

FCC Appendix RF Test Data

FCC ID : 2BRFV-L-98

Company : Dongguan Zhuocheng Precision Components Co., Ltd.

EUT : Bluetooth speaker

Model Number : L-98

Report No. : CTA25071000301

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	2401.544	2402.501	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.951	2479.547	2480.498	---	---
2DH5	Ant1	2402	1.320	2401.346	2402.666	---	---
		2441	1.263	2440.394	2441.657	---	---
		2480	1.323	2479.346	2480.669	---	---
3DH5	Ant1	2402	1.290	2401.364	2402.654	---	---
		2441	1.293	2440.361	2441.654	---	---
		2480	1.296	2479.364	2480.660	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_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	0.87319	2401.5718	2402.4450	---	---
		2441	0.86262	2440.5773	2441.4399	---	---
		2480	0.87001	2479.5759	2480.4459	---	---
2DH5	Ant1	2402	1.1888	2401.4144	2402.6032	---	---
		2441	1.1903	2440.4132	2441.6035	---	---
		2480	1.1947	2479.4136	2480.6083	---	---
3DH5	Ant1	2402	1.1848	2401.4170	2402.6018	---	---
		2441	1.1828	2440.4194	2441.6022	---	---
		2480	1.1901	2479.4143	2480.6044	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



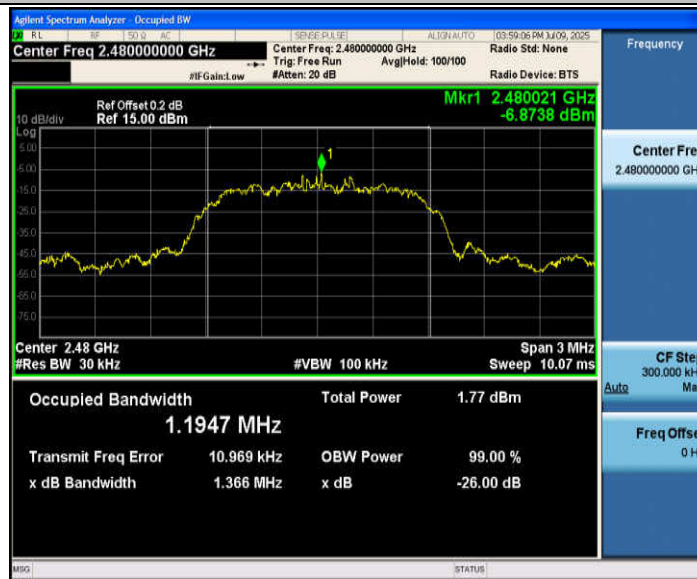
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_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	-0.28	≤20.97	PASS
		2441	-0.52	≤20.97	PASS
		2480	-0.62	≤20.97	PASS
2DH5	Ant1	2402	-1.11	≤20.97	PASS
		2441	-1.34	≤20.97	PASS
		2480	-1.43	≤20.97	PASS
3DH5	Ant1	2402	-0.72	≤20.97	PASS
		2441	-1.00	≤20.97	PASS
		2480	-1.05	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	≥ 0.638	PASS
2DH5	Ant1	Hop	1.38	≥ 0.882	PASS
3DH5	Ant1	Hop	1.004	≥ 0.864	PASS

Test Graphs



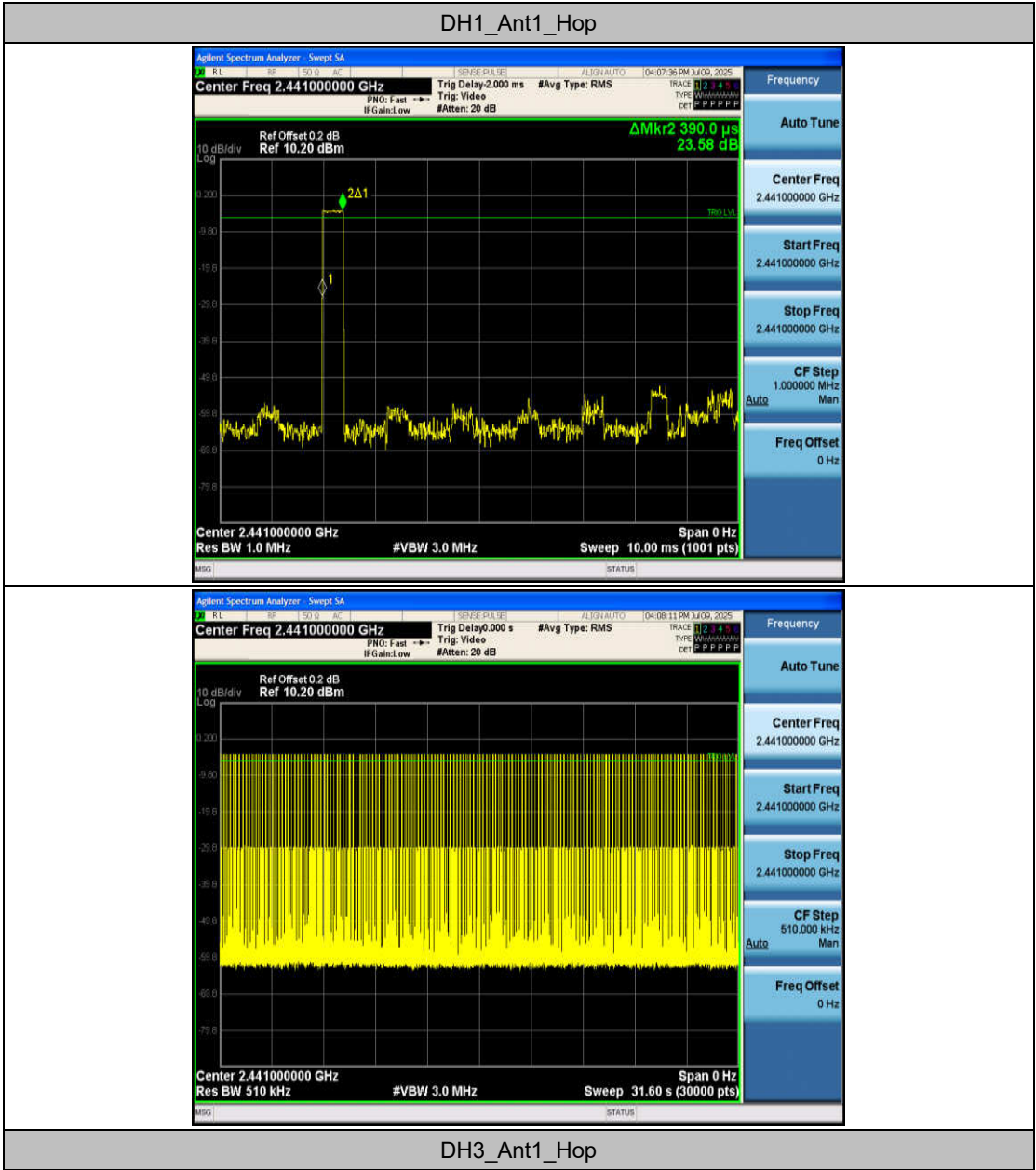


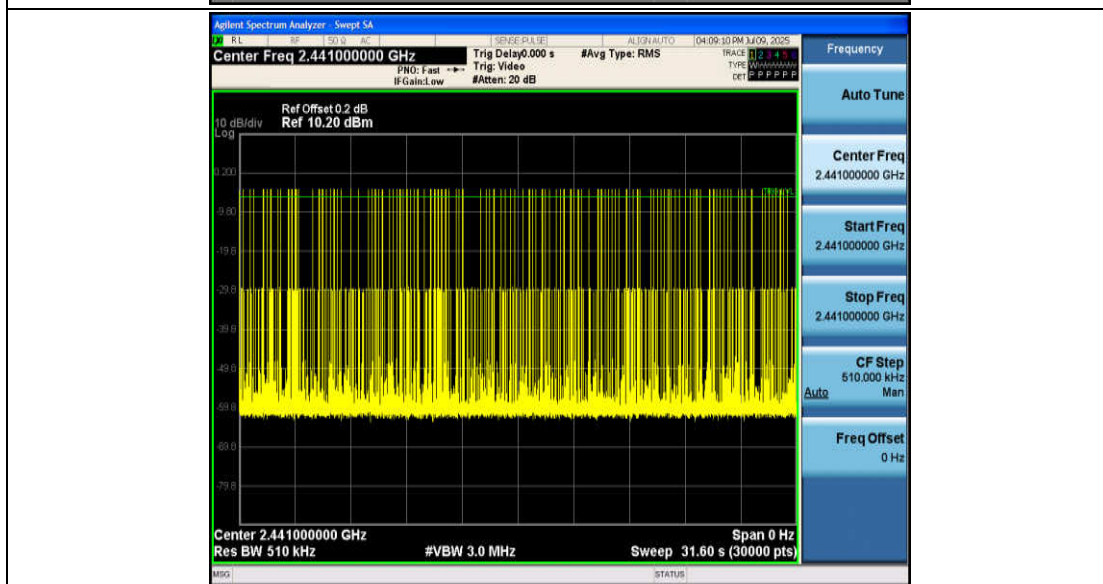
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	316	0.123	≤0.4	PASS
DH3	Ant1	Hop	1.640	151	0.248	≤0.4	PASS
DH5	Ant1	Hop	2.890	109	0.315	≤0.4	PASS
2DH1	Ant1	Hop	0.400	317	0.127	≤0.4	PASS
2DH3	Ant1	Hop	1.650	159	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.900	105	0.305	≤0.4	PASS
3DH1	Ant1	Hop	0.400	318	0.127	≤0.4	PASS
3DH3	Ant1	Hop	1.640	158	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.900	102	0.296	≤0.4	PASS

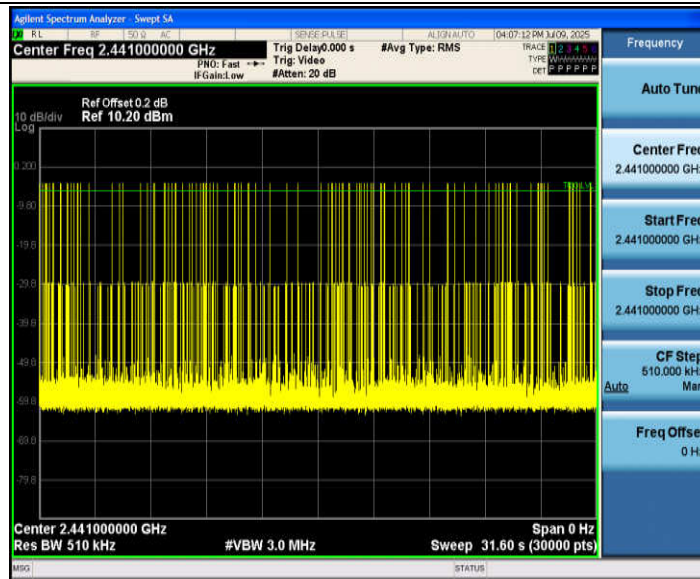
Test Graphs



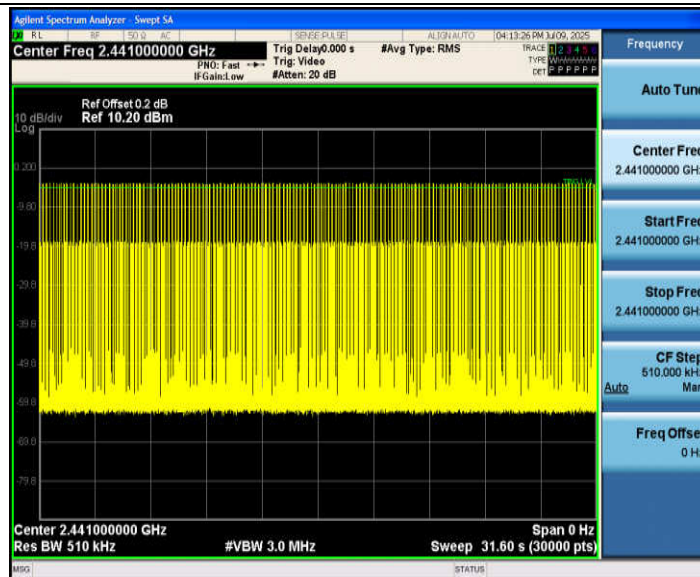
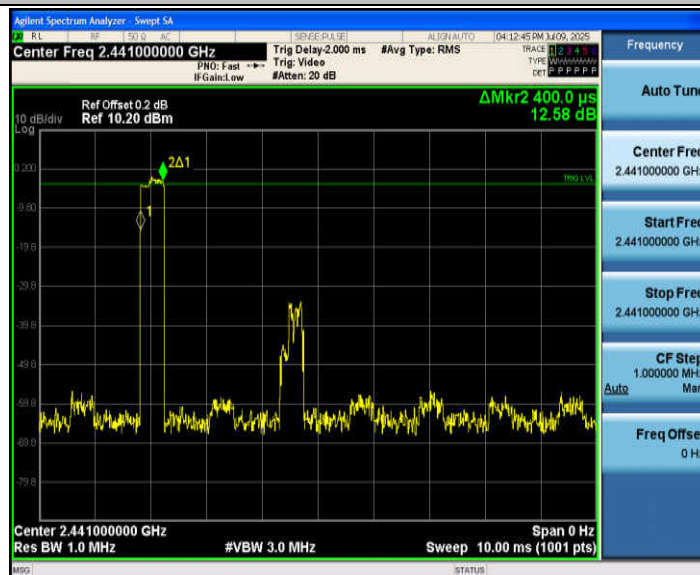


DH5_Ant1_Hop

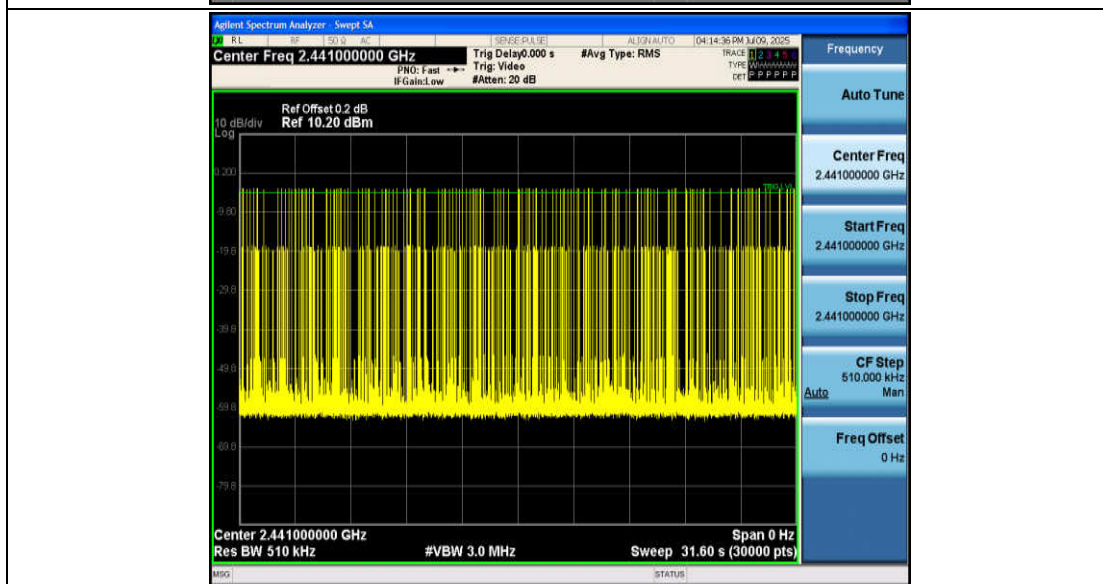




2DH1_Ant1_Hop

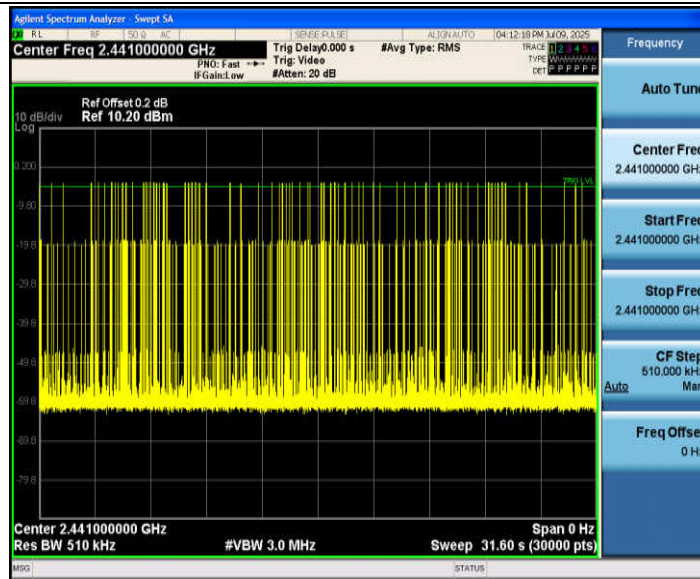


2DH3_Ant1_Hop

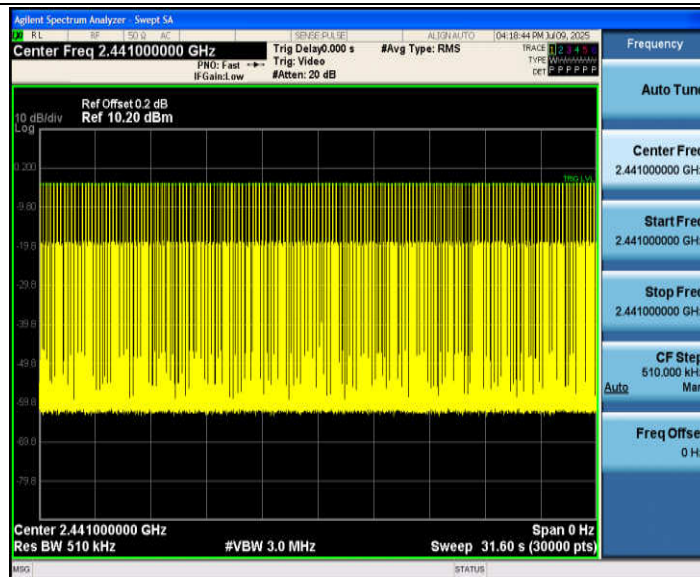


2DH5_Ant1_Hop

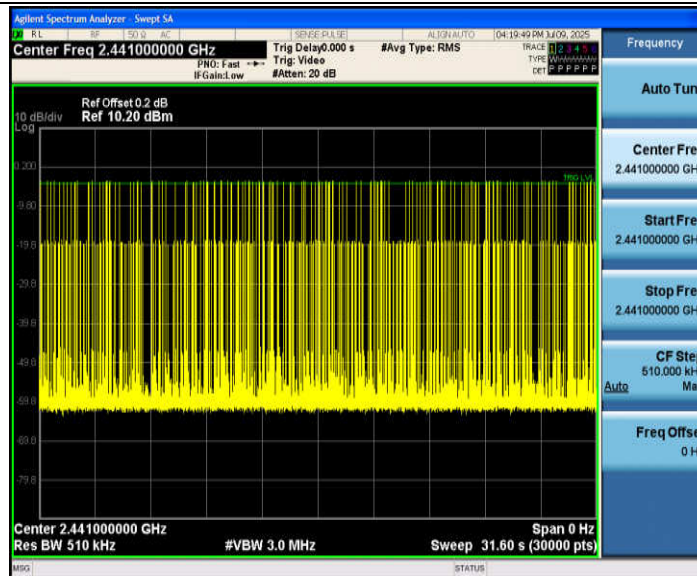




3DH1_Ant1_Hop

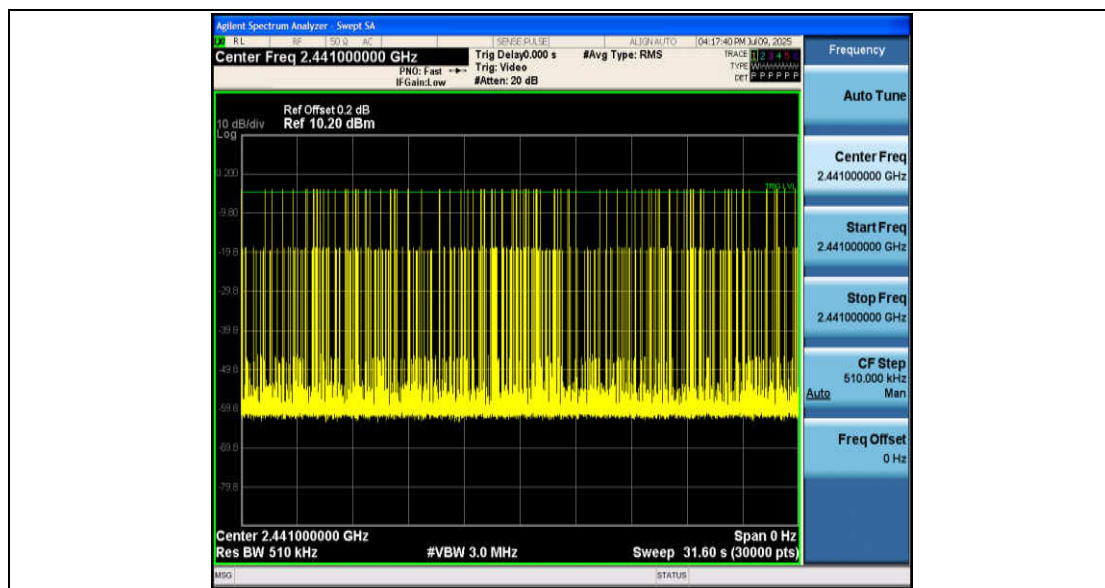


3DH3_Ant1_Hop



3DH5_Ant1_Hop



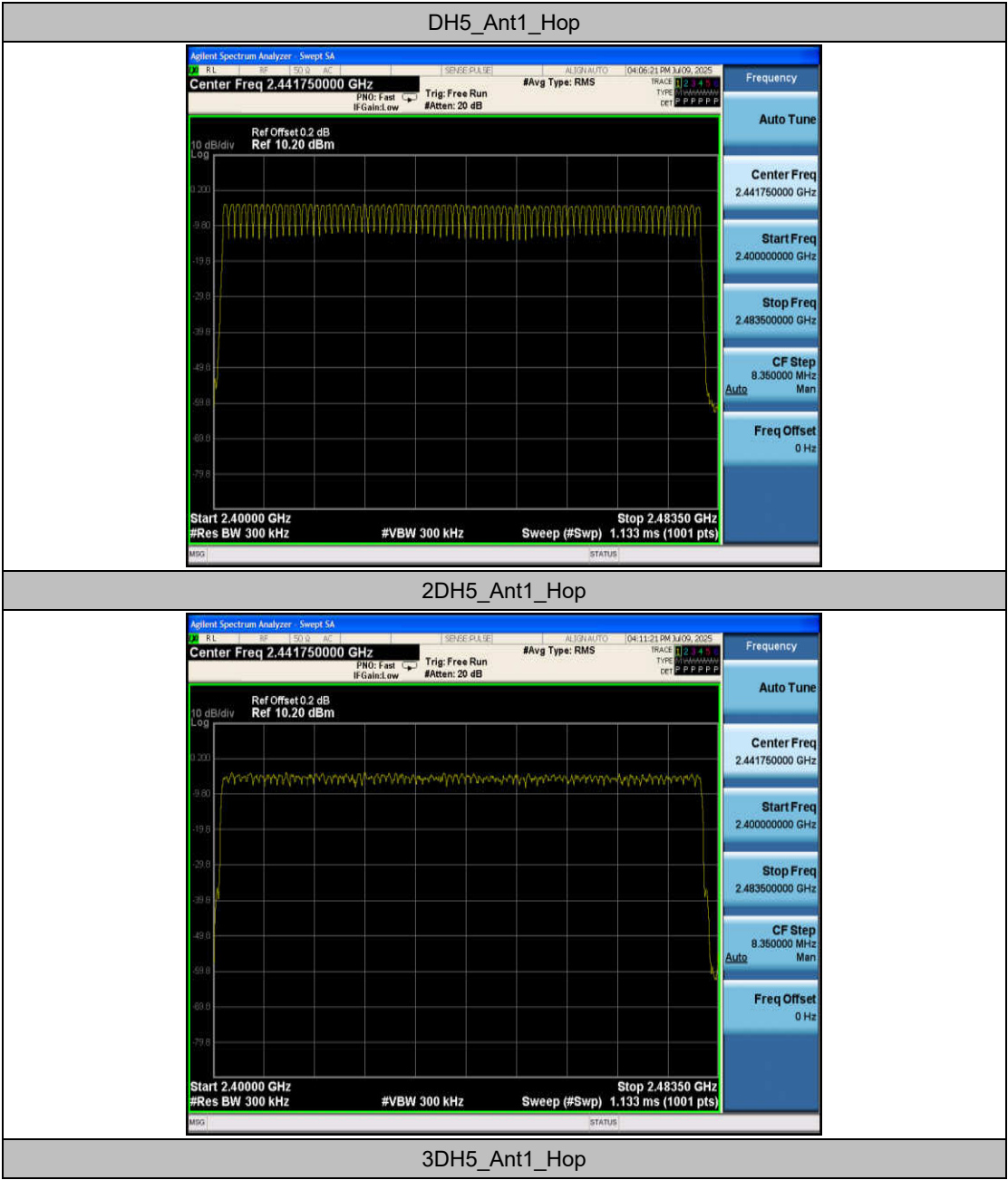


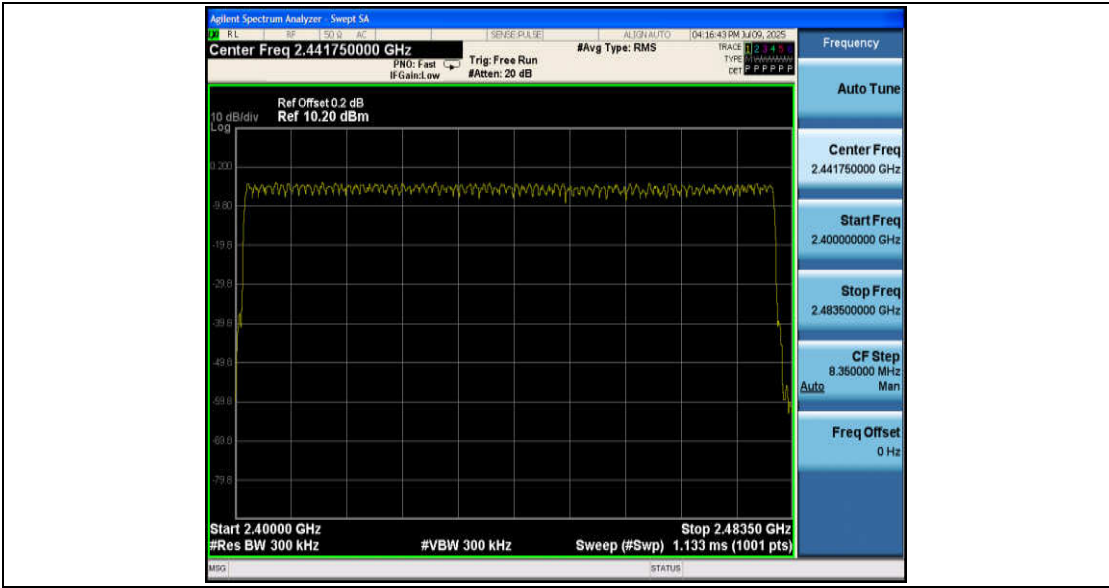
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs





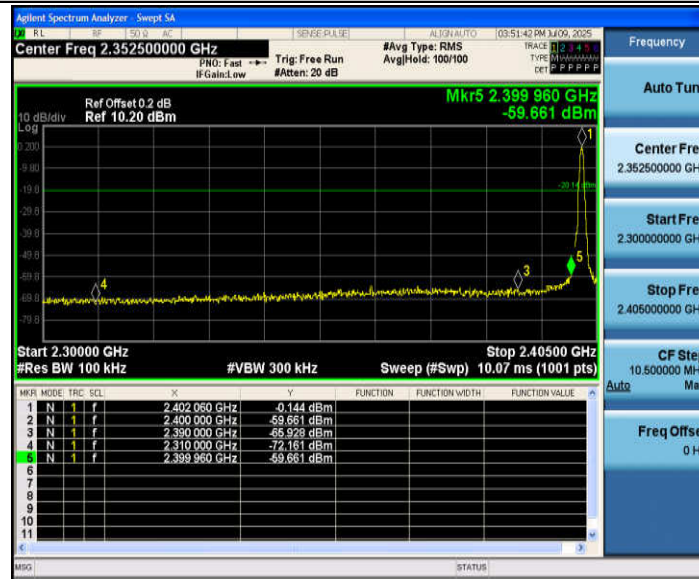
Appendix G: Band edge measurements

Test Result

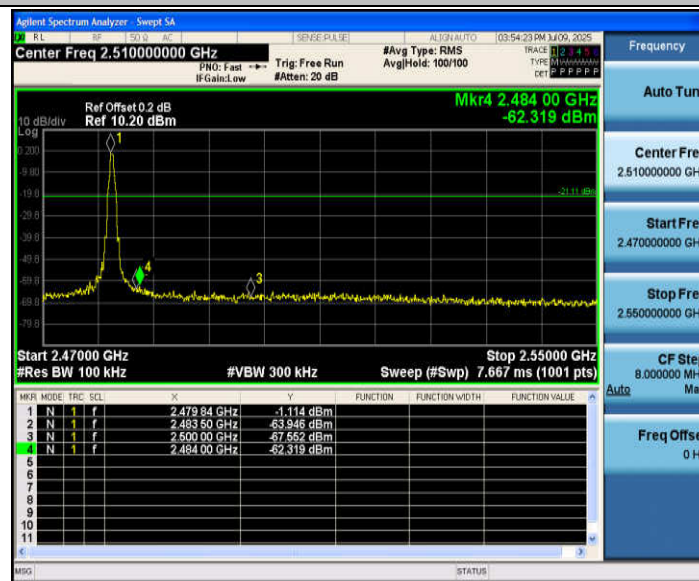
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.14	-59.66	≤ -20.14	PASS
		High	2480	-1.11	-62.32	≤ -21.11	PASS
		Low	Hop_2402	-4.45	-61.59	≤ -24.45	PASS
		High	Hop_2480	-4.40	-63.85	≤ -24.4	PASS
2DH5	Ant1	Low	2402	-3.74	-59.46	≤ -23.74	PASS
		High	2480	-4.29	-63.97	≤ -24.29	PASS
		Low	Hop_2402	-4.86	-61.53	≤ -24.86	PASS
		High	Hop_2480	-5.50	-64.43	≤ -25.5	PASS
3DH5	Ant1	Low	2402	-5.62	-57.16	≤ -25.62	PASS
		High	2480	-4.70	-63.71	≤ -24.7	PASS
		Low	Hop_2402	-4.31	-60.19	≤ -24.31	PASS
		High	Hop_2480	-4.92	-61.73	≤ -24.92	PASS

Test Graphs

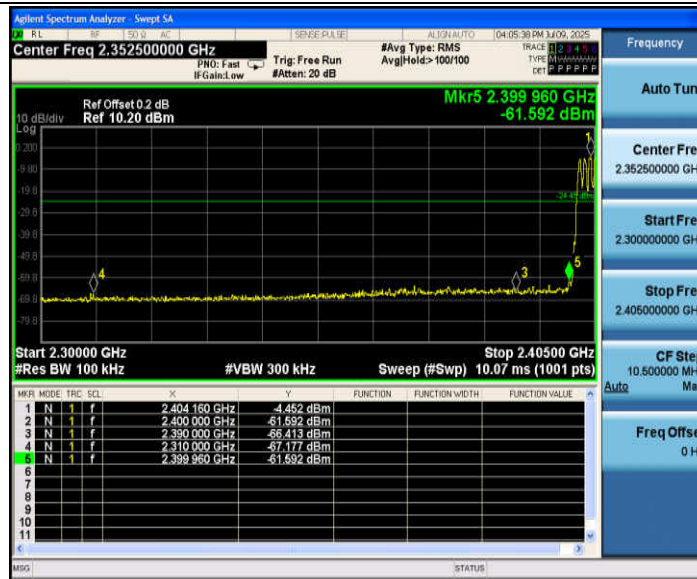
DH5_Ant1_Low_2402



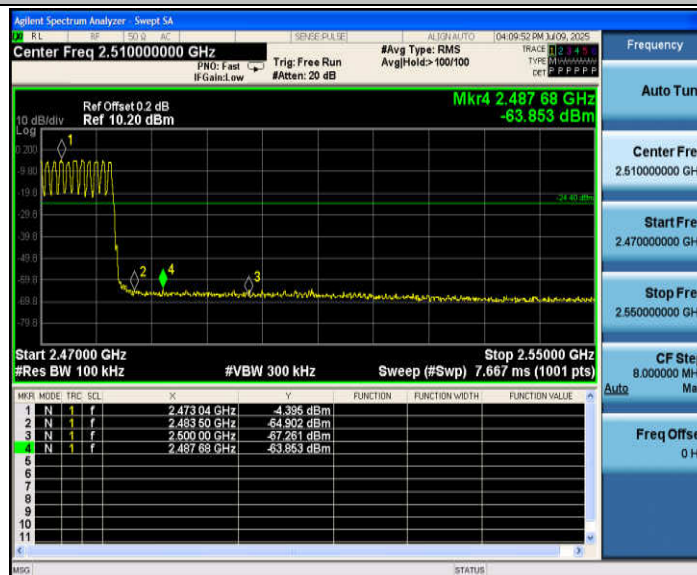
DH5_Ant1_High_2480



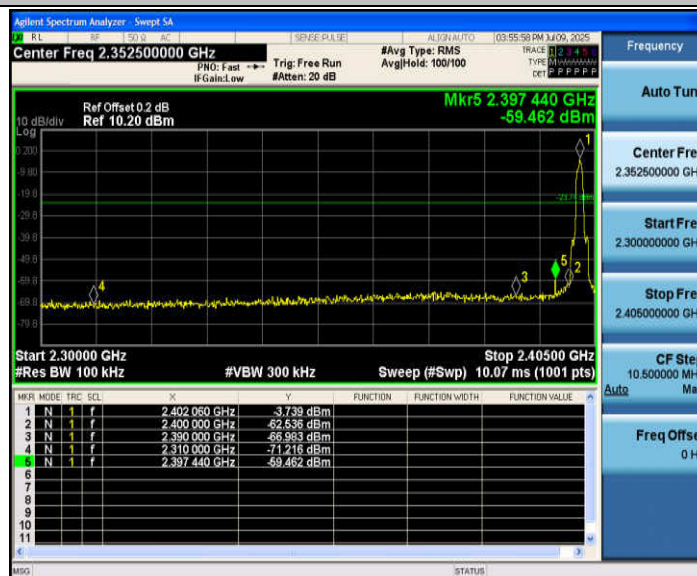
DH5_Ant1_Low_Hop_2402



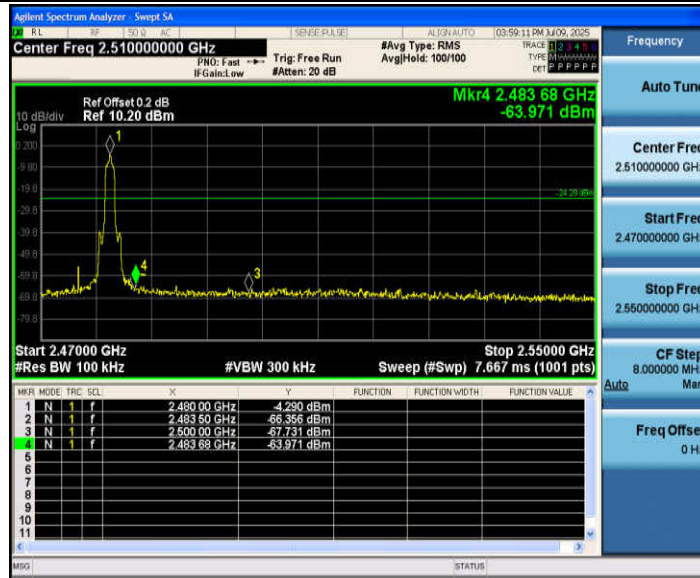
DH5_Ant1_High_Hop_2480



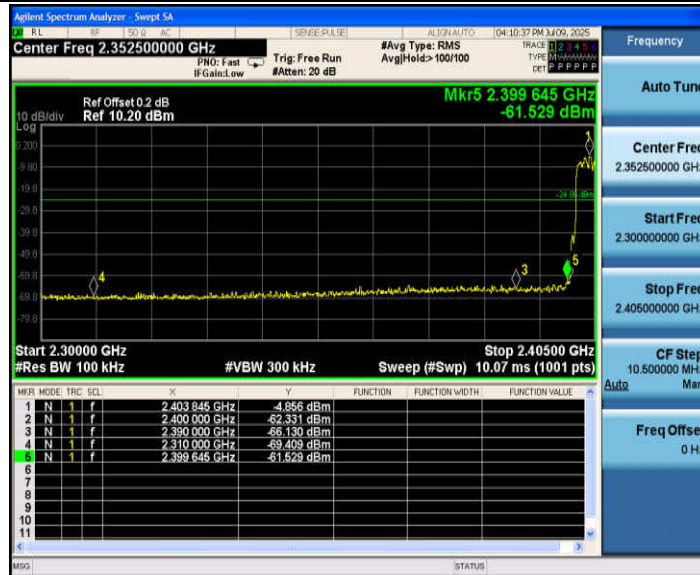
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



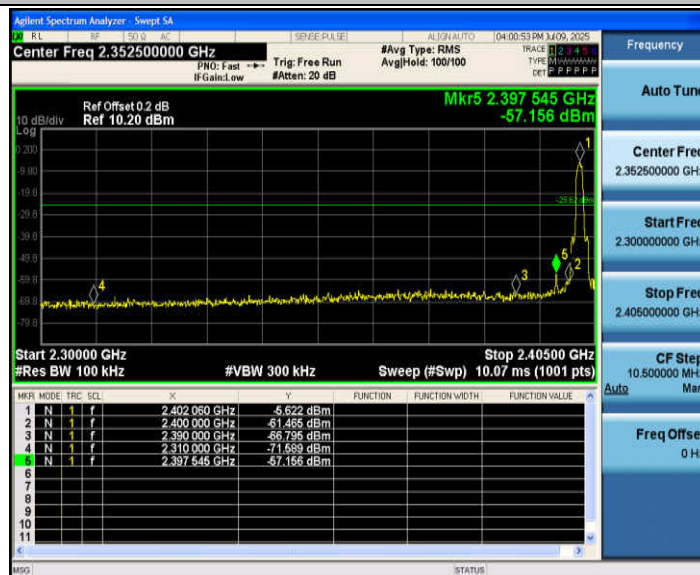
2DH5_Ant1_Low_Hop_2402



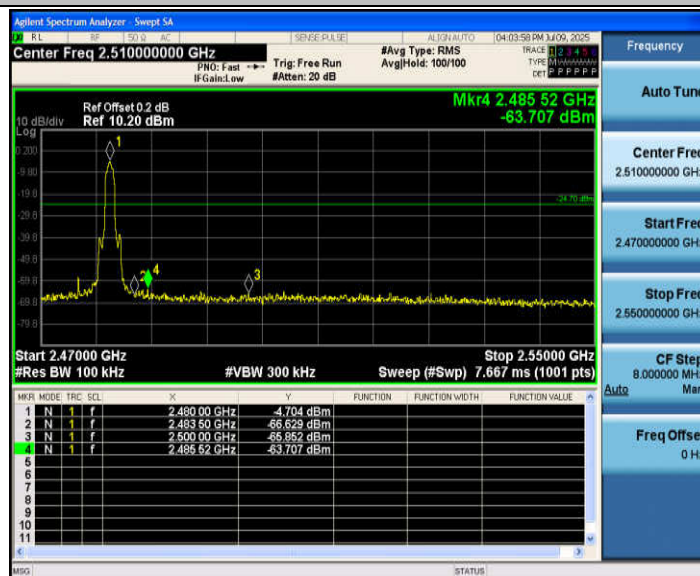
2DH5_Ant1_High_Hop_2480



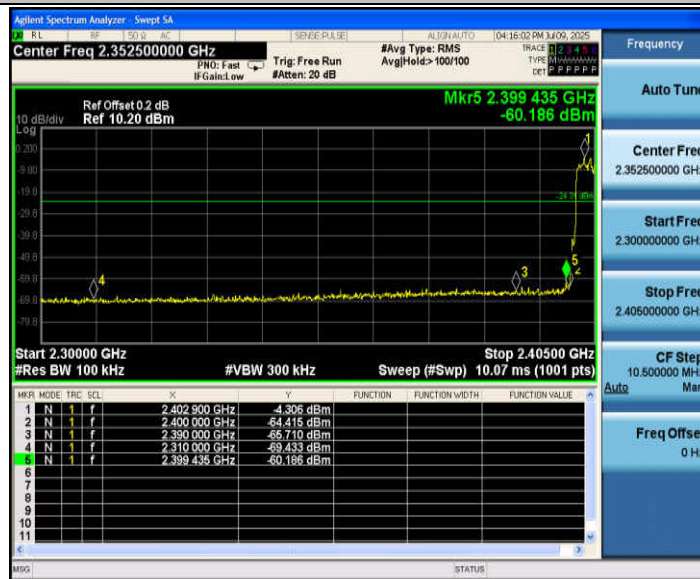
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

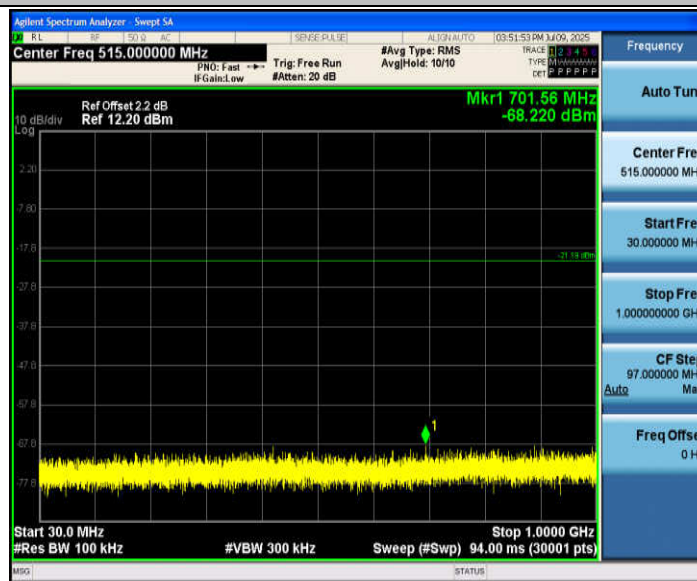
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-68.22	≤-21.19	PASS
			1000~26500	-1.19	-42.07	≤-21.19	PASS
		2441	Reference	-1.46	-1.46	---	PASS
			30~1000	-1.46	-68.66	≤-21.46	PASS
			1000~26500	-1.46	-44.52	≤-21.46	PASS
		2480	Reference	-1.39	-1.39	---	PASS
			30~1000	-1.39	-58.58	≤-21.39	PASS
			1000~26500	-1.39	-42.86	≤-21.39	PASS
2DH5	Ant1	2402	Reference	-4.86	-4.86	---	PASS
			30~1000	-4.86	-67.53	≤-24.86	PASS
			1000~26500	-4.86	-50.11	≤-24.86	PASS
		2441	Reference	-5.71	-5.71	---	PASS
			30~1000	-5.71	-67.91	≤-25.71	PASS
			1000~26500	-5.71	-48.71	≤-25.71	PASS
		2480	Reference	-5.78	-5.78	---	PASS
			30~1000	-5.78	-68.15	≤-25.78	PASS
			1000~26500	-5.78	-47.37	≤-25.78	PASS
3DH5	Ant1	2402	Reference	-4.24	-4.24	---	PASS
			30~1000	-4.24	-68.21	≤-24.24	PASS
			1000~26500	-4.24	-50.06	≤-24.24	PASS
		2441	Reference	-6.46	-6.46	---	PASS
			30~1000	-6.46	-67.75	≤-26.46	PASS
			1000~26500	-6.46	-50.09	≤-26.46	PASS
		2480	Reference	-7.03	-7.03	---	PASS
			30~1000	-7.03	-67.88	≤-27.03	PASS
			1000~26500	-7.03	-50.28	≤-27.03	PASS

Test Graphs

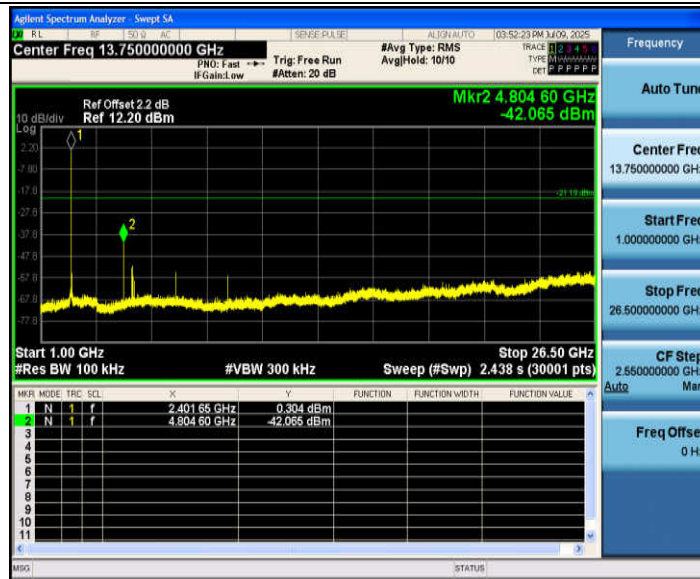
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



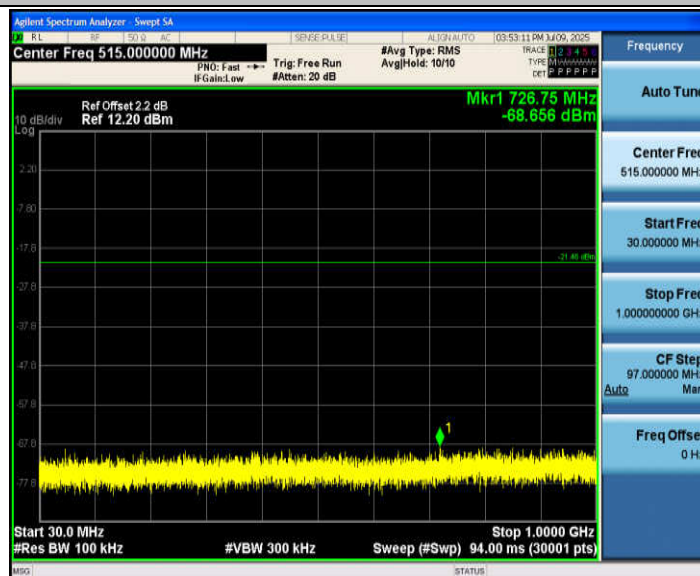
DH5_Ant1_2402_1000~26500



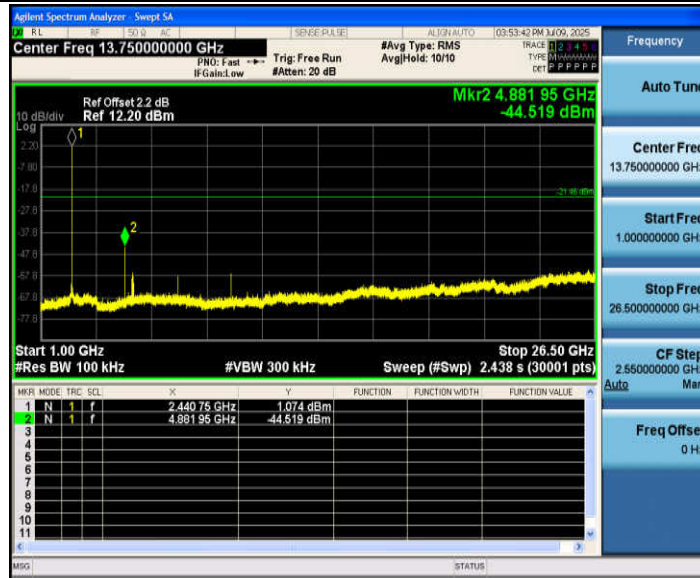
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



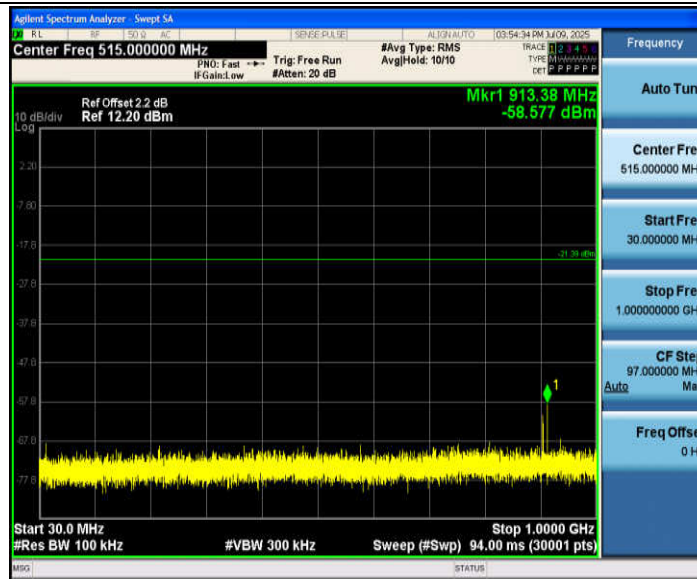
DH5_Ant1_2441_1000~26500



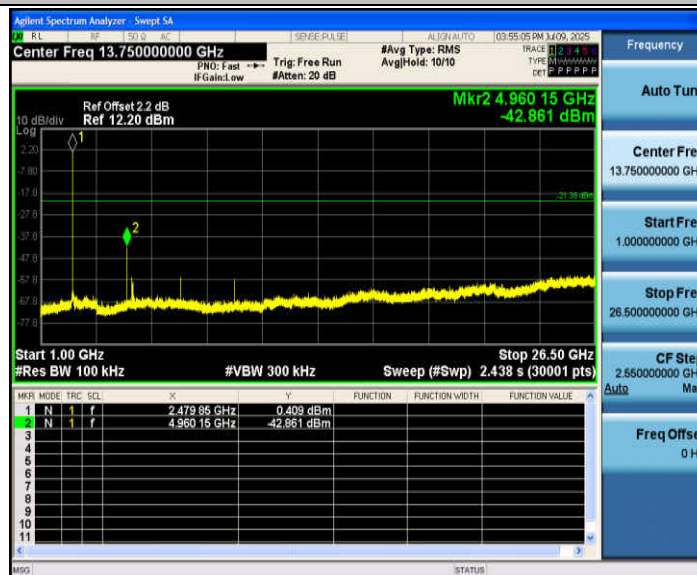
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



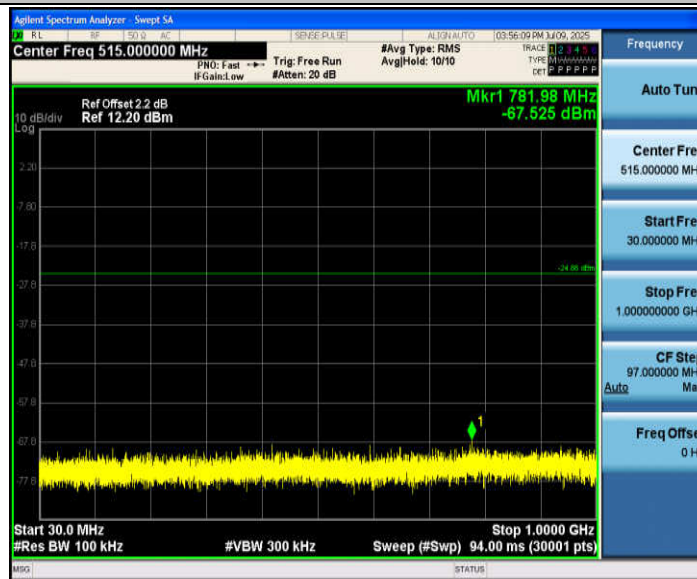
DH5_Ant1_2480_1000~26500



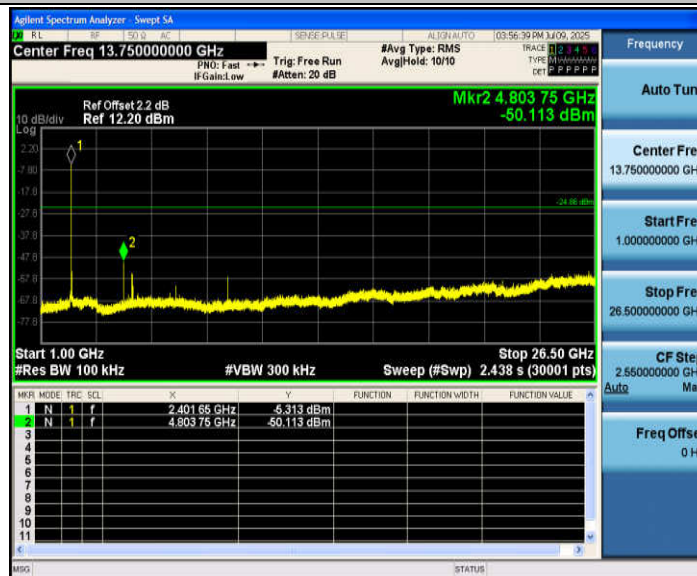
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



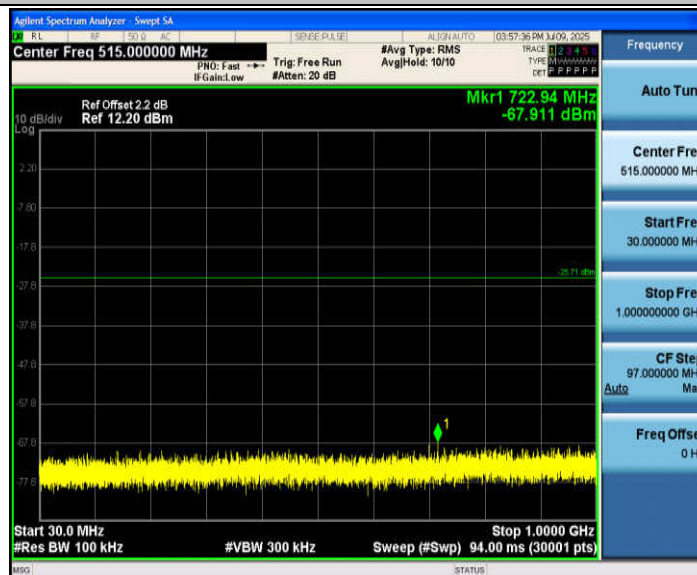
2DH5_Ant1_2402_1000~26500



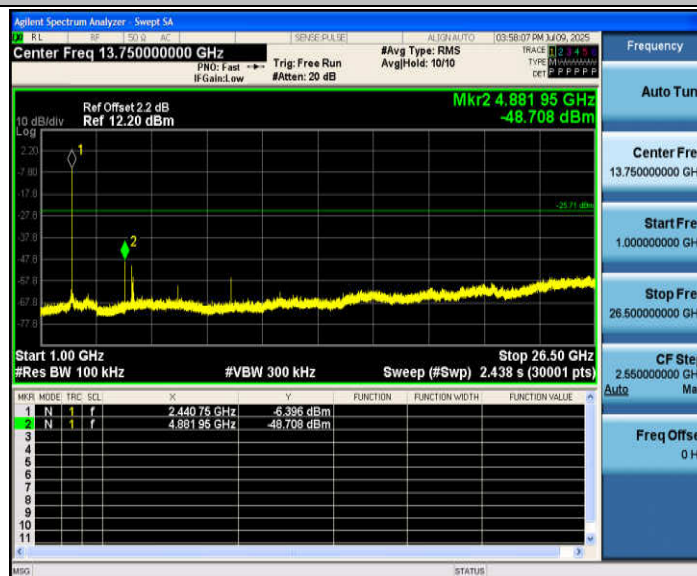
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



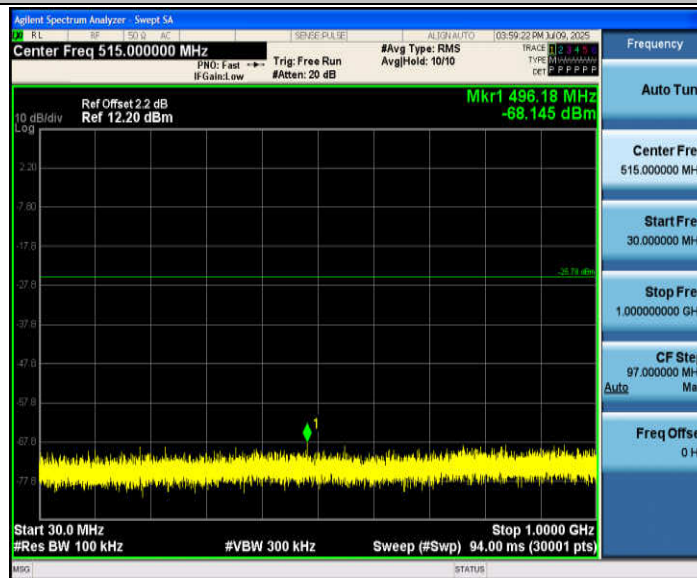
2DH5_Ant1_2441_1000~26500



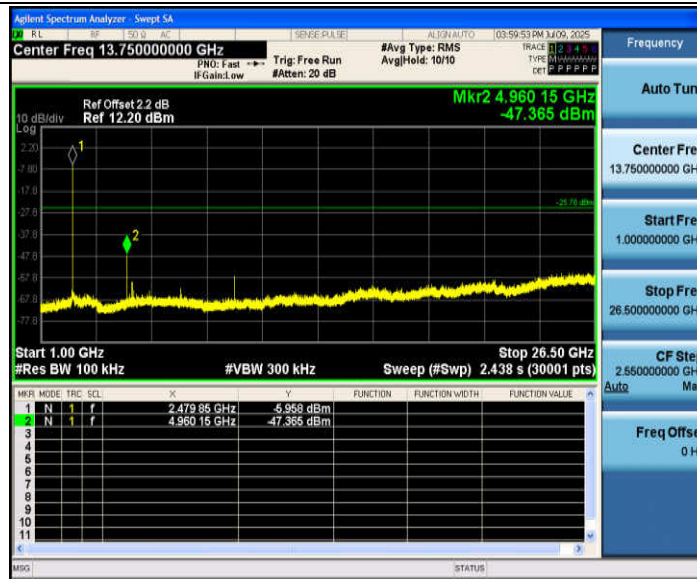
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



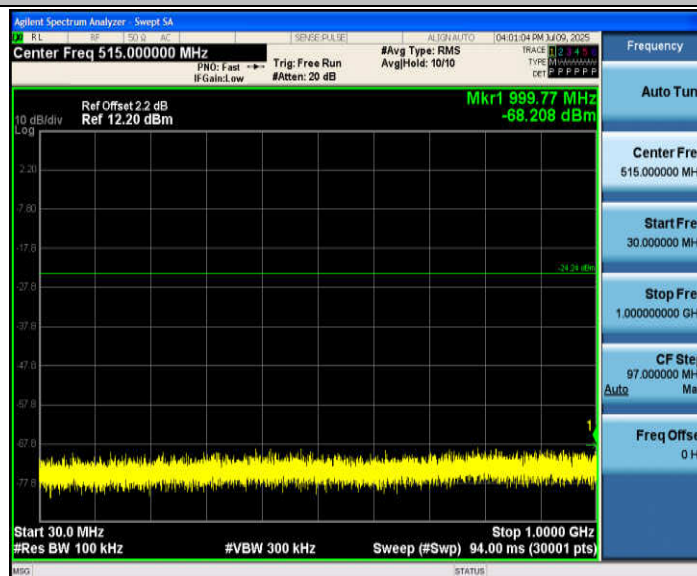
2DH5_Ant1_2480_1000~26500



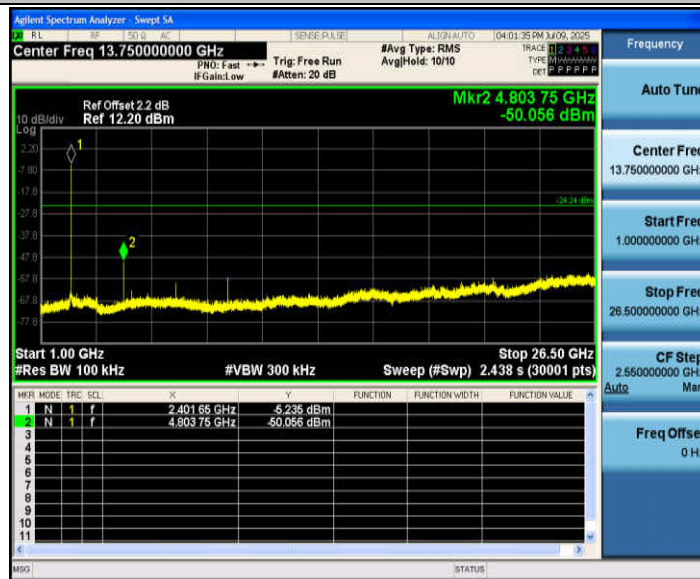
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



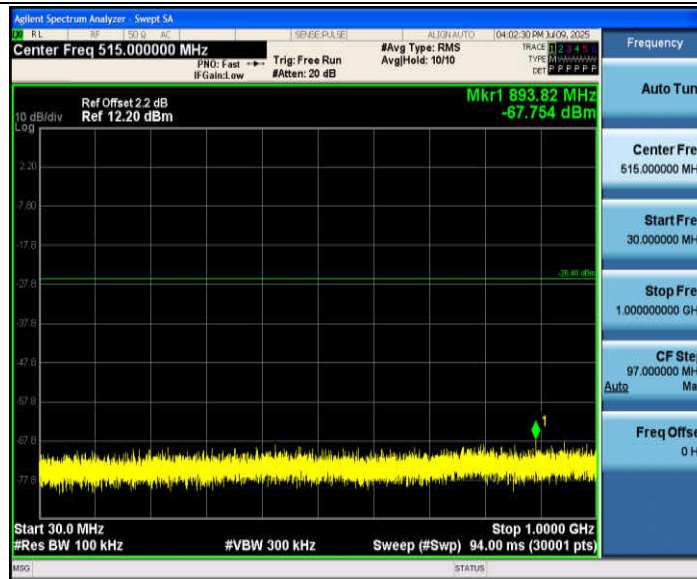
3DH5_Ant1_2402_1000~26500



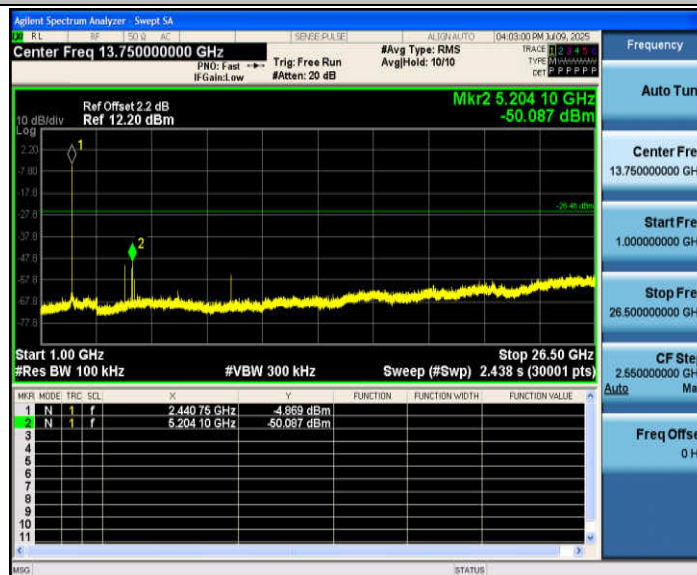
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



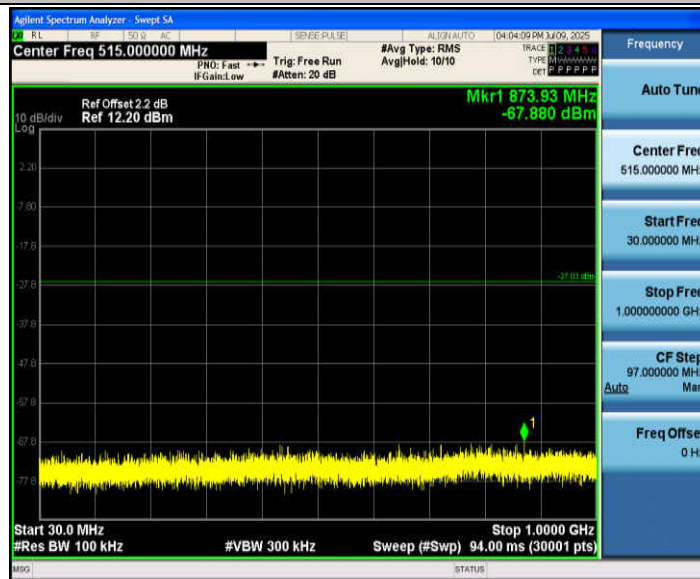
3DH5_Ant1_2441_1000~26500



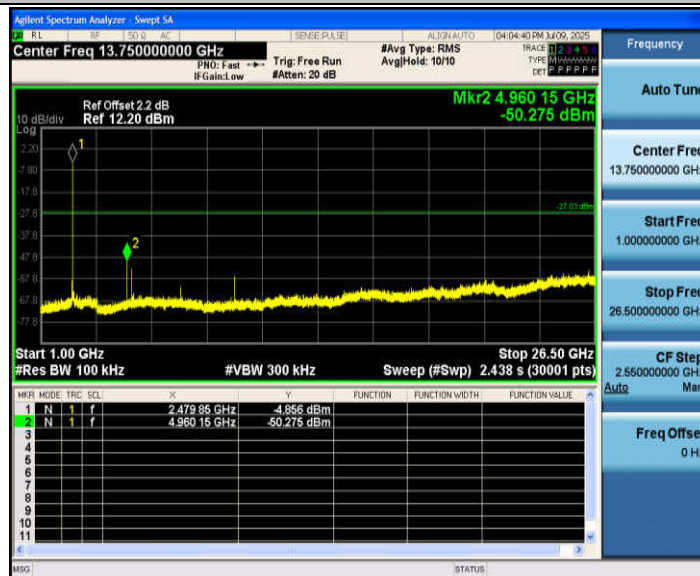
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500

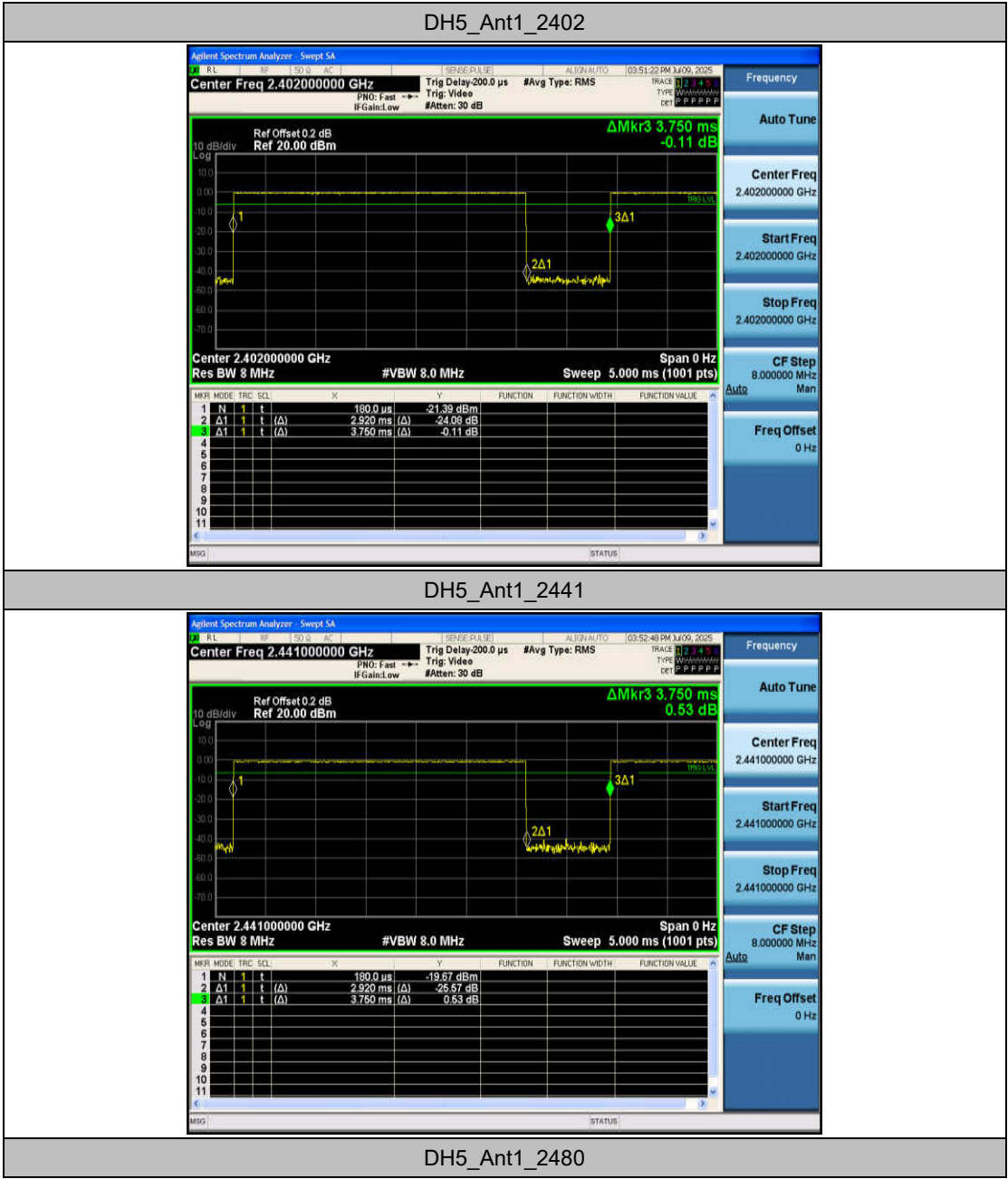


Appendix I: Duty Cycle

Test Result

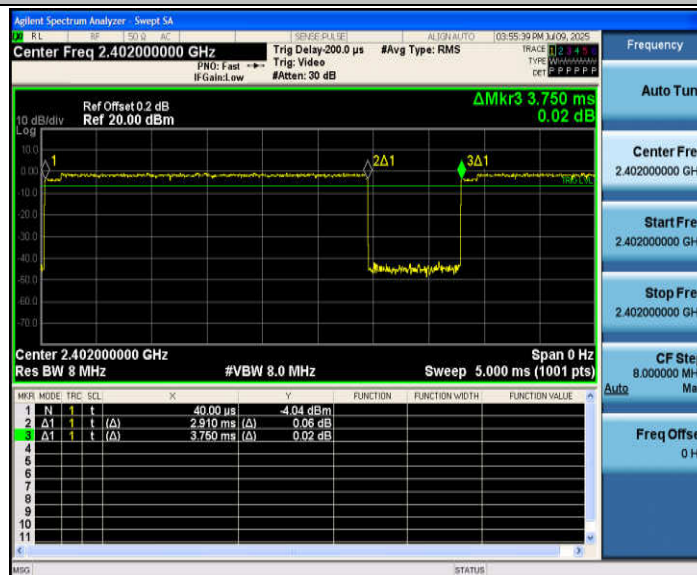
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---
3DH5	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	---	---

Test Graphs

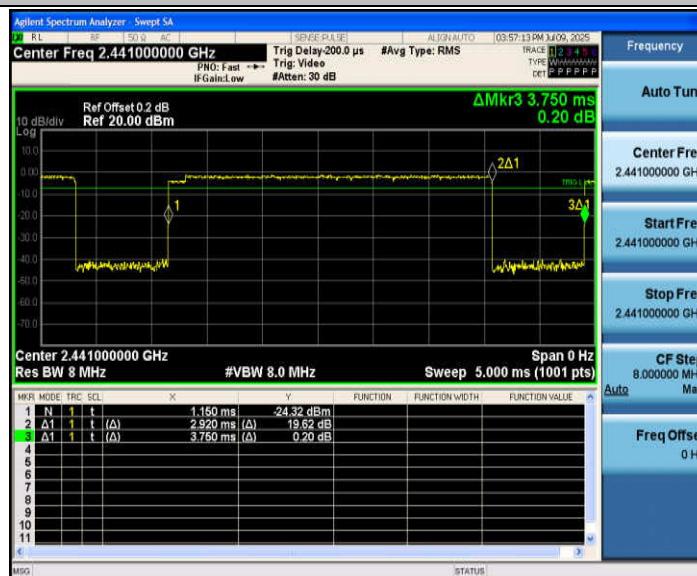




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

