass
BLE 2M	2440	-33.79	-20	Pass
BLE 2M	2480	-32.8	-20	Pass

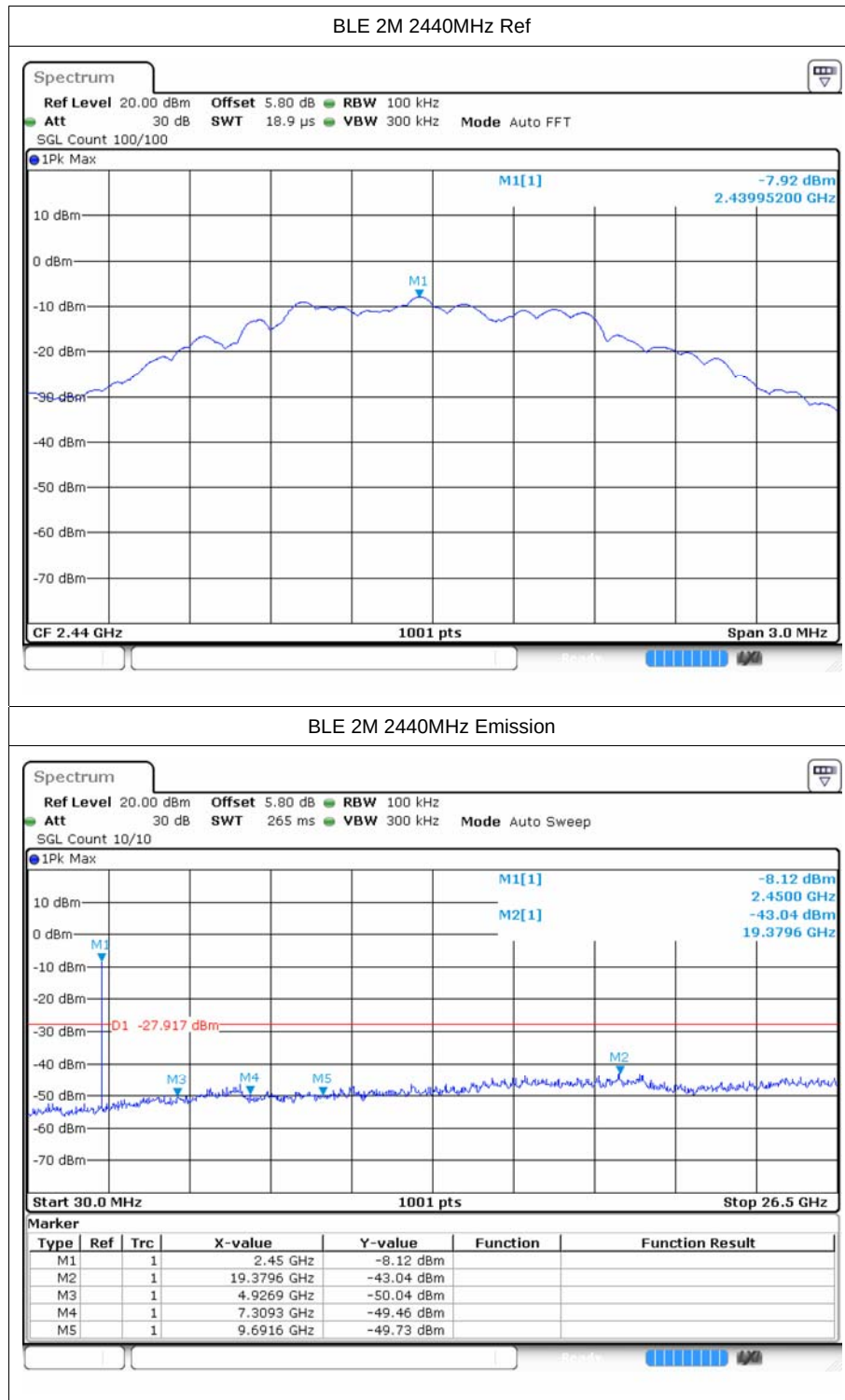
6.2 Test Graphs

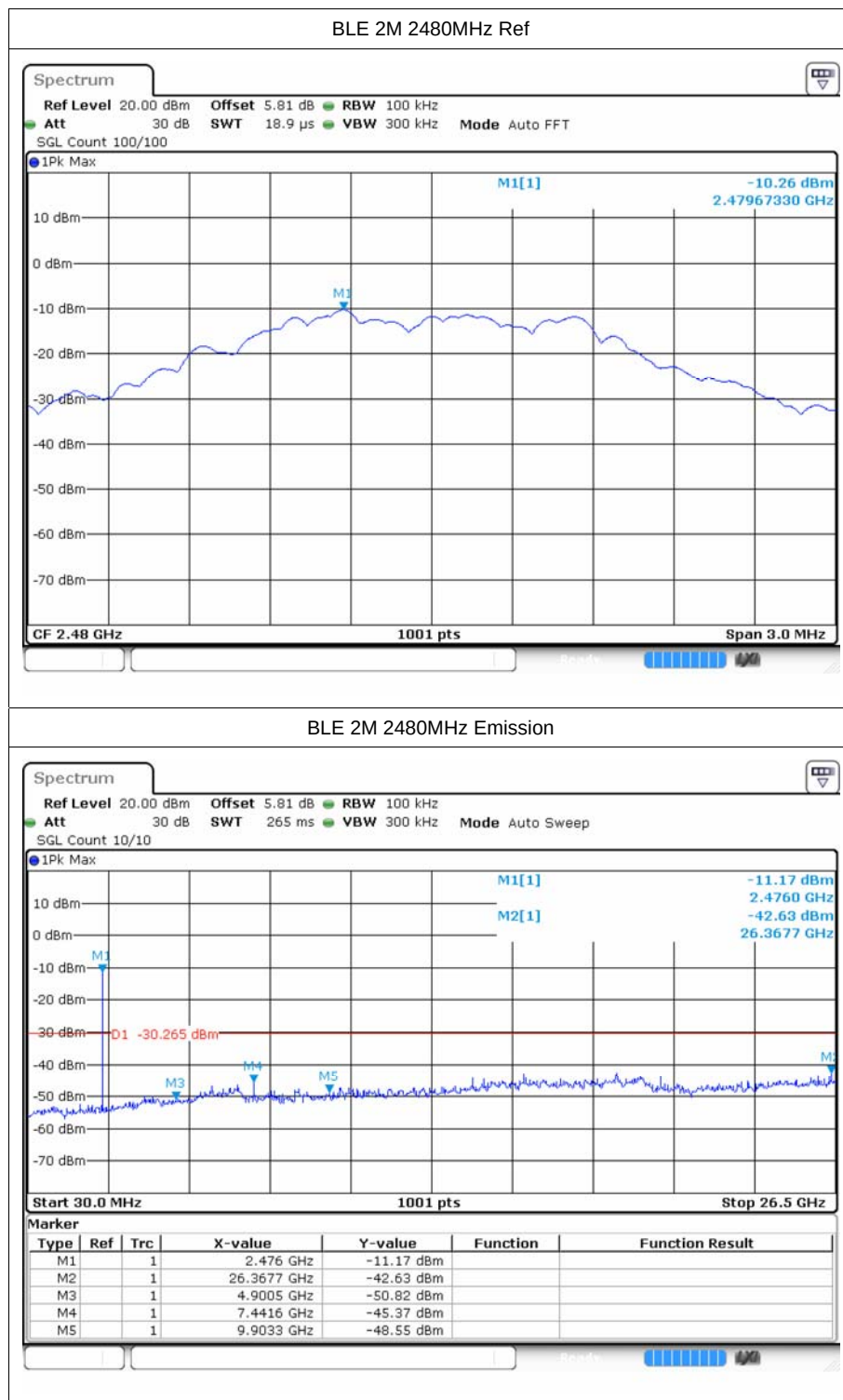




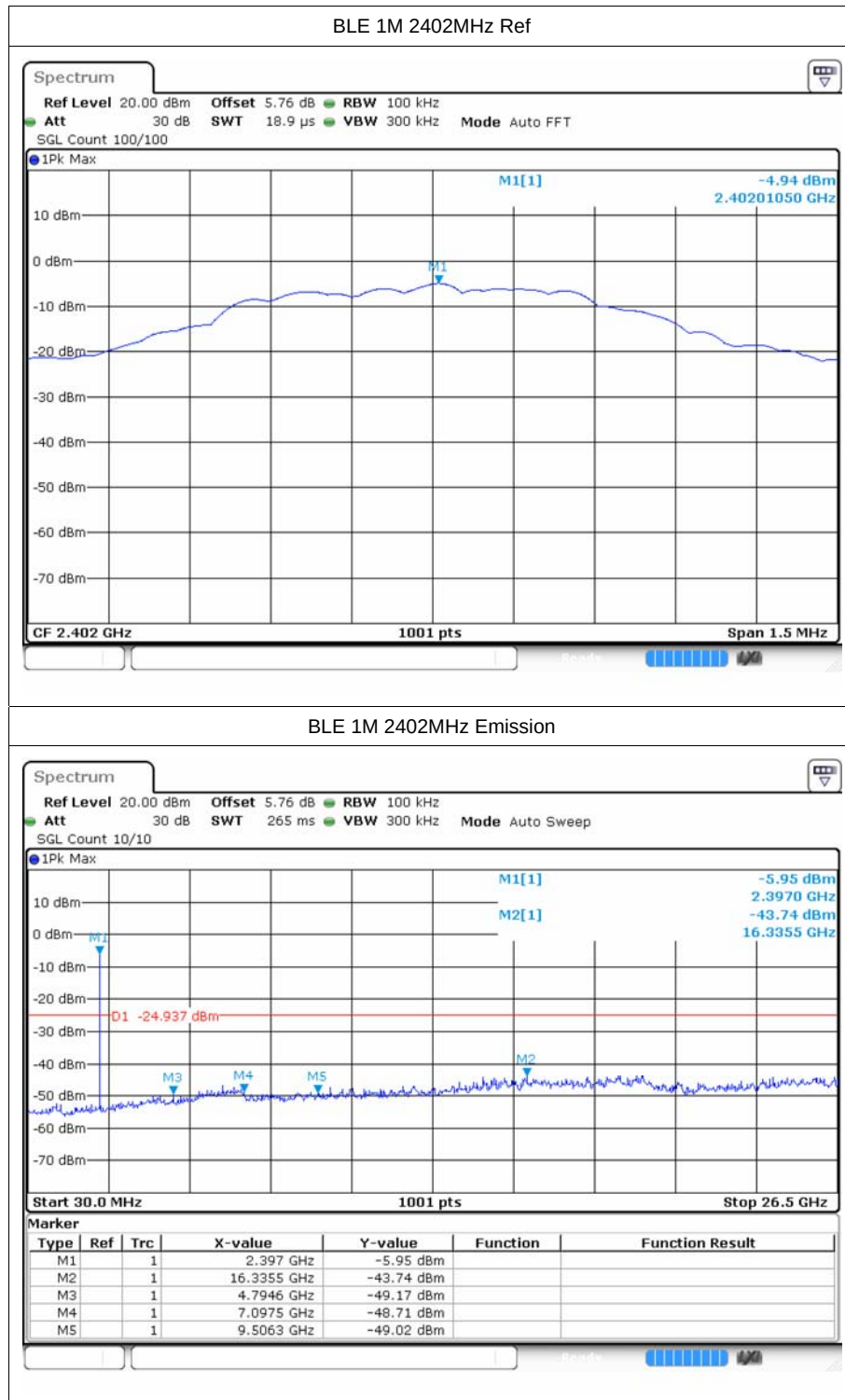


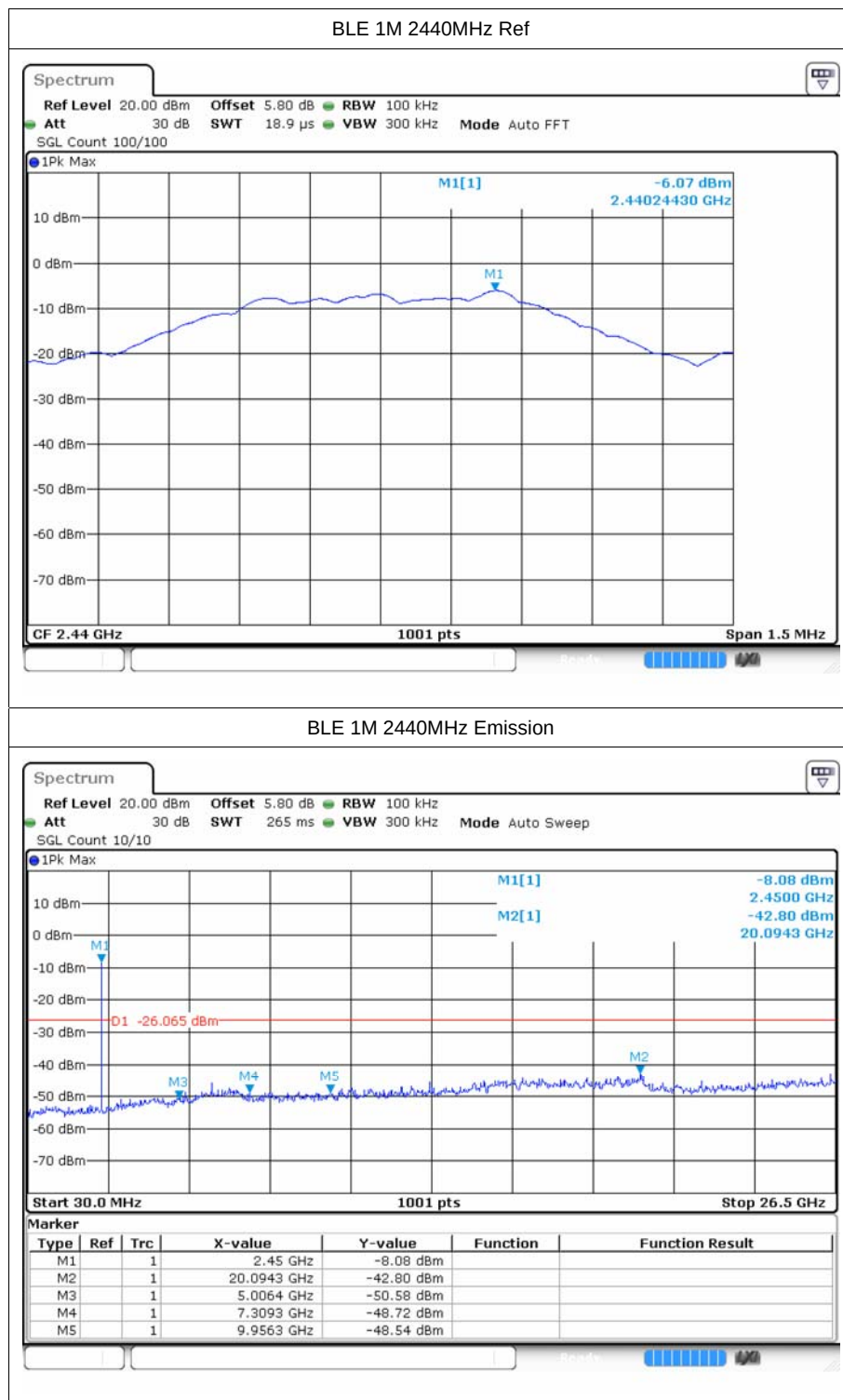


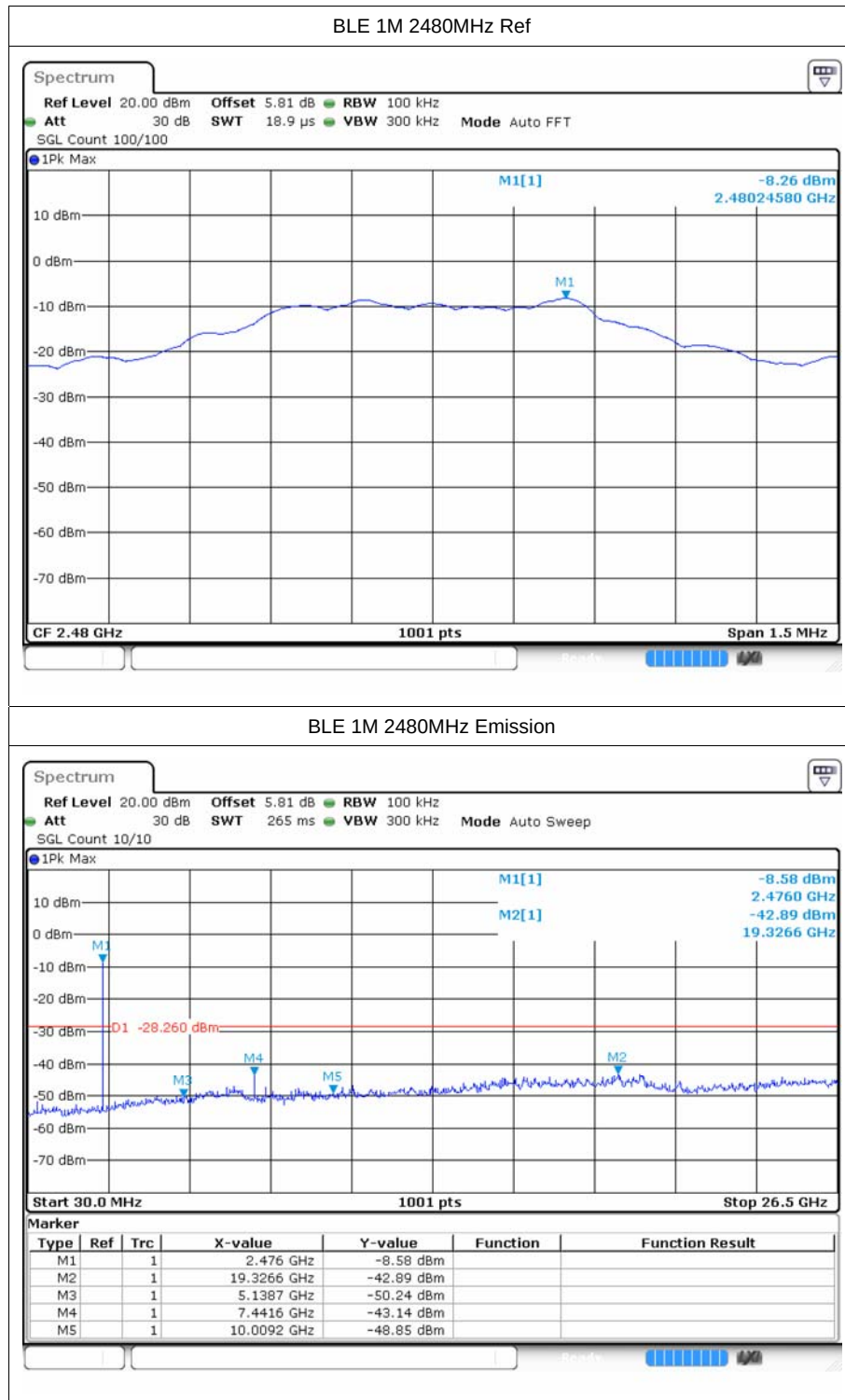


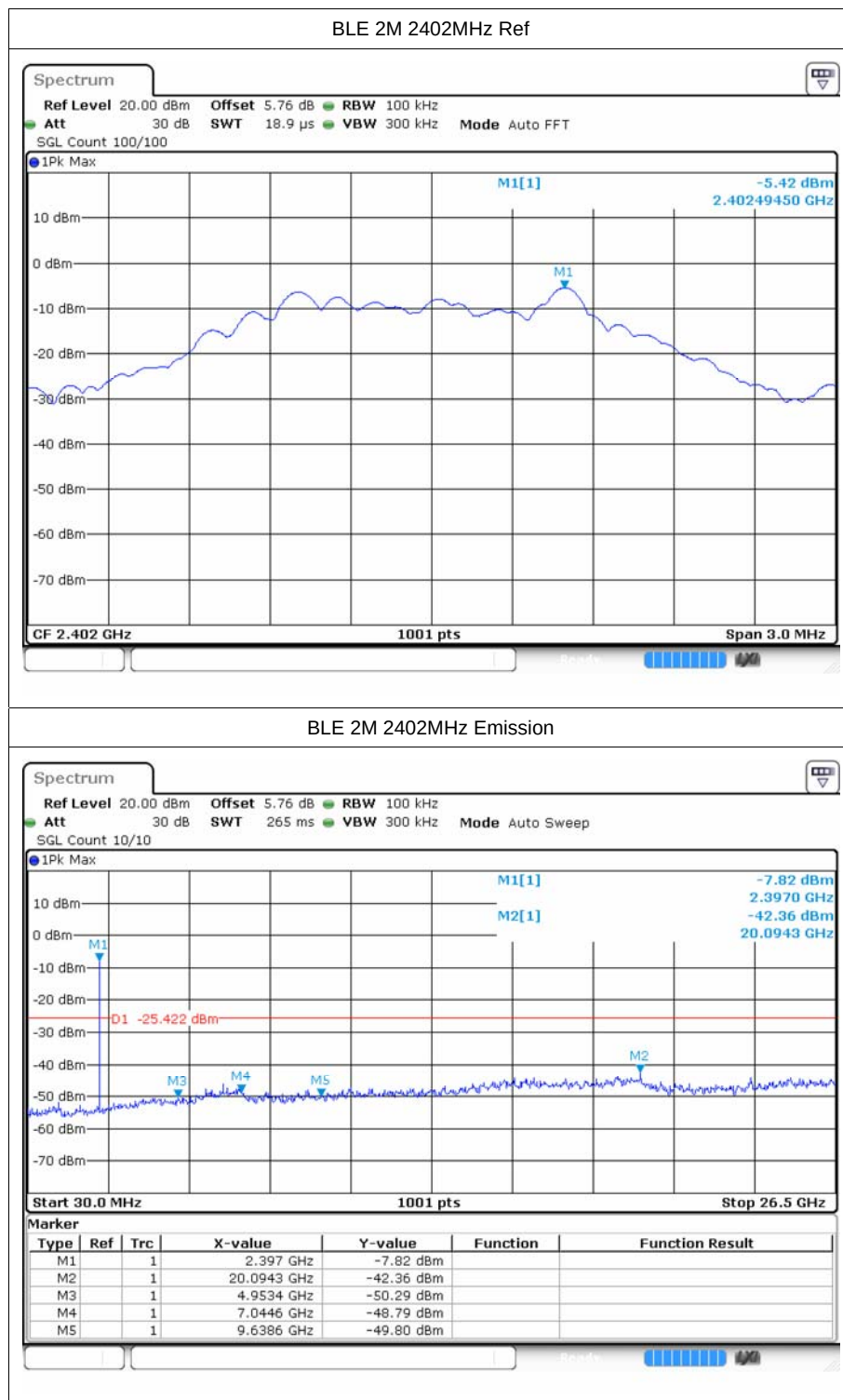


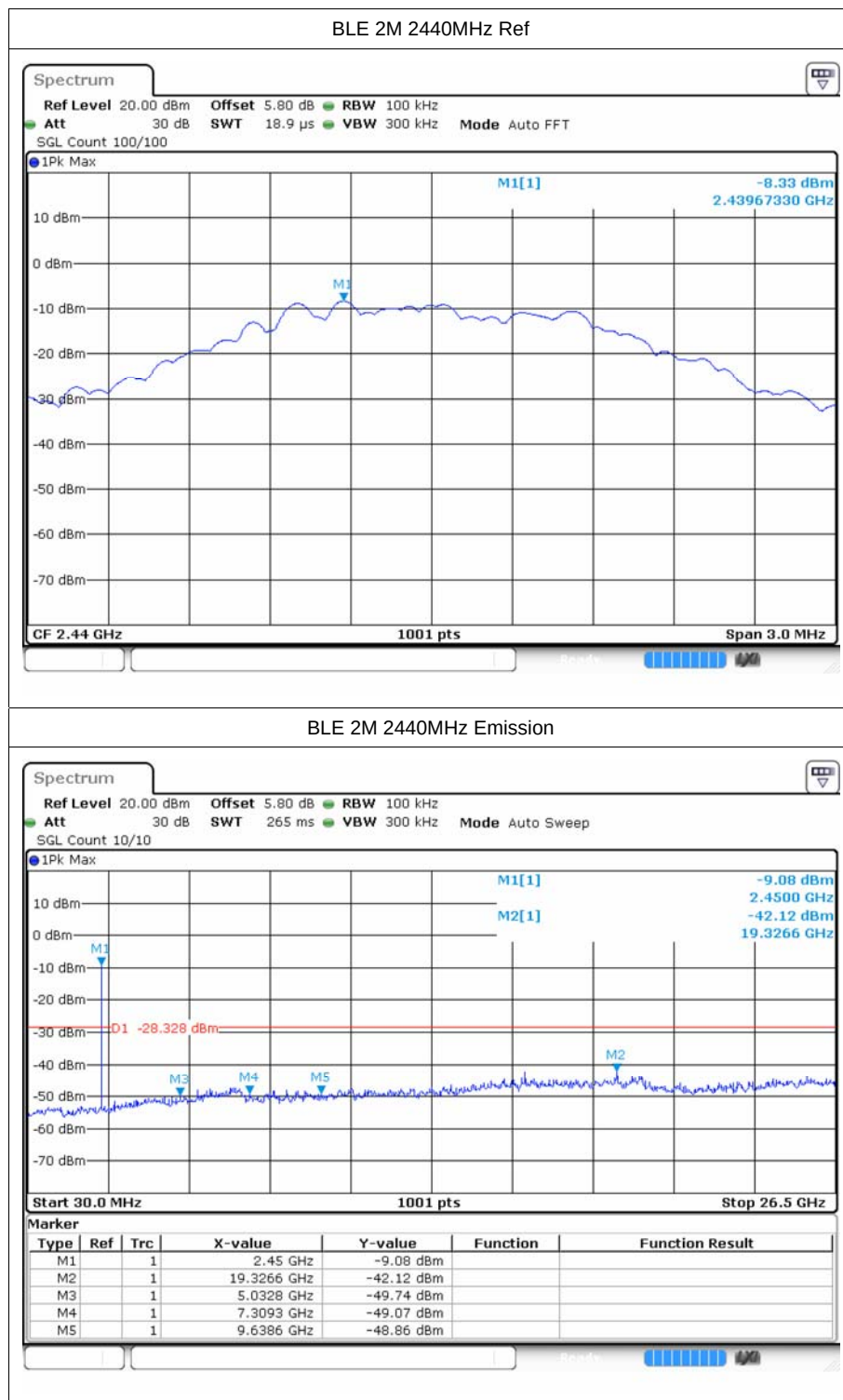
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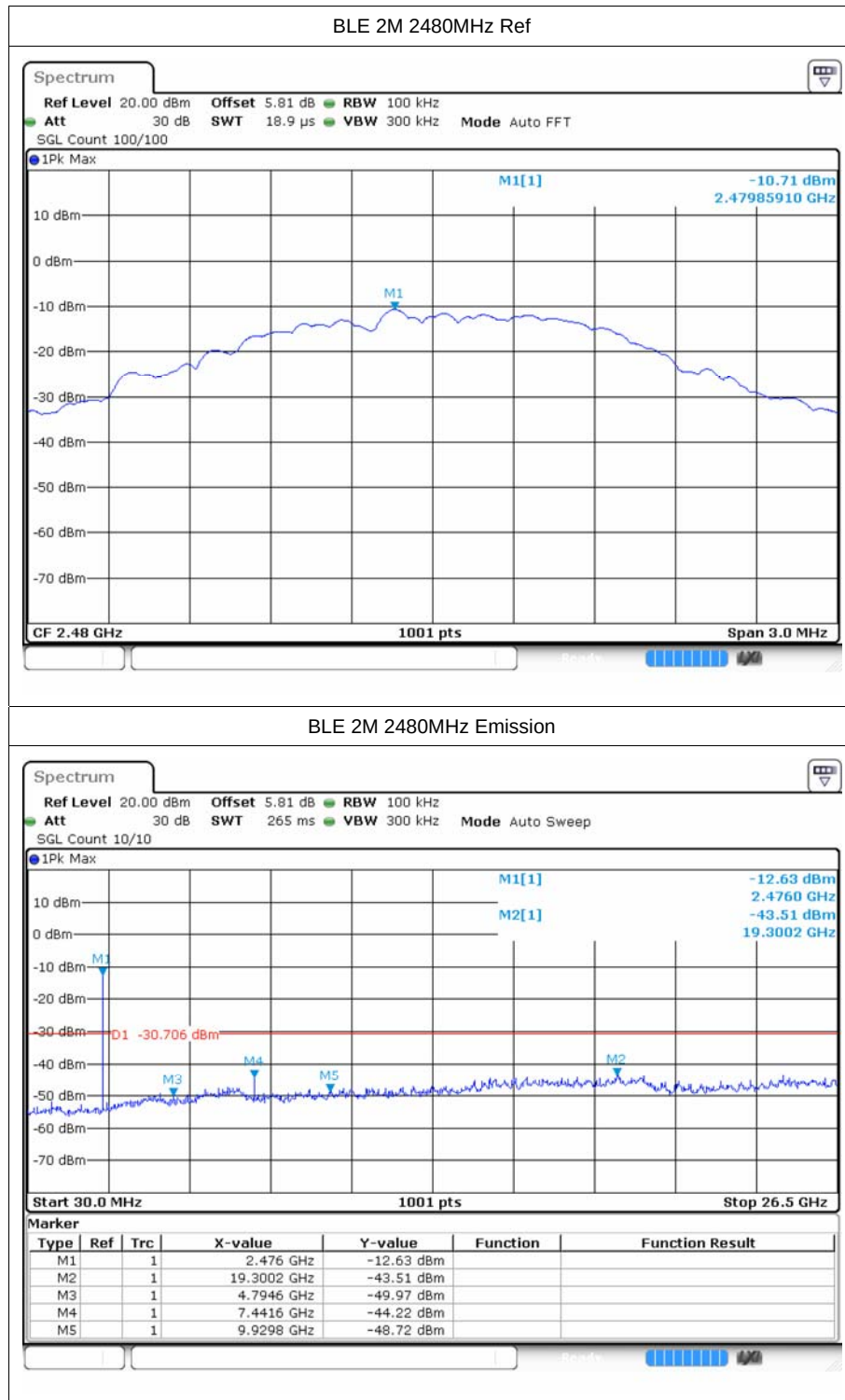














7 Restrict Band

7.1 Test Result

Left:

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
BLE 1M	2402	2310	-45.31	2	51.95	Peak	74	Pass
BLE 1M	2402	2310	-55.04	2	42.22	Average	54	Pass
BLE 1M	2402	2338.128	-43.22	2	54.04	Peak	74	Pass
BLE 1M	2402	2338.8	-53.1	2	44.16	Average	54	Pass
BLE 1M	2402	2390	-46.84	2	50.42	Peak	74	Pass
BLE 1M	2402	2390	-54.7	2	42.56	Average	54	Pass
BLE 1M	2480	2483.5	-45.9	2	51.36	Peak	74	Pass
BLE 1M	2480	2483.5	-54.86	2	42.4	Average	54	Pass
BLE 1M	2480	2489.536	-43.64	2	53.62	Peak	74	Pass
BLE 1M	2480	2499.784	-54.41	2	42.85	Average	54	Pass
BLE 1M	2480	2500	-44.91	2	52.35	Peak	74	Pass
BLE 1M	2480	2500	-54.53	2	42.73	Average	54	Pass
BLE 2M	2402	2310	-46.71	2	50.55	Peak	74	Pass
BLE 2M	2402	2310	-54.85	2	42.41	Average	54	Pass
BLE 2M	2402	2338.8	-42.87	2	54.39	Peak	74	Pass
BLE 2M	2402	2338.32	-52.98	2	44.28	Average	54	Pass
BLE 2M	2402	2390	-43.48	2	53.78	Peak	74	Pass
BLE 2M	2402	2390	-54.57	2	42.69	Average	54	Pass



2M								
BLE 2M	2480	2483.5	-45.69	2	51.57	Peak	74	Pass
BLE 2M	2480	2483.5	-53.99	2	43.27	Average	54	Pass
BLE 2M	2480	2492.704	-44.23	2	53.03	Peak	74	Pass
BLE 2M	2480	2483.512	-53.99	2	43.27	Average	54	Pass
BLE 2M	2480	2500	-44.59	2	52.67	Peak	74	Pass
BLE 2M	2480	2500	-54.47	2	42.79	Average	54	Pass



