

RF Test Data for BT(BLE) (Conducted Measurement)**Product Name: Android SET TOP BOX****Trade Mark: Viya****Test Model: SC6BHA****FCC ID: 2AOVU-SEI830AT****Environmental Conditions**

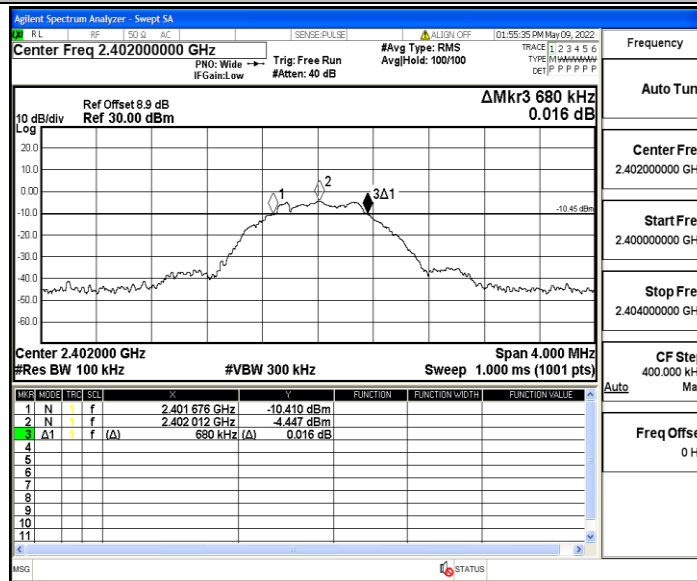
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth**Test Result**

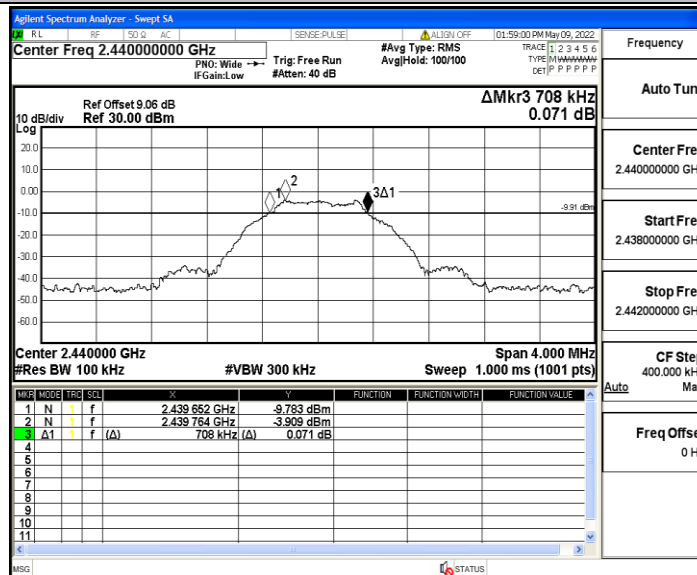
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.680	2401.676	2402.356	0.5	PASS
		2440	0.708	2439.652	2440.360	0.5	PASS
		2480	0.668	2479.688	2480.356	0.5	PASS
BLE_2M	Ant1	2402	1.228	2401.368	2402.596	0.5	PASS
		2440	1.364	2439.272	2440.636	0.5	PASS
		2480	1.164	2479.424	2480.588	0.5	PASS

Test Graphs

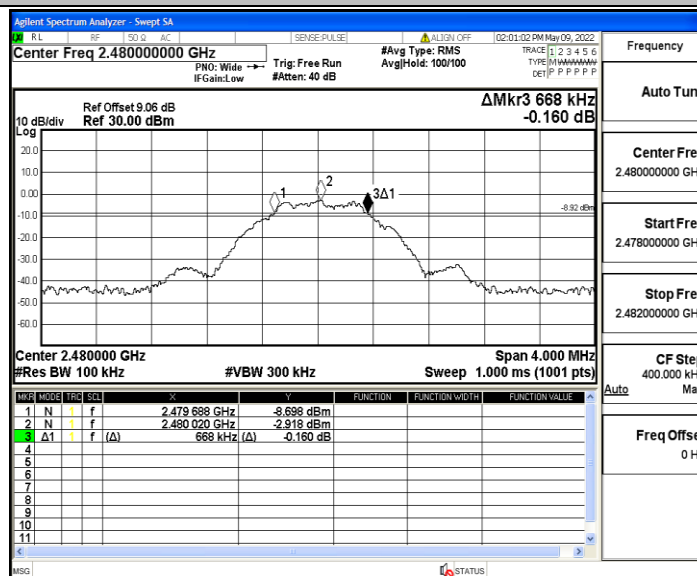
BLE_1M_Ant1_2402



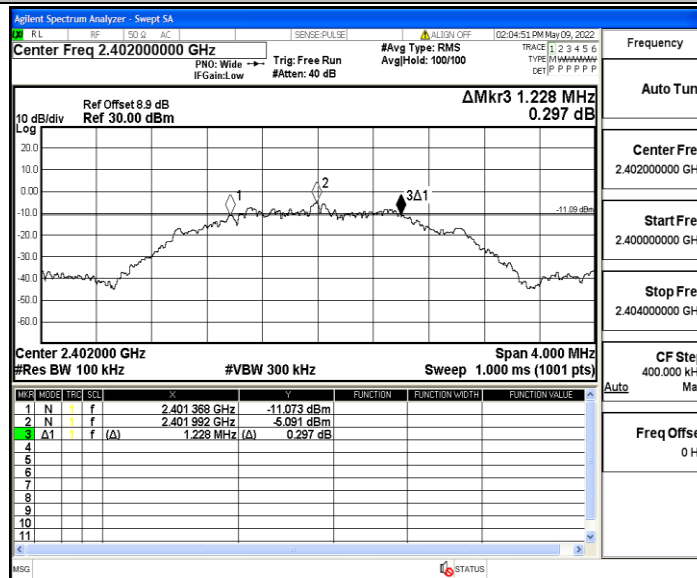
BLE_1M_Ant1_2440



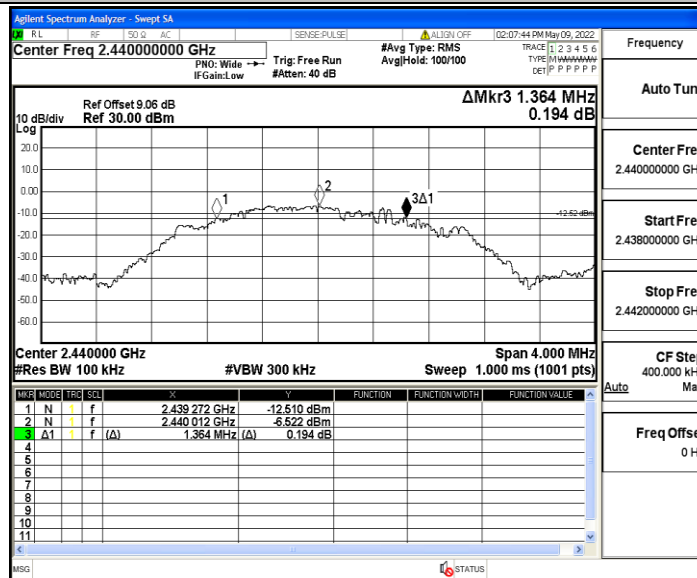
BLE_1M_Ant1_2480



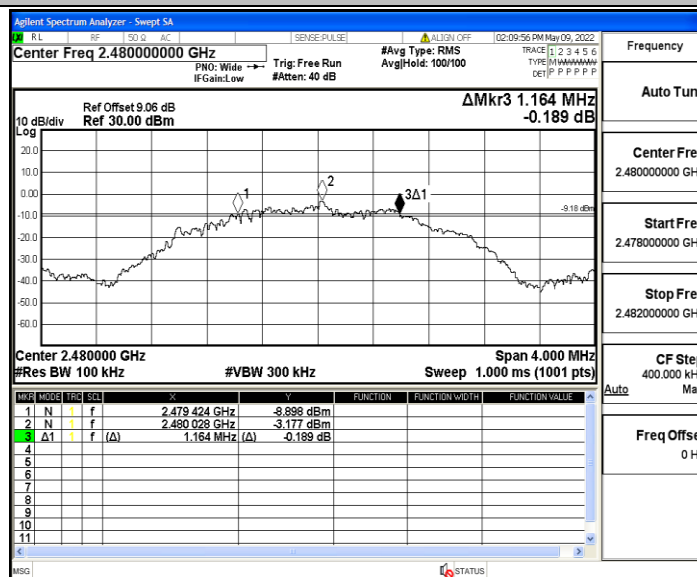
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



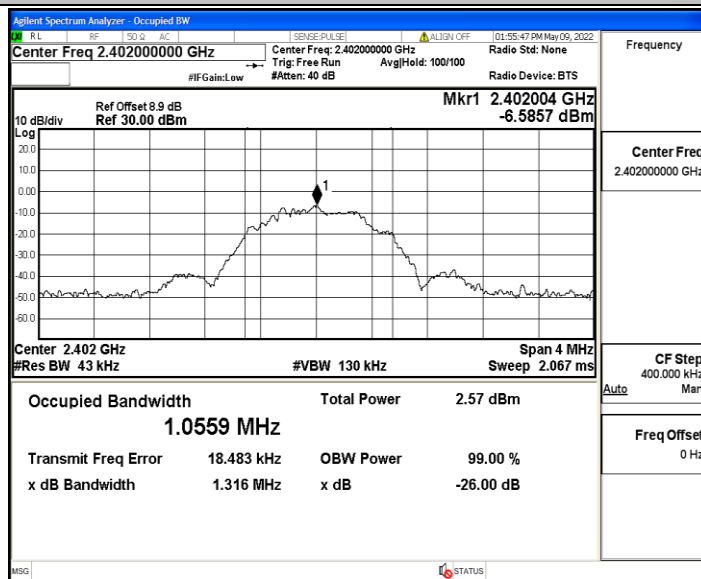
Appendix B: Occupied Channel Bandwidth

Test Result

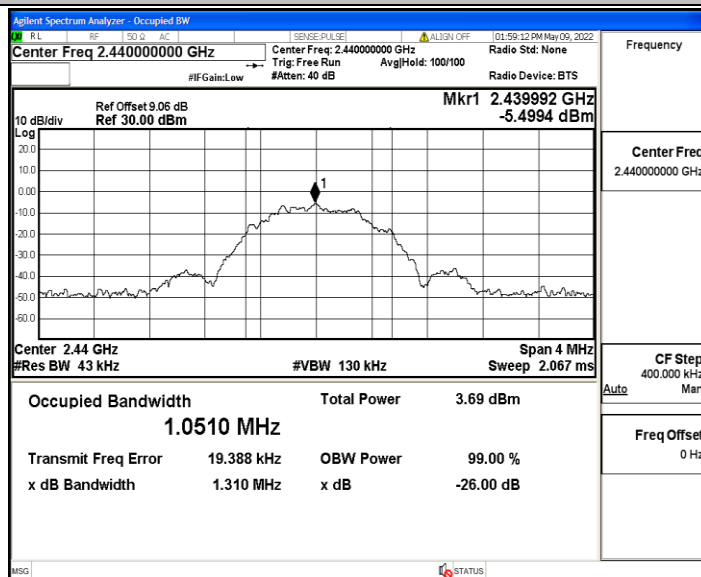
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0559	2401.491	2402.546	---	PASS
		2440	1.0510	2439.494	2440.545	---	PASS
		2480	1.0527	2479.493	2480.546	---	PASS
BLE_2M	Ant1	2402	2.0696	2400.994	2403.064	---	PASS
		2440	2.0933	2438.980	2441.073	---	PASS
		2480	2.0988	2478.974	2481.073	---	PASS

Test Graphs

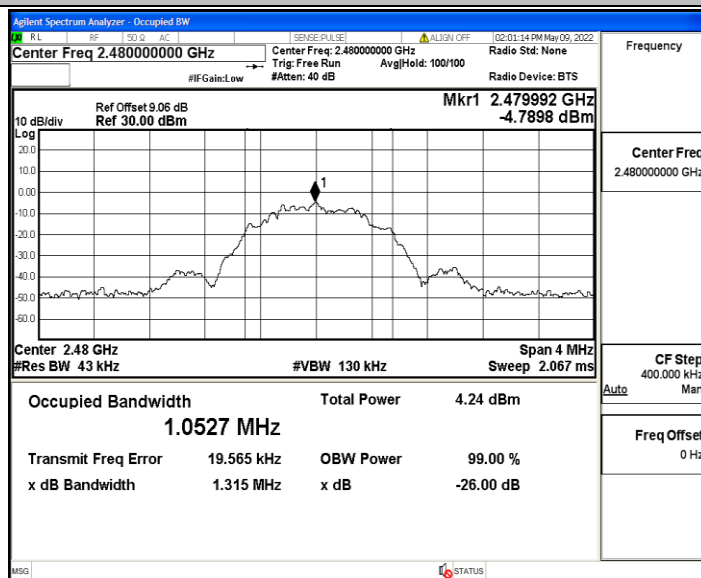
BLE_1M_Ant1_2402



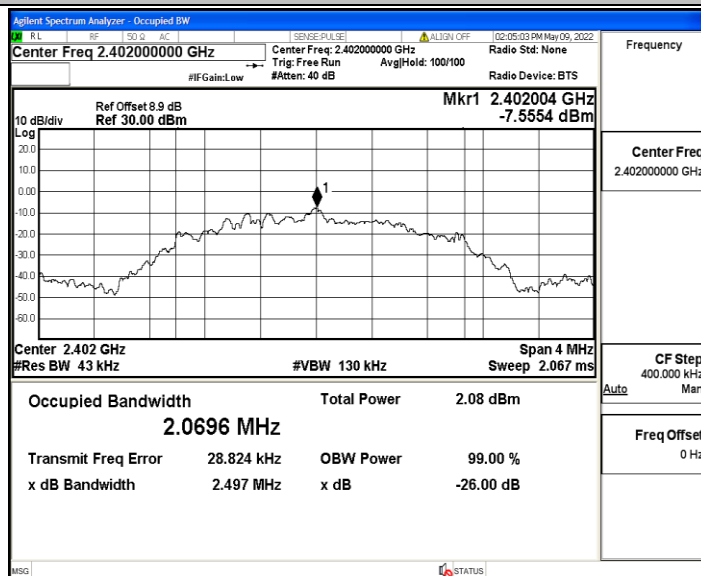
BLE_1M_Ant1_2440



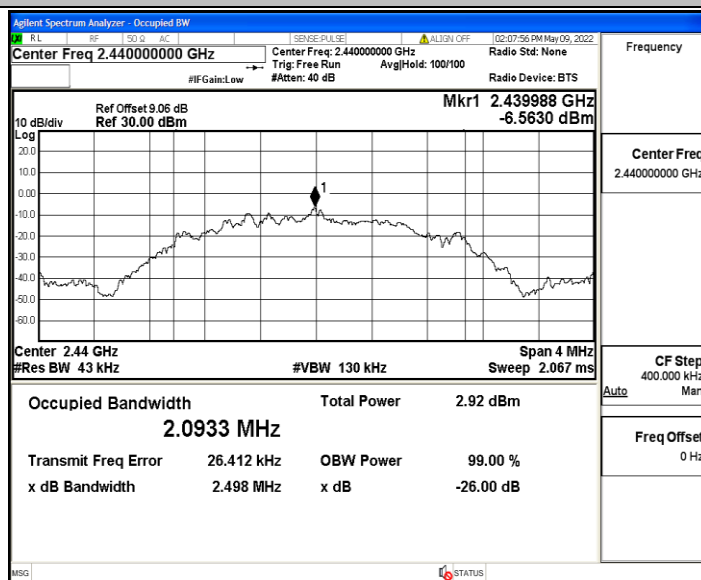
BLE_1M_Ant1_2480



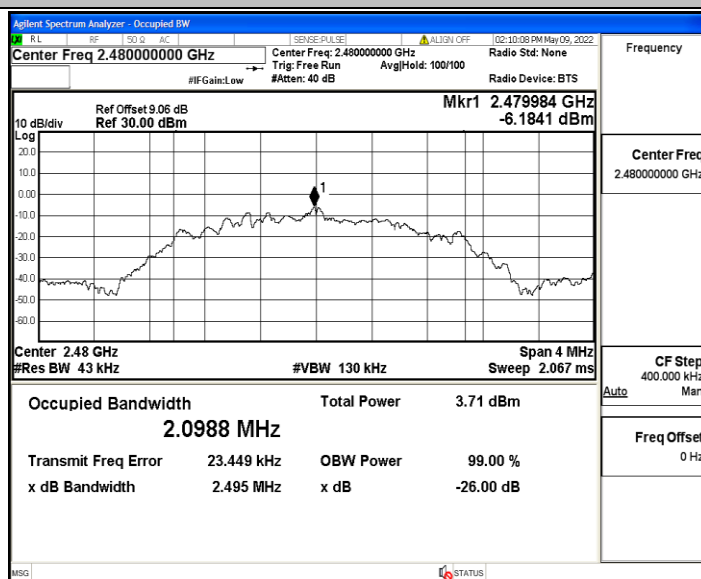
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



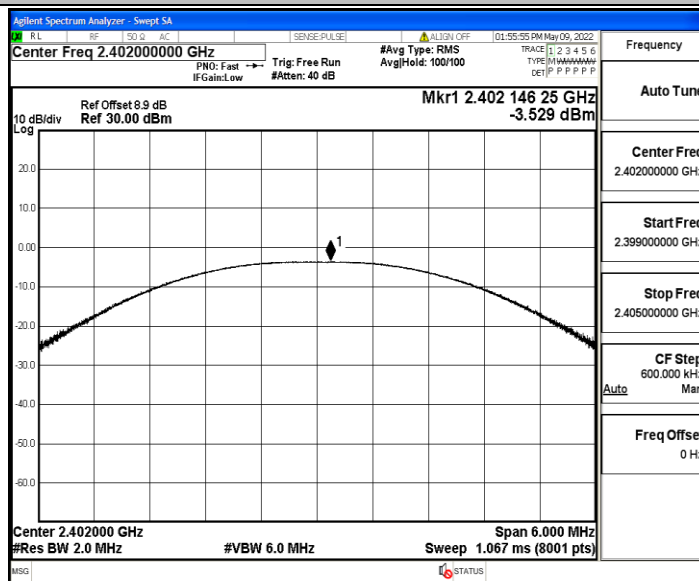
Appendix C: Maximum conducted output power

Test Result

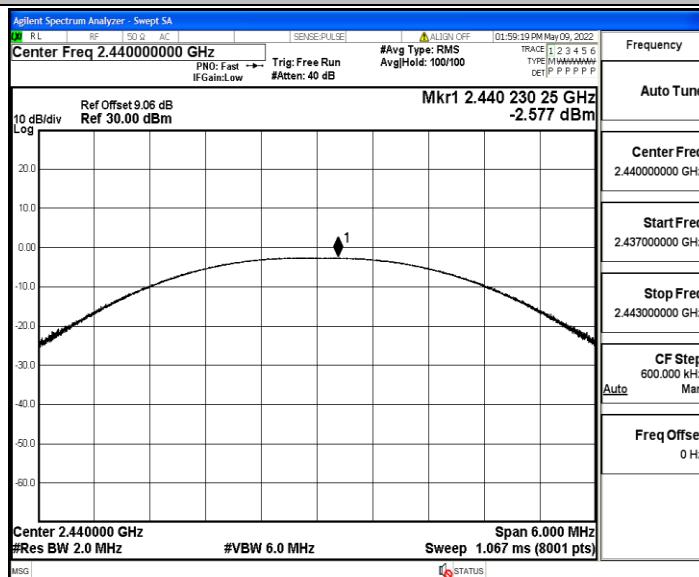
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.53	≤30	PASS
		2440	-2.58	≤30	PASS
		2480	-1.89	≤30	PASS
BLE_2M	Ant1	2402	-3.58	≤30	PASS
		2440	-2.59	≤30	PASS
		2480	-1.95	≤30	PASS

Test Graphs

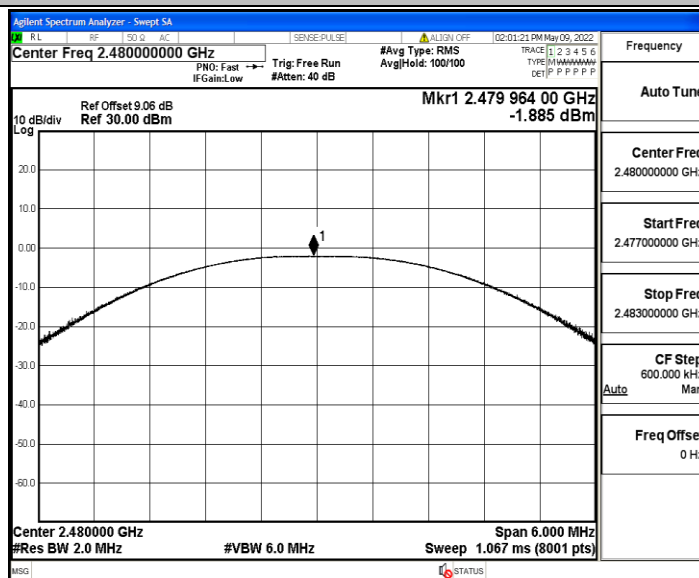
BLE_1M_Ant1_2402



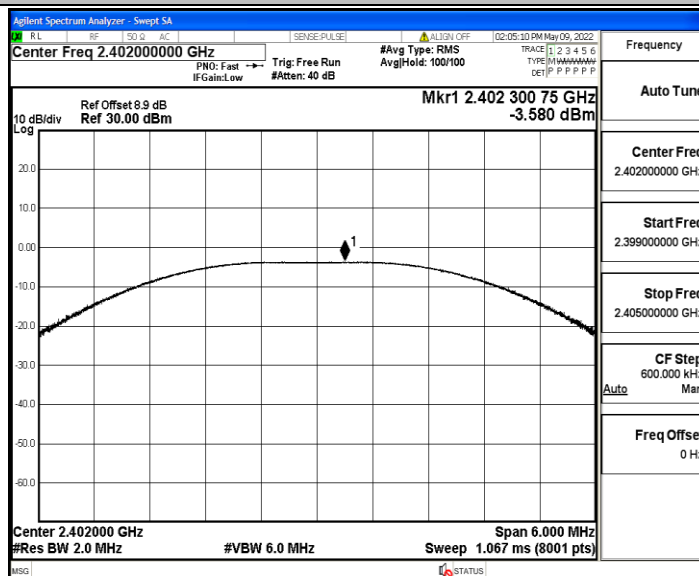
BLE_1M_Ant1_2440



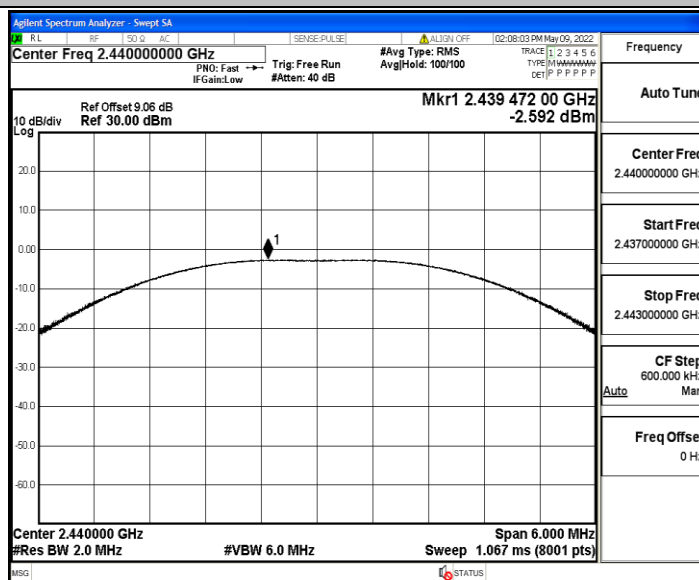
BLE_1M_Ant1_2480



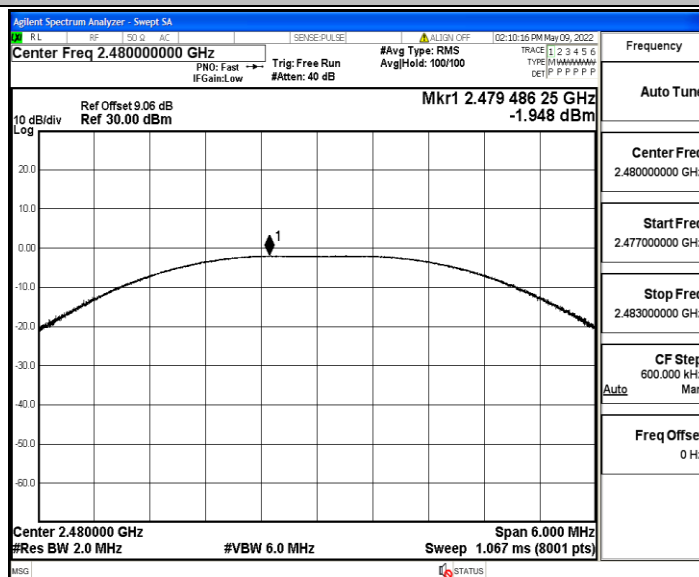
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



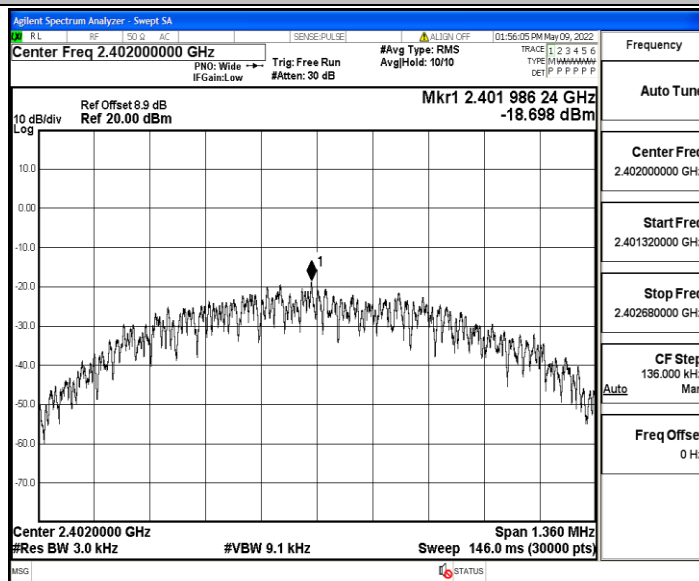
Appendix D: Maximum power spectral density

Test Result

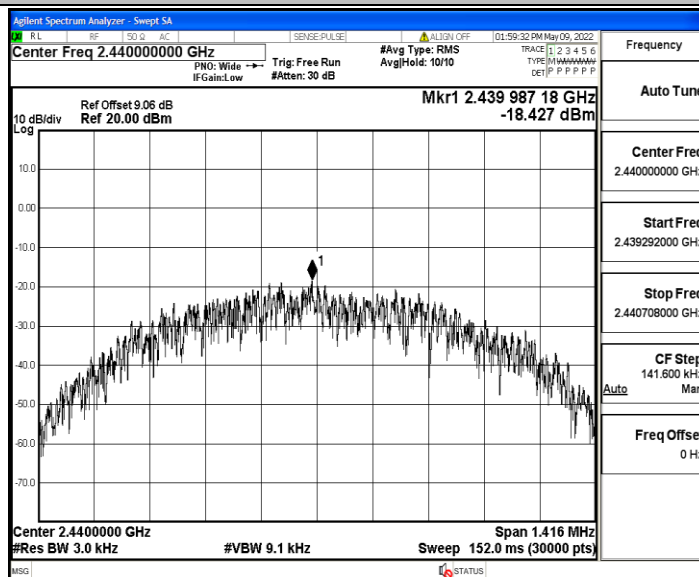
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.7	≤8.00	PASS
		2440	-18.43	≤8.00	PASS
		2480	-17.45	≤8.00	PASS
BLE_2M	Ant1	2402	-21.29	≤8.00	PASS
		2440	-20.5	≤8.00	PASS
		2480	-19.79	≤8.00	PASS

Test Graphs

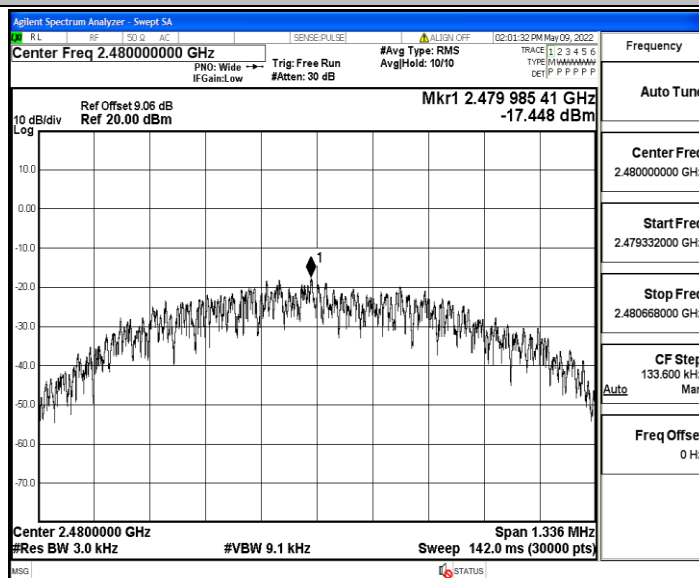
BLE_1M_Ant1_2402



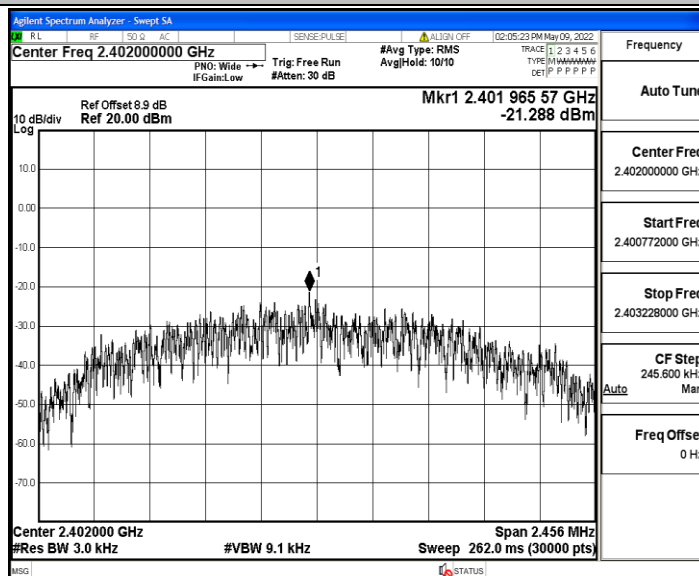
BLE_1M_Ant1_2440



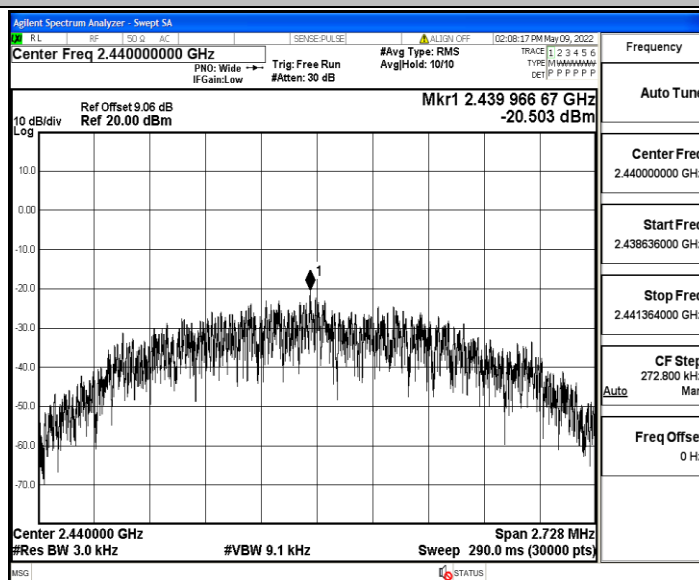
BLE_1M_Ant1_2480



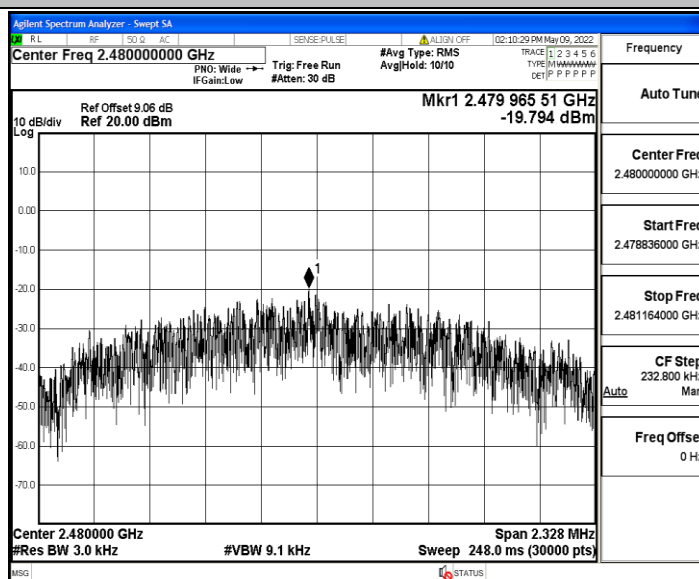
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



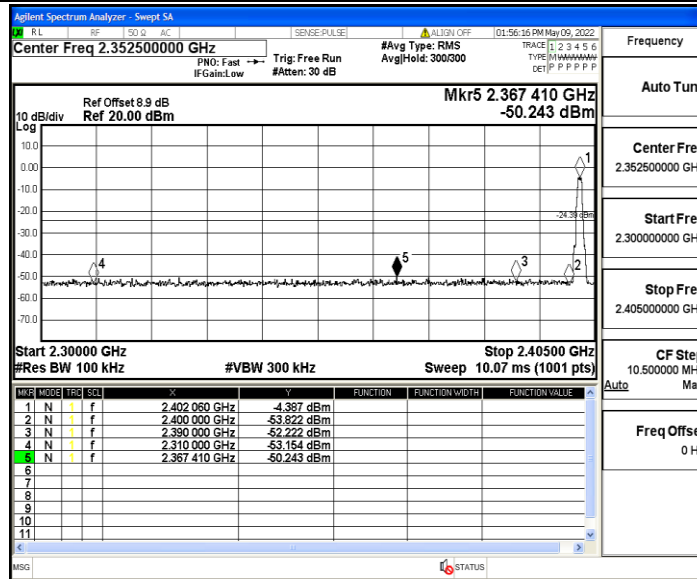
Appendix E: Band edge measurements

Test Result

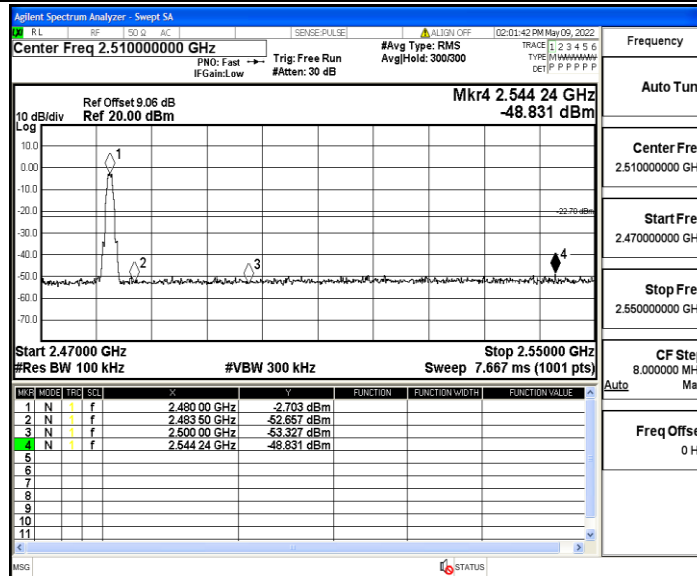
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.39	-50.24	≤ -24.39	PASS
		High	2480	-2.70	-48.83	≤ -22.7	PASS
BLE_2M	Ant1	Low	2402	-4.86	-36.65	≤ -24.86	PASS
		High	2480	-2.72	-49.8	≤ -22.72	PASS

Test Graphs

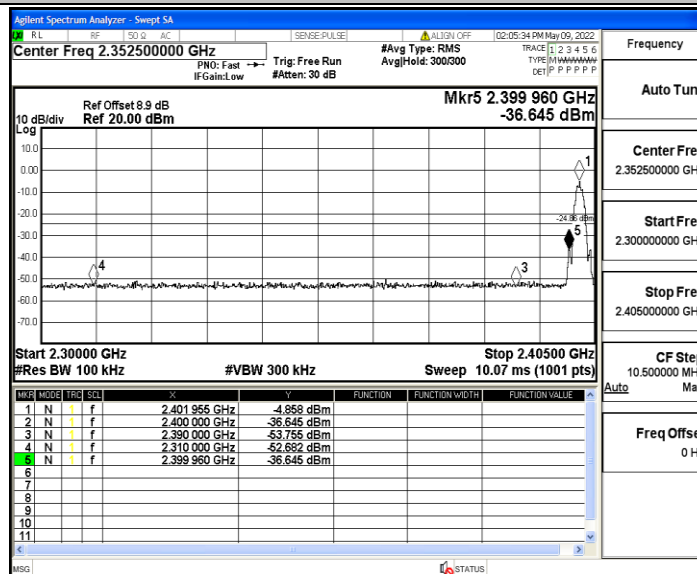
BLE_1M_Ant1_Low_2402



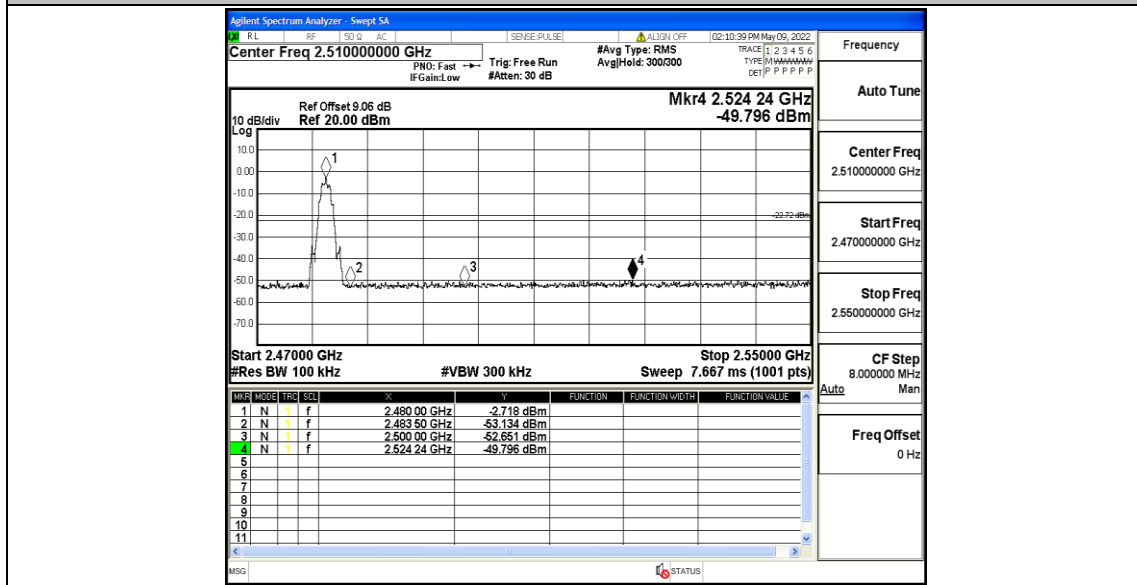
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480



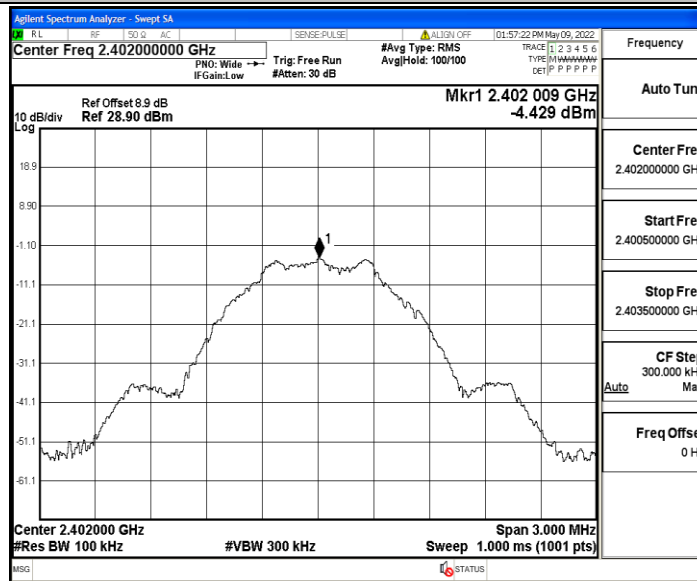
Appendix F: Conducted Spurious Emission

Test Result

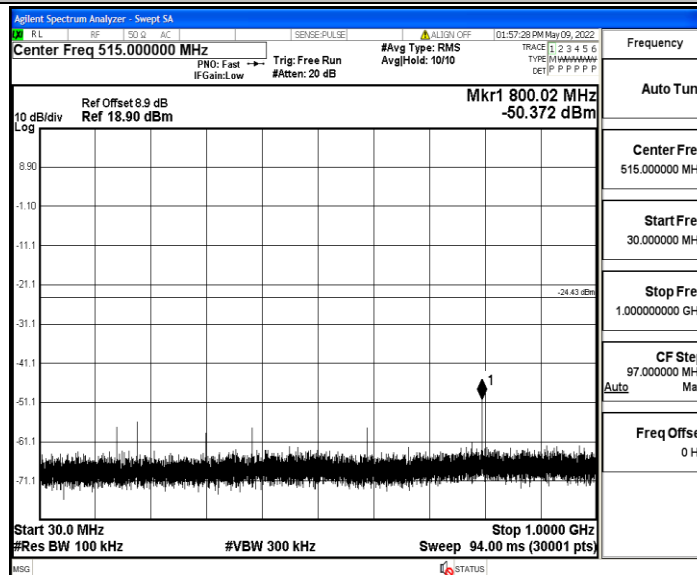
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.43	-4.43	---	PASS
			30~1000	-4.43	-50.37	≤-24.43	PASS
			1000~26500	-4.43	-51.02	≤-24.43	PASS
		2440	Reference	-3.81	-3.81	---	PASS
			30~1000	-3.81	-50.92	≤-23.81	PASS
			1000~26500	-3.81	-51	≤-23.81	PASS
		2480	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-50.62	≤-22.76	PASS
			1000~26500	-2.76	-50.76	≤-22.76	PASS
BLE_2M	Ant1	2402	Reference	-4.75	-4.75	---	PASS
			30~1000	-4.75	-50.67	≤-24.75	PASS
			1000~26500	-4.75	-50.85	≤-24.75	PASS
		2440	Reference	-3.50	-3.50	---	PASS
			30~1000	-3.50	-50.5	≤-23.5	PASS
			1000~26500	-3.50	-51.34	≤-23.5	PASS
		2480	Reference	-2.81	-2.81	---	PASS
			30~1000	-2.81	-54.2	≤-22.81	PASS
			1000~26500	-2.81	-51.28	≤-22.81	PASS

