

FCC Appendix RF Test Data for BT

FCC ID : 2BP5V-PL01

Company : Dong Guan Zhen Ke Technology Co., LTD

EUT : pool thermometer

Model Number : PL01

Report No. : CTA25102401902

Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.550	2402.486	---	---
		2441	0.966	2440.538	2441.504	---	---
		2480	0.954	2479.547	2480.501	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.278	2440.379	2441.657	---	---
		2480	1.275	2479.382	2480.657	---	---
3DH5	Ant1	2402	1.323	2401.346	2402.669	---	---
		2441	1.317	2440.349	2441.666	---	---
		2480	1.281	2479.379	2480.660	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix B: Occupied Channel Bandwidth

Test Result

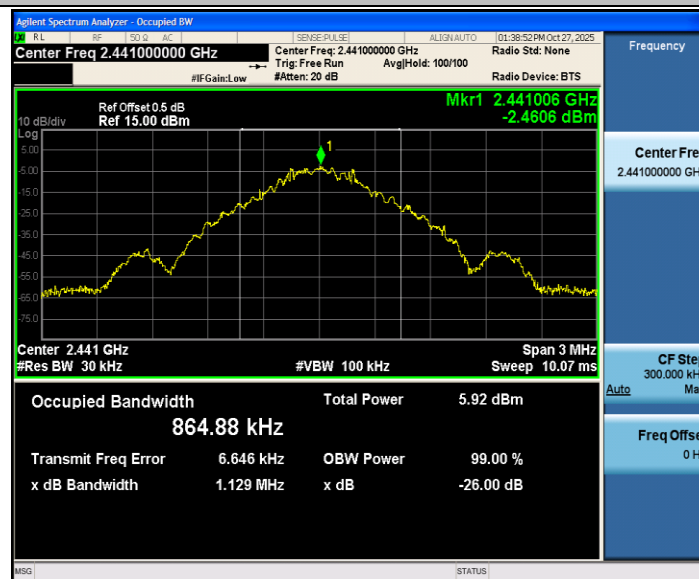
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86700	2401.5764	2402.4434	---	---
		2441	0.86488	2440.5742	2441.4391	---	---
		2480	0.86597	2479.5748	2480.4408	---	---
2DH5	Ant1	2402	1.1856	2401.4173	2402.6029	---	---
		2441	1.1888	2440.4161	2441.6049	---	---
		2480	1.1871	2479.4168	2480.6039	---	---
3DH5	Ant1	2402	1.1899	2401.4155	2402.6054	---	---
		2441	1.1870	2440.4163	2441.6033	---	---
		2480	1.1894	2479.4161	2480.6055	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



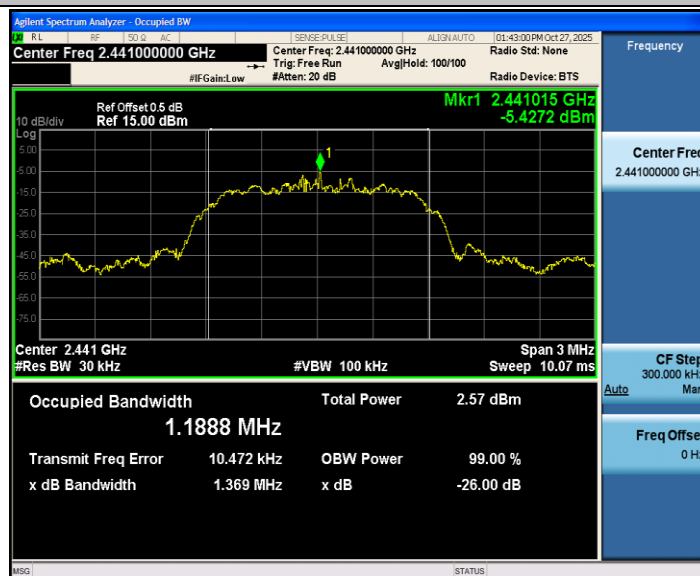
DH5_Ant1_2480



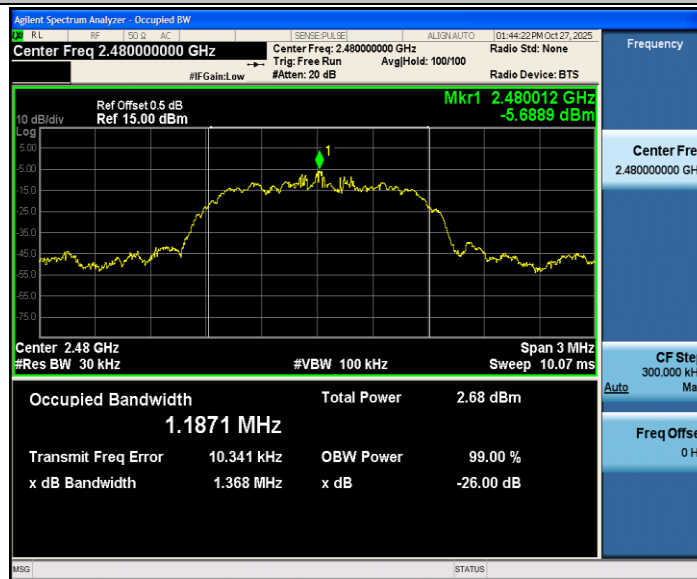
2DH5_Ant1_2402



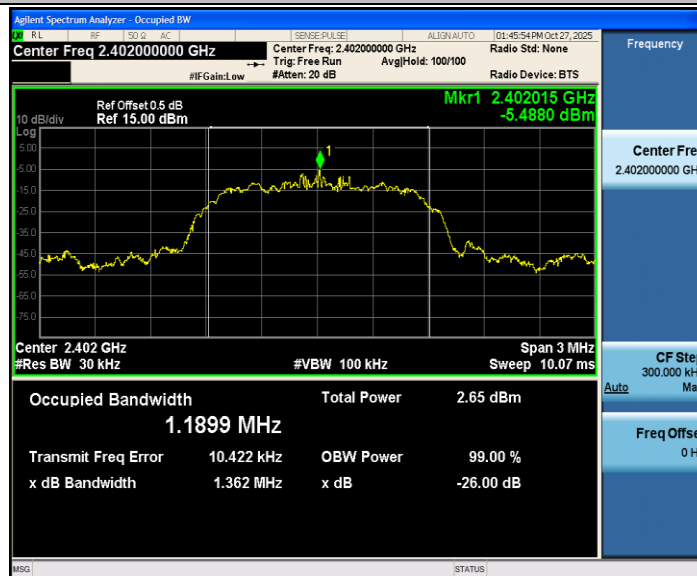
2DH5_Ant1_2441



2DH5_Ant1_2480



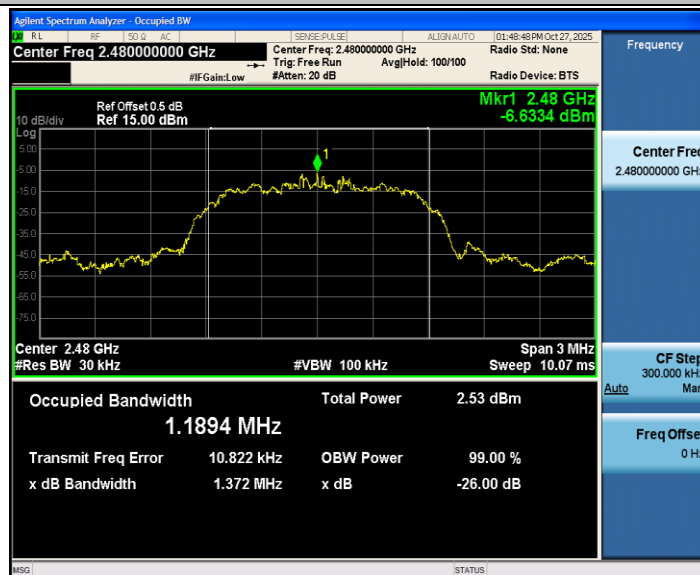
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-0.03	≤20.97	PASS
		2441	-0.14	≤20.97	PASS
		2480	-0.09	≤20.97	PASS
2DH5	Ant1	2402	-0.85	≤20.97	PASS
		2441	-0.94	≤20.97	PASS
		2480	-0.89	≤20.97	PASS
3DH5	Ant1	2402	-0.85	≤20.97	PASS
		2441	-0.96	≤20.97	PASS
		2480	-0.92	≤20.97	PASS

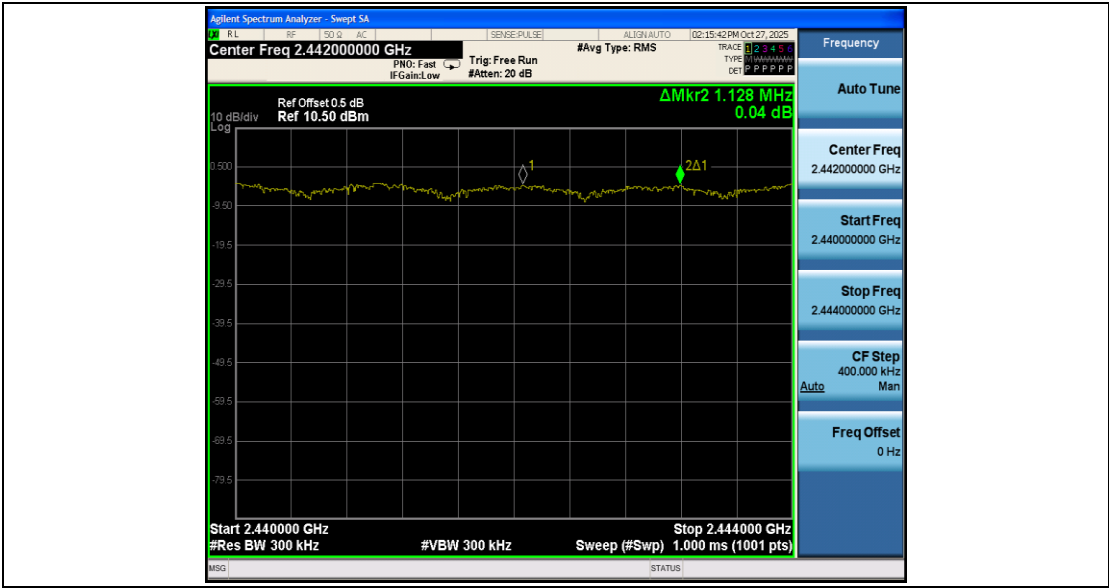
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.032	≥ 0.966	PASS
2DH5	Ant1	Hop	1.016	≥ 0.854	PASS
3DH5	Ant1	Hop	1.128	≥ 0.882	PASS

Test Graphs



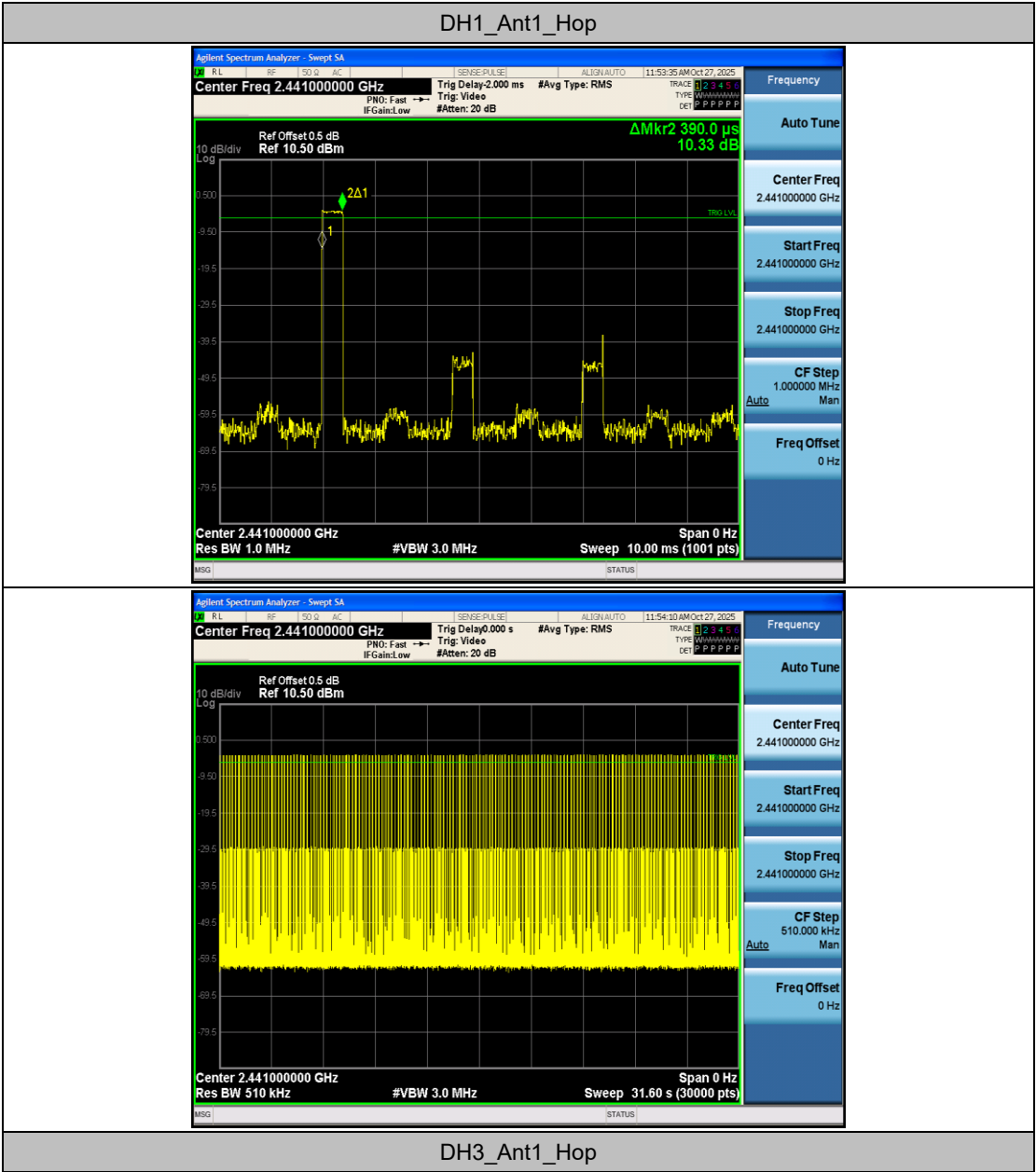


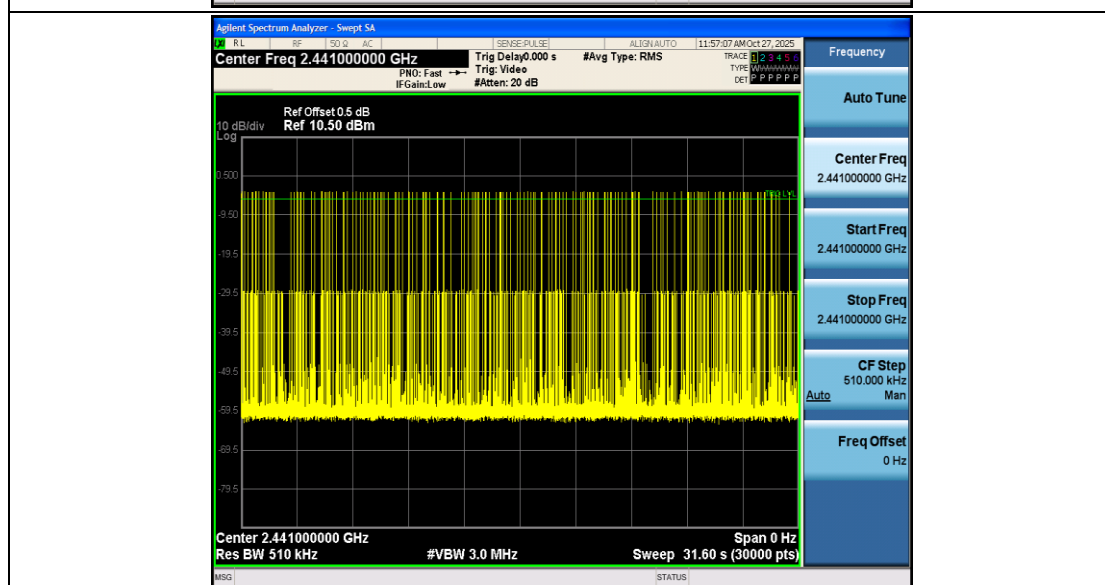
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	163	0.267	≤0.4	PASS
DH5	Ant1	Hop	2.890	113	0.327	≤0.4	PASS
2DH1	Ant1	Hop	0.390	317	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.640	160	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.900	108	0.313	≤0.4	PASS
3DH1	Ant1	Hop	0.390	315	0.123	≤0.4	PASS
3DH3	Ant1	Hop	1.650	158	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.900	104	0.302	≤0.4	PASS

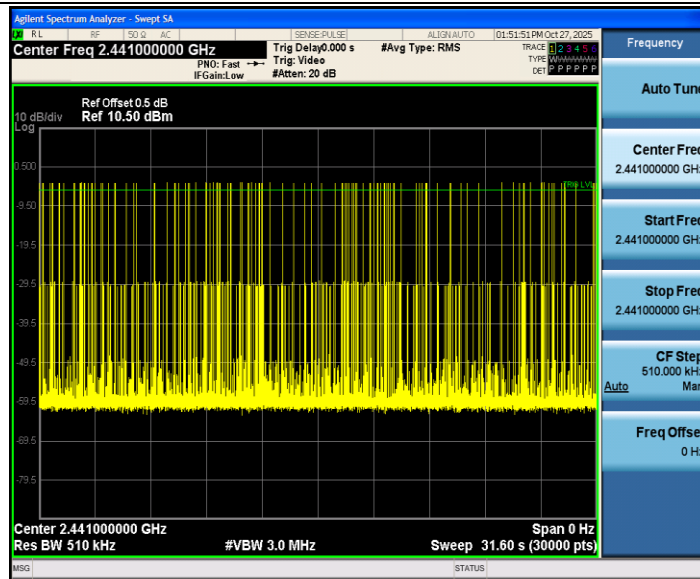
Test Graphs



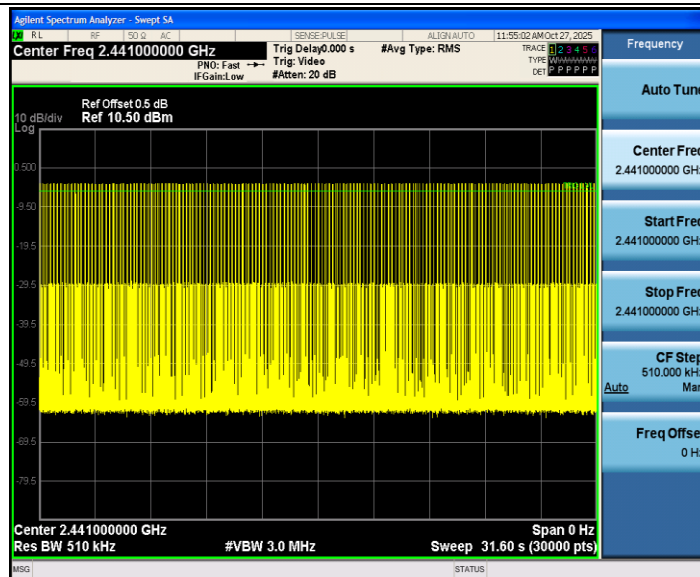
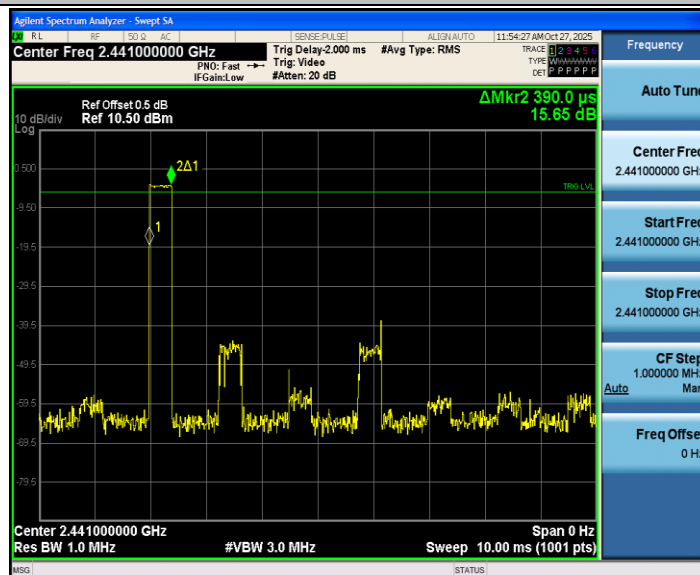


DH5_Ant1_Hop

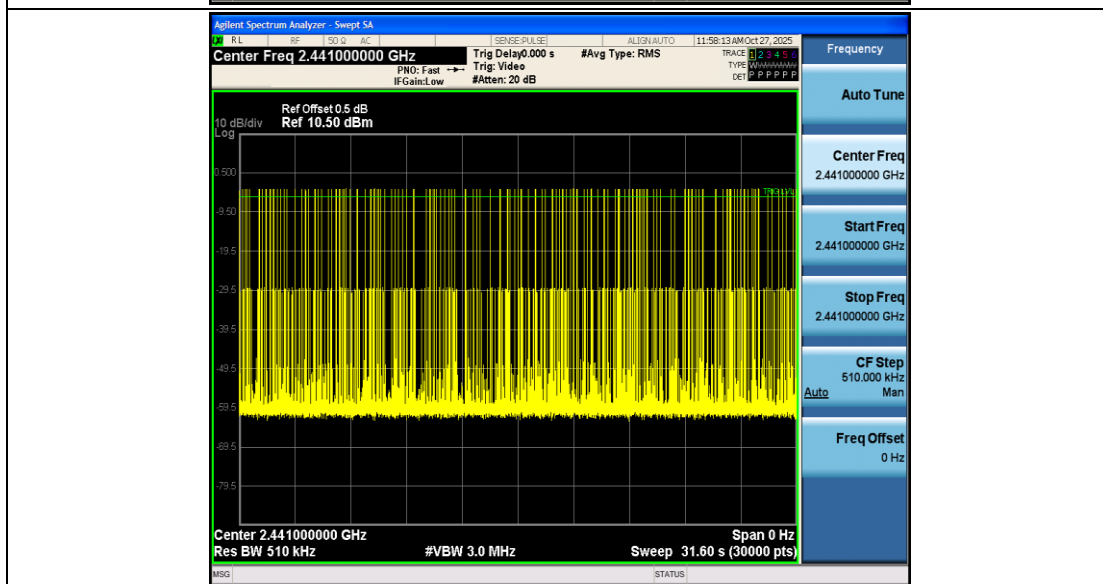




2DH1_Ant1_Hop

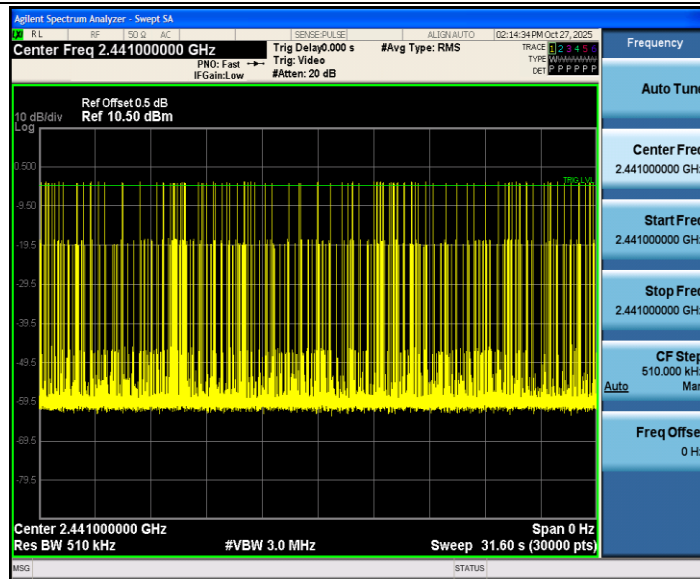


2DH3_Ant1_Hop

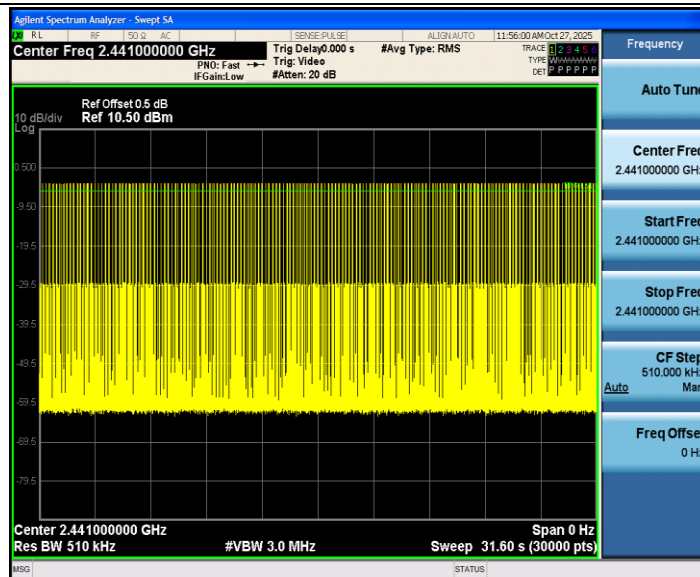
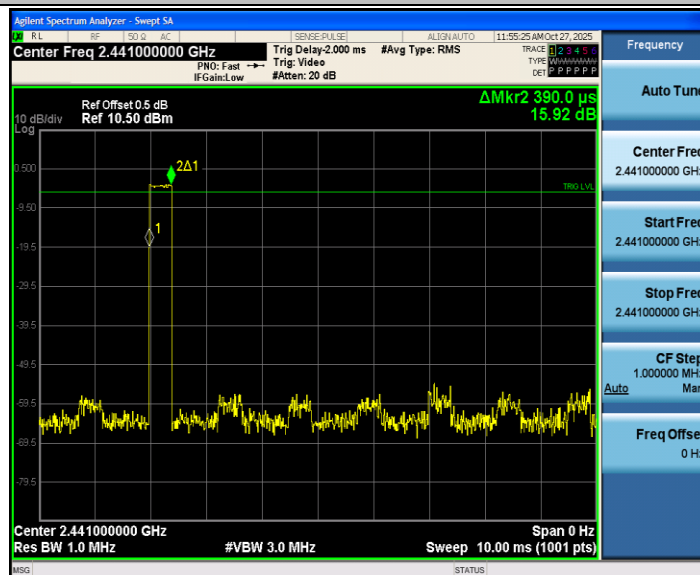


2DH5_Ant1_Hop

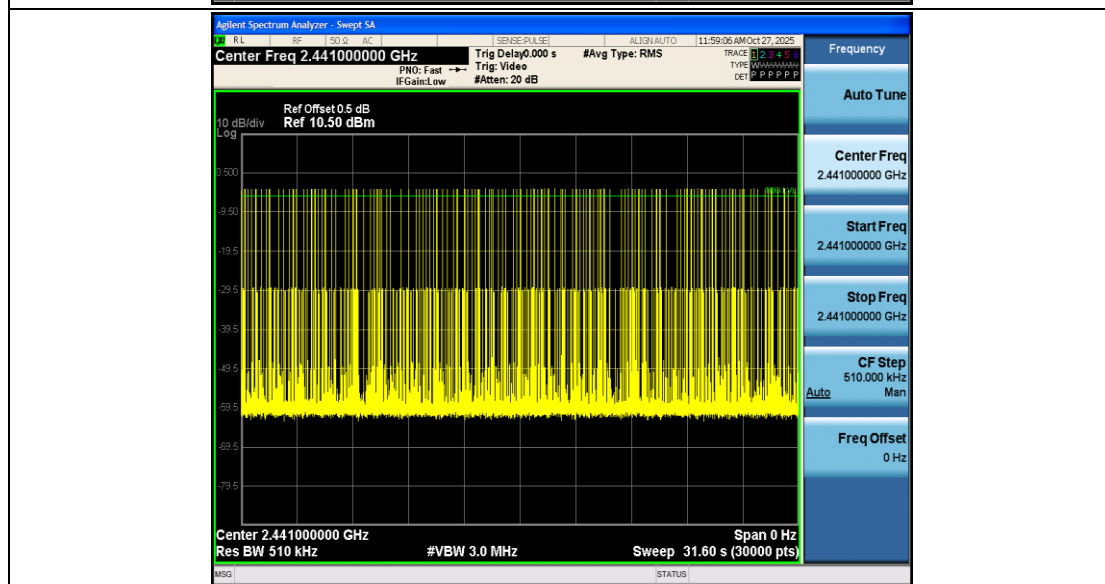




3DH1_Ant1_Hop

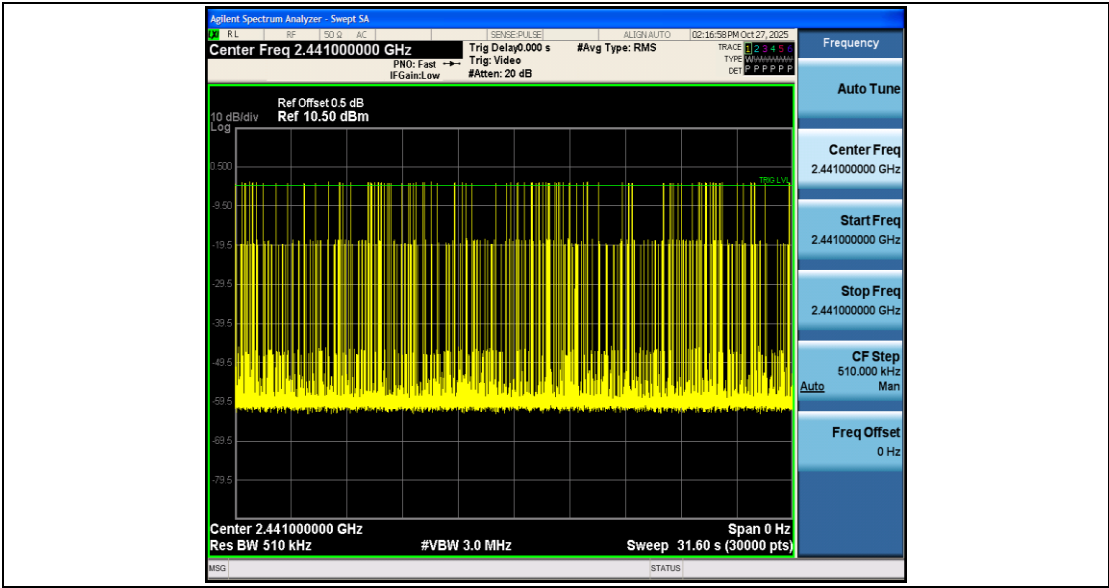


3DH3_Ant1_Hop



3DH5_Ant1_Hop





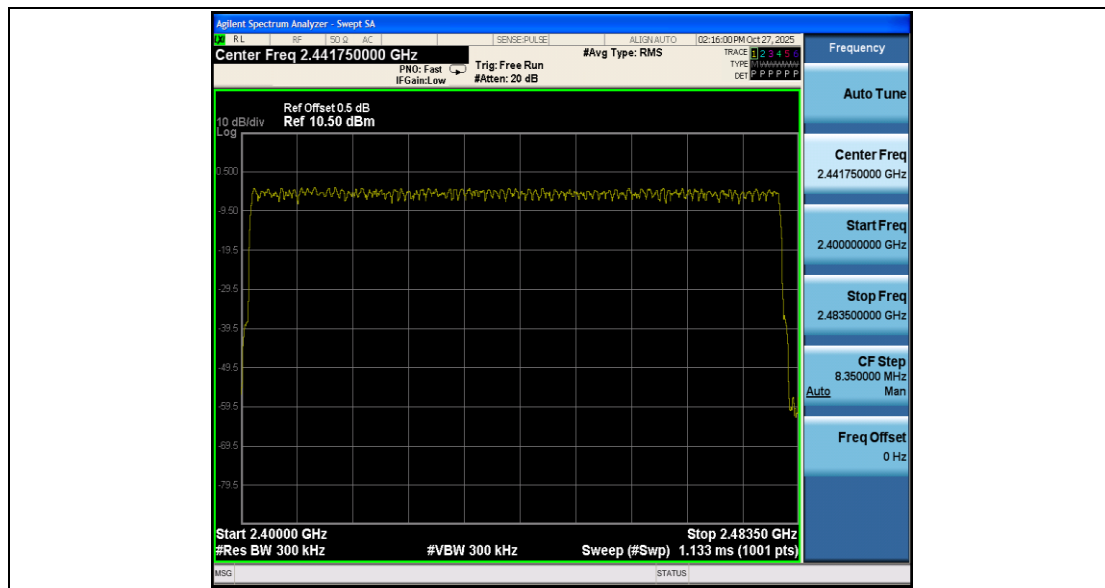
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



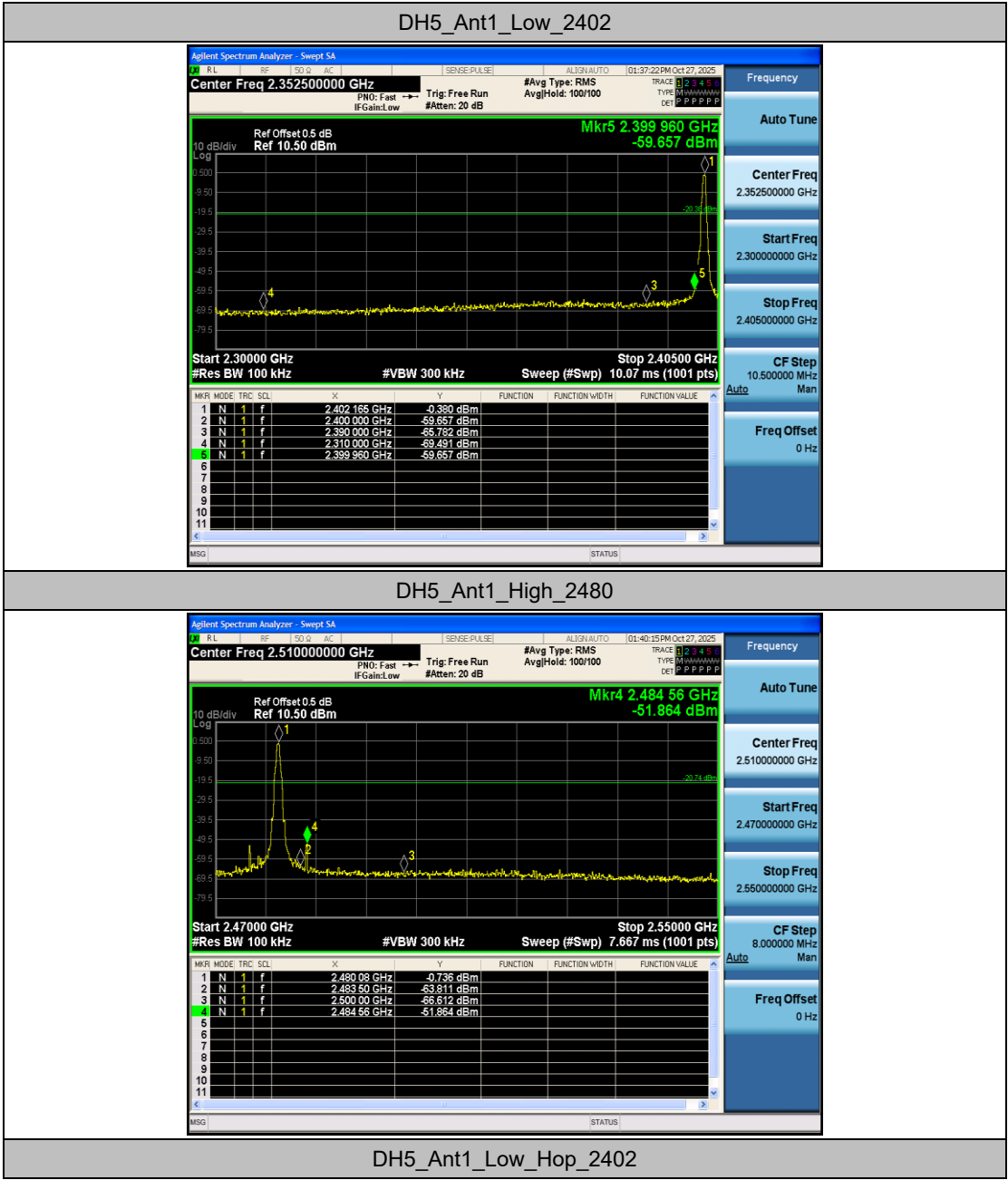


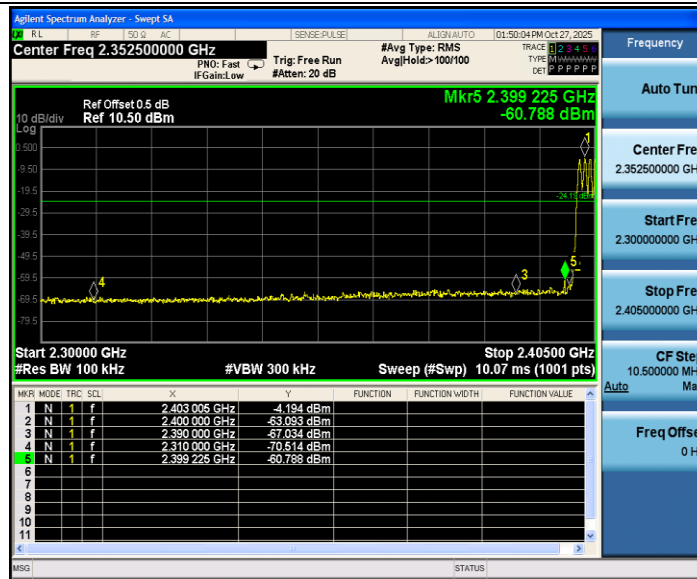
Appendix G: Band edge measurements

Test Result

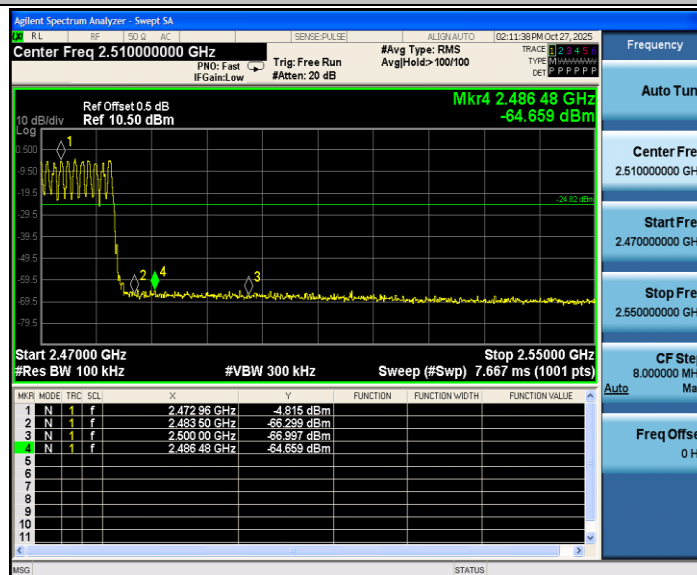
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.38	-59.66	≤-20.38	PASS
		High	2480	-0.74	-51.86	≤-20.74	PASS
		Low	Hop_2402	-4.19	-60.79	≤-24.19	PASS
		High	Hop_2480	-4.82	-64.66	≤-24.82	PASS
2DH5	Ant1	Low	2402	-4.72	-59.37	≤-24.72	PASS
		High	2480	-5.05	-61.6	≤-25.05	PASS
		Low	Hop_2402	-6.49	-62.21	≤-26.49	PASS
		High	Hop_2480	-6.47	-64.37	≤-26.47	PASS
3DH5	Ant1	Low	2402	-4.60	-59.51	≤-24.6	PASS
		High	2480	-3.72	-57.59	≤-23.72	PASS
		Low	Hop_2402	-4.62	-61.32	≤-24.62	PASS
		High	Hop_2480	-4.05	-63.74	≤-24.05	PASS

Test Graphs

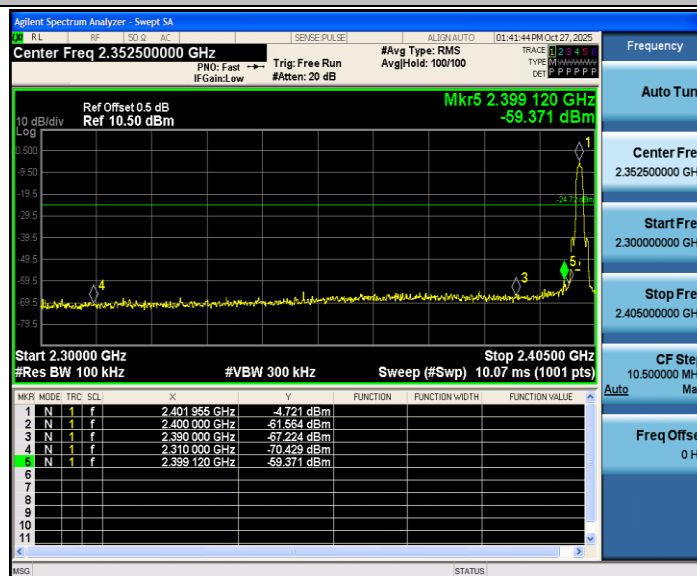




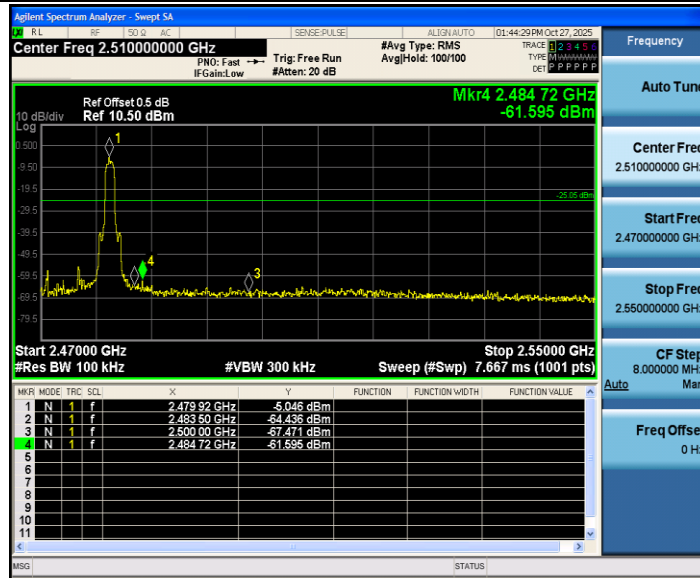
DH5_Ant1_High_Hop_2480



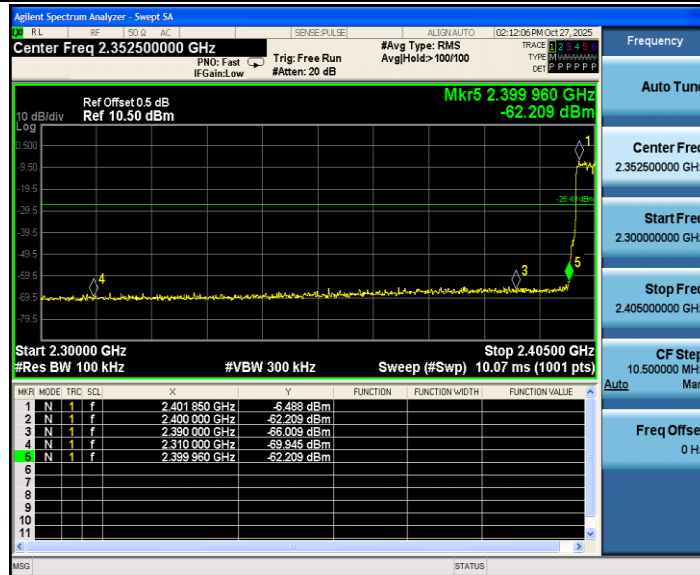
2DH5_Ant1_Low_2402



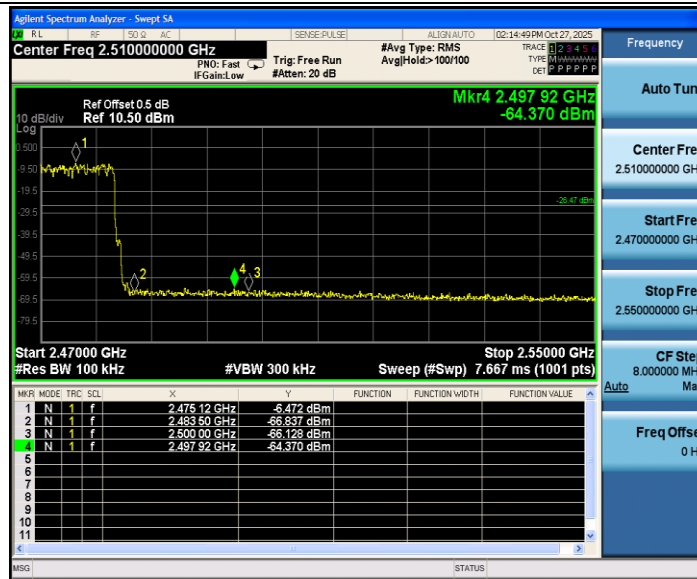
2DH5_Ant1_High_2480



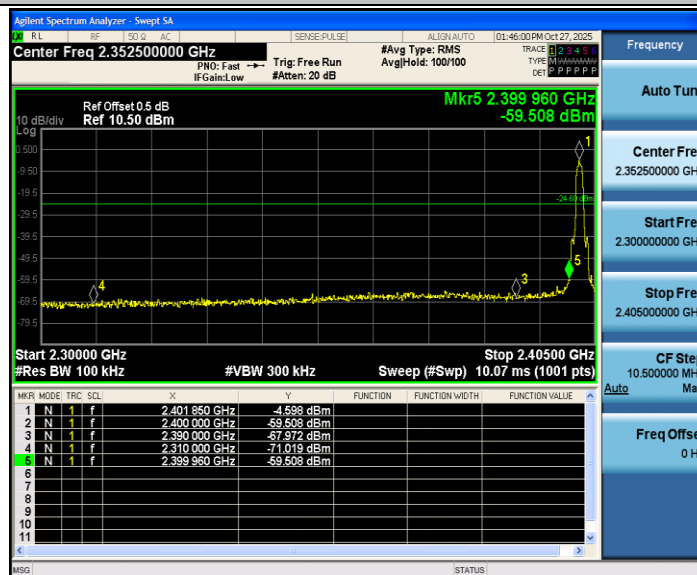
2DH5_Ant1_Low_Hop_2402



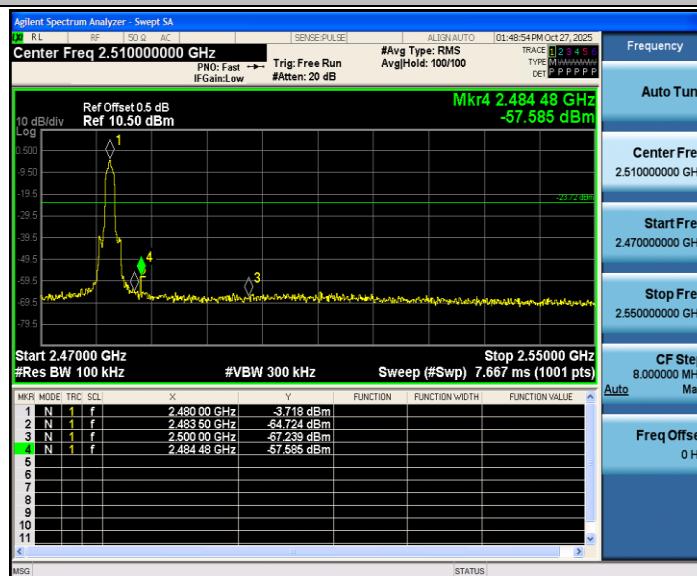
2DH5_Ant1_High_Hop_2480



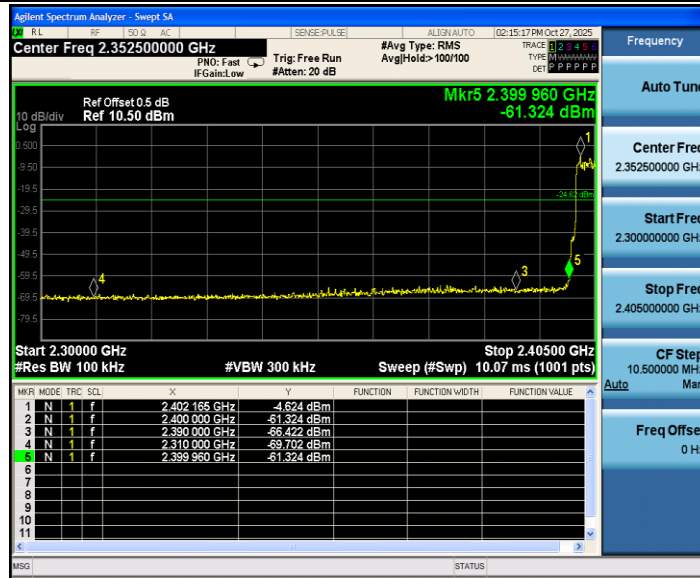
3DH5_Ant1_Low_2402



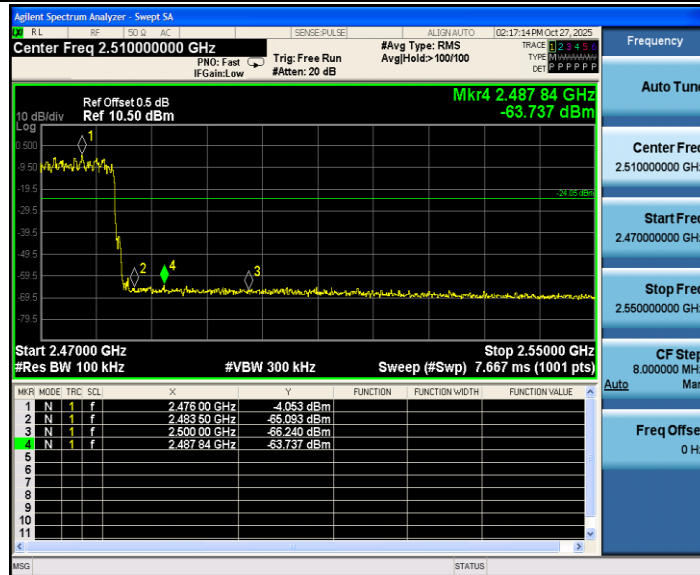
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

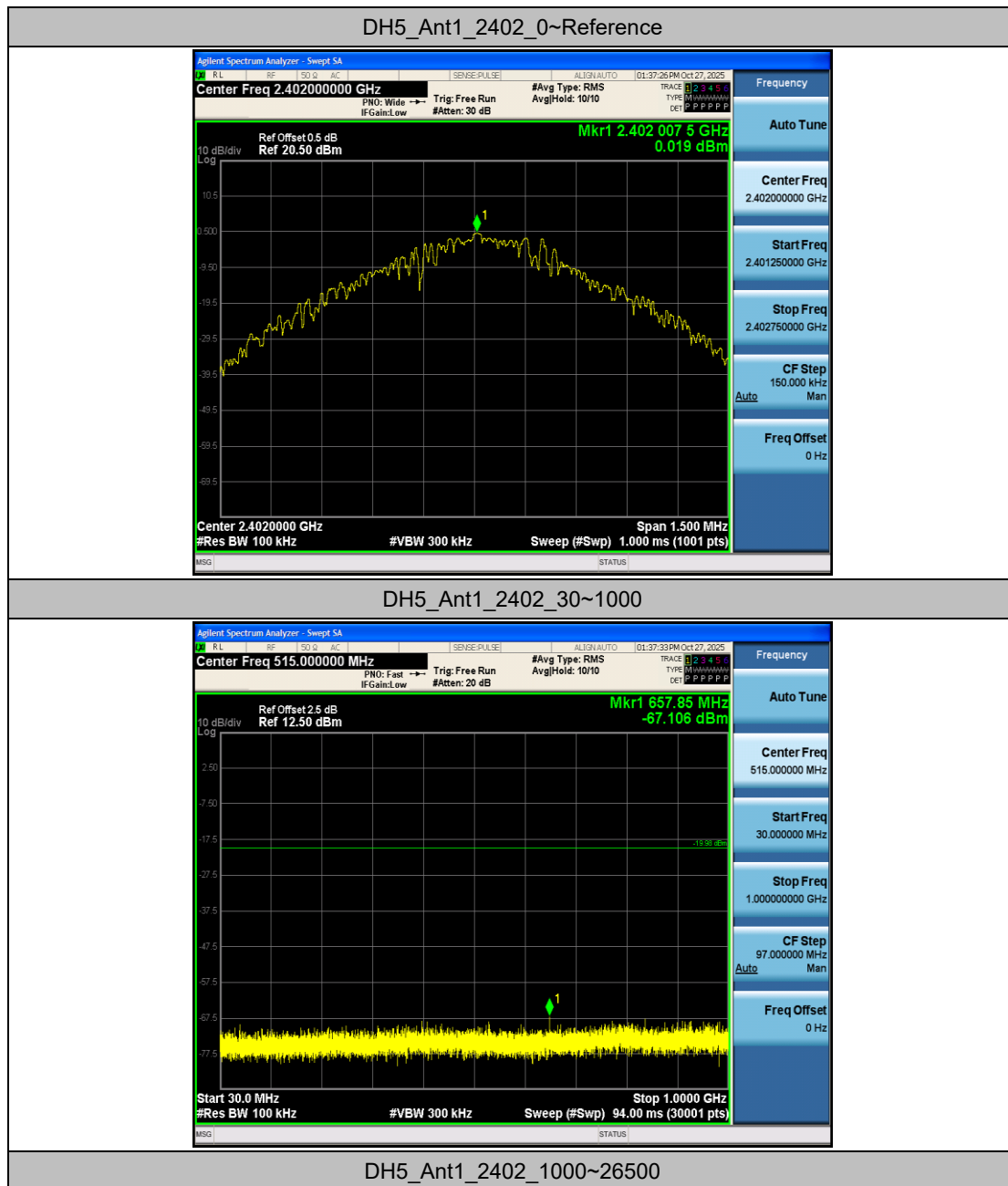


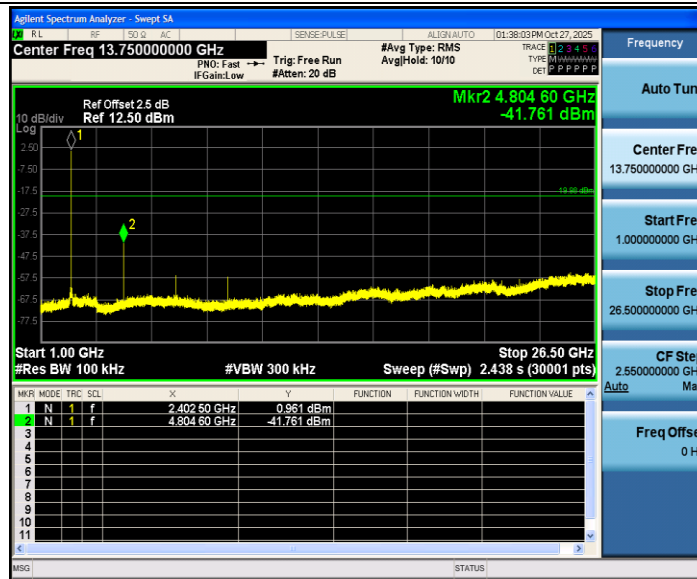
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.02	0.02	---	PASS
			30~1000	0.02	-67.11	≤-19.98	PASS
			1000~26500	0.02	-41.76	≤-19.98	PASS
		2441	Reference	-0.67	-0.67	---	PASS
			30~1000	-0.67	-67.26	≤-20.67	PASS
			1000~26500	-0.67	-42.59	≤-20.67	PASS
		2480	Reference	-0.94	-0.94	---	PASS
			30~1000	-0.94	-65.95	≤-20.94	PASS
			1000~26500	-0.94	-45.3	≤-20.94	PASS
2DH5	Ant1	2402	Reference	-5.11	-5.11	---	PASS
			30~1000	-5.11	-67.94	≤-25.11	PASS
			1000~26500	-5.11	-50.19	≤-25.11	PASS
		2441	Reference	-4.43	-4.43	---	PASS
			30~1000	-4.43	-68.17	≤-24.43	PASS
			1000~26500	-4.43	-47.16	≤-24.43	PASS
		2480	Reference	-4.71	-4.71	---	PASS
			30~1000	-4.71	-68.02	≤-24.71	PASS
			1000~26500	-4.71	-48.62	≤-24.71	PASS
3DH5	Ant1	2402	Reference	-4.42	-4.42	---	PASS
			30~1000	-4.42	-67.58	≤-24.42	PASS
			1000~26500	-4.42	-49.96	≤-24.42	PASS
		2441	Reference	-7.29	-7.29	---	PASS
			30~1000	-7.29	-67.65	≤-27.29	PASS
			1000~26500	-7.29	-47.08	≤-27.29	PASS
		2480	Reference	-5.17	-5.17	---	PASS
			30~1000	-5.17	-66.99	≤-25.17	PASS
			1000~26500	-5.17	-46.52	≤-25.17	PASS

Test Graphs





DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

