

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

Product Name: D66 Mechanical keyboard

Trade Mark: DUSTSILVER

Test Model: D66

FCC ID: 2A7D6-D66

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	60%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

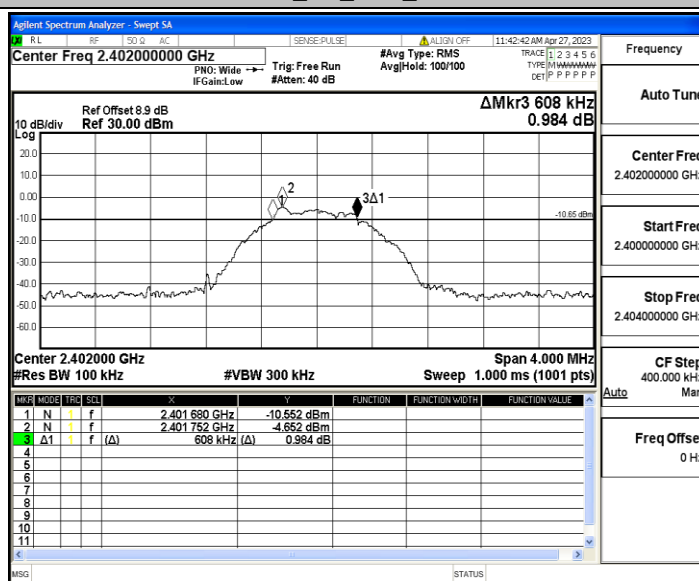
Appendix A: DTS Bandwidth

Test Result

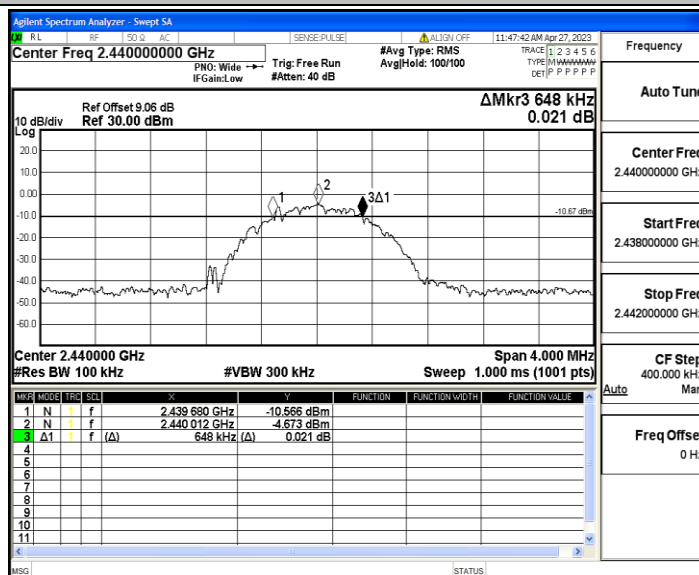
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.608	2401.680	2402.288	0.5	PASS
		2440	0.648	2439.680	2440.328	0.5	PASS
		2480	0.700	2479.648	2480.348	0.5	PASS

Test Graphs

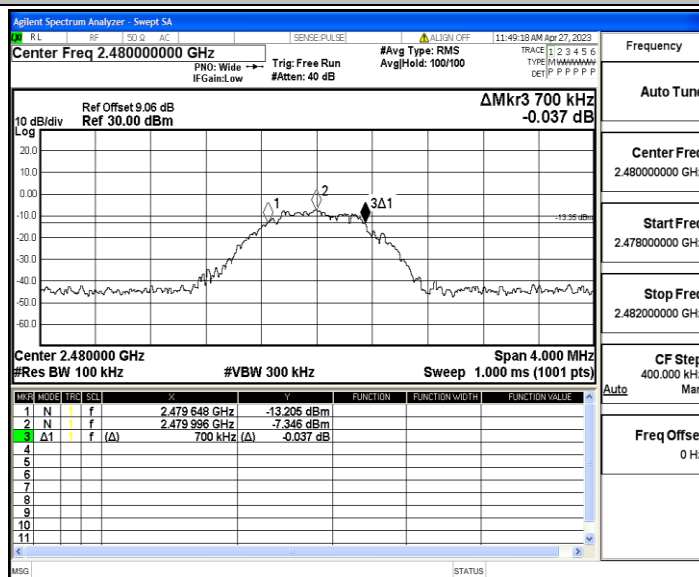
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



