

FCC Appendix RF Test Data for BT

FCC ID : 2AYIY-EK1119

Company : Shenzhen Yinghongyuan Technology Co., Ltd.

EUT : Bluetooth speaker

Model Number : EK1119

Report No. : CTA26060903301

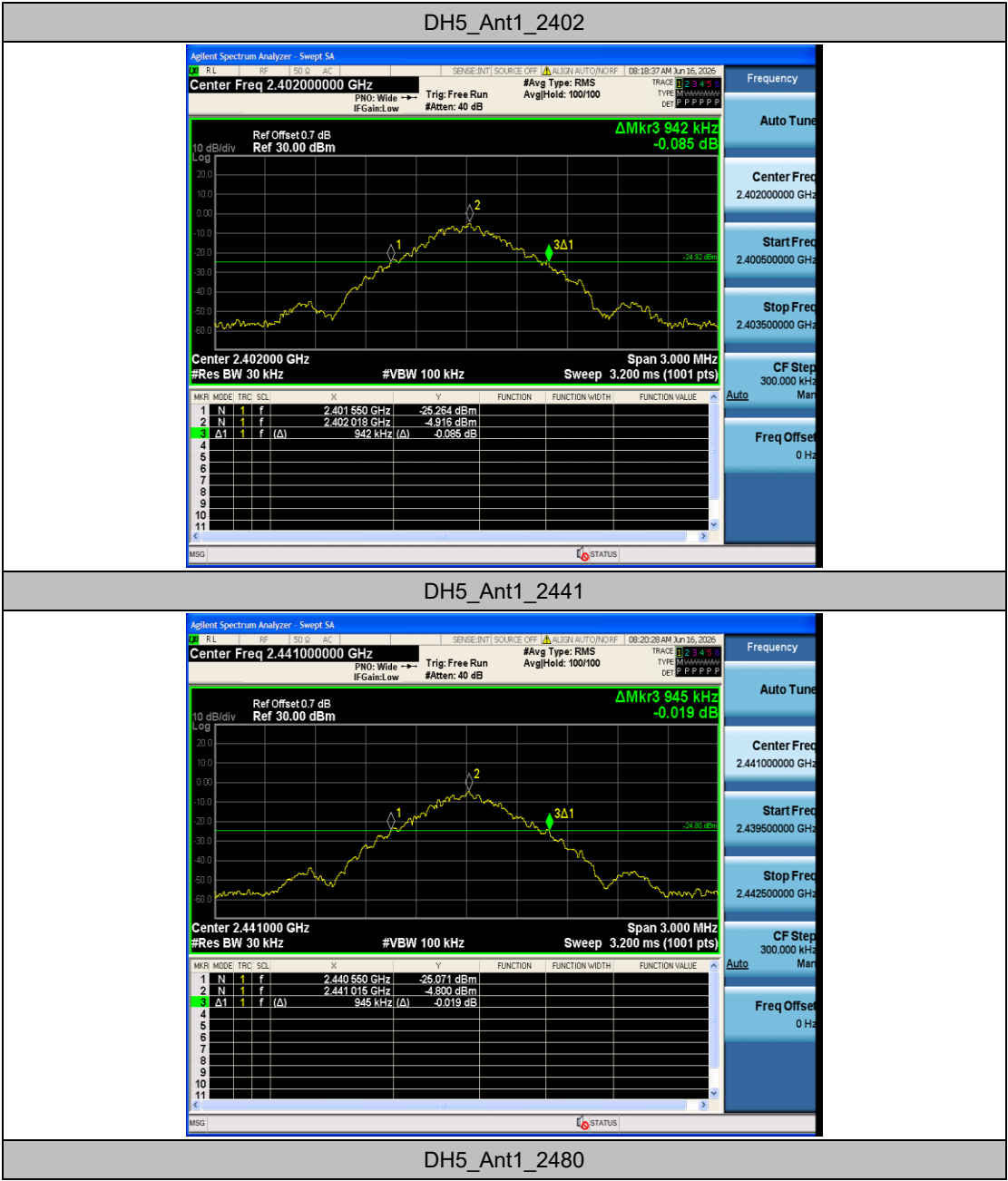
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.942	2401.550	2402.492	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.939	2479.556	2480.495	---	---
2DH5	Ant1	2402	1.320	2401.349	2402.669	---	---
		2441	1.335	2440.337	2441.672	---	---
		2480	1.326	2479.346	2480.672	---	---
3DH5	Ant1	2402	1.293	2401.361	2402.654	---	---
		2441	1.296	2440.364	2441.660	---	---
		2480	1.299	2479.361	2480.660	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

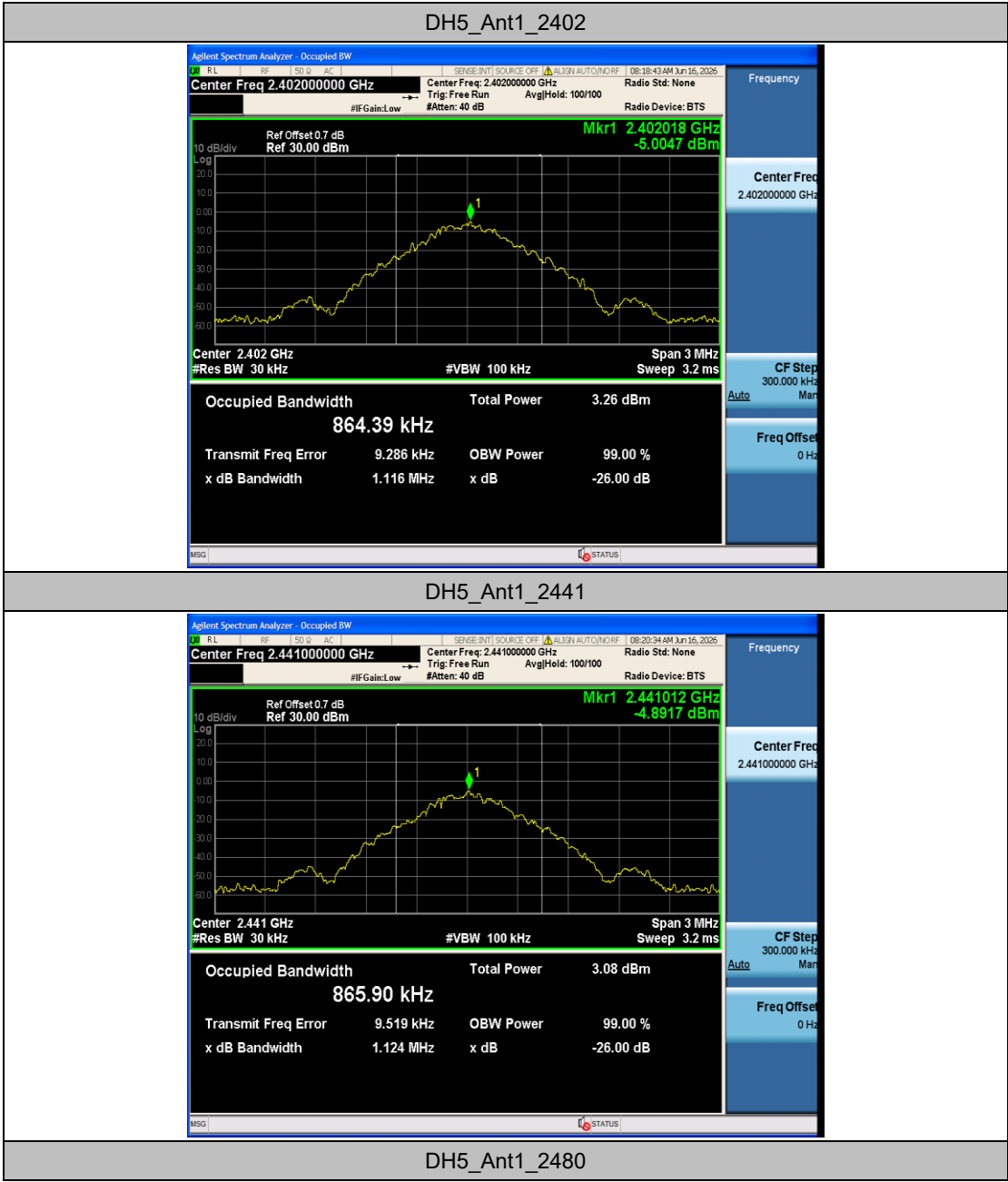


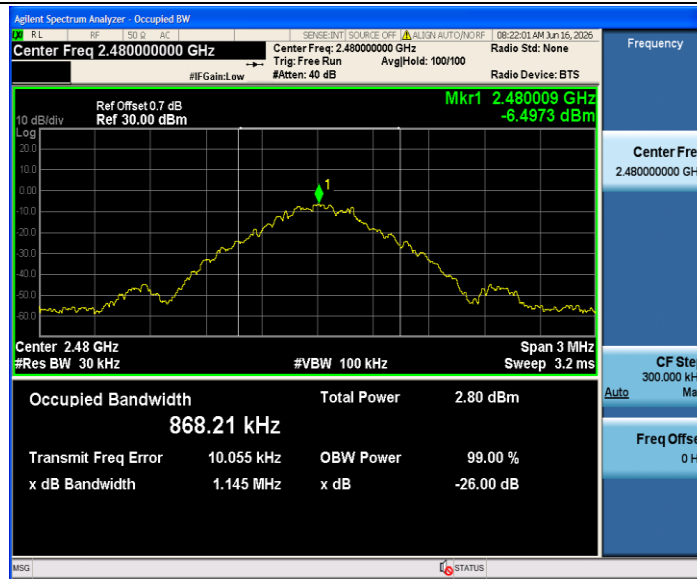
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86439	2401.5771	2402.4415	---	---
		2441	0.86590	2440.5766	2441.4425	---	---
		2480	0.86821	2479.5760	2480.4442	---	---
2DH5	Ant1	2402	1.1889	2401.4152	2402.6041	---	---
		2441	1.1890	2440.4137	2441.6027	---	---
		2480	1.1866	2479.4158	2480.6024	---	---
3DH5	Ant1	2402	1.1937	2401.4143	2402.6080	---	---
		2441	1.1960	2440.4132	2441.6092	---	---
		2480	1.1826	2479.4239	2480.6065	---	---

Test Graphs





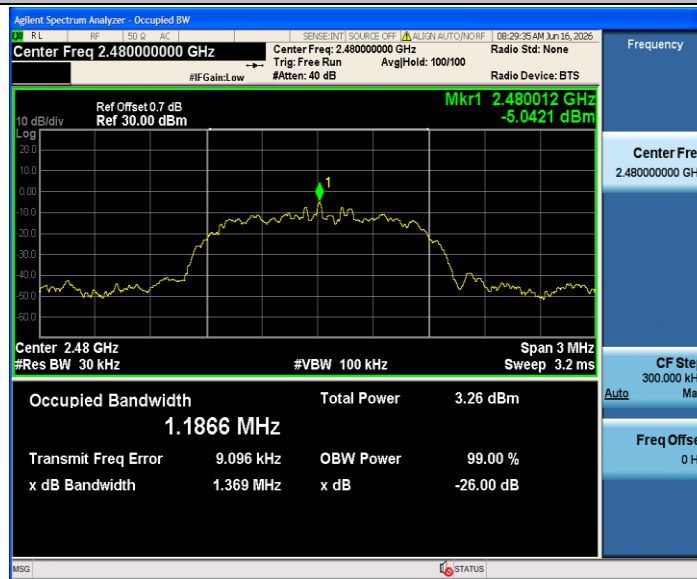
2DH5_Ant1_2402



2DH5_Ant1_2441



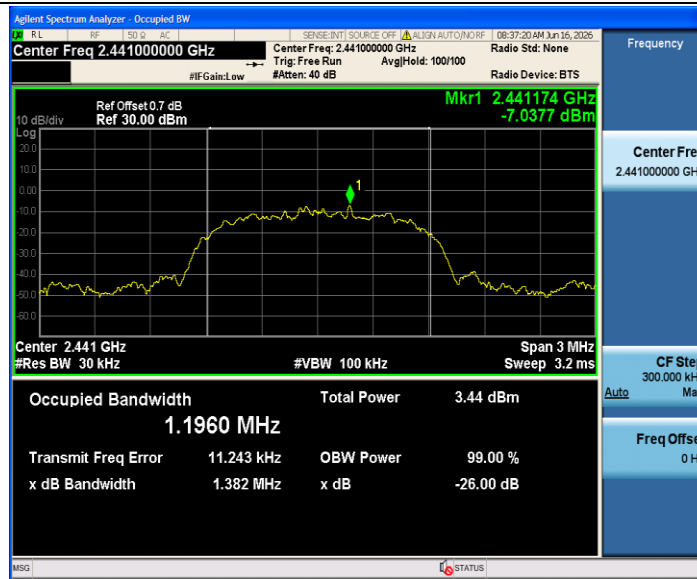
2DH5_Ant1_2480



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	-3.20	≤20.97	PASS
		2441	-3.27	≤20.97	PASS
		2480	-3.50	≤20.97	PASS
2DH5	Ant1	2402	-0.63	≤20.97	PASS
		2441	-0.64	≤20.97	PASS
		2480	-0.86	≤20.97	PASS
3DH5	Ant1	2402	-0.23	≤20.97	PASS
		2441	-0.30	≤20.97	PASS
		2480	-0.52	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.036	≥ 0.945	PASS
2DH5	Ant1	Hop	0.956	≥ 0.890	PASS
3DH5	Ant1	Hop	1.13	≥ 0.866	PASS

Test Graphs



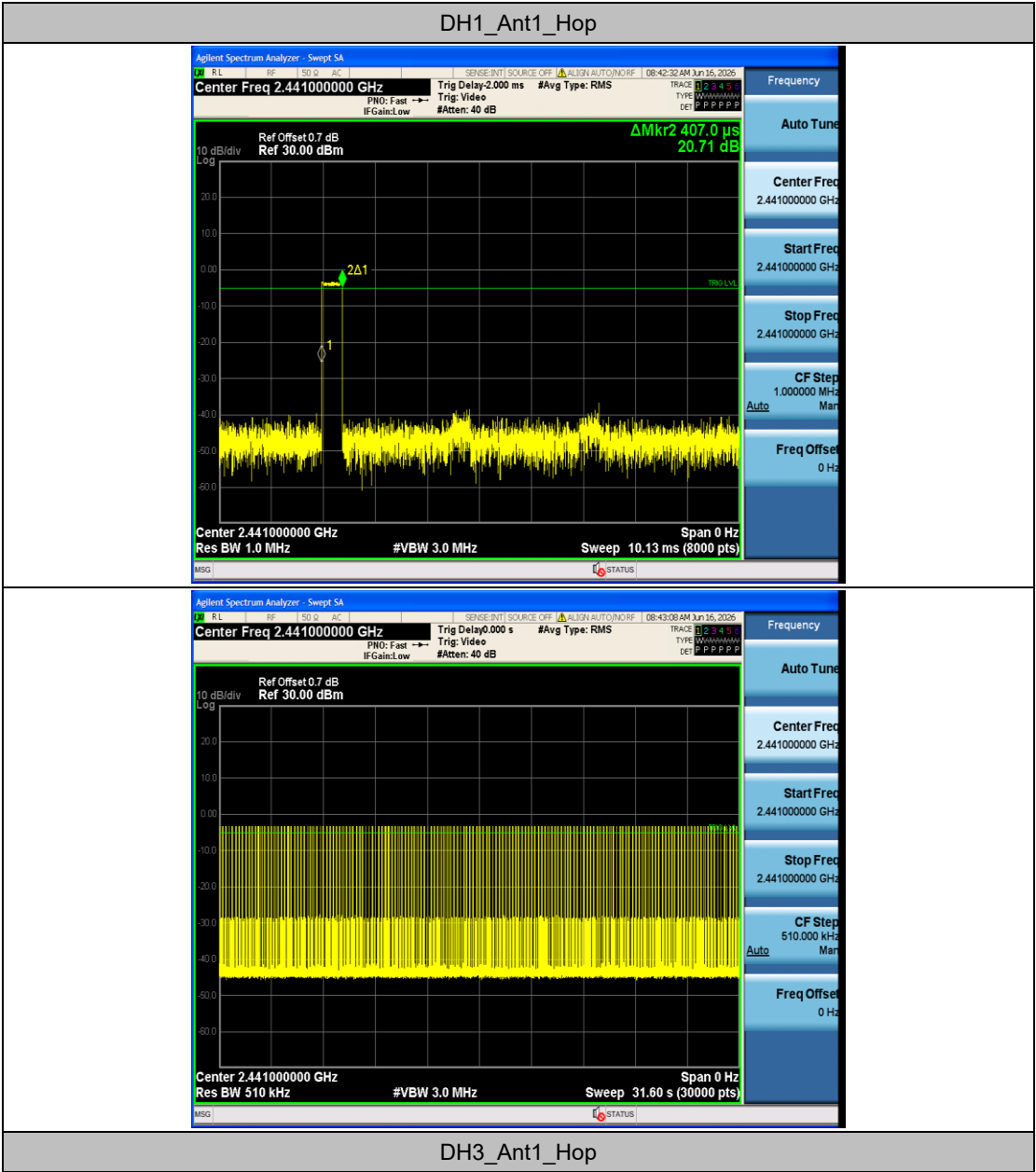


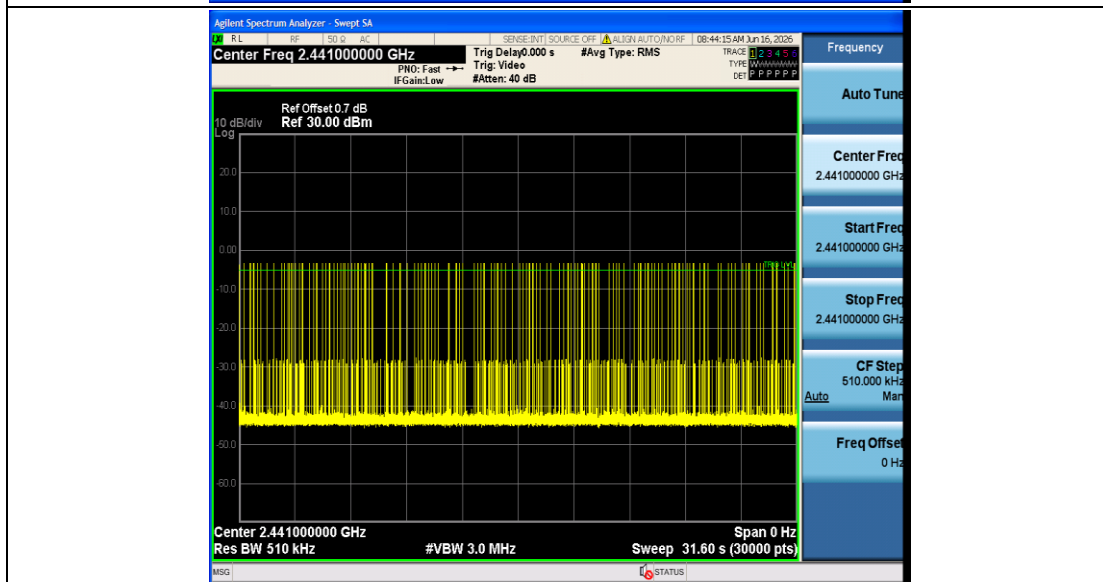
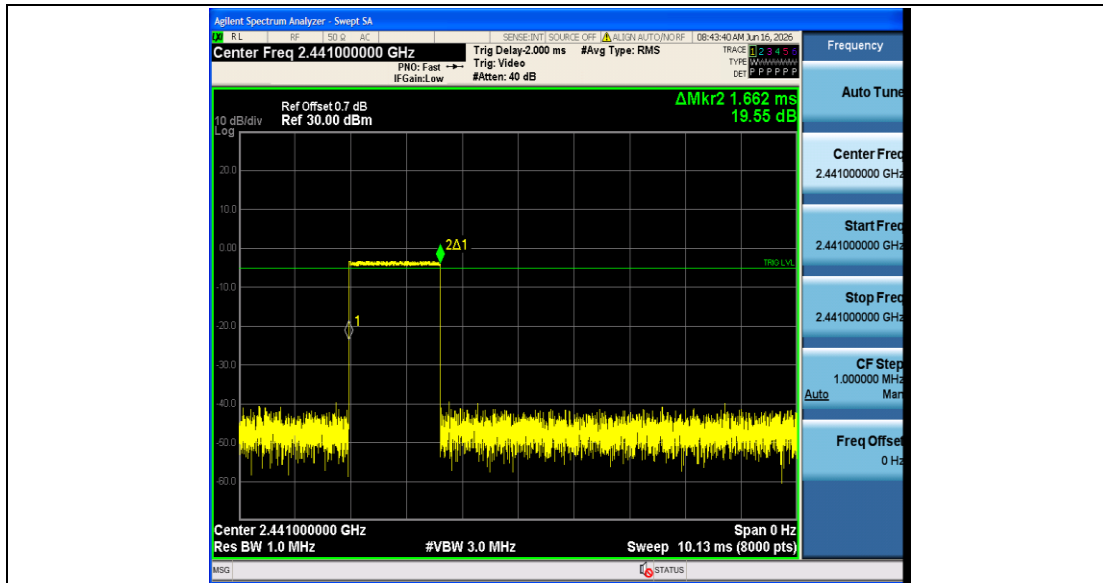
Appendix E: Time of occupancy

Test Result

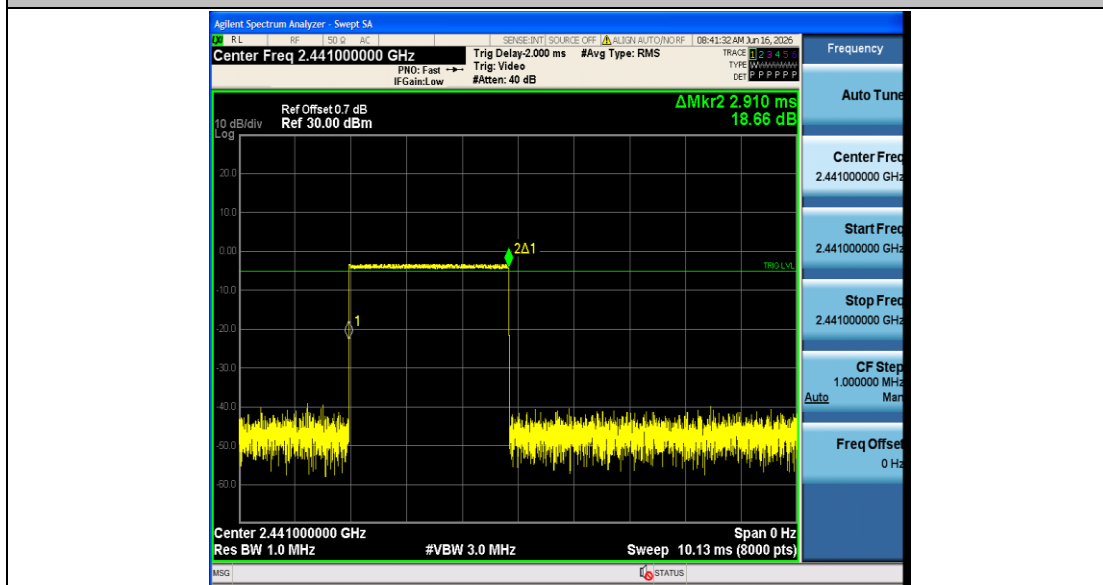
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	317	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	158	0.263	≤0.4	PASS
DH5	Ant1	Hop	2.910	119	0.346	≤0.4	PASS
2DH1	Ant1	Hop	0.415	316	0.131	≤0.4	PASS
2DH3	Ant1	Hop	1.668	174	0.29	≤0.4	PASS
2DH5	Ant1	Hop	2.915	103	0.3	≤0.4	PASS
3DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.664	154	0.256	≤0.4	PASS
3DH5	Ant1	Hop	2.916	111	0.324	≤0.4	PASS

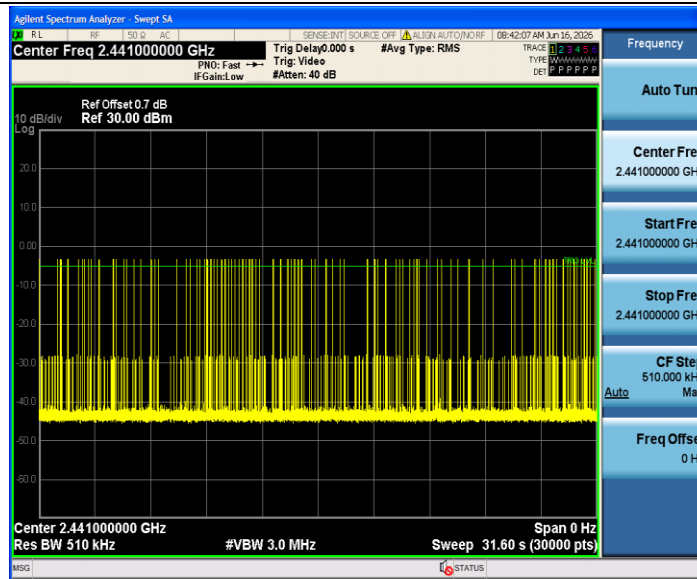
Test Graphs



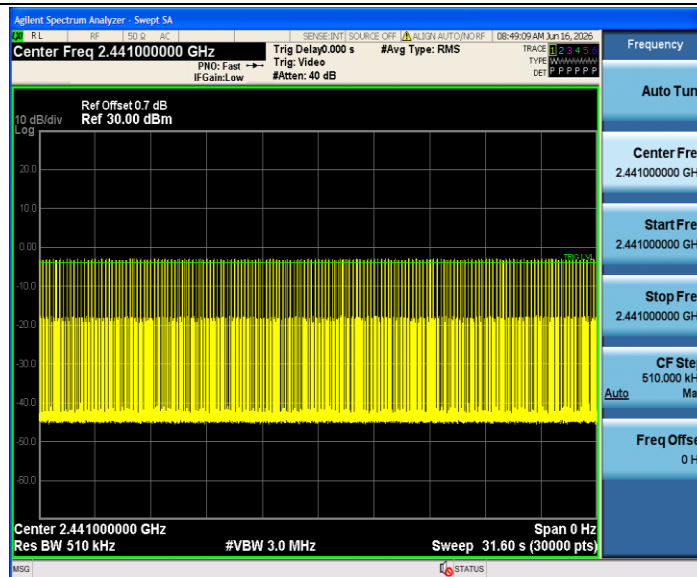
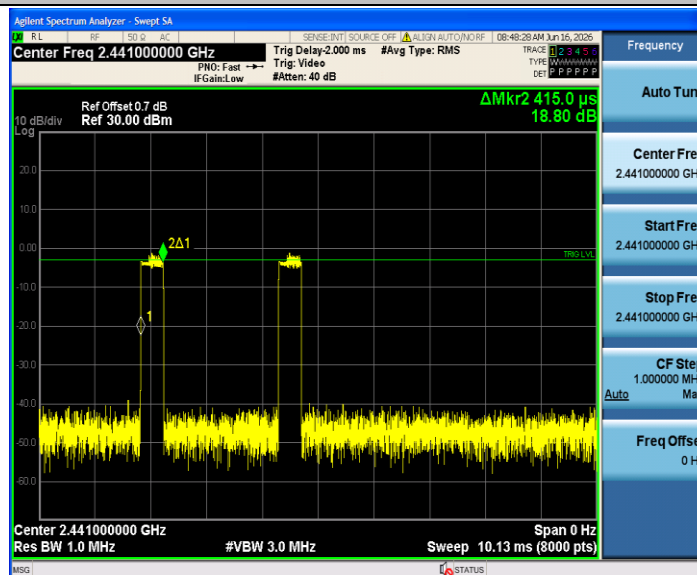


DH5_Ant1_Hop

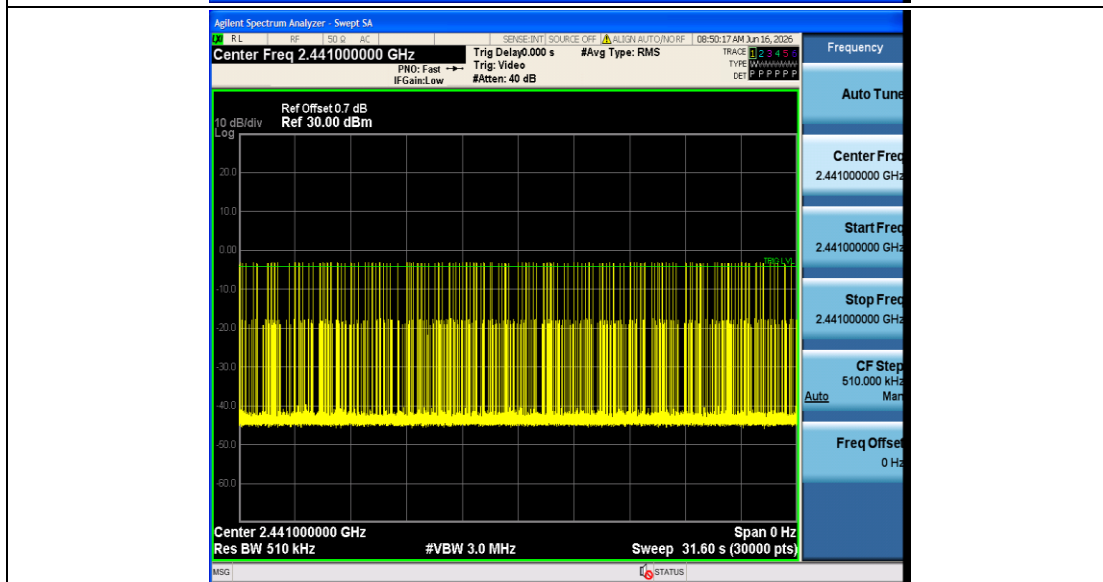
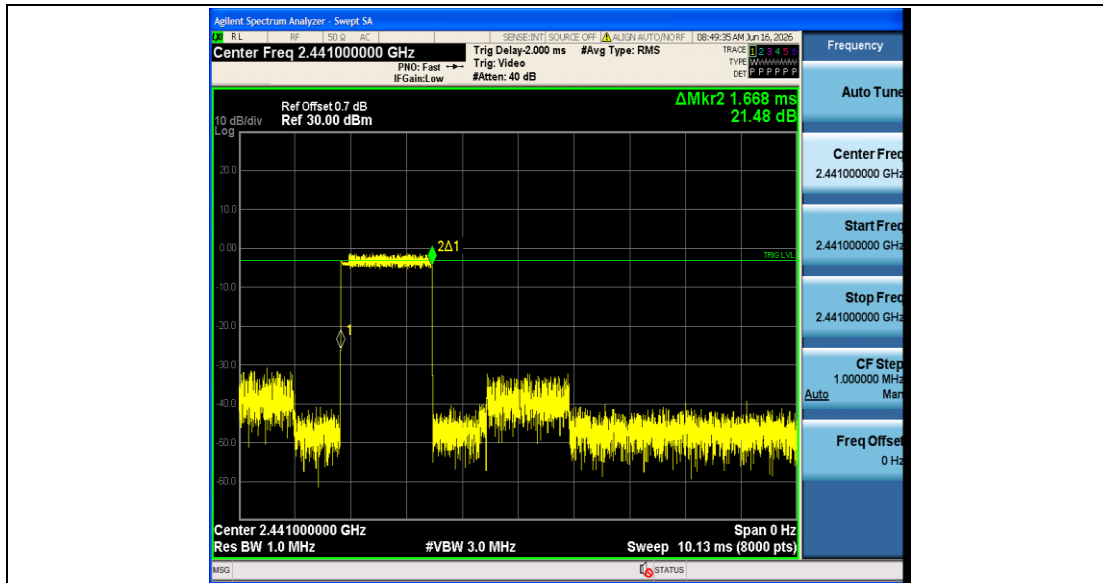




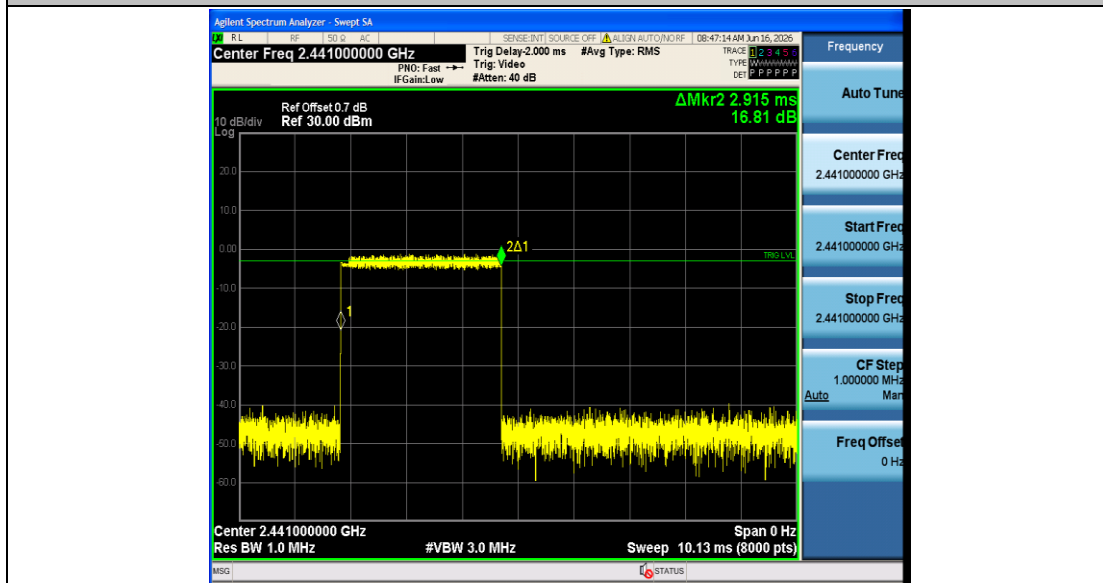
2DH1_Ant1_Hop

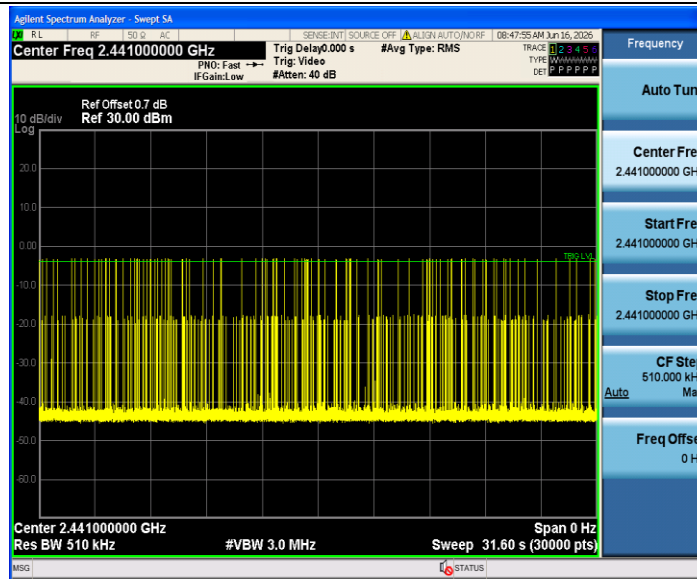


2DH3_Ant1_Hop

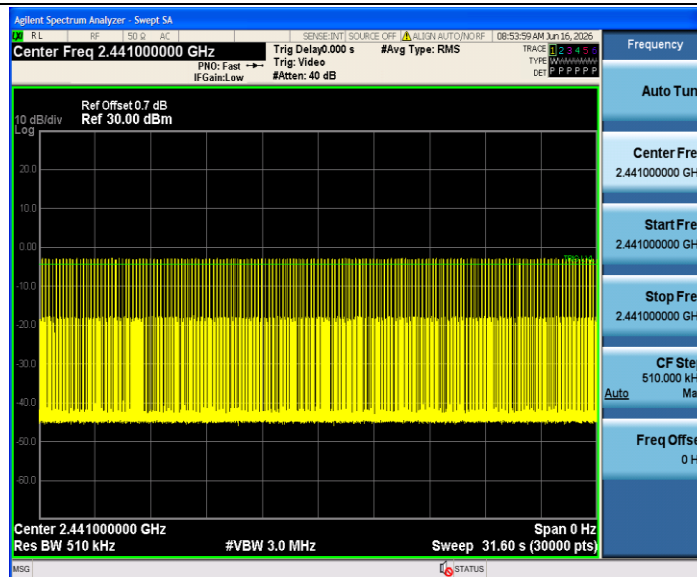
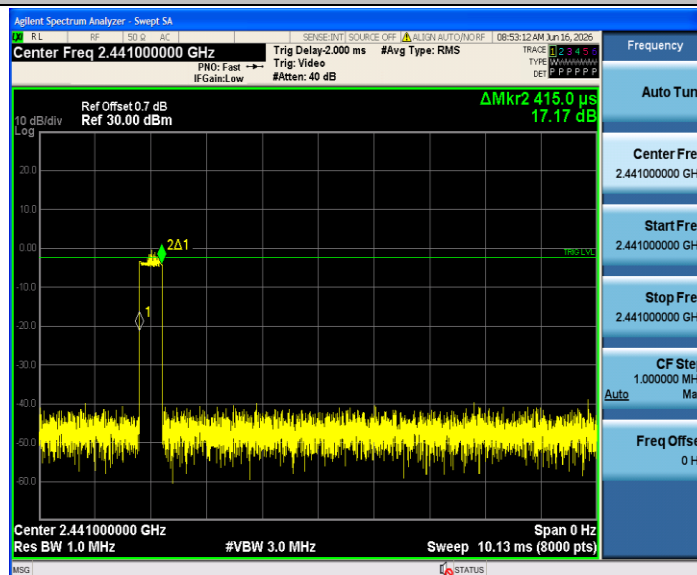


2DH5_Ant1_Hop

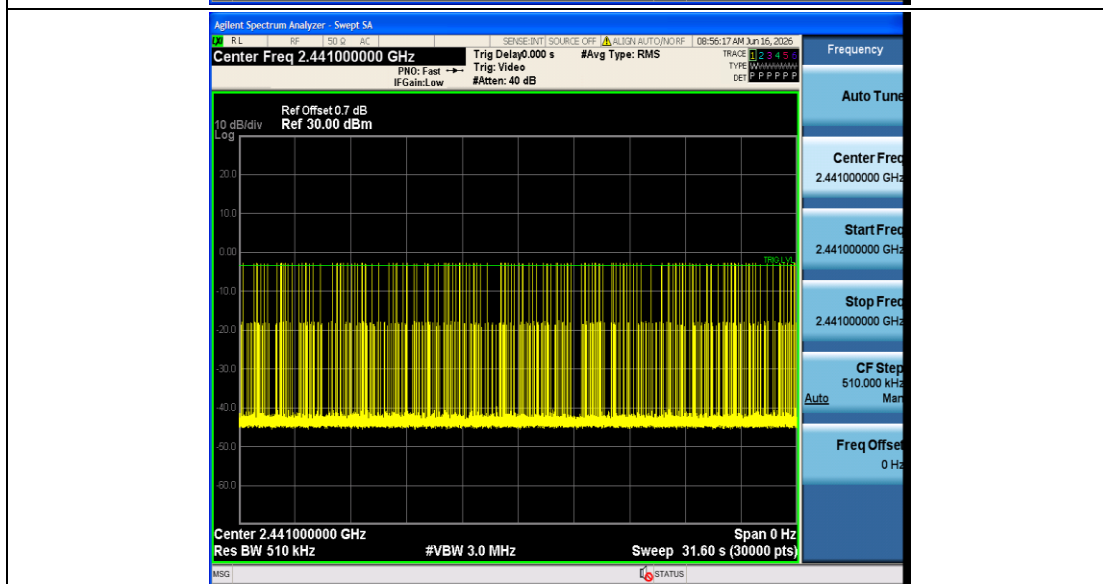
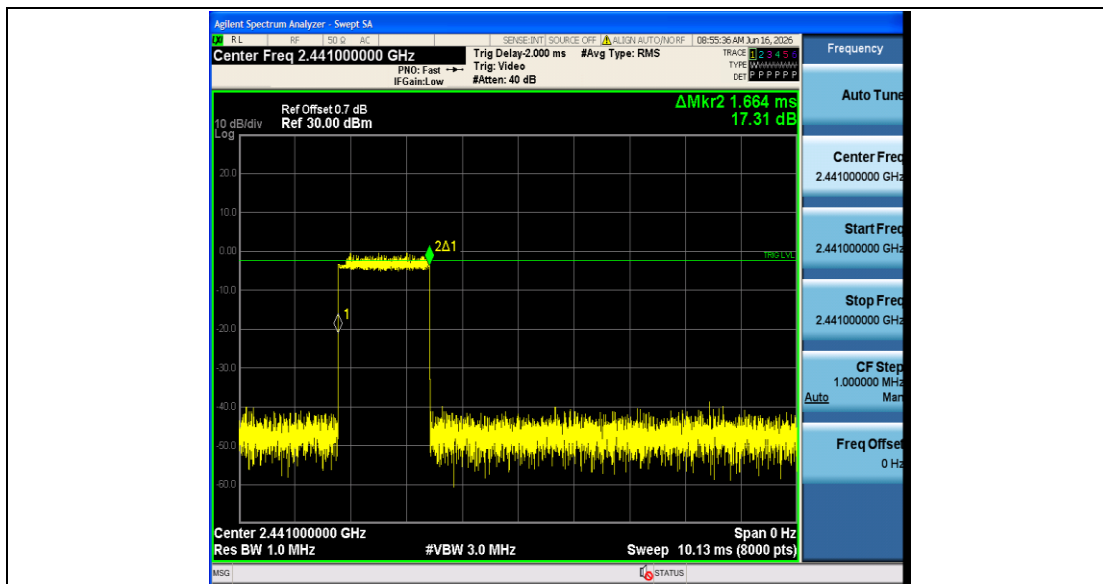




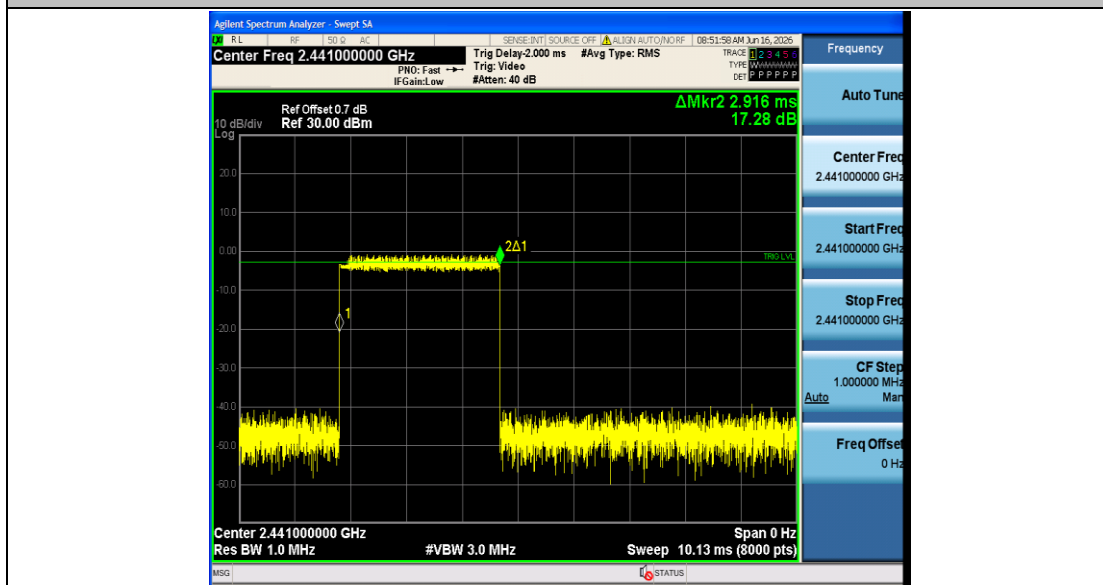
3DH1_Ant1_Hop

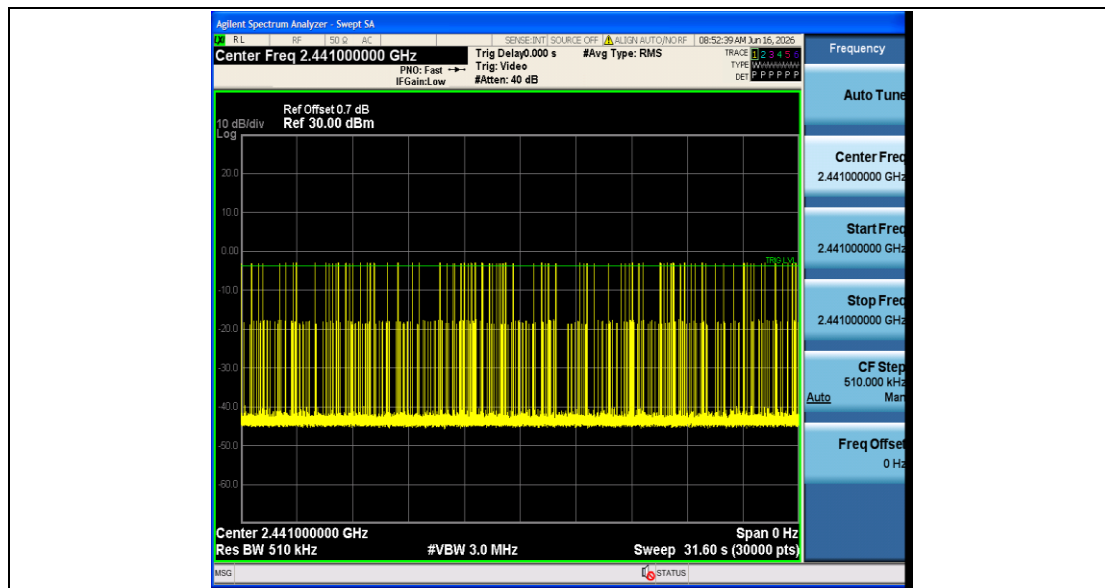


3DH3_Ant1_Hop



3DH5_Ant1_Hop



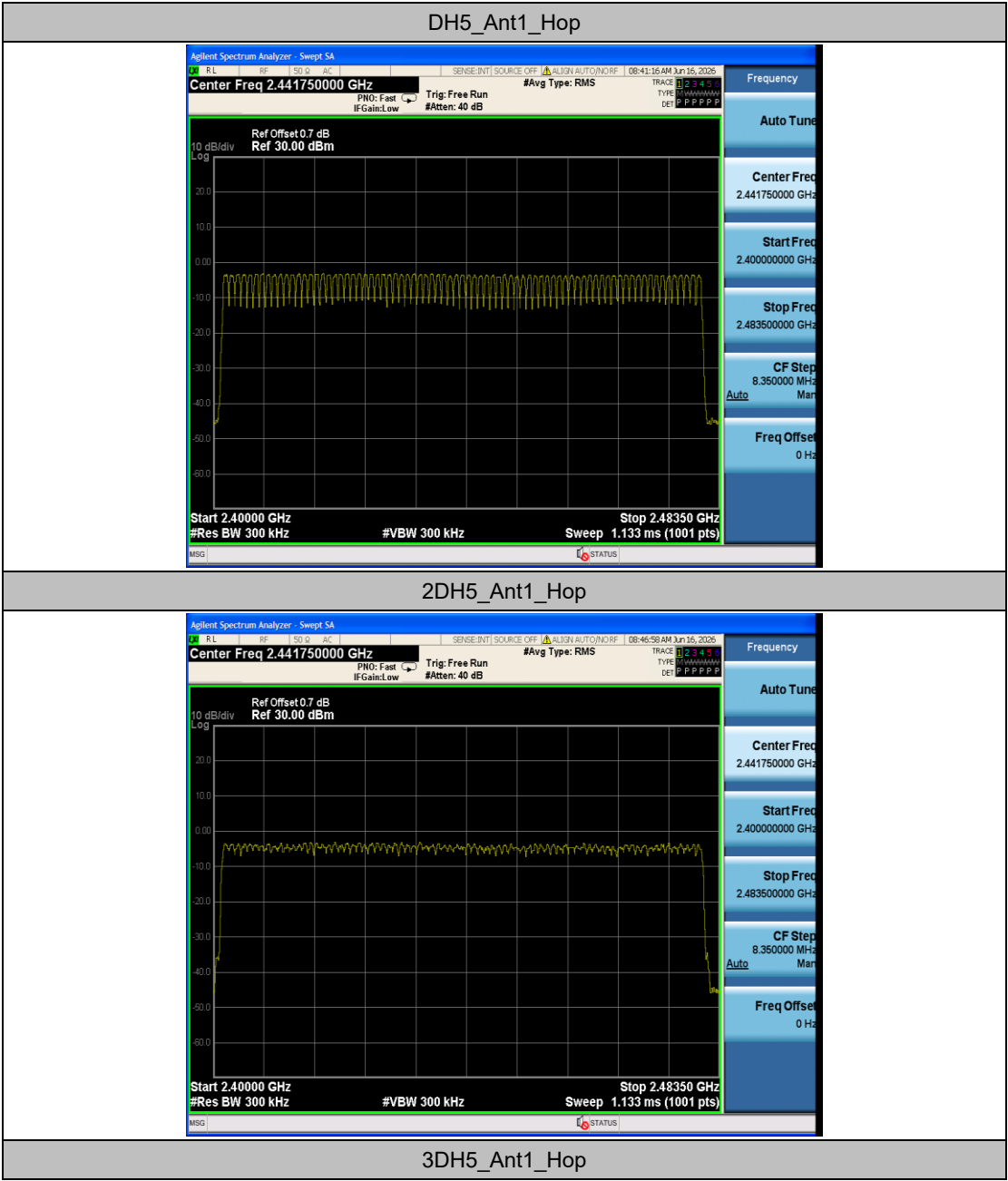


Appendix F: Number of hopping channels

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



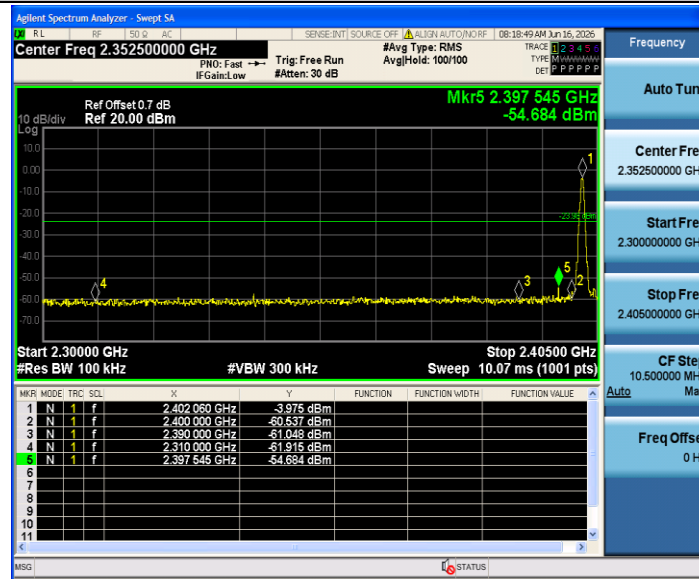
Appendix G: Band edge measurements

Test Result

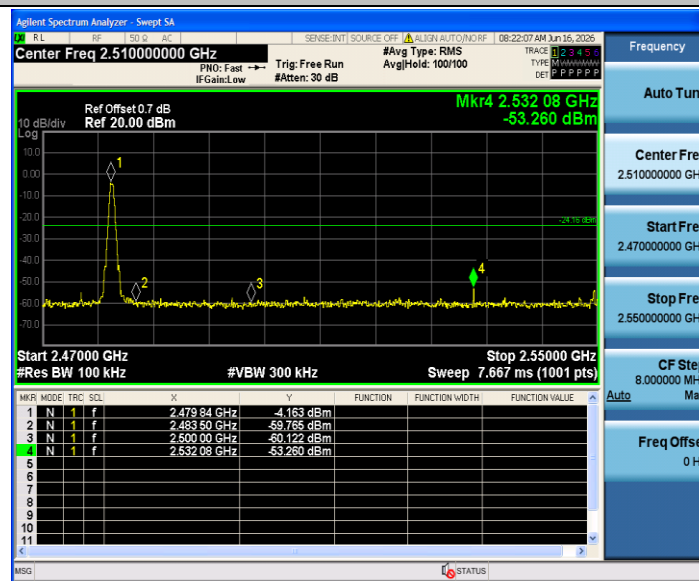
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.98	-54.68	≤-23.98	PASS
		High	2480	-4.16	-53.26	≤-24.16	PASS
		Low	Hop_2402	-4.68	-56.99	≤-24.68	PASS
		High	Hop_2480	-4.09	-57.71	≤-24.09	PASS
2DH5	Ant1	Low	2402	-4.39	-57.35	≤-24.39	PASS
		High	2480	-4.89	-57.6	≤-24.89	PASS
		Low	Hop_2402	-4.43	-56.45	≤-24.43	PASS
		High	Hop_2480	-5.45	-42.68	≤-25.45	PASS
3DH5	Ant1	Low	2402	-3.32	-54.05	≤-23.32	PASS
		High	2480	-3.90	-53.45	≤-23.9	PASS
		Low	Hop_2402	-5.86	-56.64	≤-25.86	PASS
		High	Hop_2480	-4.19	-46.28	≤-24.19	PASS

Test Graphs

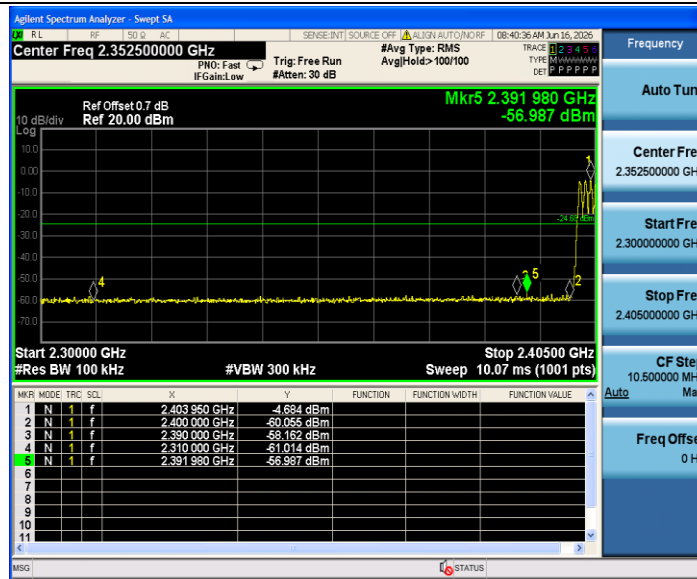
DH5_Ant1_Low_2402



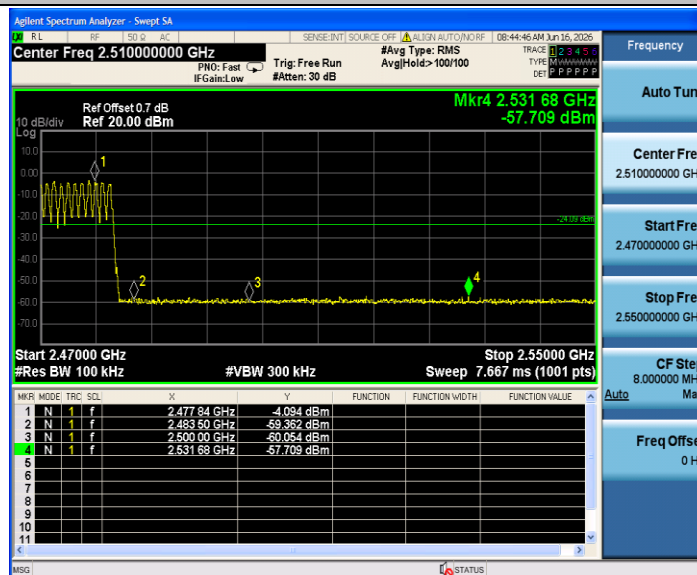
DH5_Ant1_High_2480



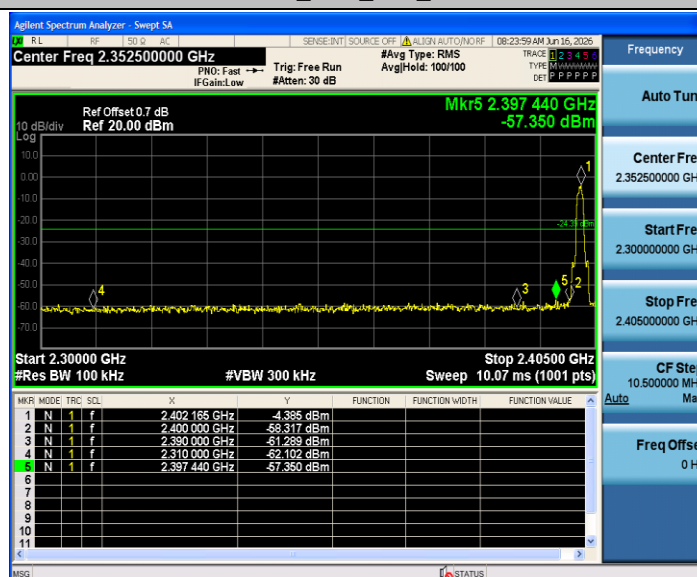
DH5_Ant1_Low_Hop_2402



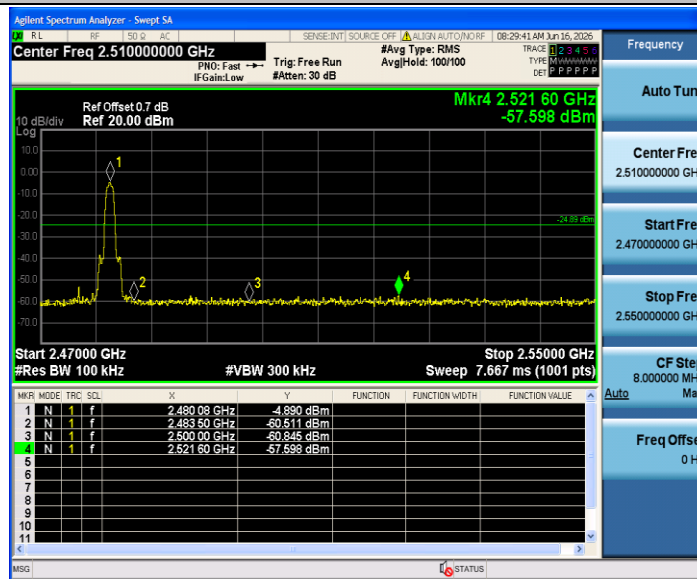
DH5_Ant1_High_Hop_2480



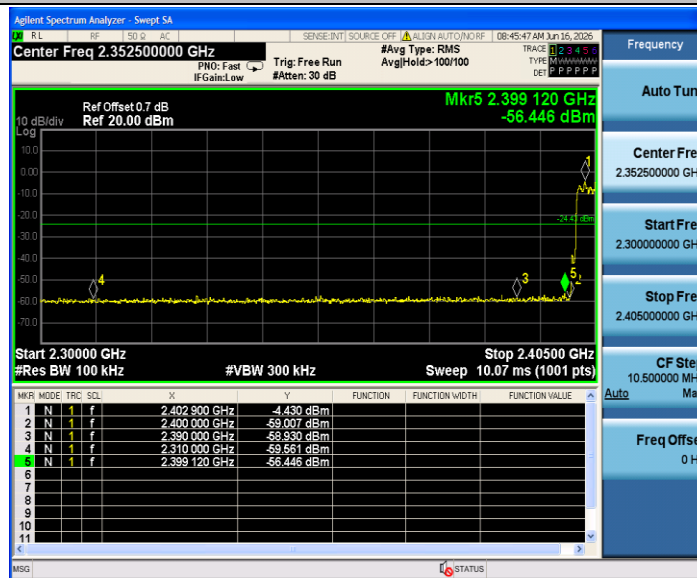
2DH5_Ant1_Low_2402



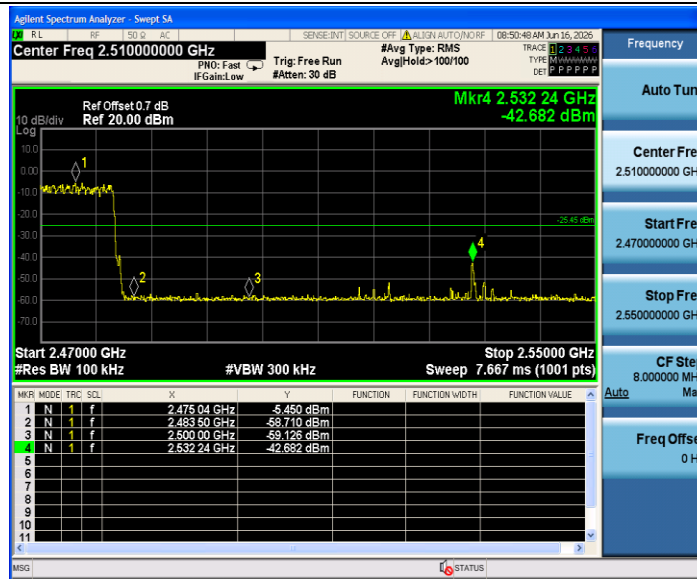
2DH5_Ant1_High_2480



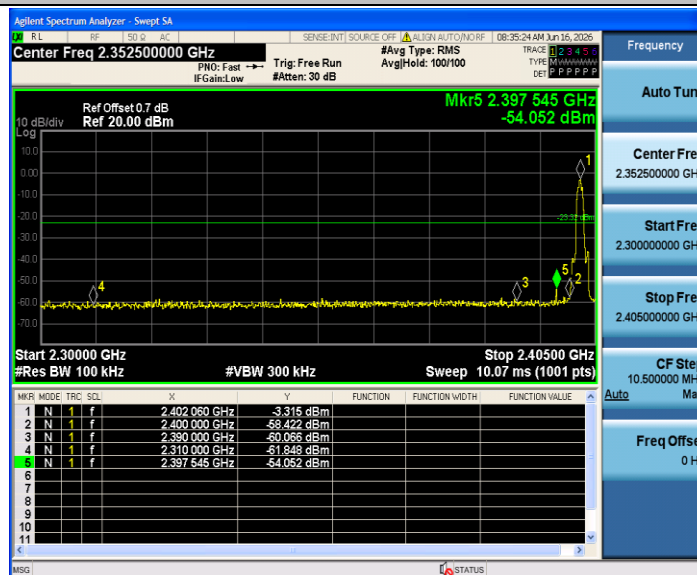
2DH5_Ant1_Low_Hop_2402



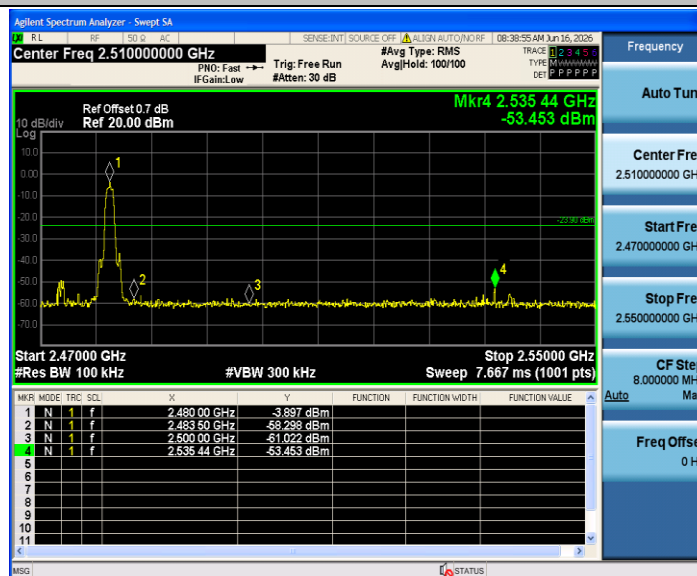
2DH5_Ant1_High_Hop_2480



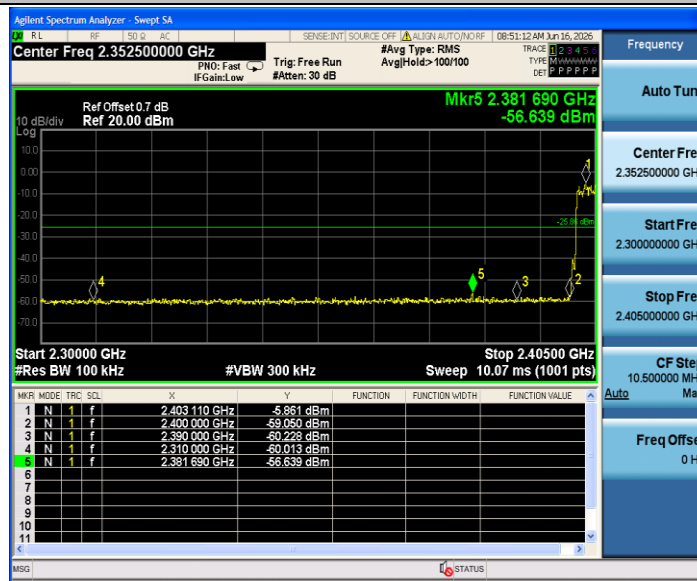
3DH5_Ant1_Low_2402



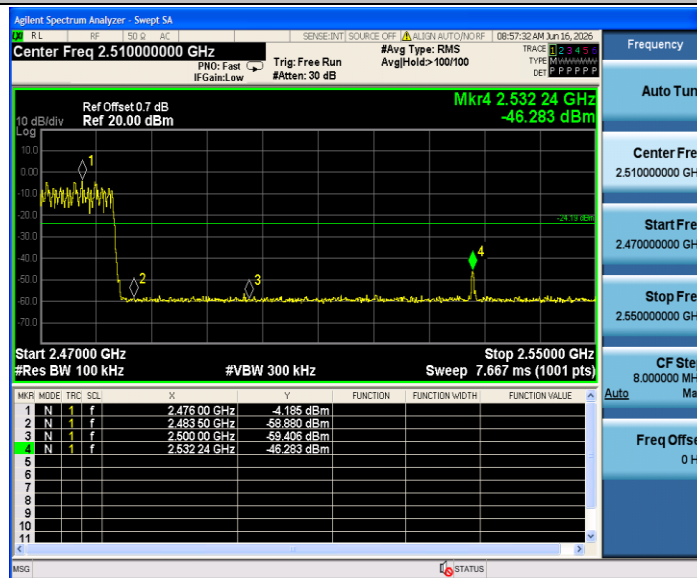
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

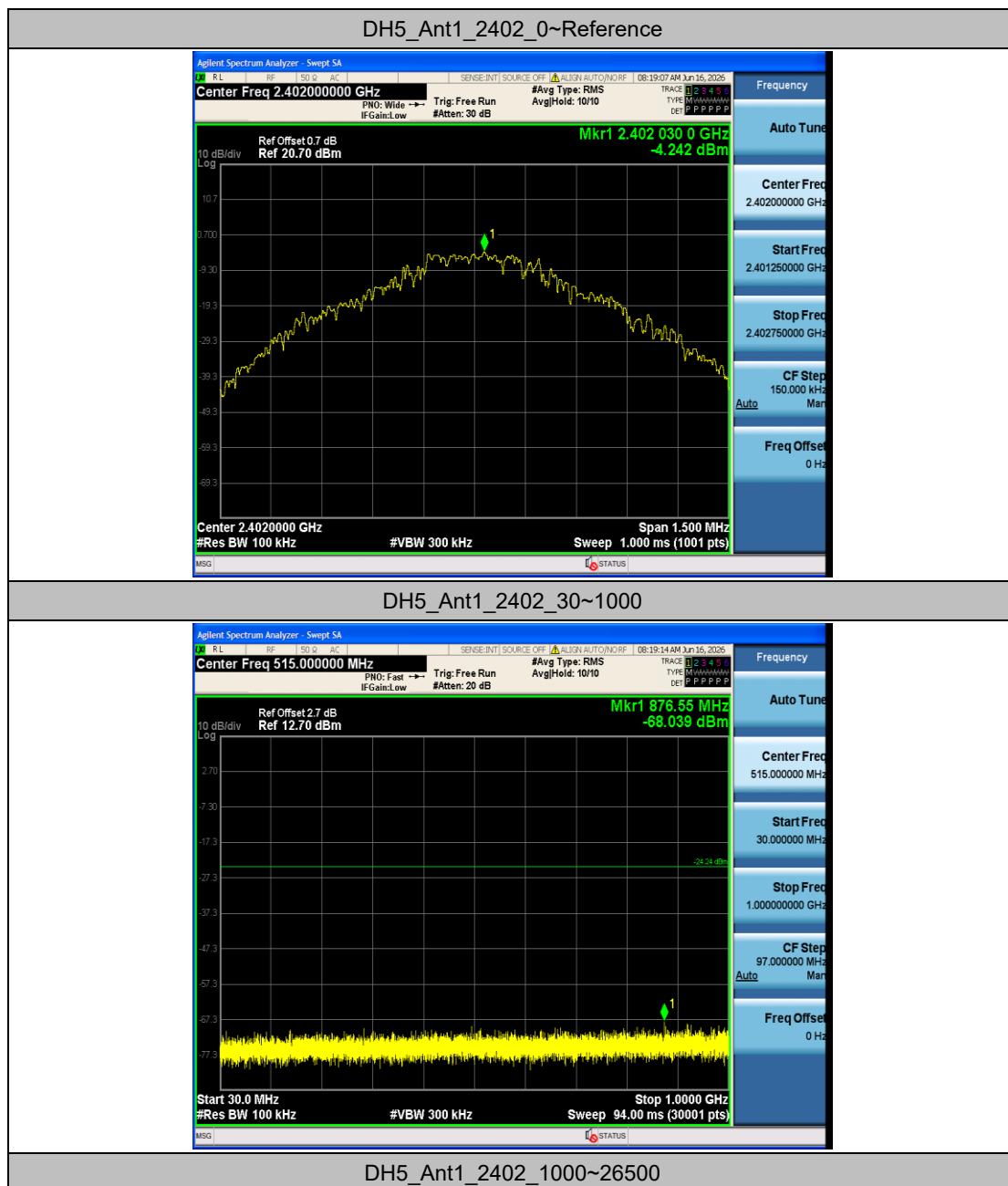


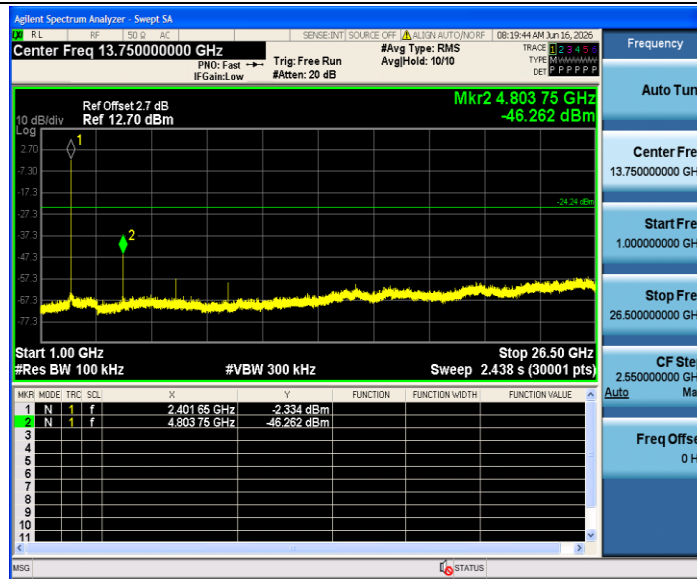
Appendix H: Conducted Spurious Emission

Test Result

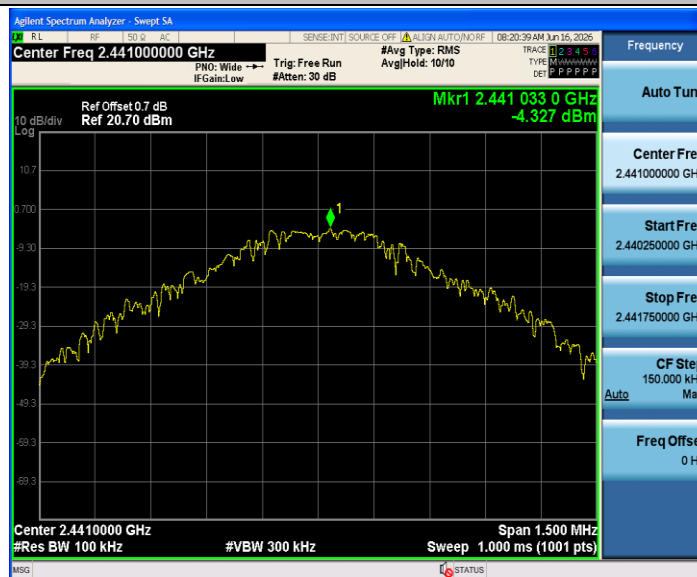
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.24	-4.24	---	PASS
			30~1000	-4.24	-68.04	≤ -24.24	PASS
			1000~26500	-4.24	-46.26	≤ -24.24	PASS
		2441	Reference	-4.33	-4.33	---	PASS
			30~1000	-4.33	-68.04	≤ -24.33	PASS
			1000~26500	-4.33	-47.03	≤ -24.33	PASS
		2480	Reference	-4.58	-4.58	---	PASS
			30~1000	-4.58	-68.46	≤ -24.58	PASS
			1000~26500	-4.58	-48.33	≤ -24.58	PASS
2DH5	Ant1	2402	Reference	-4.19	-4.19	---	PASS
			30~1000	-4.19	-68.05	≤ -24.19	PASS
			1000~26500	-4.19	-46	≤ -24.19	PASS
		2441	Reference	-6.76	-6.76	---	PASS
			30~1000	-6.76	-68.5	≤ -26.76	PASS
			1000~26500	-6.76	-49.26	≤ -26.76	PASS
		2480	Reference	-6.98	-6.98	---	PASS
			30~1000	-6.98	-68.34	≤ -26.98	PASS
			1000~26500	-6.98	-44.85	≤ -26.98	PASS
3DH5	Ant1	2402	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-68.81	≤ -24.16	PASS
			1000~26500	-4.16	-46.27	≤ -24.16	PASS
		2441	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-68.39	≤ -24.63	PASS
			1000~26500	-4.63	-47.94	≤ -24.63	PASS
		2480	Reference	-5.27	-5.27	---	PASS
			30~1000	-5.27	-68.68	≤ -25.27	PASS
			1000~26500	-5.27	-48.51	≤ -25.27	PASS

Test Graphs

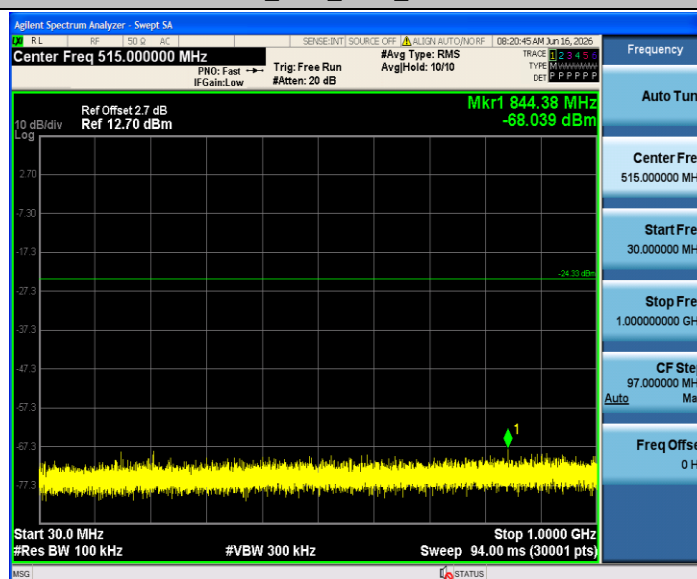




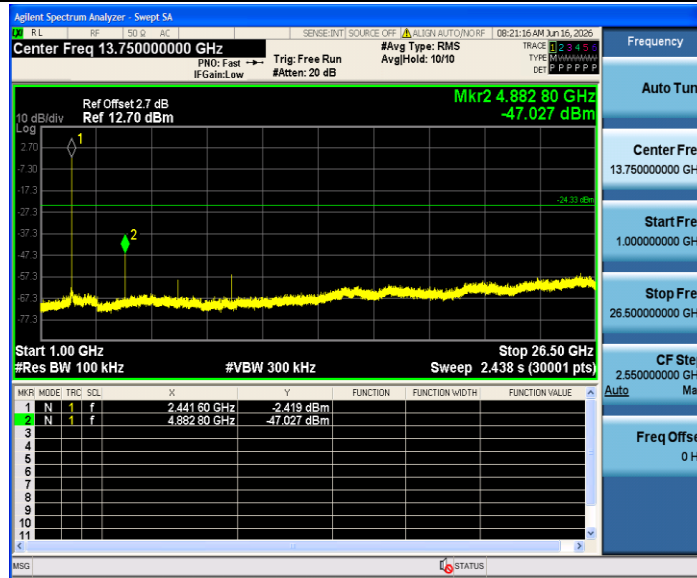
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



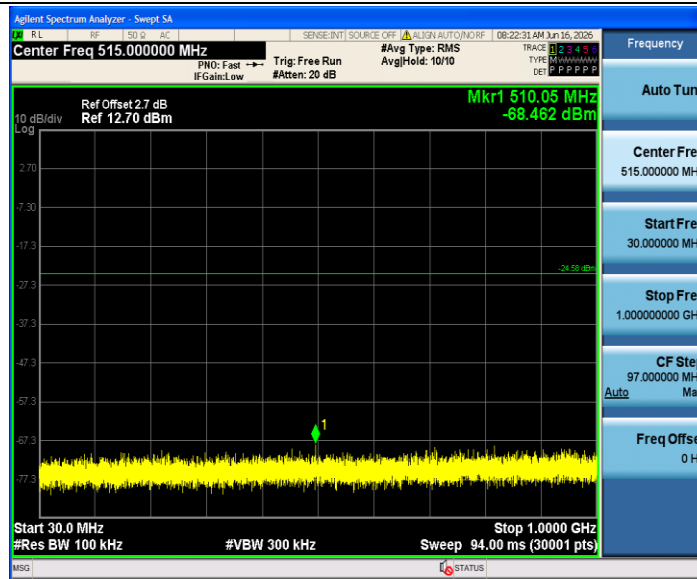
DH5_Ant1_2441_1000~26500



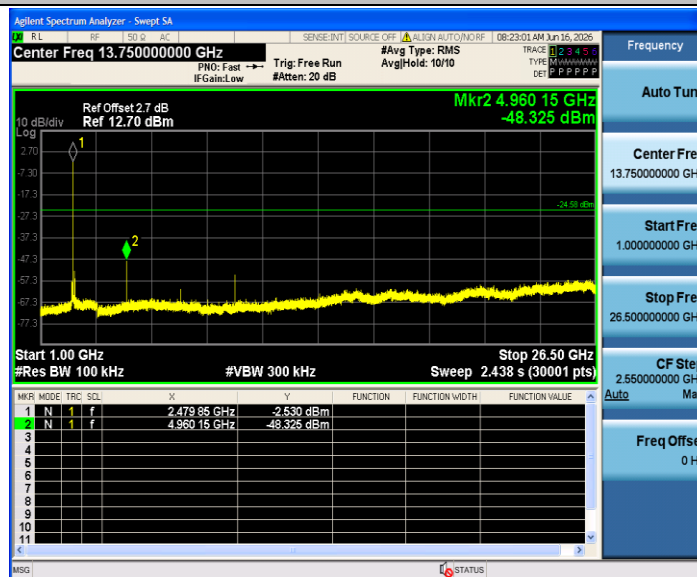
DH5_Ant1_2480_0~Reference



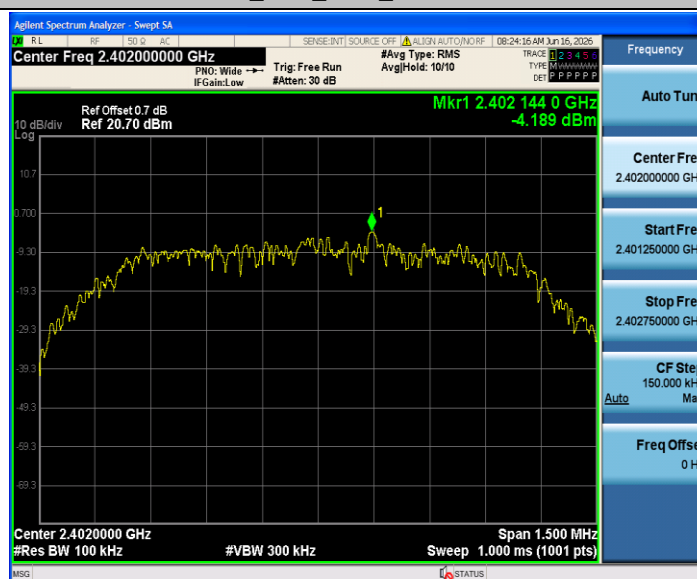
DH5_Ant1_2480_30~1000



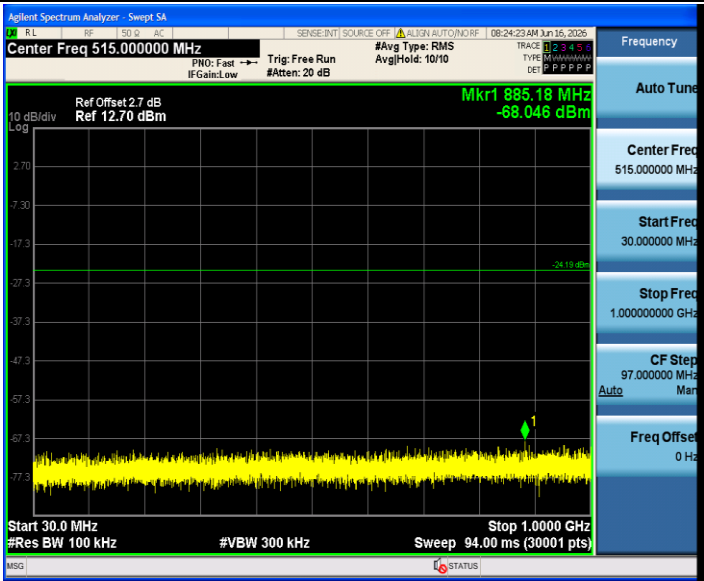
DH5_Ant1_2480_1000~26500



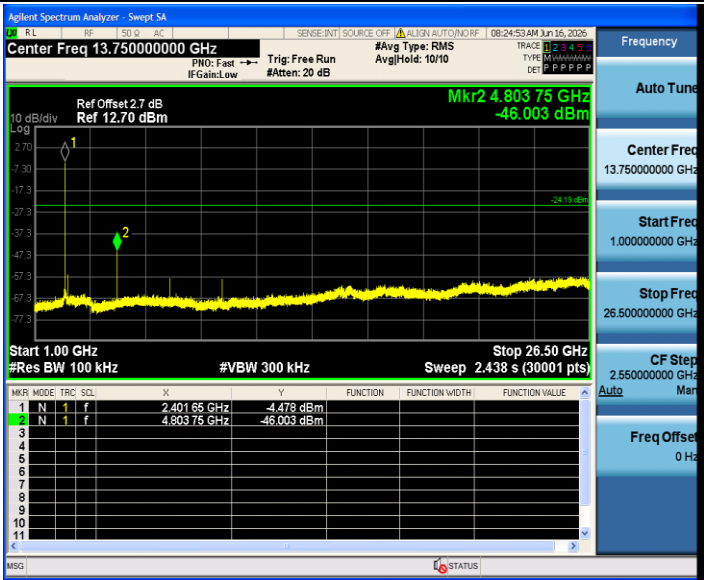
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference