

FCC Appendix RF Test Data

FCC ID : 2BPBL-FLHR4031943

Company: : NIGHT OWL CO., LIMITED

EUT : Floor lamp

Model Number : HR4031943

Report No. : CTA25042701002

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	0.948	2401.550	2402.498	---	---
		2441	0.948	2440.547	2441.495	---	---
		2480	0.942	2479.553	2480.495	---	---
2DH5	Ant1	2402	1.284	2401.379	2402.663	---	---
		2441	1.317	2440.346	2441.663	---	---
		2480	1.275	2479.382	2480.657	---	---
3DH5	Ant1	2402	1.293	2401.367	2402.660	---	---
		2441	1.314	2440.355	2441.669	---	---
		2480	1.305	2479.361	2480.666	---	---

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



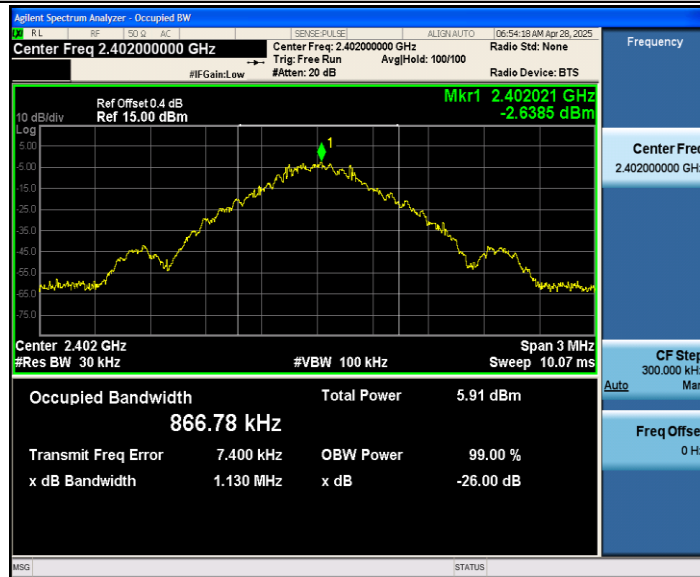
Appendix B: Occupied Channel Bandwidth

Test Result

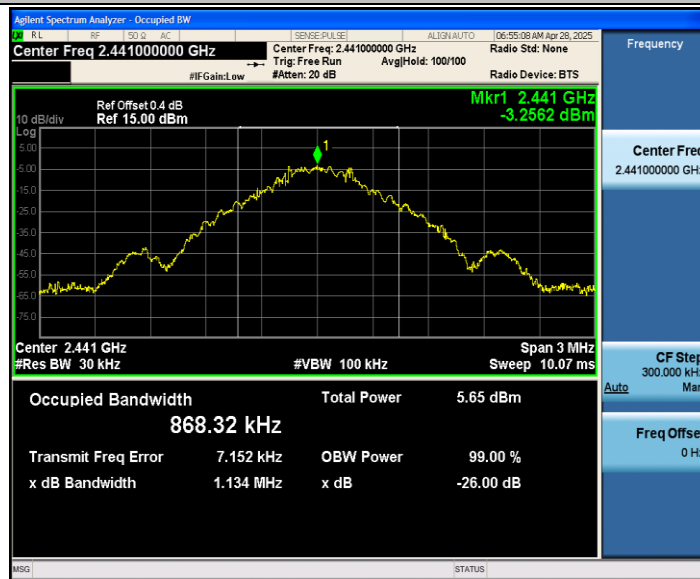
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86678	2401.5740	2402.4408	---	---
		2441	0.86832	2440.5730	2441.4413	---	---
		2480	0.87053	2479.5745	2480.4450	---	---
2DH5	Ant1	2402	1.1905	2401.4149	2402.6054	---	---
		2441	1.1861	2440.4170	2441.6031	---	---
		2480	1.1920	2479.4154	2480.6074	---	---
3DH5	Ant1	2402	1.1808	2401.4209	2402.6017	---	---
		2441	1.1913	2440.4134	2441.6047	---	---
		2480	1.1877	2479.4162	2480.6039	---	---

Test Graphs

DH5_Ant1_2402



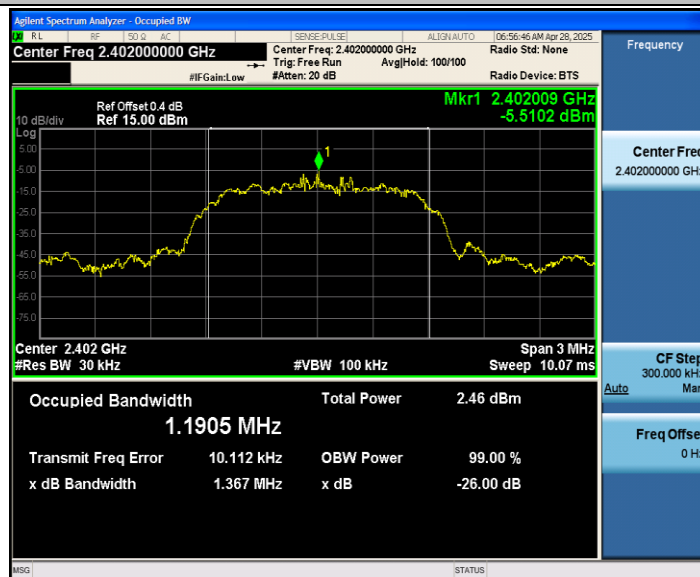
DH5_Ant1_2441



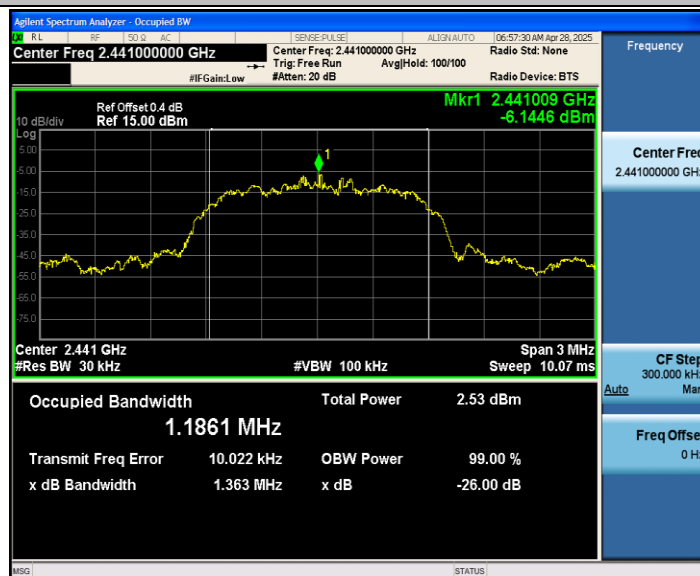
DH5_Ant1_2480



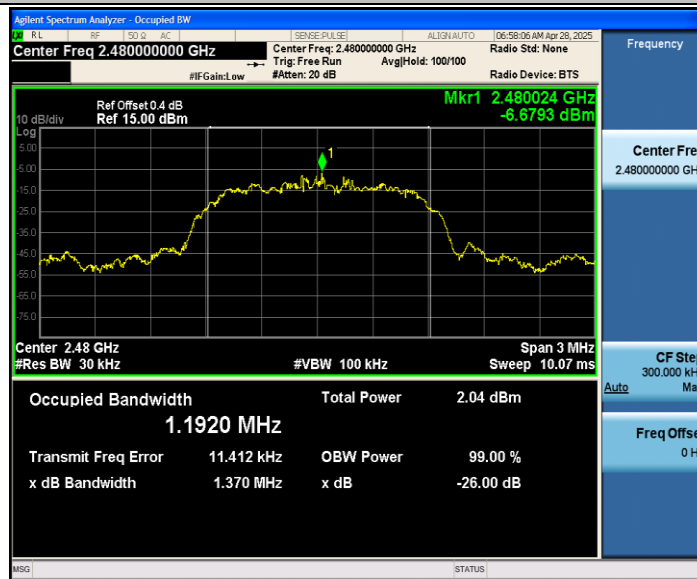
2DH5_Ant1_2402



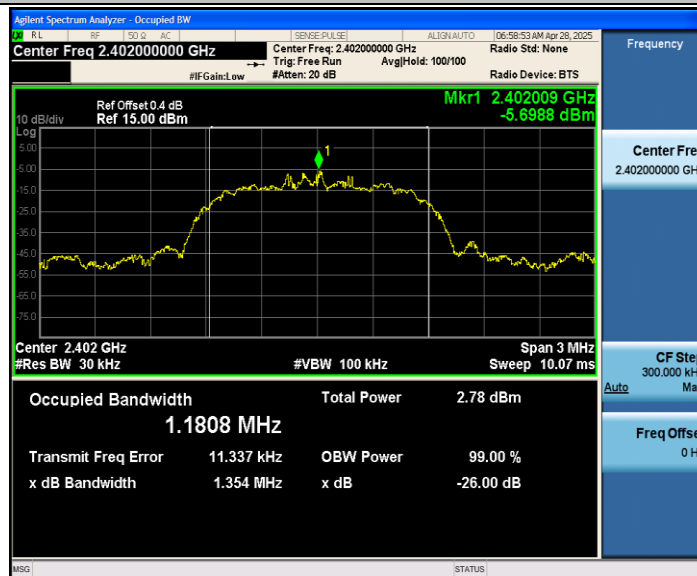
2DH5_Ant1_2441



2DH5_Ant1_2480



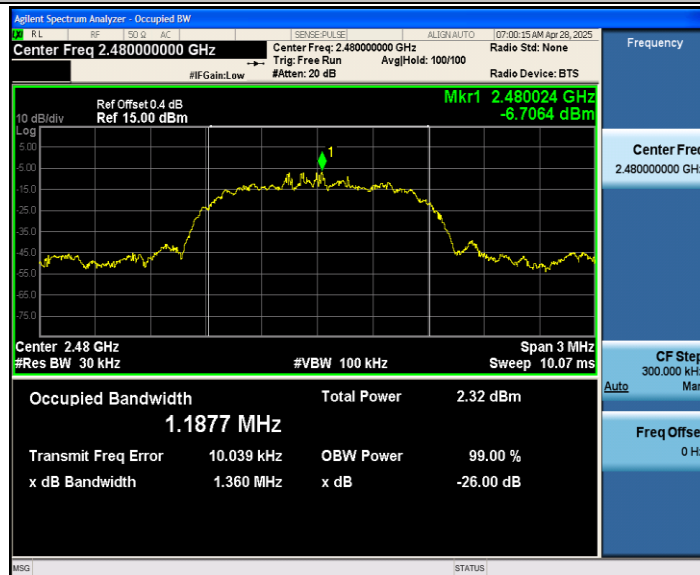
3DH5_Ant1_2402



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	-0.09	≤20.97	PASS
		2441	-0.34	≤20.97	PASS
		2480	-0.43	≤20.97	PASS
2DH5	Ant1	2402	-0.95	≤20.97	PASS
		2441	-1.15	≤20.97	PASS
		2480	-1.22	≤20.97	PASS
3DH5	Ant1	2402	-0.51	≤20.97	PASS
		2441	-0.75	≤20.97	PASS
		2480	-0.82	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥ 0.948	PASS
2DH5	Ant1	Hop	1.152	≥ 0.878	PASS
3DH5	Ant1	Hop	1.064	≥ 0.876	PASS

Test Graphs



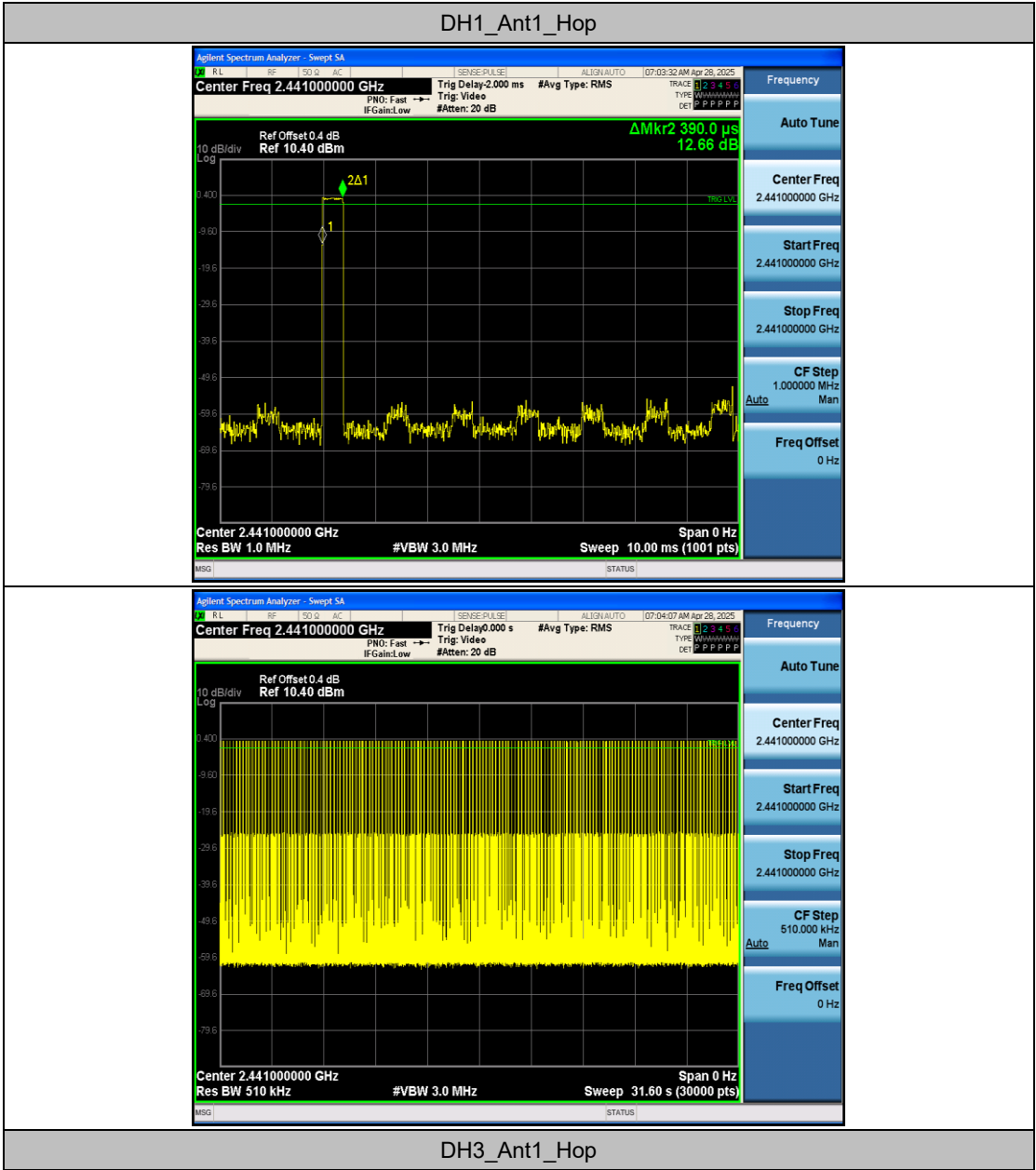


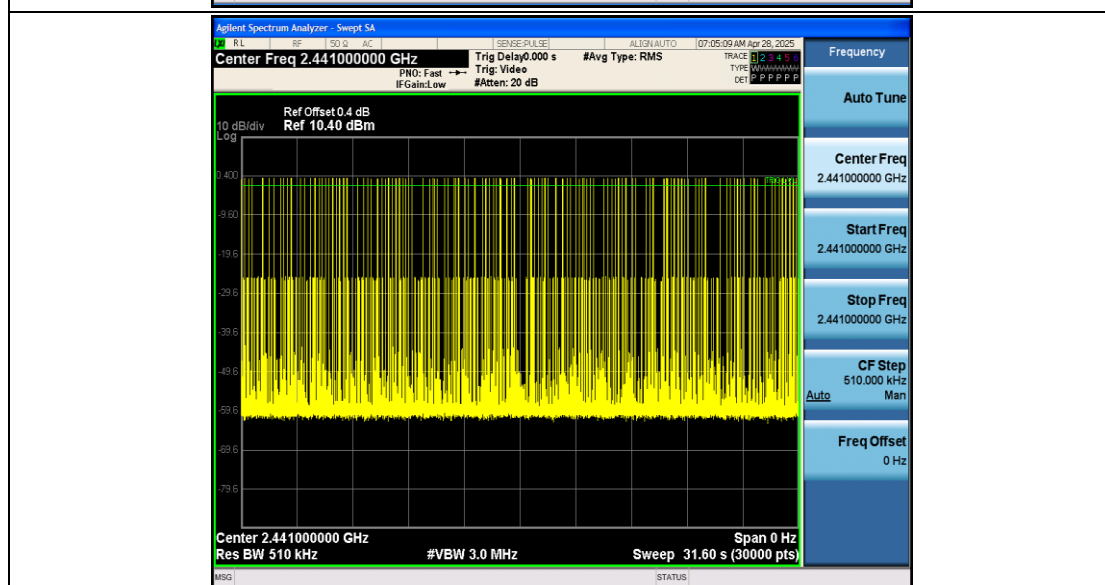
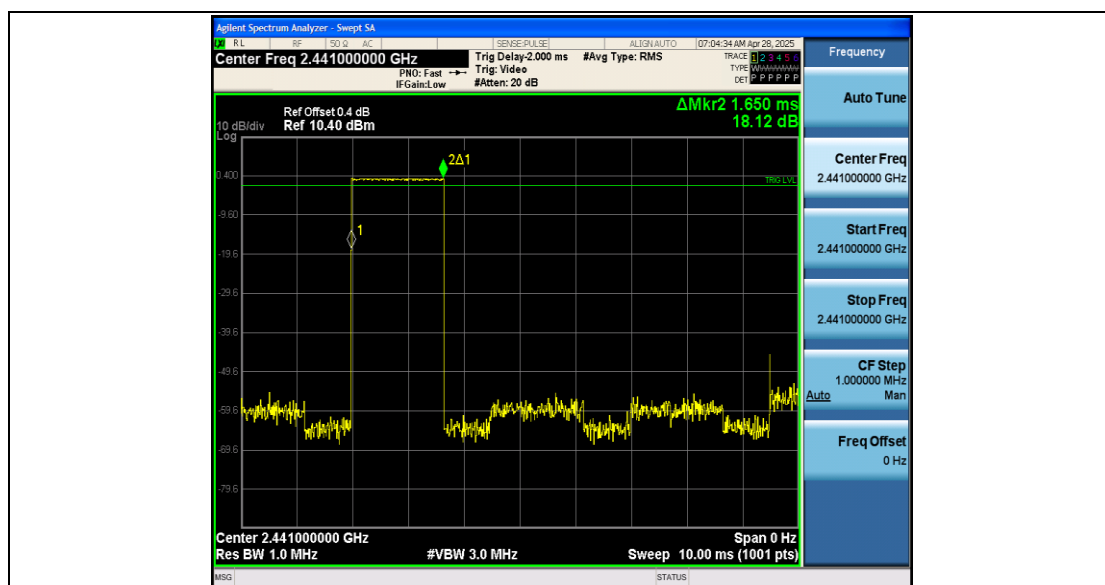
Appendix E: Time of occupancy

Test Result

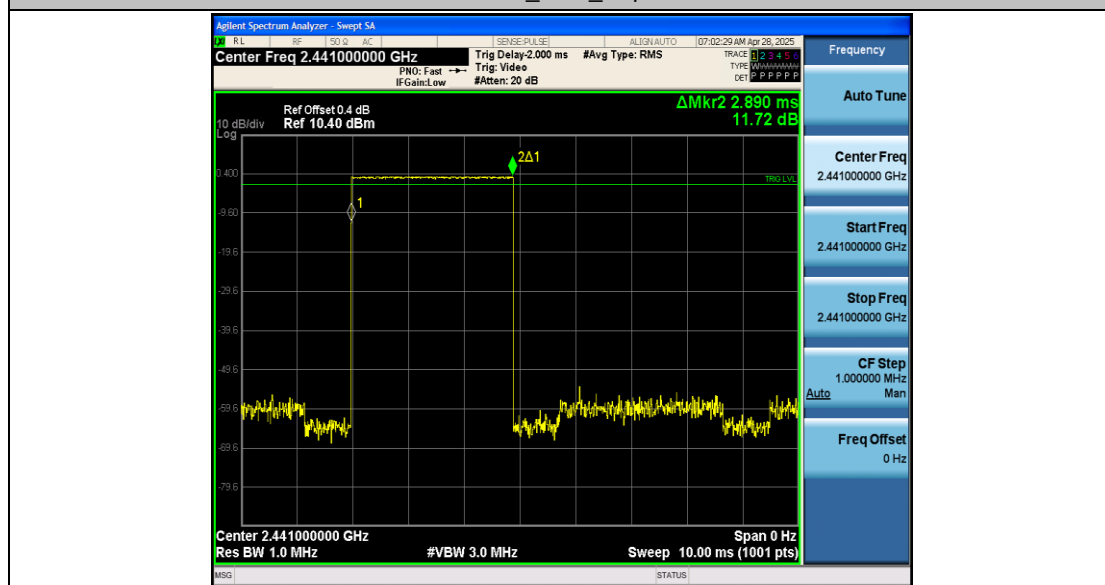
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.650	157	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.890	122	0.353	≤0.4	PASS
2DH1	Ant1	Hop	0.390	316	0.123	≤0.4	PASS
2DH3	Ant1	Hop	1.650	156	0.257	≤0.4	PASS
2DH5	Ant1	Hop	2.900	104	0.302	≤0.4	PASS
3DH1	Ant1	Hop	0.400	319	0.128	≤0.4	PASS
3DH3	Ant1	Hop	1.650	157	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.900	116	0.336	≤0.4	PASS

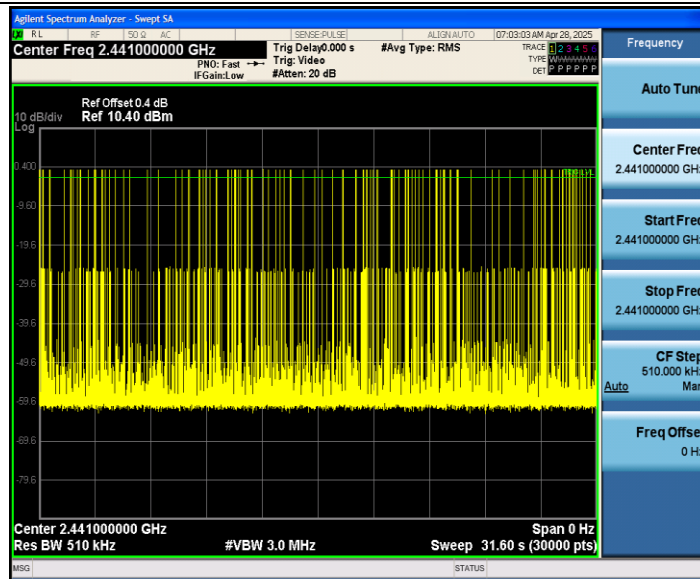
Test Graphs



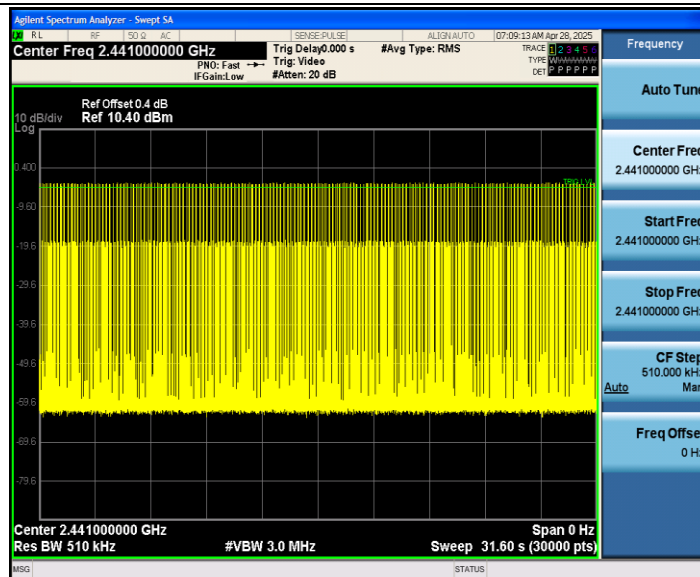
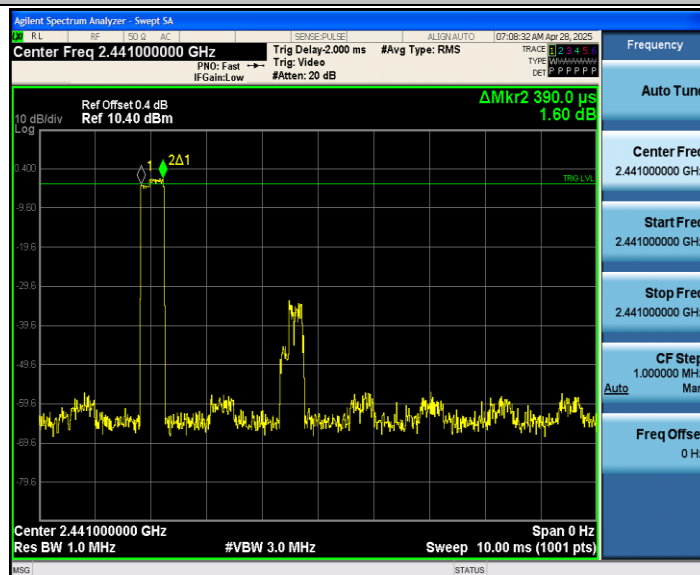


DH5_Ant1_Hop

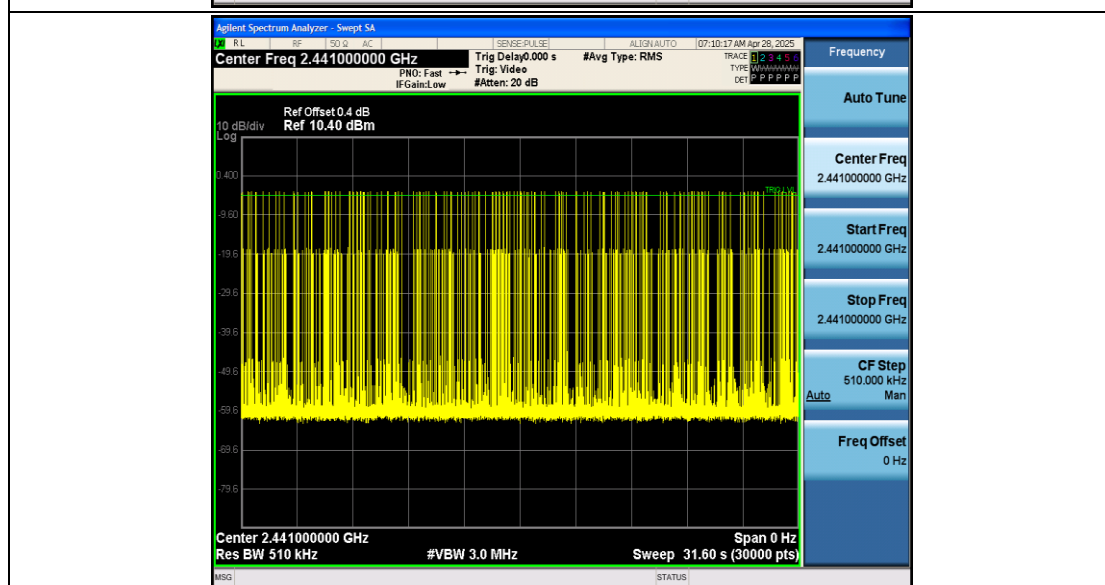
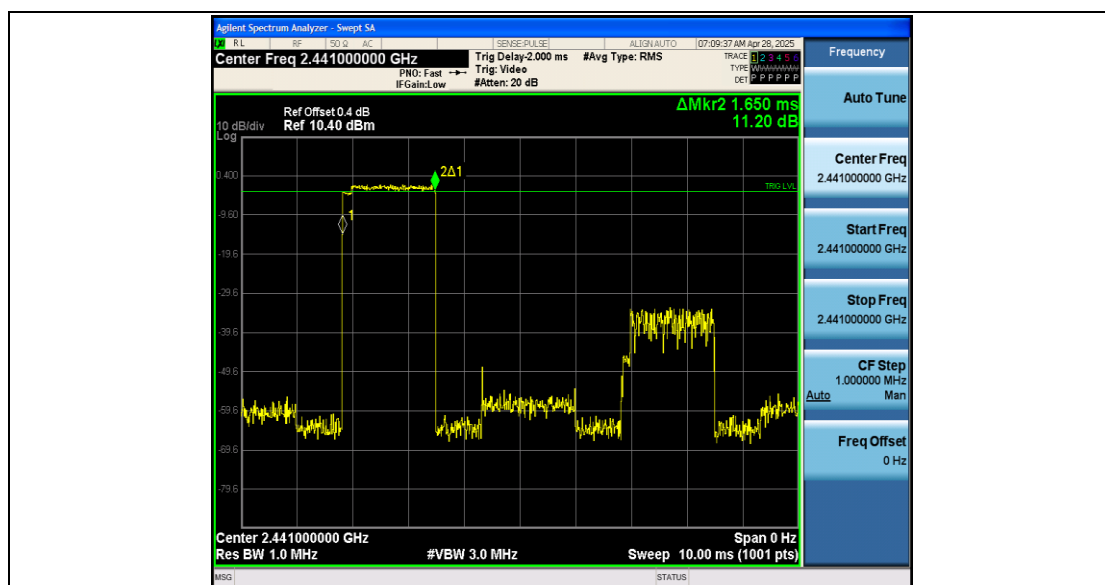




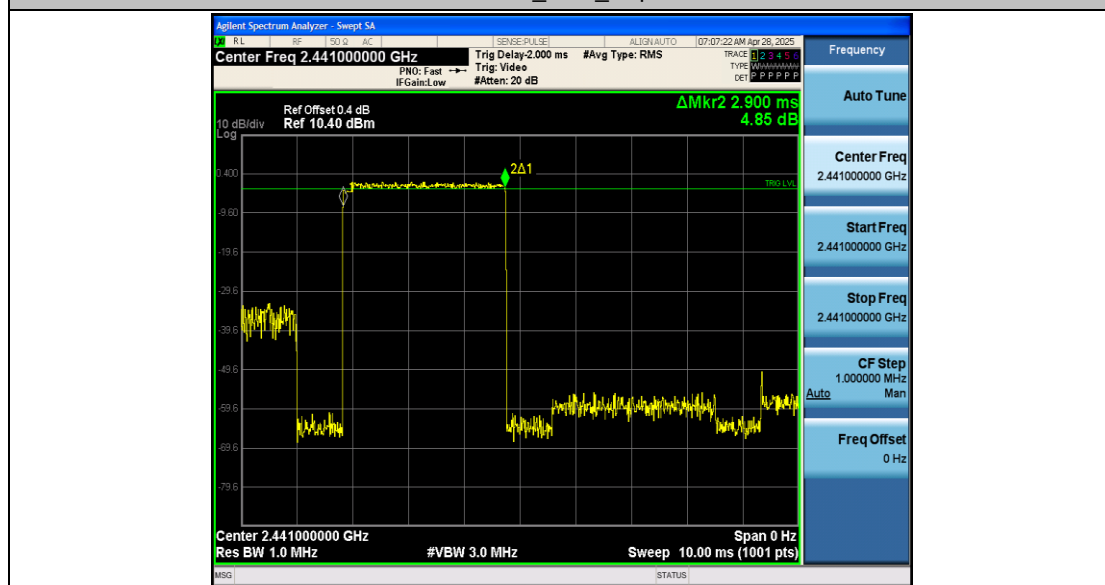
2DH1_Ant1_Hop

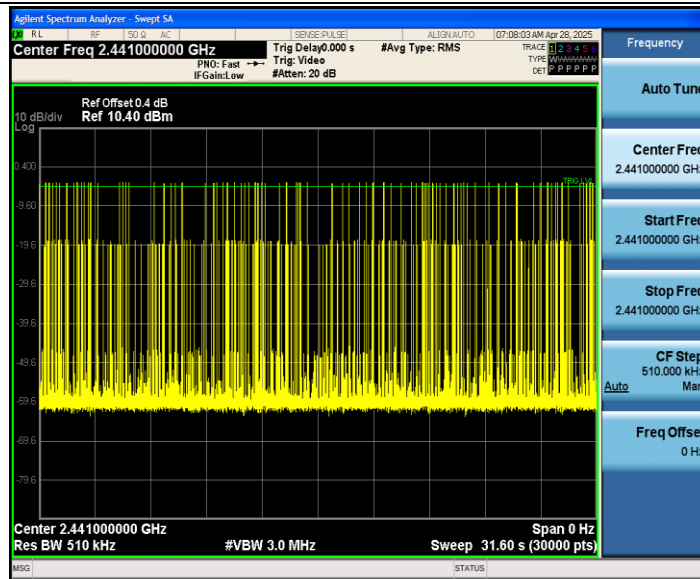


2DH3_Ant1_Hop

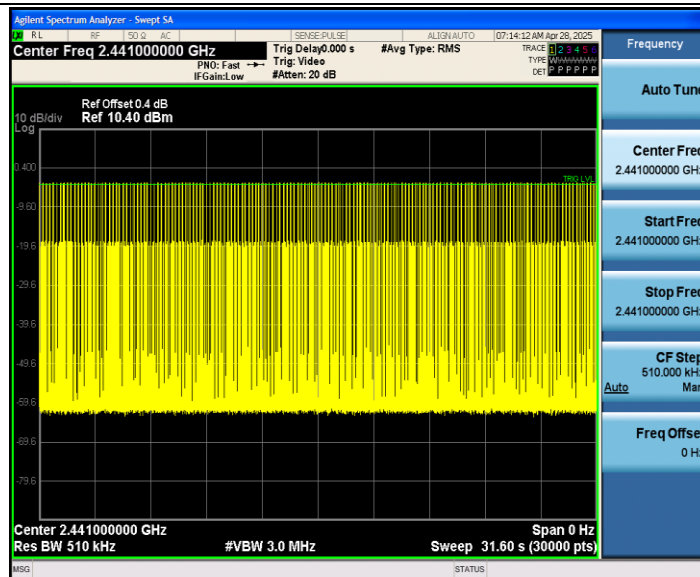
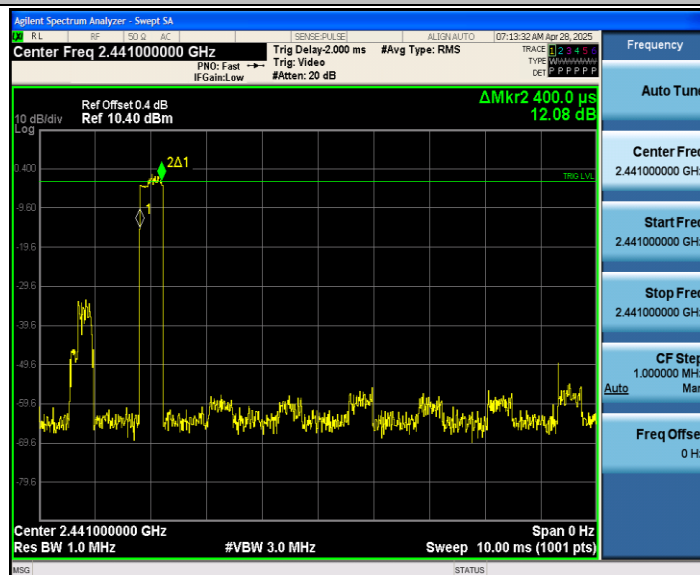


2DH5_Ant1_Hop

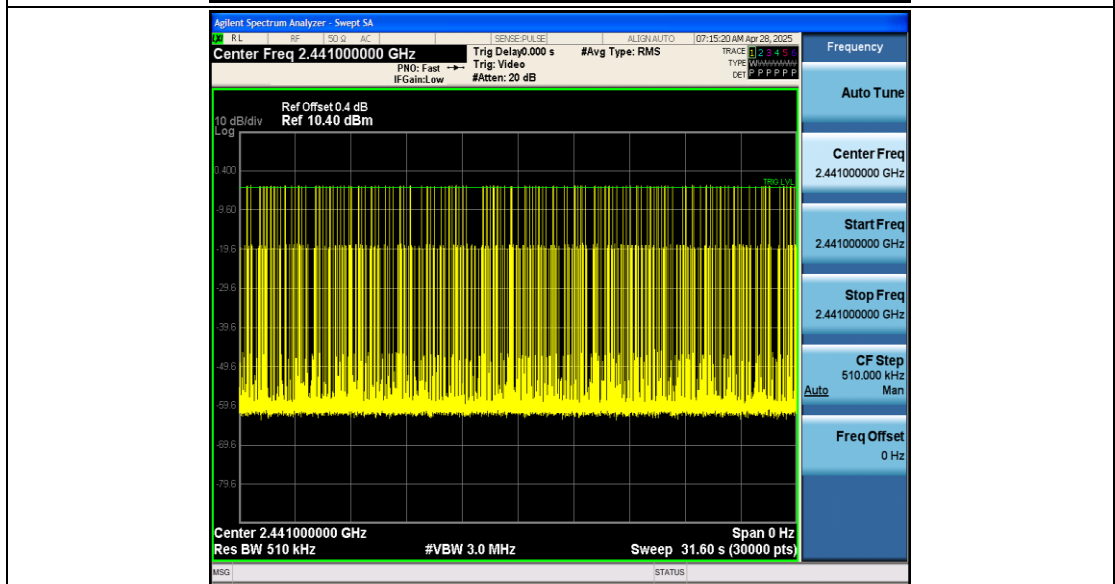
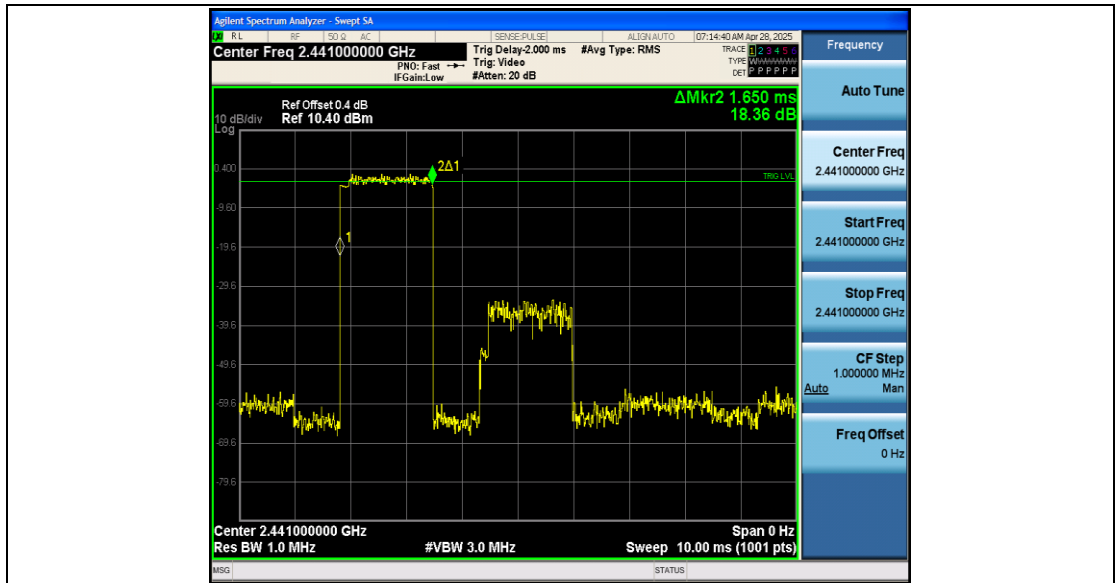




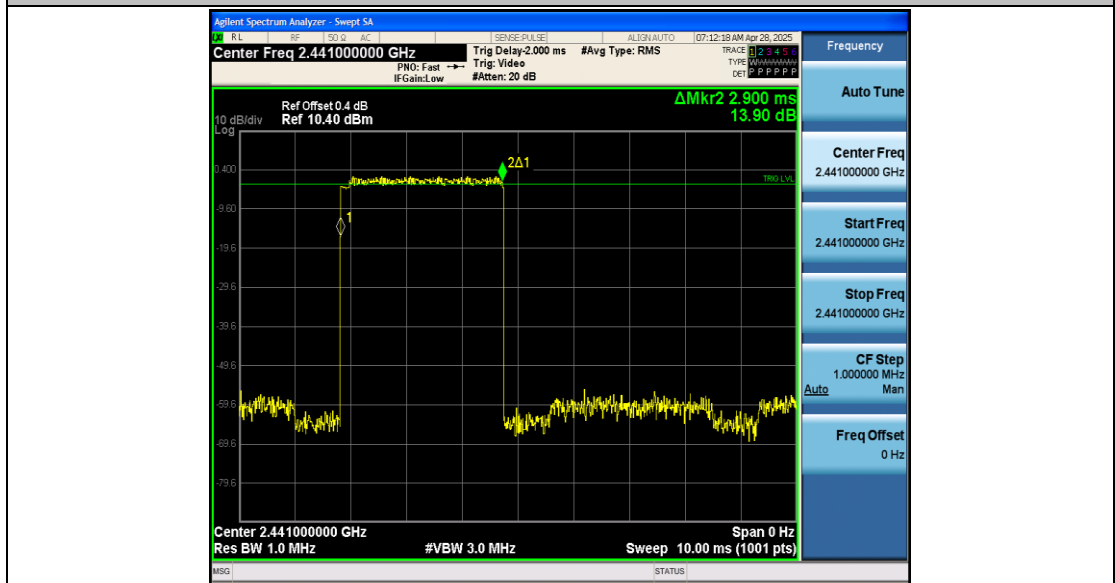
3DH1_Ant1_Hop

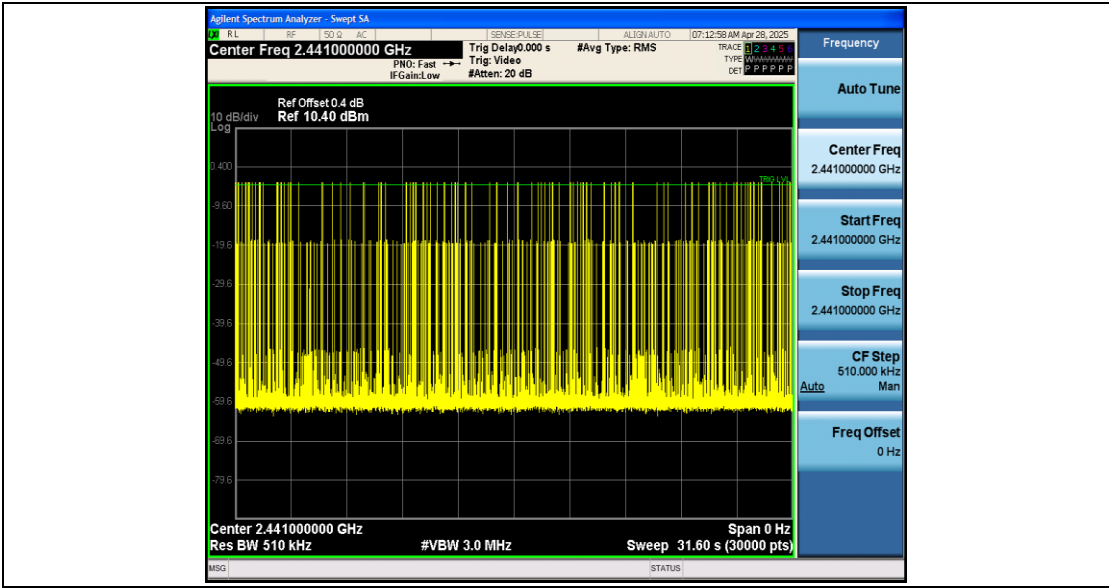


3DH3_Ant1_Hop



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

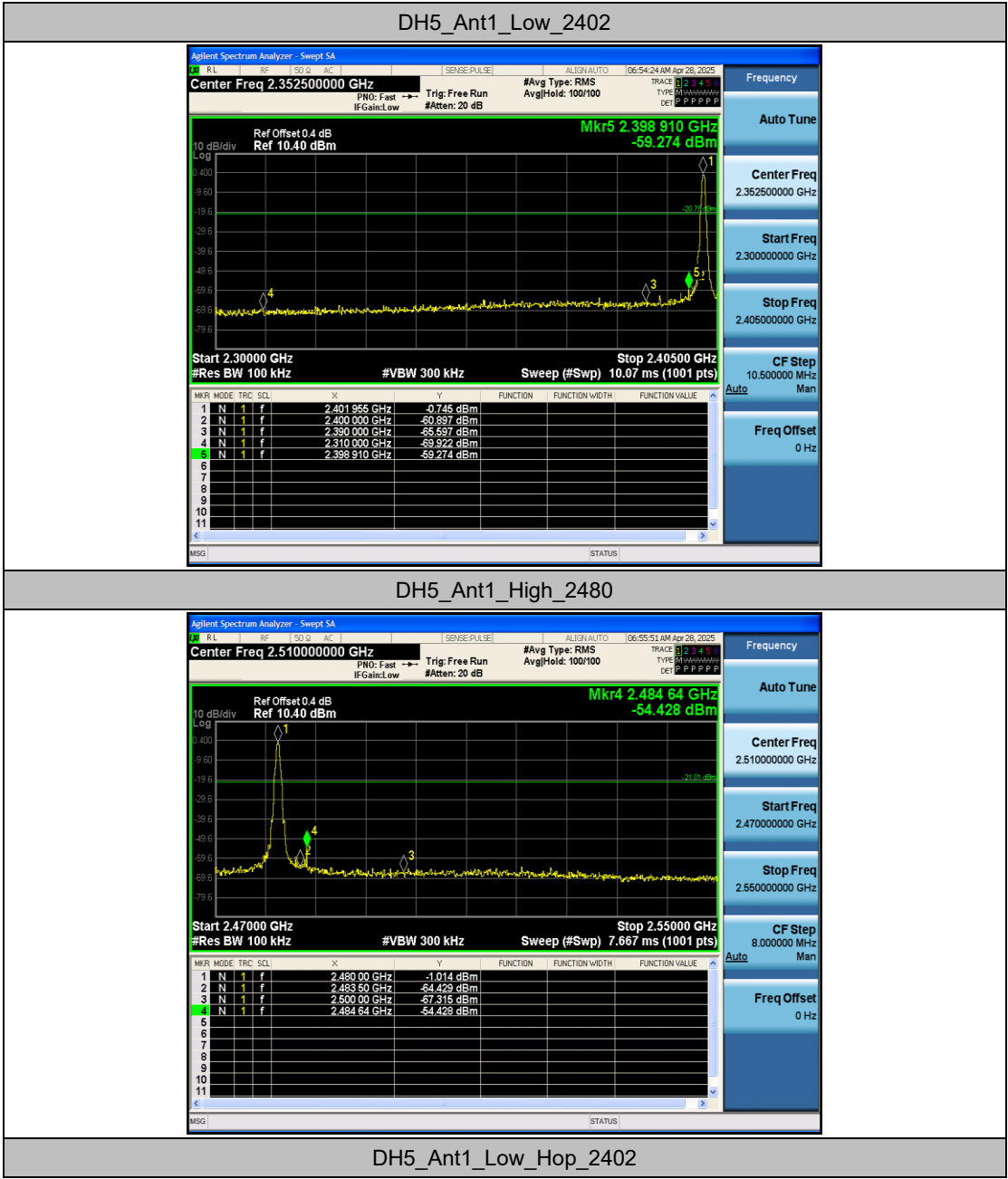


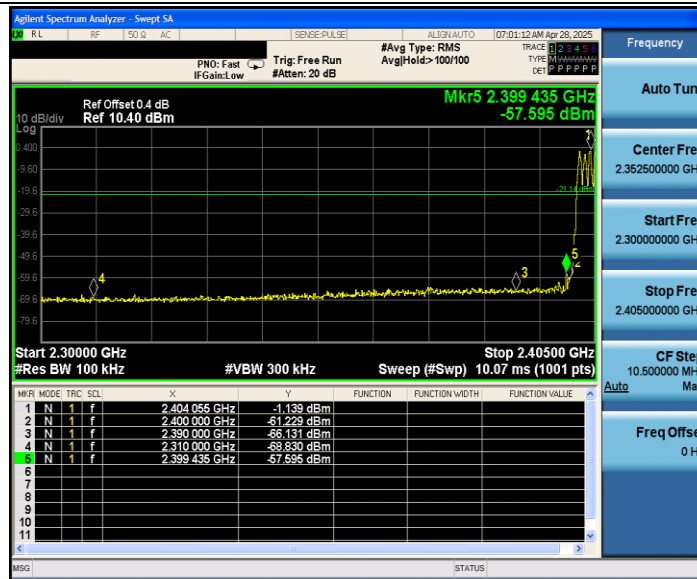
Appendix G: Band edge measurements

Test Result

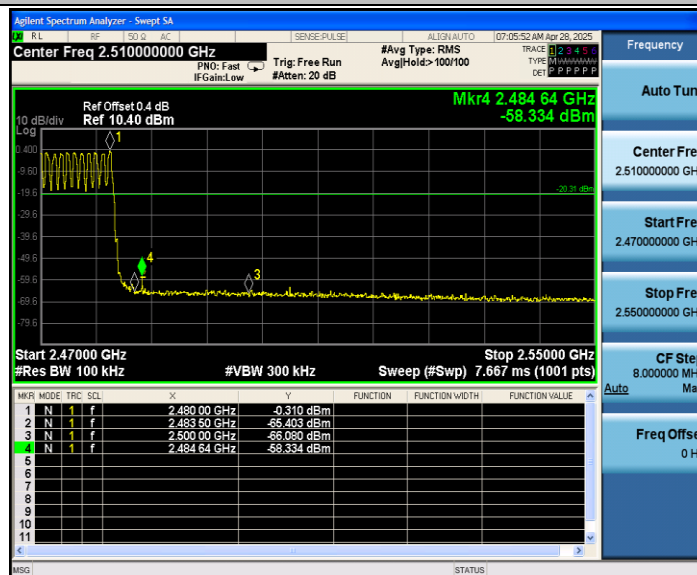
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.75	-59.27	≤-20.75	PASS
		High	2480	-1.01	-54.43	≤-21.01	PASS
		Low	Hop_2402	-1.14	-57.6	≤-21.14	PASS
		High	Hop_2480	-0.31	-58.33	≤-20.31	PASS
2DH5	Ant1	Low	2402	-3.53	-61.21	≤-23.53	PASS
		High	2480	-5.01	-55.68	≤-25.01	PASS
		Low	Hop_2402	-6.52	-63.68	≤-26.52	PASS
		High	Hop_2480	-5.10	-56.22	≤-25.1	PASS
3DH5	Ant1	Low	2402	-4.96	-60.74	≤-24.96	PASS
		High	2480	-4.03	-64	≤-24.03	PASS
		Low	Hop_2402	-5.25	-61.5	≤-25.25	PASS
		High	Hop_2480	-4.03	-62.72	≤-24.03	PASS

Test Graphs

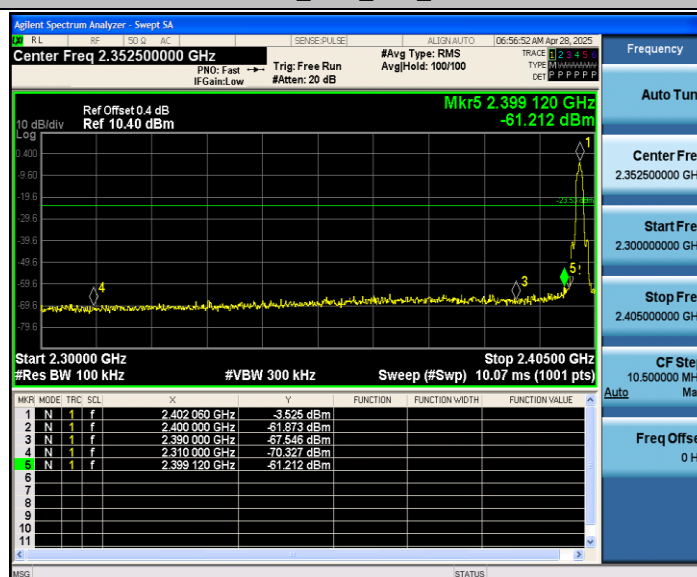




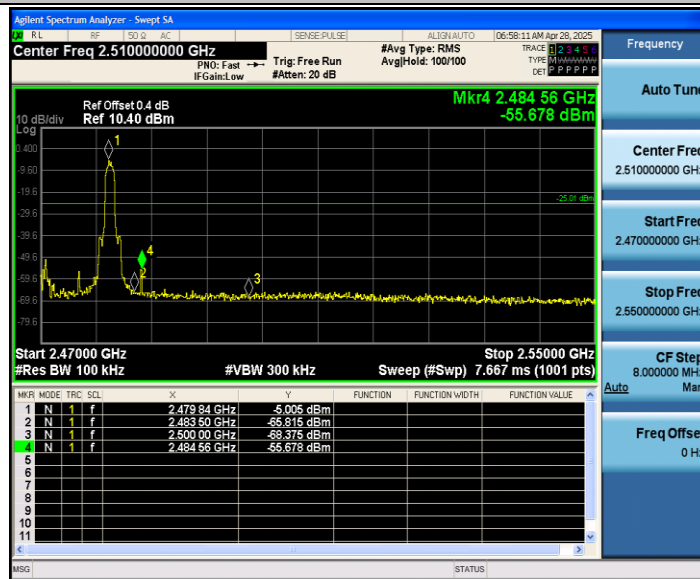
DH5_Ant1_High_Hop_2480



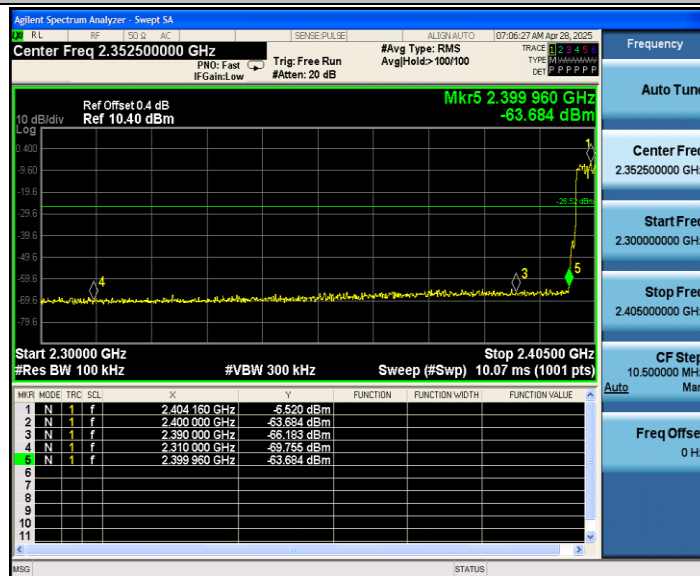
2DH5_Ant1_Low_2402



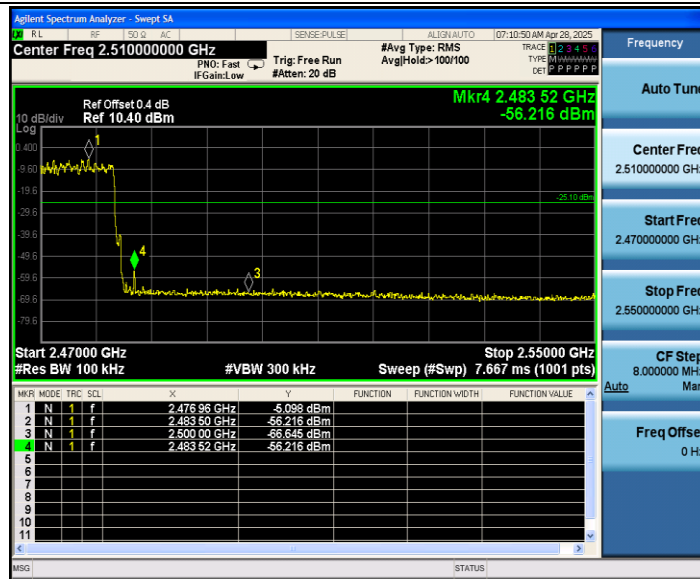
2DH5_Ant1_High_2480



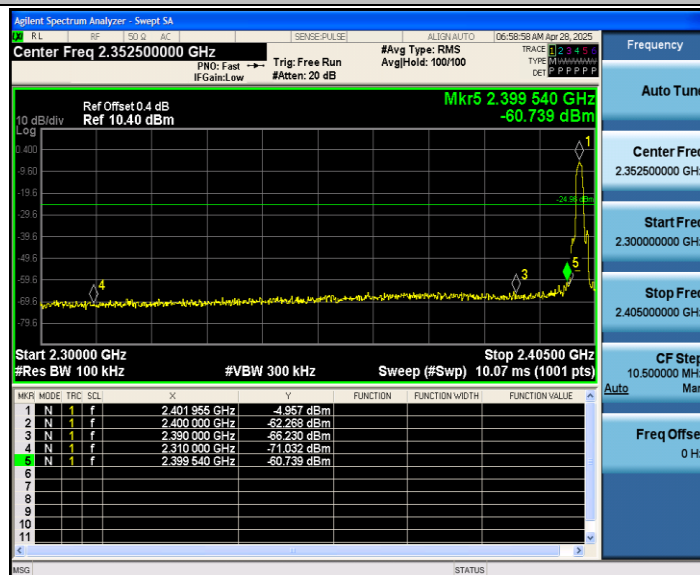
2DH5_Ant1_Low_Hop_2402



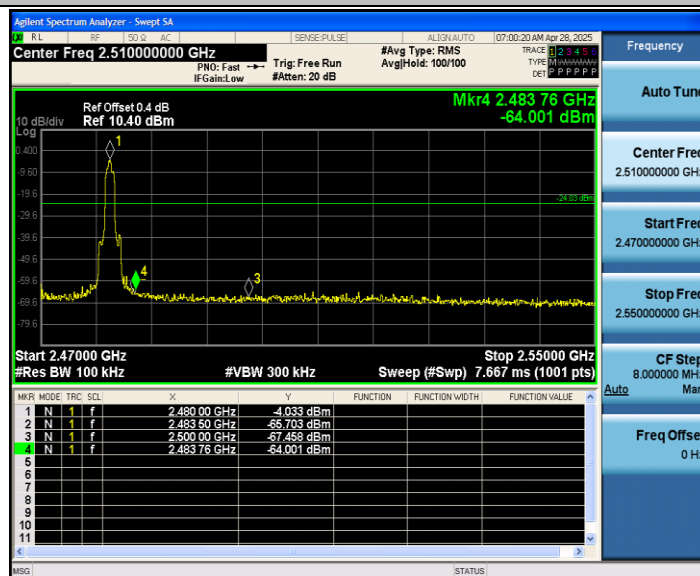
2DH5_Ant1_High_Hop_2480



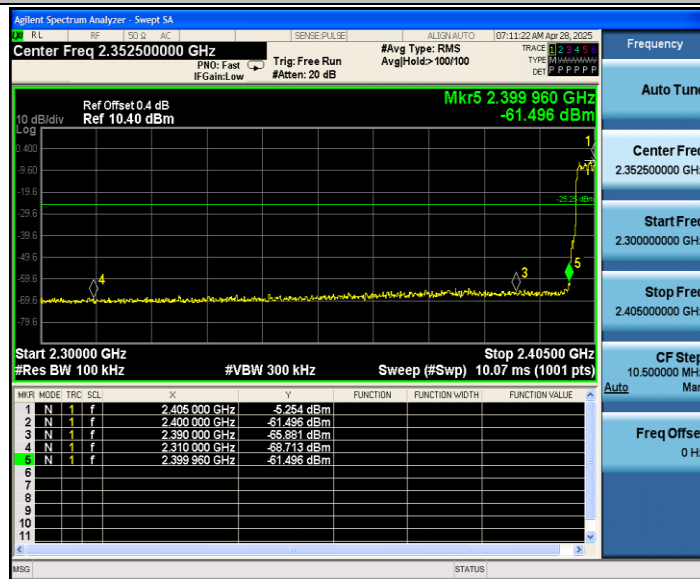
3DH5_Ant1_Low_2402



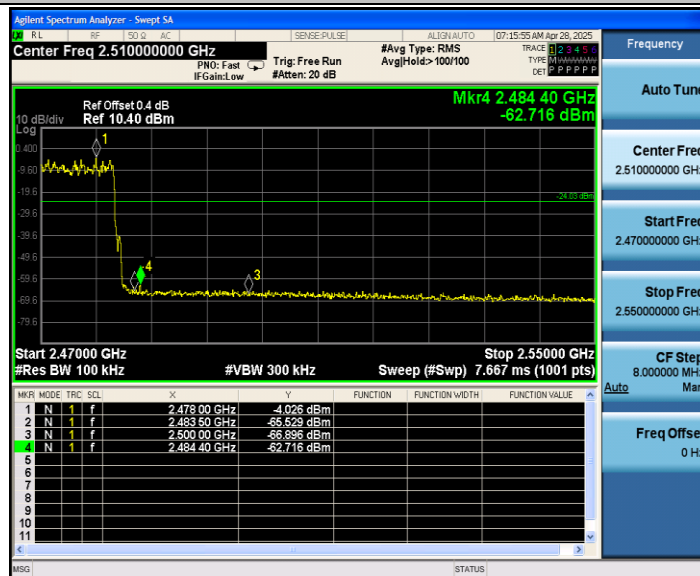
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

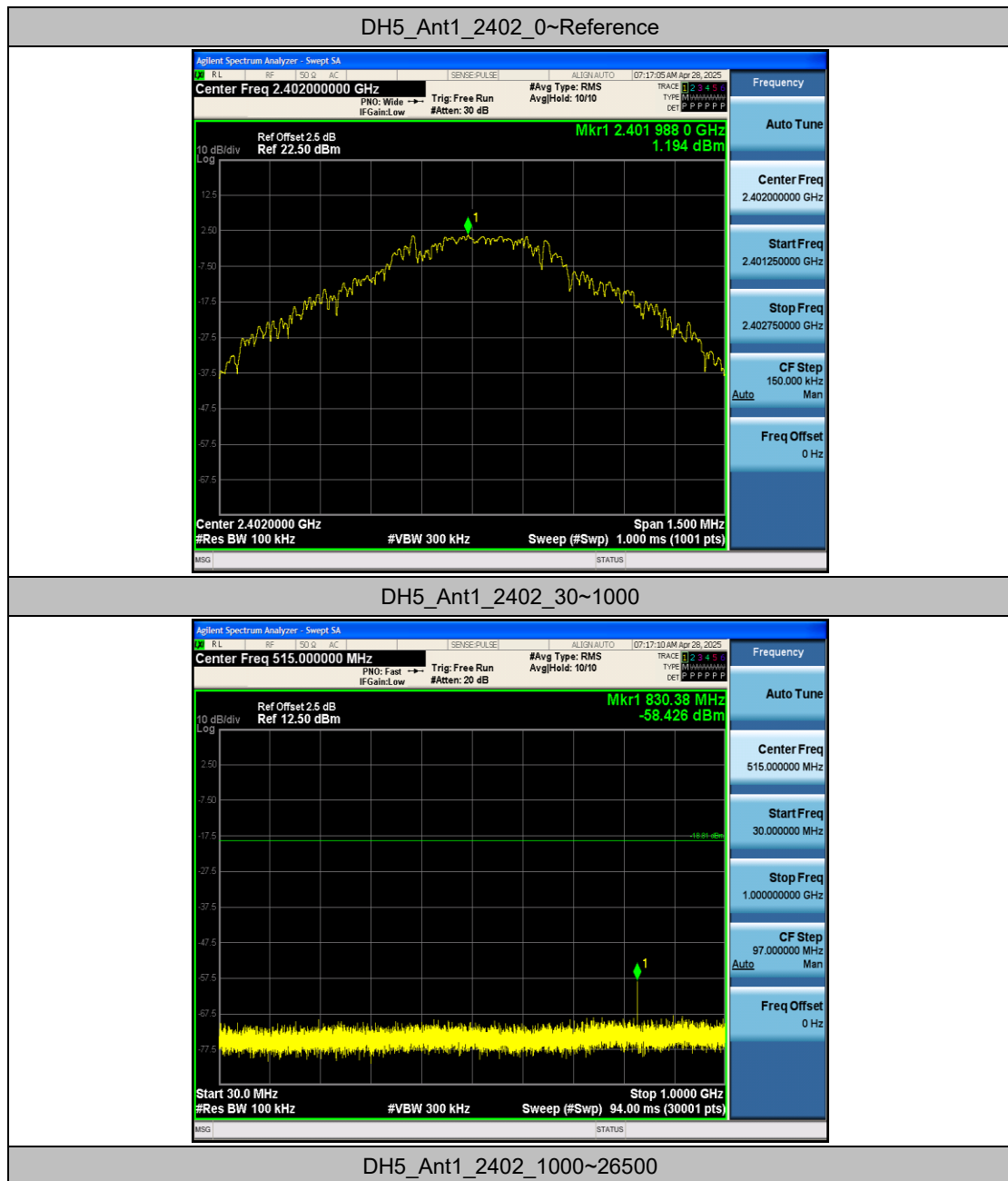


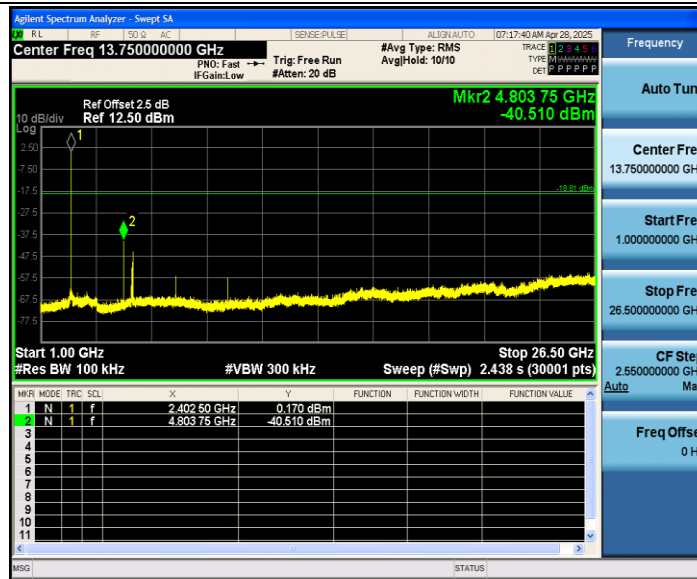
Appendix H: Conducted Spurious Emission

Test Result

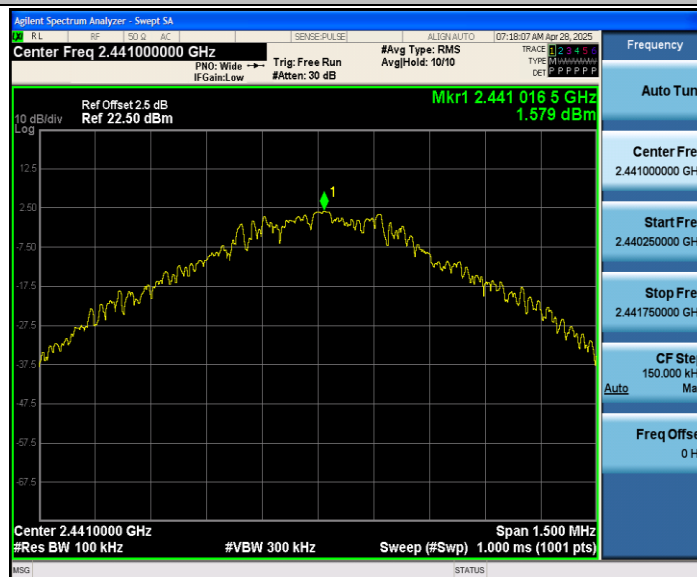
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.19	1.19	---	PASS
			30~1000	1.19	-58.43	≤-18.81	PASS
			1000~26500	1.19	-40.51	≤-18.81	PASS
		2441	Reference	1.58	1.58	---	PASS
			30~1000	1.58	-67.89	≤-18.42	PASS
			1000~26500	1.58	-44.12	≤-18.42	PASS
		2480	Reference	0.44	0.44	---	PASS
			30~1000	0.44	-67.69	≤-19.56	PASS
			1000~26500	0.44	-44.49	≤-19.56	PASS
2DH5	Ant1	2402	Reference	-3.75	-3.75	---	PASS
			30~1000	-3.75	-66.98	≤-23.75	PASS
			1000~26500	-3.75	-45.28	≤-23.75	PASS
		2441	Reference	-3.19	-3.19	---	PASS
			30~1000	-3.19	-67.6	≤-23.19	PASS
			1000~26500	-3.19	-46.06	≤-23.19	PASS
		2480	Reference	-4.96	-4.96	---	PASS
			30~1000	-4.96	-68.48	≤-24.96	PASS
			1000~26500	-4.96	-46.31	≤-24.96	PASS
3DH5	Ant1	2402	Reference	-2.14	-2.14	---	PASS
			30~1000	-2.14	-68.12	≤-22.14	PASS
			1000~26500	-2.14	-42.32	≤-22.14	PASS
		2441	Reference	-4.48	-4.48	---	PASS
			30~1000	-4.48	-68.05	≤-24.48	PASS
			1000~26500	-4.48	-44.29	≤-24.48	PASS
		2480	Reference	-3.22	-3.22	---	PASS
			30~1000	-3.22	-67.83	≤-23.22	PASS
			1000~26500	-3.22	-49.28	≤-23.22	PASS

Test Graphs

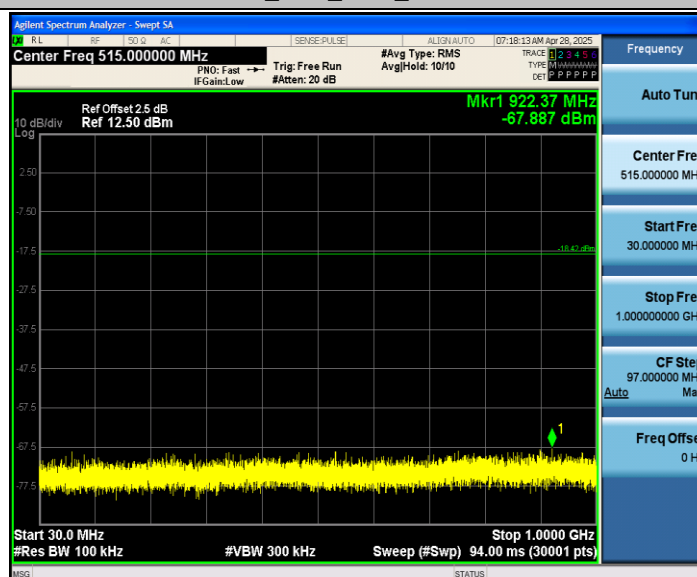




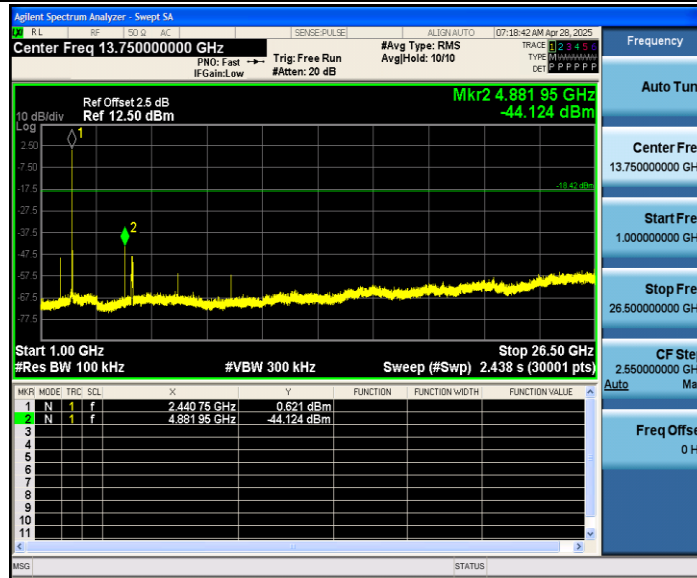
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



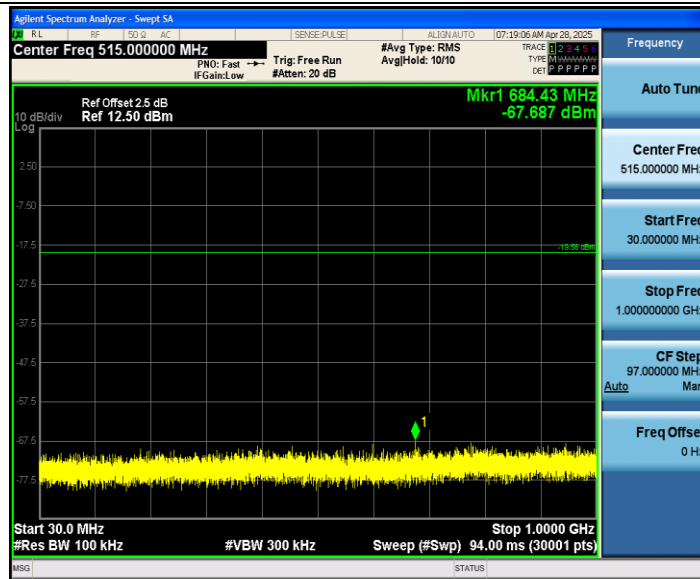
DH5_Ant1_2441_1000~26500



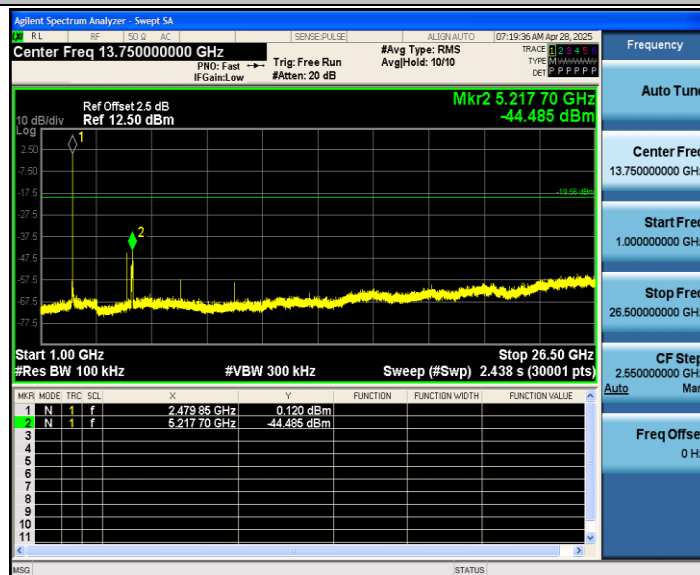
DH5_Ant1_2480_0~Reference



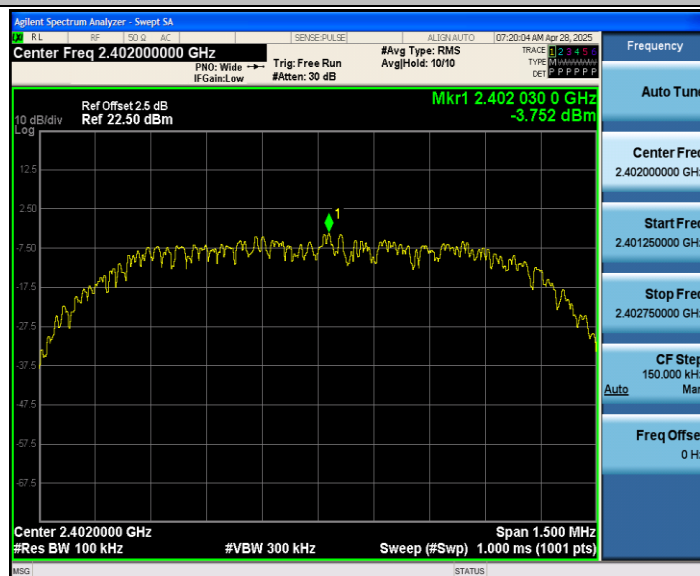
DH5_Ant1_2480_30~1000



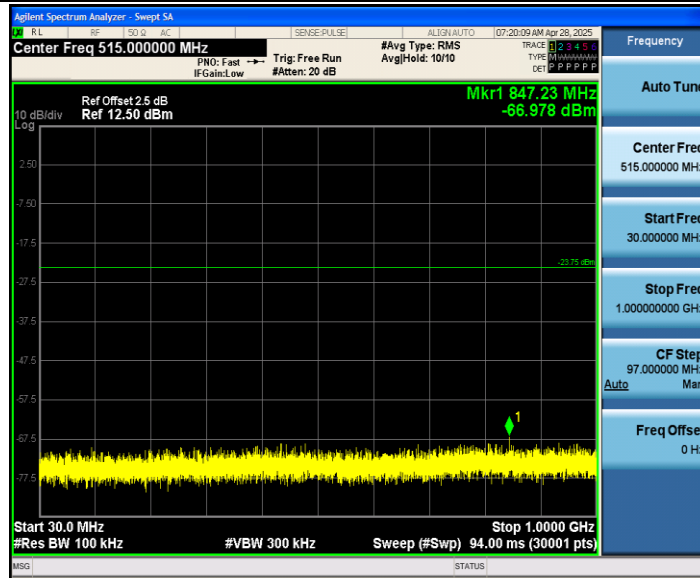
DH5_Ant1_2480_1000~26500



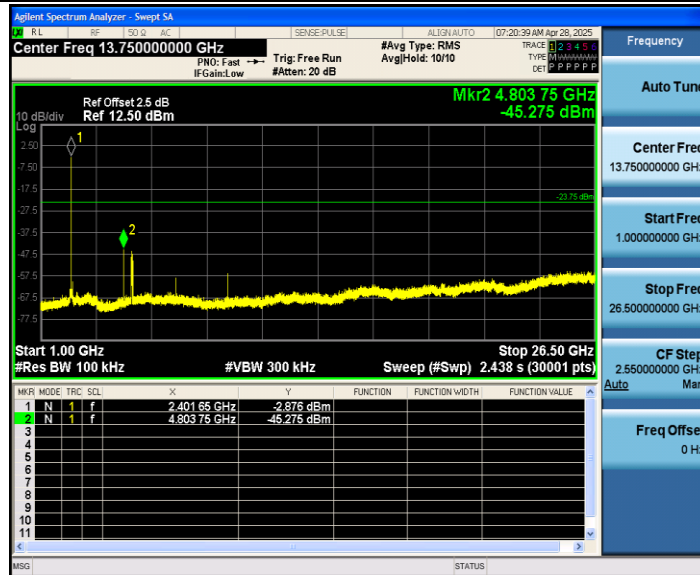
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference