

FCC Appendix RF Test Data for BT

FCC ID : 2BTRQ-KSF-8024

Company : MITZU GLOBAL LLC

EUT : Speaker

Model Number : KSF-8024

Report No. : CTA26020202401

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	0.960	2401.547	2402.507	---	---
		2441	0.960	2440.544	2441.504	---	---
		2480	0.948	2479.550	2480.498	---	---
2DH5	Ant1	2402	1.284	2401.379	2402.663	---	---
		2441	1.290	2440.376	2441.666	---	---
		2480	1.290	2479.379	2480.669	---	---
3DH5	Ant1	2402	1.308	2401.361	2402.669	---	---
		2441	1.275	2440.370	2441.645	---	---
		2480	1.317	2479.355	2480.672	---	---

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

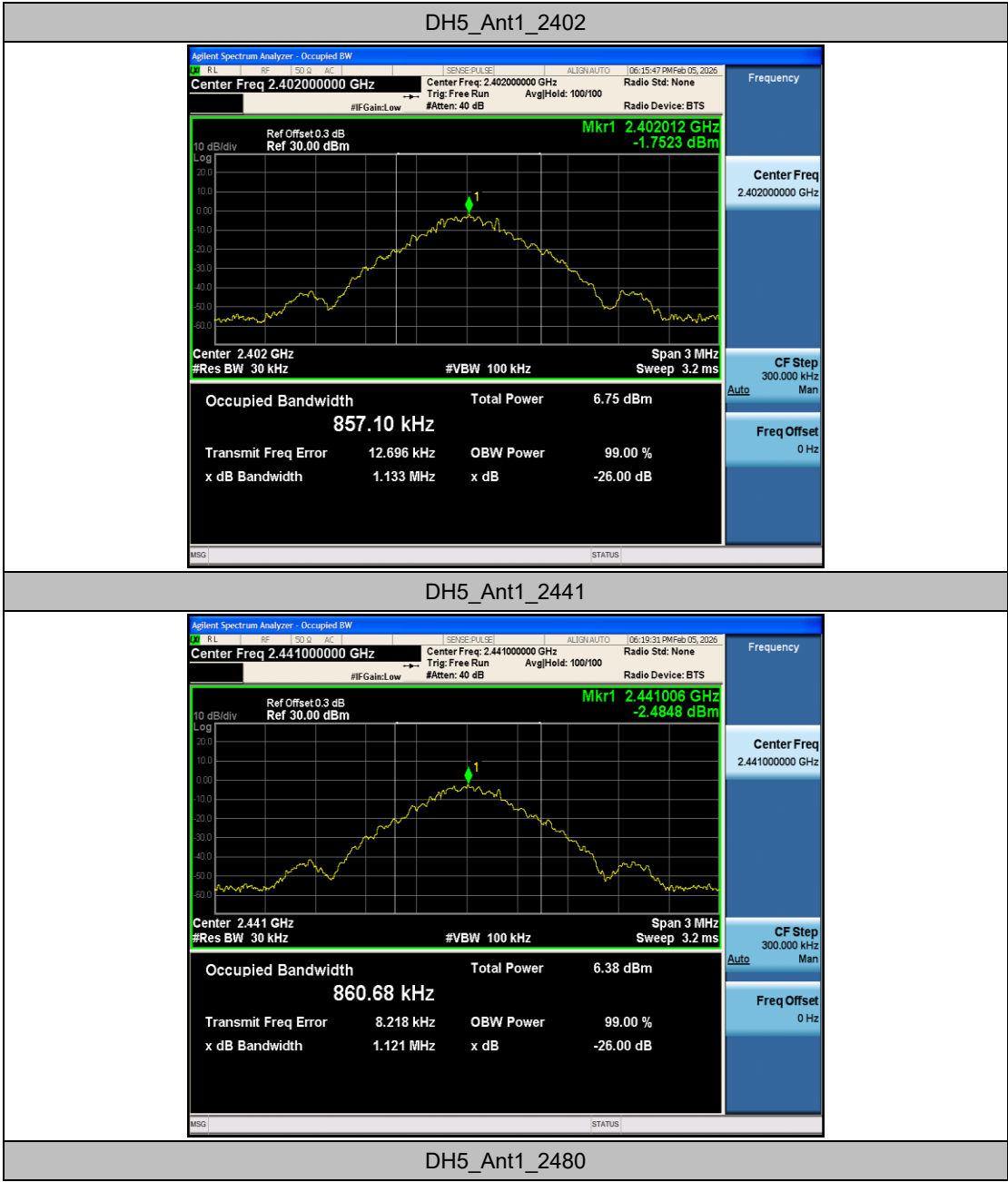


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85710	2401.5842	2402.4413	---	---
		2441	0.86068	2440.5779	2441.4386	---	---
		2480	0.85418	2479.5829	2480.4371	---	---
2DH5	Ant1	2402	1.1803	2401.4236	2402.6039	---	---
		2441	1.1813	2440.4169	2441.5982	---	---
		2480	1.1818	2479.4208	2480.6026	---	---
3DH5	Ant1	2402	1.1827	2401.4226	2402.6053	---	---
		2441	1.1876	2440.4200	2441.6076	---	---
		2480	1.1912	2479.4163	2480.6075	---	---

Test Graphs





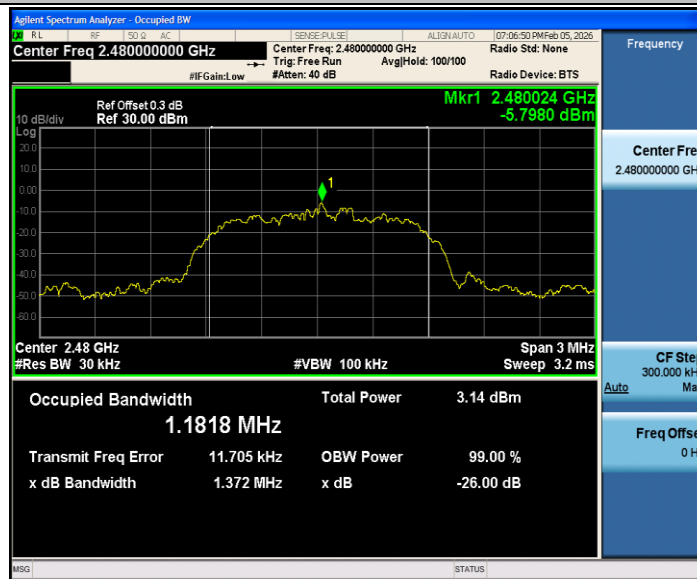
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

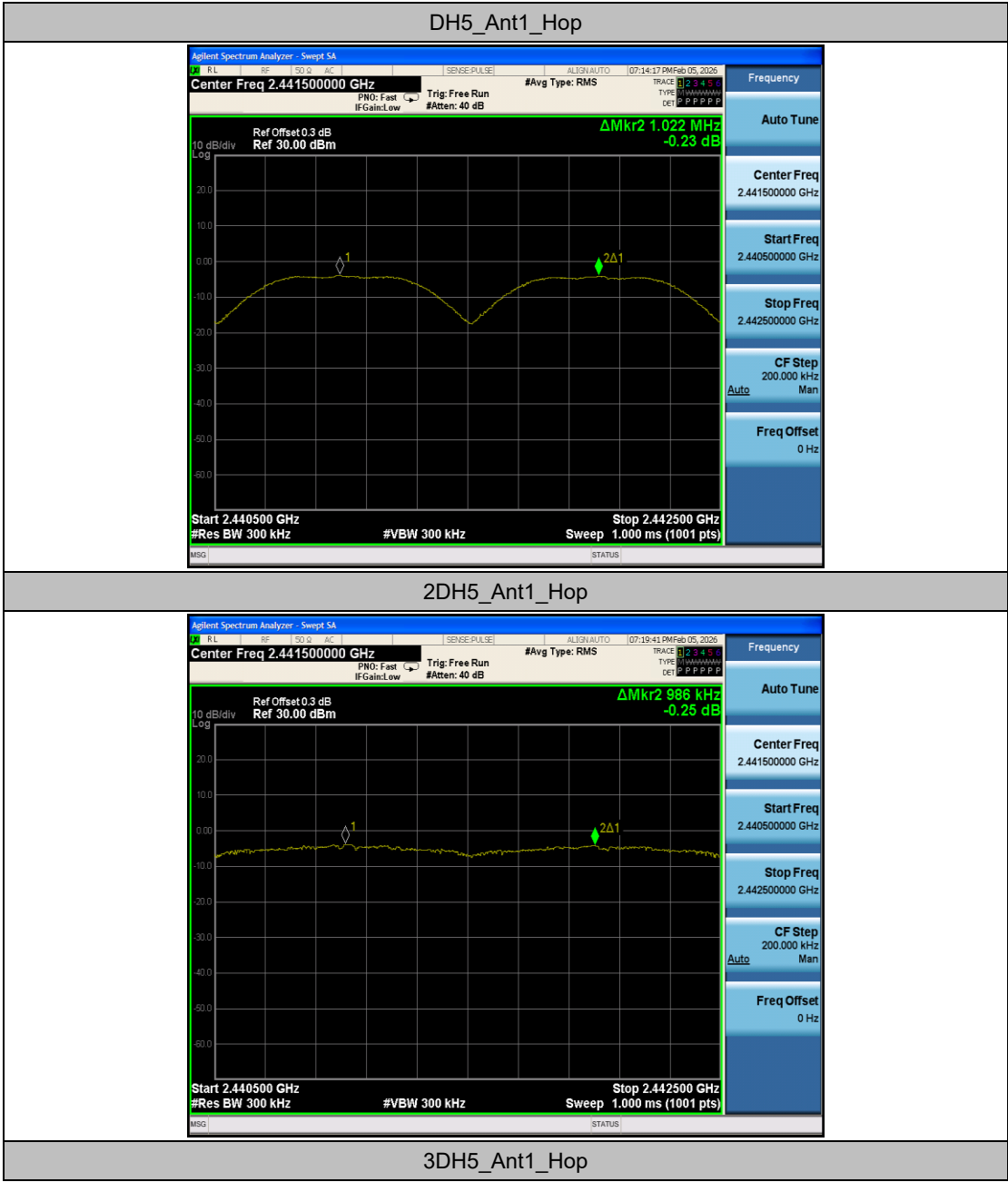
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.05	≤20.97	PASS
		2441	-0.33	≤20.97	PASS
		2480	-0.37	≤20.97	PASS
2DH5	Ant1	2402	-0.82	≤20.97	PASS
		2441	-1.16	≤20.97	PASS
		2480	-1.22	≤20.97	PASS
3DH5	Ant1	2402	-0.46	≤20.97	PASS
		2441	-0.81	≤20.97	PASS
		2480	-0.87	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.022	≥ 0.960	PASS
2DH5	Ant1	Hop	0.986	≥ 0.860	PASS
3DH5	Ant1	Hop	1.016	≥ 0.878	PASS

Test Graphs



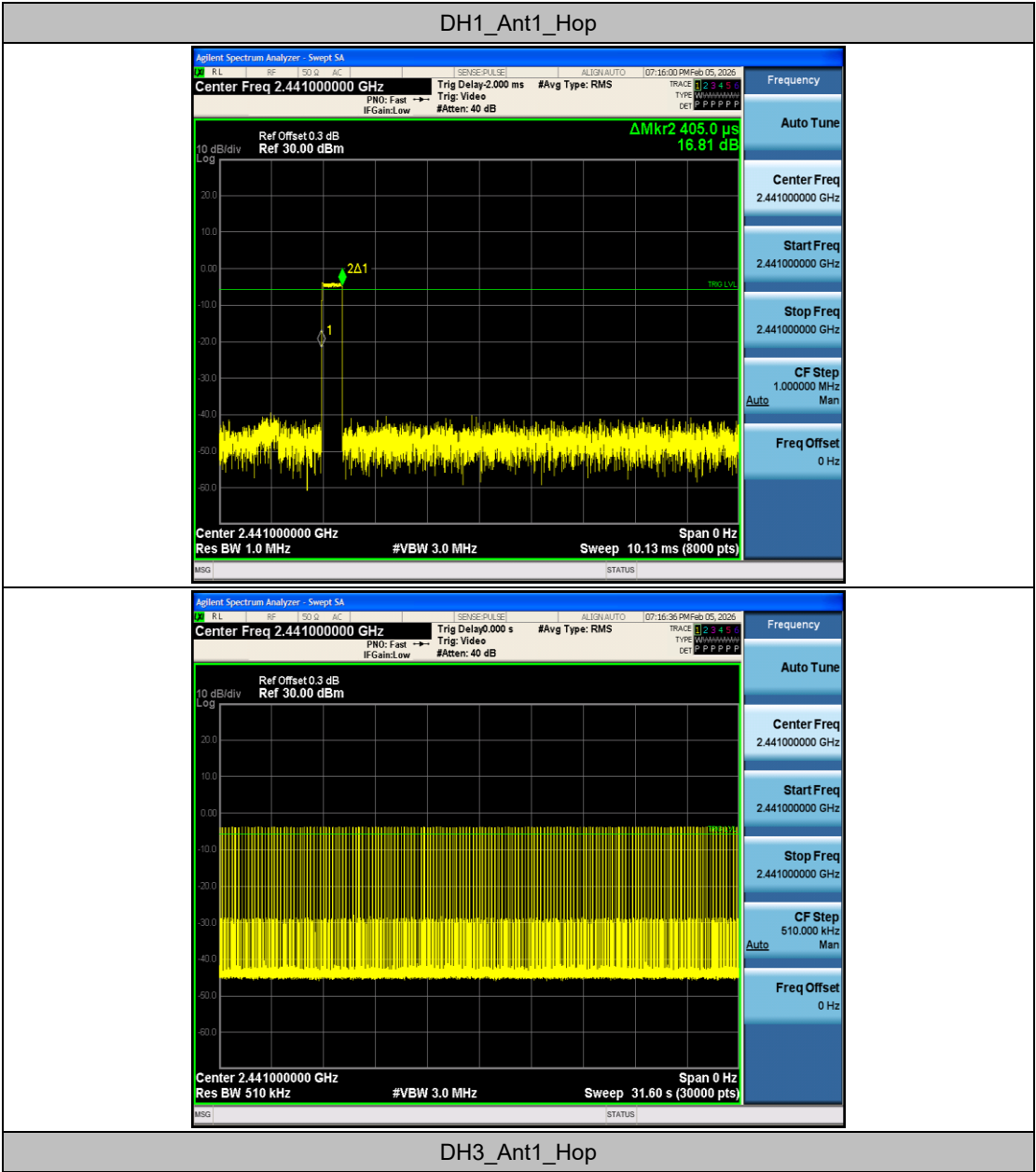


Appendix E: Time of occupancy

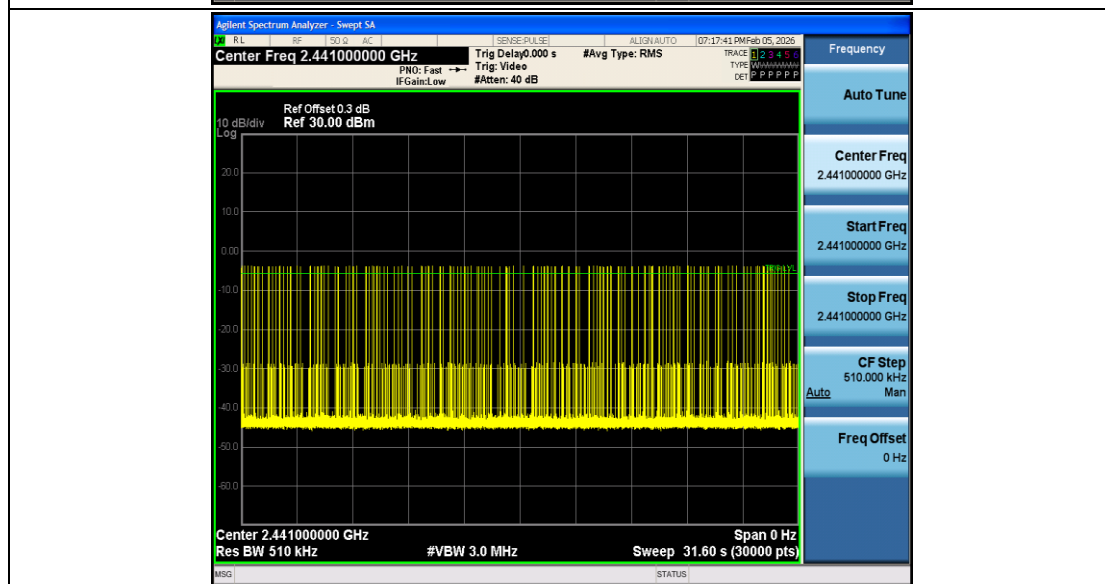
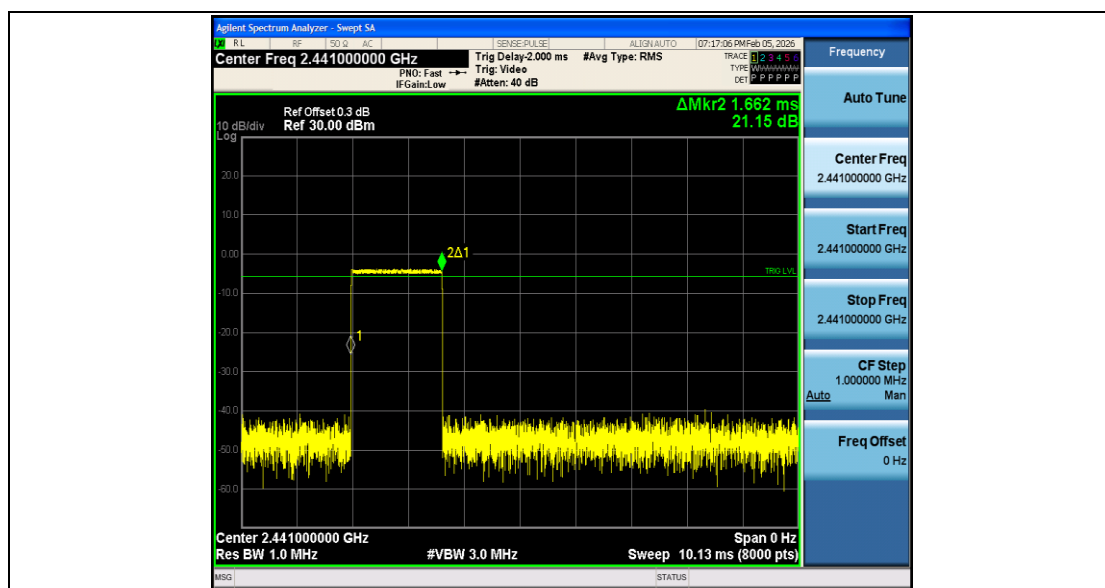
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	320	0.13	≤0.4	PASS
DH3	Ant1	Hop	1.662	160	0.266	≤0.4	PASS
DH5	Ant1	Hop	2.911	93	0.271	≤0.4	PASS
2DH1	Ant1	Hop	0.415	320	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.668	155	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.916	110	0.321	≤0.4	PASS
3DH1	Ant1	Hop	0.415	318	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.666	165	0.275	≤0.4	PASS
3DH5	Ant1	Hop	2.916	102	0.297	≤0.4	PASS

