

FCC Appendix RF Test Data for BT

FCC ID : 2AOMX-PBX-1503SM

Company : QFX Inc.

EUT : Battery Speaker

Model Number : PBX-1503SM

Report No. : CTA26051802801

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	0.957	2401.496	2402.453	---	---
		2441	0.933	2440.508	2441.441	---	---
		2480	0.915	2479.508	2480.423	---	---
2DH5	Ant1	2402	1.245	2401.340	2402.585	---	---
		2441	1.230	2440.358	2441.588	---	---
		2480	1.221	2479.340	2480.561	---	---
3DH5	Ant1	2402	1.221	2401.361	2402.582	---	---
		2441	1.251	2440.328	2441.579	---	---
		2480	1.323	2479.304	2480.627	---	---

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

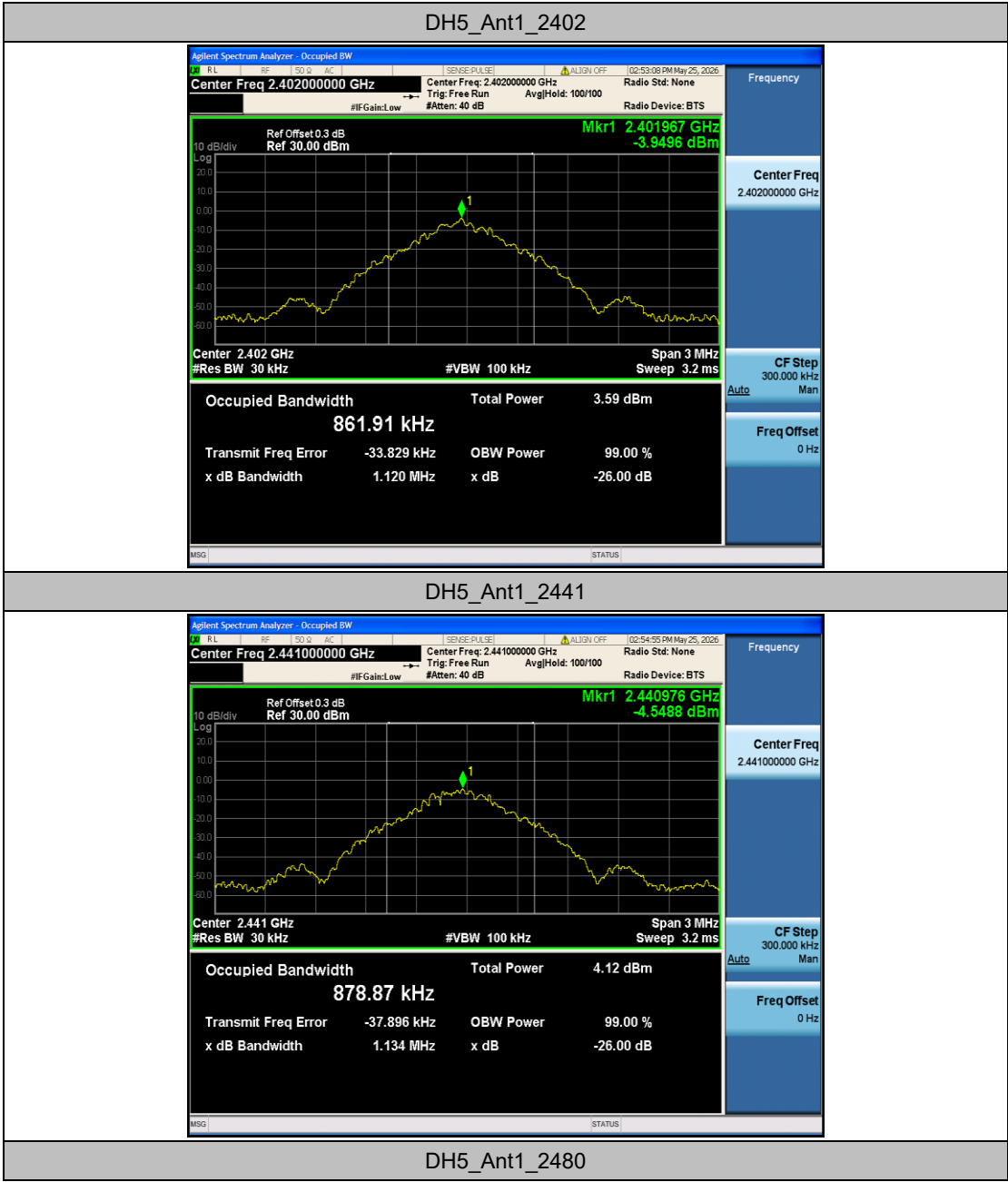


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86191	2401.5352	2402.3971	---	---
		2441	0.87887	2440.5227	2441.4015	---	---
		2480	0.85496	2479.5304	2480.3854	---	---
2DH5	Ant1	2402	1.1787	2401.3718	2402.5505	---	---
		2441	1.1806	2440.3718	2441.5524	---	---
		2480	1.1667	2479.3770	2480.5437	---	---
3DH5	Ant1	2402	1.1696	2401.3821	2402.5517	---	---
		2441	1.1704	2440.3784	2441.5488	---	---
		2480	1.1777	2479.3724	2480.5501	---	---

Test Graphs



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

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-2.64	≤20.97	PASS
		2441	-1.92	≤20.97	PASS
		2480	-1.81	≤20.97	PASS
2DH5	Ant1	2402	-1.96	≤20.97	PASS
		2441	-1.17	≤20.97	PASS
		2480	-1.08	≤20.97	PASS
3DH5	Ant1	2402	-1.42	≤20.97	PASS
		2441	-0.66	≤20.97	PASS
		2480	-0.49	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.024	≥ 0.957	PASS
2DH5	Ant1	Hop	1.032	≥ 0.830	PASS
3DH5	Ant1	Hop	0.978	≥ 0.882	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

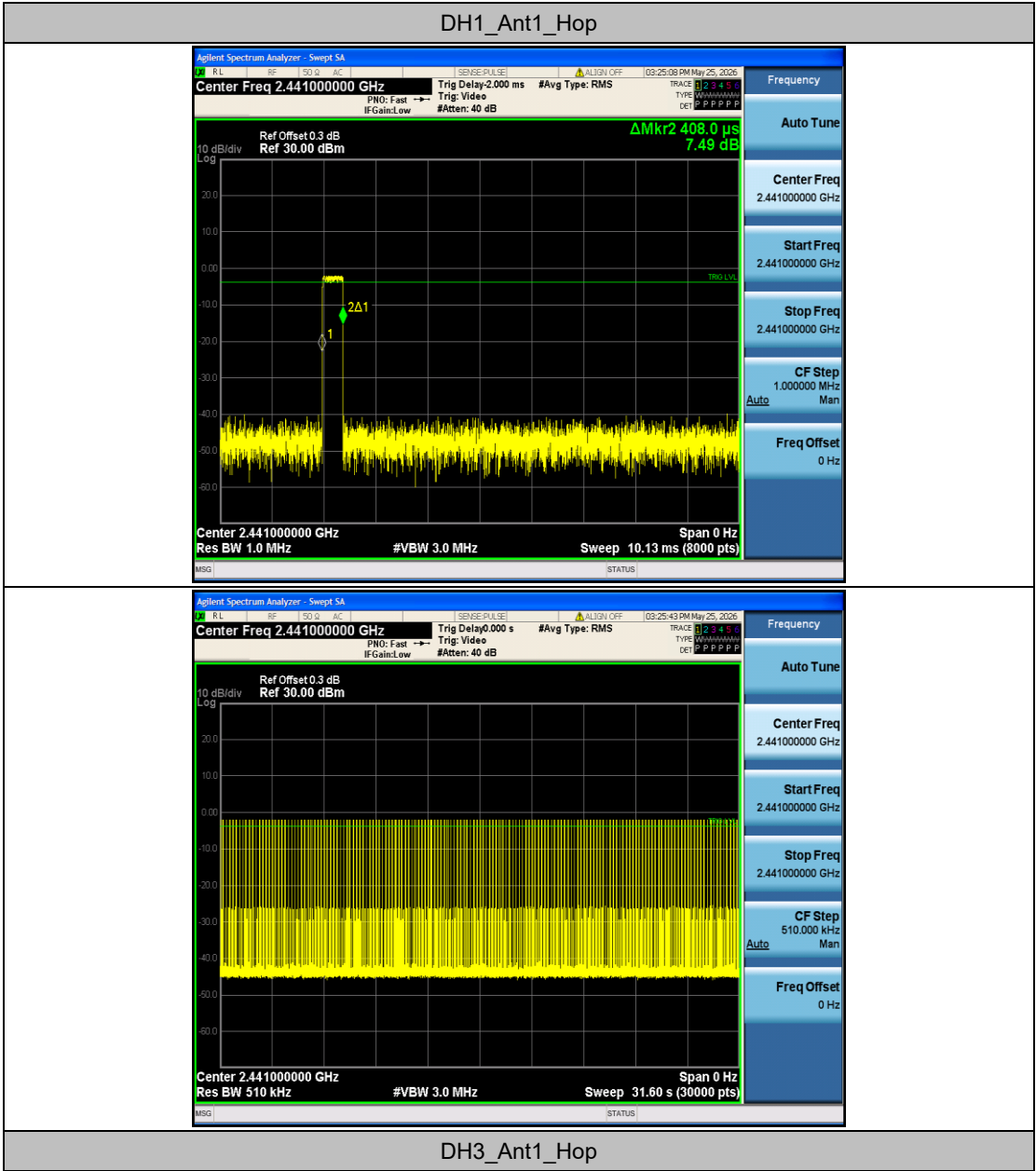


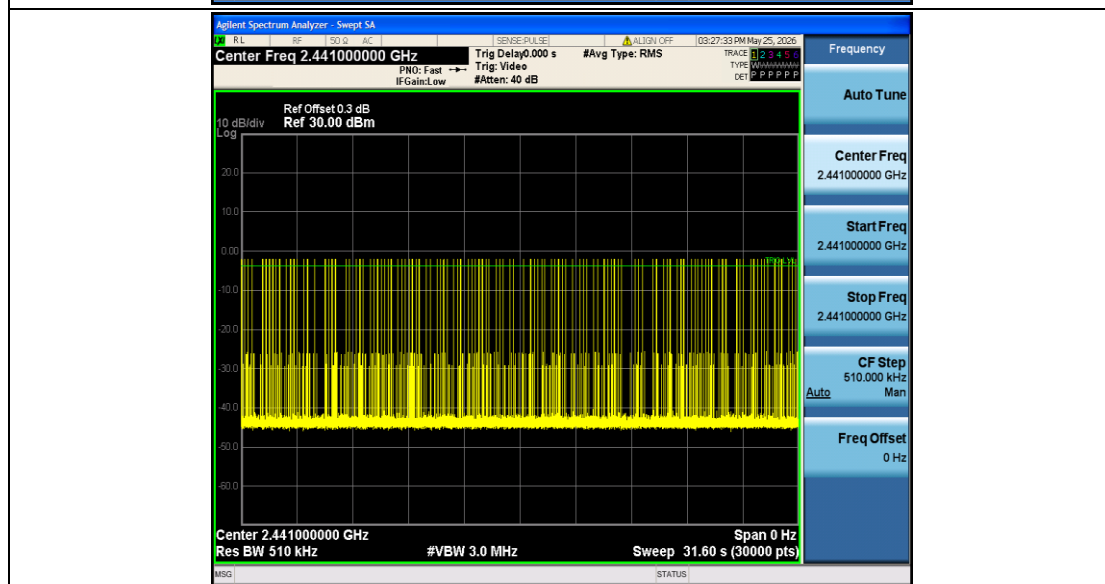
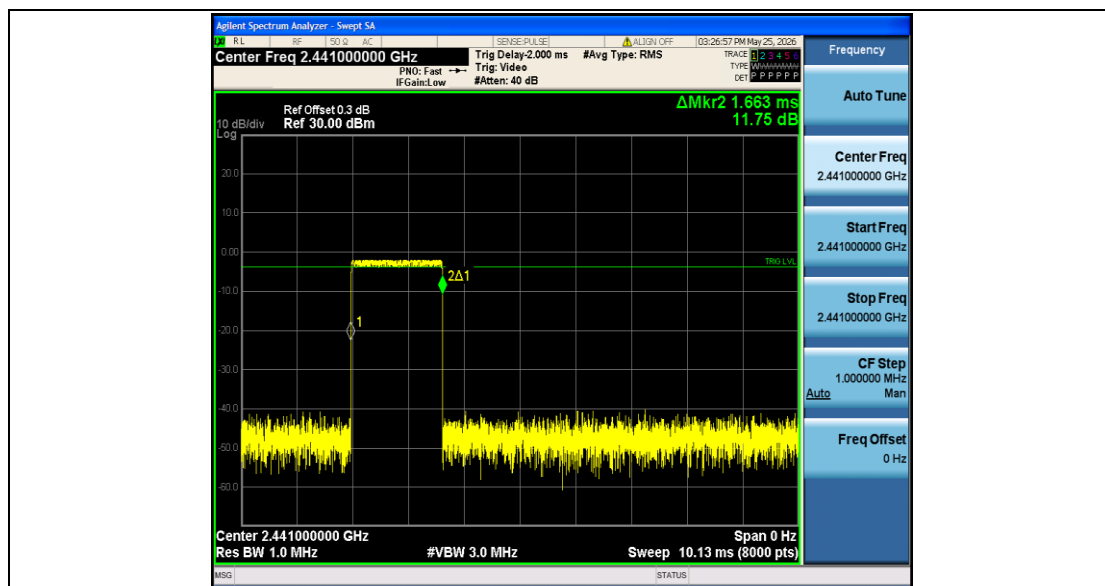
Appendix E: Time of occupancy

Test Result

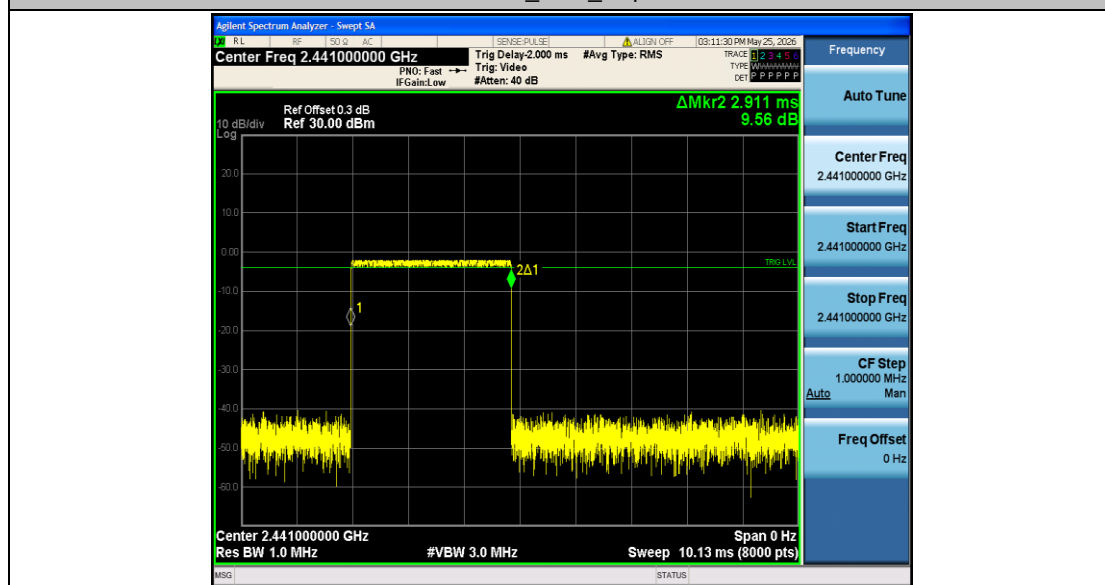
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.408	319	0.13	≤0.4	PASS
DH3	Ant1	Hop	1.663	163	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.911	101	0.294	≤0.4	PASS
2DH1	Ant1	Hop	0.418	319	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.668	163	0.272	≤0.4	PASS
2DH5	Ant1	Hop	2.917	115	0.335	≤0.4	PASS
3DH1	Ant1	Hop	0.419	320	0.134	≤0.4	PASS
3DH3	Ant1	Hop	1.669	161	0.269	≤0.4	PASS
3DH5	Ant1	Hop	2.920	111	0.324	≤0.4	PASS

