

FCC Appendix RF Test Data for BT

FCC ID : 2BBD4-EAC-SU25

Company : Shenzhen ANTHEN Electronics Co.,Ltd

EUT : Wireless Speaker

Model Number : AT2081

Report No. : CTA26012201301

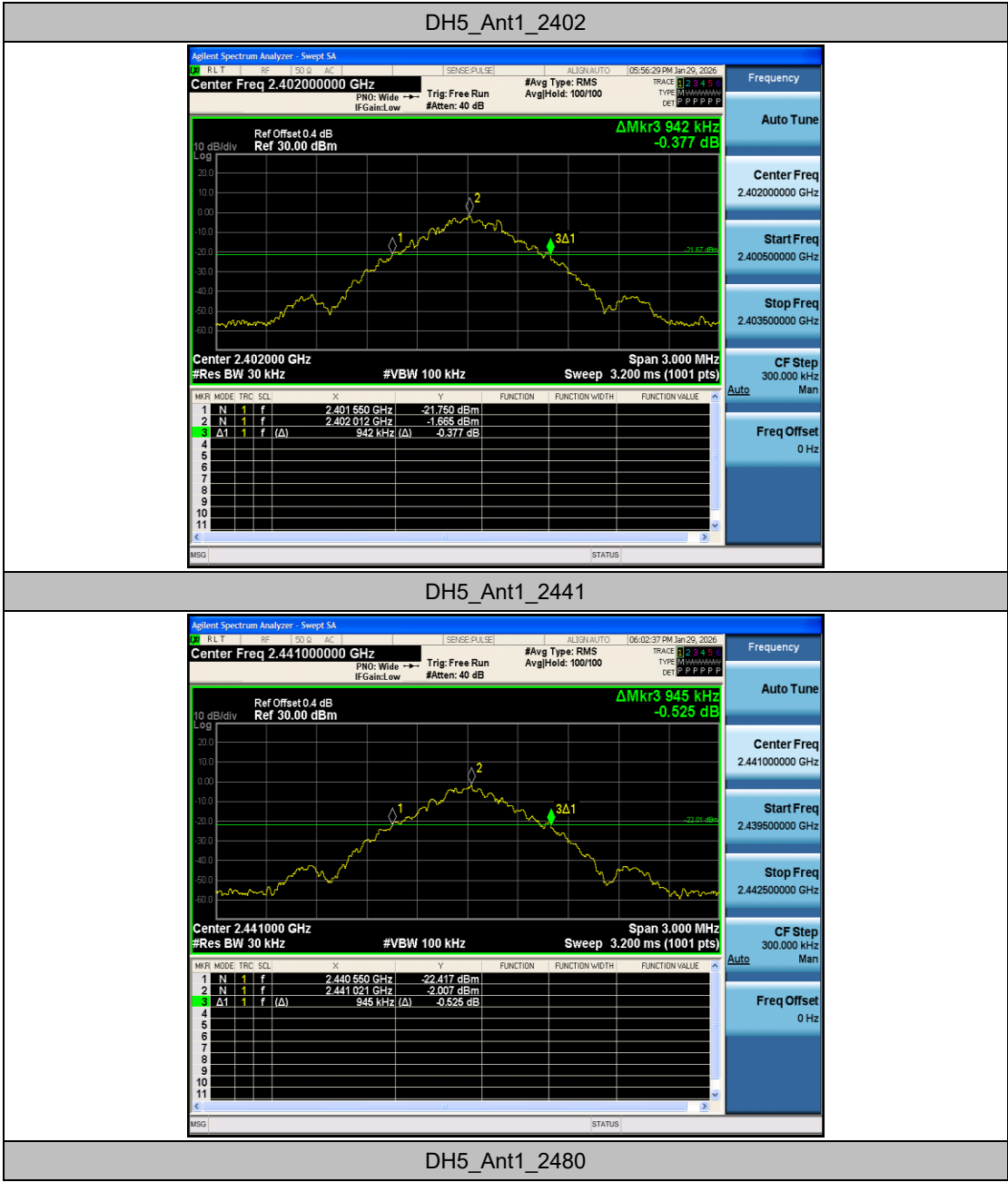
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.942	2401.550	2402.492	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.957	2479.547	2480.504	---	---
2DH5	Ant1	2402	1.323	2401.349	2402.672	---	---
		2441	1.287	2440.376	2441.663	---	---
		2480	1.287	2479.379	2480.666	---	---
3DH5	Ant1	2402	1.329	2401.346	2402.675	---	---
		2441	1.284	2440.382	2441.666	---	---
		2480	1.287	2479.376	2480.663	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



