

FCC Appendix RF Test Data for BT

FCC ID : 2AW5N-P20

Company : Shenzhen Guye Technology Co., Ltd.

EUT : Karaoke machine

Model Number : P20

Report No. : CTA26092901301

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	0.945	2401.550	2402.495	---	---
		2441	0.951	2440.547	2441.498	---	---
		2480	0.951	2479.547	2480.498	---	---
2DH5	Ant1	2402	1.287	2401.376	2402.663	---	---
		2441	1.284	2440.376	2441.660	---	---
		2480	1.314	2479.352	2480.666	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

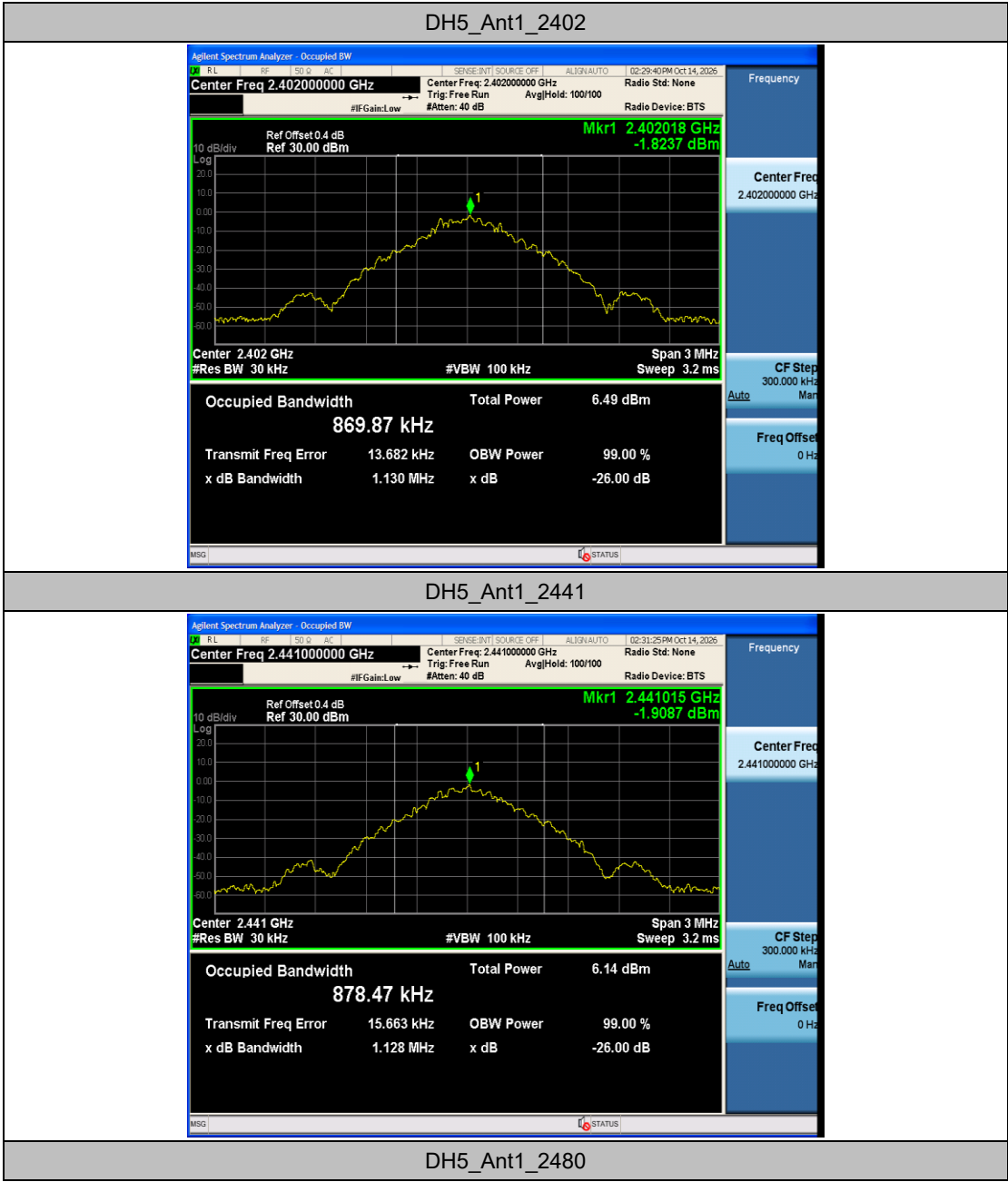


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86987	2401.5787	2402.4486	---	---
		2441	0.87847	2440.5764	2441.4549	---	---
		2480	0.86296	2479.5776	2480.4406	---	---
2DH5	Ant1	2402	1.1892	2401.4160	2402.6052	---	---
		2441	1.1740	2440.4226	2441.5966	---	---
		2480	1.1926	2479.4128	2480.6054	---	---

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	-0.09	≤20.97	PASS
		2441	-0.18	≤20.97	PASS
		2480	-0.41	≤20.97	PASS
2DH5	Ant1	2402	-0.95	≤20.97	PASS
		2441	-1.07	≤20.97	PASS
		2480	-1.29	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.026	≥ 0.951	PASS
2DH5	Ant1	Hop	0.974	≥ 0.876	PASS

Test Graphs

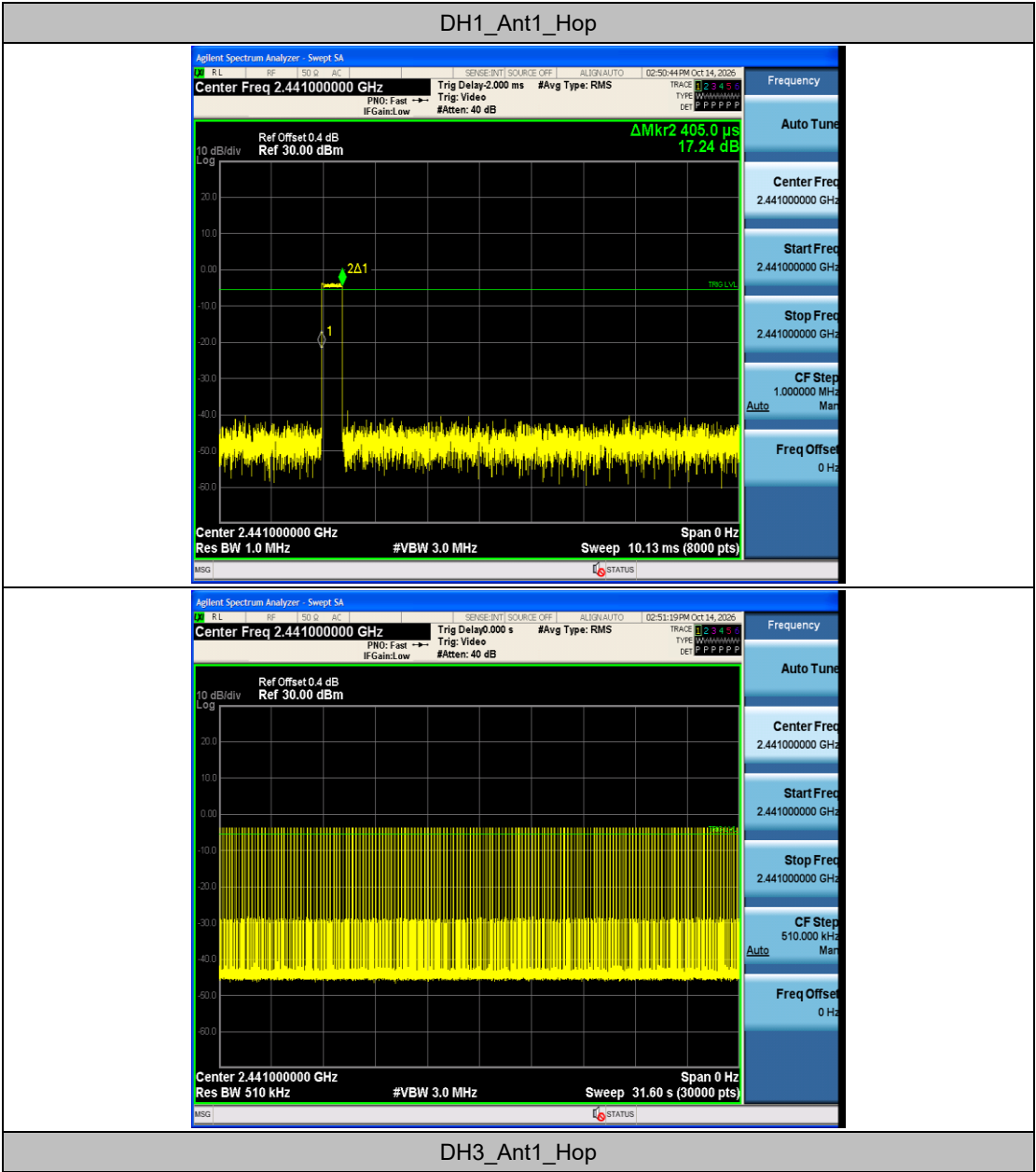


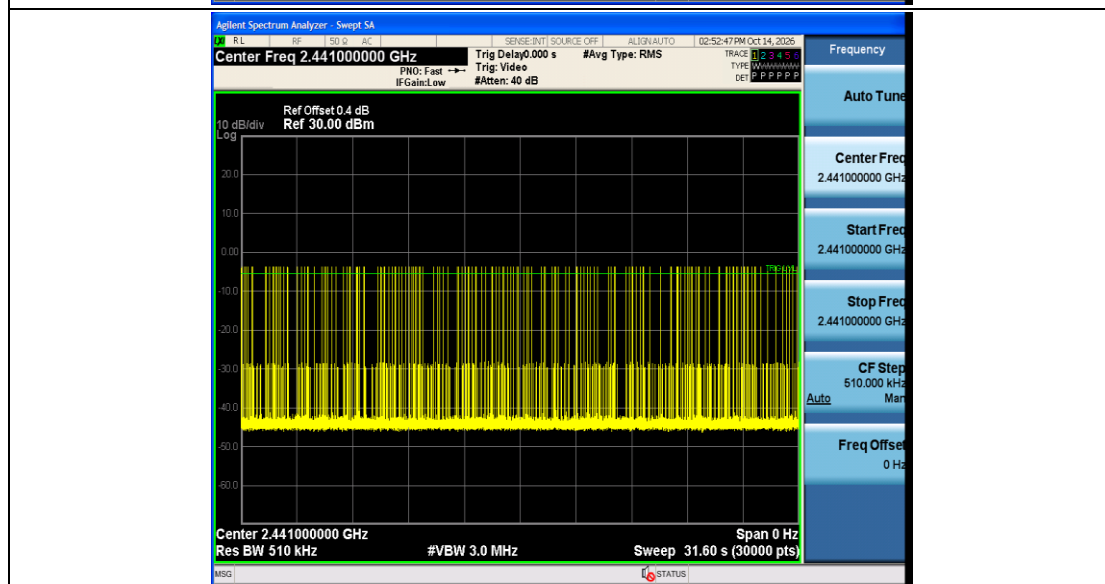
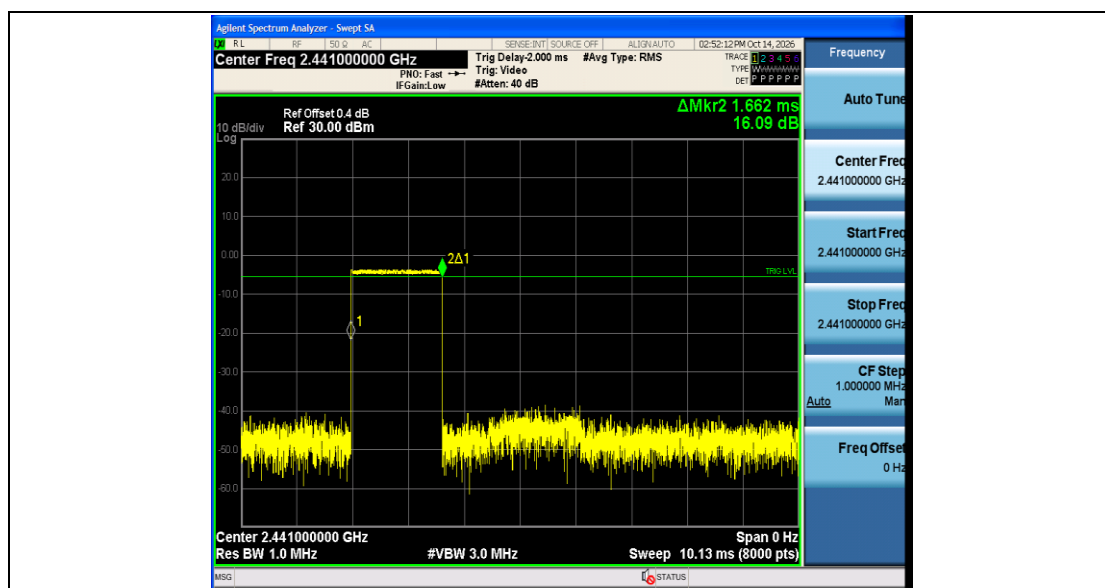
Appendix E: Time of occupancy

Test Result

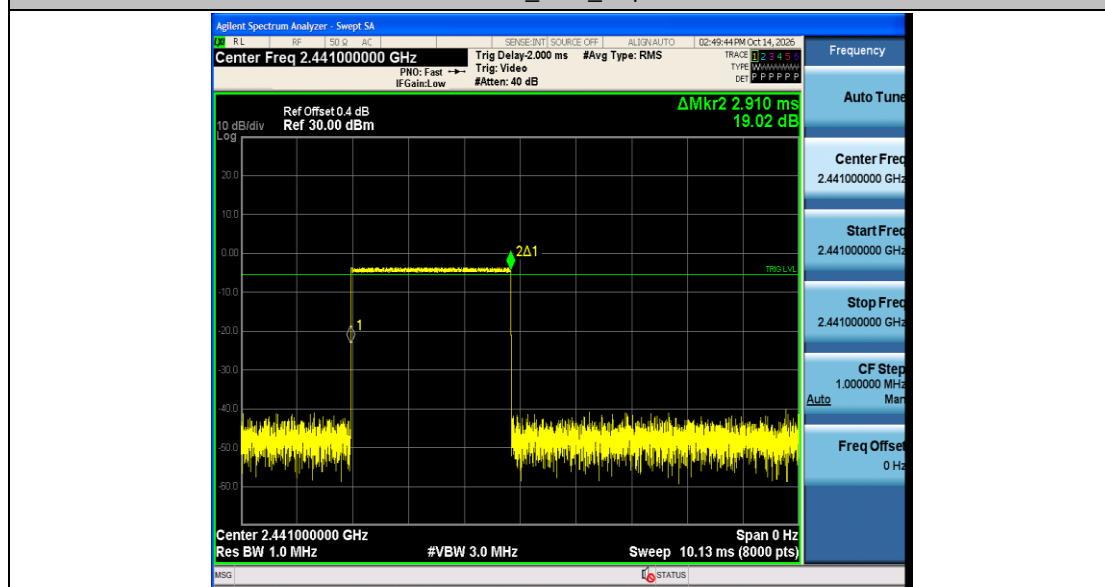
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	314	0.127	≤0.4	PASS
DH3	Ant1	Hop	1.662	160	0.266	≤0.4	PASS
DH5	Ant1	Hop	2.910	111	0.323	≤0.4	PASS
2DH1	Ant1	Hop	0.417	318	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.668	154	0.257	≤0.4	PASS
2DH5	Ant1	Hop	2.915	105	0.306	≤0.4	PASS

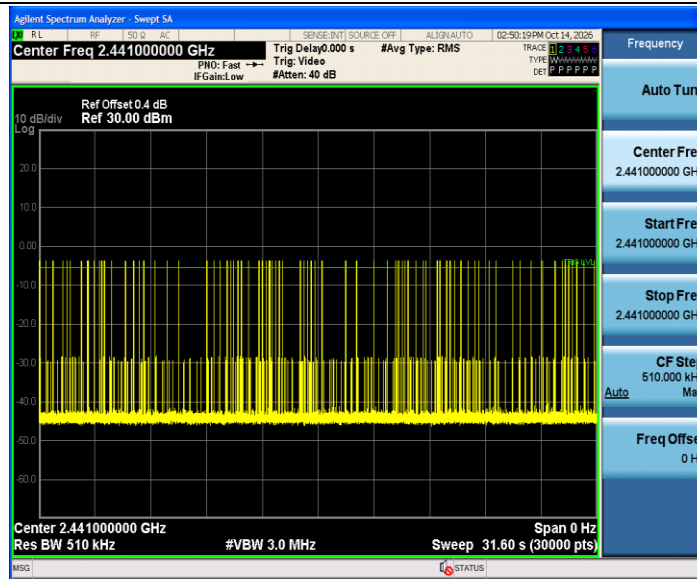
Test Graphs



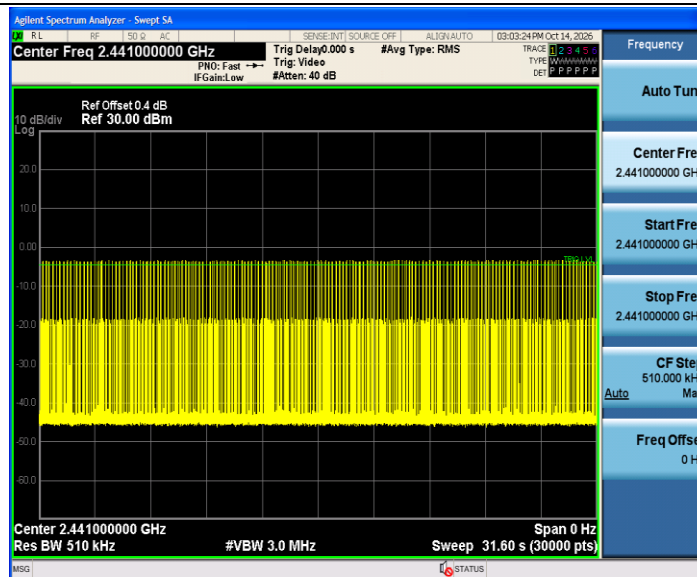
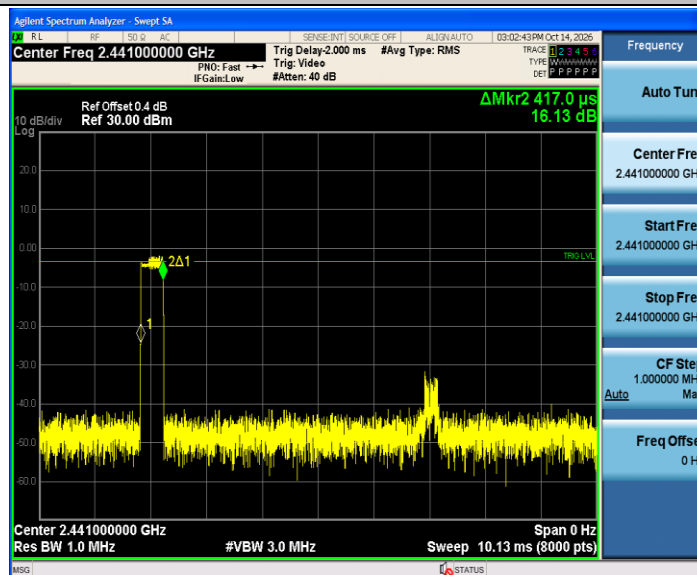


DH5_Ant1_Hop

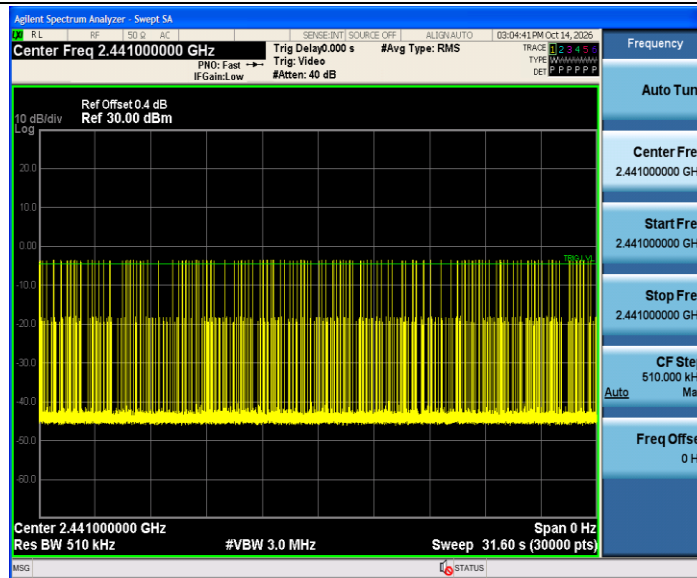
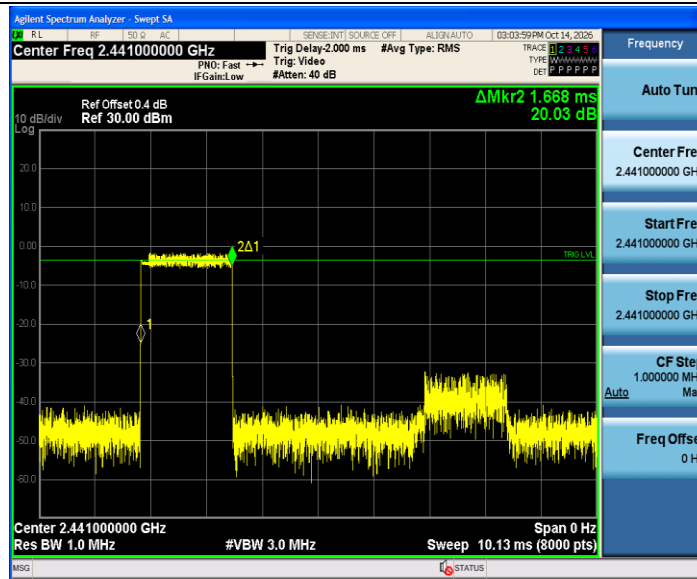




