



Appendix B

RF Test Data for BLE (Conducted Measurement)

Product Name: Pocket Auto Catch Light

Trade Mark: BROOK

Test Model: ZPP0067

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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1 Duty Cycle

1.1 Test Result

Module 1:

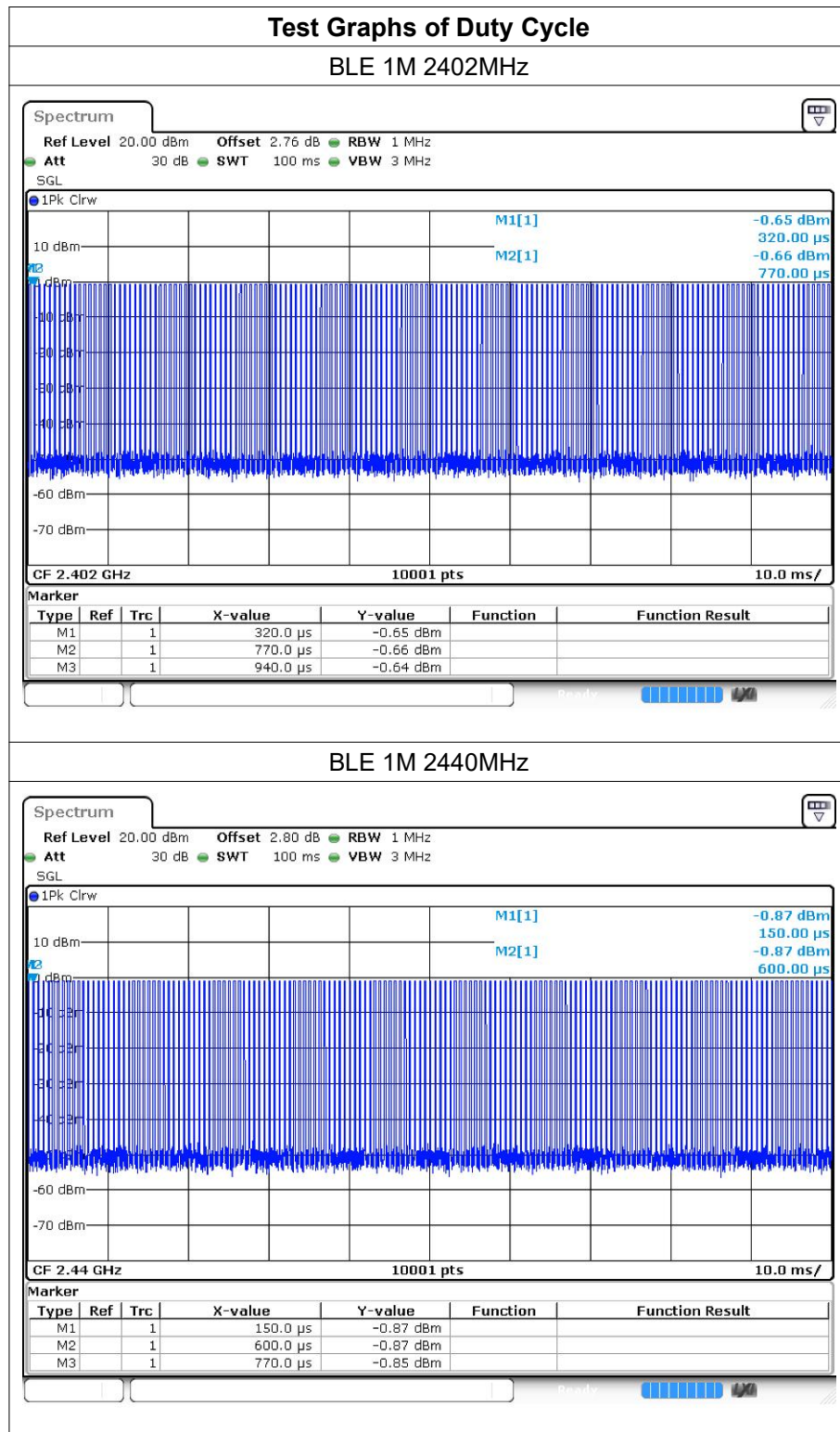
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
GFSK 1M	2402	Ant1	29.69	5.88
GFSK 1M	2440	Ant1	29.72	5.88
GFSK 1M	2480	Ant1	29.73	5.88

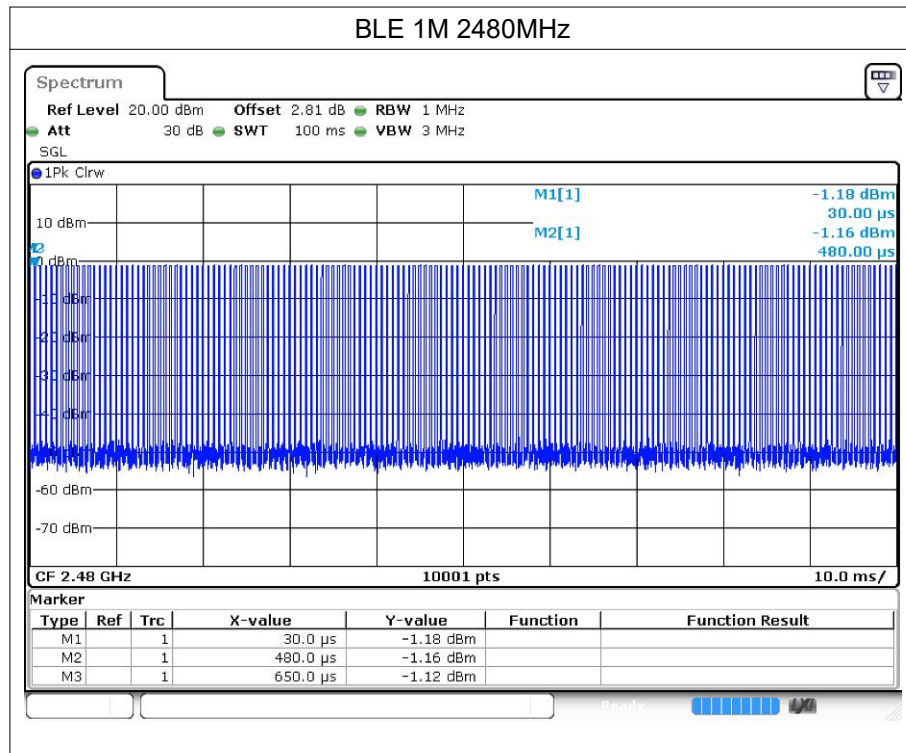
Module 2:

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
GFSK 1M	2402	Ant1	87.77	0.61
GFSK 1M	2440	Ant1	87.75	0.61
GFSK 1M	2480	Ant1	87.95	0.61

1.2 Test Graphs

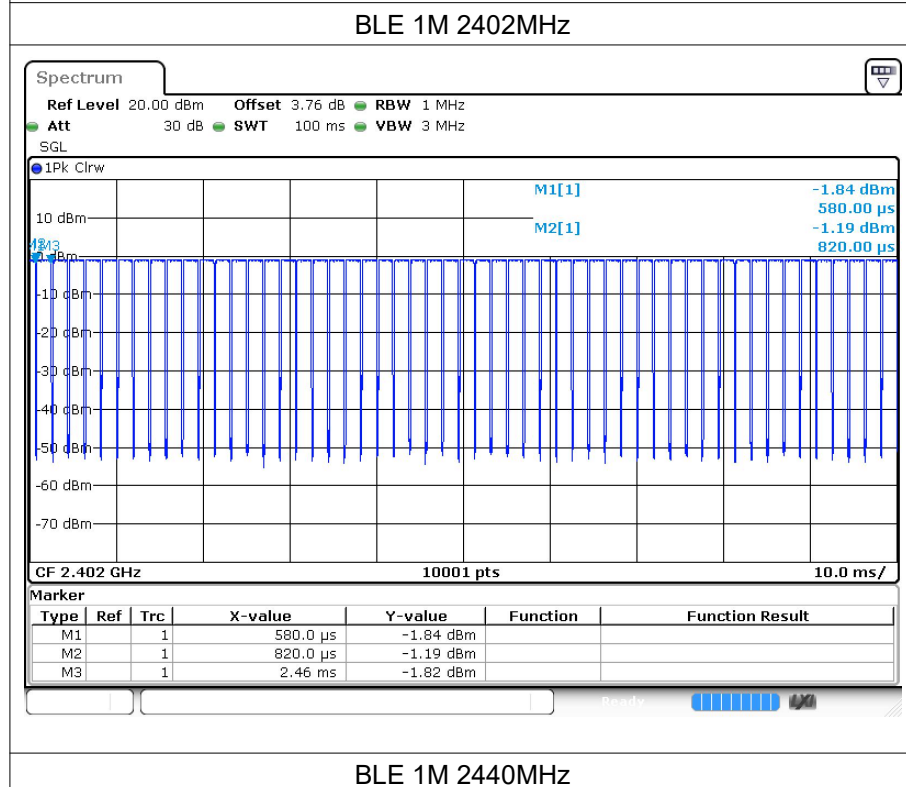
Module 1:

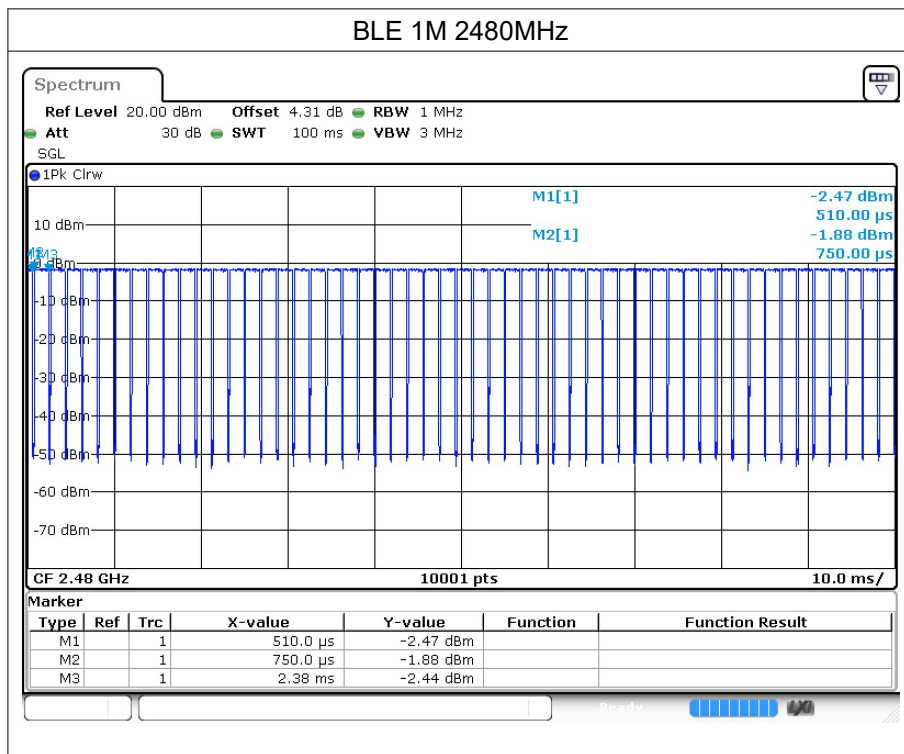
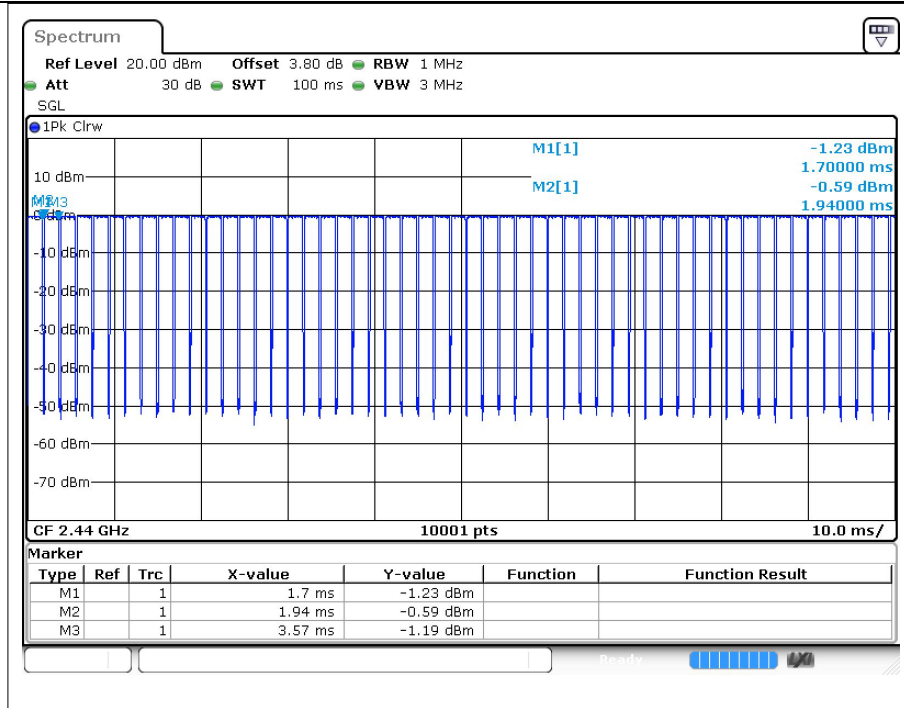




Module 2:

Test Graphs of Duty Cycle







2 Maximum Conducted Output Power

2.1 Test Result

Module 1:

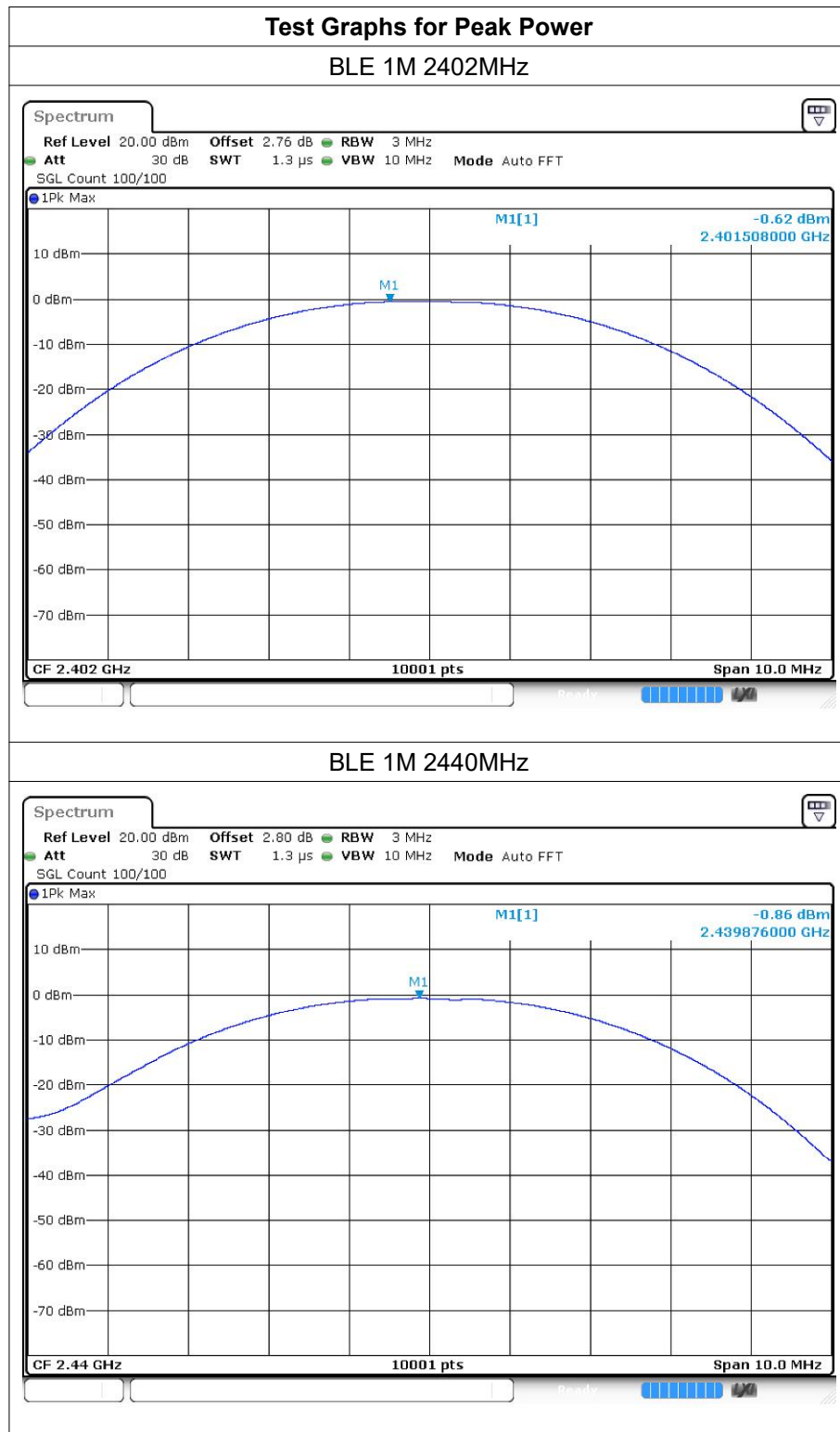
Test Data of Conducted Output Power				
Test Mode	Test Channel (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK 1M	2402	-0.62	≤ 30	Pass
	2440	-0.86	≤ 30	Pass
	2480	-1.14	≤ 30	Pass

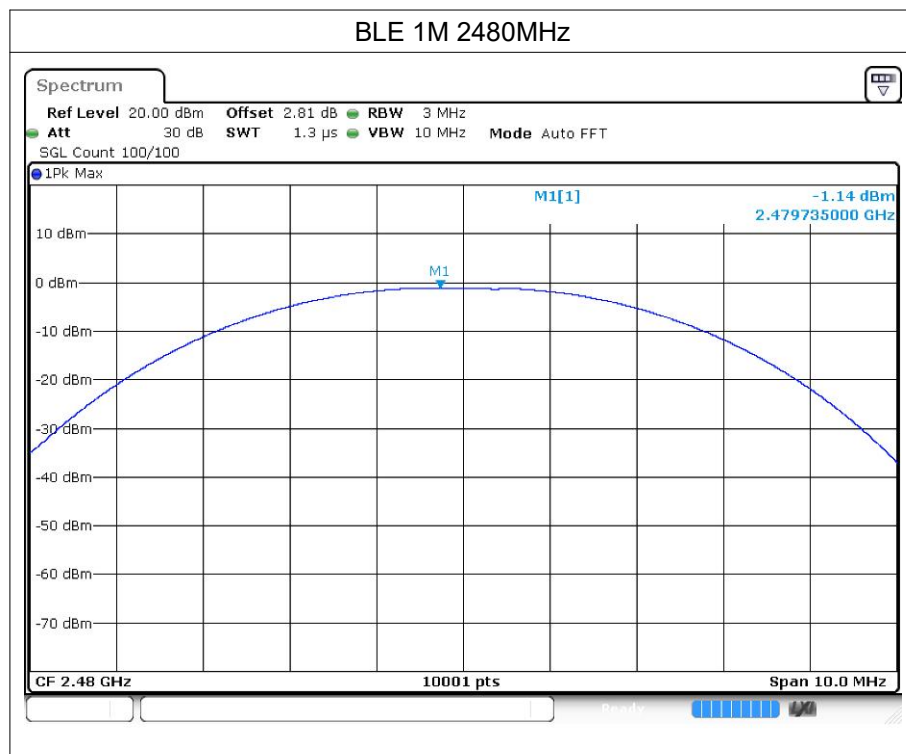
Module 2:

Test Data of Conducted Output Power				
Test Mode	Test Channel (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK 1M	2402	-0.82	≤ 30	Pass
	2440	-0.26	≤ 30	Pass
	2480	-1.49	≤ 30	Pass

2.2 Test Graphs

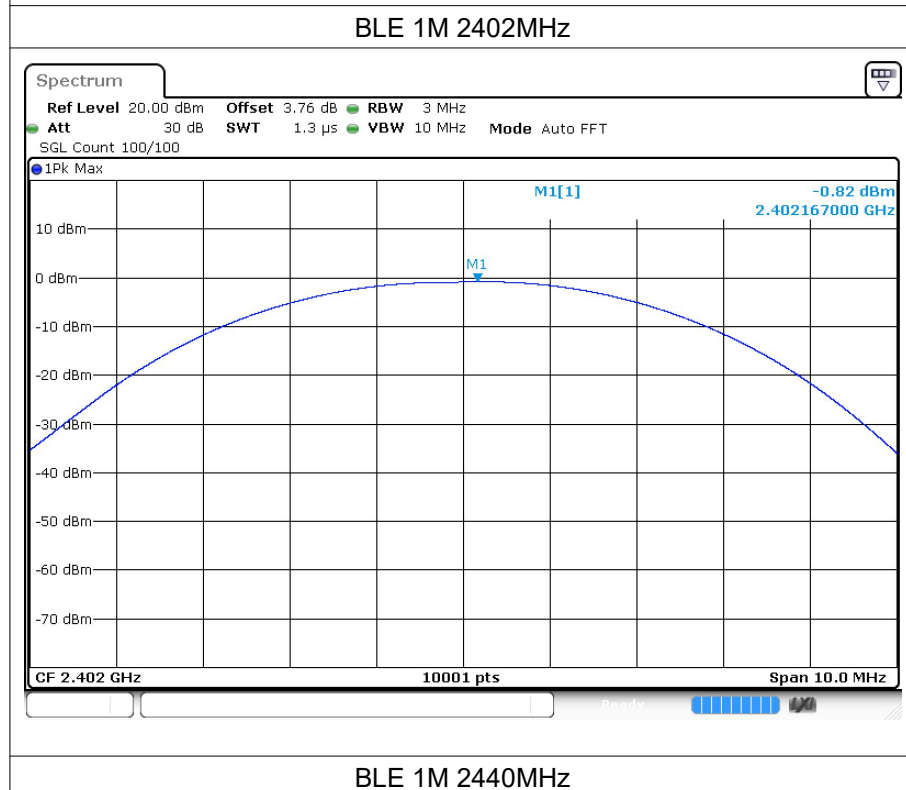
Module 1:

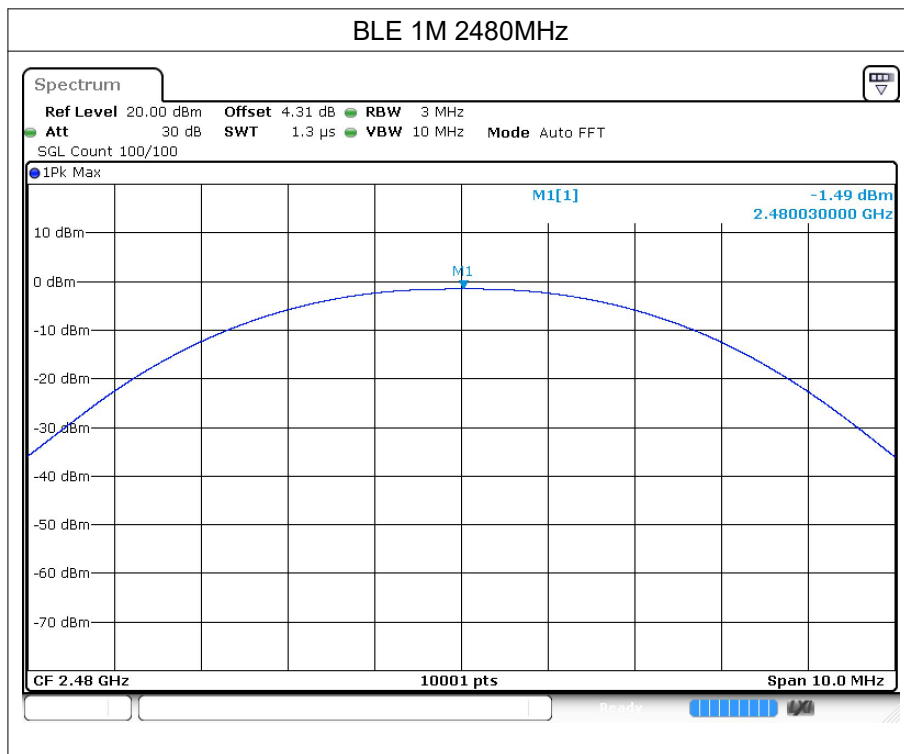
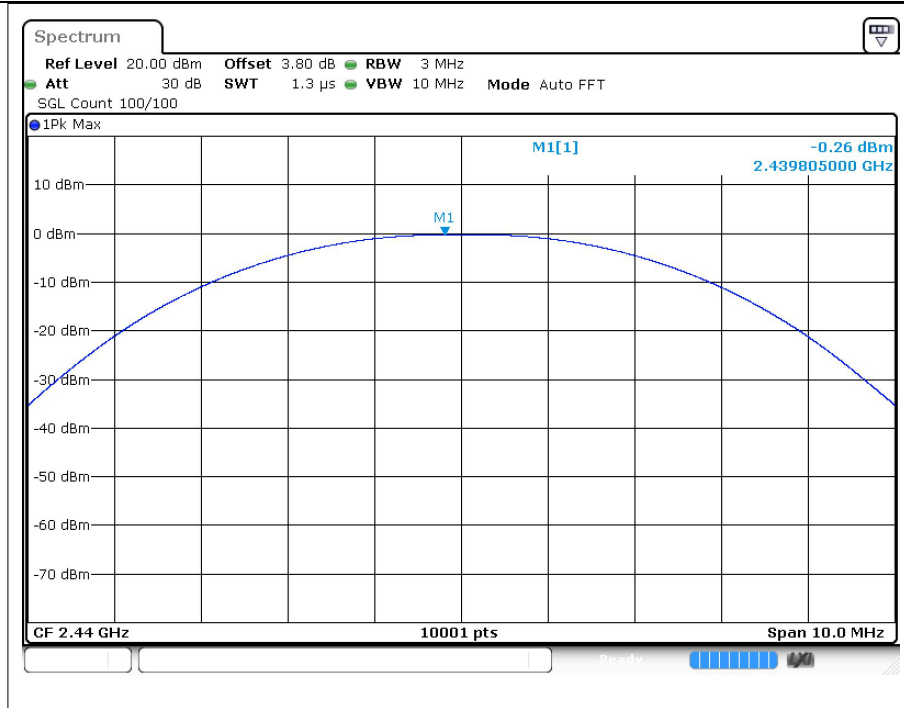




Module 2:

Test Graphs for Peak Power





3 -6dB Bandwidth

3.1 Test Result

Module 1:

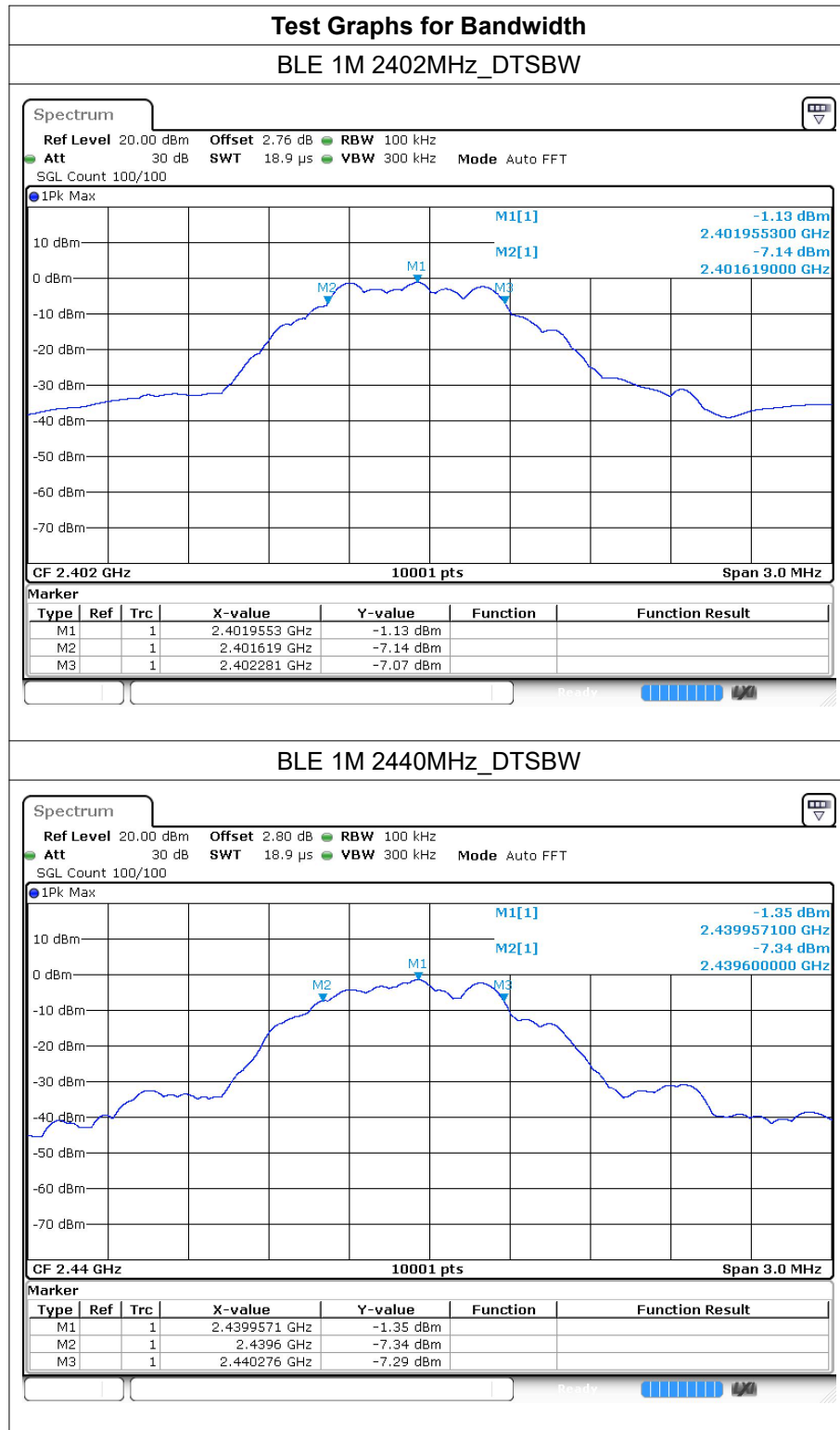
Test Data of Occupied Bandwidth and DTS Bandwidth					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-6dB Bandwidth	Limits (MHz)	Pass or Fail
GFSK 1M	2402	1.041	0.662	≥ 0.5	Pass
	2440	1.028	0.677	≥ 0.5	Pass
	2480	1.05	0.669	≥ 0.5	Pass

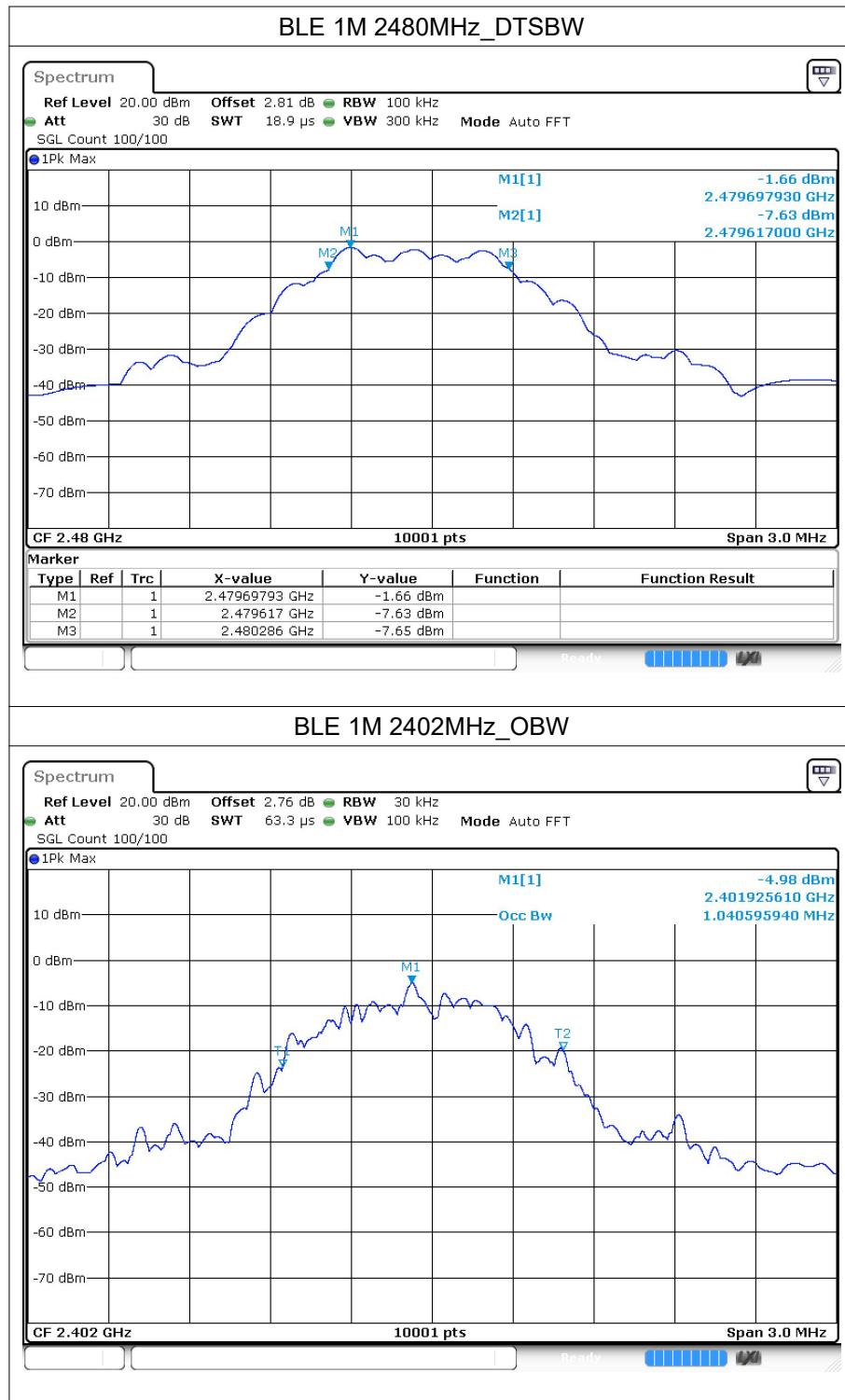
Module 2:

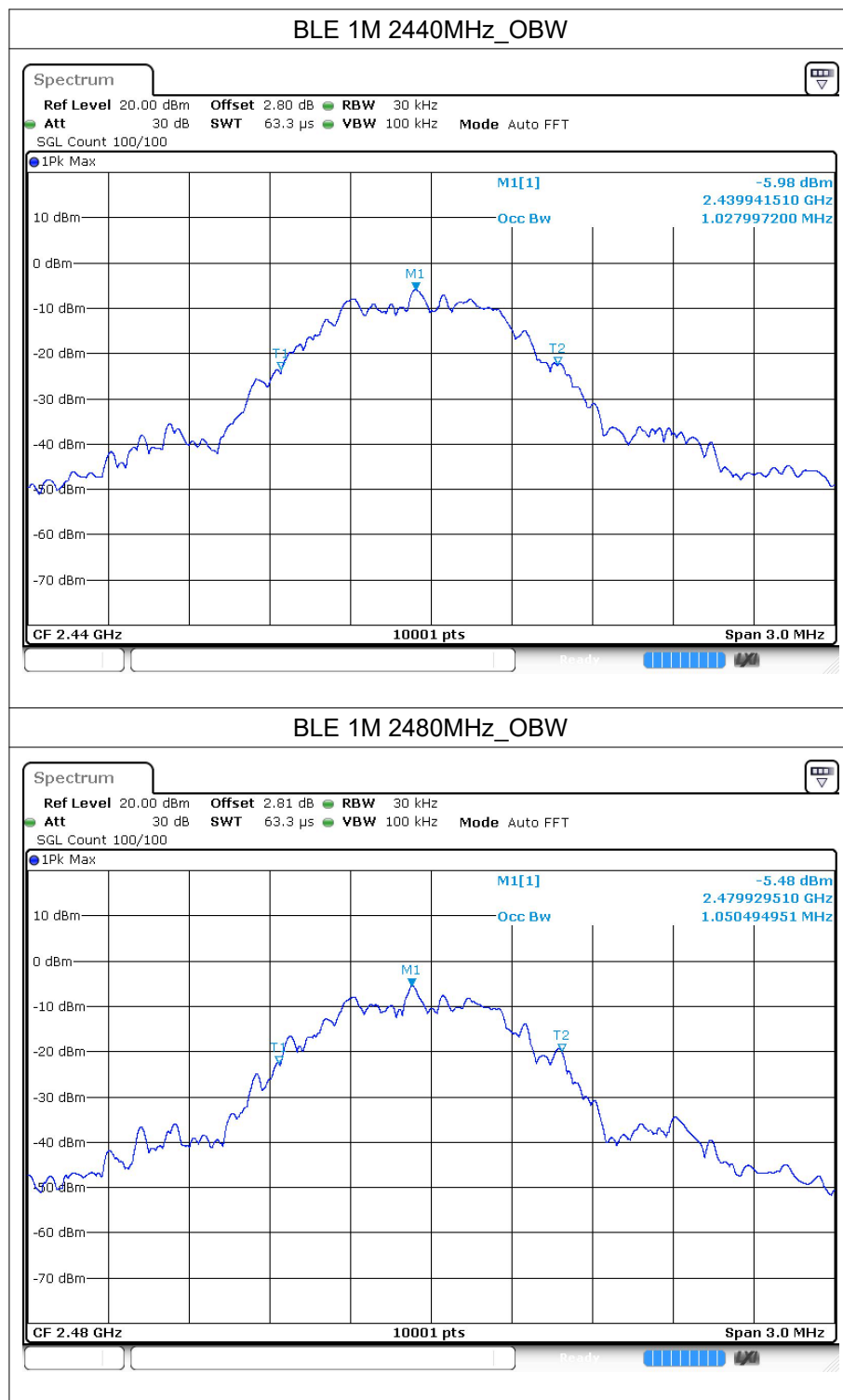
Test Data of Occupied Bandwidth and DTS Bandwidth					
Test Mode	Test Channel (MHz)	99% Occupied Bandwidth (MHz)	-6dB Bandwidth	Limits (MHz)	Pass or Fail
GFSK 1M	2402	1.005	0.695	≥ 0.5	Pass
	2440	1.01	0.677	≥ 0.5	Pass
	2480	1.007	0.665	≥ 0.5	Pass

3.2 Test Graphs

Module 1:



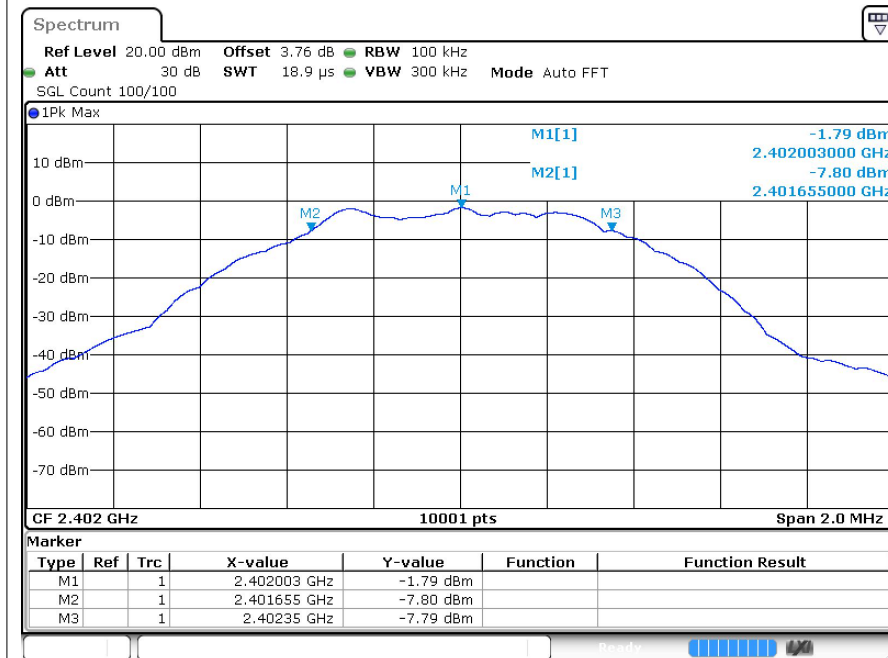




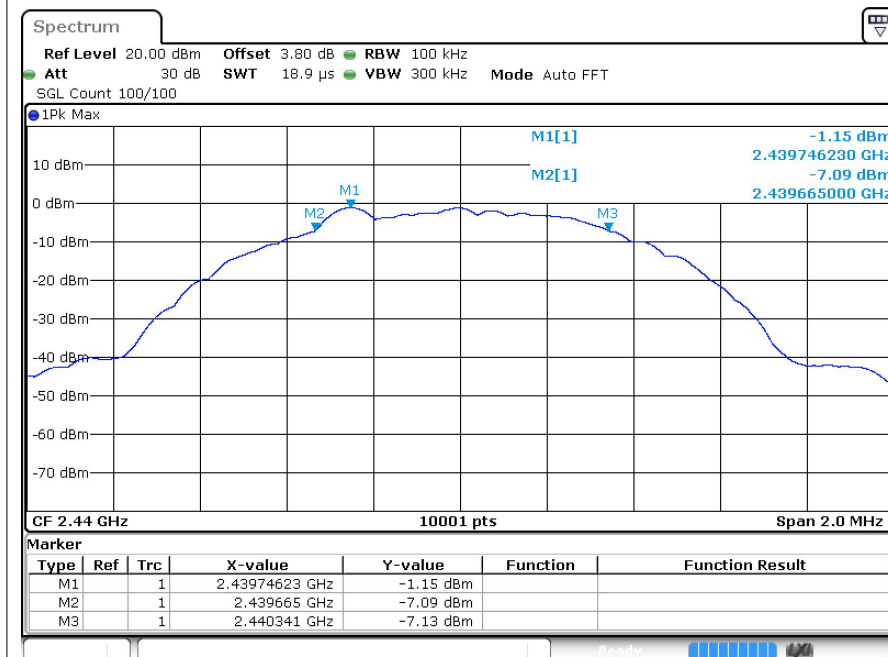
Module 2:

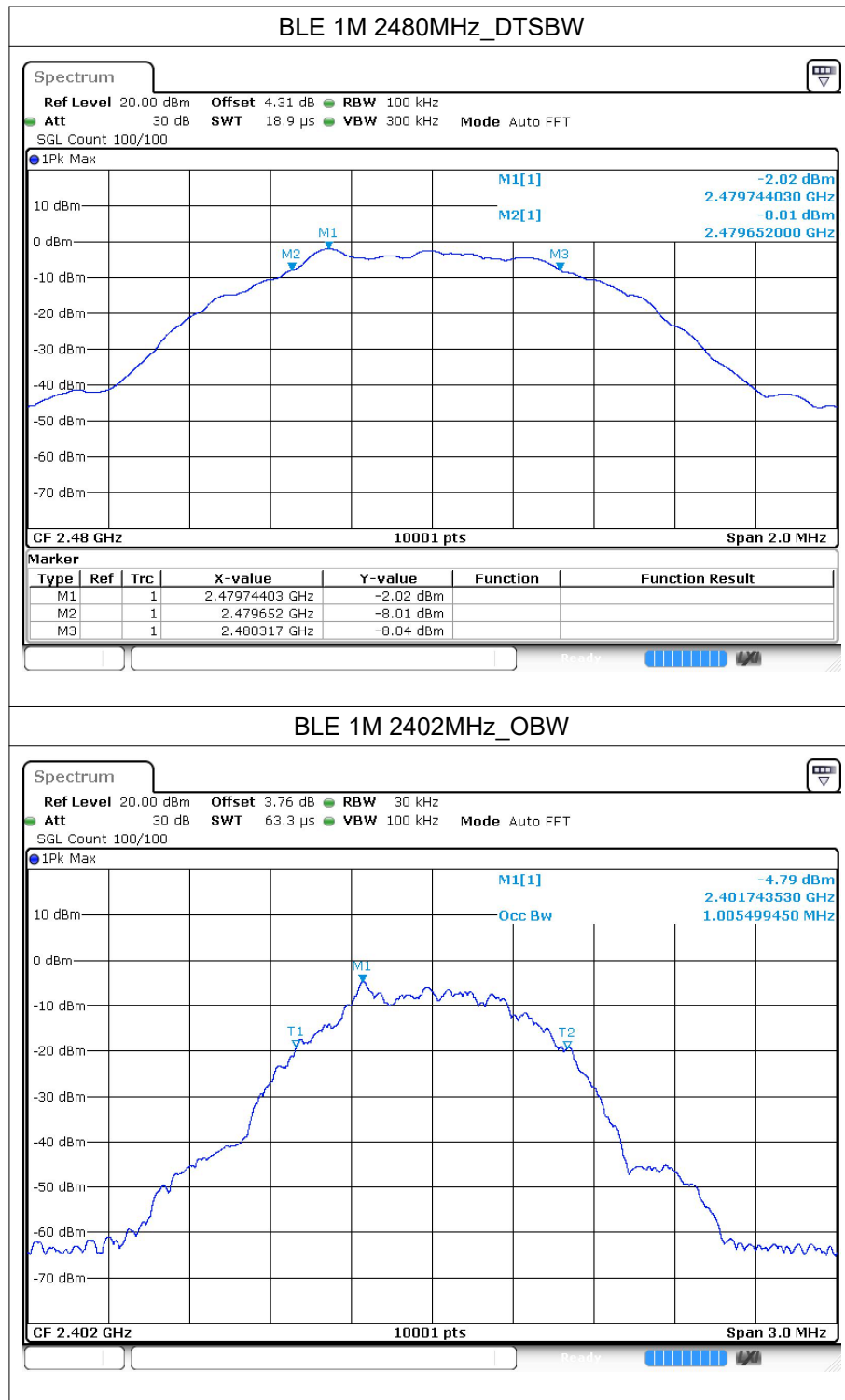
Test Graphs for Bandwidth

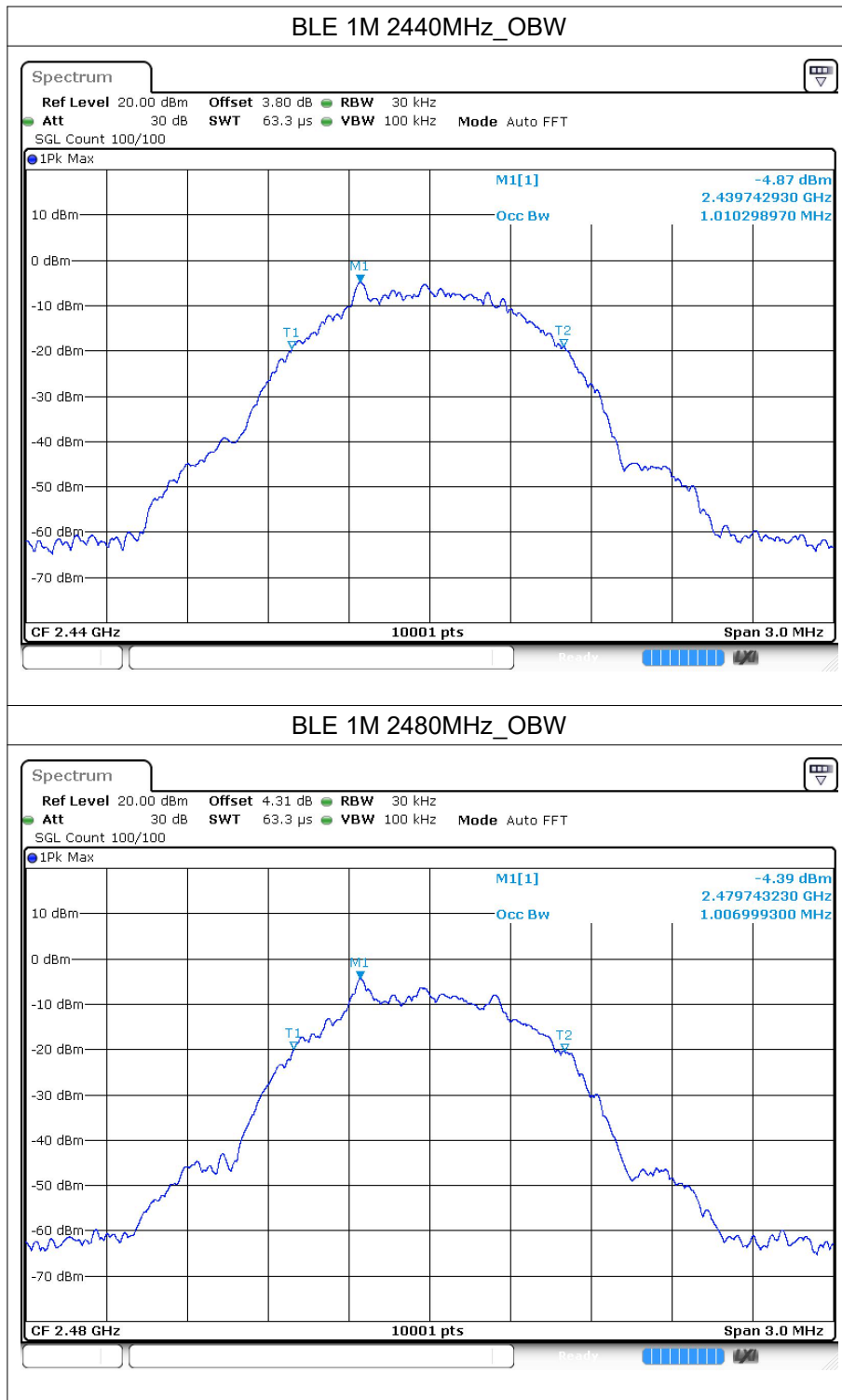
BLE 1M 2402MHz_DTSBW



BLE 1M 2440MHz_DTSBW









4 Maximum Power Spectral Density Level

4.1 Test Result

Module 1:

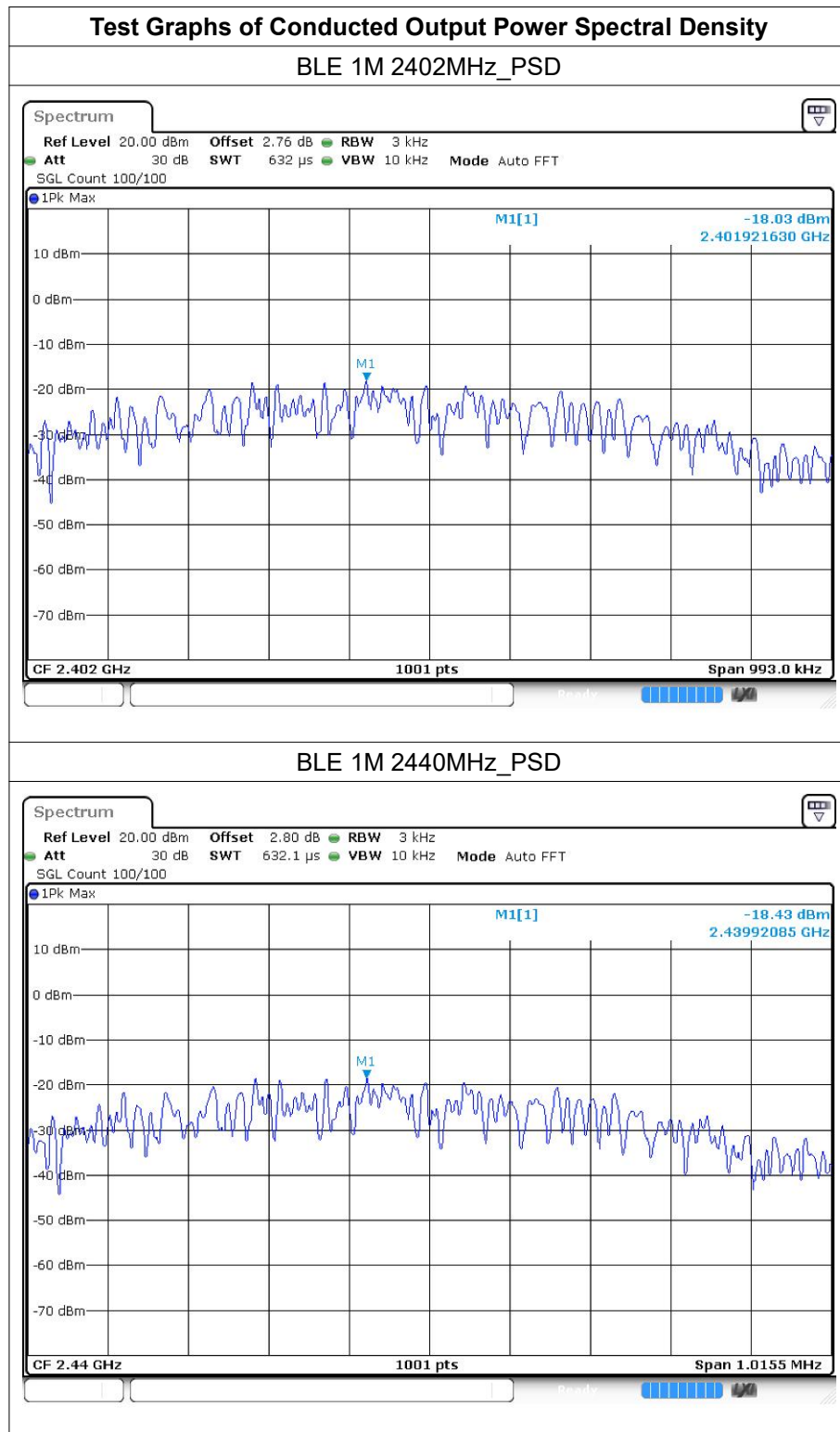
Test Data of Conducted Output Power Spectral Density				
Test Mode	Test Channel (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
GFSK 1M	2402	-18.03	≤ 8	Pass
	2440	-18.43	≤ 8	Pass
	2480	-18.69	≤ 8	Pass

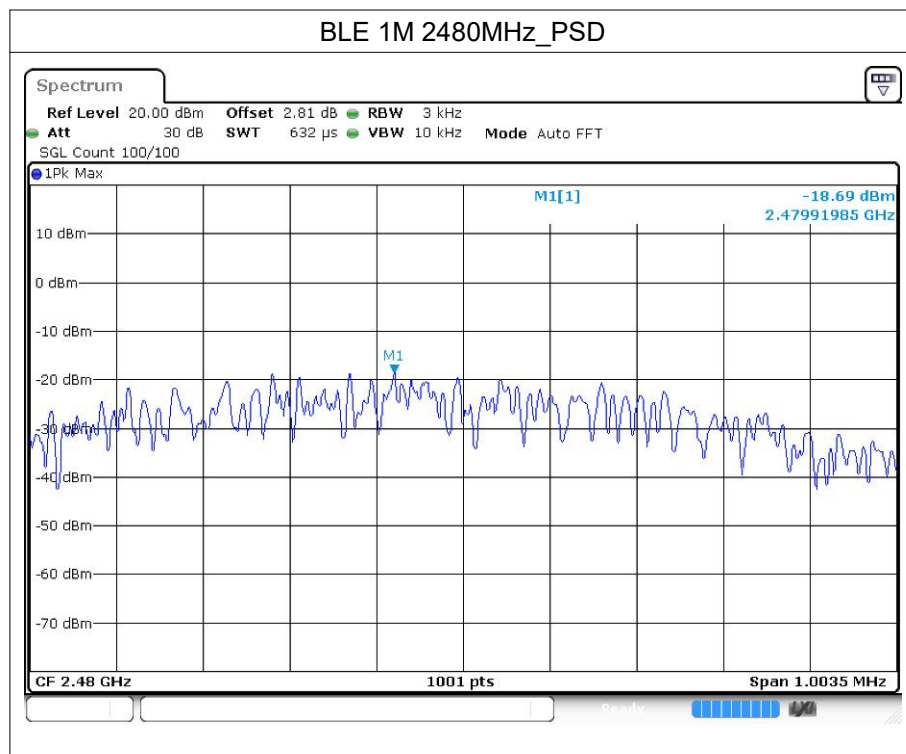
Module 2:

Test Data of Conducted Output Power Spectral Density				
Test Mode	Test Channel (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
GFSK 1M	2402	-14.63	≤ 8	Pass
	2440	-14.24	≤ 8	Pass
	2480	-15.46	≤ 8	Pass

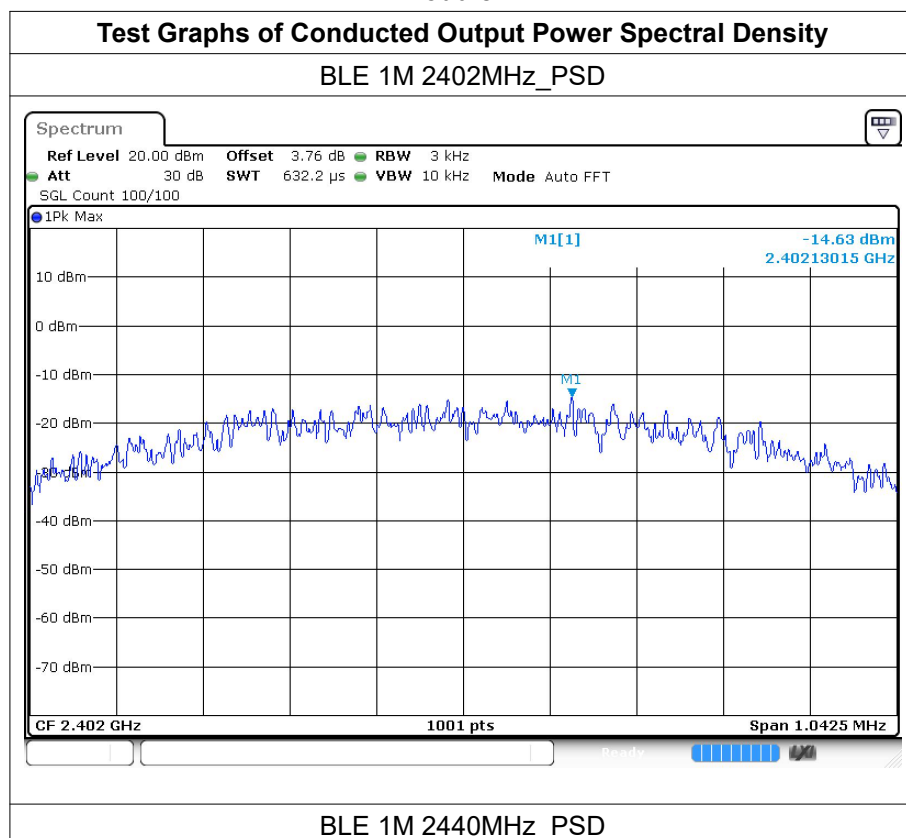
4.2 Test Graphs

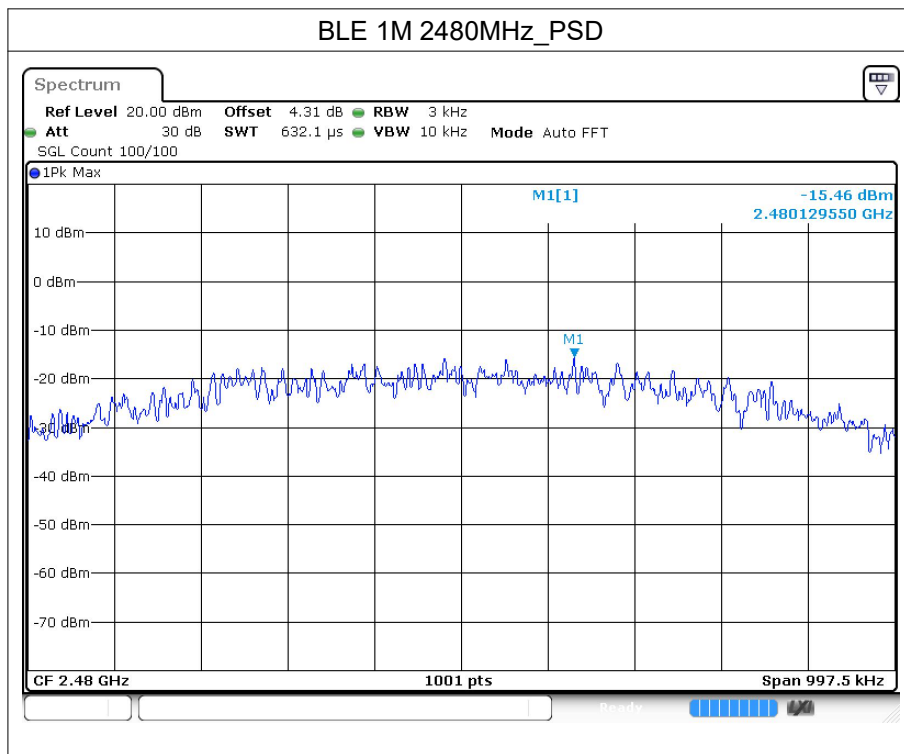
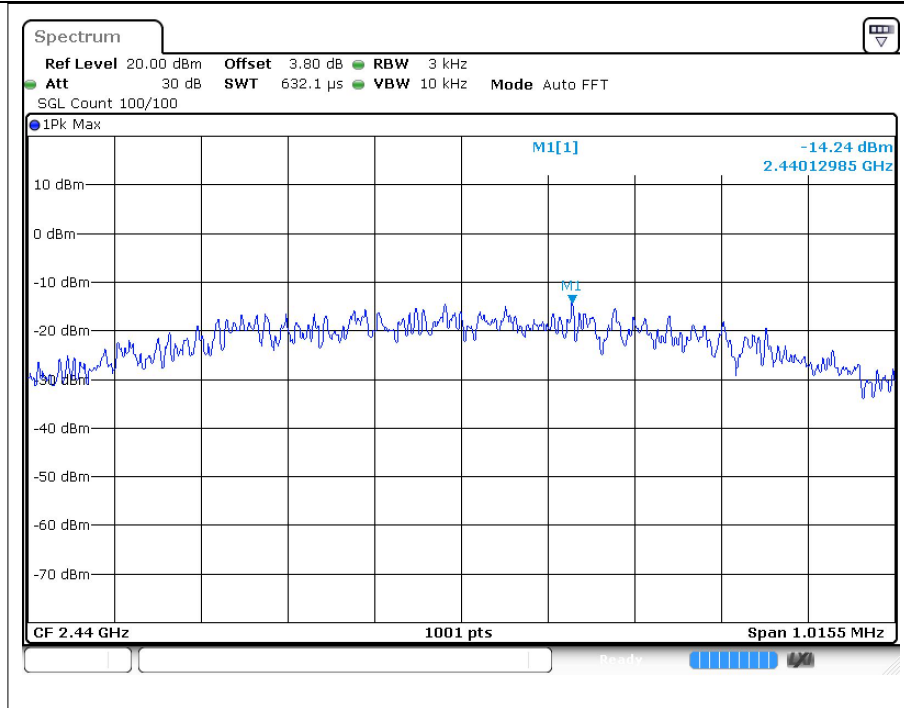
Module 1:





Module 2:





5 Band Edge

5.1 Test Result

Module 1:

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
GFSK 1M	2402	-53.35	-20	Pass
GFSK 1M	2480	-44.77	-20	Pass

Module 2:

Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
GFSK 1M	2402	-53.84	-20	Pass
GFSK 1M	2480	-52.61	-20	Pass