

Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth 3

 Test Result 3

 Test Graphs 4

Appendix B: Occupied Channel Bandwidth 7

 Test Result 7

 Test Graphs 8

Appendix C: Maximum conducted output power 11

 Test Result Peak 11

 Test Graphs Peak 12

Appendix D: Maximum power spectral density 15

 Test Result 15

 Test Graphs 16

Appendix E: Band edge measurements 19

 Test Result 19

 Test Graphs 20

Appendix F: Conducted Spurious Emission 22

 Test Result 22

 Test Graphs 23

Appendix G: Duty Cycle 32

 Test Result 32

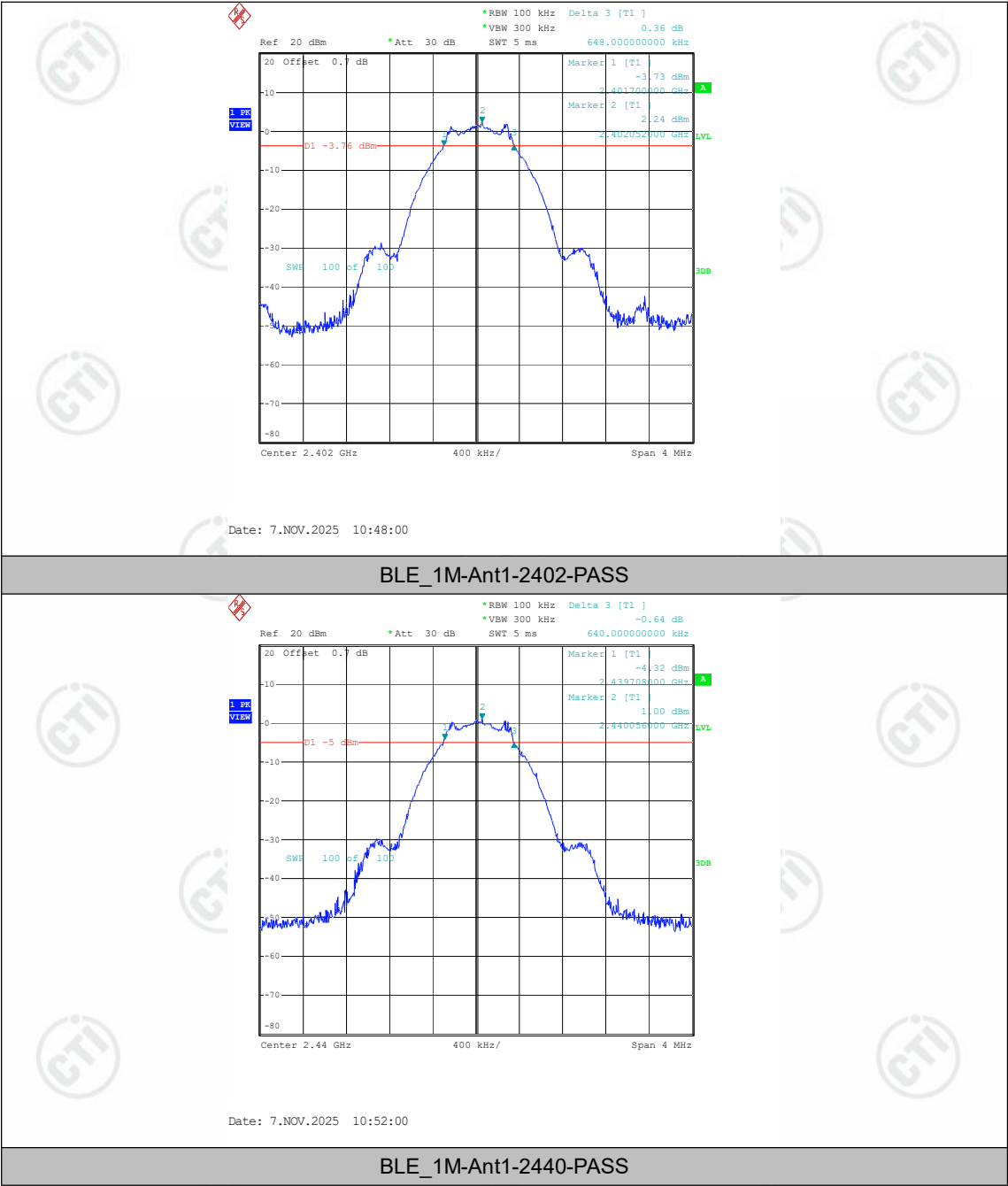
 Test Graphs 33

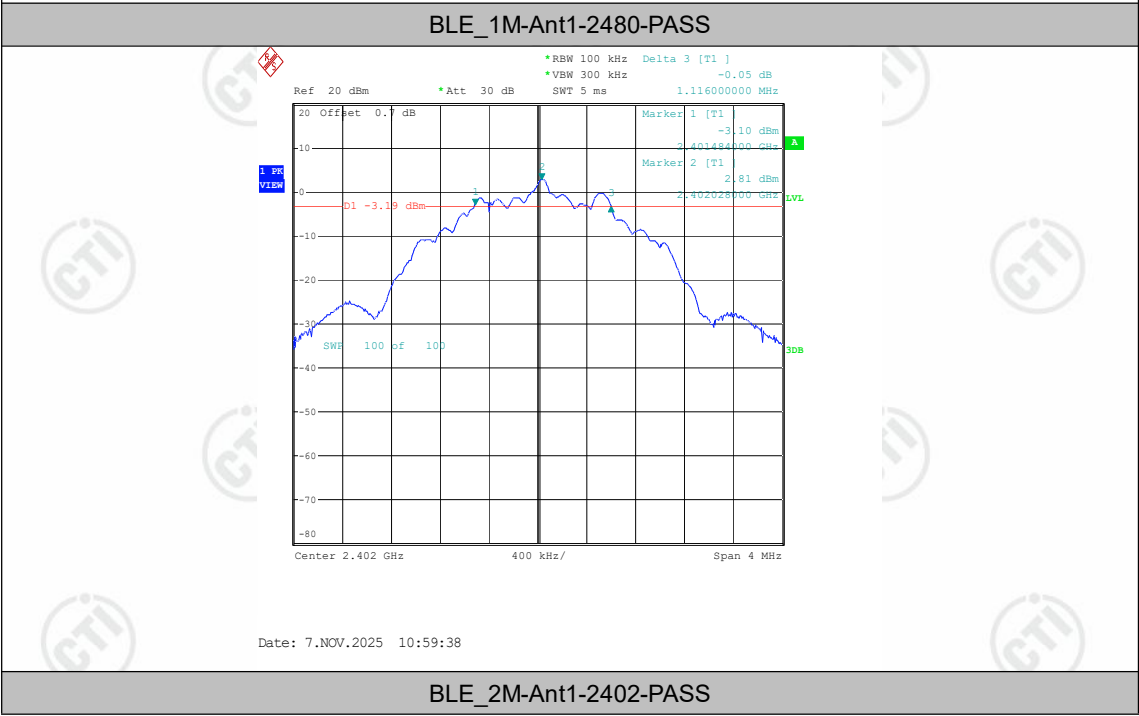
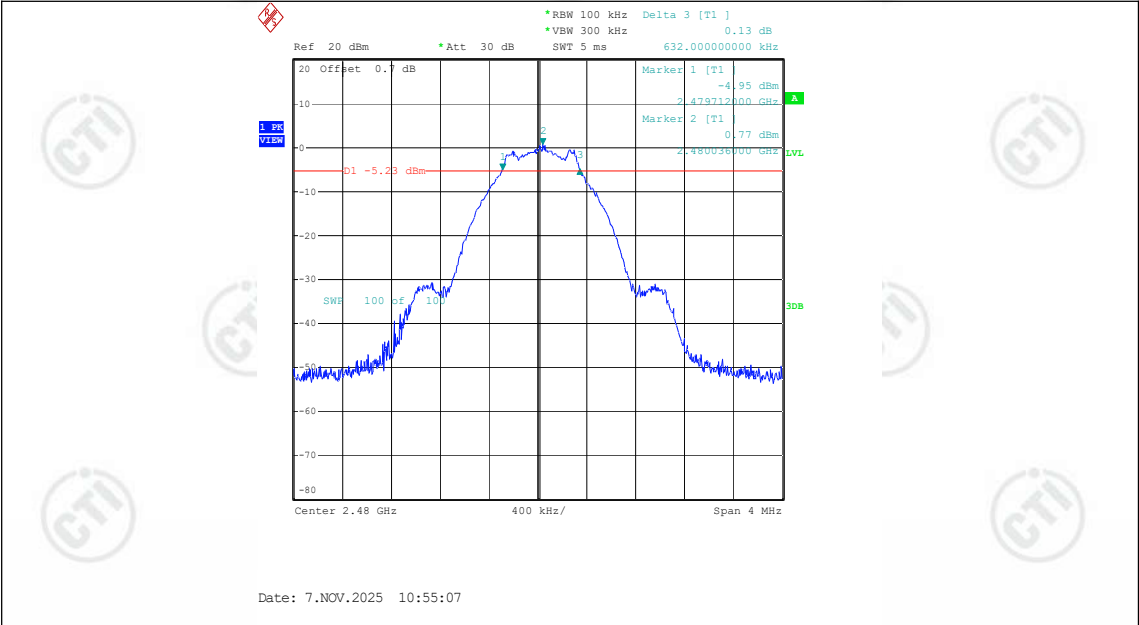
Appendix A: DTS Bandwidth

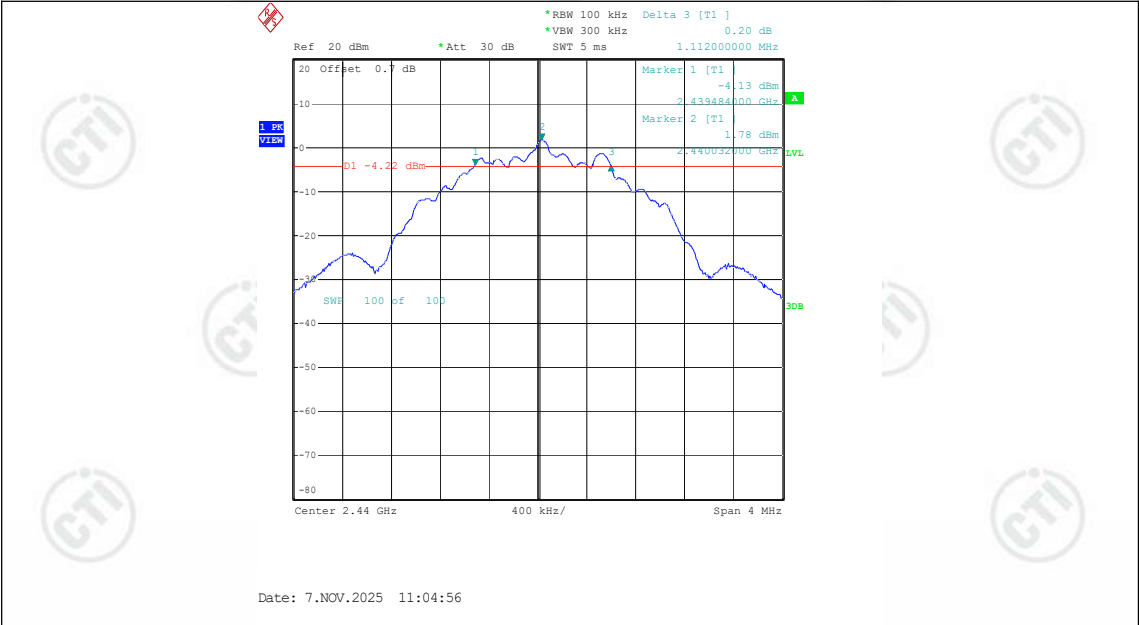
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.65	2401.70	2402.35	0.5	PASS
BLE_1M	Ant1	2440	0.64	2439.71	2440.35	0.5	PASS
BLE_1M	Ant1	2480	0.63	2479.71	2480.34	0.5	PASS
BLE_2M	Ant1	2402	1.12	2401.48	2402.60	0.5	PASS
BLE_2M	Ant1	2440	1.11	2439.48	2440.60	0.5	PASS
BLE_2M	Ant1	2480	1.12	2479.48	2480.60	0.5	PASS

Test Graphs





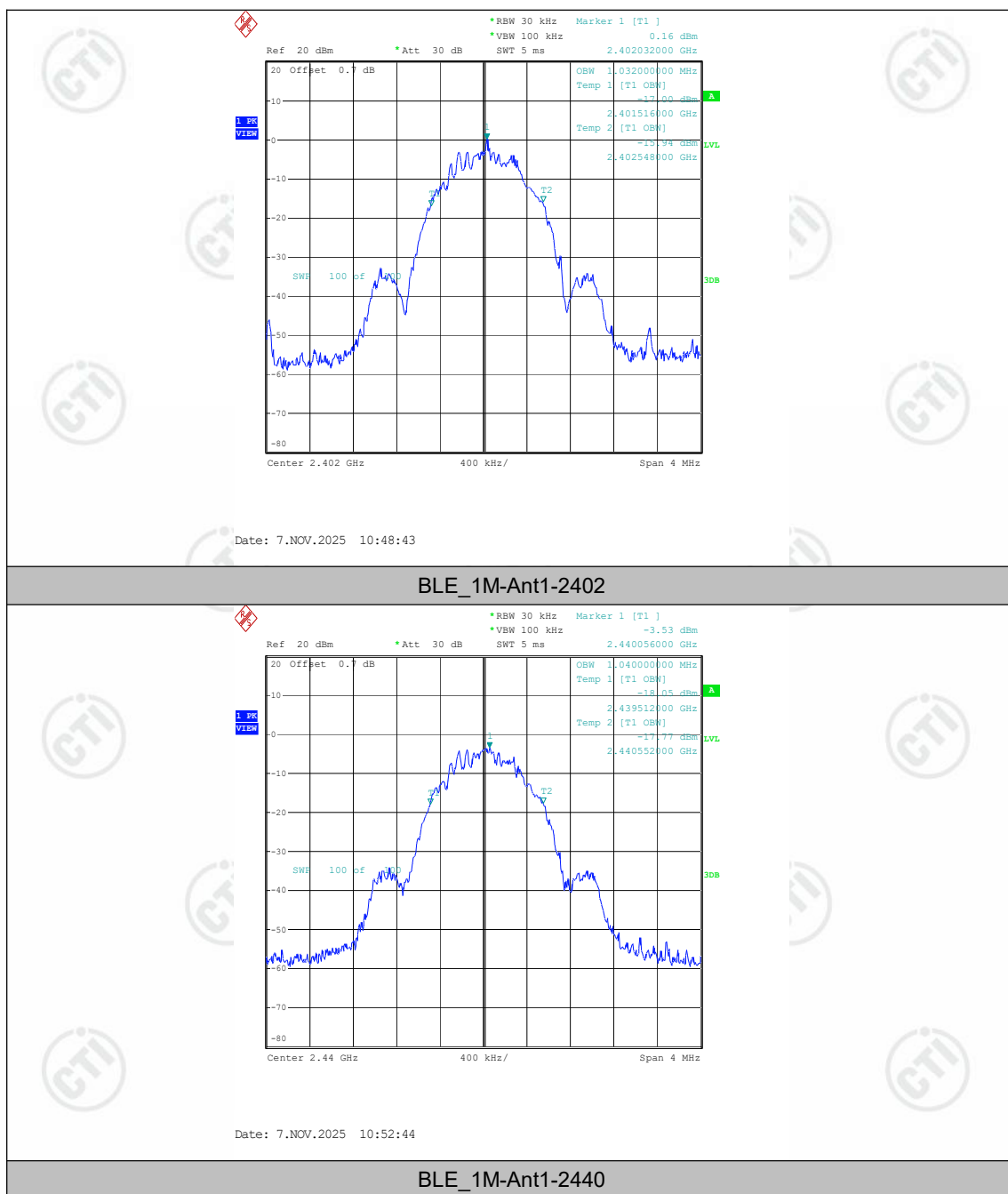


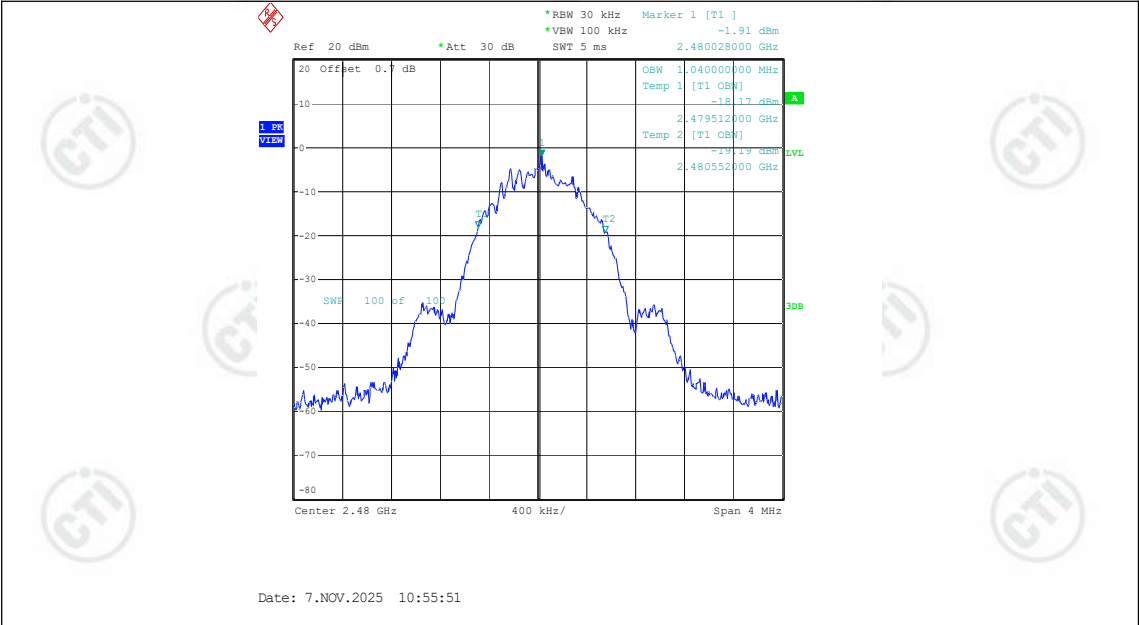
Appendix B: Occupied Channel Bandwidth

Test Result

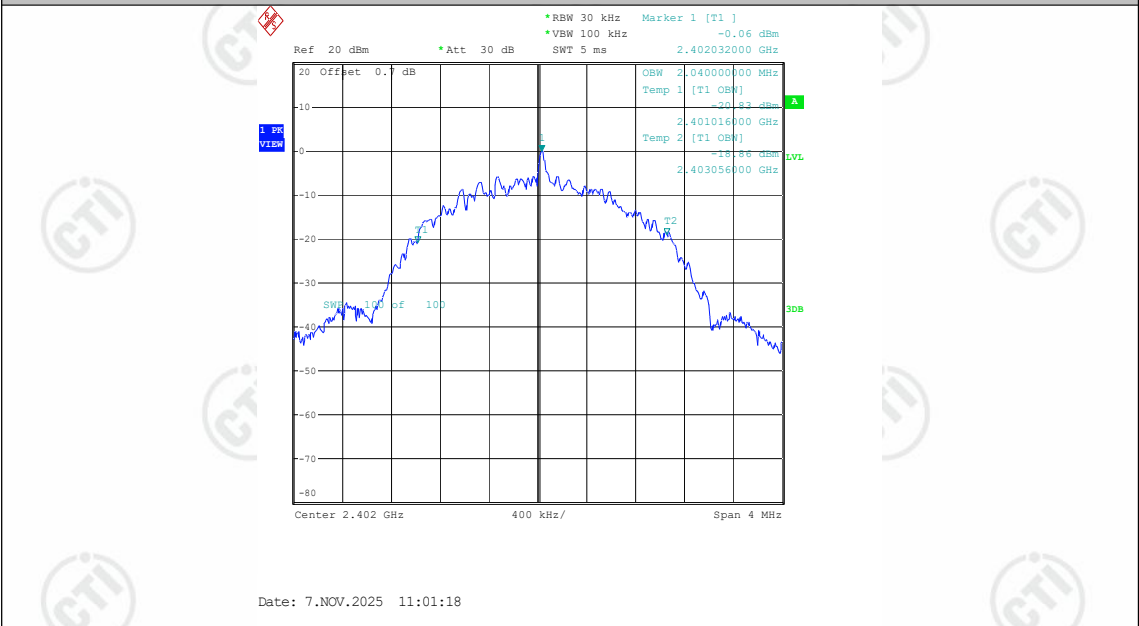
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0320	---	---
BLE_1M	Ant1	2440	1.0400	---	---
BLE_1M	Ant1	2480	1.0400	---	---
BLE_2M	Ant1	2402	2.0400	---	---
BLE_2M	Ant1	2440	2.0640	---	---
BLE_2M	Ant1	2480	2.0640	---	---

Test Graphs

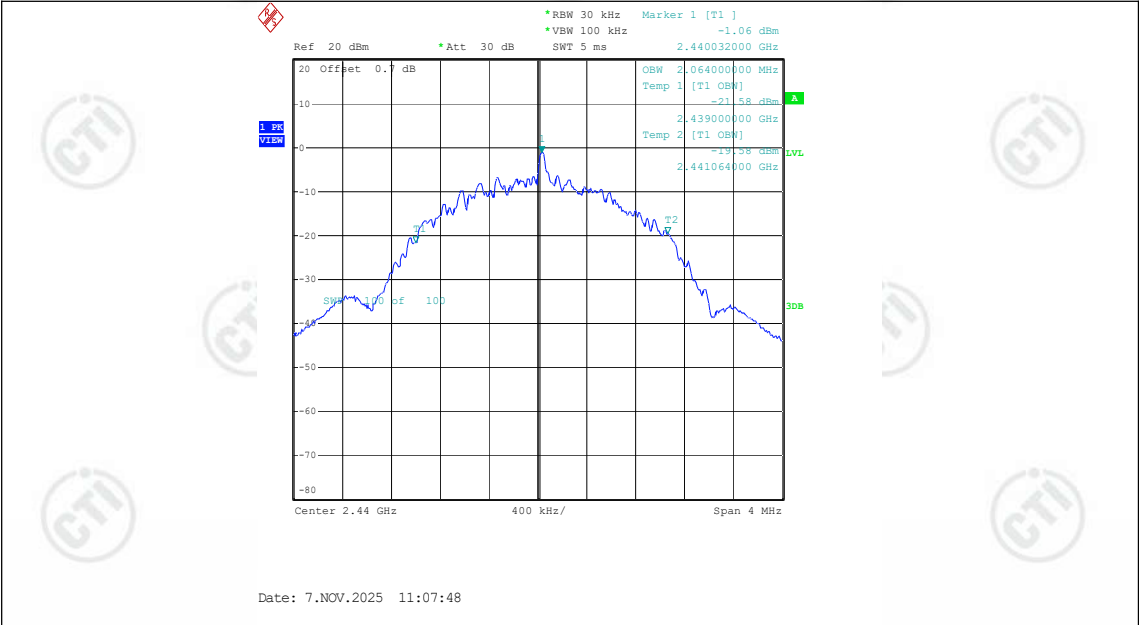




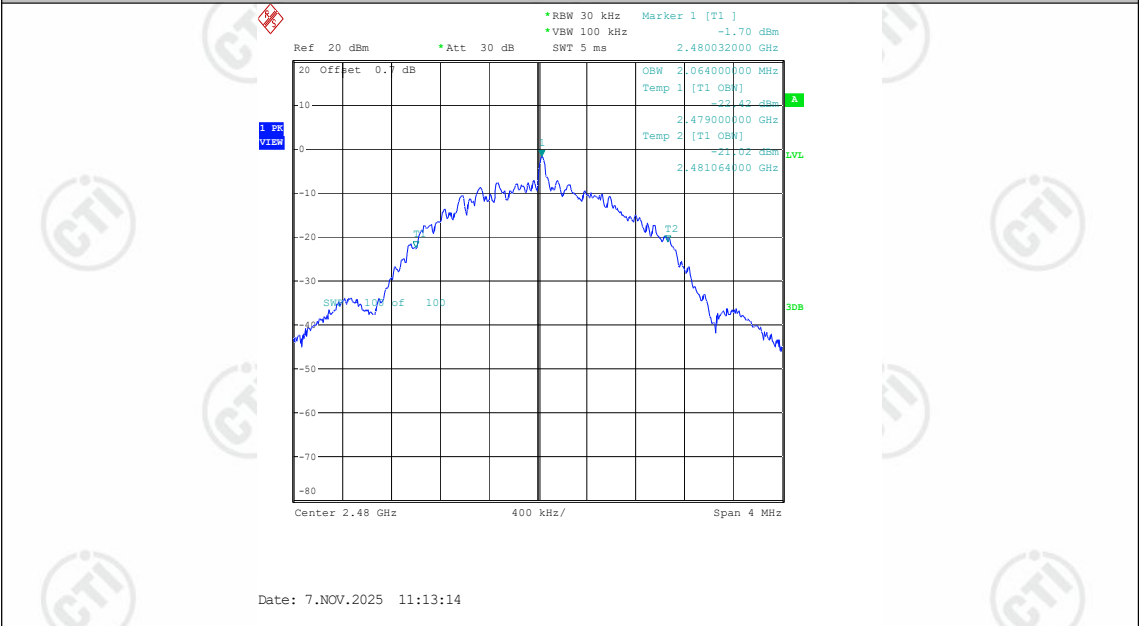
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



