

FCC Appendix RF Test Data

FCC ID : 2AQ5R-HM-5E

Company : Shenzhen KTC Commercial Display Technology
CO.,LTD.

EUT : Speakerphone

Model Number : HM-5E

Report No. : CTA25071601501

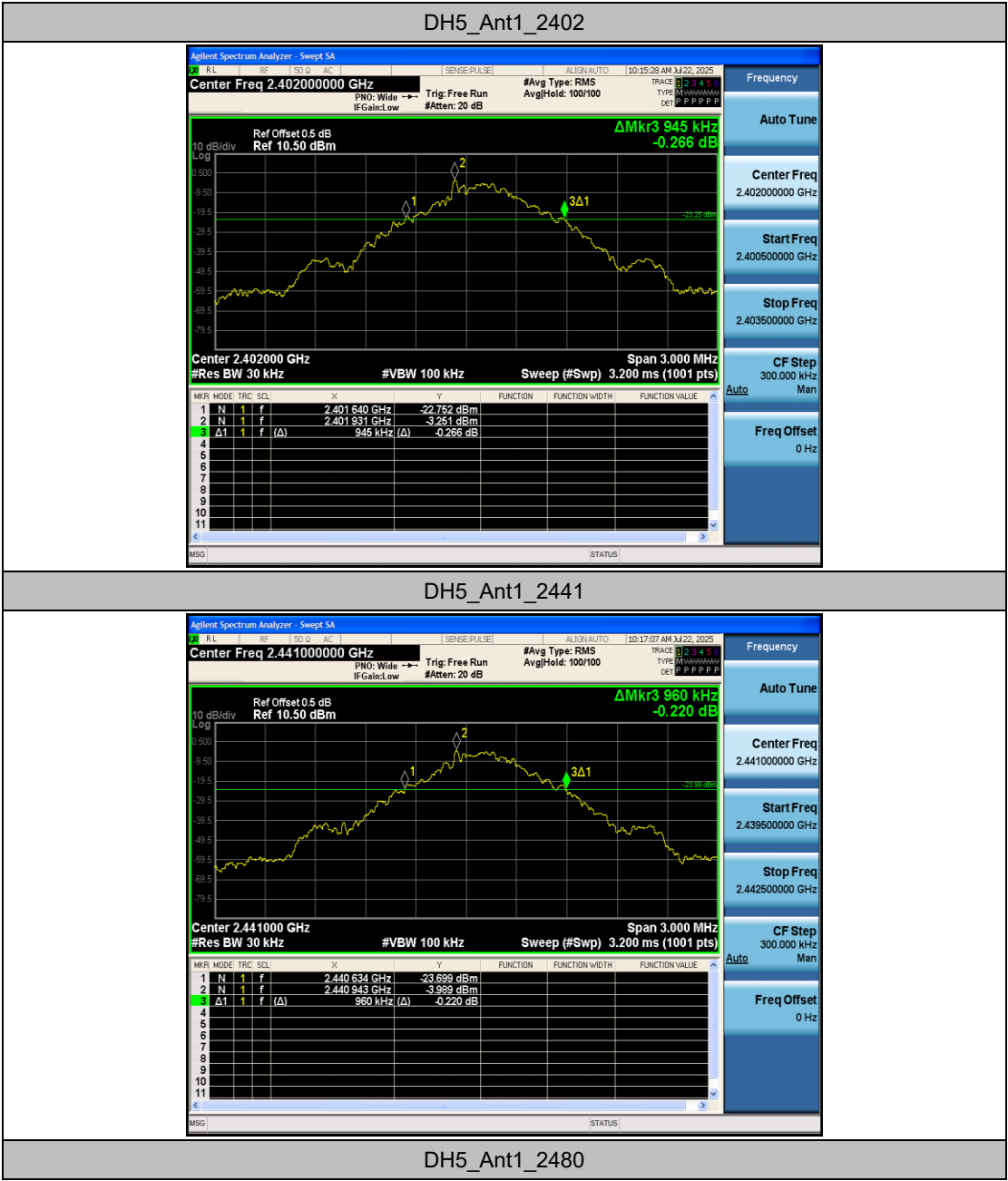
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.640	2402.585	---	---
		2441	0.960	2440.634	2441.594	---	---
		2480	1.041	2479.568	2480.609	---	---
2DH5	Ant1	2402	1.278	2401.469	2402.747	---	---
		2441	1.281	2440.466	2441.747	---	---
		2480	1.368	2479.418	2480.786	---	---
3DH5	Ant1	2402	1.245	2401.472	2402.717	---	---
		2441	1.263	2440.457	2441.720	---	---
		2480	1.254	2479.460	2480.714	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

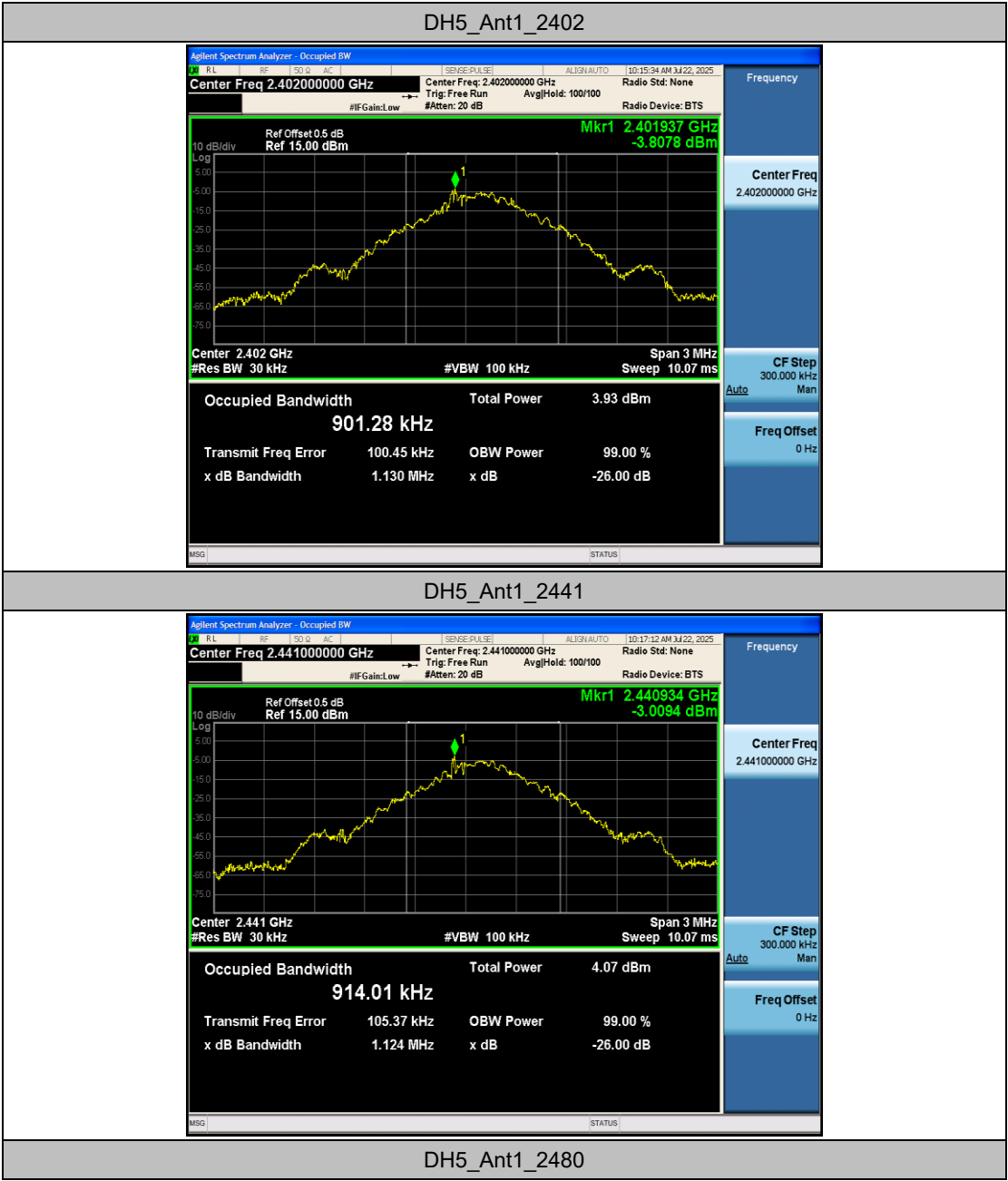


Appendix B: Occupied Channel Bandwidth

Test Result

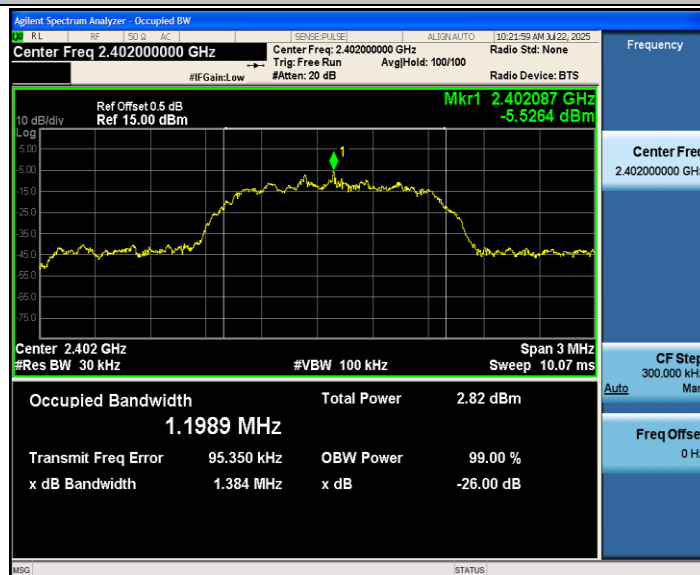
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.90128	2401.6498	2402.5511	---	---
		2441	0.91401	2440.6484	2441.5624	---	---
		2480	0.91416	2479.6508	2480.5649	---	---
2DH5	Ant1	2402	1.1989	2401.4959	2402.6948	---	---
		2441	1.2051	2440.4957	2441.7008	---	---
		2480	1.1979	2479.5013	2480.6992	---	---
3DH5	Ant1	2402	1.1972	2401.4943	2402.6915	---	---
		2441	1.1992	2440.4943	2441.6935	---	---
		2480	1.2076	2479.4902	2480.6978	---	---

Test Graphs

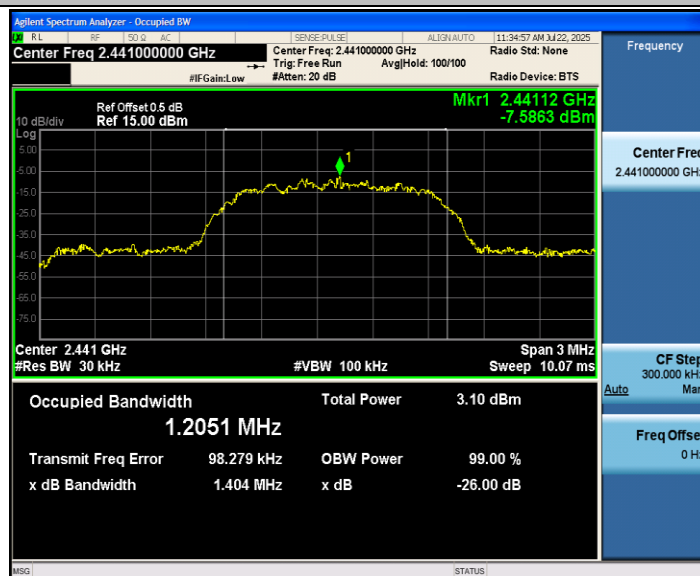




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

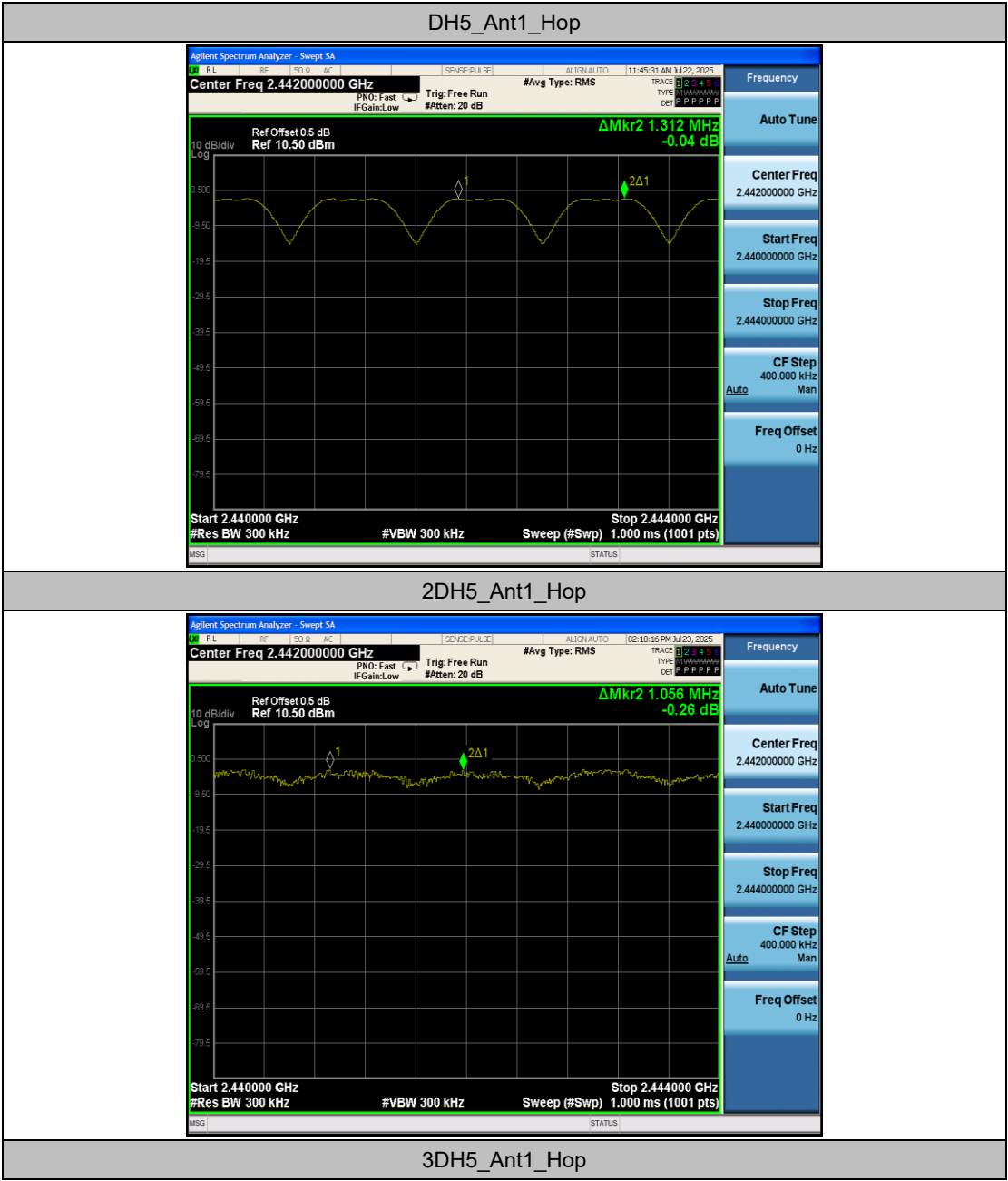
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-2.15	≤20.97	PASS
		2441	-1.79	≤20.97	PASS
		2480	-1.79	≤20.97	PASS
2DH5	Ant1	2402	-1.58	≤20.97	PASS
		2441	-1.22	≤20.97	PASS
		2480	-1.23	≤20.97	PASS
3DH5	Ant1	2402	-0.89	≤20.97	PASS
		2441	-0.61	≤20.97	PASS
		2480	-0.68	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.312	≥ 1.041	PASS
2DH5	Ant1	Hop	1.056	≥ 0.912	PASS
3DH5	Ant1	Hop	0.984	≥ 0.842	PASS

Test Graphs



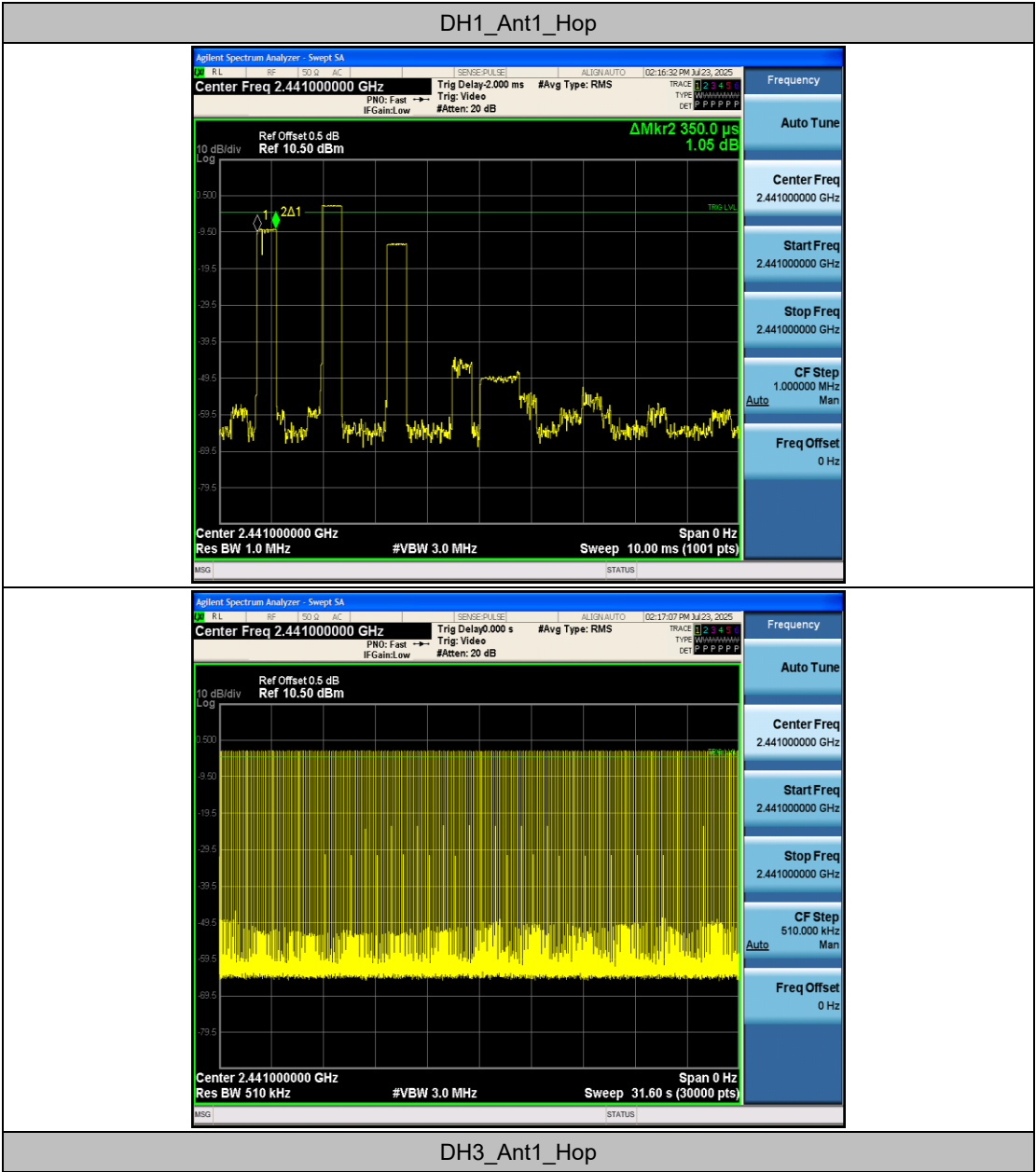


Appendix E: Time of occupancy

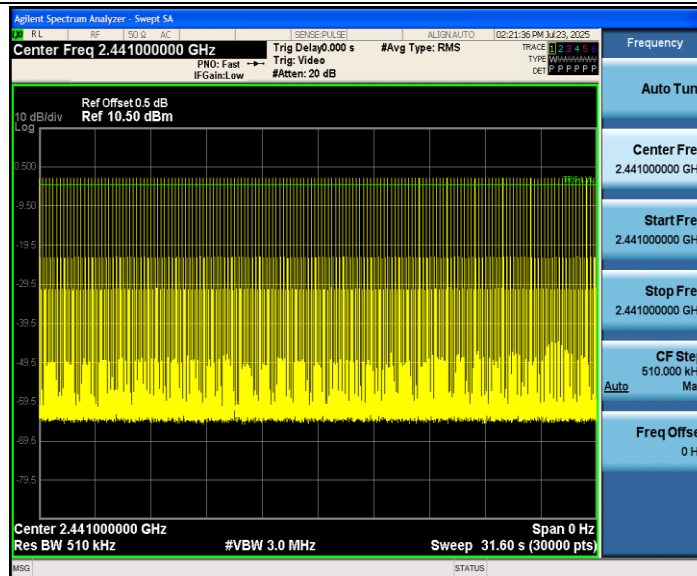
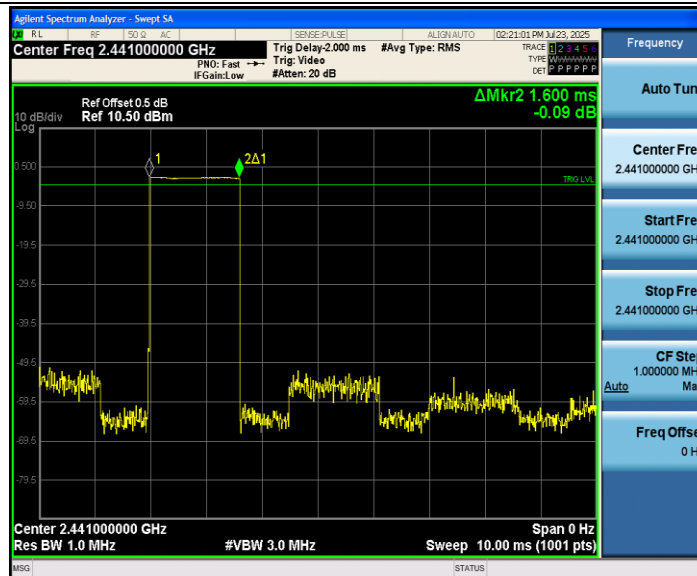
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.350	319	0.112	≤0.4	PASS
DH3	Ant1	Hop	1.600	160	0.256	≤0.4	PASS
DH5	Ant1	Hop	2.850	107	0.305	≤0.4	PASS
2DH1	Ant1	Hop	0.370	319	0.118	≤0.4	PASS
2DH3	Ant1	Hop	1.600	160	0.256	≤0.4	PASS
2DH5	Ant1	Hop	2.860	107	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.360	319	0.115	≤0.4	PASS
3DH3	Ant1	Hop	1.600	160	0.256	≤0.4	PASS
3DH5	Ant1	Hop	2.870	107	0.307	≤0.4	PASS

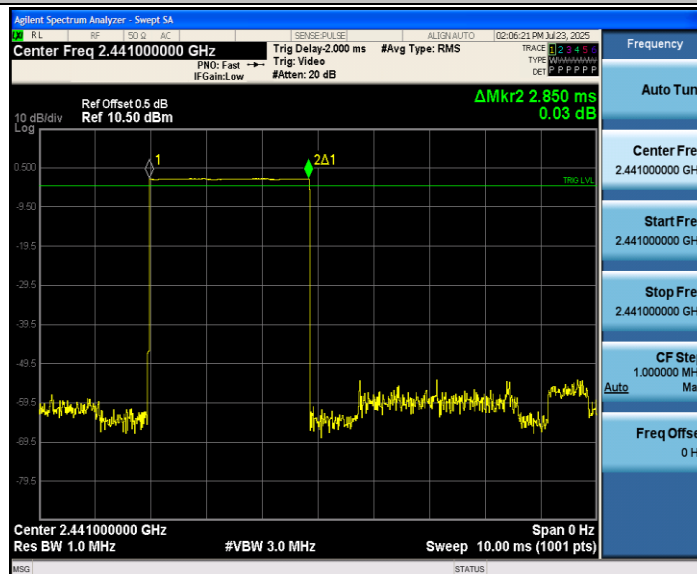
Test Graphs

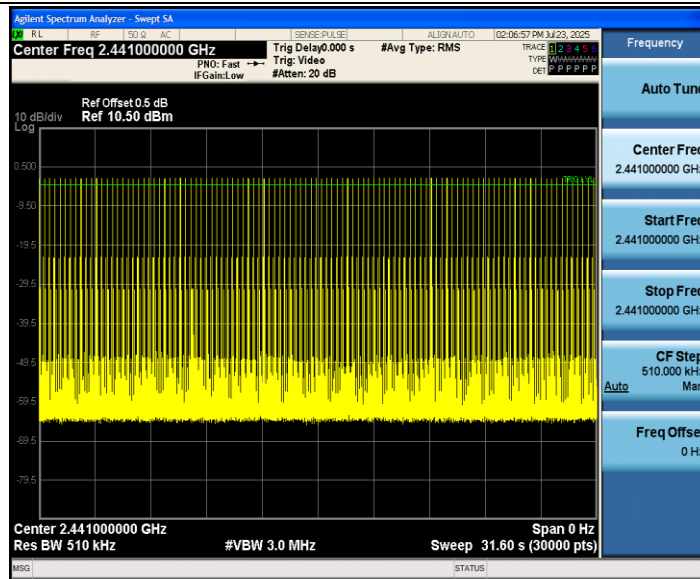


DH3_Ant1_Hop

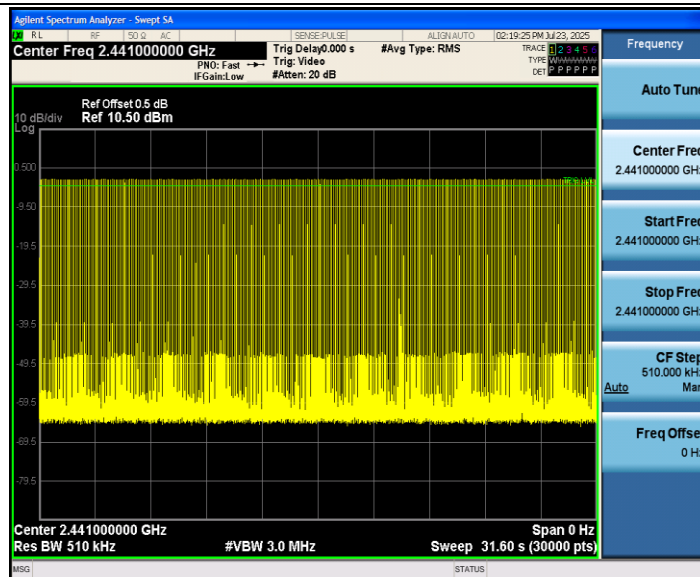
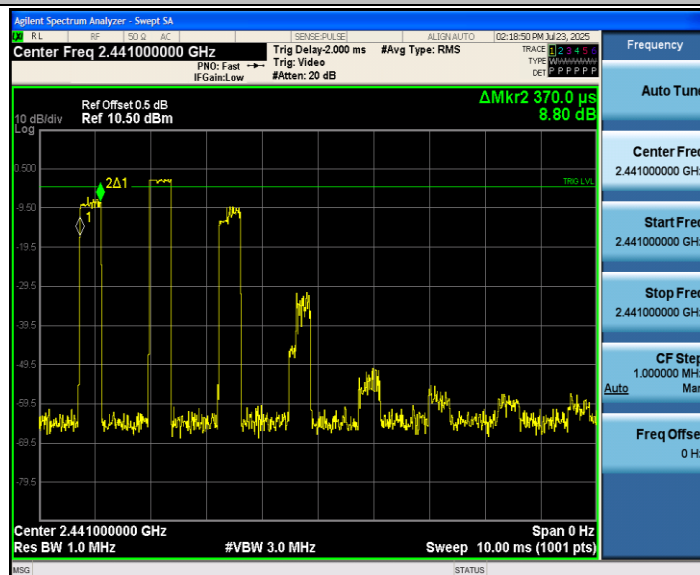


DH5_Ant1_Hop

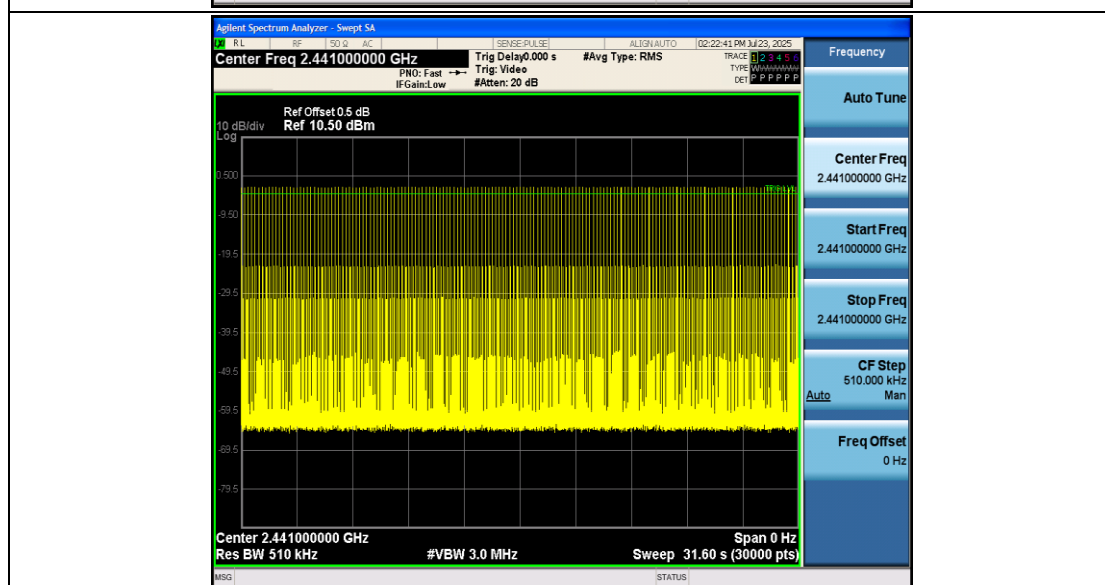




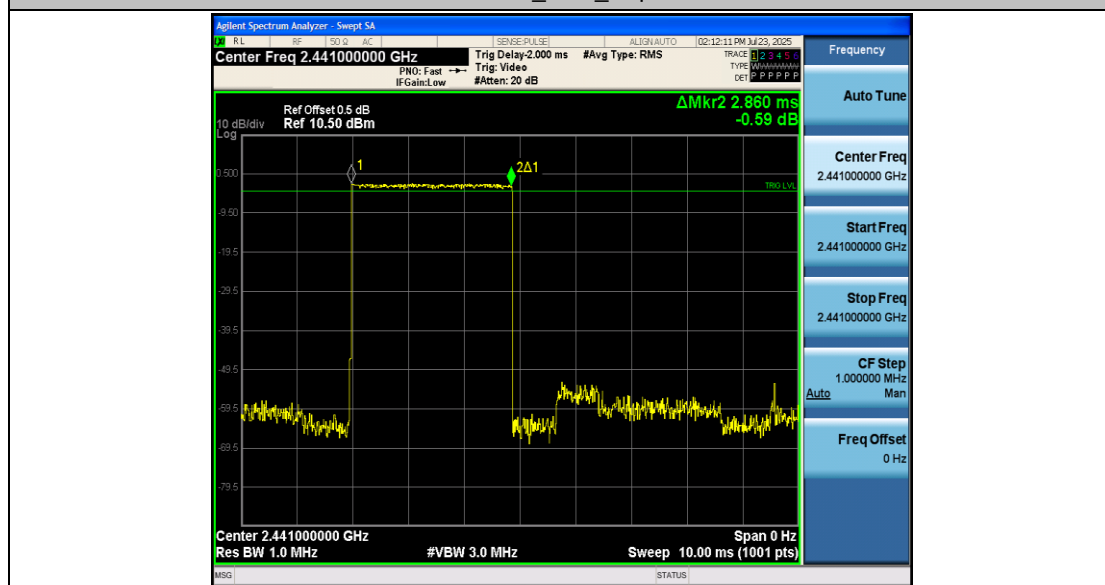
2DH1_Ant1_Hop

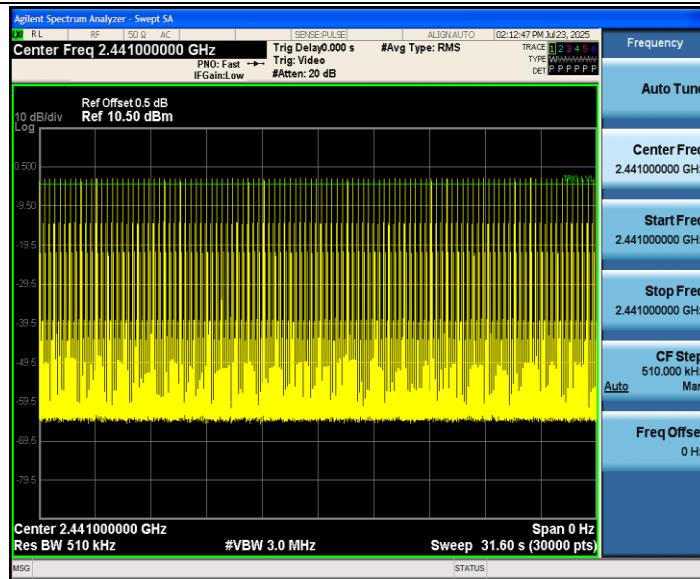


2DH3_Ant1_Hop

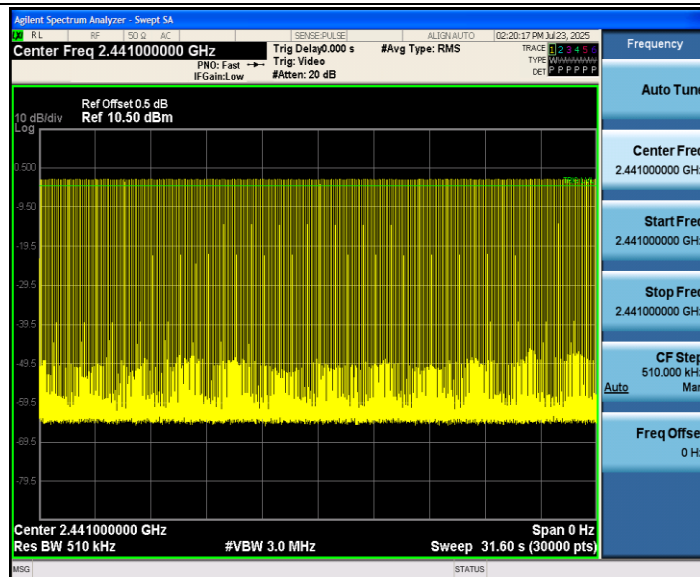
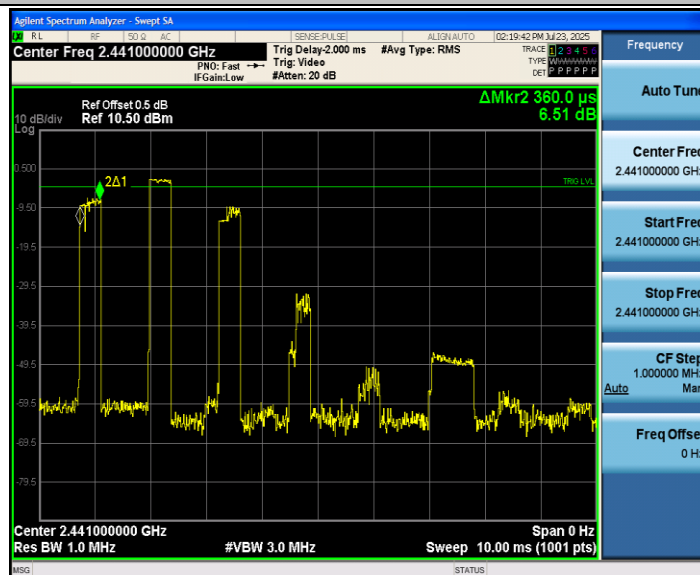


2DH5_Ant1_Hop

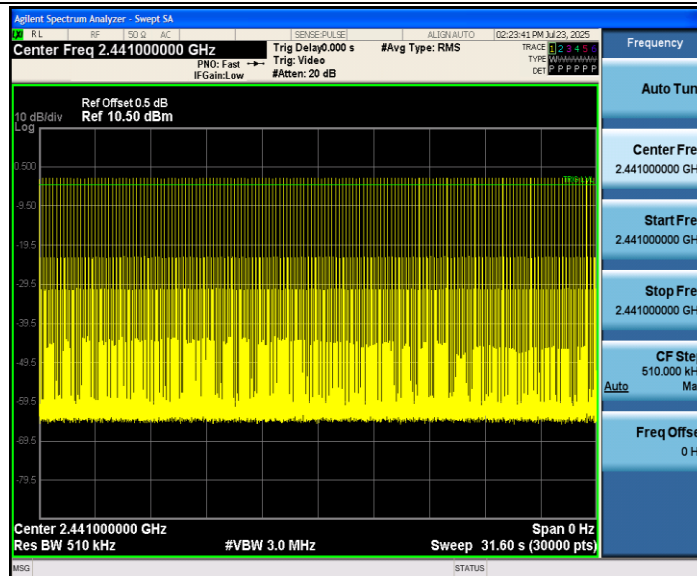
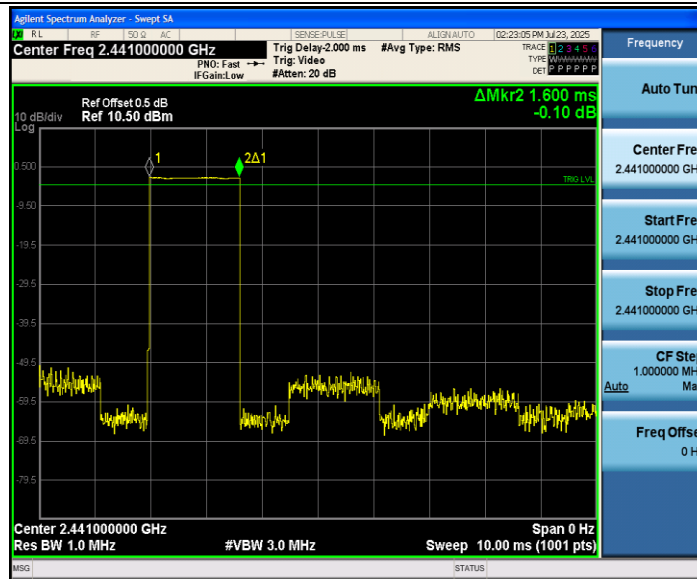




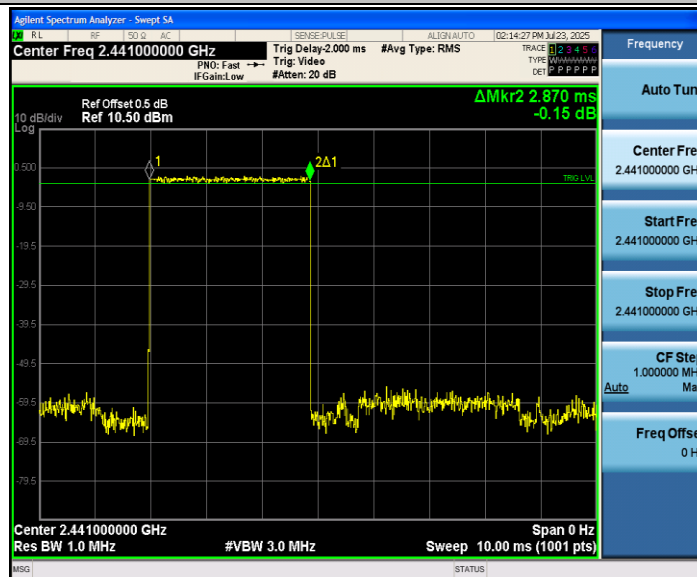
3DH1_Ant1_Hop

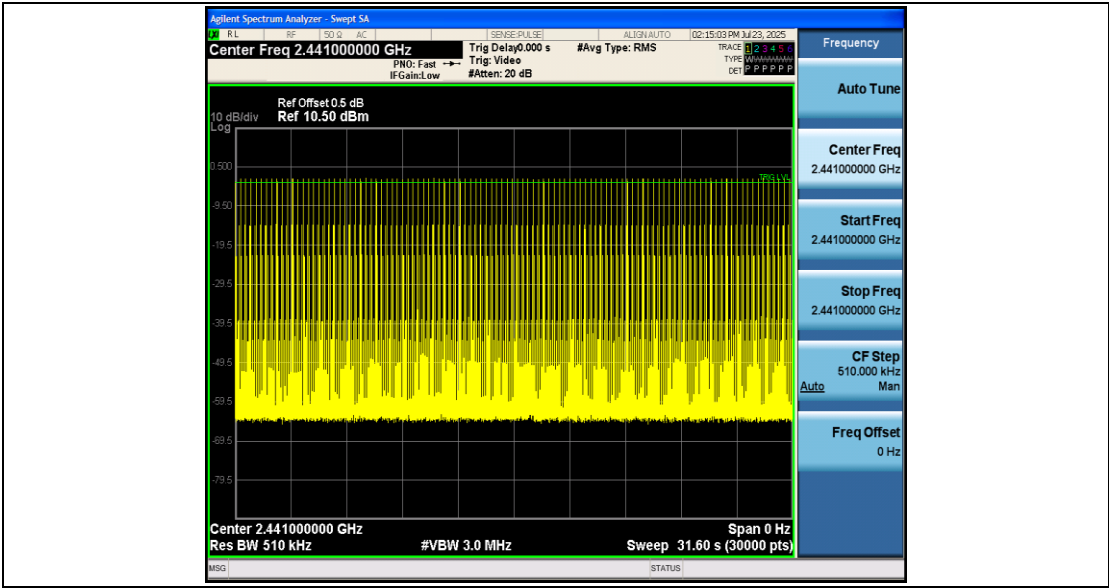


3DH3_Ant1_Hop



3DH5_Ant1_Hop





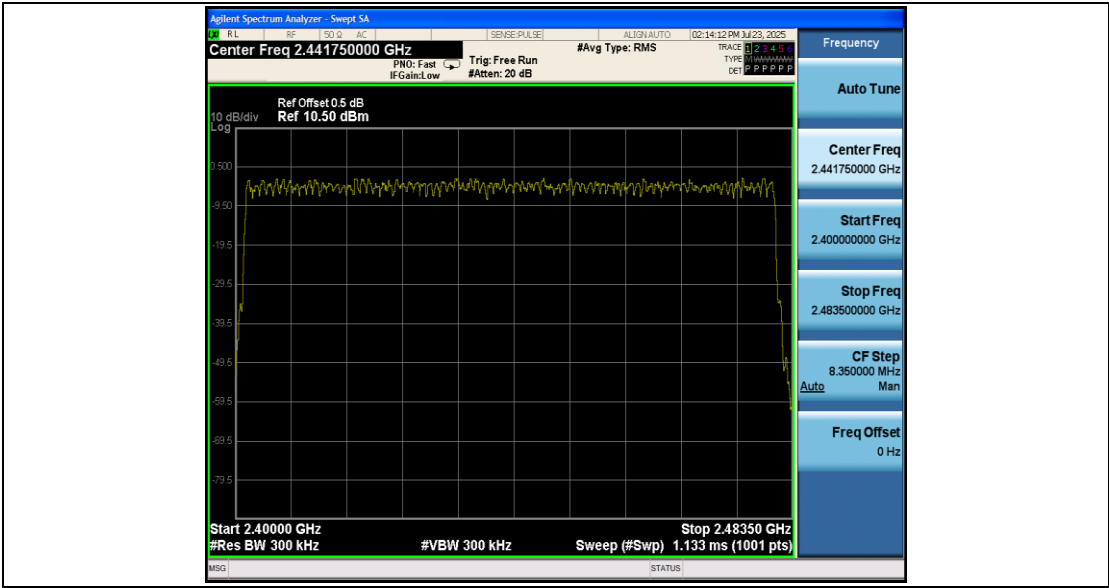
Appendix F: Number of hopping channels

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



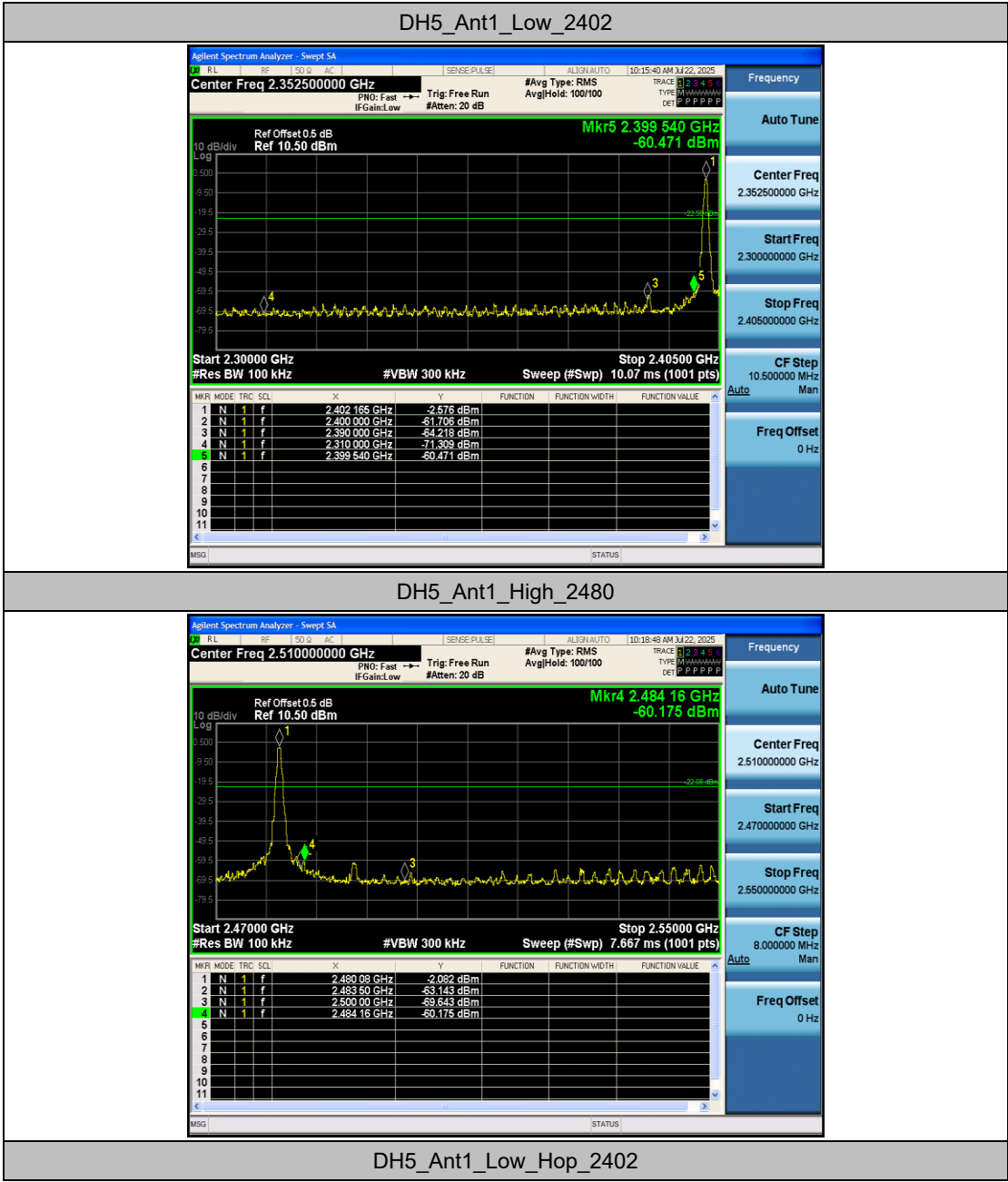


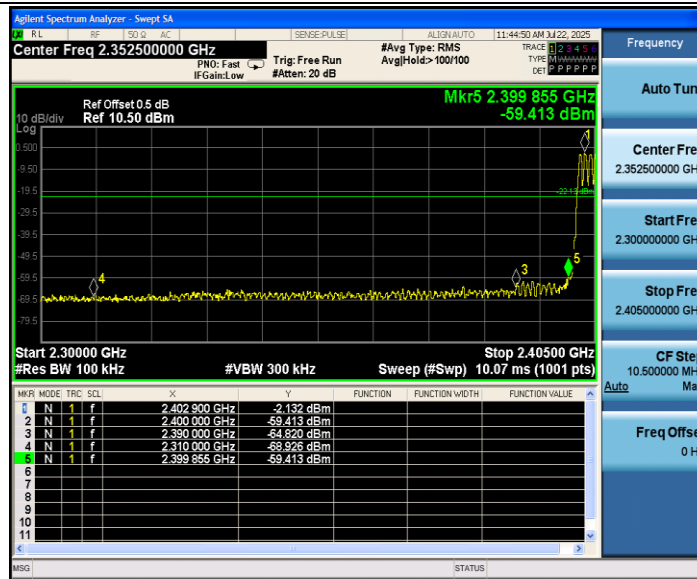
Appendix G: Band edge measurements

Test Result

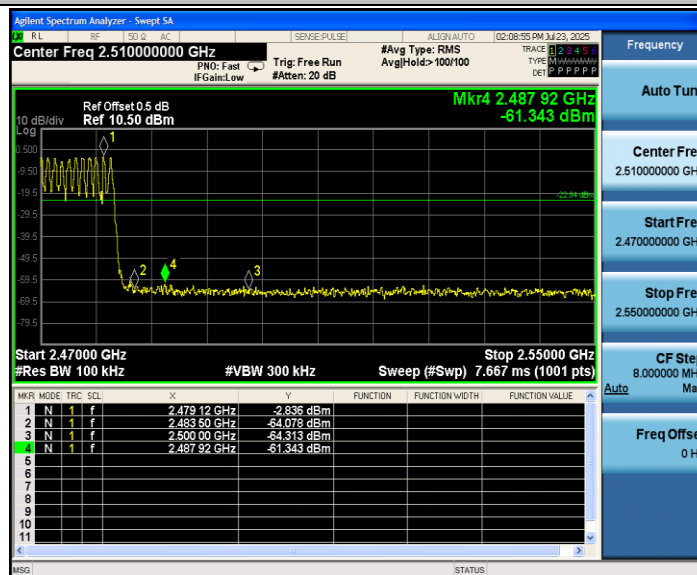
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.58	-60.47	≤ -22.58	PASS
		High	2480	-2.08	-60.18	≤ -22.08	PASS
		Low	Hop_2402	-2.13	-59.41	≤ -22.13	PASS
		High	Hop_2480	-2.84	-61.34	≤ -22.84	PASS
2DH5	Ant1	Low	2402	-3.80	-55.12	≤ -23.8	PASS
		High	2480	-5.38	-61.76	≤ -25.38	PASS
		Low	Hop_2402	-3.60	-57.03	≤ -23.6	PASS
		High	Hop_2480	-6.80	-63.36	≤ -26.8	PASS
3DH5	Ant1	Low	2402	-3.77	-51.49	≤ -23.77	PASS
		High	2480	-4.65	-61.52	≤ -24.65	PASS
		Low	Hop_2402	-5.44	-59.94	≤ -25.44	PASS
		High	Hop_2480	-4.66	-62.02	≤ -24.66	PASS

Test Graphs

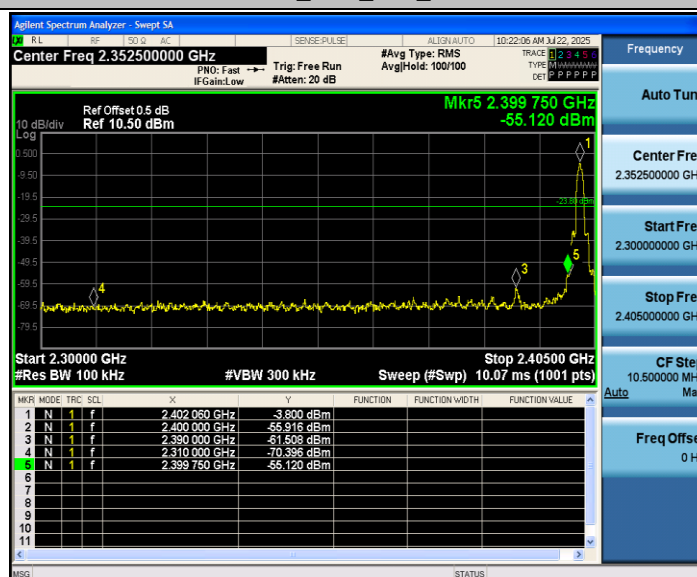




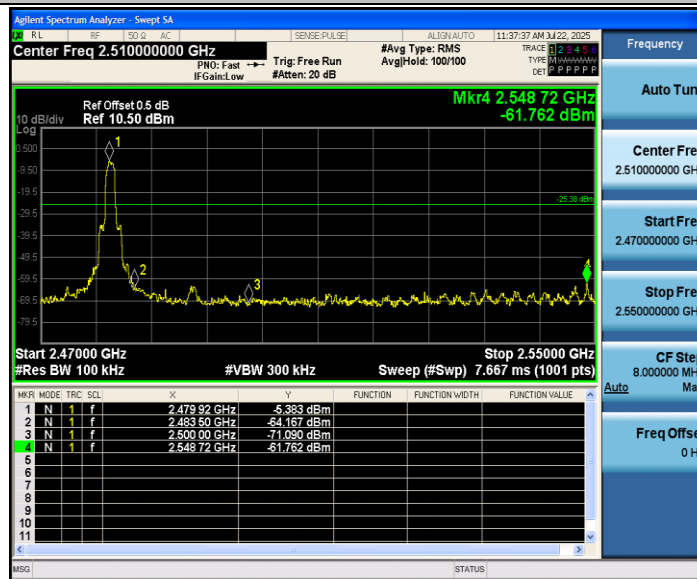
DH5_Ant1_High_Hop_2480



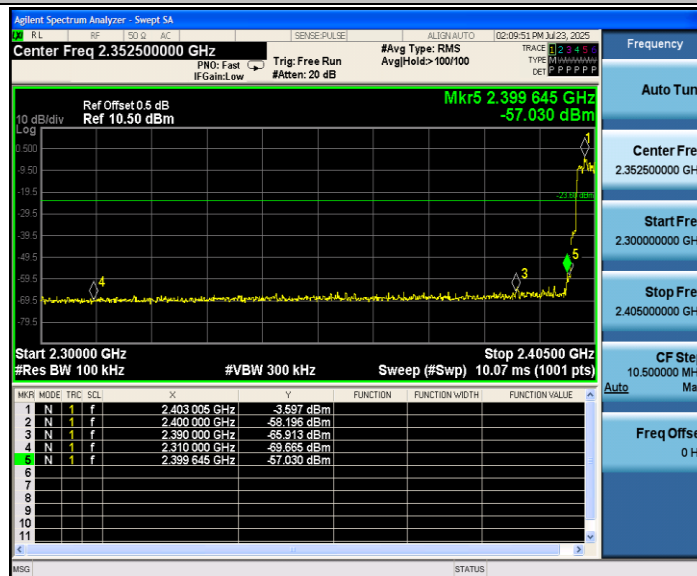
2DH5_Ant1_Low_2402



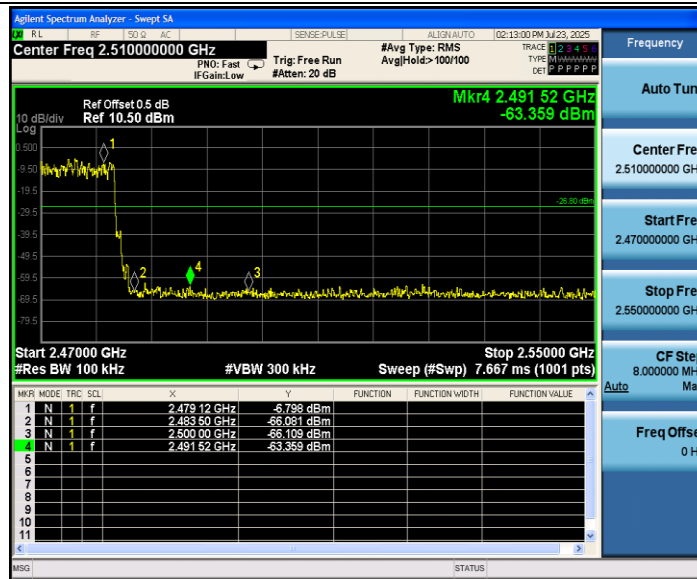
2DH5_Ant1_High_2480



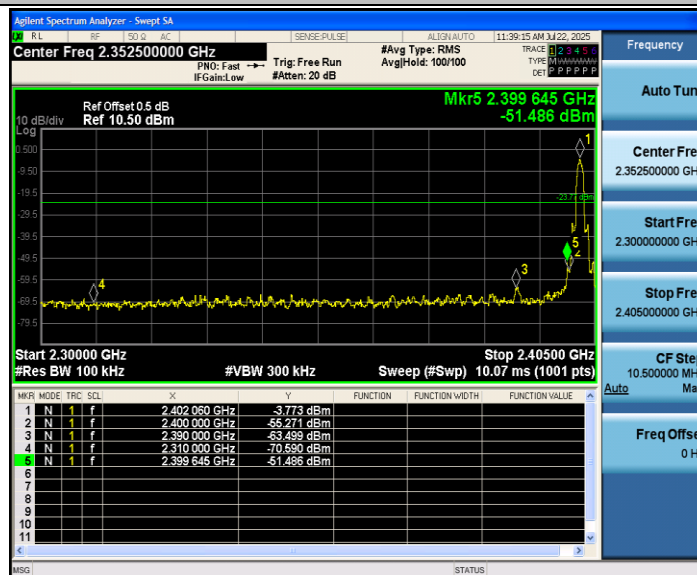
2DH5_Ant1_Low_Hop_2402



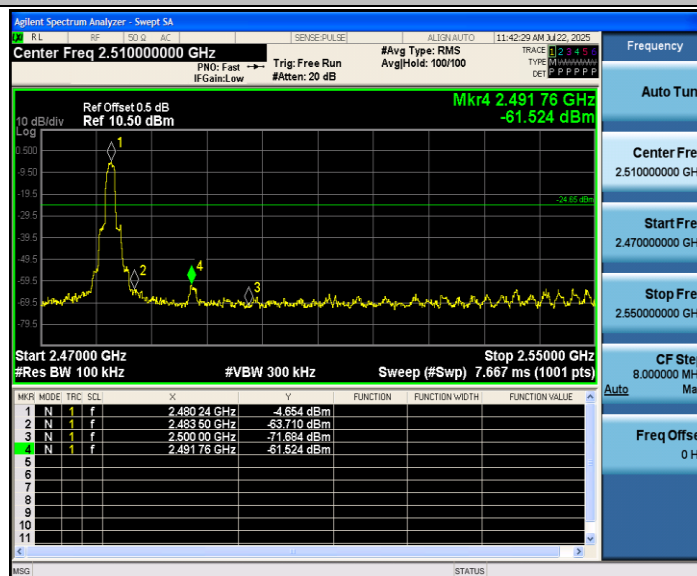
2DH5_Ant1_High_Hop_2480



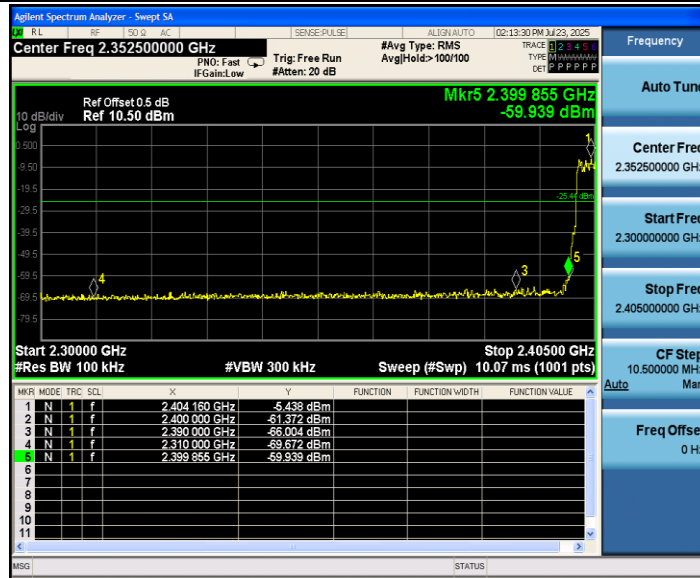
3DH5_Ant1_Low_2402



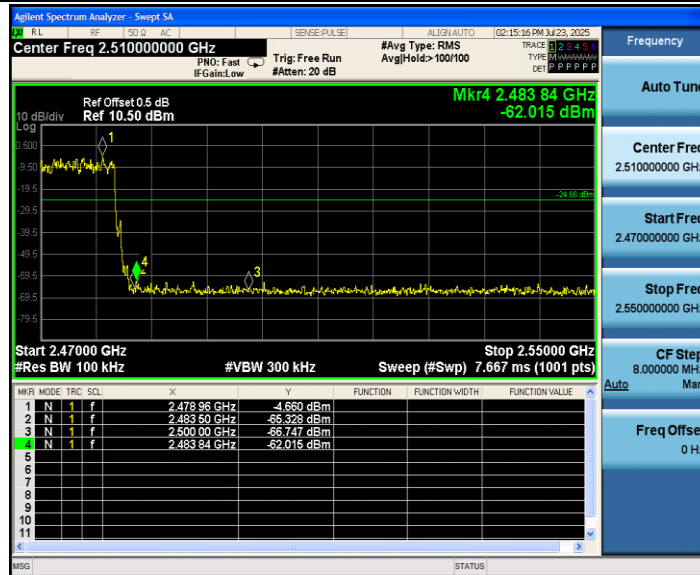
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

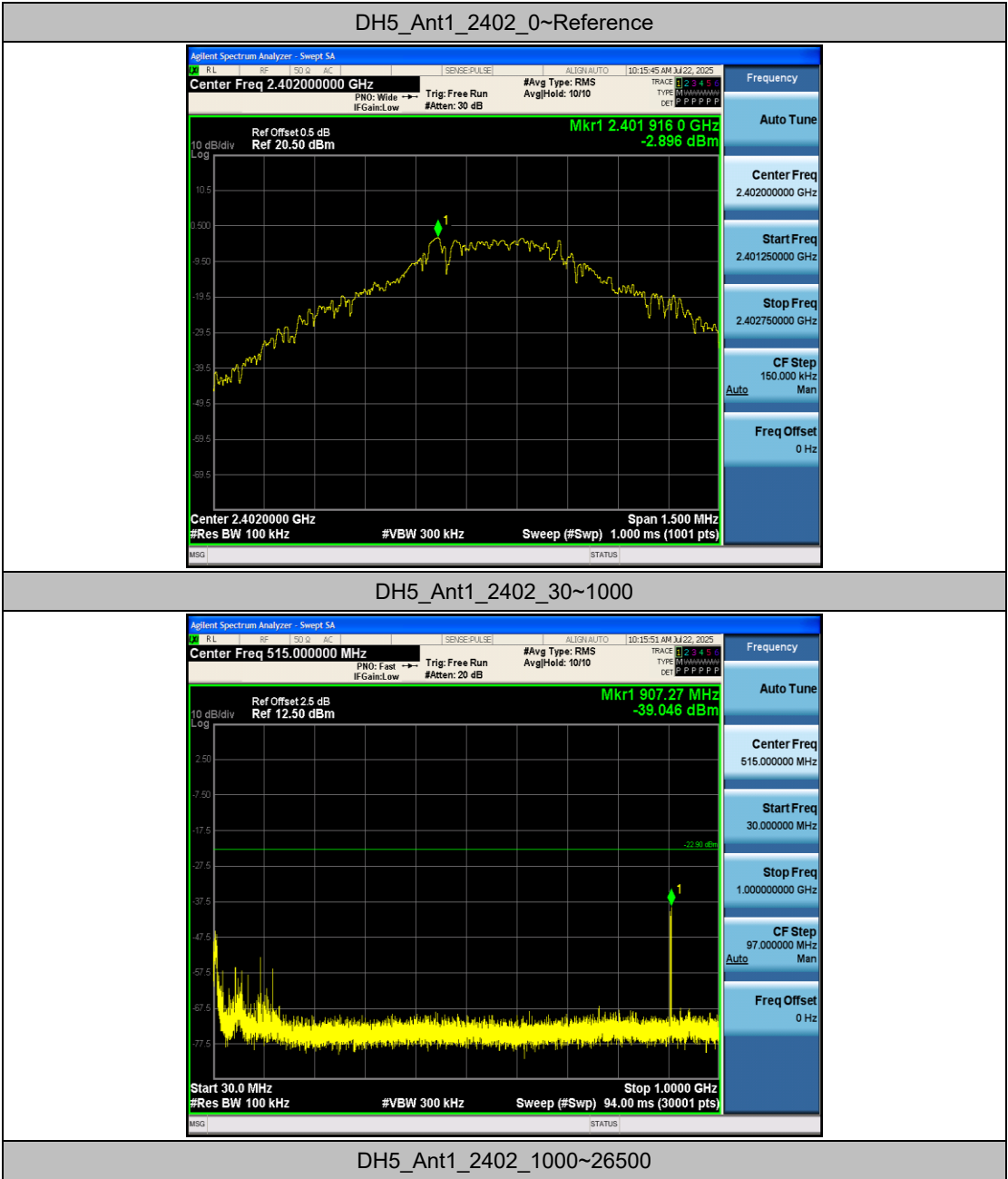


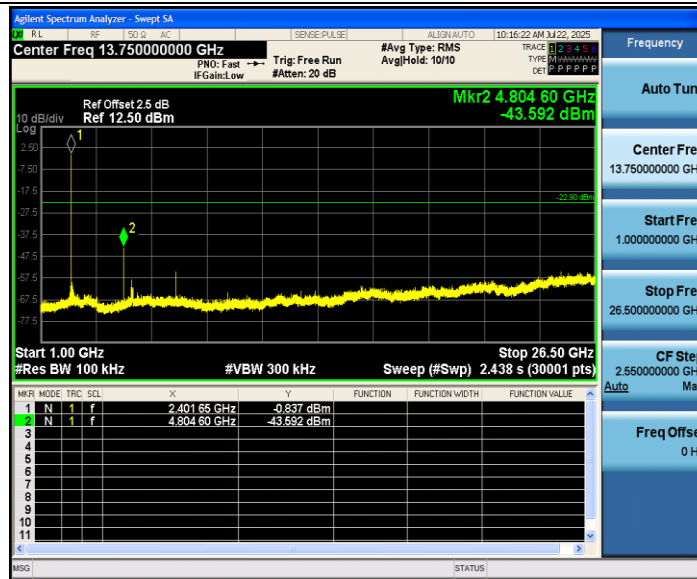
Appendix H: Conducted Spurious Emission

Test Result

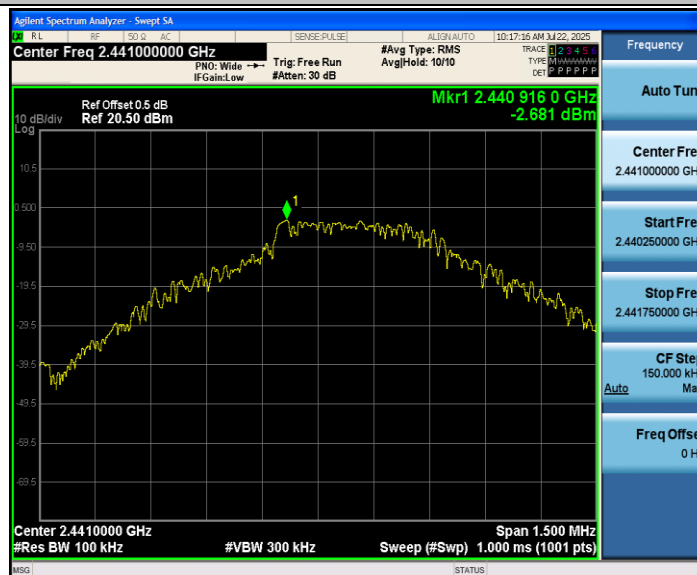
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-2.90	-2.90	---	PASS
			30~1000	-2.90	-39.05	≤-22.9	PASS
			1000~26500	-2.90	-43.59	≤-22.9	PASS
		2441	Reference	-2.68	-2.68	---	PASS
			30~1000	-2.68	-45.42	≤-22.68	PASS
			1000~26500	-2.68	-50.34	≤-22.68	PASS
		2480	Reference	-2.62	-2.62	---	PASS
			30~1000	-2.62	-44.32	≤-22.62	PASS
			1000~26500	-2.62	-49.88	≤-22.62	PASS
2DH5	Ant1	2402	Reference	-5.51	-5.51	---	PASS
			30~1000	-5.51	-44.54	≤-25.51	PASS
			1000~26500	-5.51	-47.12	≤-25.51	PASS
		2441	Reference	-5.10	-5.10	---	PASS
			30~1000	-5.10	-38.46	≤-25.1	PASS
			1000~26500	-5.10	-52.45	≤-25.1	PASS
		2480	Reference	-2.04	-2.04	---	PASS
			30~1000	-2.04	-46.74	≤-22.04	PASS
			1000~26500	-2.04	-52.77	≤-22.04	PASS
3DH5	Ant1	2402	Reference	-5.31	-5.31	---	PASS
			30~1000	-5.31	-46.3	≤-25.31	PASS
			1000~26500	-5.31	-42.57	≤-25.31	PASS
		2441	Reference	-2.40	-2.40	---	PASS
			30~1000	-2.40	-46.69	≤-22.4	PASS
			1000~26500	-2.40	-51.47	≤-22.4	PASS
		2480	Reference	-2.69	-2.69	---	PASS
			30~1000	-2.69	-46.37	≤-22.69	PASS
			1000~26500	-2.69	-52.18	≤-22.69	PASS

Test Graphs

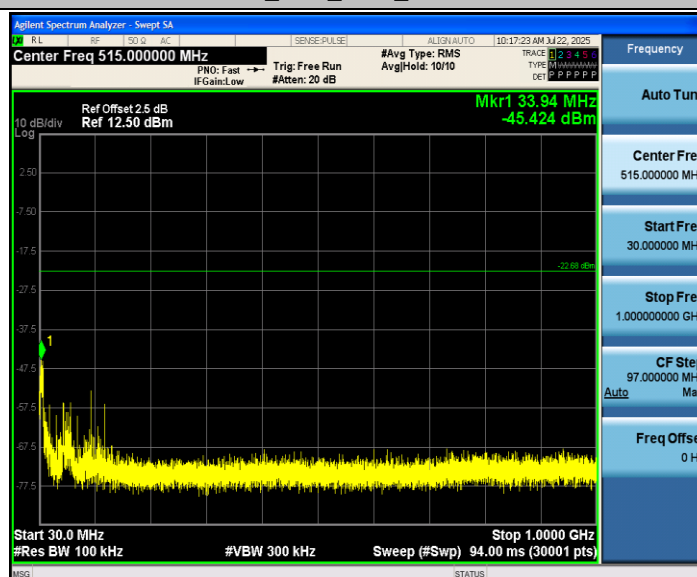




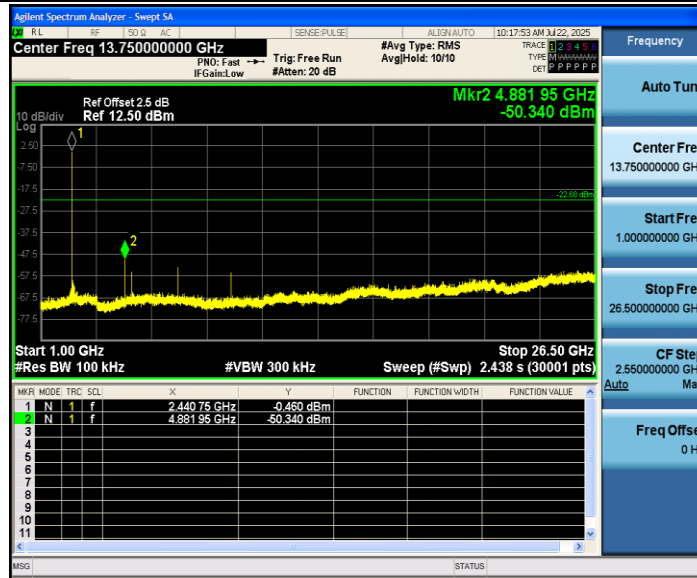
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



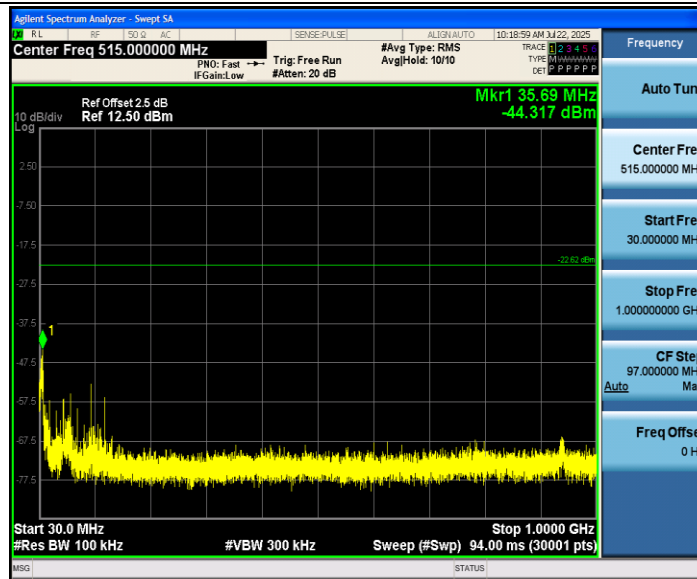
DH5_Ant1_2441_1000~26500



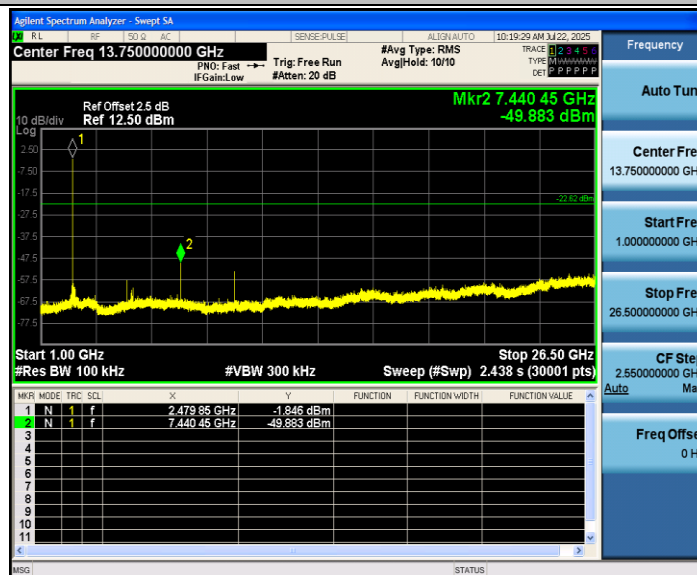
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

