

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

Product Name: Mechanical keyboard



Trade Mark:

Test Model: RT100

FCC ID: 2A5D2-RT100

Environmental Conditions

Temperature:	22.7℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

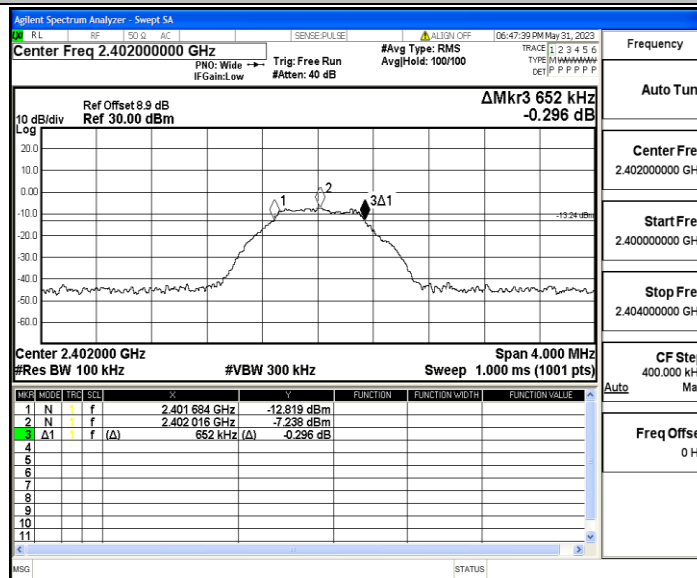
Appendix A: DTS Bandwidth

Test Result

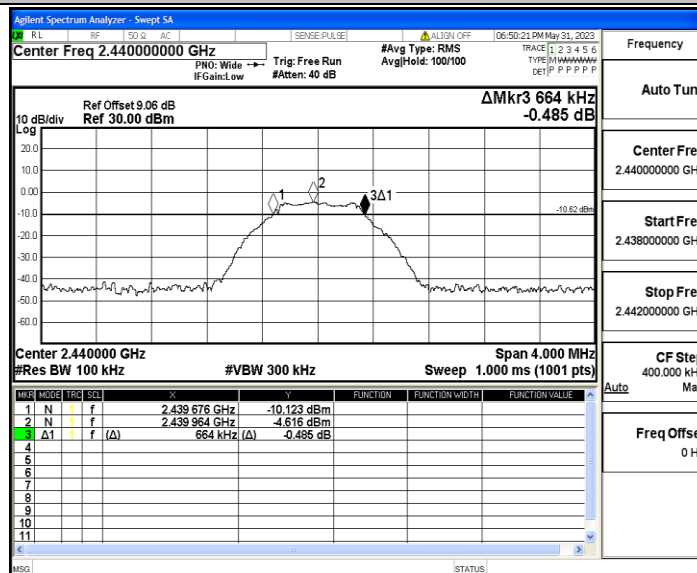
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.684	2402.336	0.5	PASS
		2440	0.664	2439.676	2440.340	0.5	PASS
		2480	0.660	2479.672	2480.332	0.5	PASS

Test Graphs

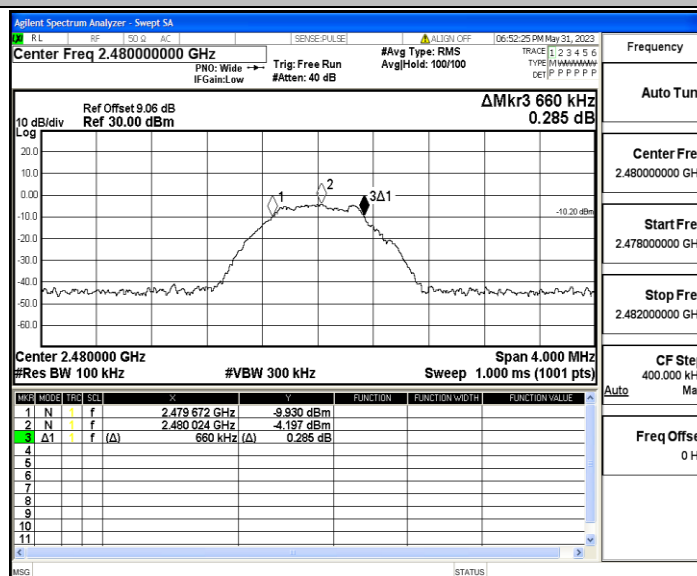
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

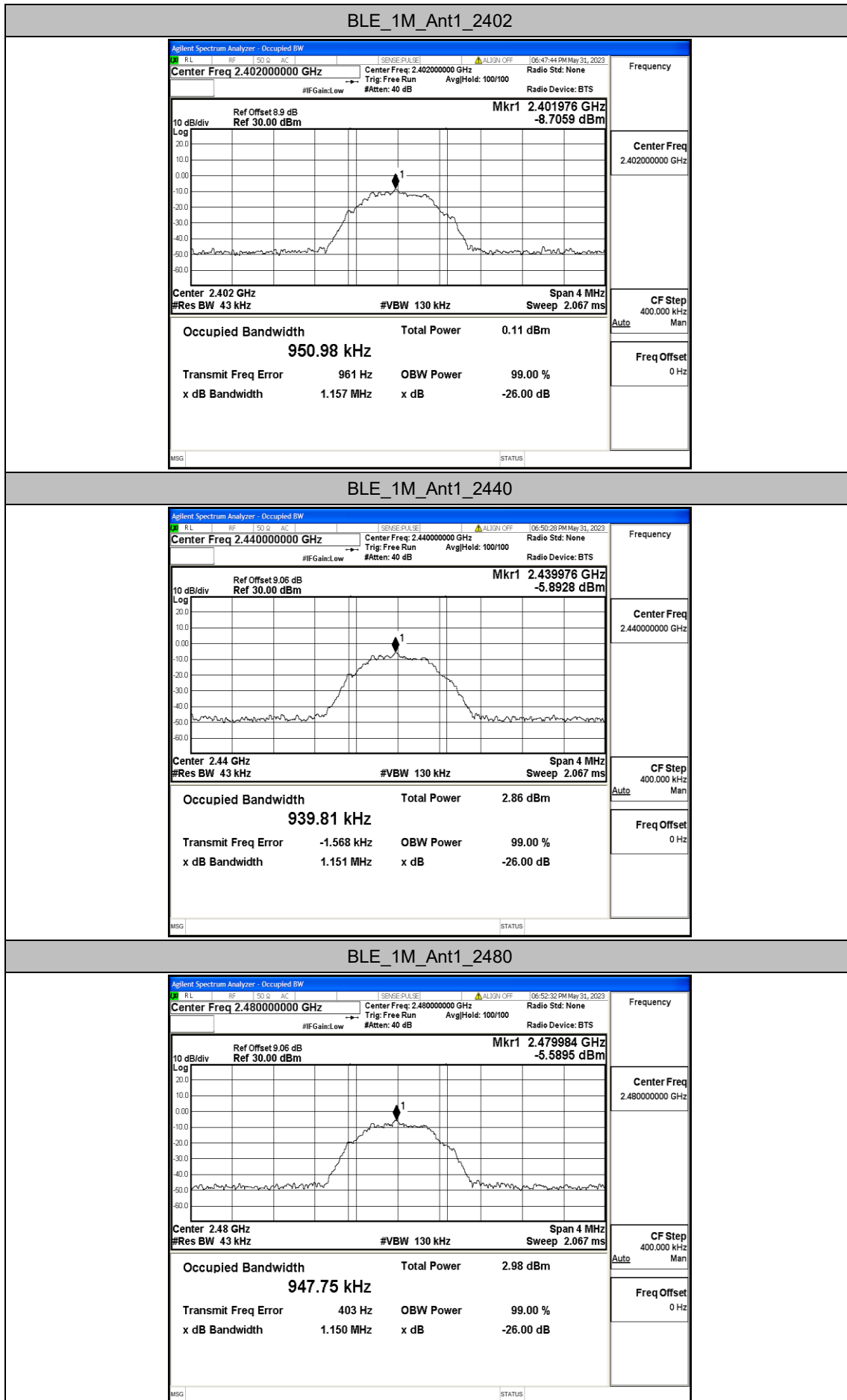


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.95098	2401.5255	2402.4765	---	---
		2440	0.93981	2439.5285	2440.4683	---	---
		2480	0.94775	2479.5265	2480.4743	---	---

Test Graphs

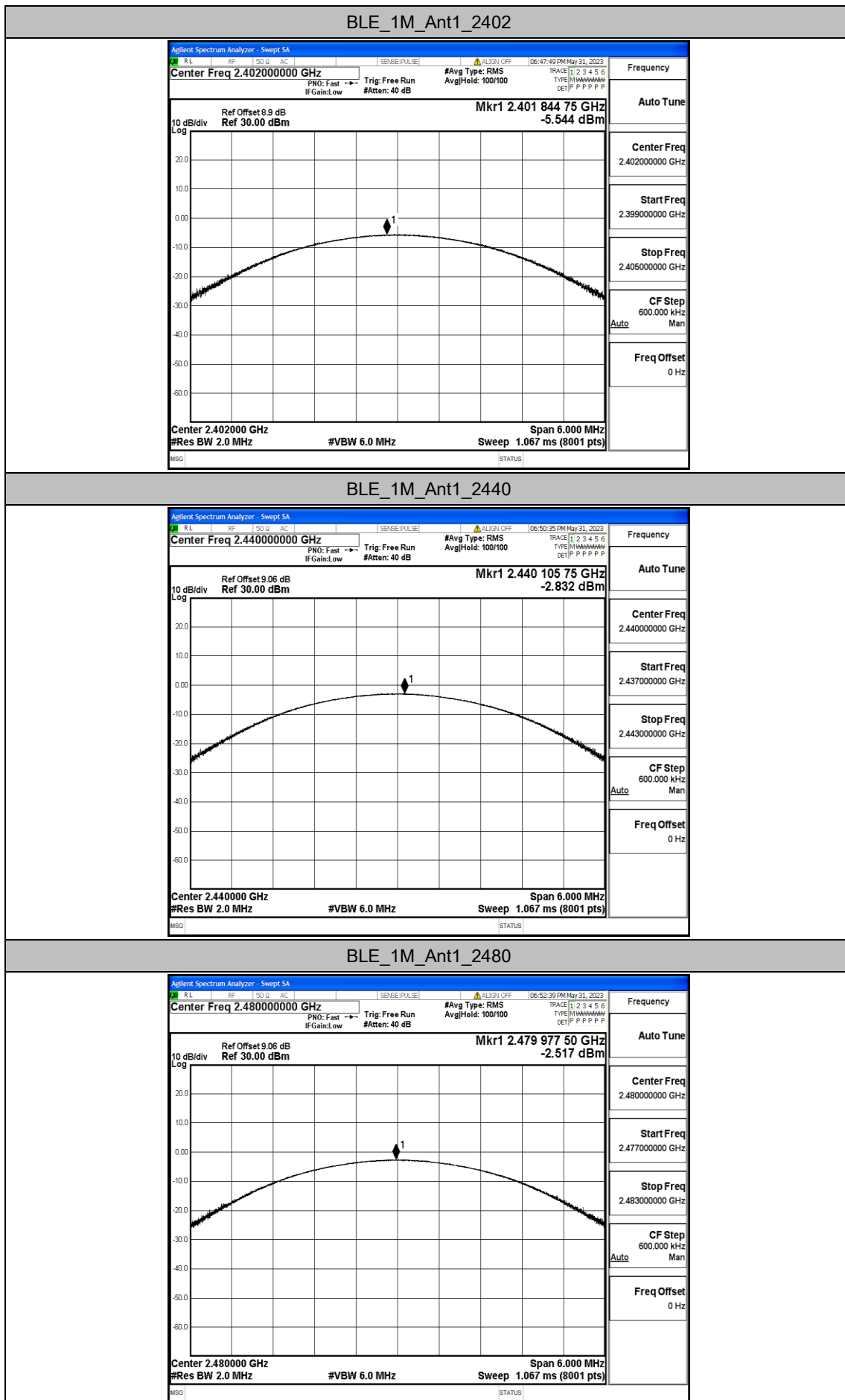


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-5.54	≤30	PASS
		2440	-2.83	≤30	PASS
		2480	-2.52	≤30	PASS

Test Graphs

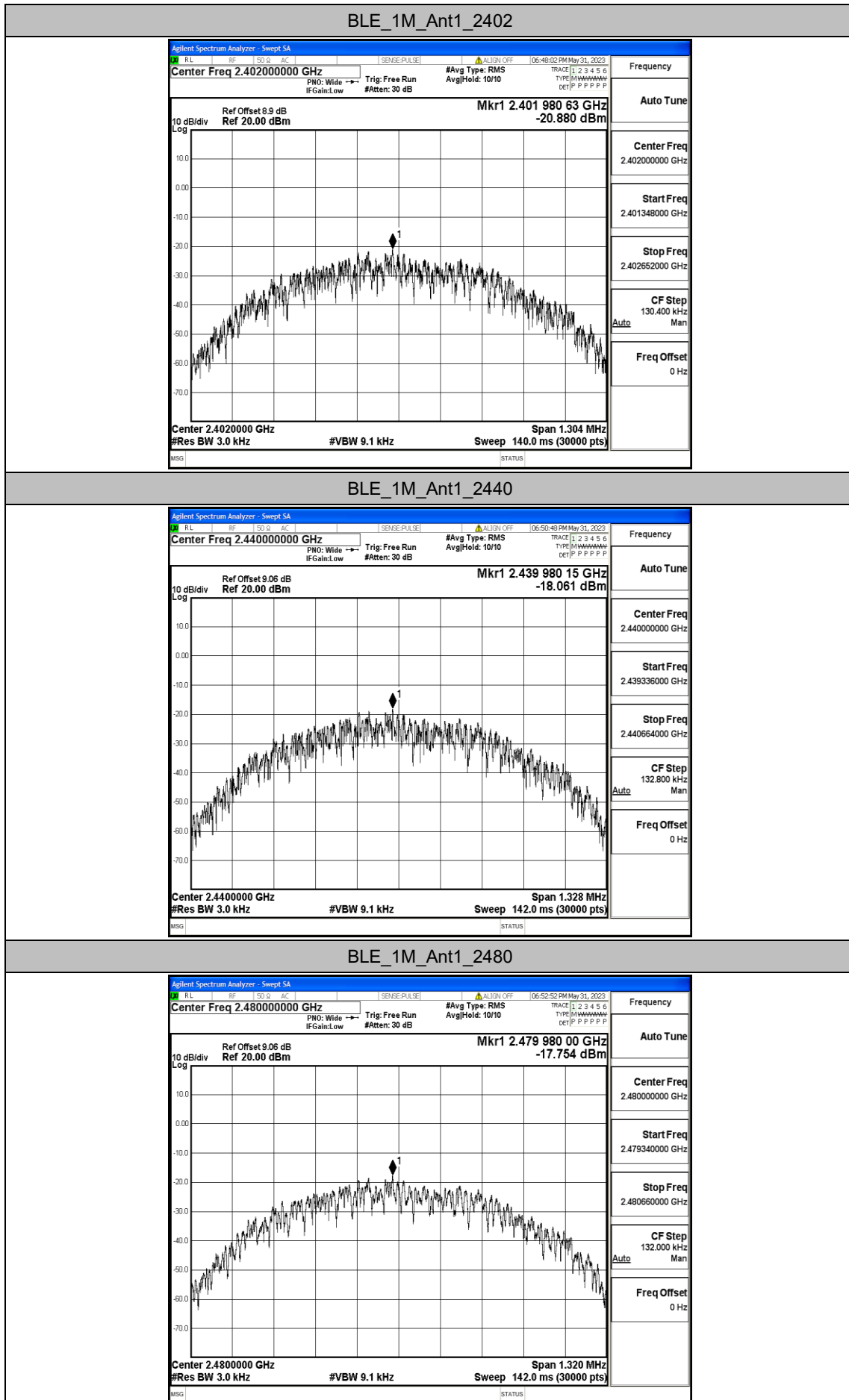


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-20.88	≤8.00	PASS
		2440	-18.06	≤8.00	PASS
		2480	-17.75	≤8.00	PASS

Test Graphs

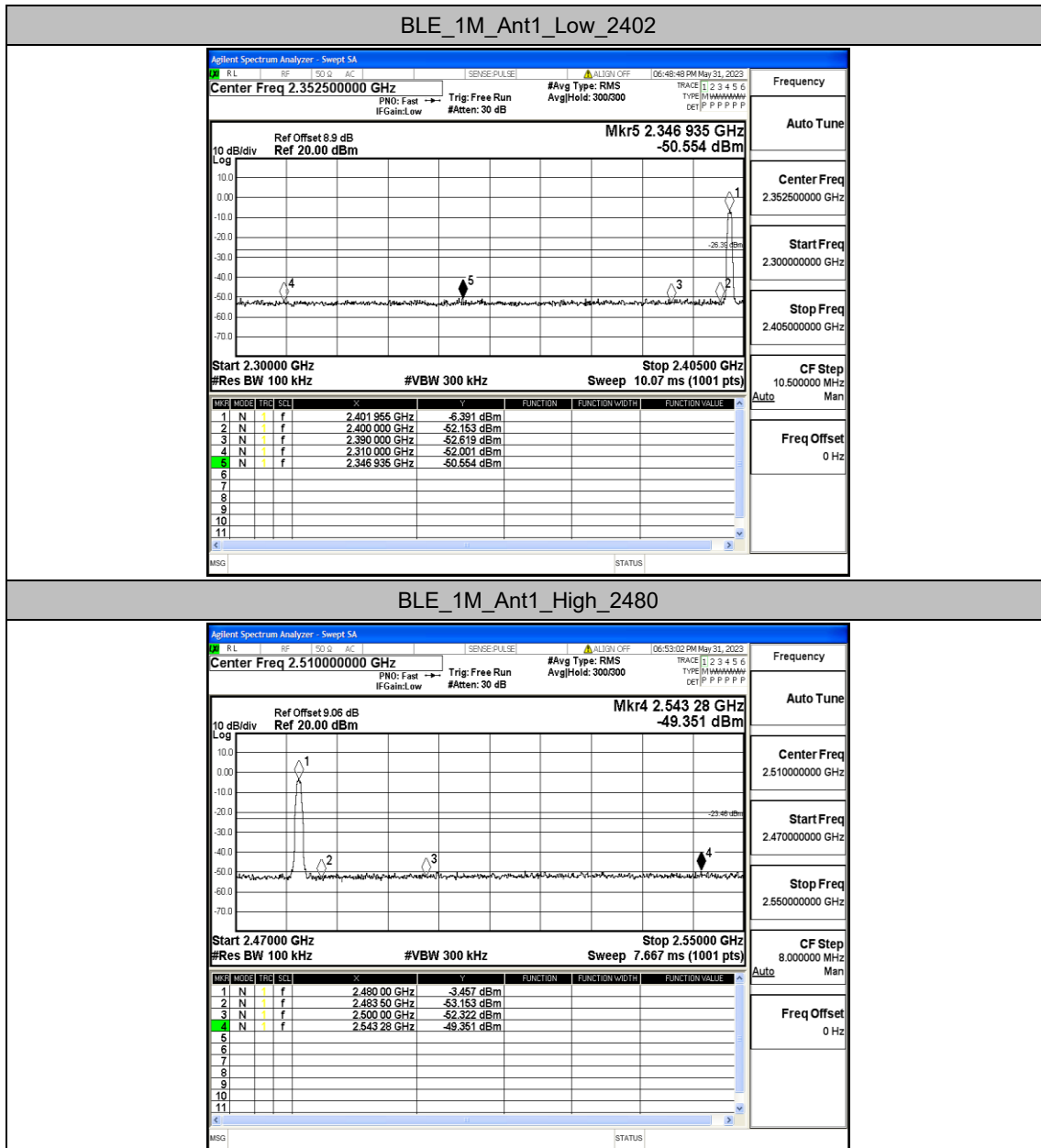


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-6.39	-50.55	≤-26.39	PASS
		High	2480	-3.46	-49.35	≤-23.46	PASS

Test Graphs



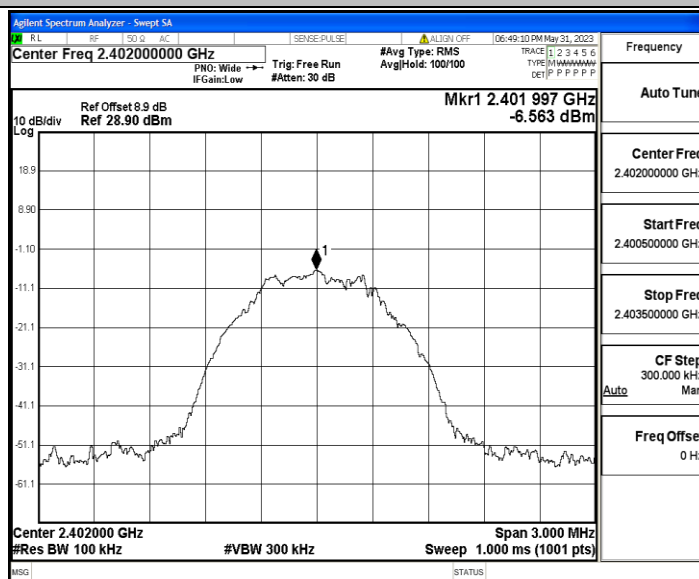
Appendix F: Conducted Spurious Emission

Test Result

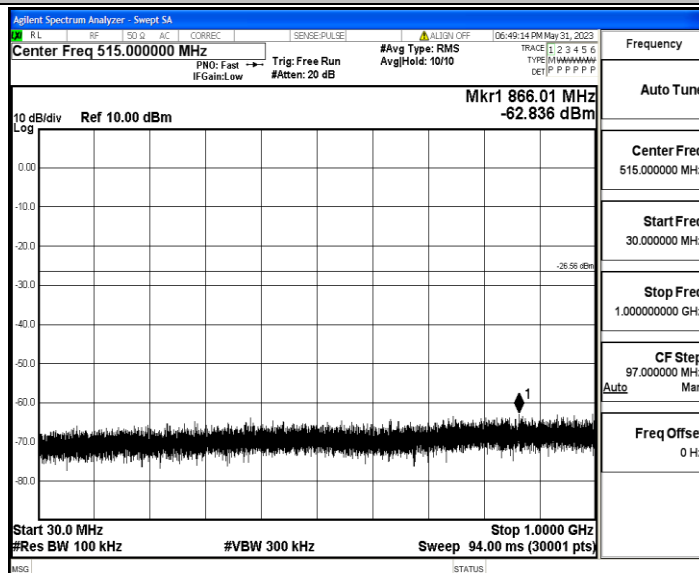
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-6.56	-6.56	---	PASS
			30~1000	-6.56	-62.84	≤ -26.56	PASS
			1000~26500	-6.56	-49.58	≤ -26.56	PASS
		2440	Reference	-3.82	-3.82	---	PASS
			30~1000	-3.82	-63.06	≤ -23.82	PASS
			1000~26500	-3.82	-50.42	≤ -23.82	PASS
		2480	Reference	-4.27	-4.27	---	PASS
			30~1000	-4.27	-62.76	≤ -24.27	PASS
			1000~26500	-4.27	-50.66	≤ -24.27	PASS

Test Graphs

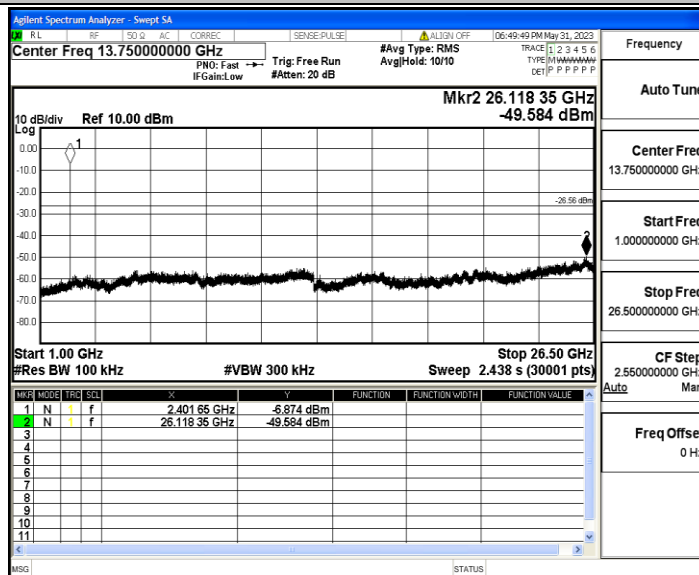
BLE_1M_Ant1_2402_0~Reference



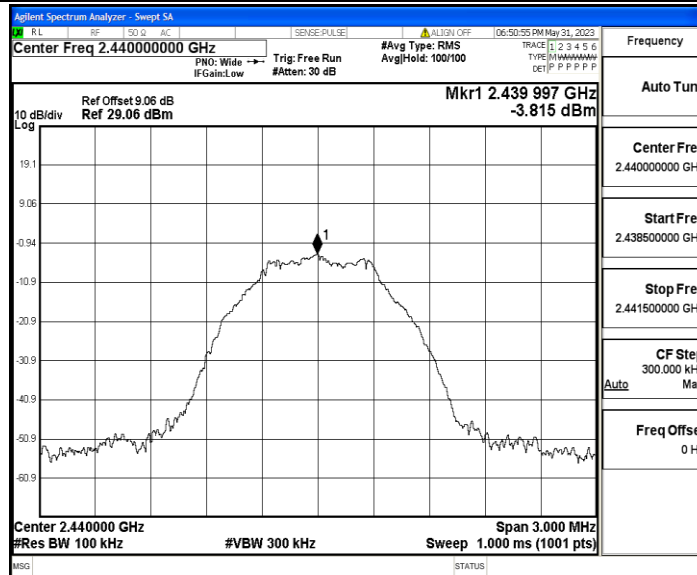
BLE_1M_Ant1_2402_30~1000



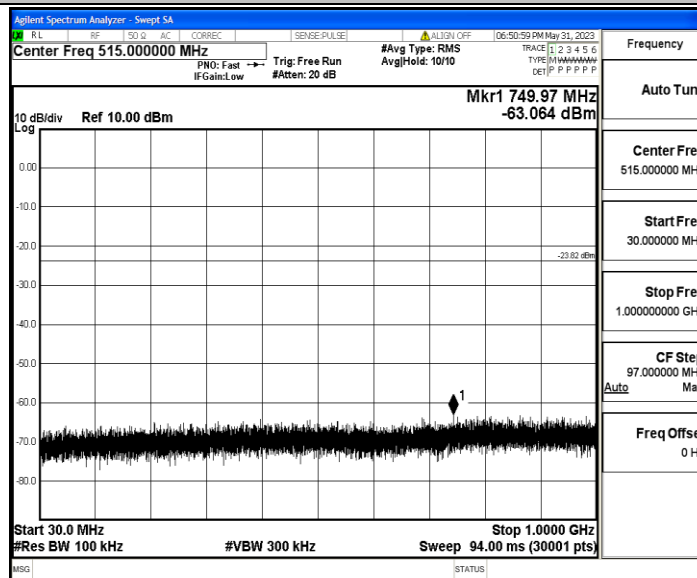
BLE_1M_Ant1_2402_1000~26500



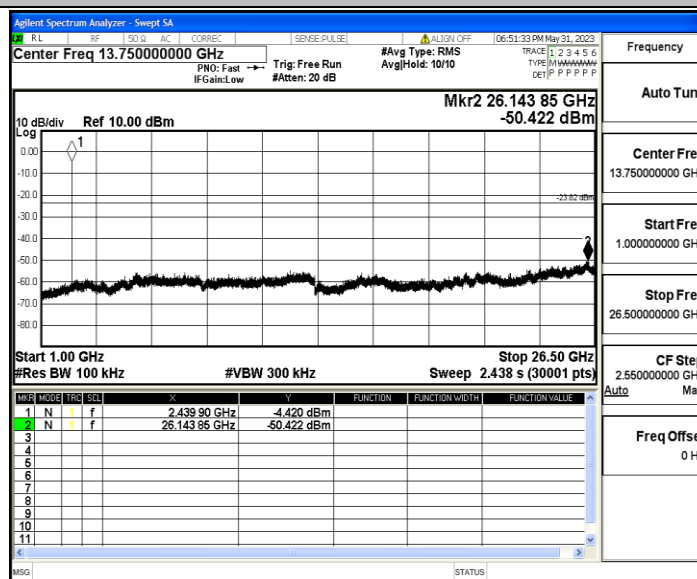
BLE_1M_Ant1_2440_0~Reference



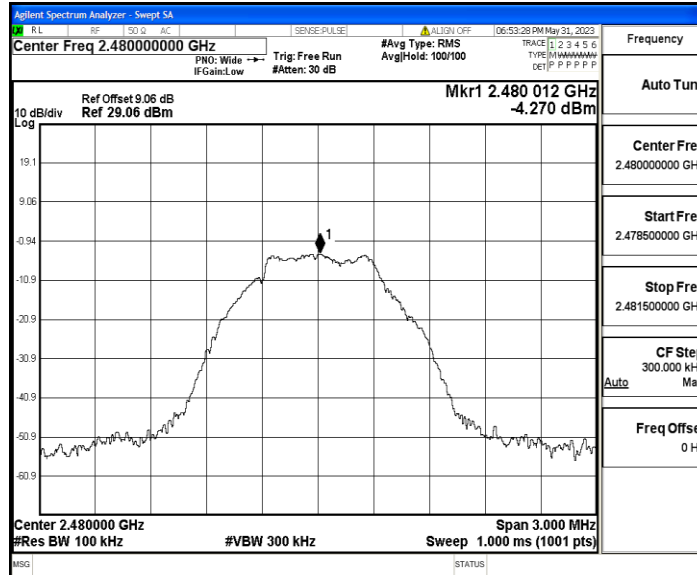
BLE_1M_Ant1_2440_30~1000



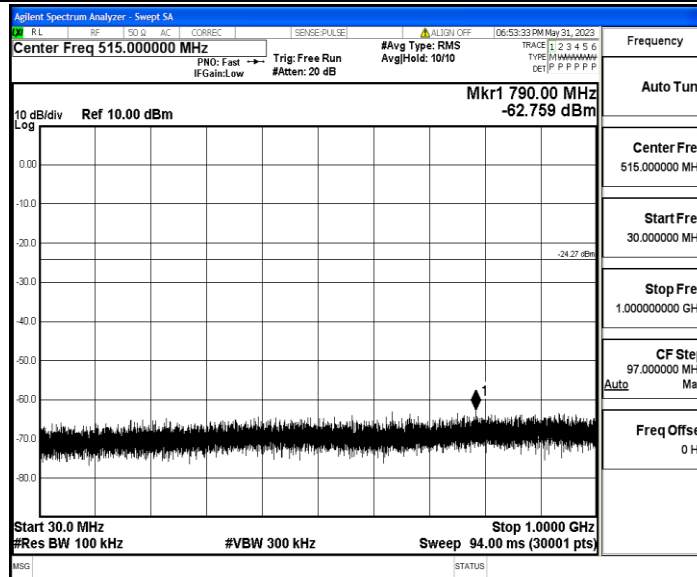
BLE_1M_Ant1_2440_1000~26500



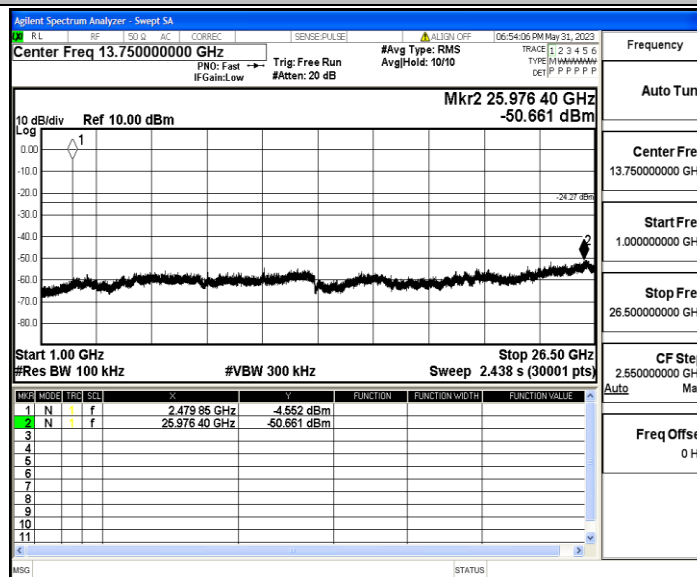
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



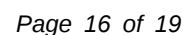
BLE_1M_Ant1_2480_1000~26500



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	0.63	61.90	2.56
		2440	0.39	0.63	61.90	2.56
		2480	0.39	0.63	61.90	2.56



Appendix H: Emissions in Restricted Bands

Test Result

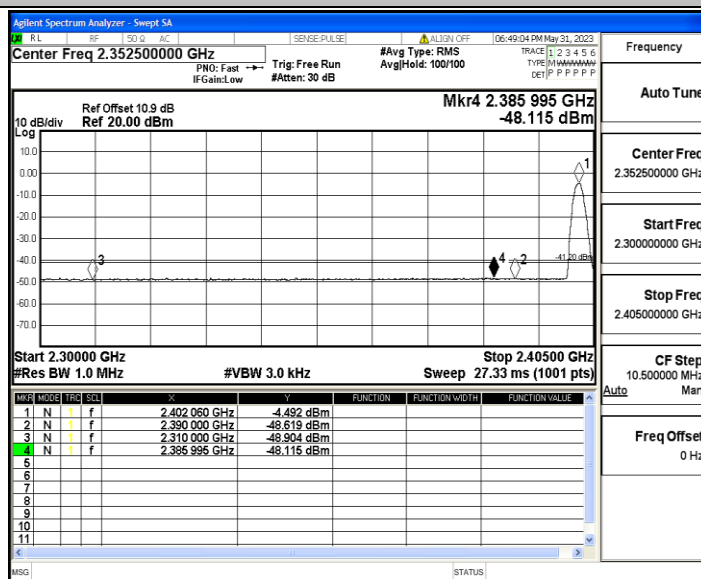
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.9	≤-41.20	PASS
				AV	2385.995	-48.12	≤-41.20	PASS
				AV	2390.000	-48.62	≤-41.20	PASS
				Peak	2310.000	-42.92	≤-21.20	PASS
				Peak	2378.645	-39.92	≤-21.20	PASS
				Peak	2390.000	-42.21	≤-21.20	PASS
		High	2480	AV	2483.500	-47.66	≤-41.20	PASS
				AV	2497.840	-47.4	≤-41.20	PASS
				AV	2500.000	-47.77	≤-41.20	PASS
				Peak	2483.500	-42.79	≤-21.20	PASS
				Peak	2494.960	-38.96	≤-21.20	PASS
				Peak	2500.000	-42.21	≤-21.20	PASS

Note:

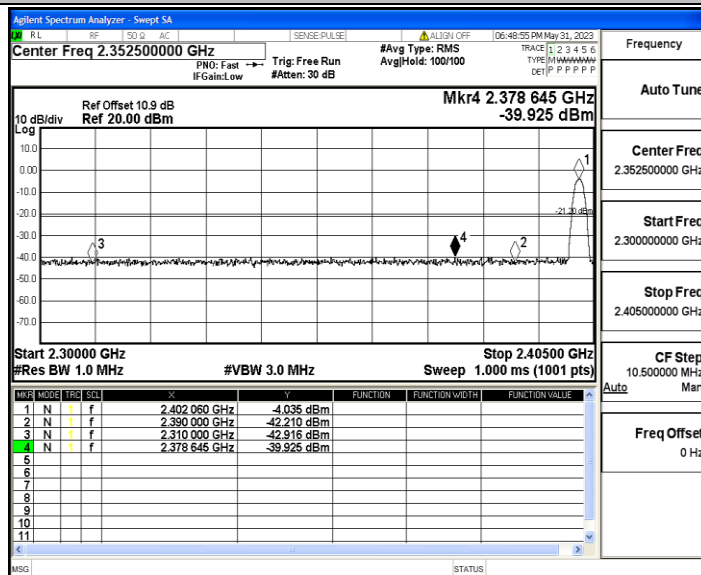
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

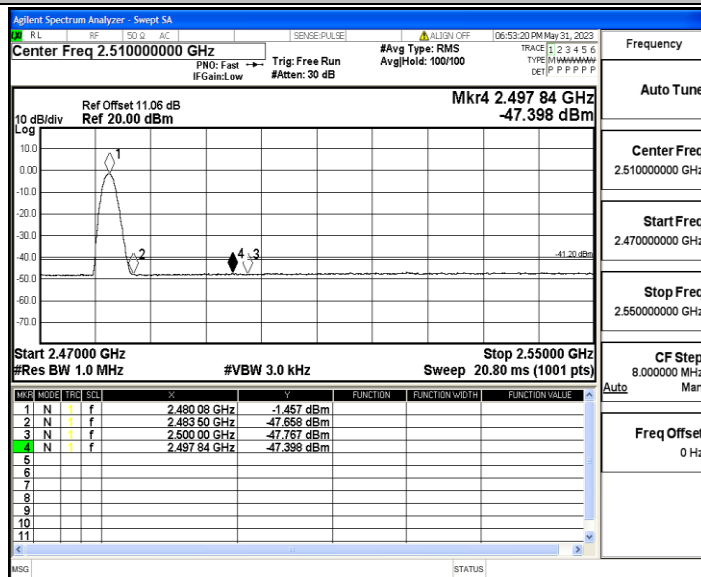
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

