

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	0.73	2401.62	2402.35	0.5	PASS
		2440	0.71	2439.63	2440.34	0.5	PASS
		2480	0.71	2479.64	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	1.221	2401.432	2402.652	---	---
		2440	1.178	2439.447	2440.626	---	---
		2480	1.089	2479.477	2480.566	---	---

Test Graphs



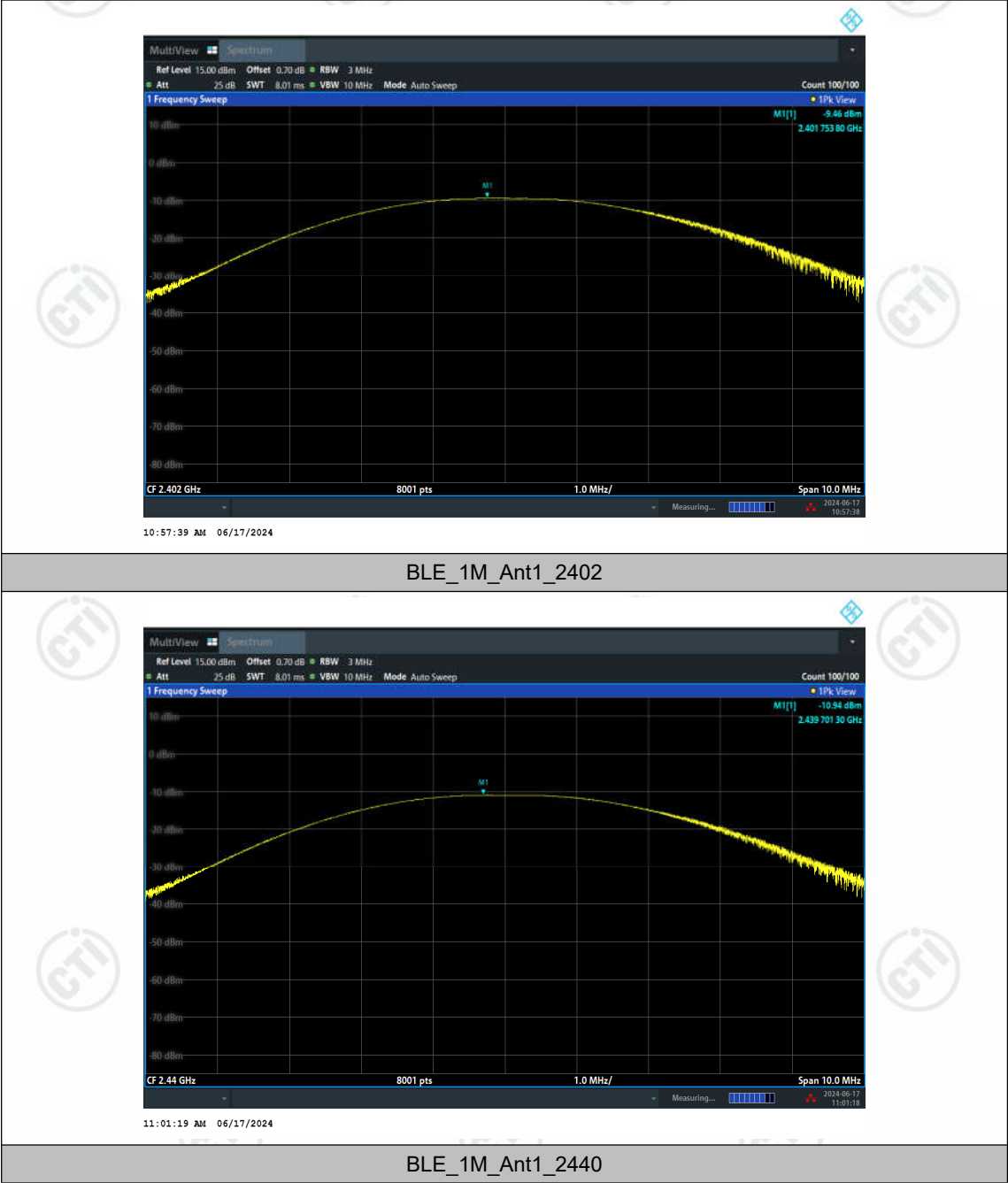


Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-9.46	≤30	PASS
		2440	-10.94	≤30	PASS
		2480	-12.22	≤30	PASS

Test Graphs Peak



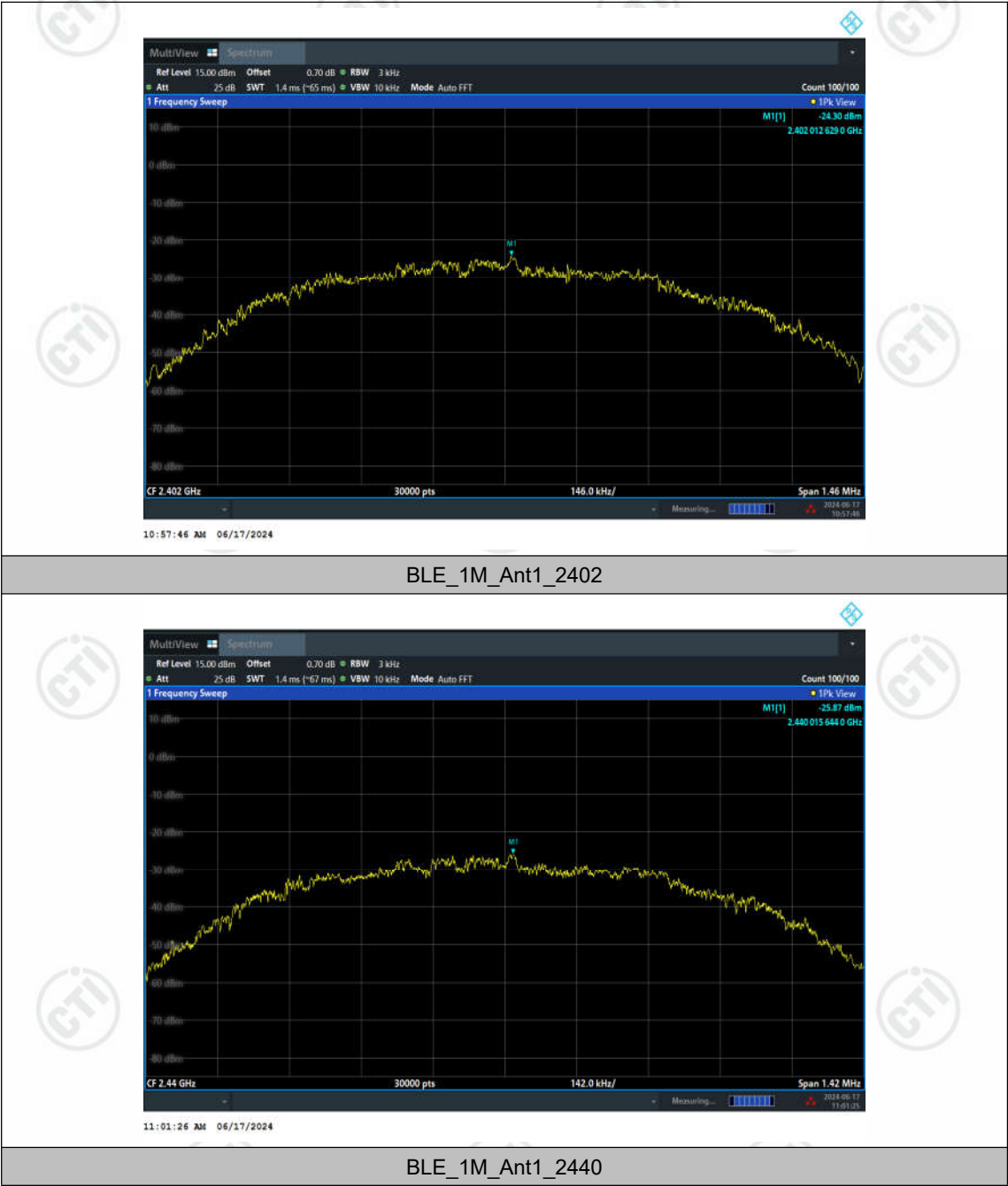


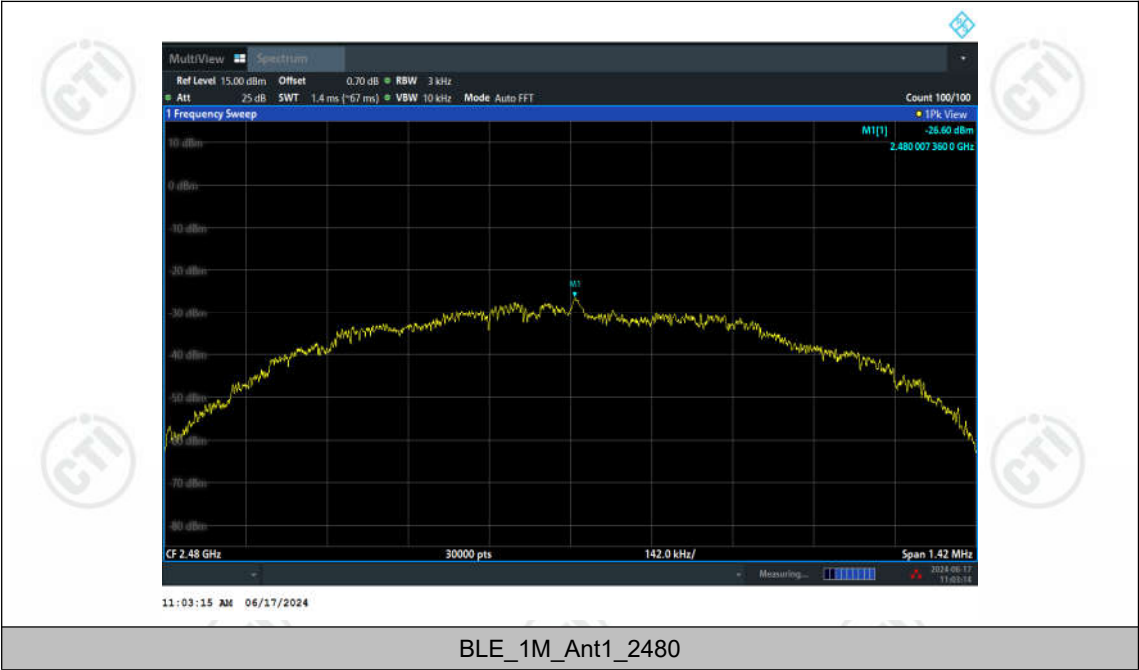
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-24.3	≤8.00	PASS
		2440	-25.87	≤8.00	PASS
		2480	-26.6	≤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	-9.73	-47.84	≤-29.73	PASS
		High	2480	-12.44	-50.89	≤-32.44	PASS

