

Appendix Test Data

Report No.:	18220WC30022502	Test Sample No.:	1-2-2
Start Test Date:	2023.02.15	Finish Test Date:	2023.02.20
Test Engineer:	<i>Tony He</i>	Auditor:	<i>Edward Pan</i>
Temperature:	25.1℃	Relative Humidity:	42 %
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	0.656	2401.692	2402.348	0.5	PASS
		2440	0.636	2439.700	2440.336	0.5	PASS
		2480	0.612	2479.708	2480.320	0.5	PASS
BLE_2M	Ant1	2402	1.096	2401.476	2402.572	0.5	PASS
		2440	1.112	2439.468	2440.580	0.5	PASS
		2480	0.952	2479.468	2480.420	0.5	PASS



Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

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BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

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Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0356	2401.5121	2402.5477
		2440	1.0399	2439.5051	2440.5450
		2480	1.0383	2479.5124	2480.5507
BLE_2M	Ant1	2402	2.0473	2401.0238	2403.0711
		2440	2.0524	2439.0313	2441.0837
		2480	2.0695	2479.0155	2481.0850

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Test Graphs



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BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

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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	4.4	≤30	PASS
		2440	4.17	≤30	PASS
		2480	3.86	≤30	PASS
BLE_2M	Ant1	2402	4.48	≤30	PASS
		2440	4.36	≤30	PASS
		2480	3.96	≤30	PASS



Test Graphs Peak

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

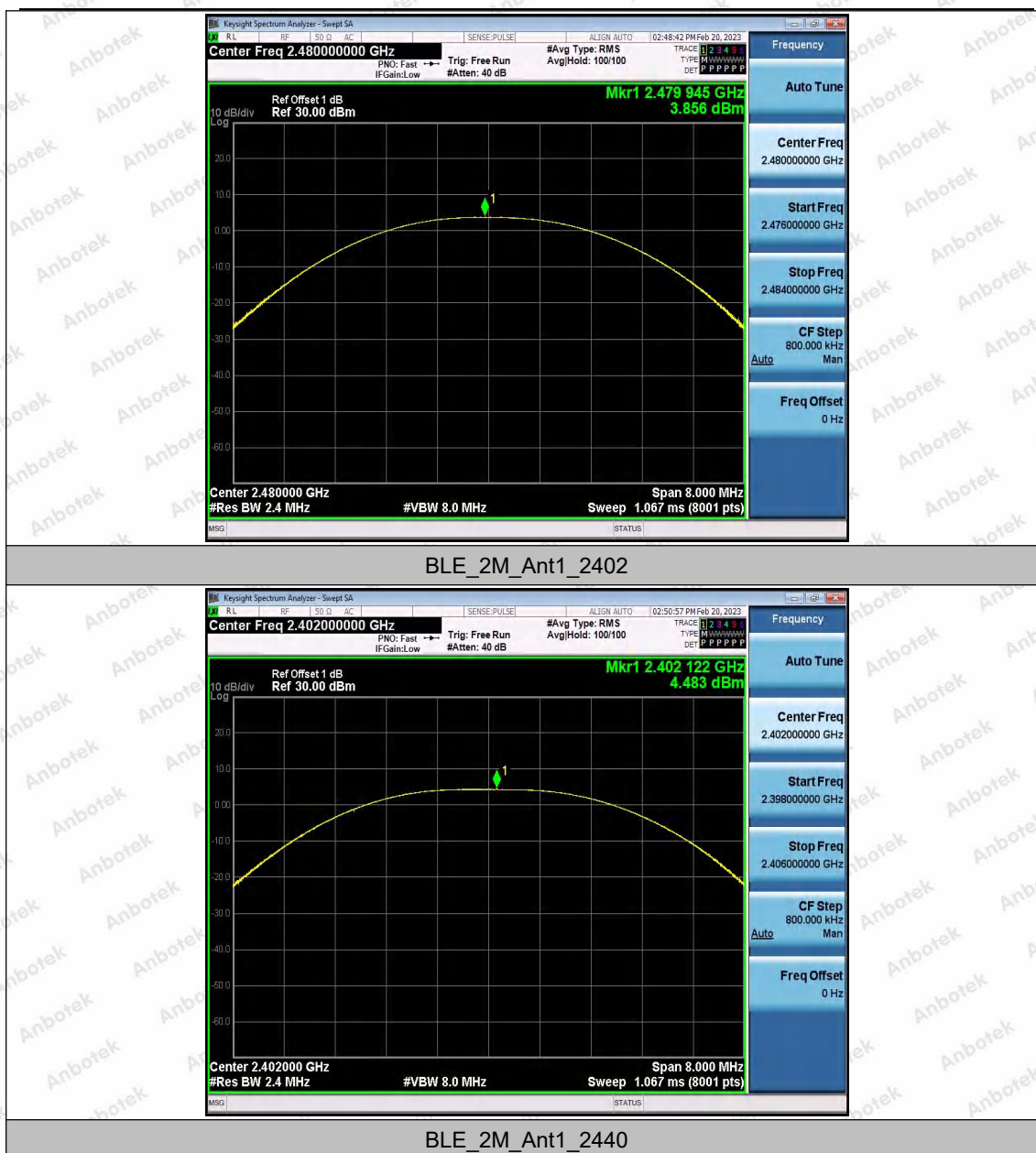
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Appendix D: Maximum power spectral density

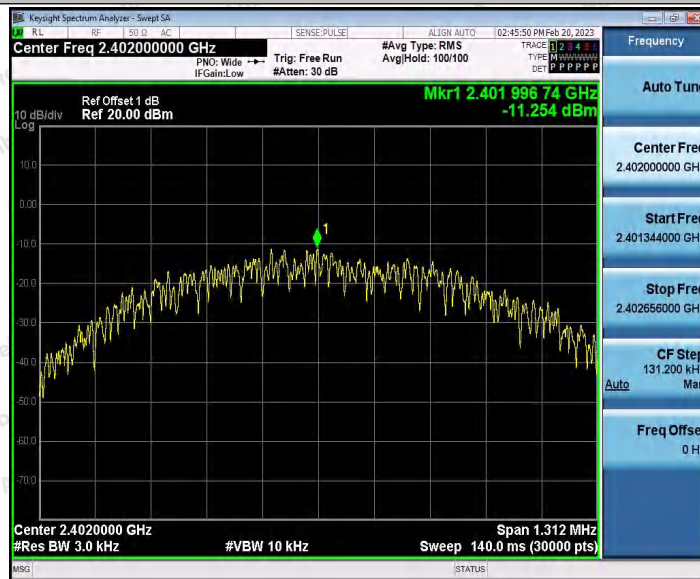
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.25	≤8.00	PASS
		2440	-10.47	≤8.00	PASS
		2480	-11.07	≤8.00	PASS
BLE_2M	Ant1	2402	-13.28	≤8.00	PASS
		2440	-13.3	≤8.00	PASS
		2480	-13.96	≤8.00	PASS



Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

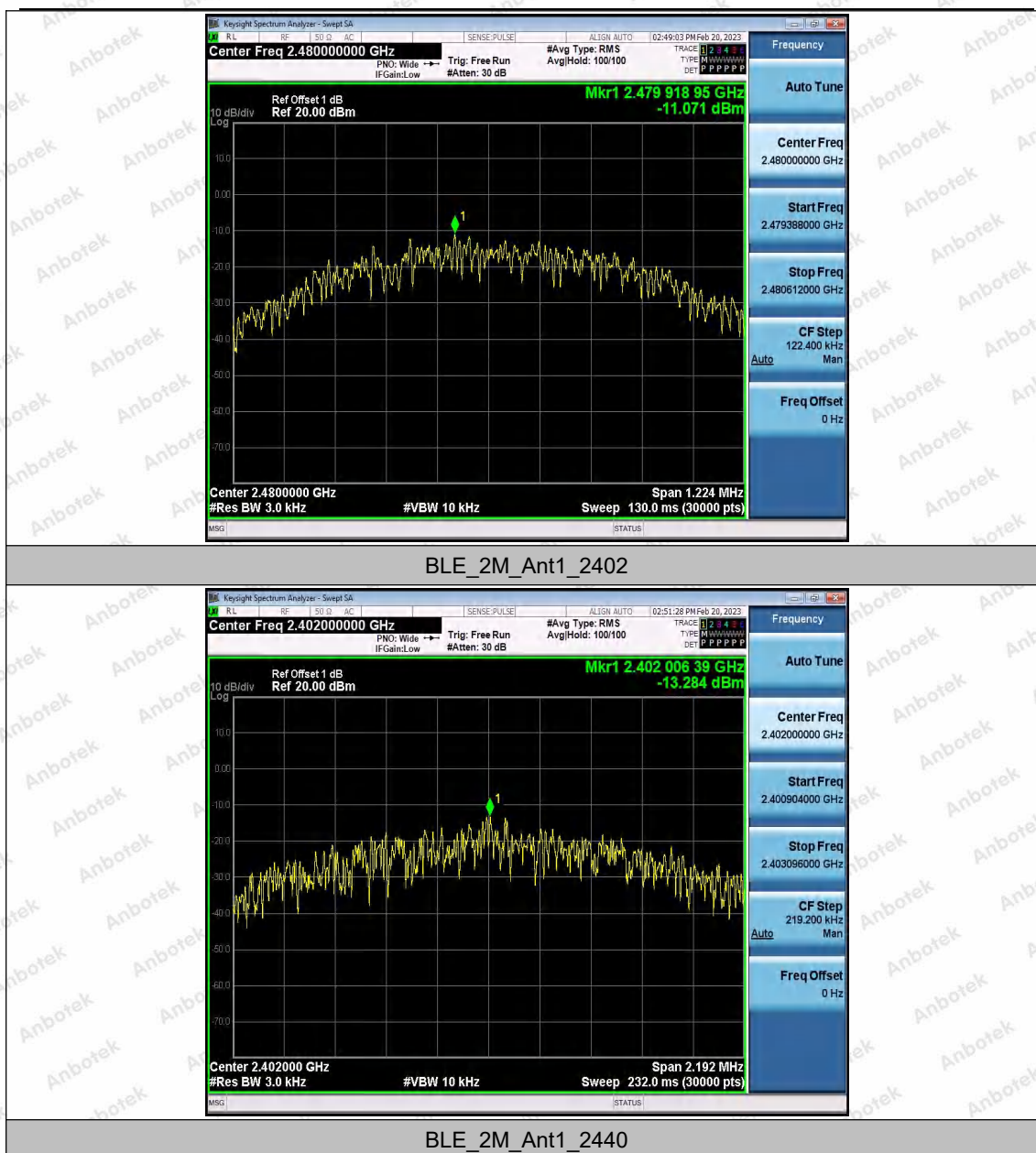
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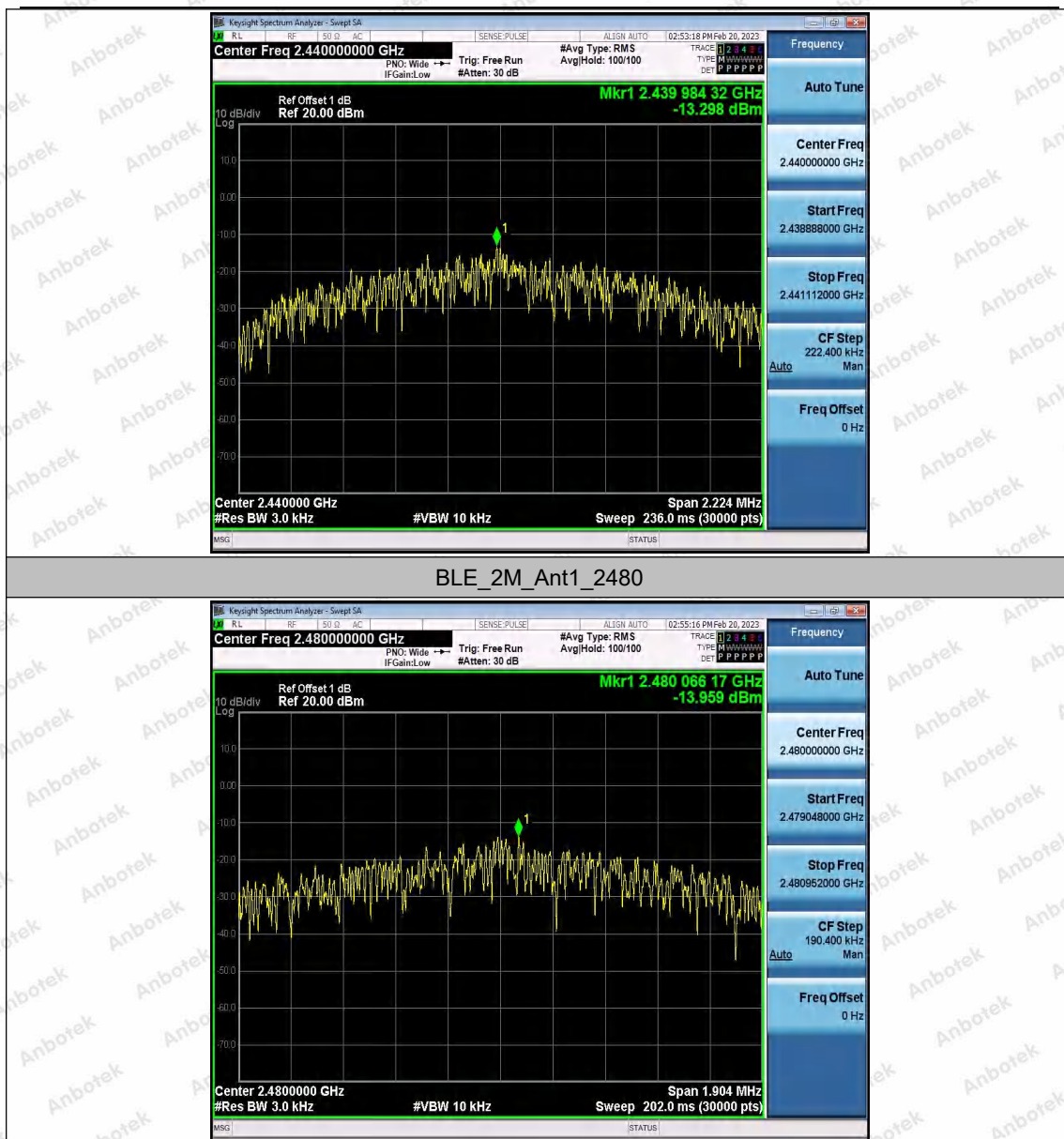
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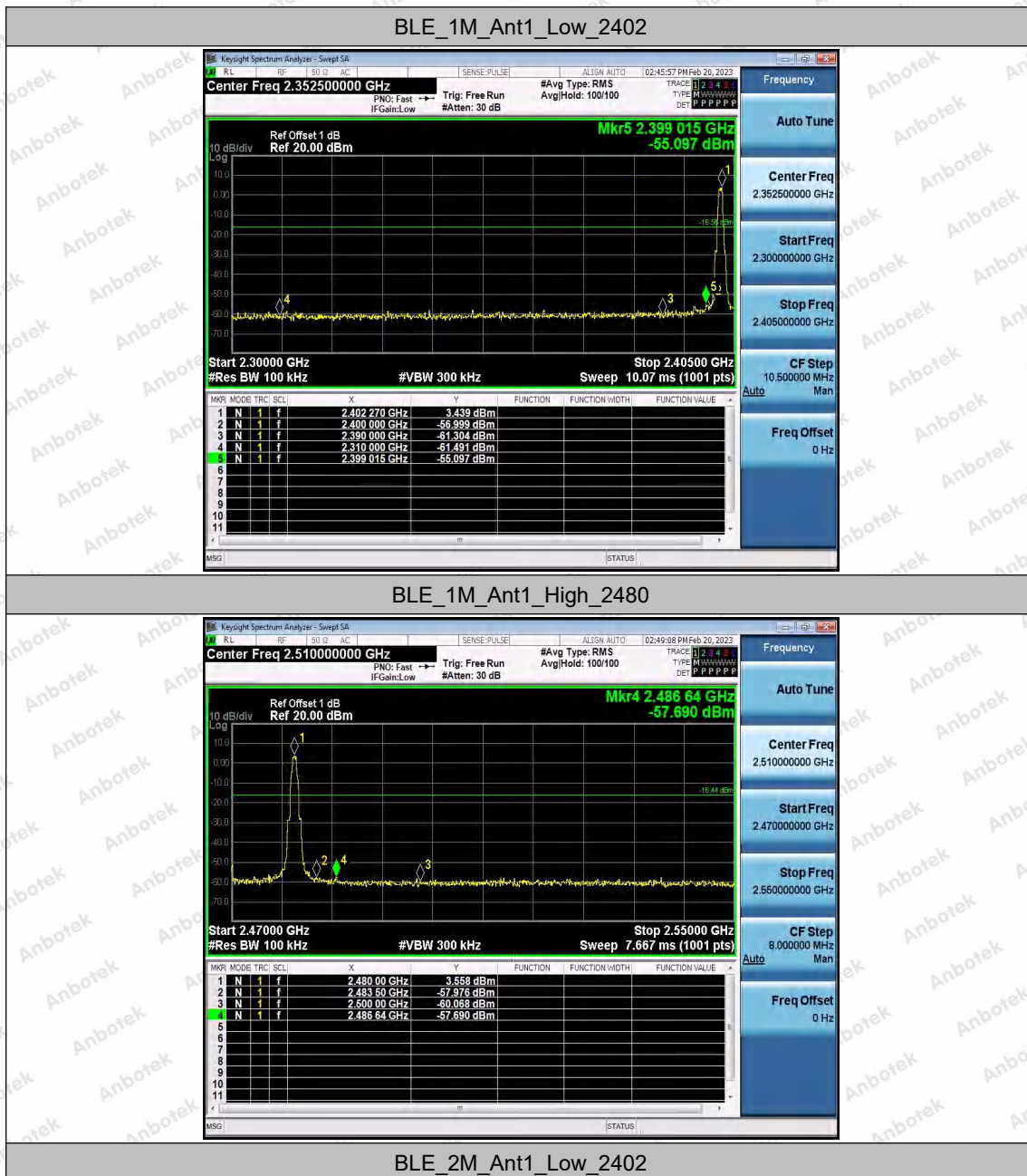
Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.44	-55.1	≤-16.56	PASS
		High	2480	3.56	-57.69	≤-16.44	PASS
BLE_2M	Ant1	Low	2402	3.19	-29.33	≤-16.81	PASS
		High	2480	2.70	-56.96	≤-17.3	PASS



Test Graphs



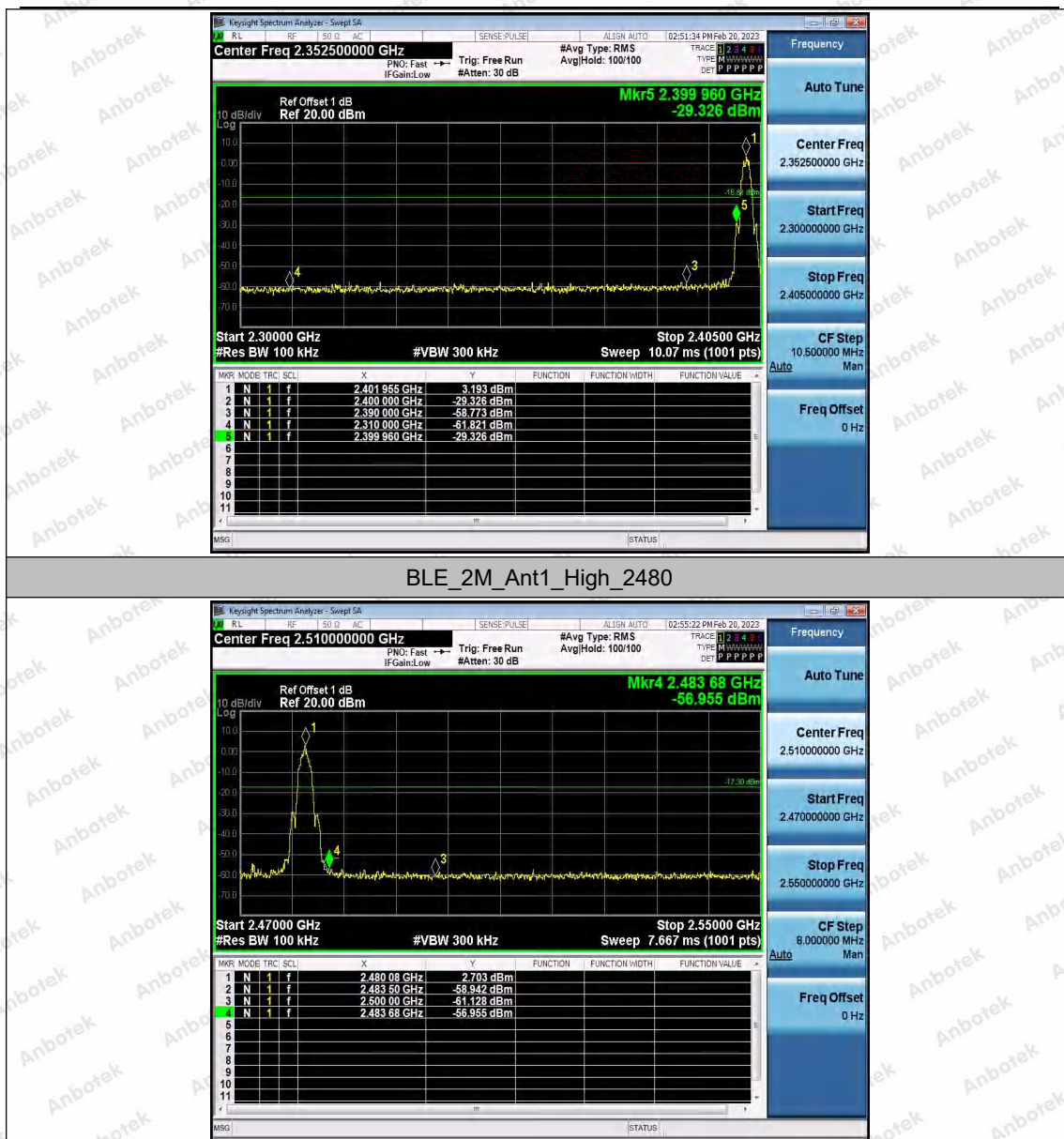
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Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.05	3.05	---	PASS
			30~1000	3.05	-65.33	≤-16.95	PASS
			1000~26500	3.05	-53.04	≤-16.95	PASS
		2440	Reference	3.00	3.00	---	PASS
			30~1000	3.00	-65.28	≤-17	PASS
			1000~26500	3.00	-48.22	≤-17	PASS
		2480	Reference	2.43	2.43	---	PASS
			30~1000	2.43	-63.75	≤-17.57	PASS
			1000~26500	2.43	-51.16	≤-17.57	PASS
BLE_2M	Ant1	2402	Reference	4.04	4.04	---	PASS
			30~1000	4.04	-67.11	≤-15.96	PASS
			1000~26500	4.04	-51.62	≤-15.96	PASS
		2440	Reference	1.55	1.55	---	PASS
			30~1000	1.55	-66.35	≤-18.45	PASS
			1000~26500	1.55	-52.9	≤-18.45	PASS
		2480	Reference	0.34	0.34	---	PASS
			30~1000	0.34	-61.58	≤-19.66	PASS
			1000~26500	0.34	-53.27	≤-19.66	PASS

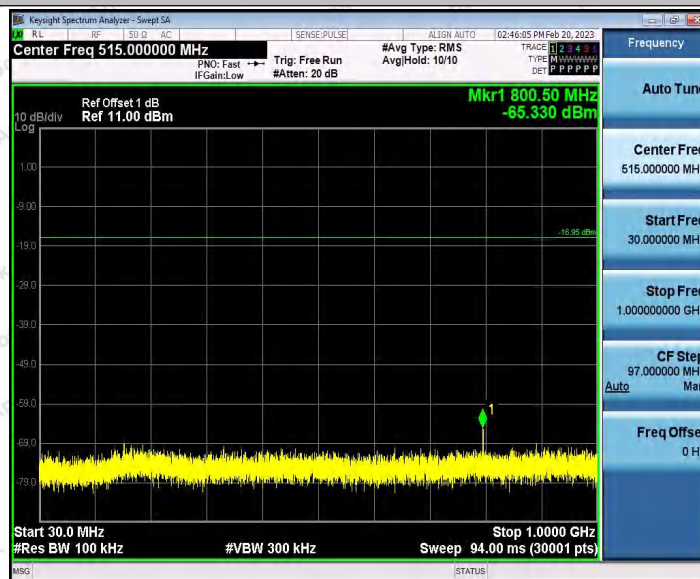


Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

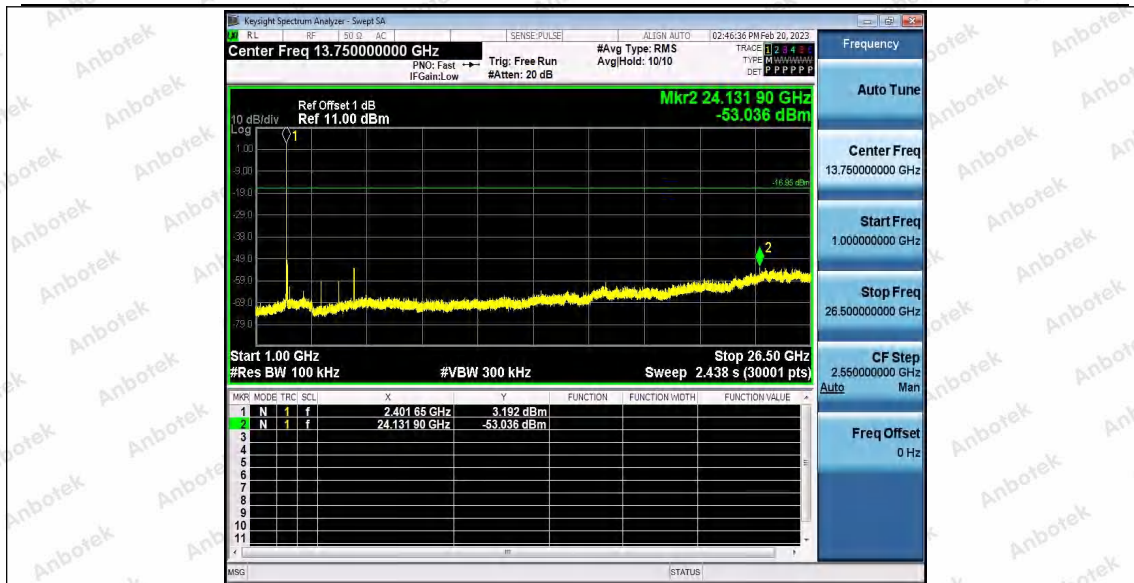
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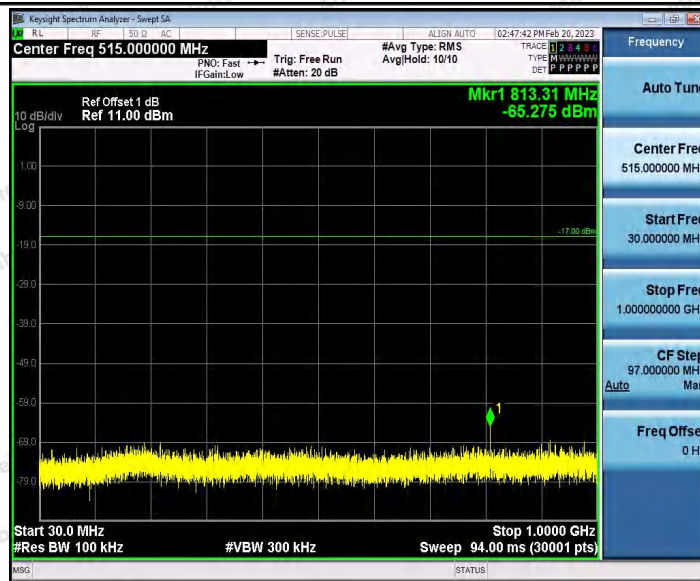


BLE_1M_Ant1_2440_0~Reference

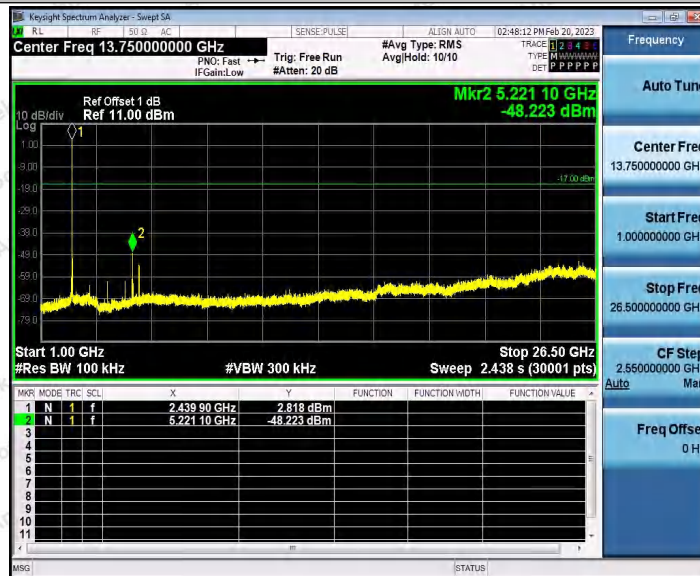


BLE_1M_Ant1_2440_30~1000





BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

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BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

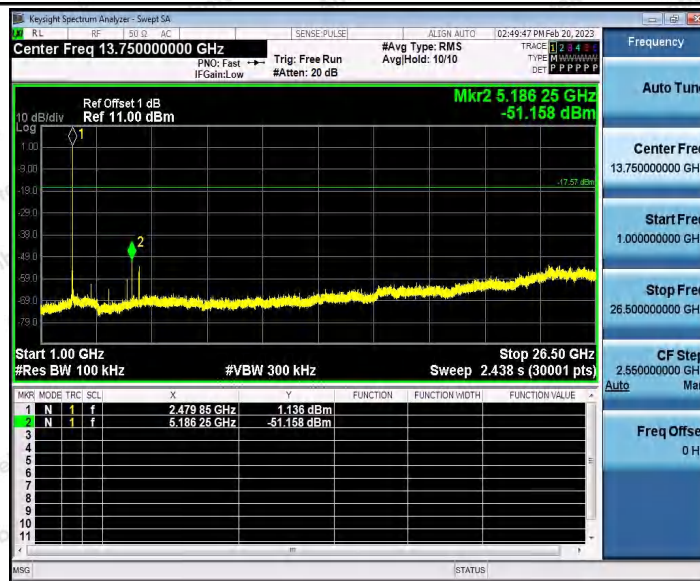
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BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000

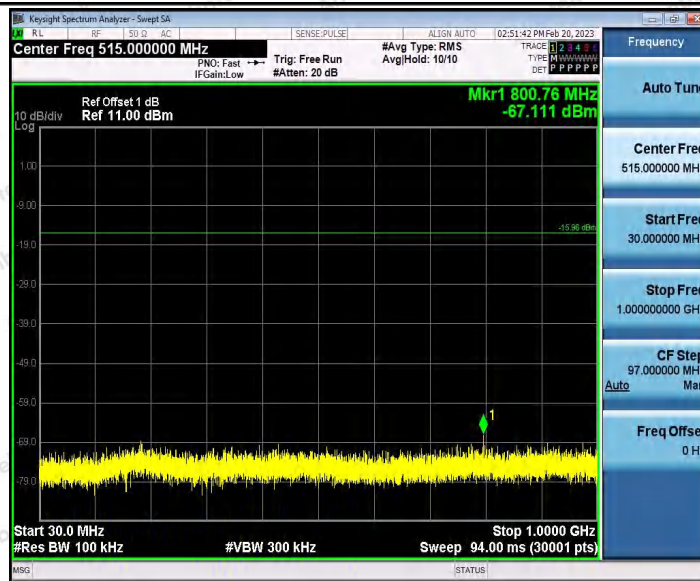
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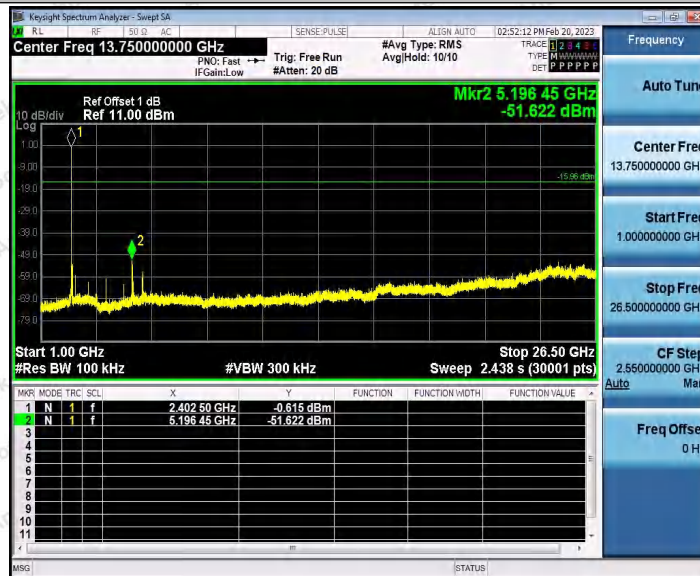


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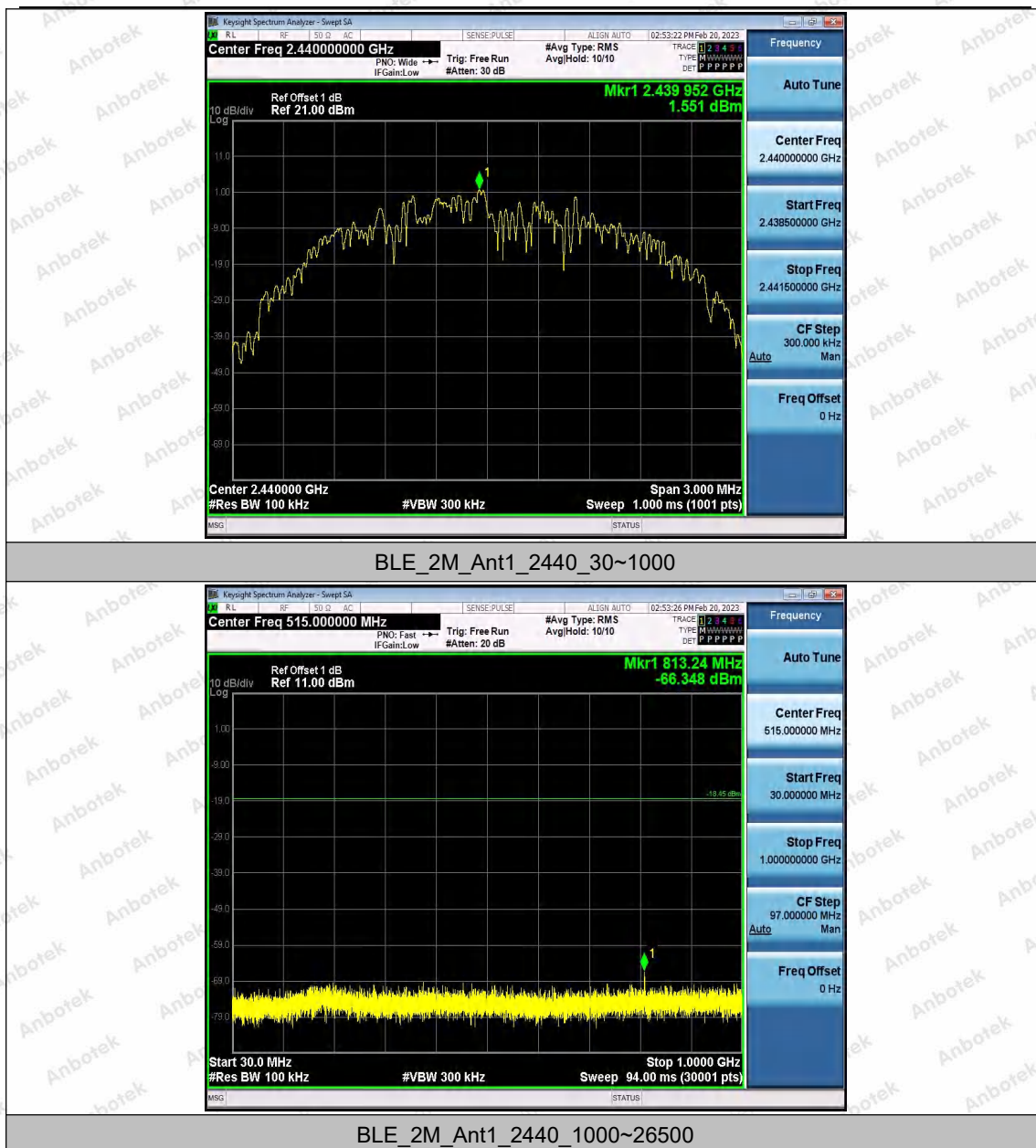


BLE_2M_Ant1_2402_1000~26500



BLE_2M_Ant1_2440_0~Reference





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BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000

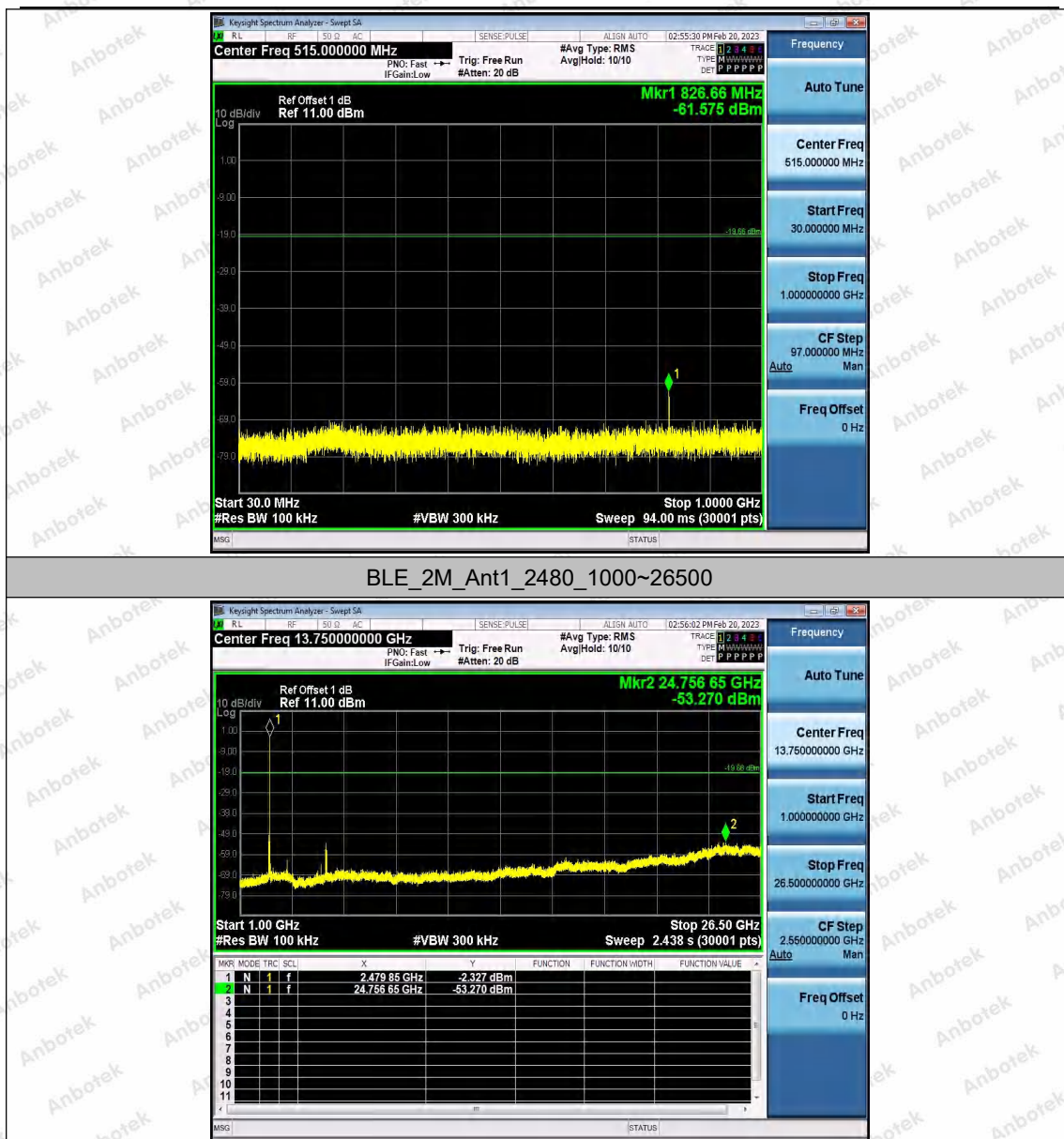
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Appendix G: Duty Cycle

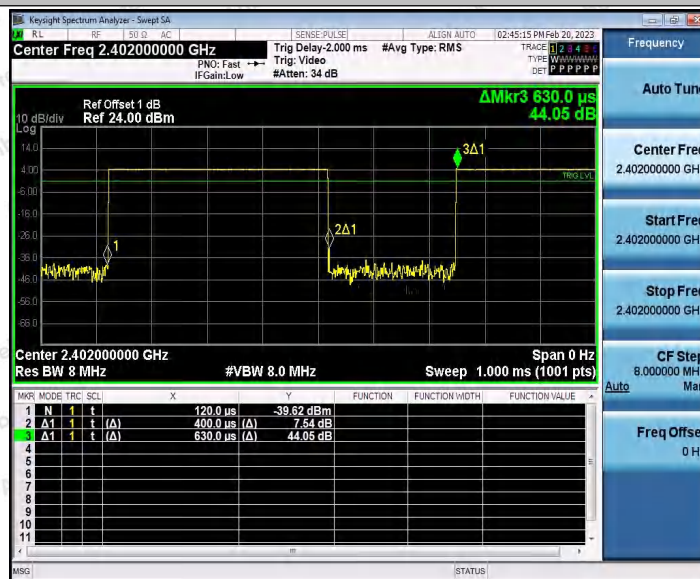
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.40	0.63	63.49	1.97
		2440	0.40	0.63	63.49	1.97
		2480	0.40	0.63	63.49	1.97
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

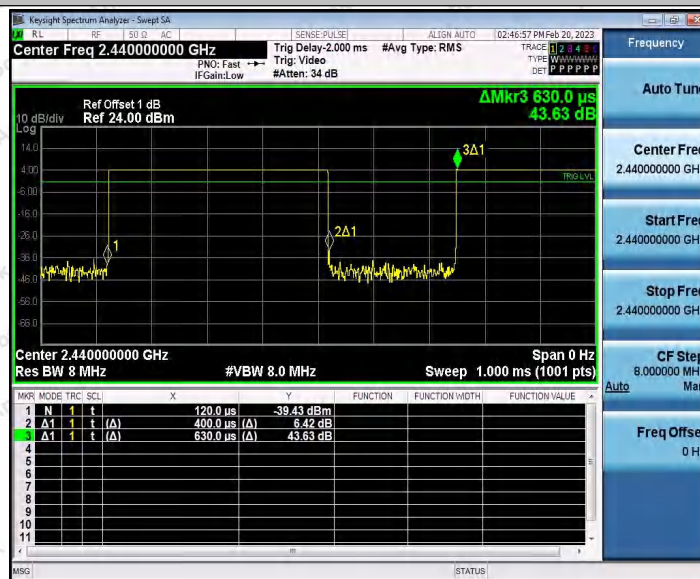


Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

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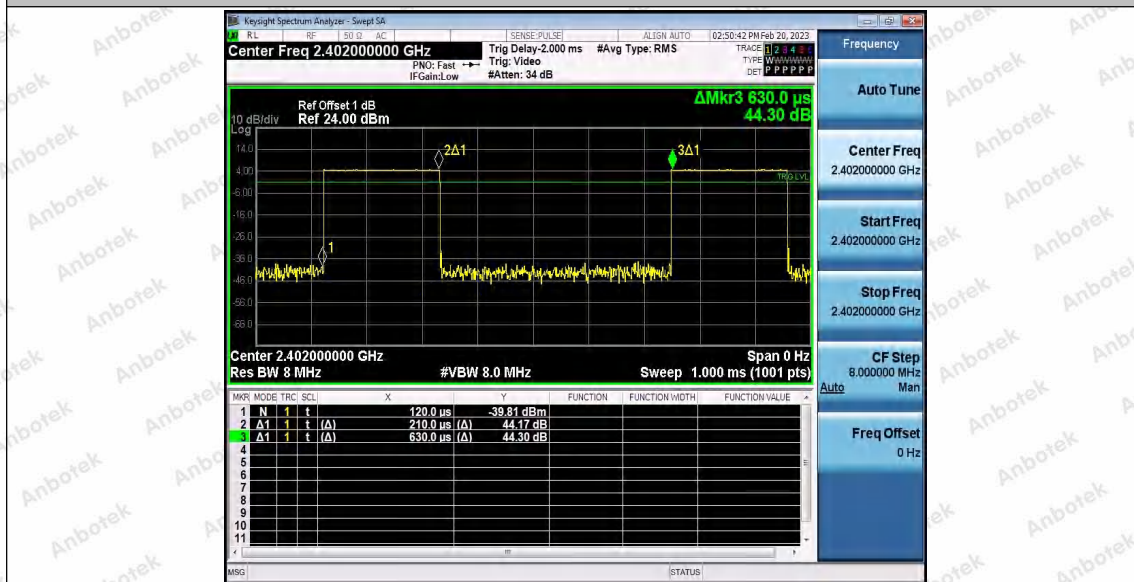


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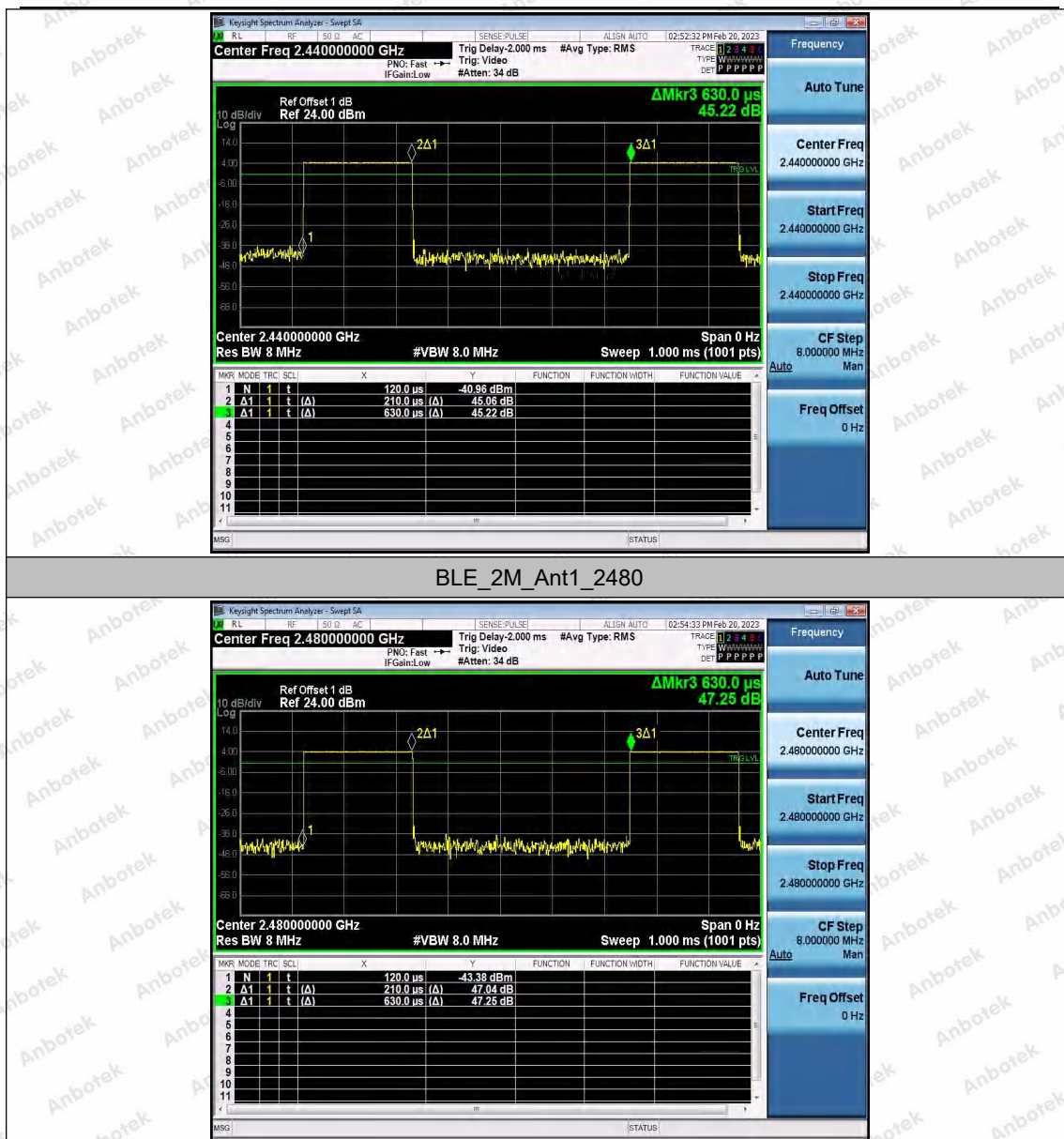


BLE_2M_Ant1_2402



BLE_2M_Ant1_2440





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