

Annex for BLE

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1Mbps	Ant1	2402	0.712	2401.664	2402.376	0.5	PASS
		2440	0.704	2439.660	2440.364	0.5	PASS
		2480	0.700	2479.660	2480.360	0.5	PASS
BLE_2Mbps	Ant1	2402	1.170	2401.442	2402.612	0.5	PASS
		2440	1.164	2439.448	2440.612	0.5	PASS
		2480	1.182	2479.424	2480.606	0.5	PASS

Test Graphs



BLE_1Mbps_Ant1_2402



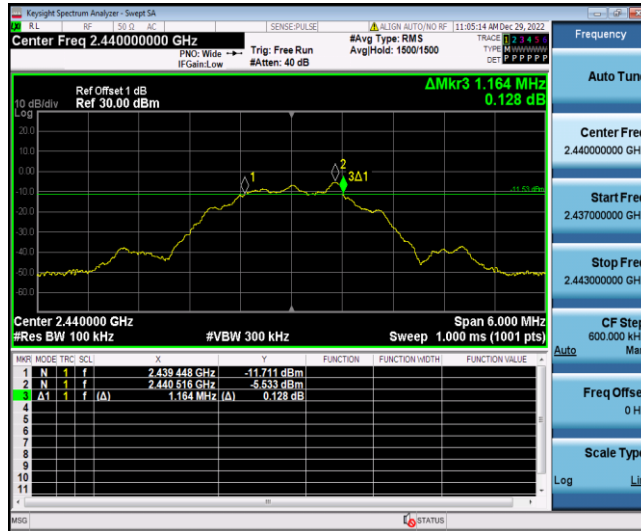
BLE_1Mbps_Ant1_2440



BLE_1Mbps_Ant1_2480



BLE_2Mbps_Ant1_2402



BLE_2Mbps_Ant1_2440



BLE_2Mbps_Ant1_2480

Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1Mbps	Ant1	2402	1.0353	2401.507	2402.542	---	PASS
		2440	1.0345	2439.508	2440.543	---	PASS
		2480	1.0338	2479.508	2480.542	---	PASS
BLE_2Mbps	Ant1	2402	2.0405	2401.021	2403.062	---	PASS
		2440	2.0428	2439.021	2441.064	---	PASS
		2480	2.0458	2479.020	2481.066	---	PASS

Test Graphs



BLE_1Mbps_Ant1_2402



BLE_1Mbps_Ant1_2440



BLE_1Mbps_Ant1_2480



BLE_2Mbps_Ant1_2402



BLE_2Mbps_Ant1_2440



BLE_2Mbps_Ant1_2480

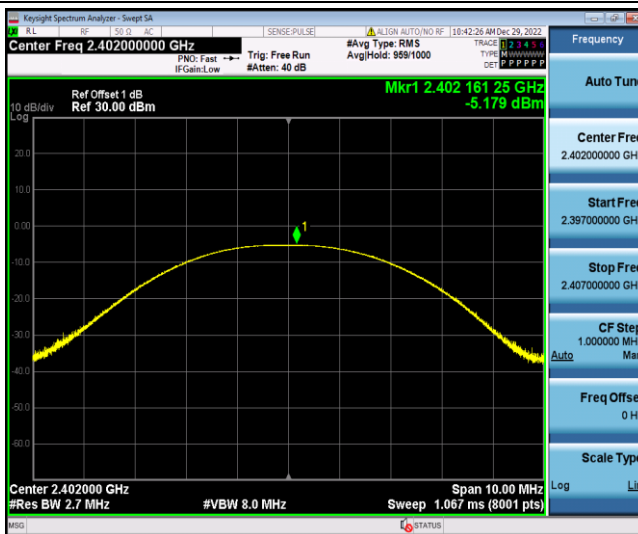
Appendix C: Maximum conducted output power

Test Result

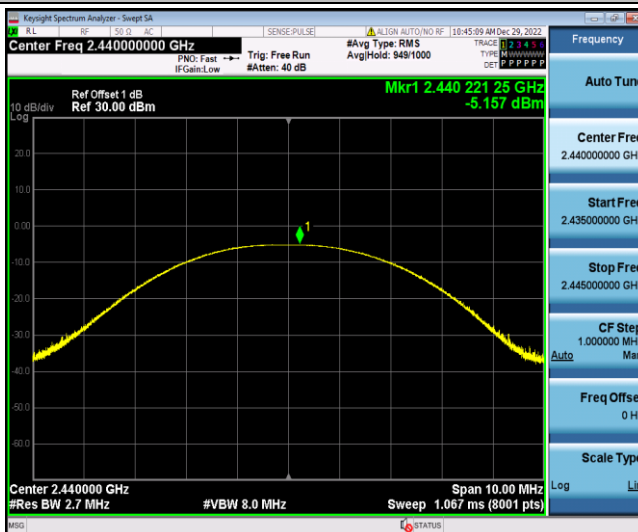
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1Mbps	Ant1	2402	-5.18	≤30	PASS
		2440	-5.22	≤30	PASS
		2480	-5.72	≤30	PASS
BLE_2Mbps	Ant1	2402	-5.24	≤30	PASS
		2440	-5.24	≤30	PASS
		2480	-5.8	≤30	PASS

TestMode	Antenna	Channel	Conducted output power [dBm]	Antenna gain(dBi)	EIRP [dBm]	EIRP Limit [dBm]	Verdict
BLE_1Mbps	Ant1	2402	-5.18	3.25	-1.93	≤36.02	PASS
		2440	-5.22	3.25	-1.97	≤36.02	PASS
		2480	-5.72	3.25	-2.47	≤36.02	PASS
BLE_2Mbps	Ant1	2402	-5.24	3.25	-1.99	≤36.02	PASS
		2440	-5.24	3.25	-1.99	≤36.02	PASS
		2480	-5.80	3.25	-2.55	≤36.02	PASS

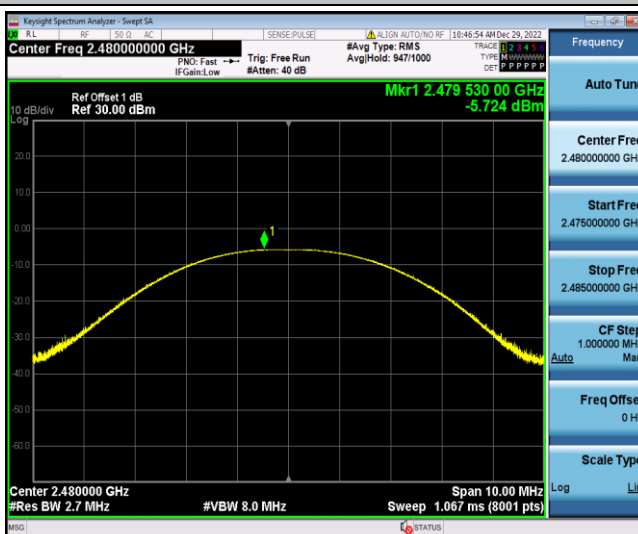
Test Graphs



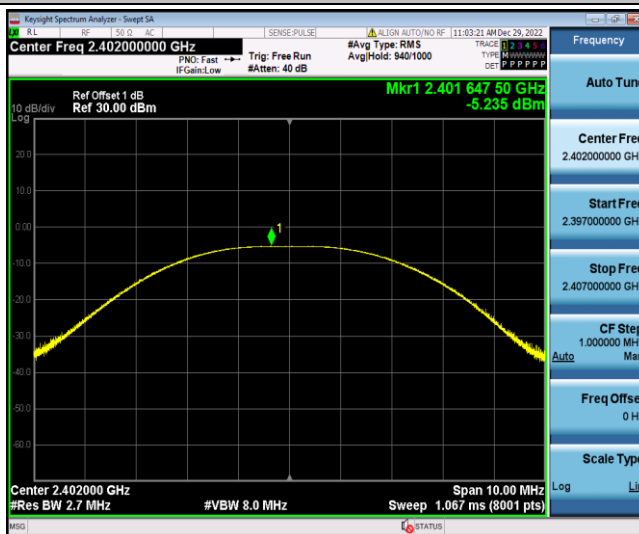
BLE_1Mbps_Ant1_2402



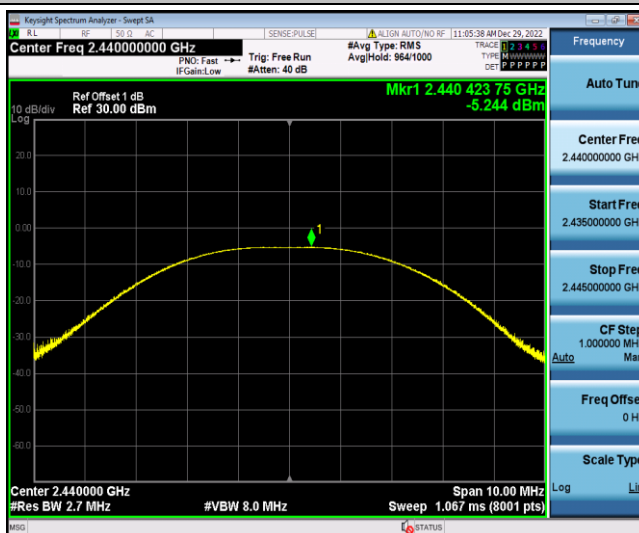
BLE_1Mbps_Ant1_2440



BLE_1Mbps_Ant1_2480



BLE_2Mbps_Ant1_2402



BLE_2Mbps_Ant1_2440



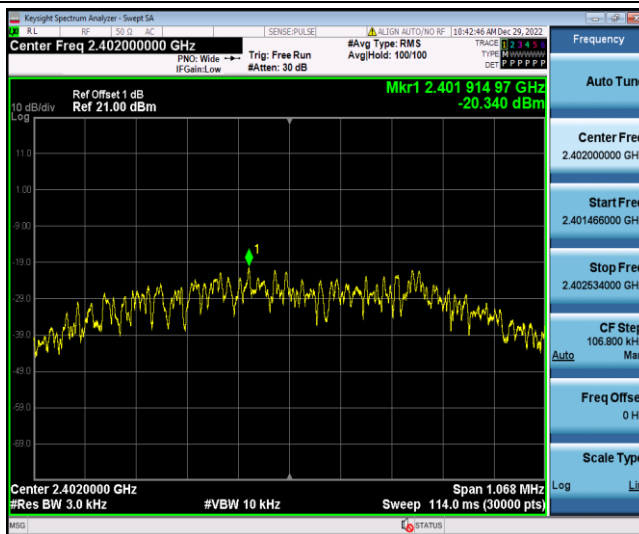
BLE_2Mbps_Ant1_2480

Appendix D: Maximum power spectral density

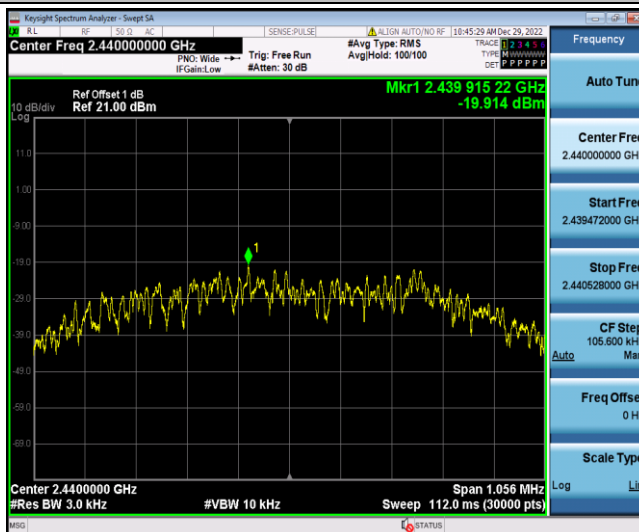
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1Mbps	Ant1	2402	-20.34	≤8	PASS
		2440	-19.91	≤8	PASS
		2480	-21.03	≤8	PASS
BLE_2Mbps	Ant1	2402	-22.64	≤8	PASS
		2440	-22.46	≤8	PASS
		2480	-23.04	≤8	PASS

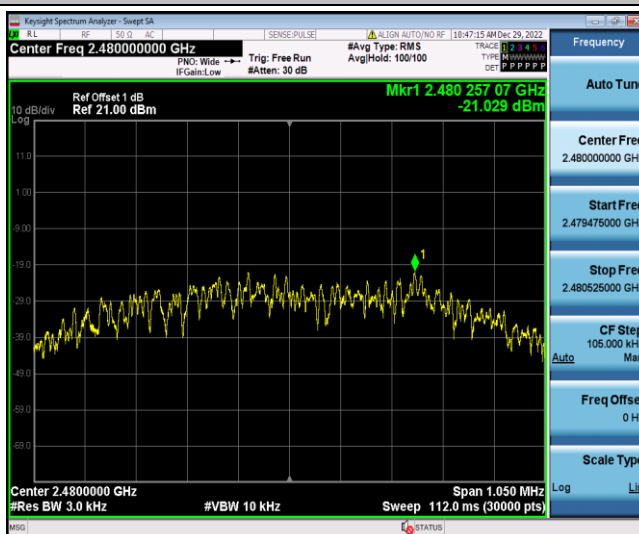
Test Graphs



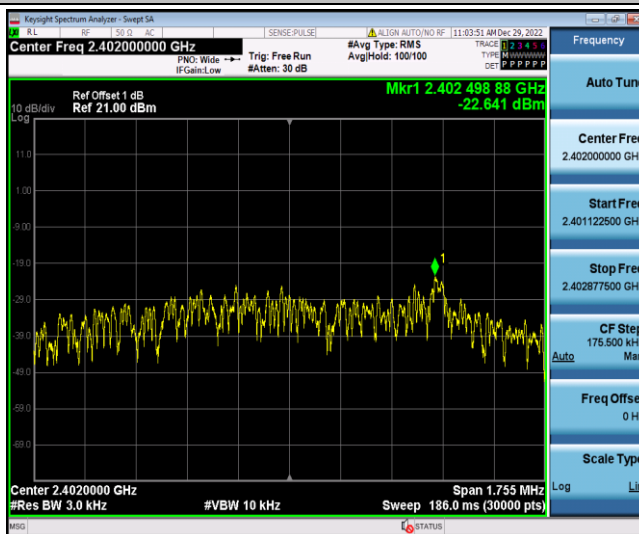
BLE_1Mbps_Ant1_2402



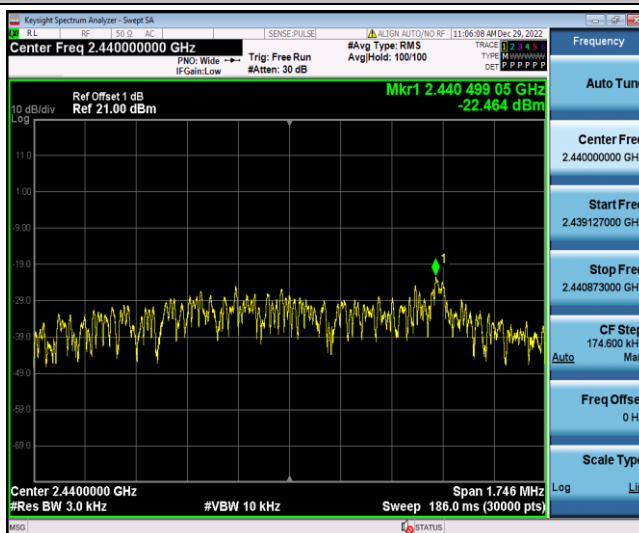
BLE_1Mbps_Ant1_2440



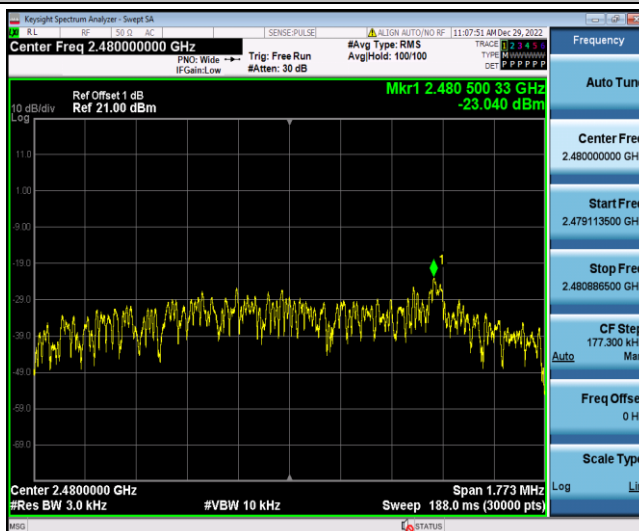
BLE_1Mbps_Ant1_2480



BLE_2Mbps_Ant1_2402



BLE_2Mbps_Ant1_2440



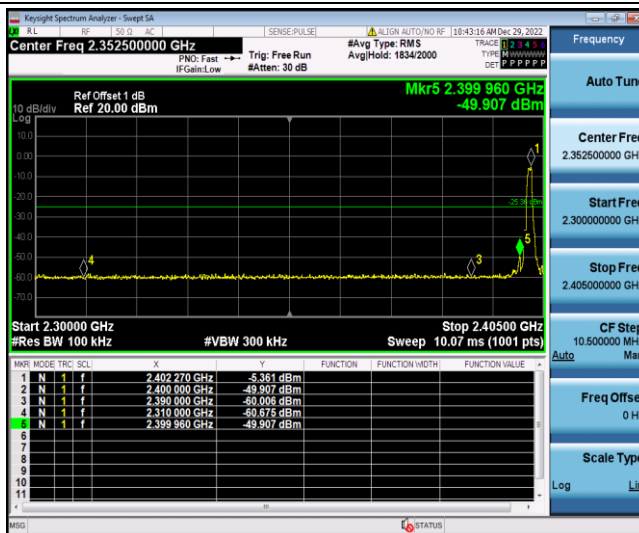
BLE_2Mbps_Ant1_2480

Appendix E: Band edge measurements

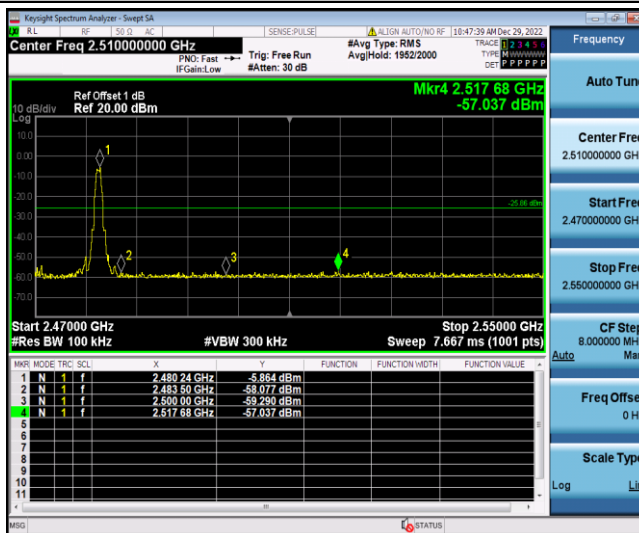
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1Mbps	Ant1	Low	2402	-5.36	-49.91	≤-25.36	PASS
		High	2480	-5.86	-57.04	≤-25.86	PASS
BLE_2Mbps	Ant1	Low	2402	-5.34	-38.07	≤-25.34	PASS
		High	2480	-5.93	-57.3	≤-25.93	PASS

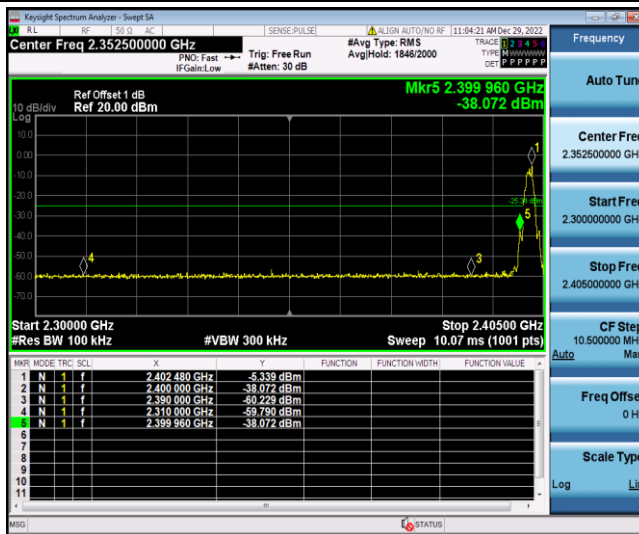
Test Graphs



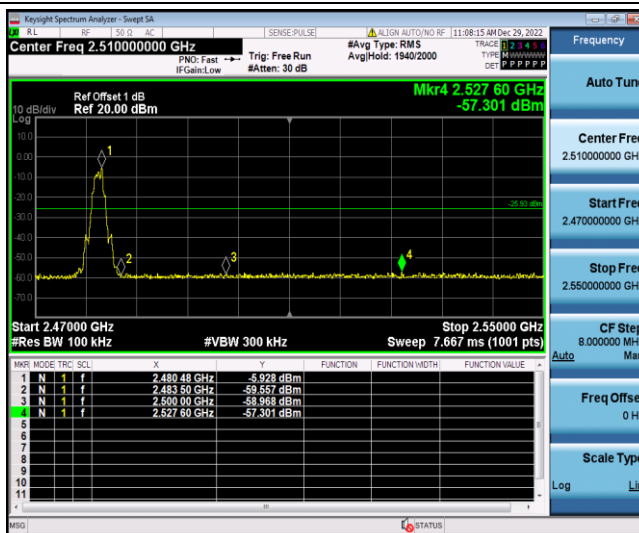
BLE_1Mbps_Ant1_Low_2402



BLE_1Mbps_Ant1_High_2480



BLE_2Mbps_Ant1_Low_2402



BLE_2Mbps_Ant1_High_2480

Appendix F: Conducted Spurious Emission

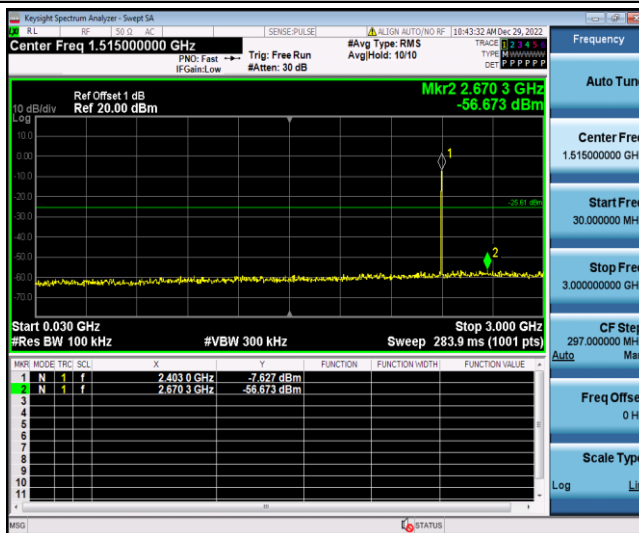
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1Mbps	Ant1	2402	Reference	-5.61	-5.61	---	PASS
			30~3000	-5.61	-56.67	≤-25.61	PASS
			3000~26500	-5.61	-45.61	≤-25.61	PASS
		2440	Reference	-5.50	-5.50	---	PASS
			30~3000	-5.50	-49.15	≤-25.5	PASS
			3000~26500	-5.50	-42.13	≤-25.5	PASS
		2480	Reference	-6.01	-6.01	---	PASS
			30~3000	-6.01	-55.85	≤-26.01	PASS
			3000~26500	-6.01	-43.33	≤-26.01	PASS
BLE_2Mbps	Ant1	2402	Reference	-5.60	-5.60	---	PASS
			30~3000	-5.60	-42.31	≤-25.6	PASS
			3000~26500	-5.60	-42.38	≤-25.6	PASS
		2440	Reference	-5.53	-5.53	---	PASS
			30~3000	-5.53	-52.05	≤-25.53	PASS
			3000~26500	-5.53	-46.5	≤-25.53	PASS
		2480	Reference	-6.20	-6.20	---	PASS
			30~3000	-6.20	-56.62	≤-26.2	PASS
			3000~26500	-6.20	-40.42	≤-26.2	PASS

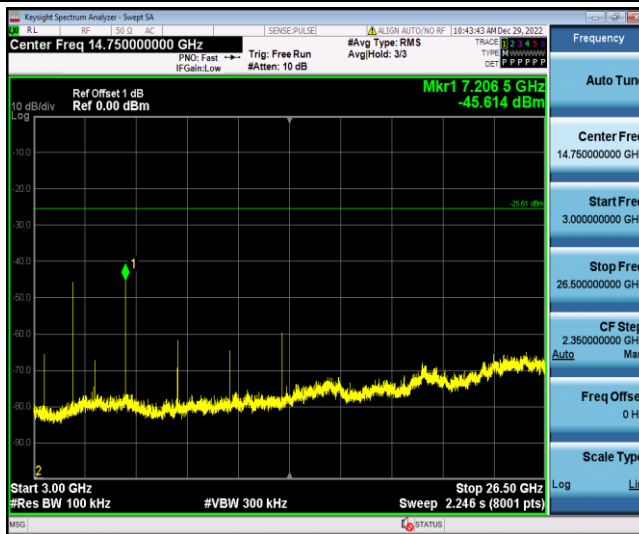
Test Graphs



BLE_1Mbps_Ant1_2402_0~Reference



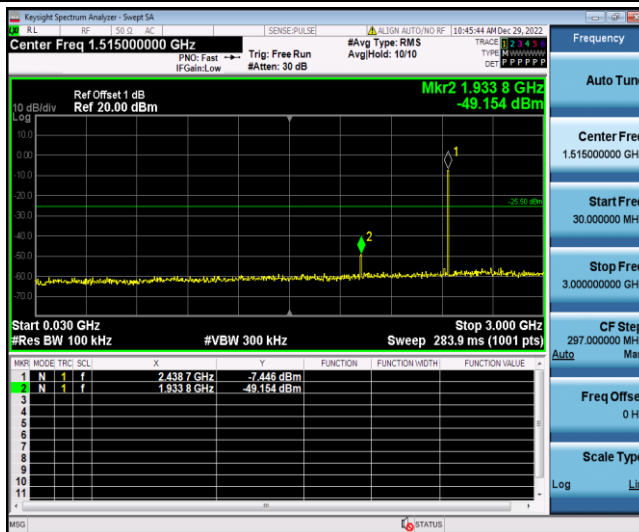
BLE_1Mbps_Ant1_2402_30~3000



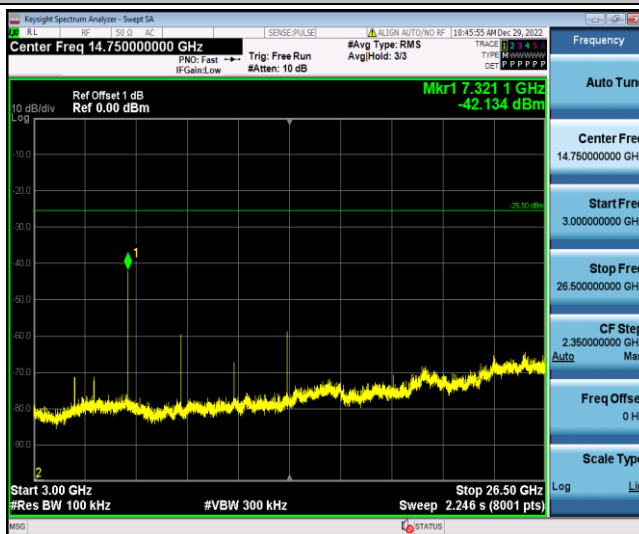
BLE_1Mbps_Ant1_2402_3000~26500



BLE_1Mbps_Ant1_2440_0~Reference



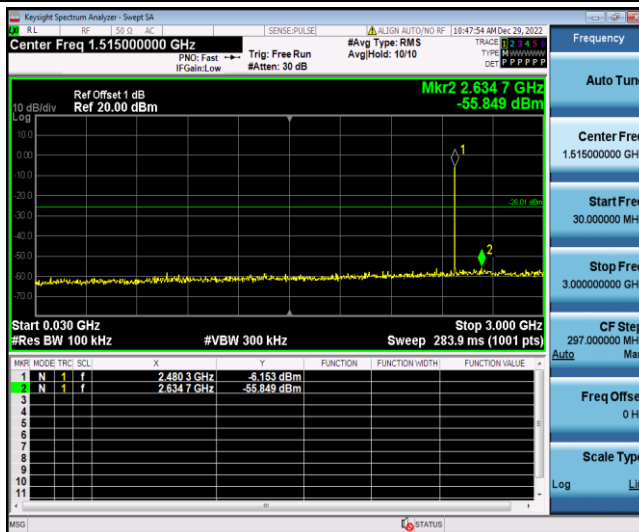
BLE_1Mbps_Ant1_2440_30~3000



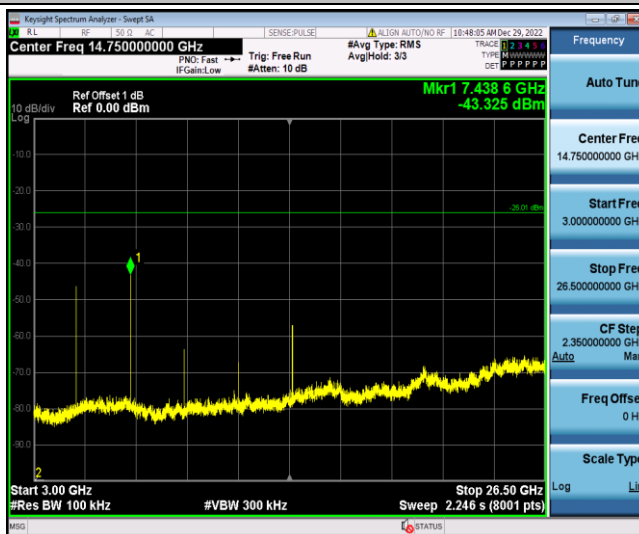
BLE_1Mbps_Ant1_2440_3000~26500



BLE_1Mbps_Ant1_2480_0~Reference



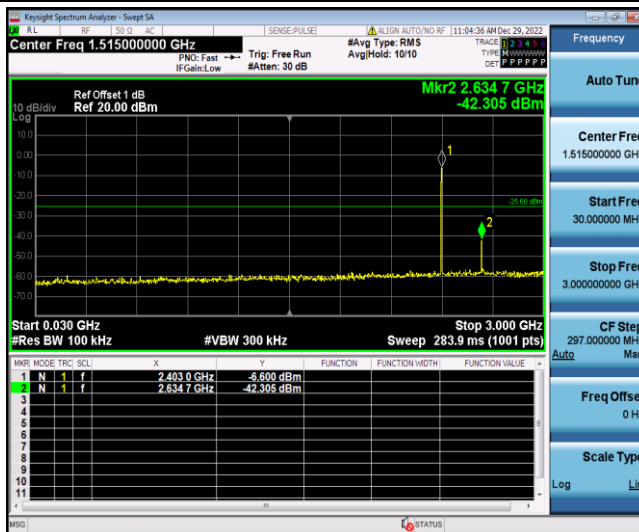
BLE_1Mbps_Ant1_2480_30~3000



BLE_1Mbps_Ant1_2480_3000~26500



BLE_2Mbps_Ant1_2402_0~Reference



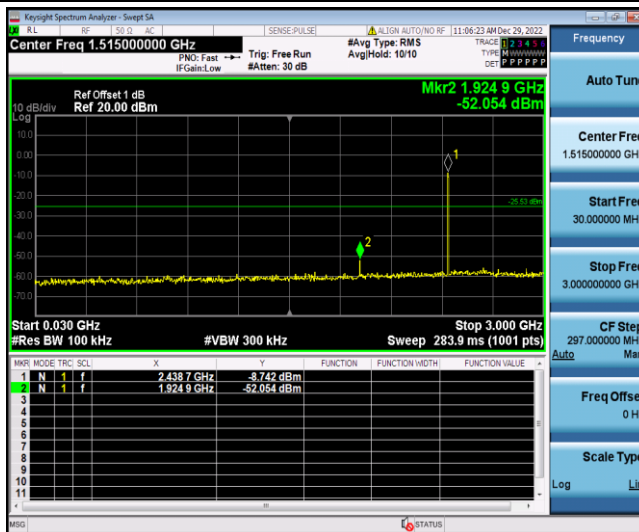
BLE_2Mbps_Ant1_2402_30~3000



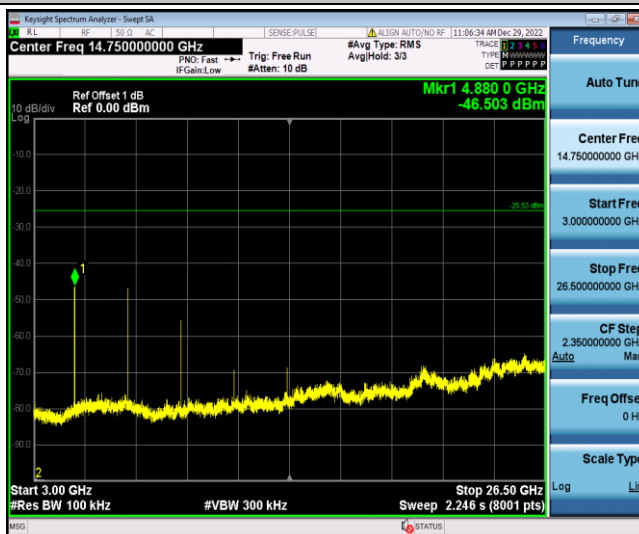
BLE_2Mbps_Ant1_2402_3000~26500



BLE_2Mbps_Ant1_2440_0~Reference



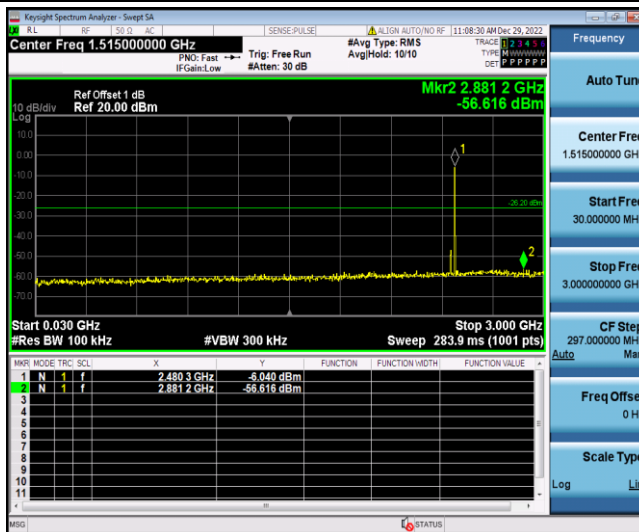
BLE_2Mbps_Ant1_2440_30~3000



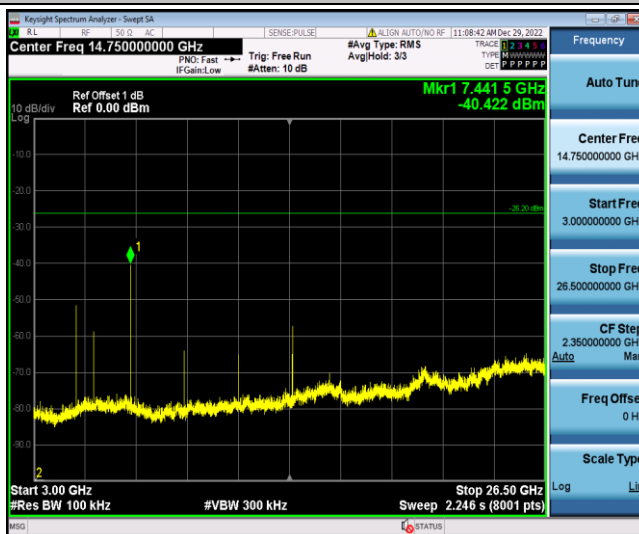
BLE_2Mbps_Ant1_2440_3000~26500



BLE_2Mbps_Ant1_2480_0~Reference



BLE_2Mbps_Ant1_2480_30~3000



BLE_2Mbps_Ant1_2480_3000~26500

***** End *****