

FCC Appendix RF Test Data for BT

FCC ID : 2AXCX-NT809BT

Company : Shenzhen Foxwell Technology Co., Ltd

EUT : Automotive Diagnostic System

Model Number : NT809BT

Report No. : CTA25091901002

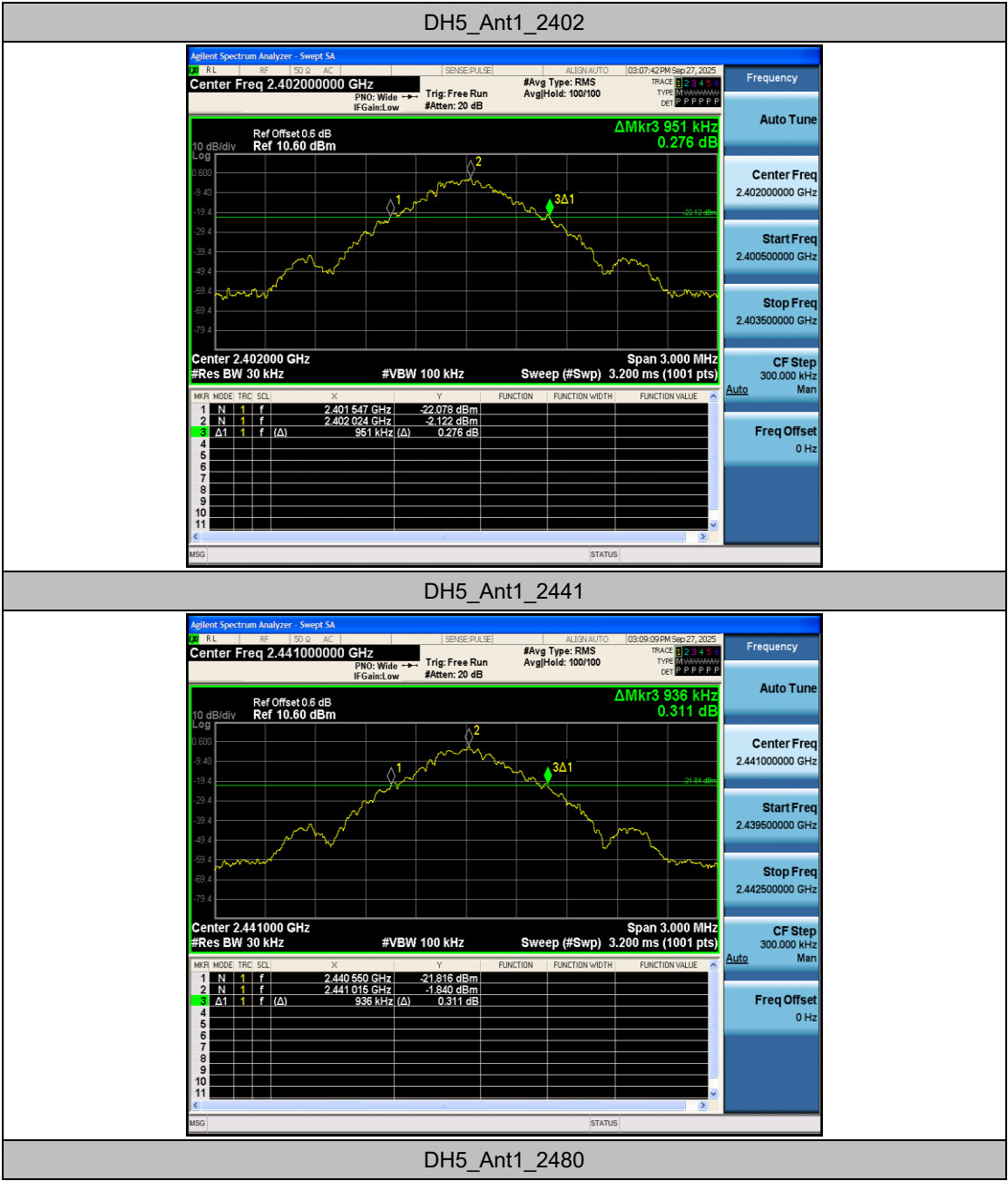
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.547	2402.498	---	---
		2441	0.936	2440.550	2441.486	---	---
		2480	0.954	2479.550	2480.504	---	---
2DH5	Ant1	2402	1.320	2401.346	2402.666	---	---
		2441	1.275	2440.382	2441.657	---	---
		2480	1.314	2479.352	2480.666	---	---
3DH5	Ant1	2402	1.323	2401.349	2402.672	---	---
		2441	1.344	2440.337	2441.681	---	---
		2480	1.341	2479.340	2480.681	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

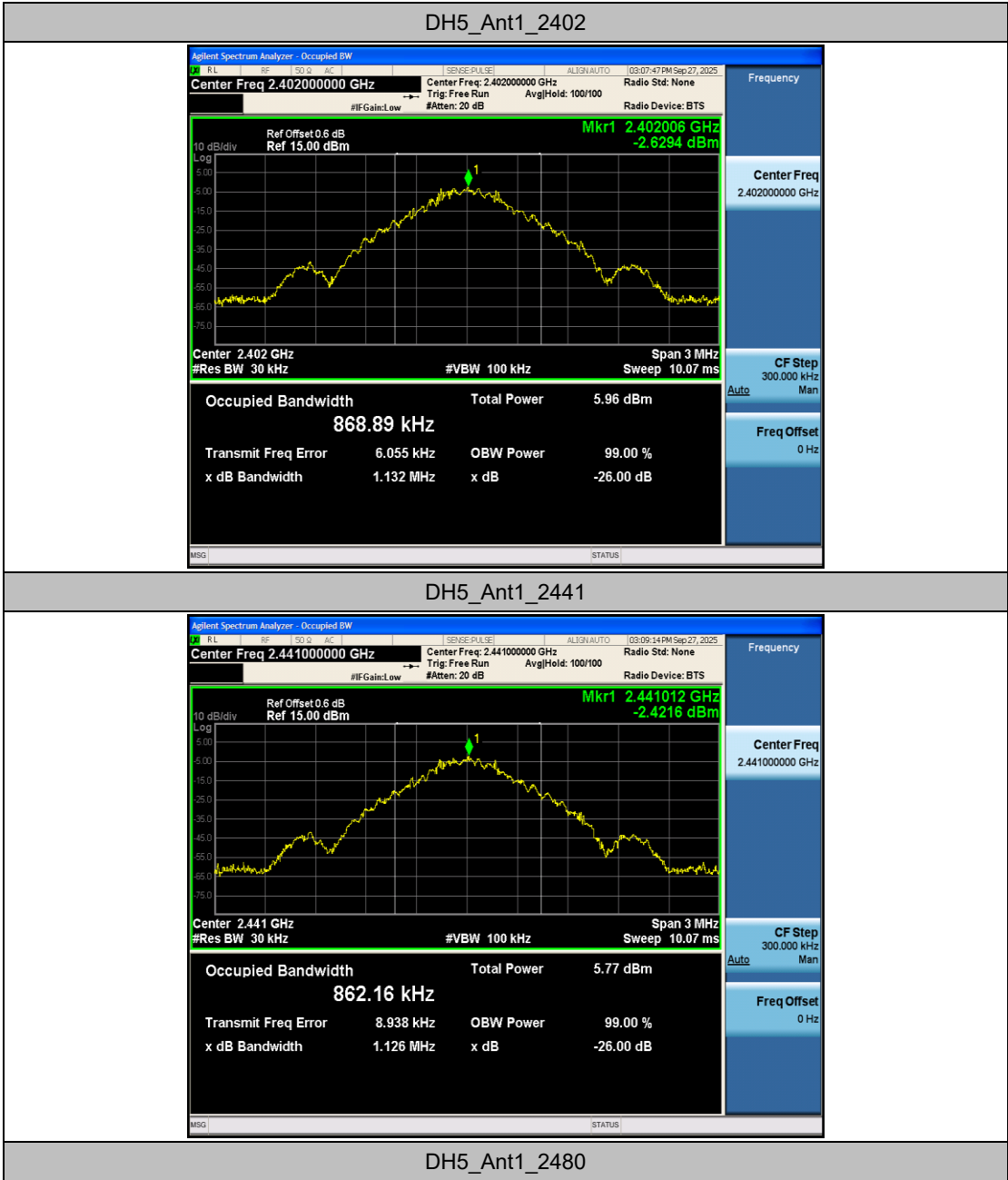


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86889	2401.5716	2402.4405	---	---
		2441	0.86216	2440.5779	2441.4400	---	---
		2480	0.87271	2479.5720	2480.4448	---	---
2DH5	Ant1	2402	1.1870	2401.4163	2402.6033	---	---
		2441	1.1854	2440.4174	2441.6028	---	---
		2480	1.1867	2479.4154	2480.6021	---	---
3DH5	Ant1	2402	1.1886	2401.4148	2402.6034	---	---
		2441	1.1850	2440.4172	2441.6022	---	---
		2480	1.1860	2479.4180	2480.6040	---	---

