

Appendix RF Test Data for BT

FCC ID : 2BR4J-POWERAURAE1

Company : power appliance Co., Ltd.

EUT : Bluetooth headset

Model Number : POWER AURA E1

Report No. : CTA25082000902

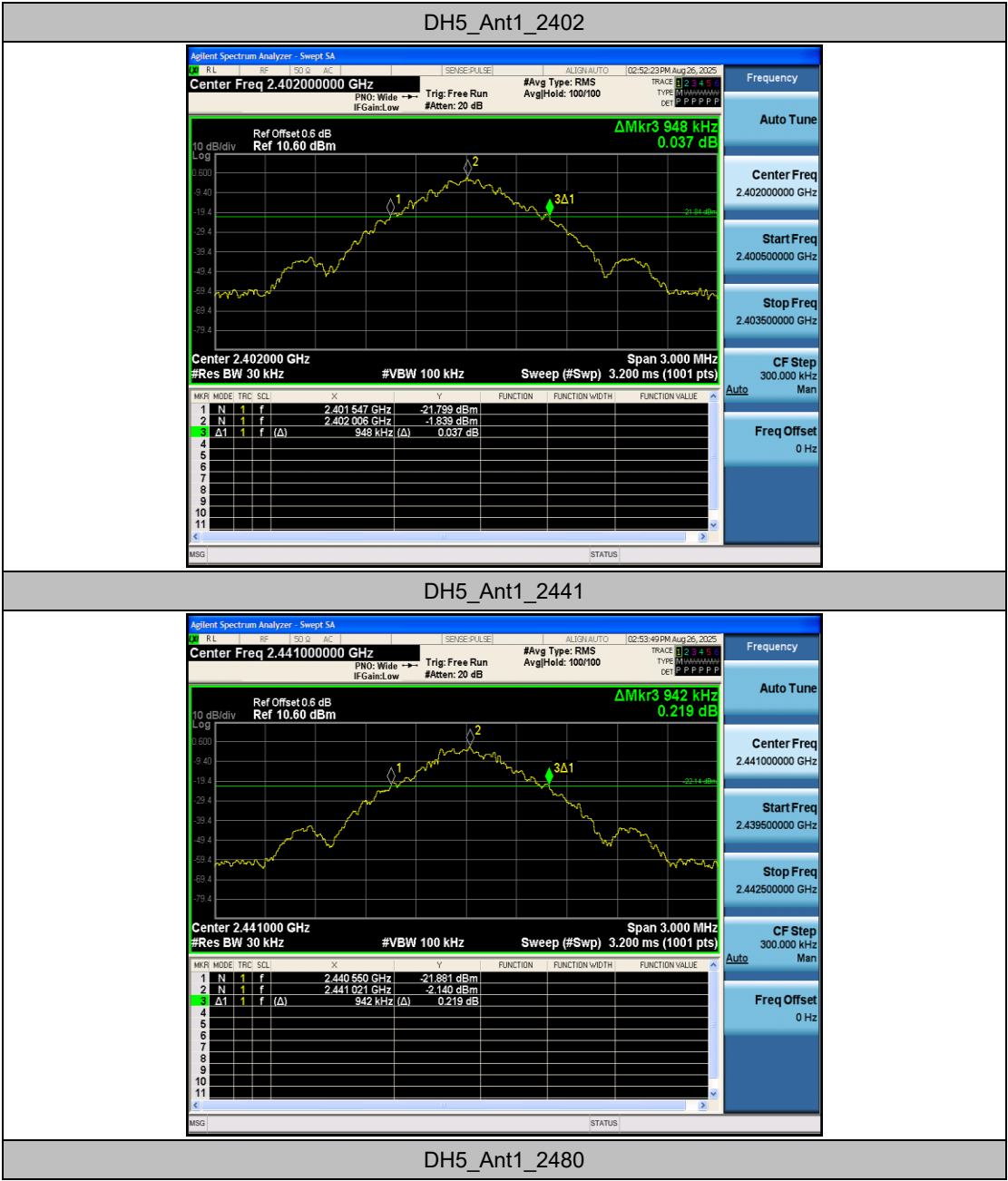
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.547	2402.495	---	---
		2441	0.942	2440.550	2441.492	---	---
		2480	0.936	2479.553	2480.489	---	---
2DH5	Ant1	2402	1.314	2401.352	2402.666	---	---
		2441	1.311	2440.352	2441.663	---	---
		2480	1.278	2479.382	2480.660	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

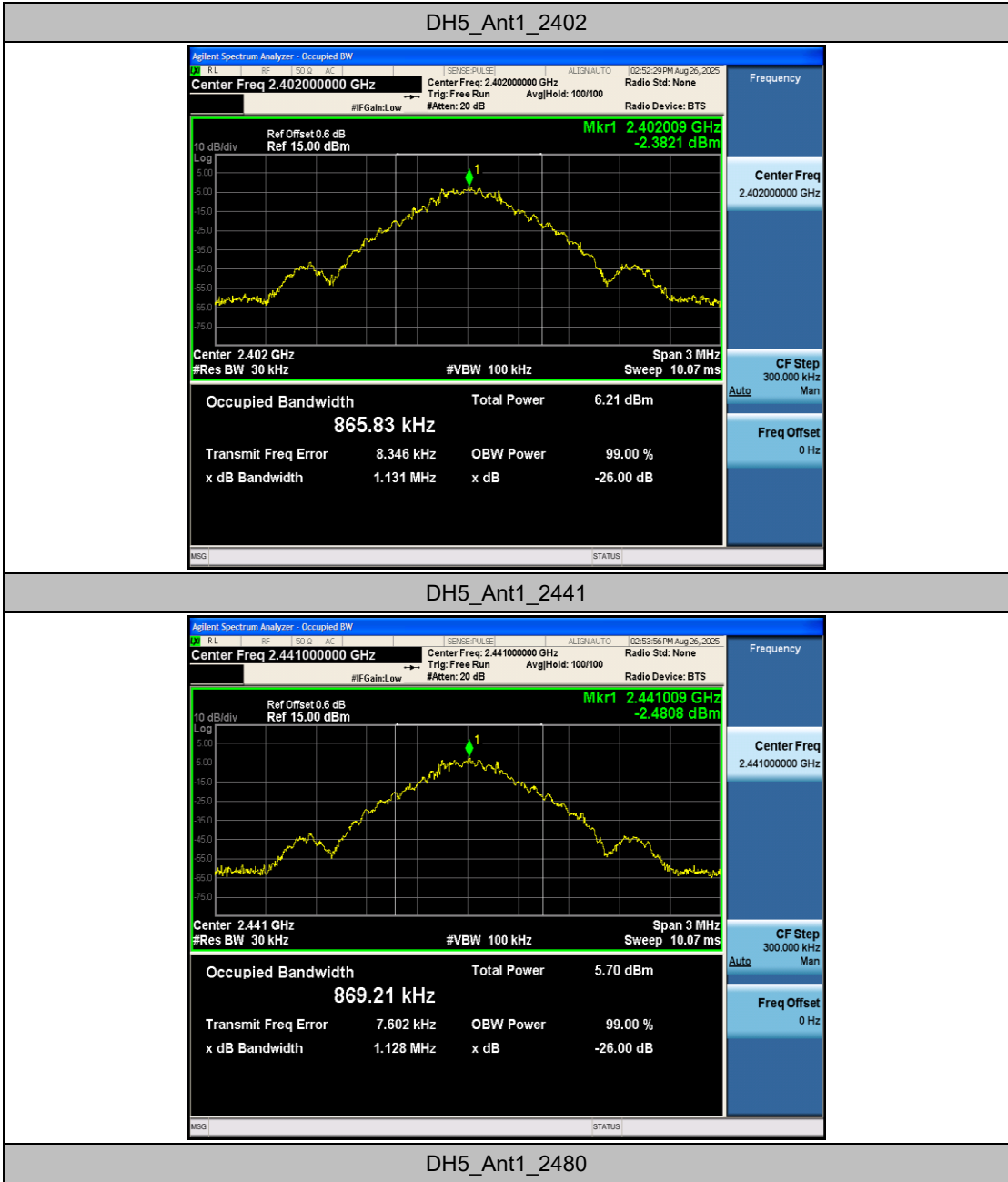


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86583	2401.5754	2402.4413	---	---
		2441	0.86921	2440.5730	2441.4422	---	---
		2480	0.87157	2479.5723	2480.4439	---	---
2DH5	Ant1	2402	1.1885	2401.4152	2402.6037	---	---
		2441	1.1878	2440.4150	2441.6028	---	---
		2480	1.1870	2479.4170	2480.6040	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Left:

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.20	≤20.97	PASS
		2441	-0.29	≤20.97	PASS
		2480	-0.55	≤20.97	PASS
2DH5	Ant1	2402	-0.56	≤20.97	PASS
		2441	-1.10	≤20.97	PASS
		2480	-1.36	≤20.97	PASS

Right:

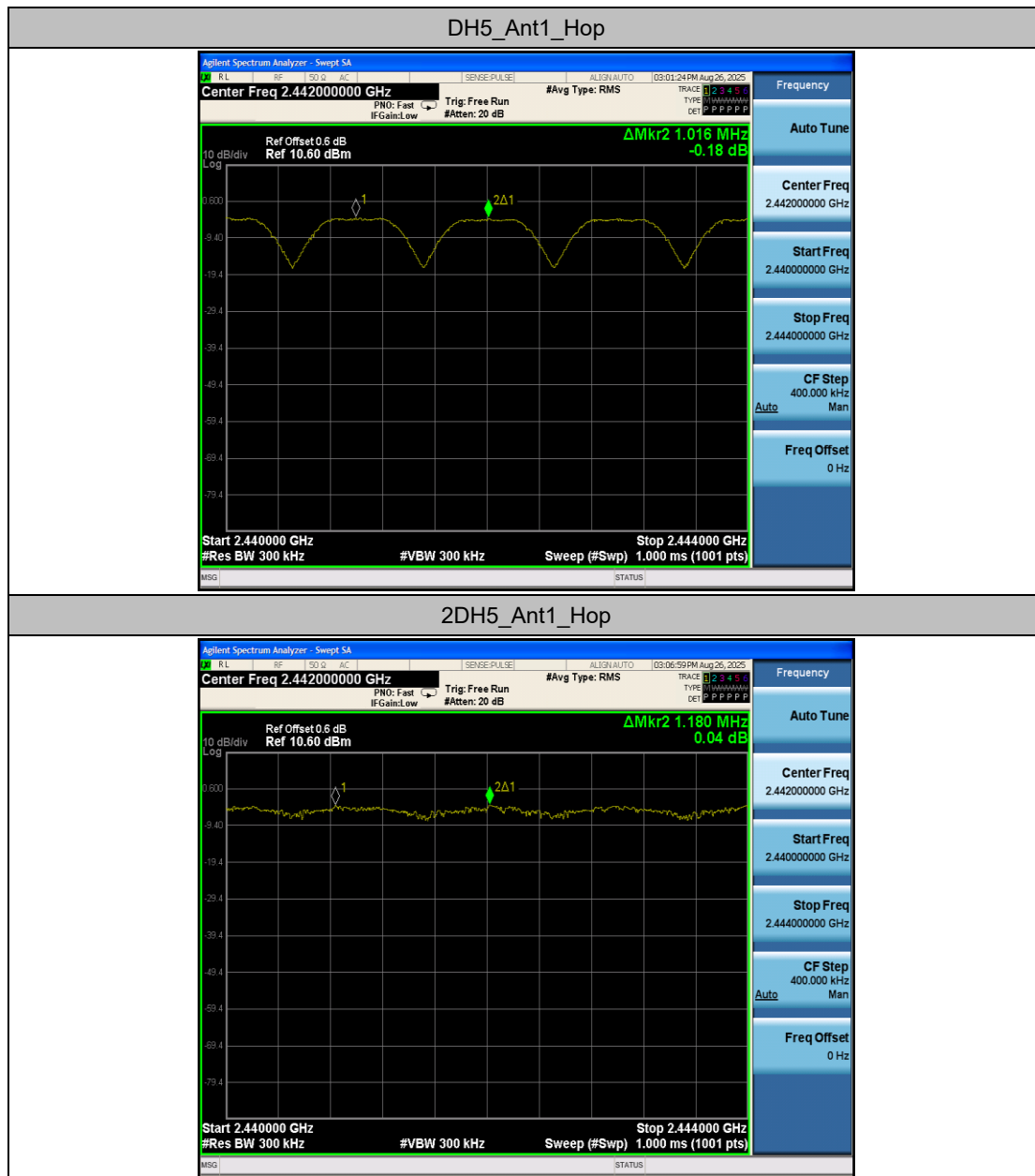
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.15	≤20.97	PASS
		2441	-0.25	≤20.97	PASS
		2480	-0.59	≤20.97	PASS
2DH5	Ant1	2402	-0.58	≤20.97	PASS
		2441	-1.17	≤20.97	PASS
		2480	-1.44	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.948	PASS
2DH5	Ant1	Hop	1.18	≥ 0.876	PASS

Test Graphs

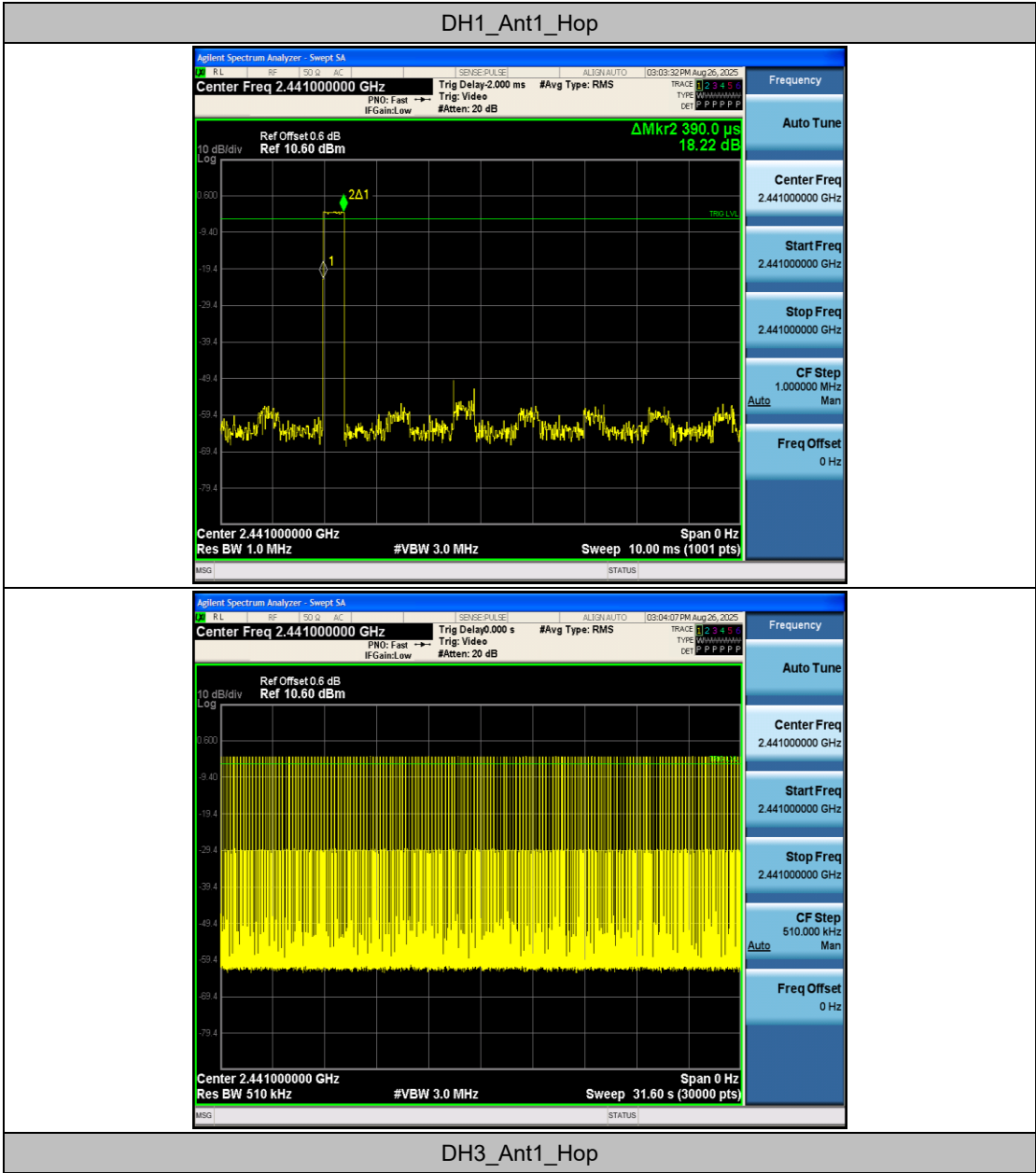


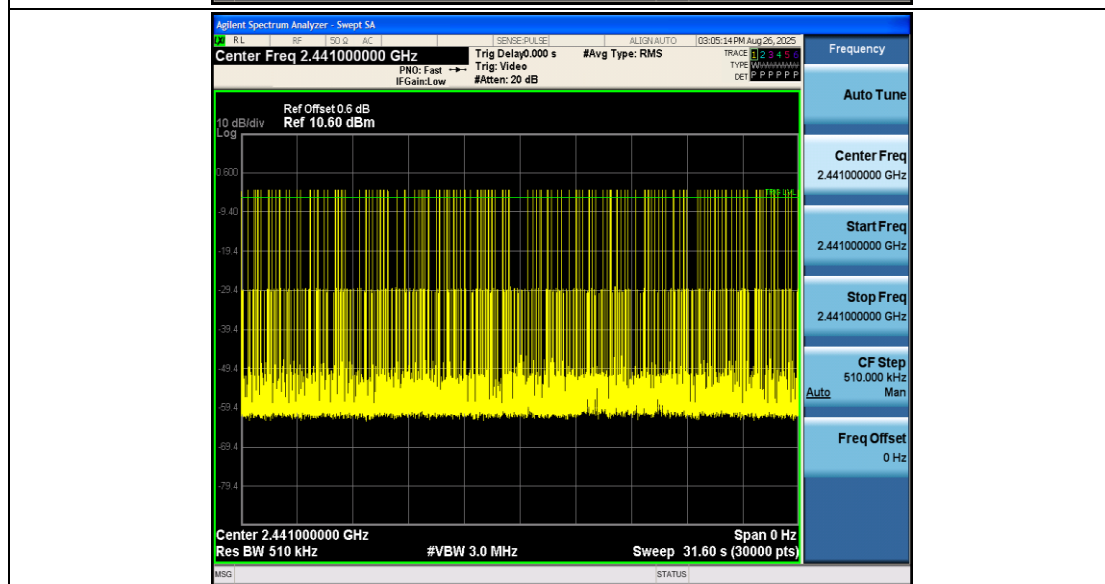
Appendix E: Time of occupancy

Test Result

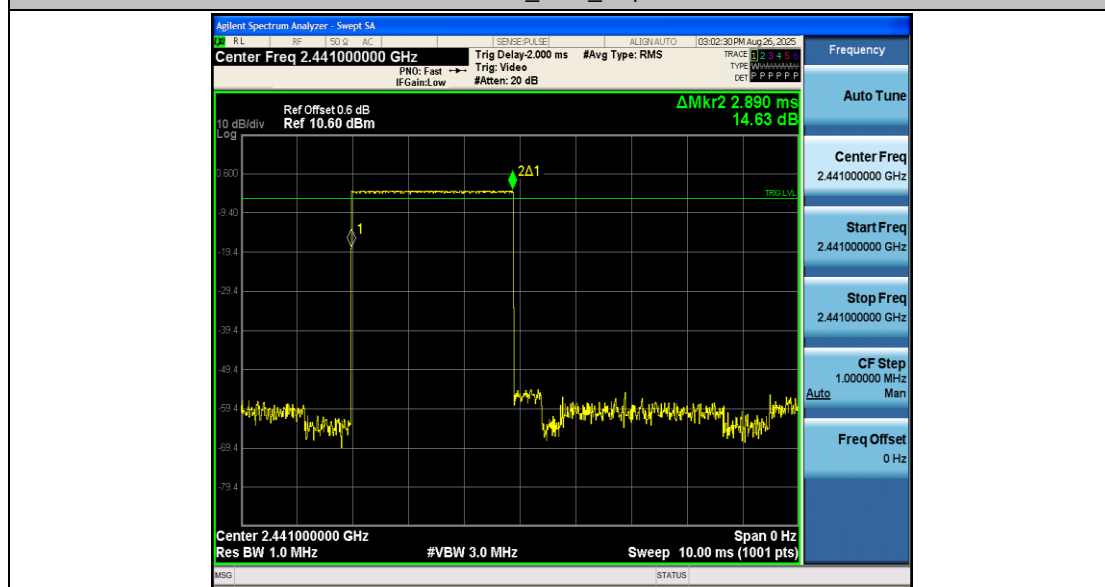
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	152	0.249	≤0.4	PASS
DH5	Ant1	Hop	2.890	95	0.275	≤0.4	PASS
2DH1	Ant1	Hop	0.400	316	0.126	≤0.4	PASS
2DH3	Ant1	Hop	1.650	161	0.266	≤0.4	PASS
2DH5	Ant1	Hop	2.900	107	0.31	≤0.4	PASS

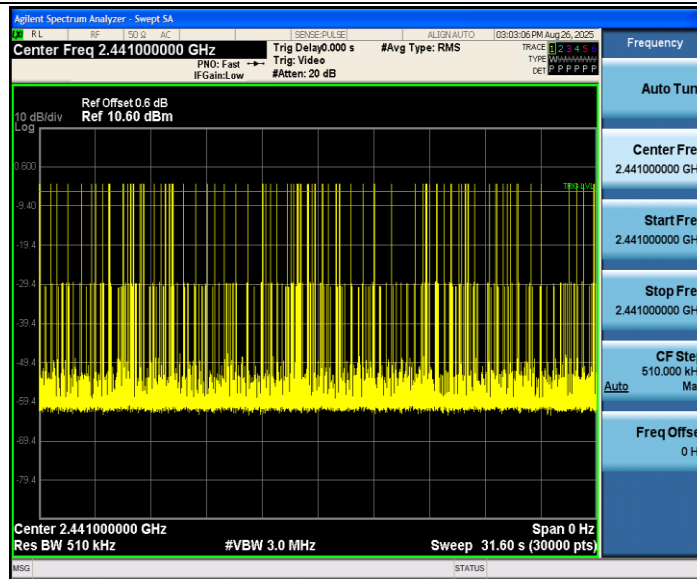
Test Graphs



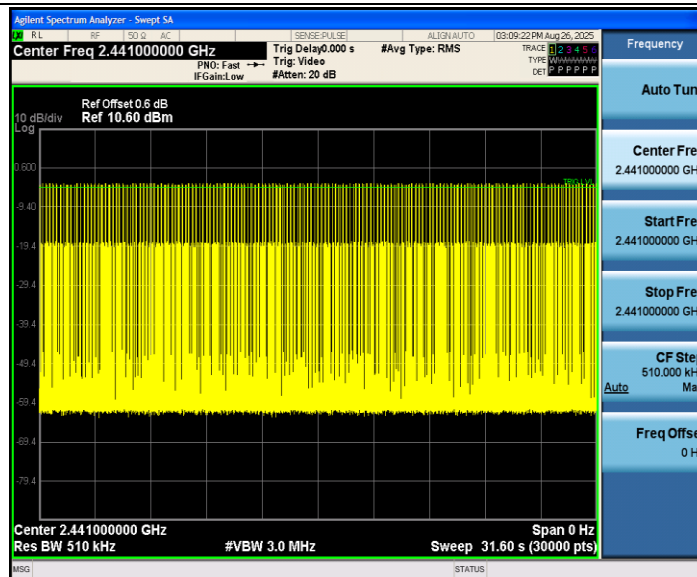
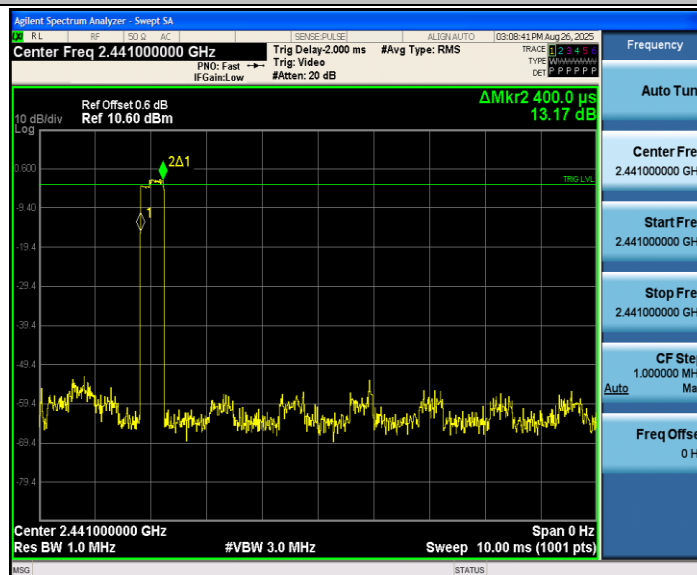


DH5_Ant1_Hop

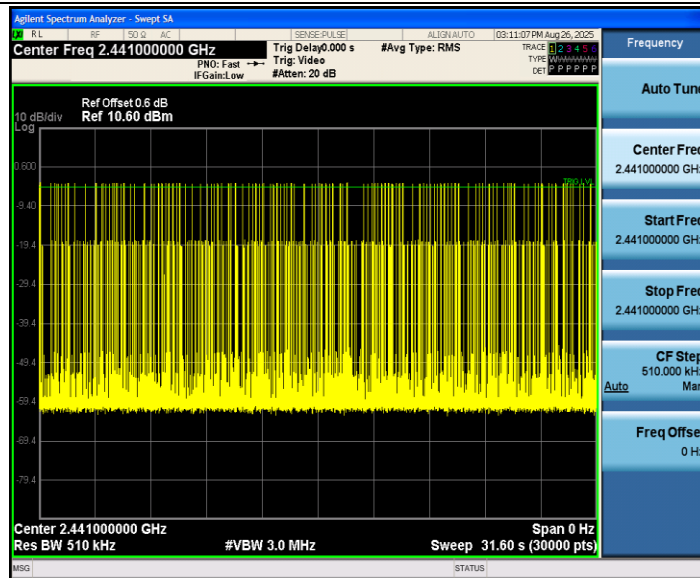
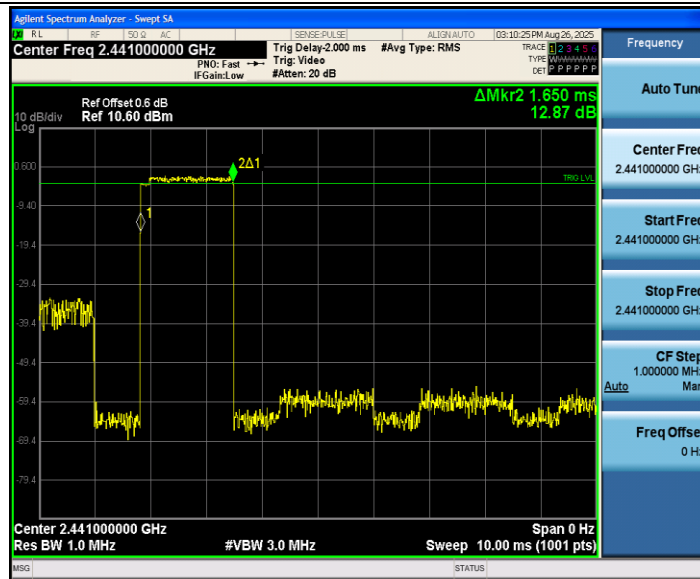




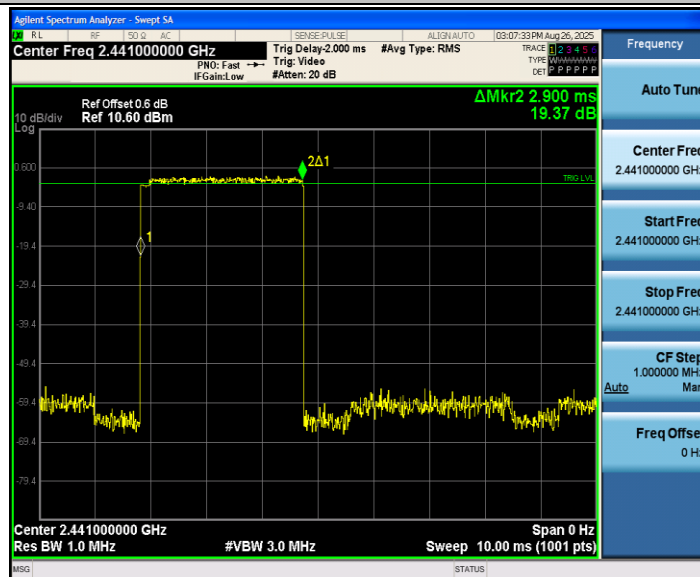
2DH1_Ant1_Hop

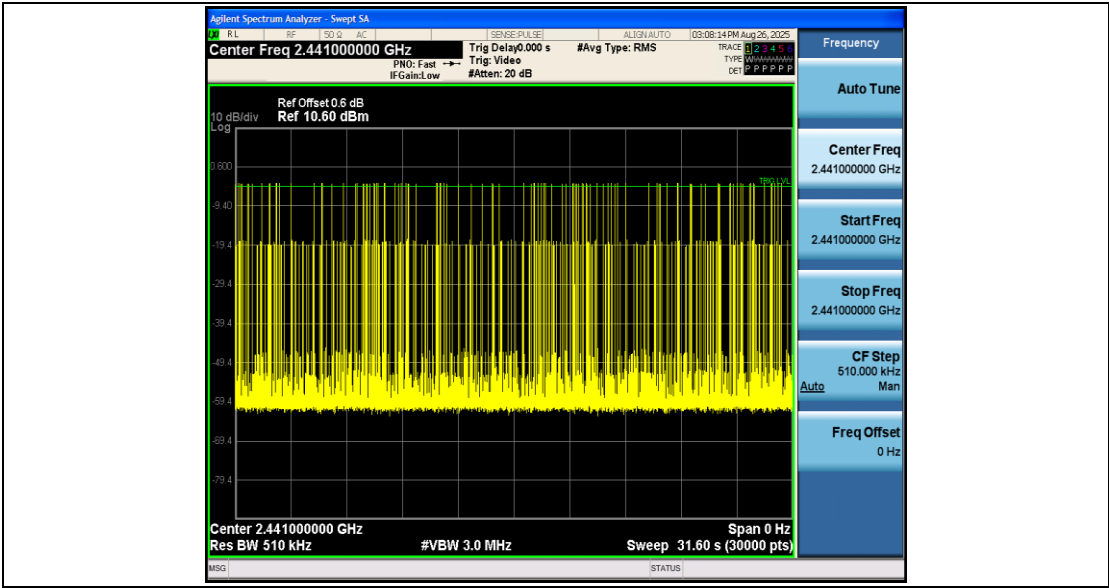


2DH3_Ant1_Hop



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

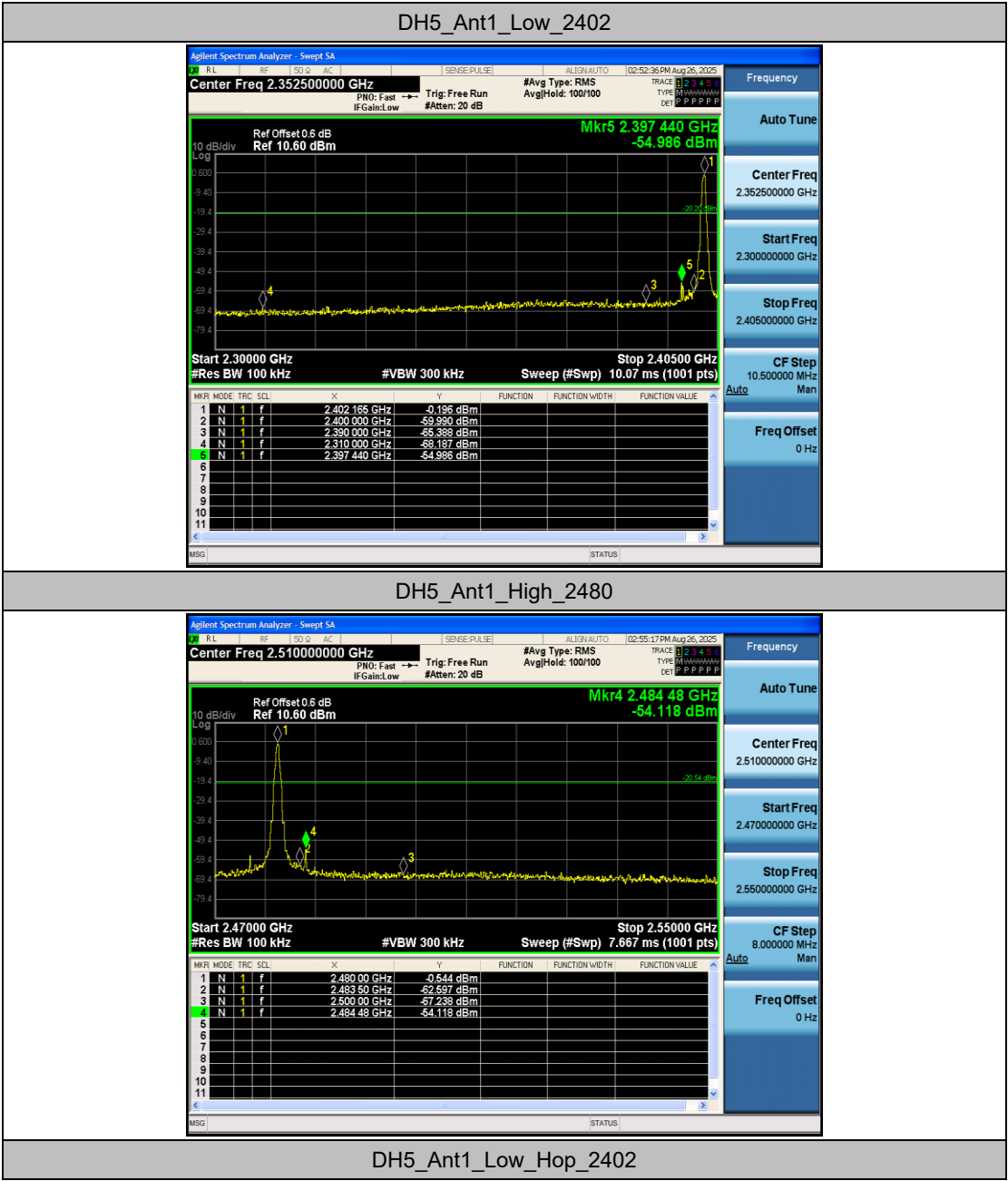


Appendix G: Band edge measurements

Test Result

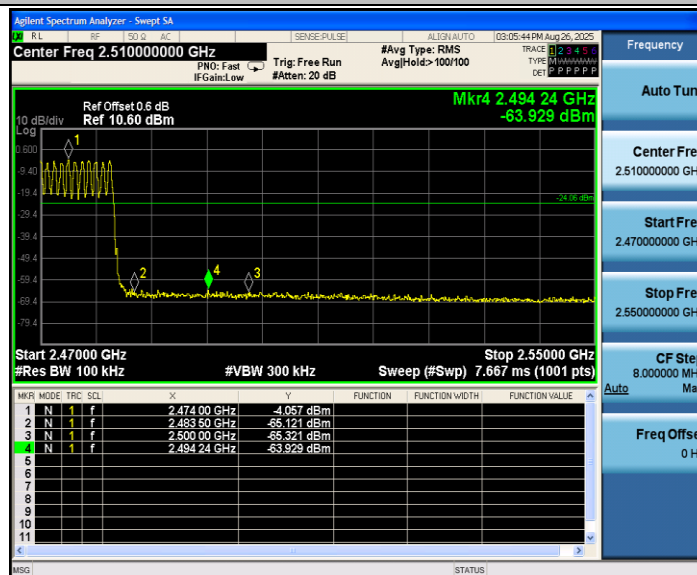
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.20	-54.99	≤ -20.2	PASS
		High	2480	-0.54	-54.12	≤ -20.54	PASS
		Low	Hop_2402	-3.84	-63.34	≤ -23.84	PASS
		High	Hop_2480	-4.06	-63.93	≤ -24.06	PASS
2DH5	Ant1	Low	2402	-5.31	-59.75	≤ -25.31	PASS
		High	2480	-5.96	-63.06	≤ -25.96	PASS
		Low	Hop_2402	-6.28	-62.62	≤ -26.28	PASS
		High	Hop_2480	-4.06	-64	≤ -24.06	PASS

Test Graphs

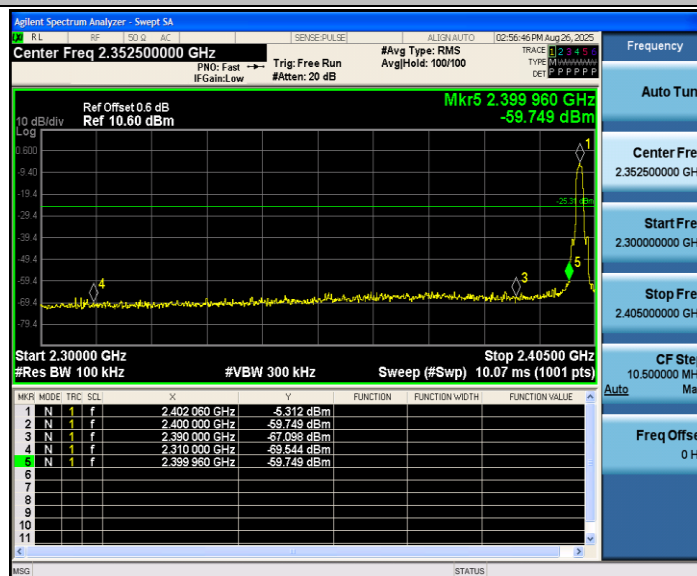




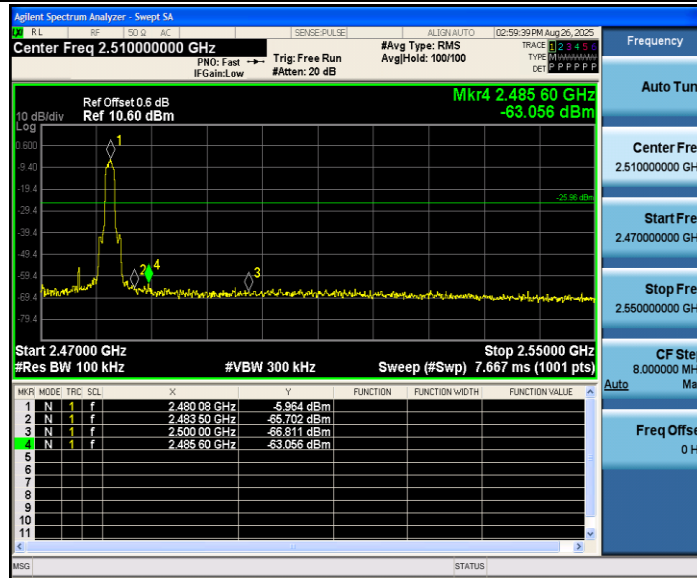
DH5_Ant1_High_Hop_2480



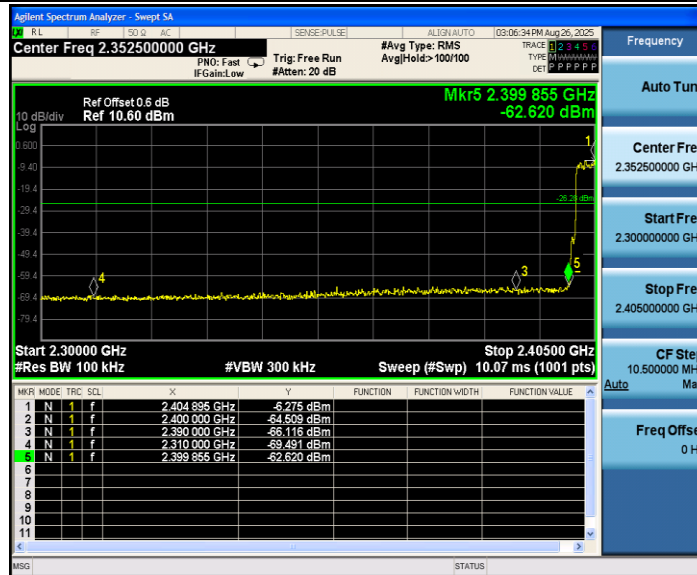
2DH5_Ant1_Low_2402



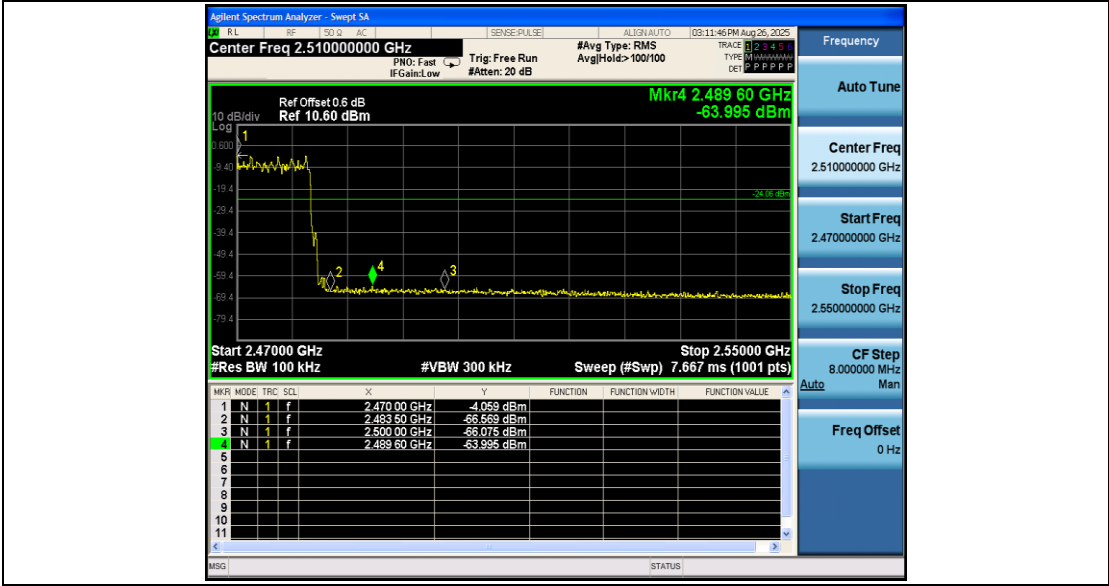
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

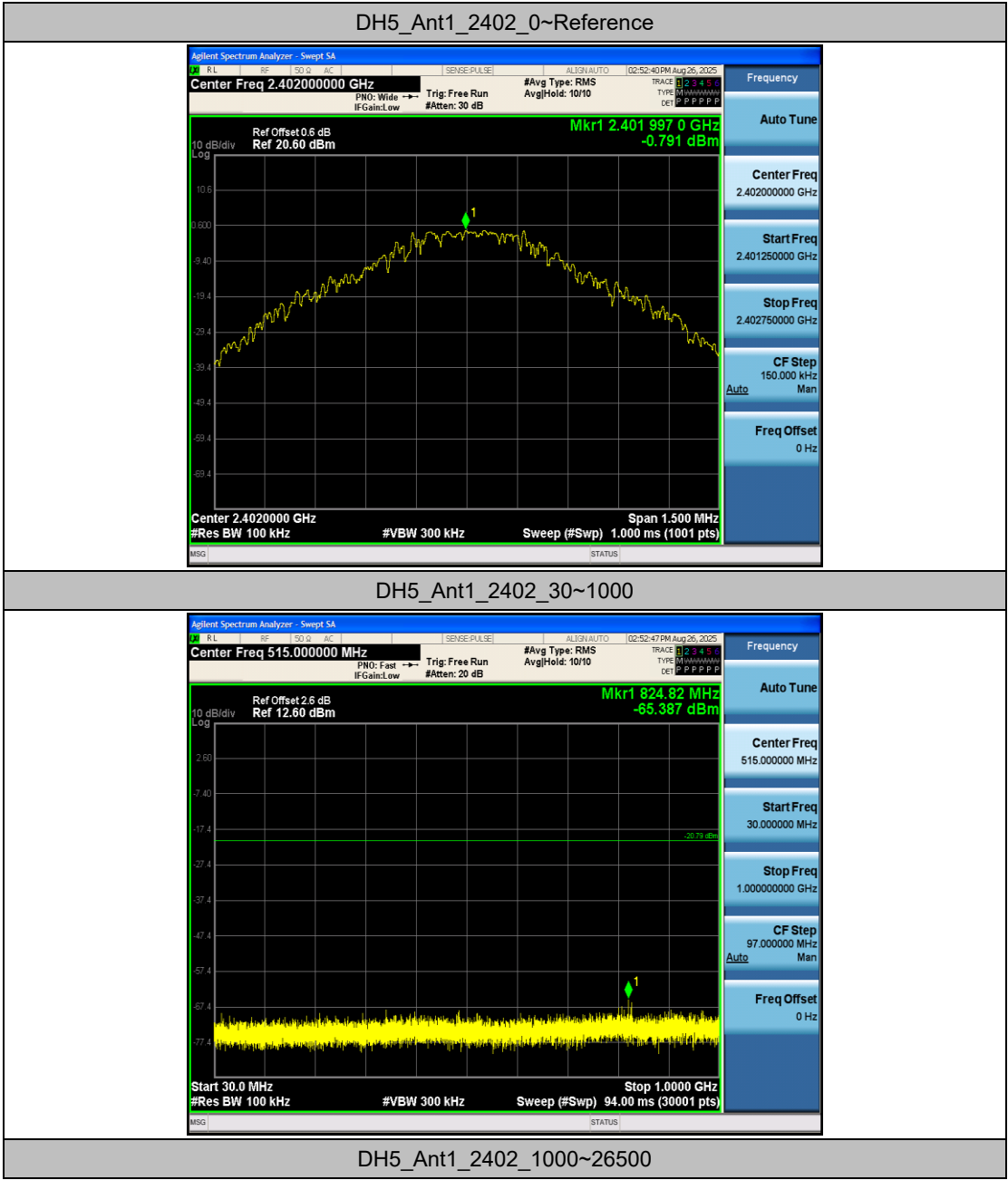


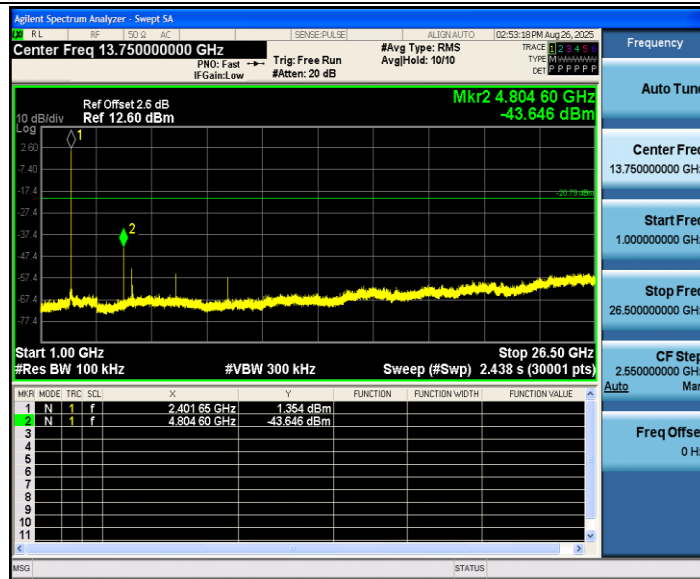
Appendix H: Conducted Spurious Emission

Test Result

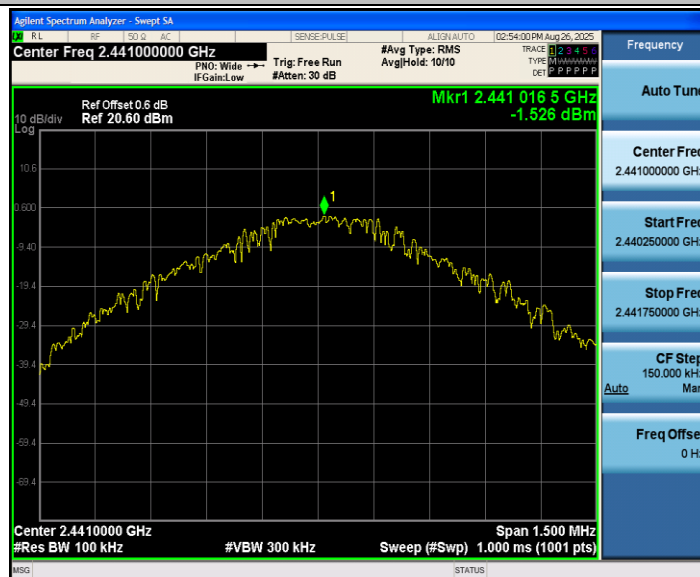
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-65.39	≤-20.79	PASS
			1000~26500	-0.79	-43.65	≤-20.79	PASS
		2441	Reference	-1.53	-1.53	---	PASS
			30~1000	-1.53	-64.21	≤-21.53	PASS
			1000~26500	-1.53	-41.05	≤-21.53	PASS
		2480	Reference	-1.08	-1.08	---	PASS
			30~1000	-1.08	-67.21	≤-21.08	PASS
			1000~26500	-1.08	-42.55	≤-21.08	PASS
2DH5	Ant1	2402	Reference	-5.43	-5.43	---	PASS
			30~1000	-5.43	-67.3	≤-25.43	PASS
			1000~26500	-5.43	-48.83	≤-25.43	PASS
		2441	Reference	-4.56	-4.56	---	PASS
			30~1000	-4.56	-67.41	≤-24.56	PASS
			1000~26500	-4.56	-49.91	≤-24.56	PASS
		2480	Reference	-7.73	-7.73	---	PASS
			30~1000	-7.73	-66.72	≤-27.73	PASS
			1000~26500	-7.73	-49.09	≤-27.73	PASS

Test Graphs

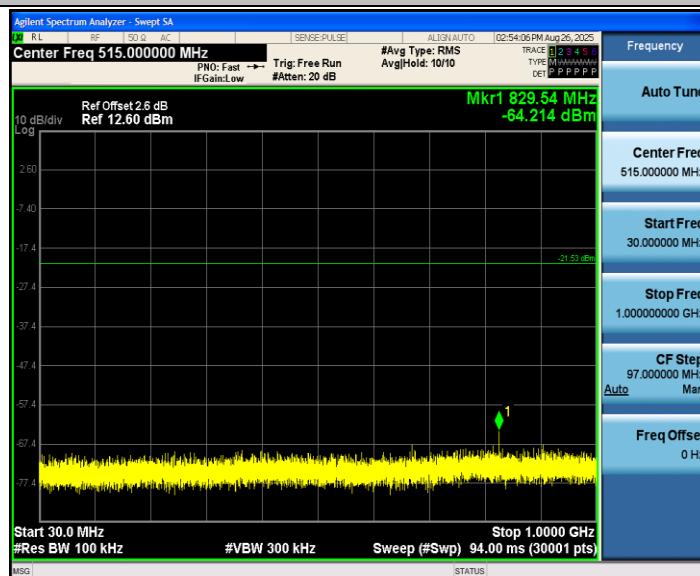




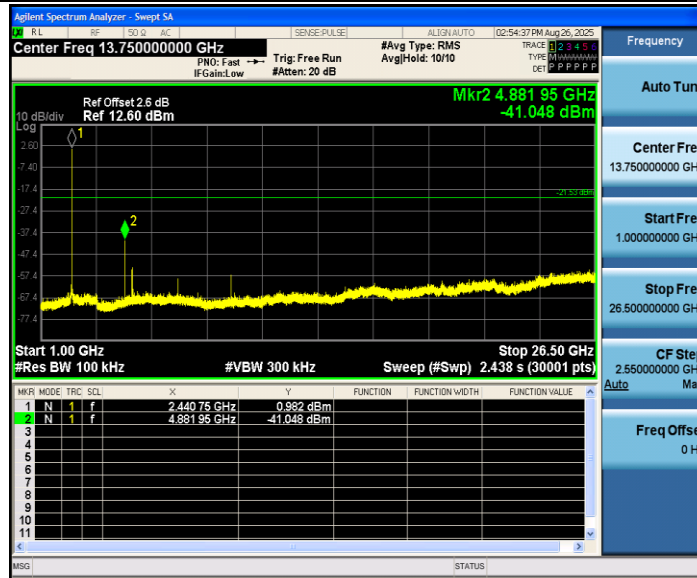
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



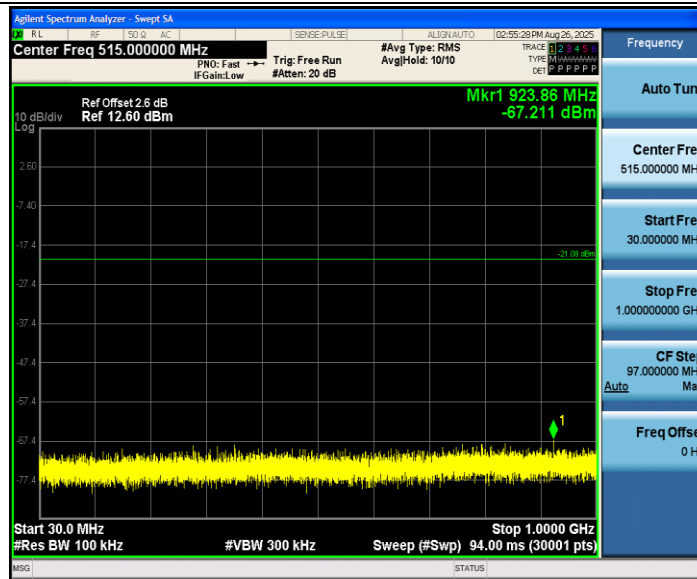
DH5_Ant1_2441_1000~26500



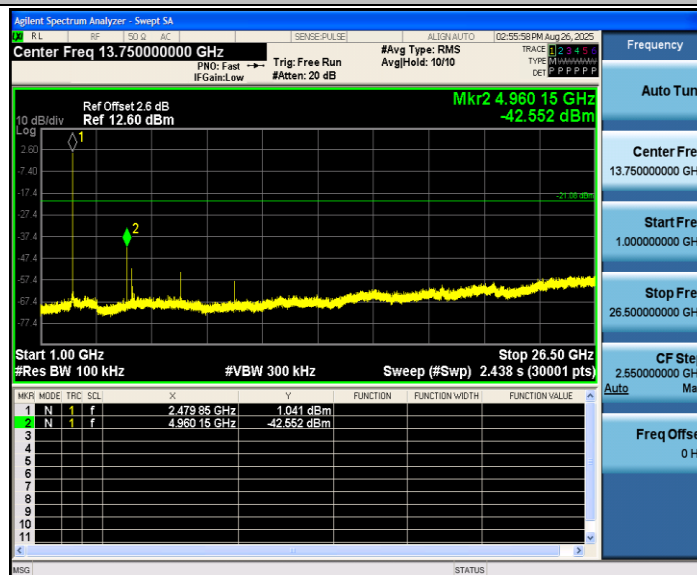
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



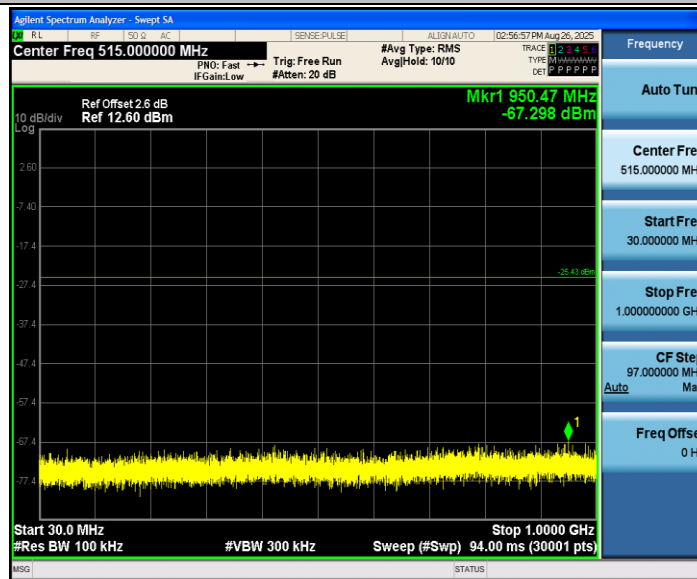
DH5_Ant1_2480_1000~26500



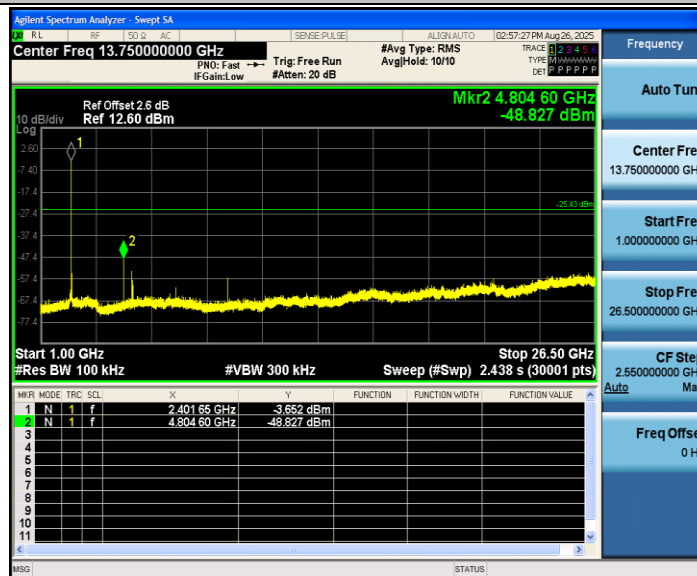
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



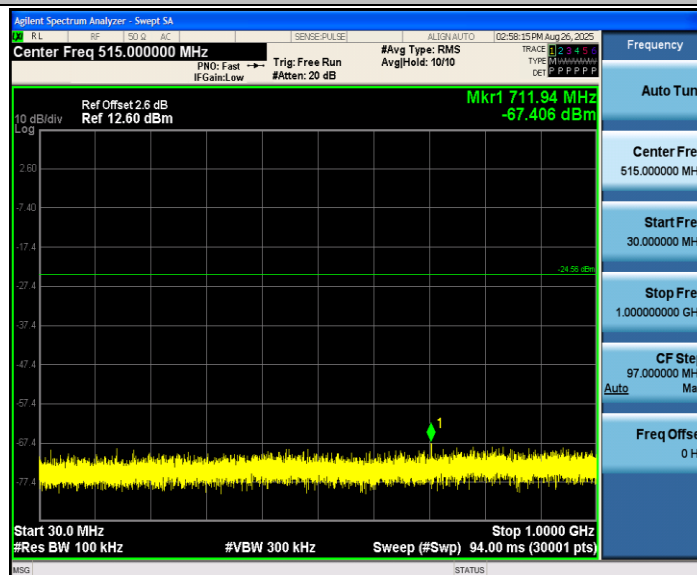
2DH5_Ant1_2402_1000~26500



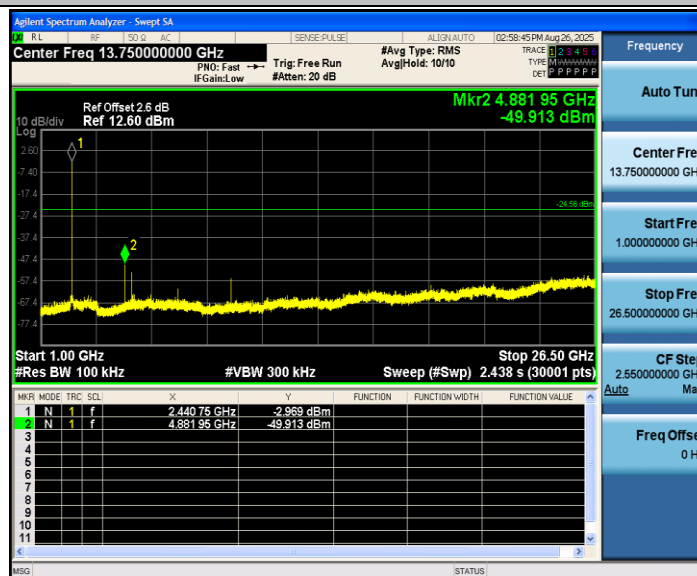
2DH5_Ant1_2441_0~Reference



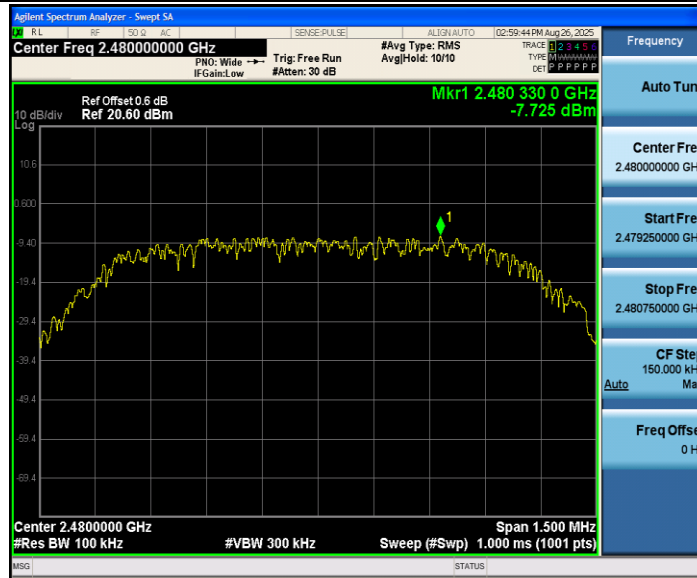
2DH5_Ant1_2441_30~1000



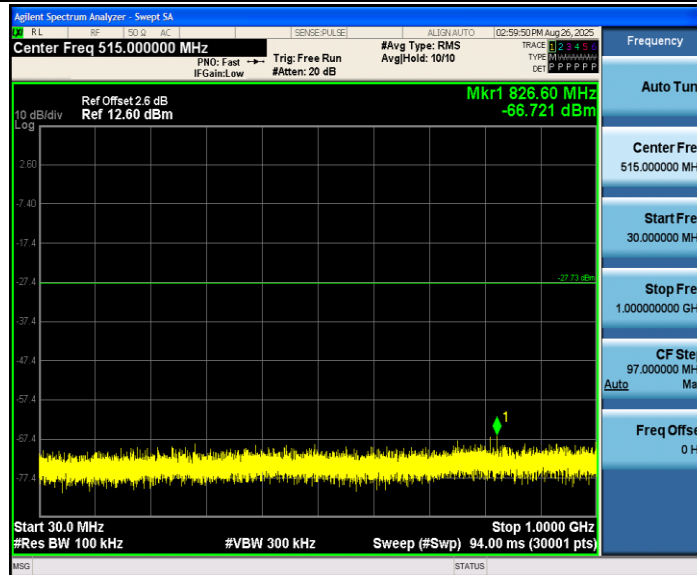
2DH5_Ant1_2441_1000~26500



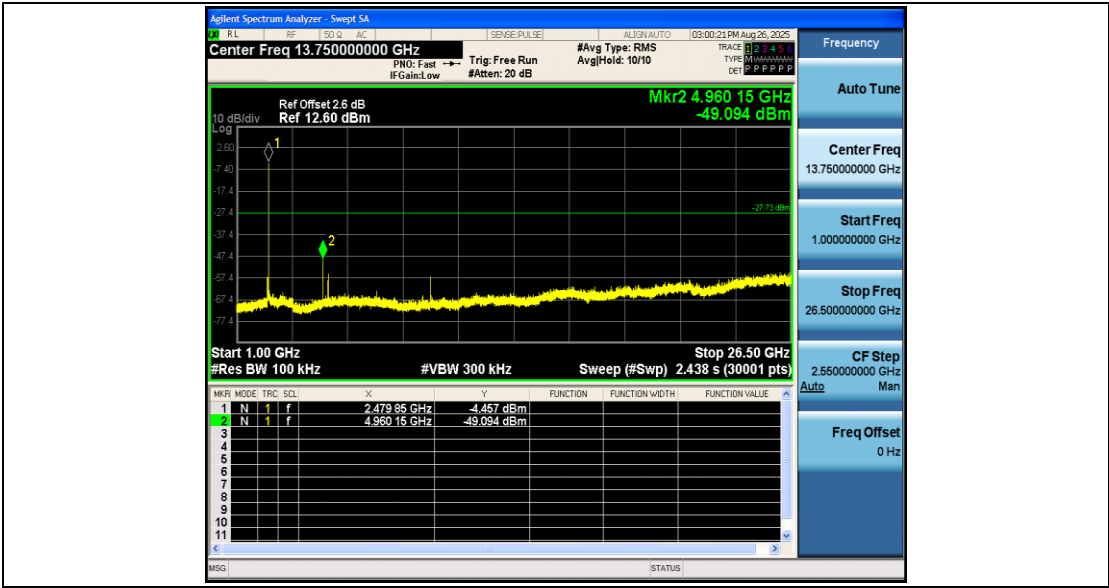
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



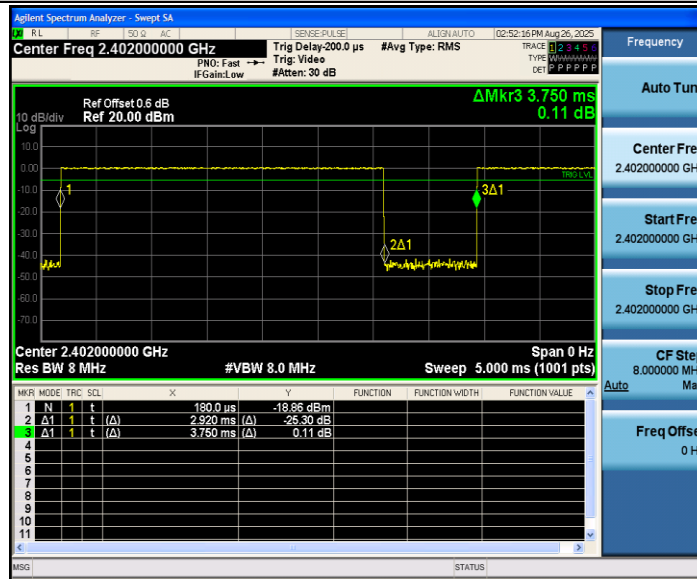
Appendix I: Duty Cycle

Test Result

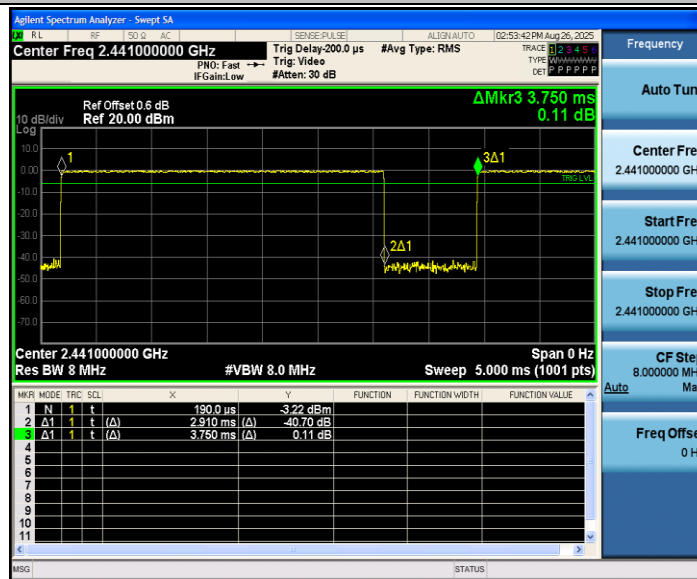
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09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

Test Graphs

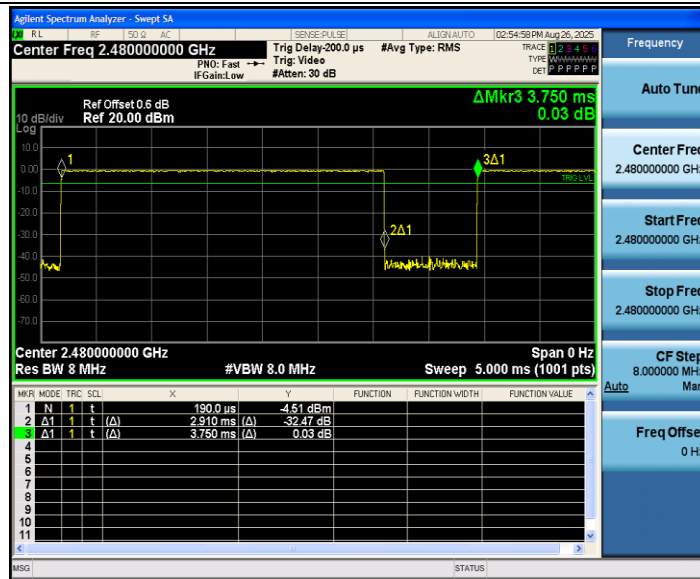
DH5_Ant1_2402



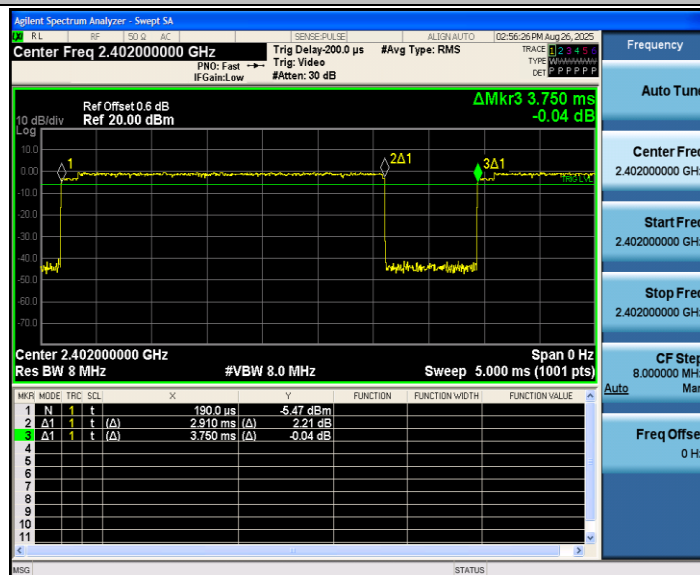
DH5_Ant1_2441



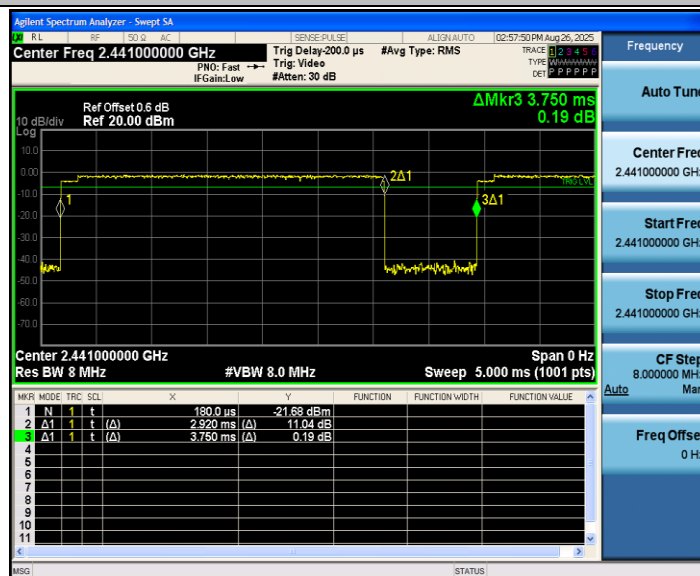
DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