Test Graphs

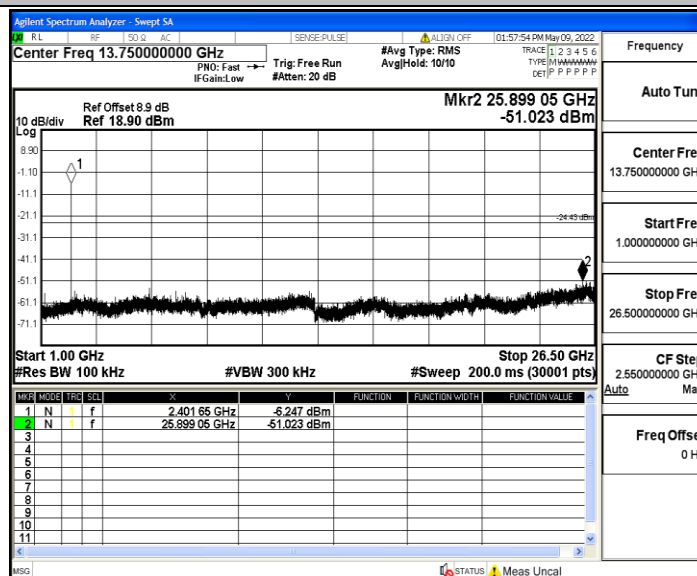
BLE_1M_Ant1_2402_0~Reference



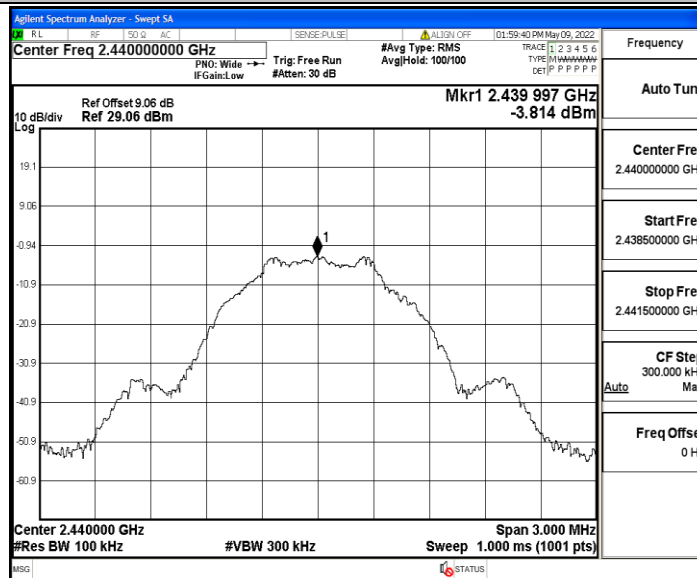
BLE_1M_Ant1_2402_30~1000



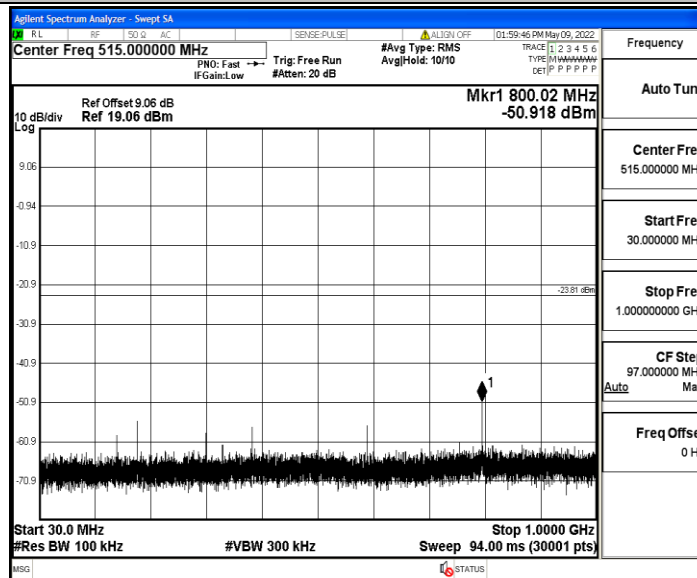
BLE_1M_Ant1_2402_1000~26500



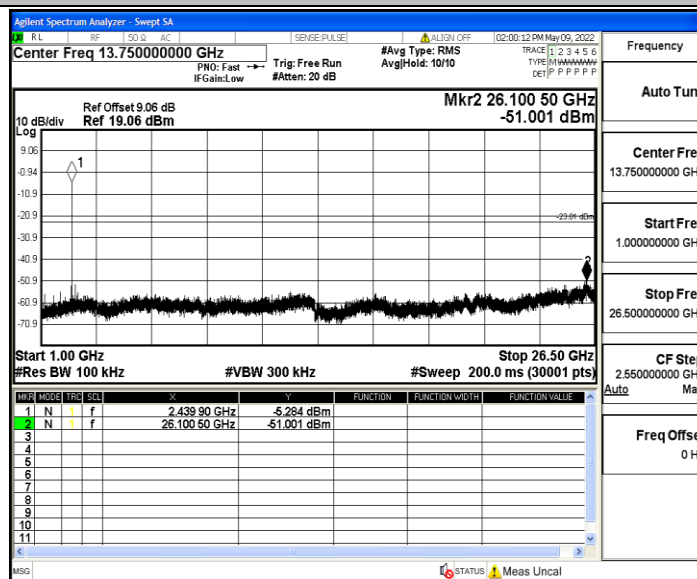
BLE_1M_Ant1_2440_0~Reference



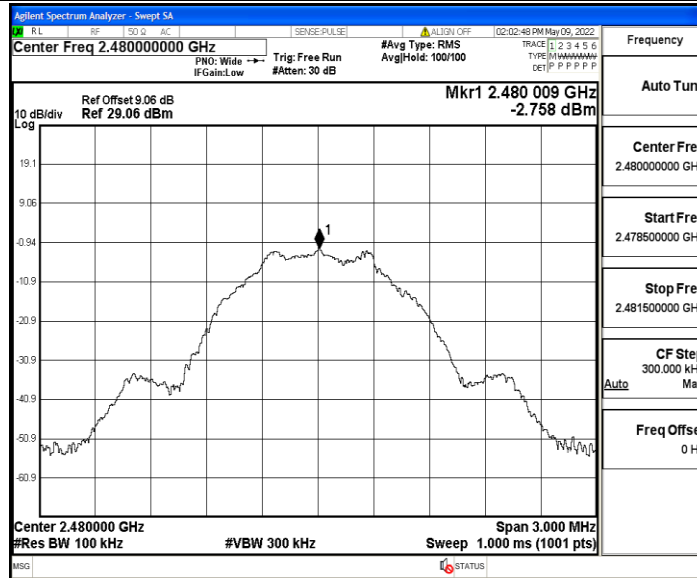
BLE_1M_Ant1_2440_30~1000



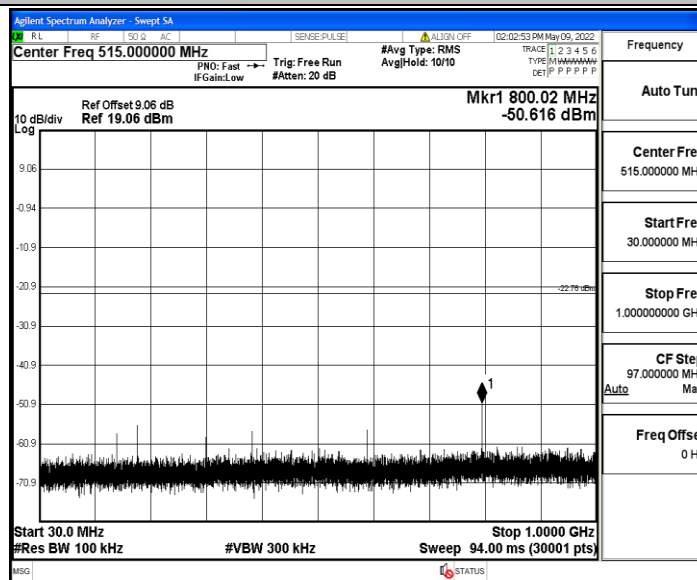
BLE_1M_Ant1_2440_1000~26500



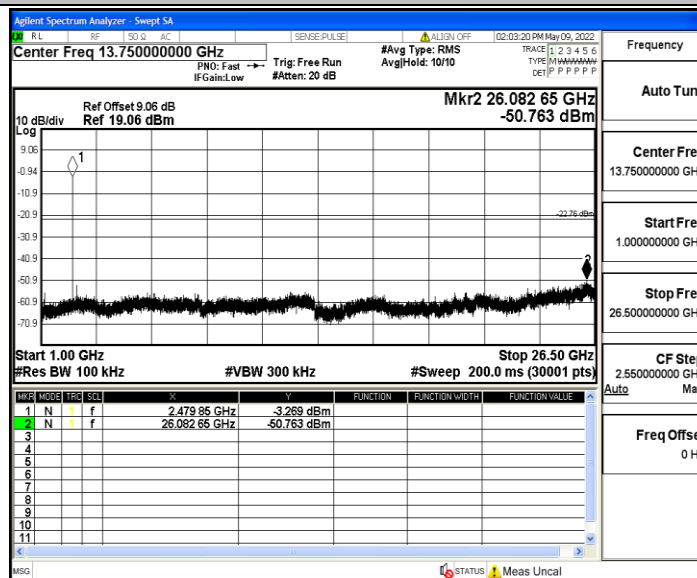
BLE_1M_Ant1_2480_0~Reference



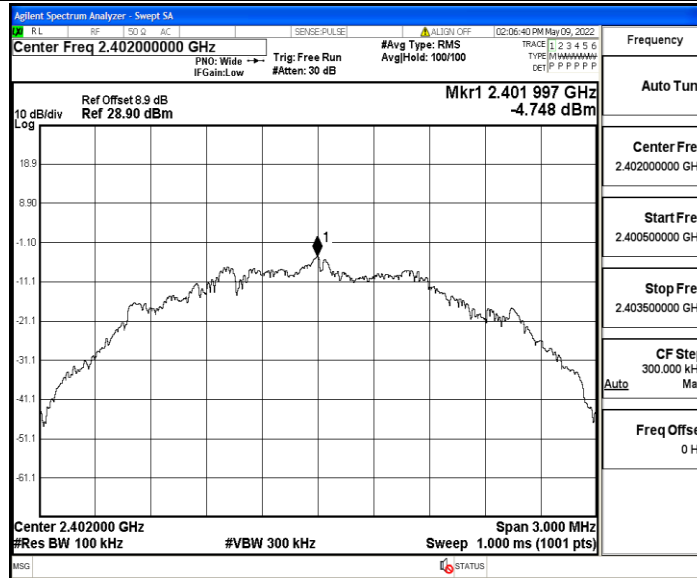
BLE_1M_Ant1_2480_30~1000



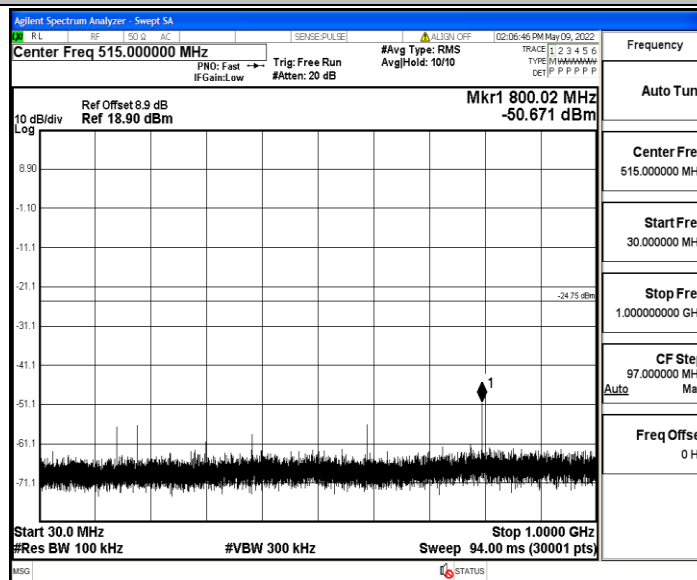
BLE_1M_Ant1_2480_1000~26500



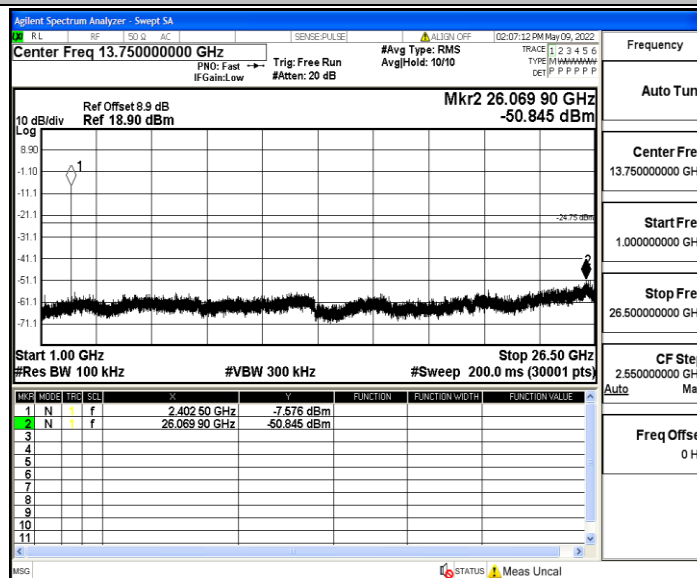
BLE_2M_Ant1_2402_0~Reference



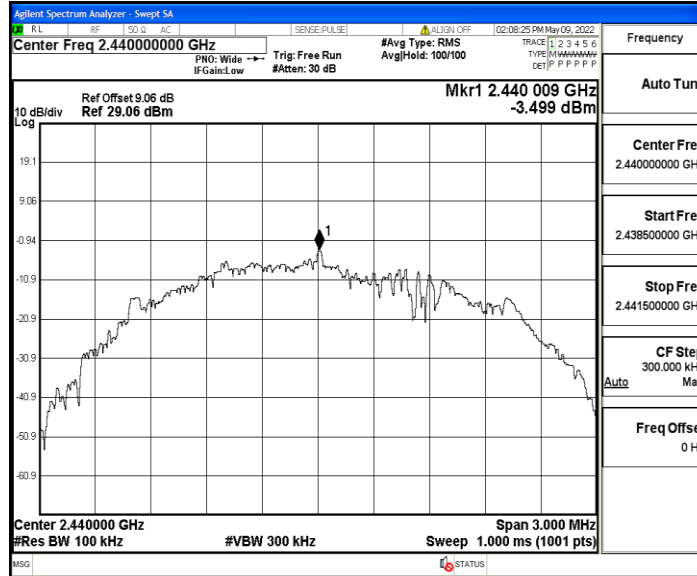
BLE_2M_Ant1_2402_30~1000



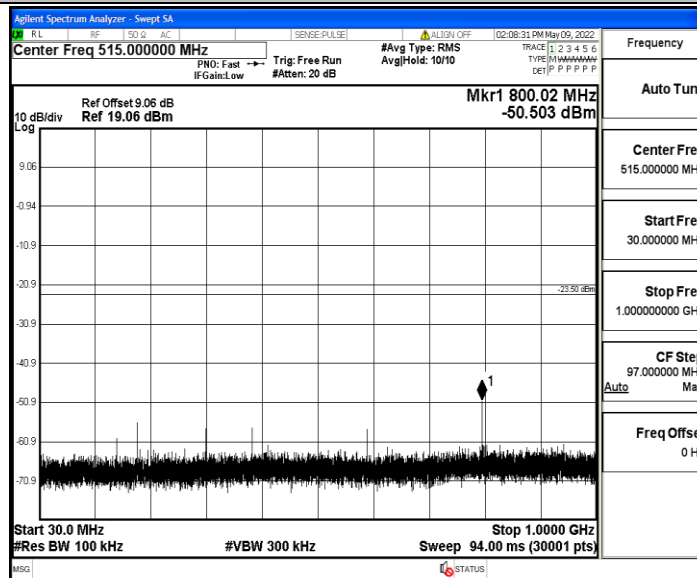
BLE_2M_Ant1_2402_1000~26500



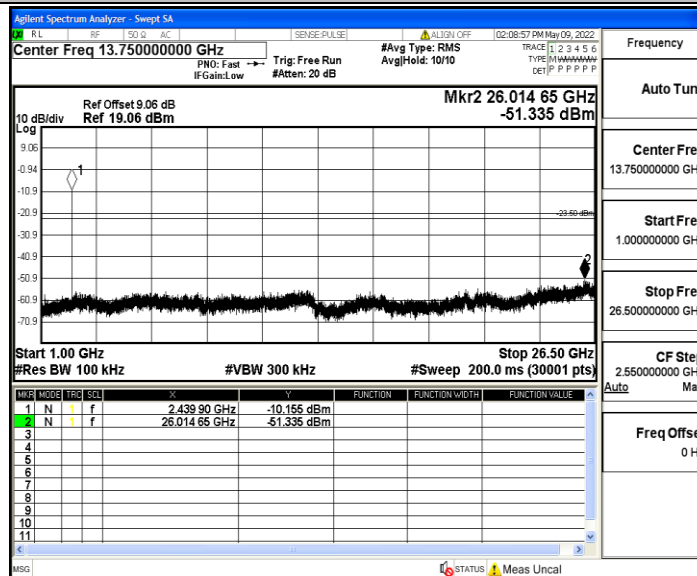
BLE_2M_Ant1_2440_0~Reference



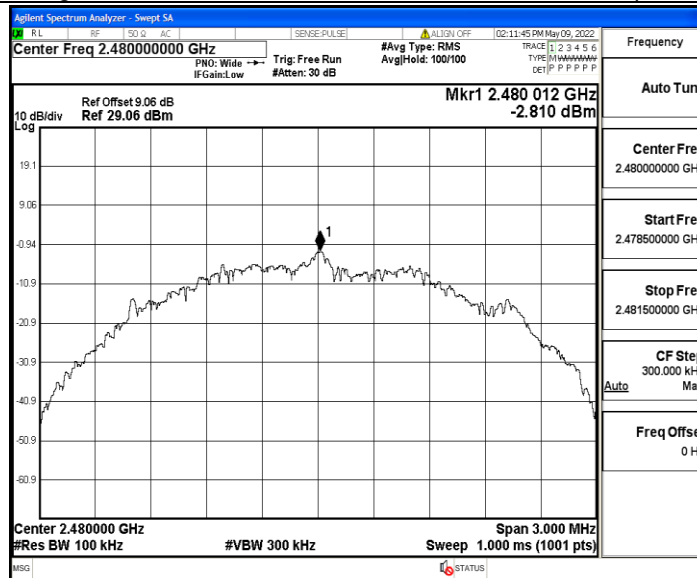
BLE_2M_Ant1_2440_30~1000



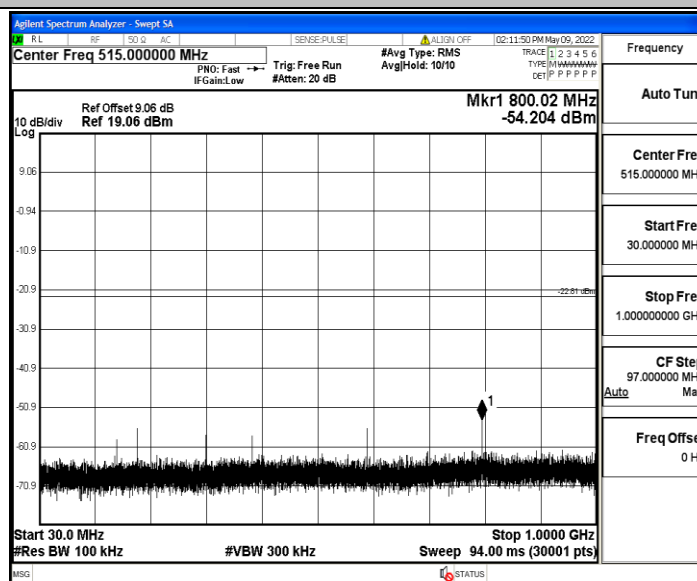
BLE_2M_Ant1_2440_1000~26500



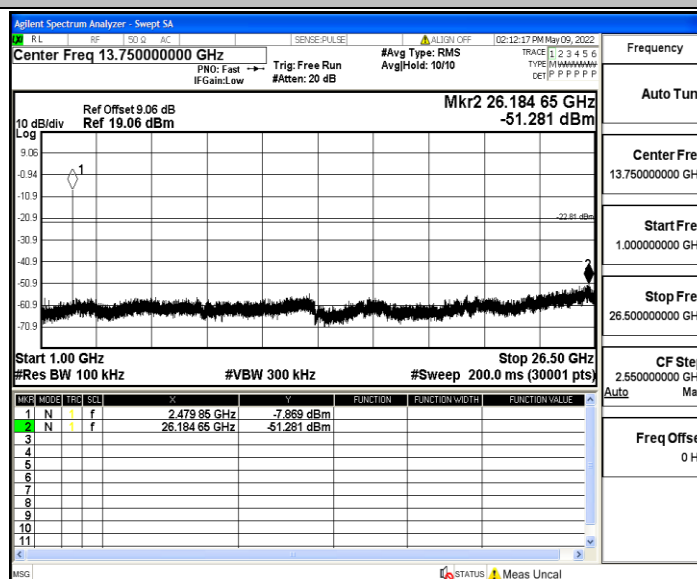
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



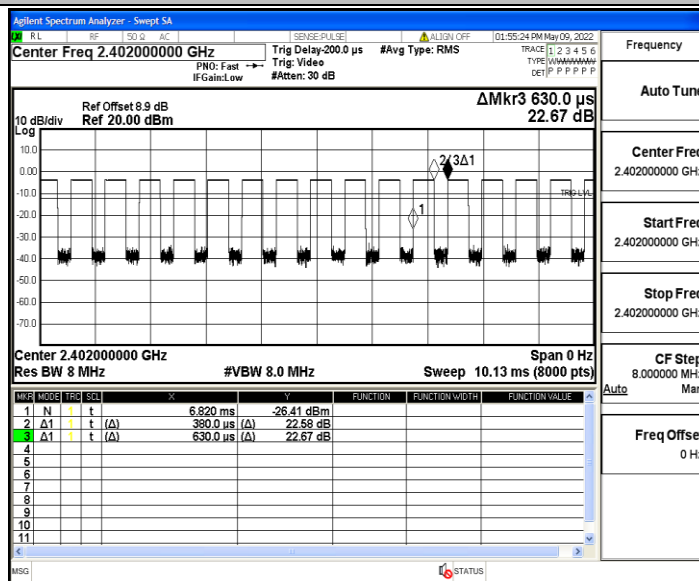
Appendix G: Duty Cycle

Test Result

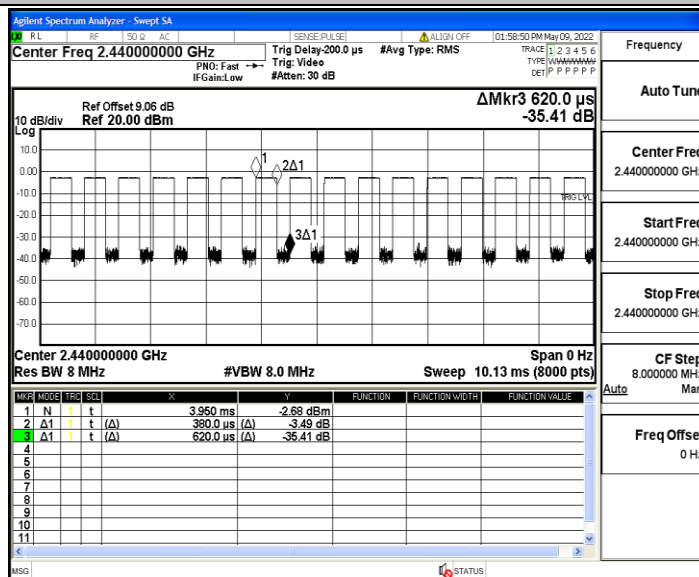
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [KHz]
BLE_1M	Ant1	2402	0.38	0.63	60.32	2.63
		2440	0.38	0.62	61.29	2.63
		2480	0.38	0.62	61.29	2.63
BLE_2M	Ant1	2402	0.20	0.62	32.26	5.00
		2440	0.20	0.62	32.26	5.00
		2480	0.20	0.62	32.26	5.00

Test Graphs

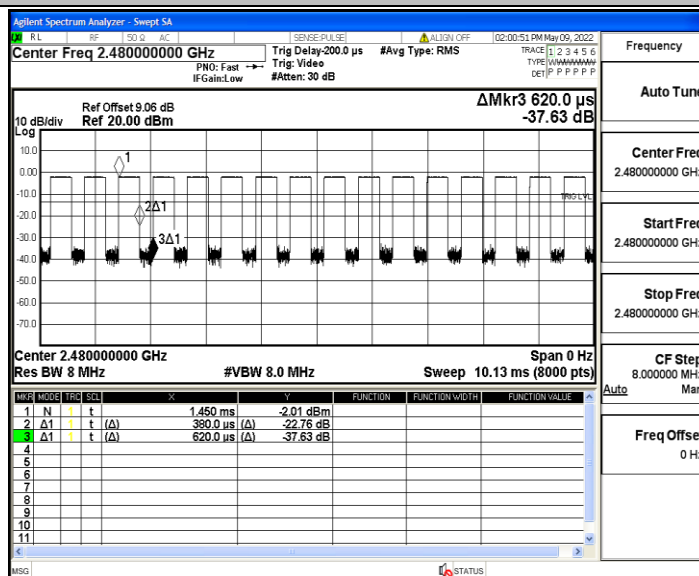
BLE_1M_Ant1_2402



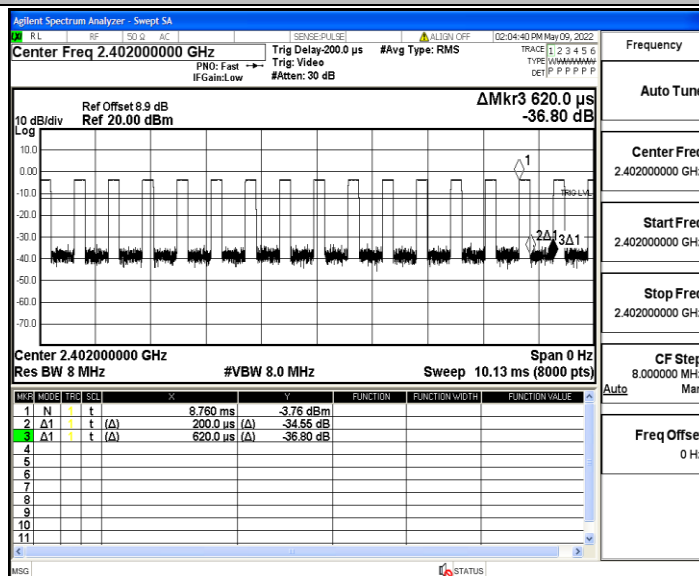
BLE_1M_Ant1_2440



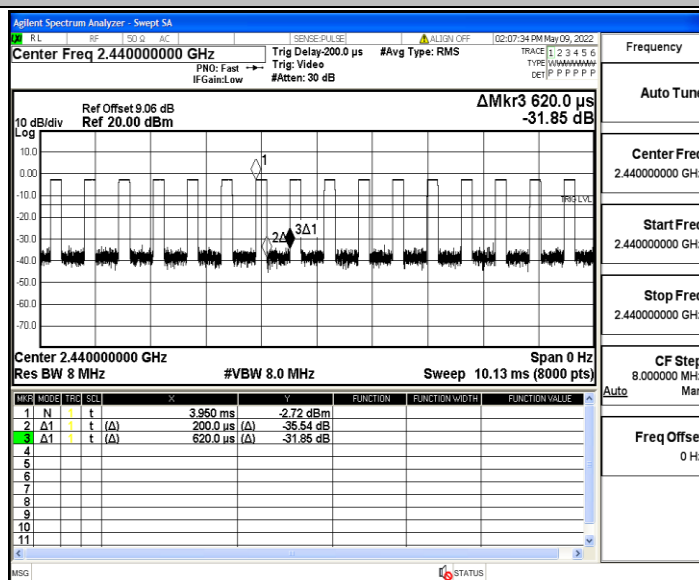
BLE_1M_Ant1_2480



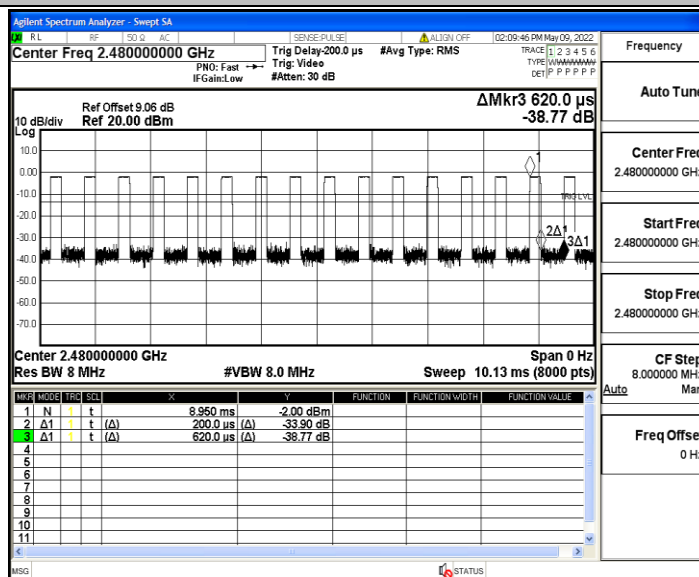
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

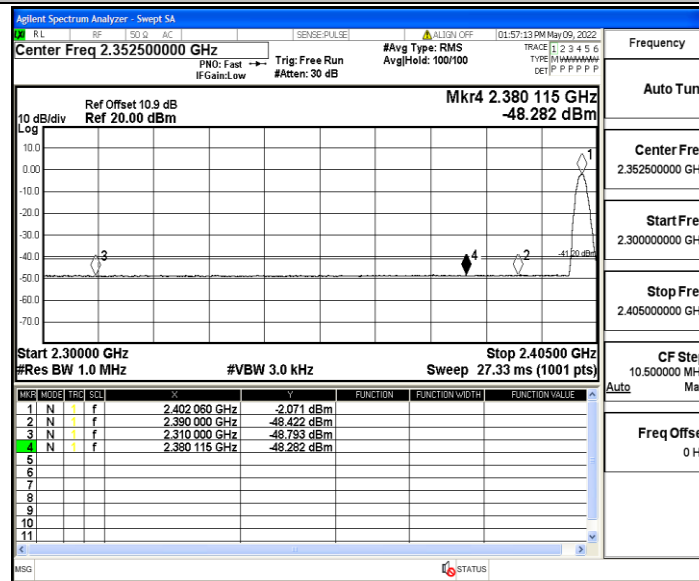
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.79	≤-41.20	PASS
				AV	2380.115	-48.28	≤-41.20	PASS
				AV	2390.000	-48.42	≤-41.20	PASS
				Peak	2310.000	-43.78	≤-21.20	PASS
				Peak	2325.305	-39.42	≤-21.20	PASS
				Peak	2390.000	-39.87	≤-21.20	PASS
		High	2480	AV	2483.500	-47.94	≤-41.20	PASS
				AV	2494.960	-47.49	≤-41.20	PASS
				AV	2500.000	-47.87	≤-41.20	PASS
				Peak	2483.500	-42.28	≤-21.20	PASS
				Peak	2493.760	-38.75	≤-21.20	PASS
				Peak	2500.000	-42.21	≤-21.20	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-48.61	≤-41.20	PASS
				AV	2382.110	-47.52	≤-41.20	PASS
				AV	2390.000	-47.82	≤-41.20	PASS
				Peak	2310.000	-40.82	≤-21.20	PASS
				Peak	2352.605	-39.13	≤-21.20	PASS
				Peak	2390.000	-41.43	≤-21.20	PASS
		High	2480	AV	2483.500	-46.93	≤-41.20	PASS
				AV	2483.520	-46.92	≤-41.20	PASS
				AV	2500.000	-47.37	≤-41.20	PASS
				Peak	2483.500	-41.88	≤-21.20	PASS
				Peak	2497.520	-38.44	≤-21.20	PASS
				Peak	2500.000	-39.48	≤-21.20	PASS

Note:

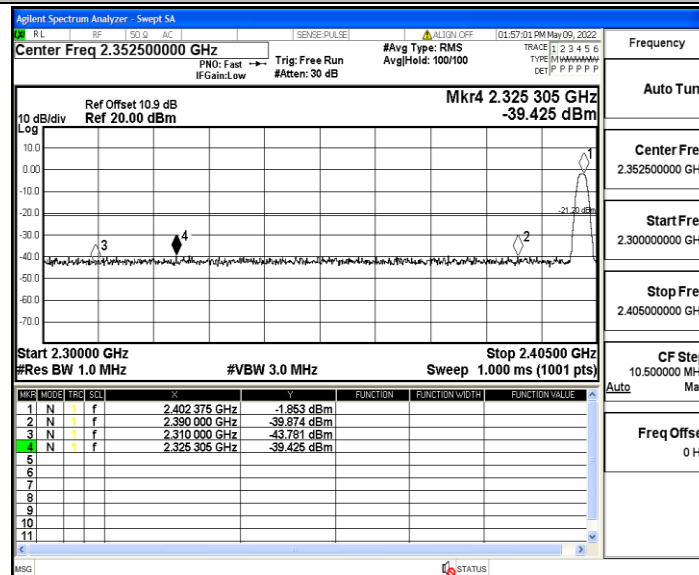
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

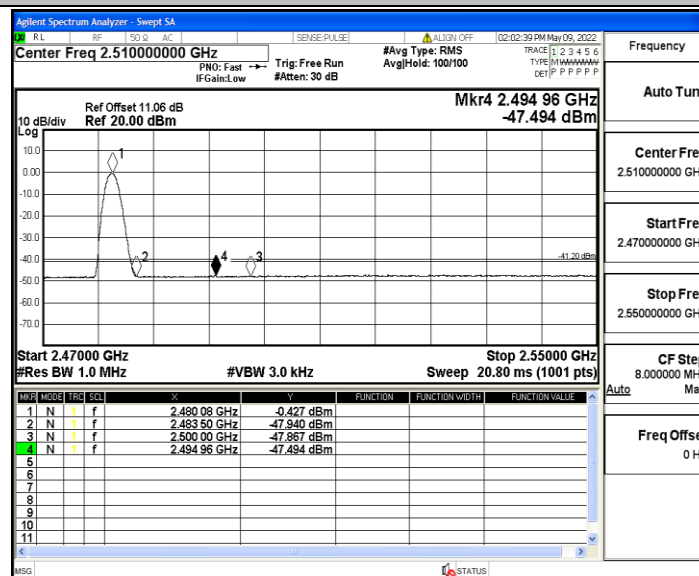
BLE_1M_Ant1_Low_2402_AV



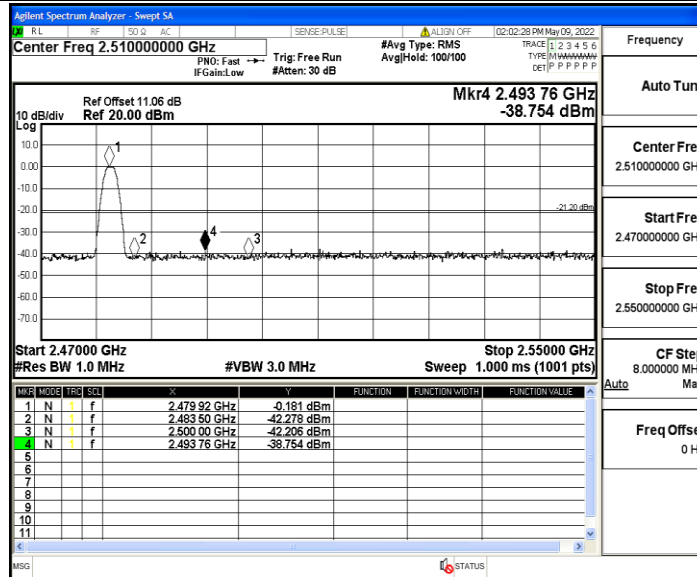
BLE_1M_Ant1_Low_2402_Peak



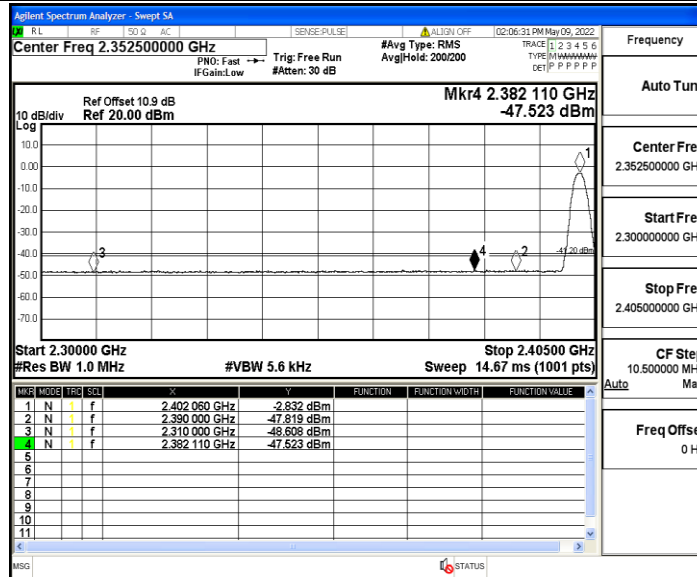
BLE_1M_Ant1_High_2480_AV



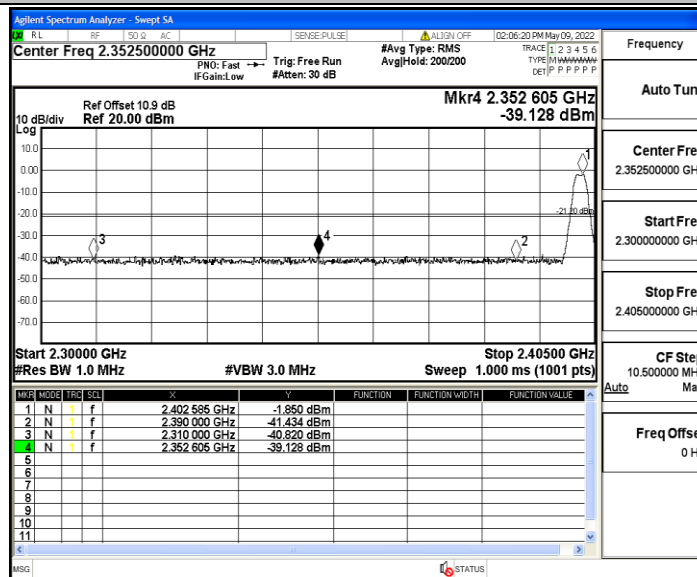
BLE_1M_Ant1_High_2480_Peak



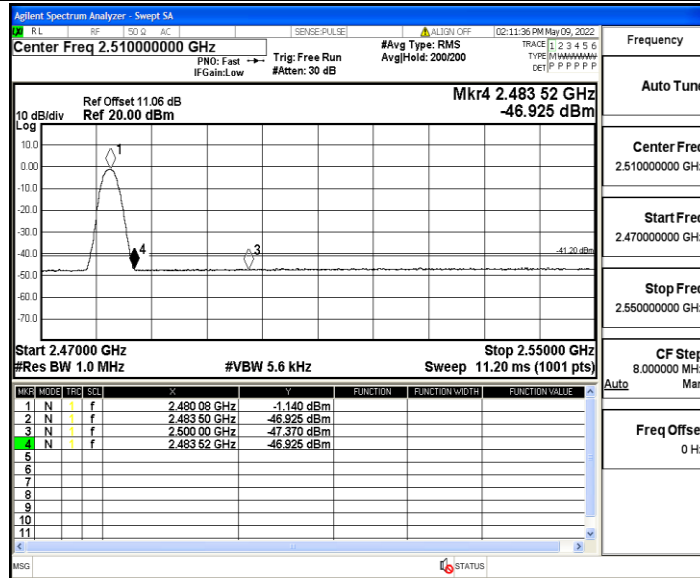
BLE_2M_Ant1_Low_2402_AV



BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV



BLE_2M_Ant1_High_2480_Peak

