Appendix Test Data for BLE (Conducted Measurement)

Product Name: Smart Watch

Trade Mark: XINJI

Test Model: C1 Plus

FCC ID: 2AE8V-C1PLUS

Environmental Conditions

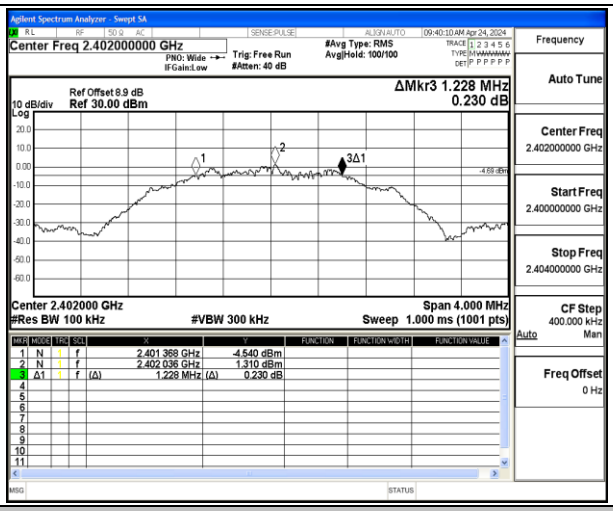
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

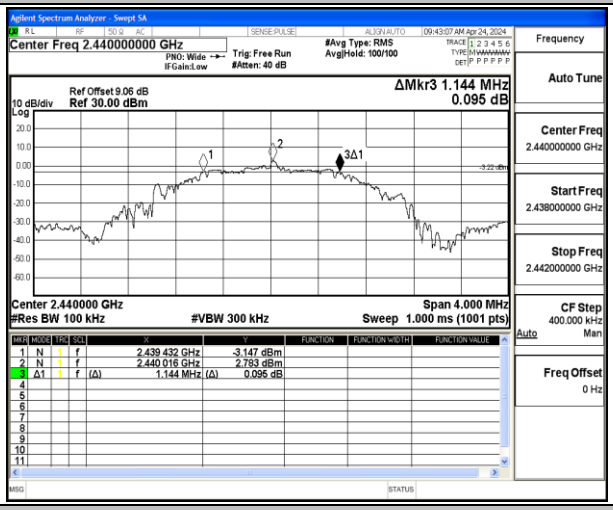
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant1	2402	1.228	2401.368	2402.596	0.5	PASS
BLE_2M	Ant1	2440	1.144	2439.432	2440.576	0.5	PASS
BLE_2M	Ant1	2480	0.920	2479.444	2480.364	0.5	PASS

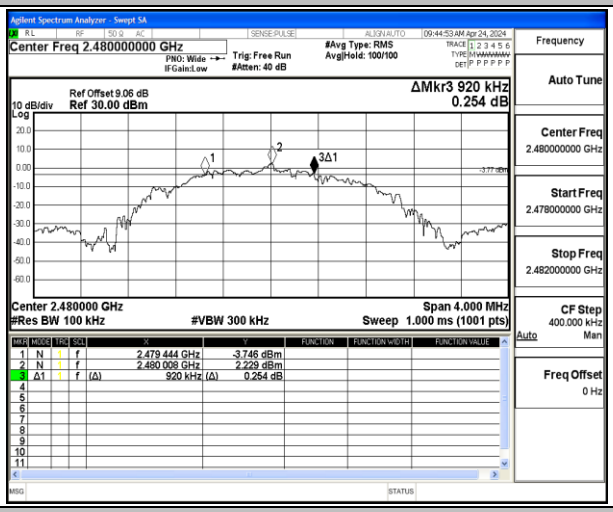
Test Graphs



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



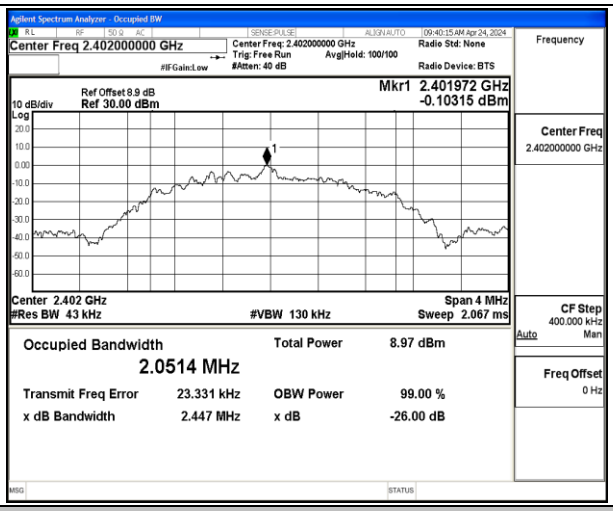
BLE_2M-Ant1-2480-PASS

Appendix B: Occupied Channel Bandwidth

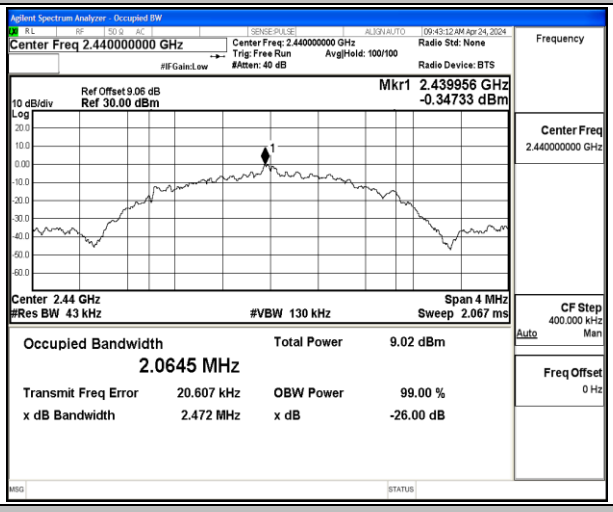
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant1	2402	2.0514	2400.9976	2403.0490	---	---
BLE_2M	Ant1	2440	2.0645	2438.9884	2441.0529	---	---
BLE_2M	Ant1	2480	2.0603	2478.9892	2481.0495	---	---

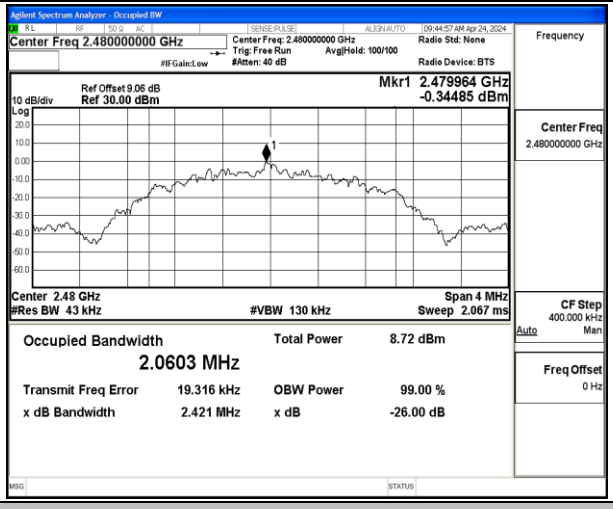
Test Graphs



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



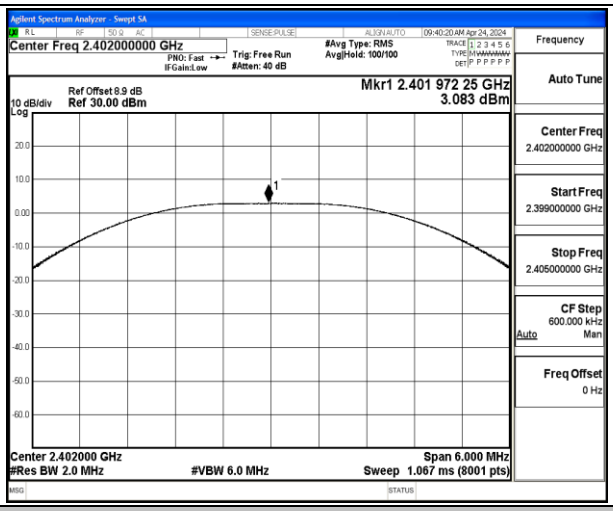
BLE_2M-Ant1-2480

Appendix C: Maximum peak conducted output power

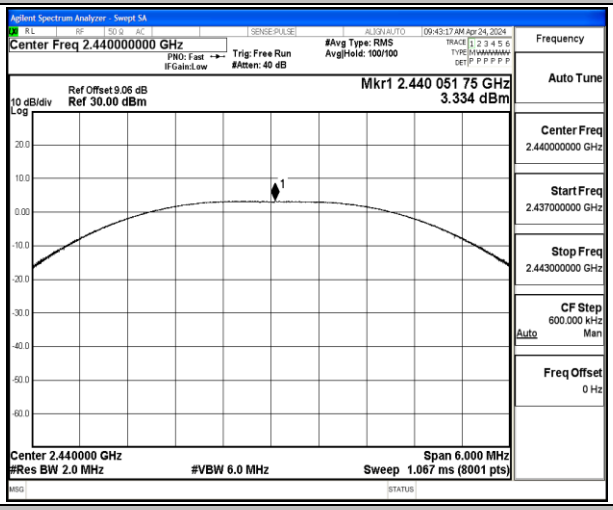
Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
BLE_2M	Ant1	2402	3.08	≤30	PASS
BLE_2M	Ant1	2440	3.33	≤30	PASS
BLE_2M	Ant1	2480	2.70	≤30	PASS

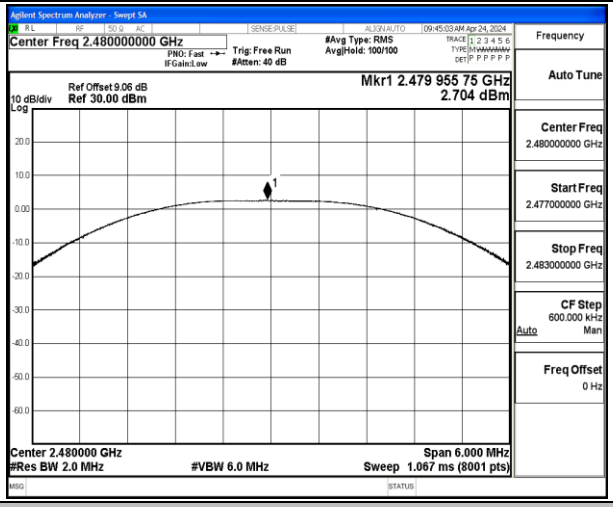
Test Graphs Peak



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



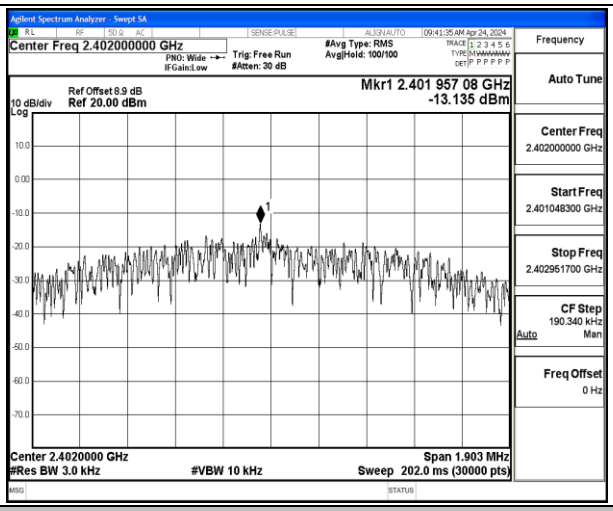
BLE_2M-Ant1-2480-PASS

Appendix D: Maximum peak power spectral density

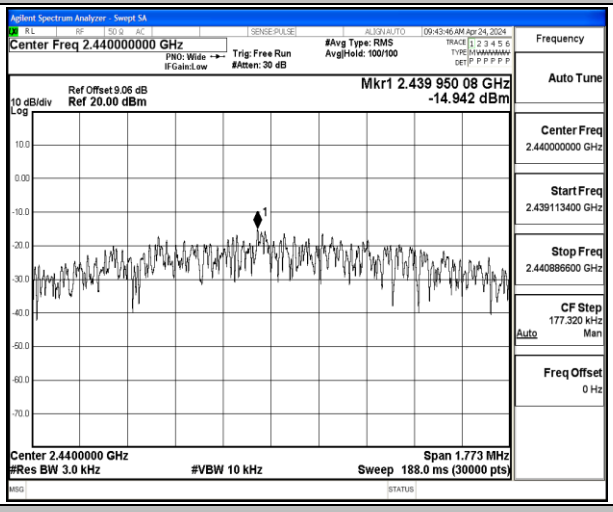
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_2M	Ant1	2402	-13.14	≤8.00	PASS
BLE_2M	Ant1	2440	-14.94	≤8.00	PASS
BLE_2M	Ant1	2480	-14.03	≤8.00	PASS

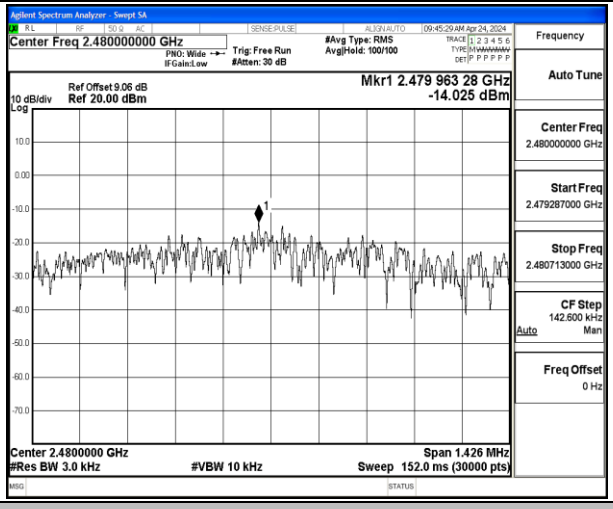
Test Graphs



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



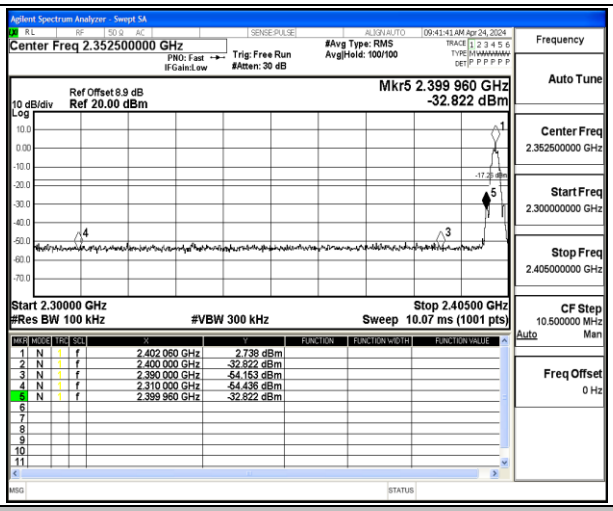
BLE_2M-Ant1-2480-PASS

Appendix E: Band edge measurements

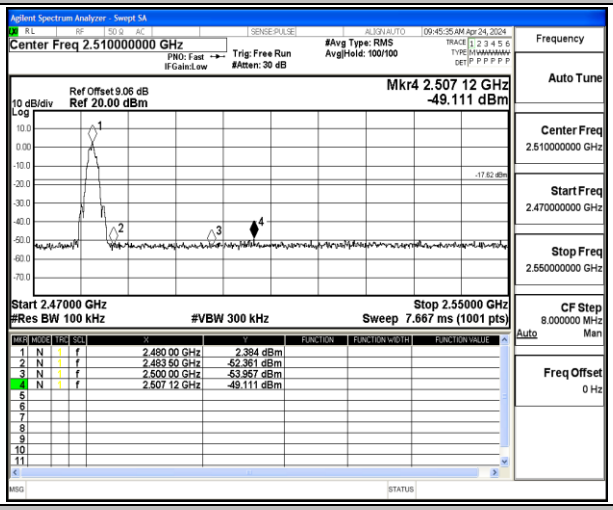
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	Low	2402	2.74	-32.82	≤-17.26	PASS
BLE_2M	Ant1	High	2480	2.38	-49.11	≤-17.62	PASS

Test Graphs



BLE_2M-Ant1-2402-PASS



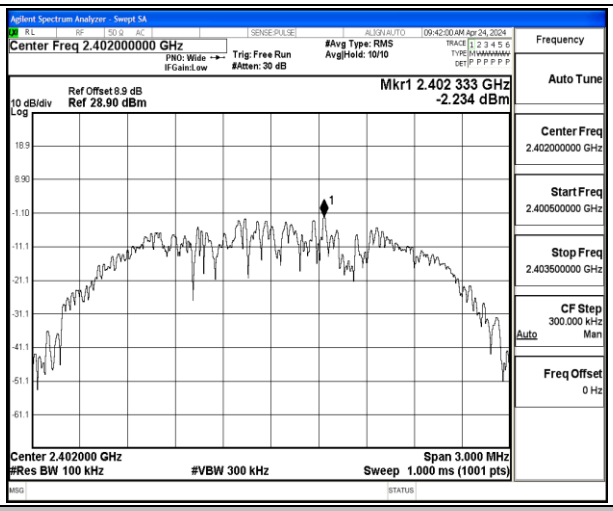
BLE_2M-Ant1-2480-PASS

Appendix F: Conducted Spurious Emission

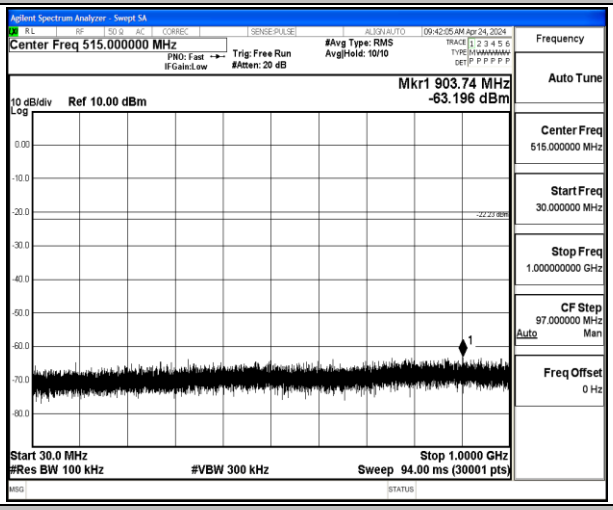
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	2402	0~Reference	-2.23	-2.23	---	PASS
BLE_2M	Ant1	2402	30~1000	-2.23	-63.2	≤-22.23	PASS
BLE_2M	Ant1	2402	1000~26500	-2.23	-50.36	≤-22.23	PASS
BLE_2M	Ant1	2440	0~Reference	2.17	2.17	---	PASS
BLE_2M	Ant1	2440	30~1000	2.17	-63.03	≤-17.83	PASS
BLE_2M	Ant1	2440	1000~26500	2.17	-50.27	≤-17.83	PASS
BLE_2M	Ant1	2480	0~Reference	-0.79	-0.79	---	PASS
BLE_2M	Ant1	2480	30~1000	-0.79	-62.54	≤-20.79	PASS
BLE_2M	Ant1	2480	1000~26500	-0.79	-51.09	≤-20.79	PASS

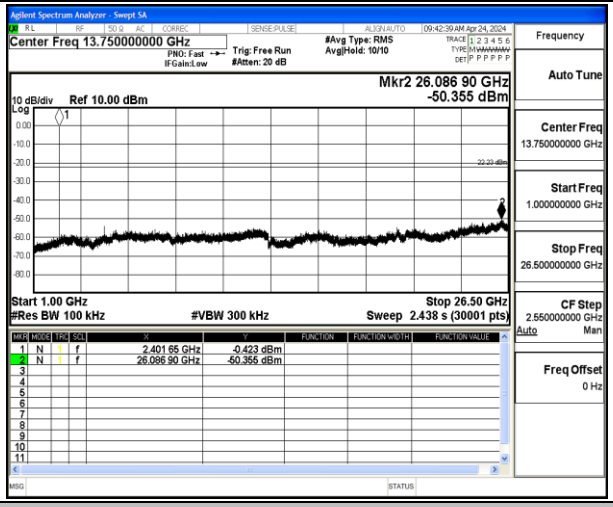
Test Graphs



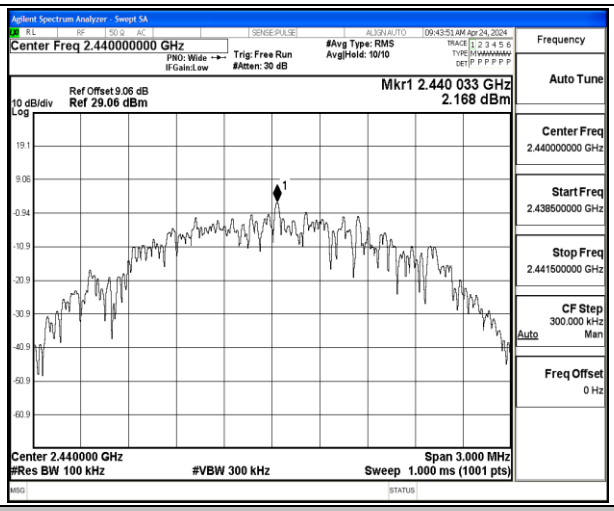
BLE_2M-Ant1-2402-0~Reference-PASS



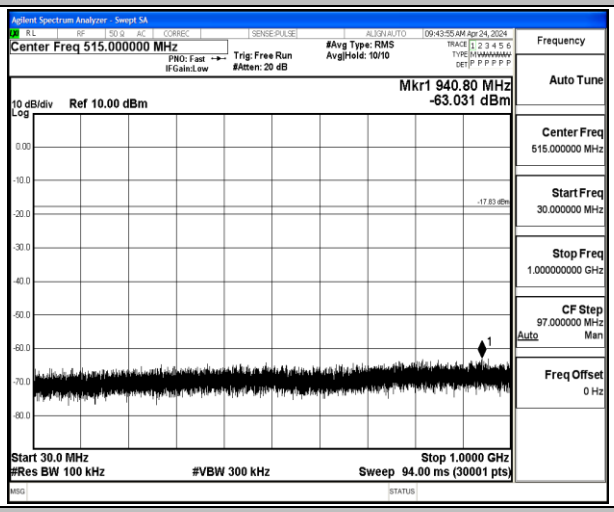
BLE_2M-Ant1-2402-30~1000-PASS



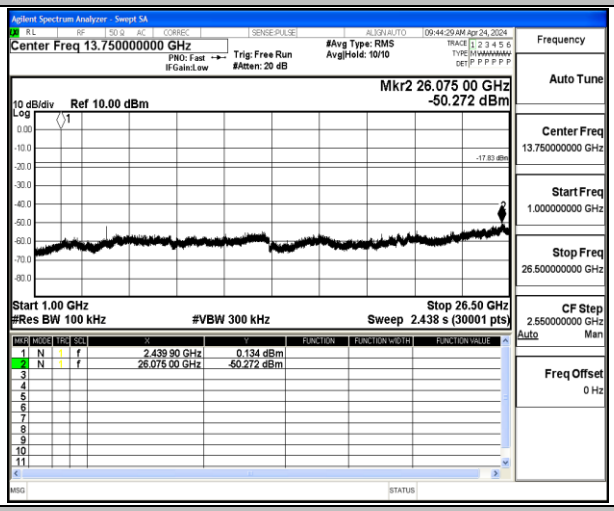
BLE_2M-Ant1-2402-1000~26500-PASS



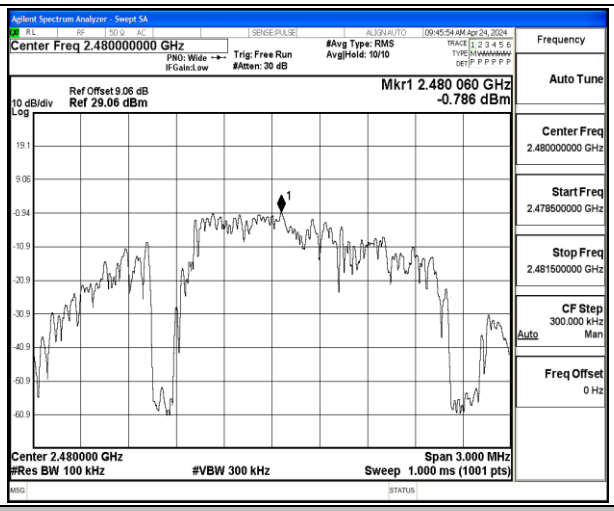
BLE_2M-Ant1-2440-0~Reference-PASS



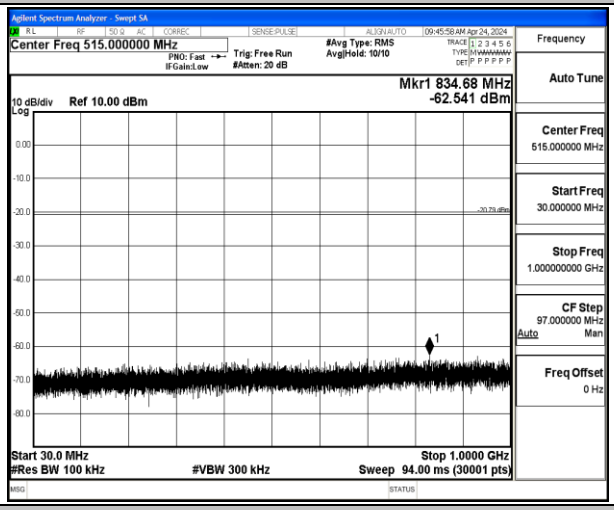
BLE_2M-Ant1-2440-30~1000-PASS



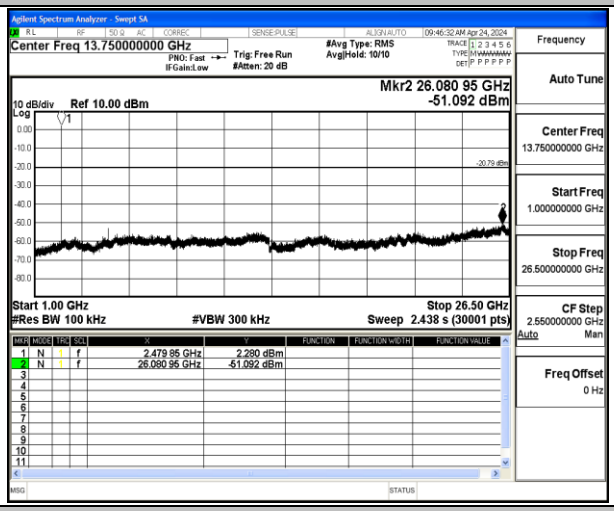
BLE_2M-Ant1-2440-1000~26500-PASS



BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS



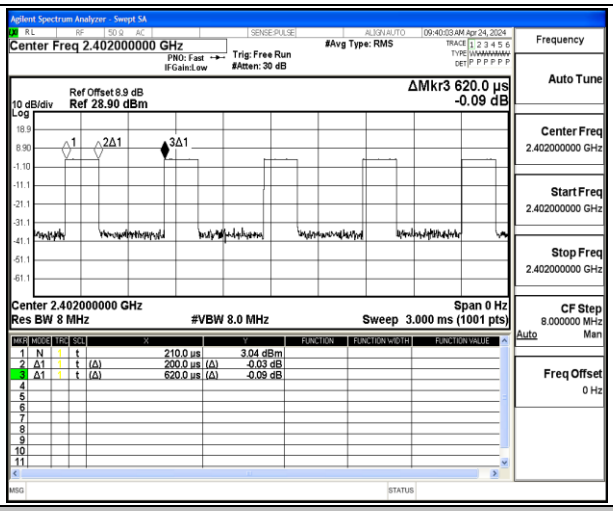
BLE_2M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

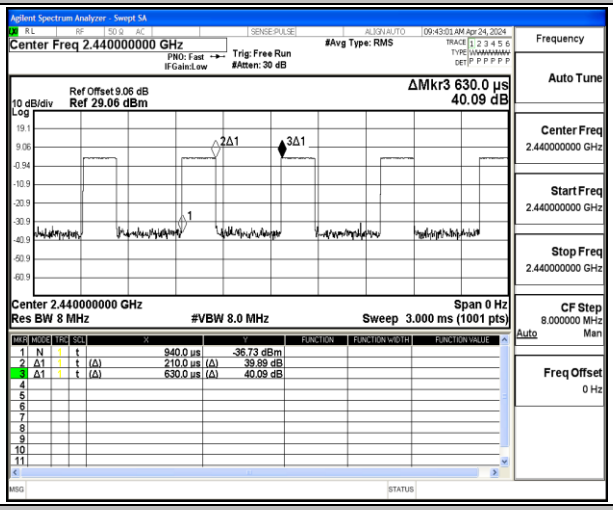
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_2M	Ant1	2402	0.20	0.62	32.26	4.91
BLE_2M	Ant1	2440	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2480	0.21	0.63	33.33	4.77

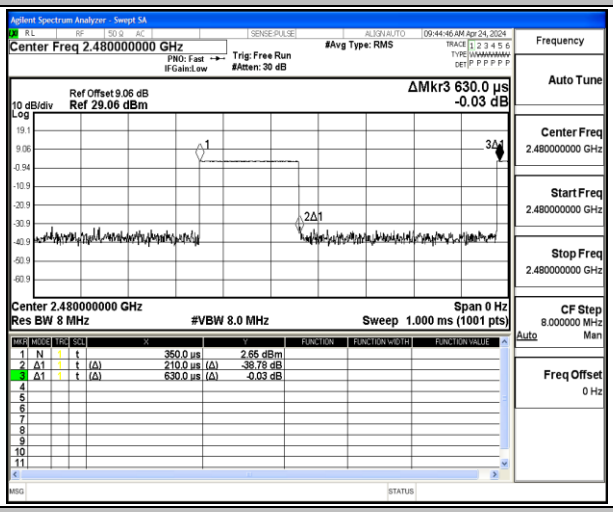
Test Graphs



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



NTNV-BLE_2M-Ant1-2480

Appendix H: Emissions in Restricted Bands

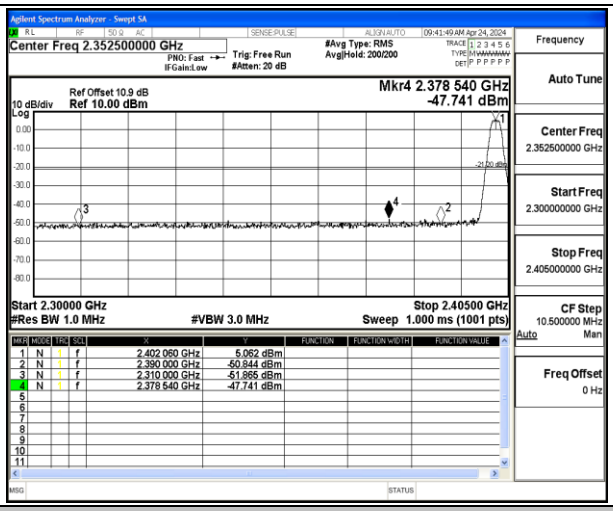
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_2M	Ant1	Low	2402	Peak	2390.000	-50.84	≤-21.20	44.36	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2310.000	-51.87	≤-21.20	43.33	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2378.540	-47.74	≤-21.20	47.46	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2390.000	-54.41	≤-41.20	40.79	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-55.76	≤-41.20	39.44	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2387.255	-54.19	≤-41.20	41.01	≤54	PASS
BLE_2M	Ant1	High	2480	Peak	2483.500	-46.24	≤-21.20	48.96	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2500.000	-50.67	≤-21.20	44.53	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2483.760	-45.79	≤-21.20	49.41	≤74	PASS
BLE_2M	Ant1	High	2480	AV	2483.500	-51.31	≤-41.20	43.89	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2500.000	-54.37	≤-41.20	40.83	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2483.520	-51.31	≤-41.20	43.89	≤54	PASS

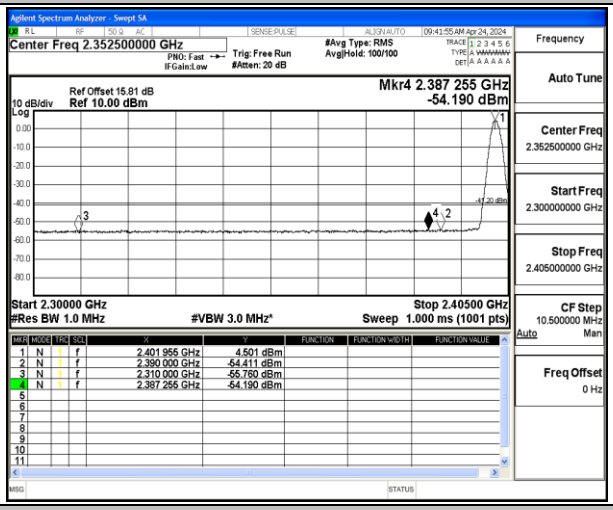
Note：

1. The Antenna Gain is compensated in the graph.
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.

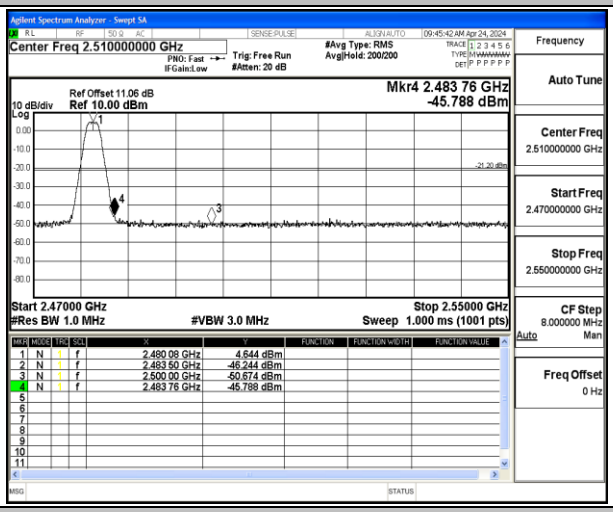
Test Graphs



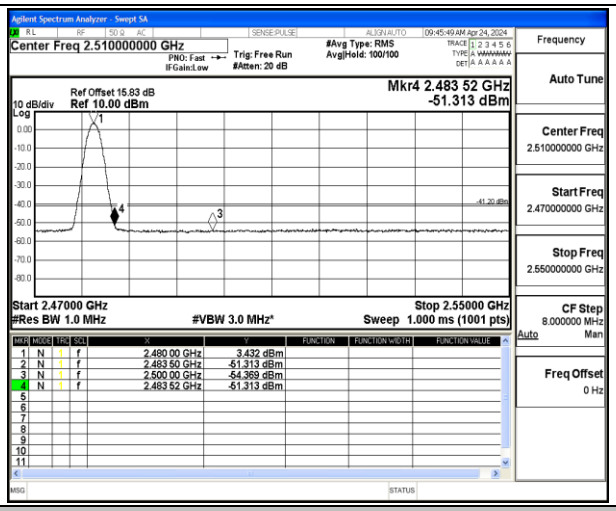
BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS



BLE_2M-Ant1-2480-PASS