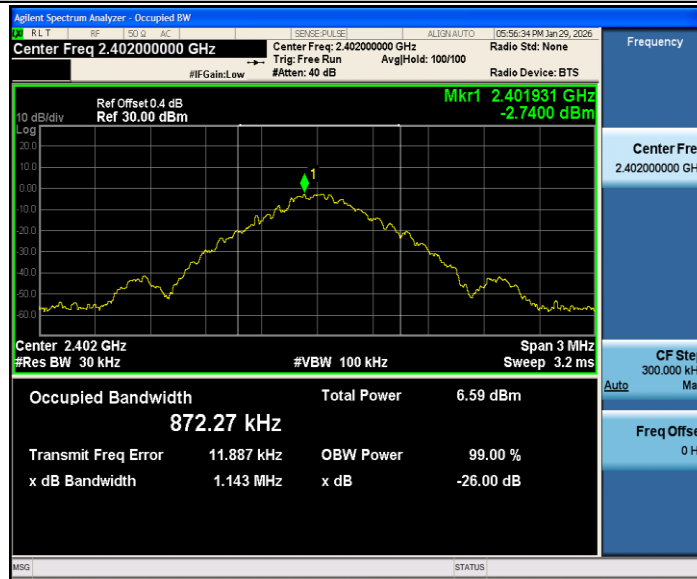
Appendix B: Occupied Channel Bandwidth

Test Result

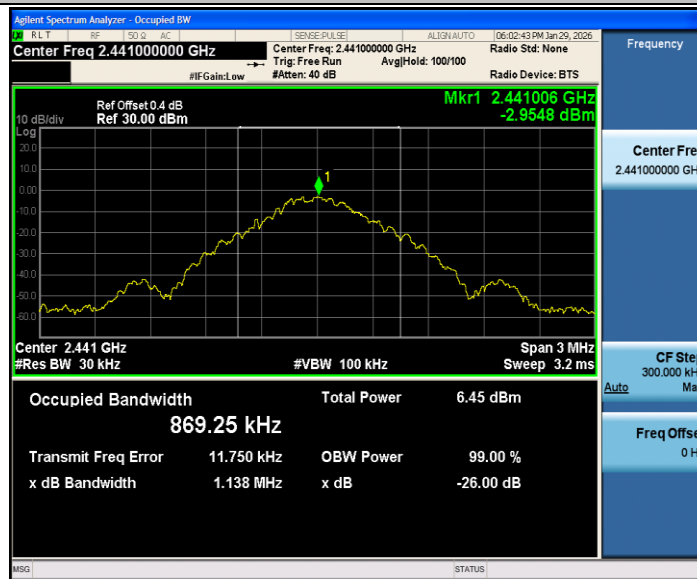
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87227	2401.5758	2402.4480	---	---
		2441	0.86925	2440.5771	2441.4464	---	---
		2480	0.86436	2479.5765	2480.4409	---	---
2DH5	Ant1	2402	1.1940	2401.4152	2402.6092	---	---
		2441	1.1861	2440.4187	2441.6048	---	---
		2480	1.1867	2479.4154	2480.6021	---	---
3DH5	Ant1	2402	1.1853	2401.4175	2402.6028	---	---
		2441	1.1916	2440.4146	2441.6062	---	---
		2480	1.1882	2479.4172	2480.6054	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



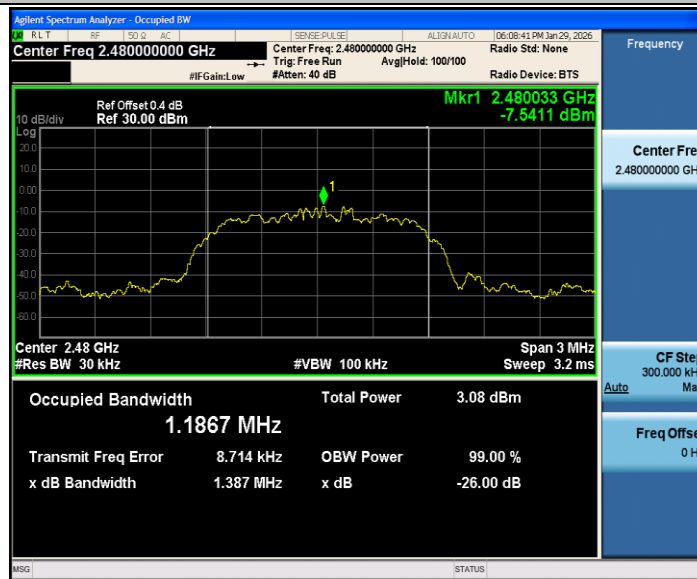
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



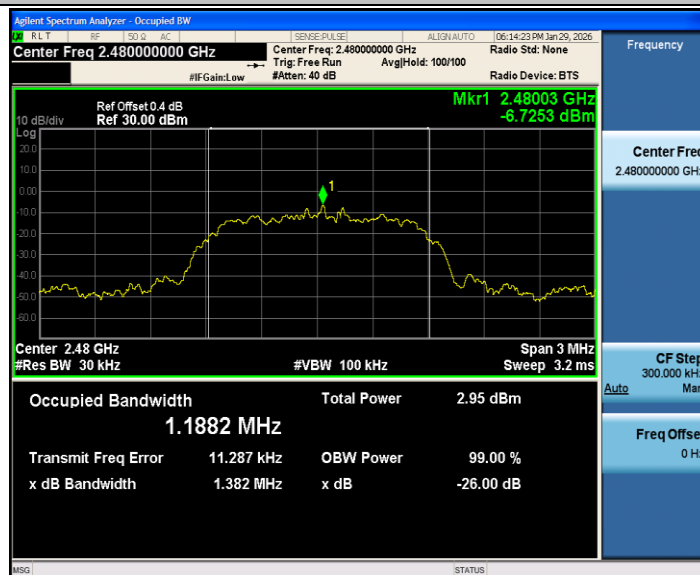
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

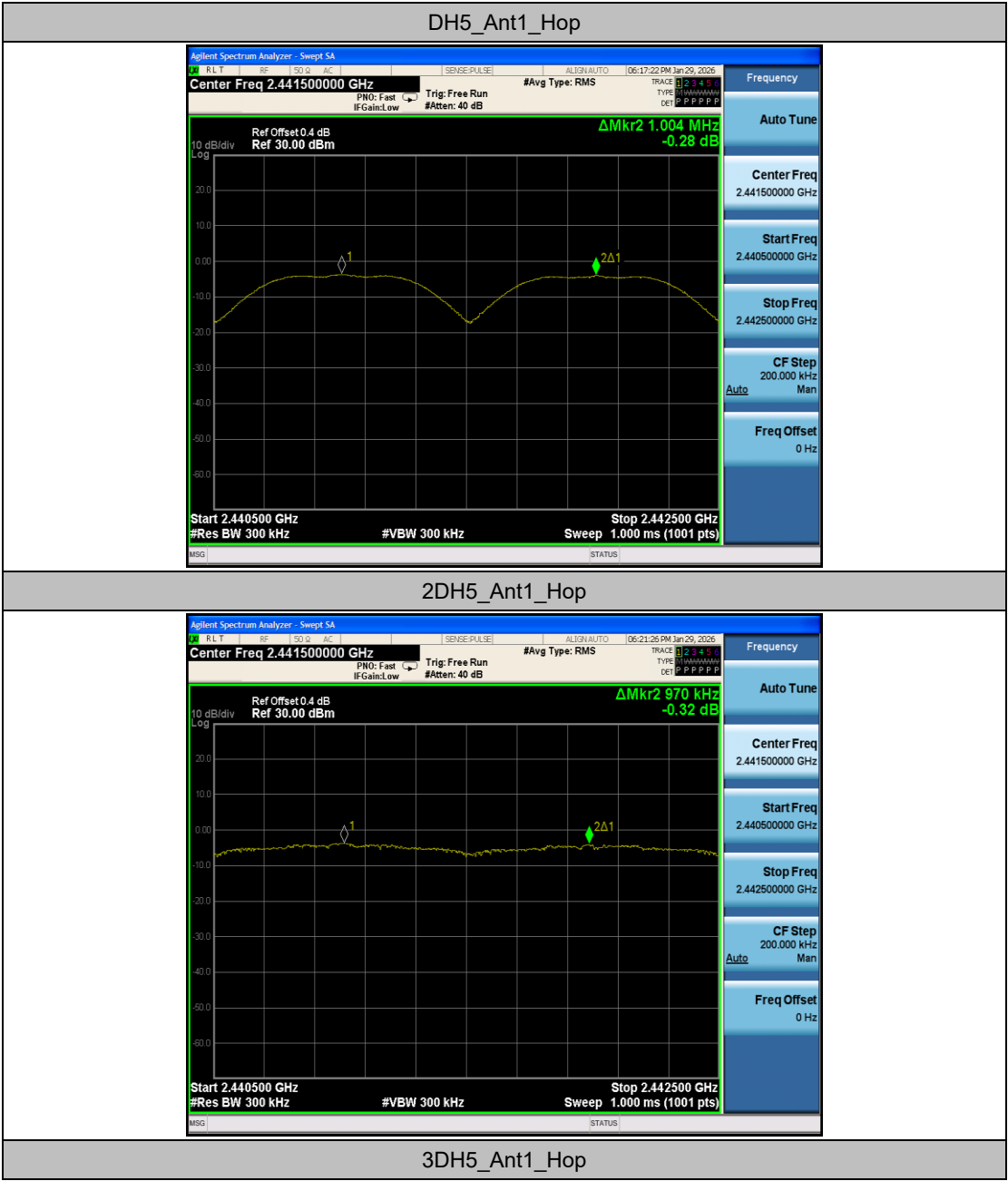
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.15	≤20.97	PASS
		2441	-0.18	≤20.97	PASS
		2480	-0.22	≤20.97	PASS
2DH5	Ant1	2402	-0.69	≤20.97	PASS
		2441	-1.03	≤20.97	PASS
		2480	-1.09	≤20.97	PASS
3DH5	Ant1	2402	-0.79	≤20.97	PASS
		2441	-1.02	≤20.97	PASS
		2480	-1.01	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥ 0.957	PASS
2DH5	Ant1	Hop	0.97	≥ 0.882	PASS
3DH5	Ant1	Hop	1.02	≥ 0.886	PASS

