



Appendix B

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

Product Name: LED Lights

Trade Mark: N/A

Test Model: 12MAC864WBOD

Environmental Conditions

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



Contents

Page

COVER PAGE

1	Duty Cycle	3
1.1	Test Result	3
1.2	Test Graphs	4
2	Maximum Conducted Output Power	6
2.1	Test Result	6
2.2	Test Graphs	7
3	-6dB Bandwidth	9
3.1	Test Result	9
3.2	Test Graphs	10
4	Maximum Power Spectral Density Level	12
4.1	Test Result	12
4.2	Test Graphs	13
5	Band Edge	15
5.1	Test Result	15
5.2	Test Graphs	16
6	Conducted RF Spurious Emission	18
6.1	Test Result	18
6.2	Test Graphs	19
7	Restrict Band	22
7.1	Test Result	22
7.2	Test Graphs	23

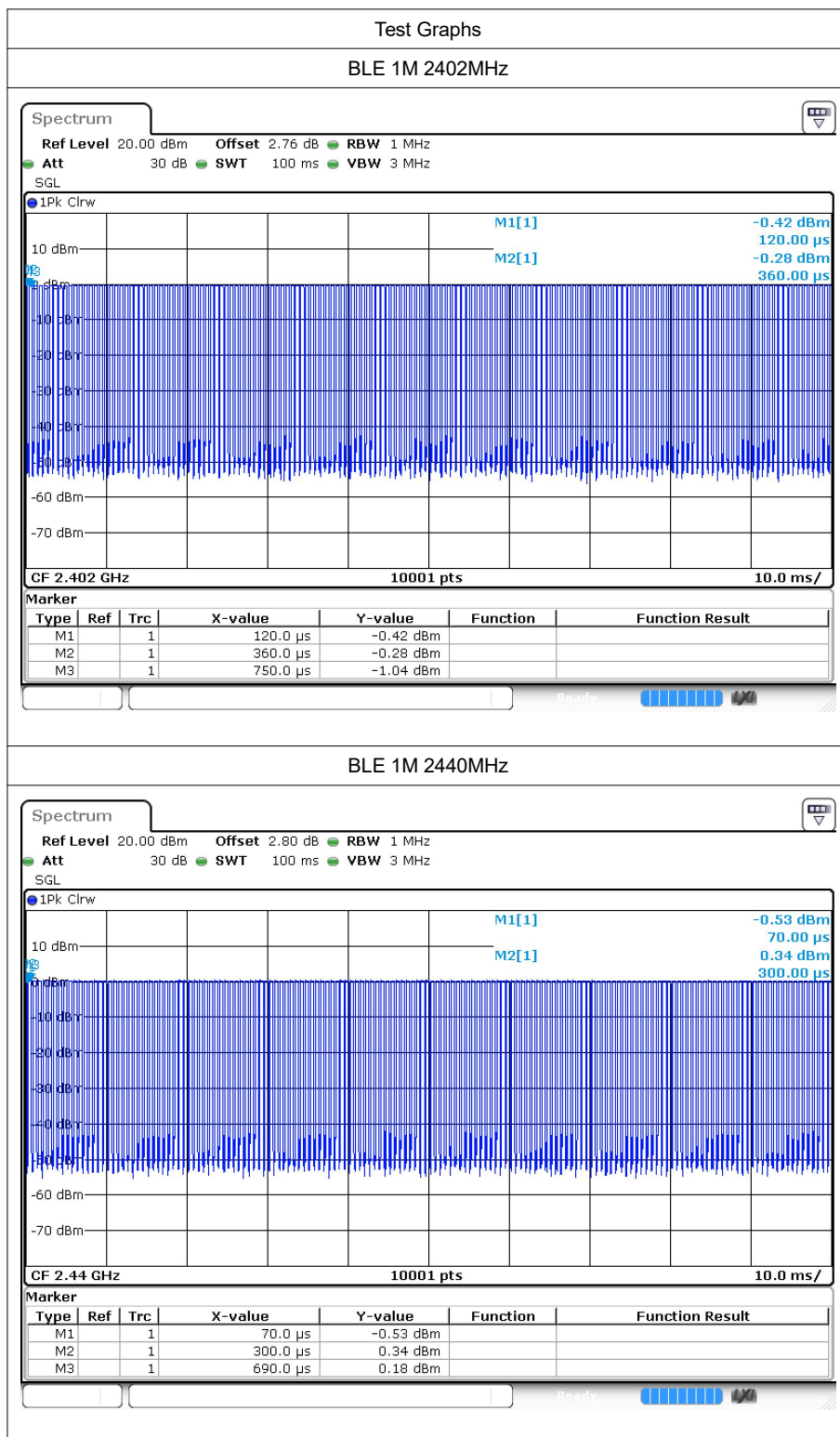


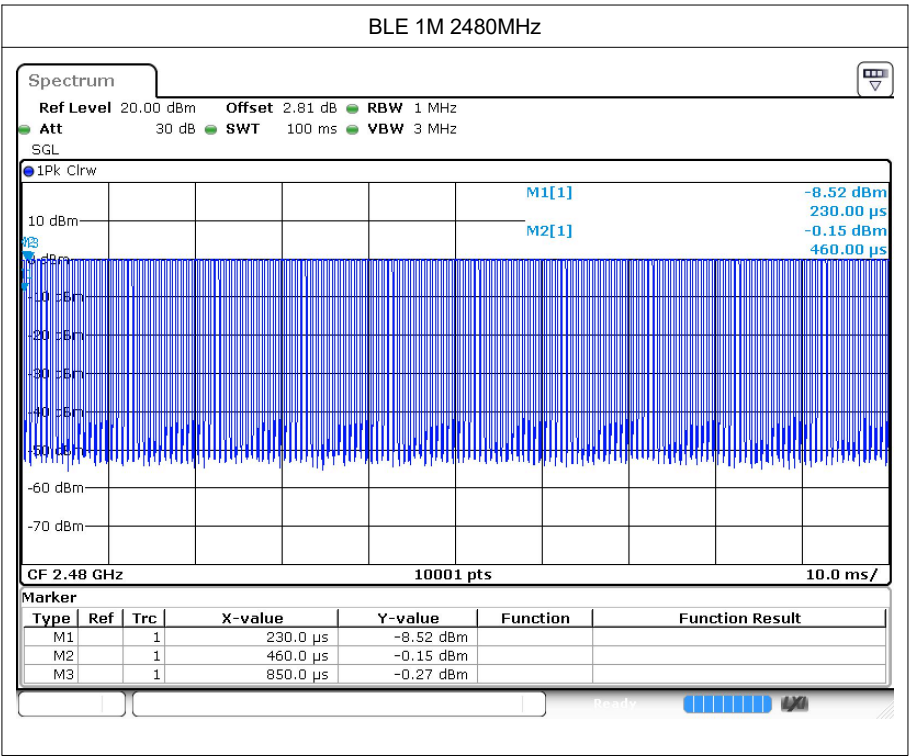
1 Duty Cycle

1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
BLE 1M	2402	64	1.94	2.56
BLE 1M	2440	64	1.94	2.56
BLE 1M	2480	64.54	1.9	2.56

1.2 Test Graphs



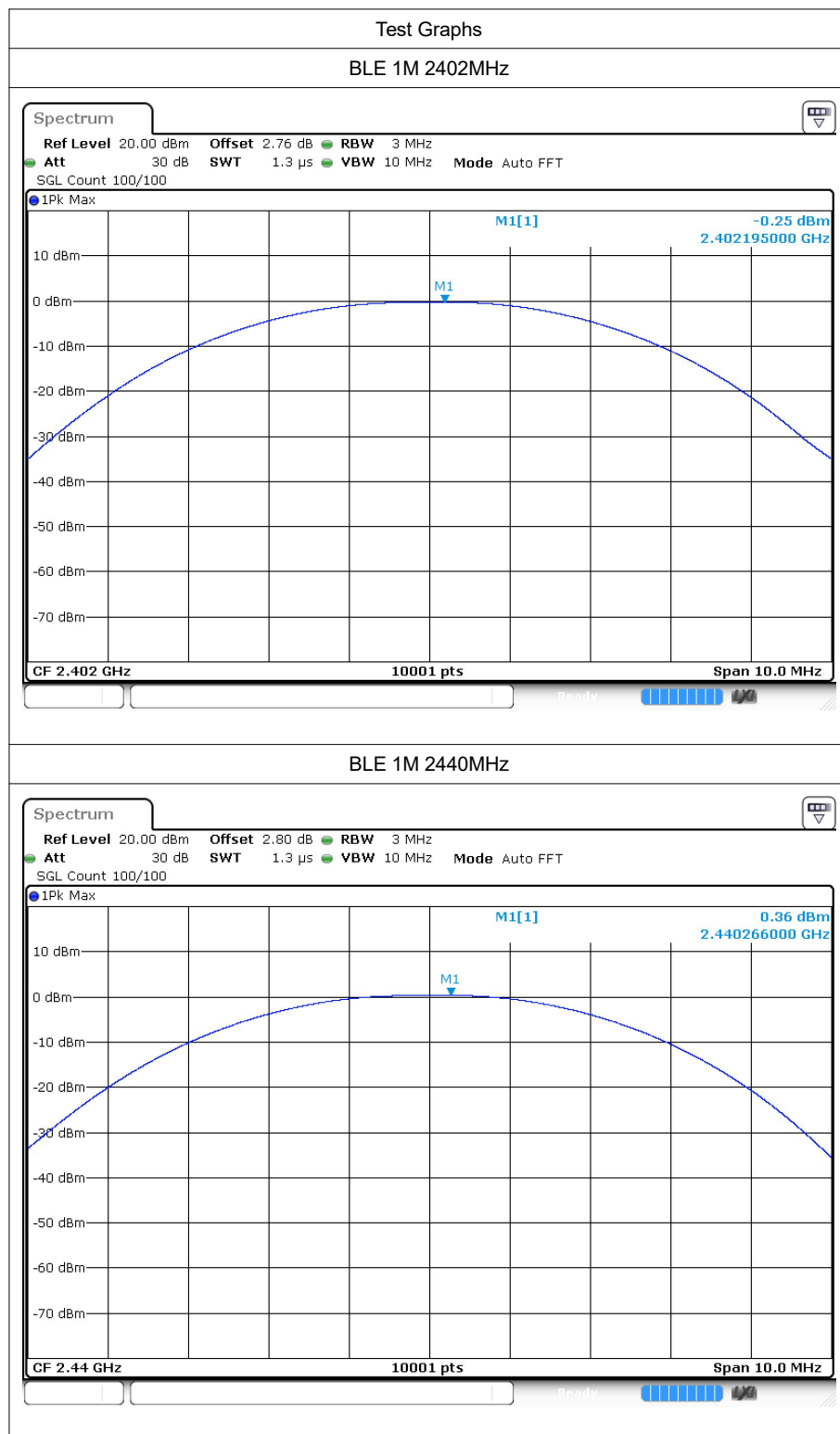


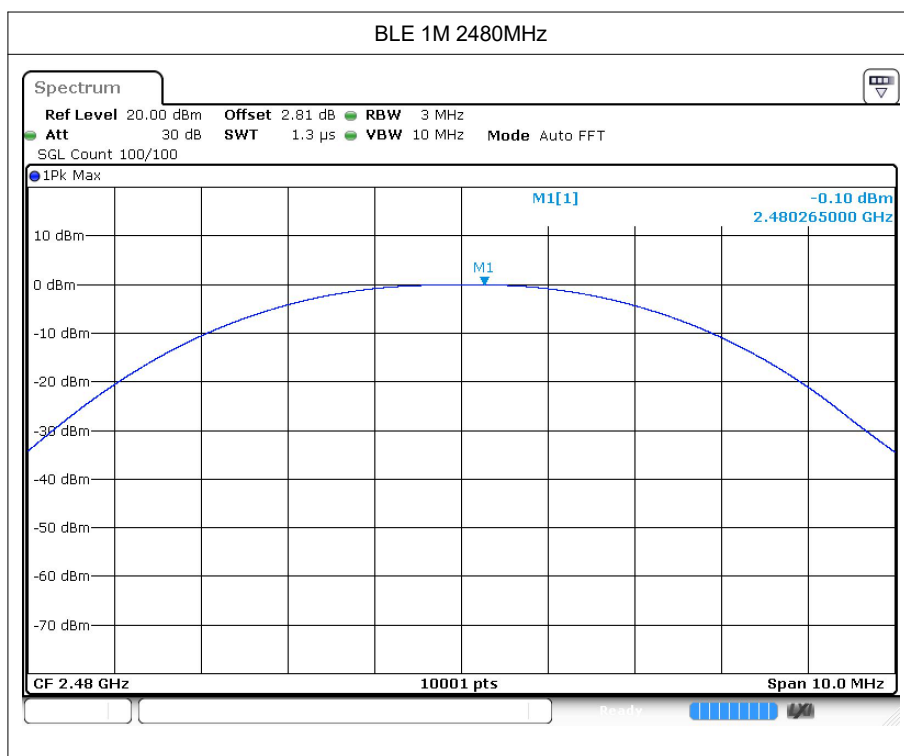
2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	-0.25	30	Pass
BLE 1M	2440	0.36	30	Pass
BLE 1M	2480	-0.1	30	Pass

2.2 Test Graphs





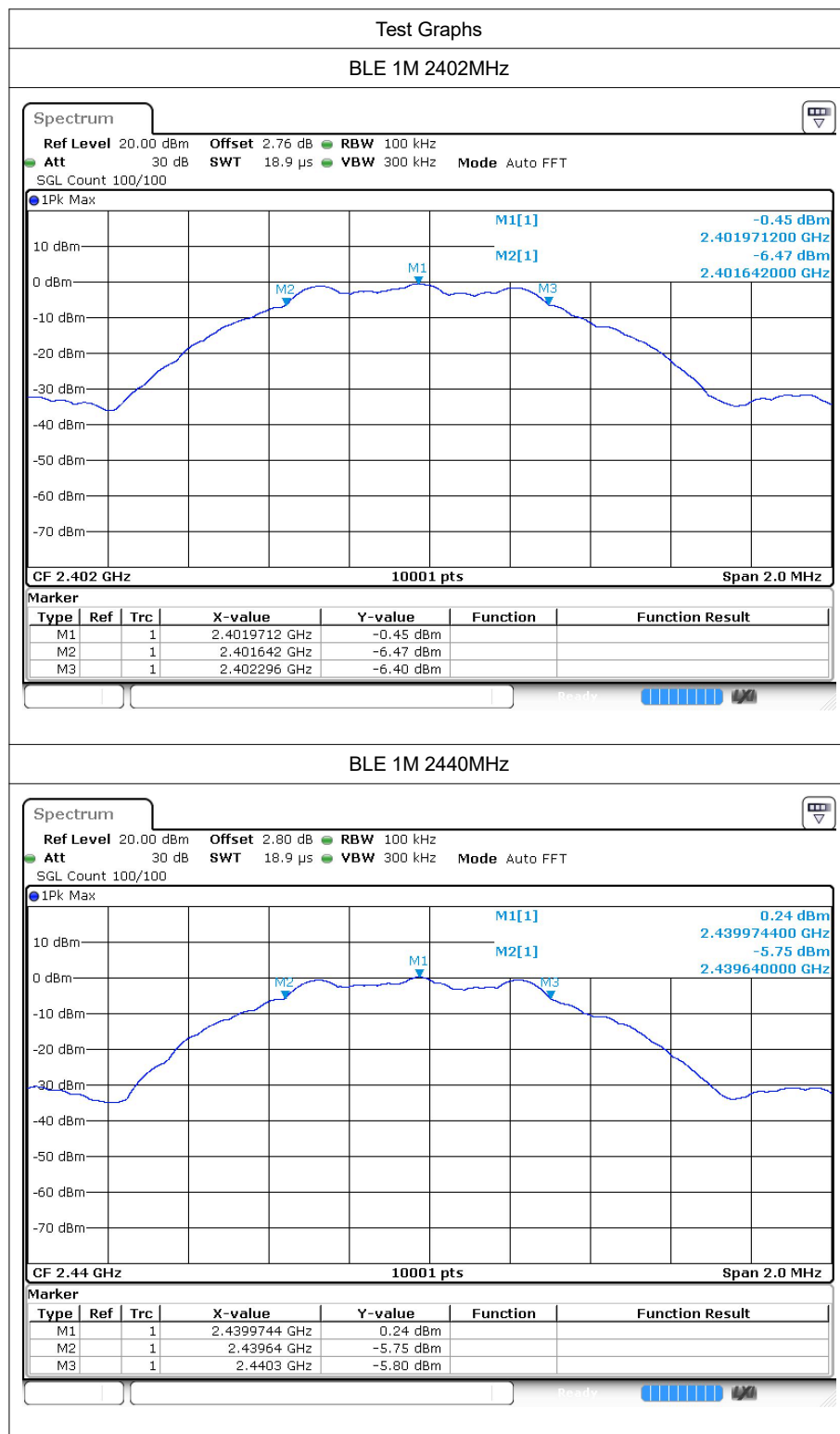


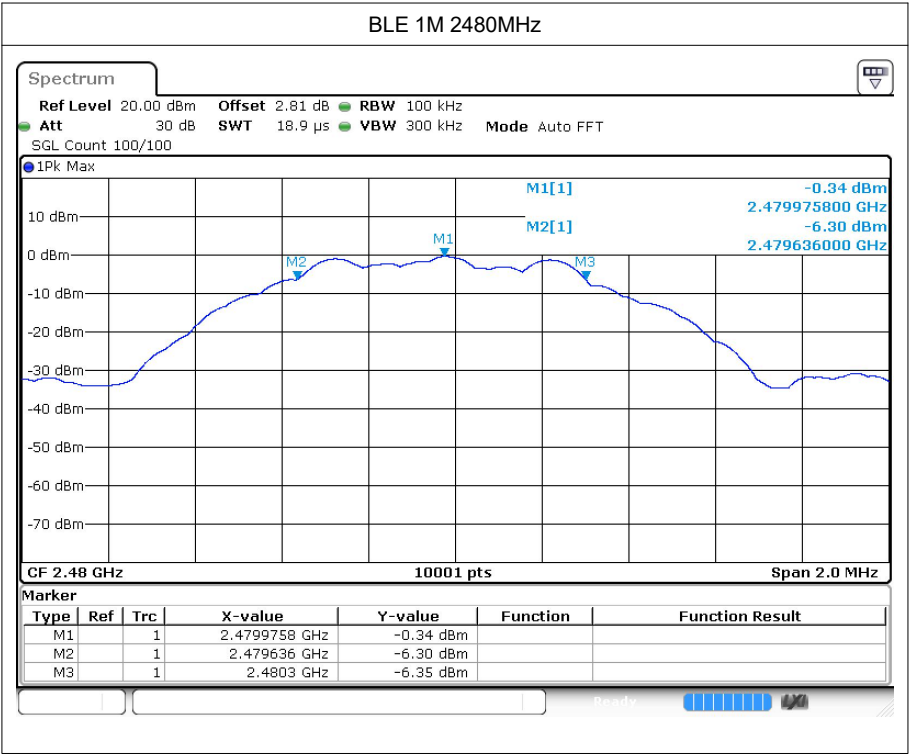
3 -6dB Bandwidth

3.1 Test Result

Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.654	0.5	Pass
BLE 1M	2440	0.66	0.5	Pass
BLE 1M	2480	0.664	0.5	Pass

3.2 Test Graphs





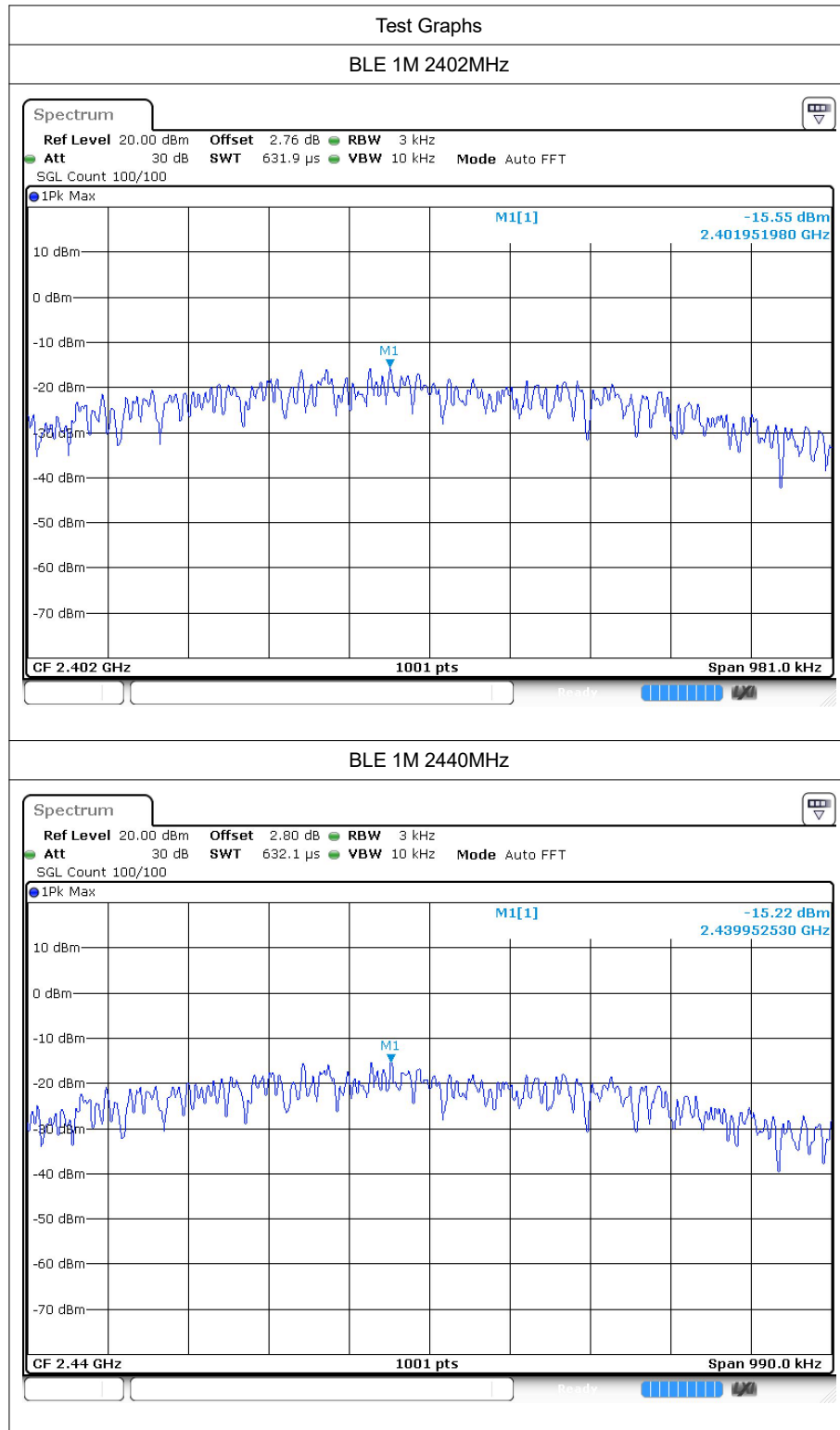


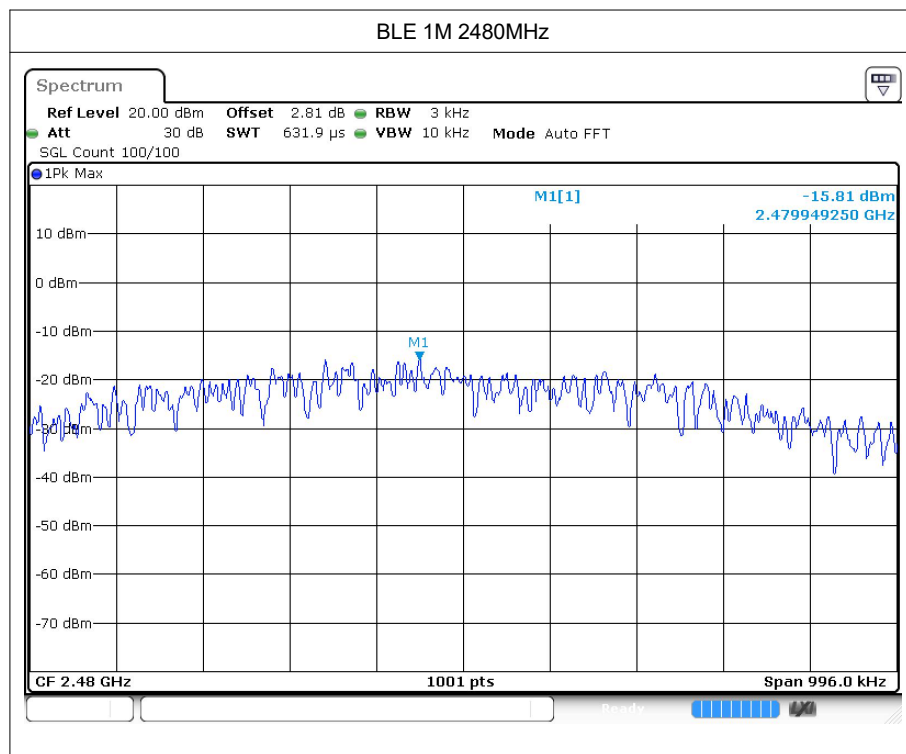
4 Maximum Power Spectral Density Level

4.1 Test Result

Mode	Frequency (MHz)	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-15.55	≤ 8	Pass
BLE 1M	2440	-15.22	≤ 8	Pass
BLE 1M	2480	-15.81	≤ 8	Pass

4.2 Test Graphs





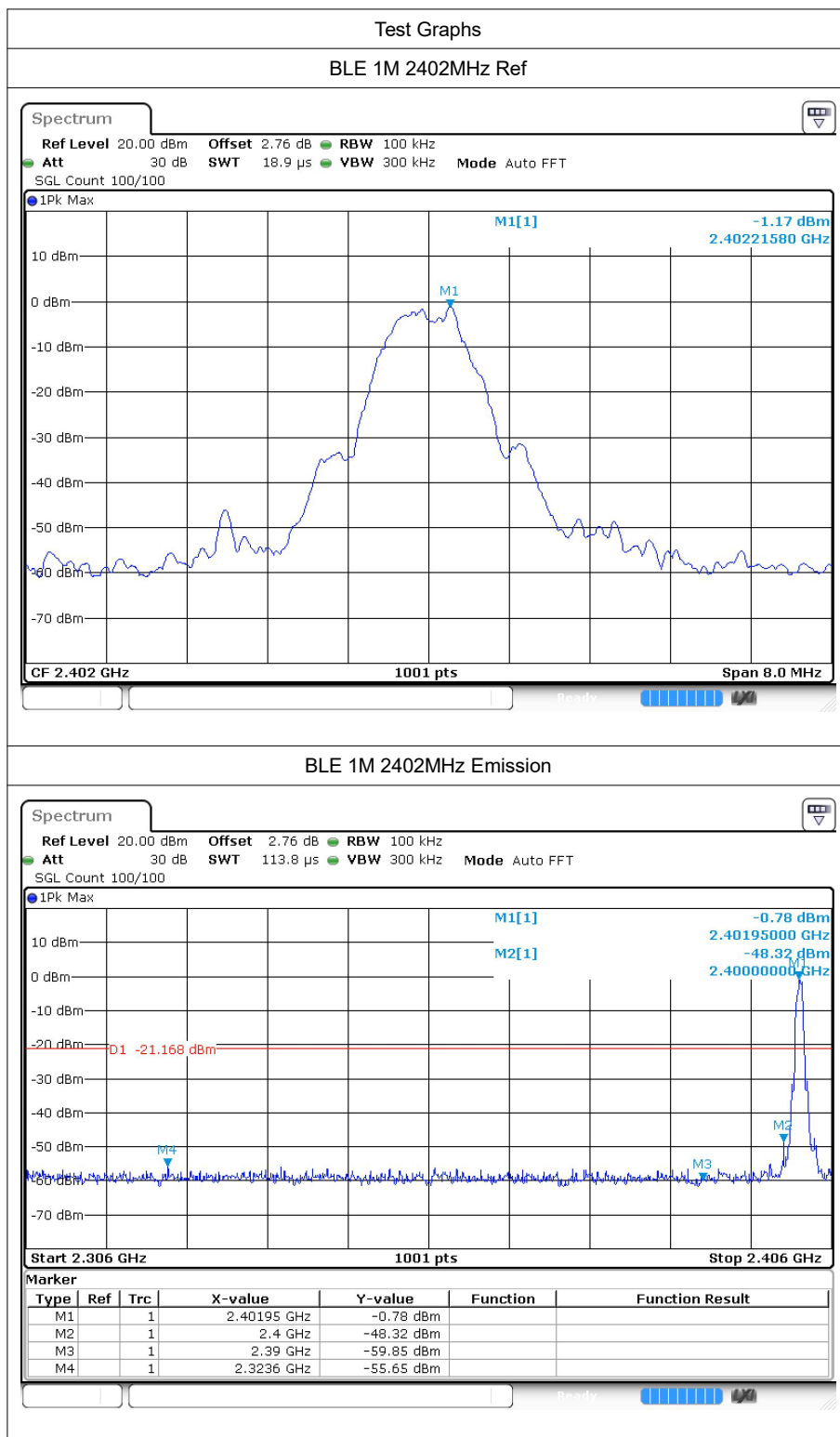


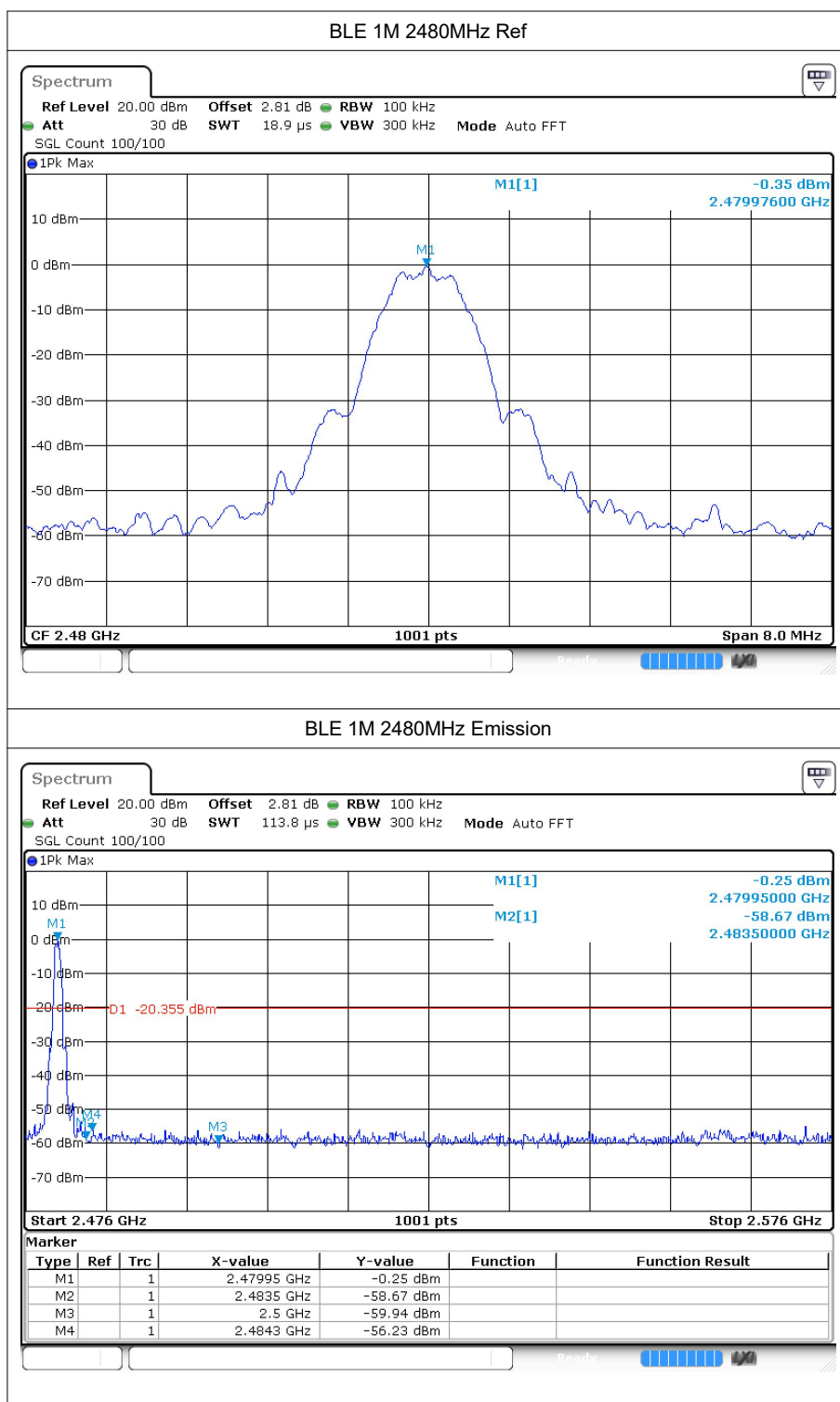
5 Band Edge

5.1 Test Result

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-54.47	-20	Pass
BLE 1M	2480	-55.87	-20	Pass

5.2 Test Graphs





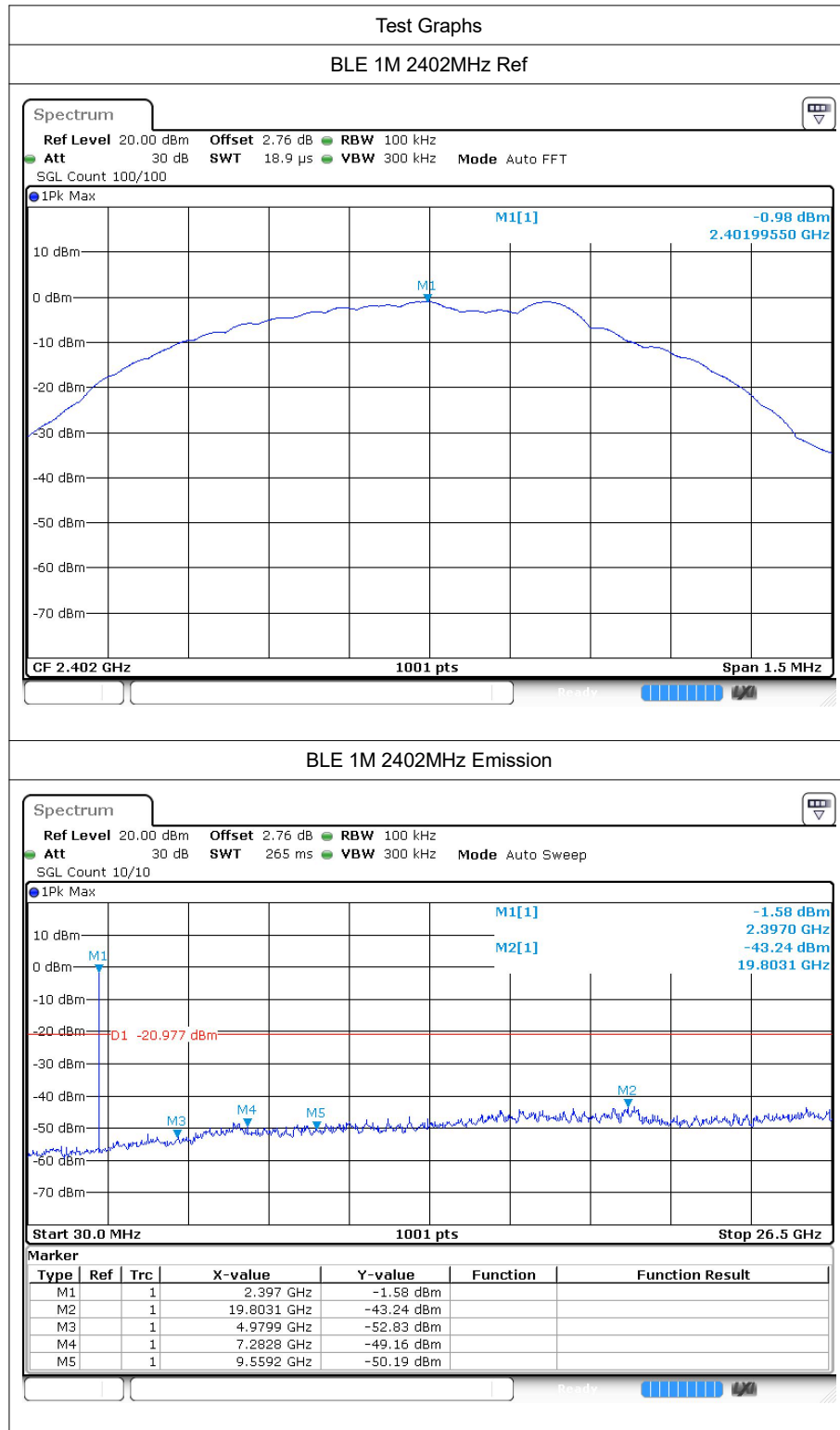


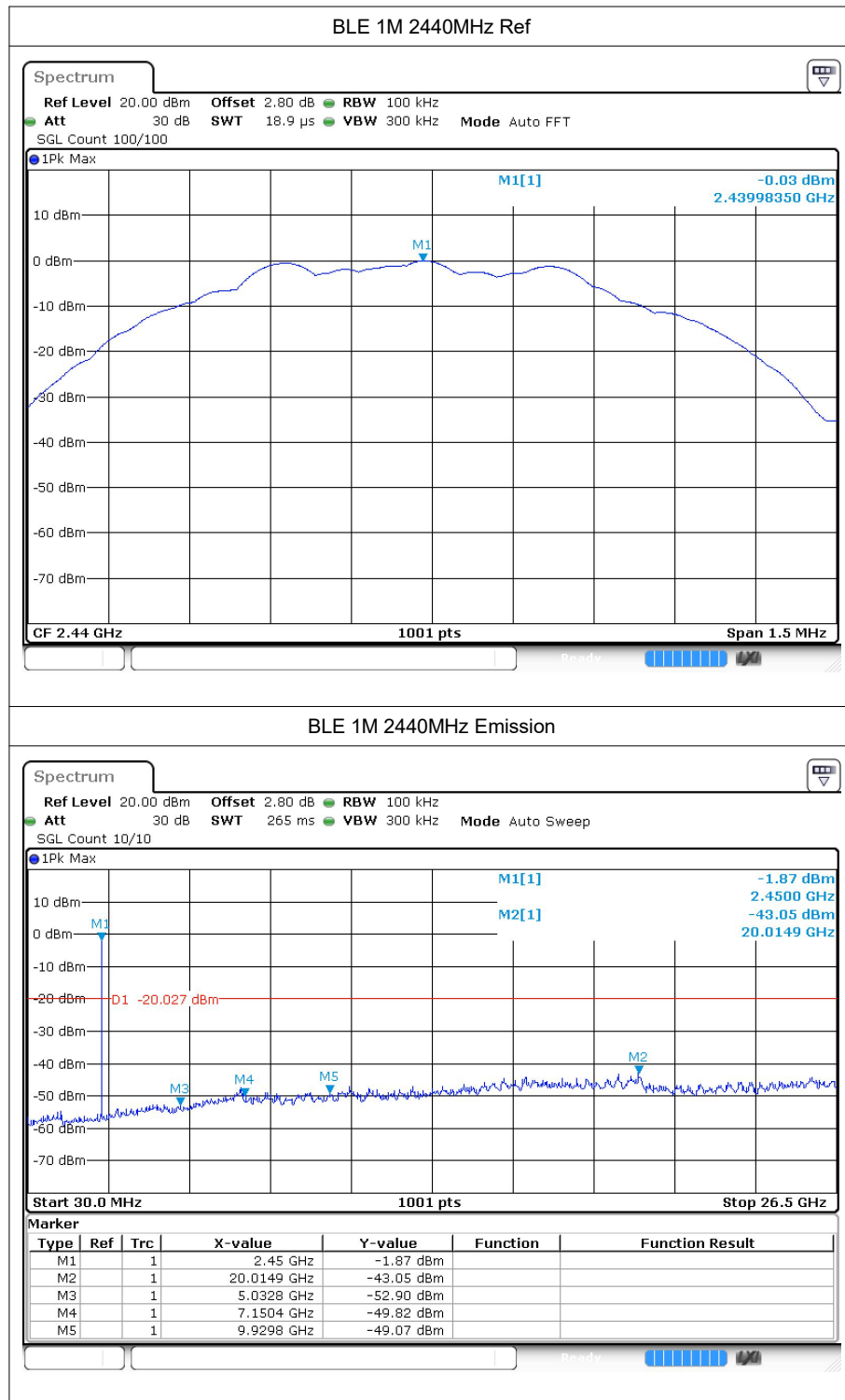
6 Conducted RF Spurious Emission

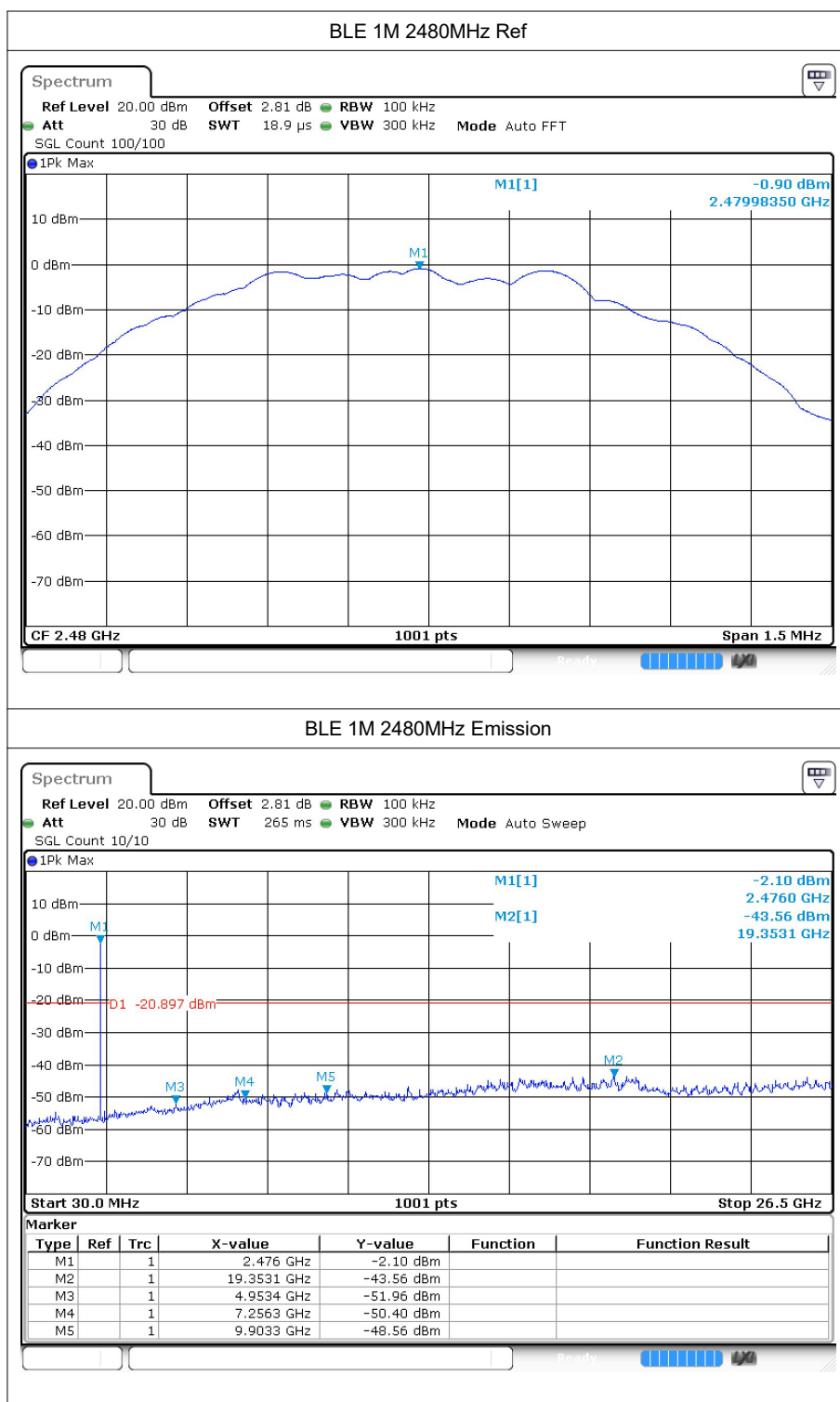
6.1 Test Result

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-42.26	-20	Pass
BLE 1M	2440	-43.01	-20	Pass
BLE 1M	2480	-42.65	-20	Pass

6.2 Test Graphs







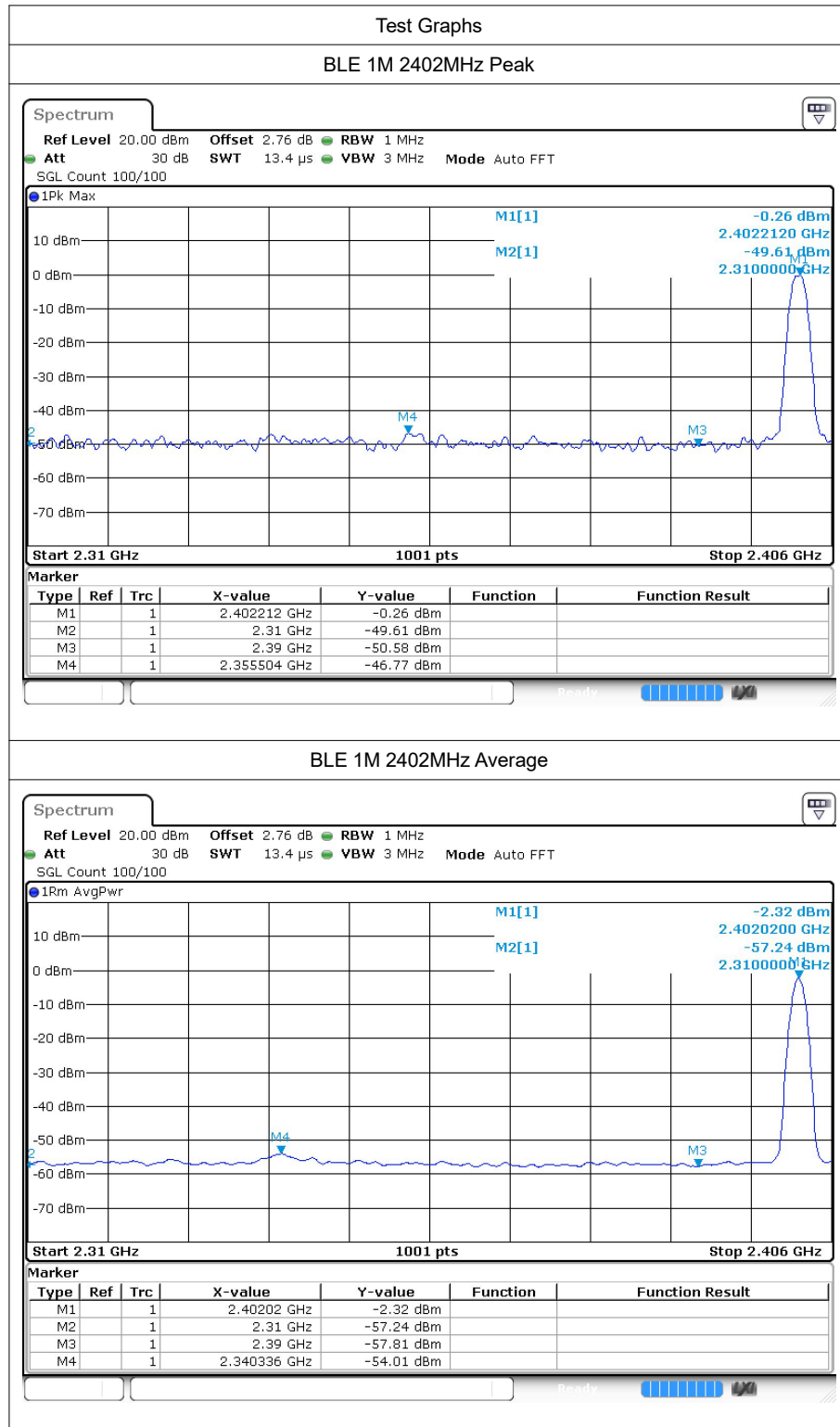


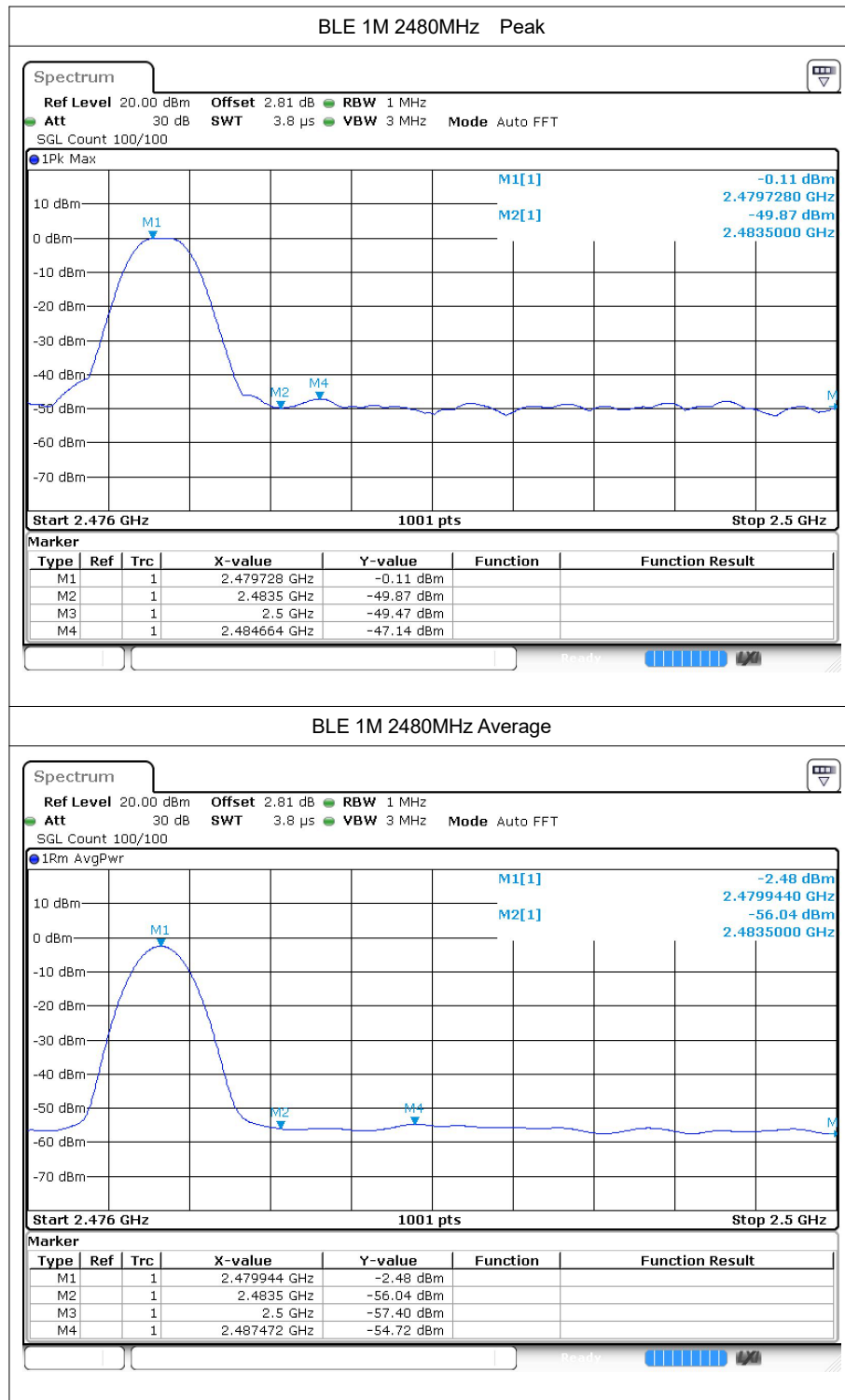
7 Restrict Band

7.1 Test Result

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
BLE 1M	2402	2310	-49.61	2	-	47.65	Peak	74	Pass
BLE 1M	2402	2310	-57.24	2	1.94	41.96	Average	54	Pass
BLE 1M	2402	2355.504	-46.76	2	-	50.5	Peak	74	Pass
BLE 1M	2402	2340.336	-54	2	1.94	45.2	Average	54	Pass
BLE 1M	2402	2390	-50.58	2	-	46.68	Peak	74	Pass
BLE 1M	2402	2390	-57.81	2	1.94	41.39	Average	54	Pass
BLE 1M	2480	2483.5	-49.87	2	-	47.39	Peak	74	Pass
BLE 1M	2480	2483.5	-56.04	2	1.9	43.12	Average	54	Pass
BLE 1M	2480	2484.664	-47.13	2	-	50.13	Peak	74	Pass
BLE 1M	2480	2487.472	-54.71	2	1.9	44.45	Average	54	Pass
BLE 1M	2480	2500	-49.47	2	-	47.79	Peak	74	Pass
BLE 1M	2480	2500	-57.4	2	1.9	41.76	Average	54	Pass

7.2 Test Graphs





---The End---