

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

Product Name: Mobile Phone

Trade Mark: TG

Test Model: TGM0vil

FCC ID: 2BA86TGM0VIL

Environmental Conditions

Temperature:	23.3℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

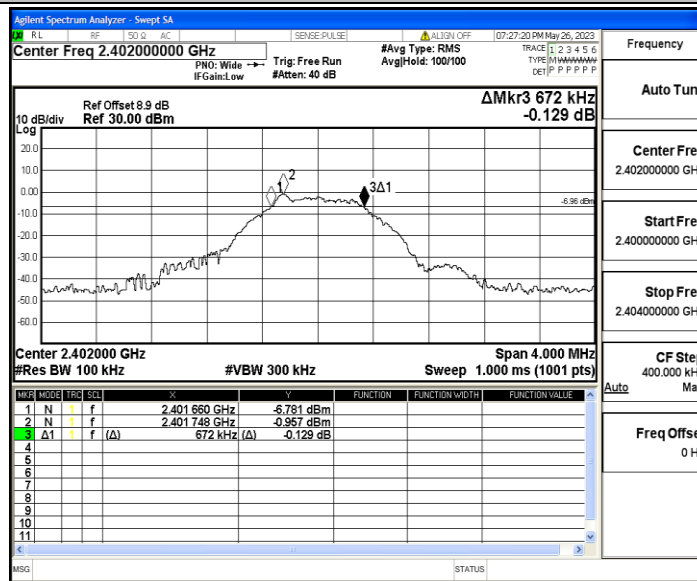
Appendix A: DTS Bandwidth

Test Result

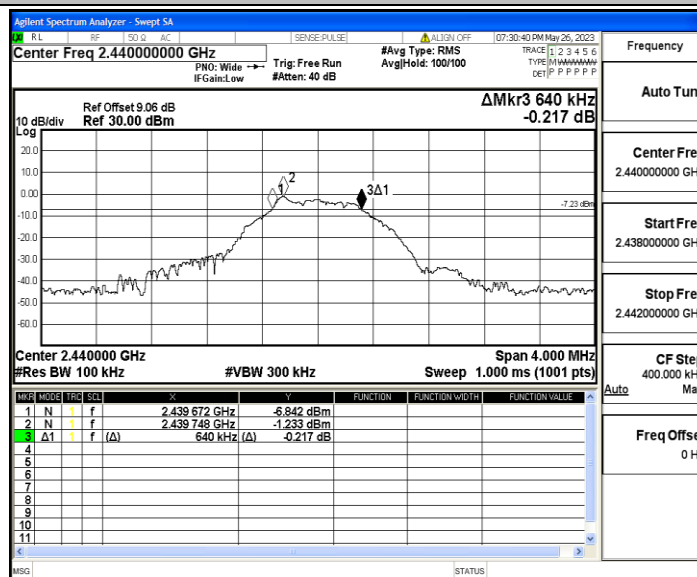
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.660	2402.332	0.5	PASS
		2440	0.640	2439.672	2440.312	0.5	PASS
		2480	0.664	2479.664	2480.328	0.5	PASS

Test Graphs

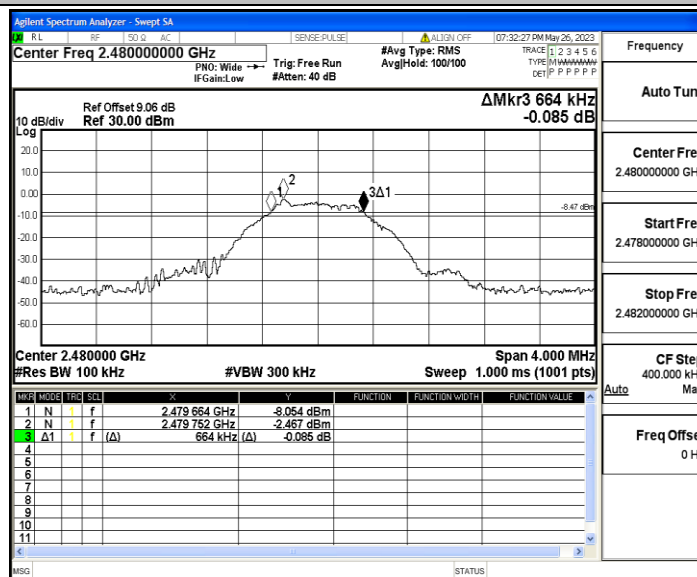
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



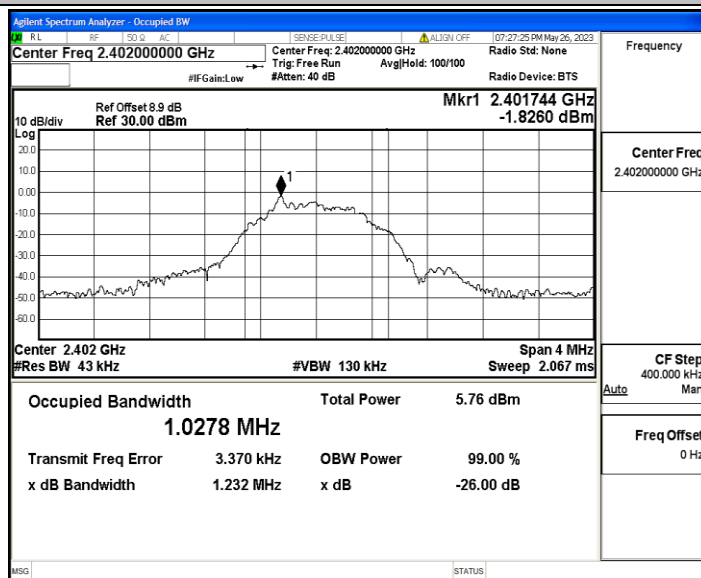
Appendix B: Occupied Channel Bandwidth

Test Result

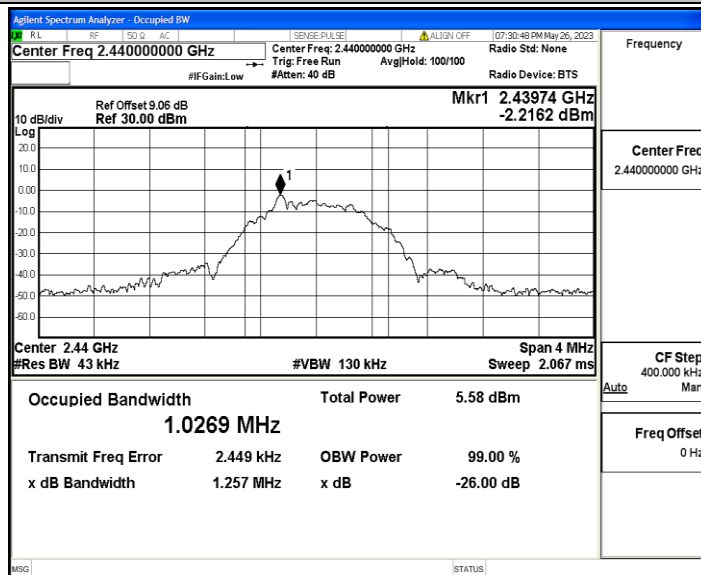
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0278	2401.4895	2402.5173	---	---
		2440	1.0269	2439.4890	2440.5159	---	---
		2480	1.0323	2479.4876	2480.5199	---	---

Test Graphs

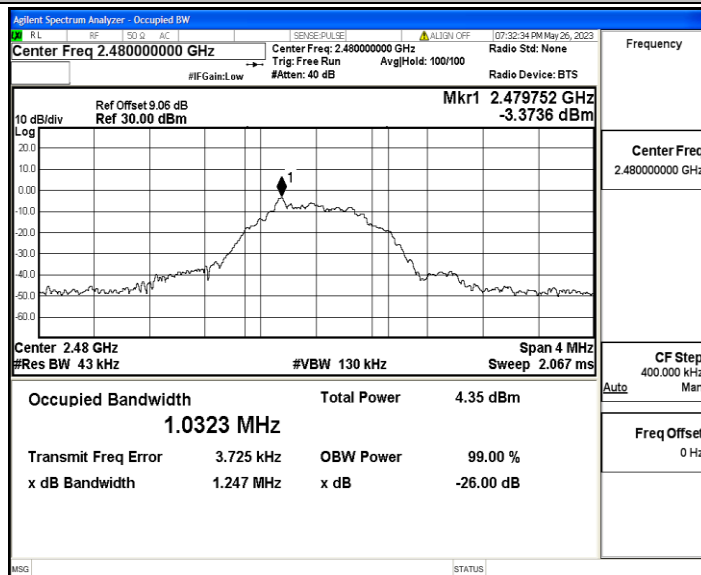
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



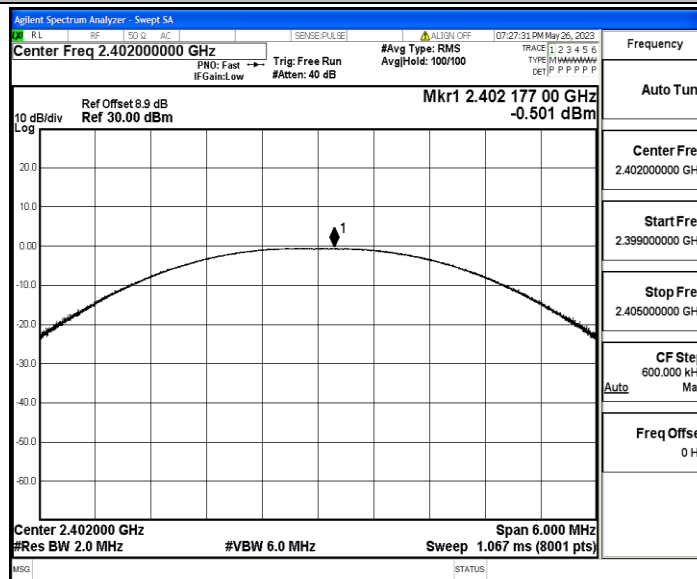
Appendix C: Maximum Peak conducted output power

Test Result

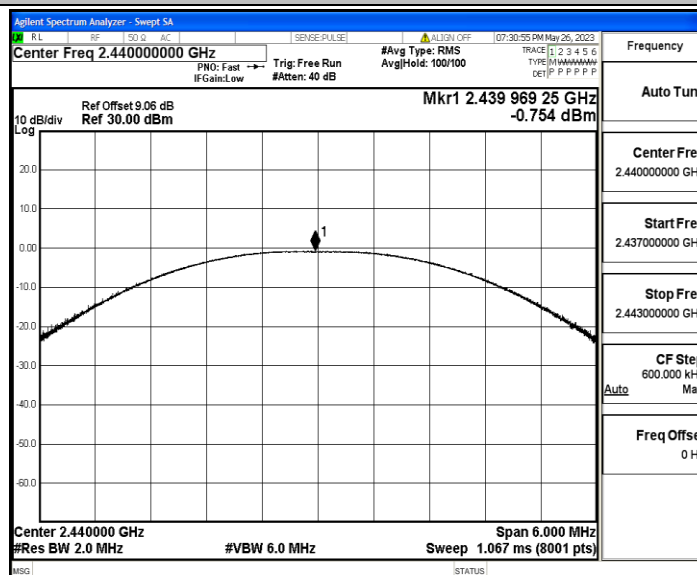
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.5	≤30	PASS
		2440	-0.75	≤30	PASS
		2480	-1.91	≤30	PASS

Test Graphs

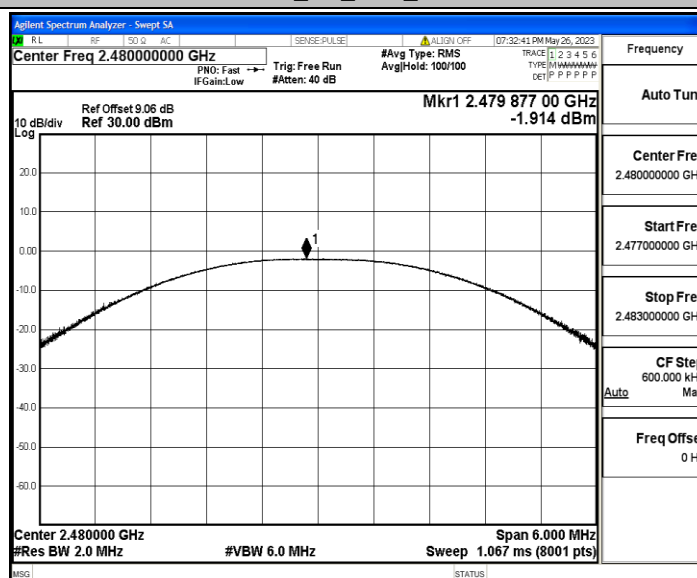
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



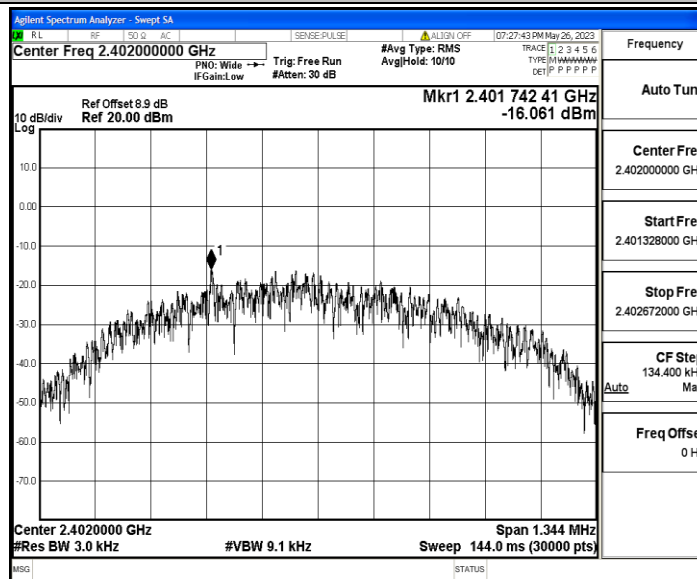
Appendix D: Maximum power spectral density

Test Result

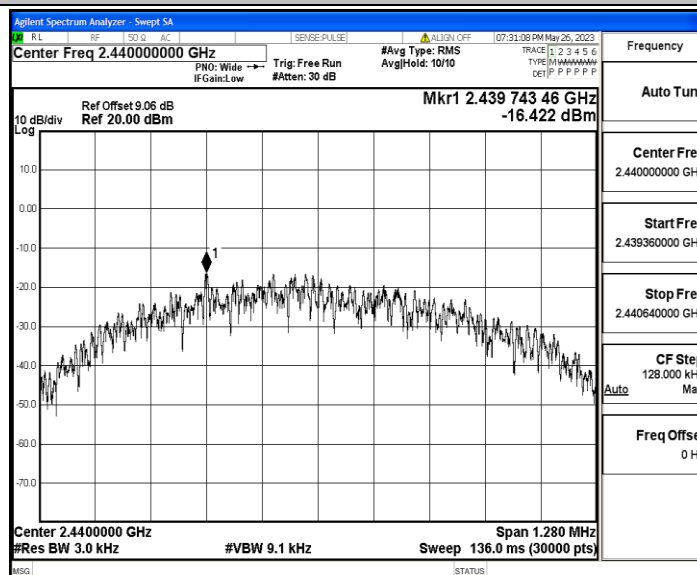
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-16.06	≤8.00	PASS
		2440	-16.42	≤8.00	PASS
		2480	-17.47	≤8.00	PASS

Test Graphs

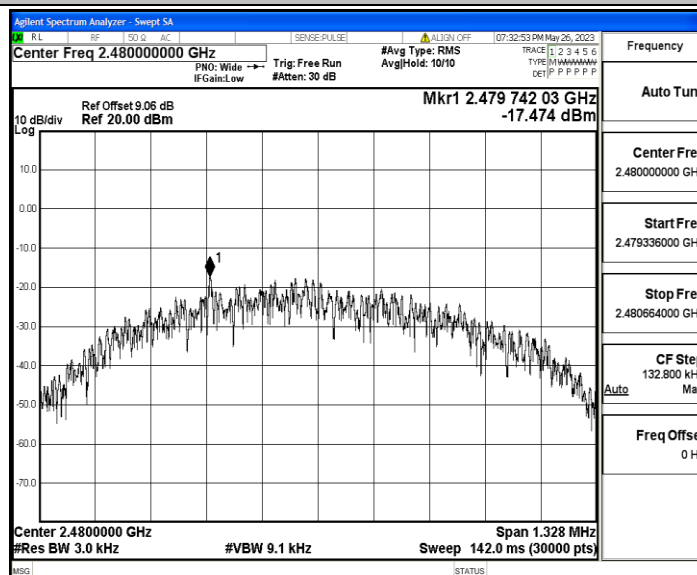
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

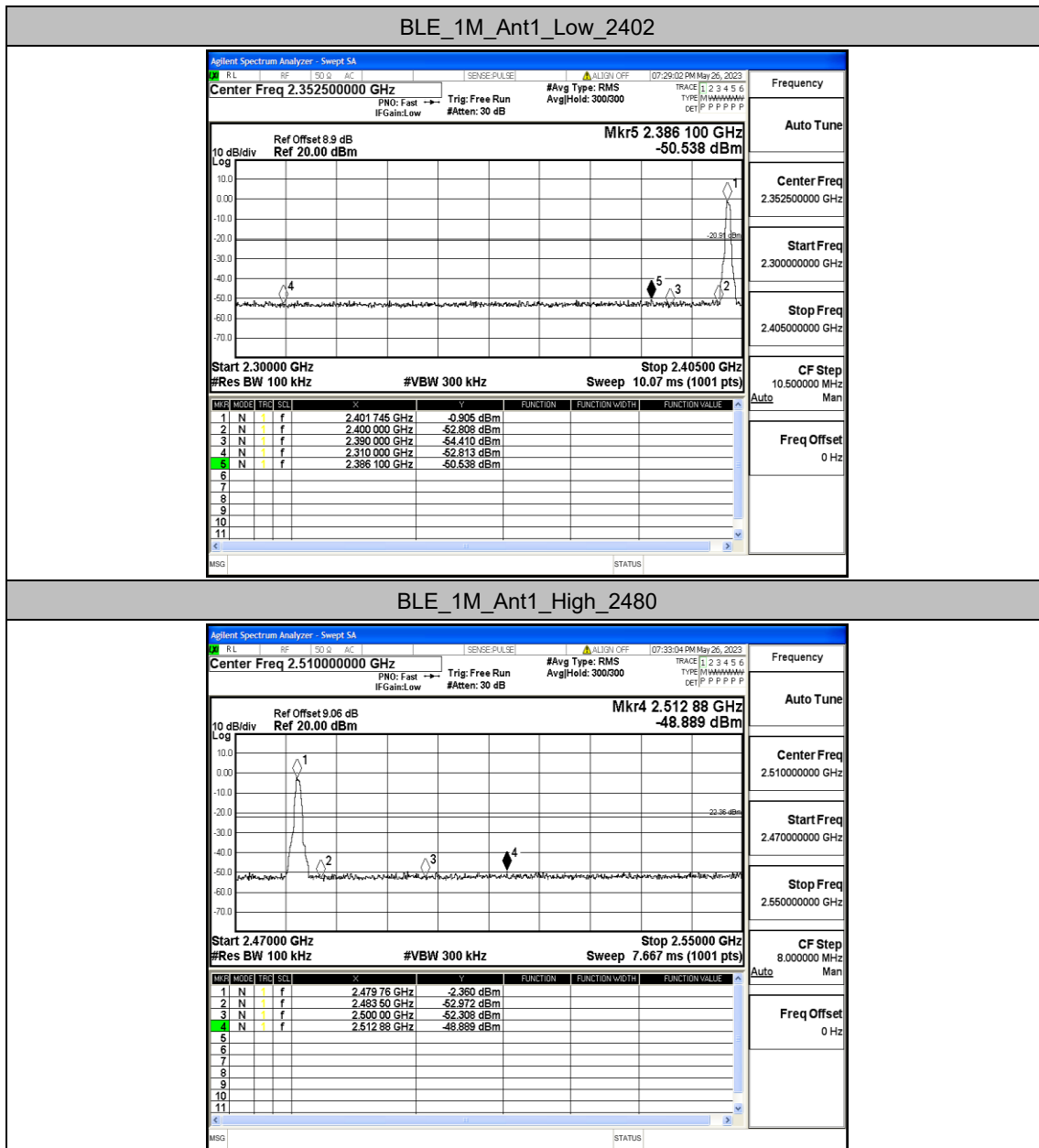


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.91	-50.54	≤-20.91	PASS
		High	2480	-2.36	-48.89	≤-22.36	PASS

Test Graphs



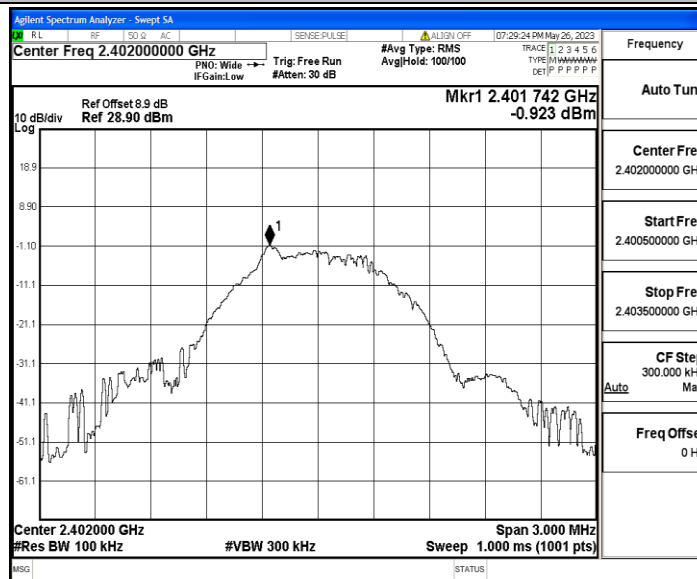
Appendix F: Conducted Spurious Emission

Test Result

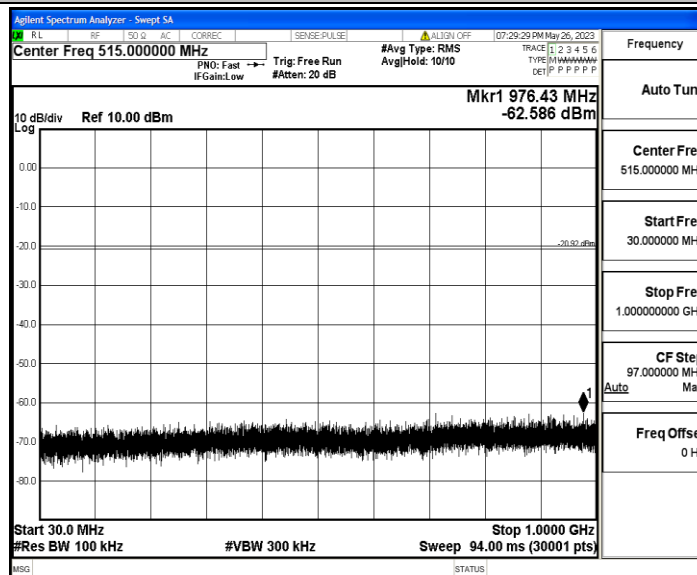
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.92	-0.92	---	PASS
			30~1000	-0.92	-62.59	≤-20.92	PASS
			1000~26500	-0.92	-50.07	≤-20.92	PASS
		2440	Reference	-1.20	-1.20	---	PASS
			30~1000	-1.20	-62.44	≤-21.2	PASS
			1000~26500	-1.20	-50.04	≤-21.2	PASS
		2480	Reference	-2.35	-2.35	---	PASS
			30~1000	-2.35	-62.51	≤-22.35	PASS
			1000~26500	-2.35	-50.79	≤-22.35	PASS

Test Graphs

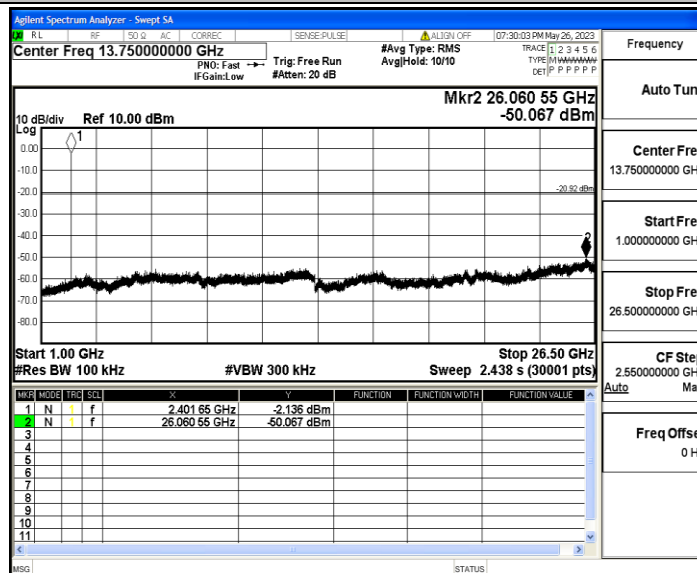
BLE_1M_Ant1_2402_0~Reference



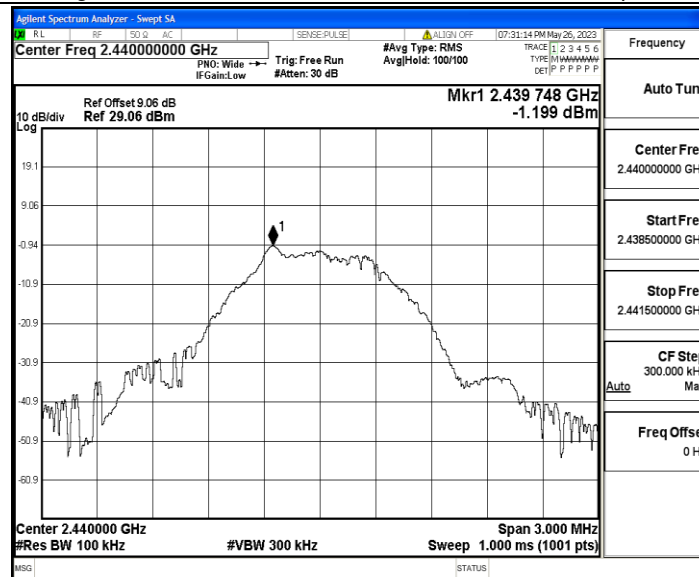
BLE_1M_Ant1_2402_30~1000



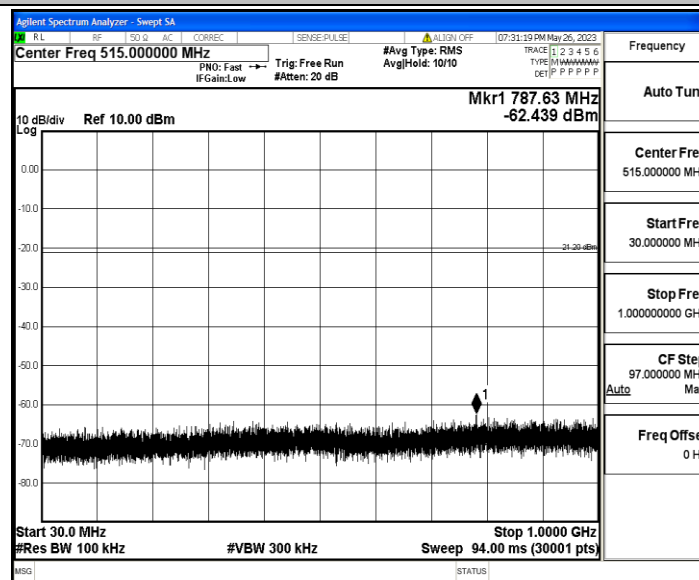
BLE_1M_Ant1_2402_1000~26500



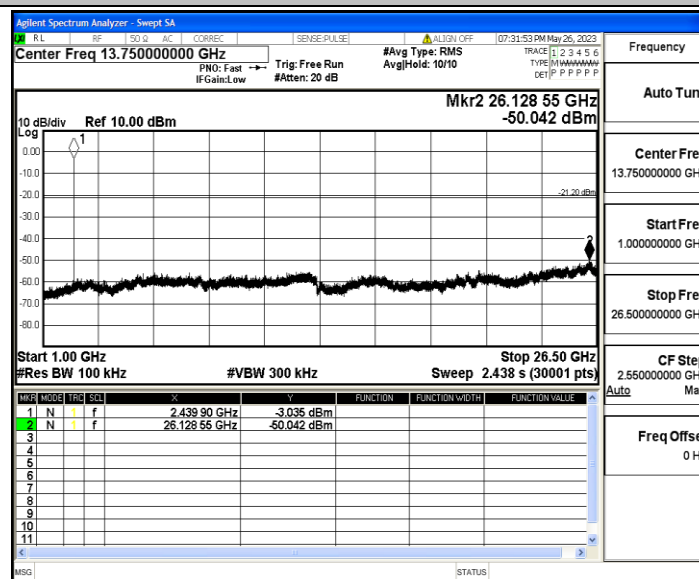
BLE_1M_Ant1_2440_0~Reference



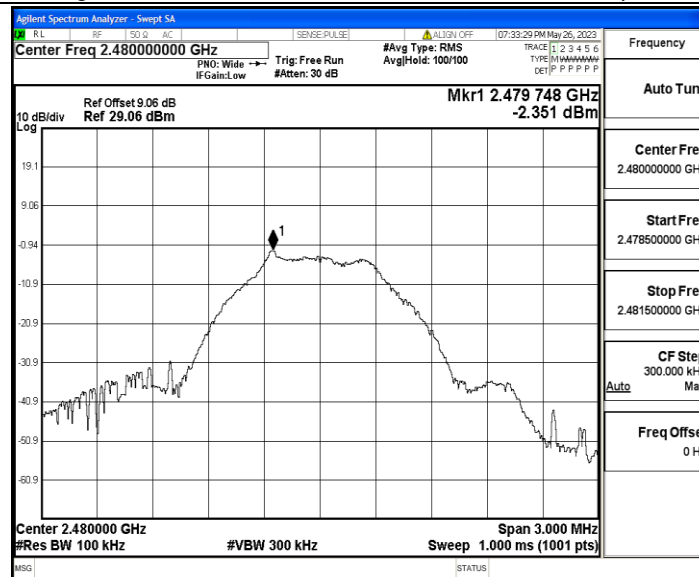
BLE_1M_Ant1_2440_30~1000



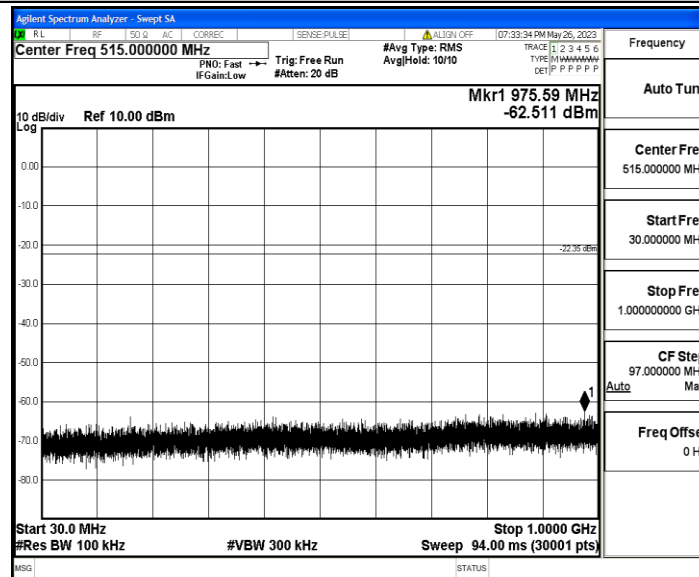
BLE_1M_Ant1_2440_1000~26500



