

FCC Appendix RF Test Data for BT

FCC ID : 2BWHS-A20

Company : SHENZHEN XIAOMEI INNOVATION TECHNOLOGY
CO., LTD.

EUT : Bluetooth speaker

Model Number : A20

Report No. : CTA26052001301

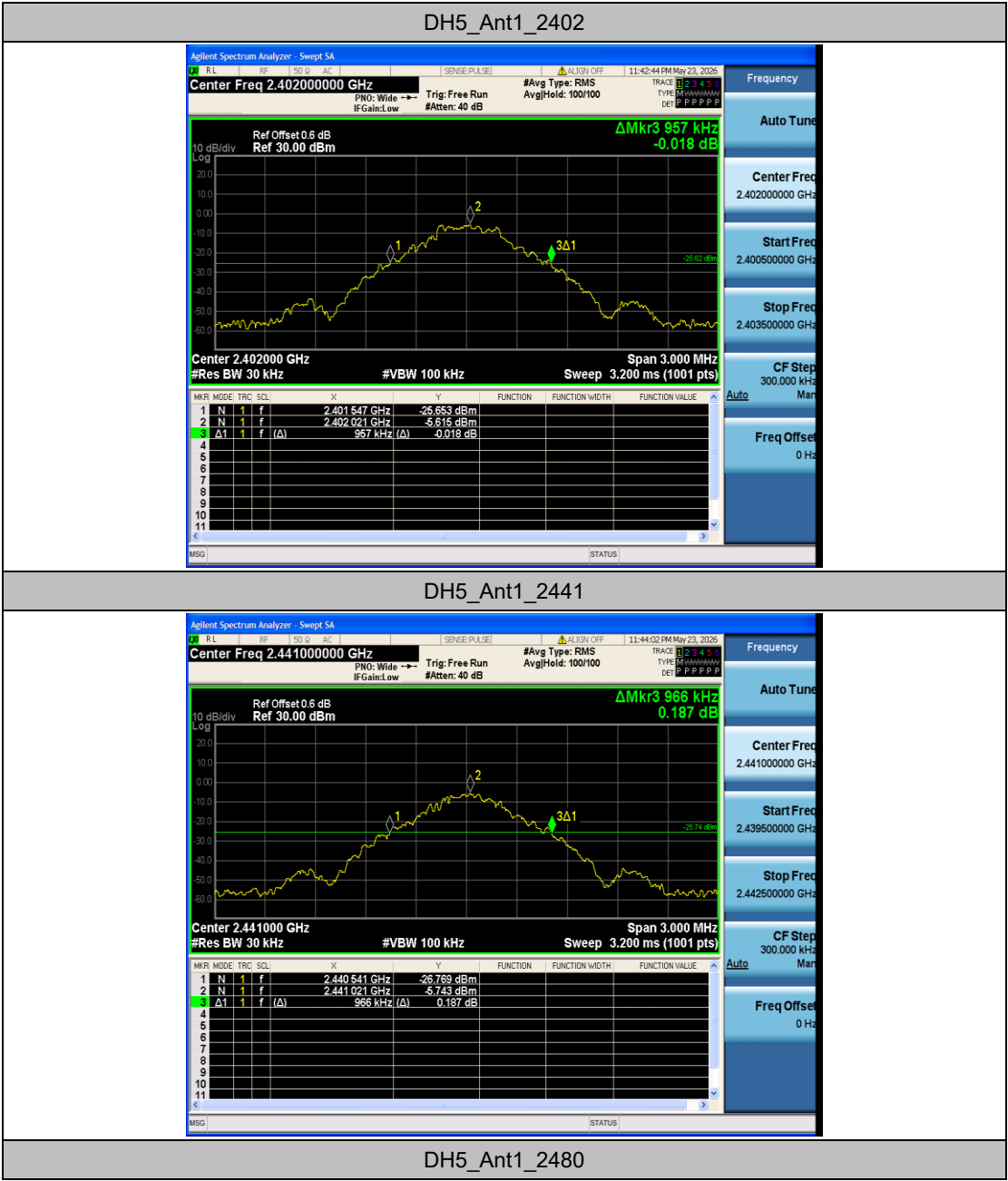
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.957	2401.547	2402.504	---	---
		2441	0.966	2440.541	2441.507	---	---
		2480	0.939	2479.553	2480.492	---	---
2DH5	Ant1	2402	1.344	2401.337	2402.681	---	---
		2441	1.338	2440.340	2441.678	---	---
		2480	1.284	2479.379	2480.663	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

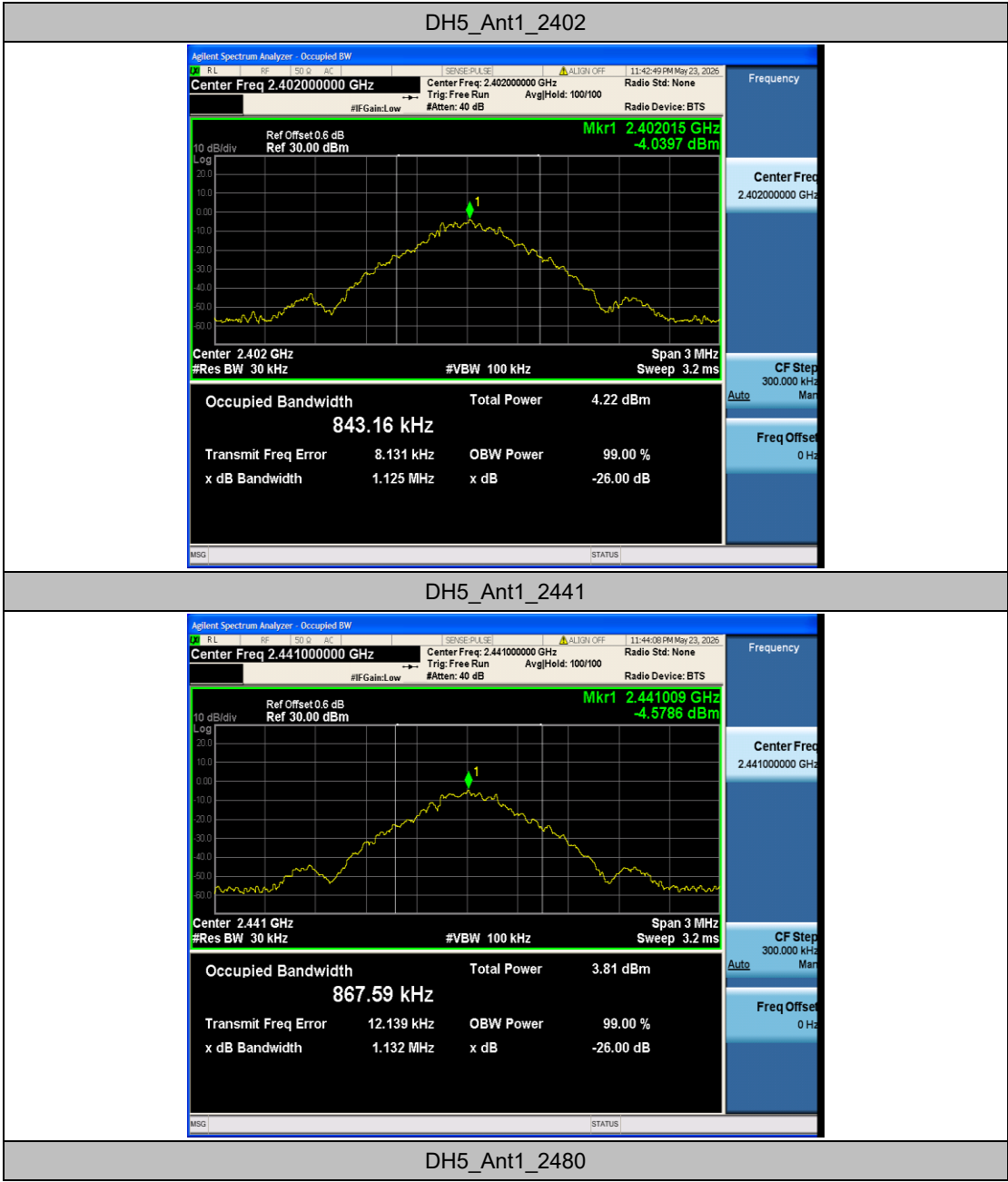


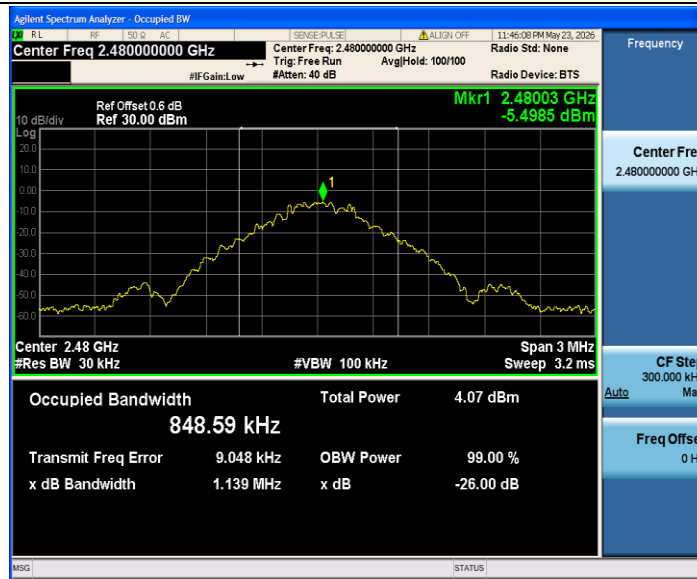
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.84316	2401.5866	2402.4297	---	---
		2441	0.86759	2440.5783	2441.4459	---	---
		2480	0.84859	2479.5848	2480.4333	---	---
2DH5	Ant1	2402	1.1728	2401.4283	2402.6011	---	---
		2441	1.1880	2440.4168	2441.6048	---	---
		2480	1.1819	2479.4243	2480.6062	---	---

