

FCC Appendix RF Test Data for BT

FCC ID : 2BWS5-TG100

Company : Taiguang Technology (Huizhou) Co., Ltd

EUT : Smart microhome Speaker

Model Number : TG 100

Report No. : CTA26050700701

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	0.963	2401.541	2402.504	---	---
		2441	0.963	2440.541	2441.504	---	---
		2480	0.942	2479.547	2480.489	---	---
2DH5	Ant1	2402	1.356	2401.331	2402.687	---	---
		2441	1.287	2440.376	2441.663	---	---
		2480	1.284	2479.379	2480.663	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

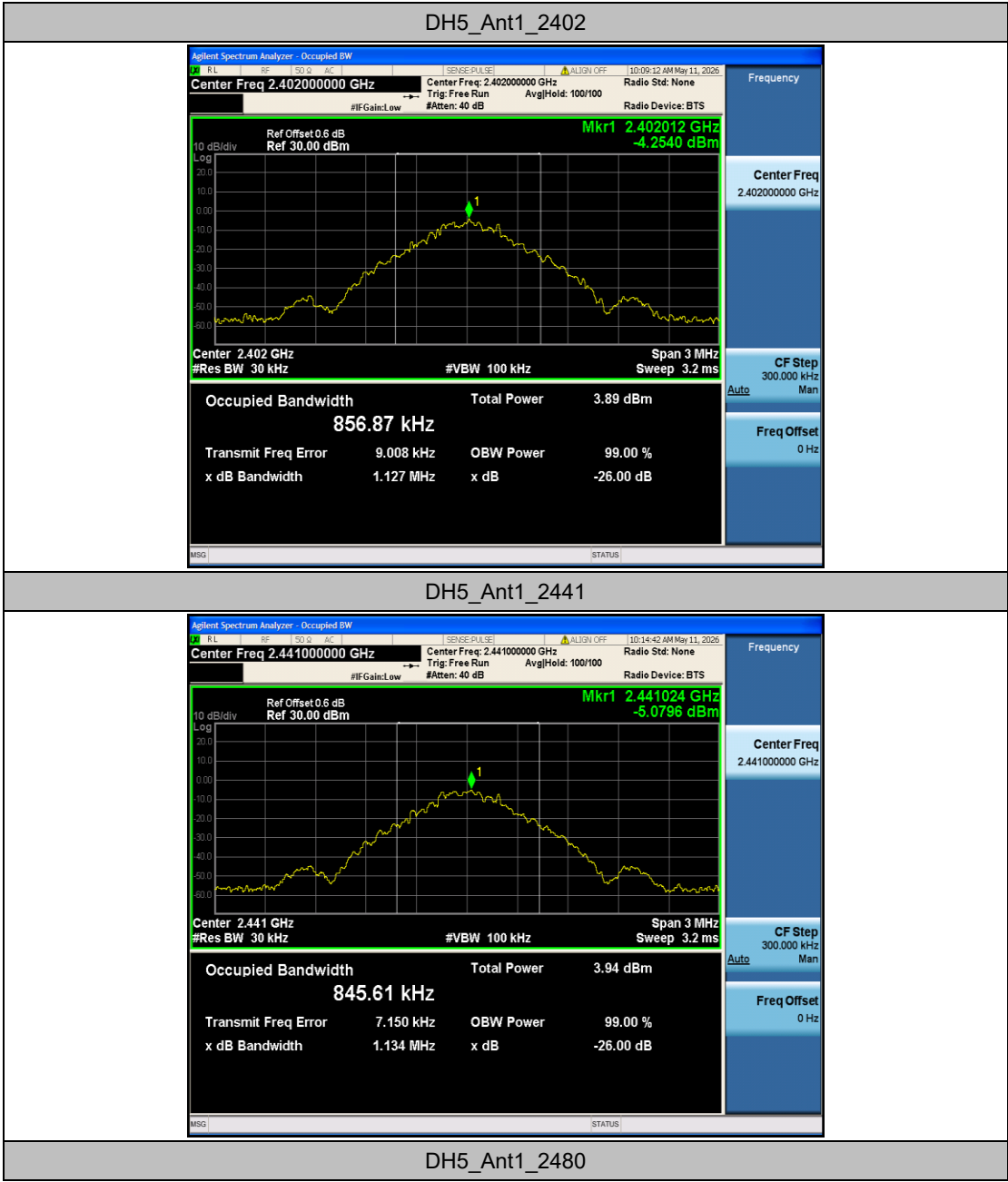


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85687	2401.5806	2402.4374	---	---
		2441	0.84561	2440.5843	2441.4300	---	---
		2480	0.86574	2479.5767	2480.4424	---	---
2DH5	Ant1	2402	1.1911	2401.4148	2402.6059	---	---
		2441	1.1865	2440.4165	2441.6030	---	---
		2480	1.1930	2479.4140	2480.6070	---	---

Test Graphs





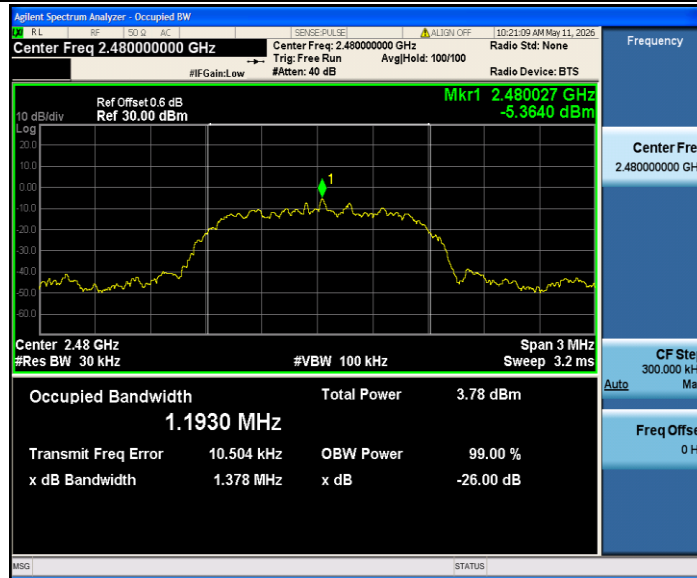
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

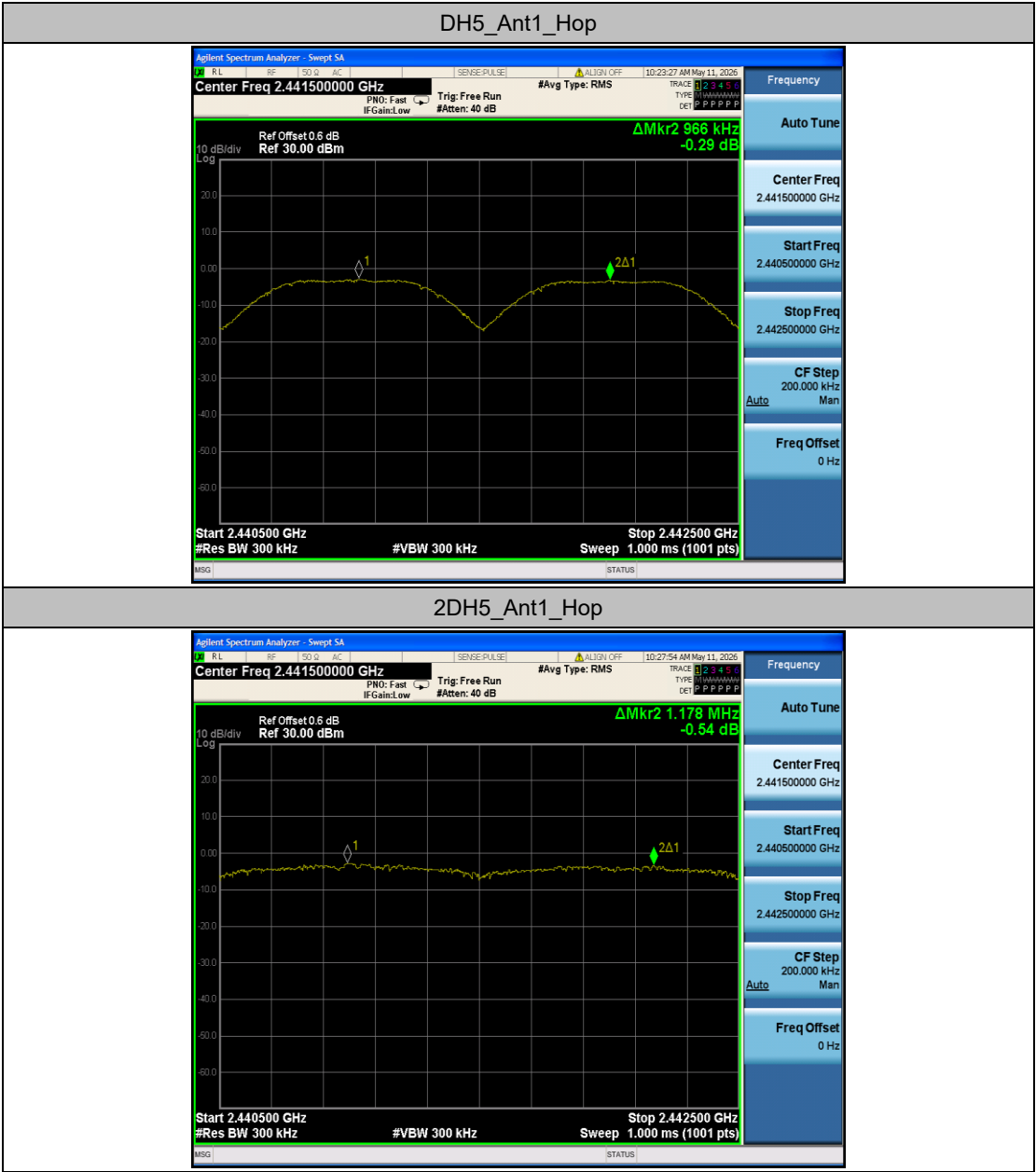
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-2.65	≤20.97	PASS
		2441	-2.71	≤20.97	PASS
		2480	-2.67	≤20.97	PASS
2DH5	Ant1	2402	-0.04	≤20.97	PASS
		2441	-0.13	≤20.97	PASS
		2480	-0.06	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.966	≥ 0.963	PASS
2DH5	Ant1	Hop	1.178	≥ 0.904	PASS

Test Graphs

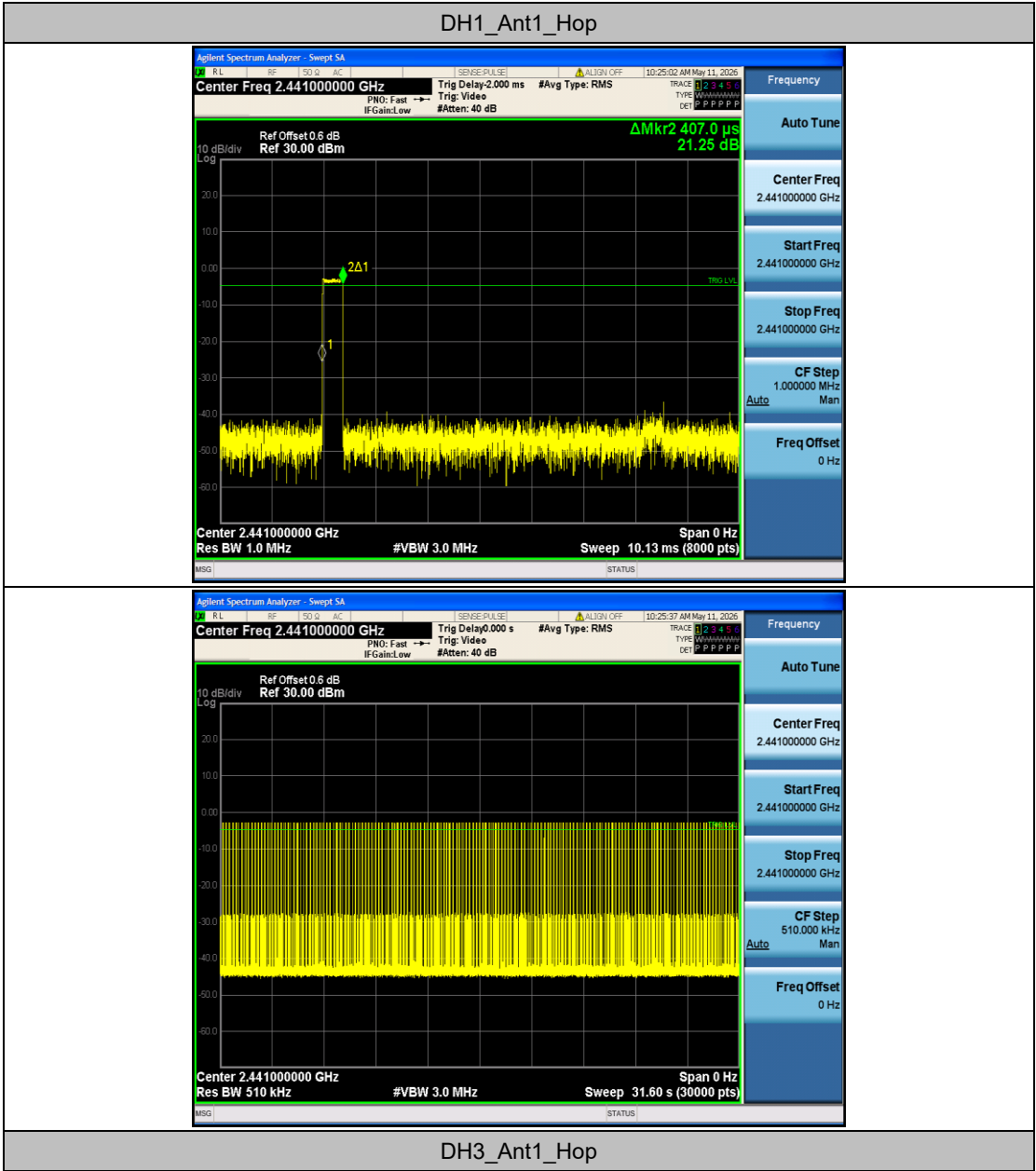


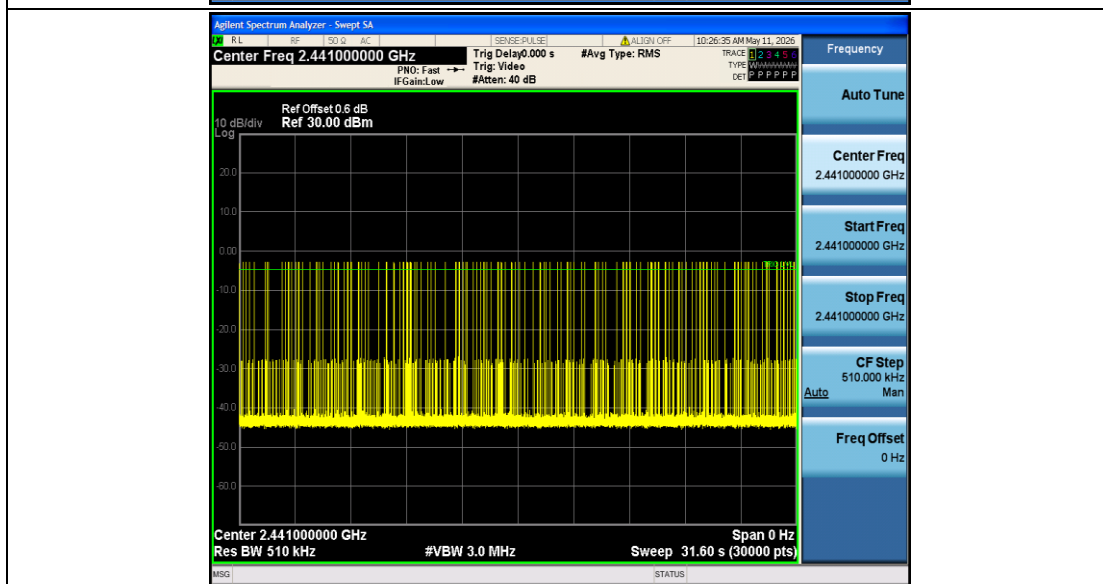
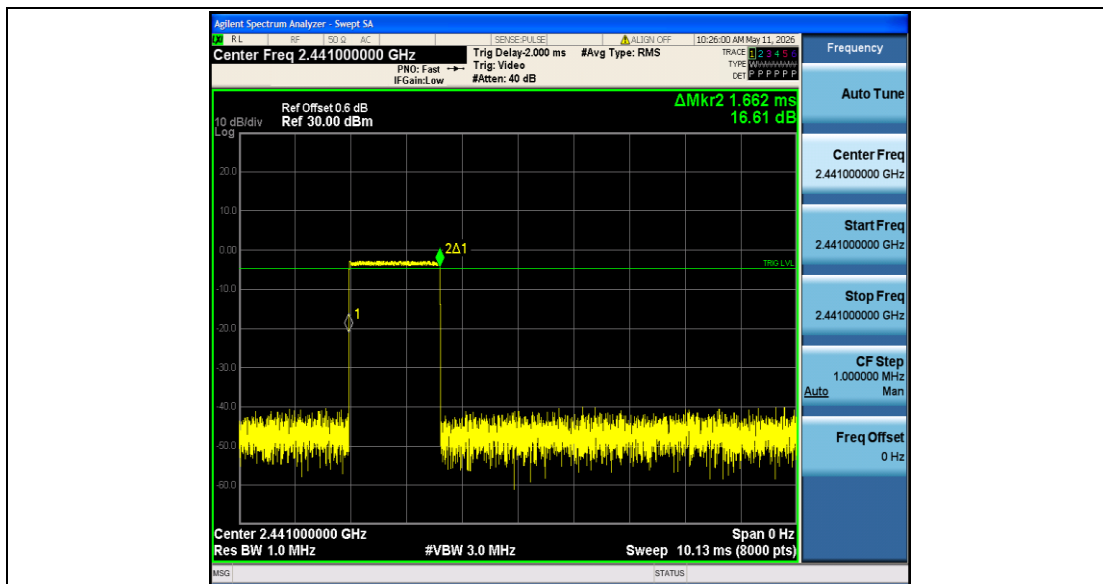
Appendix E: Time of occupancy

Test Result

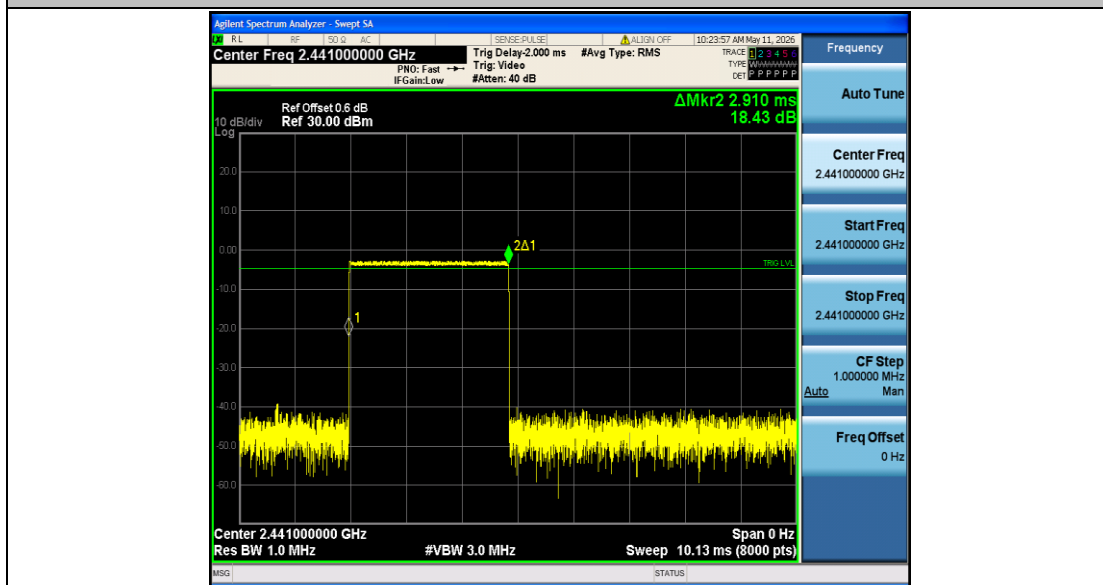
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	317	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	157	0.261	≤0.4	PASS
DH5	Ant1	Hop	2.910	118	0.343	≤0.4	PASS
2DH1	Ant1	Hop	0.415	317	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	161	0.269	≤0.4	PASS
2DH5	Ant1	Hop	2.915	109	0.318	≤0.4	PASS

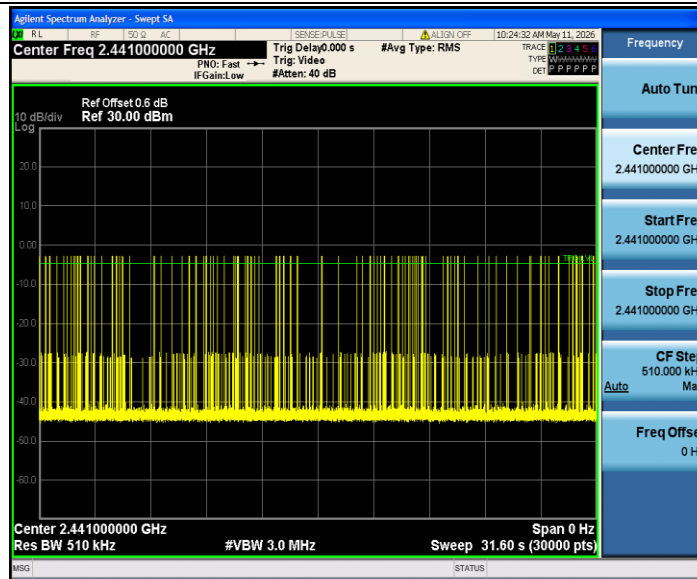
Test Graphs



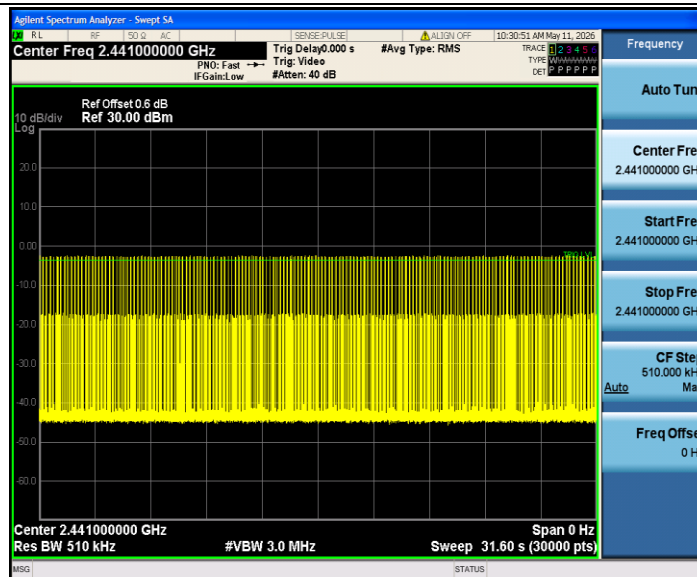
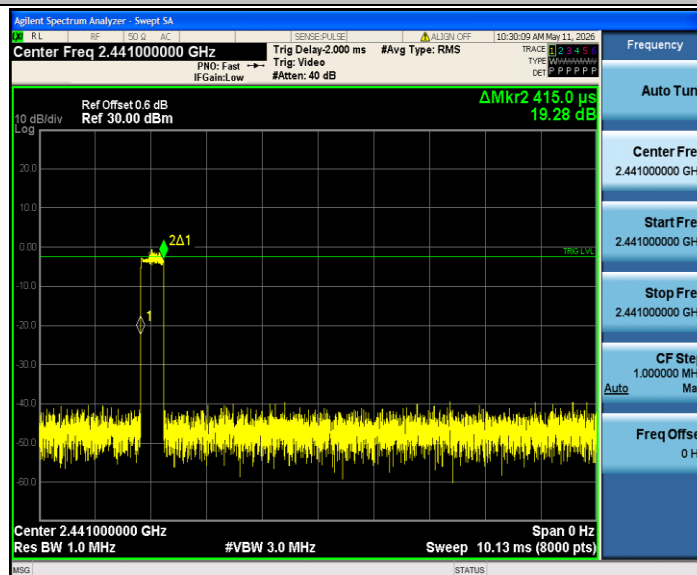


DH5_Ant1_Hop

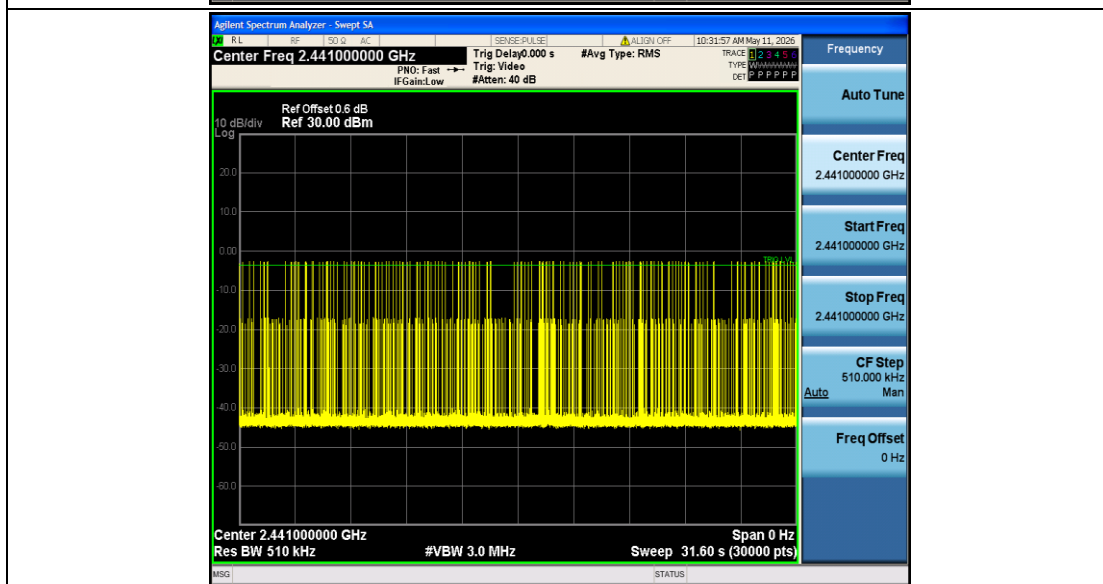
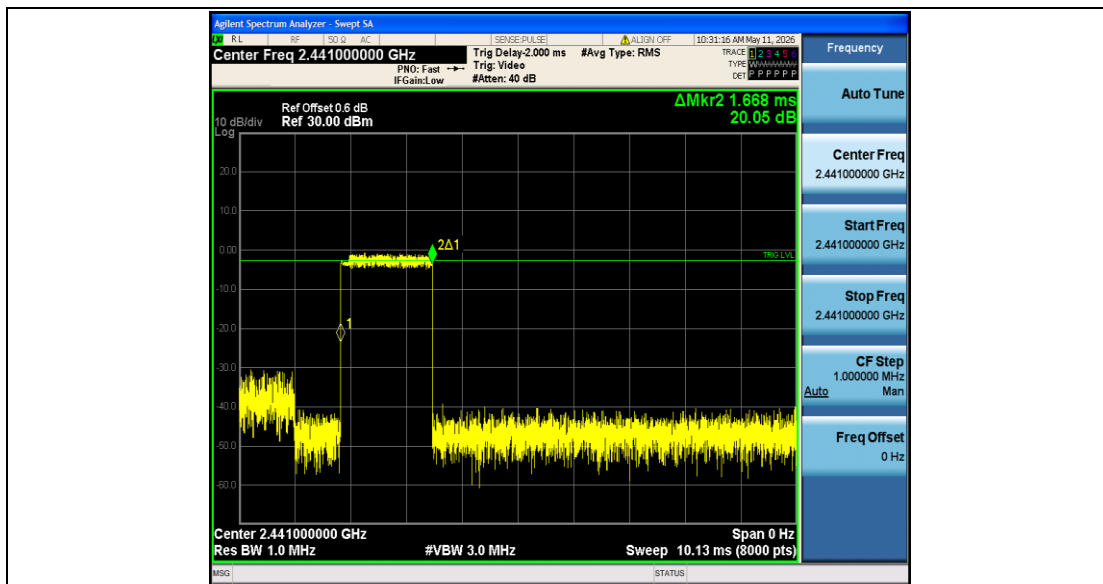




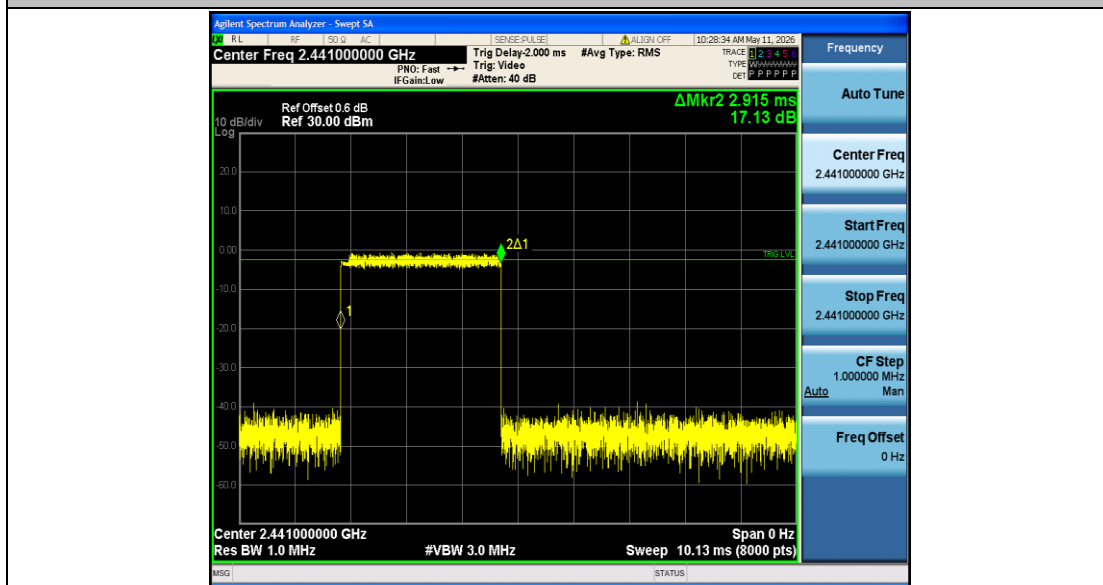
2DH1_Ant1_Hop

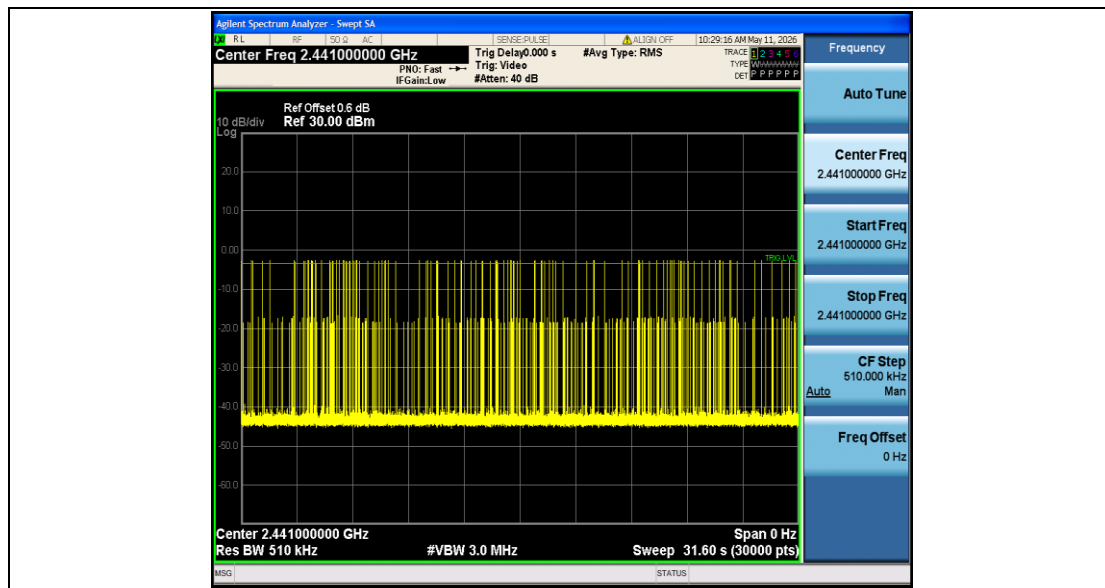


2DH3_Ant1_Hop



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

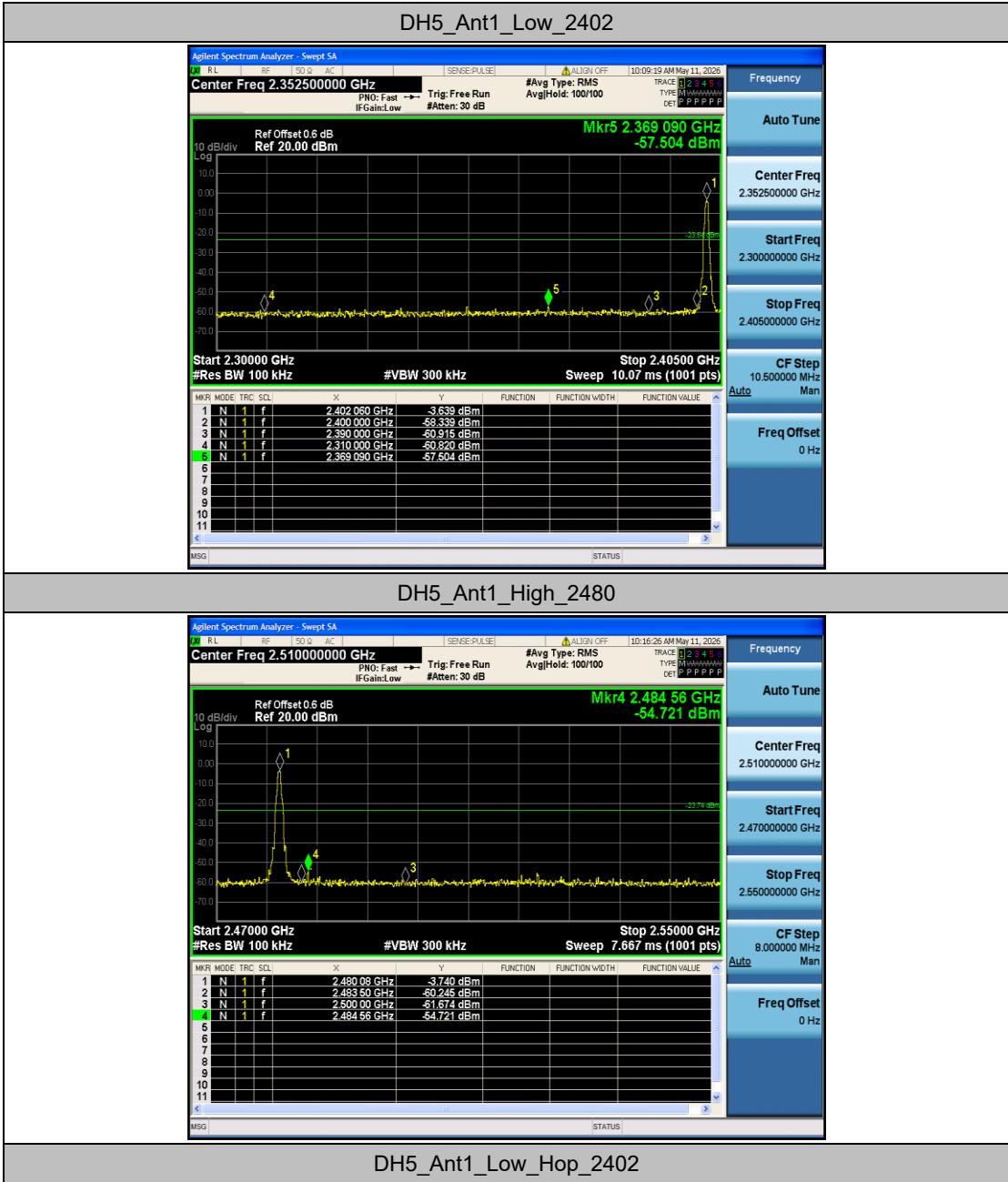


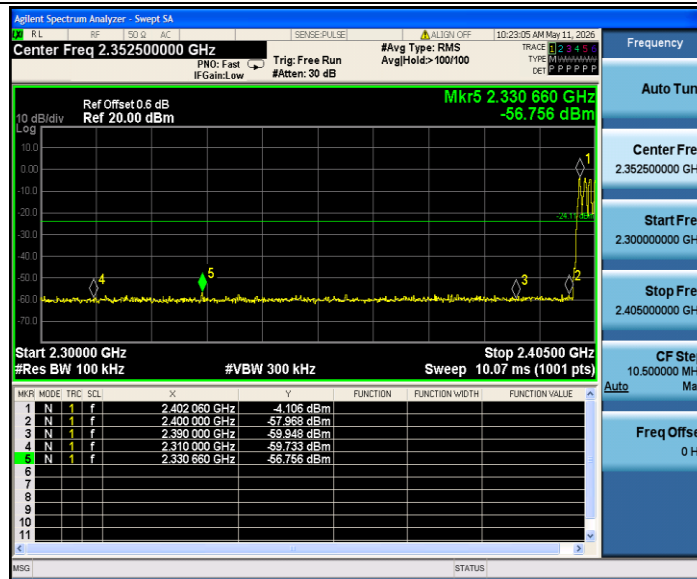
Appendix G: Band edge measurements

Test Result

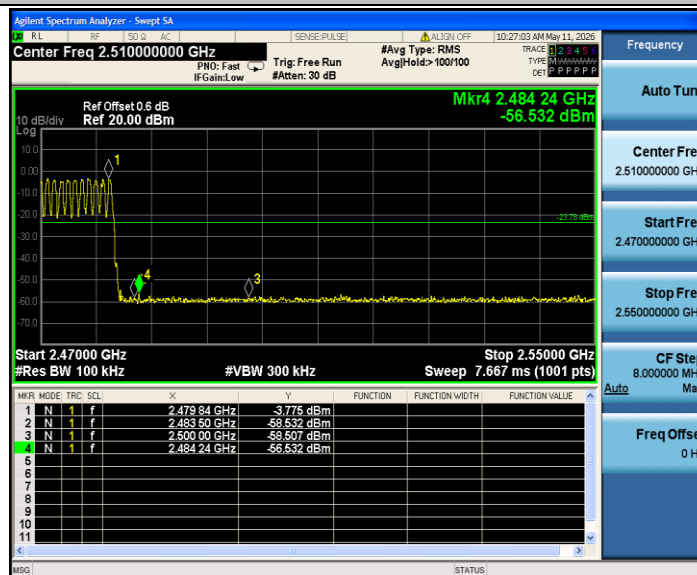
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.64	-57.5	≤ -23.64	PASS
		High	2480	-3.74	-54.72	≤ -23.74	PASS
		Low	Hop_2402	-4.11	-56.76	≤ -24.11	PASS
		High	Hop_2480	-3.78	-56.53	≤ -23.78	PASS
2DH5	Ant1	Low	2402	-3.54	-56.38	≤ -23.54	PASS
		High	2480	-4.00	-56.41	≤ -24	PASS
		Low	Hop_2402	-5.16	-55.51	≤ -25.16	PASS
		High	Hop_2480	-4.13	-51.32	≤ -24.13	PASS

Test Graphs

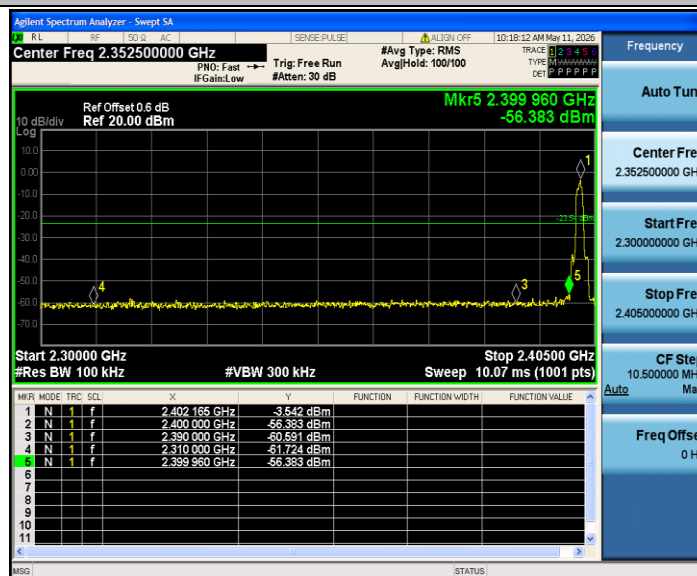




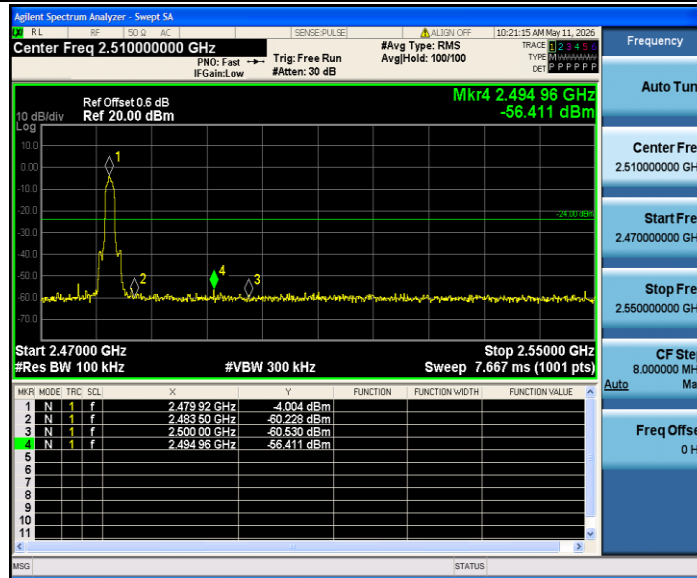
DH5_Ant1_High_Hop_2480



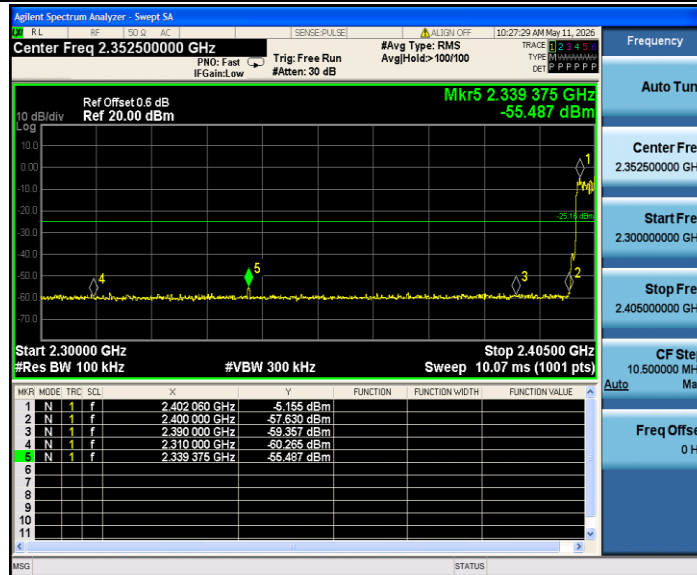
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



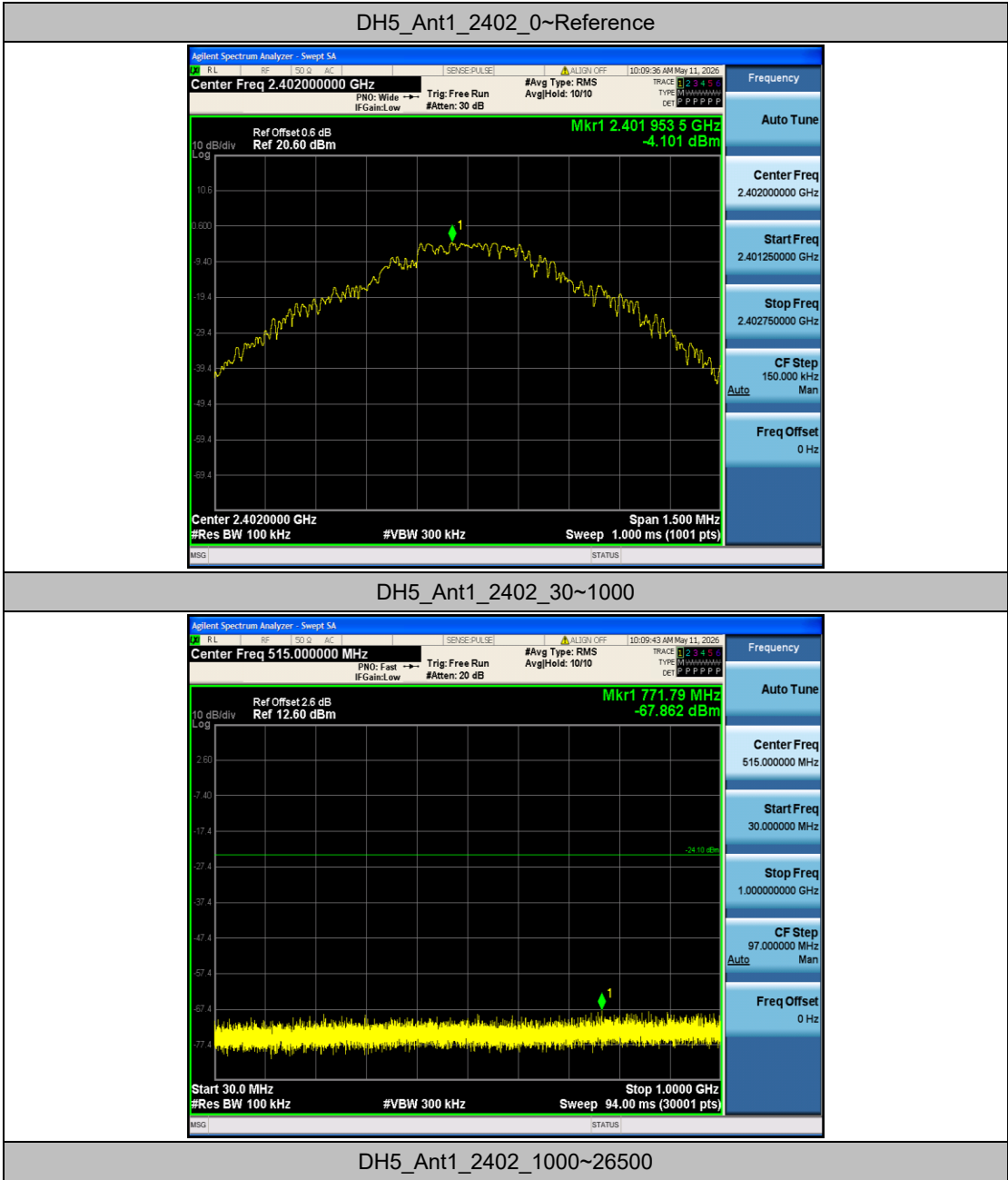
2DH5_Ant1_High_Hop_2480

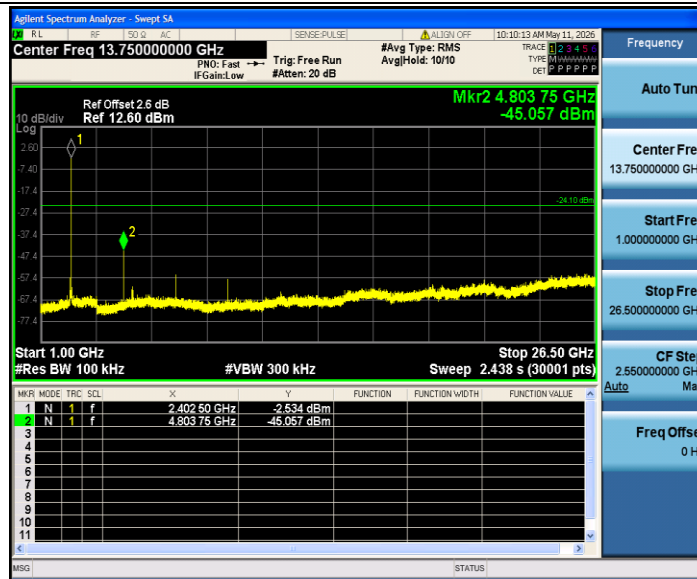
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.10	-4.10	---	PASS
			30~1000	-4.10	-67.86	≤-24.1	PASS
			1000~26500	-4.10	-45.06	≤-24.1	PASS
		2441	Reference	-4.04	-4.04	---	PASS
			30~1000	-4.04	-66.68	≤-24.04	PASS
			1000~26500	-4.04	-44.88	≤-24.04	PASS
		2480	Reference	-3.72	-3.72	---	PASS
			30~1000	-3.72	-67.84	≤-23.72	PASS
			1000~26500	-3.72	-45.18	≤-23.72	PASS
2DH5	Ant1	2402	Reference	-6.46	-6.46	---	PASS
			30~1000	-6.46	-66.84	≤-26.46	PASS
			1000~26500	-6.46	-46.21	≤-26.46	PASS
		2441	Reference	-6.08	-6.08	---	PASS
			30~1000	-6.08	-67.4	≤-26.08	PASS
			1000~26500	-6.08	-46.03	≤-26.08	PASS
		2480	Reference	-4.98	-4.98	---	PASS
			30~1000	-4.98	-67.1	≤-24.98	PASS
			1000~26500	-4.98	-45.86	≤-24.98	PASS

Test Graphs

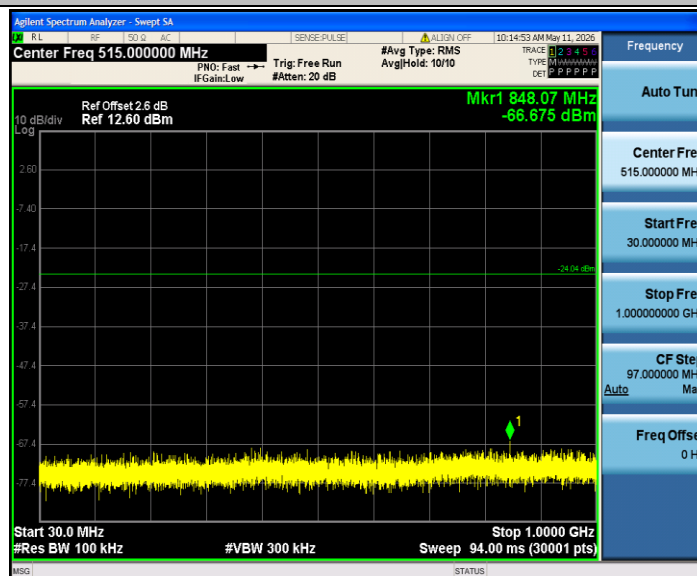




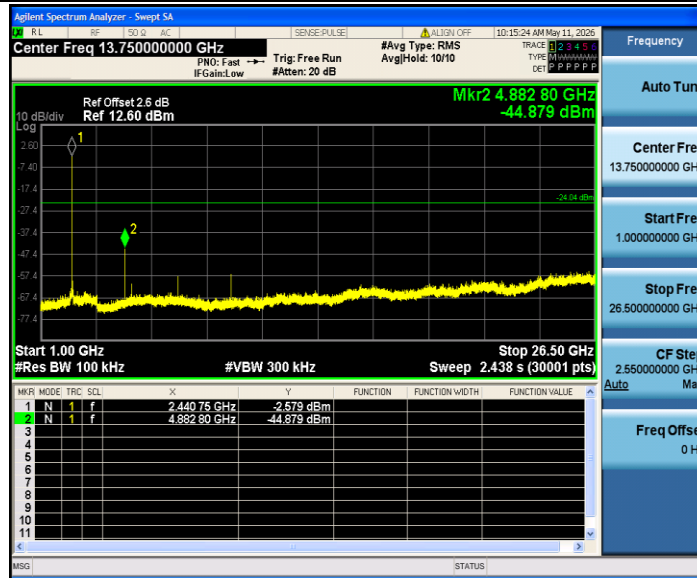
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



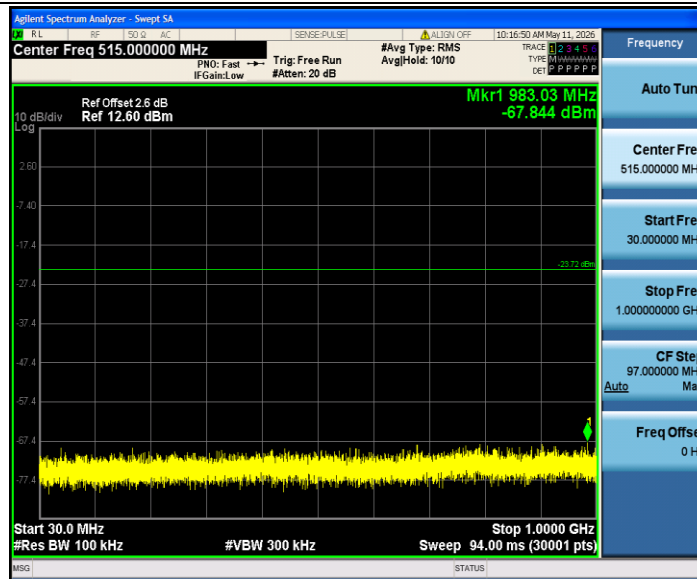
DH5_Ant1_2441_1000~26500



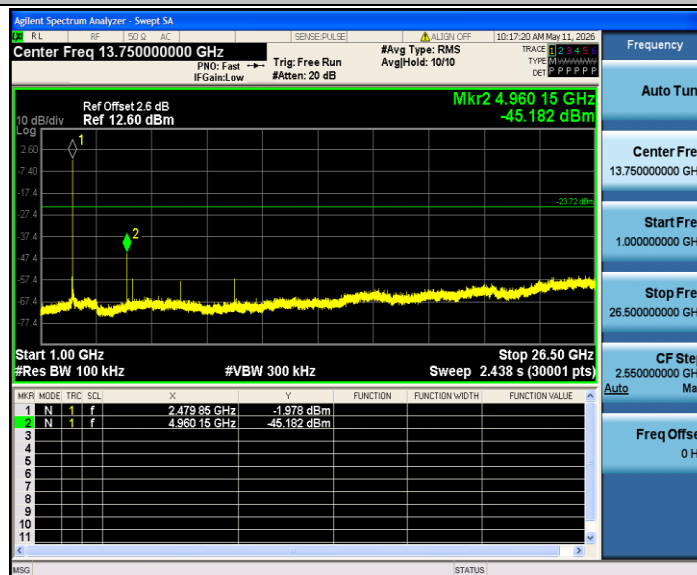
DH5_Ant1_2480_0~Reference



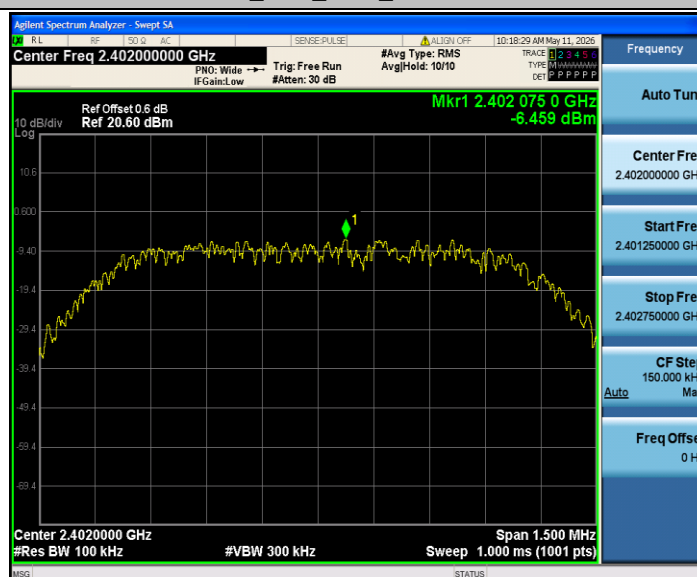
DH5_Ant1_2480_30~1000



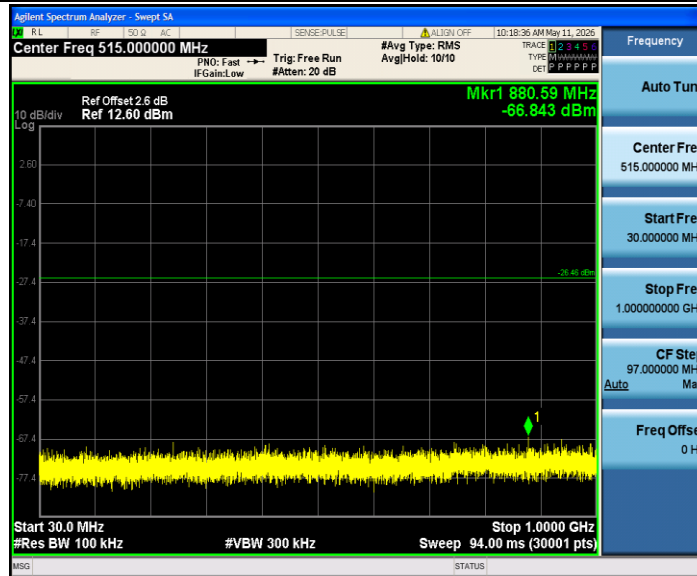
DH5_Ant1_2480_1000~26500



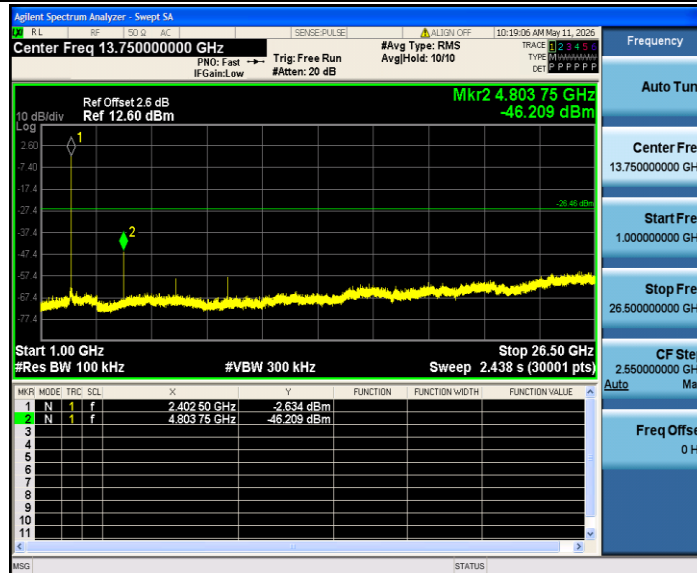
2DH5_Ant1_2402_0~Reference



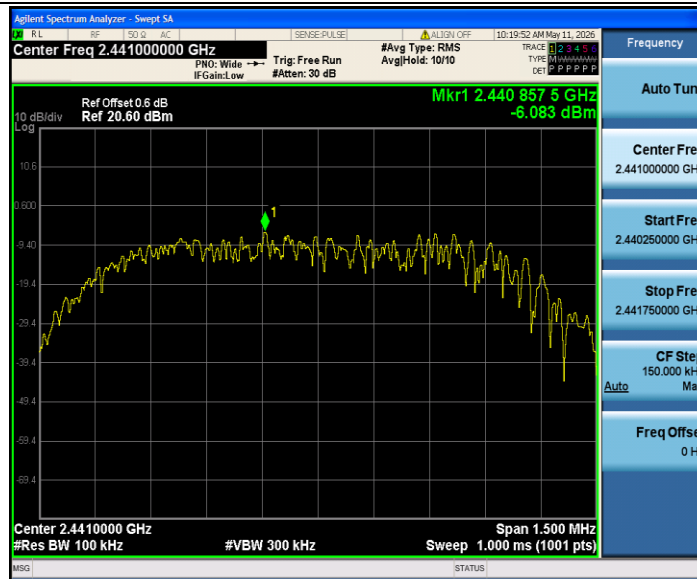
2DH5_Ant1_2402_30~1000



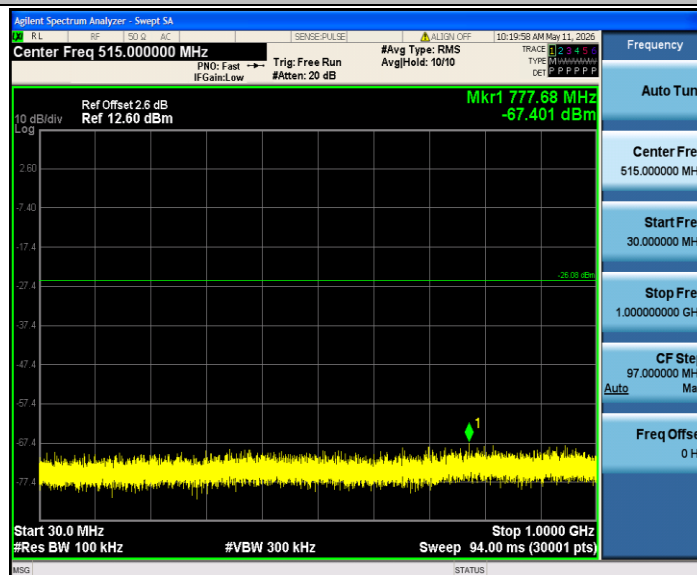
2DH5_Ant1_2402_1000~26500



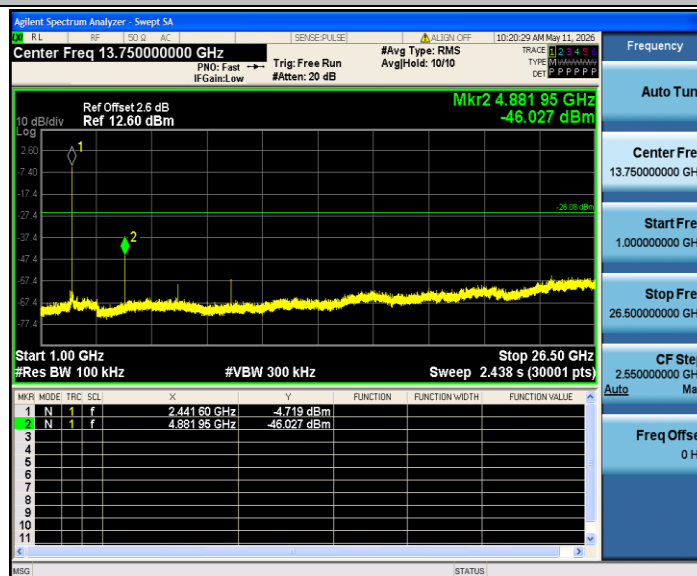
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



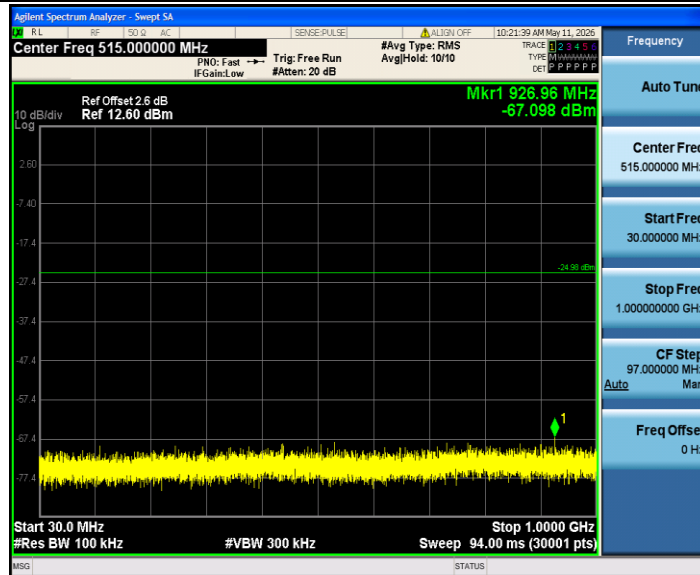
2DH5_Ant1_2441_1000~26500



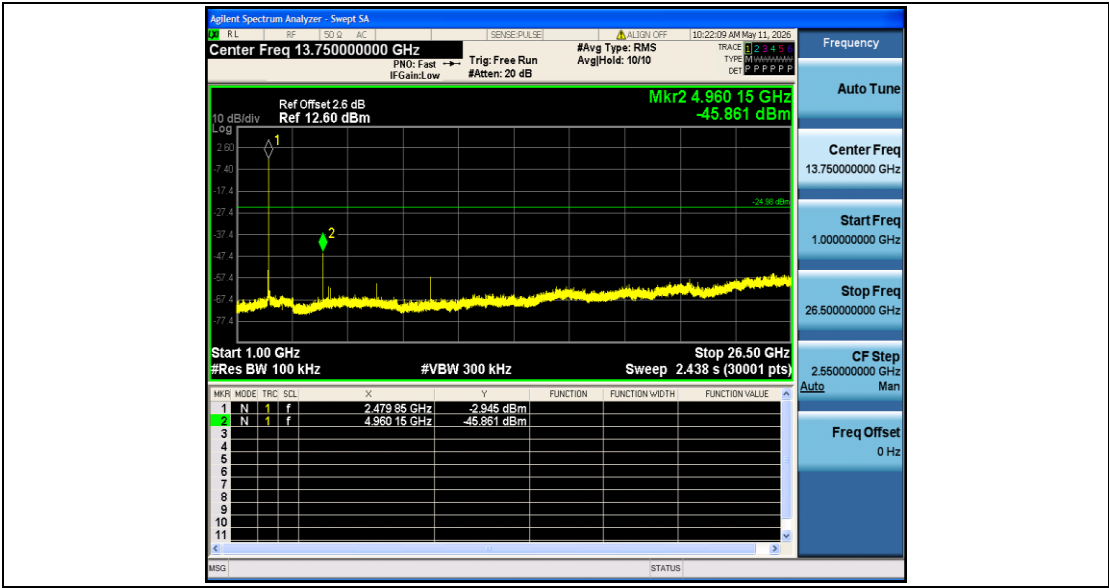
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

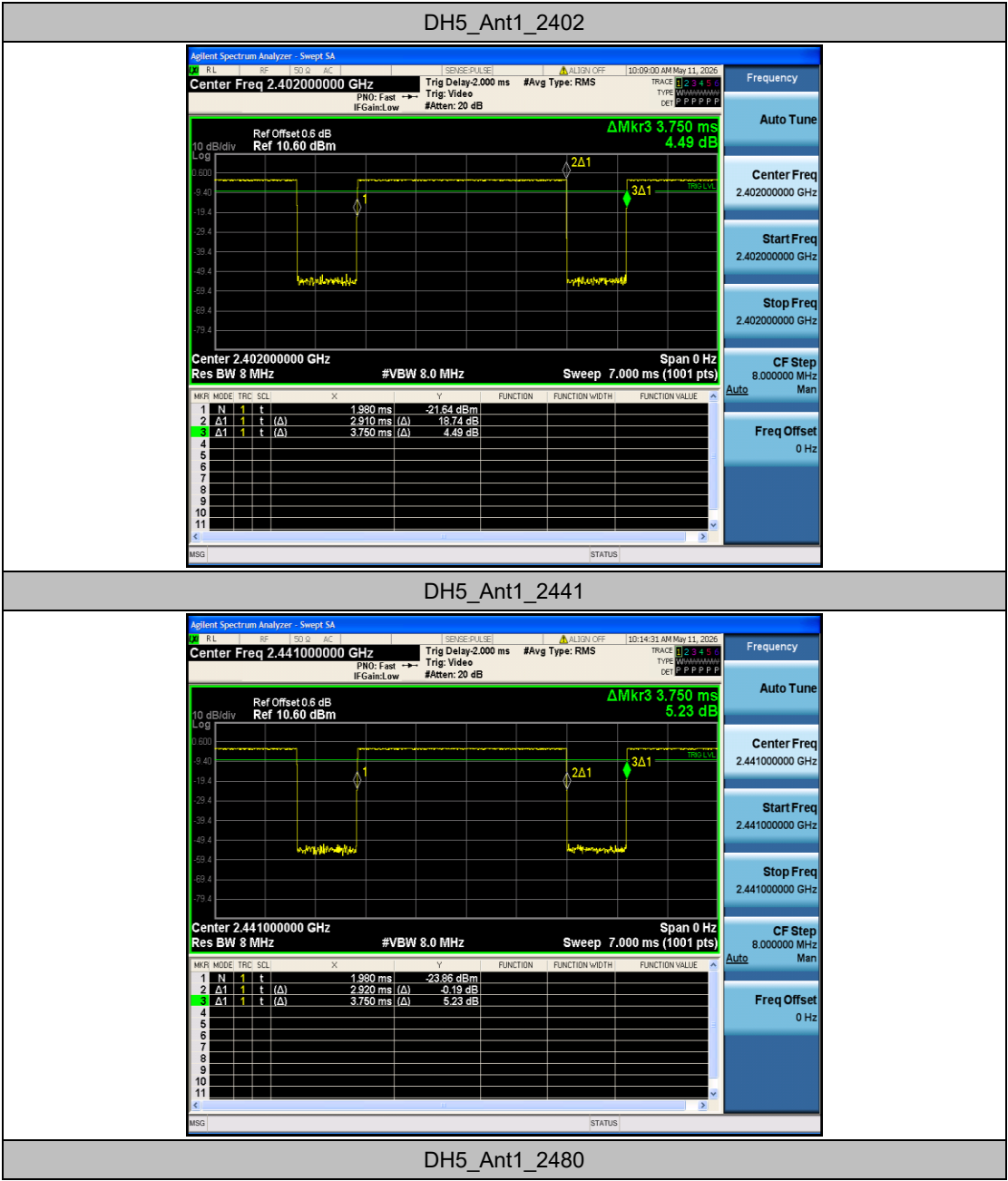


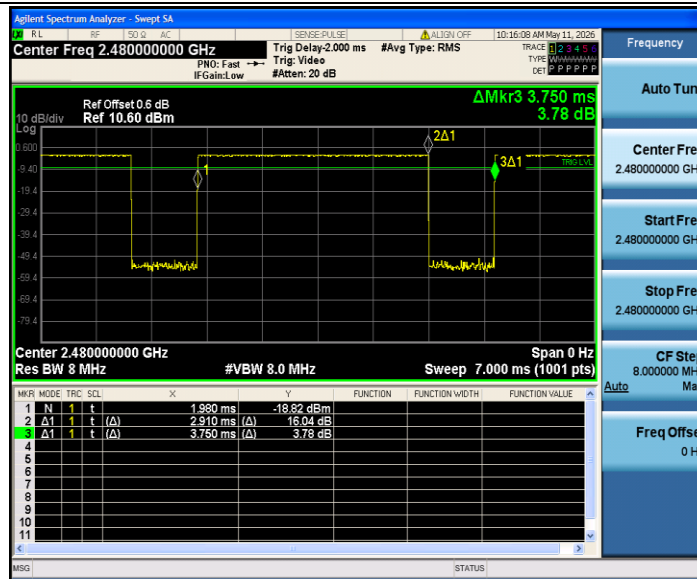
Appendix I: Duty Cycle

Test Result

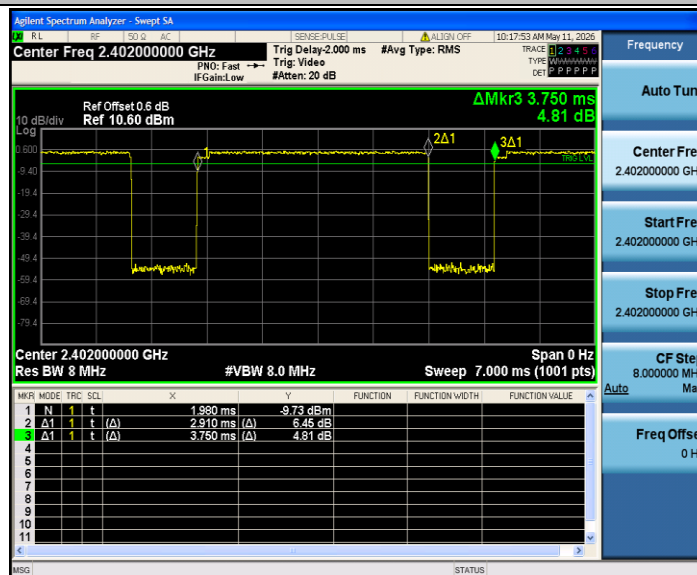
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09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

Test Graphs

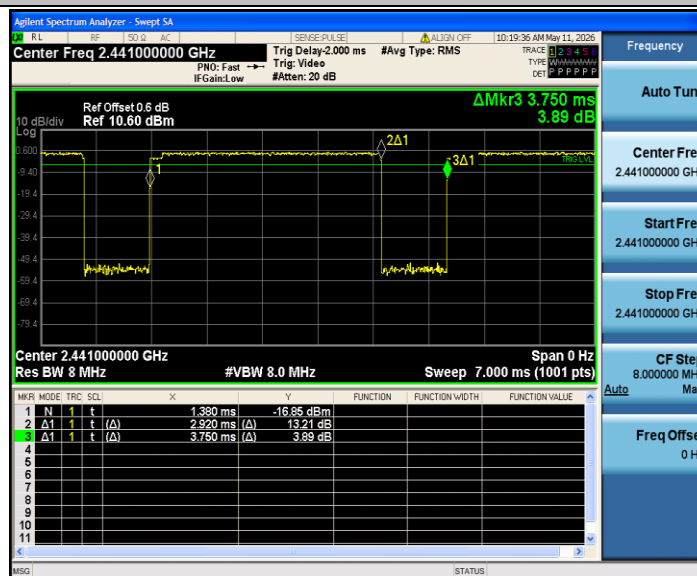




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