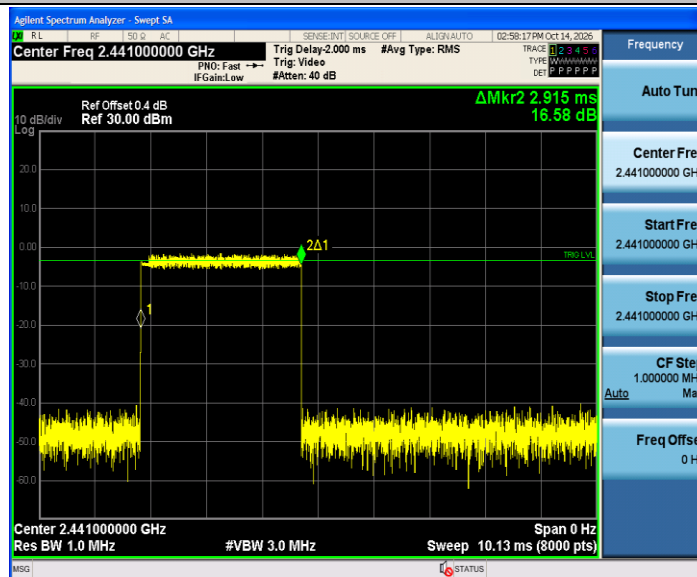
2DH1_Ant1_Hop

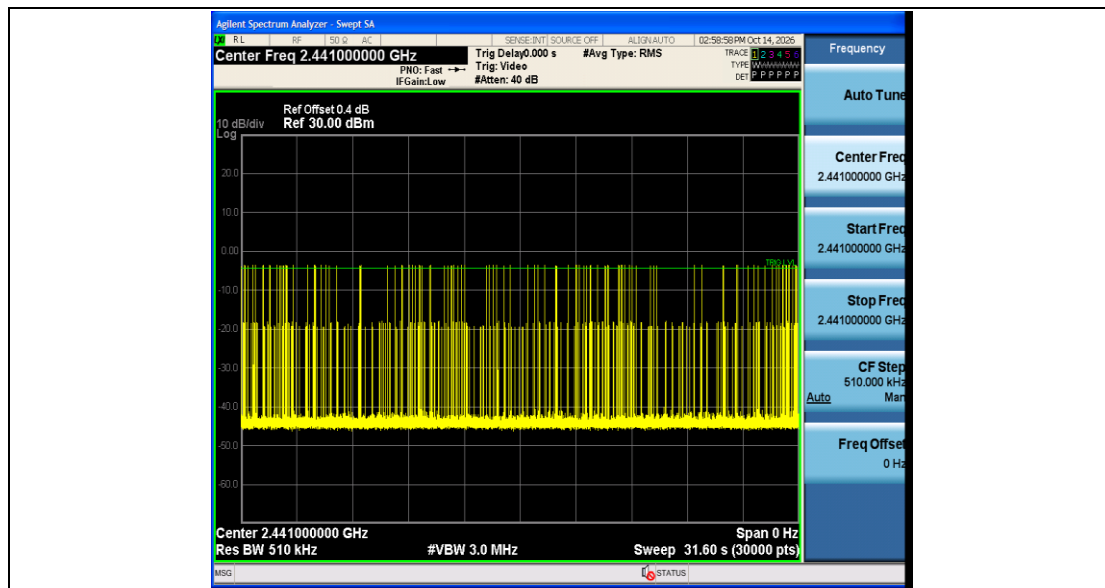


2DH3_Ant1_Hop



2DH5_Ant1_Hop



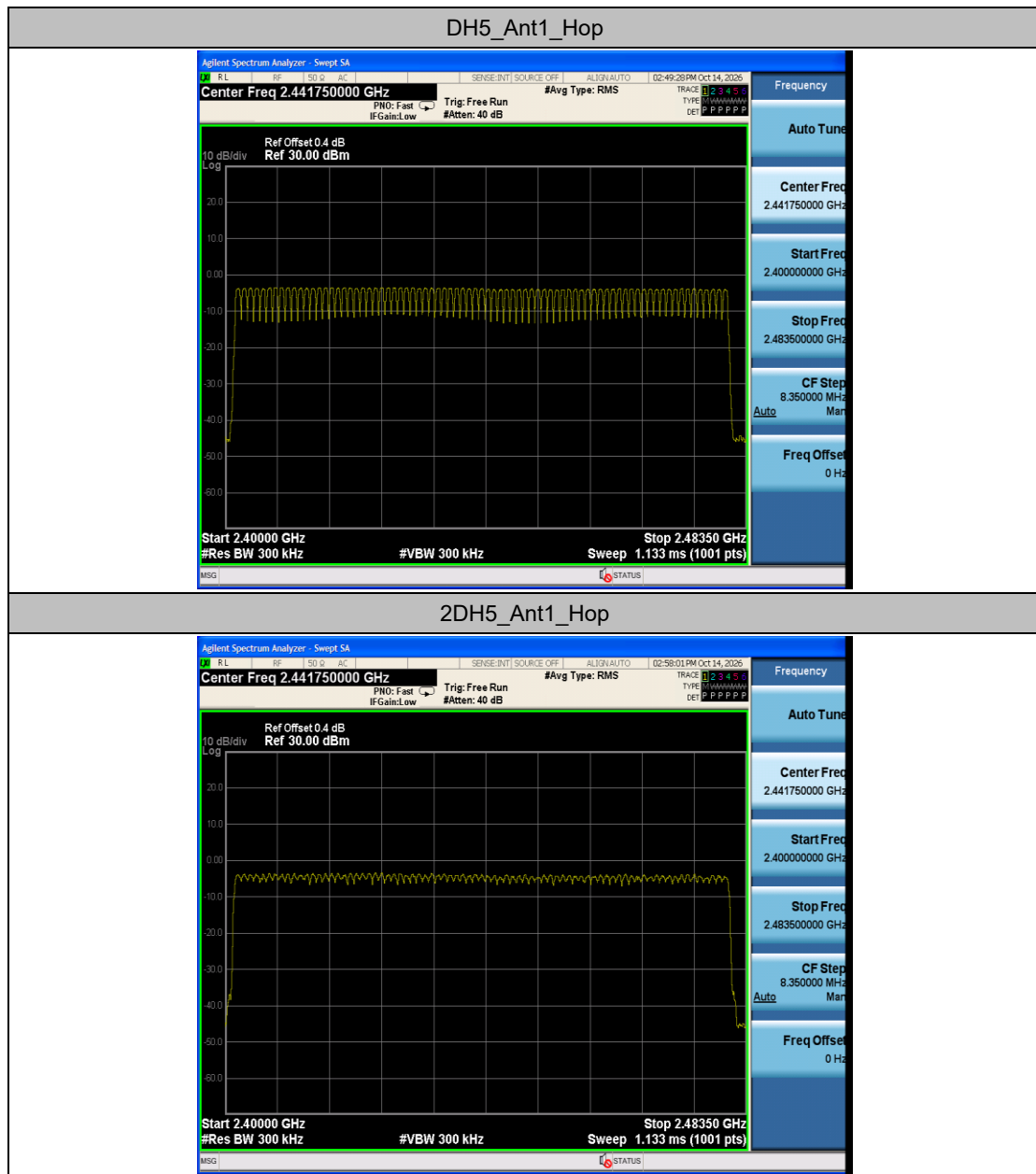


Appendix F: Number of hopping channels

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

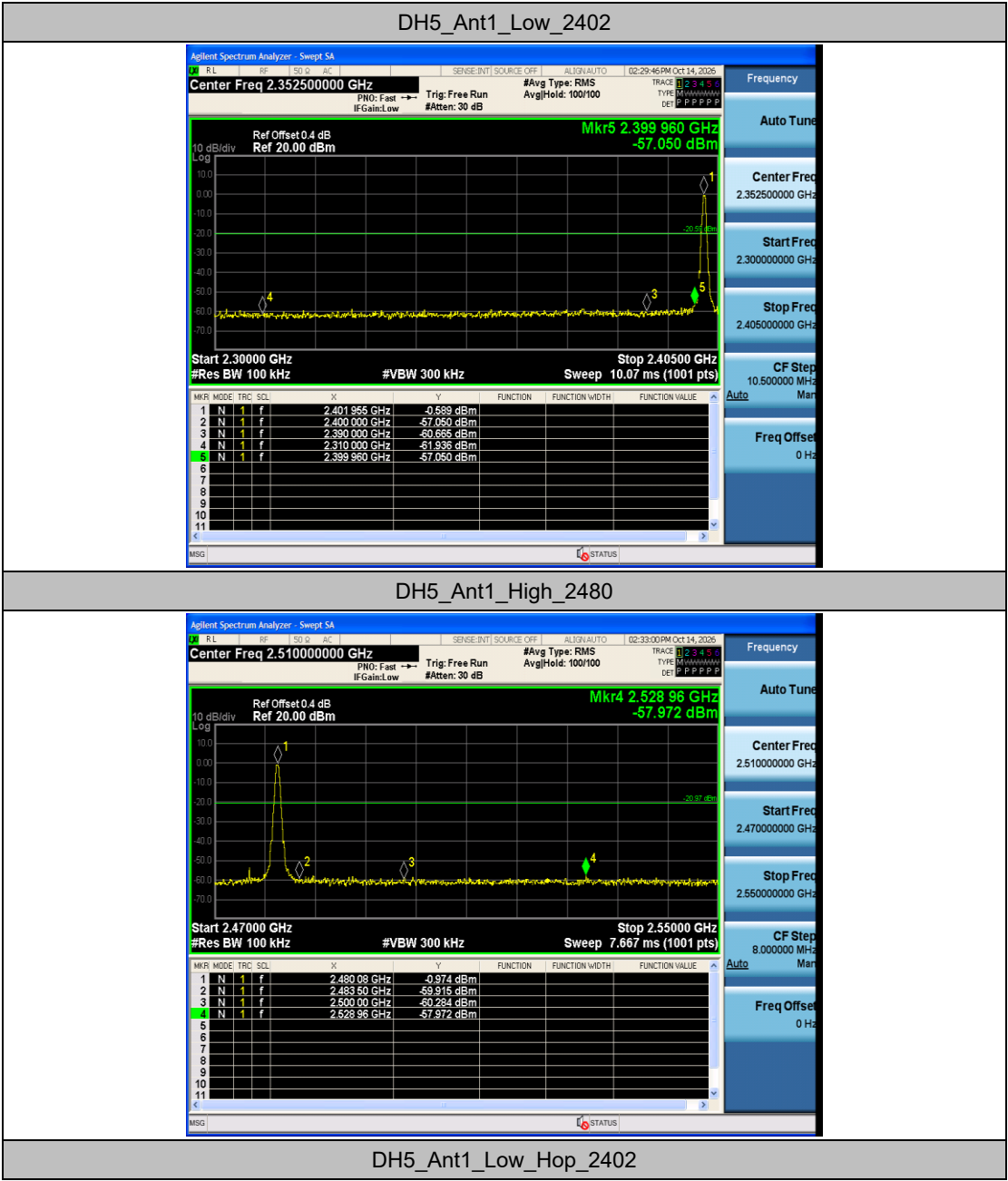


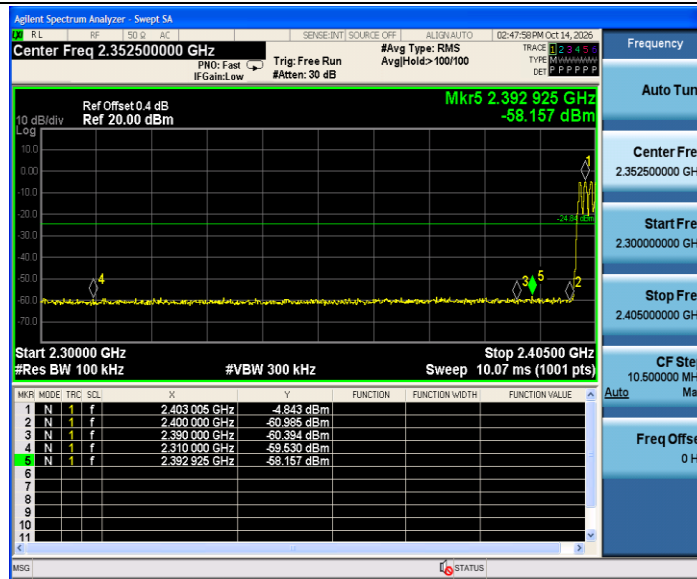
Appendix G: Band edge measurements

Test Result

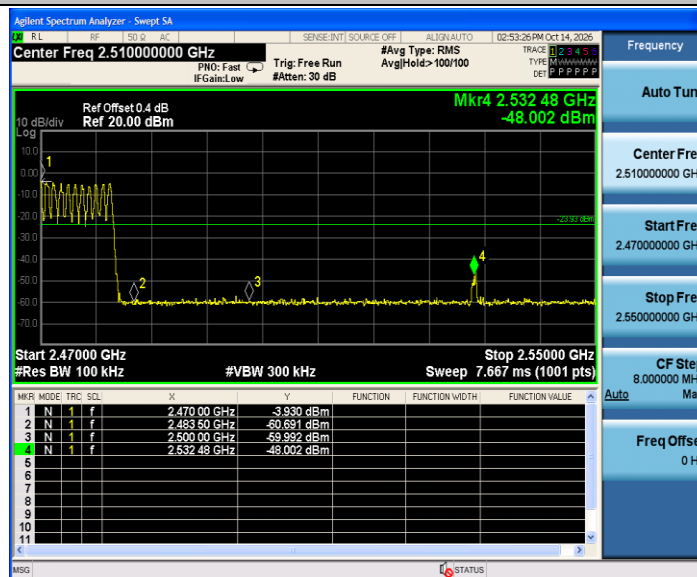
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.59	-57.05	≤-20.59	PASS
		High	2480	-0.97	-57.97	≤-20.97	PASS
		Low	Hop_2402	-4.84	-58.16	≤-24.84	PASS
		High	Hop_2480	-3.93	-48	≤-23.93	PASS
2DH5	Ant1	Low	2402	-4.84	-57.44	≤-24.84	PASS
		High	2480	-4.02	-49.11	≤-24.02	PASS
		Low	Hop_2402	-5.91	-58.41	≤-25.91	PASS
		High	Hop_2480	-4.47	-52.3	≤-24.47	PASS

Test Graphs

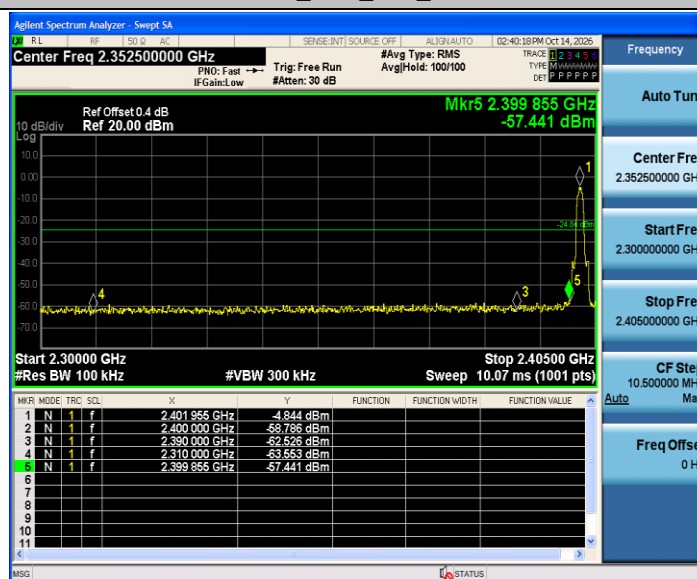




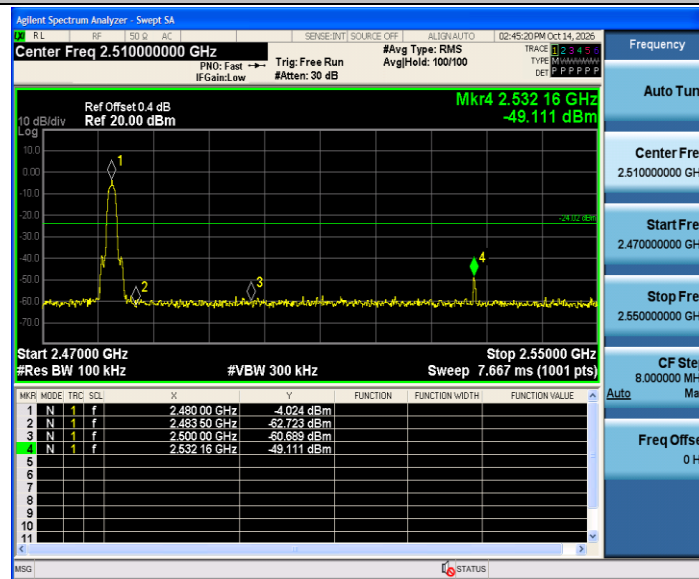
DH5_Ant1_High_Hop_2480



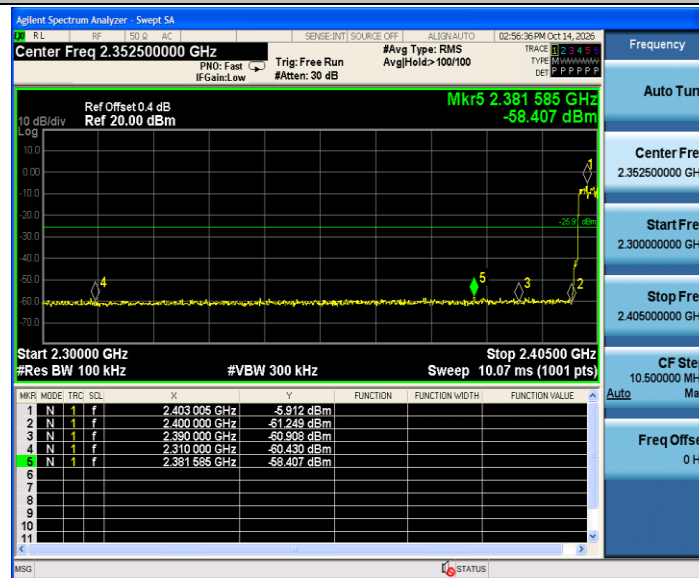
2DH5_Ant1_Low_2402



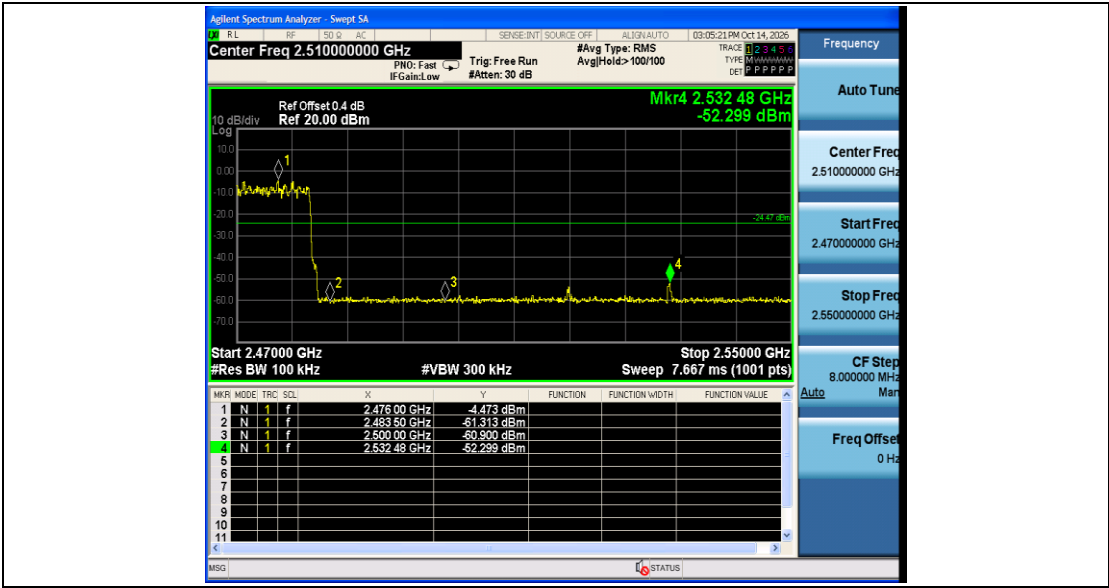
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

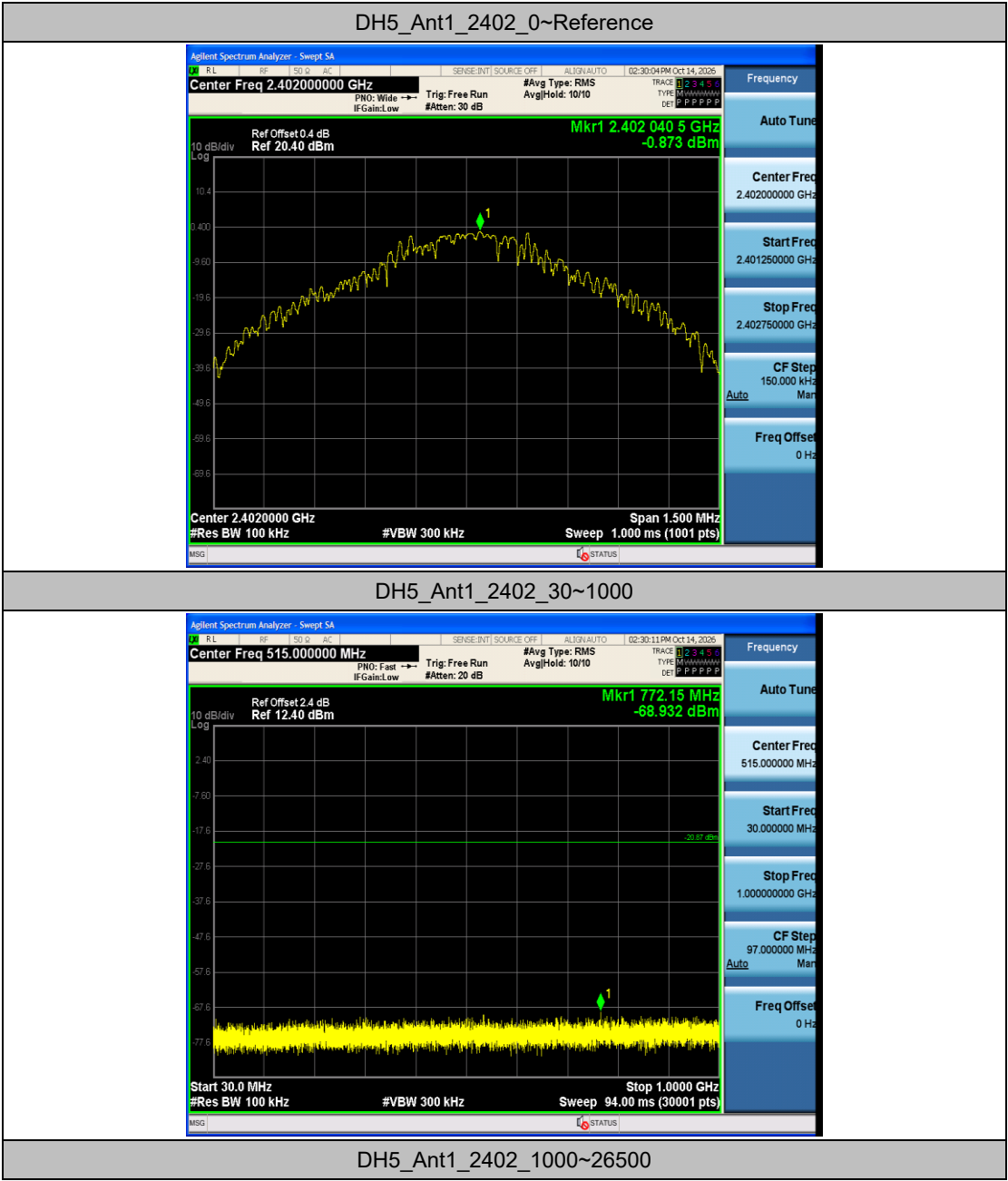


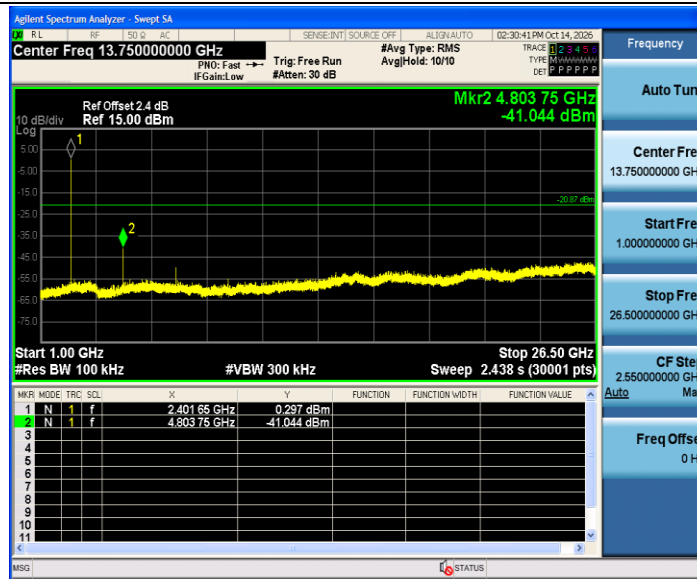
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.87	-0.87	---	PASS
			30~1000	-0.87	-68.93	≤-20.87	PASS
			1000~26500	-0.87	-41.04	≤-20.87	PASS
		2441	Reference	-1.38	-1.38	---	PASS
			30~1000	-1.38	-68.59	≤-21.38	PASS
			1000~26500	-1.38	-42.28	≤-21.38	PASS
		2480	Reference	-1.43	-1.43	---	PASS
			30~1000	-1.43	-69.28	≤-21.43	PASS
			1000~26500	-1.43	-42.7	≤-21.43	PASS
2DH5	Ant1	2402	Reference	-4.82	-4.82	---	PASS
			30~1000	-4.82	-69.12	≤-24.82	PASS
			1000~26500	-4.82	-47.13	≤-24.82	PASS
		2441	Reference	-5.79	-5.79	---	PASS
			30~1000	-5.79	-68.83	≤-25.79	PASS
			1000~26500	-5.79	-46.79	≤-25.79	PASS
		2480	Reference	-4.23	-4.23	---	PASS
			30~1000	-4.23	-69.35	≤-24.23	PASS
			1000~26500	-4.23	-46.15	≤-24.23	PASS

Test Graphs

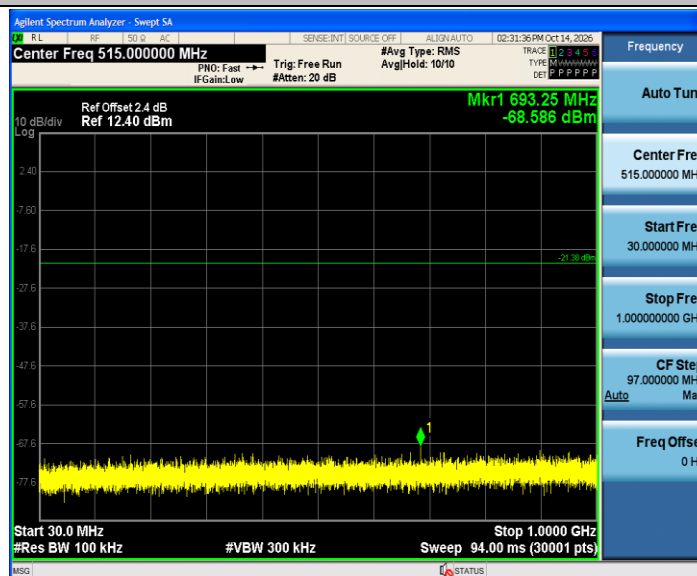




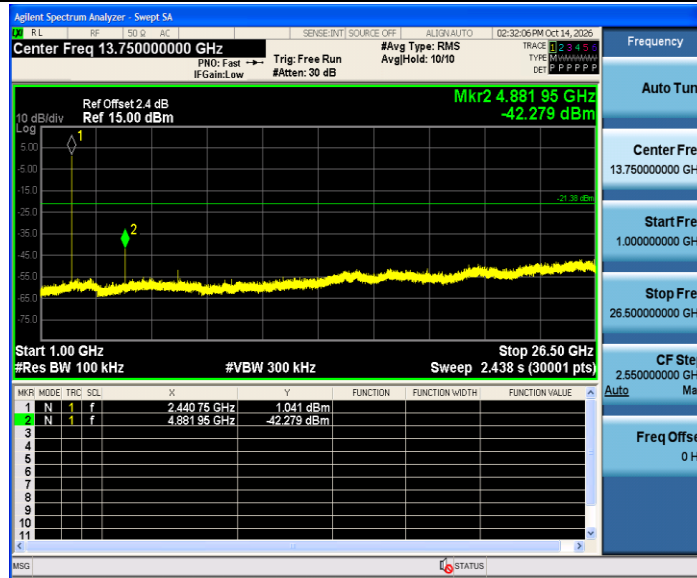
DH5_Ant1_2441_0~Reference



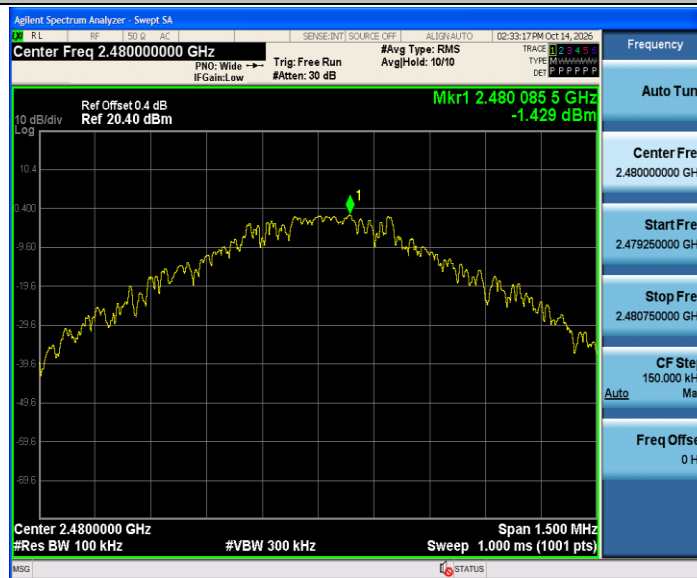
DH5_Ant1_2441_30~1000



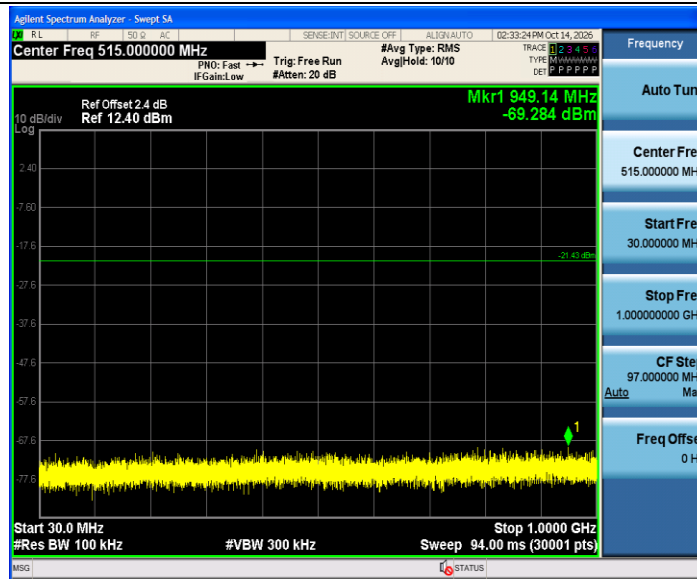
DH5_Ant1_2441_1000~26500



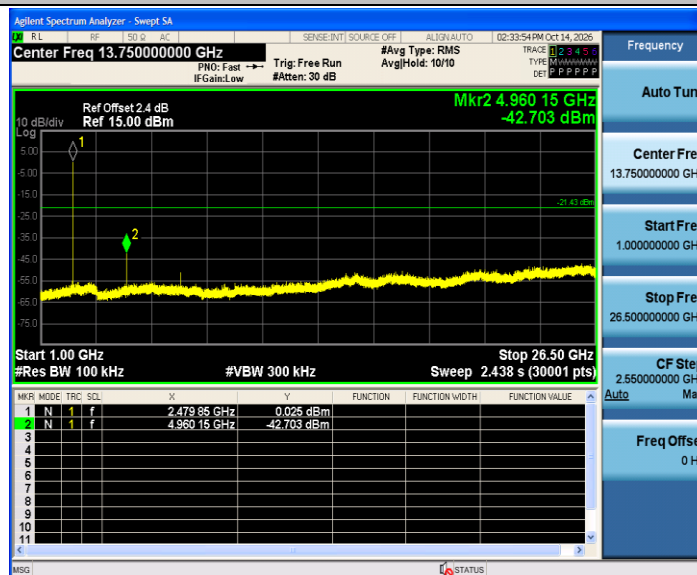
DH5_Ant1_2480_0~Reference



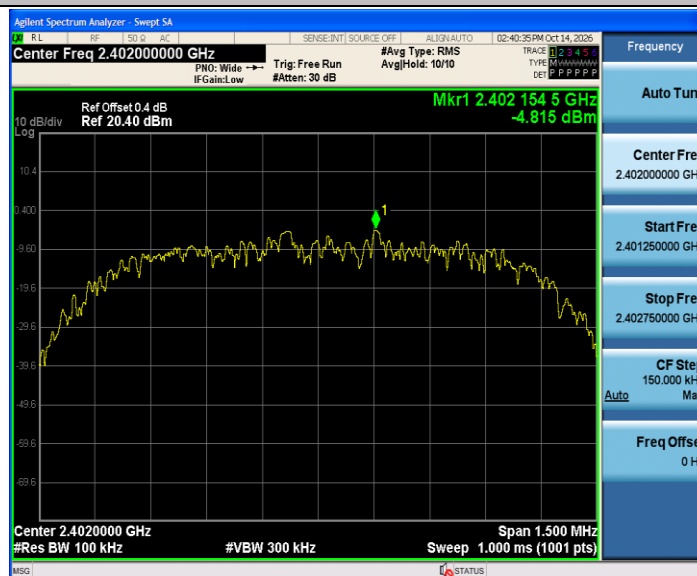
DH5_Ant1_2480_30~1000



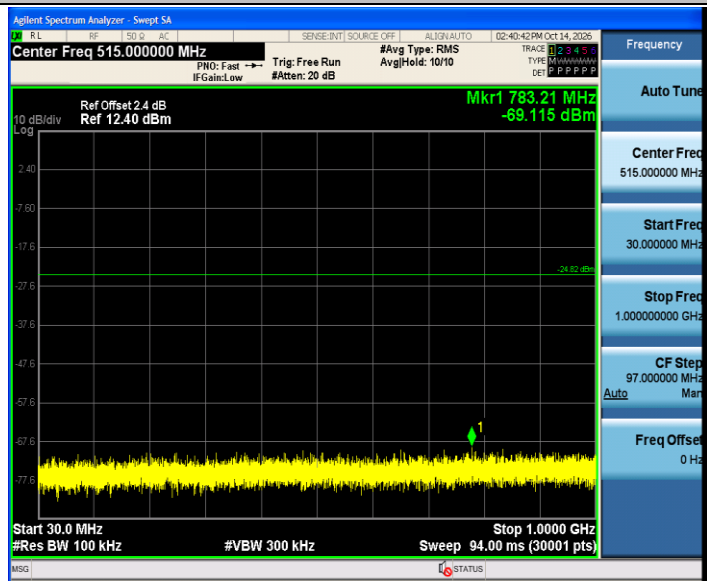
DH5_Ant1_2480_1000~26500



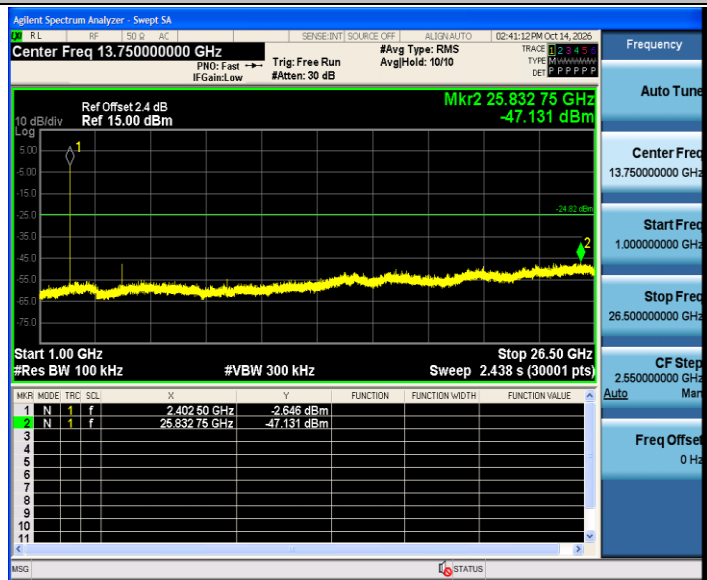
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



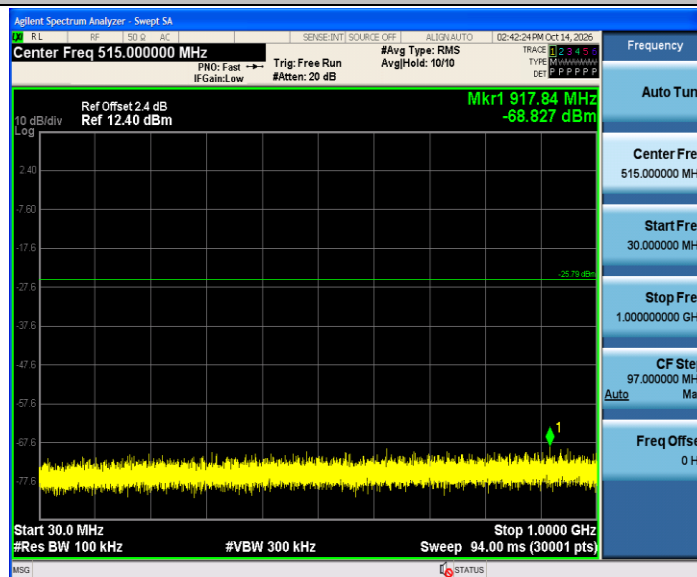
2DH5_Ant1_2402_1000~26500



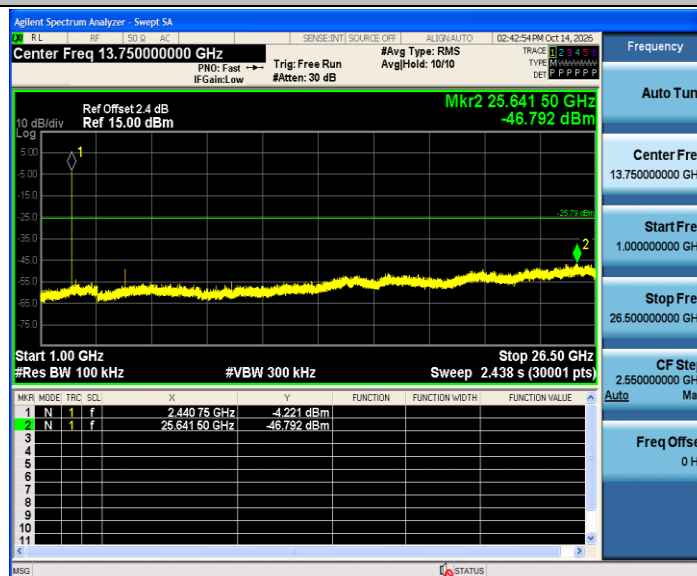
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



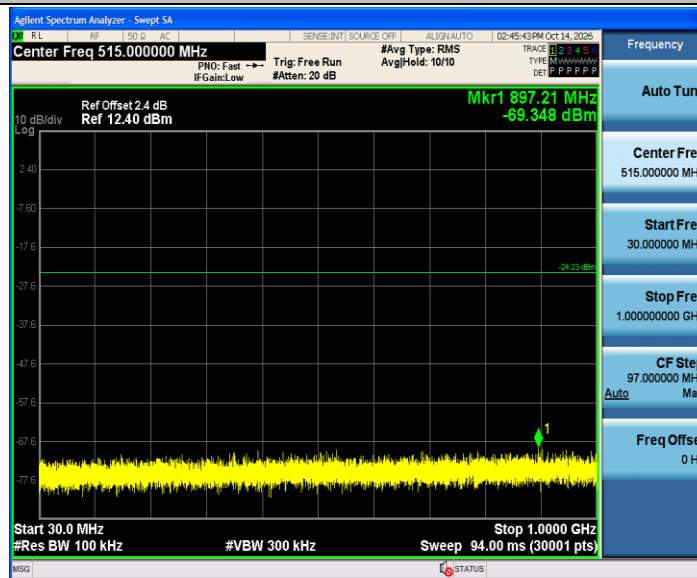
2DH5_Ant1_2441_1000~26500



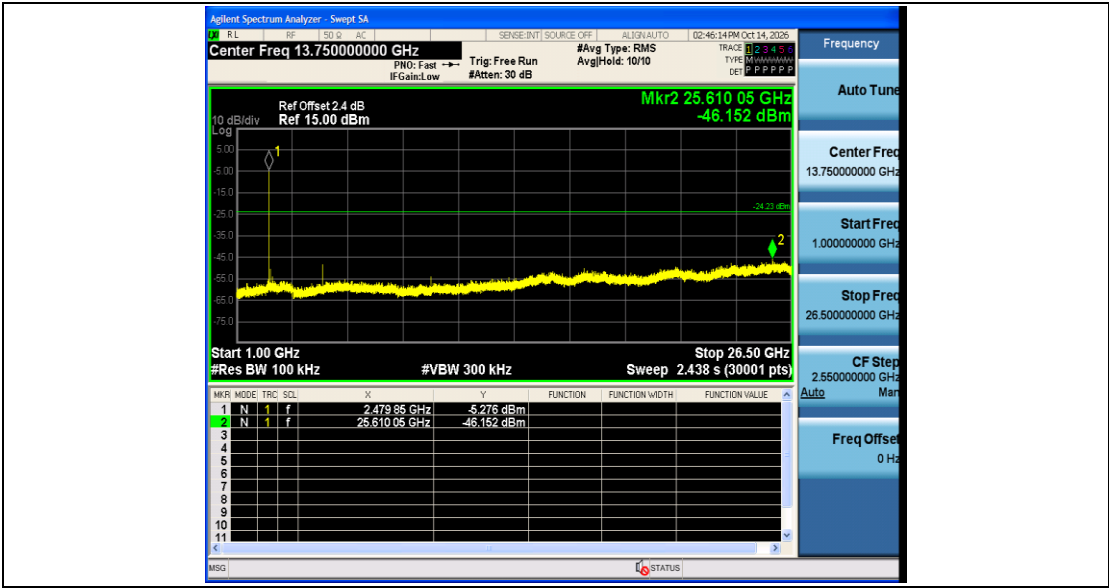
2DH5_Ant1_2480_0~Reference



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	3.76	77.66	1.10	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.92	3.74	78.07	1.08	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---