

FCC Appendix RF Test Data for BT

FCC ID : 2BVXB-K50

Company : Shenzhen BTX Electronics Co., Ltd

EUT : Helmet headset

Model Number : K50

Report No. : CTA26042100201

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	0.945	2440.553	2441.498	---	---
		2480	0.942	2479.553	2480.495	---	---
2DH5	Ant1	2402	1.275	2401.382	2402.657	---	---
		2441	1.287	2440.379	2441.666	---	---
		2480	1.326	2479.346	2480.672	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

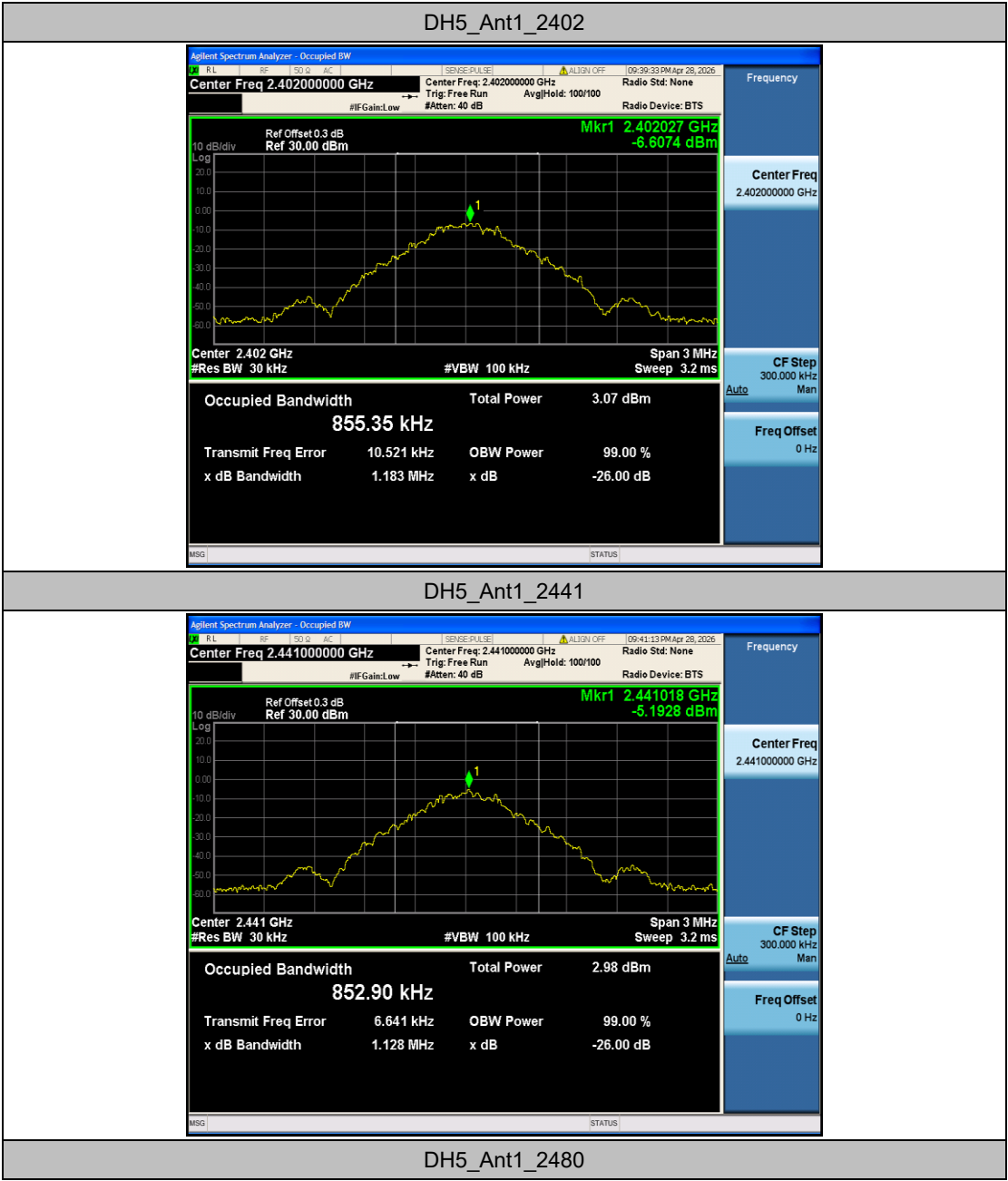


Appendix B: Occupied Channel Bandwidth

Test Result

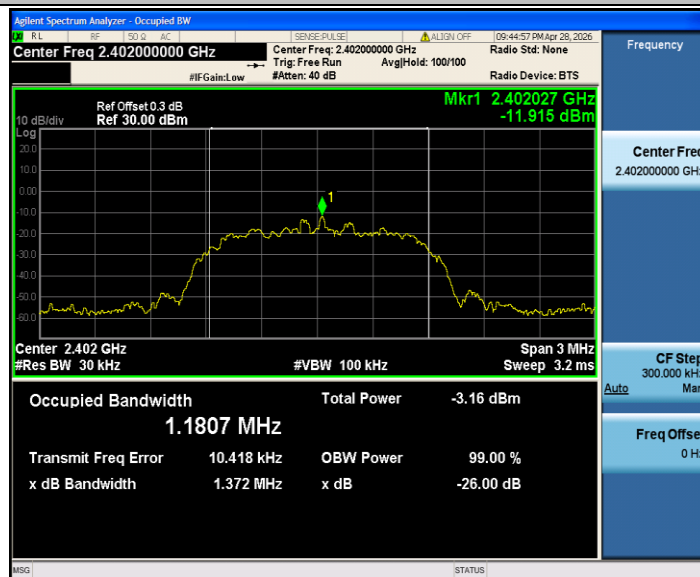
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85535	2401.5828	2402.4382	---	---
		2441	0.85290	2440.5802	2441.4331	---	---
		2480	0.87252	2479.5765	2480.4490	---	---
2DH5	Ant1	2402	1.1807	2401.4201	2402.6008	---	---
		2441	1.1770	2440.4240	2441.6010	---	---
		2480	1.1902	2479.4163	2480.6065	---	---

Test Graphs

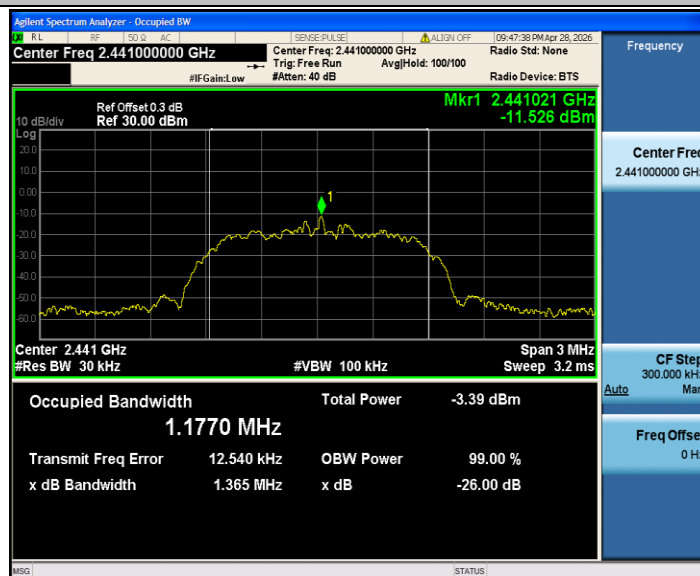




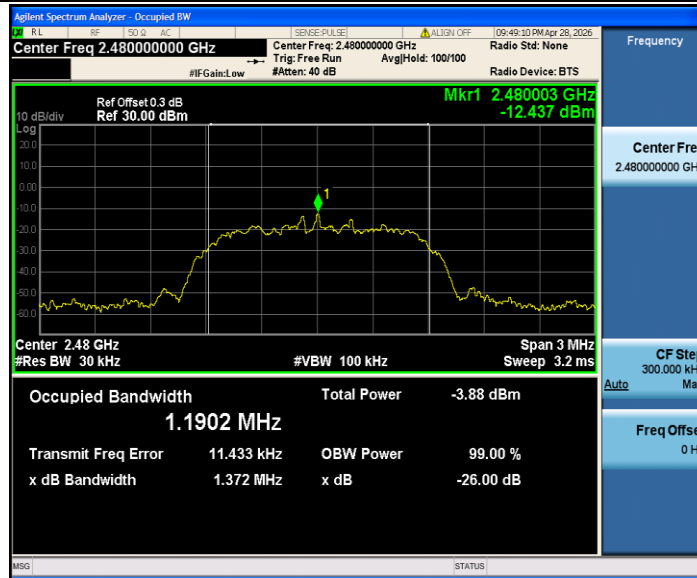
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

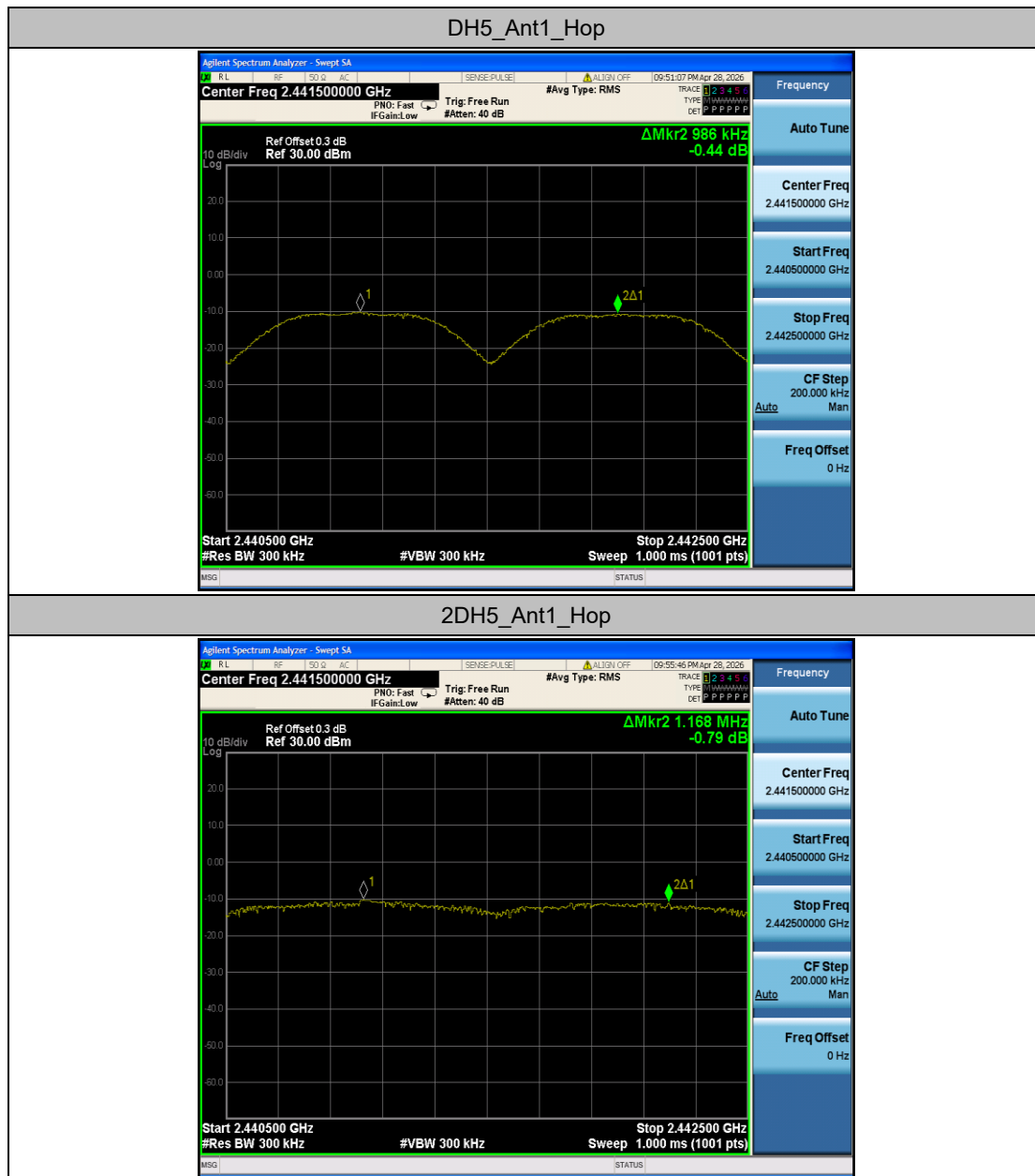
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-3.38	≤20.97	PASS
		2441	-3.65	≤20.97	PASS
		2480	-3.63	≤20.97	PASS
2DH5	Ant1	2402	-7.39	≤20.97	PASS
		2441	-7.63	≤20.97	PASS
		2480	-7.82	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.986	≥ 0.960	PASS
2DH5	Ant1	Hop	1.168	≥ 0.884	PASS

Test Graphs

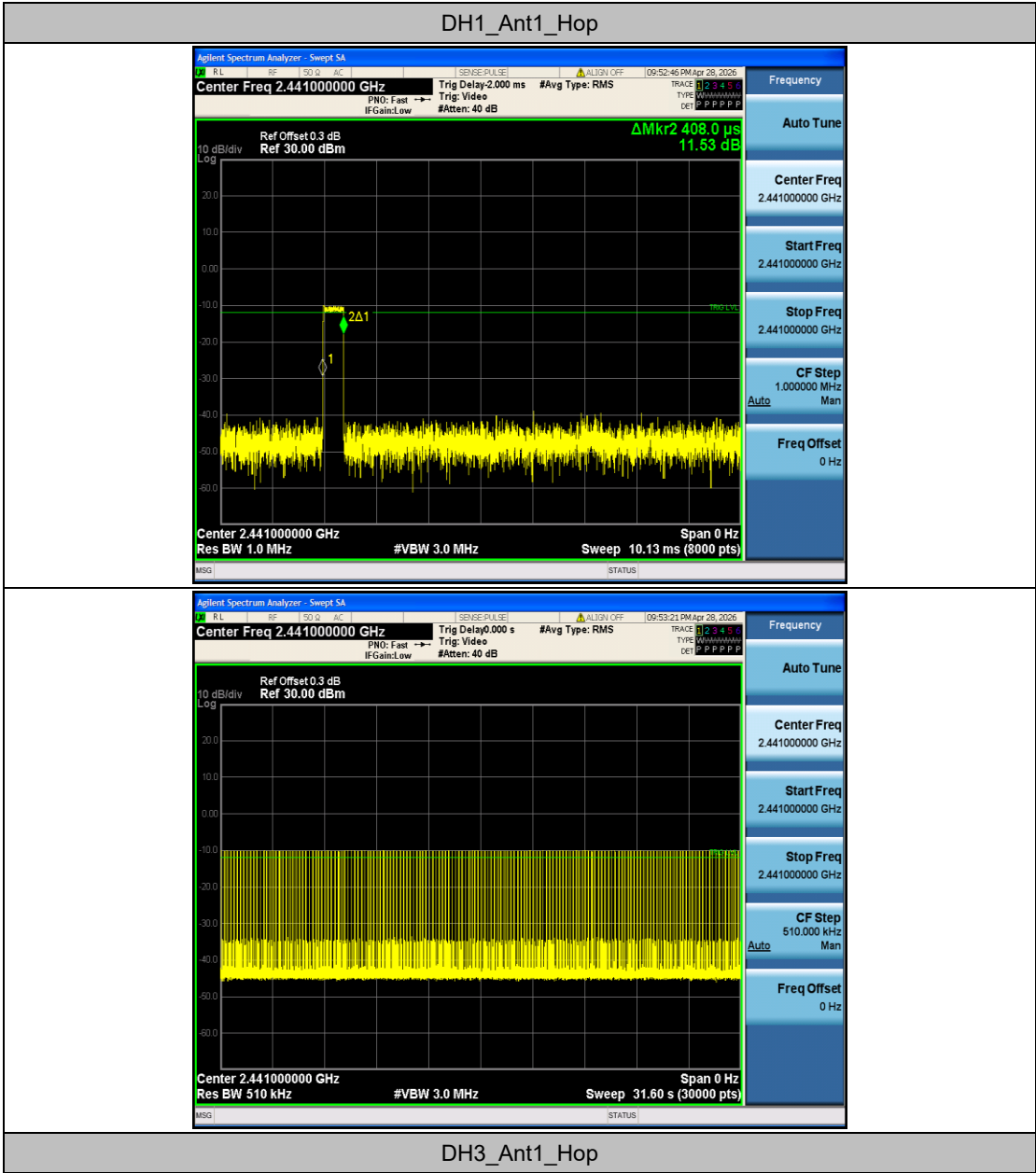


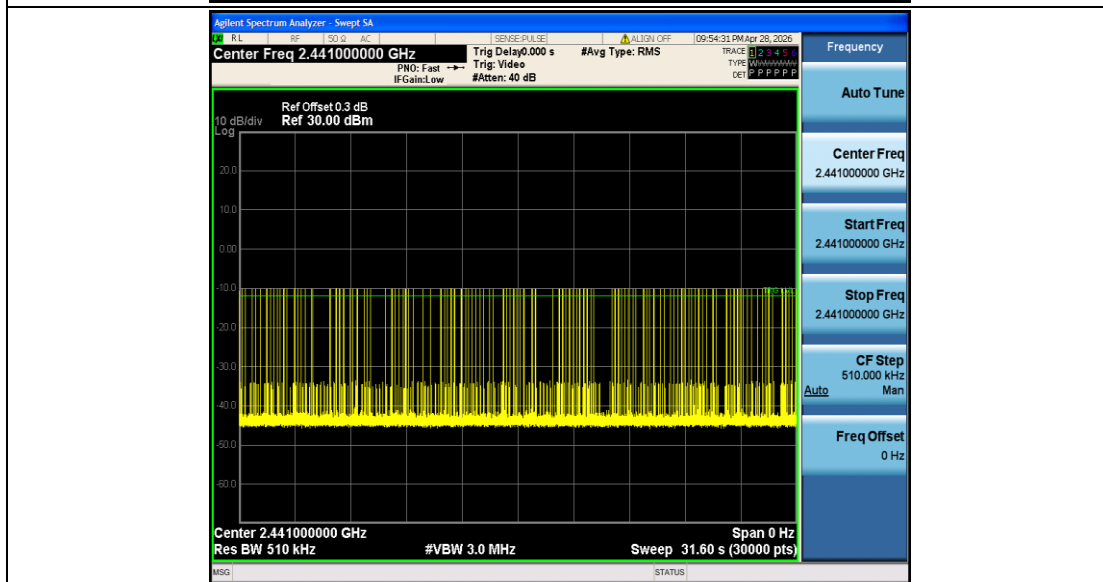
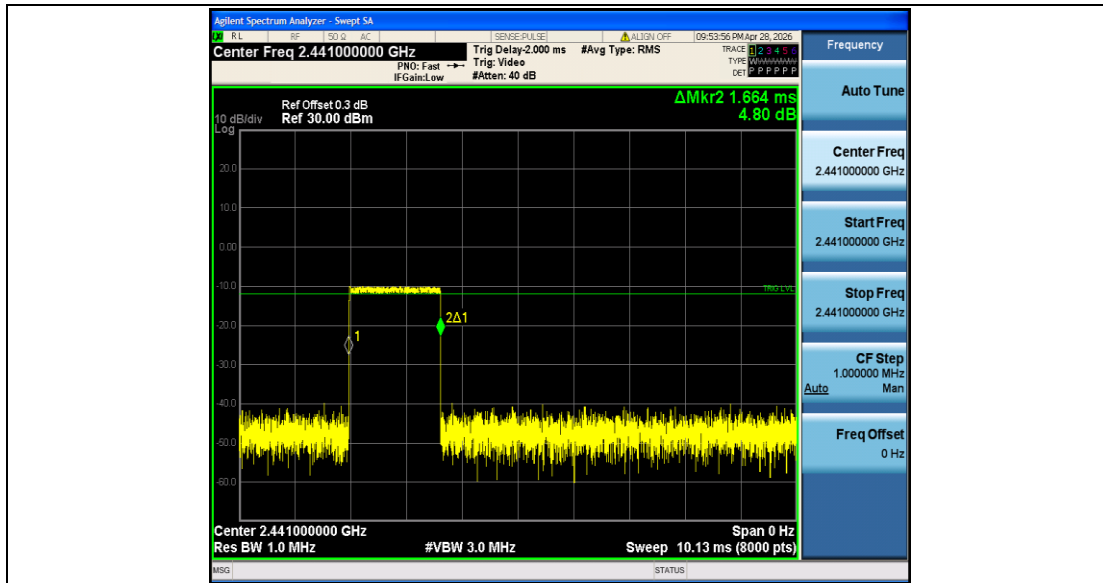
Appendix E: Time of occupancy

Test Result

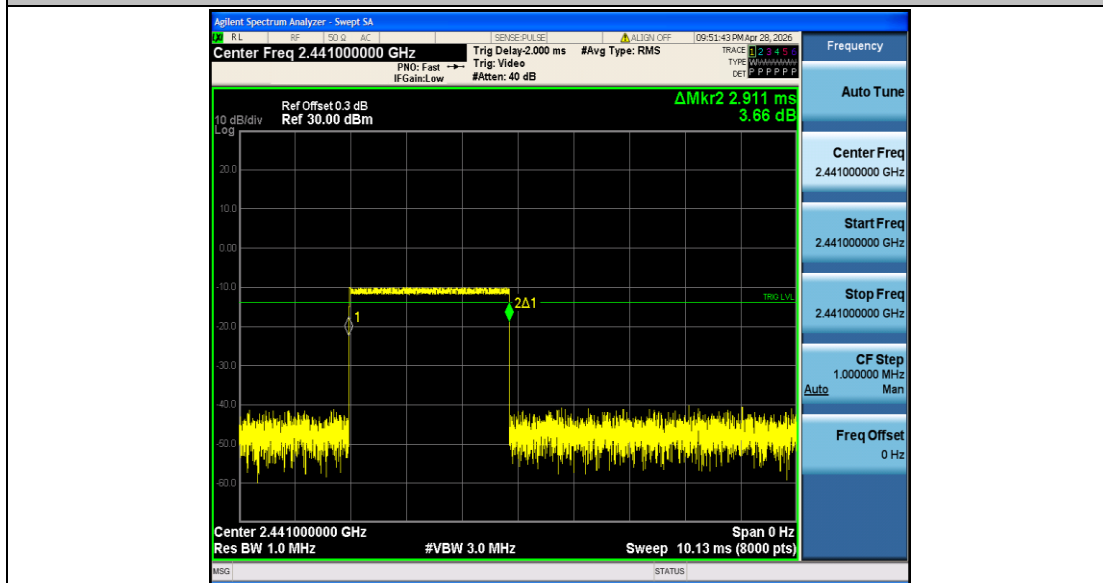
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.408	314	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.664	155	0.258	≤0.4	PASS
DH5	Ant1	Hop	2.911	107	0.311	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.669	158	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.917	108	0.315	≤0.4	PASS

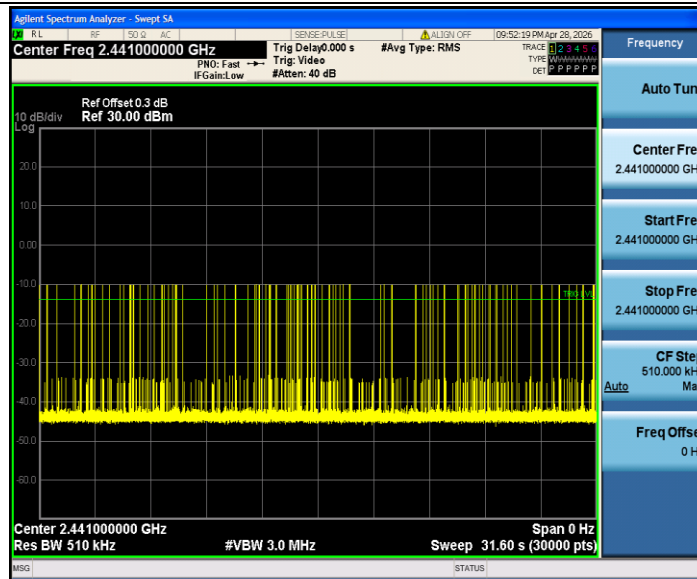
Test Graphs



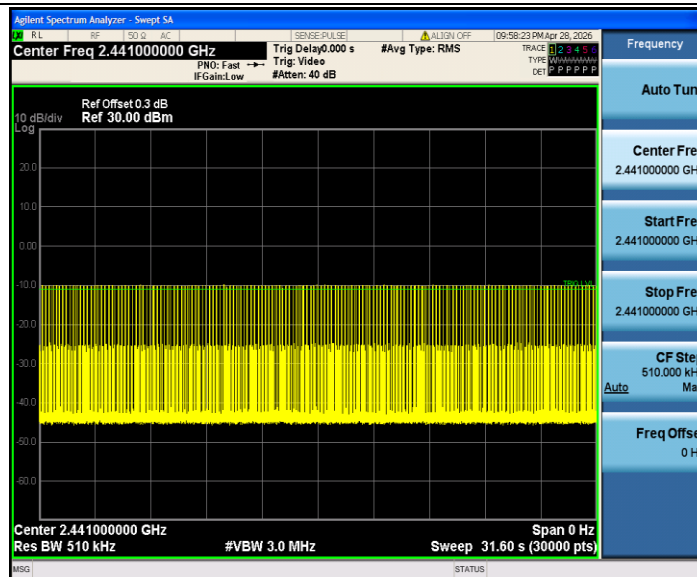
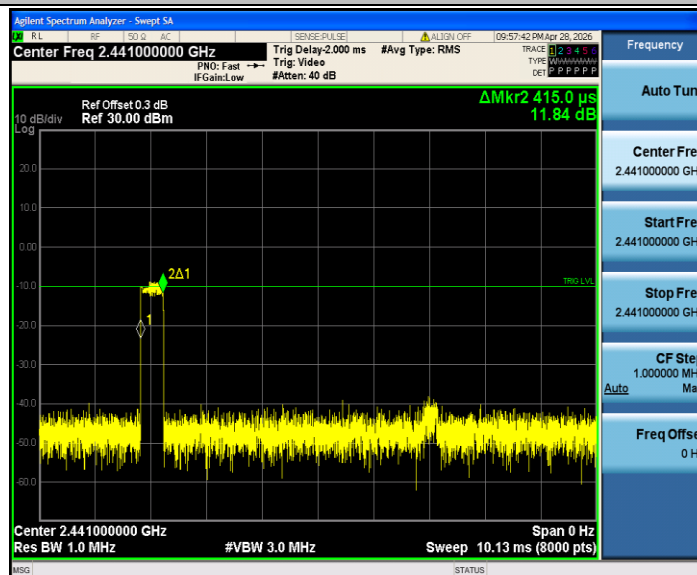


DH5_Ant1_Hop

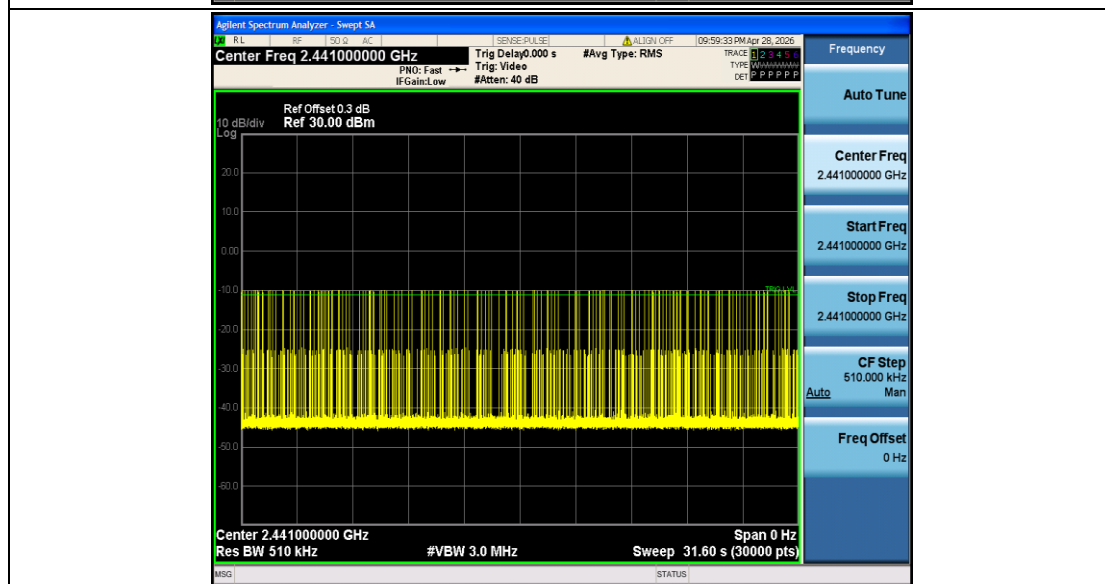
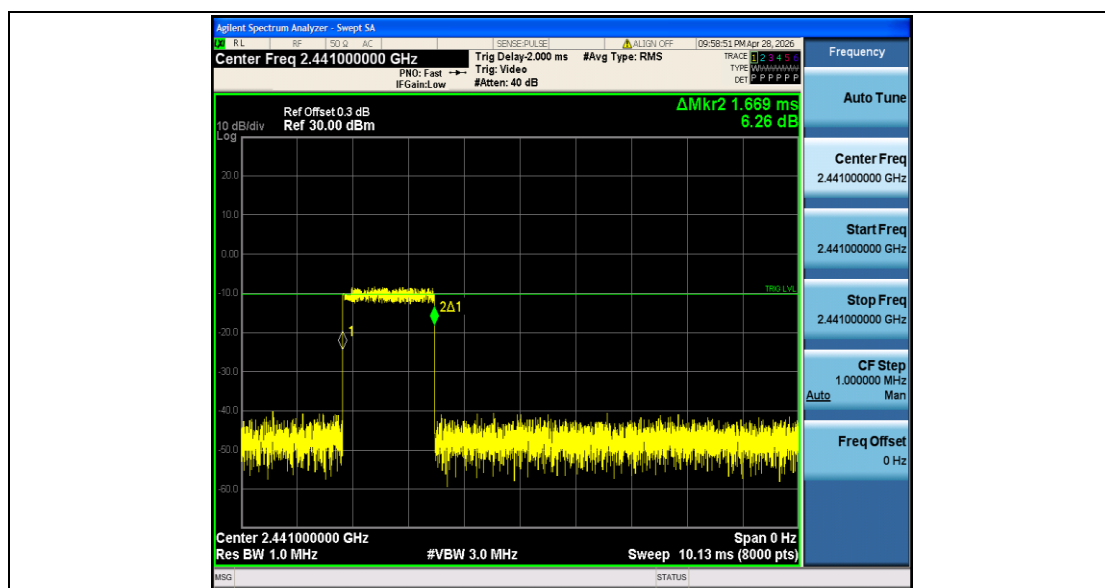




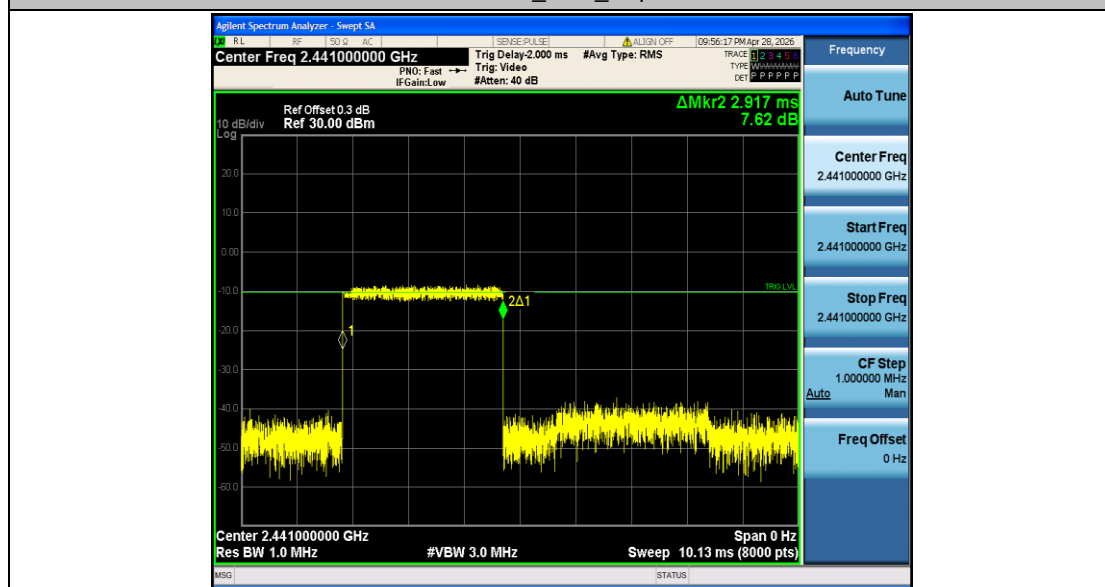
2DH1_Ant1_Hop

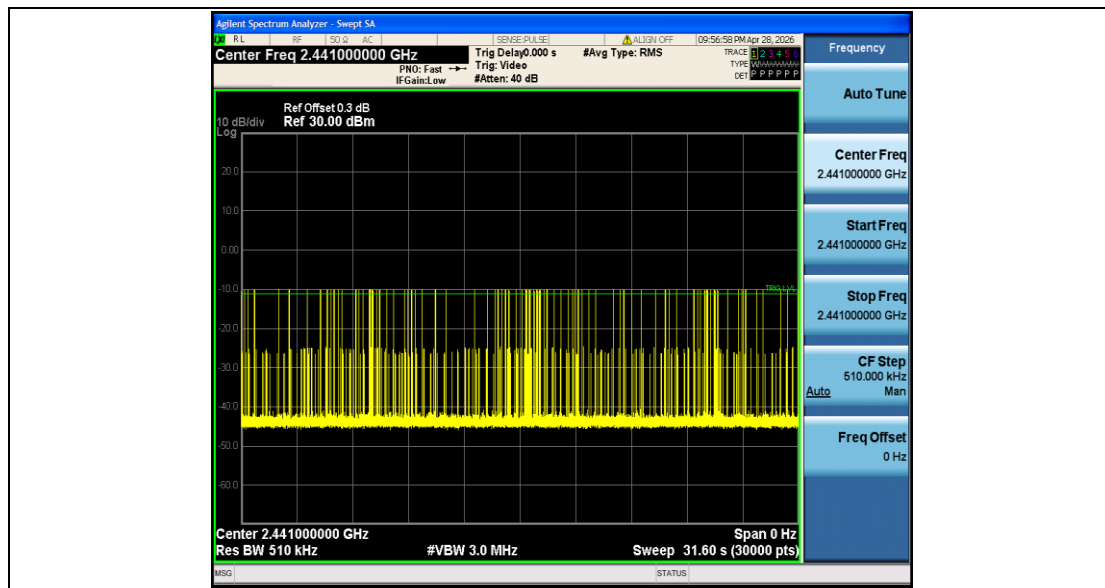


2DH3_Ant1_Hop



2DH5_Ant1_Hop



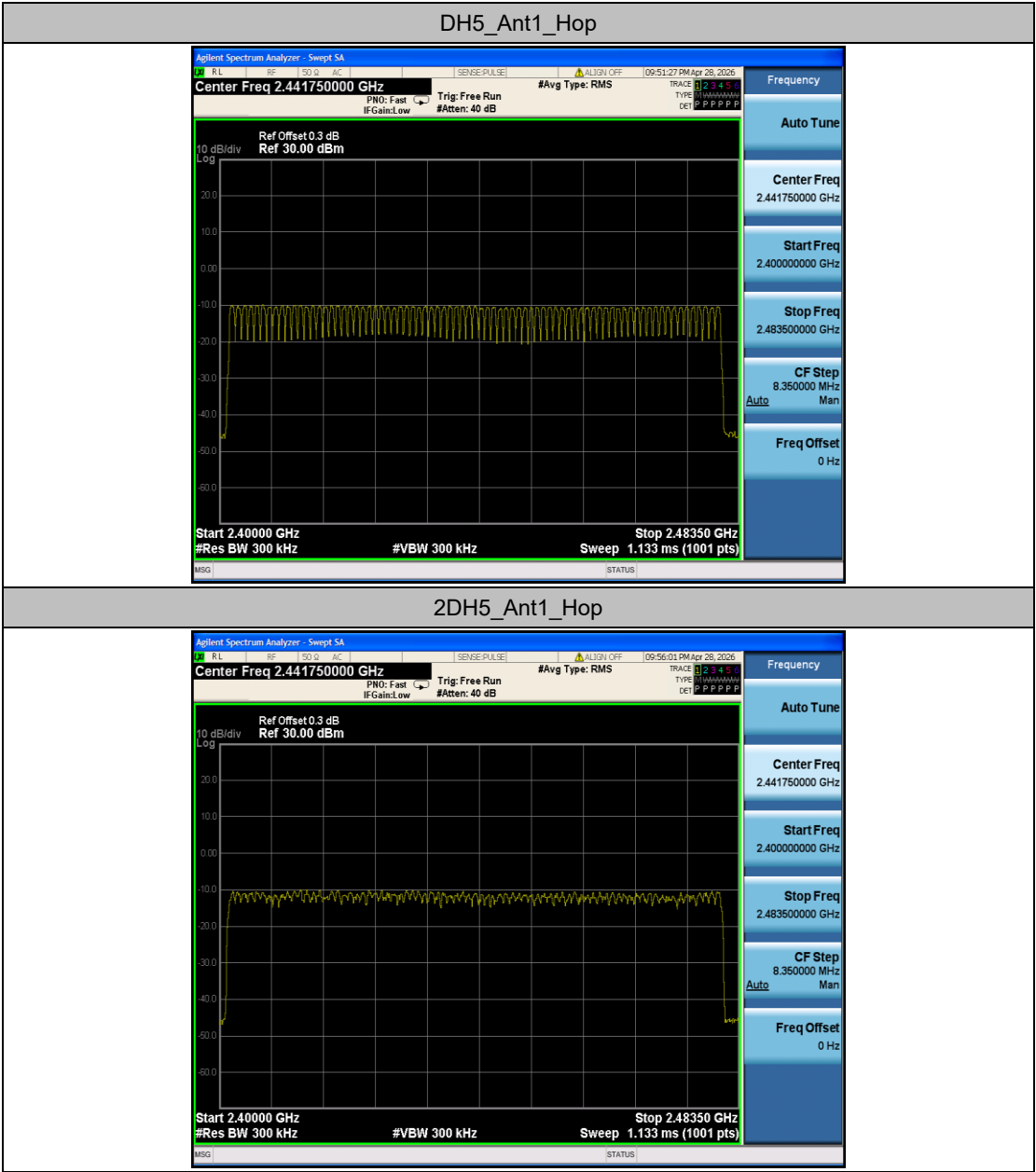


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

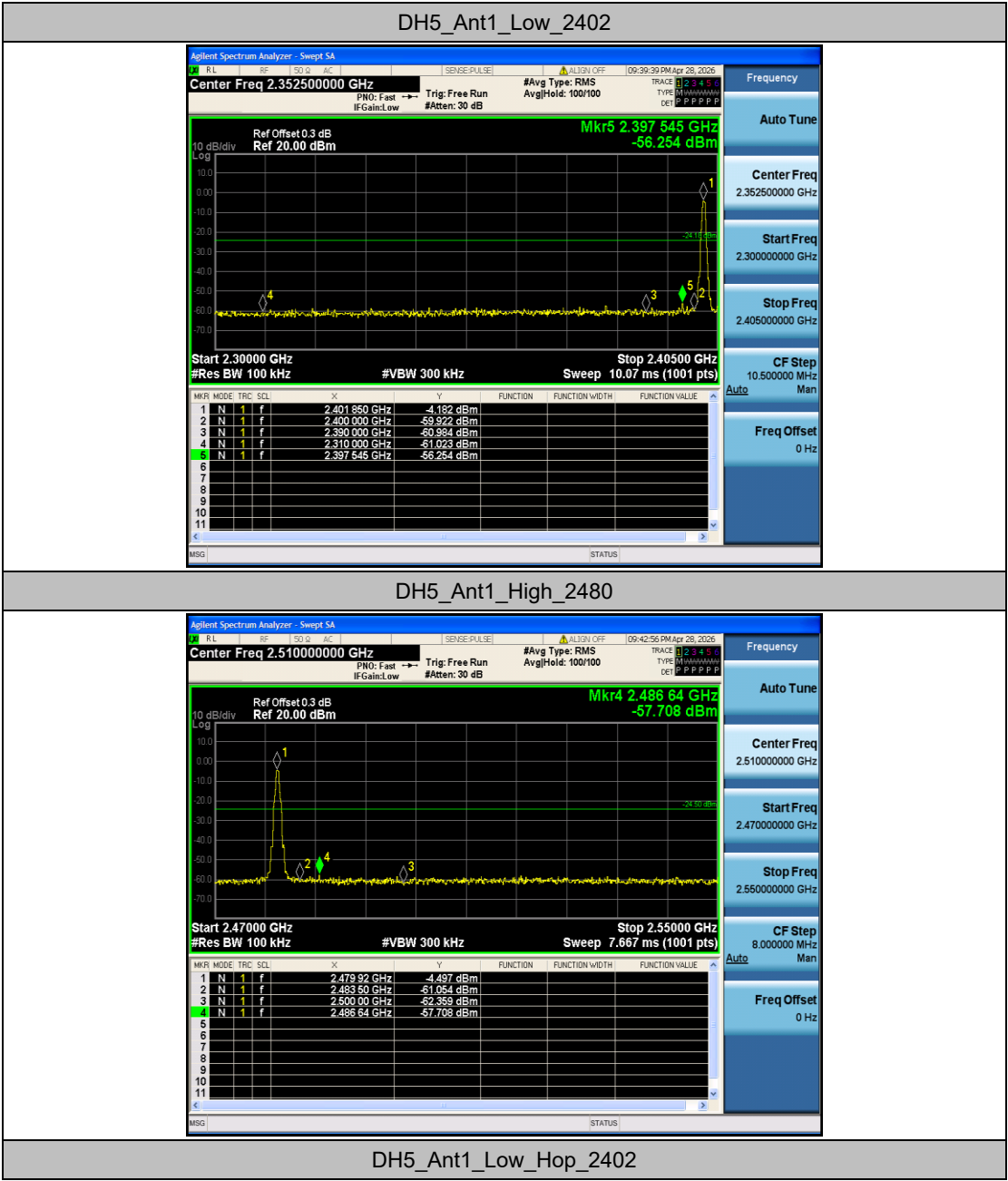


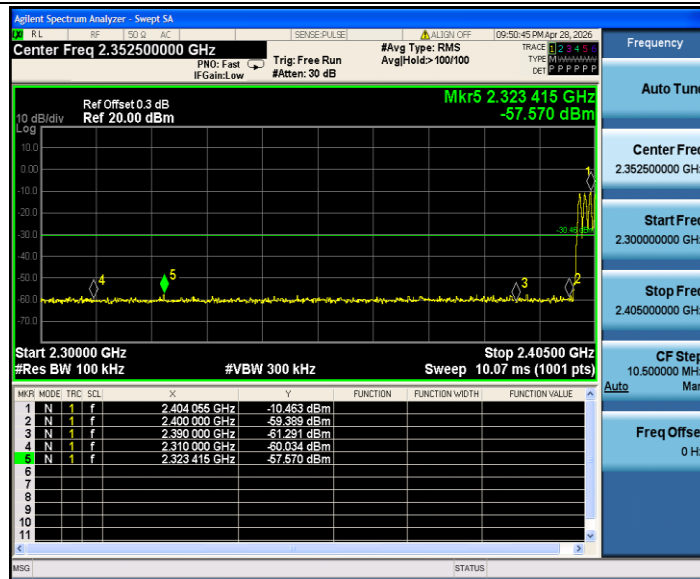
Appendix G: Band edge measurements

Test Result

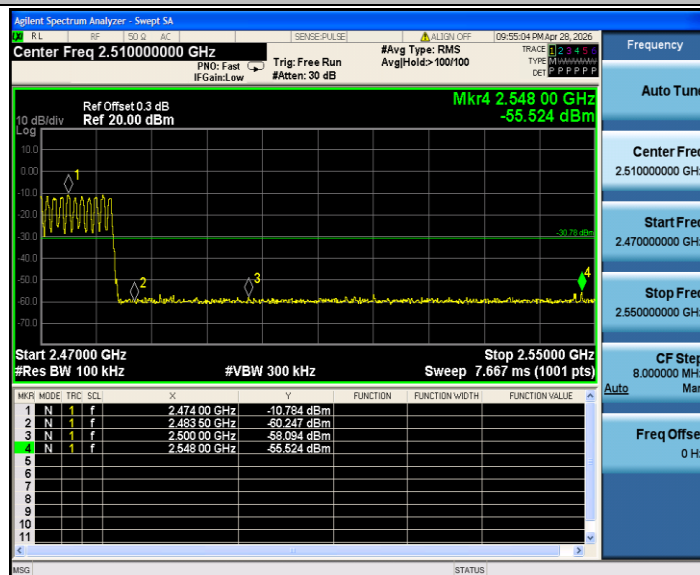
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.18	-56.25	≤-24.18	PASS
		High	2480	-4.50	-57.71	≤-24.5	PASS
		Low	Hop_2402	-10.46	-57.57	≤-30.46	PASS
		High	Hop_2480	-10.78	-55.52	≤-30.78	PASS
2DH5	Ant1	Low	2402	-10.65	-58.11	≤-30.65	PASS
		High	2480	-10.34	-57.26	≤-30.34	PASS
		Low	Hop_2402	-11.52	-57.28	≤-31.52	PASS
		High	Hop_2480	-10.17	-57.37	≤-30.17	PASS

Test Graphs

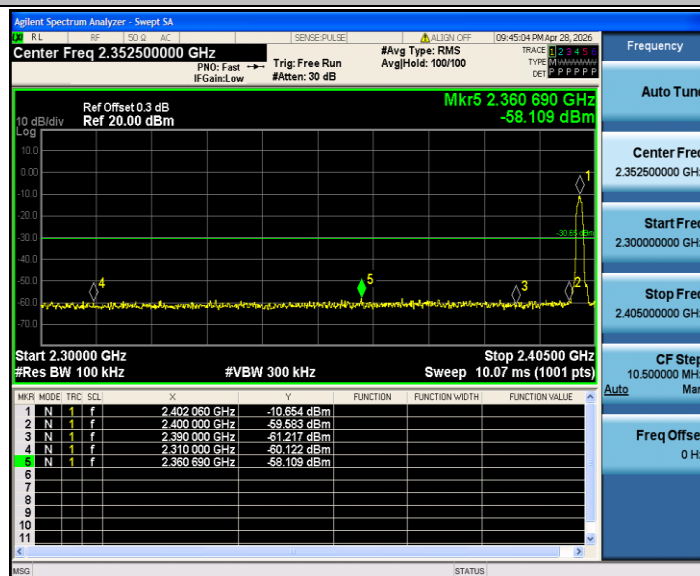




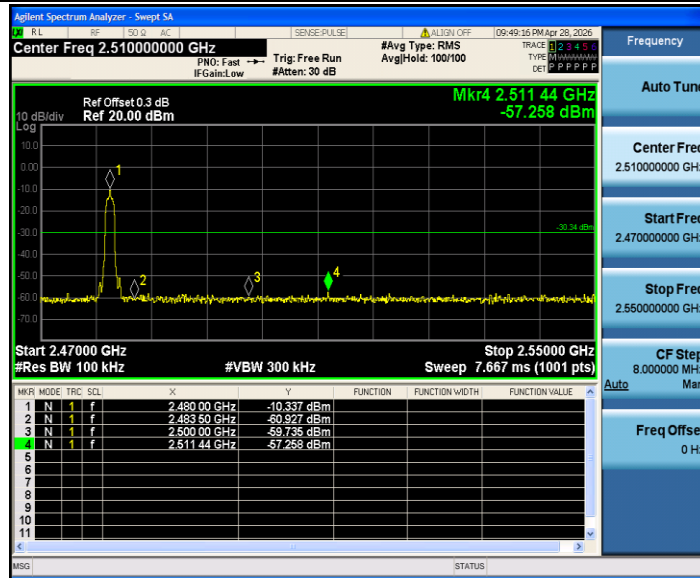
DH5_Ant1_High_Hop_2480



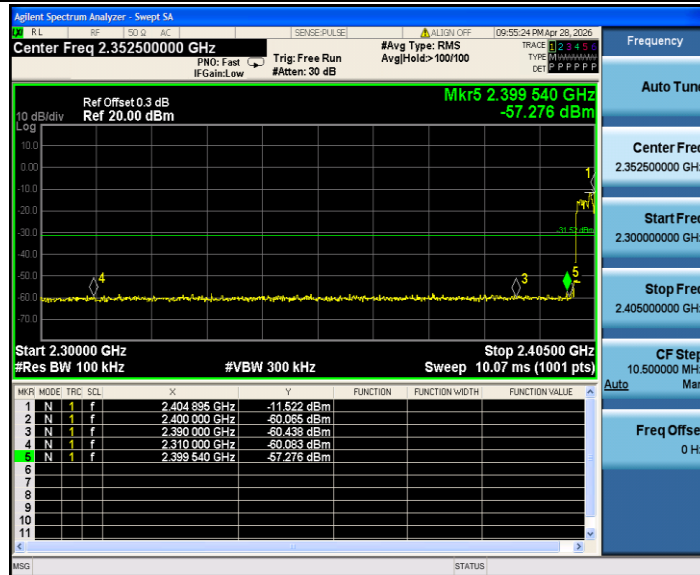
2DH5_Ant1_Low_2402



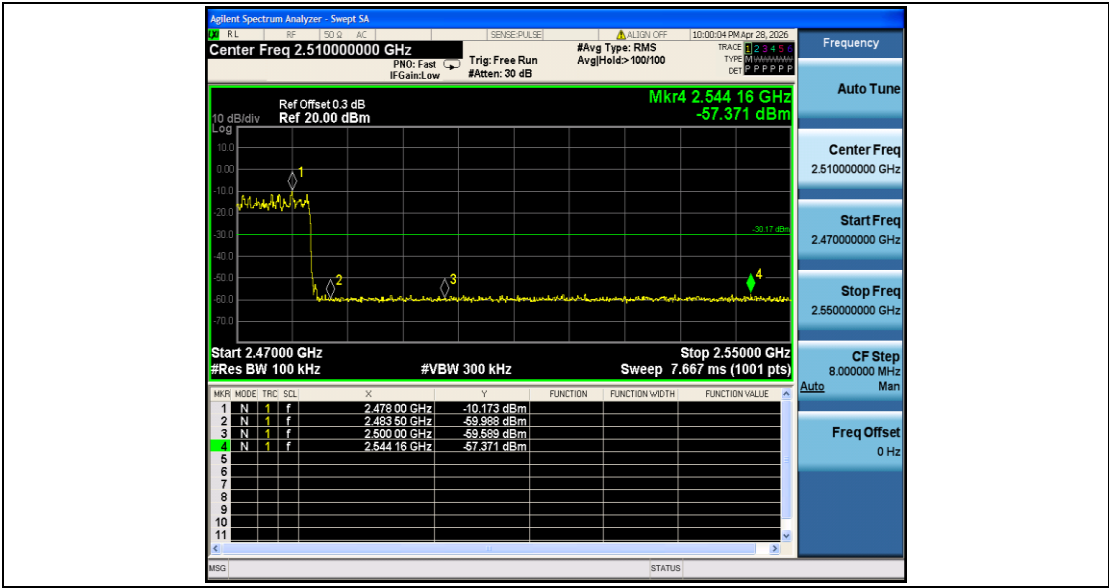
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

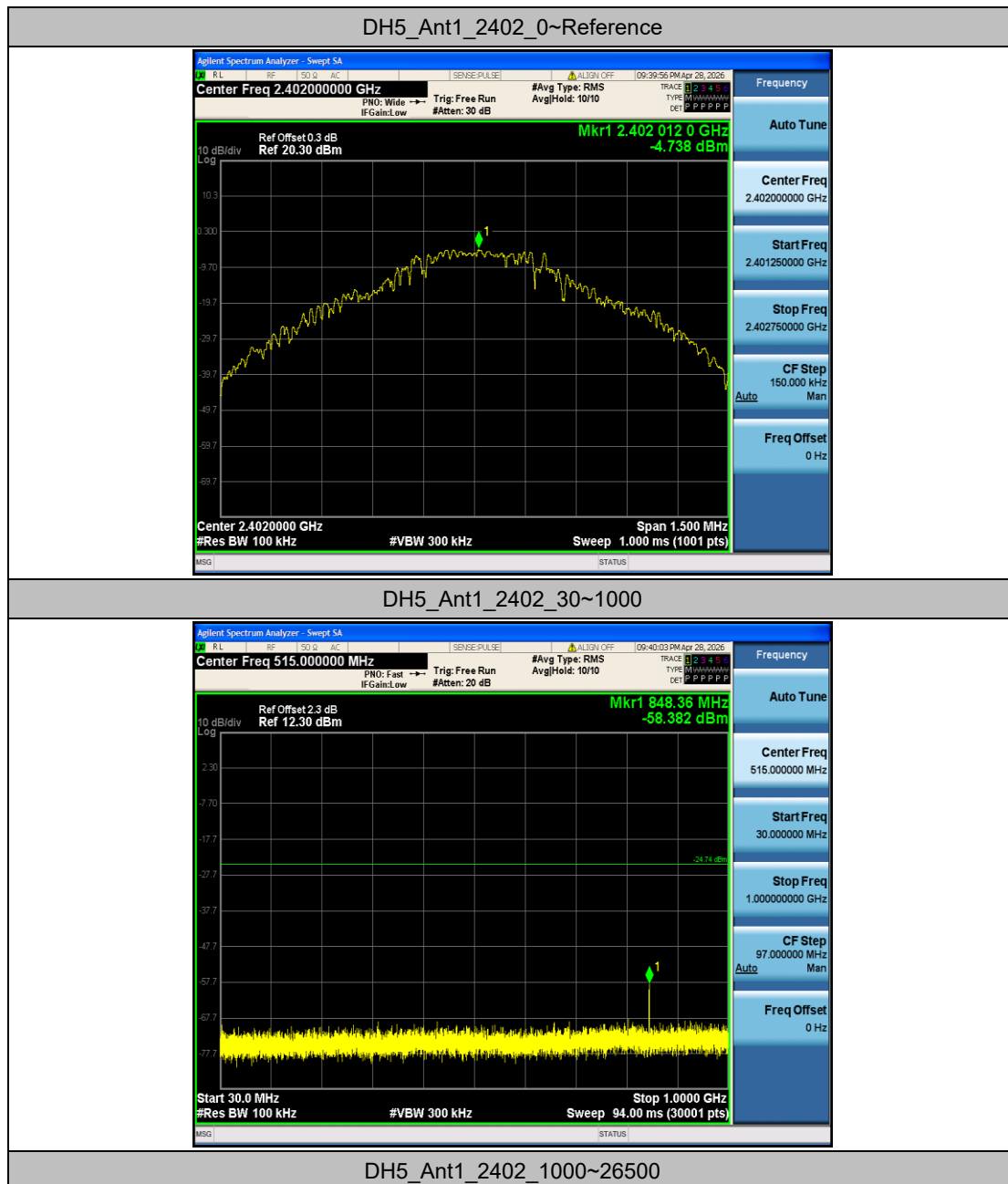


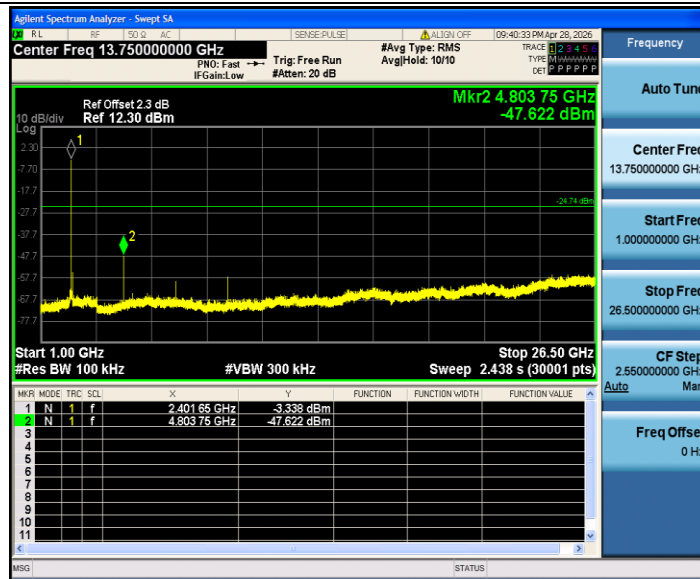
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.74	-4.74	---	PASS
			30~1000	-4.74	-58.38	≤-24.74	PASS
			1000~26500	-4.74	-47.62	≤-24.74	PASS
		2441	Reference	-4.78	-4.78	---	PASS
			30~1000	-4.78	-68.33	≤-24.78	PASS
			1000~26500	-4.78	-48.17	≤-24.78	PASS
		2480	Reference	-4.85	-4.85	---	PASS
			30~1000	-4.85	-57.9	≤-24.85	PASS
			1000~26500	-4.85	-48.5	≤-24.85	PASS
2DH5	Ant1	2402	Reference	-12.20	-12.20	---	PASS
			30~1000	-12.20	-66.54	≤-32.2	PASS
			1000~26500	-12.20	-55.64	≤-32.2	PASS
		2441	Reference	-12.91	-12.91	---	PASS
			30~1000	-12.91	-66.39	≤-32.91	PASS
			1000~26500	-12.91	-55.58	≤-32.91	PASS
		2480	Reference	-13.85	-13.85	---	PASS
			30~1000	-13.85	-68.23	≤-33.85	PASS
			1000~26500	-13.85	-55.86	≤-33.85	PASS

Test Graphs

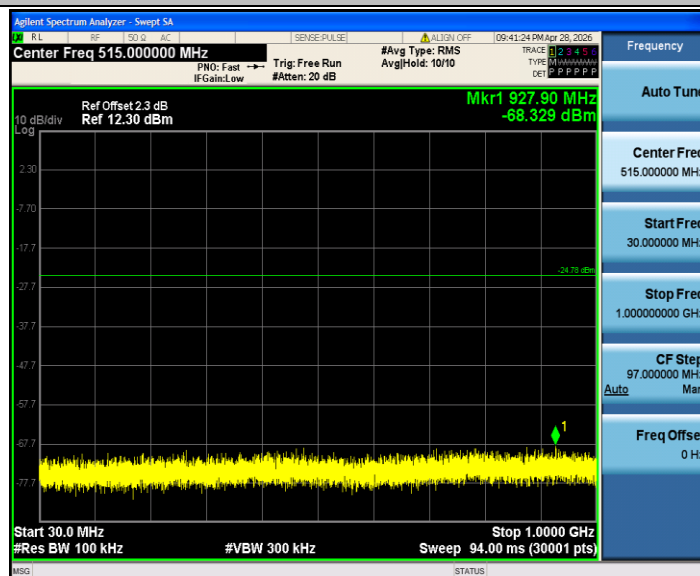




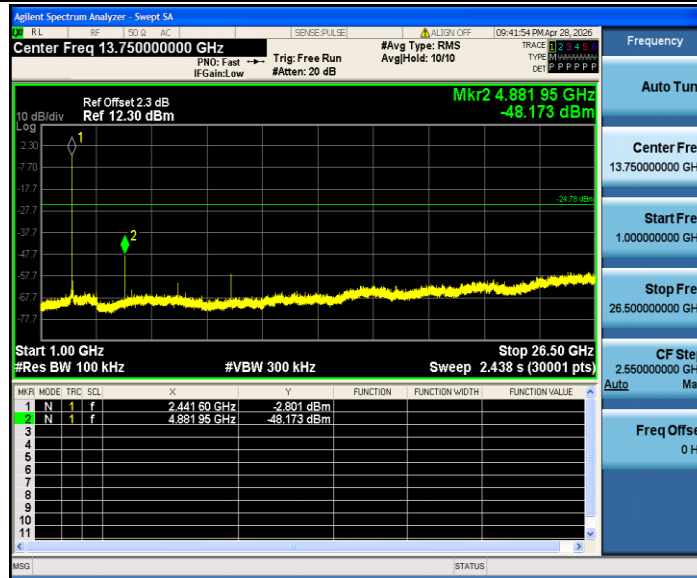
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



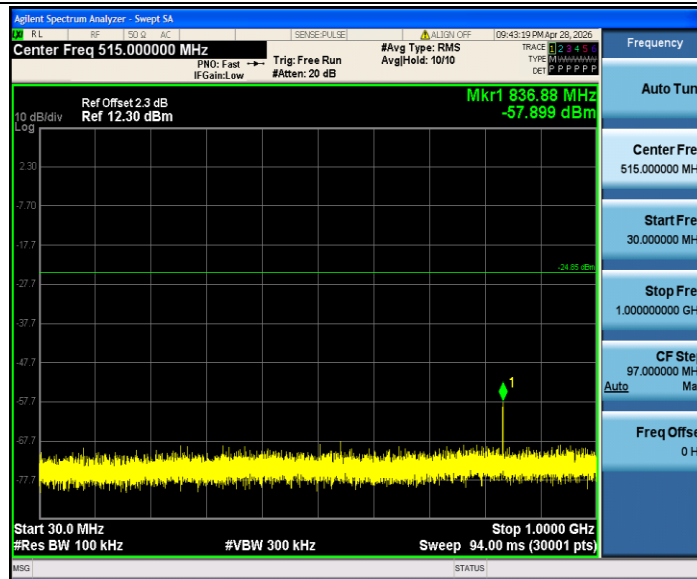
DH5_Ant1_2441_1000~26500



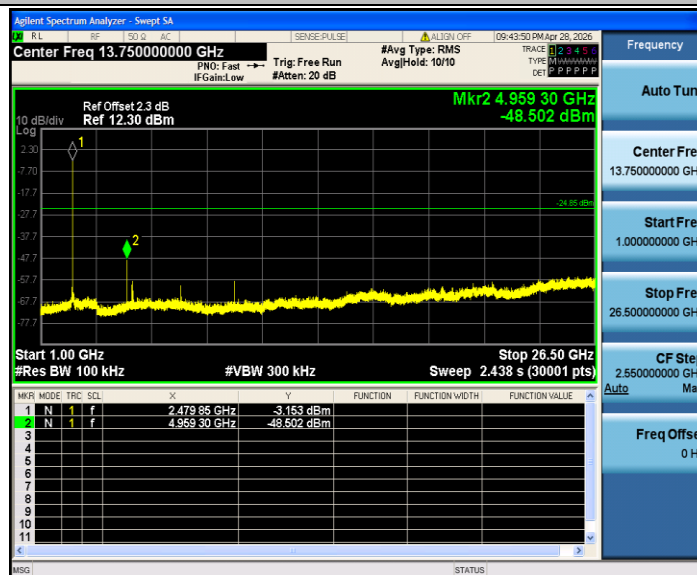
DH5_Ant1_2480_0~Reference



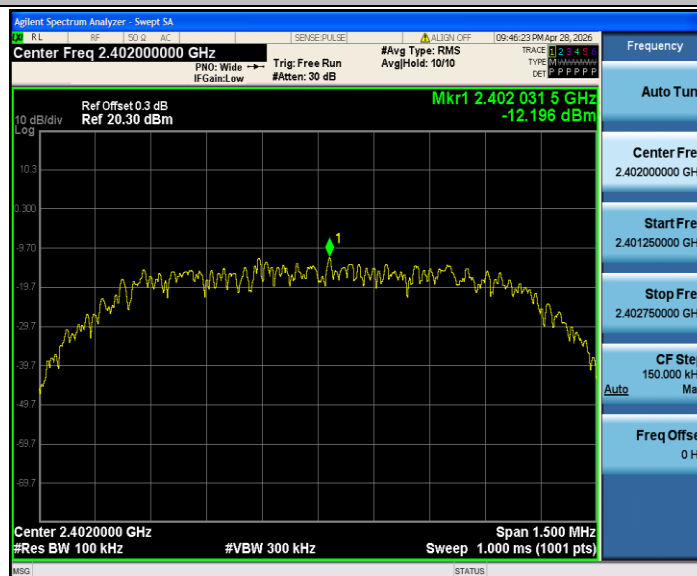
DH5_Ant1_2480_30~1000



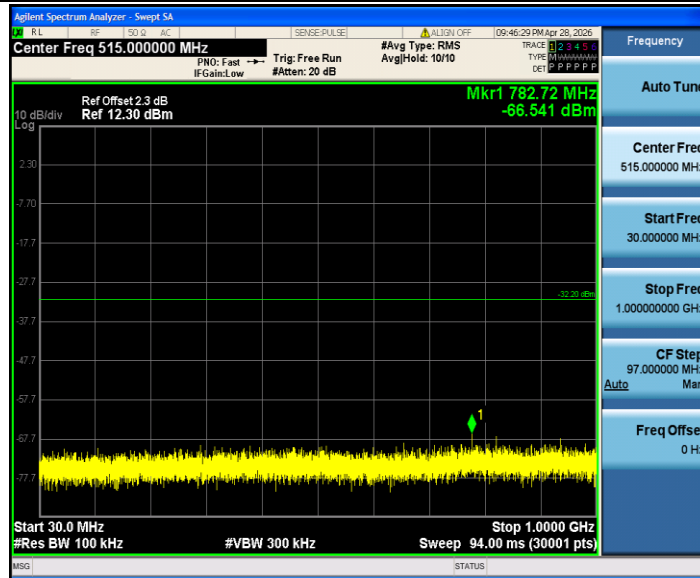
DH5_Ant1_2480_1000~26500



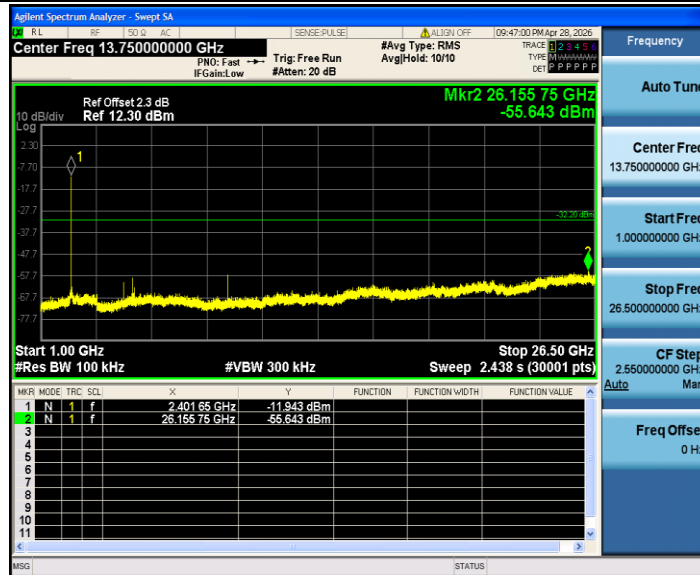
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



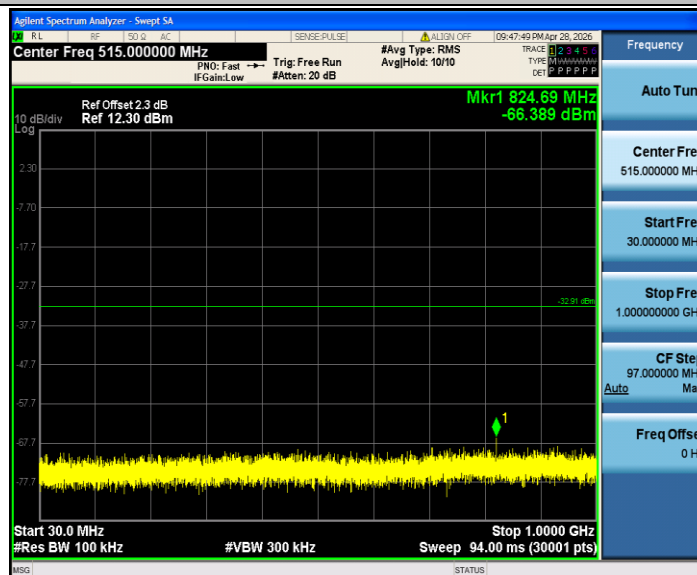
2DH5_Ant1_2402_1000~26500



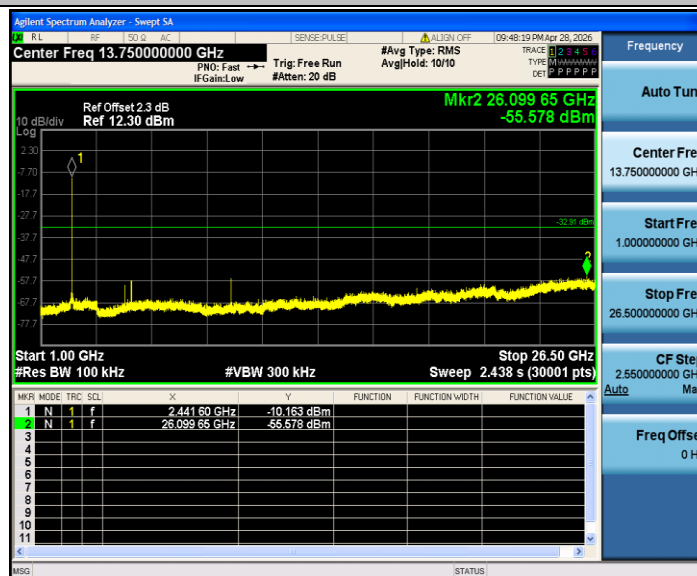
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



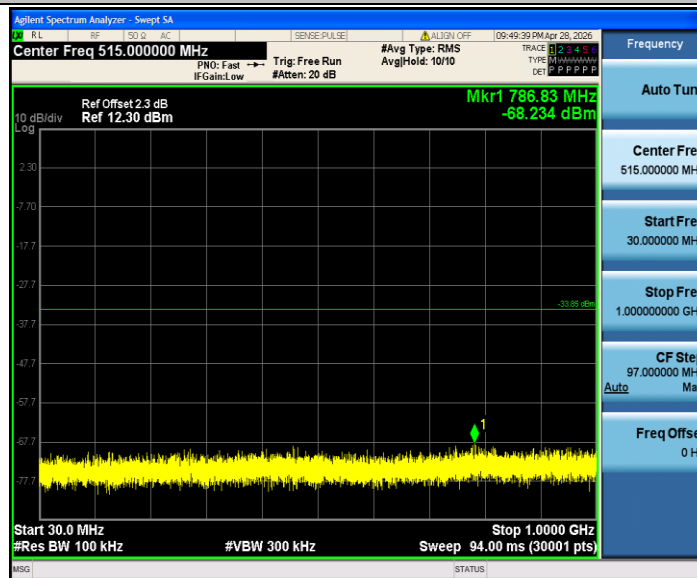
2DH5_Ant1_2441_1000~26500



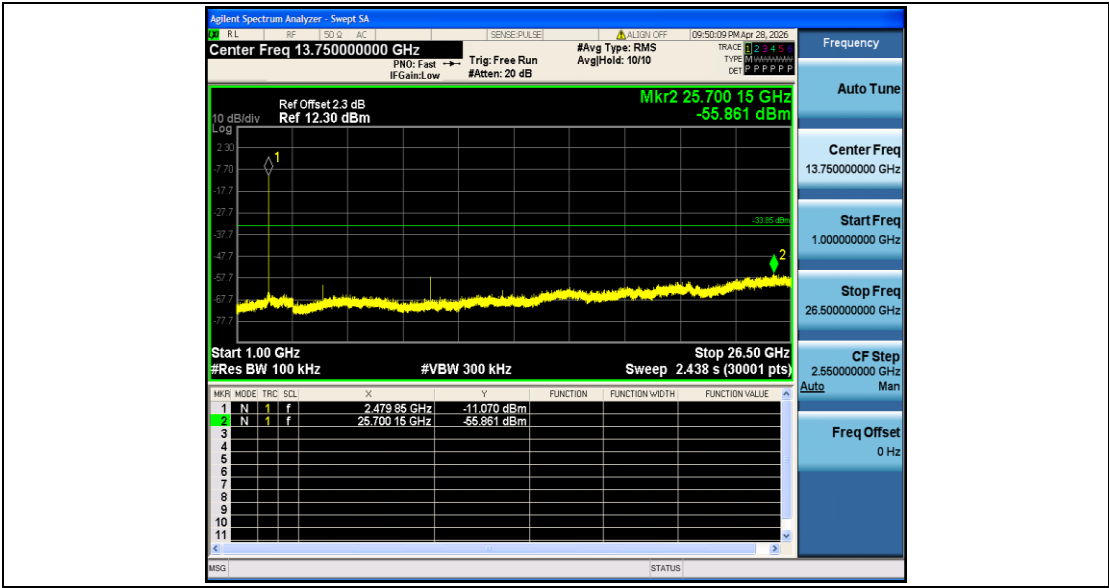
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.76	77.66	1.10	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---