

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

Product Name: Force Feedback Racing Wheel
Trade Mark: N/A
Test Model: PXN-V10
FCC ID: 2AFGF-PXN-V10

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

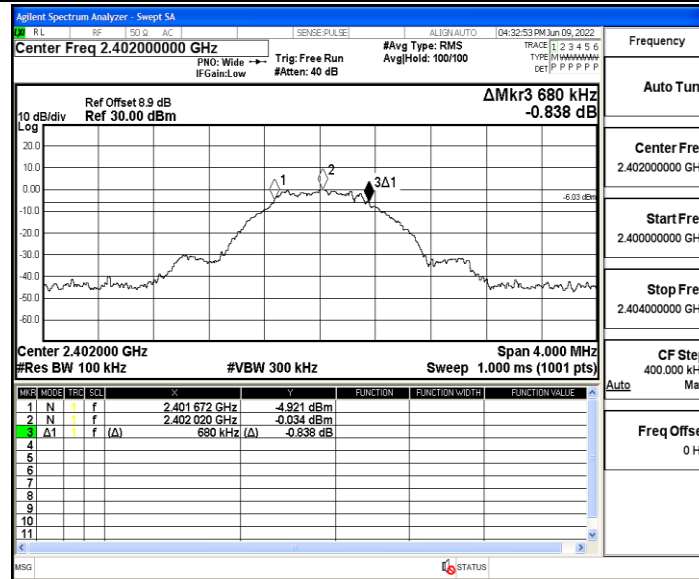
Appendix A: DTS Bandwidth

Test Result

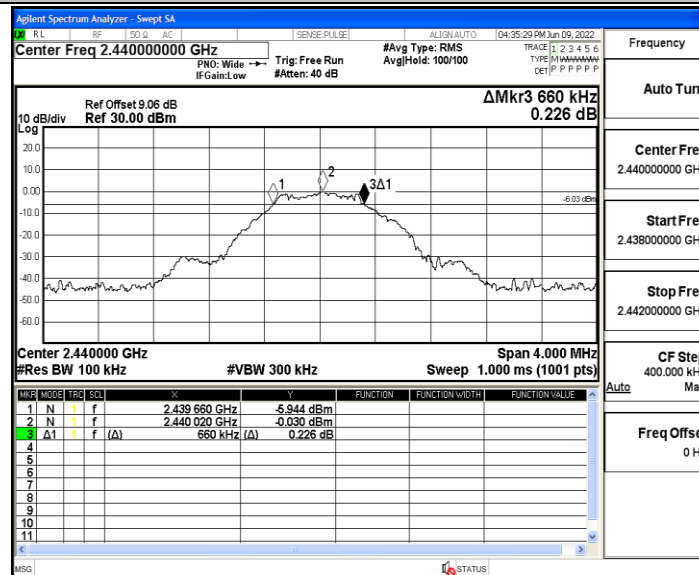
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.680	2401.672	2402.352	0.5	PASS
		2440	0.660	2439.660	2440.320	0.5	PASS
		2480	0.664	2479.664	2480.328	0.5	PASS

Test Graphs

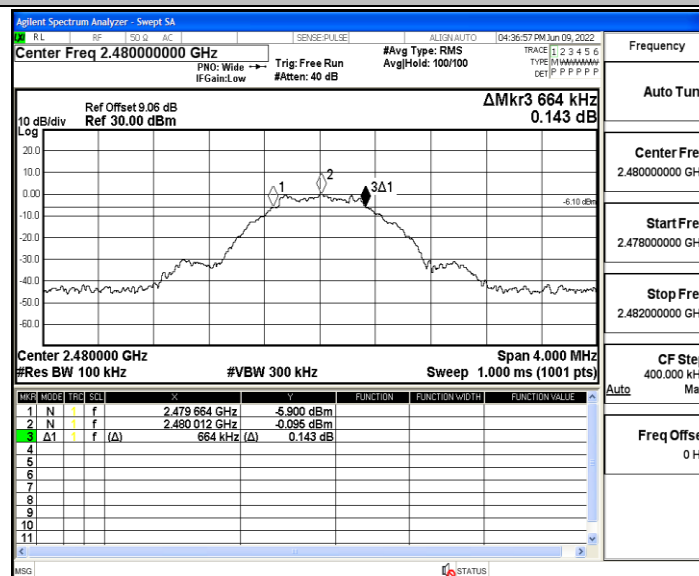
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