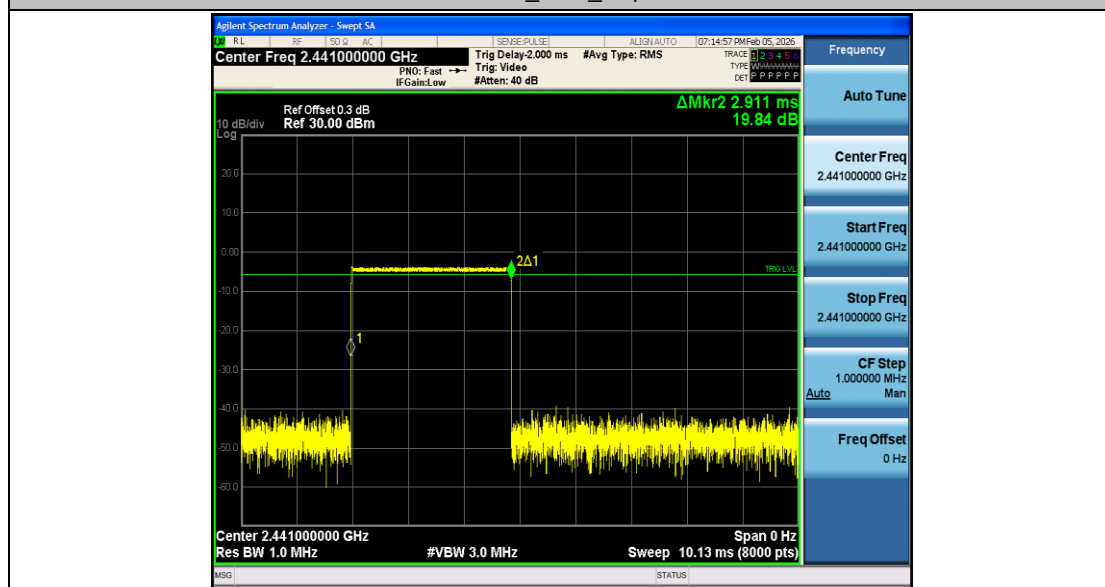
Test Graphs

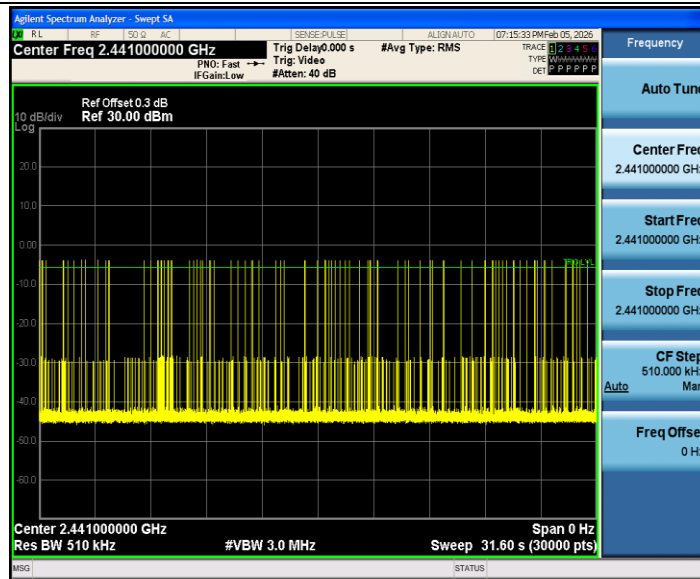


DH3_Ant1_Hop

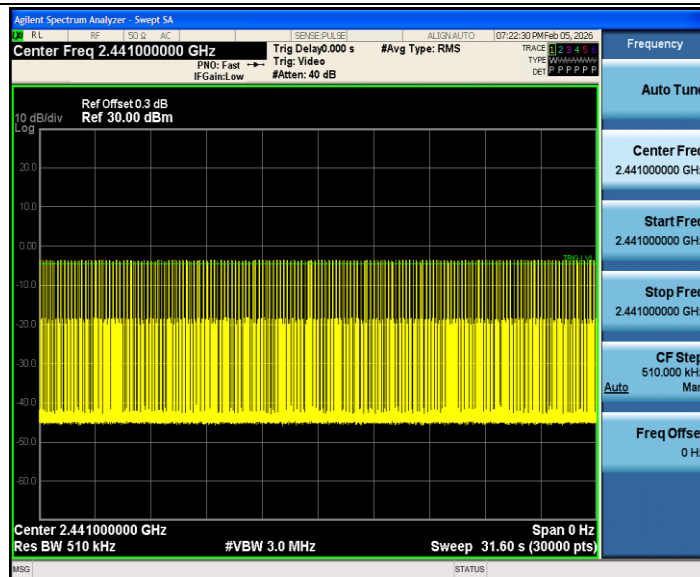
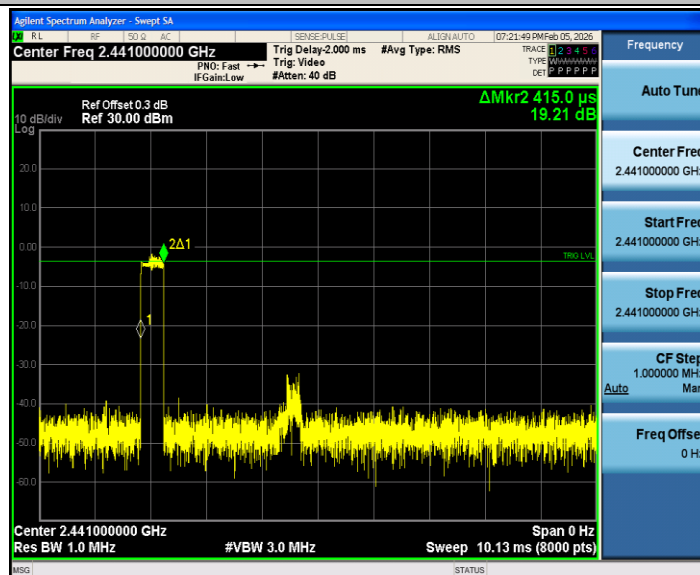


DH5_Ant1_Hop

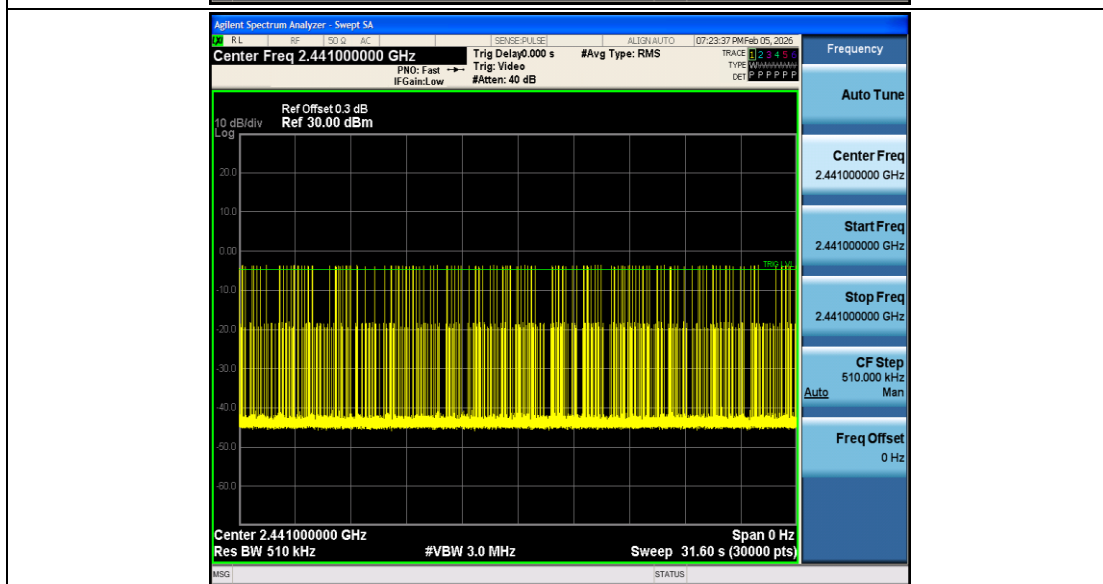
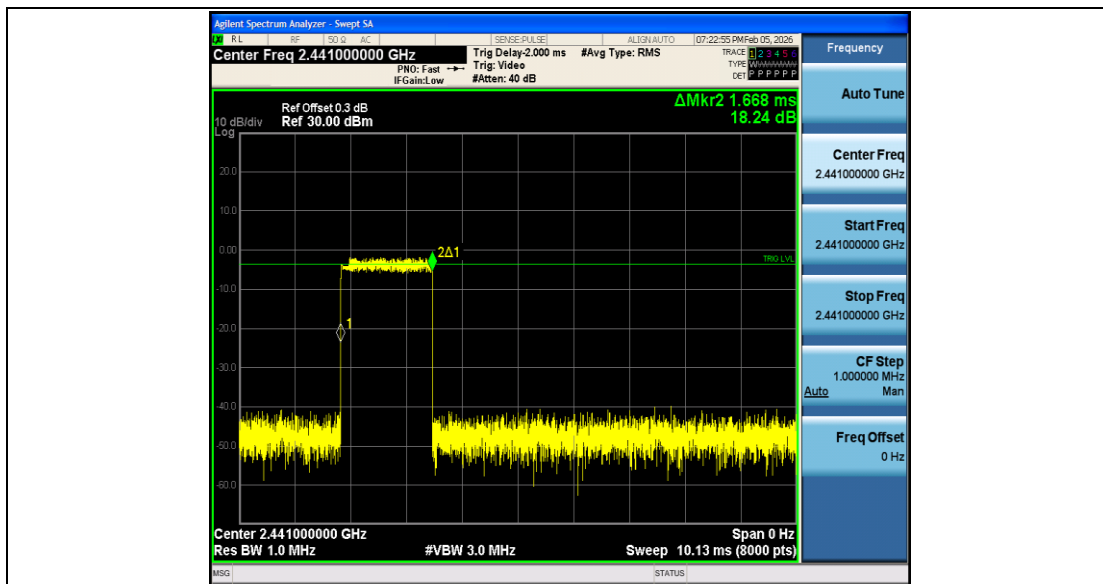




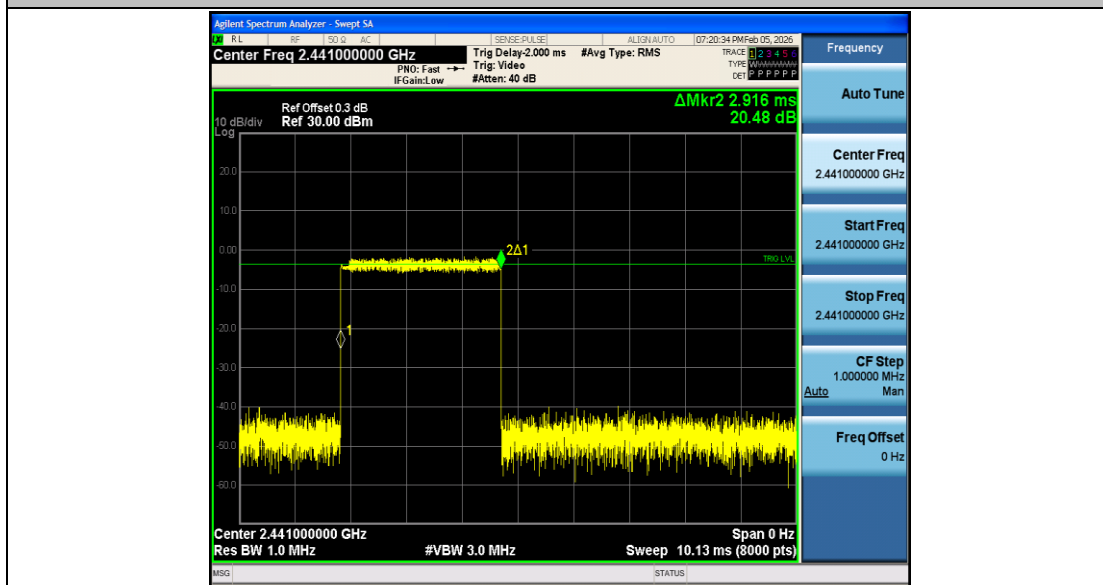
2DH1_Ant1_Hop

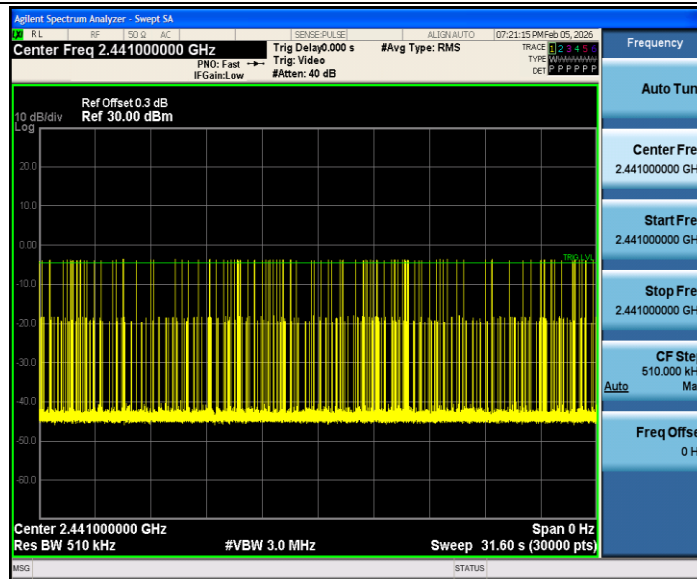


2DH3_Ant1_Hop

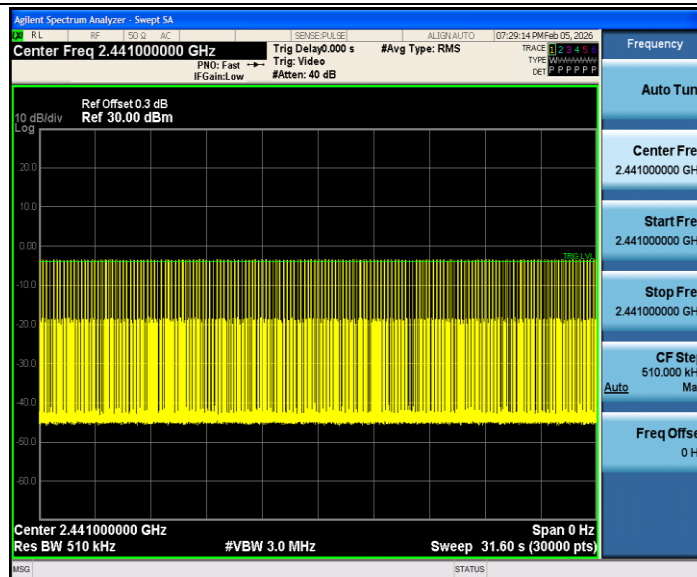
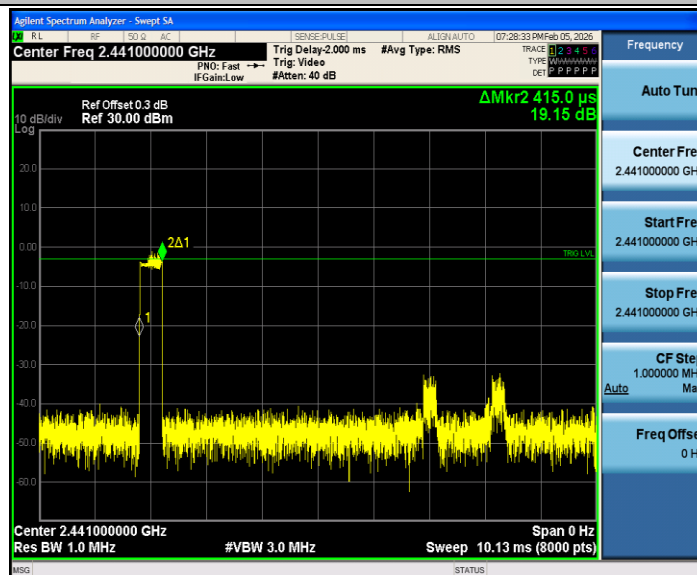


2DH5_Ant1_Hop

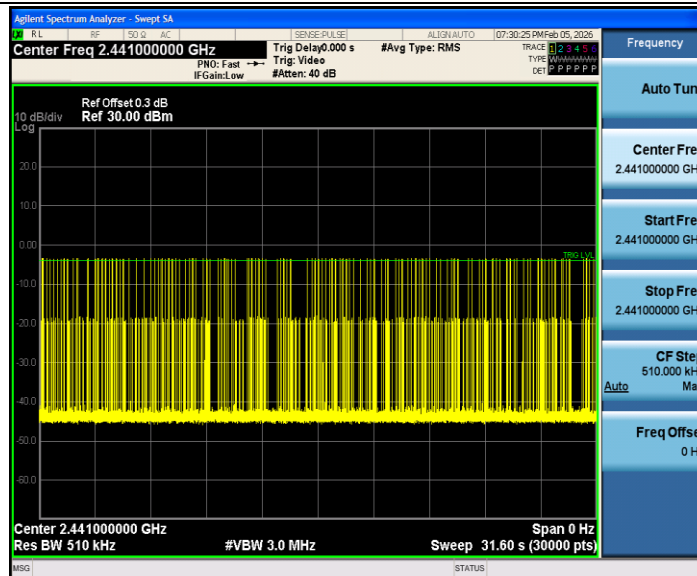
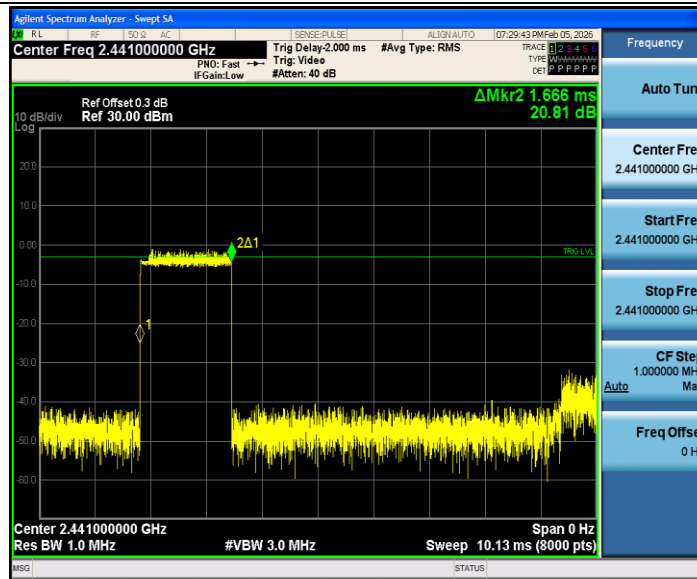