Right:

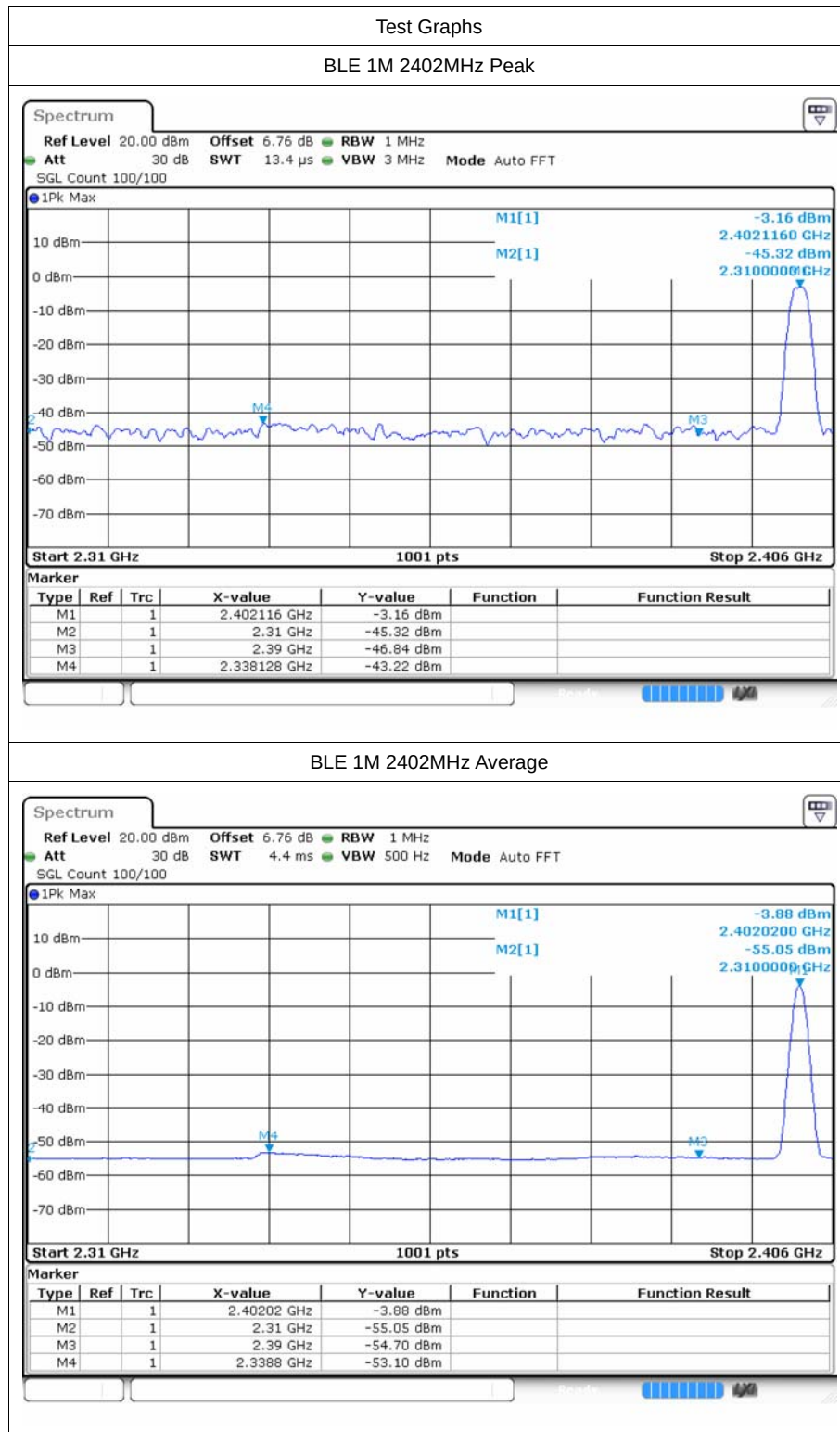
Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
BLE 1M	2402	2310	-45.81	2	51.45	Peak	74	Pass
BLE 1M	2402	2310	-54.97	2	42.29	Average	54	Pass
BLE 1M	2402	2338.992	-42.91	2	54.35	Peak	74	Pass
BLE 1M	2402	2338.896	-53.2	2	44.06	Average	54	Pass
BLE 1M	2402	2390	-45.74	2	51.52	Peak	74	Pass
BLE 1M	2402	2390	-54.83	2	42.43	Average	54	Pass
BLE 1M	2480	2483.5	-45.96	2	51.3	Peak	74	Pass
BLE 1M	2480	2483.5	-54.81	2	42.45	Average	54	Pass
BLE 1M	2480	2498.56	-43.41	2	53.85	Peak	74	Pass
BLE 1M	2480	2486.632	-54.28	2	42.98	Average	54	Pass
BLE 1M	2480	2500	-46.42	2	50.84	Peak	74	Pass
BLE 1M	2480	2500	-54.57	2	42.69	Average	54	Pass
BLE 2M	2402	2310	-45.51	2	51.75	Peak	74	Pass
BLE 2M	2402	2310	-54.87	2	42.39	Average	54	Pass
BLE 2M	2402	2336.304	-42.64	2	54.62	Peak	74	Pass
BLE 2M	2402	2338.032	-52.79	2	44.47	Average	54	Pass
BLE 2M	2402	2390	-47.38	2	49.88	Peak	74	Pass
BLE 2M	2402	2390	-54.66	2	42.6	Average	54	Pass
BLE 2M	2480	2483.5	-45.56	2	51.7	Peak	74	Pass
BLE 2M	2480	2483.5	-53.93	2	43.33	Average	54	Pass

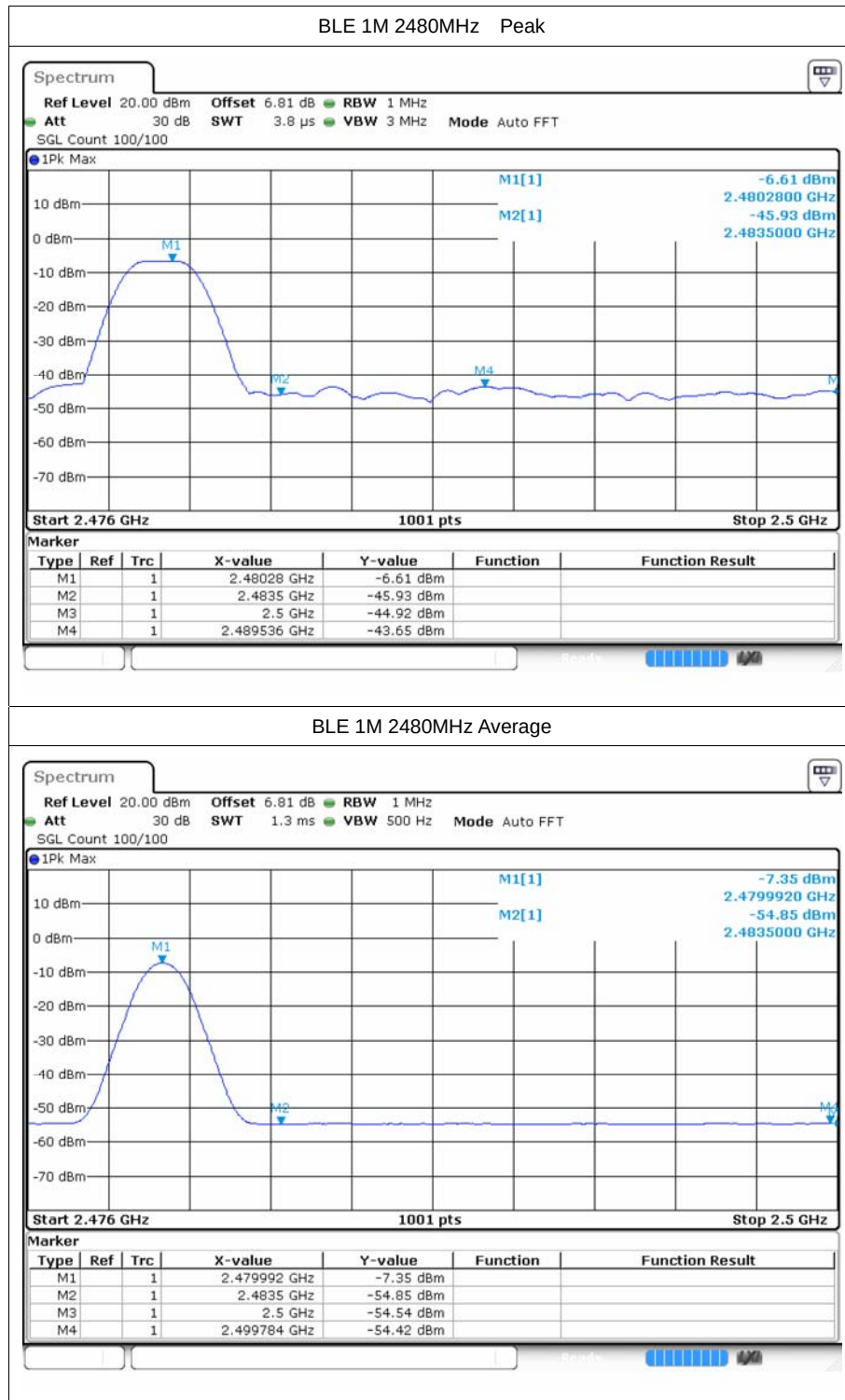


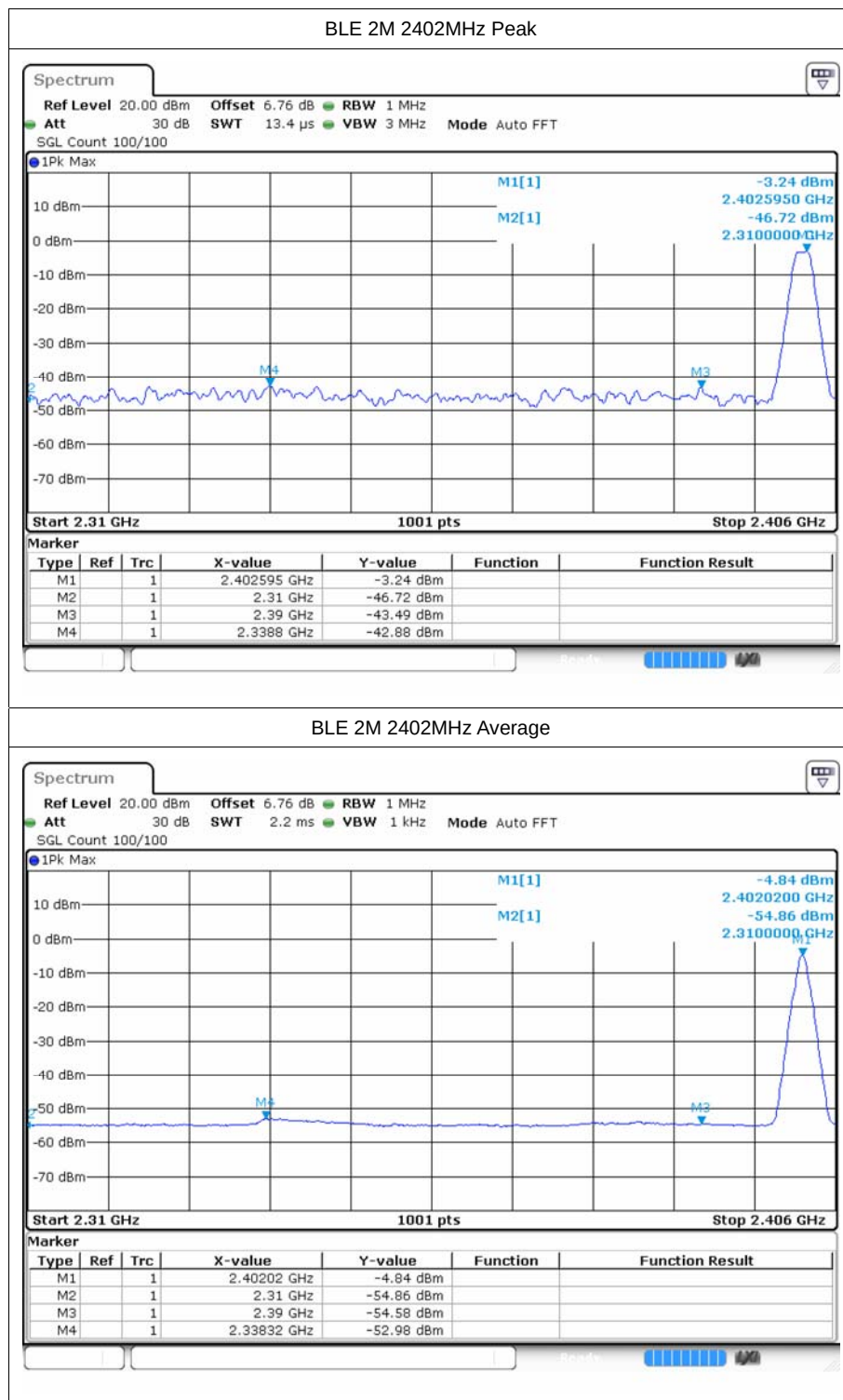
BLE 2M	2480	2491.6	-44.2	2	53.06	Peak	74	Pass
BLE 2M	2480	2483.512	-53.93	2	43.33	Average	54	Pass
BLE 2M	2480	2500	-45.4	2	51.86	Peak	74	Pass
BLE 2M	2480	2500	-54.27	2	42.99	Average	54	Pass

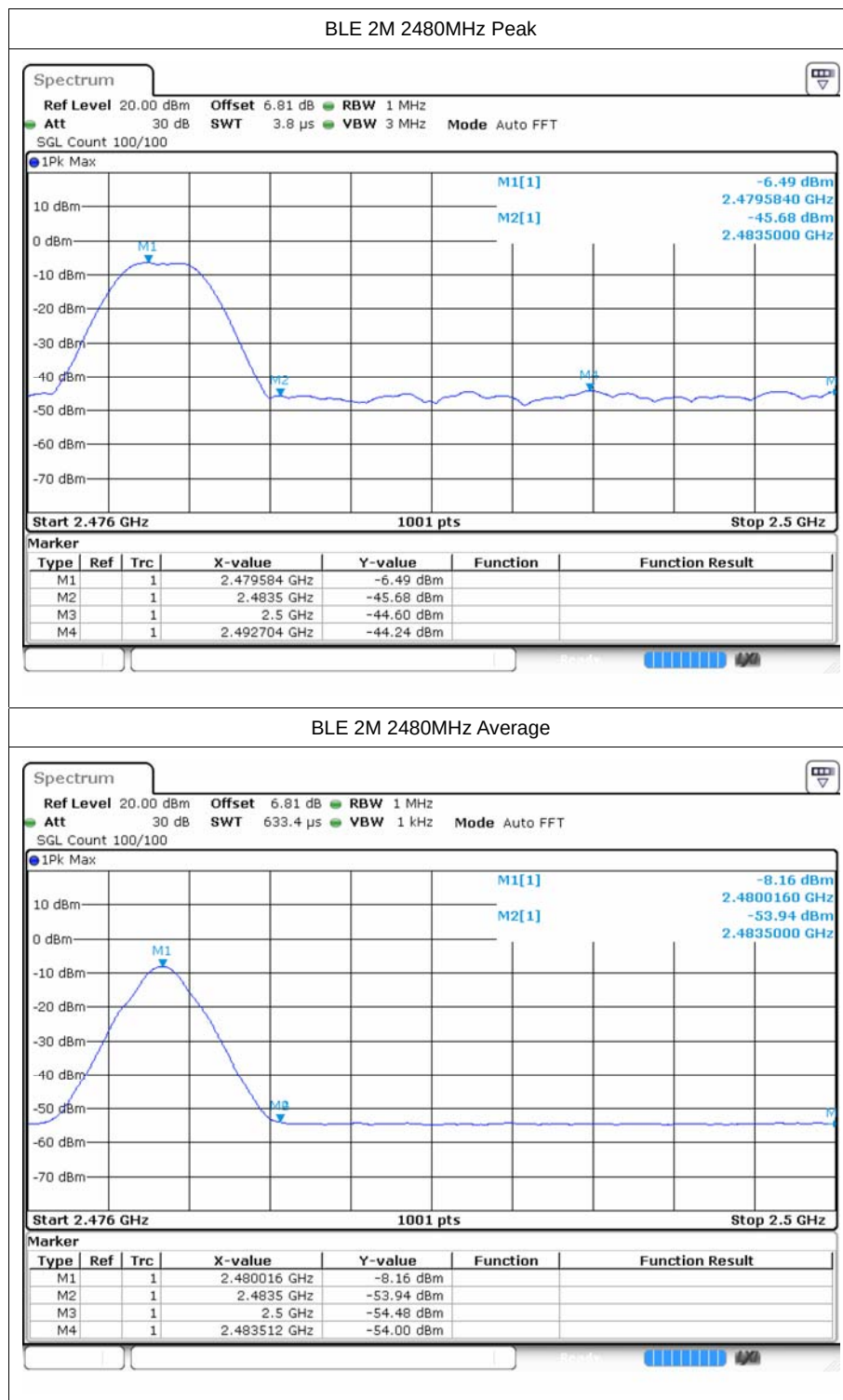
7.2 Test Graphs

Left:

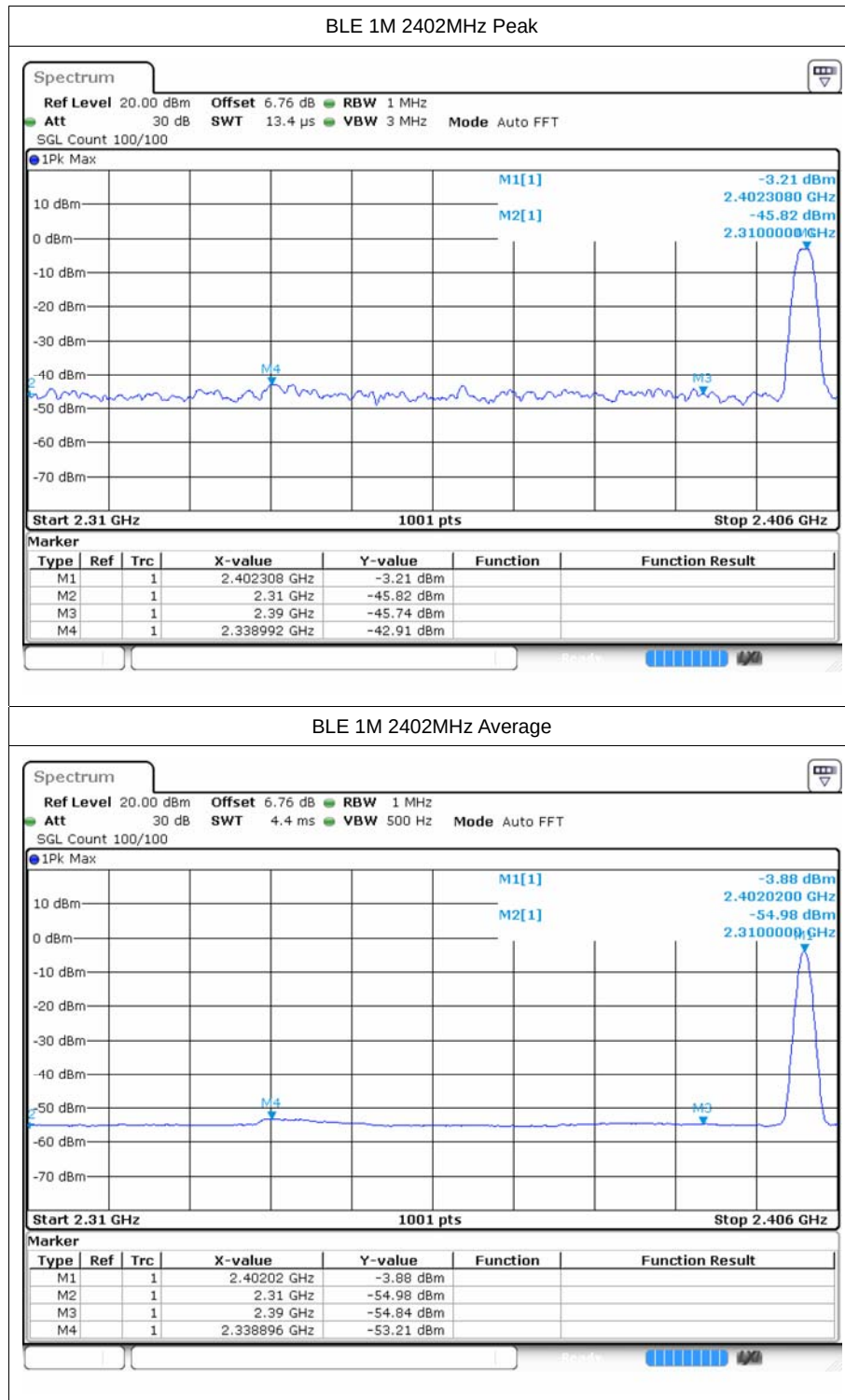


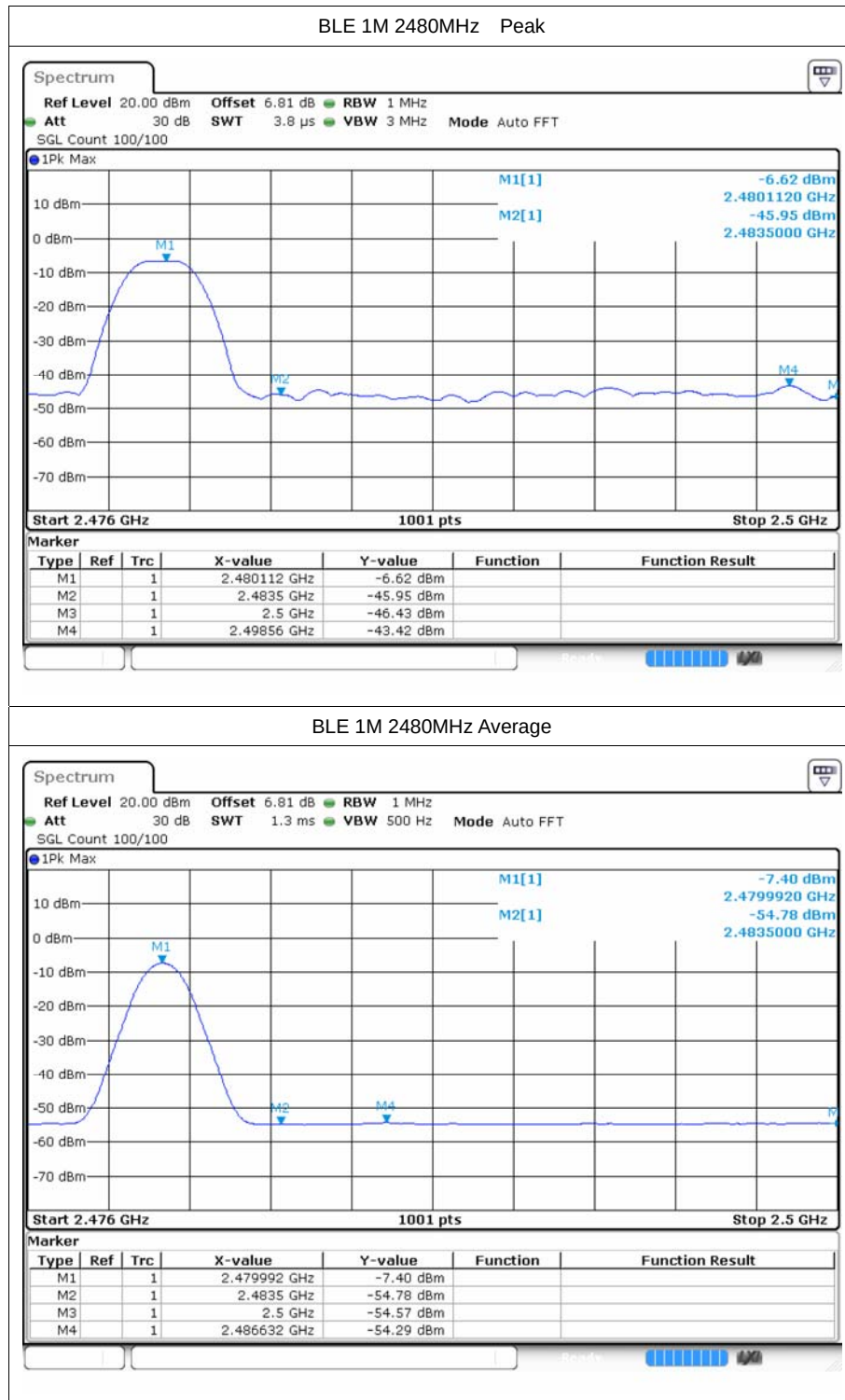


