

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

Product Name: Bluetooth Media Button

Trade Mark: Audison, Hertz

Test Model: AUDISON BRC

FCC ID: 2ASUD-BRC

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

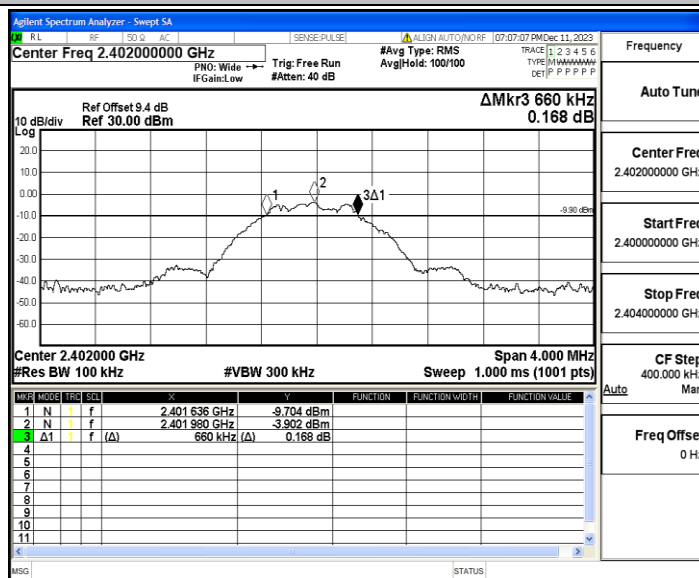
Appendix A: DTS Bandwidth

Test Result

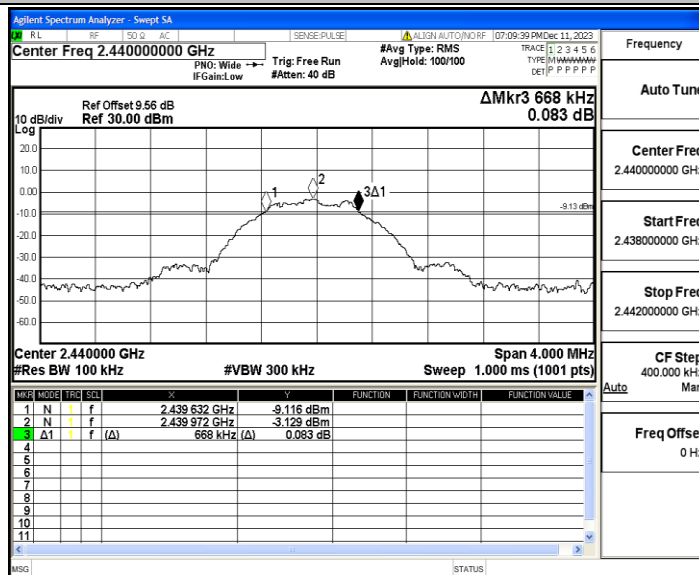
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.636	2402.296	0.5	PASS
		2440	0.668	2439.632	2440.300	0.5	PASS
		2480	0.652	2479.644	2480.296	0.5	PASS

Test Graphs

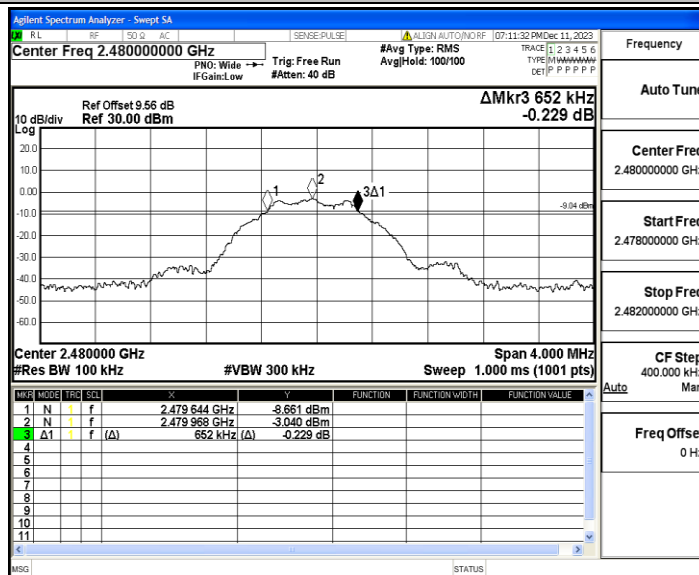
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



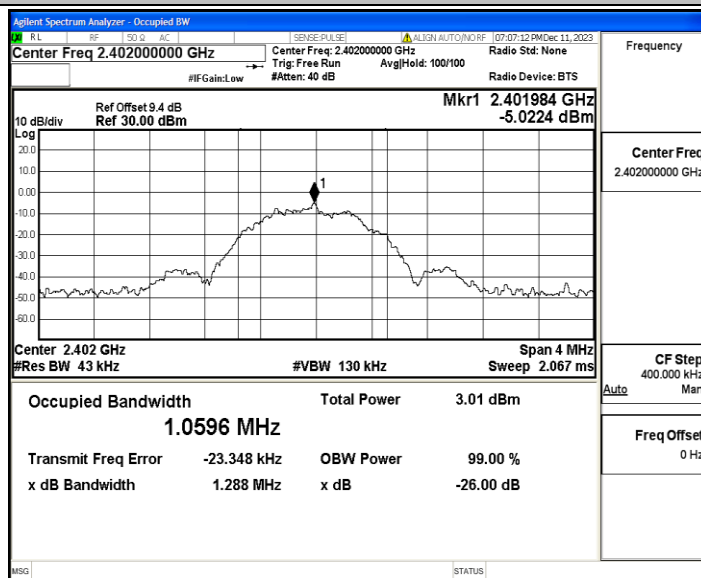
Appendix B: Occupied Channel Bandwidth

Test Result

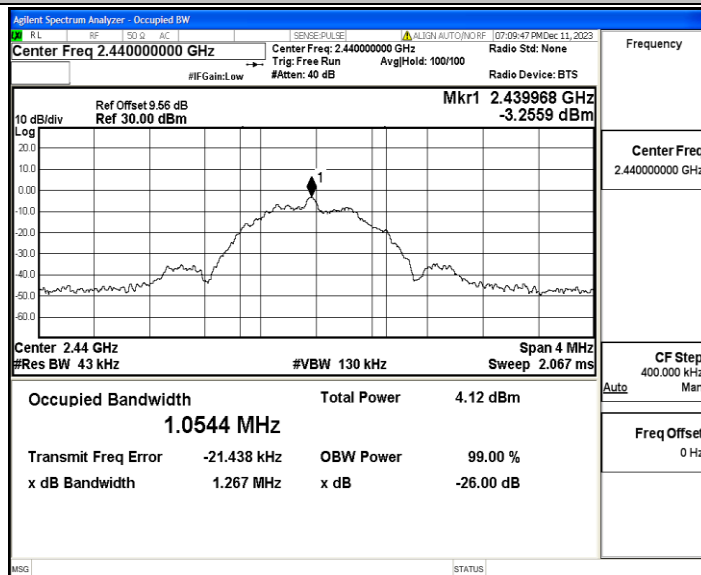
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0596	2401.4469	2402.5065	---	---
		2440	1.0544	2439.4514	2440.5058	---	---
		2480	1.0460	2479.4543	2480.5003	---	---

Test Graphs

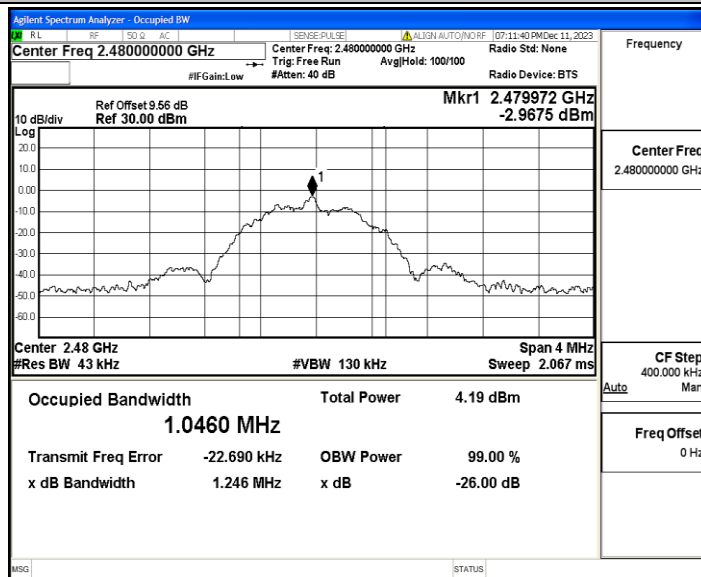
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



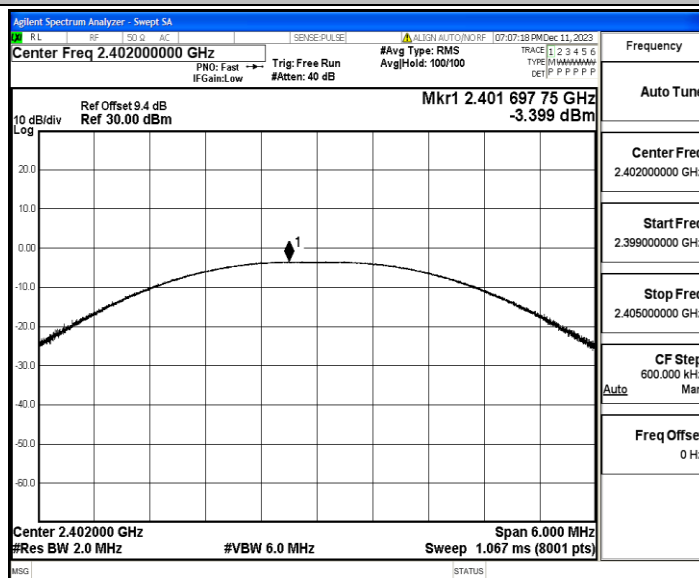
Appendix C: Maximum Peak conducted output power

Test Result

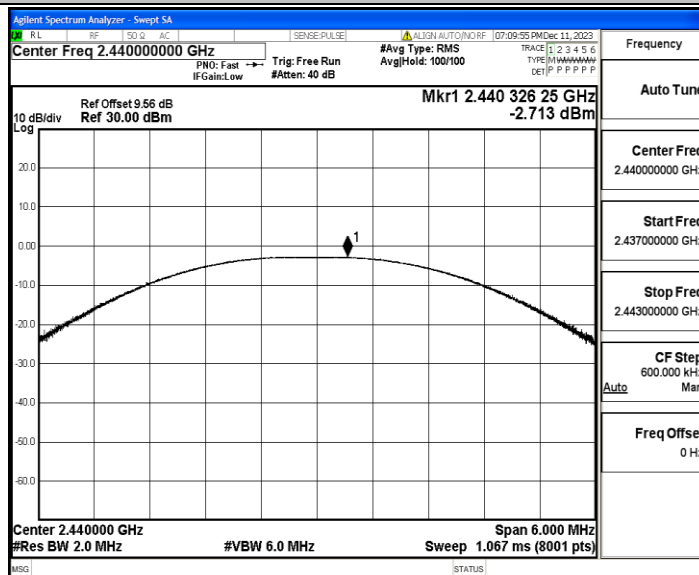
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.4	≤30	PASS
		2440	-2.71	≤30	PASS
		2480	-2.61	≤30	PASS

Test Graphs

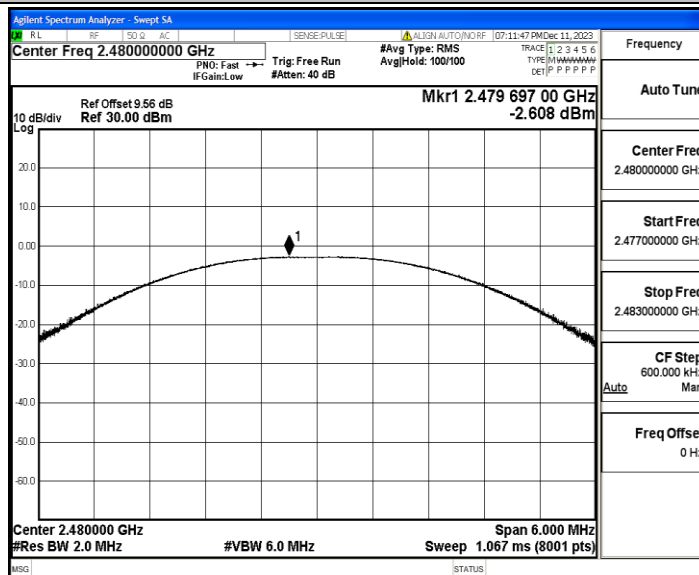
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



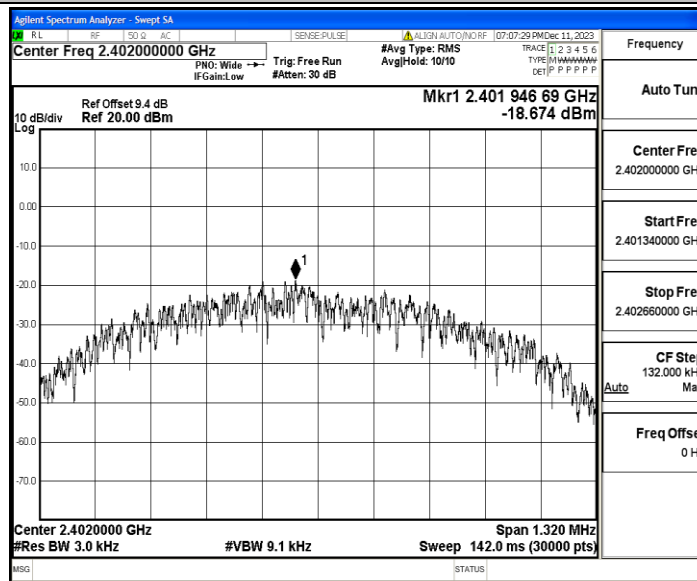
Appendix D: Maximum power spectral density

Test Result

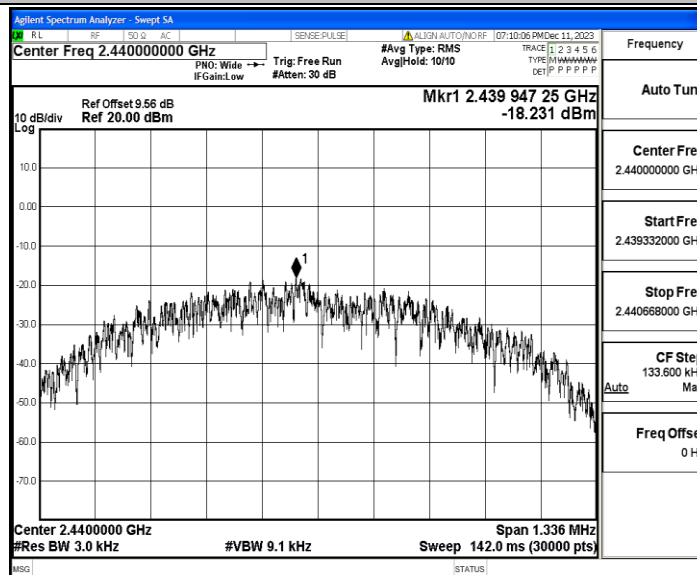
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.67	≤8.00	PASS
		2440	-18.23	≤8.00	PASS
		2480	-17.87	≤8.00	PASS

Test Graphs

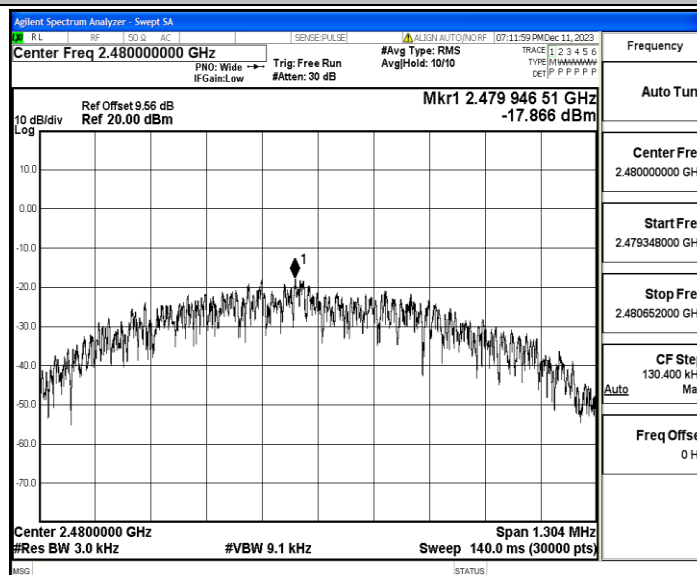
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



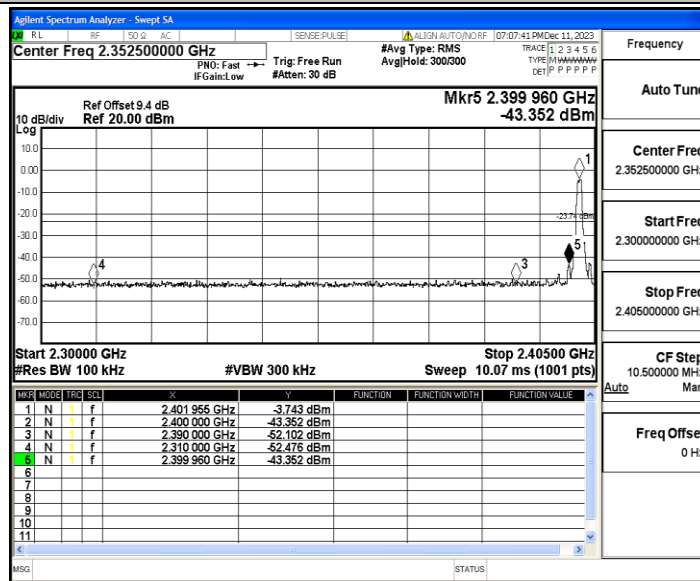
Appendix E: Band edge measurements

Test Result

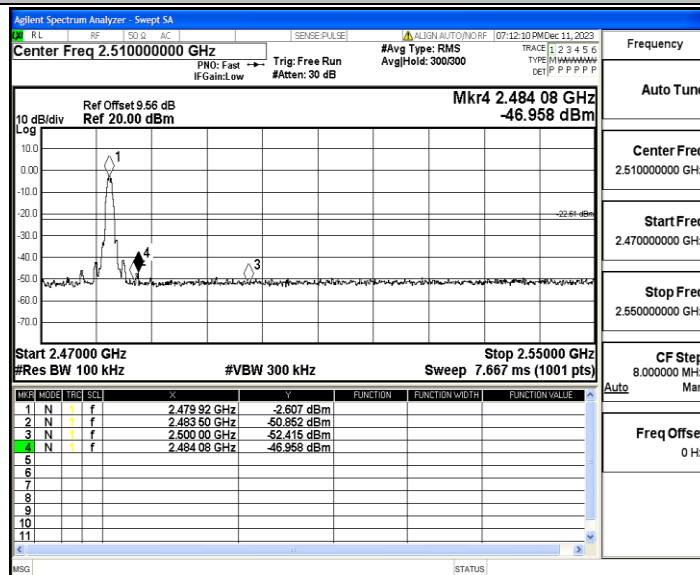
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.74	-43.35	≤-23.74	PASS
		High	2480	-2.61	-46.96	≤-22.61	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



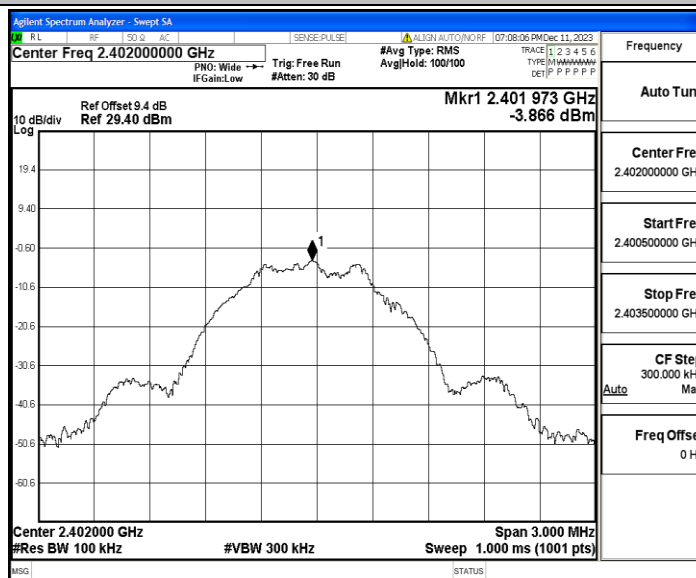
Appendix F: Conducted Spurious Emission

Test Result

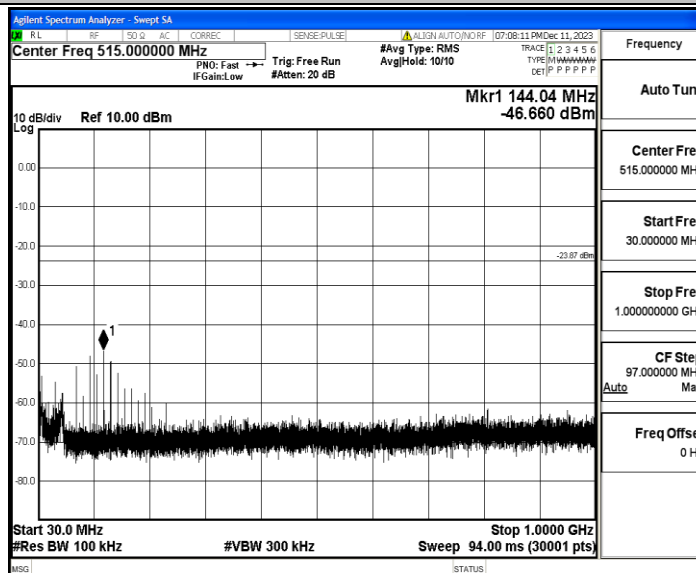
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-46.66	≤ -23.87	PASS
			1000~26500	-3.87	-45.1	≤ -23.87	PASS
		2440	Reference	-3.09	-3.09	---	PASS
			30~1000	-3.09	-46.4	≤ -23.09	PASS
			1000~26500	-3.09	-44.23	≤ -23.09	PASS
		2480	Reference	-2.99	-2.99	---	PASS
			30~1000	-2.99	-46.57	≤ -22.99	PASS
			1000~26500	-2.99	-45.55	≤ -22.99	PASS

Test Graphs

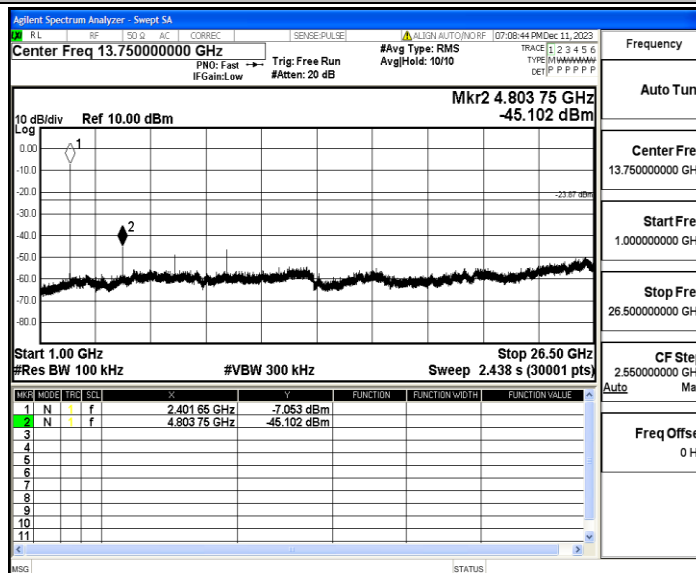
BLE_1M_Ant1_2402_0~Reference



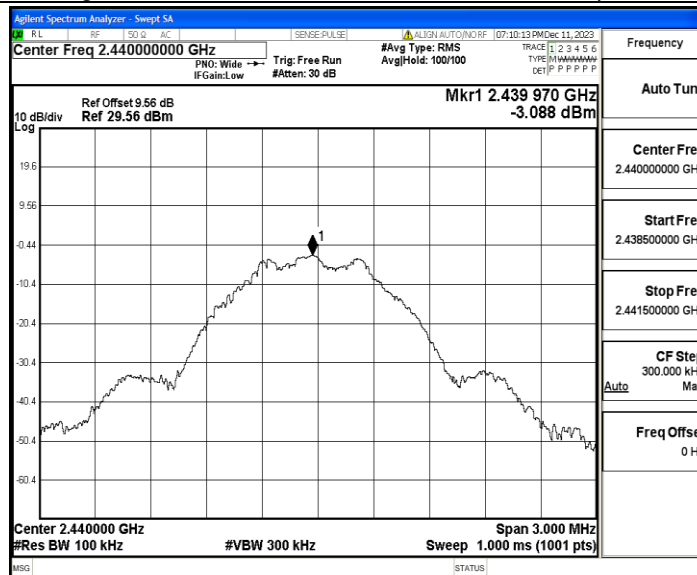
BLE_1M_Ant1_2402_30~1000



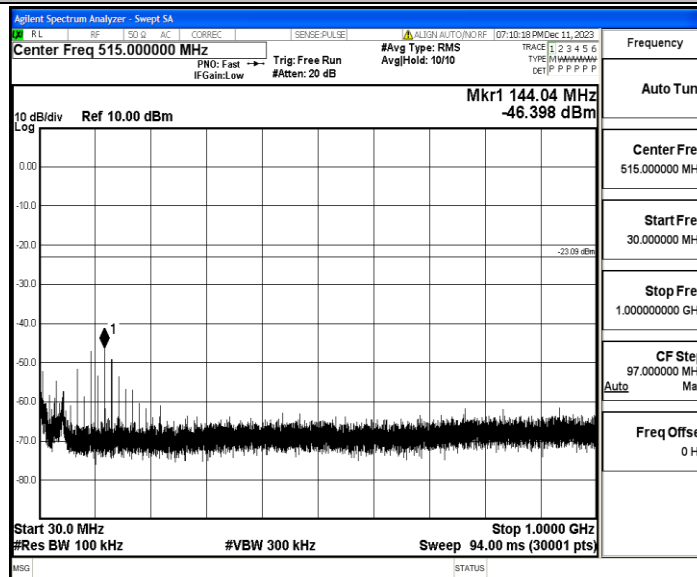
BLE_1M_Ant1_2402_1000~26500



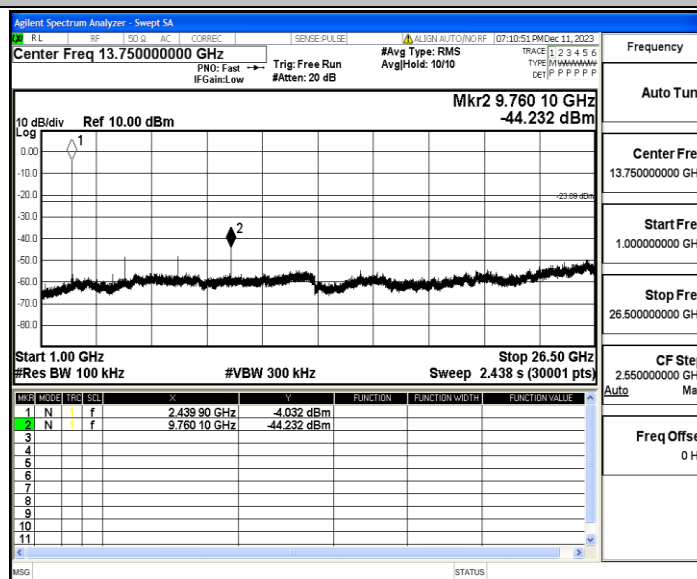
BLE_1M_Ant1_2440_0~Reference



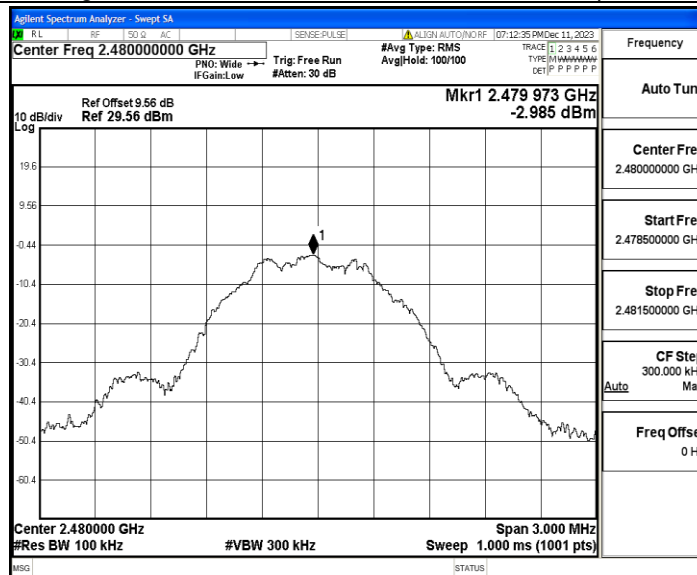
BLE_1M_Ant1_2440_30~1000



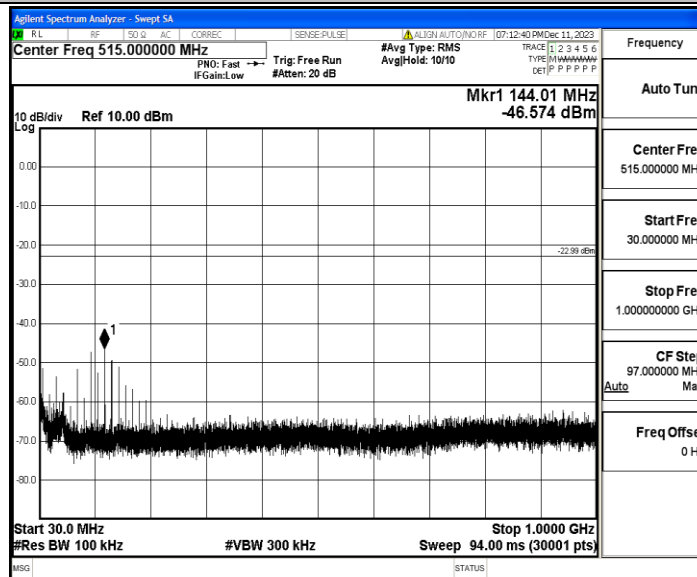
BLE_1M_Ant1_2440_1000~26500



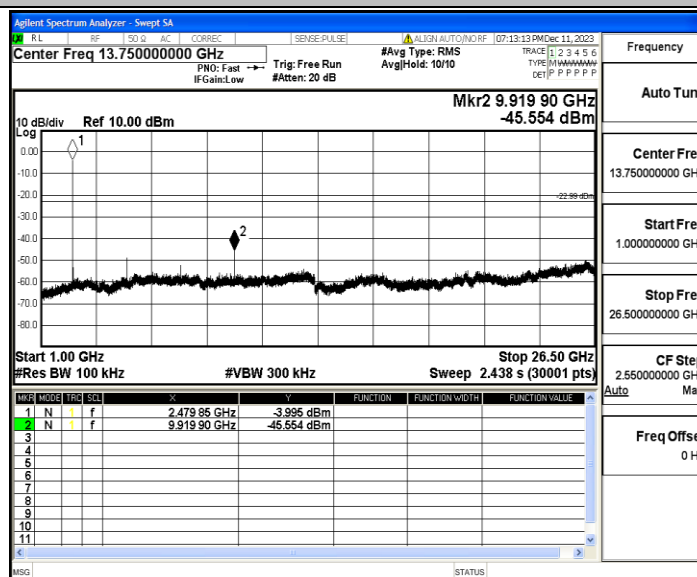
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



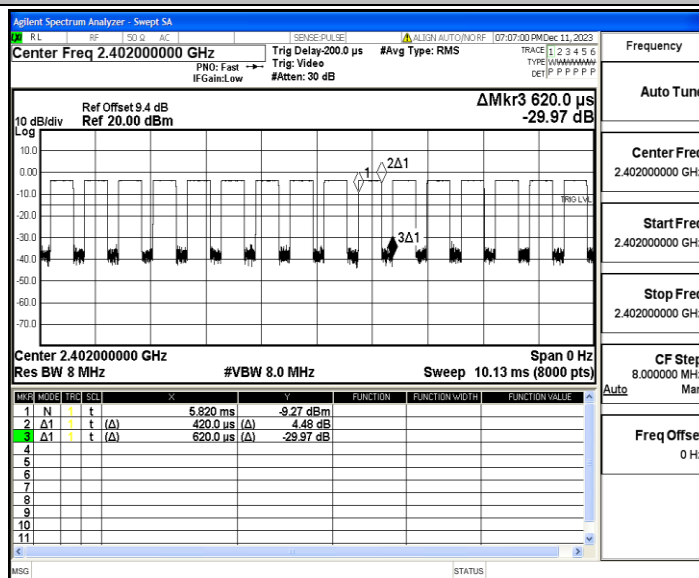
Appendix G: Duty Cycle

Test Result

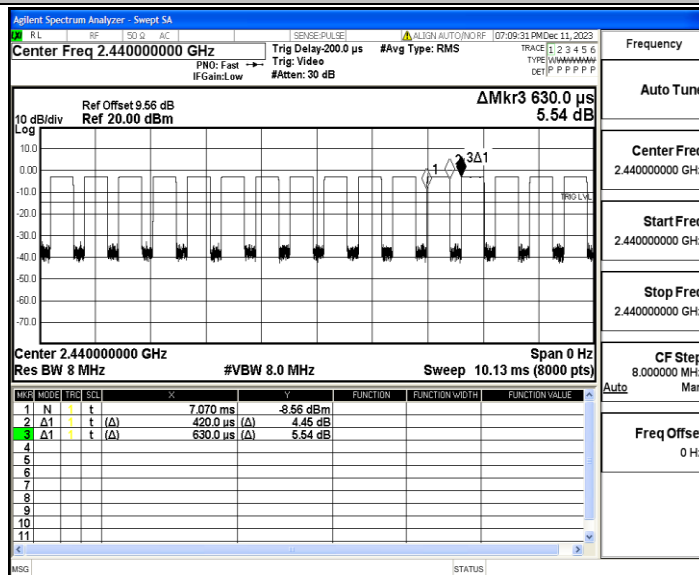
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
BLE_1M	Ant1	2402	0.42	0.62	67.74	2.38
		2440	0.42	0.63	66.67	2.38
		2480	0.42	0.63	66.67	2.38

Test Graphs

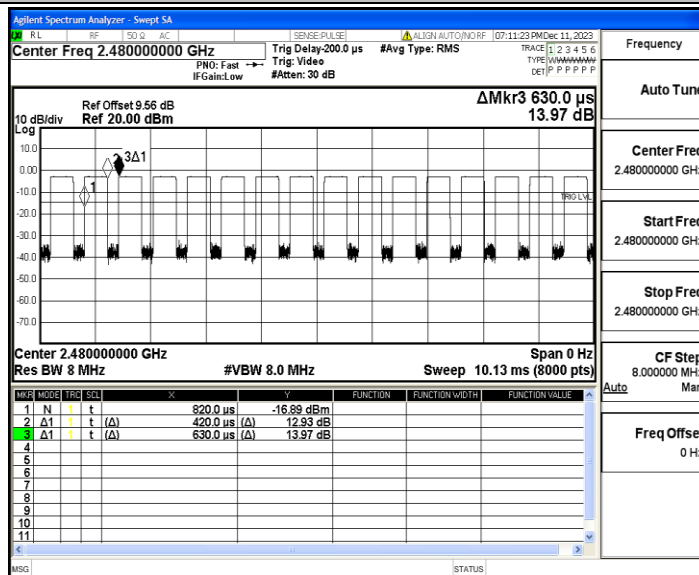
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

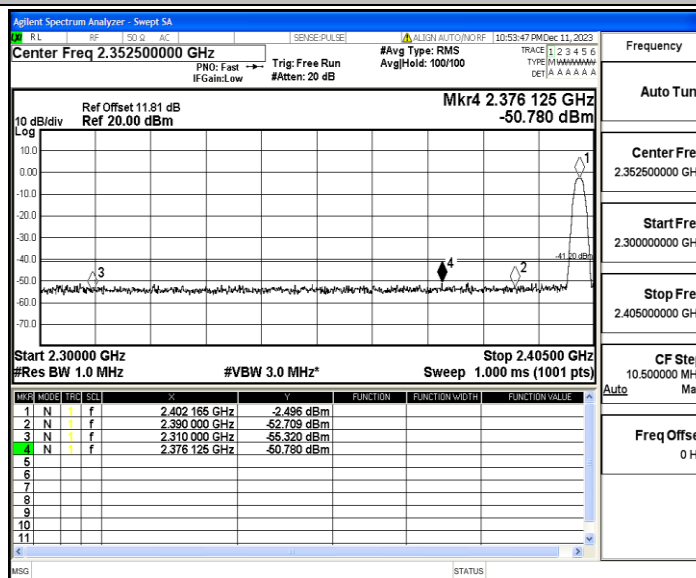
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-55.32	≤-41.20	PASS
				AV	2376.125	-50.78	≤-41.20	PASS
				AV	2390.000	-52.71	≤-41.20	PASS
				Peak	2310.000	-52.05	≤-21.20	PASS
				Peak	2360.480	-48.37	≤-21.20	PASS
				Peak	2390.000	-52.02	≤-21.20	PASS
		High	2480	AV	2483.500	-53.3	≤-41.20	PASS
				AV	2498.560	-49.19	≤-41.20	PASS
				AV	2500.000	-53.4	≤-41.20	PASS
				Peak	2483.500	-50.9	≤-21.20	PASS
				Peak	2499.600	-47.47	≤-21.20	PASS
				Peak	2500.000	-51.29	≤-21.20	PASS

Note:

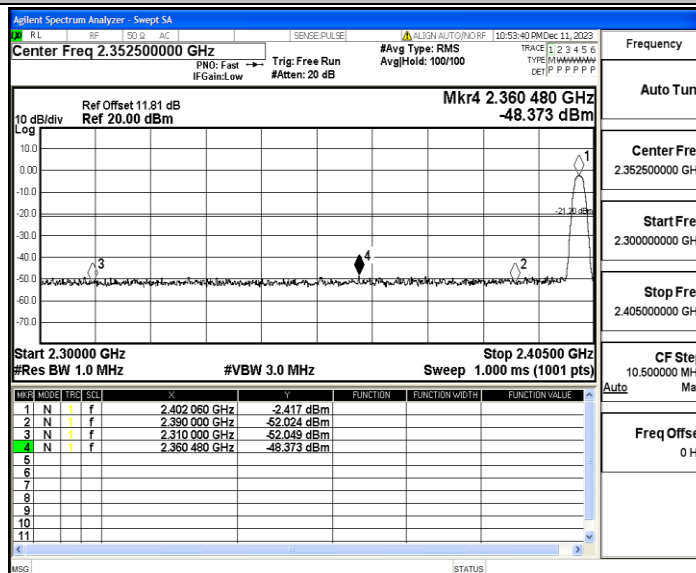
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

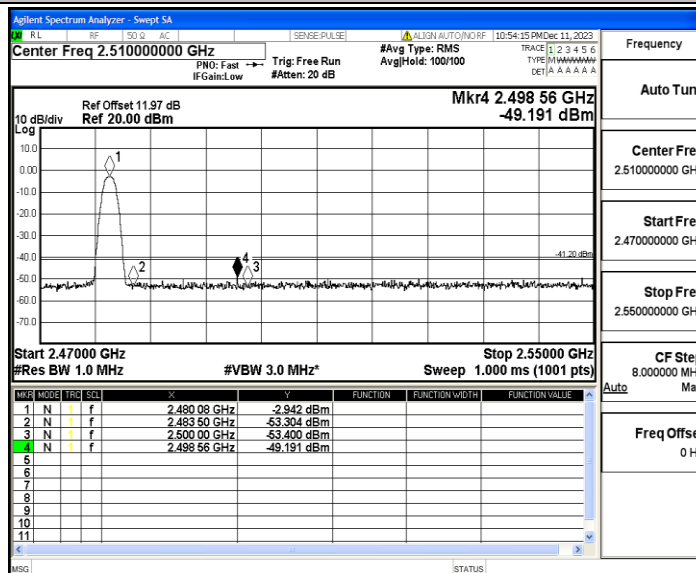
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

