

Appendix: Bluetooth LE

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Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.70	2401.65	2402.35	0.5	PASS
BLE_1M	Ant1	2440	0.70	2439.64	2440.35	0.5	PASS
BLE_1M	Ant1	2480	0.72	2479.63	2480.35	0.5	PASS
BLE_2M	Ant1	2402	1.15	2401.42	2402.57	0.5	PASS
BLE_2M	Ant1	2440	1.15	2439.42	2440.57	0.5	PASS
BLE_2M	Ant1	2480	1.14	2479.42	2480.57	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	1.0562	2401.4722	2402.5285	---	---
BLE_1M	Ant1	2440	1.0616	2439.4682	2440.5298	---	---
BLE_1M	Ant1	2480	1.0760	2479.4611	2480.5372	---	---
BLE_2M	Ant1	2402	2.0669	2400.9756	2403.0425	---	---
BLE_2M	Ant1	2440	2.0681	2438.9760	2441.0441	---	---
BLE_2M	Ant1	2480	2.0834	2478.9685	2481.0519	---	---

Test Graphs

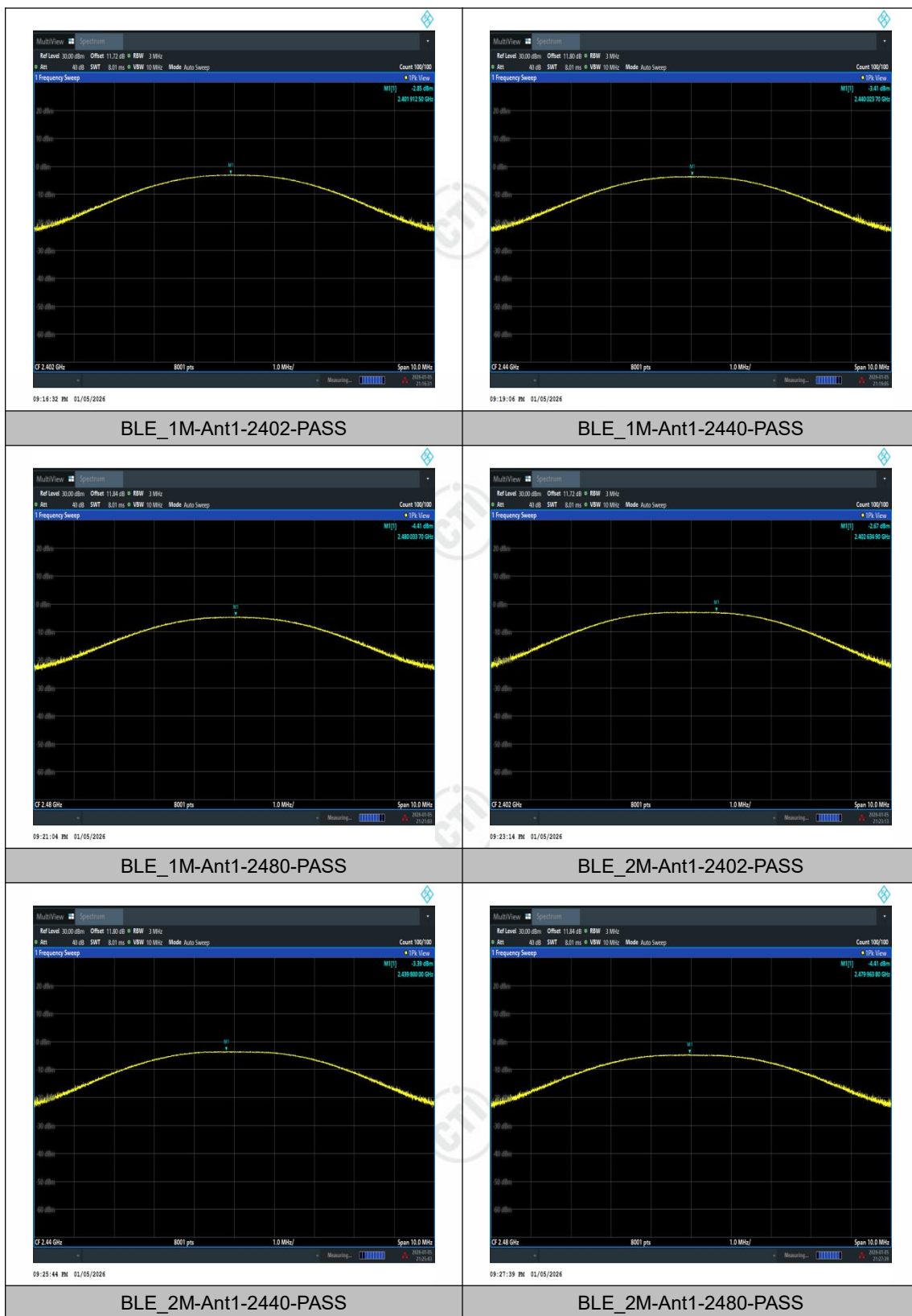


Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-2.85	≤30	-4.23	≤36	PASS
BLE_1M	Ant1	2440	-3.41	≤30	-4.79	≤36	PASS
BLE_1M	Ant1	2480	-4.41	≤30	-5.79	≤36	PASS
BLE_2M	Ant1	2402	-2.67	≤30	-4.05	≤36	PASS
BLE_2M	Ant1	2440	-3.39	≤30	-4.77	≤36	PASS
BLE_2M	Ant1	2480	-4.41	≤30	-5.79	≤36	PASS

Test Graphs Peak

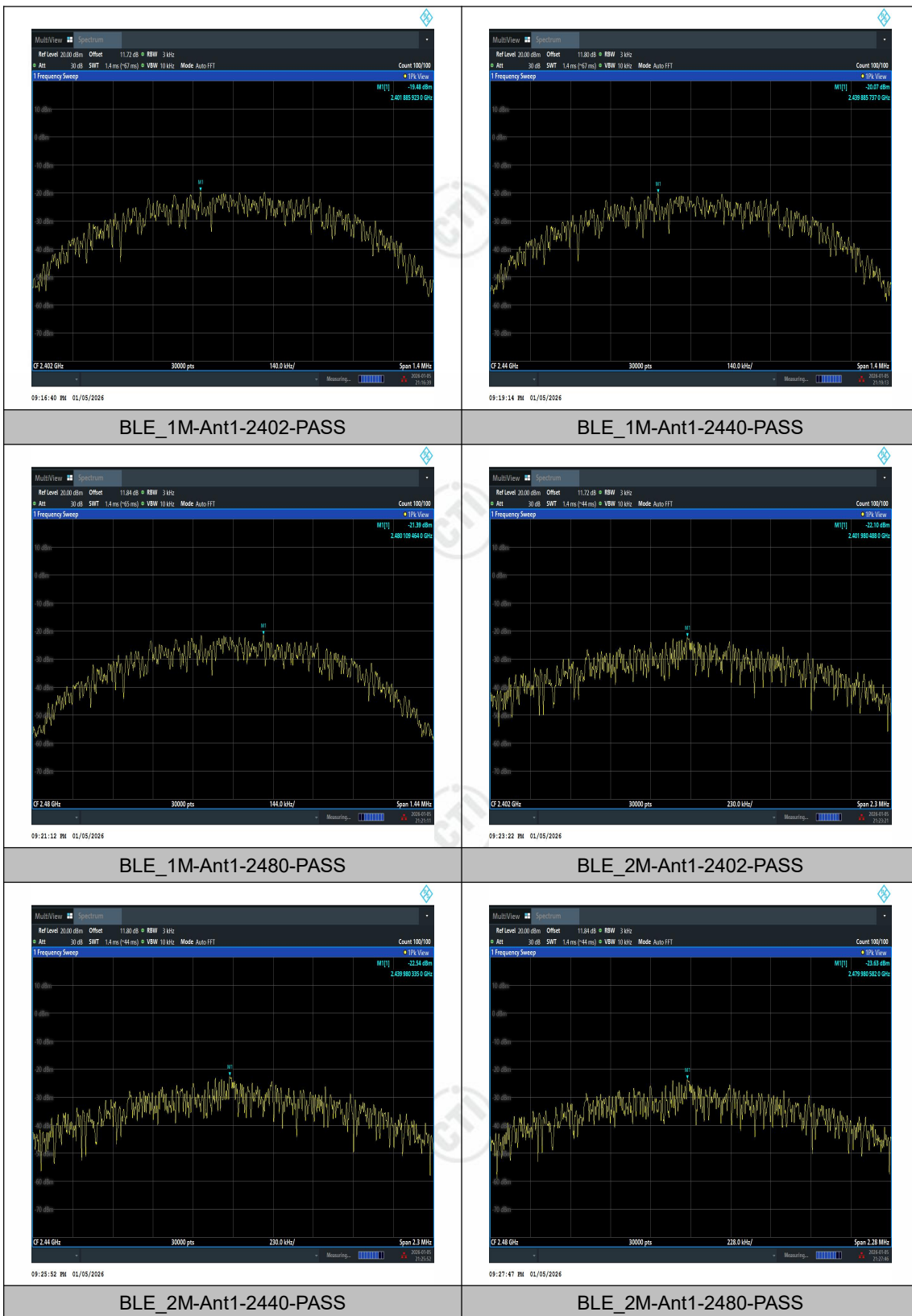


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.48	≤8.00	PASS
BLE_1M	Ant1	2440	-20.07	≤8.00	PASS
BLE_1M	Ant1	2480	-21.39	≤8.00	PASS
BLE_2M	Ant1	2402	-22.10	≤8.00	PASS
BLE_2M	Ant1	2440	-22.54	≤8.00	PASS
BLE_2M	Ant1	2480	-23.63	≤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	-3.53	-34.08	≤-23.53	PASS
BLE_1M	Ant1	High	2480	-5.35	-42.22	≤-25.35	PASS
BLE_2M	Ant1	Low	2402	-3.59	-34	≤-23.59	PASS
BLE_2M	Ant1	High	2480	-5.38	-41.75	≤-25.38	PASS

Test Graphs

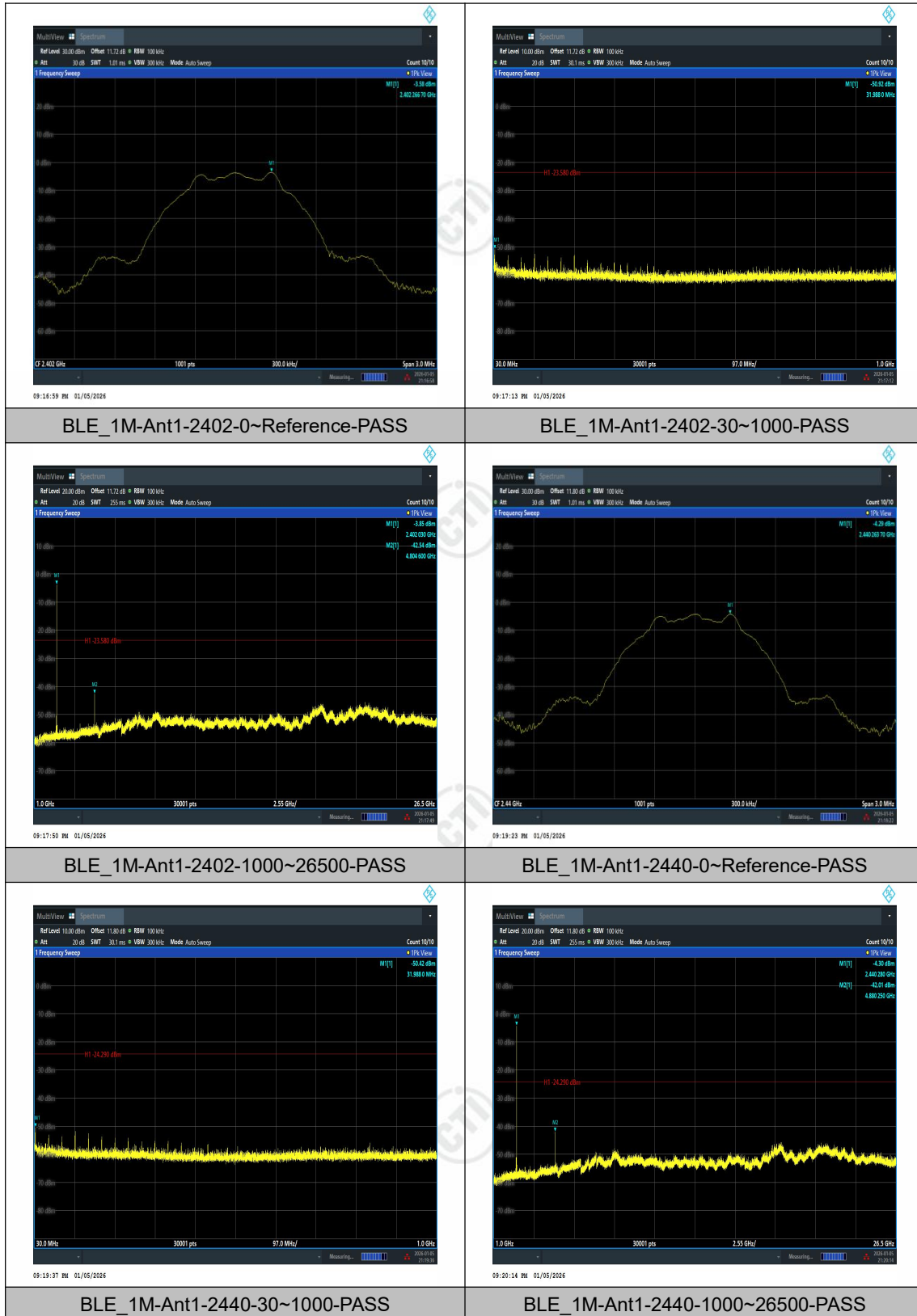


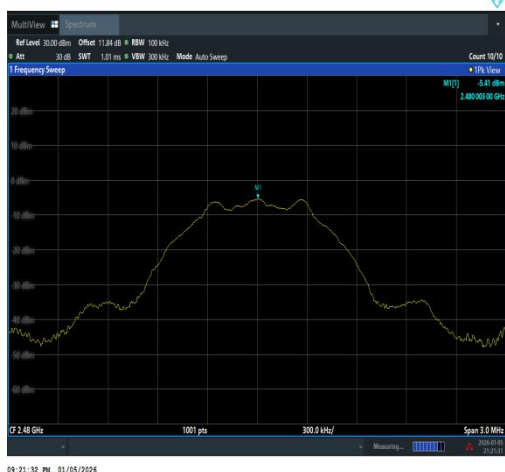
Appendix F: Conducted Spurious Emission

Test Result

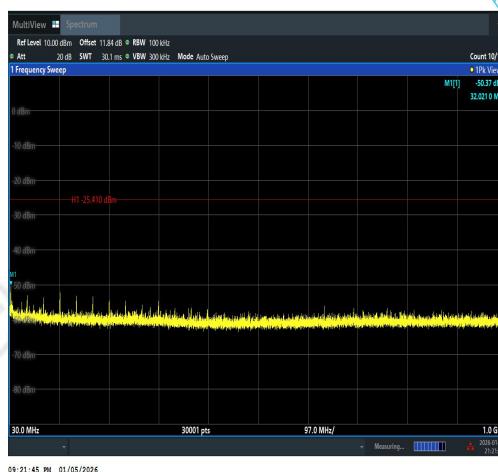
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-3.58	-3.58	---	PASS
BLE_1M	Ant1	2402	30~1000	-3.58	-50.92	≤-23.58	PASS
BLE_1M	Ant1	2402	1000~26500	-3.58	-42.54	≤-23.58	PASS
BLE_1M	Ant1	2440	0~Reference	-4.29	-4.29	---	PASS
BLE_1M	Ant1	2440	30~1000	-4.29	-50.42	≤-24.29	PASS
BLE_1M	Ant1	2440	1000~26500	-4.29	-42.01	≤-24.29	PASS
BLE_1M	Ant1	2480	0~Reference	-5.41	-5.41	---	PASS
BLE_1M	Ant1	2480	30~1000	-5.41	-50.37	≤-25.41	PASS
BLE_1M	Ant1	2480	1000~26500	-5.41	-44.11	≤-25.41	PASS
BLE_2M	Ant1	2402	0~Reference	-3.74	-3.74	---	PASS
BLE_2M	Ant1	2402	30~1000	-3.74	-50.21	≤-23.74	PASS
BLE_2M	Ant1	2402	1000~26500	-3.74	-41.94	≤-23.74	PASS
BLE_2M	Ant1	2440	0~Reference	-4.37	-4.37	---	PASS
BLE_2M	Ant1	2440	30~1000	-4.37	-50.82	≤-24.37	PASS
BLE_2M	Ant1	2440	1000~26500	-4.37	-43.77	≤-24.37	PASS
BLE_2M	Ant1	2480	0~Reference	-5.47	-5.47	---	PASS
BLE_2M	Ant1	2480	30~1000	-5.47	-50.43	≤-25.47	PASS
BLE_2M	Ant1	2480	1000~26500	-5.47	-43.19	≤-25.47	PASS

Test Graphs





BLE_1M-Ant1-2480-0~Reference-PASS



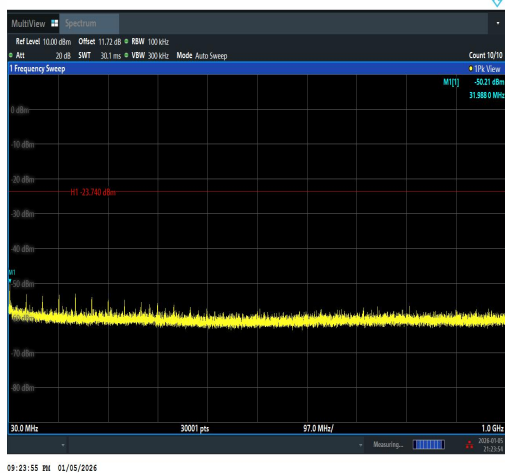
BLE_1M-Ant1-2480-30~1000-PASS



BLE_1M-Ant1-2480-1000~26500-PASS



BLE_2M-Ant1-2402-0~Reference-PASS



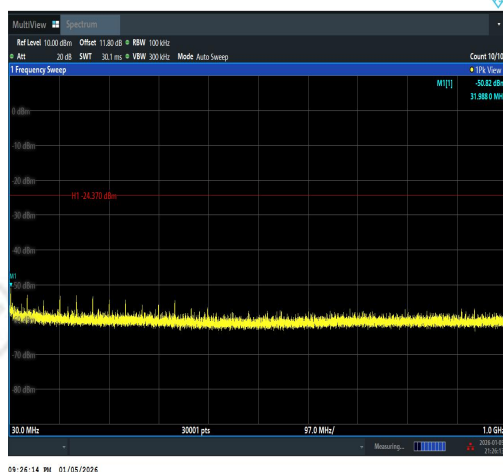
BLE_2M-Ant1-2402-30~1000-PASS



BLE_2M-Ant1-2402-1000~26500-PASS



BLE_2M-Ant1-2440-0~Reference-PASS



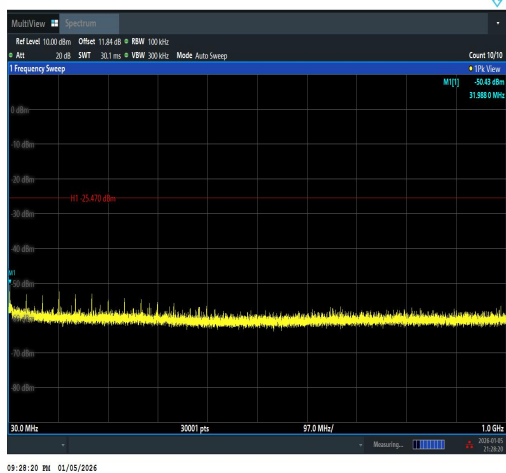
BLE_2M-Ant1-2440-30~1000-PASS



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

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.40	0.63	63.49	1.97
BLE_1M	Ant1	2440	0.40	0.63	63.49	1.97
BLE_1M	Ant1	2480	0.40	0.63	63.49	1.97
BLE_2M	Ant1	2402	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2440	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2480	0.21	0.63	33.33	4.77

Test Graphs



*** End of Report ***