

Appendix: Bluetooth LE

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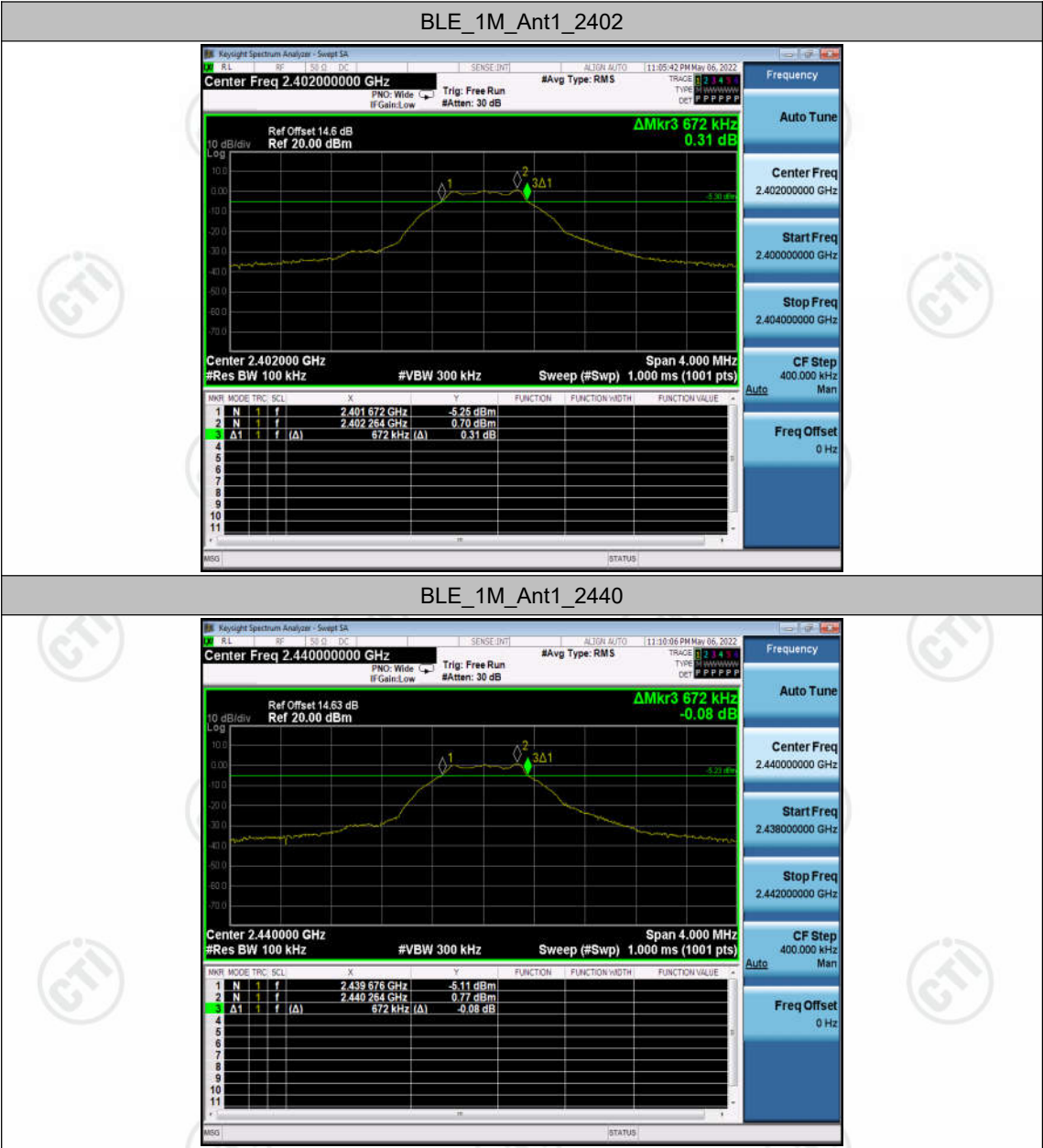
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Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.672	2402.344	0.5	PASS
		2440	0.672	2439.676	2440.348	0.5	PASS
		2480	0.676	2479.672	2480.348	0.5	PASS
BLE_2M	Ant1	2402	1.164	2401.440	2402.604	0.5	PASS
		2440	1.172	2439.432	2440.604	0.5	PASS
		2480	1.164	2479.436	2480.600	0.5	PASS

Test Graphs



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

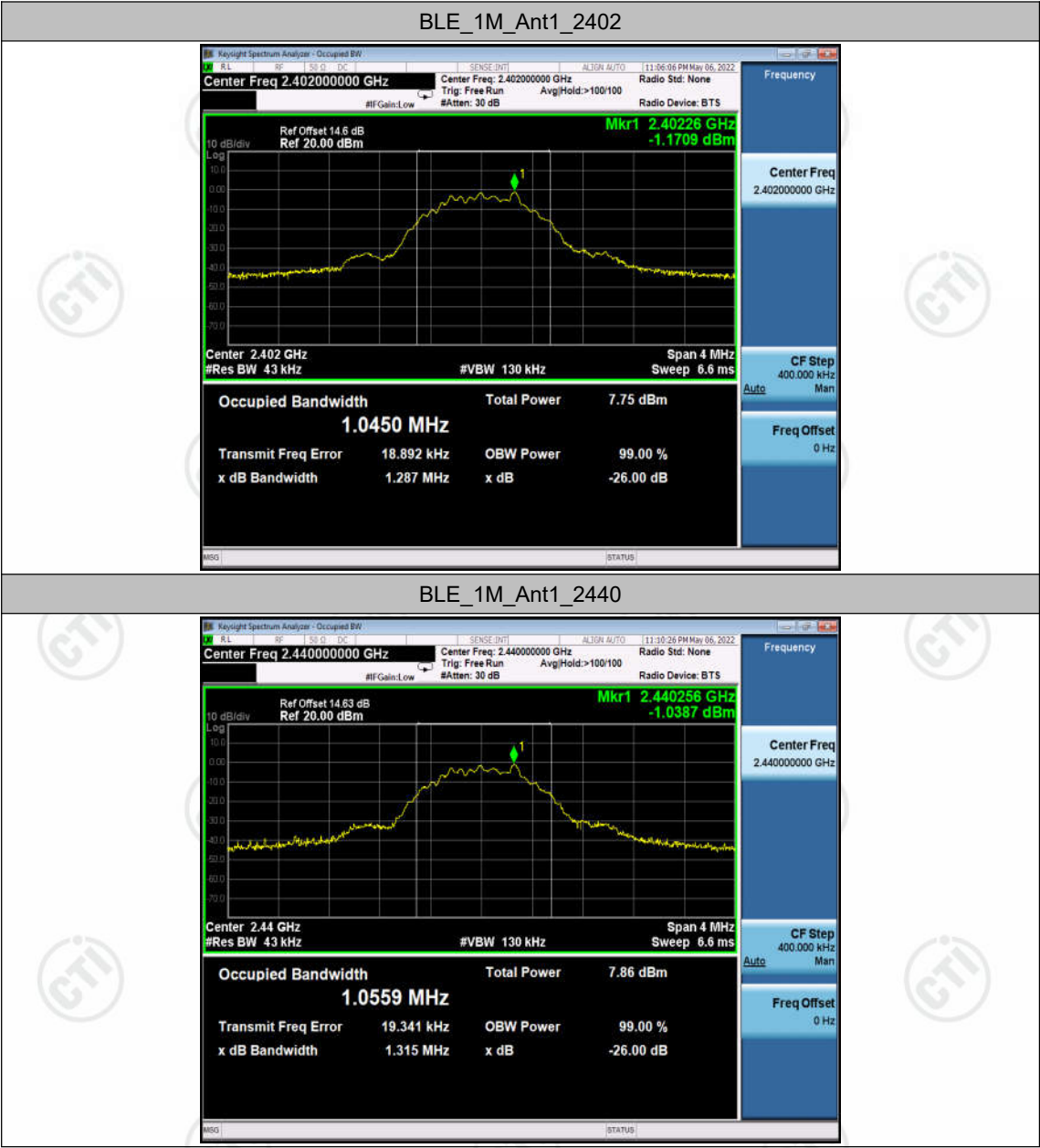


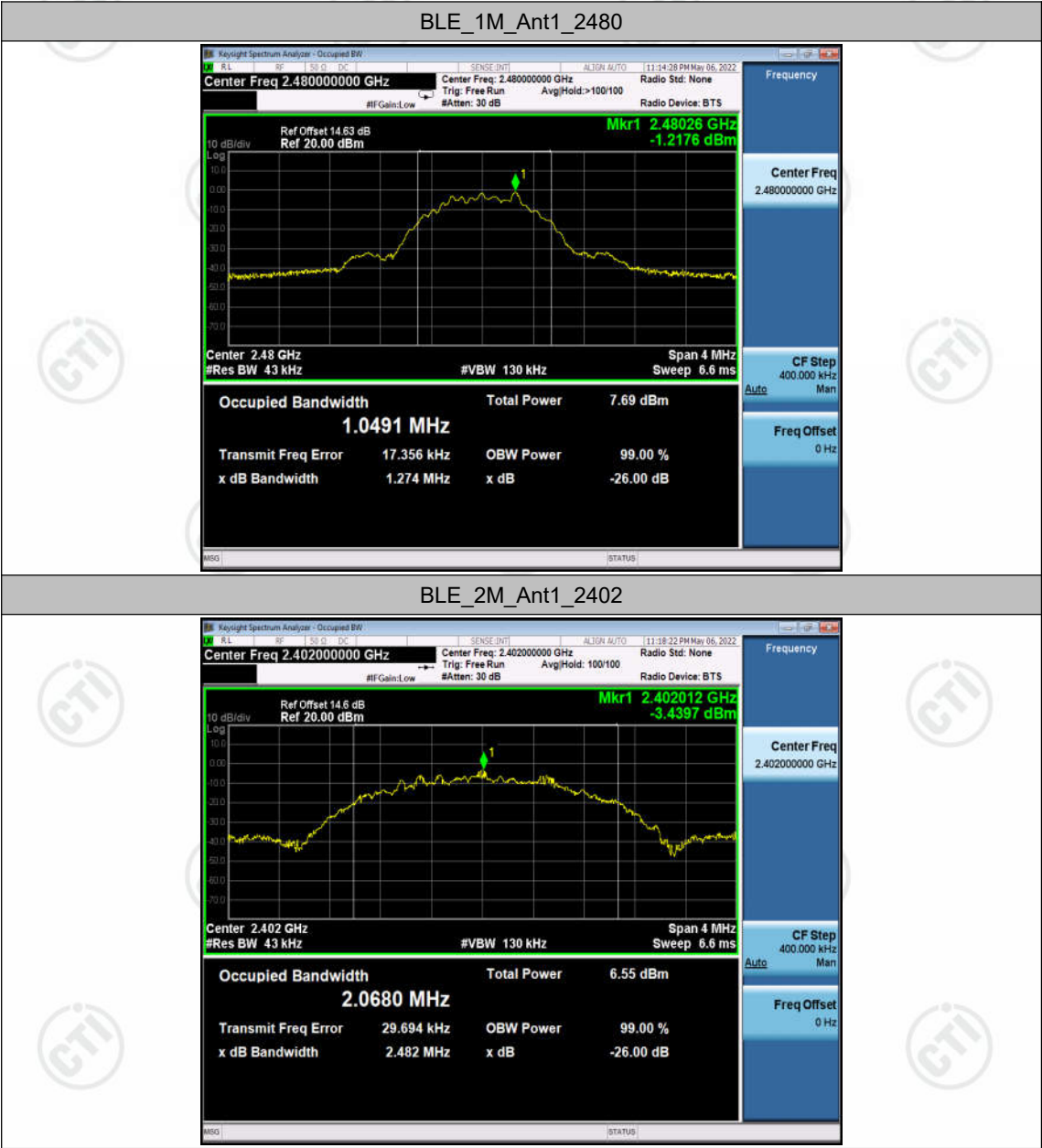
Appendix B: Occupied Channel Bandwidth

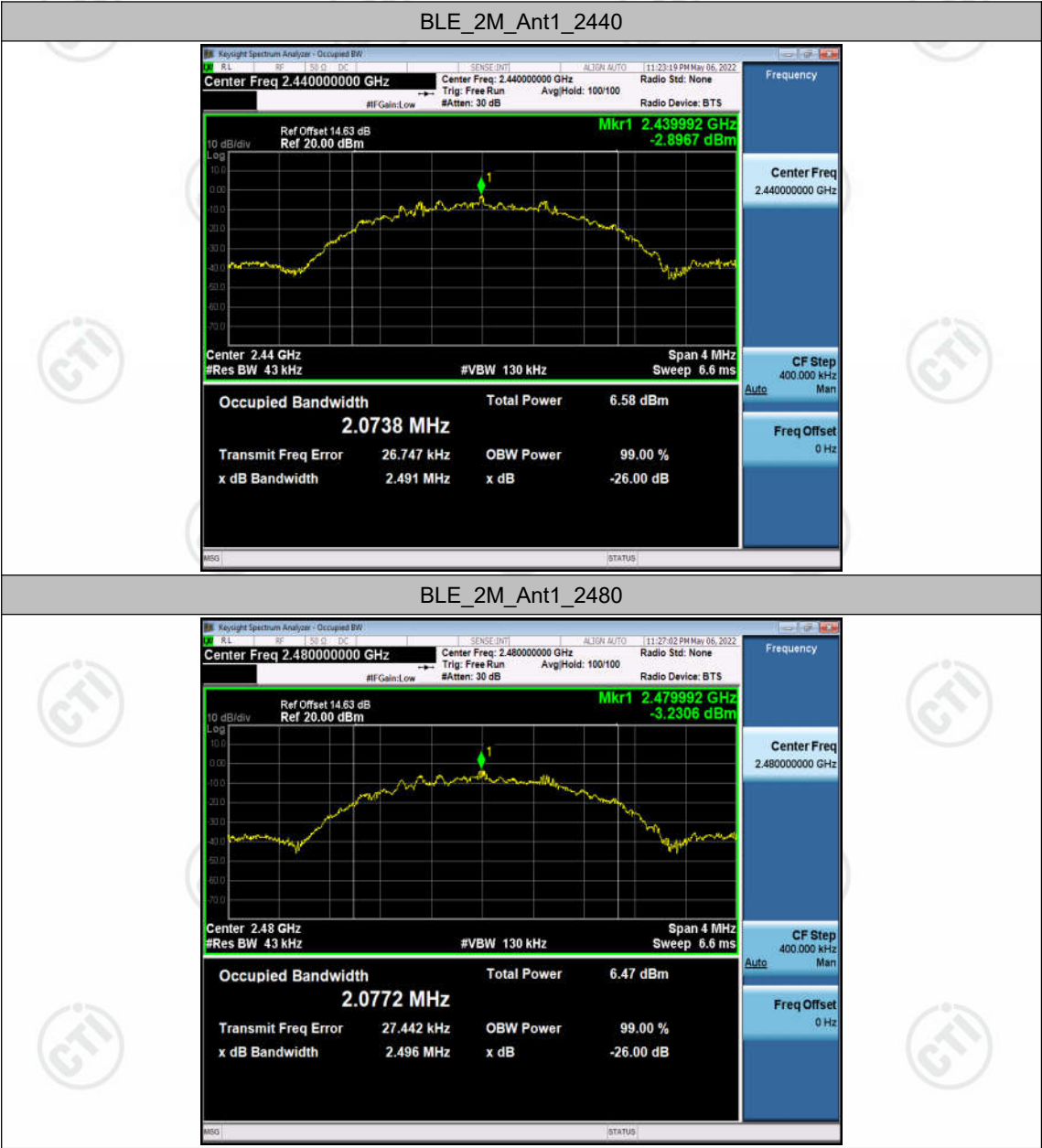
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0448	2401.497	2402.541	---	---
		2440	1.0558	2439.491	2440.547	---	---
		2480	1.0492	2479.493	2480.542	---	---
BLE_2M	Ant1	2402	2.0680	2400.996	2403.064	---	---
		2440	2.0738	2438.990	2441.064	---	---
		2480	2.0772	2478.989	2481.066	---	---

Test Graphs





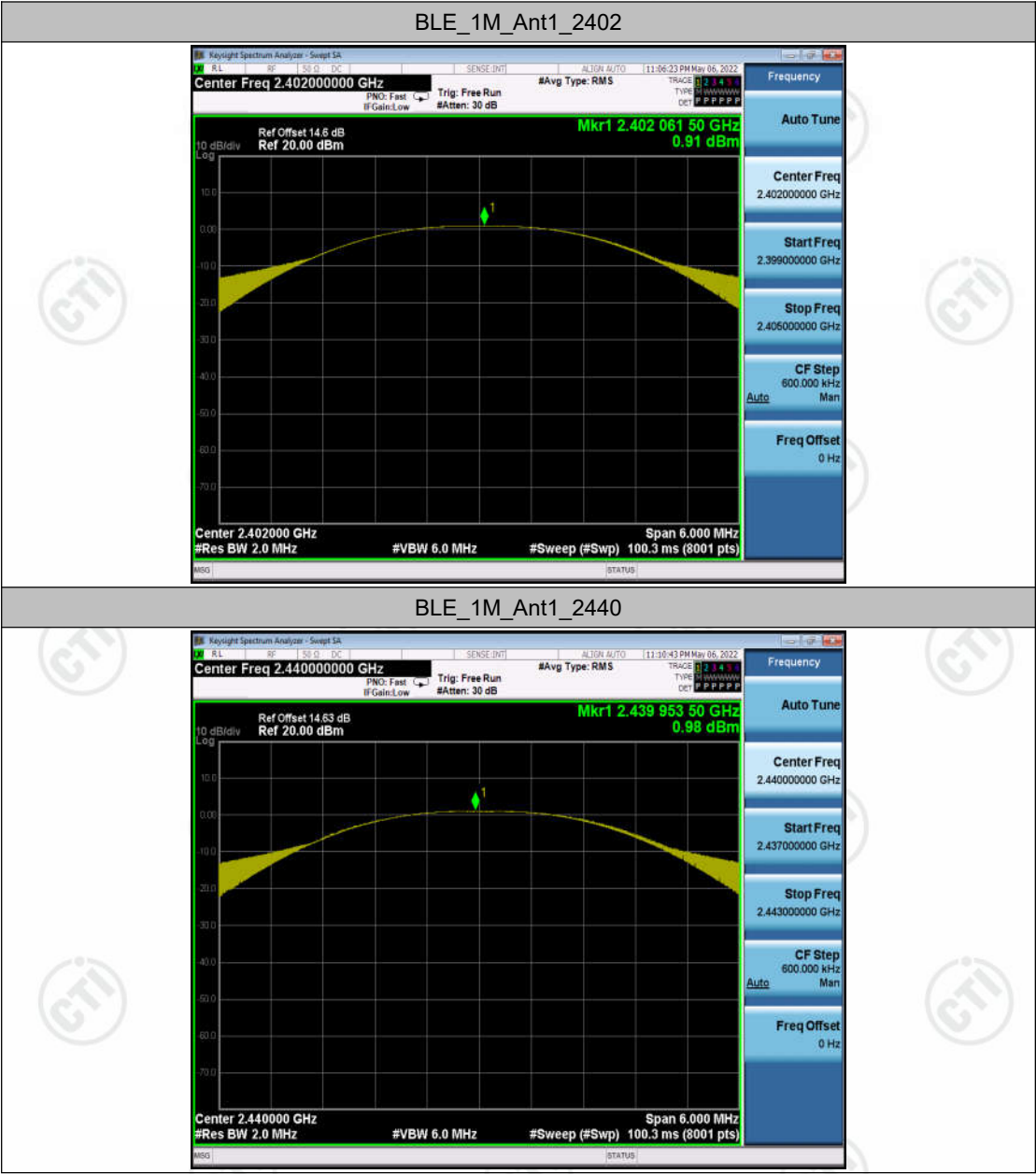


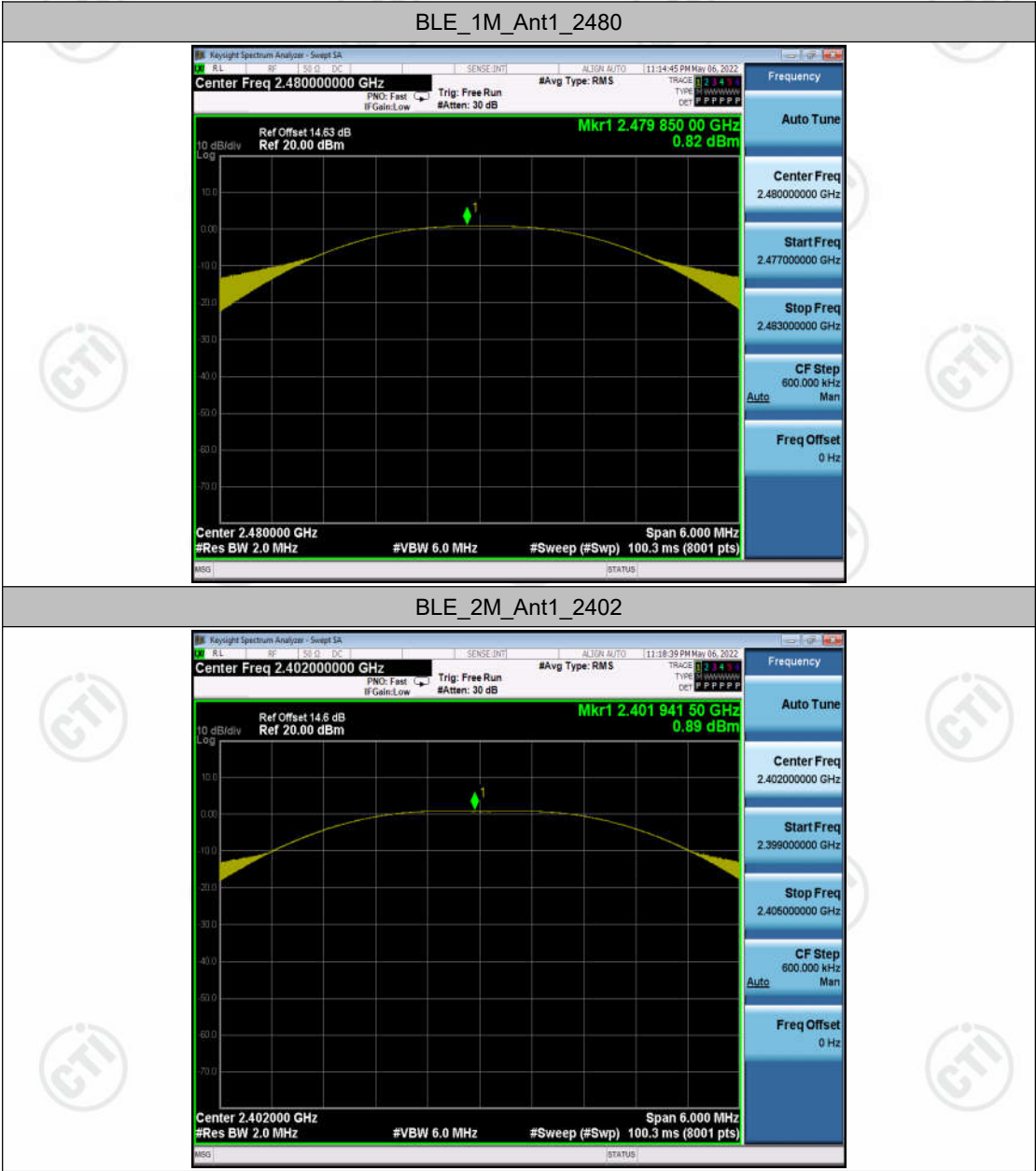
Appendix C: Maximum conducted output power

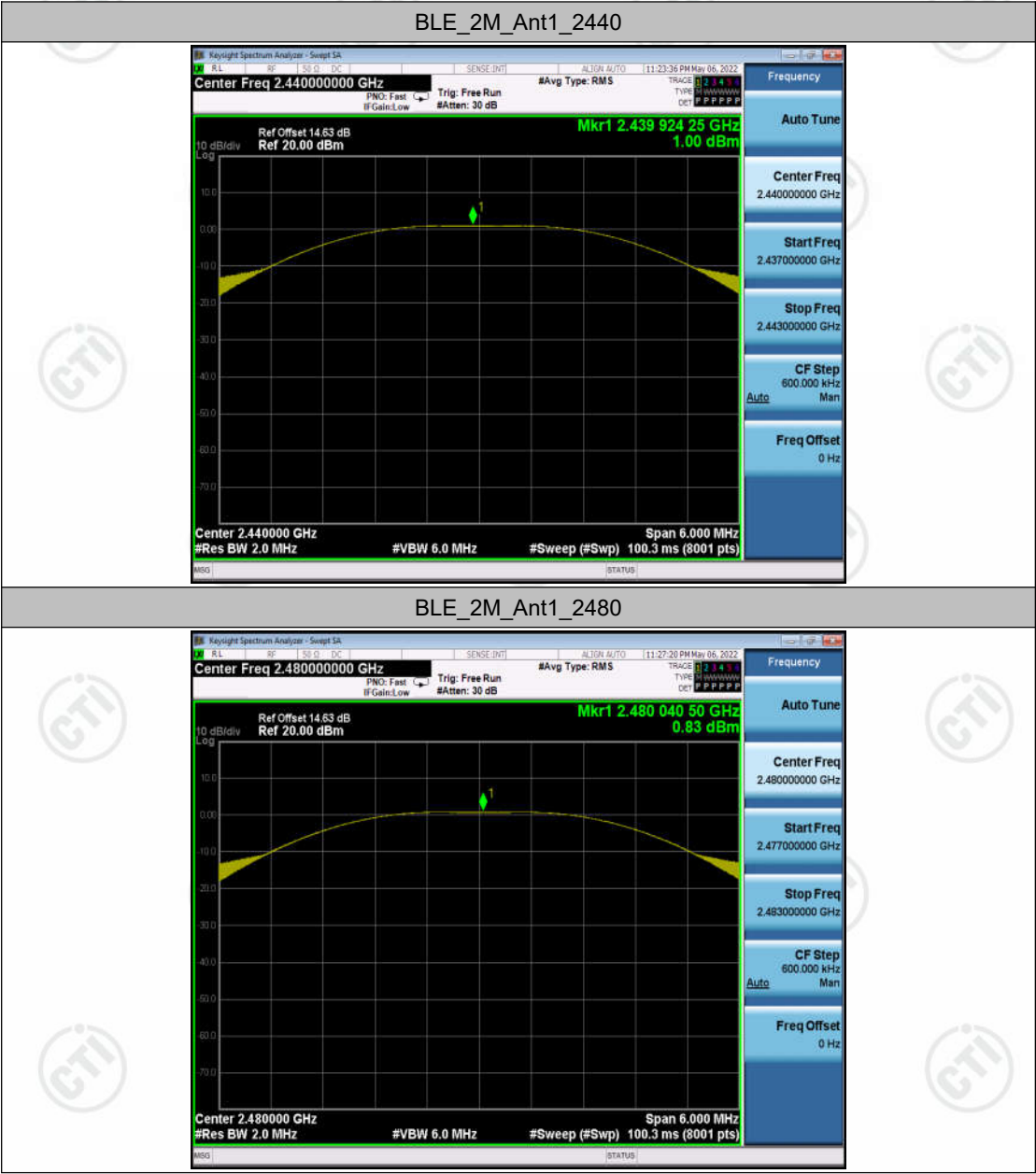
Test Result Peak

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.91	≤30	PASS
		2440	0.98	≤30	PASS
		2480	0.82	≤30	PASS
BLE_2M	Ant1	2402	0.89	≤30	PASS
		2440	1	≤30	PASS
		2480	0.83	≤30	PASS

Test Graphs Peak





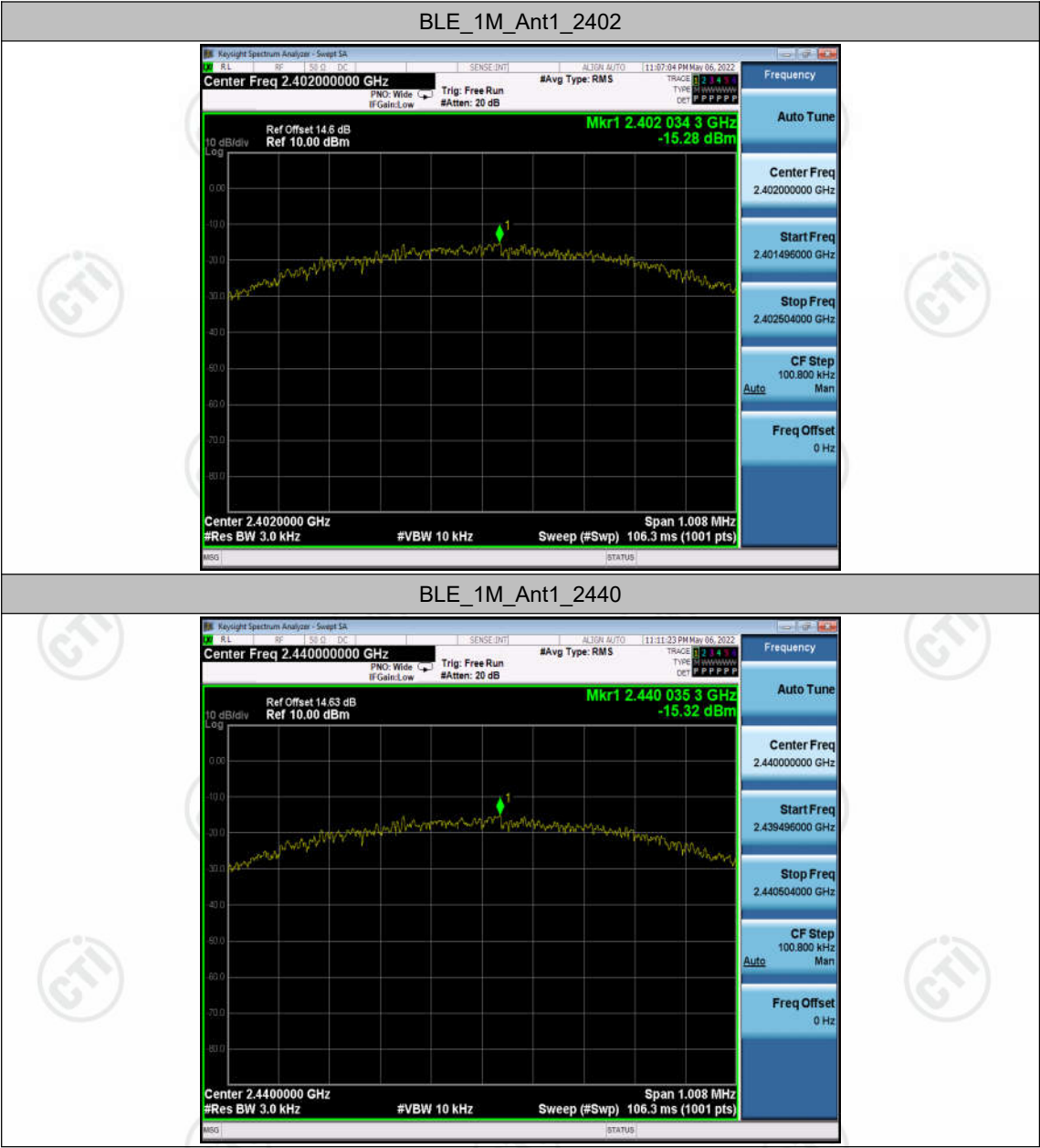


Appendix D: Maximum power spectral density

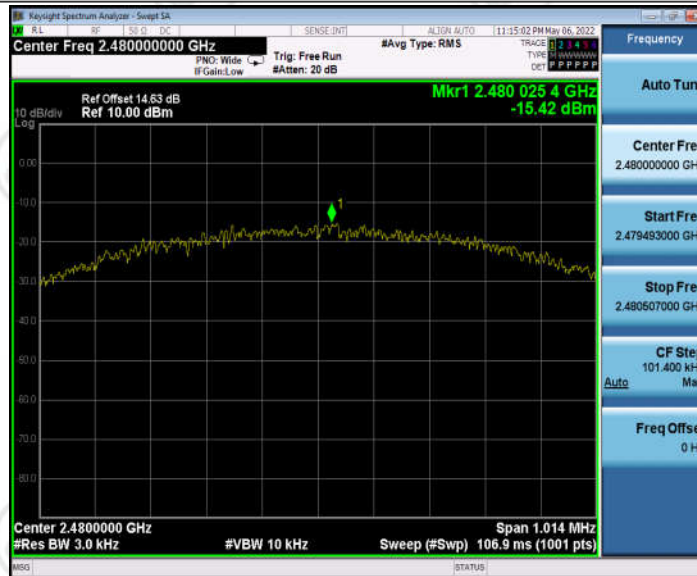
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.29	≤8.00	PASS
		2440	-15.32	≤8.00	PASS
		2480	-15.42	≤8.00	PASS
BLE_2M	Ant1	2402	-17.67	≤8.00	PASS
		2440	-17.65	≤8.00	PASS
		2480	-17.85	≤8.00	PASS

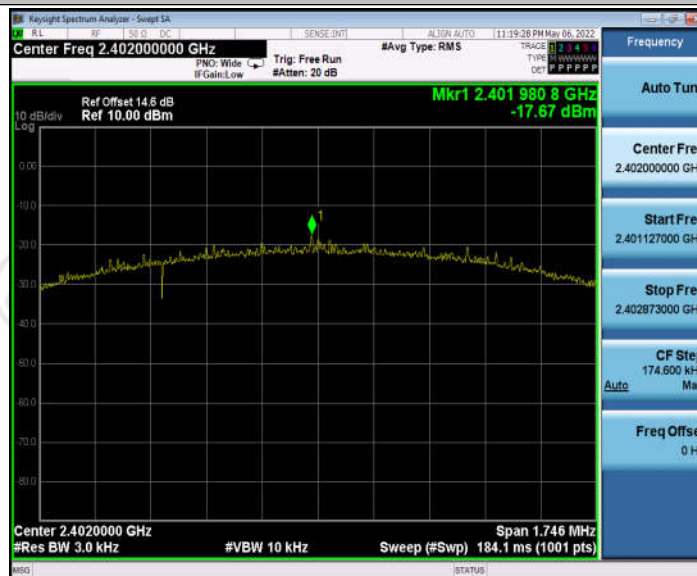
Test Graphs



BLE_1M_Ant1_2480



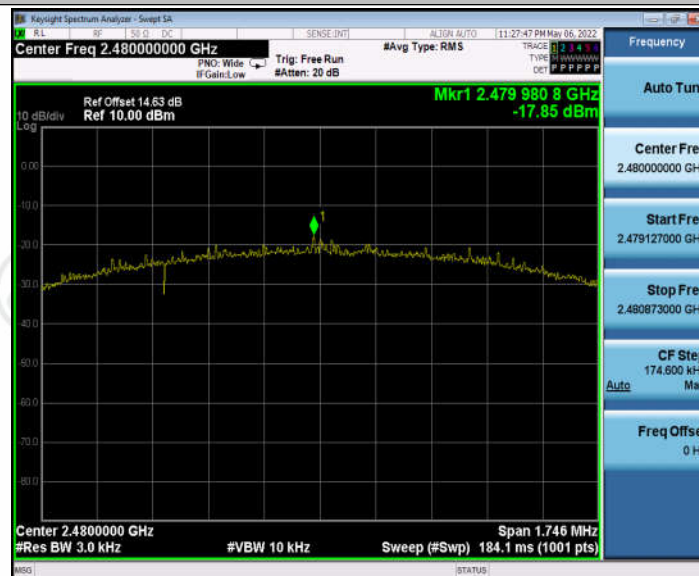
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

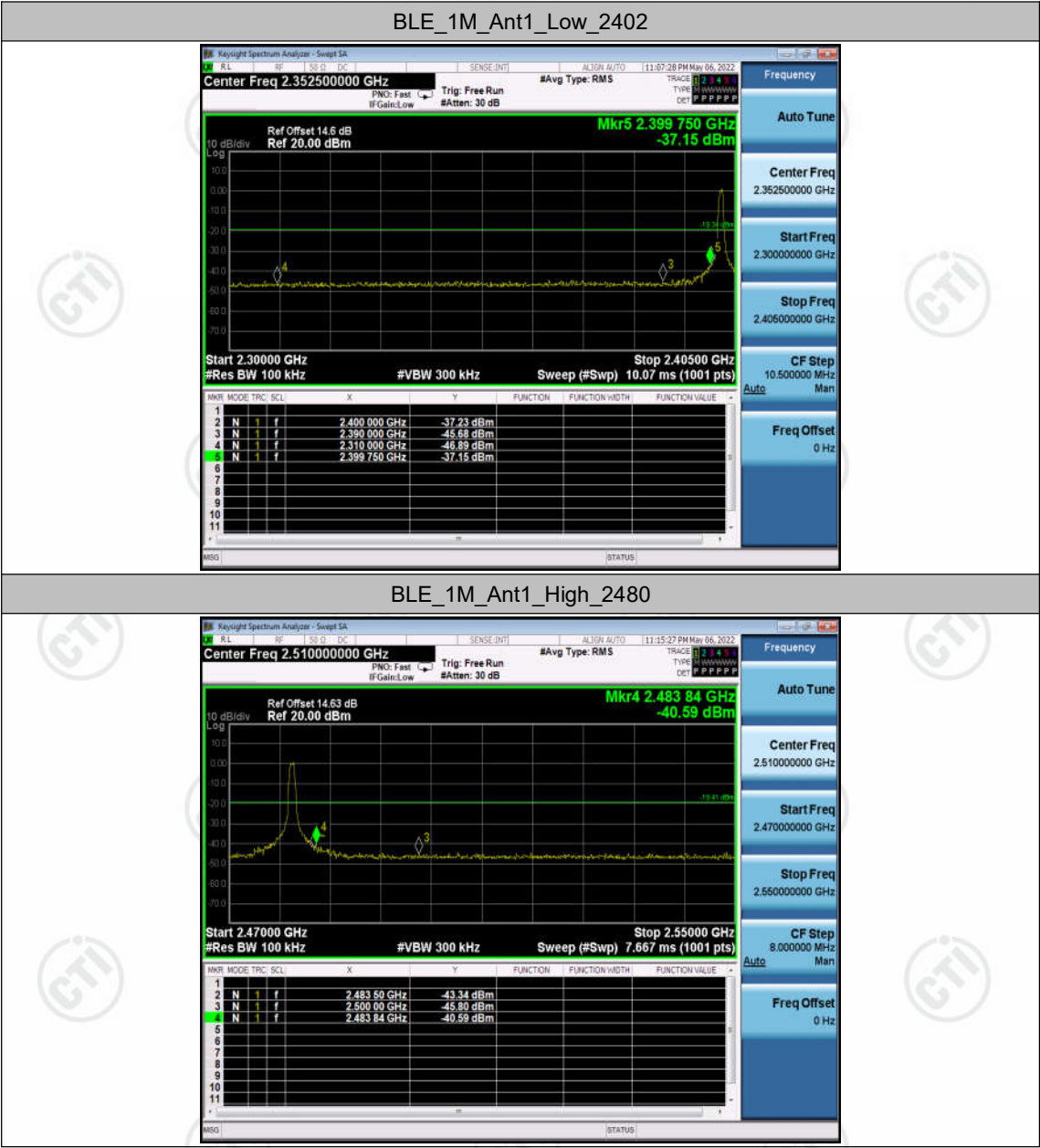


Appendix E: Band edge measurements

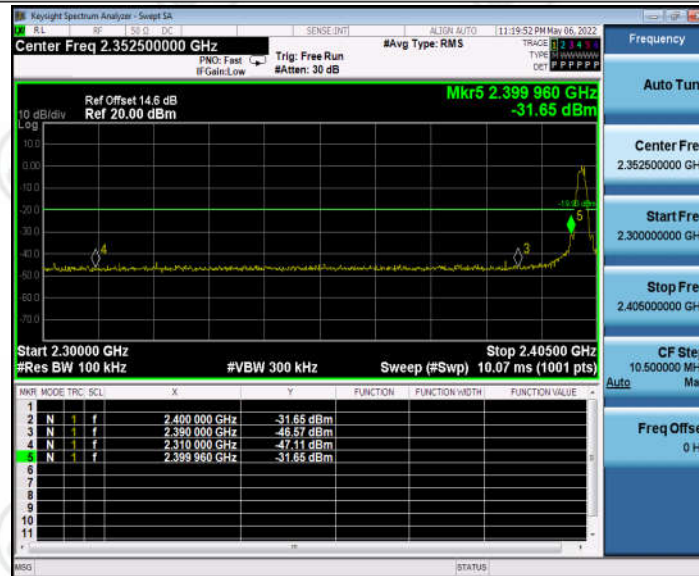
Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.66	-37.15	≤-19.34	PASS
		High	2480	0.59	-40.59	≤-19.41	PASS
BLE_2M	Ant1	Low	2402	0.07	-31.65	≤-19.93	PASS
		High	2480	0.06	-40.69	≤-19.94	PASS

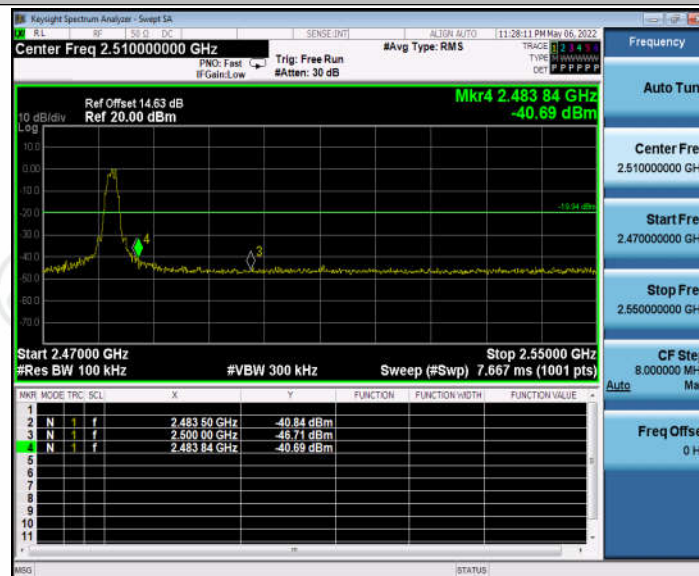
Test Graphs



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480

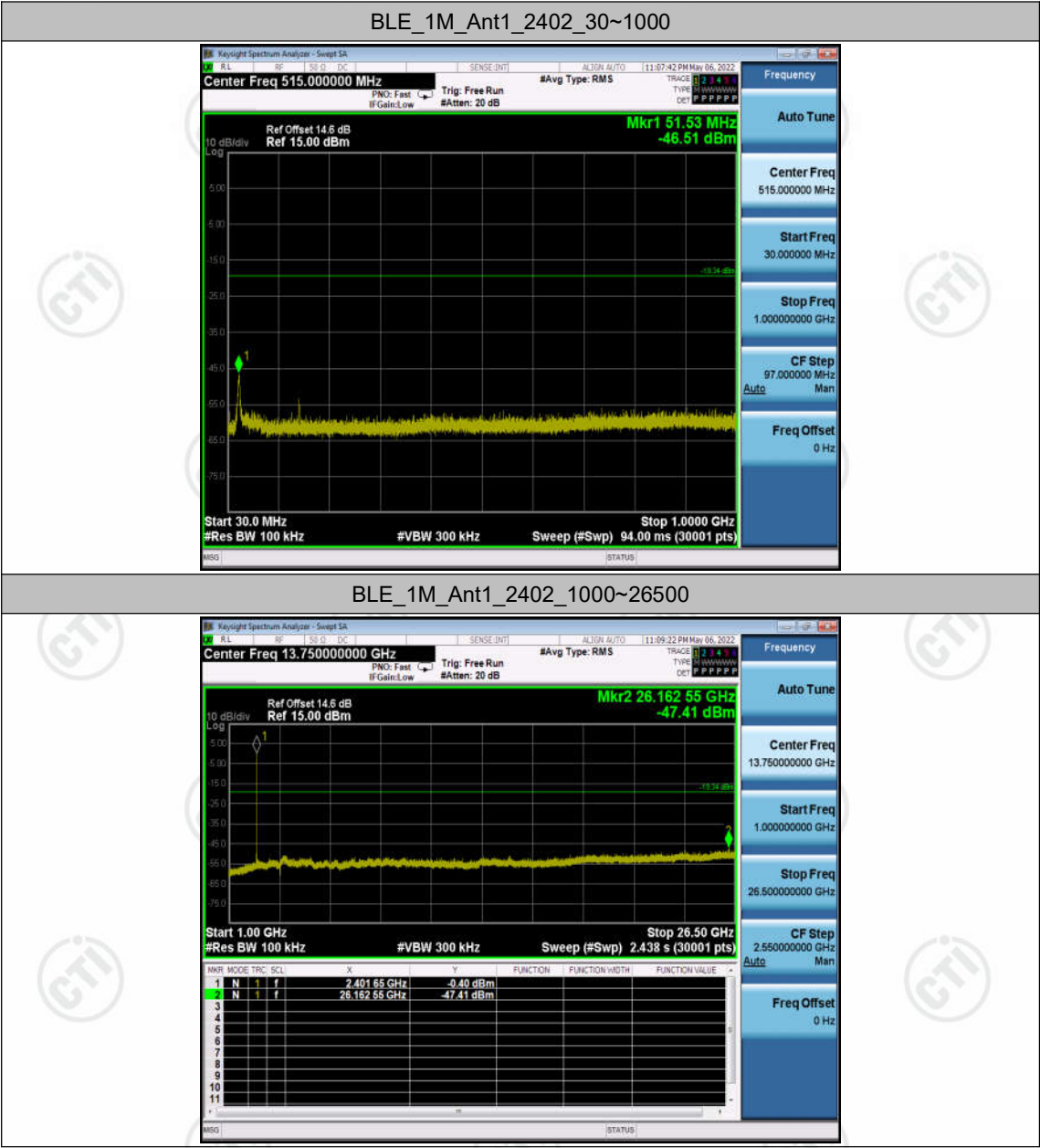


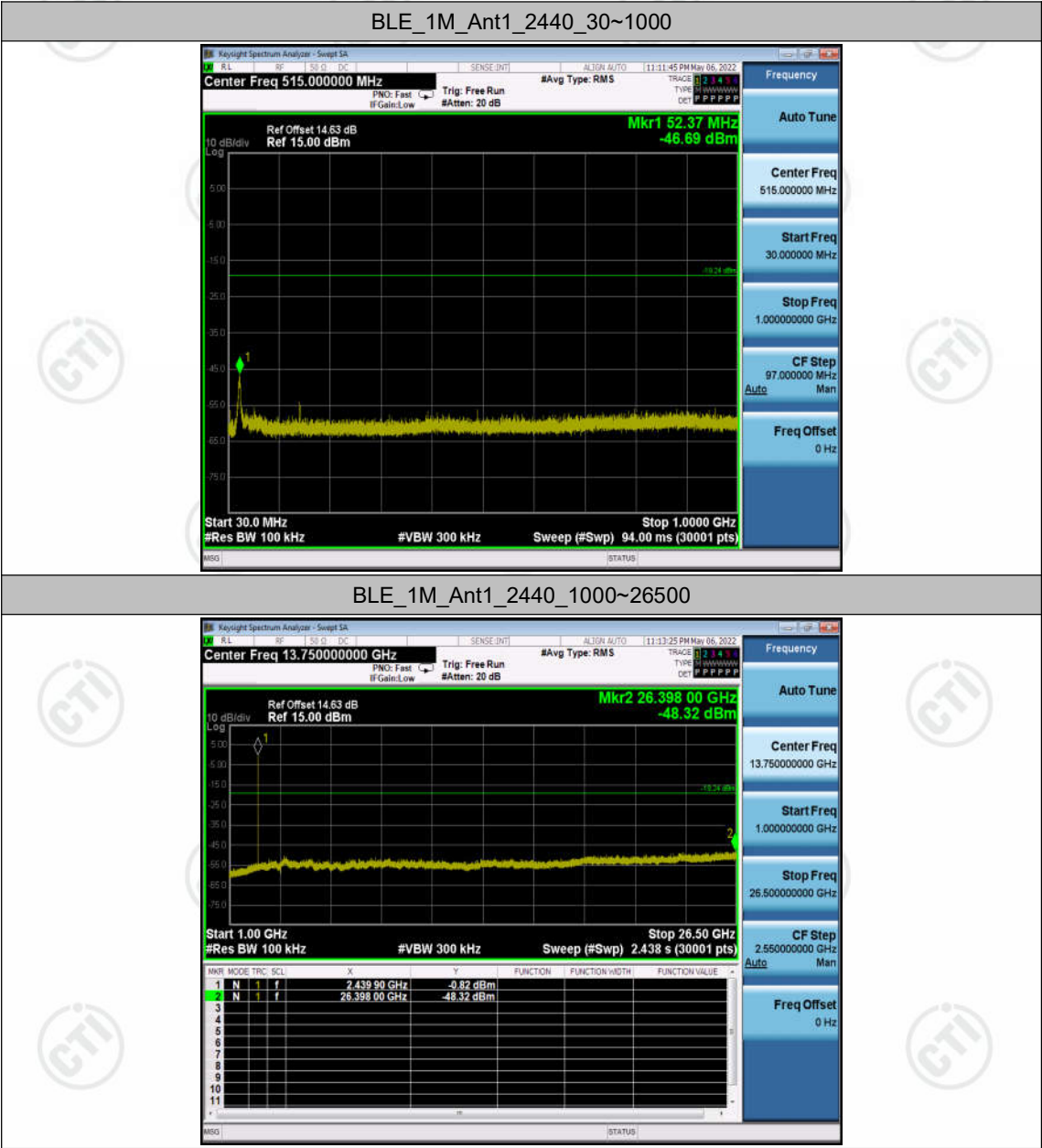
Appendix F: Conducted Spurious Emission

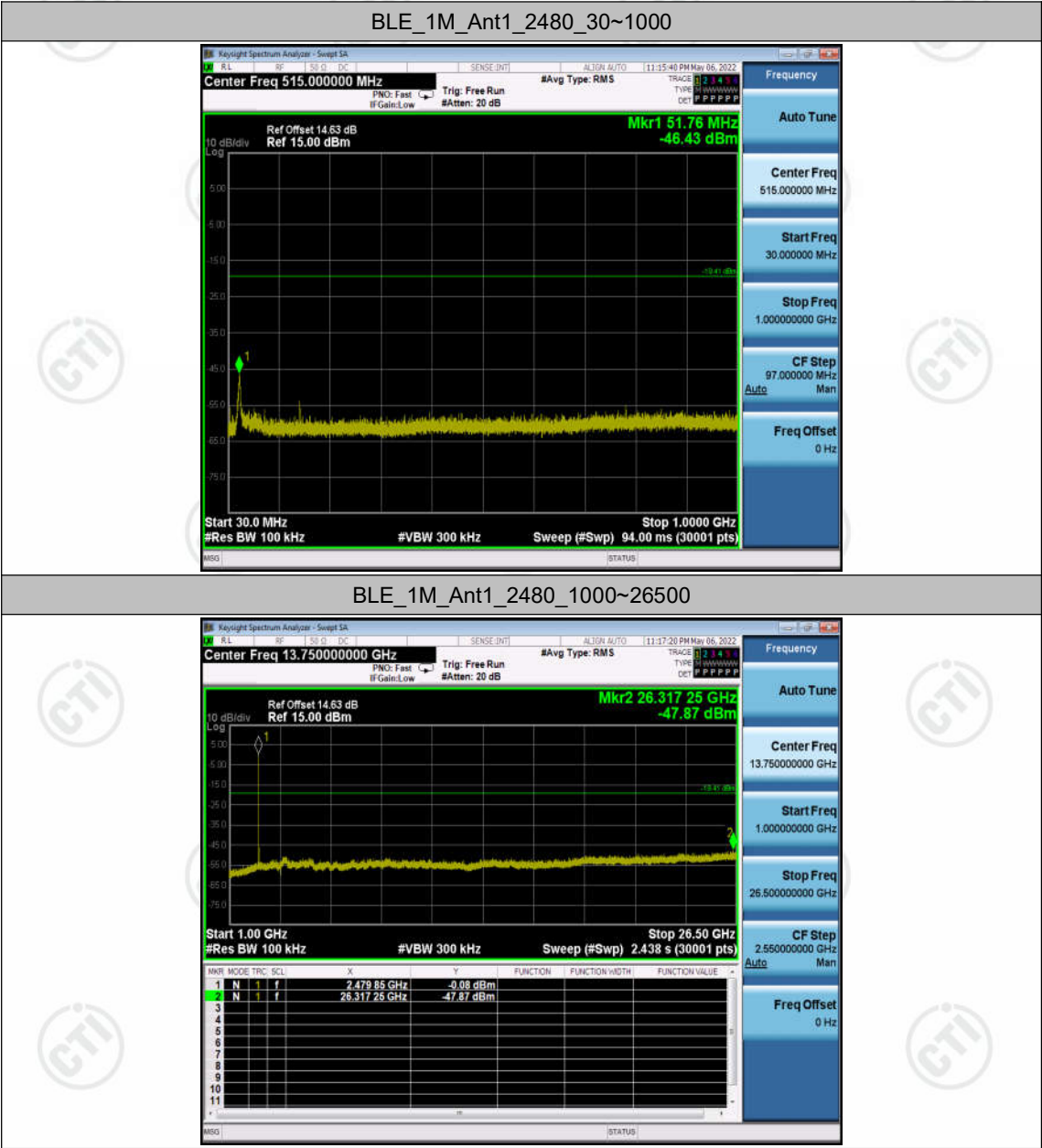
Test Result

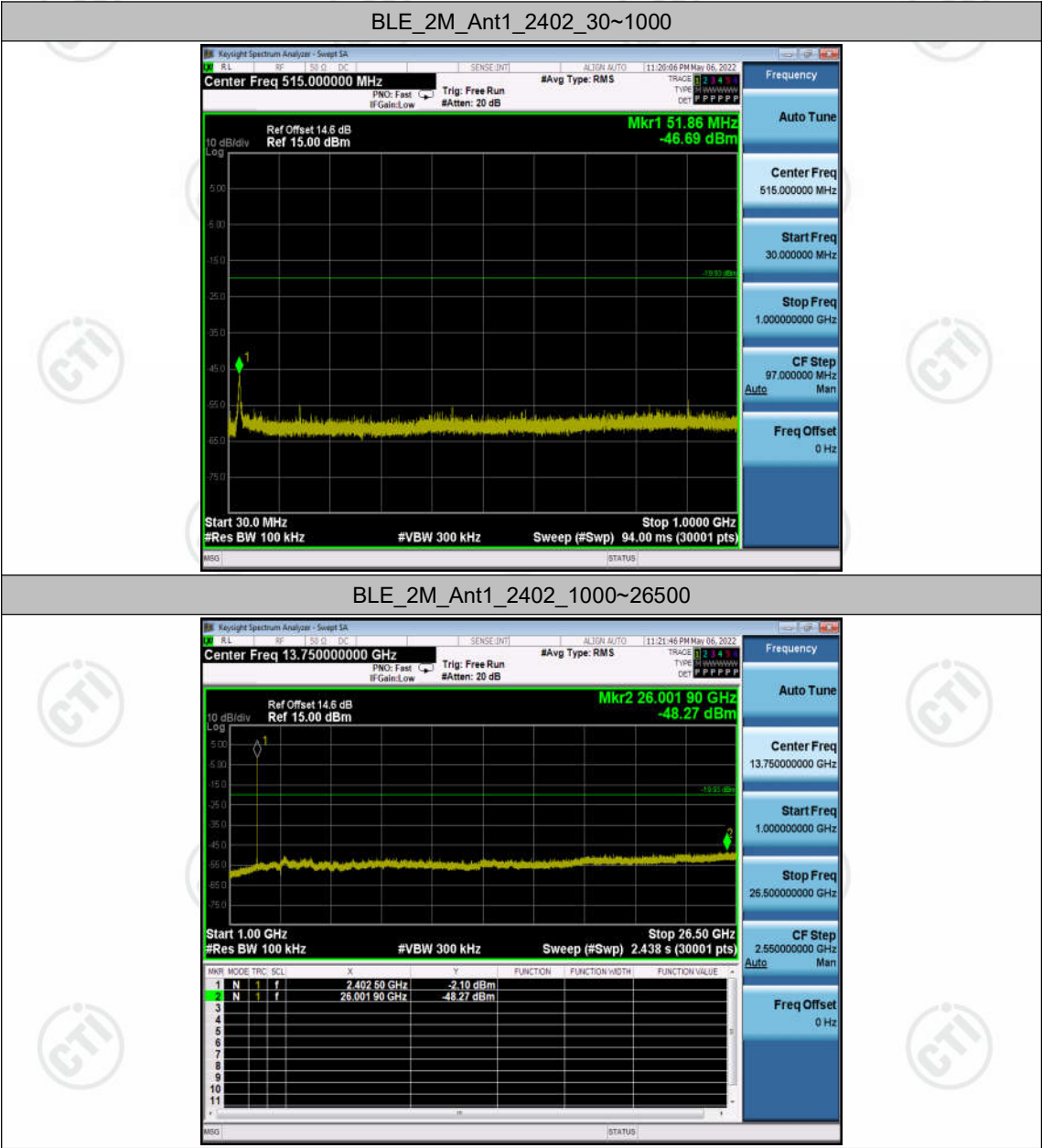
Test Mode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	0.66	-46.51	≤-19.34	PASS
			1000~26500	0.66	-47.41	≤-19.34	PASS
		2440	30~1000	0.76	-46.69	≤-19.24	PASS
			1000~26500	0.76	-48.32	≤-19.24	PASS
		2480	30~1000	0.59	-46.43	≤-19.41	PASS
			1000~26500	0.59	-47.87	≤-19.41	PASS
BLE_2M	Ant1	2402	30~1000	0.07	-46.7	≤-19.93	PASS
			1000~26500	0.07	-48.27	≤-19.93	PASS
		2440	30~1000	0.17	-46.43	≤-19.83	PASS
			1000~26500	0.17	-48.48	≤-19.83	PASS
		2480	30~1000	0.06	-45.97	≤-19.94	PASS
			1000~26500	0.06	-47.36	≤-19.94	PASS

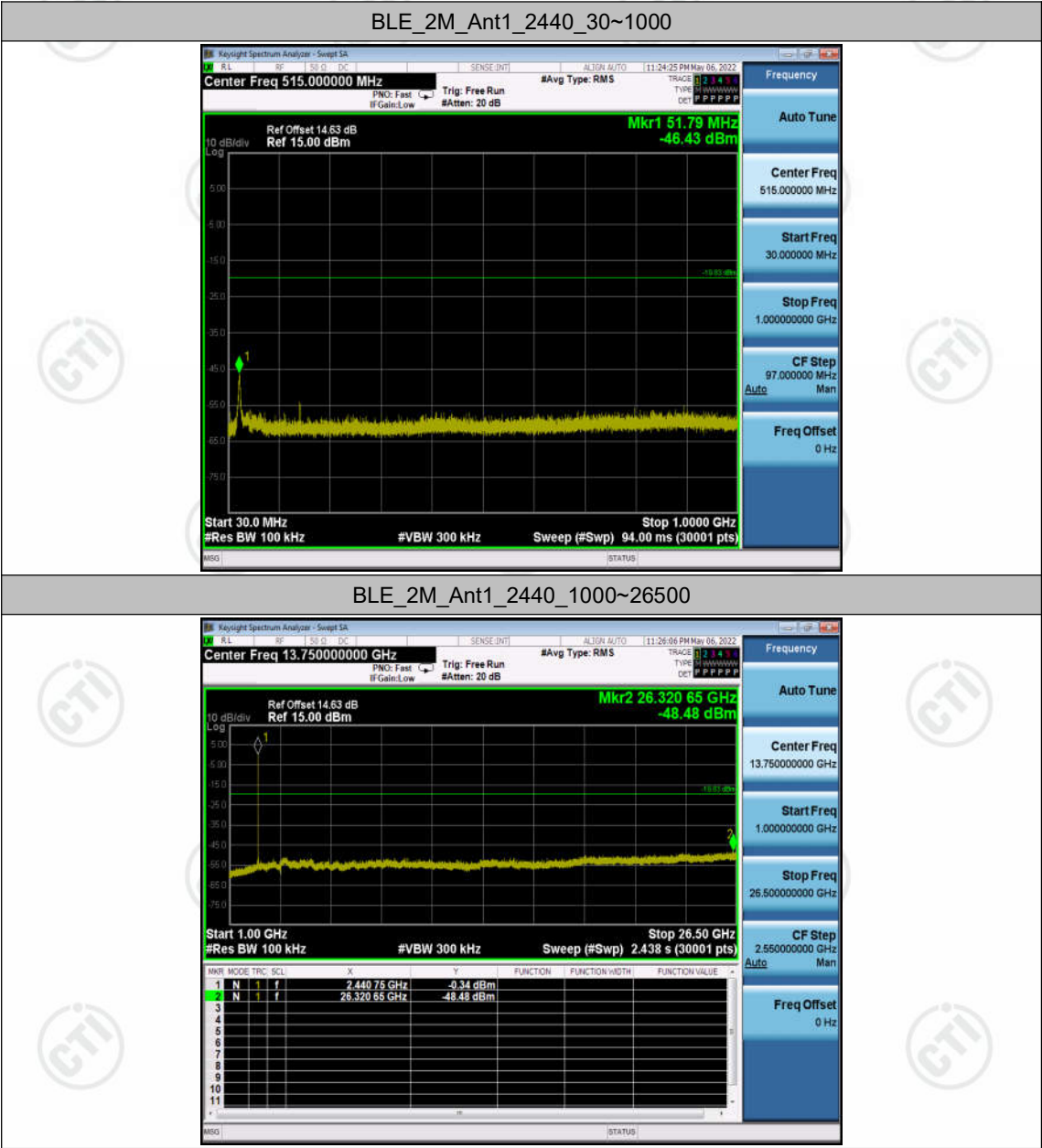
Test Graphs

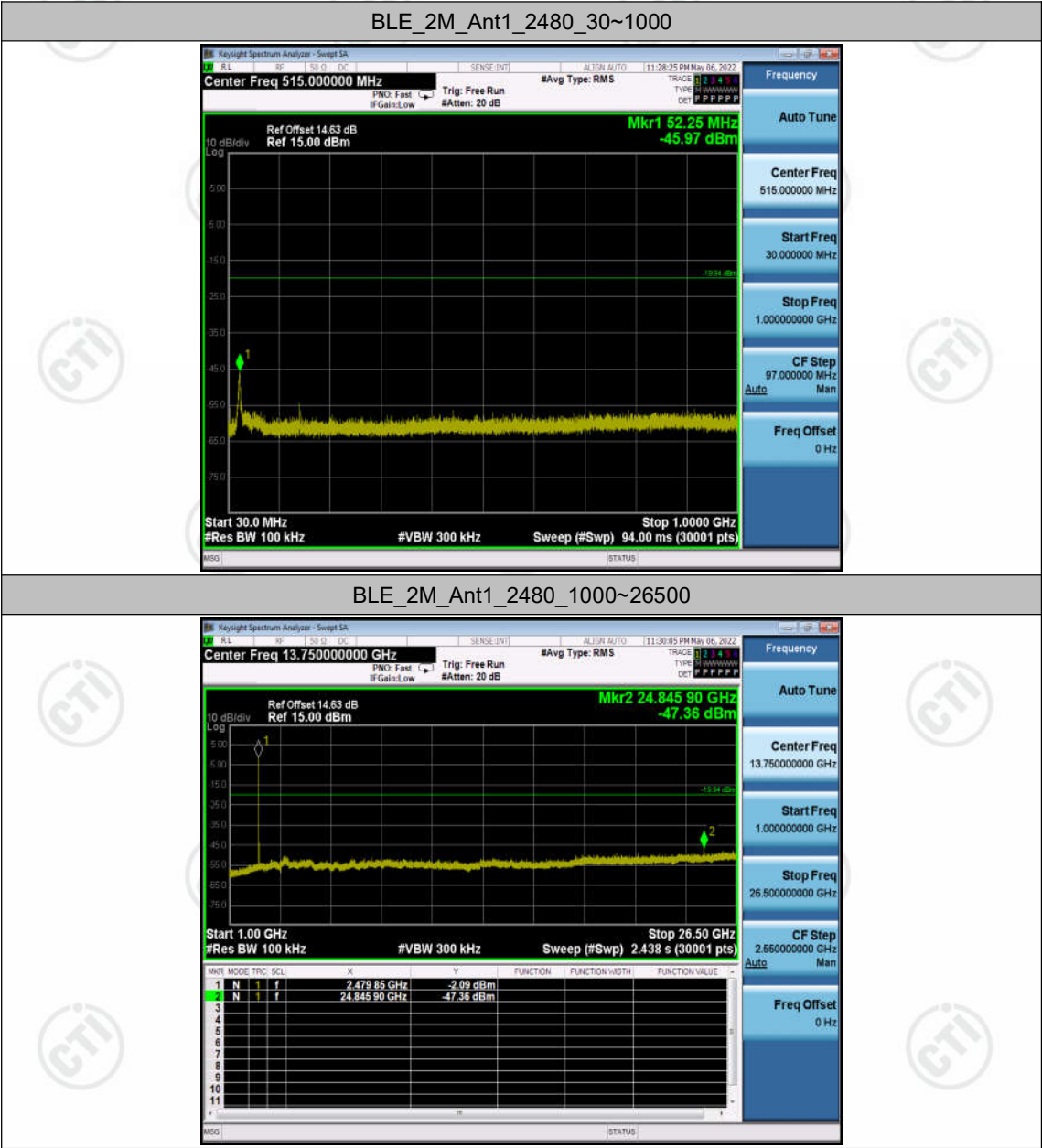








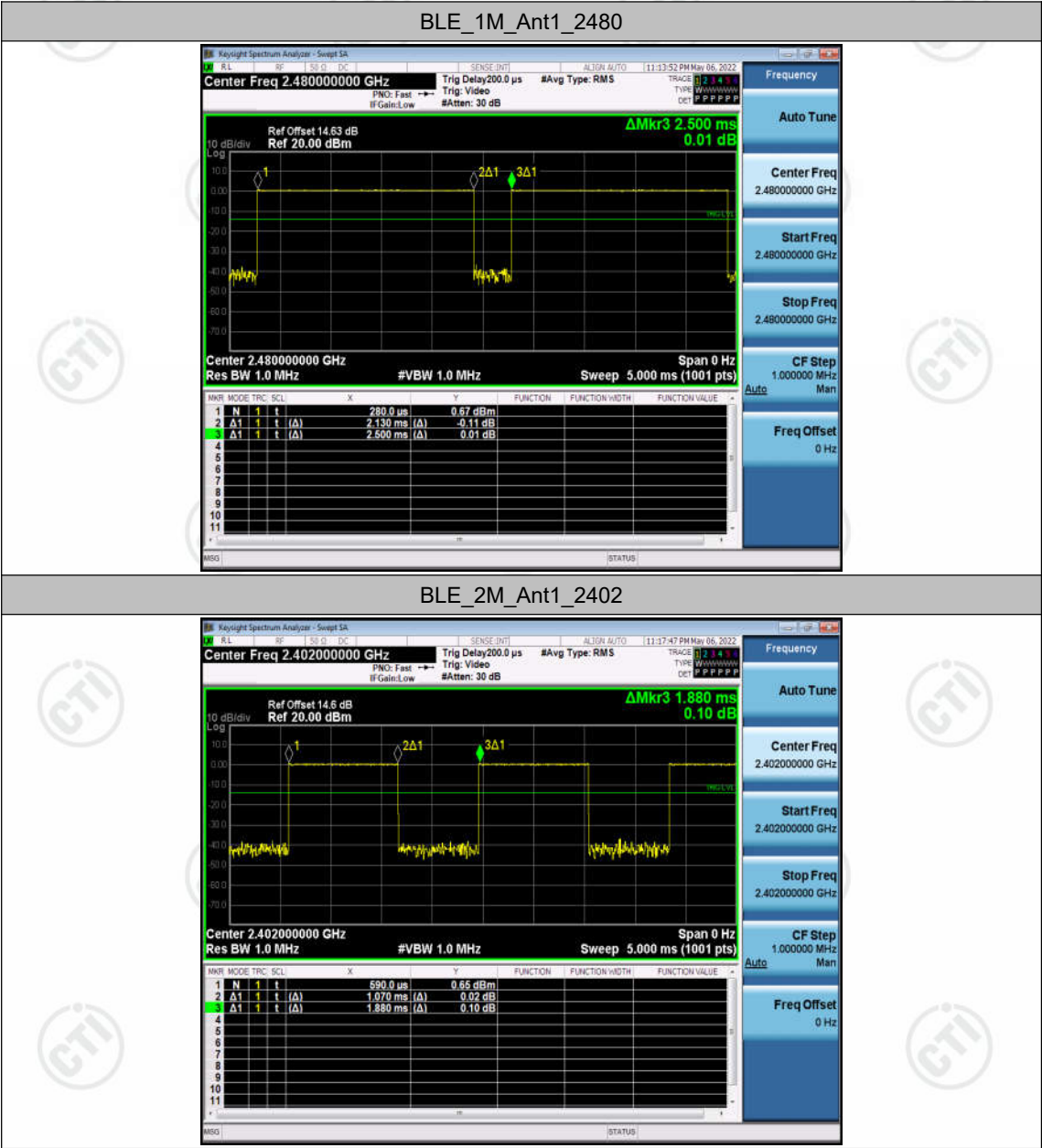


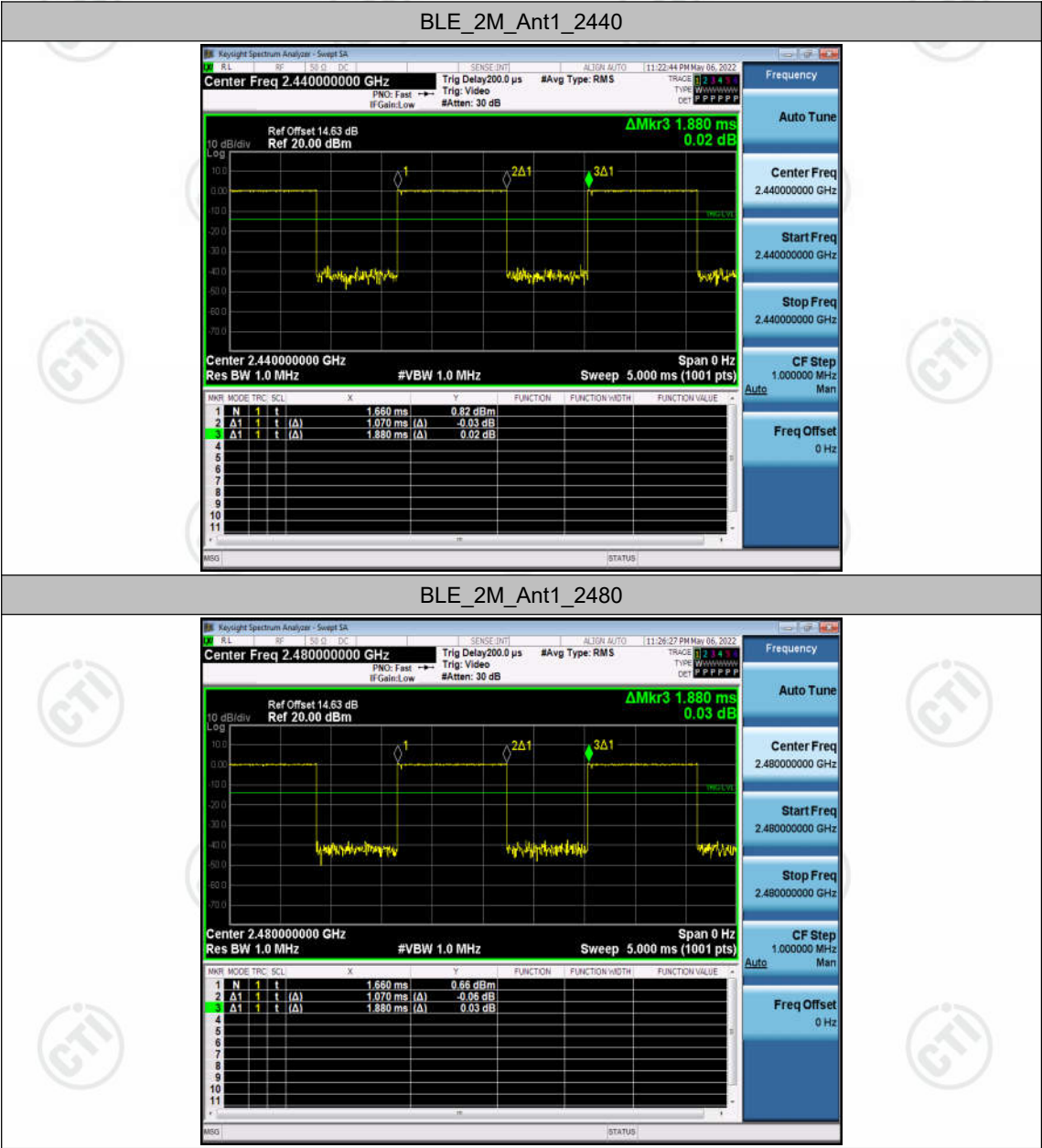


Appendix G: Duty Cycle

Test Result

Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	2.13	2.50	85.20	0.70
		2440	2.13	2.50	85.20	0.70
		2480	2.13	2.50	85.20	0.70
BLE_2M	Ant1	2402	1.07	1.88	56.91	2.45
		2440	1.07	1.88	56.91	2.45
		2480	1.07	1.88	56.91	2.45





*** End of Report ***