

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

Product Name: Bluetooth Adapter

Trade Mark: INSTALLBAY

Test Model: IBBTR19

FCC ID: 2AHL8-IBBTR19

Environmental Conditions

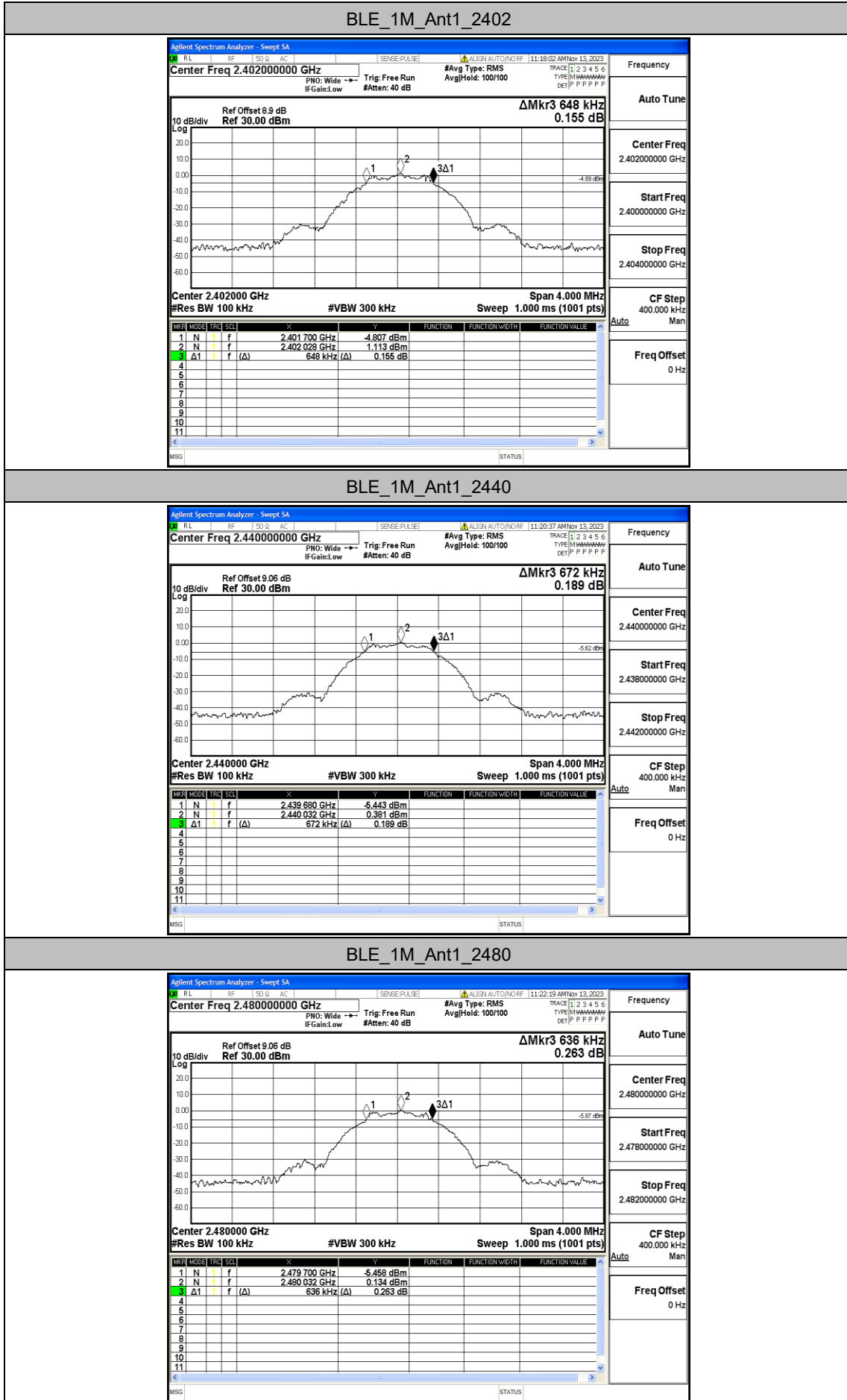
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.700	2402.348	0.5	PASS
		2440	0.672	2439.680	2440.352	0.5	PASS
		2480	0.636	2479.700	2480.336	0.5	PASS

Test Graphs

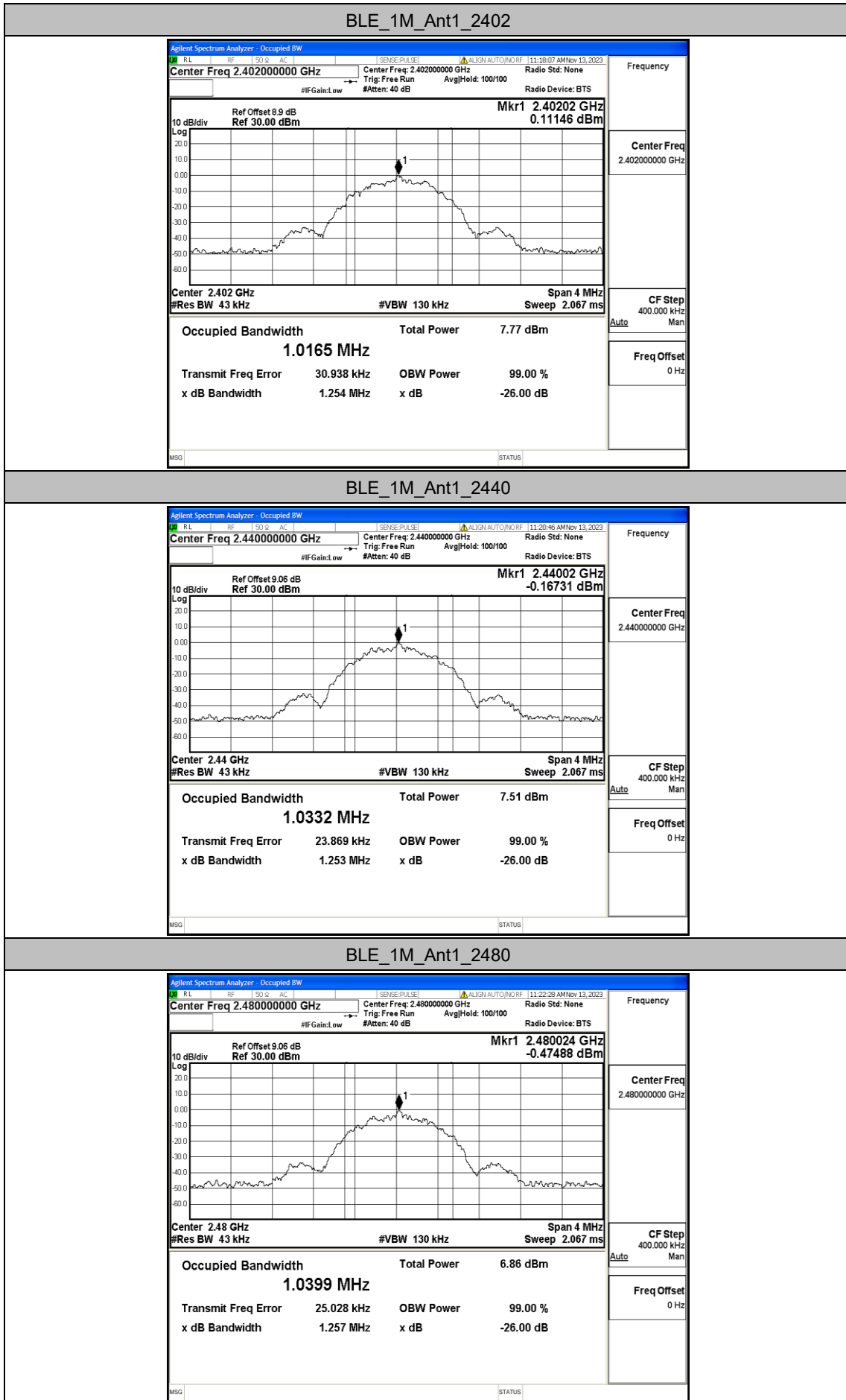


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0165	2401.5227	2402.5392	---	---
		2440	1.0332	2439.5073	2440.5405	---	---
		2480	1.0399	2479.5051	2480.5450	---	---

Test Graphs

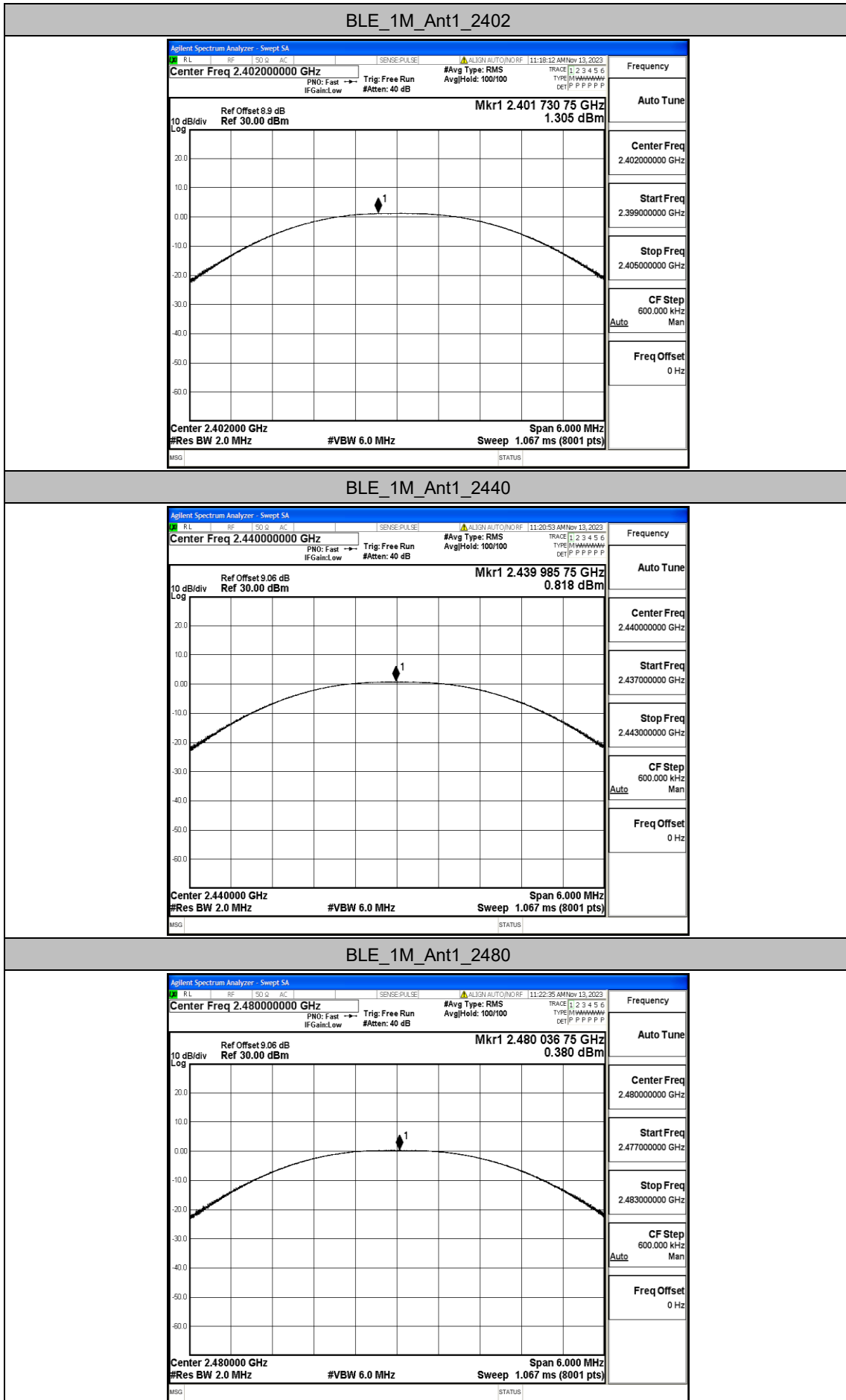


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.31	≤30	PASS
		2440	0.82	≤30	PASS
		2480	0.38	≤30	PASS

Test Graphs

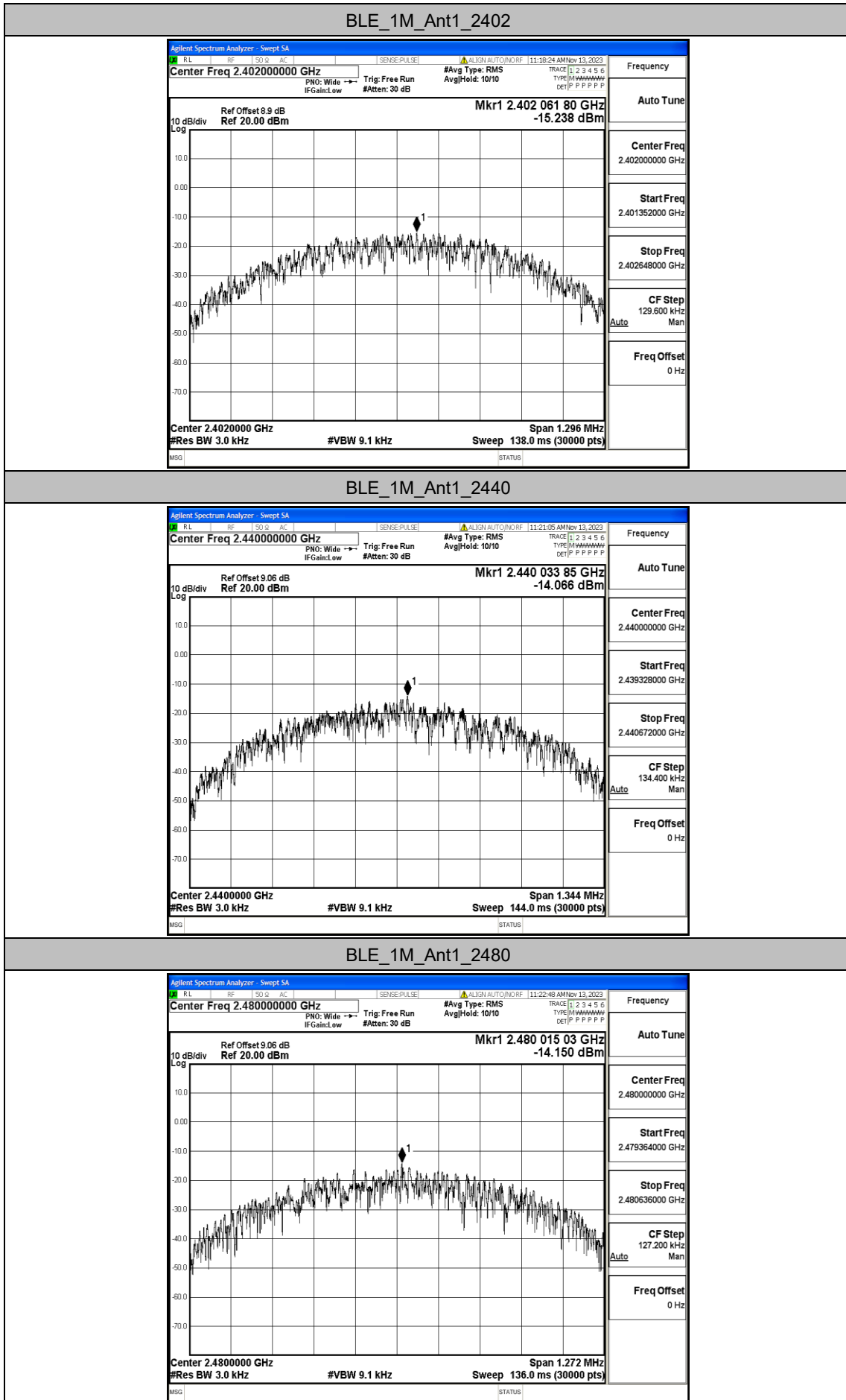


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.24	≤8.00	PASS
		2440	-14.07	≤8.00	PASS
		2480	-14.15	≤8.00	PASS

Test Graphs

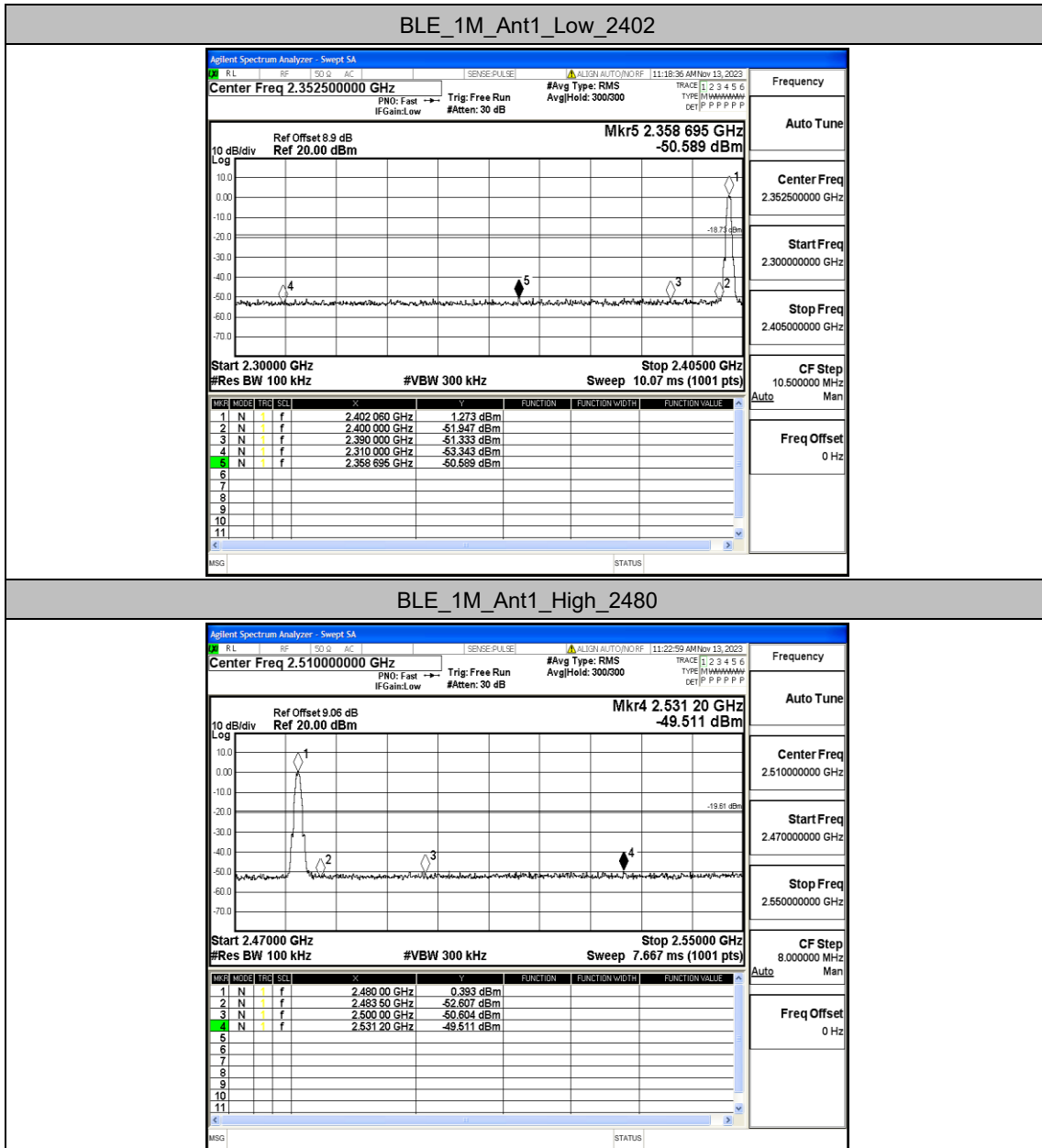


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.27	-50.59	≤-18.73	PASS
		High	2480	0.39	-49.51	≤-19.61	PASS

Test Graphs

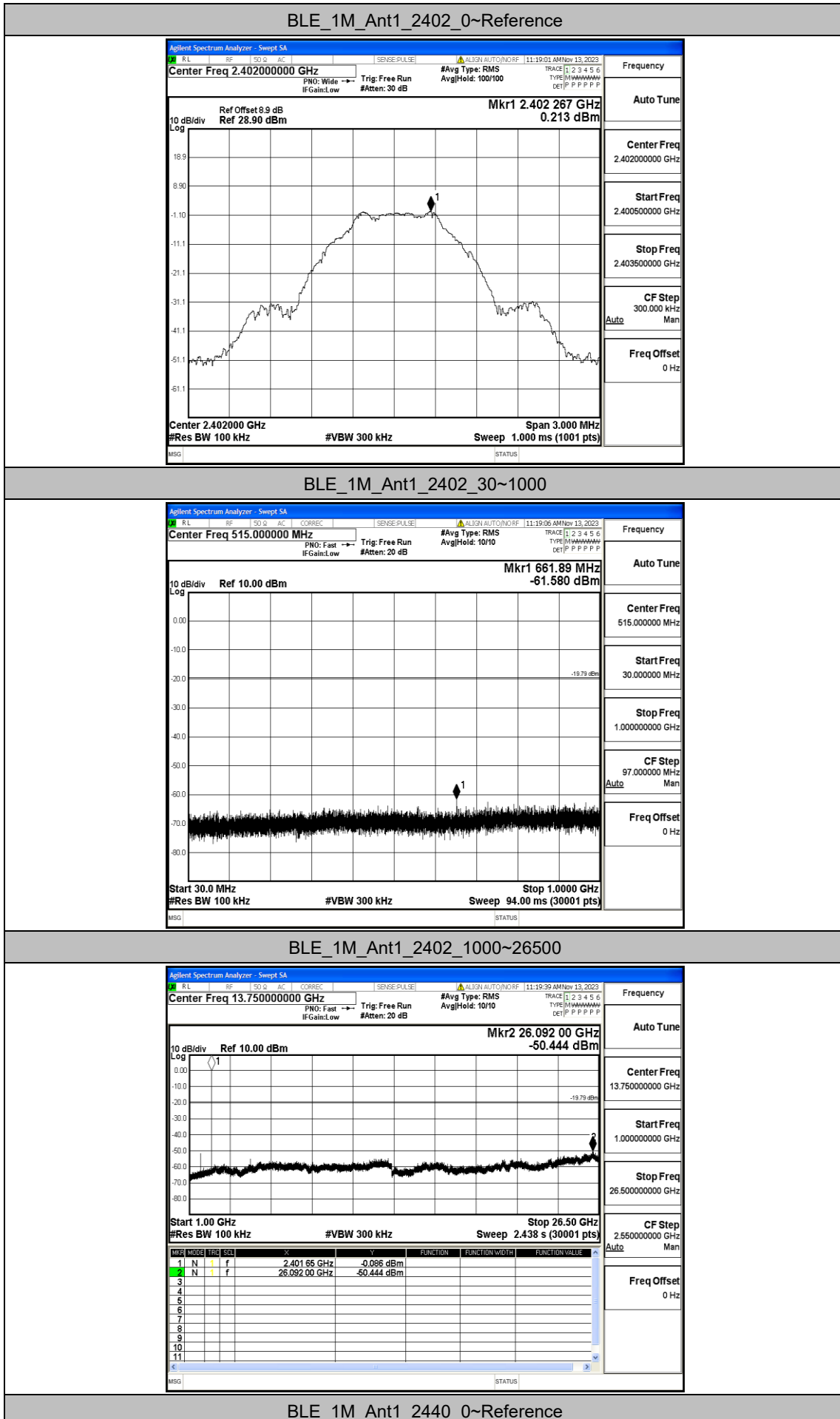


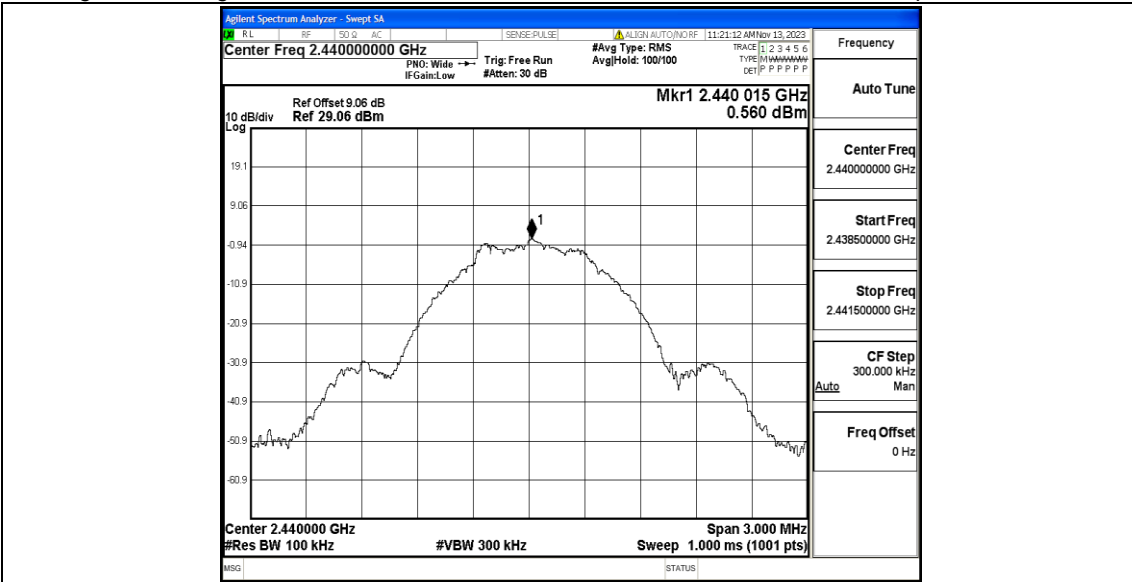
Appendix F: Conducted Spurious Emission

Test Result

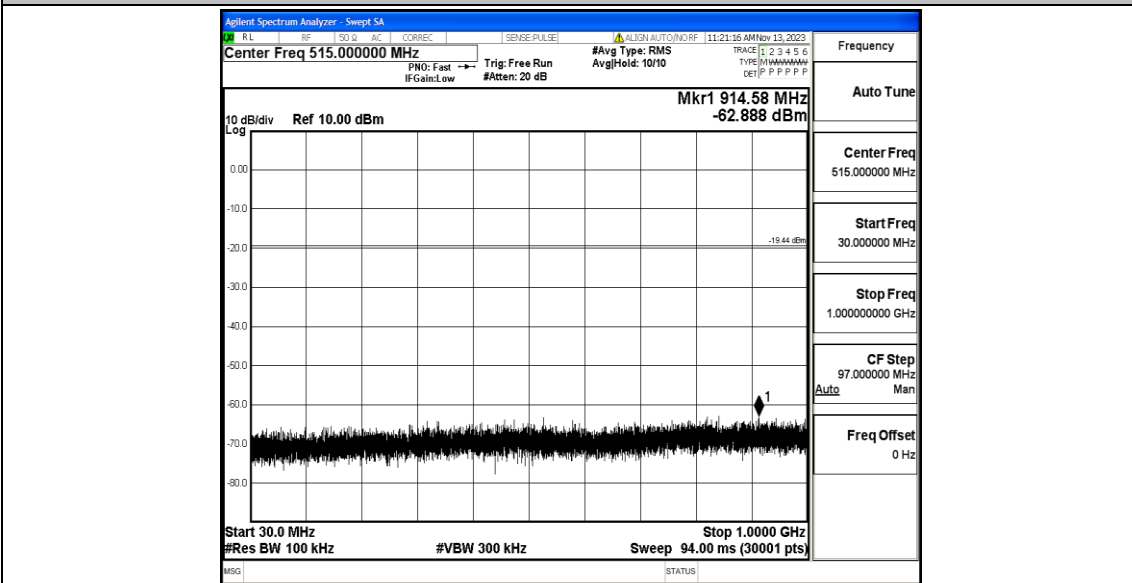
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.21	0.21	---	PASS
			30~1000	0.21	-61.58	≤-19.79	PASS
			1000~26500	0.21	-50.44	≤-19.79	PASS
		2440	Reference	0.56	0.56	---	PASS
			30~1000	0.56	-62.89	≤-19.44	PASS
			1000~26500	0.56	-50.51	≤-19.44	PASS
		2480	Reference	0.23	0.23	---	PASS
			30~1000	0.23	-62.93	≤-19.77	PASS
			1000~26500	0.23	-50.47	≤-19.77	PASS

Test Graphs

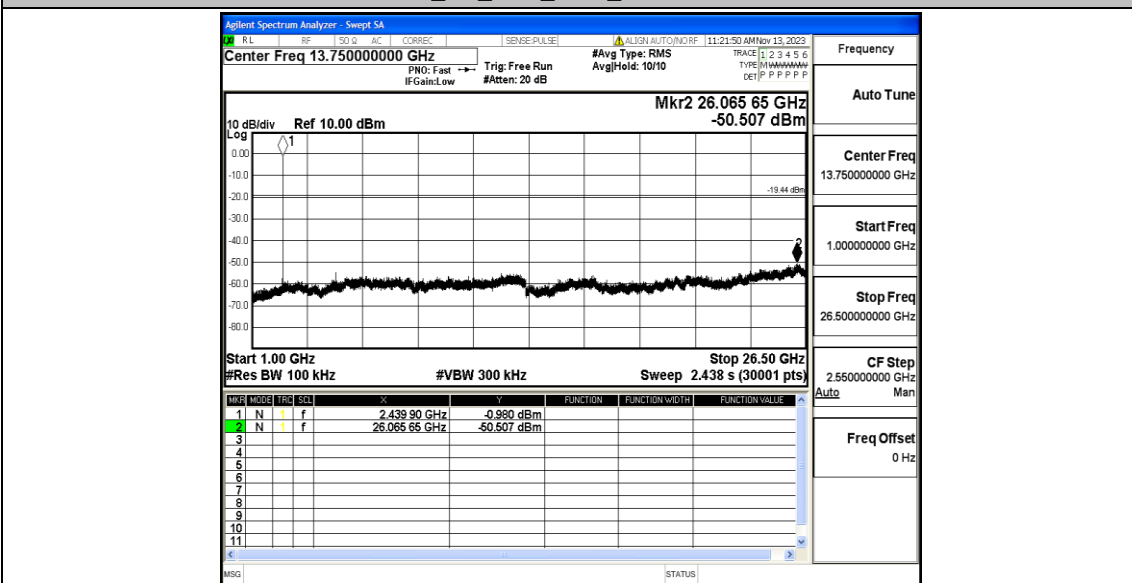




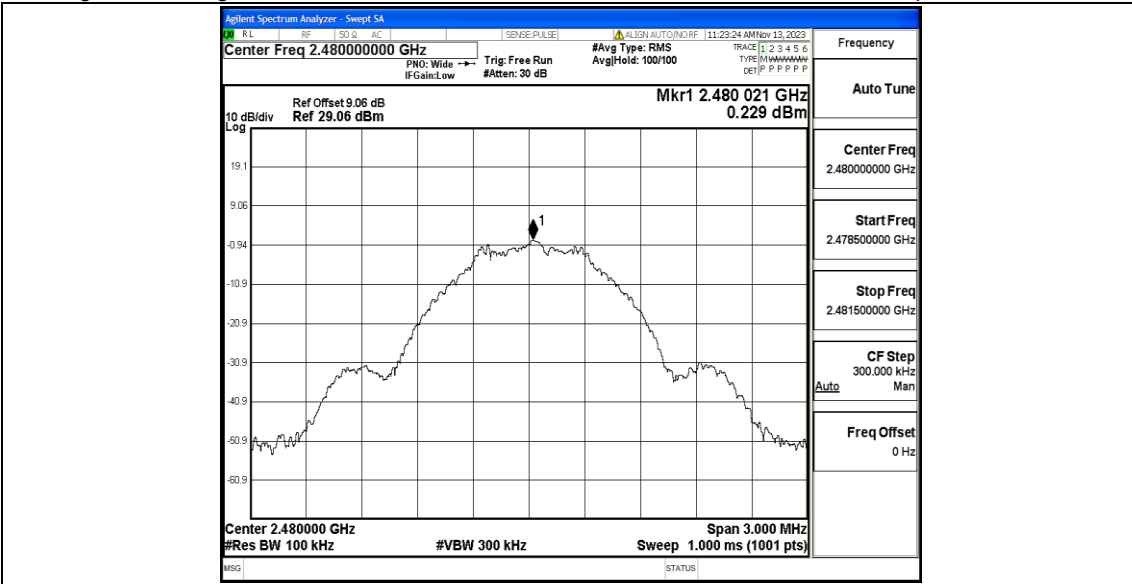
BLE_1M_Ant1_2440_30~1000



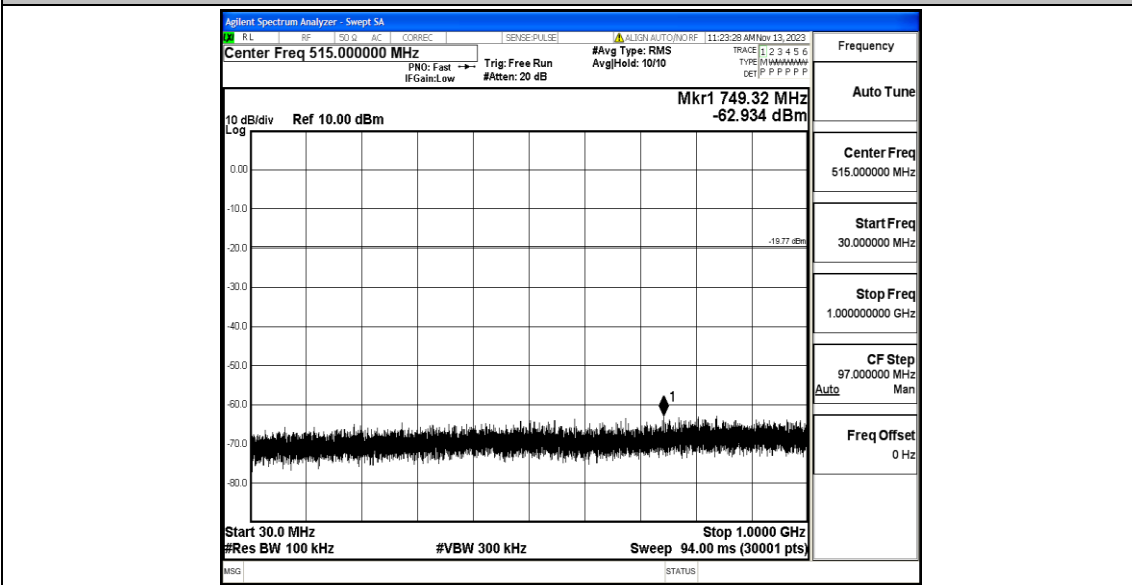
BLE_1M_Ant1_2440_1000~26500



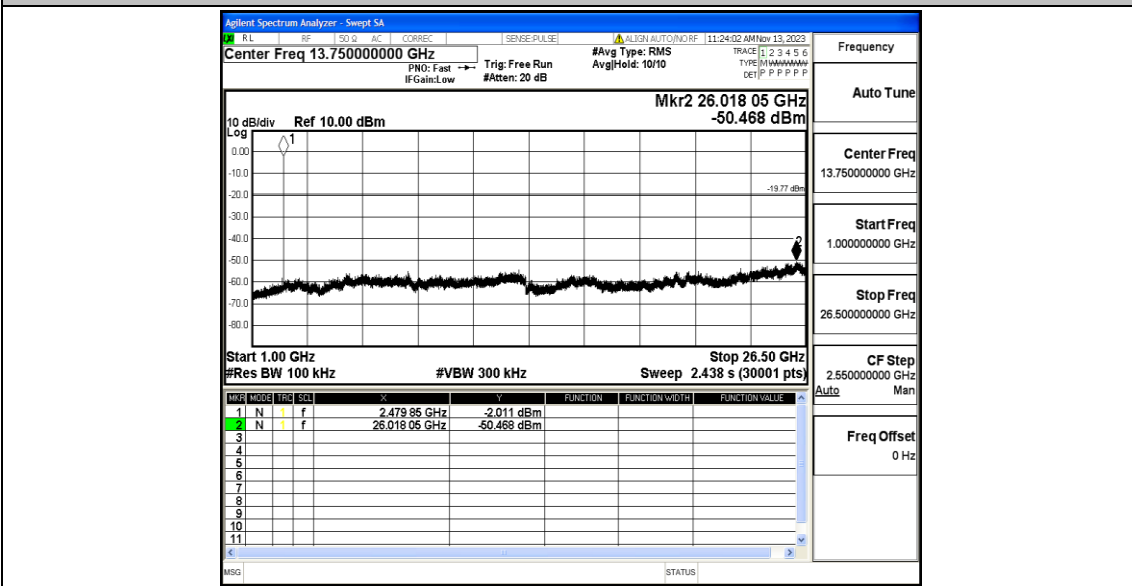
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

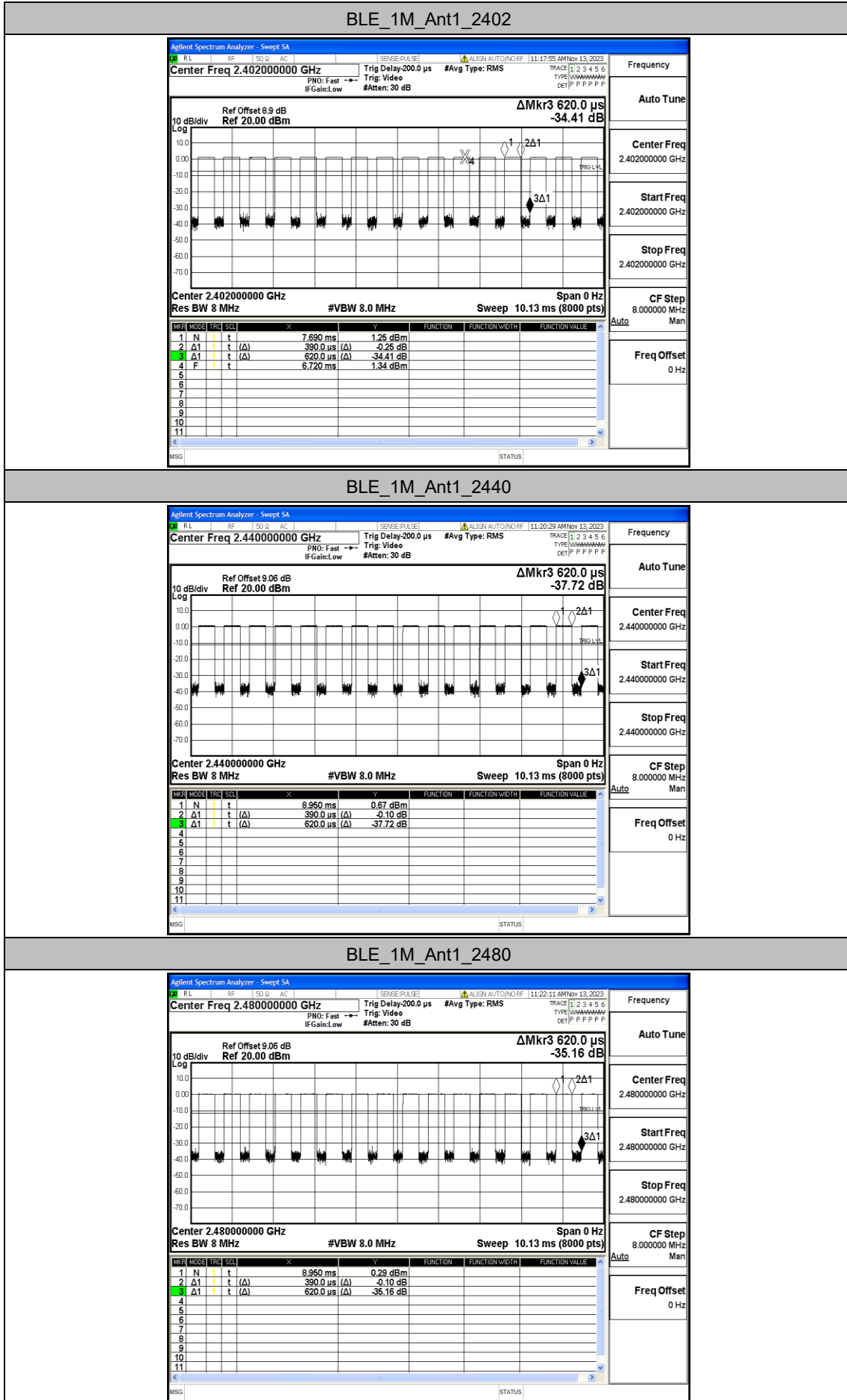


Appendix G: Duty Cycle

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	0.39	0.62	62.90	2.56
		2480	0.39	0.62	62.90	2.56

Test Graphs



Appendix H: Emissions in Restricted Bands

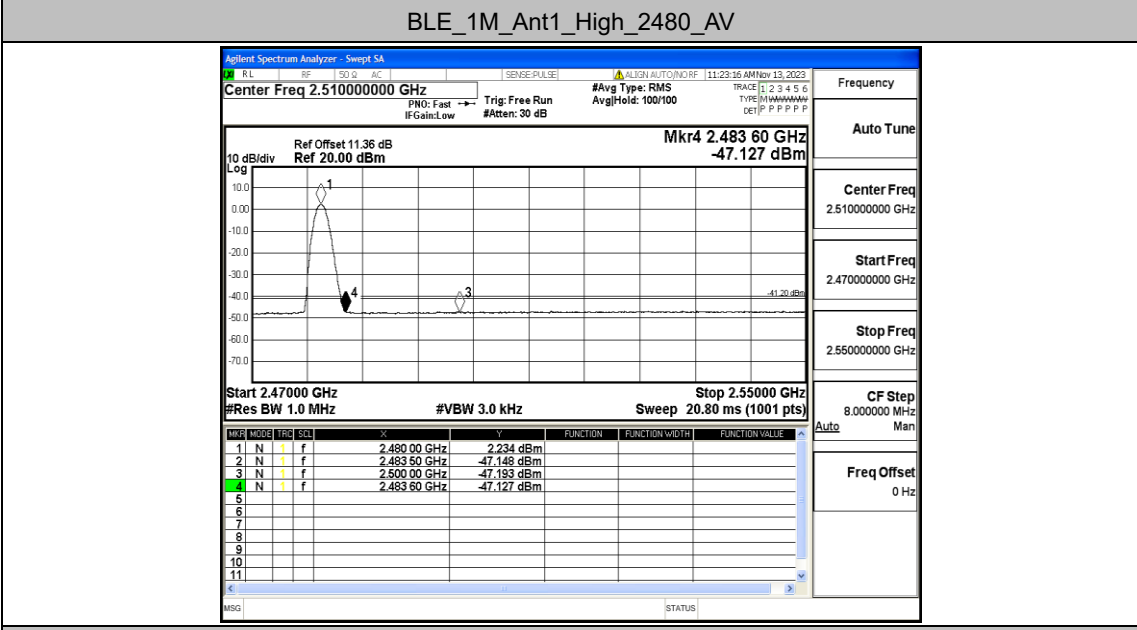
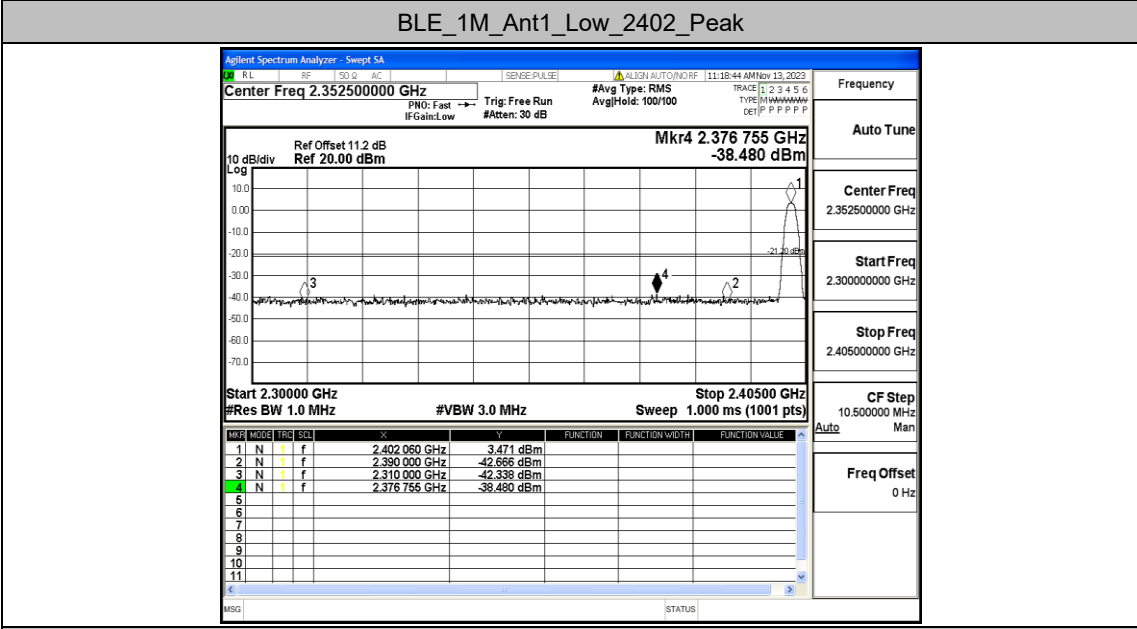
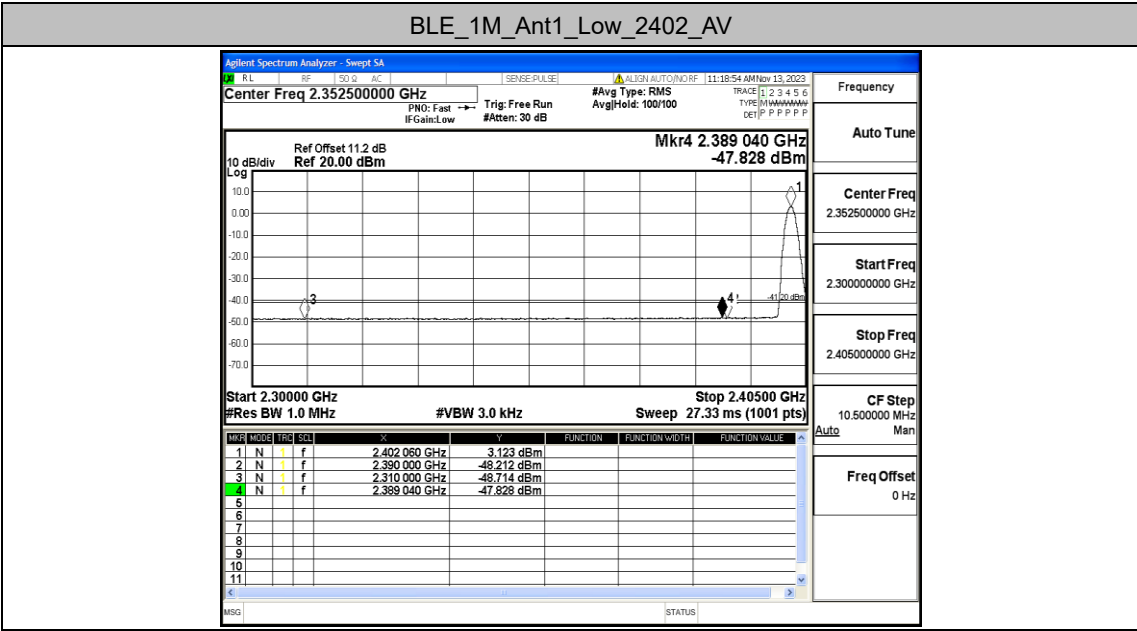
Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.71	≤-41.20	PASS
				AV	2389.040	-47.83	≤-41.20	PASS
				AV	2390.000	-48.21	≤-41.20	PASS
				Peak	2310.000	-42.34	≤-21.20	PASS
				Peak	2376.755	-38.48	≤-21.20	PASS
				Peak	2390.000	-42.67	≤-21.20	PASS
		High	2480	AV	2483.500	-47.15	≤-41.20	PASS
				AV	2483.600	-47.13	≤-41.20	PASS
				AV	2500.000	-47.19	≤-41.20	PASS
				Peak	2483.500	-40.48	≤-21.20	PASS
				Peak	2484.080	-38.06	≤-21.20	PASS
				Peak	2500.000	-41.21	≤-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_High_2480_Peak

