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	0.640	2401.676	2402.316	0.5	PASS
BLE_1M	Ant1	2440	0.652	2439.668	2440.320	0.5	PASS
BLE_1M	Ant1	2480	0.668	2479.656	2480.324	0.5	PASS
BLE_2M	Ant1	2402	1.116	2401.432	2402.548	0.5	PASS
BLE_2M	Ant1	2440	1.120	2439.432	2440.552	0.5	PASS
BLE_2M	Ant1	2480	1.096	2479.452	2480.548	0.5	PASS

Test Graphs

BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2440-PASS

BLE_1M-Ant1-2480-PASS

BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2440-PASS

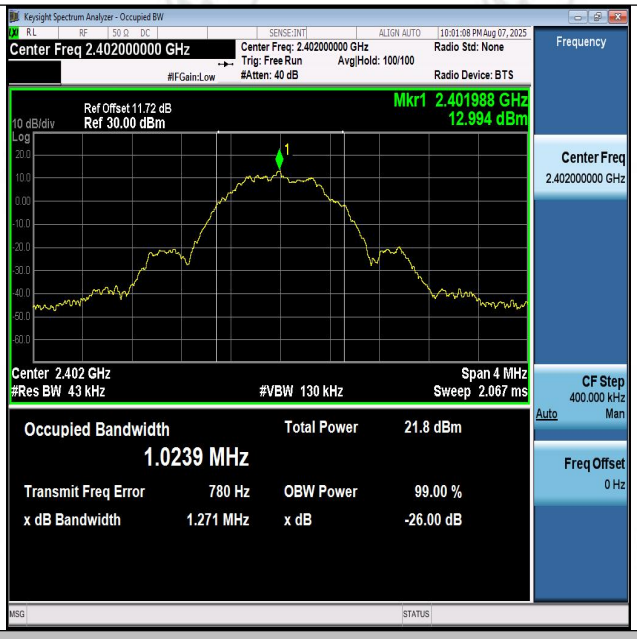
BLE_2M-Ant1-2480-PASS

Appendix B: Occupied Channel Bandwidth

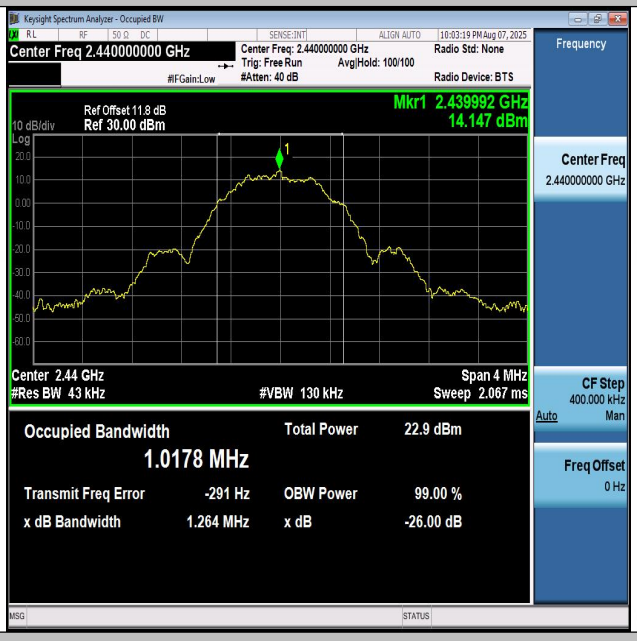
Test Result

TestMode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0239	2401.4888	2402.5127	---	---
BLE_1M	Ant1	2440	1.0178	2439.4908	2440.5086	---	---
BLE_1M	Ant1	2480	1.0226	2479.4879	2480.5105	---	---
BLE_2M	Ant1	2402	2.0043	2401.0071	2403.0114	---	---
BLE_2M	Ant1	2440	2.0019	2439.0037	2441.0056	---	---
BLE_2M	Ant1	2480	2.0266	2478.9944	2481.0210	---	---

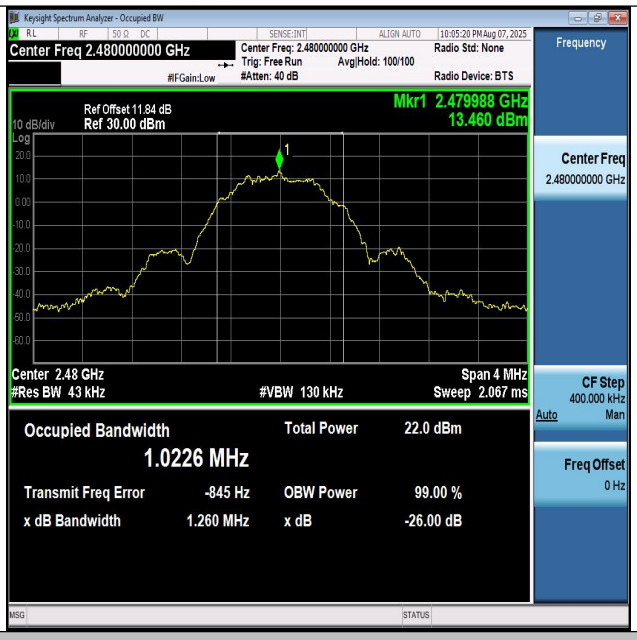
Test Graphs



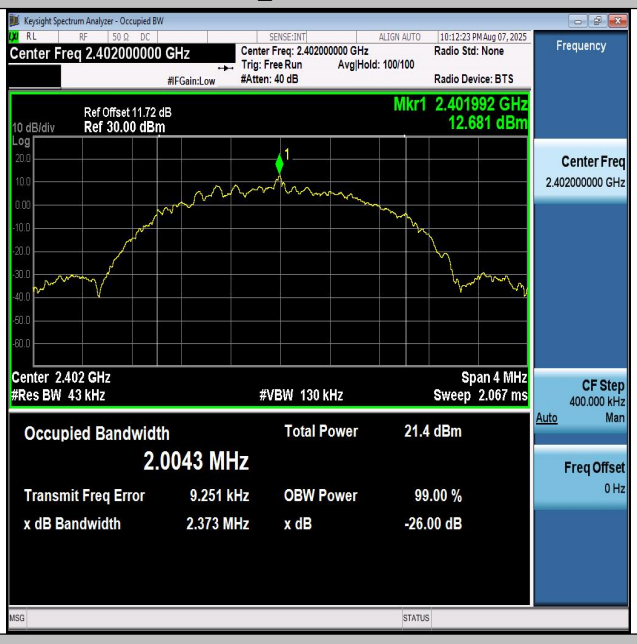
BLE_1M-Ant1-2402



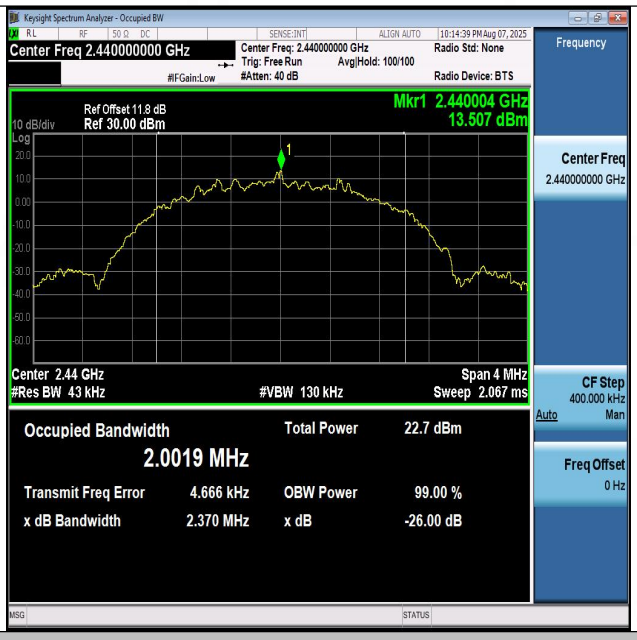
BLE_1M-Ant1-2440



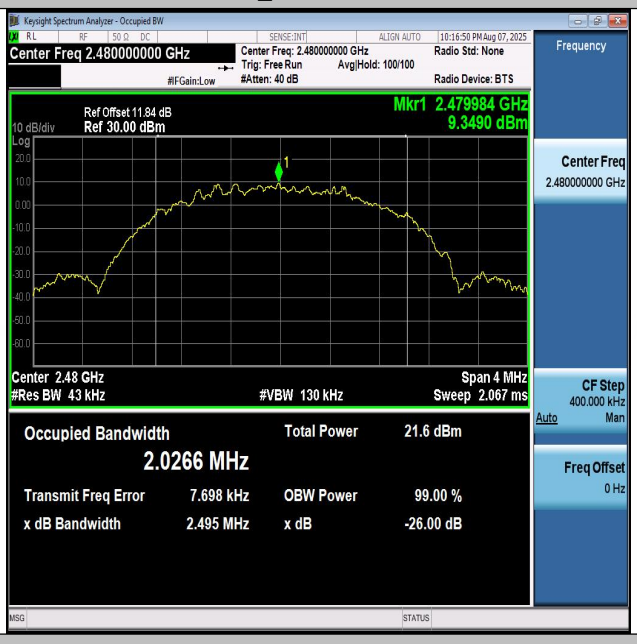
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



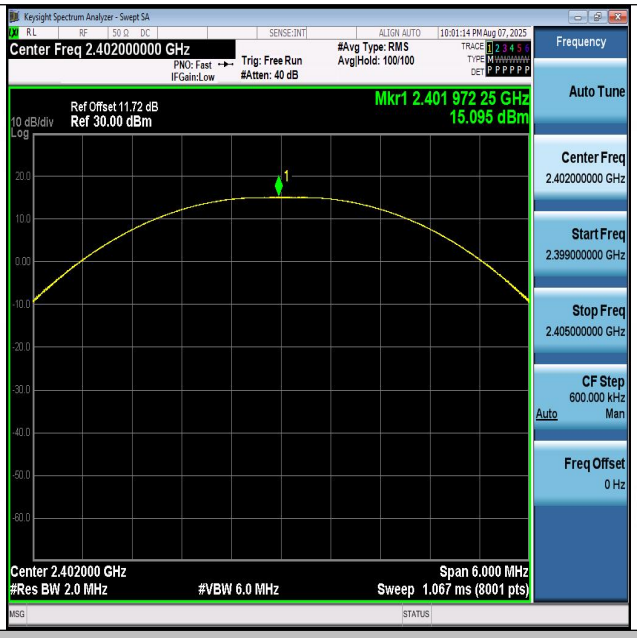
BLE_2M-Ant1-2480

Appendix C: Maximum conducted output power

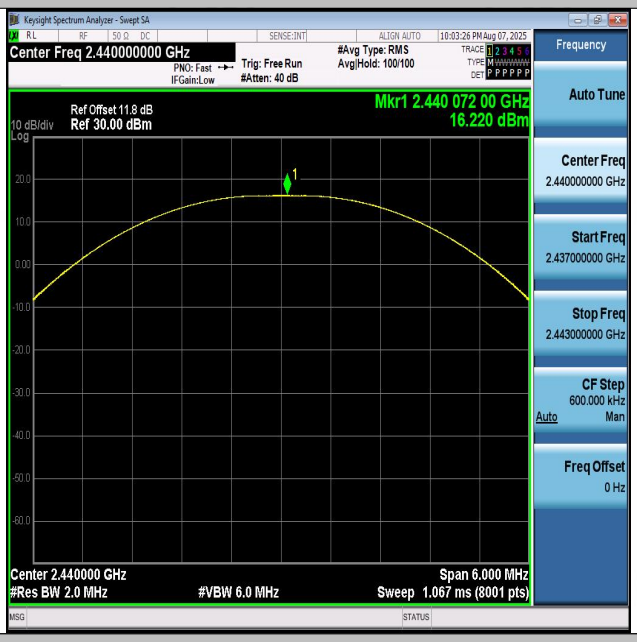
Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	15.10	≤30	18.45	≤36	PASS
BLE_1M	Ant1	2440	16.22	≤30	19.57	≤36	PASS
BLE_1M	Ant1	2480	15.52	≤30	18.87	≤36	PASS
BLE_2M	Ant1	2402	15.06	≤30	18.41	≤36	PASS
BLE_2M	Ant1	2440	16.21	≤30	19.56	≤36	PASS
BLE_2M	Ant1	2480	15.58	≤30	18.93	≤36	PASS

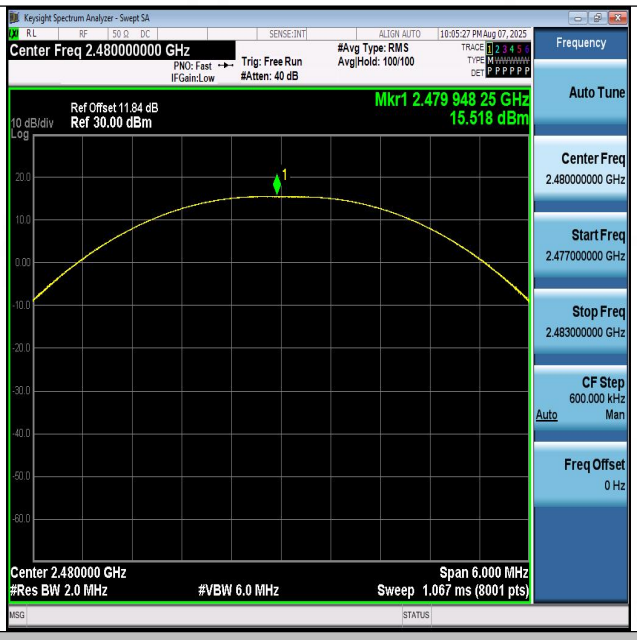
Test Graphs Peak



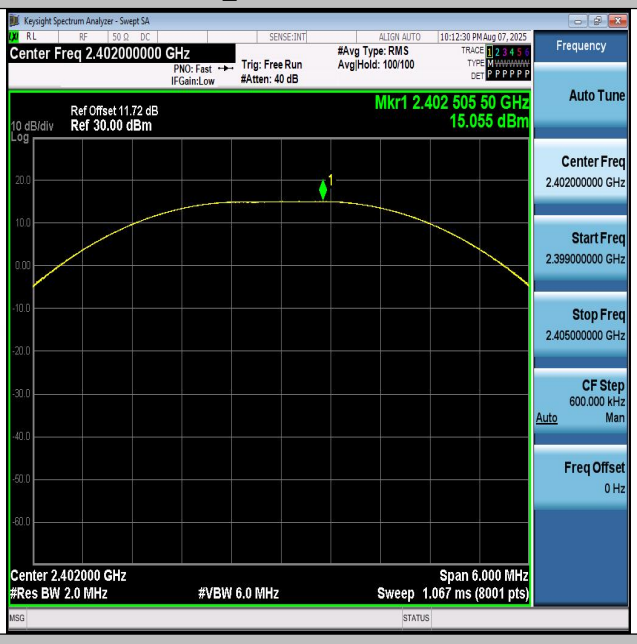
BLE_1M-Ant1-2402-PASS



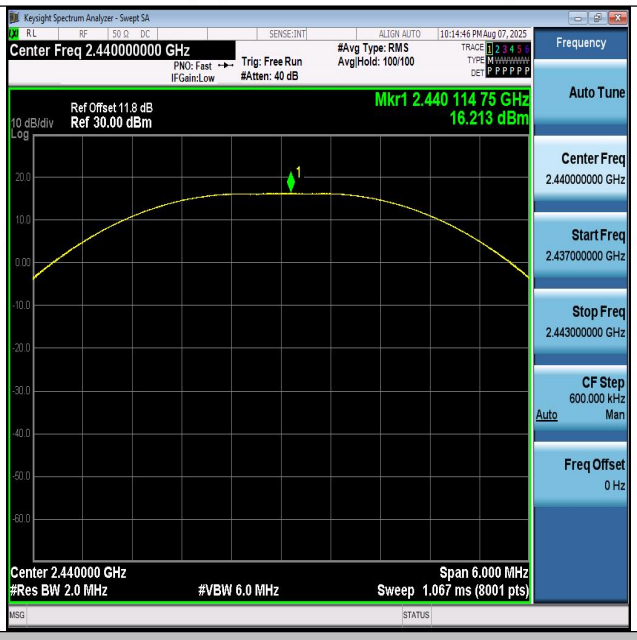
BLE_1M-Ant1-2440-PASS



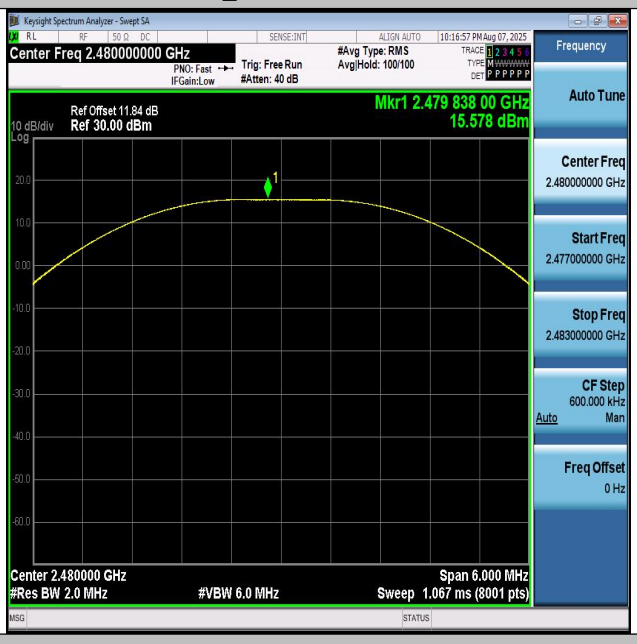
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



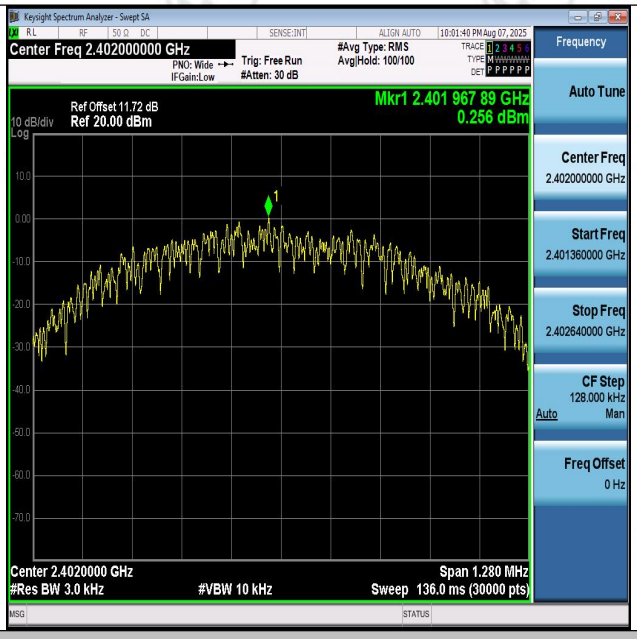
BLE_2M-Ant1-2480-PASS

Appendix D: Maximum power spectral density

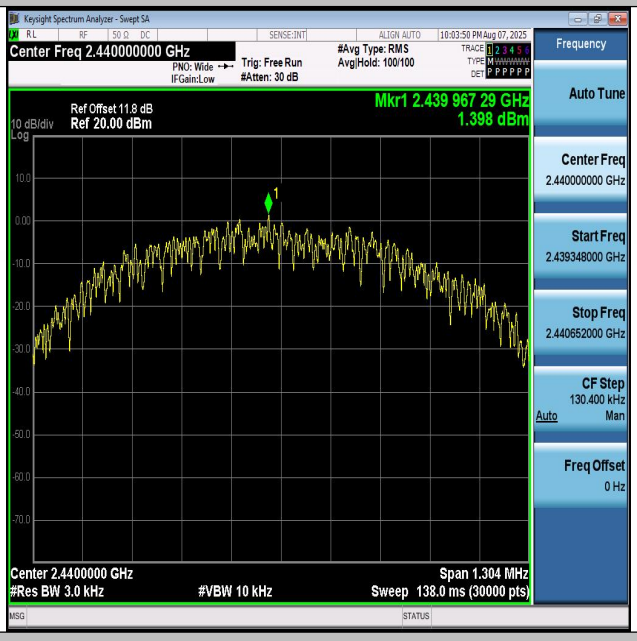
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	0.26	≤8.00	PASS
BLE_1M	Ant1	2440	1.40	≤8.00	PASS
BLE_1M	Ant1	2480	0.70	≤8.00	PASS
BLE_2M	Ant1	2402	-3.96	≤8.00	PASS
BLE_2M	Ant1	2440	-2.74	≤8.00	PASS
BLE_2M	Ant1	2480	-3.43	≤8.00	PASS

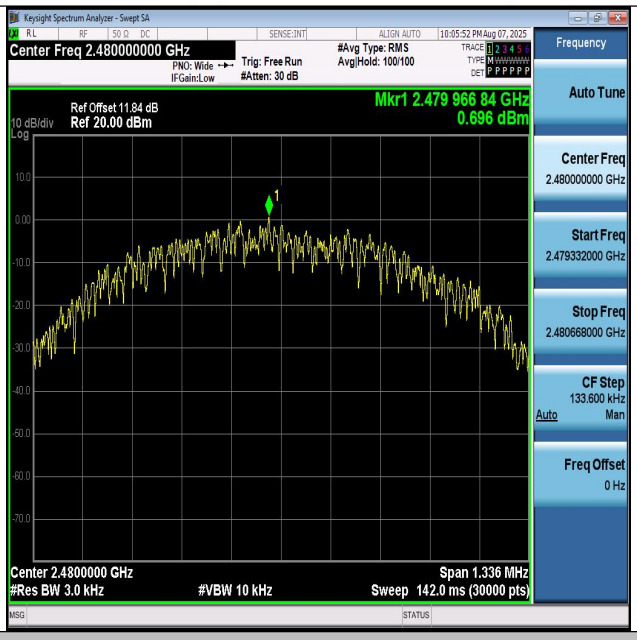
Test Graphs



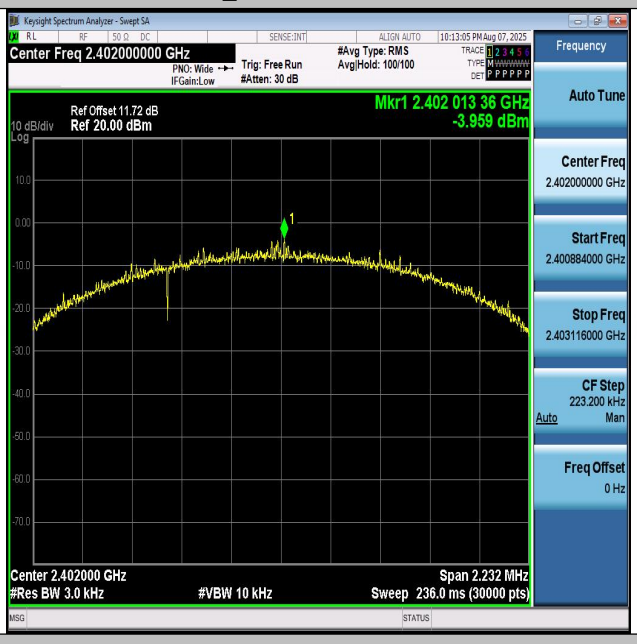
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2440-PASS

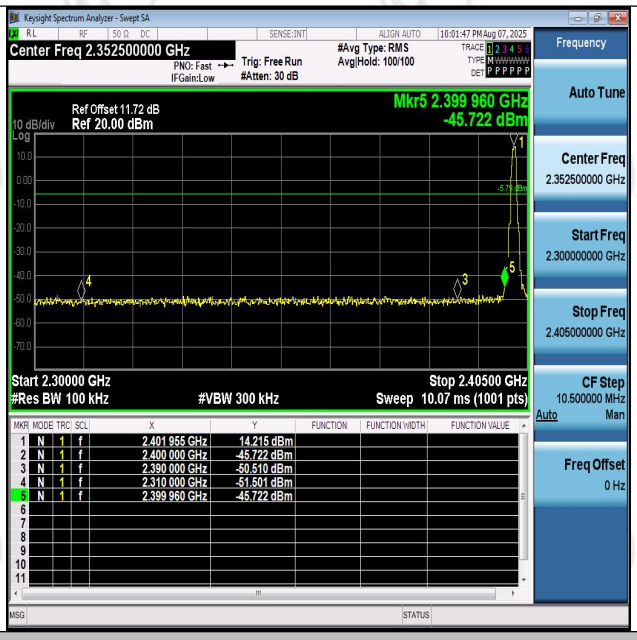
BLE_2M-Ant1-2480-PASS

Appendix E: Band edge measurements

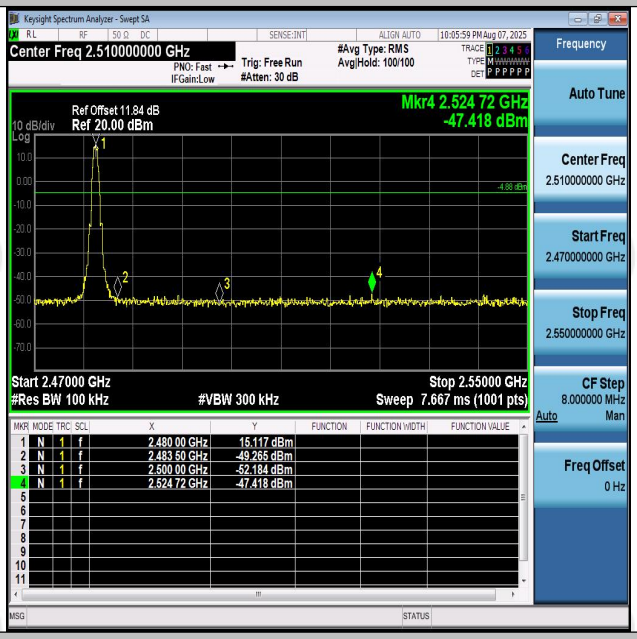
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	14.22	-45.72	≤-5.79	PASS
BLE_1M	Ant1	High	2480	15.12	-47.42	≤-4.88	PASS
BLE_2M	Ant1	Low	2402	12.23	-33.67	≤-7.78	PASS
BLE_2M	Ant1	High	2480	13.66	-47.87	≤-6.34	PASS

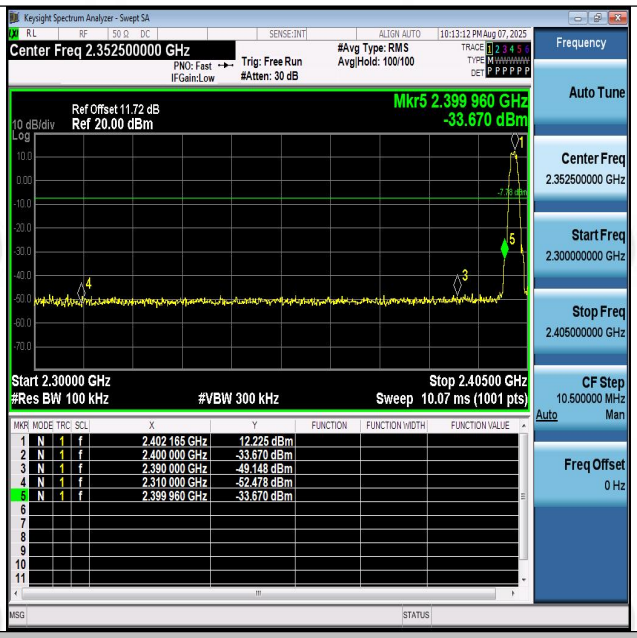
Test Graphs



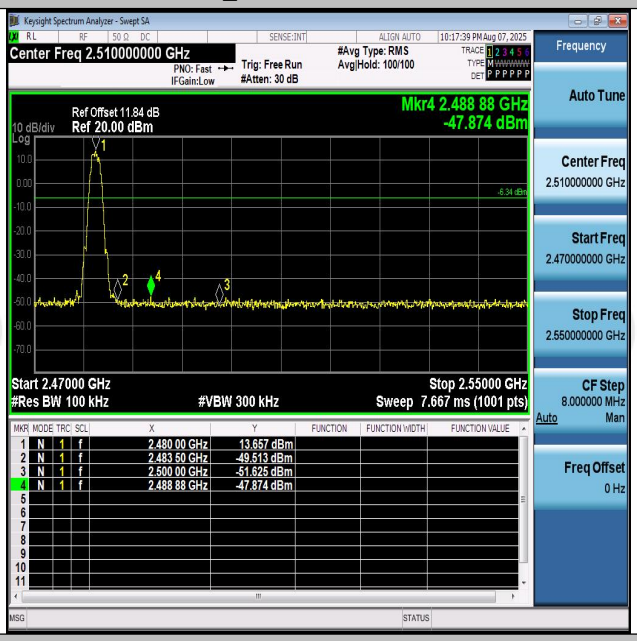
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS

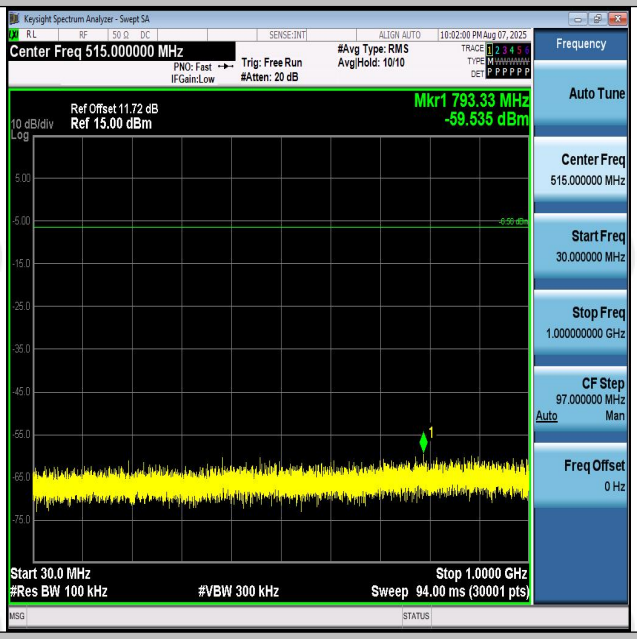
Appendix F: Conducted Spurious Emission

Test Result

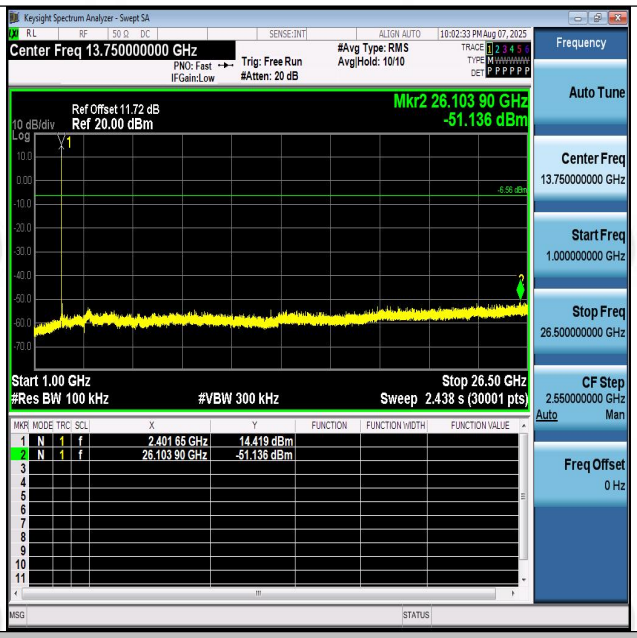
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	13.44	13.44	---	PASS
BLE_1M	Ant1	2402	30~1000	13.44	-59.54	≤-6.56	PASS
BLE_1M	Ant1	2402	1000~26500	13.44	-51.14	≤-6.56	PASS
BLE_1M	Ant1	2440	0~Reference	15.09	15.09	---	PASS
BLE_1M	Ant1	2440	30~1000	15.09	-59.61	≤-4.91	PASS
BLE_1M	Ant1	2440	1000~26500	15.09	-51.73	≤-4.91	PASS
BLE_1M	Ant1	2480	0~Reference	14.38	14.38	---	PASS
BLE_1M	Ant1	2480	30~1000	14.38	-59.4	≤-5.62	PASS
BLE_1M	Ant1	2480	1000~26500	14.38	-50.15	≤-5.62	PASS
BLE_2M	Ant1	2402	0~Reference	10.82	10.82	---	PASS
BLE_2M	Ant1	2402	30~1000	10.82	-59.79	≤-9.18	PASS
BLE_2M	Ant1	2402	1000~26500	10.82	-50.94	≤-9.18	PASS
BLE_2M	Ant1	2440	0~Reference	11.94	11.94	---	PASS
BLE_2M	Ant1	2440	30~1000	11.94	-58.99	≤-8.06	PASS
BLE_2M	Ant1	2440	1000~26500	11.94	-51.16	≤-8.06	PASS
BLE_2M	Ant1	2480	0~Reference	13.12	13.12	---	PASS
BLE_2M	Ant1	2480	30~1000	13.12	-59.67	≤-6.88	PASS
BLE_2M	Ant1	2480	1000~26500	13.12	-51.27	≤-6.88	PASS

Test Graphs

BLE_1M-Ant1-2402-0~Reference-PASS

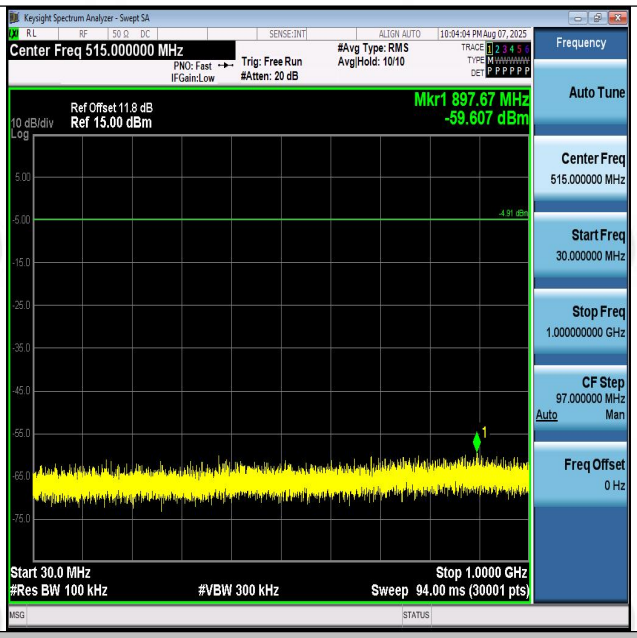


BLE_1M-Ant1-2402-30~1000-PASS

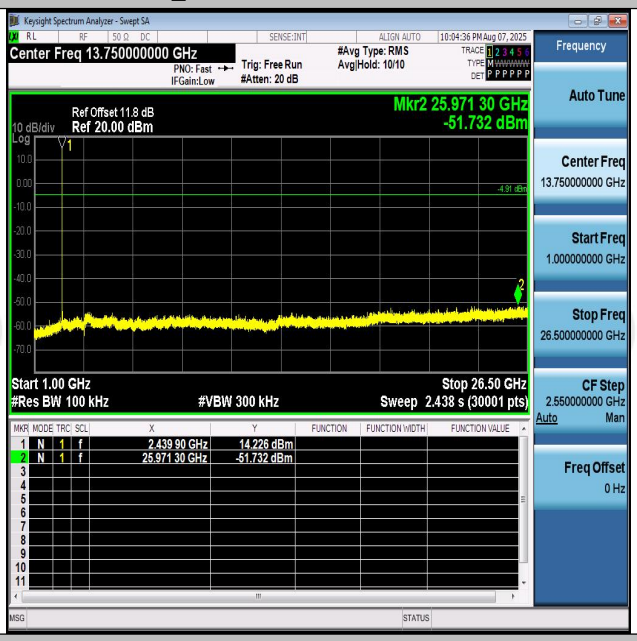


BLE_1M-Ant1-2402-1000~26500-PASS

BLE_1M-Ant1-2440-0~Reference-PASS

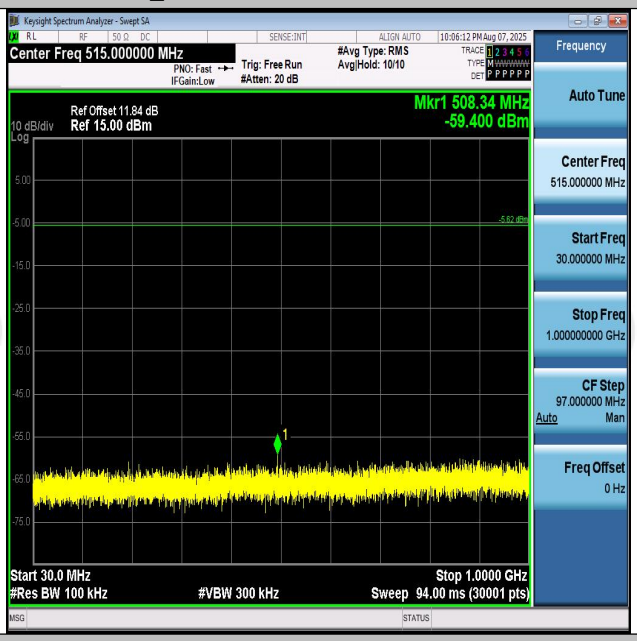


BLE_1M-Ant1-2440-30~1000-PASS

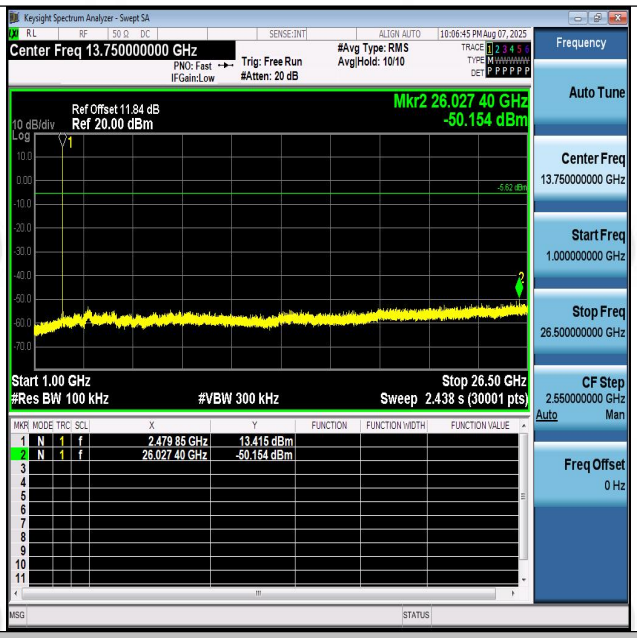


BLE_1M-Ant1-2440-1000~26500-PASS

BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



BLE_1M-Ant1-2480-1000~26500-PASS

BLE_2M-Ant1-2402-0~Reference-PASS