

FCC Appendix RF Test Data for BT

FCC ID : 2BTJ2-H48

Company : Shenzhen Boxuan beauty digital technology Co., LTD

EUT : Sensor Bluetooth speaker stand

Model Number : H48

Report No. : CTA25091702001

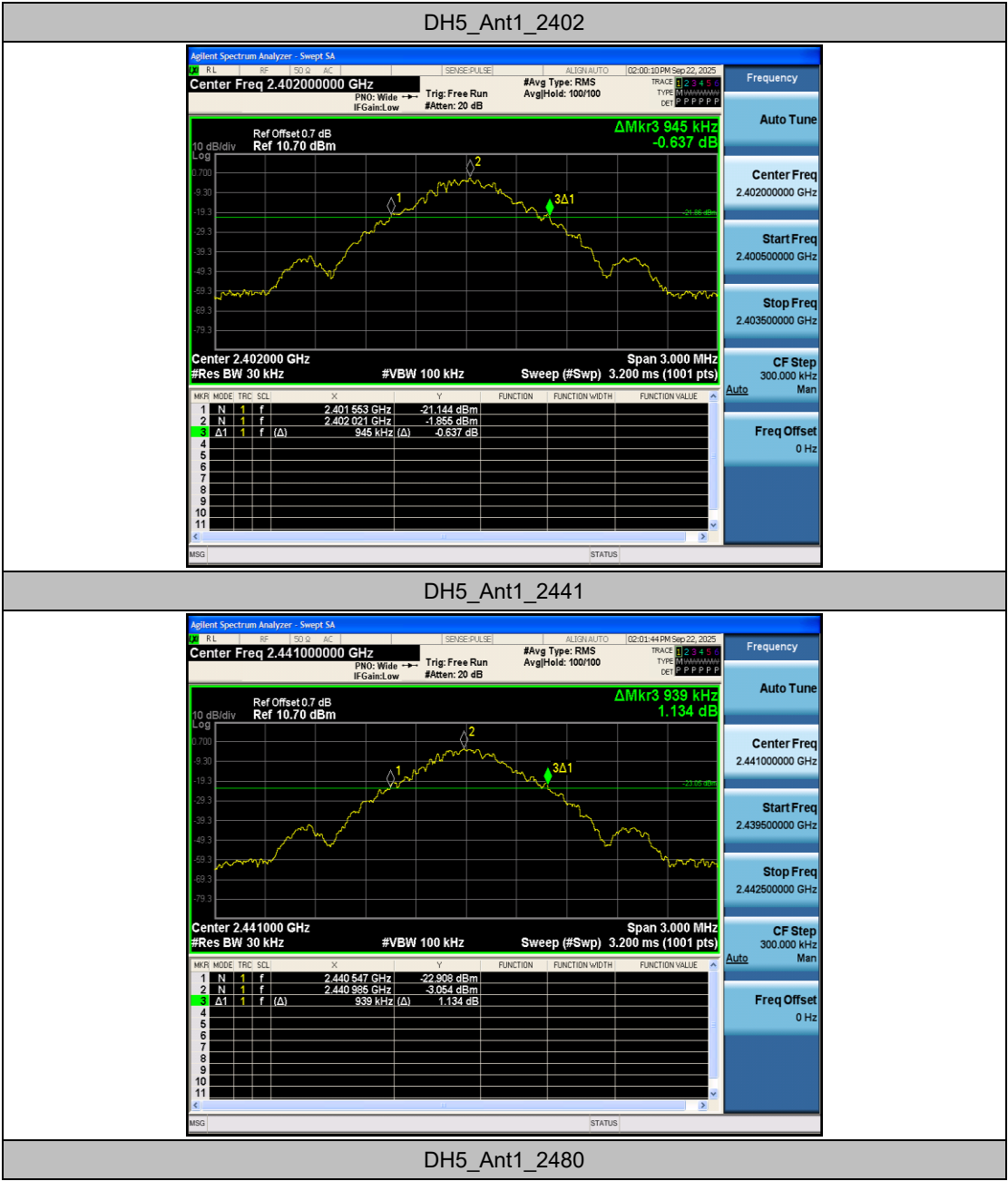
Reviewed By : Eric Wang

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	2401.553	2402.498	---	---
		2441	0.939	2440.547	2441.486	---	---
		2480	0.951	2479.547	2480.498	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.296	2440.373	2441.669	---	---
		2480	1.275	2479.379	2480.654	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

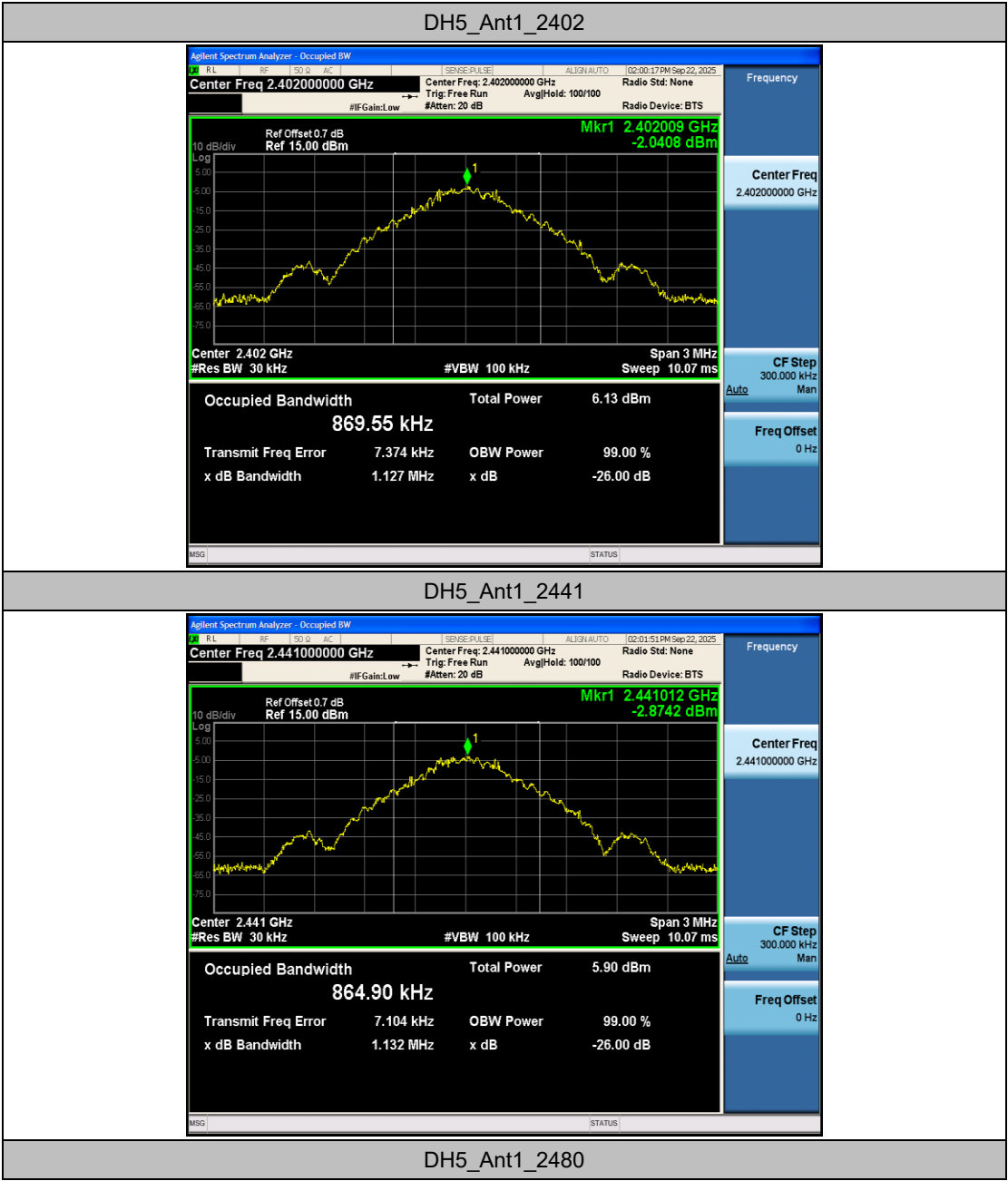


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86955	2401.5726	2402.4421	---	---
		2441	0.86490	2440.5747	2441.4396	---	---
		2480	0.87126	2479.5730	2480.4443	---	---
2DH5	Ant1	2402	1.1913	2401.4137	2402.6050	---	---
		2441	1.1858	2440.4166	2441.6024	---	---
		2480	1.1897	2479.4151	2480.6048	---	---

Test Graphs

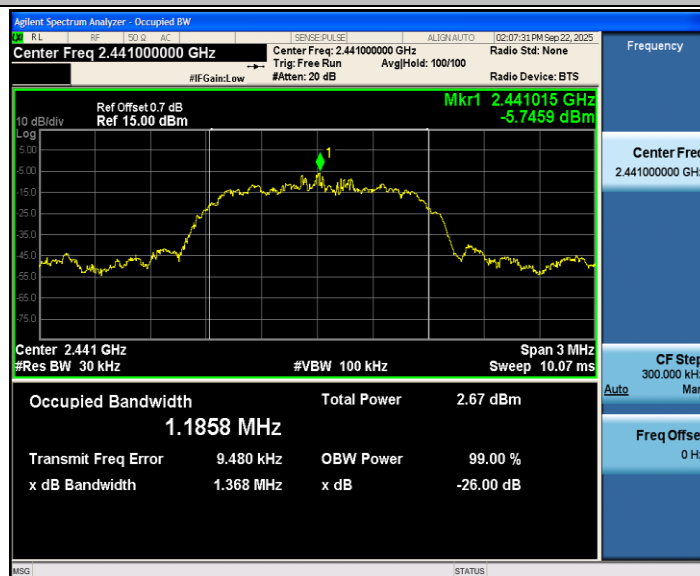




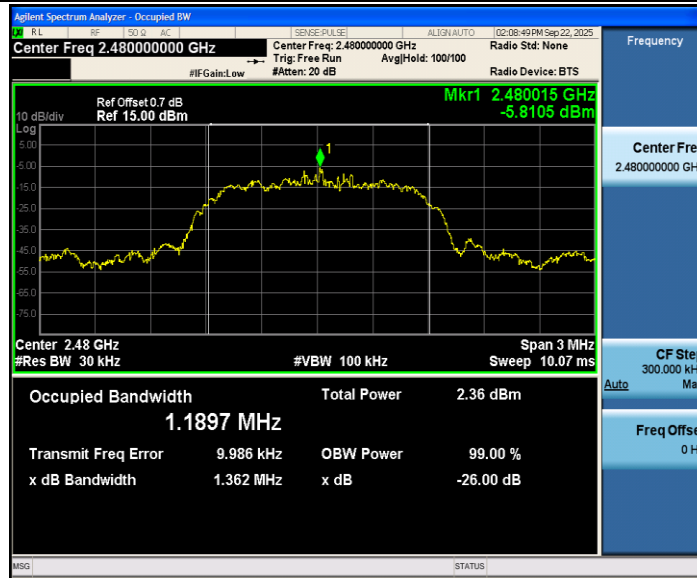
2DH5_Ant1_2402



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	0.14	≤20.97	PASS
		2441	-0.11	≤20.97	PASS
		2480	-0.24	≤20.97	PASS
2DH5	Ant1	2402	-0.64	≤20.97	PASS
		2441	-0.92	≤20.97	PASS
		2480	-1.04	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.951	PASS
2DH5	Ant1	Hop	1.208	≥ 0.864	PASS

Test Graphs

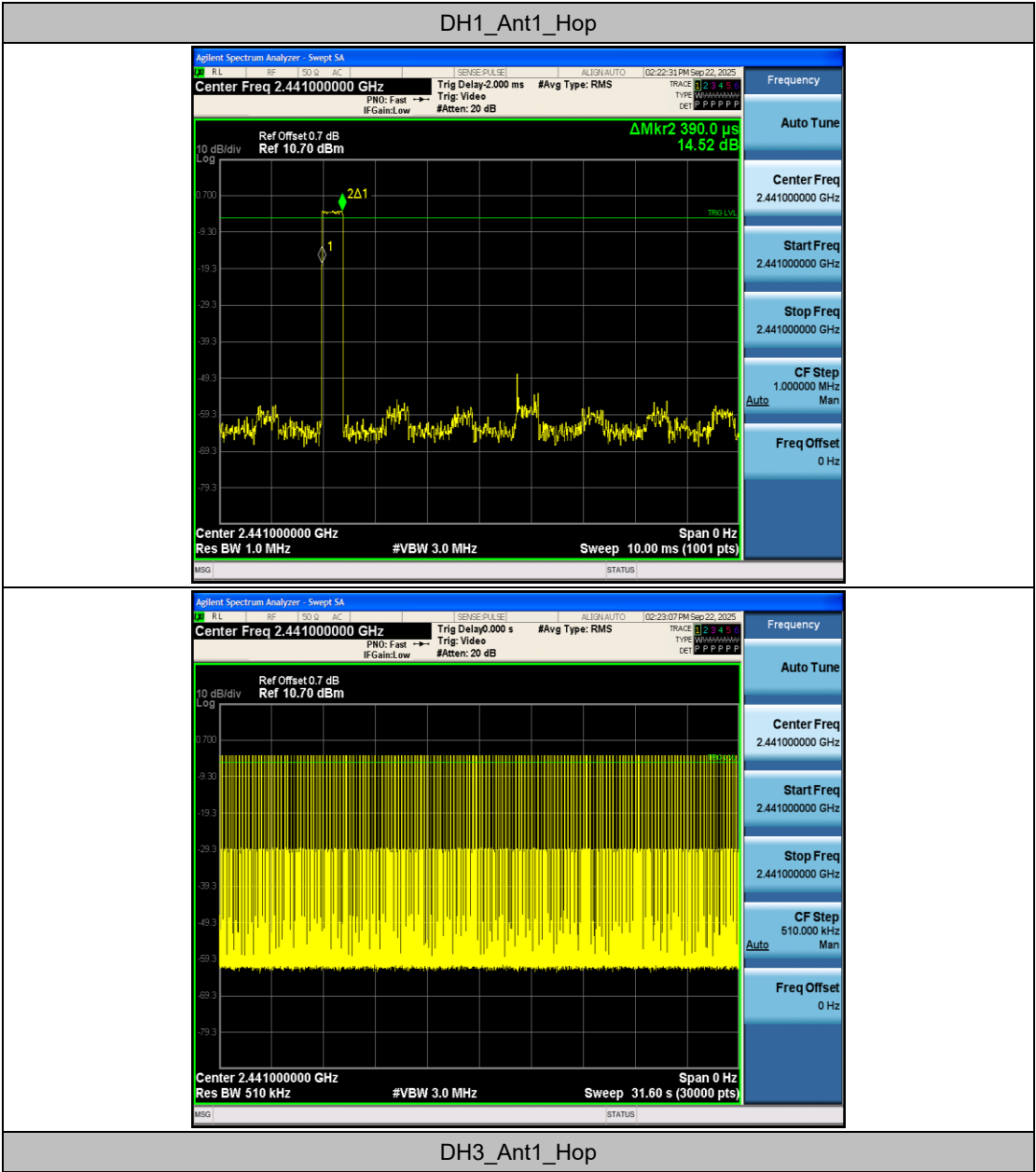


Appendix E: Time of occupancy

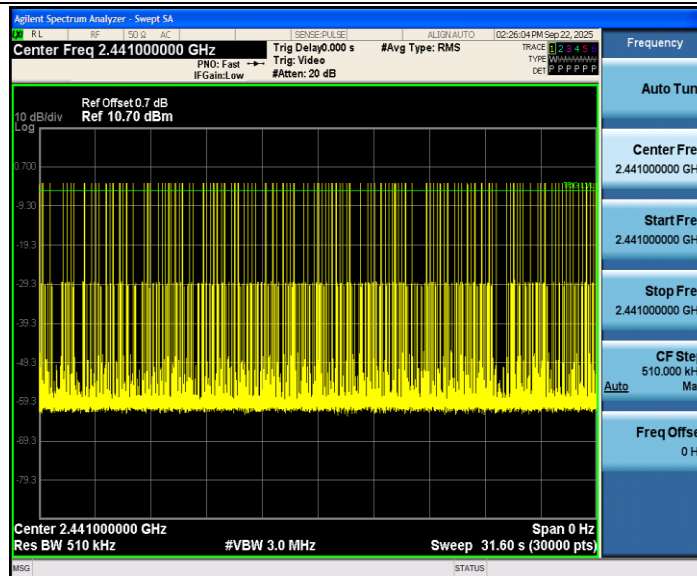
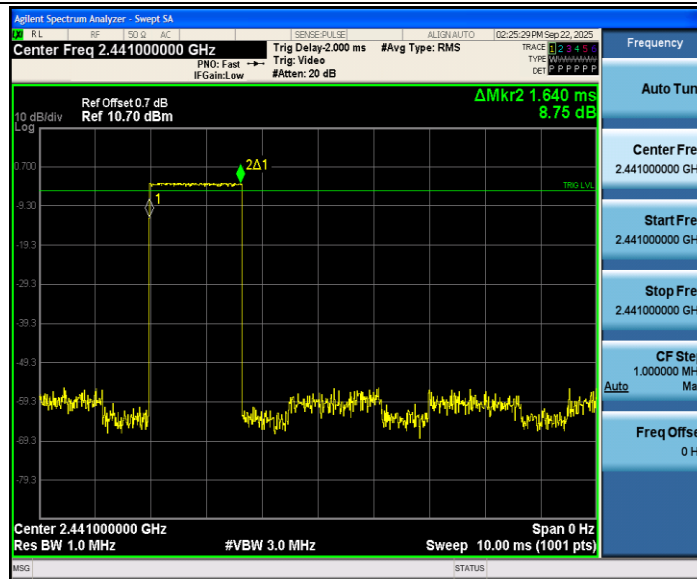
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	150	0.246	≤0.4	PASS
DH5	Ant1	Hop	2.890	93	0.269	≤0.4	PASS
2DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
2DH3	Ant1	Hop	1.640	160	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.900	96	0.278	≤0.4	PASS

