Appendix Test Data

Report No.:	18220WC30010402	Test Sample No.:	1-2-2
Start Test Date:	2023.2.2	Finish Test Date:	2023.2.4
Test Engineer:	Tony.He	Auditor:	Edward.Pan
Temperature:	24.3℃	Relative Humidity:	52 %
Pressure:	1012 hPa		

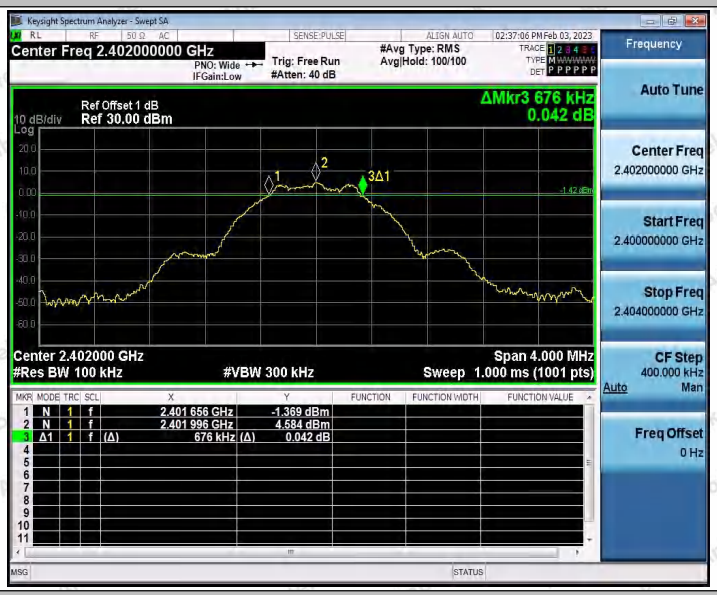
Appendix A: DTS Bandwidth

Test Result

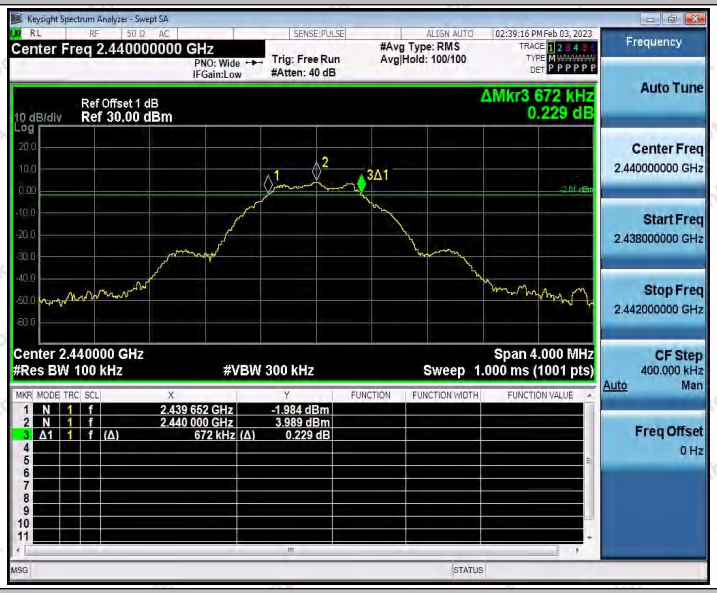
Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.676	2401.656	2402.332	0.5	PASS
		2440	0.672	2439.652	2440.324	0.5	PASS
		2480	0.672	2479.660	2480.332	0.5	PASS
BLE_2M	Ant1	2402	1.108	2401.452	2402.560	0.5	PASS
		2440	1.104	2439.460	2440.564	0.5	PASS
		2480	1.288	2479.316	2480.604	0.5	PASS

Test Graphs

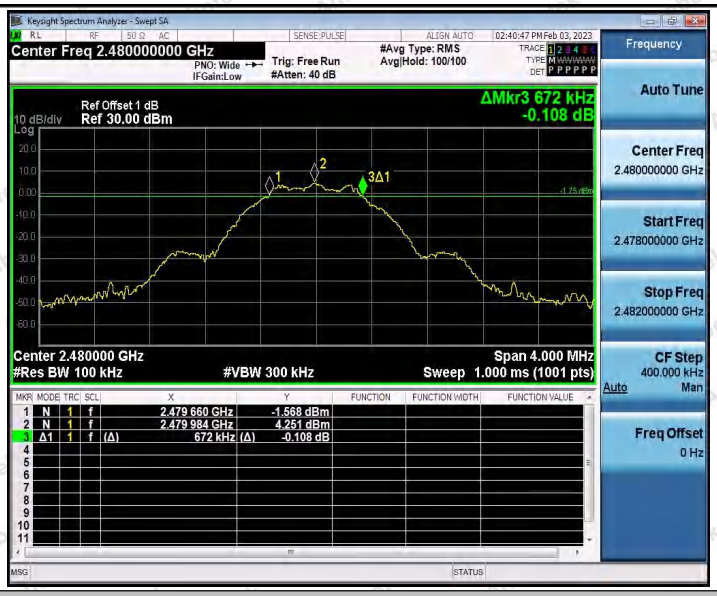
BLE_1M_Ant1_2402



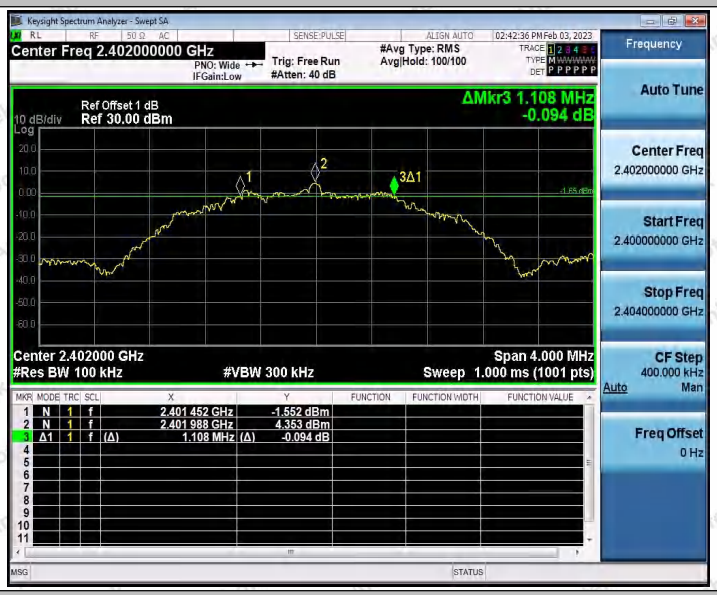
BLE_1M_Ant1_2440



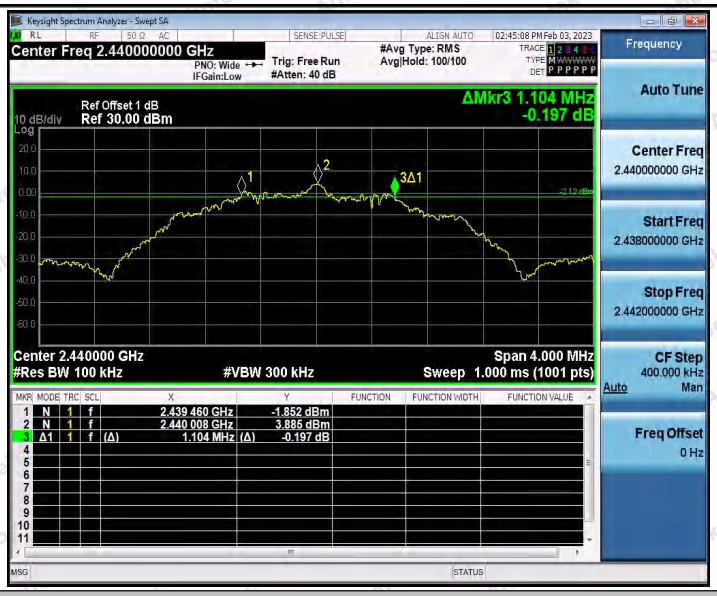
BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

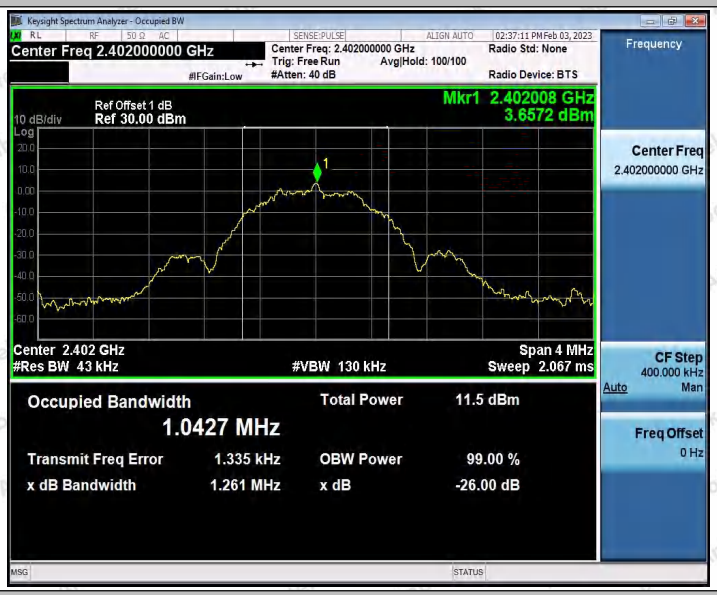
Appendix B: Occupied Channel Bandwidth

Test Result

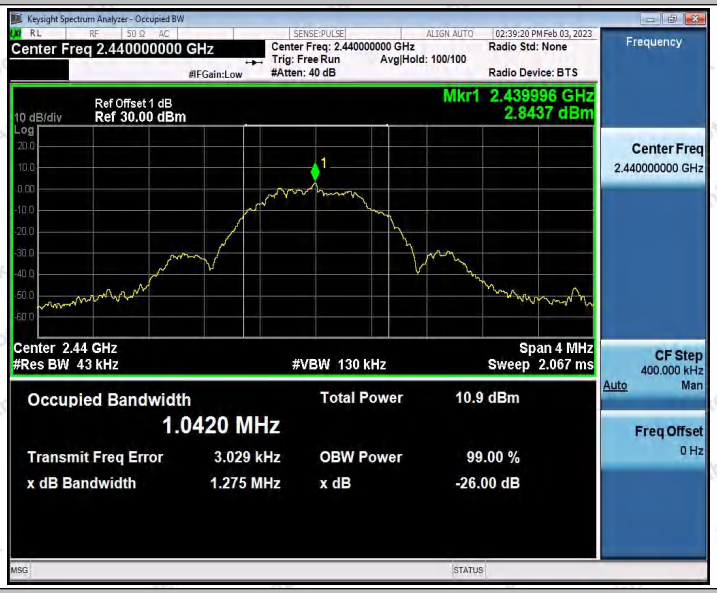
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0427	2401.4800	2402.5227
		2440	1.0420	2439.4820	2440.5240
		2480	1.0379	2479.4774	2480.5153
BLE_2M	Ant1	2402	2.0664	2400.9816	2403.0480
		2440	2.0496	2438.9925	2441.0421
		2480	2.0645	2478.9666	2481.0311

Test Graphs

BLE_1M_Ant1_2402

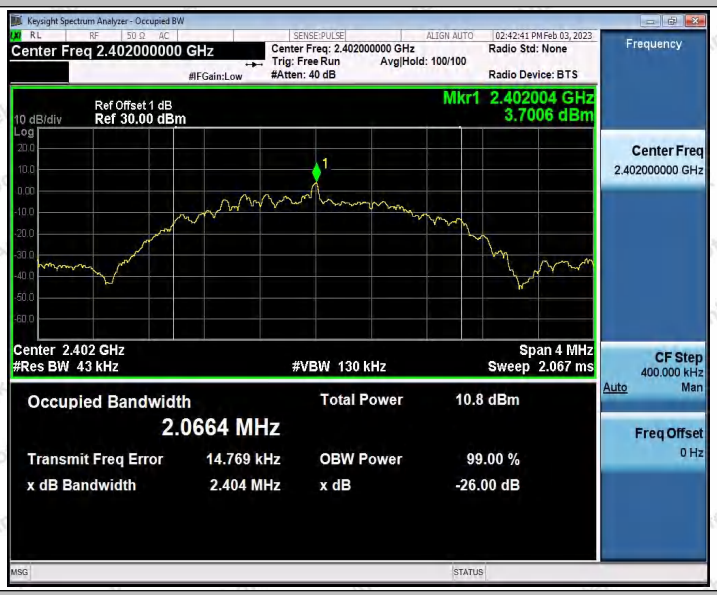


BLE_1M_Ant1_2440



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

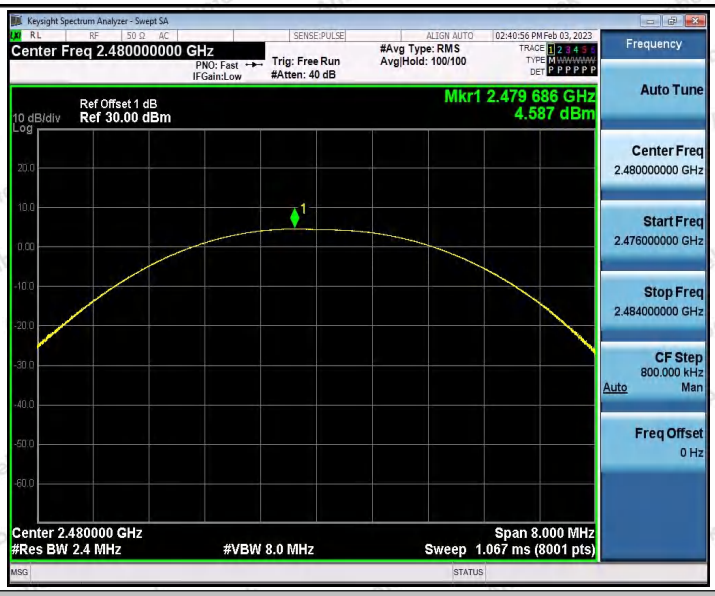
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	4.72	≤30	PASS
		2440	4.14	≤30	PASS
		2480	4.59	≤30	PASS
BLE_2M	Ant1	2402	4.72	≤30	PASS
		2440	4.15	≤30	PASS
		2480	4.70	≤30	PASS

Test Graphs Peak

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 D: Maximum power spectral density

Test Result

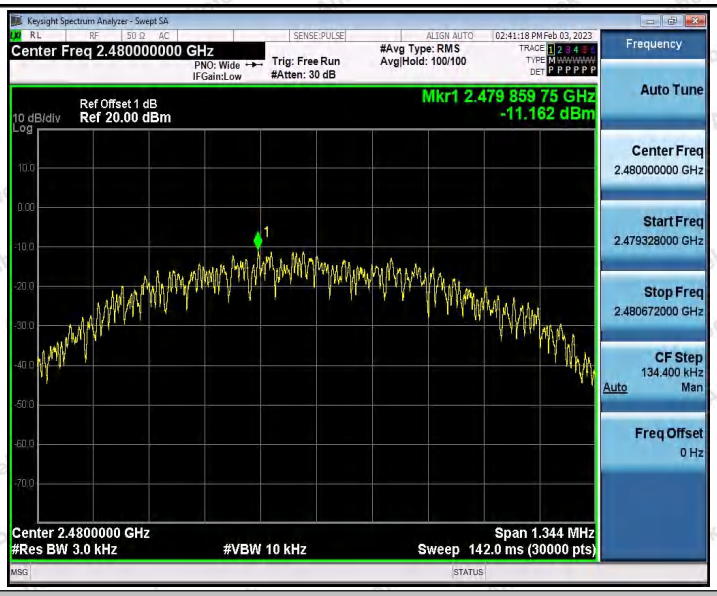
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.29	≤8.00	PASS
		2440	-11.28	≤8.00	PASS
		2480	-11.16	≤8.00	PASS
BLE_2M	Ant1	2402	-12.93	≤8.00	PASS
		2440	-13.55	≤8.00	PASS
		2480	-13.22	≤8.00	PASS

Test Graphs

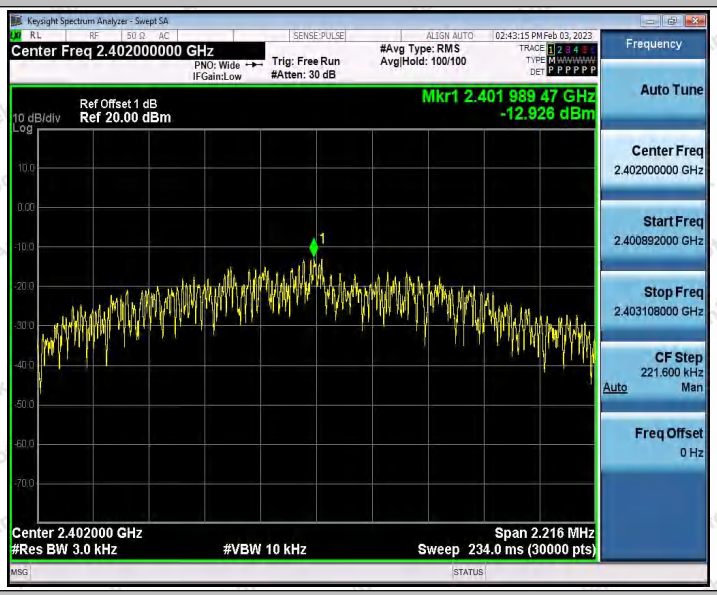
BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

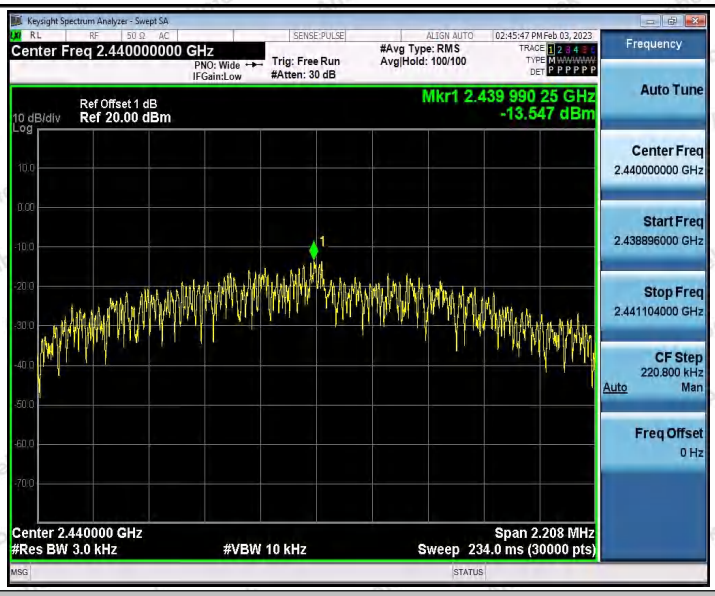
BLE_1M_Ant1_2480



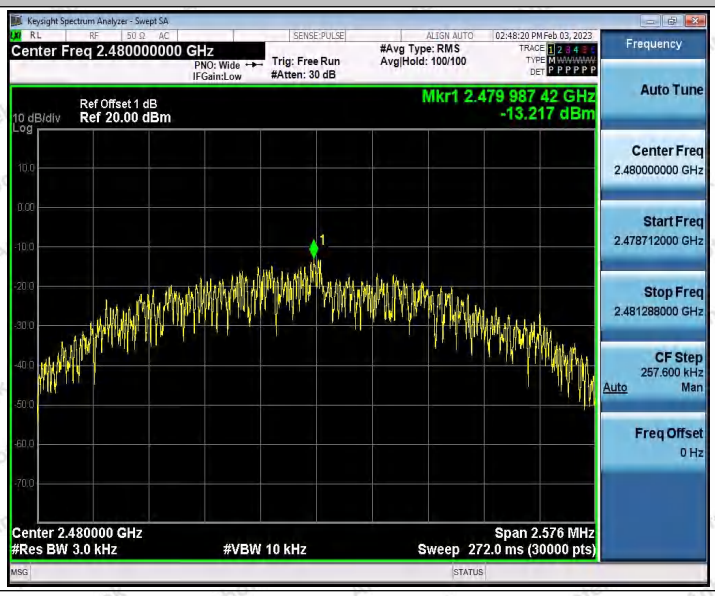
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



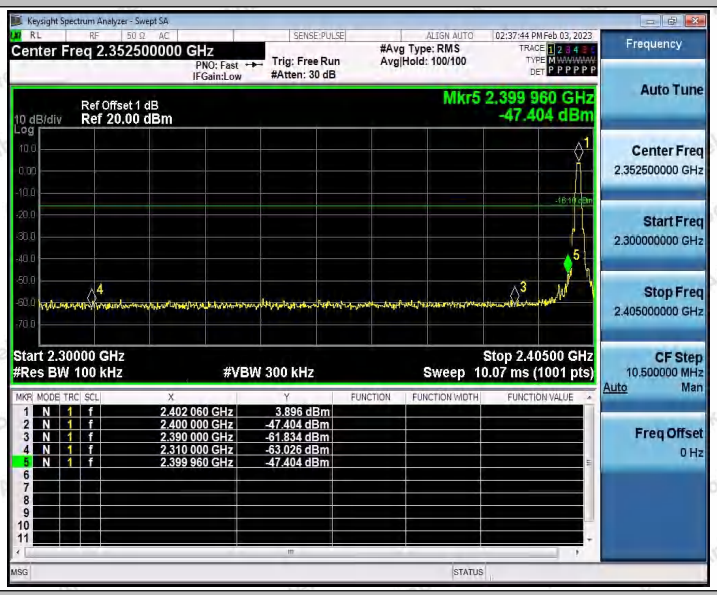
Appendix E: Band edge measurements

Test Result

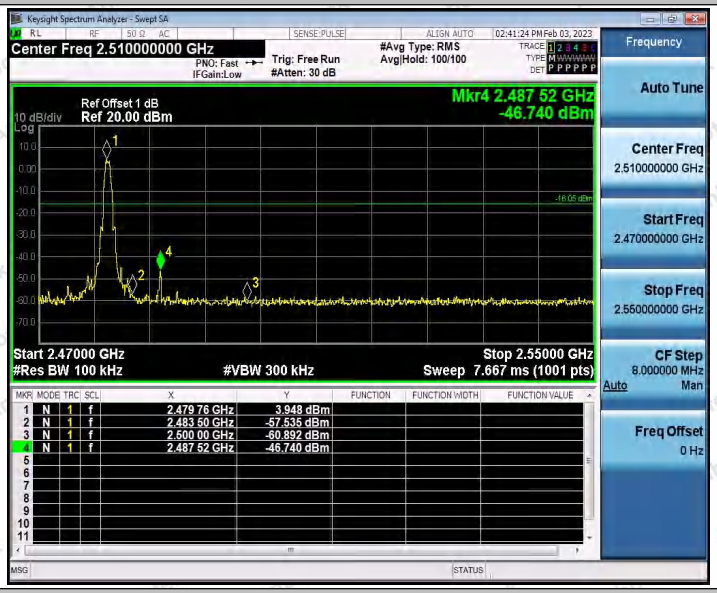
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.90	-47.4	≤-16.1	PASS
		High	2480	3.95	-46.74	≤-16.05	PASS
BLE_2M	Ant1	Low	2402	4.70	-28	≤-15.3	PASS
		High	2480	4.45	-44.22	≤-15.56	PASS

Test Graphs

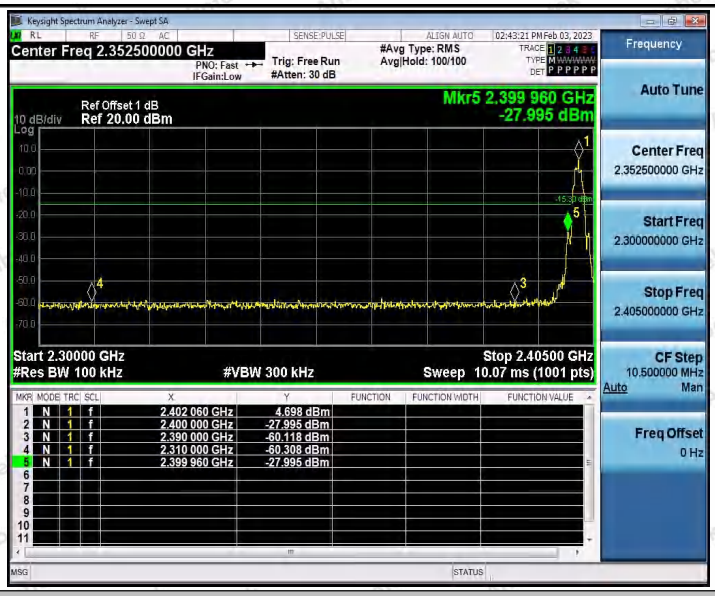
BLE_1M_Ant1_Low_2402



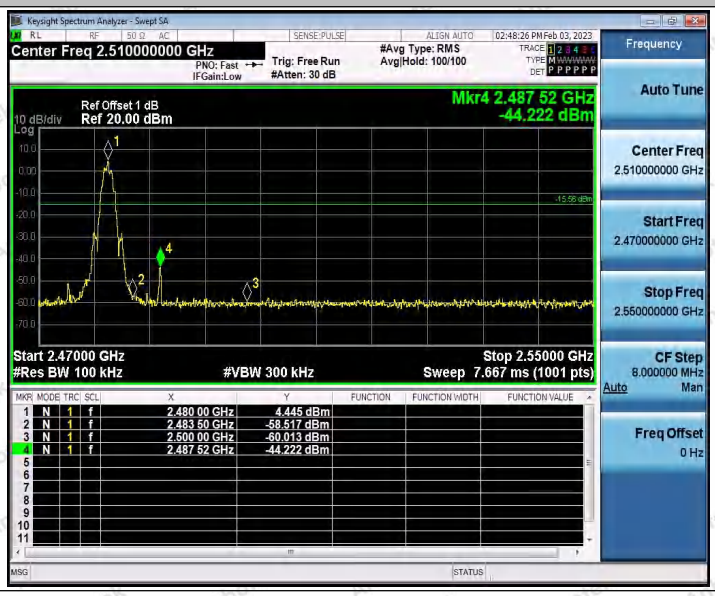
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

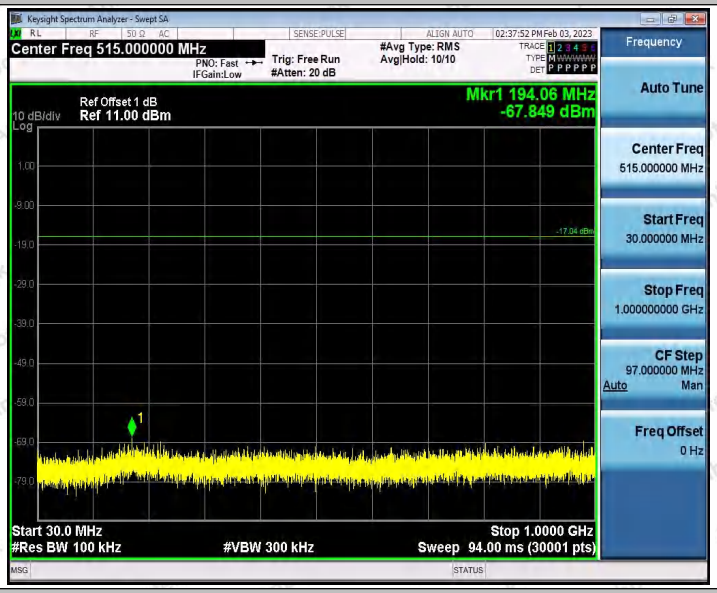
Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	2.96	2.96	---	PASS
			30~1000	2.96	-67.85	≤-17.04	PASS
			1000~26500	2.96	-53.33	≤-17.04	PASS
		2440	Reference	2.42	2.42	---	PASS
			30~1000	2.42	-68.98	≤-17.58	PASS
			1000~26500	2.42	-53.69	≤-17.58	PASS
		2480	Reference	4.36	4.36	---	PASS
			30~1000	4.36	-68.45	≤-15.64	PASS
			1000~26500	4.36	-53.31	≤-15.64	PASS
BLE_2M	Ant1	2402	Reference	1.11	1.11	---	PASS
			30~1000	1.11	-68.83	≤-18.89	PASS
			1000~26500	1.11	-53.6	≤-18.89	PASS
		2440	Reference	2.49	2.49	---	PASS
			30~1000	2.49	-68.62	≤-17.51	PASS
			1000~26500	2.49	-52.76	≤-17.51	PASS
		2480	Reference	1.78	1.78	---	PASS
			30~1000	1.78	-68.57	≤-18.22	PASS
			1000~26500	1.78	-52.67	≤-18.22	PASS

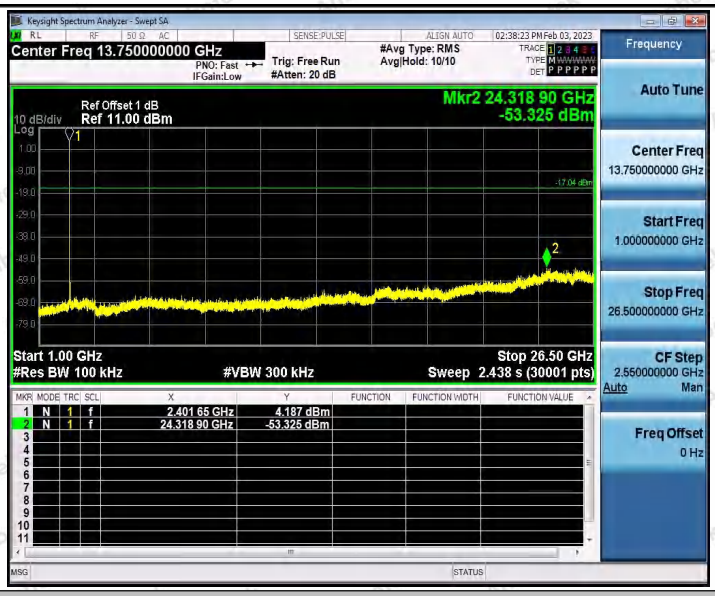
Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

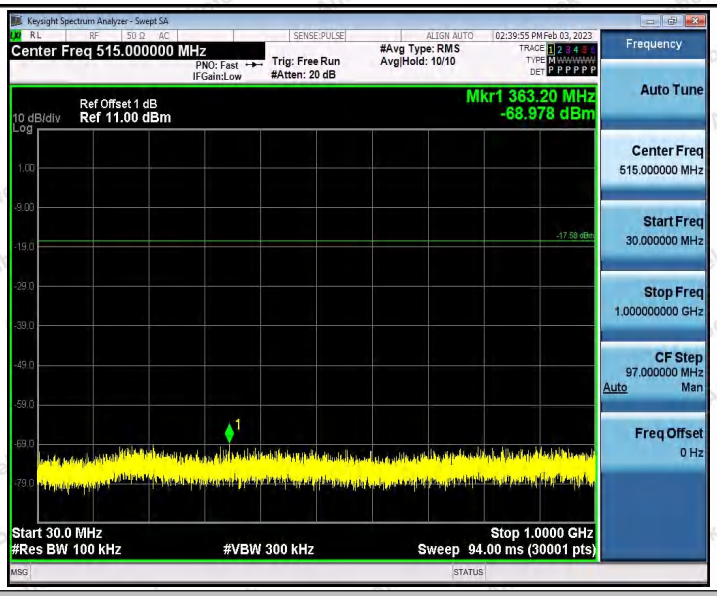


BLE_1M_Ant1_2402_1000~26500

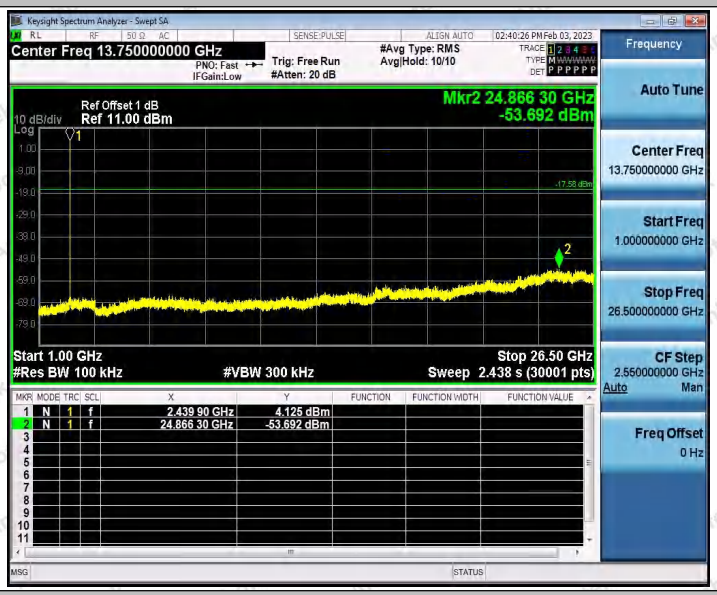


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

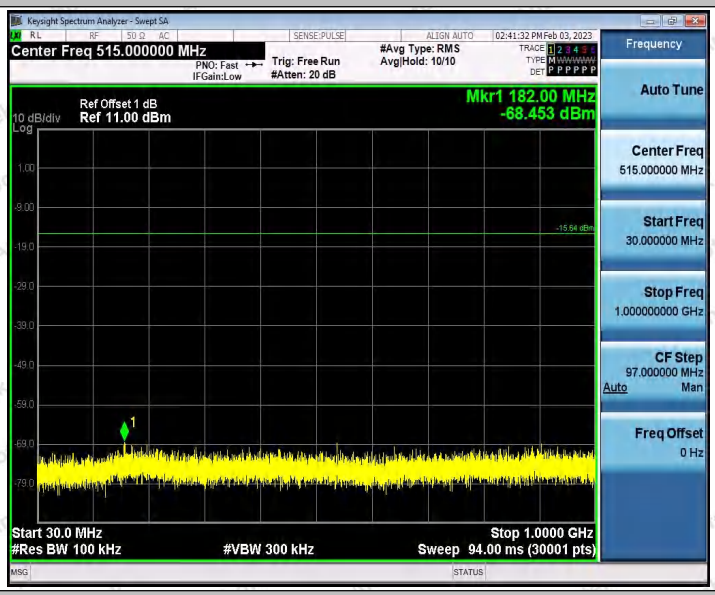


BLE_1M_Ant1_2440_1000~26500

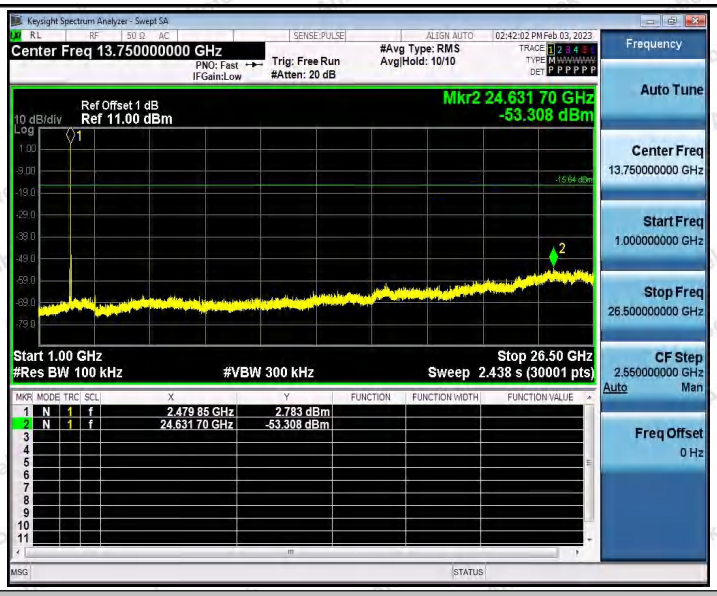


BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000

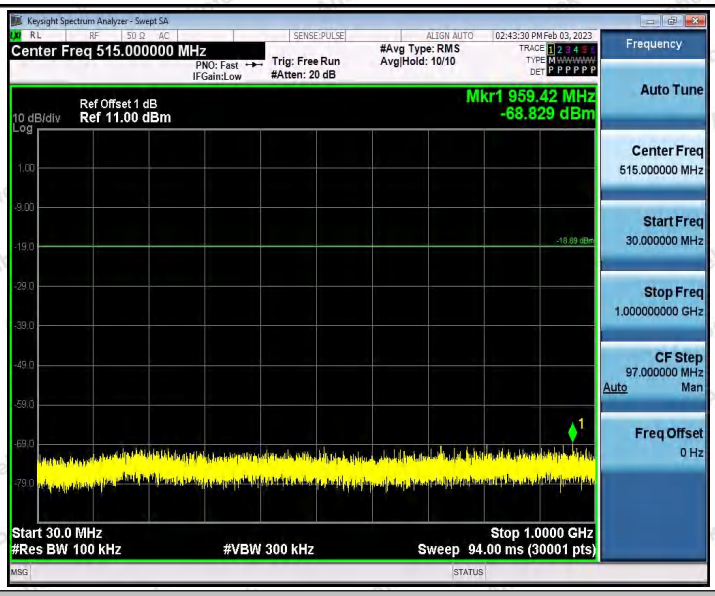


BLE_1M_Ant1_2480_1000~26500

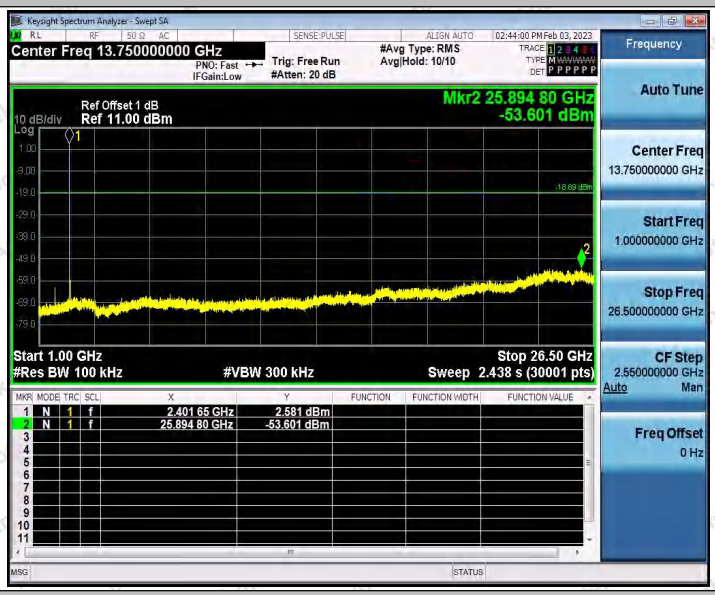


BLE_2M_Ant1_2402_0~Reference

BLE_2M_Ant1_2402_30~1000

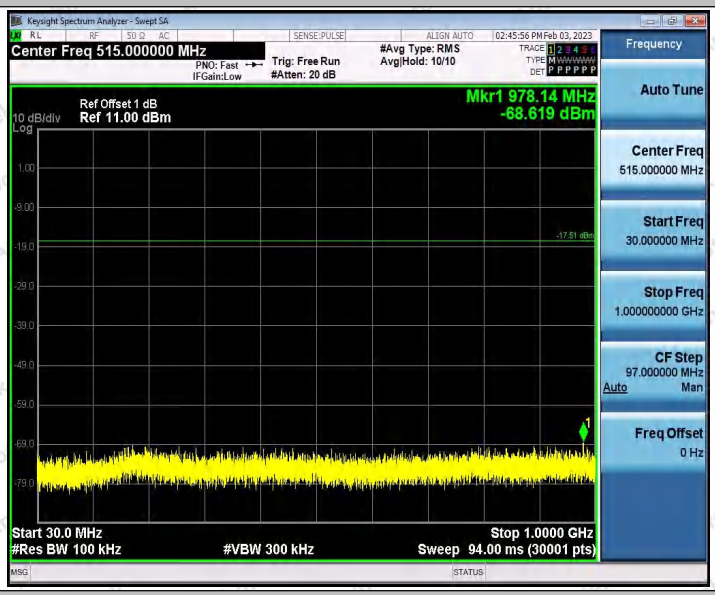


BLE_2M_Ant1_2402_1000~26500

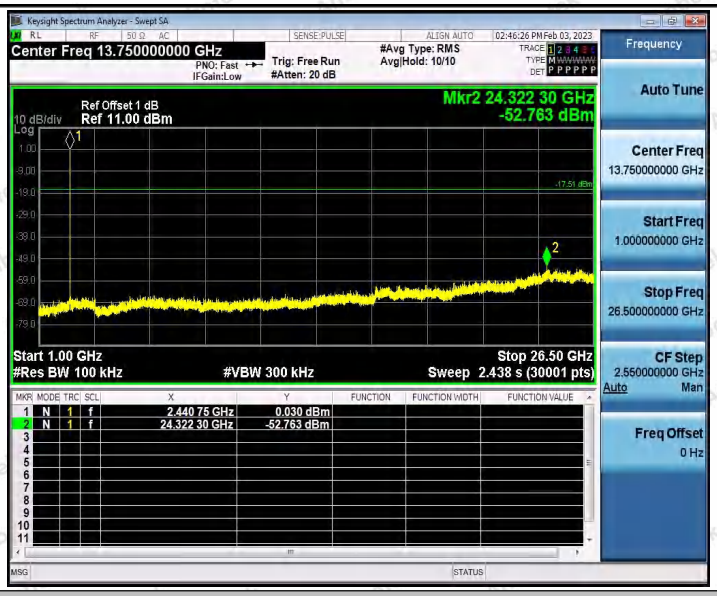


BLE_2M_Ant1_2440_0~Reference

BLE_2M_Ant1_2440_30~1000

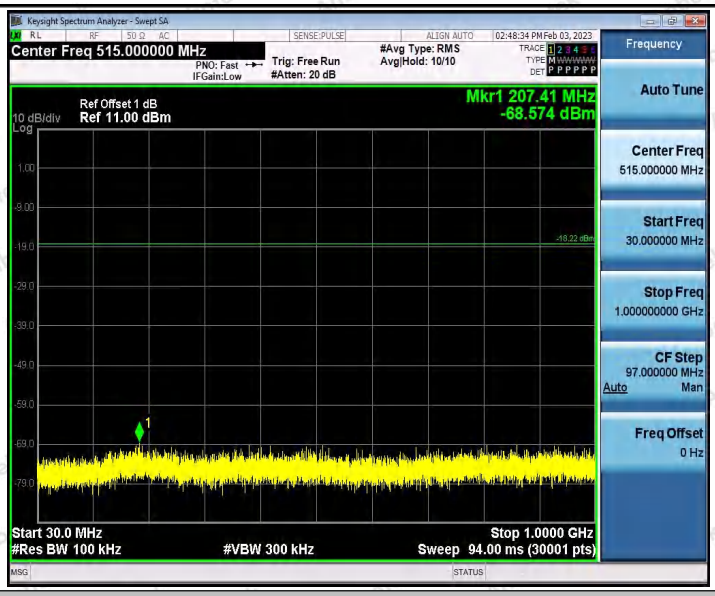


BLE_2M_Ant1_2440_1000~26500

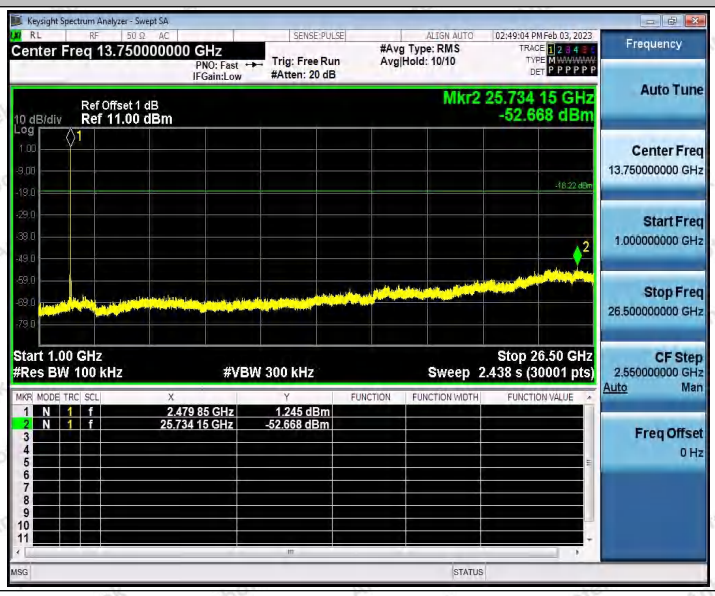


BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



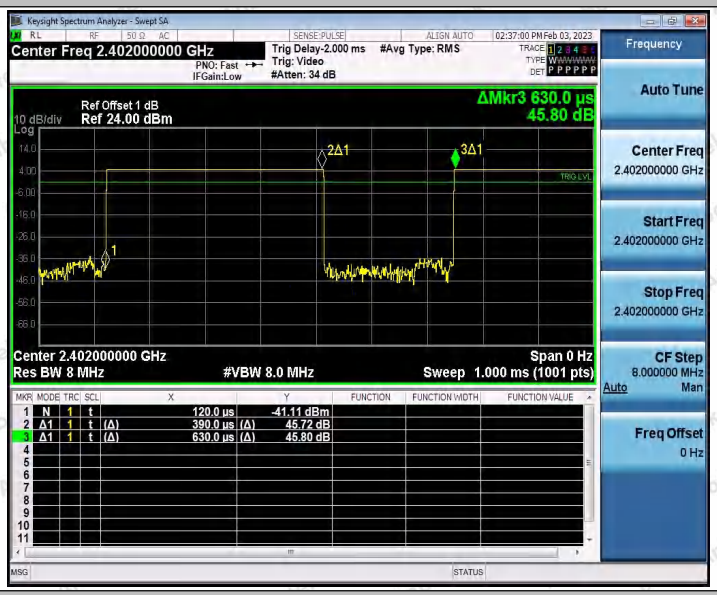
Appendix G: Duty Cycle

Test Result

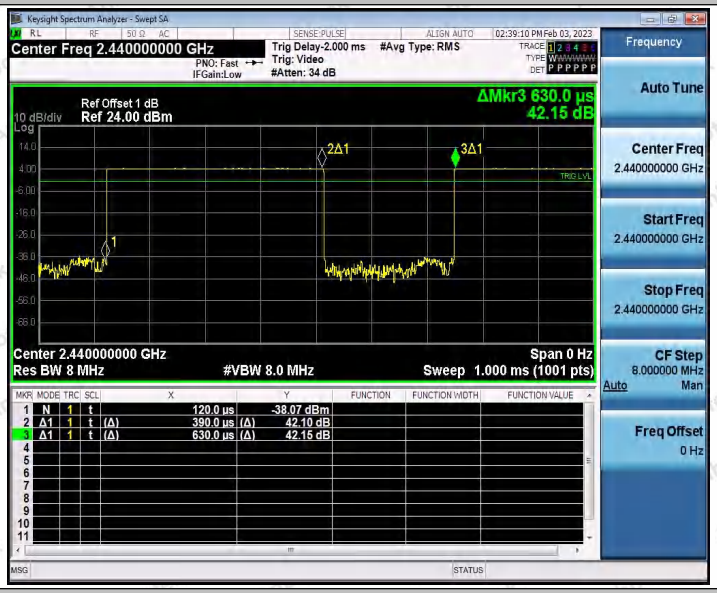
Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.08
		2440	0.39	0.63	61.90	2.08
		2480	0.39	0.63	61.90	2.08
BLE_2M	Ant1	2402	0.21	0.63	33.33	4.77
		2440	0.21	0.63	33.33	4.77
		2480	0.21	0.63	33.33	4.77

Test Graphs

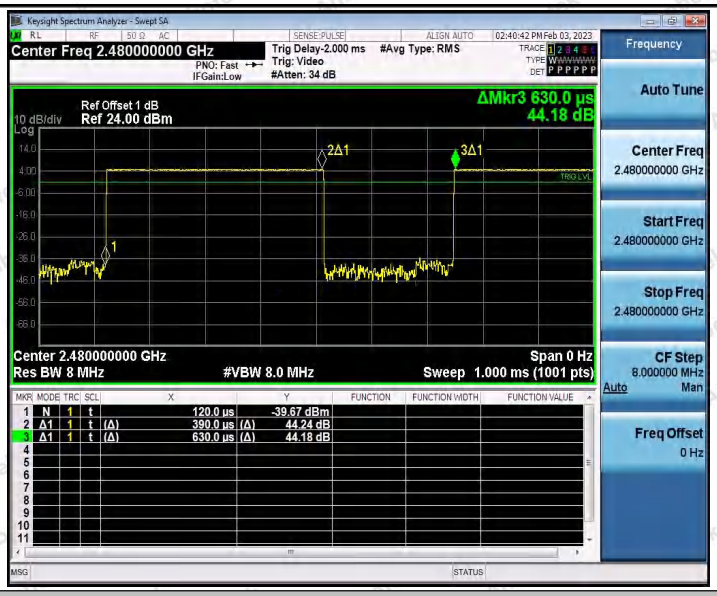
BLE_1M_Ant1_2402



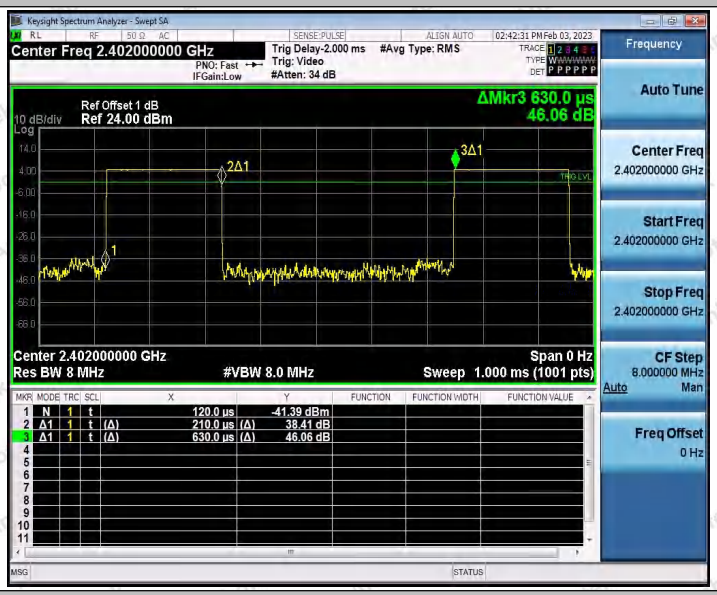
BLE_1M_Ant1_2440



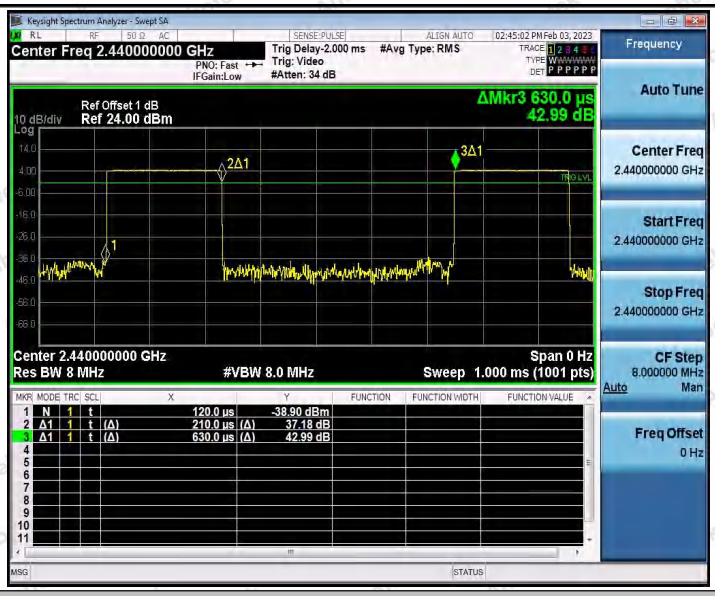
BLE_1M_Ant1_2480



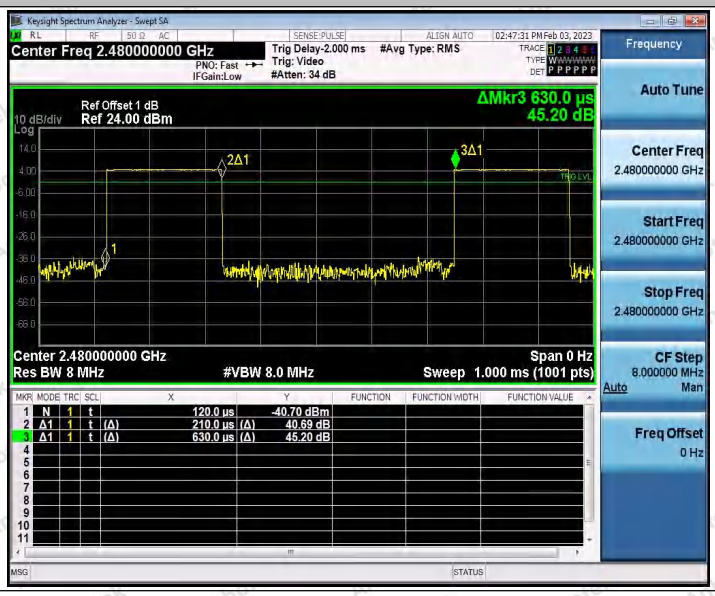
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



---End---