

Appendix A

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

Product Name: Wireless Vertical Ergonomic Mouse

Trade Mark: N/A

Test Model: IWG-SGM01

FCC ID: 2A5DLSG00002

Environmental Conditions

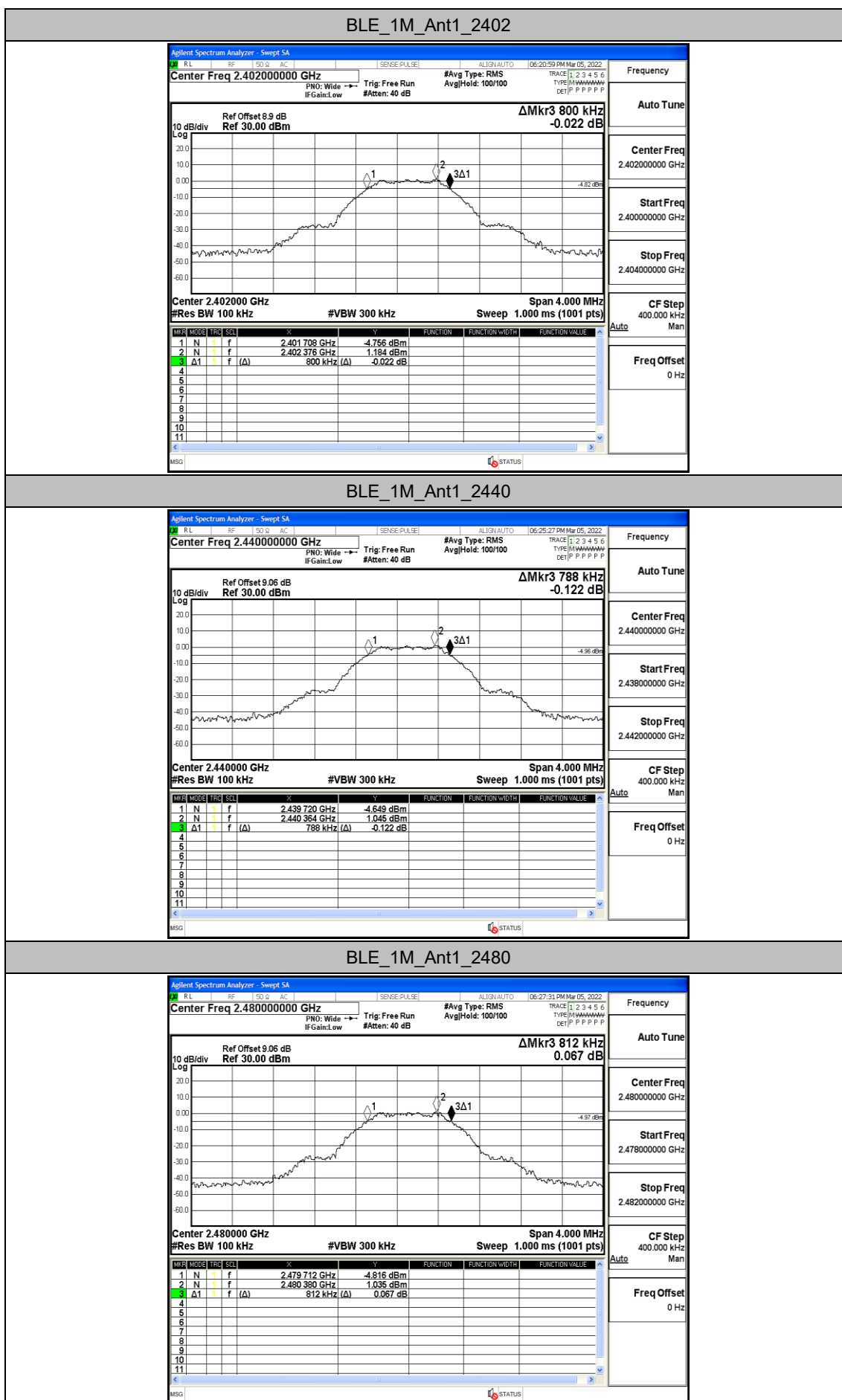
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.800	2401.708	2402.508	0.5	PASS
		2440	0.788	2439.720	2440.508	0.5	PASS
		2480	0.812	2479.712	2480.524	0.5	PASS

Test Graphs

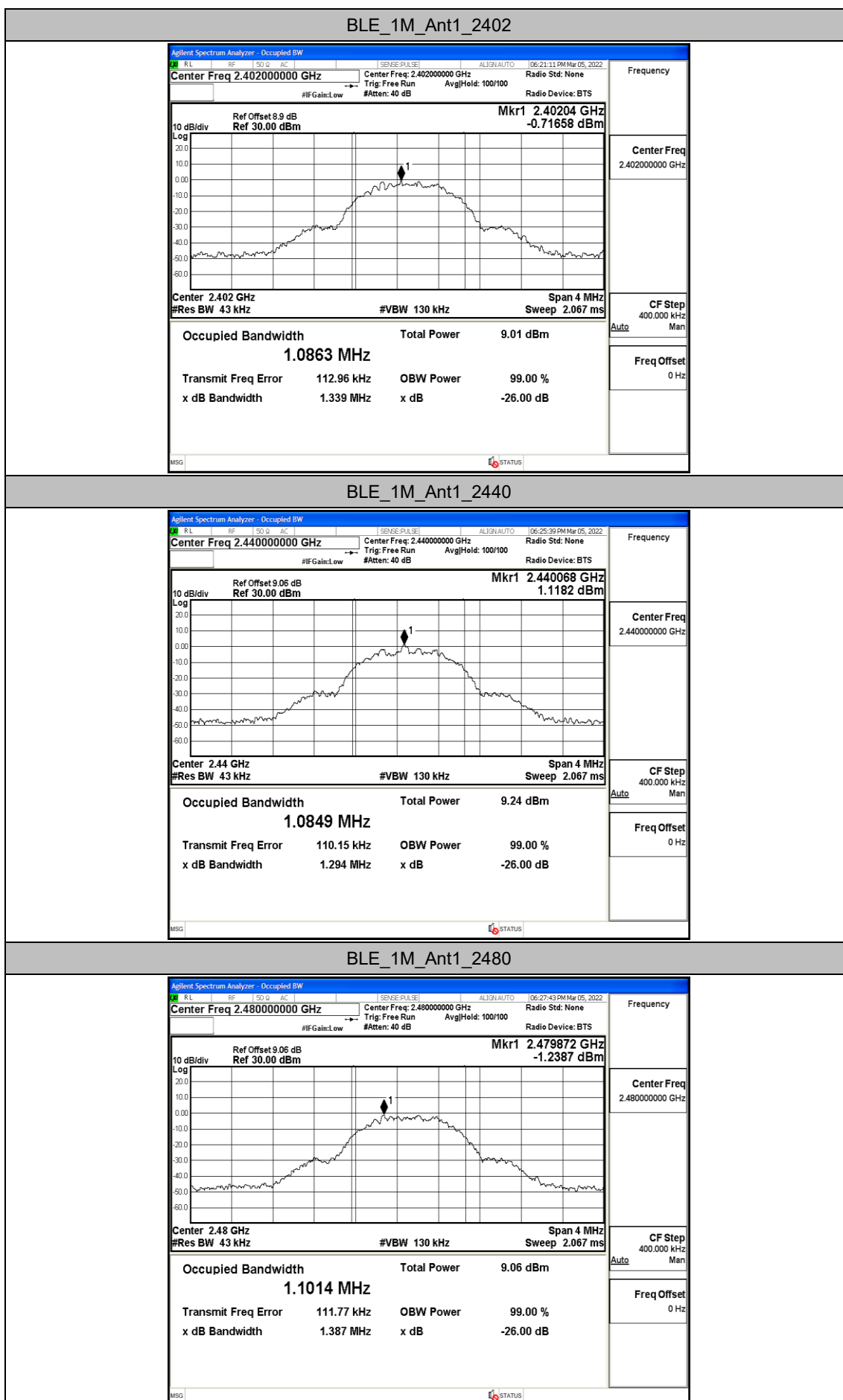


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0863	2401.570	2402.656	---	---
		2440	1.0849	2439.568	2440.653	---	---
		2480	1.1014	2479.561	2480.662	---	---

Test Graphs

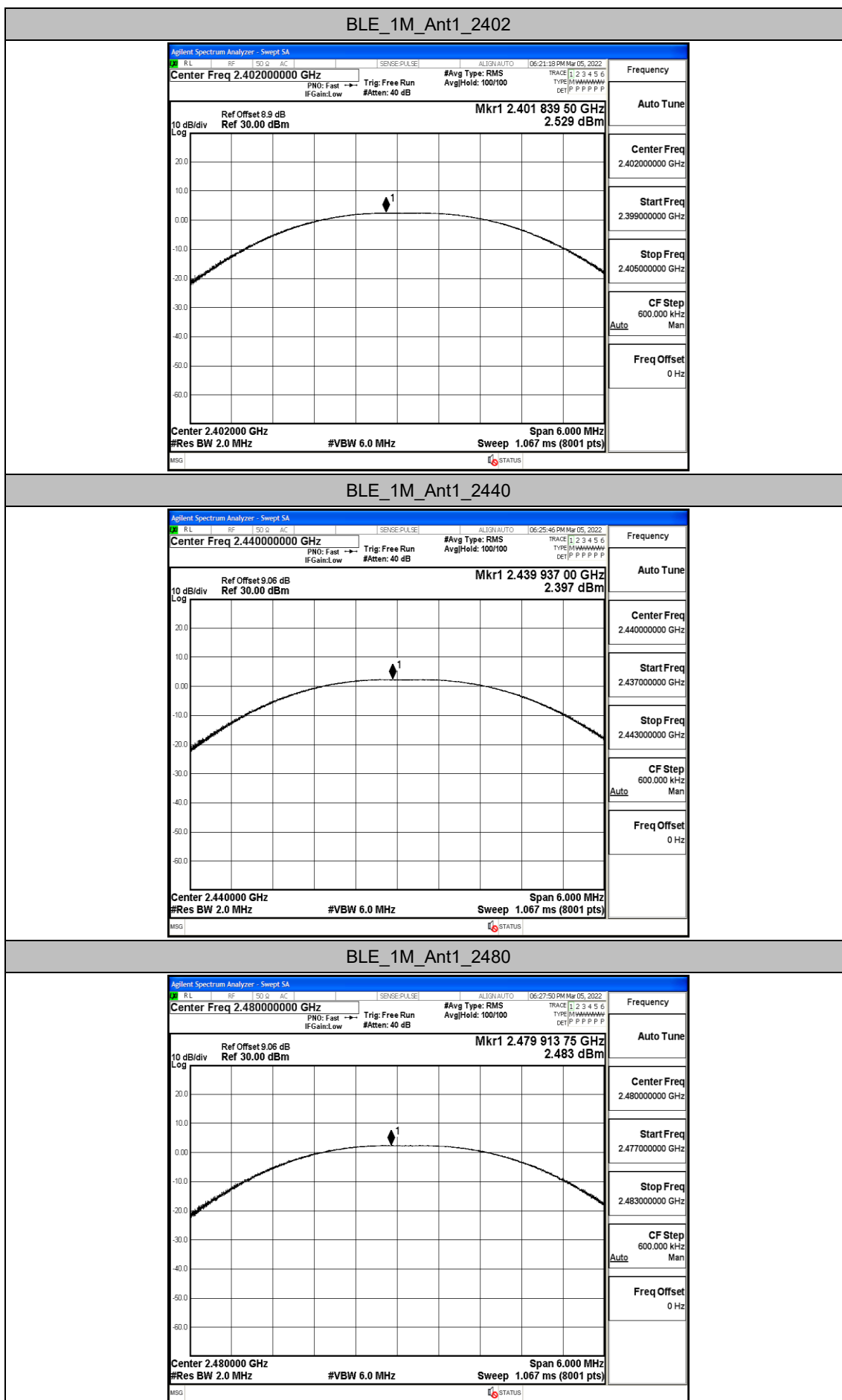


Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.53	≤30	PASS
		2440	2.4	≤30	PASS
		2480	2.48	≤30	PASS

Test Graphs

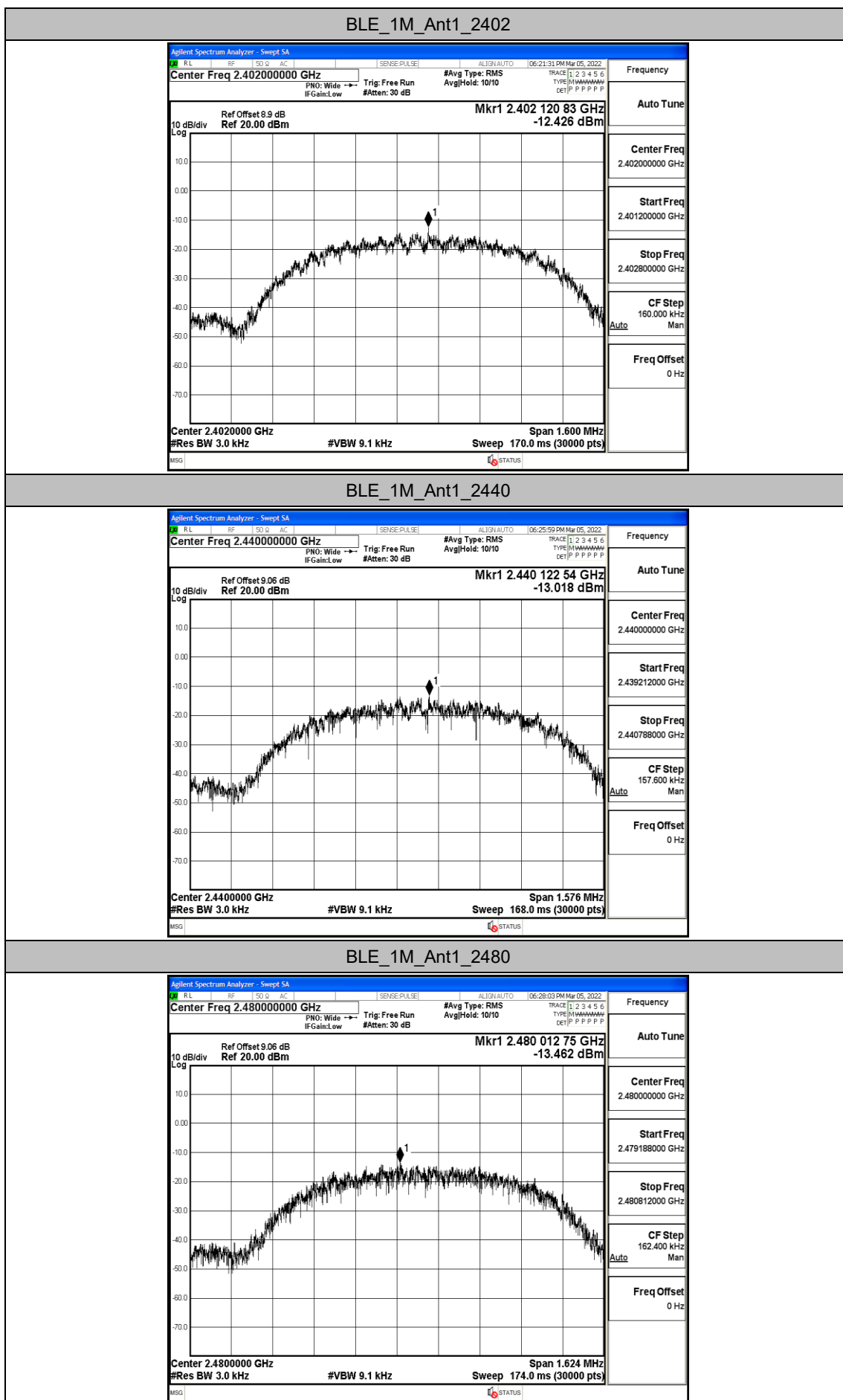


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.43	≤8.00	PASS
		2440	-13.02	≤8.00	PASS
		2480	-13.46	≤8.00	PASS

Test Graphs

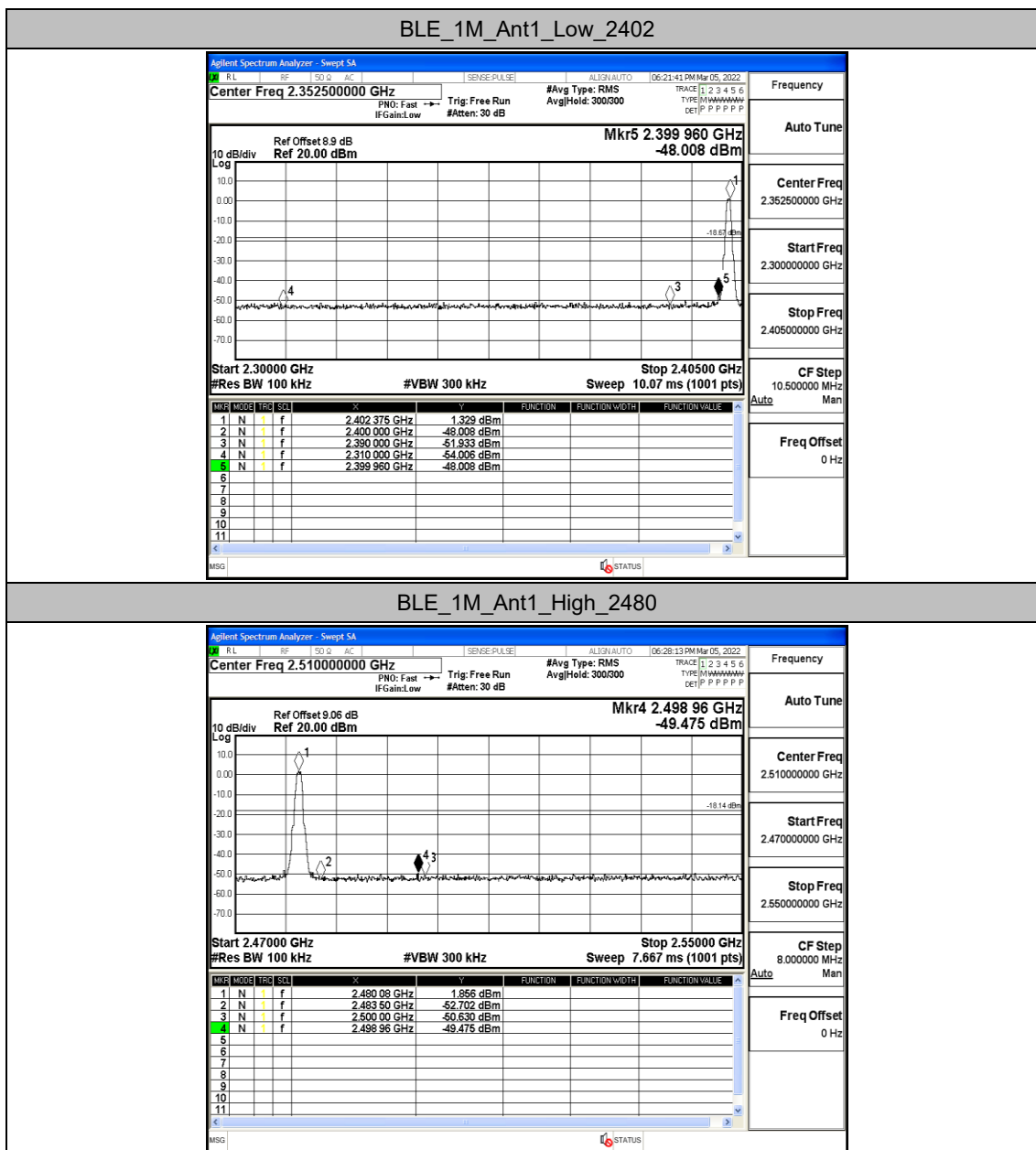


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.33	-48.01	≤-18.67	PASS
		High	2480	1.86	-49.48	≤-18.14	PASS

Test Graphs

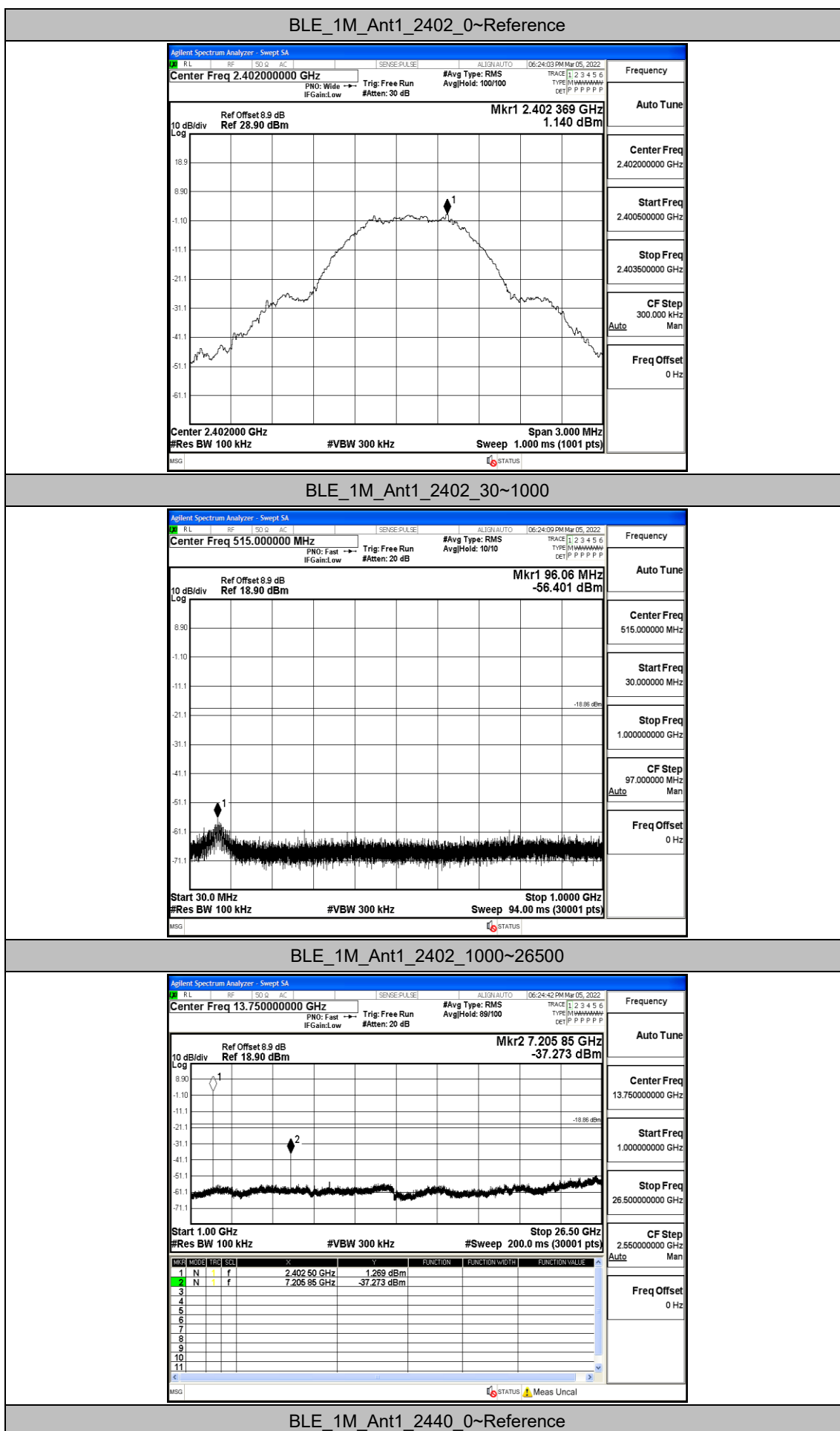


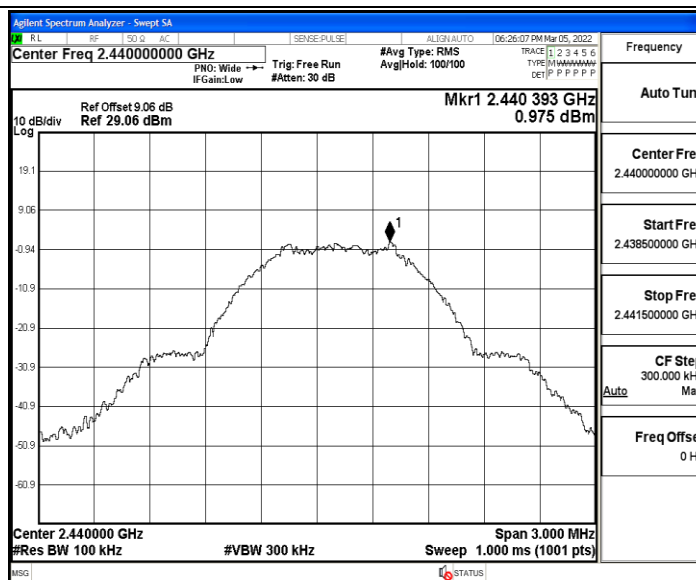
Appendix F: Conducted Spurious Emission

Test Result

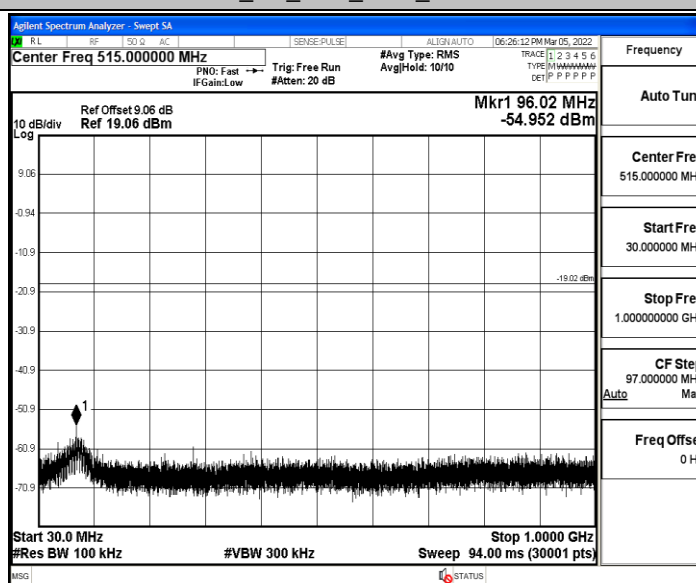
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.14	1.14	---	PASS
			30~1000	1.14	-56.4	≤-18.86	PASS
			1000~26500	1.14	-37.27	≤-18.86	PASS
		2440	Reference	0.98	0.98	---	PASS
			30~1000	0.98	-54.95	≤-19.02	PASS
			1000~26500	0.98	-35.62	≤-19.02	PASS
		2480	Reference	0.74	0.74	---	PASS
			30~1000	0.74	-56.49	≤-19.26	PASS
			1000~26500	0.74	-35.48	≤-19.26	PASS

Test Graphs

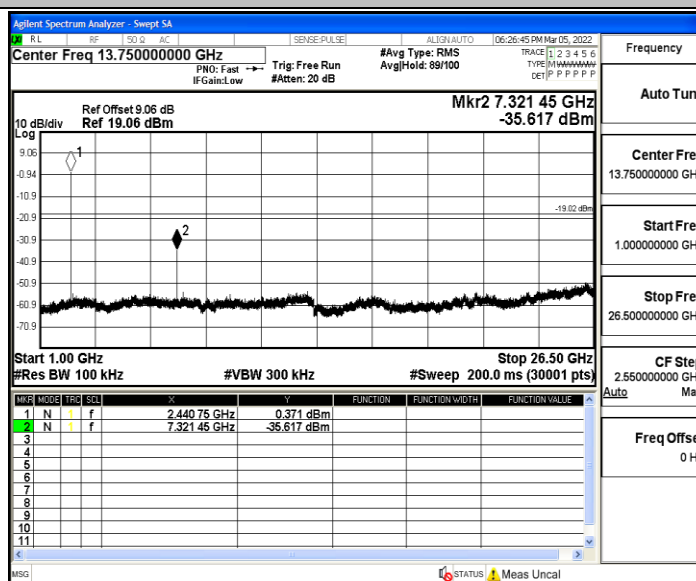




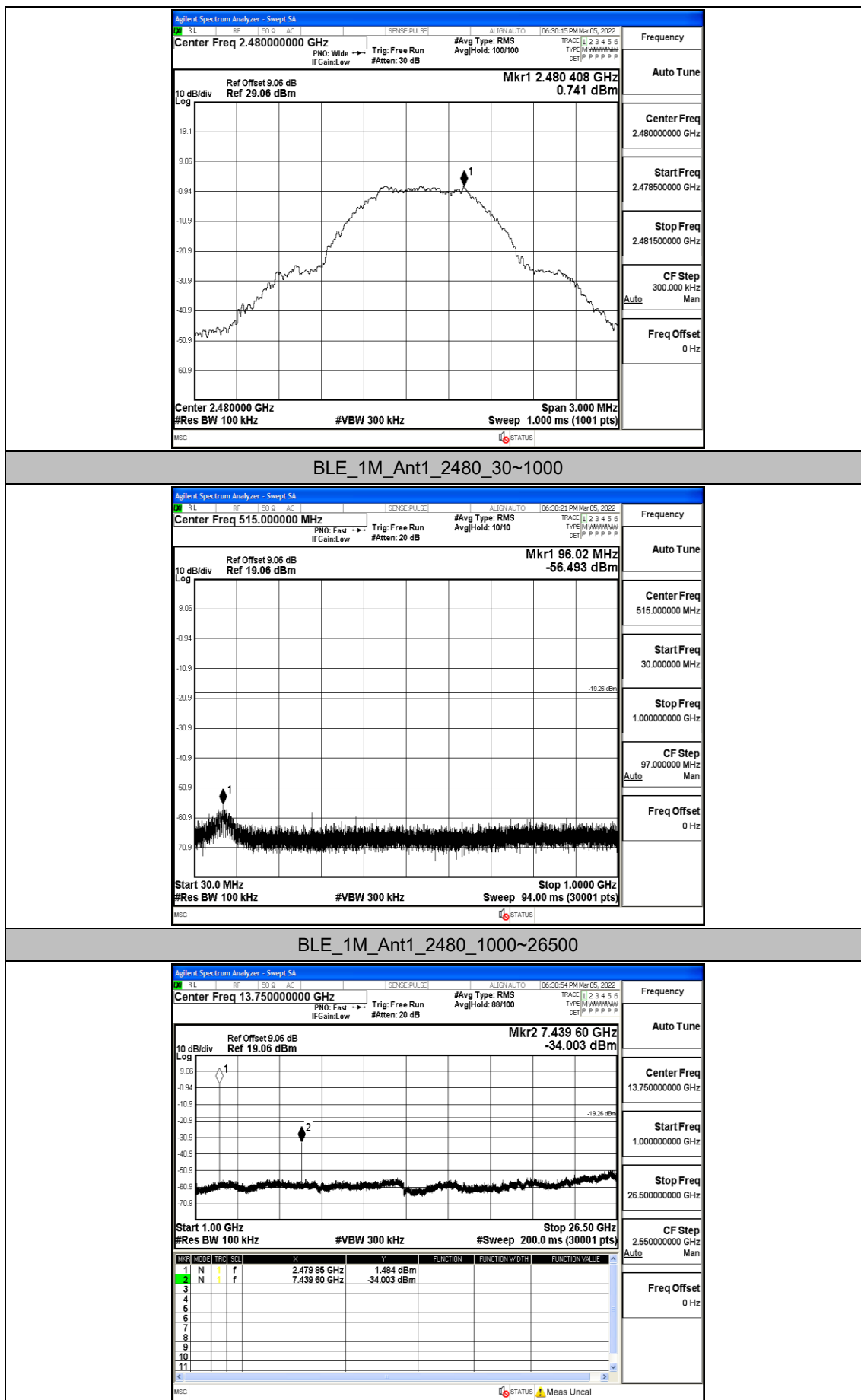
BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

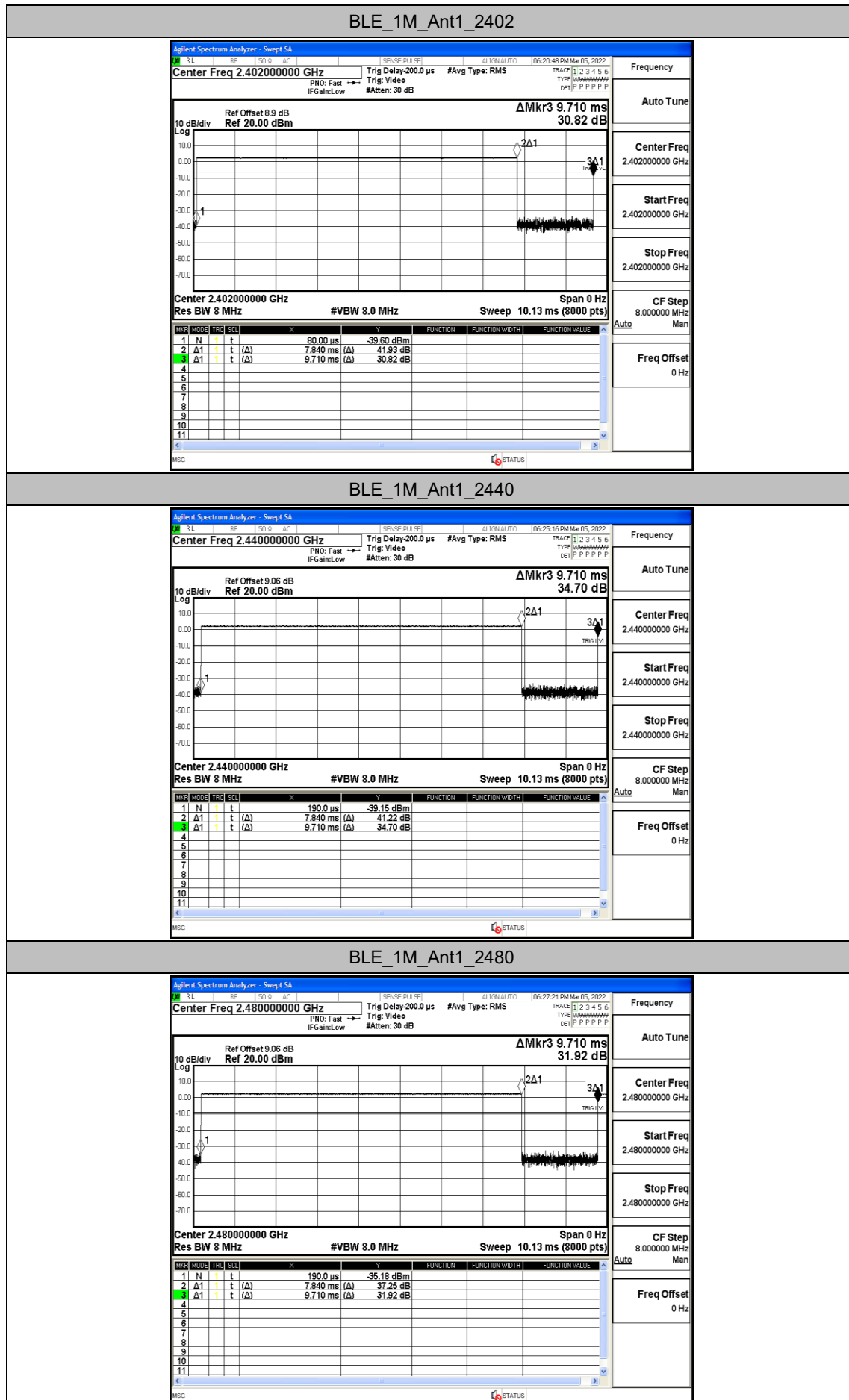


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	7.84	9.71	80.74	0.13
		2440	7.84	9.71	80.74	0.13
		2480	7.84	9.71	80.74	0.13

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	-49.61	≤-41.20	PASS
				AV	2386.730	-49.33	≤-41.20	PASS
				AV	2390.000	-49.34	≤-41.20	PASS
				Peak	2310.000	-42.53	≤-21.20	PASS
				Peak	2342.630	-39.19	≤-21.20	PASS
				Peak	2390.000	-42.39	≤-21.20	PASS
		High	2480	AV	2483.500	-46.84	≤-41.20	PASS
				AV	2483.520	-46.84	≤-41.20	PASS
				AV	2500.000	-48.7	≤-41.20	PASS
				Peak	2483.500	-39.23	≤-21.20	PASS
				Peak	2483.520	-39.23	≤-21.20	PASS
				Peak	2500.000	-41.6	≤-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

