

FCC Appendix RF Test Data for BT

FCC ID : 2AOMX-MPX-8080

Company : QFX Inc.

EUT : Bluetooth speaker

Model Number : MPX-8080

Report No. : CTA26051802701

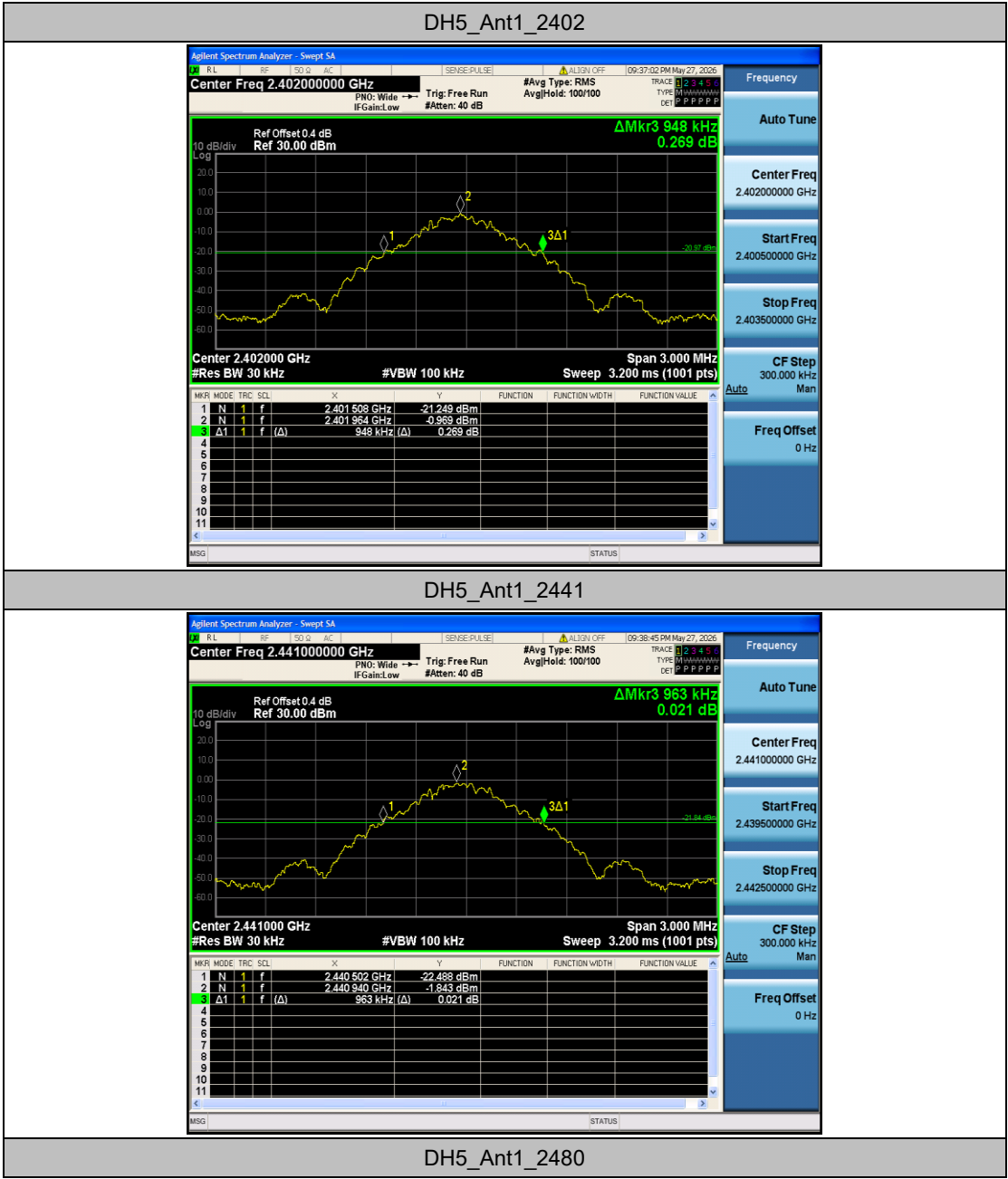
Reviewed By : Eric Wang

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	2401.508	2402.456	---	---
		2441	0.963	2440.502	2441.465	---	---
		2480	0.966	2479.499	2480.465	---	---
2DH5	Ant1	2402	1.260	2401.355	2402.615	---	---
		2441	1.257	2440.343	2441.600	---	---
		2480	1.326	2479.301	2480.627	---	---
3DH5	Ant1	2402	1.287	2401.331	2402.618	---	---
		2441	1.287	2440.325	2441.612	---	---
		2480	1.305	2479.319	2480.624	---	---

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	0.86981	2401.5369	2402.4067	---	---
		2441	0.85801	2440.5378	2441.3958	---	---
		2480	0.86844	2479.5369	2480.4053	---	---
2DH5	Ant1	2402	1.1696	2401.3860	2402.5556	---	---
		2441	1.1759	2440.3839	2441.5598	---	---
		2480	1.1794	2479.3791	2480.5585	---	---
3DH5	Ant1	2402	1.1955	2401.3819	2402.5774	---	---
		2441	1.1748	2440.3856	2441.5604	---	---
		2480	1.1964	2479.3837	2480.5801	---	---

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	0.67	≤20.97	PASS
		2441	0.97	≤20.97	PASS
		2480	0.63	≤20.97	PASS
2DH5	Ant1	2402	1.46	≤20.97	PASS
		2441	1.77	≤20.97	PASS
		2480	1.48	≤20.97	PASS
3DH5	Ant1	2402	2.10	≤20.97	PASS
		2441	2.43	≤20.97	PASS
		2480	2.07	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.966	PASS
2DH5	Ant1	Hop	1.16	≥ 0.884	PASS
3DH5	Ant1	Hop	1.16	≥ 0.870	PASS

Test Graphs



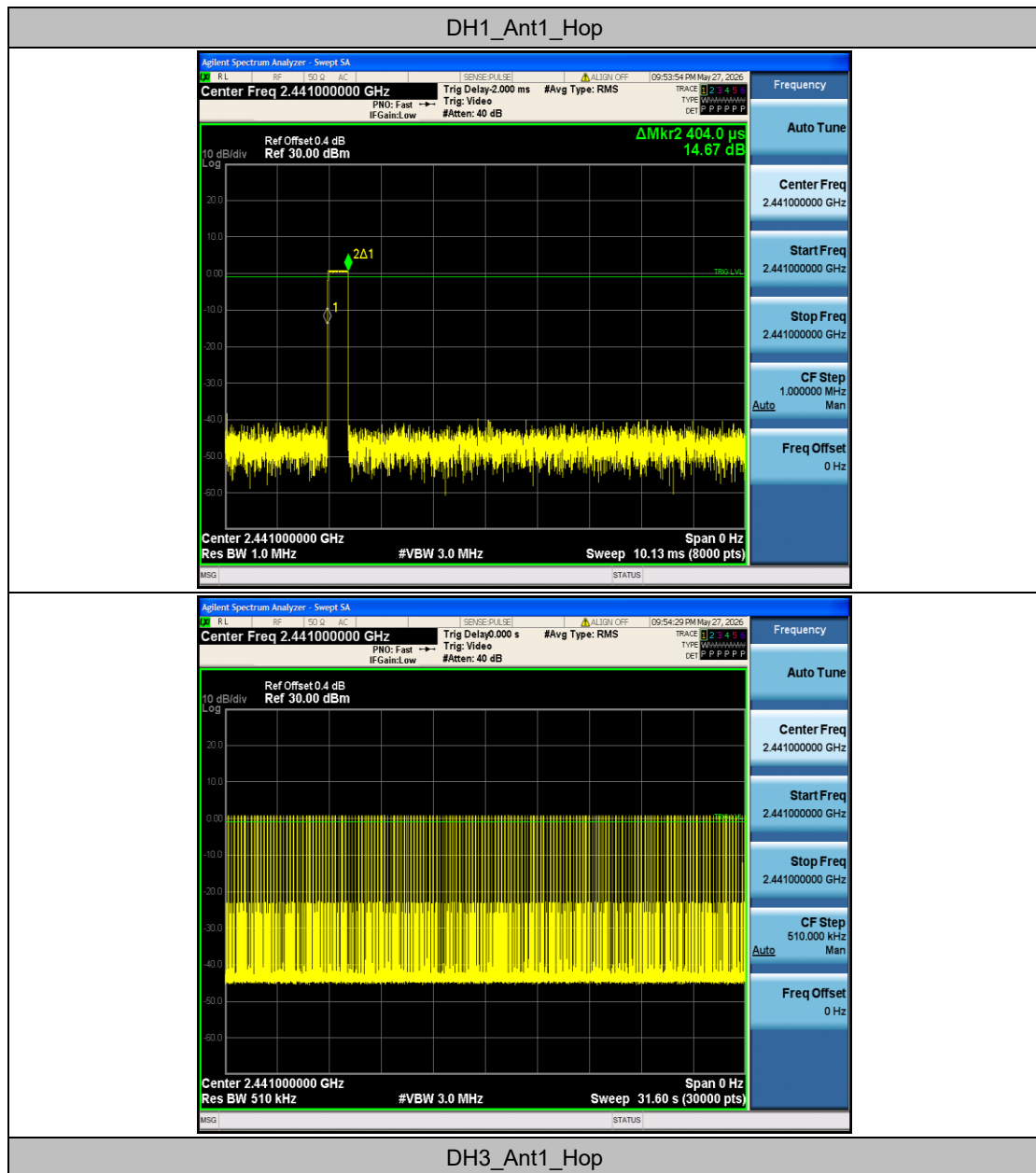


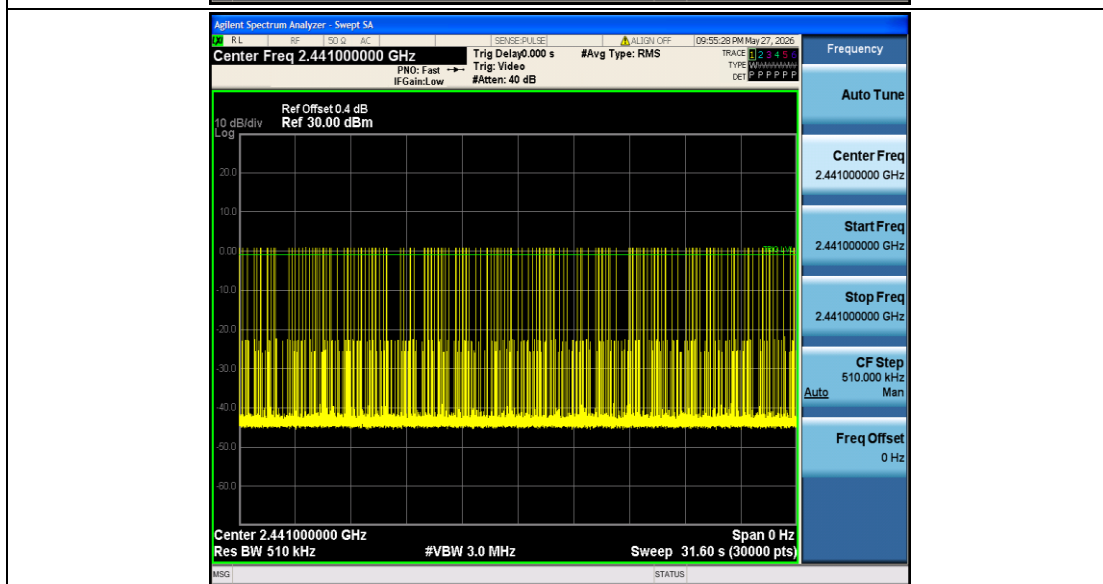
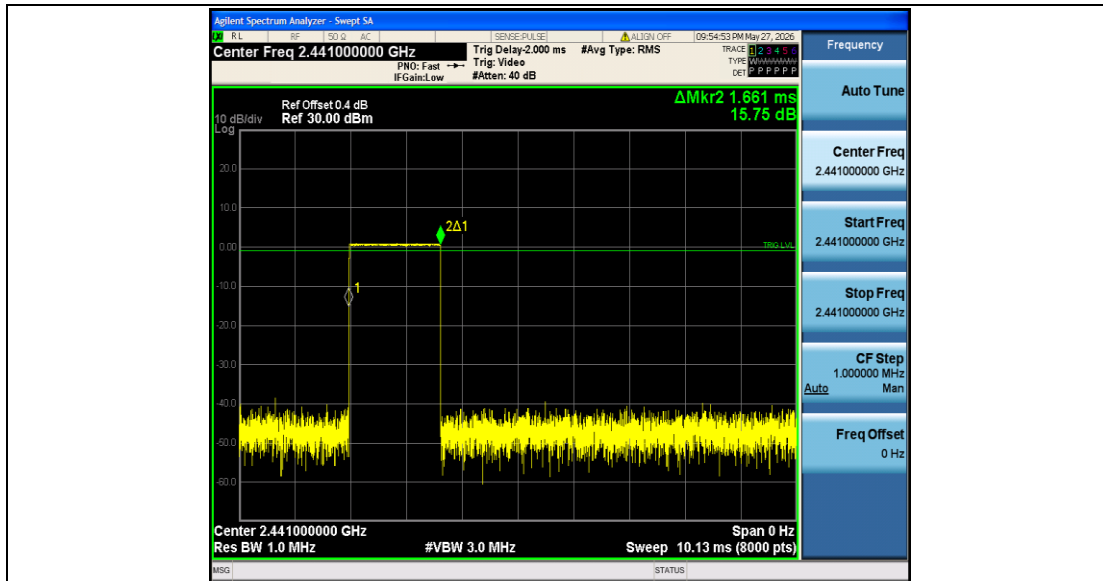
Appendix E: Time of occupancy

Test Result

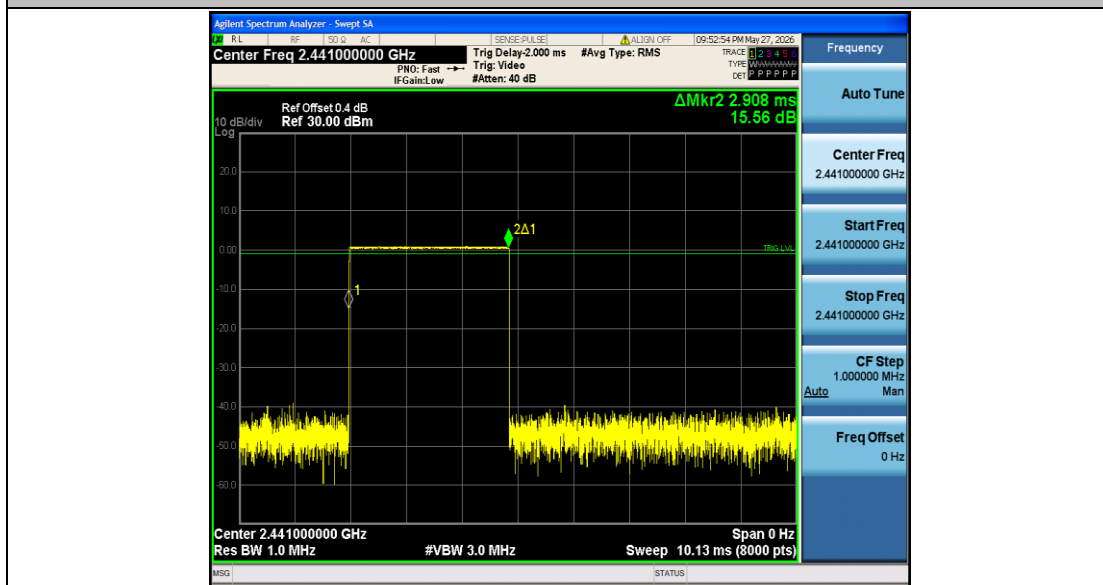
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.404	317	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.661	171	0.284	≤0.4	PASS
DH5	Ant1	Hop	2.908	103	0.3	≤0.4	PASS
2DH1	Ant1	Hop	0.415	317	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.667	146	0.243	≤0.4	PASS
2DH5	Ant1	Hop	2.916	107	0.312	≤0.4	PASS
3DH1	Ant1	Hop	0.417	316	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.667	172	0.287	≤0.4	PASS
3DH5	Ant1	Hop	2.917	105	0.306	≤0.4	PASS

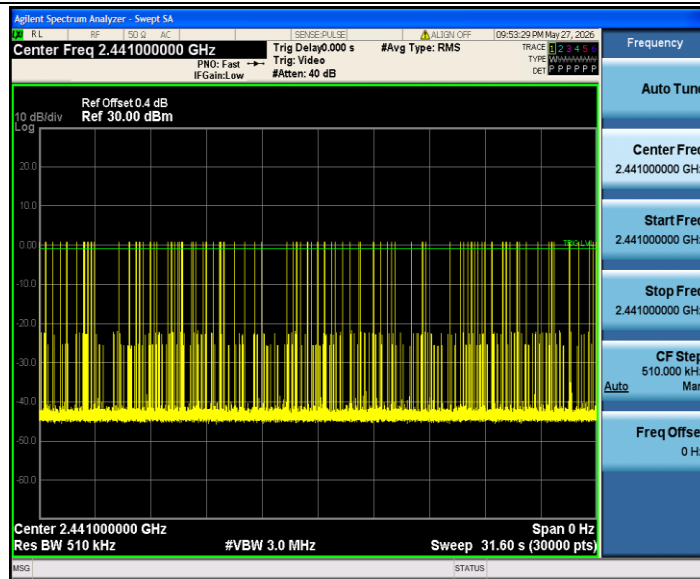
Test Graphs



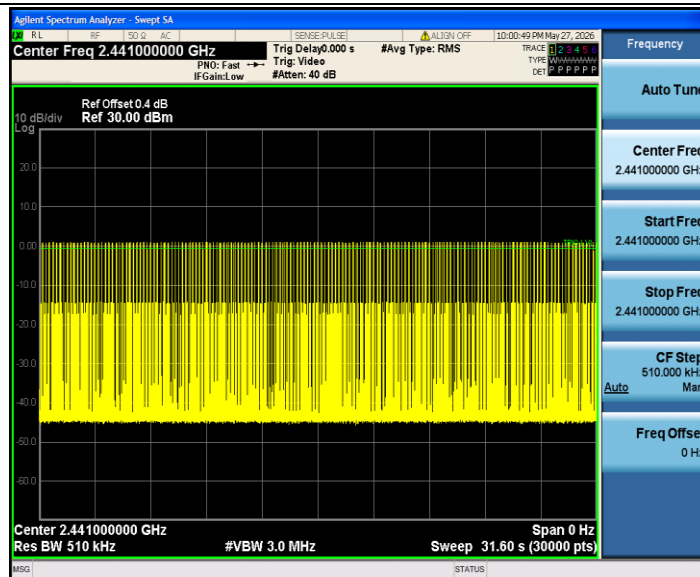
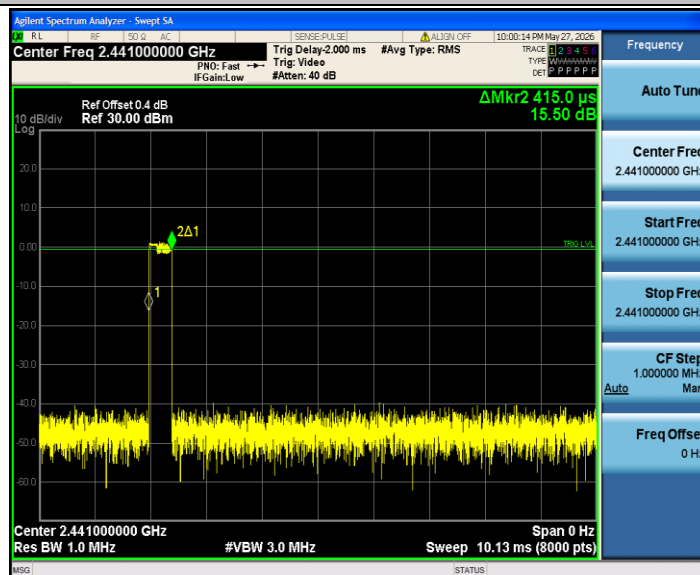


DH5_Ant1_Hop

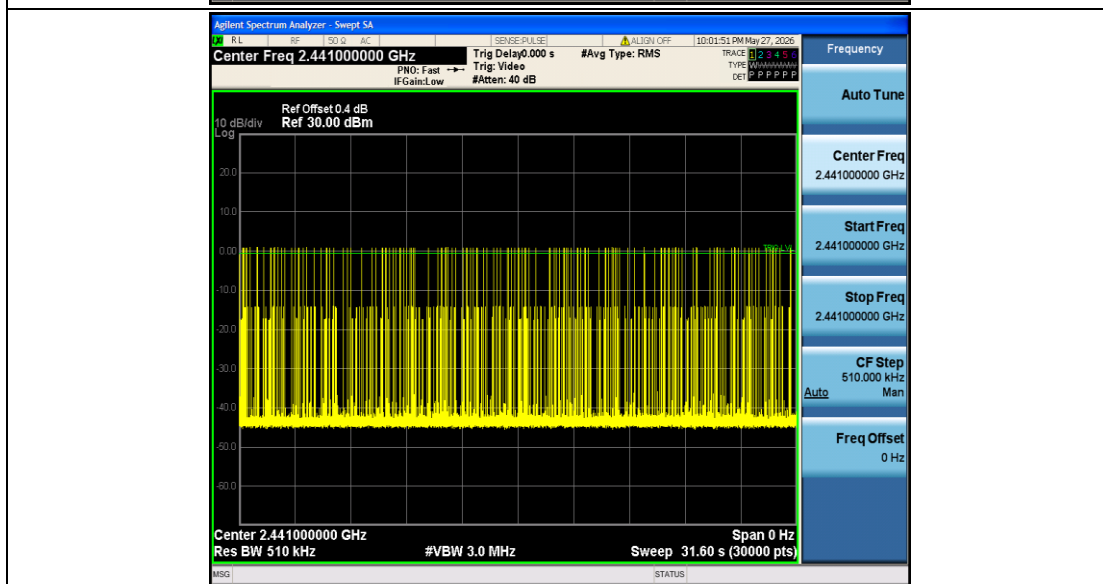
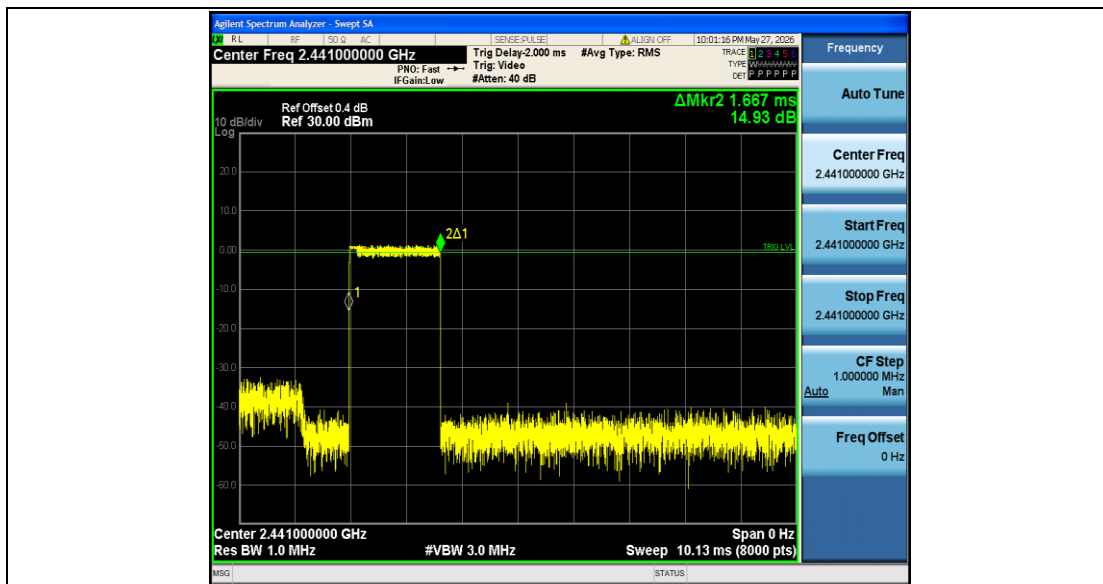




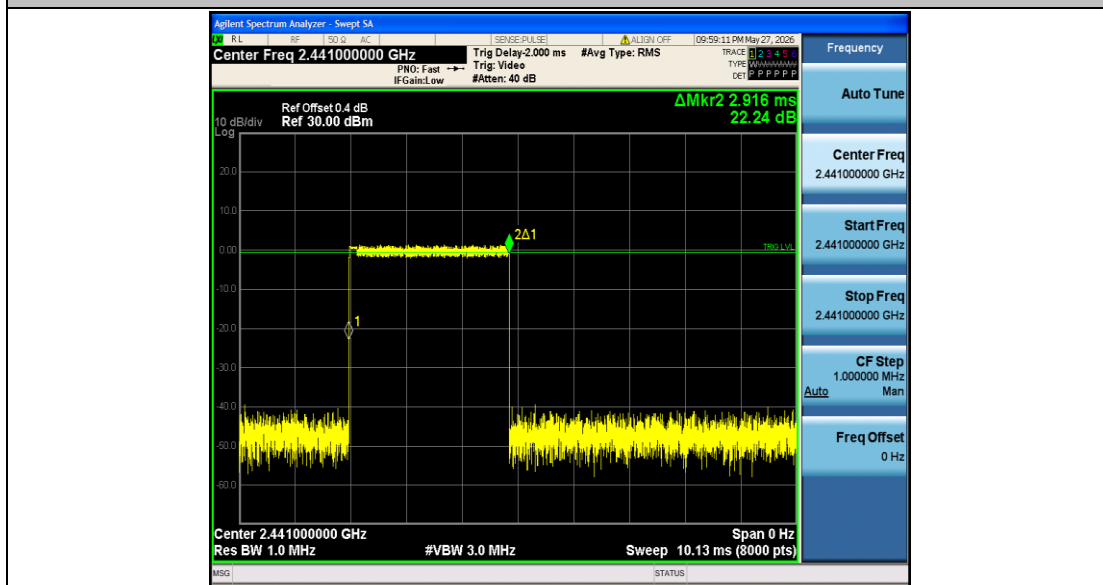
2DH1_Ant1_Hop

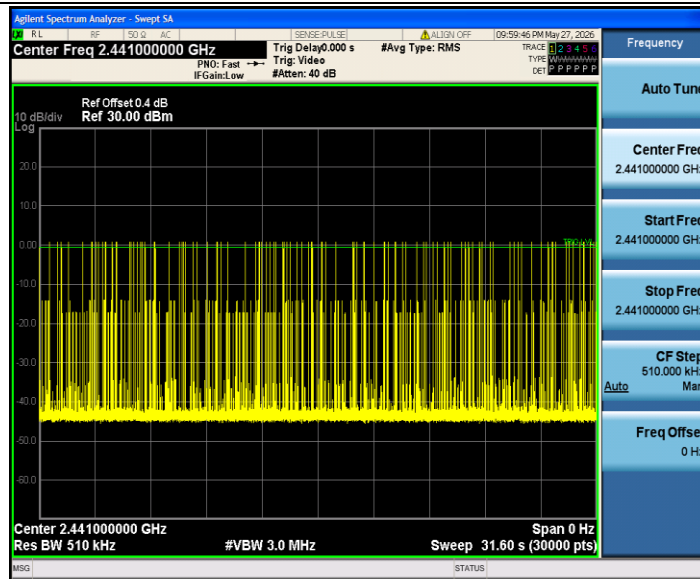


2DH3_Ant1_Hop

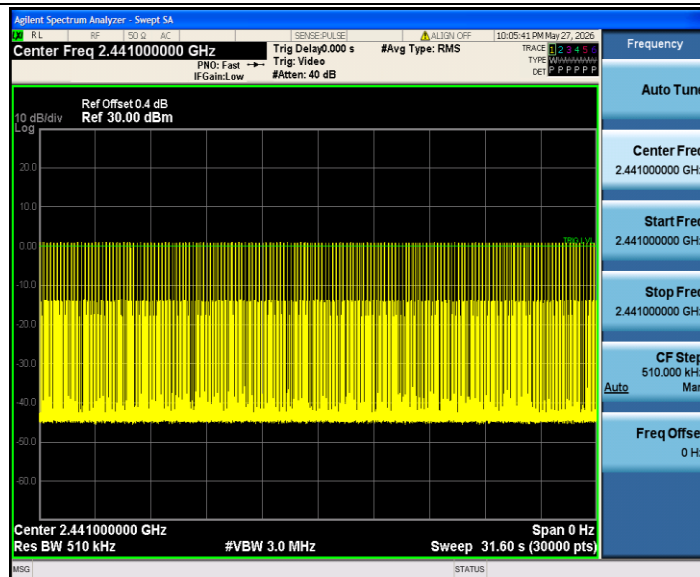
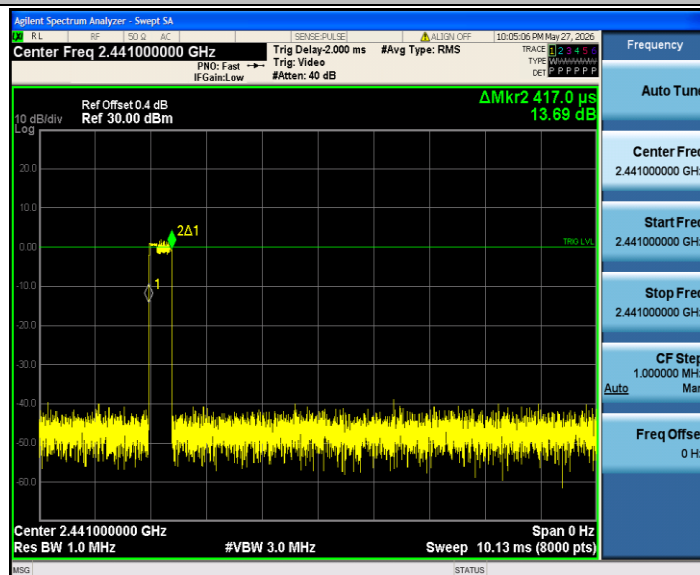


2DH5_Ant1_Hop

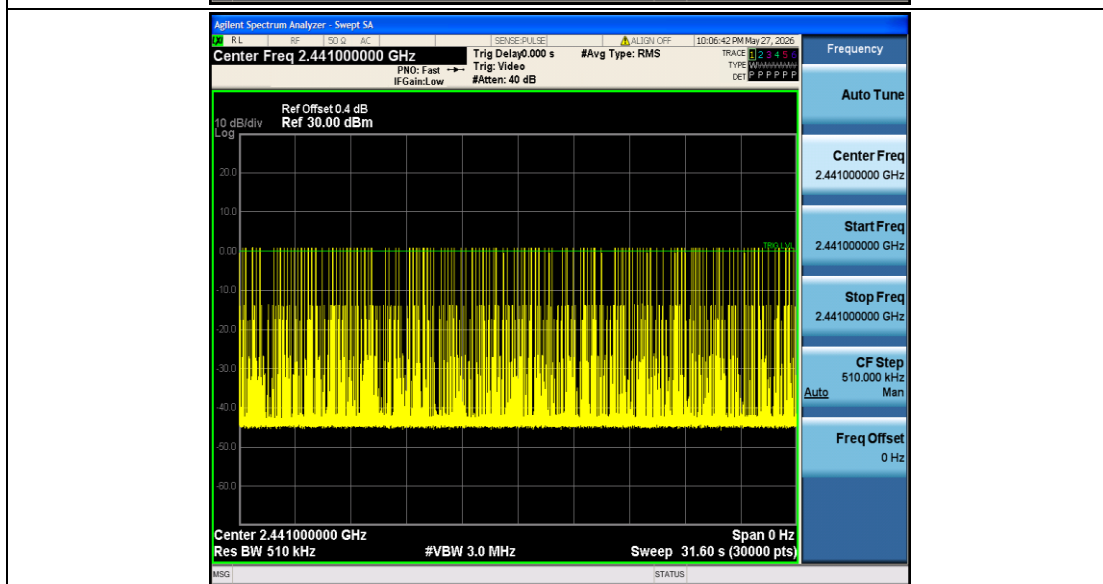
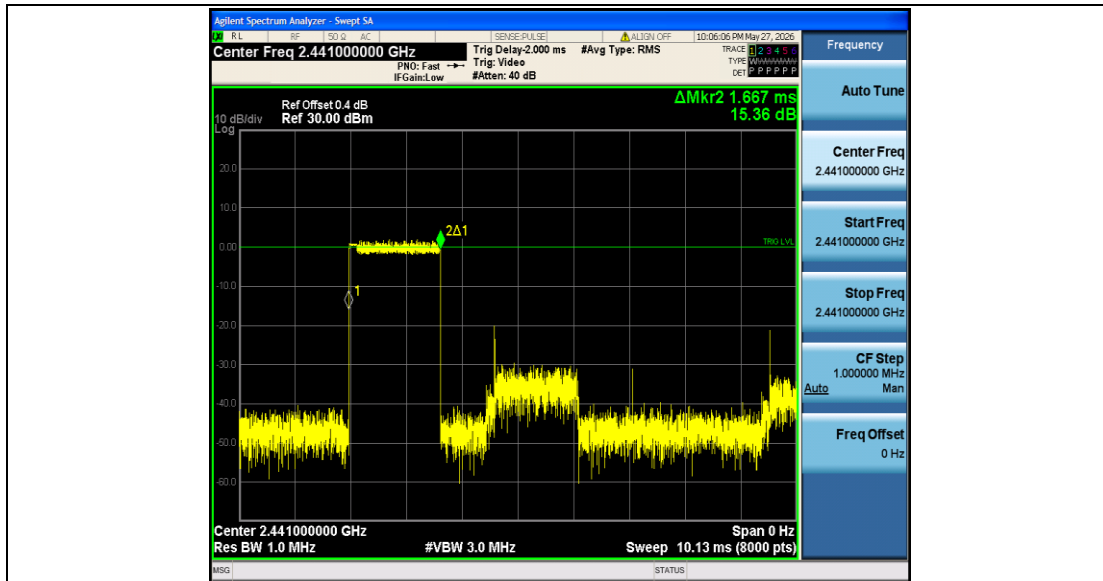




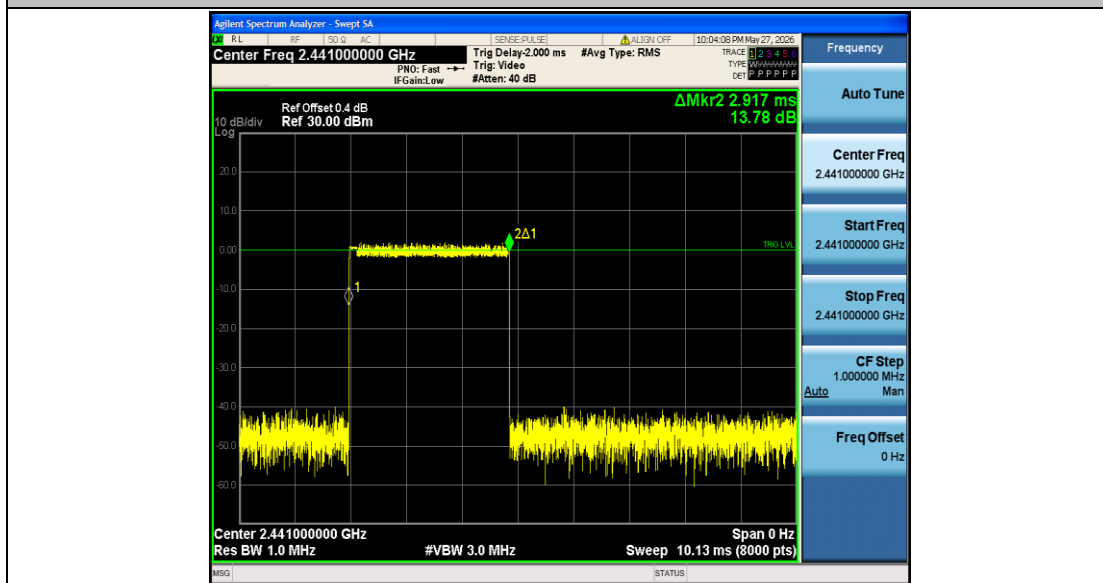
3DH1_Ant1_Hop

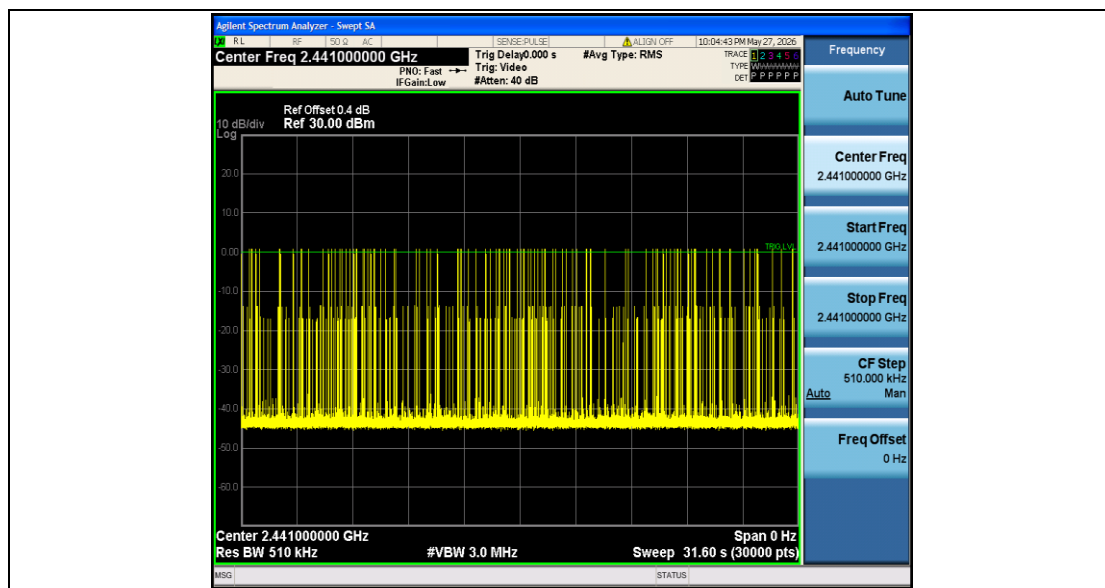


3DH3_Ant1_Hop



3DH5_Ant1_Hop



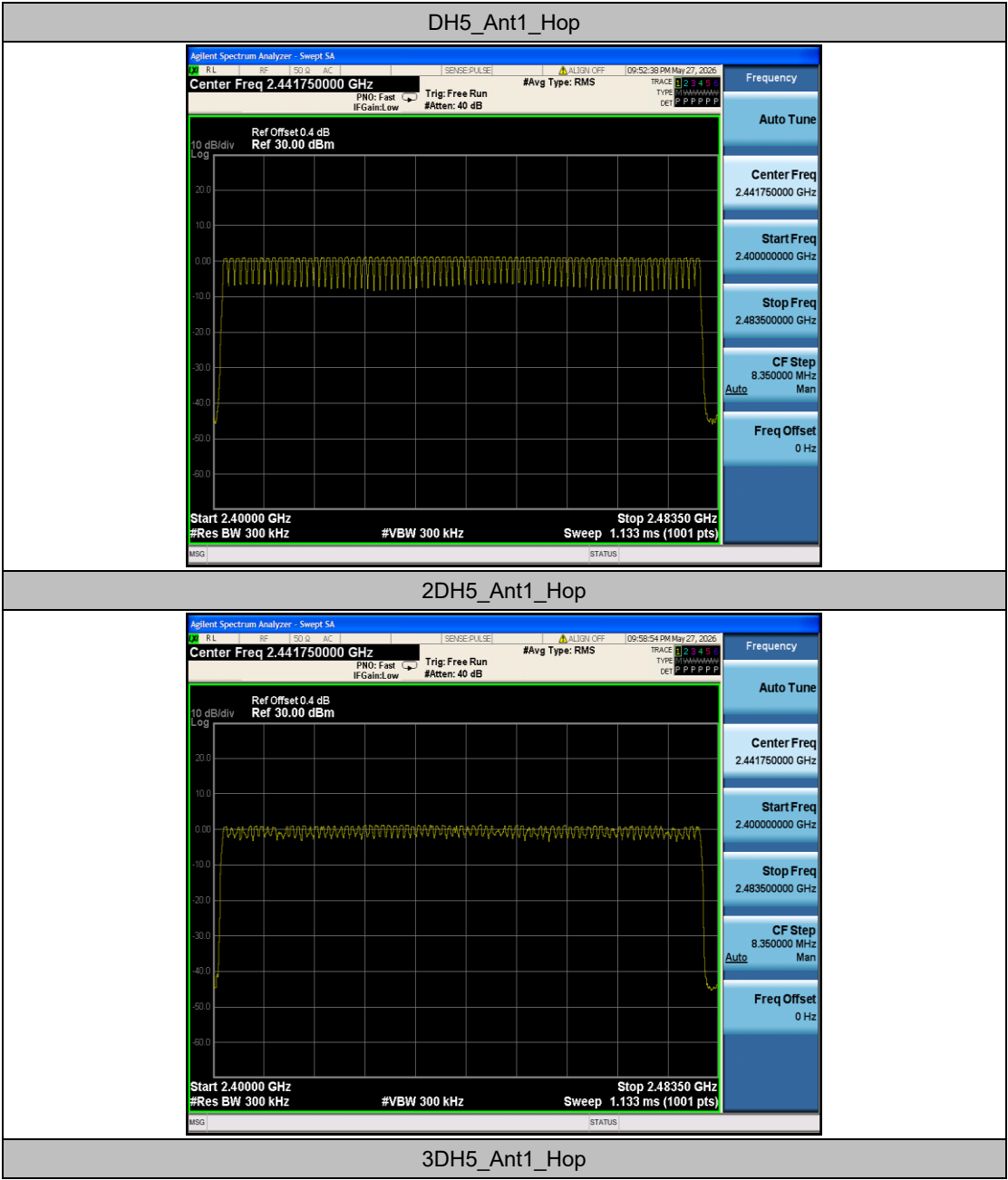


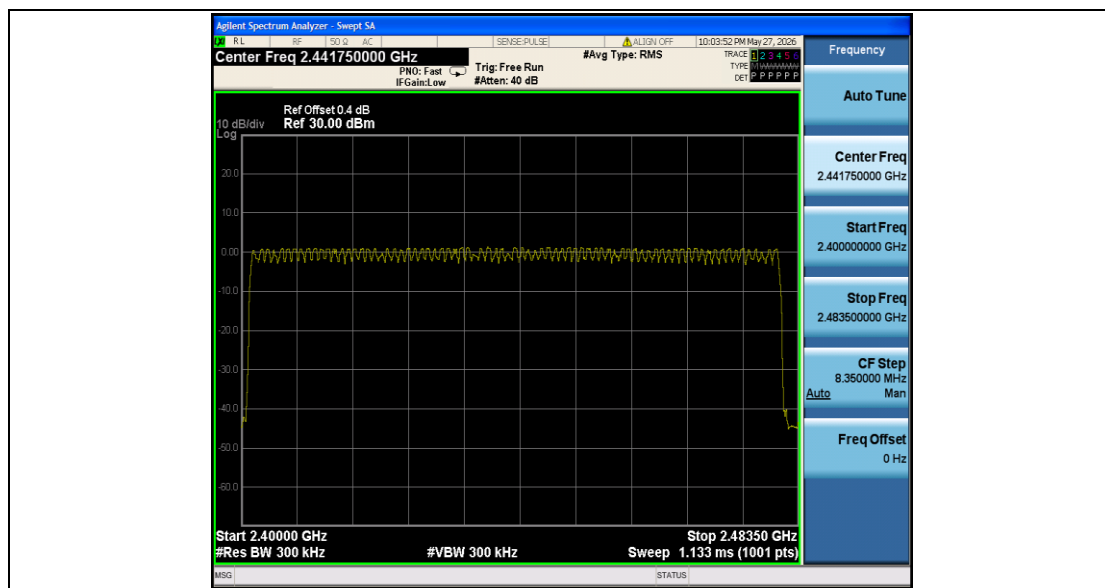
Appendix F: Number of hopping channels

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



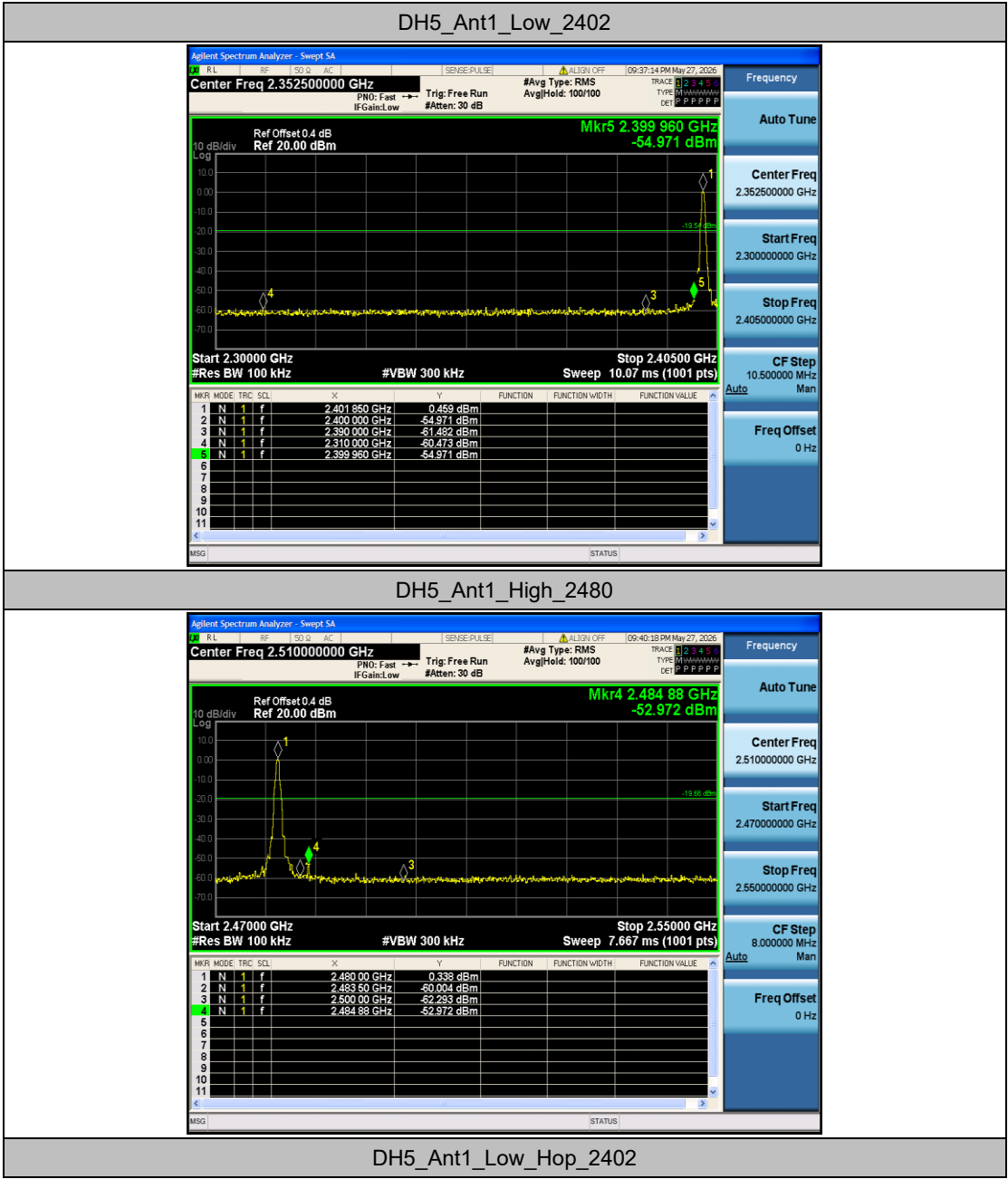


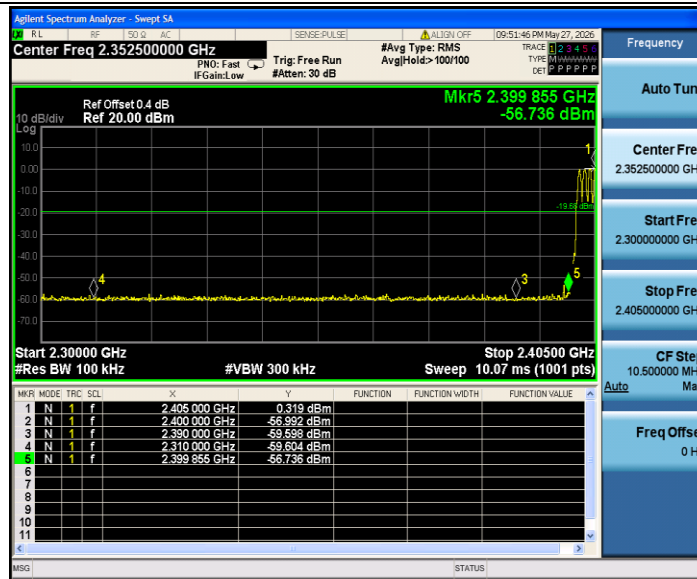
Appendix G: Band edge measurements

Test Result

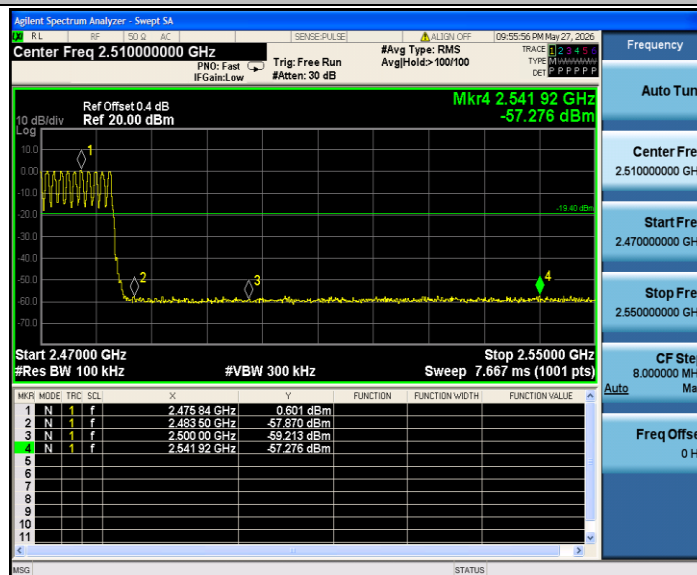
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.46	-54.97	≤-19.54	PASS
		High	2480	0.34	-52.97	≤-19.66	PASS
		Low	Hop_2402	0.32	-56.74	≤-19.68	PASS
		High	Hop_2480	0.60	-57.28	≤-19.4	PASS
2DH5	Ant1	Low	2402	-0.50	-48.09	≤-20.5	PASS
		High	2480	0.39	-56.59	≤-19.61	PASS
		Low	Hop_2402	0.06	-56.83	≤-19.95	PASS
		High	Hop_2480	-1.21	-57.48	≤-21.21	PASS
3DH5	Ant1	Low	2402	-0.36	-53.77	≤-20.36	PASS
		High	2480	-1.18	-57.27	≤-21.18	PASS
		Low	Hop_2402	-3.69	-56.39	≤-23.69	PASS
		High	Hop_2480	0.11	-56.86	≤-19.89	PASS

Test Graphs

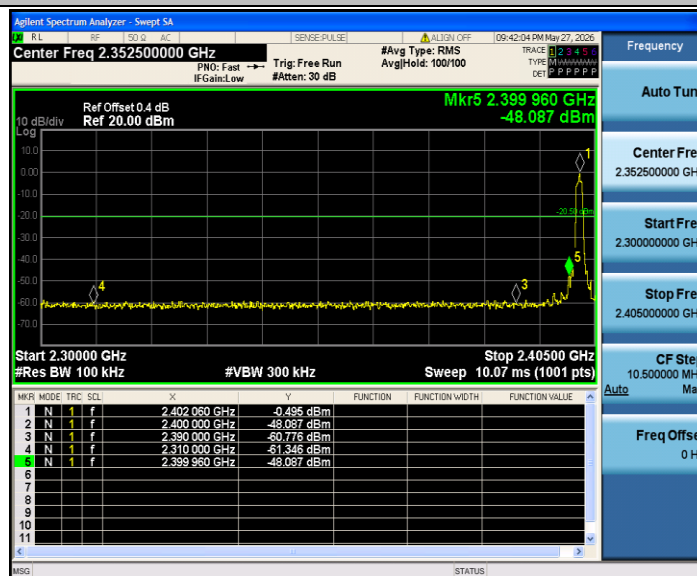




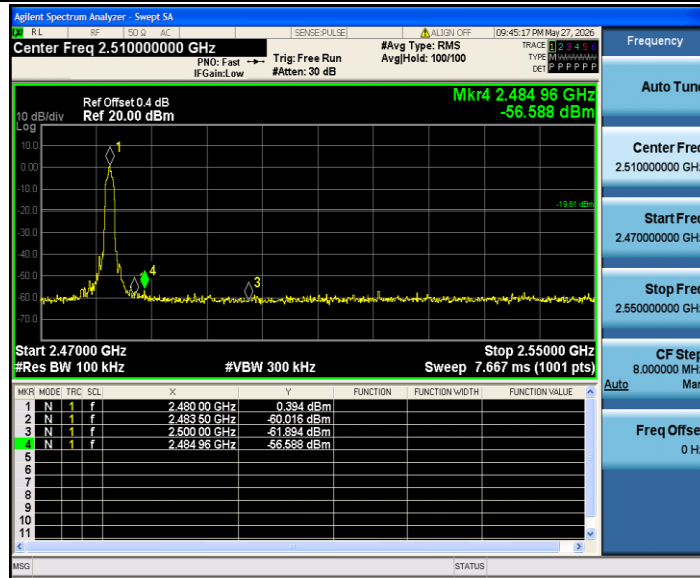
DH5_Ant1_High_Hop_2480



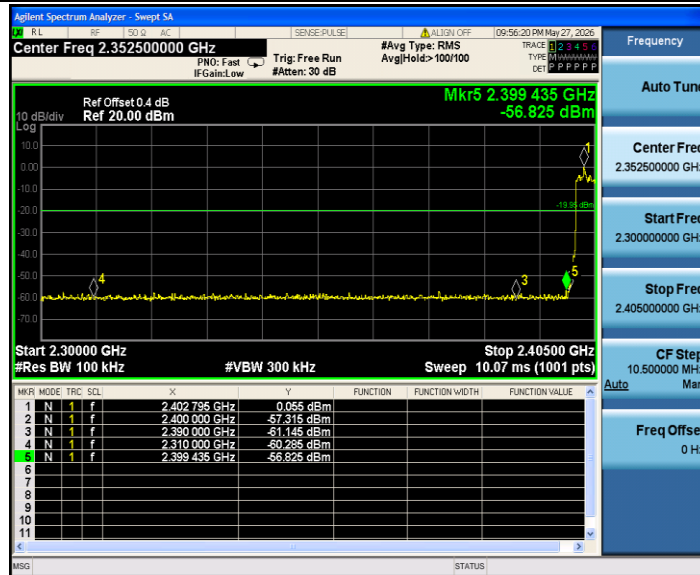
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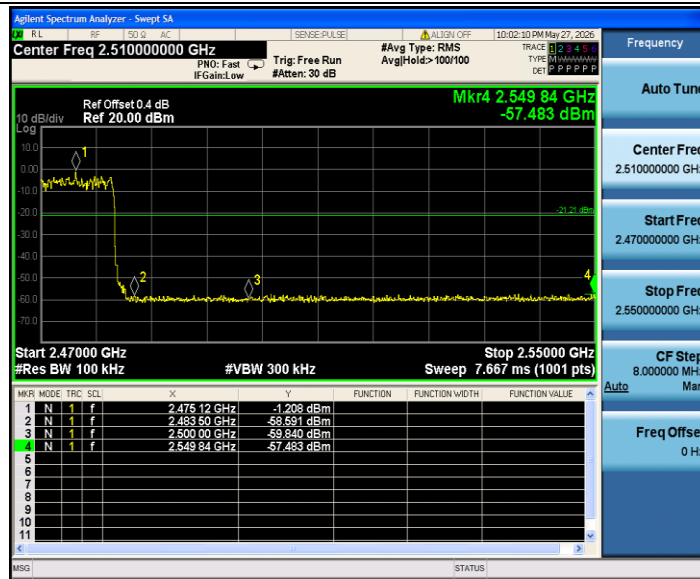
2DH5_Ant1_High_2480



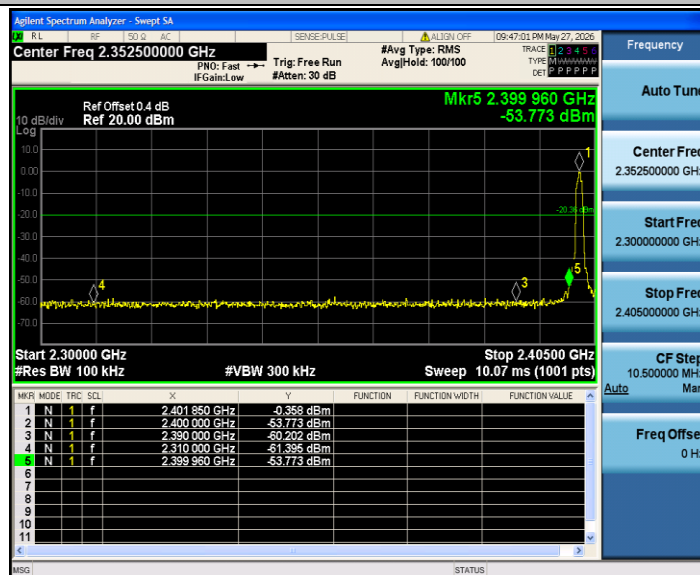
2DH5_Ant1_Low_Hop_2402



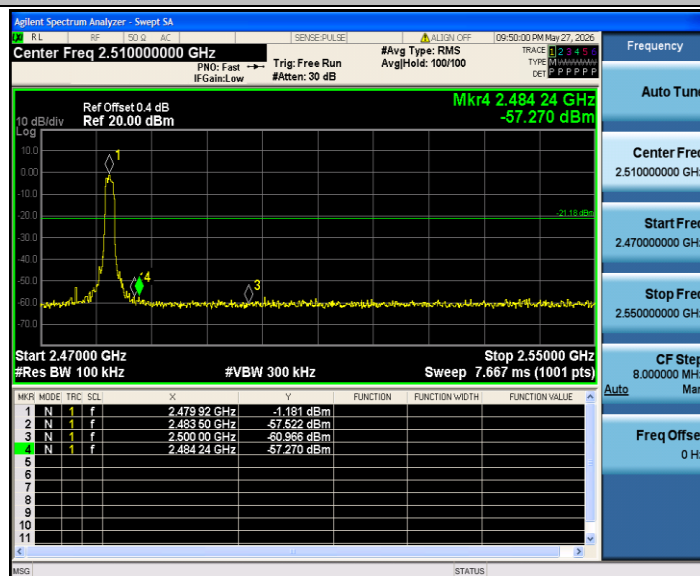
2DH5_Ant1_High_Hop_2480



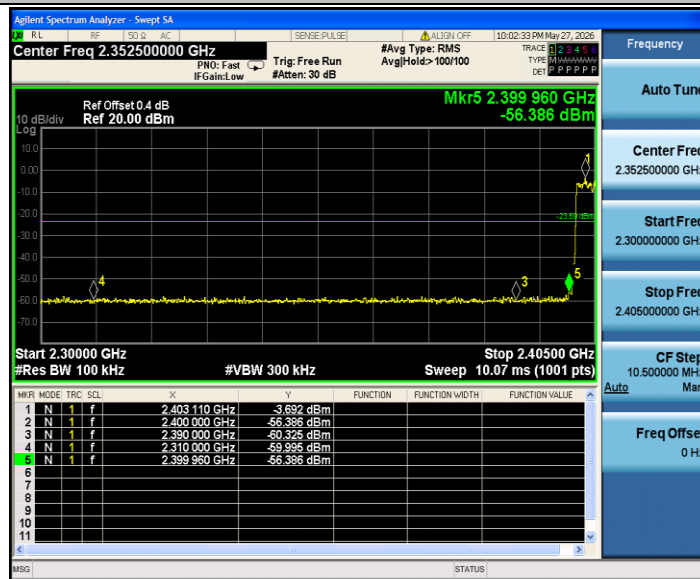
3DH5_Ant1_Low_2402



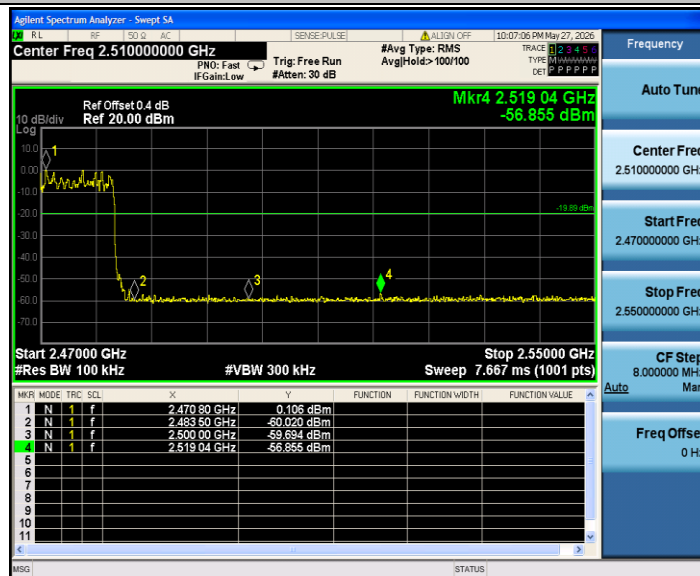
3DH5_Ant1_High_2480



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	-0.23	-0.23	---	PASS
			30~1000	-0.23	-67.43	≤-20.23	PASS
			1000~26500	-0.23	-27.43	≤-20.23	PASS
		2441	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-67.68	≤-20.01	PASS
			1000~26500	-0.01	-27.09	≤-20.01	PASS
		2480	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-68.07	≤-20.17	PASS
			1000~26500	-0.17	-27.61	≤-20.17	PASS
2DH5	Ant1	2402	Reference	0.48	0.48	---	PASS
			30~1000	0.48	-67.69	≤-19.52	PASS
			1000~26500	0.48	-32.78	≤-19.52	PASS
		2441	Reference	0.51	0.51	---	PASS
			30~1000	0.51	-67.74	≤-19.49	PASS
			1000~26500	0.51	-27.57	≤-19.49	PASS
		2480	Reference	-4.10	-4.10	---	PASS
			30~1000	-4.10	-67.68	≤-24.1	PASS
			1000~26500	-4.10	-32.61	≤-24.1	PASS
3DH5	Ant1	2402	Reference	-1.03	-1.03	---	PASS
			30~1000	-1.03	-68.27	≤-21.03	PASS
			1000~26500	-1.03	-28.74	≤-21.03	PASS
		2441	Reference	-3.21	-3.21	---	PASS
			30~1000	-3.21	-67.52	≤-23.21	PASS
			1000~26500	-3.21	-32.39	≤-23.21	PASS
		2480	Reference	-0.33	-0.33	---	PASS
			30~1000	-0.33	-67.64	≤-20.33	PASS
			1000~26500	-0.33	-28.16	≤-20.33	PASS