Test Graphs



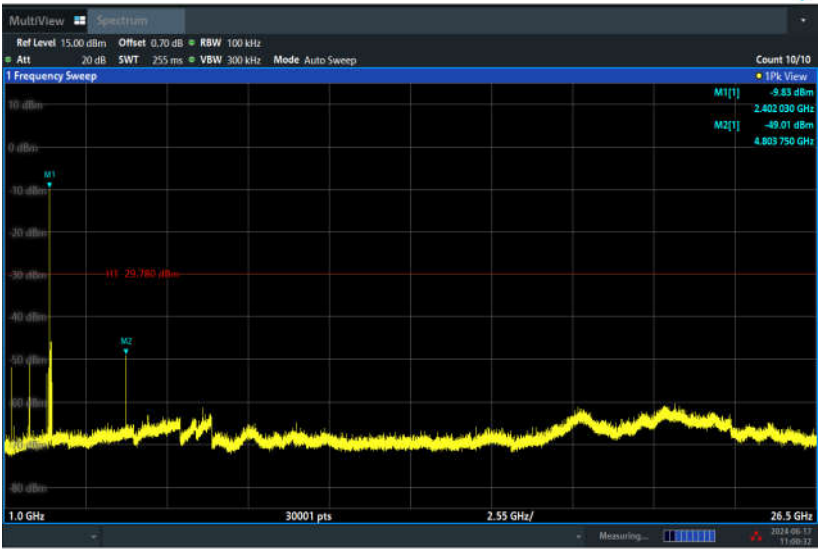
Appendix F: Conducted Spurious Emission

Test Result

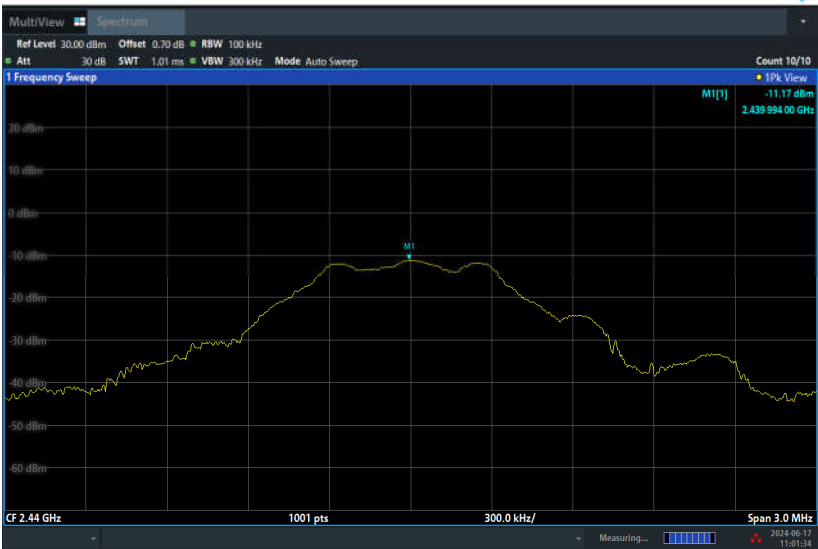
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-9.78	-9.78	---	PASS
			30~1000	-9.78	-65.62	≤-29.78	PASS
			1000~26500	-9.78	-49.01	≤-29.78	PASS
		2440	Reference	-11.17	-11.17	---	PASS
			30~1000	-11.17	-64.01	≤-31.17	PASS
			1000~26500	-11.17	-40.48	≤-31.17	PASS
		2480	Reference	-12.38	-12.38	---	PASS
			30~1000	-12.38	-63.37	≤-32.38	PASS
			1000~26500	-12.38	-45.35	≤-32.38	PASS

Test Graphs

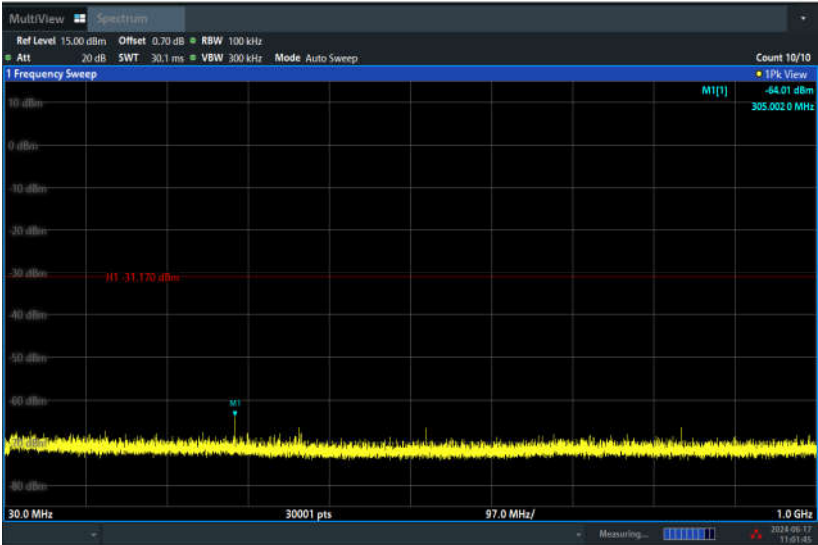




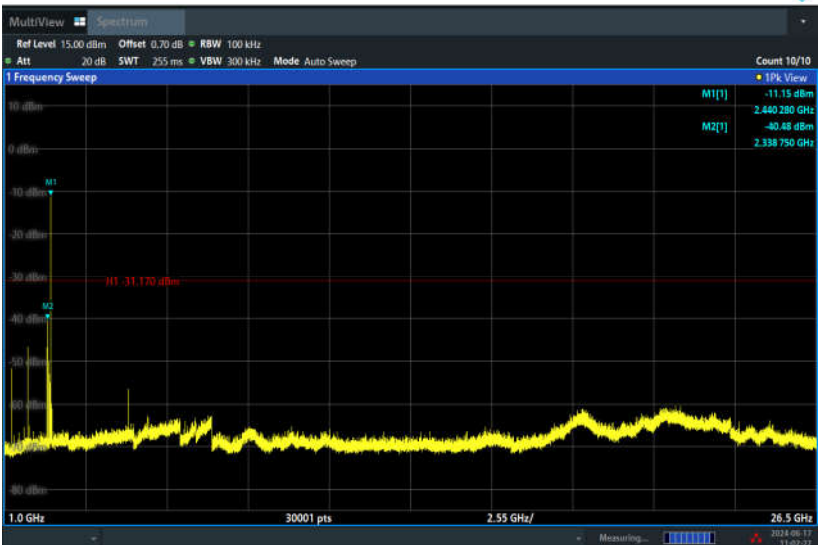
BLE_1M_Ant1_2402_1000~26500



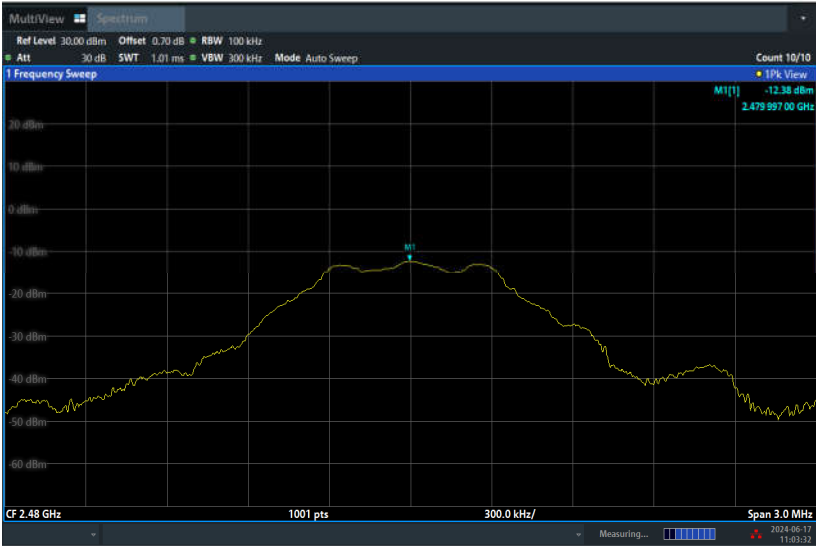
BLE_1M_Ant1_2440_0~Reference



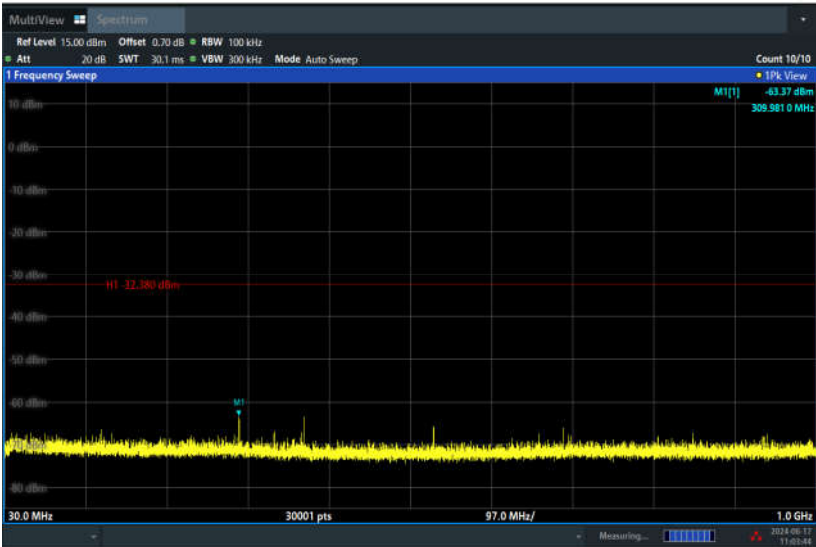
BLE_1M_Ant1_2440_30~1000



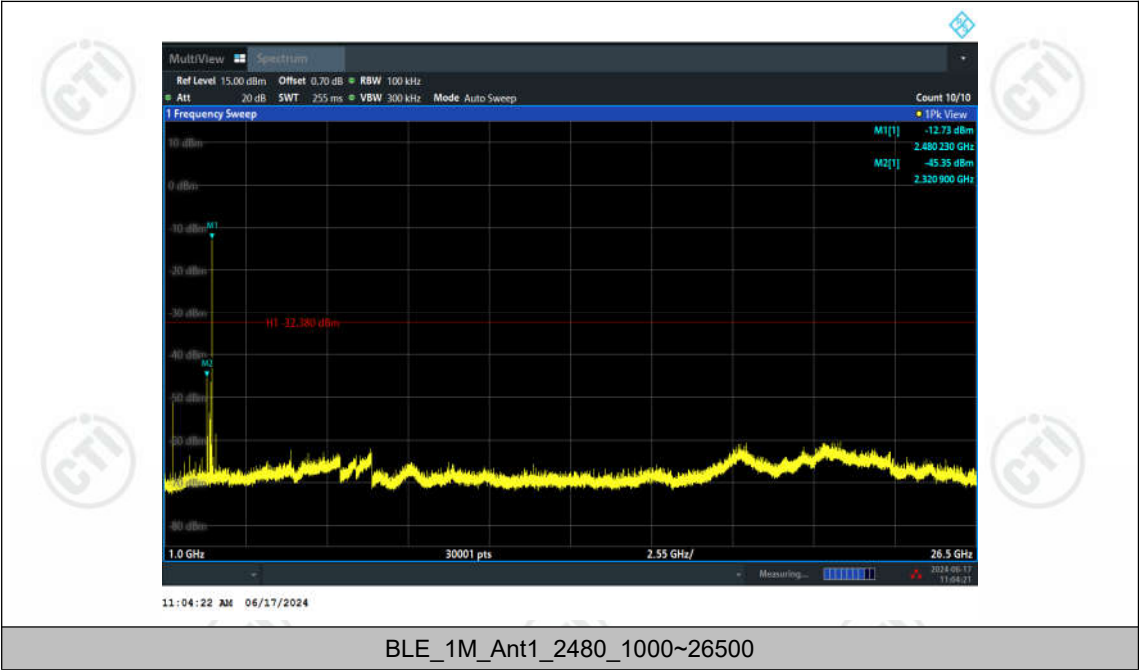
BLE_1M_Ant1_2440_1000~26500



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	0.43	0.63	68.25	1.66
		2440	0.43	0.63	68.25	1.66
		2480	0.43	0.63	68.25	1.66

Test Graphs





*** End of Report ***