

FCC Appendix RF Test Data for BT

FCC ID : 2BF3S-FSS227

Company : Dongguan Faraoou Electric Appliance Co., Ltd

EUT : Portable Wireless Speaker System

Model Number : FS-S227

Report No. : CTA26012002701

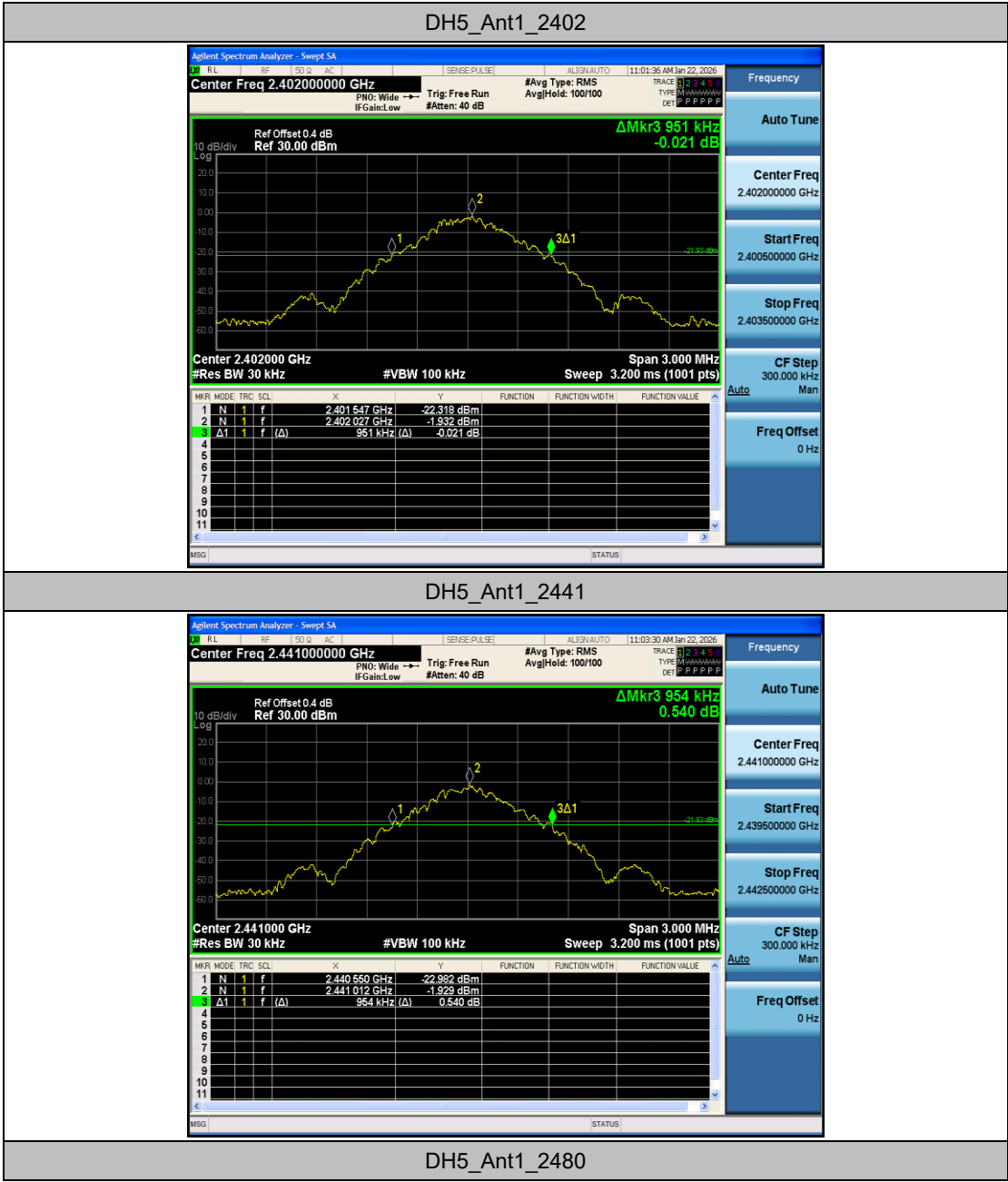
Reviewed By : Eric Wang

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	0.954	2440.550	2441.504	---	---
		2480	0.960	2479.547	2480.507	---	---
2DH5	Ant1	2402	1.341	2401.340	2402.681	---	---
		2441	1.341	2440.340	2441.681	---	---
		2480	1.320	2479.349	2480.669	---	---
3DH5	Ant1	2402	1.338	2401.346	2402.684	---	---
		2441	1.281	2440.382	2441.663	---	---
		2480	1.314	2479.355	2480.669	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441





3DH5_Ant1_2480

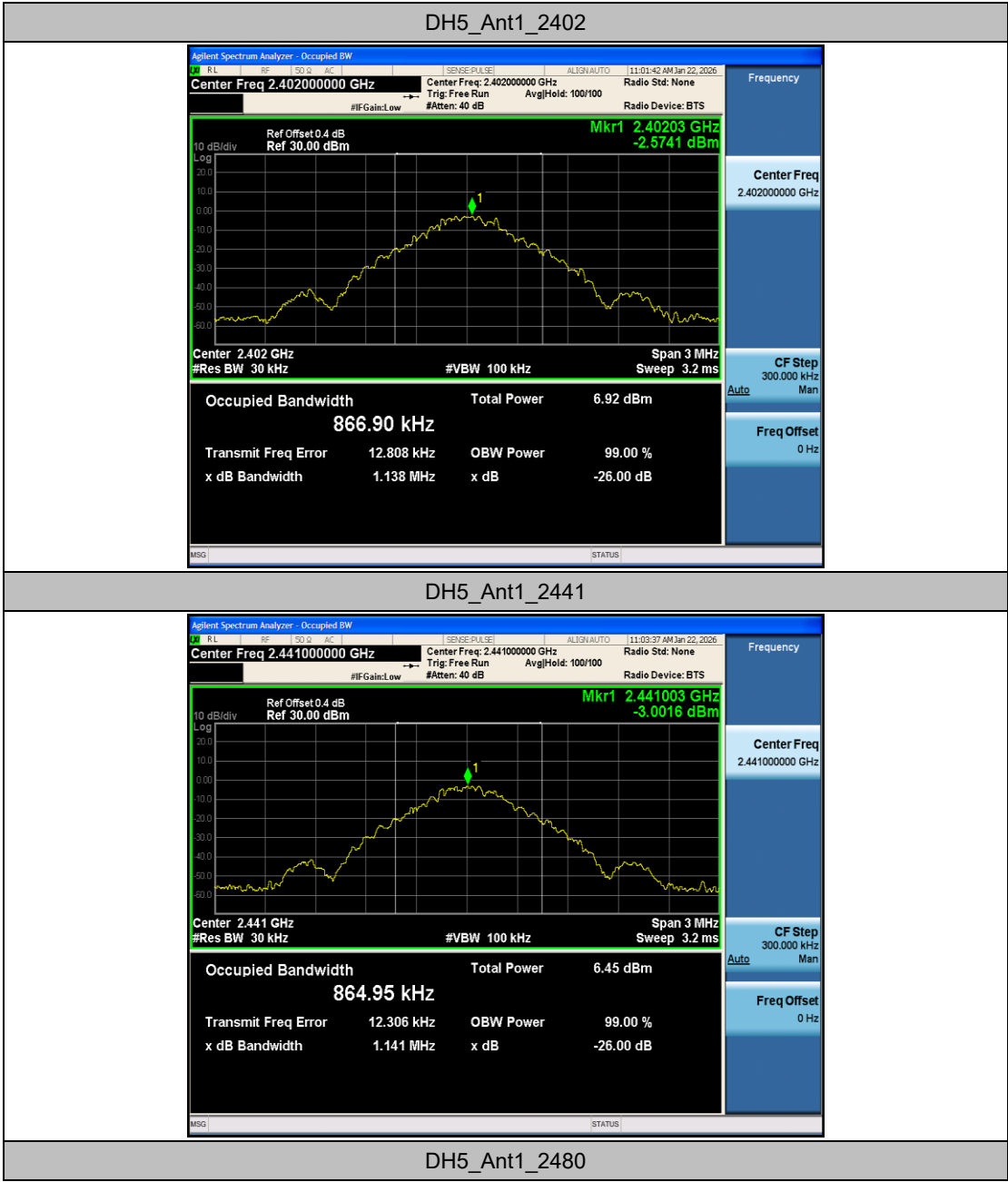


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86690	2401.5794	2402.4463	---	---
		2441	0.86495	2440.5798	2441.4448	---	---
		2480	0.85499	2479.5817	2480.4367	---	---
2DH5	Ant1	2402	1.1842	2401.4200	2402.6042	---	---
		2441	1.1924	2440.4205	2441.6129	---	---
		2480	1.1787	2479.4251	2480.6038	---	---
3DH5	Ant1	2402	1.1775	2401.4261	2402.6036	---	---
		2441	1.1925	2440.4181	2441.6106	---	---
		2480	1.1931	2479.4182	2480.6113	---	---

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	0.26	≤20.97	PASS
		2441	-0.09	≤20.97	PASS
		2480	-0.15	≤20.97	PASS
2DH5	Ant1	2402	-0.62	≤20.97	PASS
		2441	-0.94	≤20.97	PASS
		2480	-1.04	≤20.97	PASS
3DH5	Ant1	2402	-0.59	≤20.97	PASS
		2441	-0.94	≤20.97	PASS
		2480	-1.04	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.006	≥ 0.960	PASS
2DH5	Ant1	Hop	1.044	≥ 0.894	PASS
3DH5	Ant1	Hop	1.006	≥ 0.892	PASS

