

RF Test Data for BT(BLE) (Conducted Measurement)**Product Name:** Bluetooth adaptor**Trade Mark:** POWERBASS**Test Model:** XL-BTRS**FCC ID:** 2A6V3-XLBTRS**Environmental Conditions**

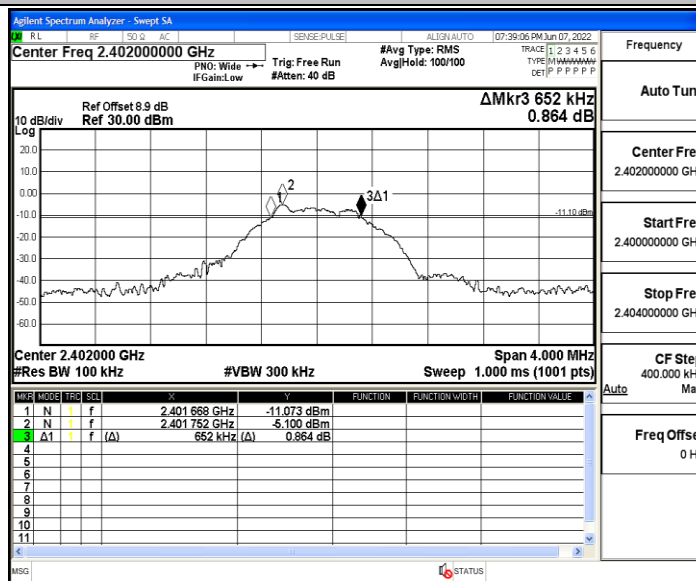
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth**Test Result**

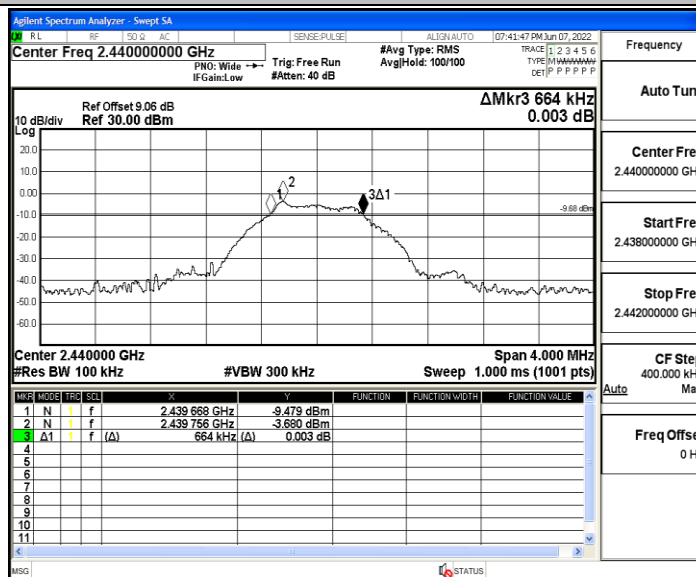
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.668	2402.320	0.5	PASS
		2440	0.664	2439.668	2440.332	0.5	PASS
		2480	0.636	2479.680	2480.316	0.5	PASS

Test Graphs

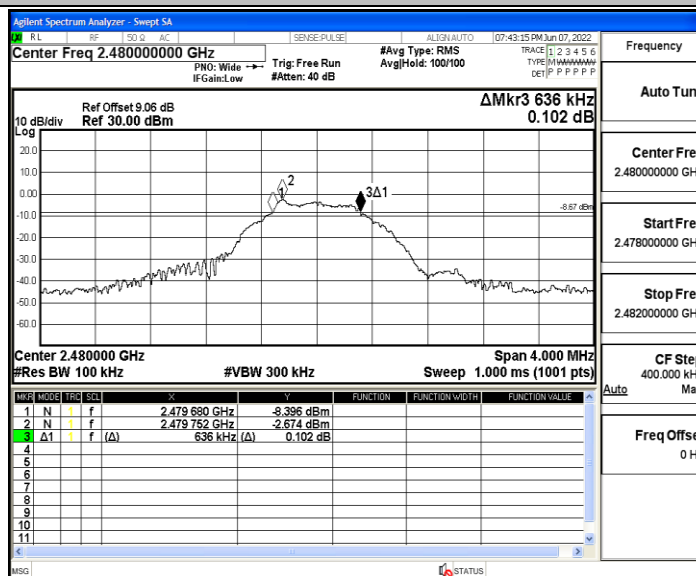
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



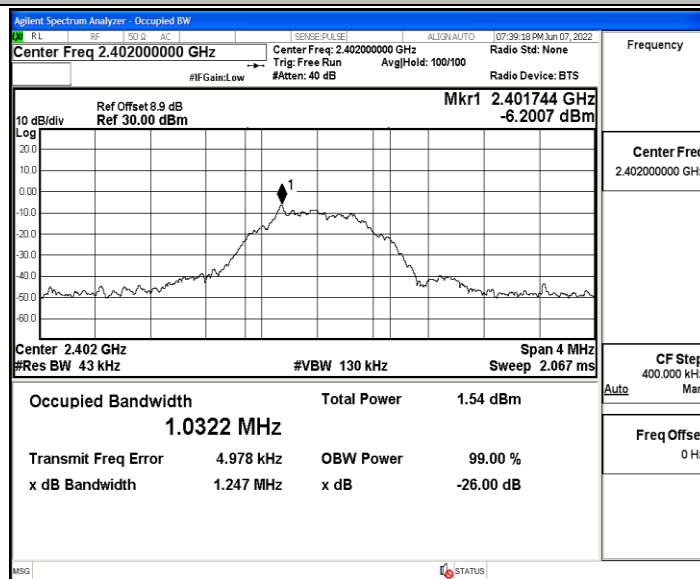
Appendix B: Occupied Channel Bandwidth

Test Result

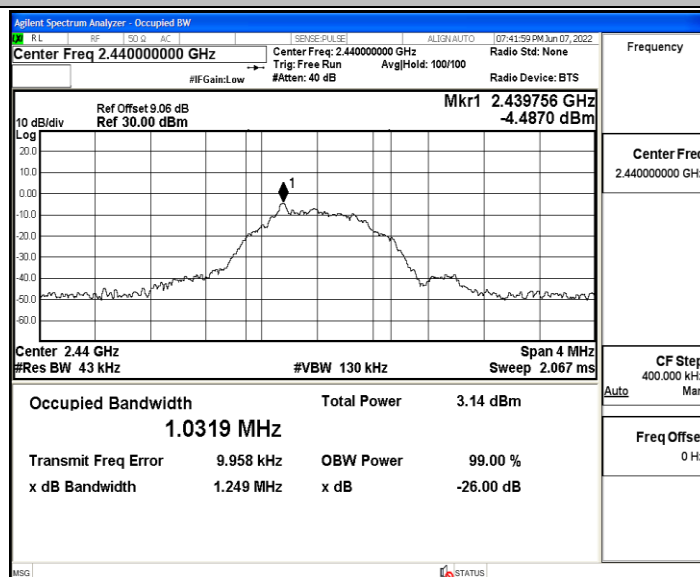
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0322	2401.489	2402.521	---	---
		2440	1.0319	2439.494	2440.526	---	---
		2480	1.0338	2479.493	2480.527	---	---

Test Graphs

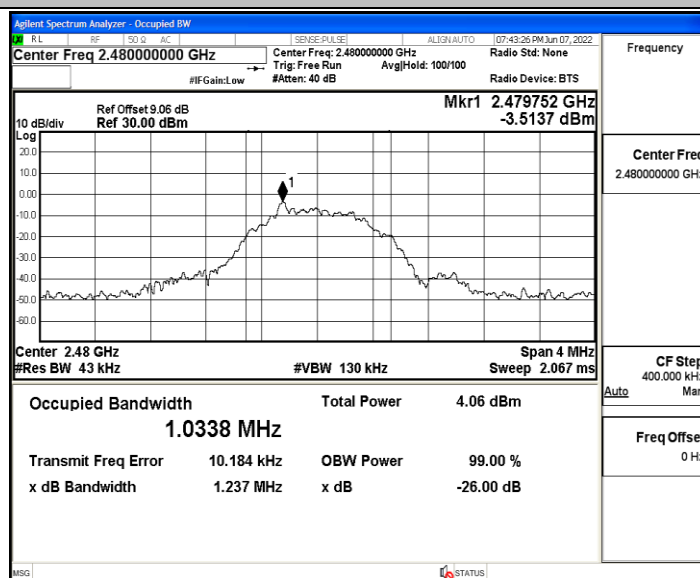
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

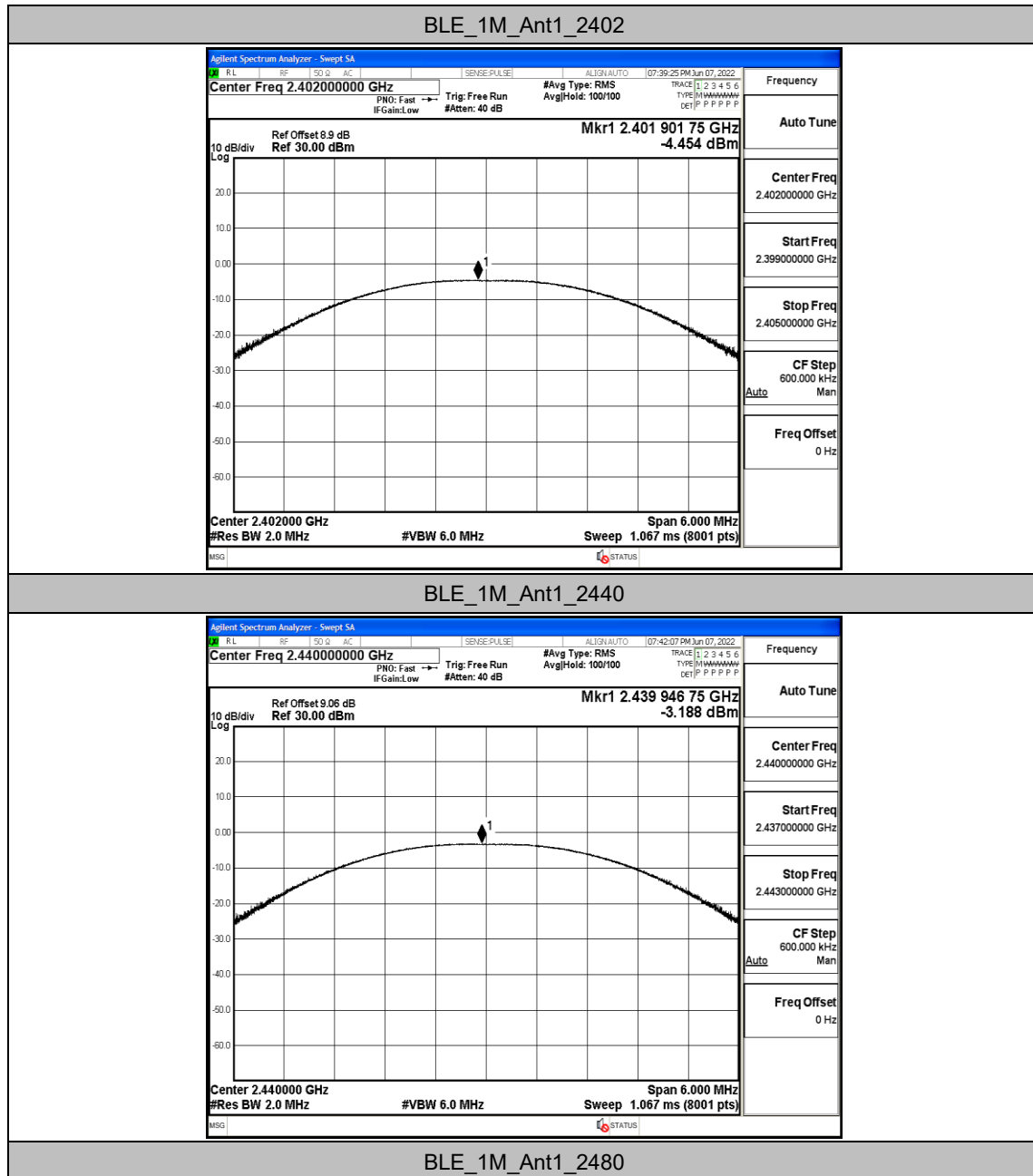


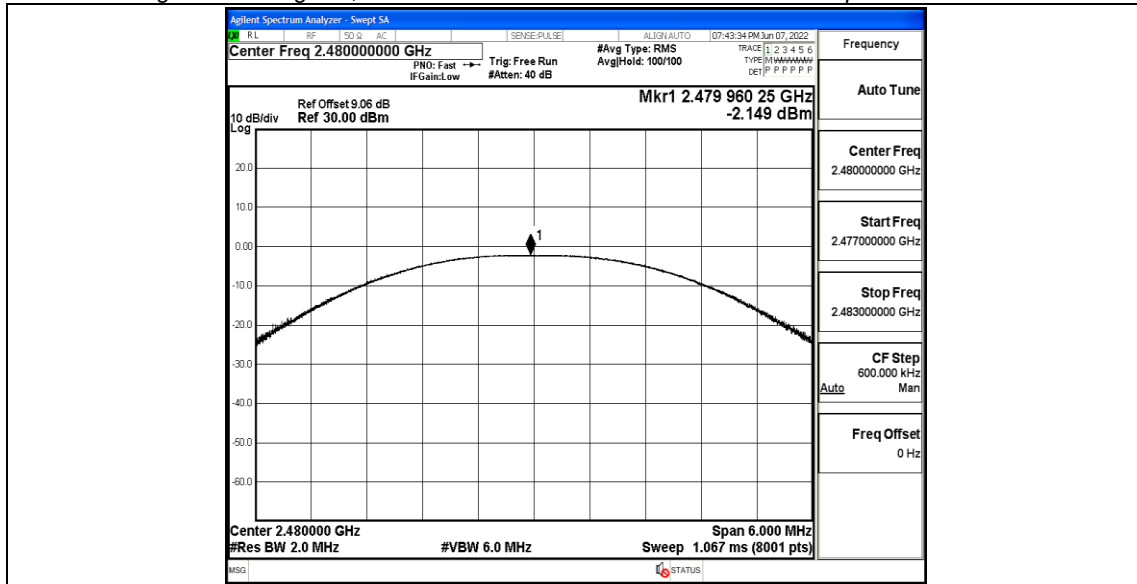
Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-4.45	≤30	PASS
		2440	-3.19	≤30	PASS
		2480	-2.15	≤30	PASS

Test Graphs



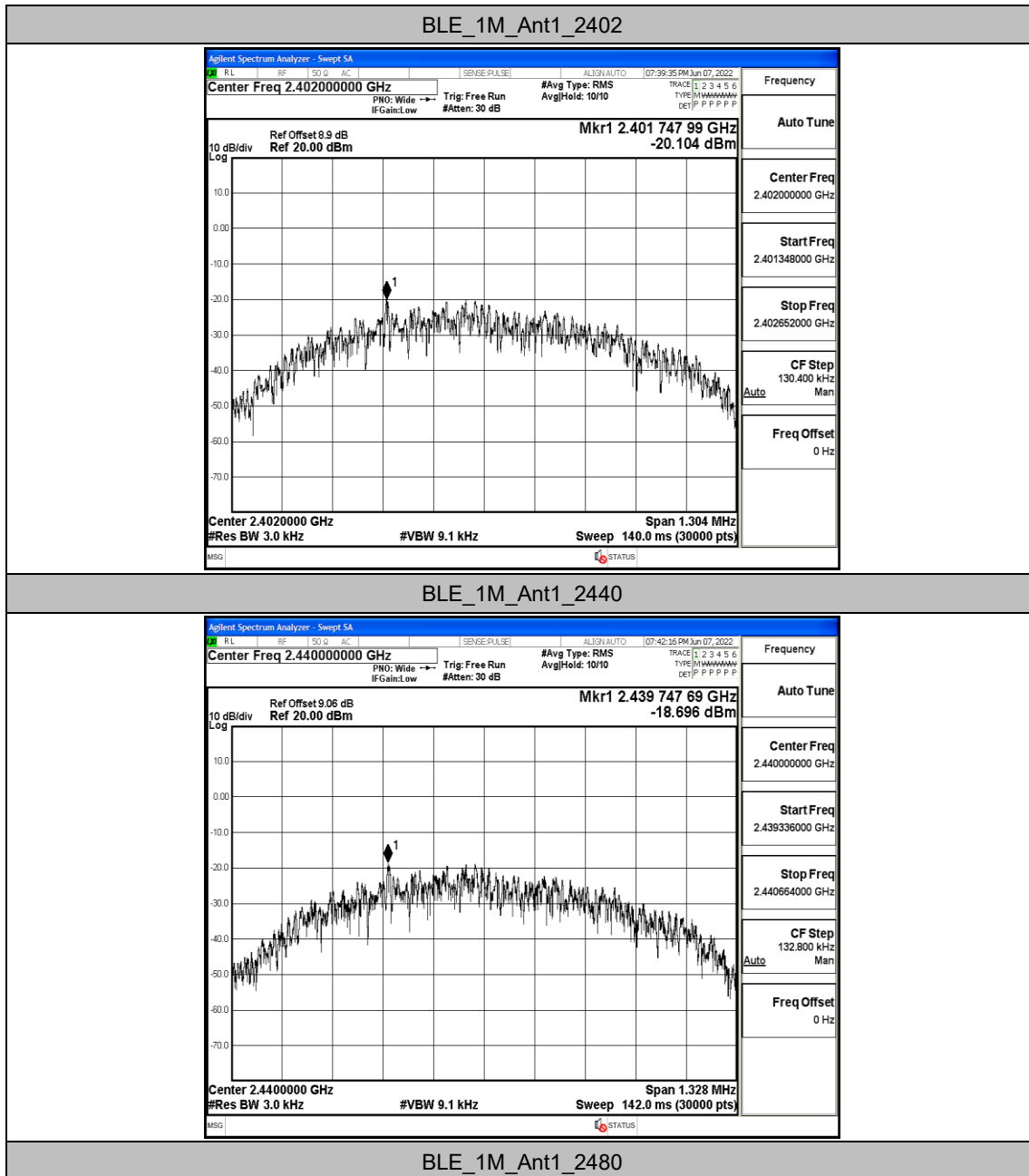


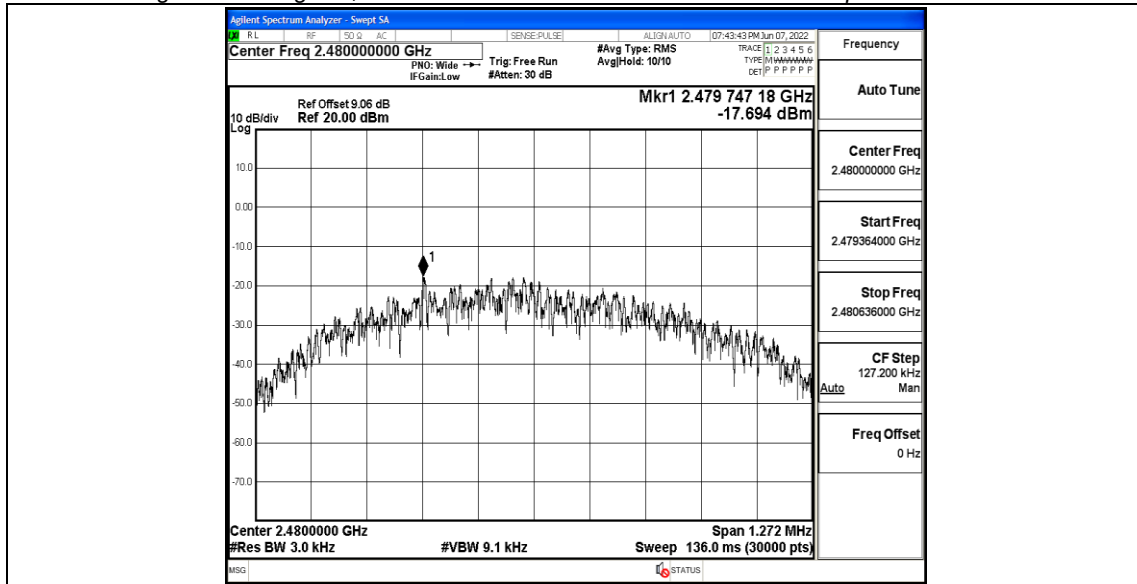
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-20.1	≤8.00	PASS
		2440	-18.7	≤8.00	PASS
		2480	-17.69	≤8.00	PASS

Test Graphs





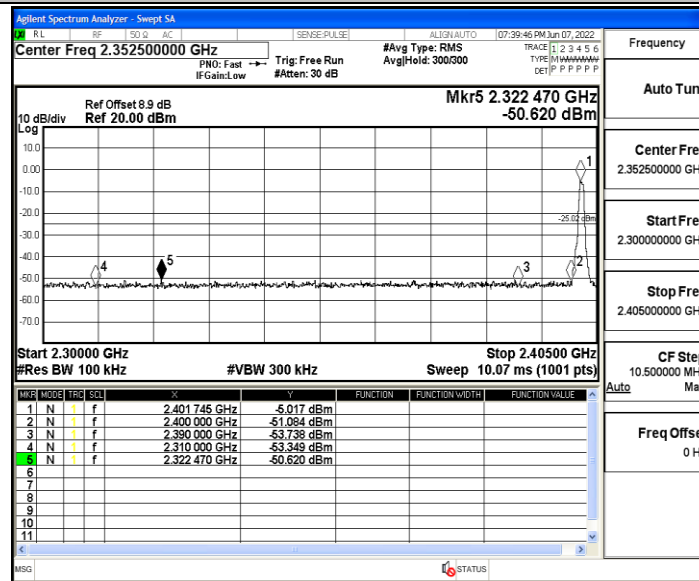
Appendix E: Band edge measurements

Test Result

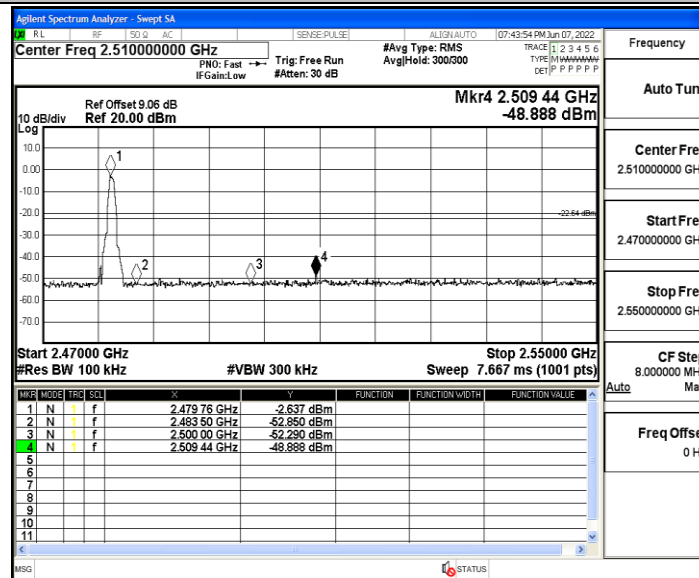
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-5.02	-50.62	≤-25.02	PASS
		High	2480	-2.64	-48.89	≤-22.64	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



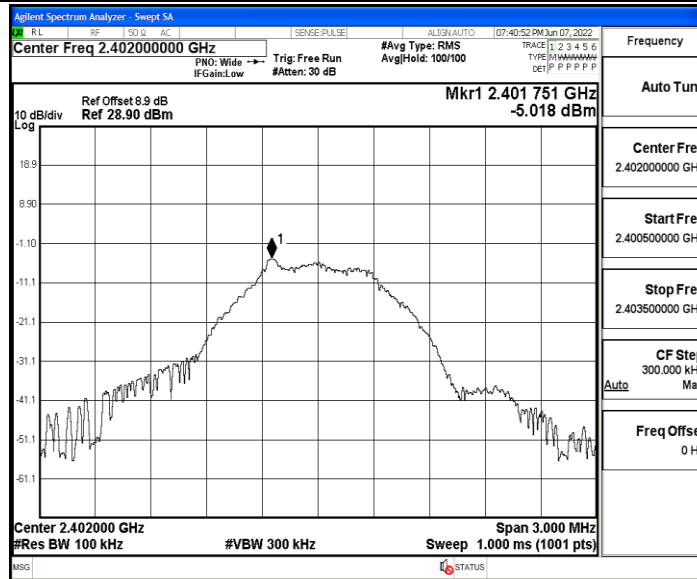
Appendix F: Conducted Spurious Emission

Test Result

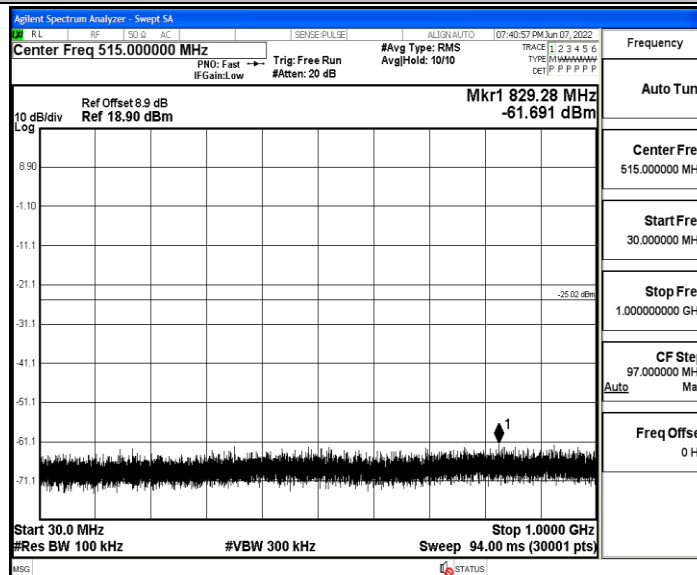
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-5.02	-5.02	---	PASS
			30~1000	-5.02	-61.69	≤-25.02	PASS
			1000~26500	-5.02	-51.67	≤-25.02	PASS
		2440	Reference	-3.67	-3.67	---	PASS
			30~1000	-3.67	-61.26	≤-23.67	PASS
			1000~26500	-3.67	-51.39	≤-23.67	PASS
		2480	Reference	-2.99	-2.99	---	PASS
			30~1000	-2.99	-61.96	≤-22.99	PASS
			1000~26500	-2.99	-51.72	≤-22.99	PASS

Test Graphs

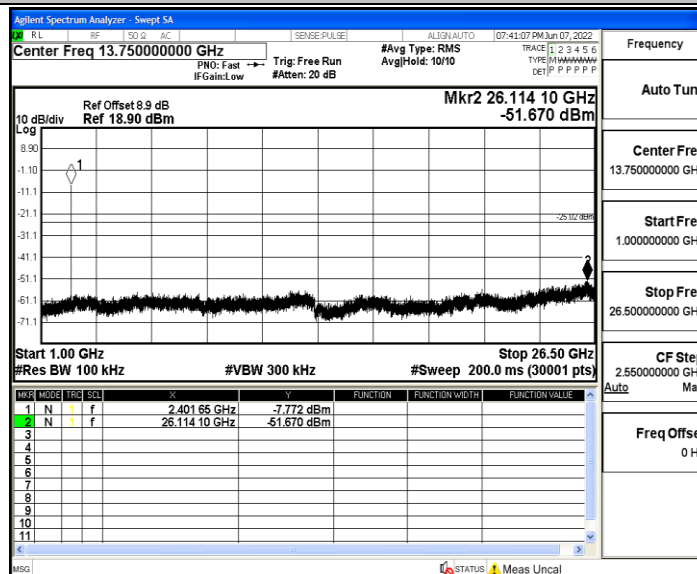
BLE_1M_Ant1_2402_0~Reference



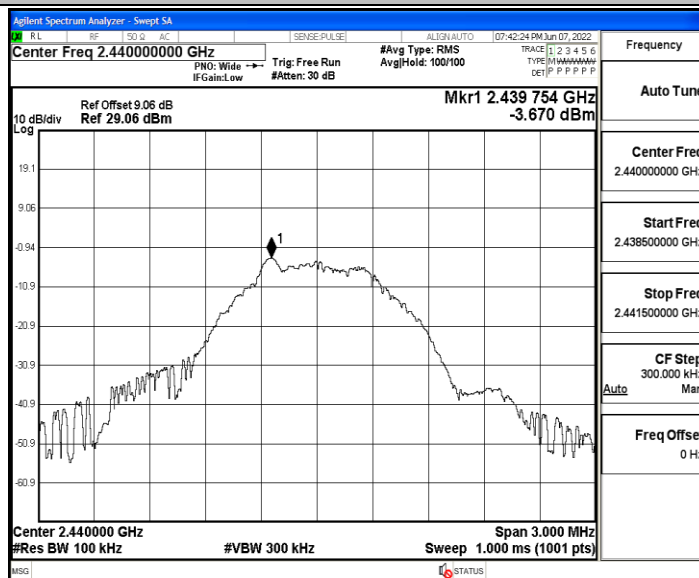
BLE_1M_Ant1_2402_30~1000



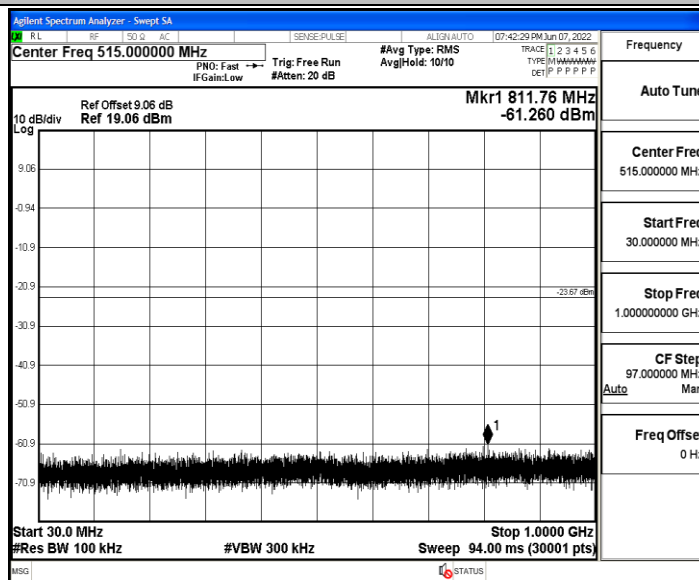
BLE_1M_Ant1_2402_1000~26500



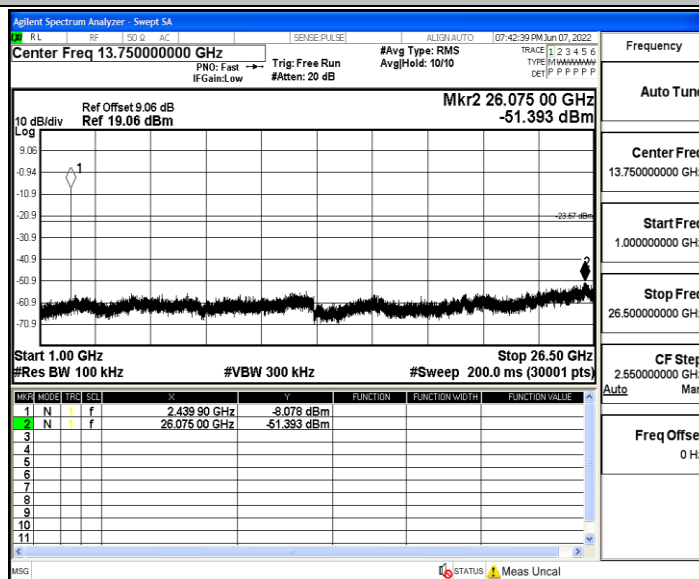
BLE_1M_Ant1_2440_0~Reference



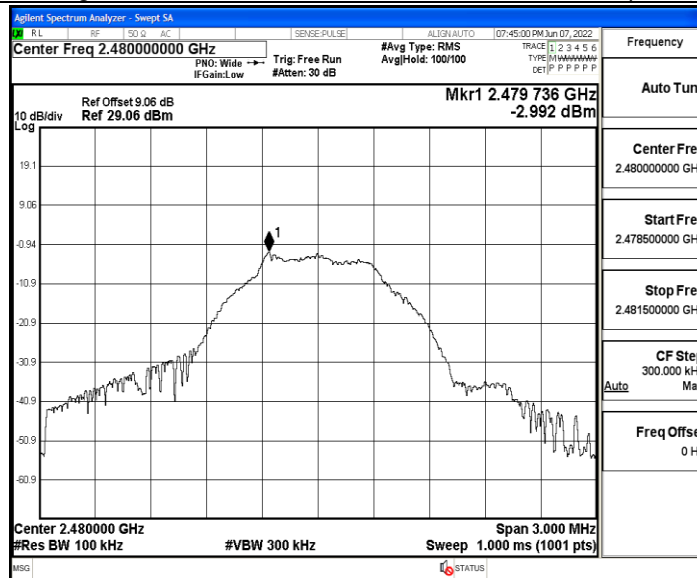
BLE_1M_Ant1_2440_30~1000



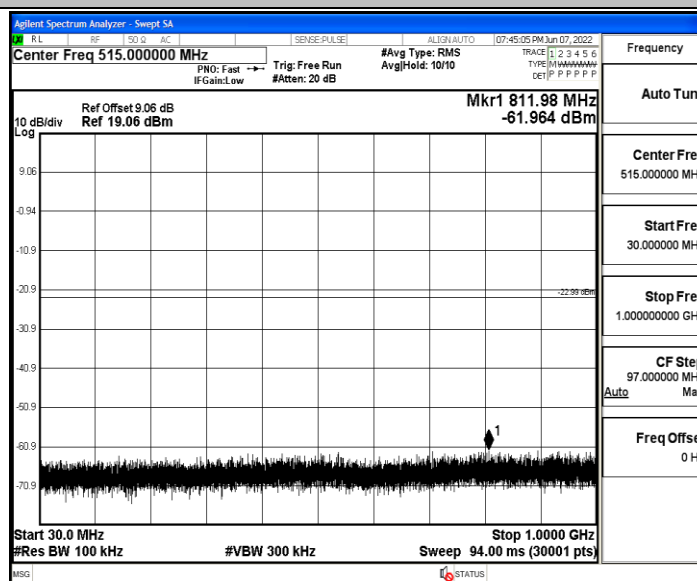
BLE_1M_Ant1_2440_1000~26500



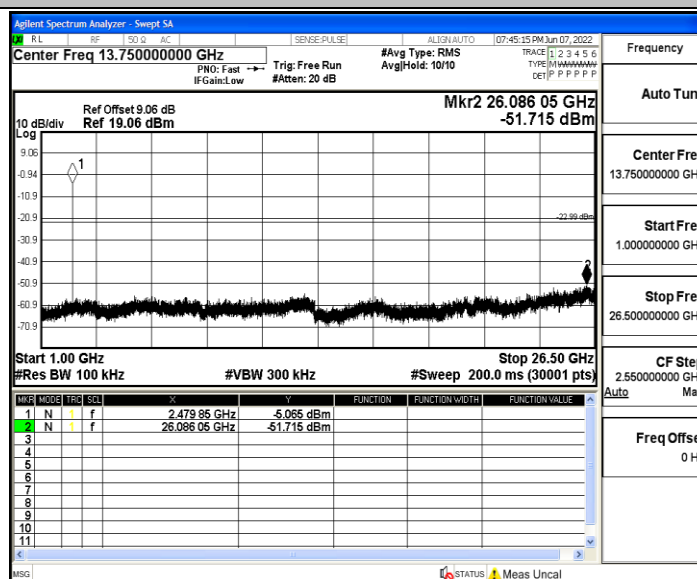
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



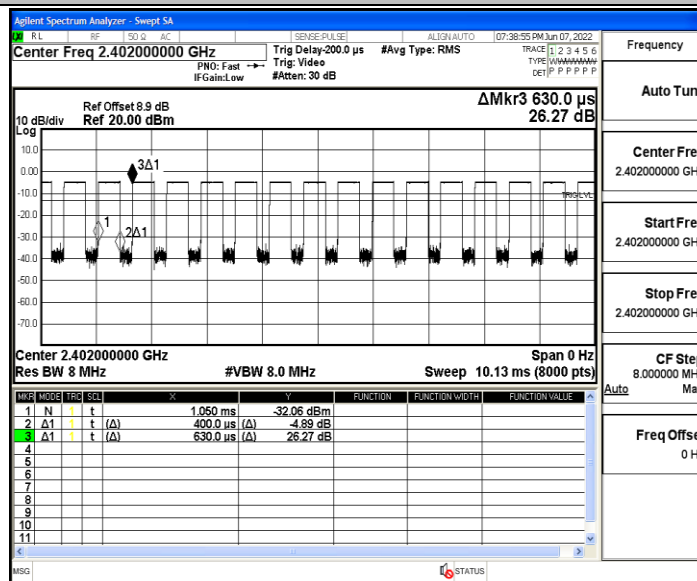
Appendix G: Duty Cycle

Test Result

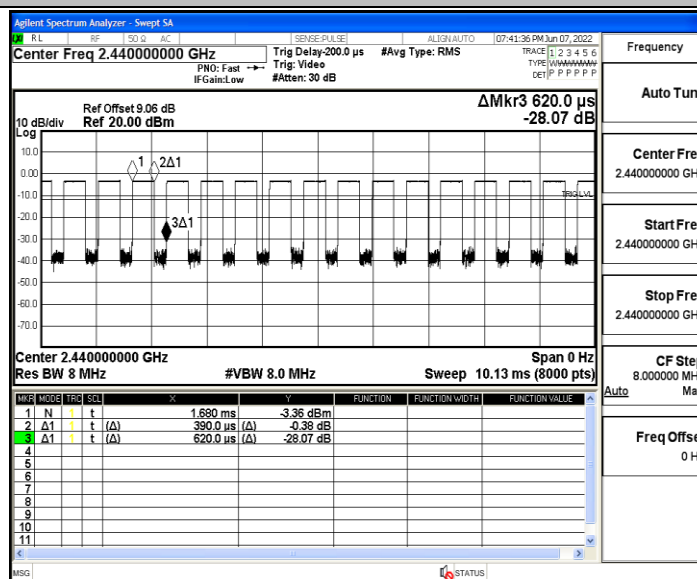
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.40	0.63	63.49	2.50
		2440	0.39	0.62	62.90	2.56
		2480	0.40	0.63	63.49	2.50

Test Graphs

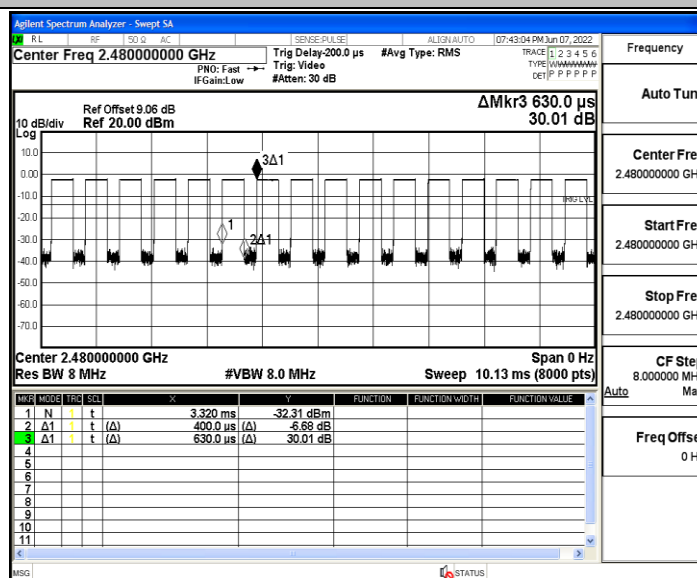
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

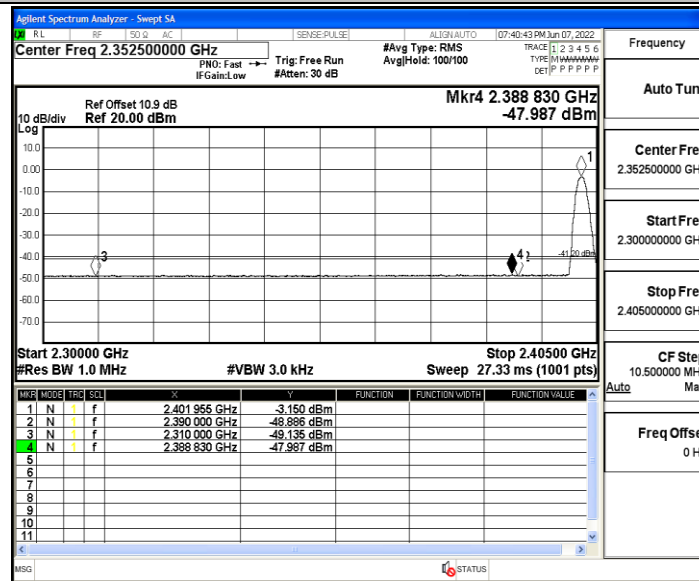
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-49.14	≤-41.20	PASS
				AV	2388.830	-47.99	≤-41.20	PASS
				AV	2390.000	-48.89	≤-41.20	PASS
				Peak	2310.000	-41.51	≤-21.20	PASS
				Peak	2358.905	-39.19	≤-21.20	PASS
				Peak	2390.000	-42.65	≤-21.20	PASS
		High	2480	AV	2483.500	-48.12	≤-41.20	PASS
				AV	2497.760	-47.34	≤-41.20	PASS
				AV	2500.000	-47.96	≤-41.20	PASS
				Peak	2483.500	-40.81	≤-21.20	PASS
				Peak	2499.440	-38.57	≤-21.20	PASS
				Peak	2500.000	-41.49	≤-21.20	PASS

Note:

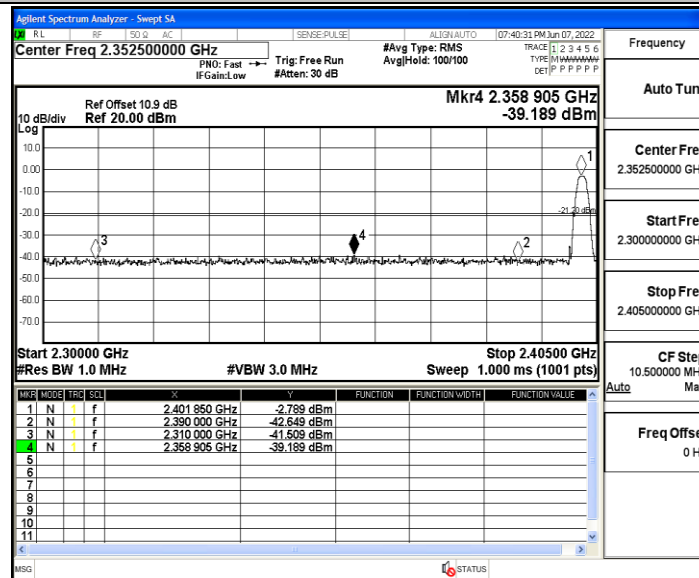
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

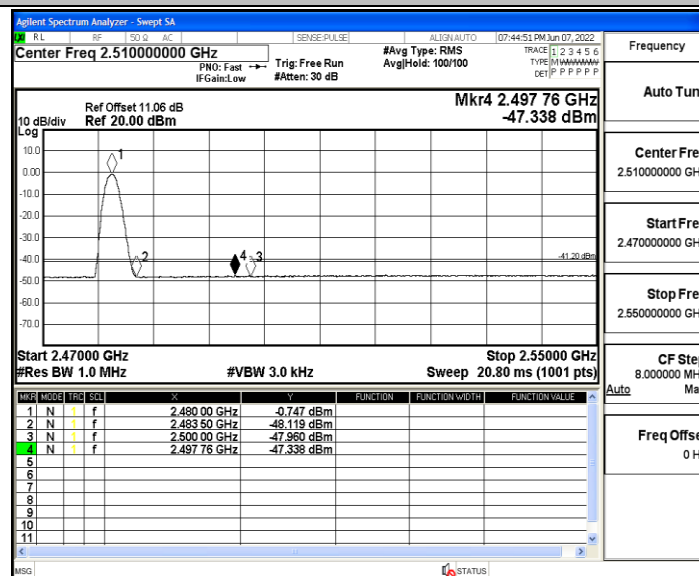
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

