

FCC Appendix RF Test Data for BT

FCC ID : 2AZVL-S500-MAIN

Company : Shenzhen Saiyinwei Electronic Co.,Ltd

EUT : Sofa sound system

Model Number : S500-main

Report No. : CTA26030400701

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	0.966	2401.544	2402.510	---	---
		2441	0.936	2440.553	2441.489	---	---
		2480	0.954	2479.541	2480.495	---	---
2DH5	Ant1	2402	1.284	2401.379	2402.663	---	---
		2441	1.281	2440.382	2441.663	---	---
		2480	1.329	2479.346	2480.675	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

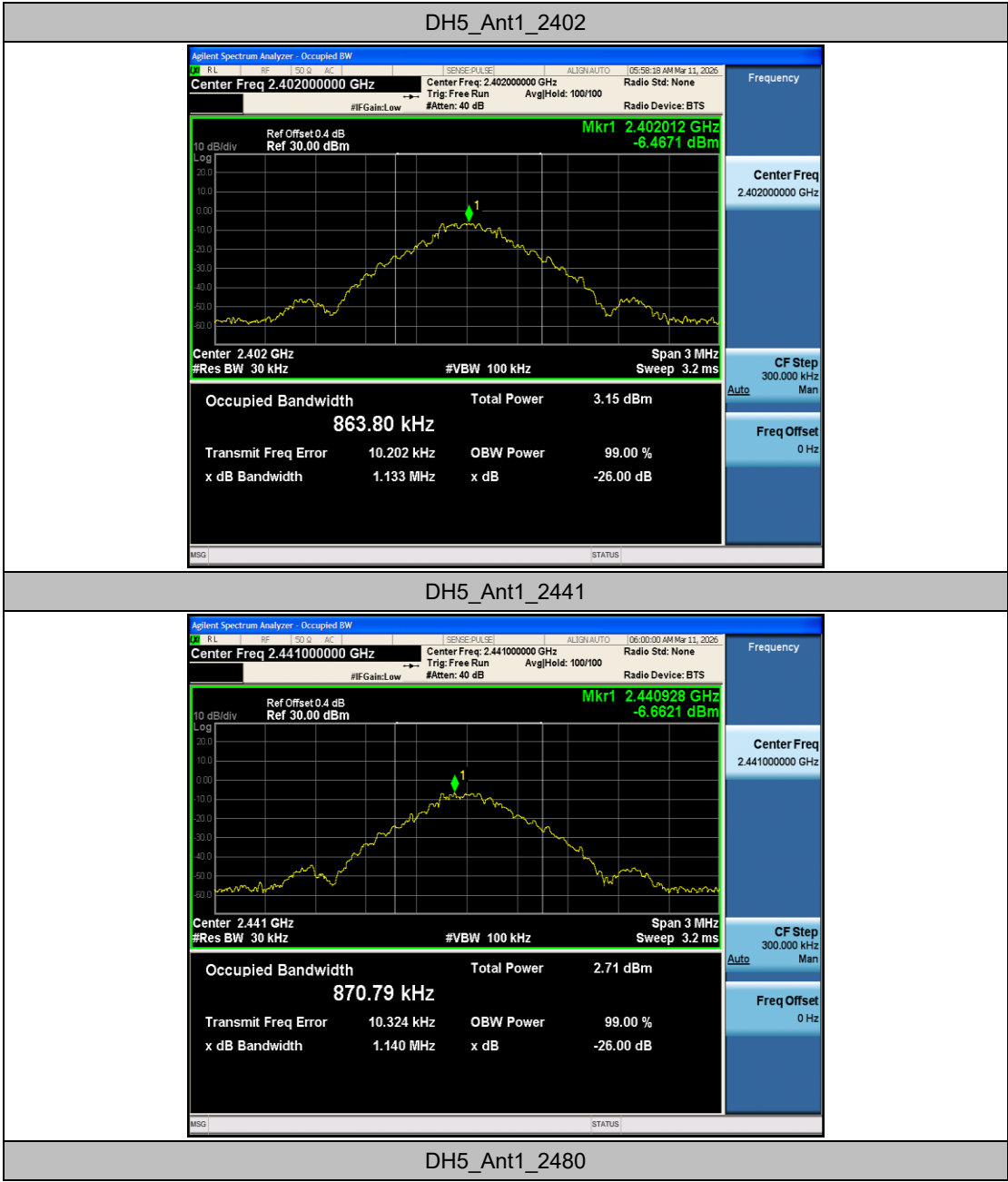


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86380	2401.5783	2402.4421	---	---
		2441	0.87079	2440.5749	2441.4457	---	---
		2480	0.84988	2479.5882	2480.4381	---	---
2DH5	Ant1	2402	1.1817	2401.4199	2402.6016	---	---
		2441	1.1812	2440.4184	2441.5996	---	---
		2480	1.1857	2479.4193	2480.6050	---	---

Test Graphs





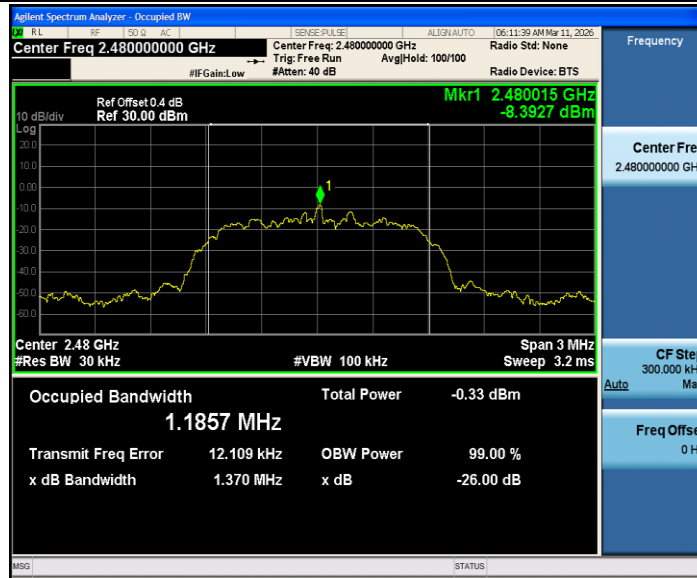
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

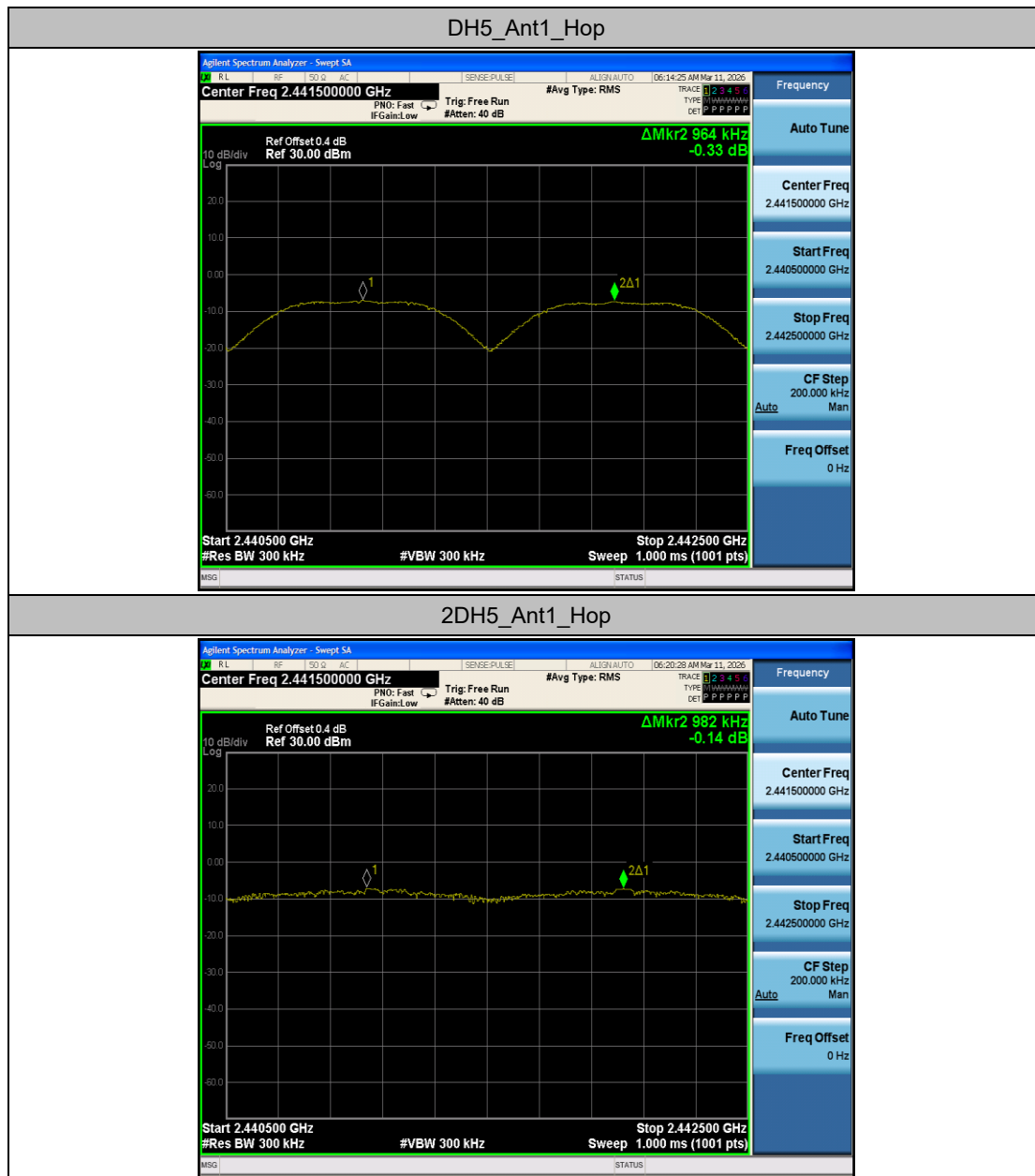
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-3.29	≤20.97	PASS
		2441	-3.63	≤20.97	PASS
		2480	-3.71	≤20.97	PASS
2DH5	Ant1	2402	-4.04	≤20.97	PASS
		2441	-4.39	≤20.97	PASS
		2480	-4.54	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.964	≥ 0.644	PASS
2DH5	Ant1	Hop	0.982	≥ 0.886	PASS

Test Graphs

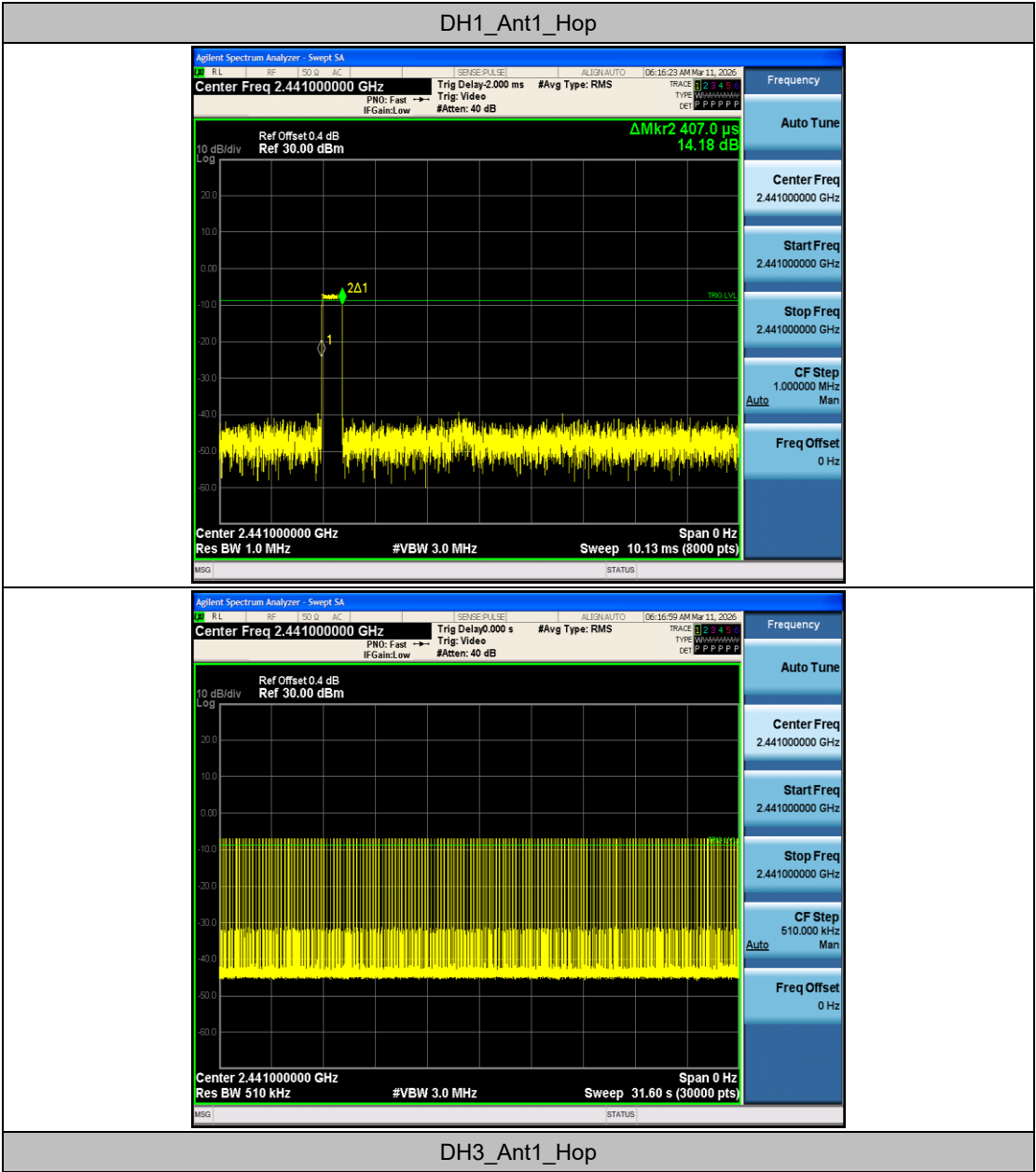


Appendix E: Time of occupancy

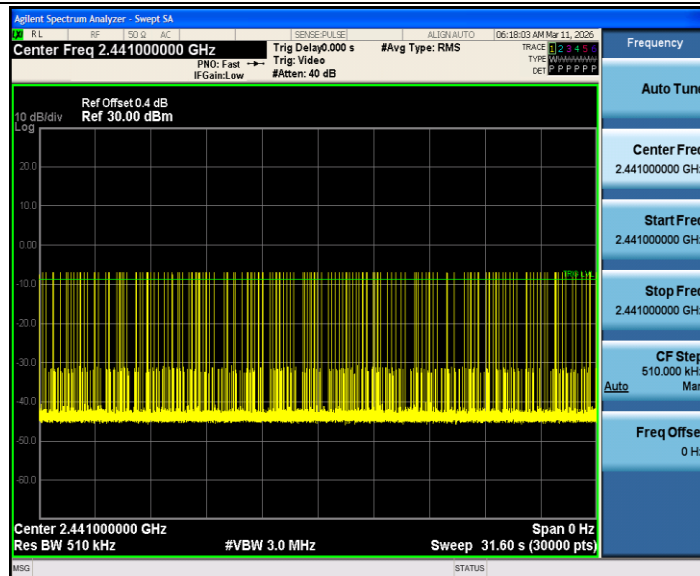
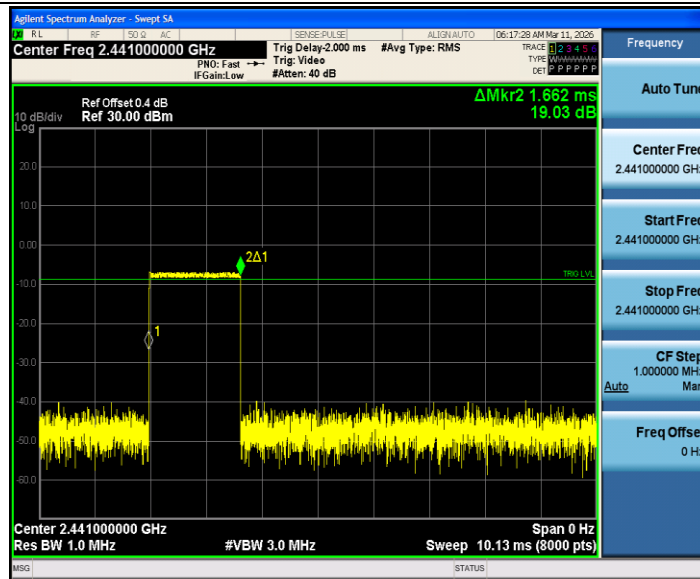
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	318	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	164	0.273	≤0.4	PASS
DH5	Ant1	Hop	2.910	106	0.308	≤0.4	PASS
2DH1	Ant1	Hop	0.417	316	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	163	0.272	≤0.4	PASS
2DH5	Ant1	Hop	2.916	111	0.324	≤0.4	PASS

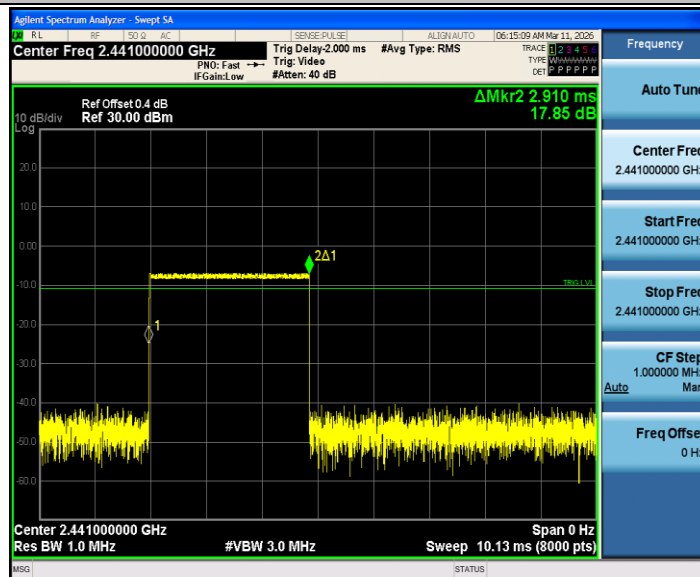
Test Graphs

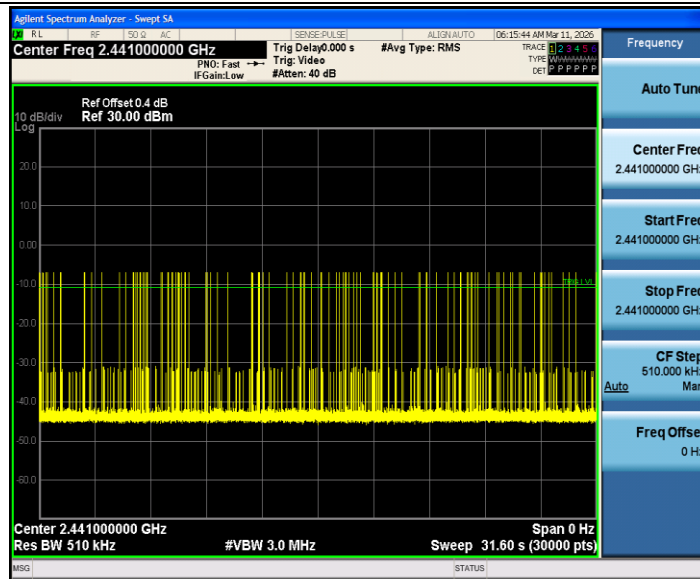


DH3_Ant1_Hop

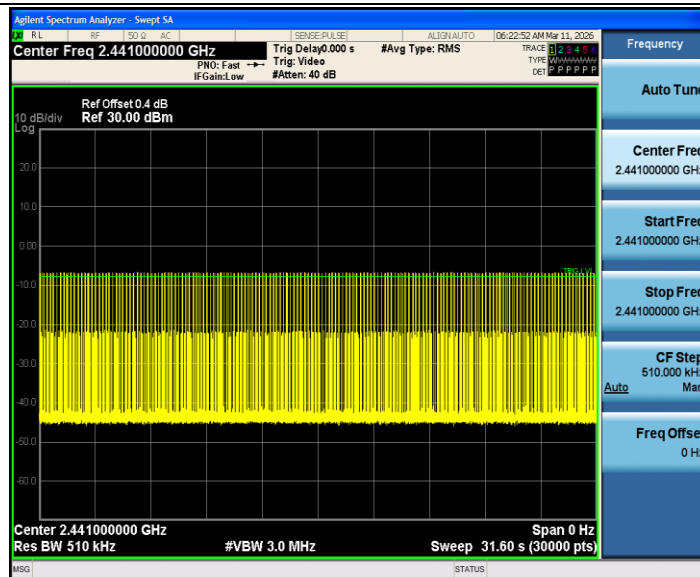
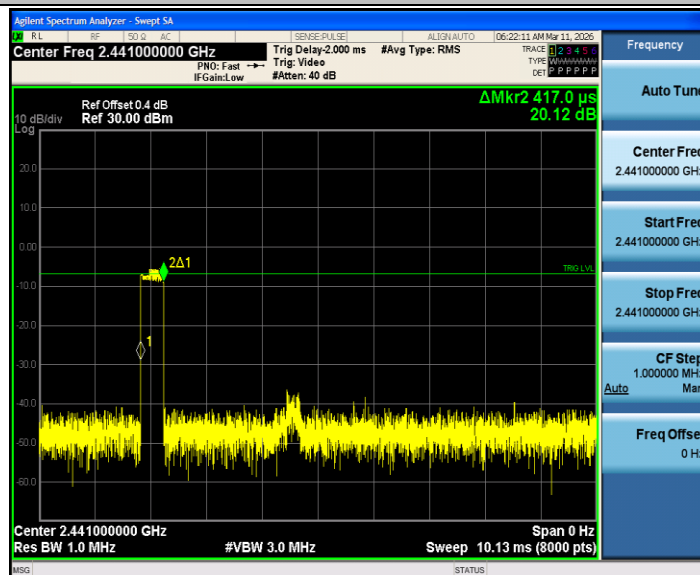


DH5_Ant1_Hop

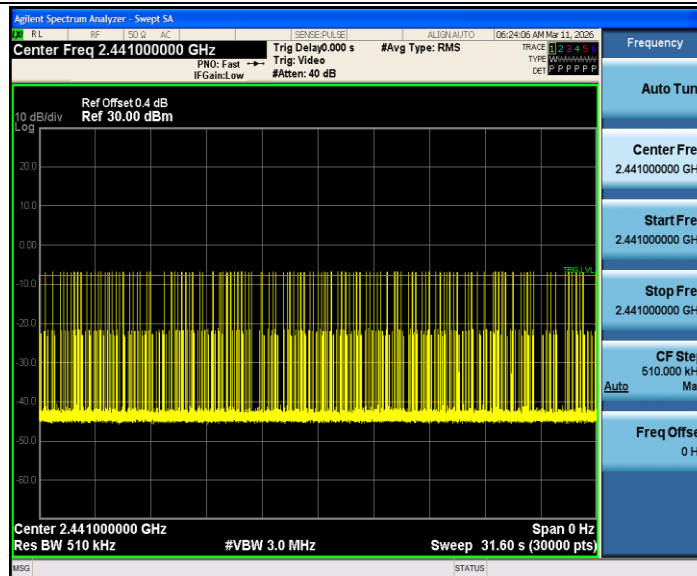
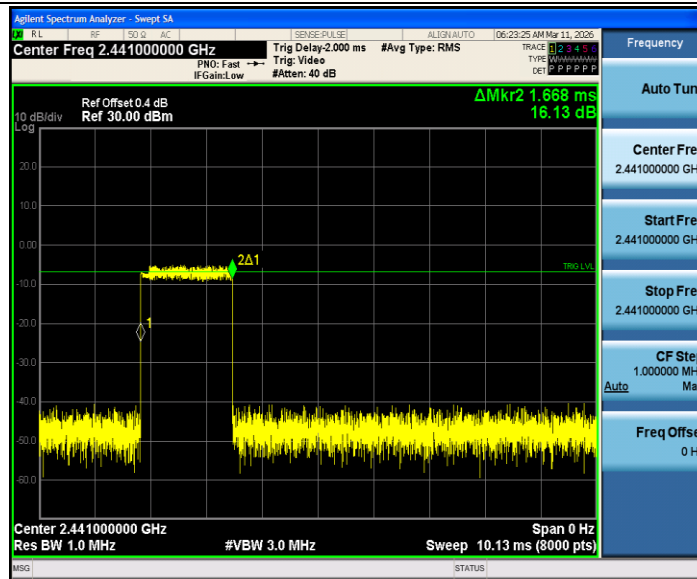