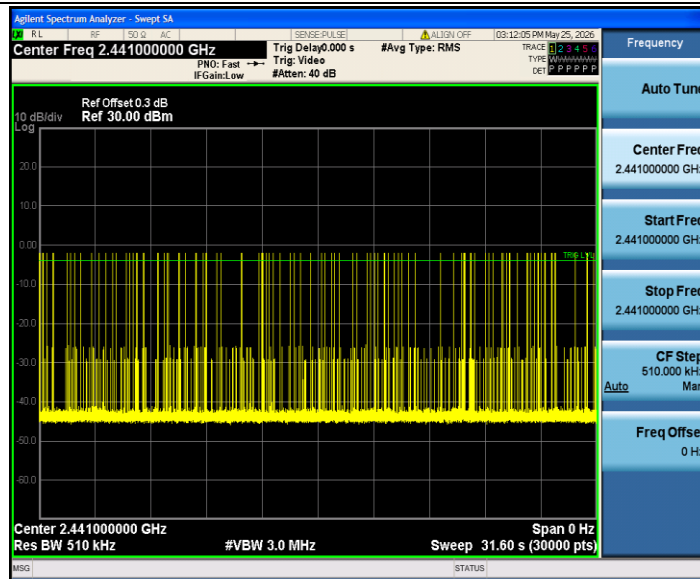
Test Graphs



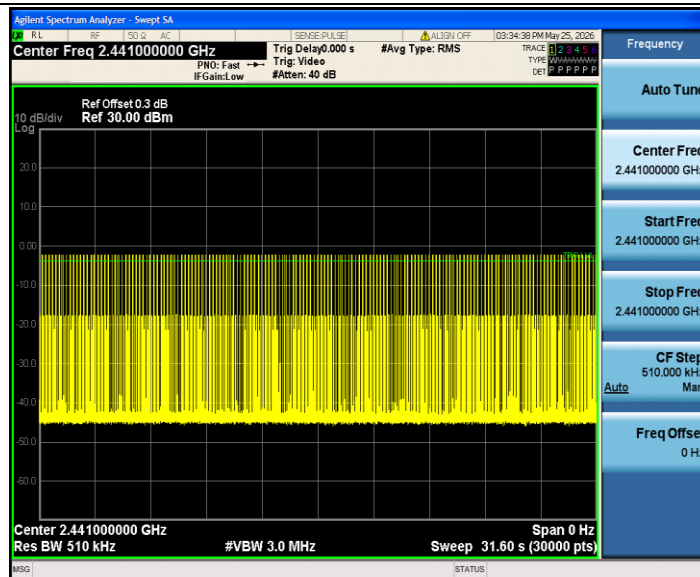
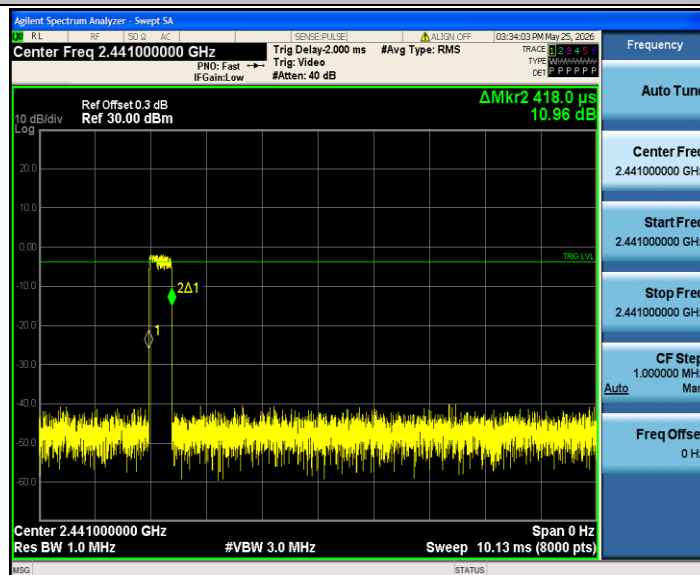


DH5_Ant1_Hop

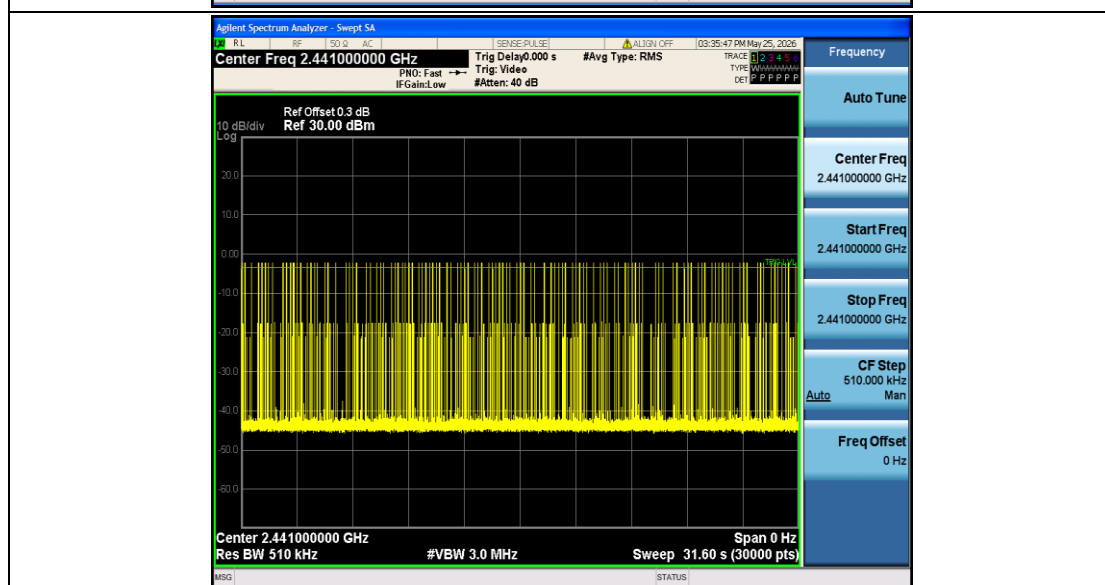
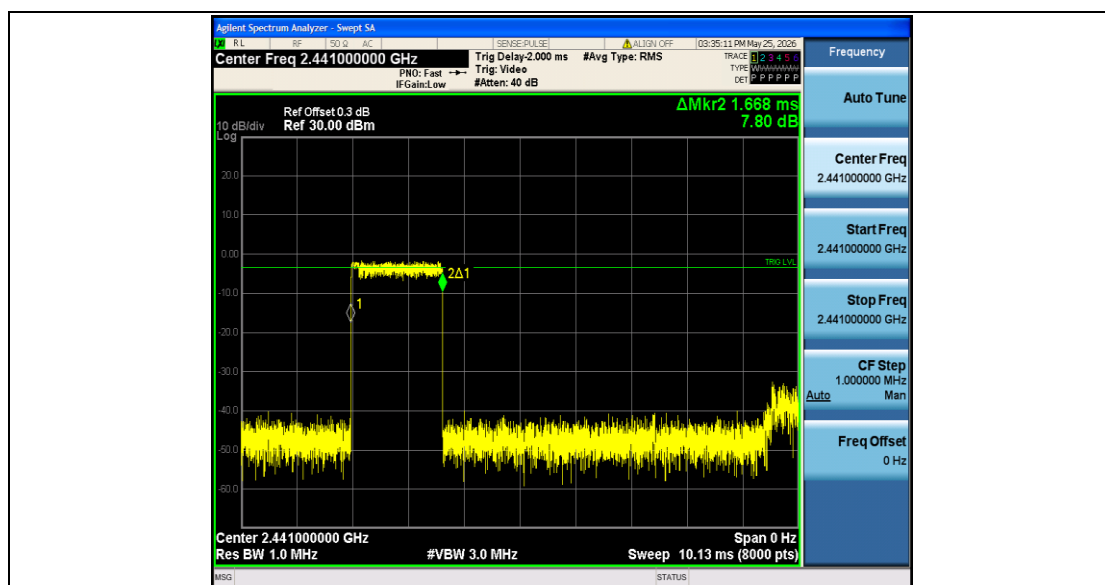