Test Graphs



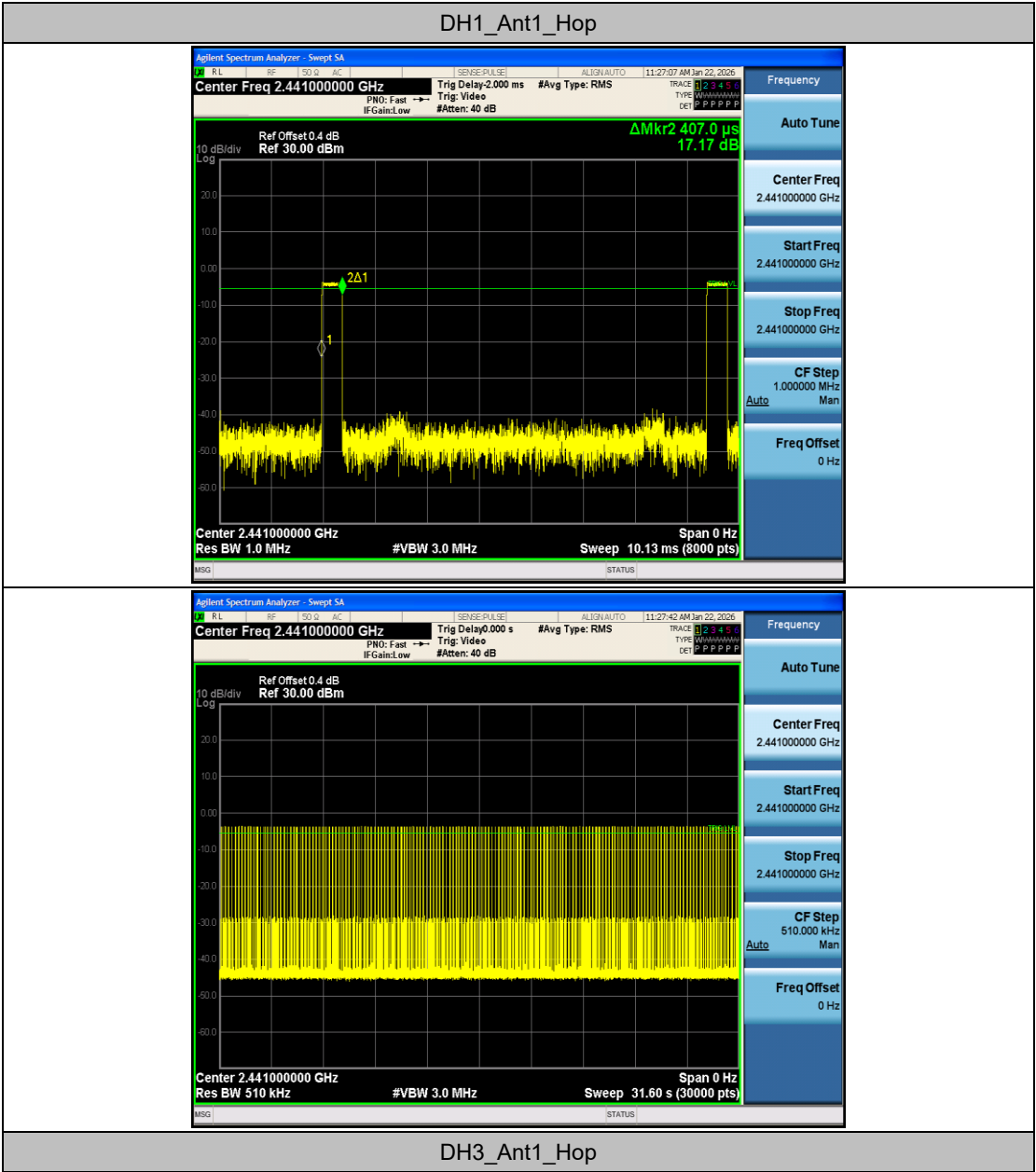


Appendix E: Time of occupancy

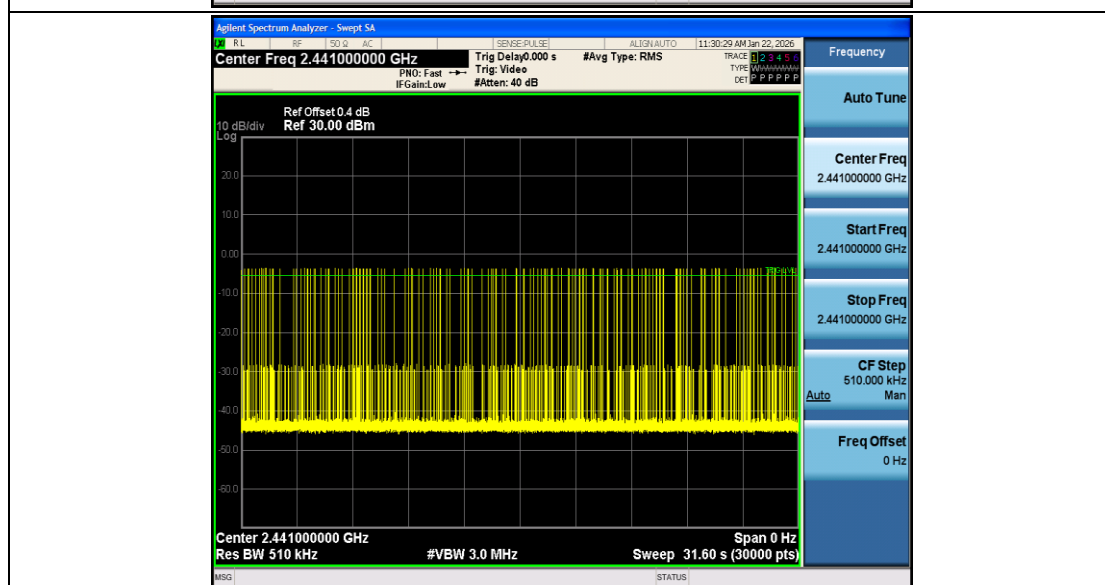
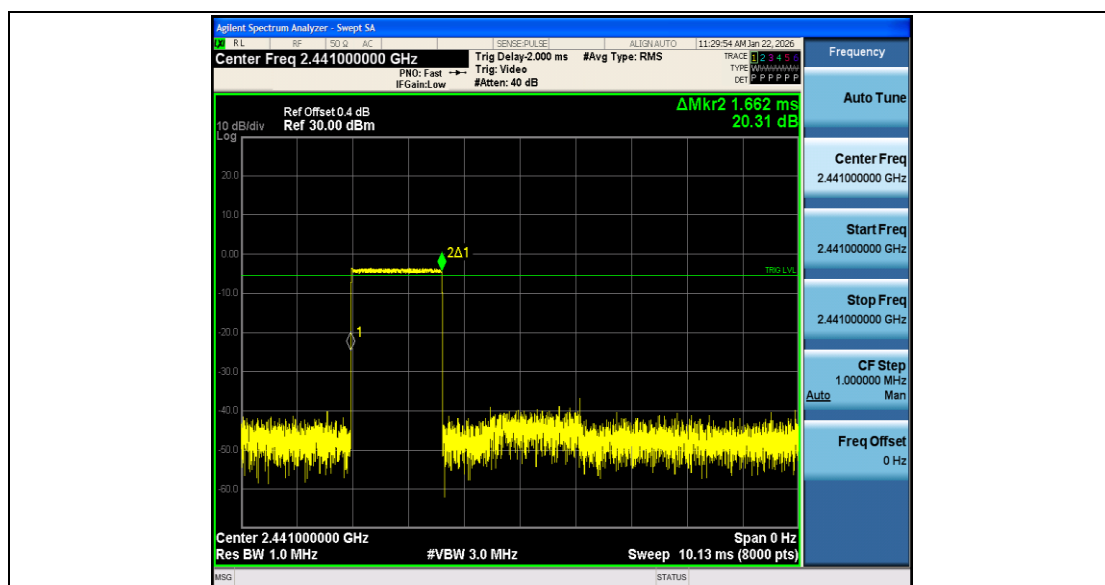
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	319	0.13	≤0.4	PASS
DH3	Ant1	Hop	1.662	155	0.258	≤0.4	PASS
DH5	Ant1	Hop	2.911	110	0.32	≤0.4	PASS
2DH1	Ant1	Hop	0.405	318	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.662	164	0.273	≤0.4	PASS
2DH5	Ant1	Hop	2.915	111	0.324	≤0.4	PASS
3DH1	Ant1	Hop	0.407	317	0.129	≤0.4	PASS
3DH3	Ant1	Hop	1.662	166	0.276	≤0.4	PASS
3DH5	Ant1	Hop	2.915	104	0.303	≤0.4	PASS

