

FCC Appendix RF Test Data for BT

FCC ID : 2AG5A-ARIA26

Company : BRANDCHARGER LTD

EUT : TWS Earphones

Model Number : Aria

Report No. : CTA26060901901

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	2401.541	2402.501	---	---
		2441	0.948	2440.547	2441.495	---	---
		2480	0.951	2479.550	2480.501	---	---
2DH5	Ant1	2402	1.347	2401.334	2402.681	---	---
		2441	1.293	2440.376	2441.669	---	---
		2480	1.329	2479.346	2480.675	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

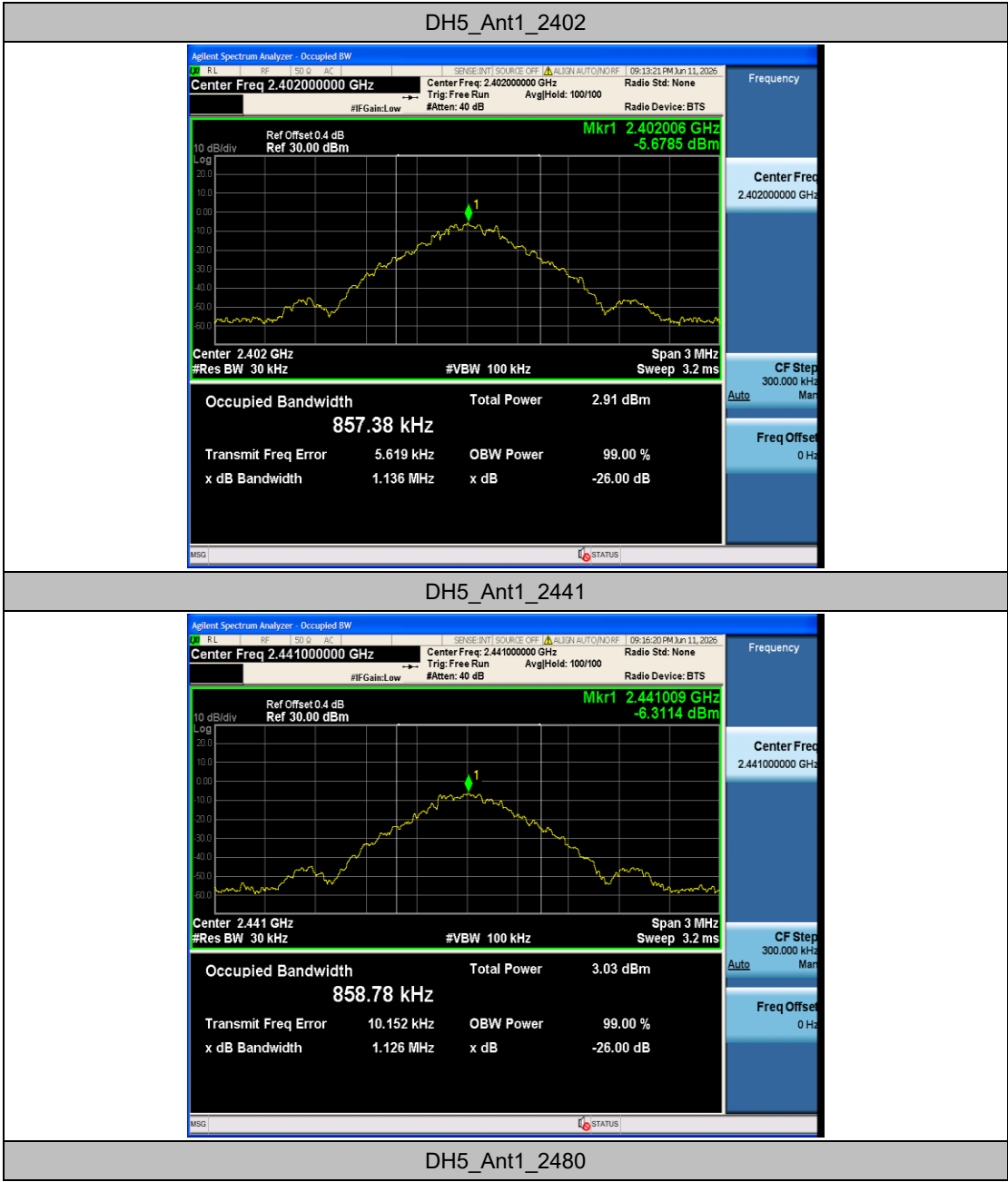


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85738	2401.5769	2402.4343	---	---
		2441	0.85878	2440.5808	2441.4395	---	---
		2480	0.85814	2479.5814	2480.4395	---	---
2DH5	Ant1	2402	1.1914	2401.4170	2402.6084	---	---
		2441	1.1960	2440.4135	2441.6095	---	---
		2480	1.1839	2479.4188	2480.6027	---	---

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	-3.34	≤20.97	PASS
		2441	-3.36	≤20.97	PASS
		2480	-3.55	≤20.97	PASS
2DH5	Ant1	2402	-0.69	≤20.97	PASS
		2441	-0.78	≤20.97	PASS
		2480	-0.92	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥ 0.960	PASS
2DH5	Ant1	Hop	0.984	≥ 0.898	PASS

Test Graphs

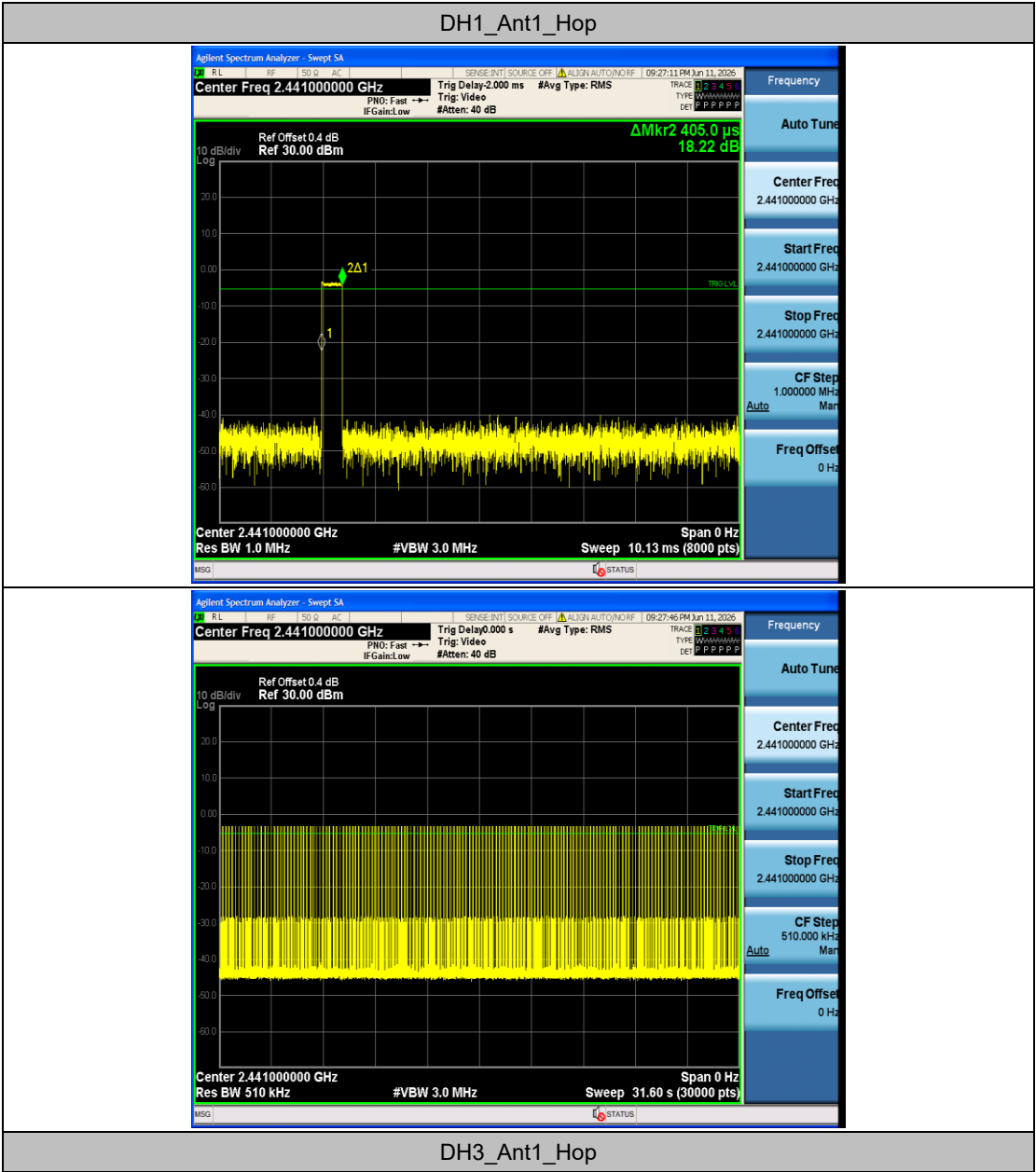


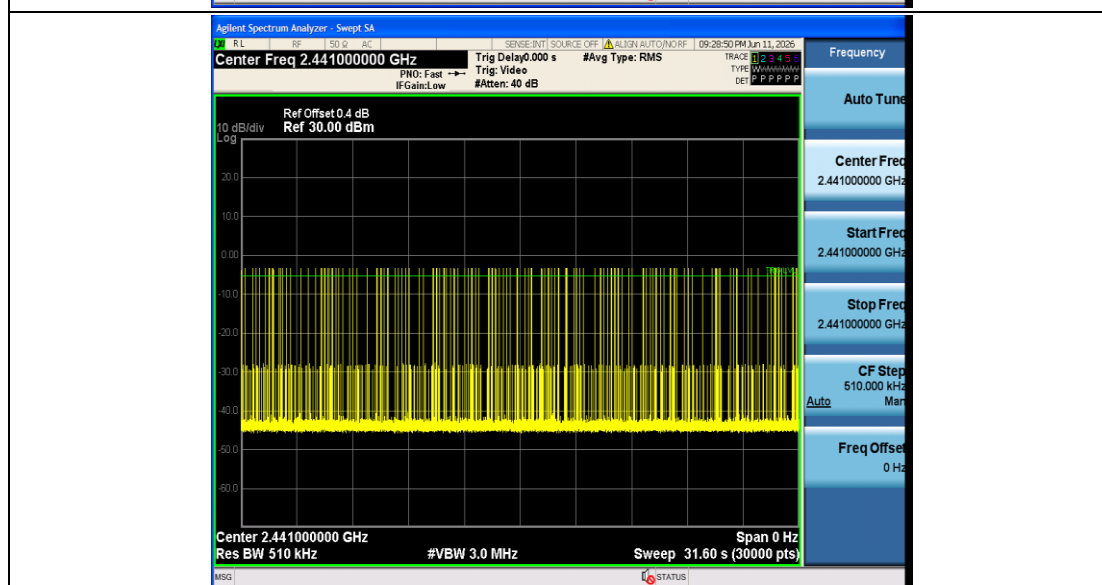
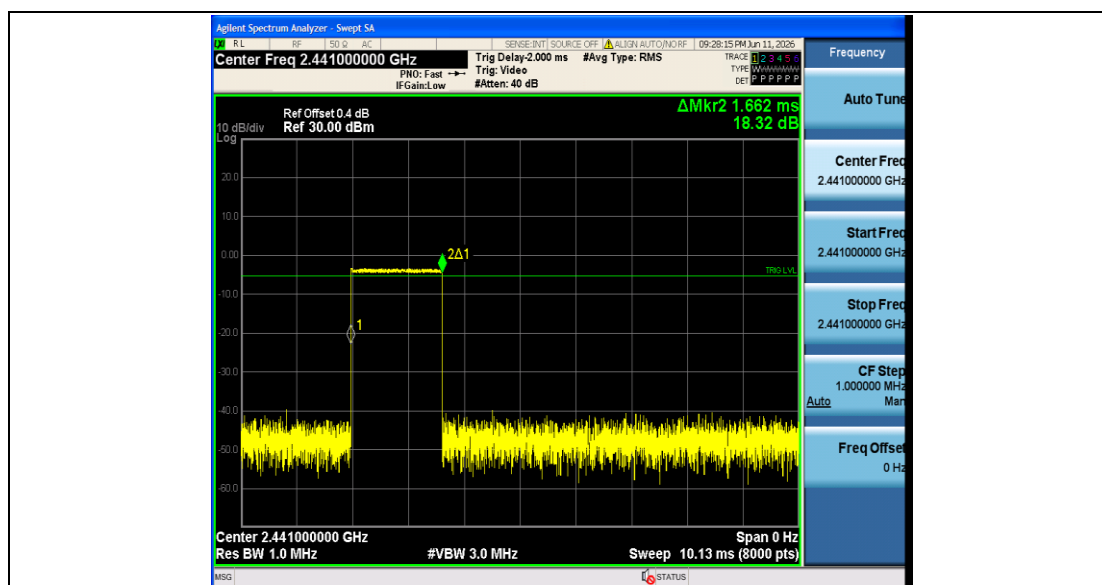
Appendix E: Time of occupancy

Test Result

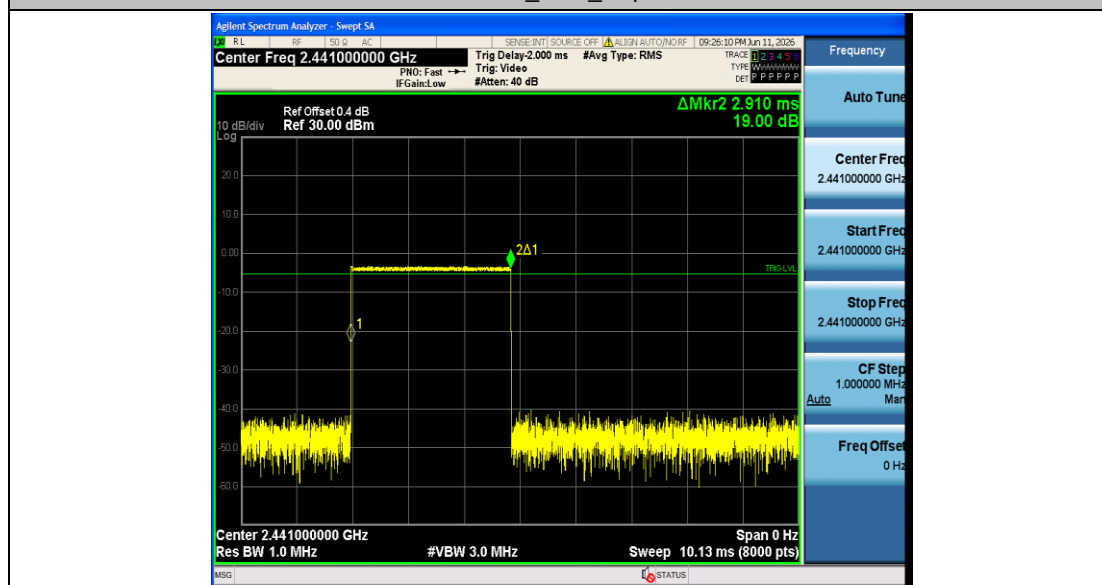
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	317	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.662	148	0.246	≤0.4	PASS
DH5	Ant1	Hop	2.910	108	0.314	≤0.4	PASS
2DH1	Ant1	Hop	0.415	317	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	159	0.265	≤0.4	PASS
2DH5	Ant1	Hop	2.916	108	0.315	≤0.4	PASS

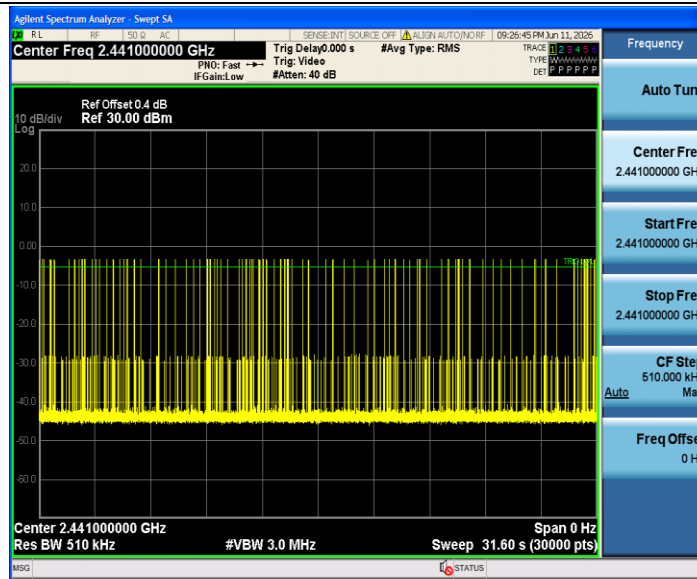
Test Graphs



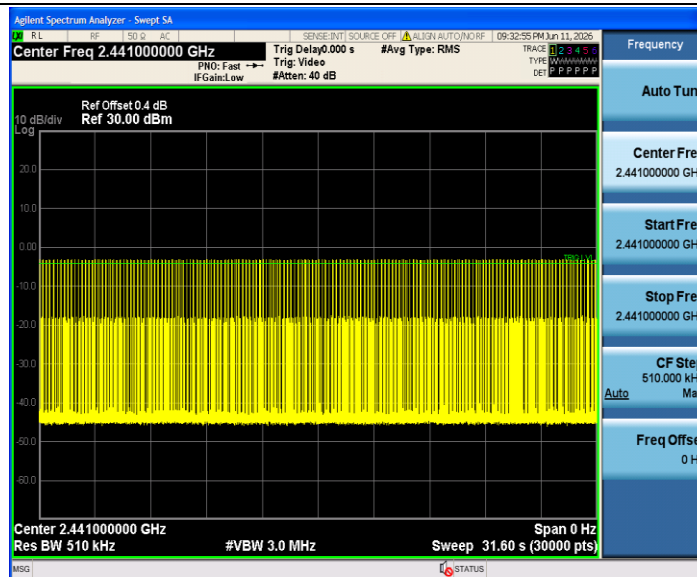
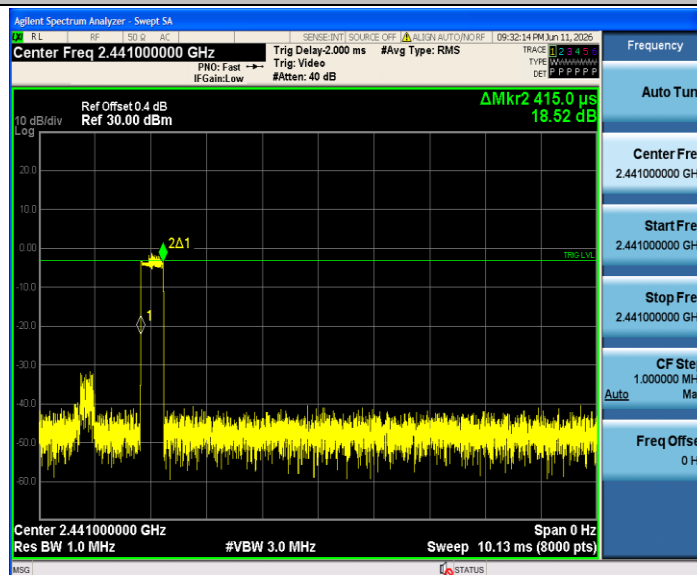


DH5_Ant1_Hop

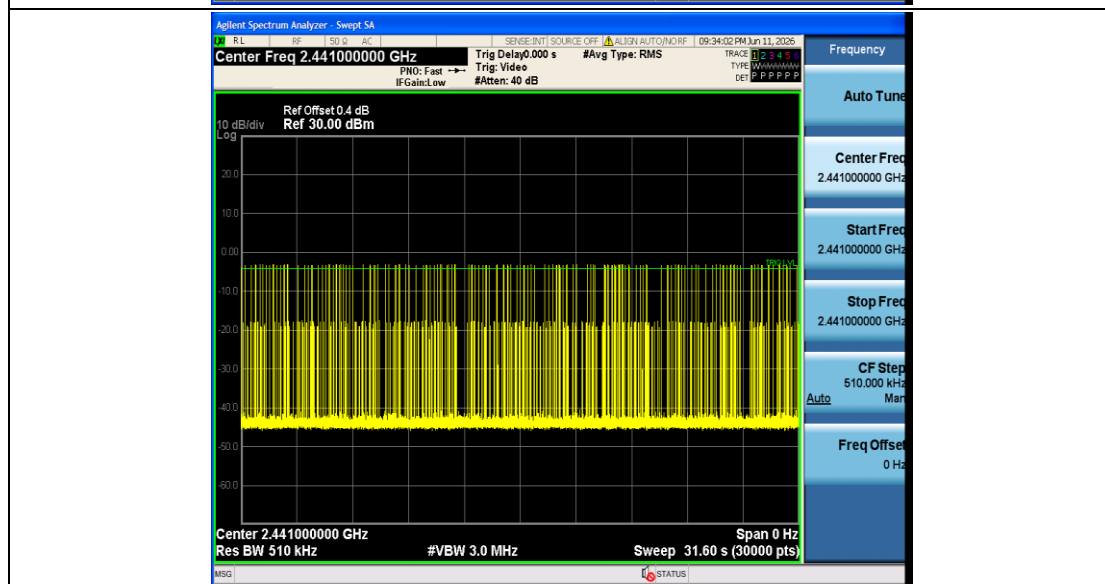
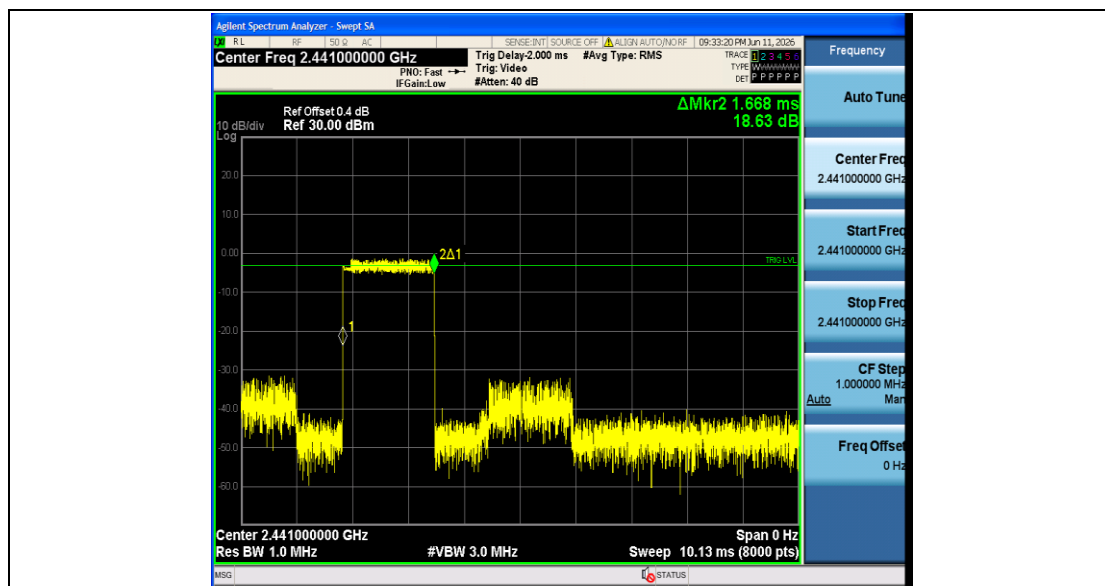




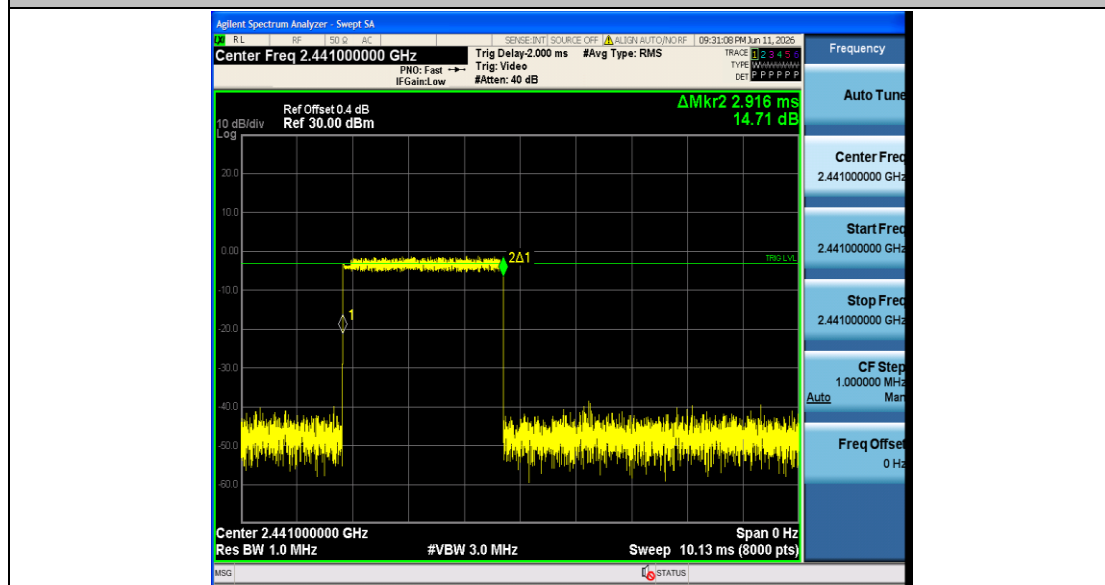
2DH1_Ant1_Hop

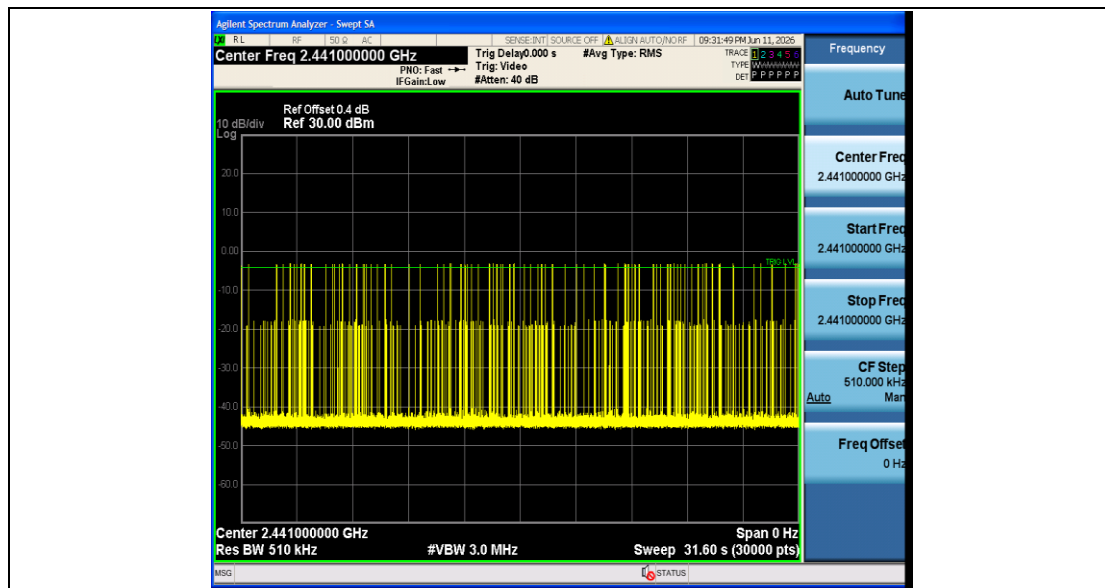


2DH3_Ant1_Hop



2DH5_Ant1_Hop



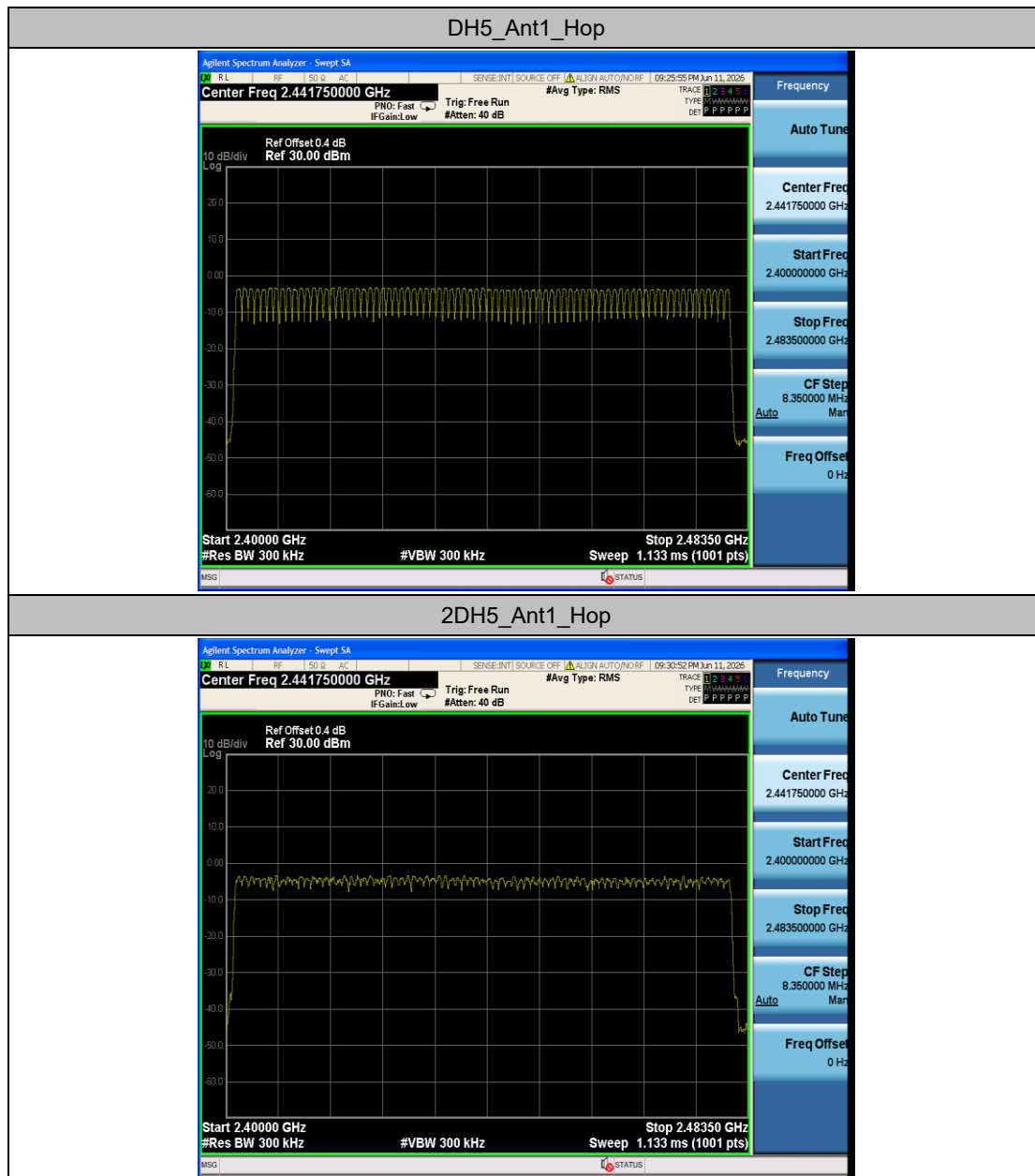


Appendix F: Number of hopping channels

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

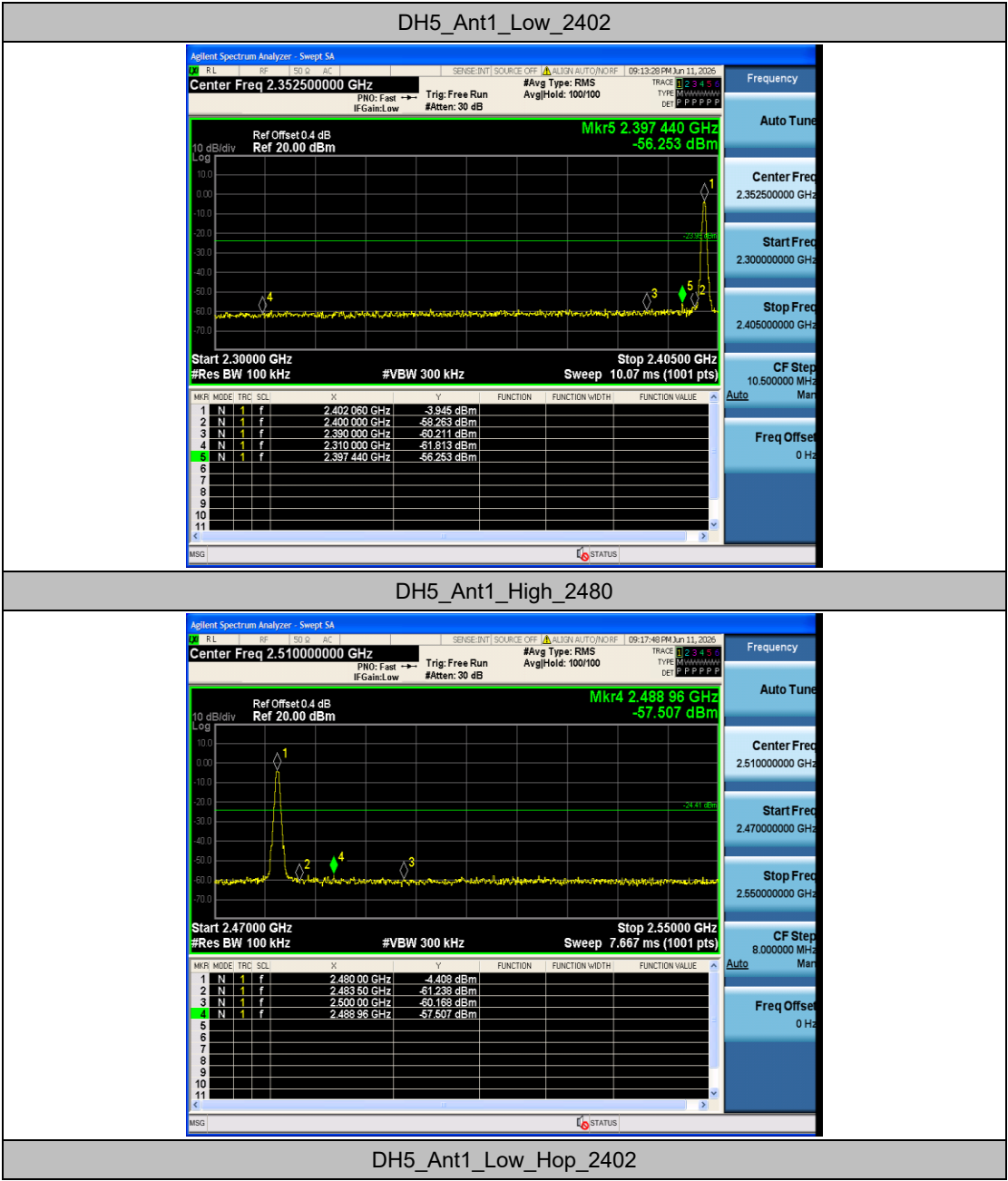


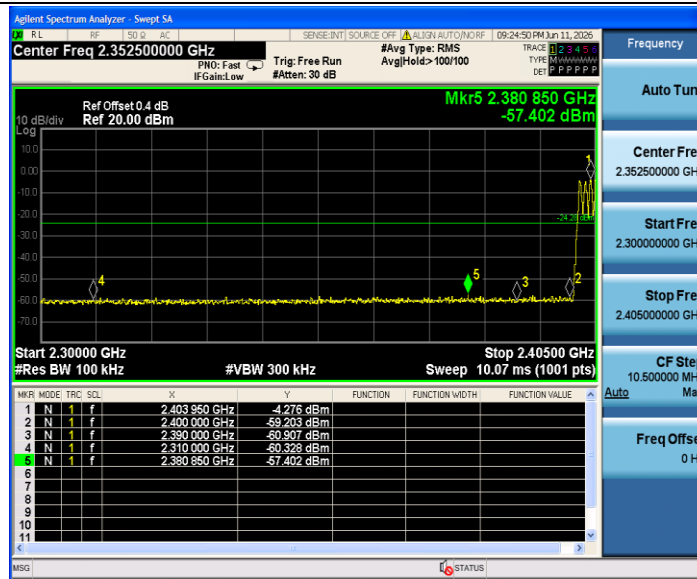
Appendix G: Band edge measurements

Test Result

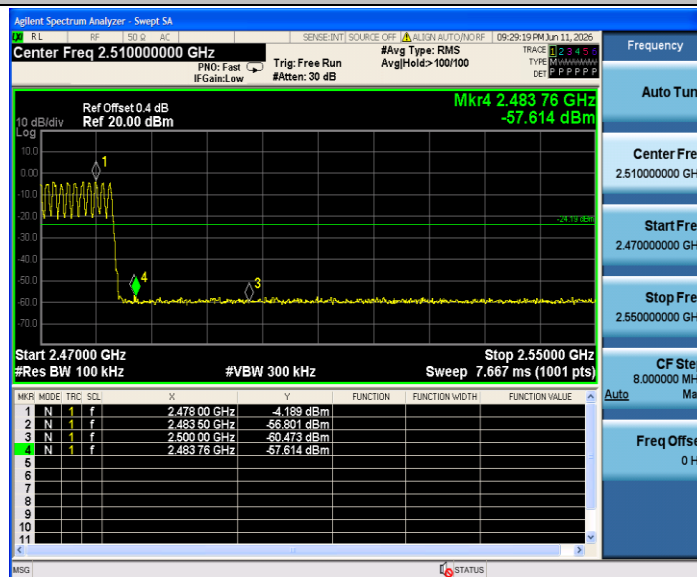
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.95	-56.25	≤-23.95	PASS
		High	2480	-4.41	-57.51	≤-24.41	PASS
		Low	Hop_2402	-4.28	-57.4	≤-24.28	PASS
		High	Hop_2480	-4.19	-57.61	≤-24.19	PASS
2DH5	Ant1	Low	2402	-4.00	-57.96	≤-24	PASS
		High	2480	-3.63	-57.3	≤-23.63	PASS
		Low	Hop_2402	-7.50	-57.52	≤-27.5	PASS
		High	Hop_2480	-3.70	-57.31	≤-23.7	PASS

Test Graphs

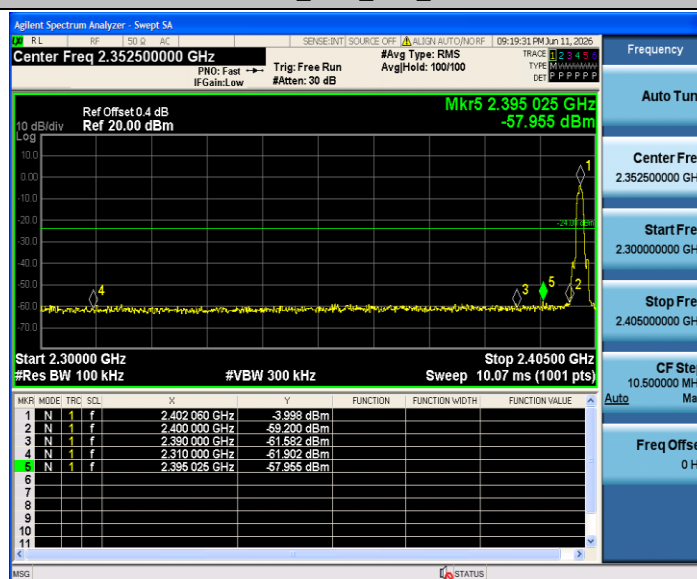




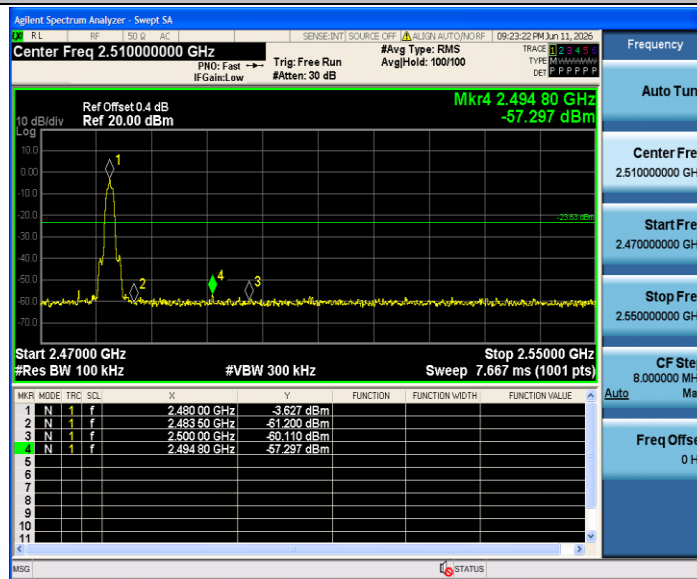
DH5_Ant1_High_Hop_2480



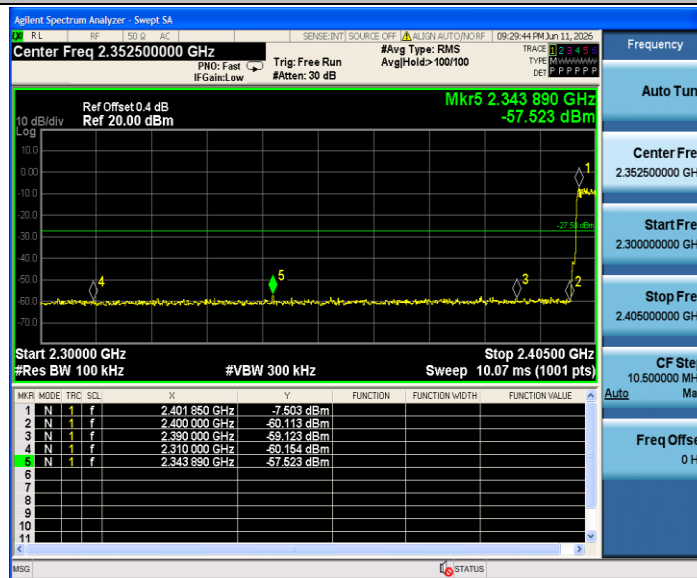
2DH5_Ant1_Low_2402



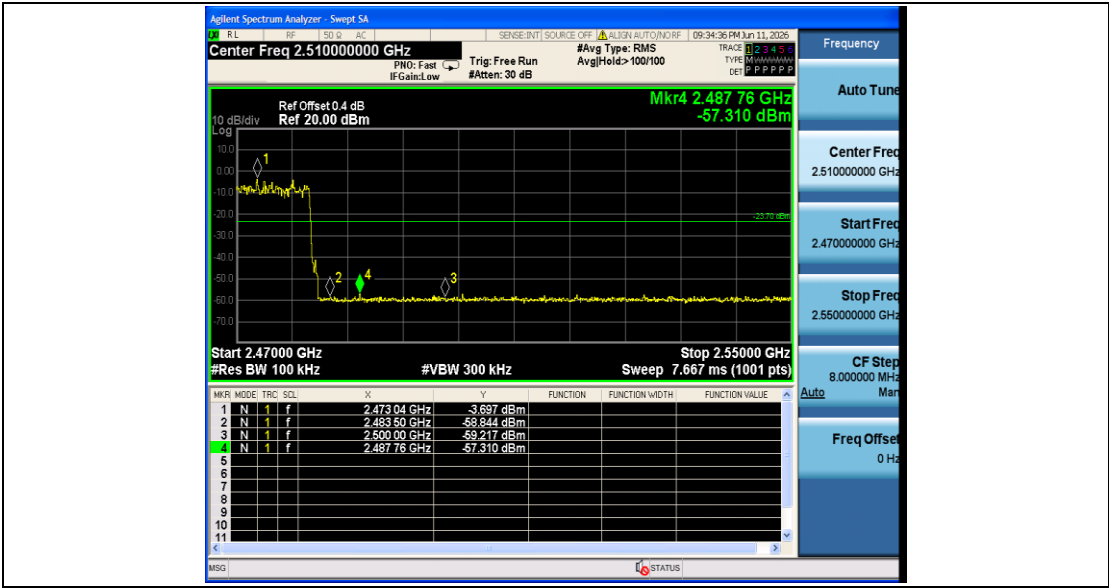
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

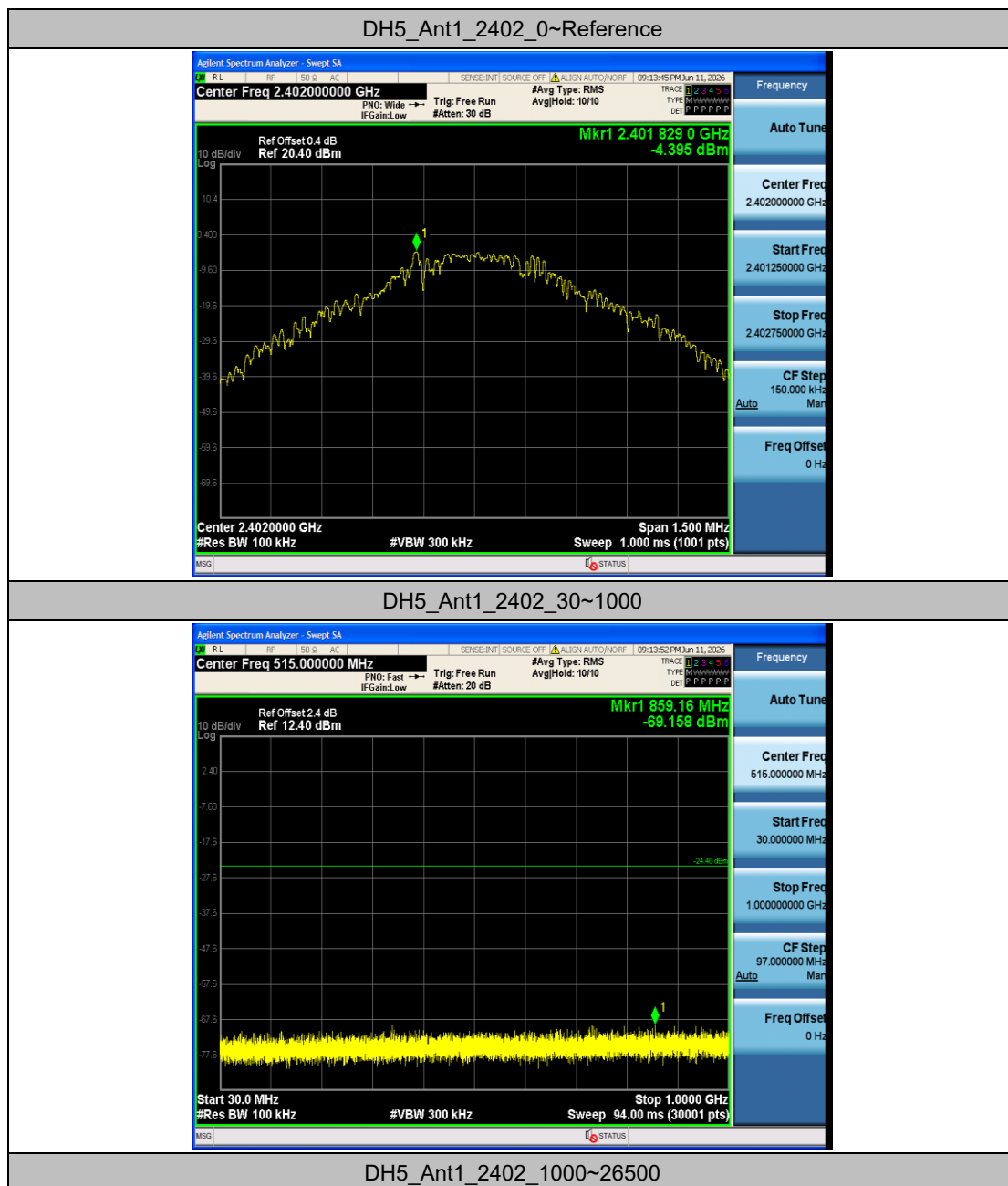


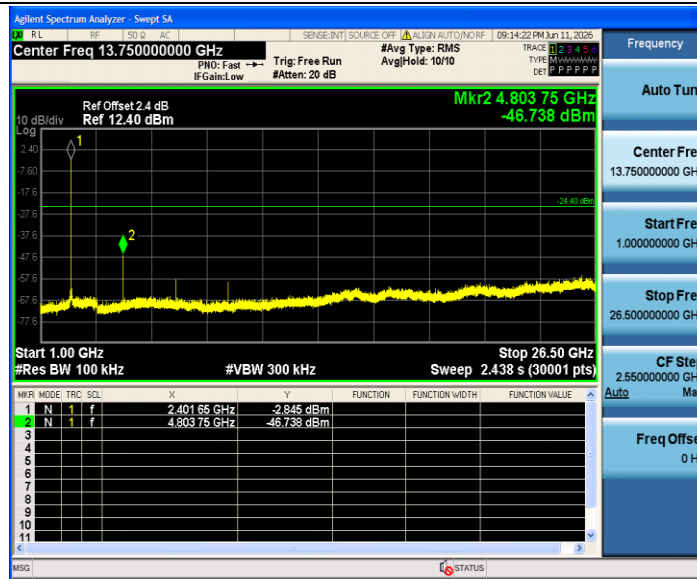
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.40	-4.40	---	PASS
			30~1000	-4.40	-69.16	≤-24.4	PASS
			1000~26500	-4.40	-46.74	≤-24.4	PASS
		2441	Reference	-4.79	-4.79	---	PASS
			30~1000	-4.79	-68.78	≤-24.79	PASS
			1000~26500	-4.79	-46.12	≤-24.79	PASS
		2480	Reference	-4.71	-4.71	---	PASS
			30~1000	-4.71	-68.33	≤-24.71	PASS
			1000~26500	-4.71	-45.5	≤-24.71	PASS
2DH5	Ant1	2402	Reference	-4.75	-4.75	---	PASS
			30~1000	-4.75	-65.02	≤-24.75	PASS
			1000~26500	-4.75	-45.67	≤-24.75	PASS
		2441	Reference	-6.12	-6.12	---	PASS
			30~1000	-6.12	-67.78	≤-26.12	PASS
			1000~26500	-6.12	-46.64	≤-26.12	PASS
		2480	Reference	-7.57	-7.57	---	PASS
			30~1000	-7.57	-69.33	≤-27.57	PASS
			1000~26500	-7.57	-48.21	≤-27.57	PASS

Test Graphs

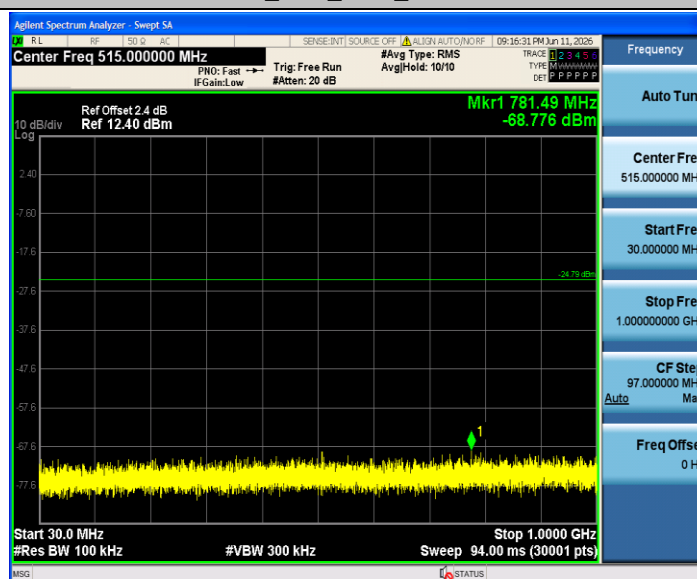




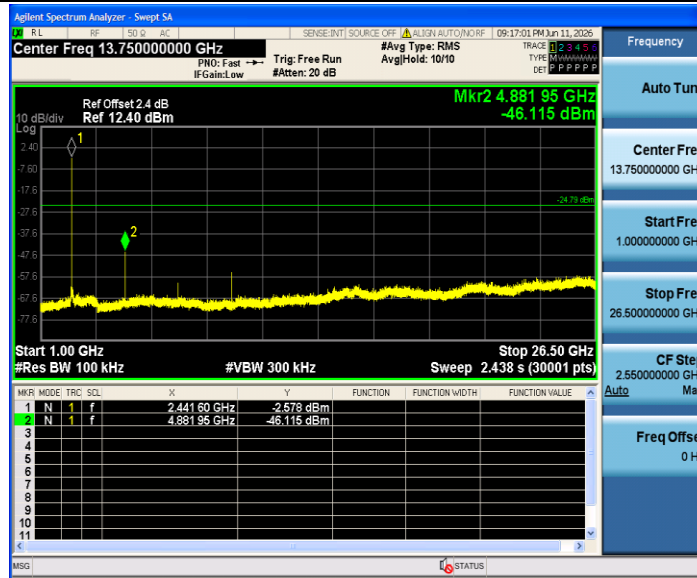
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



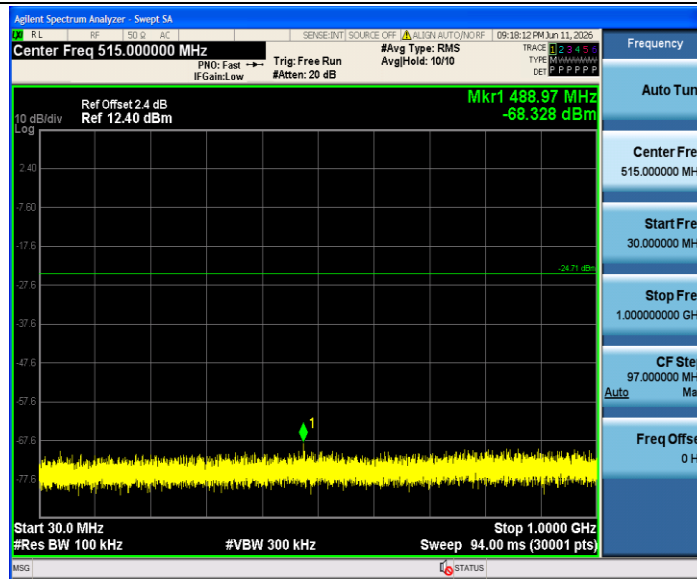
DH5_Ant1_2441_1000~26500



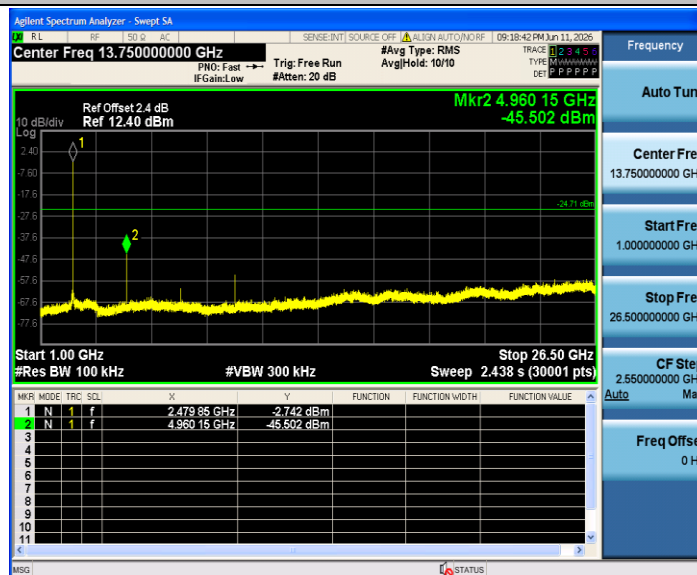
DH5_Ant1_2480_0~Reference



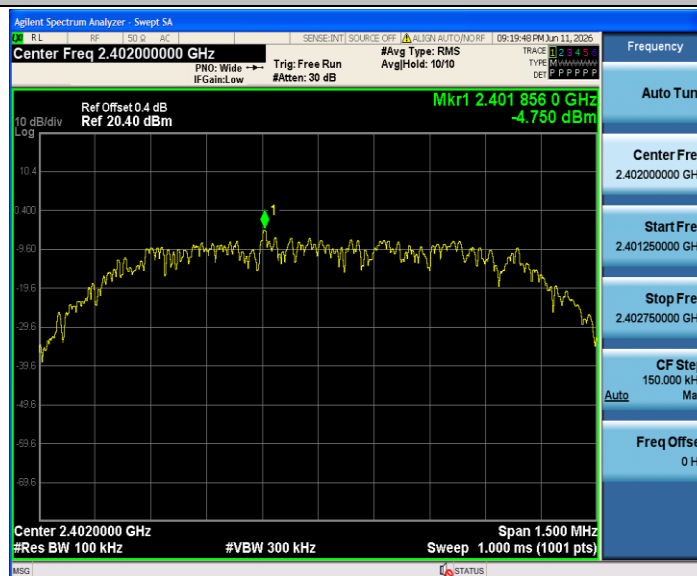
DH5_Ant1_2480_30~1000



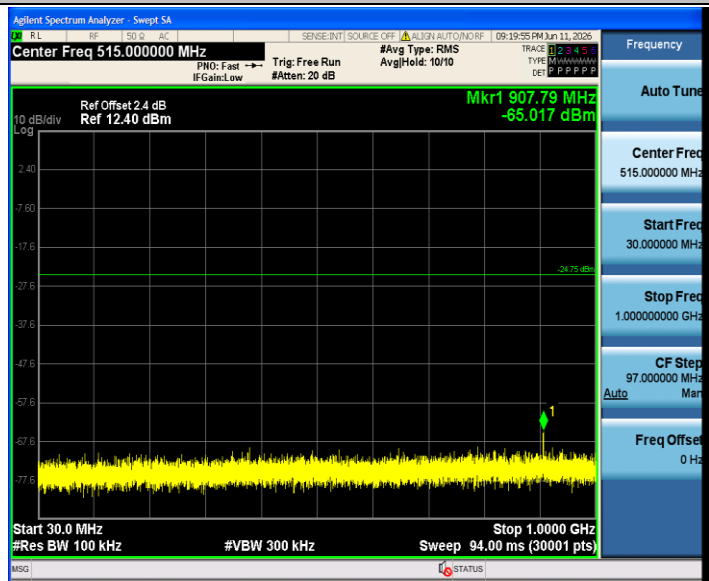
DH5_Ant1_2480_1000~26500



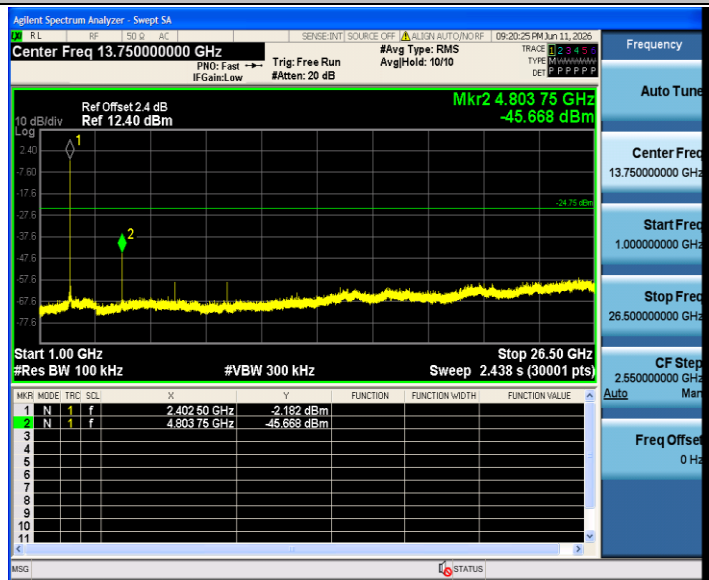
2DH5_Ant1_2402_0~Reference



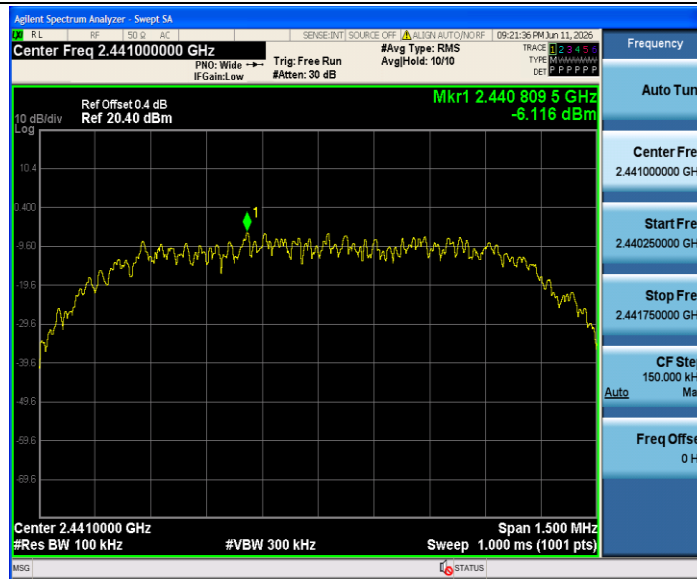
2DH5_Ant1_2402_30~1000



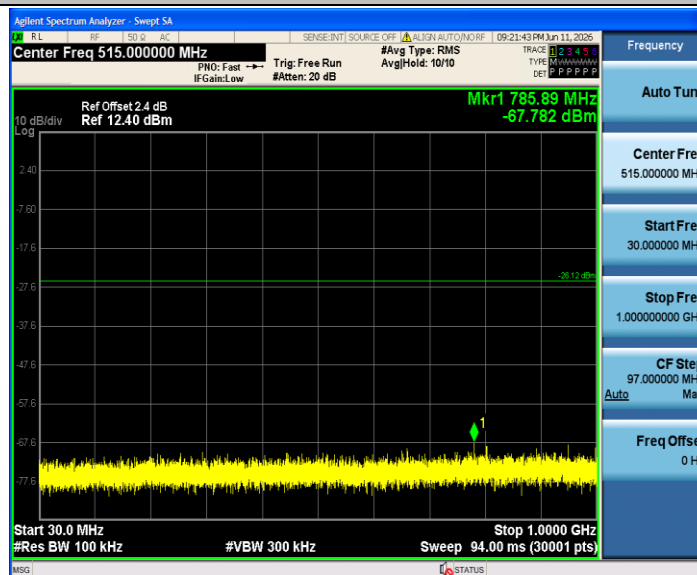
2DH5_Ant1_2402_1000~26500



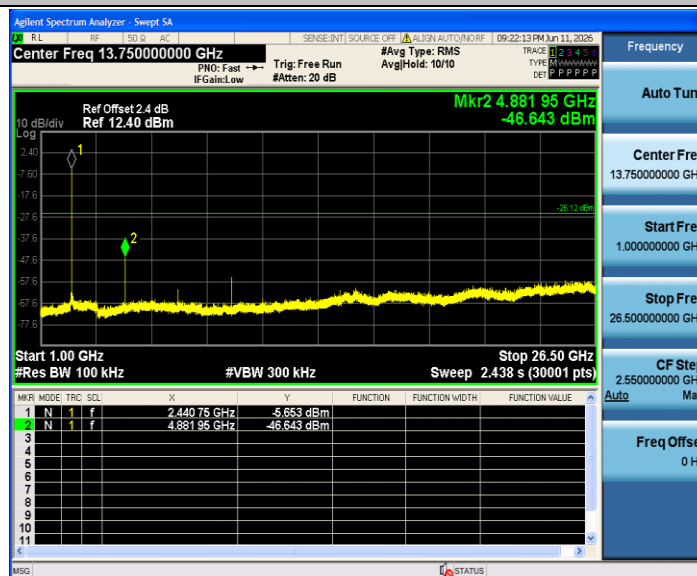
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



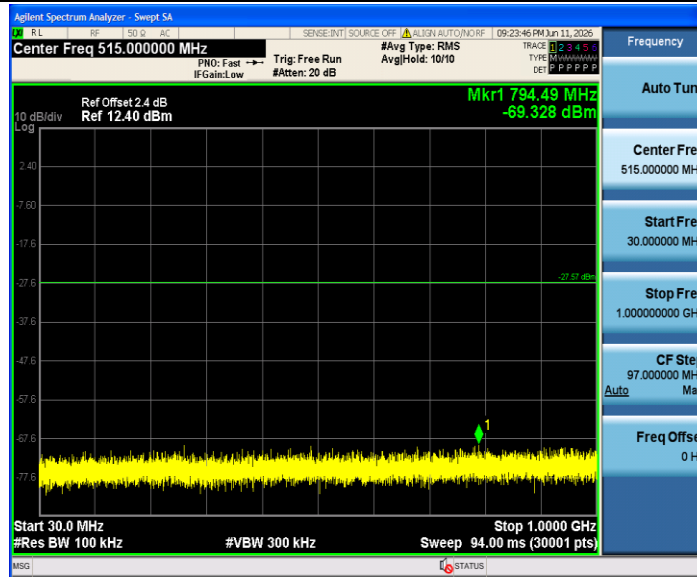
2DH5_Ant1_2441_1000~26500



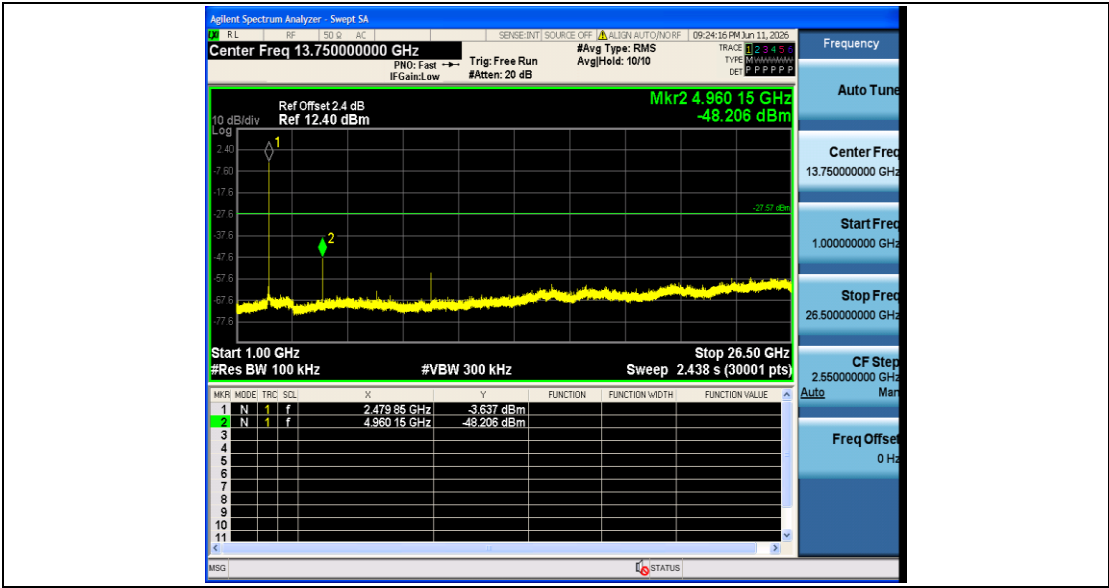
2DH5_Ant1_2480_0~Reference



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	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.91	3.74	77.81	1.09	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---