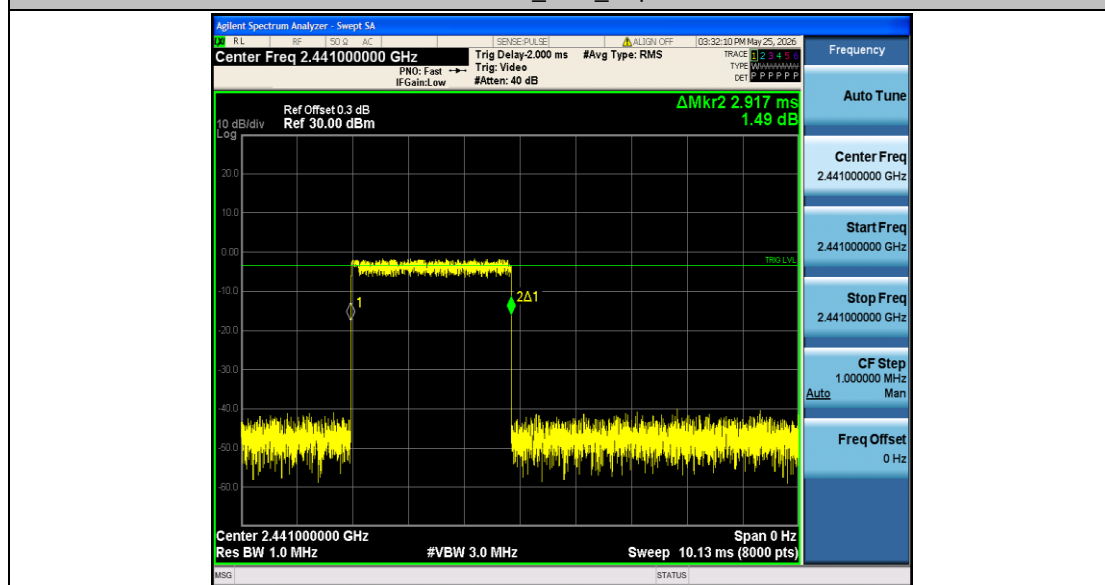
2DH1_Ant1_Hop

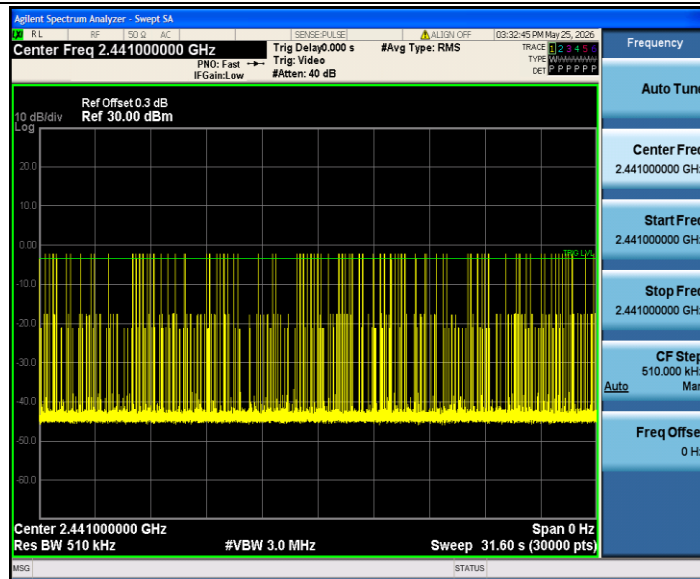


2DH3_Ant1_Hop

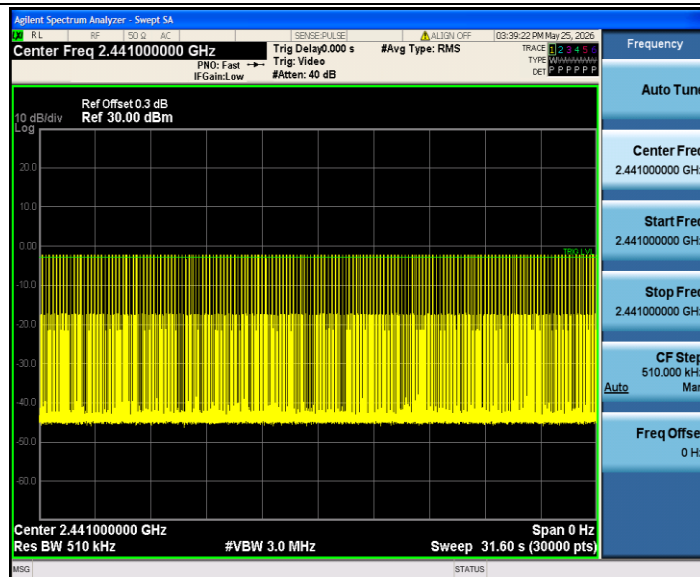
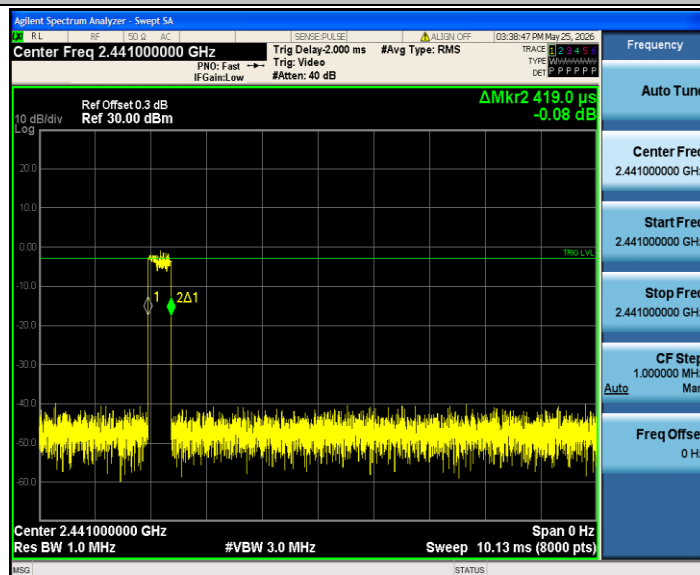


2DH5_Ant1_Hop

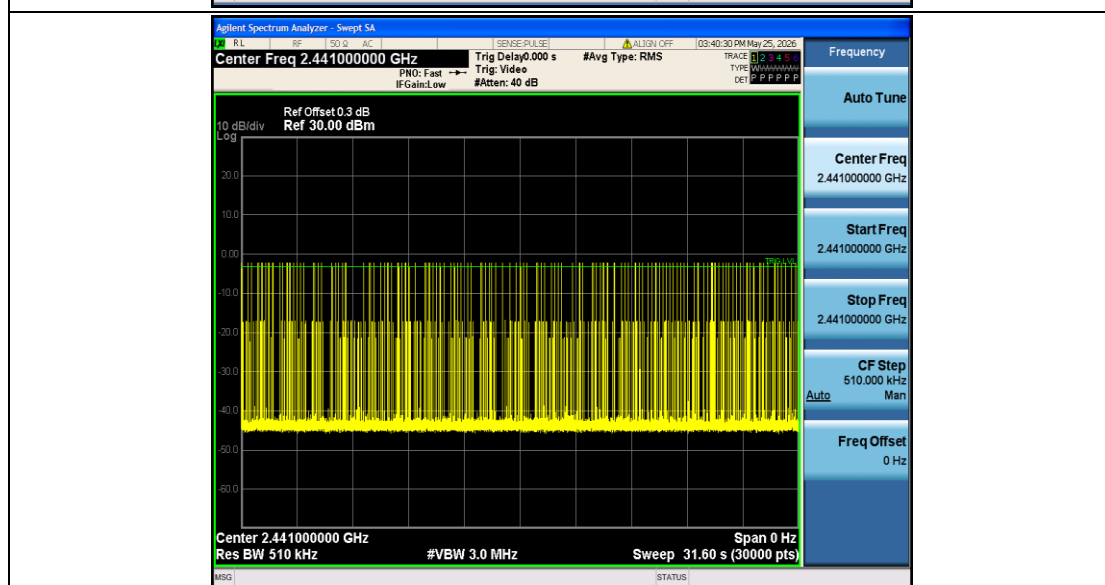
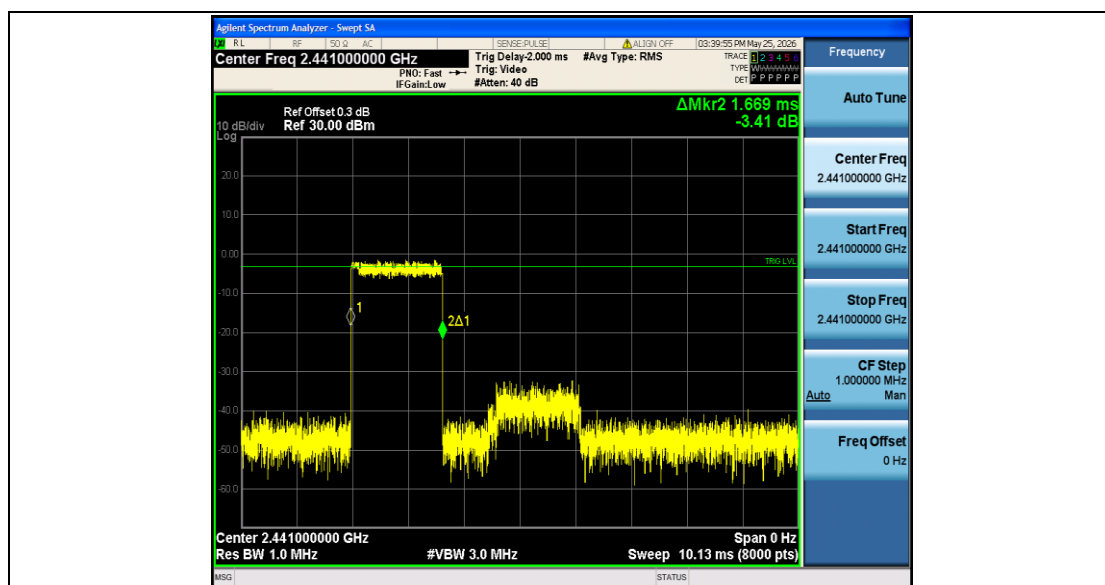




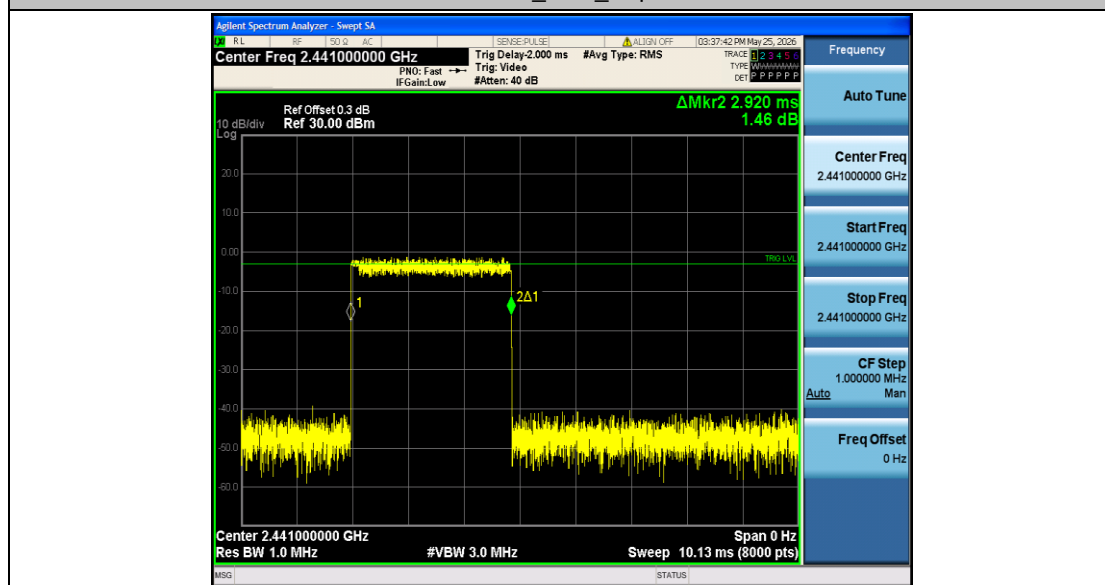
3DH1_Ant1_Hop

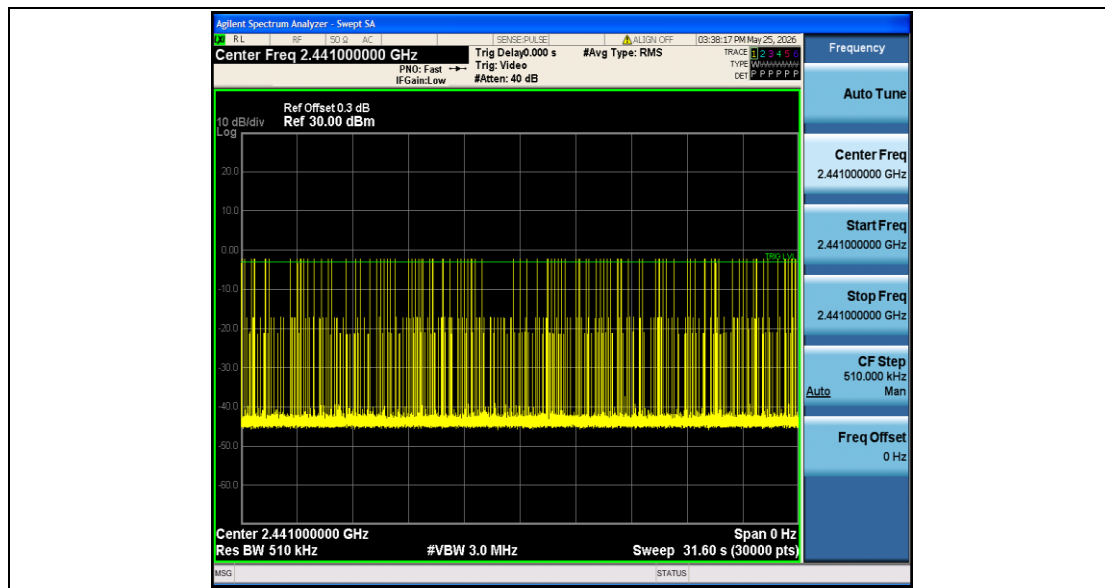


3DH3_Ant1_Hop



3DH5_Ant1_Hop



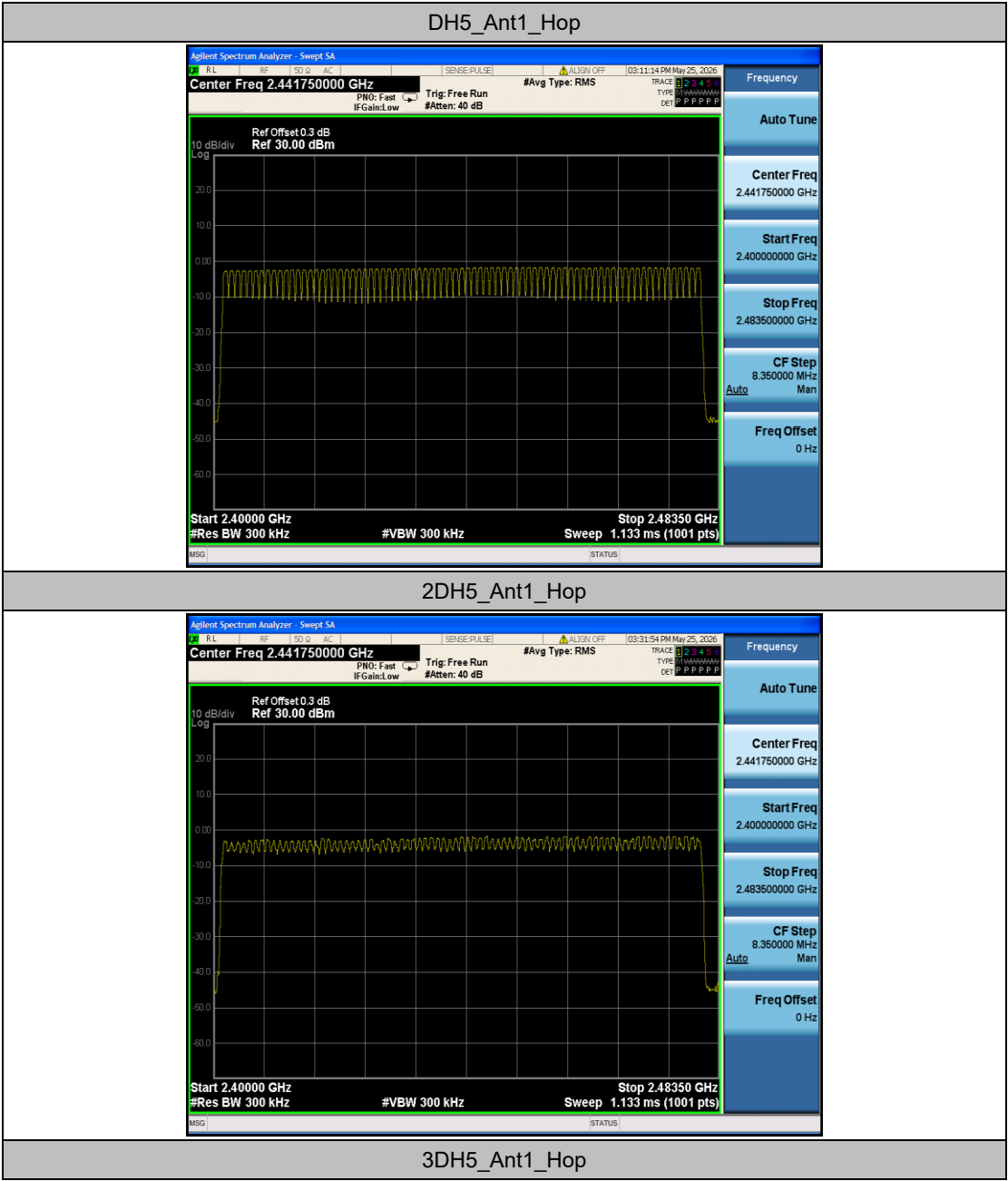


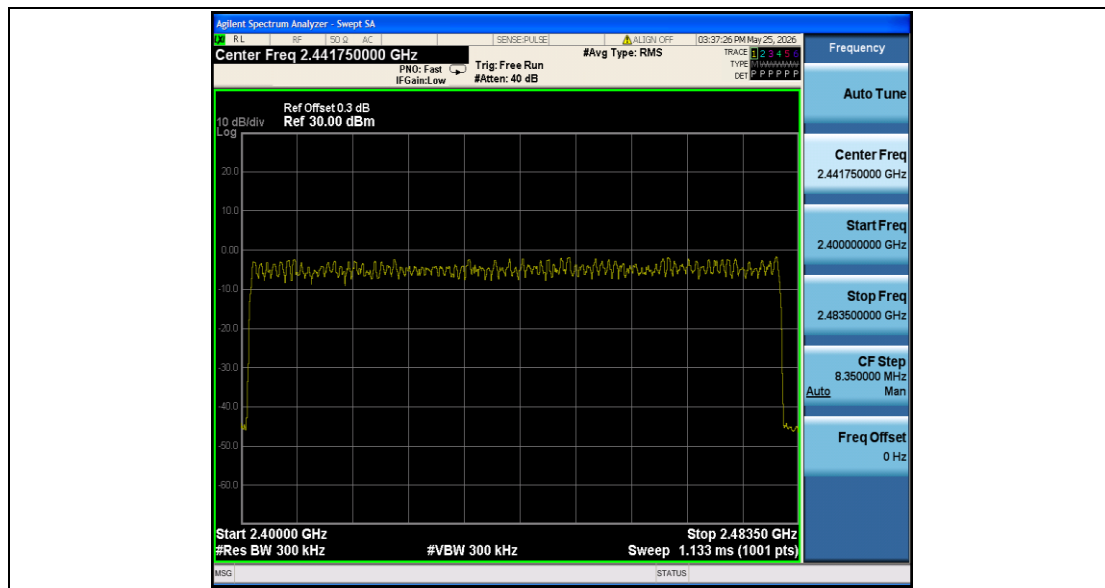
Appendix F: Number of hopping channels

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



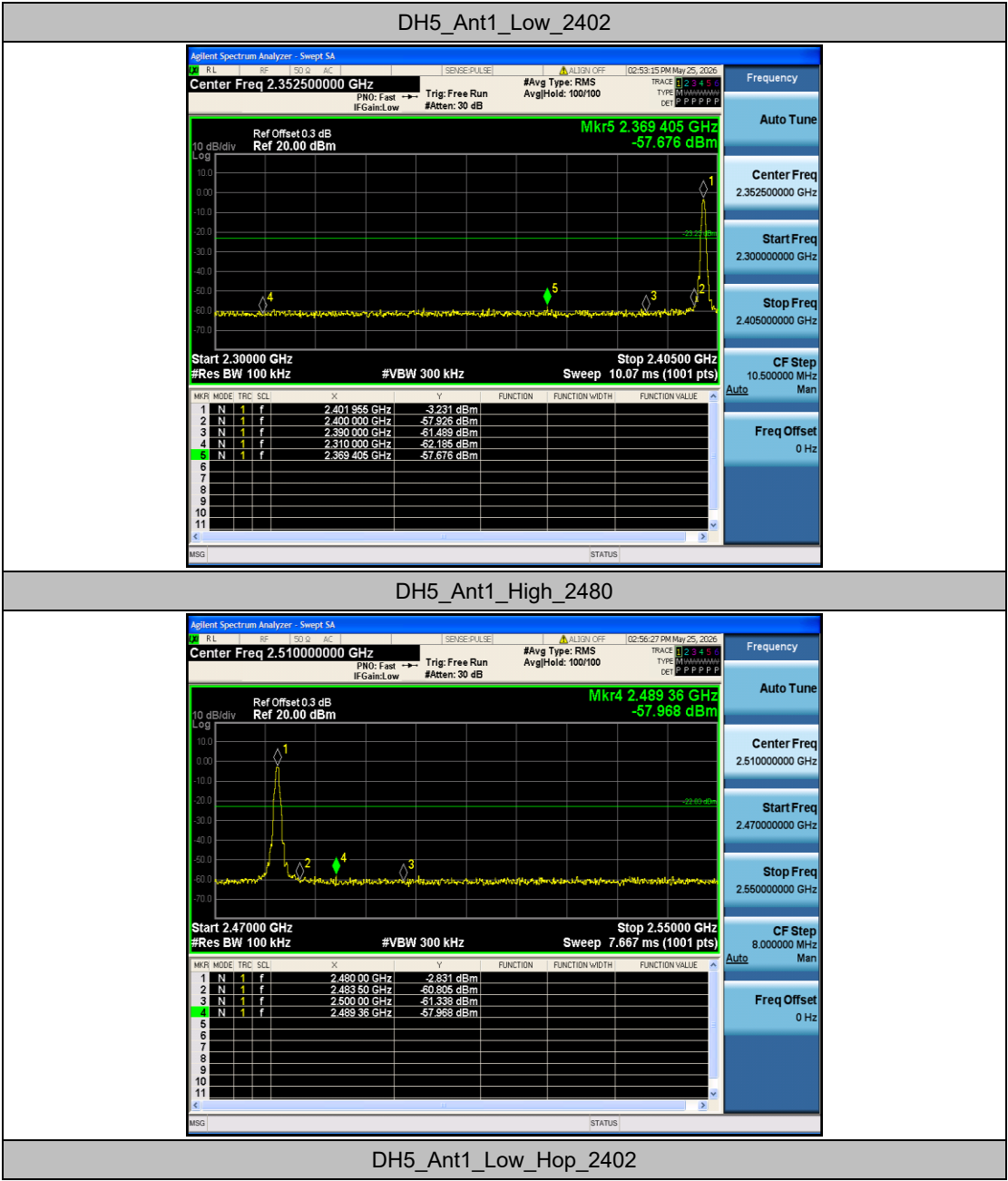


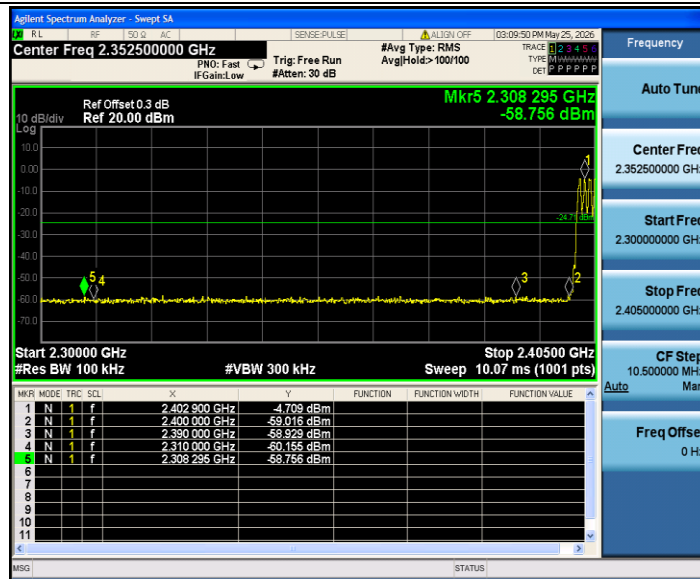
Appendix G: Band edge measurements

Test Result

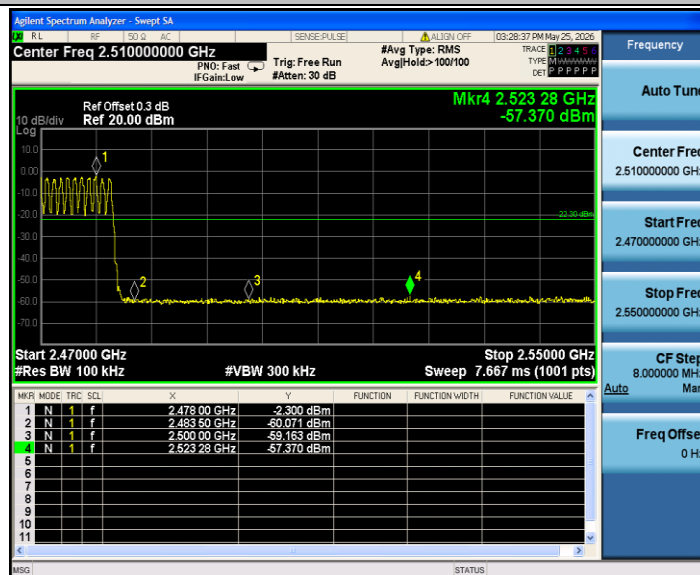
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.23	-57.68	≤-23.23	PASS
		High	2480	-2.83	-57.97	≤-22.83	PASS
		Low	Hop_2402	-4.71	-58.76	≤-24.71	PASS
		High	Hop_2480	-2.30	-57.37	≤-22.3	PASS
2DH5	Ant1	Low	2402	-6.06	-57.25	≤-26.06	PASS
		High	2480	-3.24	-57.11	≤-23.24	PASS
		Low	Hop_2402	-4.18	-56.6	≤-24.18	PASS
		High	Hop_2480	-2.61	-48.88	≤-22.61	PASS
3DH5	Ant1	Low	2402	-5.33	-56.51	≤-25.33	PASS
		High	2480	-2.64	-58.43	≤-22.64	PASS
		Low	Hop_2402	-5.97	-57.23	≤-25.97	PASS
		High	Hop_2480	-2.83	-57.78	≤-22.83	PASS

Test Graphs

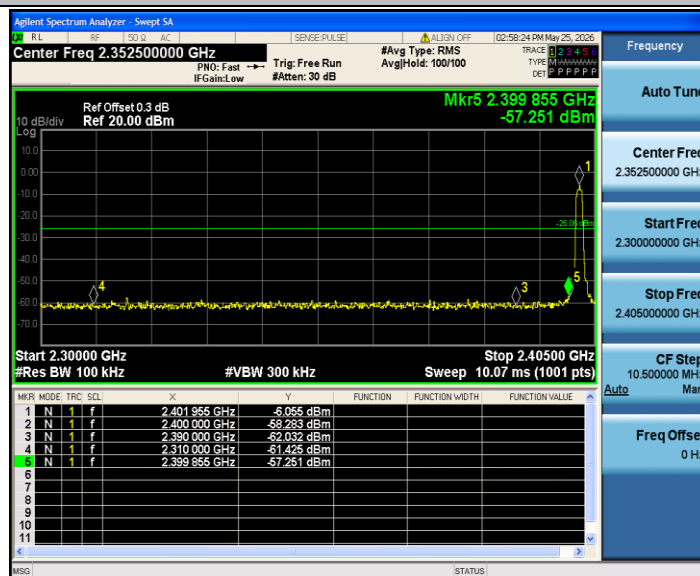




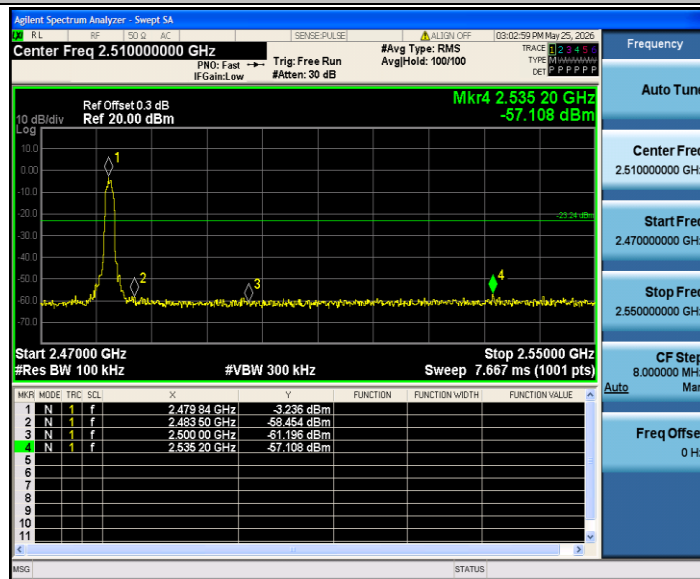
DH5_Ant1_High_Hop_2480



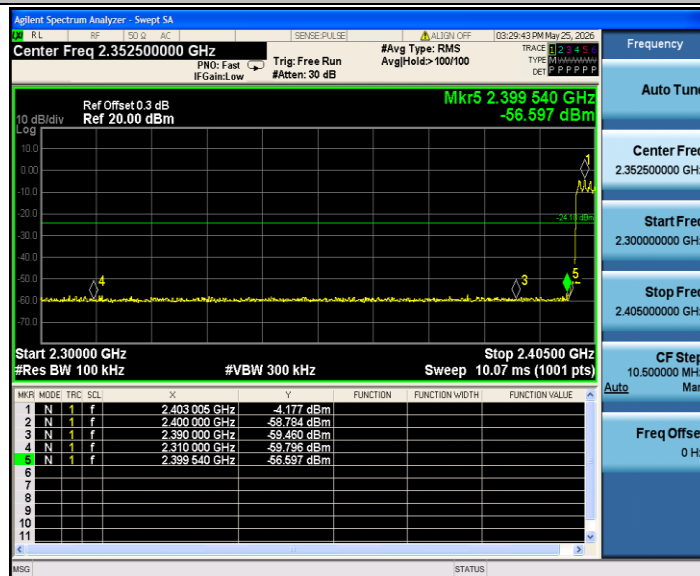
2DH5_Ant1_Low_2402



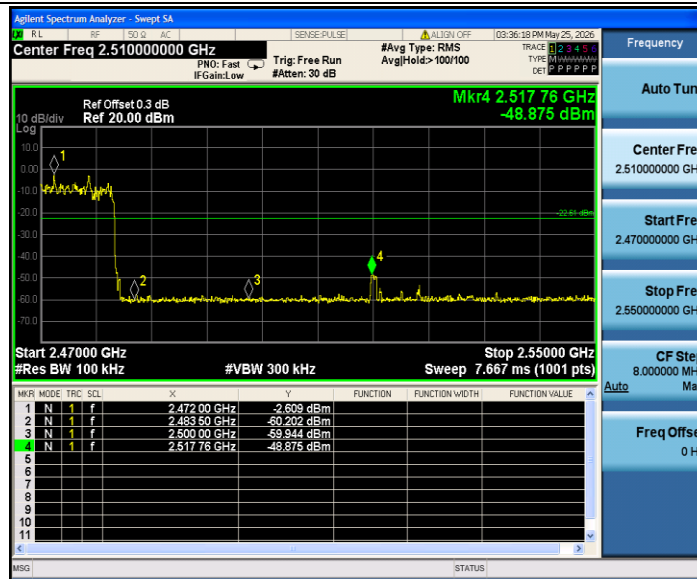
2DH5_Ant1_High_2480



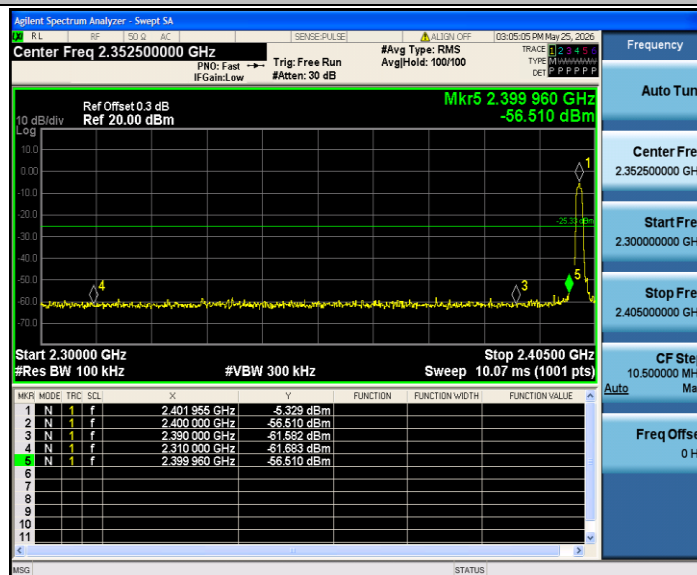
2DH5_Ant1_Low_Hop_2402



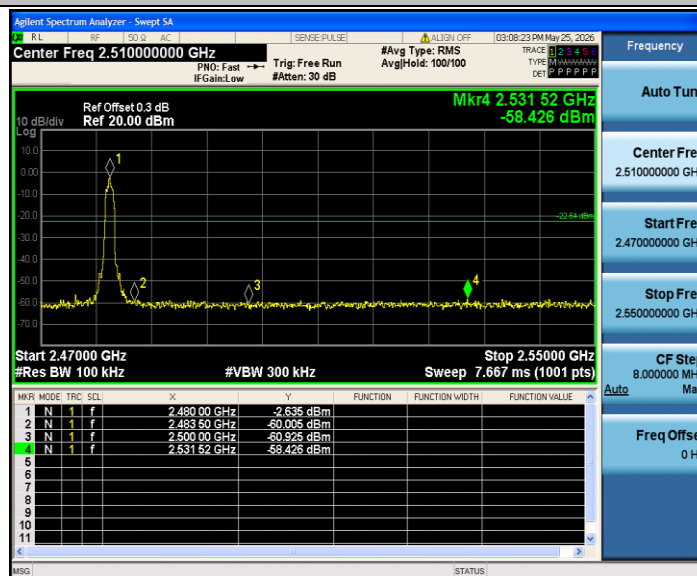
2DH5_Ant1_High_Hop_2480



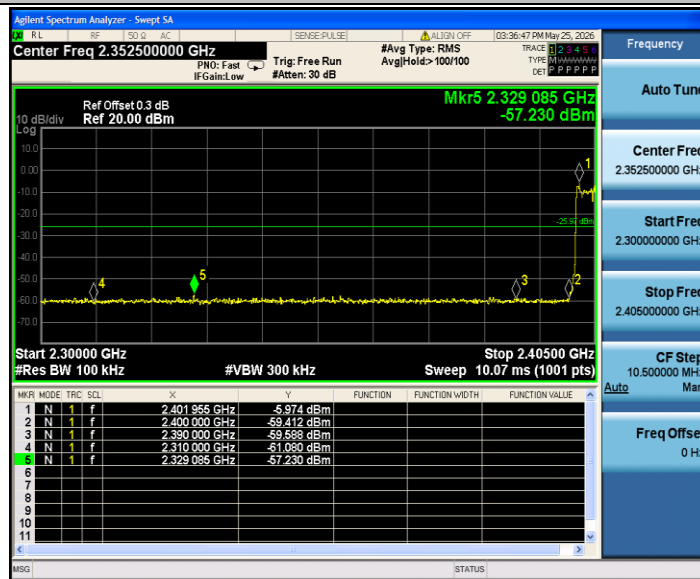
3DH5_Ant1_Low_2402



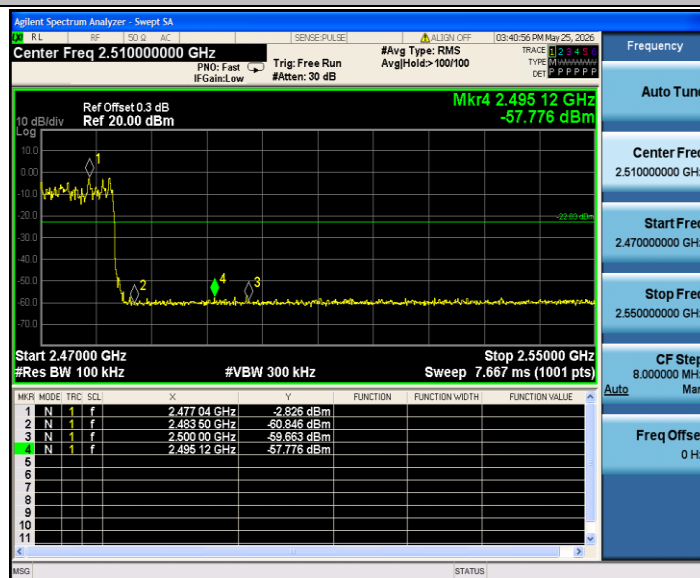
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

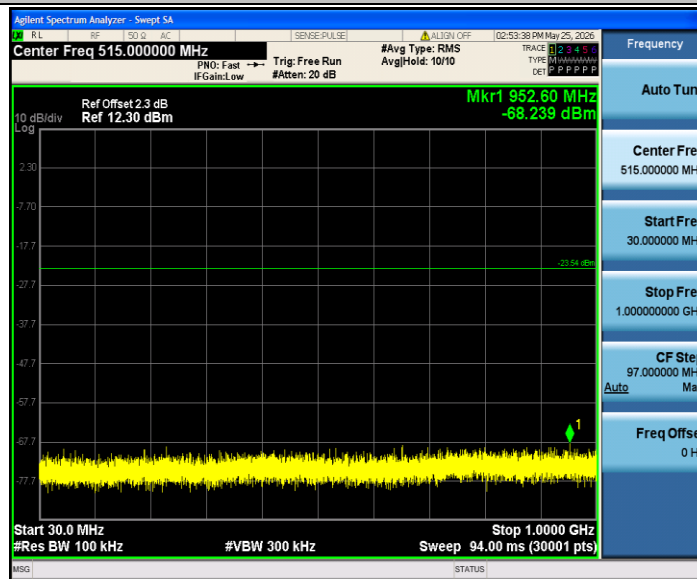
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-68.24	≤-23.54	PASS
			1000~26500	-3.54	-34.67	≤-23.54	PASS
		2441	Reference	-3.60	-3.60	---	PASS
			30~1000	-3.60	-67.55	≤-23.6	PASS
			1000~26500	-3.60	-34.41	≤-23.6	PASS
		2480	Reference	-2.98	-2.98	---	PASS
			30~1000	-2.98	-67.6	≤-22.98	PASS
			1000~26500	-2.98	-33.37	≤-22.98	PASS
2DH5	Ant1	2402	Reference	-7.89	-7.89	---	PASS
			30~1000	-7.89	-67.65	≤-27.89	PASS
			1000~26500	-7.89	-34.68	≤-27.89	PASS
		2441	Reference	-4.49	-4.49	---	PASS
			30~1000	-4.49	-67.61	≤-24.49	PASS
			1000~26500	-4.49	-37.3	≤-24.49	PASS
		2480	Reference	-6.68	-6.68	---	PASS
			30~1000	-6.68	-68.33	≤-26.68	PASS
			1000~26500	-6.68	-38.46	≤-26.68	PASS
3DH5	Ant1	2402	Reference	-3.94	-3.94	---	PASS
			30~1000	-3.94	-68.19	≤-23.94	PASS
			1000~26500	-3.94	-37.43	≤-23.94	PASS
		2441	Reference	-3.22	-3.22	---	PASS
			30~1000	-3.22	-68.06	≤-23.22	PASS
			1000~26500	-3.22	-36.83	≤-23.22	PASS
		2480	Reference	-6.53	-6.53	---	PASS
			30~1000	-6.53	-67.89	≤-26.53	PASS
			1000~26500	-6.53	-36.52	≤-26.53	PASS

Test Graphs

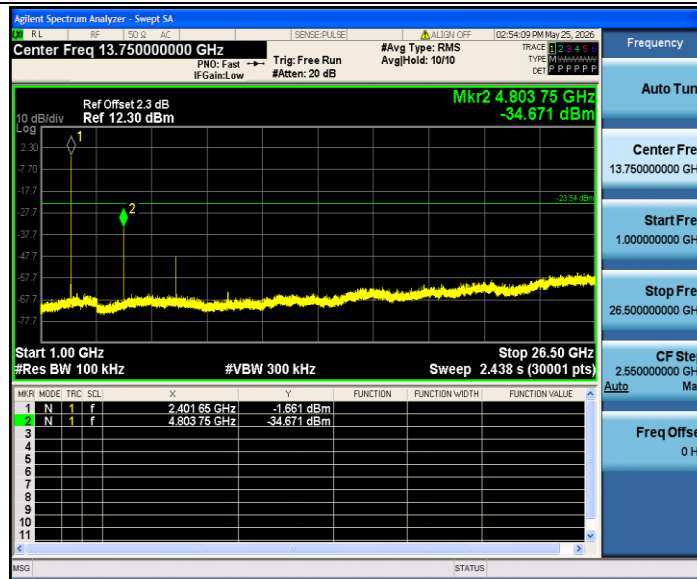
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



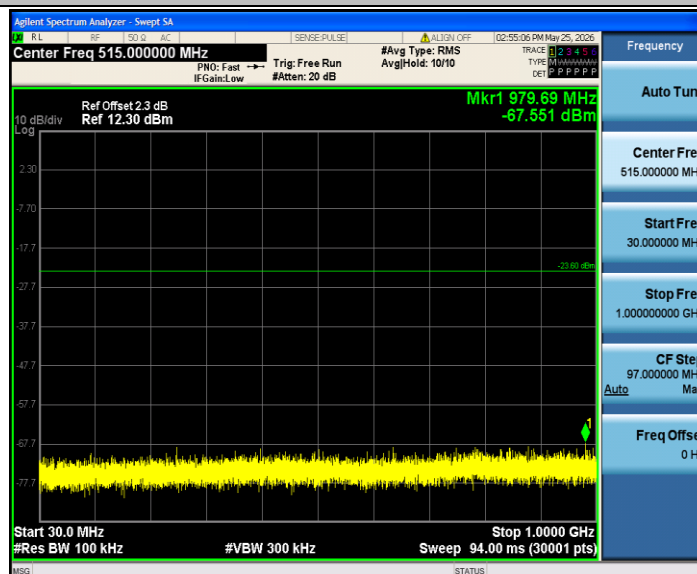
DH5_Ant1_2402_1000~26500



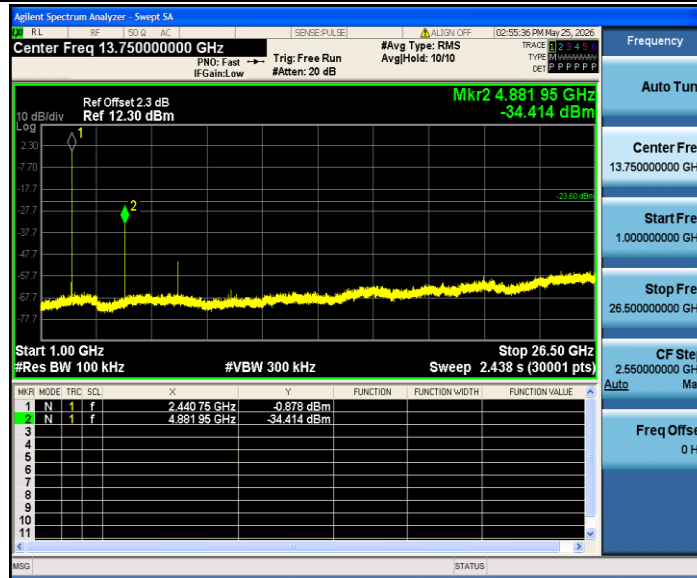
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



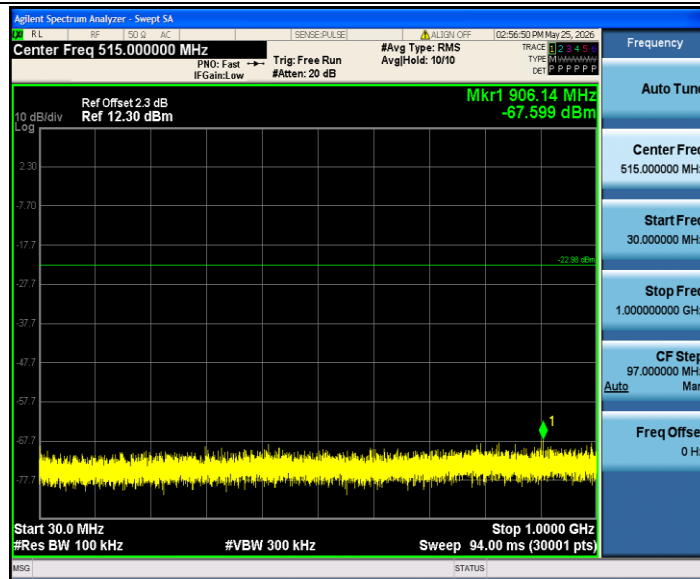
DH5_Ant1_2441_1000~26500



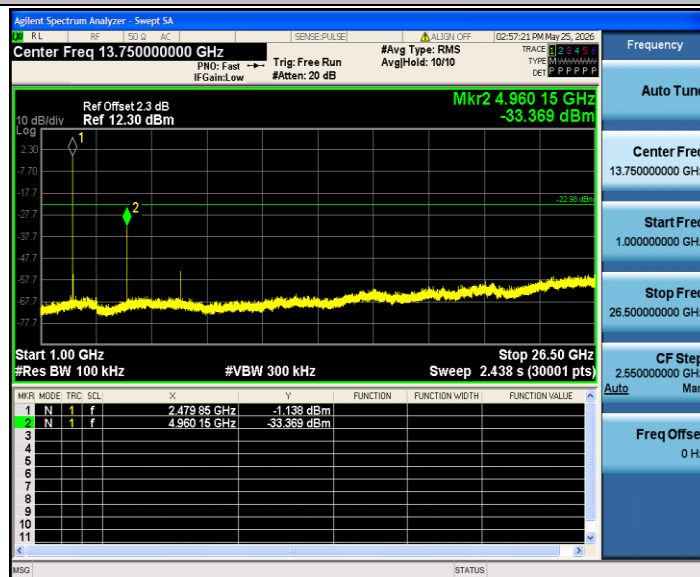
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



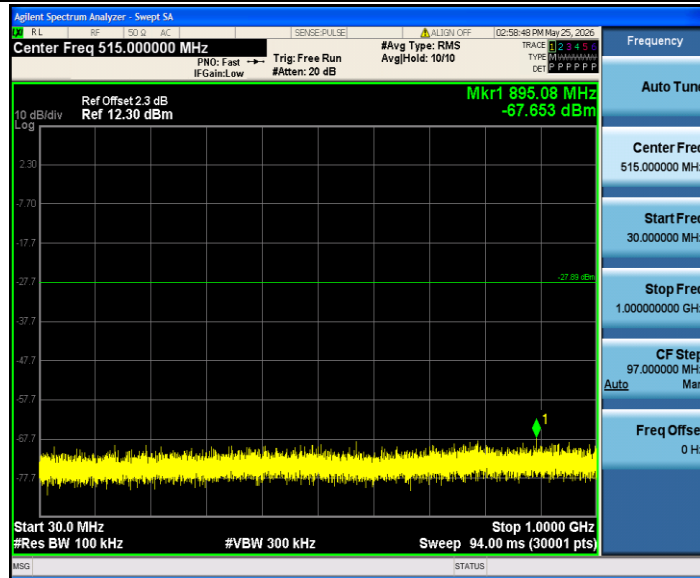
DH5_Ant1_2480_1000~26500



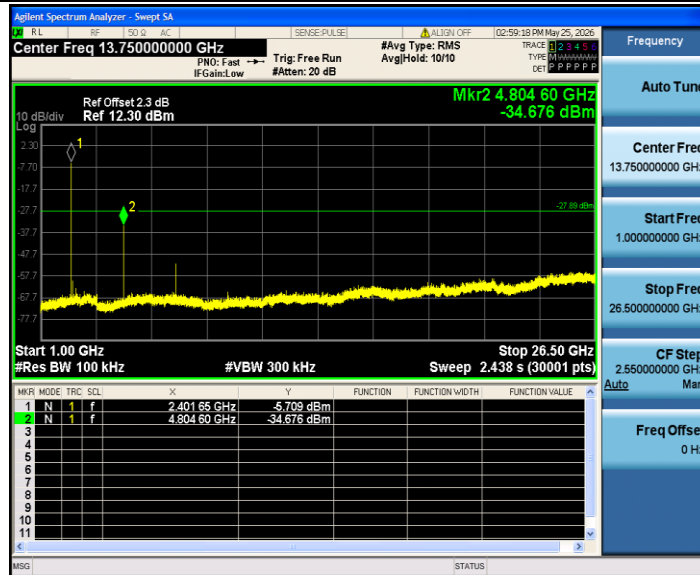
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference