

FCC Appendix RF Test Data for BT

FCC ID : 2BKOI-C101

Company : Hangzhou Guowen Technology Co., Ltd.

EUT : OBOOK e-badge

Model Number : C101

Report No. : CTA26031300202

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	0.951	2401.544	2402.495	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.930	2479.556	2480.486	---	---
2DH5	Ant1	2402	1.314	2401.358	2402.672	---	---
		2441	1.332	2440.343	2441.675	---	---
		2480	1.338	2479.337	2480.675	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

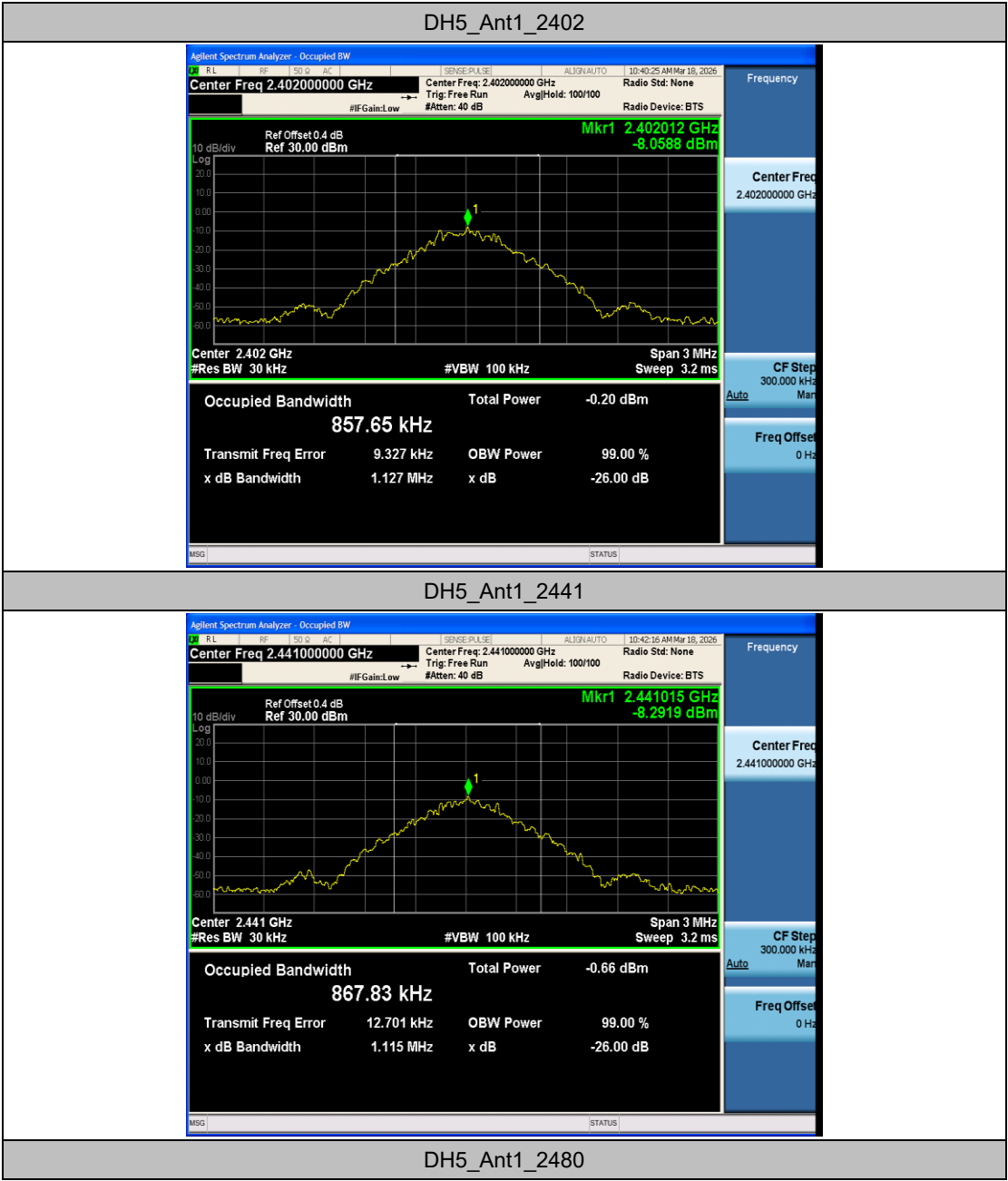


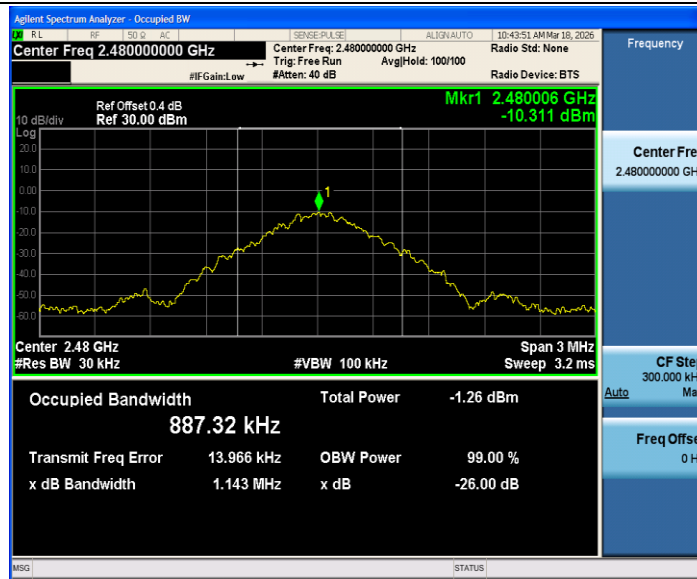
Appendix B: Occupied Channel Bandwidth

Test Result

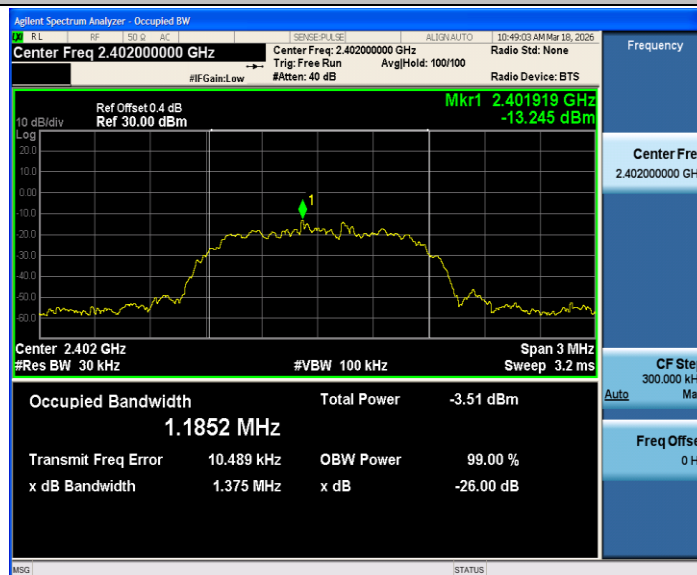
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85765	2401.5805	2402.4382	---	---
		2441	0.86783	2440.5788	2441.4466	---	---
		2480	0.88732	2479.5703	2480.4576	---	---
2DH5	Ant1	2402	1.1852	2401.4179	2402.6031	---	---
		2441	1.1869	2440.4157	2441.6026	---	---
		2480	1.1754	2479.4222	2480.5976	---	---

Test Graphs





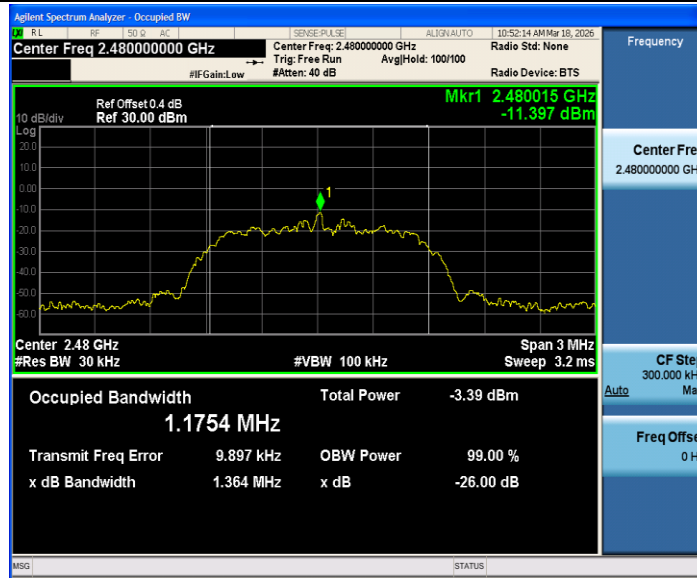
2DH5_Ant1_2402



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	-6.57	≤20.97	PASS
		2441	-6.87	≤20.97	PASS
		2480	-7.02	≤20.97	PASS
2DH5	Ant1	2402	-7.45	≤20.97	PASS
		2441	-7.75	≤20.97	PASS
		2480	-7.85	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.006	≥ 0.951	PASS
2DH5	Ant1	Hop	1.06	≥ 0.892	PASS

Test Graphs

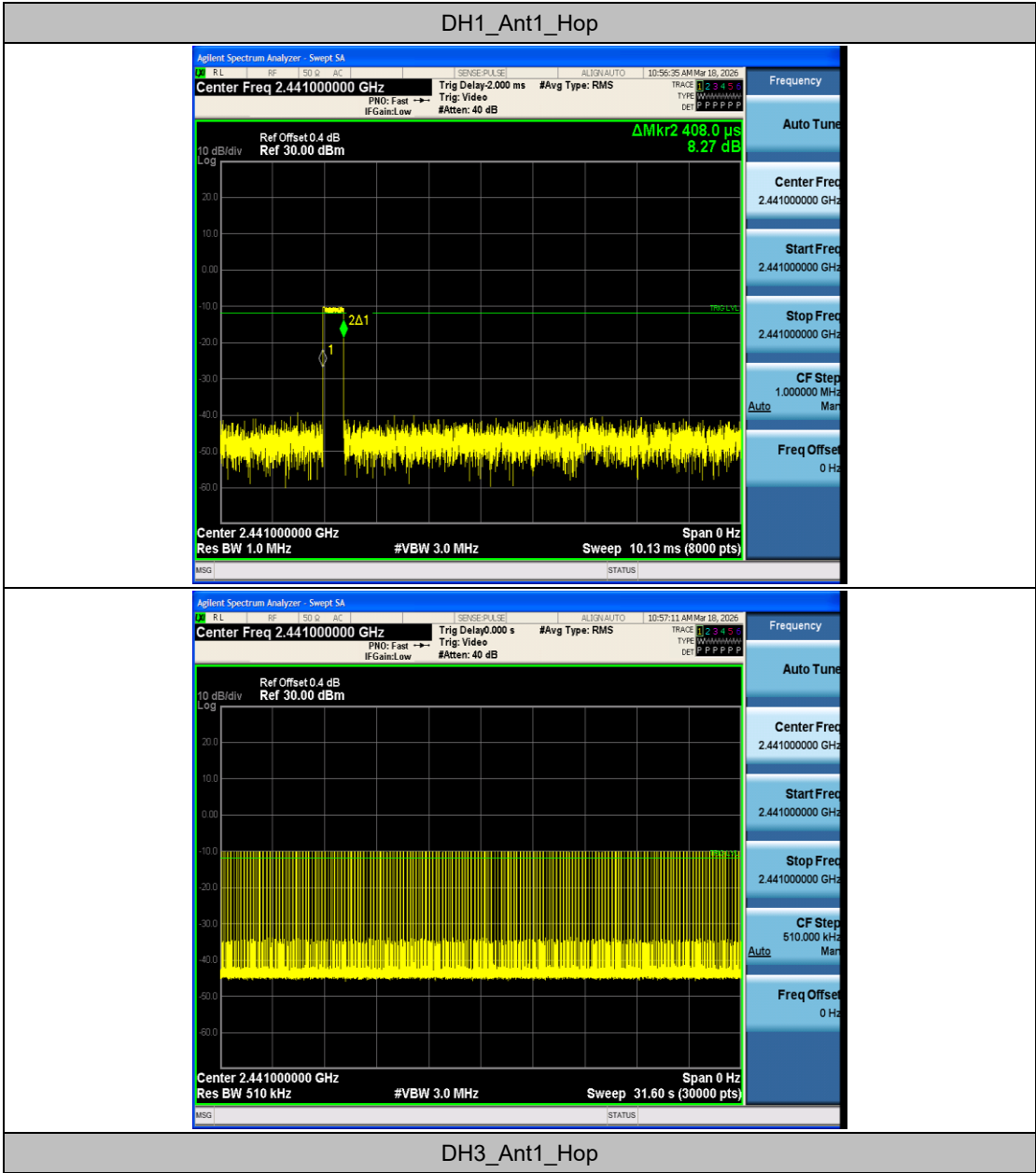


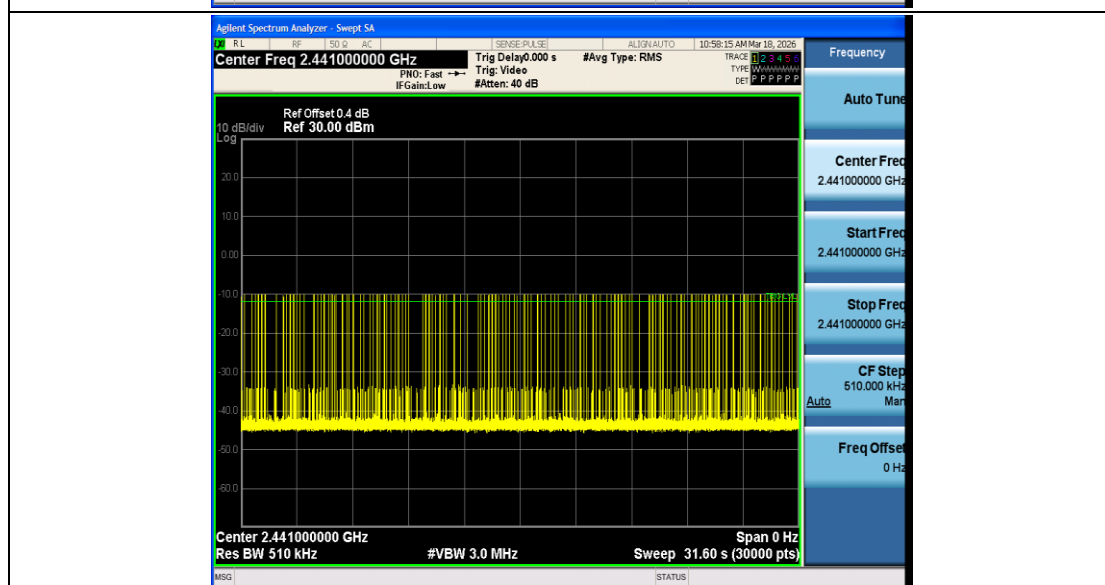
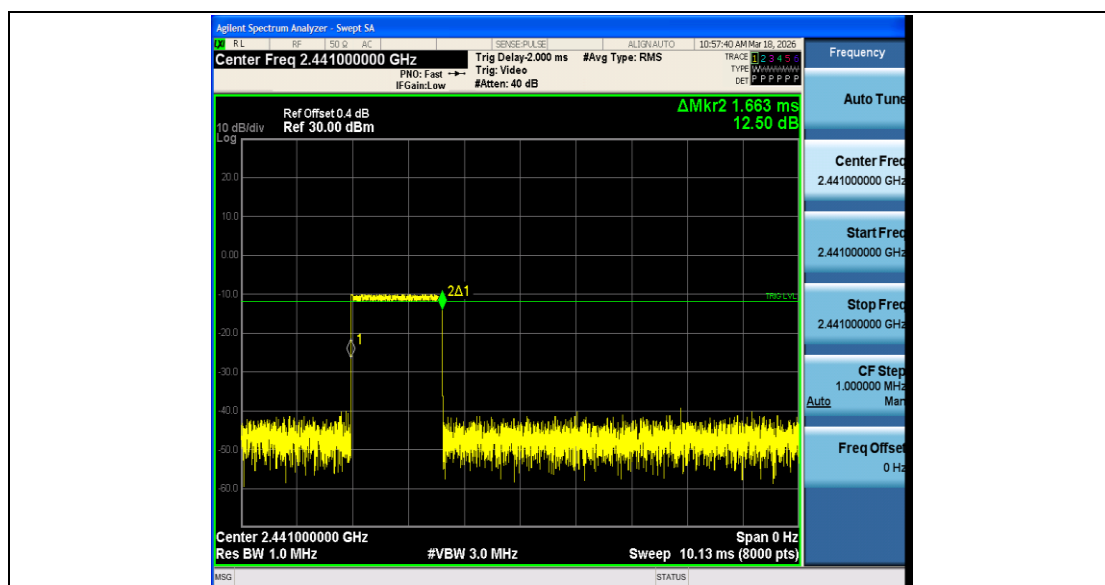
Appendix E: Time of occupancy

Test Result

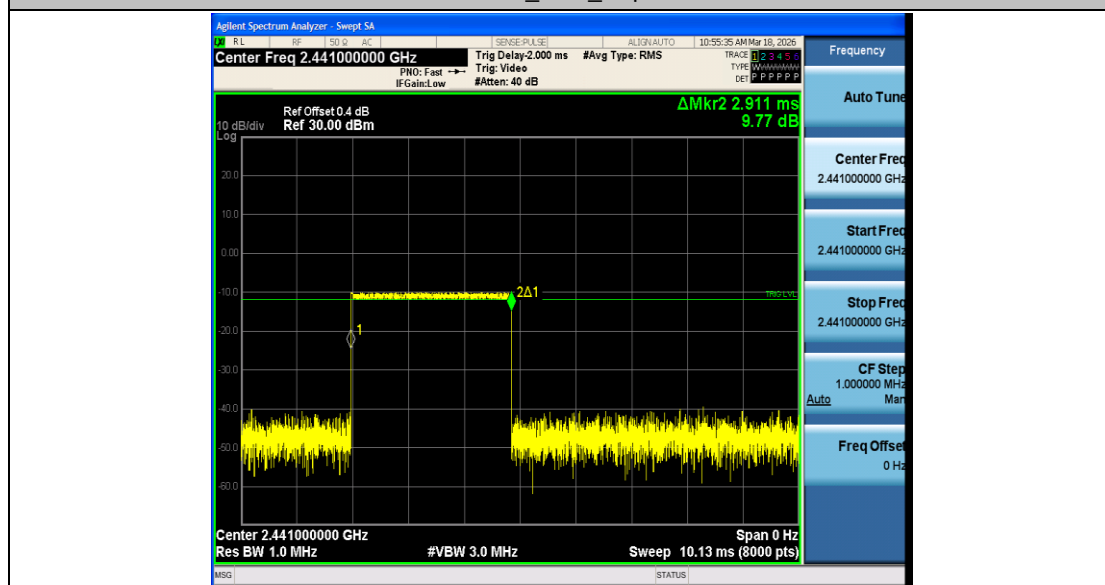
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.408	317	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.663	170	0.283	≤0.4	PASS
DH5	Ant1	Hop	2.911	106	0.309	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.667	169	0.282	≤0.4	PASS
2DH5	Ant1	Hop	2.916	106	0.309	≤0.4	PASS

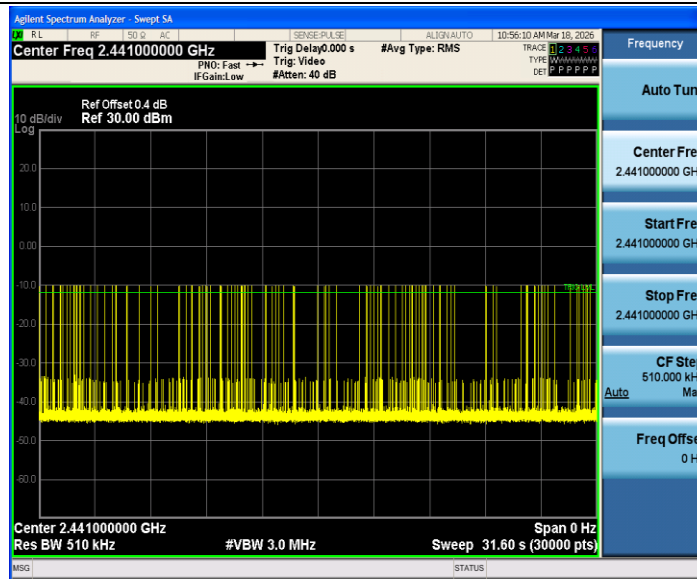
Test Graphs



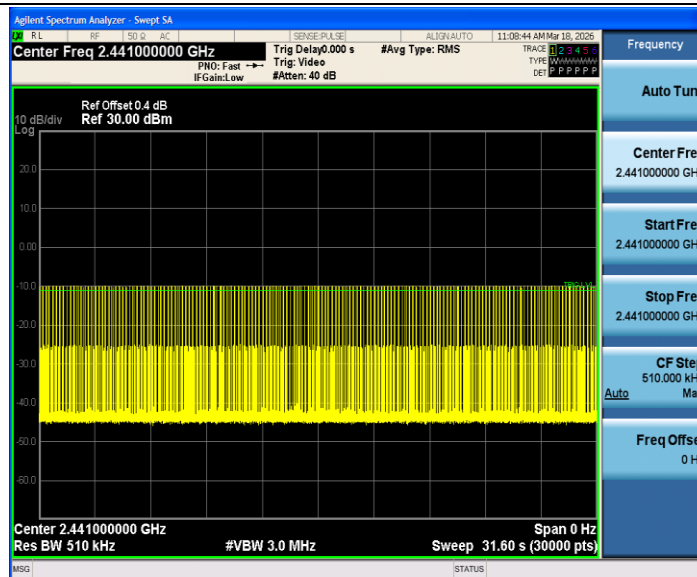
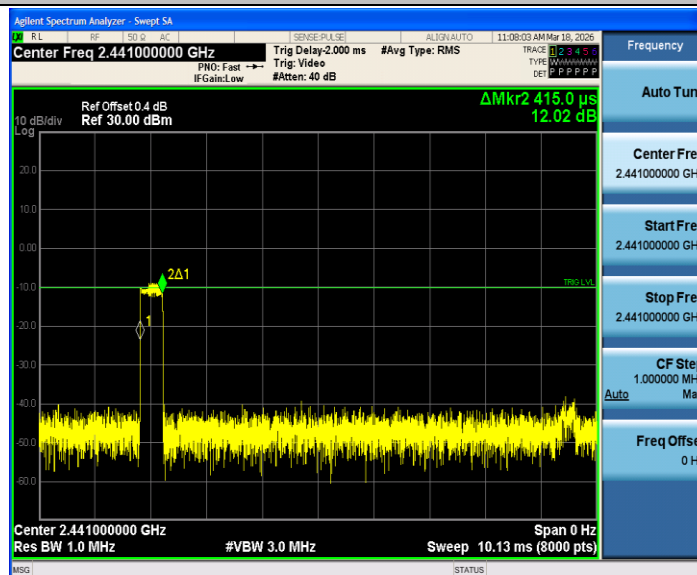


DH5_Ant1_Hop

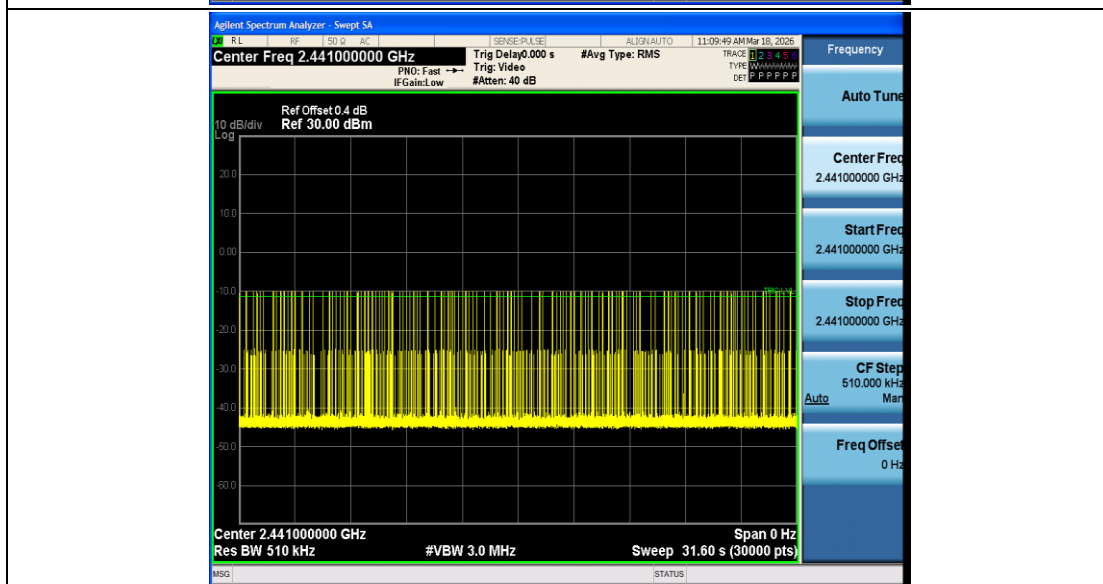
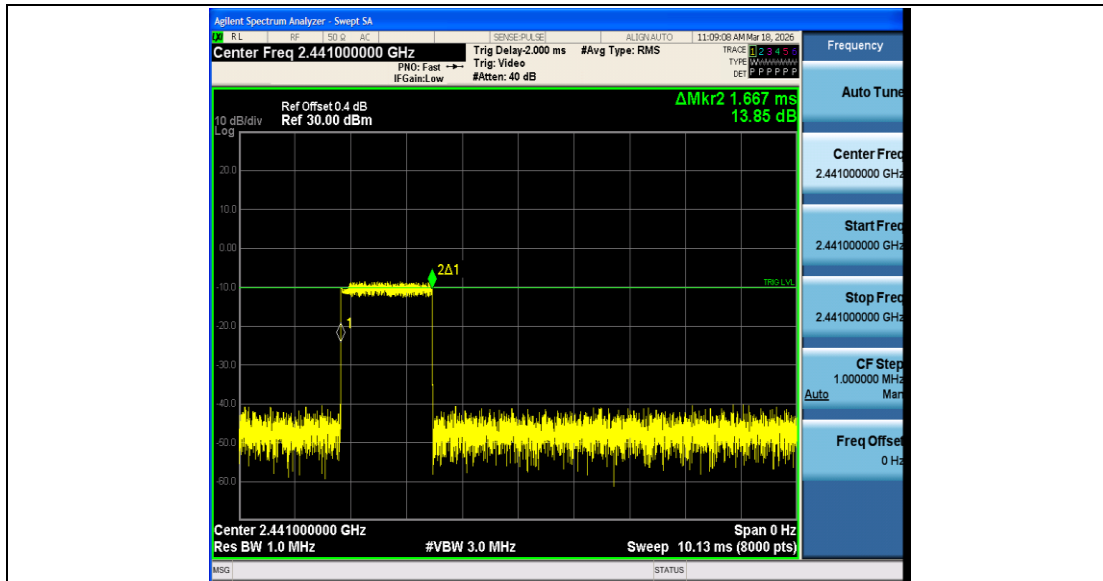




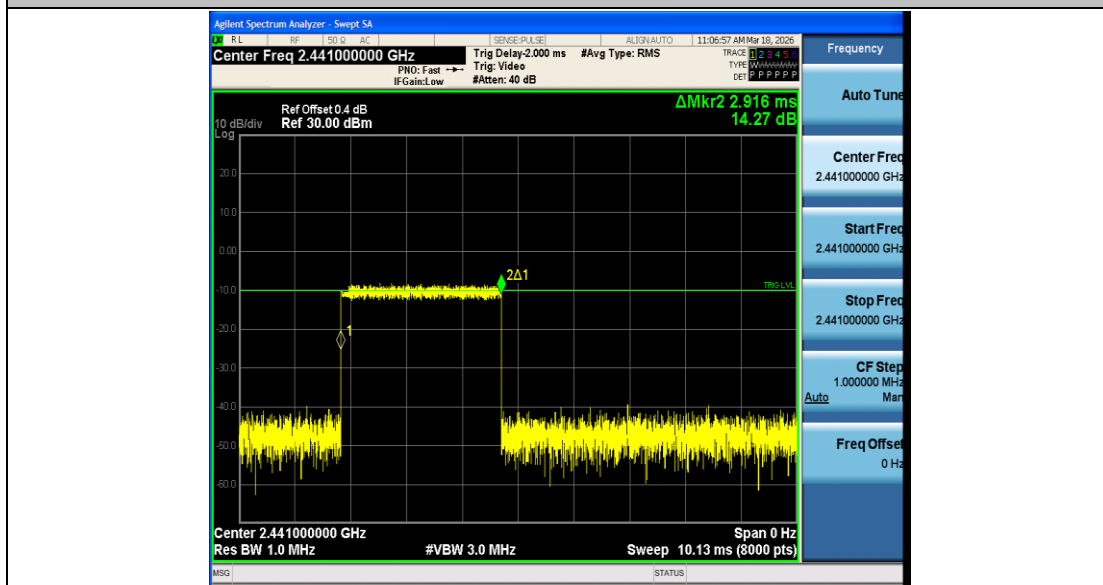
2DH1_Ant1_Hop

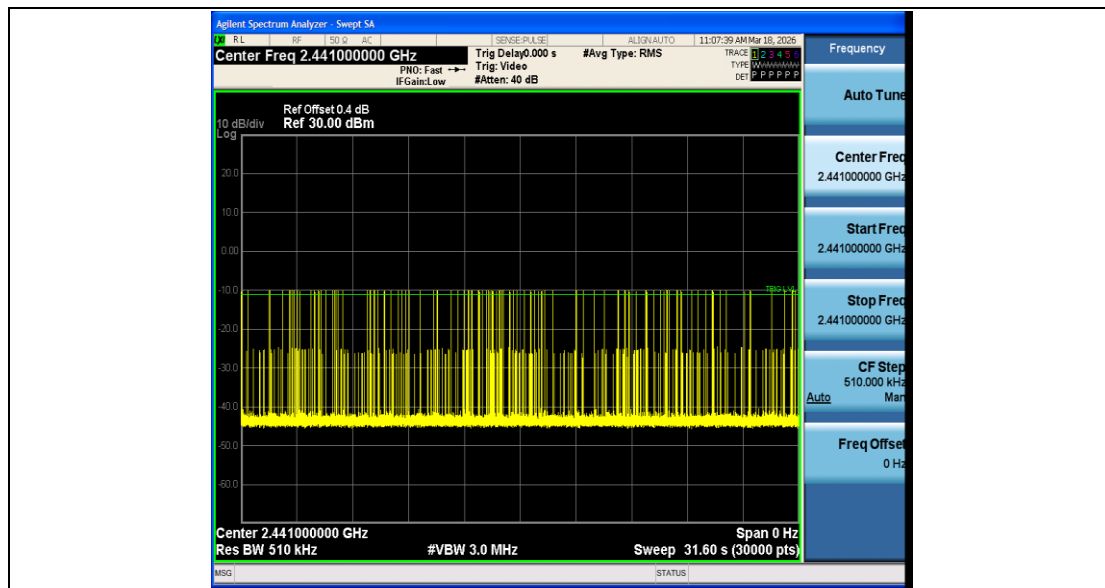


2DH3_Ant1_Hop



2DH5_Ant1_Hop



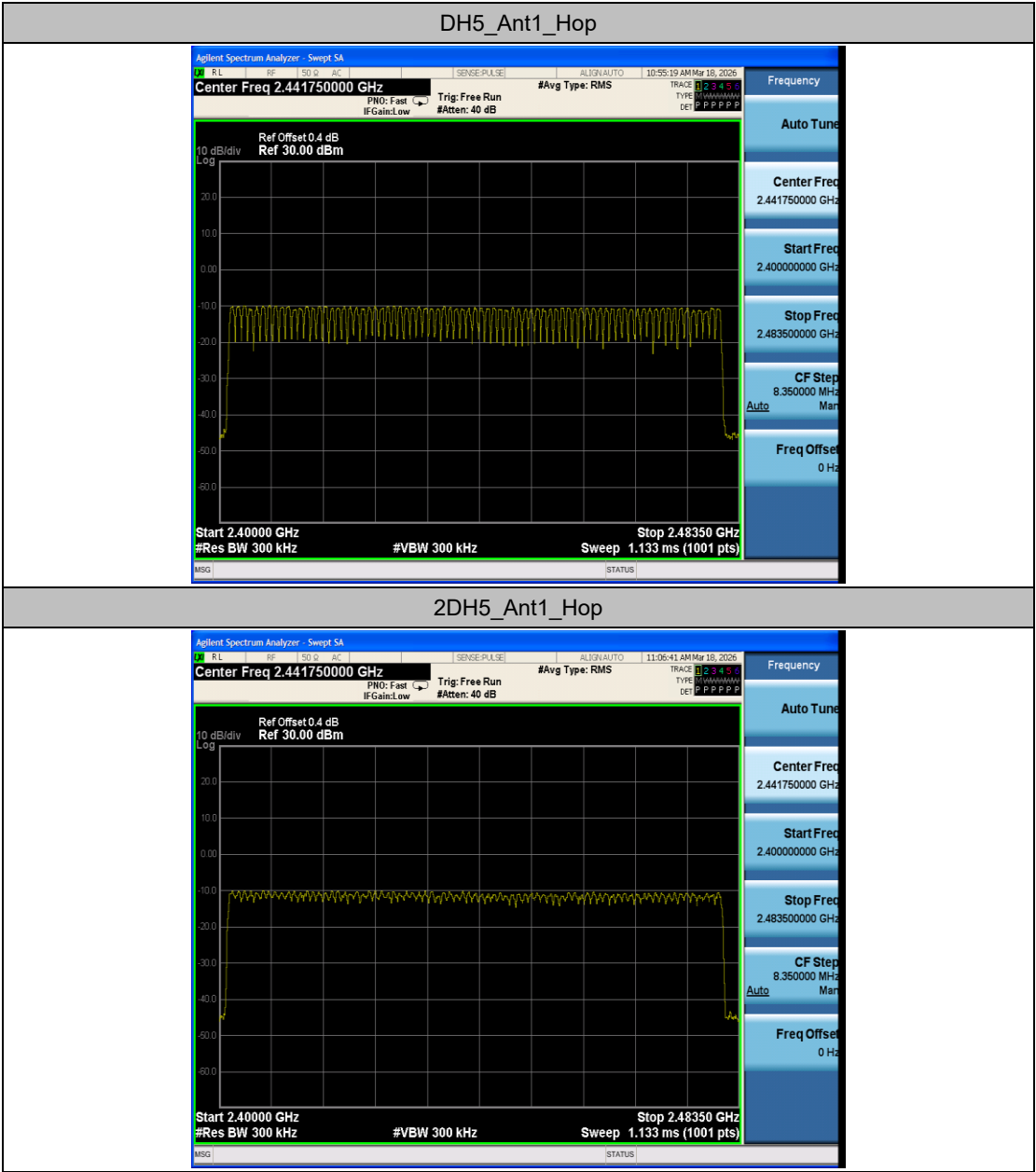


Appendix F: Number of hopping channels

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

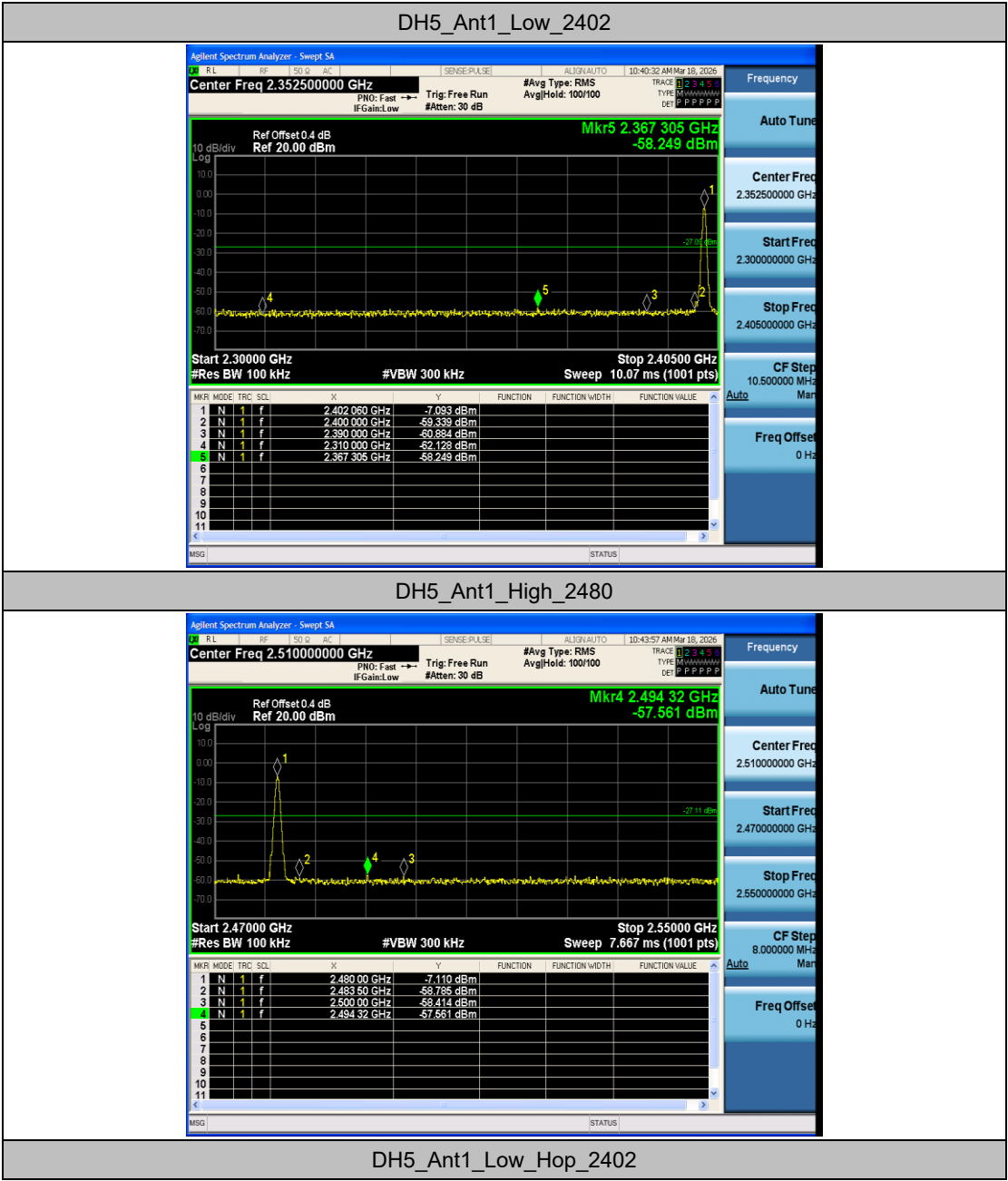


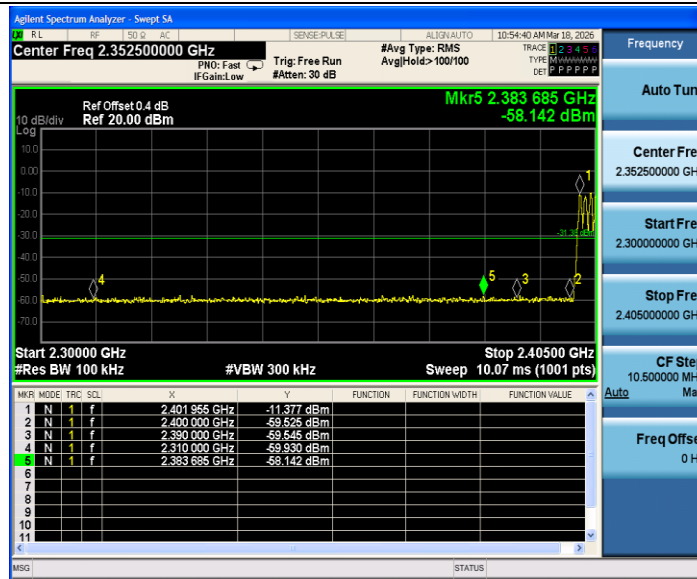
Appendix G: Band edge measurements

Test Result

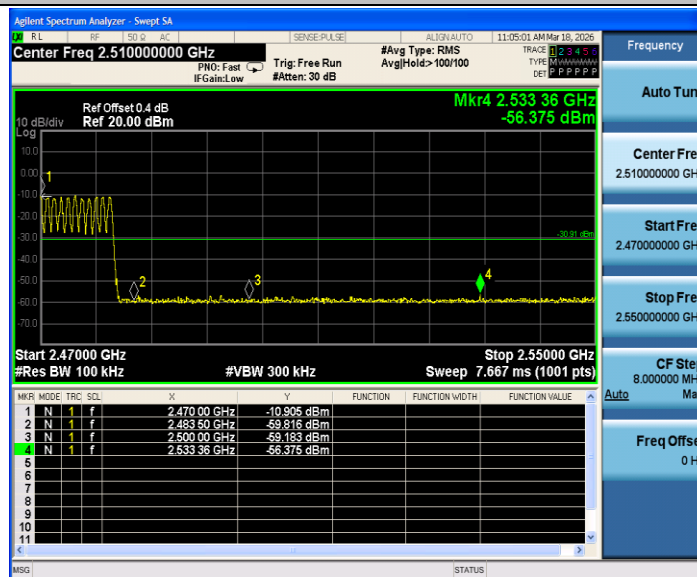
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-7.09	-58.25	≤-27.09	PASS
		High	2480	-7.11	-57.56	≤-27.11	PASS
		Low	Hop_2402	-11.38	-58.14	≤-31.38	PASS
		High	Hop_2480	-10.91	-56.38	≤-30.91	PASS
2DH5	Ant1	Low	2402	-11.93	-57.53	≤-31.93	PASS
		High	2480	-10.50	-57.55	≤-30.5	PASS
		Low	Hop_2402	-15.44	-58.46	≤-35.44	PASS
		High	Hop_2480	-13.72	-57.54	≤-33.72	PASS

Test Graphs

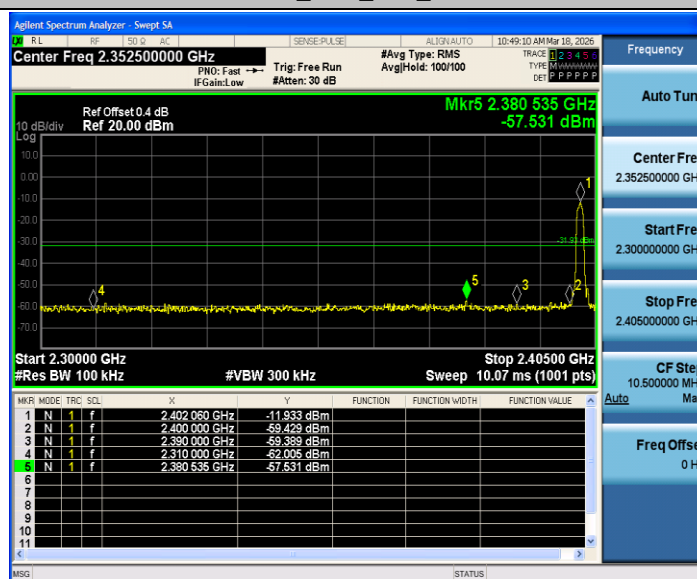




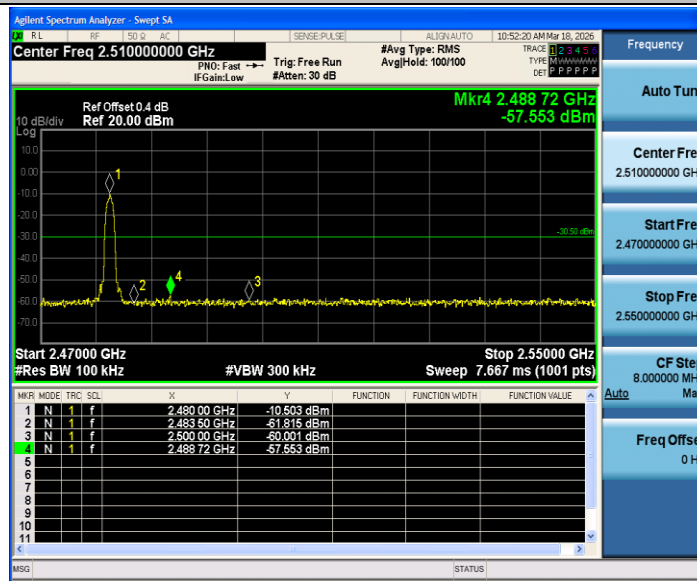
DH5_Ant1_High_Hop_2480



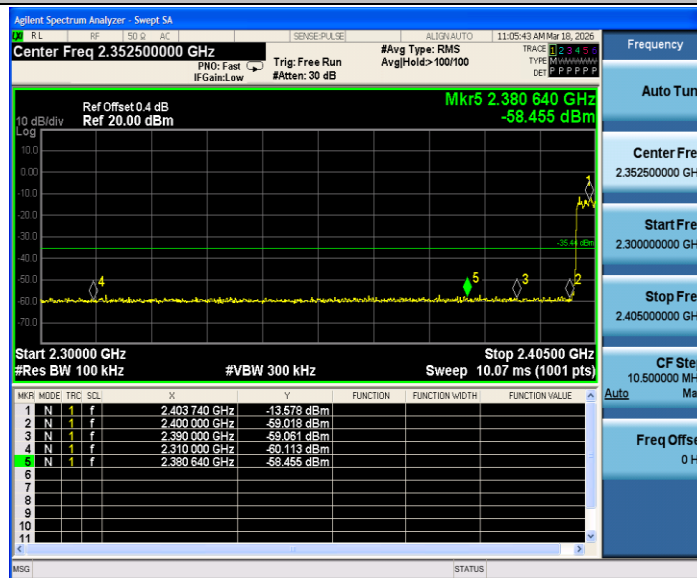
2DH5_Ant1_Low_2402



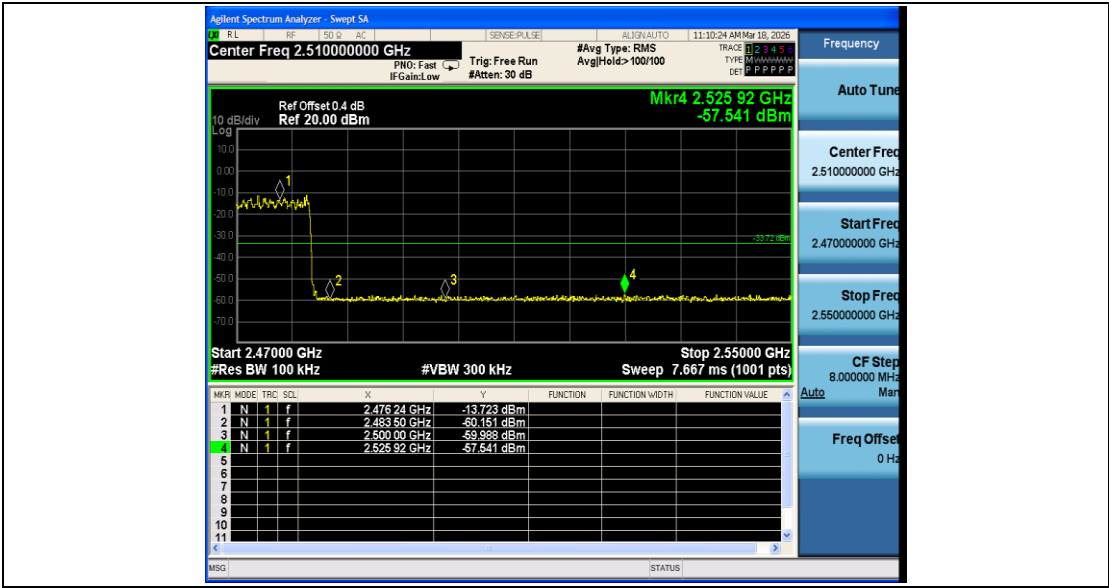
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

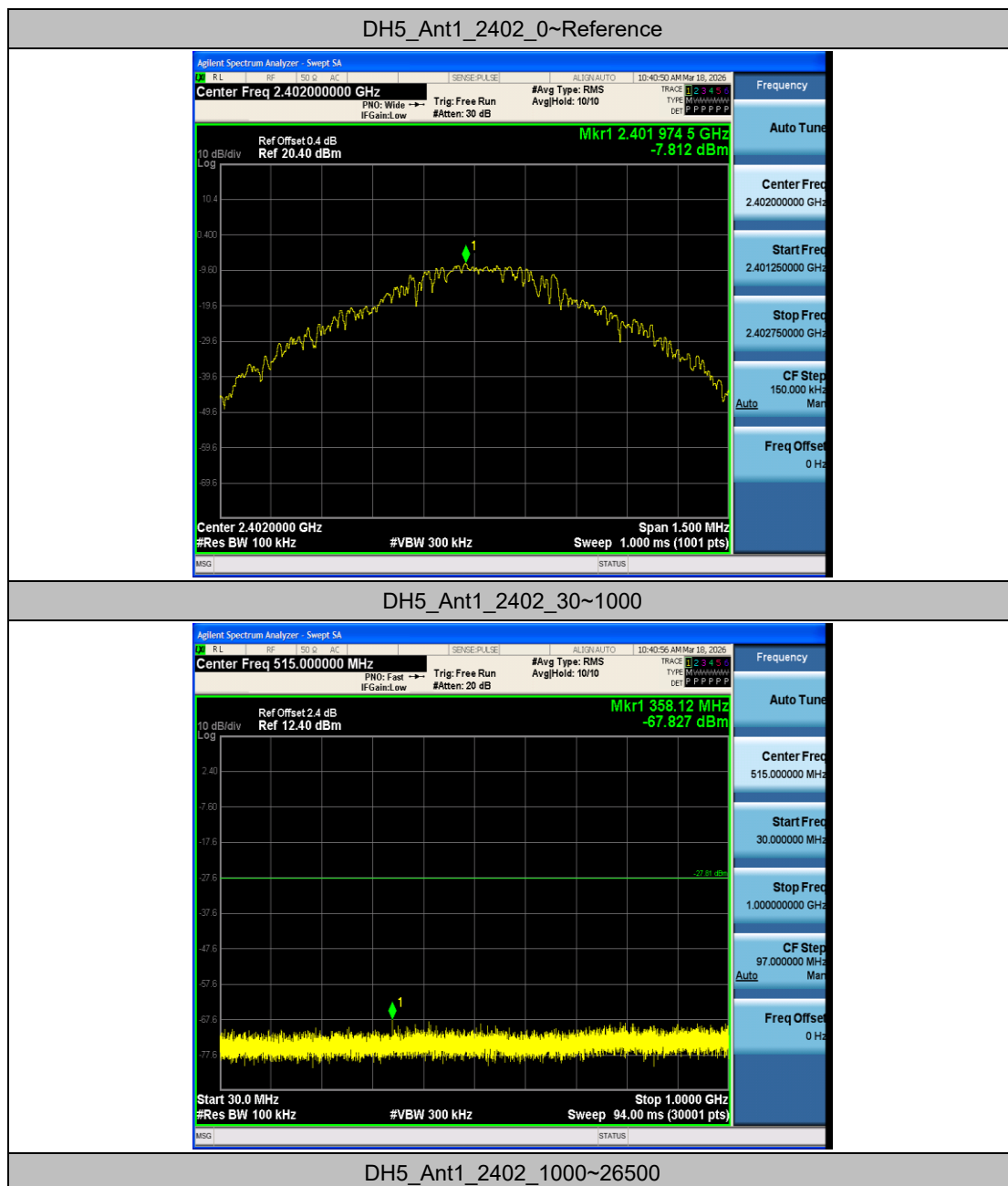


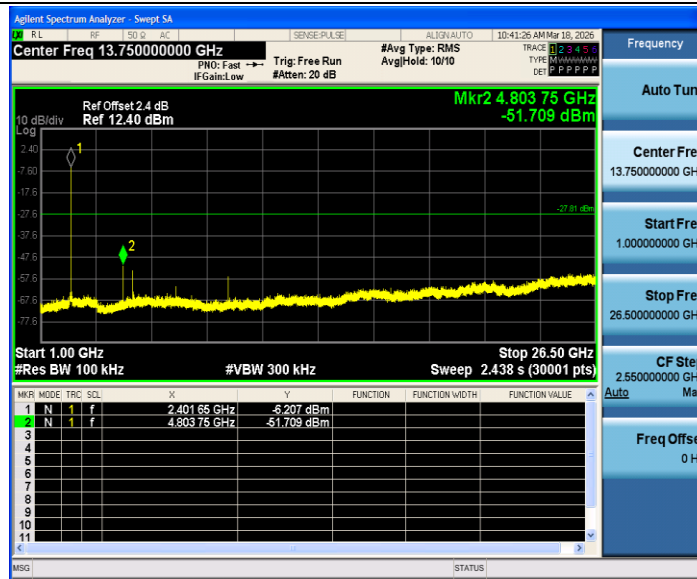
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-7.81	-7.81	---	PASS
			30~1000	-7.81	-67.83	≤-27.81	PASS
			1000~26500	-7.81	-51.71	≤-27.81	PASS
		2441	Reference	-8.49	-8.49	---	PASS
			30~1000	-8.49	-67.98	≤-28.49	PASS
			1000~26500	-8.49	-49.77	≤-28.49	PASS
		2480	Reference	-7.40	-7.40	---	PASS
			30~1000	-7.40	-67.36	≤-27.4	PASS
			1000~26500	-7.40	-49.28	≤-27.4	PASS
2DH5	Ant1	2402	Reference	-11.53	-11.53	---	PASS
			30~1000	-11.53	-67.88	≤-31.53	PASS
			1000~26500	-11.53	-46.81	≤-31.53	PASS
		2441	Reference	-12.48	-12.48	---	PASS
			30~1000	-12.48	-67.99	≤-32.48	PASS
			1000~26500	-12.48	-44.72	≤-32.48	PASS
		2480	Reference	-12.13	-12.13	---	PASS
			30~1000	-12.13	-68.03	≤-32.13	PASS
			1000~26500	-12.13	-49.06	≤-32.13	PASS

Test Graphs

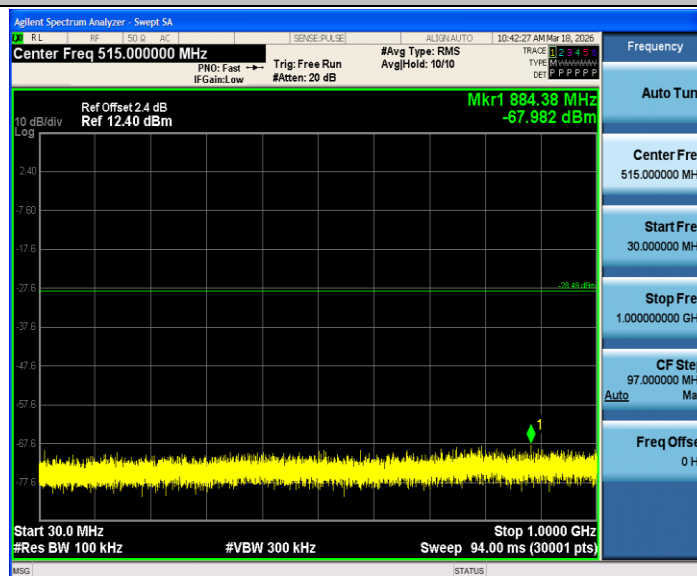




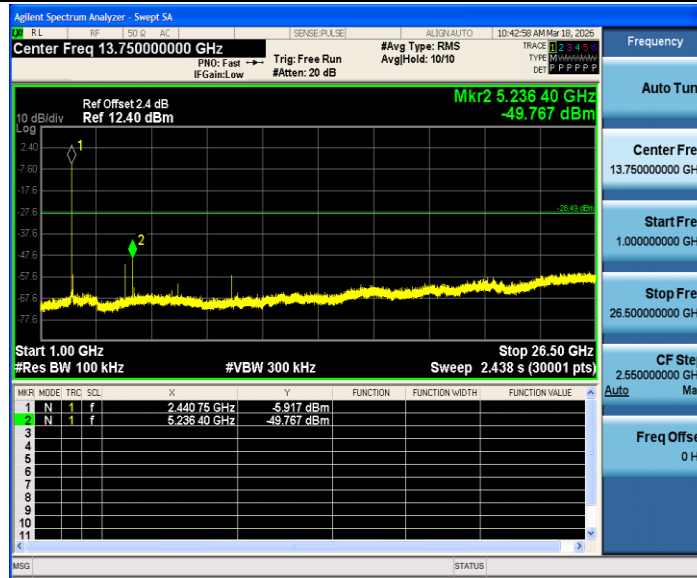
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



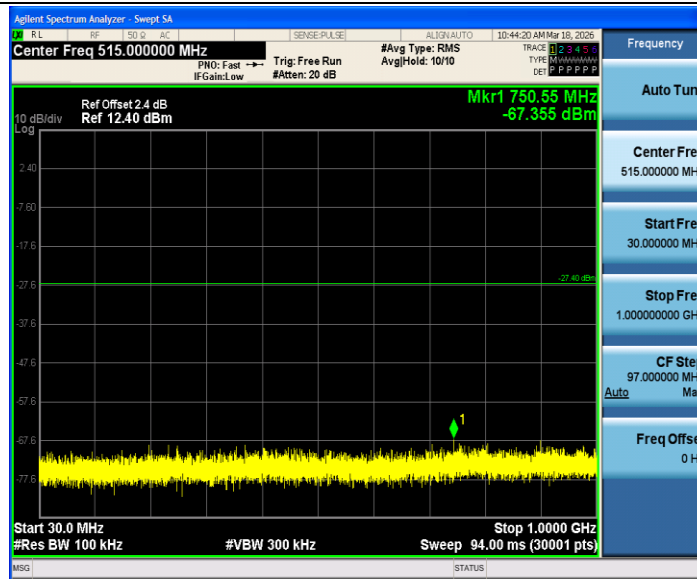
DH5_Ant1_2441_1000~26500



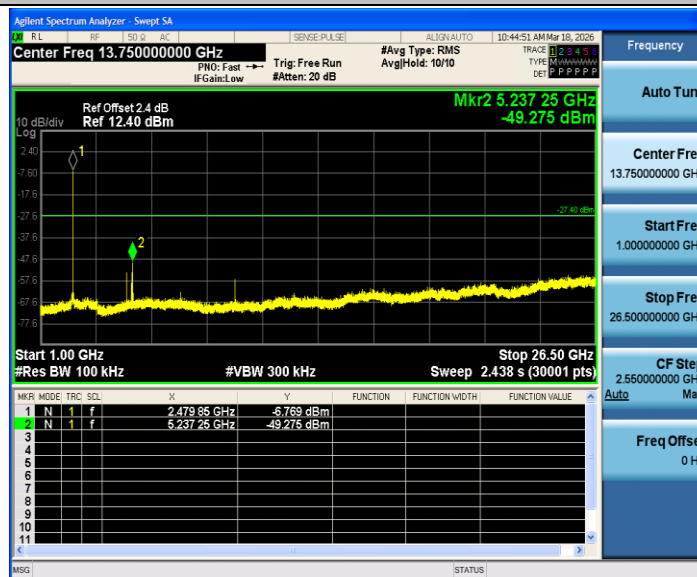
DH5_Ant1_2480_0~Reference



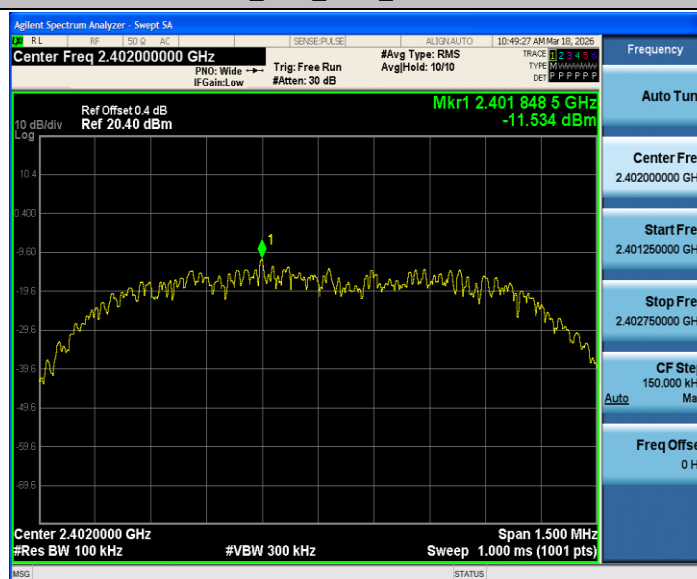
DH5_Ant1_2480_30~1000



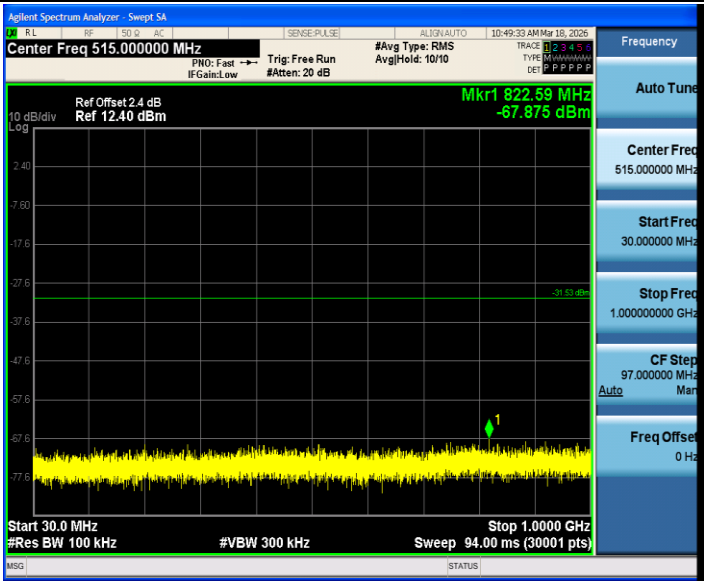
DH5_Ant1_2480_1000~26500



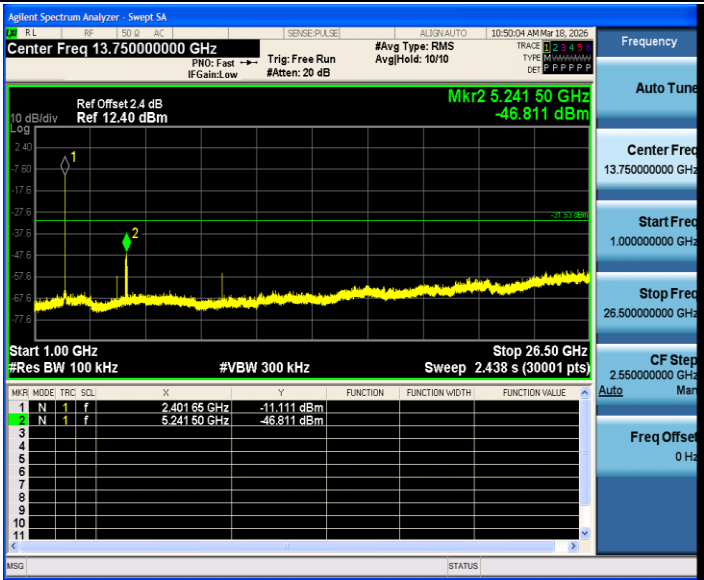
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



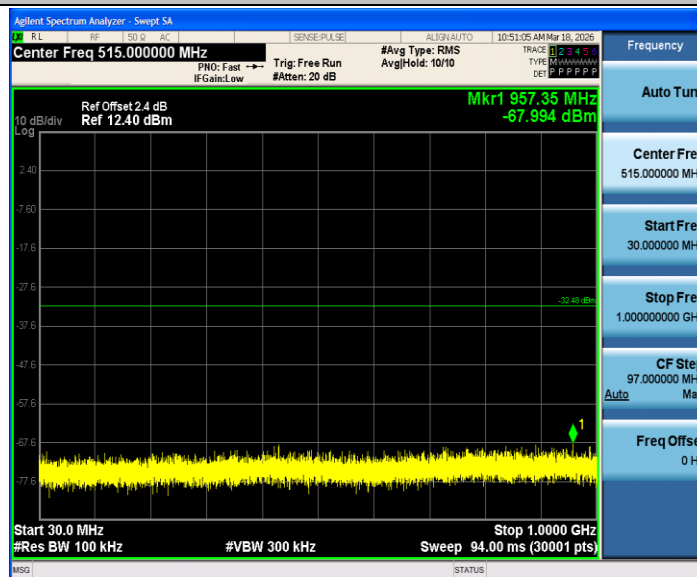
2DH5_Ant1_2402_1000~26500



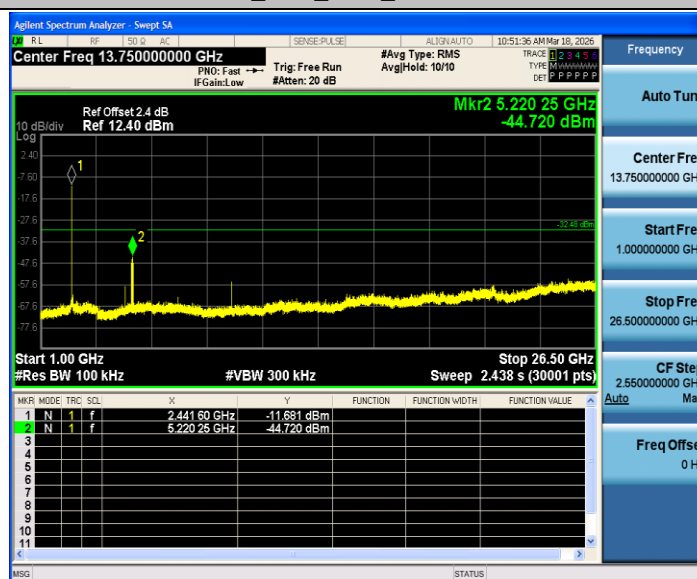
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



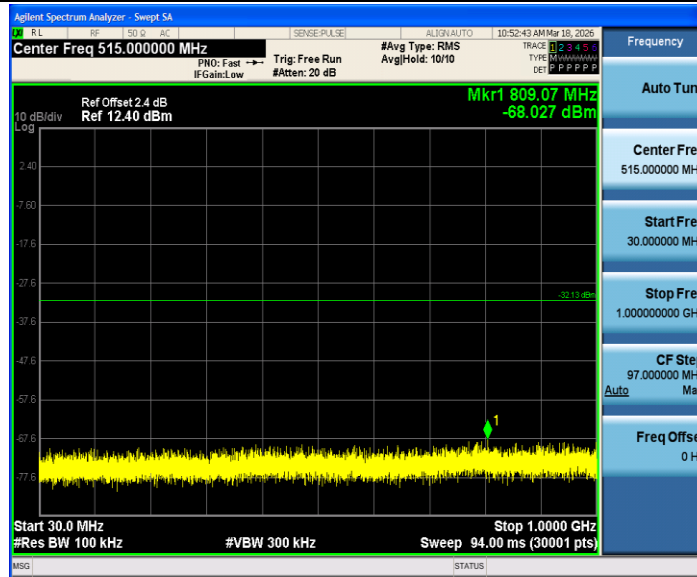
2DH5_Ant1_2441_1000~26500



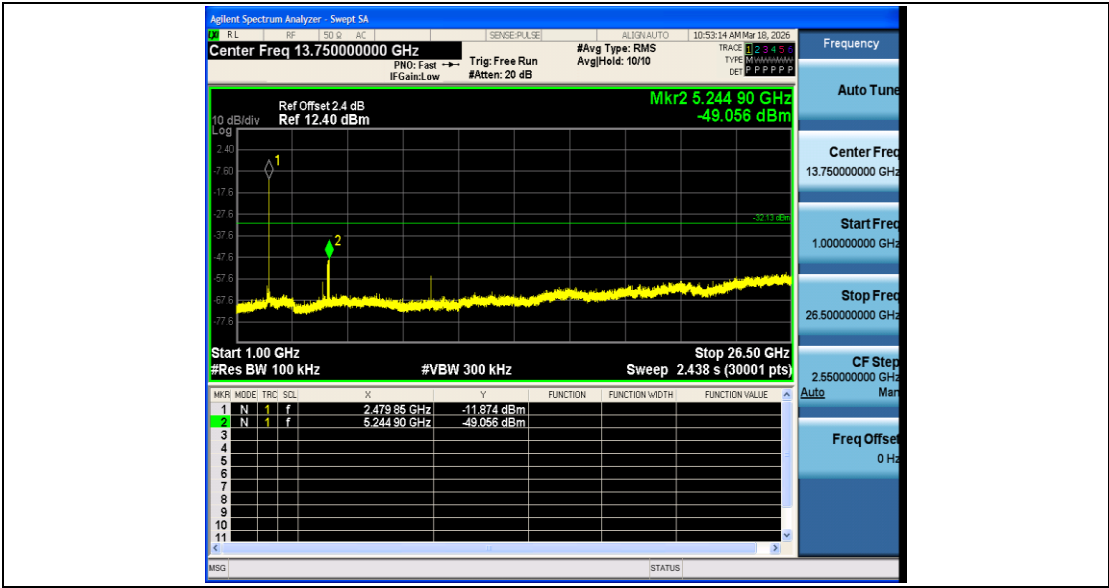
2DH5_Ant1_2480_0~Reference



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	2.92	3.76	77.66	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.74	77.81	1.09	---	---