

RF Test Data for BT(BLE) (Conducted Measurement)**Product Name: Granary Automatic Pet Feeder - Camera Monitoring 5L****Trade Mark: Petlibro****Test Model: PLAF203****FCC ID: 2A3DE-PLAF203****Environmental Conditions**

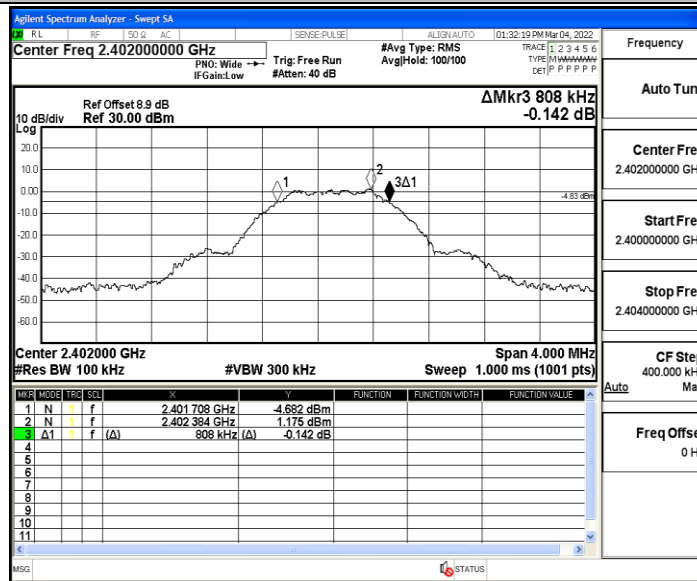
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth**Test Result**

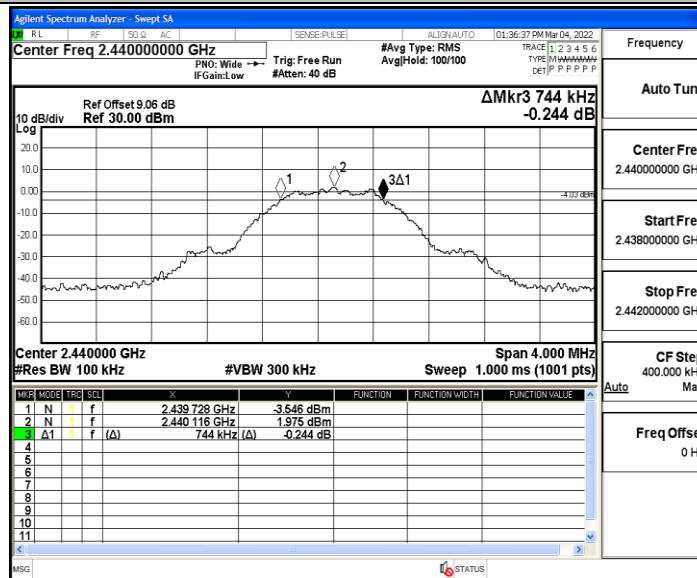
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.808	2401.708	2402.516	0.5	PASS
		2440	0.744	2439.728	2440.472	0.5	PASS
		2480	0.792	2479.728	2480.520	0.5	PASS

Test Graphs

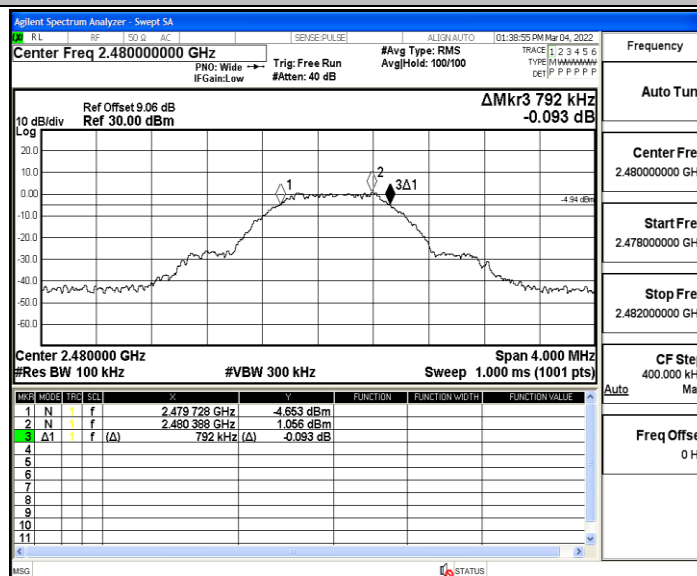
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



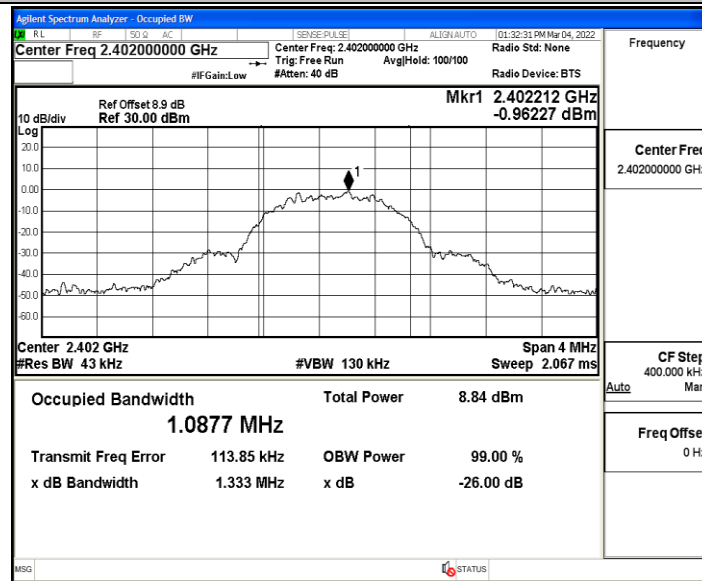
Appendix B: Occupied Channel Bandwidth

Test Result

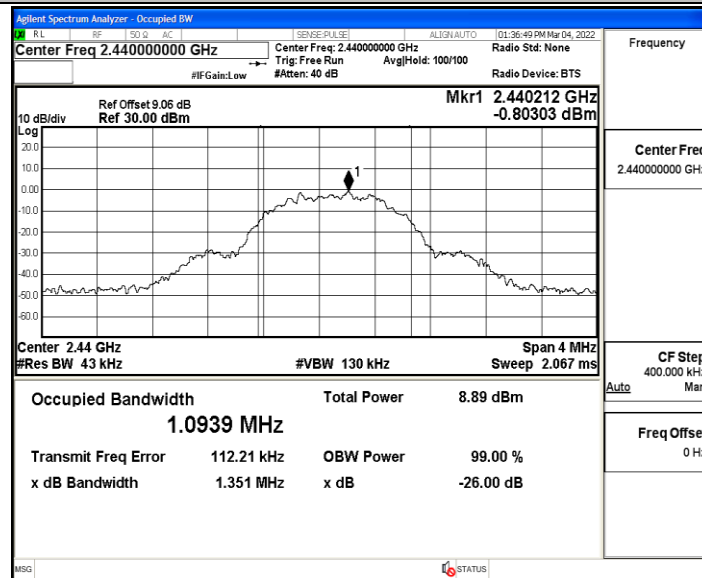
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0877	2401.570	2402.658	---	PASS
		2440	1.0939	2439.565	2440.659	---	PASS
		2480	1.0896	2479.571	2480.660	---	PASS

Test Graphs

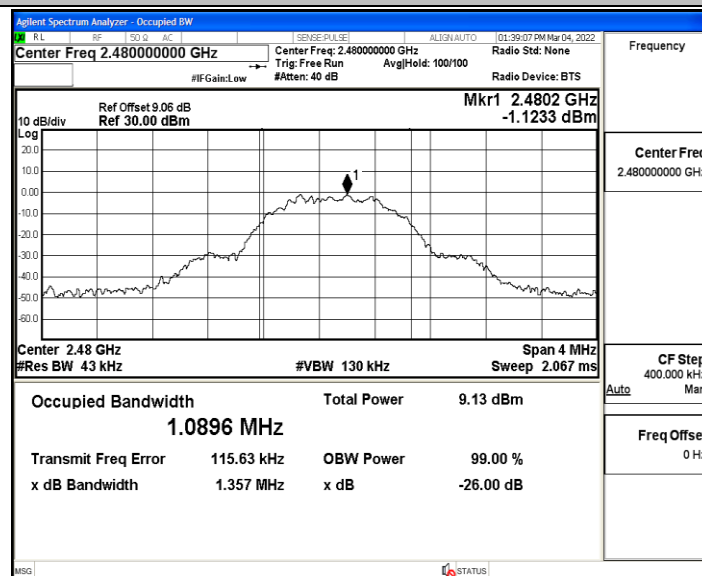
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



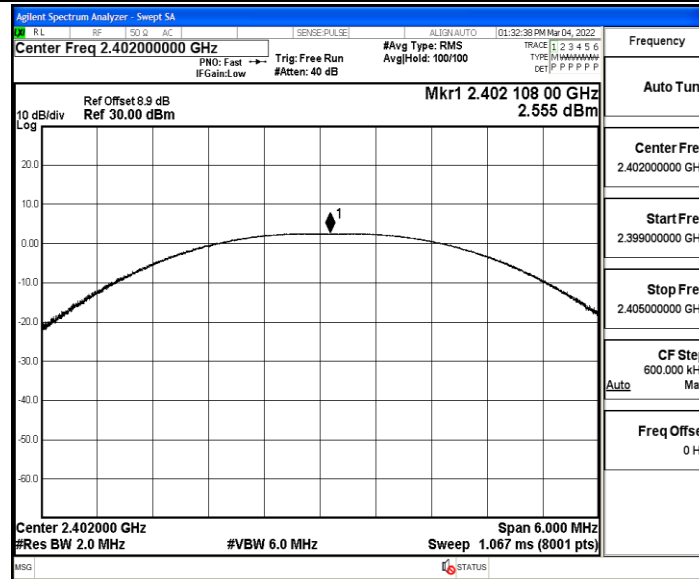
Appendix C: Maximum conducted output power

Test Result

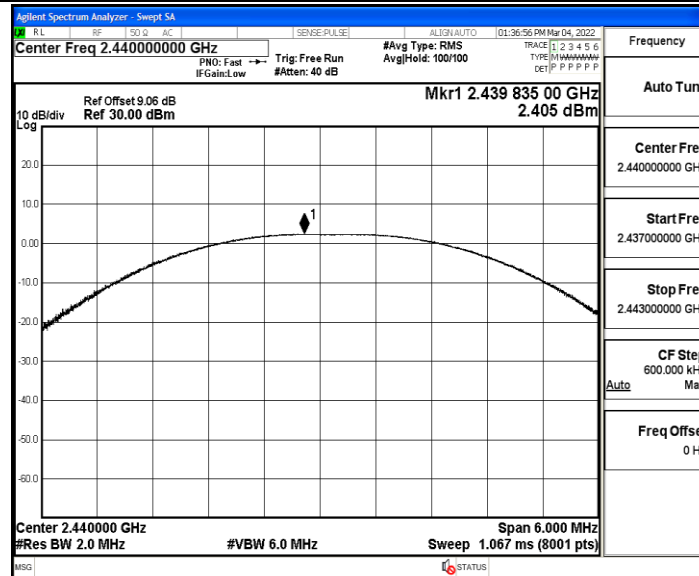
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.56	≤30	PASS
		2440	2.41	≤30	PASS
		2480	2.5	≤30	PASS

Test Graphs

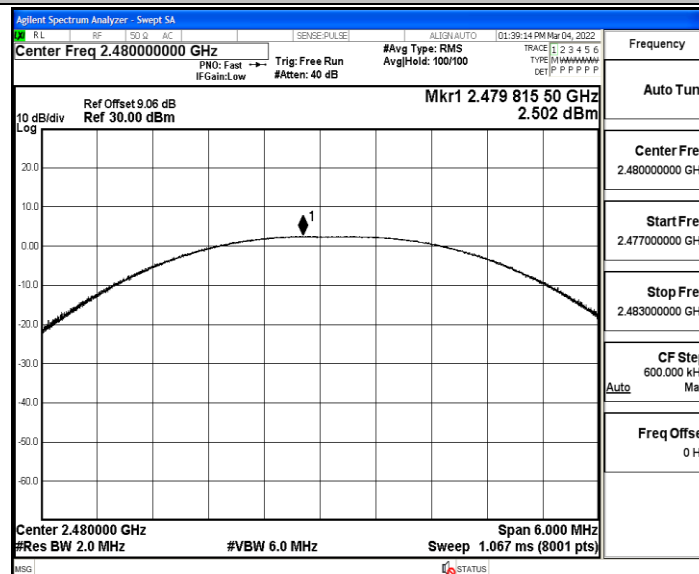
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



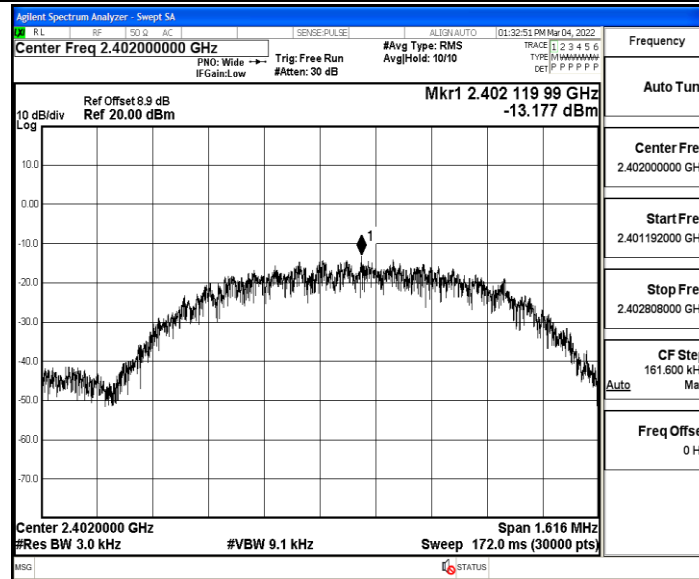
Appendix D: Maximum power spectral density

Test Result

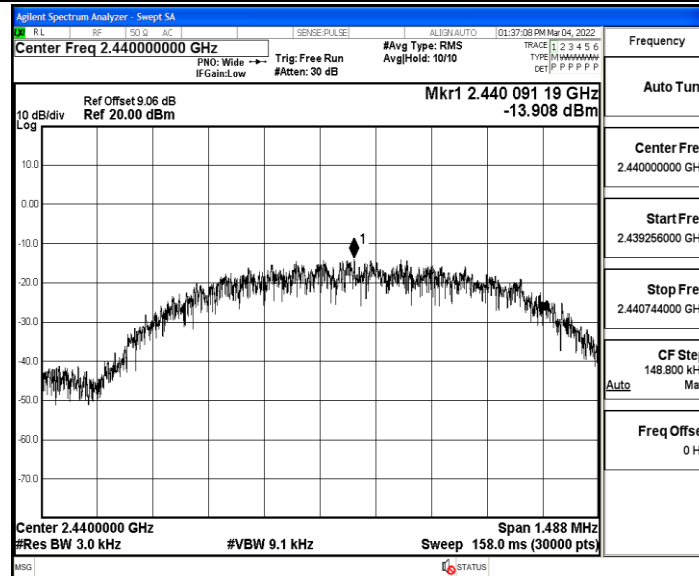
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-13.18	≤8	PASS
		2440	-13.91	≤8	PASS
		2480	-13.48	≤8	PASS

Test Graphs

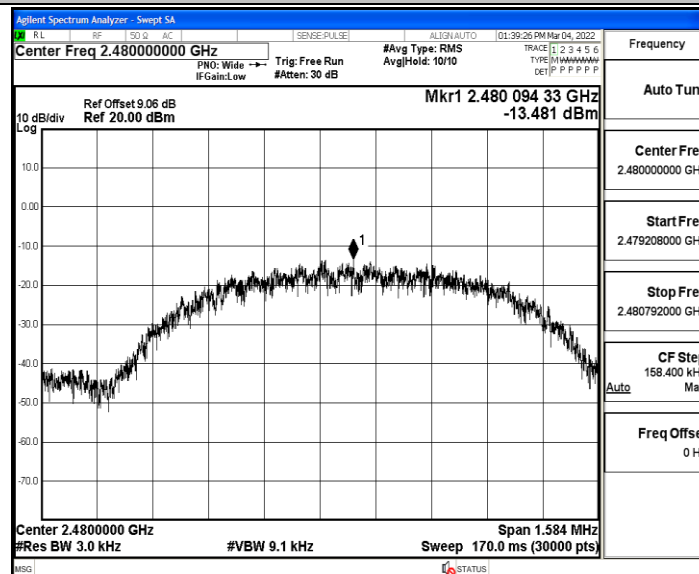
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

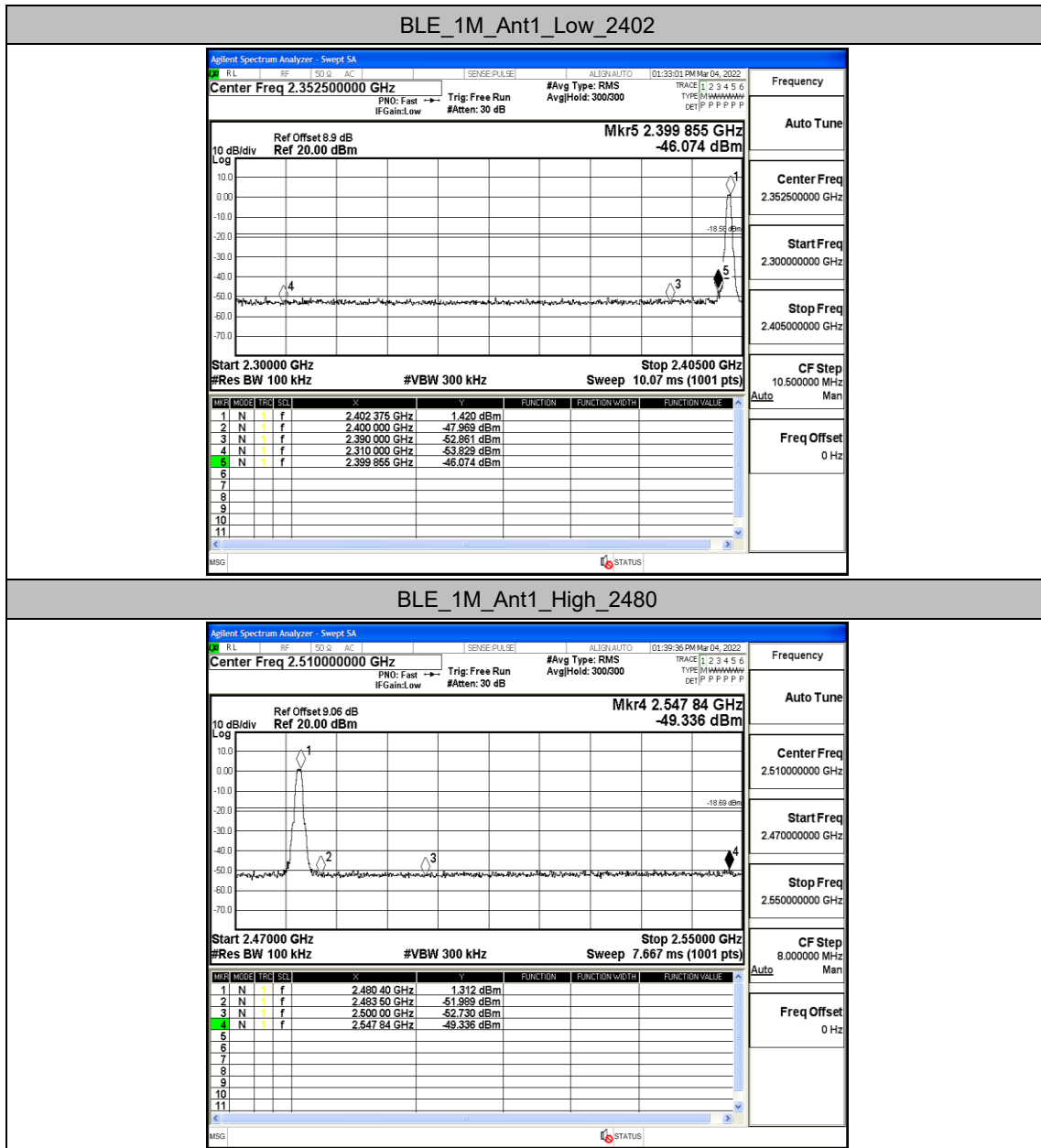


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.42	-46.07	≤-18.58	PASS
		High	2480	1.31	-49.34	≤-18.69	PASS

Test Graphs



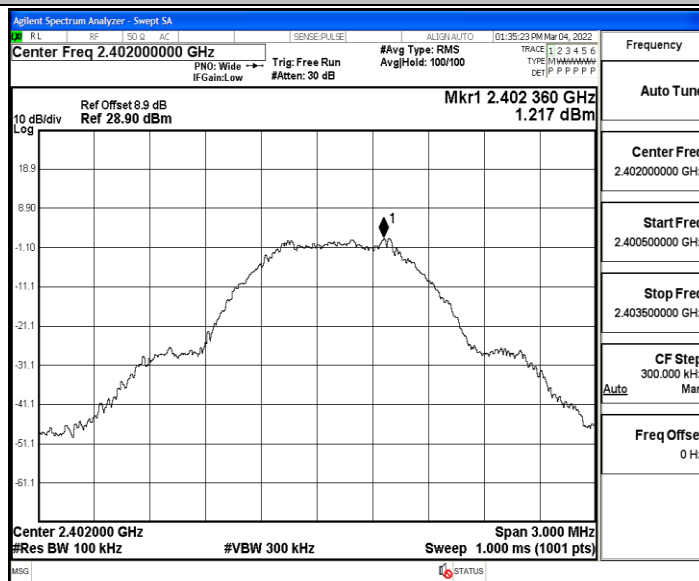
Appendix F: Conducted Spurious Emission

Test Result

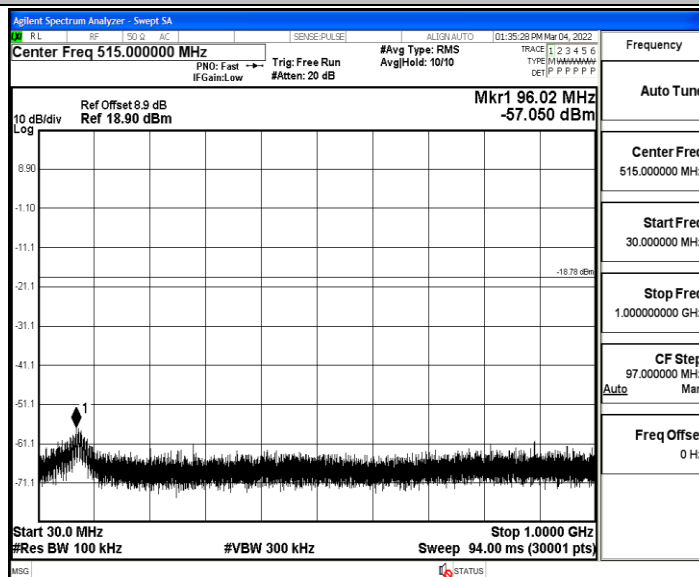
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.22	1.22	---	PASS
			30~1000	1.22	-57.05	≤-18.78	PASS
			1000~26500	1.22	-37.58	≤-18.78	PASS
		2440	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-56.48	≤-18.97	PASS
			1000~26500	1.03	-37.26	≤-18.97	PASS
		2480	Reference	1.21	1.21	---	PASS
			30~1000	1.21	-58.1	≤-18.79	PASS
			1000~26500	1.21	-35.87	≤-18.79	PASS

Test Graphs

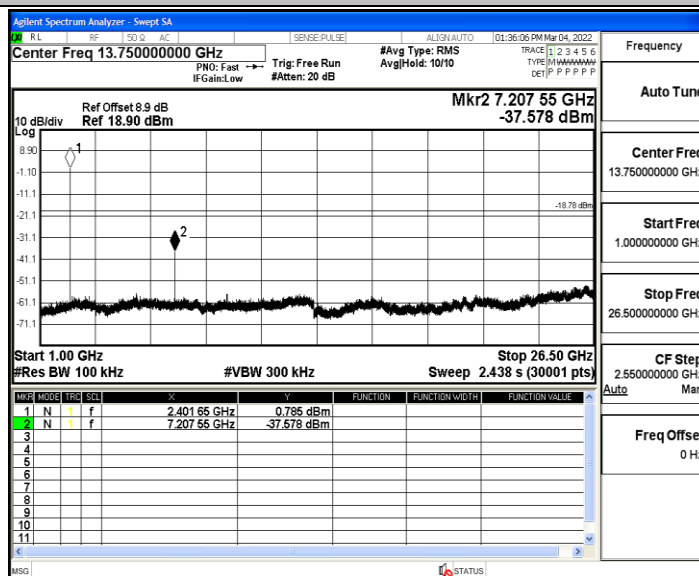
BLE_1M_Ant1_2402_0~Reference



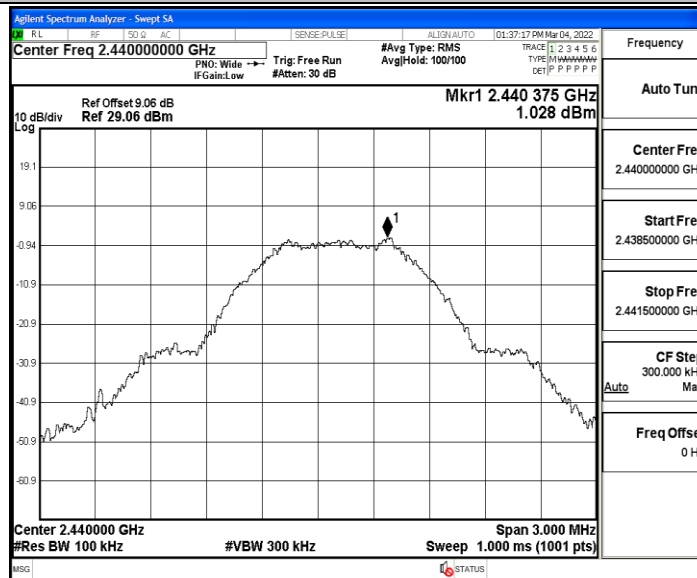
BLE_1M_Ant1_2402_30~1000



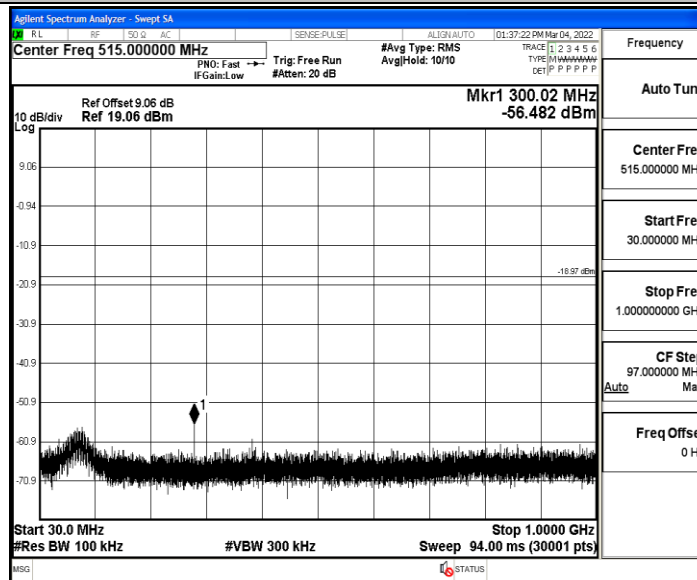
BLE_1M_Ant1_2402_1000~26500



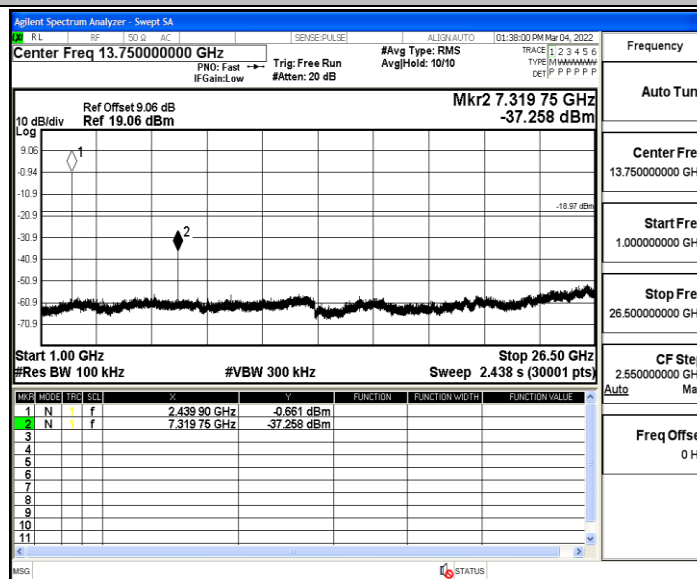
BLE_1M_Ant1_2440_0~Reference



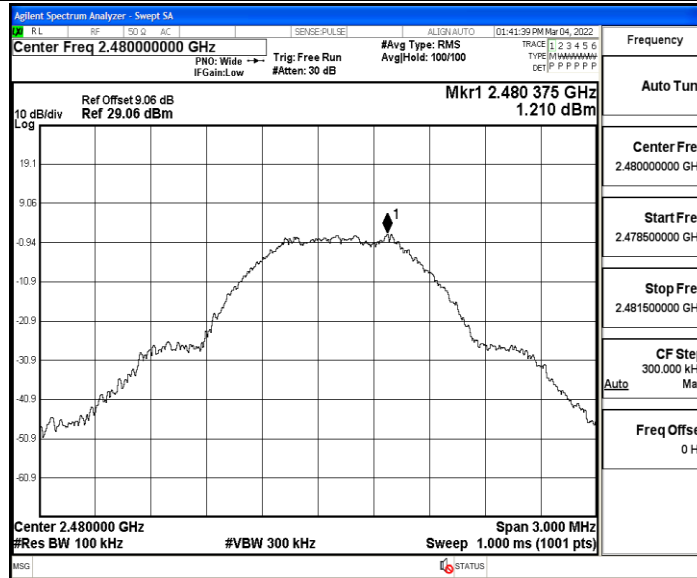
BLE_1M_Ant1_2440_30~1000



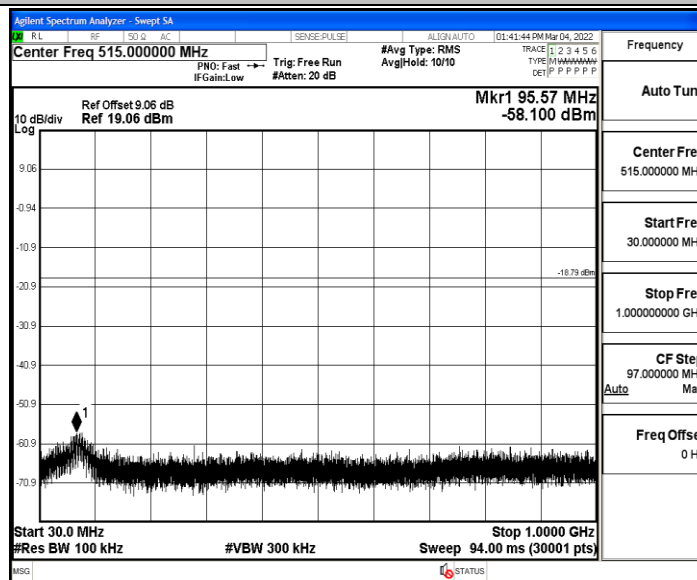
BLE_1M_Ant1_2440_1000~26500



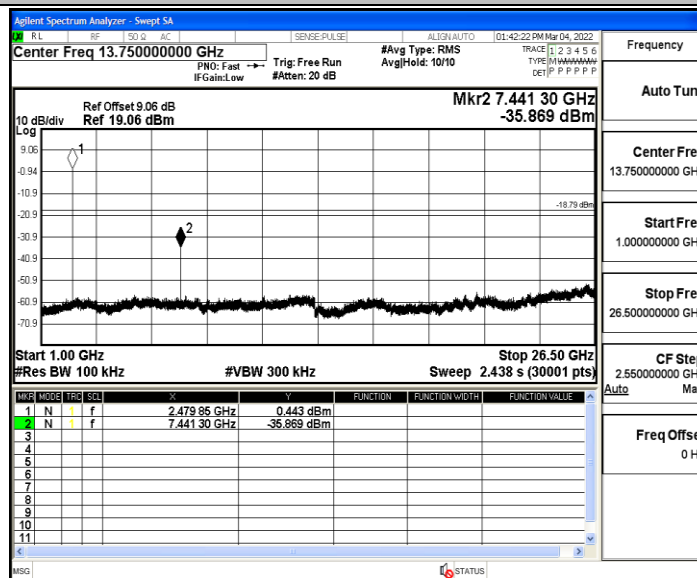
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



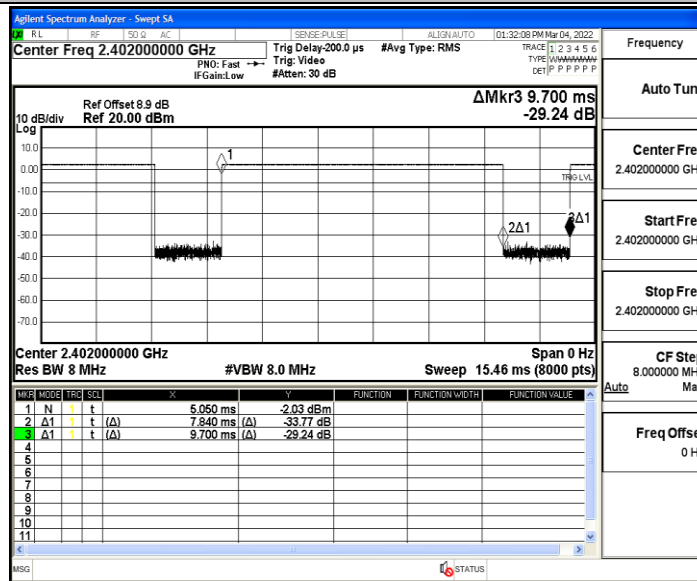
Appendix G: Duty Cycle

Test Result

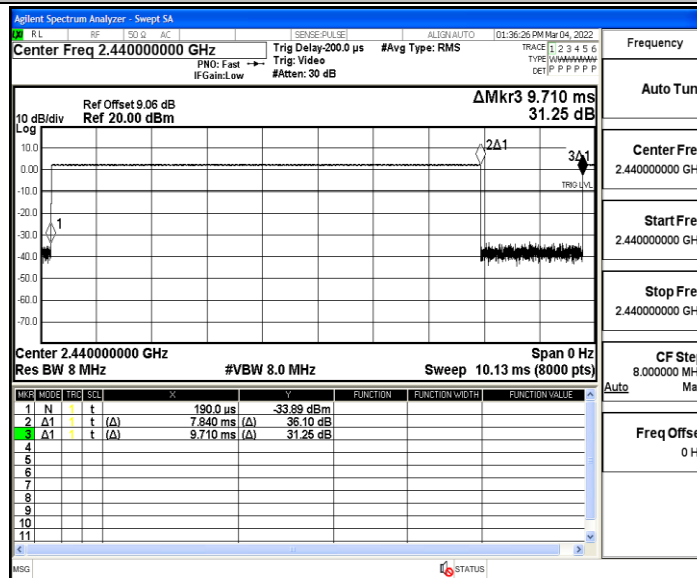
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B [kHz]
BLE_1M	Ant1	2402	7.84	9.70	80.82	0.13
		2440	7.84	9.71	80.74	0.13
		2480	7.84	9.71	80.74	0.13

Test Graphs

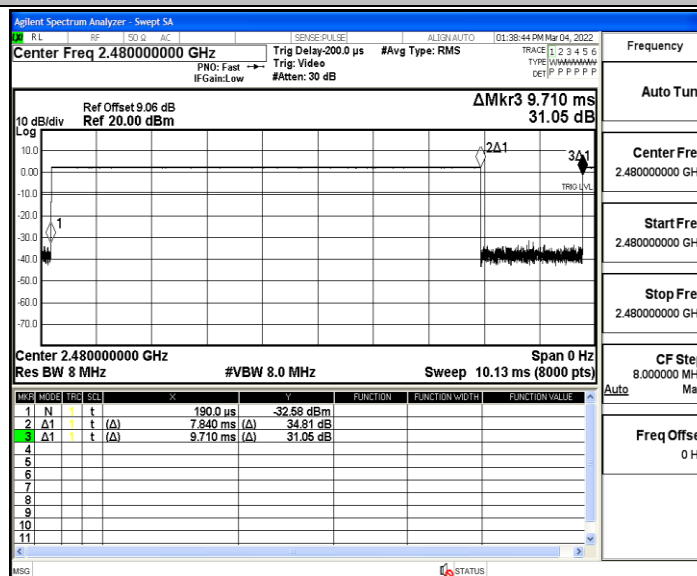
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

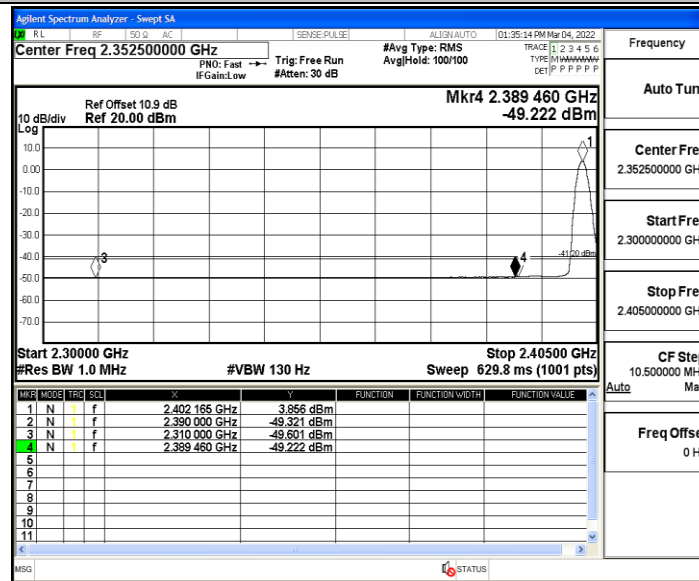
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-49.6	≤-41.20	PASS
				AV	2389.460	-49.22	≤-41.20	PASS
				AV	2390.000	-49.32	≤-41.20	PASS
				Peak	2310.000	-42.34	≤-21.20	PASS
				Peak	2361.110	-39.35	≤-21.20	PASS
				Peak	2390.000	-40.42	≤-21.20	PASS
		High	2480	AV	2483.500	-46.74	≤-41.20	PASS
				AV	2483.520	-46.74	≤-41.20	PASS
				AV	2500.000	-48.65	≤-41.20	PASS
				Peak	2483.500	-41.53	≤-21.20	PASS
				Peak	2494.880	-39.1	≤-21.20	PASS
				Peak	2500.000	-42.03	≤-21.20	PASS

Note:

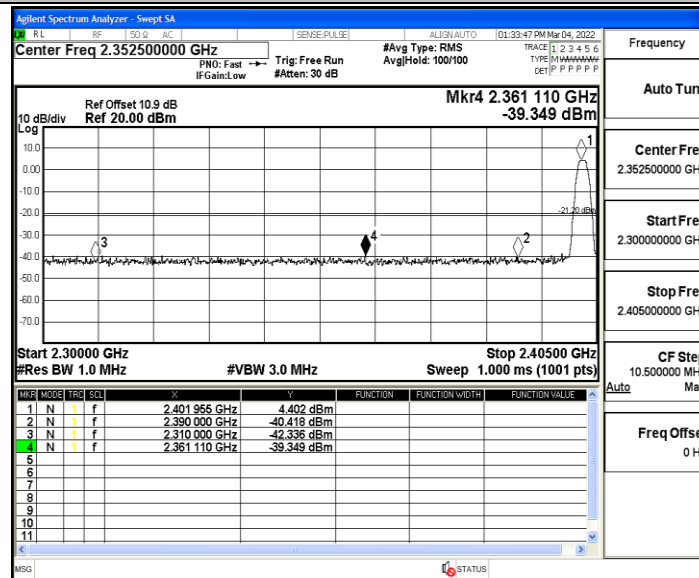
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

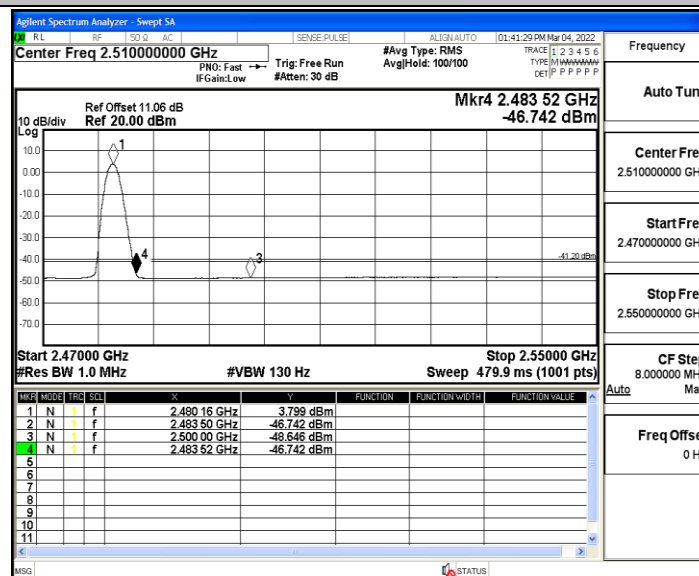
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