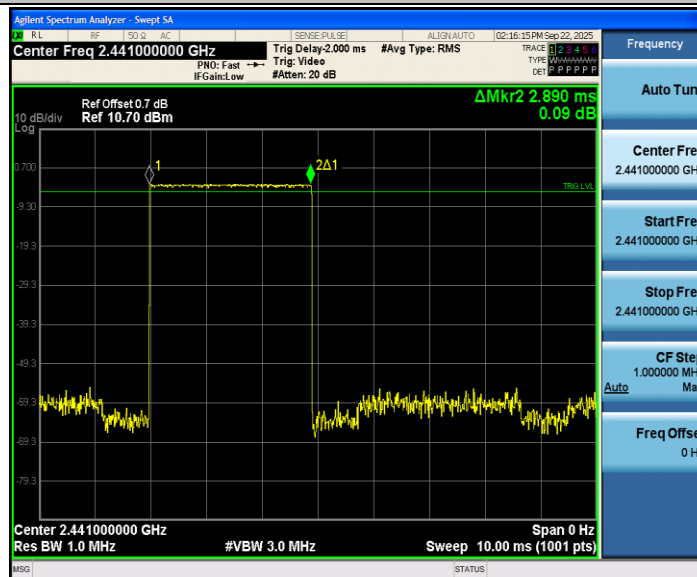
Test Graphs

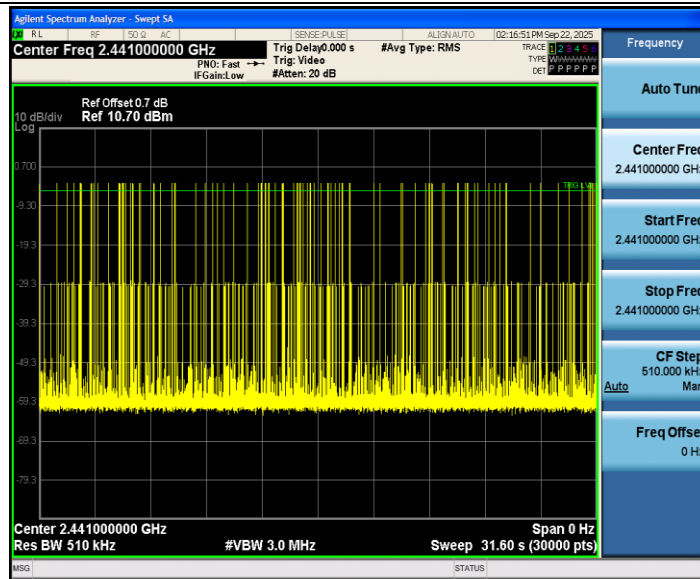


DH3_Ant1_Hop

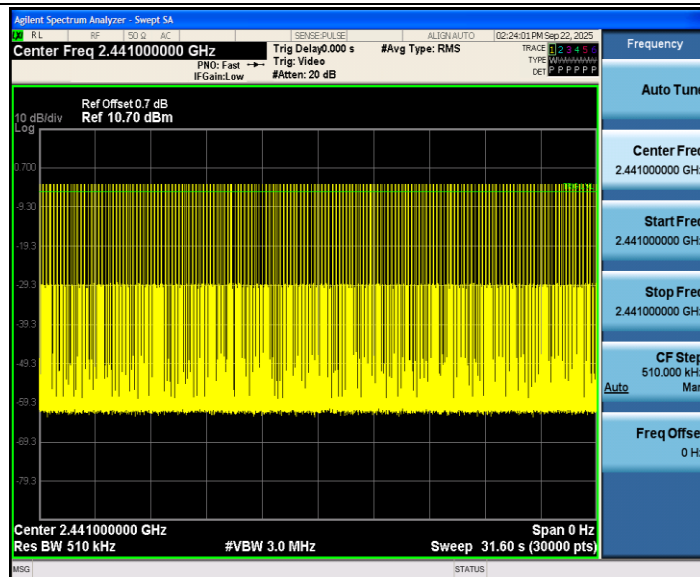
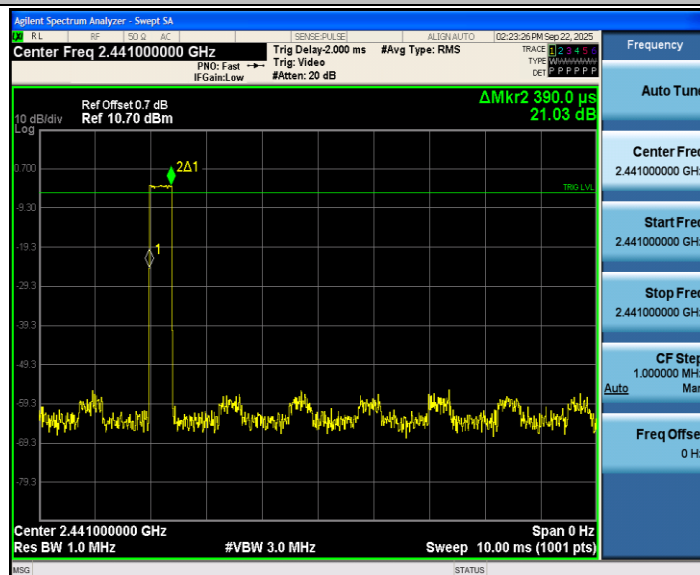


DH5_Ant1_Hop

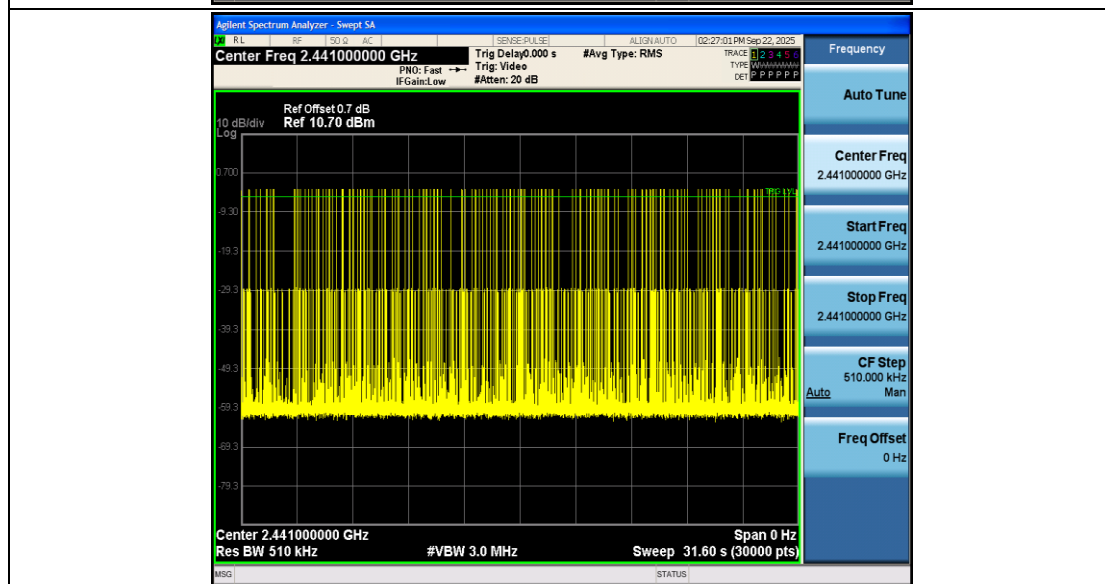




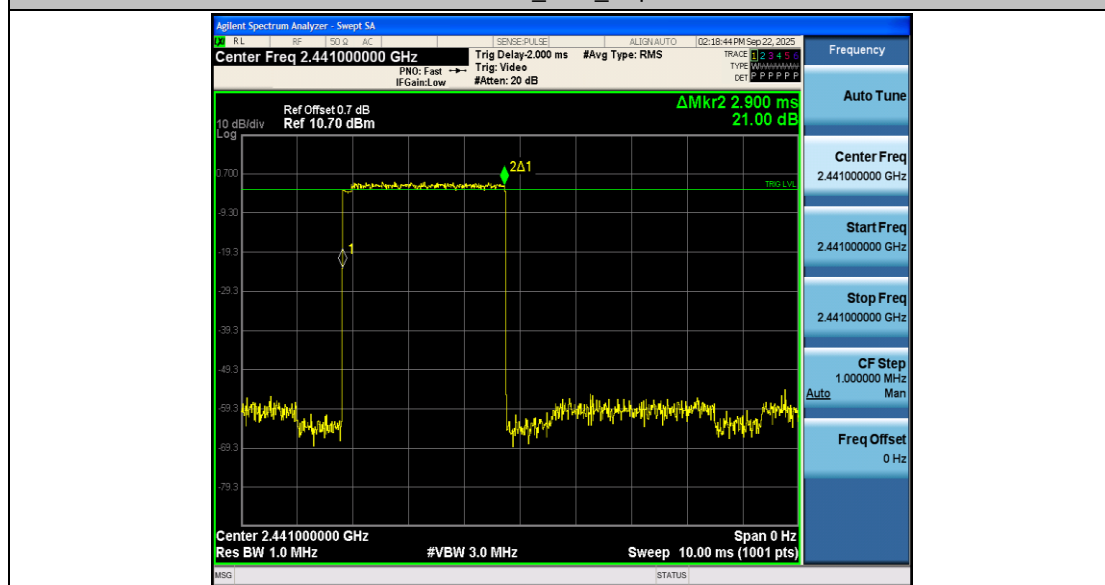
2DH1_Ant1_Hop

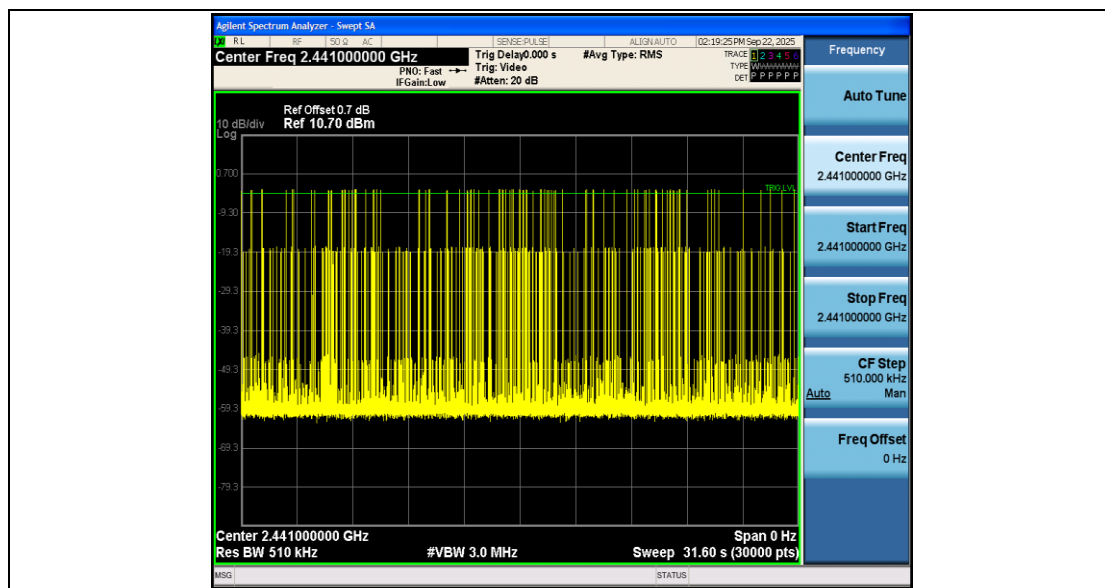


2DH3_Ant1_Hop



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

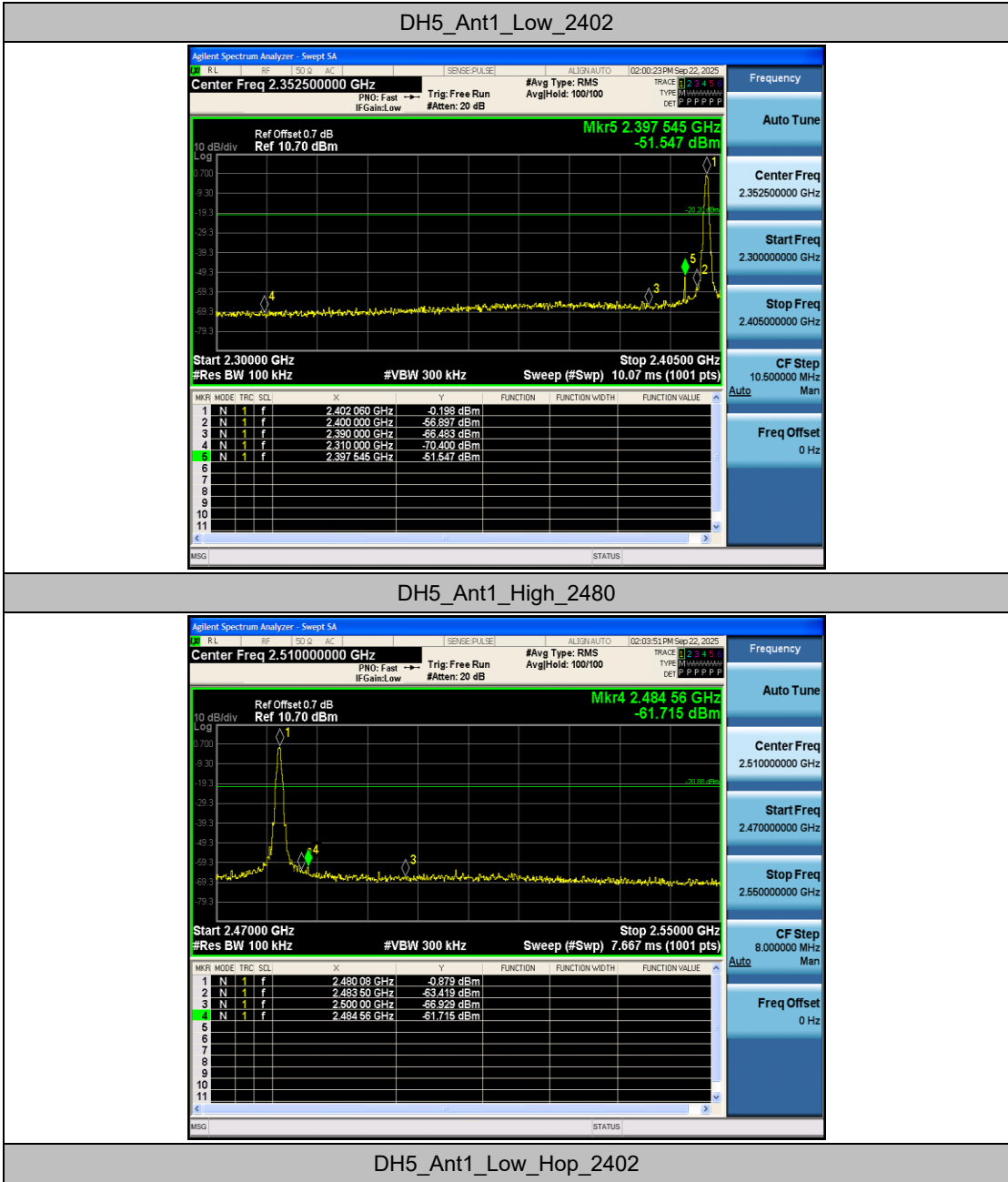


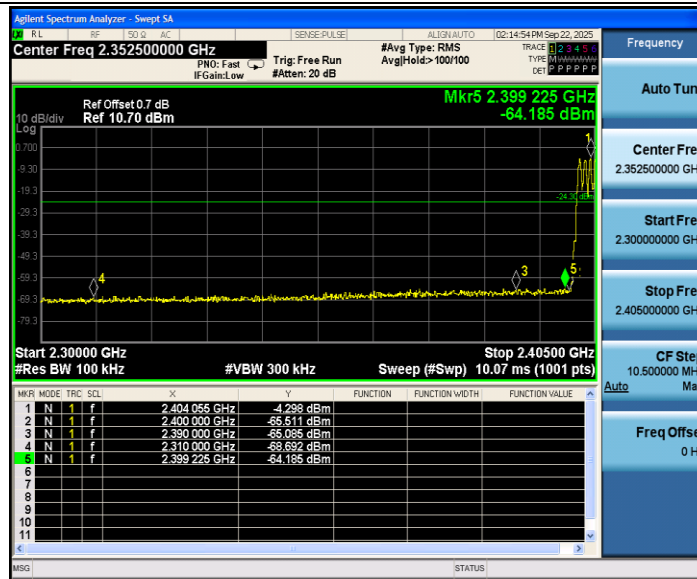
Appendix G: Band edge measurements

Test Result

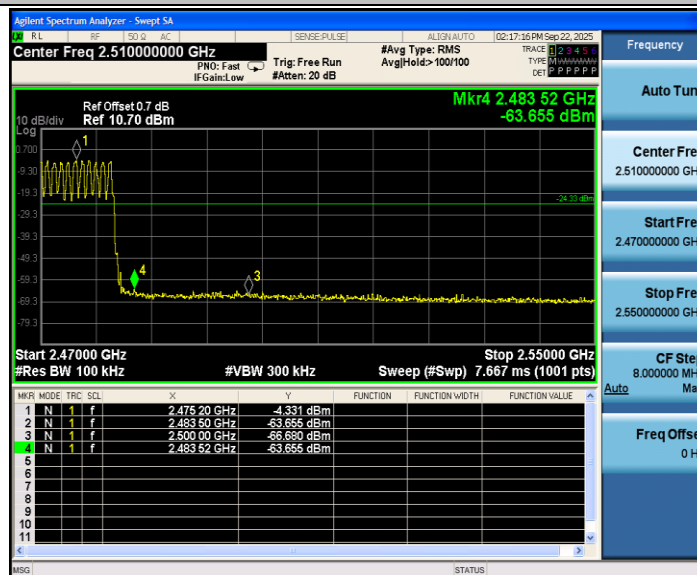
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.20	-51.55	≤-20.2	PASS
		High	2480	-0.88	-61.72	≤-20.88	PASS
		Low	Hop_2402	-4.30	-64.19	≤-24.3	PASS
		High	Hop_2480	-4.33	-63.66	≤-24.33	PASS
2DH5	Ant1	Low	2402	-3.58	-56.62	≤-23.58	PASS
		High	2480	-4.24	-57.15	≤-24.24	PASS
		Low	Hop_2402	-7.06	-60.1	≤-27.06	PASS
		High	Hop_2480	-3.88	-63.8	≤-23.88	PASS

Test Graphs

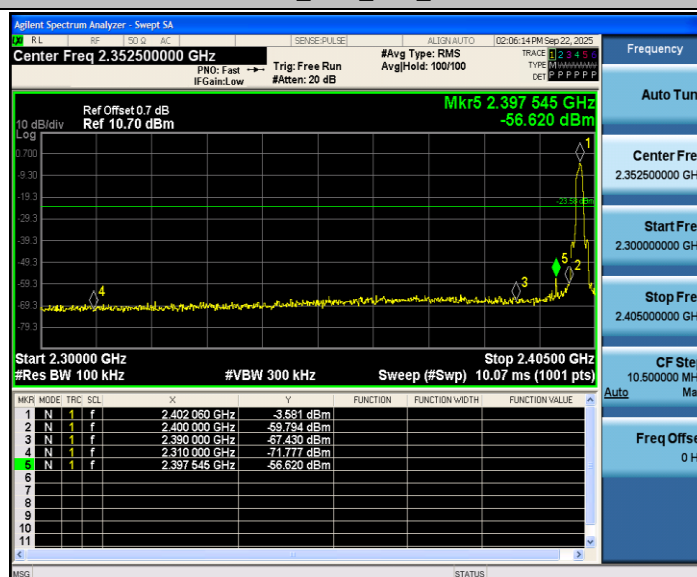




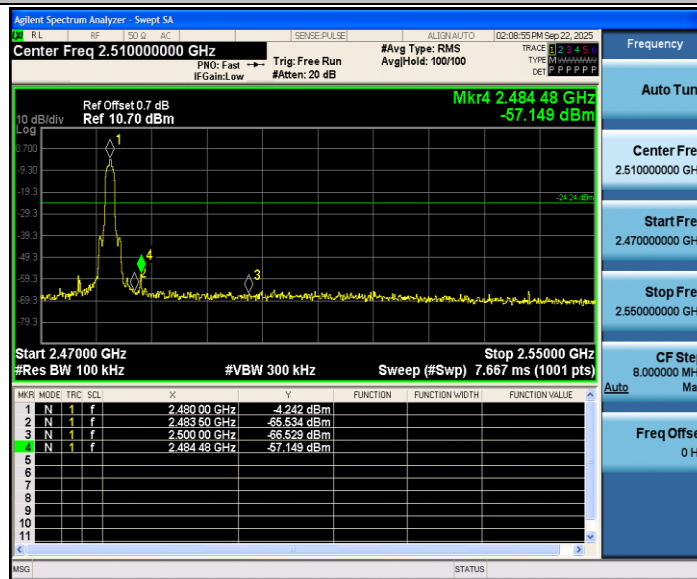
DH5_Ant1_High_Hop_2480



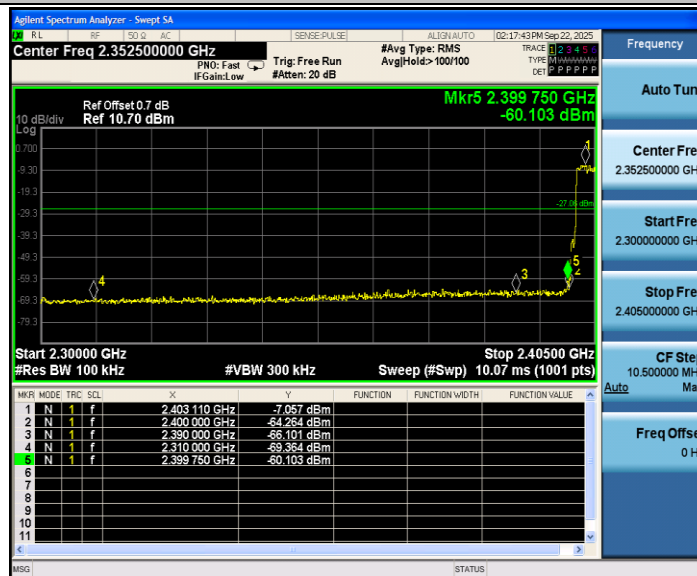
2DH5_Ant1_Low_2402



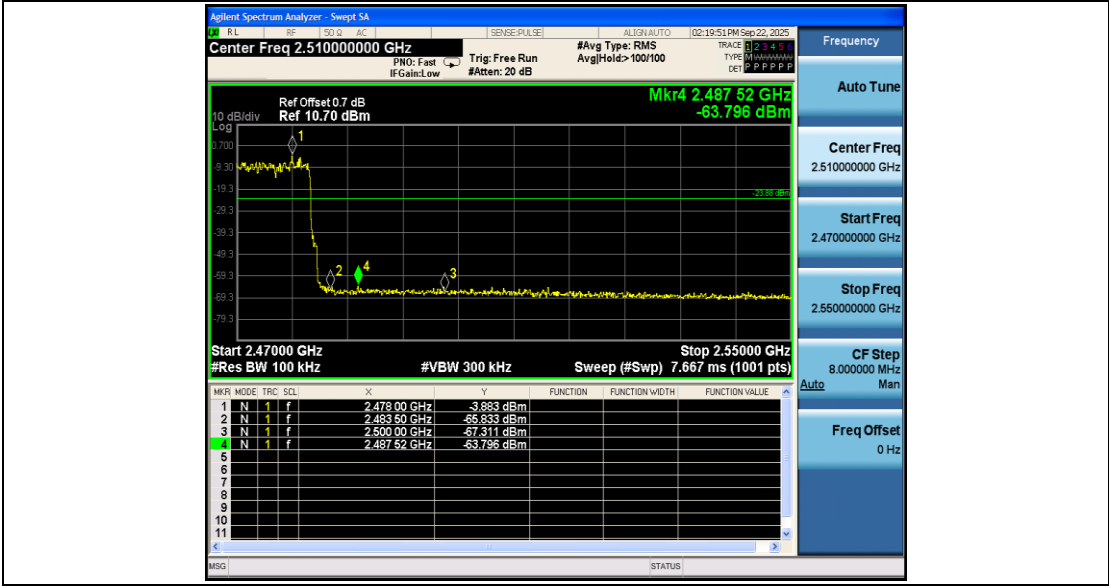
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

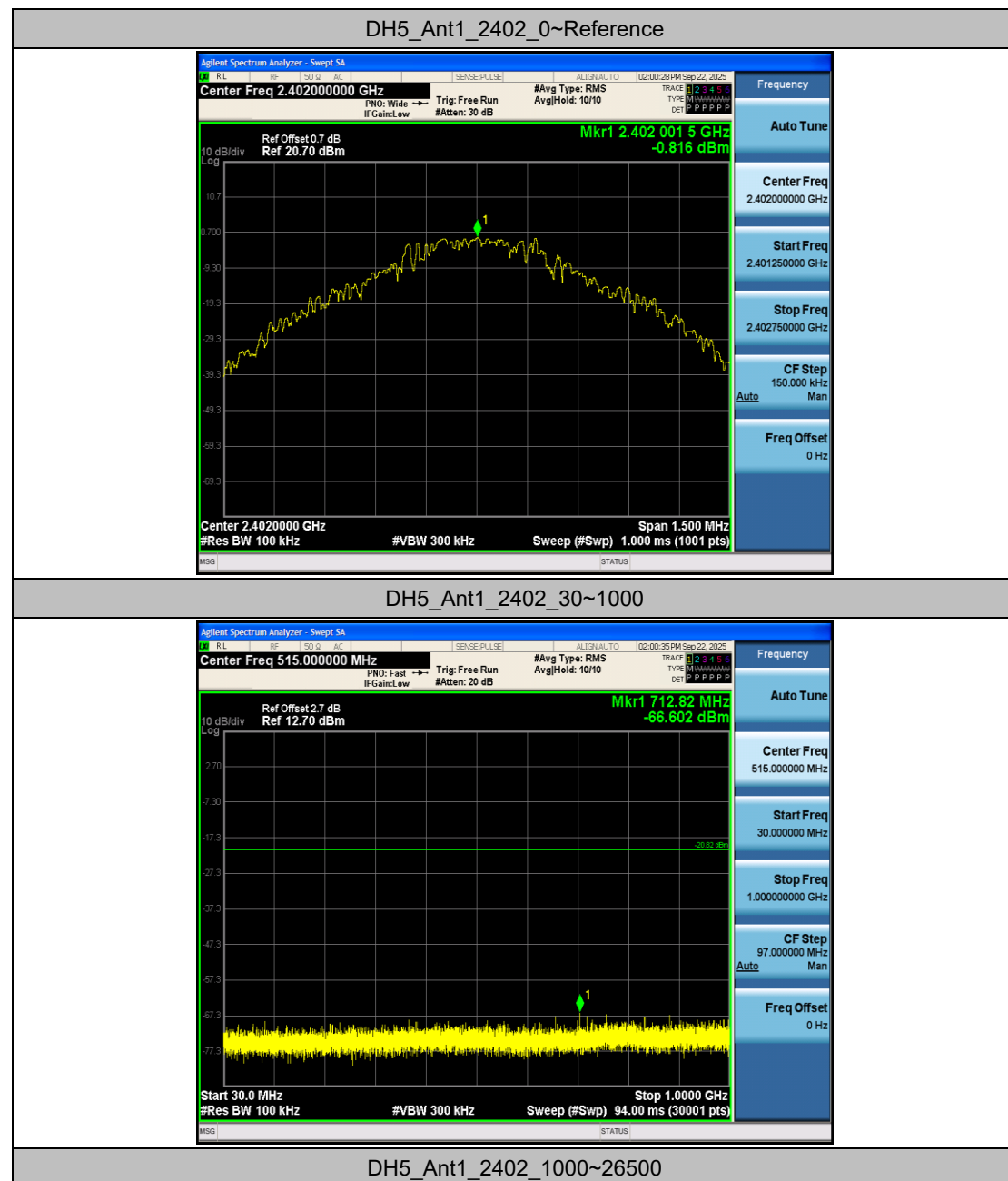


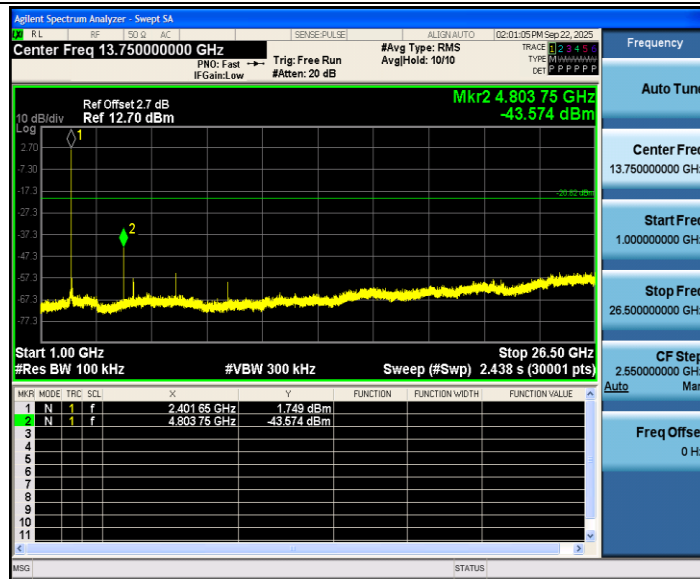
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.82	-0.82	---	PASS
			30~1000	-0.82	-66.6	≤-20.82	PASS
			1000~26500	-0.82	-43.57	≤-20.82	PASS
		2441	Reference	-0.74	-0.74	---	PASS
			30~1000	-0.74	-67.28	≤-20.74	PASS
			1000~26500	-0.74	-41.46	≤-20.74	PASS
		2480	Reference	-1.41	-1.41	---	PASS
			30~1000	-1.41	-67.63	≤-21.41	PASS
			1000~26500	-1.41	-43.46	≤-21.41	PASS
2DH5	Ant1	2402	Reference	-4.58	-4.58	---	PASS
			30~1000	-4.58	-67.38	≤-24.58	PASS
			1000~26500	-4.58	-50.39	≤-24.58	PASS
		2441	Reference	-4.19	-4.19	---	PASS
			30~1000	-4.19	-67.66	≤-24.19	PASS
			1000~26500	-4.19	-46.62	≤-24.19	PASS
		2480	Reference	-3.79	-3.79	---	PASS
			30~1000	-3.79	-67.59	≤-23.79	PASS
			1000~26500	-3.79	-50.5	≤-23.79	PASS

Test Graphs

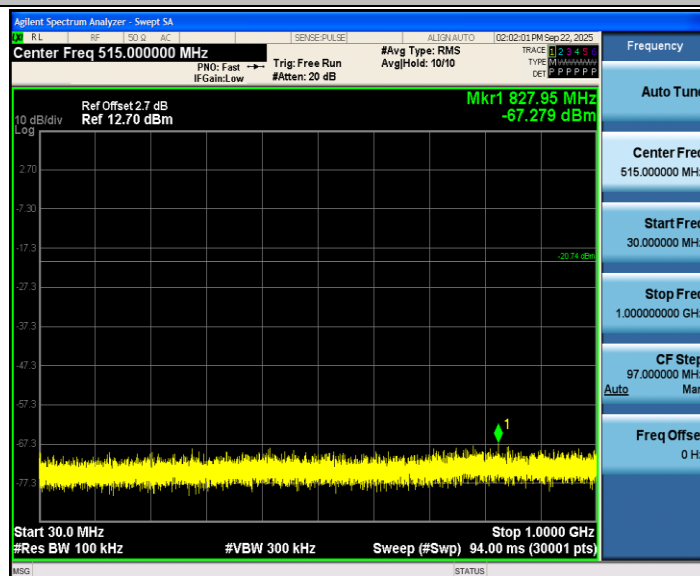




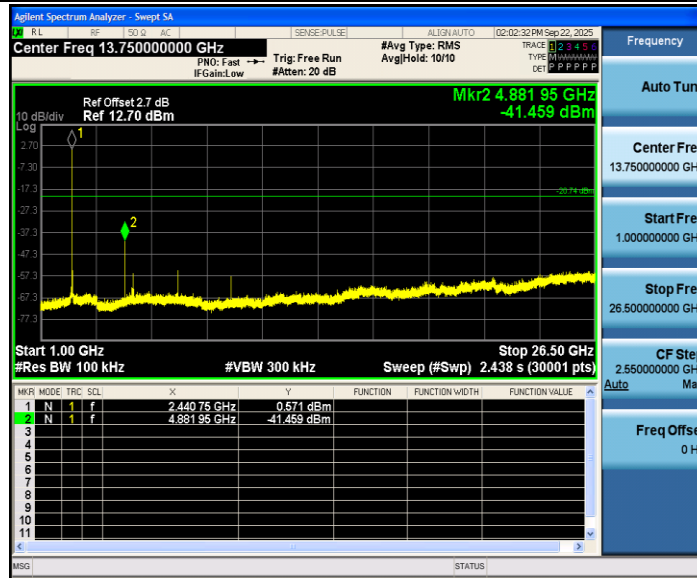
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



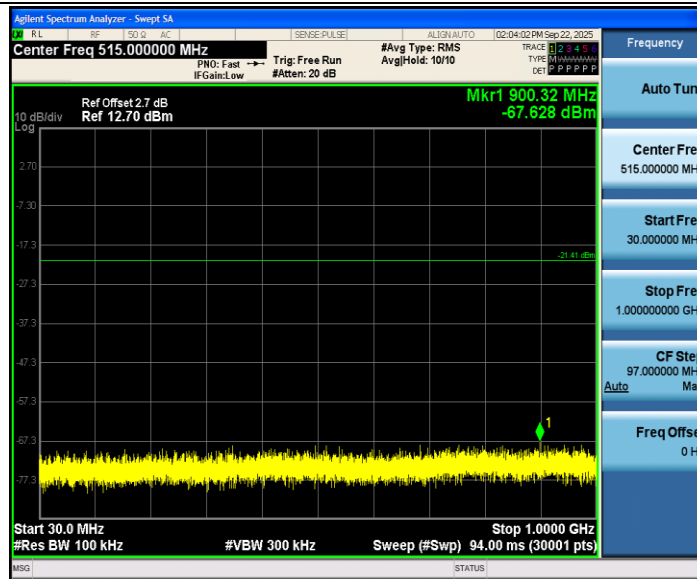
DH5_Ant1_2441_1000~26500



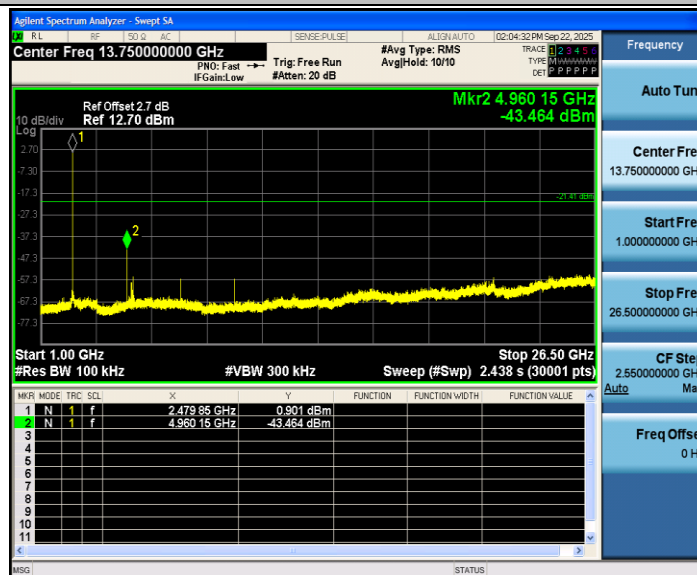
DH5_Ant1_2480_0~Reference



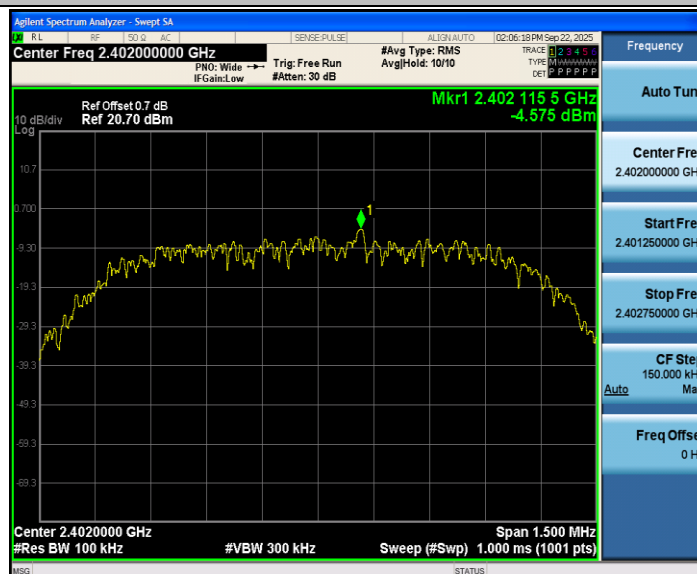
DH5_Ant1_2480_30~1000



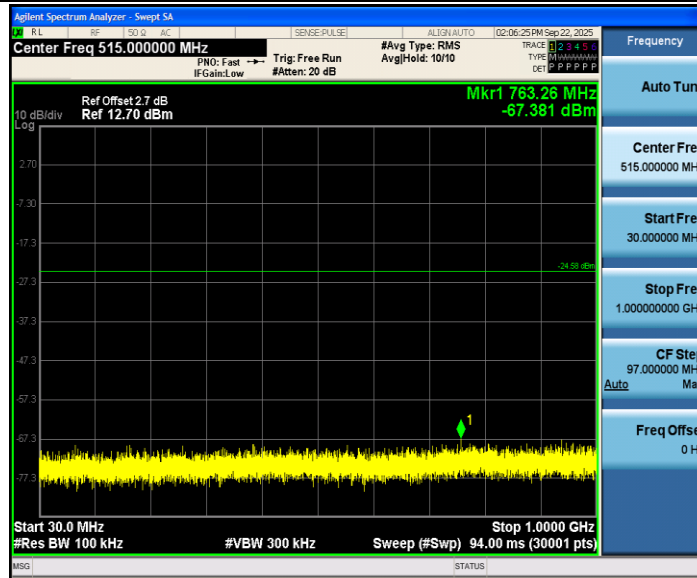
DH5_Ant1_2480_1000~26500



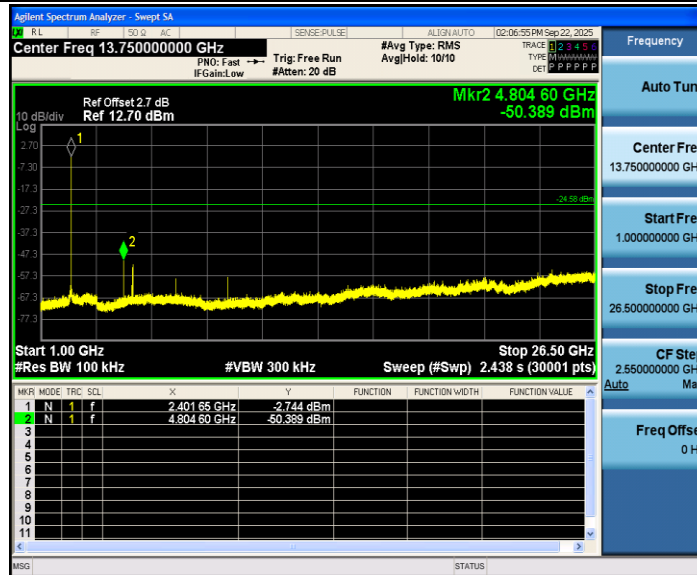
2DH5_Ant1_2402_0~Reference



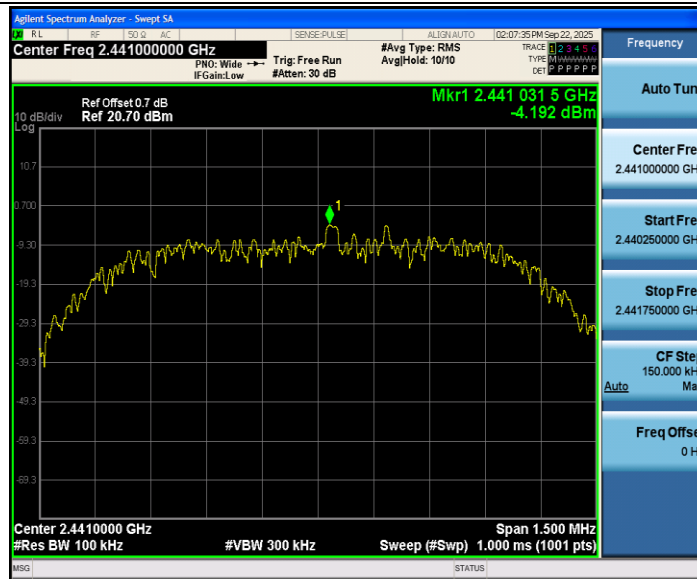
2DH5_Ant1_2402_30~1000



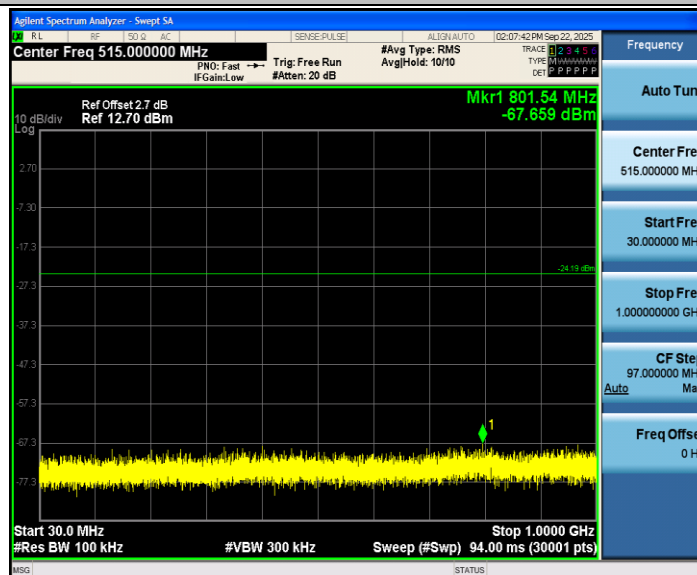
2DH5_Ant1_2402_1000~26500



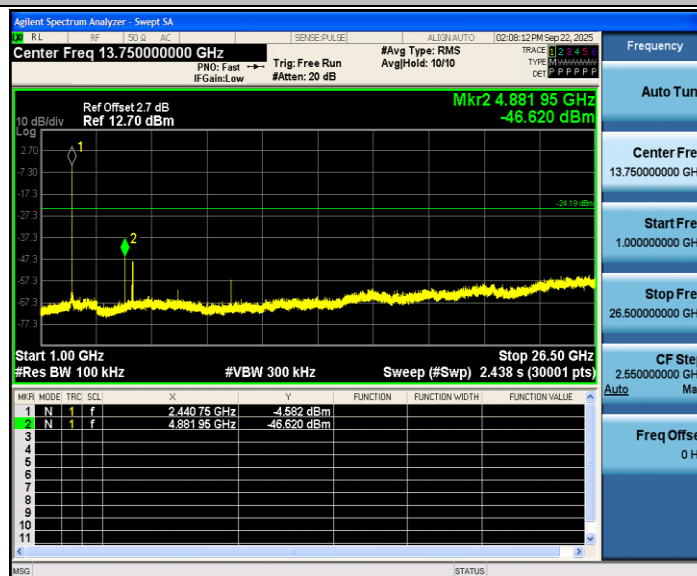
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



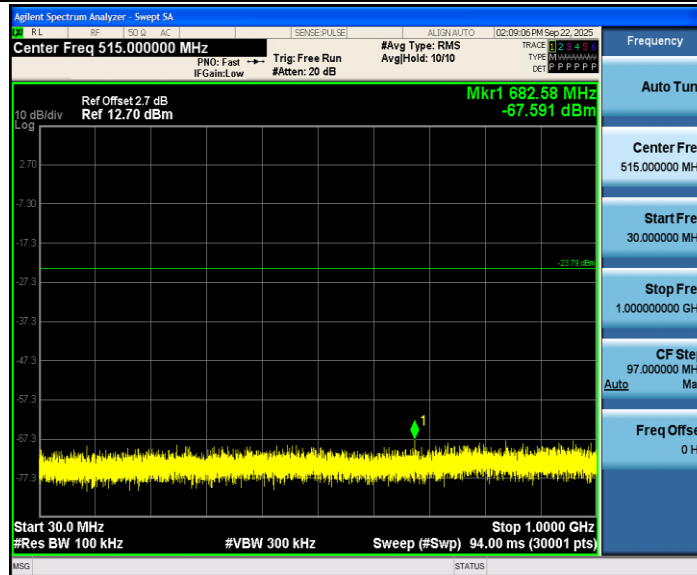
2DH5_Ant1_2441_1000~26500



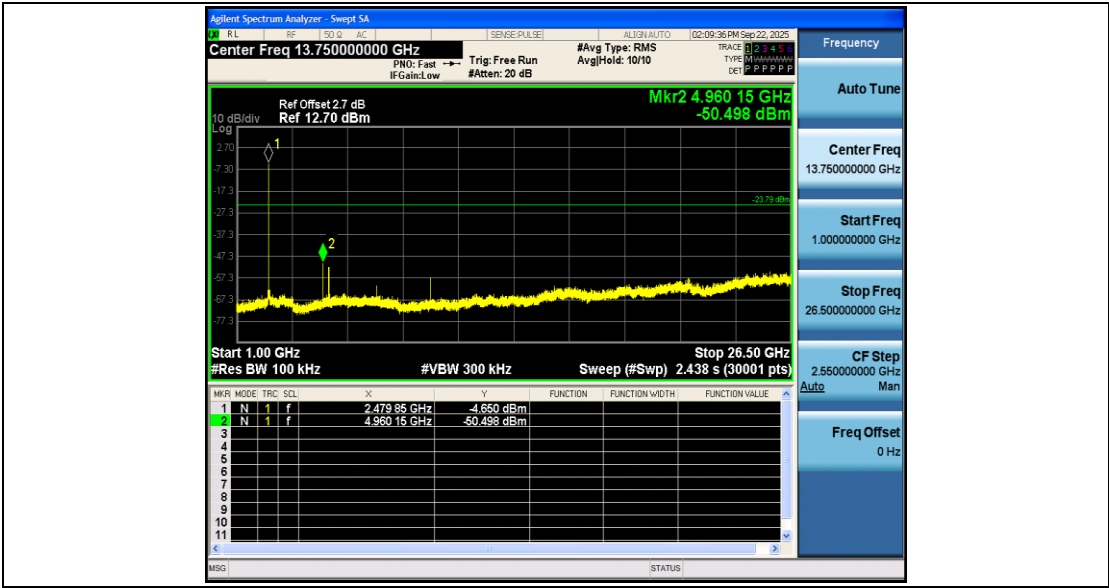
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

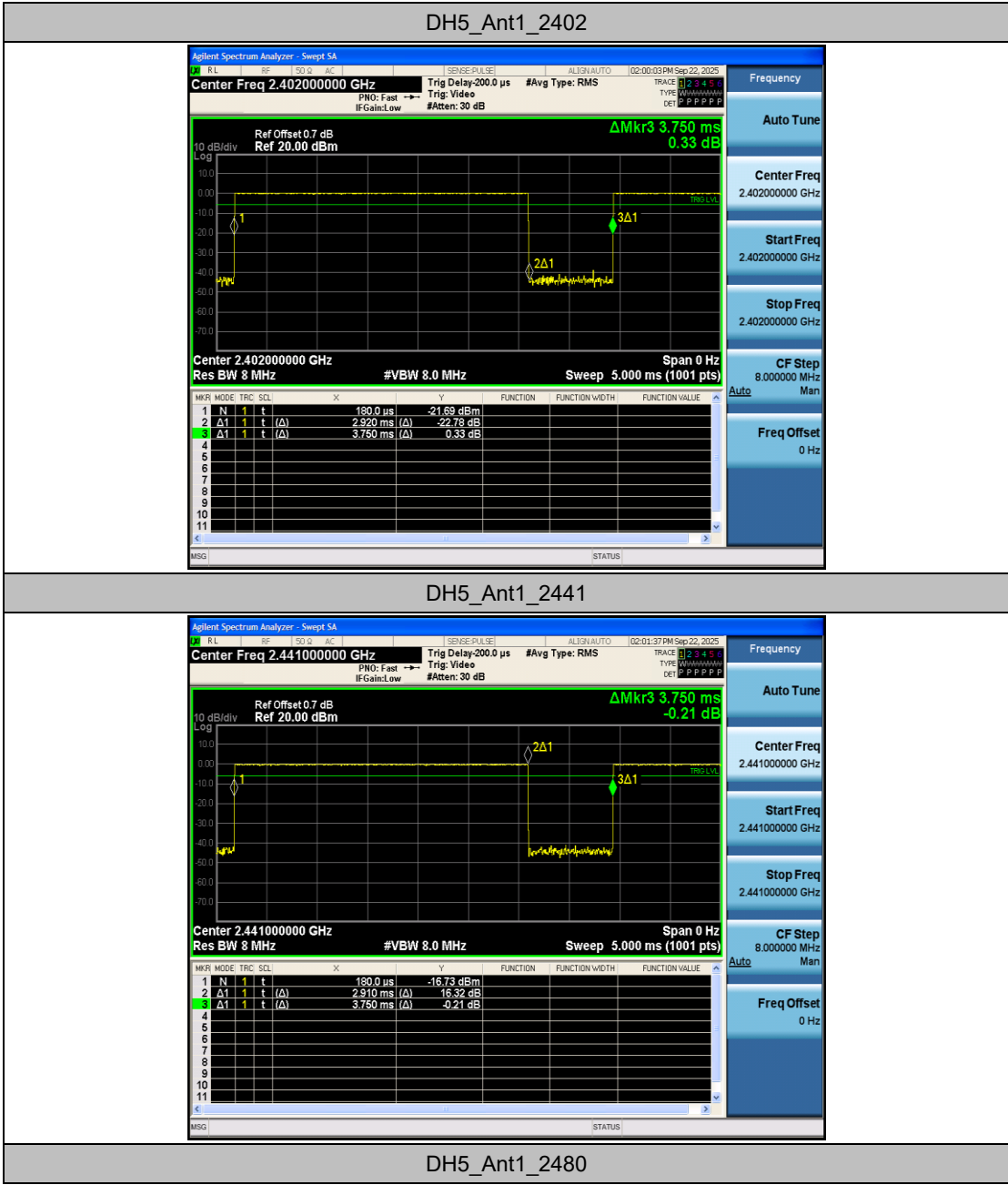


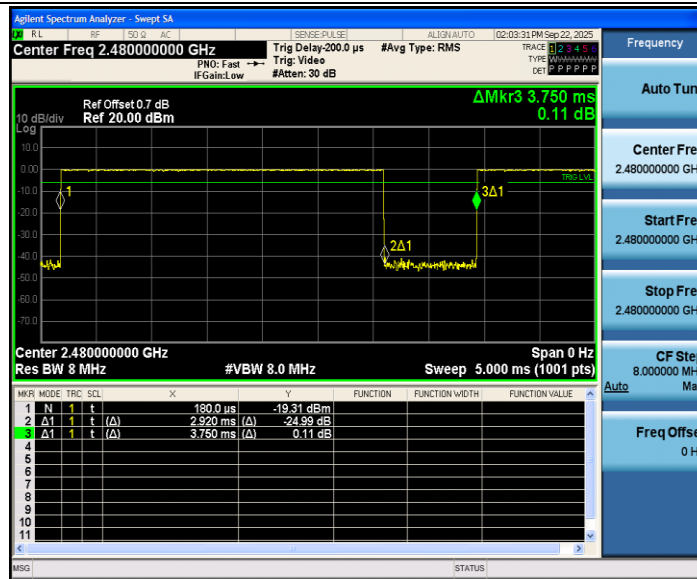
Appendix I: Duty Cycle

Test Result

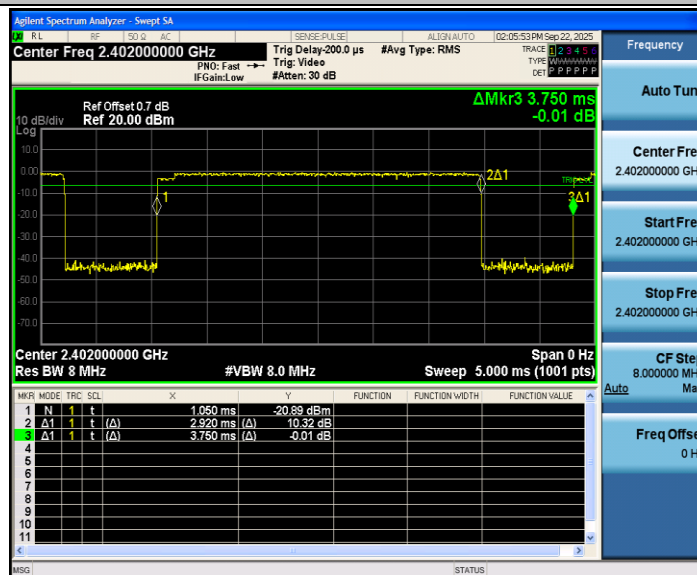
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.75	77.87	1.09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

Test Graphs

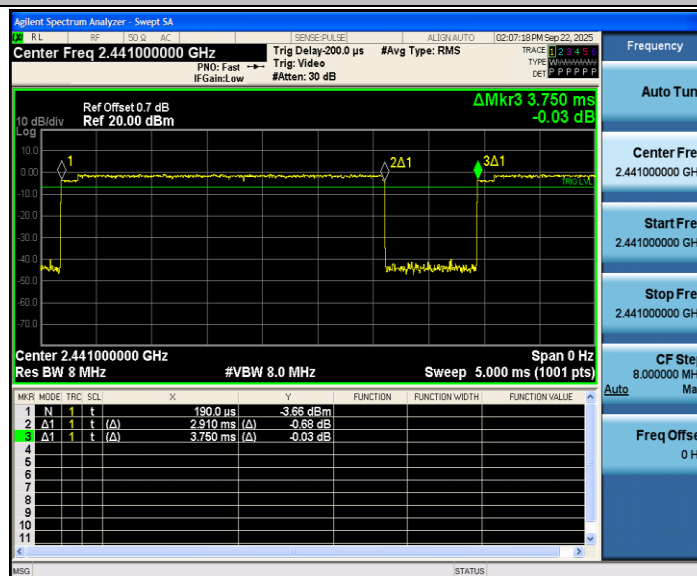




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