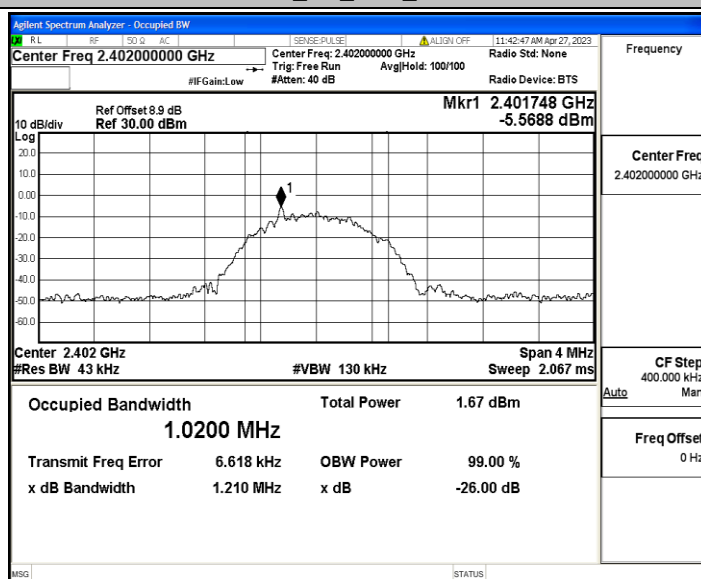
Appendix B: Occupied Channel Bandwidth

Test Result

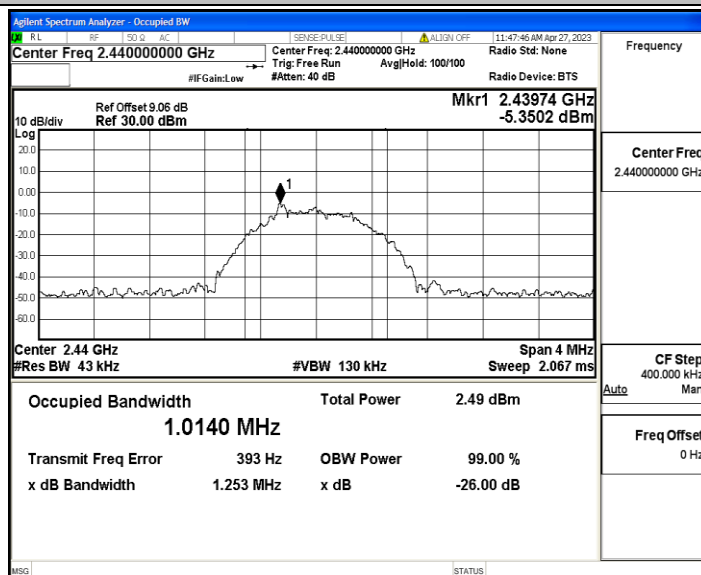
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0200	2401.4966	2402.5166	---	---
		2440	1.0140	2439.4934	2440.5074	---	---
		2480	1.0308	2479.4918	2480.5226	---	---

Test Graphs

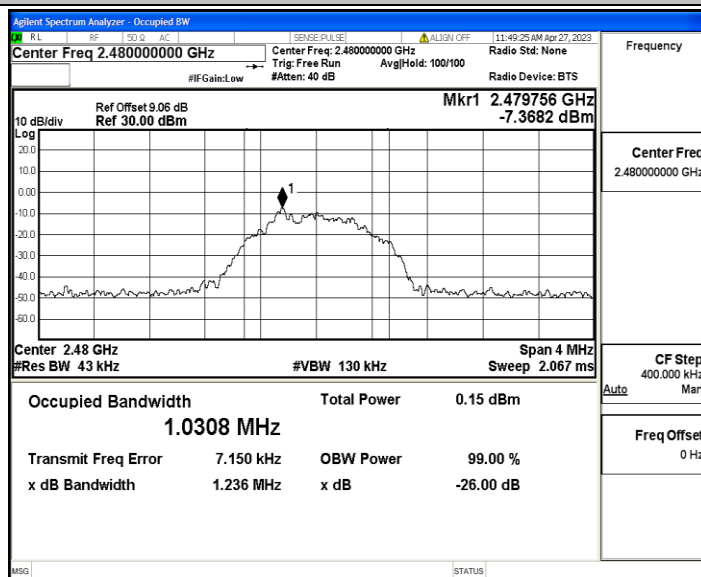
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



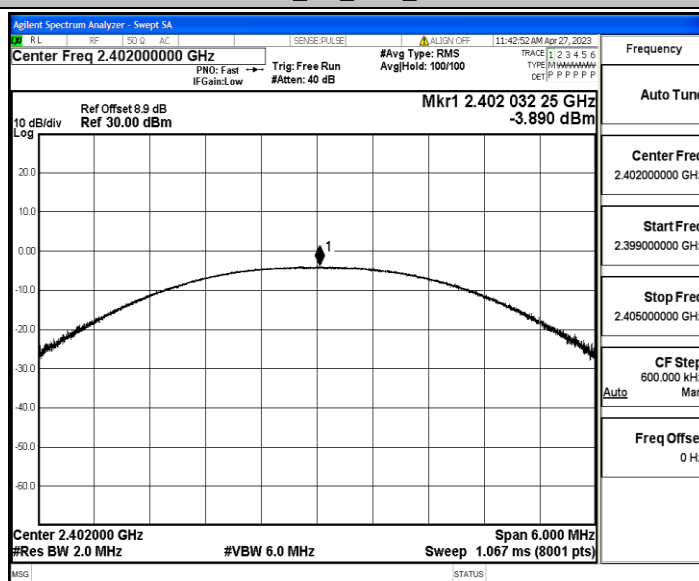
Appendix C: Maximum Peak conducted output power

Test Result

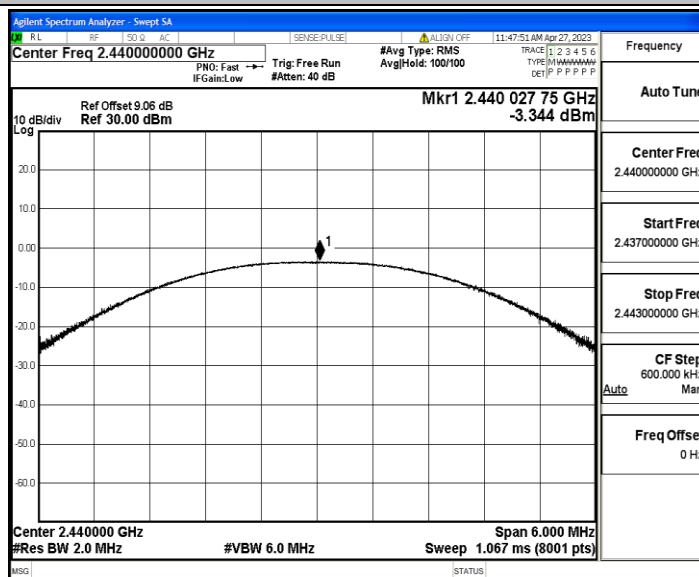
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.89	≤30	PASS
		2440	-3.34	≤30	PASS
		2480	-5.49	≤30	PASS

Test Graphs

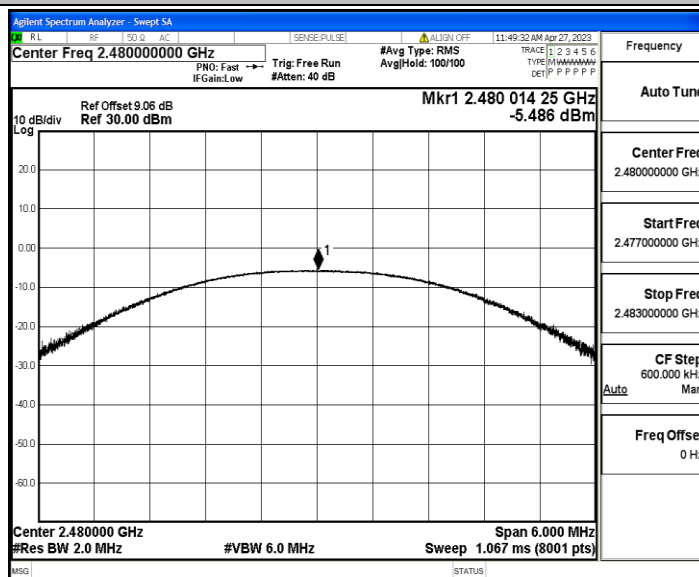
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



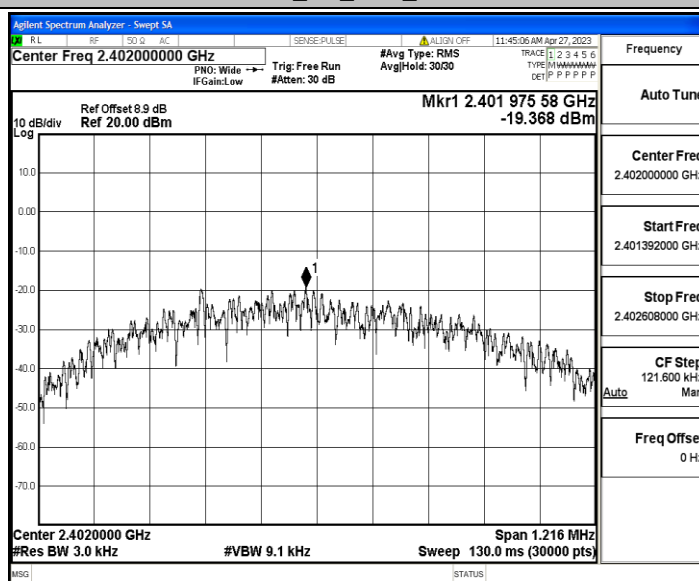
Appendix D: Maximum power spectral density

Test Result

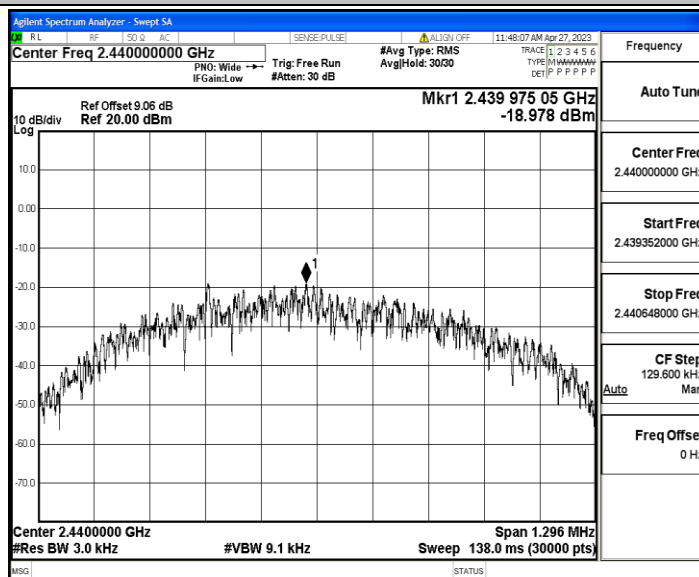
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.37	≤8.00	PASS
		2440	-18.98	≤8.00	PASS
		2480	-21.26	≤8.00	PASS

Test Graphs

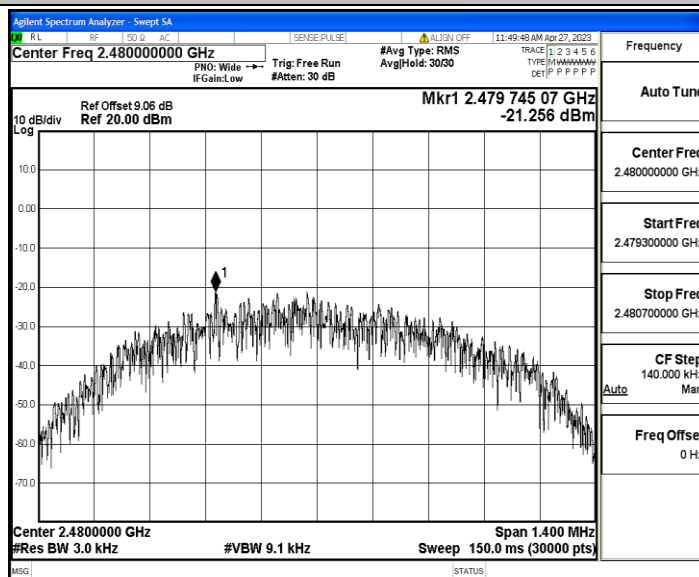
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



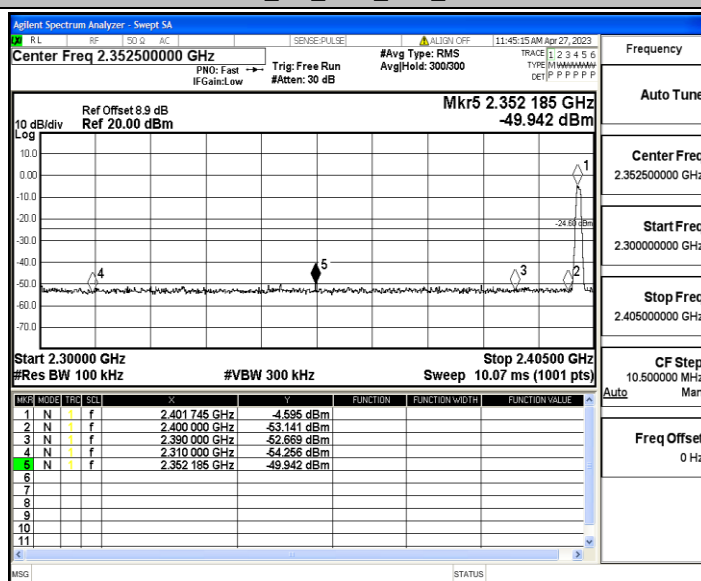
Appendix E: Band edge measurements

Test Result

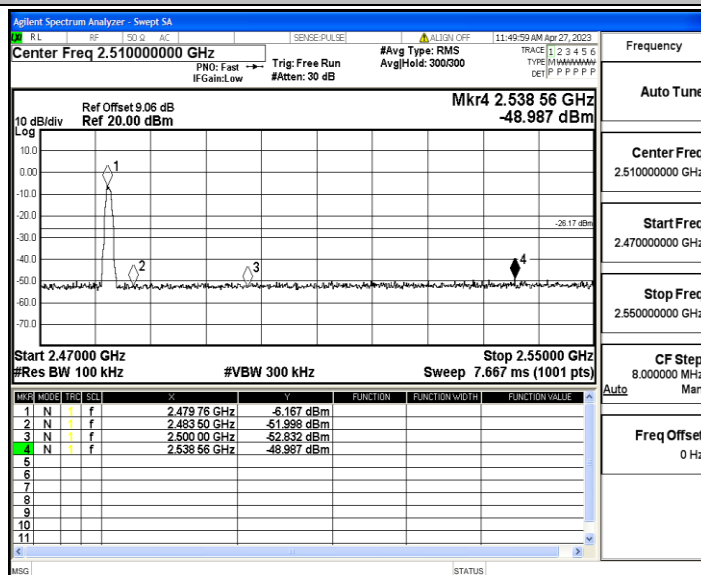
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.60	-49.94	≤-24.6	PASS
		High	2480	-6.17	-48.99	≤-26.17	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



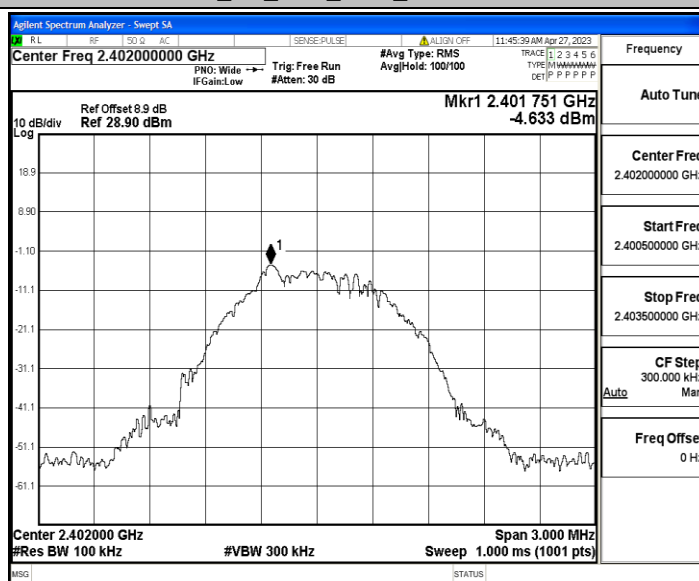
Appendix F: Conducted Spurious Emission

Test Result

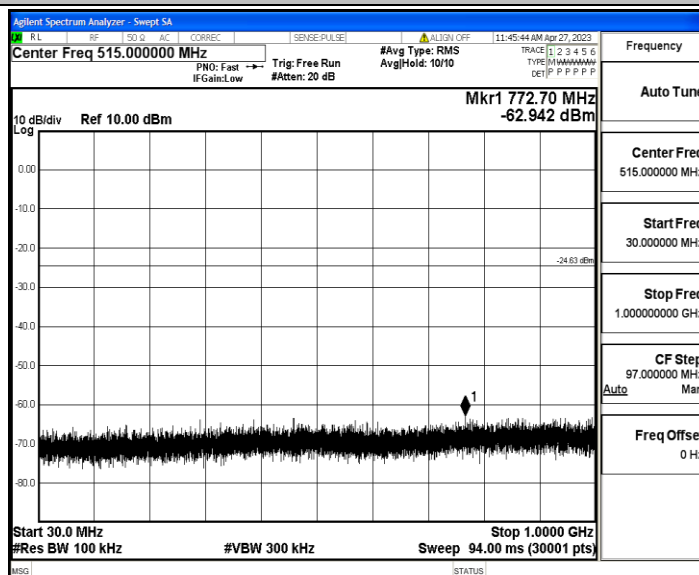
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-62.94	≤-24.63	PASS
			1000~26500	-4.63	-50.95	≤-24.63	PASS
		2440	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-62.53	≤-24.01	PASS
			1000~26500	-4.01	-49.96	≤-24.01	PASS
		2480	Reference	-6.83	-6.83	---	PASS
			30~1000	-6.83	-62.02	≤-26.83	PASS
			1000~26500	-6.83	-49.54	≤-26.83	PASS

Test Graphs

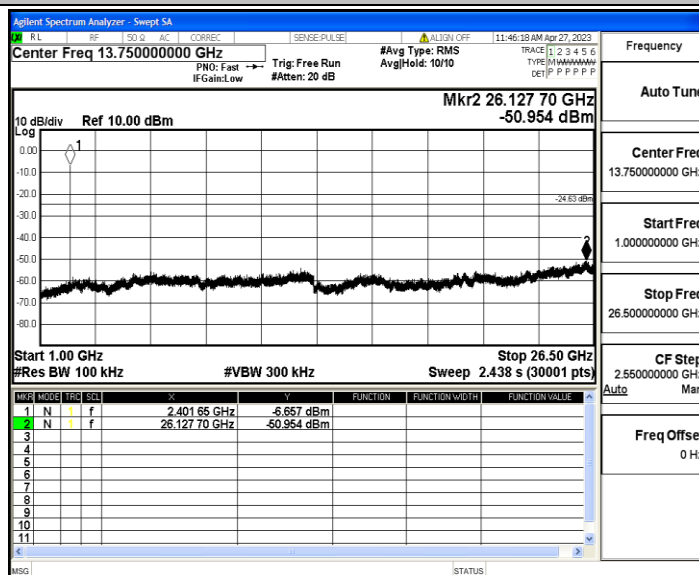
BLE_1M_Ant1_2402_0~Reference



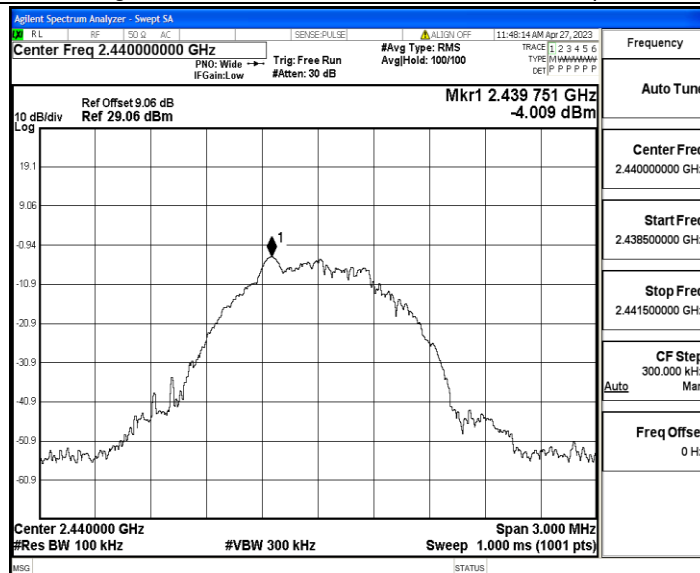
BLE_1M_Ant1_2402_30~1000



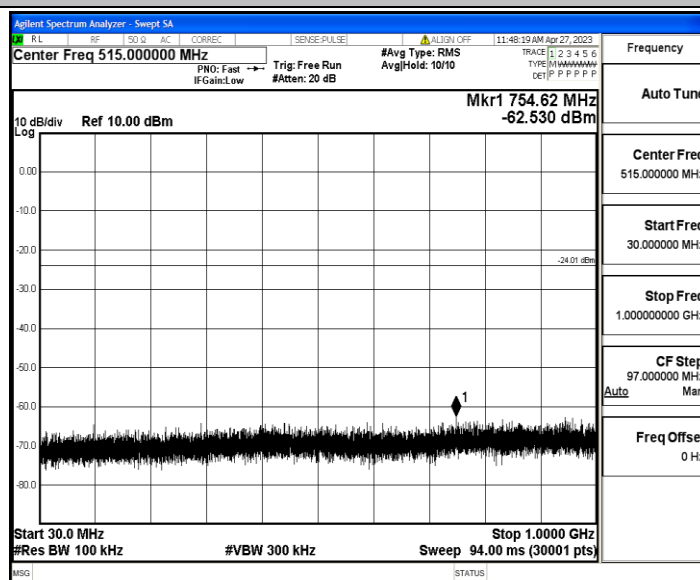
BLE_1M_Ant1_2402_1000~26500



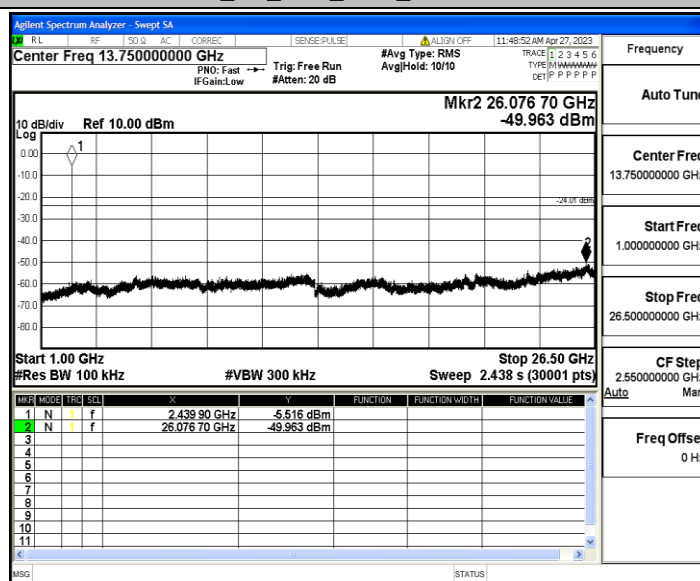
BLE_1M_Ant1_2440_0~Reference



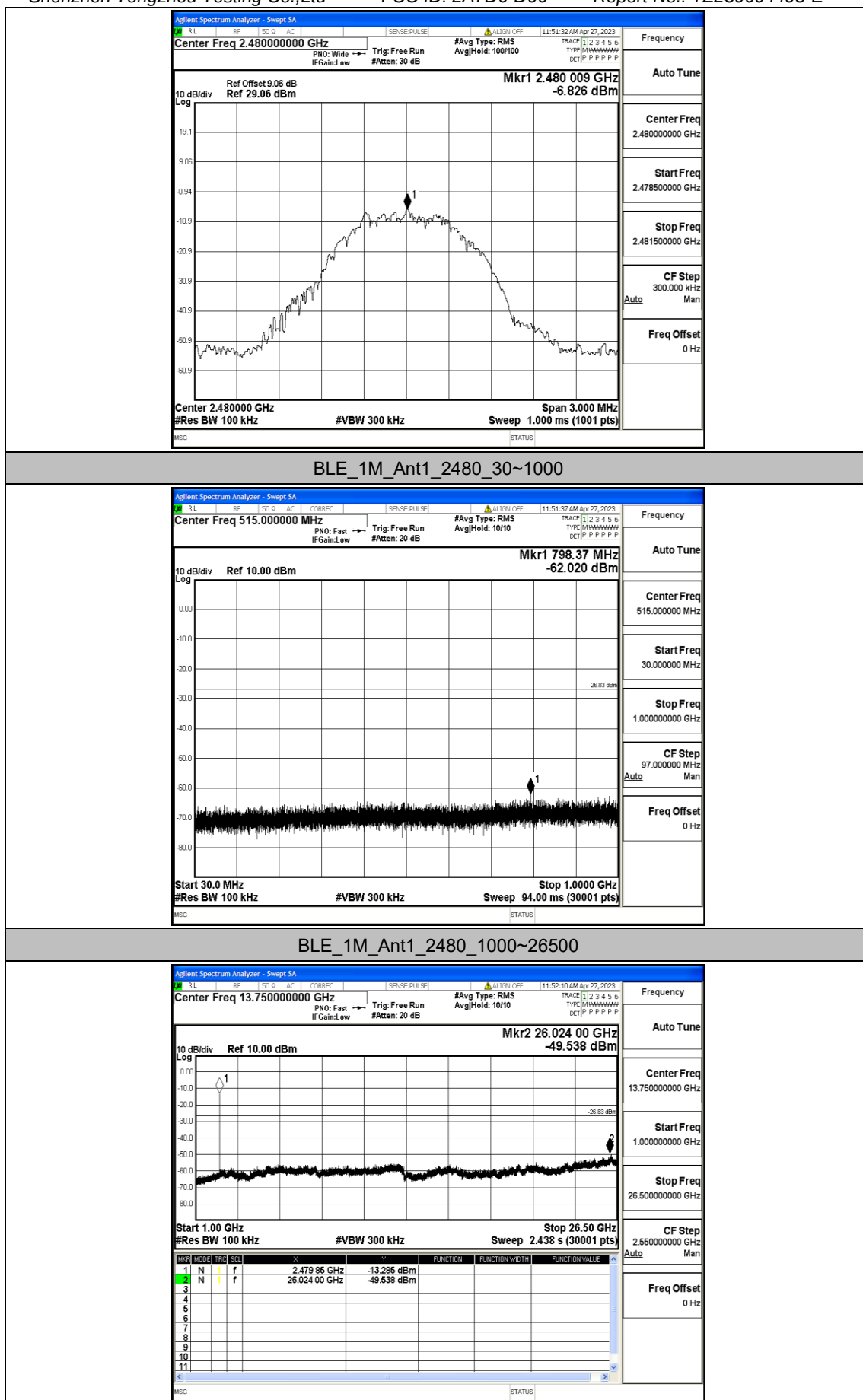
BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



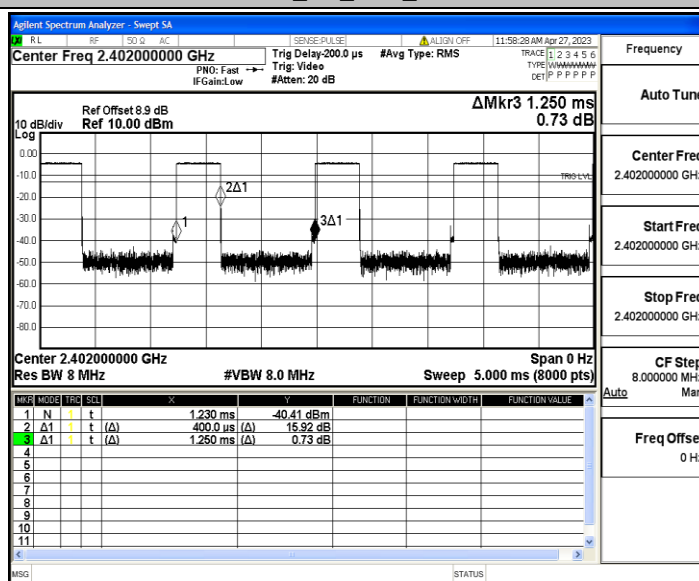
Appendix G: Duty Cycle

Test Result

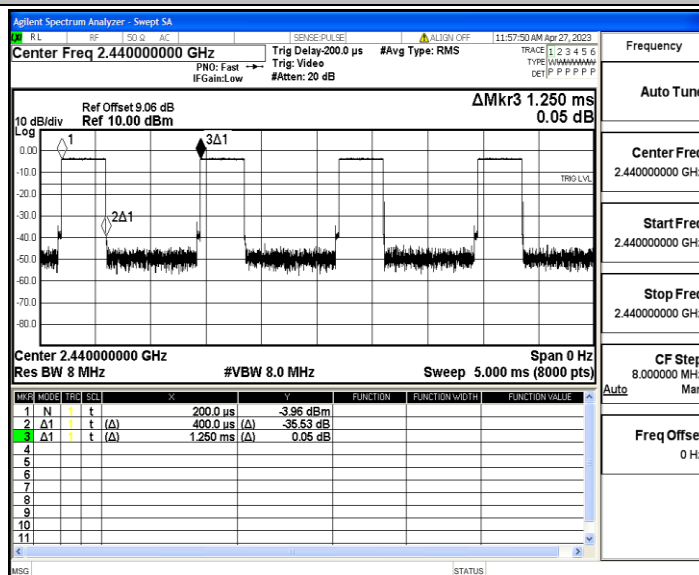
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.40	1.25	32.00	2.50
		2440	0.40	1.25	32.00	2.50
		2480	0.40	1.25	32.00	2.50

Test Graphs

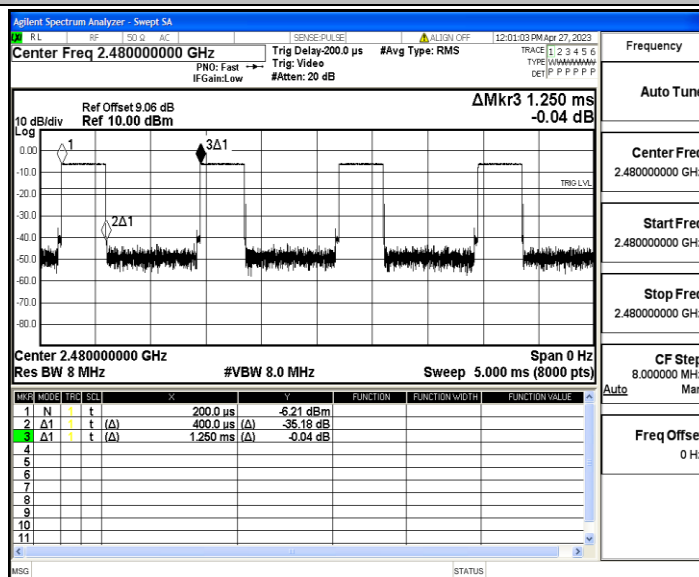
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

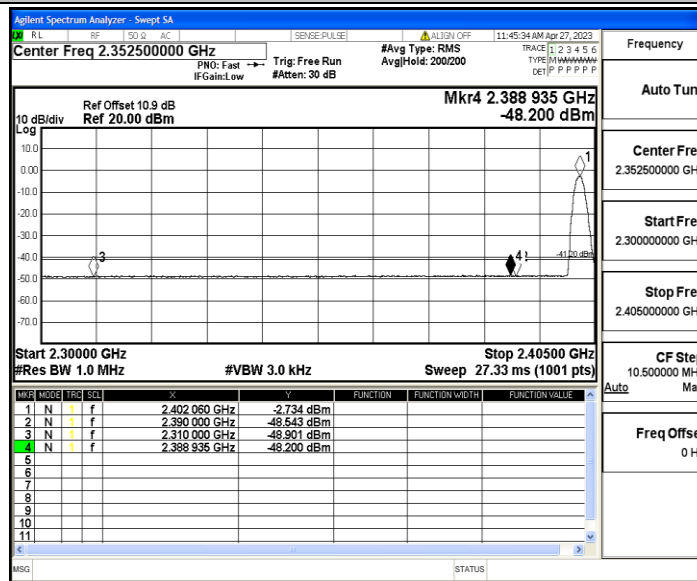
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.9	≤-41.20	PASS
				AV	2388.935	-48.2	≤-41.20	PASS
				AV	2390.000	-48.54	≤-41.20	PASS
				Peak	2310.000	-42.41	≤-21.20	PASS
				Peak	2376.965	-39.06	≤-21.20	PASS
				Peak	2390.000	-42.57	≤-21.20	PASS
		High	2480	AV	2483.500	-49.19	≤-41.20	PASS
				AV	2499.920	-48.93	≤-41.20	PASS
				AV	2500.000	-48.97	≤-41.20	PASS
				Peak	2483.500	-43.65	≤-21.20	PASS
				Peak	2484.320	-40.18	≤-21.20	PASS
				Peak	2500.000	-43.68	≤-21.20	PASS

Note:

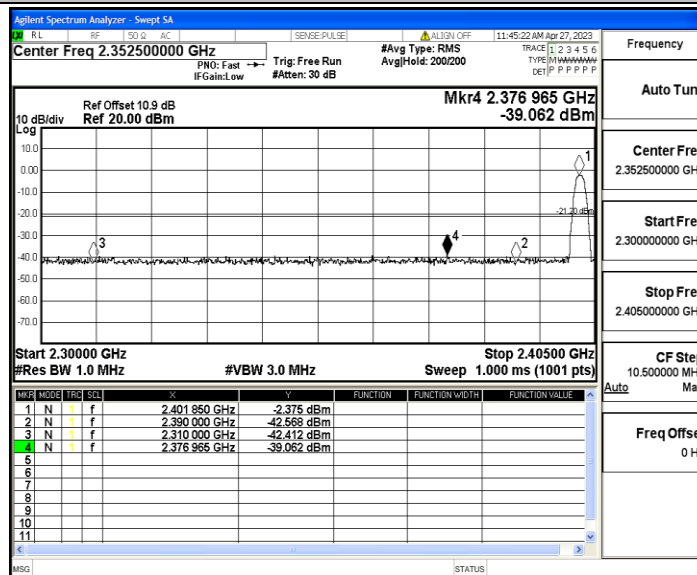
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

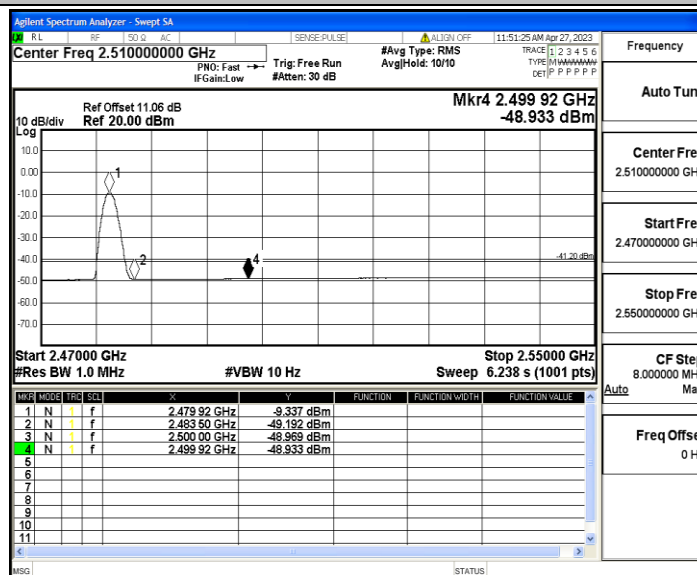
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

