

FCC Appendix RF Test Data

FCC ID : 2ASJR-CM275-1113130

Company : Globetracker, ApS

EUT : Asset Tracking Device / Data Modem

Model Number : CM2.75-1113130

Report No. : CTA25081903401

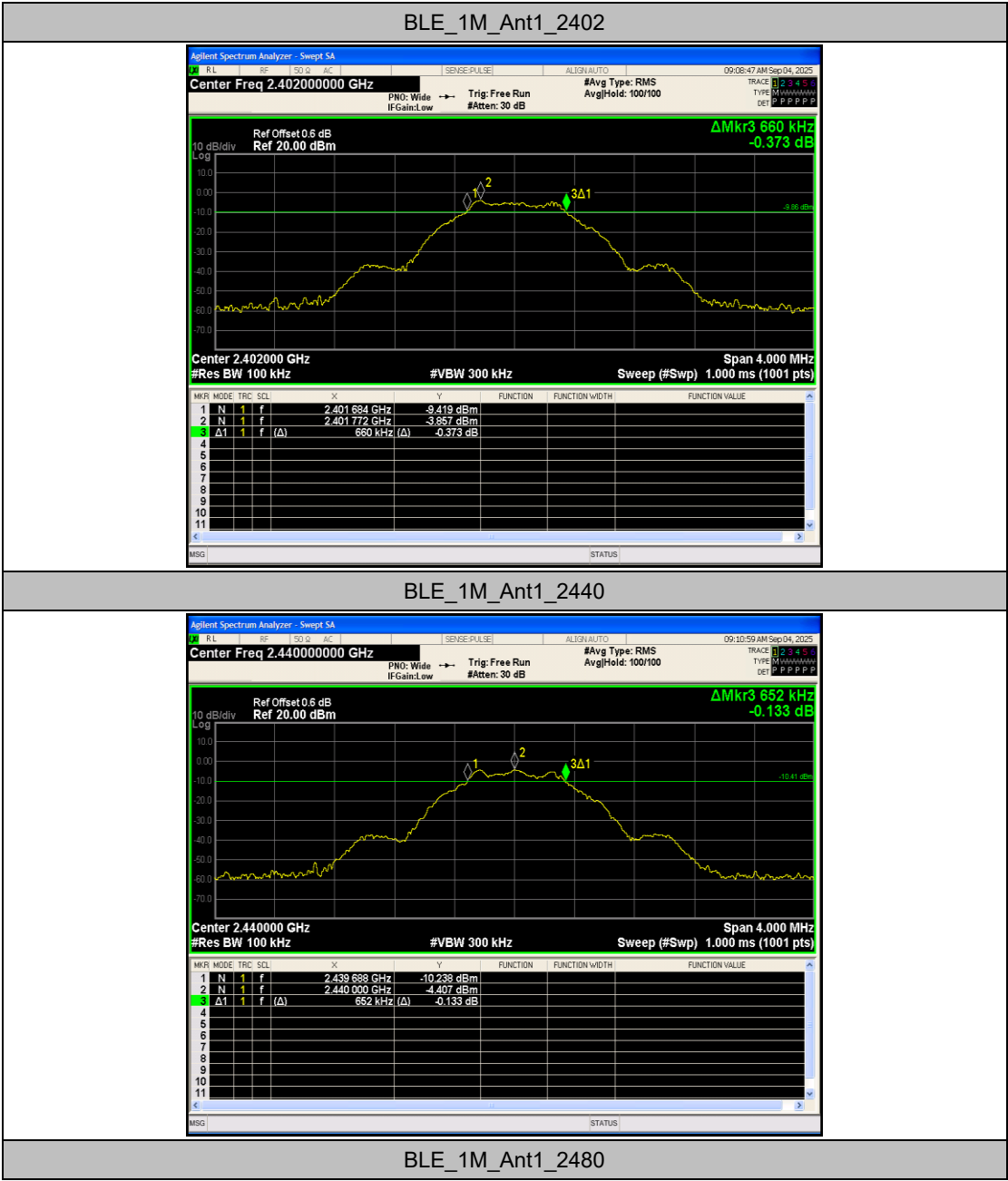
Reviewed By : Eric Wang

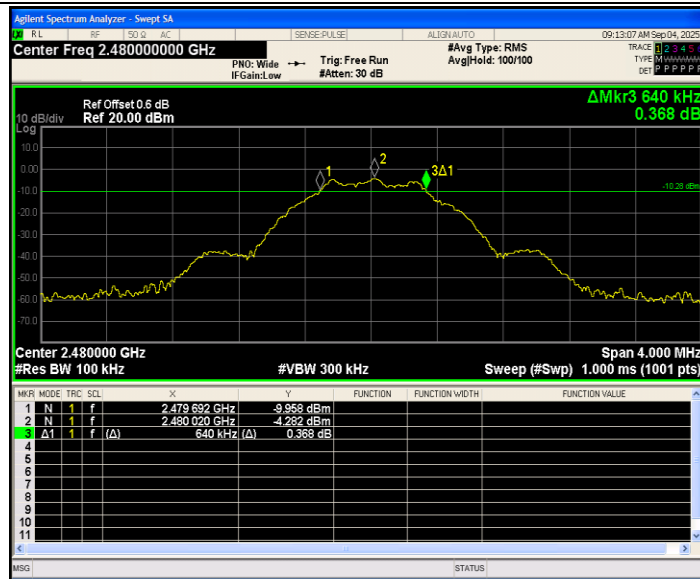
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.684	2402.344	0.5	PASS
		2440	0.652	2439.688	2440.340	0.5	PASS
		2480	0.640	2479.692	2480.332	0.5	PASS
BLE_2M	Ant1	2402	1.092	2401.440	2402.532	0.5	PASS
		2440	1.108	2439.452	2440.560	0.5	PASS
		2480	1.108	2479.448	2480.556	0.5	PASS

Test Graphs

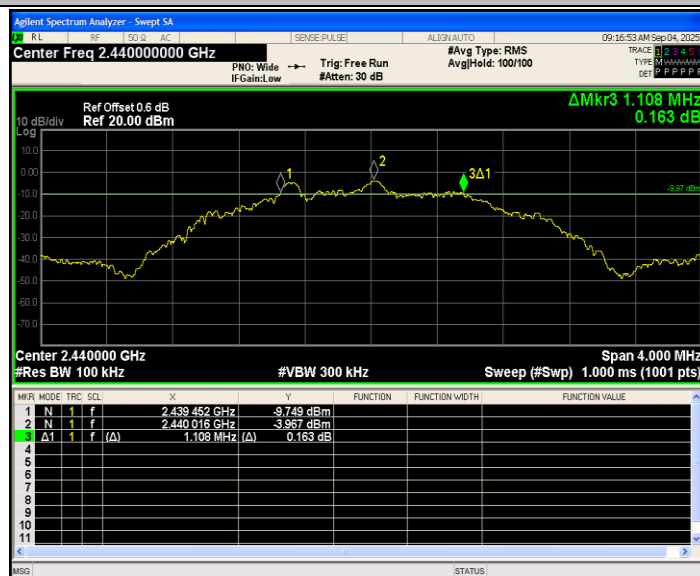




BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

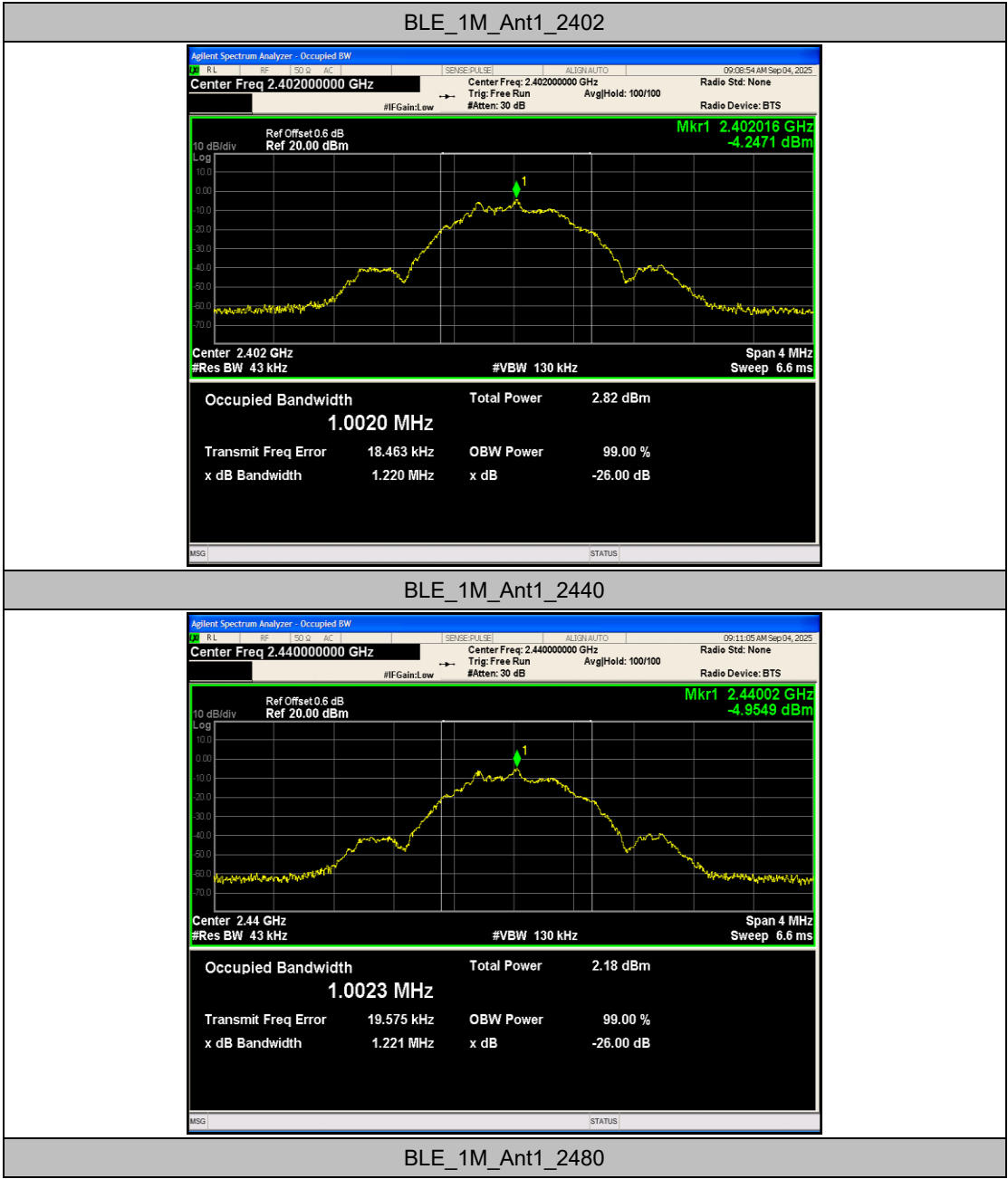


Appendix B: Occupied Channel Bandwidth

Test Result

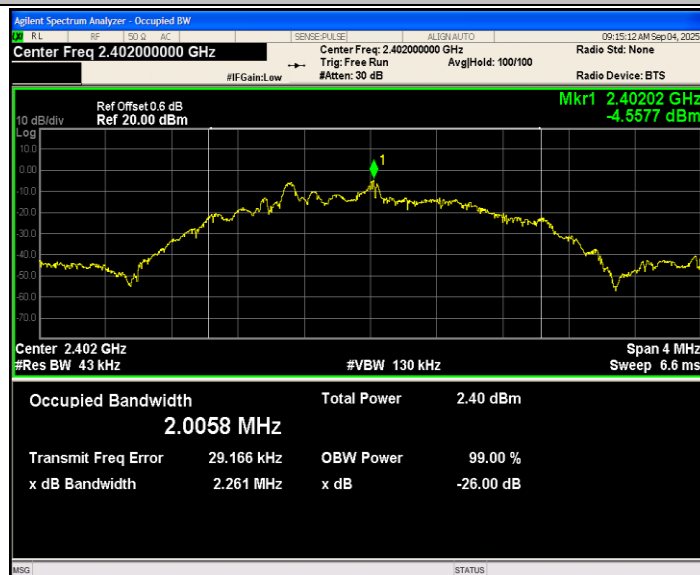
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0020	2401.5175	2402.5195	---	---
		2440	1.0023	2439.5184	2440.5207	---	---
		2480	1.0069	2479.5140	2480.5209	---	---
BLE_2M	Ant1	2402	2.0058	2401.0263	2403.0321	---	---
		2440	1.9923	2439.0316	2441.0239	---	---
		2480	2.0084	2479.0282	2481.0366	---	---

Test Graphs

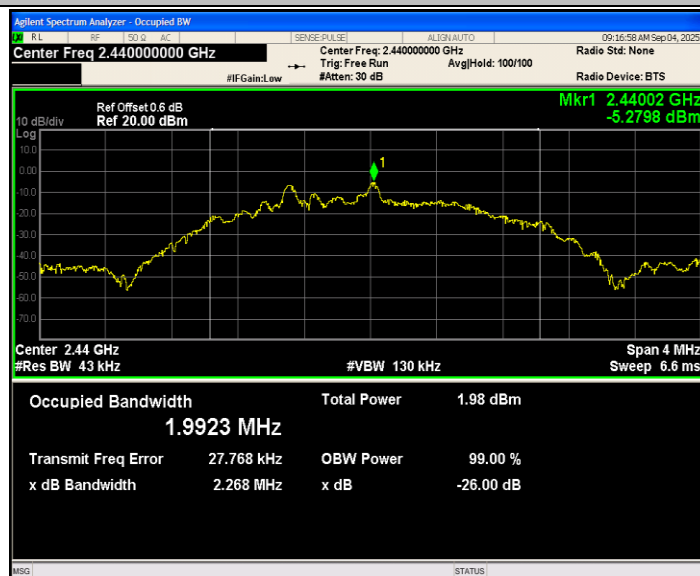




BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

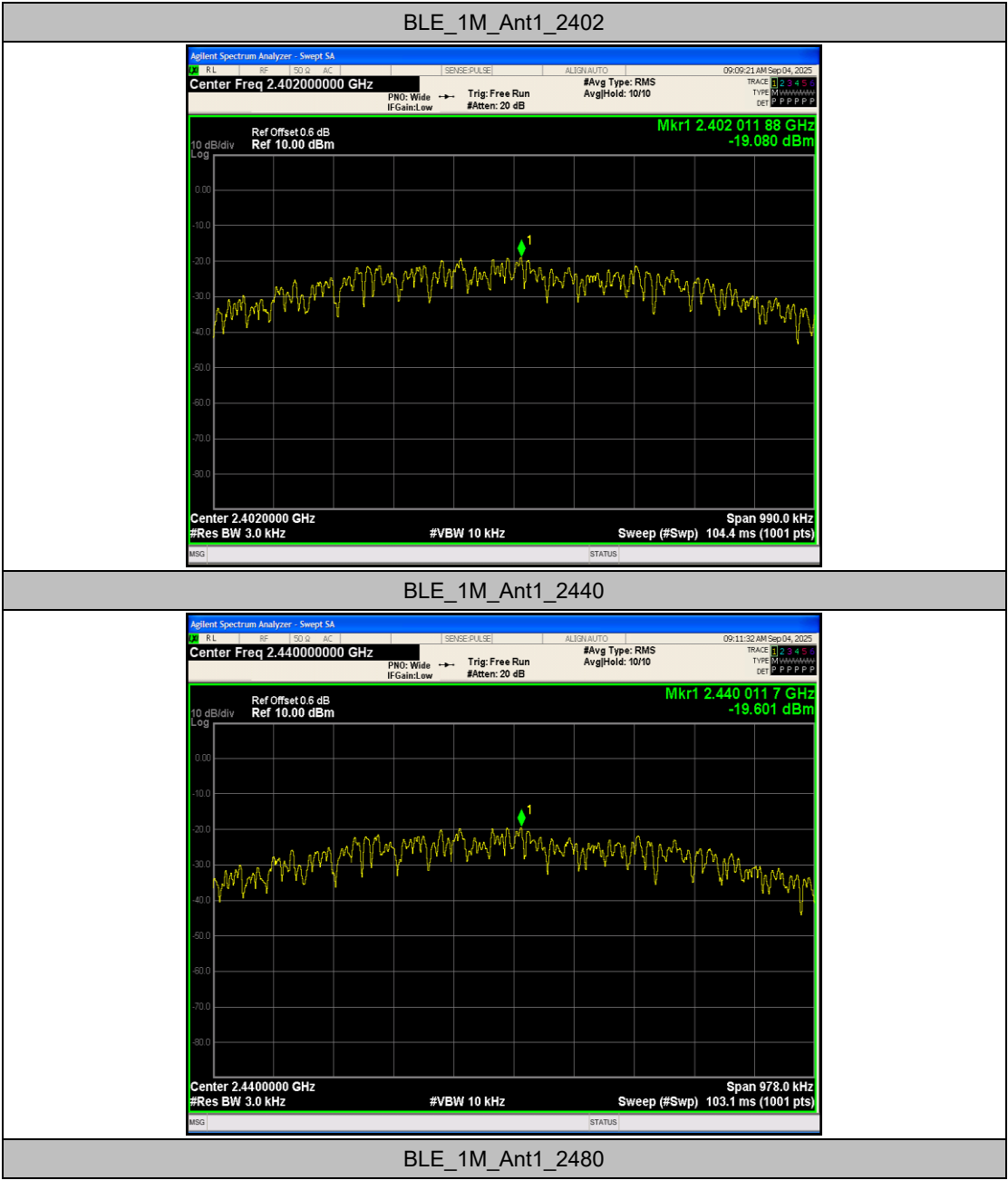
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.23	≤30	PASS
		2440	-3.86	≤30	PASS
		2480	-4.14	≤30	PASS
BLE_2M	Ant1	2402	-3.17	≤30	PASS
		2440	-3.82	≤30	PASS
		2480	-4.08	≤30	PASS

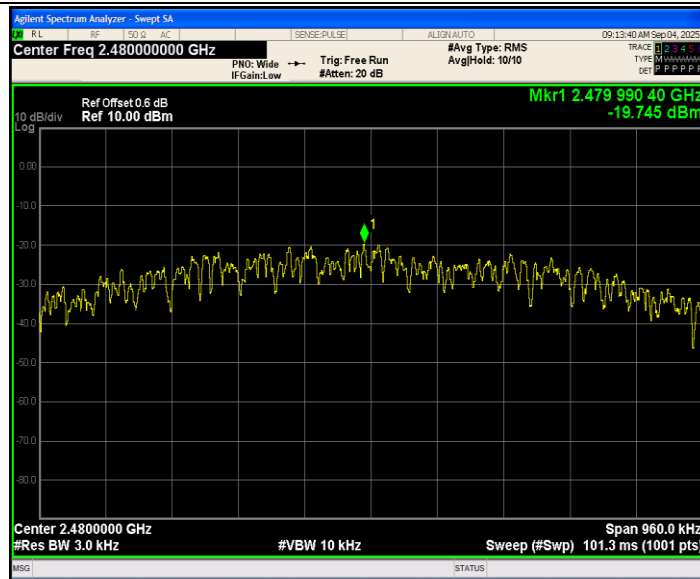
Appendix D: Maximum power spectral density

Test Result

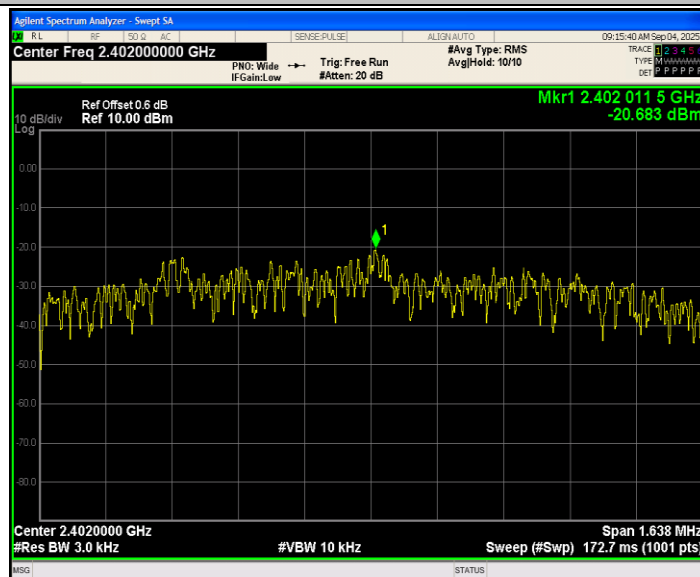
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.08	≤8.00	PASS
		2440	-19.60	≤8.00	PASS
		2480	-19.75	≤8.00	PASS
BLE_2M	Ant1	2402	-20.68	≤8.00	PASS
		2440	-20.79	≤8.00	PASS
		2480	-20.98	≤8.00	PASS

Test Graphs

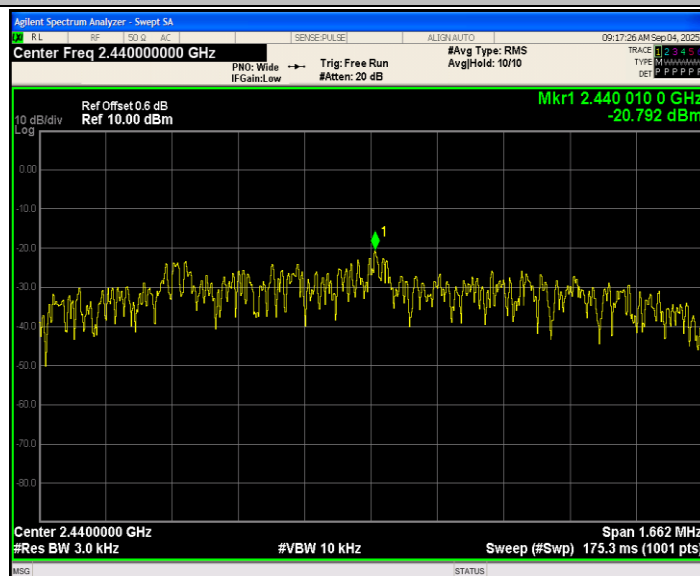




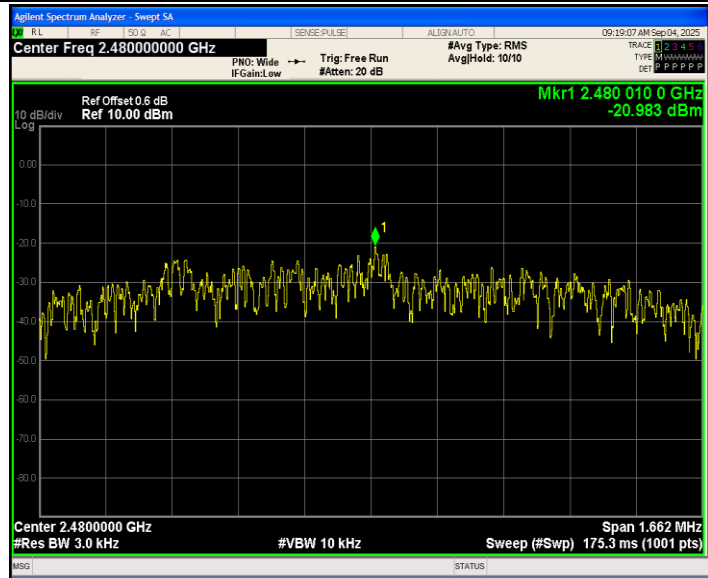
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

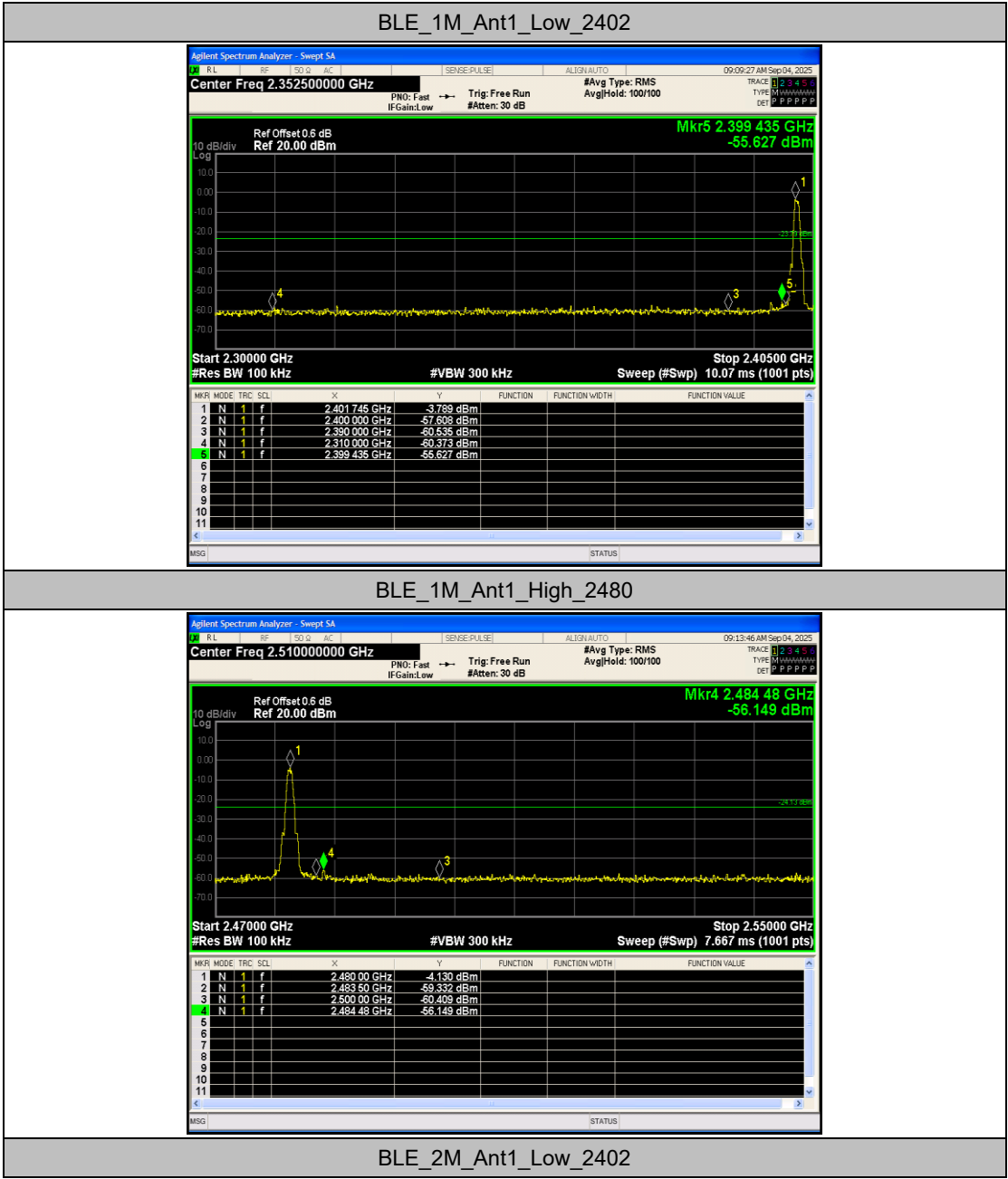


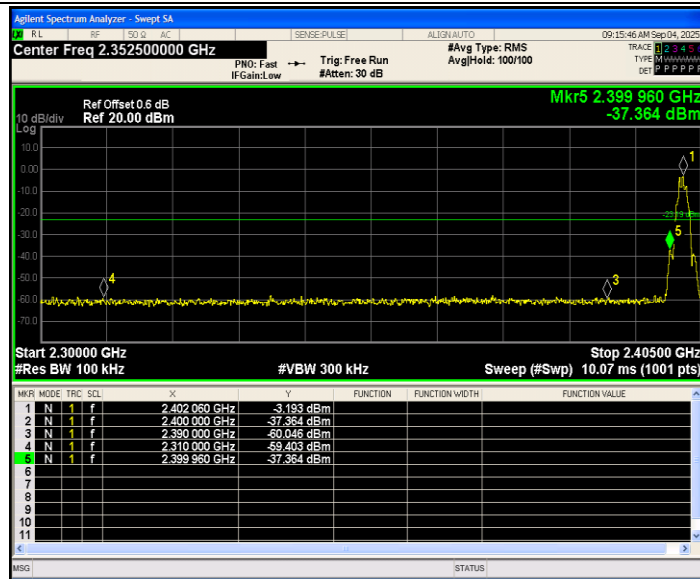
Appendix E: Band edge measurements

Test Result

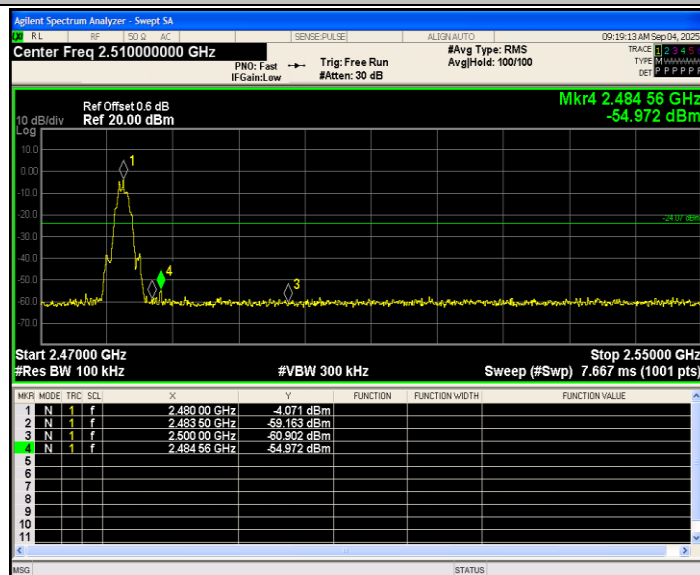
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.79	-55.63	≤-23.79	PASS
		High	2480	-4.13	-56.15	≤-24.13	PASS
BLE_2M	Ant1	Low	2402	-3.19	-37.36	≤-23.19	PASS
		High	2480	-4.07	-54.97	≤-24.07	PASS

Test Graphs





BLE_2M_Ant1_High_2480

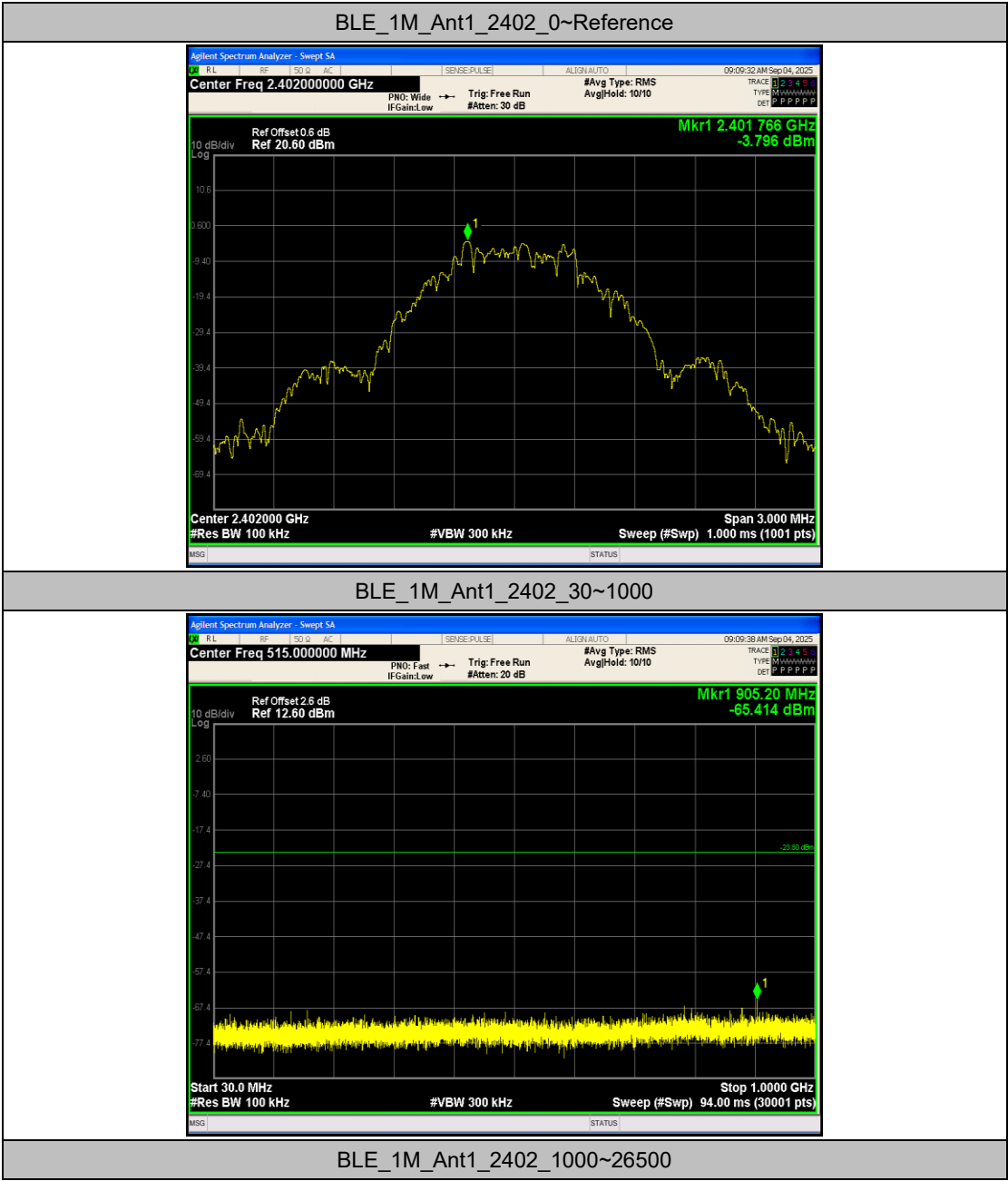


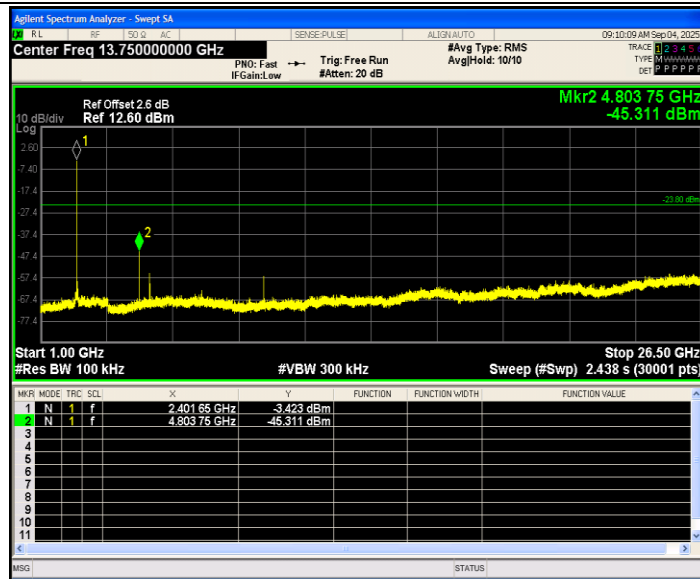
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.80	-3.80	---	PASS
			30~1000	-3.80	-65.41	≤-23.8	PASS
			1000~26500	-3.80	-45.31	≤-23.8	PASS
		2440	Reference	-4.46	-4.46	---	PASS
			30~1000	-4.46	-67.97	≤-24.46	PASS
			1000~26500	-4.46	-49.4	≤-24.46	PASS
		2480	Reference	-4.80	-4.80	---	PASS
			30~1000	-4.80	-68.02	≤-24.8	PASS
			1000~26500	-4.80	-48.45	≤-24.8	PASS
BLE_2M	Ant1	2402	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-68.15	≤-24.31	PASS
			1000~26500	-4.31	-49.71	≤-24.31	PASS
		2440	Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-67.48	≤-24.44	PASS
			1000~26500	-4.44	-50.66	≤-24.44	PASS
		2480	Reference	-6.73	-6.73	---	PASS
			30~1000	-6.73	-67.25	≤-26.73	PASS
			1000~26500	-6.73	-49.48	≤-26.73	PASS

Test Graphs

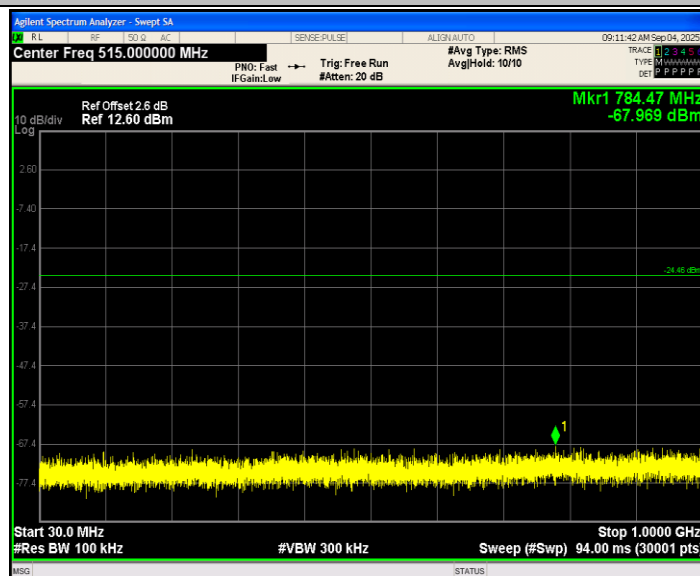




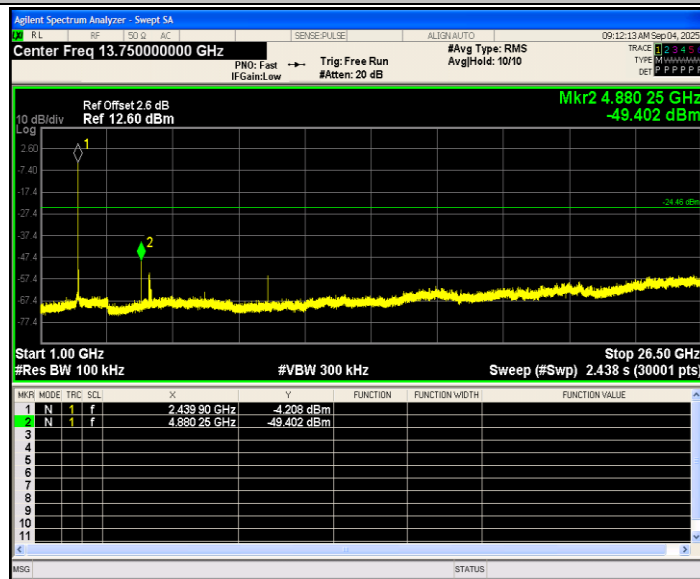
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



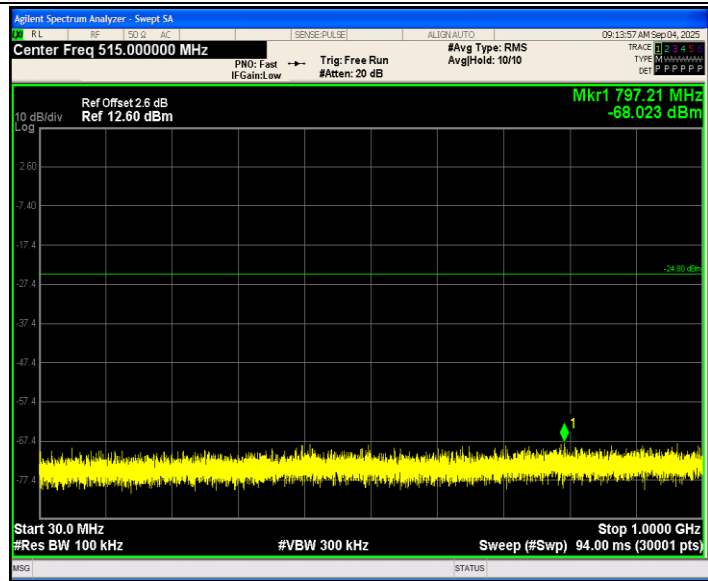
BLE_1M_Ant1_2440_1000~26500



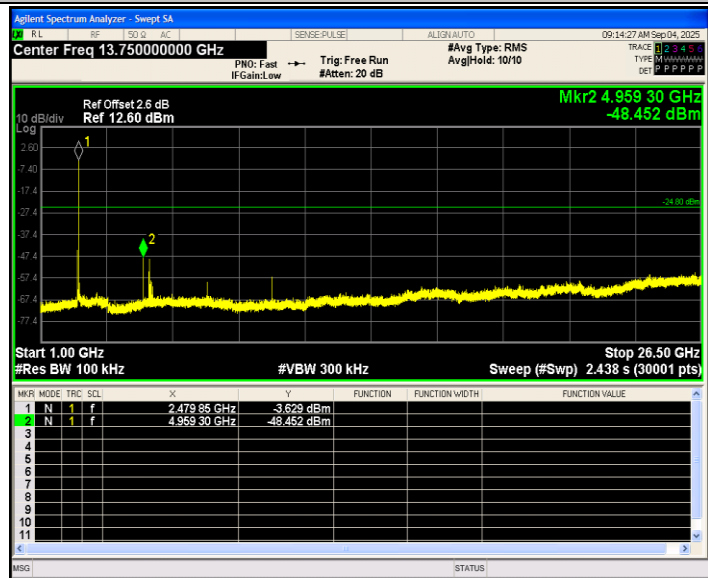
BLE_1M_Ant1_2480_0~Reference



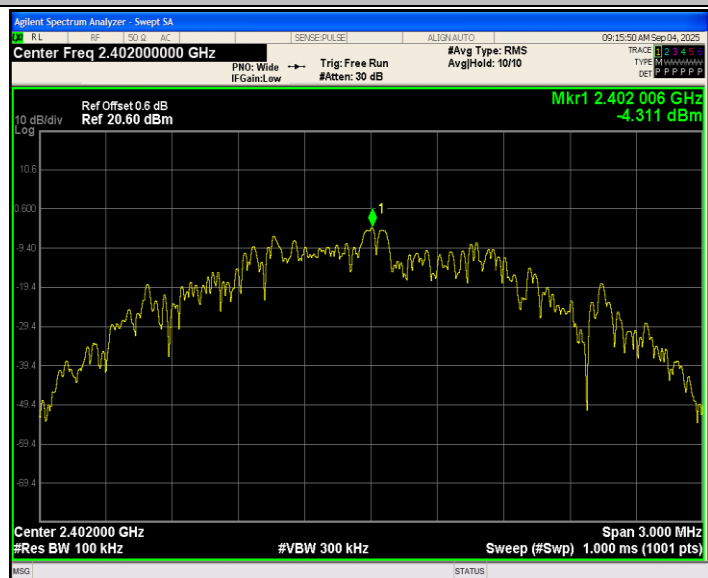
BLE_1M_Ant1_2480_30~1000



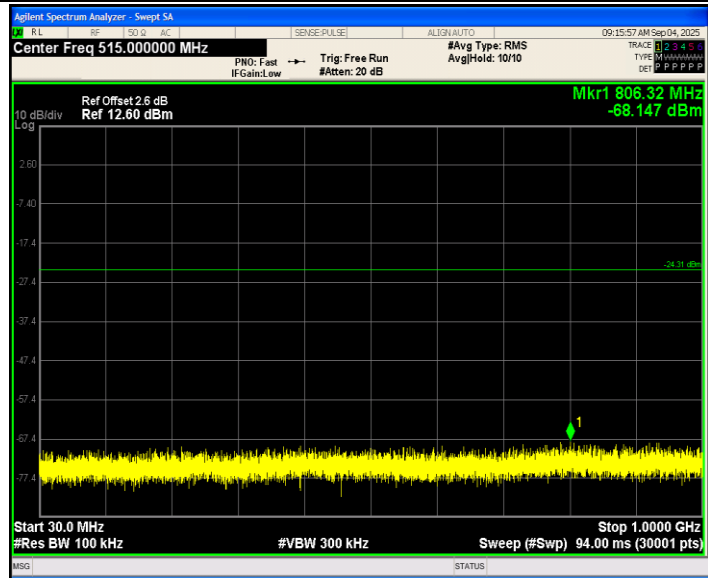
BLE_1M_Ant1_2480_1000~26500



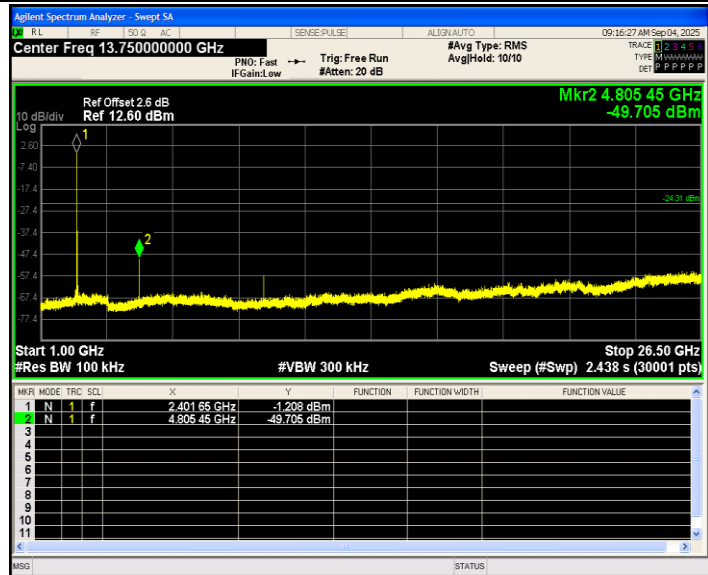
BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000



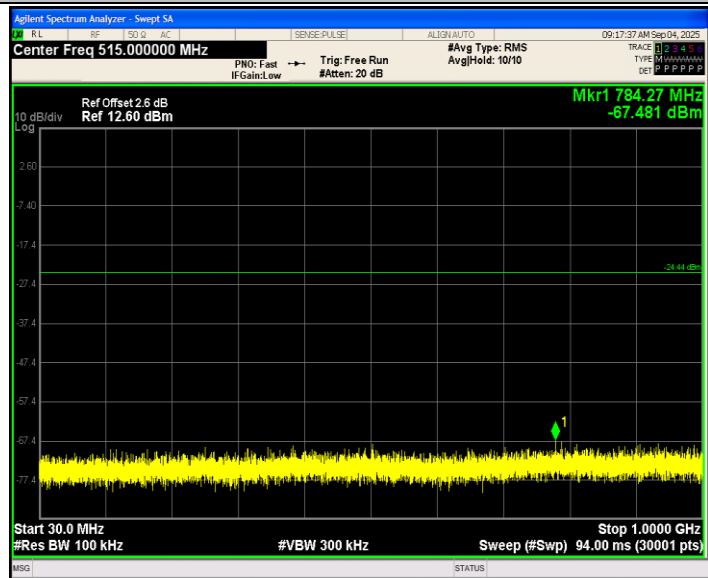
BLE_2M_Ant1_2402_1000~26500



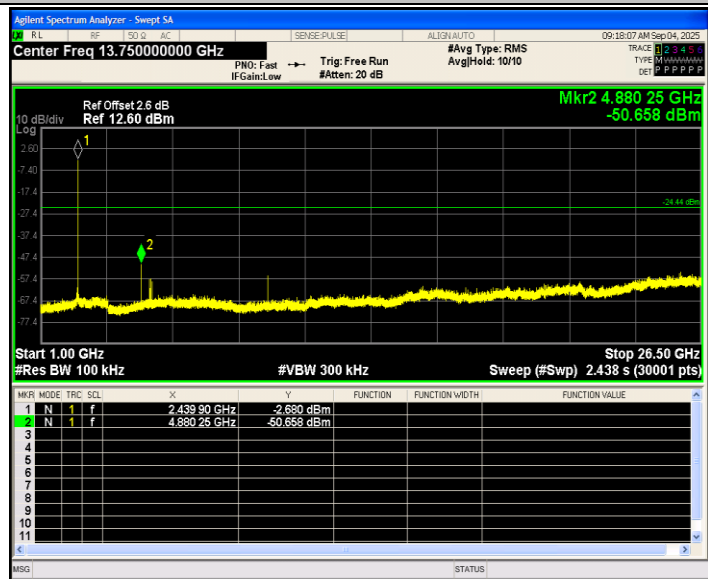
BLE_2M_Ant1_2440_0~Reference



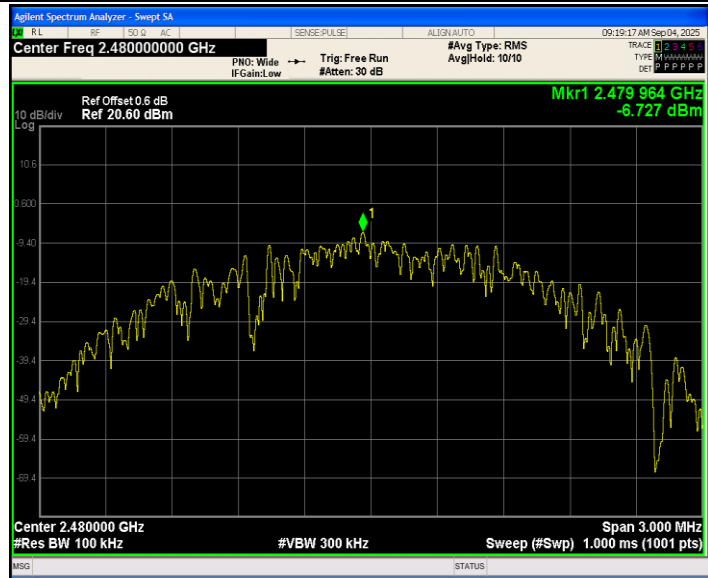
BLE_2M_Ant1_2440_30~1000



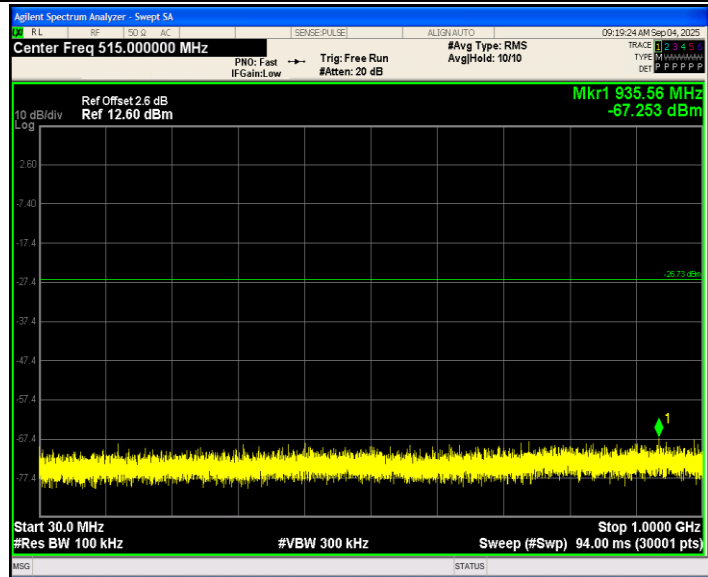
BLE_2M_Ant1_2440_1000~26500



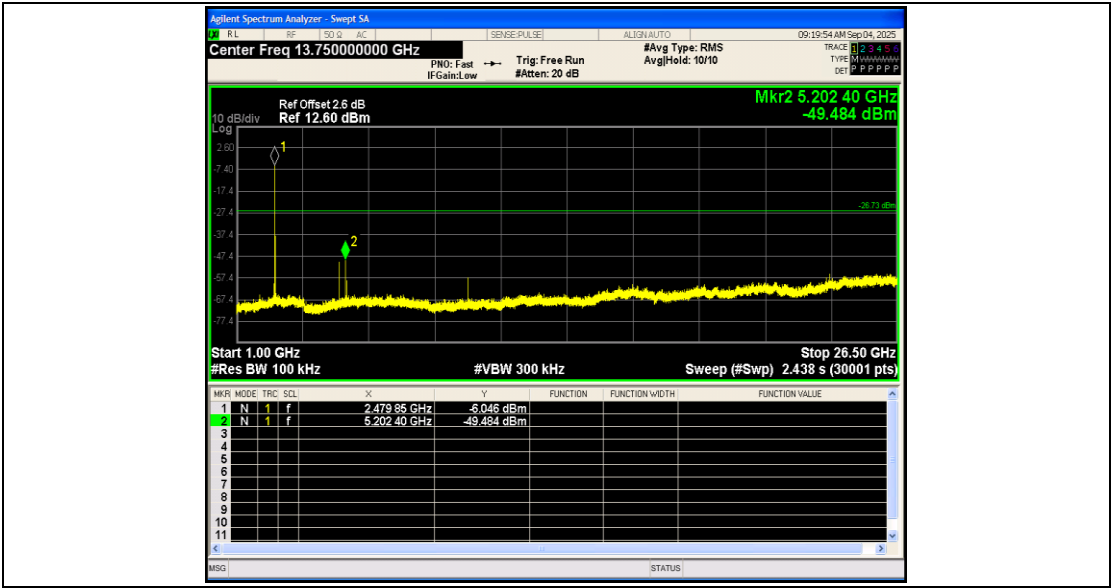
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

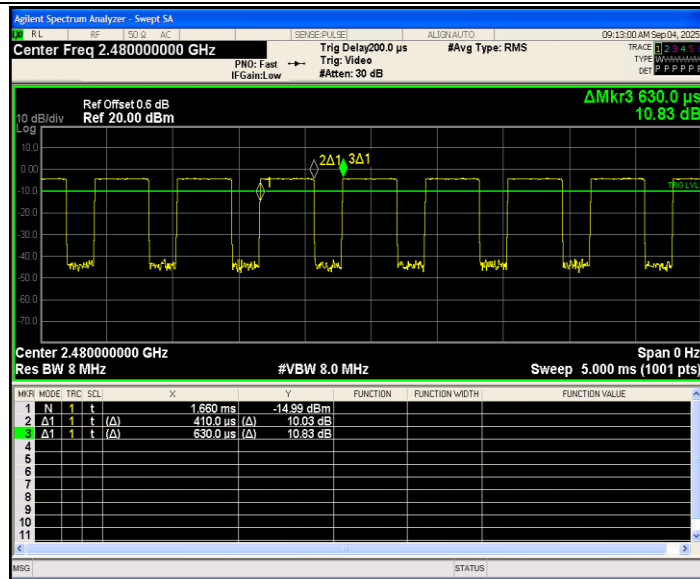


Appendix G: Duty Cycle

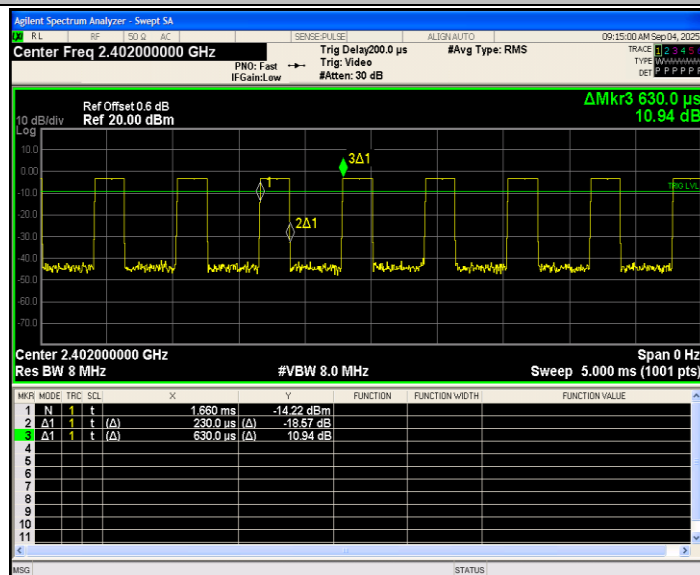
Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---
BLE_2M	Ant1	2402	0.23	0.63	0.3651	36.51	4.38	---	---
		2440	0.23	0.63	0.3651	36.51	4.38	---	---
		2480	0.23	0.63	0.3651	36.51	4.38	---	---

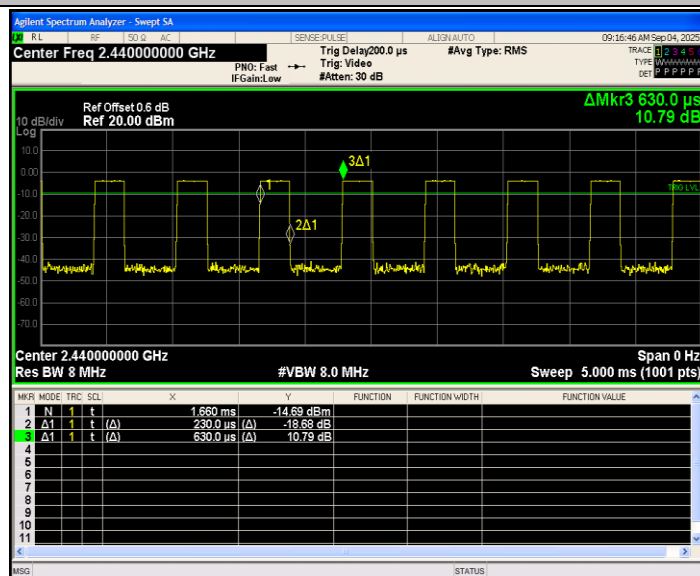
[illegible]



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

