

FCC Appendix RF Test Data for BT

FCC ID : 2AOQF-FS-D30PRO

Company : Dongguan Huahong Electrical Appliances Co.,Ltd

EUT : Portable Wireless Speaker

Model Number : FS-D30 PRO

Report No. : CTA26101401201

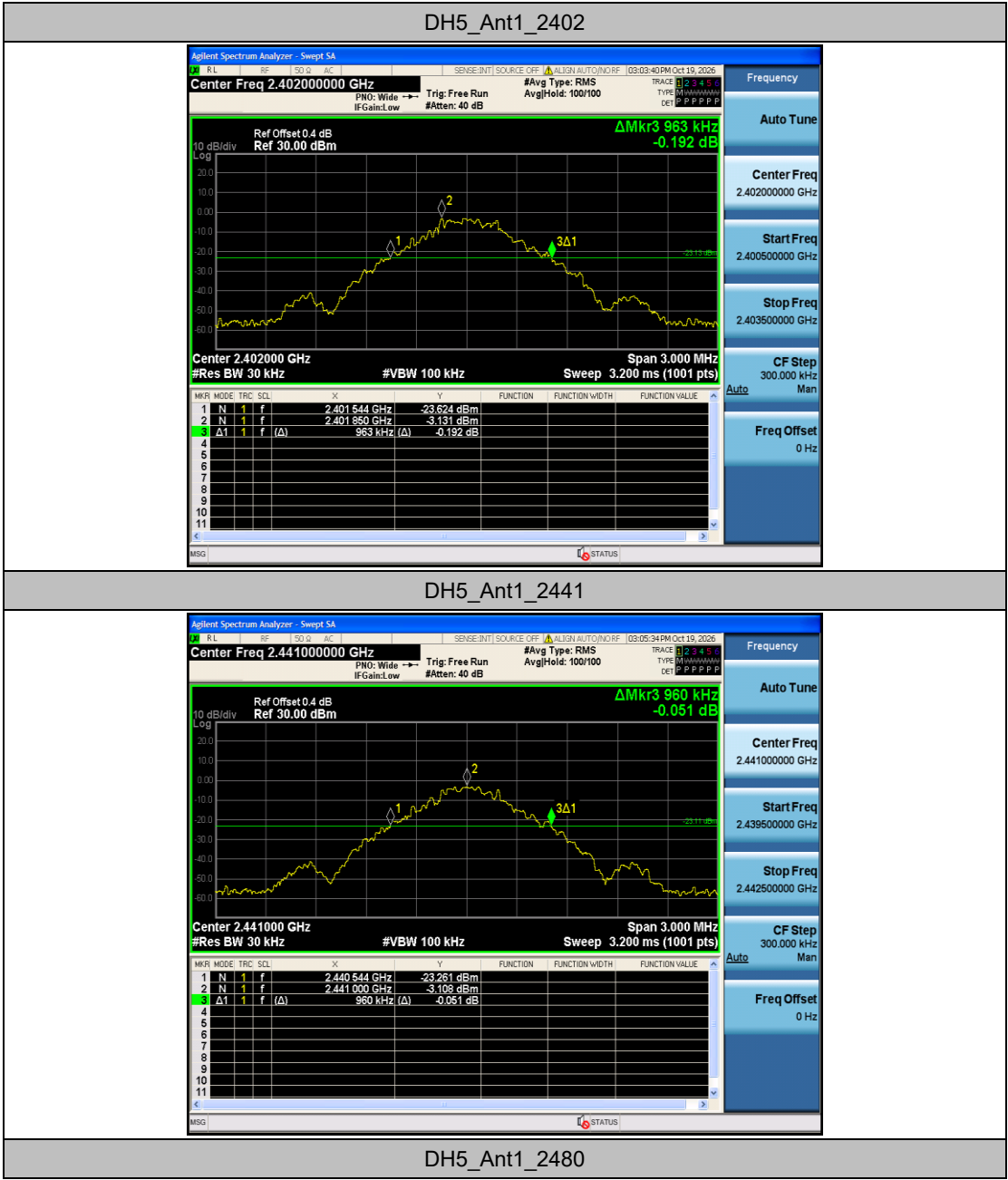
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.963	2401.544	2402.507	---	---
		2441	0.960	2440.544	2441.504	---	---
		2480	0.954	2479.547	2480.501	---	---
2DH5	Ant1	2402	1.350	2401.334	2402.684	---	---
		2441	1.284	2440.379	2441.663	---	---
		2480	1.314	2479.352	2480.666	---	---
3DH5	Ant1	2402	1.296	2401.364	2402.660	---	---
		2441	1.293	2440.364	2441.657	---	---
		2480	1.305	2479.361	2480.666	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441





3DH5_Ant1_2480

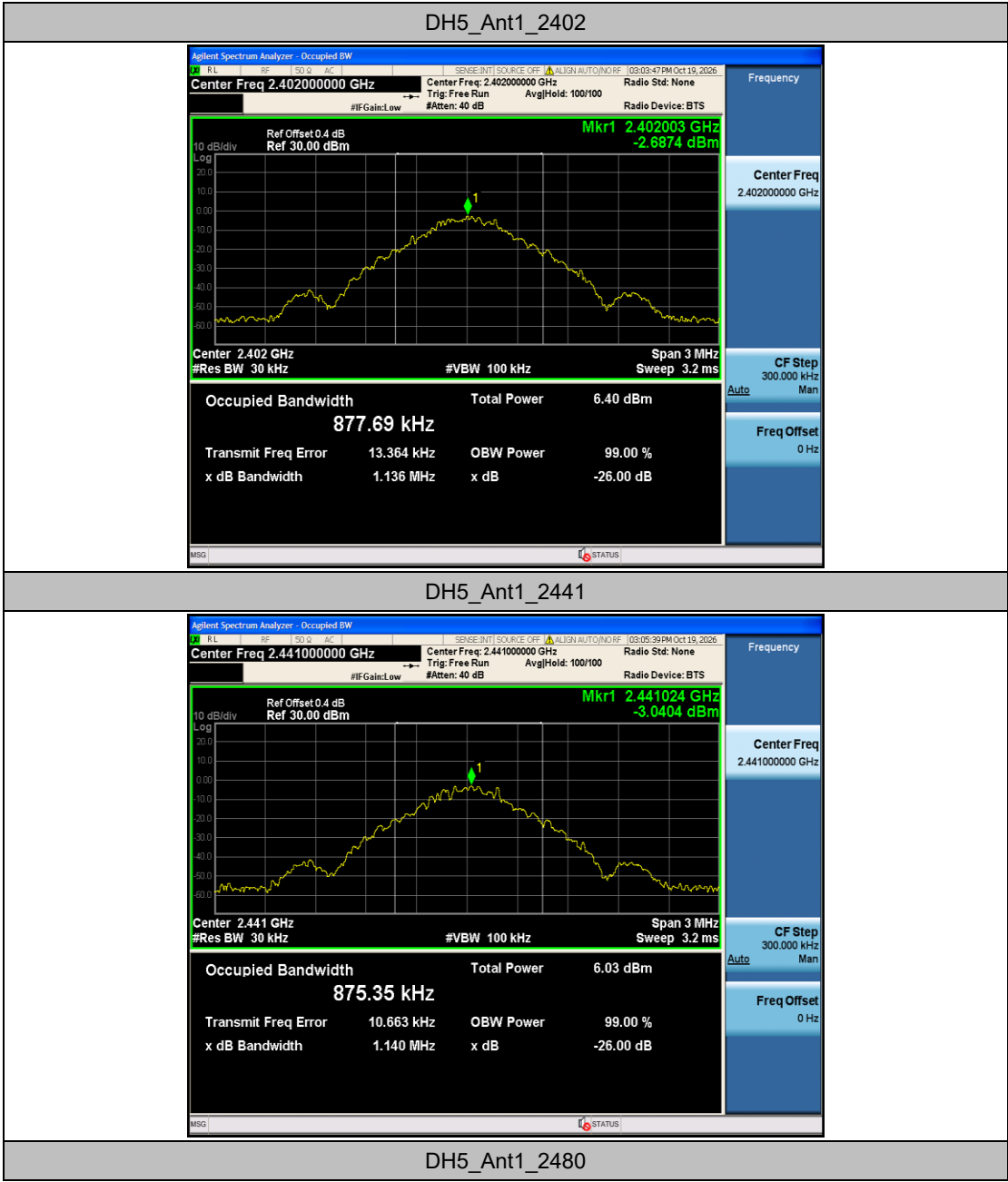


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87769	2401.5745	2402.4522	---	---
		2441	0.87535	2440.5730	2441.4483	---	---
		2480	0.86384	2479.5769	2480.4408	---	---
2DH5	Ant1	2402	1.1964	2401.4145	2402.6109	---	---
		2441	1.1866	2440.4168	2441.6034	---	---
		2480	1.1859	2479.4165	2480.6024	---	---
3DH5	Ant1	2402	1.1793	2401.4227	2402.6020	---	---
		2441	1.1851	2440.4196	2441.6047	---	---
		2480	1.1795	2479.4209	2480.6004	---	---

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	-0.11	≤20.97	PASS
		2441	-0.20	≤20.97	PASS
		2480	-0.40	≤20.97	PASS
2DH5	Ant1	2402	2.55	≤20.97	PASS
		2441	-1.01	≤20.97	PASS
		2480	-1.28	≤20.97	PASS
3DH5	Ant1	2402	-0.58	≤20.97	PASS
		2441	-0.73	≤20.97	PASS
		2480	-0.88	≤20.97	PASS

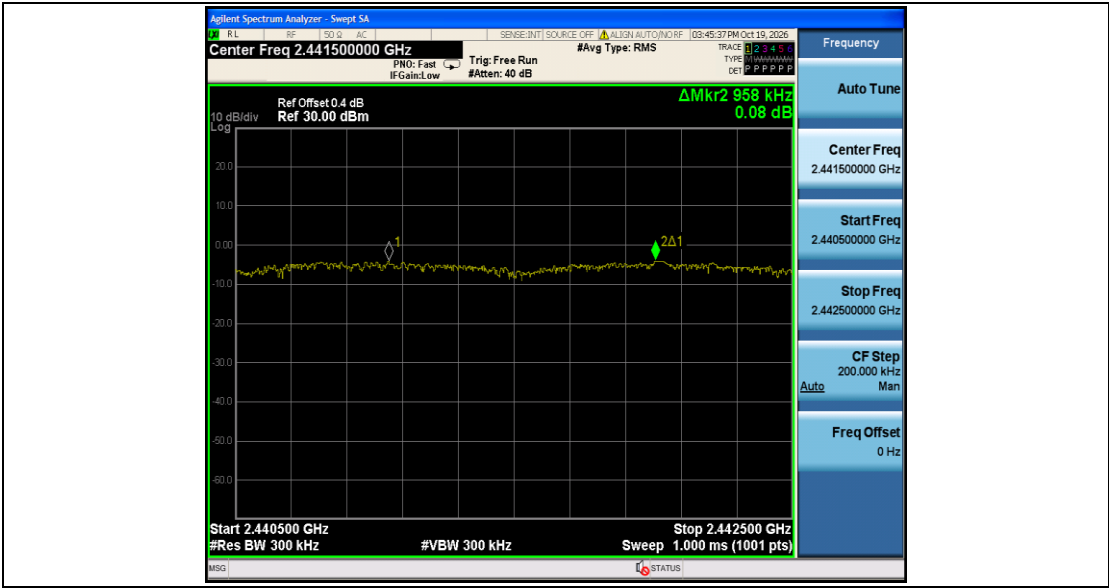
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	≥ 0.963	PASS
2DH5	Ant1	Hop	1.044	≥ 0.900	PASS
3DH5	Ant1	Hop	0.958	≥ 0.870	PASS

