

Appendix Test Data for BT(BLE) (Conducted Measurement)

Product Name: Keychron M3 Mouse

Trade Mark: Keychron

Test Model: Keychron M3

FCC ID: 2ASF4-M3

Environmental Conditions

Temperature:	22.5℃
Relative Humidity:	56%
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	0.688	2401.648	2402.336	0.5	PASS
		2440	0.656	2439.656	2440.312	0.5	PASS
		2480	0.656	2479.660	2480.316	0.5	PASS

Test Graphs

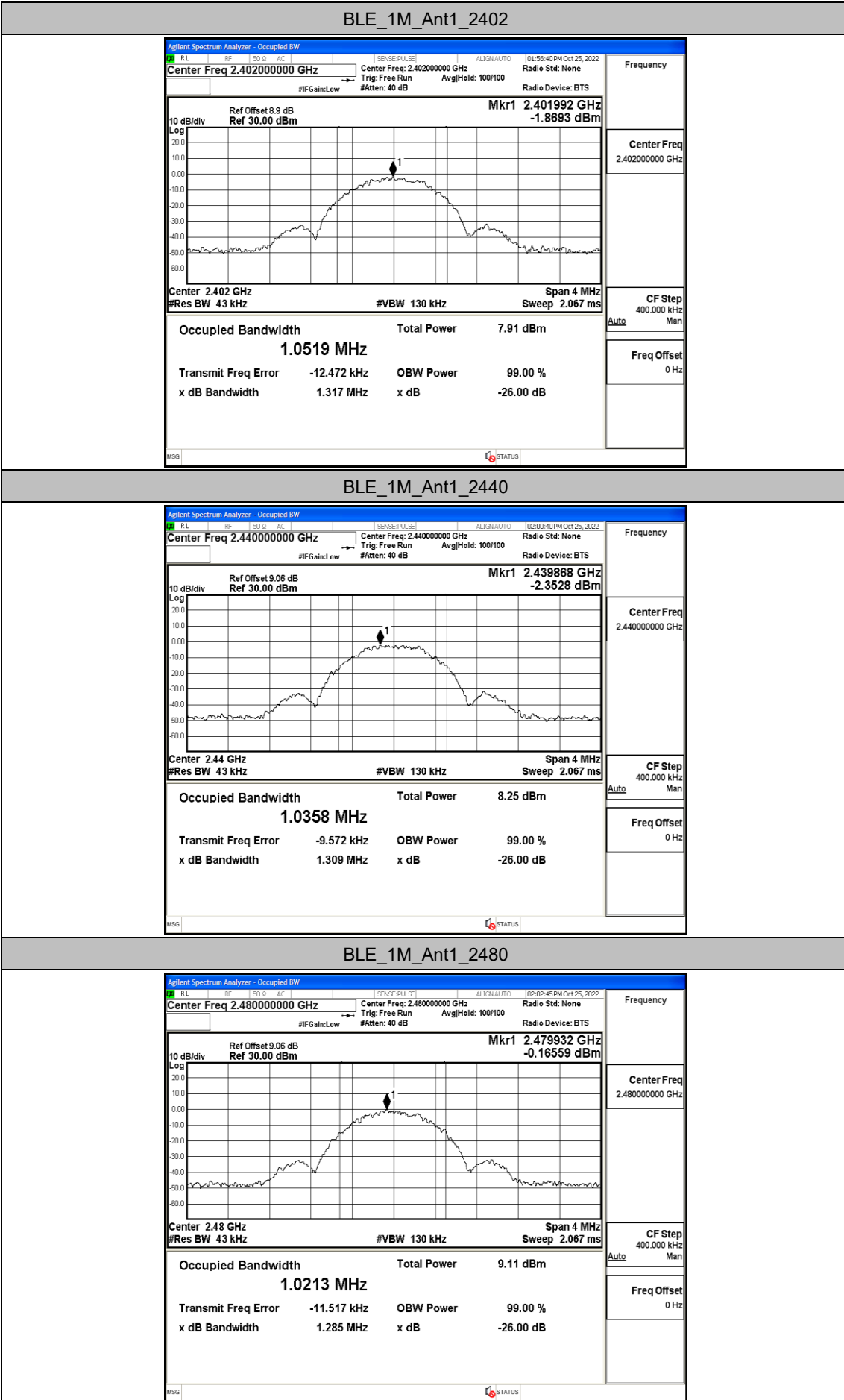


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0519	2401.4616	2402.5135	---	---
		2440	1.0358	2439.4725	2440.5083	---	---
		2480	1.0213	2479.4778	2480.4991	---	---

Test Graphs

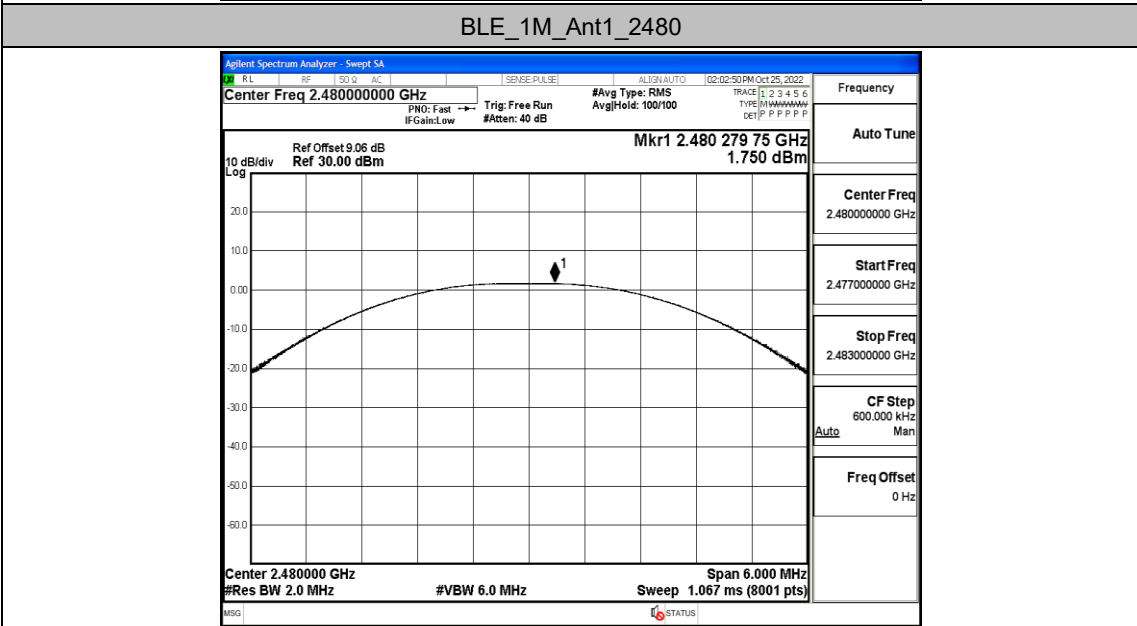
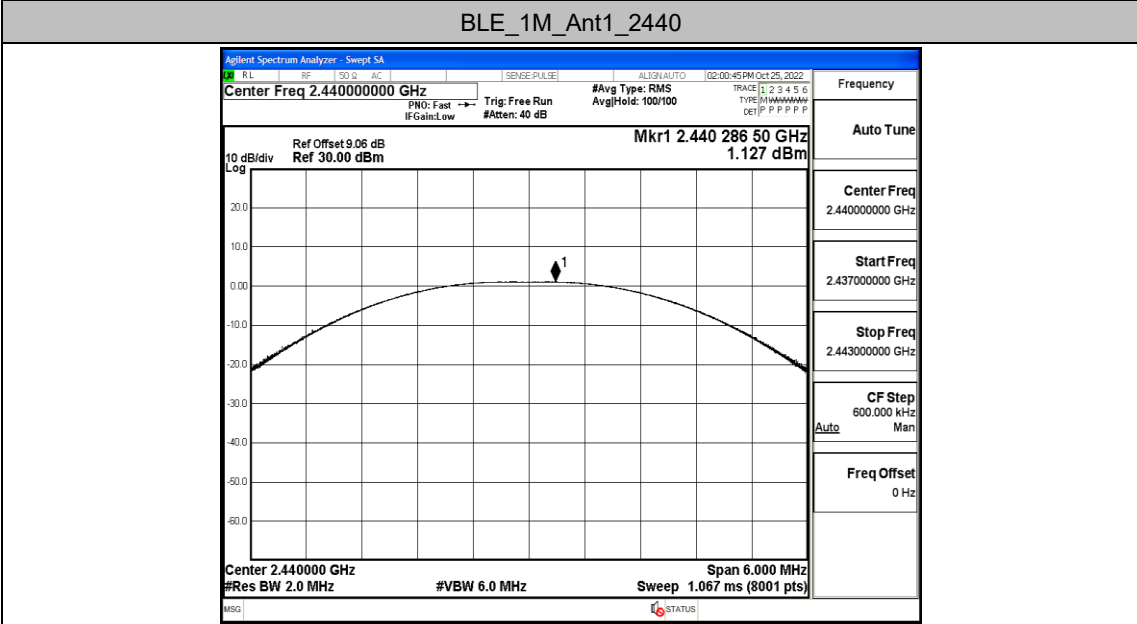
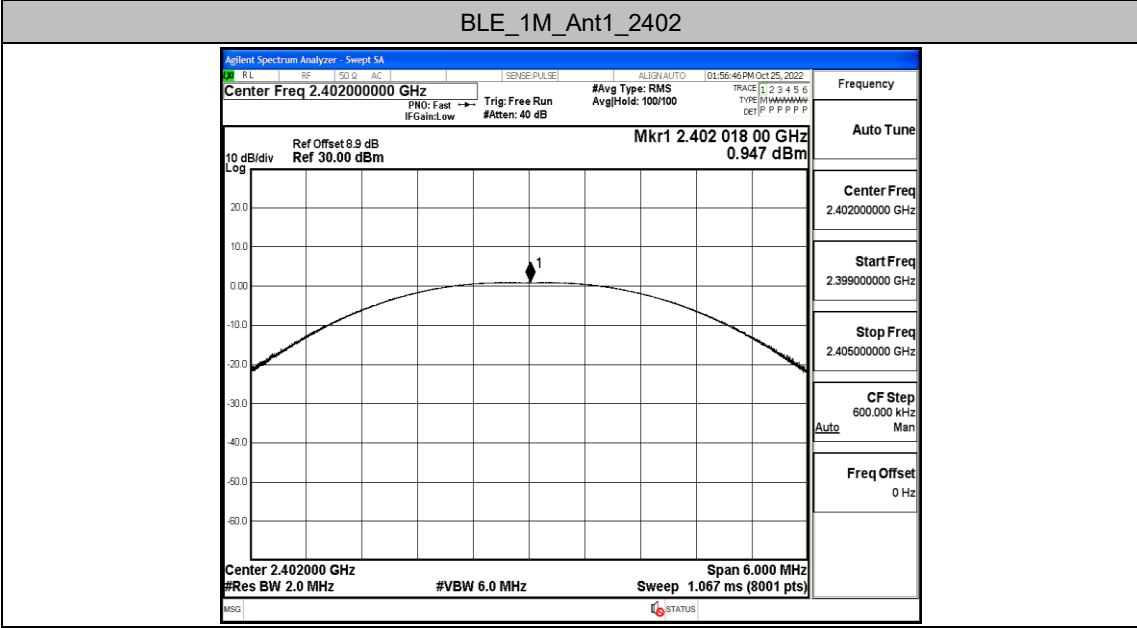


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.95	≤30	PASS
		2440	1.13	≤30	PASS
		2480	1.75	≤30	PASS

Test Graphs

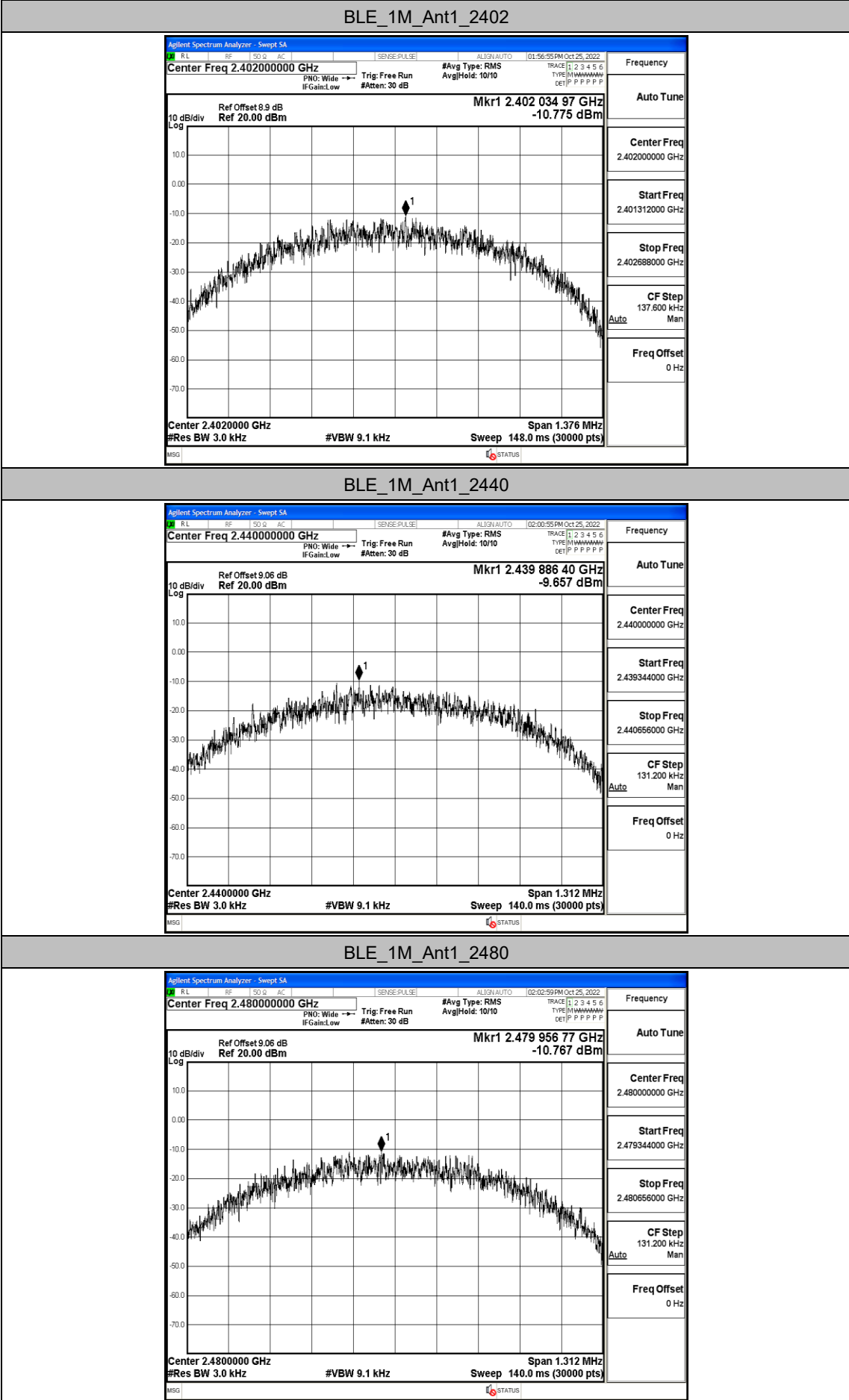


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.78	≤8.00	PASS
		2440	-9.66	≤8.00	PASS
		2480	-10.77	≤8.00	PASS

Test Graphs

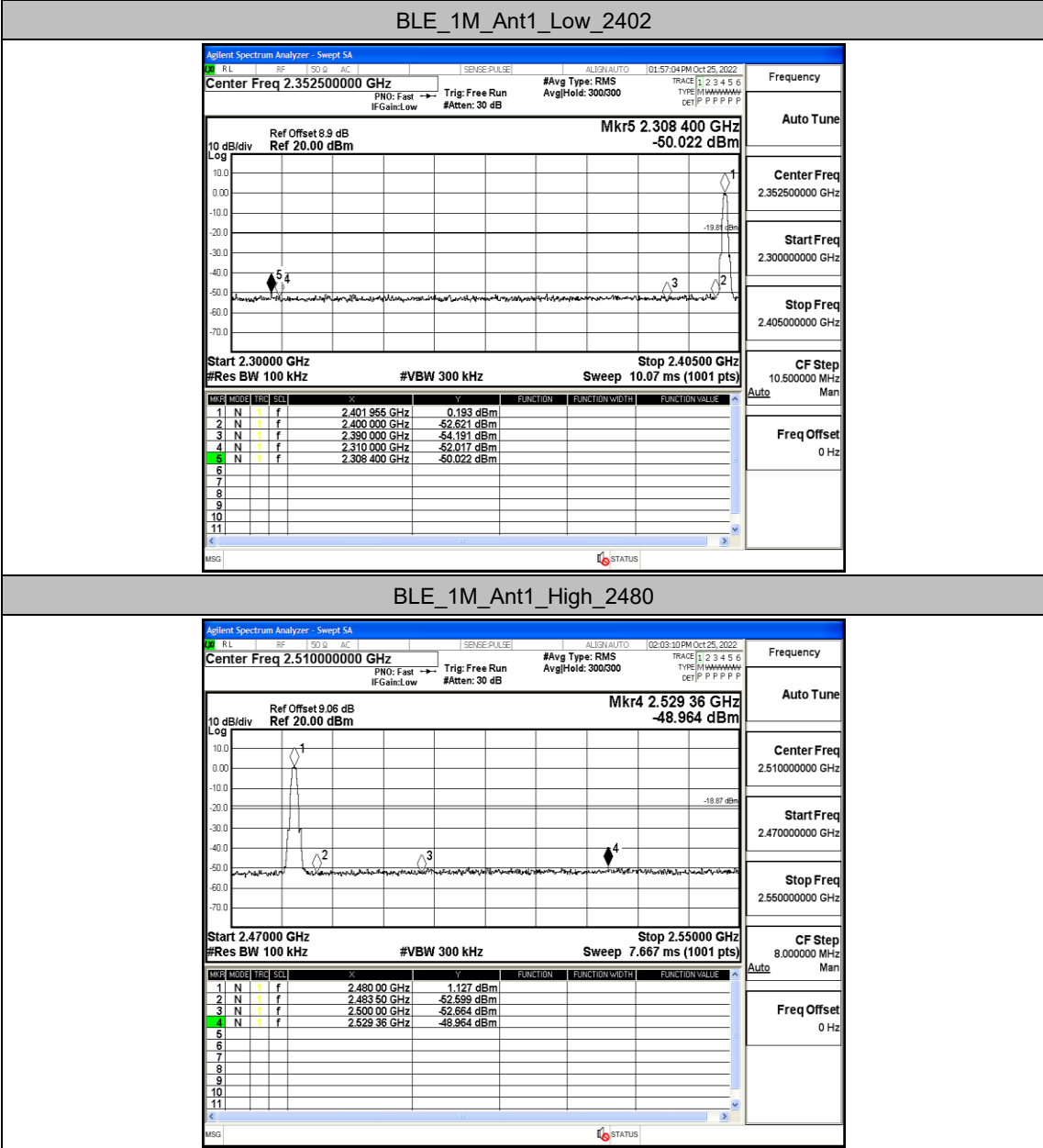


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.19	-50.02	≤-19.81	PASS
		High	2480	1.13	-48.96	≤-18.87	PASS

Test Graphs

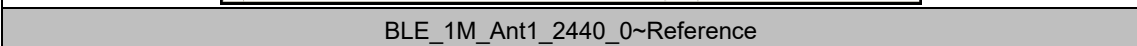
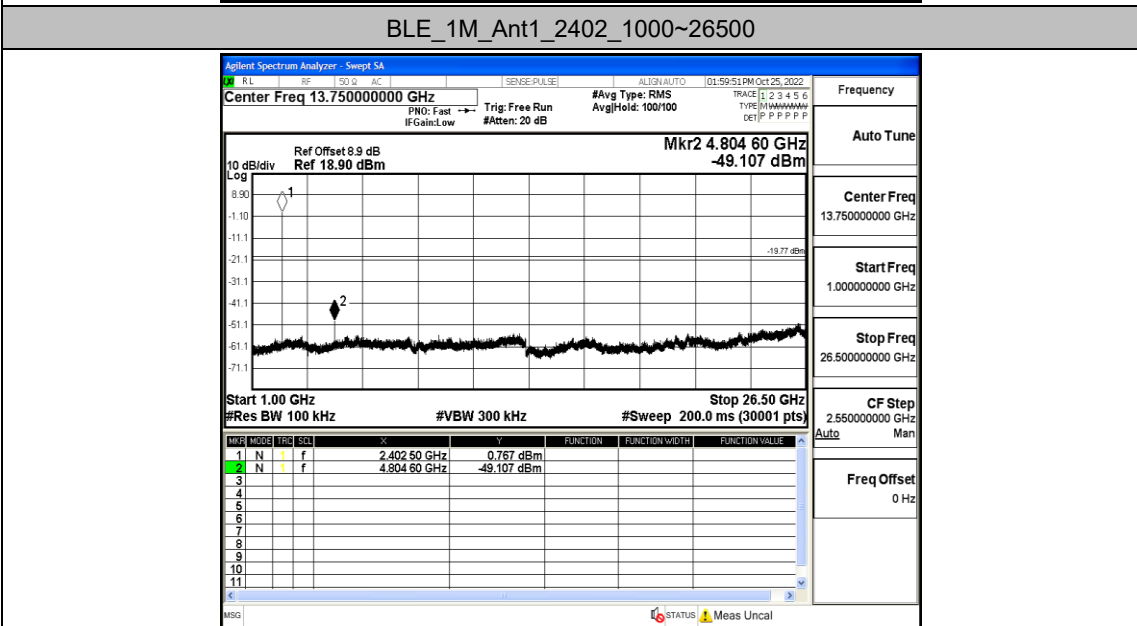
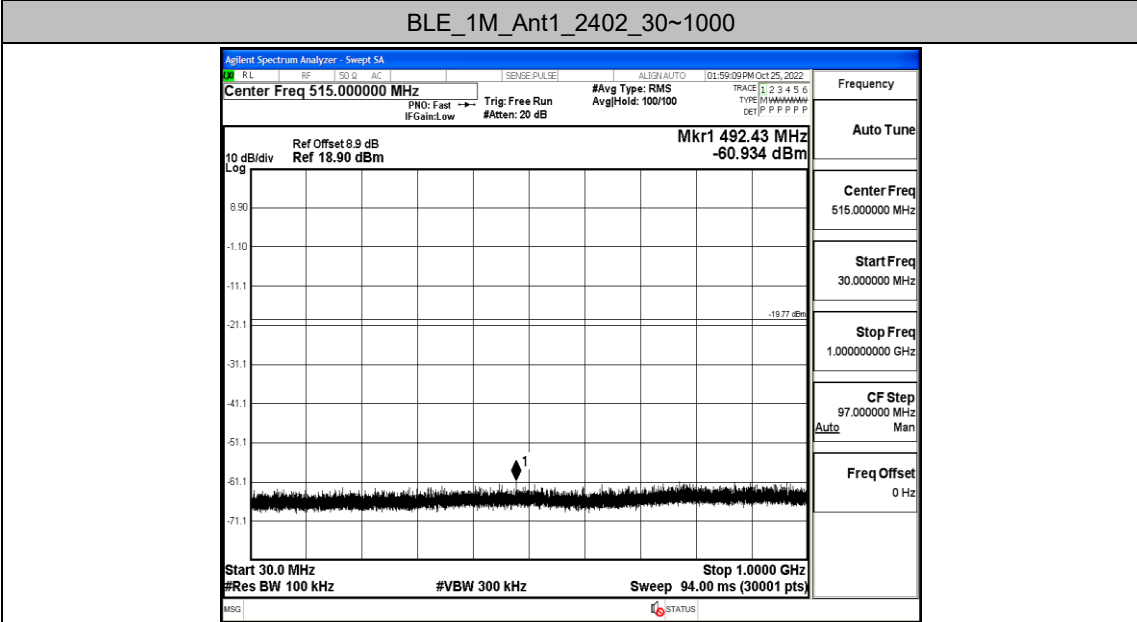
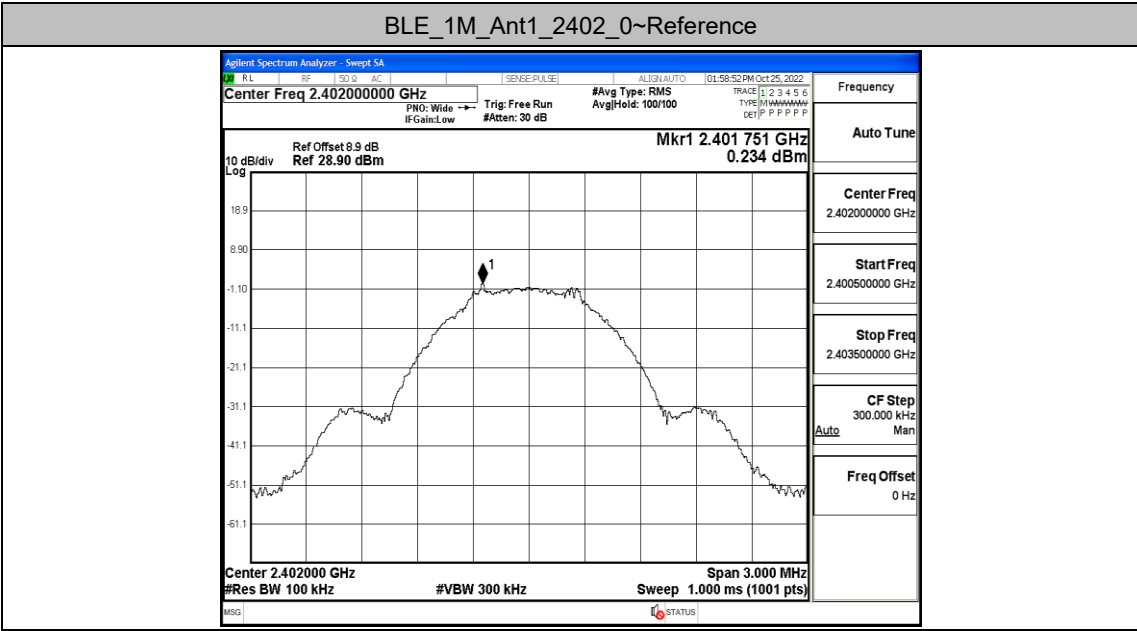


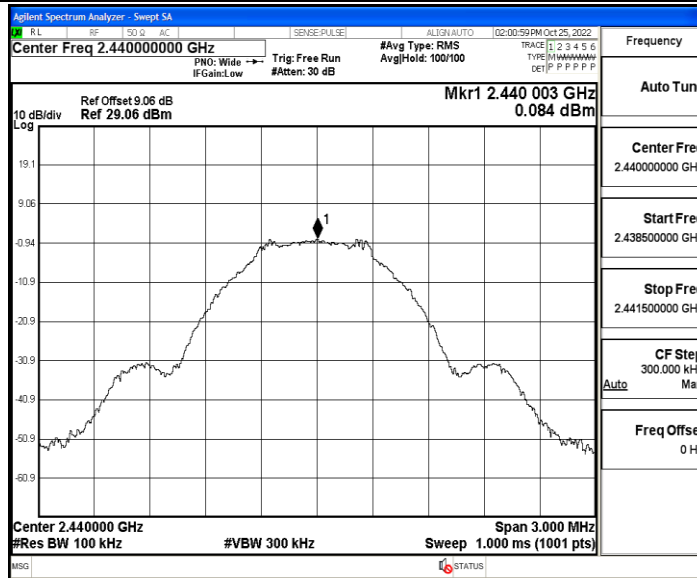
Appendix F: Conducted Spurious Emission

Test Result

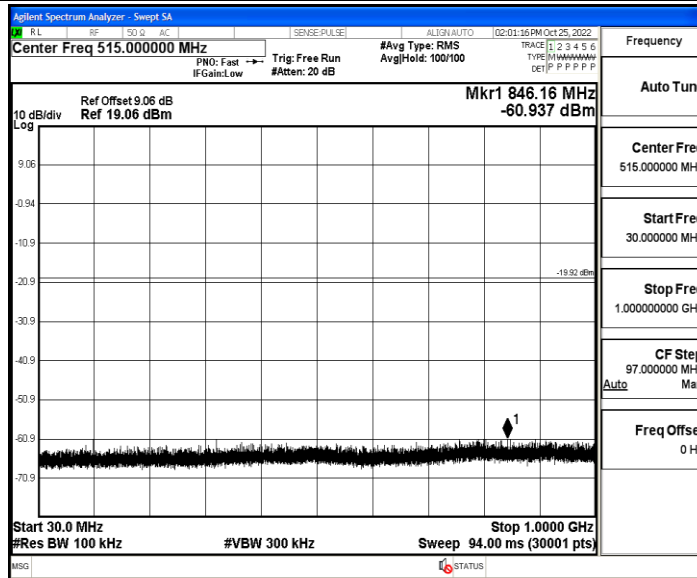
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.23	0.23	---	PASS
			30~1000	0.23	-60.93	≤-19.77	PASS
			1000~26500	0.23	-49.11	≤-19.77	PASS
		2440	Reference	0.08	0.08	---	PASS
			30~1000	0.08	-60.94	≤-19.92	PASS
			1000~26500	0.08	-48.96	≤-19.92	PASS
		2480	Reference	1.14	1.14	---	PASS
			30~1000	1.14	-60.58	≤-18.86	PASS
			1000~26500	1.14	-49.02	≤-18.86	PASS

Test Graphs

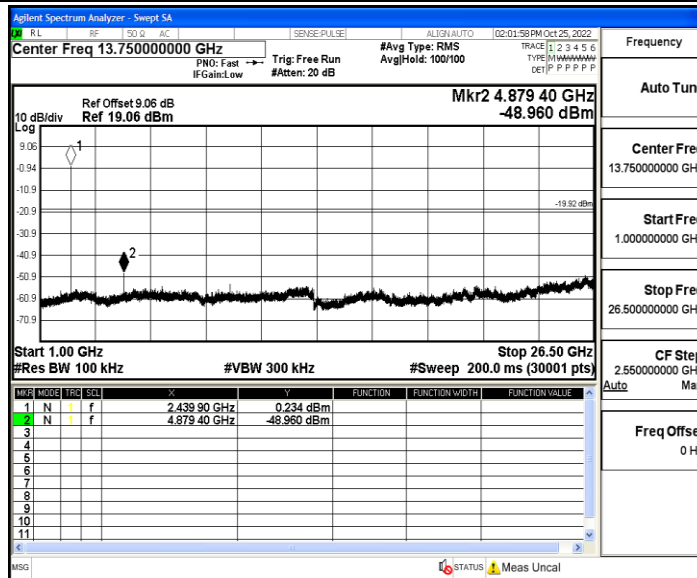




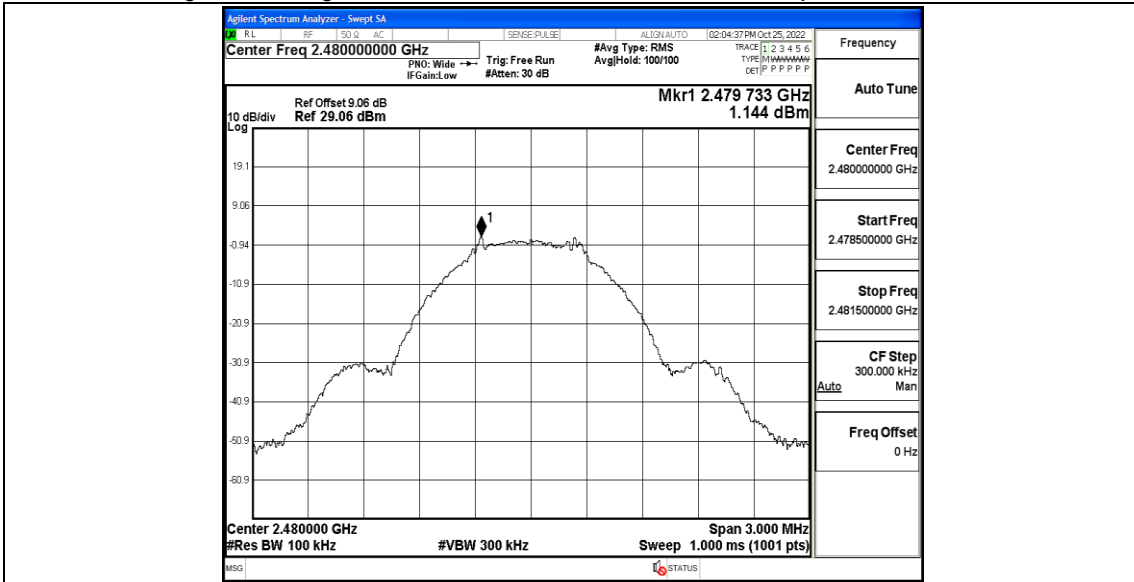
BLE_1M_Ant1_2440_30~100



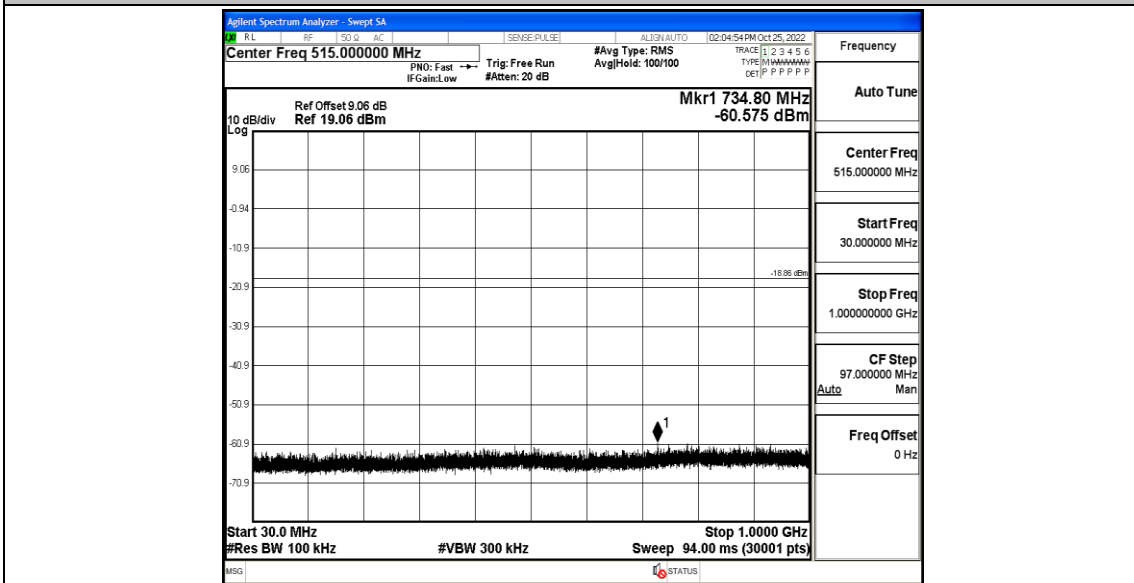
BLE_1M_Ant1_2440_1000~26500



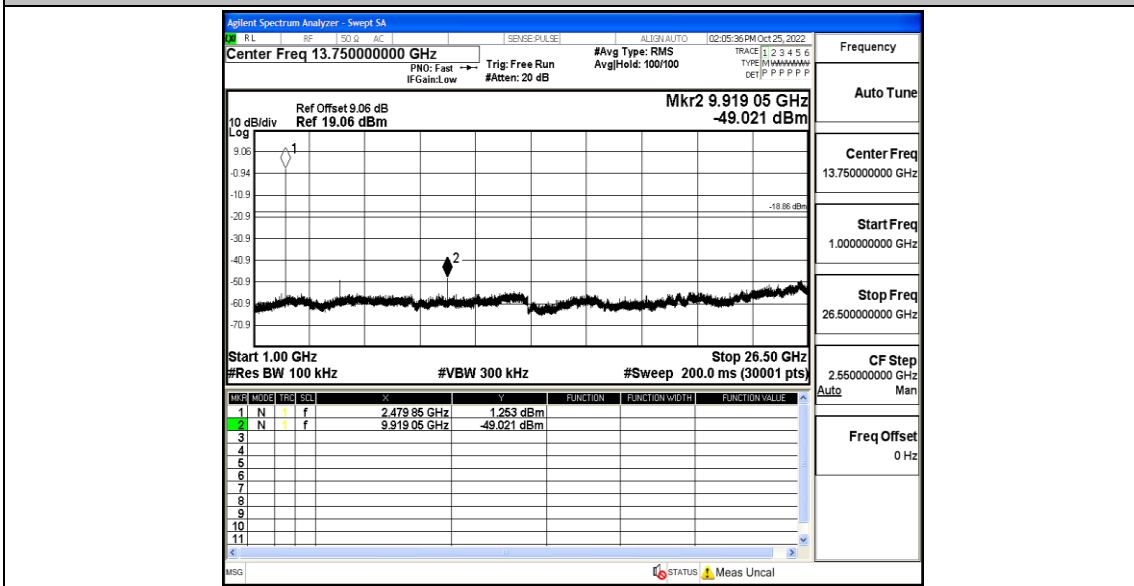
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_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	0.00	0.00	100	∞
		2440	0.00	0.00	100	∞
		2480	0.00	0.00	100	∞

Test Graphs



Appendix H: Emissions in Restricted Bands

Test Result

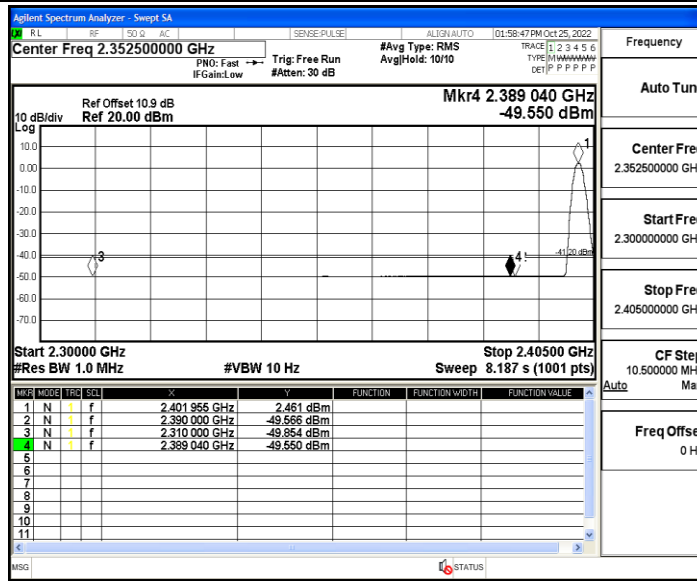
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-49.85	≤-41.20	PASS
				AV	2389.040	-49.55	≤-41.20	PASS
				AV	2390.000	-49.57	≤-41.20	PASS
				Peak	2310.000	-43.68	≤-21.20	PASS
				Peak	2364.785	-40.12	≤-21.20	PASS
				Peak	2390.000	-44.64	≤-21.20	PASS
		High	2480	AV	2483.500	-48.35	≤-41.20	PASS
				AV	2483.520	-48.35	≤-41.20	PASS
				AV	2500.000	-48.84	≤-41.20	PASS
				Peak	2483.500	-43.55	≤-21.20	PASS
				Peak	2485.520	-39.94	≤-21.20	PASS
				Peak	2500.000	-42.59	≤-21.20	PASS

Note:

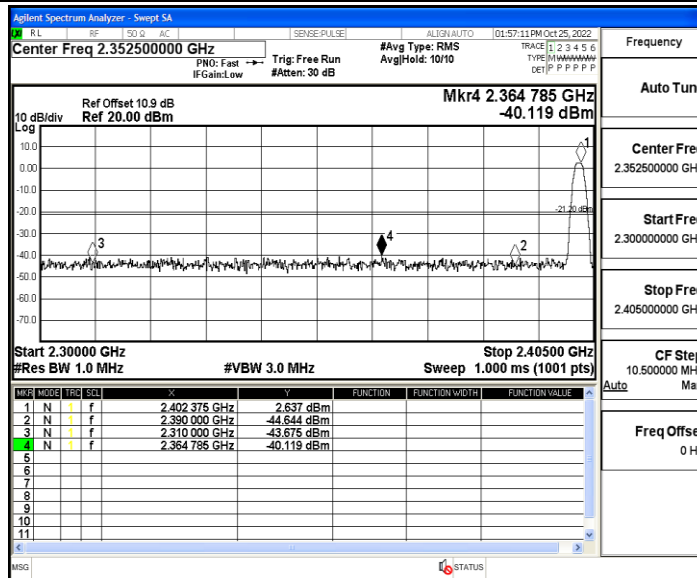
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

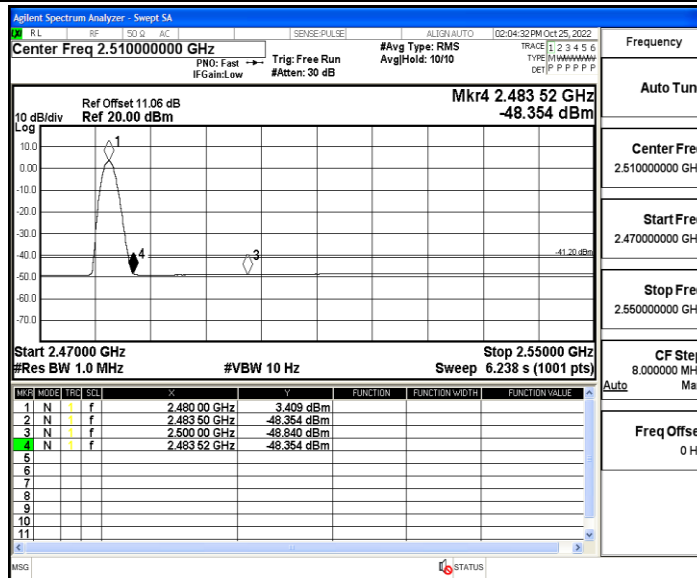
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