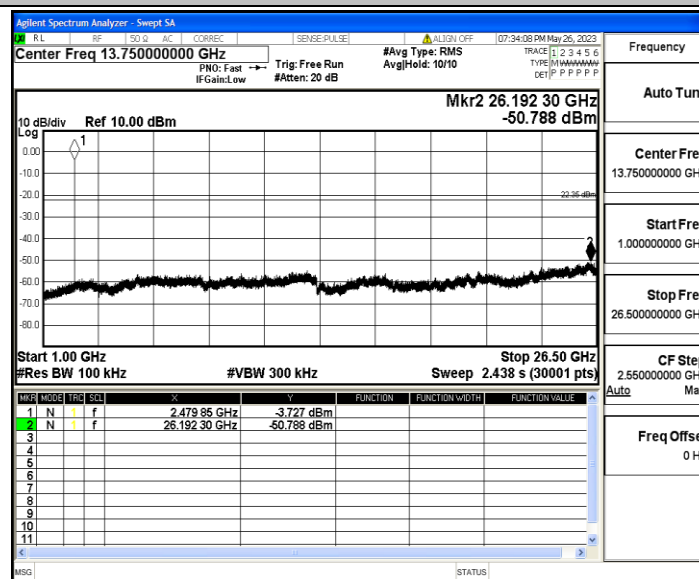
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



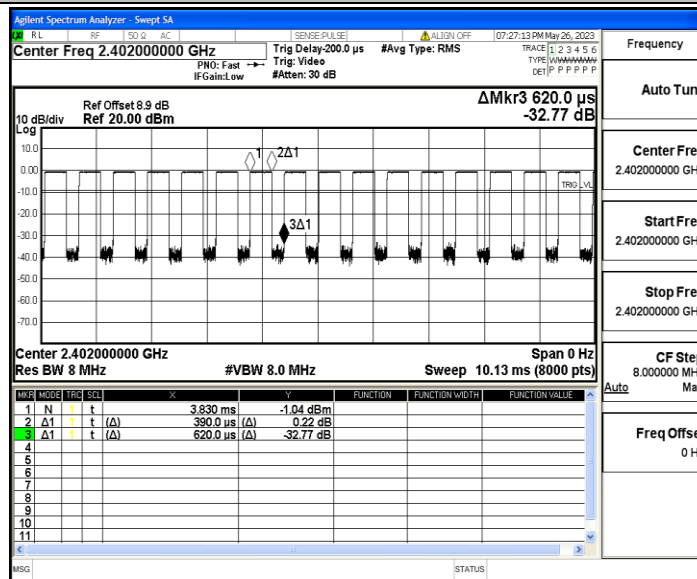
Appendix G: Duty Cycle

Test Result

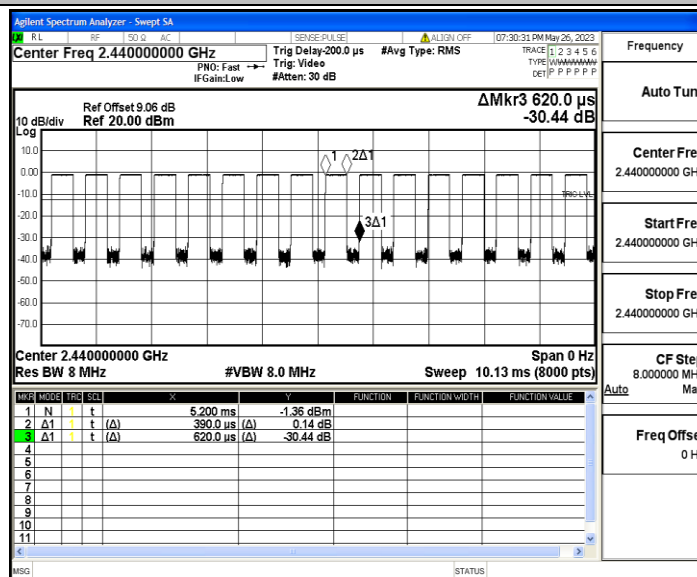
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.56
		2440	0.39	0.62	62.90	2.56
		2480	0.39	0.63	61.90	2.56

Test Graphs

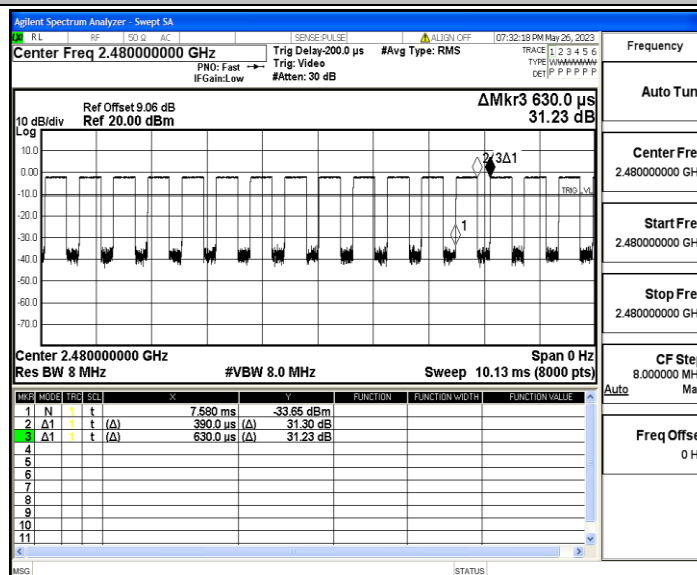
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

