

Appendix B

RF Test Data for BLE Conducted Measurement

FCC ID:2A7DX-FLAT1

Product Name:Smart phone

Test Model:FLAT 1C

Environmental Conditions

| | |
|--------------------|-------------|
| Temperature: | 21°C |
| Relative Humidity: | 51% |
| ATM Pressure: | 101Kpa |
| Test Engineer: | Simba Huang |
| Supervised by: | Seal Chen |

Contents

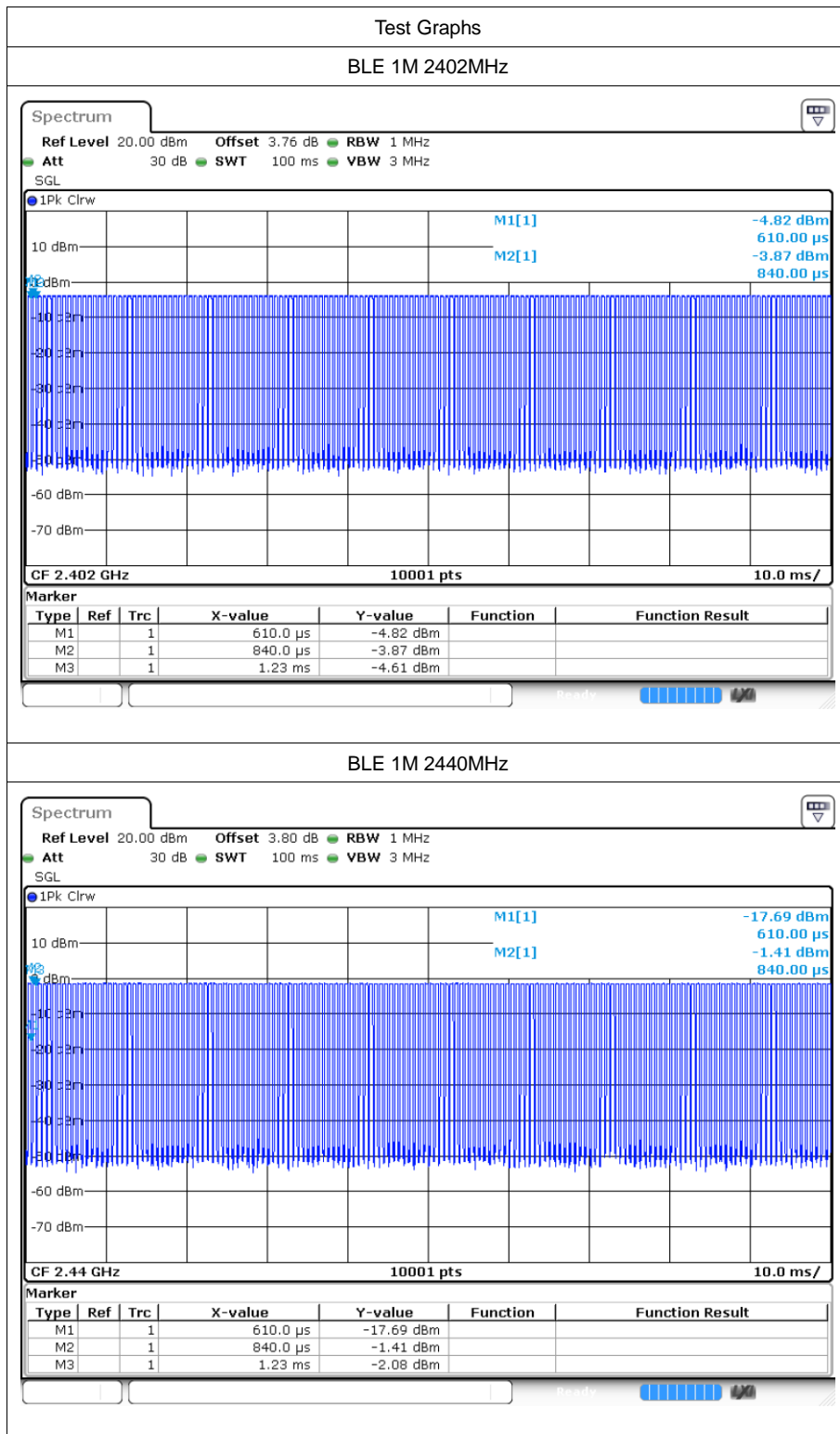
| | Page |
|--|------|
| COVER PAGE | |
| 1 Duty Cycle..... | 3 |
| 1.1 Test Result | 3 |
| 1.2 Test Graphs..... | 4 |
| 2 Maximum Conducted Output Power | 6 |
| 2.1 Test Result | 6 |
| 2.2 Test Graphs..... | 7 |
| 3 -6dB Bandwidth | 9 |
| 3.1 Test Result | 9 |
| 3.2 Test Graphs..... | 10 |
| 4 Maximum 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 |

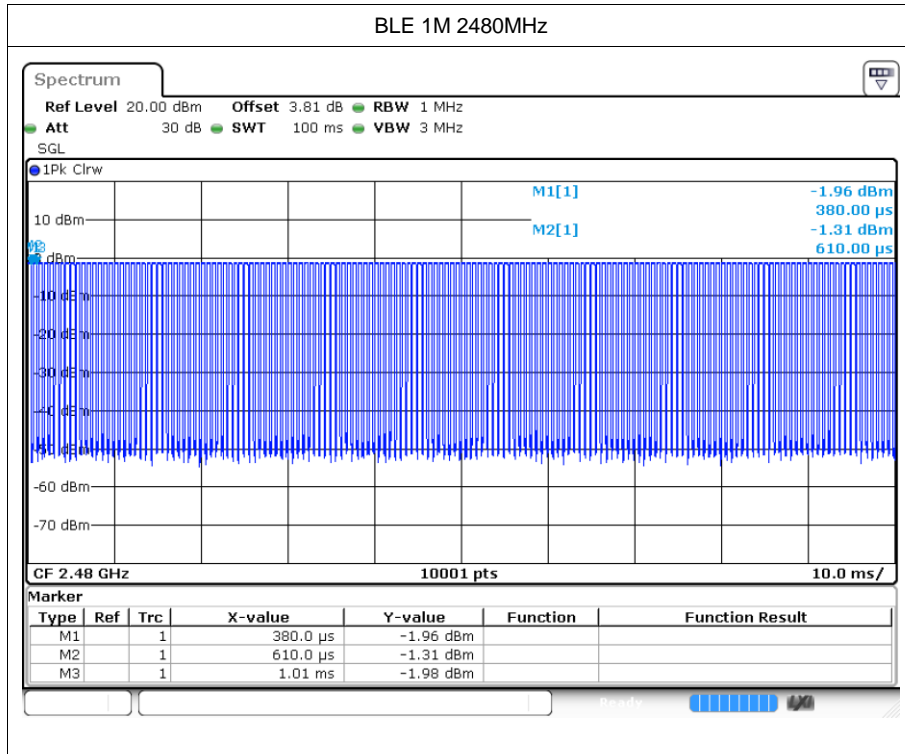
1 Duty Cycle

1.1 Test Result

| Mode | Frequency (MHz) | Duty Cycle (%) | 1/T (kHz) |
|--------|-----------------|----------------|-----------|
| BLE 1M | 2402 | 64.79 | 2.56 |
| BLE 1M | 2440 | 64.79 | 2.56 |
| BLE 1M | 2480 | 64.8 | 2.5 |

1.2 Test Graphs



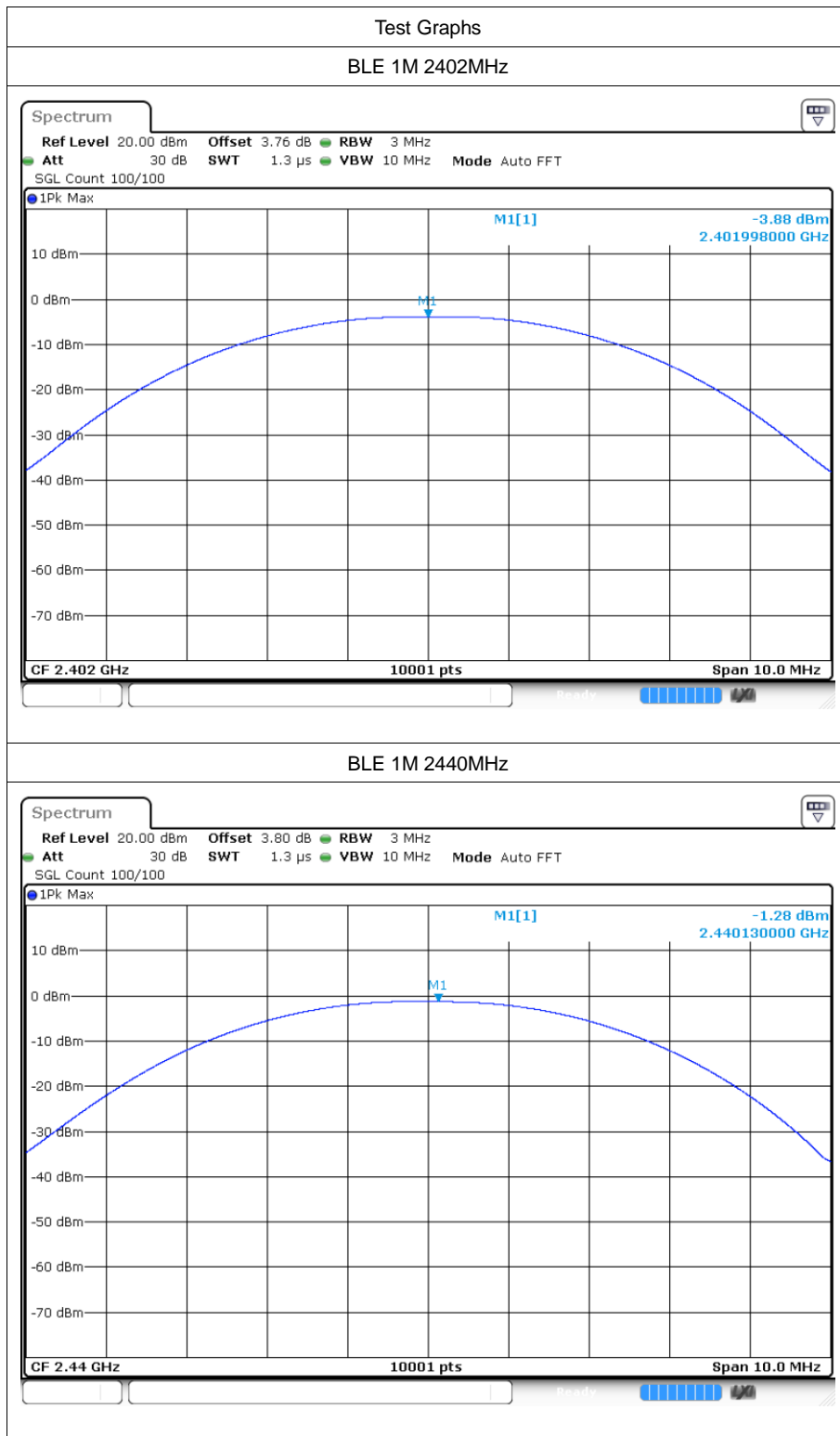


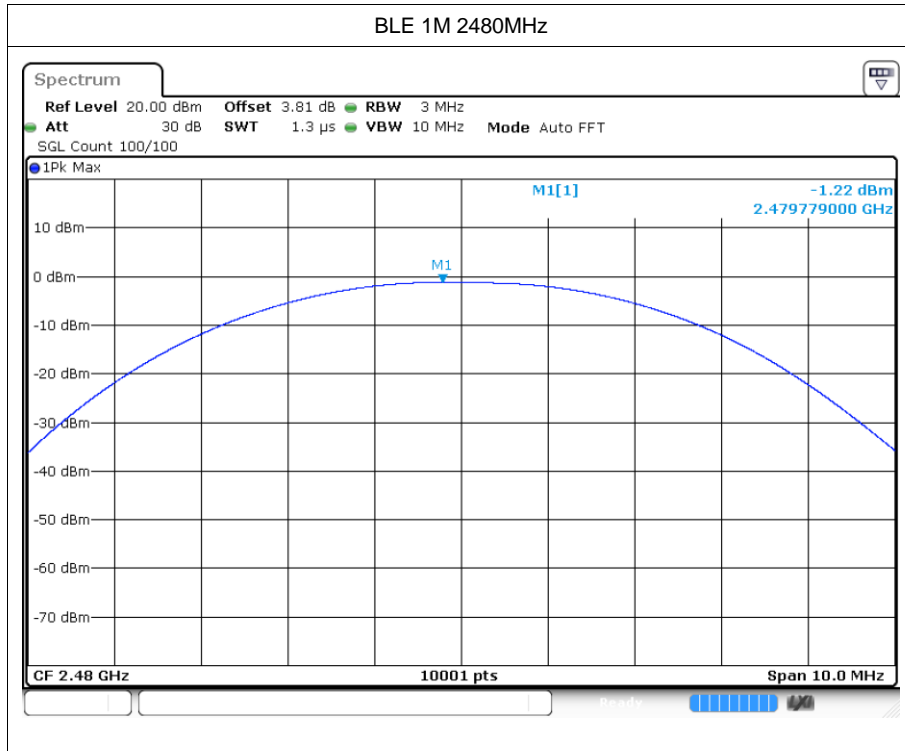
2 Maximum Conducted Output Power

2.1 Test Result

| Mode | Frequency (MHz) | Conducted Power (dBm) | Limit (dBm) | Verdict |
|--------|-----------------|-----------------------|-------------|---------|
| BLE 1M | 2402 | -3.88 | 30 | Pass |
| BLE 1M | 2440 | -1.28 | 30 | Pass |
| BLE 1M | 2480 | -1.22 | 30 | Pass |

2.2 Test Graphs



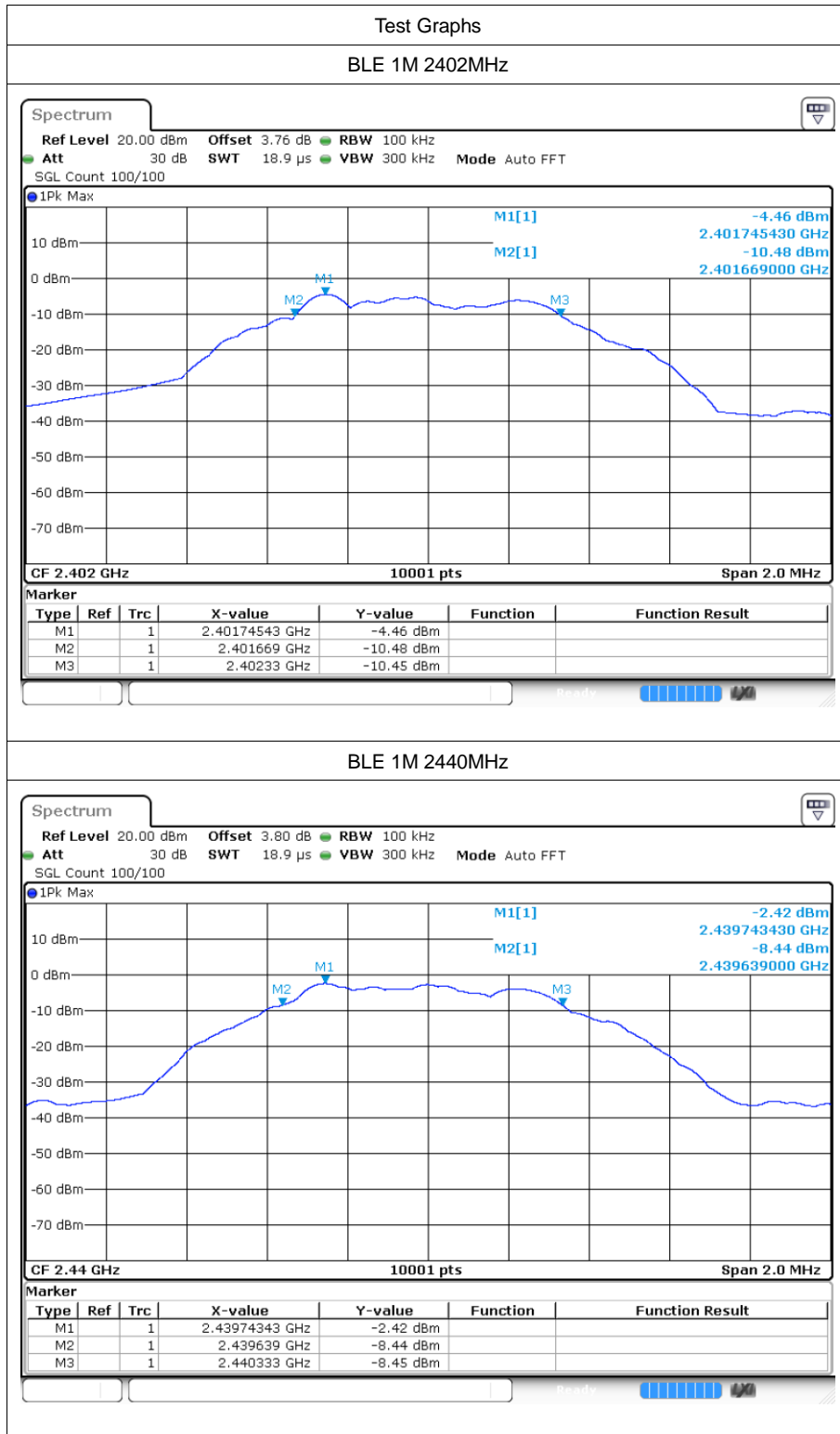


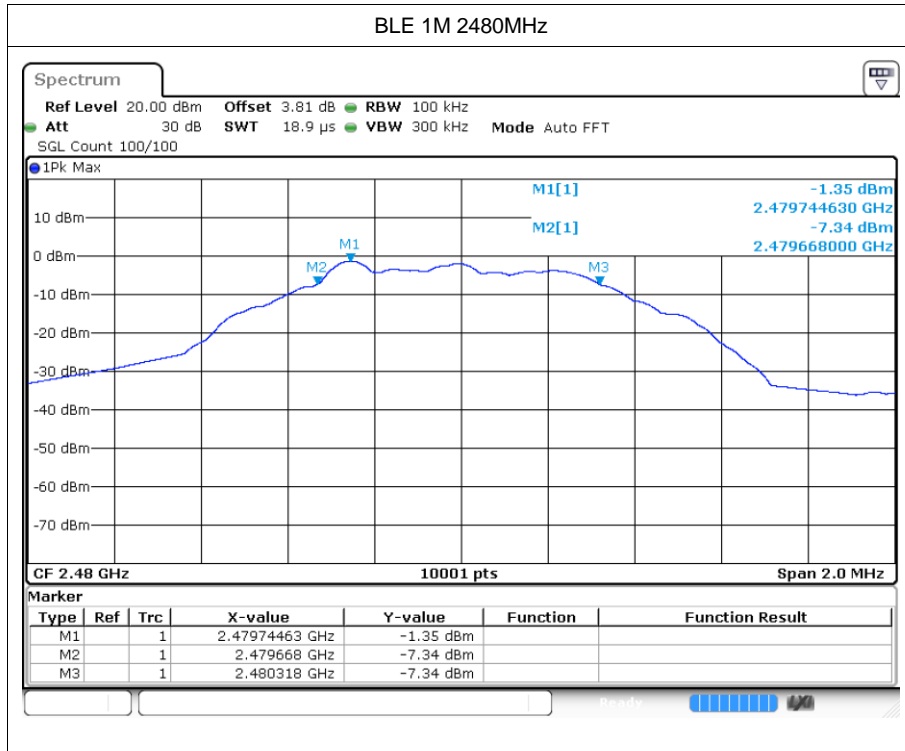
3 -6dB Bandwidth

3.1 Test Result

| Mode | Frequency (MHz) | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|--------|-----------------|-----------------------|-----------------------------|---------|
| BLE 1M | 2402 | 0.66 | 0.5 | Pass |
| BLE 1M | 2440 | 0.693 | 0.5 | Pass |
| BLE 1M | 2480 | 0.65 | 0.5 | Pass |

3.2 Test Graphs



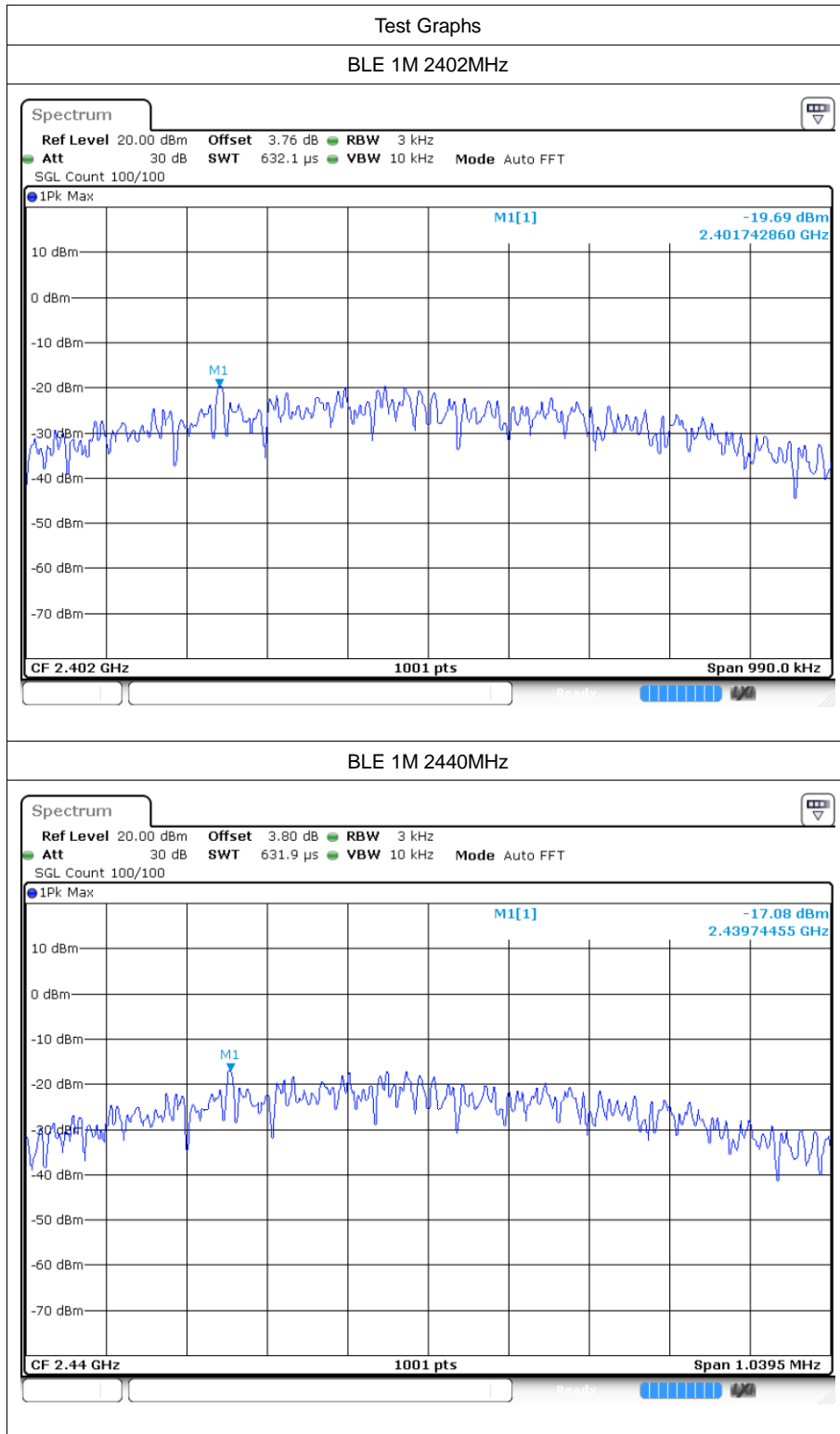


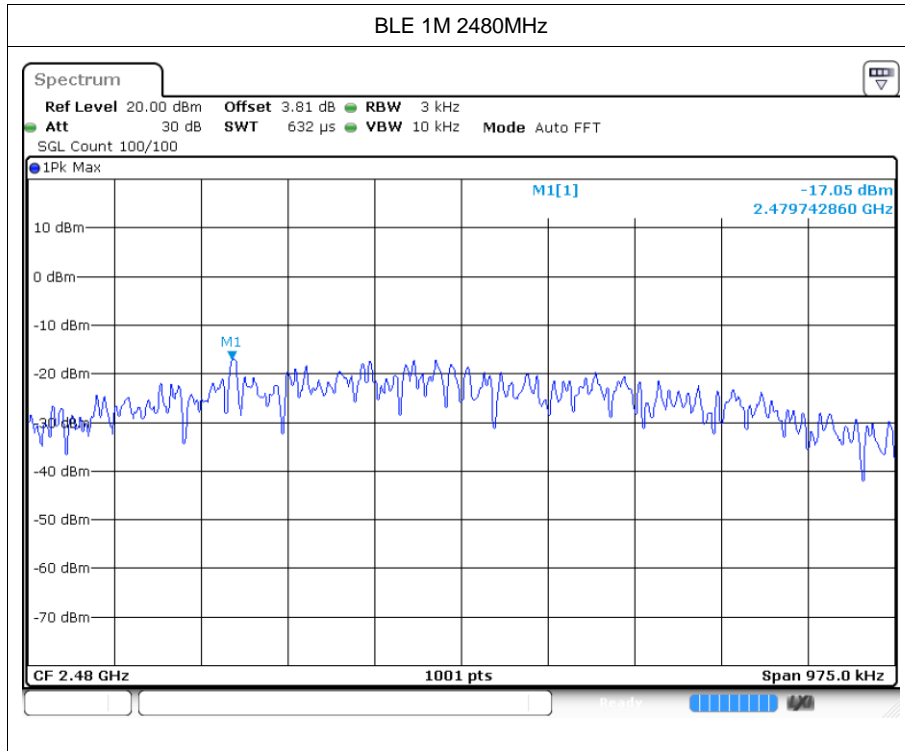
4 Maximum Power Spectral Density Level

4.1 Test Result

| Mode | Frequency (MHz) | Conducted PSD (dBm/3-100kHz) | Limit (dBm/3kHz) | Verdict |
|--------|-----------------|------------------------------|------------------|---------|
| BLE 1M | 2402 | -19.69 | ≤ 8 | Pass |
| BLE 1M | 2440 | -17.08 | ≤ 8 | Pass |
| BLE 1M | 2480 | -17.05 | ≤ 8 | Pass |

4.2 Test Graphs



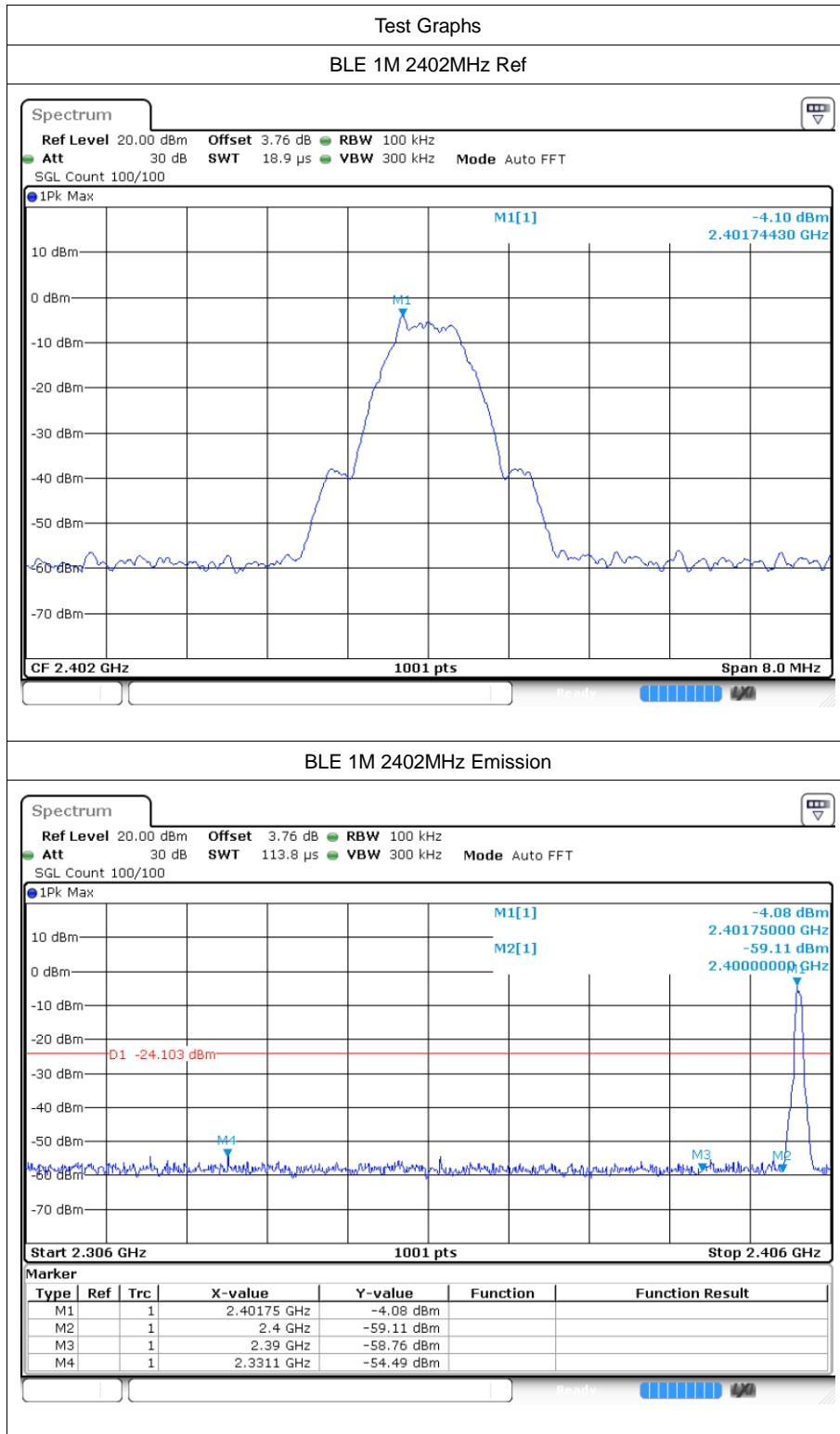


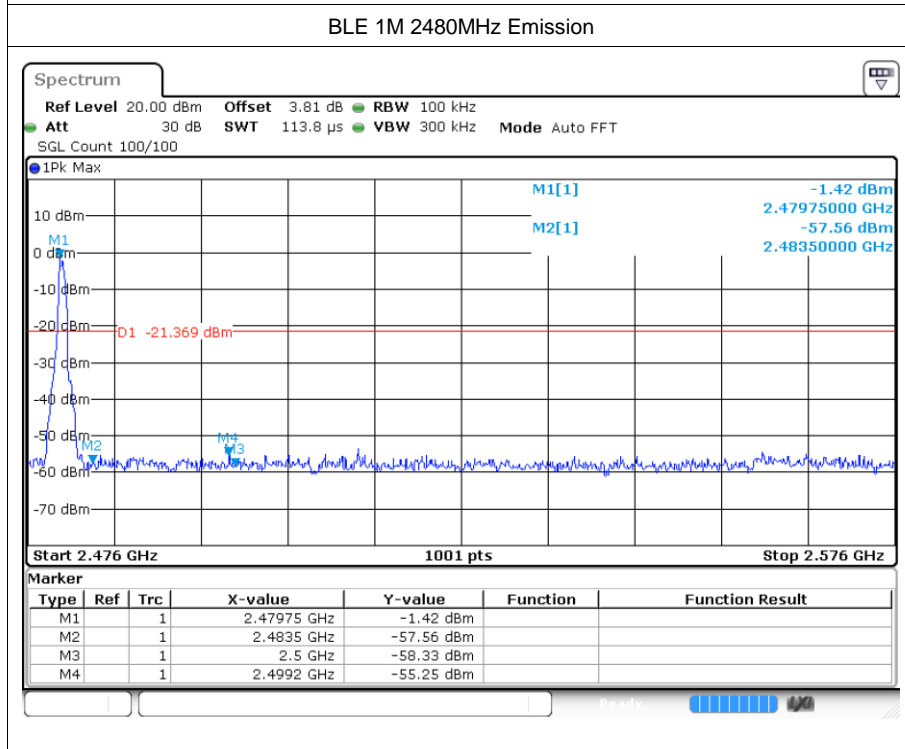
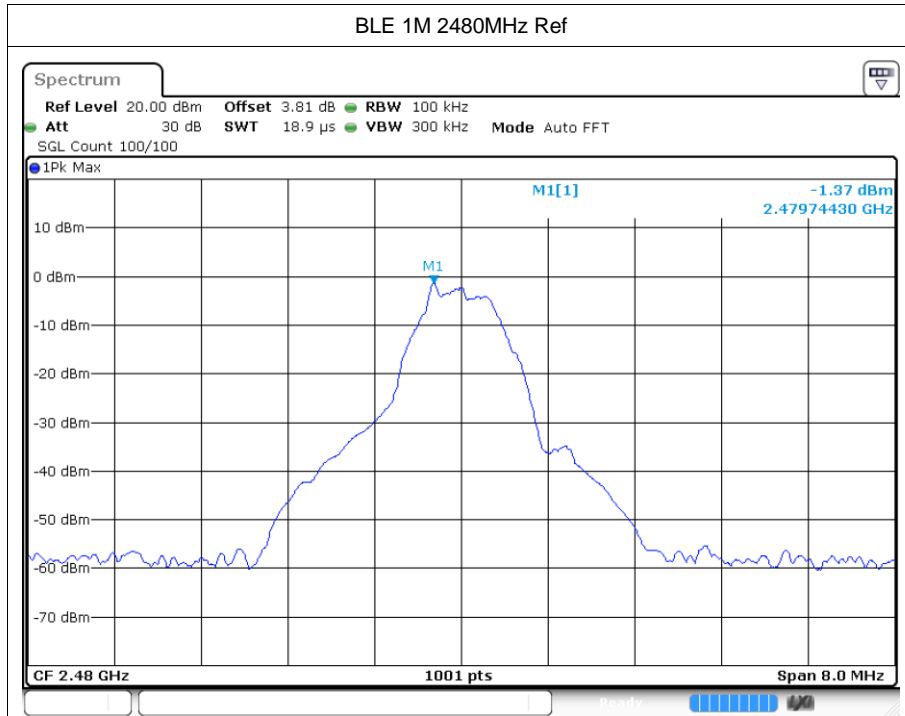
5 Band Edge

5.1 Test Result

| Mode | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402 | -50.38 | -20 | Pass |
| BLE 1M | 2480 | -53.87 | -20 | Pass |

5.2 Test Graphs



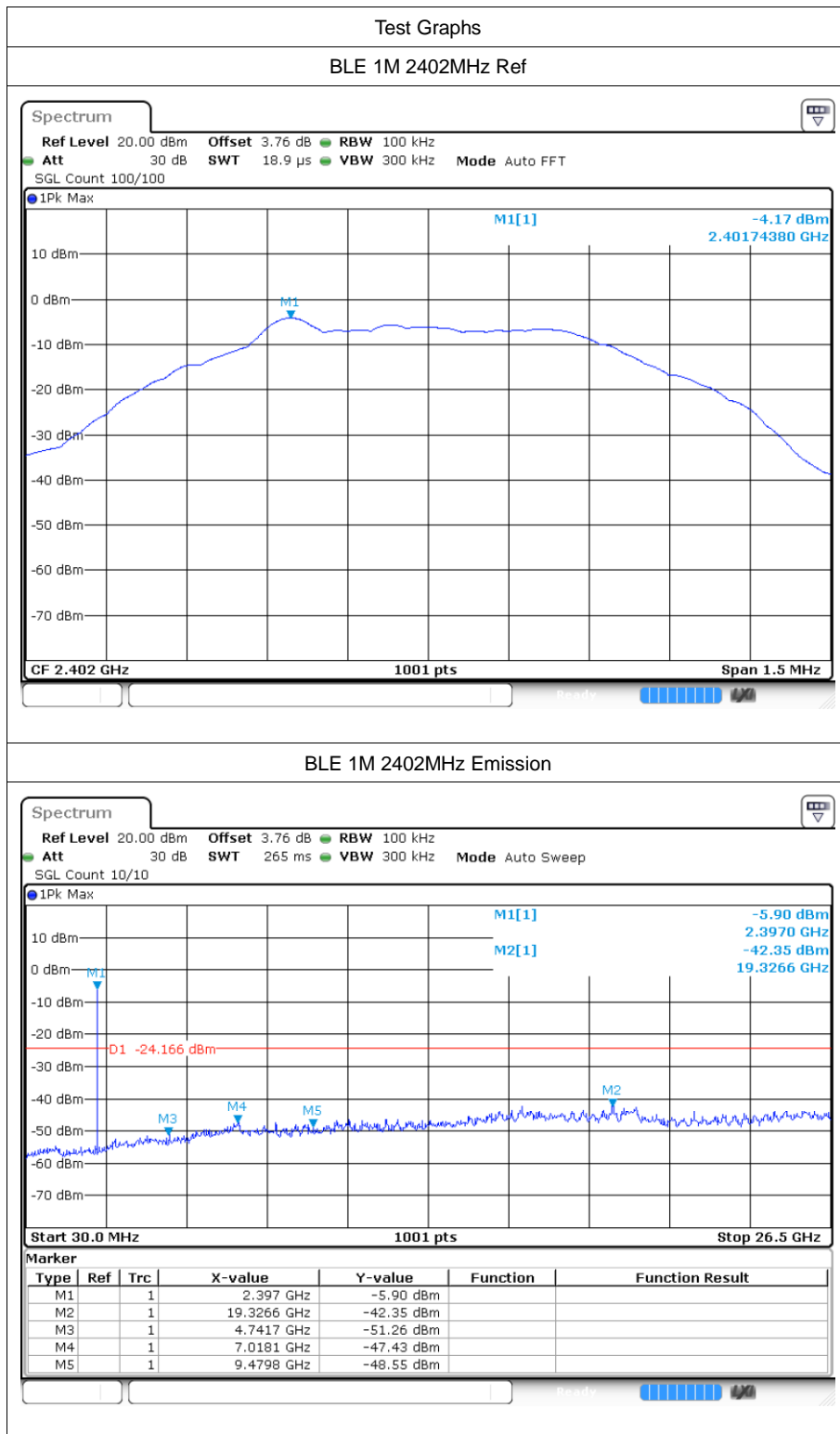


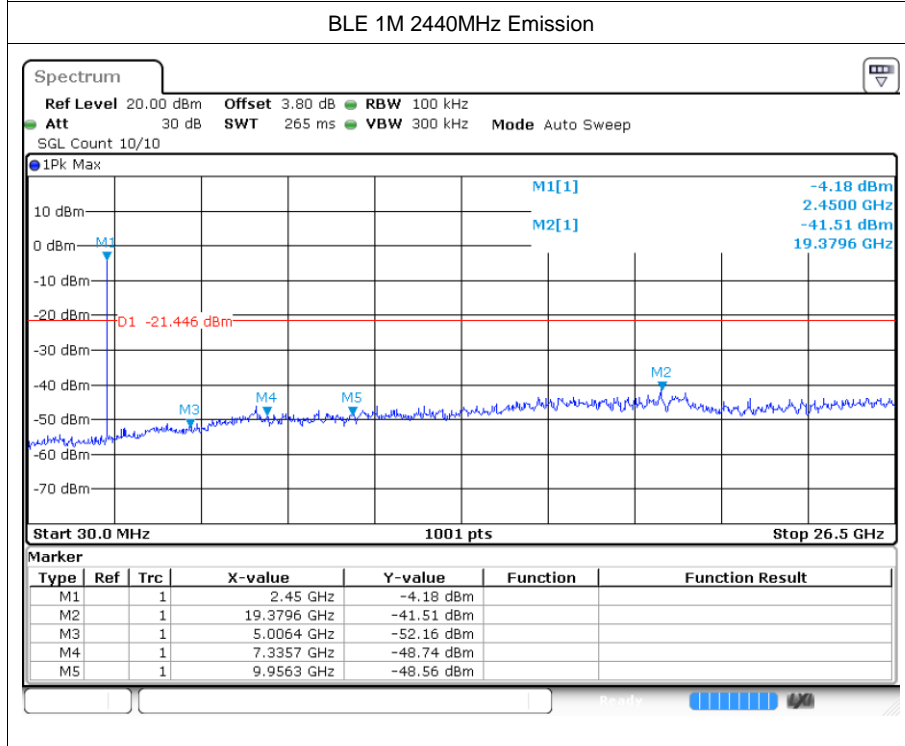
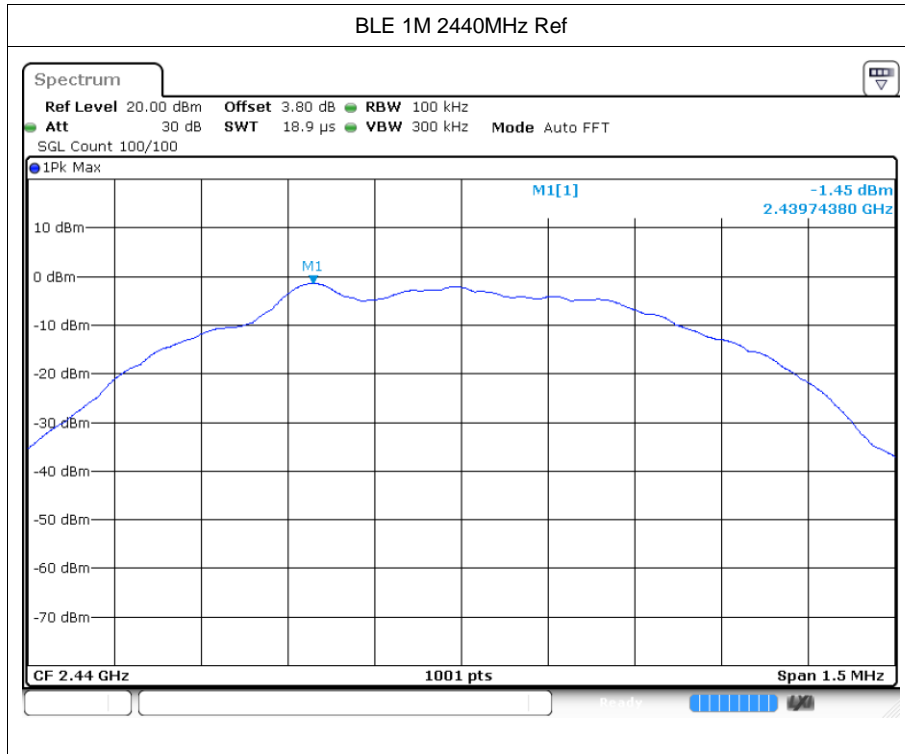
6 Conducted RF Spurious Emission

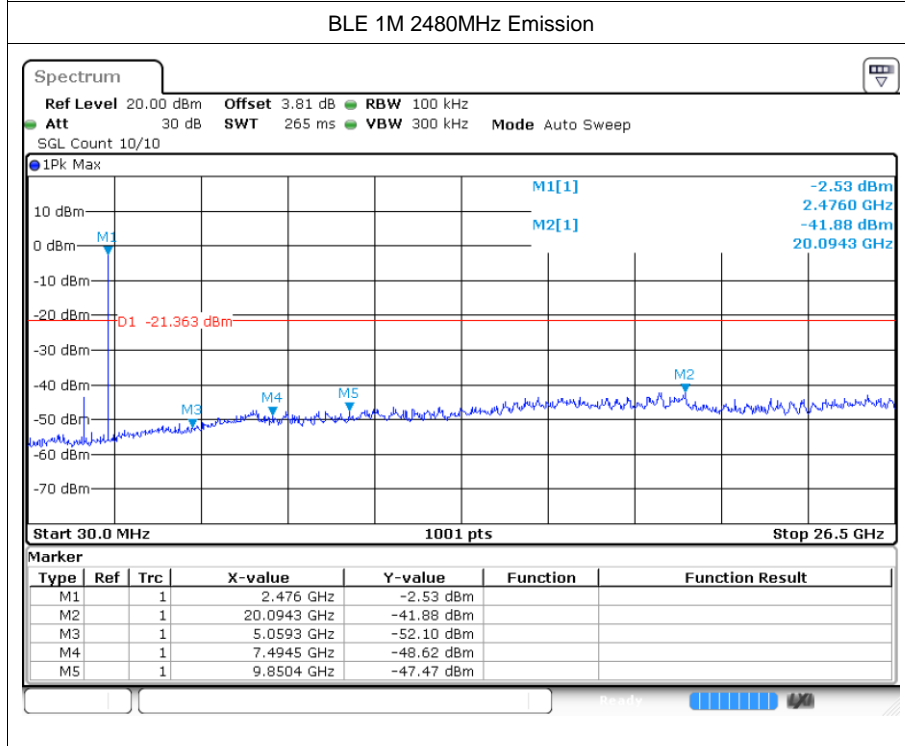
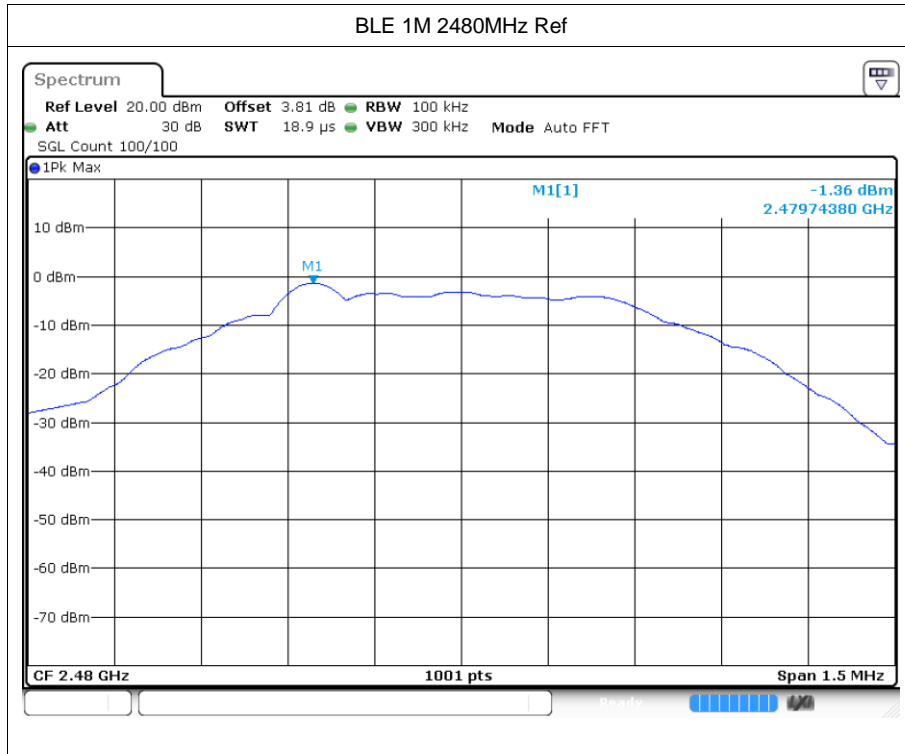
6.1 Test Result

| Mode | Frequency (MHz) | Max Value (dBc) | Limit (dBc) | Verdict |
|--------|-----------------|-----------------|-------------|---------|
| BLE 1M | 2402 | -38.17 | -20 | Pass |
| BLE 1M | 2440 | -40.05 | -20 | Pass |
| BLE 1M | 2480 | -40.52 | -20 | Pass |

6.2 Test Graphs





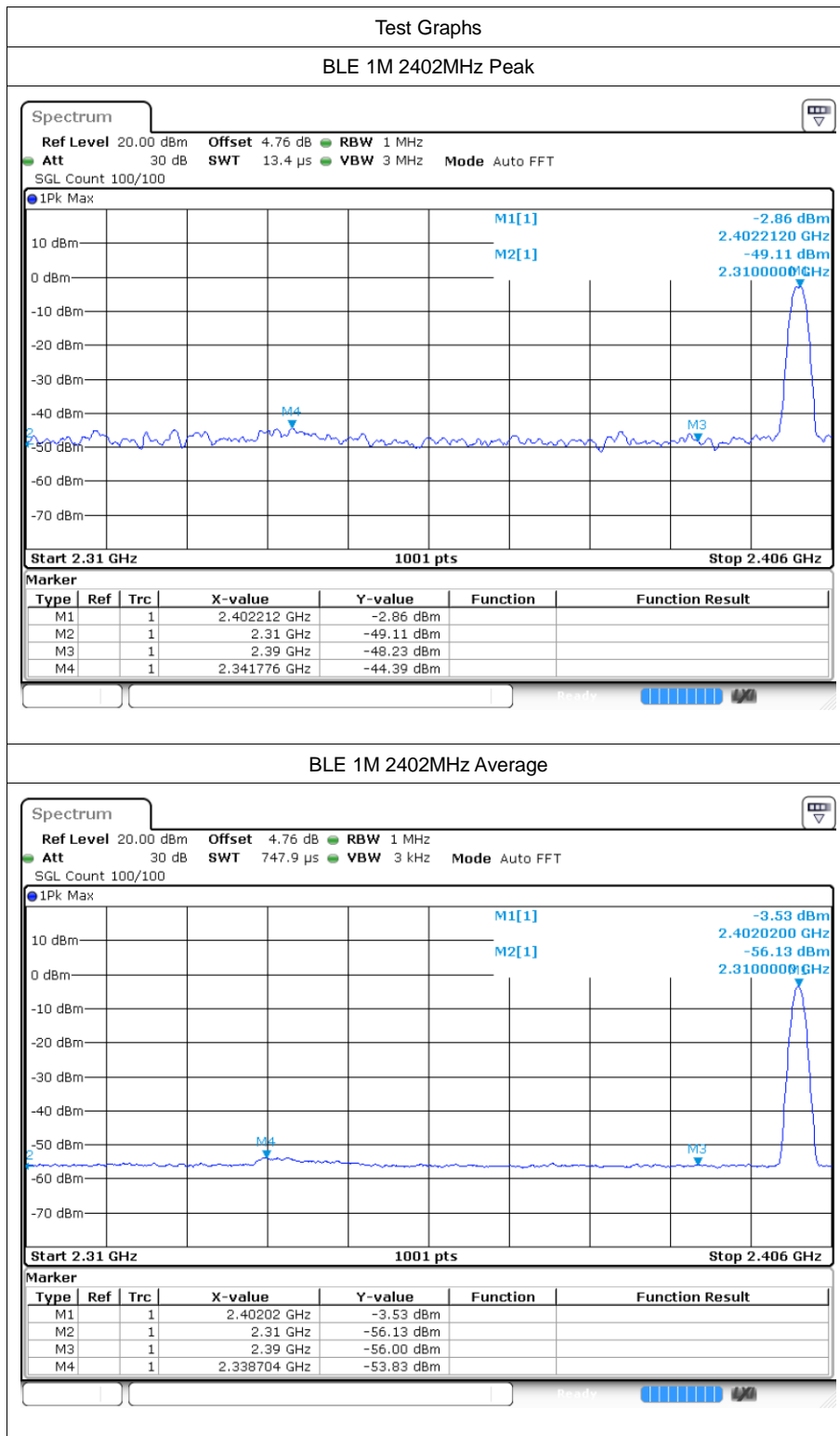


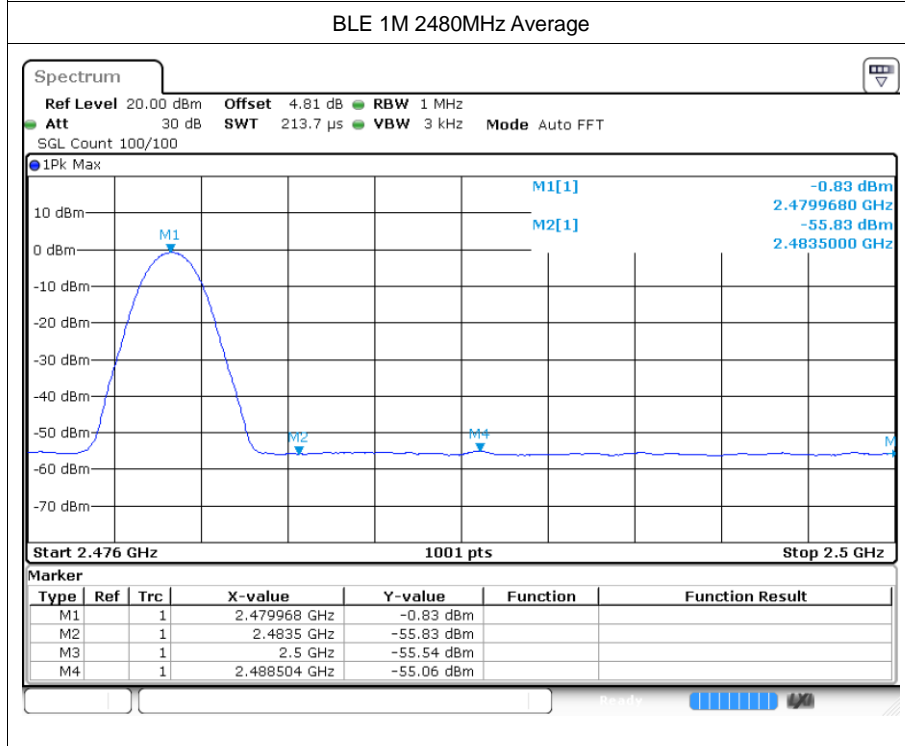
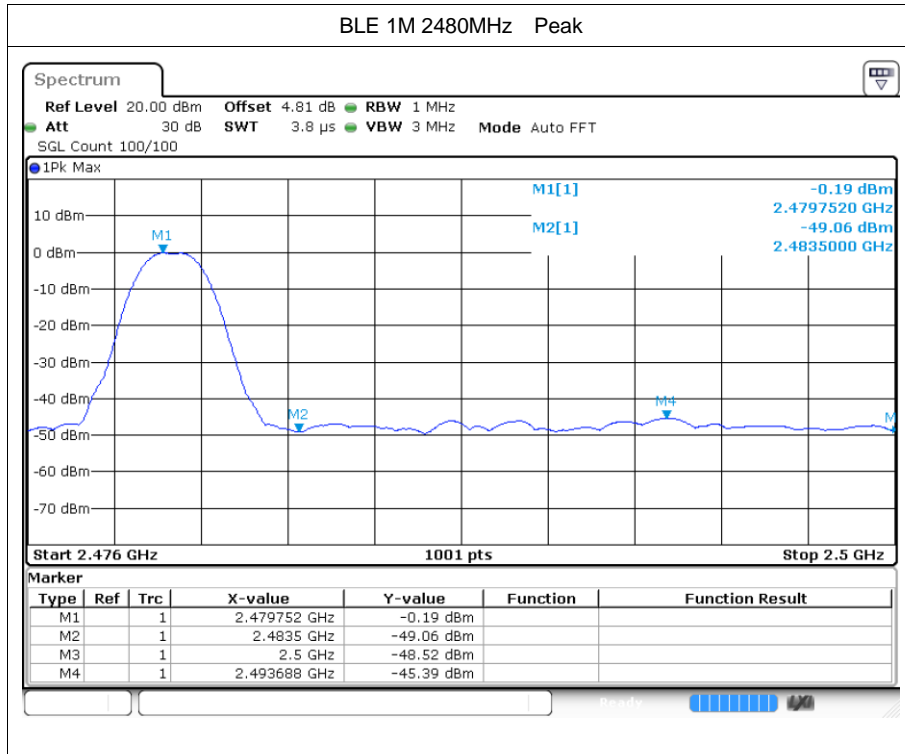
7 Restrict Band

7.1 Test Result

| Mode | Frequency (MHz) | Spur Freq (MHz) | Power (dBm) | Gain (dBi) | E (dBuV/m) | Detector | Limit (dBuV/m) | Verdict |
|--------|-----------------|-----------------|-------------|------------|------------|----------|----------------|---------|
| BLE 1M | 2402 | 2310 | -49.11 | 2 | 48.15 | Peak | 74 | Pass |
| BLE 1M | 2402 | 2310 | -56.13 | 2 | 41.13 | Average | 54 | Pass |
| BLE 1M | 2402 | 2341.776 | -44.38 | 2 | 52.88 | Peak | 74 | Pass |
| BLE 1M | 2402 | 2338.704 | -53.83 | 2 | 43.43 | Average | 54 | Pass |
| BLE 1M | 2402 | 2390 | -48.23 | 2 | 49.03 | Peak | 74 | Pass |
| BLE 1M | 2402 | 2390 | -55.99 | 2 | 41.27 | Average | 54 | Pass |
| BLE 1M | 2480 | 2483.5 | -49.01 | 2 | 48.25 | Peak | 74 | Pass |
| BLE 1M | 2480 | 2483.5 | -55.79 | 2 | 41.47 | Average | 54 | Pass |
| BLE 1M | 2480 | 2493.688 | -45.38 | 2 | 51.88 | Peak | 74 | Pass |
| BLE 1M | 2480 | 2488.504 | -55.05 | 2 | 42.21 | Average | 54 | Pass |
| BLE 1M | 2480 | 2500 | -48.52 | 2 | 48.74 | Peak | 74 | Pass |
| BLE 1M | 2480 | 2500 | -55.53 | 2 | 41.73 | Average | 54 | Pass |

7.2 Test Graphs





---The End---