

FCC Appendix RF Test Data for BT

FCC ID : 2BA4J-D2203

Company : Pangao Photoelectric

EUT : HYDRA-Mini 4-in-1 Thermal Monocular

Model Number : D2203

Report No. : CTA26051400801

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	2401.502	2402.462	---	---
		2441	0.954	2440.502	2441.456	---	---
		2480	0.963	2479.499	2480.462	---	---
2DH5	Ant1	2402	1.341	2401.295	2402.636	---	---
		2441	1.320	2440.304	2441.624	---	---
		2480	1.275	2479.337	2480.612	---	---
3DH5	Ant1	2402	1.317	2401.313	2402.630	---	---
		2441	1.290	2440.319	2441.609	---	---
		2480	1.290	2479.325	2480.615	---	---

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

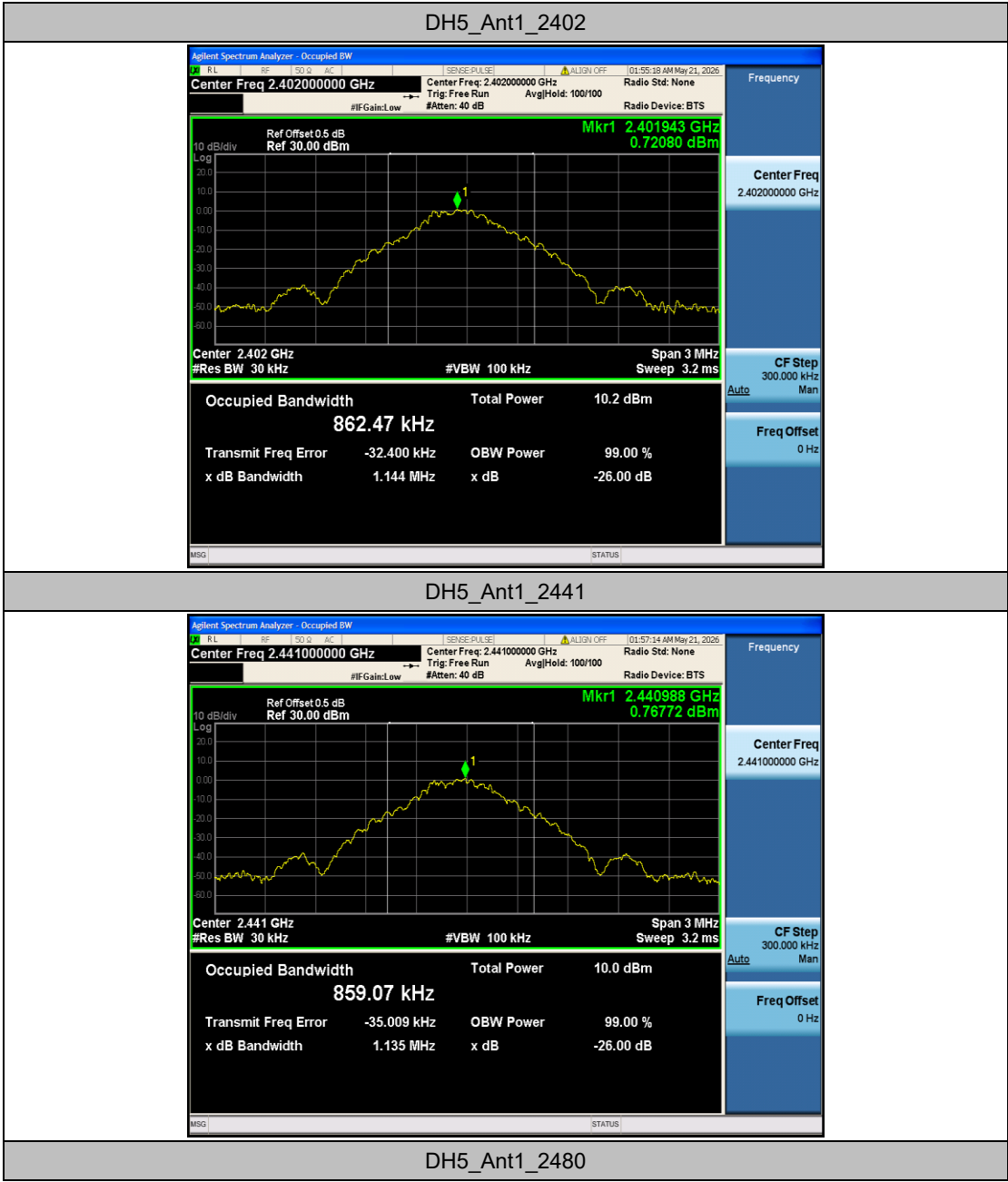


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86247	2401.5364	2402.3988	---	---
		2441	0.85907	2440.5355	2441.3945	---	---
		2480	0.85545	2479.5380	2480.3935	---	---
2DH5	Ant1	2402	1.1774	2401.3776	2402.5550	---	---
		2441	1.1762	2440.3795	2441.5557	---	---
		2480	1.1759	2479.3771	2480.5530	---	---
3DH5	Ant1	2402	1.1744	2401.3836	2402.5580	---	---
		2441	1.1820	2440.3758	2441.5578	---	---
		2480	1.1743	2479.3839	2480.5582	---	---

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	3.56	≤20.97	PASS
		2441	3.38	≤20.97	PASS
		2480	2.88	≤20.97	PASS
2DH5	Ant1	2402	4.33	≤20.97	PASS
		2441	4.15	≤20.97	PASS
		2480	3.68	≤20.97	PASS
3DH5	Ant1	2402	5.11	≤20.97	PASS
		2441	4.95	≤20.97	PASS
		2480	4.50	≤20.97	PASS

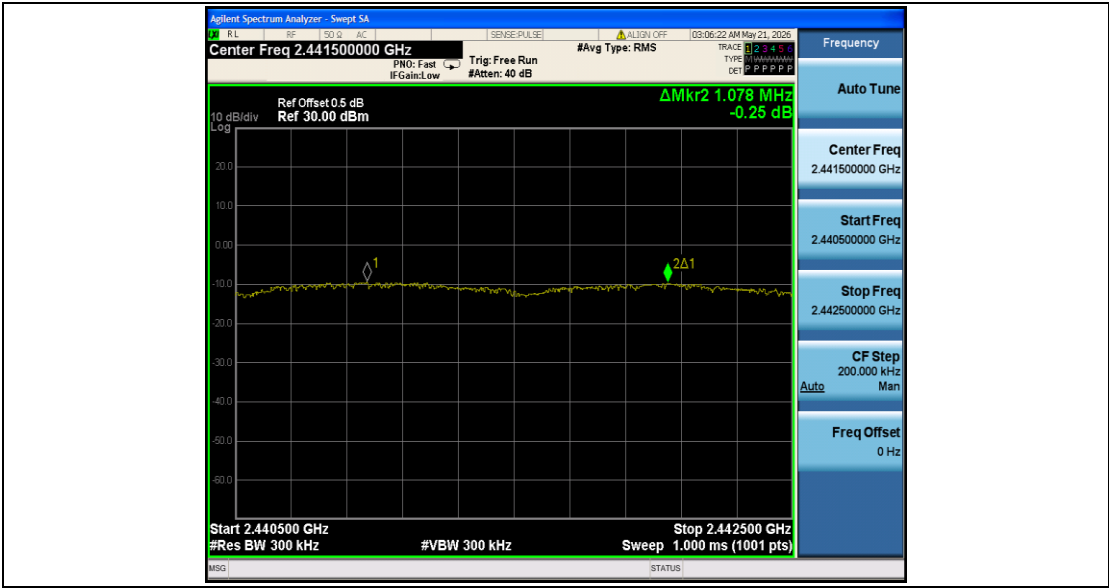
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.832	≥ 0.642	PASS
2DH5	Ant1	Hop	1.006	≥ 0.894	PASS
3DH5	Ant1	Hop	1.078	≥ 0.878	PASS

Test Graphs



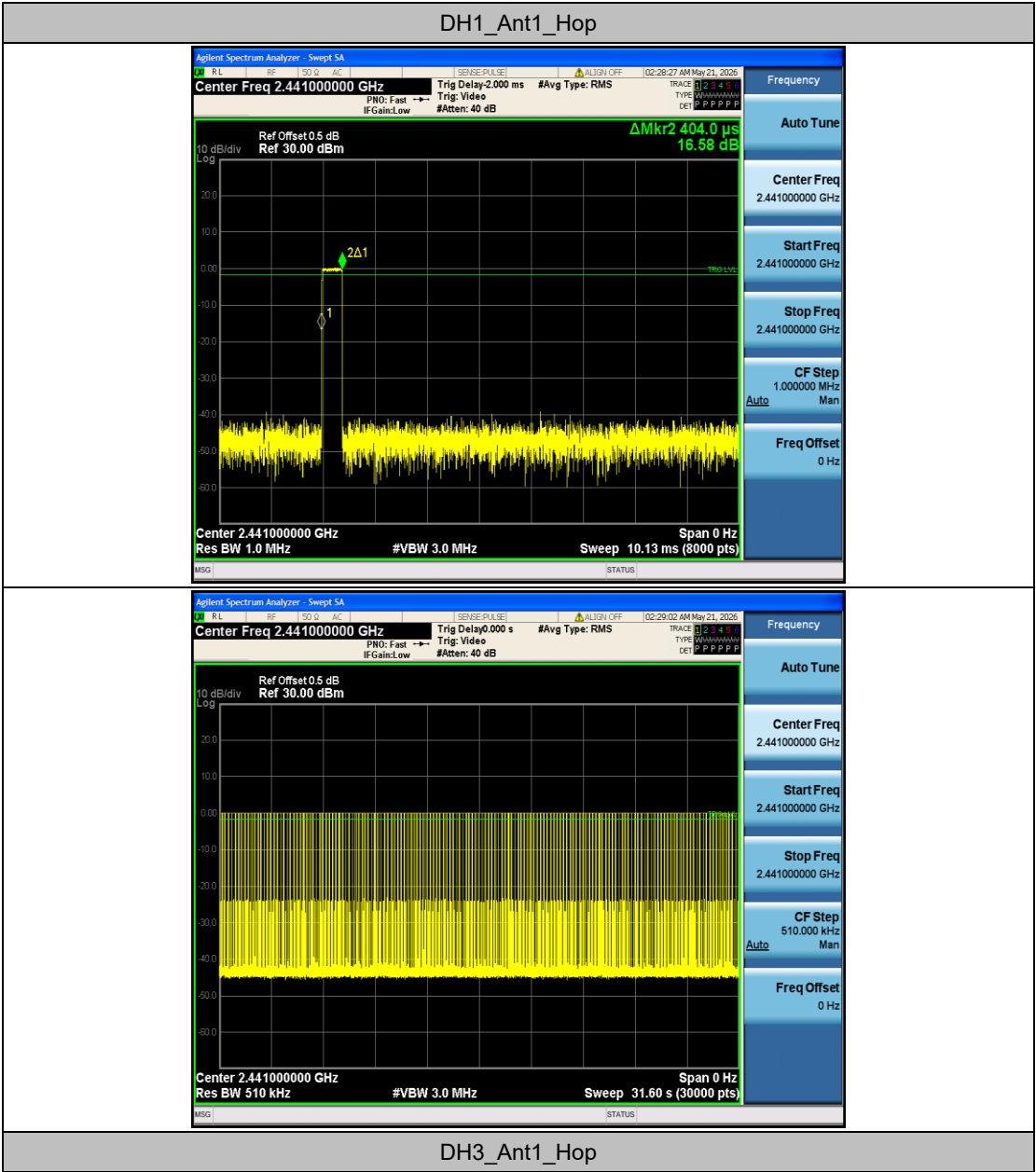


Appendix E: Time of occupancy

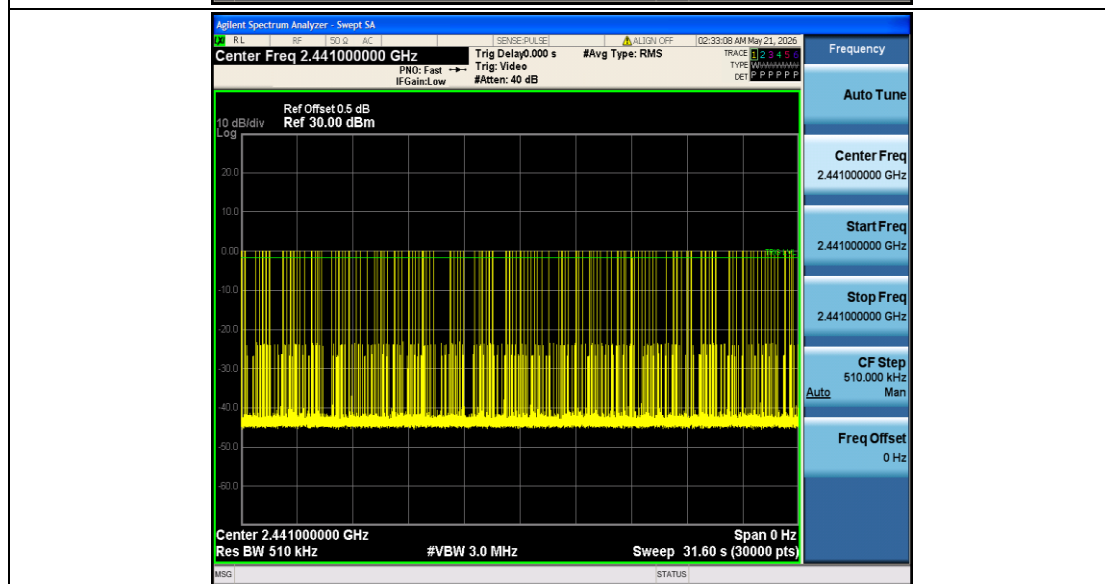
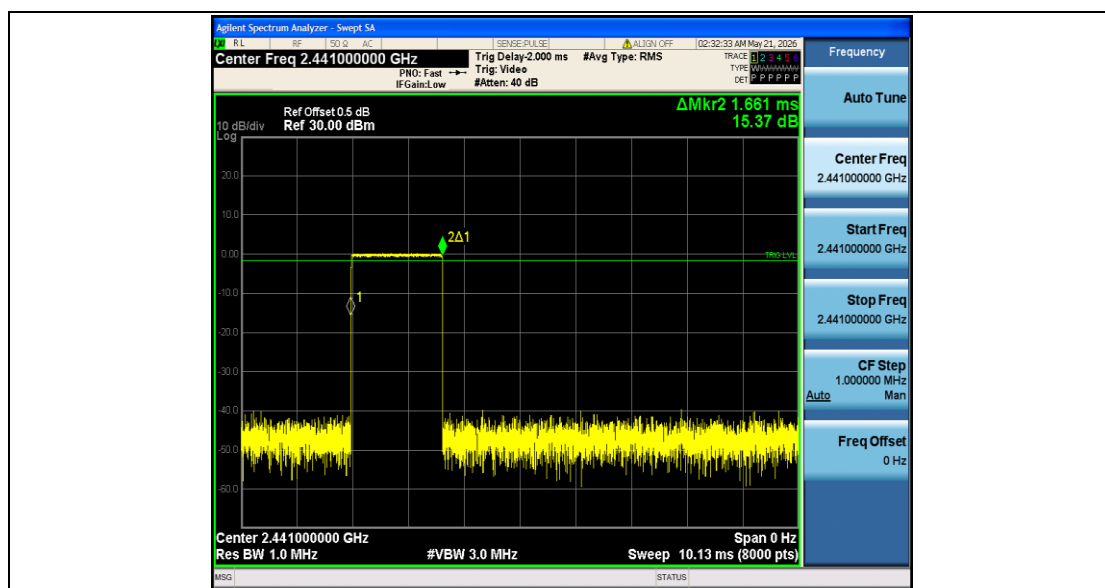
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.404	317	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.661	158	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.908	110	0.32	≤0.4	PASS
2DH1	Ant1	Hop	0.414	317	0.131	≤0.4	PASS
2DH3	Ant1	Hop	1.667	158	0.263	≤0.4	PASS
2DH5	Ant1	Hop	2.916	109	0.318	≤0.4	PASS
3DH1	Ant1	Hop	0.417	318	0.133	≤0.4	PASS
3DH3	Ant1	Hop	1.666	160	0.267	≤0.4	PASS
3DH5	Ant1	Hop	2.917	116	0.338	≤0.4	PASS

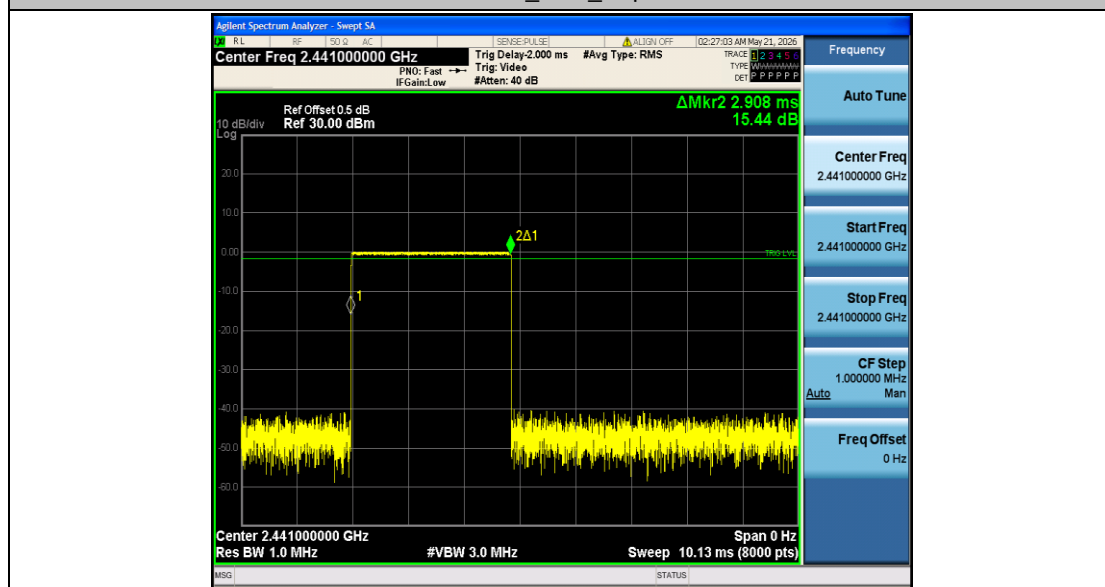
Test Graphs

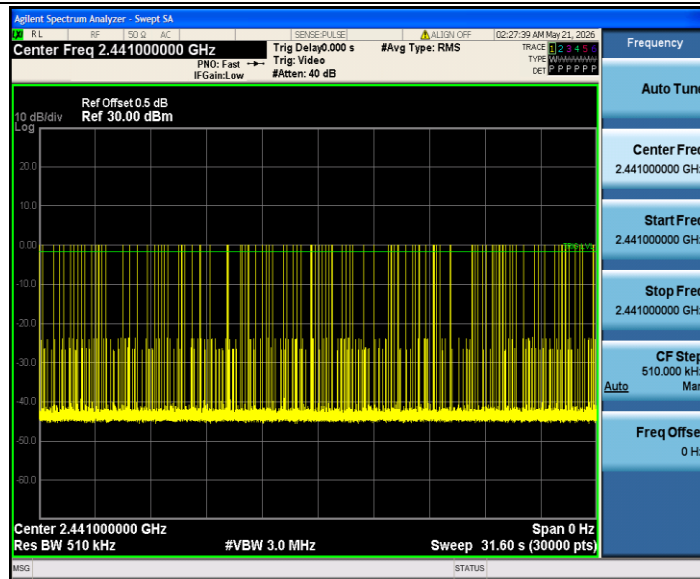


DH3_Ant1_Hop

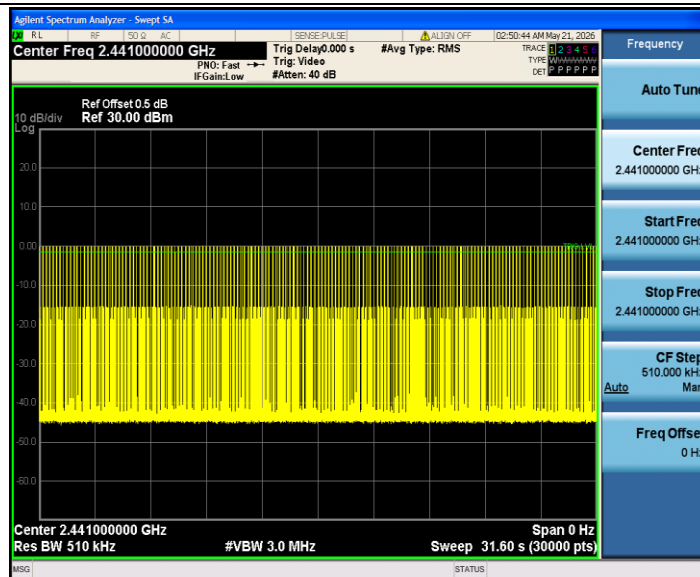
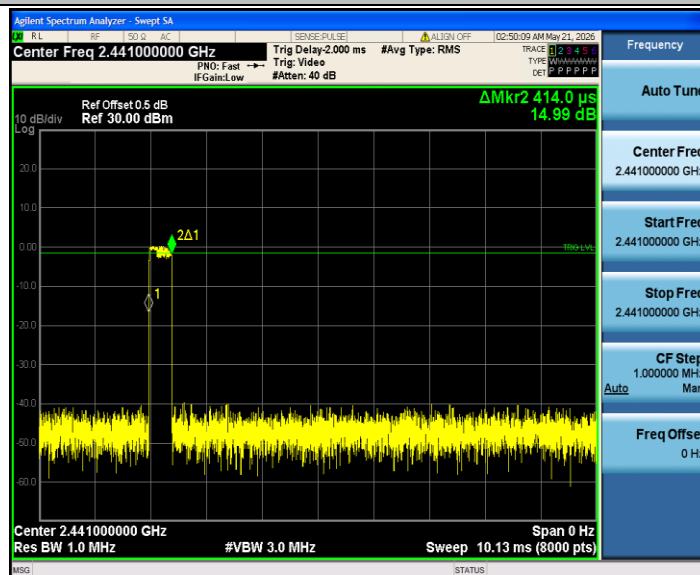


DH5_Ant1_Hop

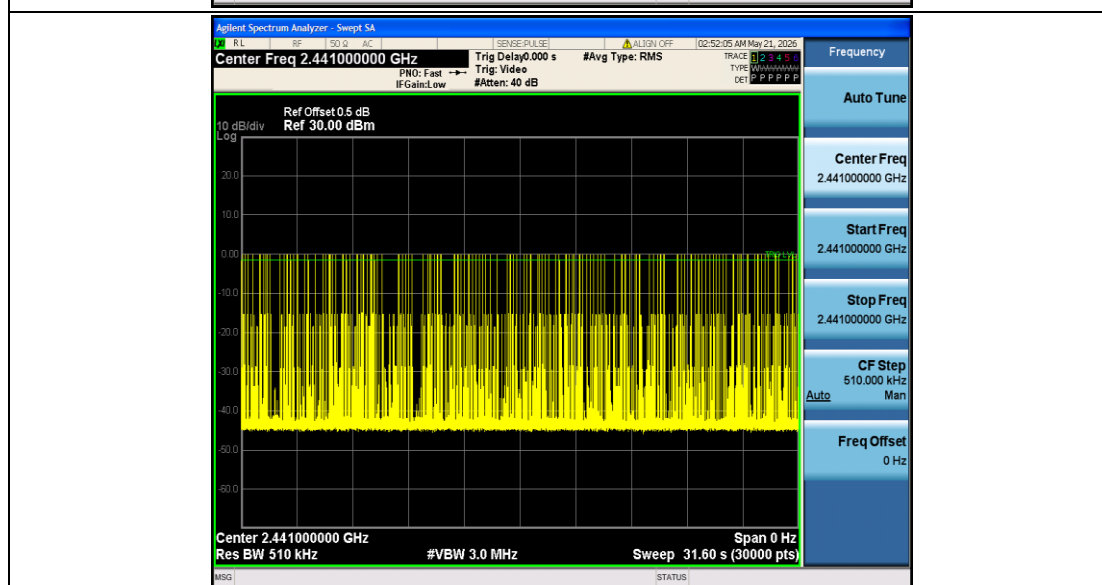
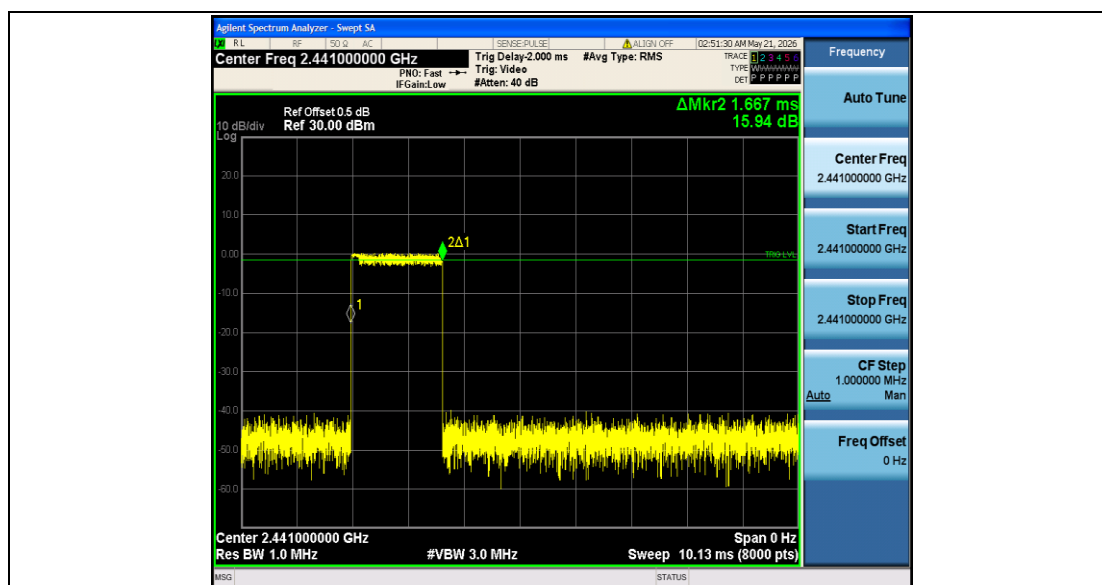




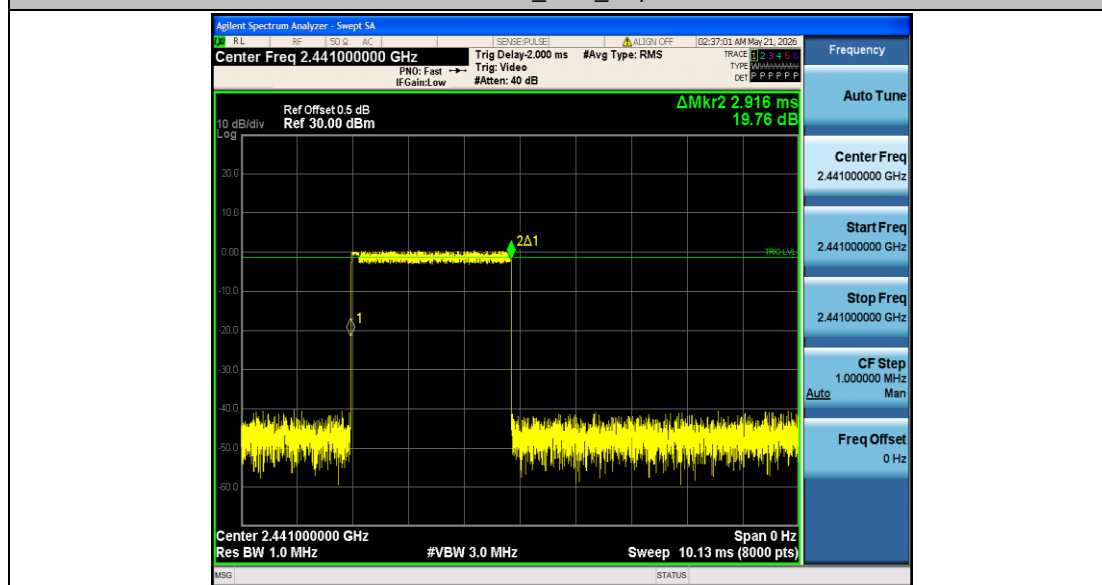
2DH1_Ant1_Hop

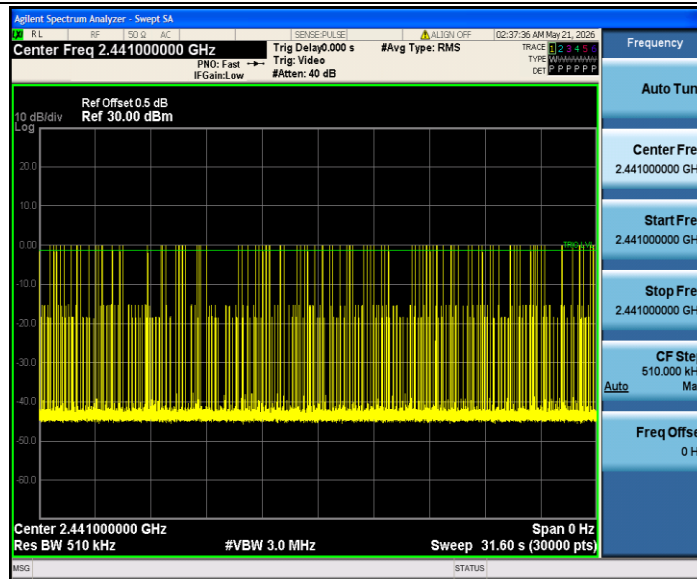


2DH3_Ant1_Hop

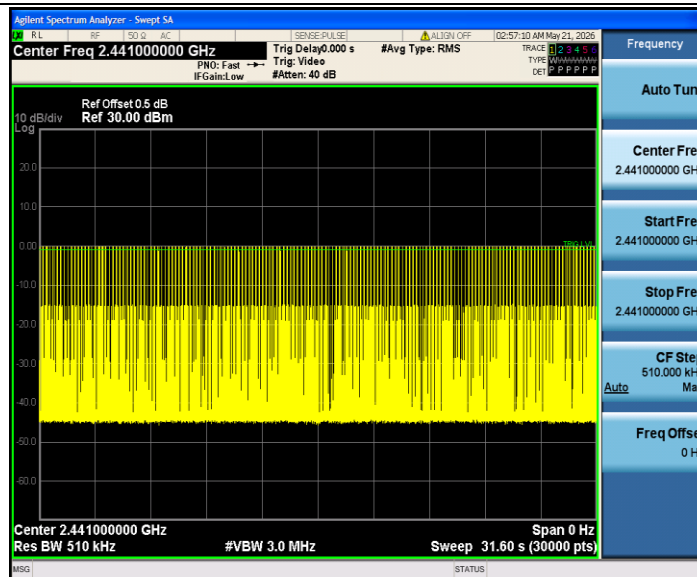
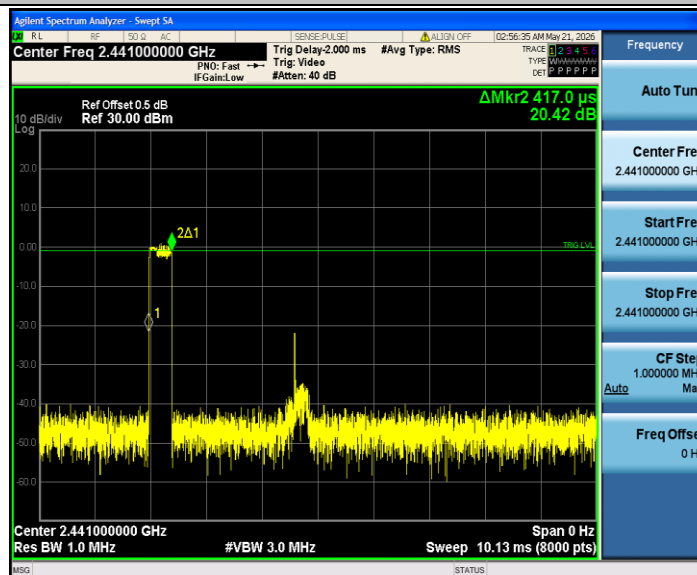


2DH5_Ant1_Hop

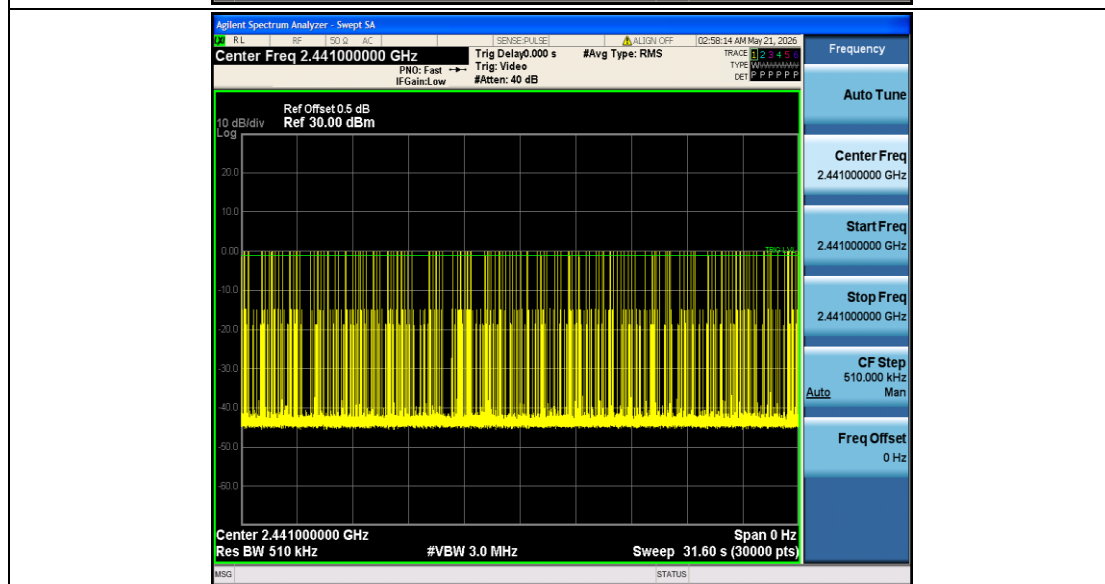
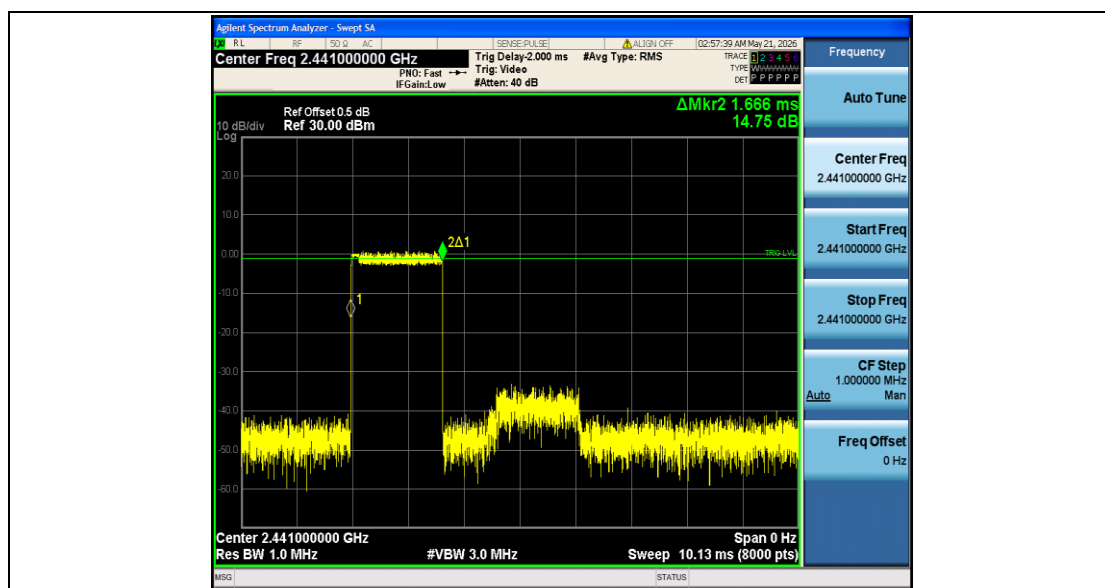




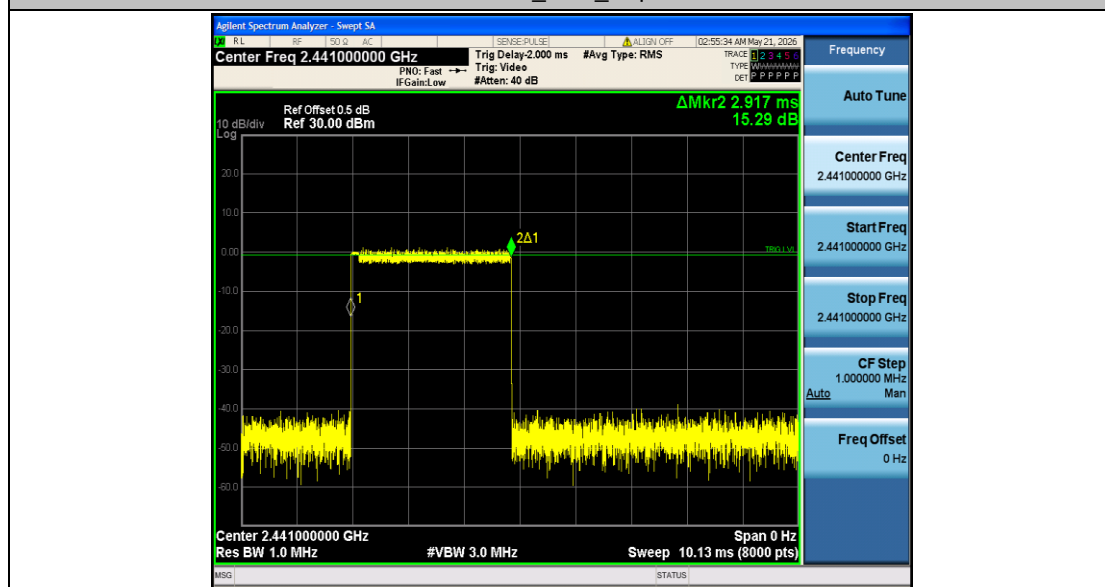
3DH1_Ant1_Hop

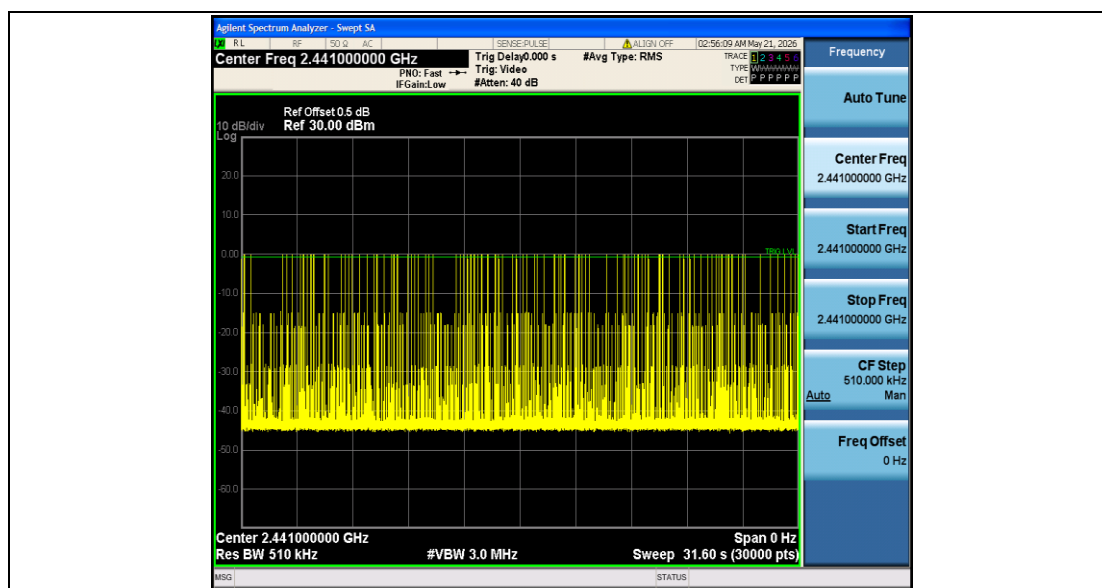


3DH3_Ant1_Hop



3DH5_Ant1_Hop



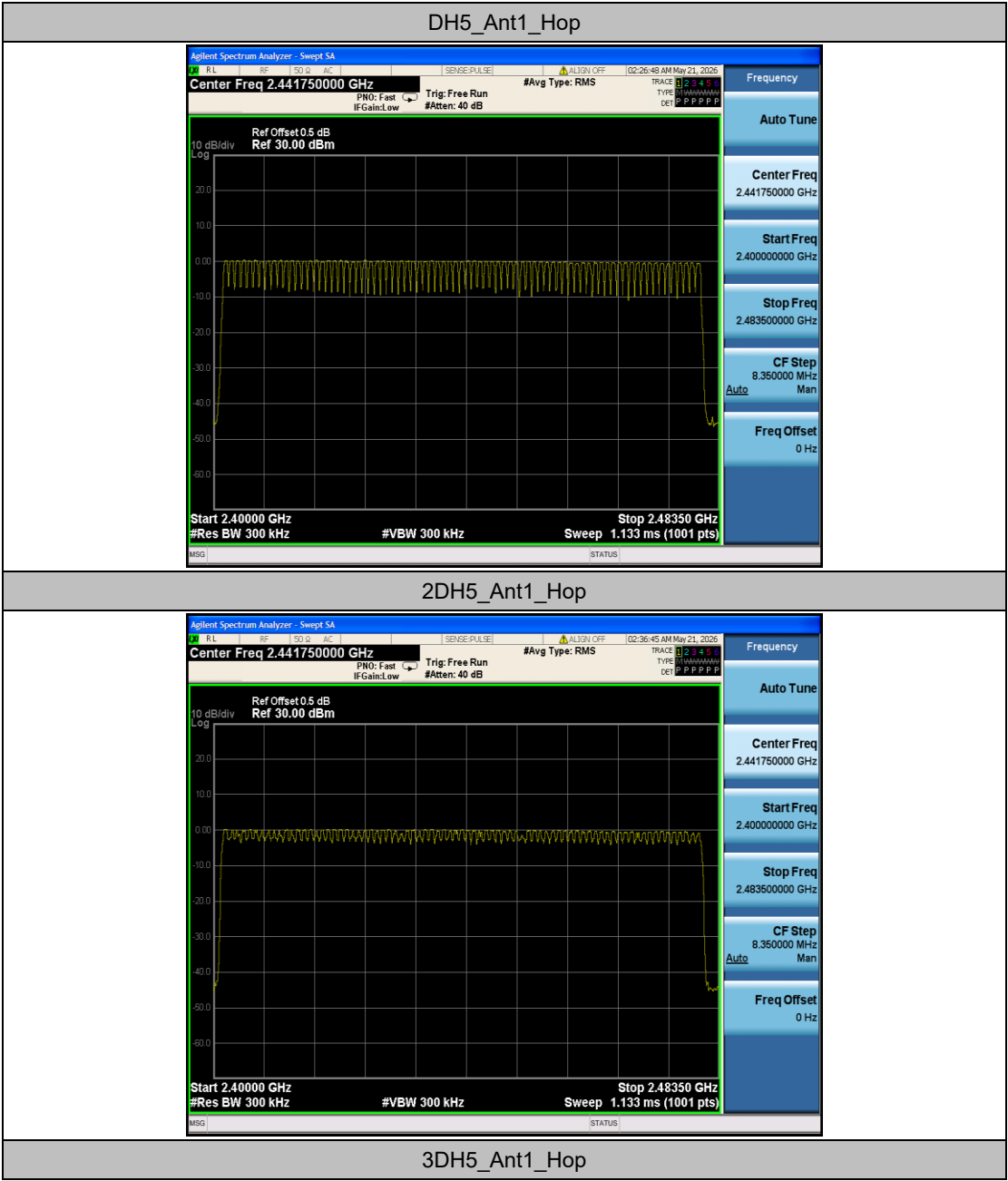


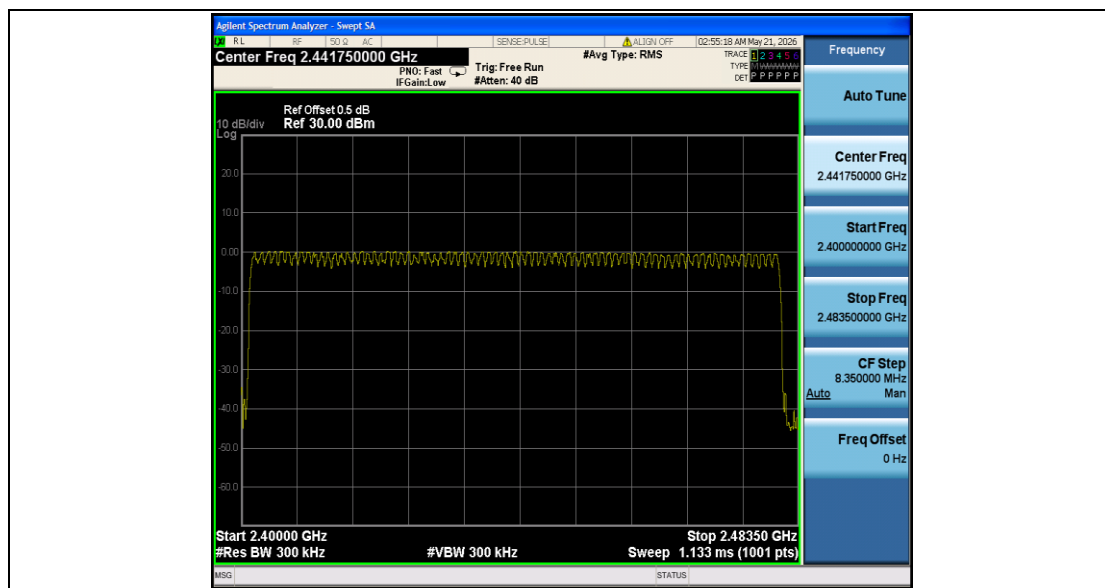
Appendix F: Number of hopping channels

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



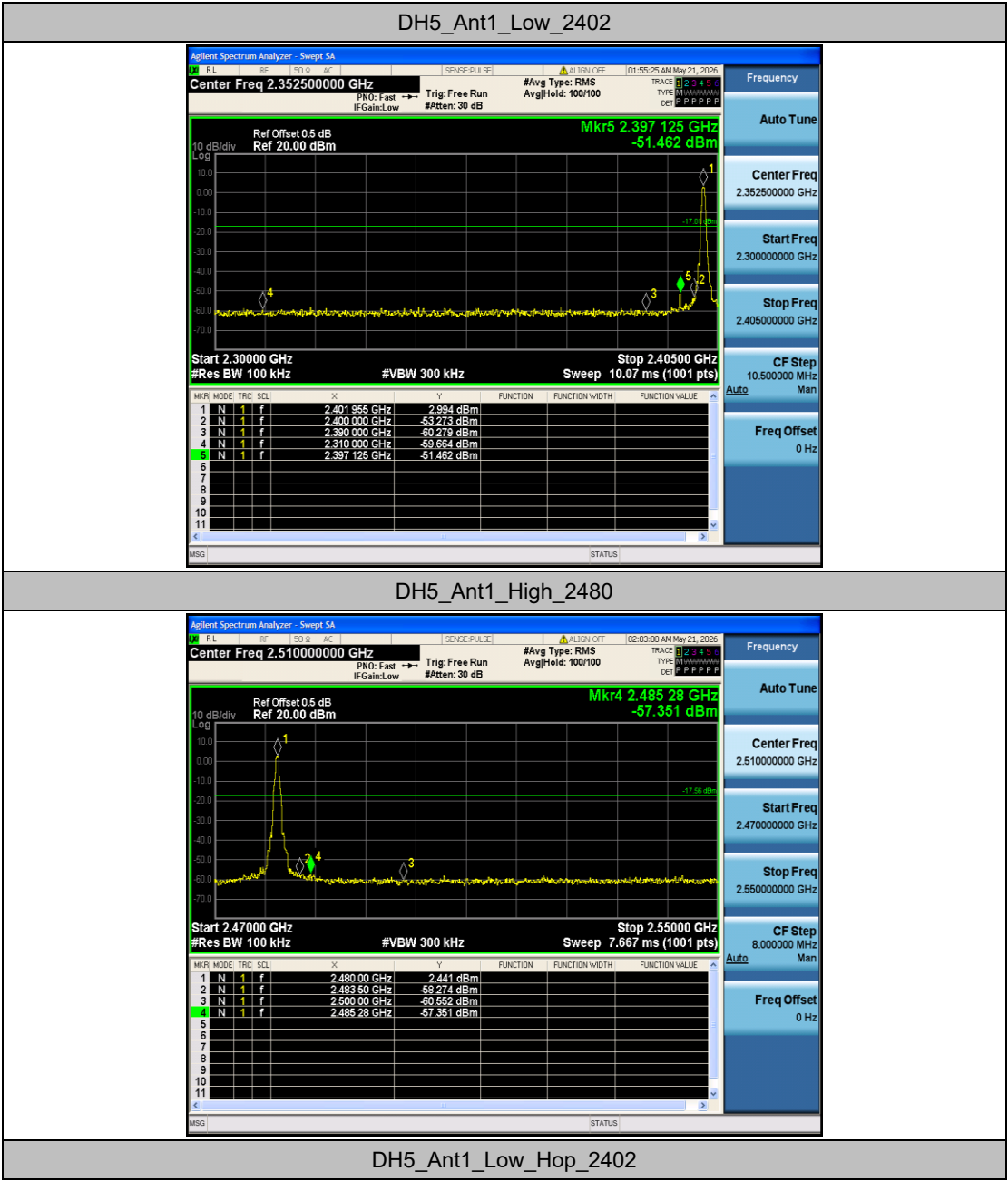


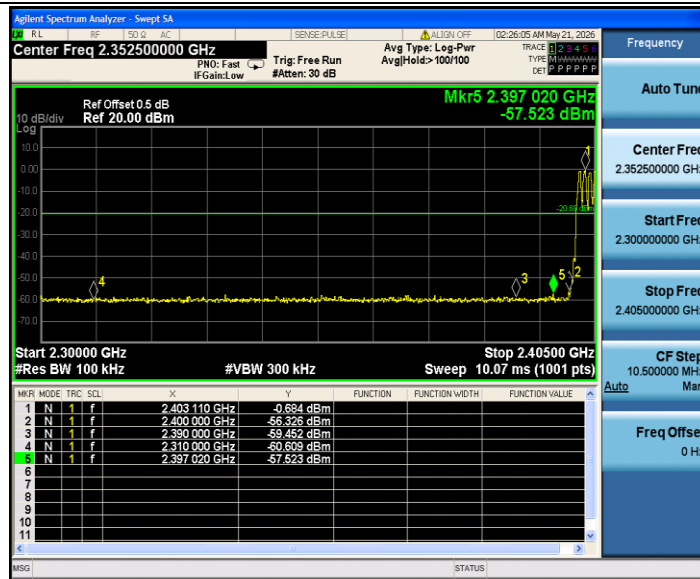
Appendix G: Band edge measurements

Test Result

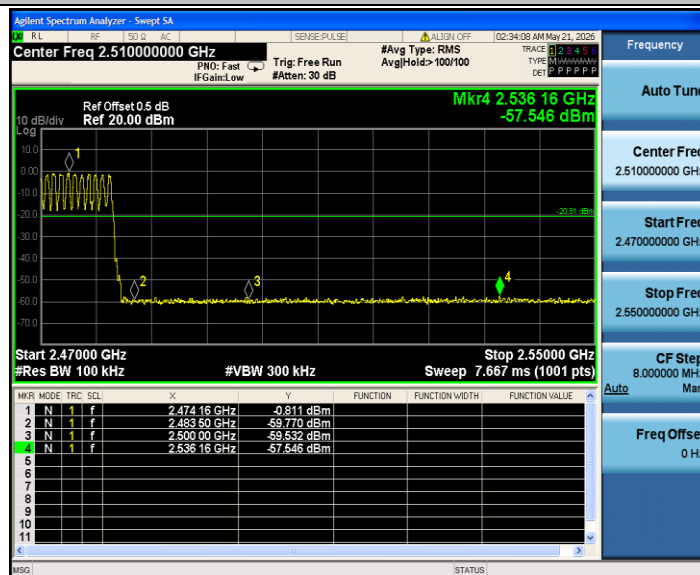
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.99	-51.46	≤-17.01	PASS
		High	2480	2.44	-57.35	≤-17.56	PASS
		Low	Hop_2402	-0.68	-57.52	≤-20.68	PASS
		High	Hop_2480	-0.81	-57.55	≤-20.81	PASS
2DH5	Ant1	Low	2402	1.42	-52.63	≤-18.58	PASS
		High	2480	0.65	-53.56	≤-19.35	PASS
		Low	Hop_2402	-0.42	-56.82	≤-20.42	PASS
		High	Hop_2480	-0.73	-57.72	≤-20.73	PASS
3DH5	Ant1	Low	2402	2.70	-42.75	≤-17.31	PASS
		High	2480	2.07	-45.91	≤-17.93	PASS
		Low	Hop_2402	-13.05	-57.32	≤-33.05	PASS
		High	Hop_2480	-0.78	-50.96	≤-20.78	PASS

Test Graphs

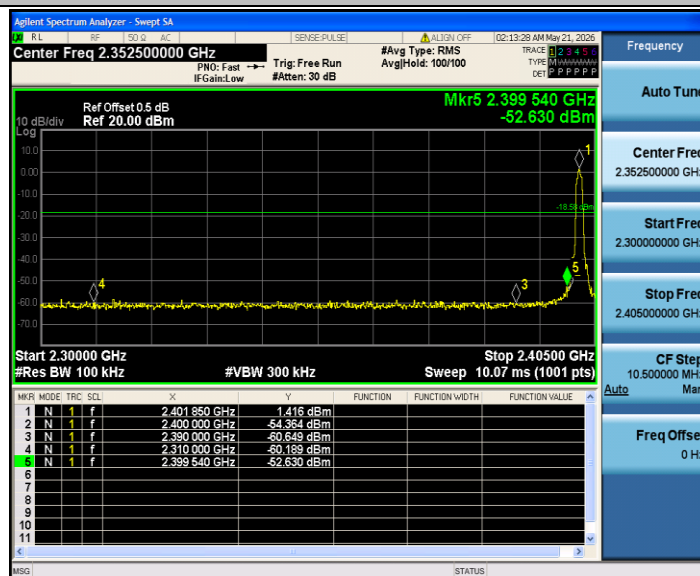




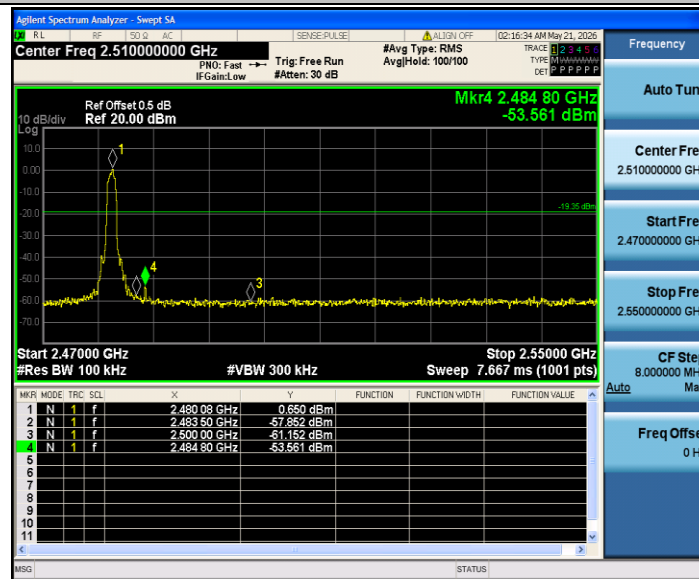
DH5_Ant1_High_Hop_2480



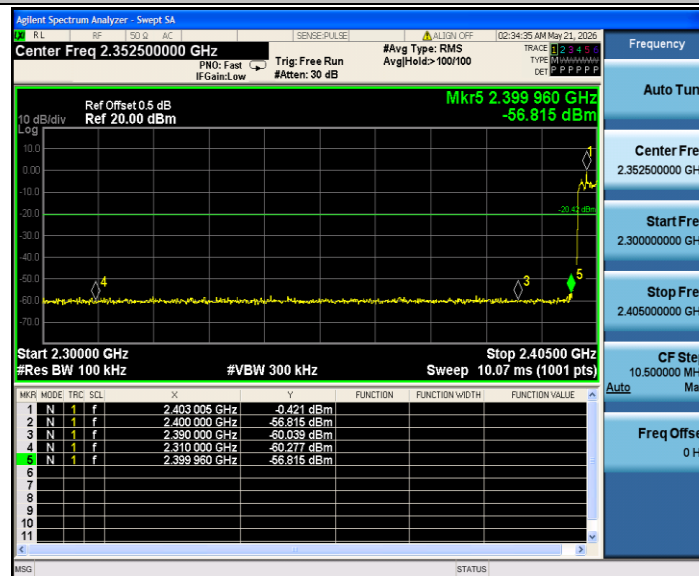
2DH5_Ant1_Low_2402



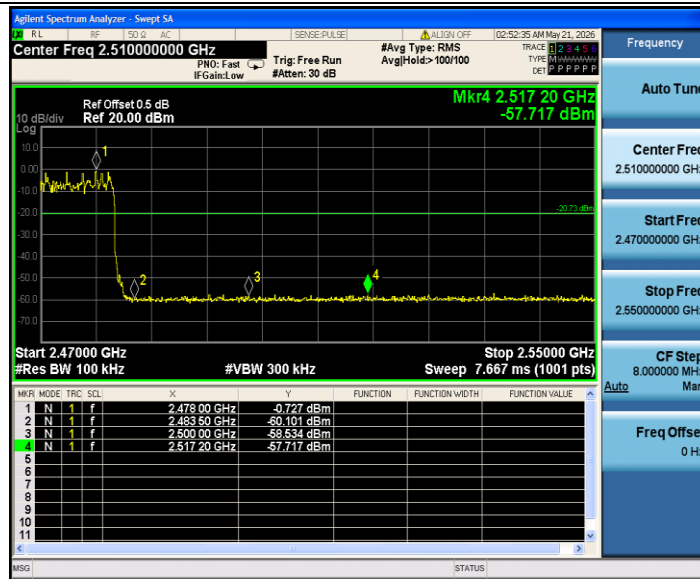
2DH5_Ant1_High_2480



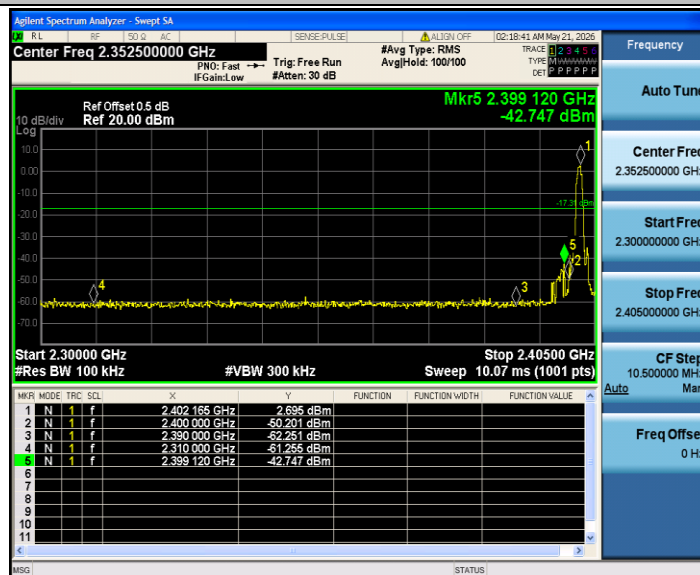
2DH5_Ant1_Low_Hop_2402



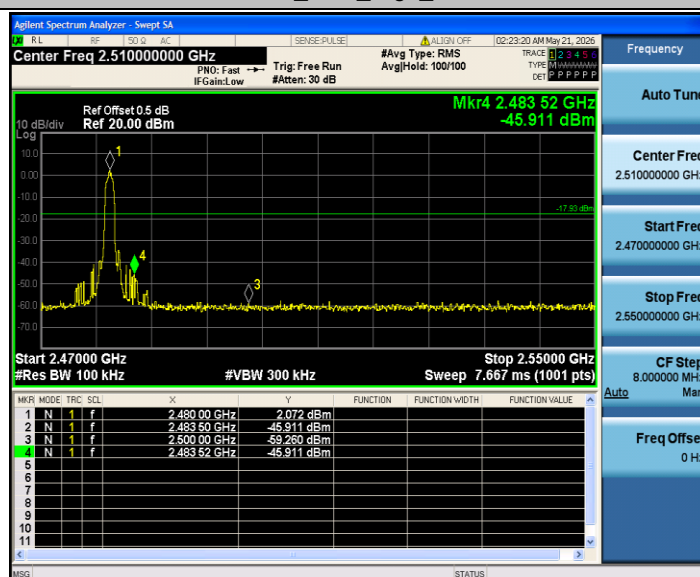
2DH5_Ant1_High_Hop_2480



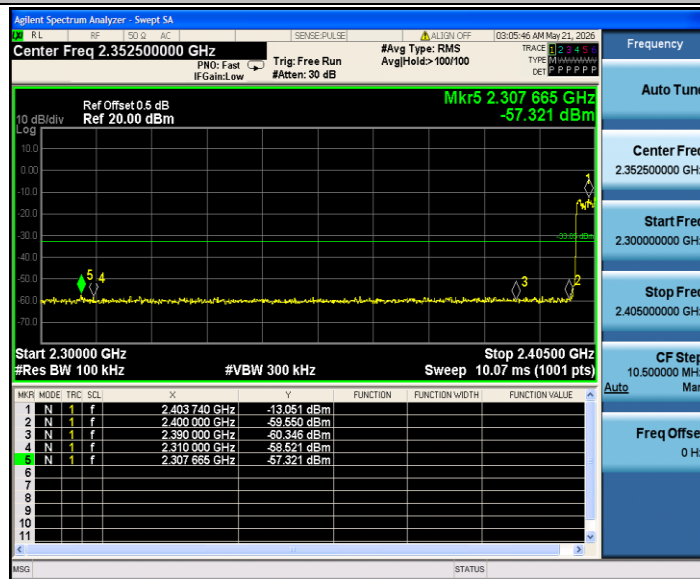
3DH5_Ant1_Low_2402



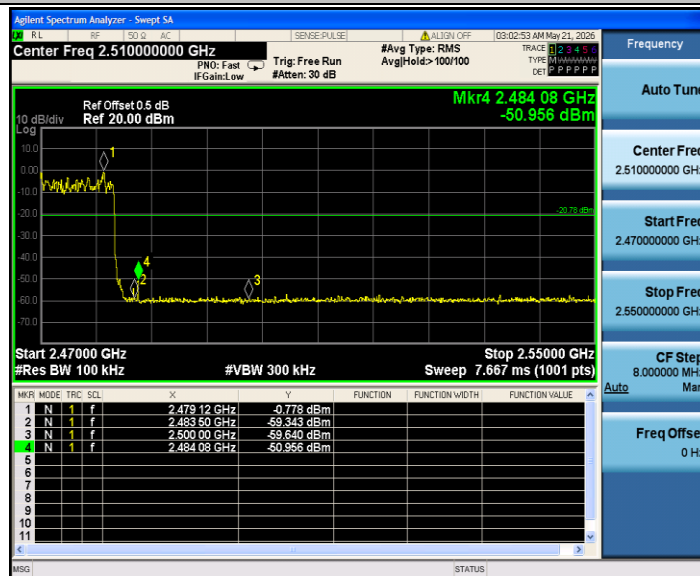
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

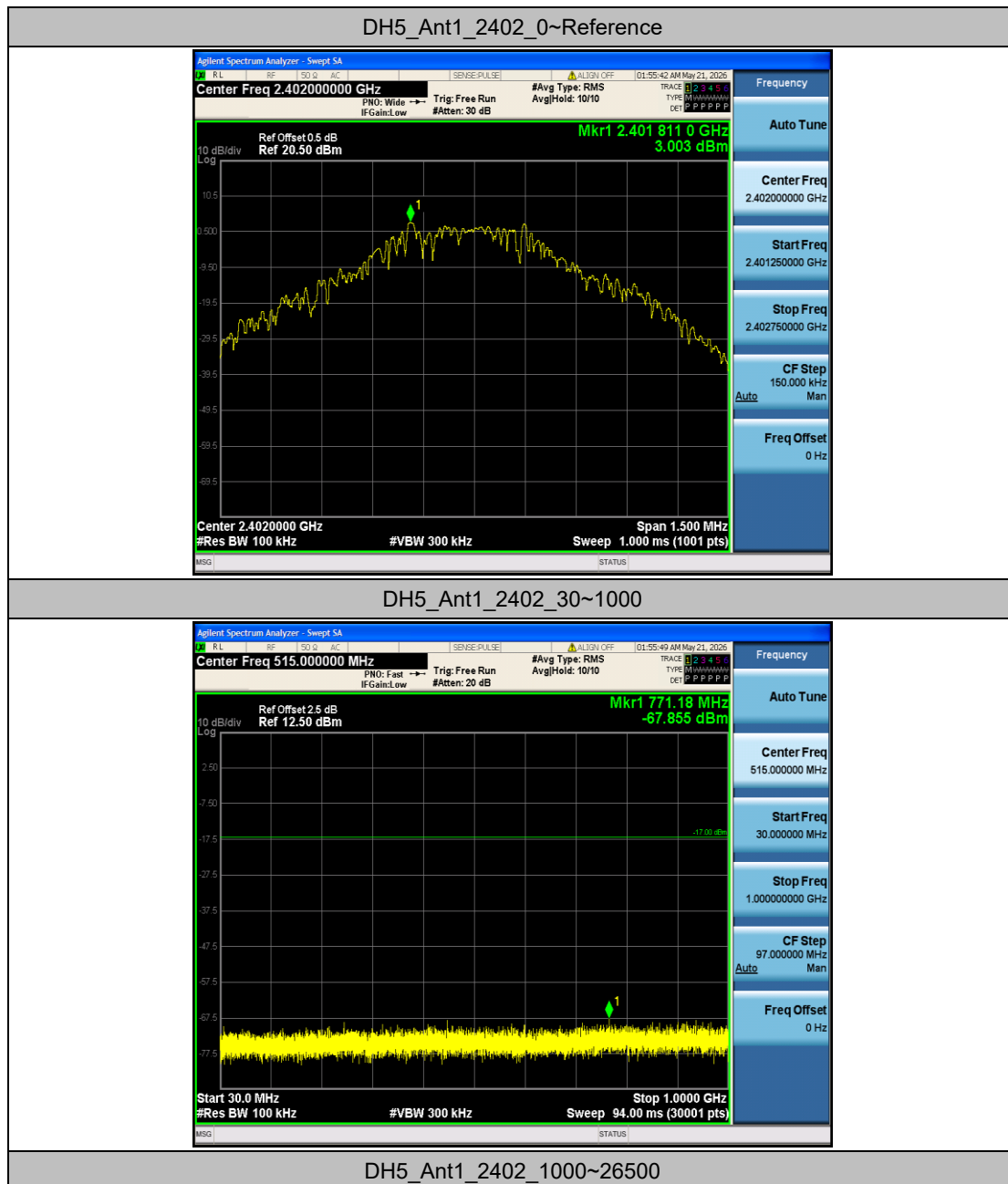


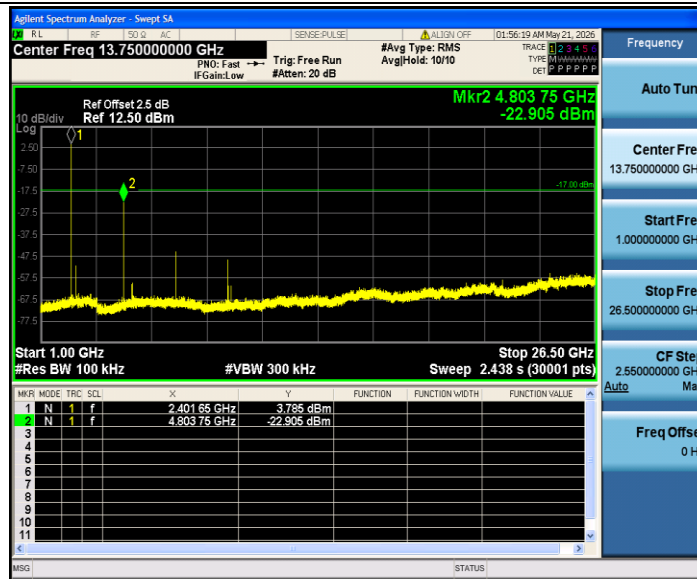
Appendix H: Conducted Spurious Emission

Test Result

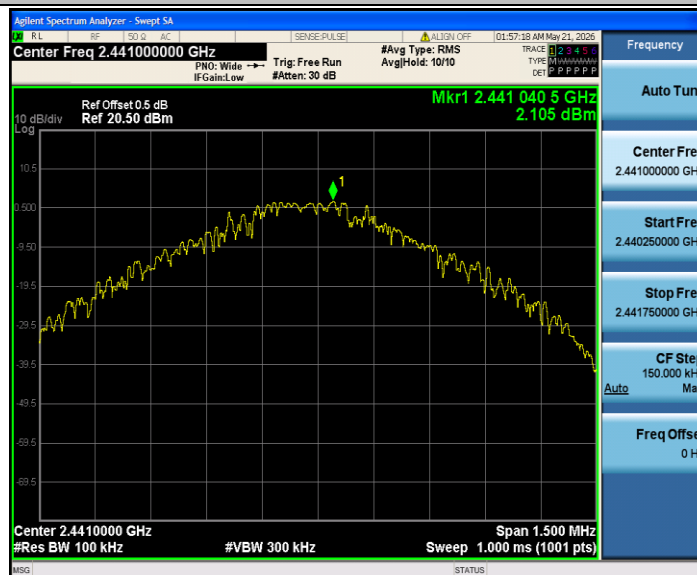
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	3.00	3.00	---	PASS
			30~1000	3.00	-67.86	≤-17	PASS
			1000~26500	3.00	-22.91	≤-17	PASS
		2441	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-64.08	≤-17.89	PASS
			1000~26500	2.11	-23.61	≤-17.89	PASS
		2480	Reference	1.99	1.99	---	PASS
			30~1000	1.99	-67.71	≤-18.01	PASS
			1000~26500	1.99	-23.83	≤-18.01	PASS
2DH5	Ant1	2402	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-68.49	≤-21.13	PASS
			1000~26500	-1.13	-25.38	≤-21.13	PASS
		2441	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-67.92	≤-21.31	PASS
			1000~26500	-1.31	-28.44	≤-21.31	PASS
		2480	Reference	-2.38	-2.38	---	PASS
			30~1000	-2.38	-68.04	≤-22.38	PASS
			1000~26500	-2.38	-28.52	≤-22.38	PASS
3DH5	Ant1	2402	Reference	2.86	2.86	---	PASS
			30~1000	2.86	-67.8	≤-17.14	PASS
			1000~26500	2.86	-27.89	≤-17.14	PASS
		2441	Reference	1.84	1.84	---	PASS
			30~1000	1.84	-67.48	≤-18.16	PASS
			1000~26500	1.84	-27.04	≤-18.16	PASS
		2480	Reference	1.38	1.38	---	PASS
			30~1000	1.38	-68.2	≤-18.62	PASS
			1000~26500	1.38	-26.59	≤-18.62	PASS

Test Graphs

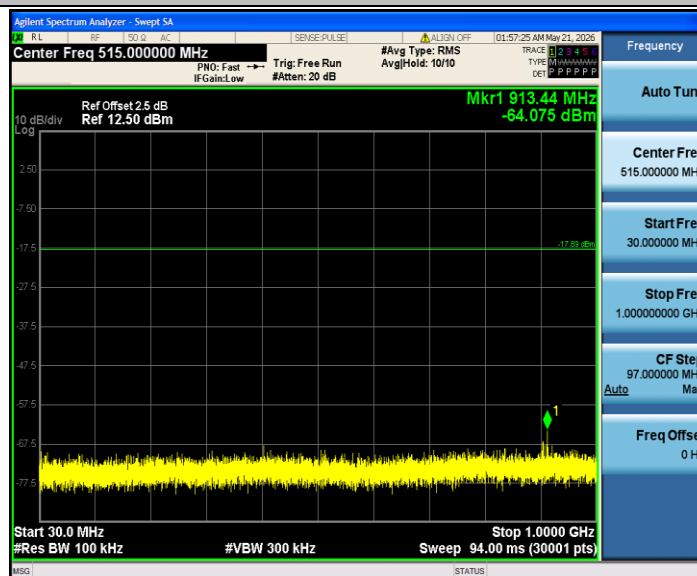




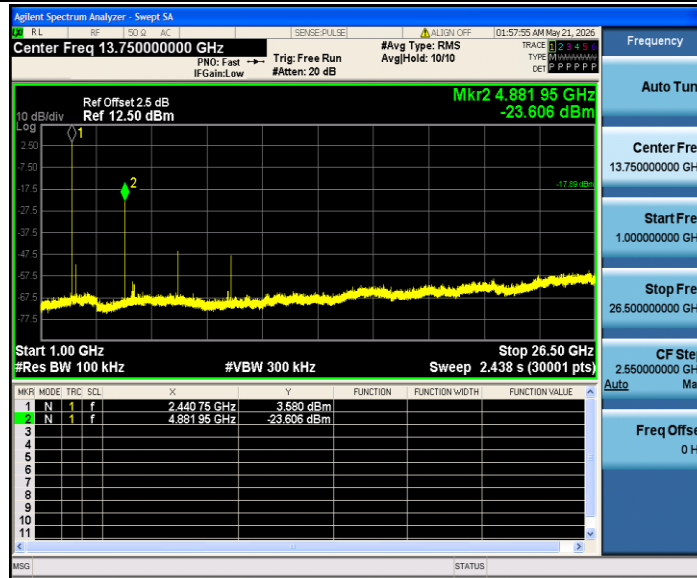
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



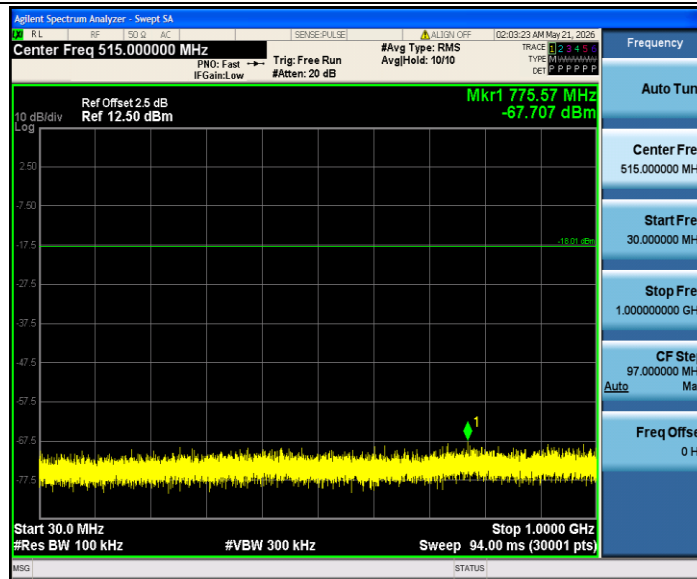
DH5_Ant1_2441_1000~26500



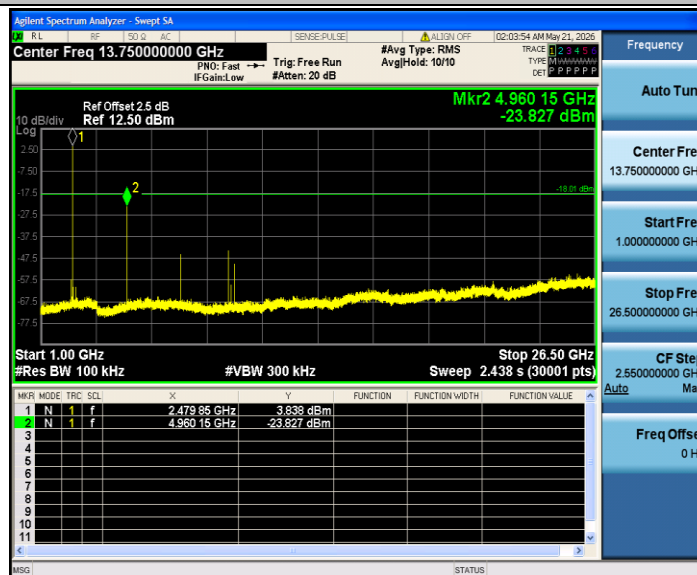
DH5_Ant1_2480_0~Reference



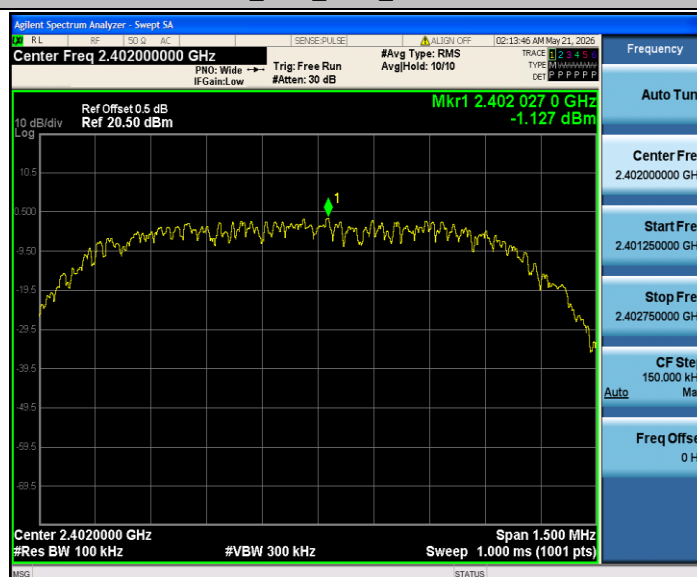
DH5_Ant1_2480_30~1000



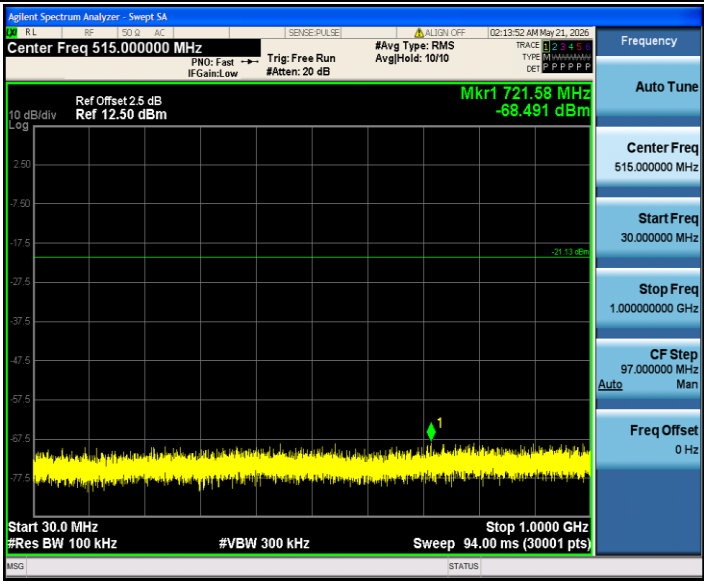
DH5_Ant1_2480_1000~26500



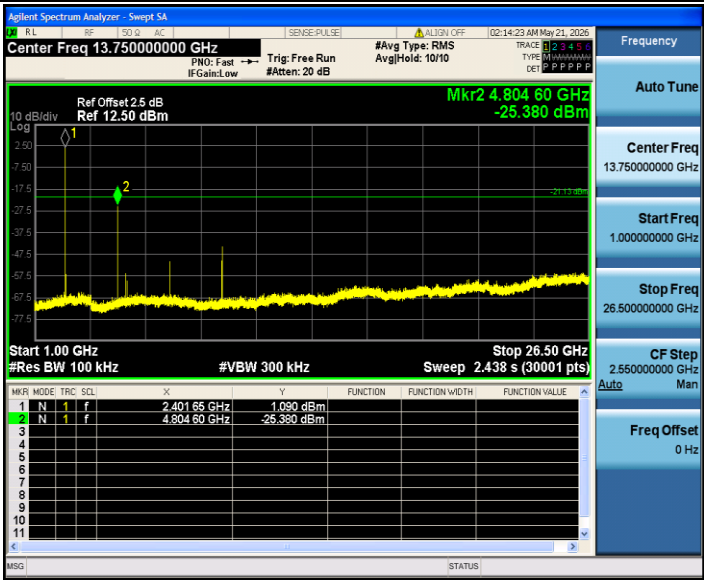
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference