



## Appendix B

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

Product Name: Pocket Auto Catch Lightning

Trade Mark: BROOK

Test Model: ZPP005J

#### Environmental Conditions

Temperature:	25.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



# Contents

	Page
<b>COVER PAGE</b>	
1 Duty Cycle .....	3
1.1 Test Result.....	3
1.2 Test Graphs .....	3
2 Maximum Conducted Output Power .....	3
2.1 Test Result.....	3
2.2 Test Graphs .....	3
3 -6dB Bandwidth .....	3
3.1 Test Result.....	3
3.2 Test Graphs .....	3
4 Occupied Channel Bandwidth .....	3
4.1 Test Result.....	3
4.2 Test Graphs .....	3
5 Maximum Power Spectral Density Level .....	3
5.1 Test Result.....	3
5.2 Test Graphs .....	3
6 Band Edge.....	3
6.1 Test Result.....	3
6.2 Test Graphs .....	3
7 Conducted RF Spurious Emission.....	3
7.1 Test Result.....	3
7.2 Test Graphs .....	3
8 Restrict Band .....	3
8.1 Test Result.....	3
8.2 Test Graphs .....	3

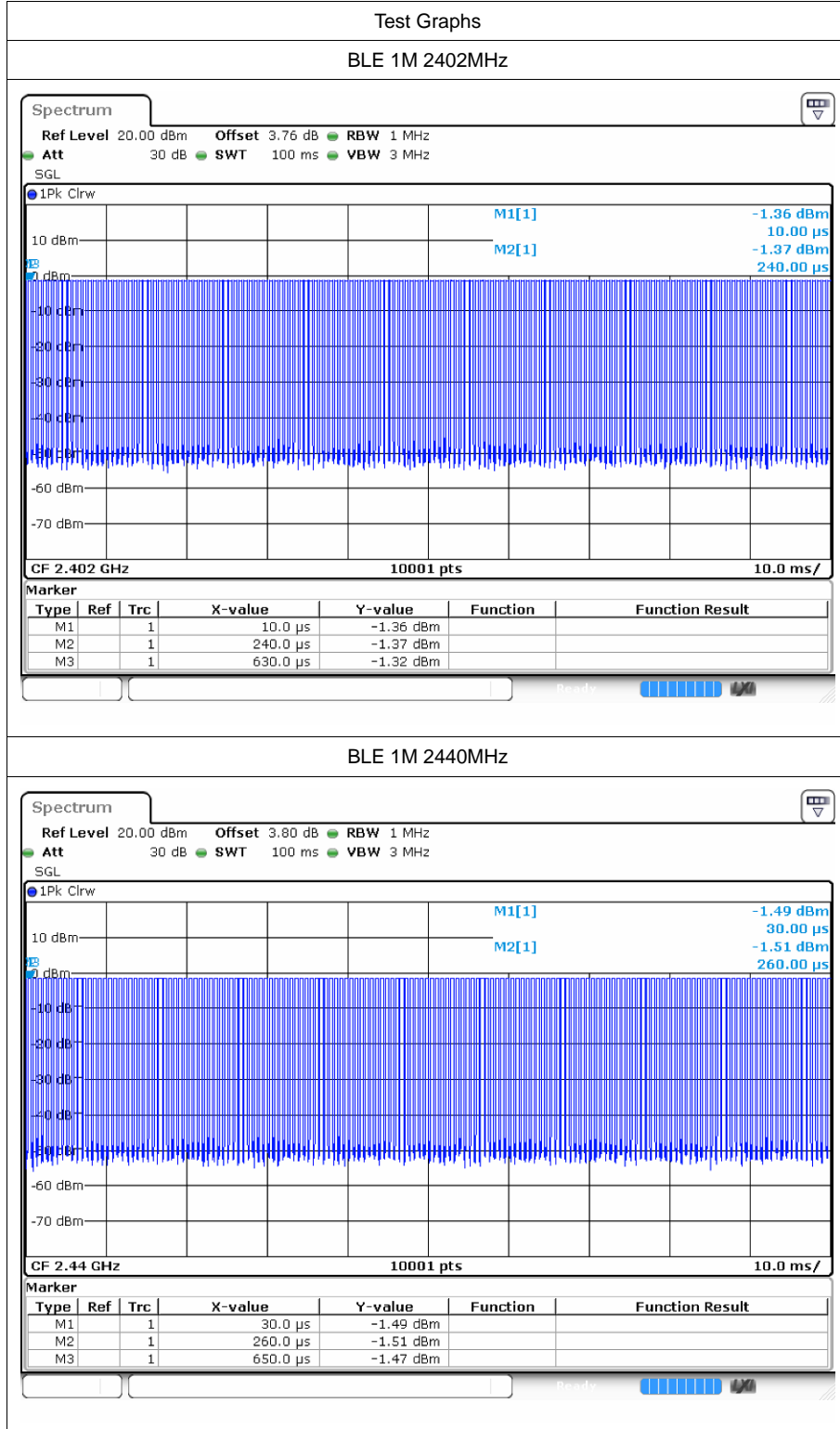


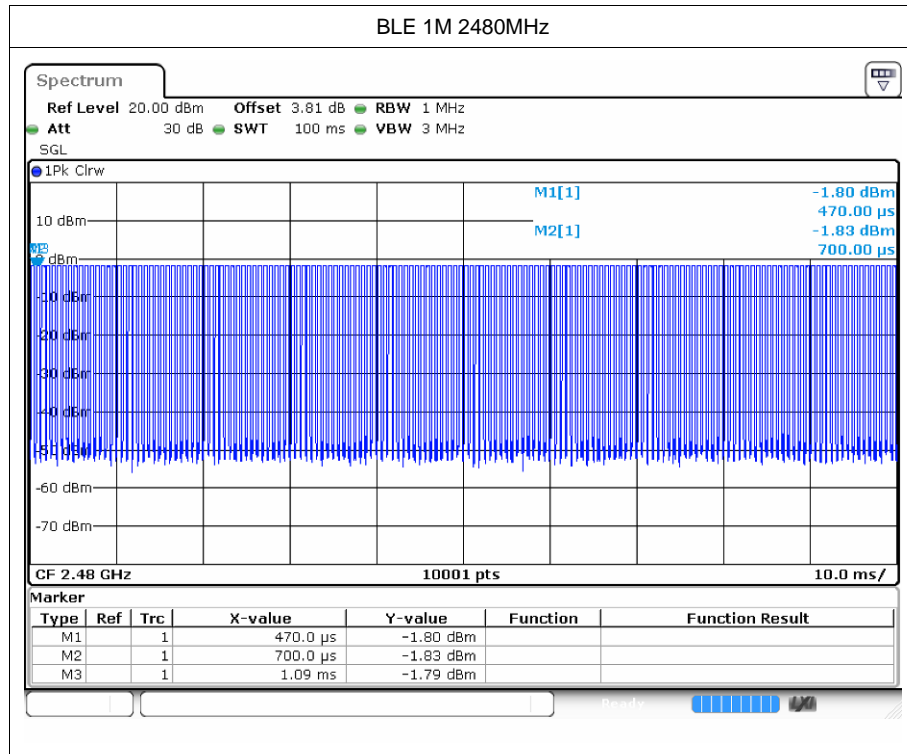
# 1 Duty Cycle

## 1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
BLE 1M	2402	64.33	2.56
BLE 1M	2440	64	2.56
BLE 1M	2480	64.32	2.56

## 1.2 Test Graphs





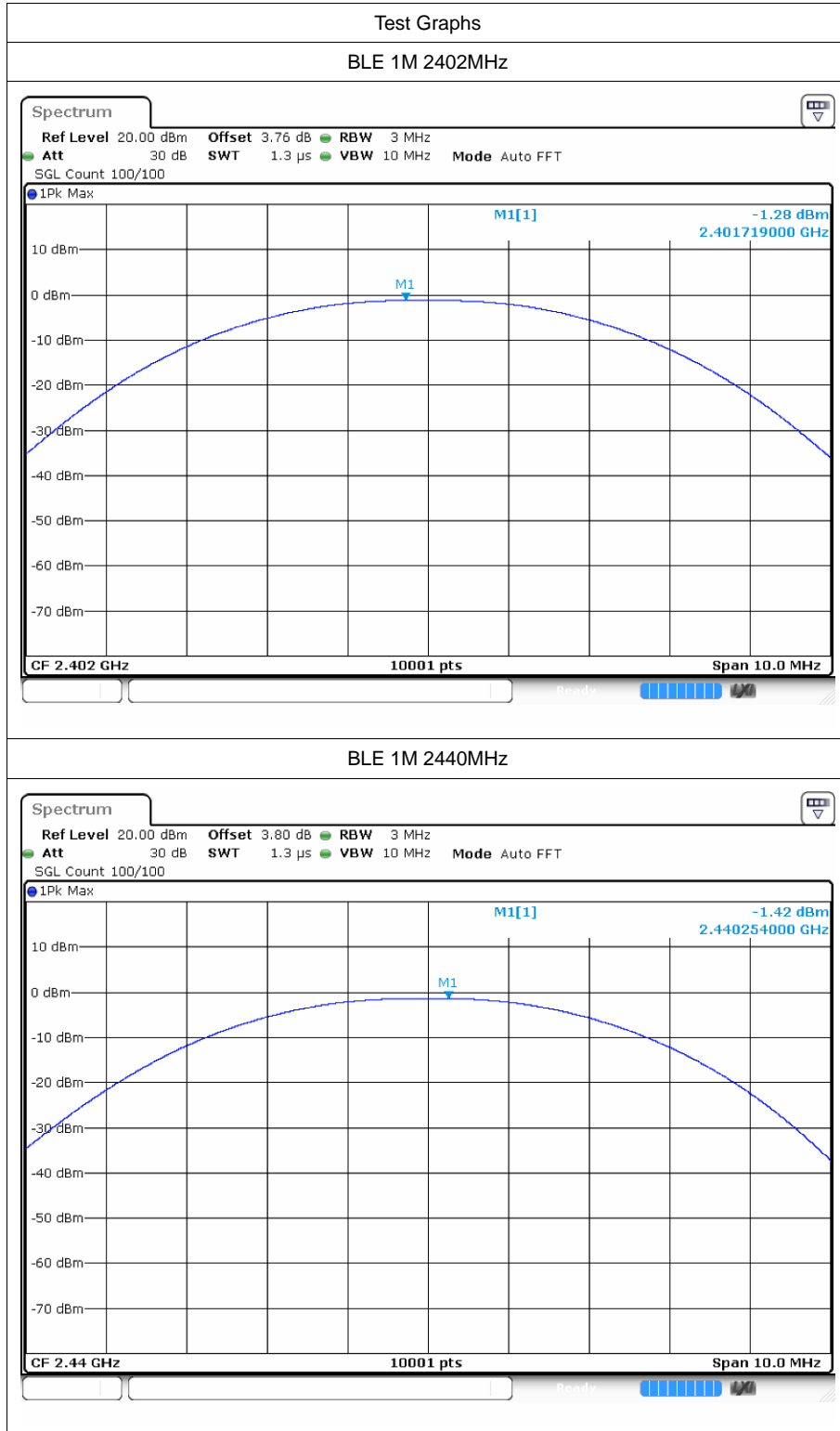


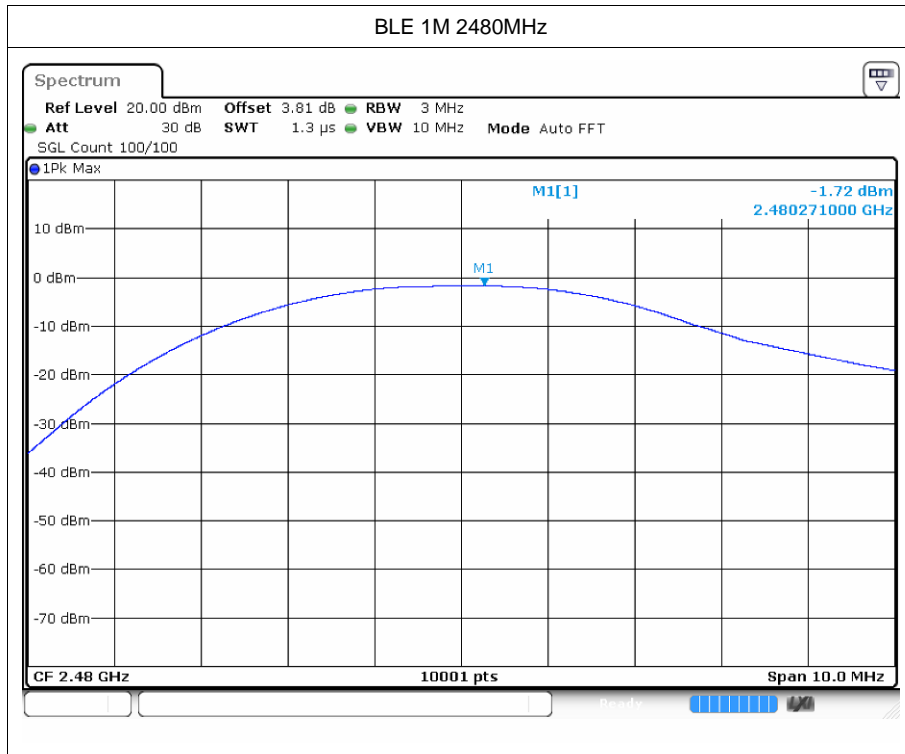
## 2 Maximum Conducted Output Power

### 2.1 Test Result

Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	-1.28	30	Pass
BLE 1M	2440	-1.42	30	Pass
BLE 1M	2480	-1.72	30	Pass

## 2.2 Test Graphs







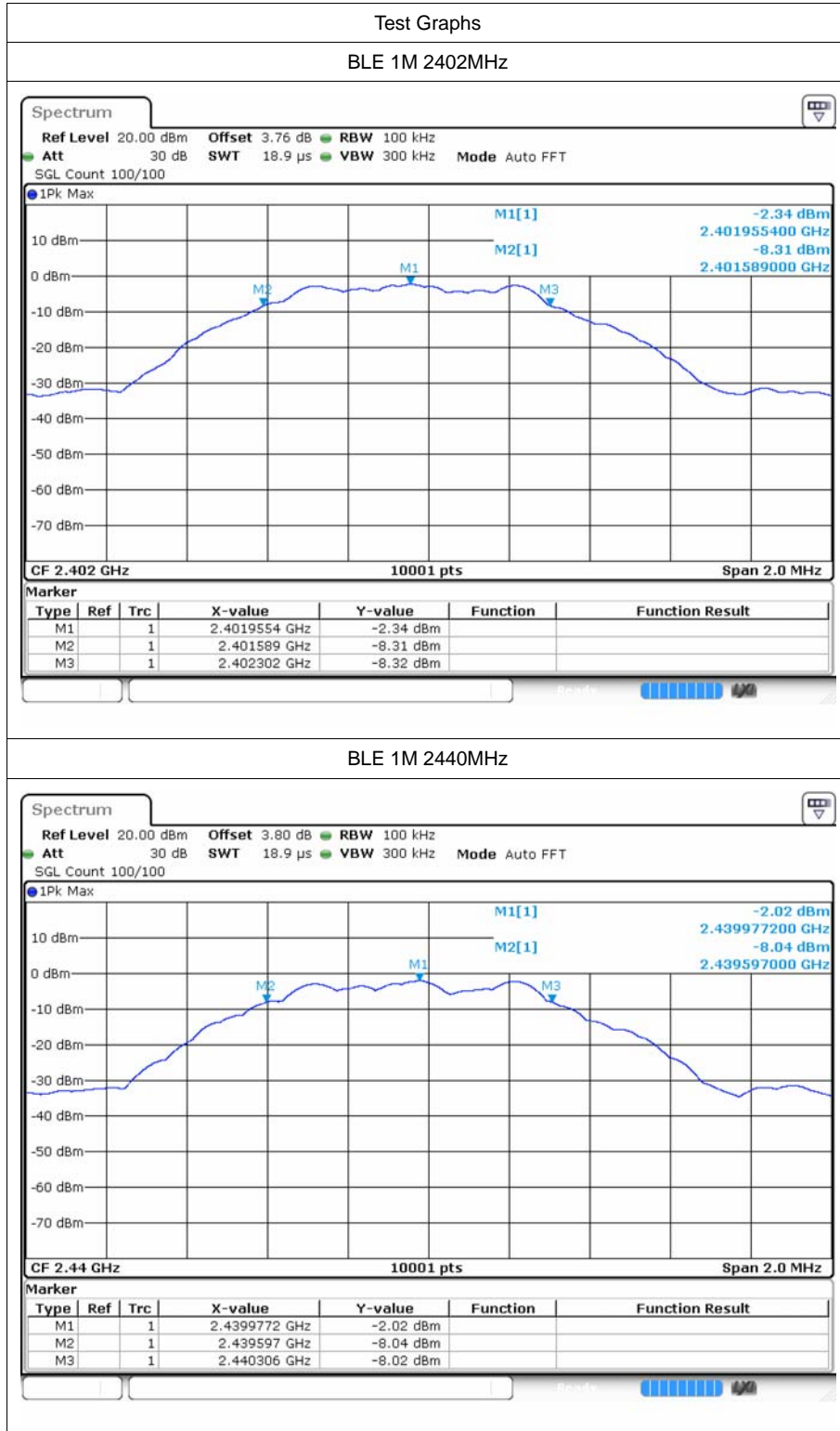


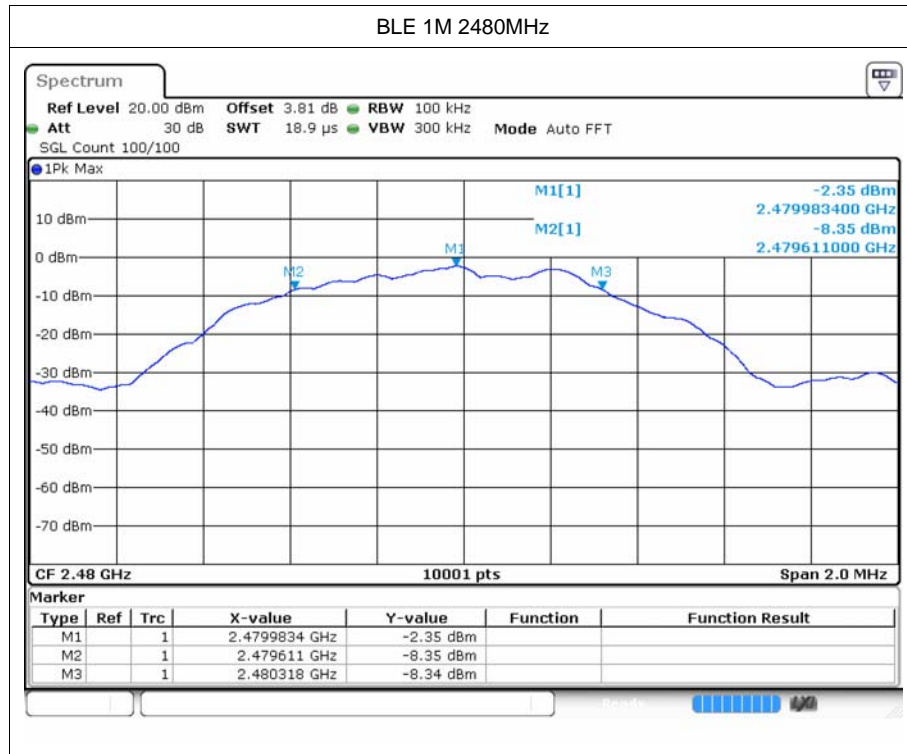
### 3 -6dB Bandwidth

#### 3.1 Test Result

Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.714	0.5	Pass
BLE 1M	2440	0.709	0.5	Pass
BLE 1M	2480	0.707	0.5	Pass

### 3.2 Test Graphs





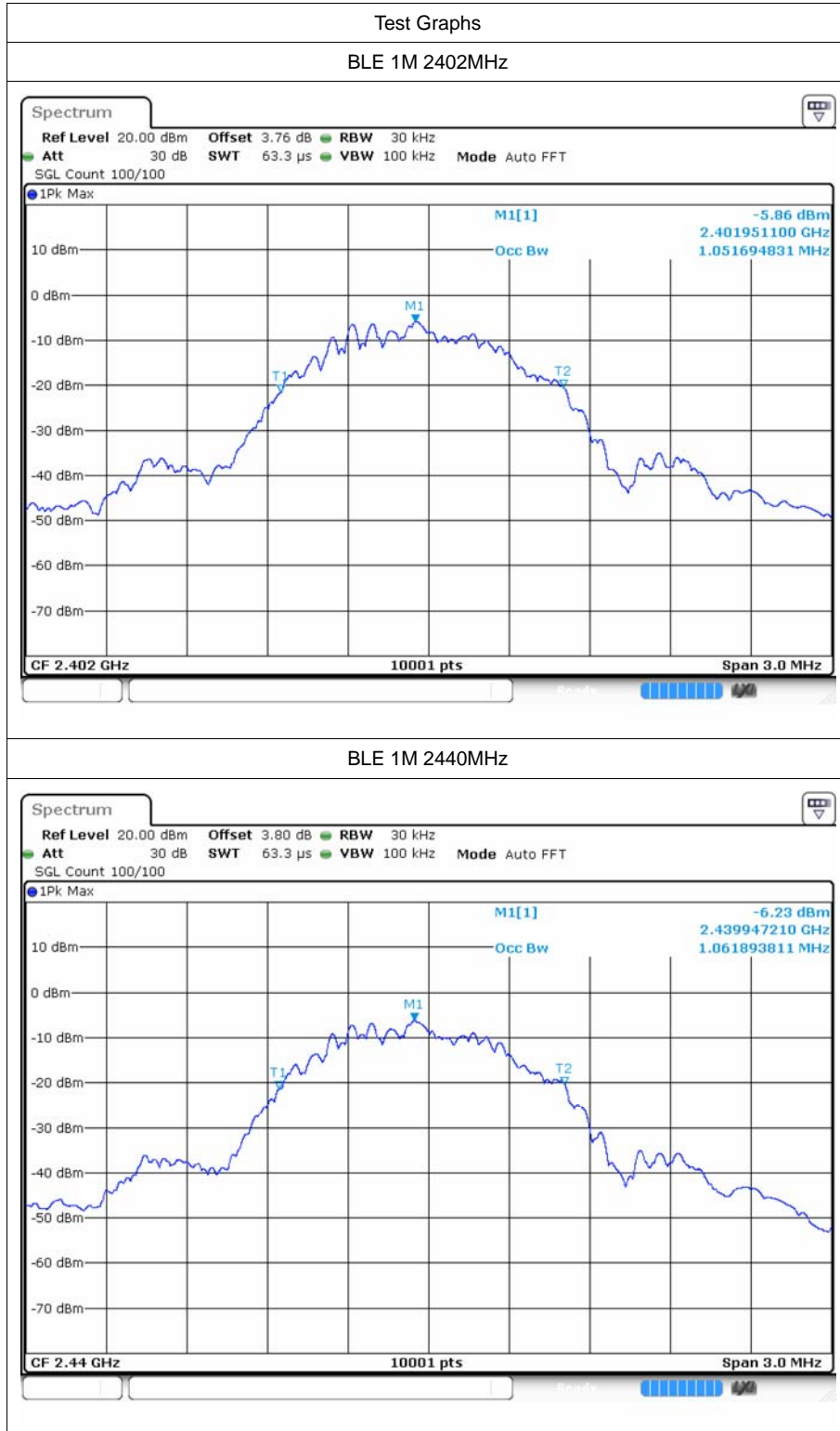


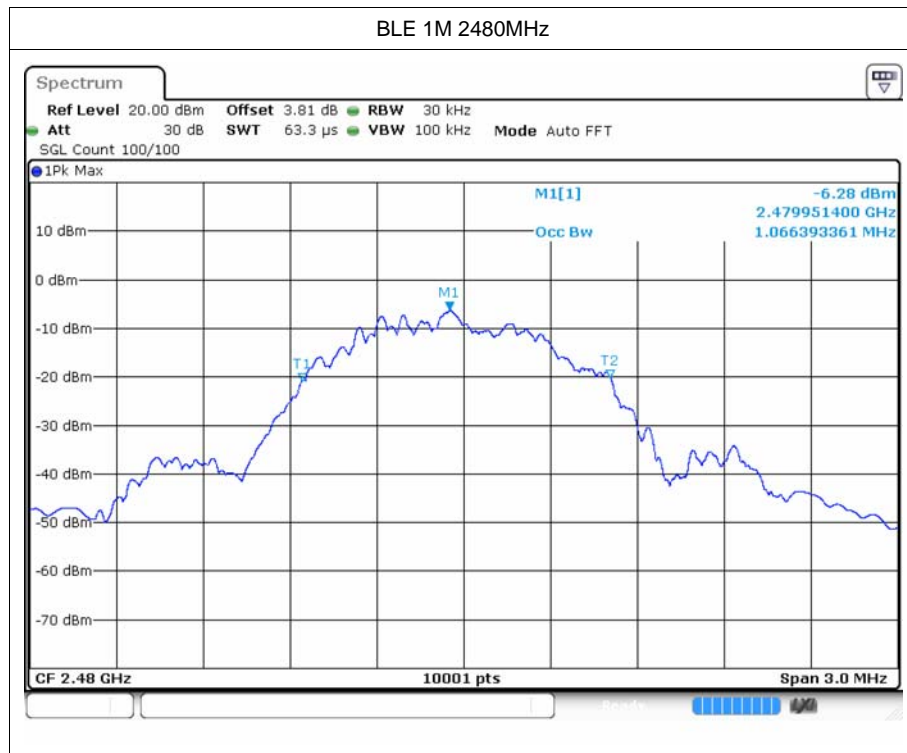
## 4 Occupied Channel Bandwidth

### 4.1 Test Result

Mode	Frequency (MHz)	99% OBW (MHz)
BLE 1M	2402	1.052
BLE 1M	2440	1.062
BLE 1M	2480	1.066

## 4.2 Test Graphs





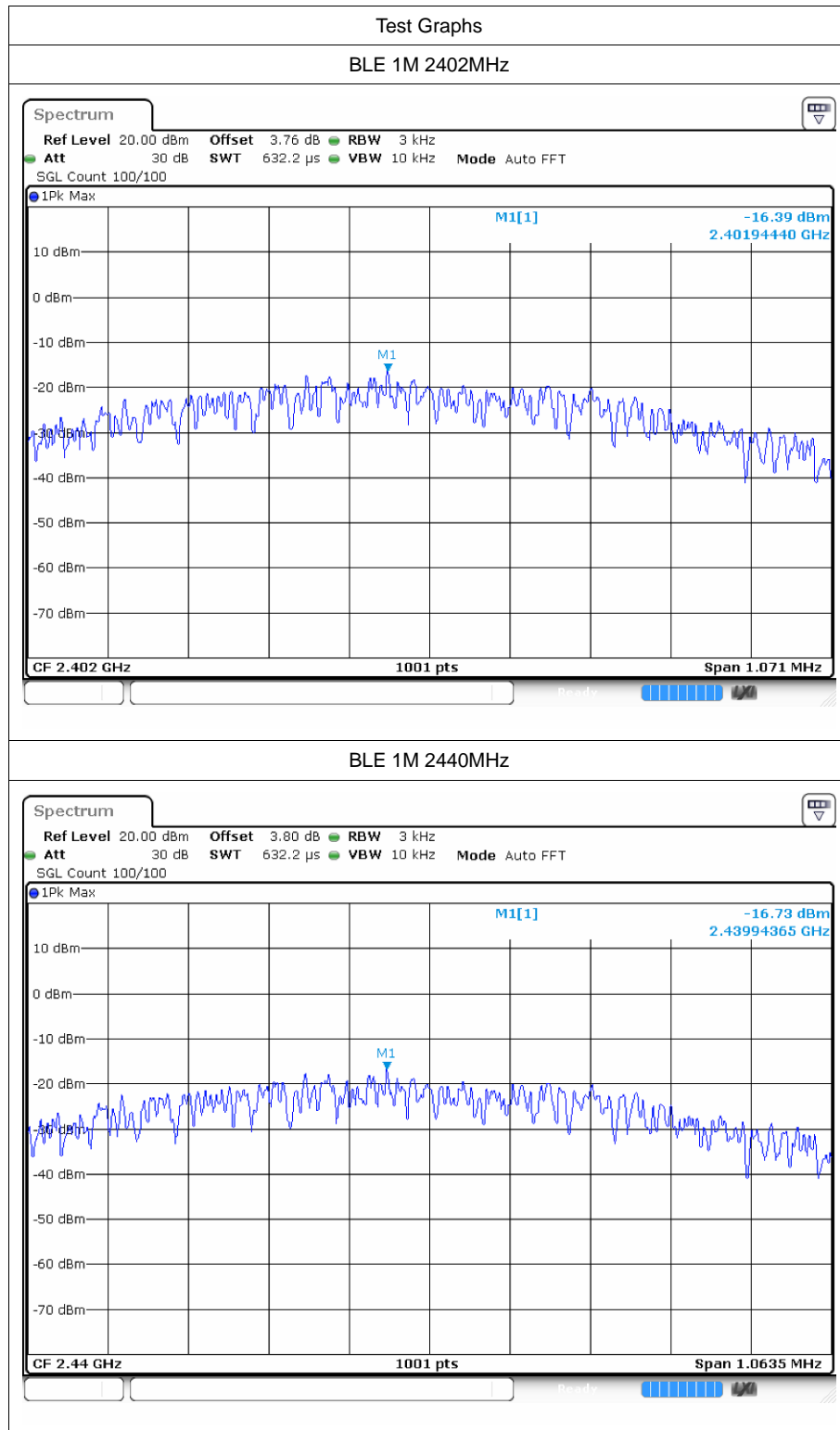


## 5 Maximum Power Spectral Density Level

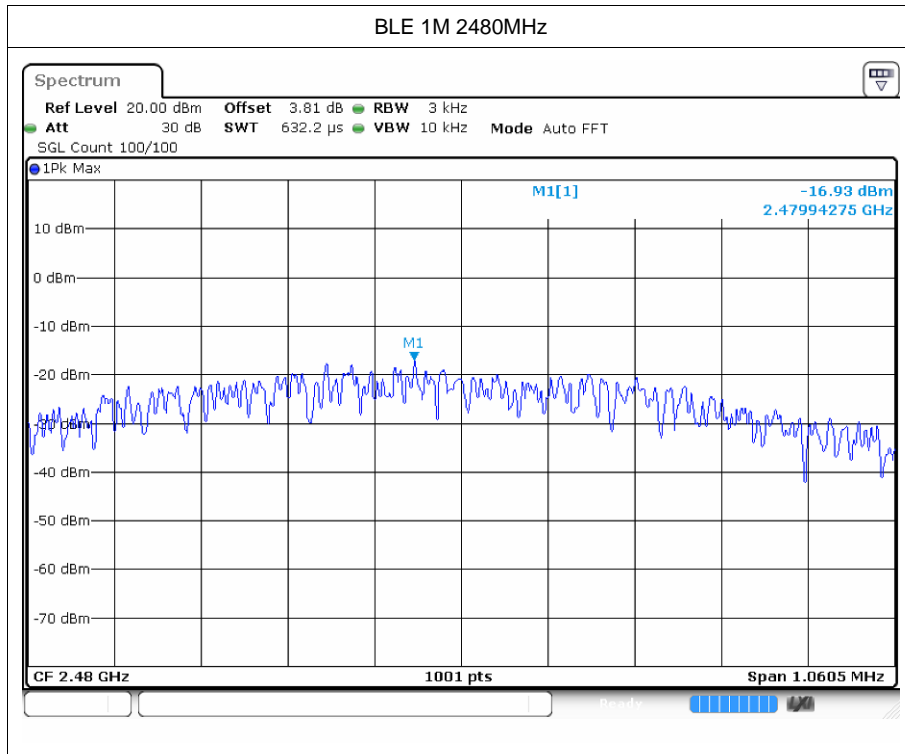
### 5.1 Test Result

Mode	Frequency (MHz)	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-16.39	≤8	Pass
BLE 1M	2440	-16.73	≤8	Pass
BLE 1M	2480	-16.93	≤8	Pass

## 5.2 Test Graphs







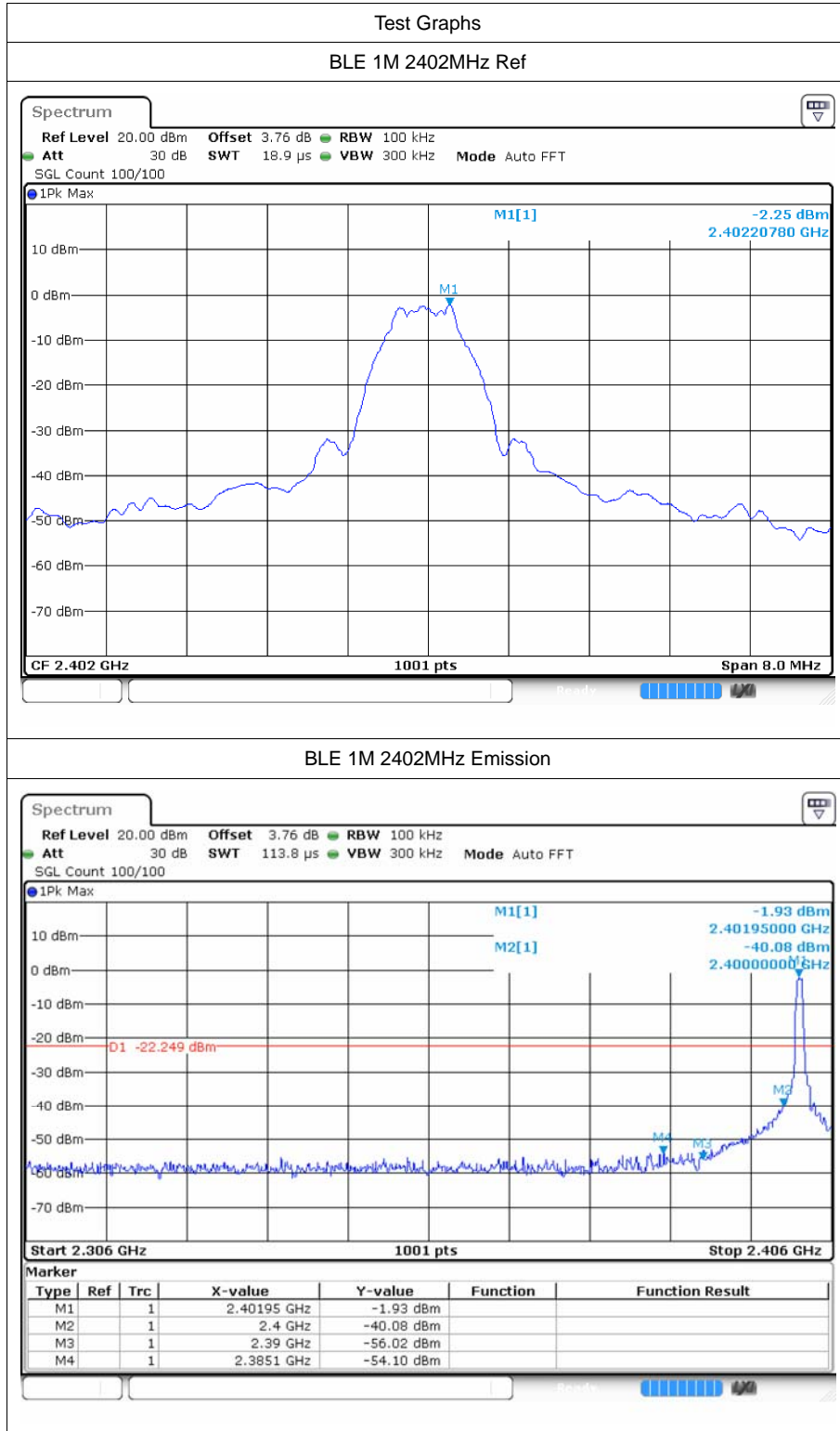


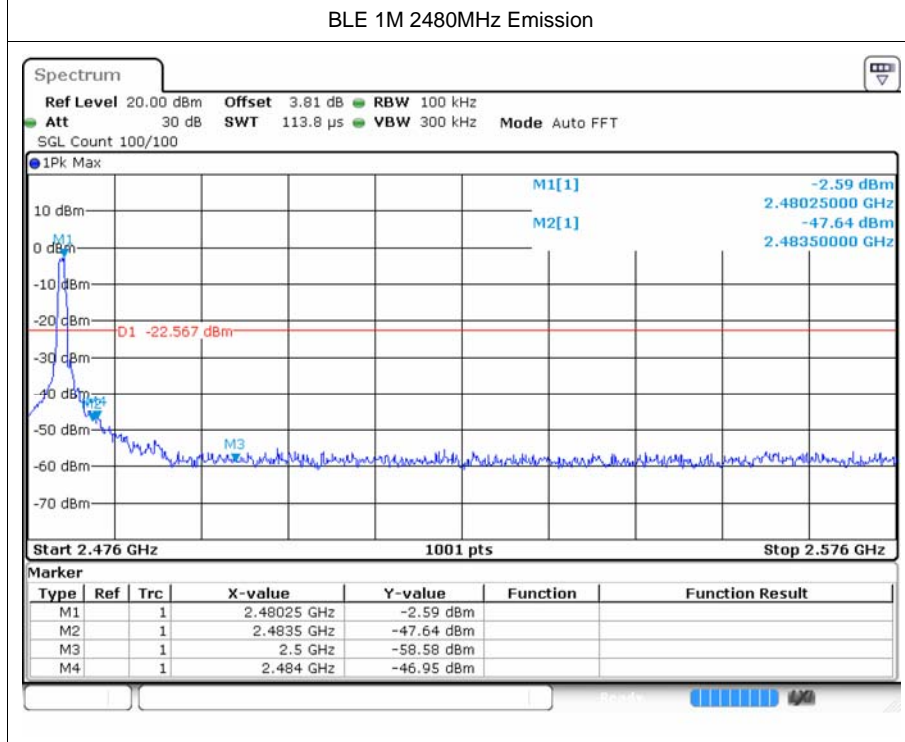
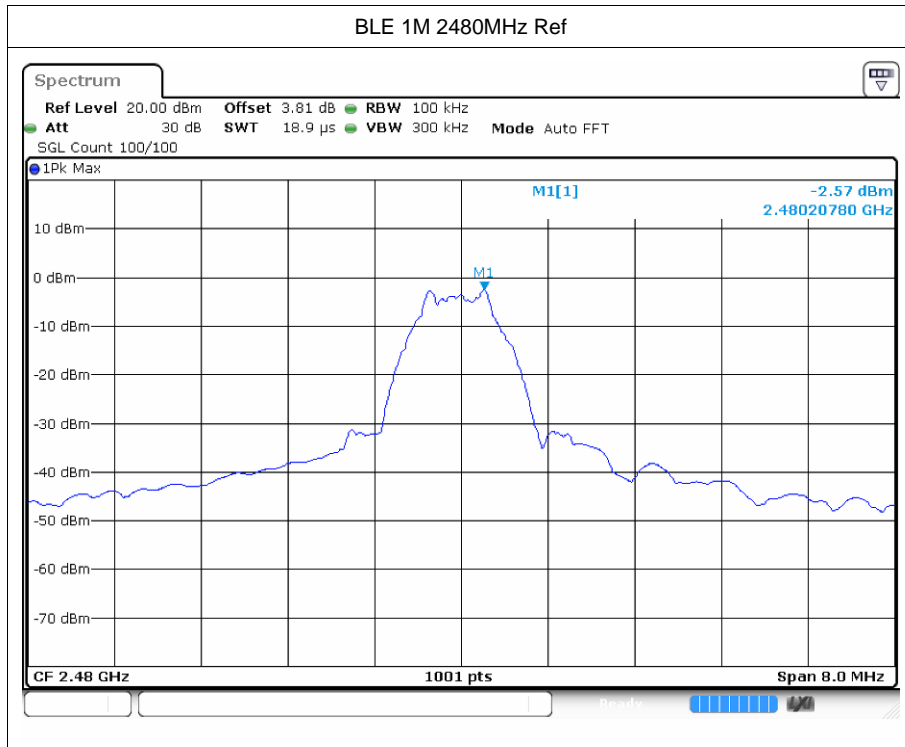
## 6 Band Edge

### 6.1 Test Result

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-51.85	-20	Pass
BLE 1M	2480	-44.37	-20	Pass

## 6.2 Test Graphs





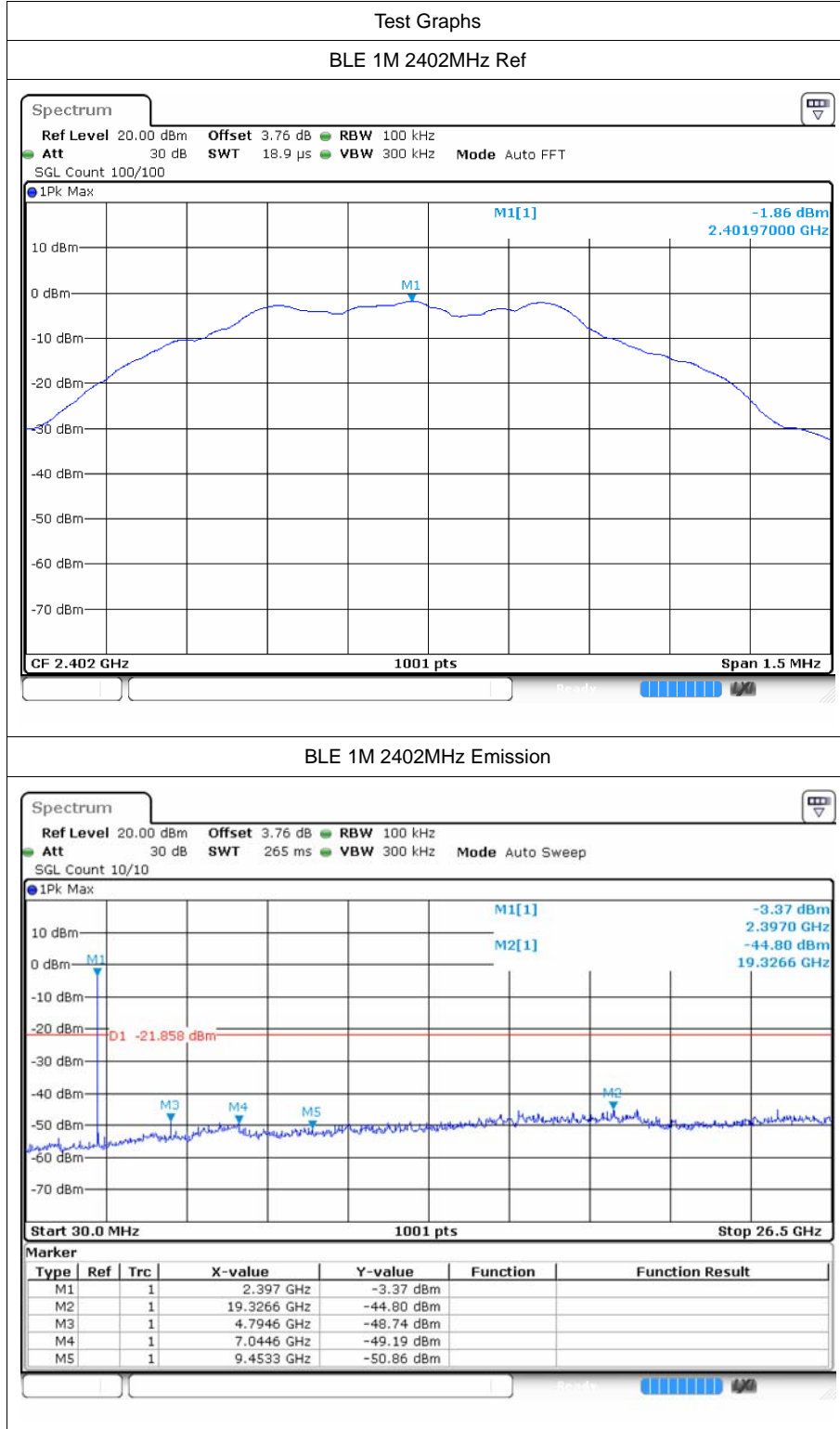


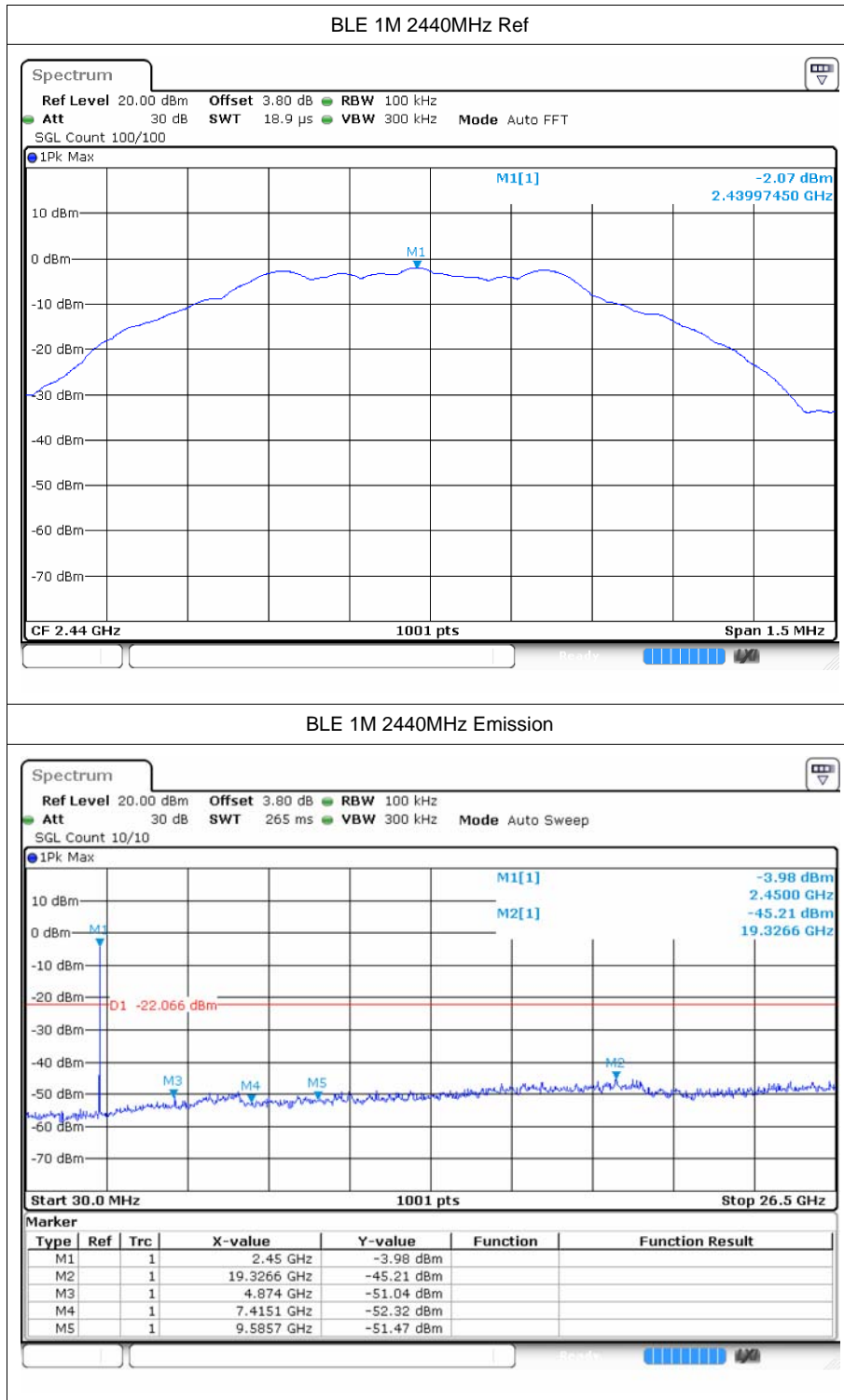
## 7 Conducted RF Spurious Emission

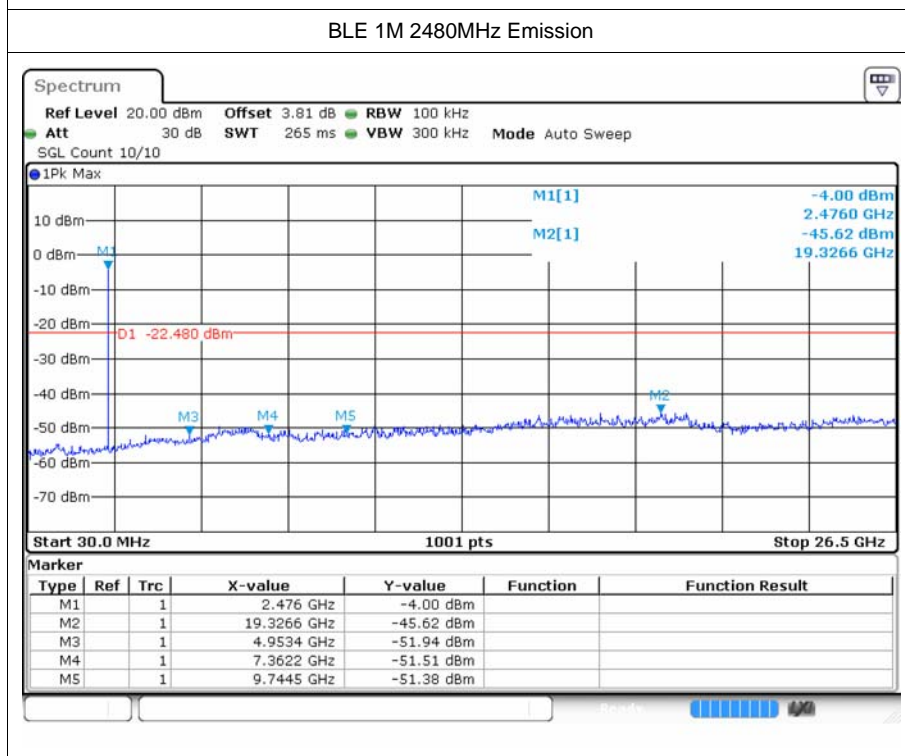
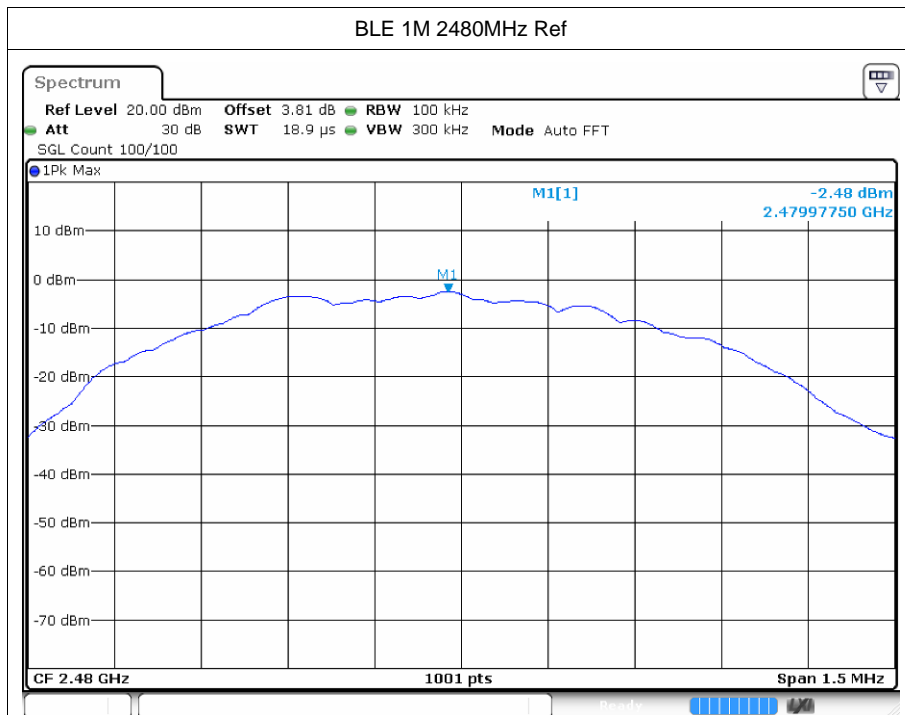
### 7.1 Test Result

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-42.93	-20	Pass
BLE 1M	2440	-43.14	-20	Pass
BLE 1M	2480	-43.14	-20	Pass

## 7.2 Test Graphs









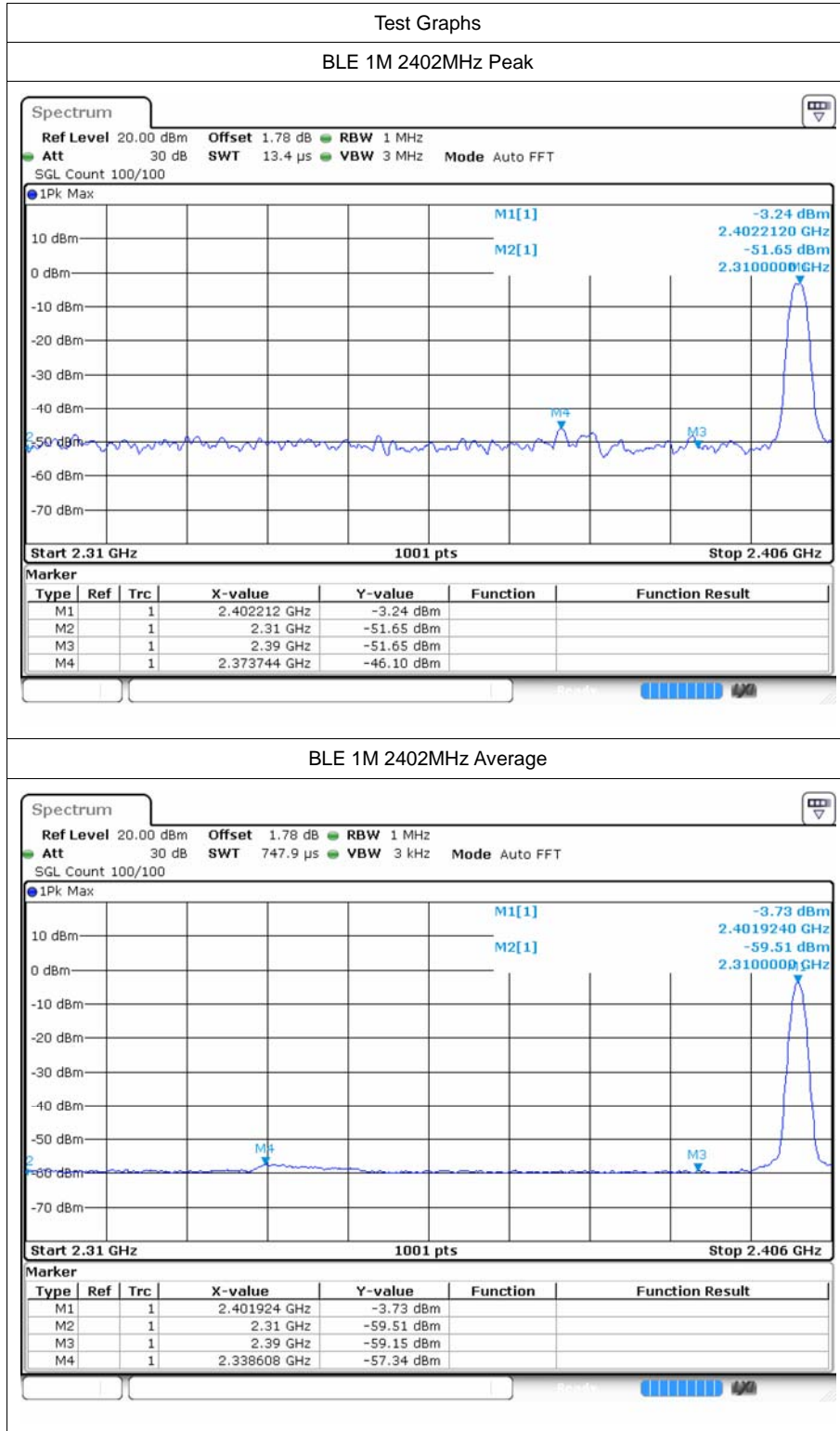


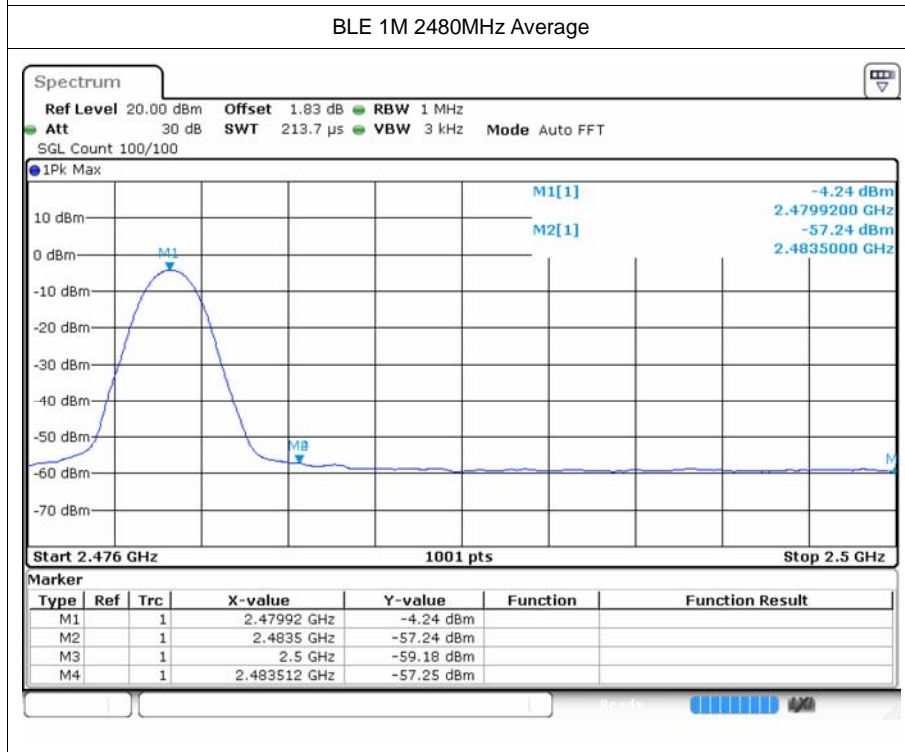
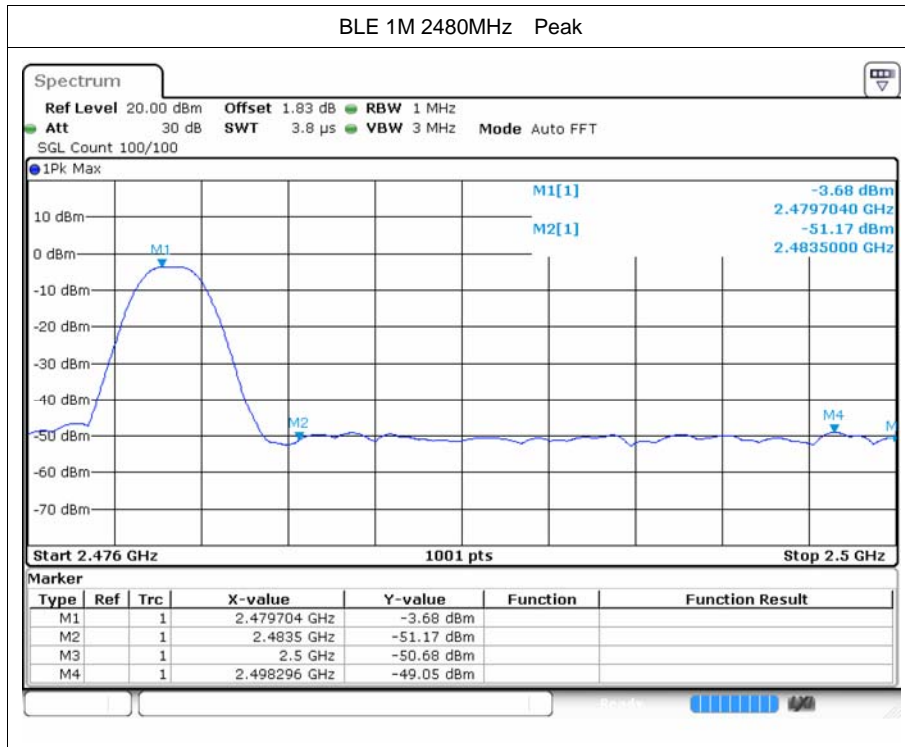
## 8 Restrict Band

### 8.1 Test Result

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
BLE 1M	2402	2310	-51.65	2	45.61	Peak	74	Pass
BLE 1M	2402	2310	-59.5	2	37.76	Average	54	Pass
BLE 1M	2402	2373.744	-46.1	2	51.16	Peak	74	Pass
BLE 1M	2402	2338.608	-57.33	2	39.93	Average	54	Pass
BLE 1M	2402	2390	-51.65	2	45.61	Peak	74	Pass
BLE 1M	2402	2390	-59.15	2	38.11	Average	54	Pass
BLE 1M	2480	2483.5	-51.01	2	46.25	Peak	74	Pass
BLE 1M	2480	2483.5	-57.25	2	40.01	Average	54	Pass
BLE 1M	2480	2498.296	-49.05	2	48.21	Peak	74	Pass
BLE 1M	2480	2483.512	-57.25	2	40.01	Average	54	Pass
BLE 1M	2480	2500	-50.67	2	46.59	Peak	74	Pass
BLE 1M	2480	2500	-59.18	2	38.08	Average	54	Pass

## 8.2 Test Graphs





---The End---