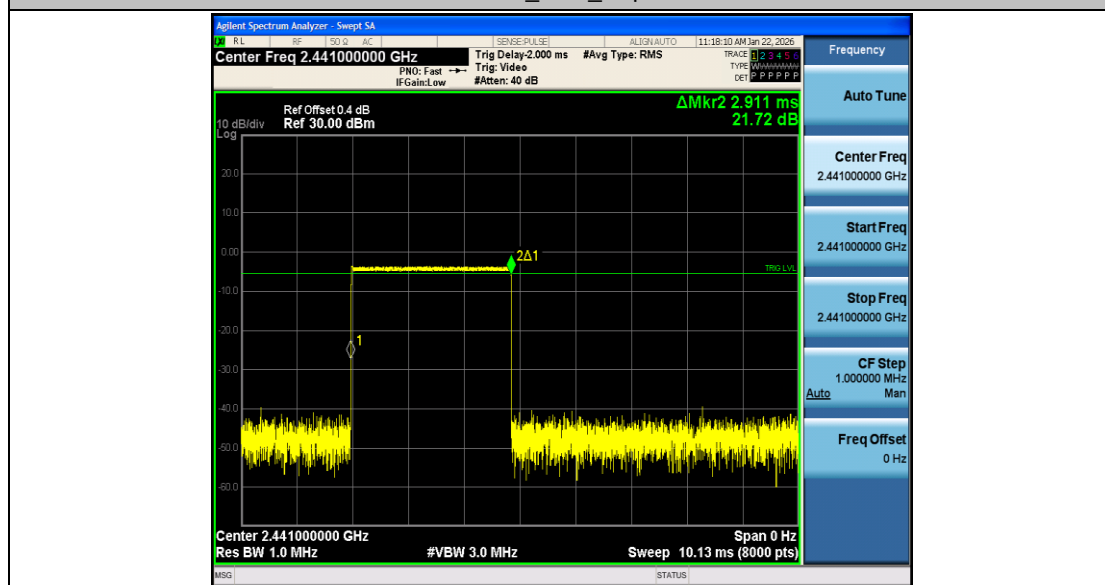
Test Graphs

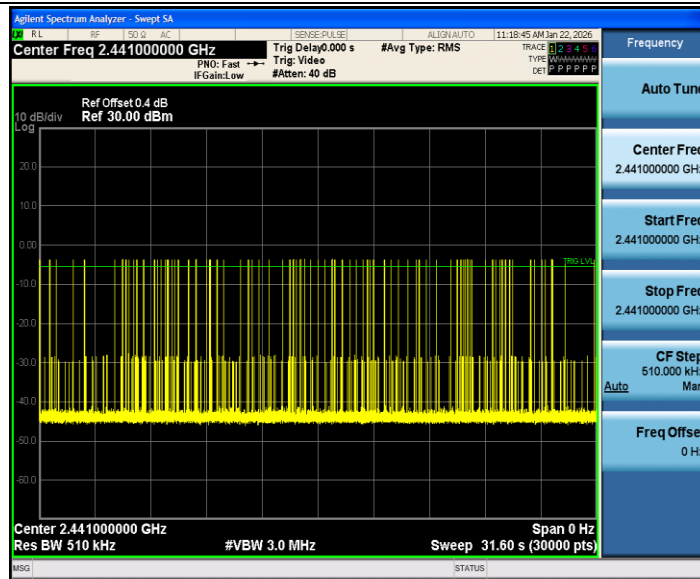


DH3_Ant1_Hop

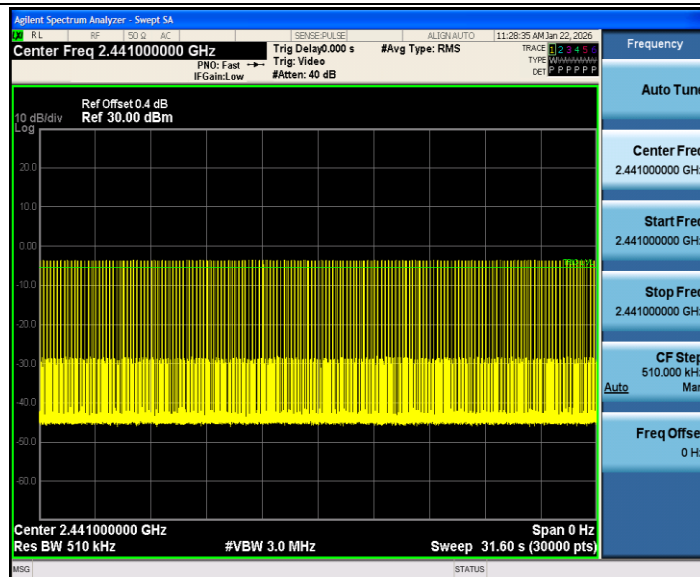
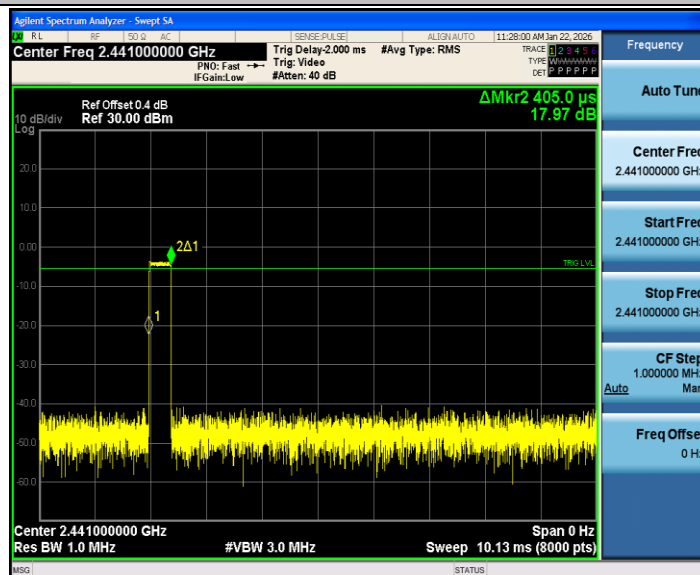


DH5_Ant1_Hop

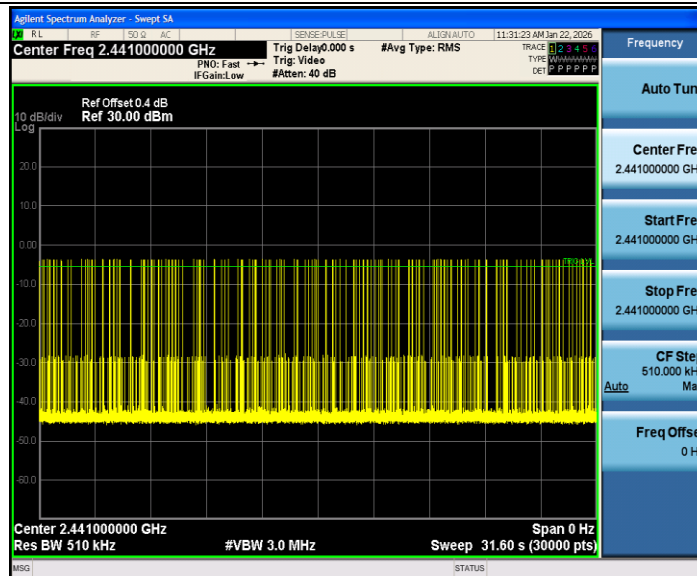
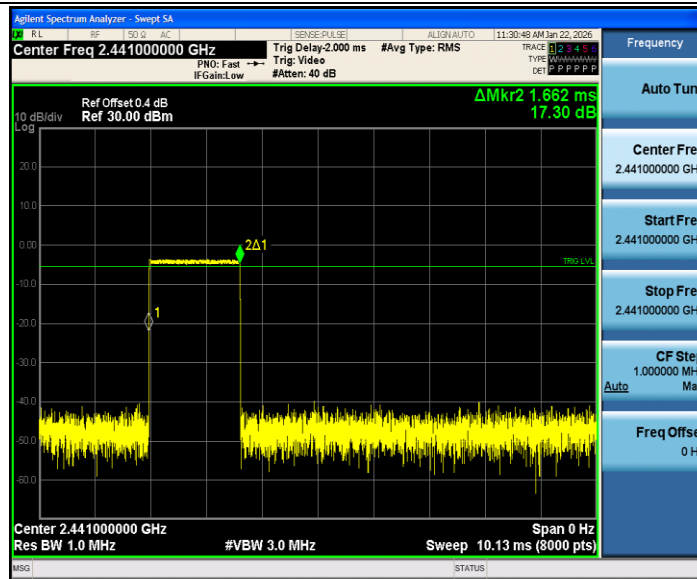




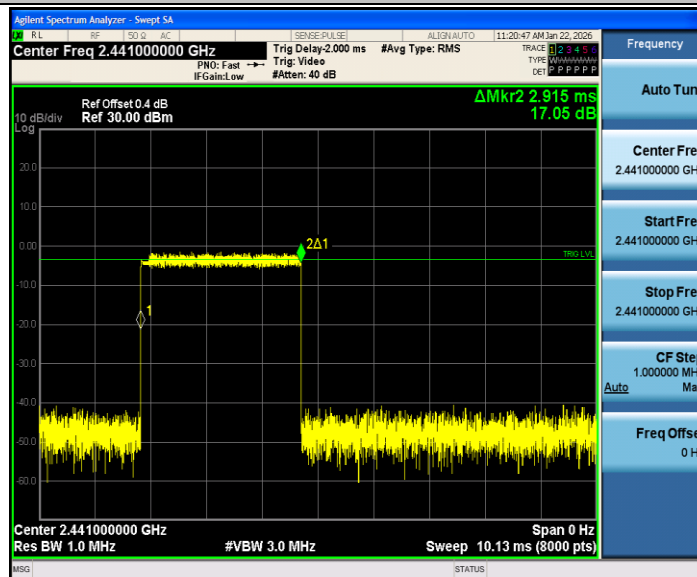
2DH1_Ant1_Hop

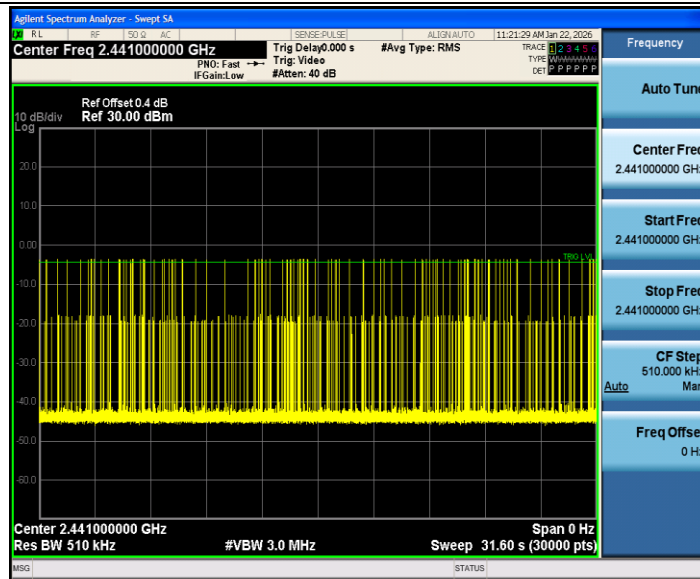


2DH3_Ant1_Hop

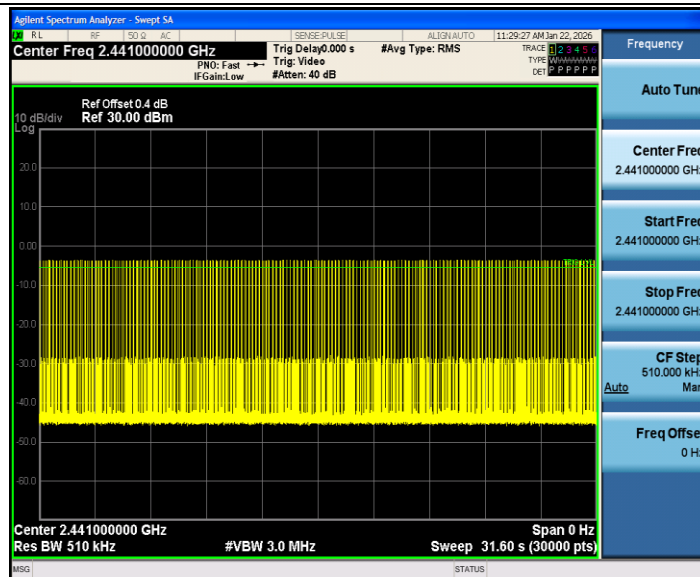
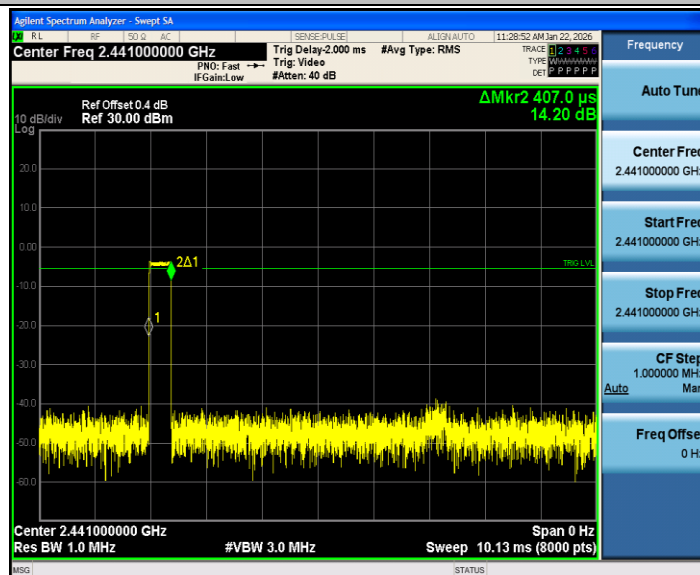


2DH5_Ant1_Hop

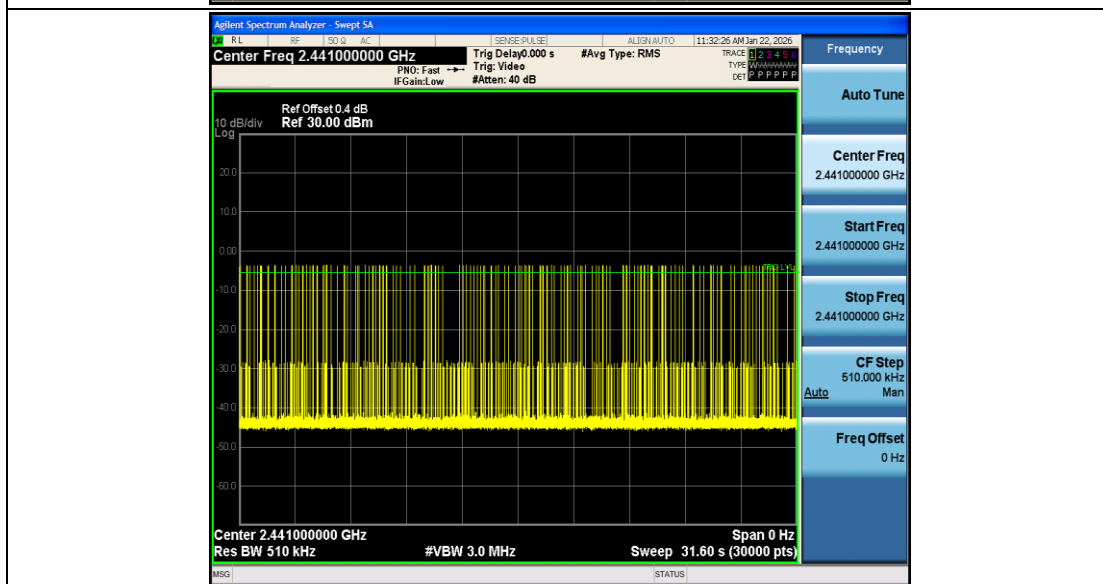
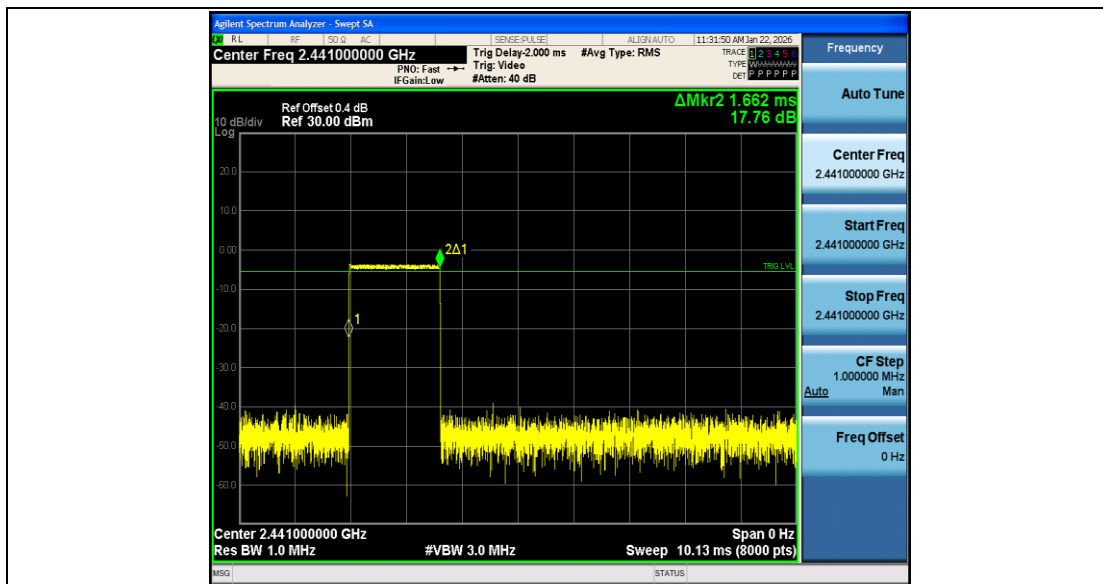




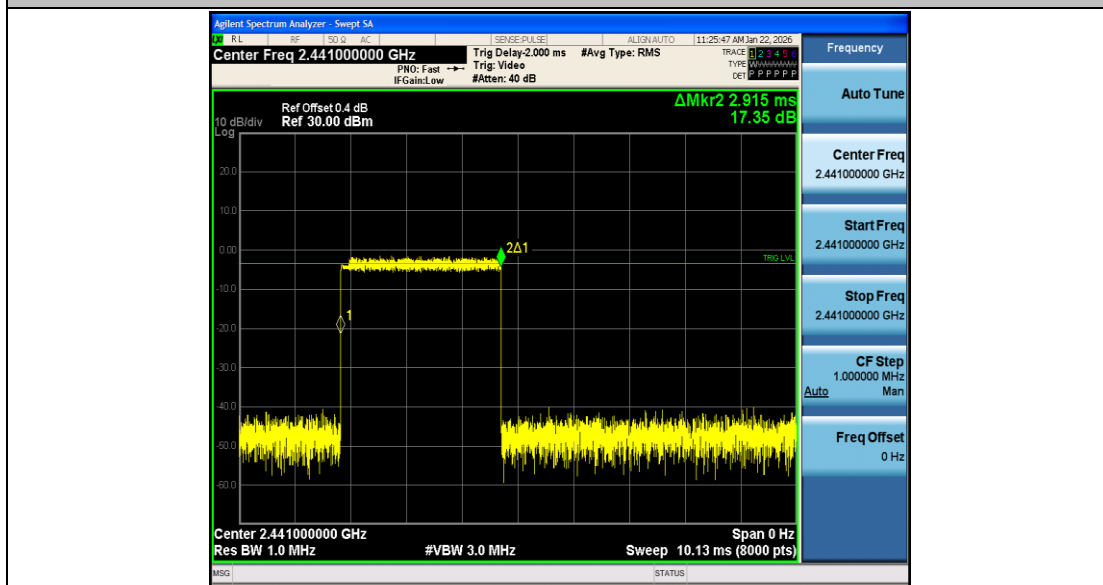
3DH1_Ant1_Hop

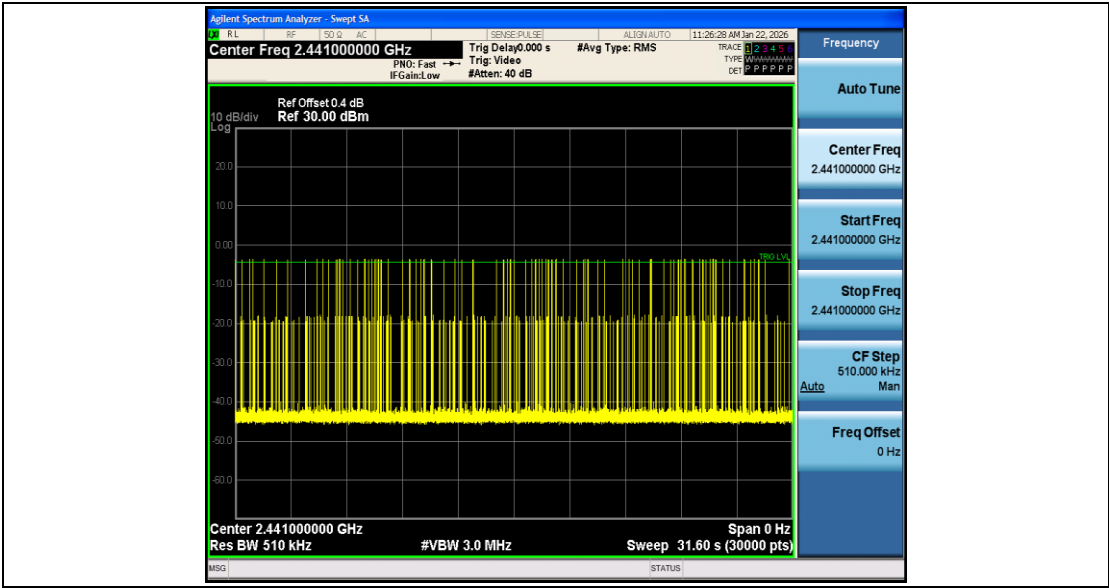


3DH3_Ant1_Hop



3DH5_Ant1_Hop



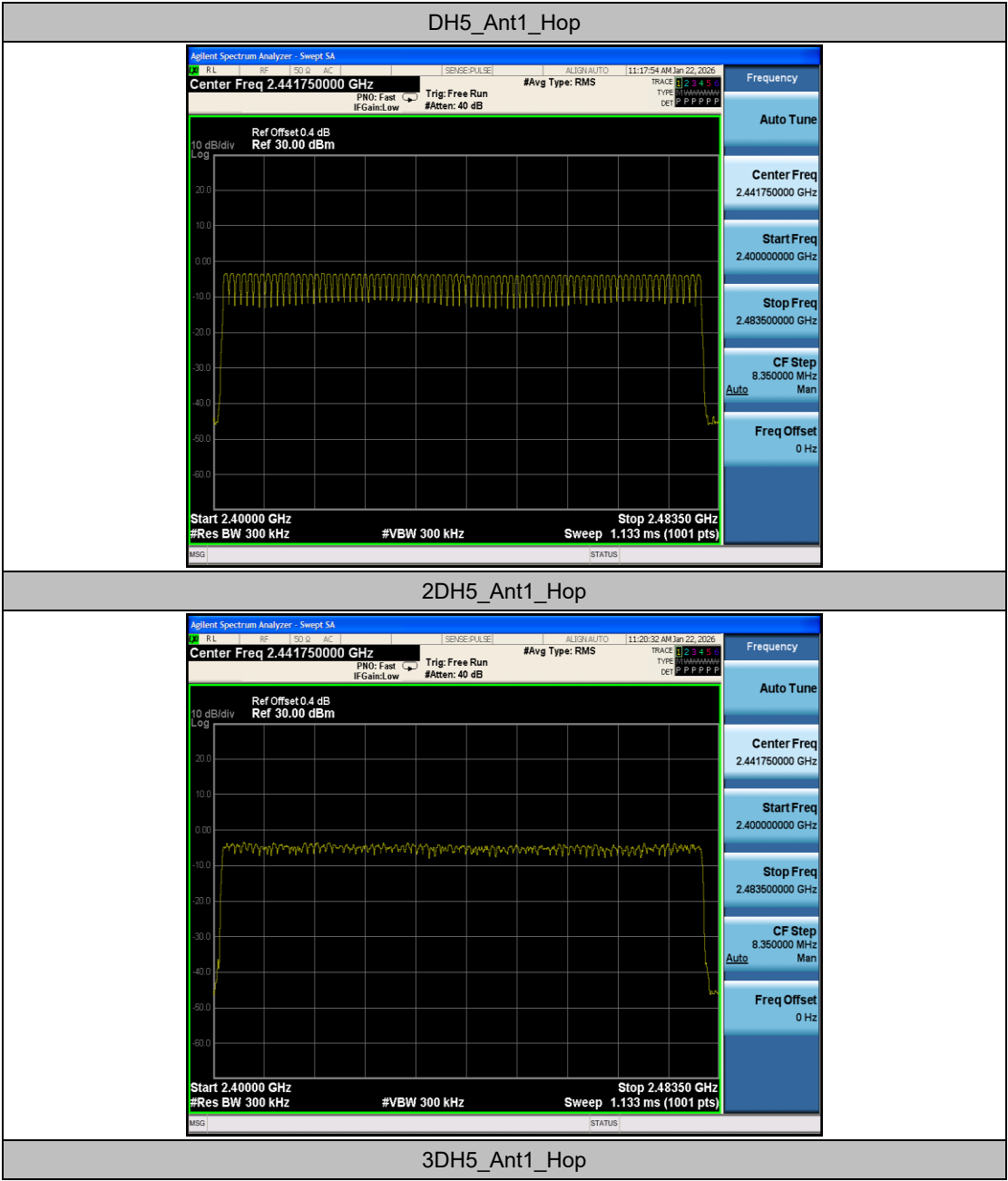


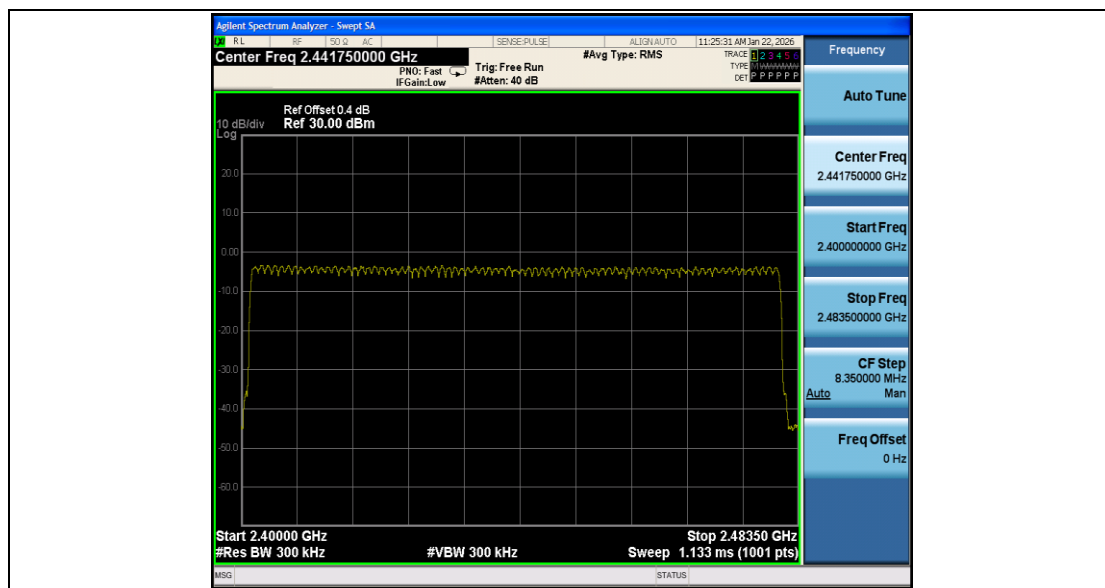
Appendix F: Number of hopping channels

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



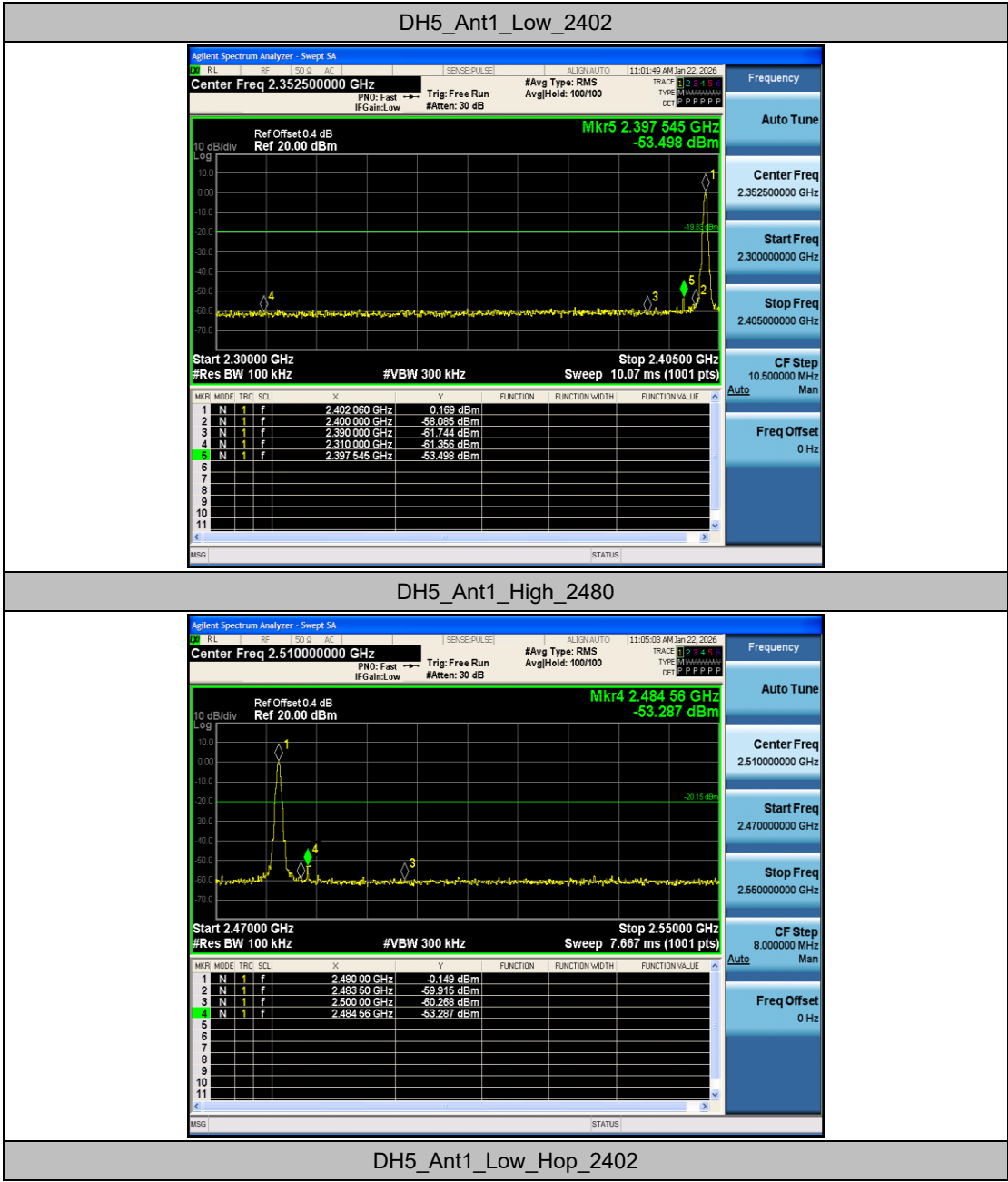


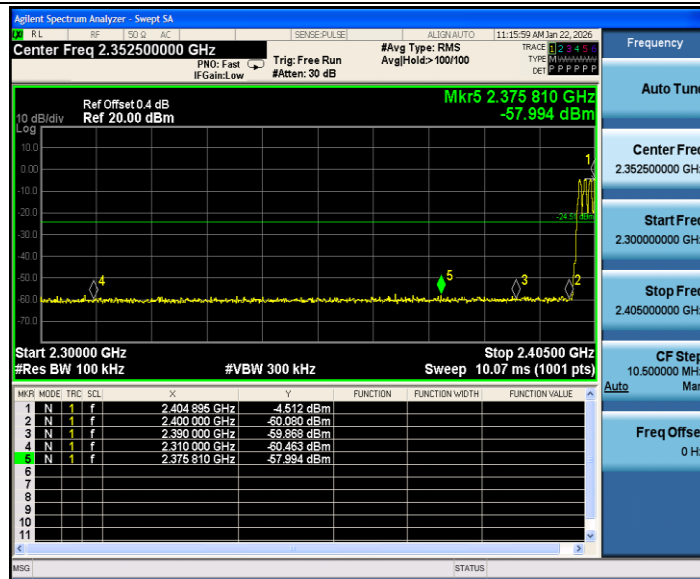
Appendix G: Band edge measurements

Test Result

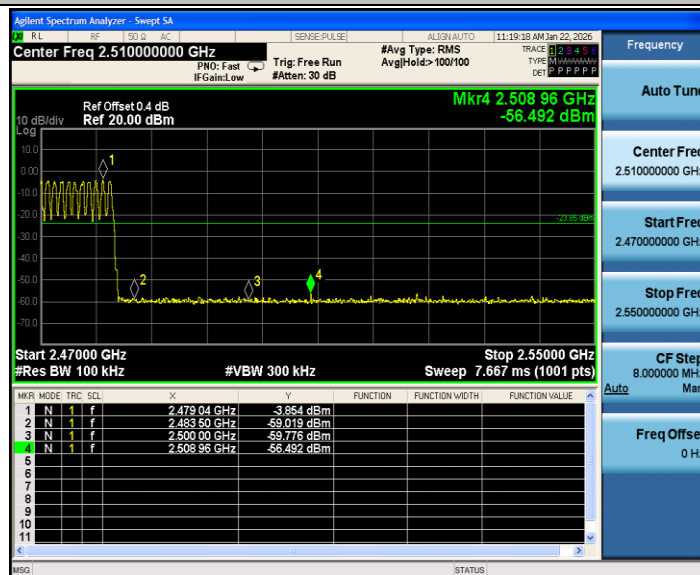
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.17	-53.5	≤-19.83	PASS
		High	2480	-0.15	-53.29	≤-20.15	PASS
		Low	Hop_2402	-4.51	-57.99	≤-24.51	PASS
		High	Hop_2480	-3.85	-56.49	≤-23.85	PASS
2DH5	Ant1	Low	2402	-4.48	-56.84	≤-24.48	PASS
		High	2480	-3.81	-57.58	≤-23.81	PASS
		Low	Hop_2402	-5.91	-58.18	≤-25.91	PASS
		High	Hop_2480	-4.90	-57.27	≤-24.9	PASS
3DH5	Ant1	Low	2402	-3.49	-57.63	≤-23.49	PASS
		High	2480	-4.79	-57.44	≤-24.79	PASS
		Low	Hop_2402	-3.47	-57.25	≤-23.47	PASS
		High	Hop_2480	-4.38	-57.08	≤-24.38	PASS

Test Graphs

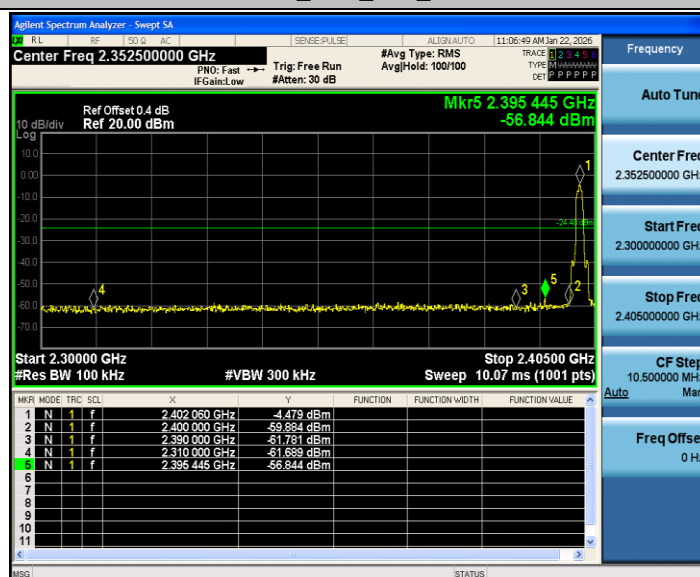




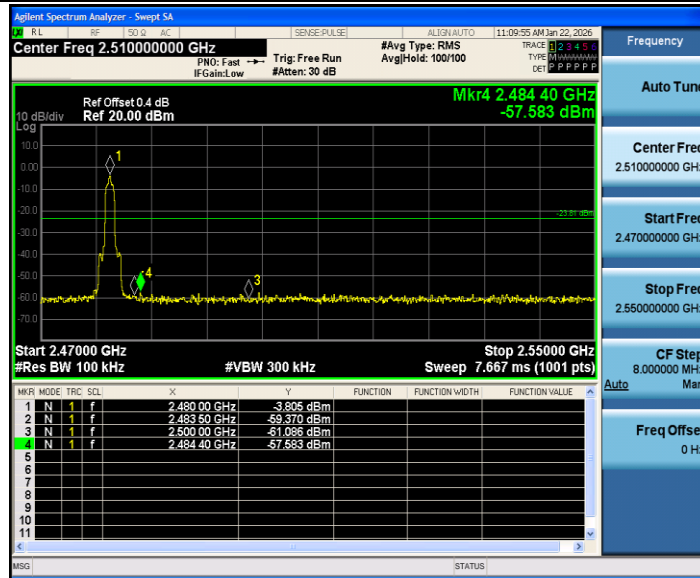
DH5_Ant1_High_Hop_2480



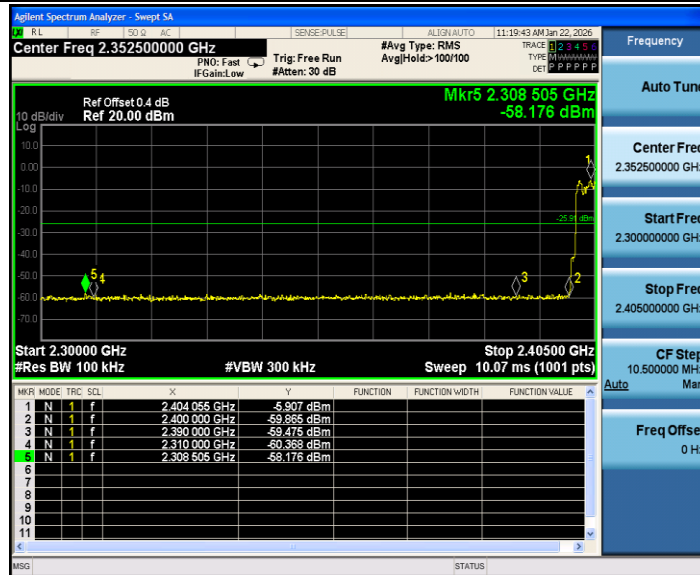
2DH5_Ant1_Low_2402



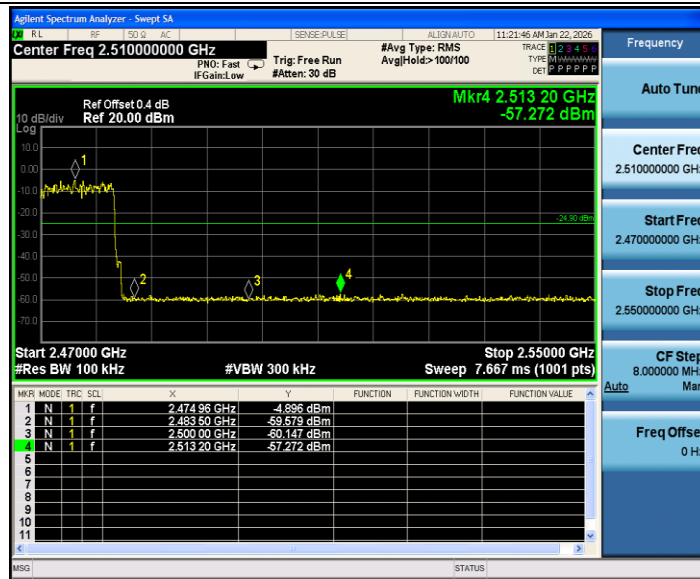
2DH5_Ant1_High_2480



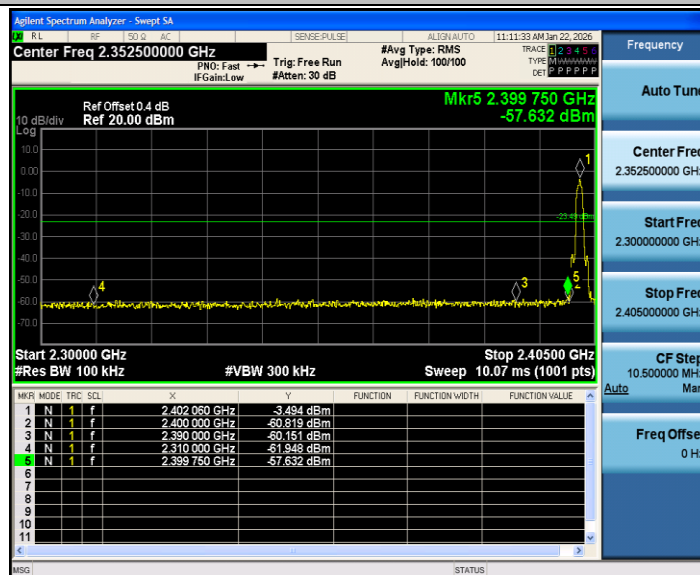
2DH5_Ant1_Low_Hop_2402



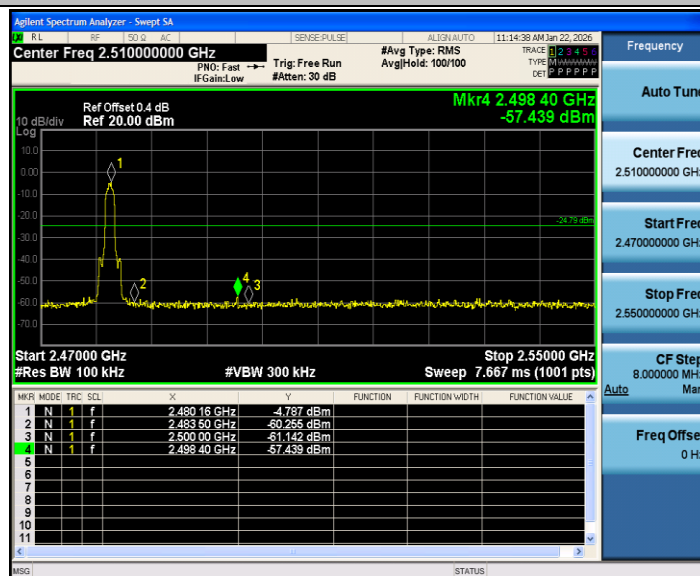
2DH5_Ant1_High_Hop_2480



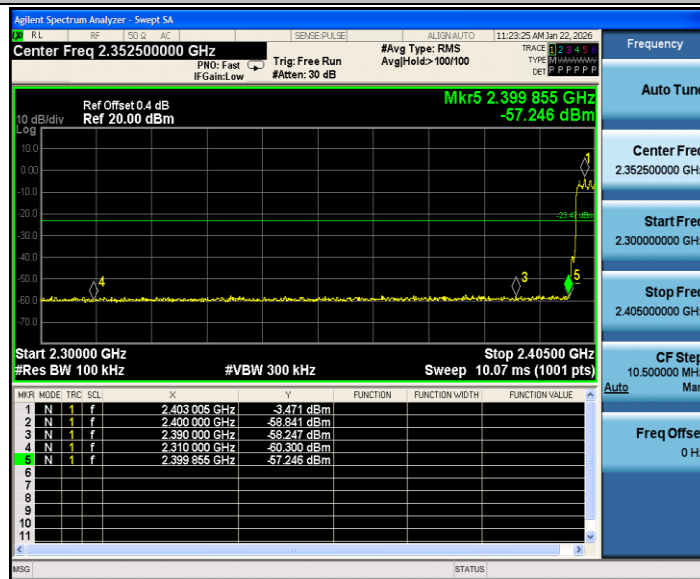
3DH5_Ant1_Low_2402



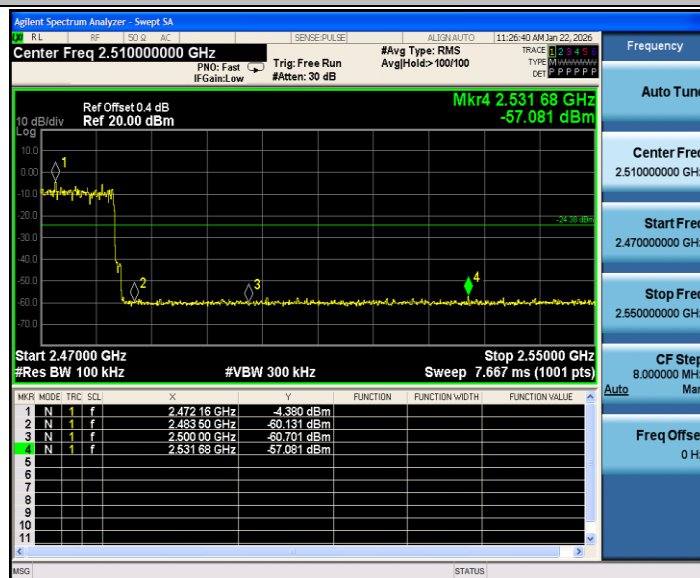
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

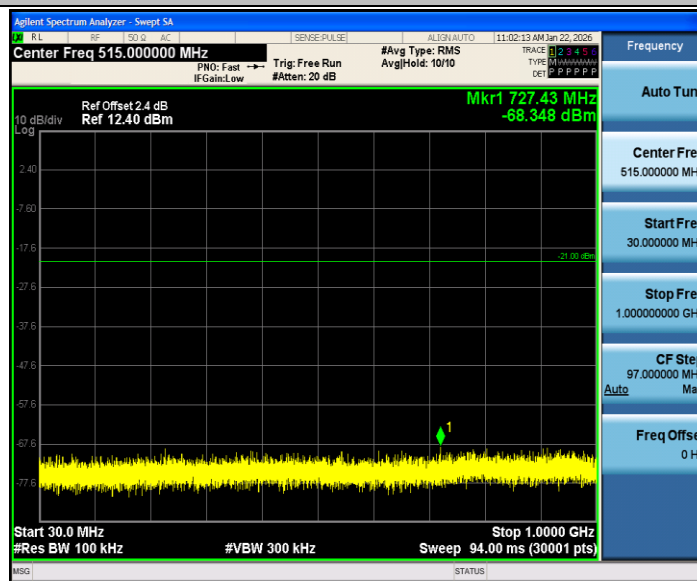
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.00	-1.00	---	PASS
			30~1000	-1.00	-68.35	≤-21	PASS
			1000~26500	-1.00	-41.31	≤-21	PASS
		2441	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-54.78	≤-21.31	PASS
			1000~26500	-1.31	-42.66	≤-21.31	PASS
		2480	Reference	-1.25	-1.25	---	PASS
			30~1000	-1.25	-68.55	≤-21.25	PASS
			1000~26500	-1.25	-42.96	≤-21.25	PASS
2DH5	Ant1	2402	Reference	-4.71	-4.71	---	PASS
			30~1000	-4.71	-63.43	≤-24.71	PASS
			1000~26500	-4.71	-47.45	≤-24.71	PASS
		2441	Reference	-6.70	-6.70	---	PASS
			30~1000	-6.70	-61.98	≤-26.7	PASS
			1000~26500	-6.70	-50.88	≤-26.7	PASS
		2480	Reference	-5.91	-5.91	---	PASS
			30~1000	-5.91	-68.33	≤-25.91	PASS
			1000~26500	-5.91	-49.96	≤-25.91	PASS
3DH5	Ant1	2402	Reference	-6.42	-6.42	---	PASS
			30~1000	-6.42	-67.79	≤-26.42	PASS
			1000~26500	-6.42	-49.53	≤-26.42	PASS
		2441	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-66.87	≤-23.87	PASS
			1000~26500	-3.87	-50.16	≤-23.87	PASS
		2480	Reference	-6.25	-6.25	---	PASS
			30~1000	-6.25	-68.23	≤-26.25	PASS
			1000~26500	-6.25	-50.23	≤-26.25	PASS

Test Graphs

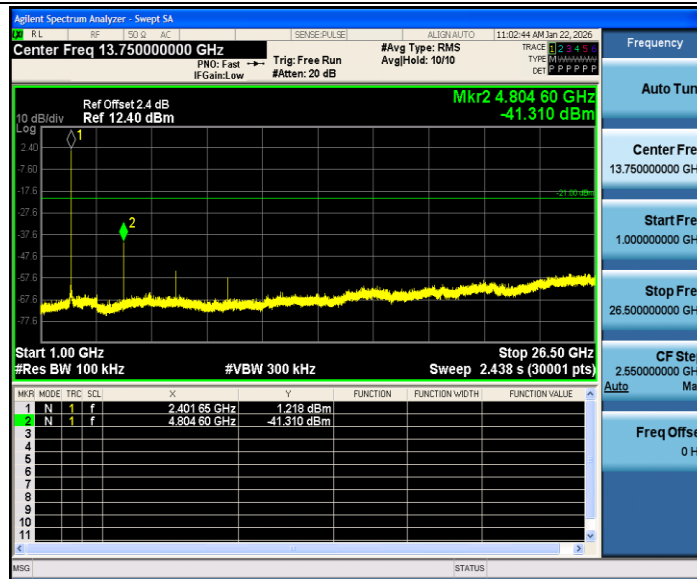
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



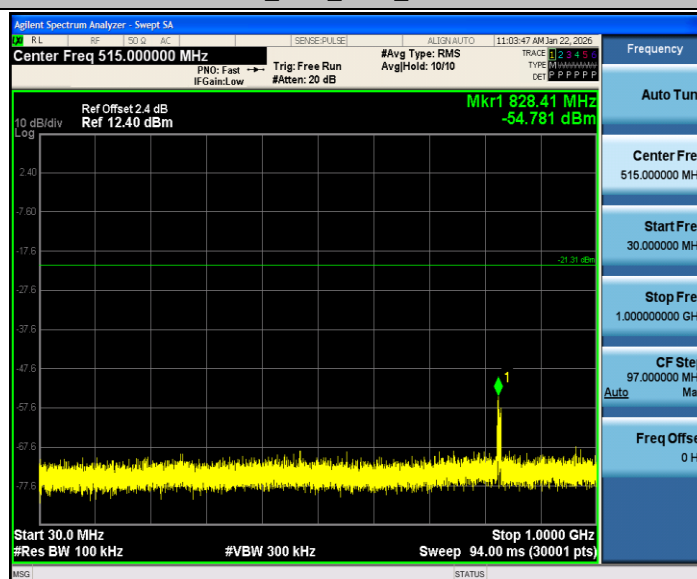
DH5_Ant1_2402_1000~26500



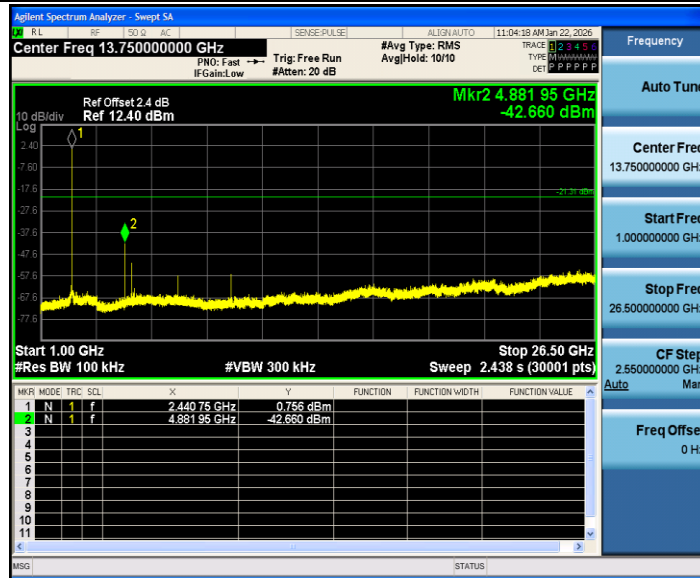
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



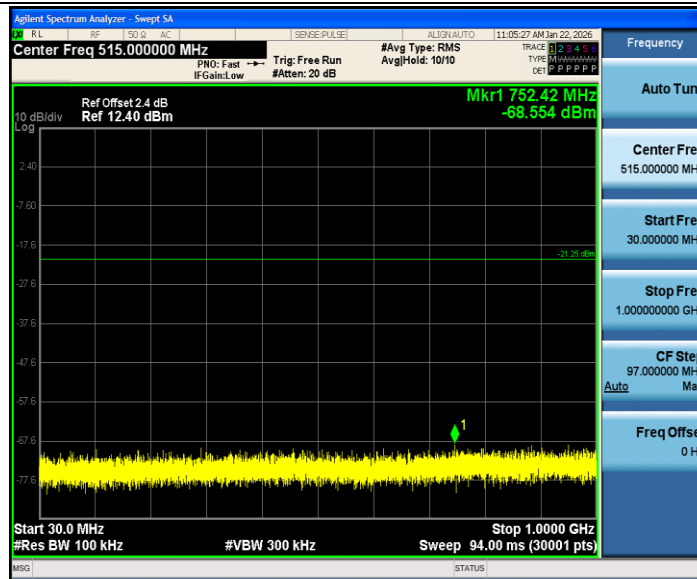
DH5_Ant1_2441_1000~26500



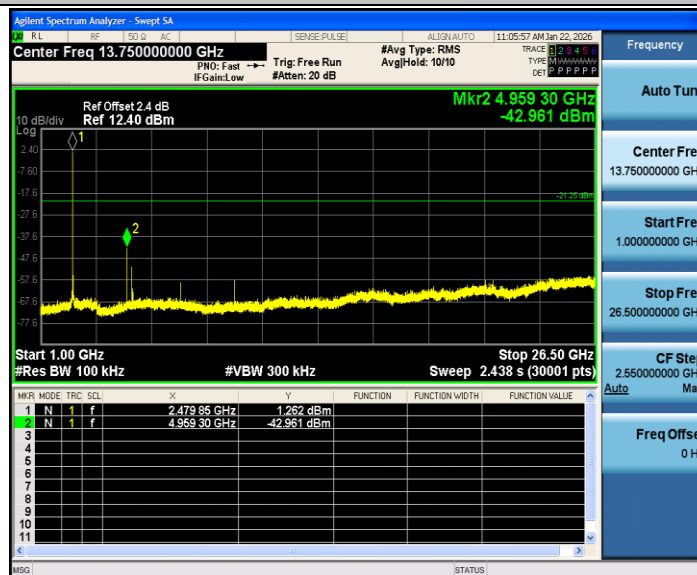
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



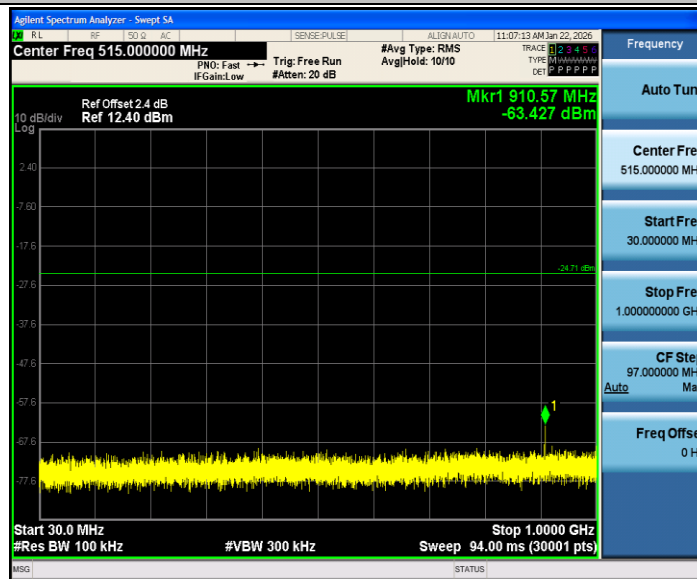
DH5_Ant1_2480_1000~26500



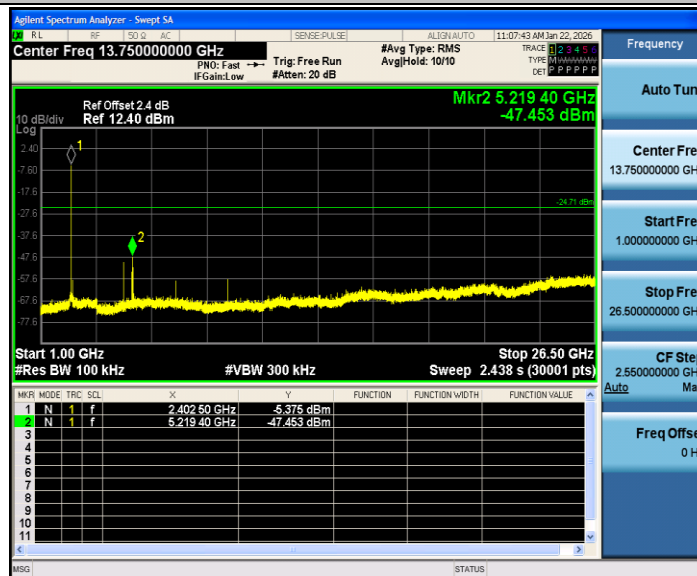
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference