

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

Product Name: Label Printer

Trade Mark: **MakeID**

Test Model: S1 Pro

FCC ID: 2AUMQ-S1PRO

Environmental Conditions

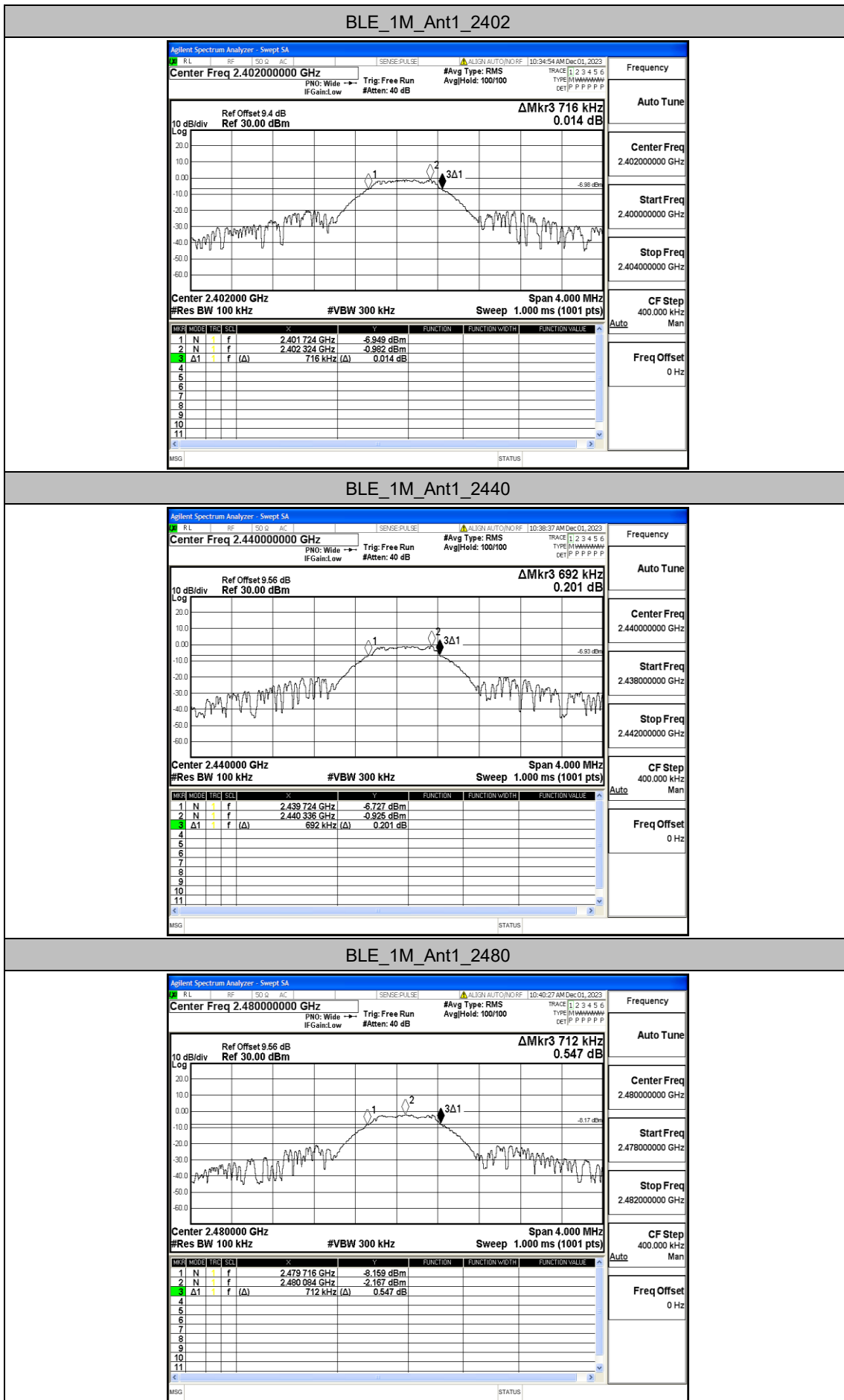
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.716	2401.724	2402.440	0.5	PASS
		2440	0.692	2439.724	2440.416	0.5	PASS
		2480	0.712	2479.716	2480.428	0.5	PASS

Test Graphs

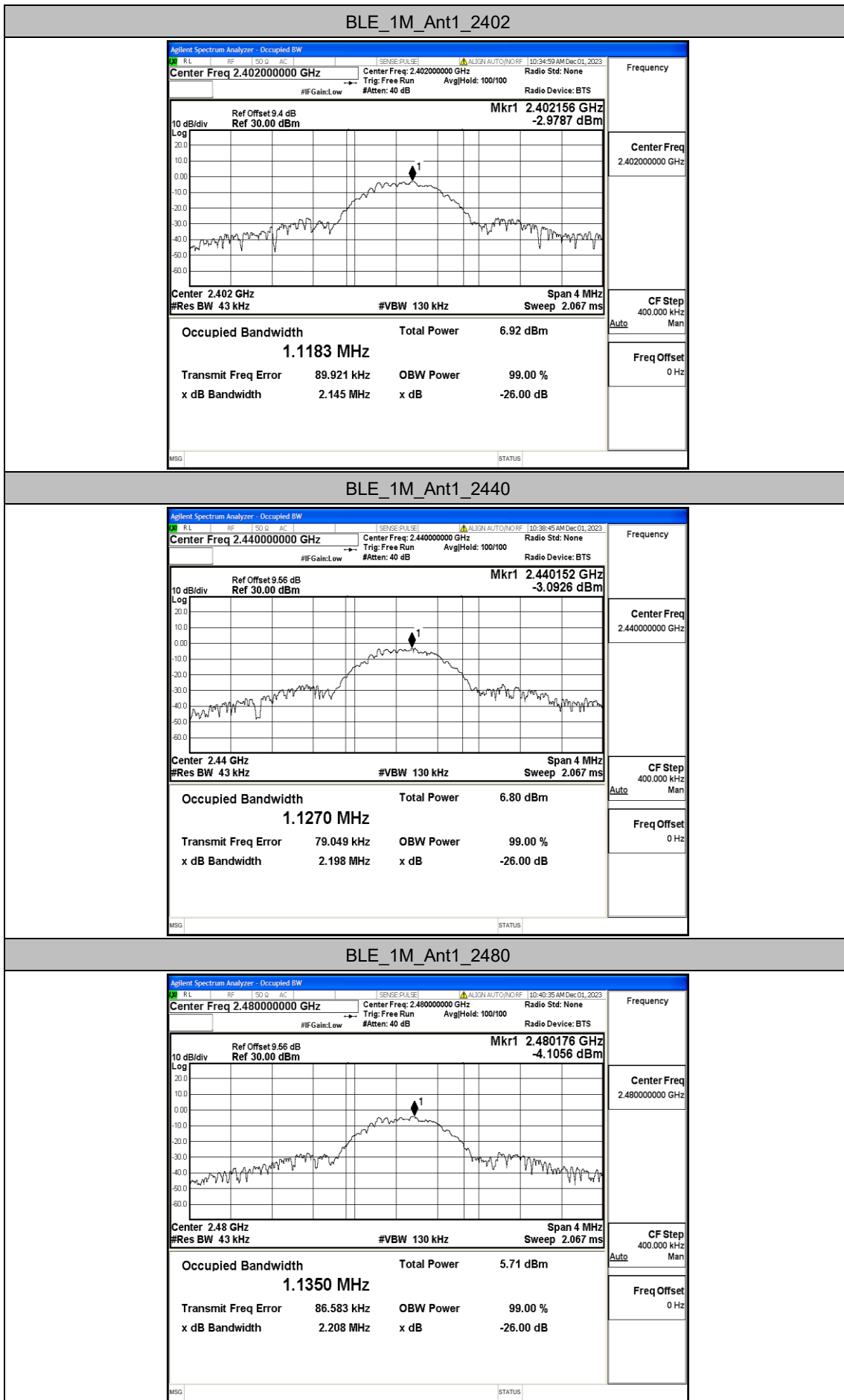


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.1183	2401.5308	2402.6491	---	---
		2440	1.1270	2439.5156	2440.6426	---	---
		2480	1.1350	2479.5191	2480.6541	---	---

Test Graphs

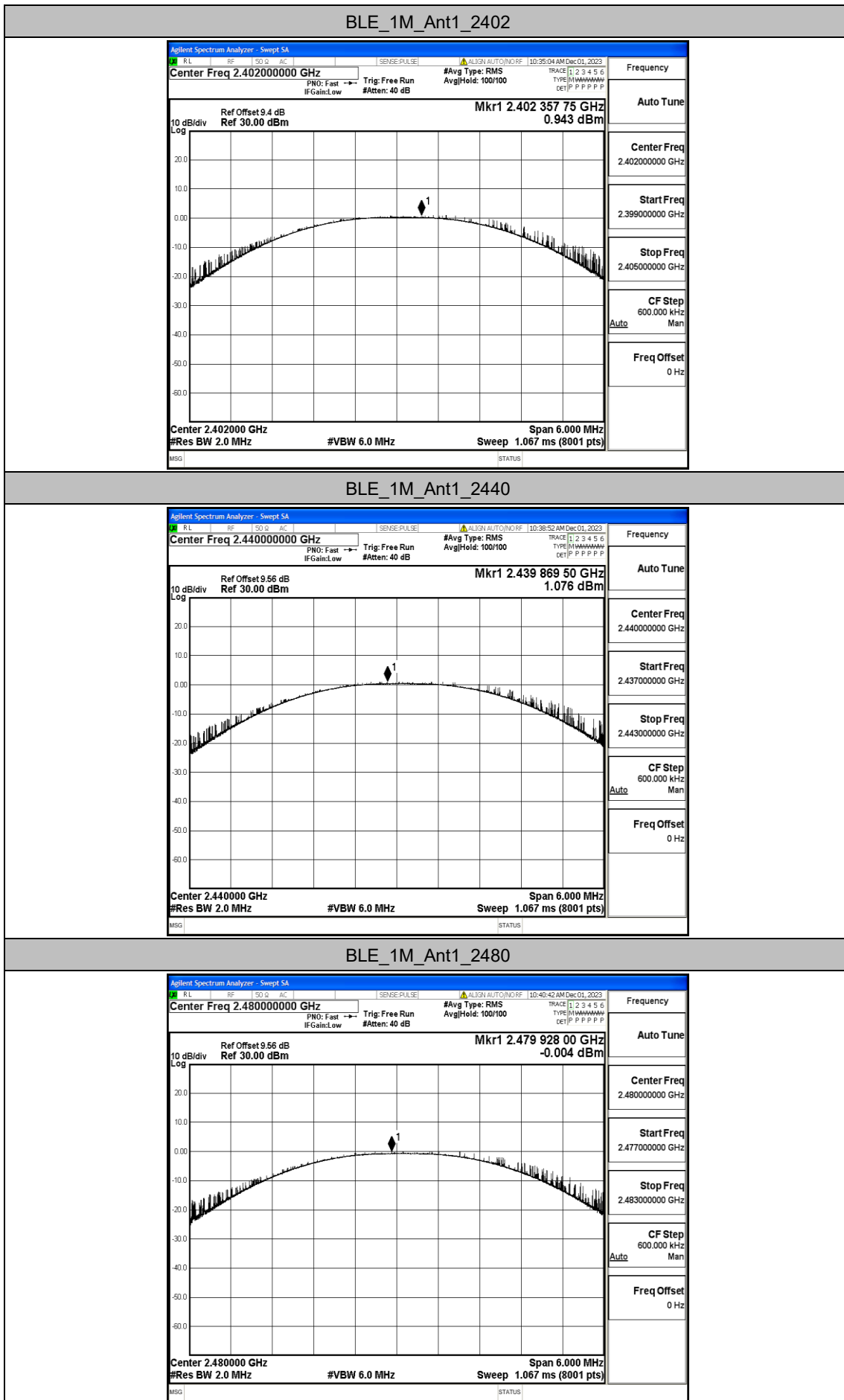


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.94	≤30	PASS
		2440	1.08	≤30	PASS
		2480	0	≤30	PASS

Test Graphs

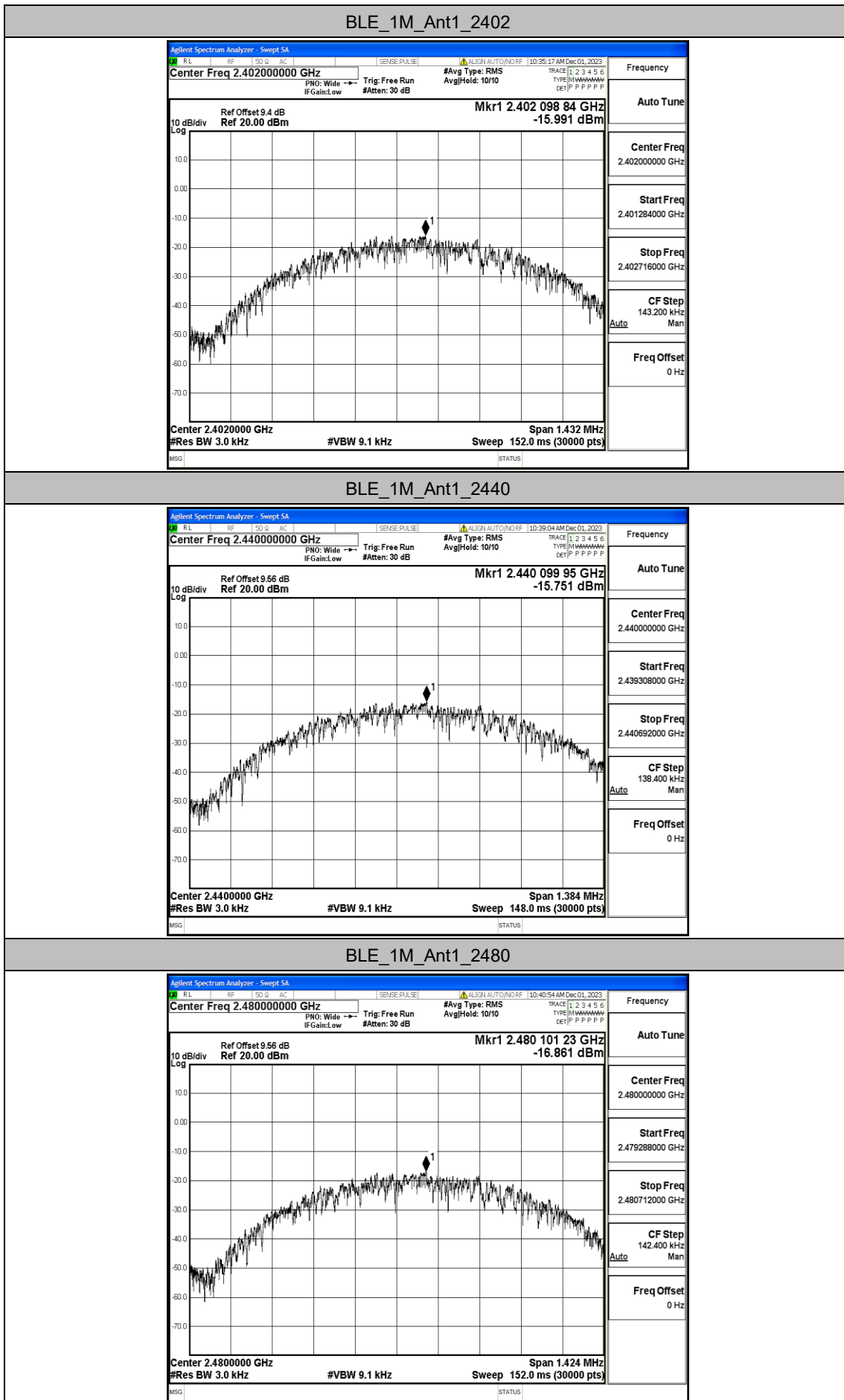


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.99	≤8.00	PASS
		2440	-15.75	≤8.00	PASS
		2480	-16.86	≤8.00	PASS

Test Graphs

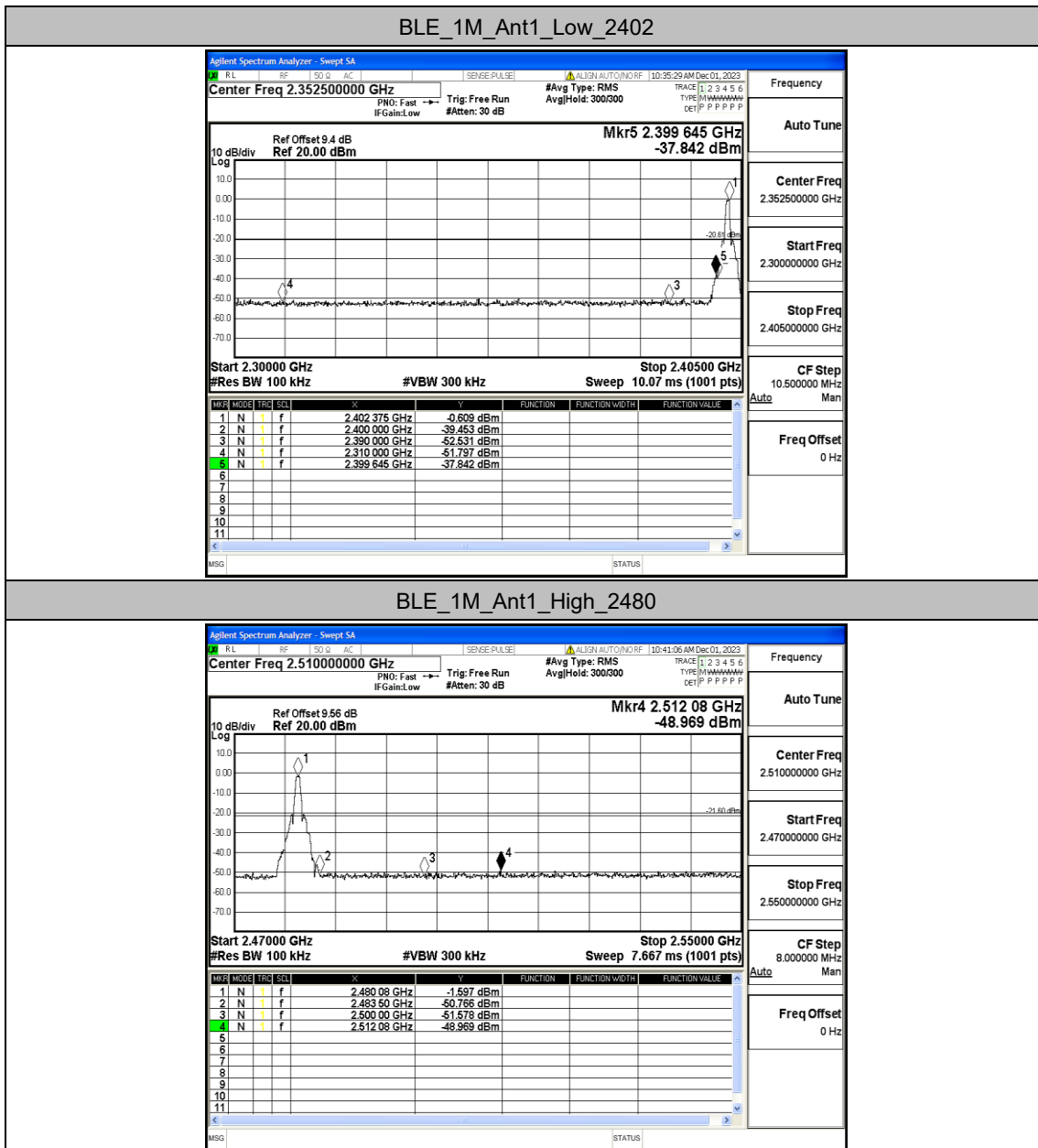


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.61	-37.84	≤-20.61	PASS
		High	2480	-1.60	-48.97	≤-21.6	PASS

Test Graphs

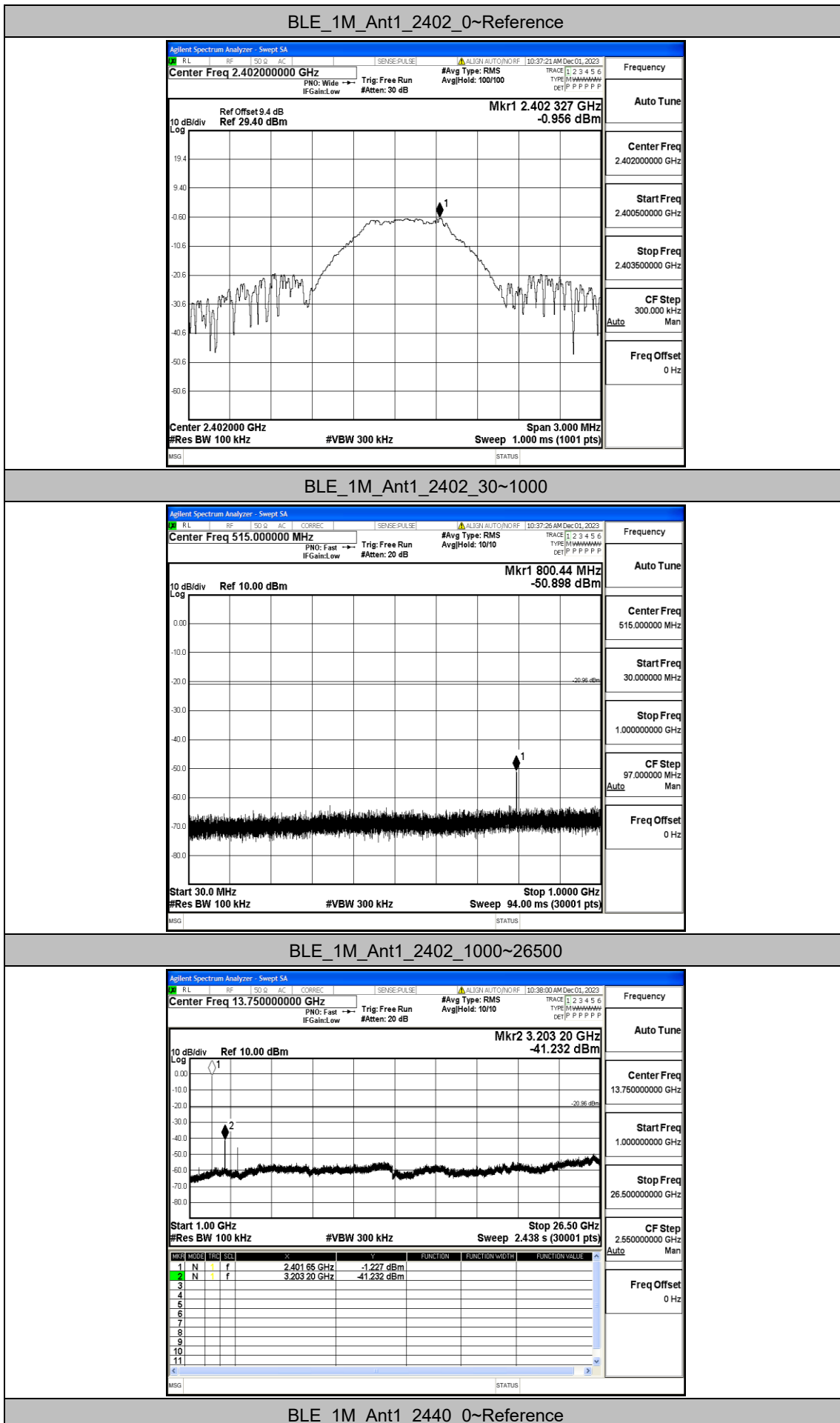


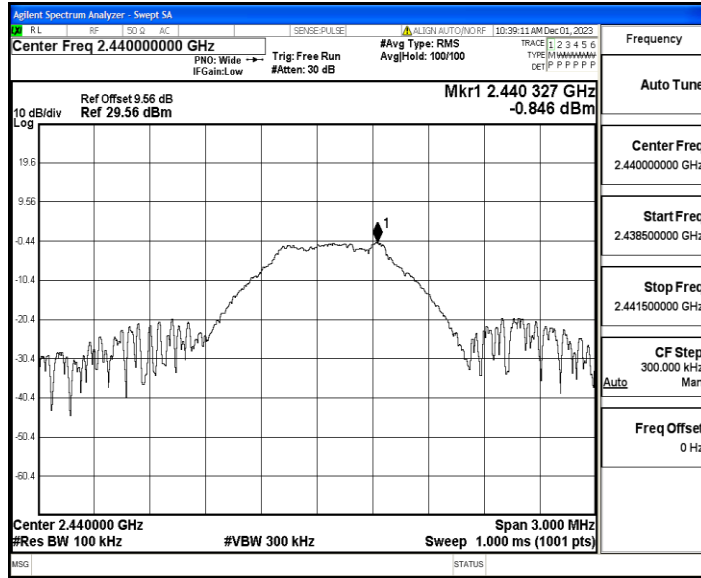
Appendix F: Conducted Spurious Emission

Test Result

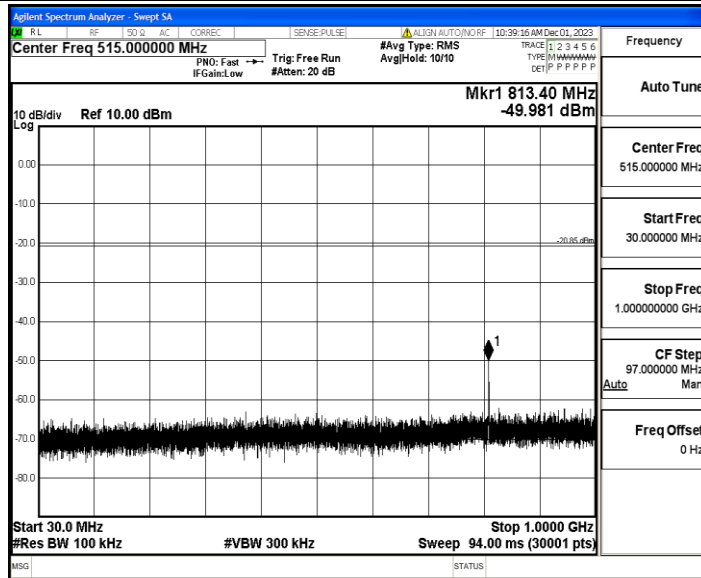
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.96	-0.96	---	PASS
			30~1000	-0.96	-50.9	≤-20.96	PASS
			1000~26500	-0.96	-41.23	≤-20.96	PASS
		2440	Reference	-0.85	-0.85	---	PASS
			30~1000	-0.85	-49.98	≤-20.85	PASS
			1000~26500	-0.85	-42.26	≤-20.85	PASS
		2480	Reference	-2.04	-2.04	---	PASS
			30~1000	-2.04	-49.07	≤-22.04	PASS
			1000~26500	-2.04	-42.22	≤-22.04	PASS

Test Graphs

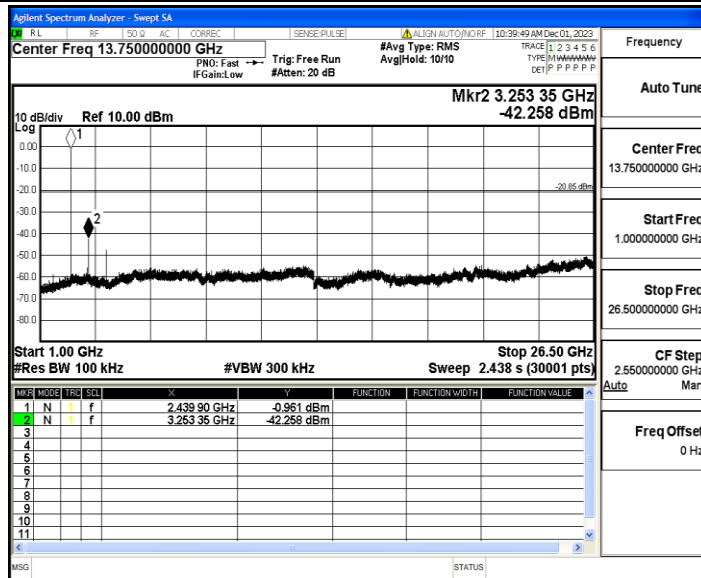




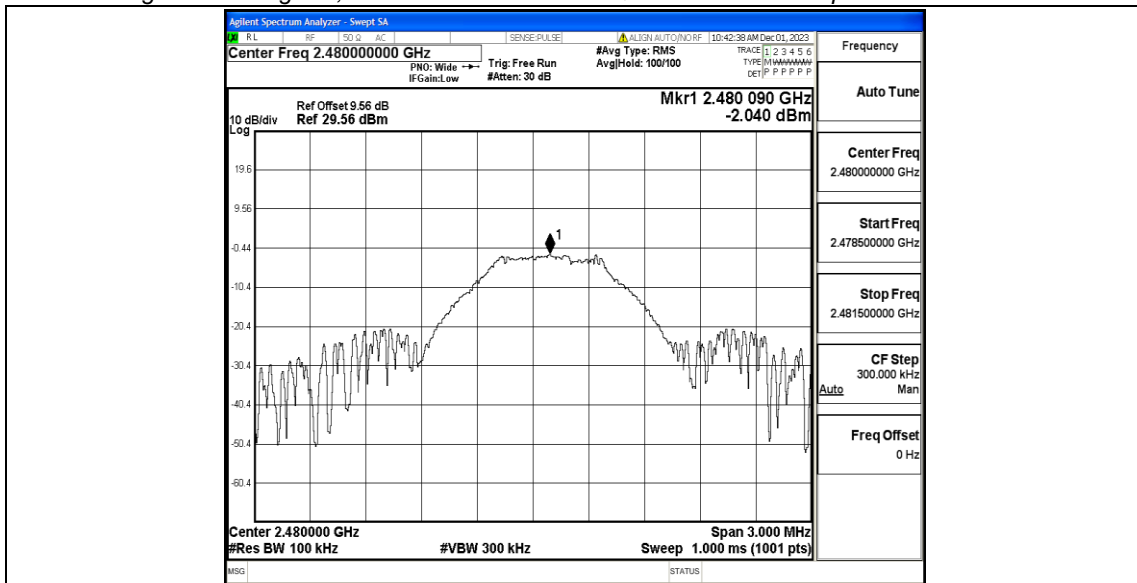
BLE_1M_Ant1_2440_30~1000



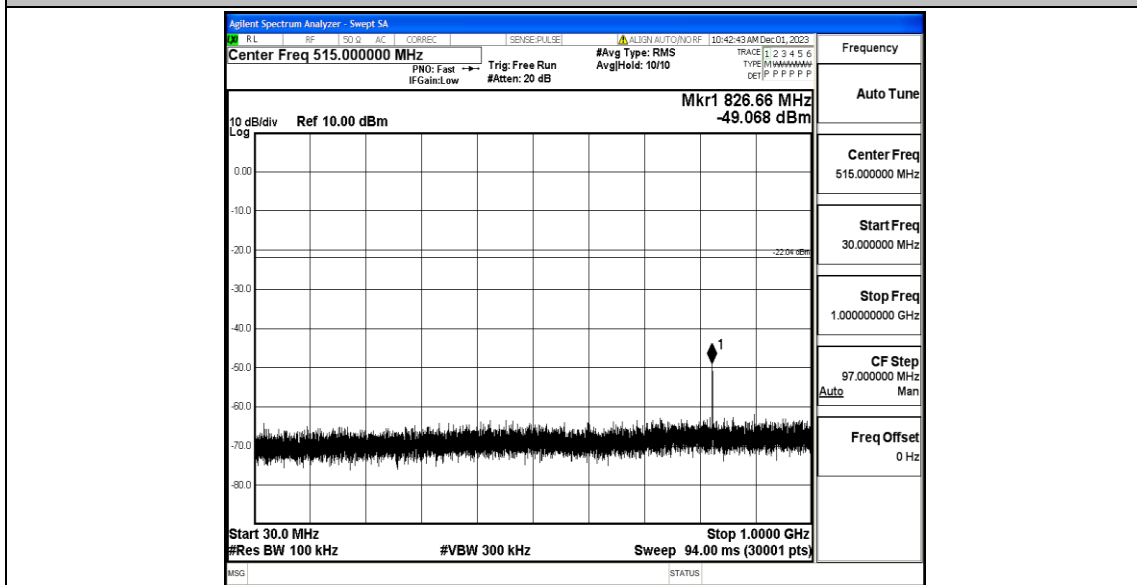
BLE_1M_Ant1_2440_1000~26500



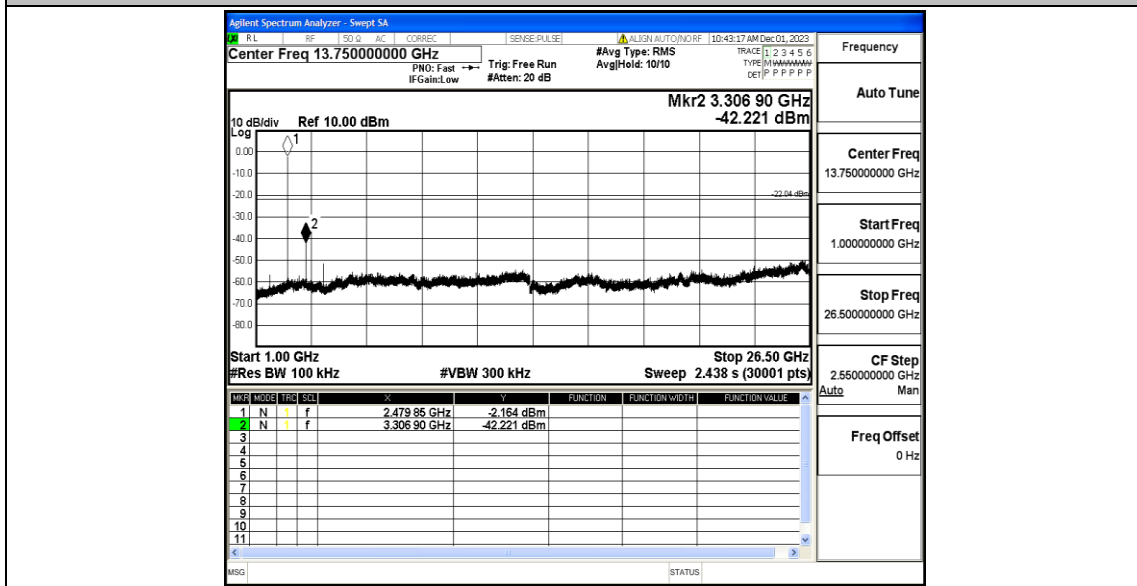
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

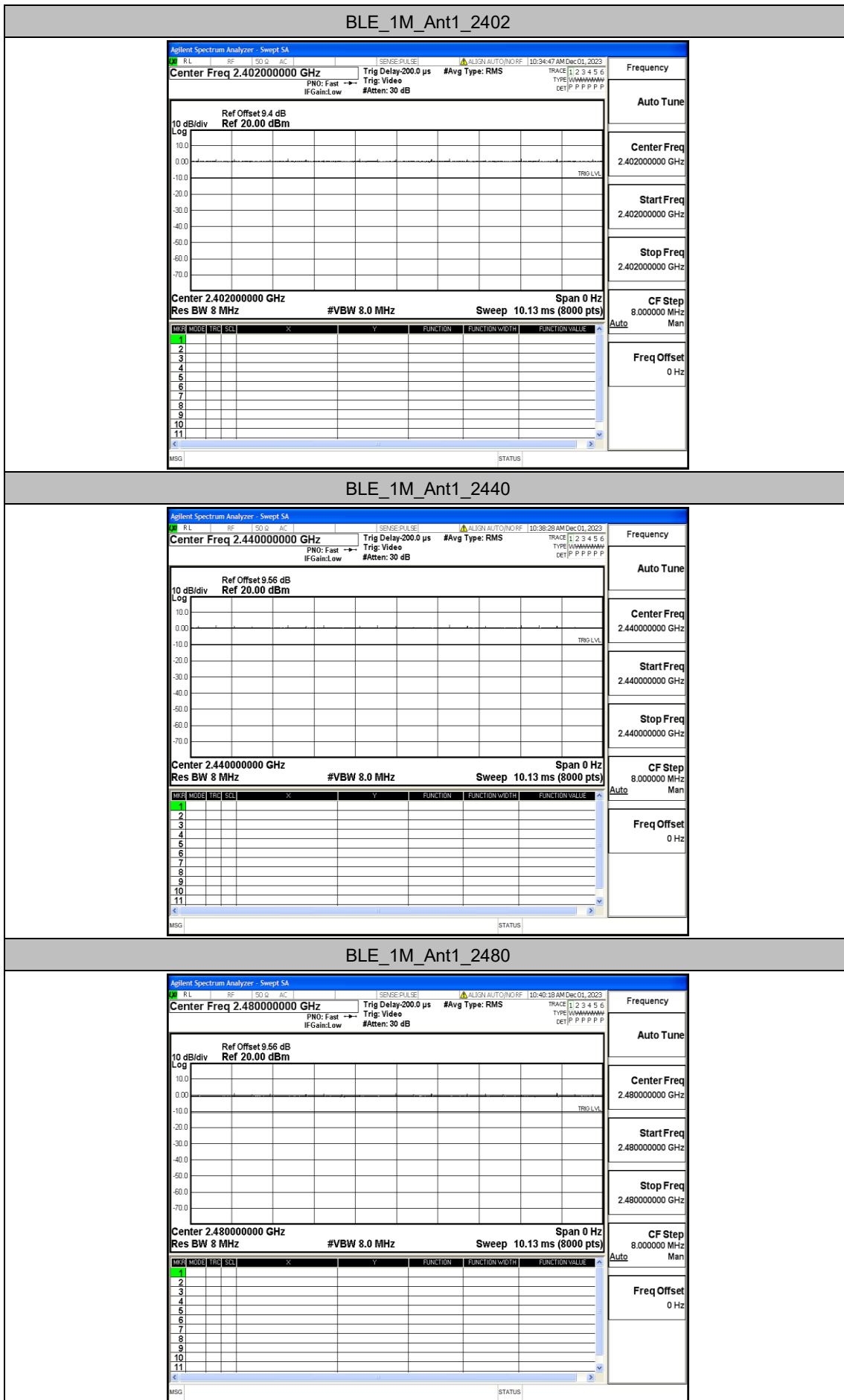


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	10.00	10.00	100.00	0.10
		2440	10.00	10.00	100.00	0.10
		2480	10.00	10.00	100.00	0.10

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	-49.39	≤-41.20	PASS
				AV	2354.180	-48.97	≤-41.20	PASS
				AV	2390.000	-49.07	≤-41.20	PASS
				Peak	2310.000	-41.92	≤-21.20	PASS
				Peak	2345.360	-39.91	≤-21.20	PASS
				Peak	2390.000	-43.93	≤-21.20	PASS
		High	2480	AV	2483.500	-47.47	≤-41.20	PASS
				AV	2483.520	-47.47	≤-41.20	PASS
				AV	2500.000	-48.36	≤-41.20	PASS
				Peak	2483.500	-44.56	≤-21.20	PASS
				Peak	2483.600	-33.6	≤-21.20	PASS
				Peak	2500.000	-41.8	≤-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