Test Graphs

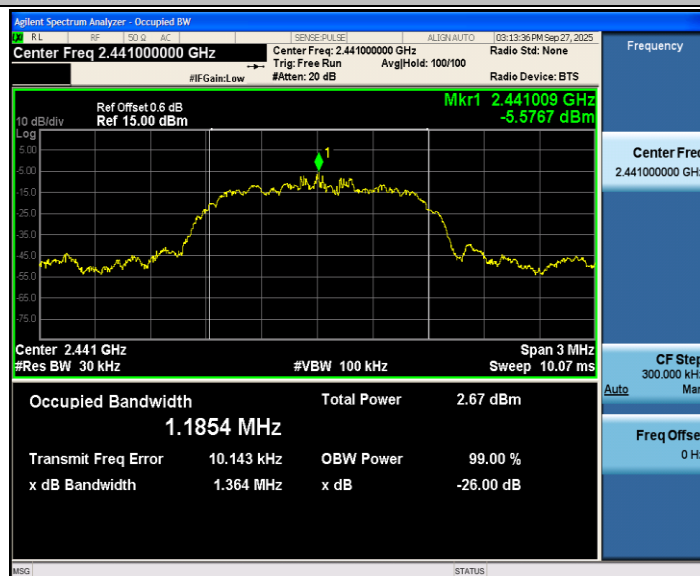




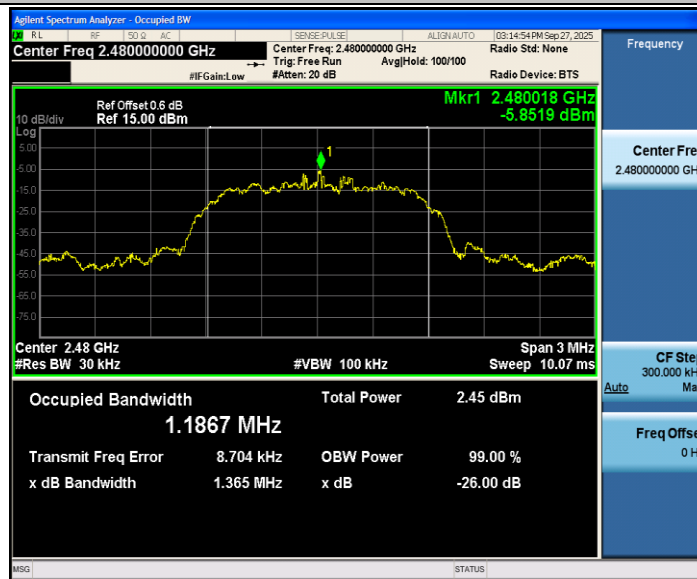
2DH5_Ant1_2402



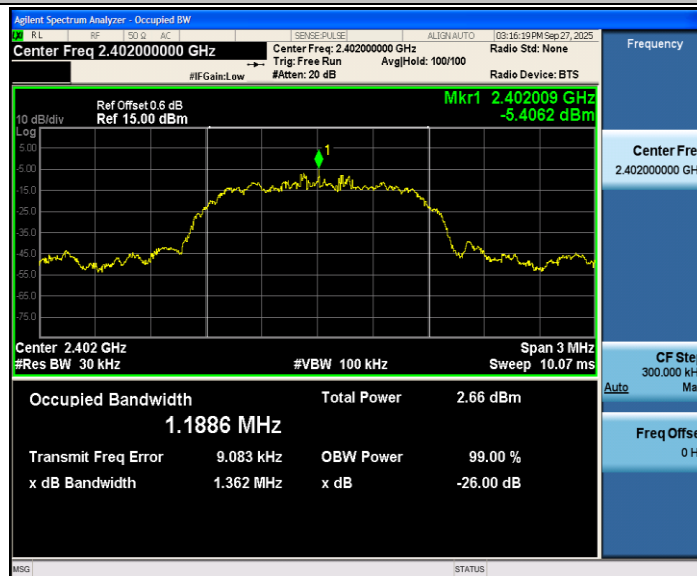
2DH5_Ant1_2441



2DH5_Ant1_2480



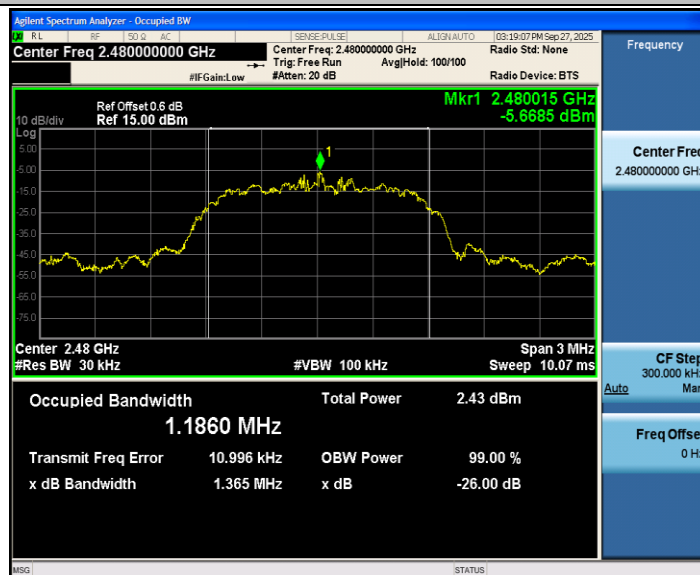
3DH5_Ant1_2402



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	0.02	≤20.97	PASS
		2441	-0.21	≤20.97	PASS
		2480	-0.29	≤20.97	PASS
2DH5	Ant1	2402	-0.82	≤20.97	PASS
		2441	-0.99	≤20.97	PASS
		2480	-1.12	≤20.97	PASS
3DH5	Ant1	2402	-0.77	≤20.97	PASS
		2441	-1.00	≤20.97	PASS
		2480	-1.03	≤20.97	PASS

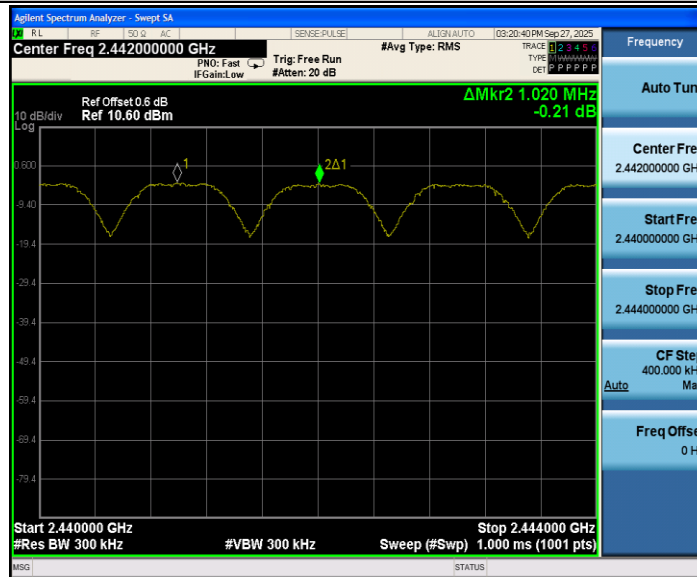
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.02	≥ 0.954	PASS
2DH5	Ant1	Hop	1.192	≥ 0.880	PASS
3DH5	Ant1	Hop	0.948	≥ 0.896	PASS

Test Graphs

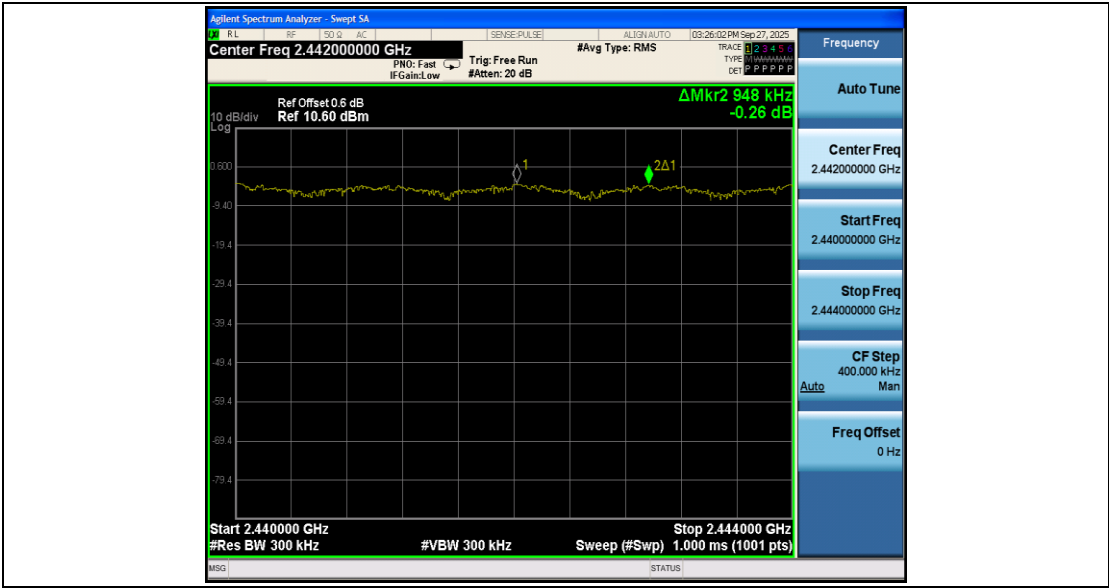
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

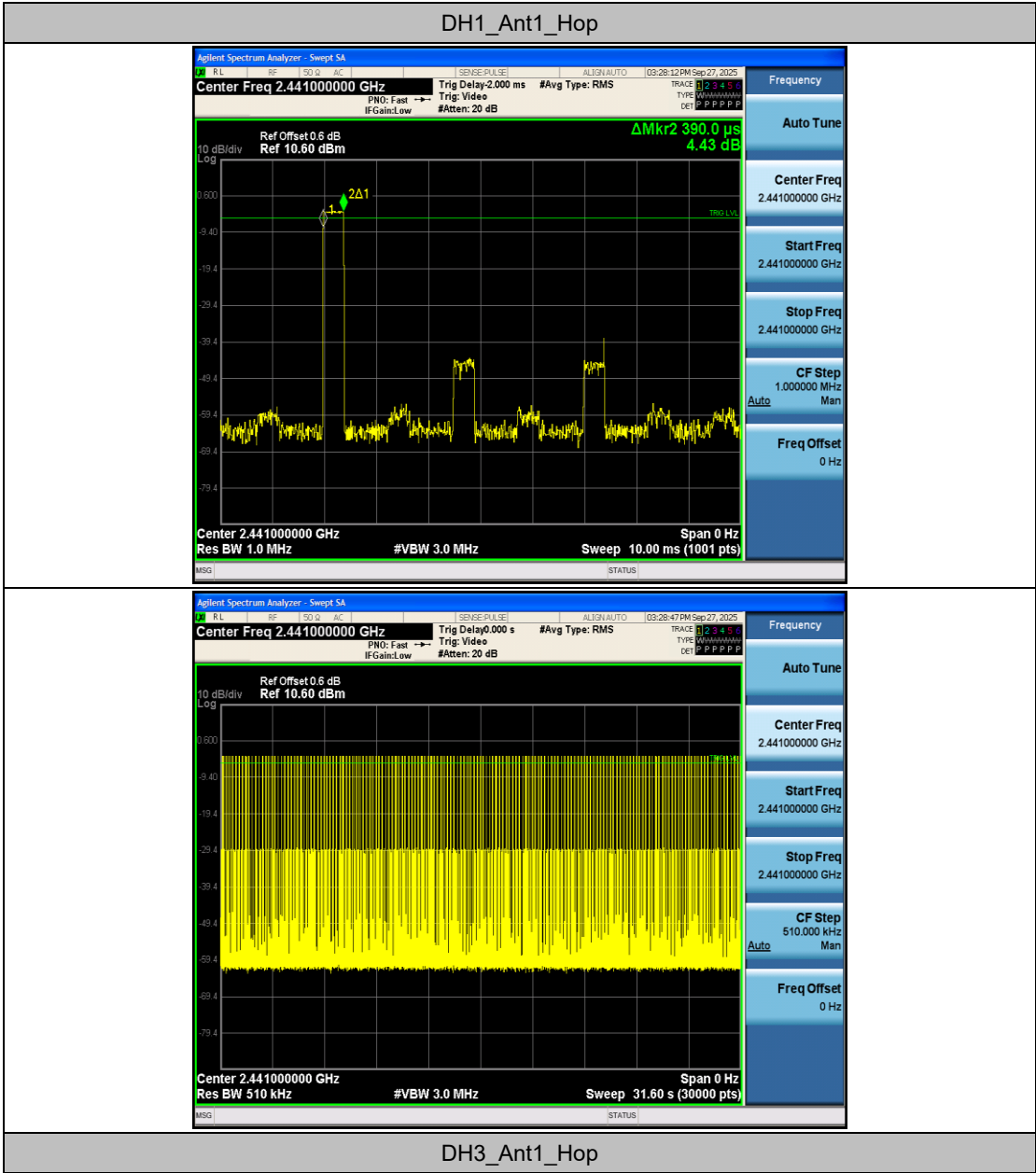


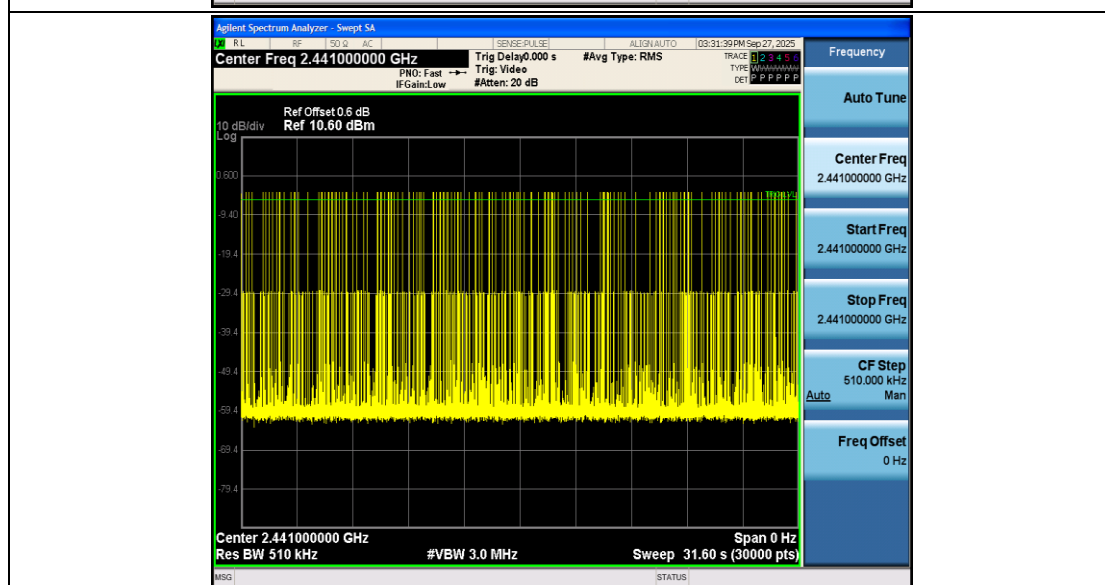
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	156	0.256	≤0.4	PASS
DH5	Ant1	Hop	2.890	111	0.321	≤0.4	PASS
2DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.650	160	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.890	115	0.332	≤0.4	PASS
3DH1	Ant1	Hop	0.380	319	0.121	≤0.4	PASS
3DH3	Ant1	Hop	1.650	159	0.262	≤0.4	PASS
3DH5	Ant1	Hop	2.900	102	0.296	≤0.4	PASS

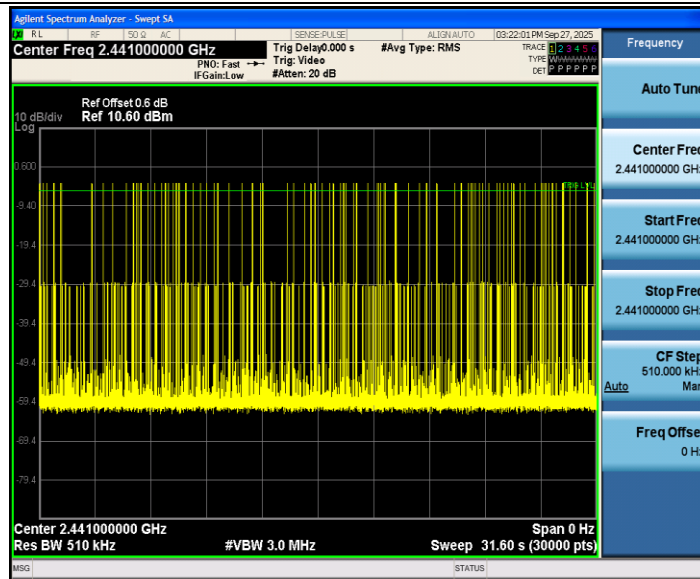
Test Graphs



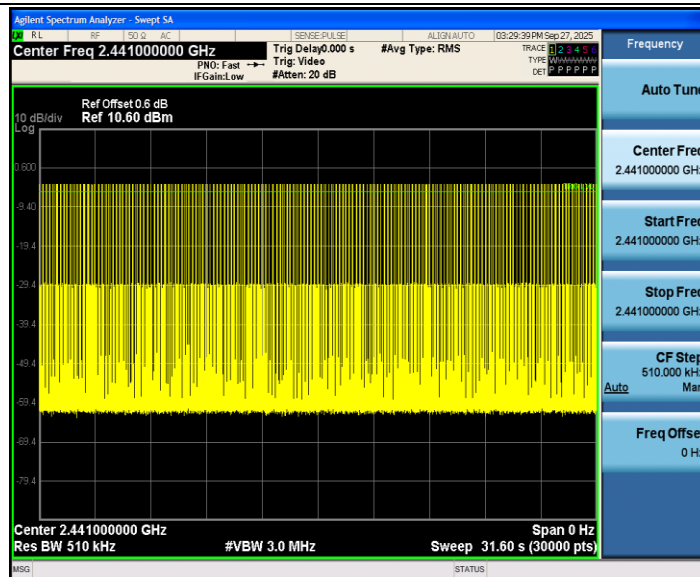
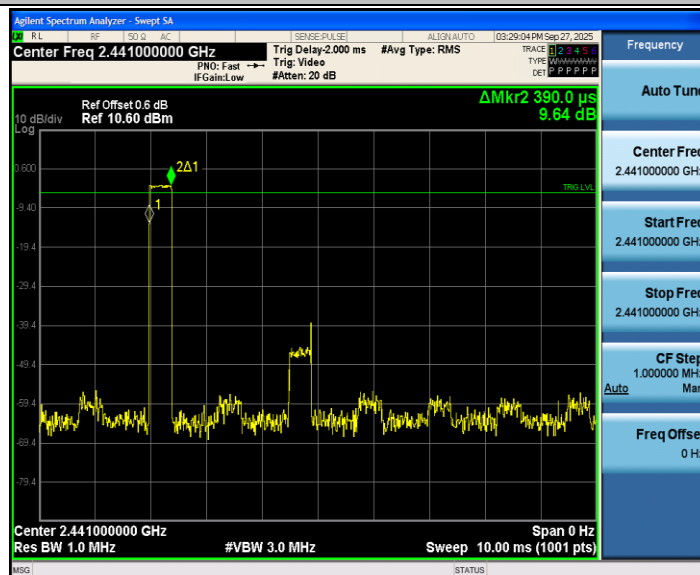


DH5_Ant1_Hop

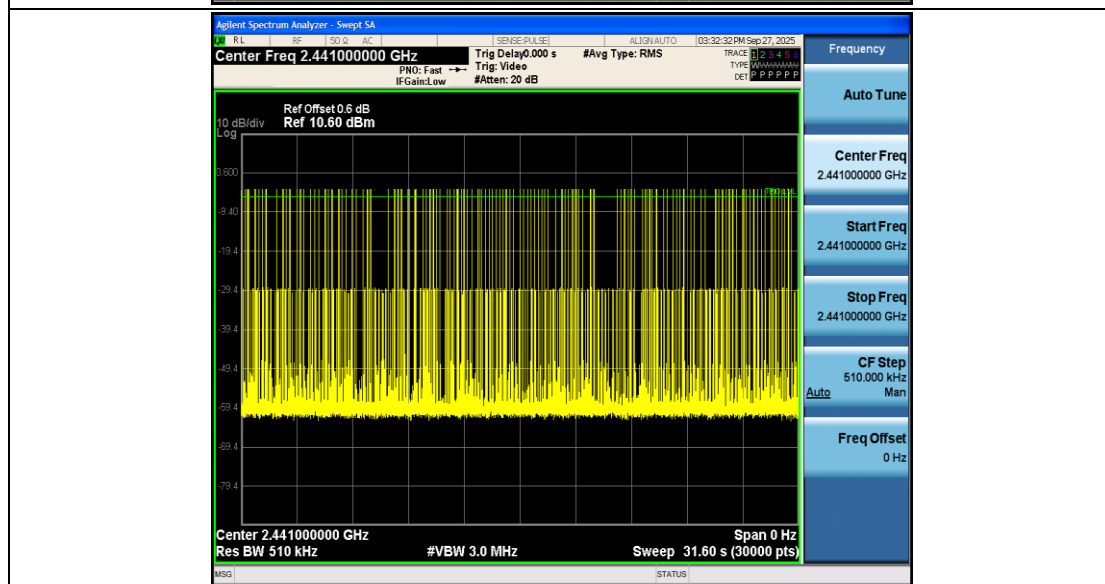




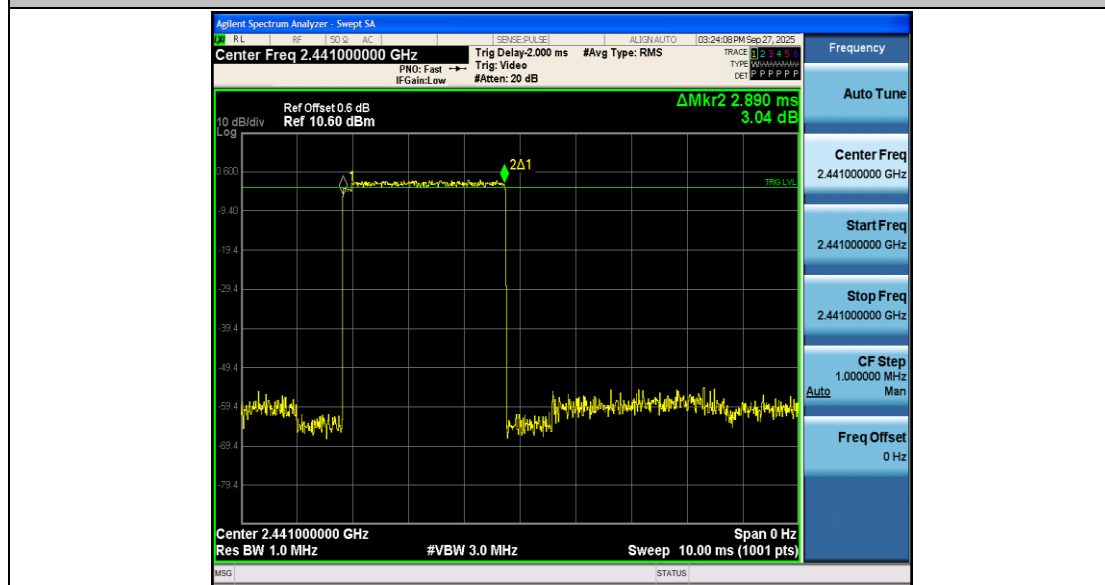
2DH1_Ant1_Hop

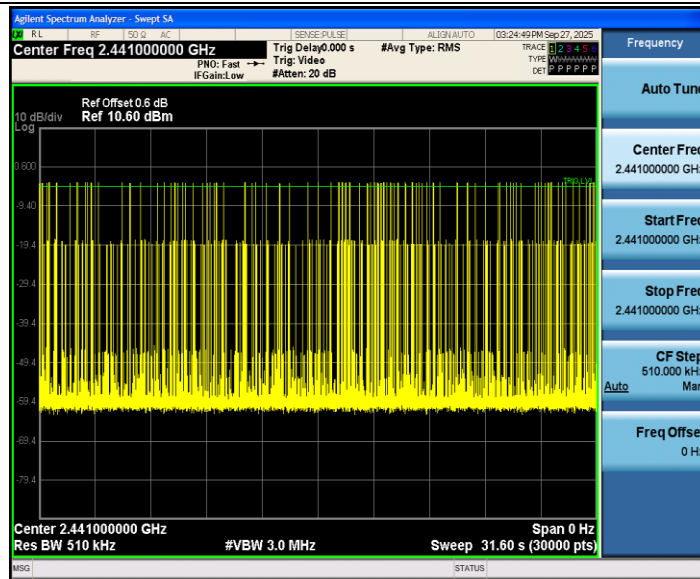


2DH3_Ant1_Hop

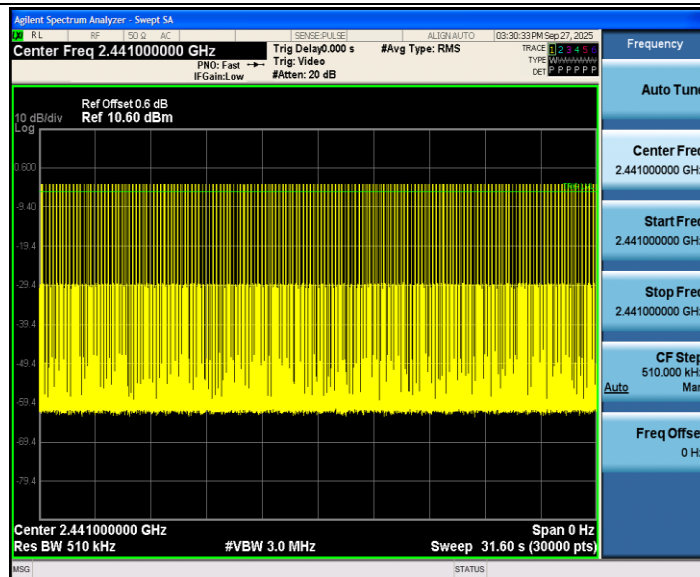
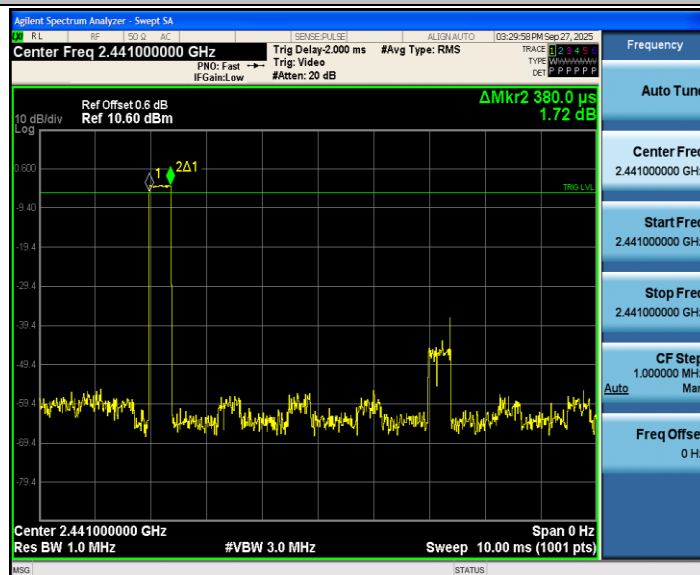


2DH5_Ant1_Hop

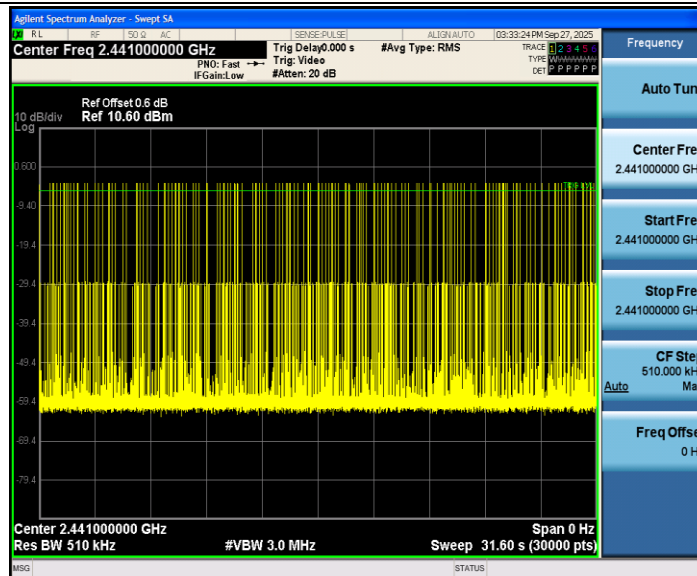
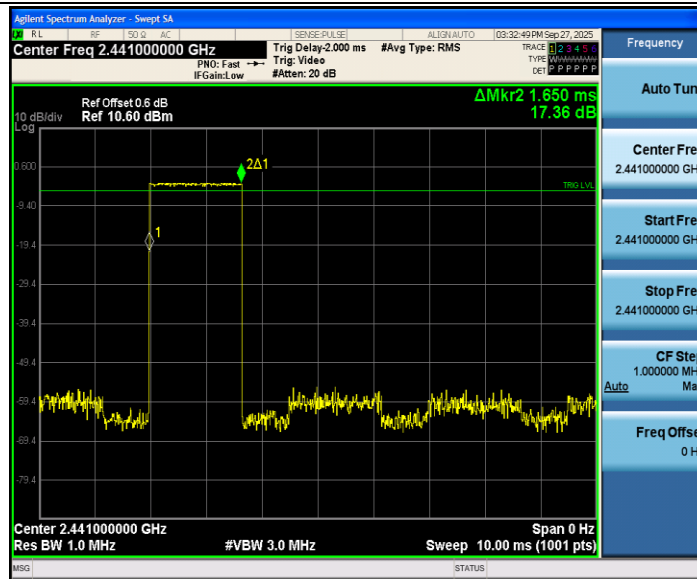




3DH1_Ant1_Hop

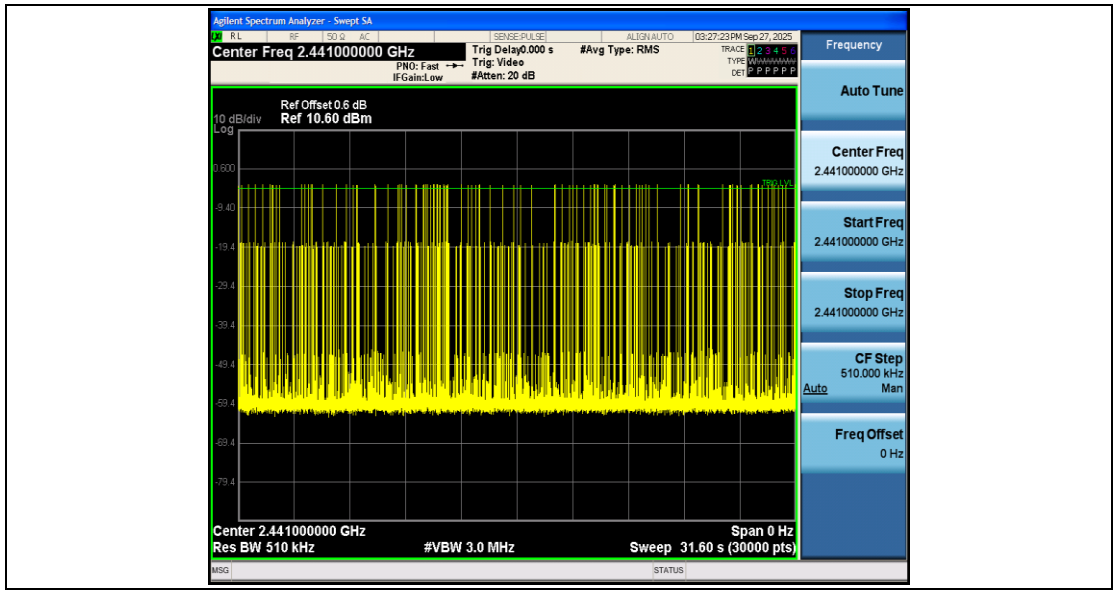


3DH3_Ant1_Hop



3DH5_Ant1_Hop





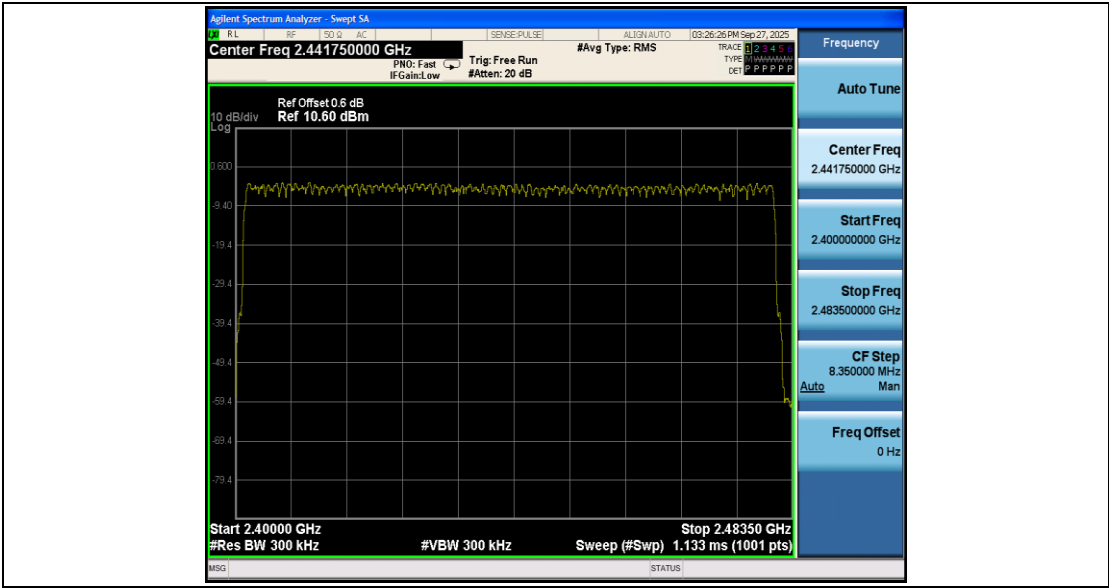
Appendix F: Number of hopping channels

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



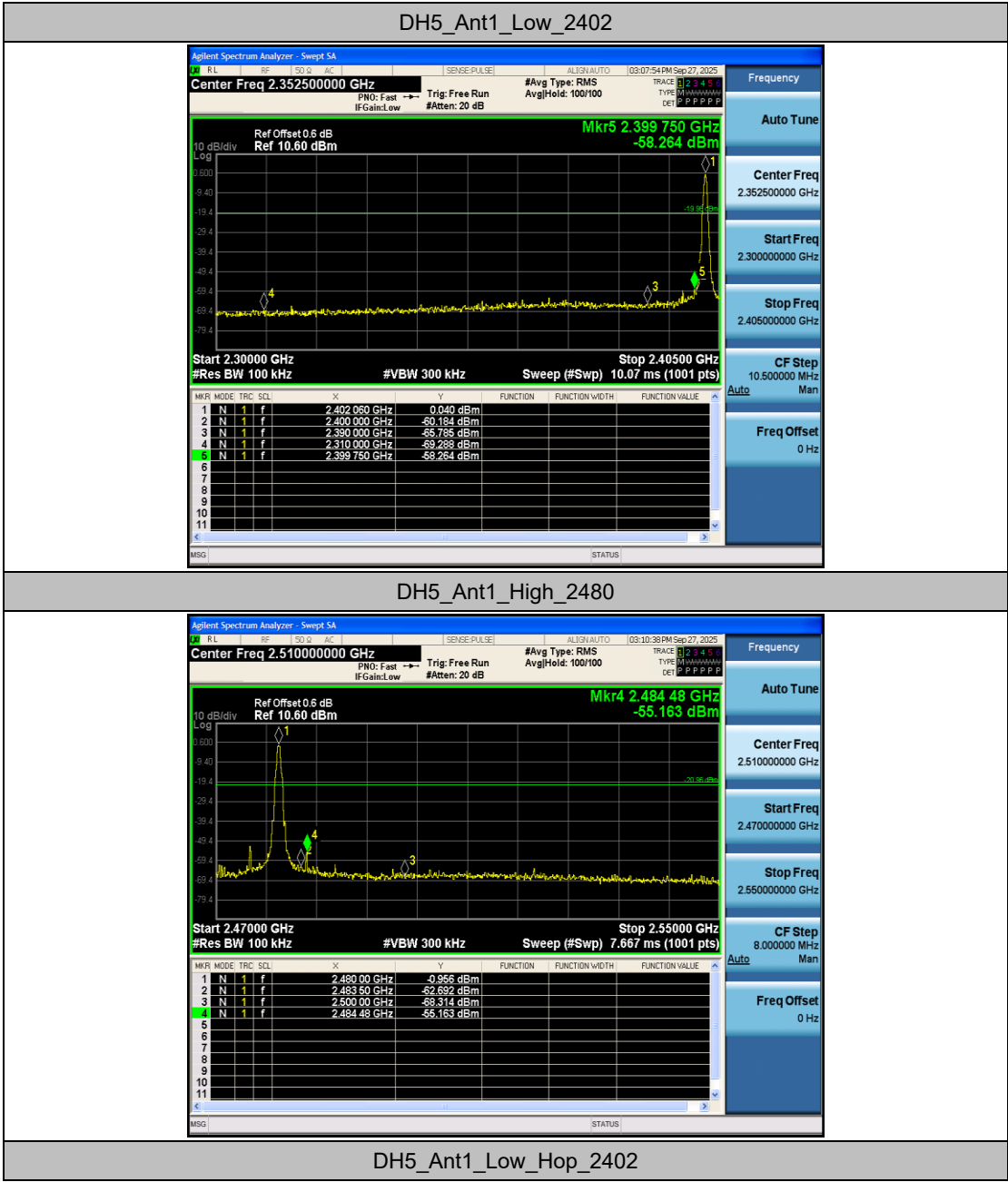


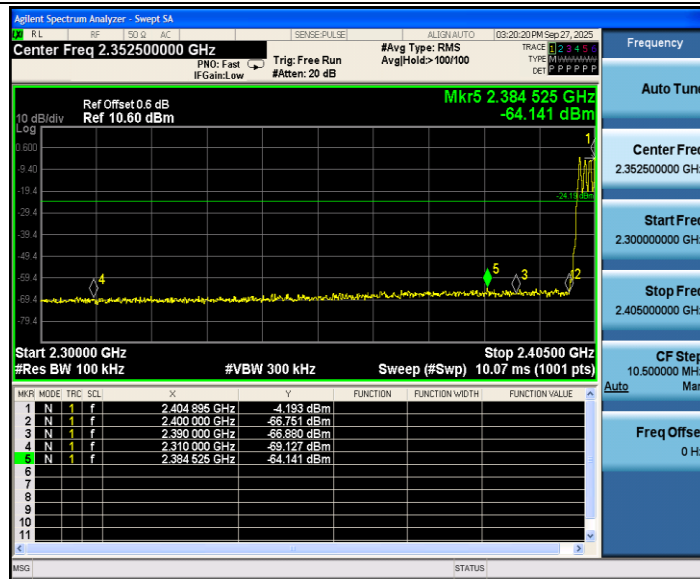
Appendix G: Band edge measurements

Test Result

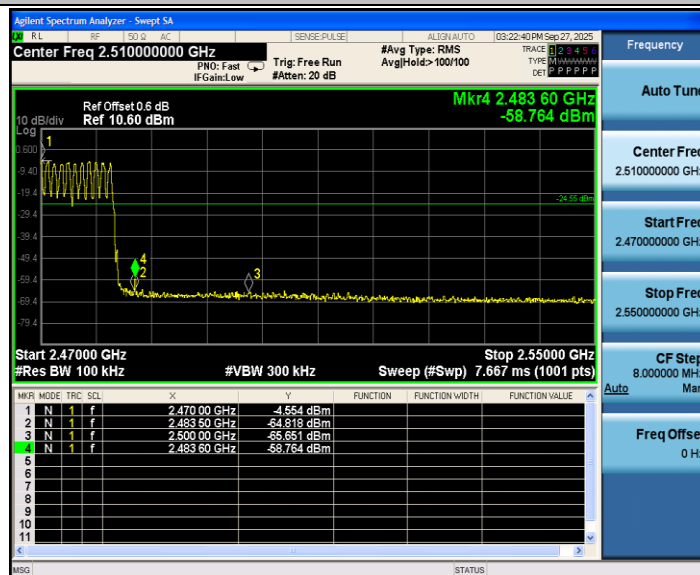
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.04	-58.26	≤-19.96	PASS
		High	2480	-0.96	-55.16	≤-20.96	PASS
		Low	Hop_2402	-4.19	-64.14	≤-24.19	PASS
		High	Hop_2480	-4.55	-58.76	≤-24.55	PASS
2DH5	Ant1	Low	2402	-4.43	-55.19	≤-24.43	PASS
		High	2480	-4.74	-58.04	≤-24.74	PASS
		Low	Hop_2402	-4.44	-59.4	≤-24.44	PASS
		High	Hop_2480	-4.57	-64.11	≤-24.57	PASS
3DH5	Ant1	Low	2402	-5.16	-59.73	≤-25.16	PASS
		High	2480	-4.90	-63.66	≤-24.9	PASS
		Low	Hop_2402	-6.84	-60.73	≤-26.84	PASS
		High	Hop_2480	-5.09	-56.01	≤-25.09	PASS

Test Graphs

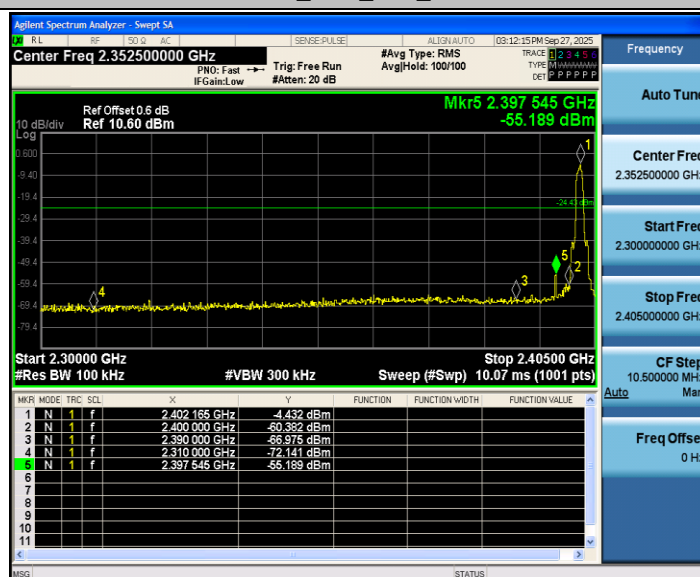




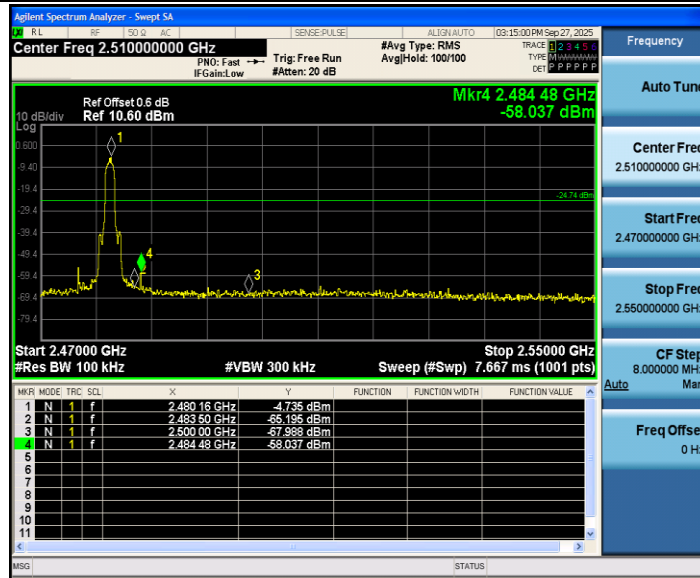
DH5_Ant1_High_Hop_2480



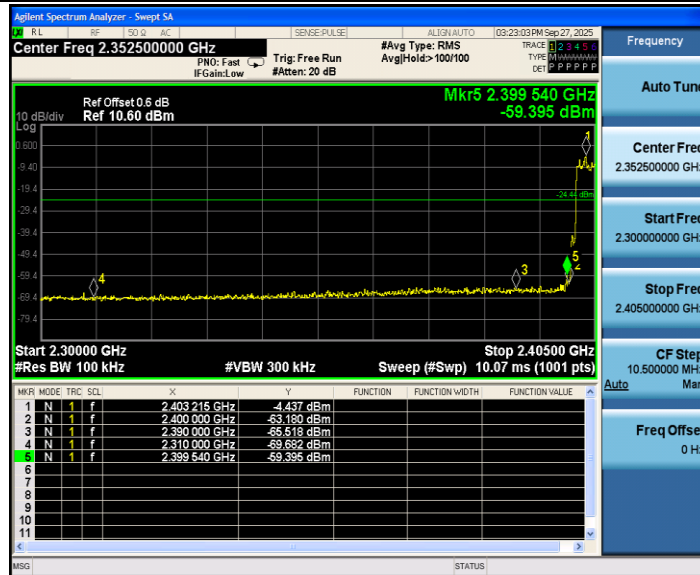
2DH5_Ant1_Low_2402



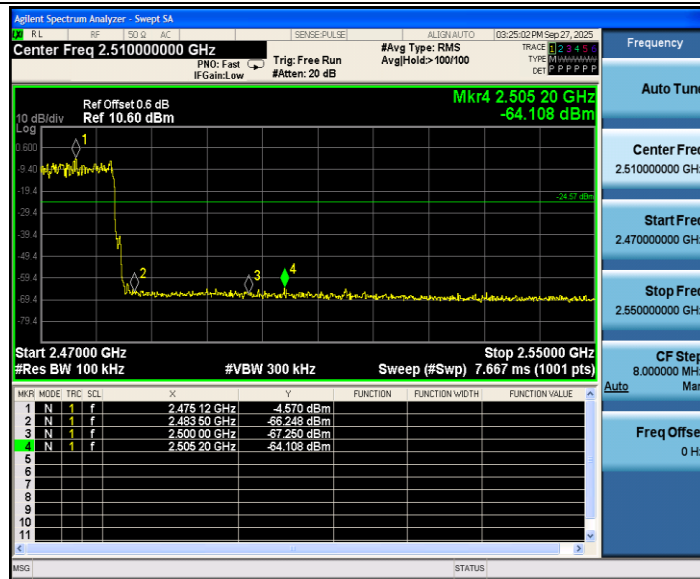
2DH5_Ant1_High_2480



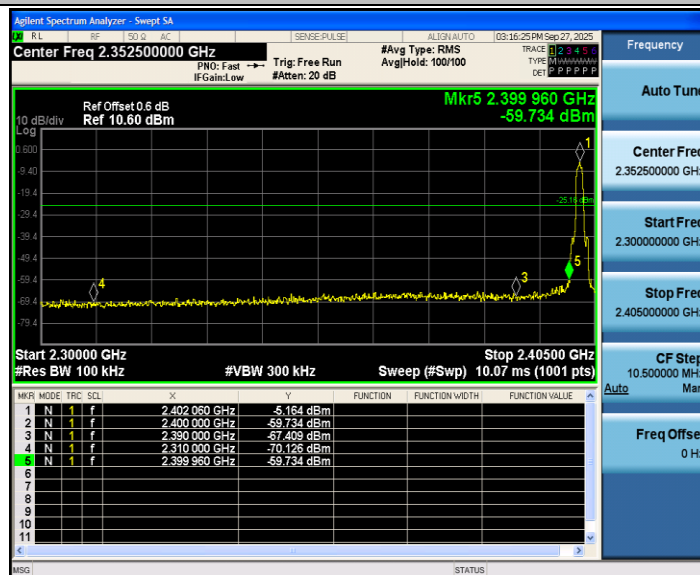
2DH5_Ant1_Low_Hop_2402



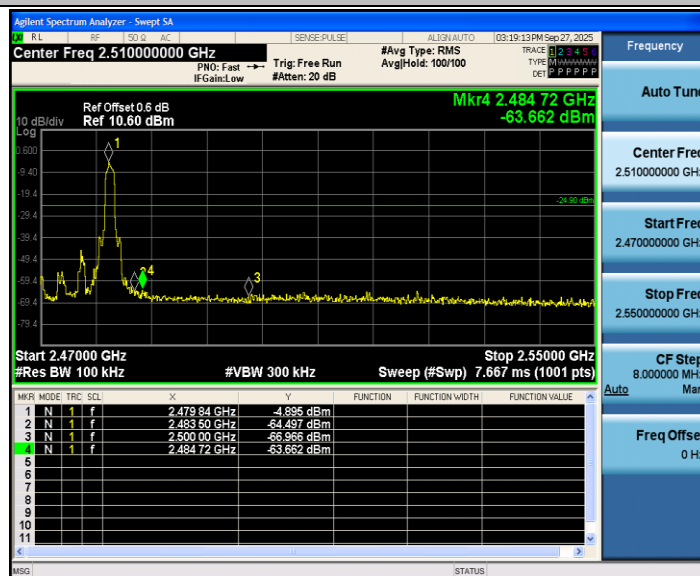
2DH5_Ant1_High_Hop_2480



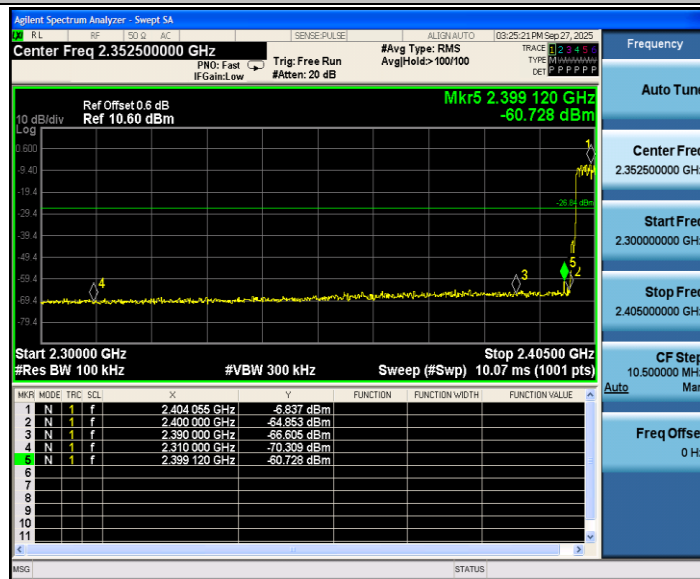
3DH5_Ant1_Low_2402



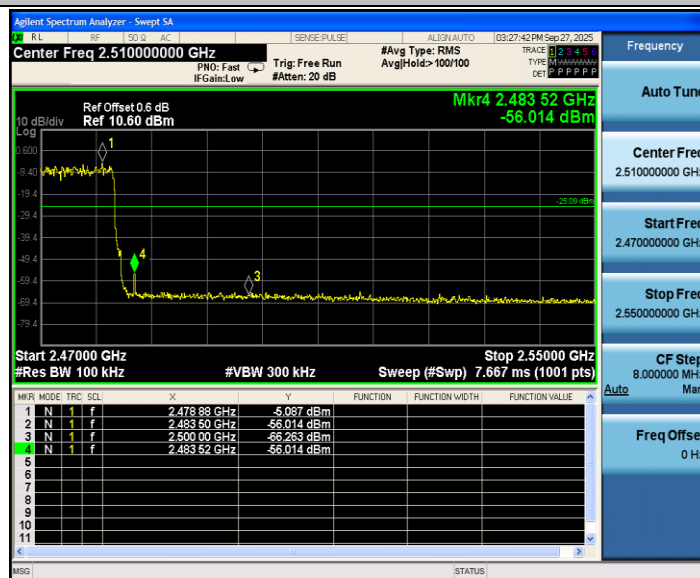
3DH5_Ant1_High_2480



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	-0.95	-0.95	---	PASS
			30~1000	-0.95	-68.05	≤-20.95	PASS
			1000~26500	-0.95	-41.75	≤-20.95	PASS
		2441	Reference	-1.36	-1.36	---	PASS
			30~1000	-1.36	-67.62	≤-21.36	PASS
			1000~26500	-1.36	-44.9	≤-21.36	PASS
		2480	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-67.69	≤-21.11	PASS
			1000~26500	-1.11	-44.92	≤-21.11	PASS
2DH5	Ant1	2402	Reference	-5.99	-5.99	---	PASS
			30~1000	-5.99	-67.93	≤-25.99	PASS
			1000~26500	-5.99	-48.41	≤-25.99	PASS
		2441	Reference	-5.87	-5.87	---	PASS
			30~1000	-5.87	-68.44	≤-25.87	PASS
			1000~26500	-5.87	-48.71	≤-25.87	PASS
		2480	Reference	-4.19	-4.19	---	PASS
			30~1000	-4.19	-51.74	≤-24.19	PASS
			1000~26500	-4.19	-51.91	≤-24.19	PASS
3DH5	Ant1	2402	Reference	-3.91	-3.91	---	PASS
			30~1000	-3.91	-67.43	≤-23.91	PASS
			1000~26500	-3.91	-49.89	≤-23.91	PASS
		2441	Reference	-5.24	-5.24	---	PASS
			30~1000	-5.24	-67.42	≤-25.24	PASS
			1000~26500	-5.24	-48.37	≤-25.24	PASS
		2480	Reference	-5.67	-5.67	---	PASS
			30~1000	-5.67	-67.13	≤-25.67	PASS
			1000~26500	-5.67	-49.4	≤-25.67	PASS