Test Graphs

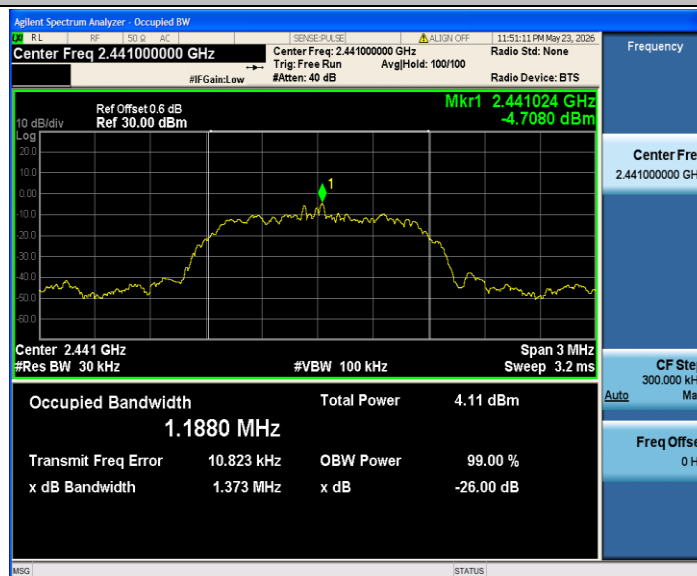




2DH5_Ant1_2402



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	-2.52	≤20.97	PASS
		2441	-2.59	≤20.97	PASS
		2480	-2.52	≤20.97	PASS
2DH5	Ant1	2402	0.04	≤20.97	PASS
		2441	0.02	≤20.97	PASS
		2480	0.12	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.956	≥ 0.644	PASS
2DH5	Ant1	Hop	0.964	≥ 0.896	PASS

Test Graphs

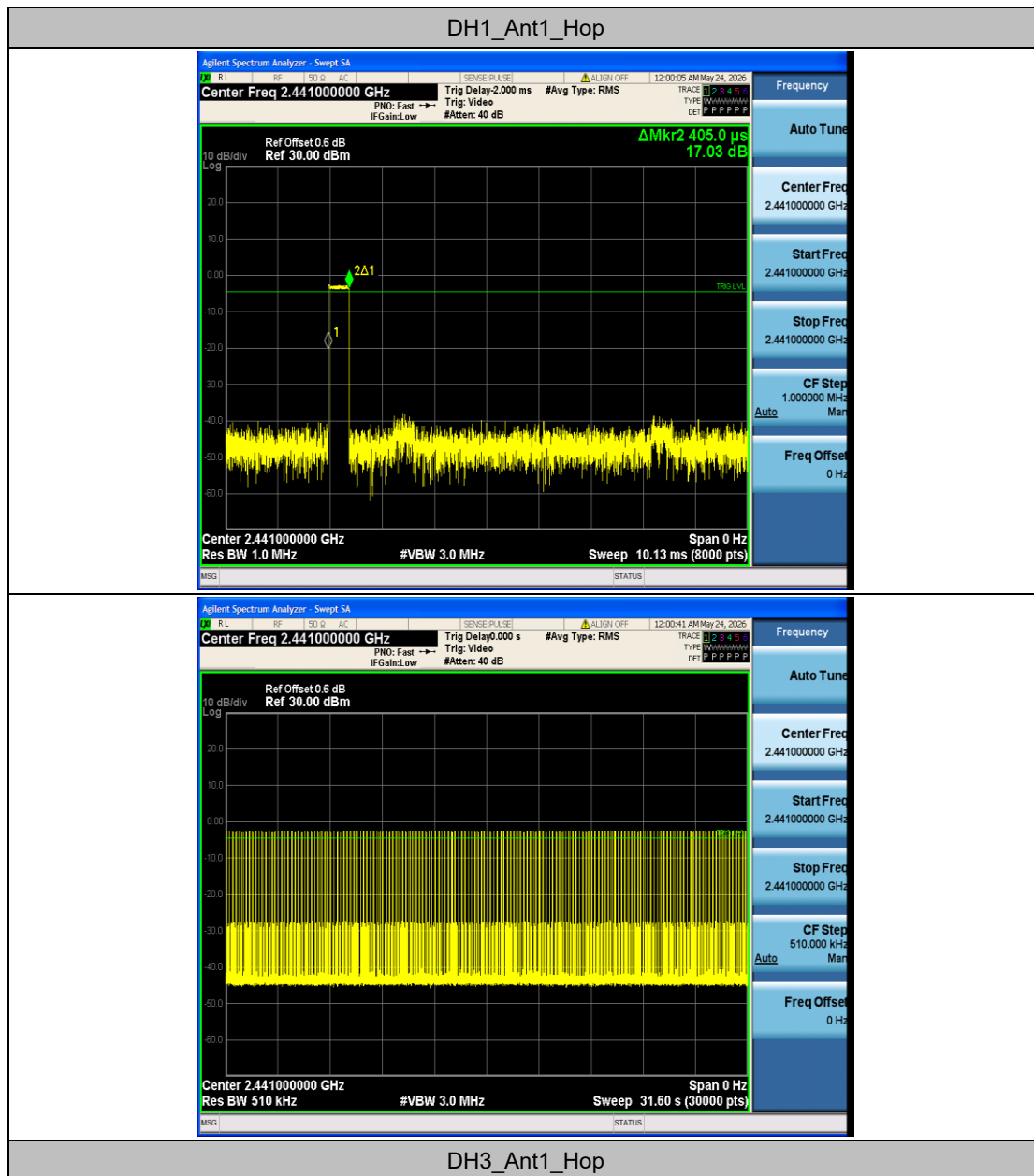


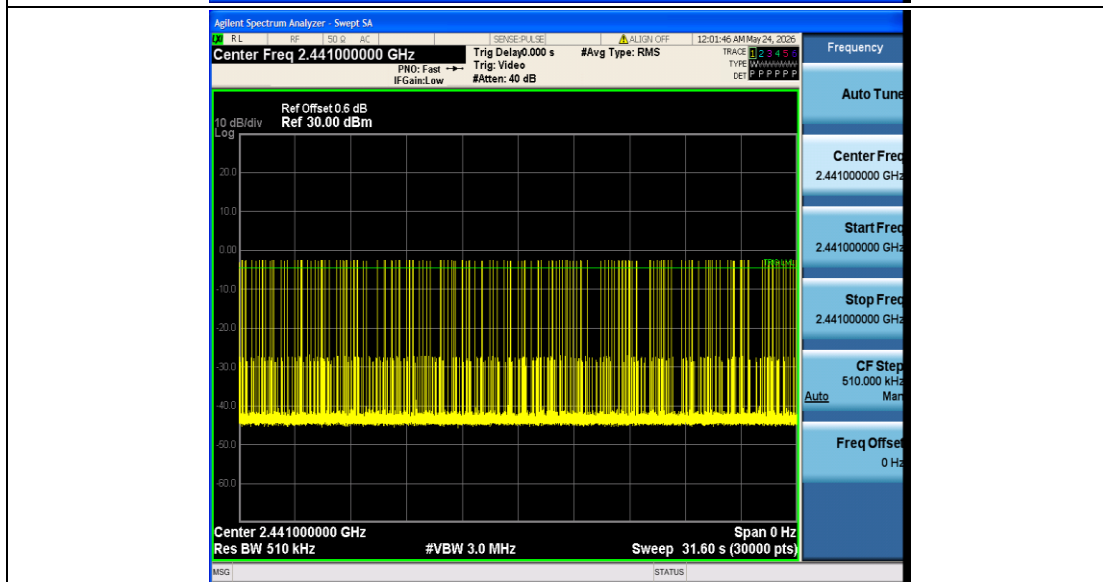
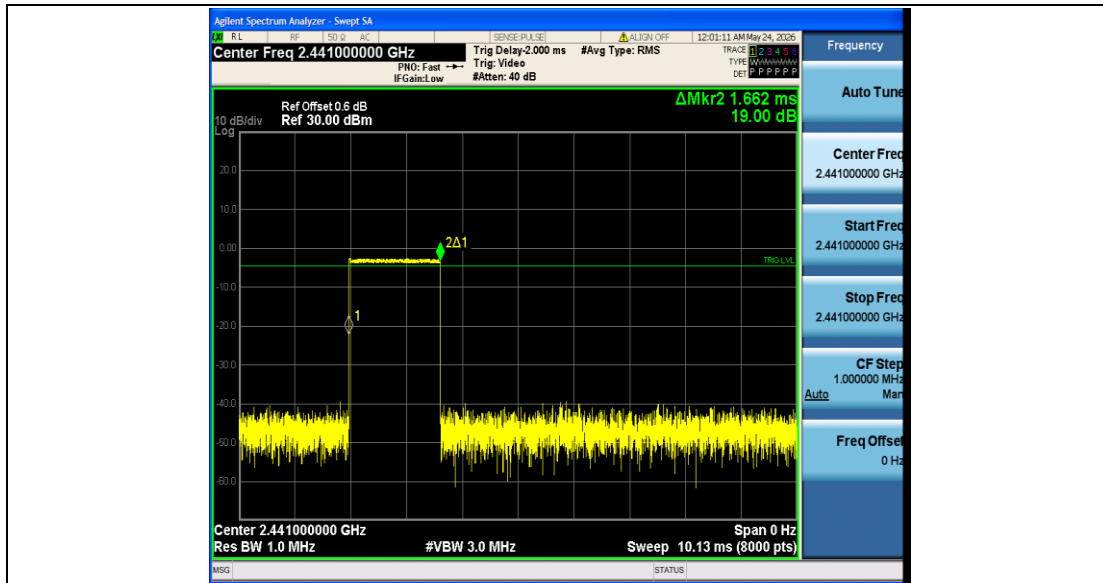
Appendix E: Time of occupancy

Test Result

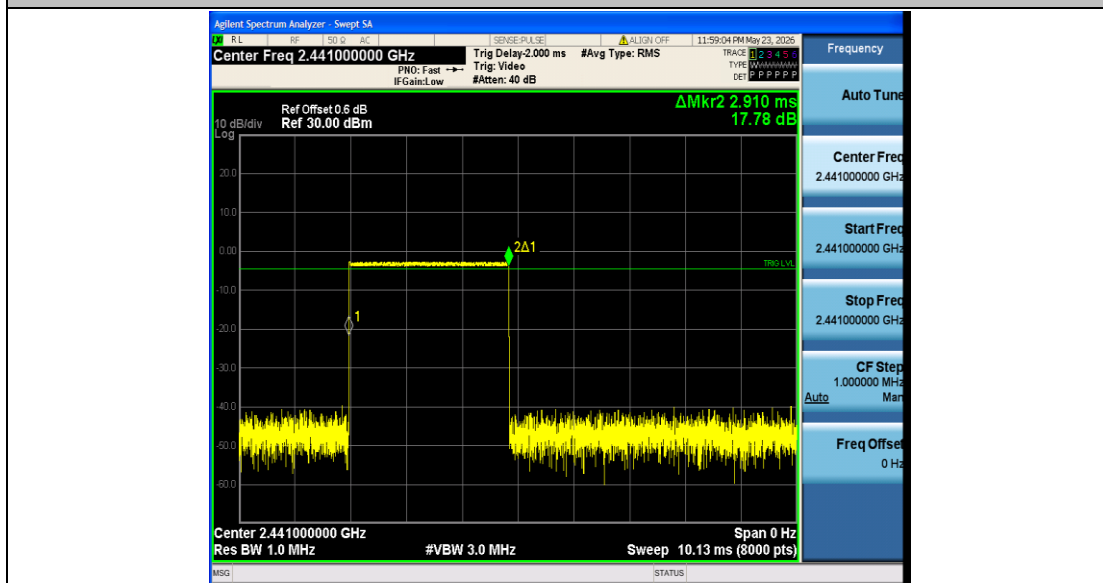
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	314	0.127	≤0.4	PASS
DH3	Ant1	Hop	1.662	165	0.274	≤0.4	PASS
DH5	Ant1	Hop	2.910	111	0.323	≤0.4	PASS
2DH1	Ant1	Hop	0.415	317	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	158	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.916	99	0.289	≤0.4	PASS

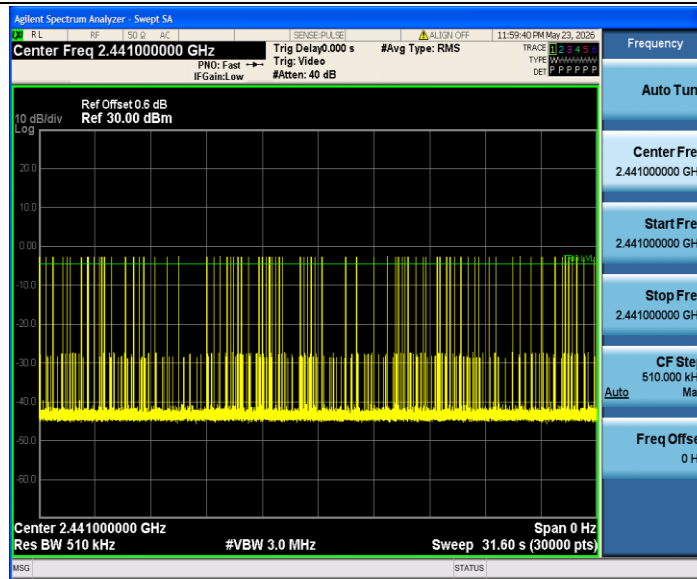
Test Graphs



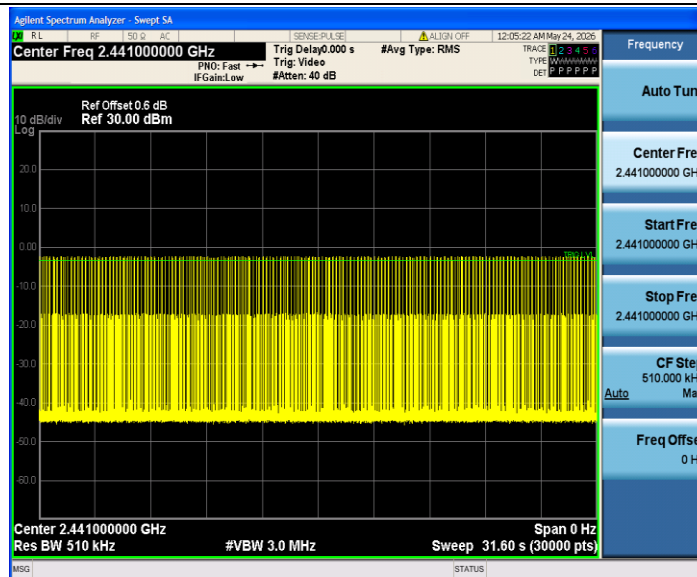
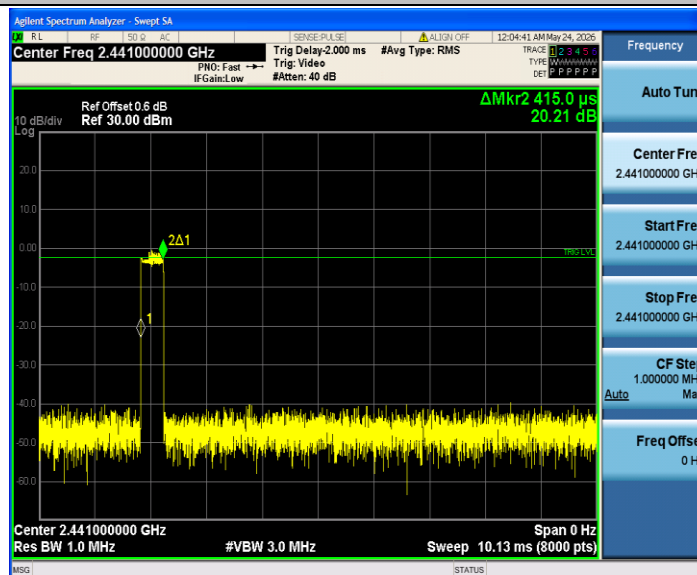


DH5_Ant1_Hop

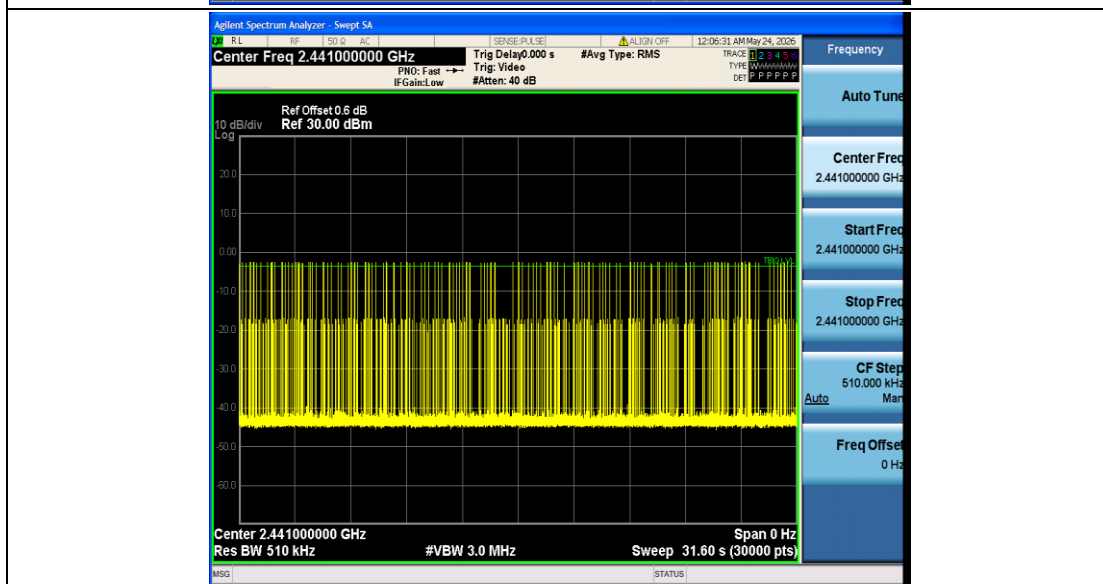
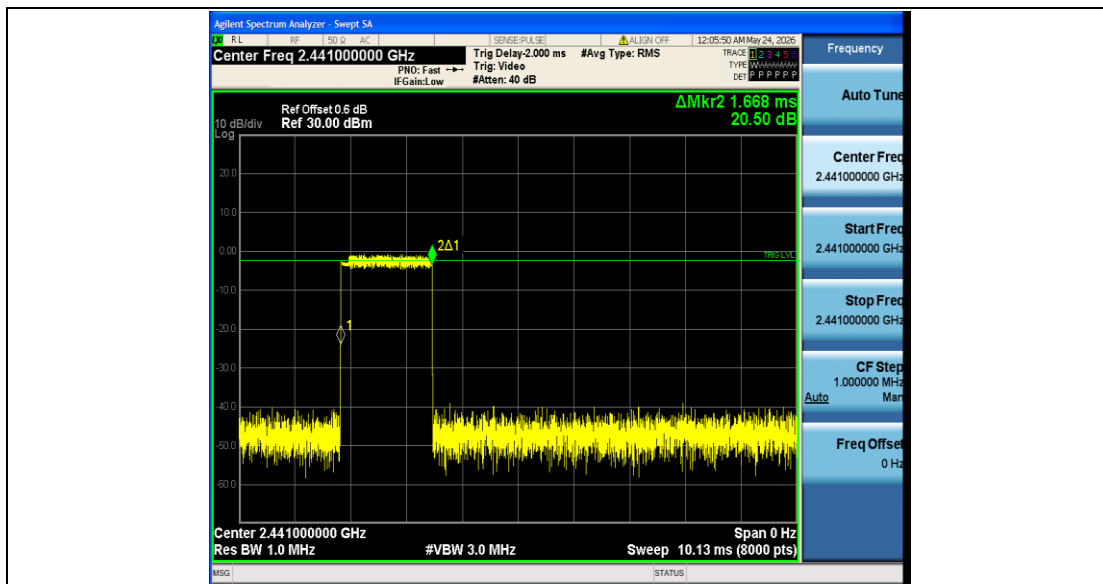




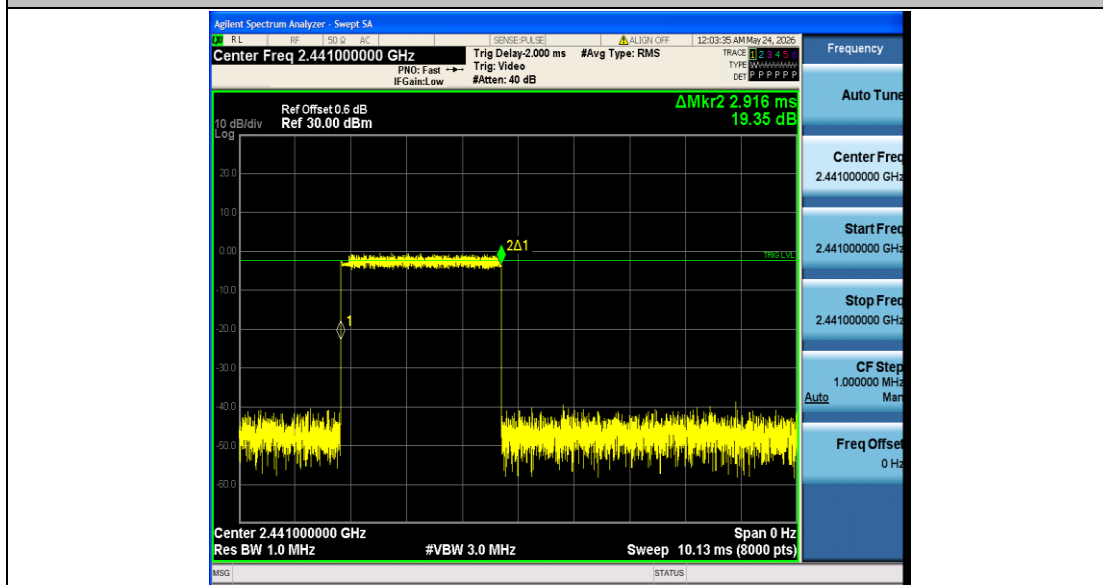
2DH1_Ant1_Hop

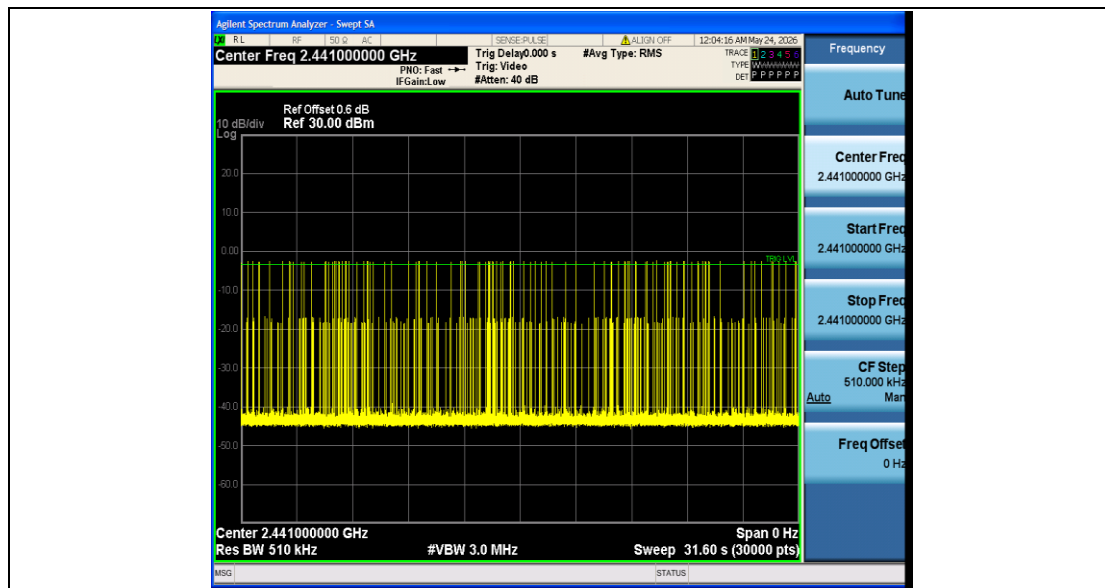


2DH3_Ant1_Hop



2DH5_Ant1_Hop



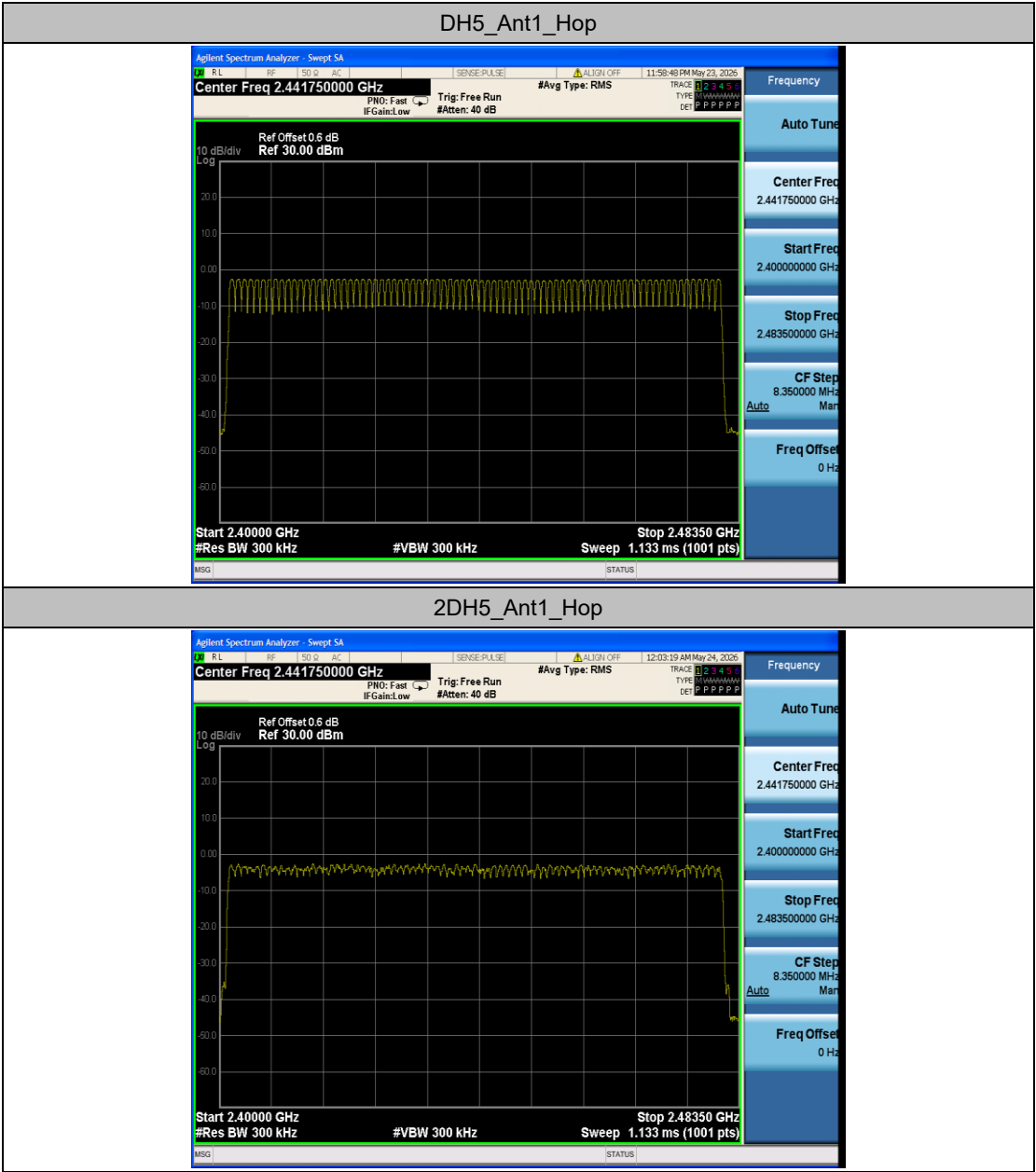


Appendix F: Number of hopping channels

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

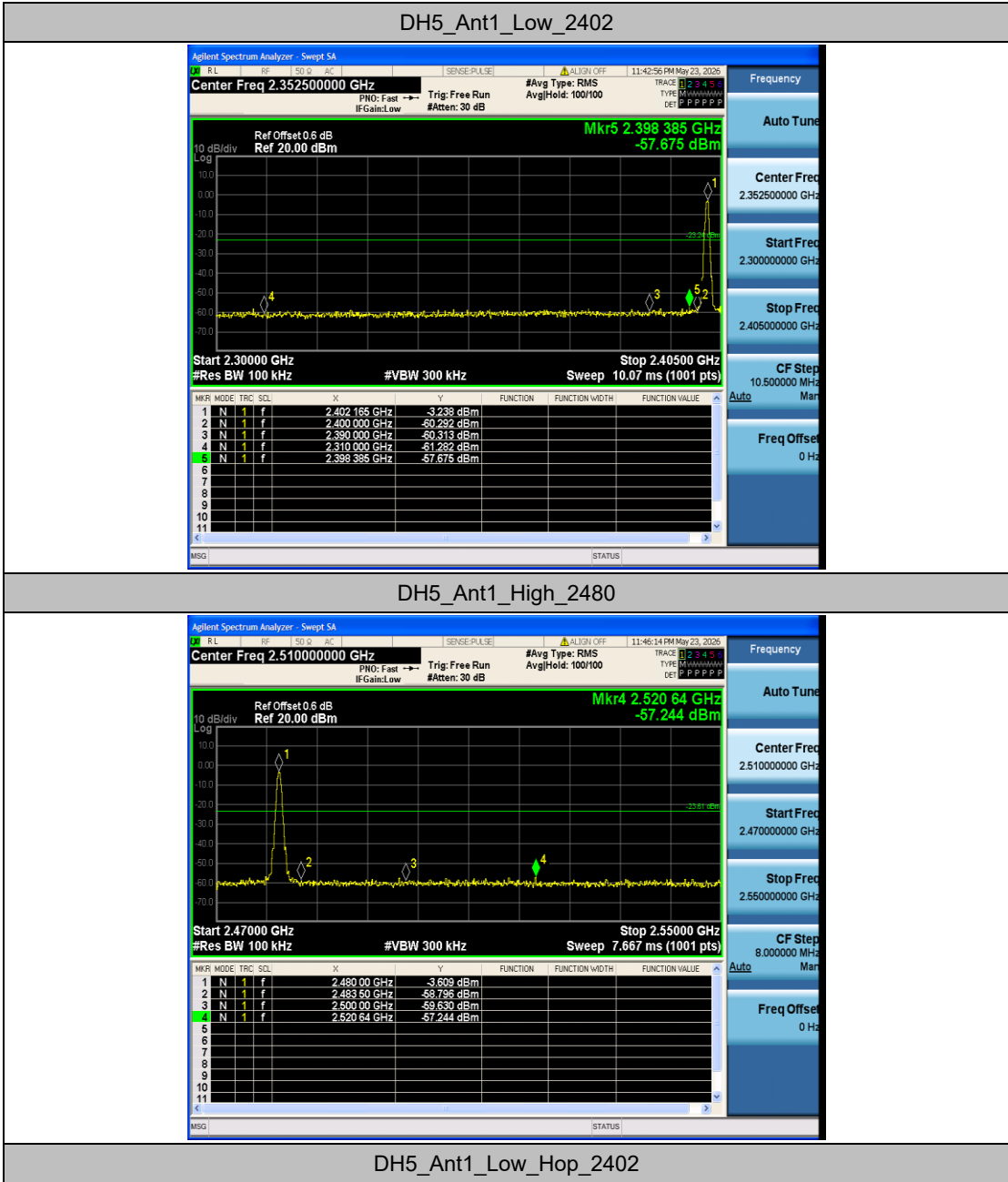


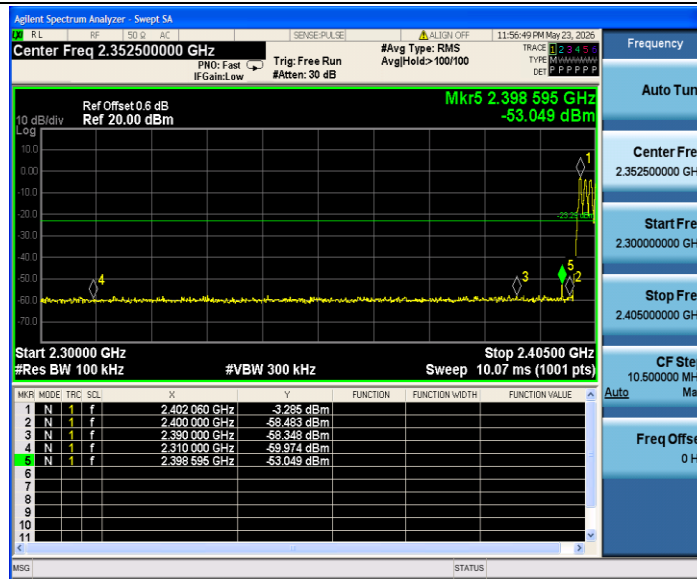
Appendix G: Band edge measurements

Test Result

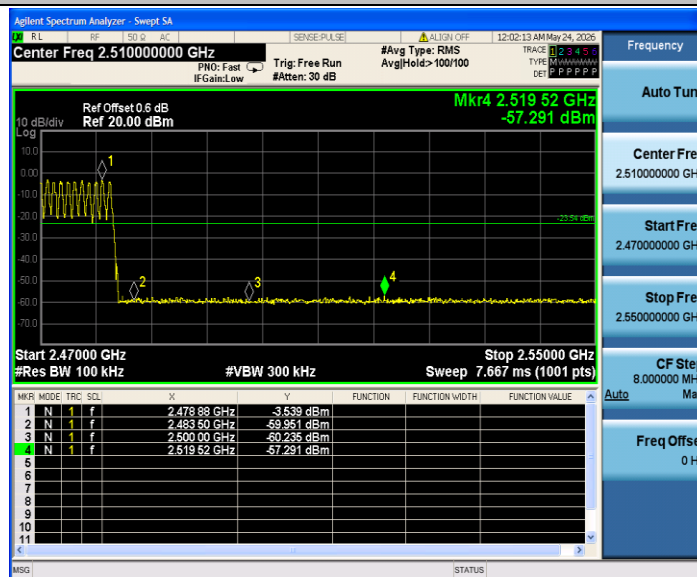
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.24	-57.68	≤-23.24	PASS
		High	2480	-3.61	-57.24	≤-23.61	PASS
		Low	Hop_2402	-3.29	-53.05	≤-23.29	PASS
		High	Hop_2480	-3.54	-57.29	≤-23.54	PASS
2DH5	Ant1	Low	2402	-3.41	-57.62	≤-23.41	PASS
		High	2480	-5.30	-57.53	≤-25.3	PASS
		Low	Hop_2402	-3.38	-57.05	≤-23.38	PASS
		High	Hop_2480	-5.47	-57.11	≤-25.47	PASS

Test Graphs

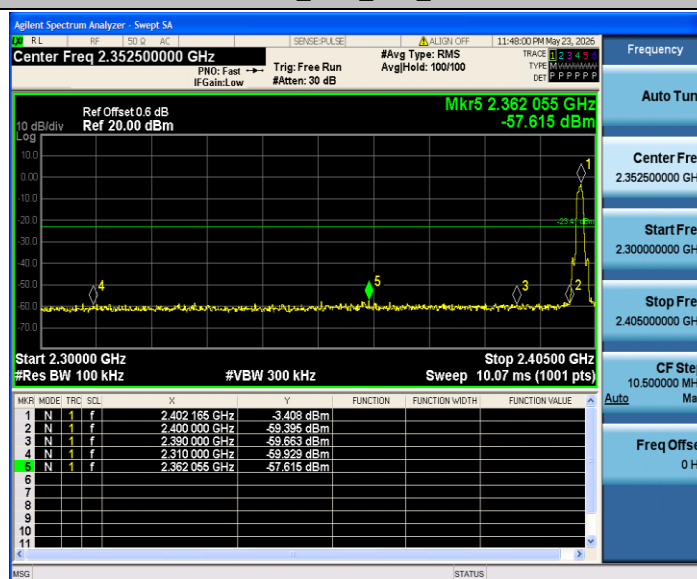




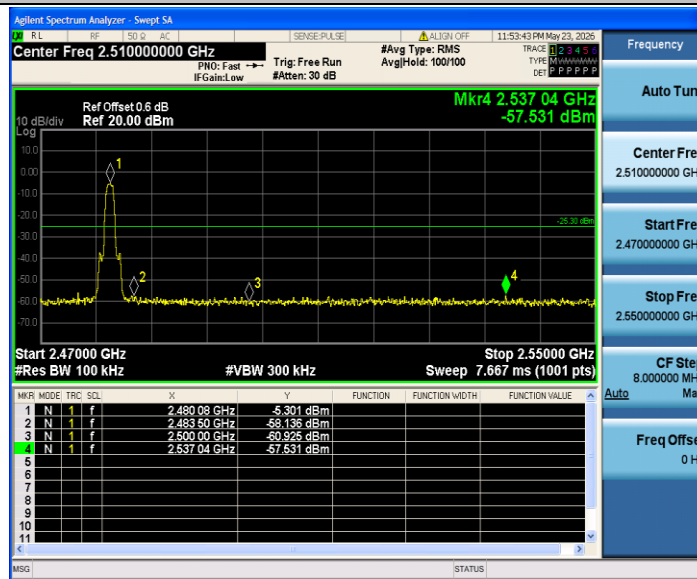
DH5_Ant1_High_Hop_2480



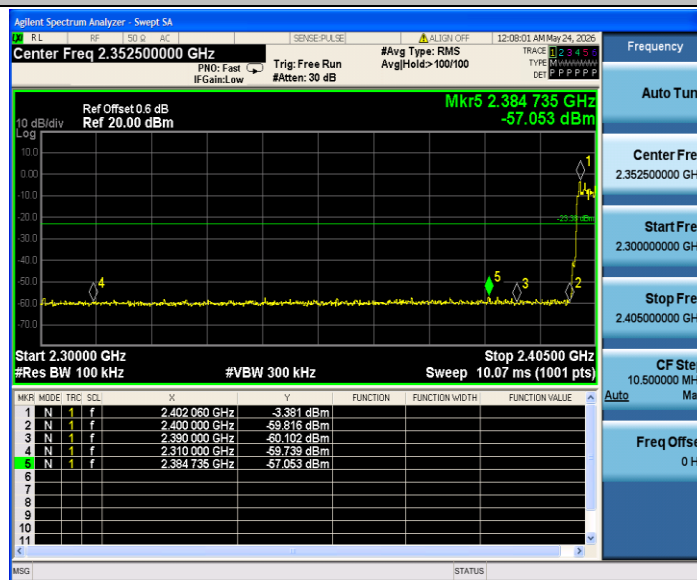
2DH5_Ant1_Low_2402



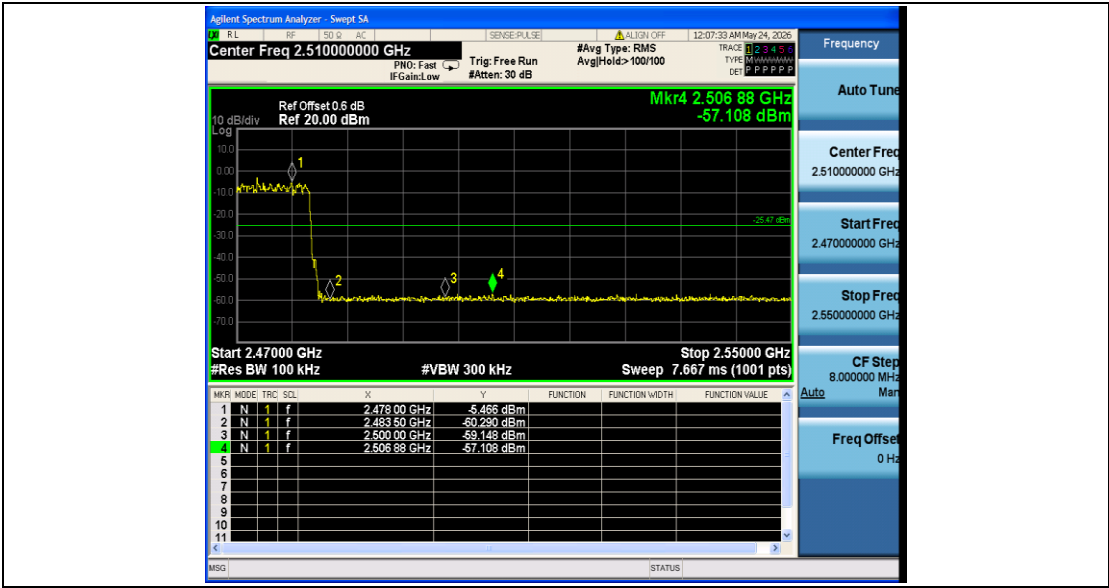
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

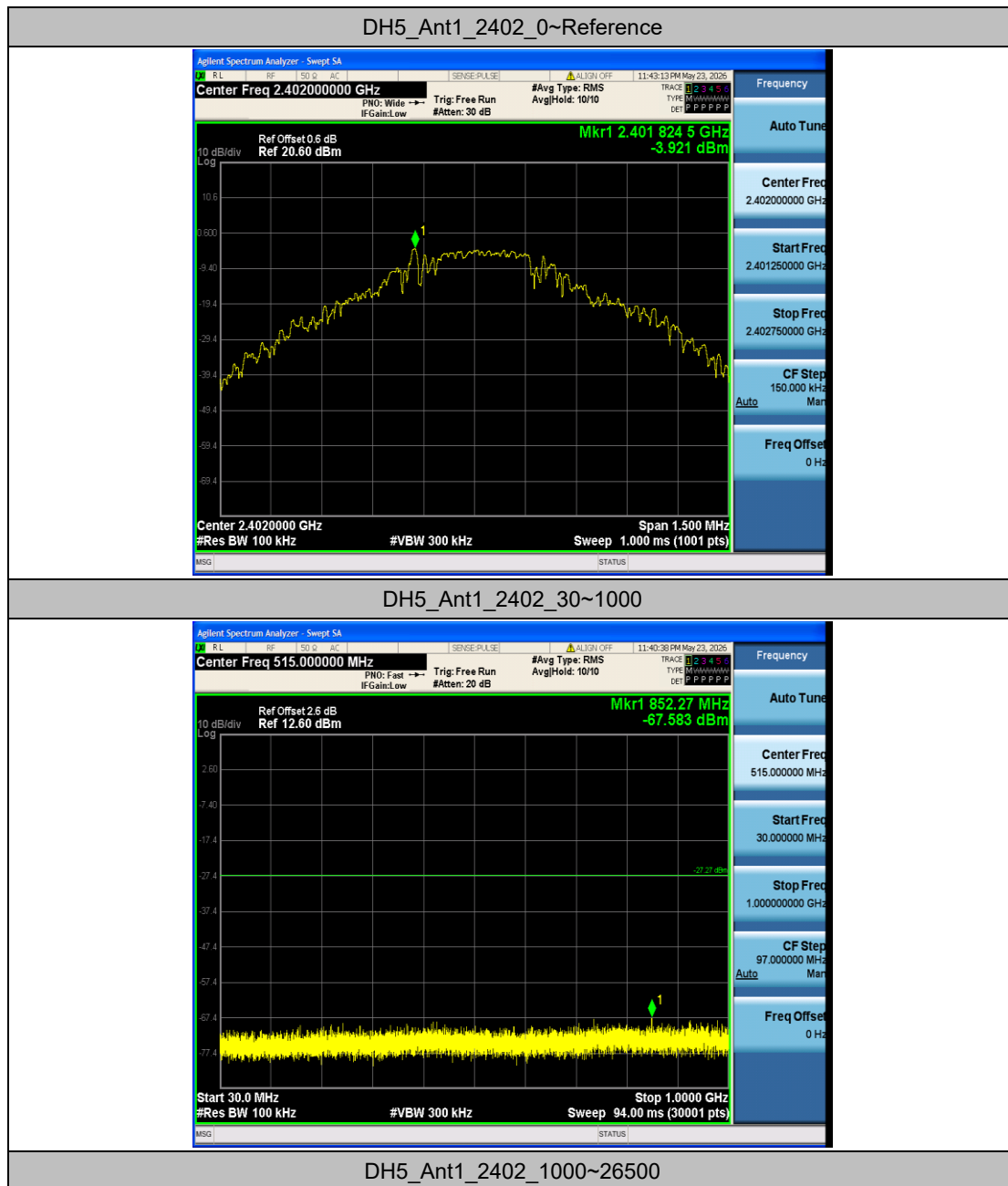


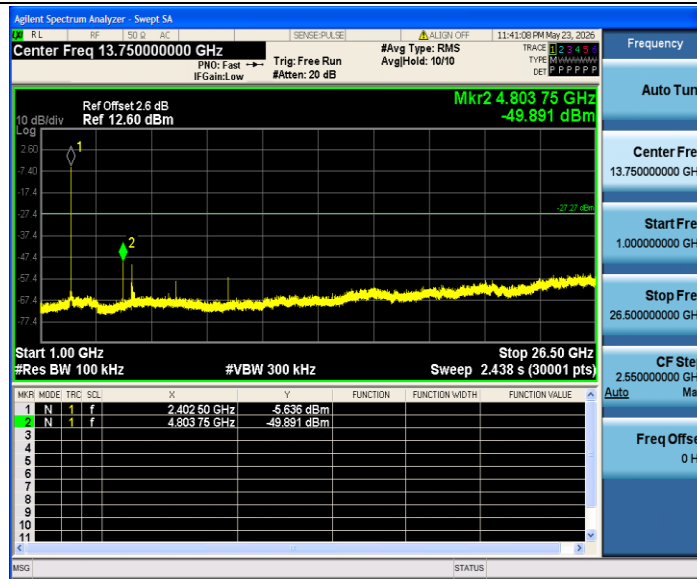
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.92	-3.92	---	PASS
			30~1000	-7.27	-67.58	≤-27.27	PASS
			1000~26500	-7.27	-49.89	≤-27.27	PASS
		2441	Reference	-3.74	-3.74	---	PASS
			30~1000	-3.74	-49.8	≤-23.74	PASS
			1000~26500	-3.74	-45.59	≤-23.74	PASS
		2480	Reference	-3.78	-3.78	---	PASS
			30~1000	-3.78	-66.37	≤-23.78	PASS
			1000~26500	-3.78	-46.09	≤-23.78	PASS
2DH5	Ant1	2402	Reference	-5.09	-5.09	---	PASS
			30~1000	-5.09	-68.43	≤-25.09	PASS
			1000~26500	-5.09	-45.22	≤-25.09	PASS
		2441	Reference	-3.69	-3.69	---	PASS
			30~1000	-3.69	-68.16	≤-23.69	PASS
			1000~26500	-3.69	-47.21	≤-23.69	PASS
		2480	Reference	-5.59	-5.59	---	PASS
			30~1000	-5.59	-67.4	≤-25.59	PASS
			1000~26500	-5.59	-46.45	≤-25.59	PASS

Test Graphs

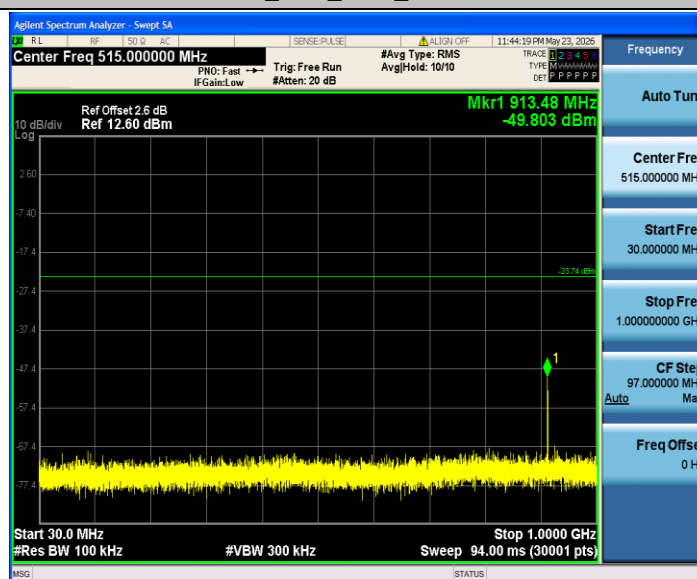




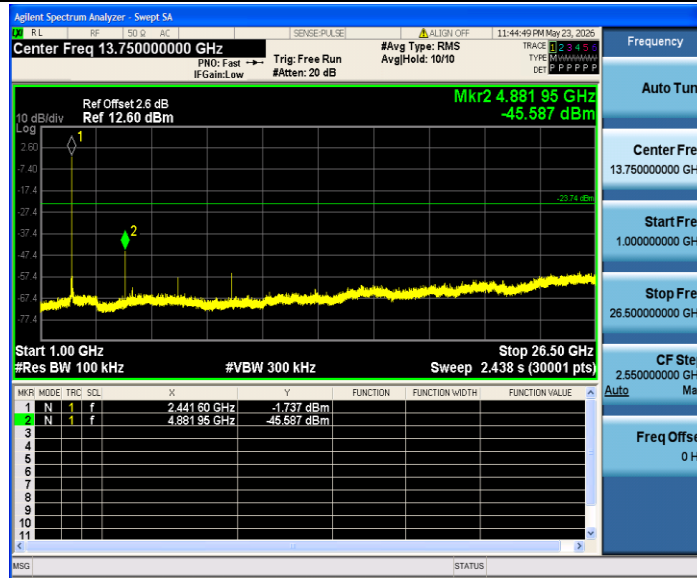
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



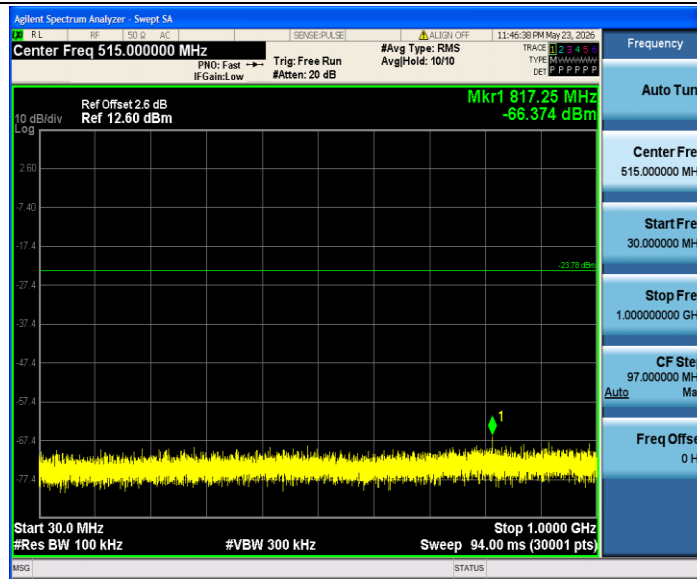
DH5_Ant1_2441_1000~26500



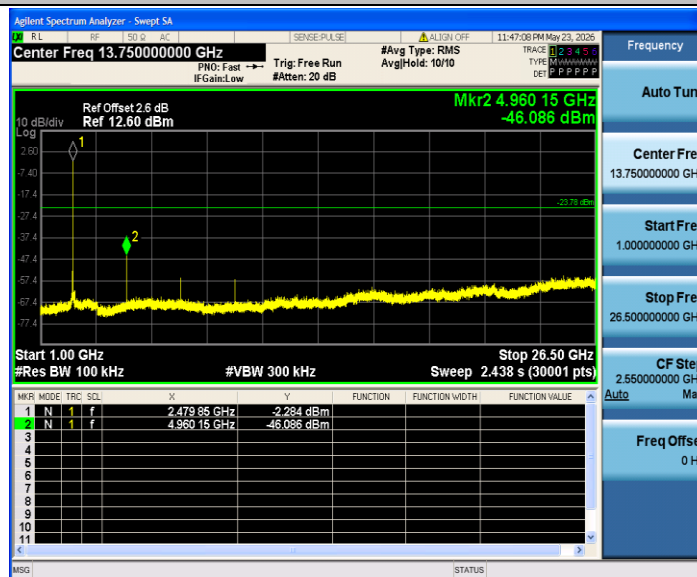
DH5_Ant1_2480_0~Reference



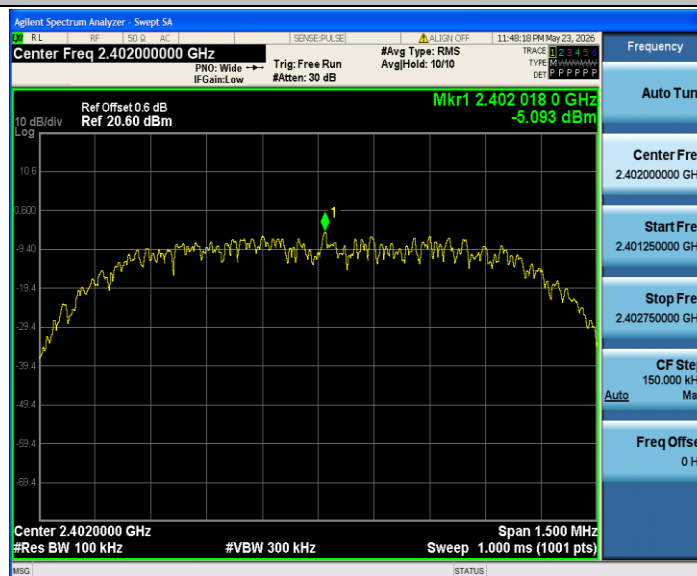
DH5_Ant1_2480_30~1000



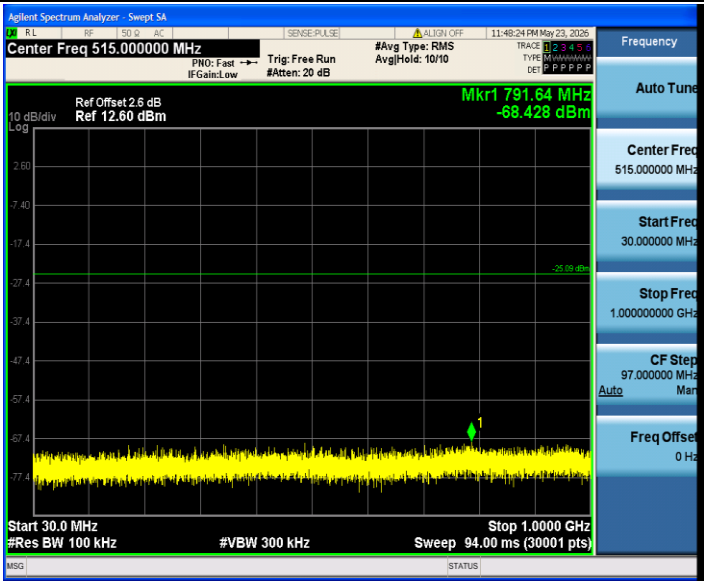
DH5_Ant1_2480_1000~26500



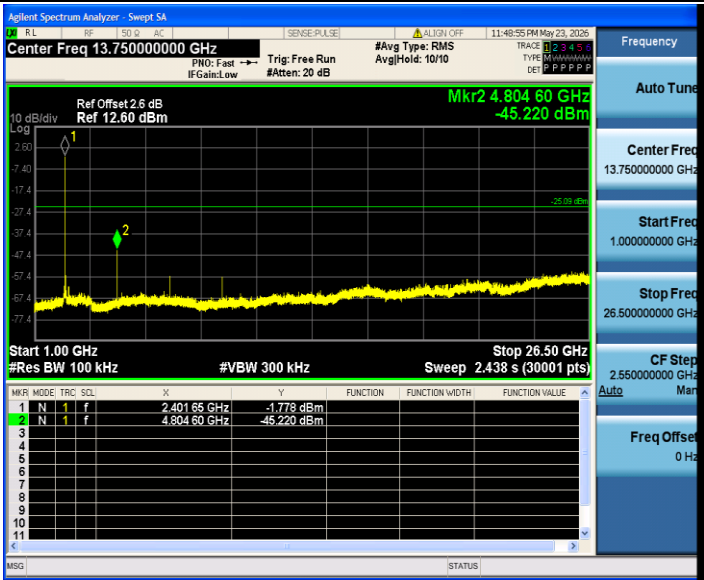
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



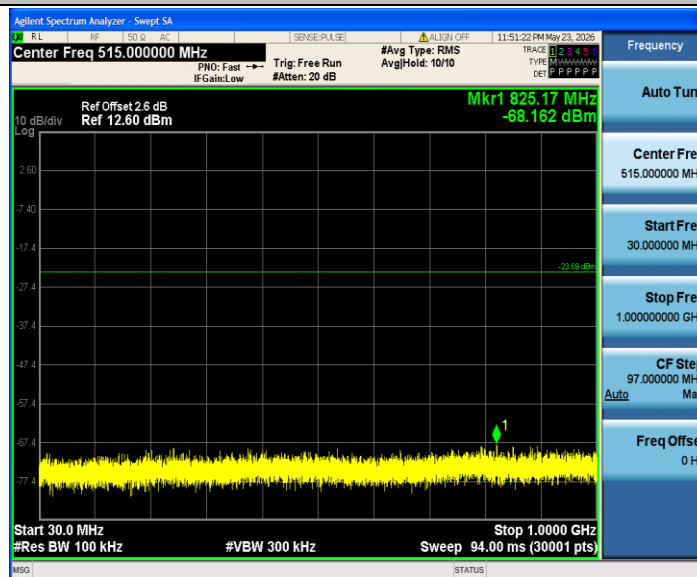
2DH5_Ant1_2402_1000~26500



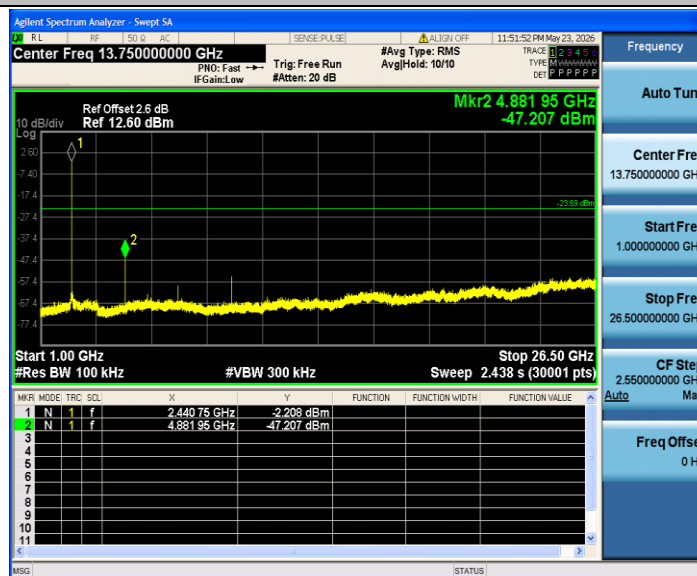
2DH5_Ant1_2441_0~Reference



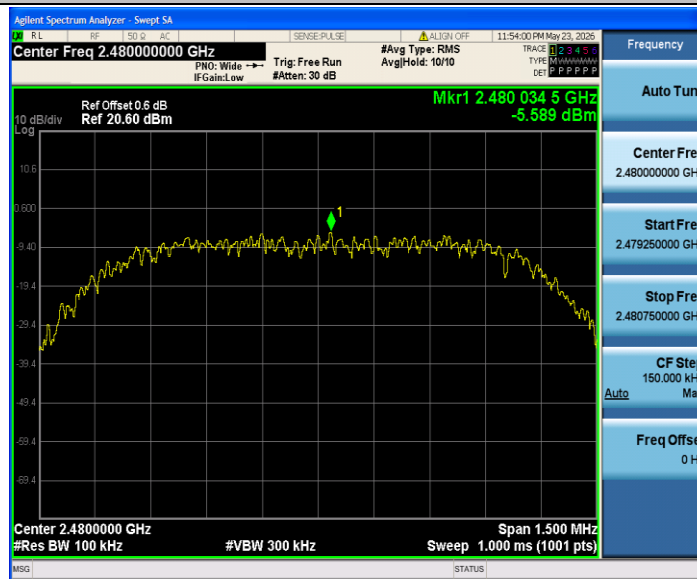
2DH5_Ant1_2441_30~1000



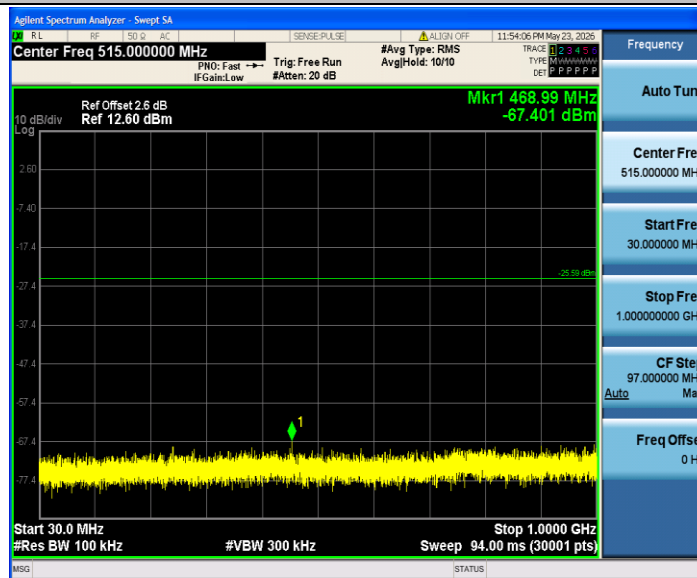
2DH5_Ant1_2441_1000~26500



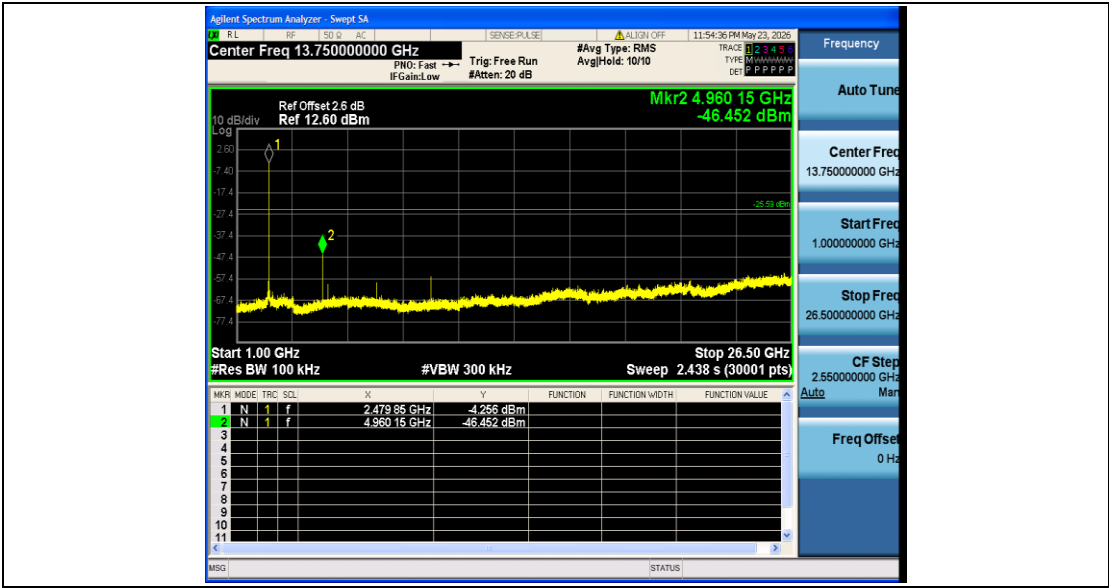
2DH5_Ant1_2480_0~Reference



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	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---