Appendix Test Data

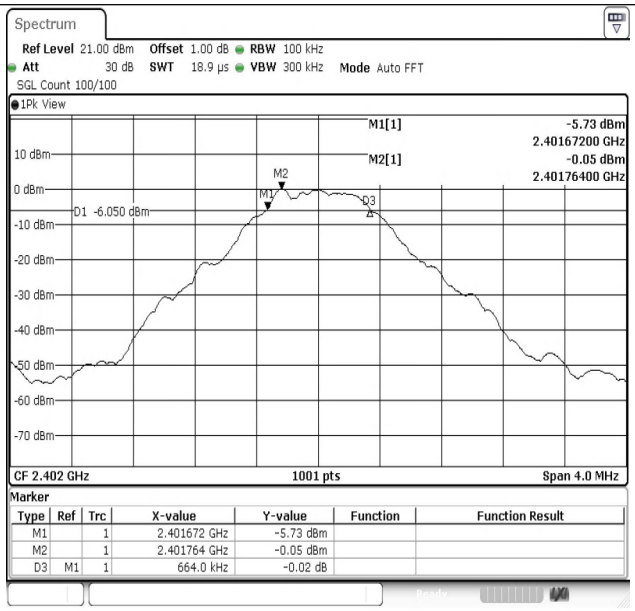
Report No.:	1813C50199612501	Test Sample No.:	1-2-2
Start Test Date:	2025-5-15	Finish Test Date:	2025-5-19
Test Engineer:	Hunsen Guan	Auditor:	Justin Feng
Temperature:	27℃	Relative Humidity:	52%
Pressure:	101kPa		

Appendix A: 6dB Bandwidth

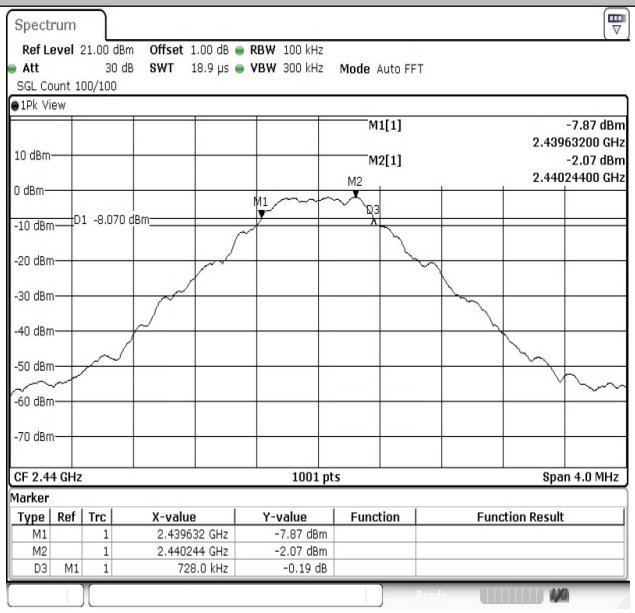
Test Result

Test Mode	Antenna	Frequency[MHz]	6dB BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.66	2401.67	2402.34	0.5	PASS
BLE_1M	Ant1	2440	0.73	2439.63	2440.36	0.5	PASS
BLE_1M	Ant1	2480	0.74	2479.62	2480.36	0.5	PASS
BLE_2M	Ant1	2402	1.14	2401.44	2402.58	0.5	PASS
BLE_2M	Ant1	2440	1.01	2439.35	2440.36	0.5	PASS
BLE_2M	Ant1	2480	1.25	2479.33	2480.58	0.5	PASS

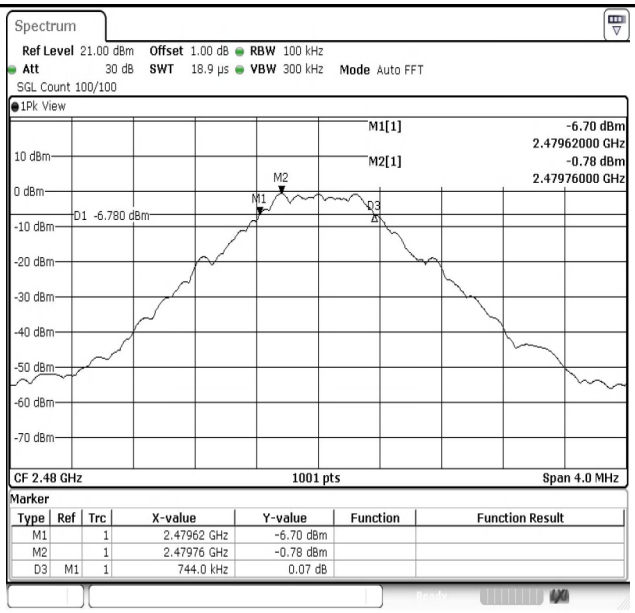
Test Graphs



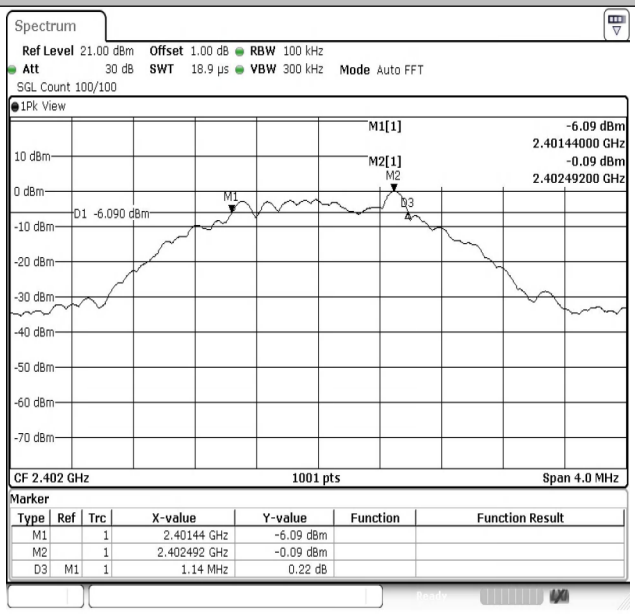
BLE_1M-Ant1-2402-PASS



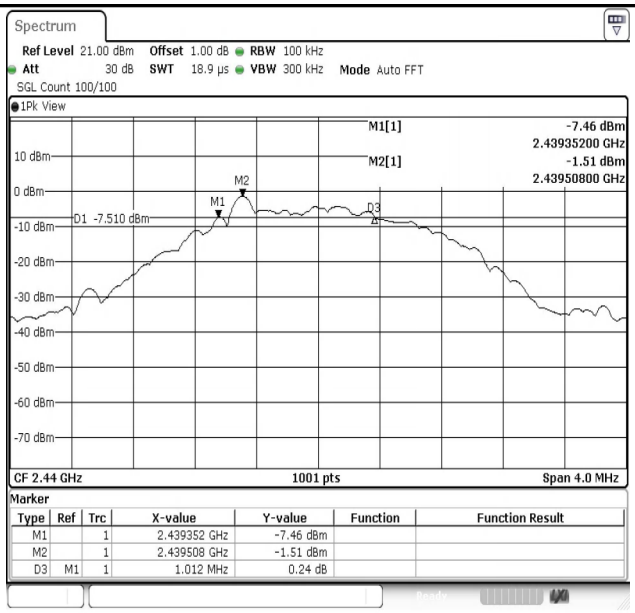
BLE_1M-Ant1-2440-PASS



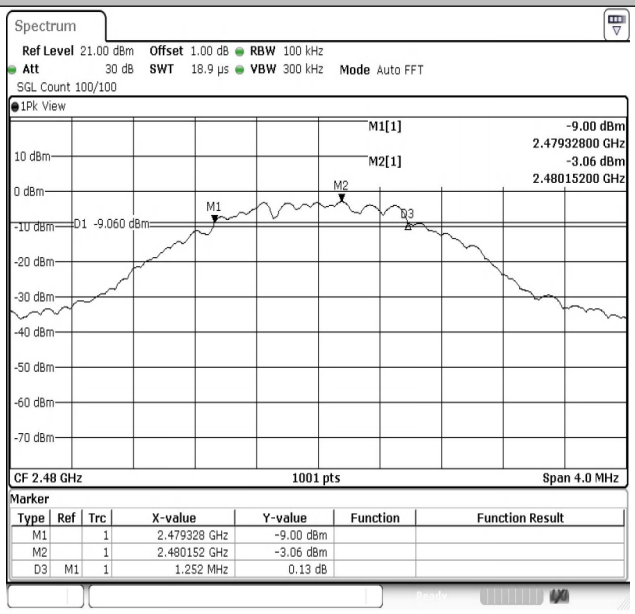
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



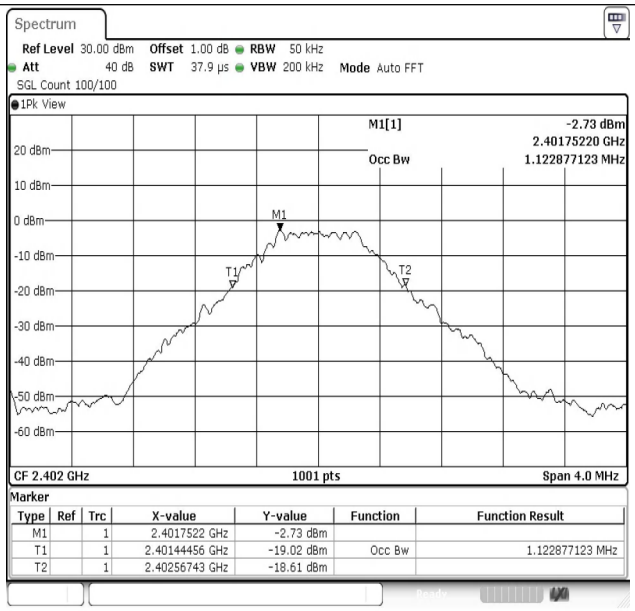
BLE_2M-Ant1-2480-PASS

Appendix B: 99% Occupied Bandwidth

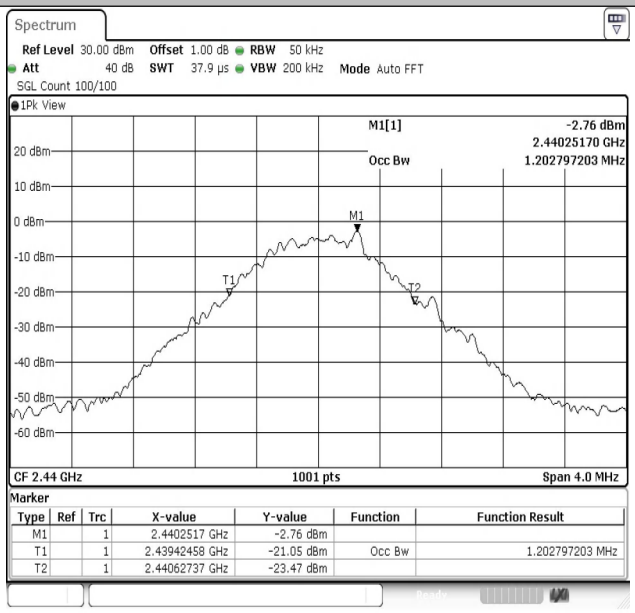
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.1229	2401.4446	2402.5674	---	---
BLE_1M	Ant1	2440	1.2028	2439.4246	2440.6274	---	---
BLE_1M	Ant1	2480	1.2587	2479.3926	2480.6513	---	---
BLE_2M	Ant1	2402	2.0779	2400.9810	2403.0589	---	---
BLE_2M	Ant1	2440	2.0779	2438.9650	2441.0430	---	---
BLE_2M	Ant1	2480	2.1059	2478.9530	2481.0589	---	---

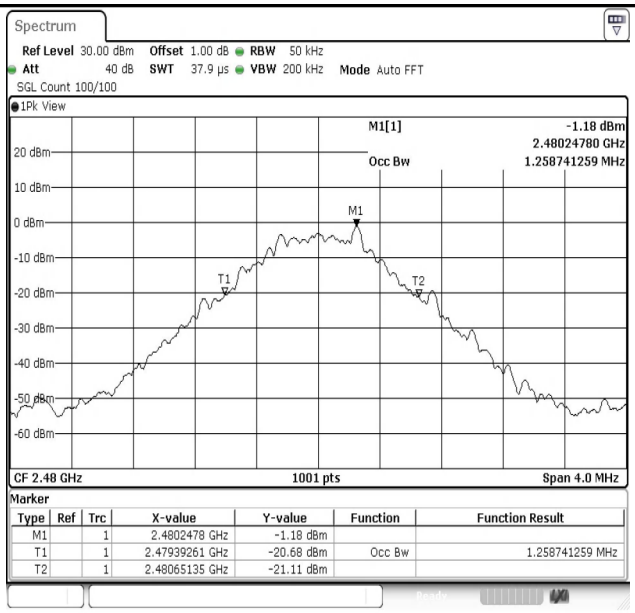
Test Graphs



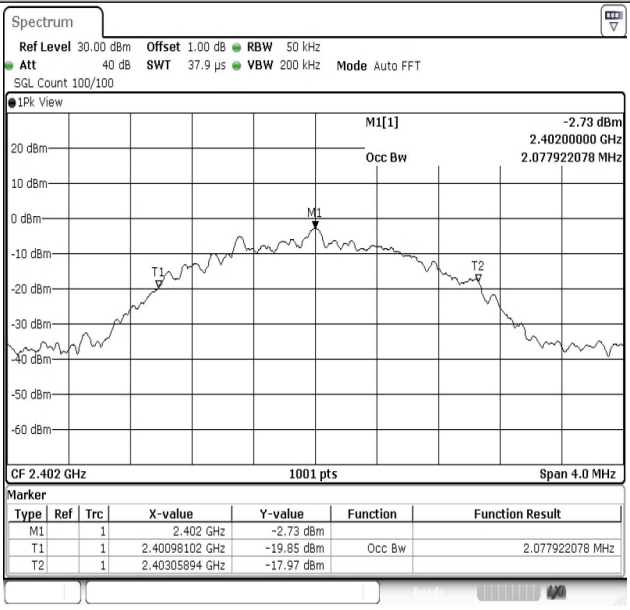
BLE_1M-Ant1-2402



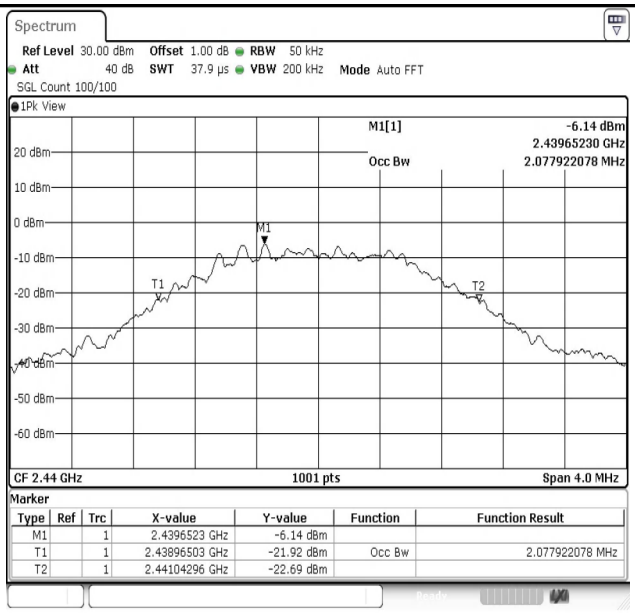
BLE_1M-Ant1-2440



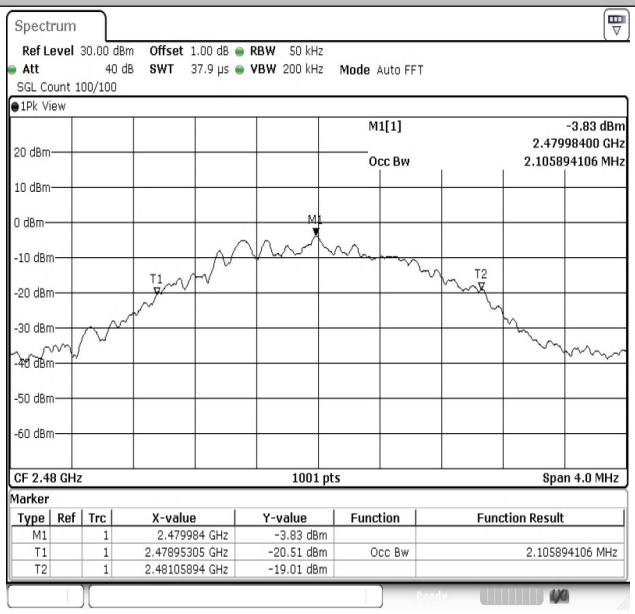
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



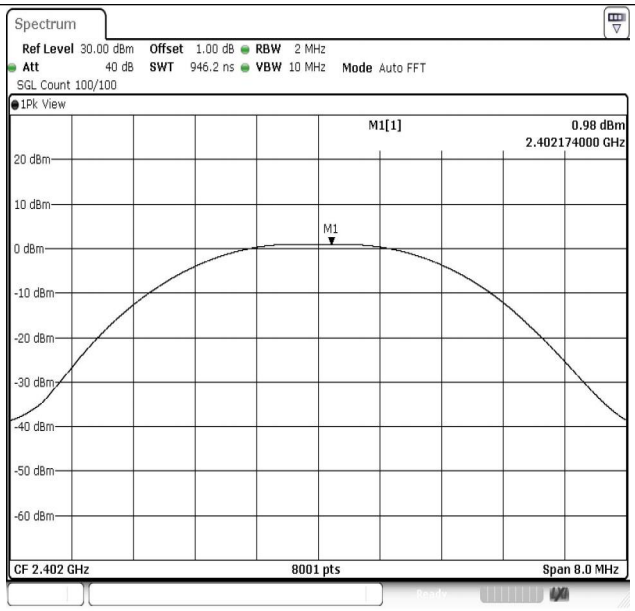
BLE_2M-Ant1-2480

Appendix C: Maximum conducted output power

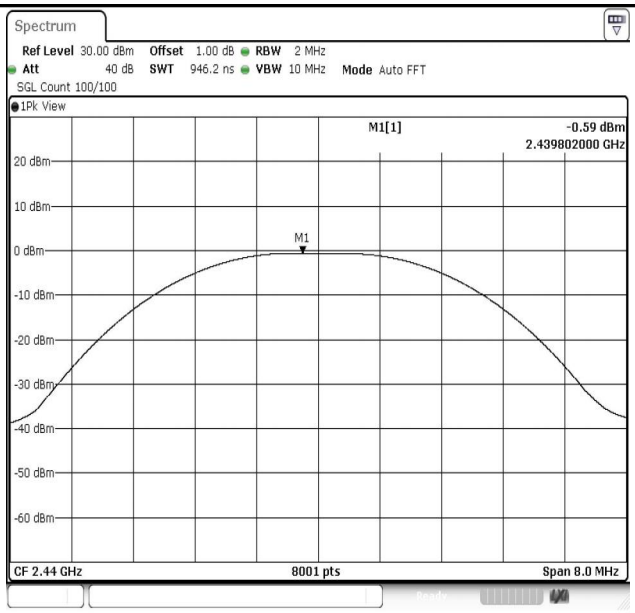
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.98	≤30	PASS
BLE_1M	Ant1	2440	-0.59	≤30	PASS
BLE_1M	Ant1	2480	0.23	≤30	PASS
BLE_2M	Ant1	2402	1.06	≤30	PASS
BLE_2M	Ant1	2440	-0.53	≤30	PASS
BLE_2M	Ant1	2480	0.28	≤30	PASS

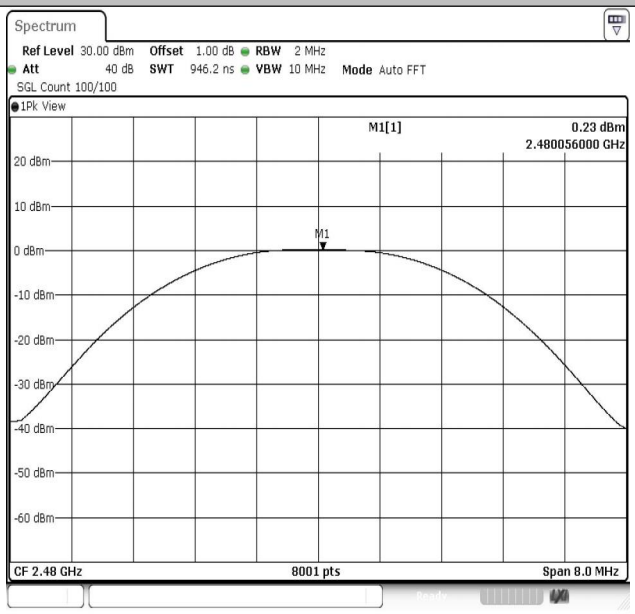
Test Graphs Peak



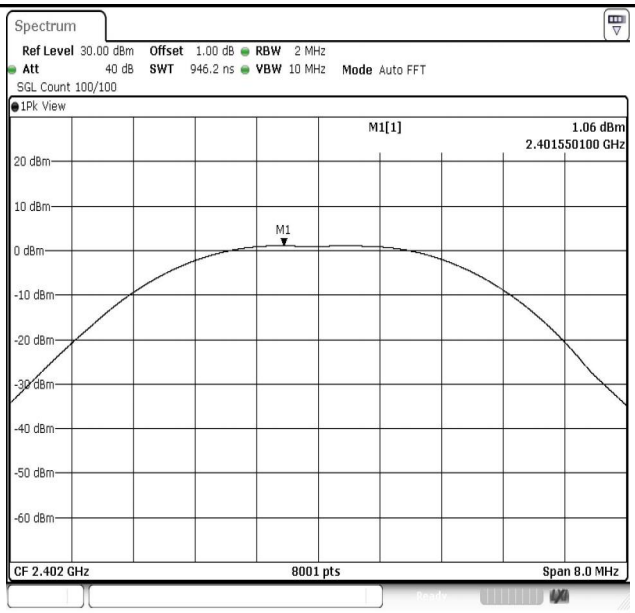
BLE_1M-Ant1-2402-PASS



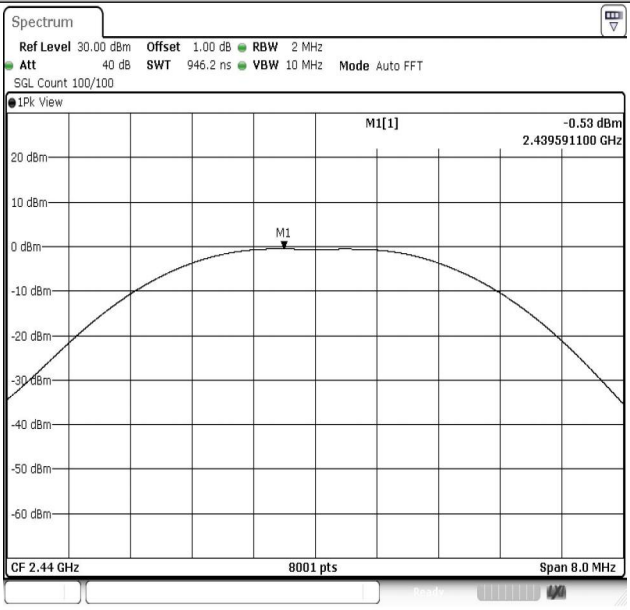
BLE_1M-Ant1-2440-PASS



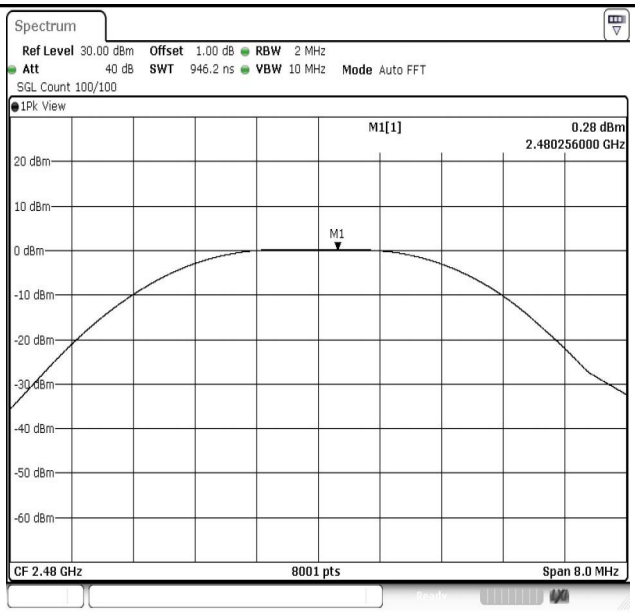
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



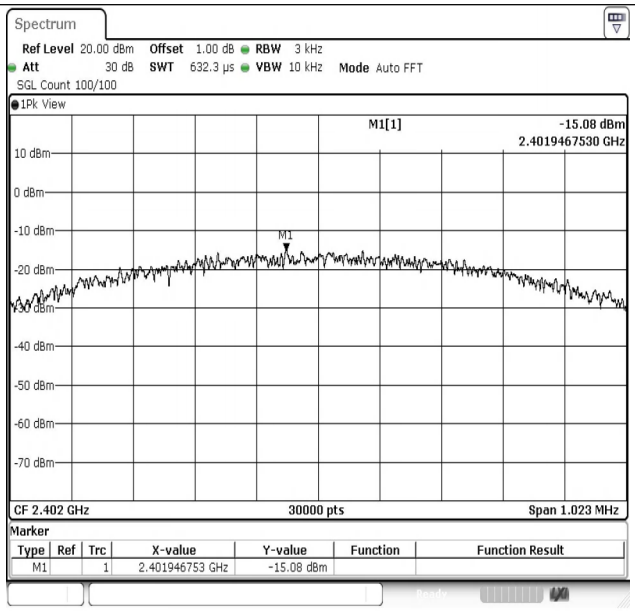
BLE_2M-Ant1-2480-PASS

Appendix D: Maximum power spectral density

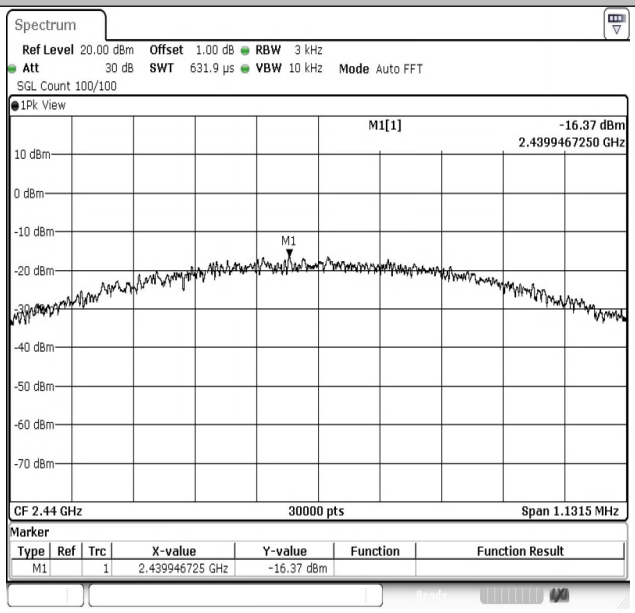
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.08	≤8.00	PASS
BLE_1M	Ant1	2440	-16.37	≤8.00	PASS
BLE_1M	Ant1	2480	-16.03	≤8.00	PASS
BLE_2M	Ant1	2402	-18.46	≤8.00	PASS
BLE_2M	Ant1	2440	-19.52	≤8.00	PASS
BLE_2M	Ant1	2480	-18.39	≤8.00	PASS

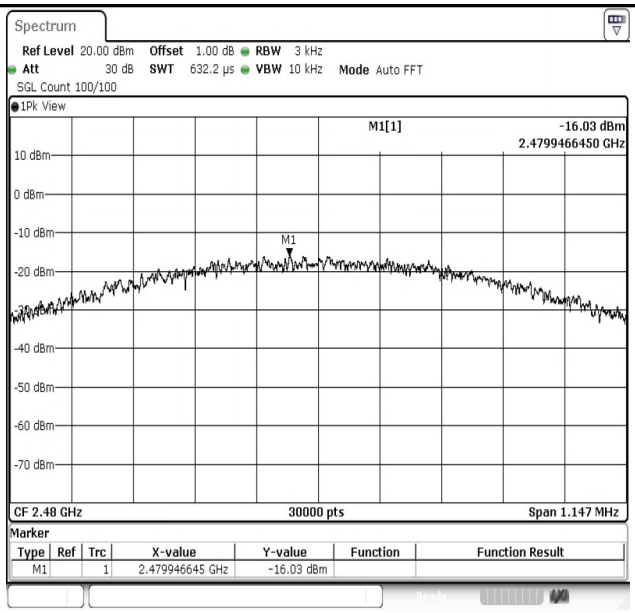
Test Graphs



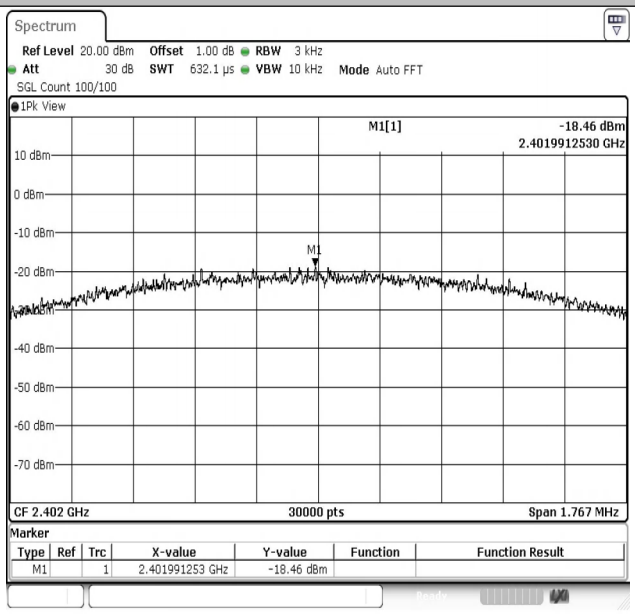
BLE_1M-Ant1-2402-PASS



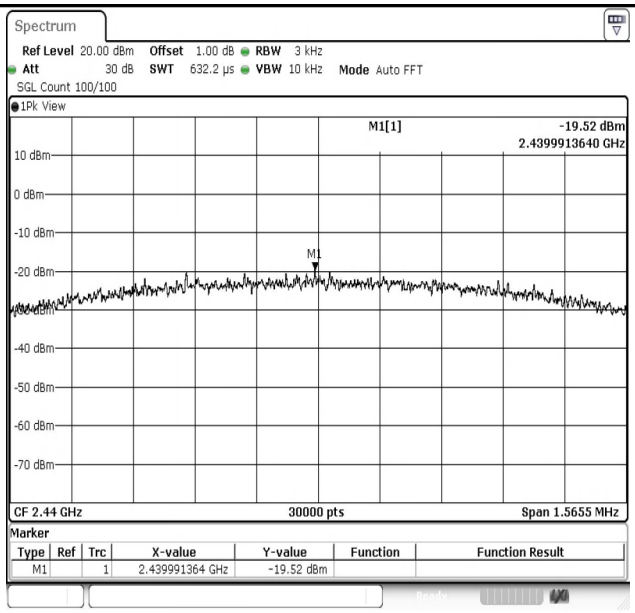
BLE_1M-Ant1-2440-PASS



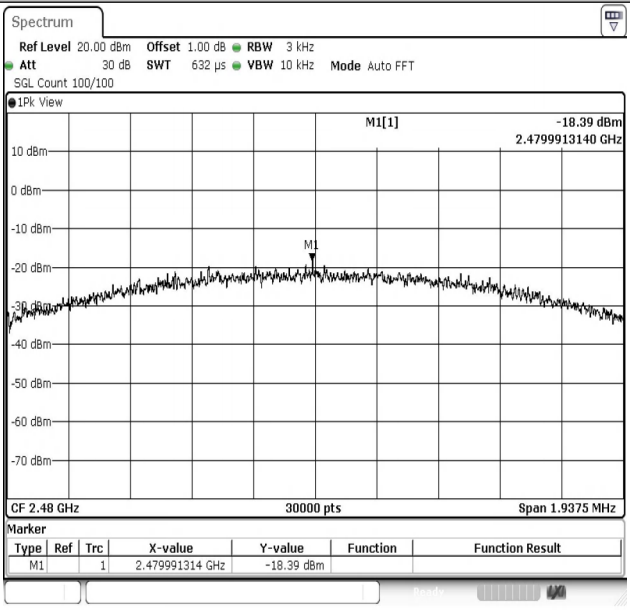
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



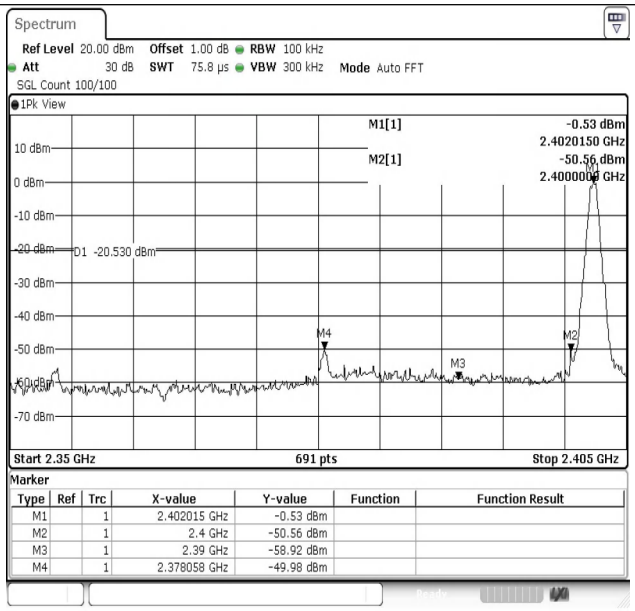
BLE_2M-Ant1-2480-PASS

Appendix E: Band edge measurements

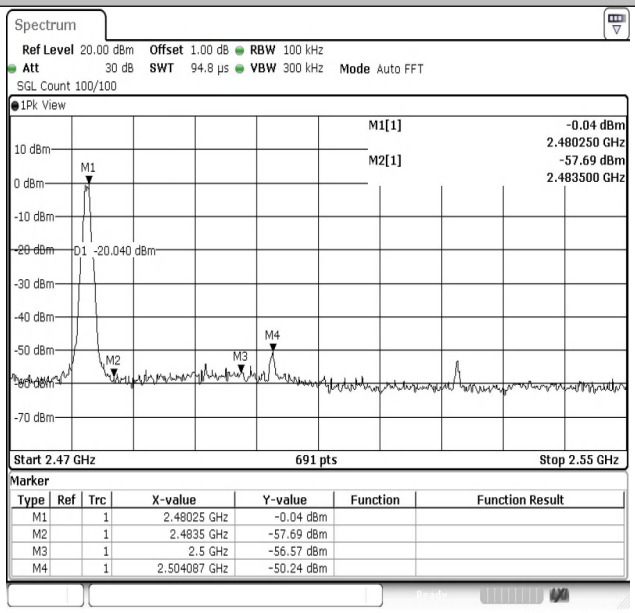
Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.53	-49.98	≤-20.53	PASS
BLE_1M	Ant1	High	2480	-0.04	-50.24	≤-20.04	PASS
BLE_2M	Ant1	Low	2402	-0.01	-36.05	≤-20.01	PASS
BLE_2M	Ant1	High	2480	-3.51	-51.36	≤-23.51	PASS

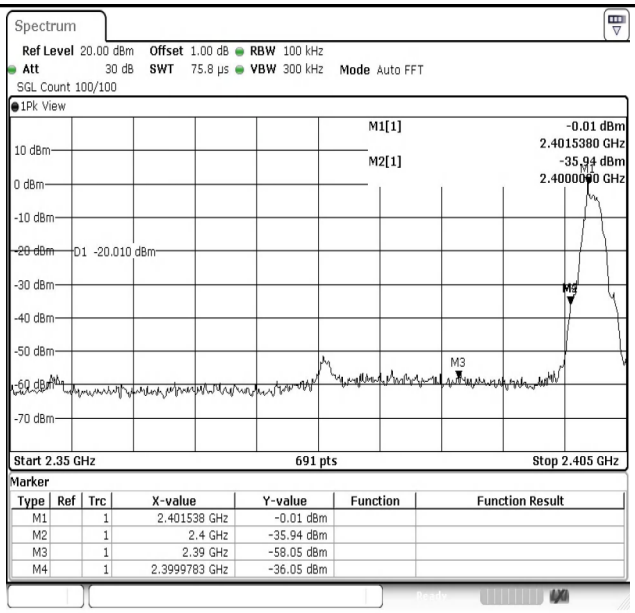
Test Graphs



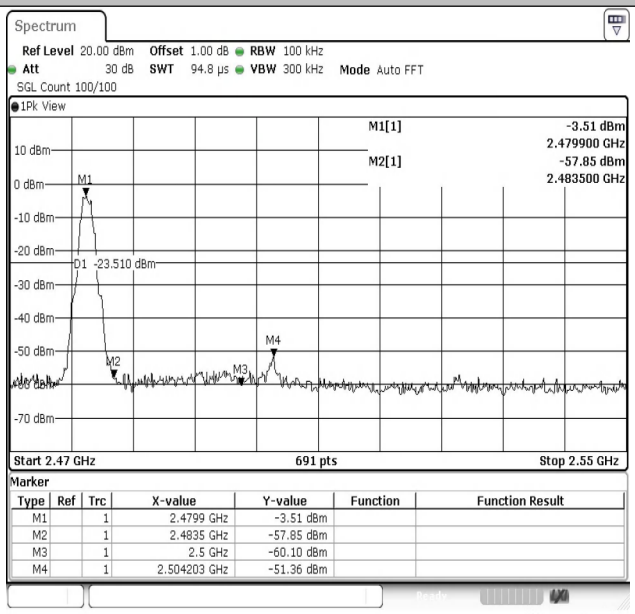
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS

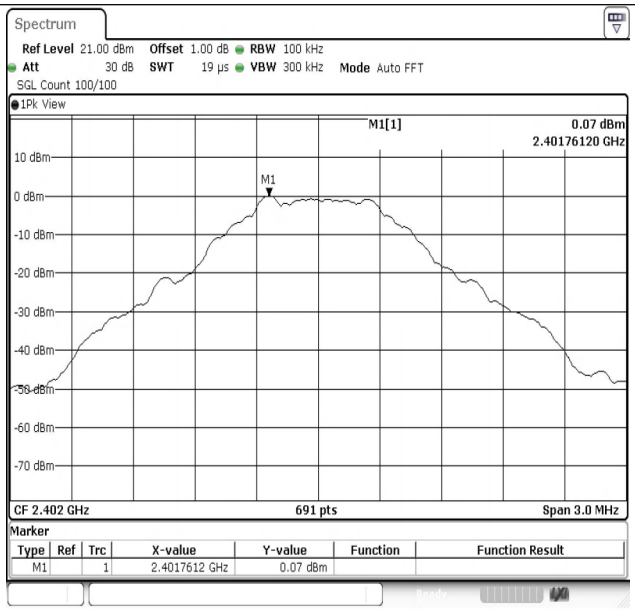
Appendix F: Conducted Spurious Emission

Test Result

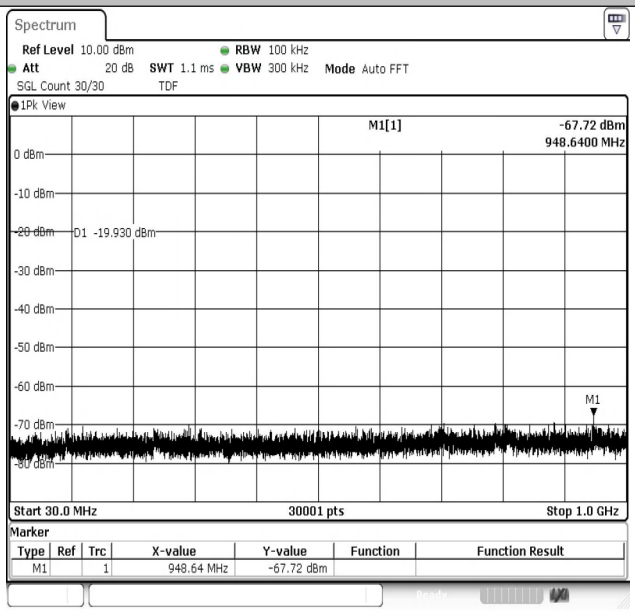
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	0.07	0.07	---	PASS
BLE_1M	Ant1	2402	30~1000	0.07	-67.72	≤-19.93	PASS
BLE_1M	Ant1	2402	1000~26500	0.07	-42.42	≤-19.93	PASS
BLE_1M	Ant1	2440	0~Reference	-1.45	-1.45	---	PASS
BLE_1M	Ant1	2440	30~1000	-1.45	-63.96	≤-21.45	PASS
BLE_1M	Ant1	2440	1000~26500	-1.45	-39.03	≤-21.45	PASS
BLE_1M	Ant1	2480	0~Reference	-1.24	-1.24	---	PASS
BLE_1M	Ant1	2480	30~1000	-1.24	-69.82	≤-21.24	PASS
BLE_1M	Ant1	2480	1000~26500	-1.24	-38.84	≤-21.24	PASS
BLE_2M	Ant1	2402	0~Reference	-1.64	-1.64	---	PASS
BLE_2M	Ant1	2402	30~1000	-1.64	-69.58	≤-21.64	PASS
BLE_2M	Ant1	2402	1000~26500	-1.64	-43.97	≤-21.64	PASS
BLE_2M	Ant1	2440	0~Reference	-2.60	-2.60	---	PASS
BLE_2M	Ant1	2440	30~1000	-2.60	-68.39	≤-22.6	PASS
BLE_2M	Ant1	2440	1000~26500	-2.60	-42.15	≤-22.6	PASS
BLE_2M	Ant1	2480	0~Reference	-1.19	-1.19	---	PASS
BLE_2M	Ant1	2480	30~1000	-1.19	-68.92	≤-21.19	PASS
BLE_2M	Ant1	2480	1000~26500	-1.19	-42.86	≤-21.19	PASS

Remark:Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose and attenuator factors have been set in the 'TDF' of the Spectrum Analyzer during the test.

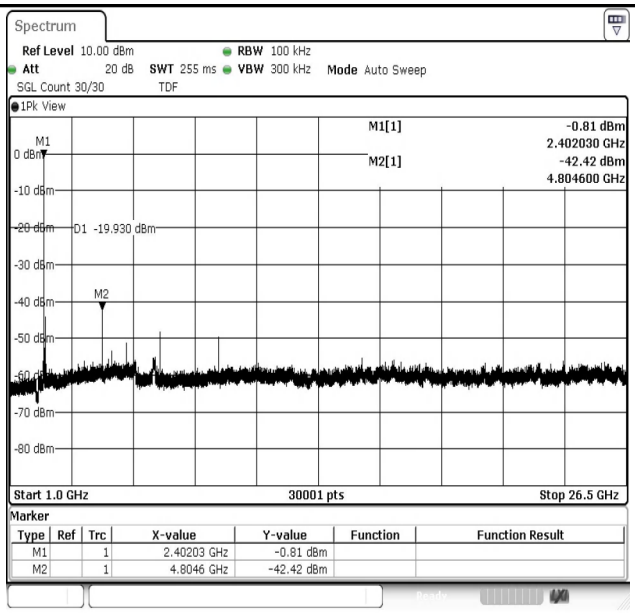
Test Graphs



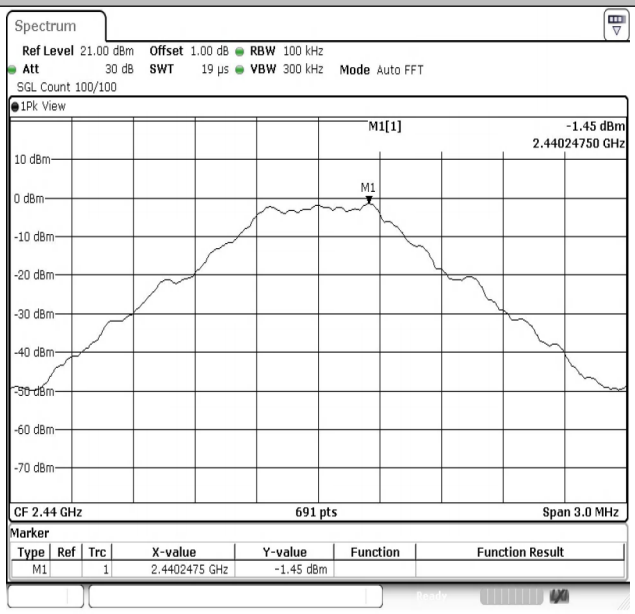
BLE_1M-Ant1-2402-0~Reference-PASS



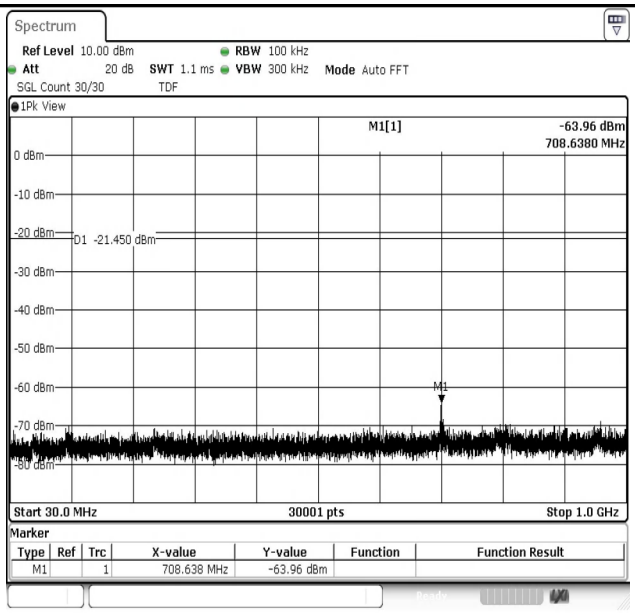
BLE_1M-Ant1-2402-30~1000-PASS



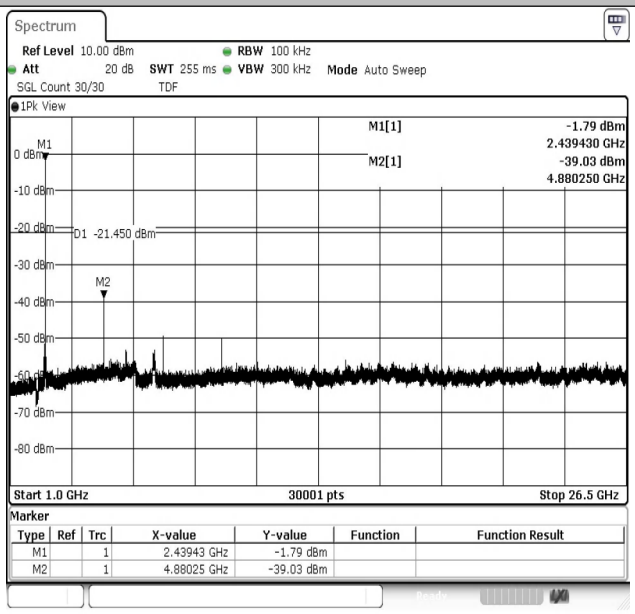
BLE_1M-Ant1-2402-1000~26500-PASS



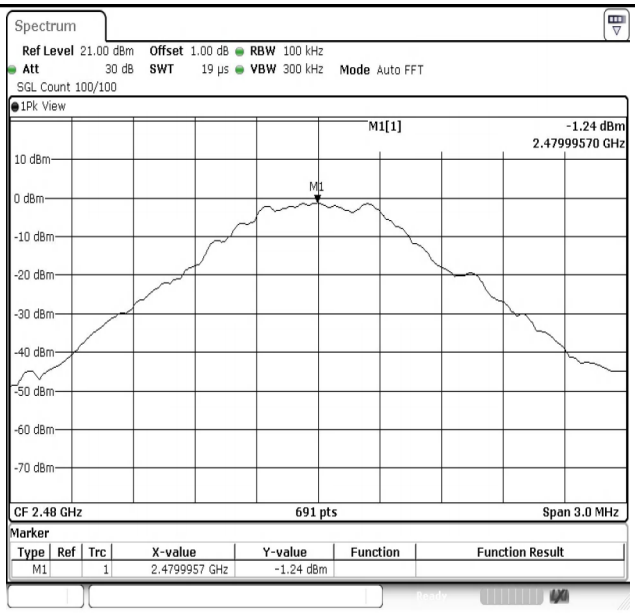
BLE_1M-Ant1-2440-0~Reference-PASS



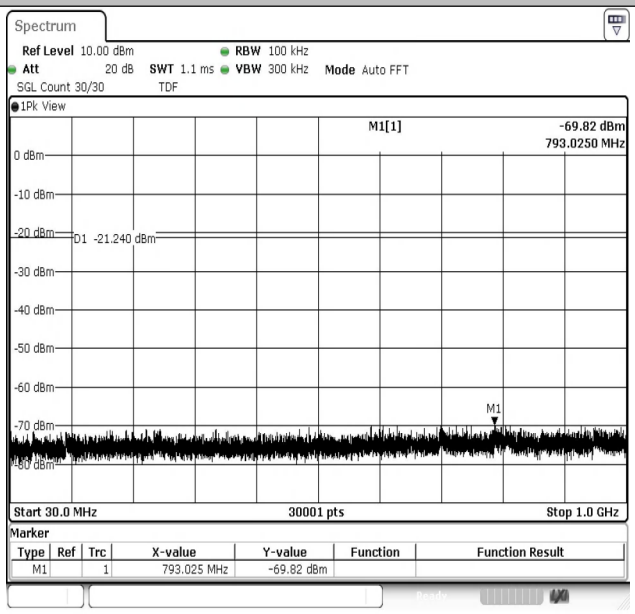
BLE_1M-Ant1-2440-30~1000-PASS



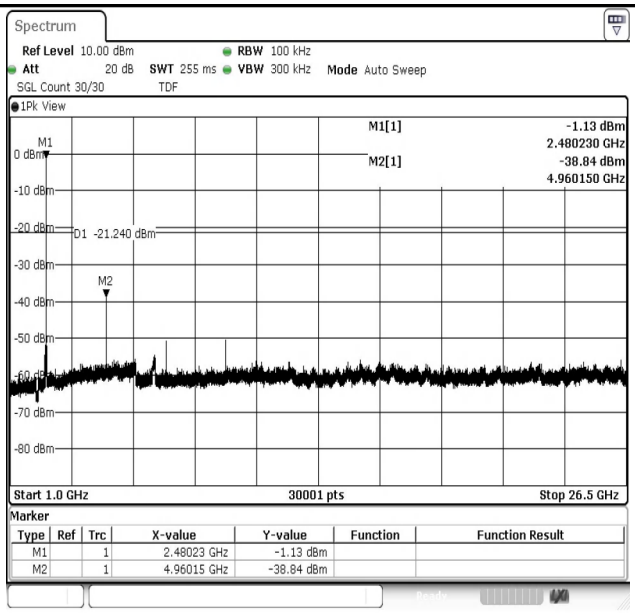
BLE_1M-Ant1-2440-1000~26500-PASS



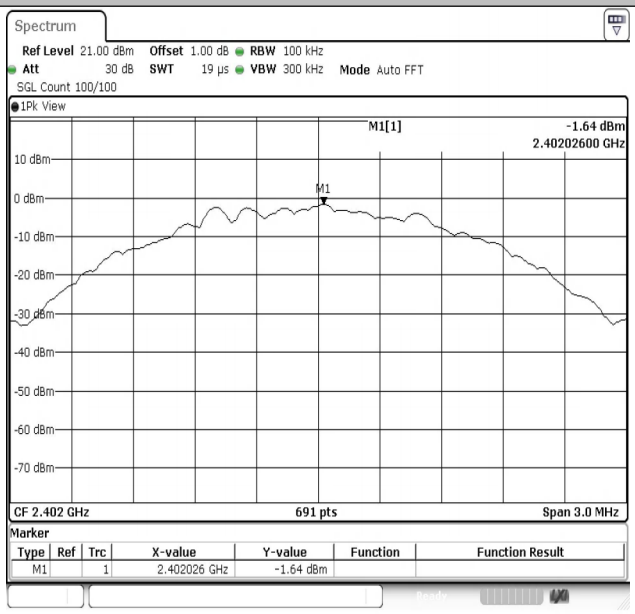
BLE_1M-Ant1-2480-0~Reference-PASS



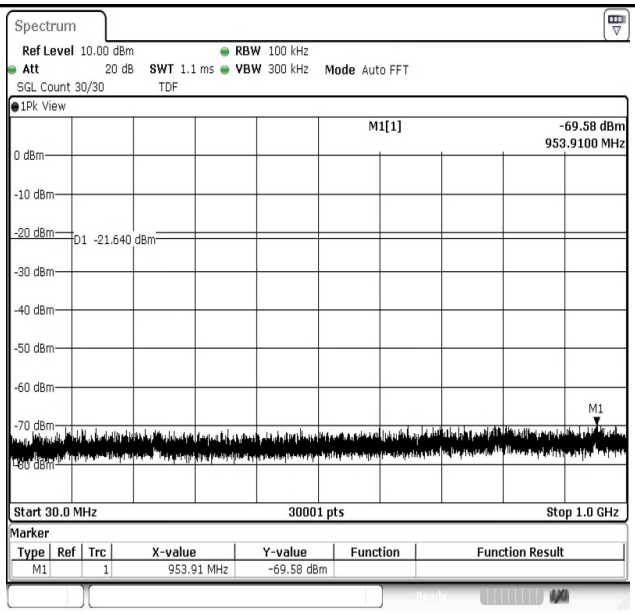
BLE_1M-Ant1-2480-30~1000-PASS



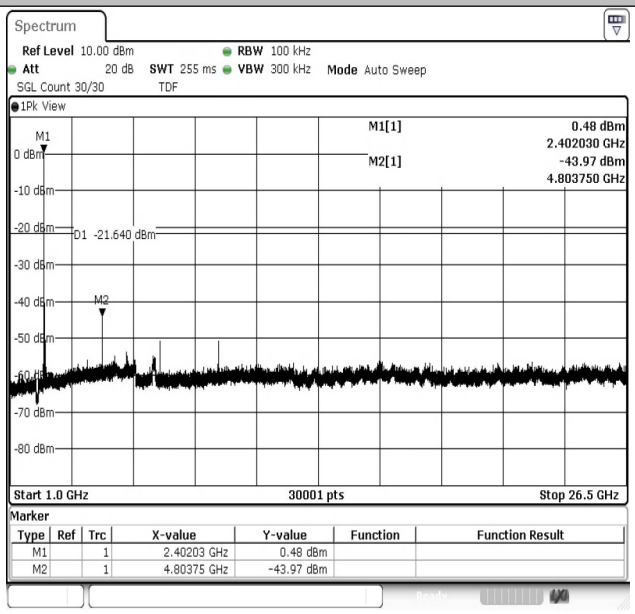
BLE_1M-Ant1-2480-1000~26500-PASS



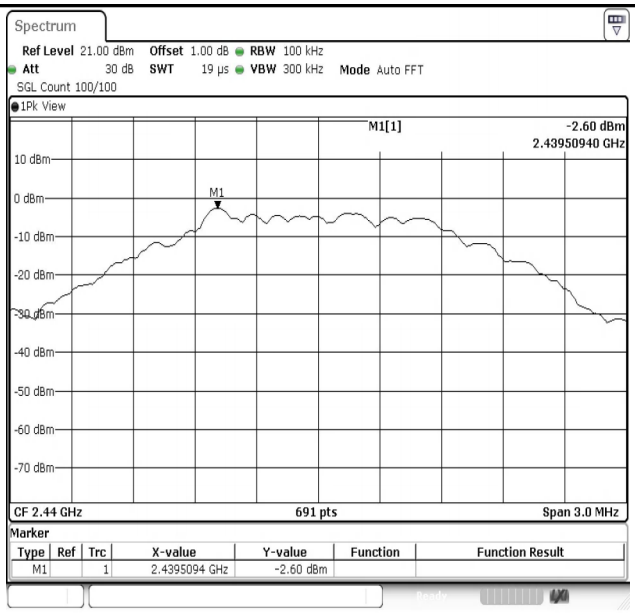
BLE_2M-Ant1-2402-0~Reference-PASS



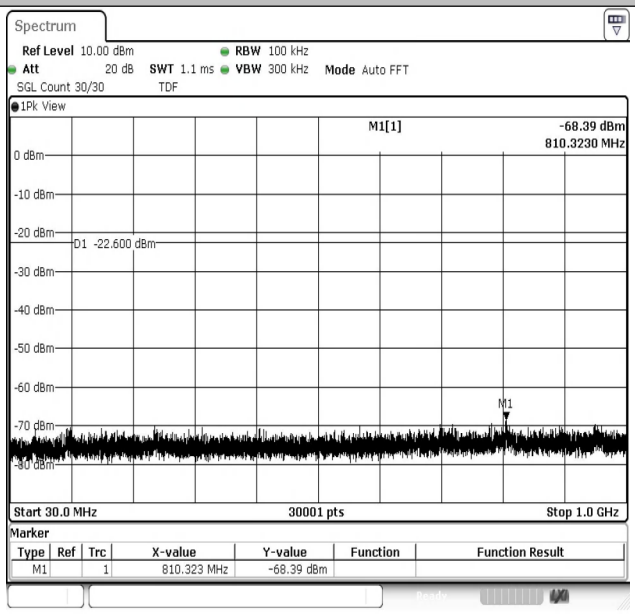
BLE_2M-Ant1-2402-30~1000-PASS



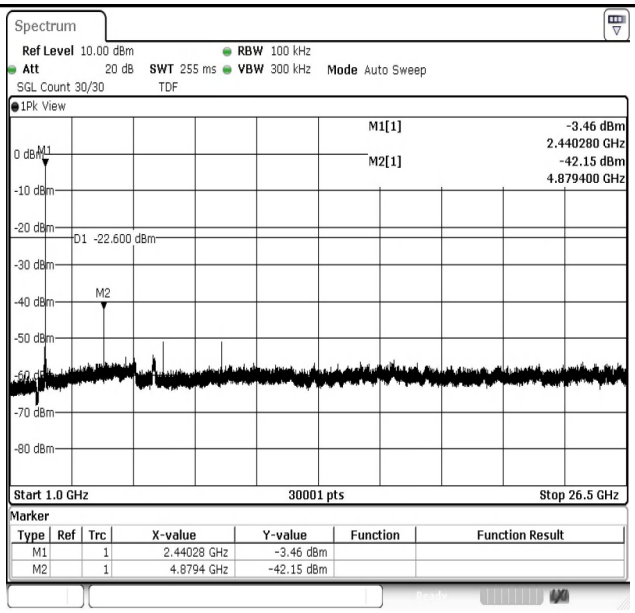
BLE_2M-Ant1-2402-1000~26500-PASS



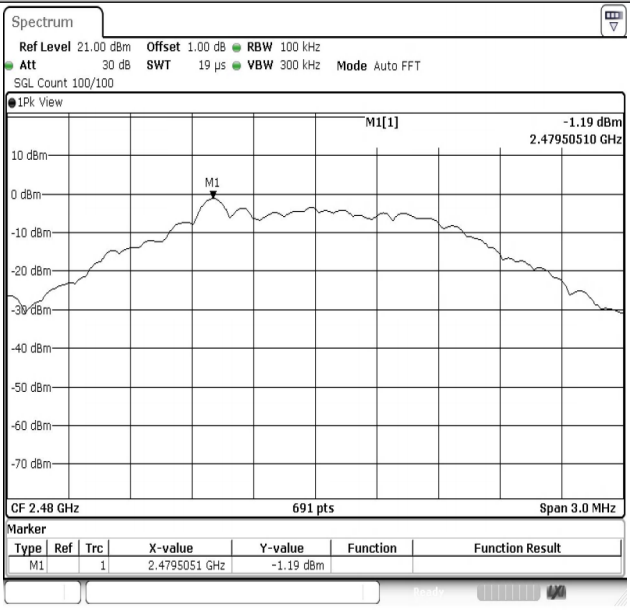
BLE_2M-Ant1-2440-0~Reference-PASS



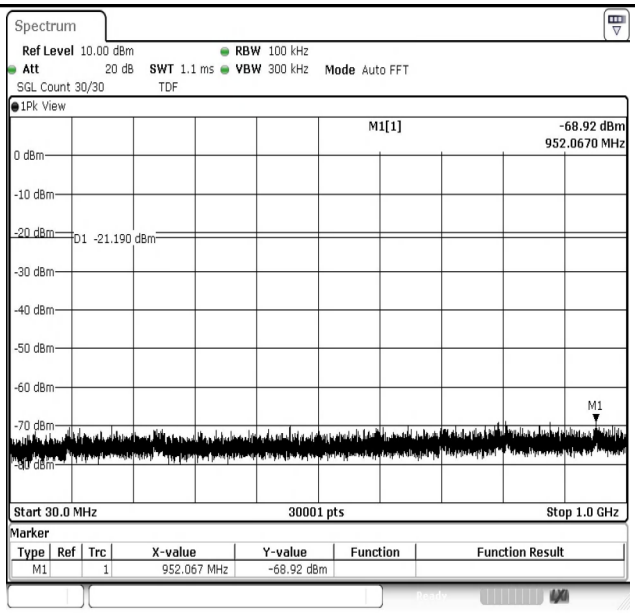
BLE_2M-Ant1-2440-30~1000-PASS



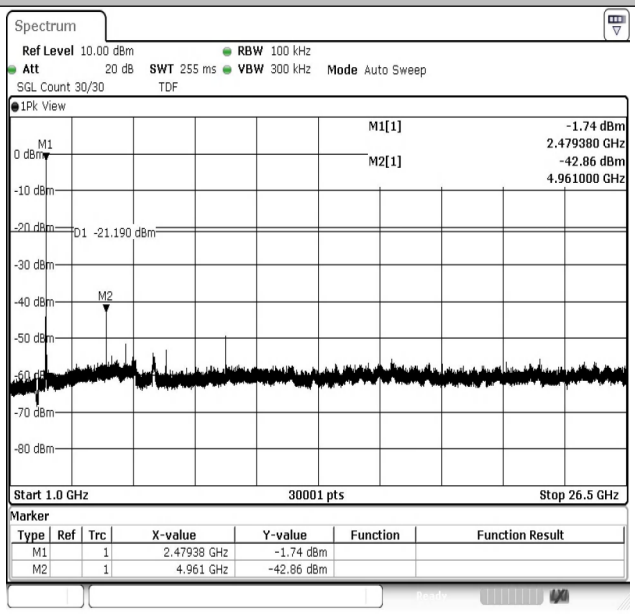
BLE_2M-Ant1-2440-1000~26500-PASS



BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS



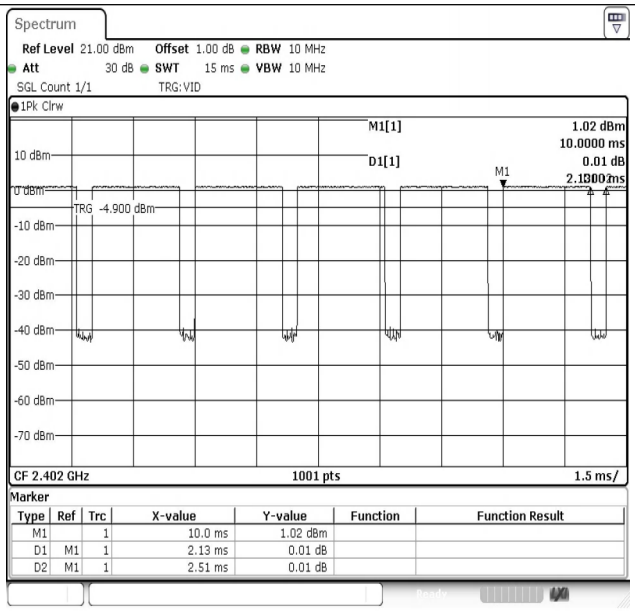
BLE_2M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

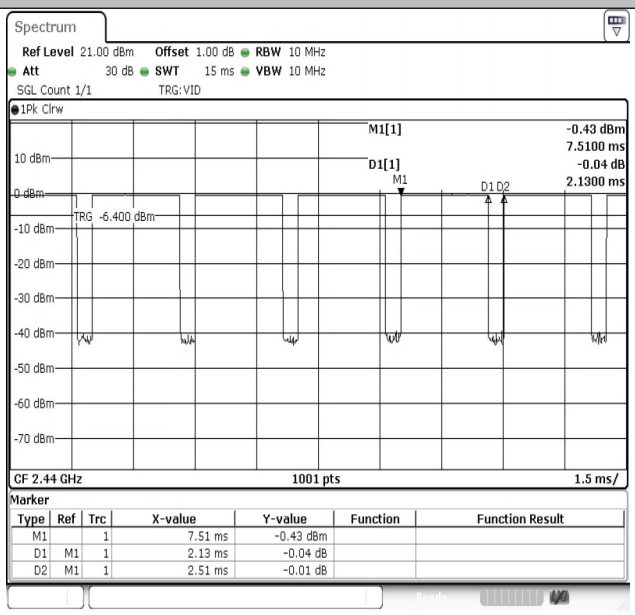
Test Result

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	2.13	2.51	84.86	0.71
BLE_1M	Ant1	2440	2.13	2.51	84.86	0.71
BLE_1M	Ant1	2480	2.13	2.51	84.86	0.71
BLE_2M	Ant1	2402	1.08	2.50	43.20	3.65
BLE_2M	Ant1	2440	1.08	2.50	43.20	3.65
BLE_2M	Ant1	2480	1.08	2.50	43.20	3.65

Test Graphs



NTNV-BLE_1M-Ant1-2402



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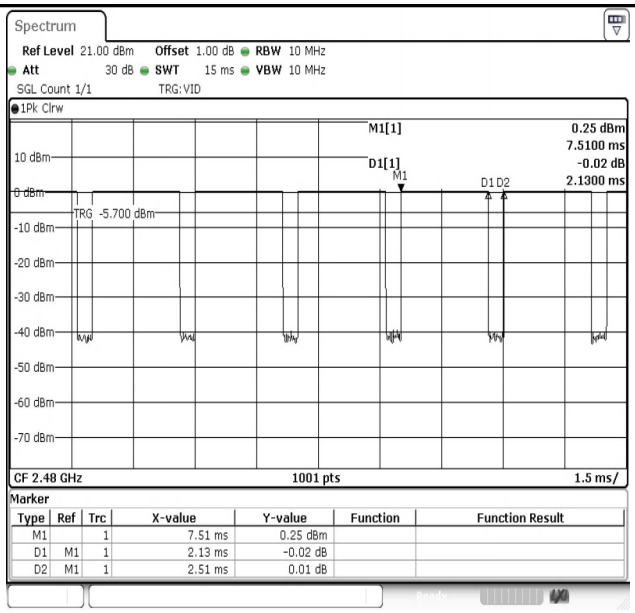
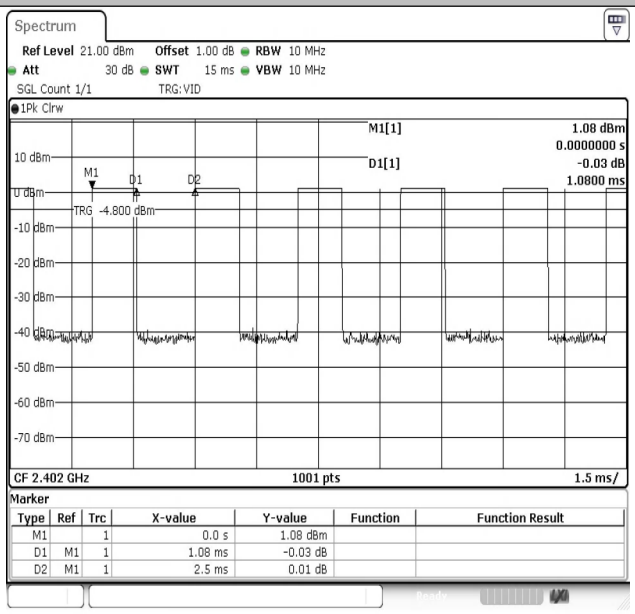
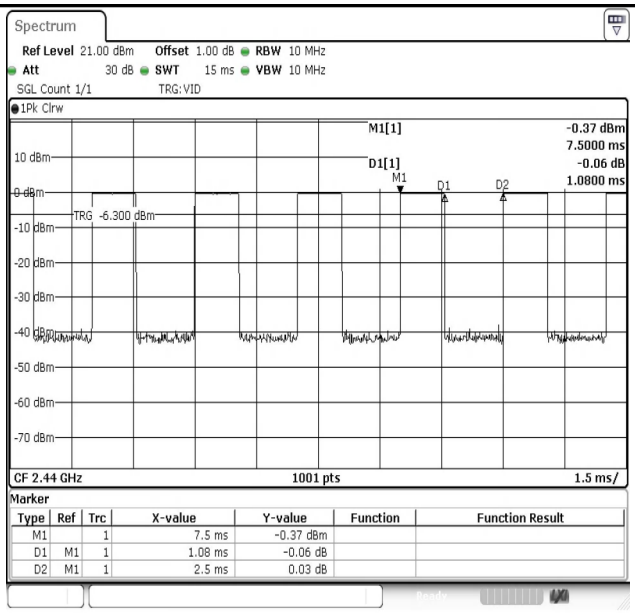


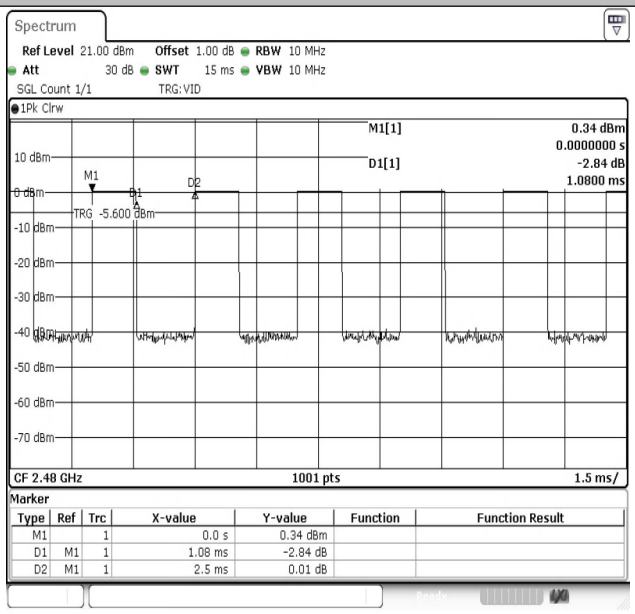
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



NTNV-BLE_2M-Ant1-2480

---End---