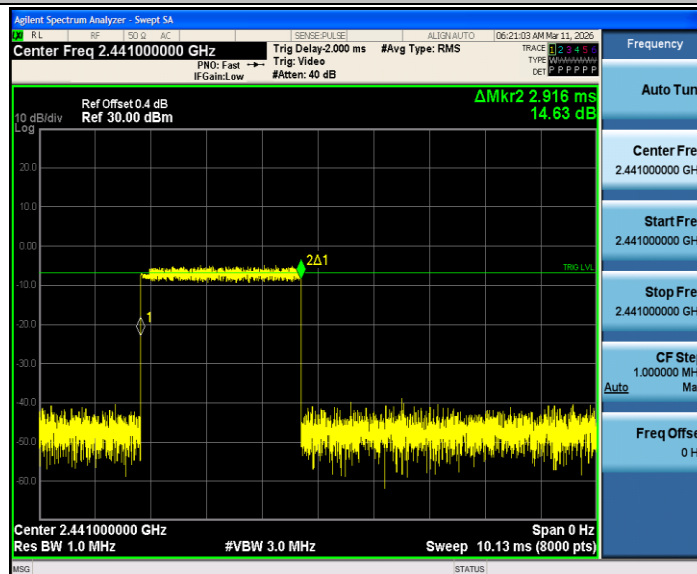
2DH1_Ant1_Hop

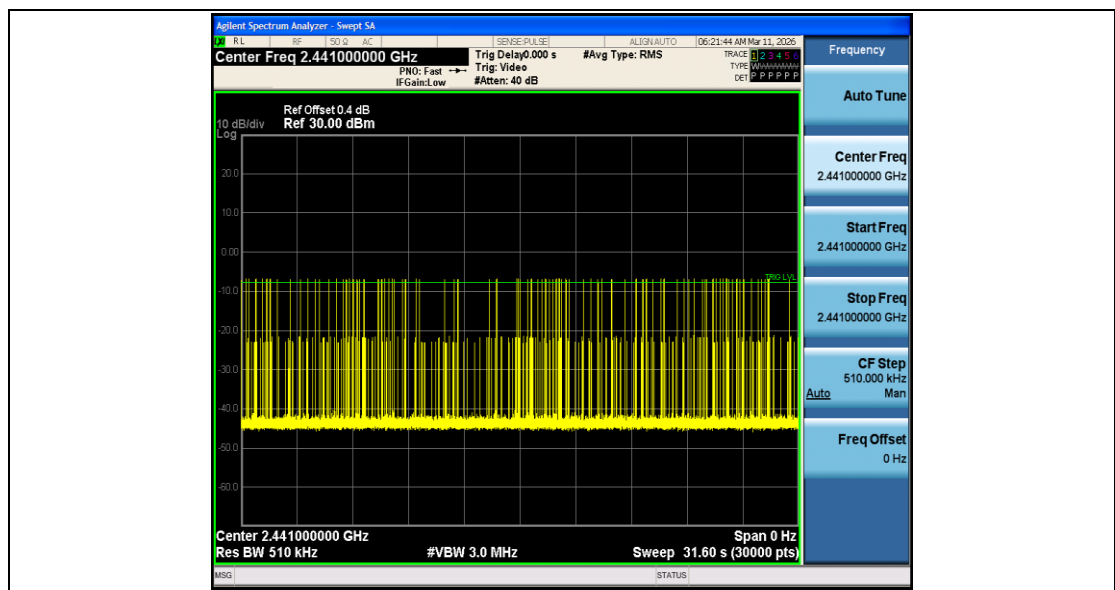


2DH3_Ant1_Hop



2DH5_Ant1_Hop



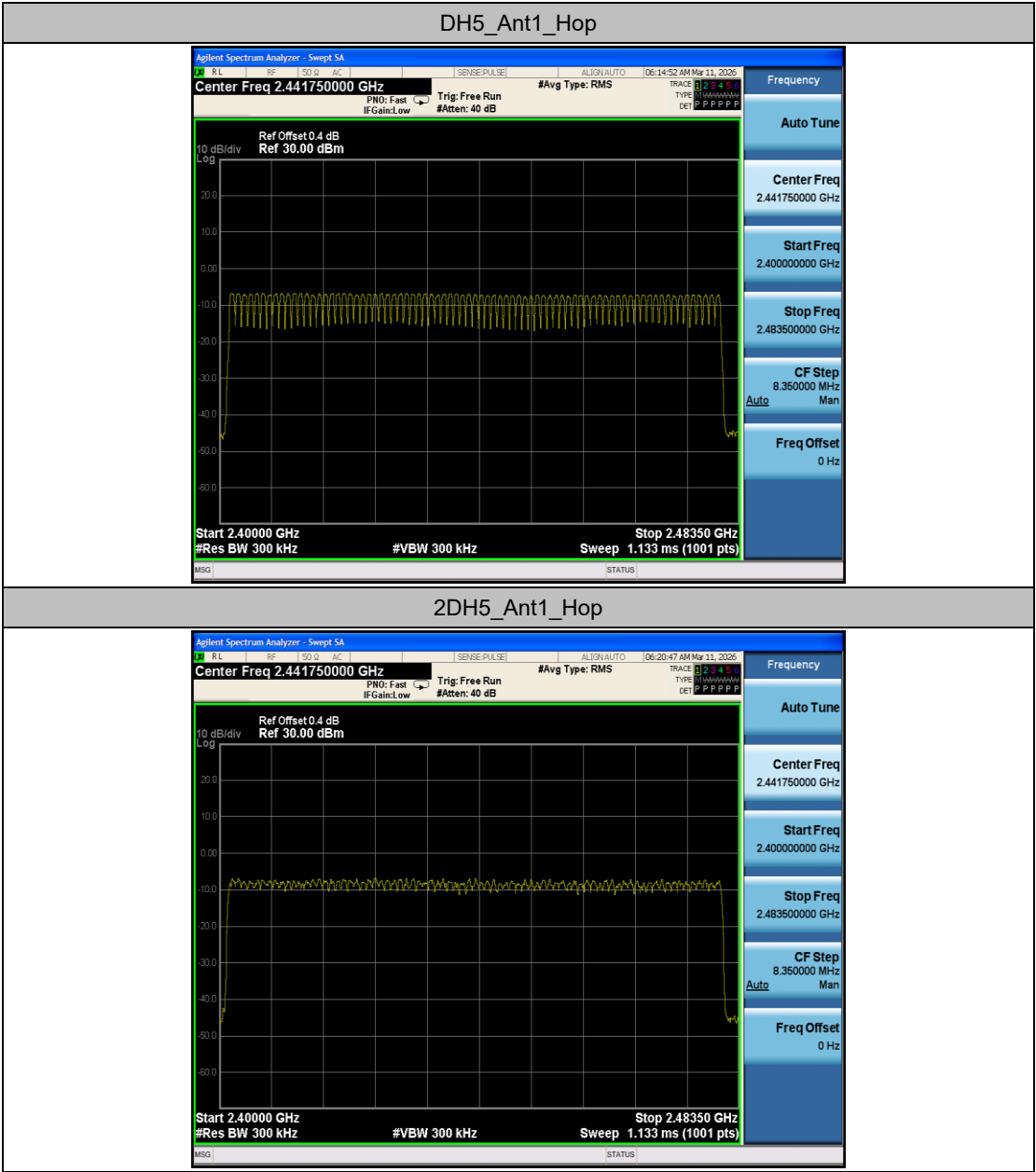


Appendix F: Number of hopping channels

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

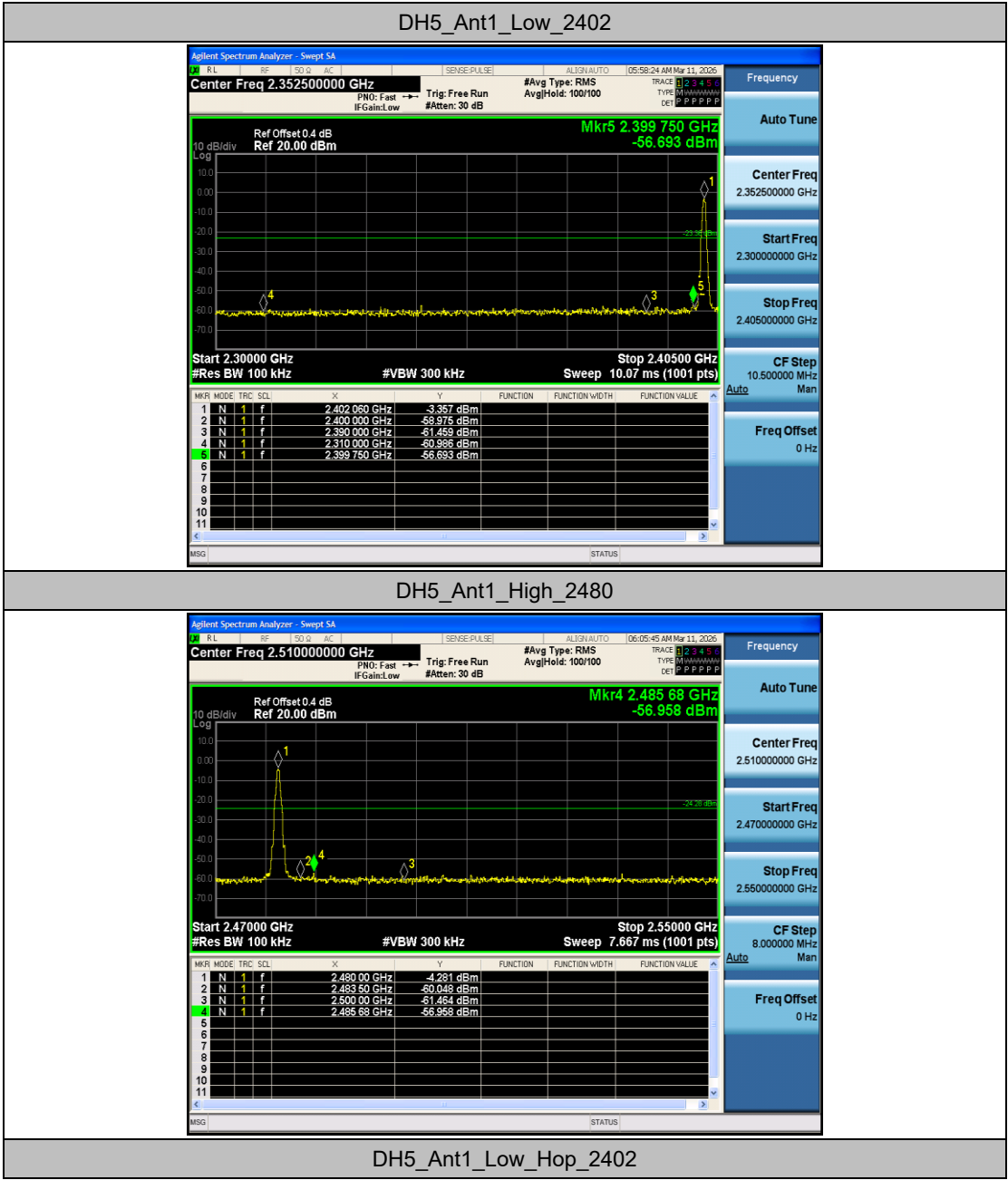


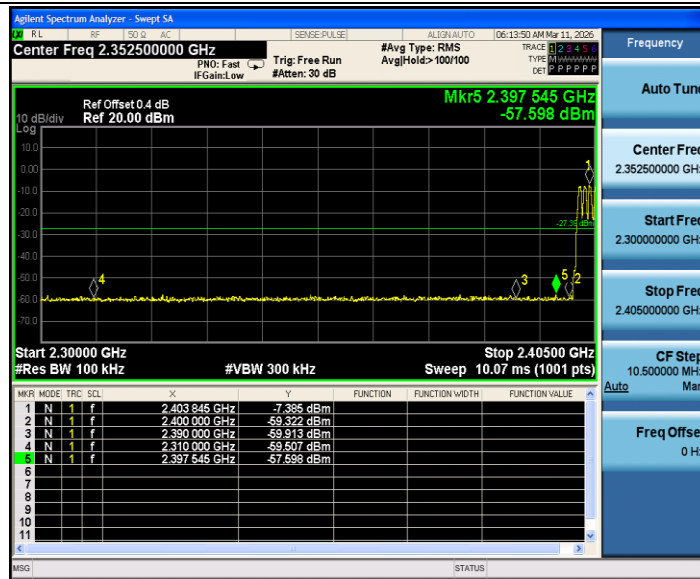
Appendix G: Band edge measurements

Test Result

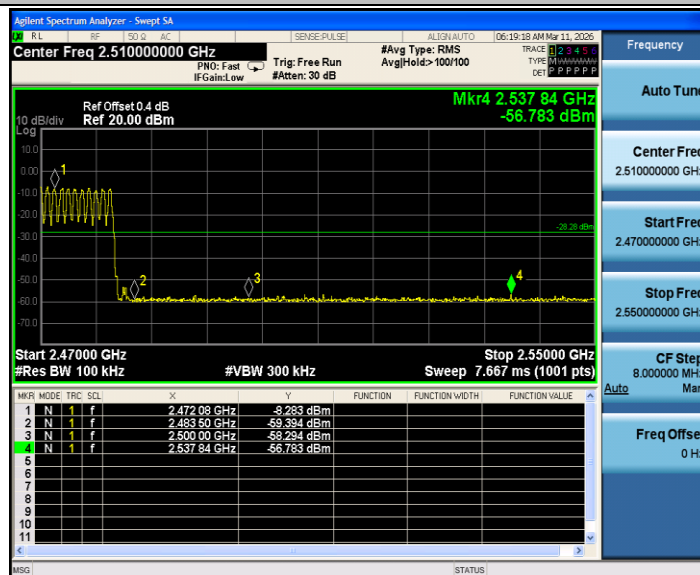
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.36	-56.69	≤-23.36	PASS
		High	2480	-4.28	-56.96	≤-24.28	PASS
		Low	Hop_2402	-7.39	-57.6	≤-27.39	PASS
		High	Hop_2480	-8.28	-56.78	≤-28.28	PASS
2DH5	Ant1	Low	2402	-8.58	-57.89	≤-28.58	PASS
		High	2480	-7.29	-57.47	≤-27.29	PASS
		Low	Hop_2402	-9.14	-58.27	≤-29.14	PASS
		High	Hop_2480	-8.33	-57.53	≤-28.33	PASS

Test Graphs

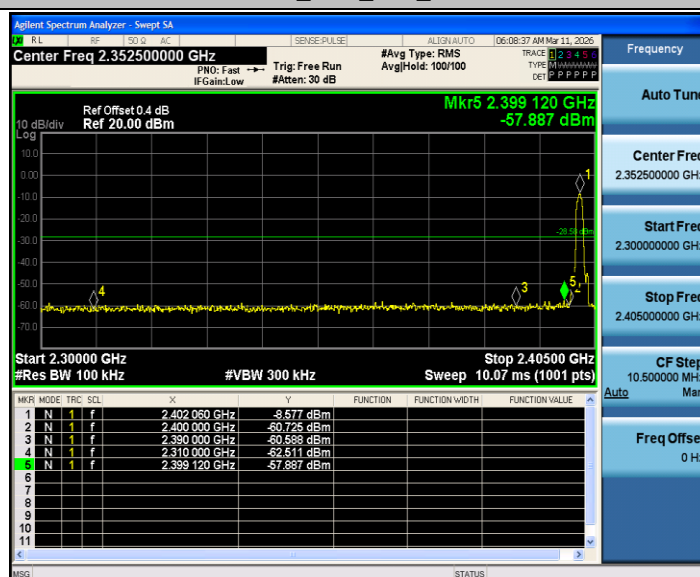




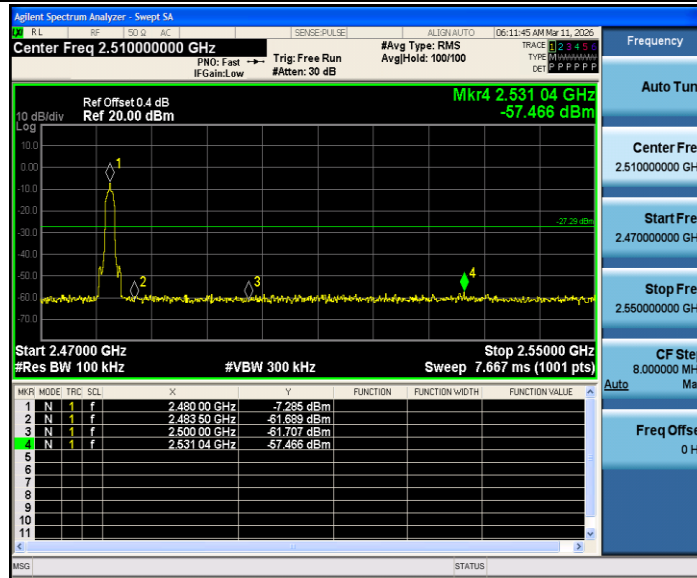
DH5_Ant1_High_Hop_2480



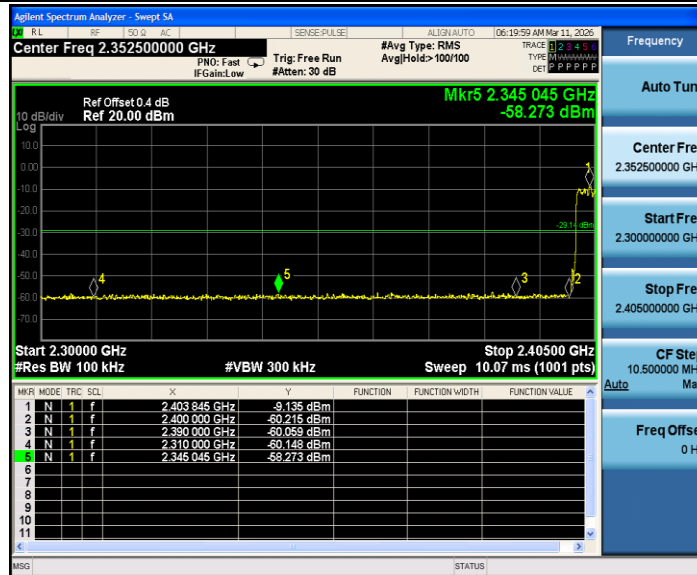
2DH5_Ant1_Low_2402



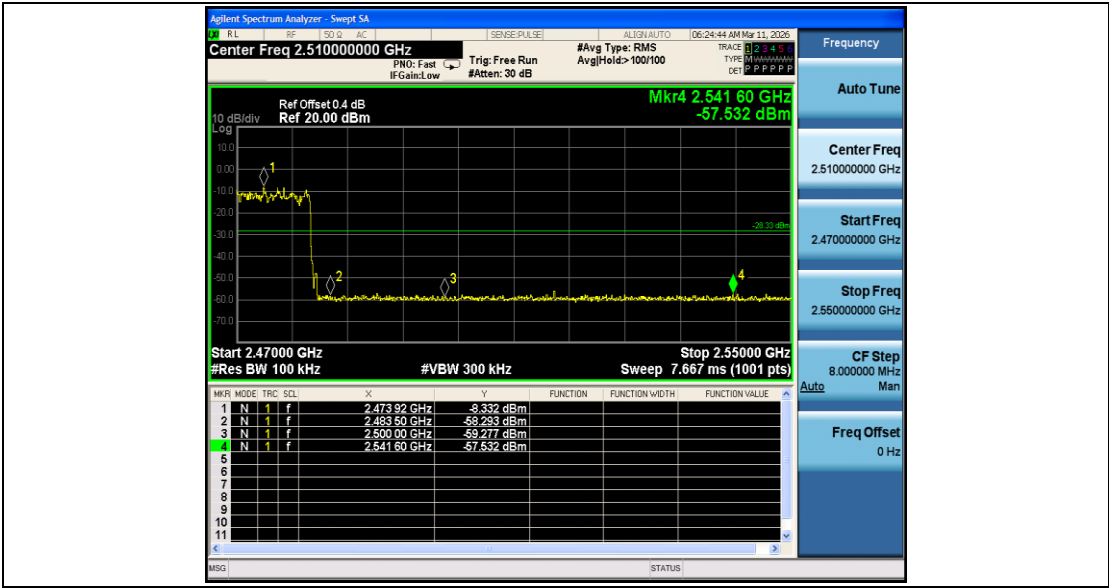
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

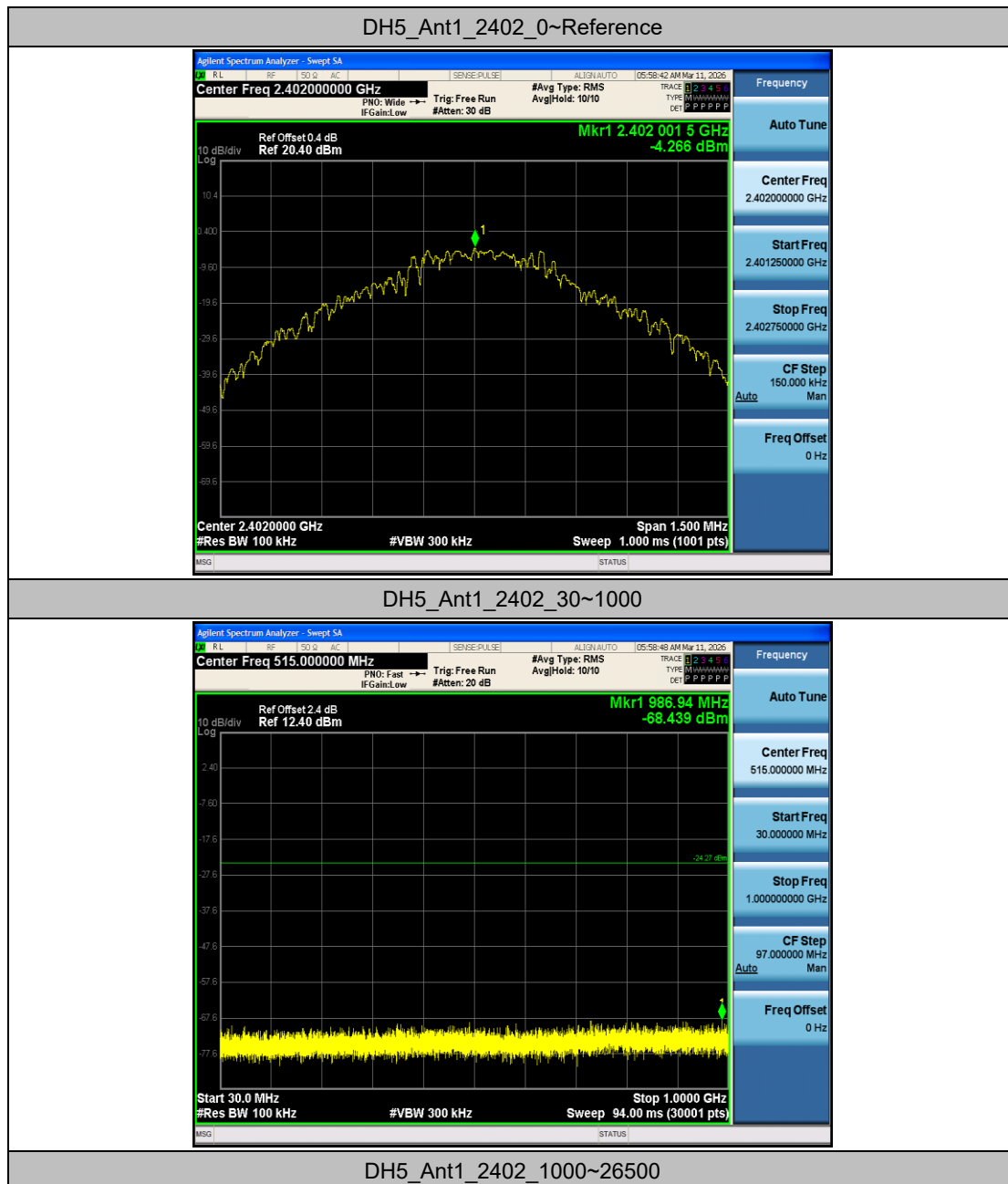


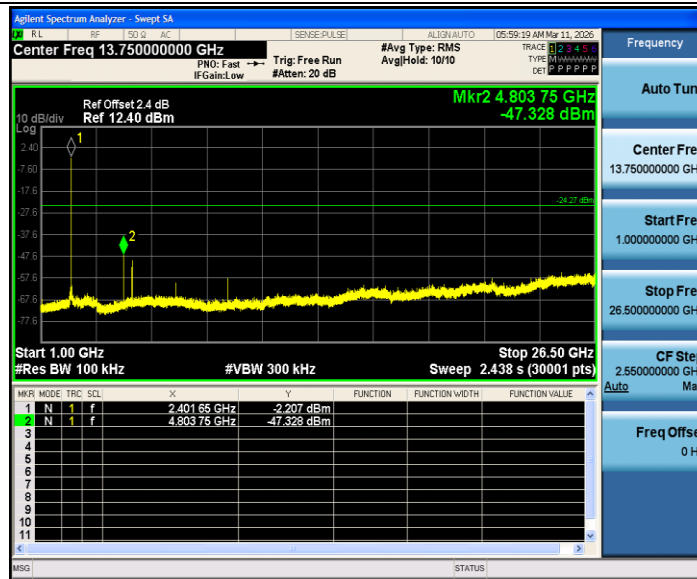
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.27	-4.27	---	PASS
			30~1000	-4.27	-68.44	≤-24.27	PASS
			1000~26500	-4.27	-47.33	≤-24.27	PASS
		2441	Reference	-4.68	-4.68	---	PASS
			30~1000	-4.68	-66.91	≤-24.68	PASS
			1000~26500	-4.68	-48.36	≤-24.68	PASS
		2480	Reference	-4.35	-4.35	---	PASS
			30~1000	-4.35	-68.46	≤-24.35	PASS
			1000~26500	-4.35	-48.15	≤-24.35	PASS
2DH5	Ant1	2402	Reference	-7.72	-7.72	---	PASS
			30~1000	-7.72	-68.35	≤-27.72	PASS
			1000~26500	-7.72	-53.4	≤-27.72	PASS
		2441	Reference	-10.63	-10.63	---	PASS
			30~1000	-10.63	-68.11	≤-30.63	PASS
			1000~26500	-10.63	-53.43	≤-30.63	PASS
		2480	Reference	-7.62	-7.62	---	PASS
			30~1000	-7.62	-68.28	≤-27.62	PASS
			1000~26500	-7.62	-55.06	≤-27.62	PASS

Test Graphs

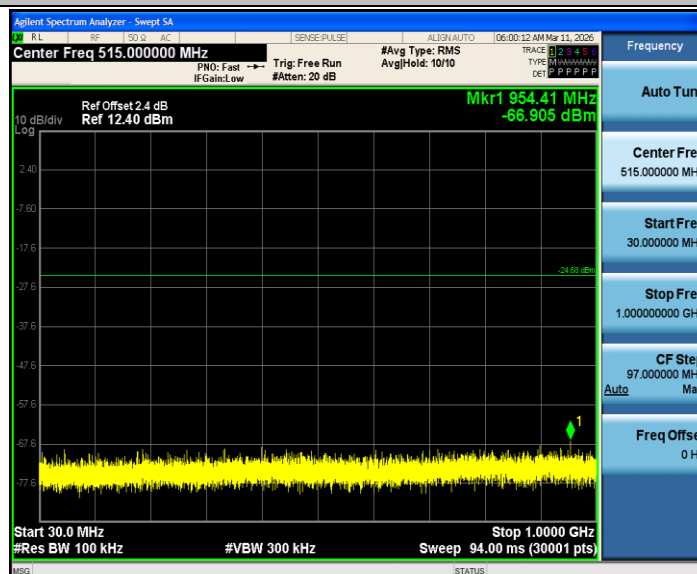




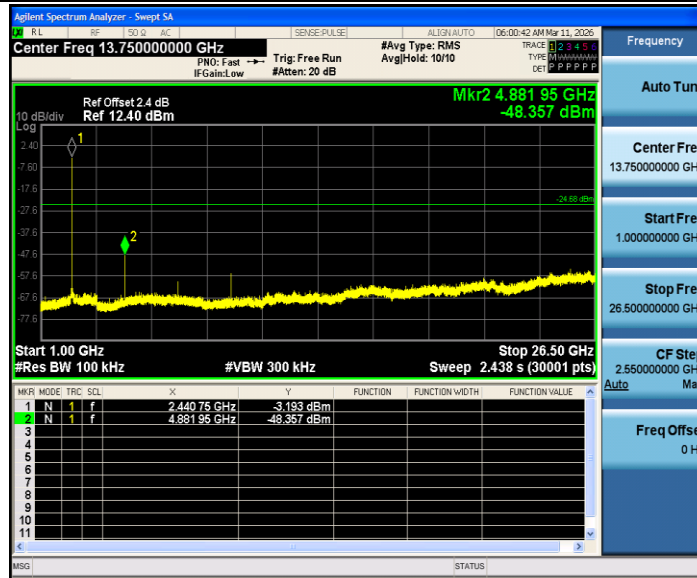
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



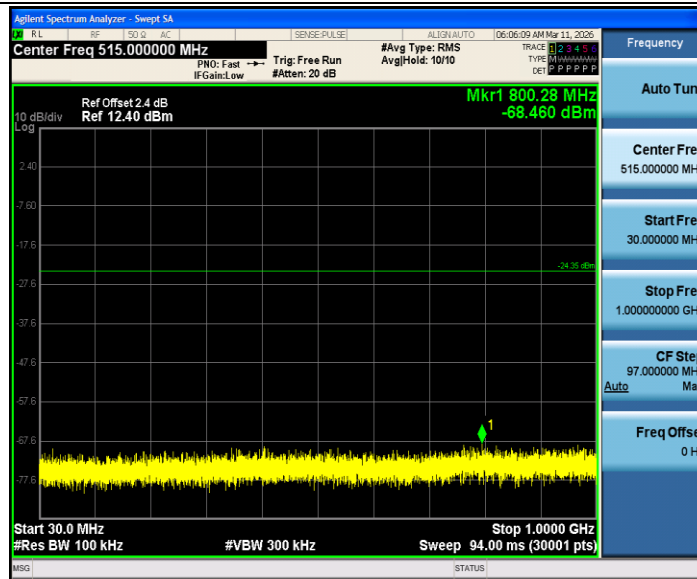
DH5_Ant1_2441_1000~26500



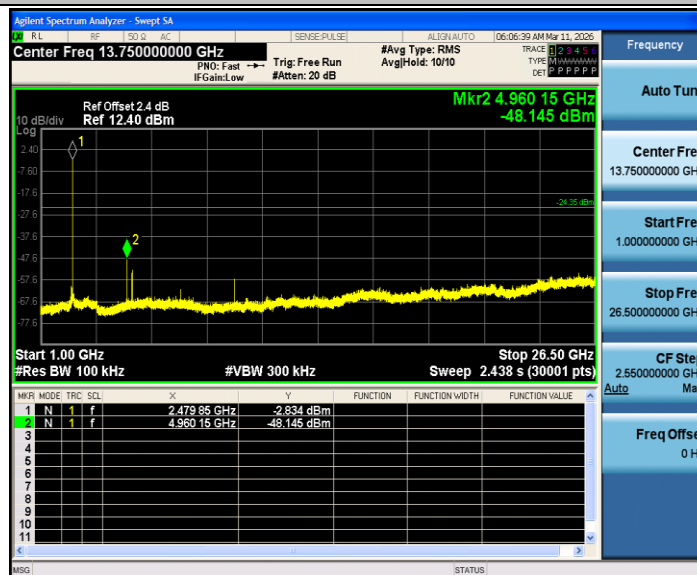
DH5_Ant1_2480_0~Reference



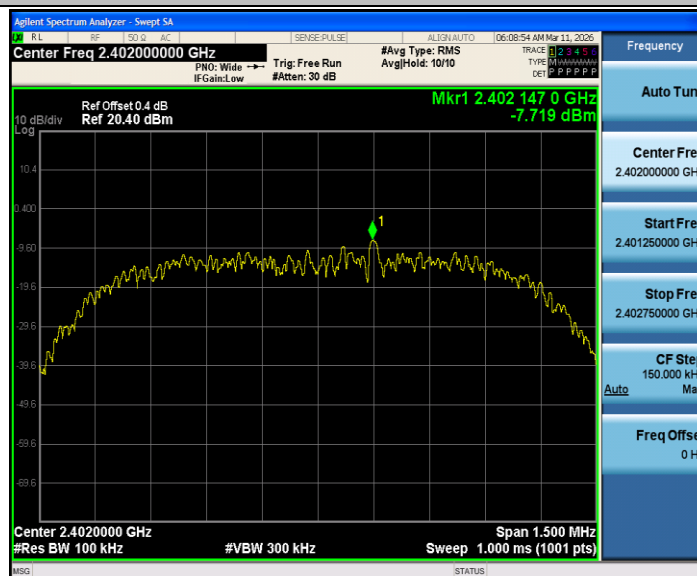
DH5_Ant1_2480_30~1000



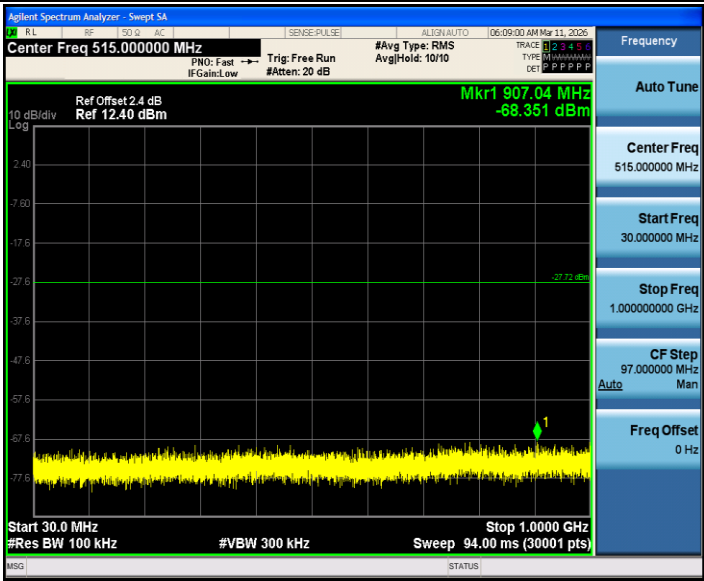
DH5_Ant1_2480_1000~26500



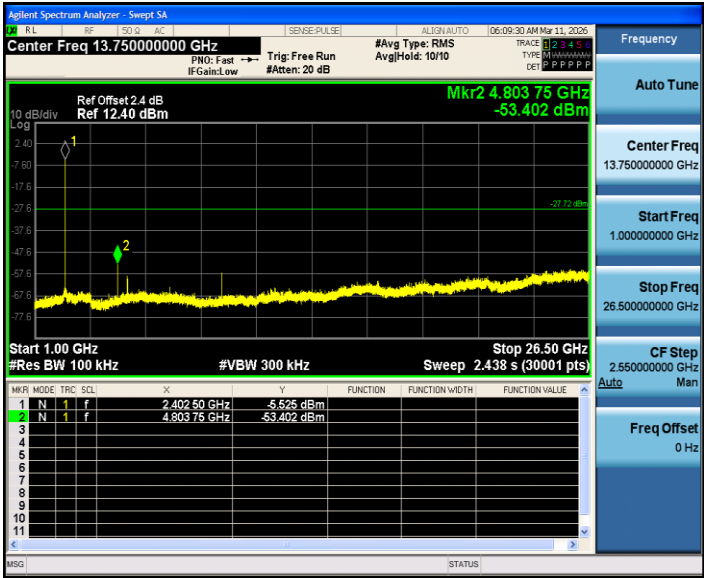
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



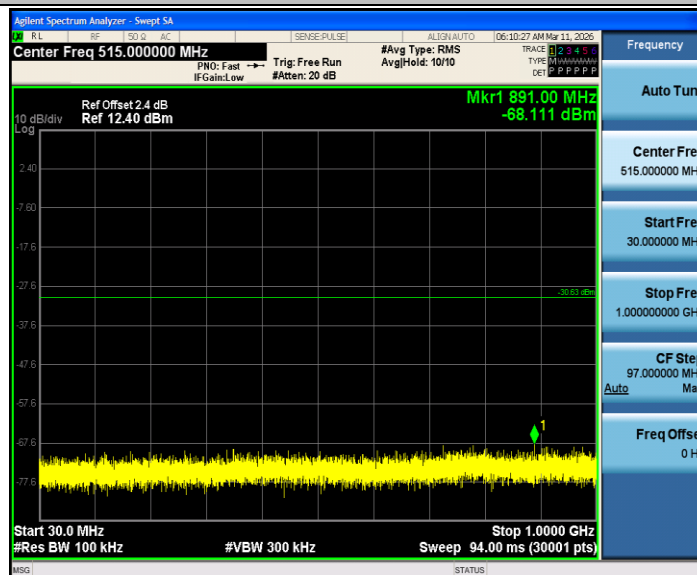
2DH5_Ant1_2402_1000~26500



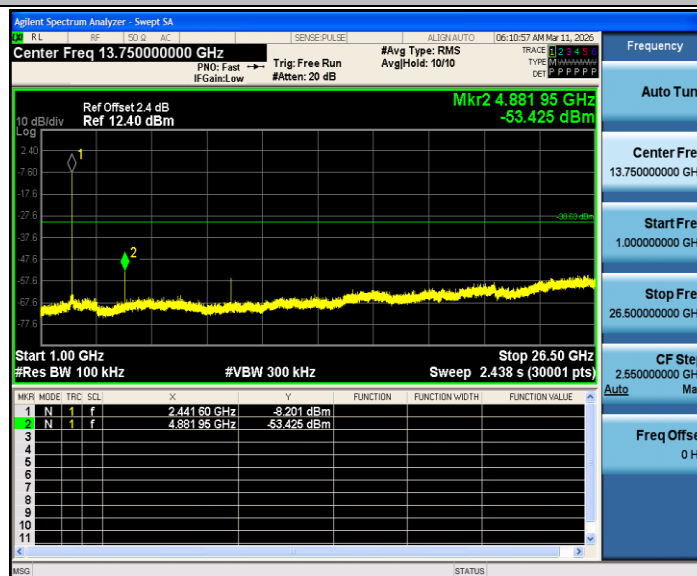
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



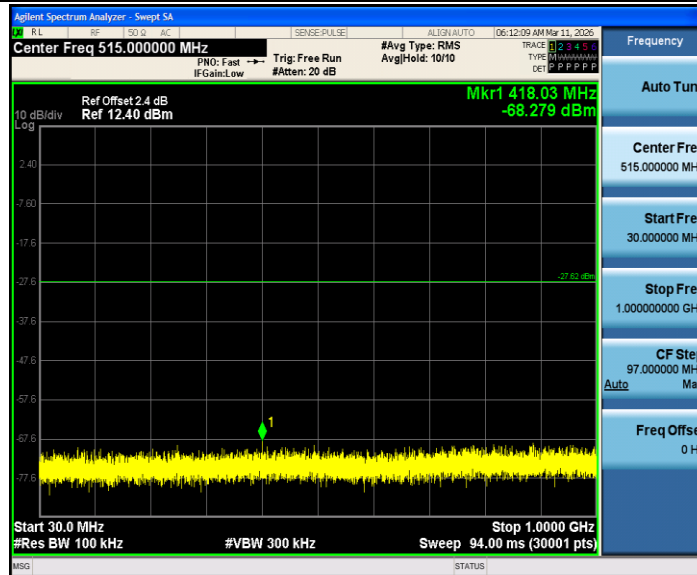
2DH5_Ant1_2441_1000~26500



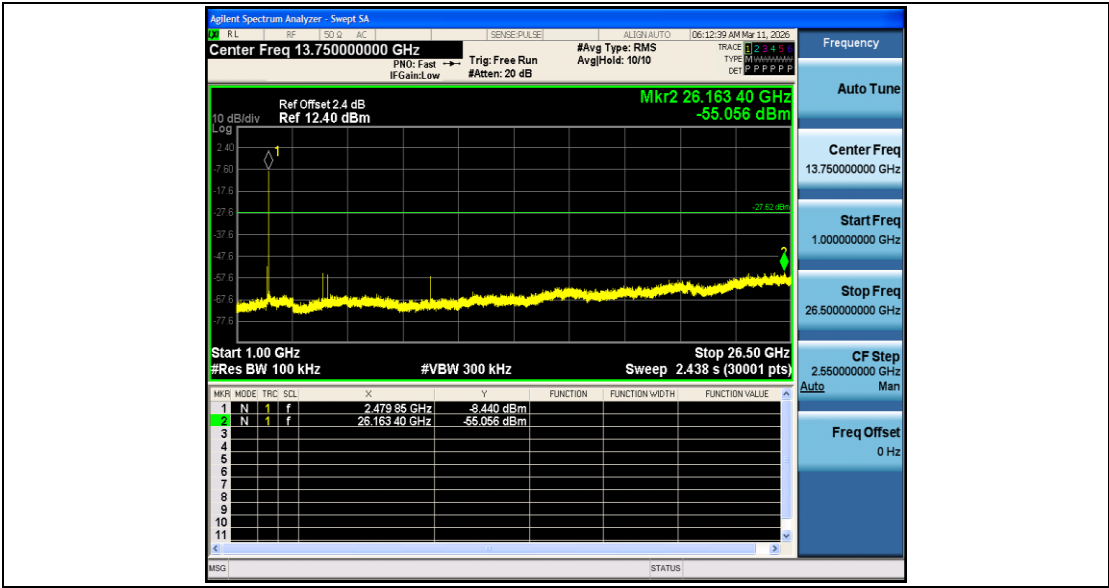
2DH5_Ant1_2480_0~Reference



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	2.92	3.75	77.87	1.09	---	---
		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	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.76	77.66	1.10	---	---