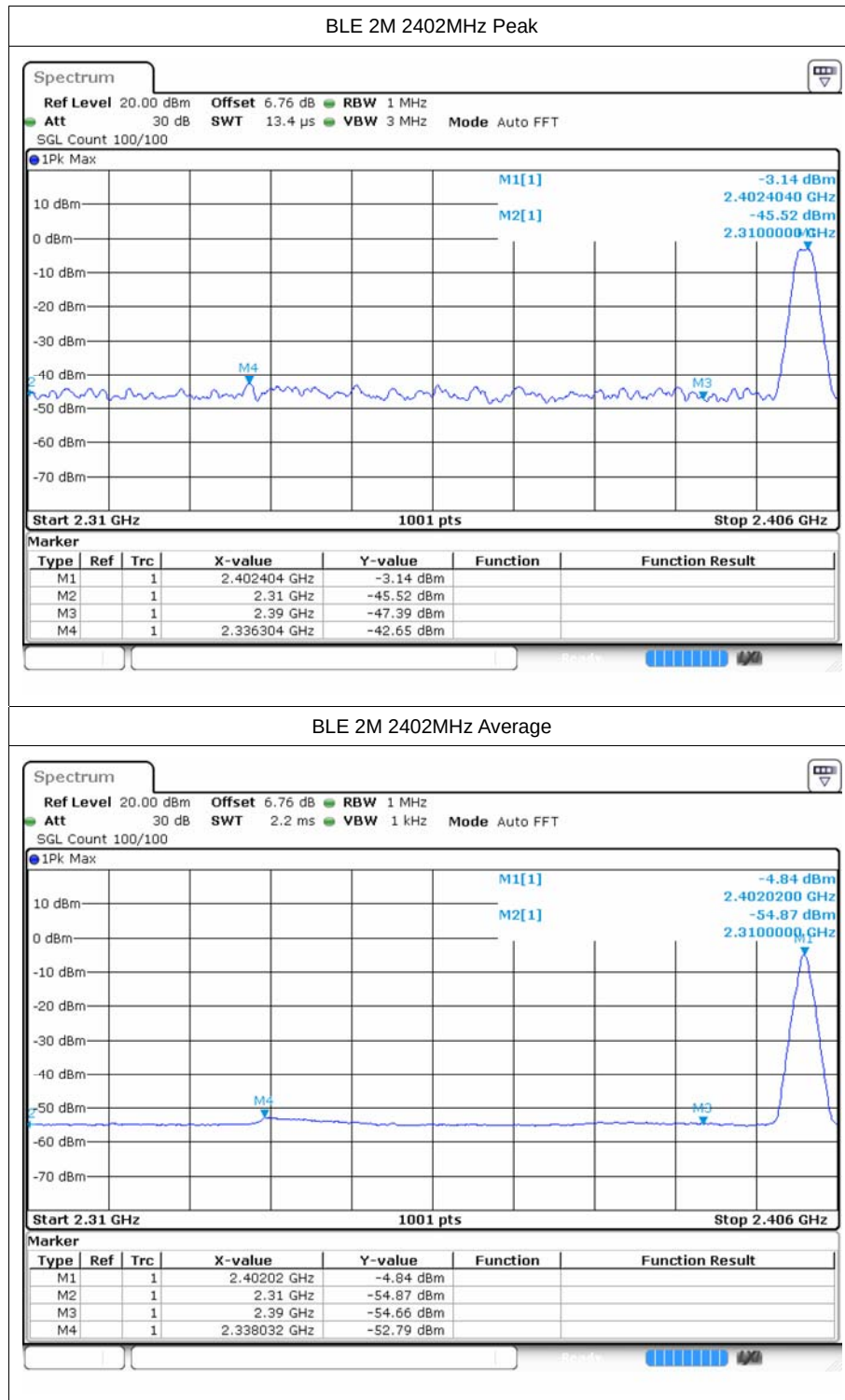


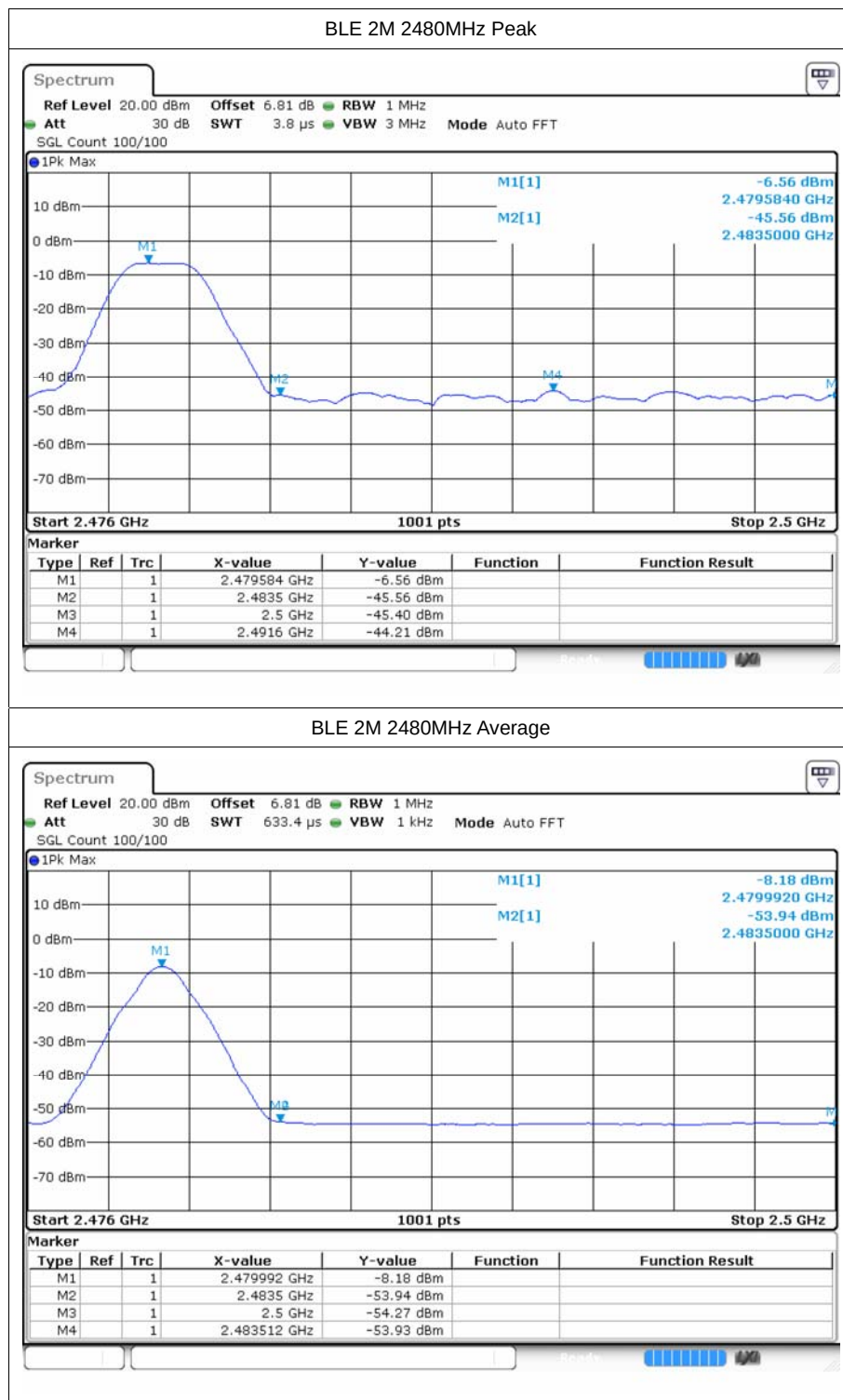


Right:









---The End---