Appendix Test Data

Report No.:	18360WC30003501	Test Sample No.:	1-2-2
Start Test Date:	2023.03.16	Finish Test Date:	2023.04.06
Test Engineer:	Tony.He	Auditor:	Edward.Pan
Temperature:	25.4℃	Relative Humidity:	57%
Pressure:	1012 hPa		

Appendix A: DTS Bandwidth

Test Result

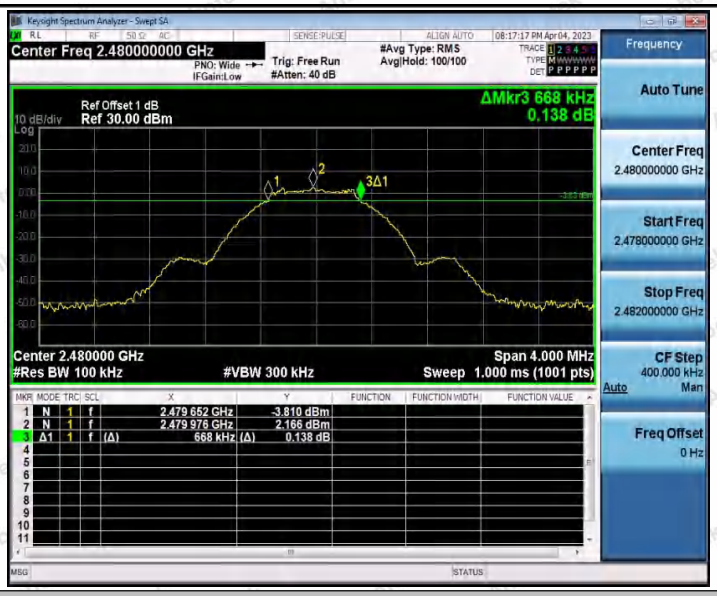
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.648	2402.312	0.5	PASS
		2440	0.708	2439.632	2440.340	0.5	PASS
		2480	0.668	2479.652	2480.320	0.5	PASS
BLE_2M	Ant1	2402	1.332	2401.312	2402.644	0.5	PASS
		2440	1.372	2439.260	2440.632	0.5	PASS
		2480	1.344	2479.308	2480.652	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

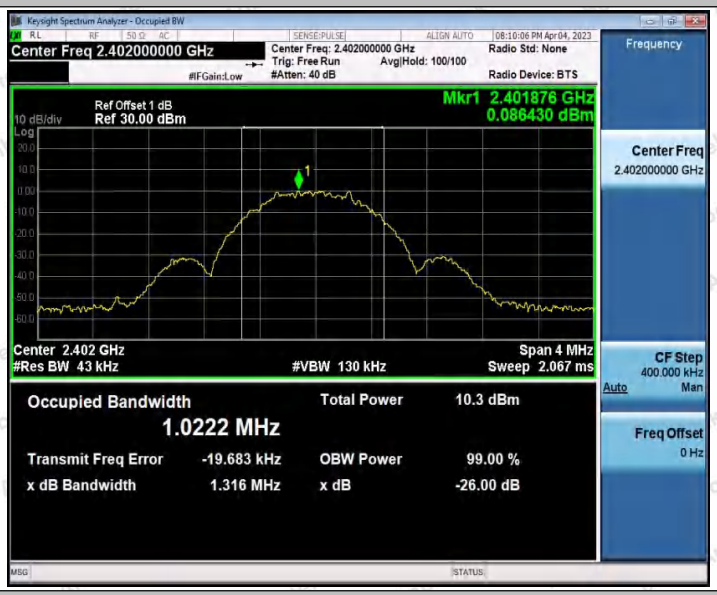
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0222	2401.4692	2402.4914
		2440	1.0494	2439.4562	2440.5056
		2480	1.0324	2479.4685	2480.5009
BLE_2M	Ant1	2402	2.0566	2400.9488	2403.0054
		2440	2.0199	2438.9747	2440.9946
		2480	2.0593	2478.9514	2481.0107

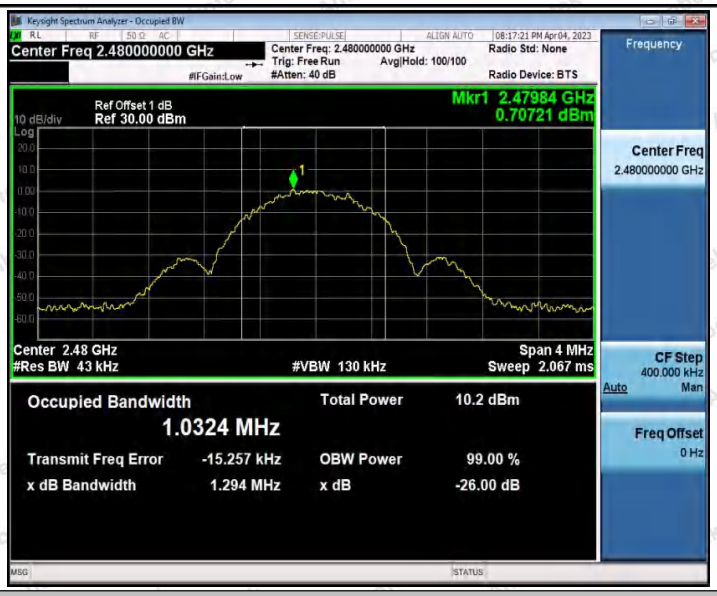
Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

BLE_1M_Ant1_2480



BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

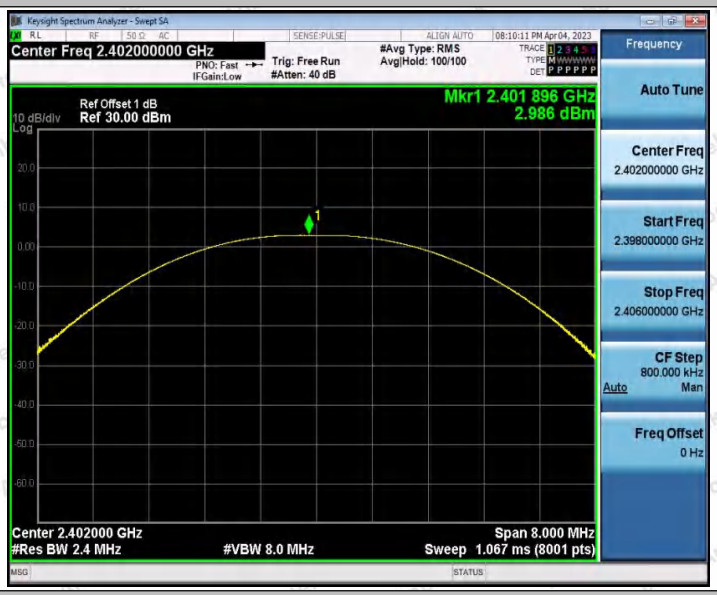
Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.99	≤30	PASS
		2440	2.97	≤30	PASS
		2480	2.86	≤30	PASS
BLE_2M	Ant1	2402	3.02	≤30	PASS
		2440	2.96	≤30	PASS
		2480	2.86	≤30	PASS

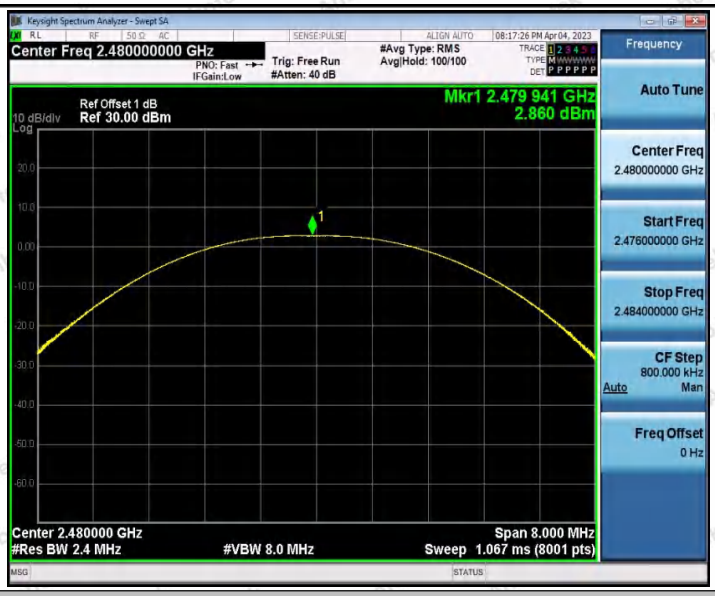
Test Graphs Peak

BLE_1M_Ant1_2402

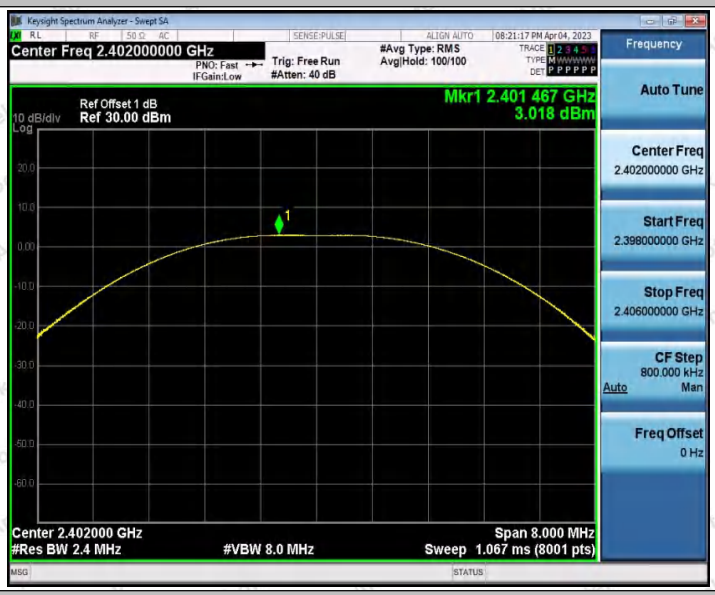


BLE_1M_Ant1_2440

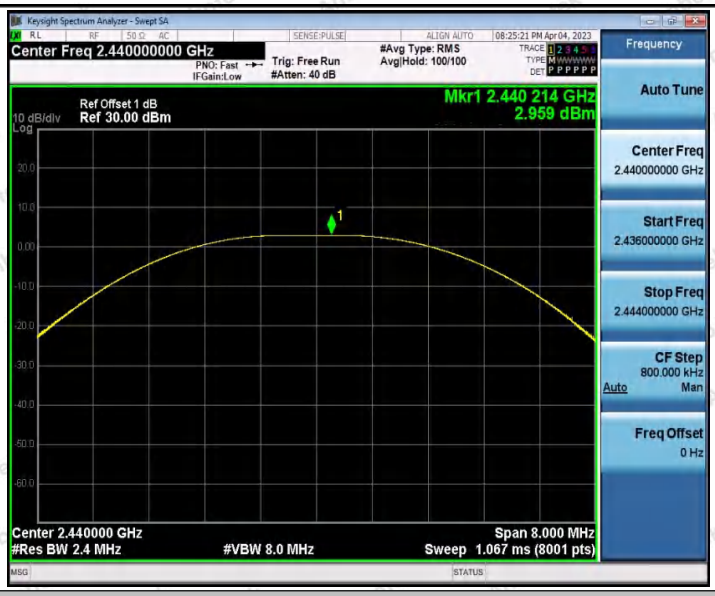
BLE_1M_Ant1_2480



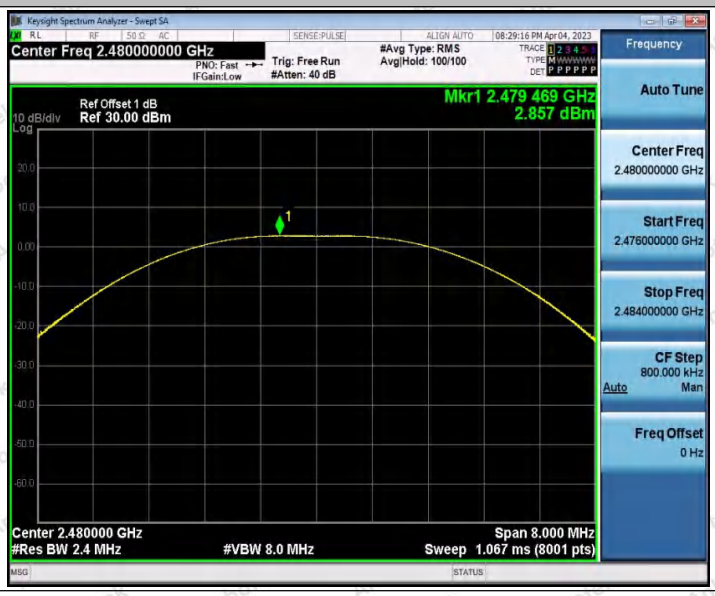
BLE_2M_Ant1_2402



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	-5.80	≤8.00	PASS
		2440	-6.69	≤8.00	PASS
		2480	-5.14	≤8.00	PASS
BLE_2M	Ant1	2402	-10.19	≤8.00	PASS
		2440	-9.66	≤8.00	PASS
		2480	-10.43	≤8.00	PASS

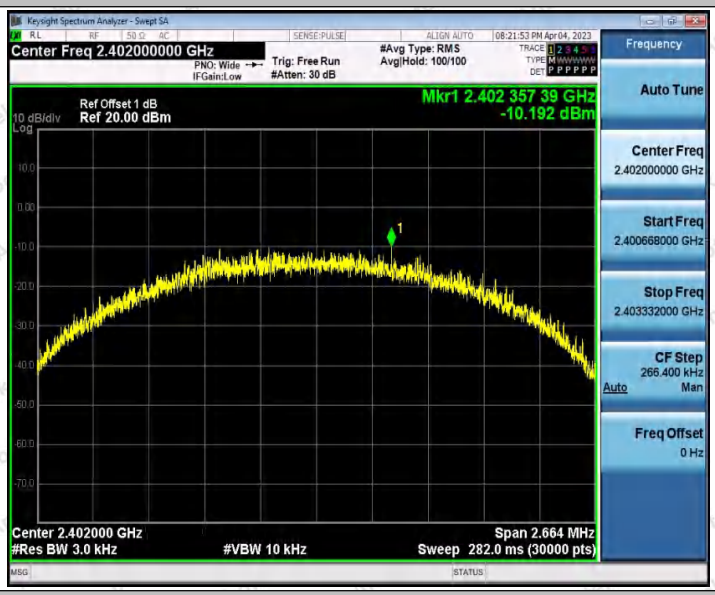
Test Graphs

BLE_1M_Ant1_2402

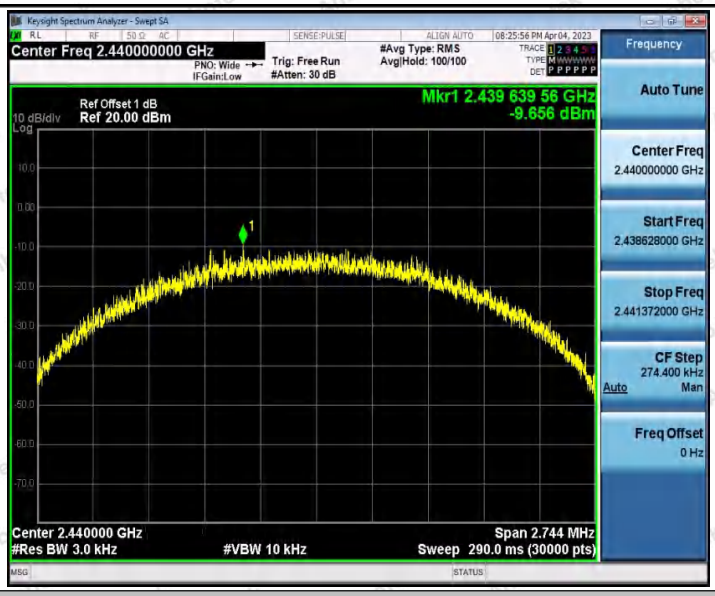
BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

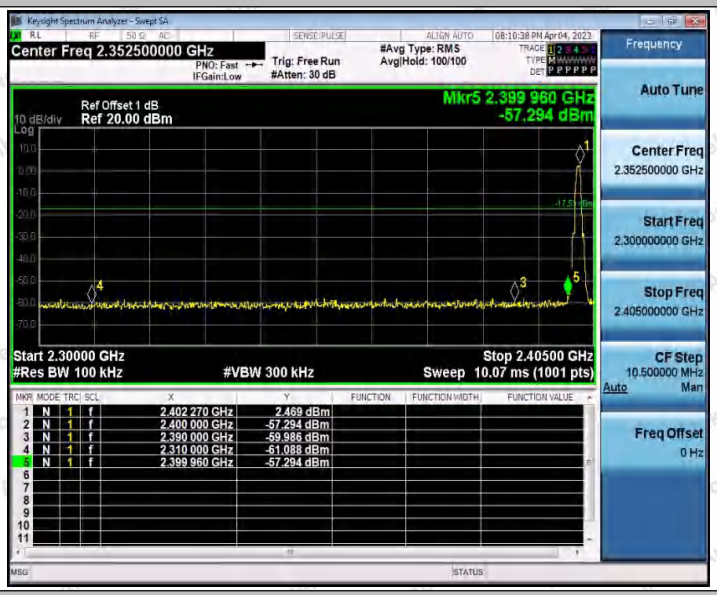
Appendix E: Band edge measurements

Test Result

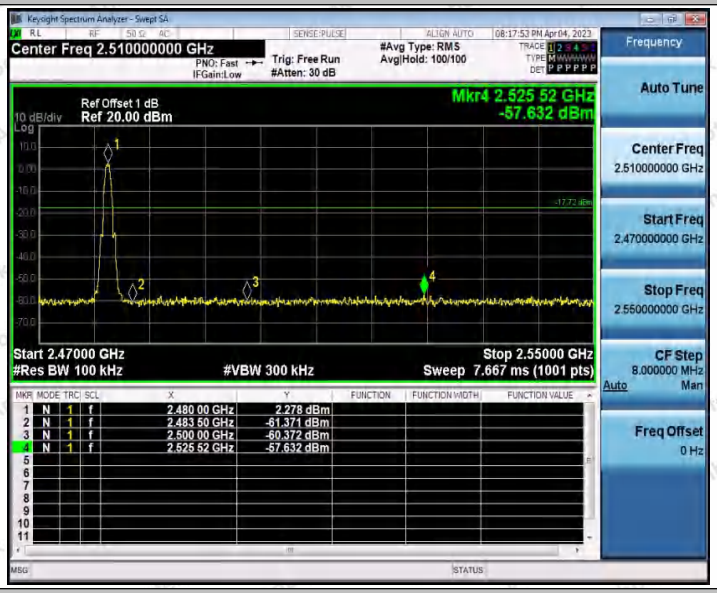
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	2.47	-57.29	≤-17.53	PASS
		High	2480	2.28	-57.63	≤-17.72	PASS
BLE_2M	Ant1	Low	2402	0.23	-30.66	≤-19.77	PASS
		High	2480	0.40	-57.75	≤-19.6	PASS

Test Graphs

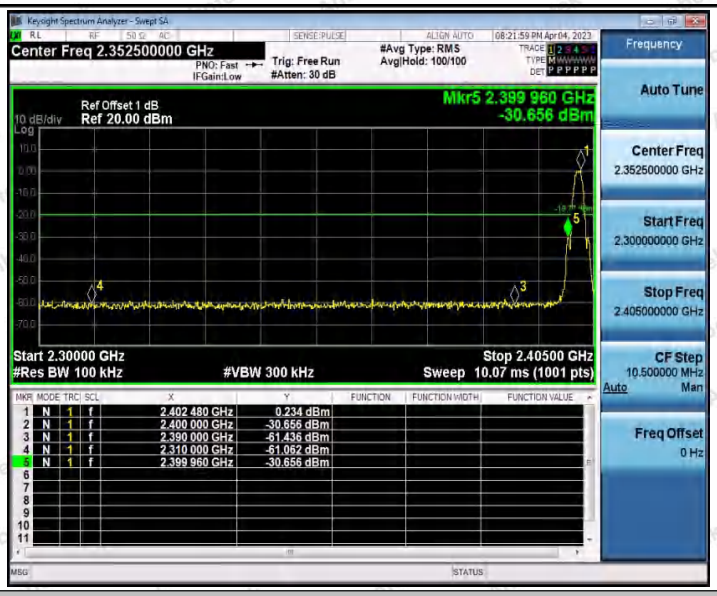
BLE_1M_Ant1_Low_2402



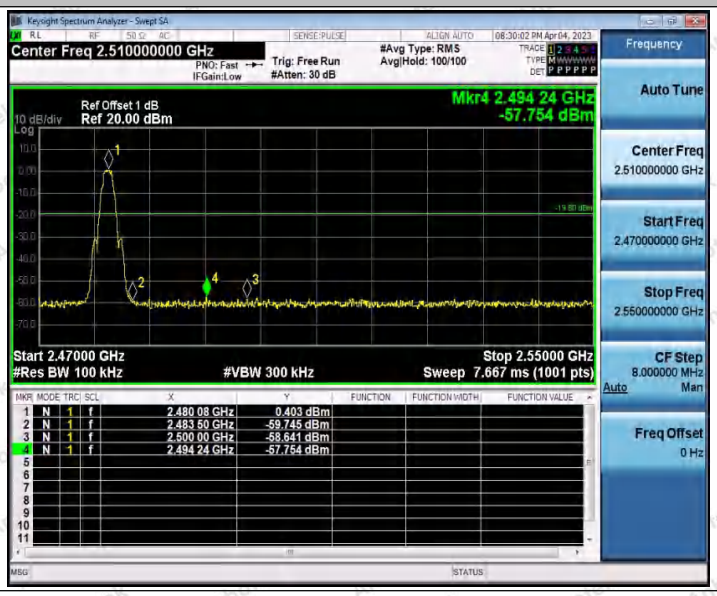
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

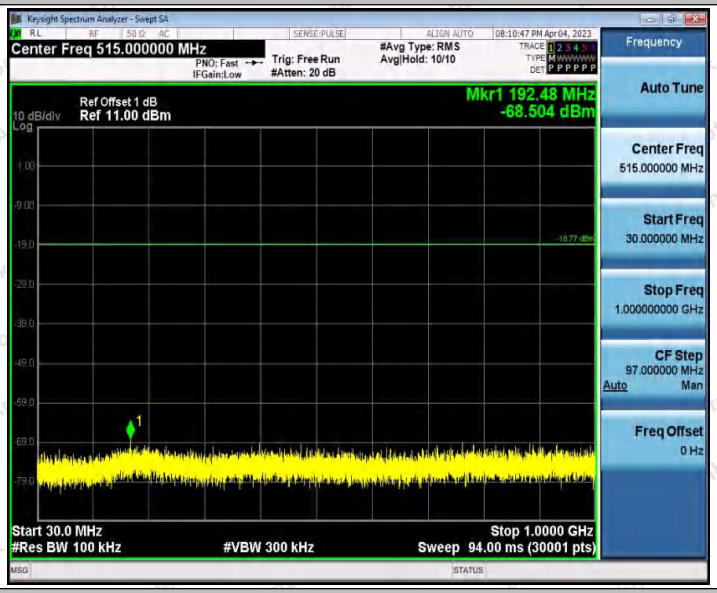
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.23	1.23	---	PASS
			30~1000	1.23	-68.5	≤-18.77	PASS
			1000~26500	1.23	-53.57	≤-18.77	PASS
		2440	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-68.83	≤-18.97	PASS
			1000~26500	1.03	-52.48	≤-18.97	PASS
		2480	Reference	2.00	2.00	---	PASS
			30~1000	2.00	-68.36	≤-18	PASS
			1000~26500	2.00	-53.25	≤-18	PASS
BLE_2M	Ant1	2402	Reference	0.77	0.77	---	PASS
			30~1000	0.77	-69.06	≤-19.23	PASS
			1000~26500	0.77	-53.28	≤-19.23	PASS
		2440	Reference	-0.20	-0.20	---	PASS
			30~1000	-0.20	-68.56	≤-20.2	PASS
			1000~26500	-0.20	-53.45	≤-20.2	PASS
		2480	Reference	0.09	0.09	---	PASS
			30~1000	0.09	-68.29	≤-19.91	PASS
			1000~26500	0.09	-53.19	≤-19.91	PASS

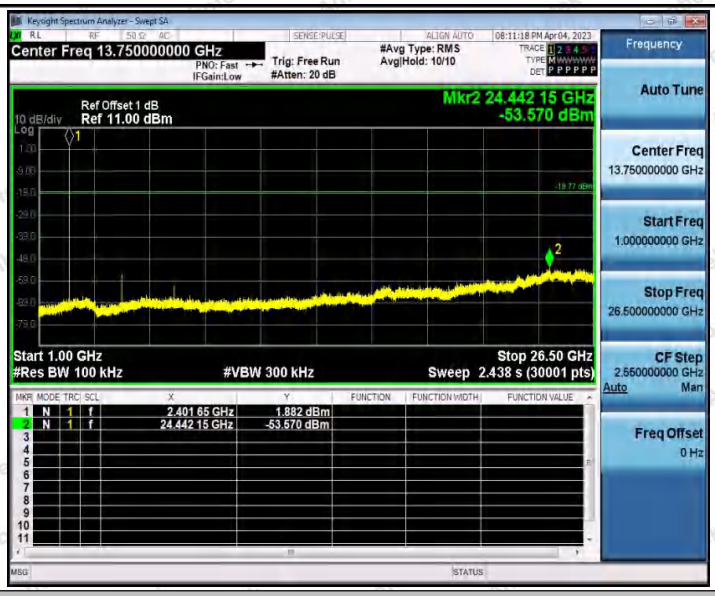
Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

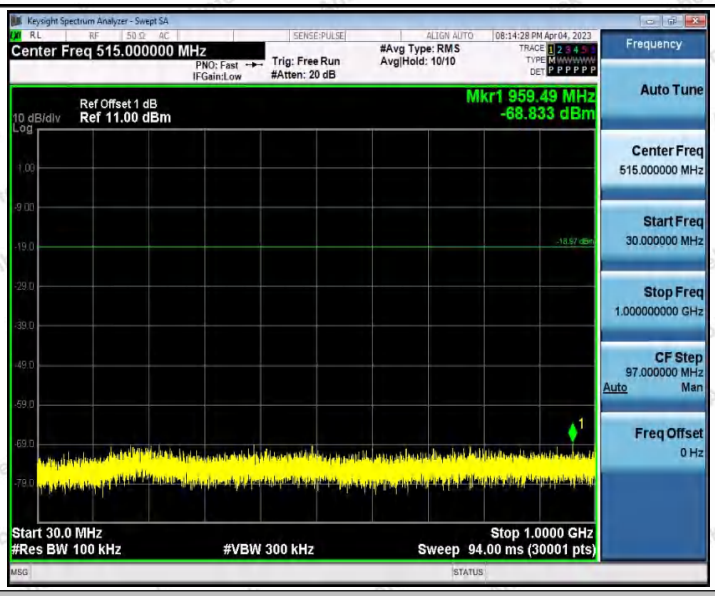


BLE_1M_Ant1_2402_1000~26500

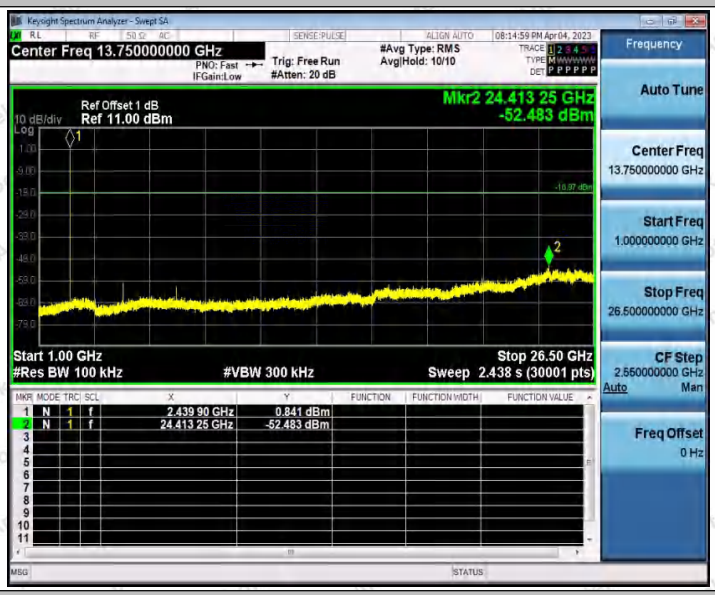


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

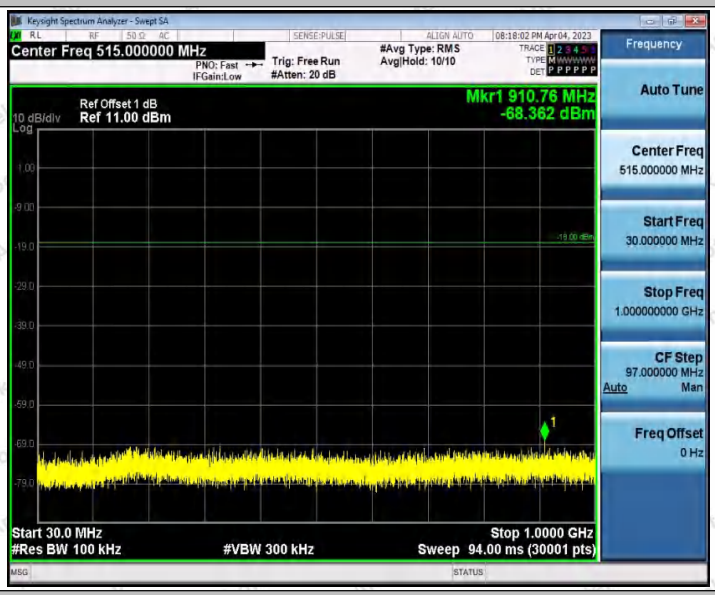


BLE_1M_Ant1_2440_1000~26500

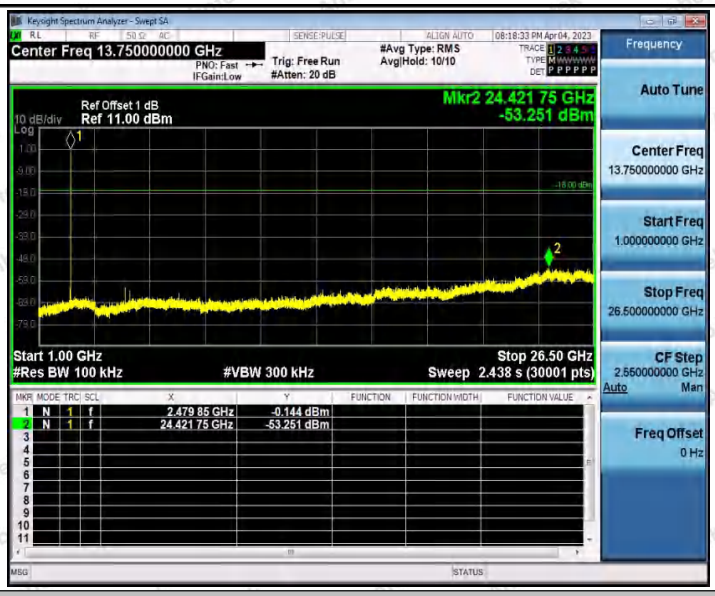


BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000

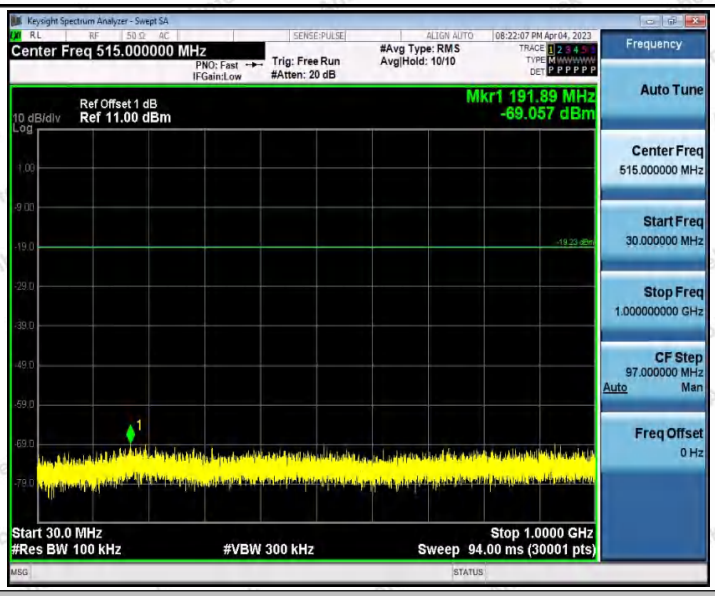


BLE_1M_Ant1_2480_1000~26500

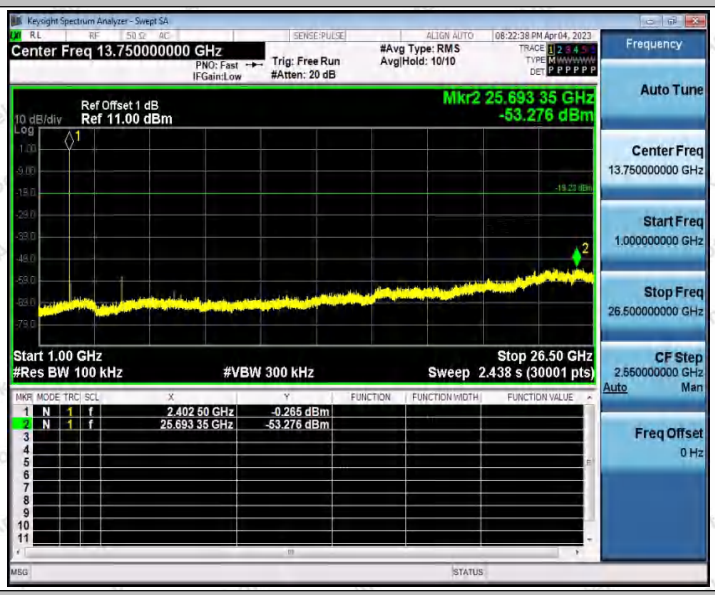


BLE_2M_Ant1_2402_0~Reference

BLE_2M_Ant1_2402_30~1000

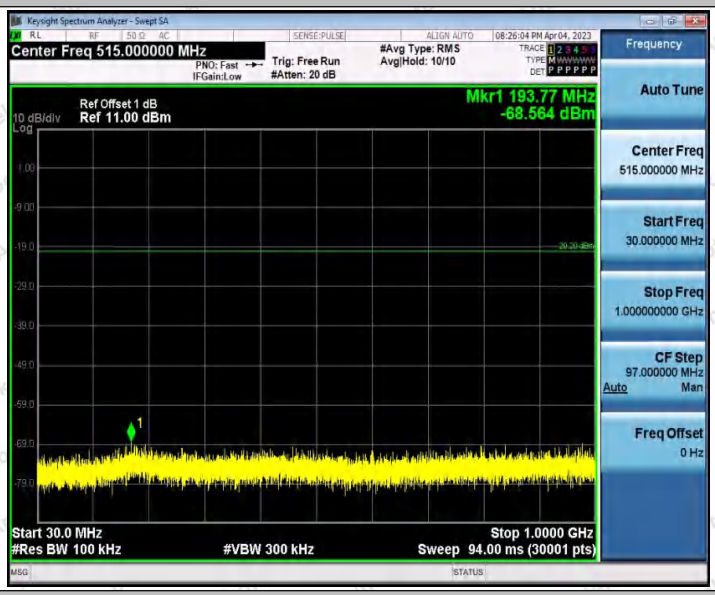


BLE_2M_Ant1_2402_1000~26500

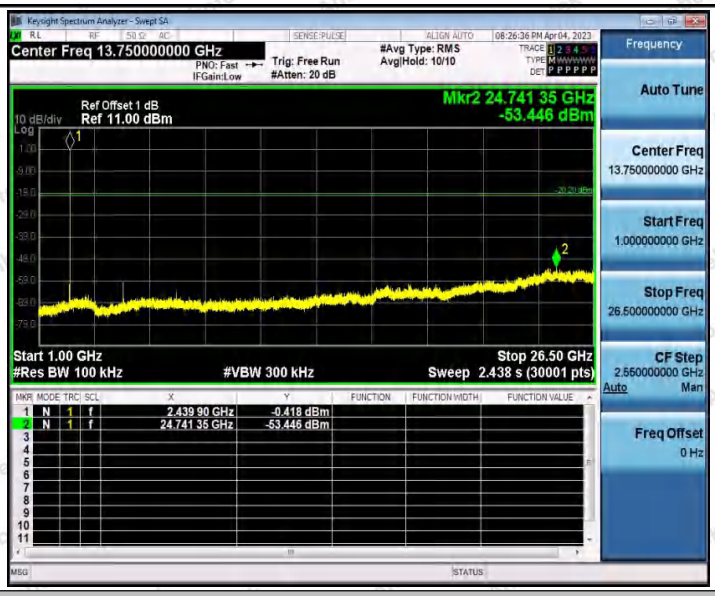


BLE_2M_Ant1_2440_0~Reference

BLE_2M_Ant1_2440_30~1000

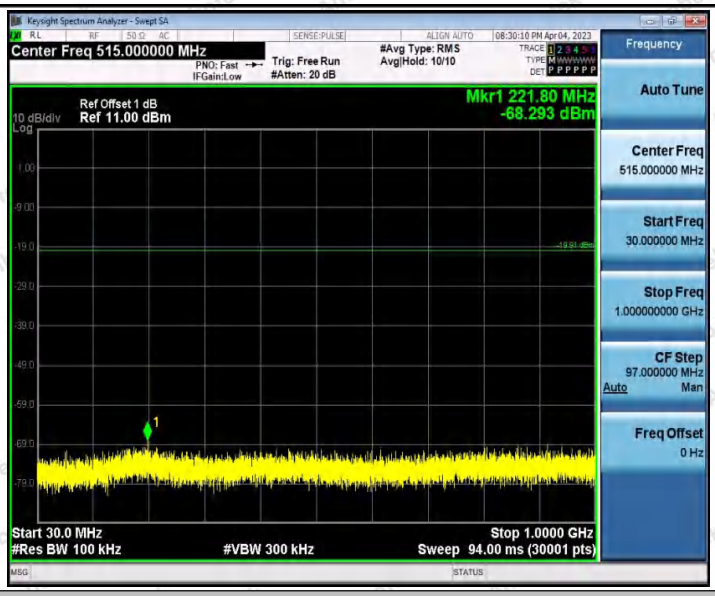


BLE_2M_Ant1_2440_1000~26500

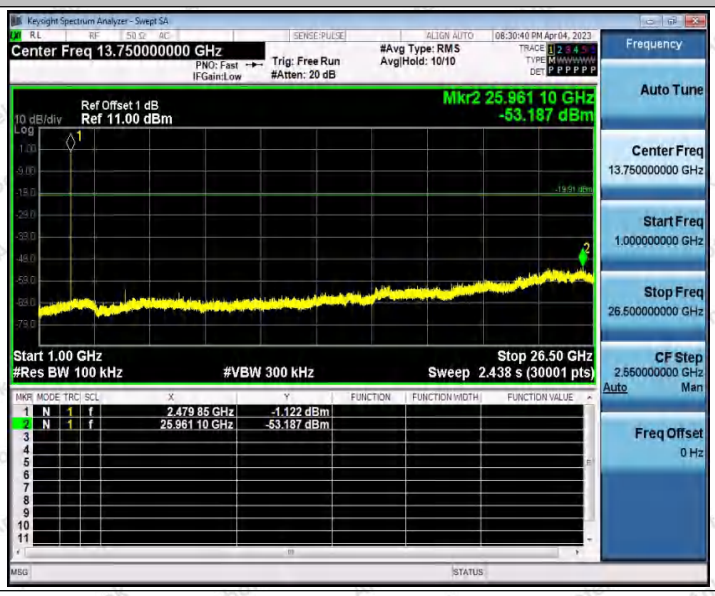


BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



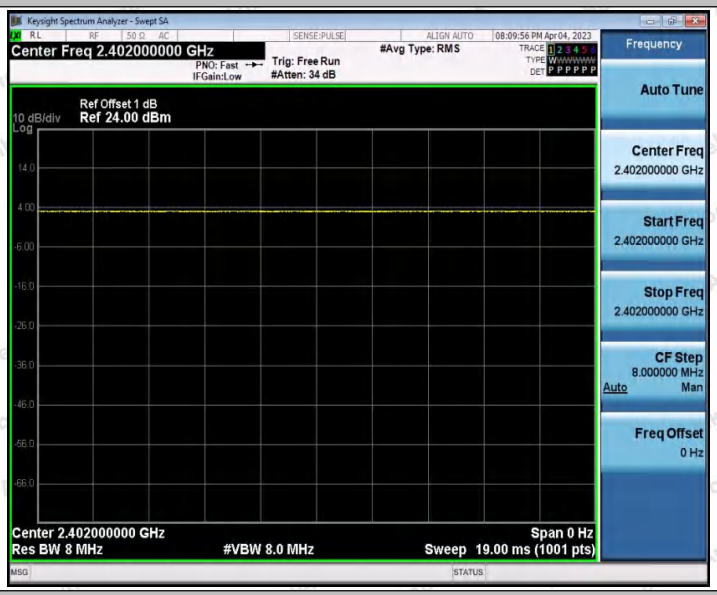
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	1.00	1.00	100	0.00
		2440	1.00	1.00	100	0.00
		2480	1.00	1.00	100	0.00
BLE_2M	Ant1	2402	1.00	1.00	100	0.00
		2440	1.00	1.00	100	0.00
		2480	1.00	1.00	100	0.00

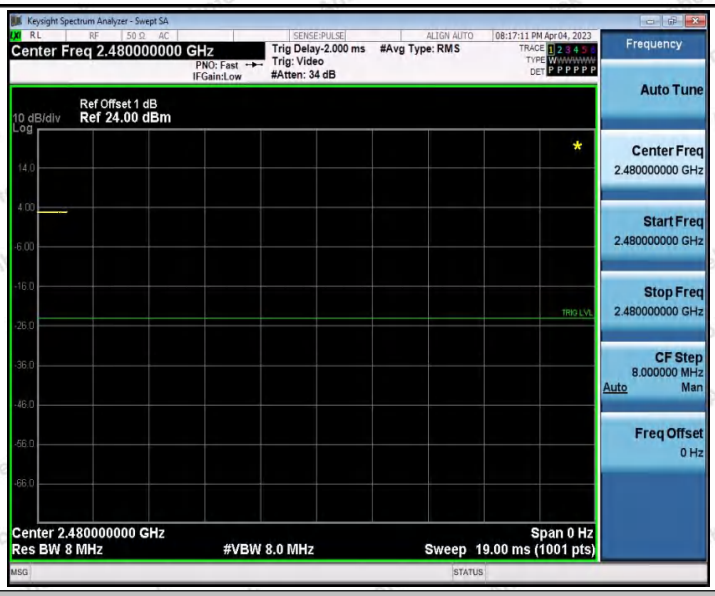
Test Graphs

BLE_1M_Ant1_2402

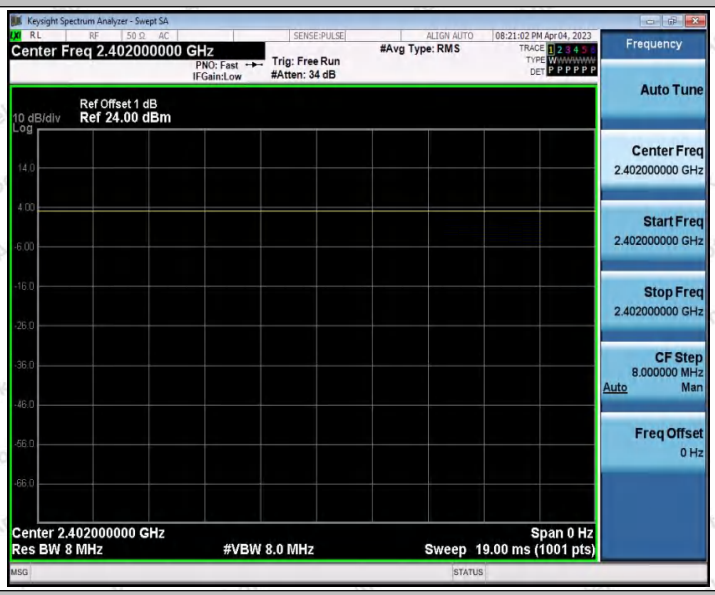


BLE_1M_Ant1_2440

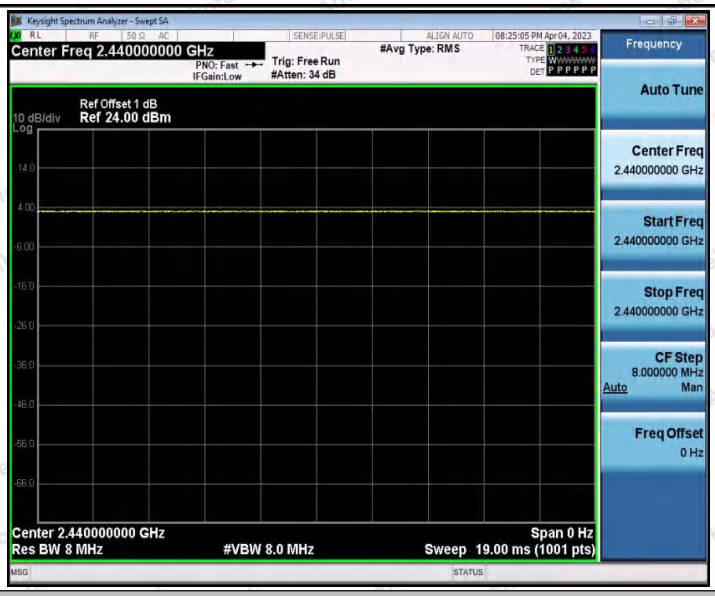
BLE_1M_Ant1_2480



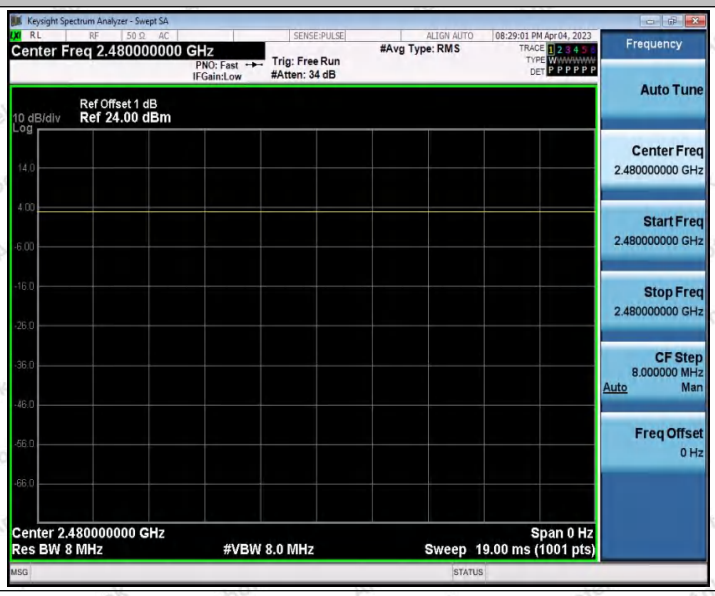
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



---End---