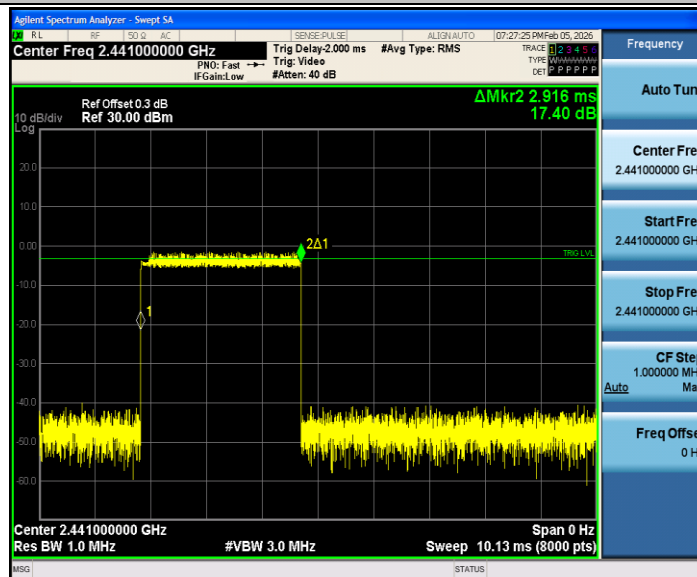
3DH1_Ant1_Hop

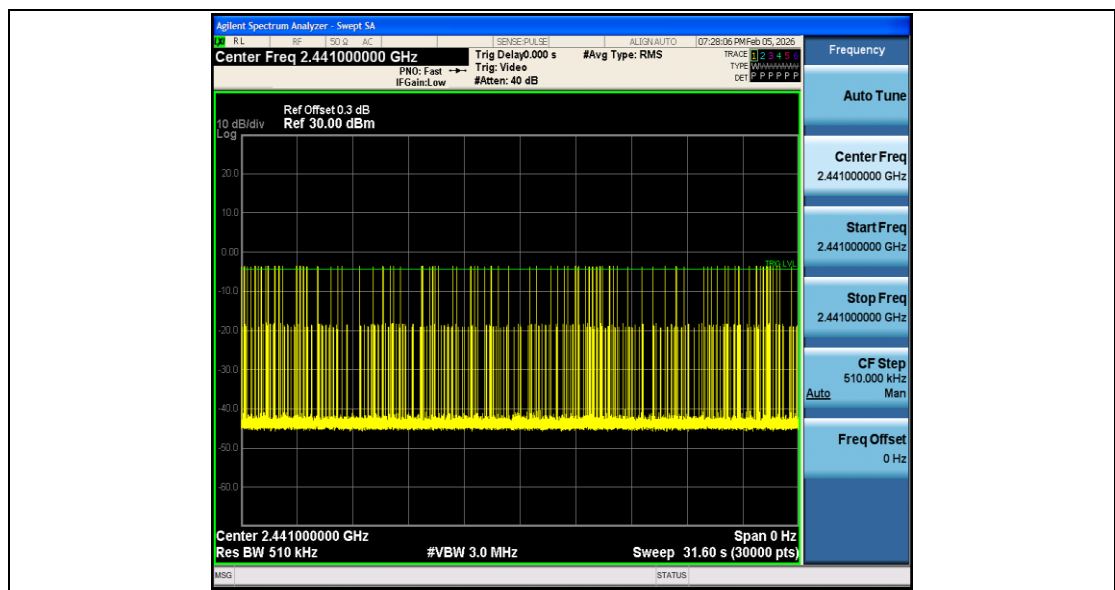


3DH3_Ant1_Hop



3DH5_Ant1_Hop



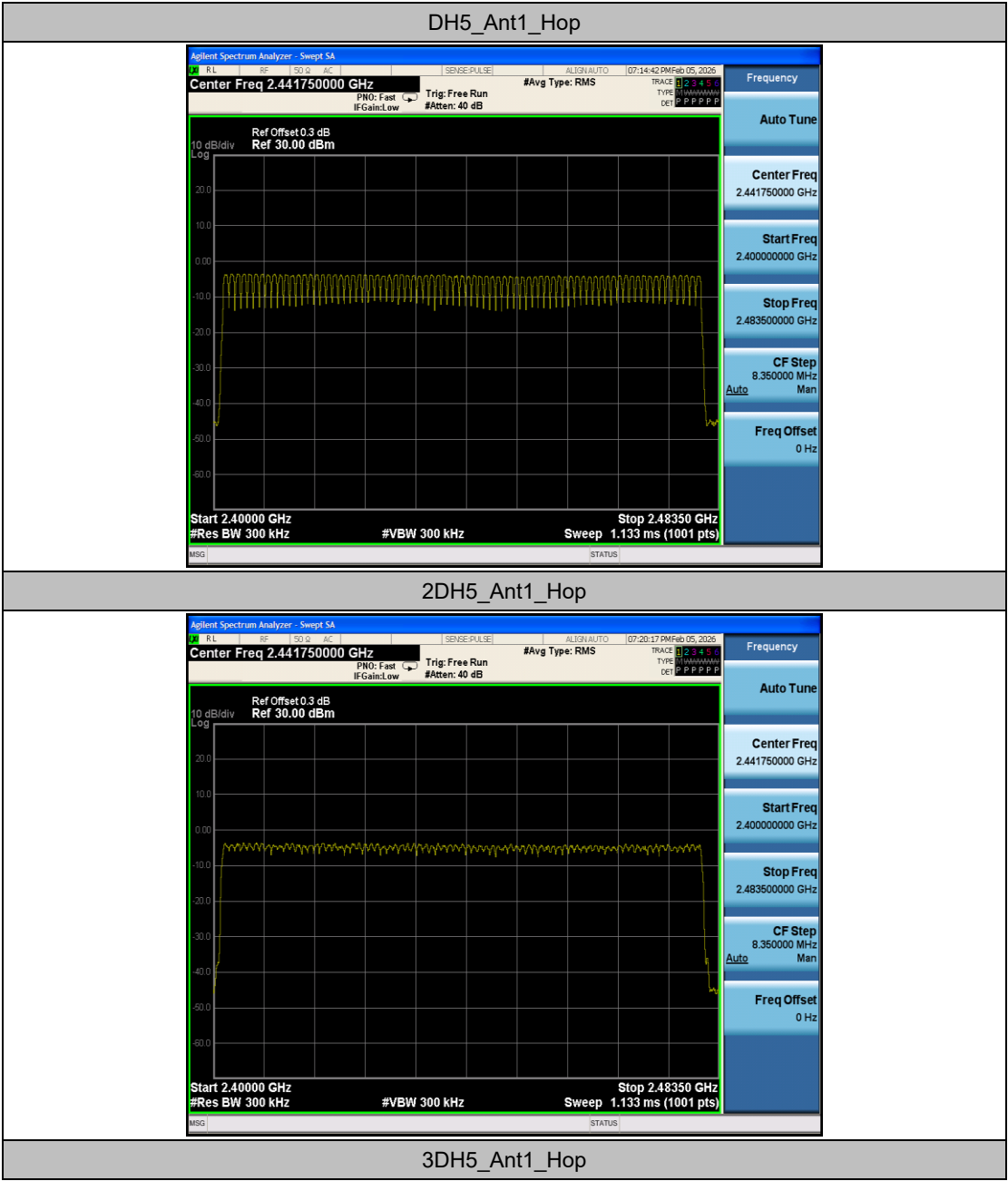


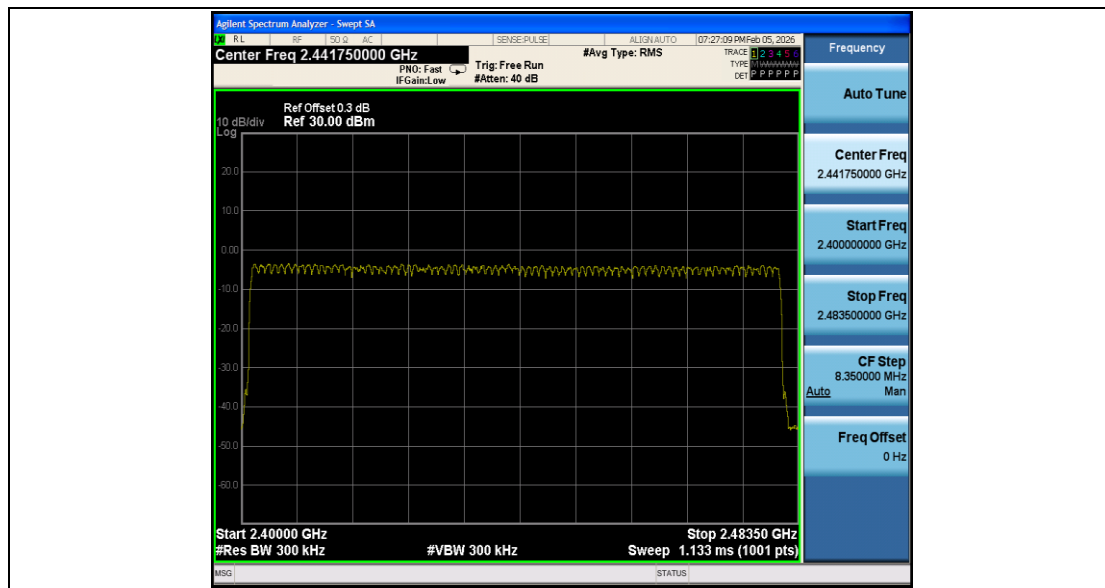
Appendix F: Number of hopping channels

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



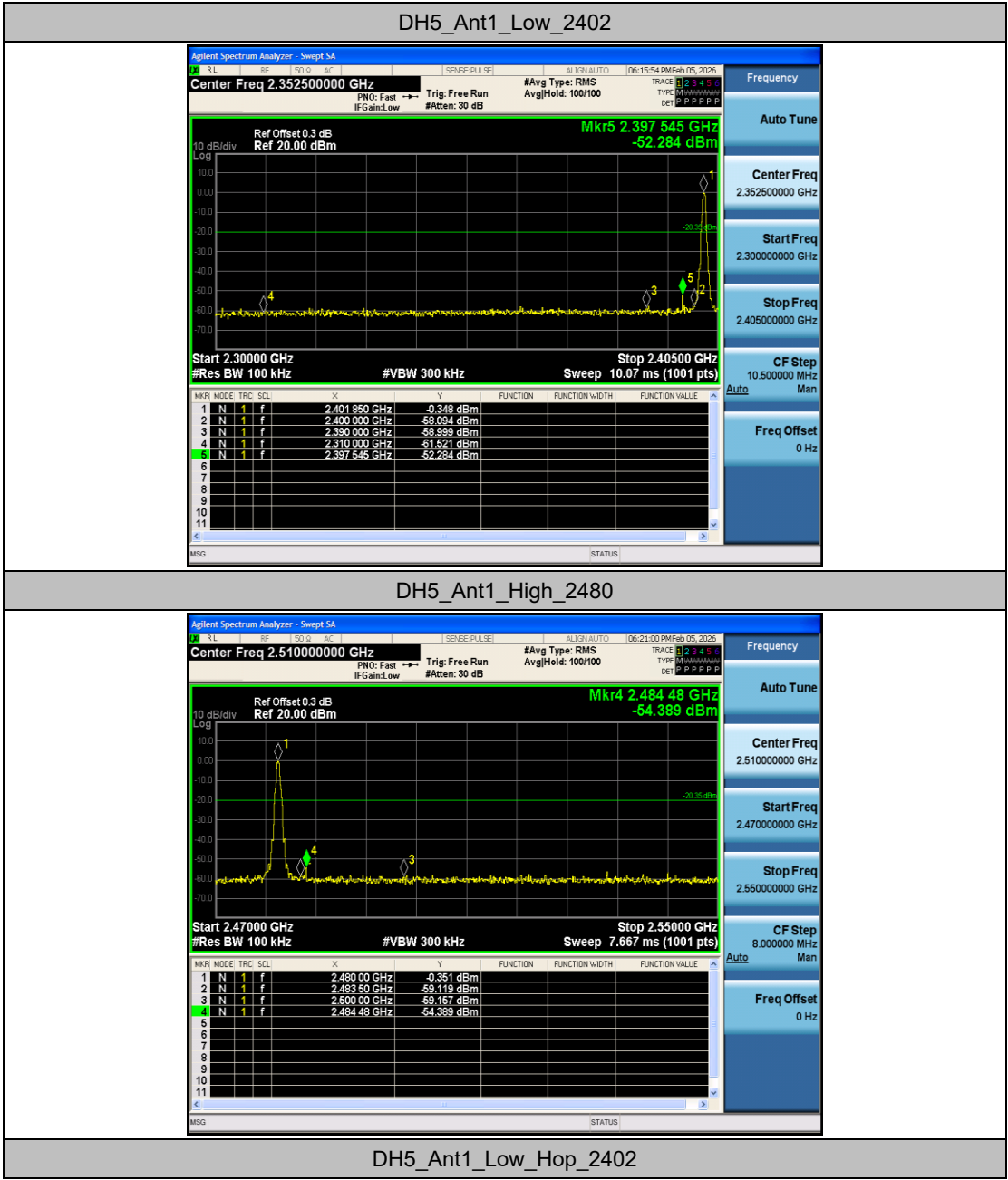


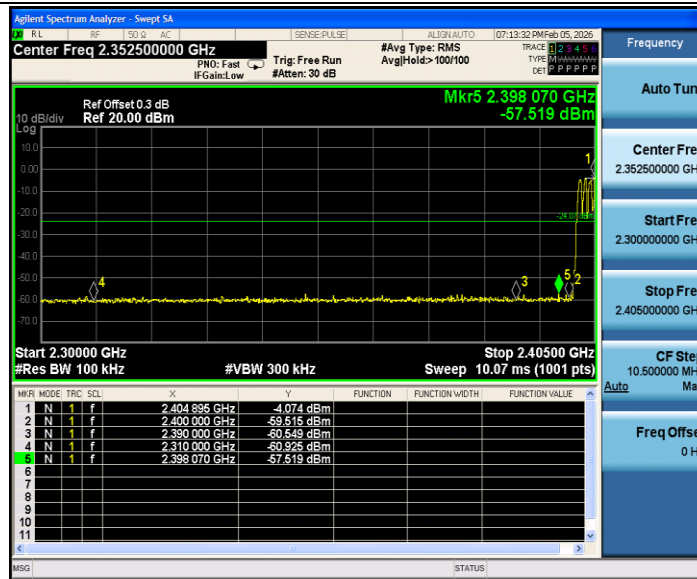
Appendix G: Band edge measurements

Test Result

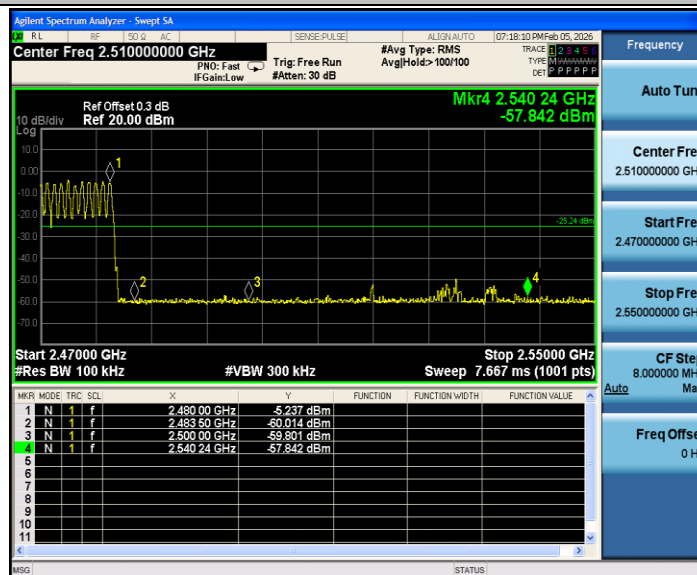
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.35	-52.28	≤-20.35	PASS
		High	2480	-0.35	-54.39	≤-20.35	PASS
		Low	Hop_2402	-4.07	-57.52	≤-24.07	PASS
		High	Hop_2480	-5.24	-57.84	≤-25.24	PASS
2DH5	Ant1	Low	2402	-4.94	-56.96	≤-24.94	PASS
		High	2480	-7.05	-57.7	≤-27.05	PASS
		Low	Hop_2402	-6.67	-56.9	≤-26.67	PASS
		High	Hop_2480	-7.52	-42.75	≤-27.52	PASS
3DH5	Ant1	Low	2402	-4.07	-56.65	≤-24.07	PASS
		High	2480	-4.06	-57.46	≤-24.06	PASS
		Low	Hop_2402	-6.45	-58.02	≤-26.45	PASS
		High	Hop_2480	-4.52	-31.15	≤-24.52	PASS

Test Graphs

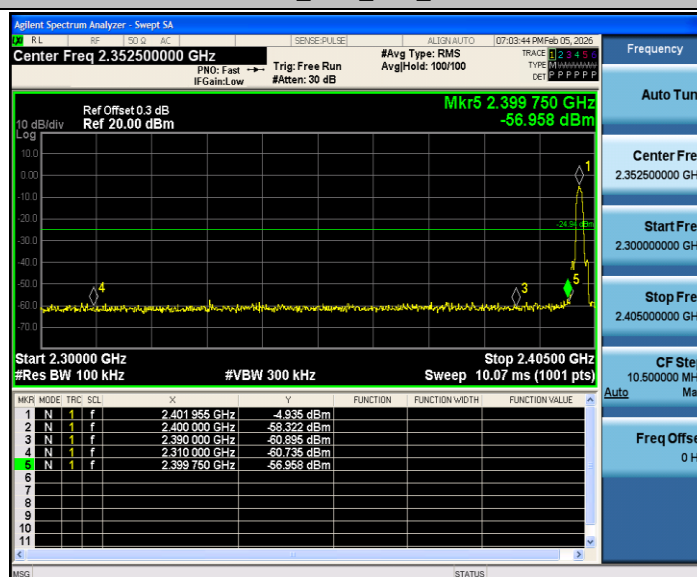




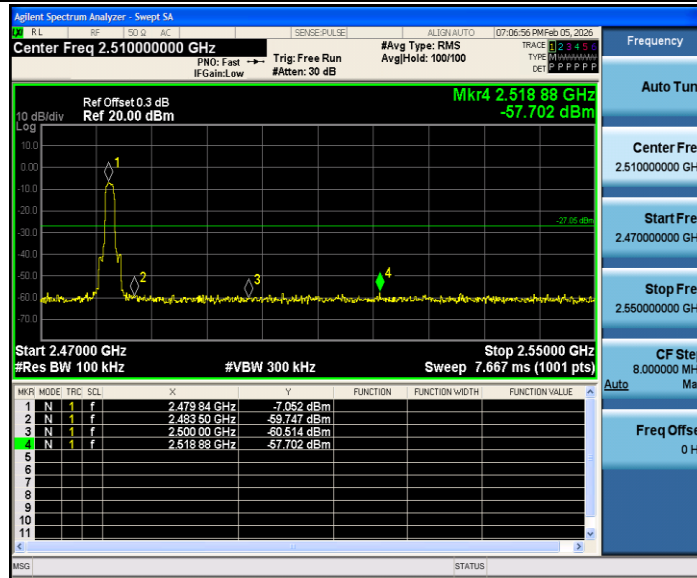
DH5_Ant1_High_Hop_2480



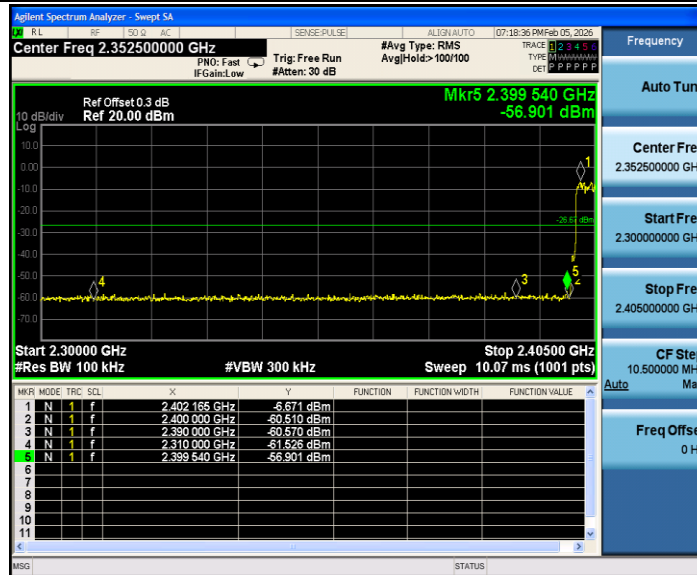
2DH5_Ant1_Low_2402



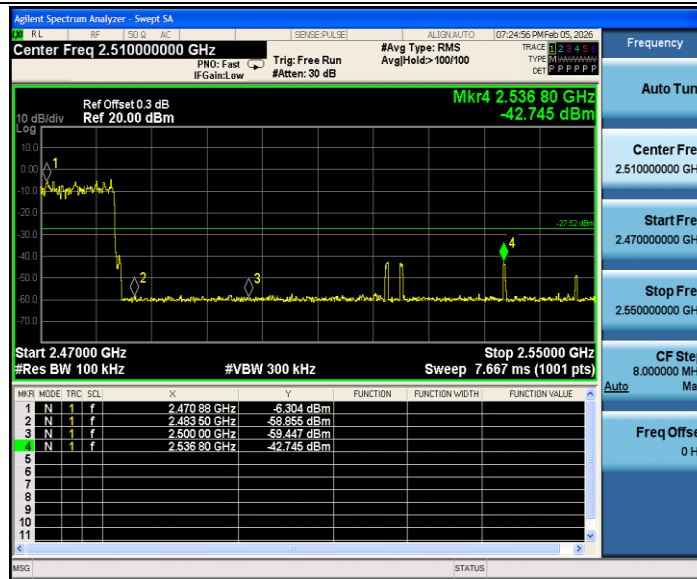
2DH5_Ant1_High_2480



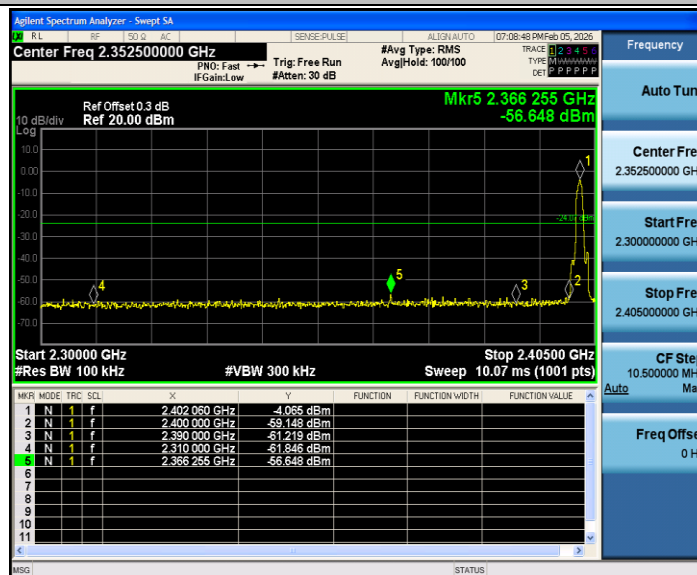
2DH5_Ant1_Low_Hop_2402



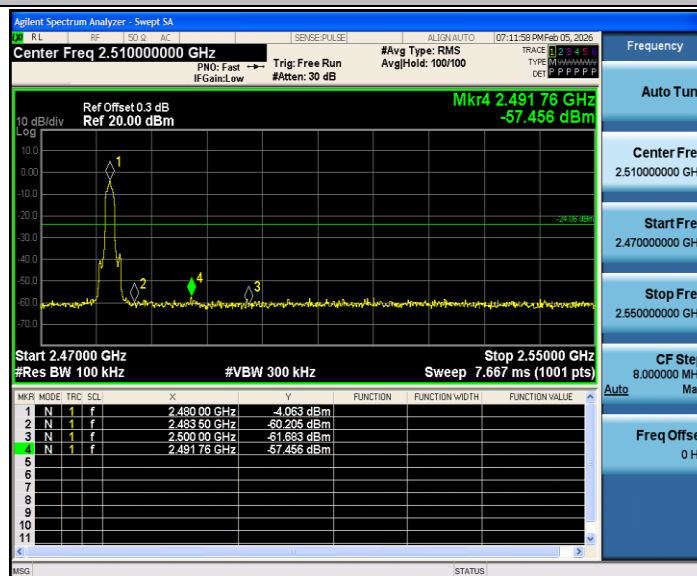
2DH5_Ant1_High_Hop_2480



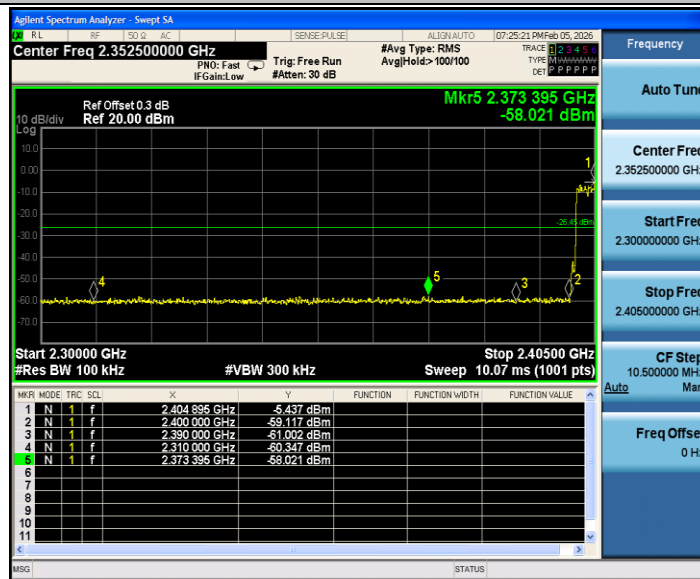
3DH5_Ant1_Low_2402



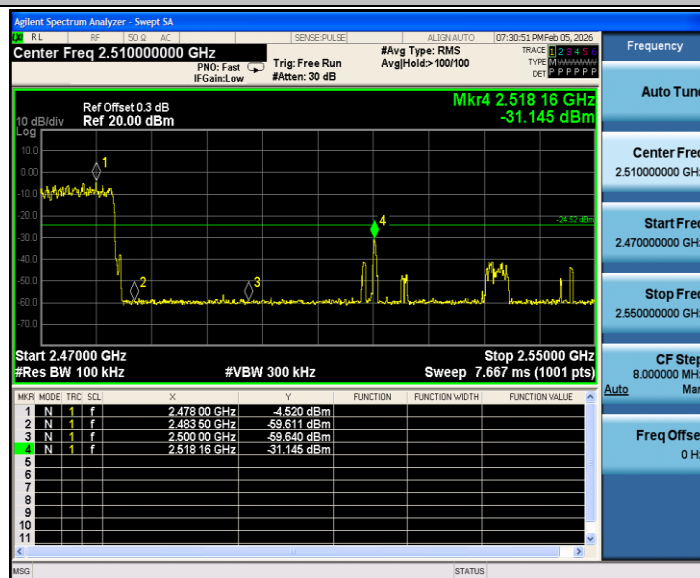
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

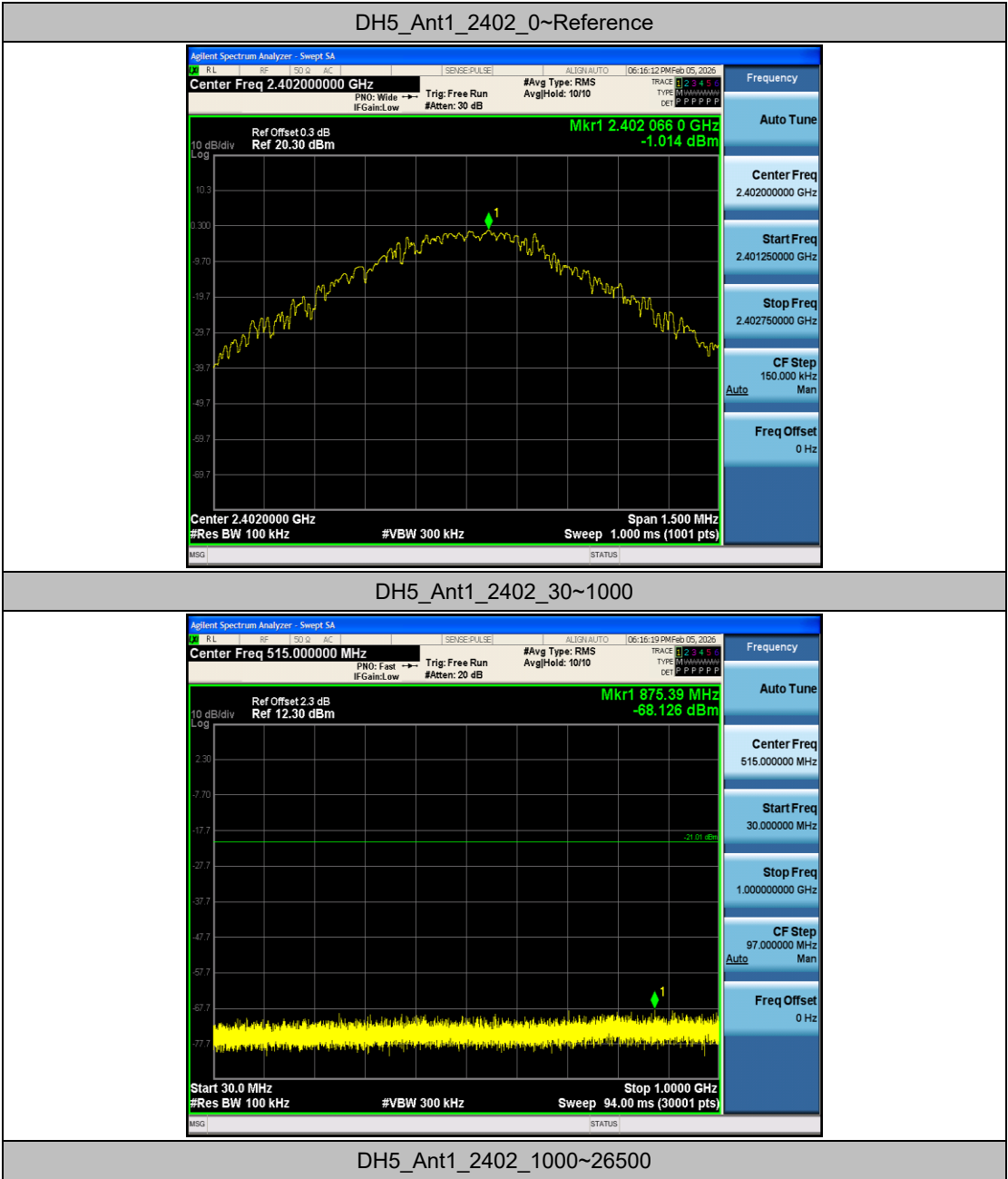


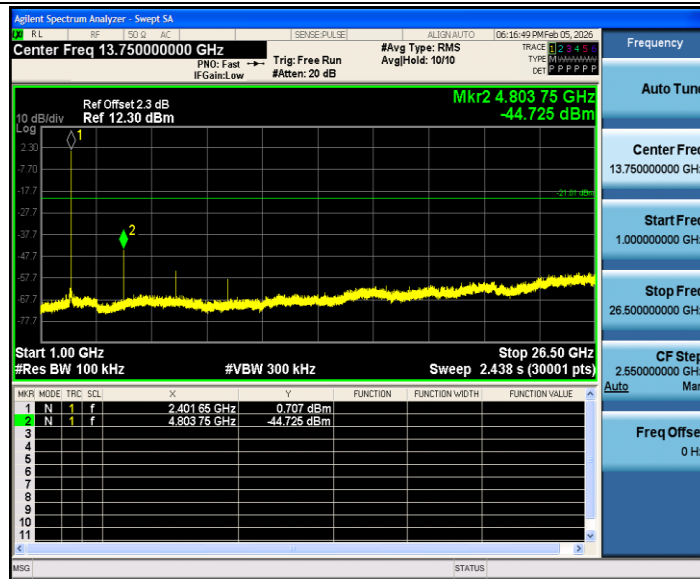
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.01	-1.01	---	PASS
			30~1000	-1.01	-68.13	≤-21.01	PASS
			1000~26500	-1.01	-44.73	≤-21.01	PASS
		2441	Reference	-1.34	-1.34	---	PASS
			30~1000	-1.34	-67.85	≤-21.34	PASS
			1000~26500	-1.34	-42.64	≤-21.34	PASS
		2480	Reference	-1.35	-1.35	---	PASS
			30~1000	-1.35	-68.01	≤-21.35	PASS
			1000~26500	-1.35	-43.75	≤-21.35	PASS
2DH5	Ant1	2402	Reference	-6.86	-6.86	---	PASS
			30~1000	-6.86	-68.41	≤-26.86	PASS
			1000~26500	-6.86	-49.27	≤-26.86	PASS
		2441	Reference	-4.66	-4.66	---	PASS
			30~1000	-4.66	-68.1	≤-24.66	PASS
			1000~26500	-4.66	-48.13	≤-24.66	PASS
		2480	Reference	-4.05	-4.05	---	PASS
			30~1000	-4.05	-68.16	≤-24.05	PASS
			1000~26500	-4.05	-50.75	≤-24.05	PASS
3DH5	Ant1	2402	Reference	-4.30	-4.30	---	PASS
			30~1000	-4.30	-68.64	≤-24.3	PASS
			1000~26500	-4.30	-46.68	≤-24.3	PASS
		2441	Reference	-3.99	-3.99	---	PASS
			30~1000	-3.99	-68.2	≤-23.99	PASS
			1000~26500	-3.99	-46.72	≤-23.99	PASS
		2480	Reference	-4.21	-4.21	---	PASS
			30~1000	-4.21	-67.75	≤-24.21	PASS
			1000~26500	-4.21	-50.63	≤-24.21	PASS

Test Graphs

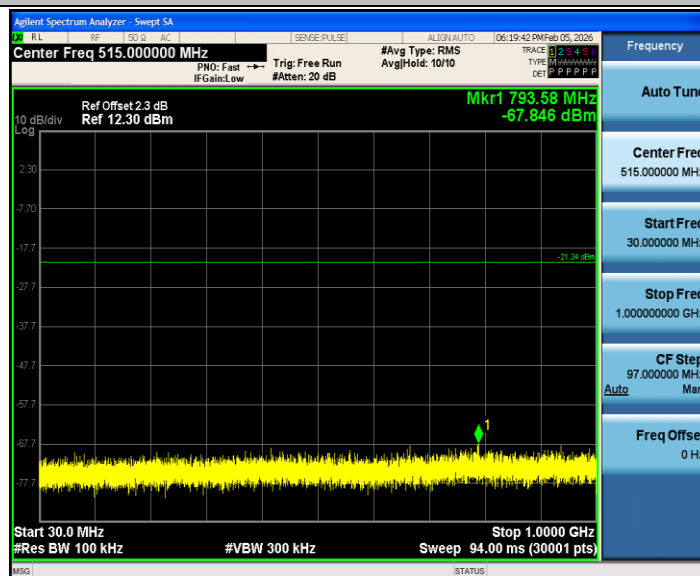




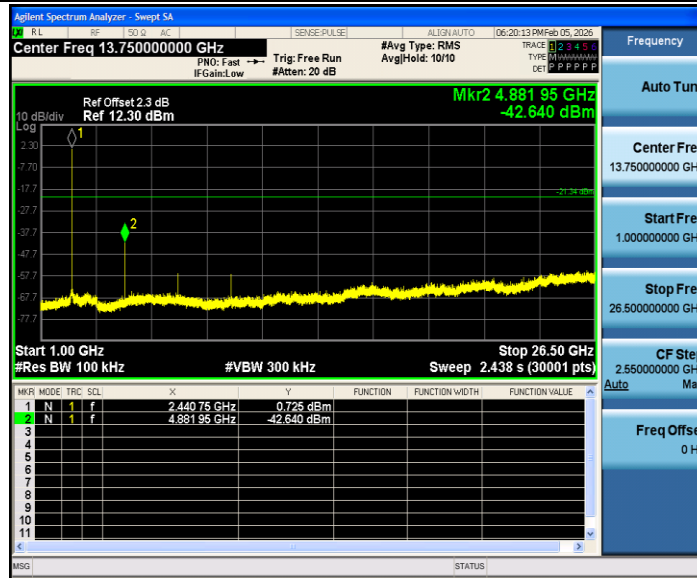
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



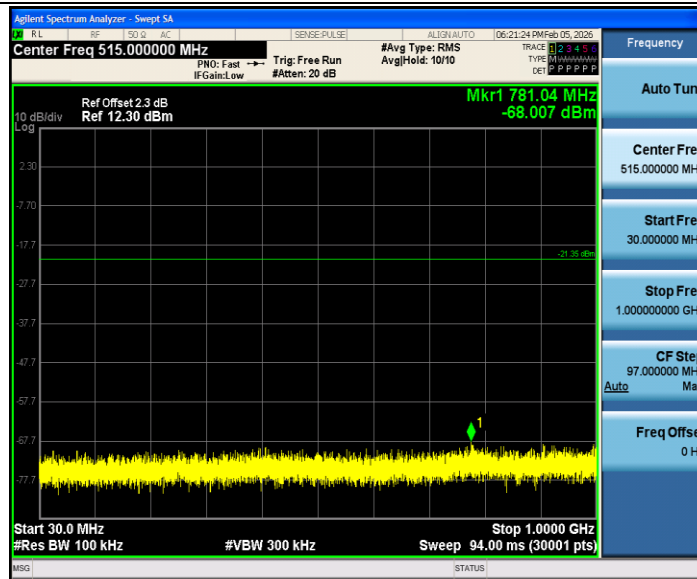
DH5_Ant1_2441_1000~26500



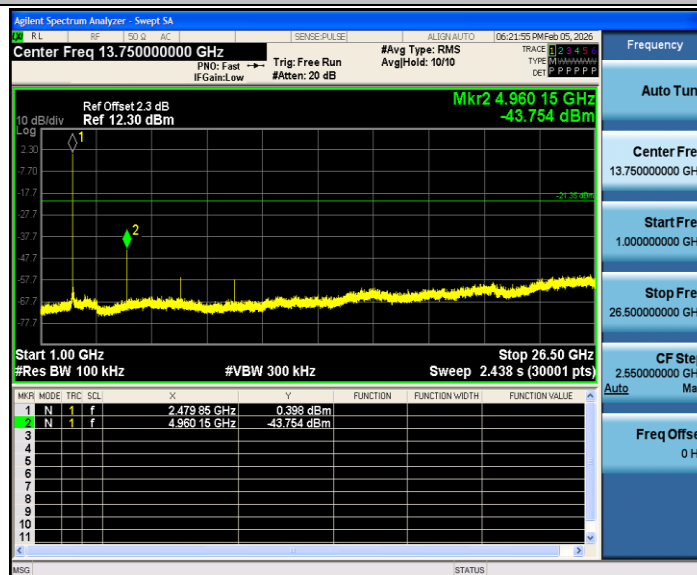
DH5_Ant1_2480_0~Reference



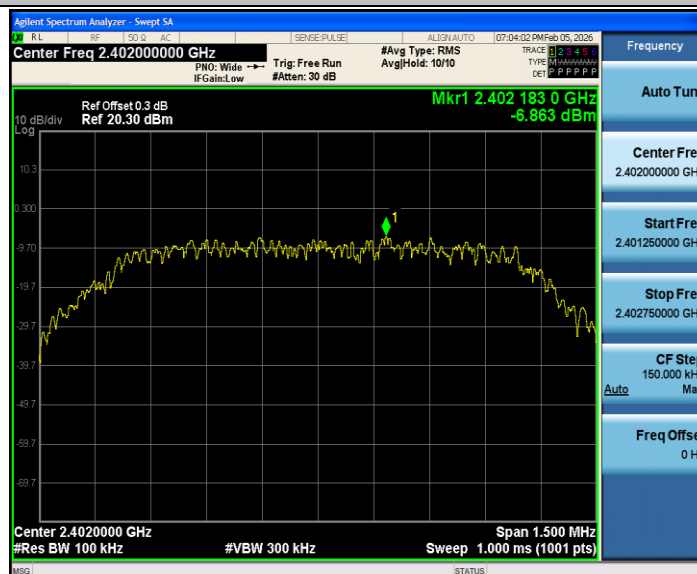
DH5_Ant1_2480_30~1000



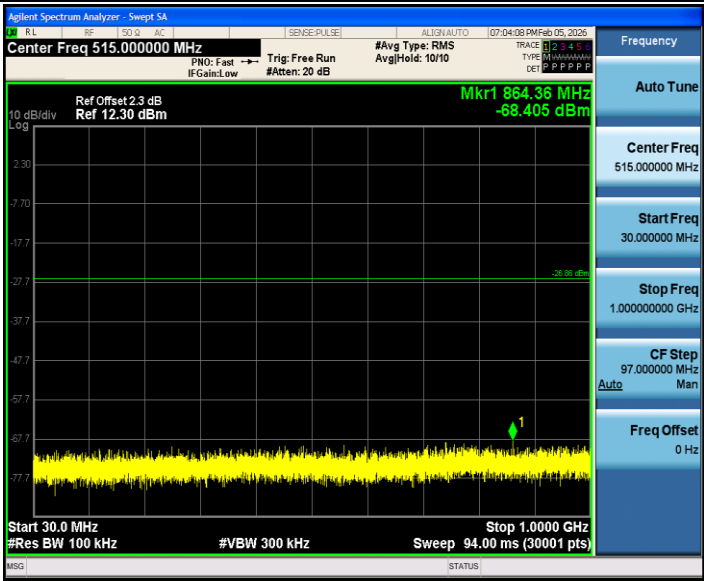
DH5_Ant1_2480_1000~26500



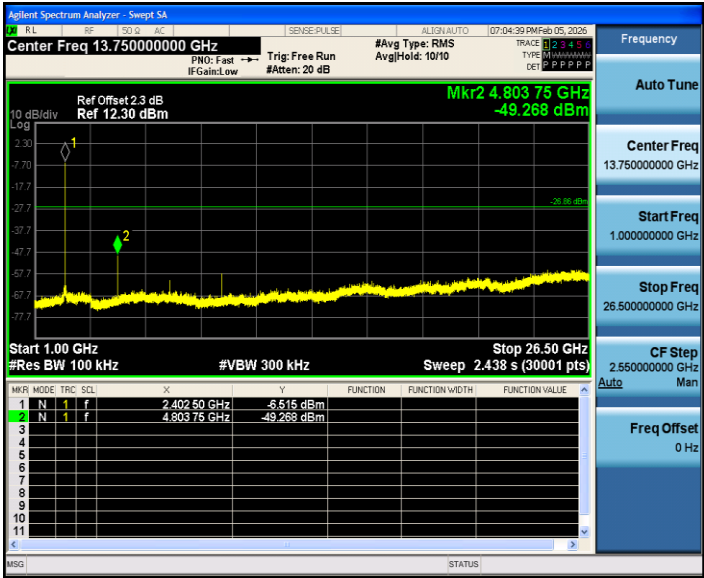
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference