

Appendix: Bluetooth LE of RCA-02-08

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

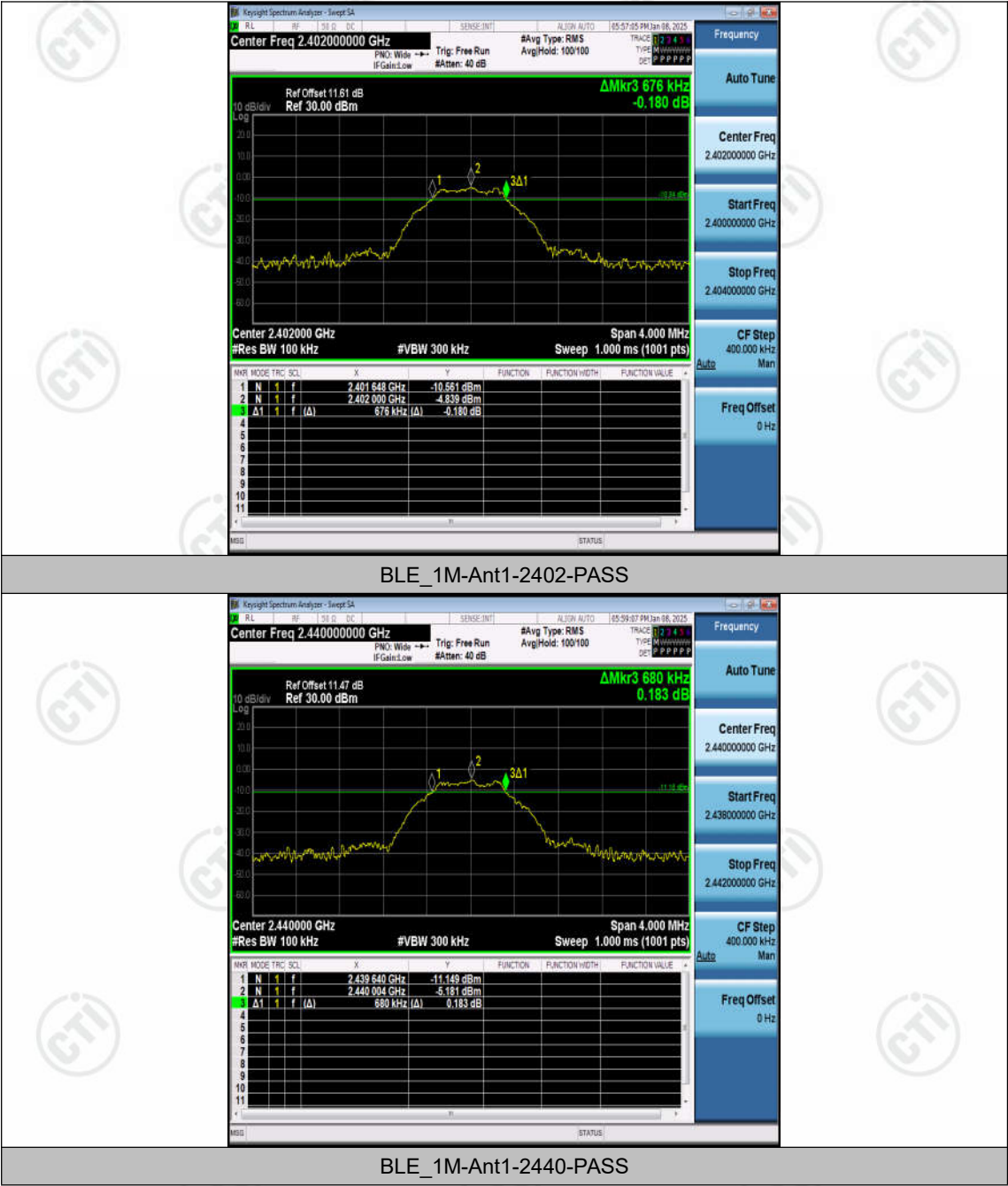
 Test Graphs 24

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.676	2401.648	2402.324	0.5	PASS
BLE_1M	Ant1	2440	0.680	2439.640	2440.320	0.5	PASS
BLE_1M	Ant1	2480	0.696	2479.628	2480.324	0.5	PASS

Test Graphs



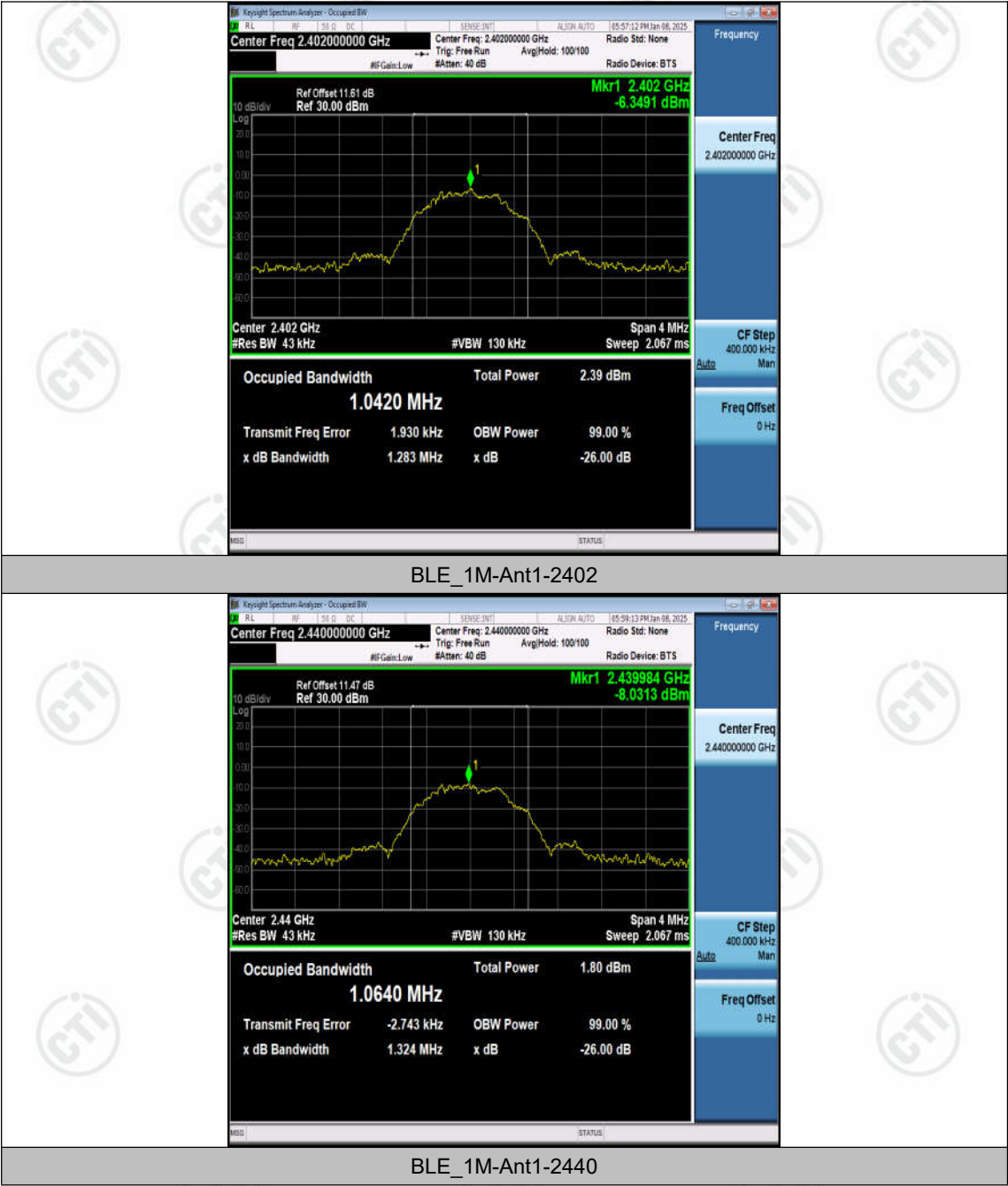


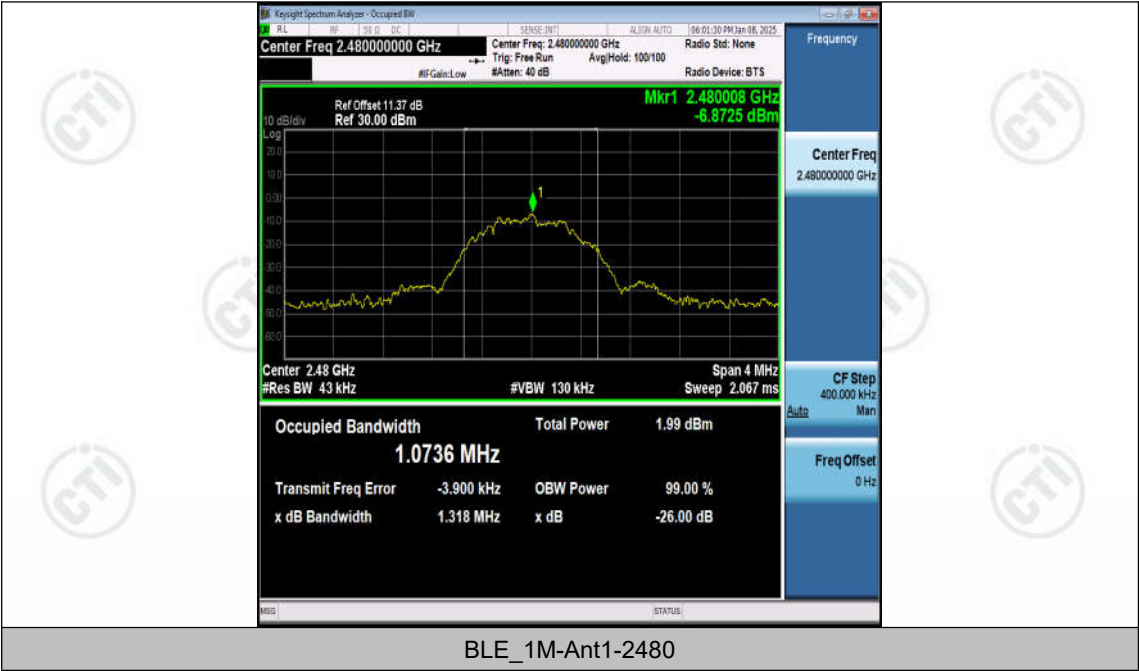
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0420	2401.4809	2402.5229	---	---
BLE_1M	Ant1	2440	1.0640	2439.4653	2440.5293	---	---
BLE_1M	Ant1	2480	1.0736	2479.4593	2480.5329	---	---

Test Graphs





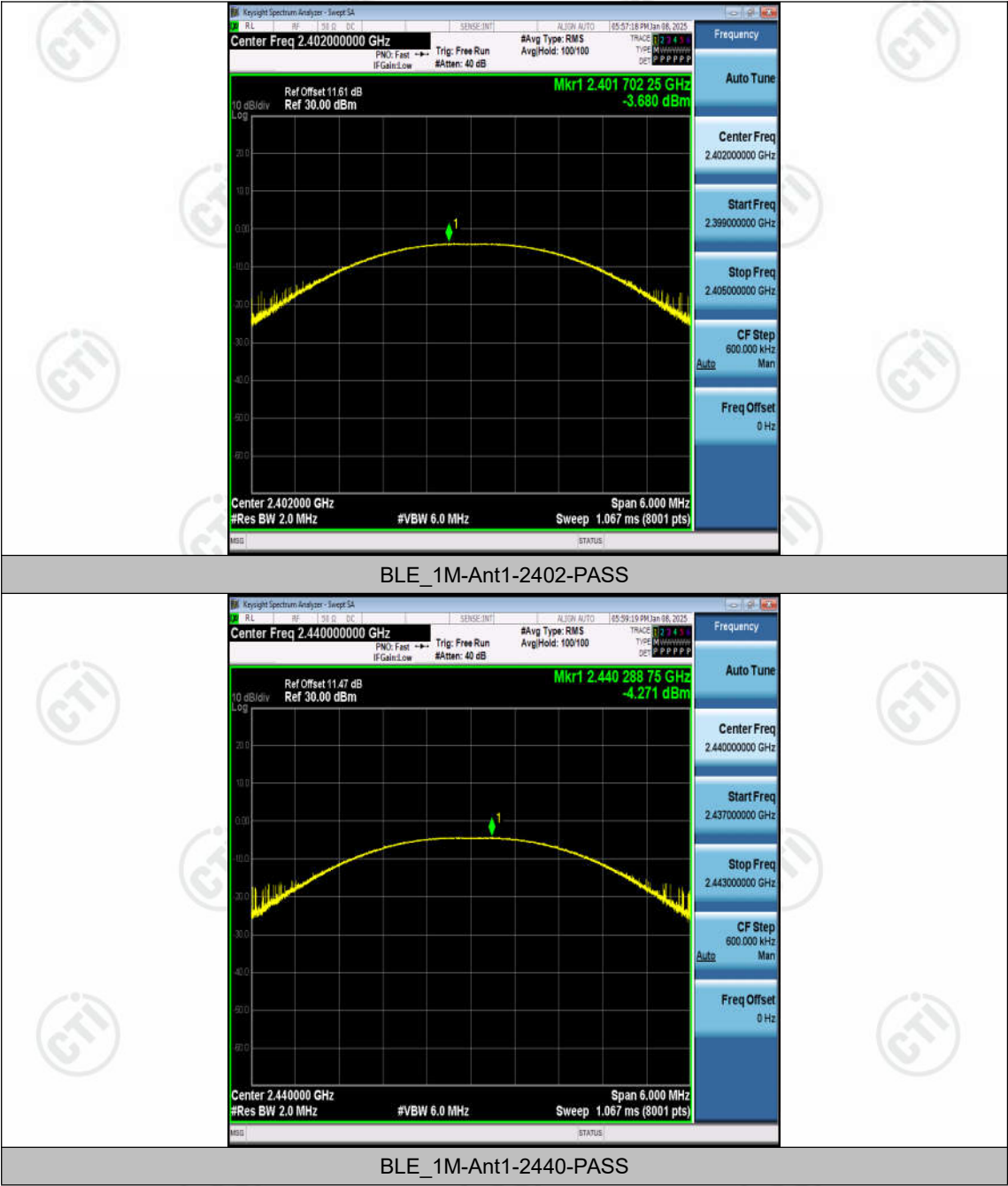
BLE_1M-Ant1-2480

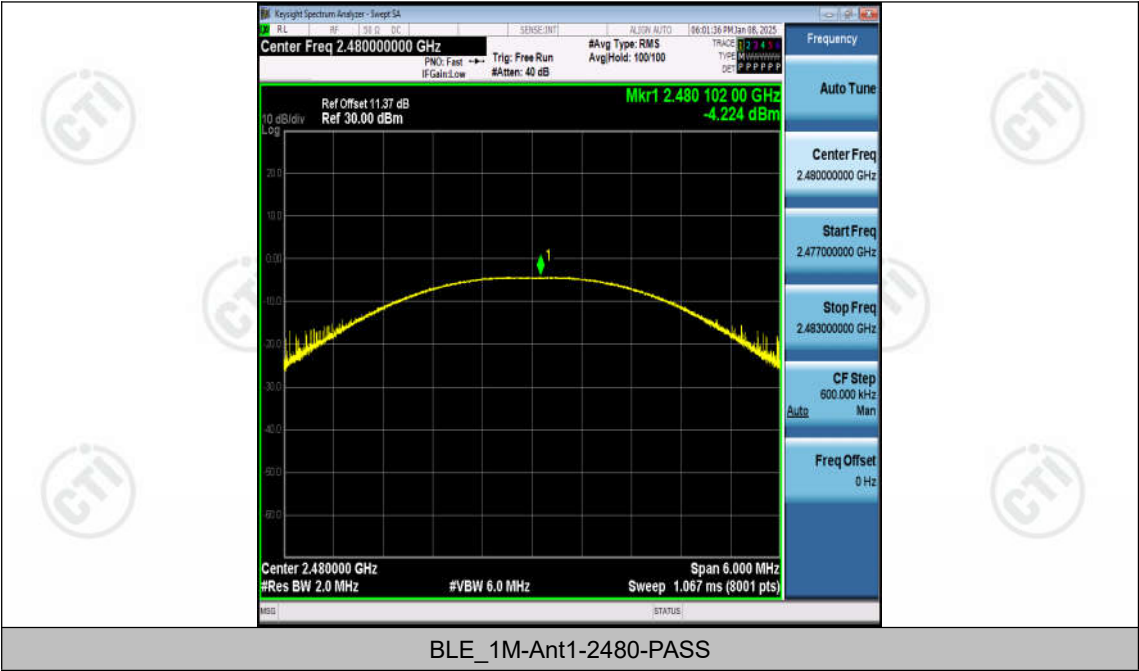
Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.68	≤30	PASS
BLE_1M	Ant1	2440	-4.27	≤30	PASS
BLE_1M	Ant1	2480	-4.22	≤30	PASS

