

FCC Appendix RF Test Data for BT

FCC ID : 2AOMX-PBX-831

Company : QFX Inc.

EUT : Bluetooth speaker

Model Number : PBX-831

Report No. : CTA26060600101

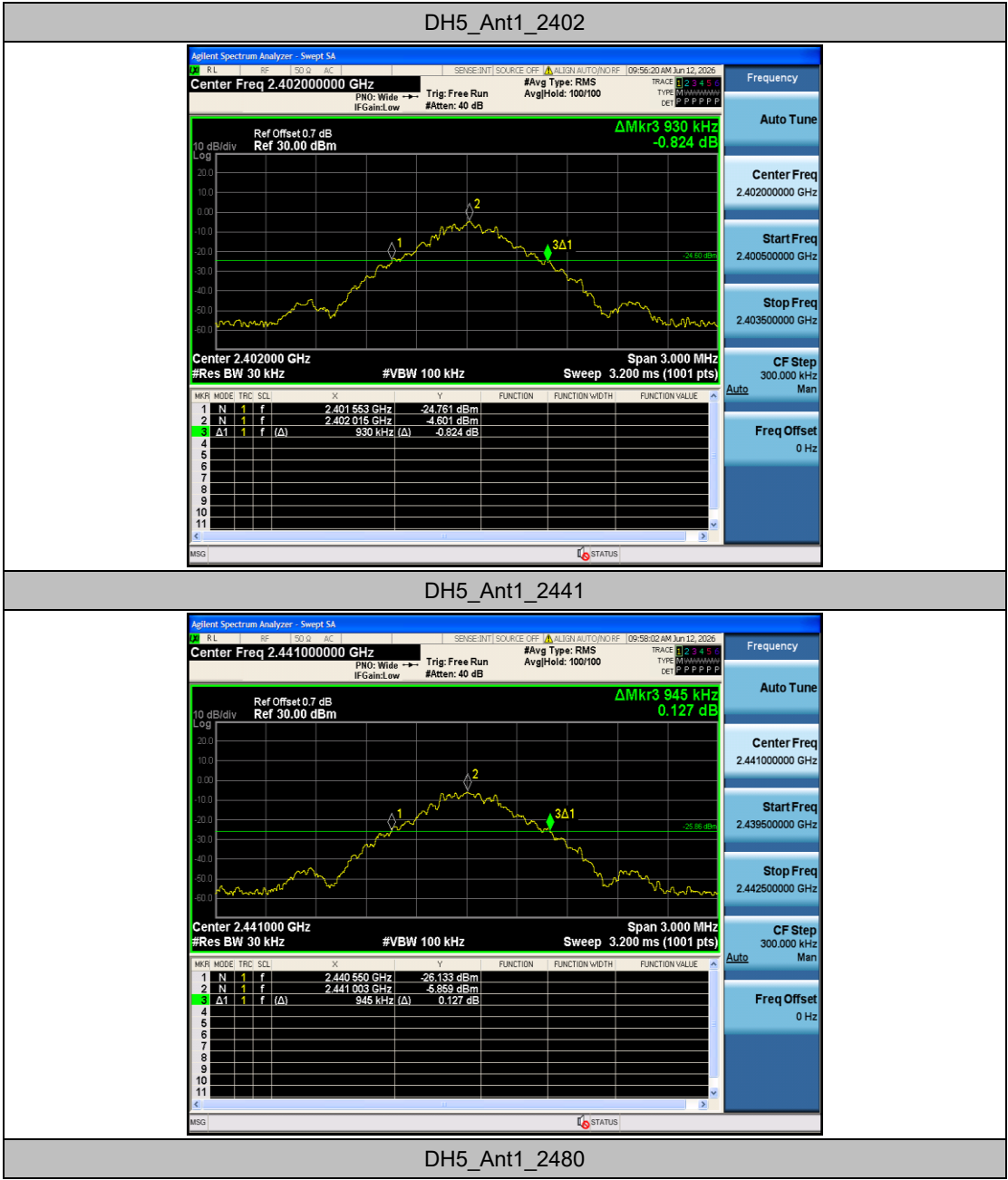
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.930	2401.553	2402.483	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.945	2479.550	2480.495	---	---
2DH5	Ant1	2402	1.278	2401.385	2402.663	---	---
		2441	1.290	2440.376	2441.666	---	---
		2480	1.320	2479.349	2480.669	---	---
3DH5	Ant1	2402	1.278	2401.361	2402.639	---	---
		2441	1.311	2440.358	2441.669	---	---
		2480	1.314	2479.358	2480.672	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

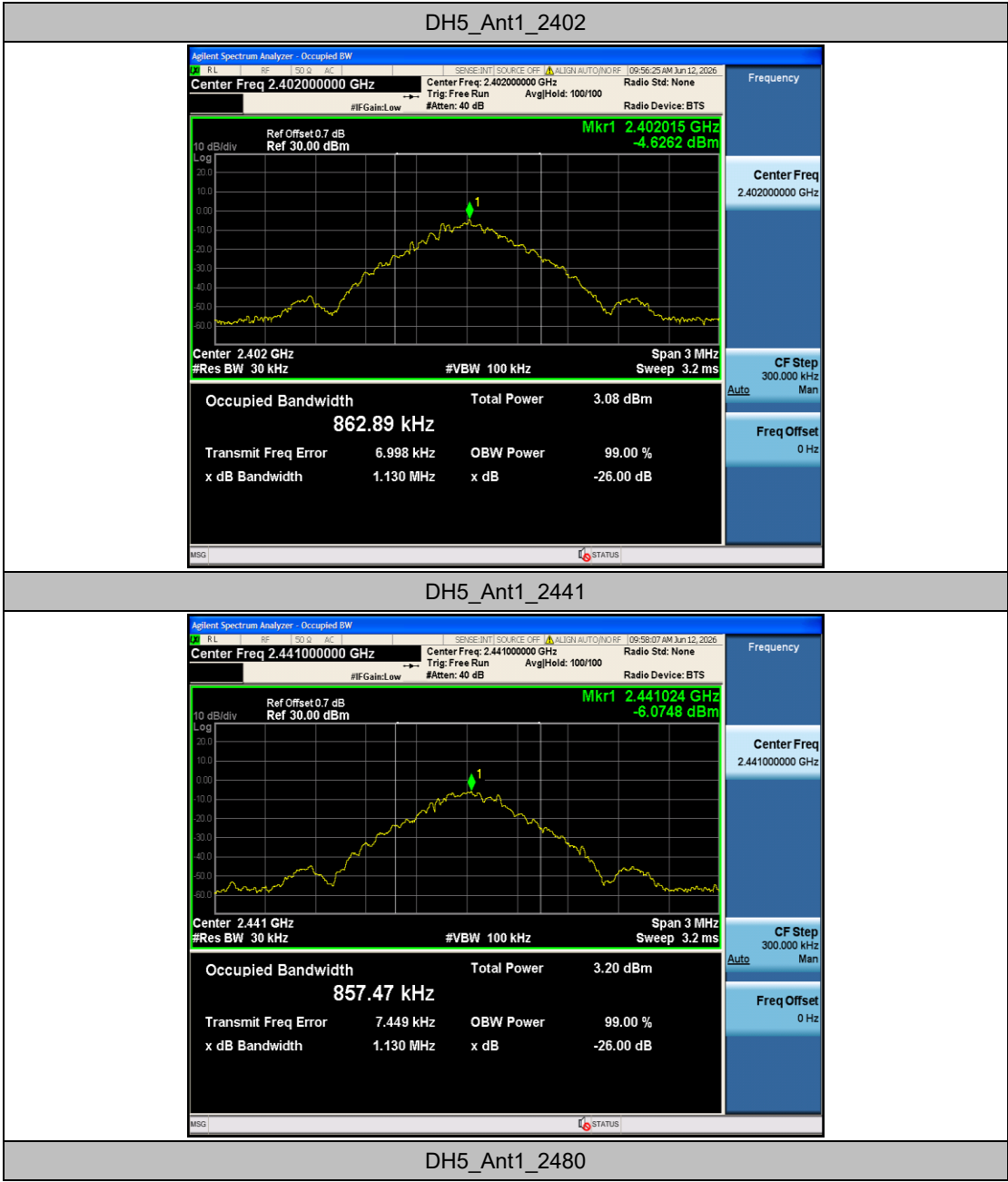


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86289	2401.5756	2402.4384	---	---
		2441	0.85747	2440.5787	2441.4362	---	---
		2480	0.86605	2479.5772	2480.4433	---	---
2DH5	Ant1	2402	1.1961	2401.4123	2402.6084	---	---
		2441	1.1778	2440.4218	2441.5996	---	---
		2480	1.1874	2479.4174	2480.6048	---	---
3DH5	Ant1	2402	1.1726	2401.4275	2402.6001	---	---
		2441	1.1920	2440.4182	2441.6102	---	---
		2480	1.1904	2479.4169	2480.6073	---	---

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	-3.10	≤20.97	PASS
		2441	-3.19	≤20.97	PASS
		2480	-3.48	≤20.97	PASS
2DH5	Ant1	2402	-0.44	≤20.97	PASS
		2441	-0.64	≤20.97	PASS
		2480	-0.90	≤20.97	PASS
3DH5	Ant1	2402	-0.05	≤20.97	PASS
		2441	-0.27	≤20.97	PASS
		2480	-0.44	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.01	≥ 0.945	PASS
2DH5	Ant1	Hop	1	≥ 0.880	PASS
3DH5	Ant1	Hop	1.106	≥ 0.876	PASS

Test Graphs



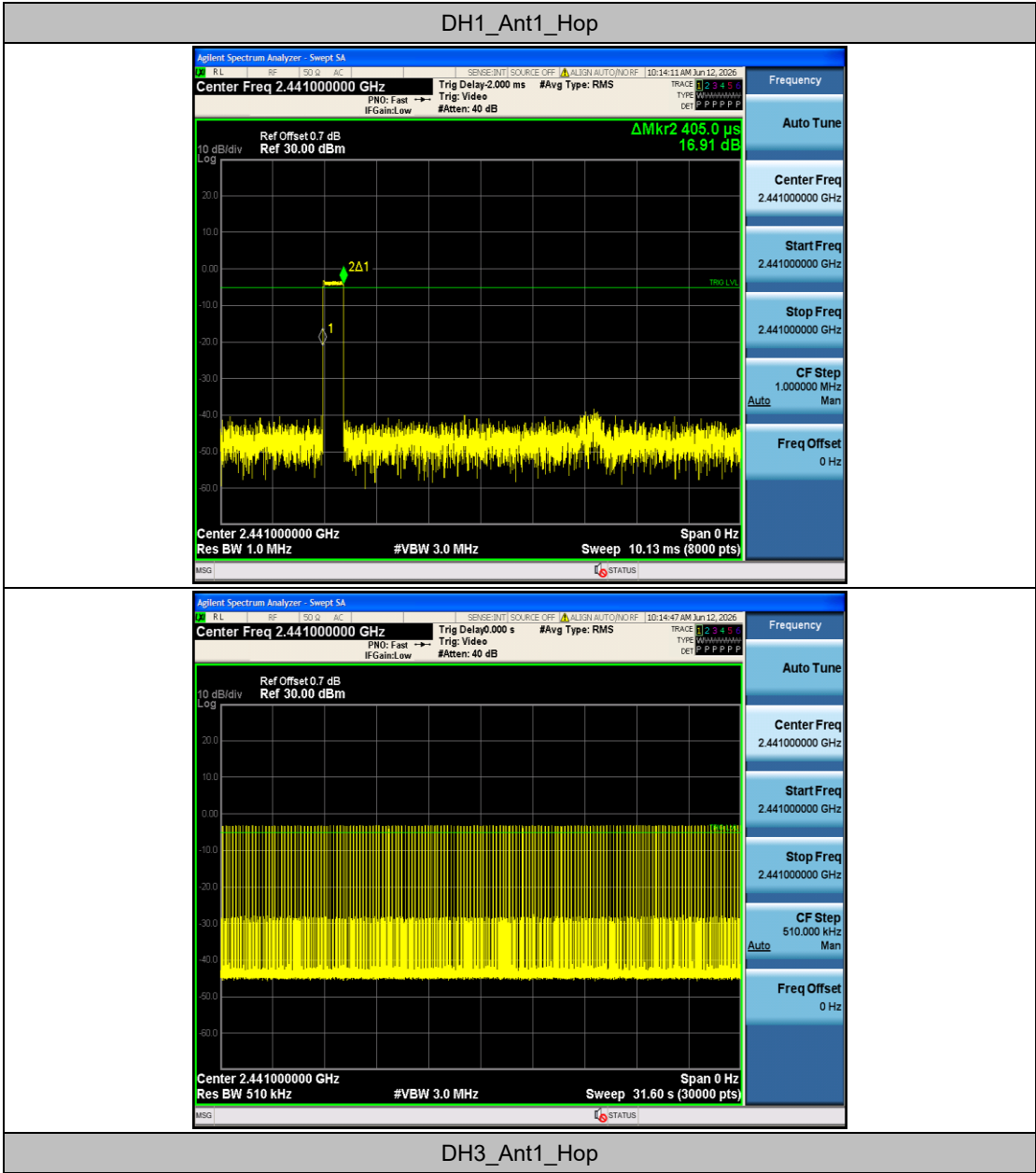


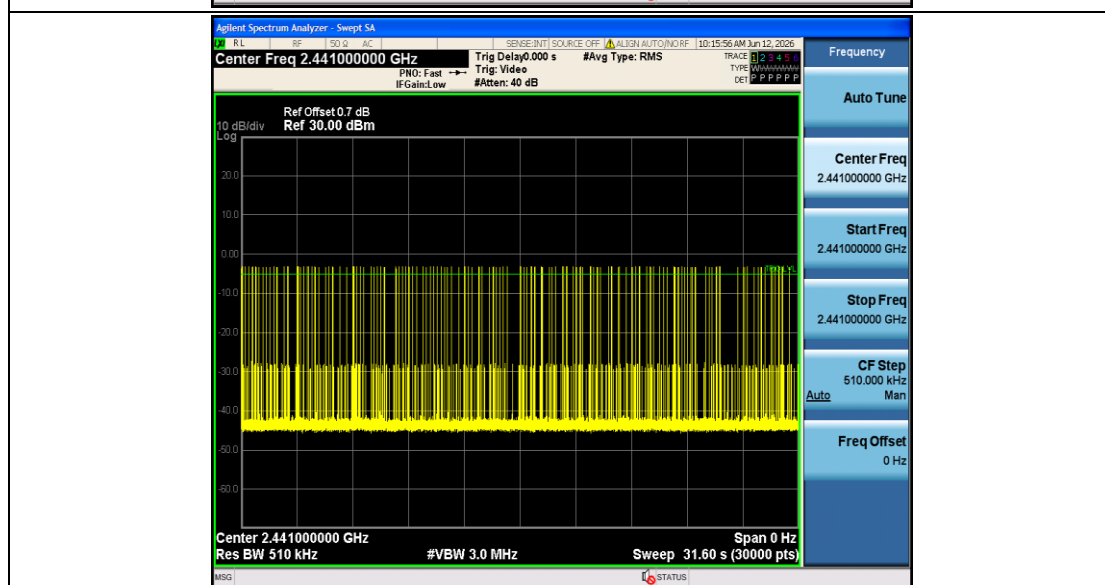
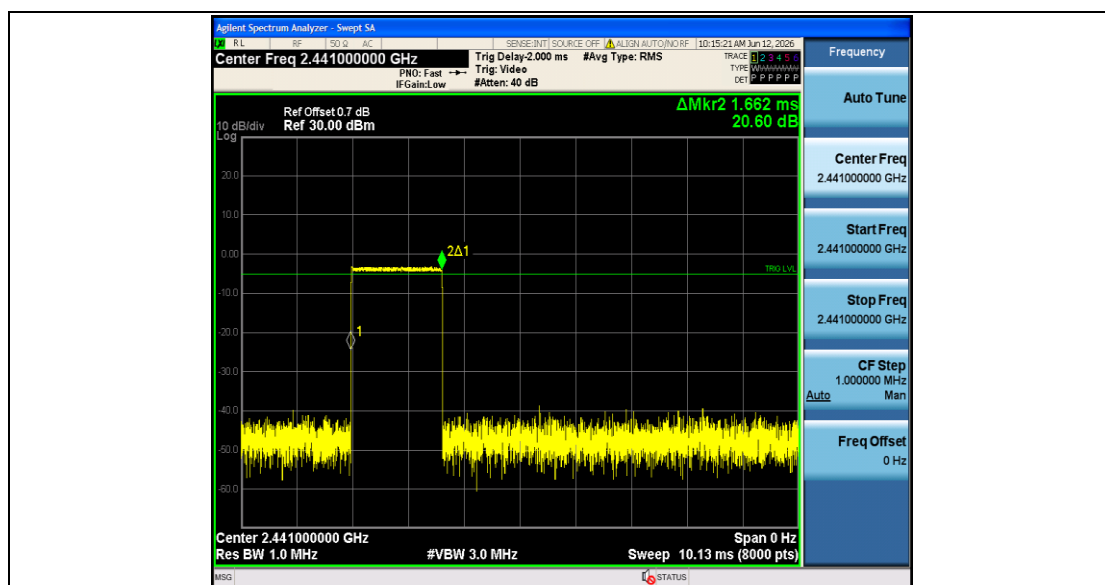
Appendix E: Time of occupancy

Test Result

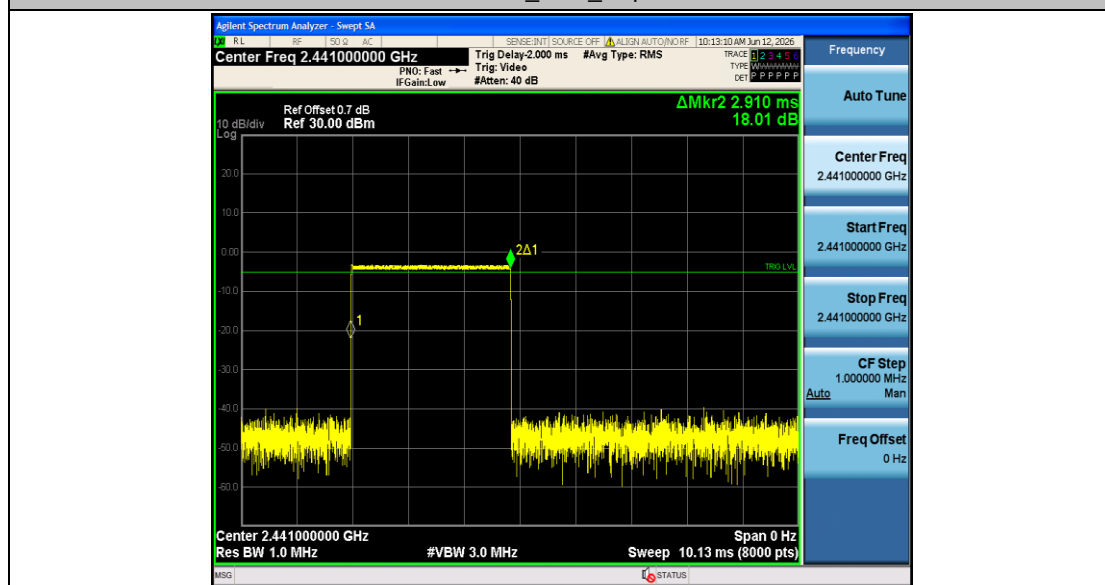
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	317	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.662	159	0.264	≤0.4	PASS
DH5	Ant1	Hop	2.910	107	0.311	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.667	154	0.257	≤0.4	PASS
2DH5	Ant1	Hop	2.915	123	0.359	≤0.4	PASS
3DH1	Ant1	Hop	0.415	316	0.131	≤0.4	PASS
3DH3	Ant1	Hop	1.666	158	0.263	≤0.4	PASS
3DH5	Ant1	Hop	2.916	102	0.297	≤0.4	PASS

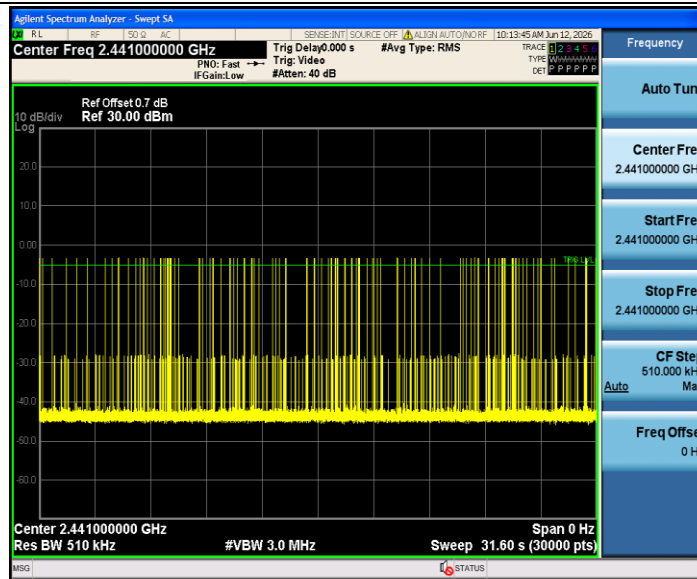
Test Graphs



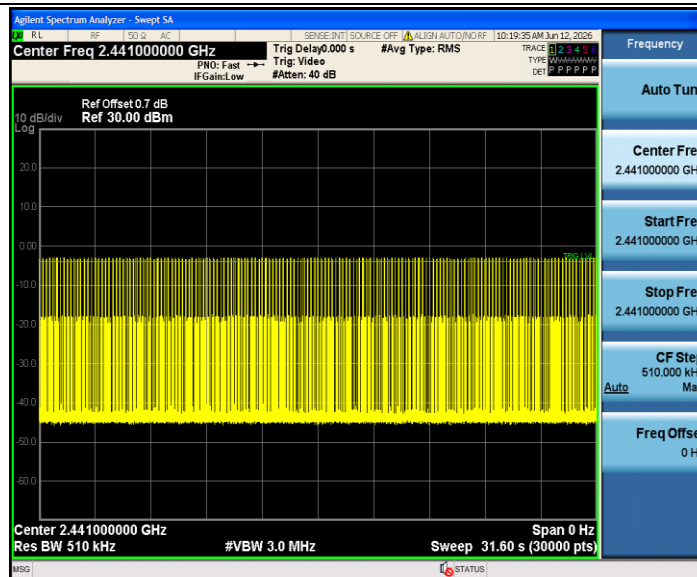
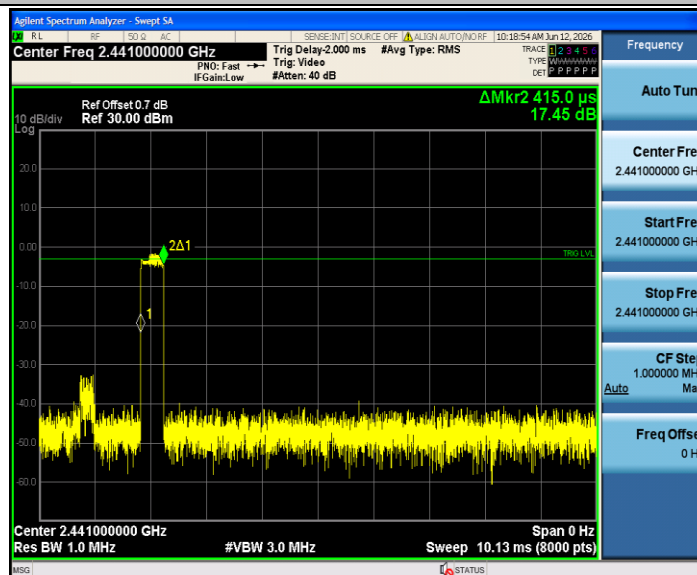


DH5_Ant1_Hop

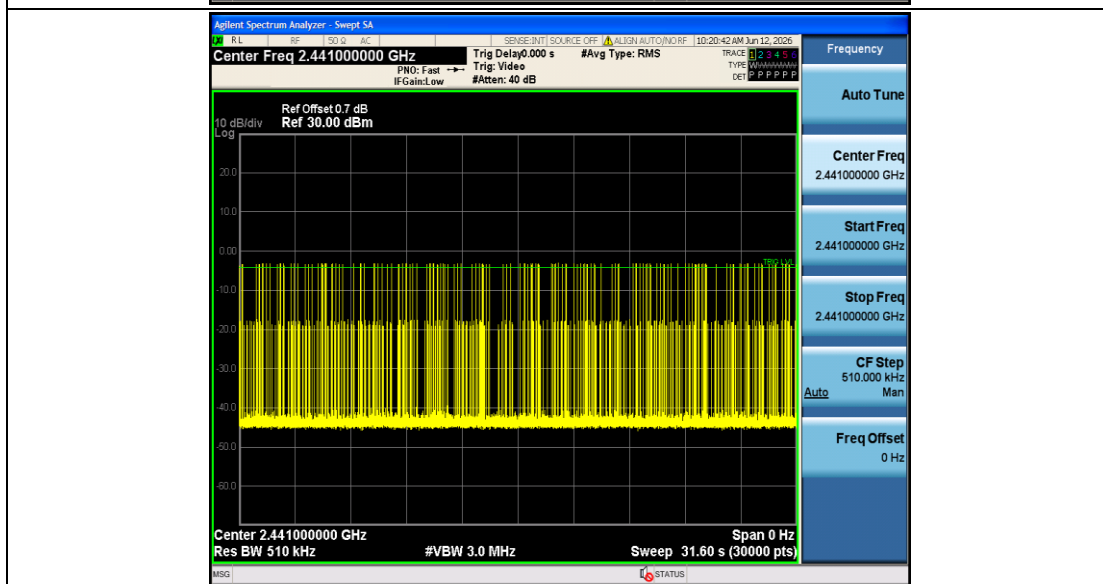
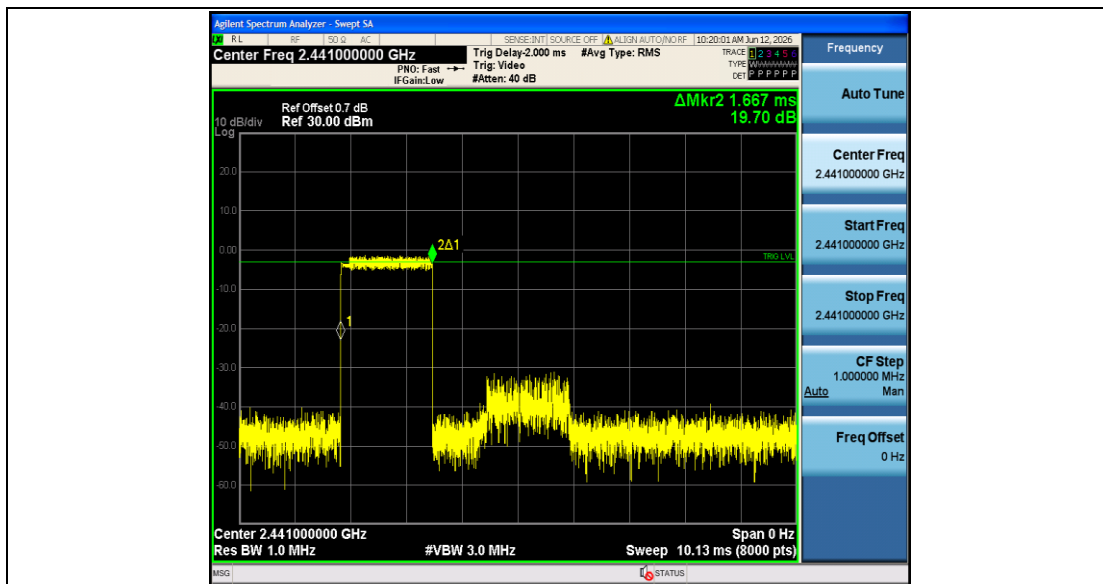




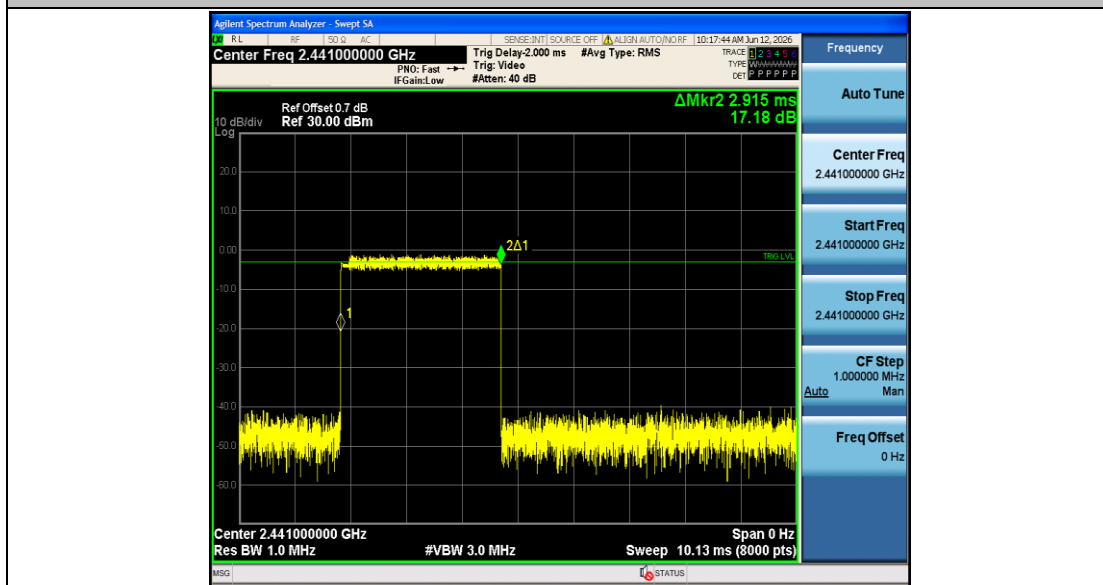
2DH1_Ant1_Hop

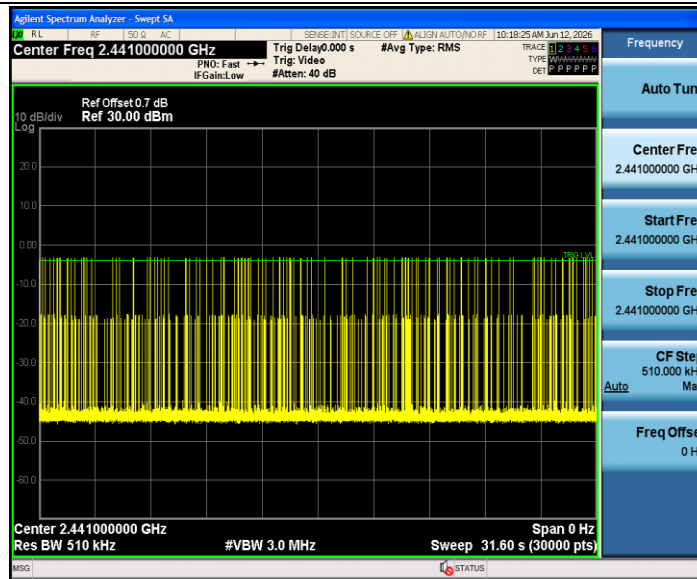


2DH3_Ant1_Hop

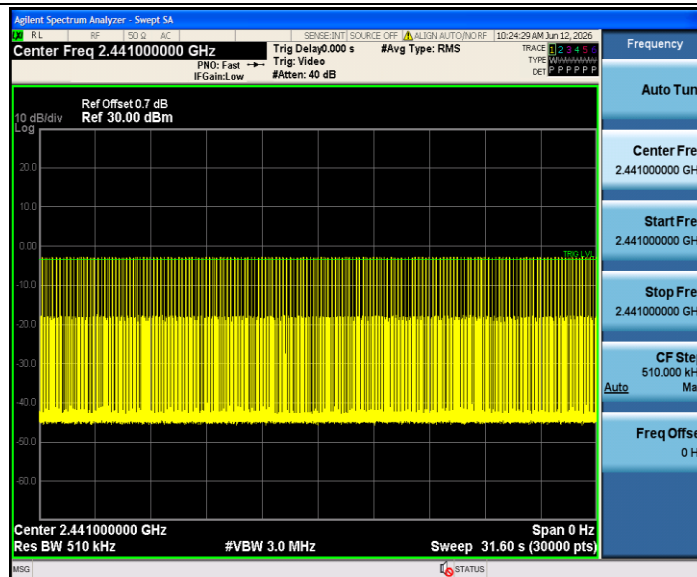
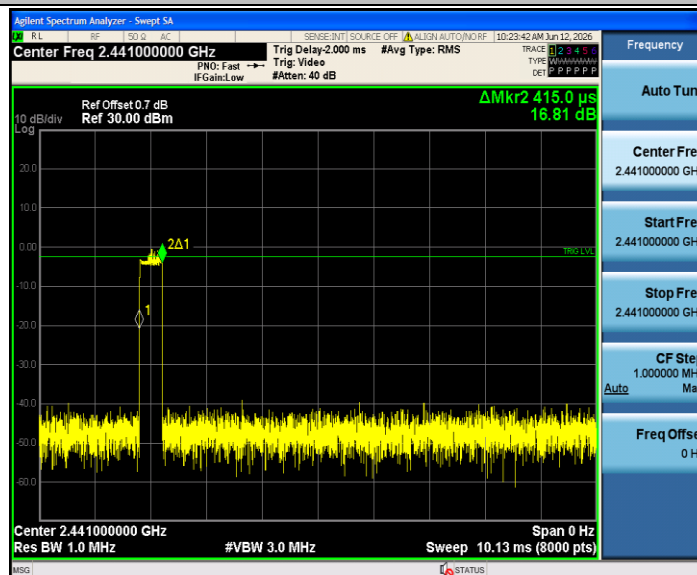


2DH5_Ant1_Hop

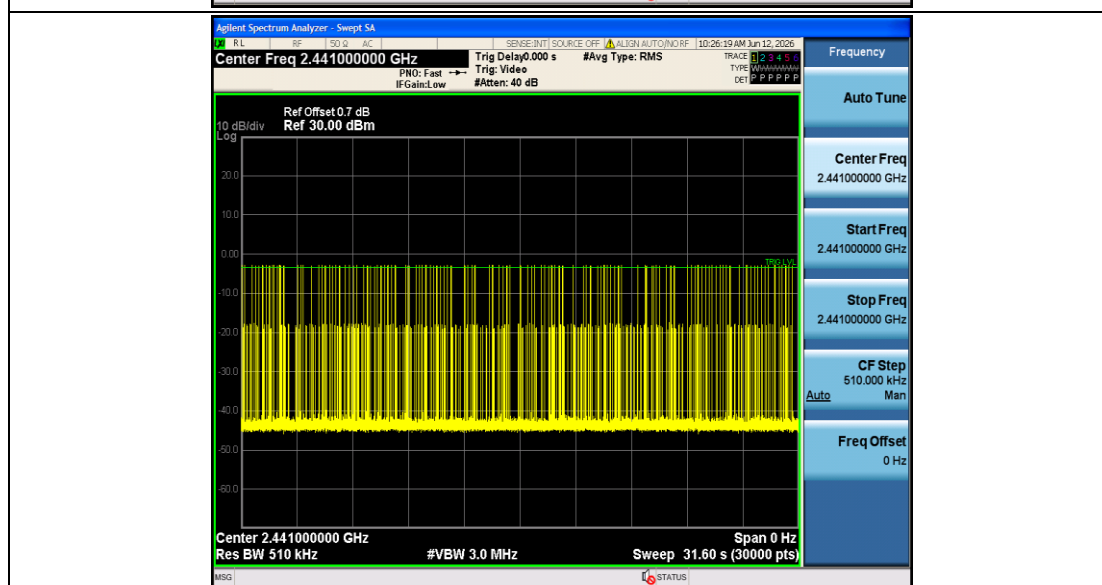
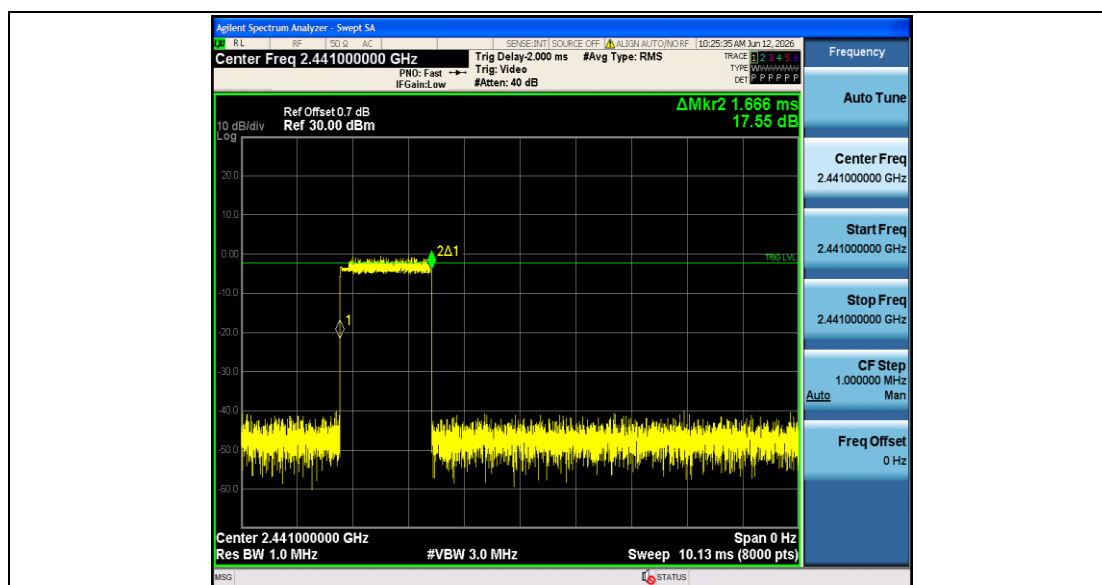




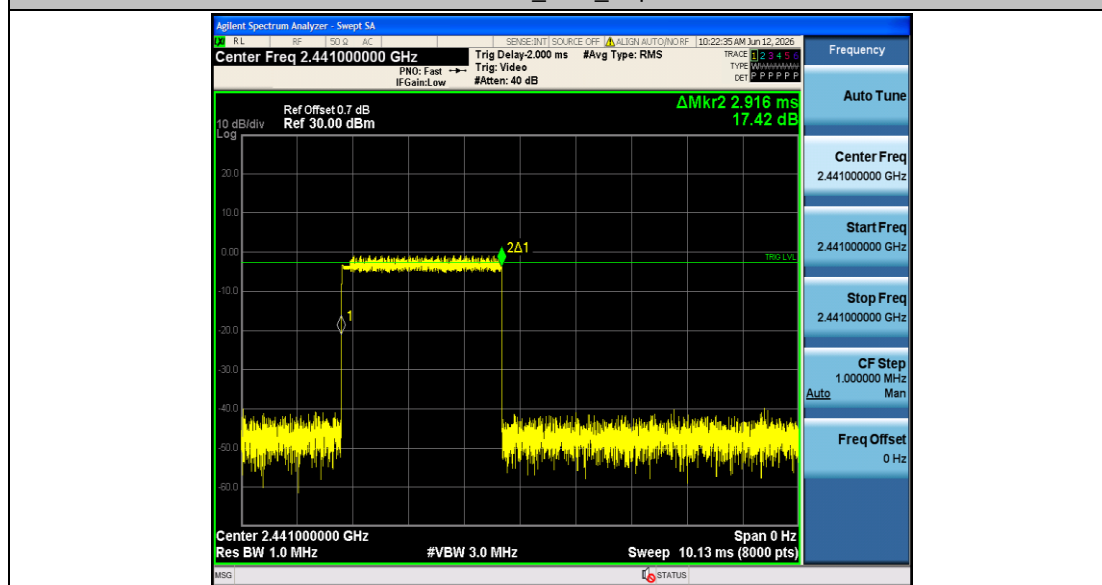
3DH1_Ant1_Hop

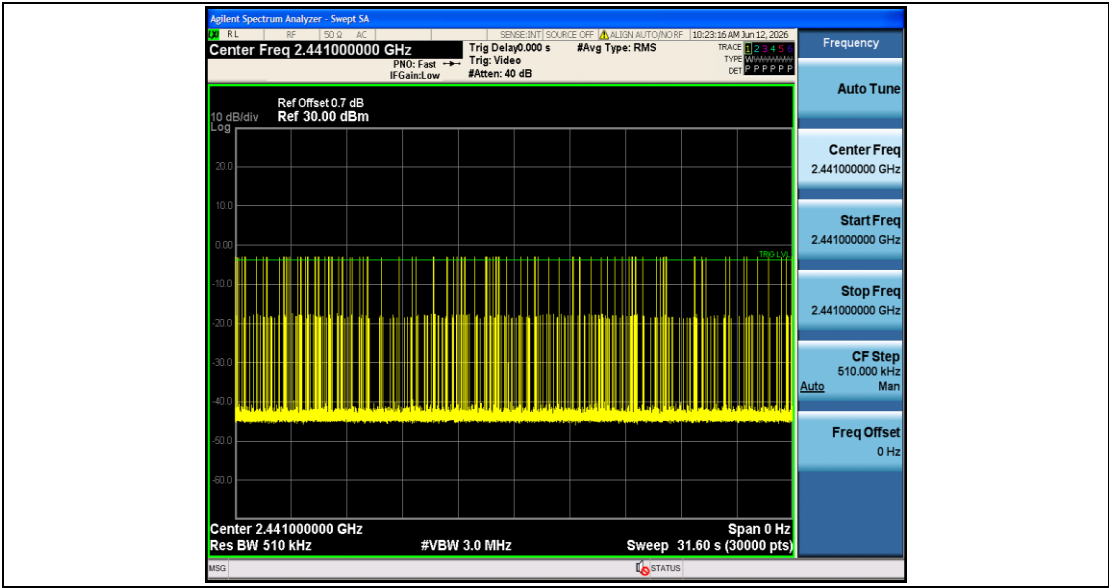


3DH3_Ant1_Hop



3DH5_Ant1_Hop



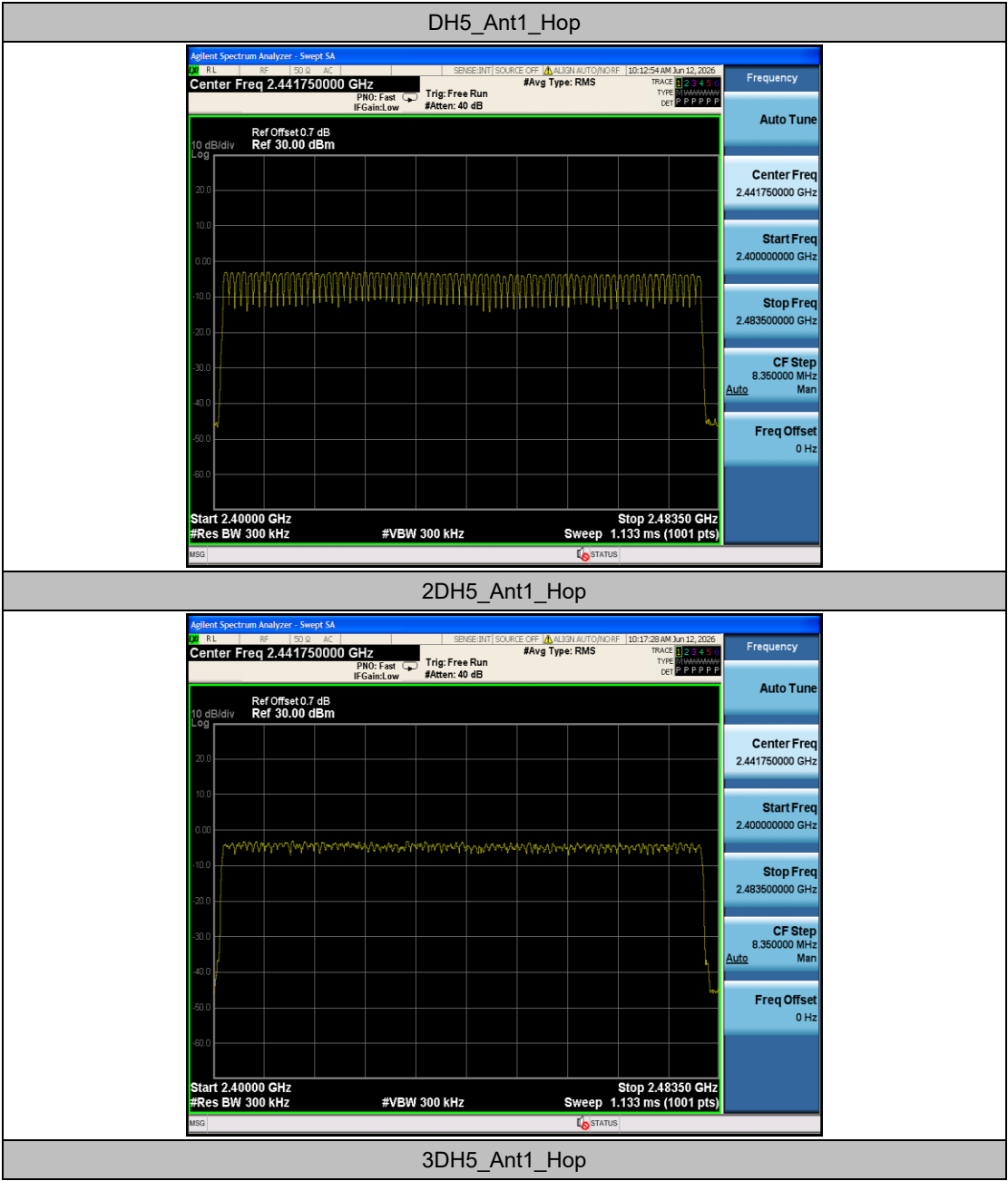


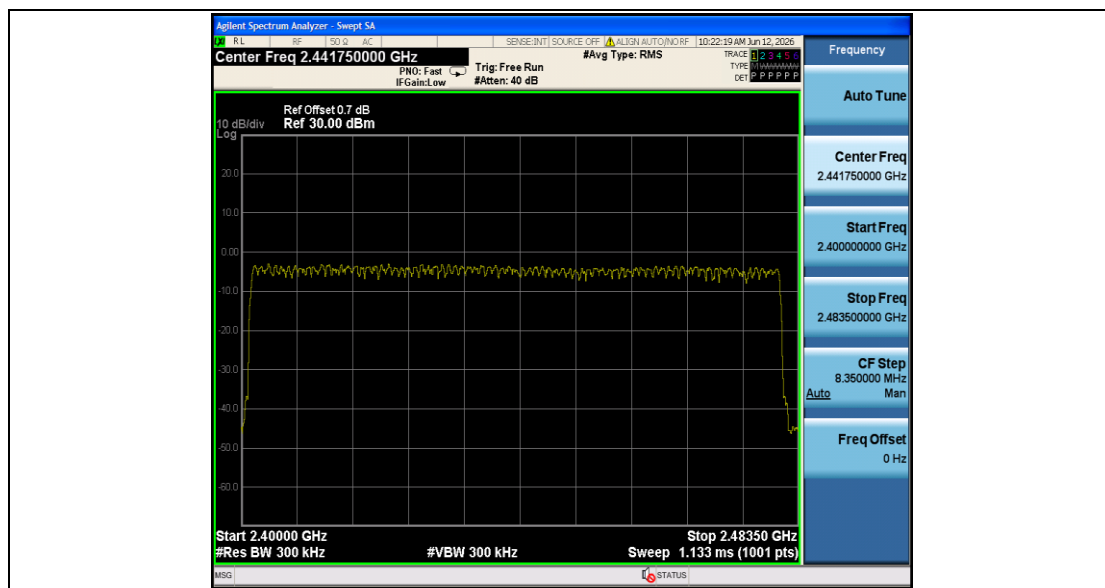
Appendix F: Number of hopping channels

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



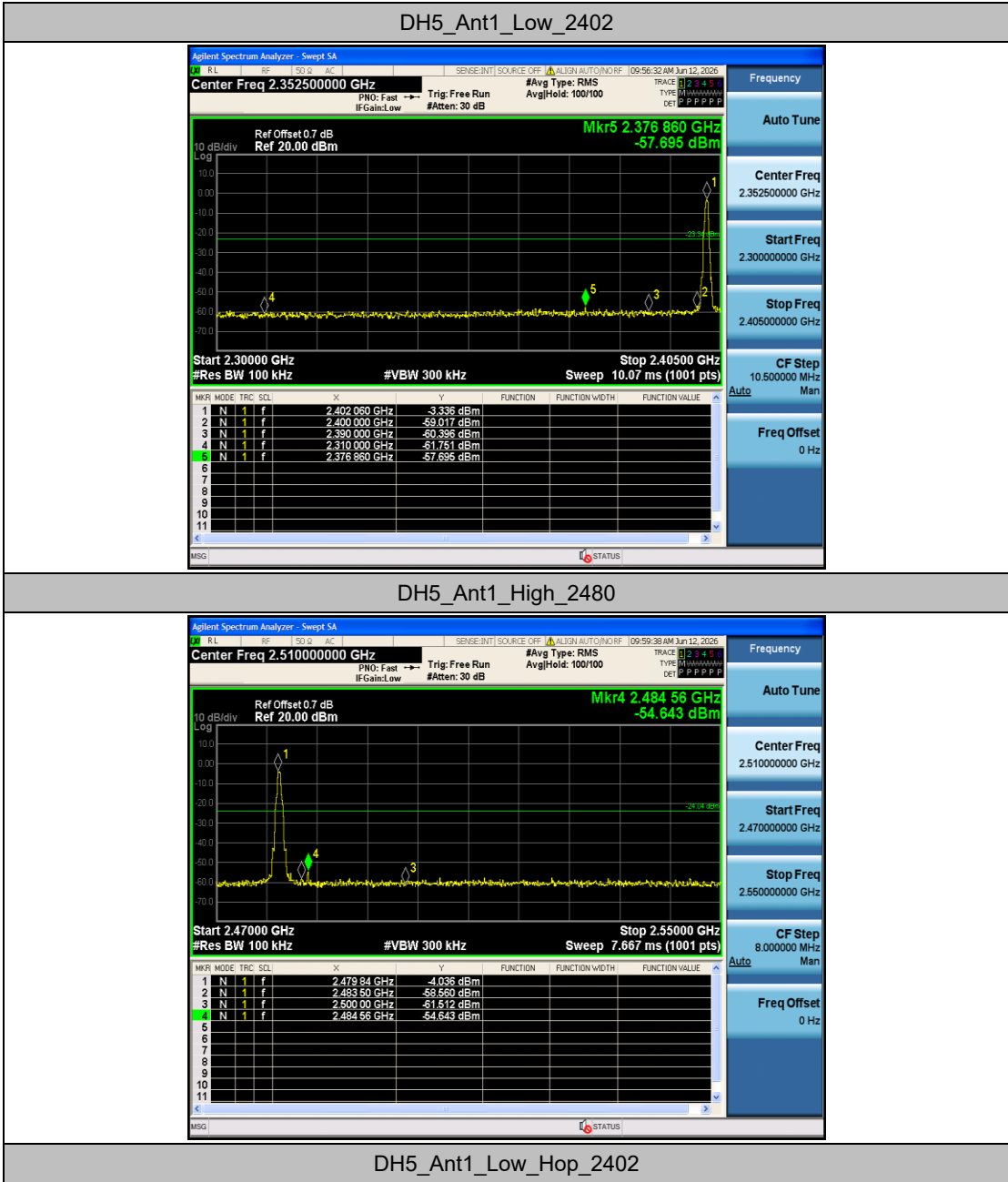


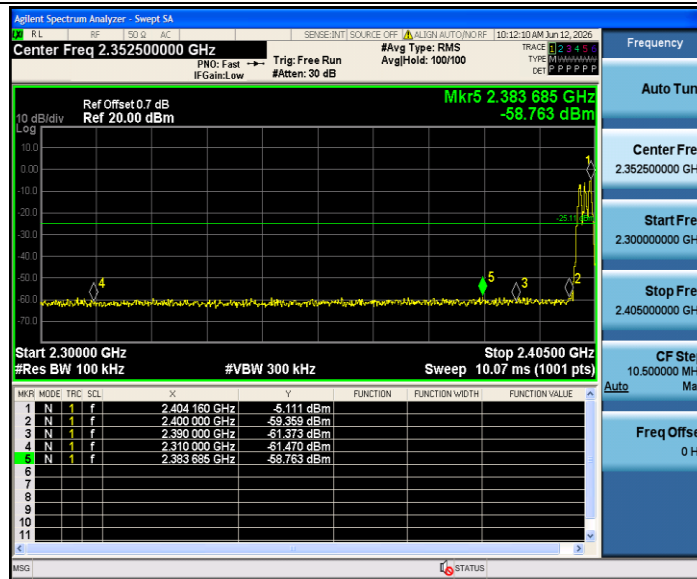
Appendix G: Band edge measurements

Test Result

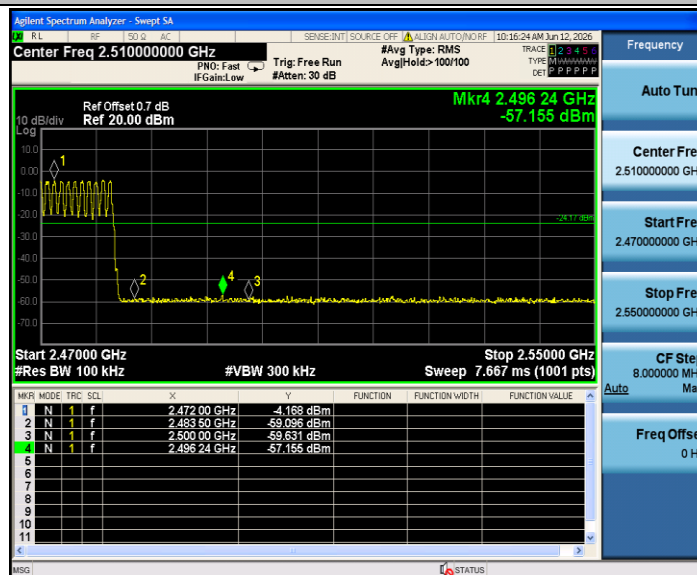
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.34	-57.7	≤ -23.34	PASS
		High	2480	-4.04	-54.64	≤ -24.04	PASS
		Low	Hop_2402	-5.11	-58.76	≤ -25.11	PASS
		High	Hop_2480	-4.17	-57.16	≤ -24.17	PASS
2DH5	Ant1	Low	2402	-4.53	-55.75	≤ -24.53	PASS
		High	2480	-4.32	-57.07	≤ -24.32	PASS
		Low	Hop_2402	-3.24	-57.44	≤ -23.24	PASS
		High	Hop_2480	-4.65	-57.33	≤ -24.65	PASS
3DH5	Ant1	Low	2402	-4.50	-57.79	≤ -24.5	PASS
		High	2480	-3.61	-57.69	≤ -23.61	PASS
		Low	Hop_2402	-4.74	-57.38	≤ -24.74	PASS
		High	Hop_2480	-6.43	-57.42	≤ -26.43	PASS

Test Graphs

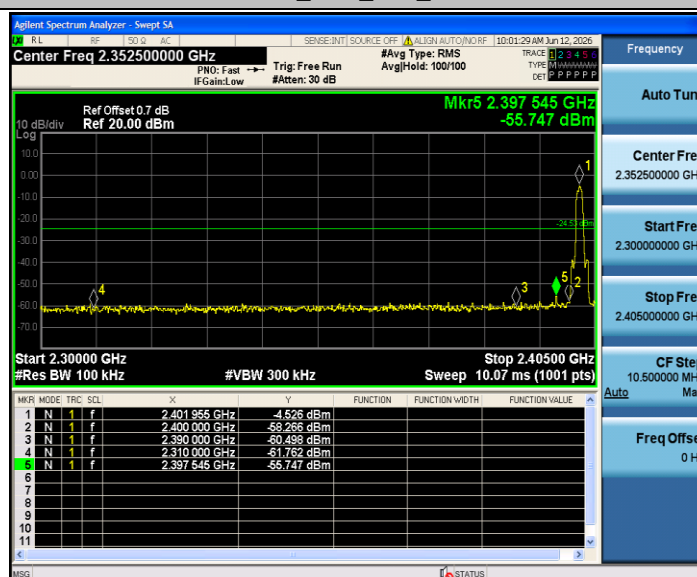




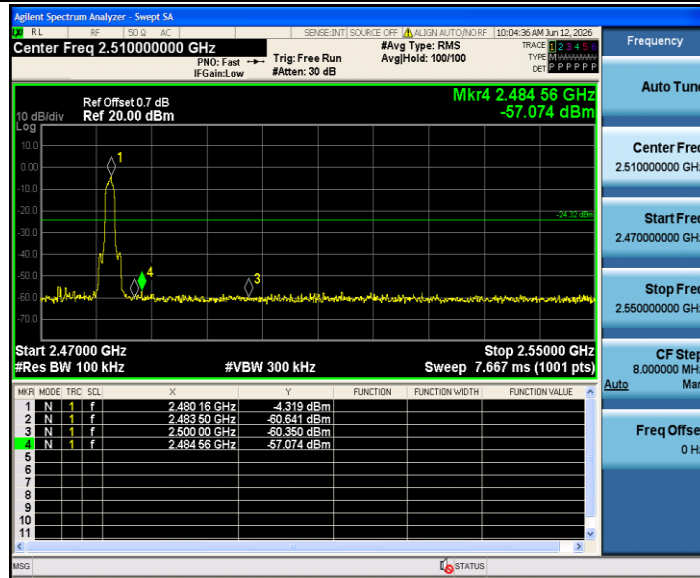
DH5_Ant1_High_Hop_2480



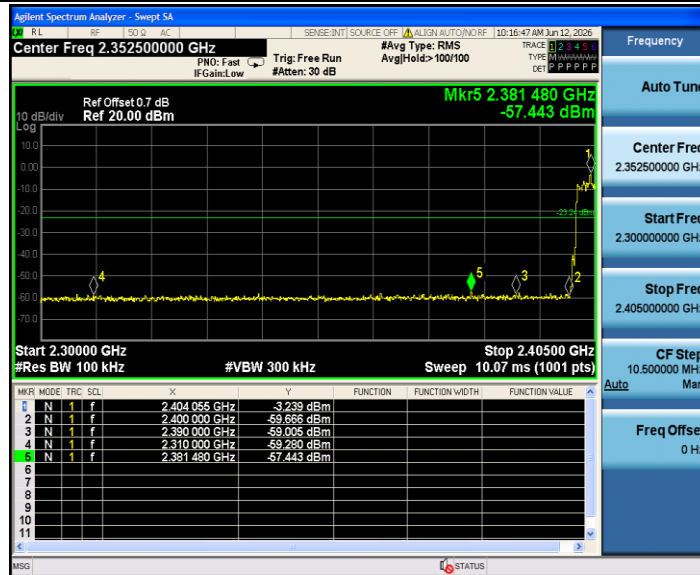
2DH5_Ant1_Low_2402



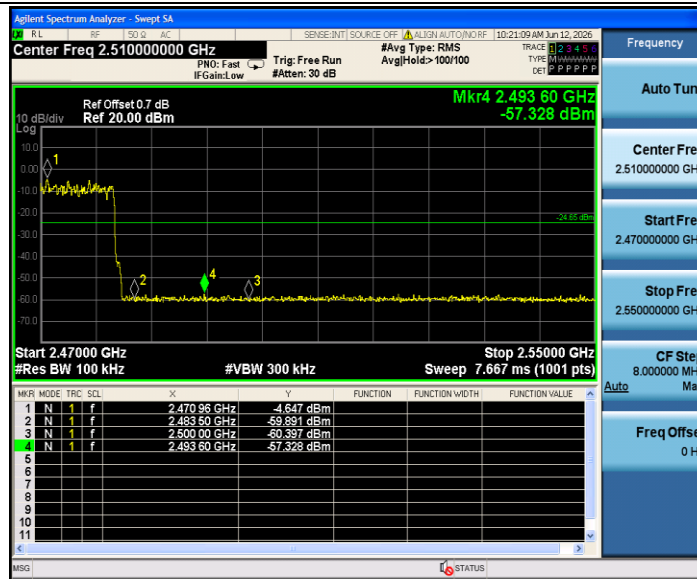
2DH5_Ant1_High_2480



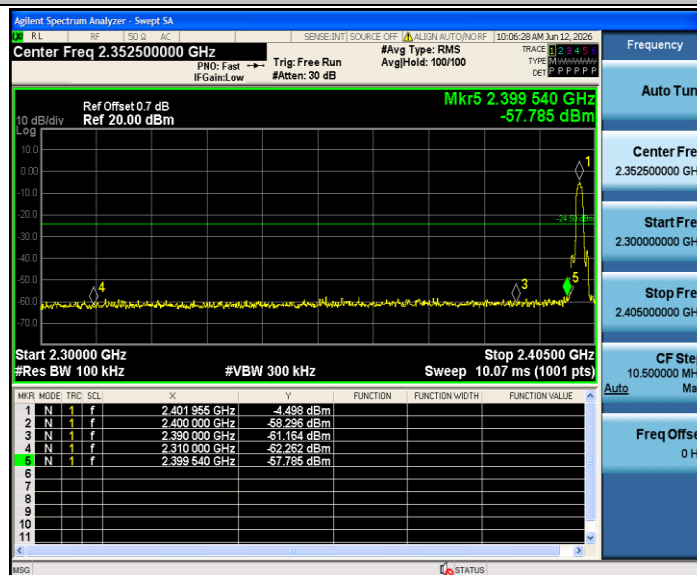
2DH5_Ant1_Low_Hop_2402



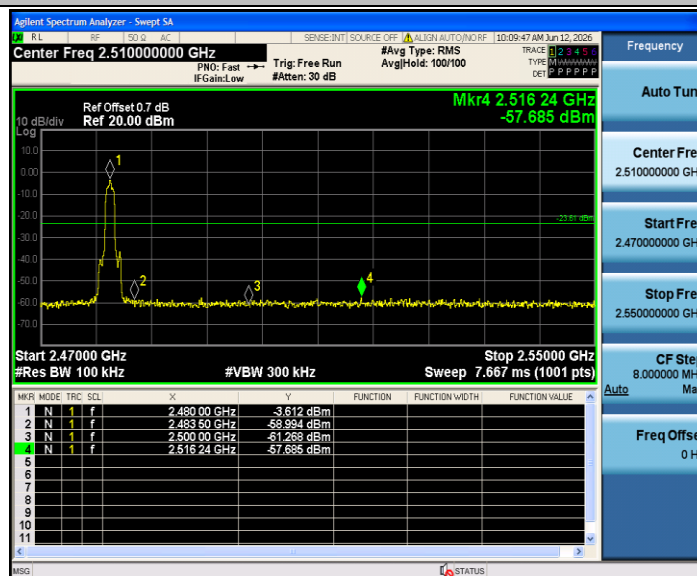
2DH5_Ant1_High_Hop_2480



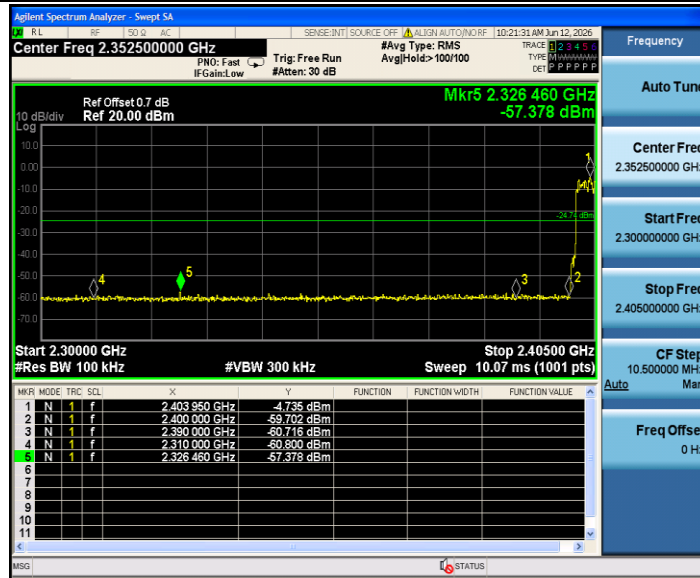
3DH5_Ant1_Low_2402



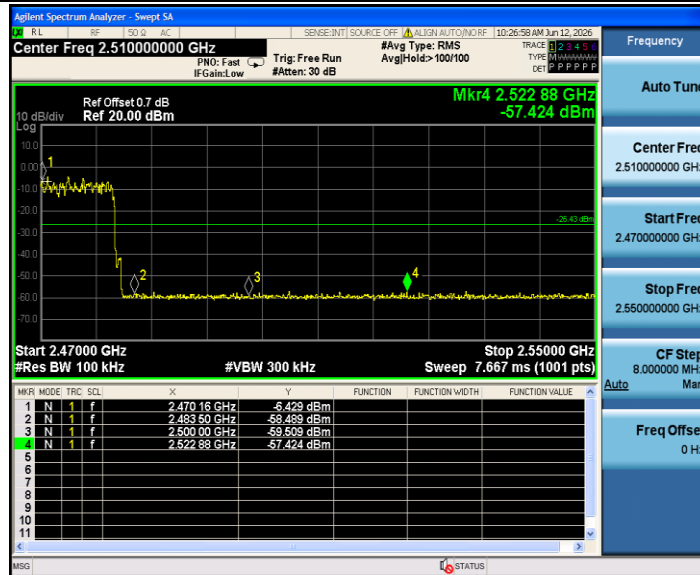
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

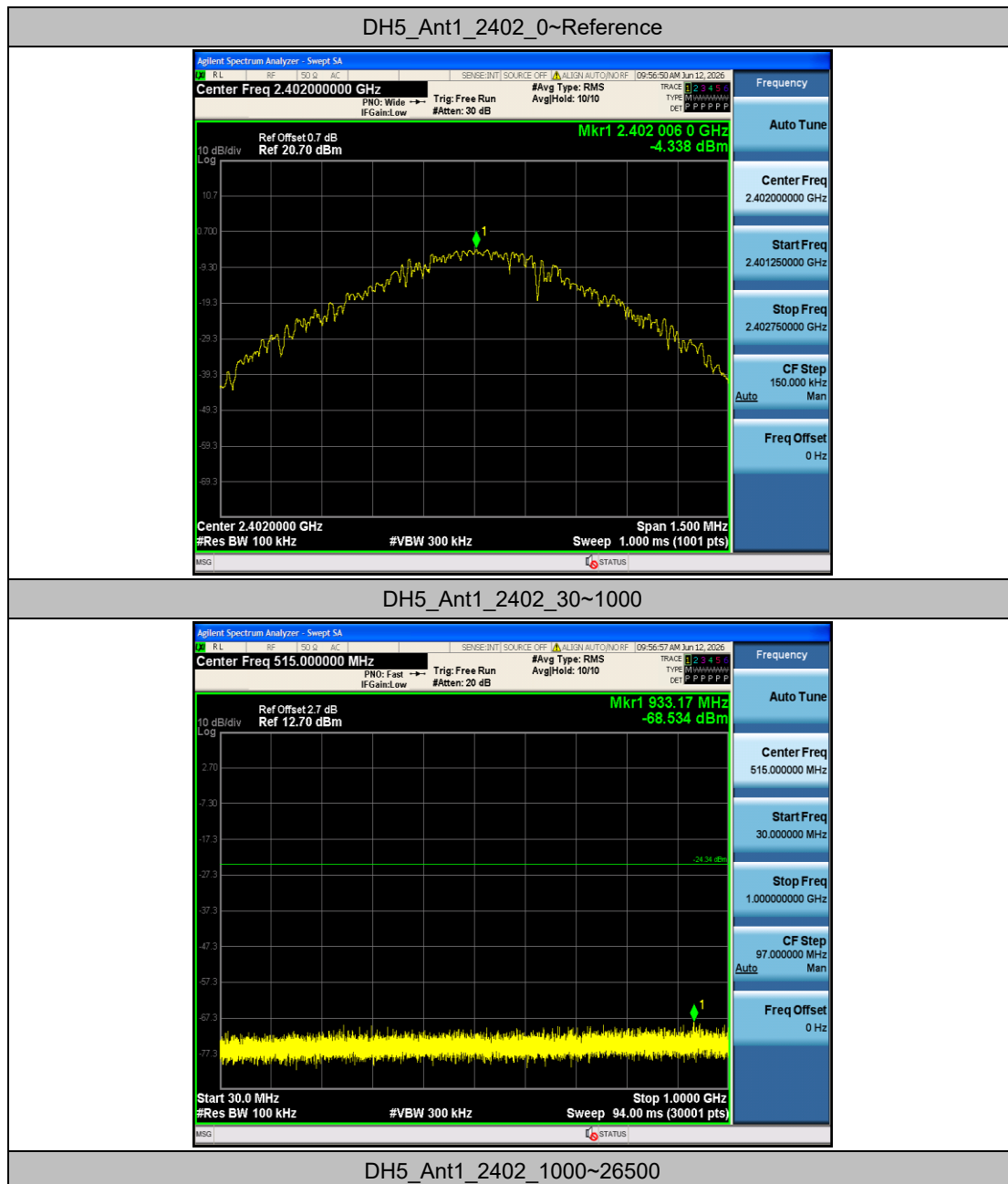


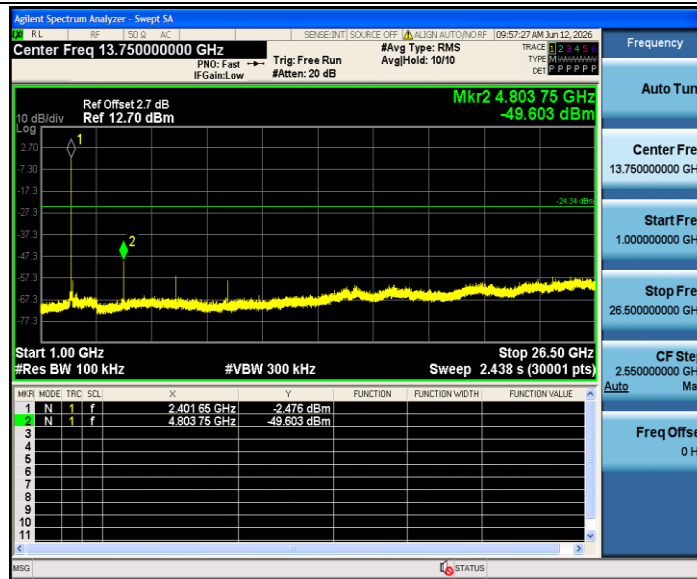
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.34	-4.34	---	PASS
			30~1000	-4.34	-68.53	≤-24.34	PASS
			1000~26500	-4.34	-49.6	≤-24.34	PASS
		2441	Reference	-4.32	-4.32	---	PASS
			30~1000	-4.32	-65.49	≤-24.32	PASS
			1000~26500	-4.32	-50.86	≤-24.32	PASS
		2480	Reference	-4.83	-4.83	---	PASS
			30~1000	-4.83	-69.2	≤-24.83	PASS
			1000~26500	-4.83	-51.34	≤-24.83	PASS
2DH5	Ant1	2402	Reference	-4.27	-4.27	---	PASS
			30~1000	-4.27	-68.93	≤-24.27	PASS
			1000~26500	-4.27	-46.67	≤-24.27	PASS
		2441	Reference	-5.49	-5.49	---	PASS
			30~1000	-5.49	-68.64	≤-25.49	PASS
			1000~26500	-5.49	-51.06	≤-25.49	PASS
		2480	Reference	-6.85	-6.85	---	PASS
			30~1000	-6.85	-69.25	≤-26.85	PASS
			1000~26500	-6.85	-52.14	≤-26.85	PASS
3DH5	Ant1	2402	Reference	-4.84	-4.84	---	PASS
			30~1000	-4.84	-68.31	≤-24.84	PASS
			1000~26500	-4.84	-50.09	≤-24.84	PASS
		2441	Reference	-5.65	-5.65	---	PASS
			30~1000	-5.65	-68.76	≤-25.65	PASS
			1000~26500	-5.65	-51.13	≤-25.65	PASS
		2480	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-68.33	≤-26.37	PASS
			1000~26500	-6.37	-51.07	≤-26.37	PASS

Test Graphs

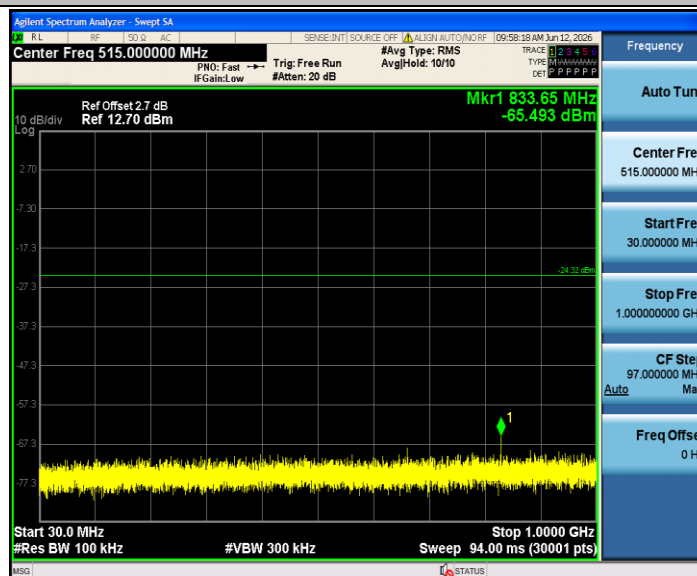




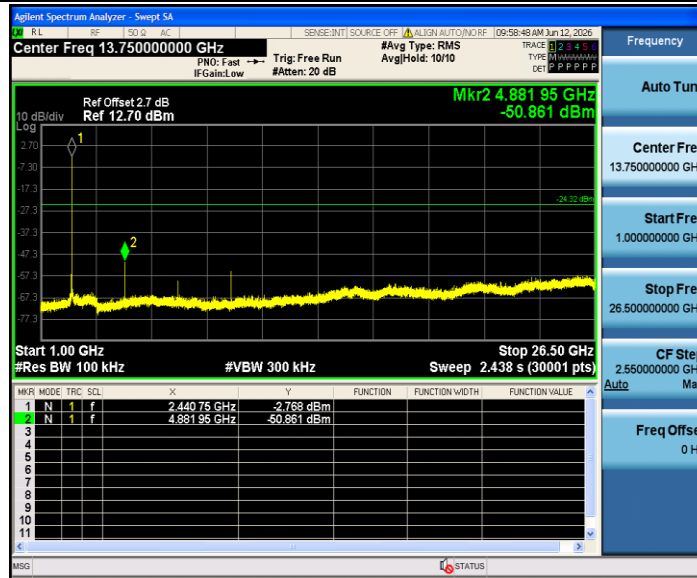
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



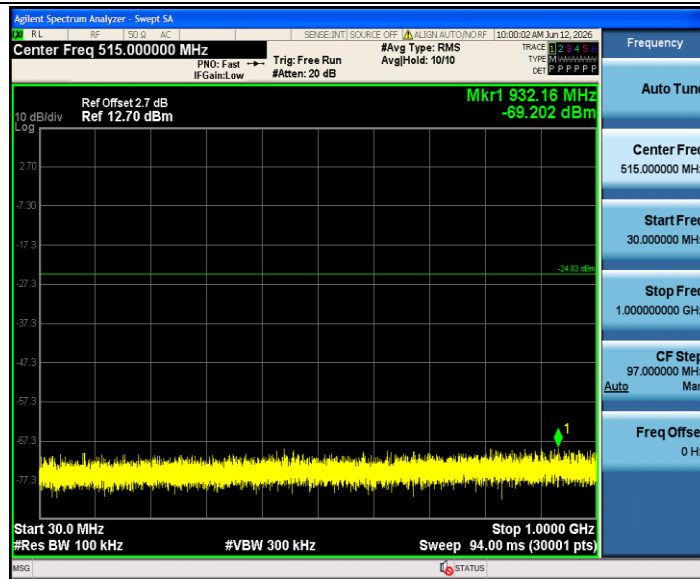
DH5_Ant1_2441_1000~26500



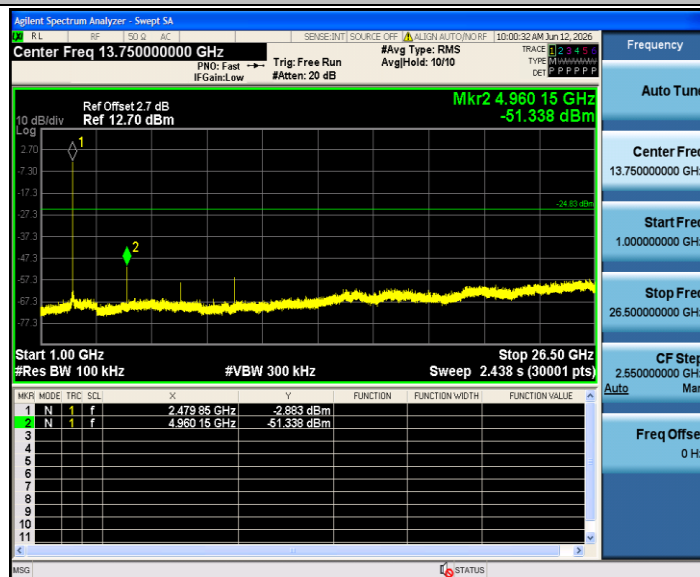
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

