

Appendix for Bluetooth BLE mode

Product Name: PC Motherboard

Model No: MS-Challenger B760ITX D5 WIFI

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant0	2402	0.704	2401.652	2402.356	0.5	PASS
		2440	0.672	2439.664	2440.336	0.5	PASS
		2480	0.680	2479.648	2480.328	0.5	PASS
BLE_2M	Ant0	2402	1.096	2401.448	2402.544	0.5	PASS
		2440	1.092	2439.460	2440.552	0.5	PASS
		2480	1.324	2479.324	2480.648	0.5	PASS

Test Graphs





BLE_2M_Ant0_2440



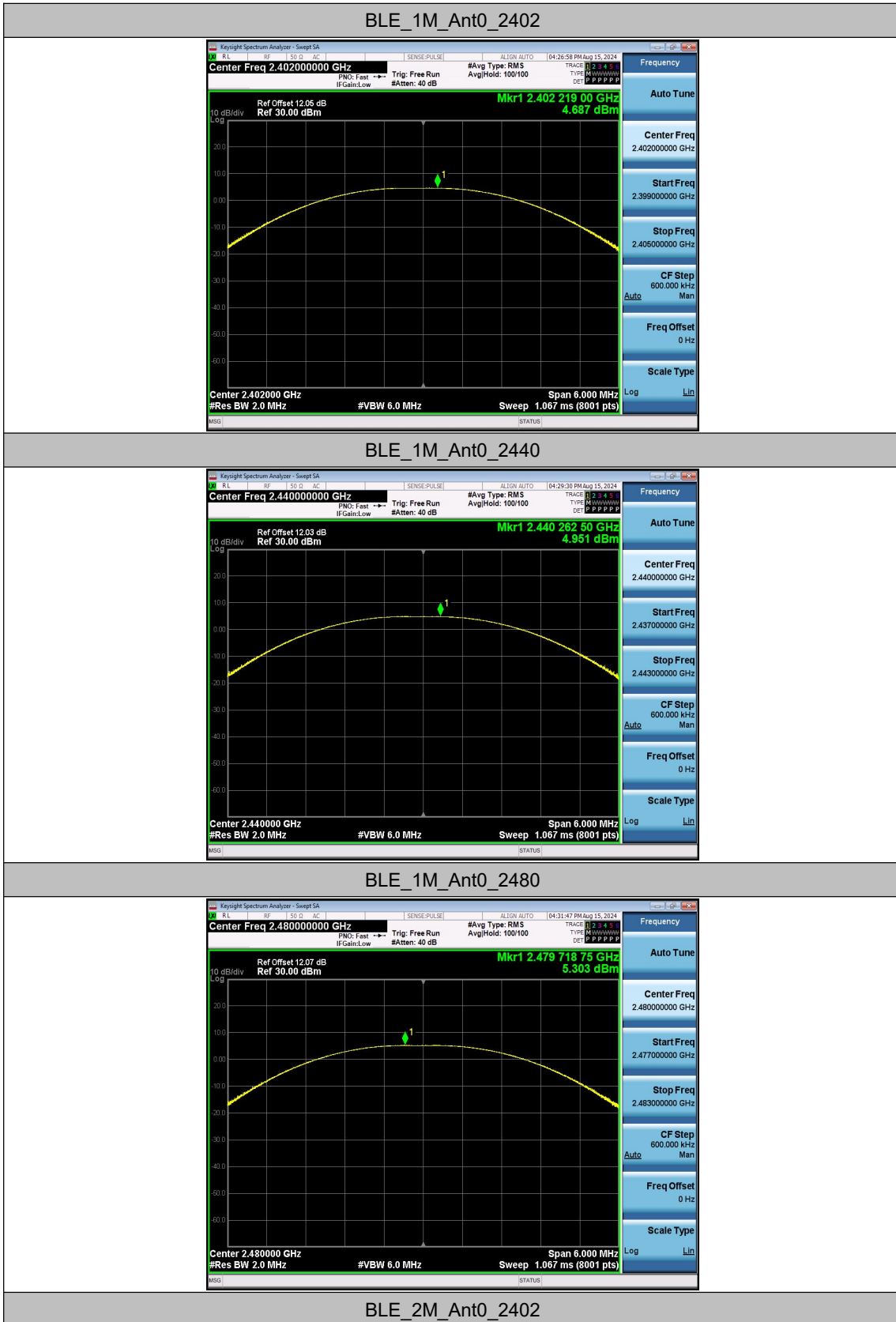
BLE_2M_Ant0_2480



Appendix B: Maximum conducted output power**Test Result Peak**

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant0	2402	4.69	≤30	PASS
		2440	4.95	≤30	PASS
		2480	5.30	≤30	PASS
BLE_2M	Ant0	2402	4.76	≤30	PASS
		2440	4.95	≤30	PASS
		2480	5.32	≤30	PASS

Test Graphs Peak





BLE_2M_Ant0_2440



BLE_2M_Ant0_2480

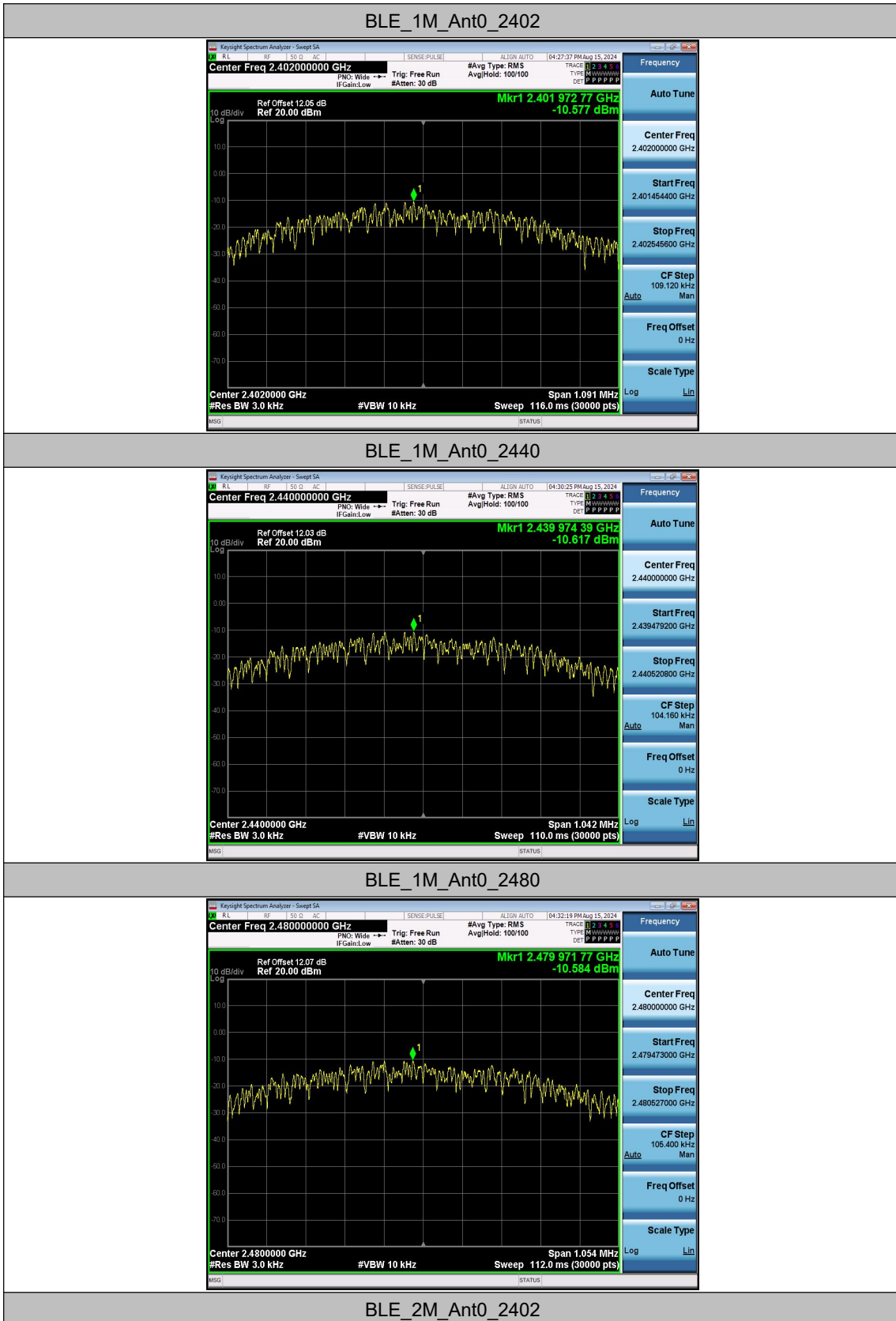


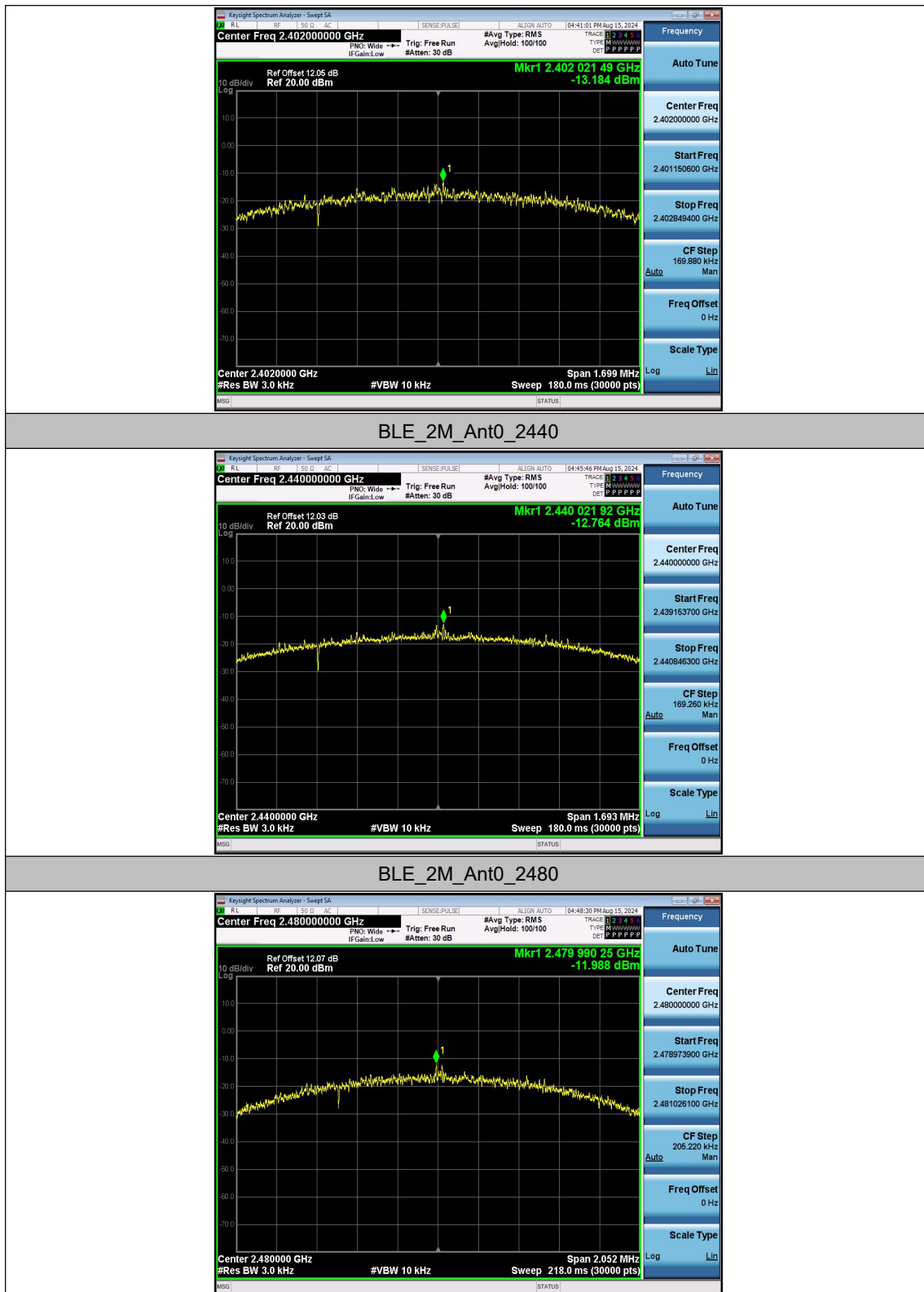
Appendix C: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant0	2402	-10.58	≤8.00	PASS
		2440	-10.62	≤8.00	PASS
		2480	-10.58	≤8.00	PASS
BLE_2M	Ant0	2402	-13.18	≤8.00	PASS
		2440	-12.76	≤8.00	PASS
		2480	-11.99	≤8.00	PASS

Test Graphs





Appendix D: Band edge measurements

Reference level measurement test result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant0	2402	2402.00	4.39
		2440	2440.01	4.59
		2480	2479.99	4.86
BLE_2M	Ant0	2402	2402.00	4.37
		2440	2440.01	4.50
		2480	2479.99	4.76

Band edge Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant0	Low	2402	4.39	-44.34	≤-15.61	PASS
		High	2480	4.86	-43.01	≤-15.14	PASS
BLE_2M	Ant0	Low	2402	4.37	-30.11	≤-15.63	PASS
		High	2480	4.76	-41.08	≤-15.24	PASS

Reference level measurement test graphs





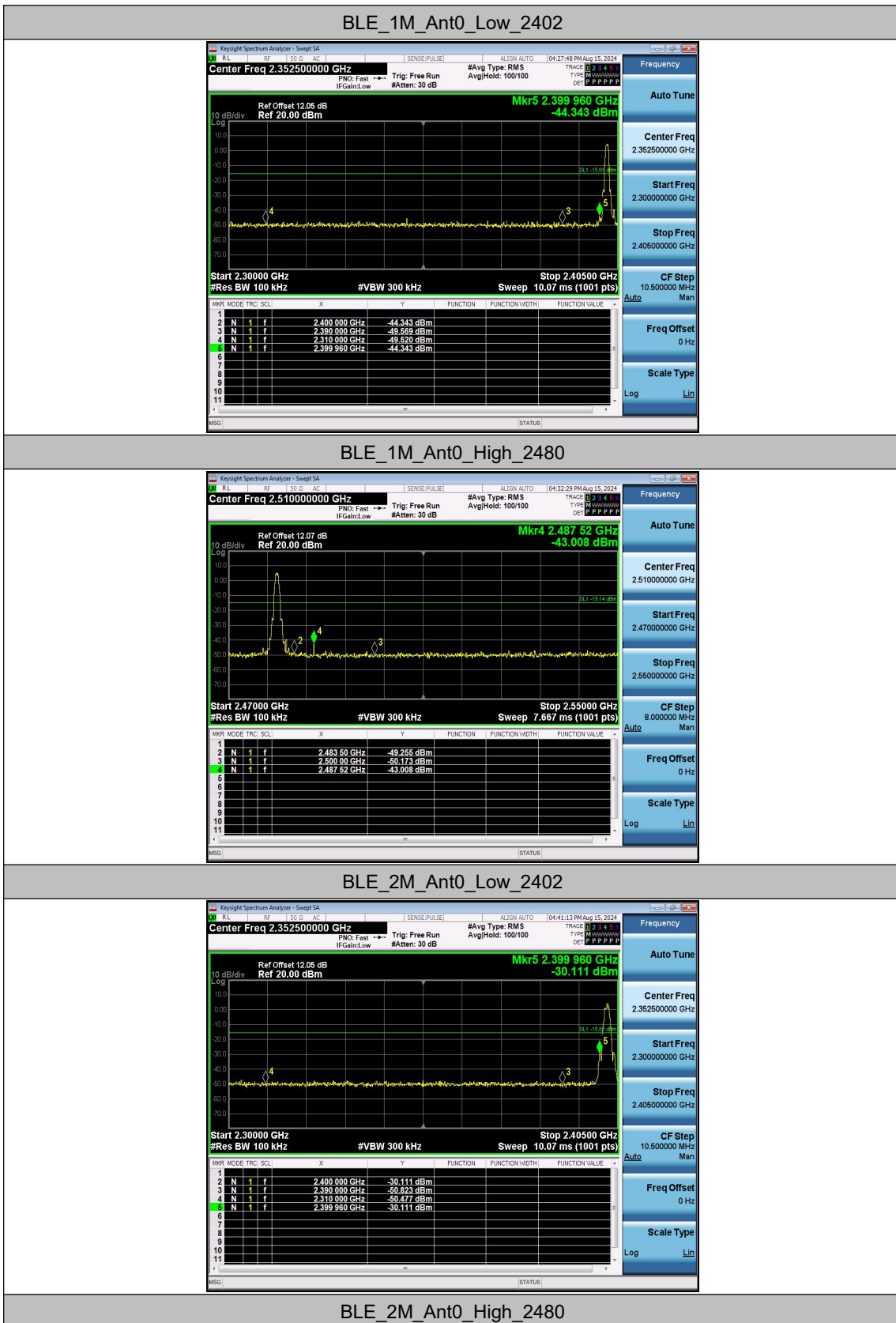
BLE_2M_Ant0_2440

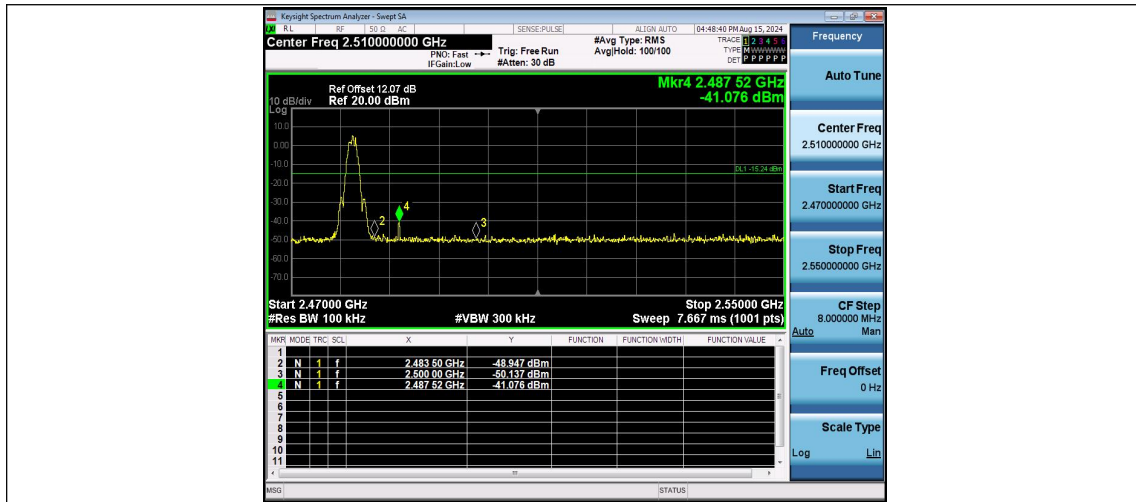


BLE_2M_Ant0_2480



Band edge test graphs



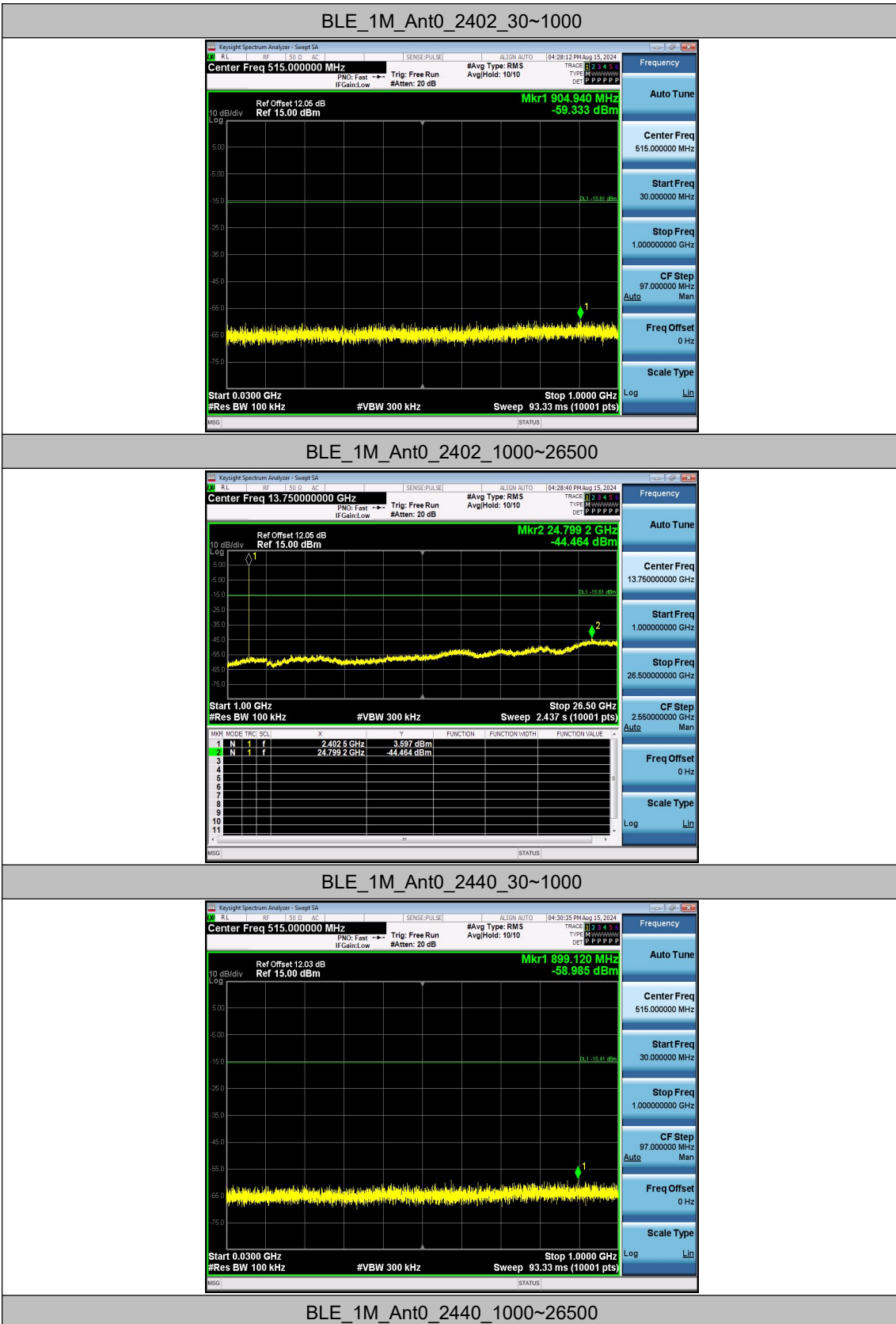


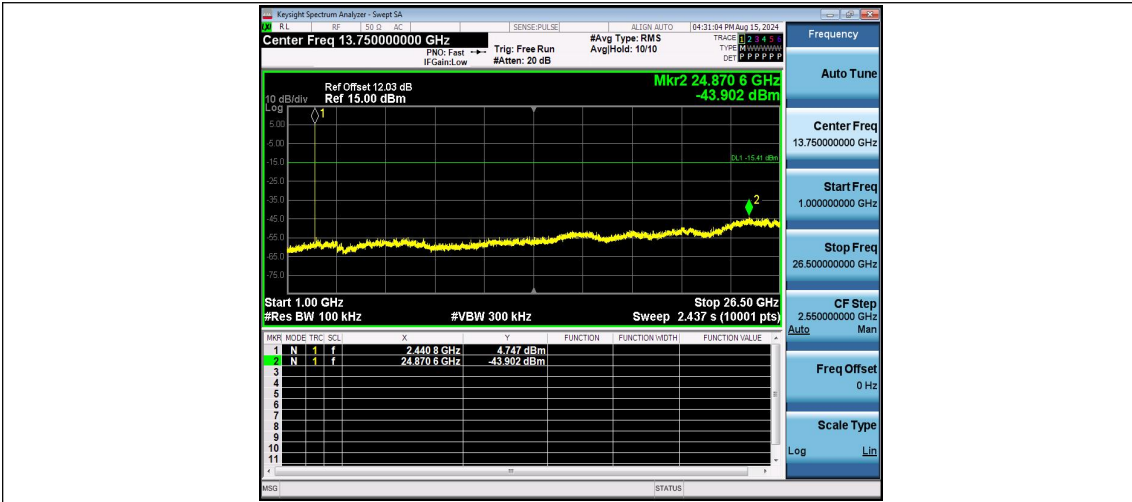
Appendix E: Conducted Spurious Emission

Test Result

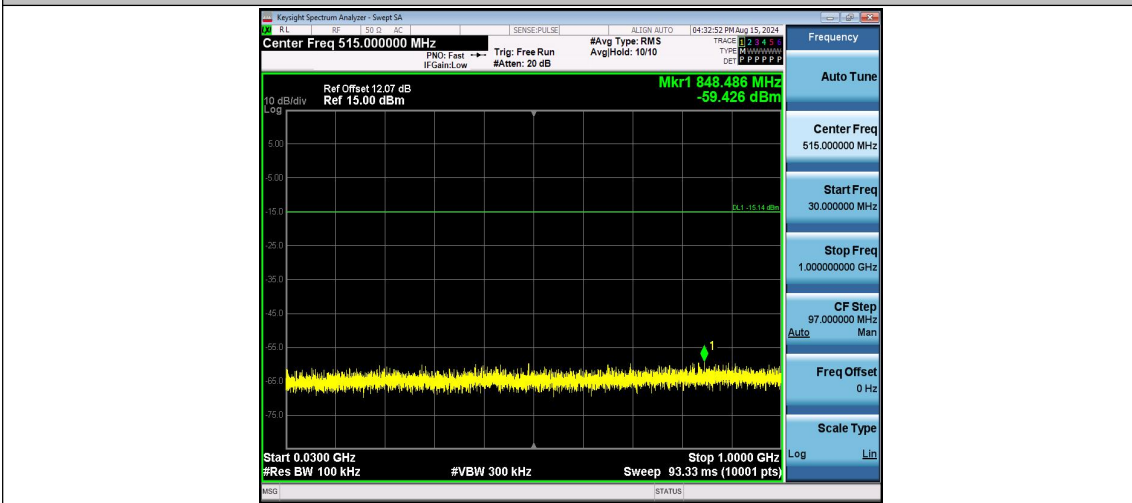
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant0	2402	30~1000	4.39	-59.33	≤-15.61	PASS
			1000~26500	4.39	-44.46	≤-15.61	PASS
		2440	30~1000	4.59	-58.99	≤-15.41	PASS
			1000~26500	4.59	-43.9	≤-15.41	PASS
		2480	30~1000	4.86	-59.43	≤-15.14	PASS
			1000~26500	4.86	-44.25	≤-15.14	PASS
BLE_2M	Ant0	2402	30~1000	4.37	-59.66	≤-15.63	PASS
			1000~26500	4.37	-44.08	≤-15.63	PASS
		2440	30~1000	4.50	-59.05	≤-15.5	PASS
			1000~26500	4.50	-44.49	≤-15.5	PASS
		2480	30~1000	4.76	-59.34	≤-15.24	PASS
			1000~26500	4.76	-44.4	≤-15.24	PASS

Test Graphs

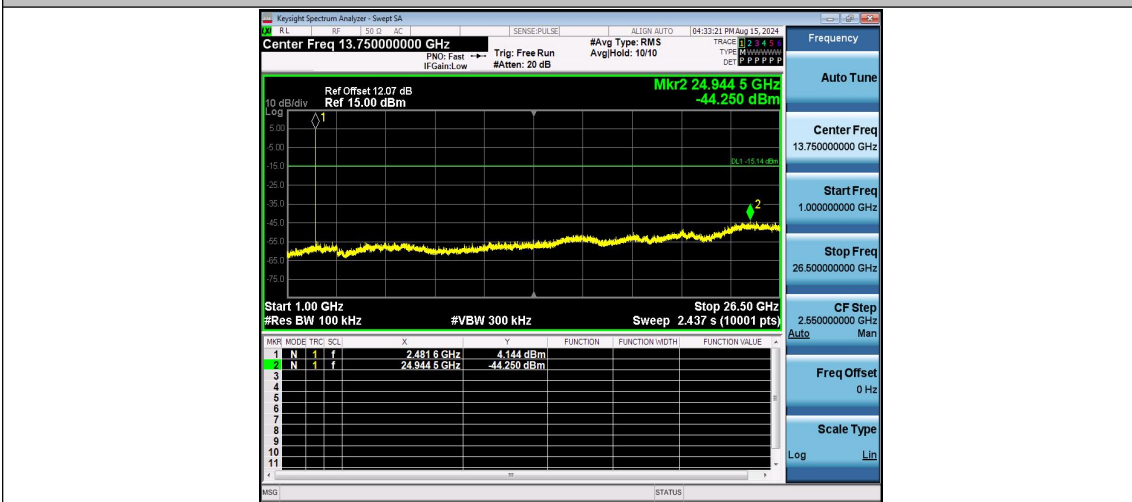




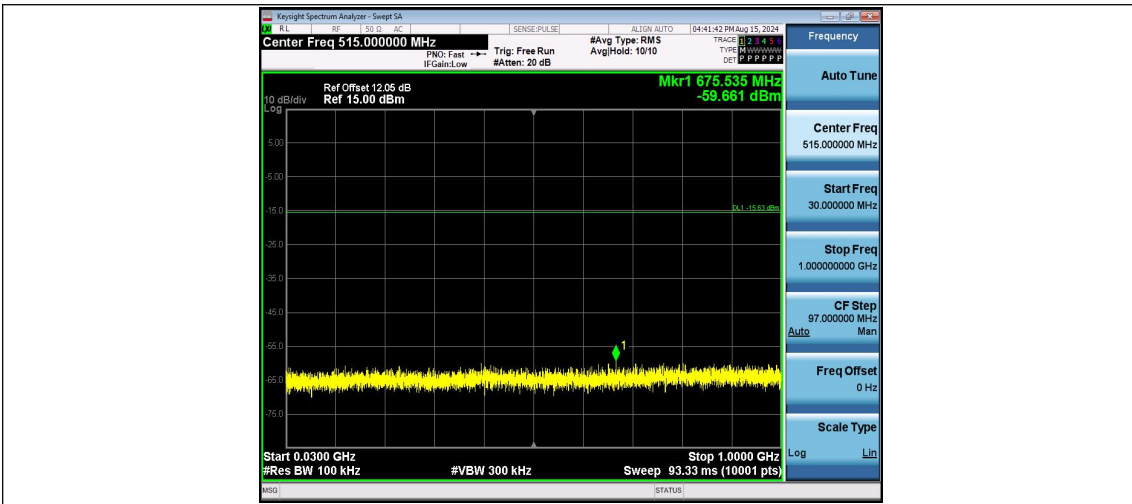
BLE_1M_Ant0_2480_30~1000



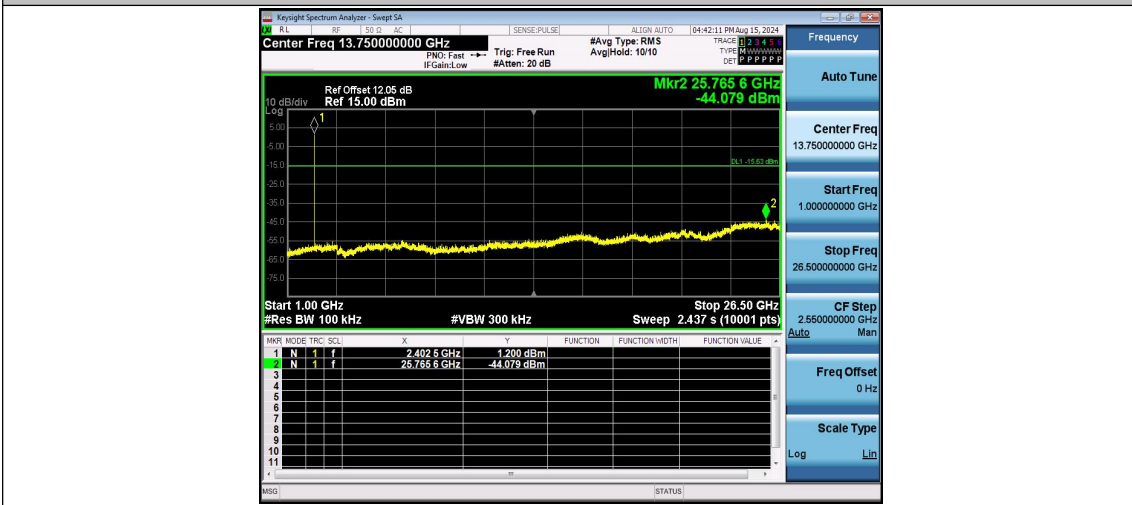
BLE_1M_Ant0_2480_1000~26500



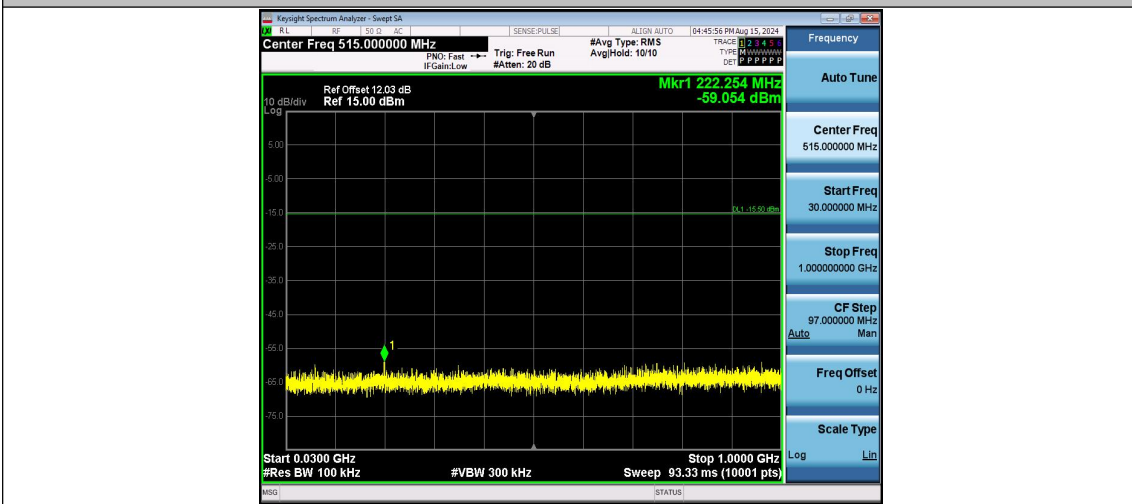
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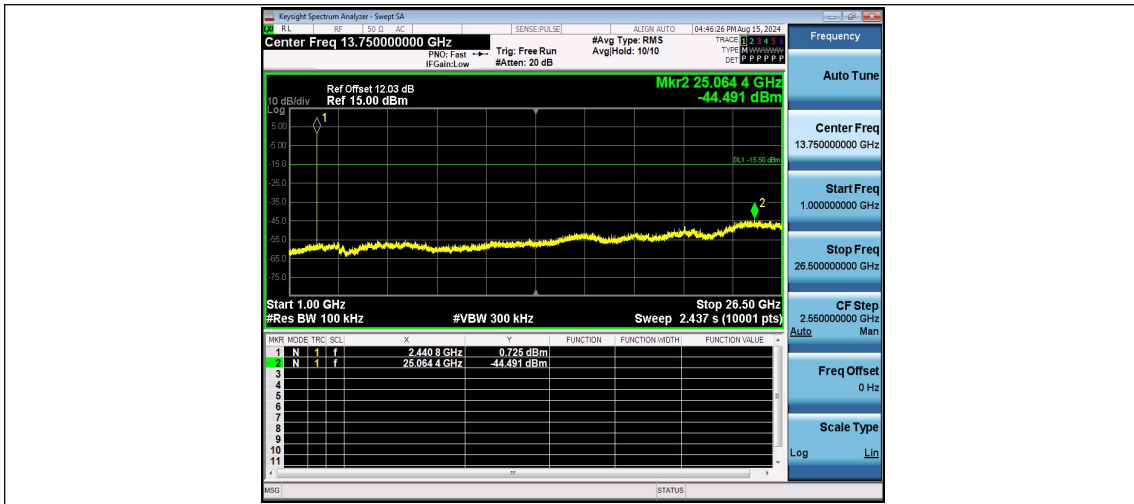
BLE_2M_Ant0_2402_1000~26500



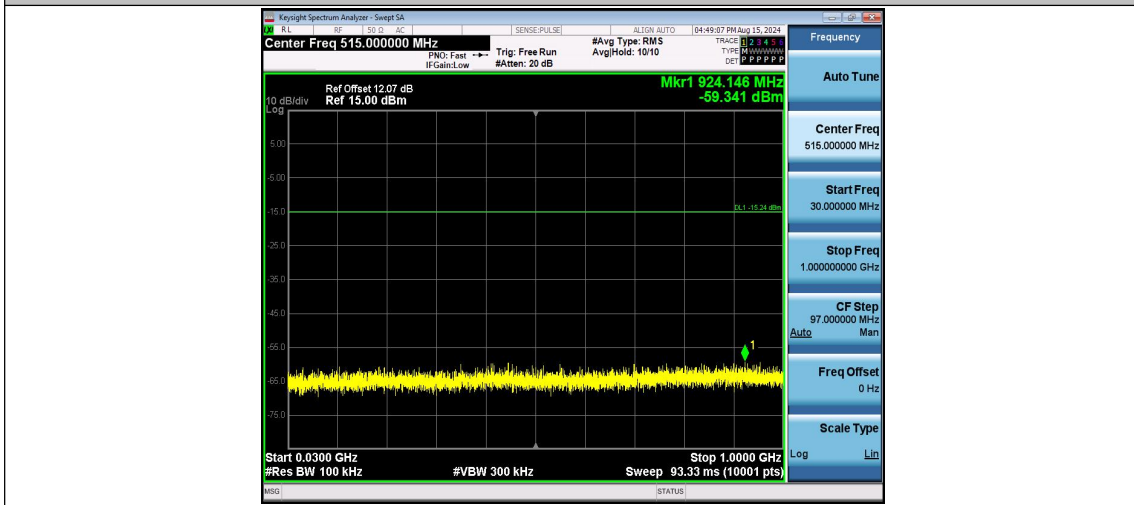
BLE_2M_Ant0_2440_30~1000



BLE_2M_Ant0_2440_1000~26500



BLE_2M_Ant0_2480_30~1000



BLE_2M_Ant0_2480_1000~26500

