

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

Product Name: Smart Watch

Trade Mark: N/A

Test Model: S03H

FCC ID: 2AO47- S03H

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

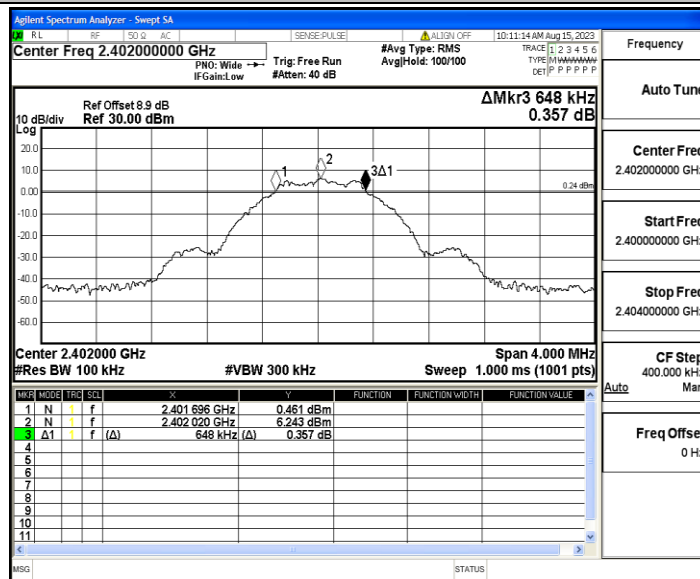
Appendix A: DTS Bandwidth

Test Result

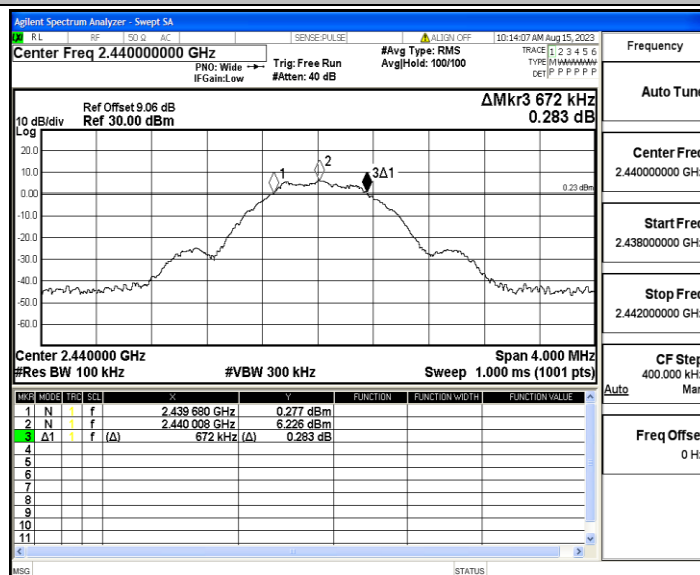
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.696	2402.344	0.5	PASS
		2440	0.672	2439.680	2440.352	0.5	PASS
		2480	0.632	2479.720	2480.352	0.5	PASS

Test Graphs

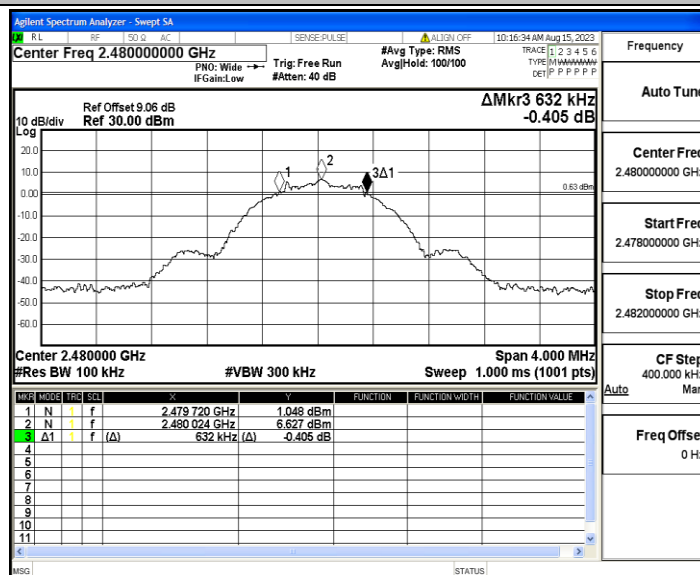
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



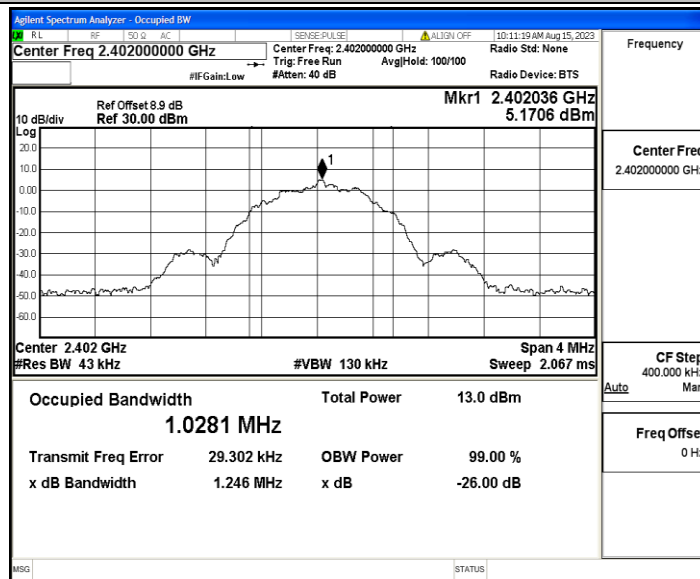
Appendix B: Occupied Channel Bandwidth

Test Result

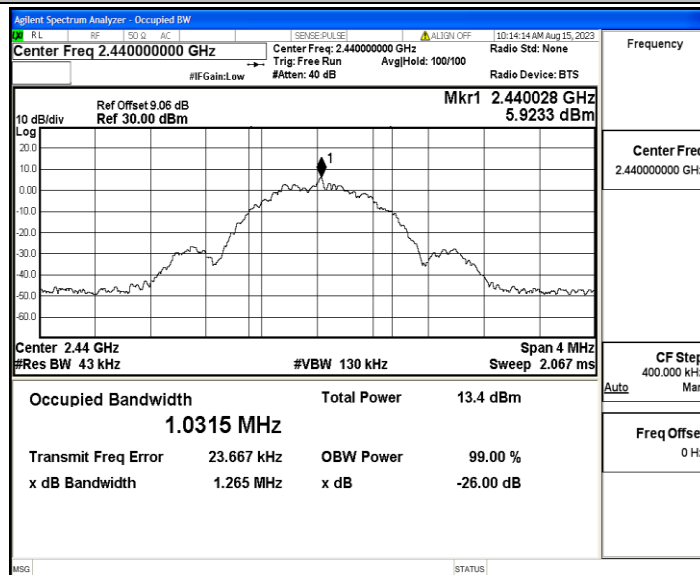
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0281	2401.5153	2402.5434	---	---
		2440	1.0315	2439.5079	2440.5394	---	---
		2480	1.0381	2479.5088	2480.5469	---	---

Test Graphs

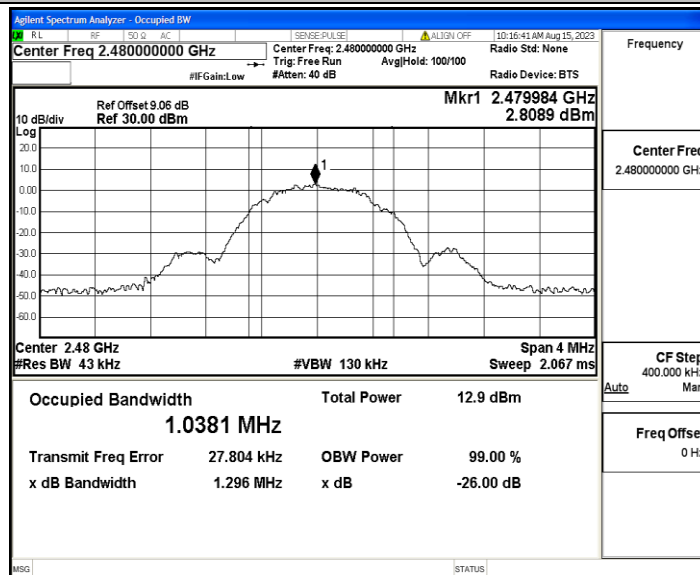
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

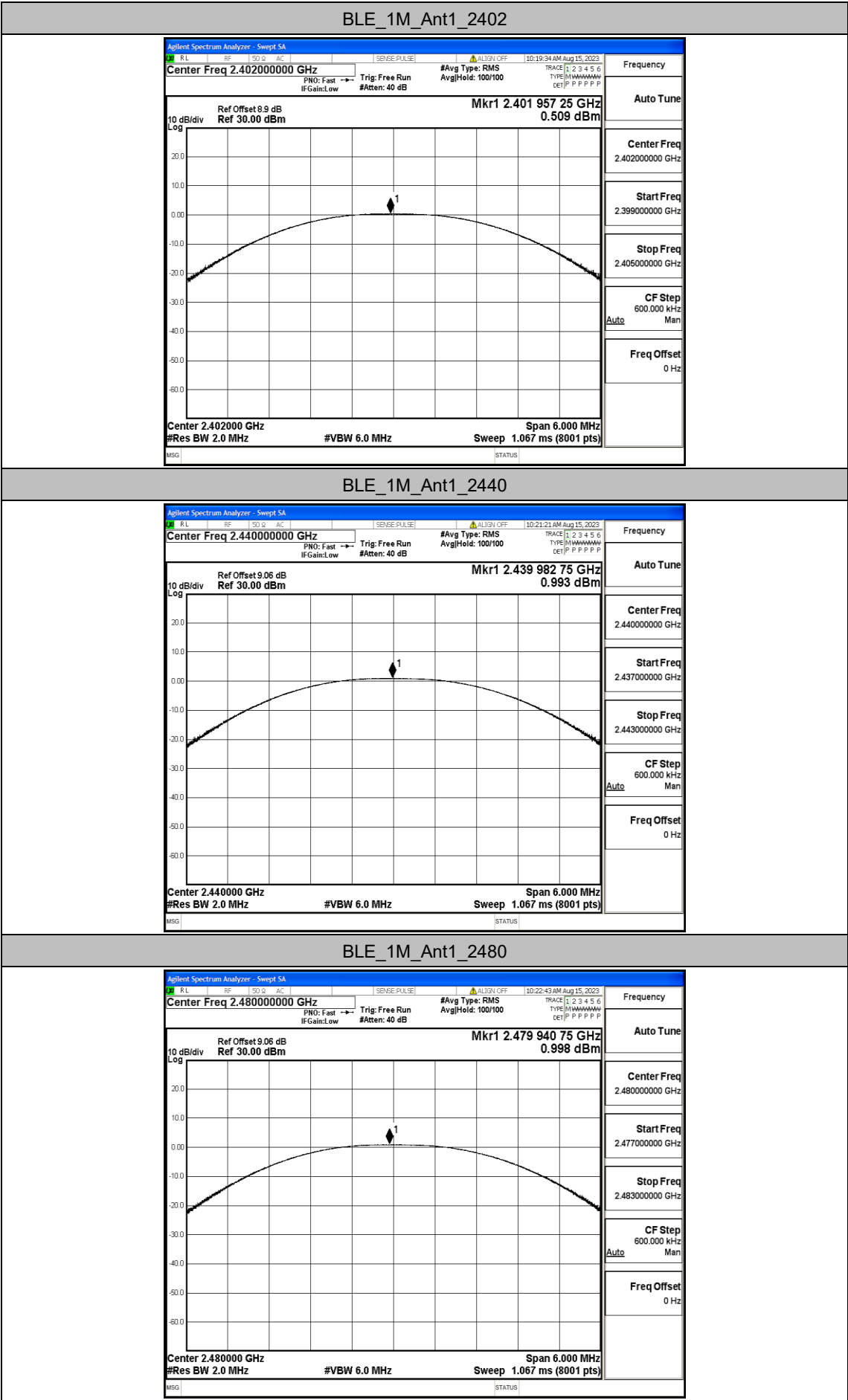


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.51	≤30	PASS
		2440	0.99	≤30	PASS
		2480	1	≤30	PASS

Test Graphs

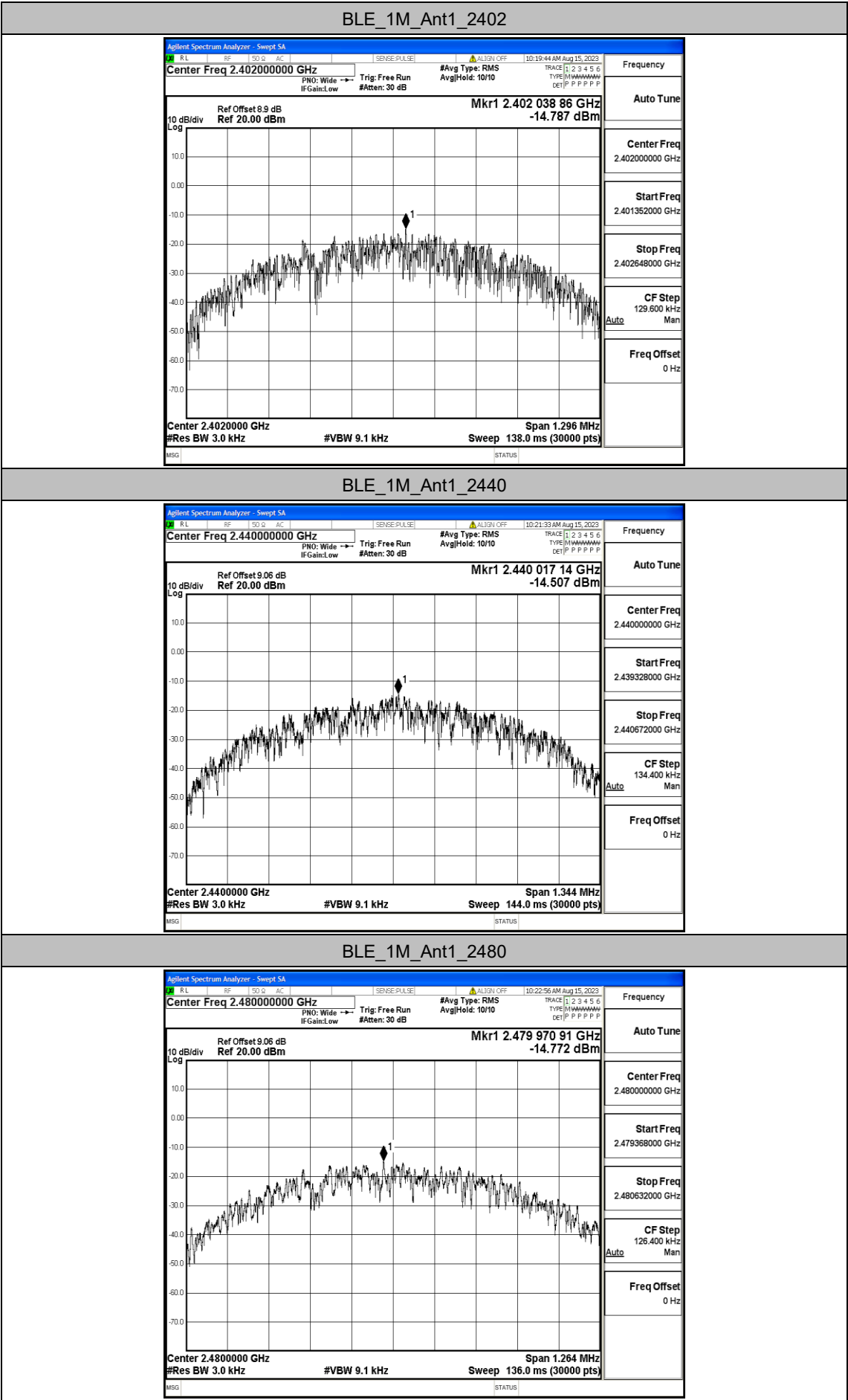


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.79	≤8.00	PASS
		2440	-14.51	≤8.00	PASS
		2480	-14.77	≤8.00	PASS

Test Graphs

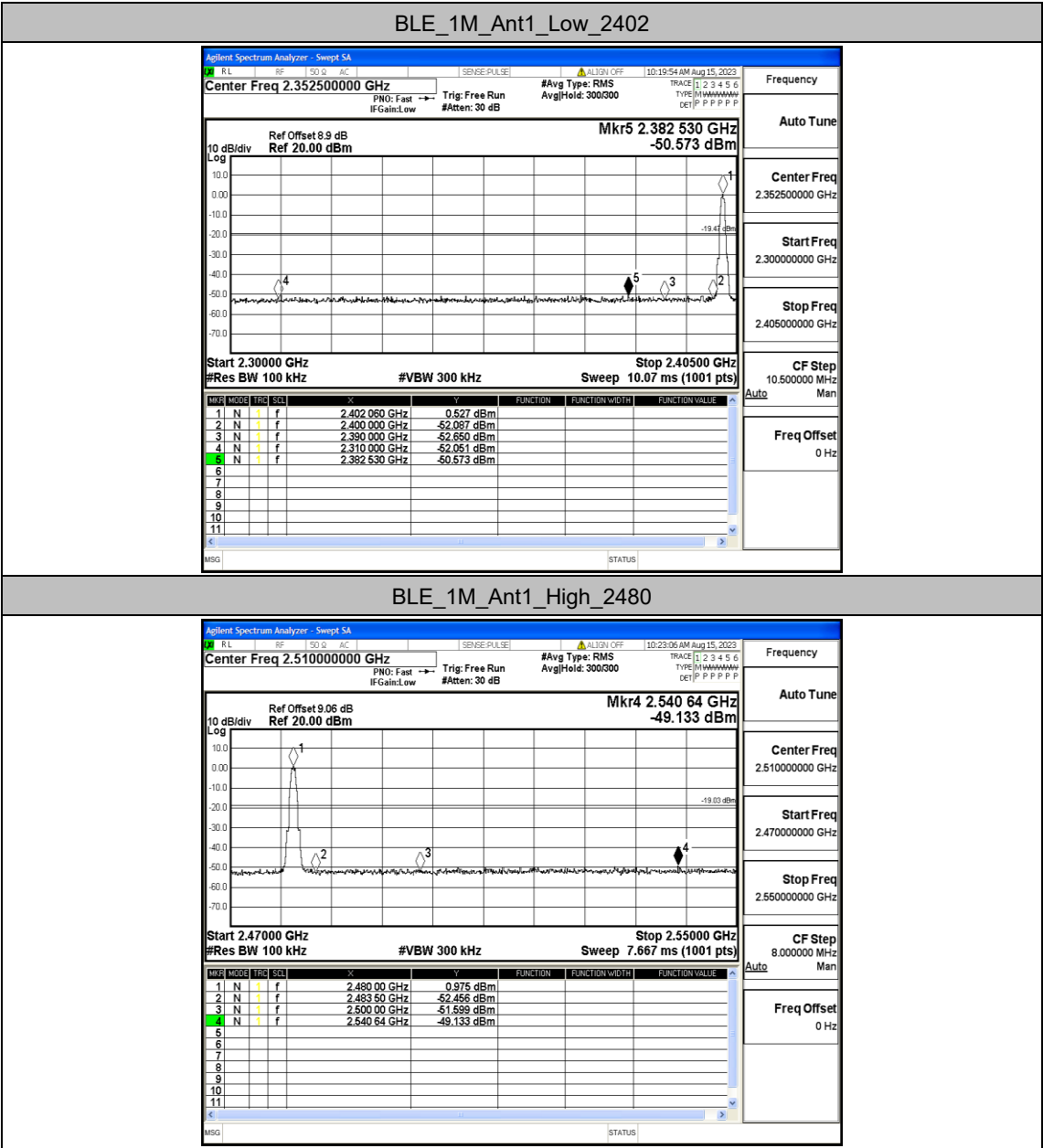


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.53	-50.57	≤-19.47	PASS
		High	2480	0.98	-49.13	≤-19.03	PASS

Test Graphs



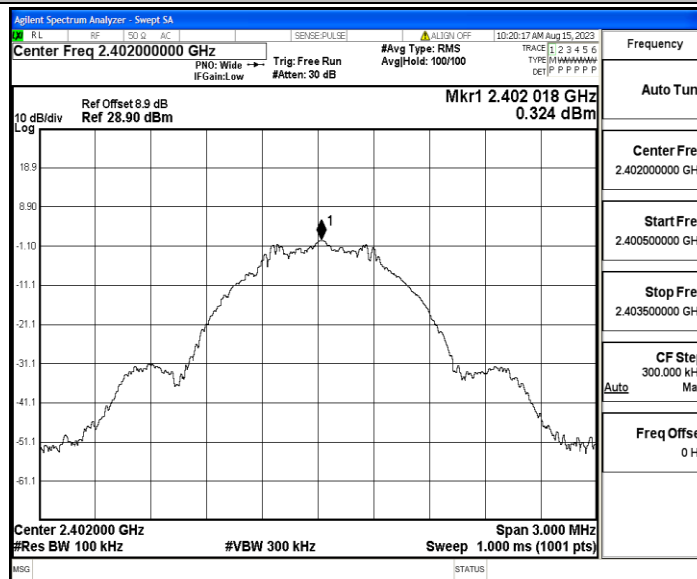
Appendix F: Conducted Spurious Emission

Test Result

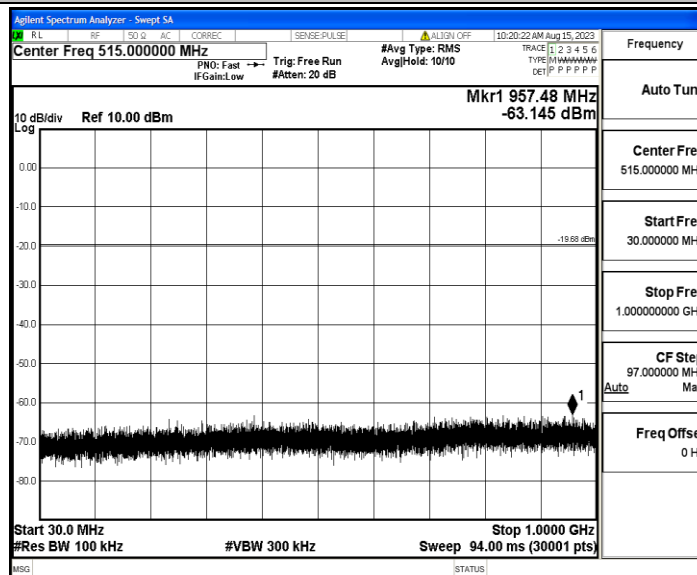
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.32	0.32	---	PASS
			30~1000	0.32	-63.15	≤-19.68	PASS
			1000~26500	0.32	-50.04	≤-19.68	PASS
		2440	Reference	-0.20	-0.20	---	PASS
			30~1000	-0.20	-61.41	≤-20.2	PASS
			1000~26500	-0.20	-50.29	≤-20.2	PASS
		2480	Reference	0.84	0.84	---	PASS
			30~1000	0.84	-63.06	≤-19.16	PASS
			1000~26500	0.84	-49.76	≤-19.16	PASS

Test Graphs

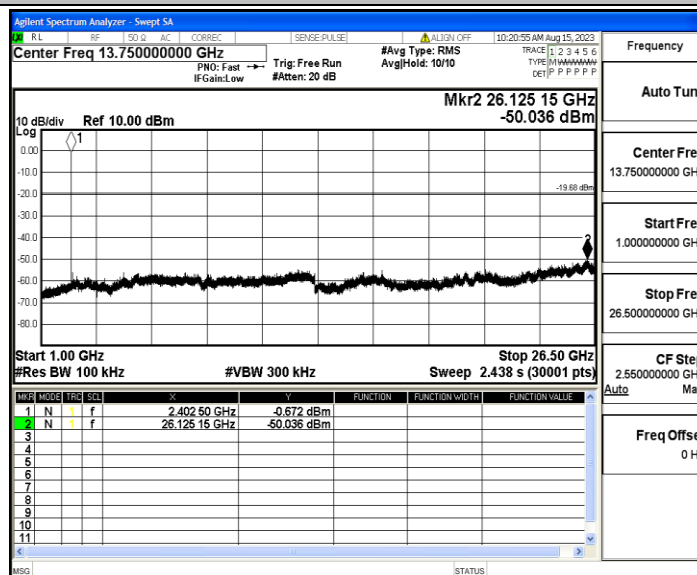
BLE_1M_Ant1_2402_0~Reference



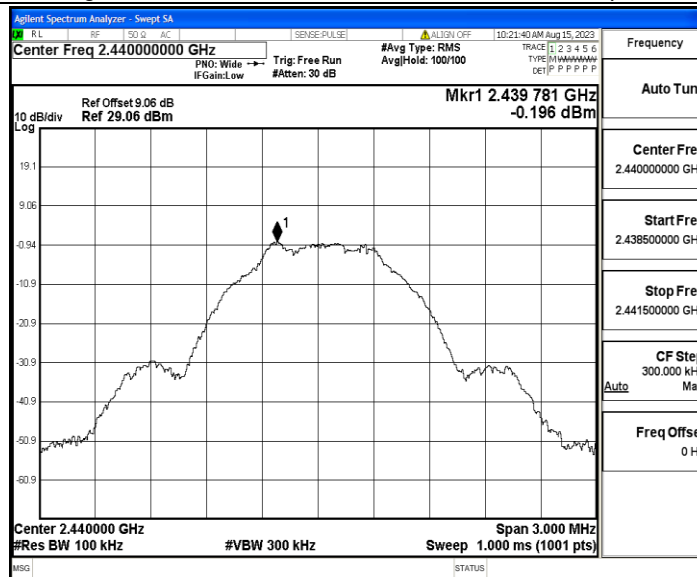
BLE_1M_Ant1_2402_30~1000



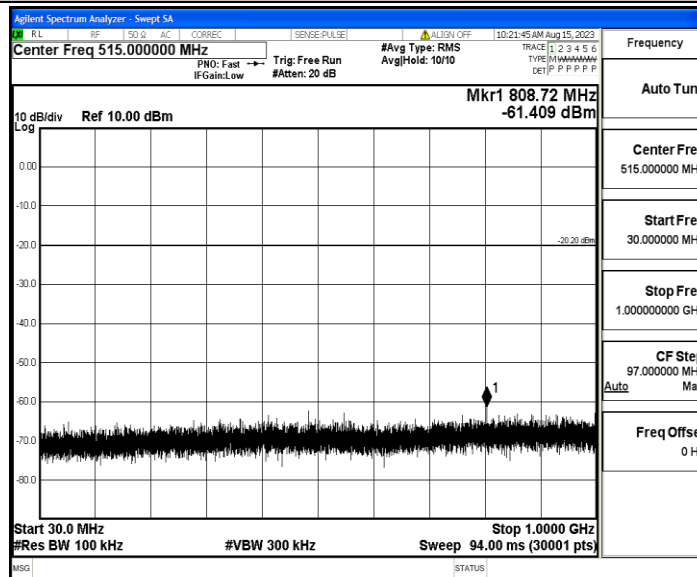
BLE_1M_Ant1_2402_1000~26500



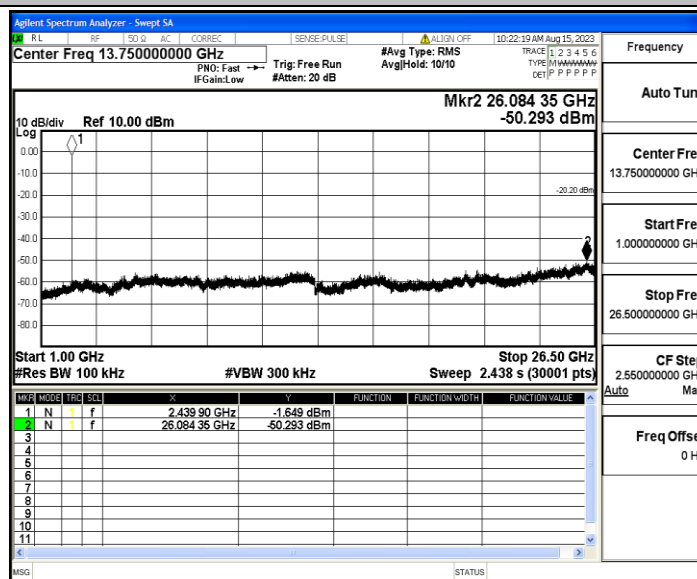
BLE_1M_Ant1_2440_0~Reference



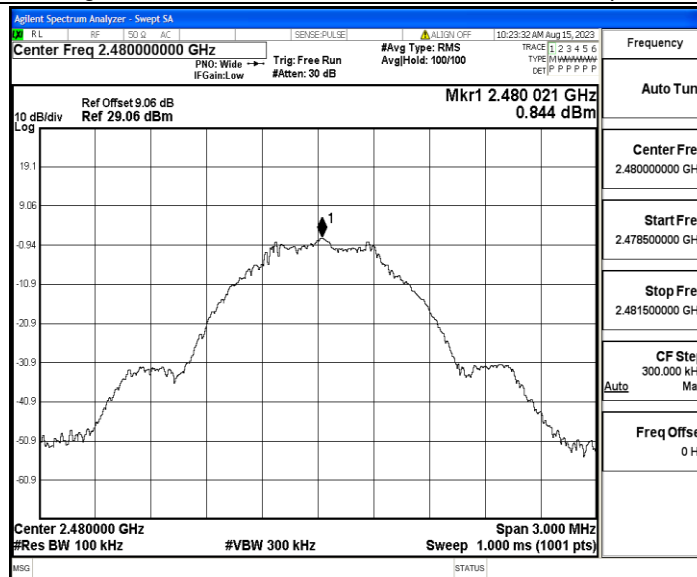
BLE_1M_Ant1_2440_30~1000



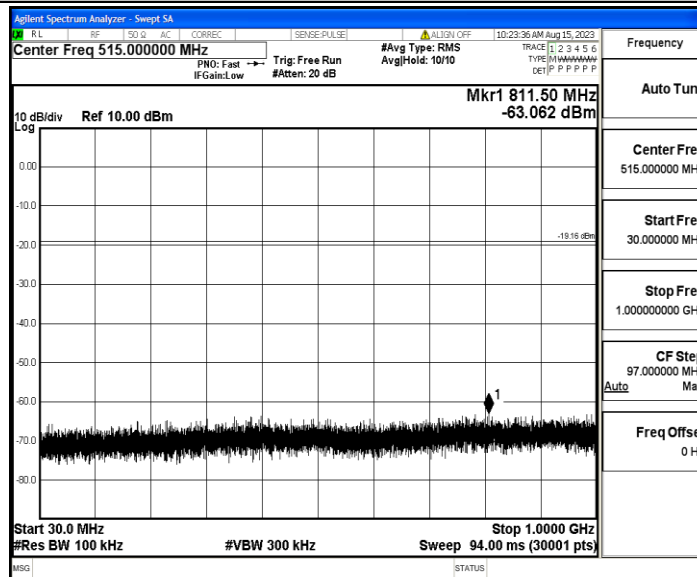
BLE_1M_Ant1_2440_1000~26500



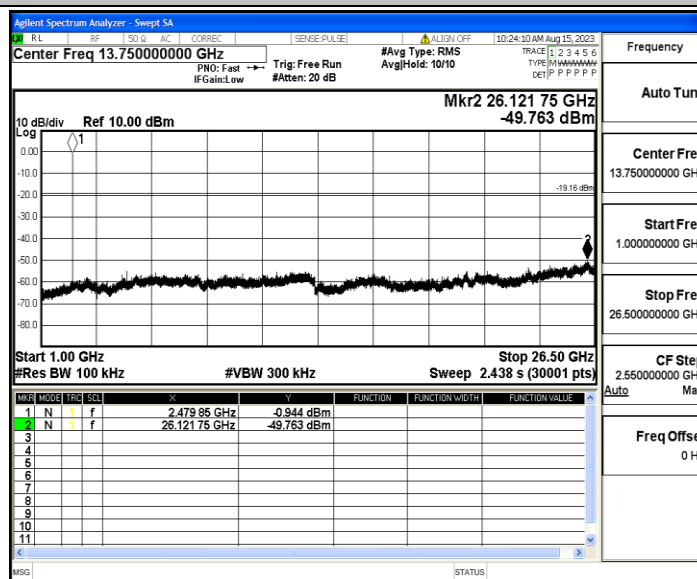
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



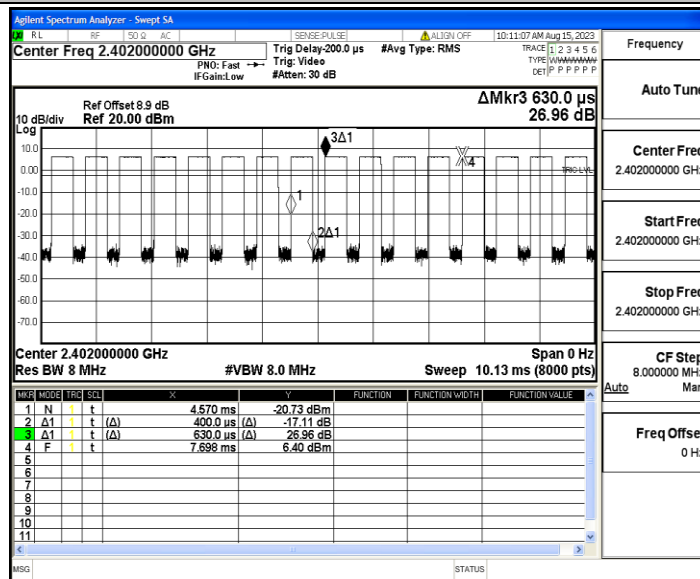
Appendix G: Duty Cycle

Test Result

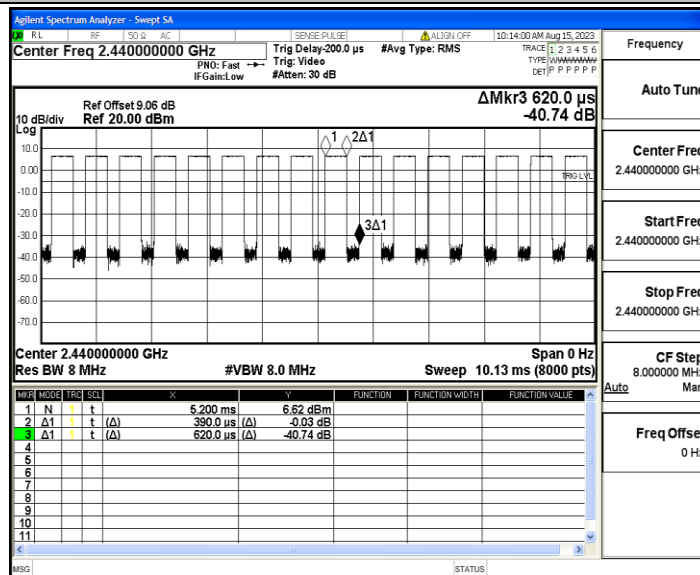
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.40	0.63	63.49	2.50
		2440	0.39	0.62	62.90	2.56
		2480	0.39	0.62	62.90	2.56

Test Graphs

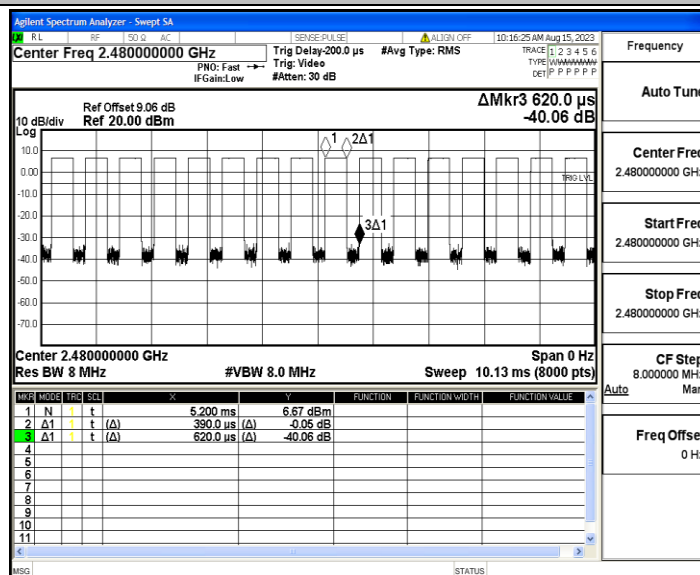
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

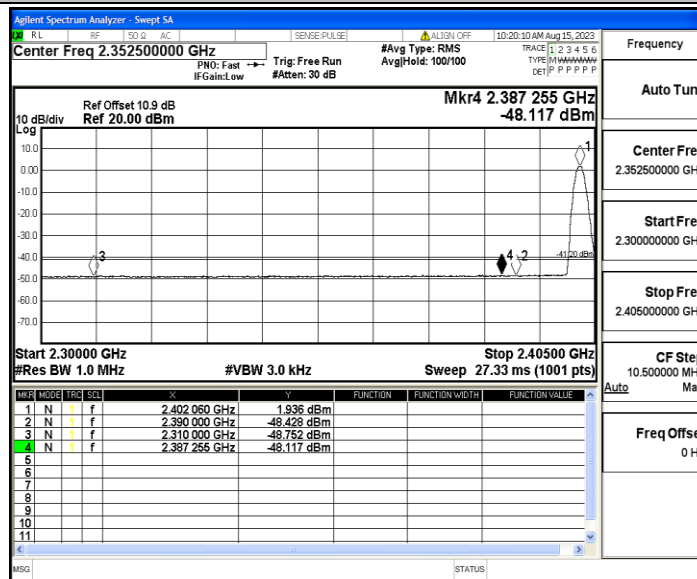
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.75	≤-41.20	PASS
				AV	2387.255	-48.12	≤-41.20	PASS
				AV	2390.000	-48.43	≤-41.20	PASS
				Peak	2310.000	-42.55	≤-21.20	PASS
				Peak	2353.235	-39.16	≤-21.20	PASS
				Peak	2390.000	-42.72	≤-21.20	PASS
		High	2480	AV	2483.500	-47.55	≤-41.20	PASS
				AV	2499.120	-47.42	≤-41.20	PASS
				AV	2500.000	-48.02	≤-41.20	PASS
				Peak	2483.500	-40.04	≤-21.20	PASS
				Peak	2489.440	-37.84	≤-21.20	PASS
				Peak	2500.000	-42.12	≤-21.20	PASS

Note:

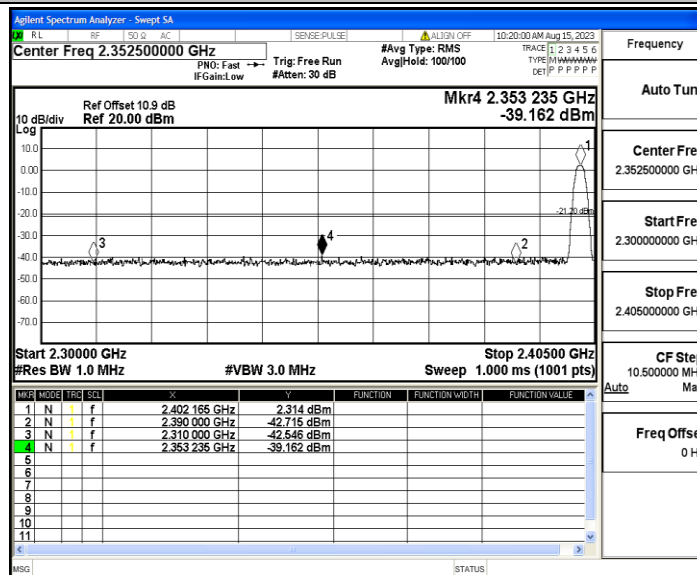
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

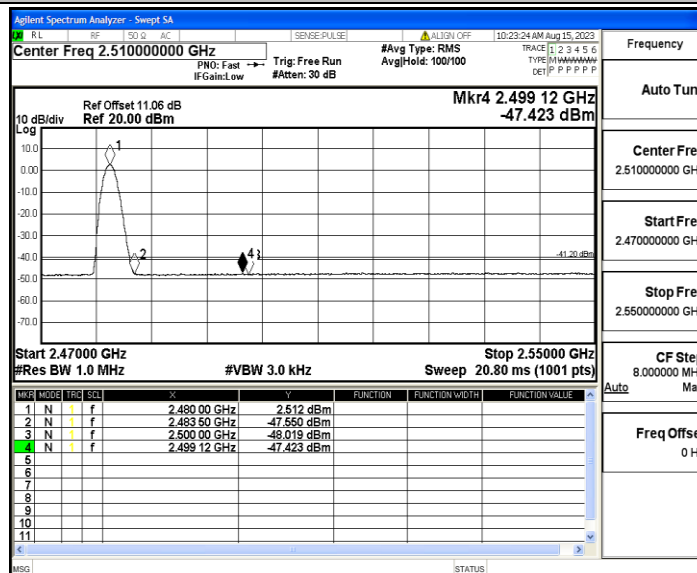
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