Test Graphs Peak



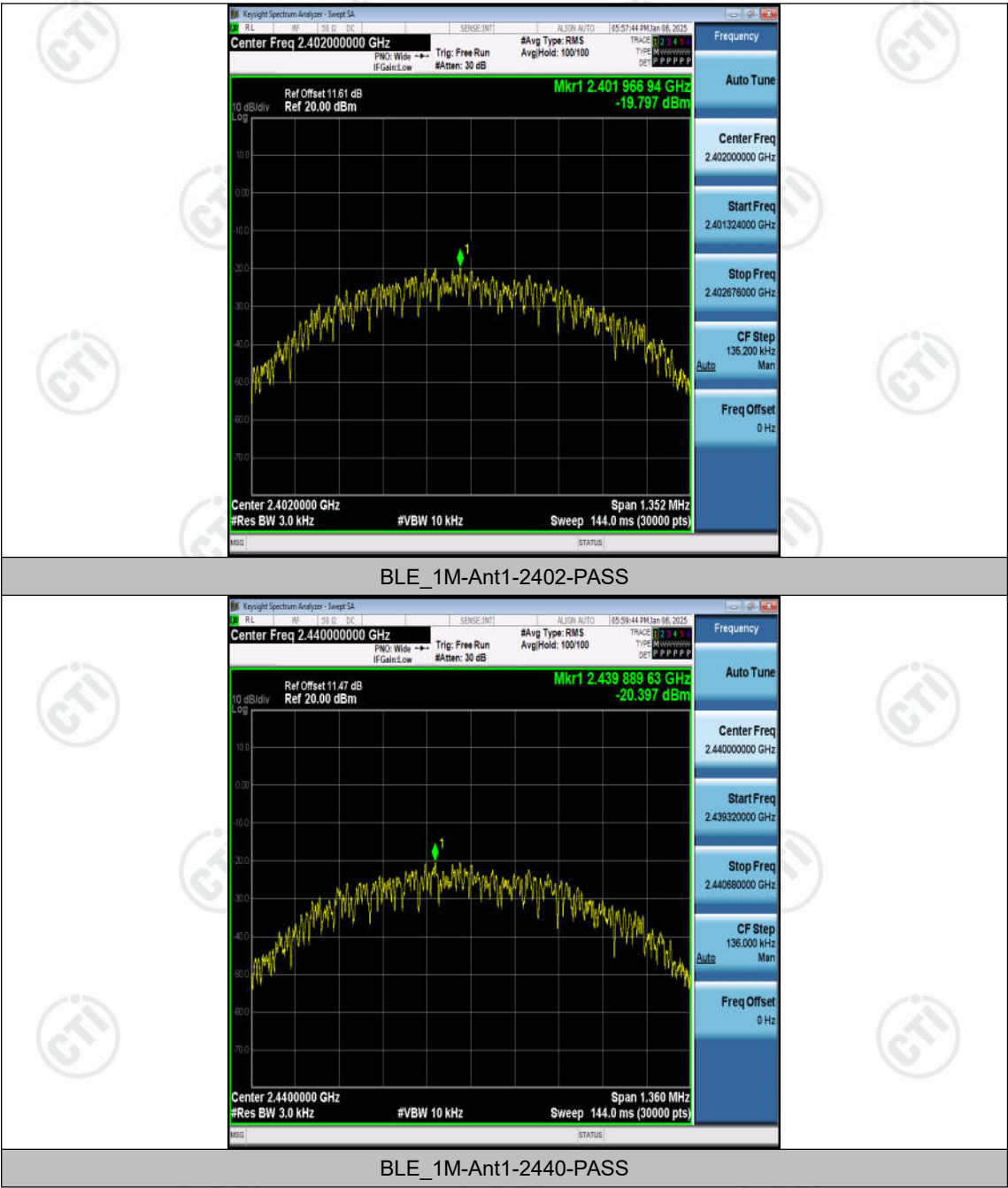


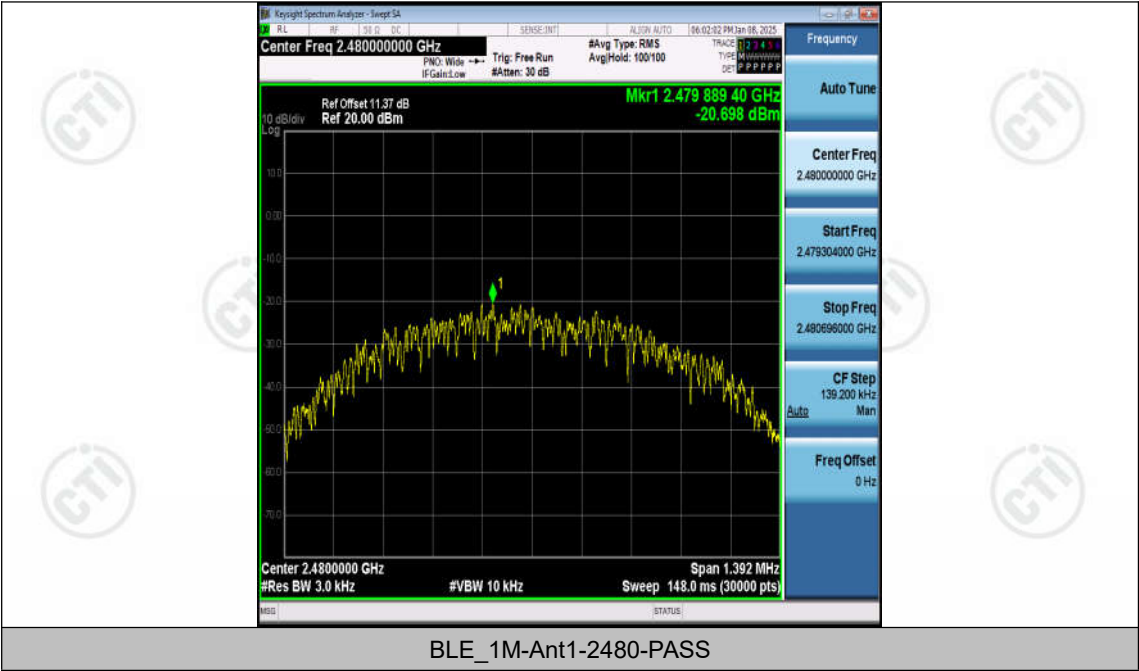
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.80	≤8.00	PASS
BLE_1M	Ant1	2440	-20.40	≤8.00	PASS
BLE_1M	Ant1	2480	-20.70	≤8.00	PASS

Test Graphs



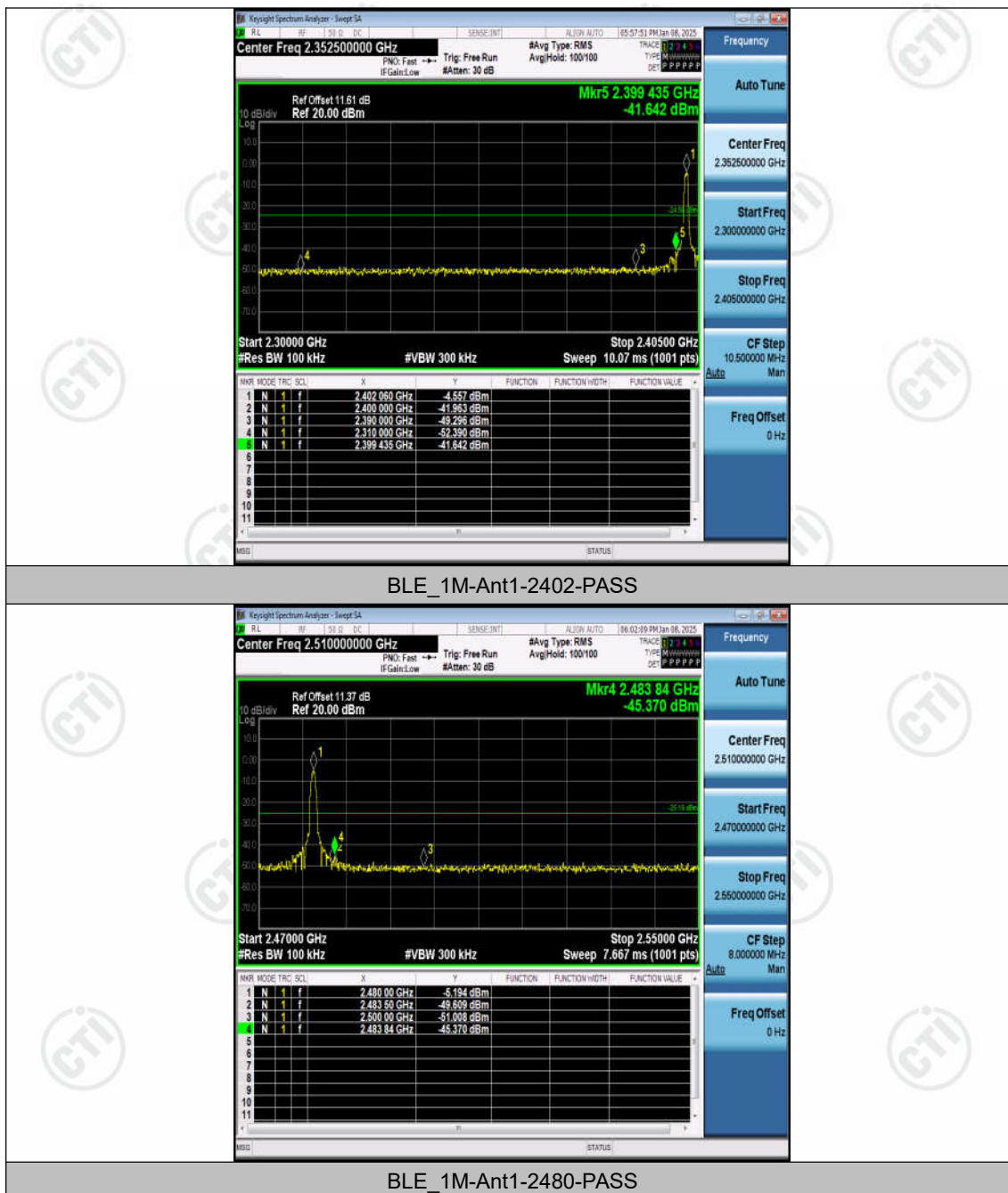


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.56	-41.64	≤-24.56	PASS
BLE_1M	Ant1	High	2480	-5.19	-45.37	≤-25.19	PASS

Test Graphs

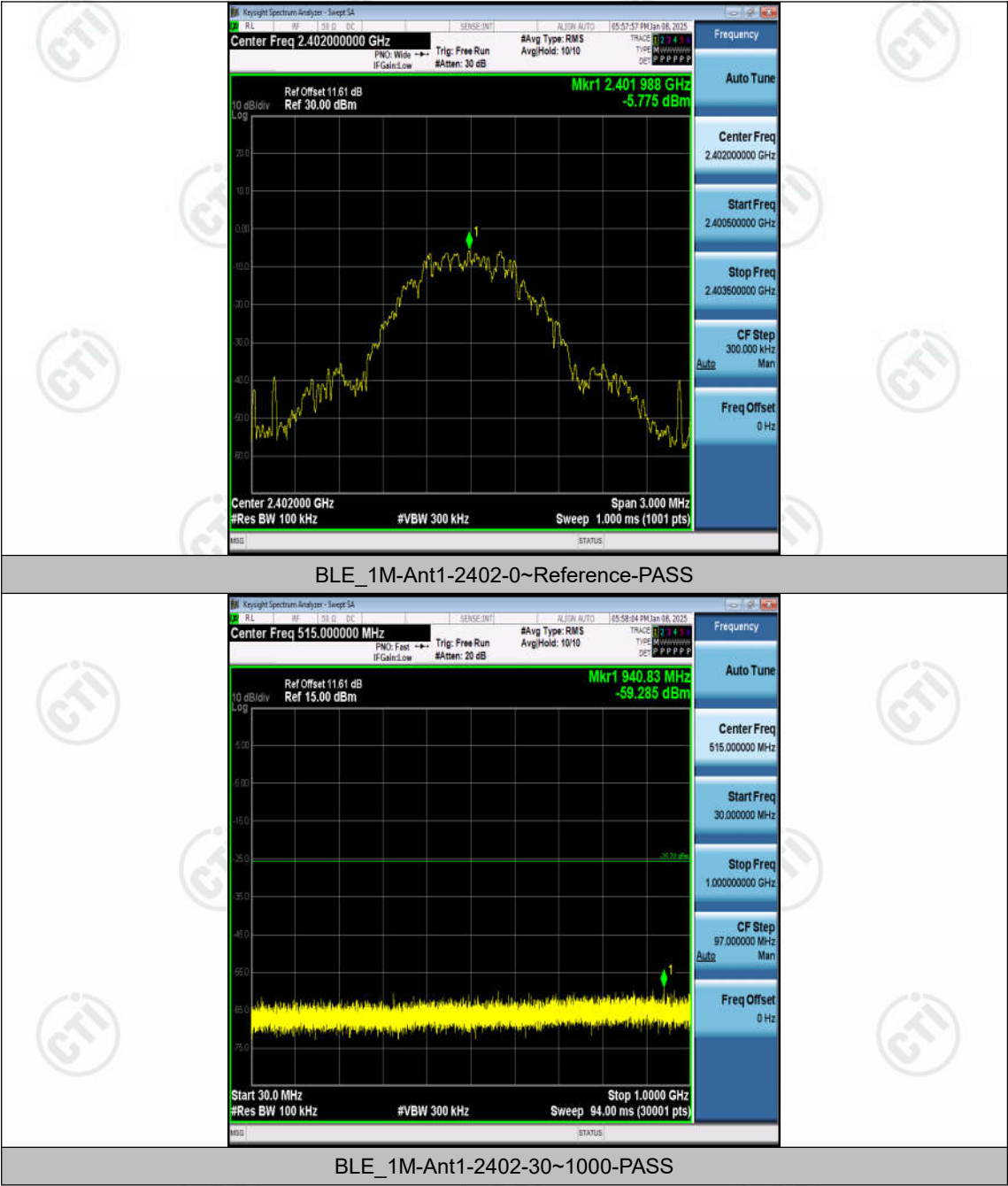


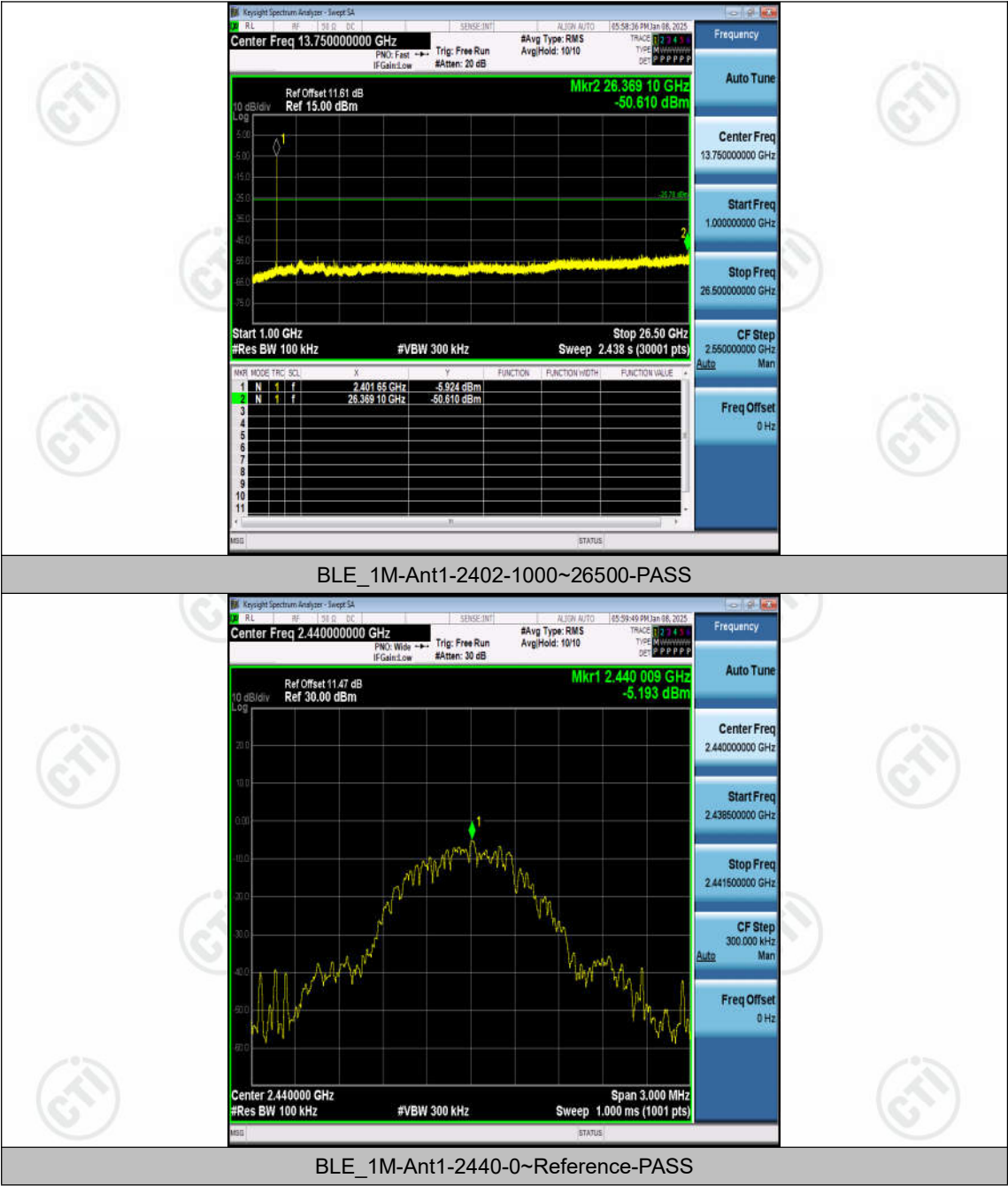
Appendix F: Conducted Spurious Emission

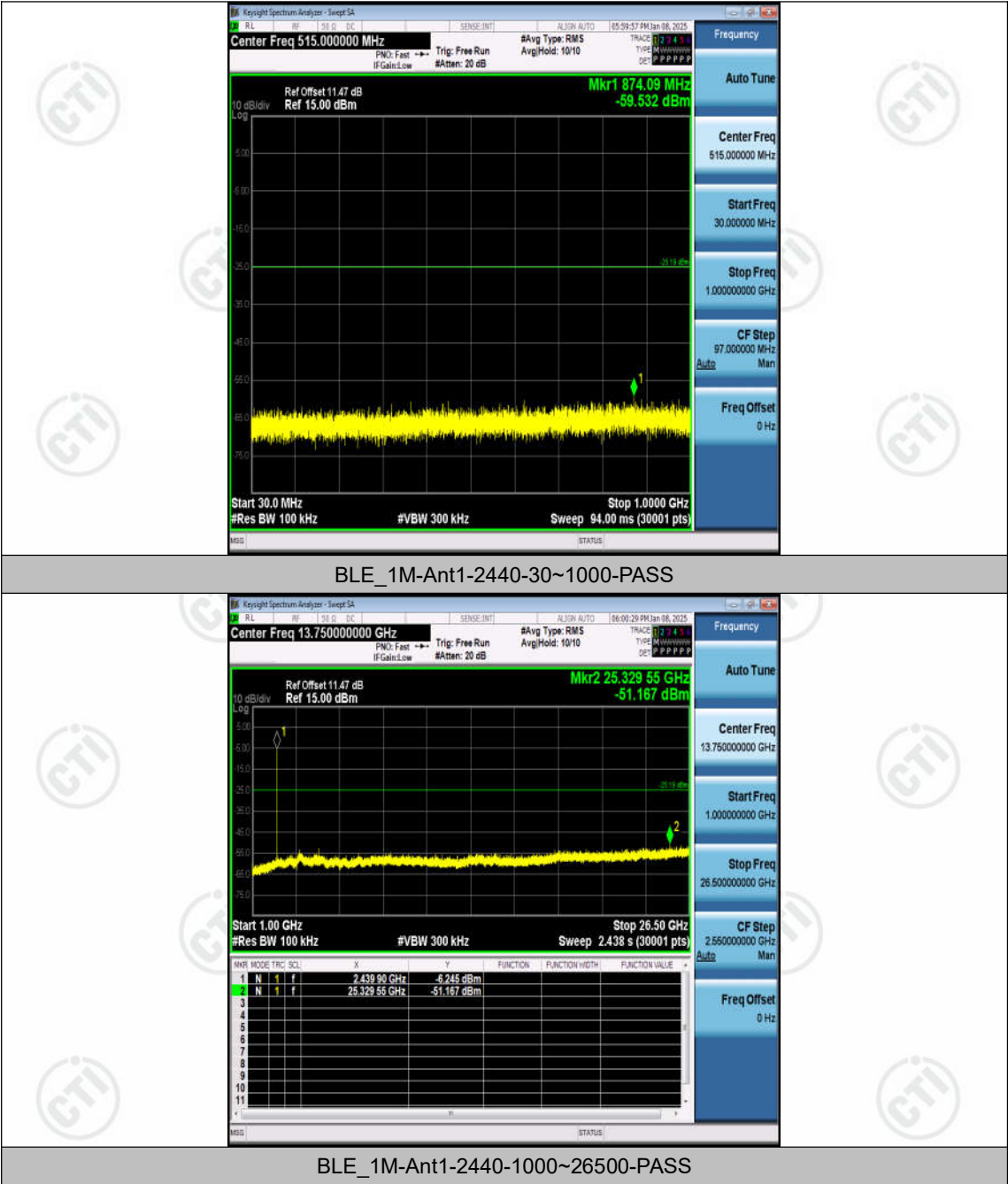
Test Result

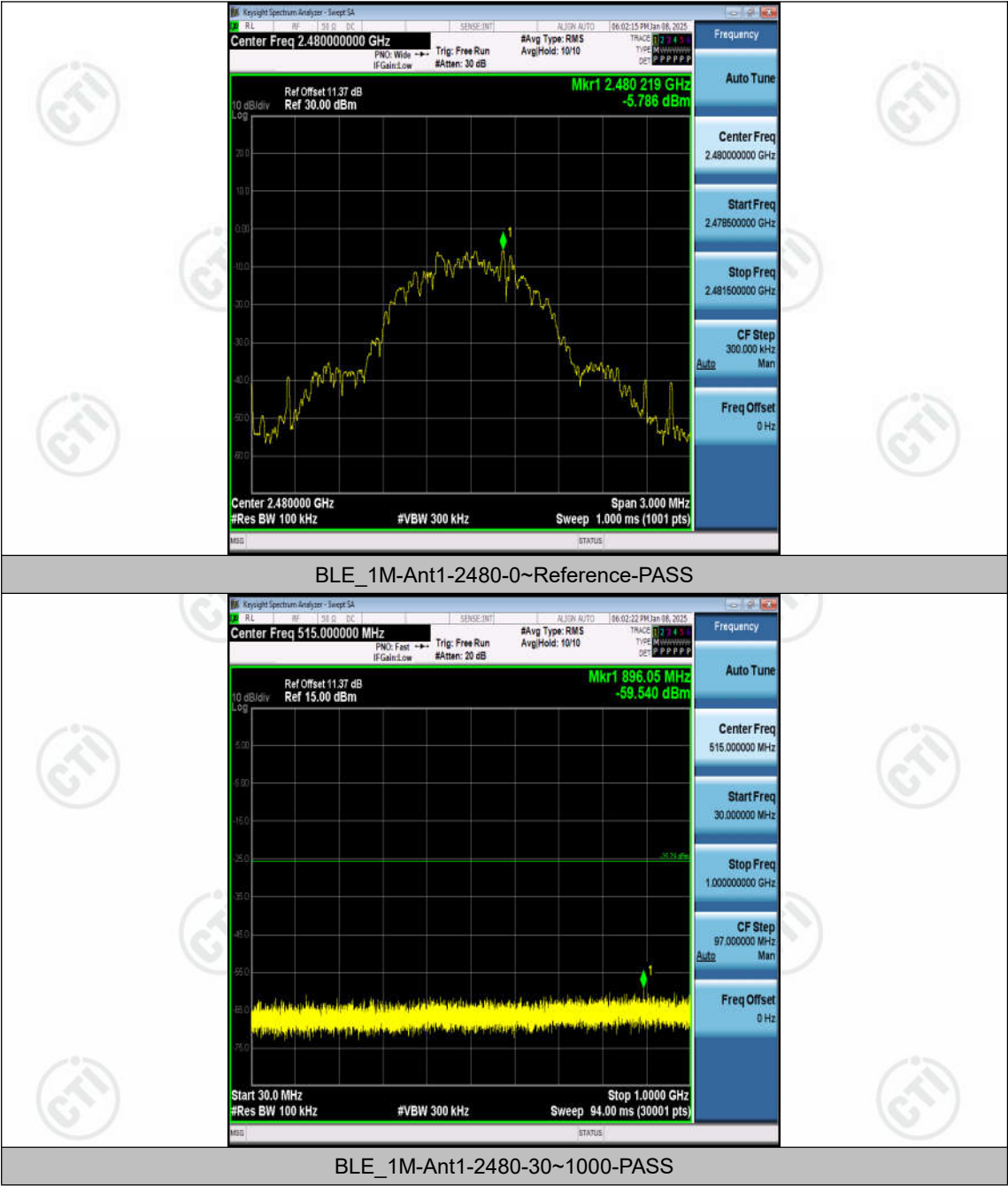
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-5.78	-5.78	---	PASS
BLE_1M	Ant1	2402	30~1000	-5.78	-59.29	≤-25.78	PASS
BLE_1M	Ant1	2402	1000~26500	-5.78	-50.61	≤-25.78	PASS
BLE_1M	Ant1	2440	0~Reference	-5.19	-5.19	---	PASS
BLE_1M	Ant1	2440	30~1000	-5.19	-59.53	≤-25.19	PASS
BLE_1M	Ant1	2440	1000~26500	-5.19	-51.17	≤-25.19	PASS
BLE_1M	Ant1	2480	0~Reference	-5.79	-5.79	---	PASS
BLE_1M	Ant1	2480	30~1000	-5.79	-59.54	≤-25.79	PASS
BLE_1M	Ant1	2480	1000~26500	-5.79	-51.04	≤-25.79	PASS

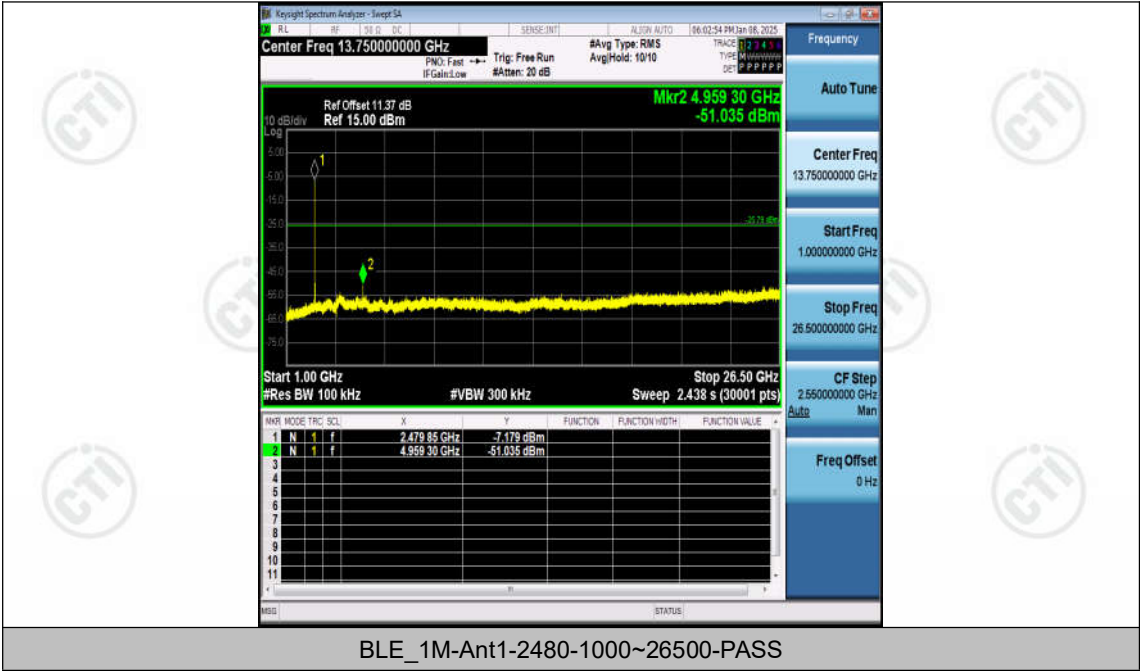
Test Graphs









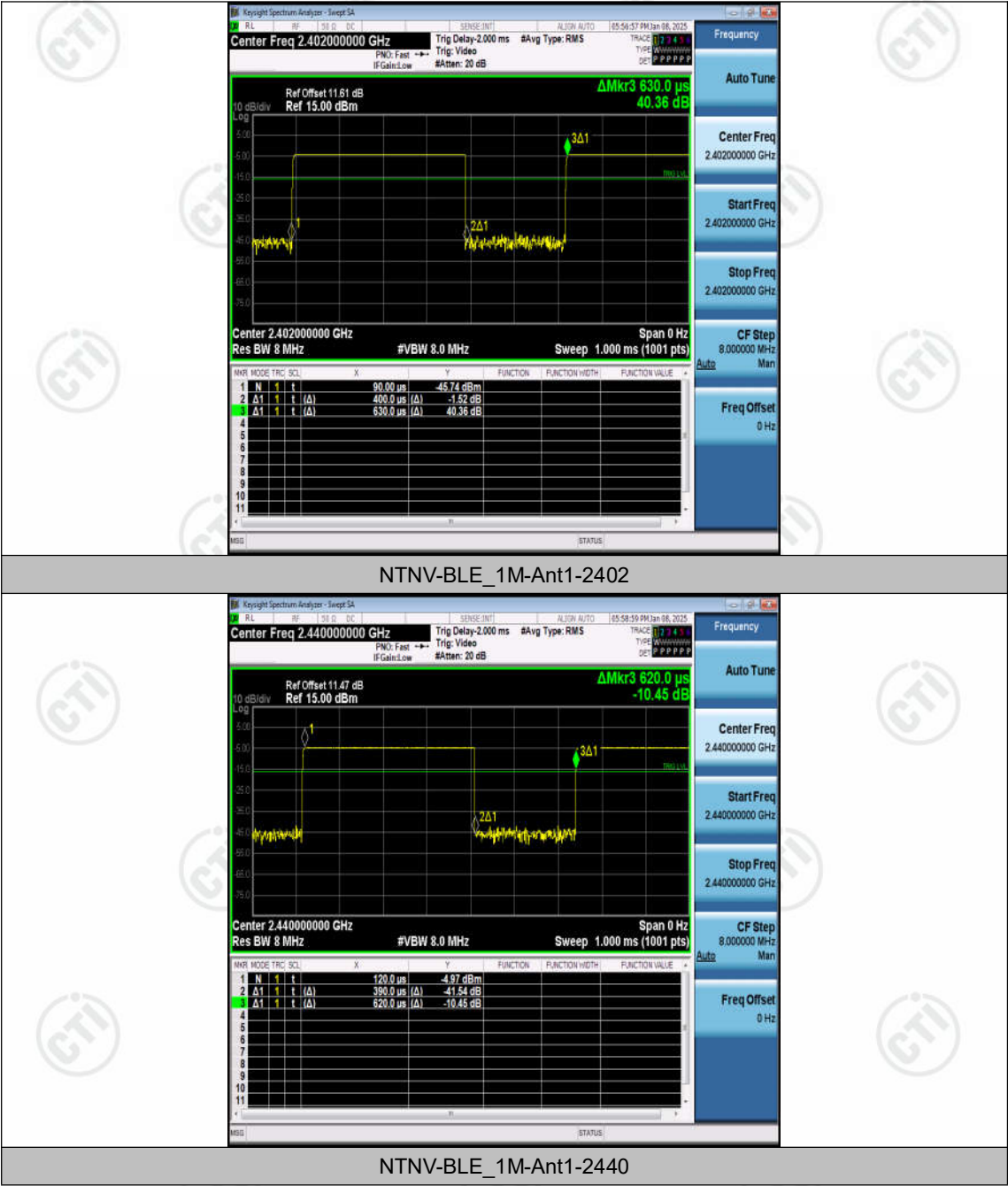


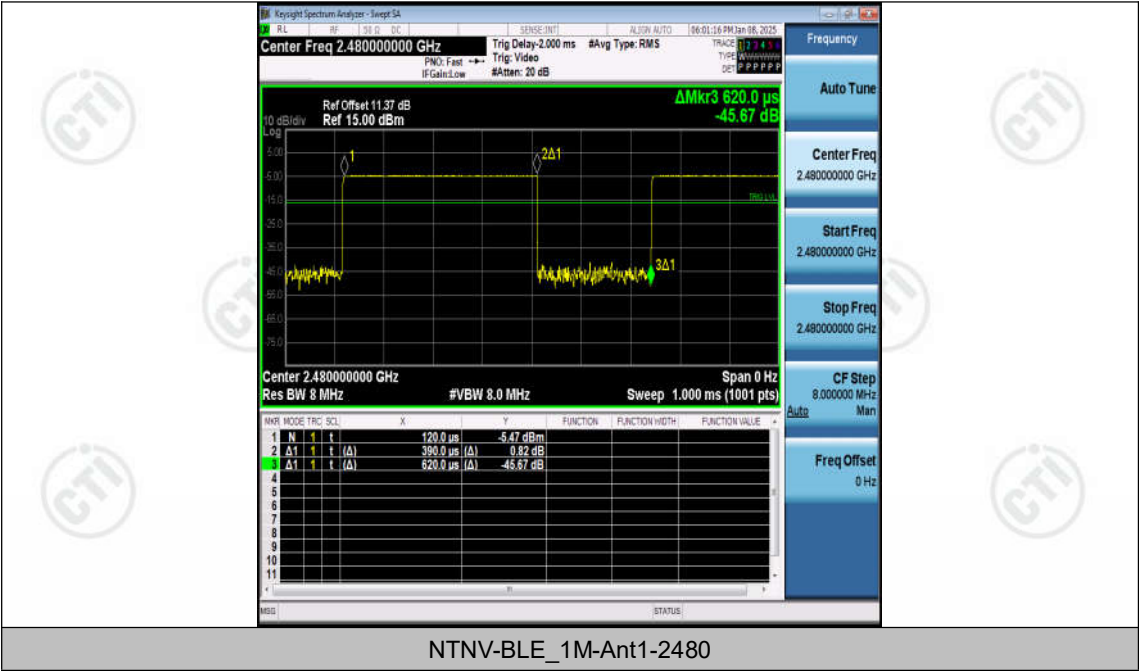
Appendix G: Duty Cycle

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	0.39	0.62	62.90	2.01
BLE_1M	Ant1	2480	0.39	0.62	62.90	2.01

Test Graphs





END OF REPORT