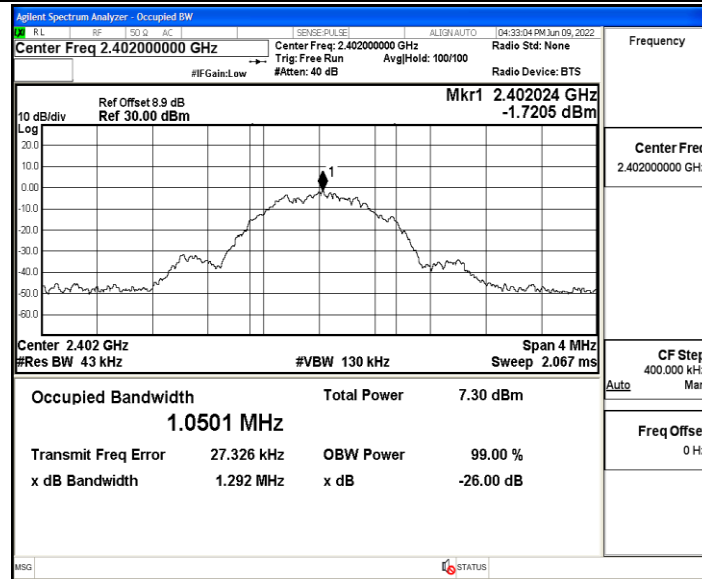
Appendix B: Occupied Channel Bandwidth

Test Result

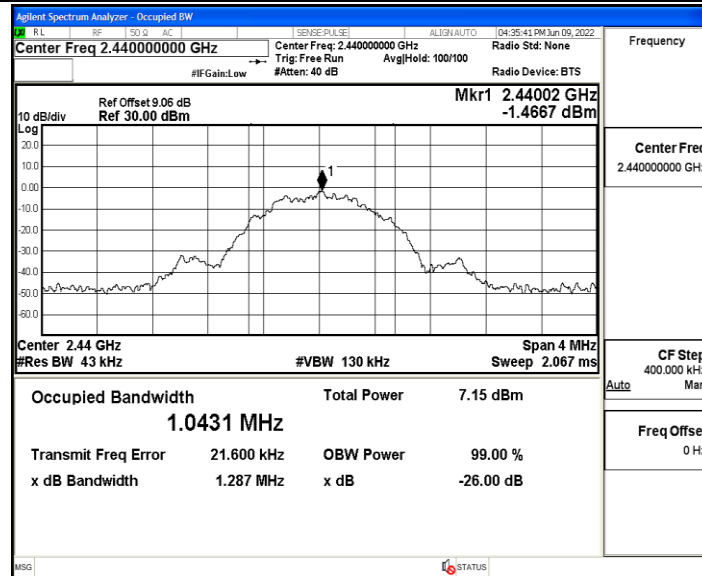
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0501	2401.502	2402.552	---	---
		2440	1.0431	2439.500	2440.543	---	---
		2480	1.0478	2479.495	2480.543	---	---

Test Graphs

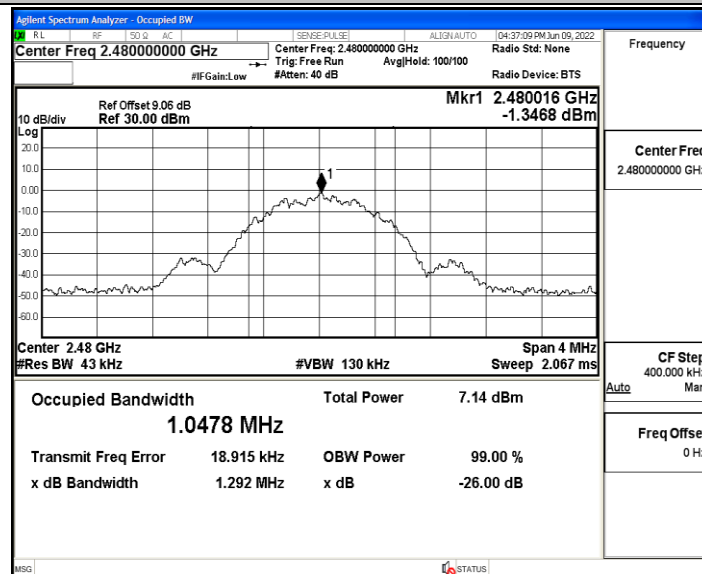
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

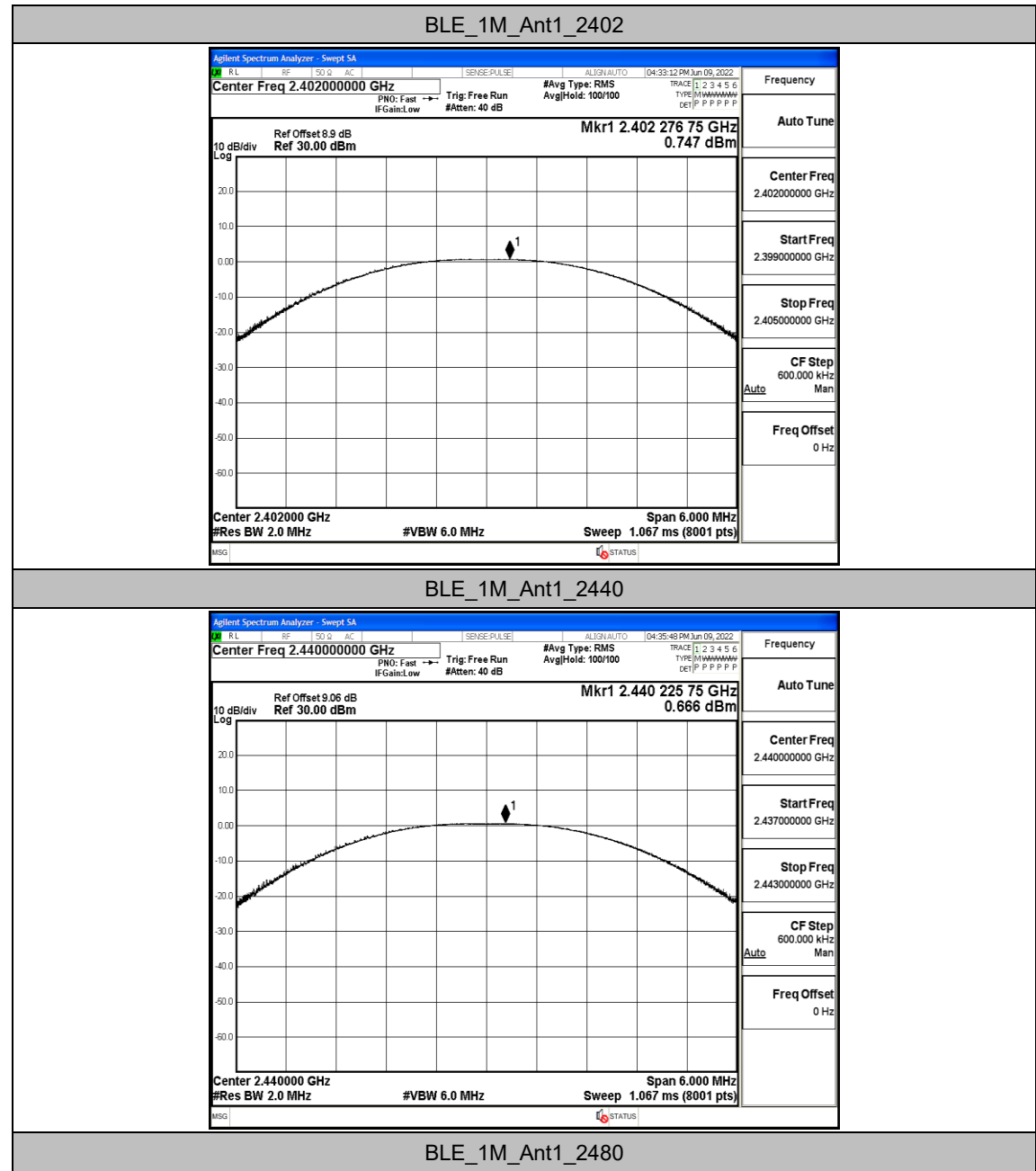


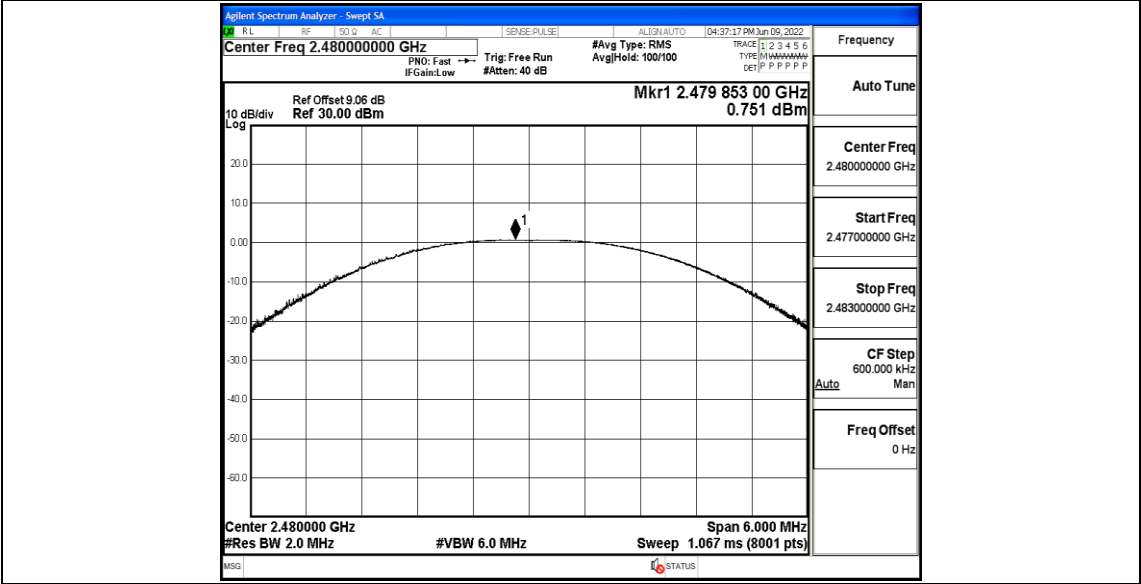
Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.75	≤30	PASS
		2440	0.67	≤30	PASS
		2480	0.76	≤30	PASS

Test Graphs



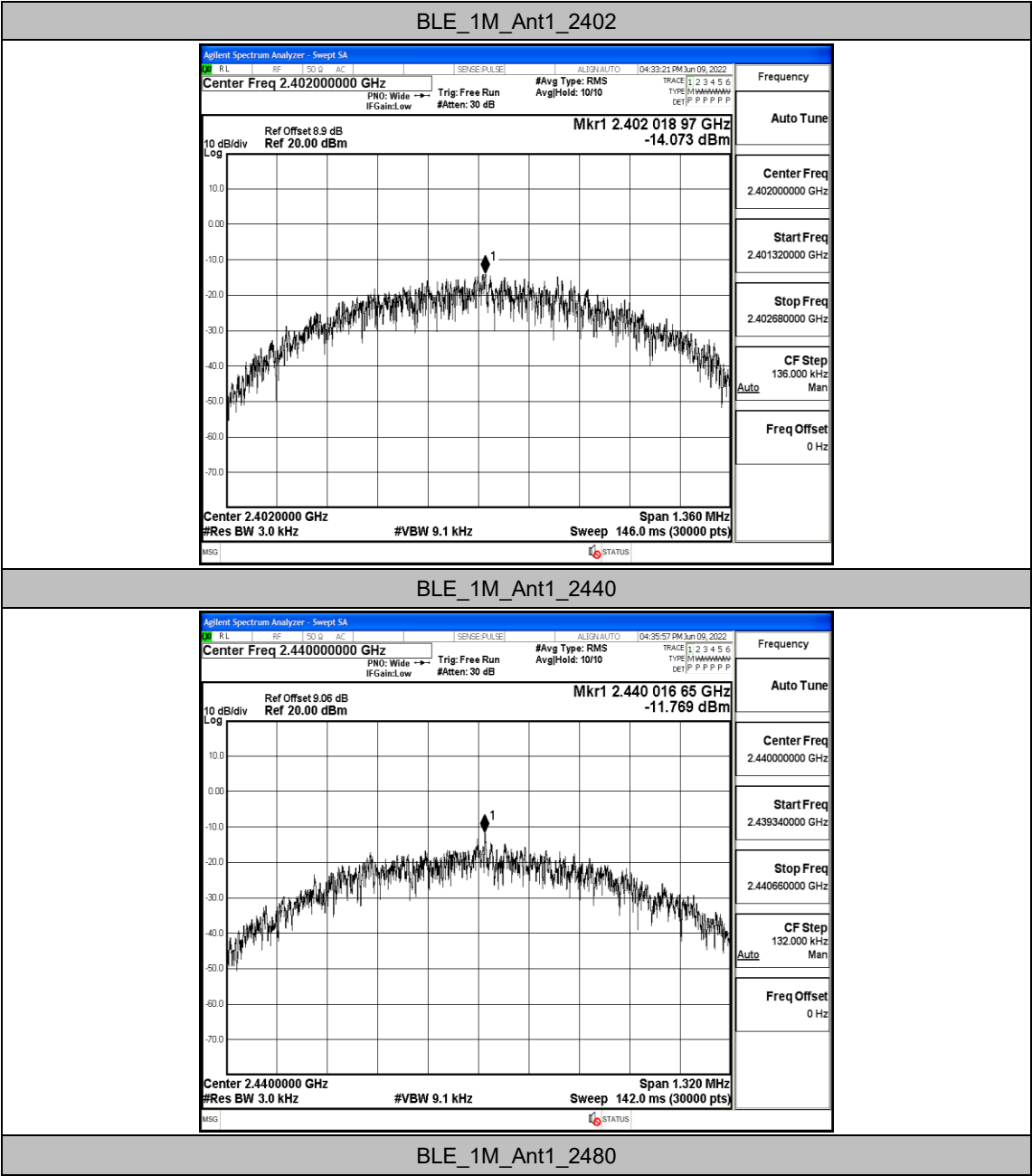


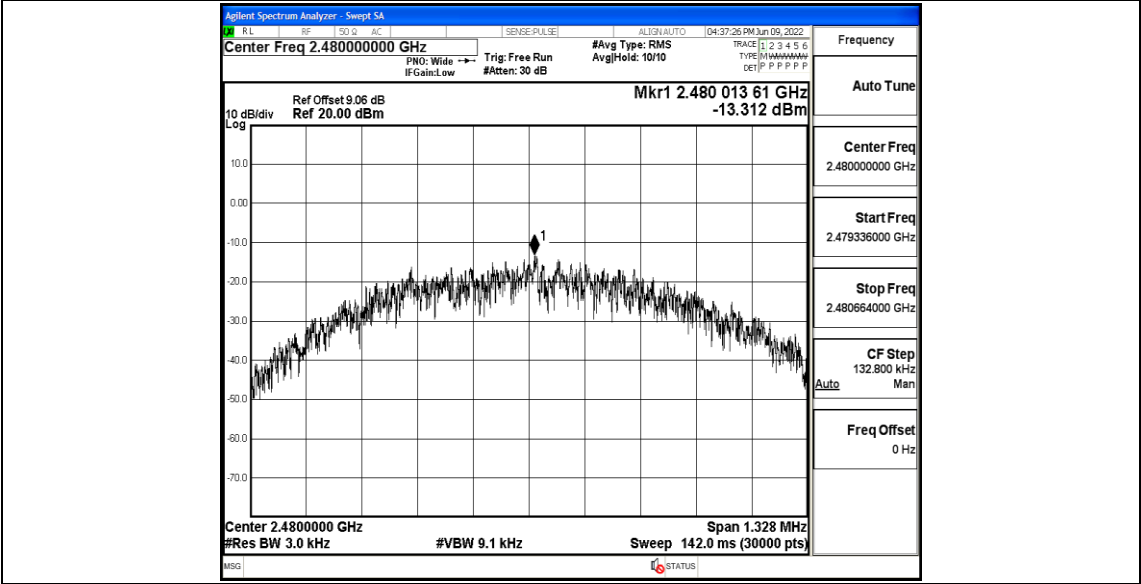
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.07	≤8.00	PASS
		2440	-11.77	≤8.00	PASS
		2480	-13.31	≤8.00	PASS

Test Graphs



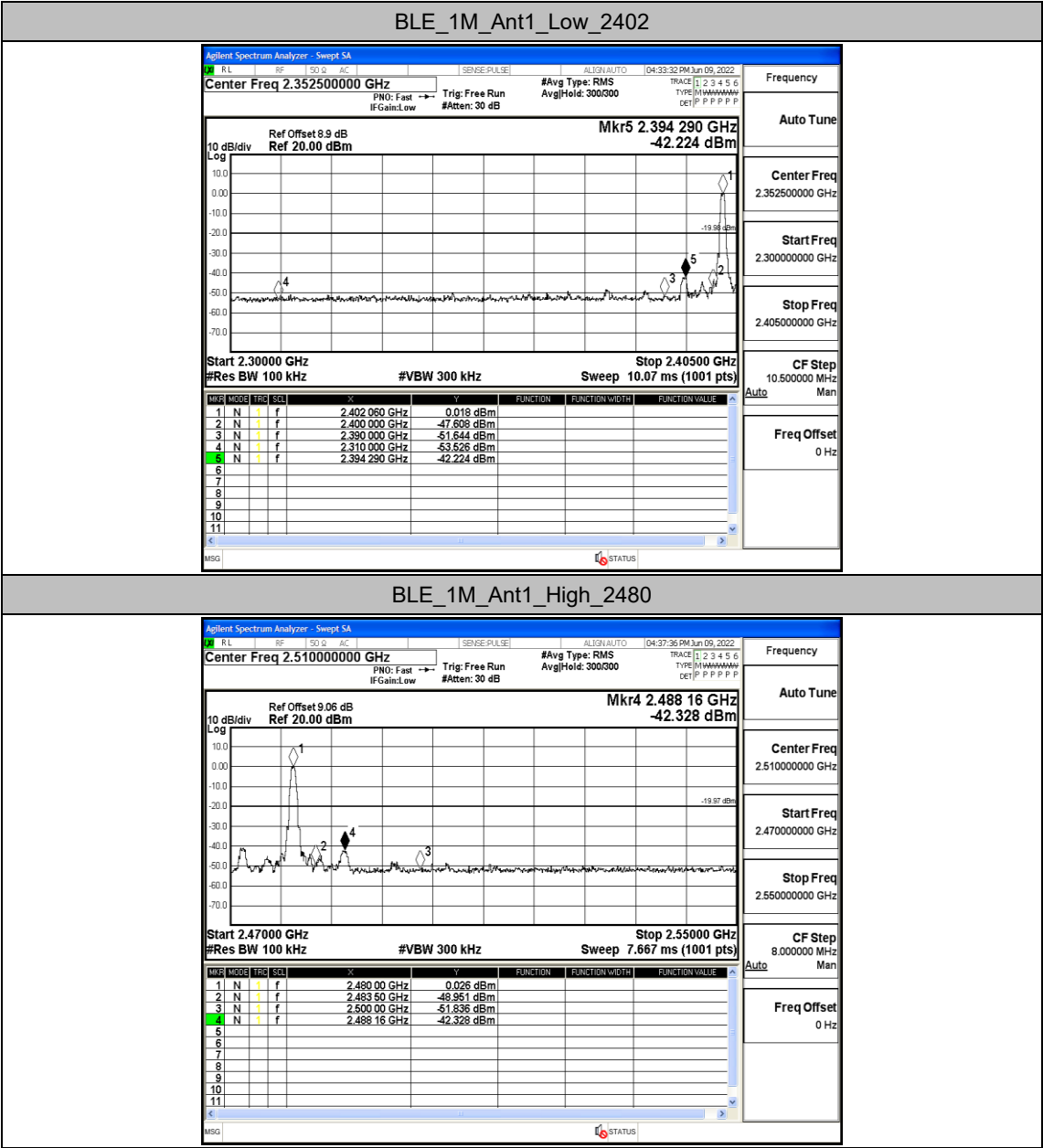


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.02	-42.22	≤-19.98	PASS
		High	2480	0.03	-42.33	≤-19.97	PASS

Test Graphs

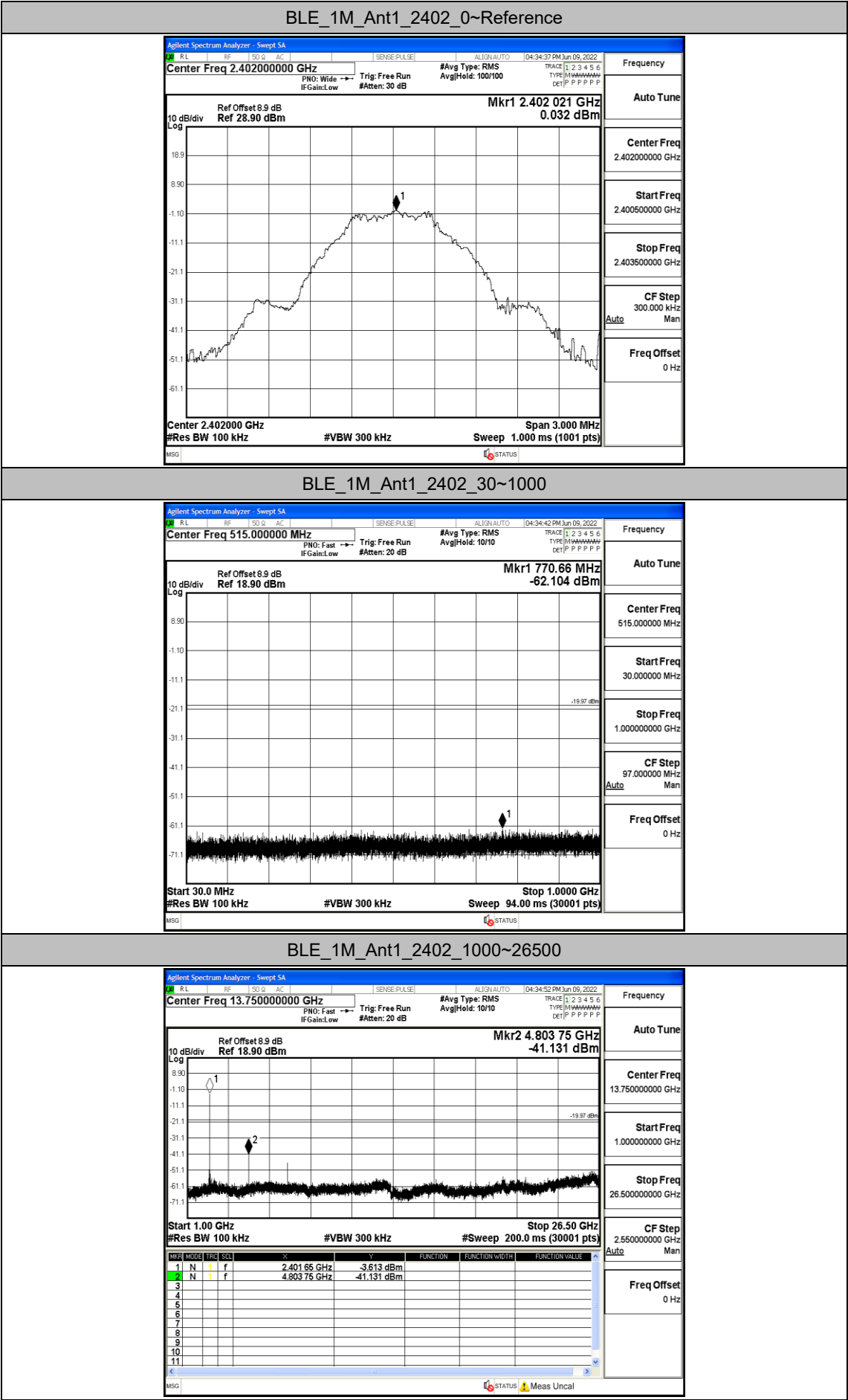


Appendix F: Conducted Spurious Emission

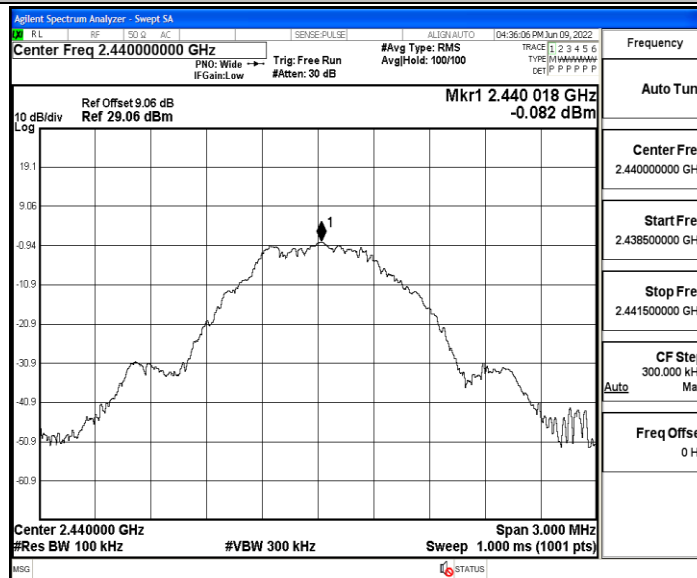
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.03	0.03	---	PASS
			30~1000	0.03	-62.1	≤-19.97	PASS
			1000~26500	0.03	-41.13	≤-19.97	PASS
		2440	Reference	-0.08	-0.08	---	PASS
			30~1000	-0.08	-61.34	≤-20.08	PASS
			1000~26500	-0.08	-40.15	≤-20.08	PASS
		2480	Reference	-0.10	-0.10	---	PASS
			30~1000	-0.10	-61.71	≤-20.1	PASS
			1000~26500	-0.10	-42.93	≤-20.1	PASS

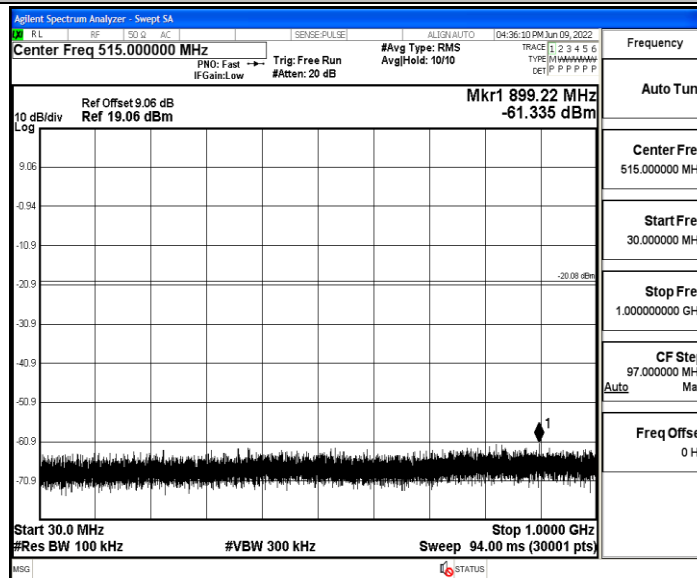
Test Graphs



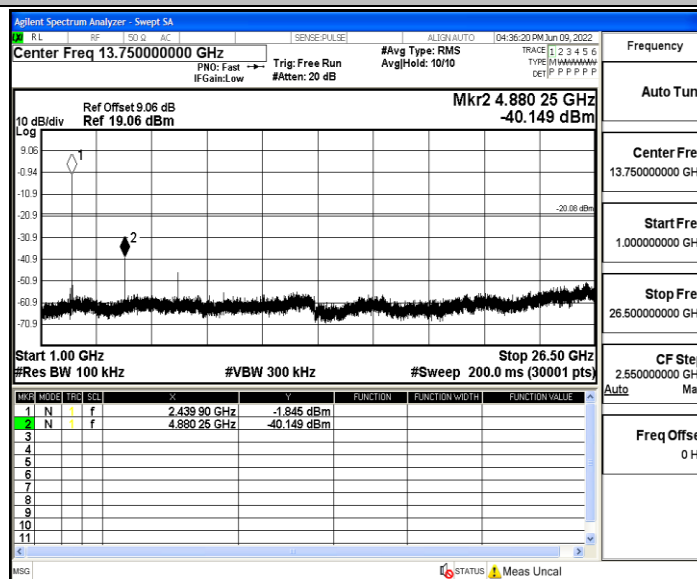
BLE_1M_Ant1_2440_0~Reference



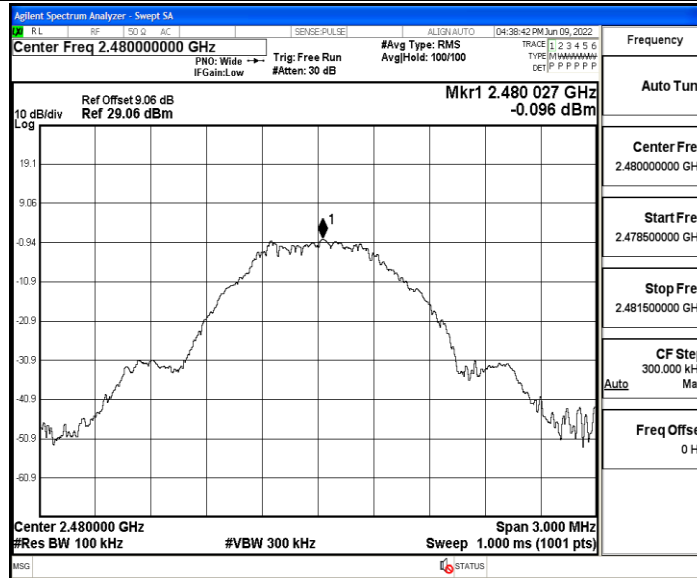
BLE_1M_Ant1_2440_30~1000



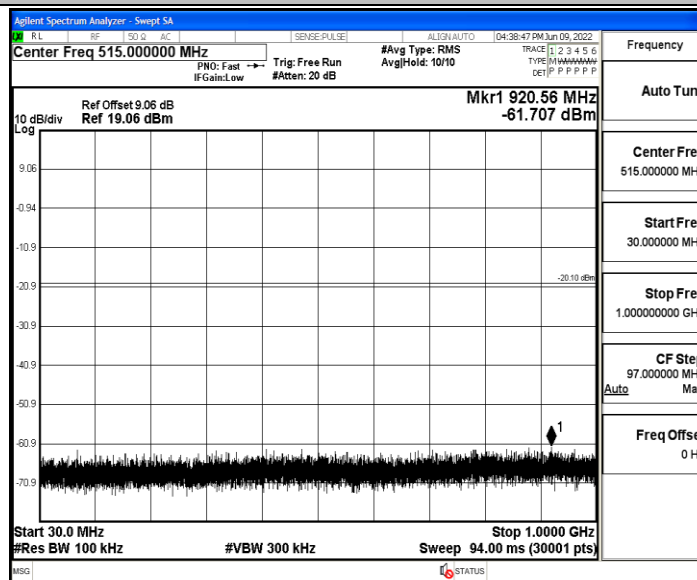
BLE_1M_Ant1_2440_1000~26500



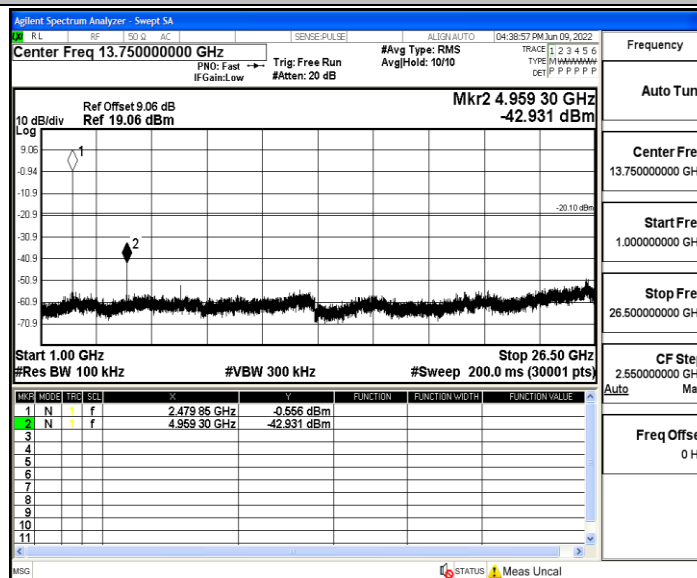
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



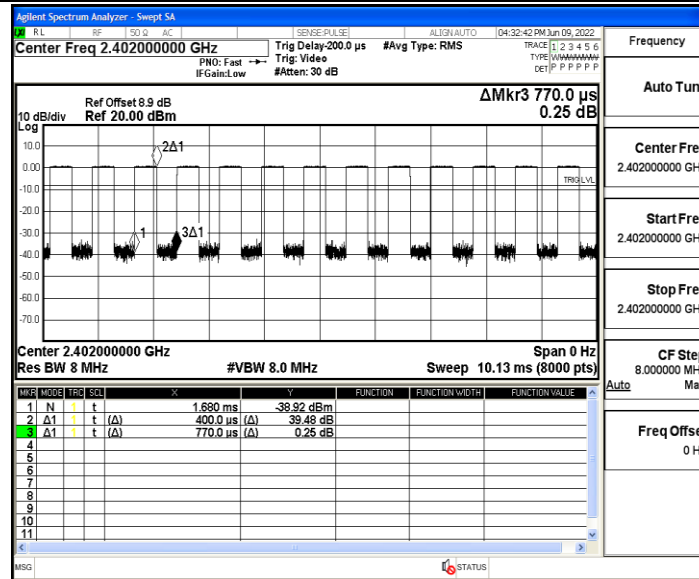
Appendix G: Duty Cycle

Test Result

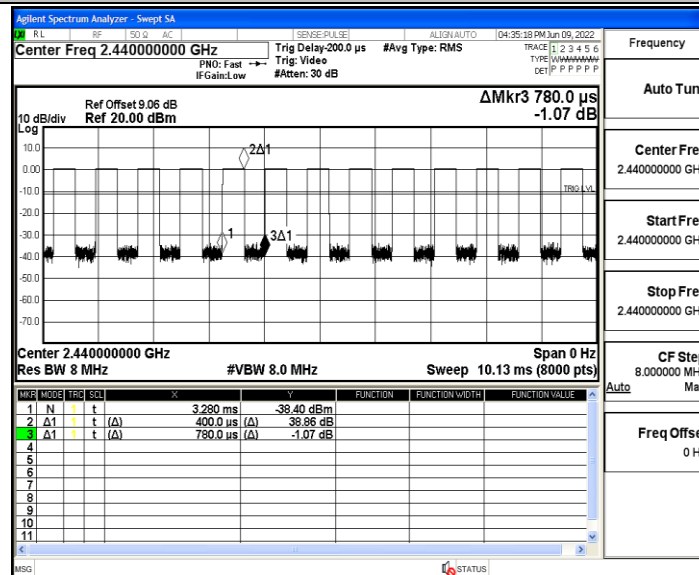
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.40	0.77	51.95	2.50
		2440	0.40	0.78	51.28	2.50
		2480	0.40	0.78	51.28	2.50

Test Graphs

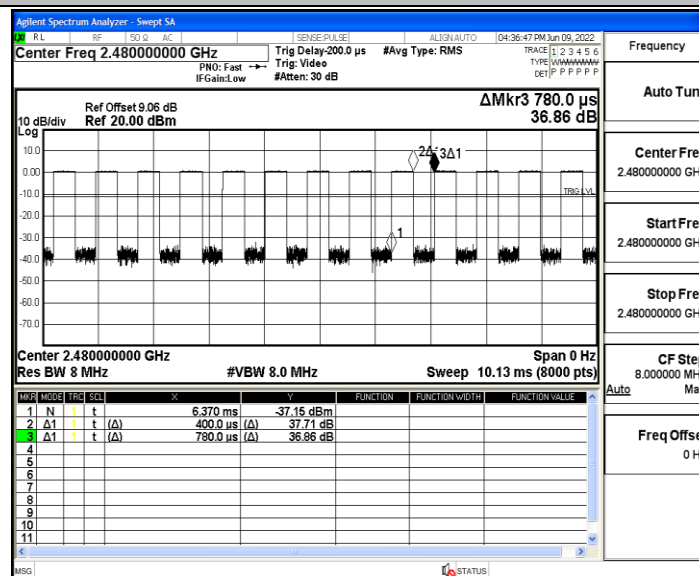
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

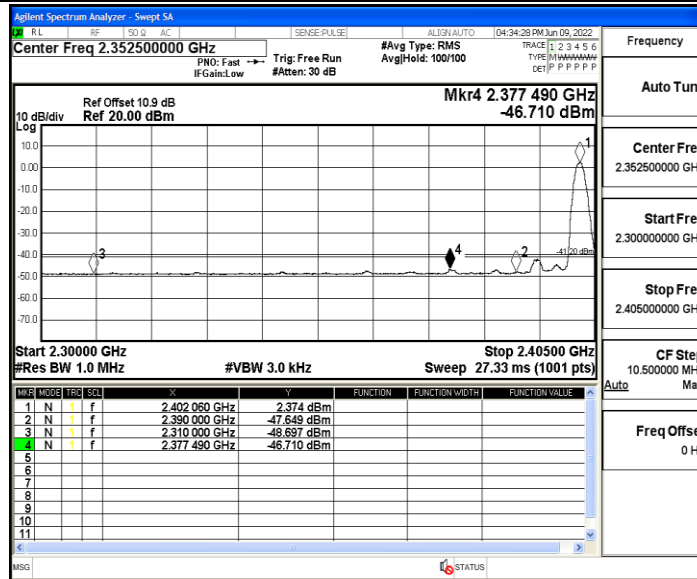
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.7	≤-41.20	PASS
				AV	2377.490	-46.71	≤-41.20	PASS
				AV	2390.000	-47.65	≤-41.20	PASS
				Peak	2310.000	-41.85	≤-21.20	PASS
				Peak	2362.265	-35.11	≤-21.20	PASS
				Peak	2390.000	-42.45	≤-21.20	PASS
		High	2480	AV	2483.500	-48.19	≤-41.20	PASS
				AV	2487.920	-43.43	≤-41.20	PASS
				AV	2500.000	-56.13	≤-41.20	PASS
				Peak	2483.500	-32.27	≤-21.20	PASS
				Peak	2488.000	-26.38	≤-21.20	PASS
				Peak	2500.000	-52.14	≤-21.20	PASS

Note:

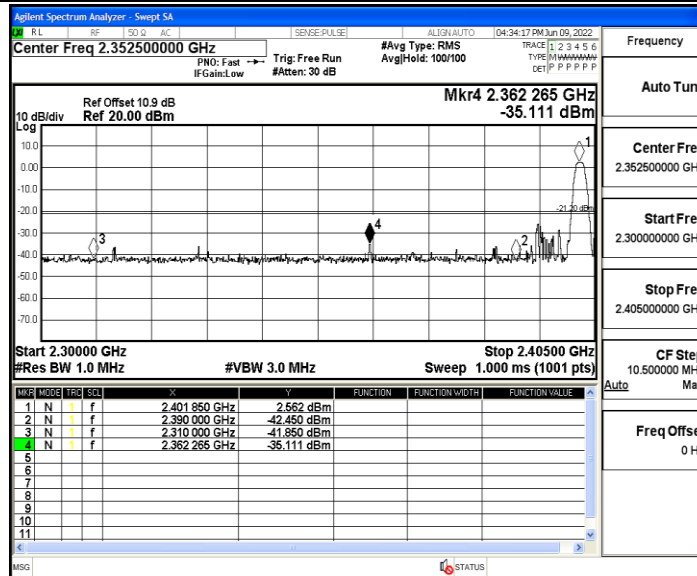
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV

