

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

Product Name: D84 Mechanical keyboard

Trade Mark: DUSTSILVER

Test Model: D84

FCC ID: 2A7D6-D84

Environmental Conditions

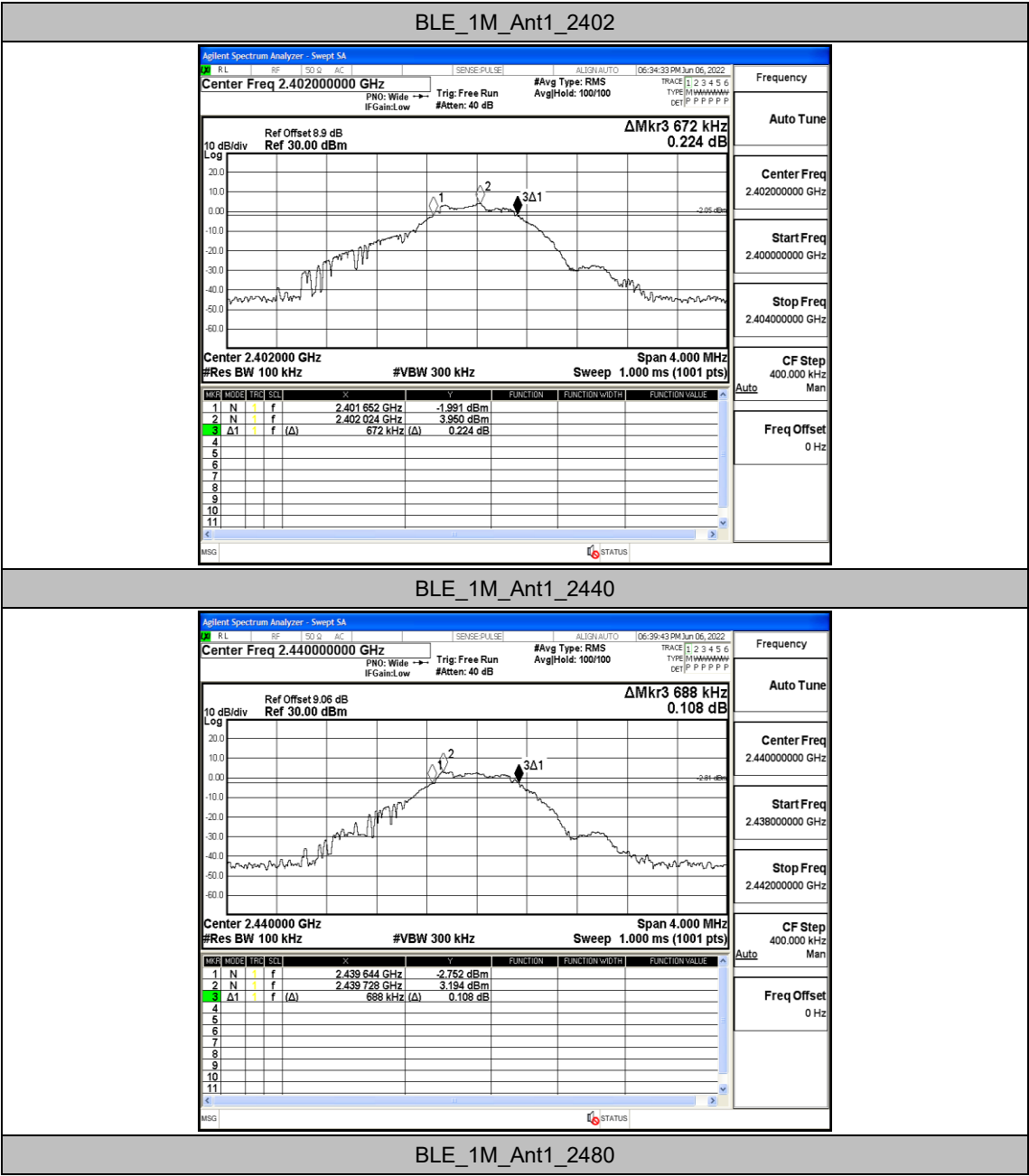
Temperature:	22.7℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

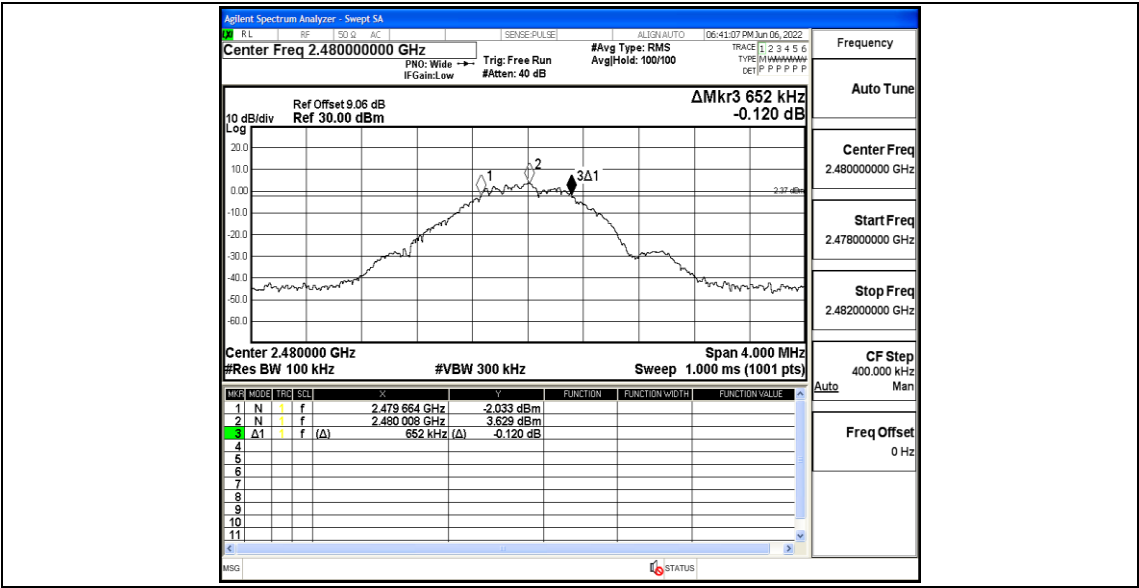
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.652	2402.324	0.5	PASS
		2440	0.688	2439.644	2440.332	0.5	PASS
		2480	0.652	2479.664	2480.316	0.5	PASS

Test Graphs





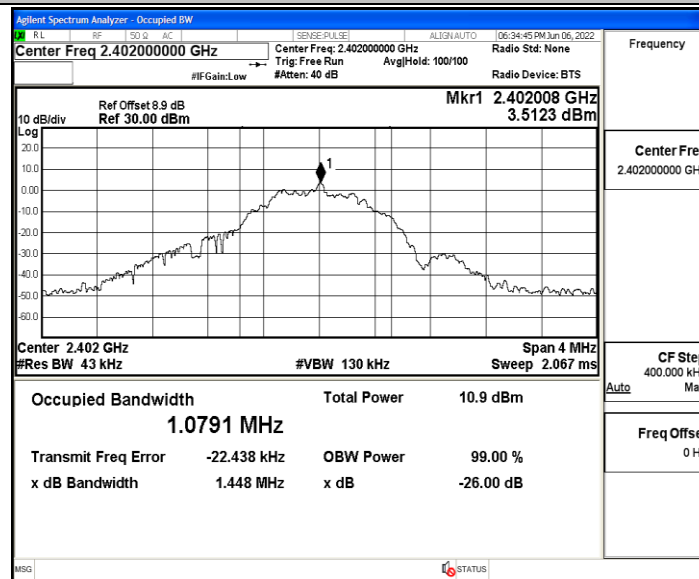
Appendix B: Occupied Channel Bandwidth

Test Result

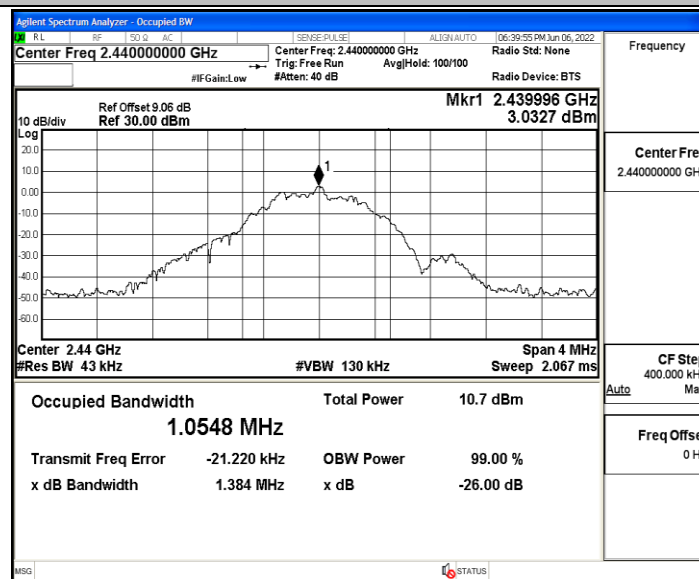
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0791	2401.438	2402.517	---	---
		2440	1.0548	2439.451	2440.506	---	---
		2480	1.0385	2479.474	2480.513	---	---

Test Graphs

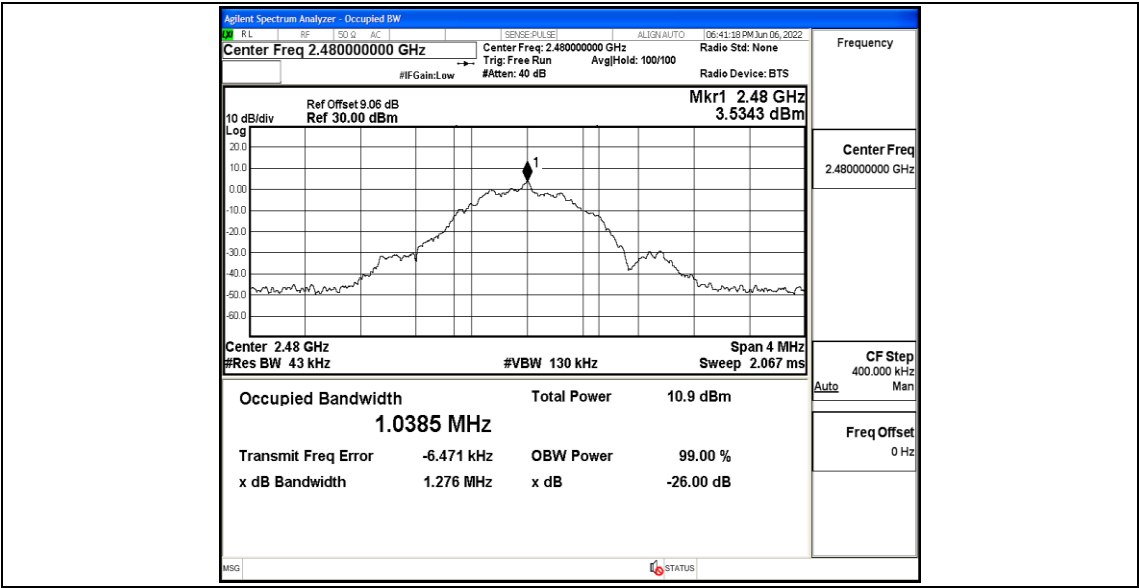
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

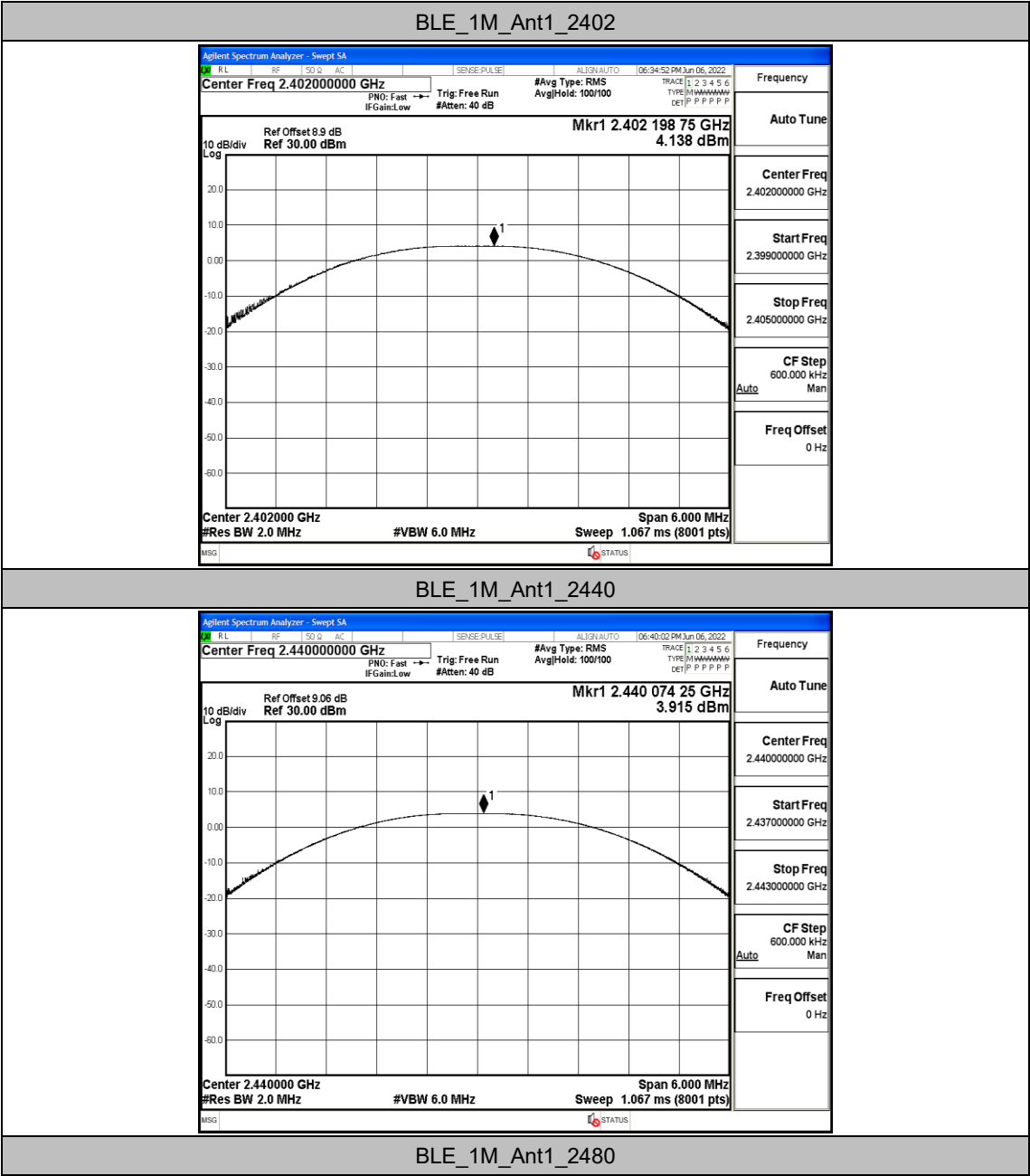


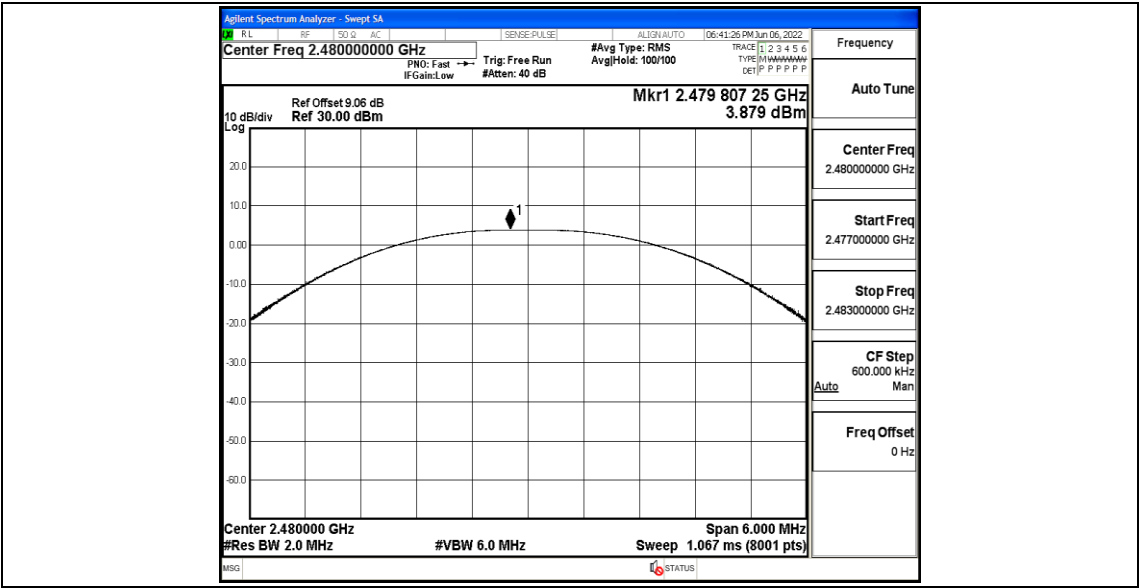
Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	4.14	≤30	PASS
		2440	3.92	≤30	PASS
		2480	3.88	≤30	PASS

Test Graphs



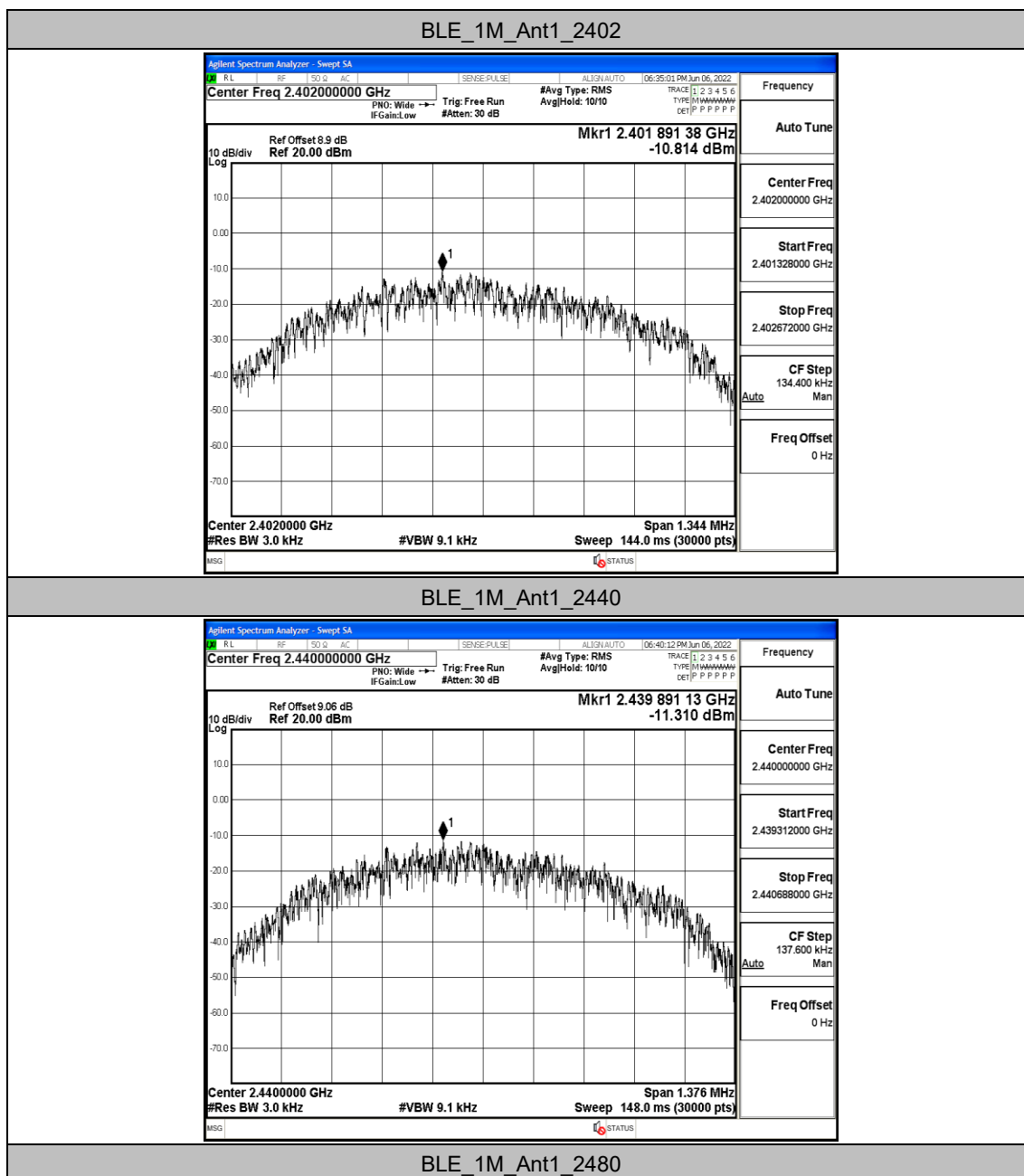


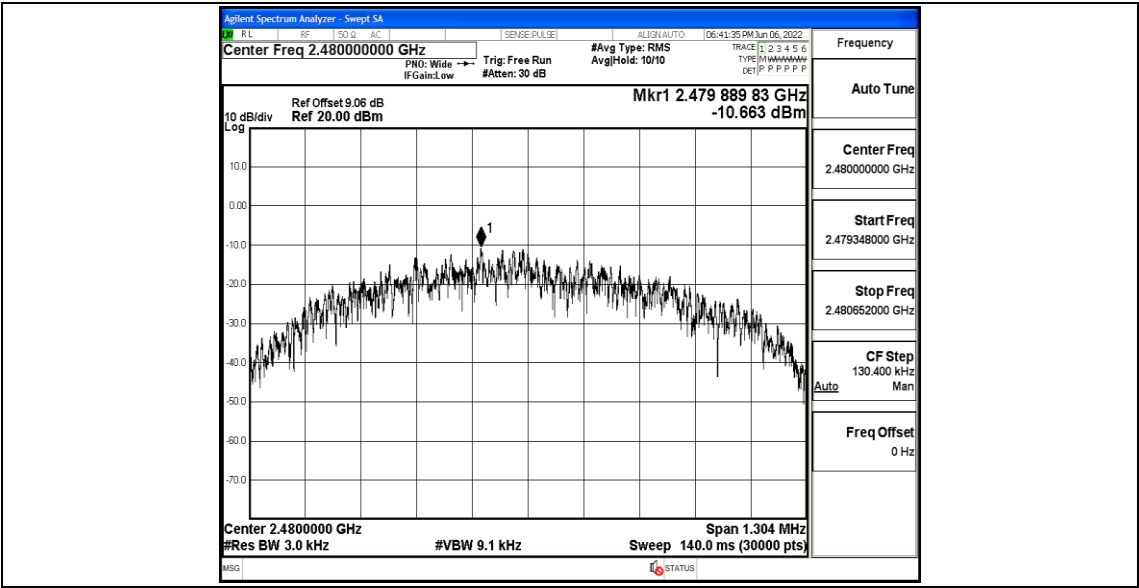
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.81	≤8.00	PASS
		2440	-11.31	≤8.00	PASS
		2480	-10.66	≤8.00	PASS

Test Graphs





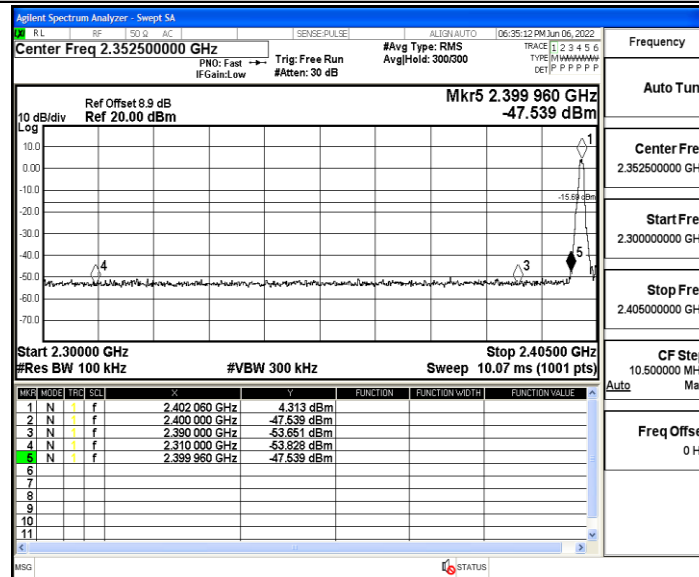
Appendix E: Band edge measurements

Test Result

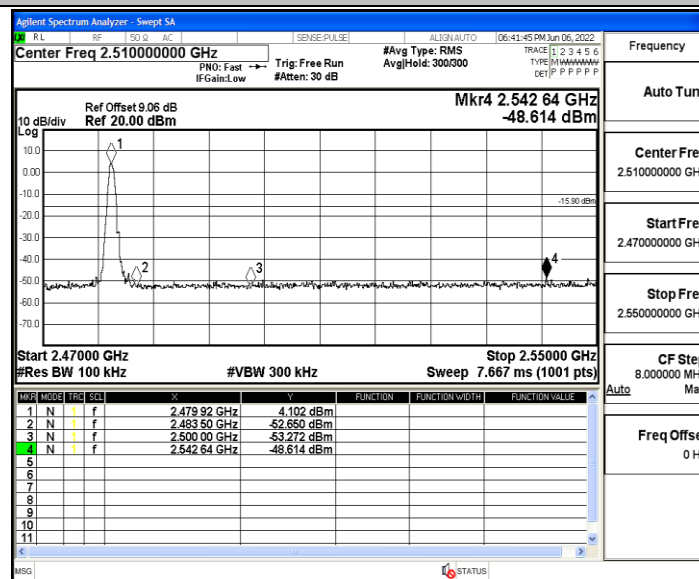
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	4.31	-47.54	≤-15.69	PASS
		High	2480	4.10	-48.61	≤-15.9	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

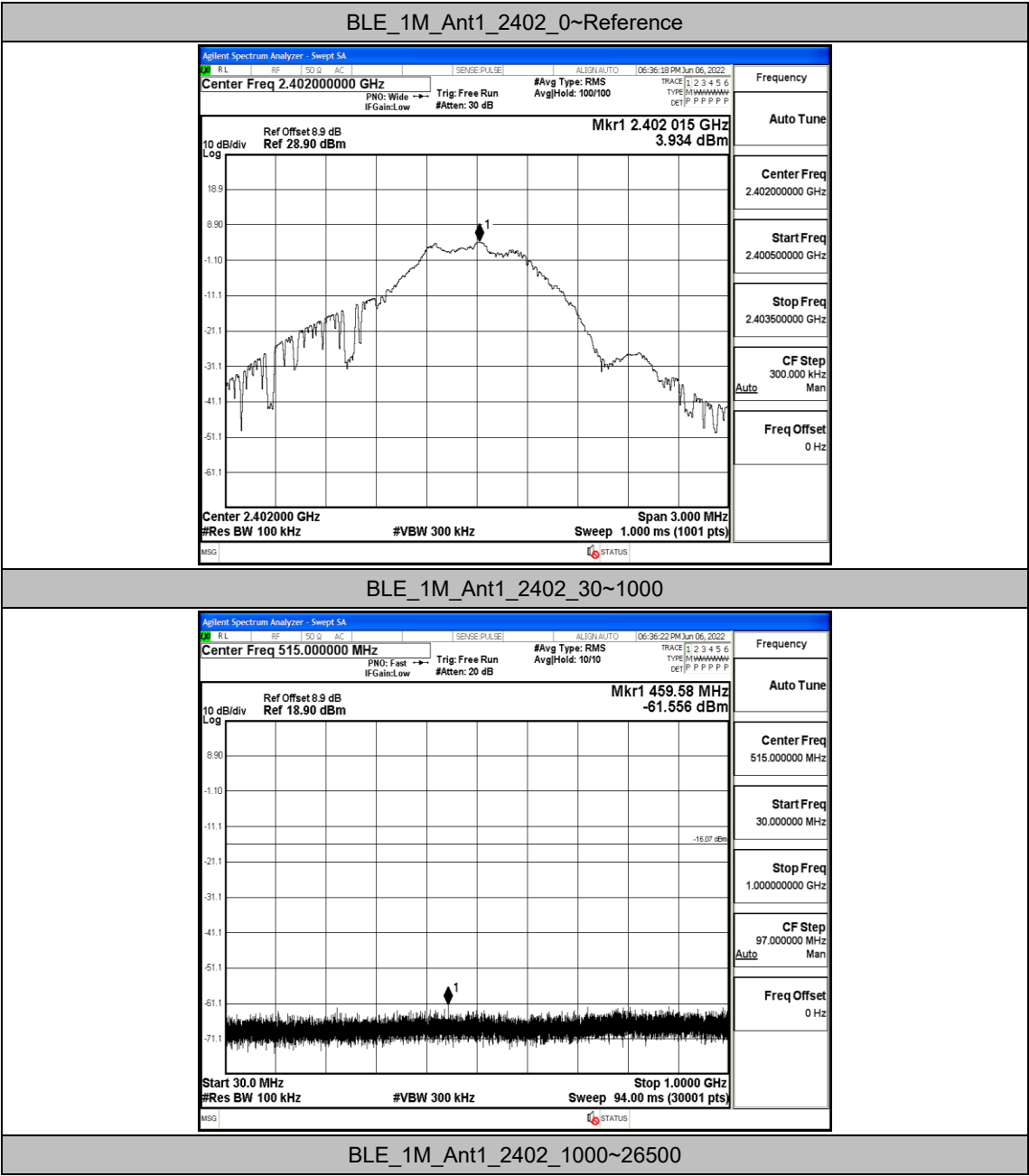


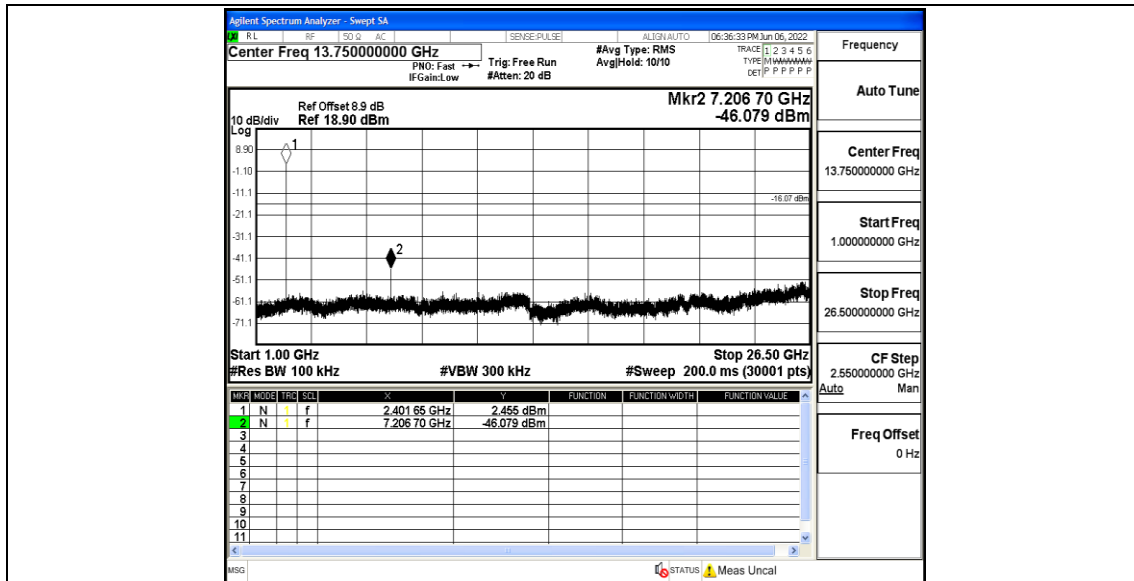
Appendix F: Conducted Spurious Emission

Test Result

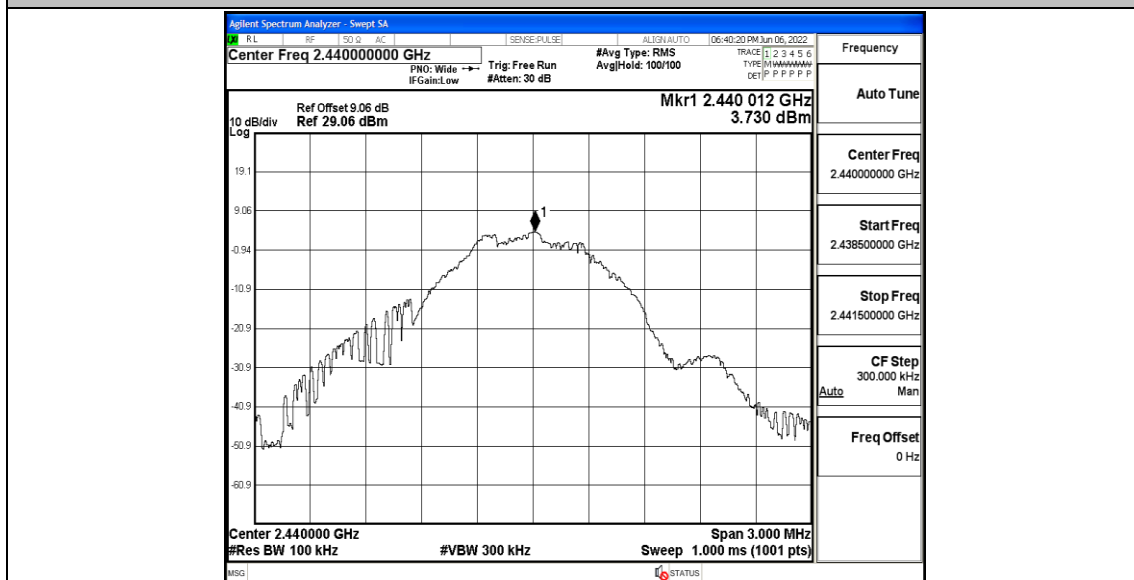
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.93	3.93	---	PASS
			30~1000	3.93	-61.56	≤-16.07	PASS
			1000~26500	3.93	-46.08	≤-16.07	PASS
		2440	Reference	3.73	3.73	---	PASS
			30~1000	3.73	-60.45	≤-16.27	PASS
			1000~26500	3.73	-47.6	≤-16.27	PASS
		2480	Reference	3.80	3.80	---	PASS
			30~1000	3.80	-61.86	≤-16.2	PASS
			1000~26500	3.80	-50.93	≤-16.2	PASS

Test Graphs

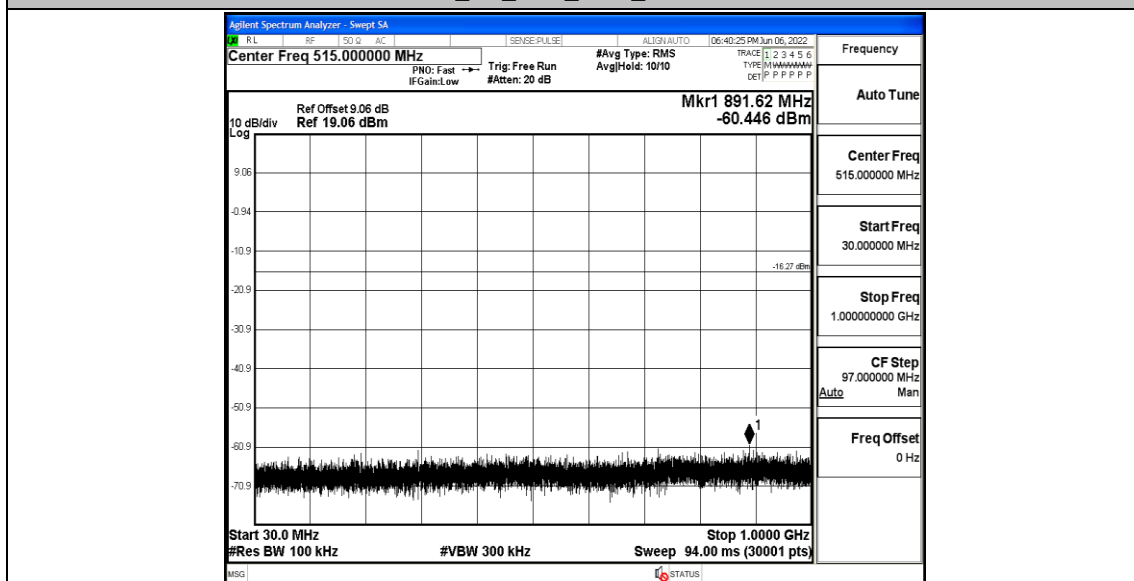


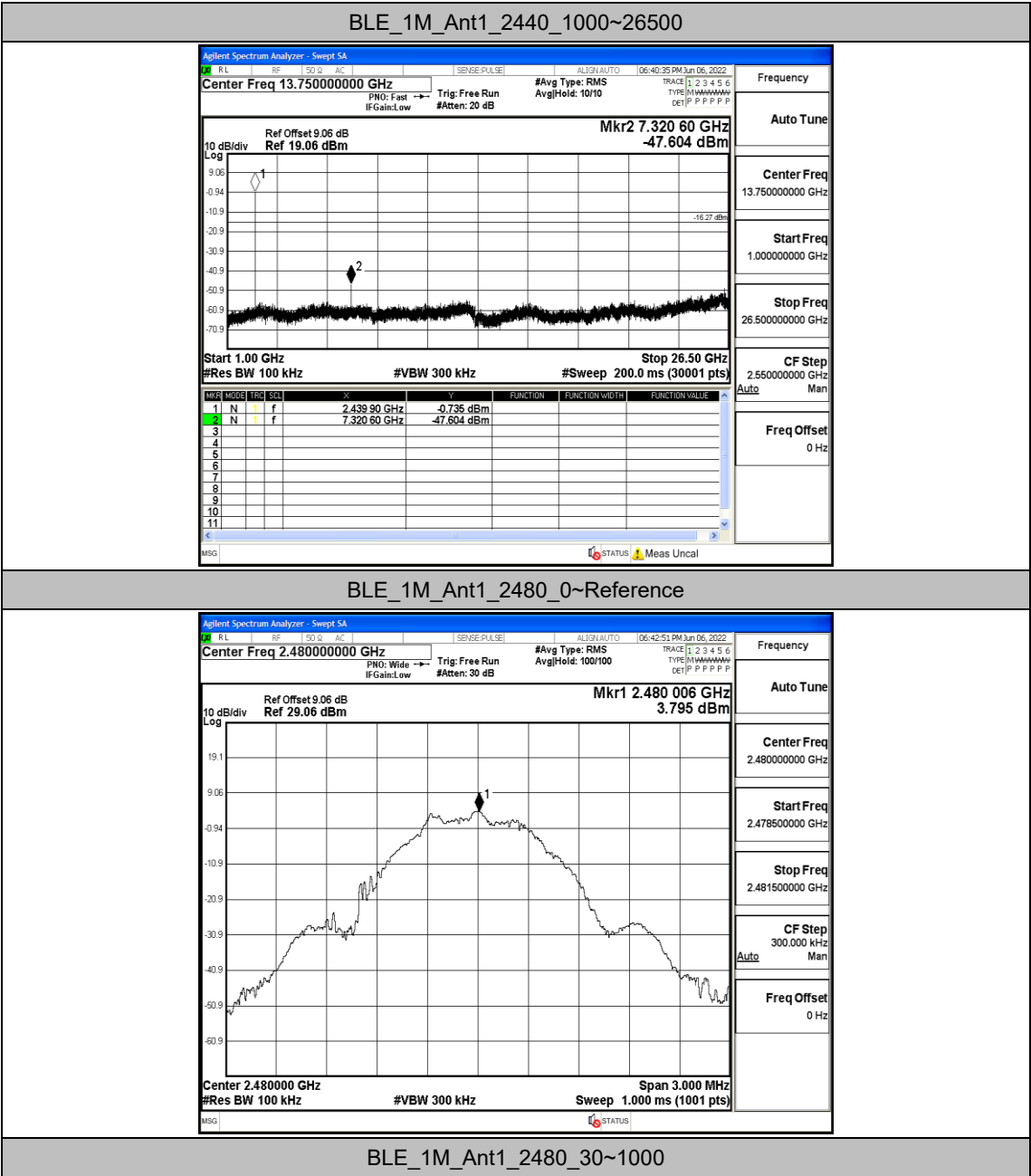


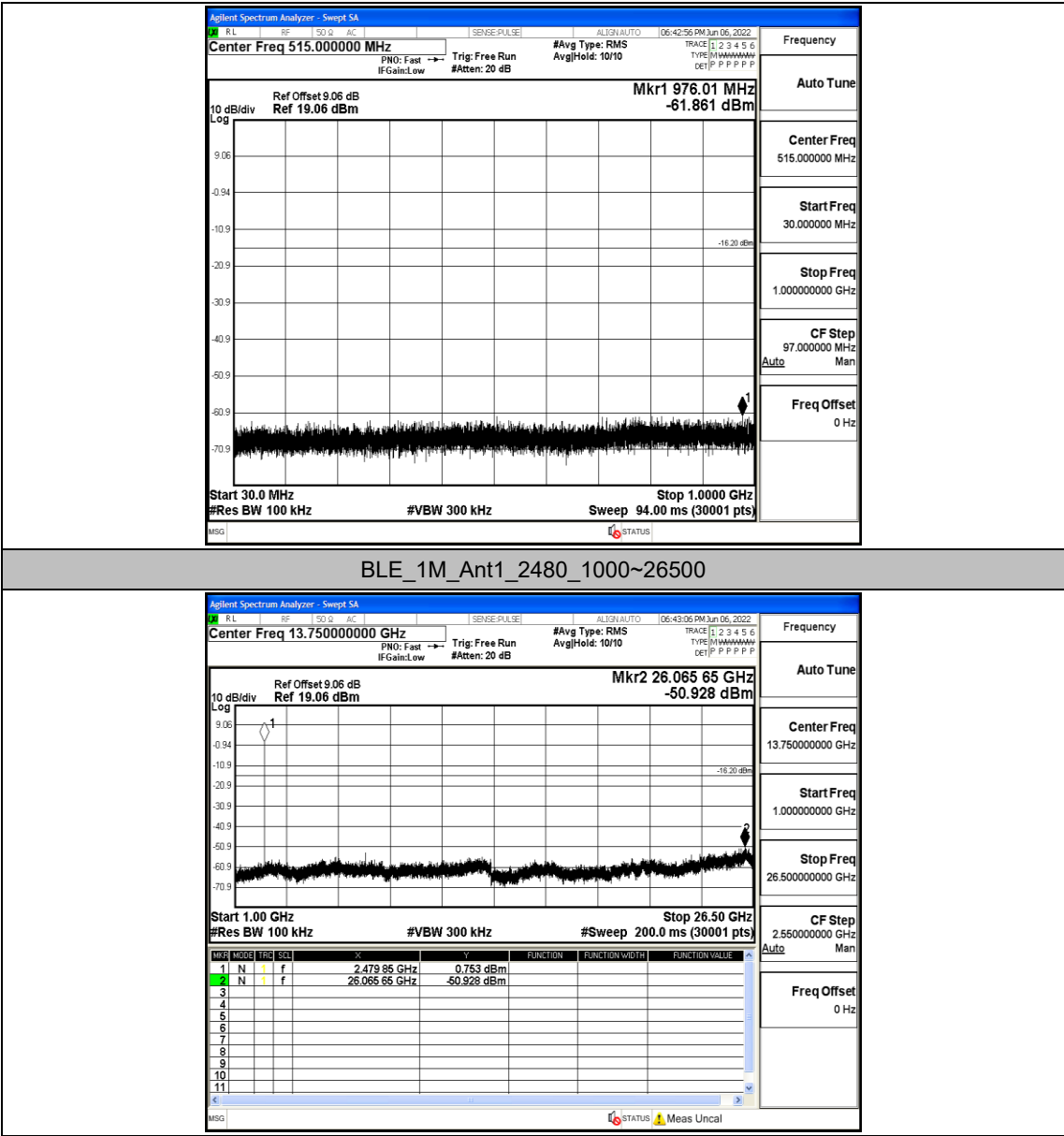
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000





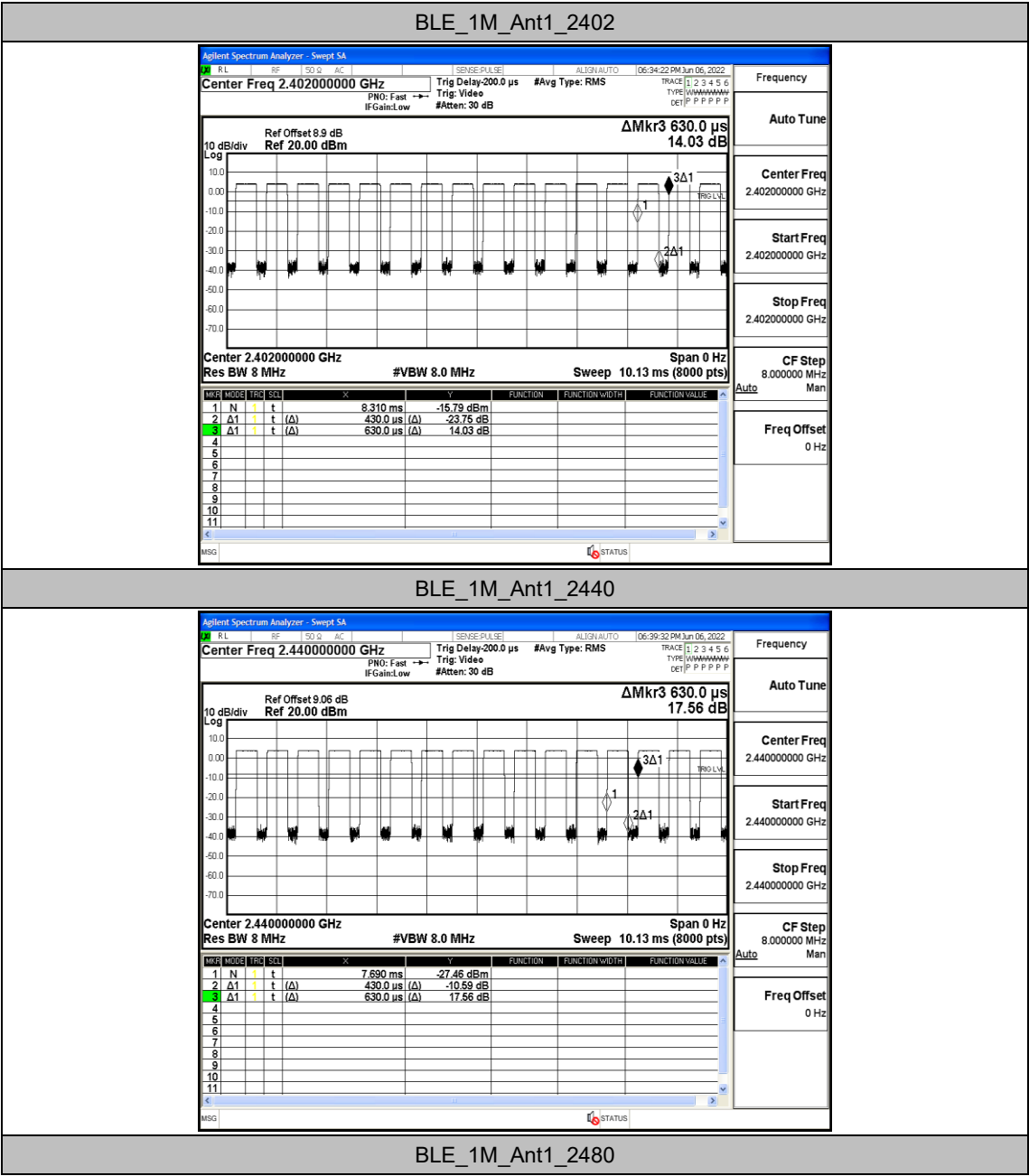


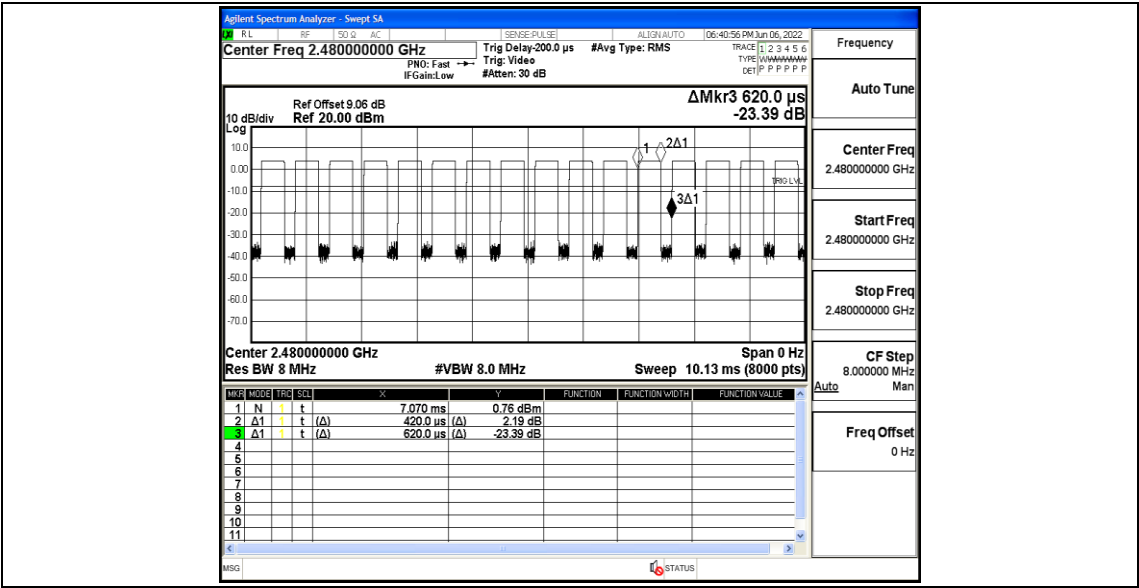
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.43	0.63	68.25	2.33
		2440	0.43	0.63	68.25	2.33
		2480	0.42	0.62	67.74	2.38

Test Graphs





Appendix H: Emissions in Restricted Bands

Test Result

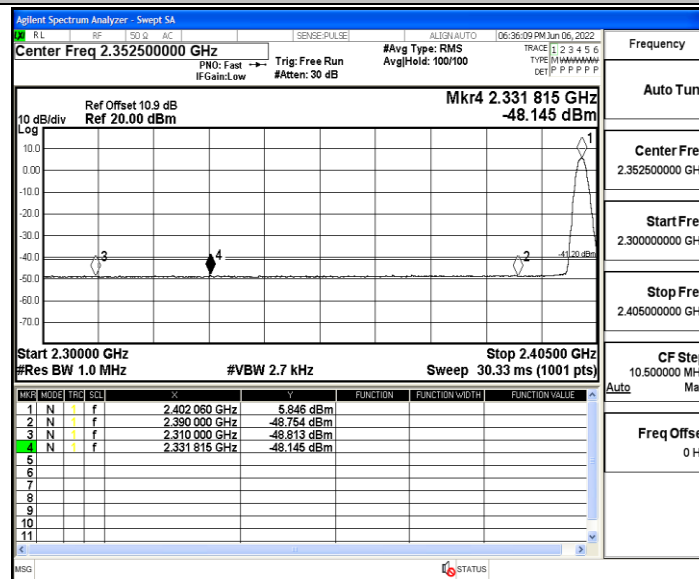
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.81	≤-41.20	PASS
				AV	2331.815	-48.15	≤-41.20	PASS
				AV	2390.000	-48.75	≤-41.20	PASS
				Peak	2310.000	-42.07	≤-21.20	PASS
				Peak	2374.550	-39.27	≤-21.20	PASS
				Peak	2390.000	-42.36	≤-21.20	PASS
		High	2480	AV	2483.500	-46.57	≤-41.20	PASS
				AV	2483.520	-46.57	≤-41.20	PASS
				AV	2500.000	-47.9	≤-41.20	PASS
				Peak	2483.500	-39.35	≤-21.20	PASS
				Peak	2494.720	-39.04	≤-21.20	PASS
				Peak	2500.000	-40.76	≤-21.20	PASS

Note:

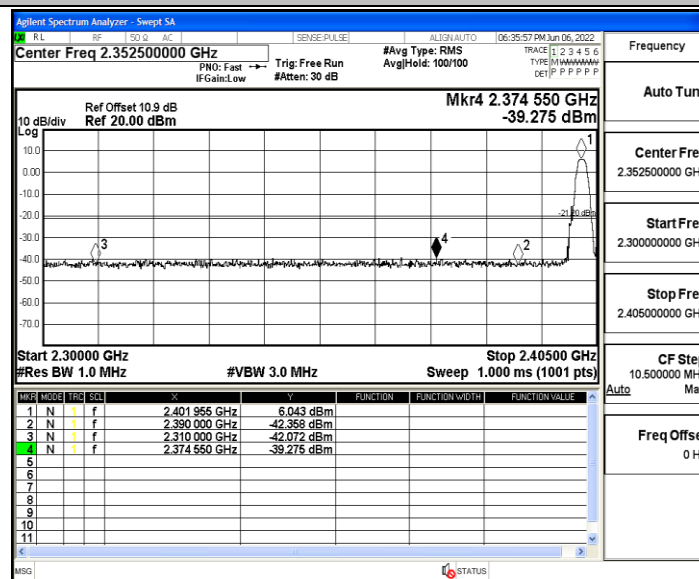
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV

