

FCC Appendix RF Test Data for BT

FCC ID : 2A4ZQ-L28

Company : shenzhen woguo technology Co., Ltd.

EUT : Smart Watch

Model Number : L28

Report No. : CTA26062601401

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	0.960	2401.544	2402.504	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.954	2479.544	2480.498	---	---
2DH5	Ant1	2402	1.332	2401.343	2402.675	---	---
		2441	1.281	2440.382	2441.663	---	---
		2480	1.320	2479.352	2480.672	---	---
3DH5	Ant1	2402	1.290	2401.367	2402.657	---	---
		2441	1.299	2440.364	2441.663	---	---
		2480	1.317	2479.355	2480.672	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

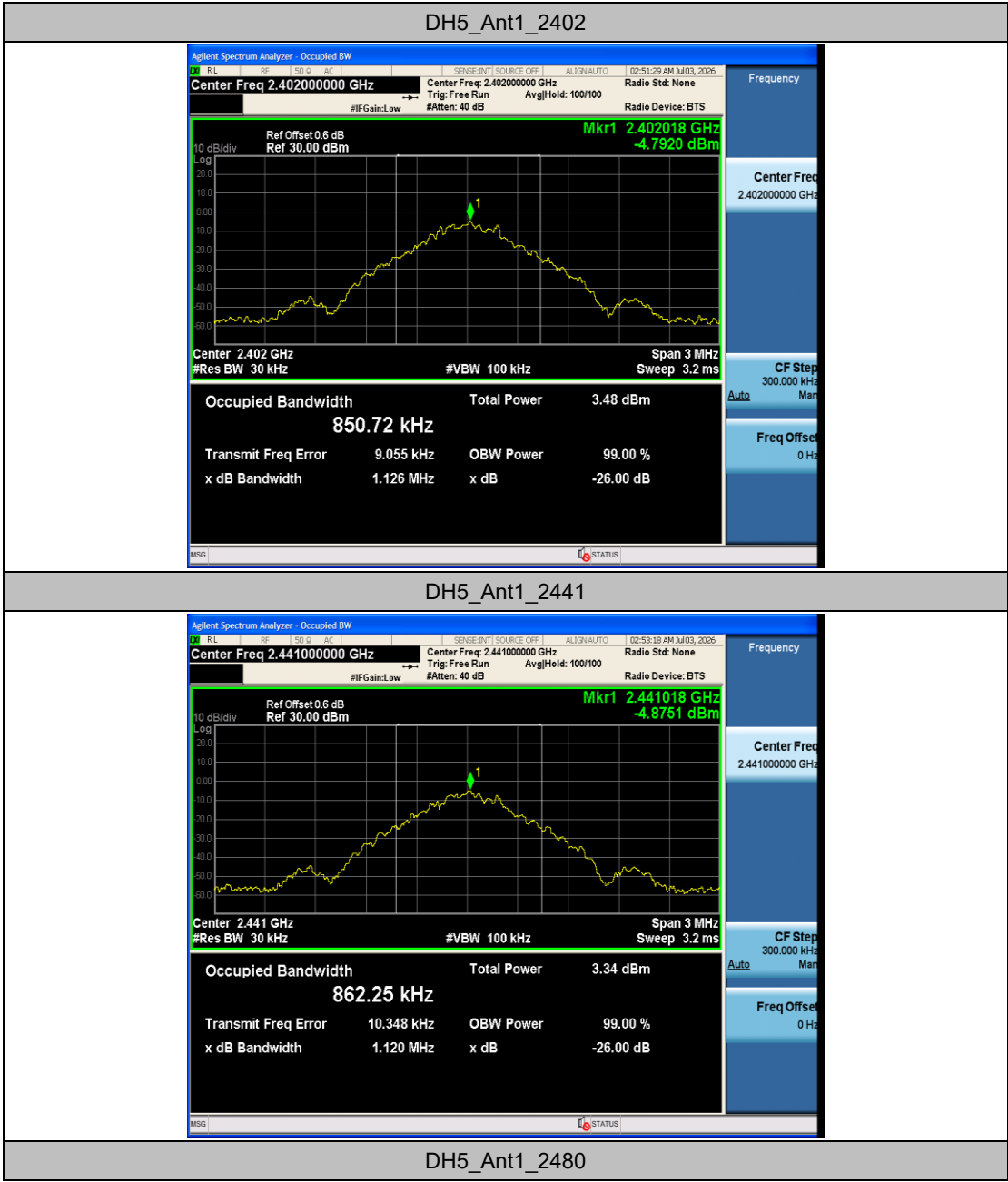


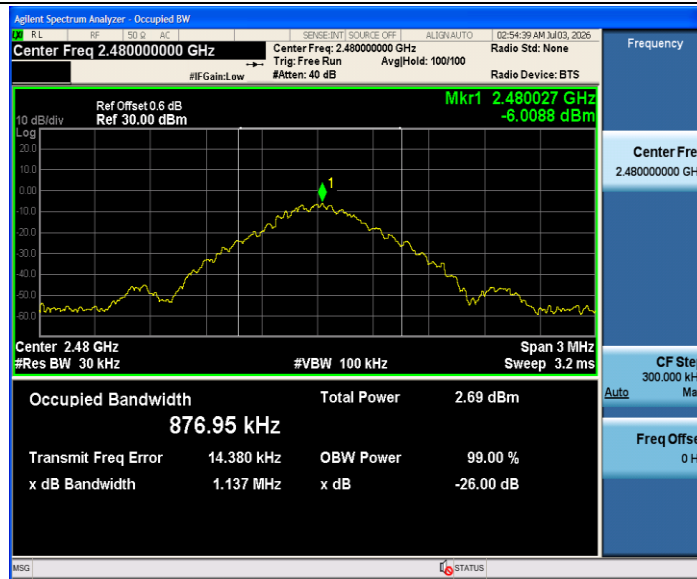
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85072	2401.5837	2402.4344	---	---
		2441	0.86225	2440.5792	2441.4415	---	---
		2480	0.87695	2479.5759	2480.4529	---	---
2DH5	Ant1	2402	1.2036	2401.4077	2402.6113	---	---
		2441	1.1886	2440.4159	2441.6045	---	---
		2480	1.1807	2479.4206	2480.6013	---	---
3DH5	Ant1	2402	1.1931	2401.4137	2402.6068	---	---
		2441	1.1879	2440.4169	2441.6048	---	---
		2480	1.1877	2479.4167	2480.6044	---	---

Test Graphs





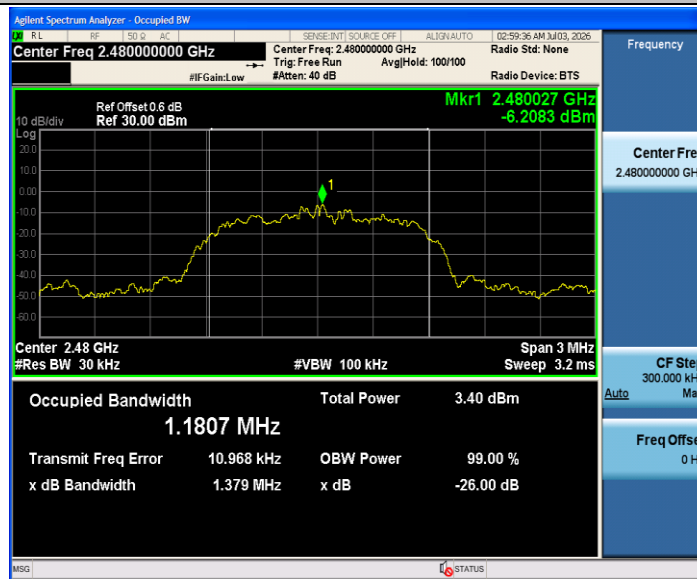
2DH5_Ant1_2402



2DH5_Ant1_2441



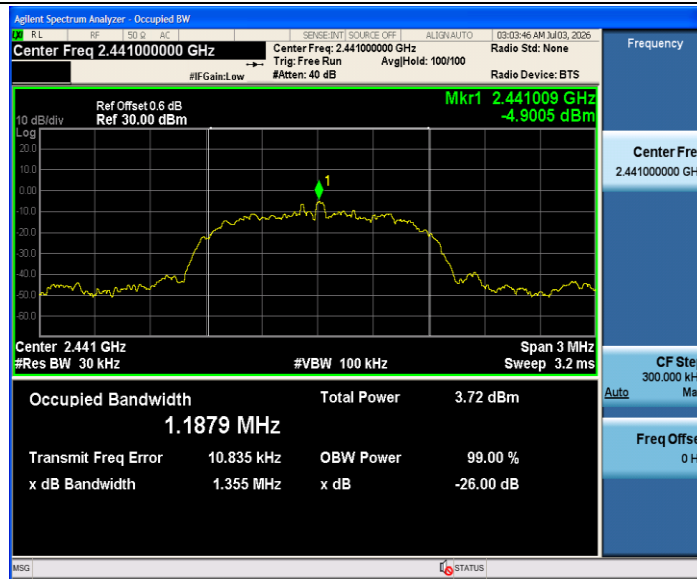
2DH5_Ant1_2480



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	-3.21	≤20.97	PASS
		2441	-3.27	≤20.97	PASS
		2480	-3.54	≤20.97	PASS
2DH5	Ant1	2402	-0.58	≤20.97	PASS
		2441	-0.61	≤20.97	PASS
		2480	-0.95	≤20.97	PASS
3DH5	Ant1	2402	-0.17	≤20.97	PASS
		2441	-0.30	≤20.97	PASS
		2480	-0.52	≤20.97	PASS

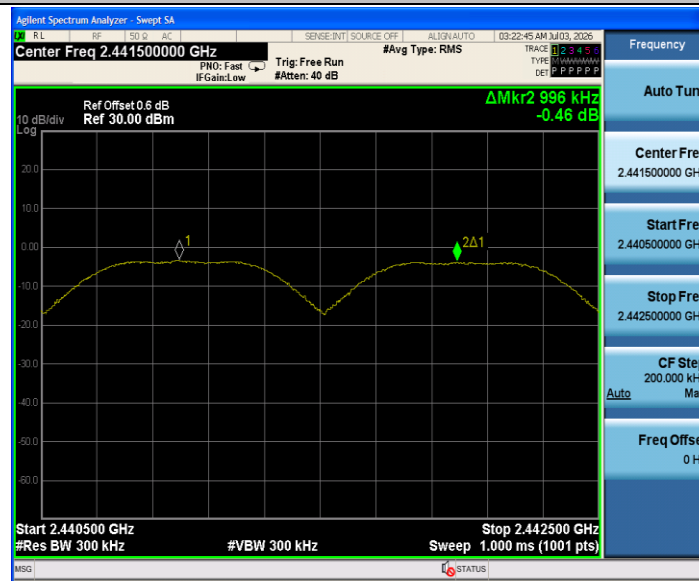
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.996	≥ 0.960	PASS
2DH5	Ant1	Hop	1.004	≥ 0.888	PASS
3DH5	Ant1	Hop	1	≥ 0.878	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



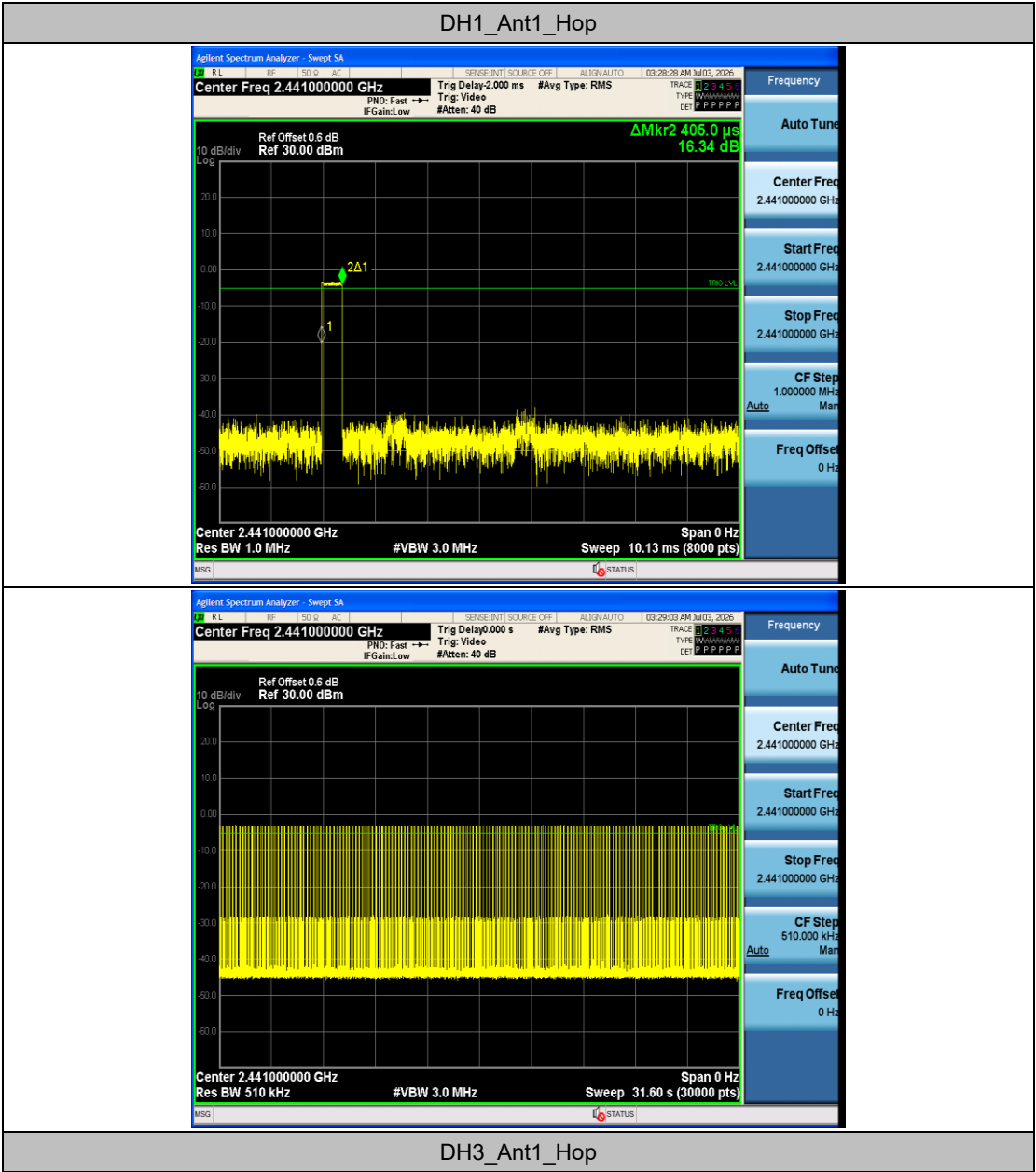
3DH5_Ant1_Hop

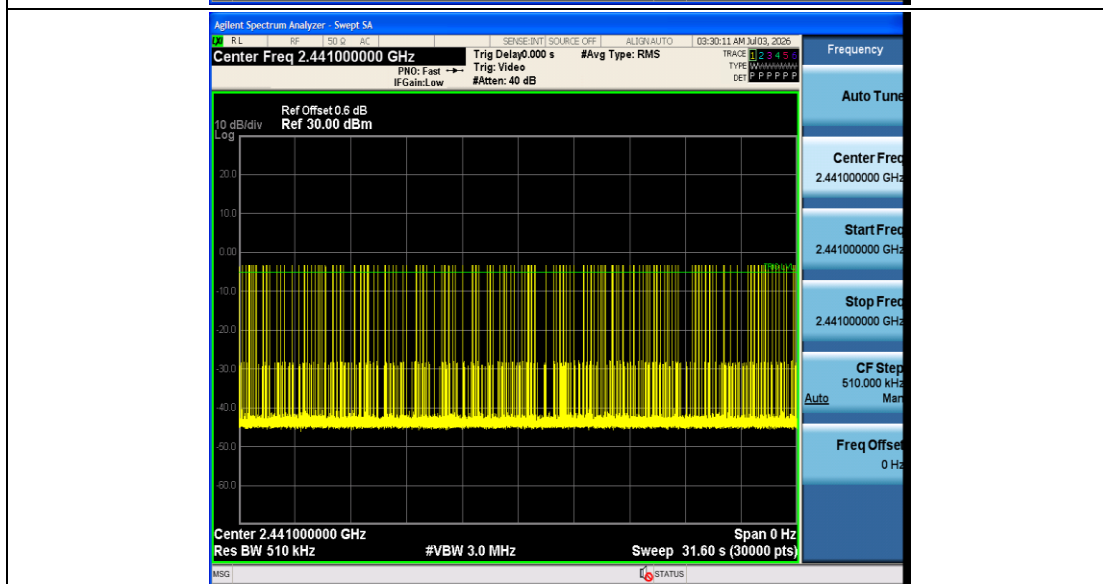
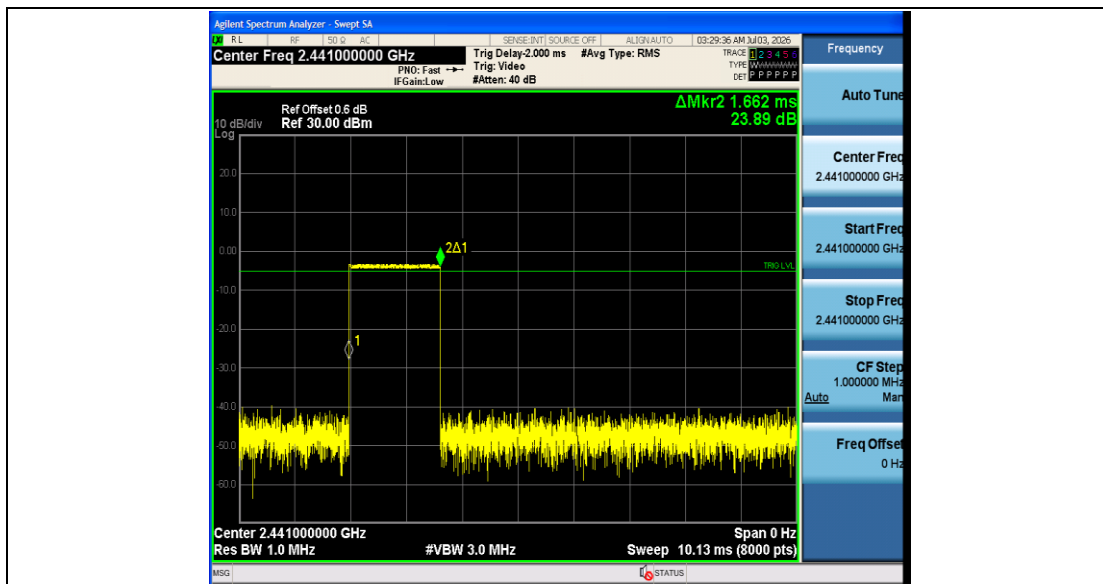
Appendix E: Time of occupancy

Test Result

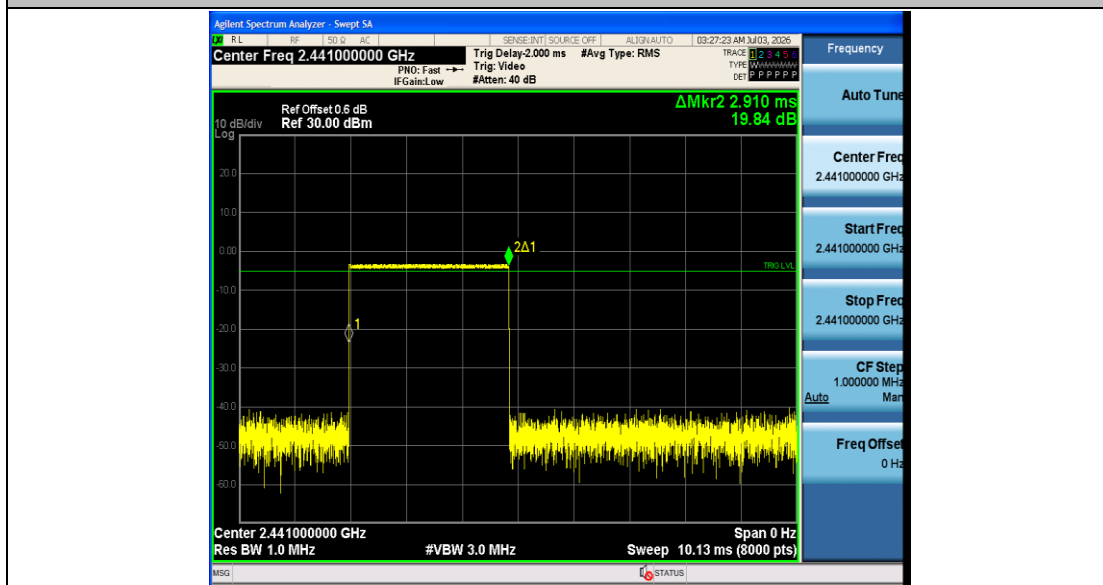
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	317	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.662	162	0.269	≤0.4	PASS
DH5	Ant1	Hop	2.910	99	0.288	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	155	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.915	112	0.326	≤0.4	PASS
3DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.667	159	0.265	≤0.4	PASS
3DH5	Ant1	Hop	2.916	102	0.297	≤0.4	PASS

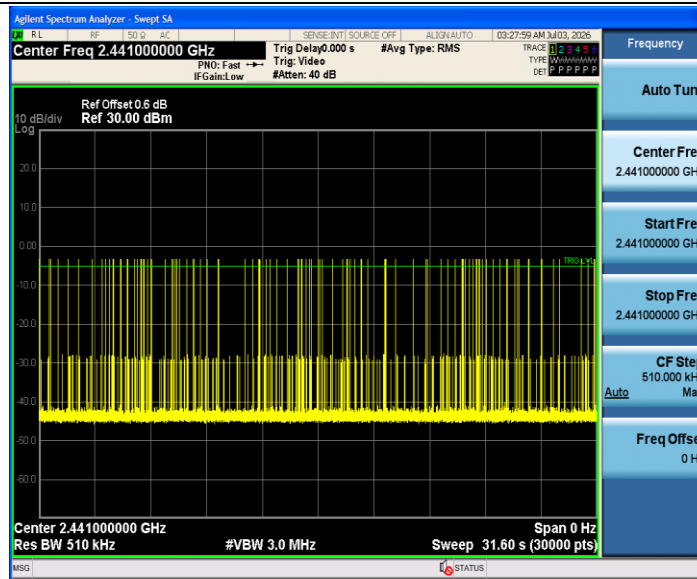
Test Graphs



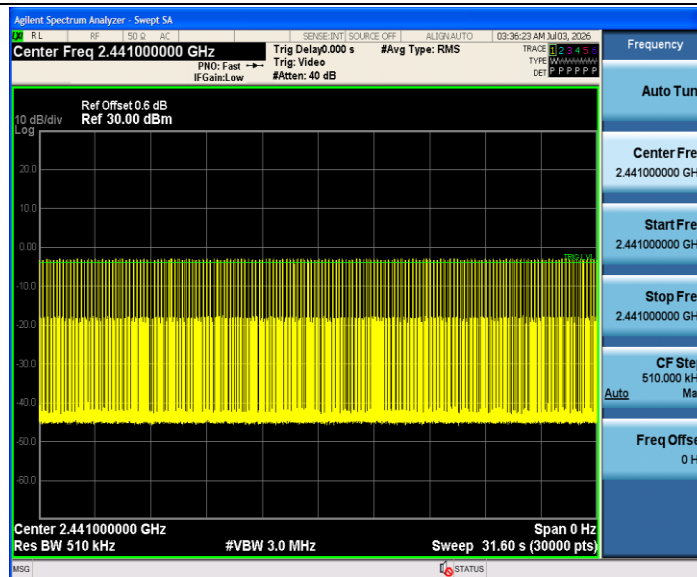
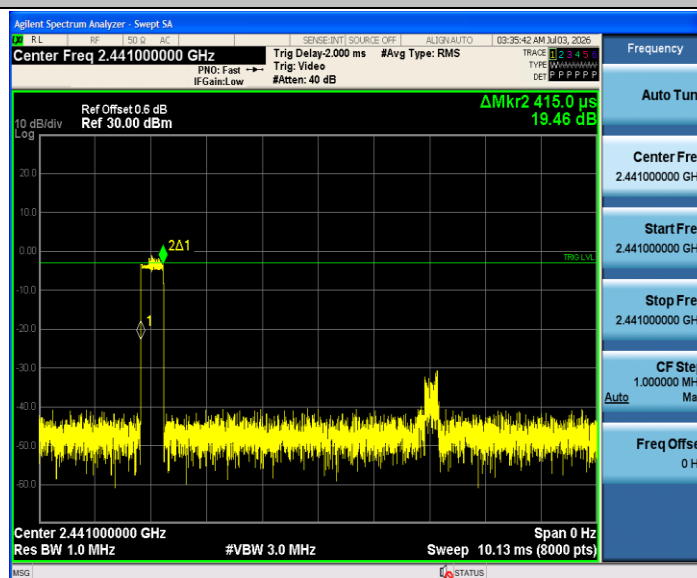


DH5_Ant1_Hop

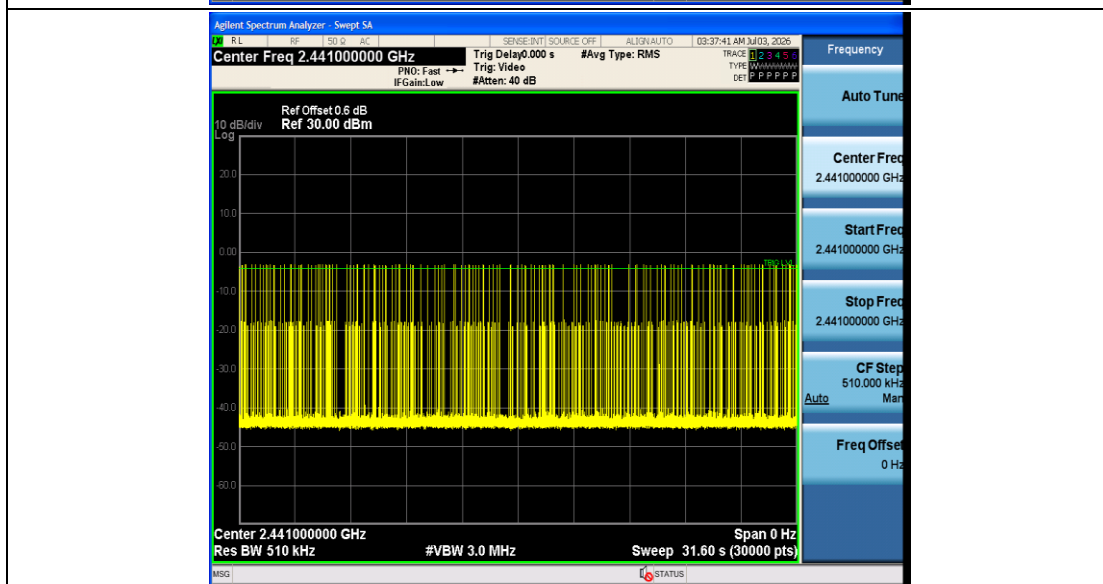
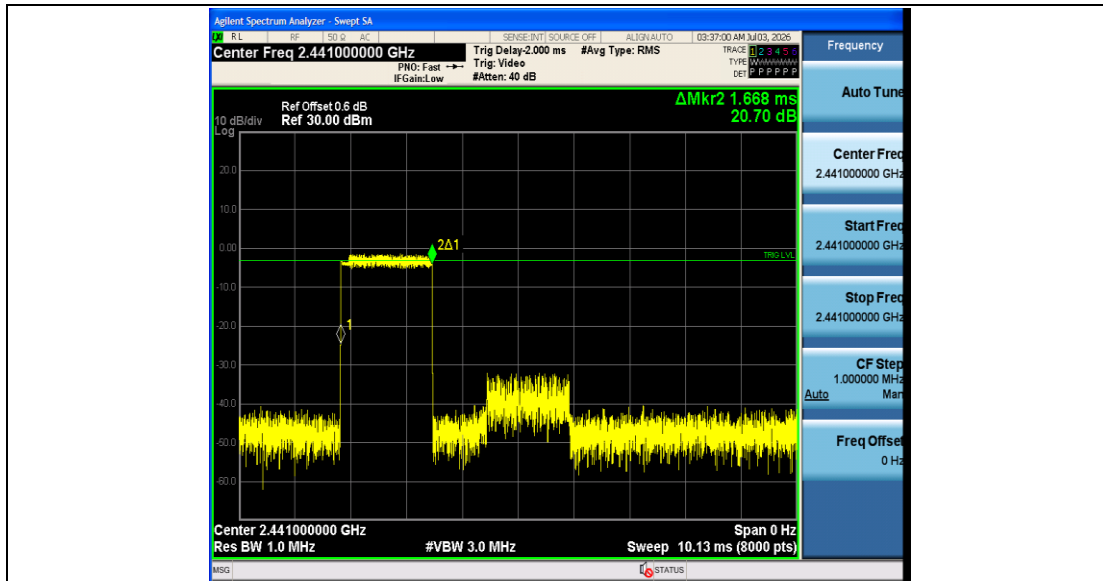




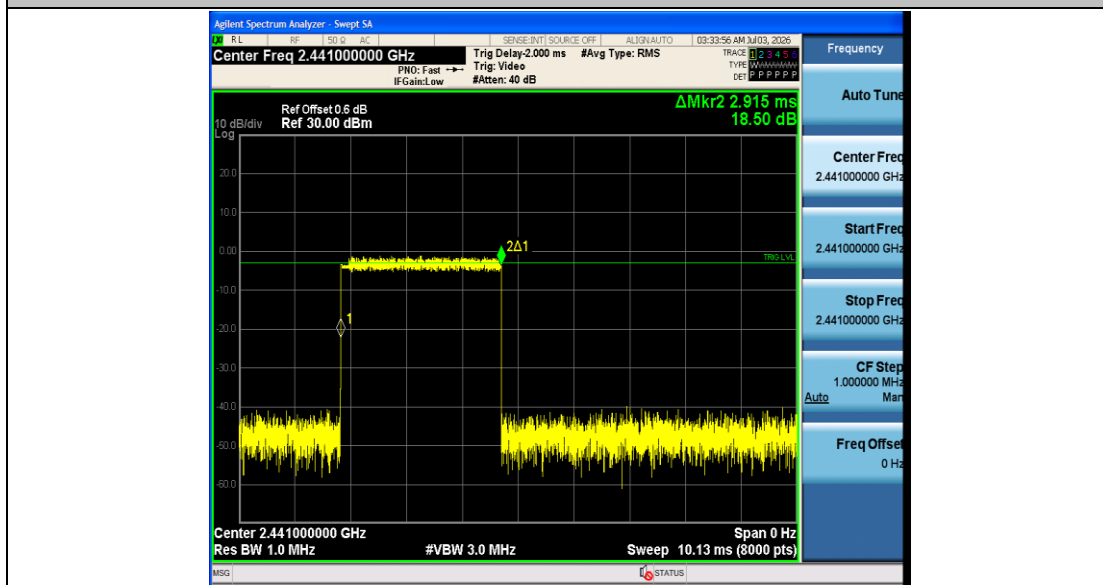
2DH1_Ant1_Hop

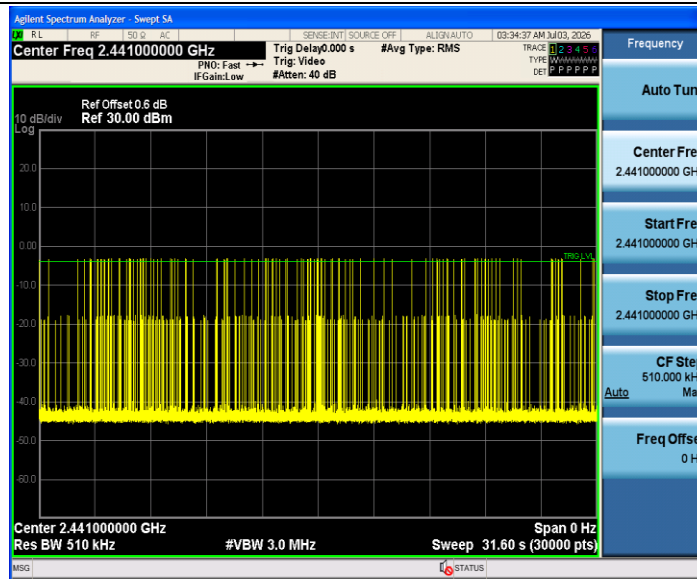


2DH3_Ant1_Hop

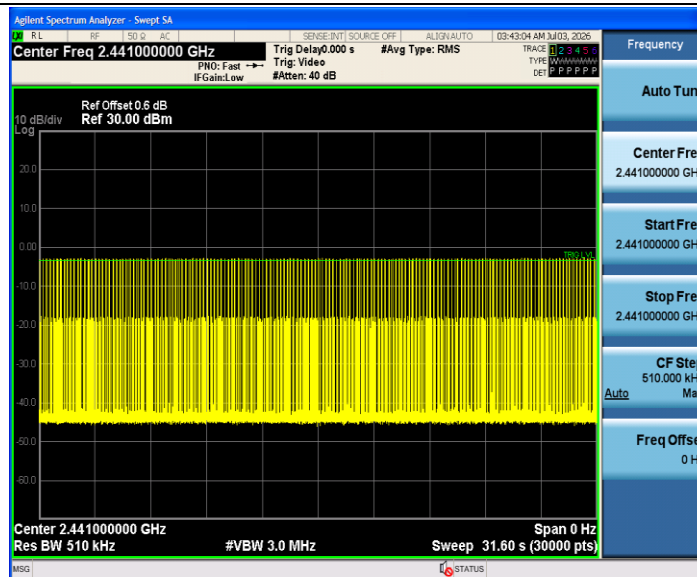
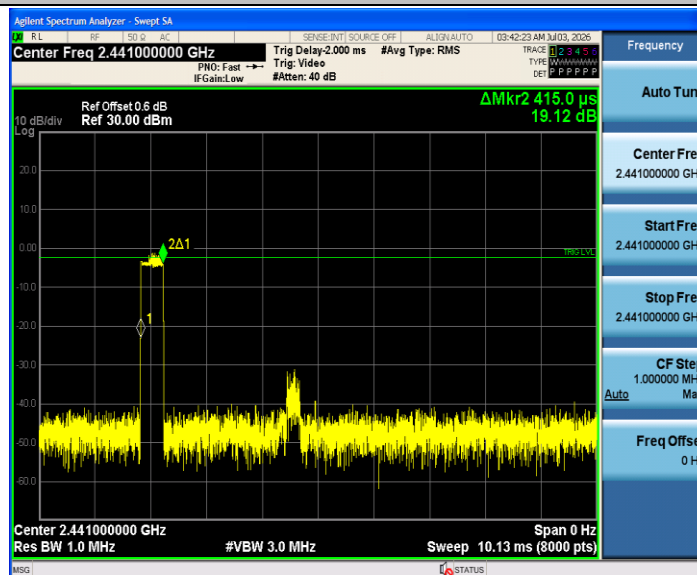


2DH5_Ant1_Hop

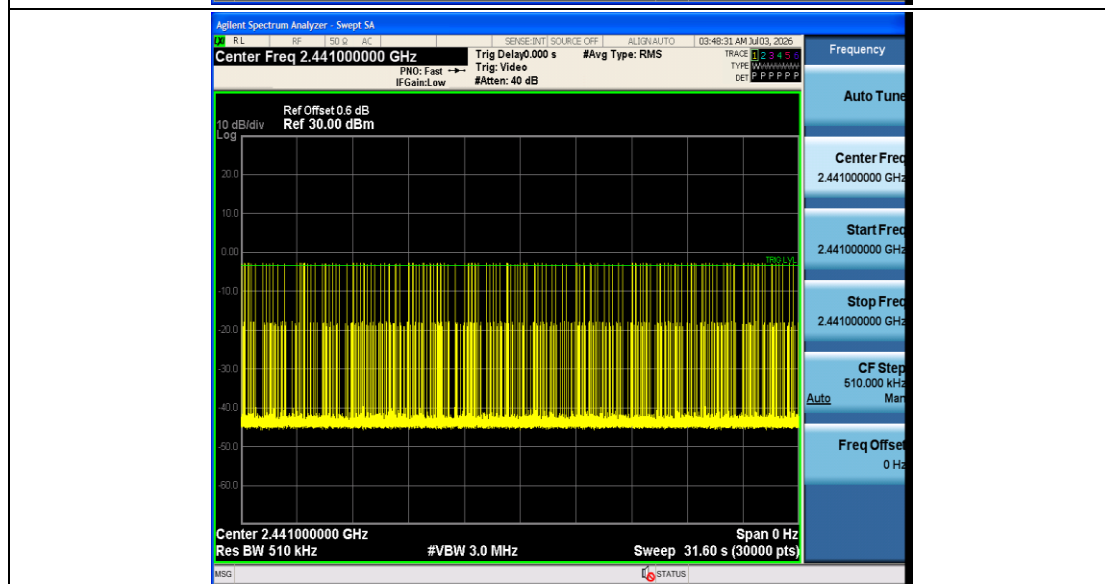
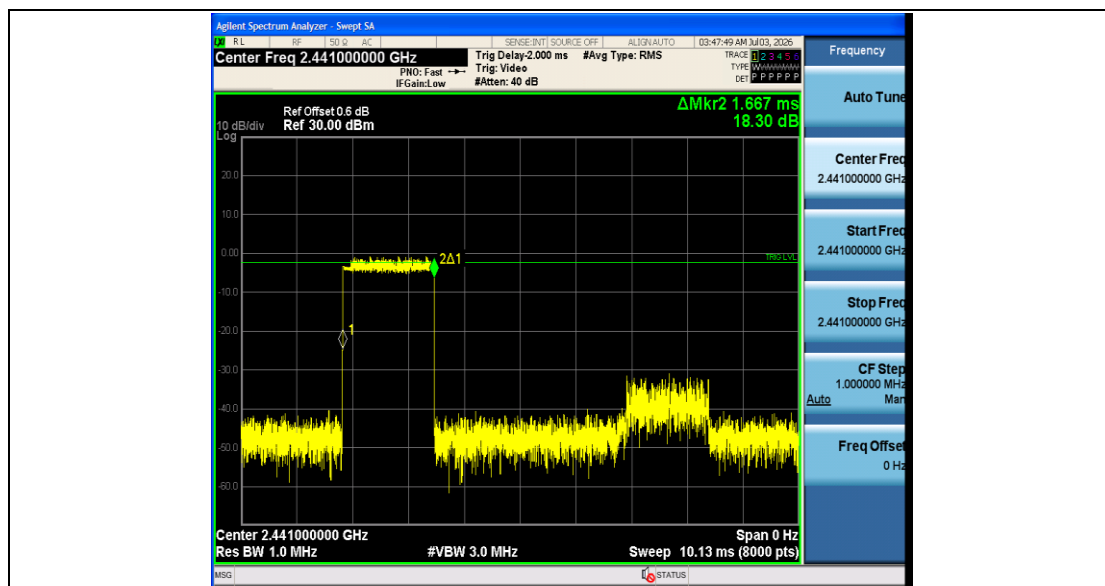




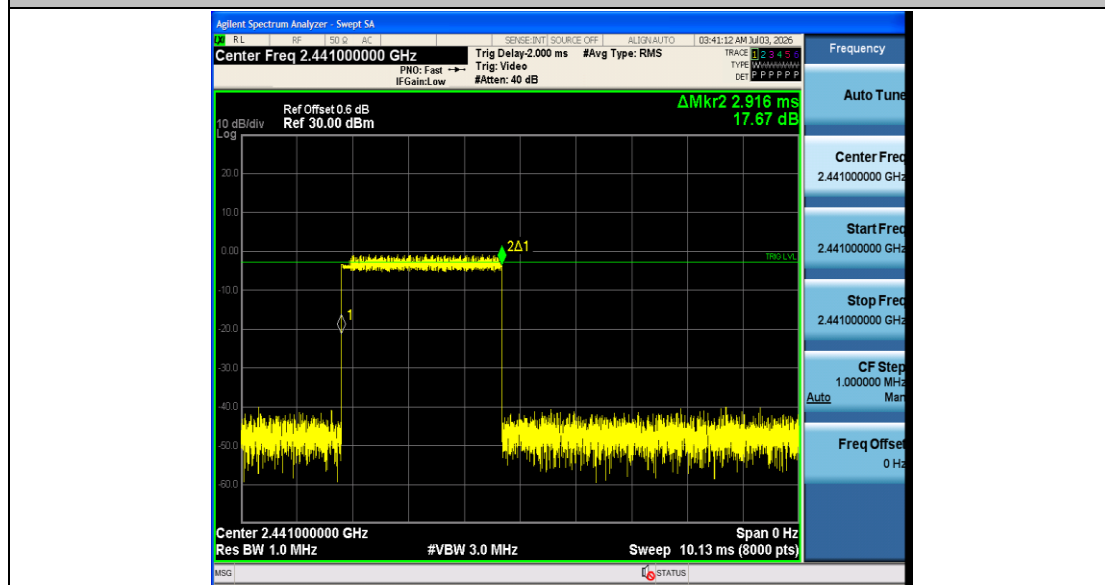
3DH1_Ant1_Hop

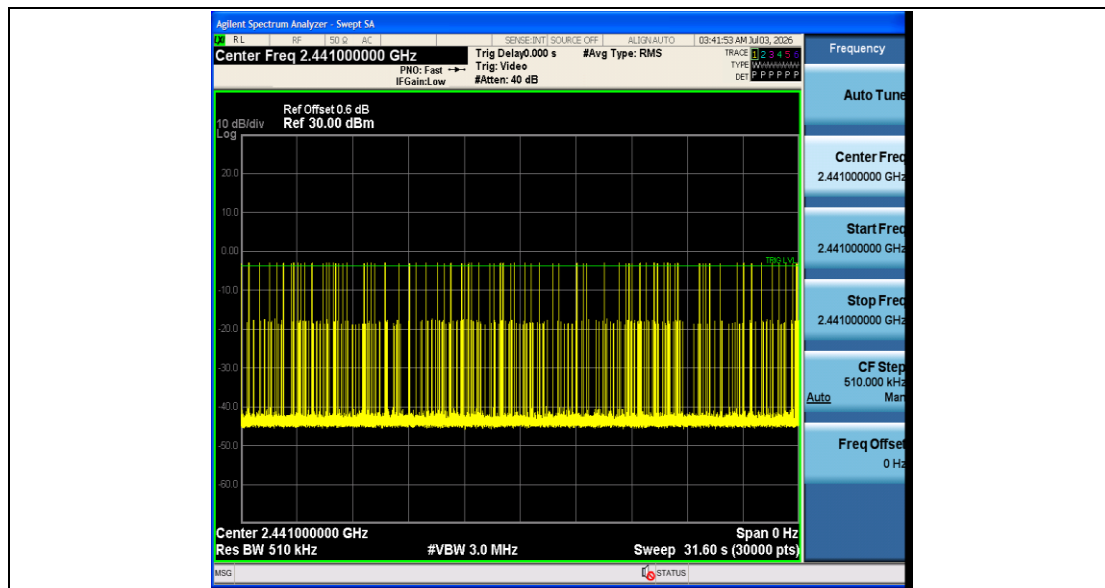


3DH3_Ant1_Hop



3DH5_Ant1_Hop



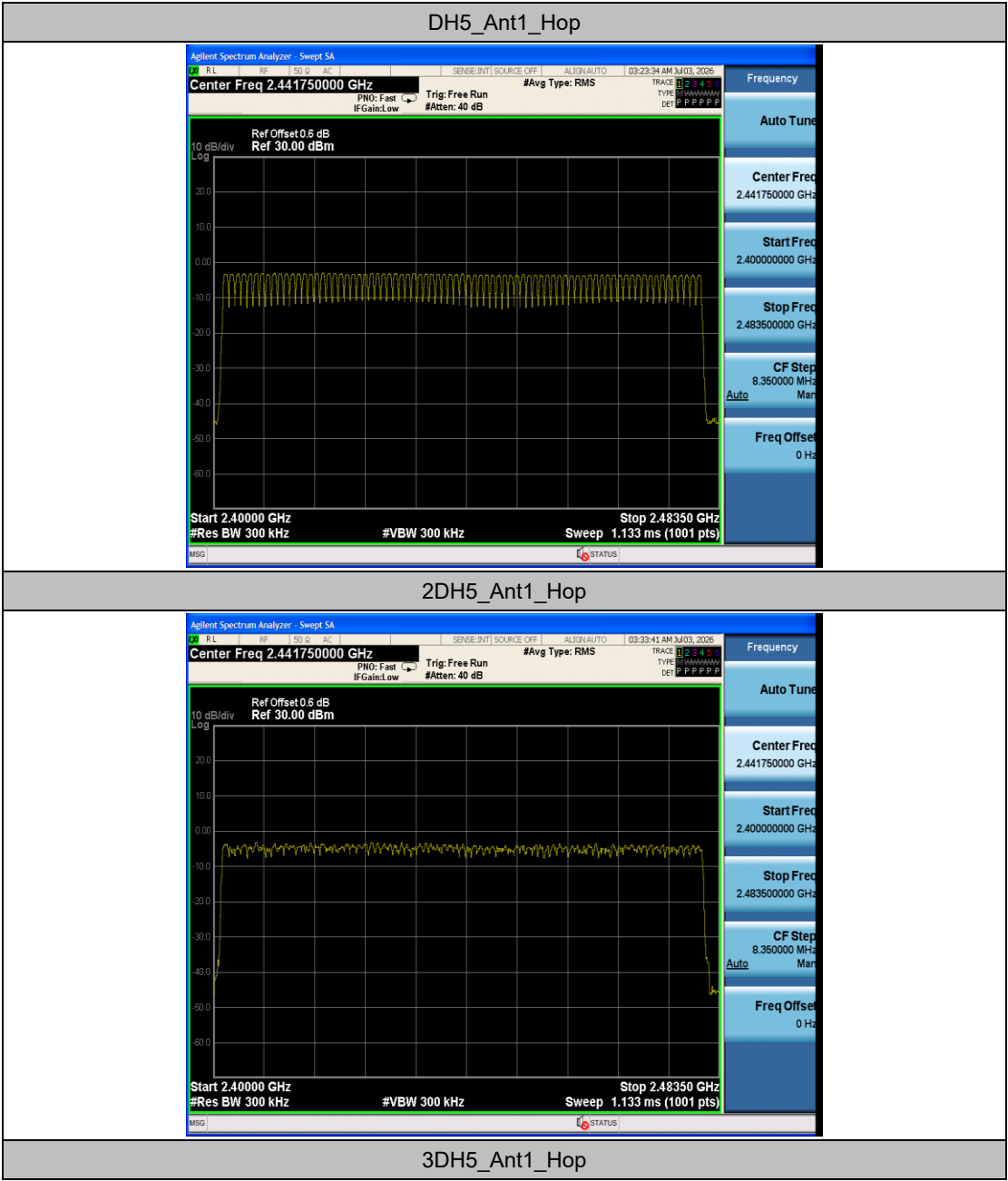


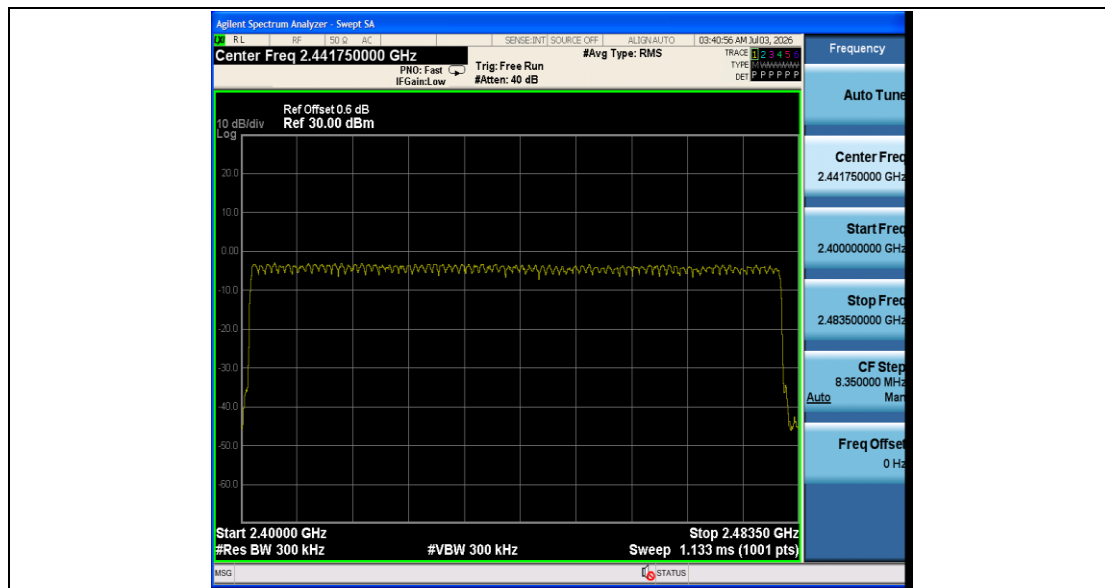
Appendix F: Number of hopping channels

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



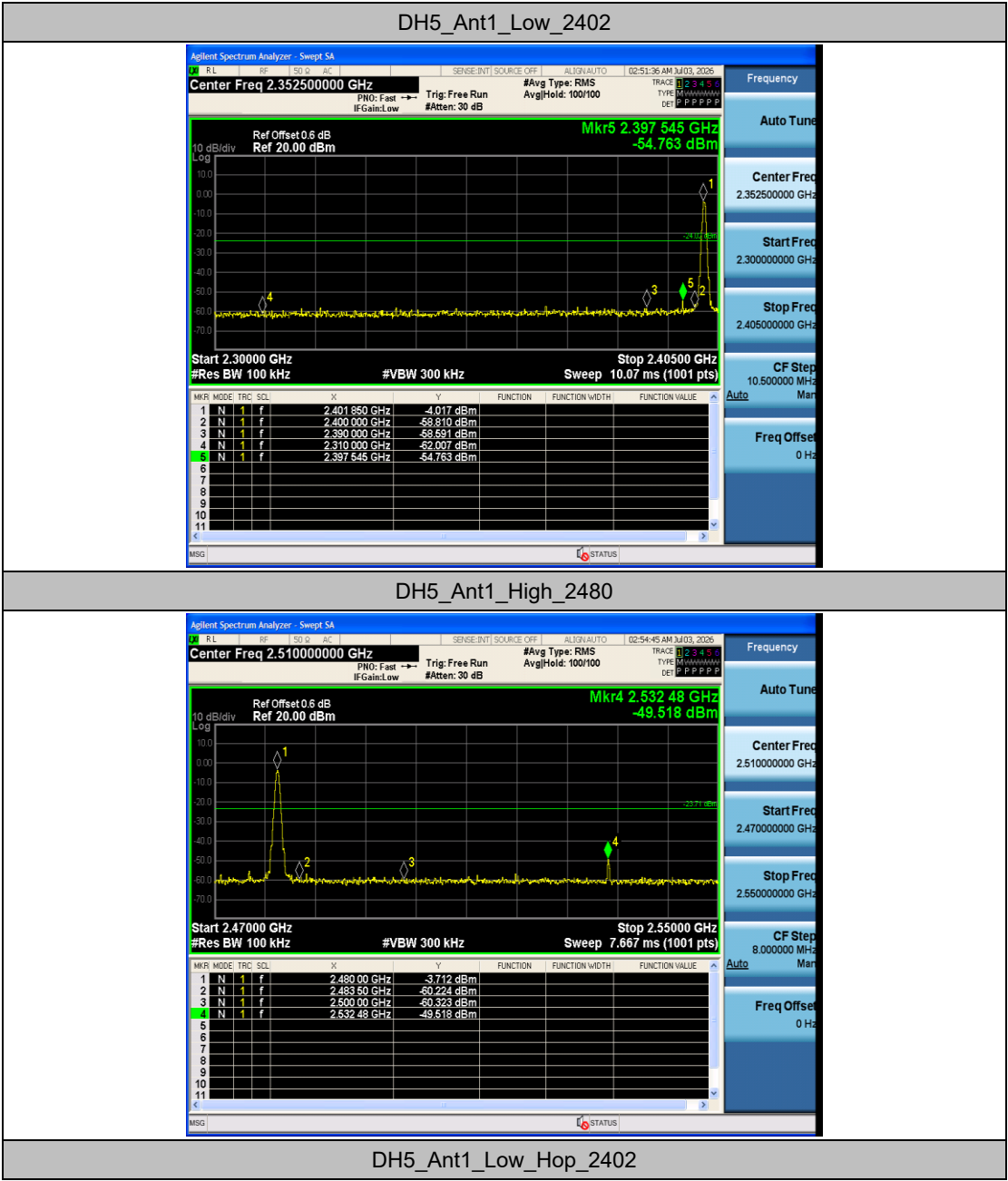


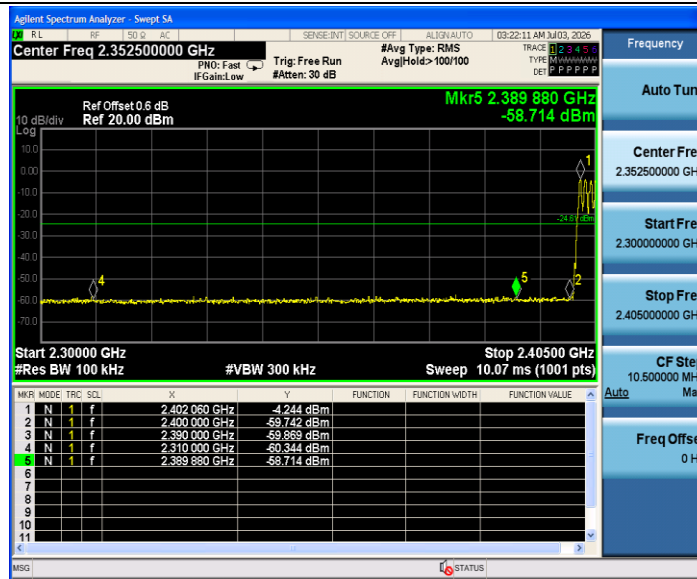
Appendix E: Band edge measurements

Test Result

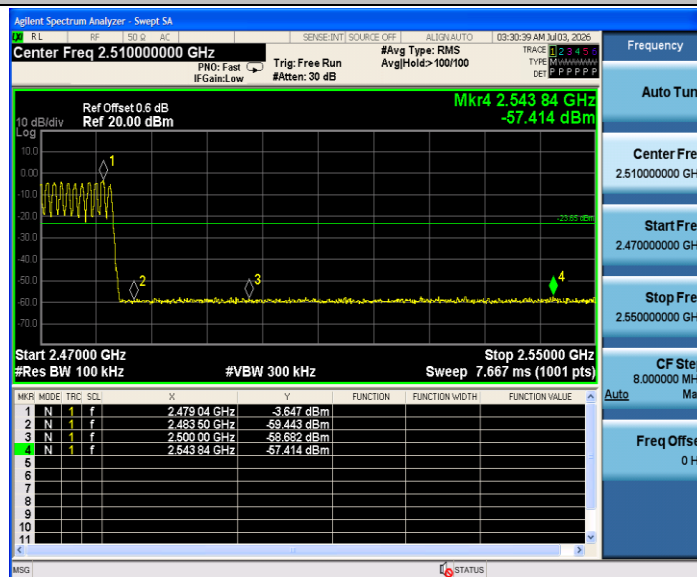
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.02	-54.76	≤-24.02	PASS
		High	2480	-3.71	-49.52	≤-23.71	PASS
		Low	Hop_2402	-4.61	-58.71	≤-24.61	PASS
		High	Hop_2480	-3.65	-57.41	≤-23.65	PASS
2DH5	Ant1	Low	2402	-4.40	-58.14	≤-24.4	PASS
		High	2480	-3.66	-57.47	≤-23.66	PASS
		Low	Hop_2402	-5.45	-56.86	≤-25.45	PASS
		High	Hop_2480	-6.40	-57.52	≤-26.4	PASS
3DH5	Ant1	Low	2402	-5.08	-58.11	≤-25.08	PASS
		High	2480	-4.12	-56.26	≤-24.12	PASS
		Low	Hop_2402	-4.12	-57.95	≤-24.12	PASS
		High	Hop_2480	-3.96	-57.78	≤-23.96	PASS

Test Graphs

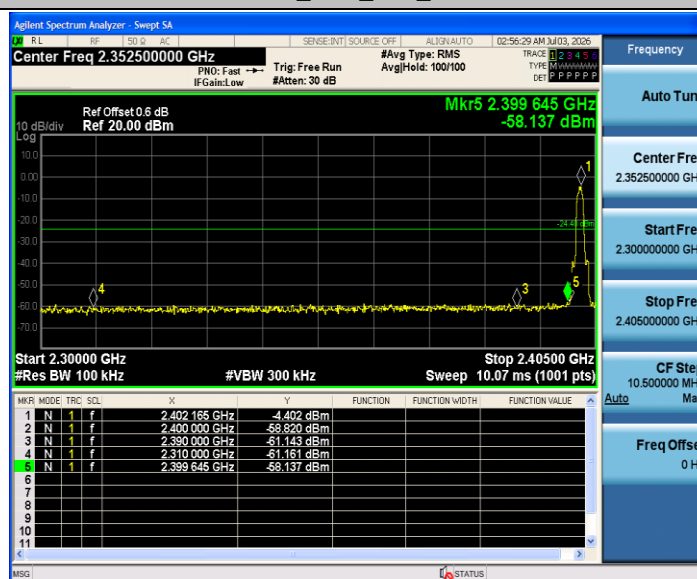




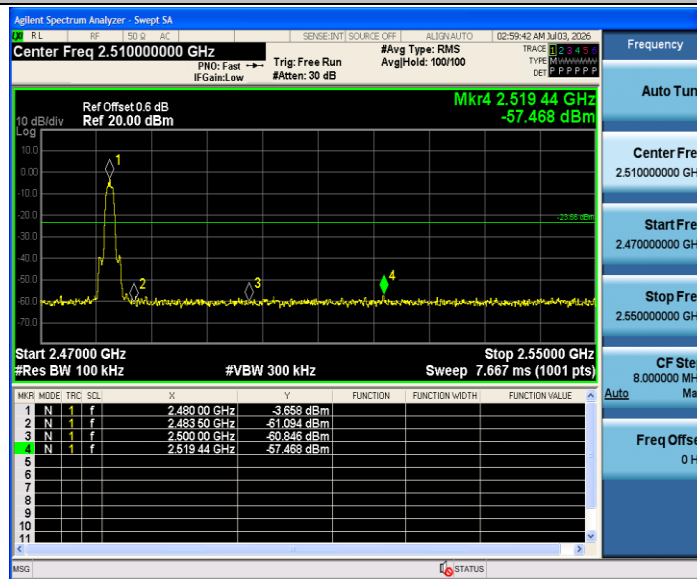
DH5_Ant1_High_Hop_2480



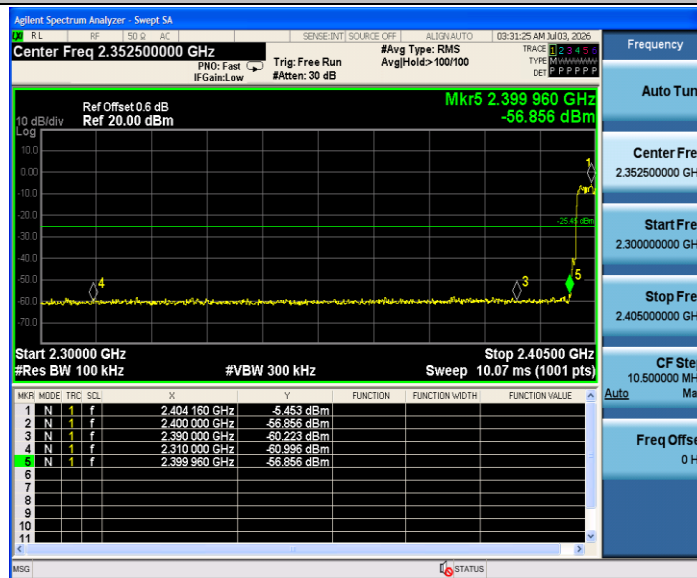
2DH5_Ant1_Low_2402



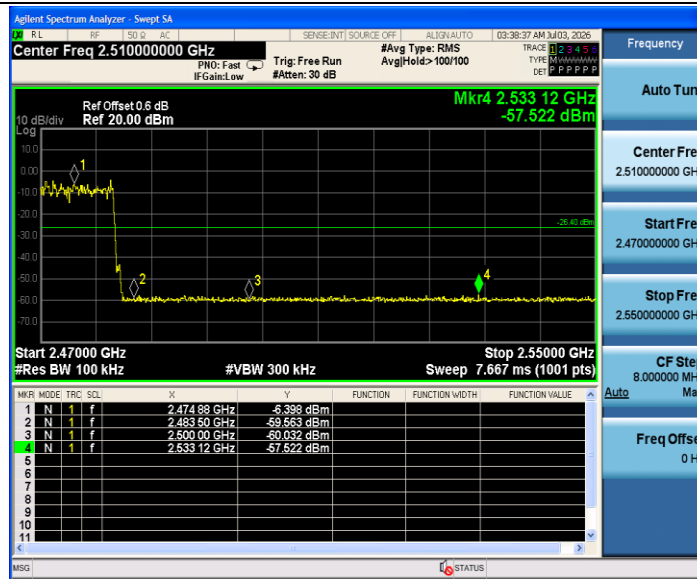
2DH5_Ant1_High_2480



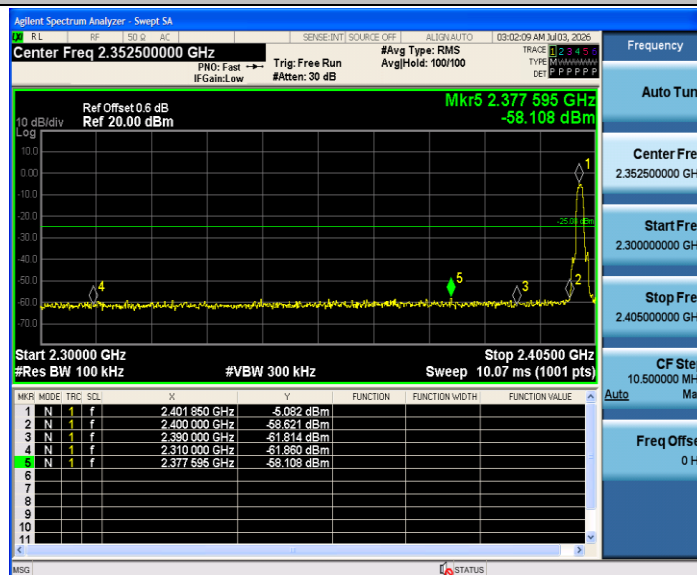
2DH5_Ant1_Low_Hop_2402



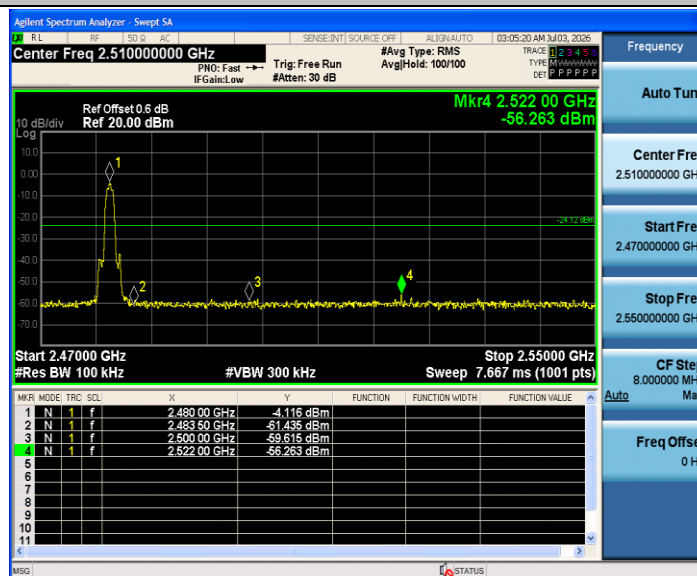
2DH5_Ant1_High_Hop_2480



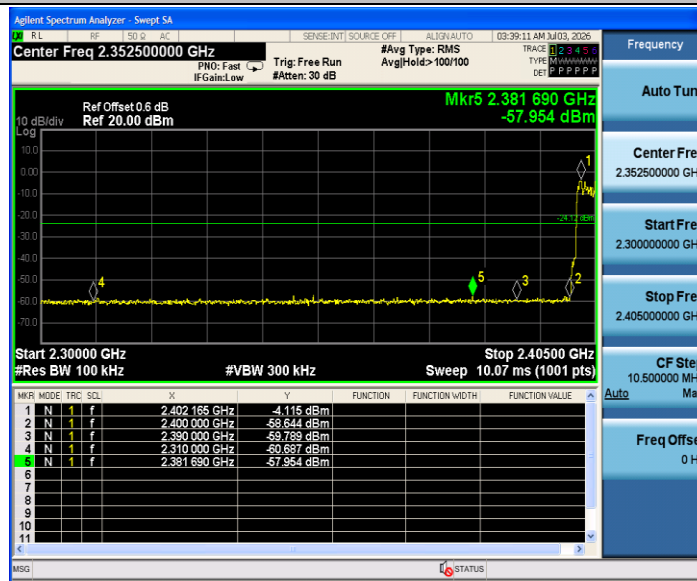
3DH5_Ant1_Low_2402



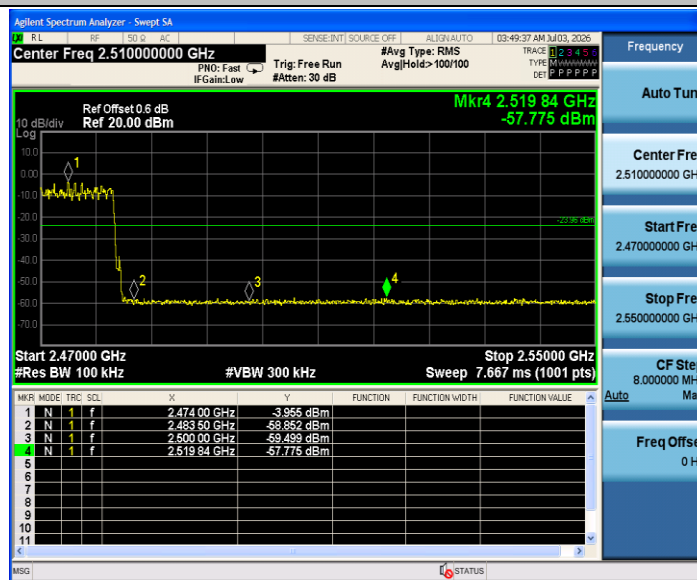
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

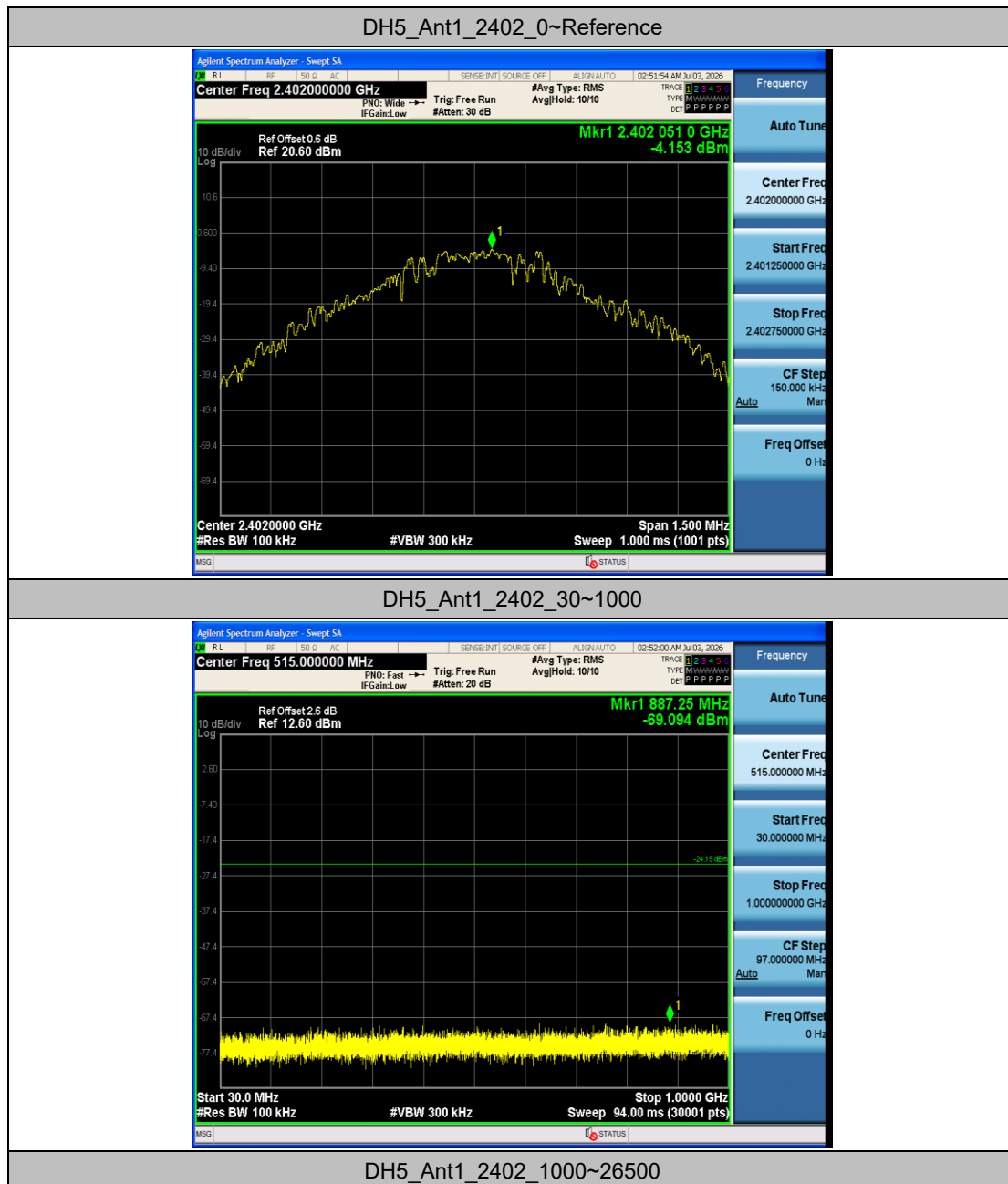


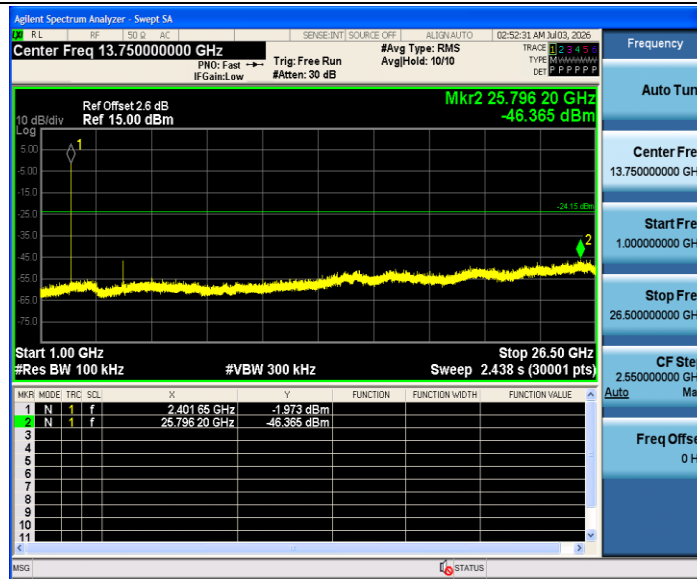
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.15	-4.15	---	PASS
			30~1000	-4.15	-69.09	≤-24.15	PASS
			1000~26500	-4.15	-46.37	≤-24.15	PASS
		2441	Reference	-4.30	-4.30	---	PASS
			30~1000	-4.30	-68.96	≤-24.3	PASS
			1000~26500	-4.30	-46.81	≤-24.3	PASS
		2480	Reference	-4.62	-4.62	---	PASS
			30~1000	-4.62	-67.85	≤-24.62	PASS
			1000~26500	-4.62	-45.34	≤-24.62	PASS
2DH5	Ant1	2402	Reference	-6.49	-6.49	---	PASS
			30~1000	-6.49	-67.99	≤-26.49	PASS
			1000~26500	-6.49	-44.39	≤-26.49	PASS
		2441	Reference	-6.80	-6.80	---	PASS
			30~1000	-6.80	-68.84	≤-26.8	PASS
			1000~26500	-6.80	-46.49	≤-26.8	PASS
		2480	Reference	-6.68	-6.68	---	PASS
			30~1000	-6.68	-69.23	≤-26.68	PASS
			1000~26500	-6.68	-47.05	≤-26.68	PASS
3DH5	Ant1	2402	Reference	-6.23	-6.23	---	PASS
			30~1000	-6.23	-68.76	≤-26.23	PASS
			1000~26500	-6.23	-46.32	≤-26.23	PASS
		2441	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-68.97	≤-24.31	PASS
			1000~26500	-4.31	-46.35	≤-24.31	PASS
		2480	Reference	-5.46	-5.46	---	PASS
			30~1000	-5.46	-68.31	≤-25.46	PASS
			1000~26500	-5.46	-46.7	≤-25.46	PASS

Test Graphs

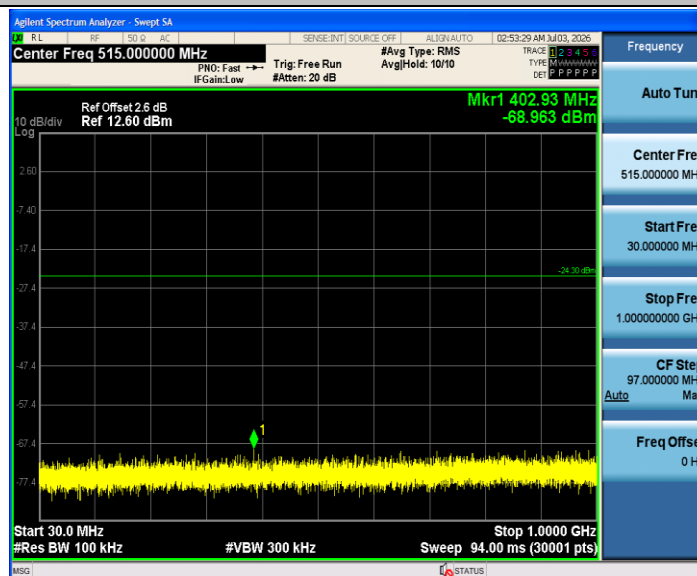




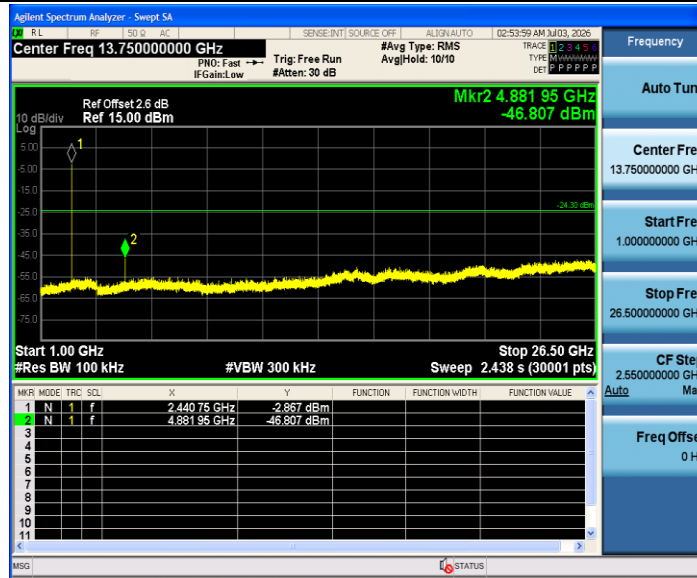
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



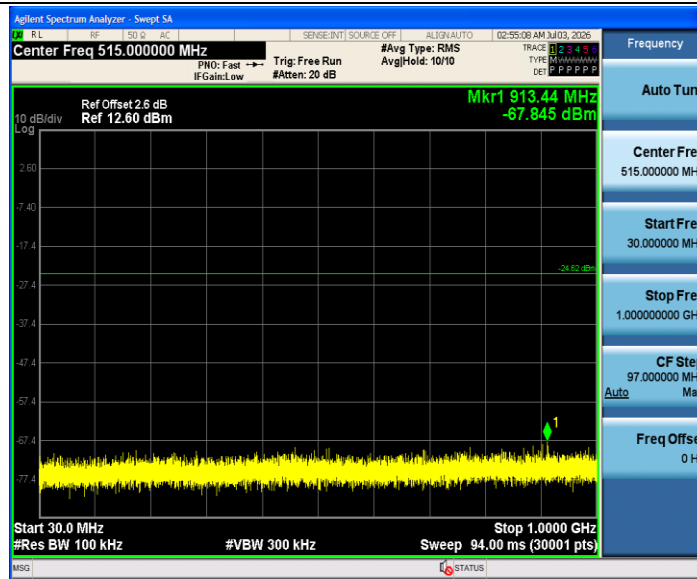
DH5_Ant1_2441_1000~26500



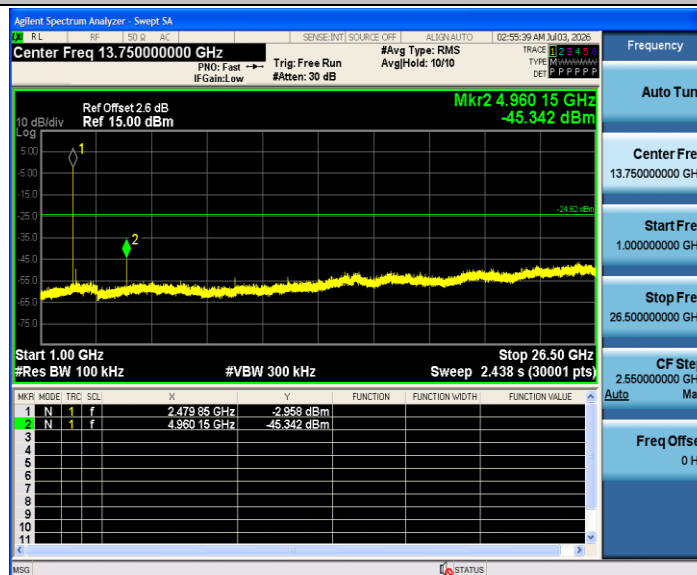
DH5_Ant1_2480_0~Reference



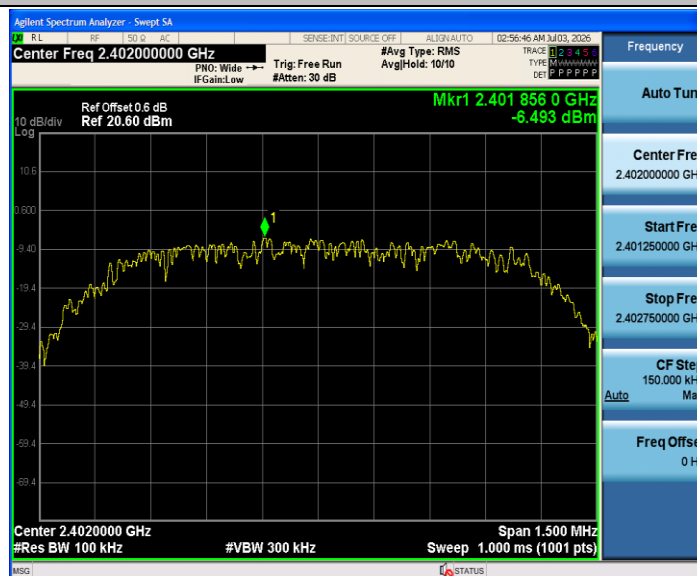
DH5_Ant1_2480_30~1000



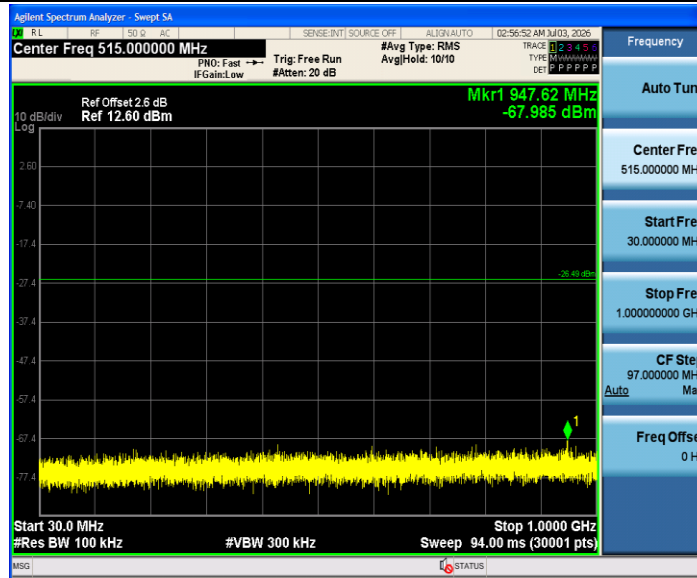
DH5_Ant1_2480_1000~26500



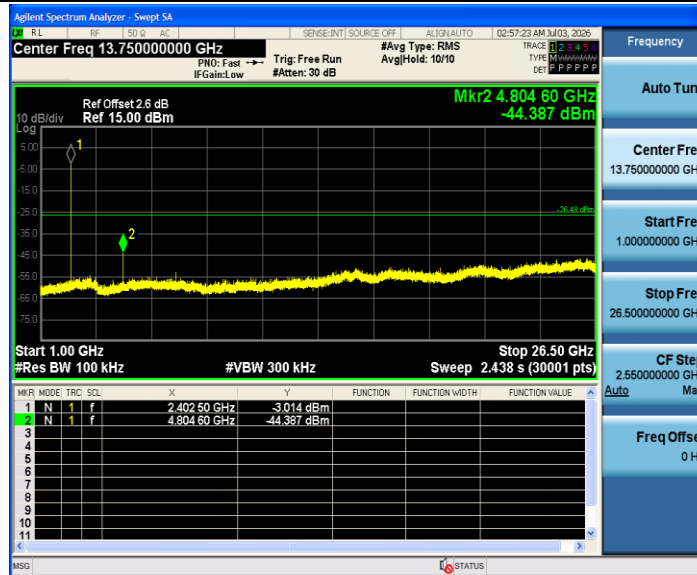
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference