

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

Product Name: Bluetooth Mechanical Keyboard

Trade Mark: Keychron

Test Model: Keychron Q2 Pro

FCC ID: 2ASF4-Q2PRO

Environmental Conditions

Temperature:	#Temp.
Relative Humidity:	#Humidity
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

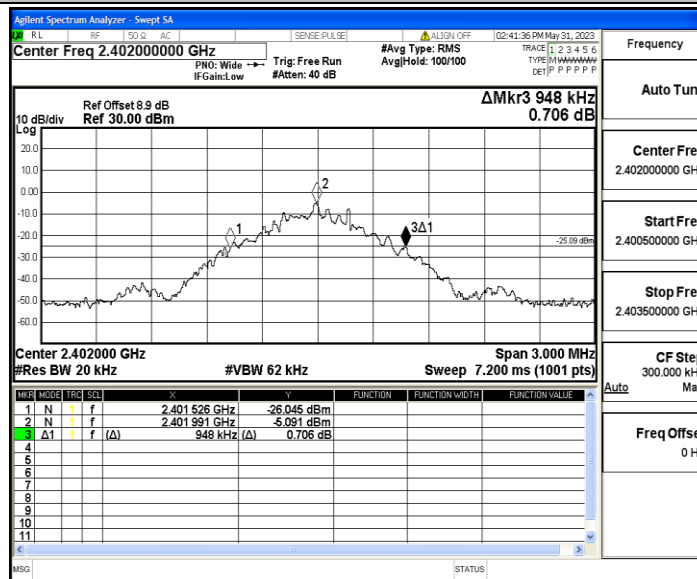
Appendix A: 20dB Emission Bandwidth

Test Result

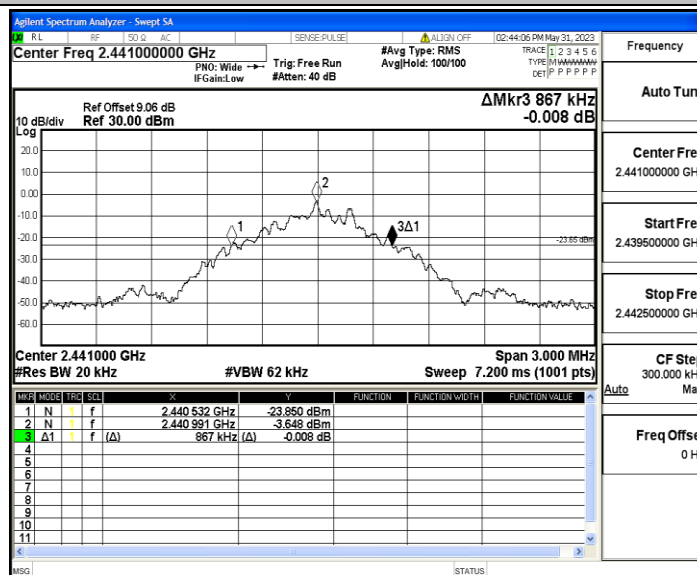
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.526	2402.474	---	---
		2441	0.867	2440.532	2441.399	---	---
		2480	0.867	2479.538	2480.405	---	---

Test Graphs

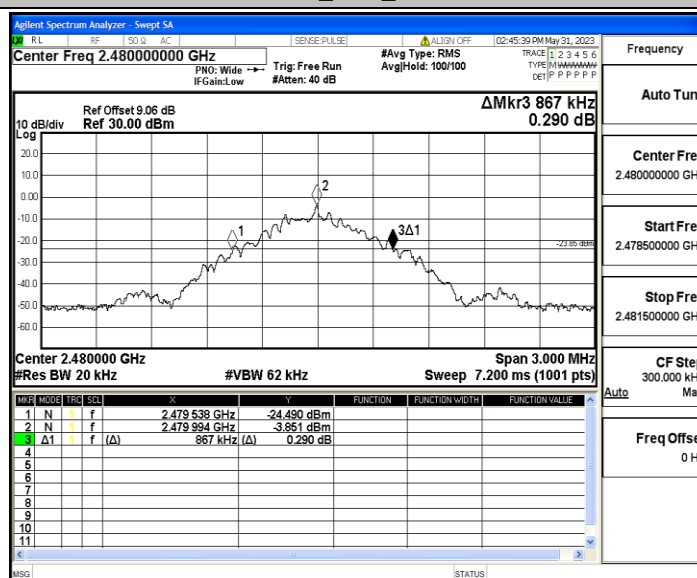
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



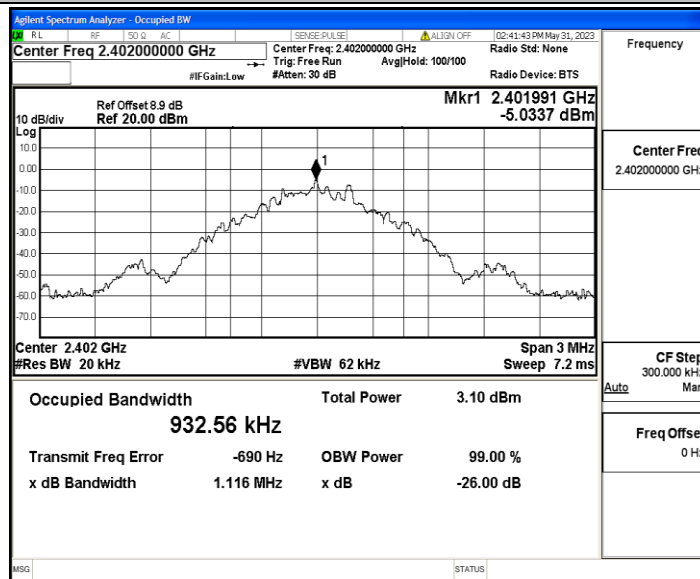
Appendix B: Occupied Channel Bandwidth

Test Result

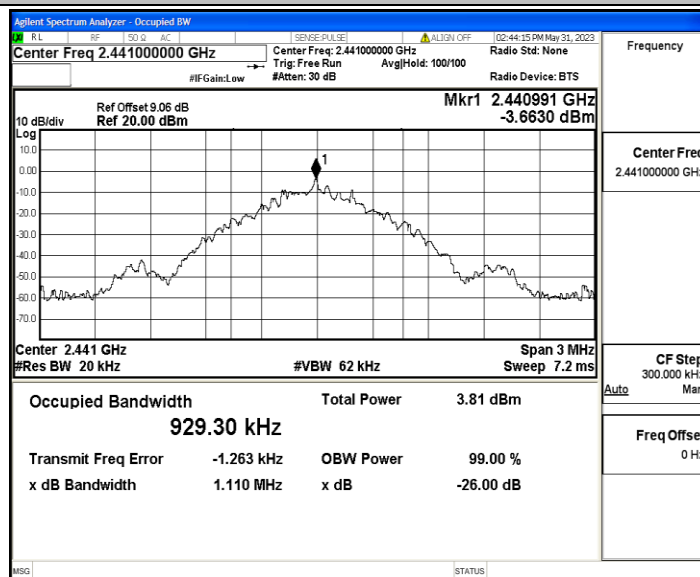
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.93256	2401.5330	2402.4656	---	---
		2441	0.92930	2440.5341	2441.4634	---	---
		2480	0.91610	2479.5474	2480.4635	---	---

Test Graphs

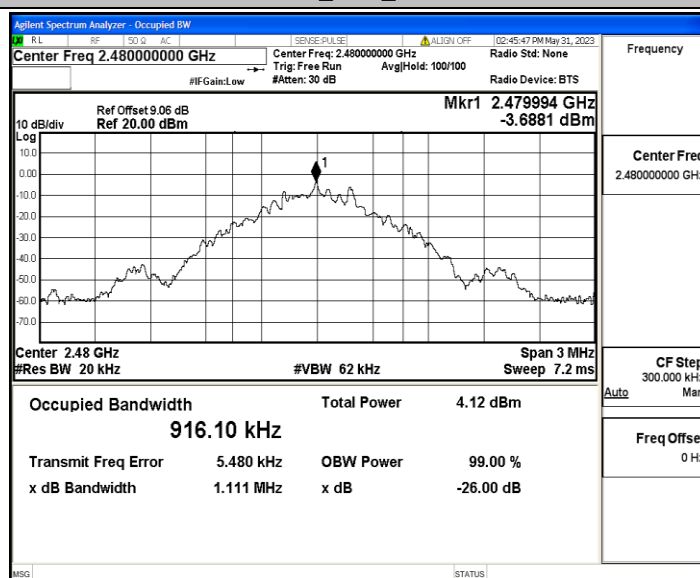
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



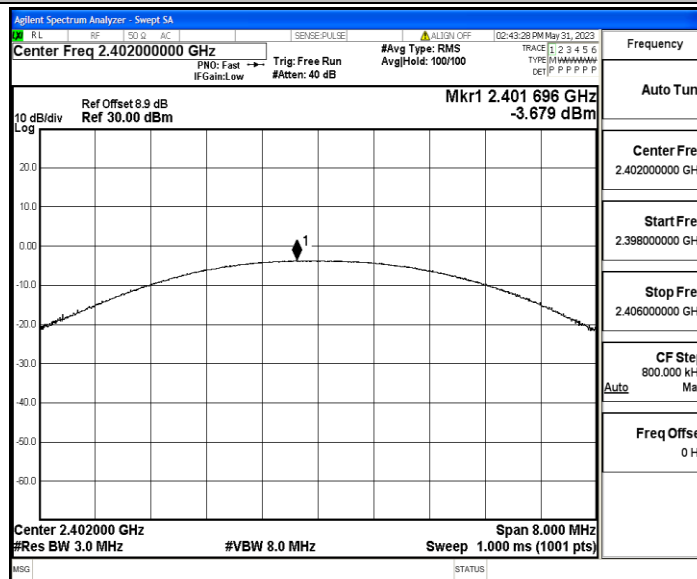
Appendix C: Maximum Peak conducted output power

Test Result

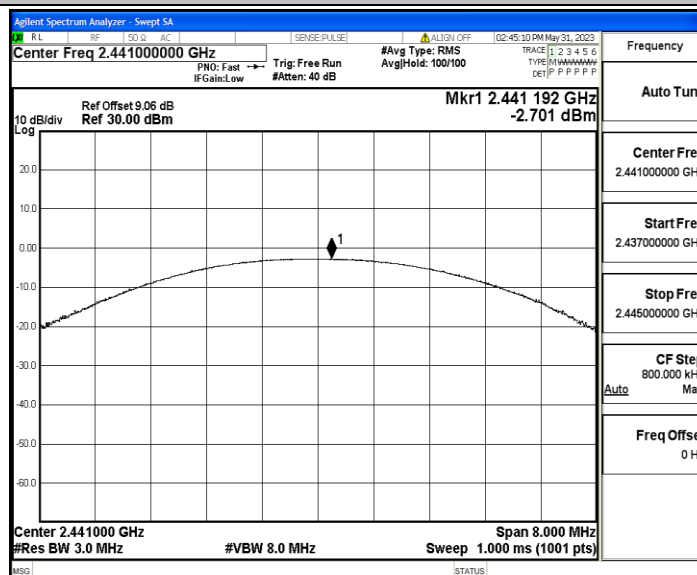
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-3.68	≤20.97	PASS
		2441	-2.7	≤20.97	PASS
		2480	-2.72	≤20.97	PASS

Test Graphs

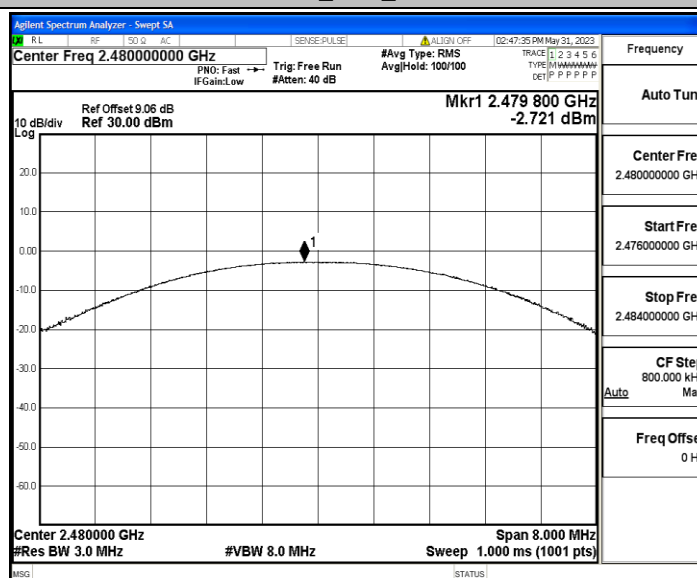
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

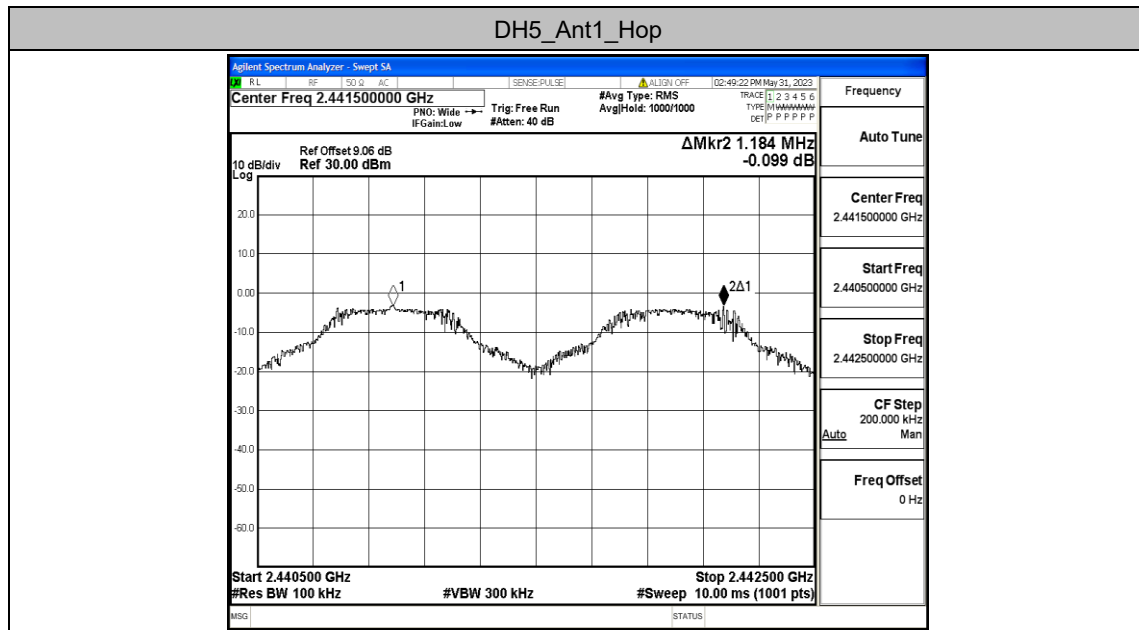


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.184	≥ 0.948	PASS

Test Graphs

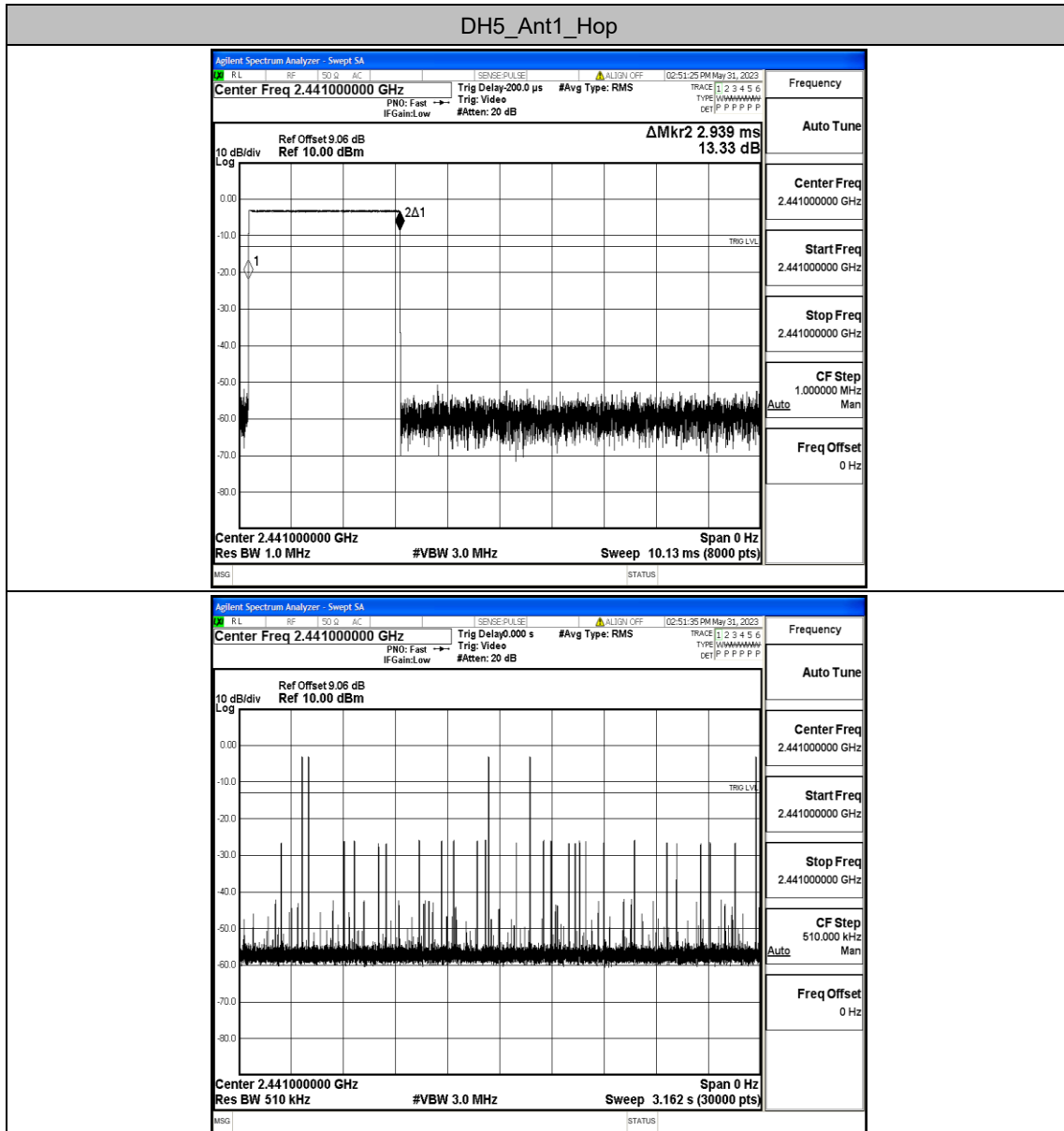


Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.939	60	0.176	≤0.4	PASS

Test Graphs

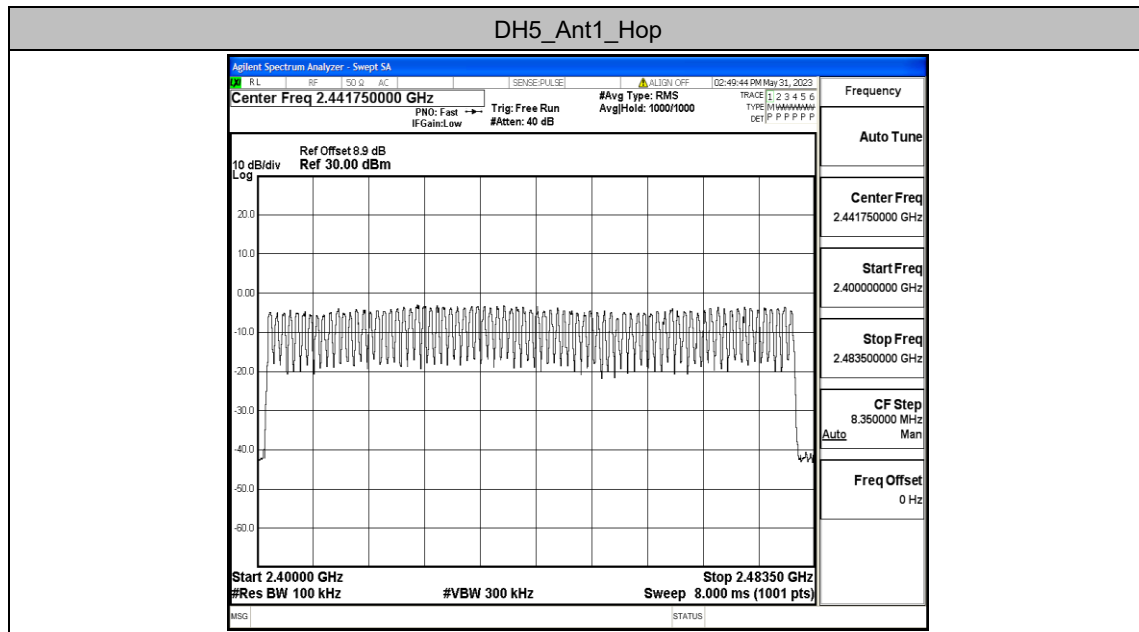


Appendix F: Number of hopping channels

Test Result

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

Test Graphs



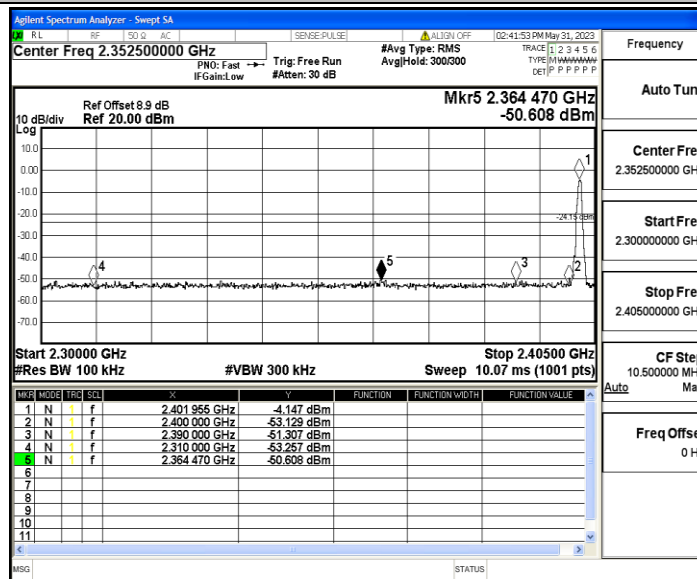
Appendix G: Band edge measurements

Test Result

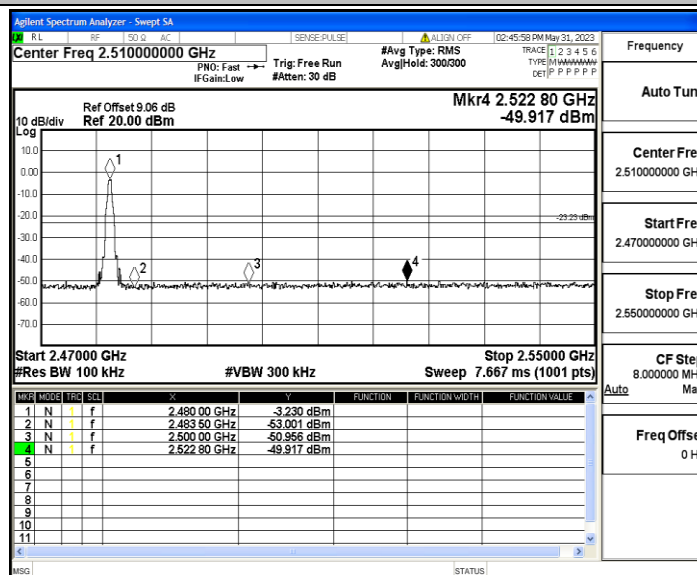
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.15	-50.61	≤ -24.15	PASS
		High	2480	-3.23	-49.92	≤ -23.23	PASS
		Low	Hop_2402	-4.84	-50.37	≤ -24.84	PASS
		High	Hop_2480	-3.23	-49.26	≤ -23.23	PASS

Test Graphs

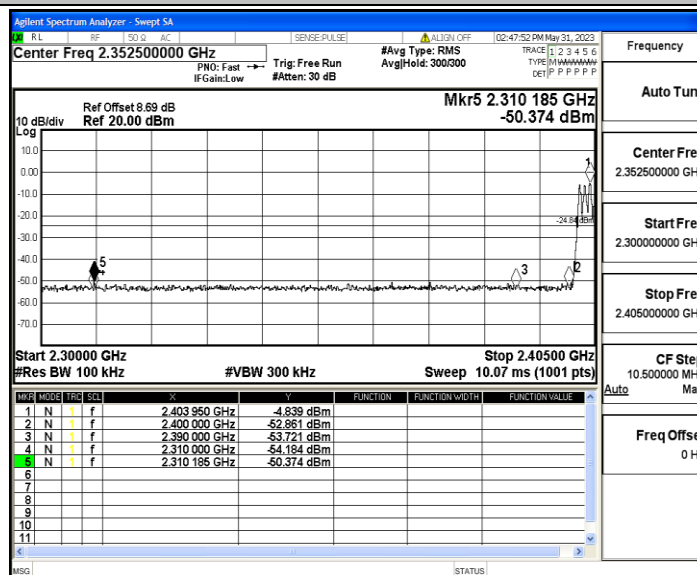
DH5_Ant1_Low_2402



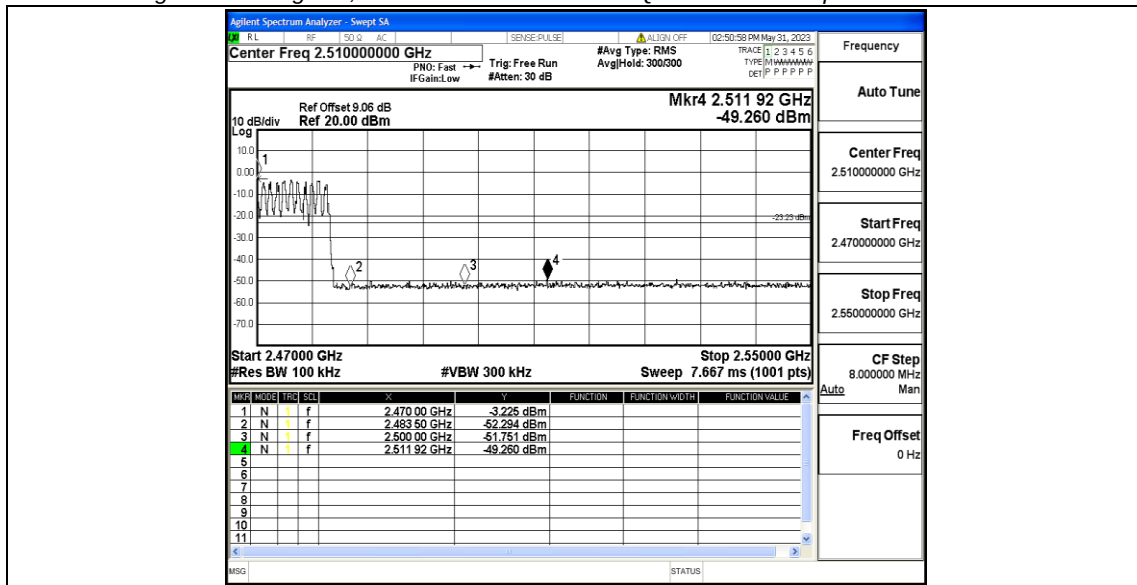
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



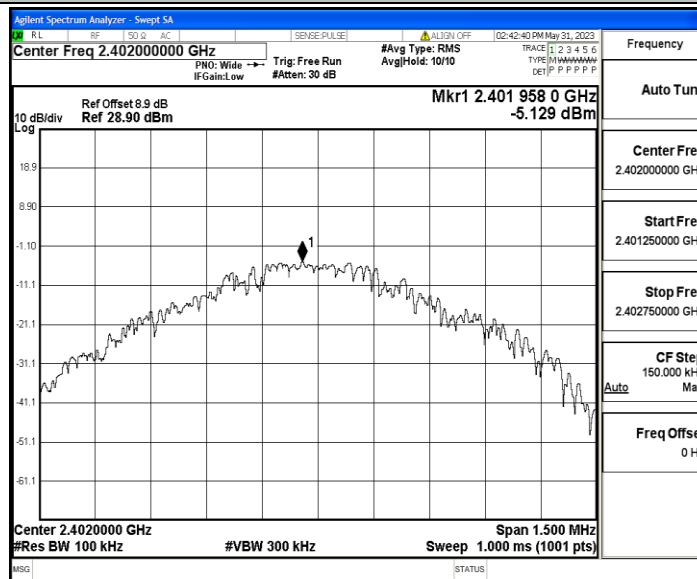
Appendix H: Conducted Spurious Emission

Test Result

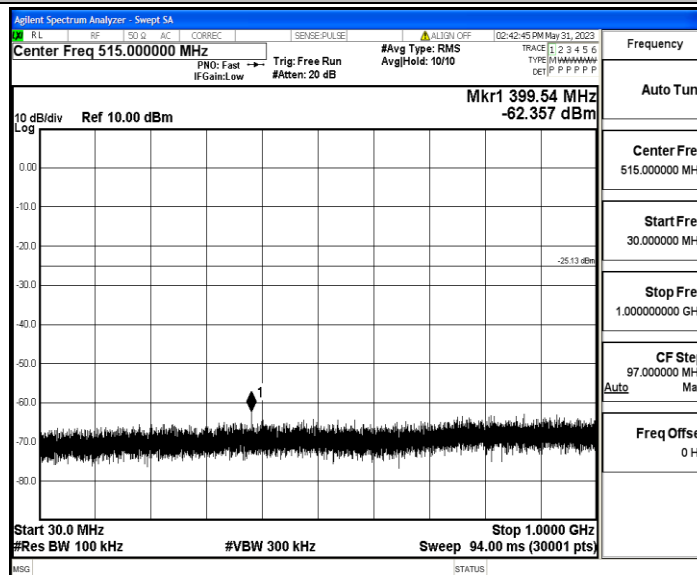
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-5.13	-5.13	---	PASS
			30~1000	-5.13	-62.36	≤-25.13	PASS
			1000~26500	-5.13	-50.24	≤-25.13	PASS
		2441	Reference	-3.99	-3.99	---	PASS
			30~1000	-3.99	-61.31	≤-23.99	PASS
			1000~26500	-3.99	-50.08	≤-23.99	PASS
		2480	Reference	-4.12	-4.12	---	PASS
			30~1000	-4.12	-62.98	≤-24.12	PASS
			1000~26500	-4.12	-48.85	≤-24.12	PASS

Test Graphs

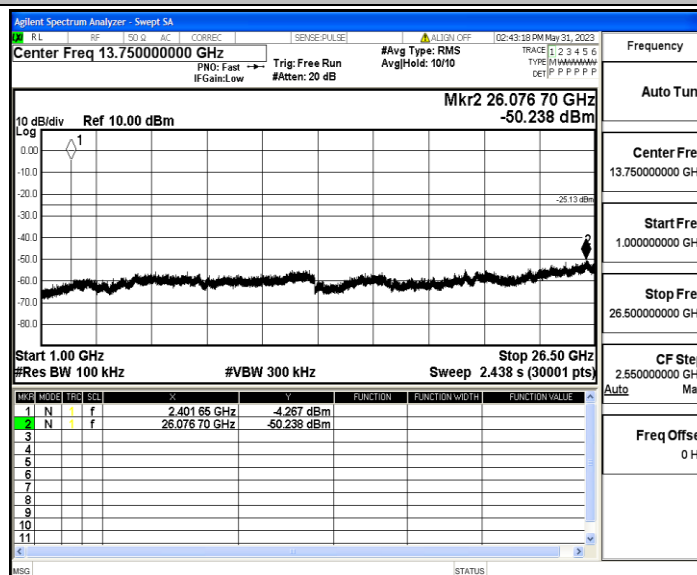
DH5_Ant1_2402_0~Reference



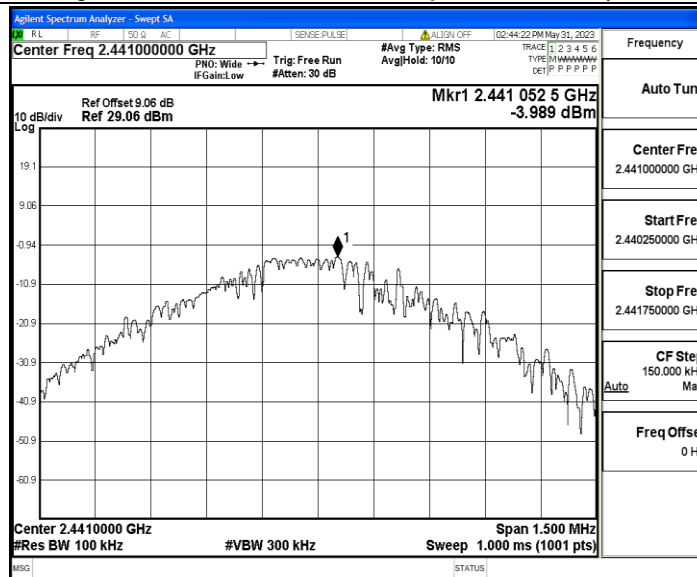
DH5_Ant1_2402_30~1000



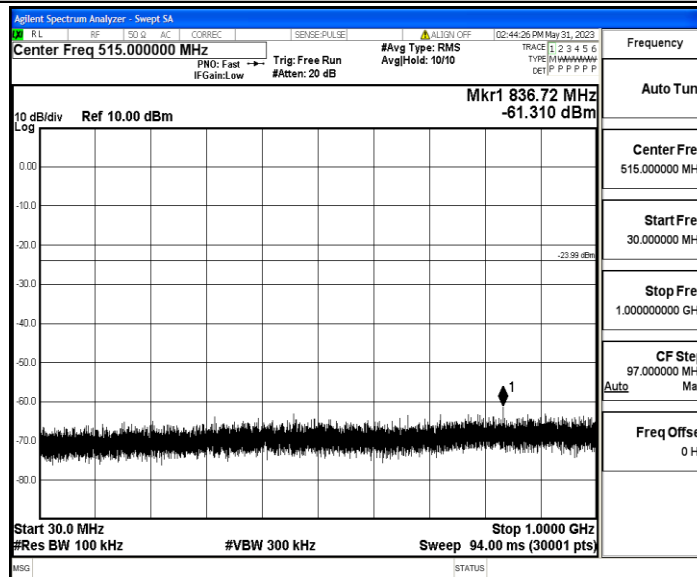
DH5_Ant1_2402_1000~26500



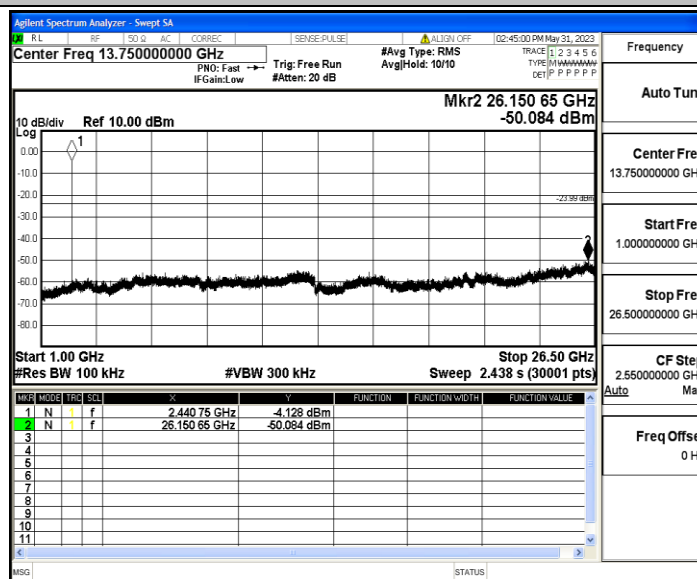
DH5_Ant1_2441_0~Reference



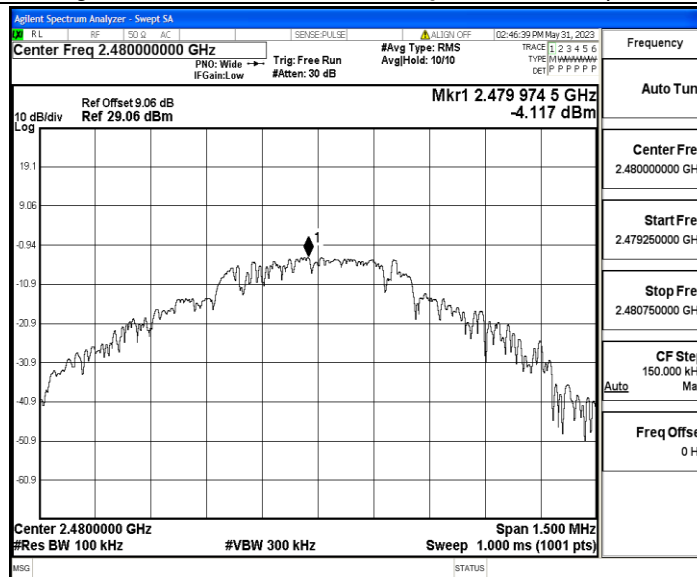
DH5_Ant1_2441_30~1000



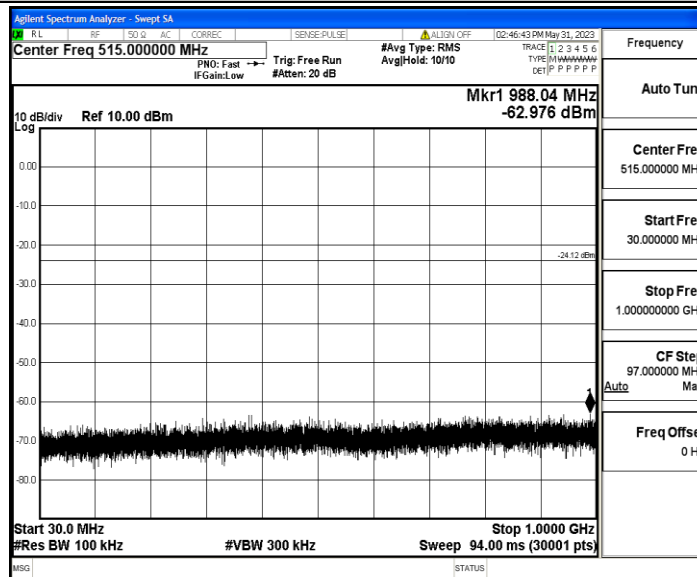
DH5_Ant1_2441_1000~26500



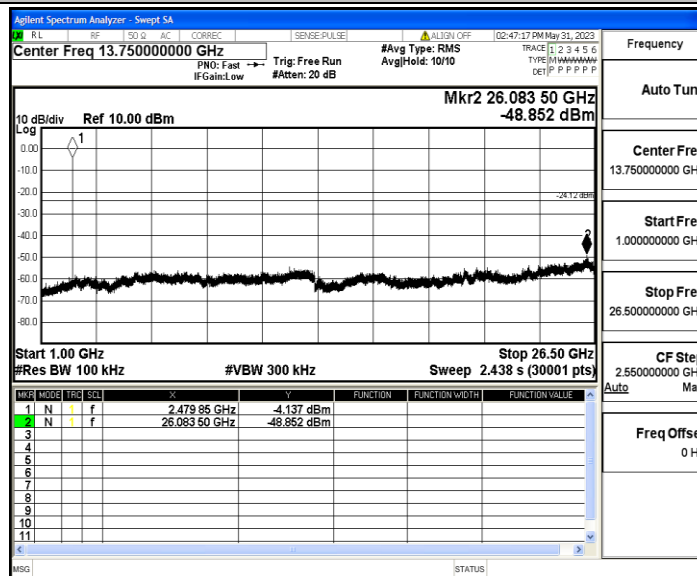
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



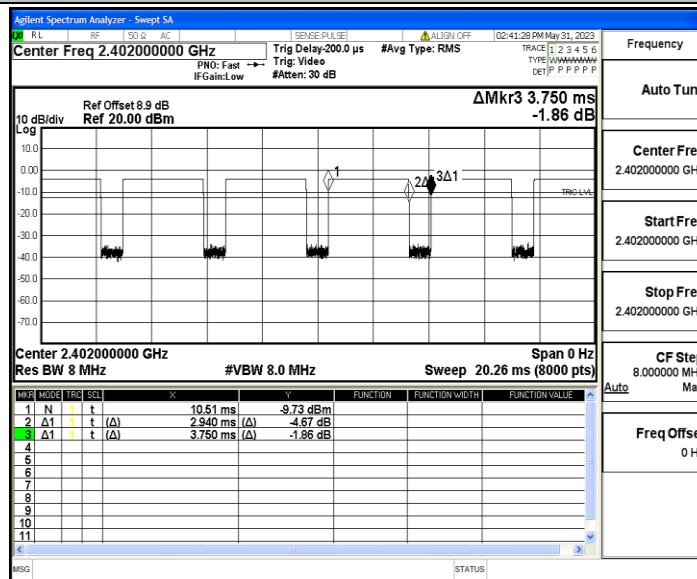
Appendix I: Duty Cycle

Test Result

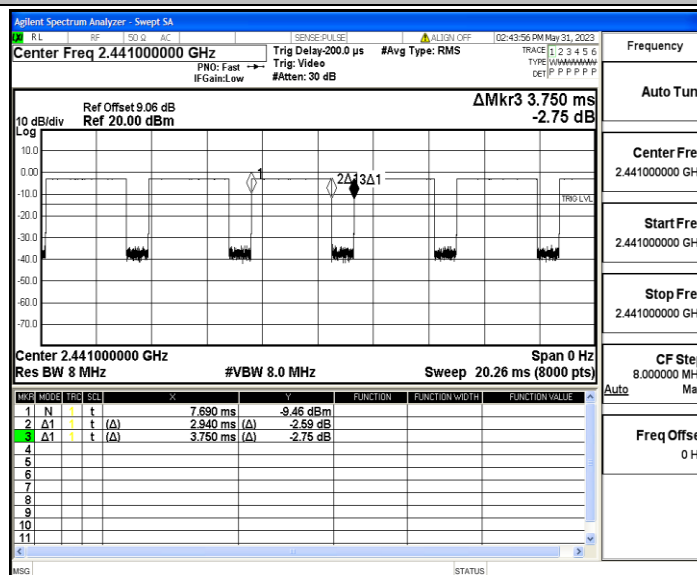
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.94	3.75	78.40	0.34
		2441	2.94	3.75	78.40	0.34
		2480	2.94	3.75	78.40	0.34

Test Graphs

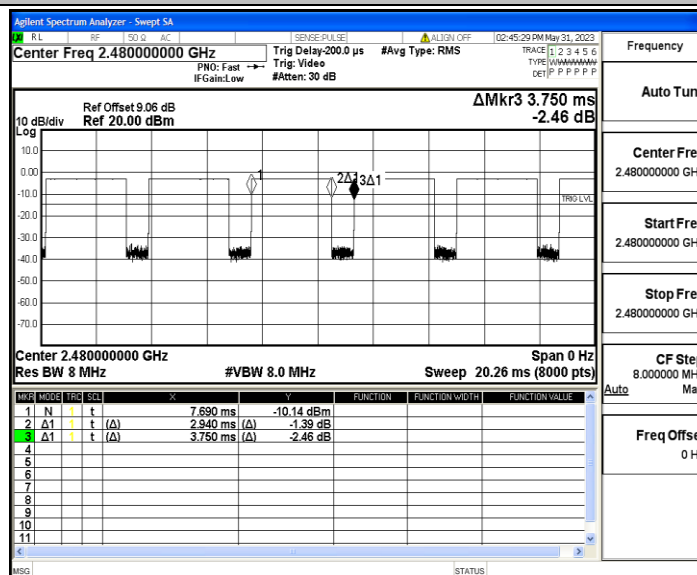
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

Test Result

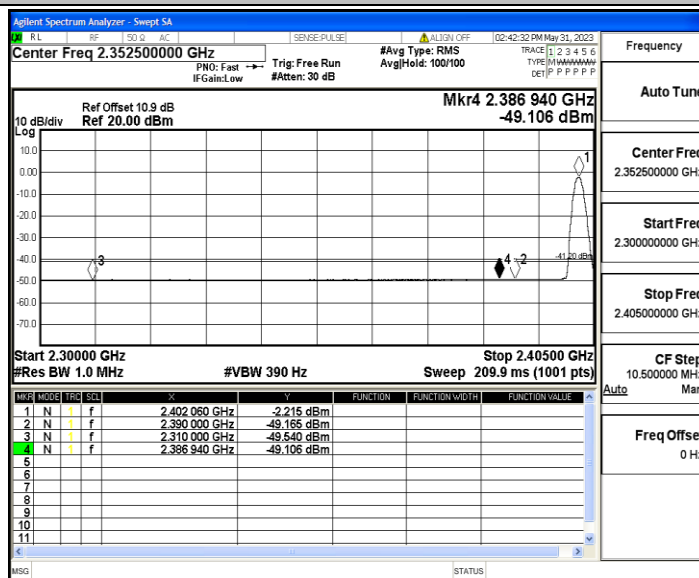
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.54	≤-41.20	PASS
				AV	2386.940	-49.11	≤-41.20	PASS
				AV	2390.000	-49.17	≤-41.20	PASS
				Peak	2310.000	-42.29	≤-21.20	PASS
				Peak	2389.145	-39.13	≤-21.20	PASS
				Peak	2390.000	-42.05	≤-21.20	PASS
		High	2480	AV	2483.500	-48.67	≤-41.20	PASS
				AV	2499.920	-48.4	≤-41.20	PASS
				AV	2500.000	-48.44	≤-41.20	PASS
				Peak	2483.500	-41.5	≤-21.20	PASS
				Peak	2486.160	-38.28	≤-21.20	PASS
				Peak	2500.000	-40.77	≤-21.20	PASS

Note:

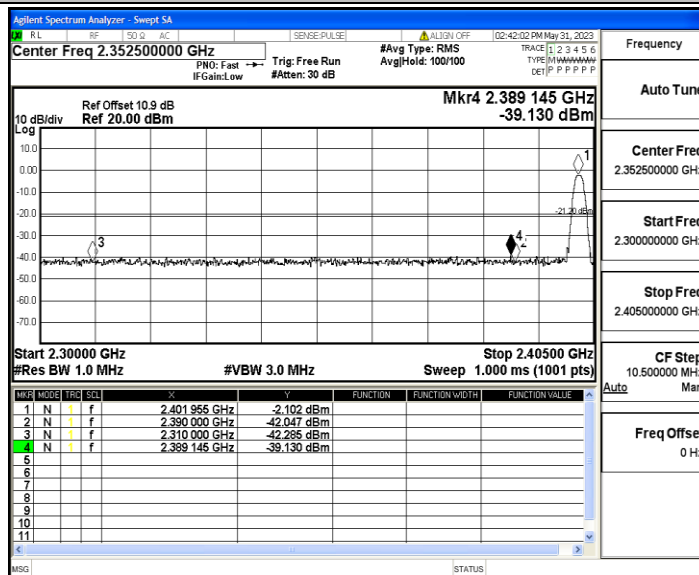
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

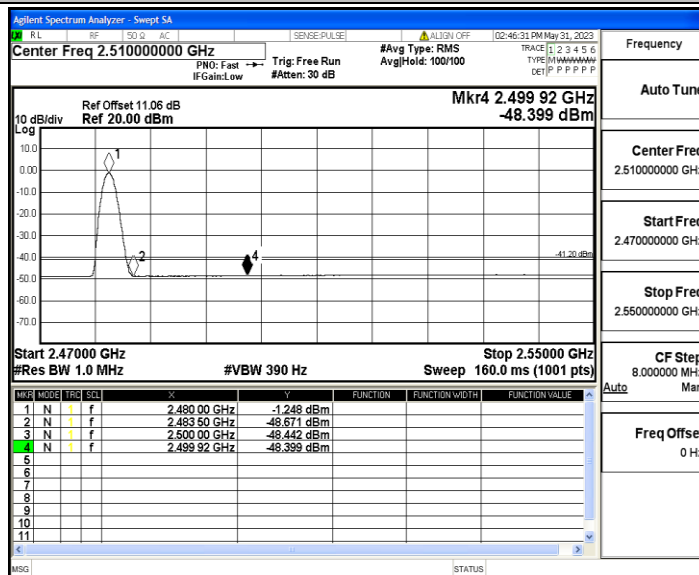
DH5_Ant1_Low_2402_AV



DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

