

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth Mechanical Keyboard

Trade Mark: Keychron

Test Model: Keychron K8 Pro

FCC ID: 2ASF4-K8PRO

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

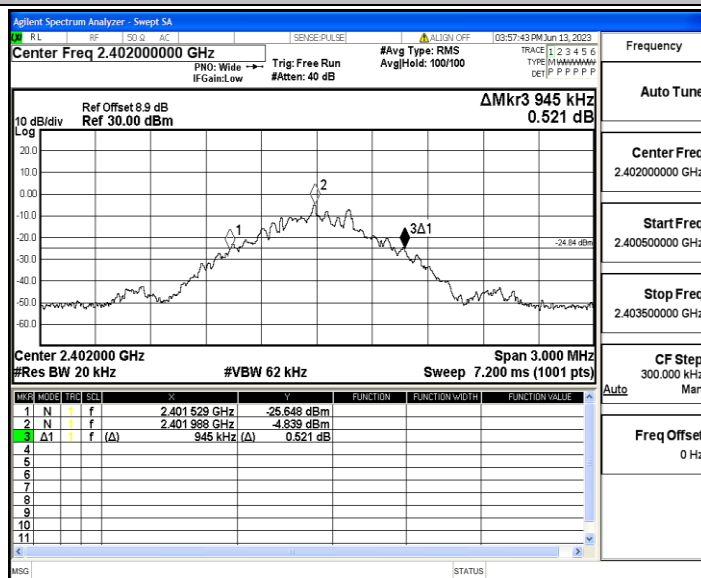
Appendix A: 20dB Emission Bandwidth

Test Result

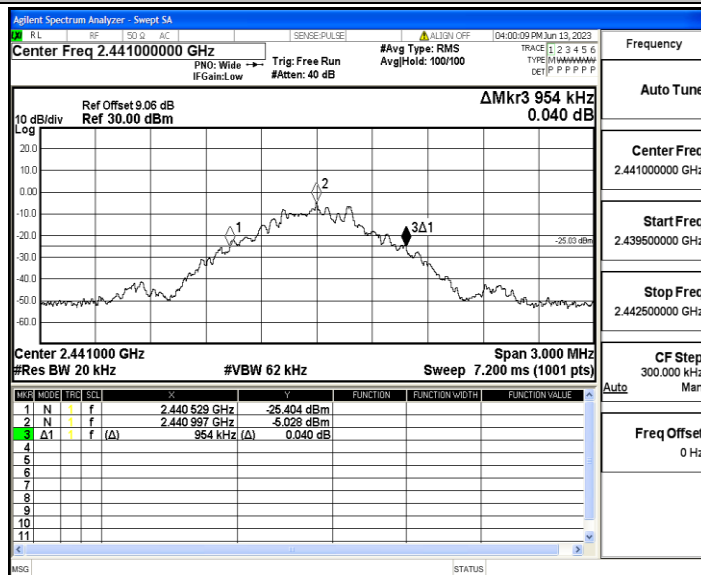
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.529	2402.474	---	---
		2441	0.954	2440.529	2441.483	---	---
		2480	0.867	2479.541	2480.408	---	---

Test Graphs

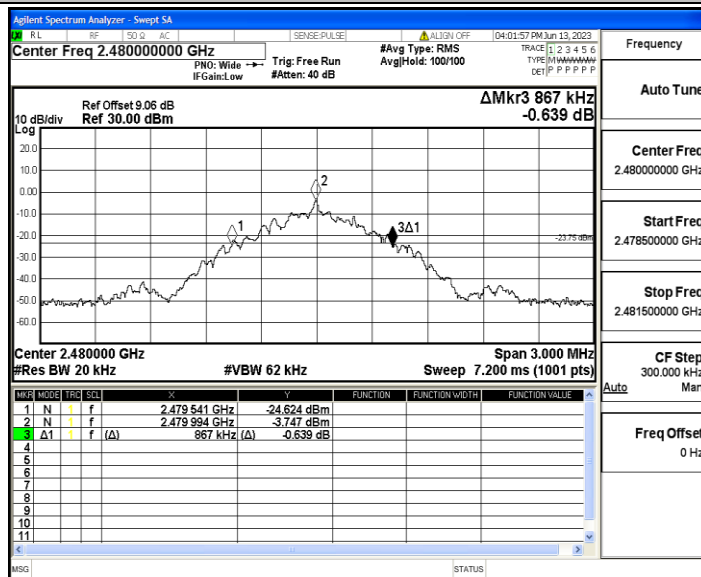
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



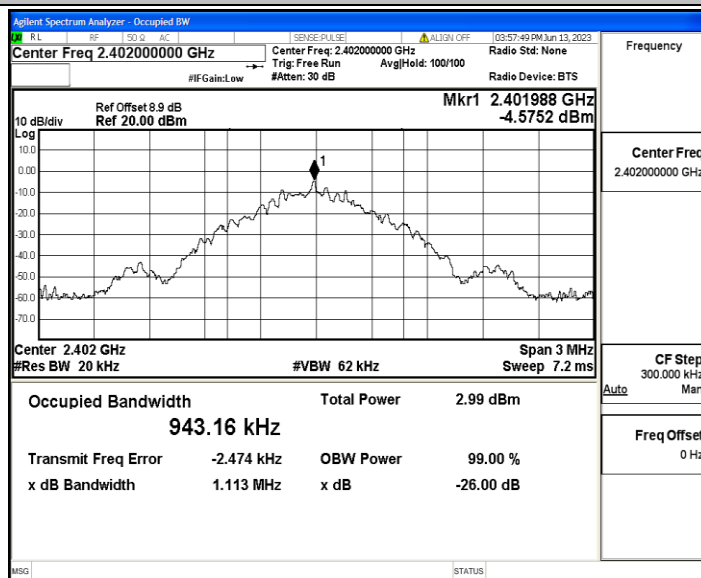
Appendix B: Occupied Channel Bandwidth

Test Result

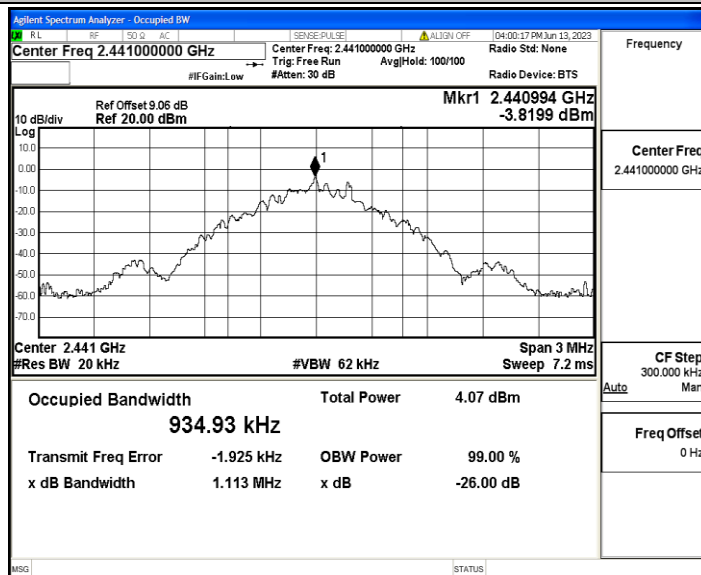
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.94316	2401.5260	2402.4691	---	---
		2441	0.93493	2440.5306	2441.4655	---	---
		2480	0.91933	2479.5394	2480.4587	---	---

Test Graphs

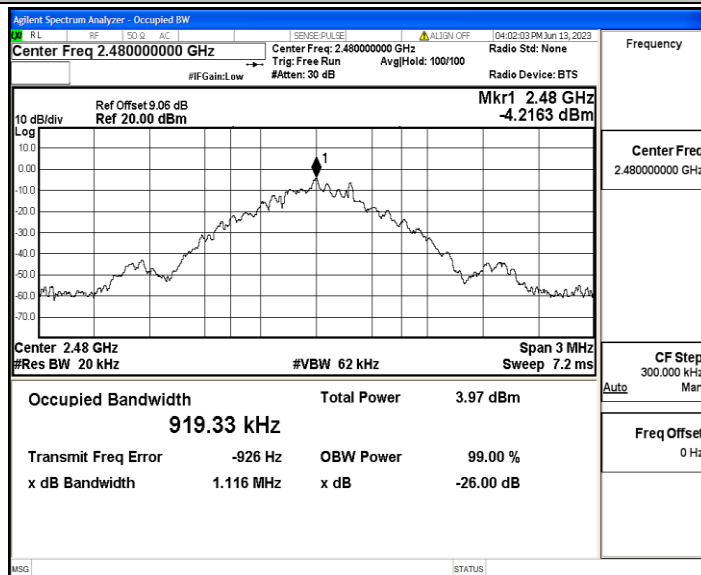
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



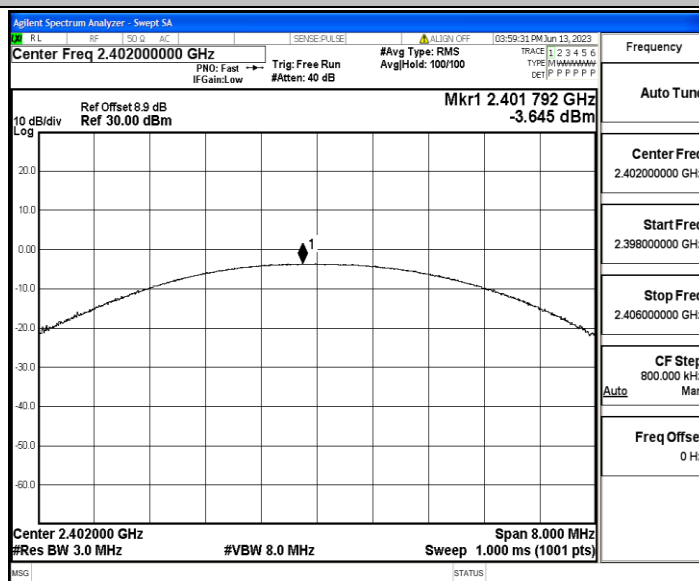
Appendix C: Maximum Peak conducted output power

Test Result

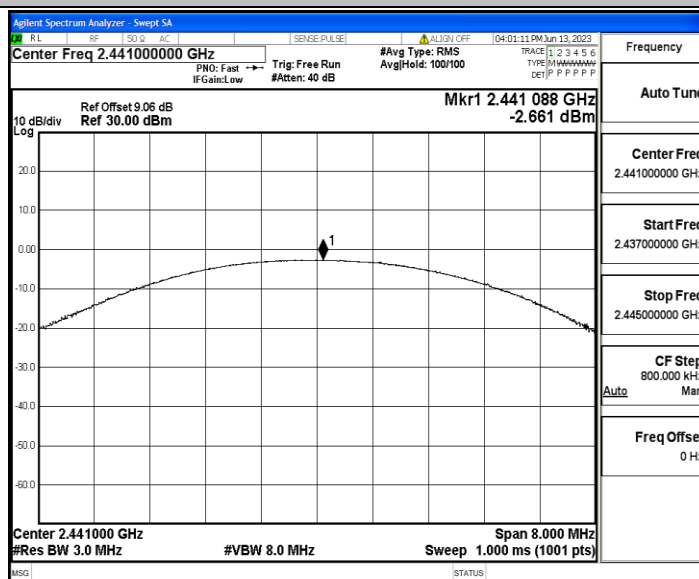
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-3.65	≤20.97	PASS
		2441	-2.66	≤20.97	PASS
		2480	-2.7	≤20.97	PASS

Test Graphs

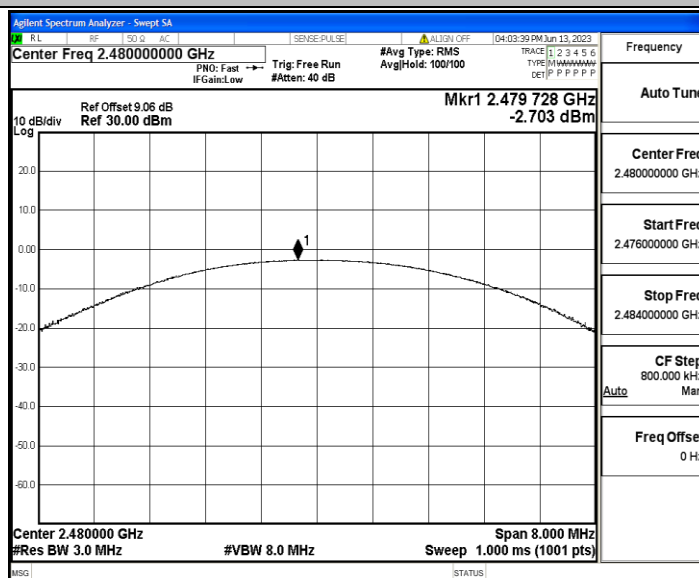
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

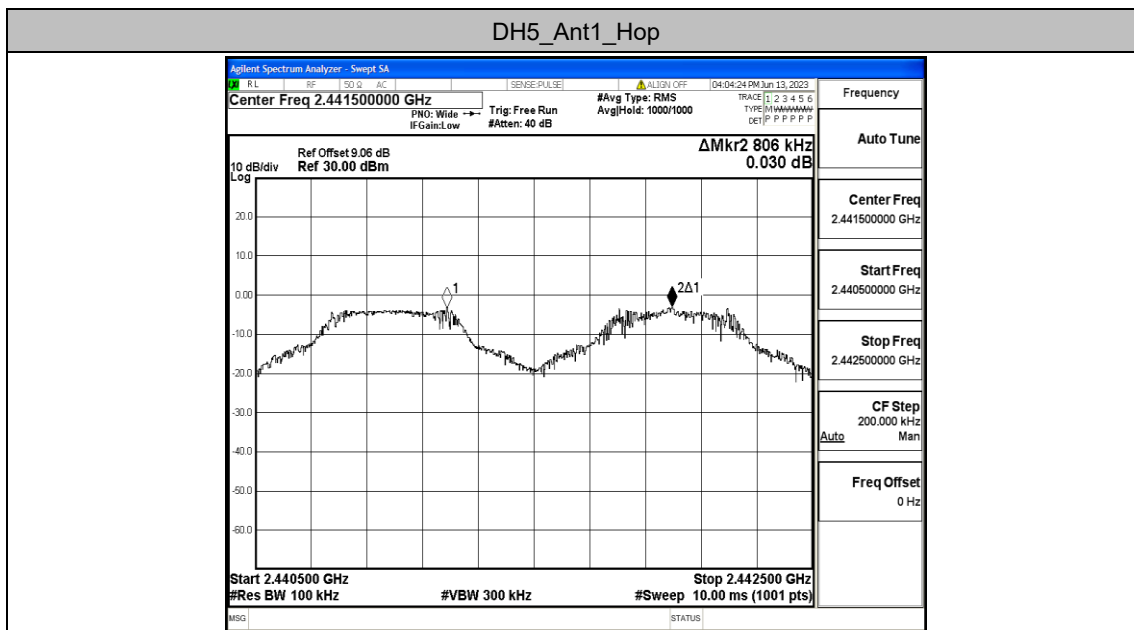


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.806	≥ 0.636	PASS

Test Graphs

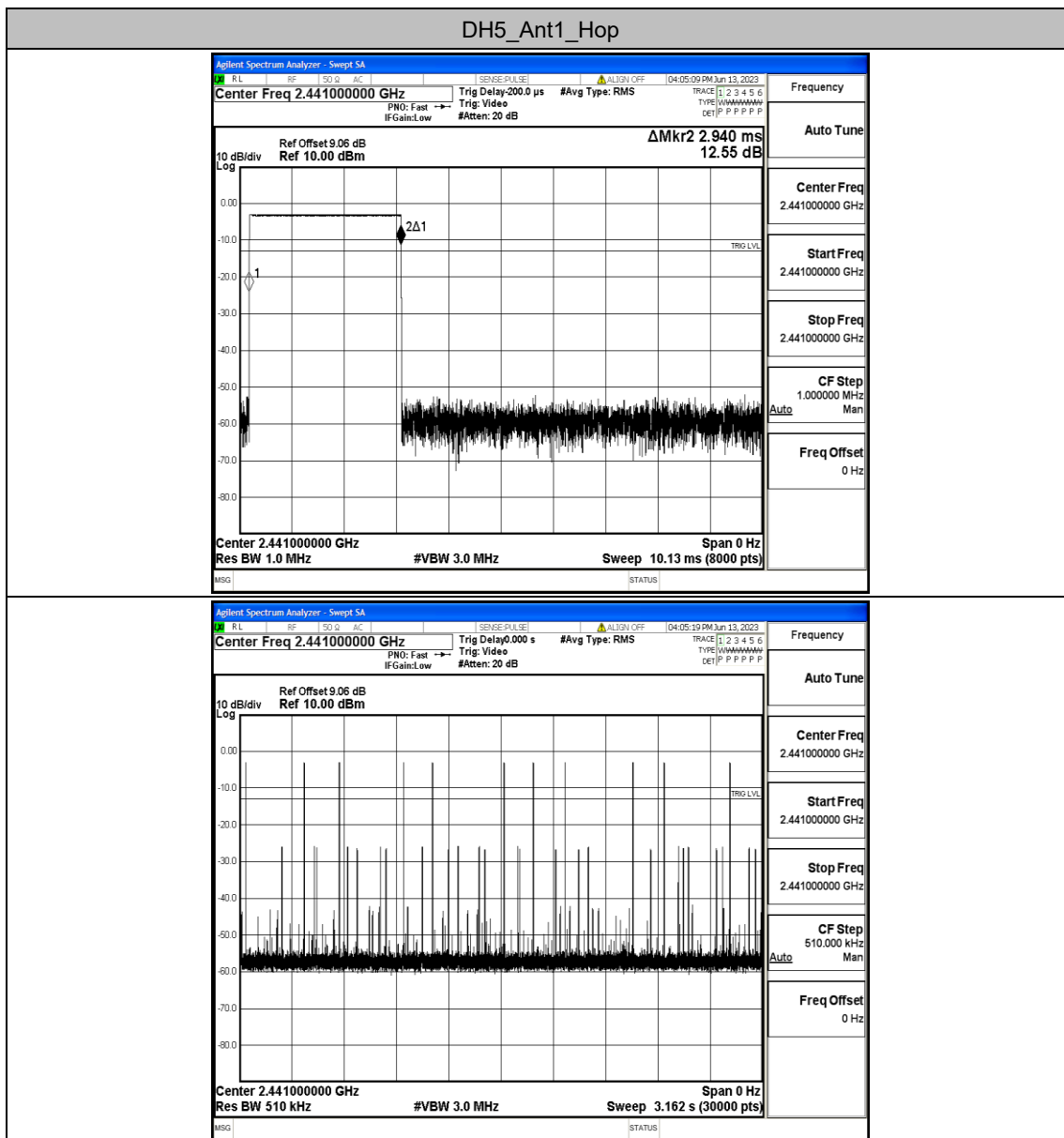


Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.940	120	0.353	≤0.4	PASS

Test Graphs

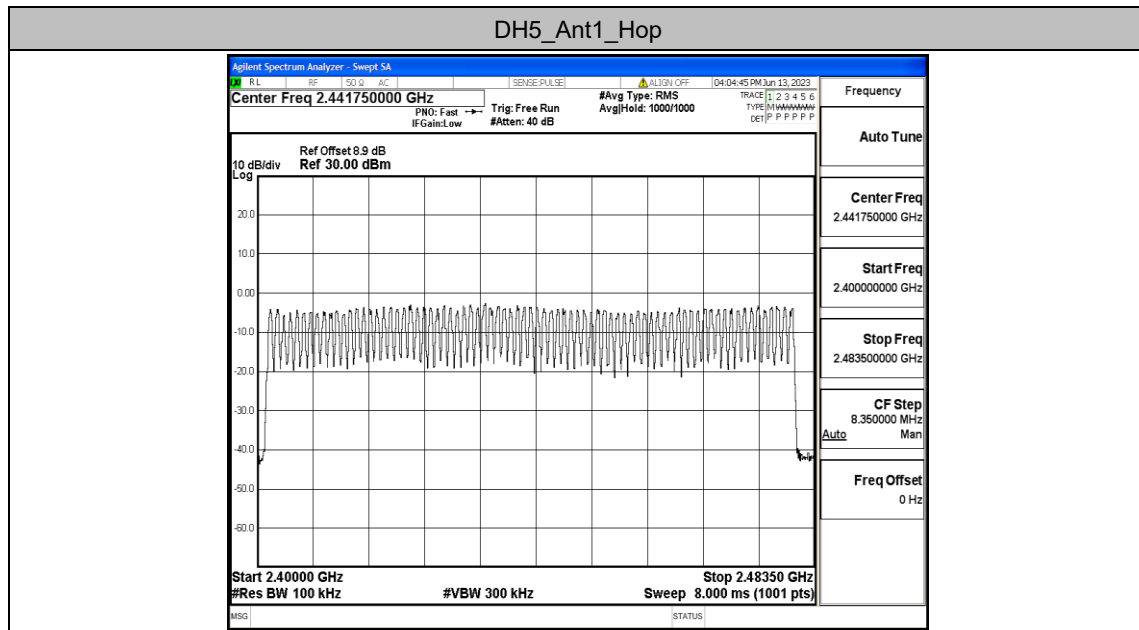


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



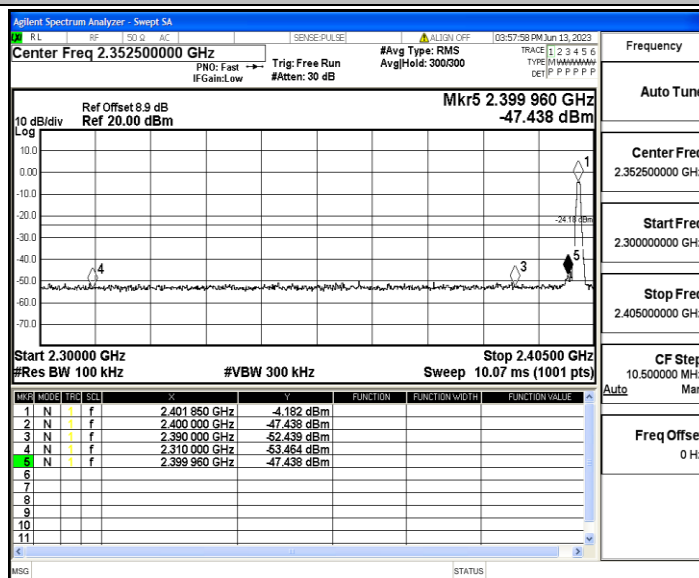
Appendix G: Band edge measurements

Test Result

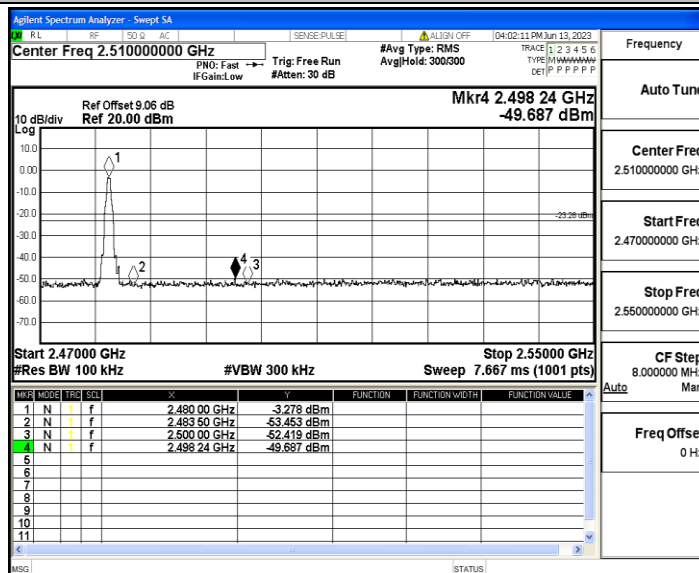
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.18	-47.44	≤-24.18	PASS
		High	2480	-3.28	-49.69	≤-23.28	PASS
		Low	Hop_2402	-4.64	-50.1	≤-24.64	PASS
		High	Hop_2480	-2.98	-49.48	≤-22.98	PASS

Test Graphs

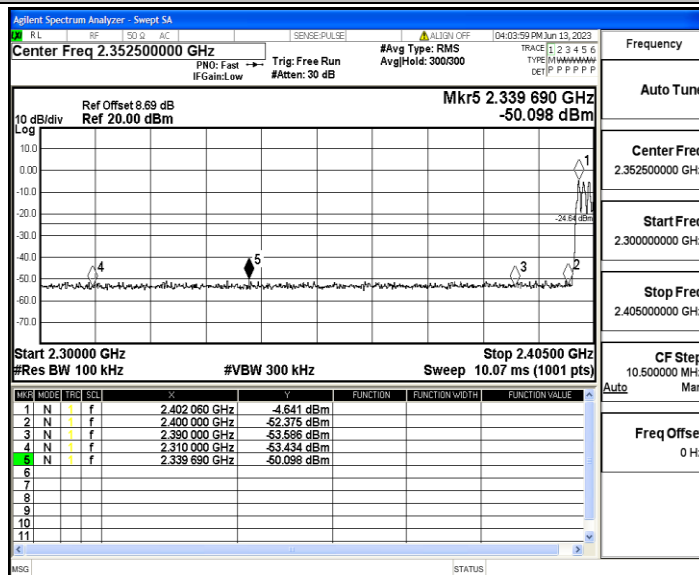
DH5_Ant1_Low_2402



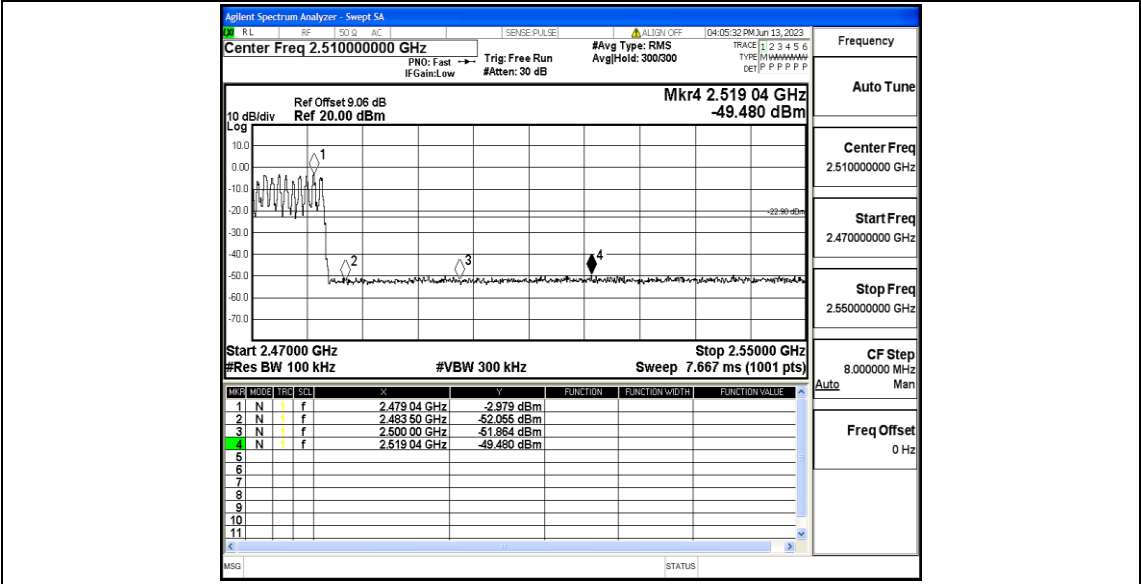
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



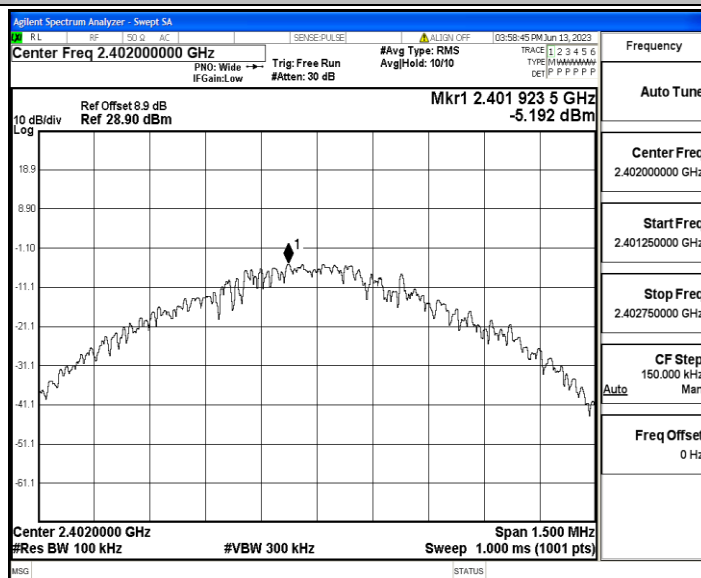
Appendix H: Conducted Spurious Emission

Test Result

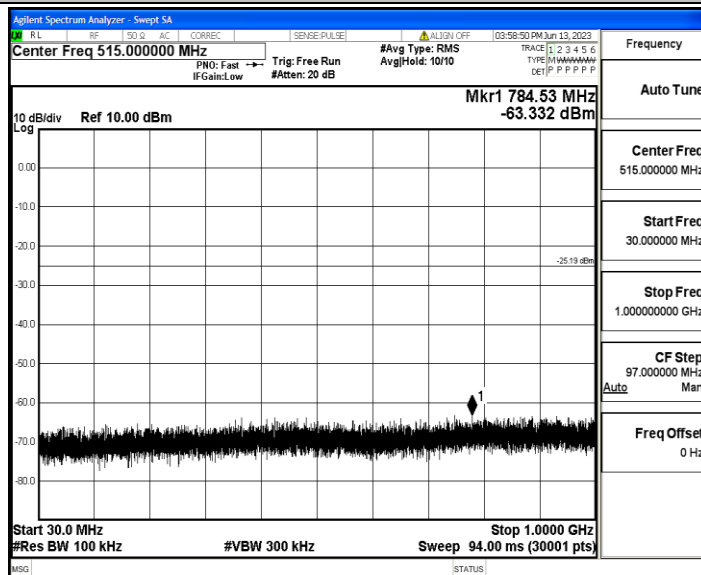
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-5.19	-5.19	---	PASS
			30~1000	-5.19	-63.33	≤ -25.19	PASS
			1000~26500	-5.19	-50.54	≤ -25.19	PASS
		2441	Reference	-4.05	-4.05	---	PASS
			30~1000	-4.05	-62.13	≤ -24.05	PASS
			1000~26500	-4.05	-50.05	≤ -24.05	PASS
		2480	Reference	-3.91	-3.91	---	PASS
			30~1000	-3.91	-63.13	≤ -23.91	PASS
			1000~26500	-3.91	-50.63	≤ -23.91	PASS

Test Graphs

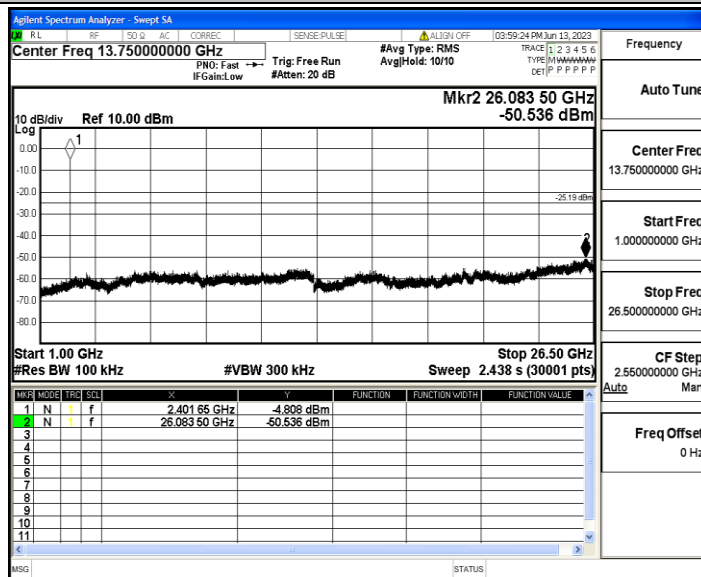
DH5_Ant1_2402_0~Reference



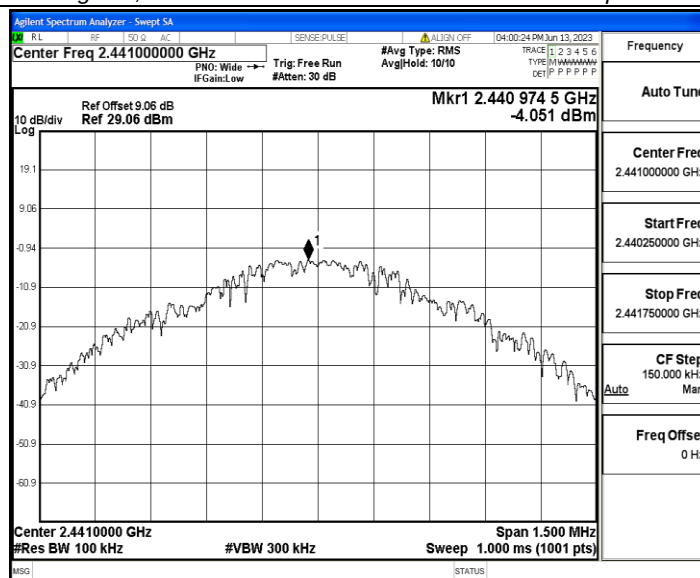
DH5_Ant1_2402_30~1000



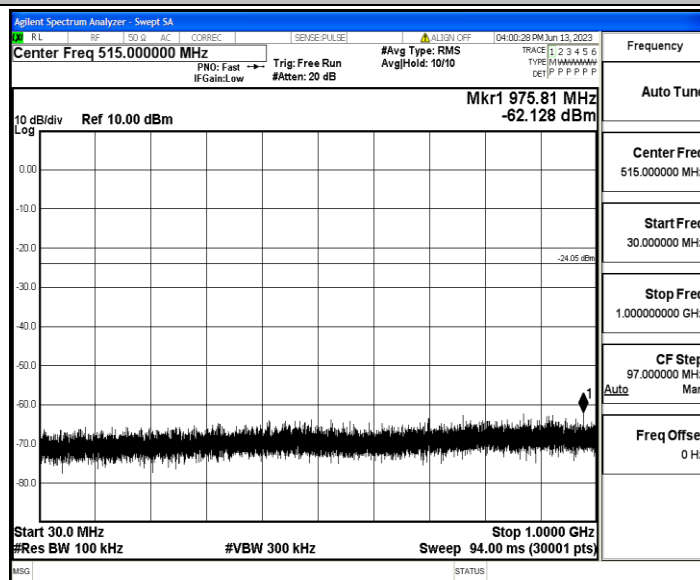
DH5_Ant1_2402_1000~26500



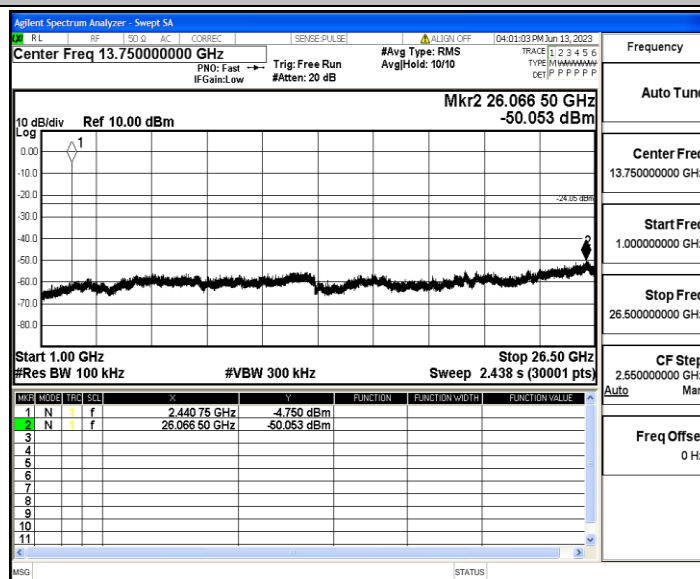
DH5_Ant1_2441_0~Reference



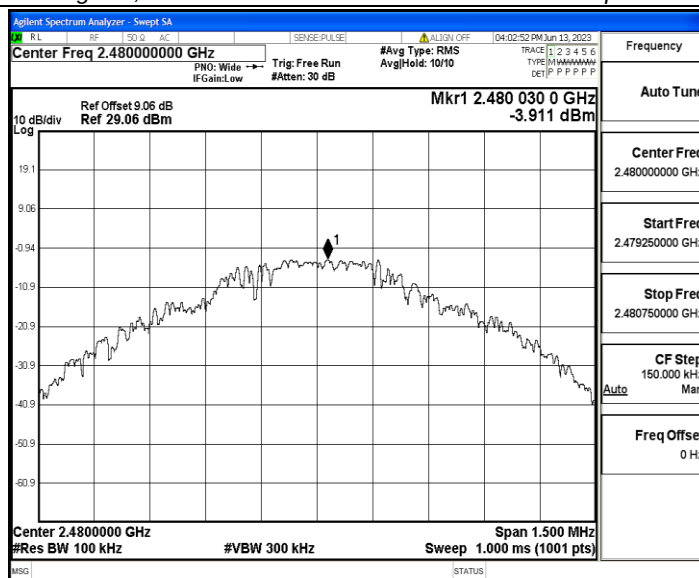
DH5_Ant1_2441_30~1000



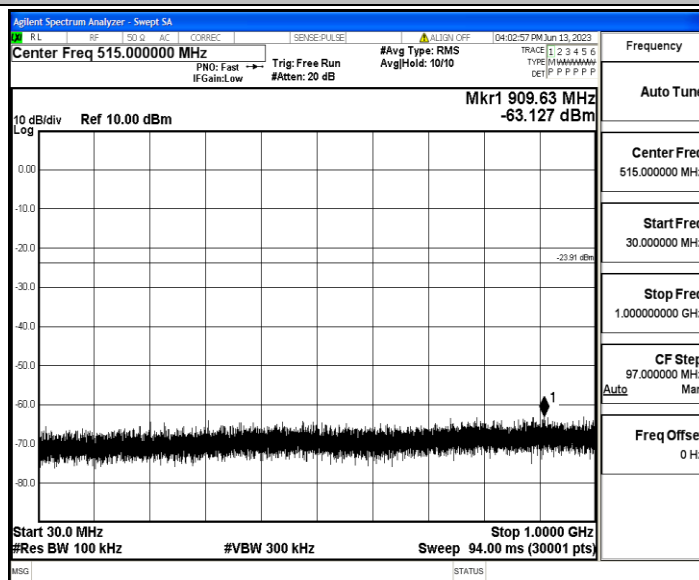
DH5_Ant1_2441_1000~26500



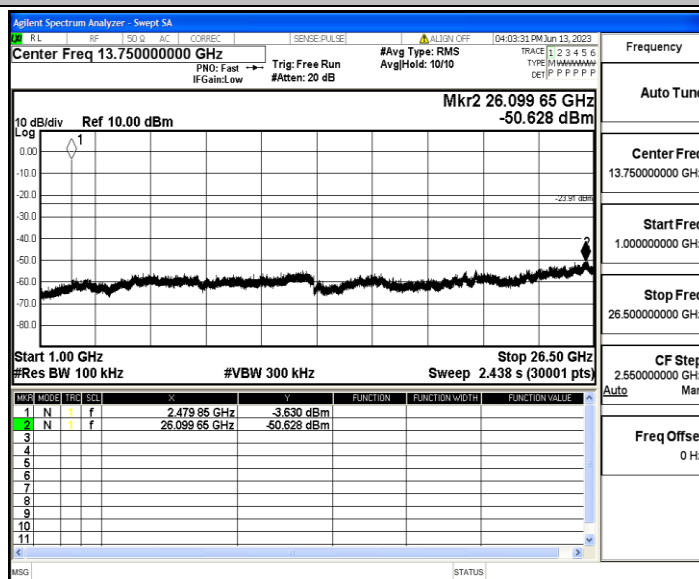
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



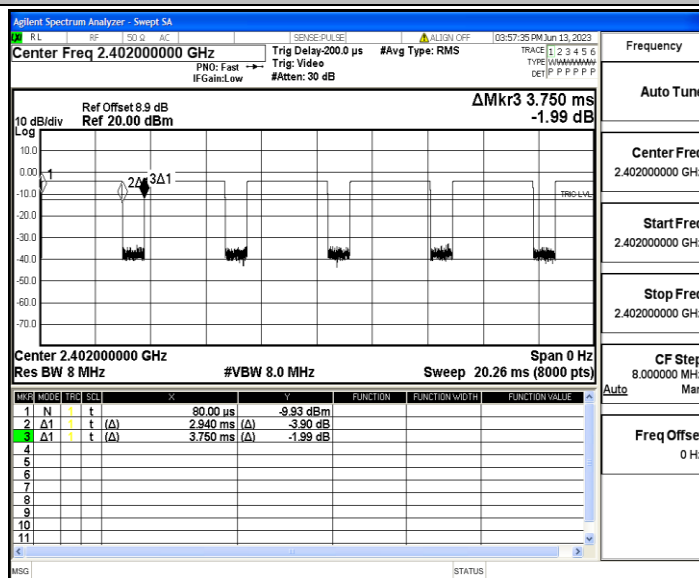
Appendix I: Duty Cycle

Test Result

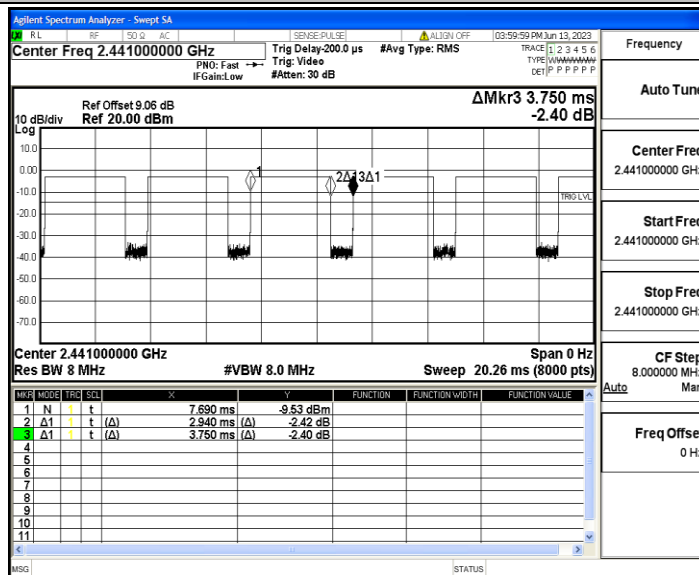
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.94	3.75	78.40	0.34
		2441	2.94	3.75	78.40	0.34
		2480	2.94	3.75	78.40	0.34

Test Graphs

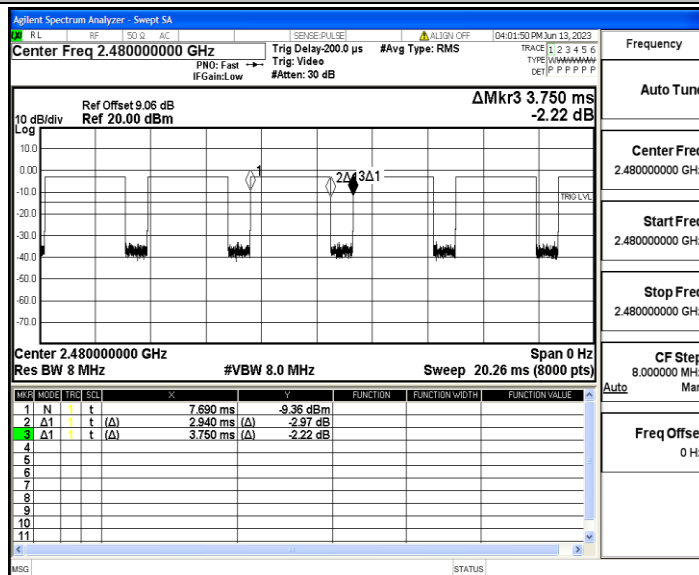
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

Test Result

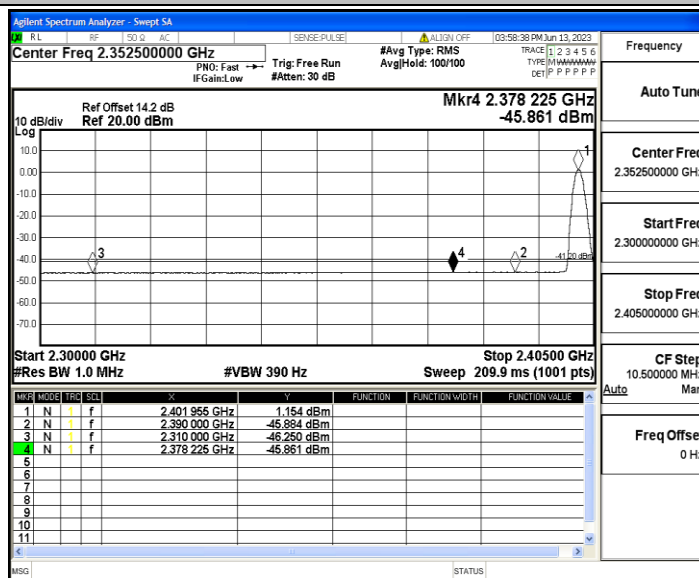
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-46.25	≤-41.20	PASS
				AV	2378.225	-45.86	≤-41.20	PASS
				AV	2390.000	-45.88	≤-41.20	PASS
				Peak	2310.000	-39.26	≤-21.20	PASS
				Peak	2327.720	-36.51	≤-21.20	PASS
				Peak	2390.000	-37.6	≤-21.20	PASS
		High	2480	AV	2483.500	-45.38	≤-41.20	PASS
				AV	2498.960	-45.2	≤-41.20	PASS
				AV	2500.000	-45.31	≤-41.20	PASS
				Peak	2483.500	-35.52	≤-21.20	PASS
				Peak	2483.520	-35.52	≤-21.20	PASS
				Peak	2500.000	-37.77	≤-21.20	PASS

Note:

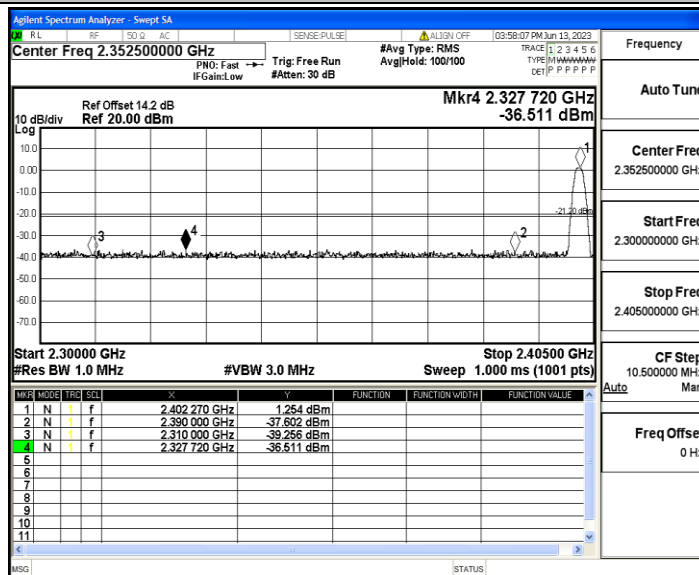
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

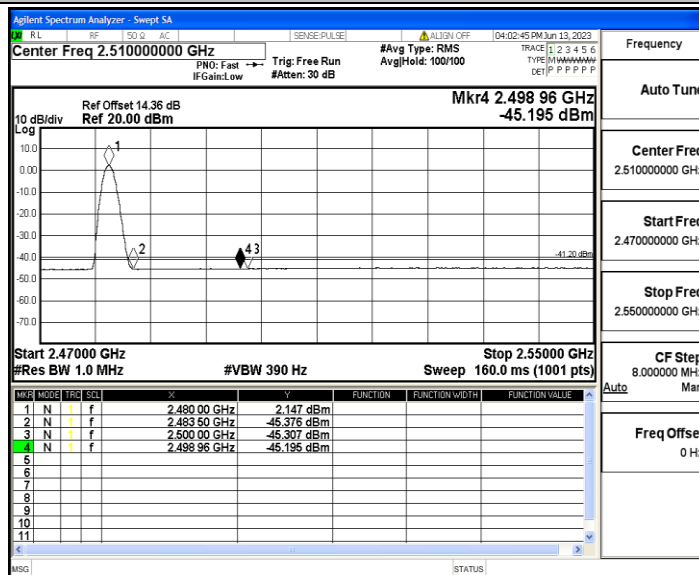
DH5_Ant1_Low_2402_AV



DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