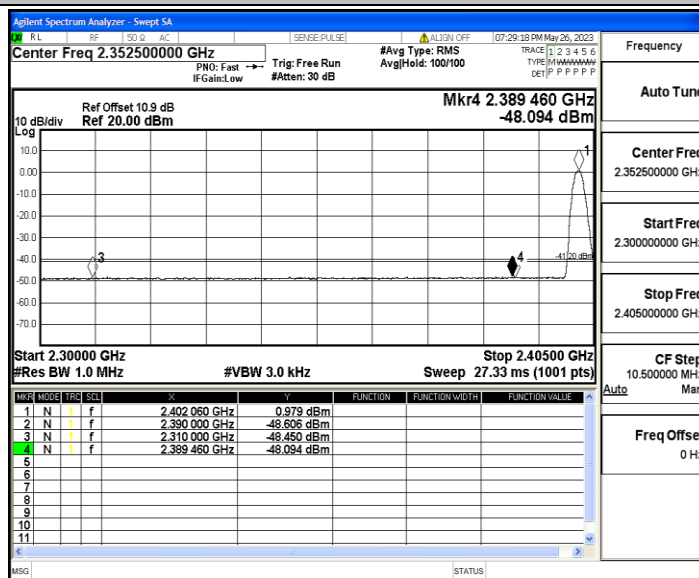
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.45	≤-41.20	PASS
				AV	2389.460	-48.09	≤-41.20	PASS
				AV	2390.000	-48.61	≤-41.20	PASS
				Peak	2310.000	-42.35	≤-21.20	PASS
				Peak	2387.150	-39.3	≤-21.20	PASS
				Peak	2390.000	-43.23	≤-21.20	PASS
		High	2480	AV	2483.500	-47.85	≤-41.20	PASS
				AV	2496.080	-47.69	≤-41.20	PASS
				AV	2500.000	-48.12	≤-41.20	PASS
				Peak	2483.500	-42.19	≤-21.20	PASS
				Peak	2484.240	-38.77	≤-21.20	PASS
				Peak	2500.000	-40.72	≤-21.20	PASS

Note:

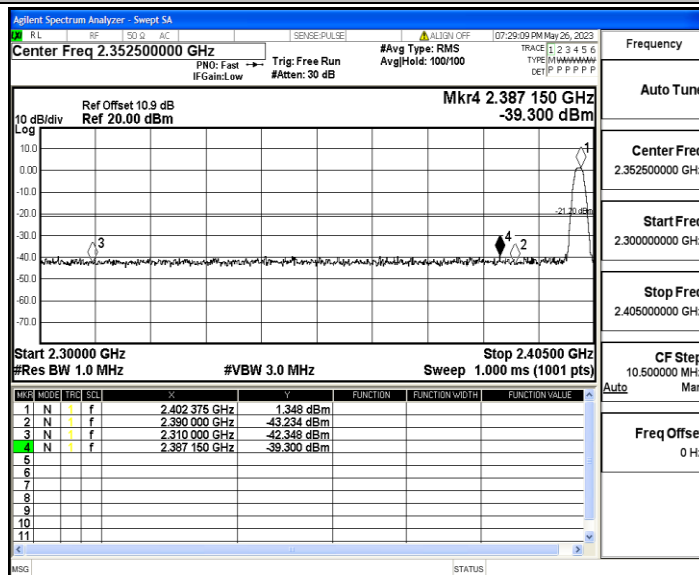
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

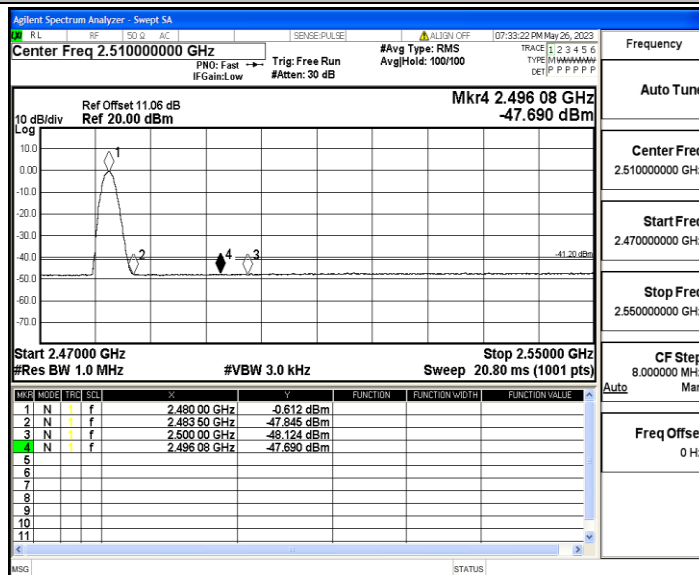
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