Test Graphs



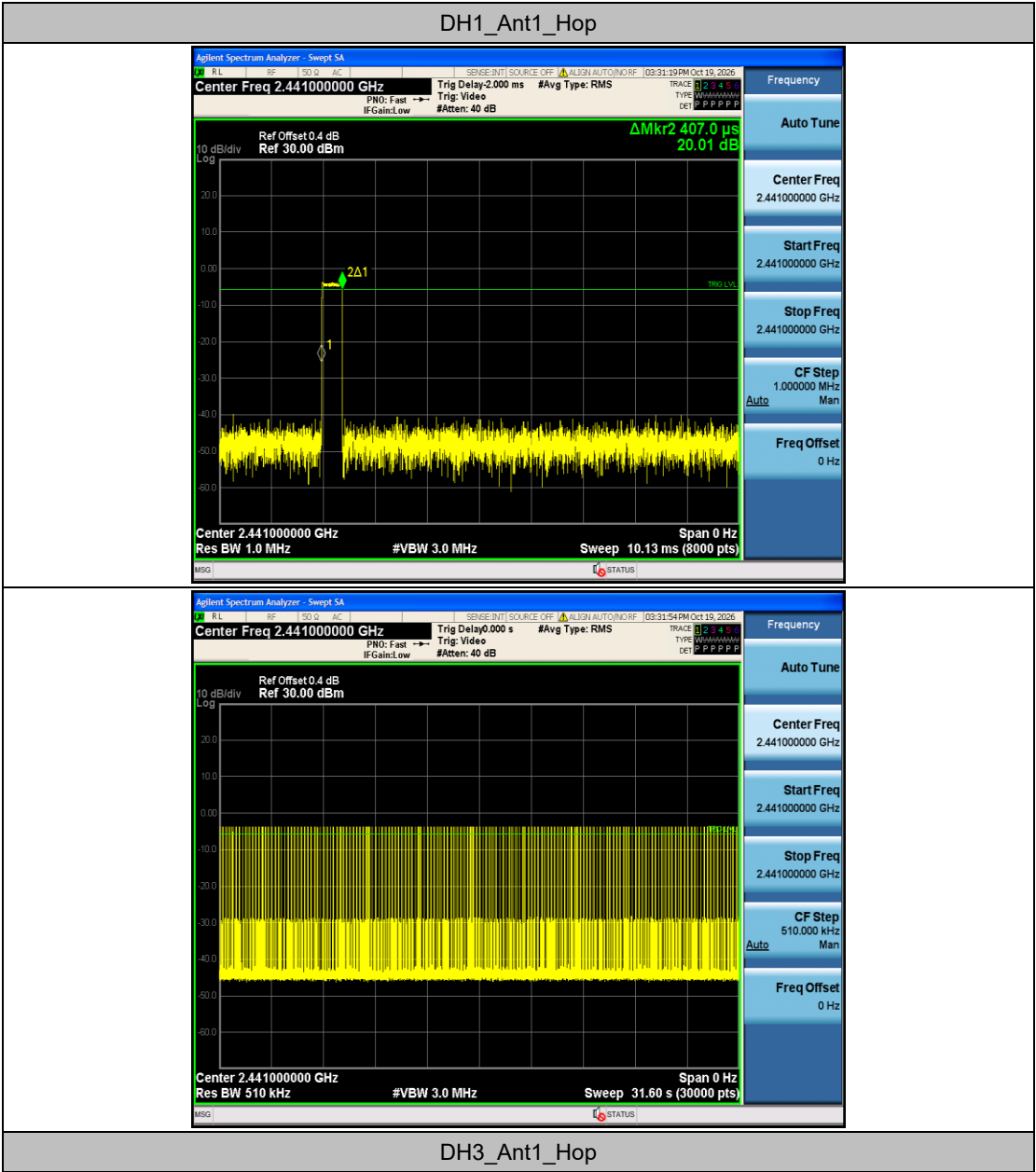


Appendix E: Time of occupancy

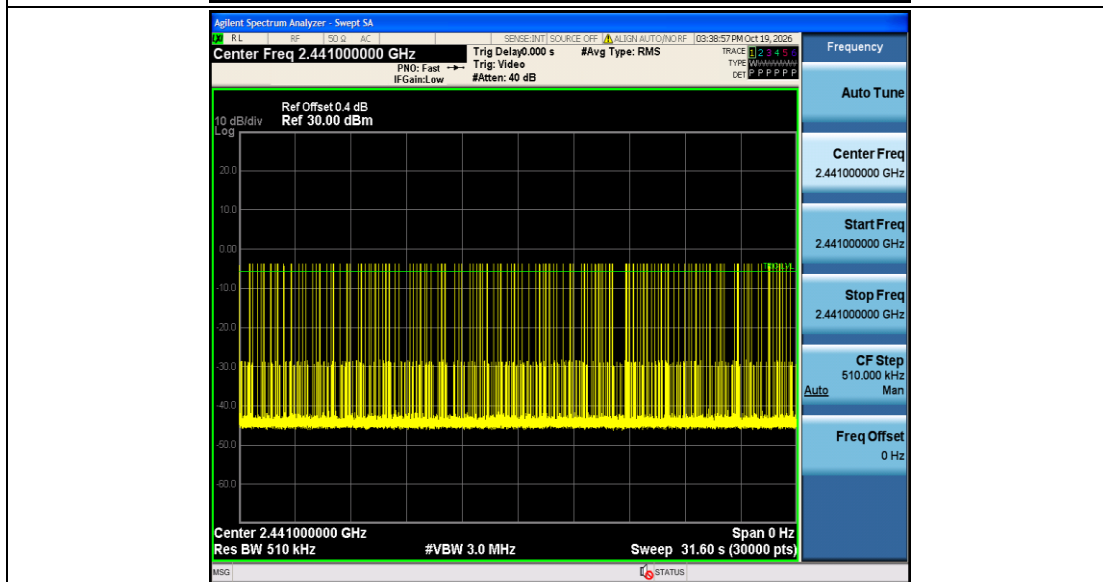
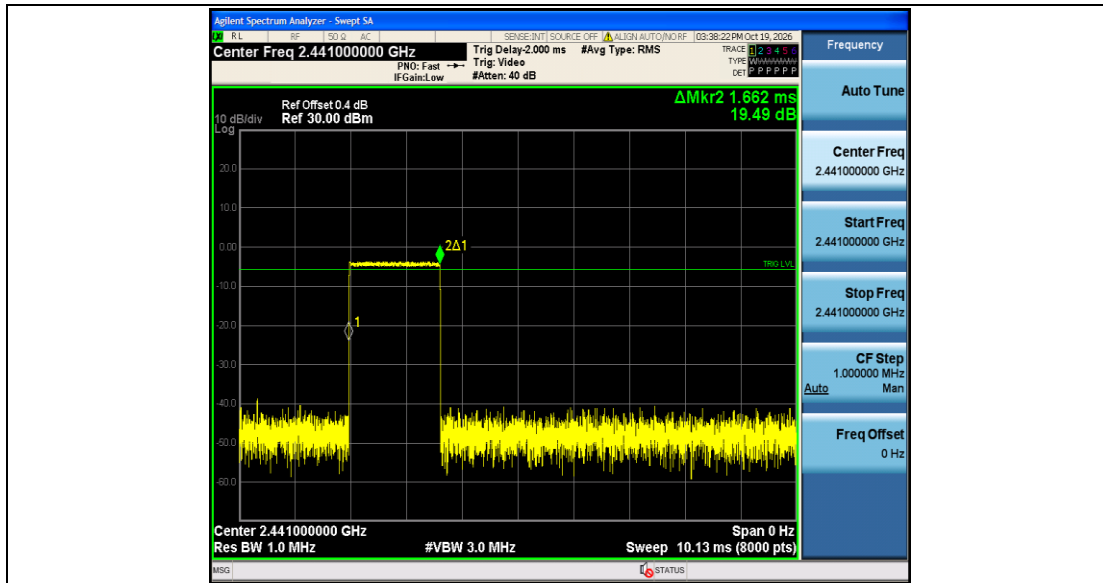
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	317	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	163	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.911	100	0.291	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.667	151	0.252	≤0.4	PASS
2DH5	Ant1	Hop	2.915	111	0.324	≤0.4	PASS
3DH1	Ant1	Hop	0.417	320	0.133	≤0.4	PASS
3DH3	Ant1	Hop	1.664	151	0.251	≤0.4	PASS
3DH5	Ant1	Hop	2.917	105	0.306	≤0.4	PASS

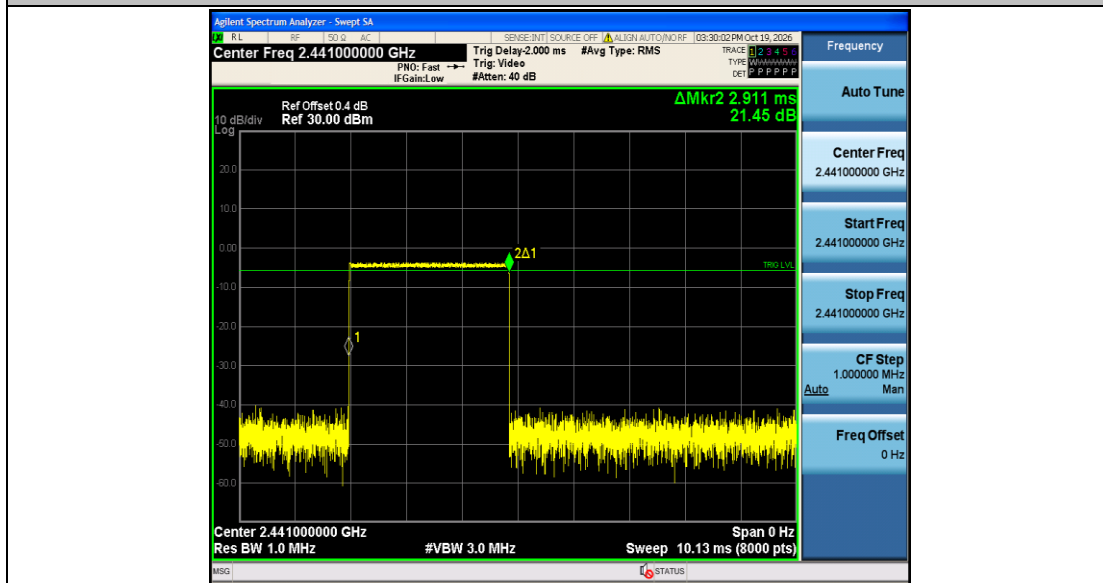
Test Graphs

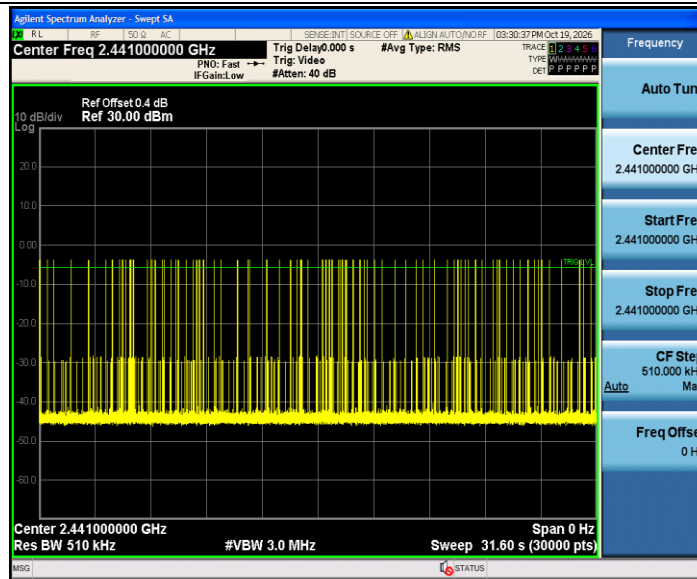


DH3_Ant1_Hop

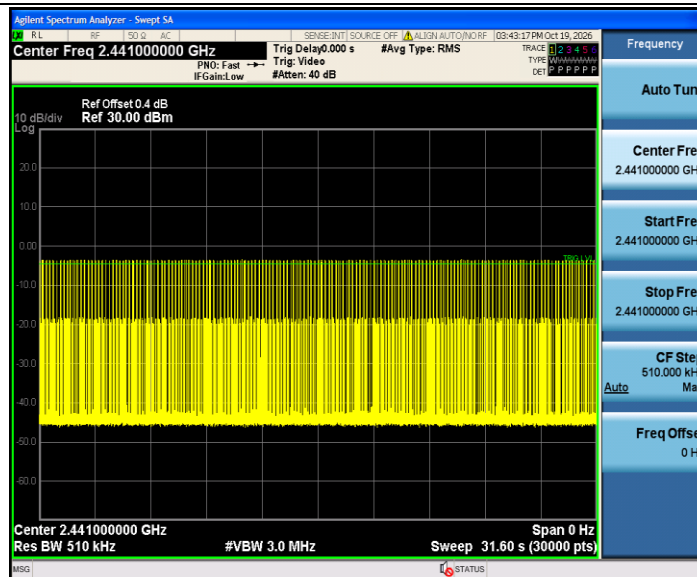
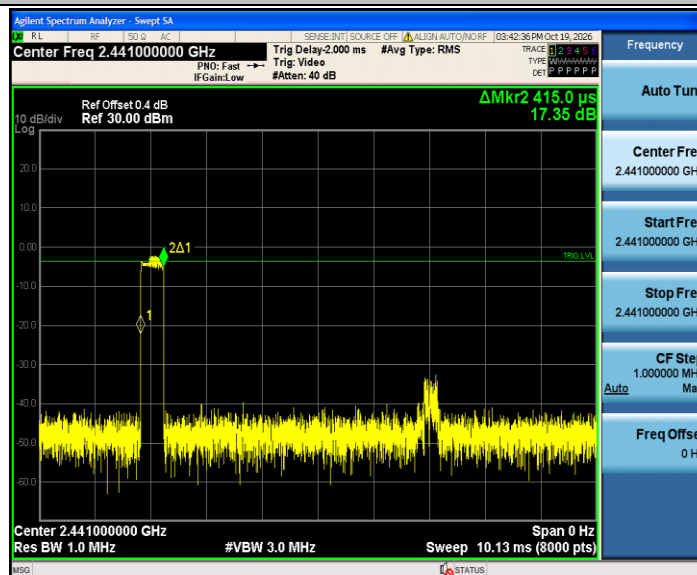


DH5_Ant1_Hop

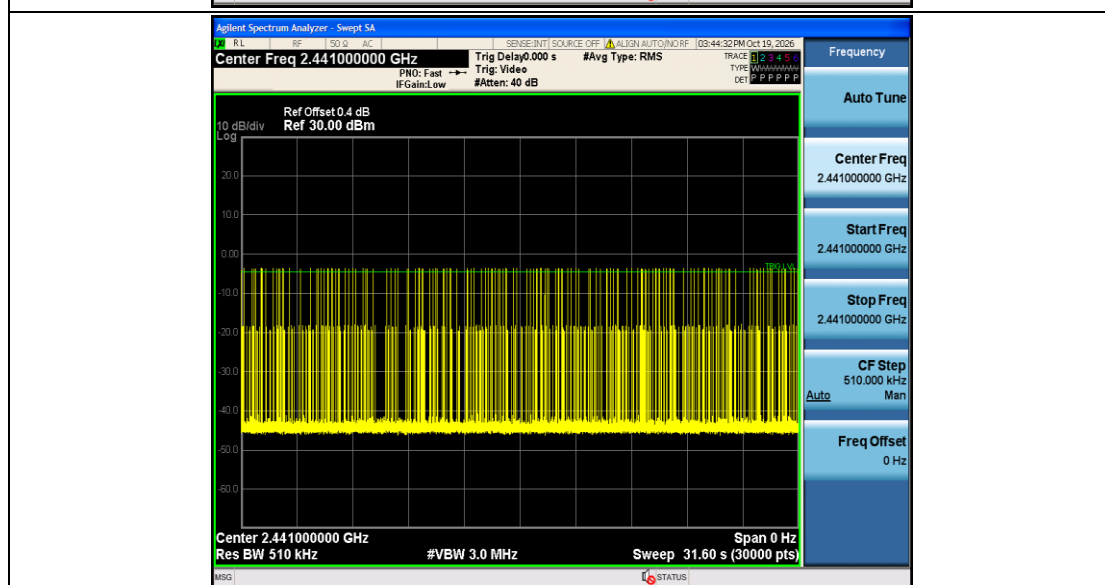
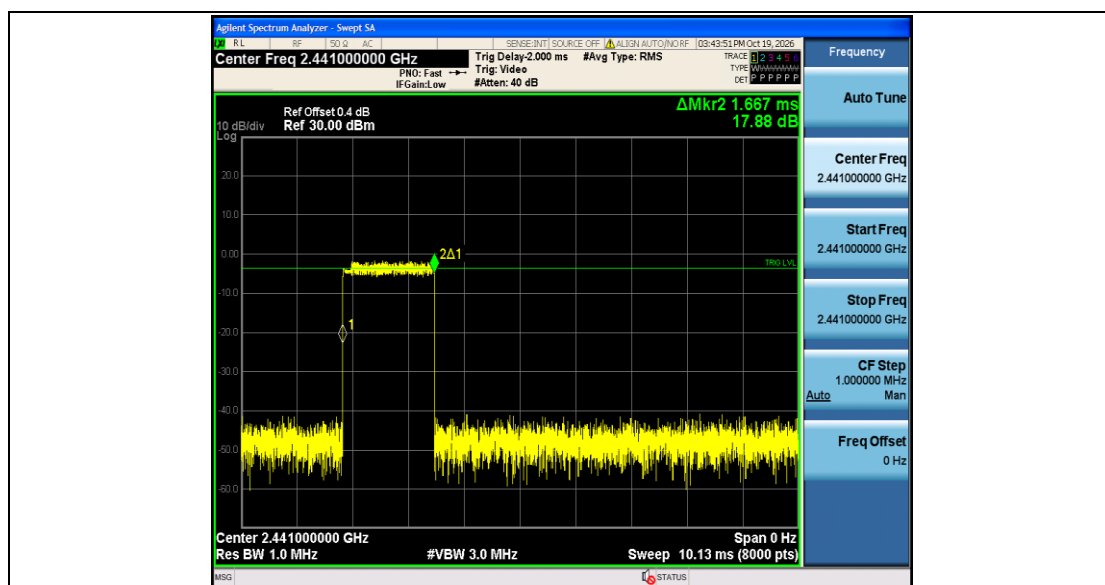




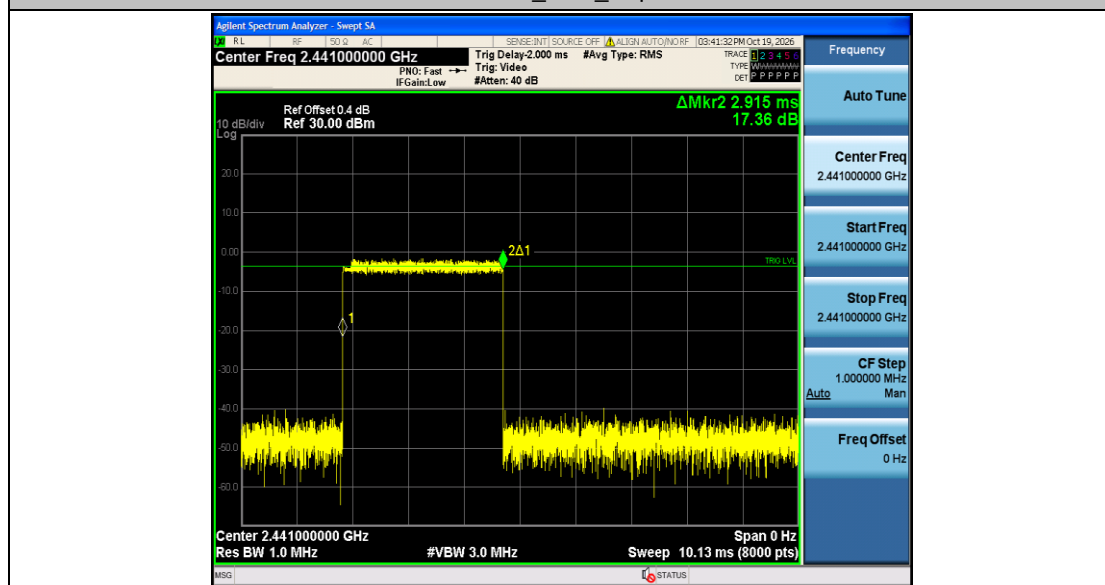
2DH1_Ant1_Hop

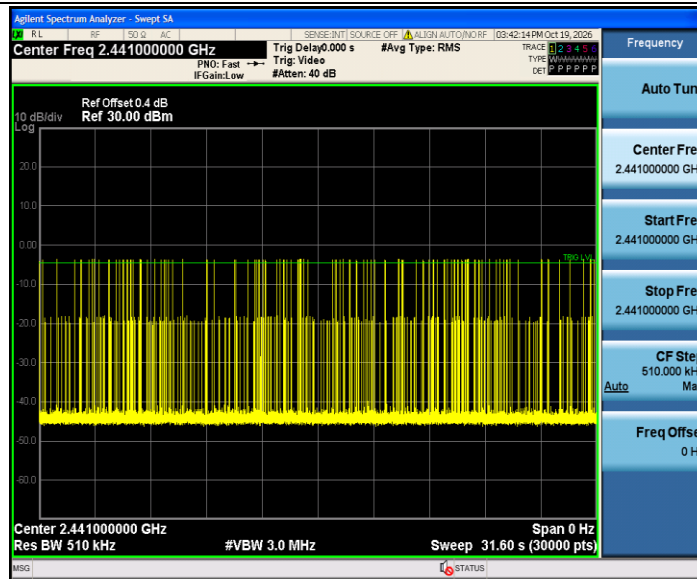


2DH3_Ant1_Hop

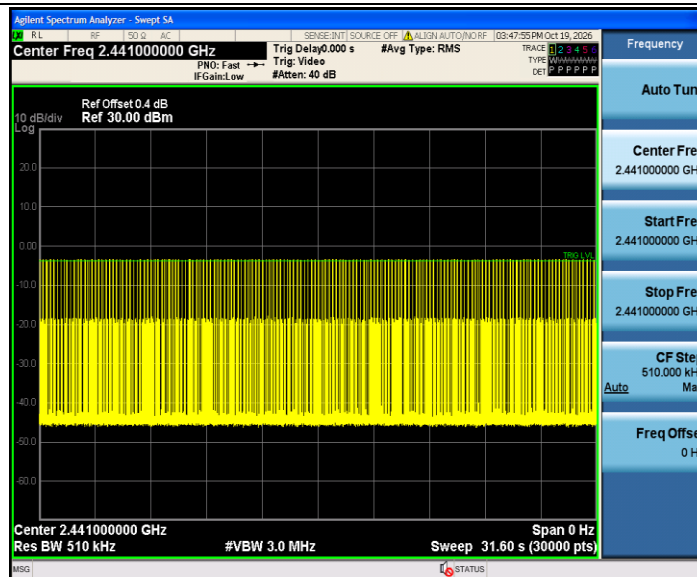
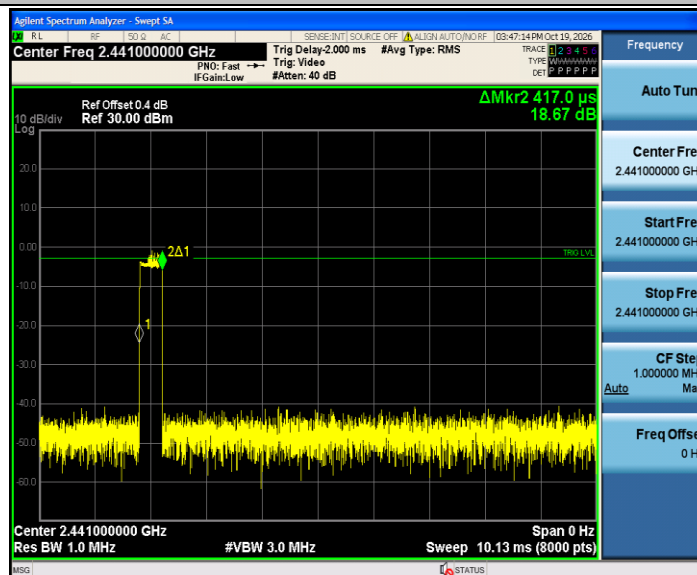


2DH5_Ant1_Hop

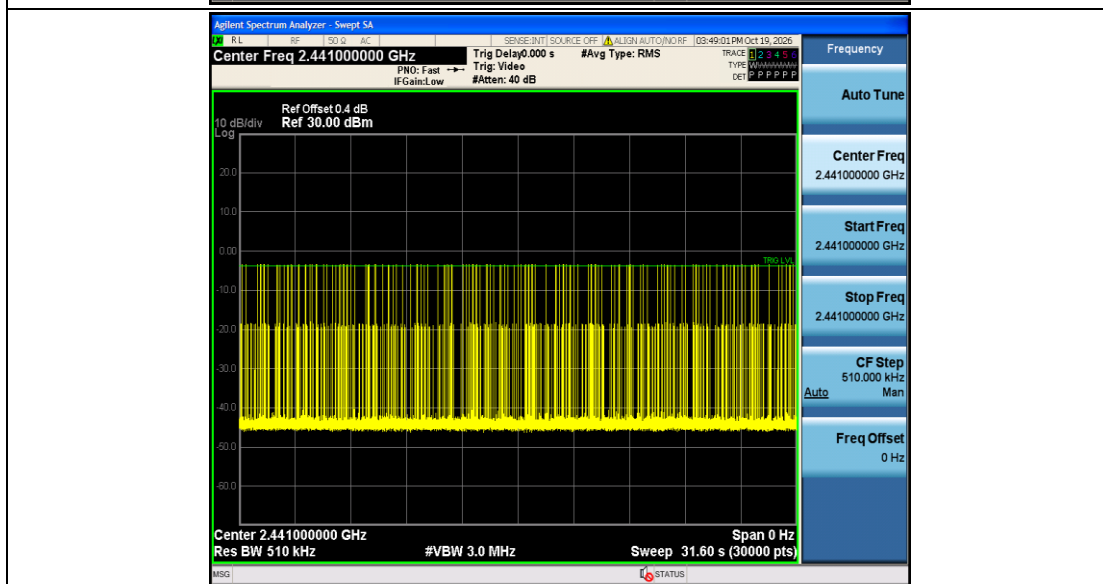
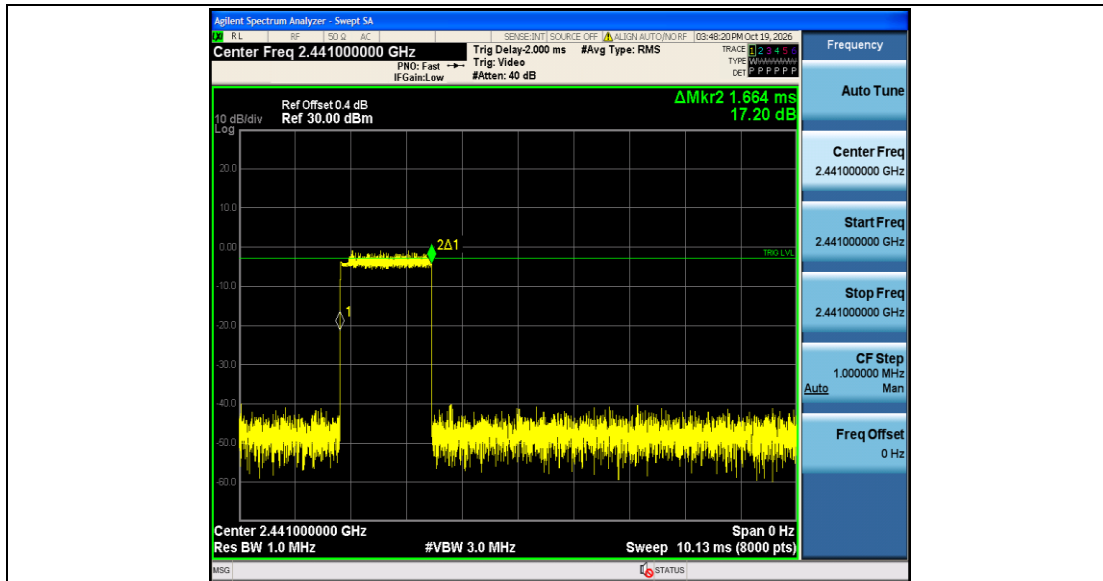




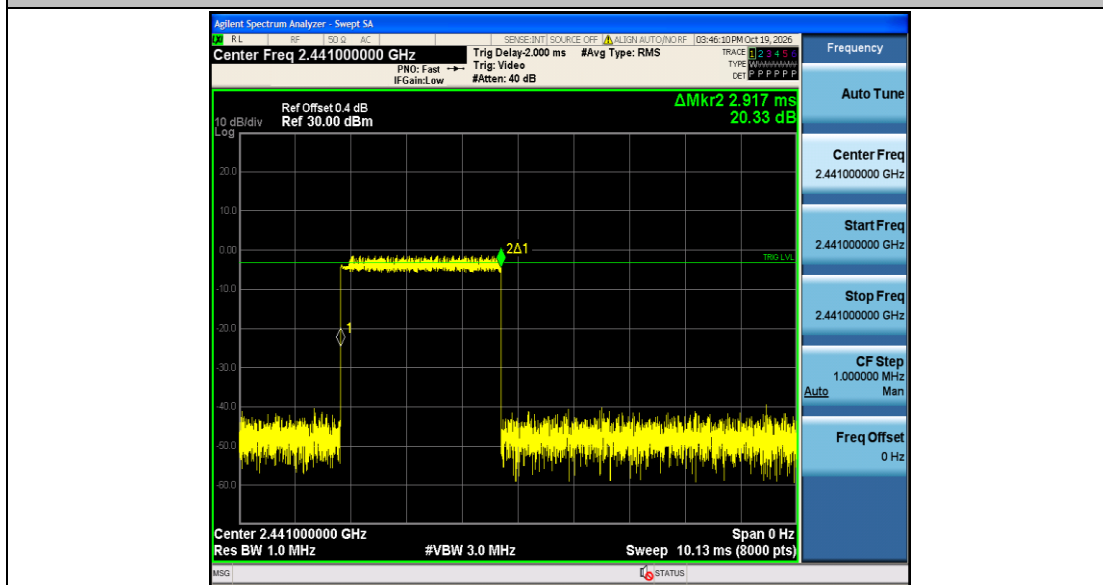
3DH1_Ant1_Hop

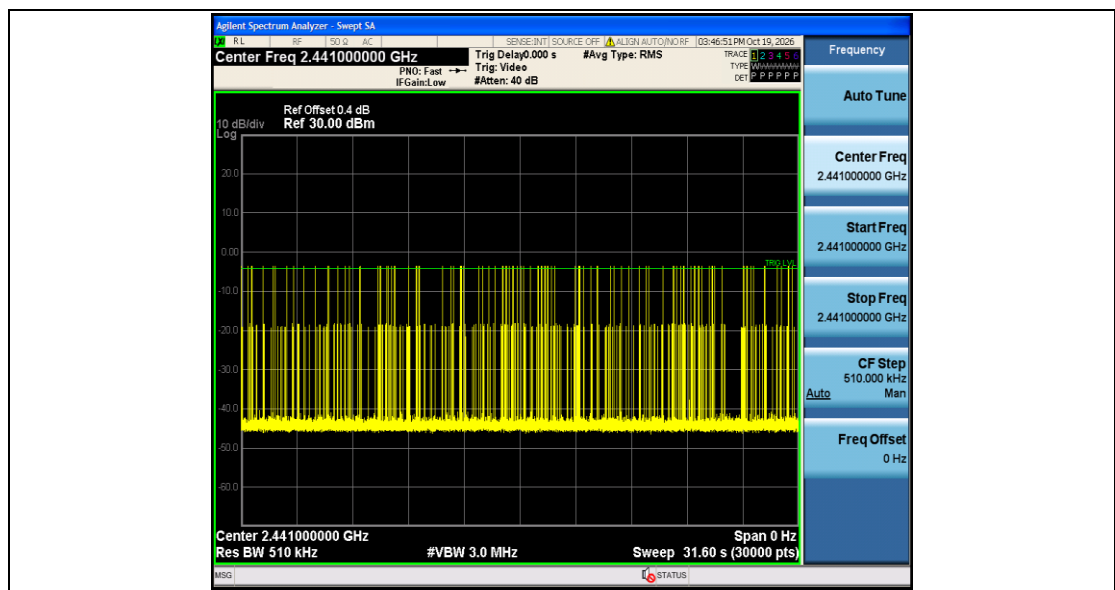


3DH3_Ant1_Hop



3DH5_Ant1_Hop



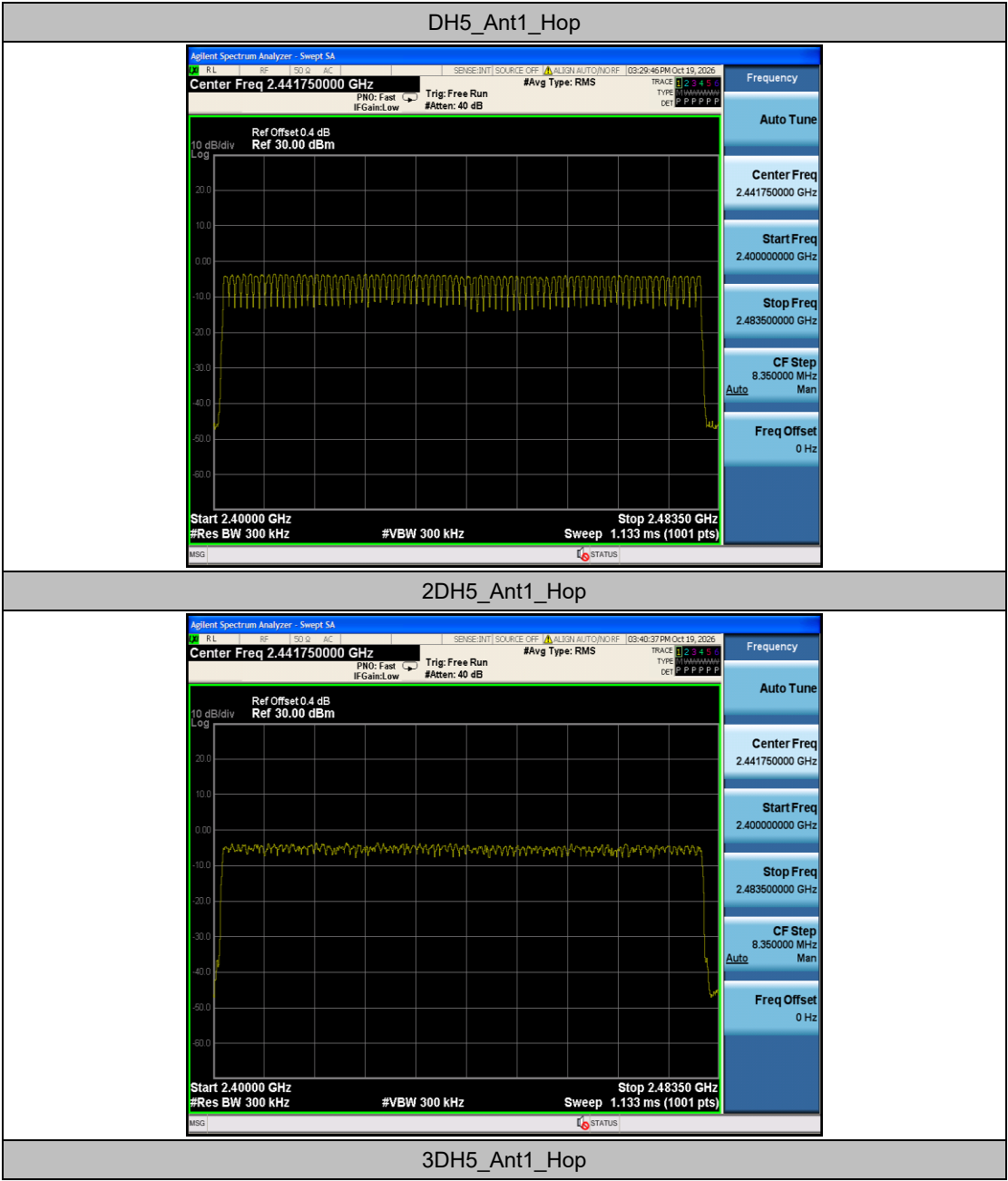


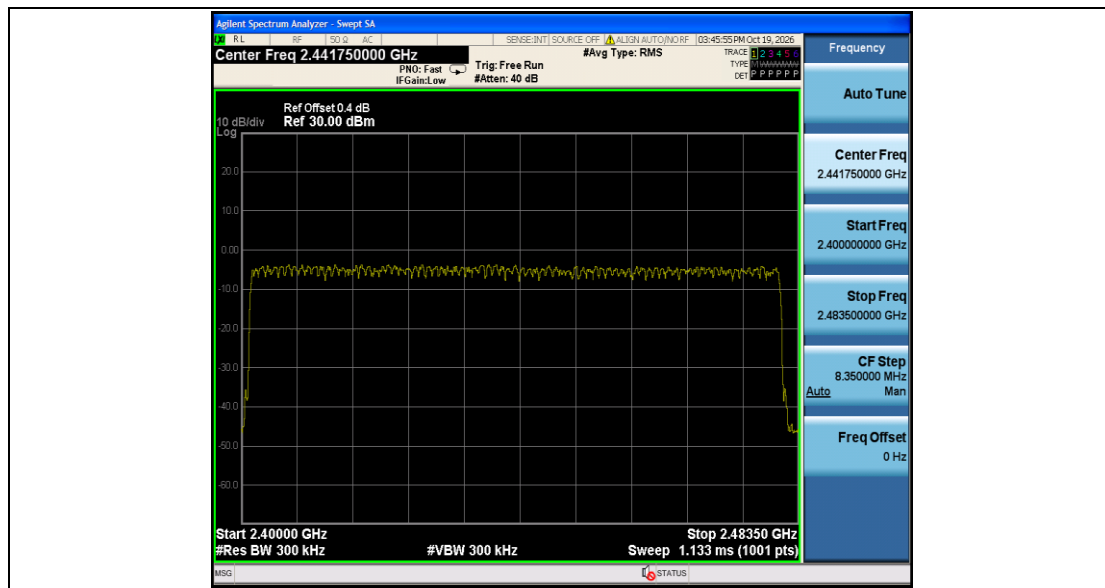
Appendix F: Number of hopping channels

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



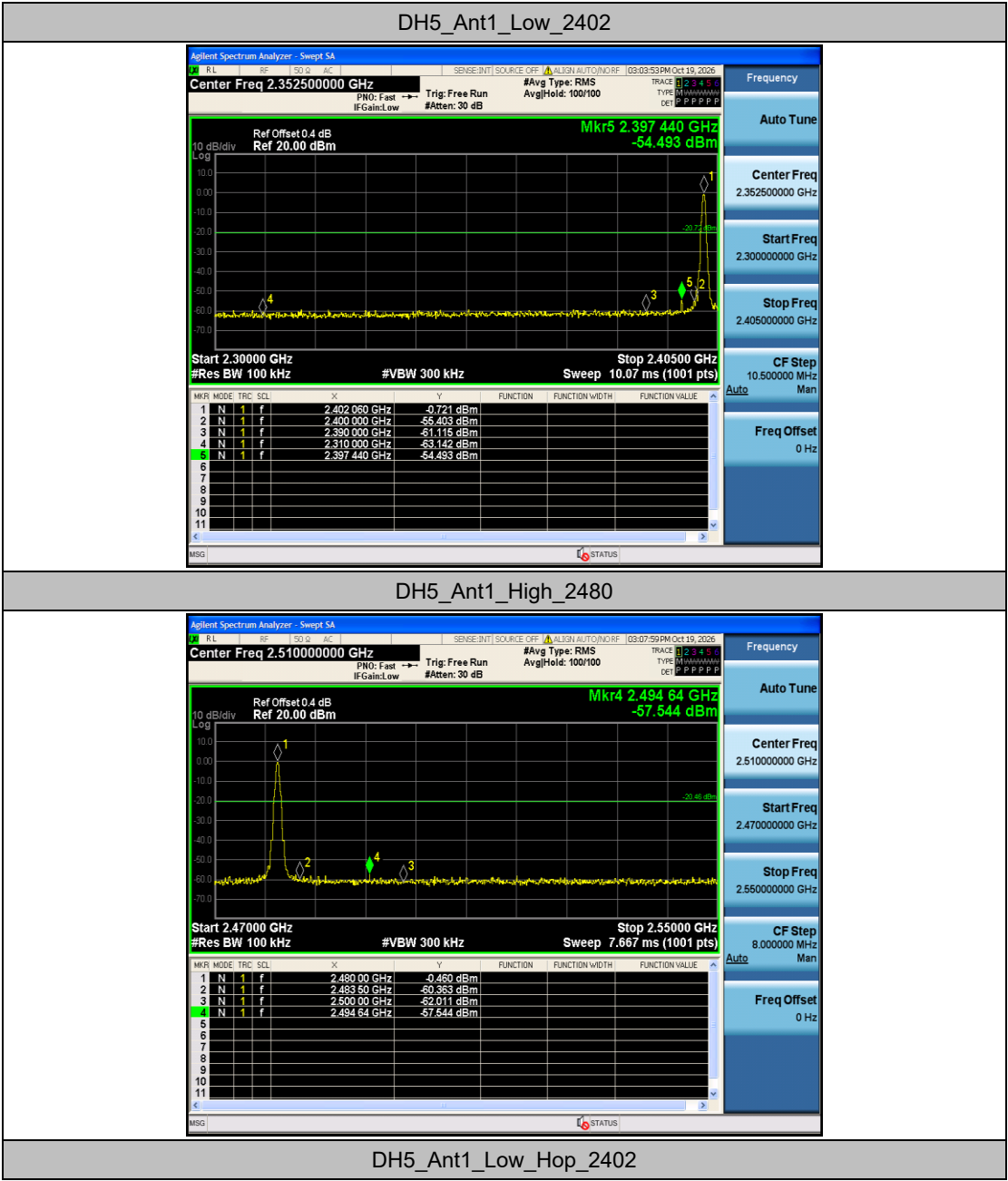


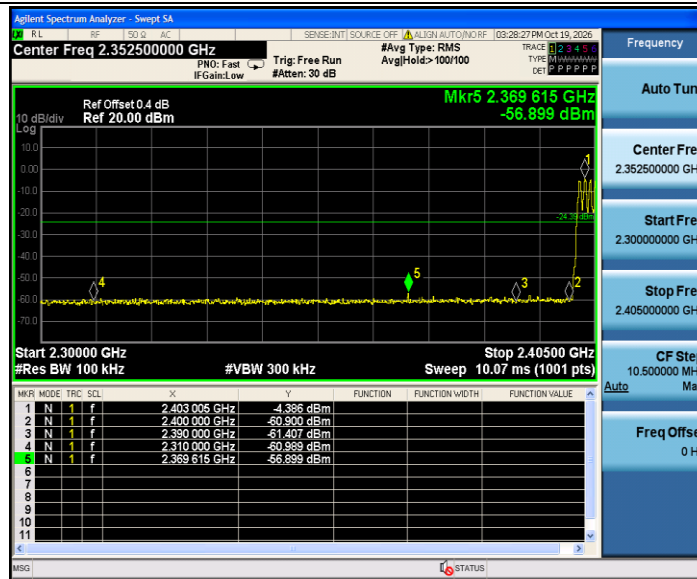
Appendix G: Band edge measurements

Test Result

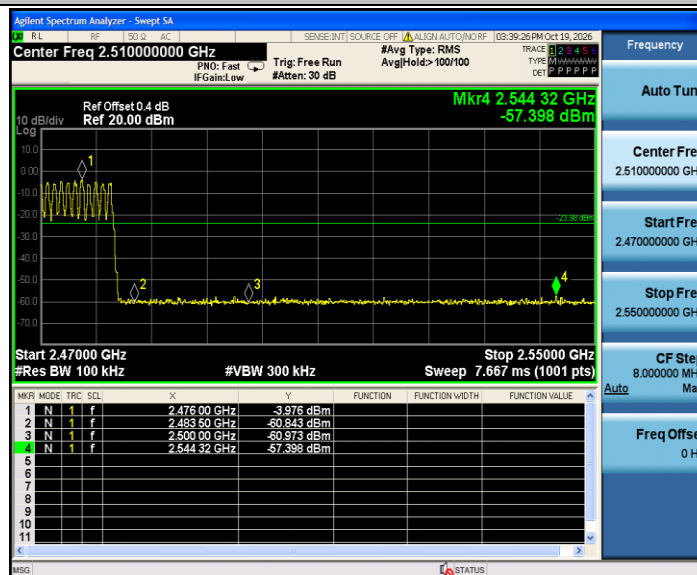
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.72	-54.49	≤-20.72	PASS
		High	2480	-0.46	-57.54	≤-20.46	PASS
		Low	Hop_2402	-4.39	-56.9	≤-24.39	PASS
		High	Hop_2480	-3.98	-57.4	≤-23.98	PASS
2DH5	Ant1	Low	2402	-1.61	-50.84	≤-21.61	PASS
		High	2480	-3.94	-57.97	≤-23.94	PASS
		Low	Hop_2402	-5.43	-58.55	≤-25.43	PASS
		High	Hop_2480	-4.20	-57.93	≤-24.2	PASS
3DH5	Ant1	Low	2402	-5.59	-55.66	≤-25.59	PASS
		High	2480	-4.06	-57.93	≤-24.06	PASS
		Low	Hop_2402	-6.24	-58.59	≤-26.24	PASS
		High	Hop_2480	-3.83	-57.84	≤-23.83	PASS

Test Graphs

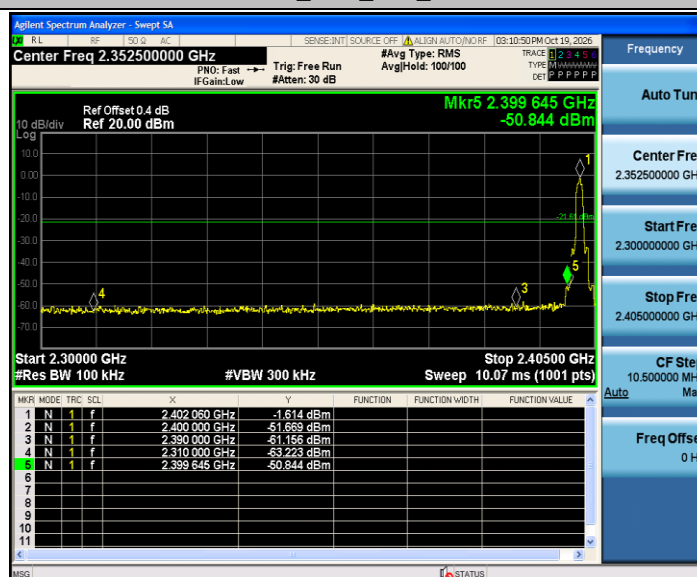




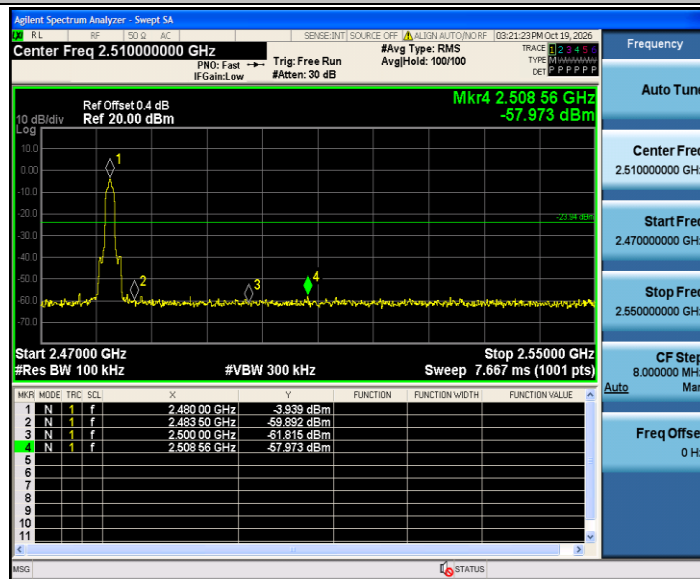
DH5_Ant1_High_Hop_2480



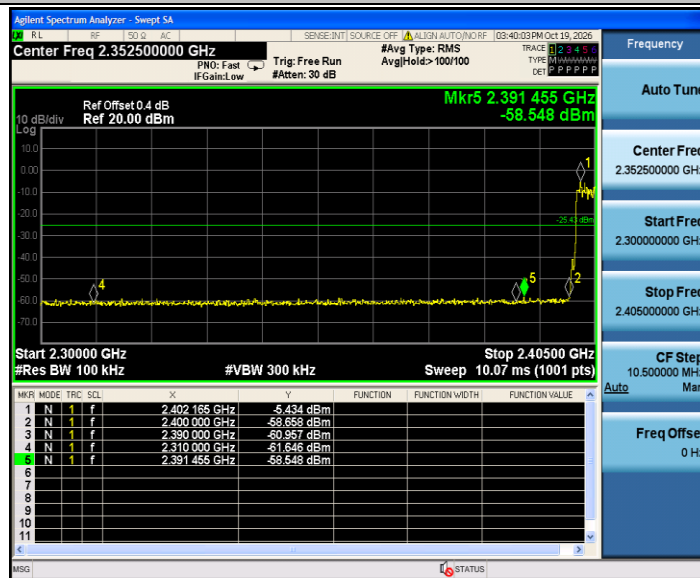
2DH5_Ant1_Low_2402



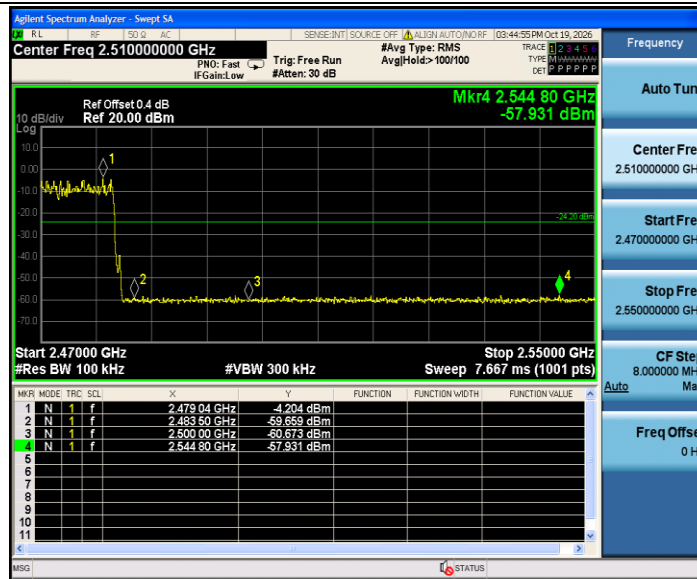
2DH5_Ant1_High_2480



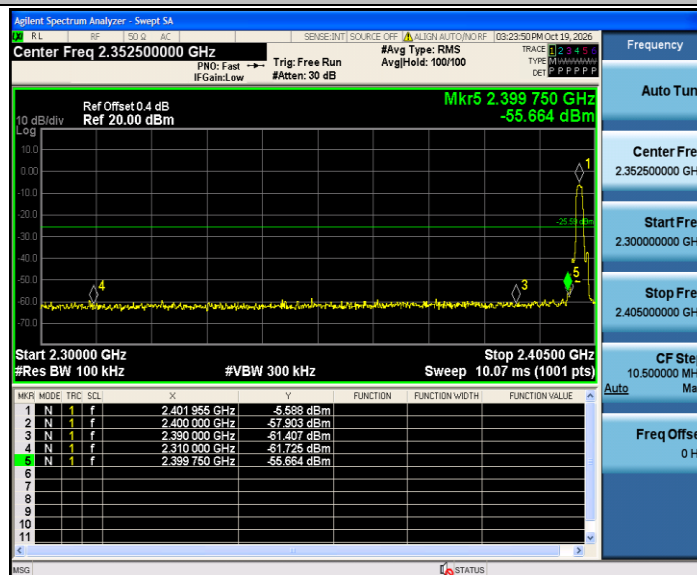
2DH5_Ant1_Low_Hop_2402



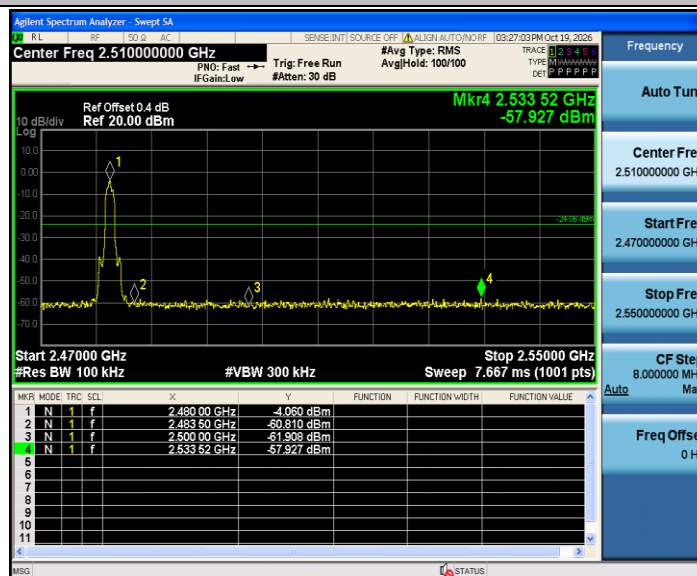
2DH5_Ant1_High_Hop_2480



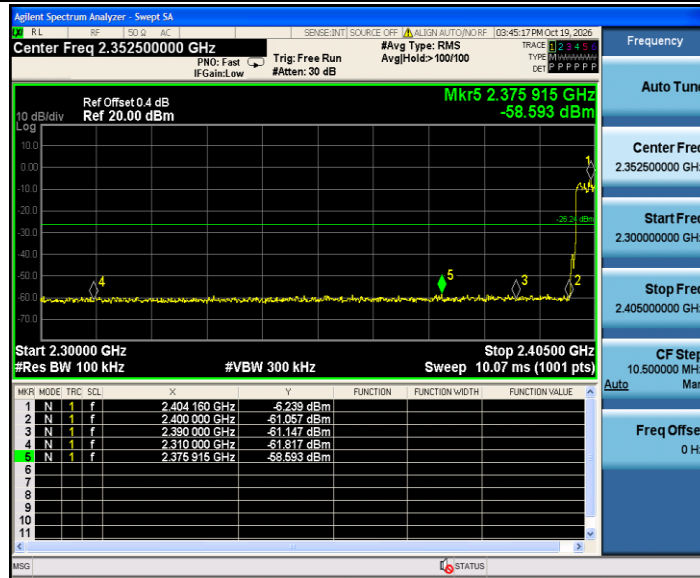
3DH5_Ant1_Low_2402



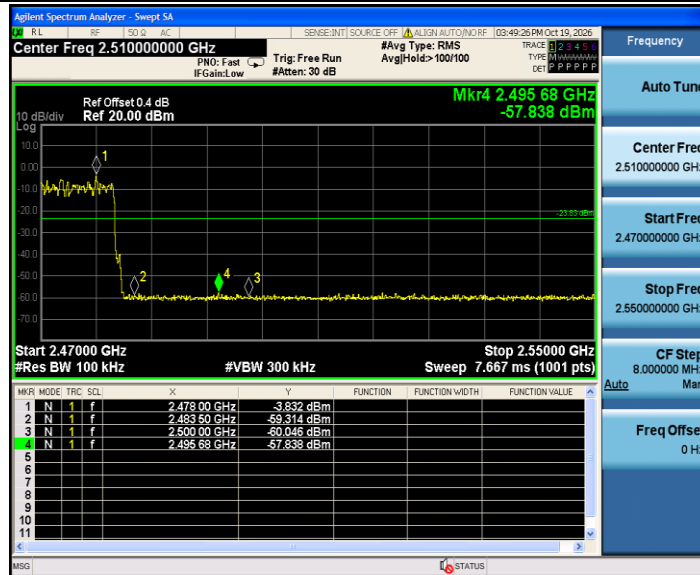
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

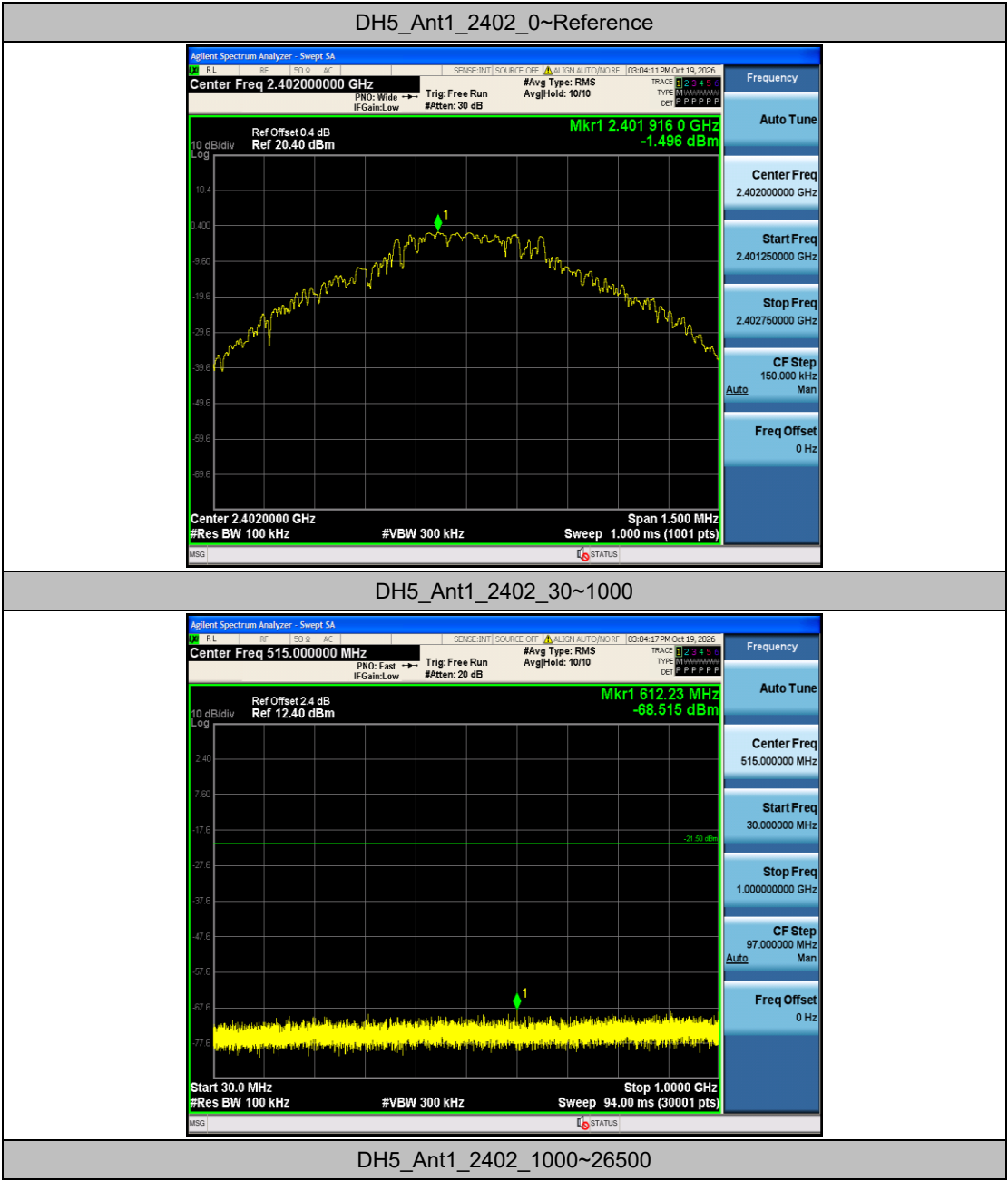


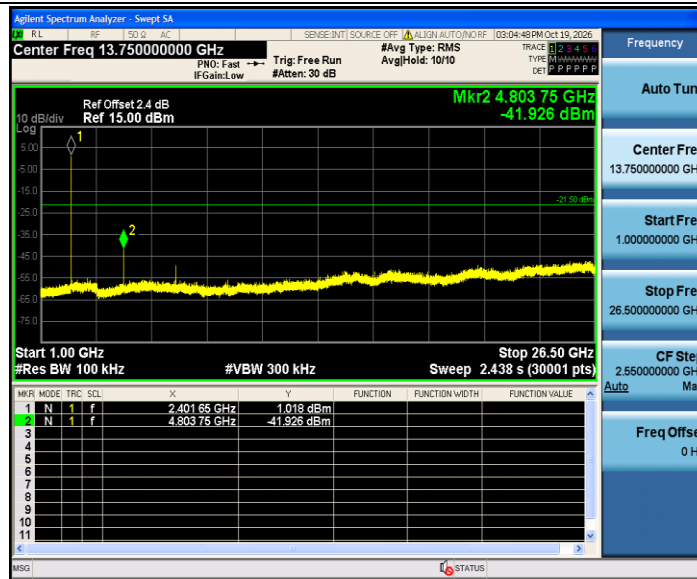
Appendix H: Conducted Spurious Emission

Test Result

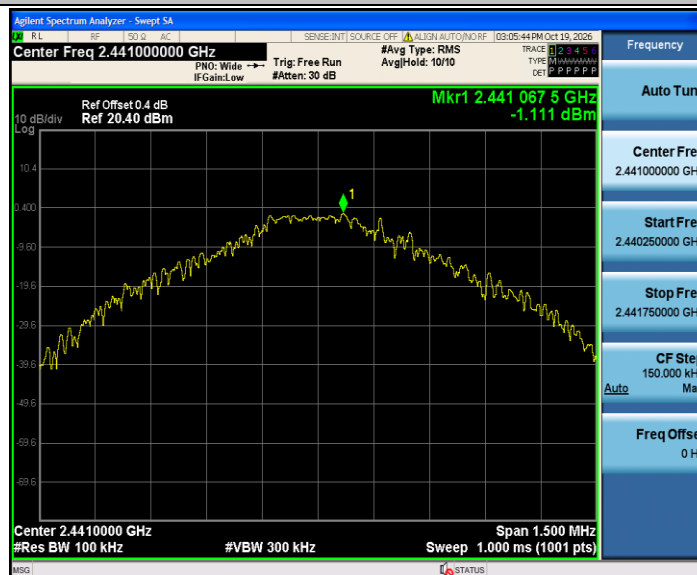
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-68.52	≤ -21.5	PASS
			1000~26500	-1.50	-41.93	≤ -21.5	PASS
		2441	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-68.33	≤ -21.11	PASS
			1000~26500	-1.11	-40.76	≤ -21.11	PASS
		2480	Reference	-1.76	-1.76	---	PASS
			30~1000	-1.76	-68.04	≤ -21.76	PASS
			1000~26500	-1.76	-41.09	≤ -21.76	PASS
2DH5	Ant1	2402	Reference	-2.20	-2.20	---	PASS
			30~1000	-2.20	-68.76	≤ -22.2	PASS
			1000~26500	-2.20	-40.71	≤ -22.2	PASS
		2441	Reference	-5.39	-5.39	---	PASS
			30~1000	-5.39	-68.47	≤ -25.39	PASS
			1000~26500	-5.39	-46.53	≤ -25.39	PASS
		2480	Reference	-6.19	-6.19	---	PASS
			30~1000	-6.19	-68.36	≤ -26.19	PASS
			1000~26500	-6.19	-47.16	≤ -26.19	PASS
3DH5	Ant1	2402	Reference	-5.68	-5.68	---	PASS
			30~1000	-5.68	-45.69	≤ -25.68	PASS
			1000~26500	-5.68	-46.27	≤ -25.68	PASS
		2441	Reference	-5.69	-5.69	---	PASS
			30~1000	-5.69	-68.47	≤ -25.69	PASS
			1000~26500	-5.69	-46.96	≤ -25.69	PASS
		2480	Reference	-6.96	-6.96	---	PASS
			30~1000	-6.96	-47.54	≤ -26.96	PASS
			1000~26500	-6.96	-47.22	≤ -26.96	PASS

Test Graphs

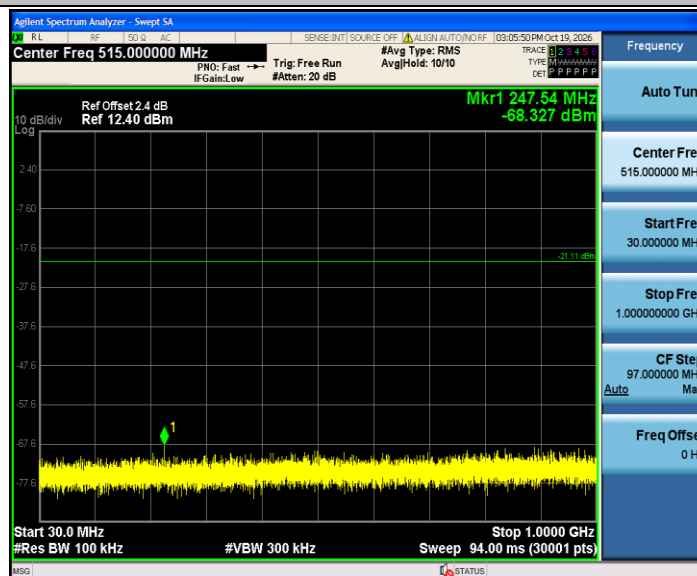




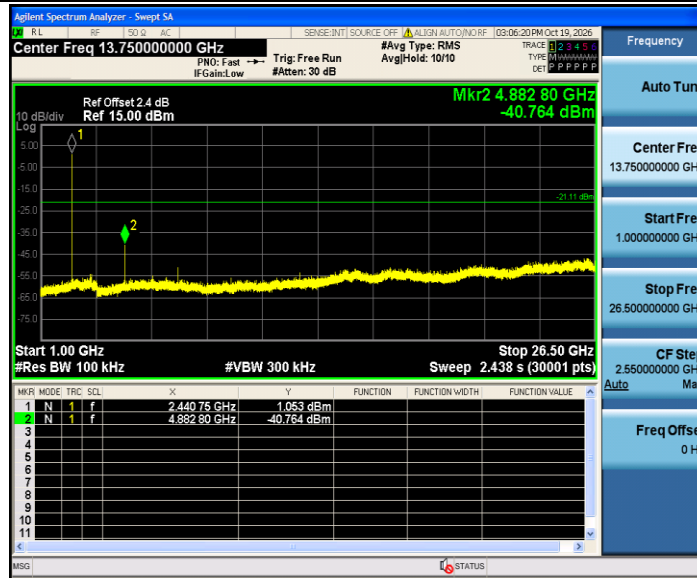
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



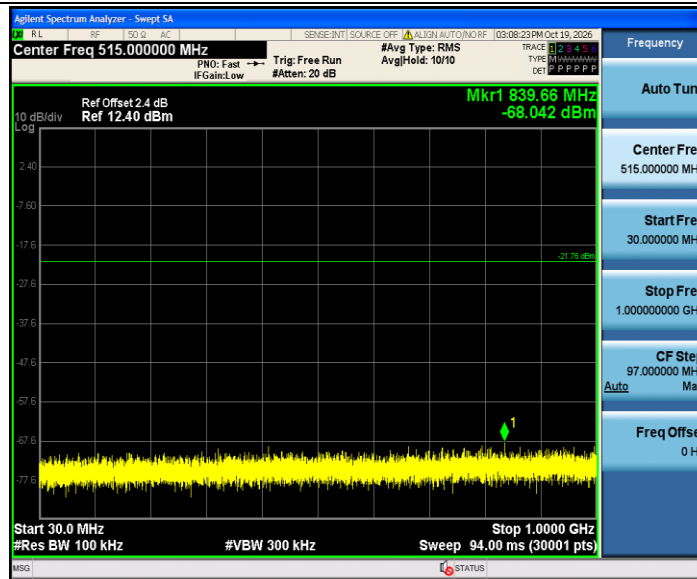
DH5_Ant1_2441_1000~26500



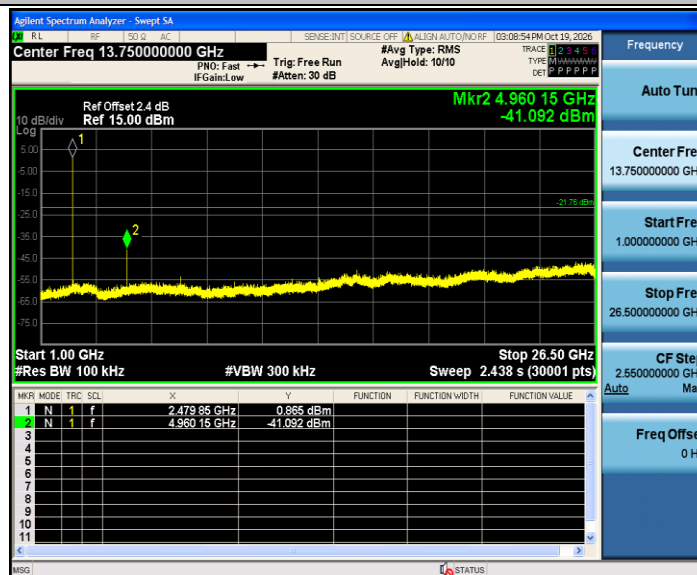
DH5_Ant1_2480_0~Reference



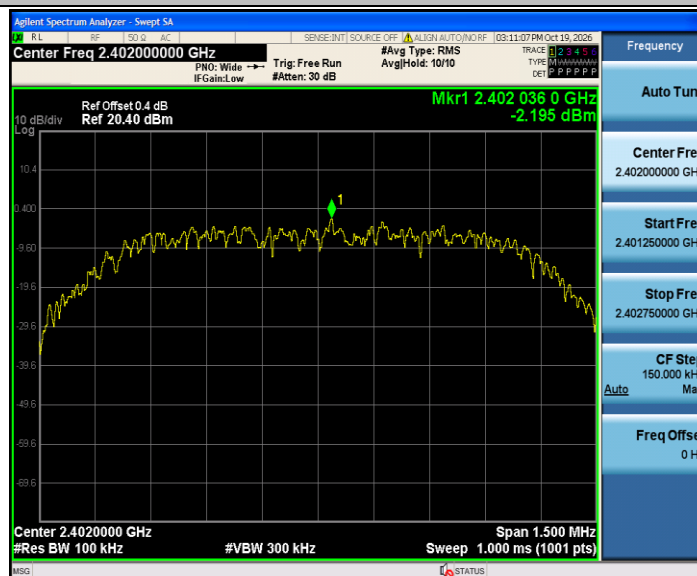
DH5_Ant1_2480_30~1000



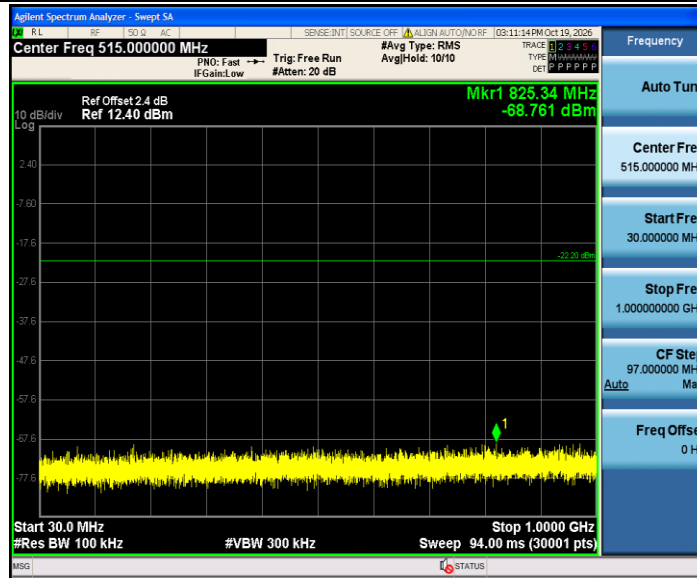
DH5_Ant1_2480_1000~26500



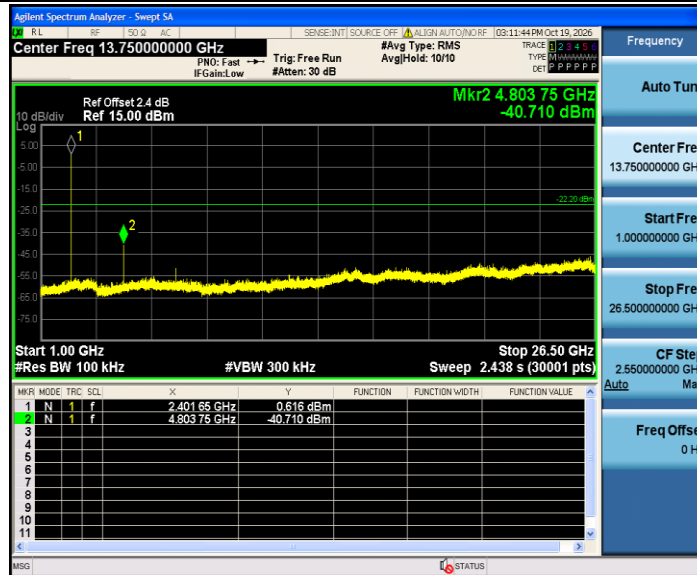
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference