

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

Product Name: Smart Watch

Trade Mark: W@nyou

Test Model: N8

FCC ID: 2A89A-N8

Environmental Conditions

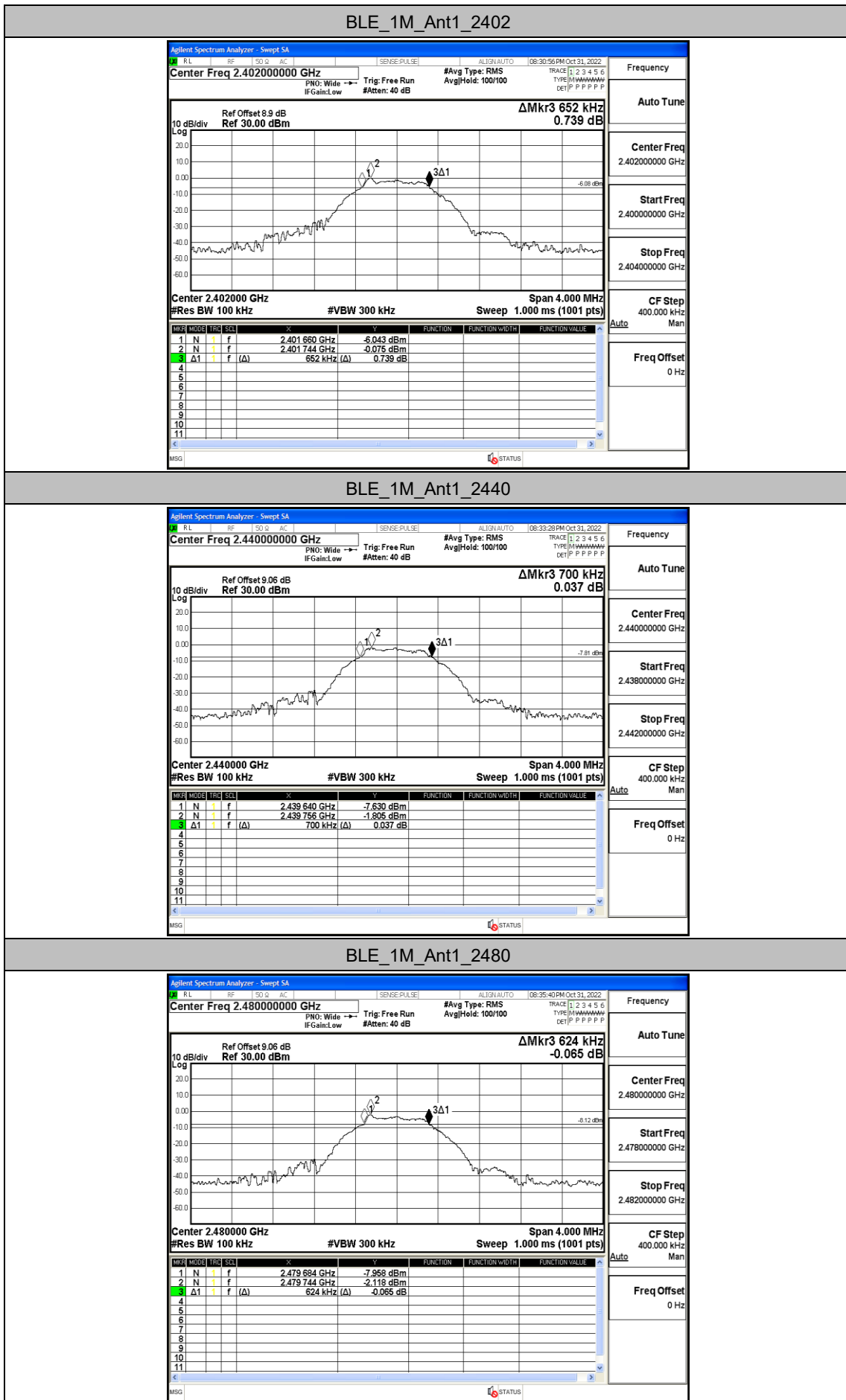
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.660	2402.312	0.5	PASS
		2440	0.700	2439.640	2440.340	0.5	PASS
		2480	0.624	2479.684	2480.308	0.5	PASS

Test Graphs

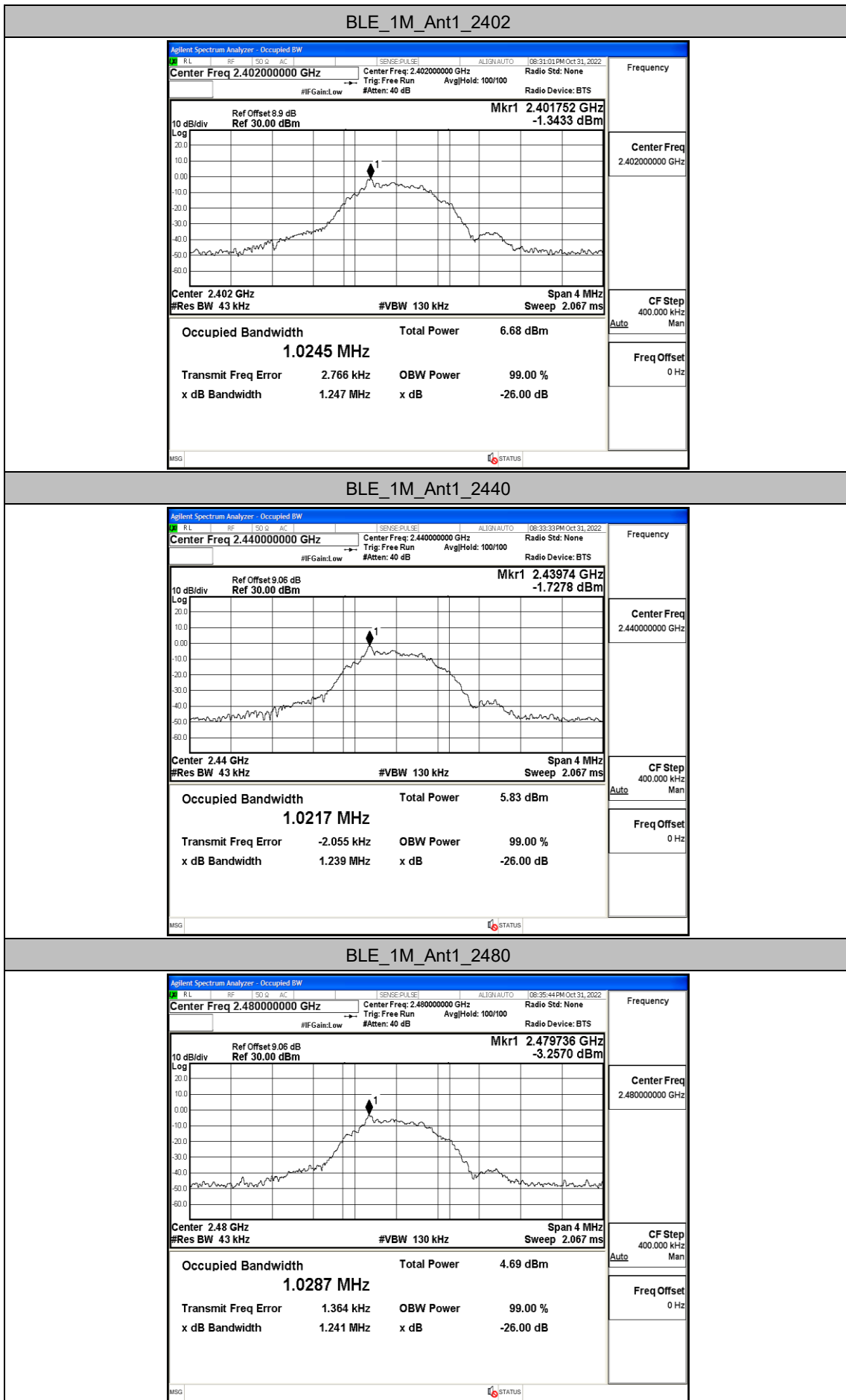


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0245	2401.4905	2402.5150	---	---
		2440	1.0217	2439.4871	2440.5088	---	---
		2480	1.0287	2479.4870	2480.5157	---	---

Test Graphs

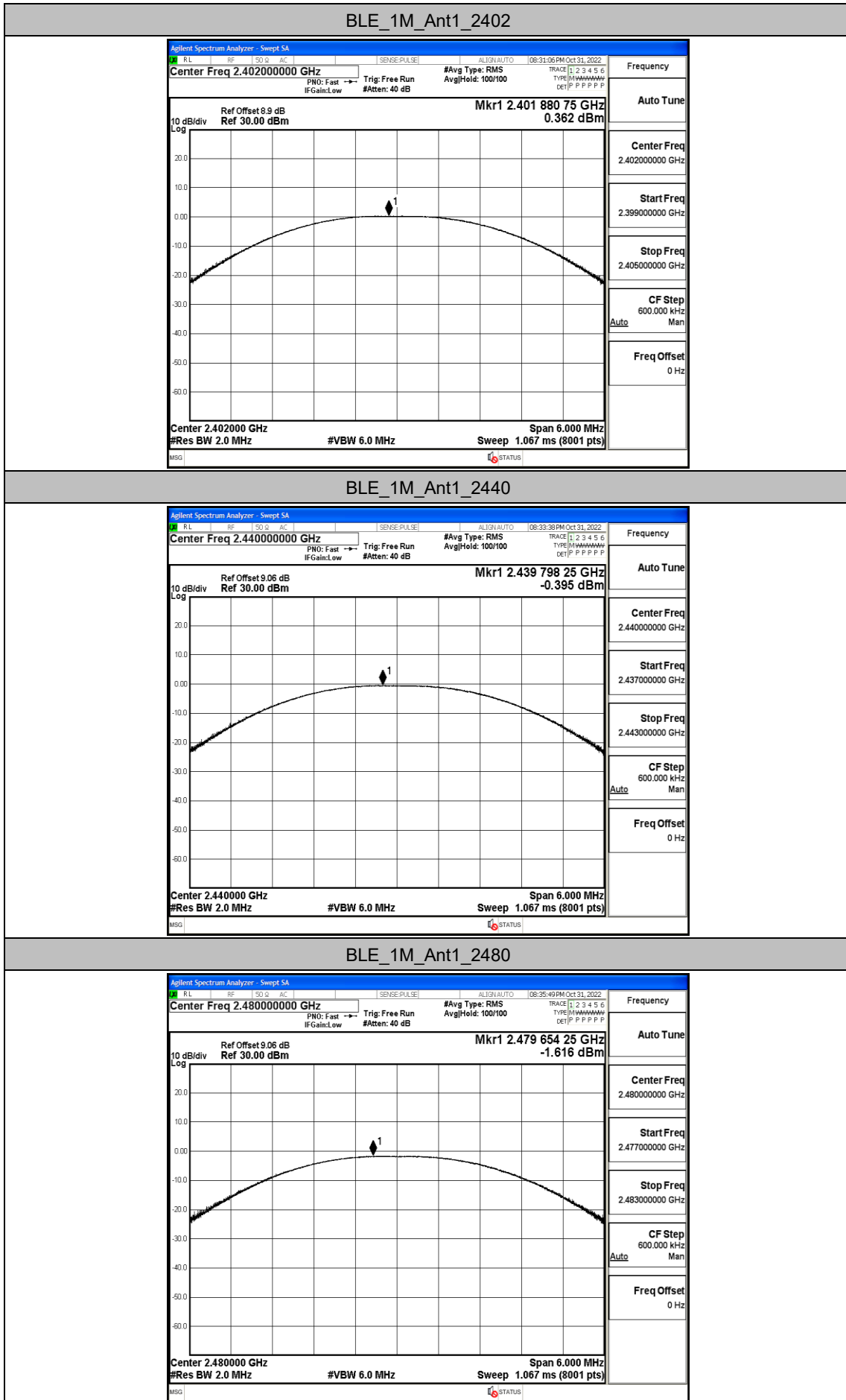


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.36	≤30	PASS
		2440	-0.4	≤30	PASS
		2480	-1.62	≤30	PASS

Test Graphs

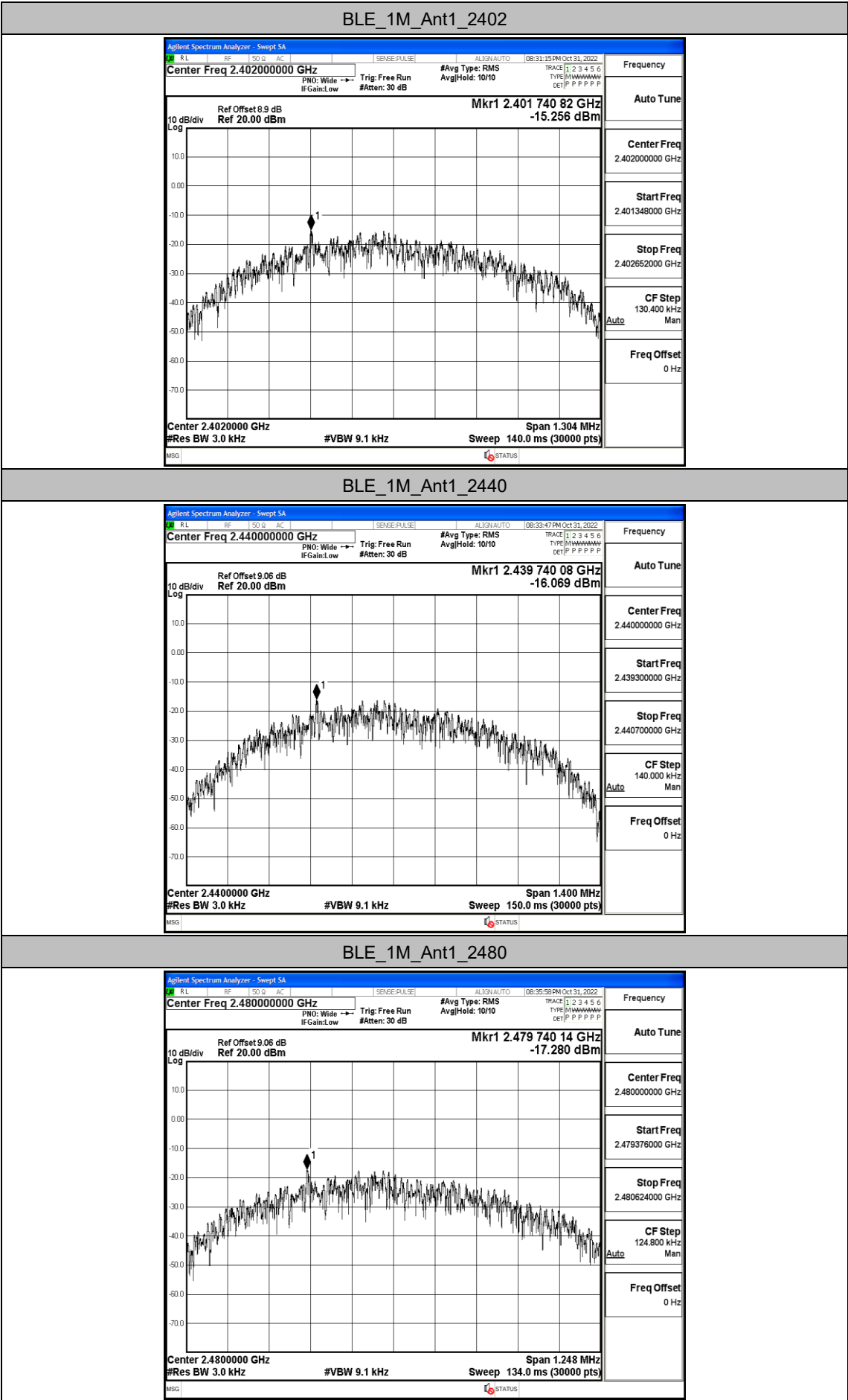


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.26	≤8.00	PASS
		2440	-16.07	≤8.00	PASS
		2480	-17.28	≤8.00	PASS

Test Graphs

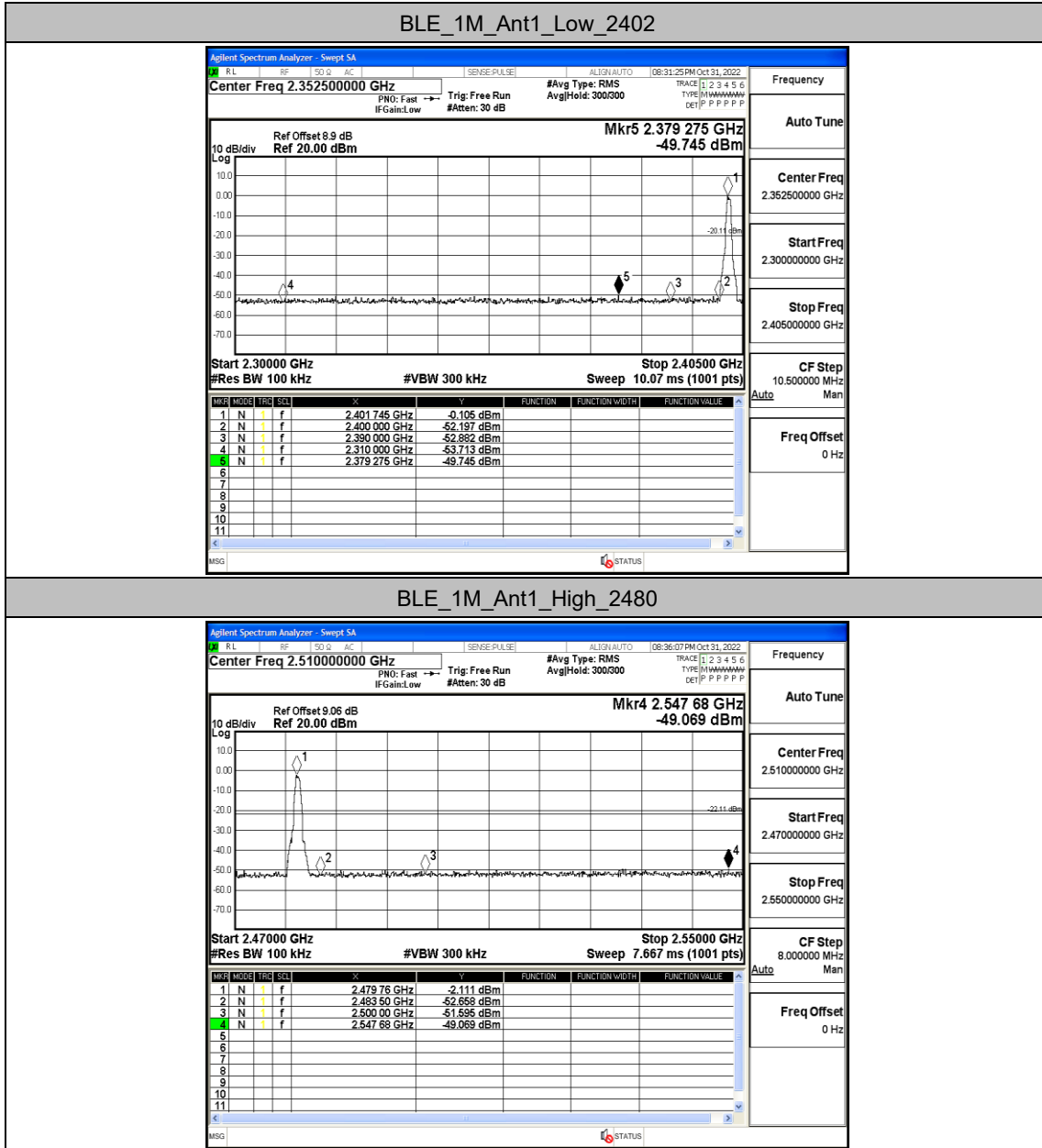


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.11	-49.75	≤-20.11	PASS
		High	2480	-2.11	-49.07	≤-22.11	PASS

Test Graphs

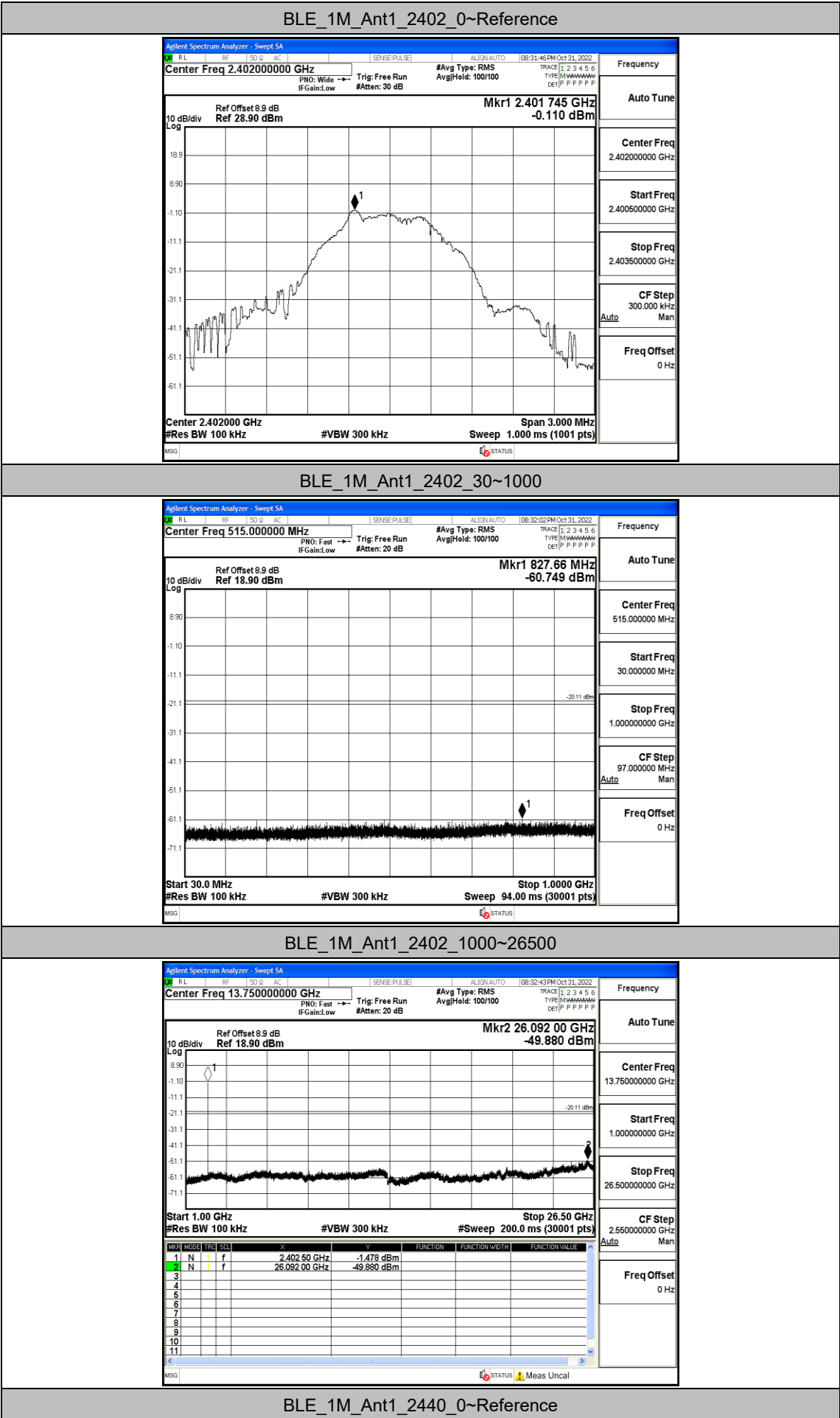


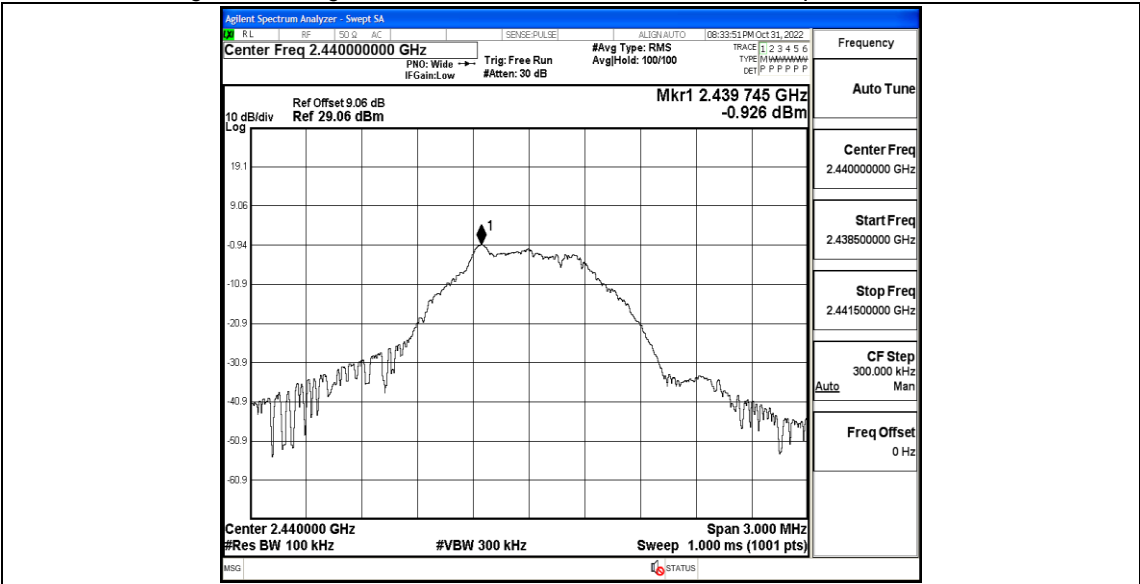
Appendix F: Conducted Spurious Emission

Test Result

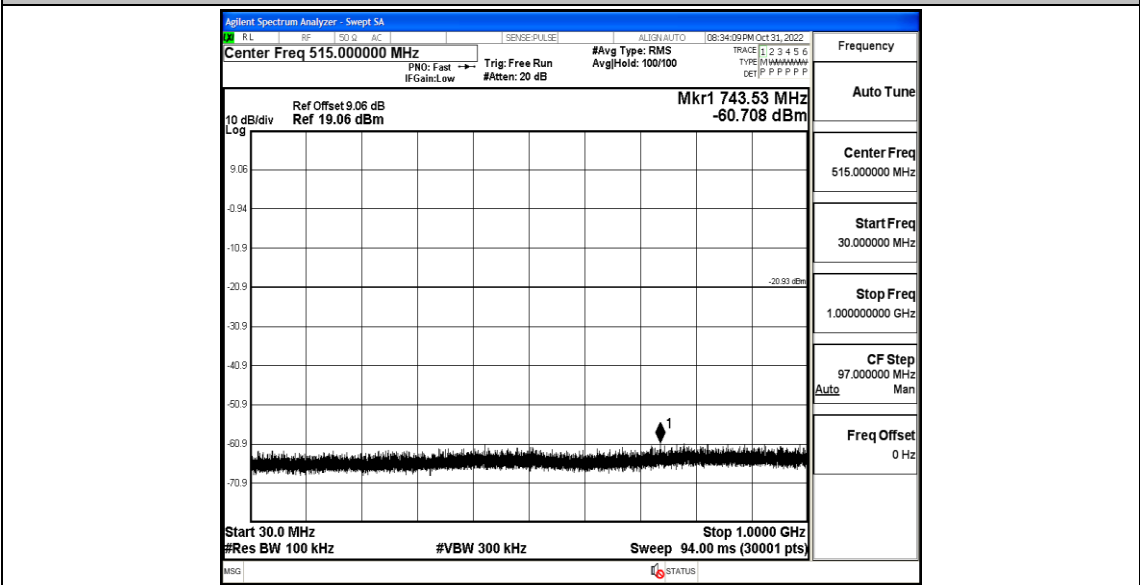
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.11	-0.11	---	PASS
			30~1000	-0.11	-60.75	≤-20.11	PASS
			1000~26500	-0.11	-49.88	≤-20.11	PASS
		2440	Reference	-0.93	-0.93	---	PASS
			30~1000	-0.93	-60.71	≤-20.93	PASS
			1000~26500	-0.93	-50.16	≤-20.93	PASS
		2480	Reference	-2.15	-2.15	---	PASS
			30~1000	-2.15	-59.9	≤-22.15	PASS
			1000~26500	-2.15	-48.87	≤-22.15	PASS

Test Graphs

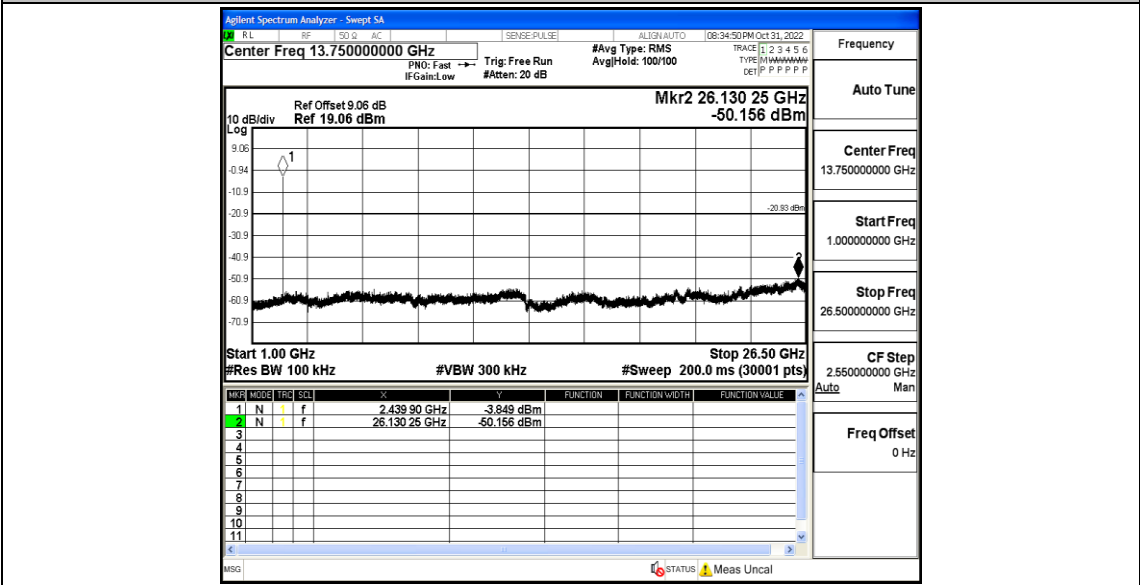




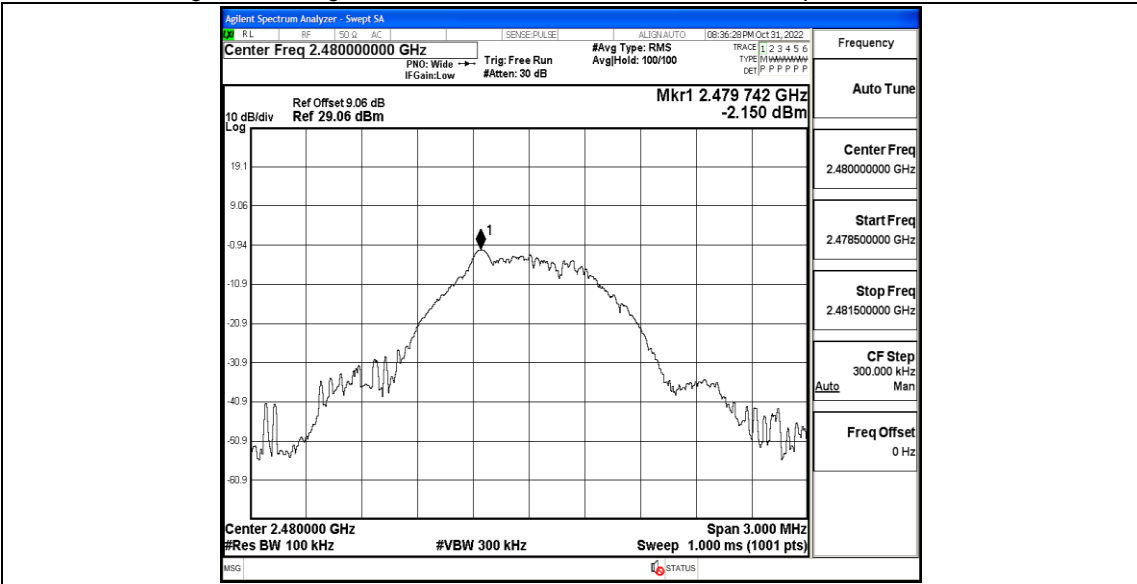
BLE_1M_Ant1_2440_30~1000



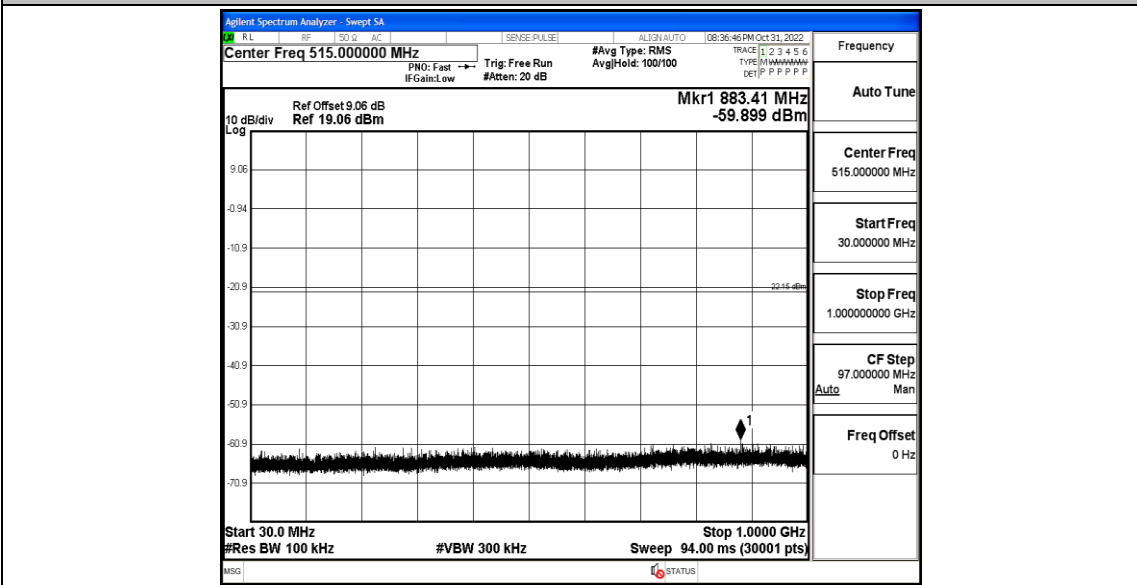
BLE_1M_Ant1_2440_1000~26500



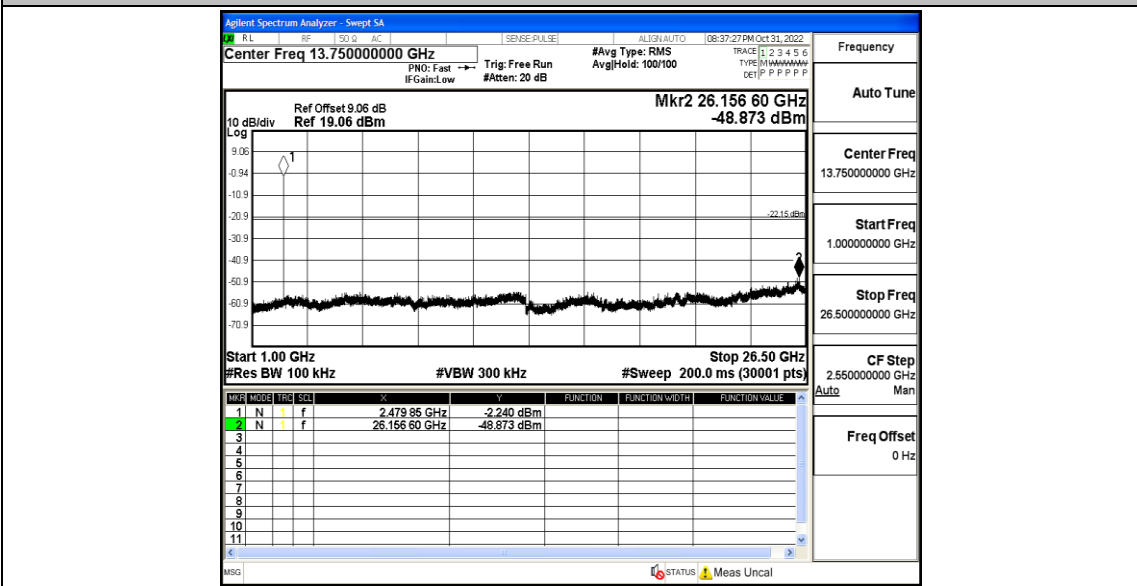
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

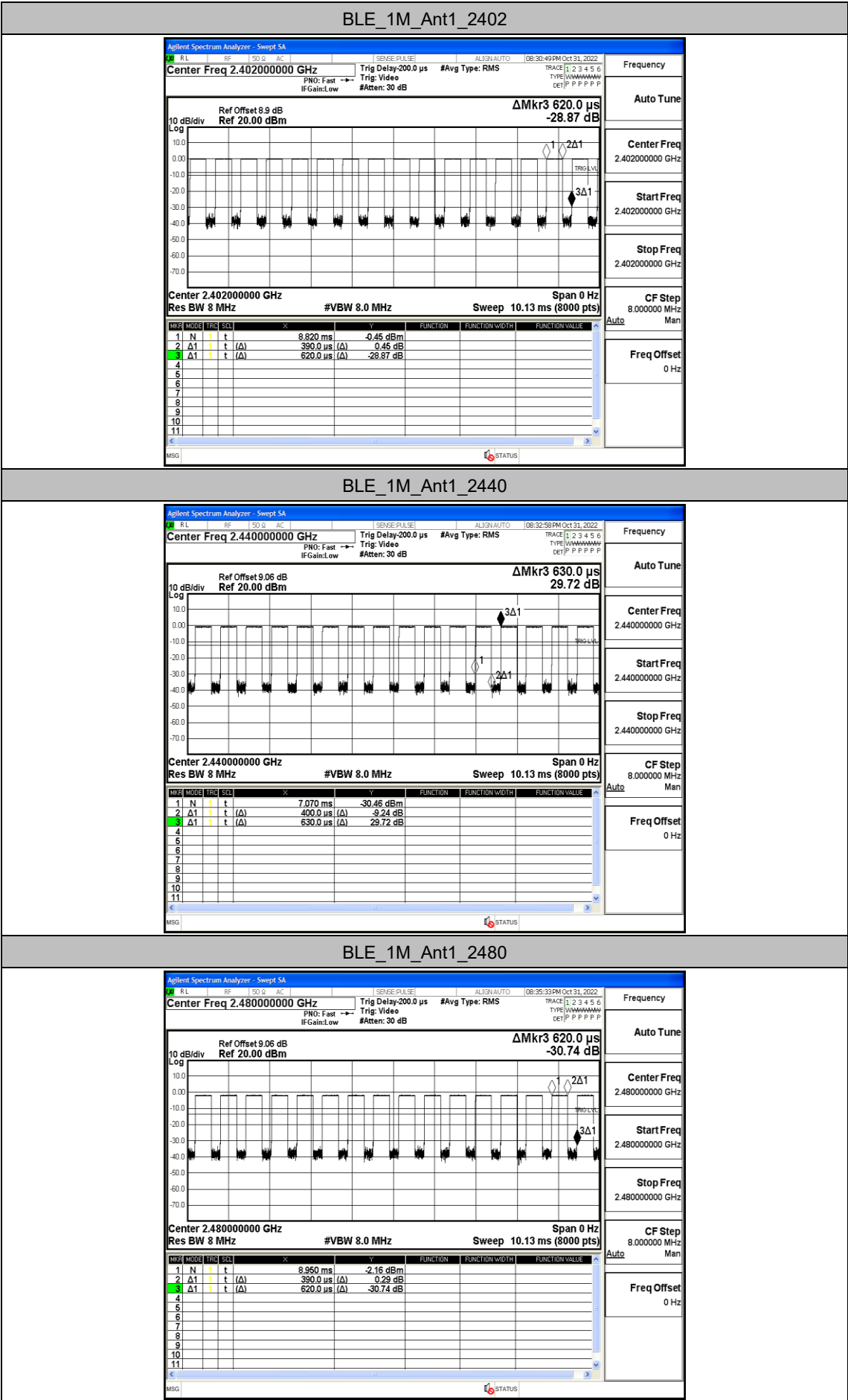


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.56
		2440	0.40	0.63	63.49	2.50
		2480	0.39	0.62	62.90	2.56

Test Graphs



Appendix H: Emissions in Restricted Bands

Test Result

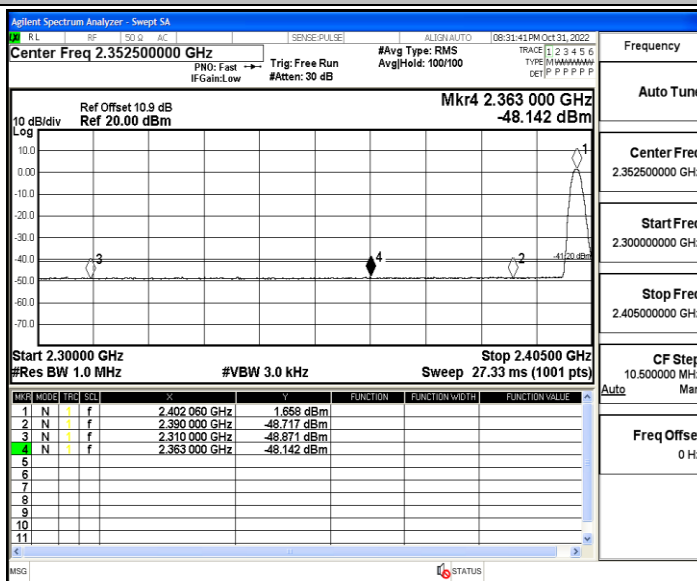
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.87	≤-41.20	PASS
				AV	2363.000	-48.14	≤-41.20	PASS
				AV	2390.000	-48.72	≤-41.20	PASS
				Peak	2310.000	-41.98	≤-21.20	PASS
				Peak	2373.710	-38.87	≤-21.20	PASS
				Peak	2390.000	-39.8	≤-21.20	PASS
		High	2480	AV	2483.500	-47.94	≤-41.20	PASS
				AV	2494.400	-47.42	≤-41.20	PASS
				AV	2500.000	-47.75	≤-41.20	PASS
				Peak	2483.500	-40.29	≤-21.20	PASS
				Peak	2496.320	-38.89	≤-21.20	PASS
				Peak	2500.000	-40.84	≤-21.20	PASS

Note:

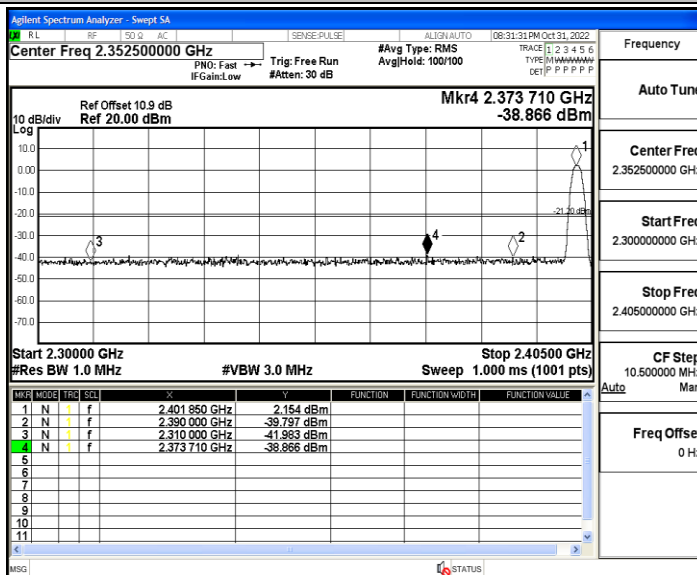
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

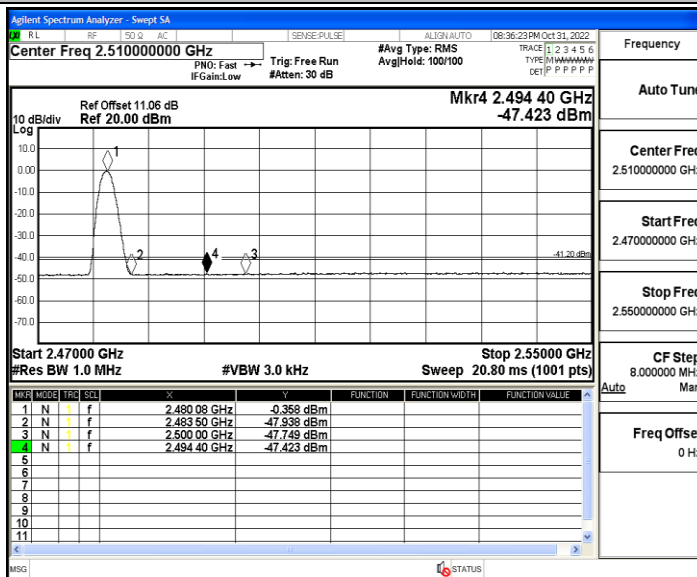
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

