Appendix Test Data

Report No.:	18220WC40015101	Test Sample No.:	1-2-2
Start Test Date:	2024.1.25	Finish Test Date:	2024.1.25
Test Engineer:	Hayman Chen	Auditor:	Rock Luo
Temperature:	25.1℃	Relative Humidity:	47%
Pressure:	101kPa		

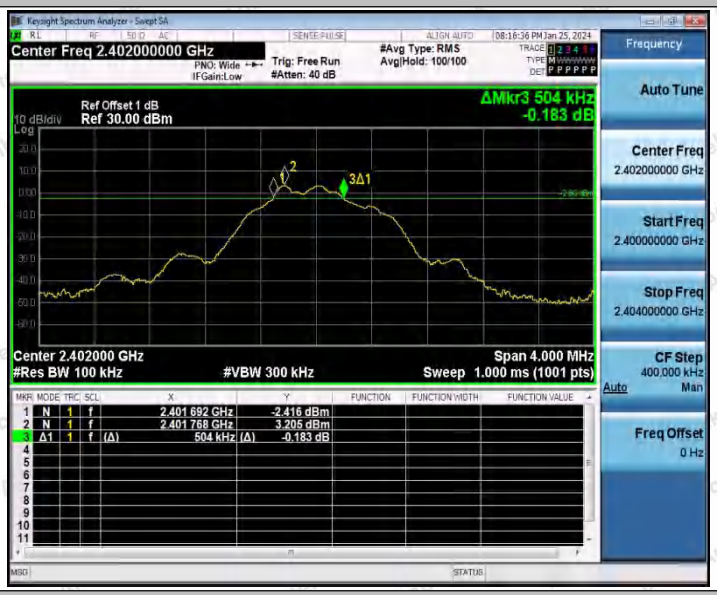
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.504	2401.692	2402.196	0.5	PASS
		2440	0.508	2439.688	2440.196	0.5	PASS
		2480	0.508	2479.688	2480.196	0.5	PASS
BLE_2M	Ant1	2402	0.848	2401.424	2402.272	0.5	PASS
		2440	0.832	2439.436	2440.268	0.5	PASS
		2480	0.836	2479.432	2480.268	0.5	PASS

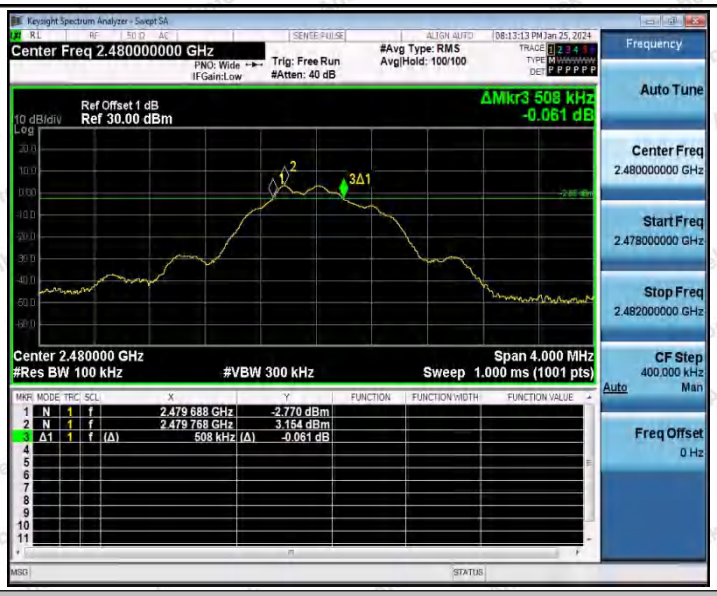
Test Graphs

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

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0225	2401.5168	2402.5393
		2440	1.0205	2439.5174	2440.5379
		2480	1.0106	2479.5219	2480.5325
BLE_2M	Ant1	2402	2.0177	2401.0251	2403.0428
		2440	2.0281	2439.0191	2441.0472
		2480	2.0346	2479.0155	2481.0501

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

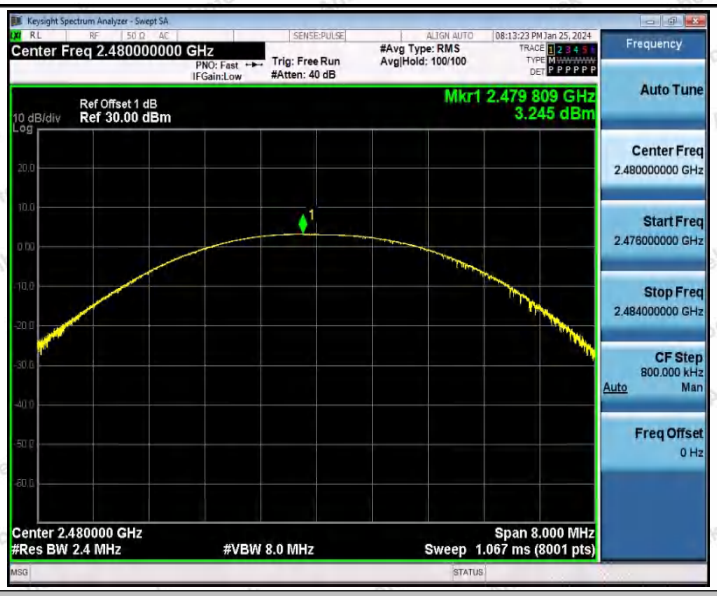
TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.29	≤30	PASS
		2440	3.35	≤30	PASS
		2480	3.25	≤30	PASS
BLE_2M	Ant1	2402	3.4	≤30	PASS
		2440	3.48	≤30	PASS
		2480	3.48	≤30	PASS

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

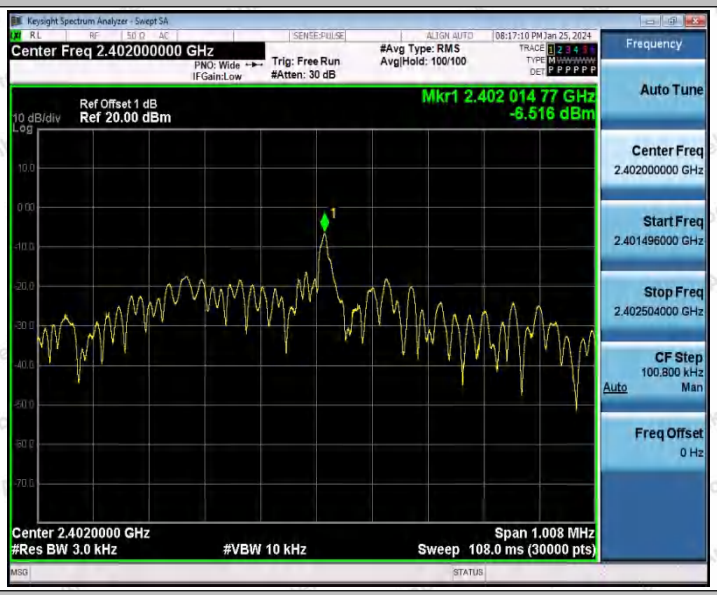
Appendix D: Maximum power spectral density

Test Result

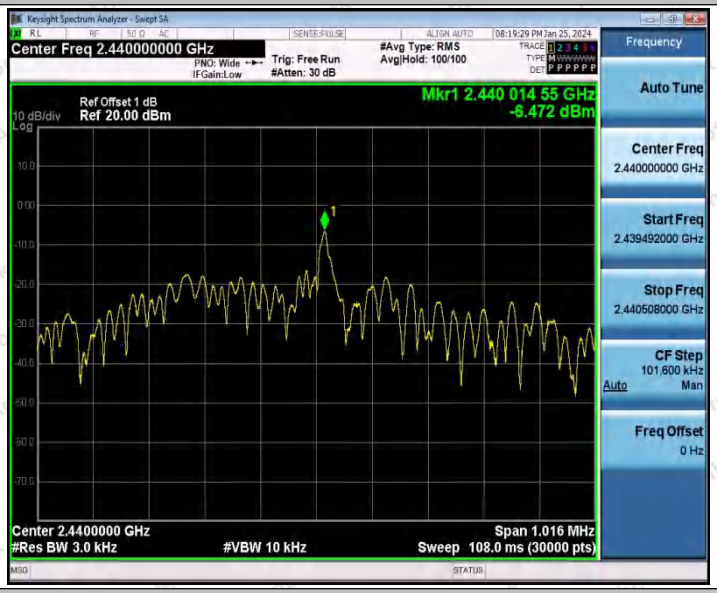
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-6.52	≤8.00	PASS
		2440	-6.47	≤8.00	PASS
		2480	-6.58	≤8.00	PASS
BLE_2M	Ant1	2402	-6.94	≤8.00	PASS
		2440	-6.89	≤8.00	PASS
		2480	-6.87	≤8.00	PASS

Test Graphs

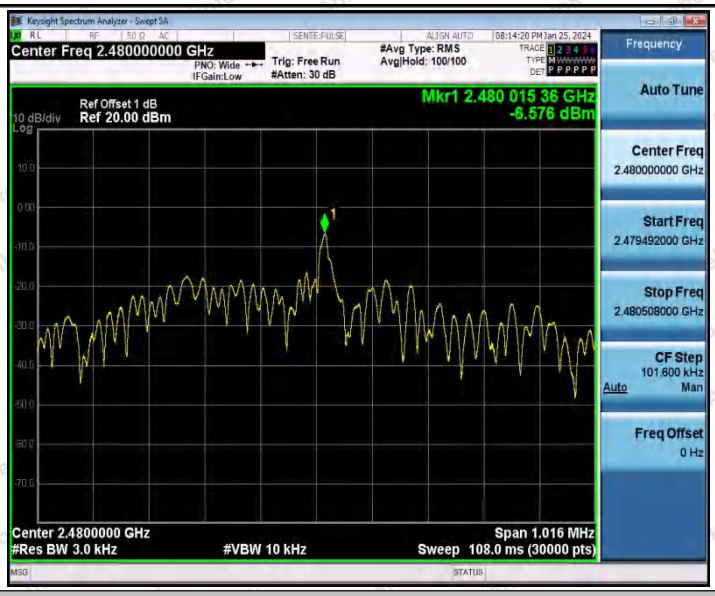
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

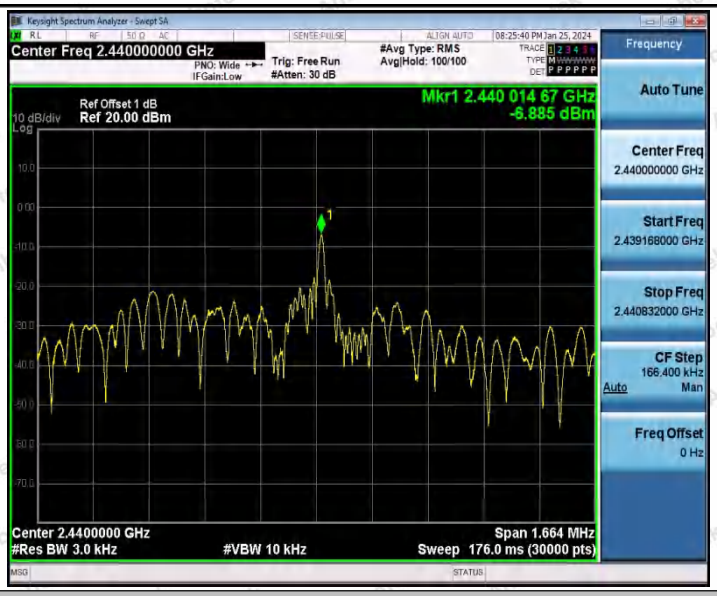


BLE_1M_Ant1_2480

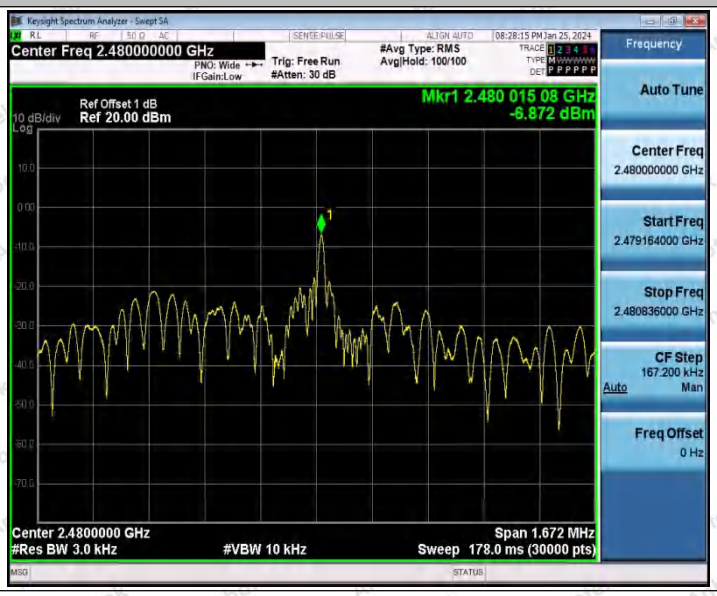


BLE_2M_Ant1_2402

BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



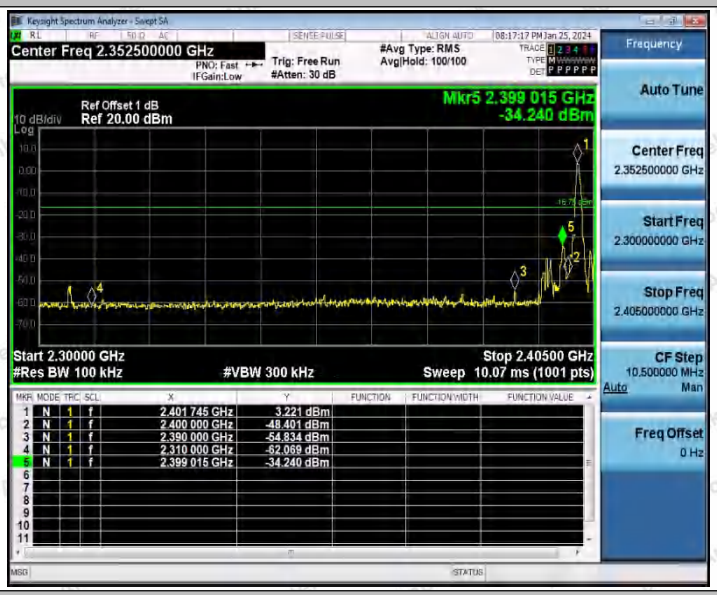
Appendix E: Band edge measurements

Test Result

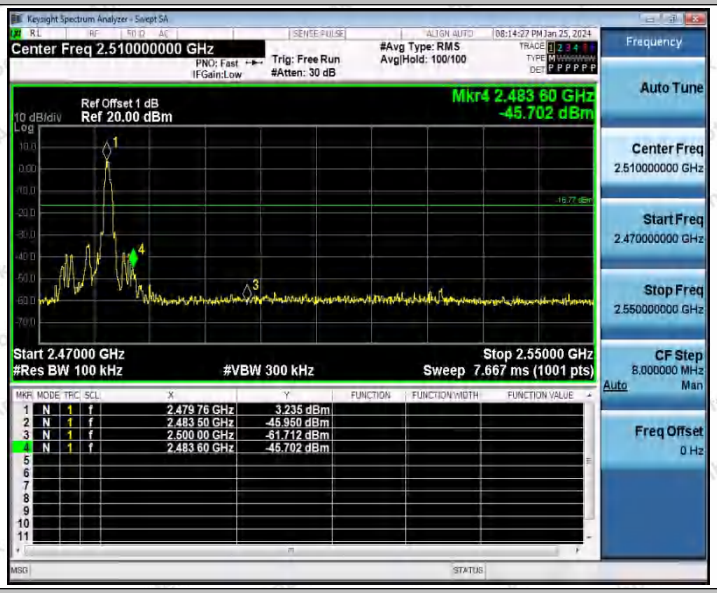
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.22	-34.24	≤-16.78	PASS
		High	2480	3.24	-45.7	≤-16.77	PASS
BLE_2M	Ant1	Low	2402	3.18	-31.17	≤-16.82	PASS
		High	2480	3.35	-45.65	≤-16.65	PASS

Test Graphs

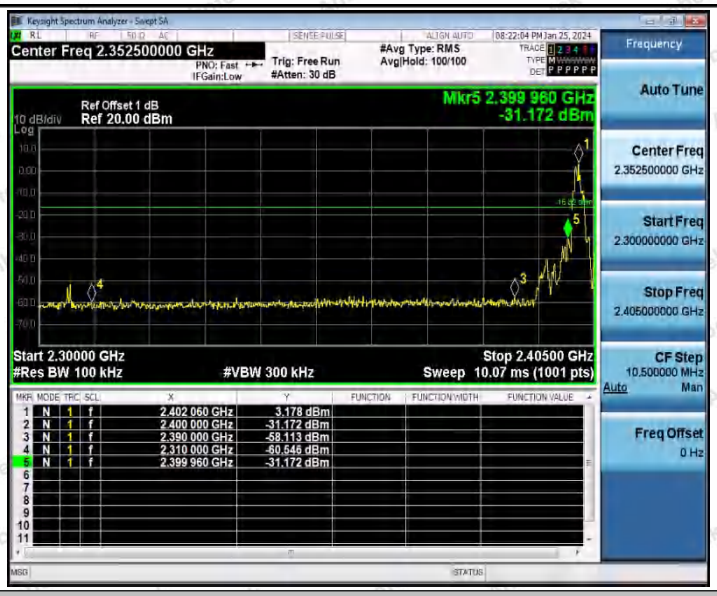
BLE_1M_Ant1_Low_2402



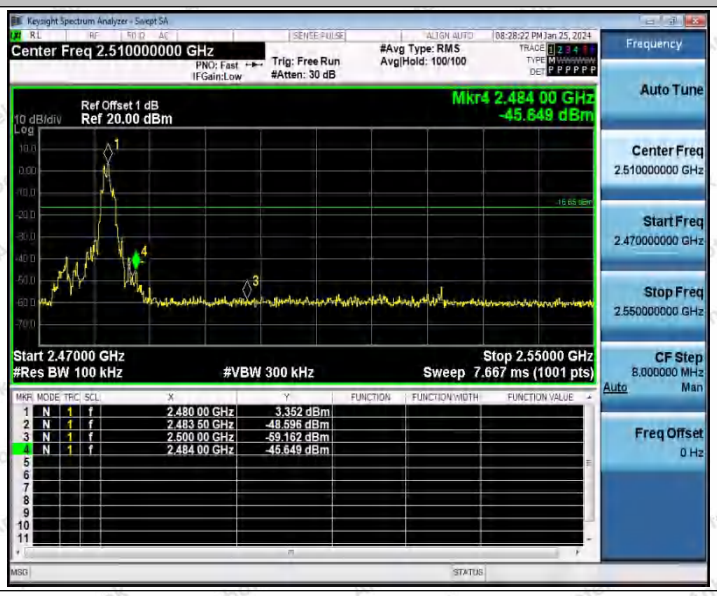
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

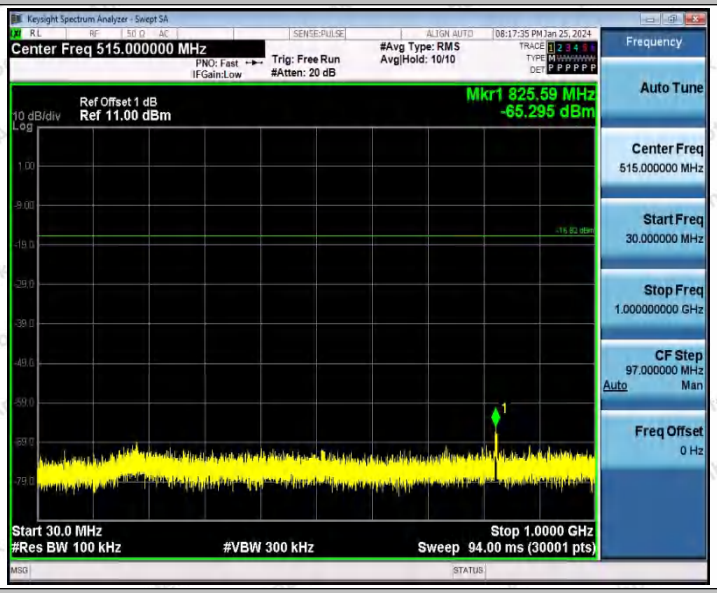
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.18	3.18	---	PASS
			30~1000	3.18	-65.3	≤-16.82	PASS
			1000~26500	3.18	-36.37	≤-16.82	PASS
		2440	Reference	3.23	3.23	---	PASS
			30~1000	3.23	-67.01	≤-16.77	PASS
			1000~26500	3.23	-36.03	≤-16.77	PASS
		2480	Reference	3.18	3.18	---	PASS
			30~1000	3.18	-68.5	≤-16.82	PASS
			1000~26500	3.18	-36.72	≤-16.82	PASS
BLE_2M	Ant1	2402	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-65.31	≤-16.85	PASS
			1000~26500	3.15	-36.57	≤-16.85	PASS
		2440	Reference	3.23	3.23	---	PASS
			30~1000	3.23	-66.99	≤-16.77	PASS
			1000~26500	3.23	-37.26	≤-16.77	PASS
		2480	Reference	3.25	3.25	---	PASS
			30~1000	3.25	-64.25	≤-16.75	PASS
			1000~26500	3.25	-33.27	≤-16.75	PASS

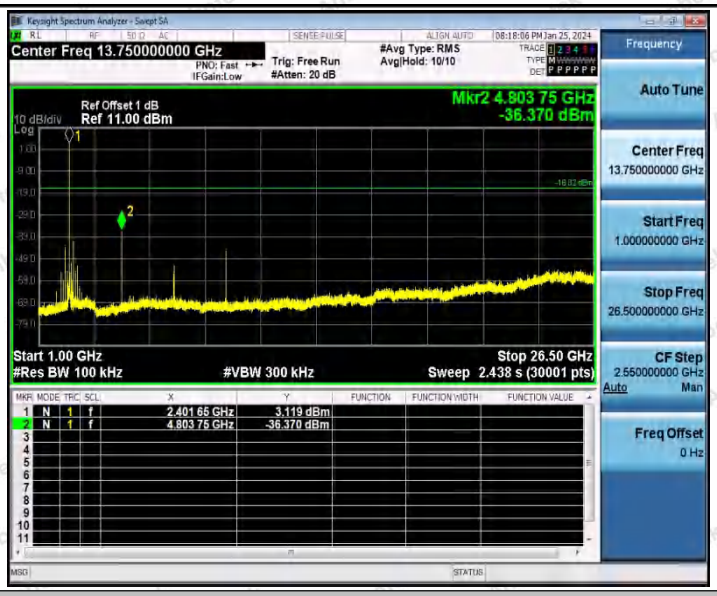
Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

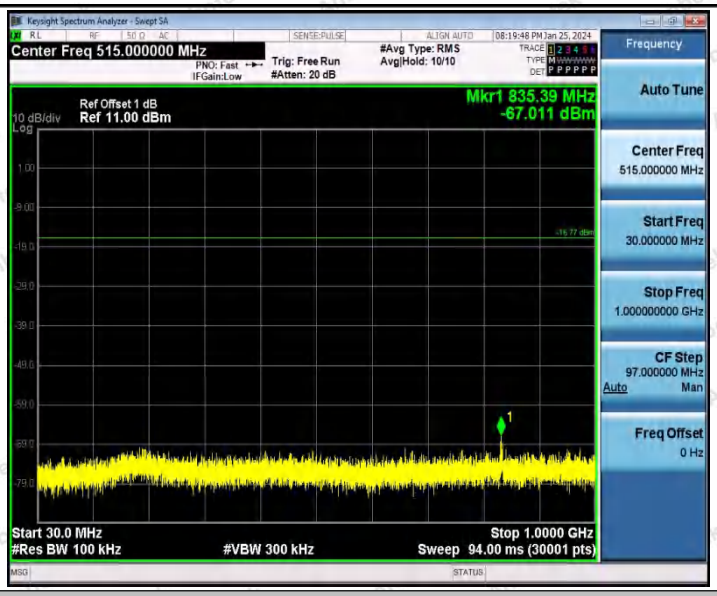


BLE_1M_Ant1_2402_1000~26500

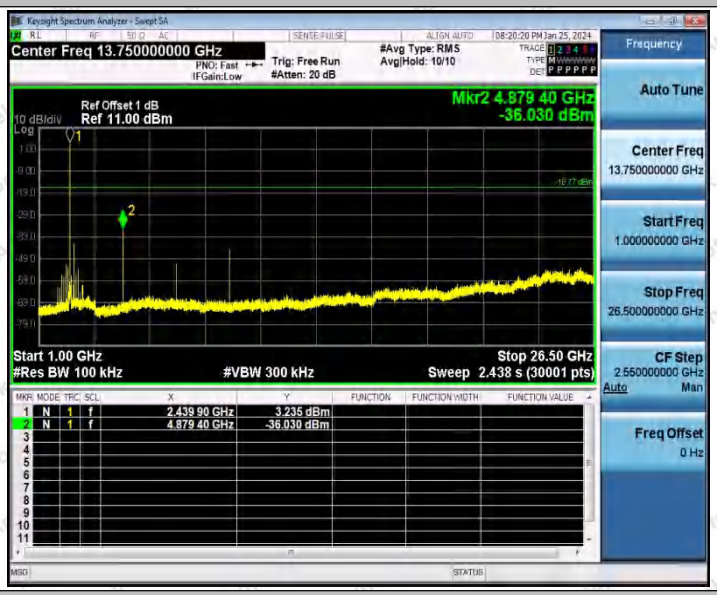


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

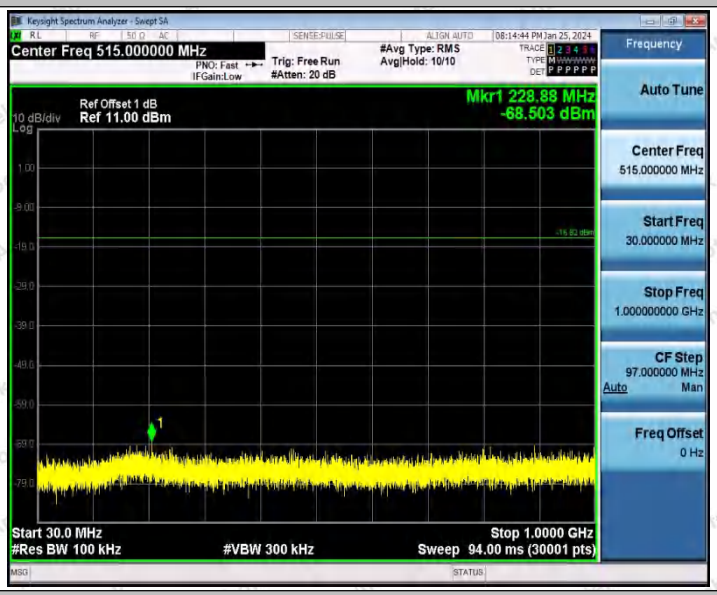


BLE_1M_Ant1_2440_1000~26500

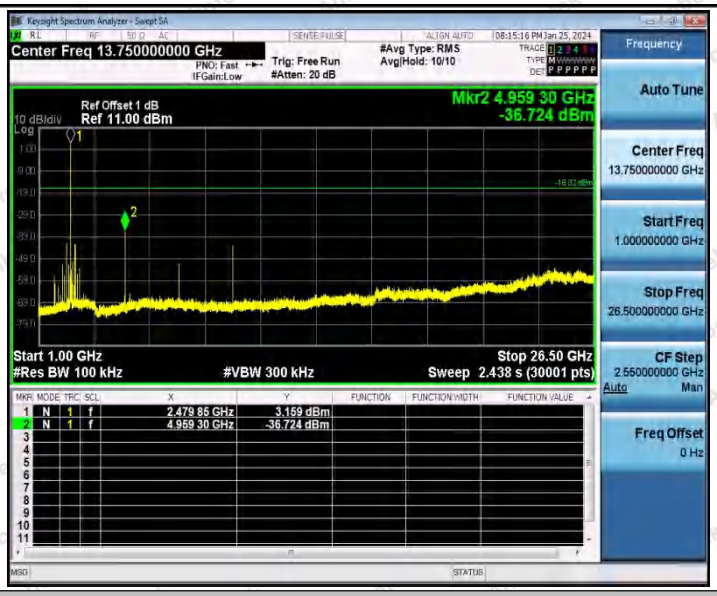


BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000

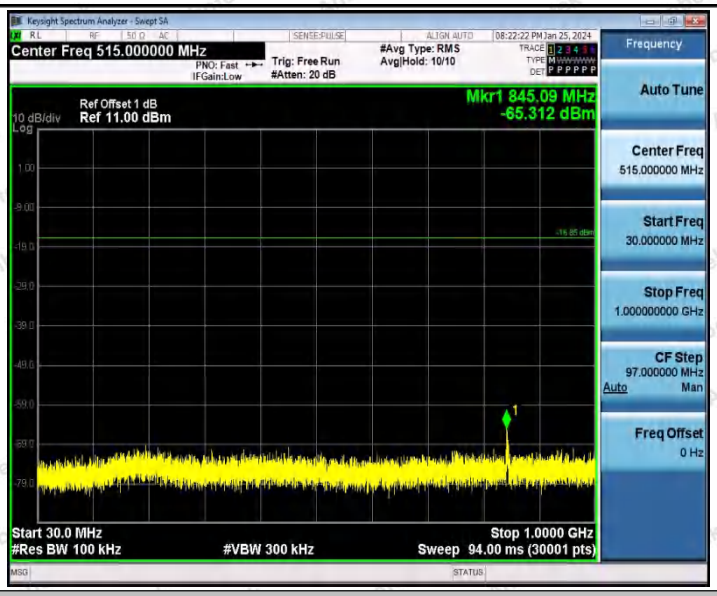


BLE_1M_Ant1_2480_1000~26500

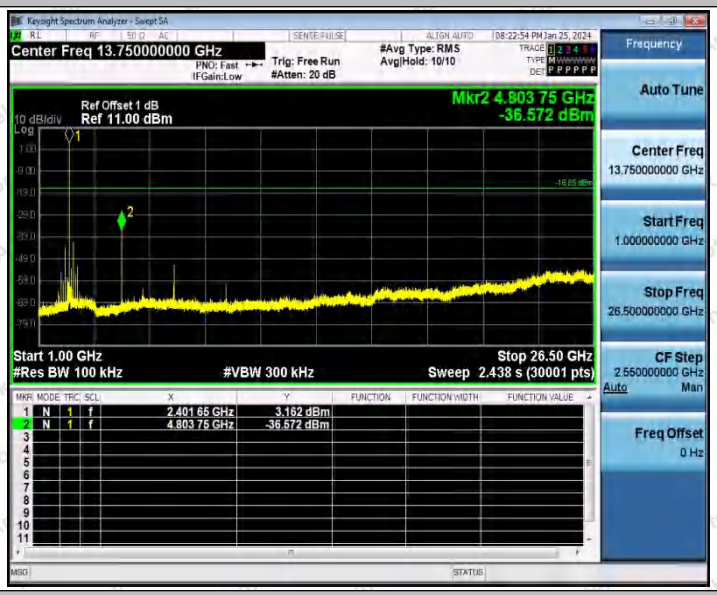


BLE_2M_Ant1_2402_0~Reference

BLE_2M_Ant1_2402_30~1000

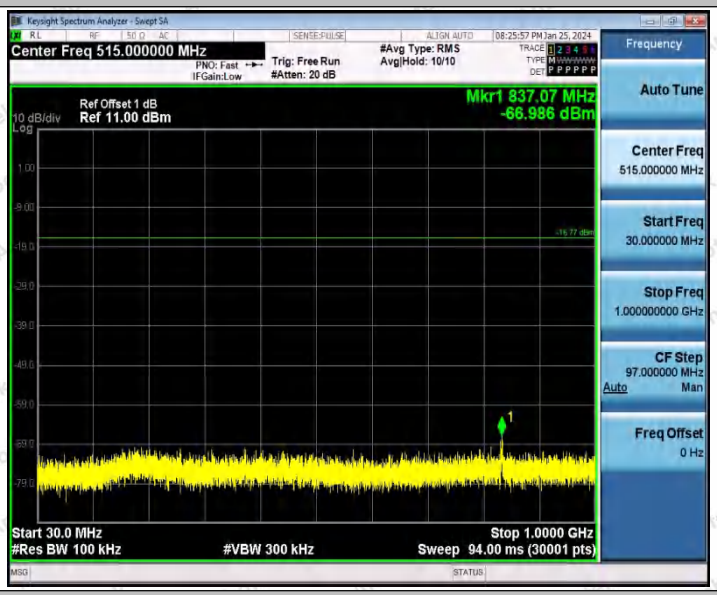


BLE_2M_Ant1_2402_1000~26500

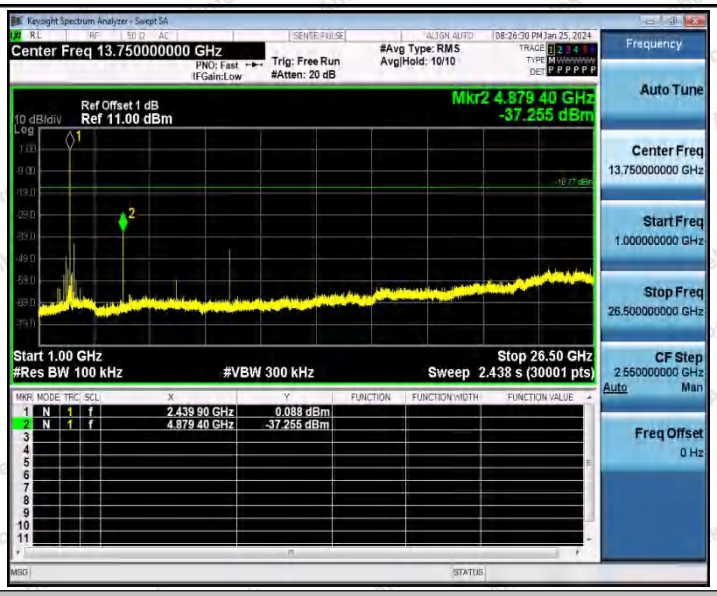


BLE_2M_Ant1_2440_0~Reference

BLE_2M_Ant1_2440_30~1000

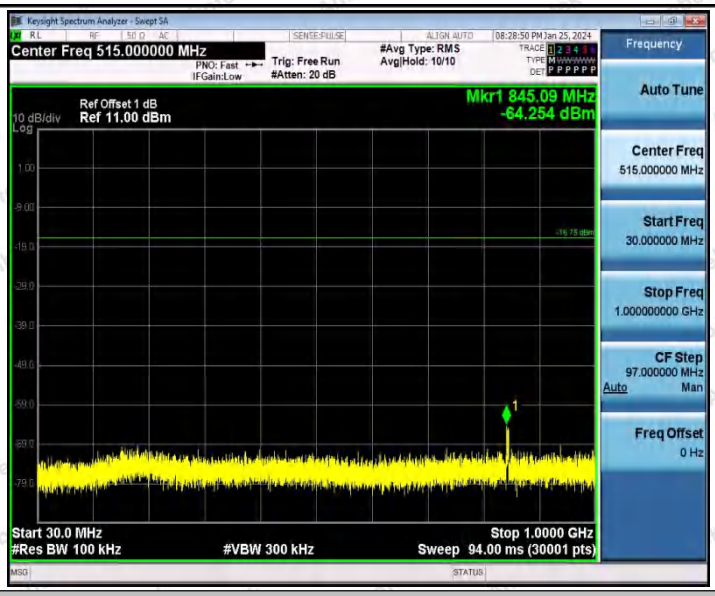


BLE_2M_Ant1_2440_1000~26500

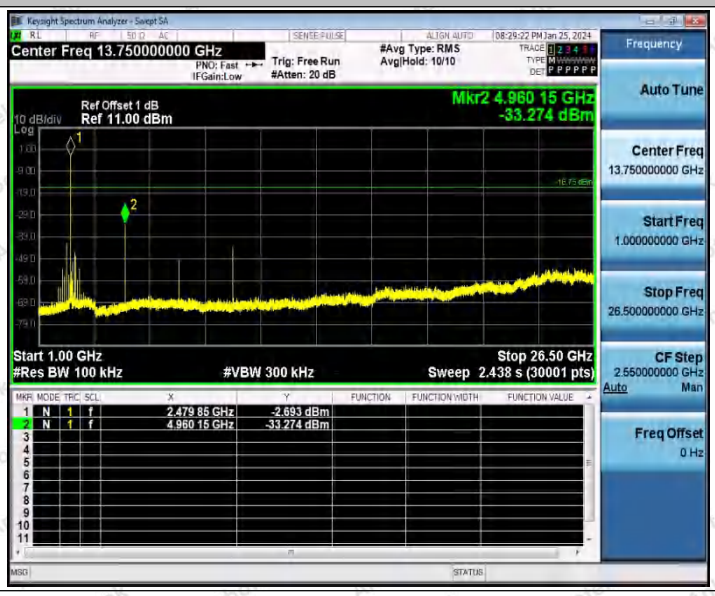


BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



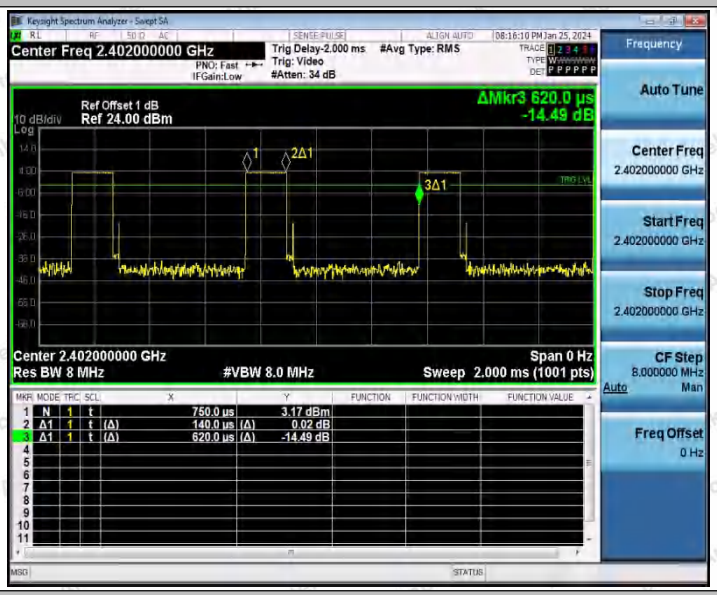
Appendix G: Duty Cycle

Test Result

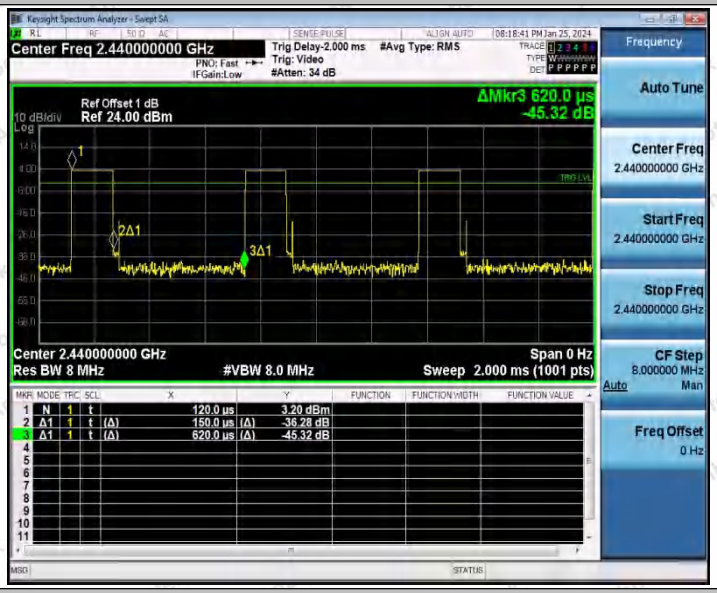
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.14	0.62	22.58	6.46
		2440	0.15	0.62	24.19	6.16
		2480	0.14	0.62	22.58	6.46
BLE_2M	Ant1	2402	0.12	0.63	19.05	7.20
		2440	0.11	0.63	17.46	7.58
		2480	0.12	0.63	19.05	7.20

Test Graphs

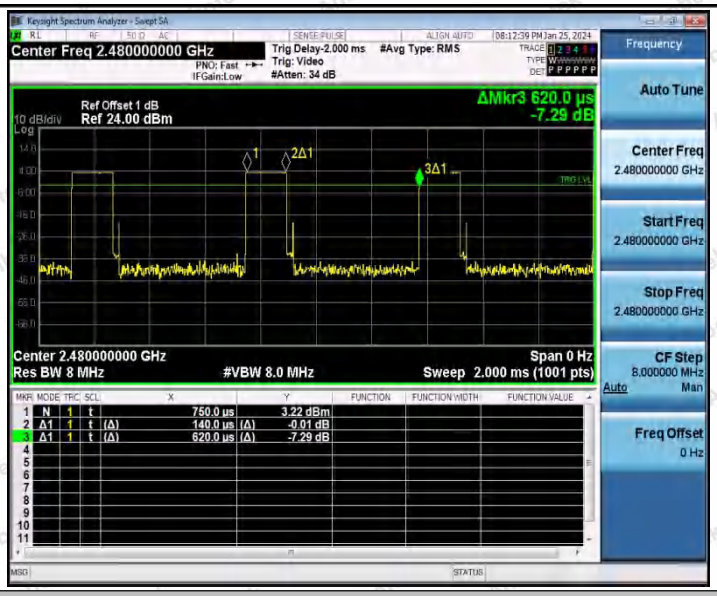
BLE_1M_Ant1_2402



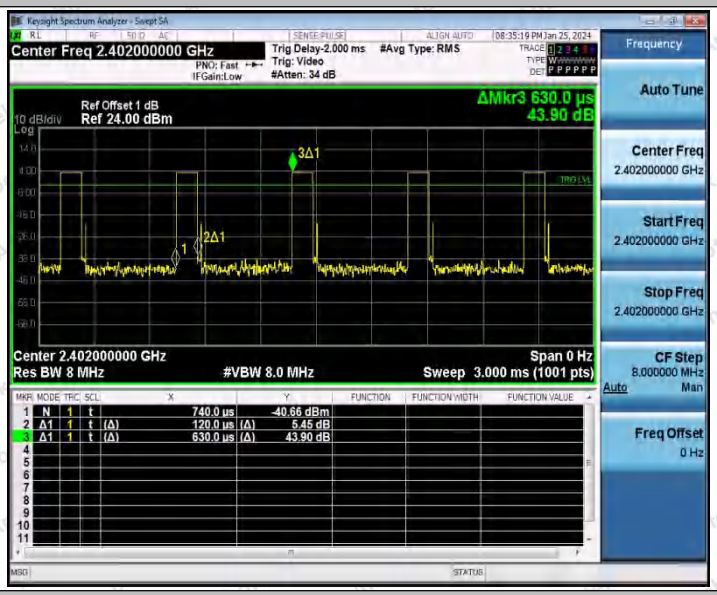
BLE_1M_Ant1_2440



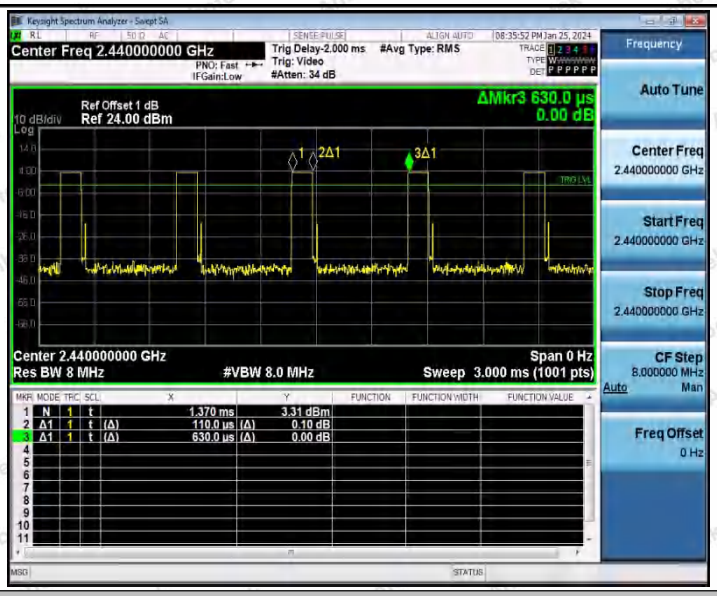
BLE_1M_Ant1_2480



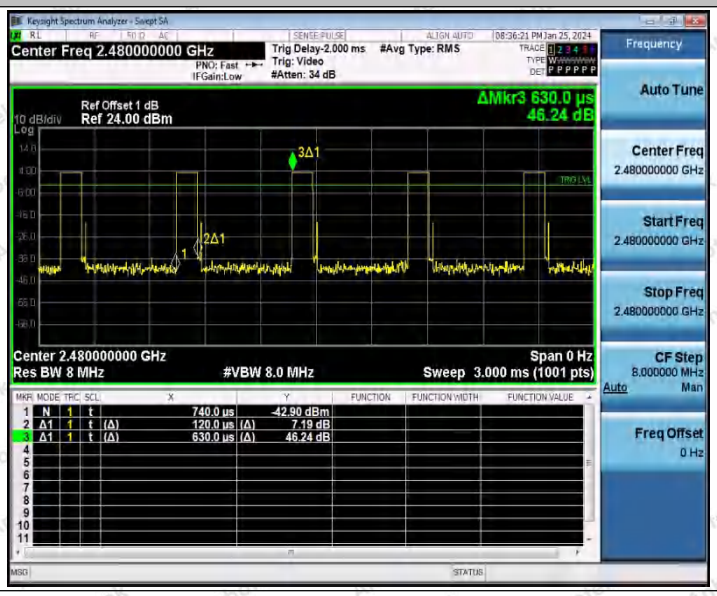
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



---end---