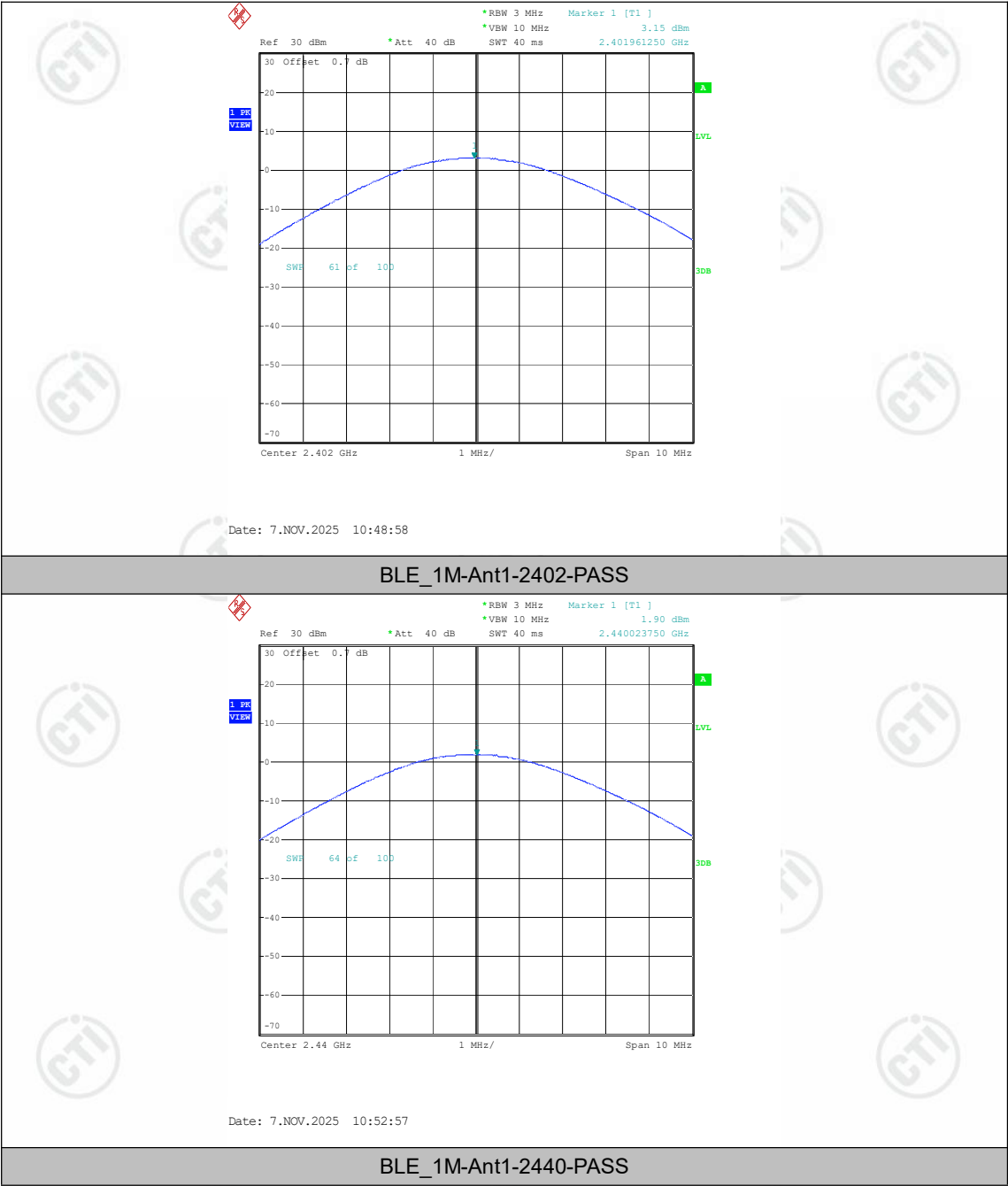
BLE_2M-Ant1-2480

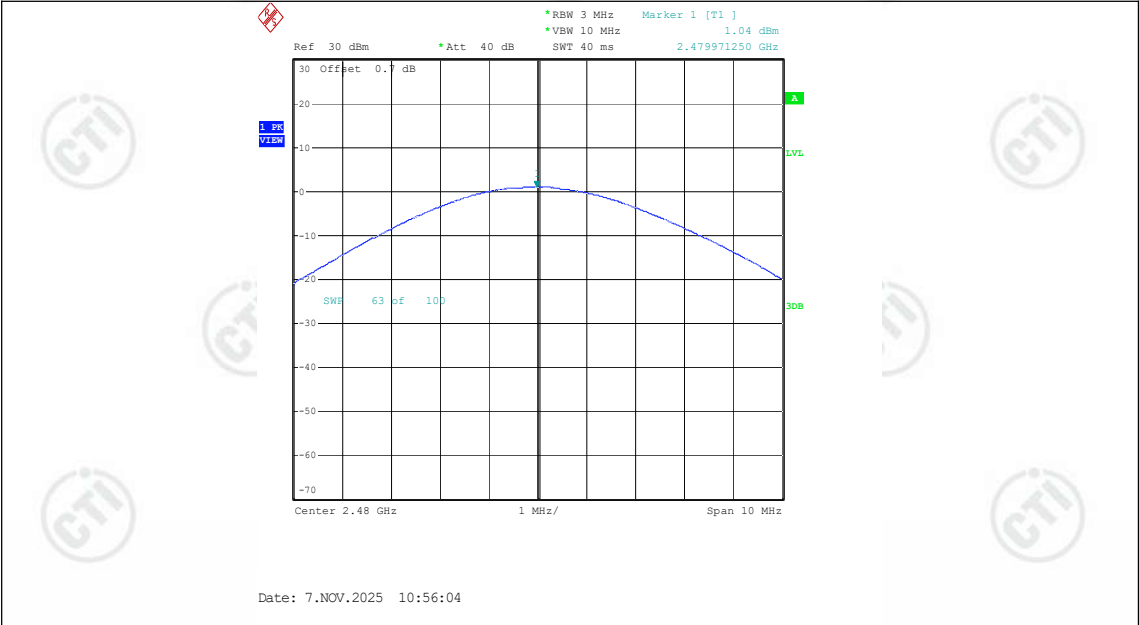
Appendix C: Maximum conducted output power

Test Result Peak

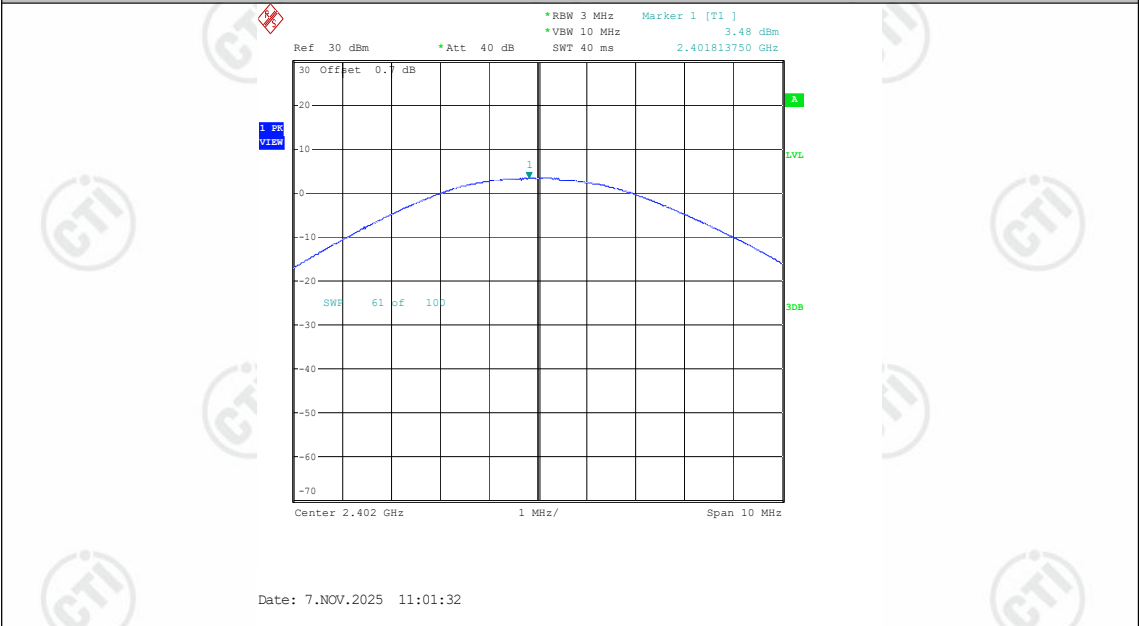
TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.15	≤30	4.69	≤36	PASS
BLE_1M	Ant1	2440	1.90	≤30	3.44	≤36	PASS
BLE_1M	Ant1	2480	1.04	≤30	2.58	≤36	PASS
BLE_2M	Ant1	2402	3.48	≤30	5.02	≤36	PASS
BLE_2M	Ant1	2440	2.27	≤30	3.81	≤36	PASS
BLE_2M	Ant1	2480	1.51	≤30	3.05	≤36	PASS

Test Graphs Peak

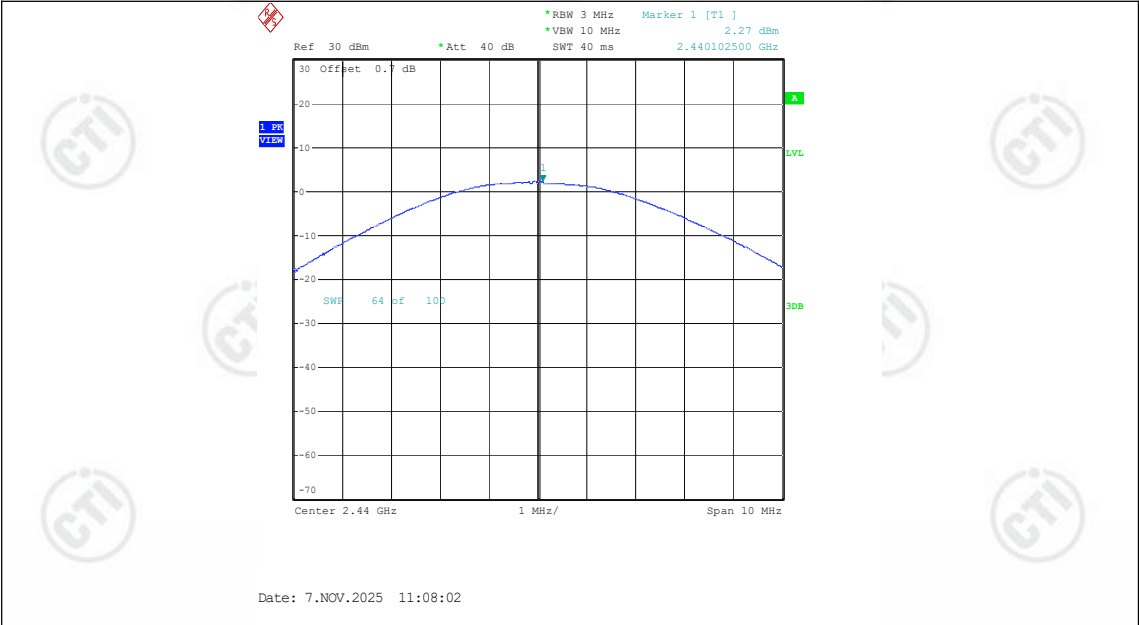




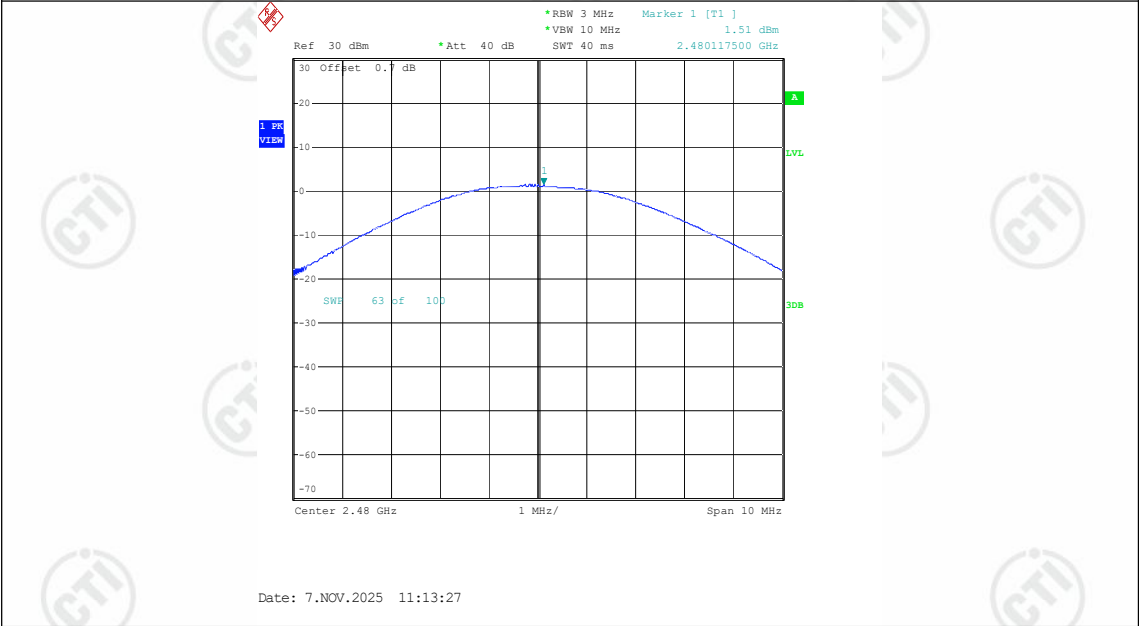
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

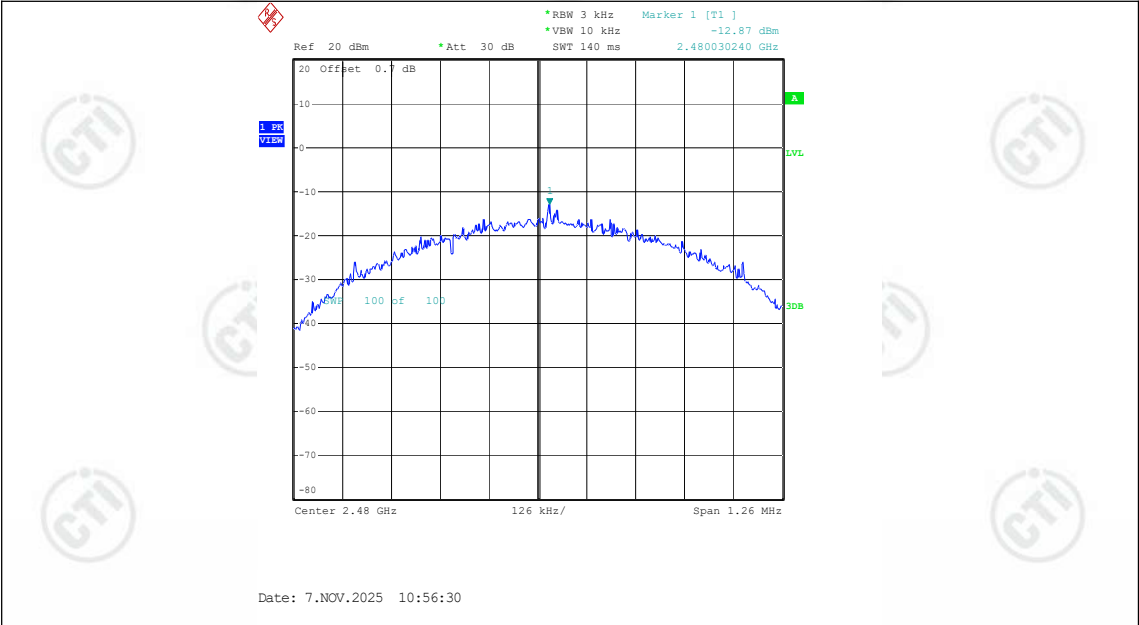


BLE_2M-Ant1-2480-PASS

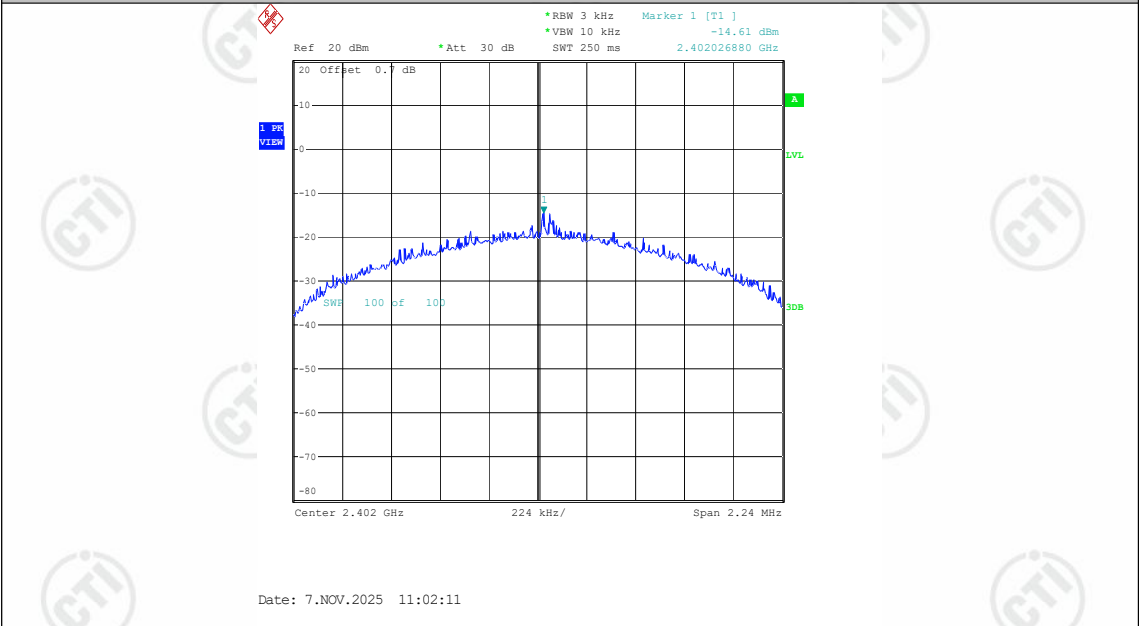
Appendix D: Maximum power spectral density

Test Result

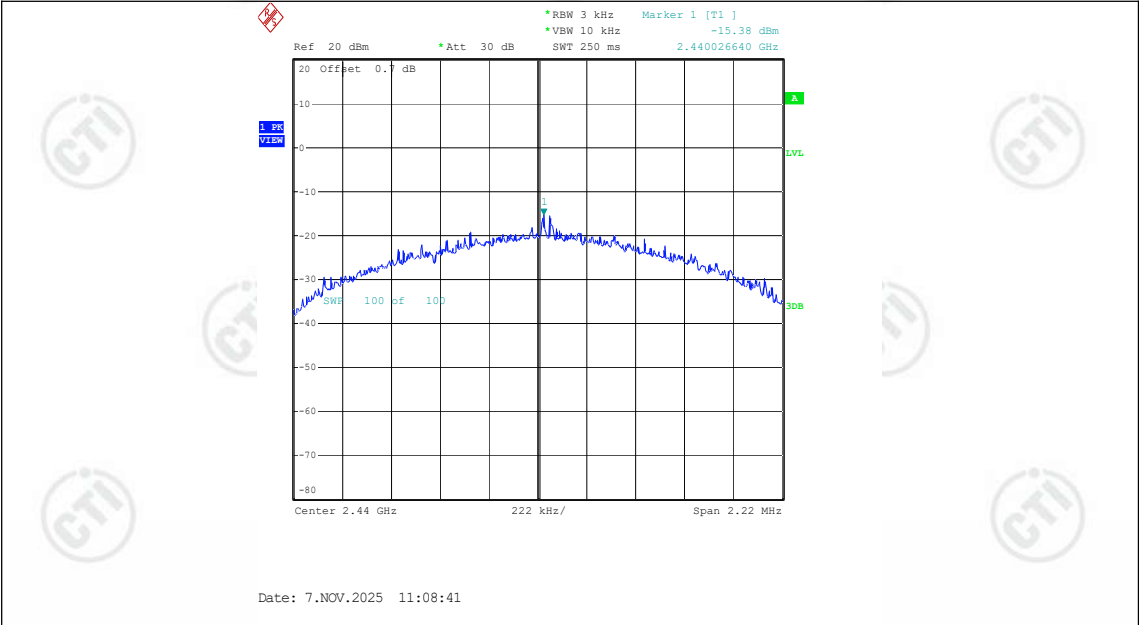
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.57	≤8.00	PASS
BLE_1M	Ant1	2440	-12.54	≤8.00	PASS
BLE_1M	Ant1	2480	-12.87	≤8.00	PASS
BLE_2M	Ant1	2402	-14.61	≤8.00	PASS
BLE_2M	Ant1	2440	-15.38	≤8.00	PASS
BLE_2M	Ant1	2480	-15.88	≤8.00	PASS



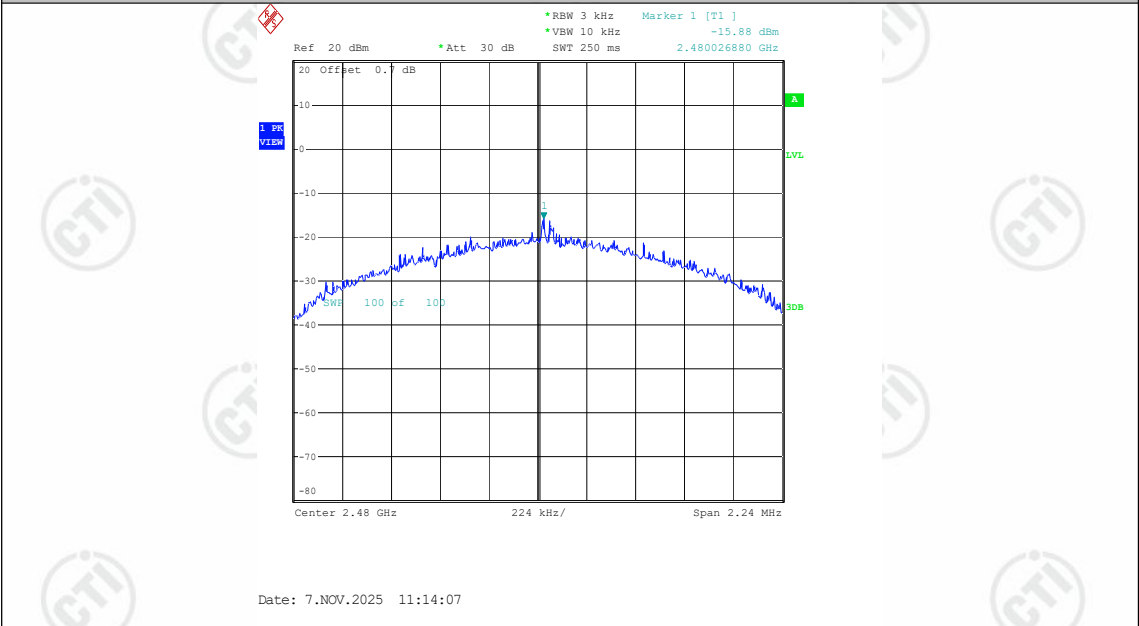
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



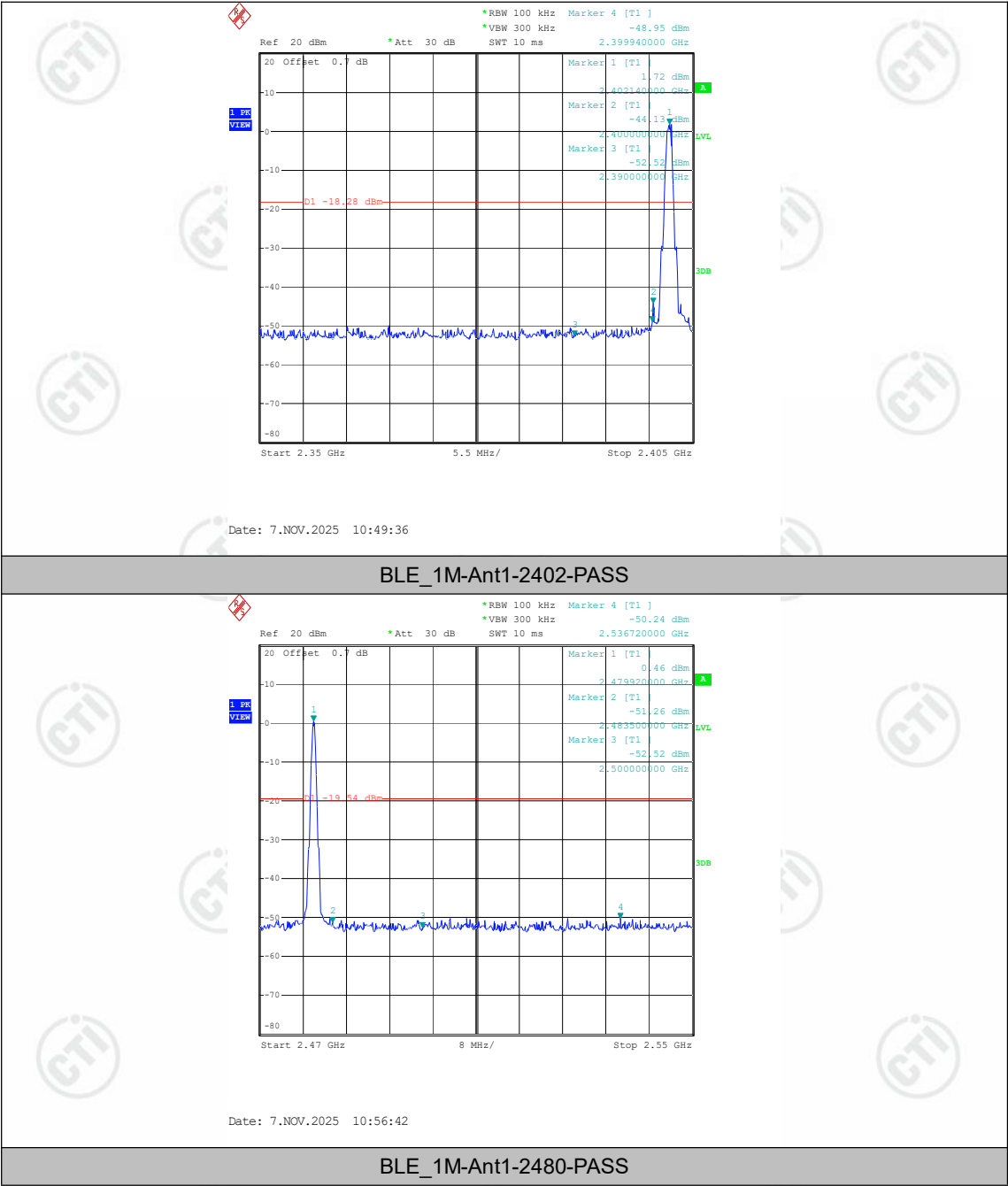
BLE_2M-Ant1-2480-PASS

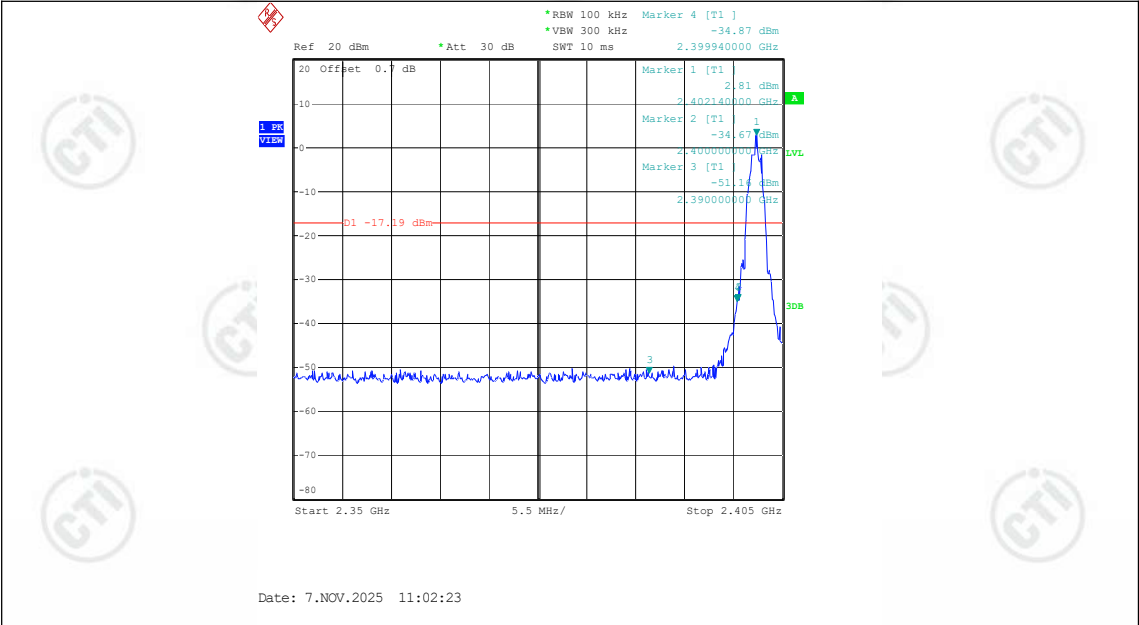
Appendix E: Band edge measurements

Test Result

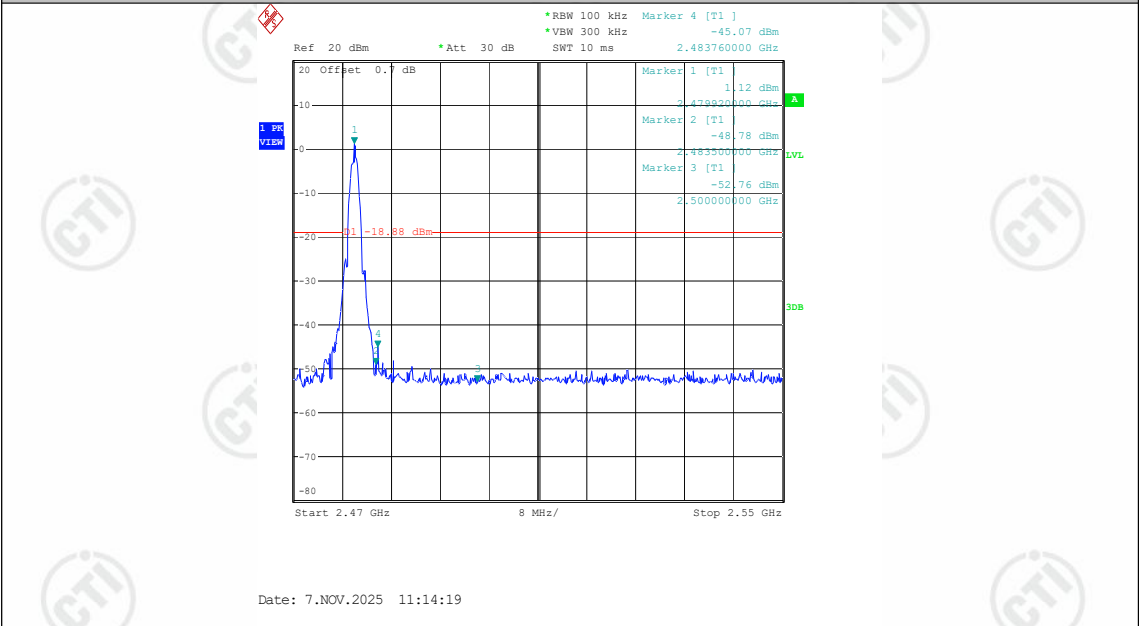
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.72	-48.95	≤-18.28	PASS
BLE_1M	Ant1	High	2480	0.46	-50.24	≤-19.54	PASS
BLE_2M	Ant1	Low	2402	2.81	-34.87	≤-17.19	PASS
BLE_2M	Ant1	High	2480	1.12	-45.07	≤-18.88	PASS

Test Graphs





BLE_2M-Ant1-2402-PASS



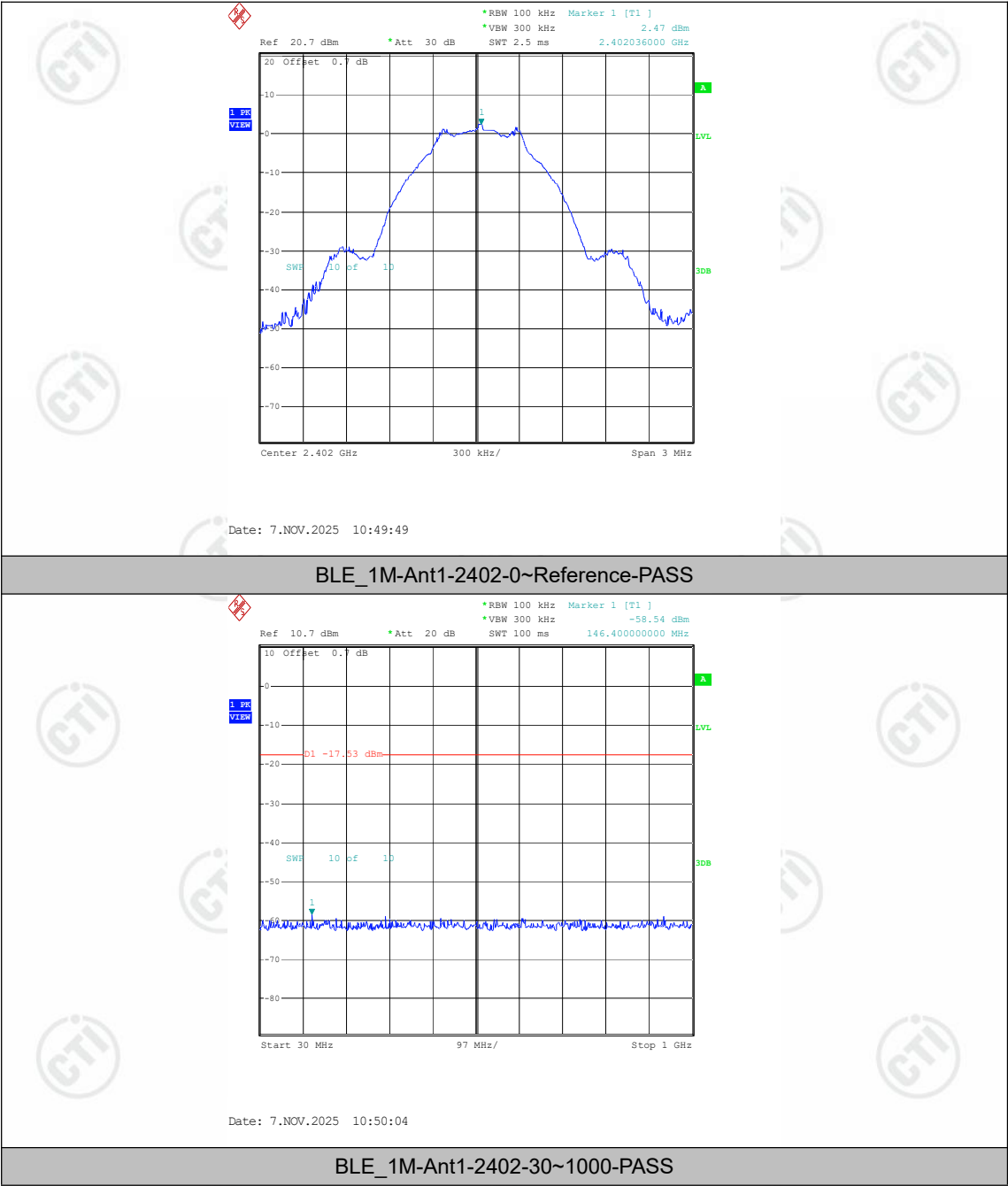
BLE_2M-Ant1-2480-PASS

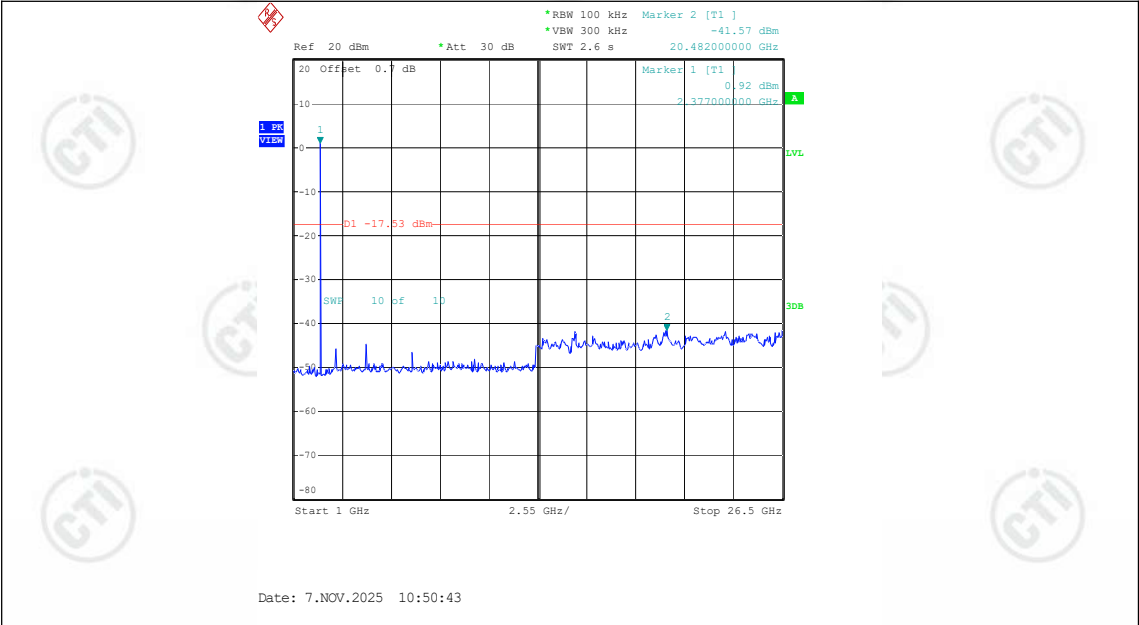
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	2.47	2.47	---	PASS
BLE_1M	Ant1	2402	30~1000	2.47	-58.54	≤-17.53	PASS
BLE_1M	Ant1	2402	1000~26500	2.47	-41.57	≤-17.53	PASS
BLE_1M	Ant1	2440	0~Reference	1.35	1.35	---	PASS
BLE_1M	Ant1	2440	30~1000	1.35	-57.34	≤-18.65	PASS
BLE_1M	Ant1	2440	1000~26500	1.35	-41.6	≤-18.65	PASS
BLE_1M	Ant1	2480	0~Reference	0.68	0.68	---	PASS
BLE_1M	Ant1	2480	30~1000	0.68	-59.23	≤-19.32	PASS
BLE_1M	Ant1	2480	1000~26500	0.68	-41.66	≤-19.32	PASS
BLE_2M	Ant1	2402	0~Reference	2.73	2.73	---	PASS
BLE_2M	Ant1	2402	30~1000	2.73	-58.65	≤-17.27	PASS
BLE_2M	Ant1	2402	1000~26500	2.73	-41.72	≤-17.27	PASS
BLE_2M	Ant1	2440	0~Reference	1.65	1.65	---	PASS
BLE_2M	Ant1	2440	30~1000	1.65	-58.56	≤-18.35	PASS
BLE_2M	Ant1	2440	1000~26500	1.65	-41.26	≤-18.35	PASS
BLE_2M	Ant1	2480	0~Reference	0.93	0.93	---	PASS
BLE_2M	Ant1	2480	30~1000	0.93	-59.18	≤-19.07	PASS
BLE_2M	Ant1	2480	1000~26500	0.93	-41.09	≤-19.07	PASS

Test Graphs

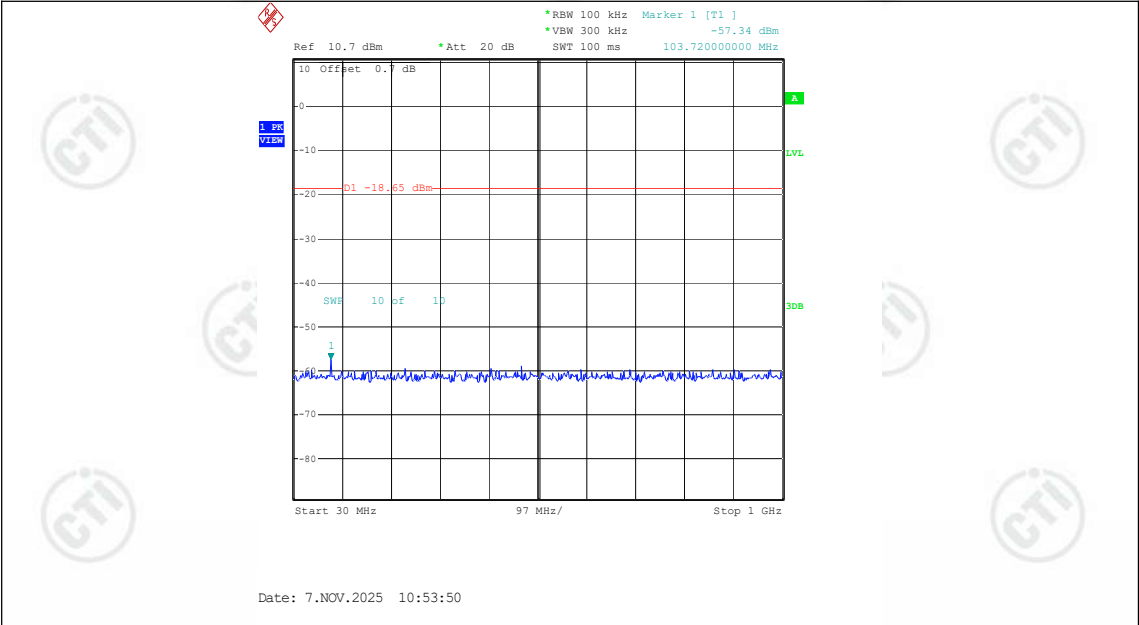




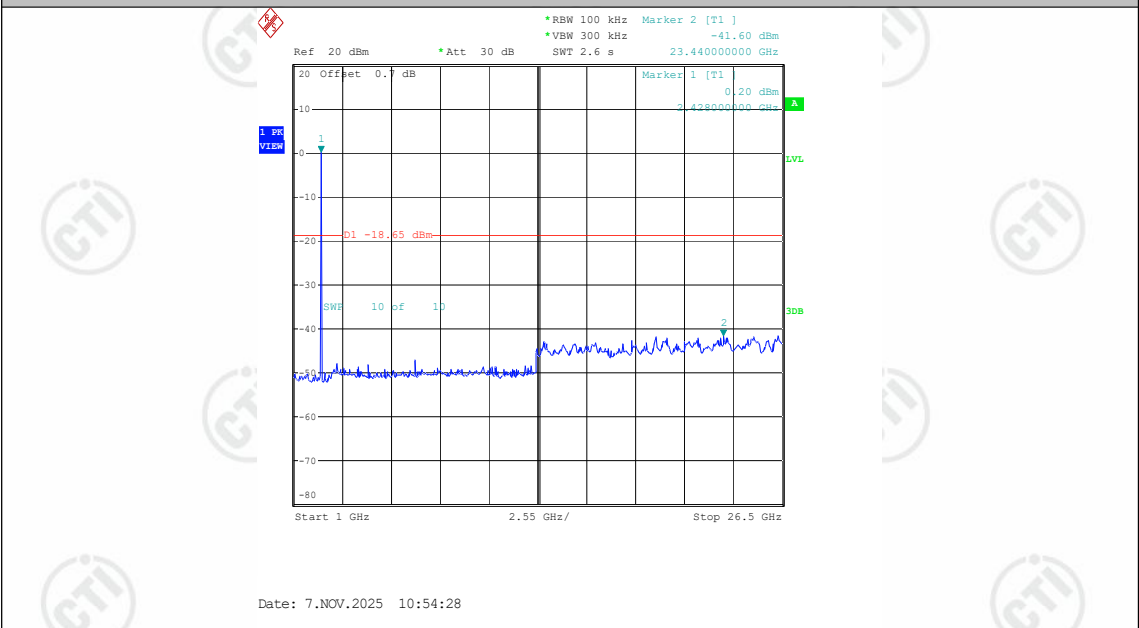
BLE_1M-Ant1-2402-1000~26500-PASS



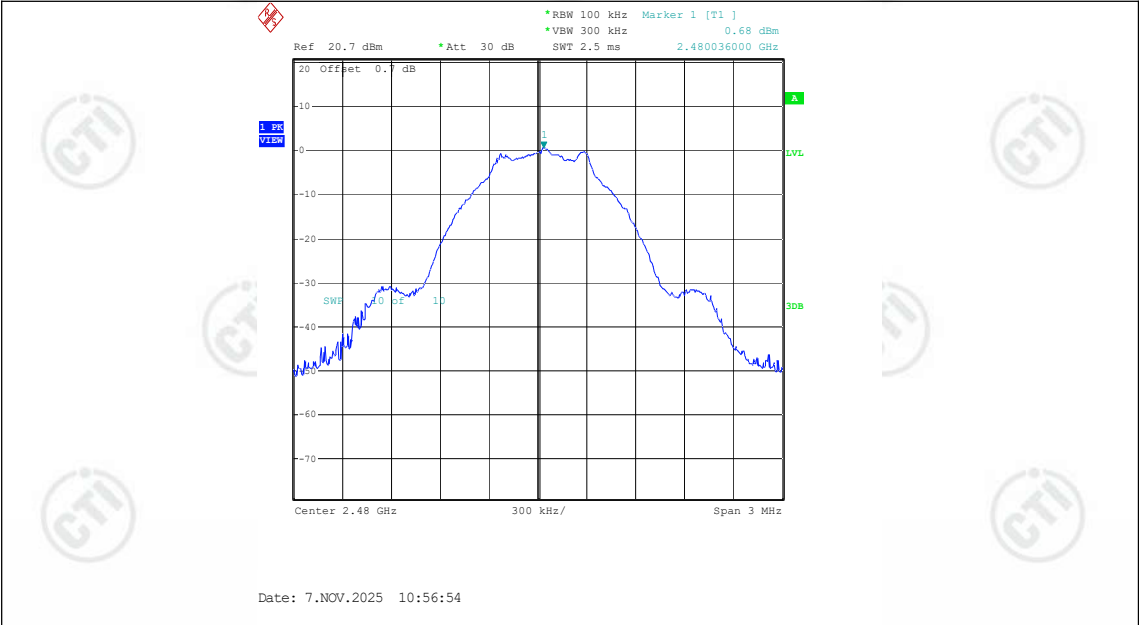
BLE_1M-Ant1-2440-0~Reference-PASS



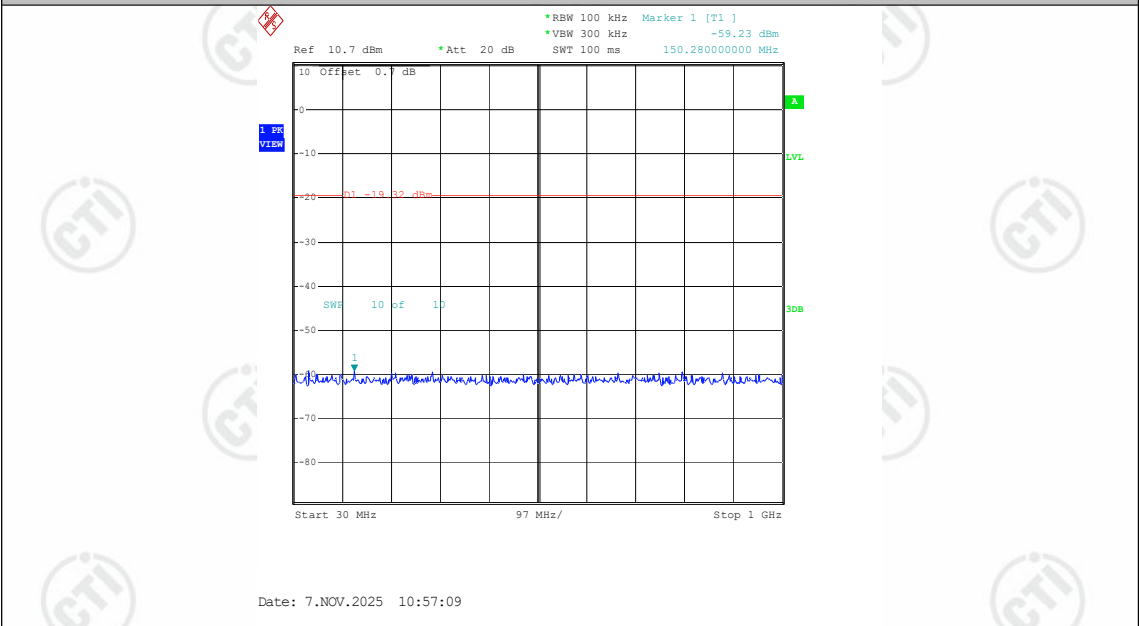
BLE_1M-Ant1-2440-30~1000-PASS



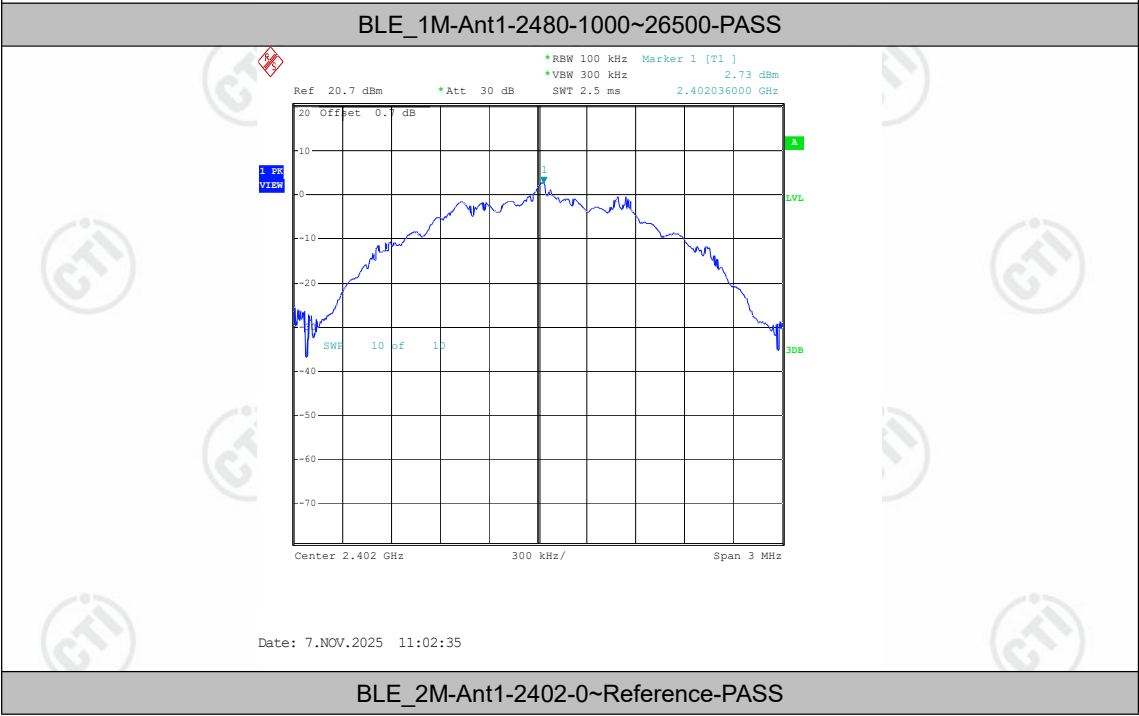
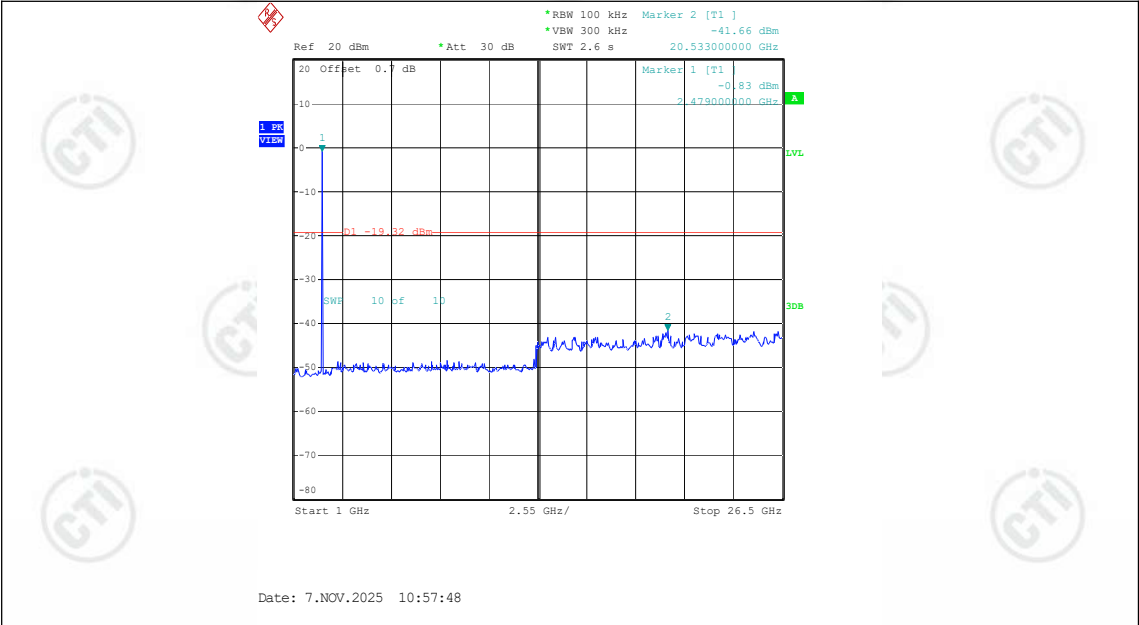
BLE_1M-Ant1-2440-1000~26500-PASS

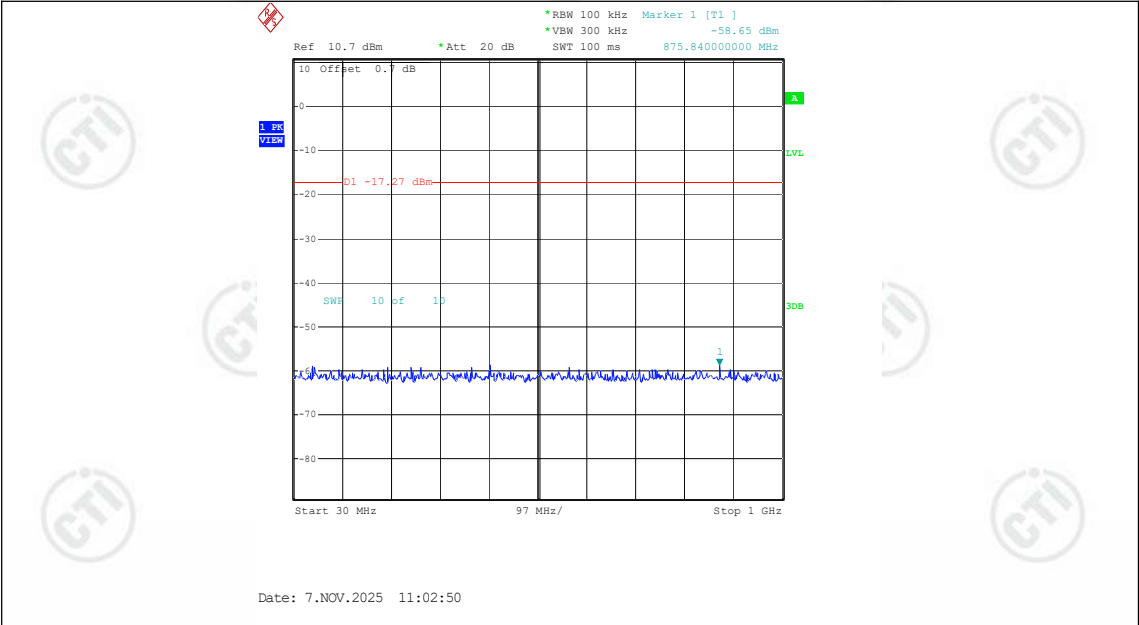


BLE_1M-Ant1-2480-0~Reference-PASS

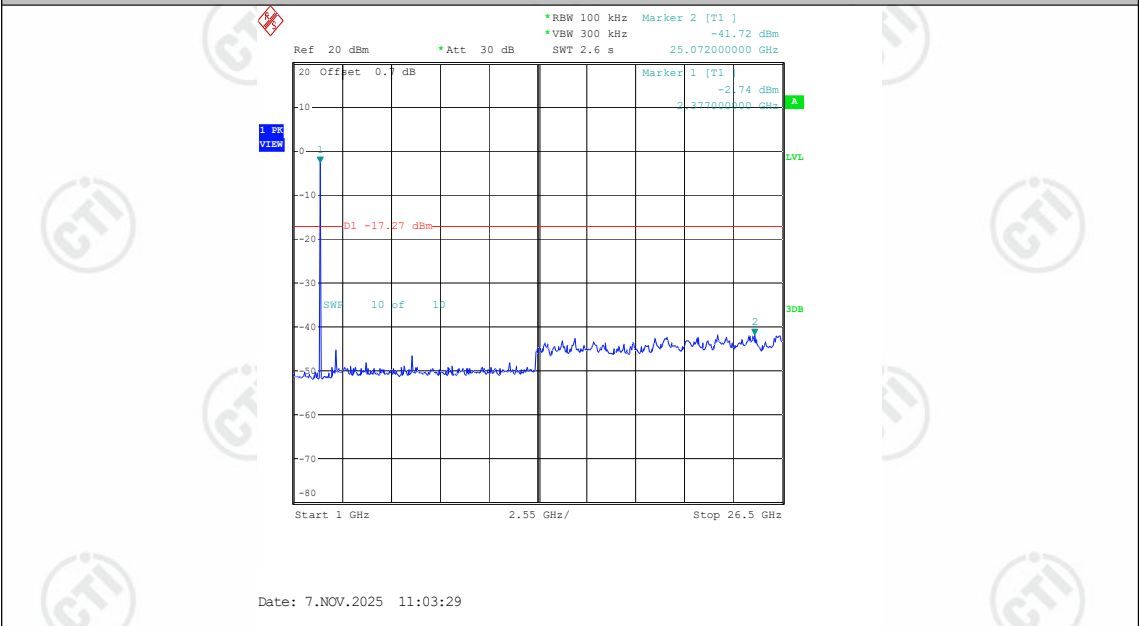


BLE_1M-Ant1-2480-30~1000-PASS





BLE_2M-Ant1-2402-30~1000-PASS

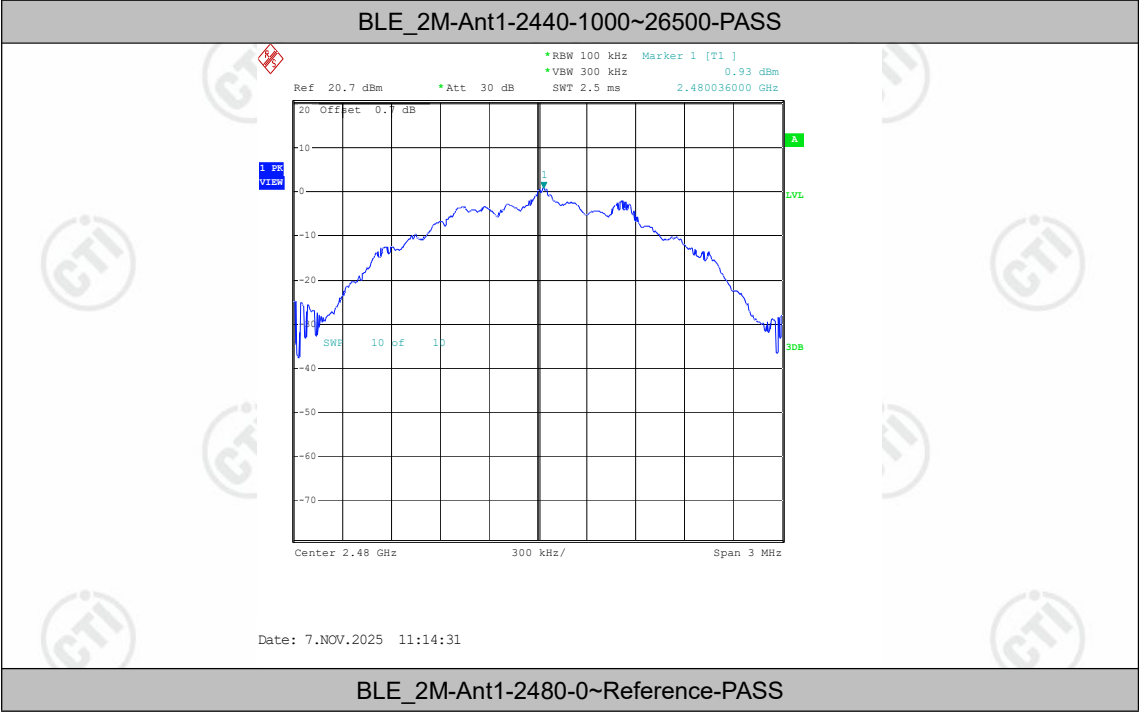
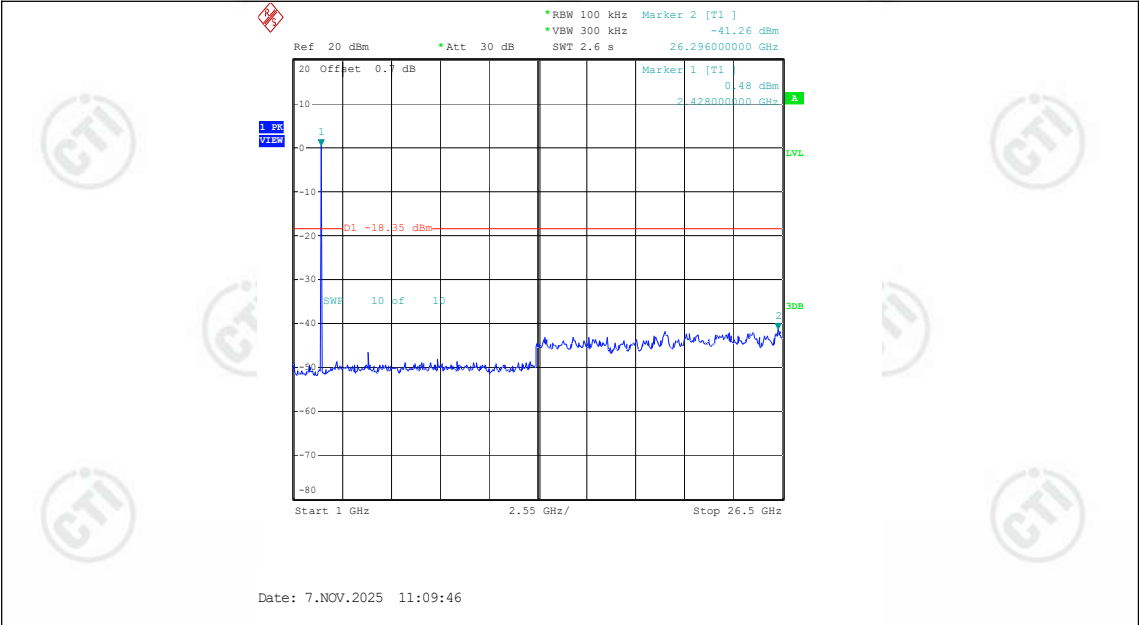


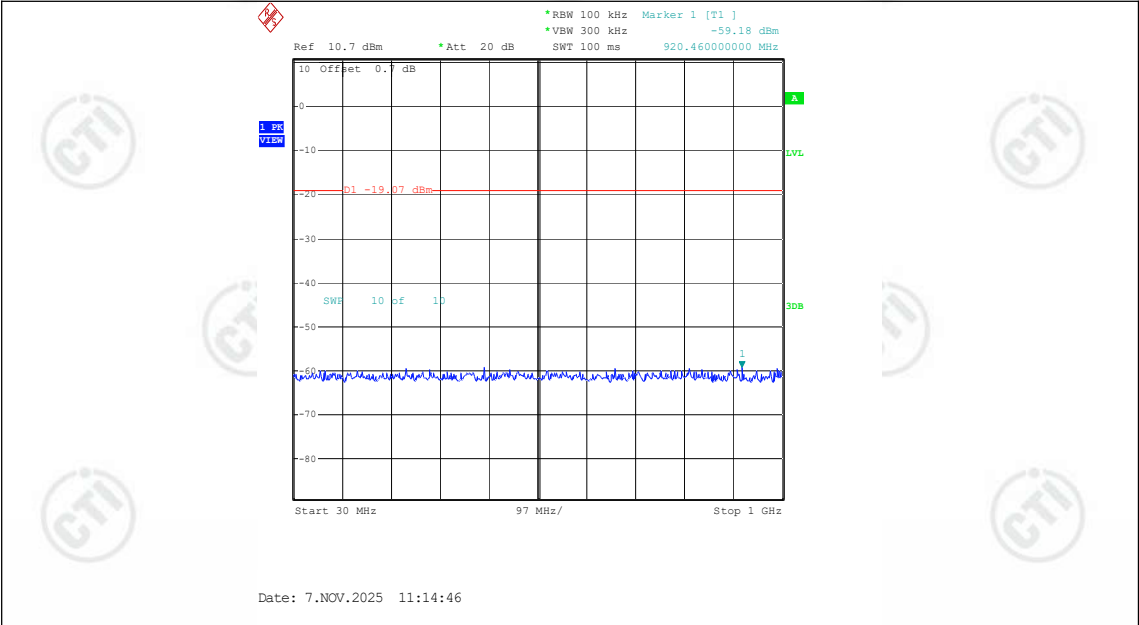
BLE_2M-Ant1-2402-1000~26500-PASS



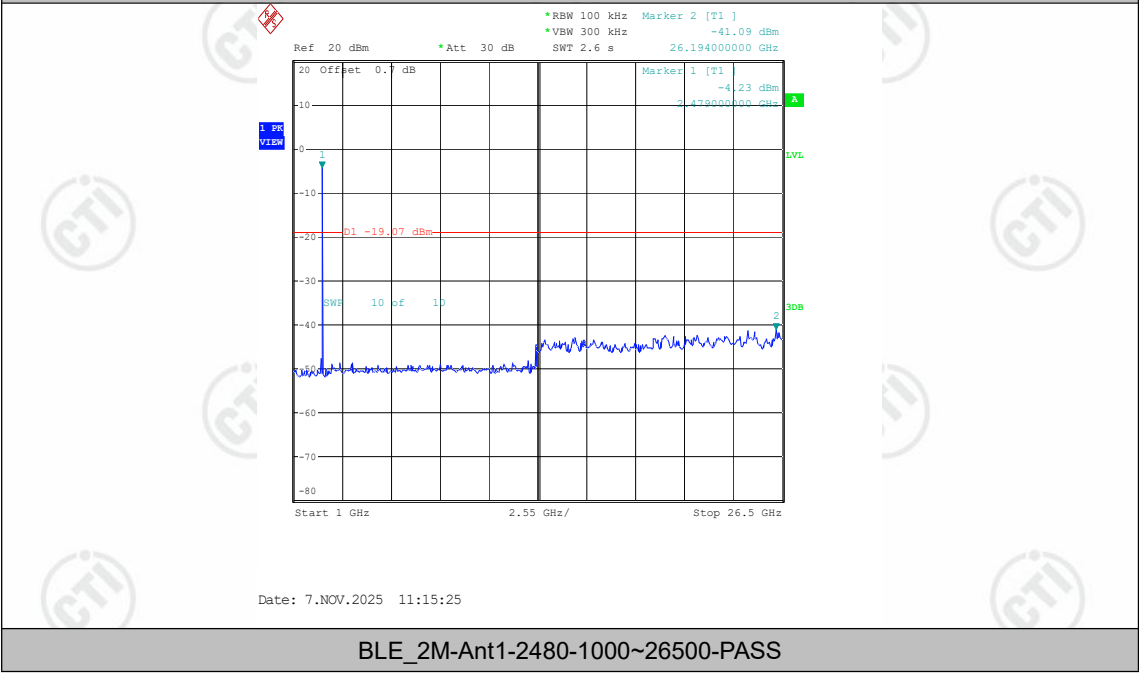
Date: 7.NOV.2025 11:09:08

Hotline:400-6788-333 www.cti-cert.com E-mail:info@cti-cert.com Complaint call:0755-33681700 Complaint E-mail:complaint@cti-cert.com





BLE_2M-Ant1-2480-30~1000-PASS

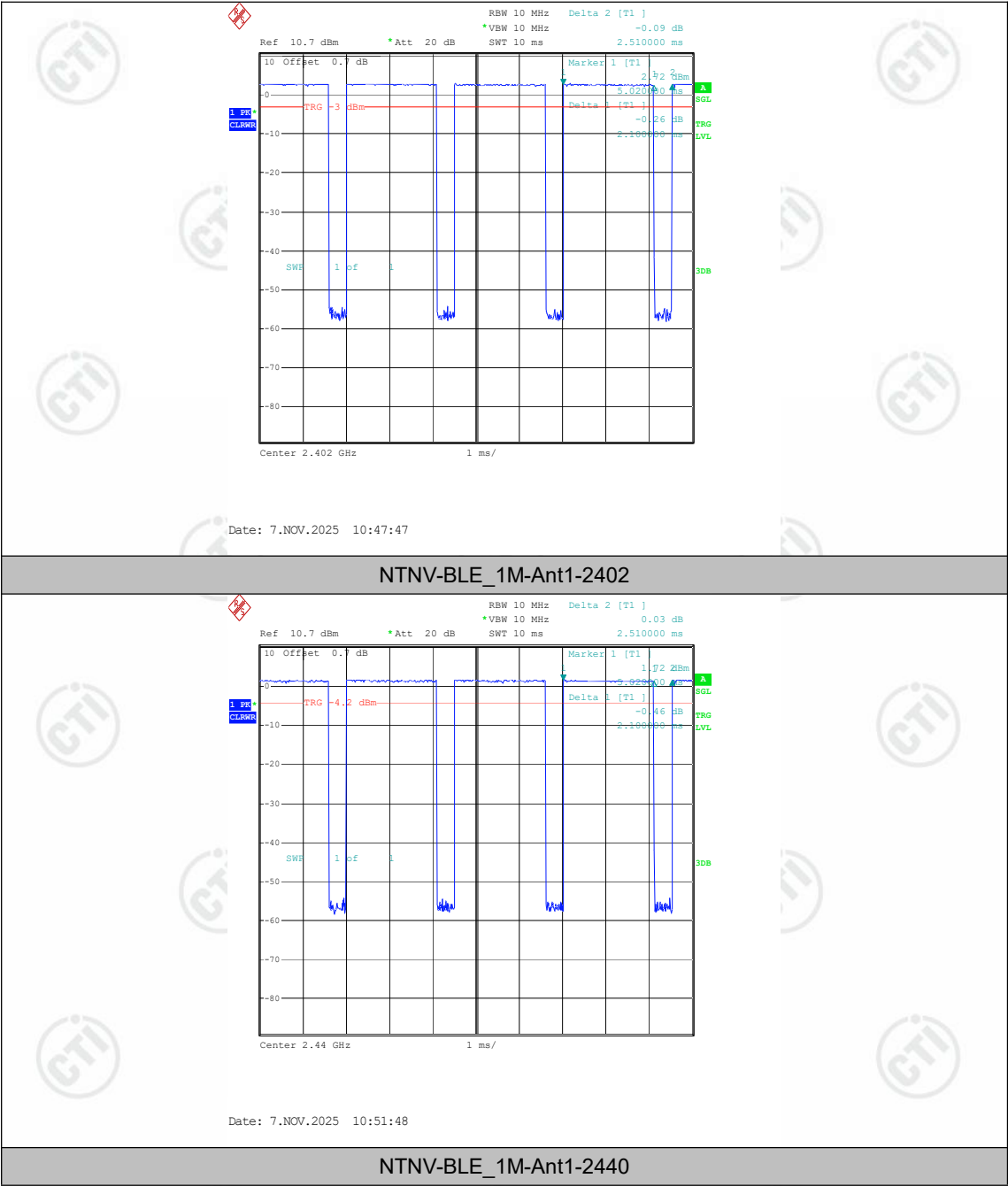


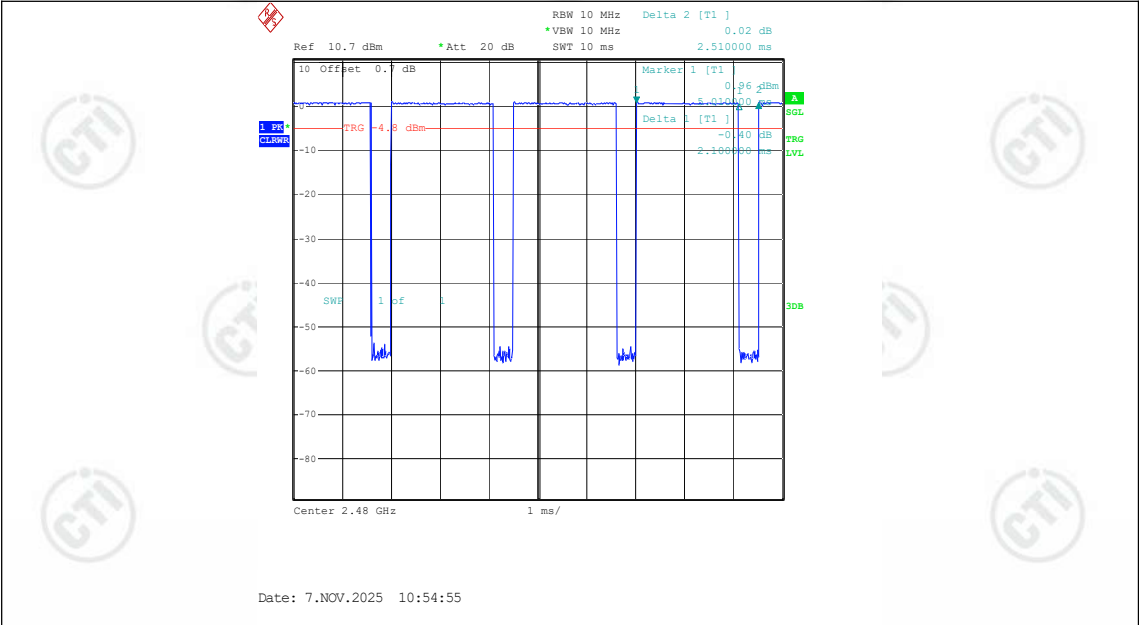
Appendix G: Duty Cycle

Test Result

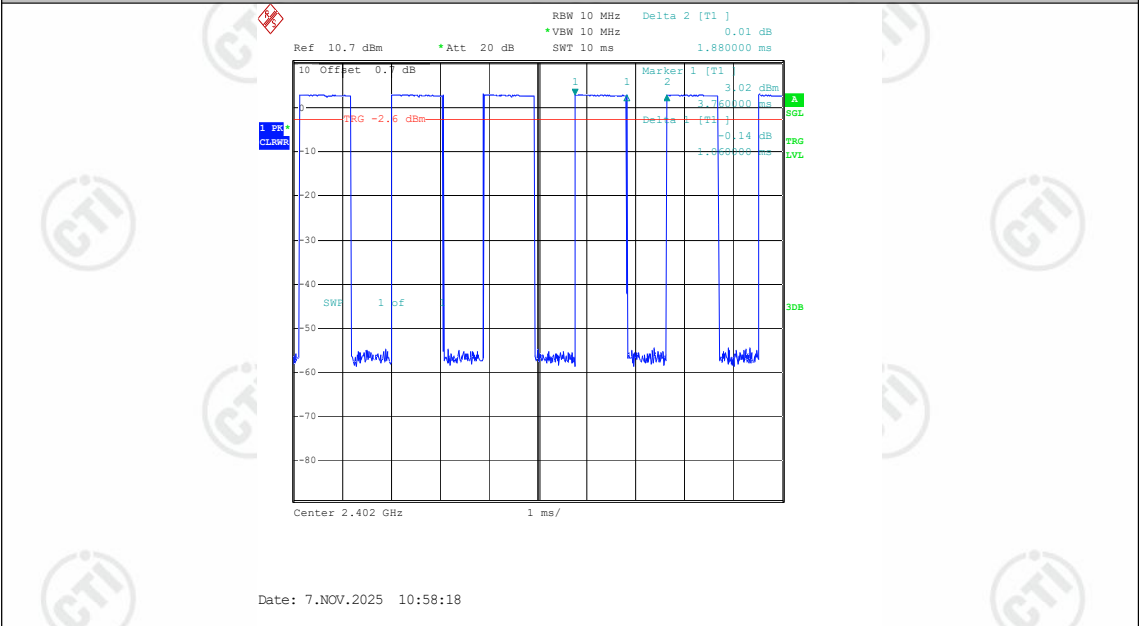
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	2.10	2.51	83.67	0.77
BLE_1M	Ant1	2440	2.10	2.51	83.67	0.77
BLE_1M	Ant1	2480	2.10	2.51	83.67	0.77
BLE_2M	Ant1	2402	1.06	1.88	56.38	2.49
BLE_2M	Ant1	2440	1.06	1.88	56.38	2.49
BLE_2M	Ant1	2480	1.06	1.88	56.38	2.49

Test Graphs

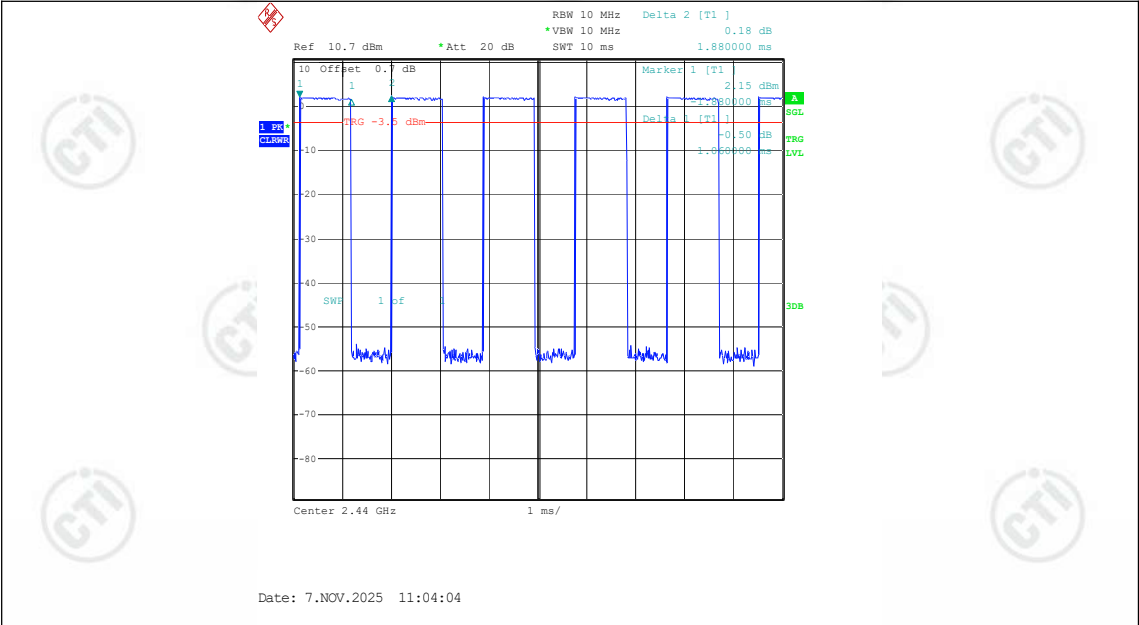




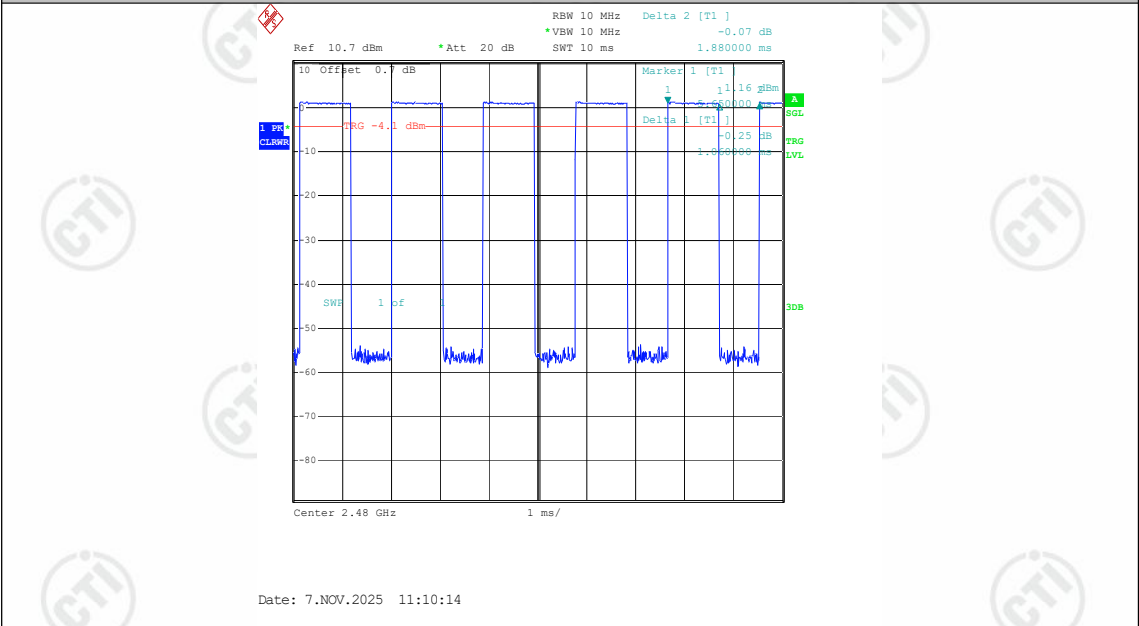
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



NTNV-BLE_2M-Ant1-2480

*** End of Report ***