

FCC Appendix RF Test Data for BT

FCC ID : 2A7UF-TK-428B

Company : QINGYUAN RUIMA ELECTRONICS CO.,LIMITED

EUT : Party speaker

Model Number : TK-428B

Report No. : CTA26052001501

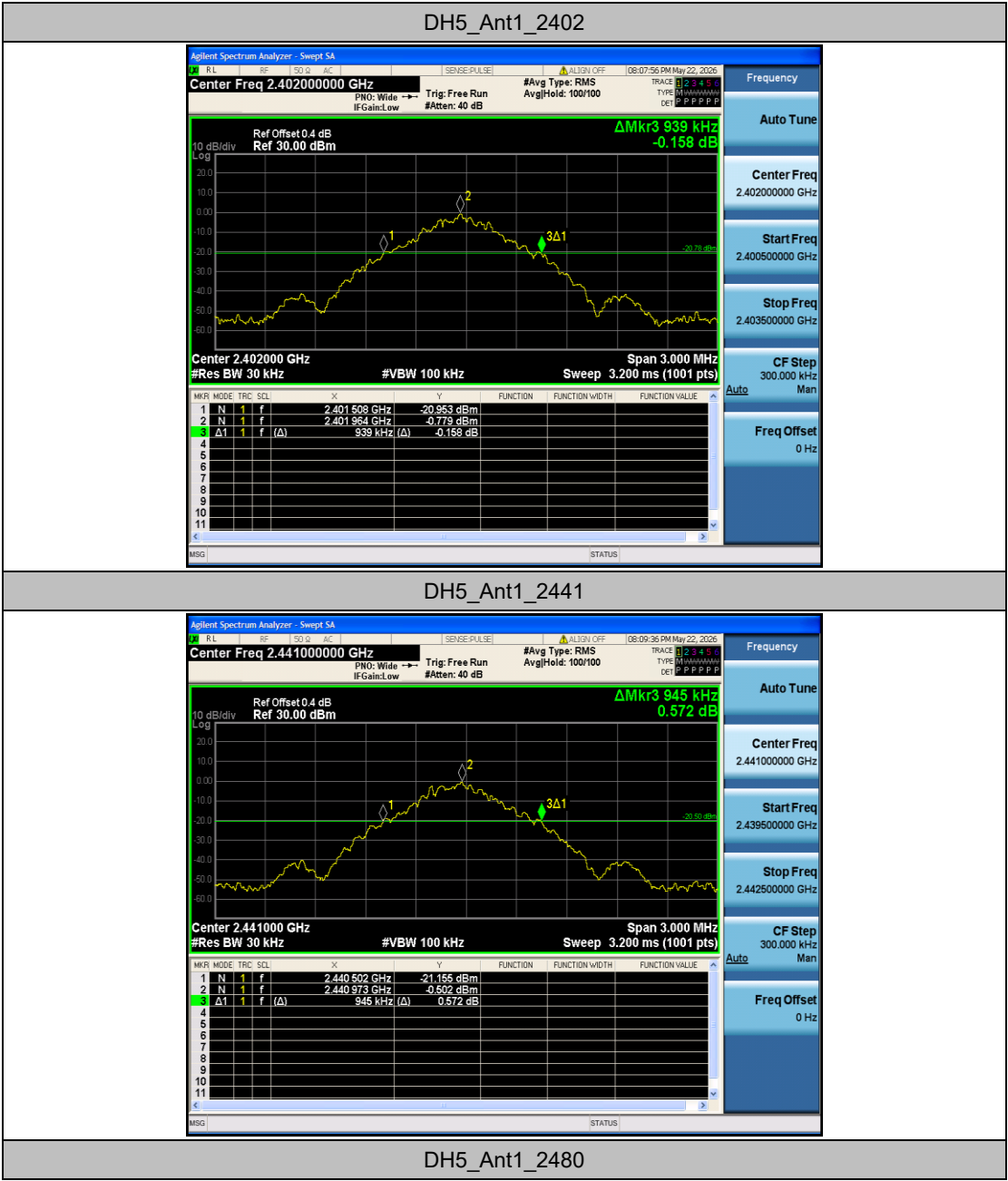
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.939	2401.508	2402.447	---	---
		2441	0.945	2440.502	2441.447	---	---
		2480	0.978	2479.496	2480.474	---	---
2DH5	Ant1	2402	1.290	2401.328	2402.618	---	---
		2441	1.221	2440.346	2441.567	---	---
		2480	1.350	2479.286	2480.636	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix B: Occupied Channel Bandwidth

Test Result

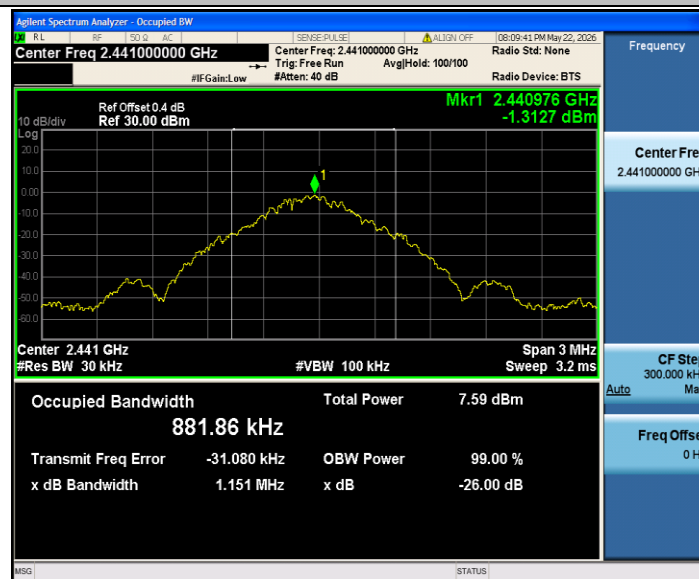
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87007	2401.5292	2402.3992	---	---
		2441	0.88186	2440.5280	2441.4099	---	---
		2480	0.87386	2479.5342	2480.4080	---	---
2DH5	Ant1	2402	1.1787	2401.3731	2402.5518	---	---
		2441	1.1672	2440.3772	2441.5444	---	---
		2480	1.1686	2479.3770	2480.5456	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



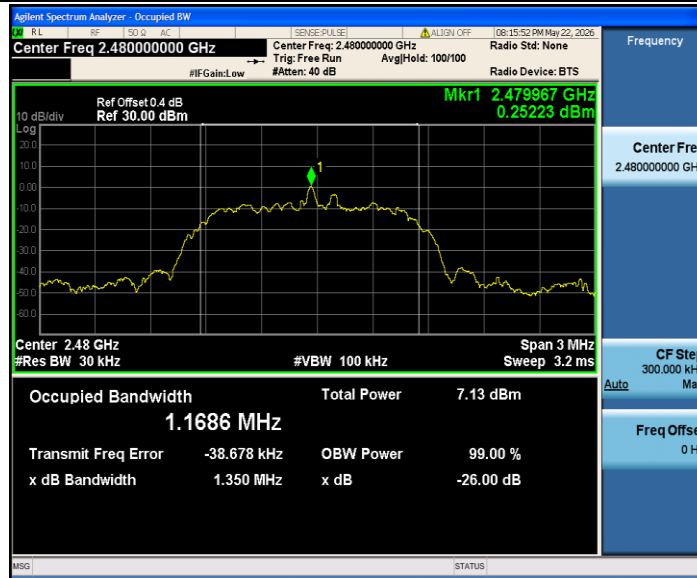
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result

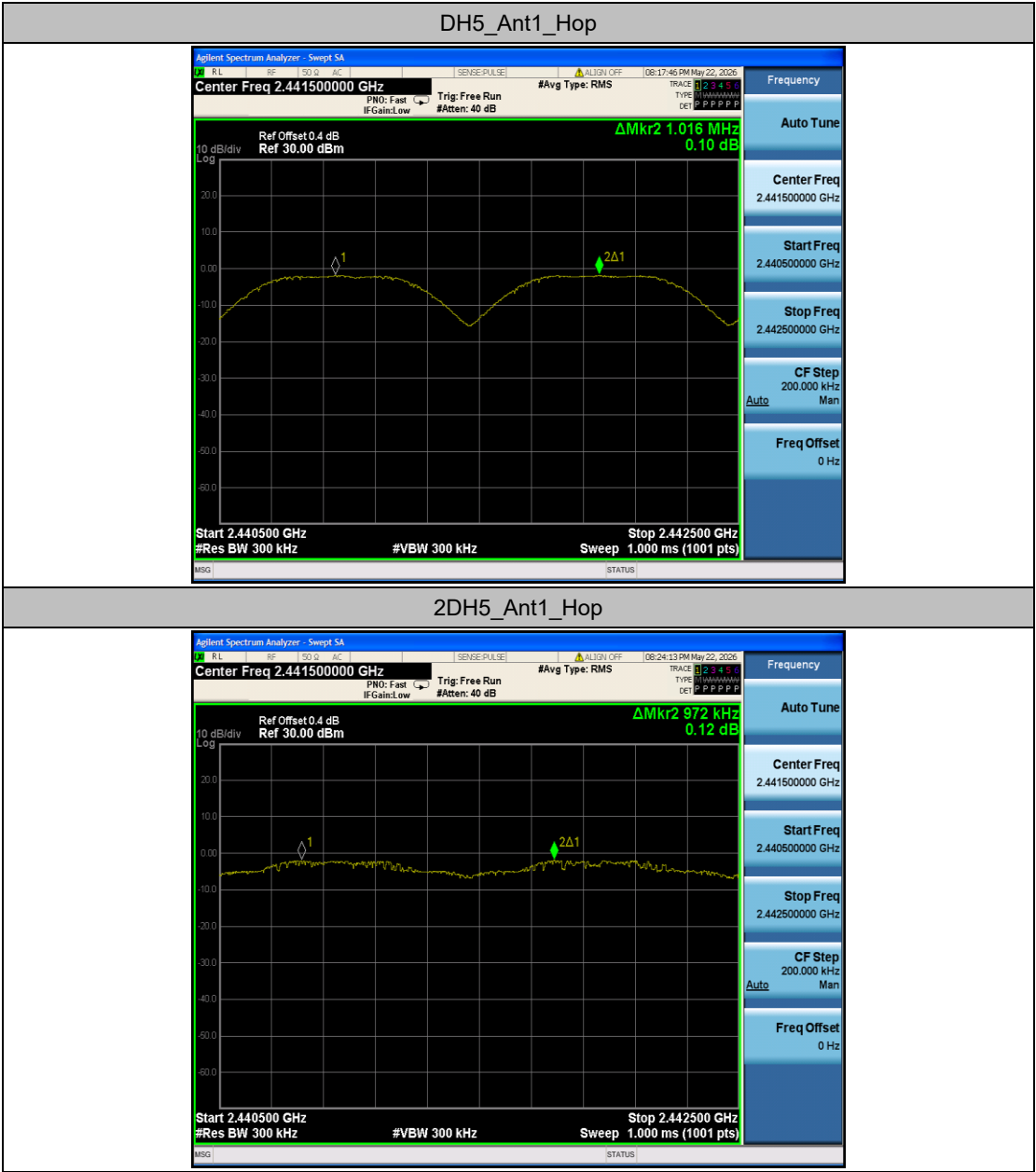
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.68	≤20.97	PASS
		2441	1.38	≤20.97	PASS
		2480	1.43	≤20.97	PASS
2DH5	Ant1	2402	1.43	≤20.97	PASS
		2441	2.24	≤20.97	PASS
		2480	2.36	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.978	PASS
2DH5	Ant1	Hop	0.972	≥ 0.900	PASS

Test Graphs

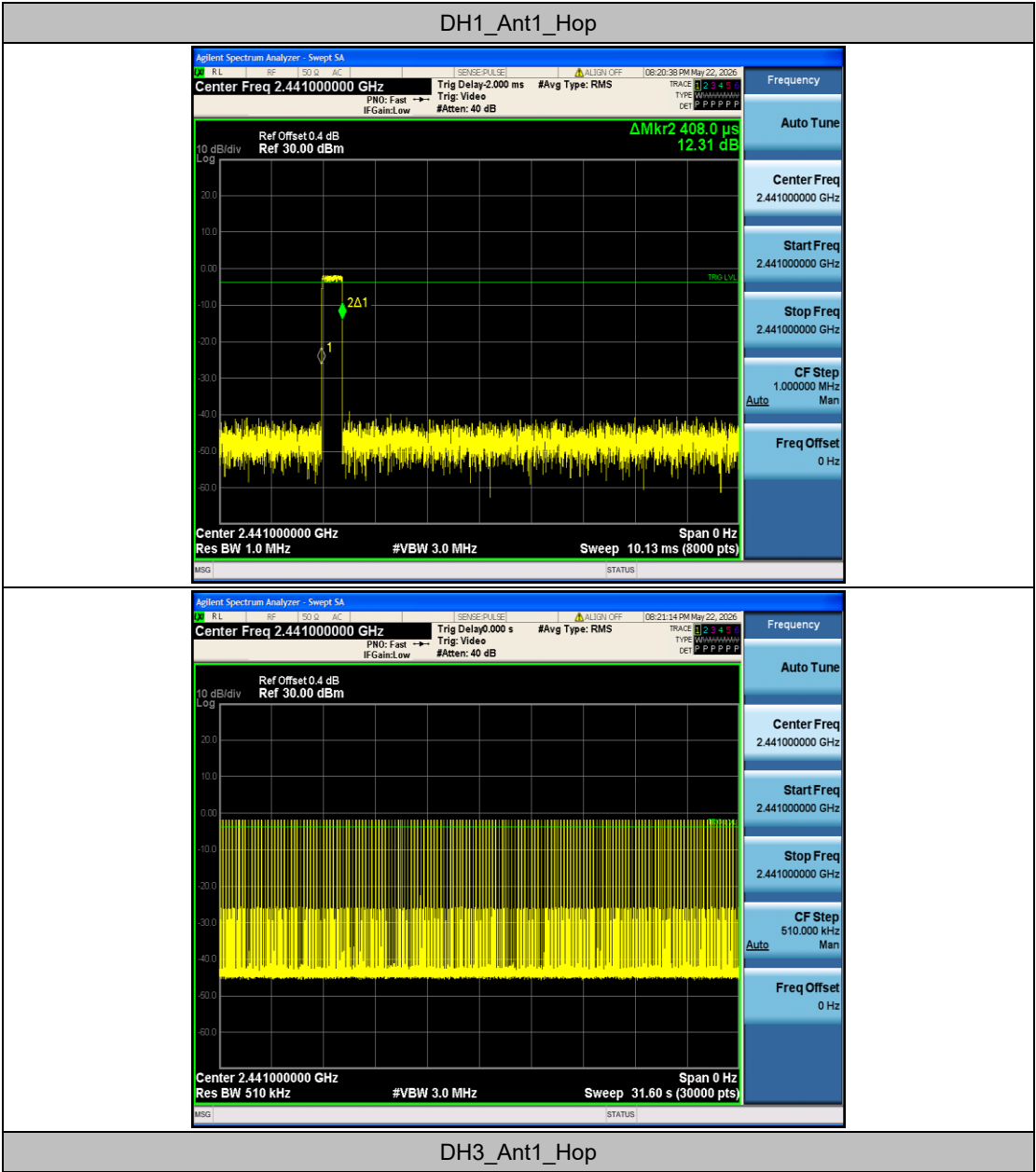


Appendix E: Time of occupancy

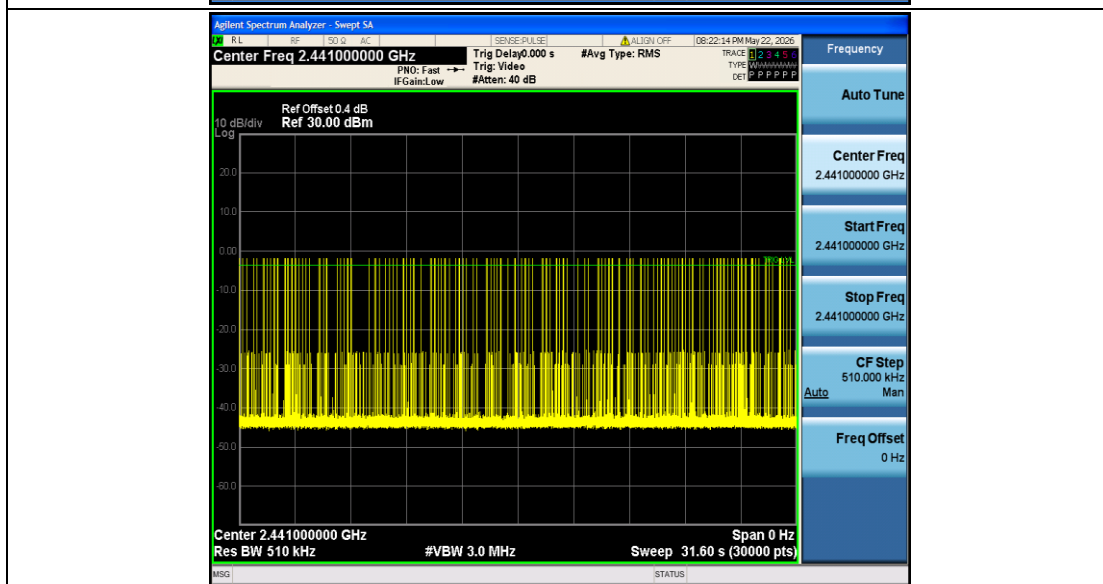
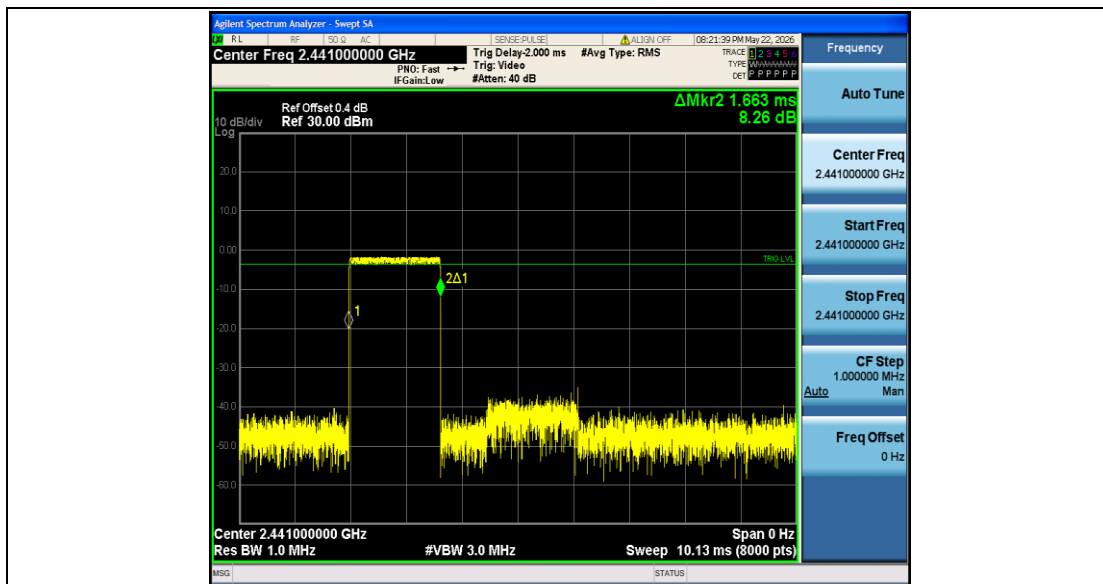
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.408	319	0.13	≤0.4	PASS
DH3	Ant1	Hop	1.663	161	0.268	≤0.4	PASS
DH5	Ant1	Hop	2.911	116	0.338	≤0.4	PASS
2DH1	Ant1	Hop	0.417	319	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.669	159	0.265	≤0.4	PASS
2DH5	Ant1	Hop	2.917	107	0.312	≤0.4	PASS

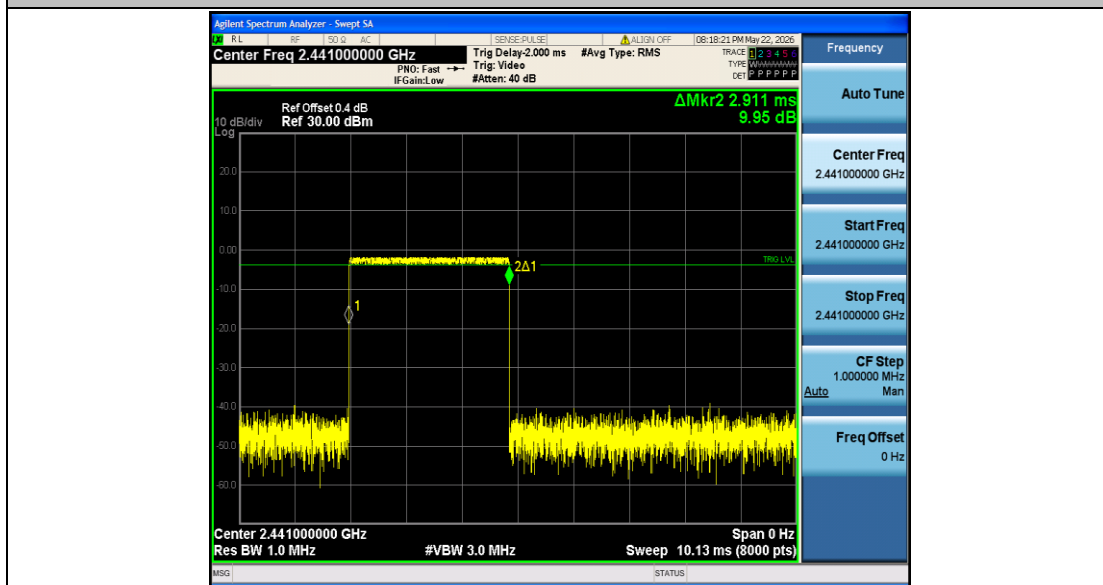
Test Graphs

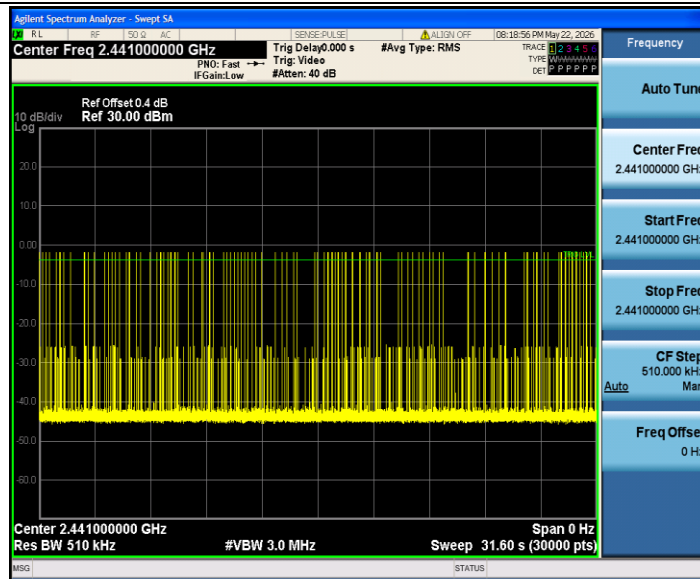


DH3_Ant1_Hop

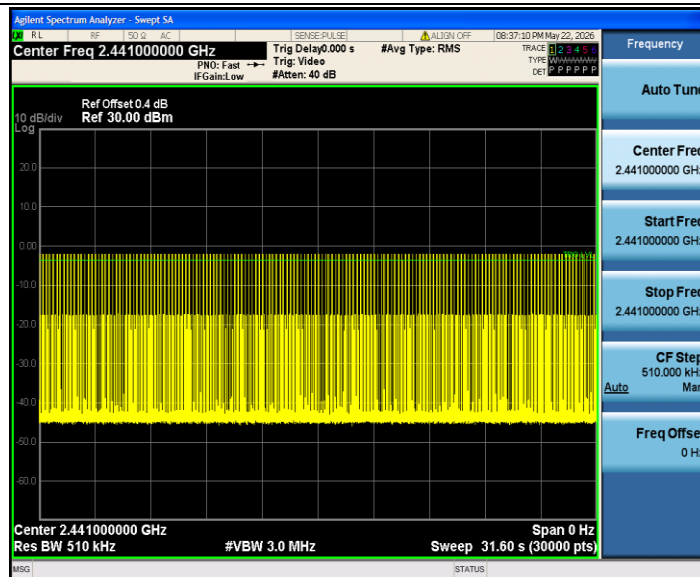
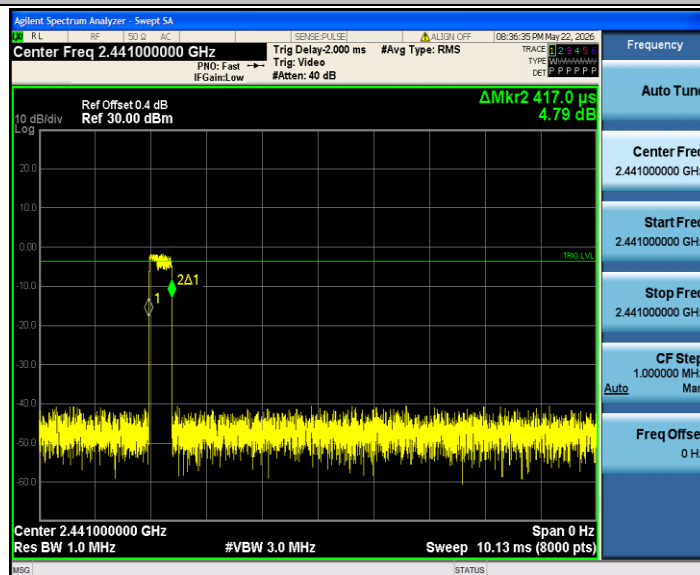


DH5_Ant1_Hop

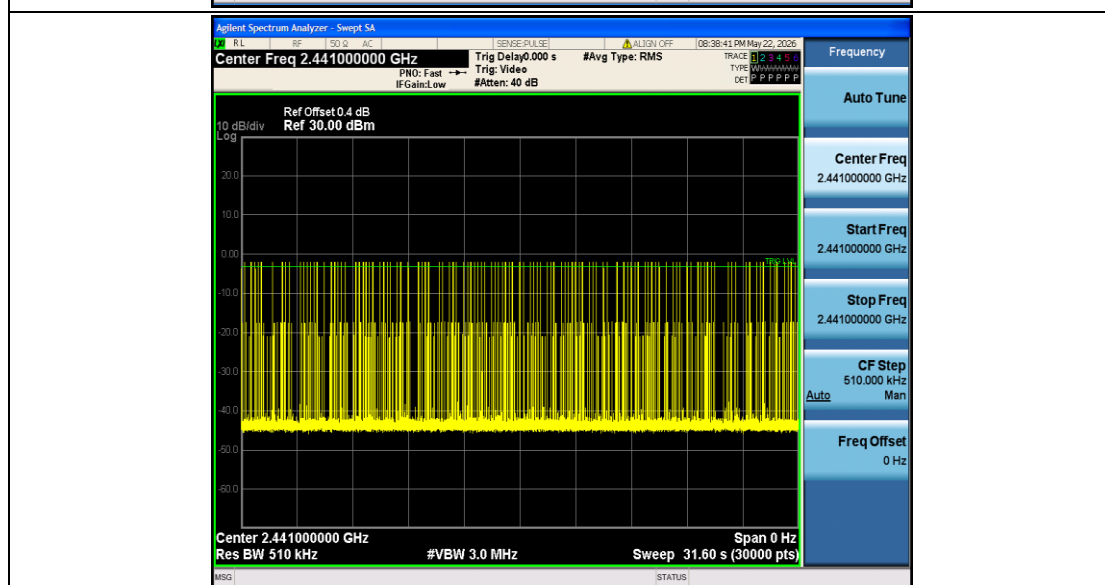
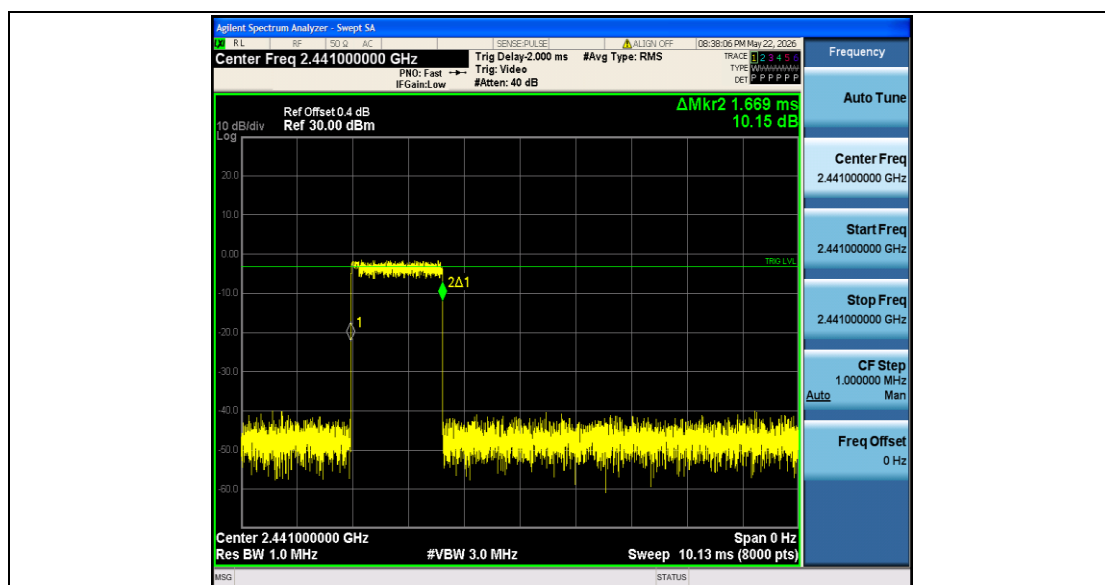




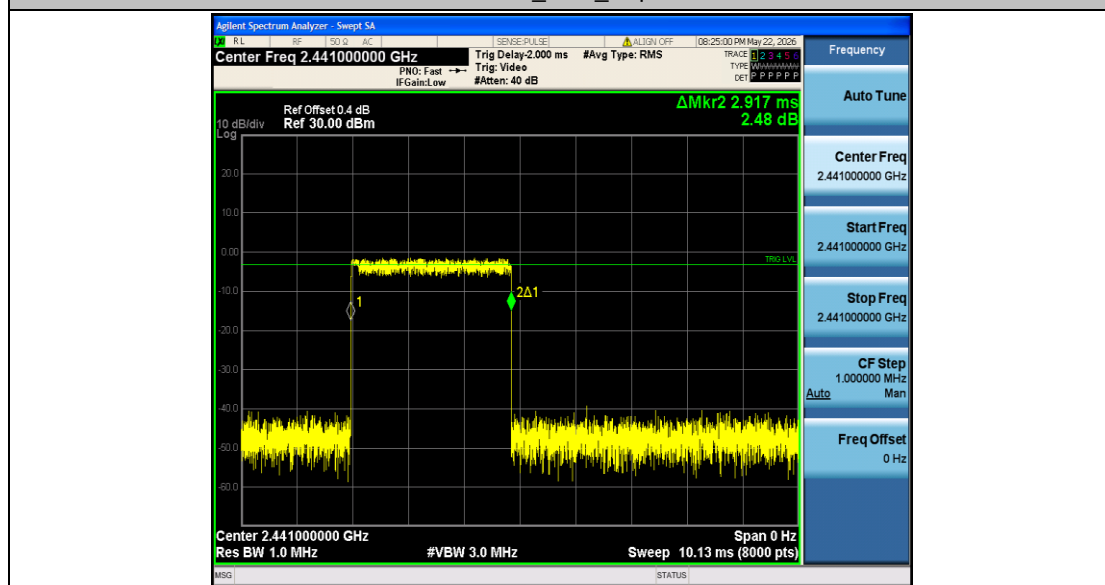
2DH1_Ant1_Hop

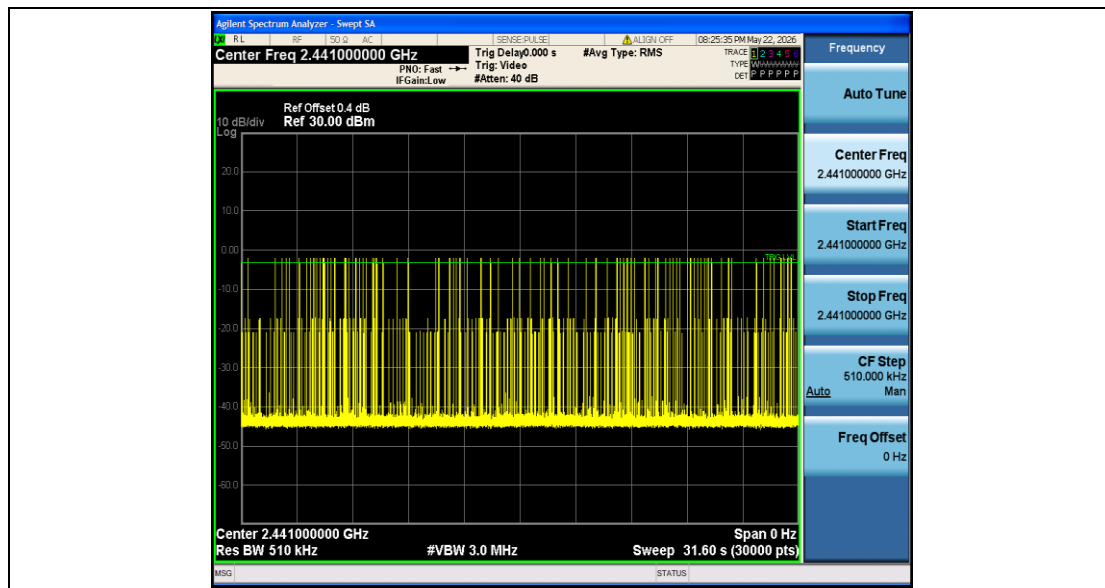


2DH3_Ant1_Hop



2DH5_Ant1_Hop



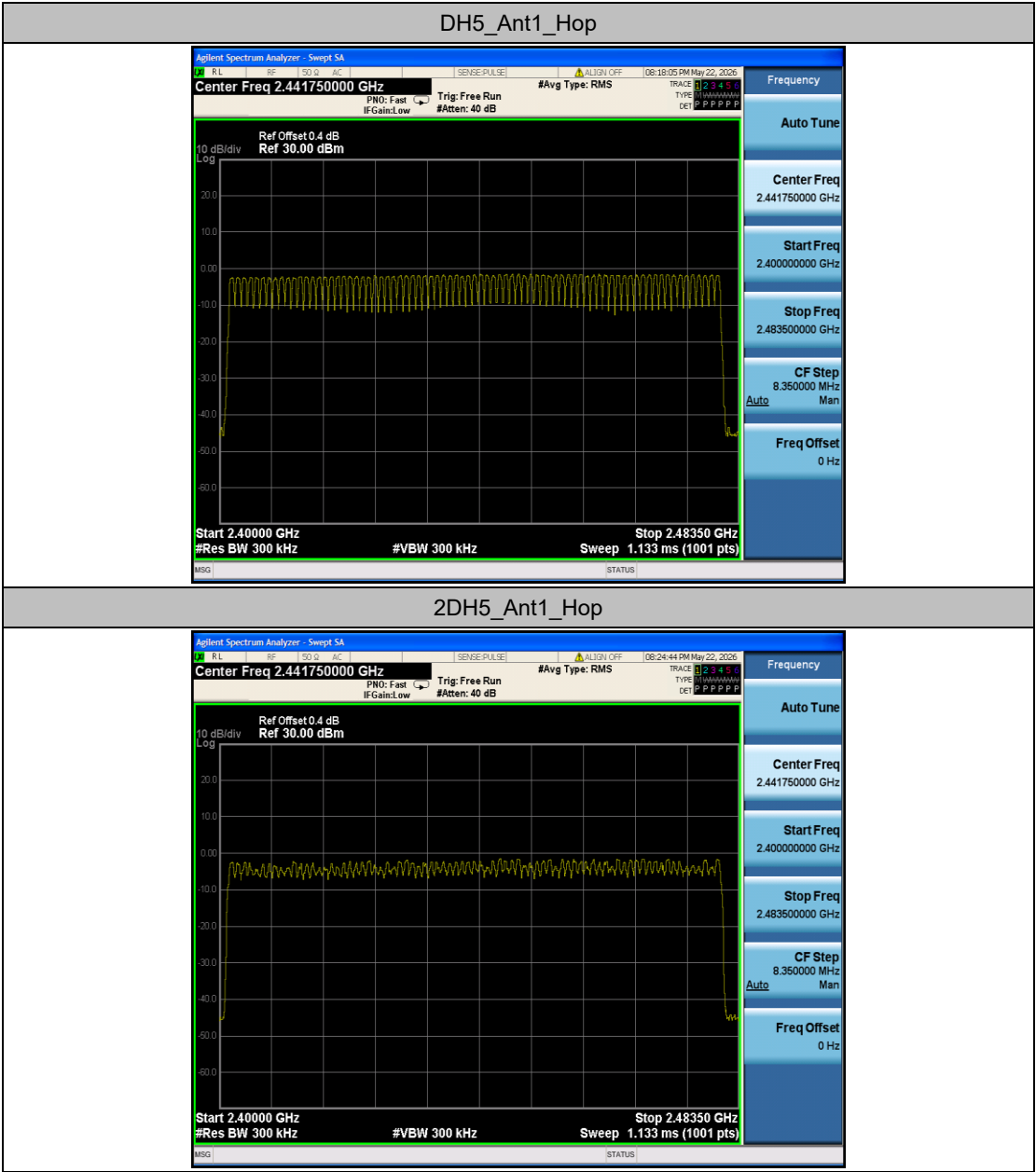


Appendix F: Number of hopping channels

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



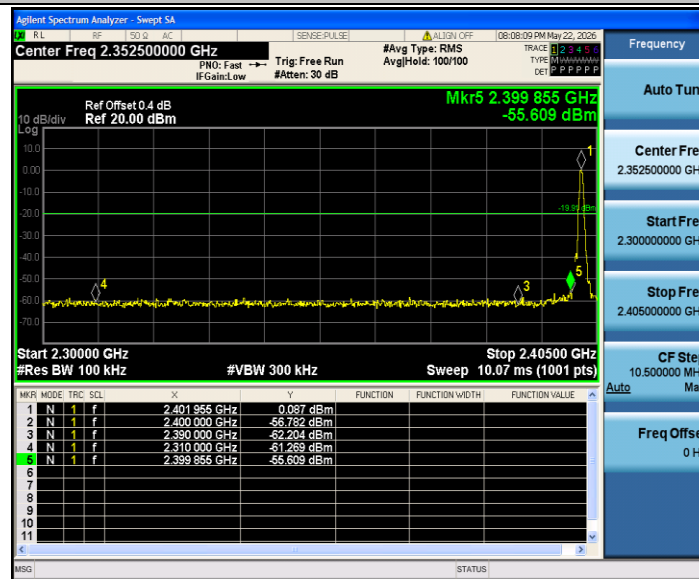
Appendix G: Band edge measurements

Test Result

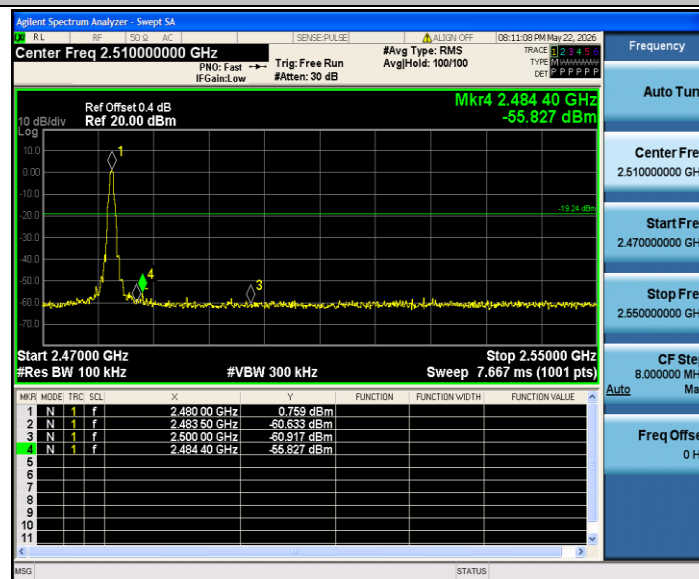
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.09	-55.61	≤-19.91	PASS
		High	2480	0.76	-55.83	≤-19.24	PASS
		Low	Hop_2402	-3.14	-58	≤-23.14	PASS
		High	Hop_2480	-2.09	-57.64	≤-22.09	PASS
2DH5	Ant1	Low	2402	-0.29	-49.7	≤-20.29	PASS
		High	2480	0.91	-56.37	≤-19.09	PASS
		Low	Hop_2402	-5.17	-57.86	≤-25.17	PASS
		High	Hop_2480	-4.84	-56.98	≤-24.84	PASS

Test Graphs

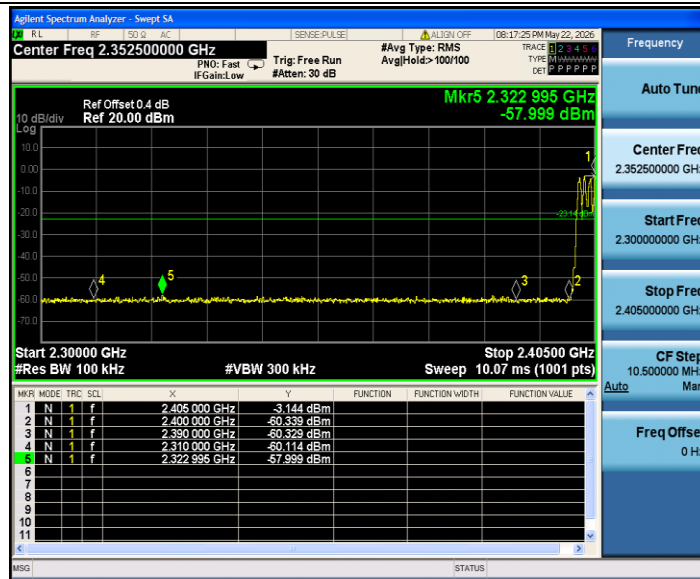
DH5_Ant1_Low_2402



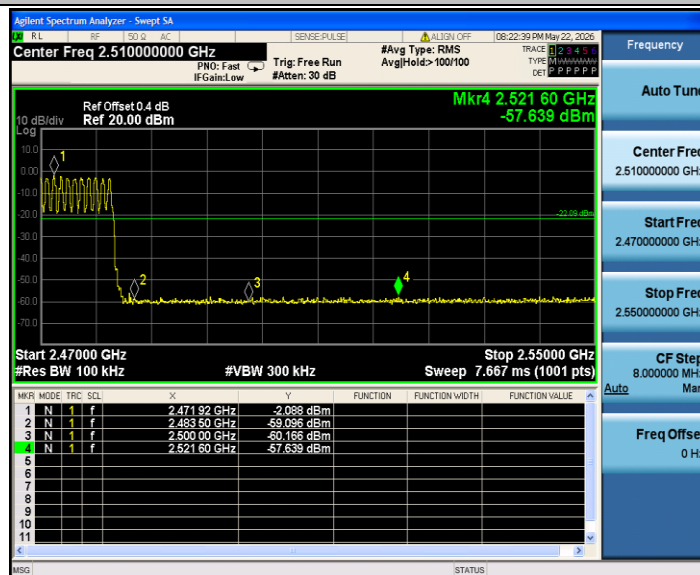
DH5_Ant1_High_2480



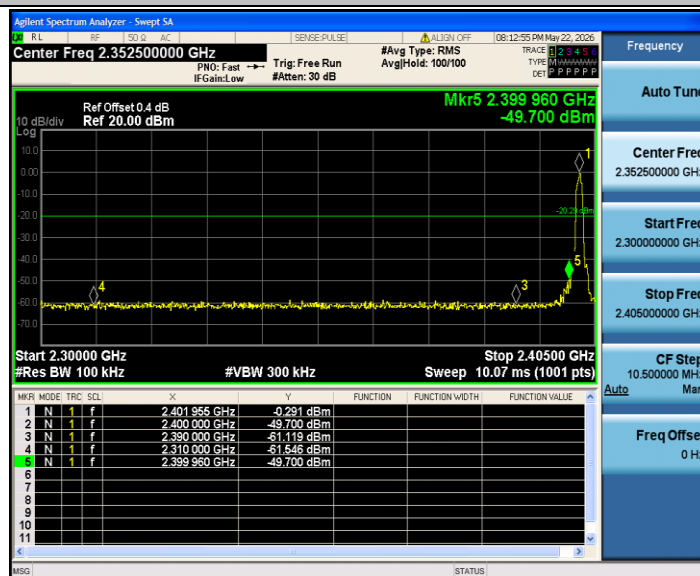
DH5_Ant1_Low_Hop_2402



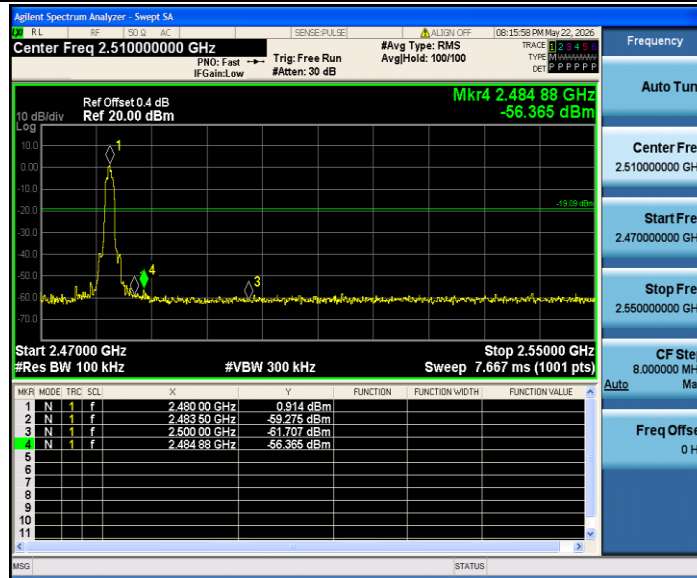
DH5_Ant1_High_Hop_2480



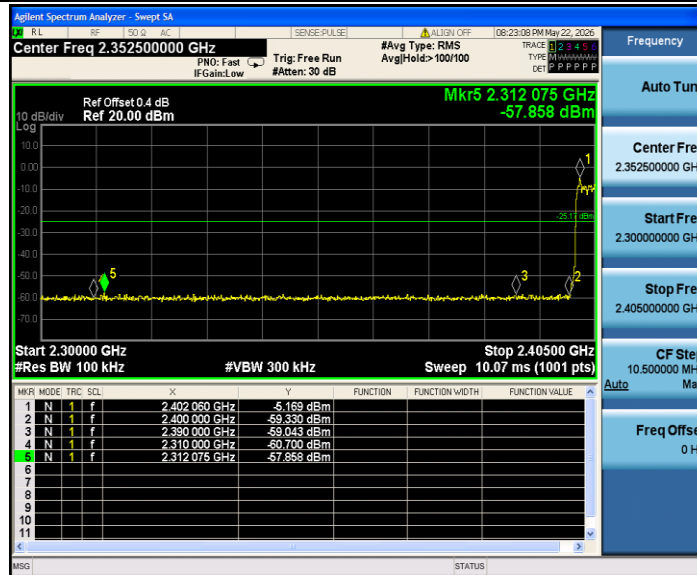
2DH5_Ant1_Low_2402



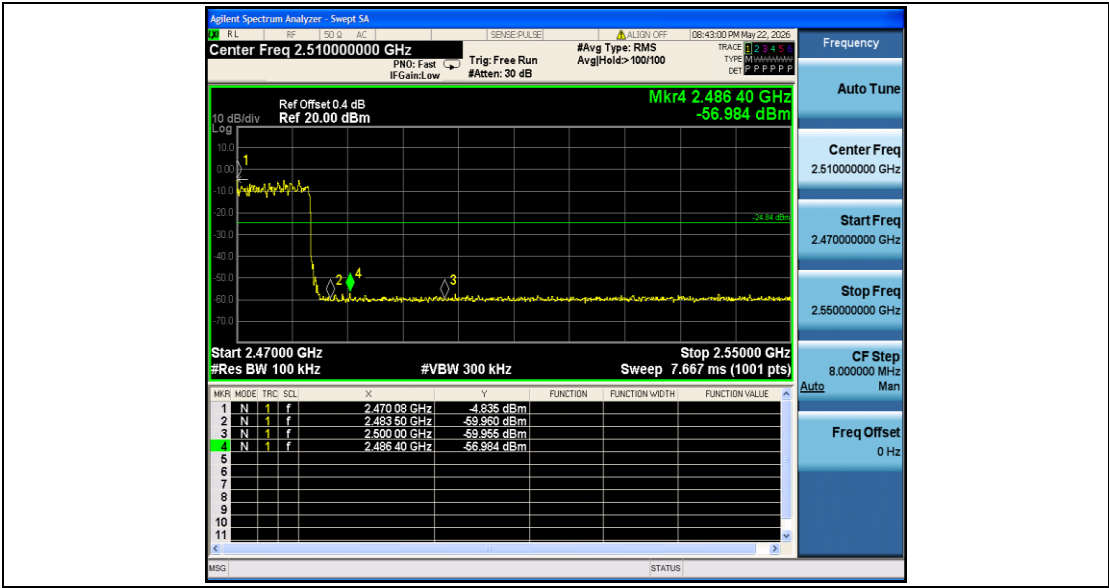
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

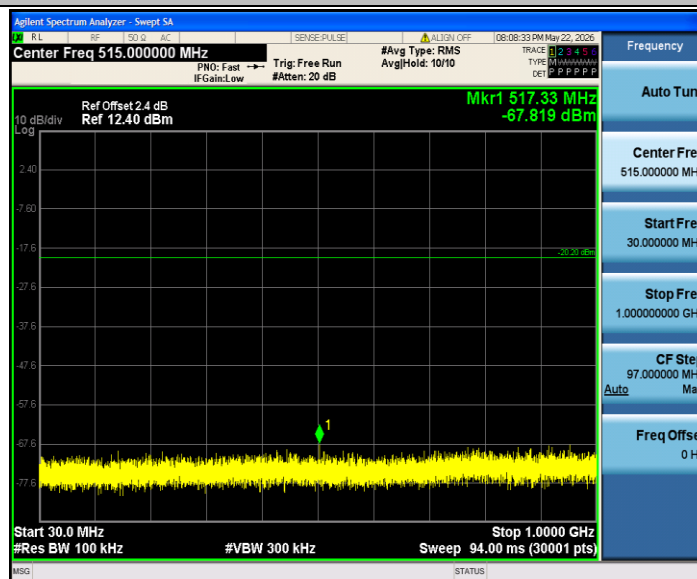
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.20	-0.20	---	PASS
			30~1000	-0.20	-67.82	≤-20.2	PASS
			1000~26500	-0.20	-26.74	≤-20.2	PASS
		2441	Reference	0.18	0.18	---	PASS
			30~1000	0.18	-67.53	≤-19.82	PASS
			1000~26500	0.18	-24.58	≤-19.82	PASS
		2480	Reference	0.52	0.52	---	PASS
			30~1000	0.52	-67.93	≤-19.48	PASS
			1000~26500	0.52	-25.44	≤-19.48	PASS
2DH5	Ant1	2402	Reference	-3.53	-3.53	---	PASS
			30~1000	-3.53	-67.97	≤-23.53	PASS
			1000~26500	-3.53	-28.33	≤-23.53	PASS
		2441	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-68.52	≤-21.14	PASS
			1000~26500	-1.14	-28.78	≤-21.14	PASS
		2480	Reference	0.02	0.02	---	PASS
			30~1000	0.02	-68.22	≤-19.98	PASS
			1000~26500	0.02	-24.63	≤-19.98	PASS

Test Graphs

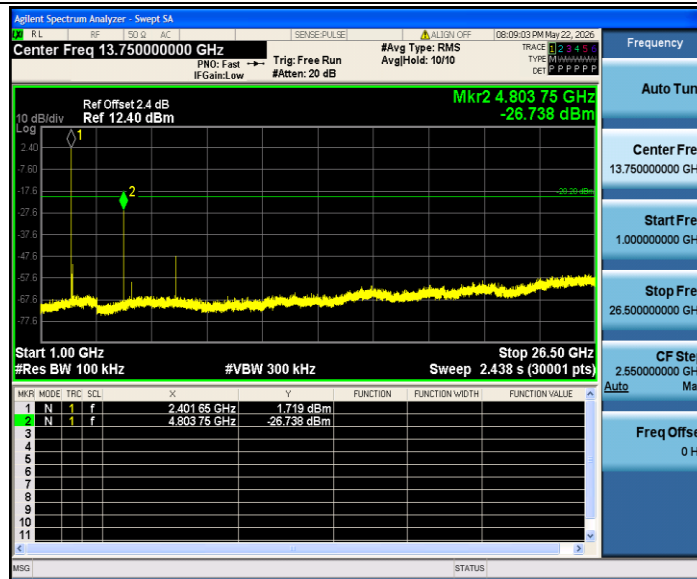
DH5_Ant1_2402_0~Reference



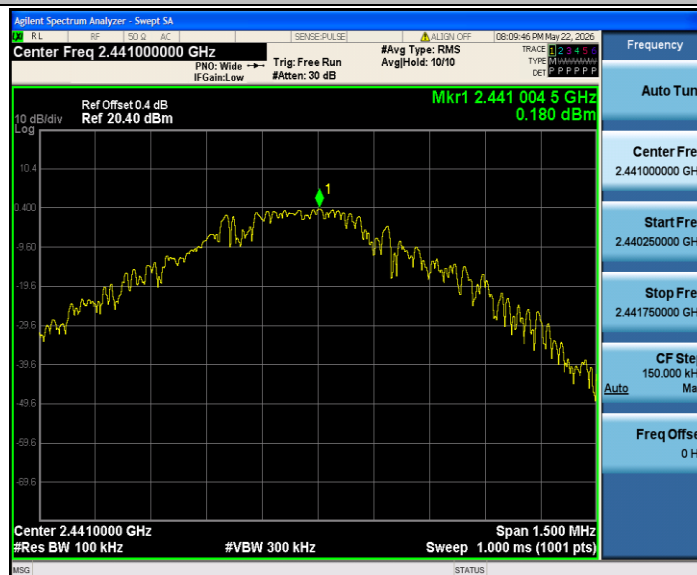
DH5_Ant1_2402_30~1000



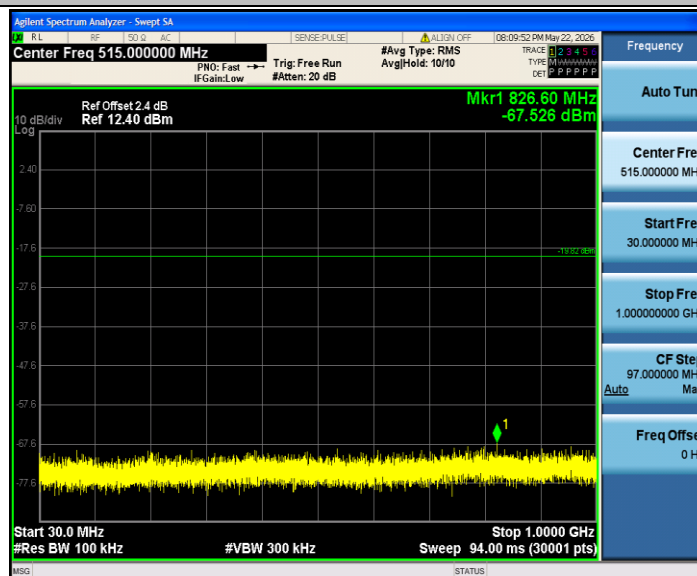
DH5_Ant1_2402_1000~26500



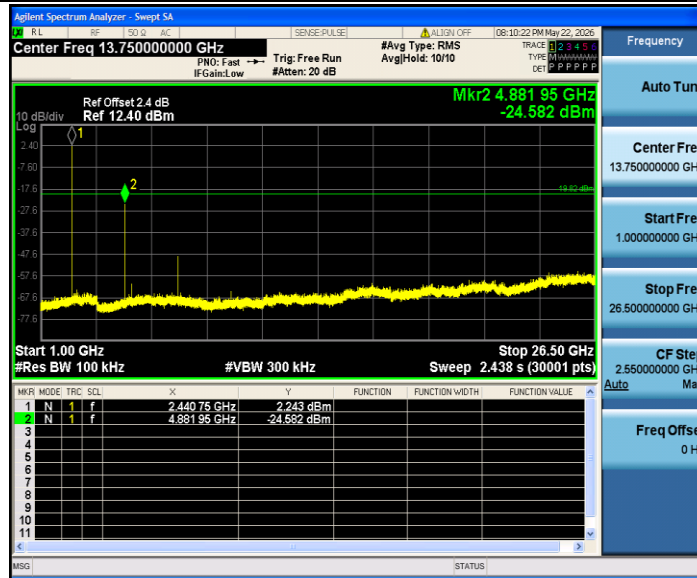
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



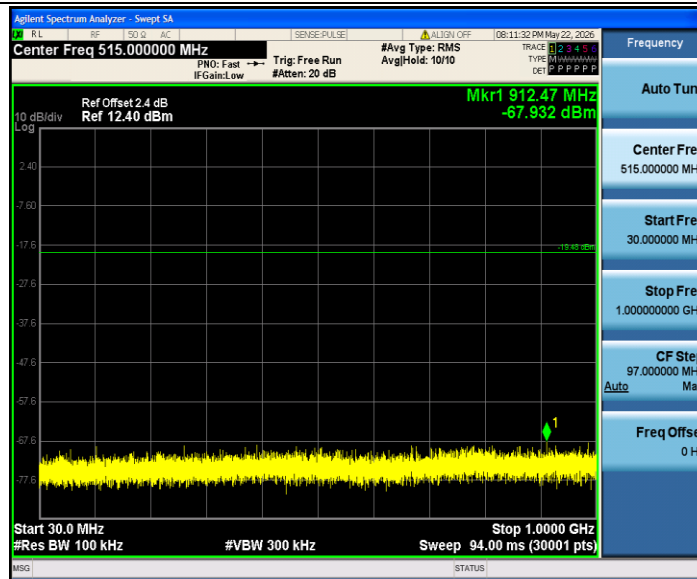
DH5_Ant1_2441_1000~26500



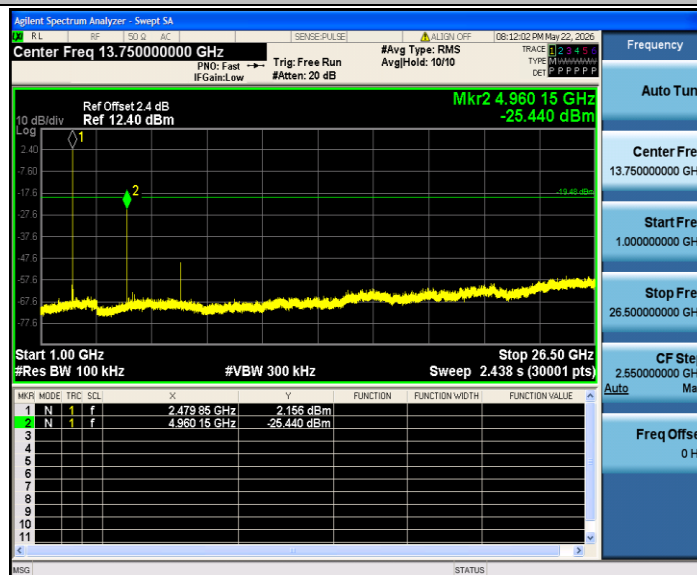
DH5_Ant1_2480_0~Reference



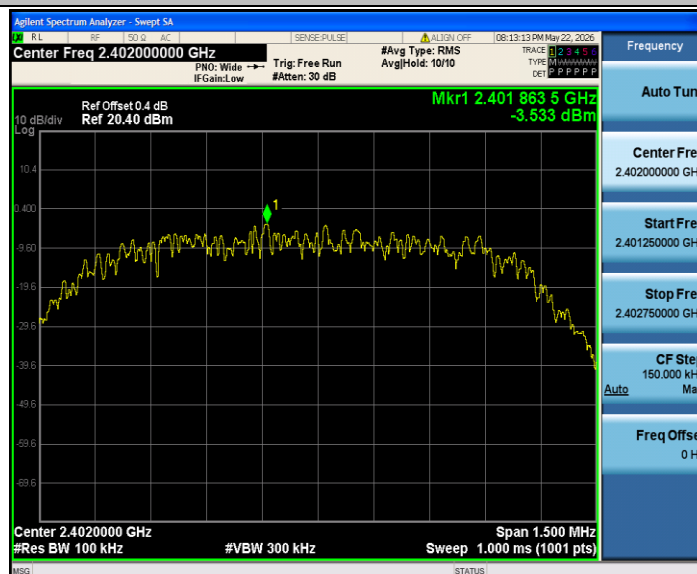
DH5_Ant1_2480_30~1000



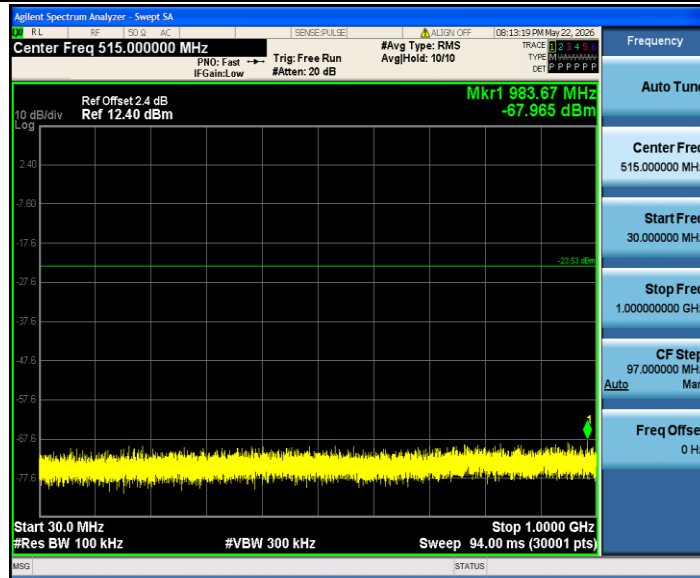
DH5_Ant1_2480_1000~26500



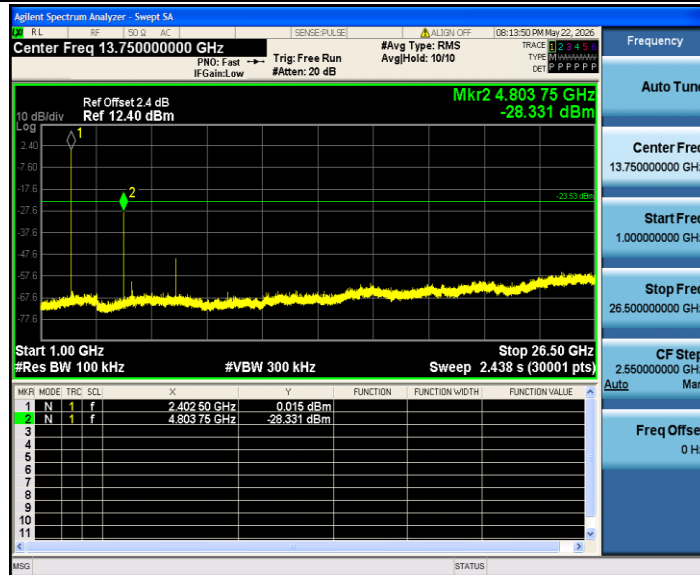
2DH5_Ant1_2402_0~Reference



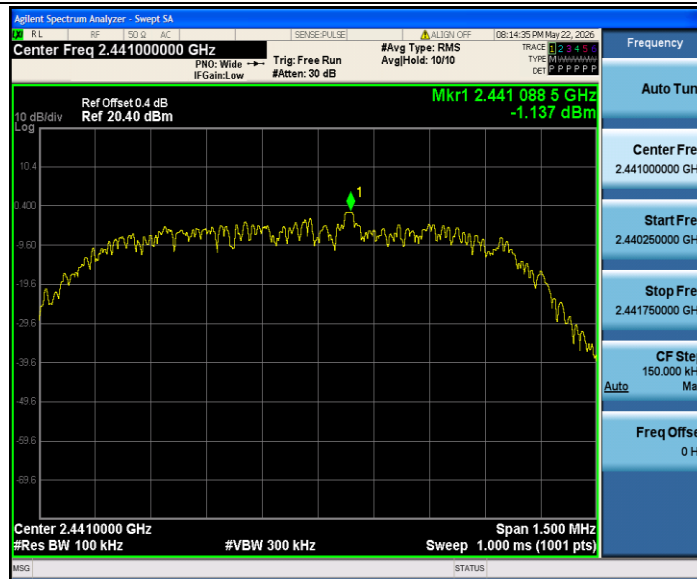
2DH5_Ant1_2402_30~1000



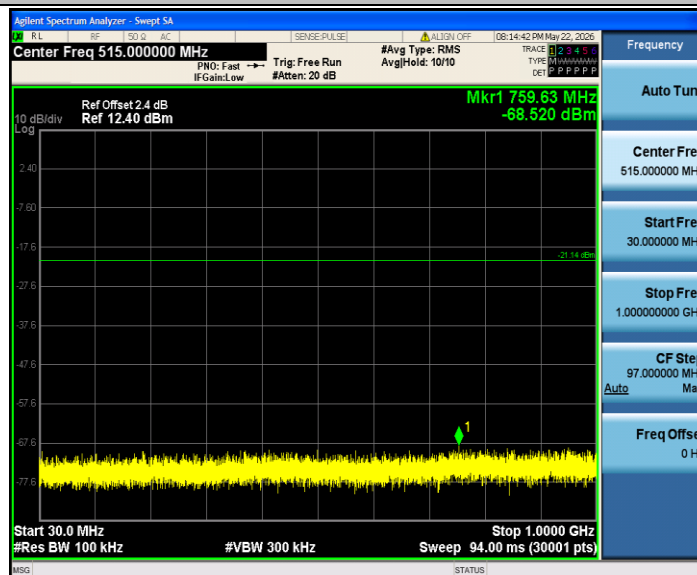
2DH5_Ant1_2402_1000~26500



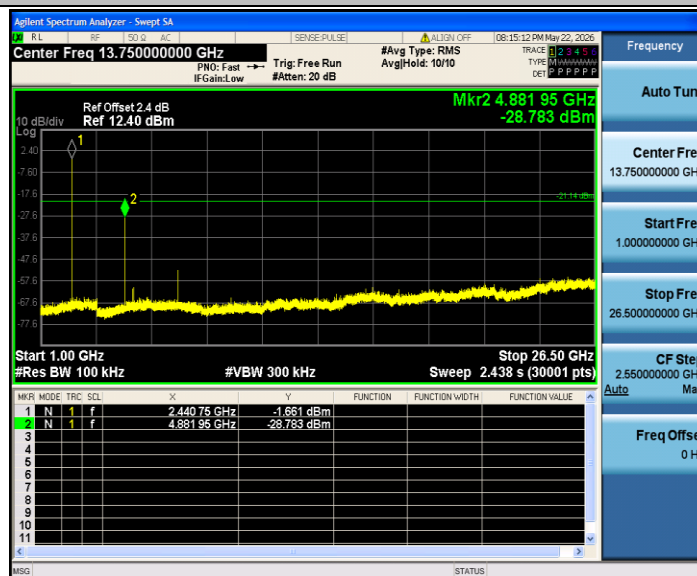
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



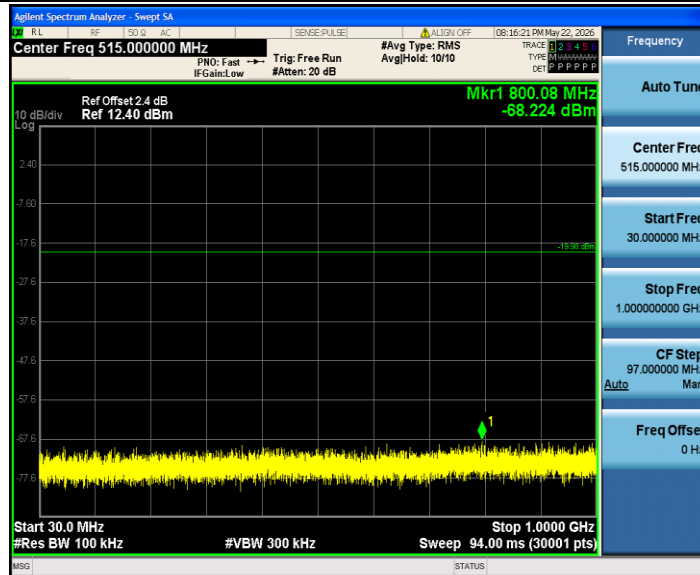
2DH5_Ant1_2441_1000~26500



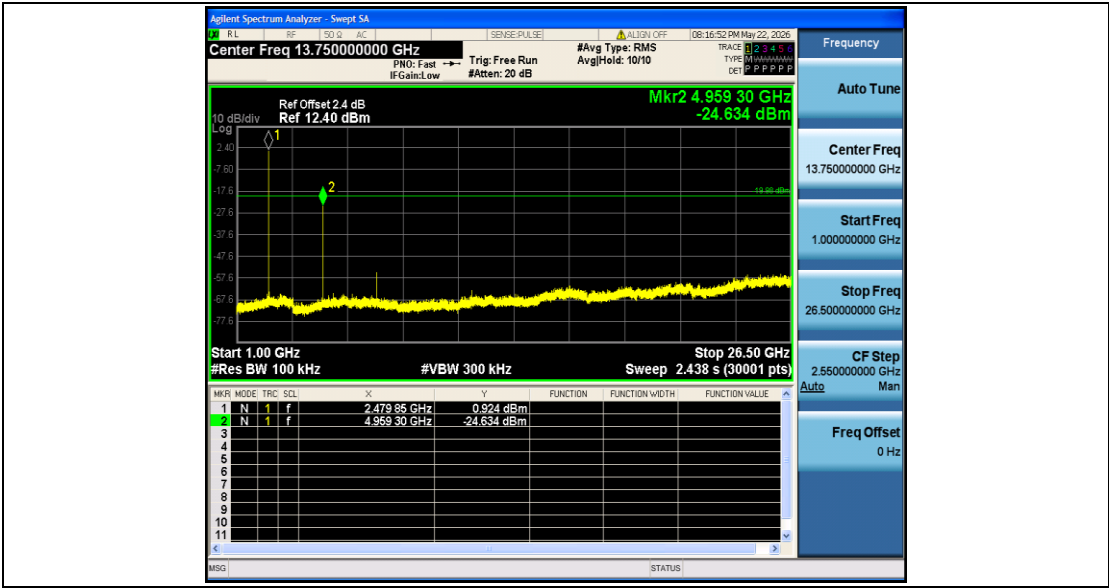
2DH5_Ant1_2480_0~Reference



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	2.92	3.76	77.66	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---