

Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth 3

 Test Result 3

 Test Graphs 4

Appendix B: Occupied Channel Bandwidth 6

 Test Result 6

 Test Graphs 7

Appendix C: Maximum conducted output power 9

 Test Result Peak 9

 Test Graphs Peak 10

Appendix D: Maximum power spectral density 12

 Test Result 12

 Test Graphs 13

Appendix E: Band edge measurements 15

 Test Result 15

 Test Graphs 16

Appendix F: Conducted Spurious Emission 17

 Test Result 17

 Test Graphs 18

Appendix G: Duty Cycle 23

 Test Result 23

 Test Graphs 24

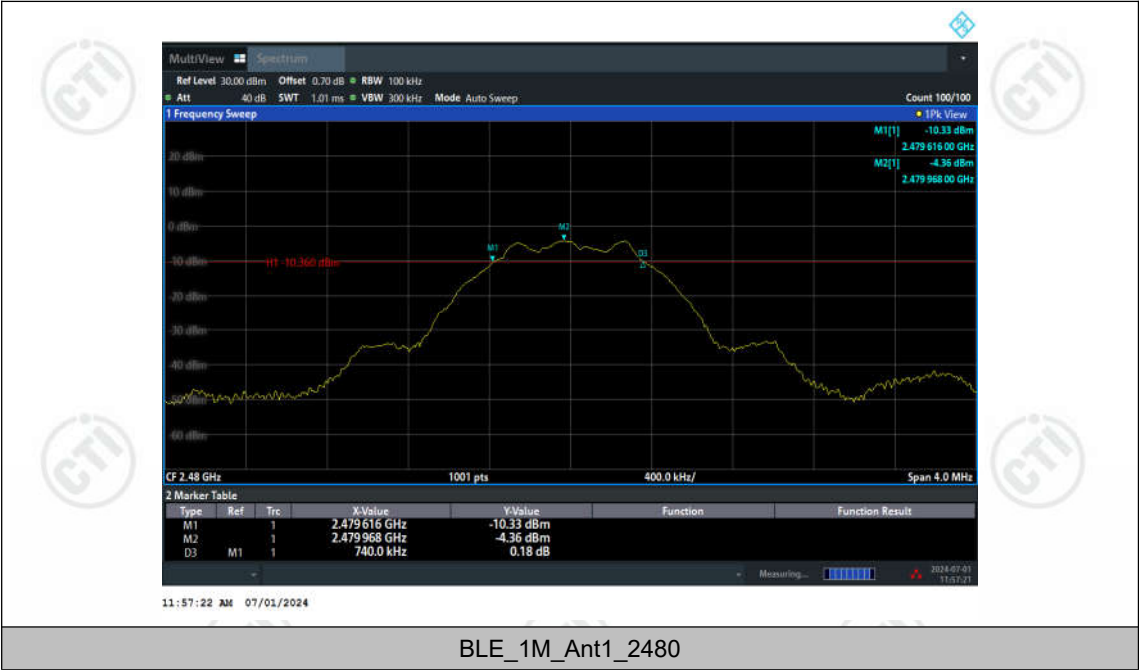
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.69	2401.65	2402.34	0.5	PASS
		2440	0.70	2439.64	2440.34	0.5	PASS
		2480	0.74	2479.62	2480.36	0.5	PASS

Test Graphs





Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.043	2401.479	2402.521	---	---
		2440	1.053	2439.474	2440.526	---	---
		2480	1.058	2479.469	2480.527	---	---

Test Graphs



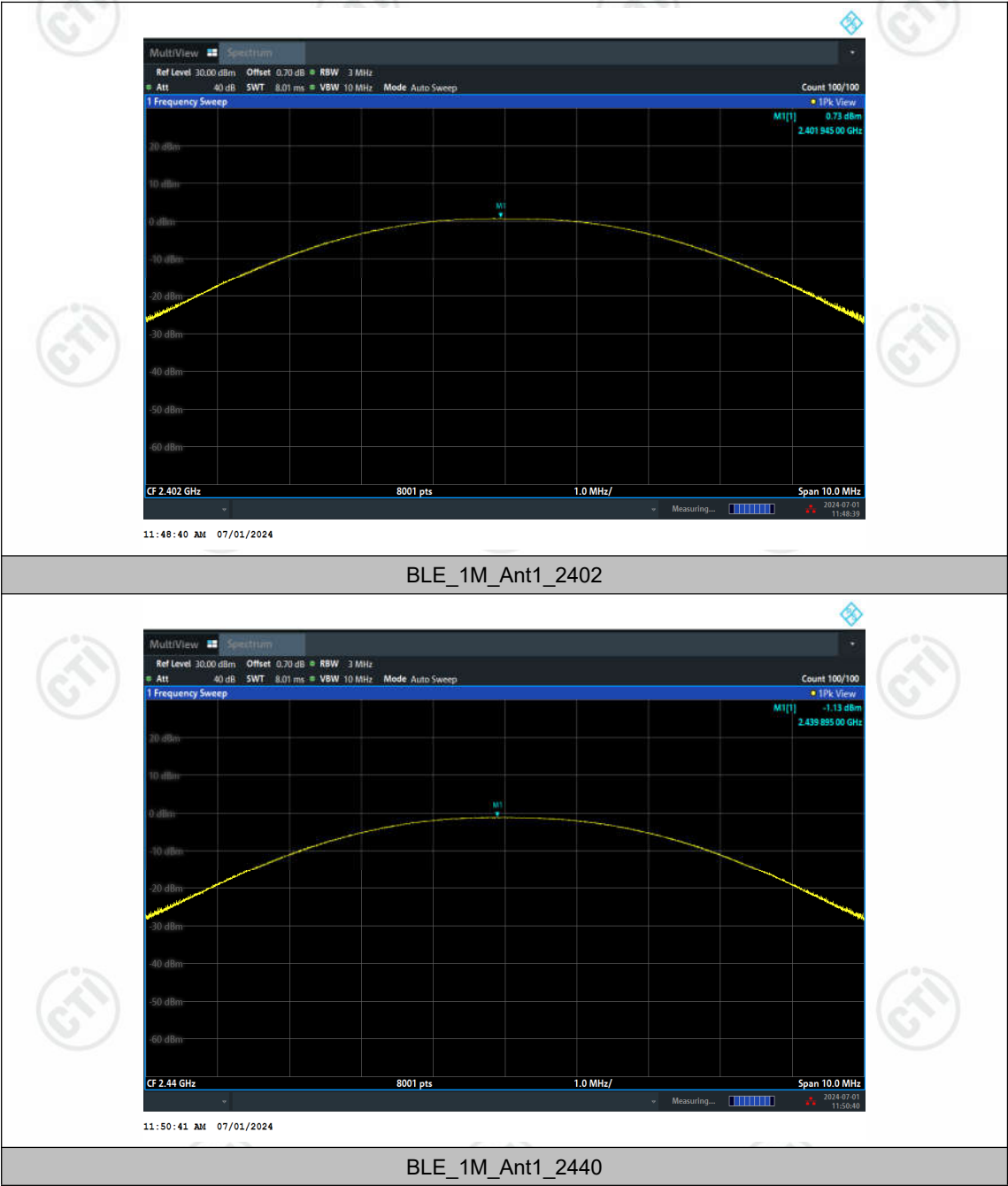


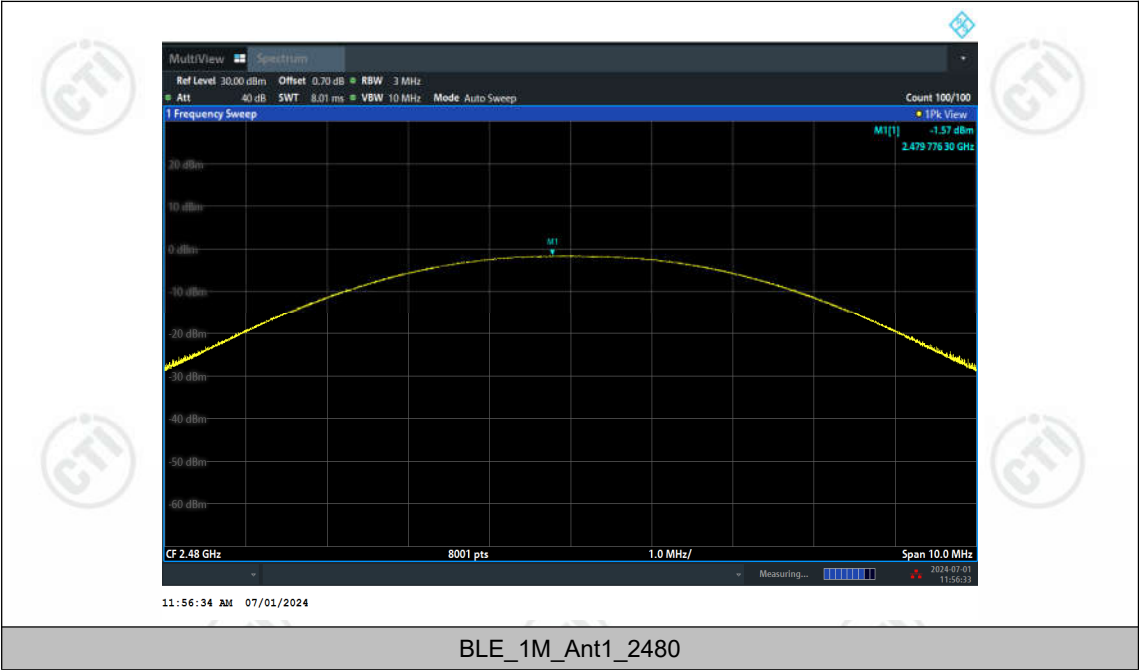
Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.73	≤30	PASS
		2440	-1.13	≤30	PASS
		2480	-1.57	≤30	PASS

Test Graphs Peak



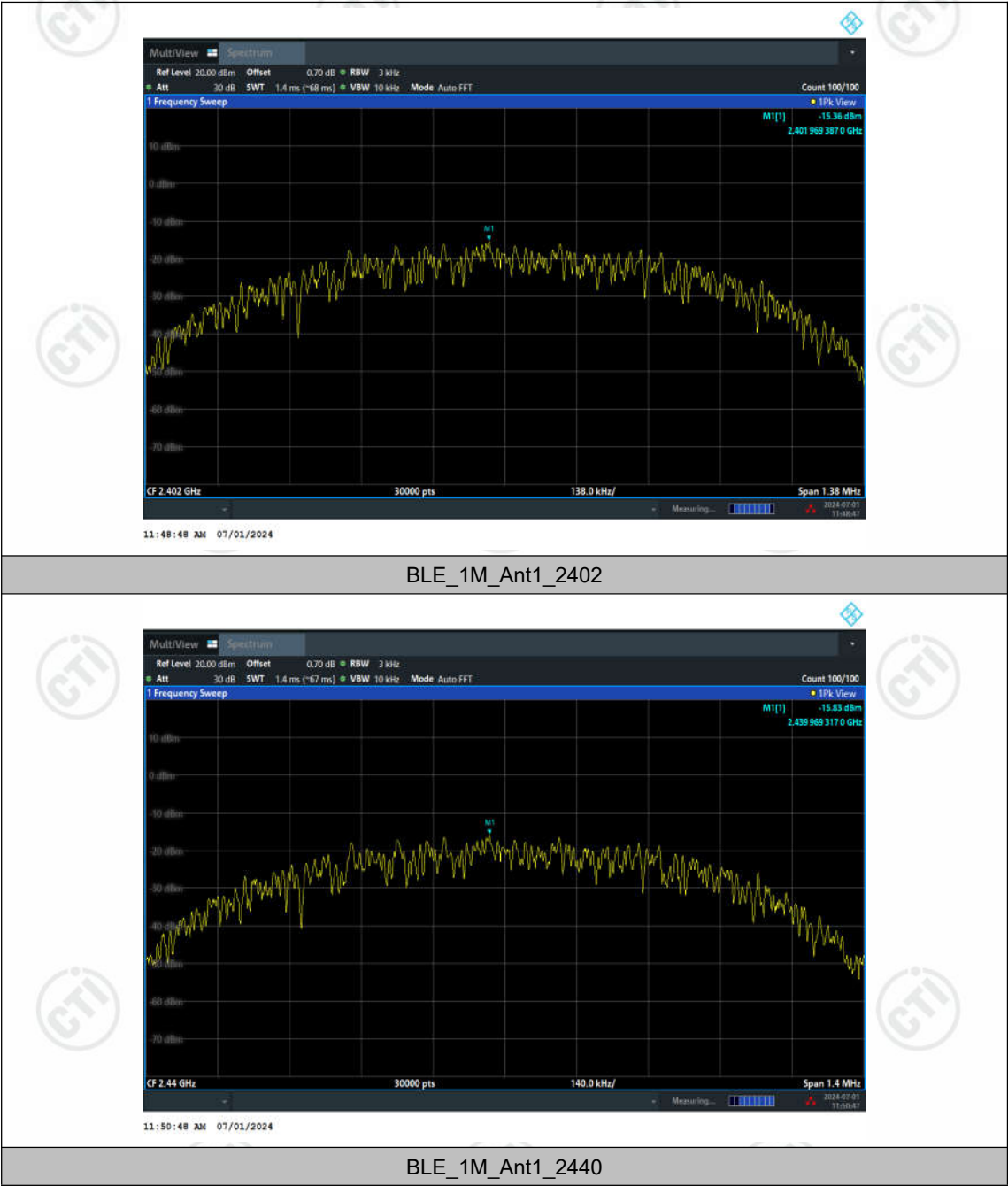


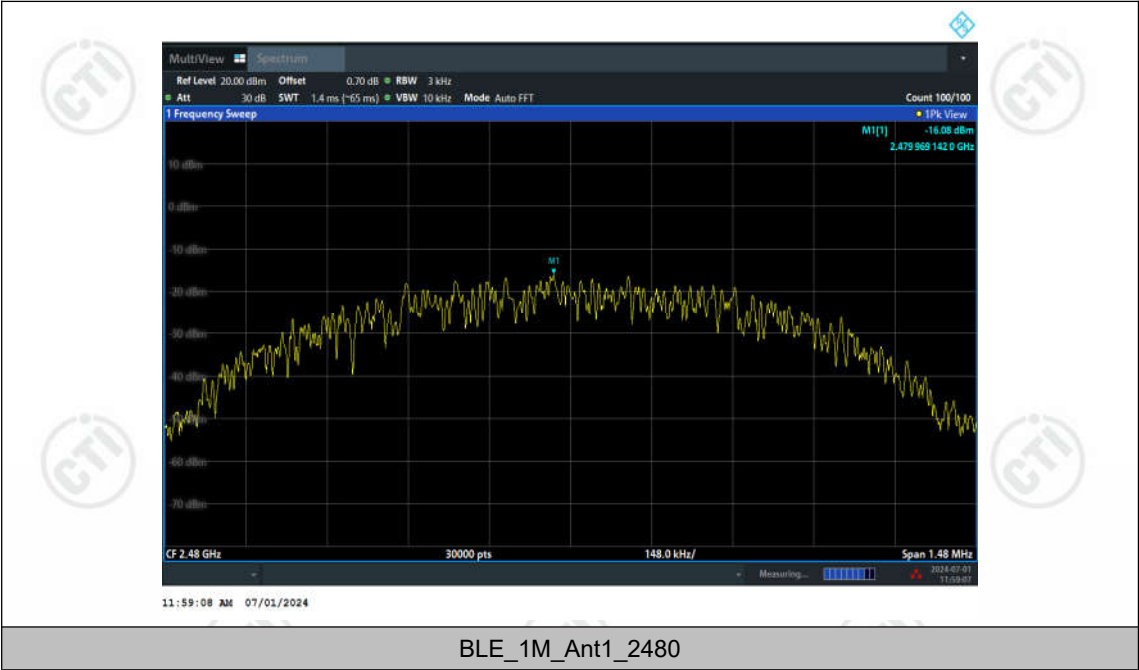
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.36	≤8.00	PASS
		2440	-15.83	≤8.00	PASS
		2480	-16.08	≤8.00	PASS

Test Graphs



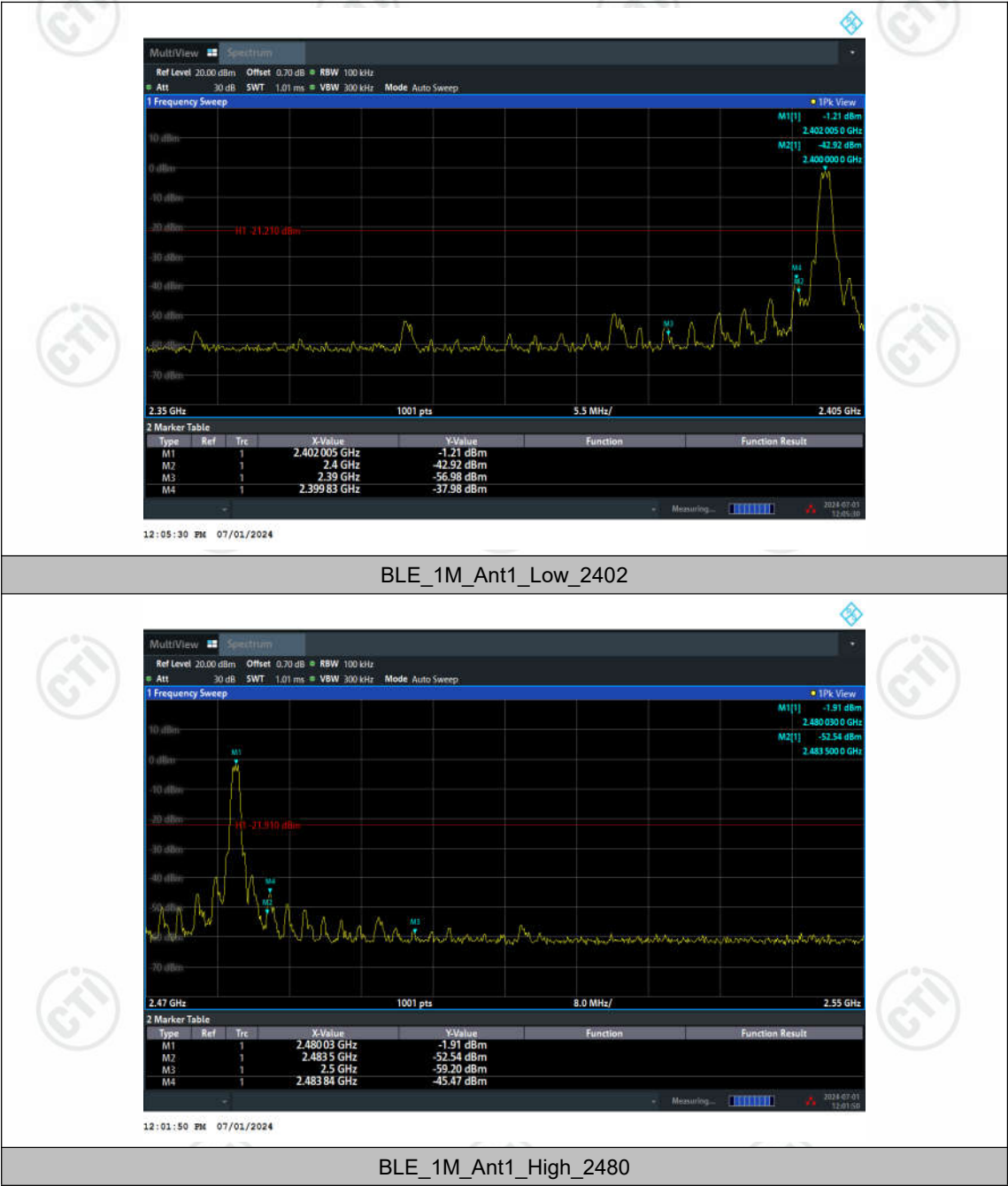


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.21	-37.98	≤-21.21	PASS
		High	2480	-1.91	-45.47	≤-21.91	PASS

Test Graphs

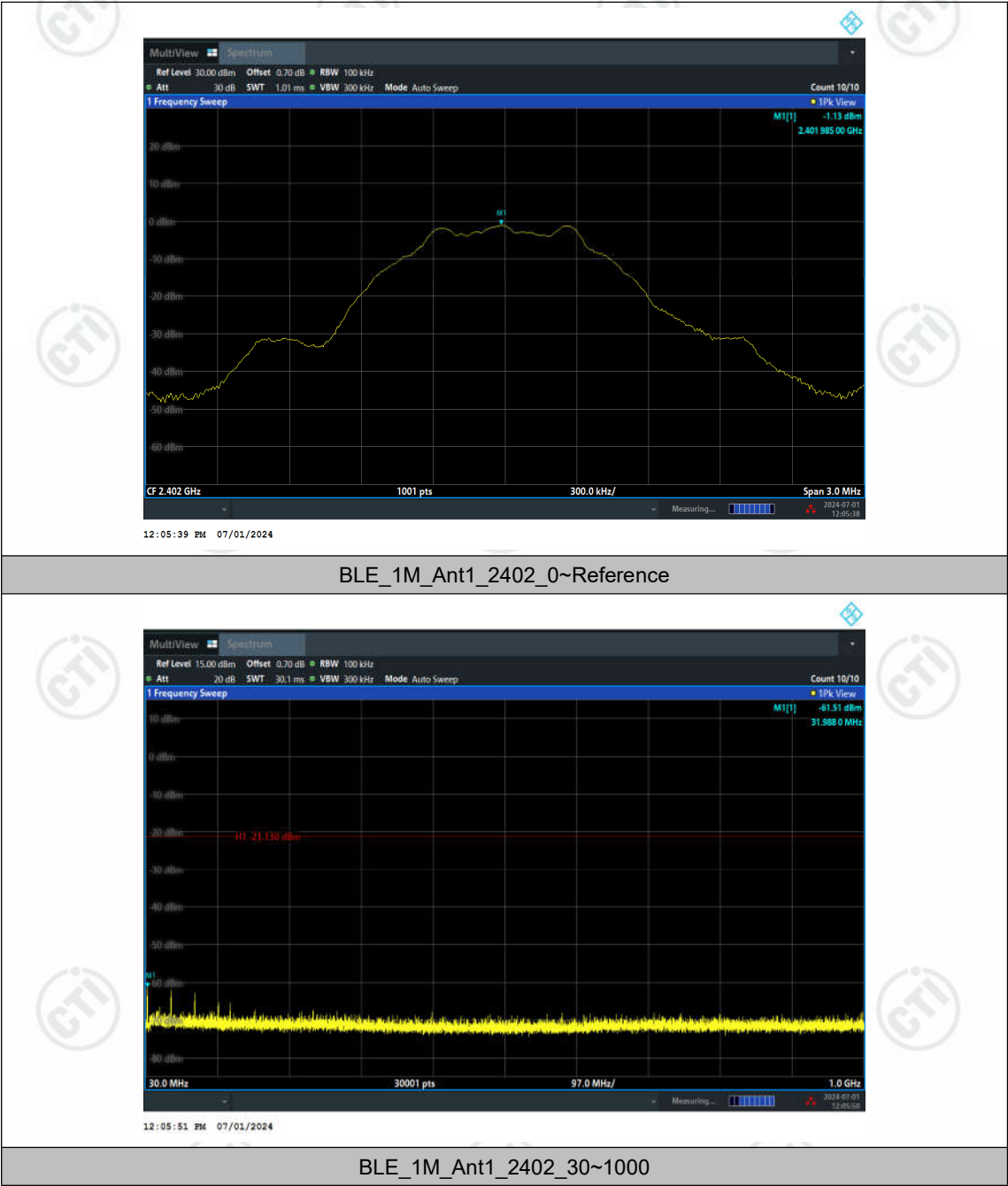


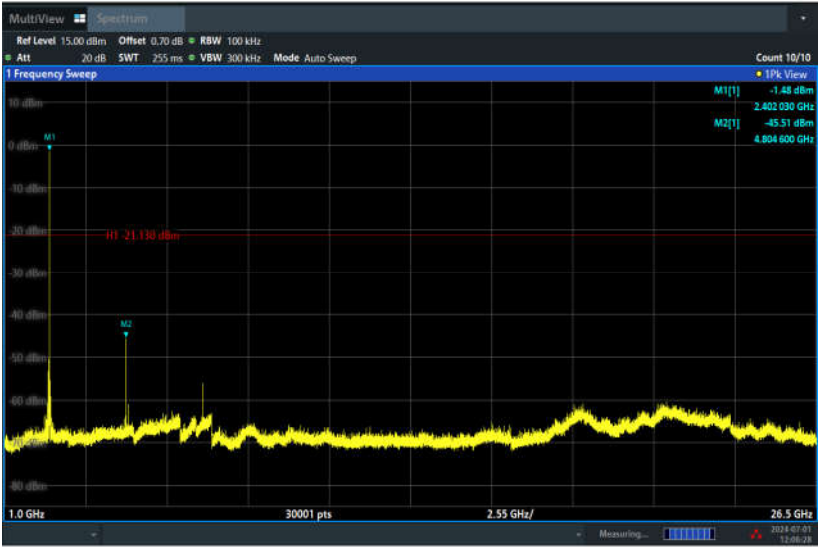
Appendix F: Conducted Spurious Emission

Test Result

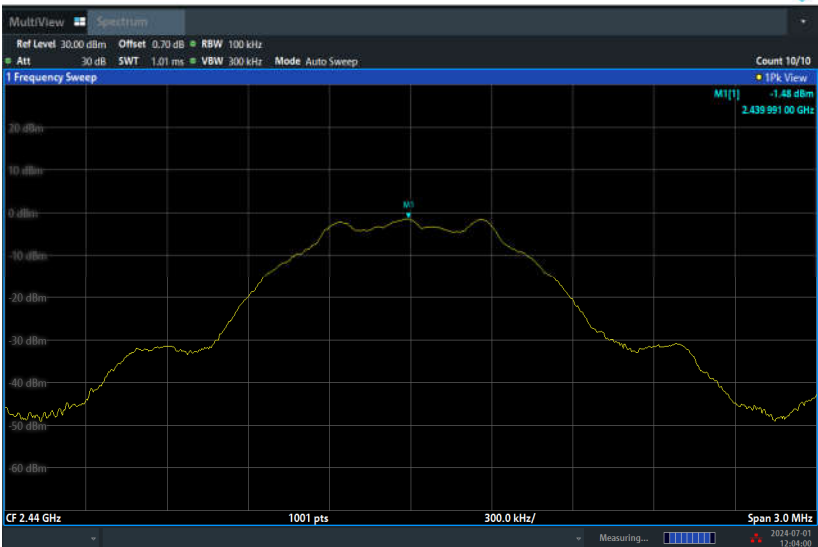
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-61.51	≤-21.13	PASS
			1000~26500	-1.13	-45.51	≤-21.13	PASS
		2440	Reference	-1.48	-1.48	---	PASS
			30~1000	-1.48	-61.82	≤-21.48	PASS
			1000~26500	-1.48	-47.66	≤-21.48	PASS
		2480	Reference	-1.82	-1.82	---	PASS
			30~1000	-1.82	-61.53	≤-21.82	PASS
			1000~26500	-1.82	-46.66	≤-21.82	PASS

Test Graphs

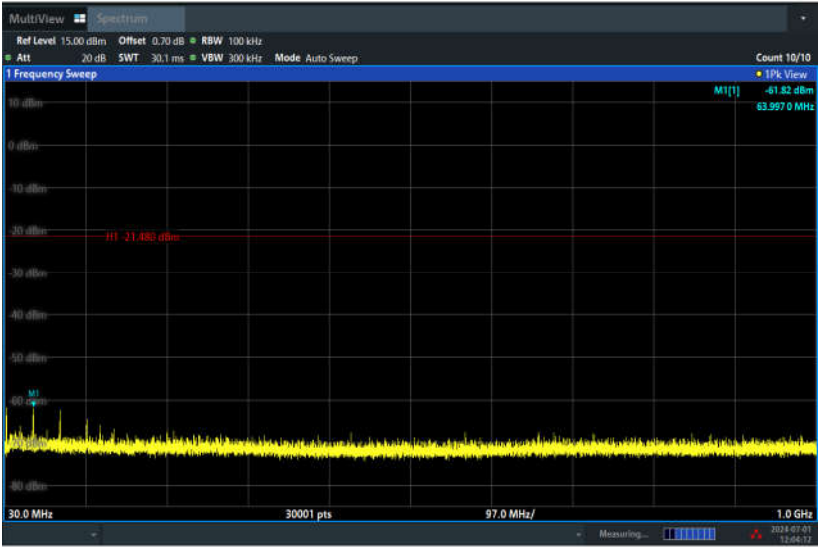




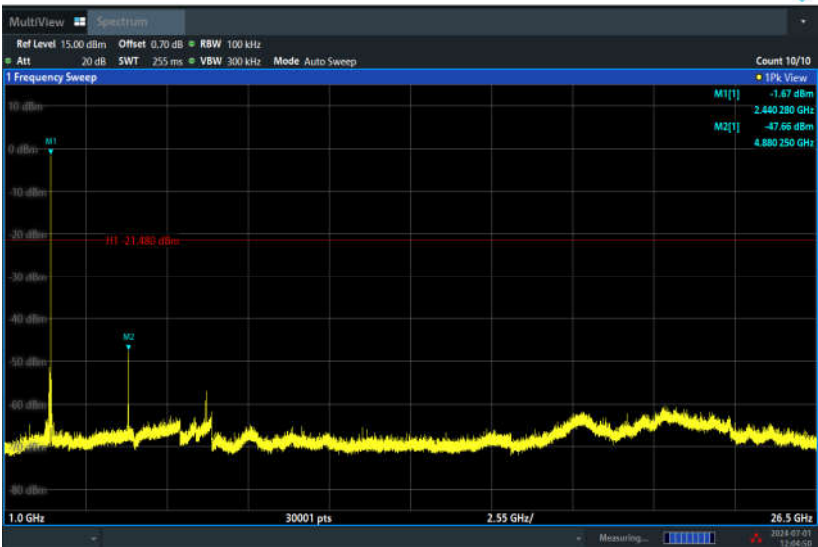
BLE_1M_Ant1_2402_1000~26500



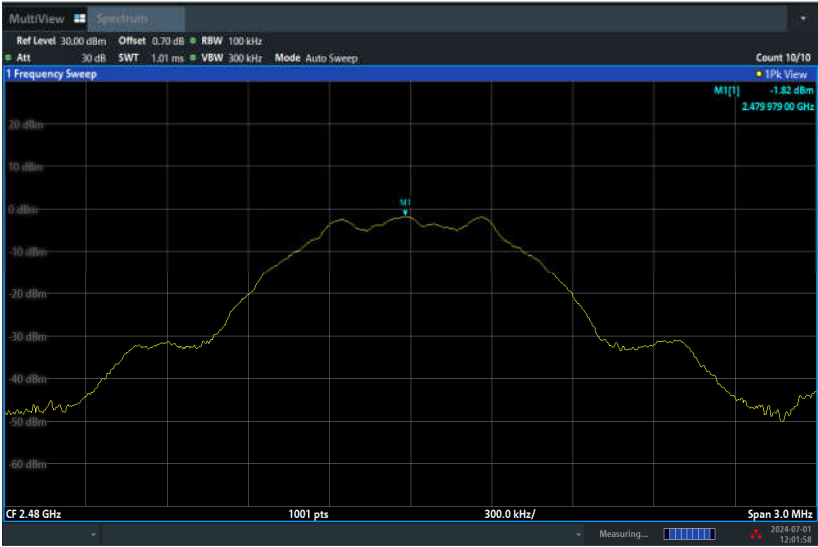
BLE_1M_Ant1_2440_0~Reference



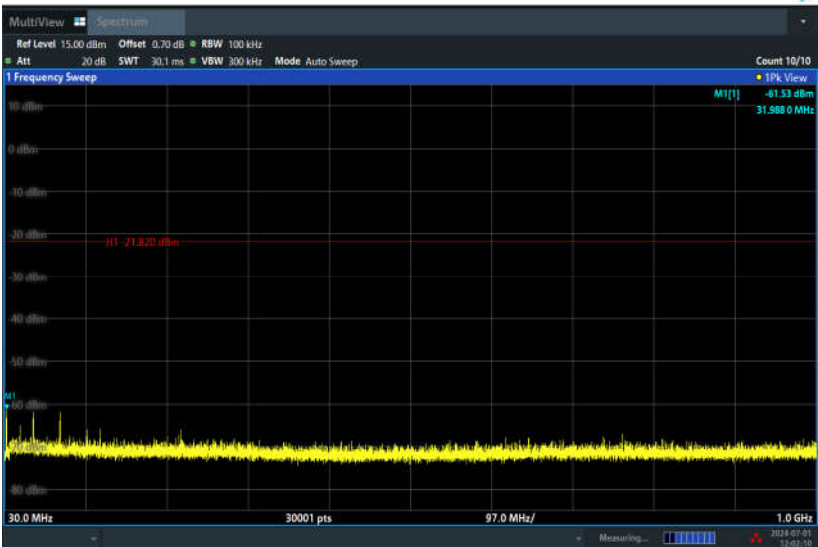
BLE_1M_Ant1_2440_30~1000



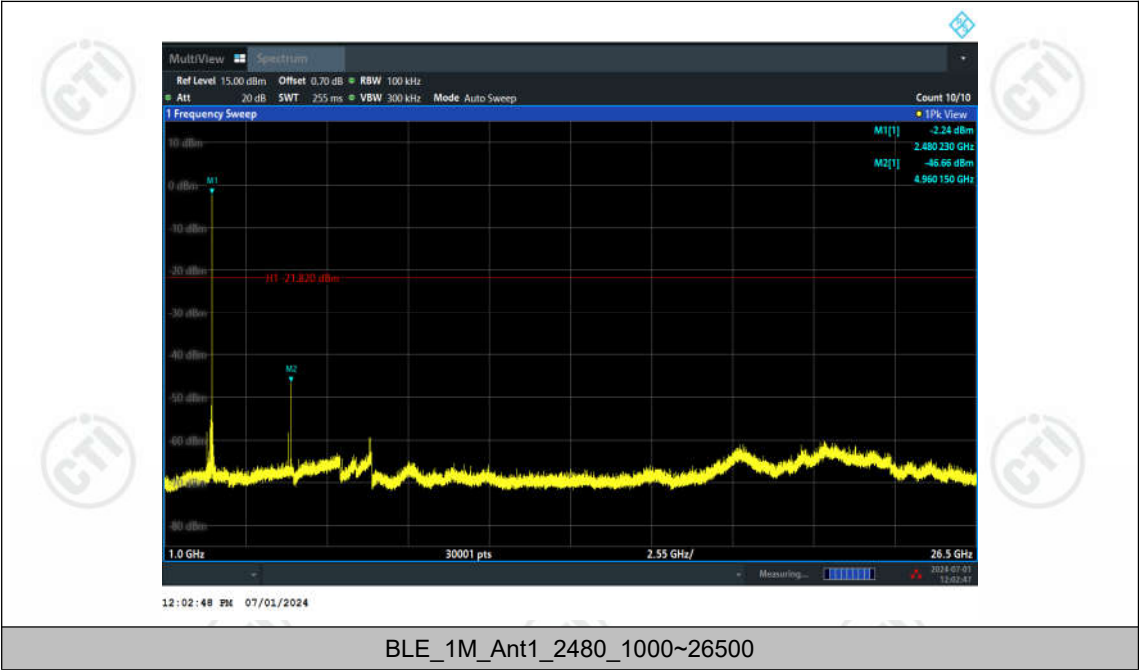
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



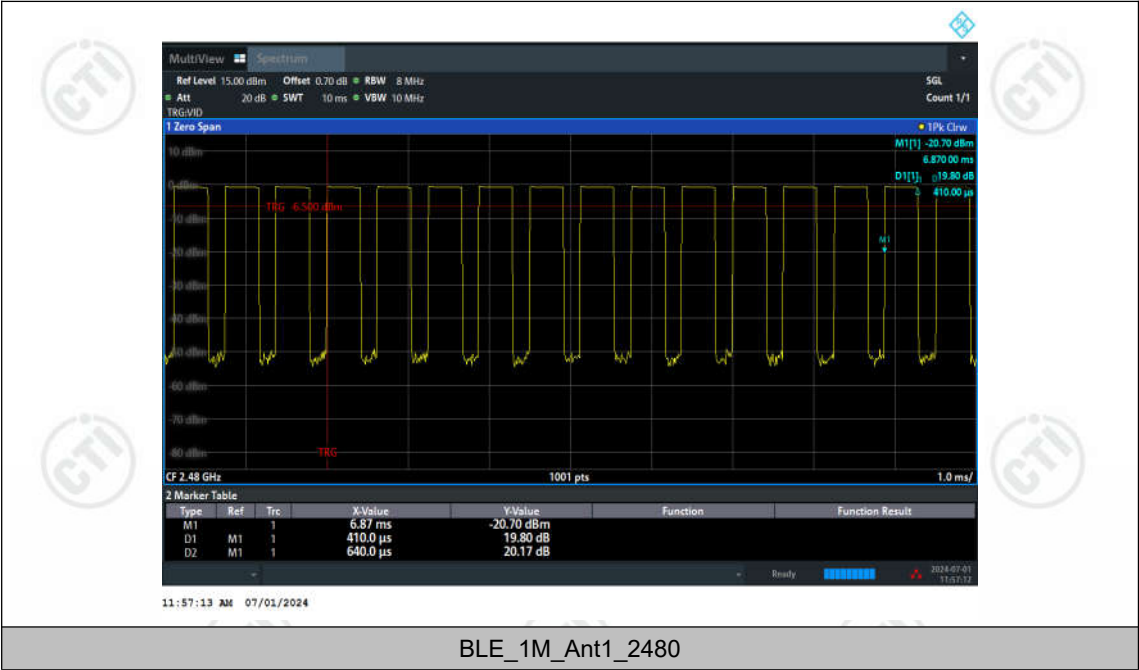
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.41	0.64	64.06	1.93
		2440	0.41	0.64	64.06	1.93
		2480	0.41	0.64	64.06	1.93

Test Graphs





*** End of Report ***