Test Graphs



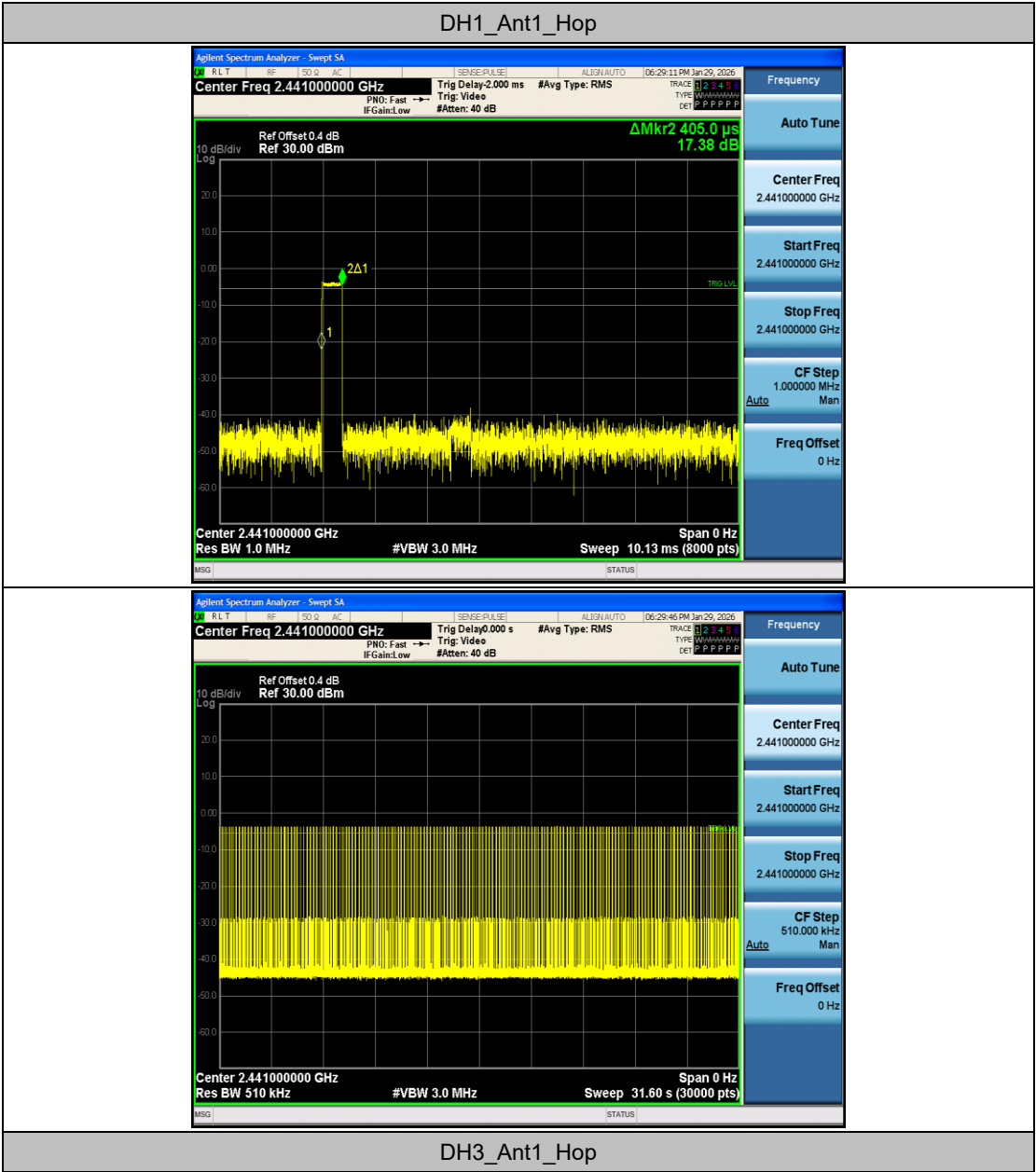


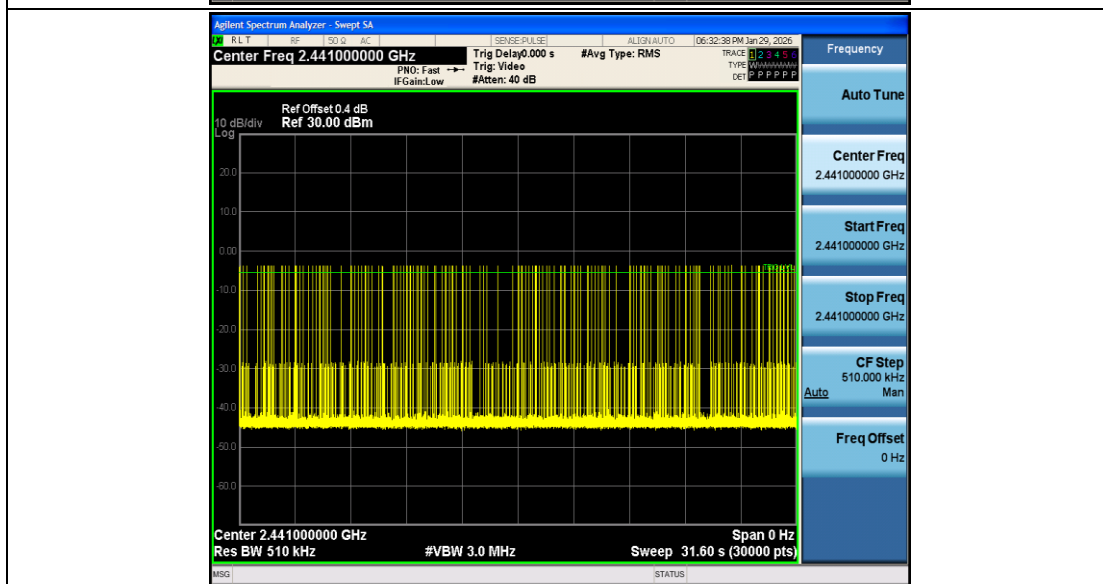
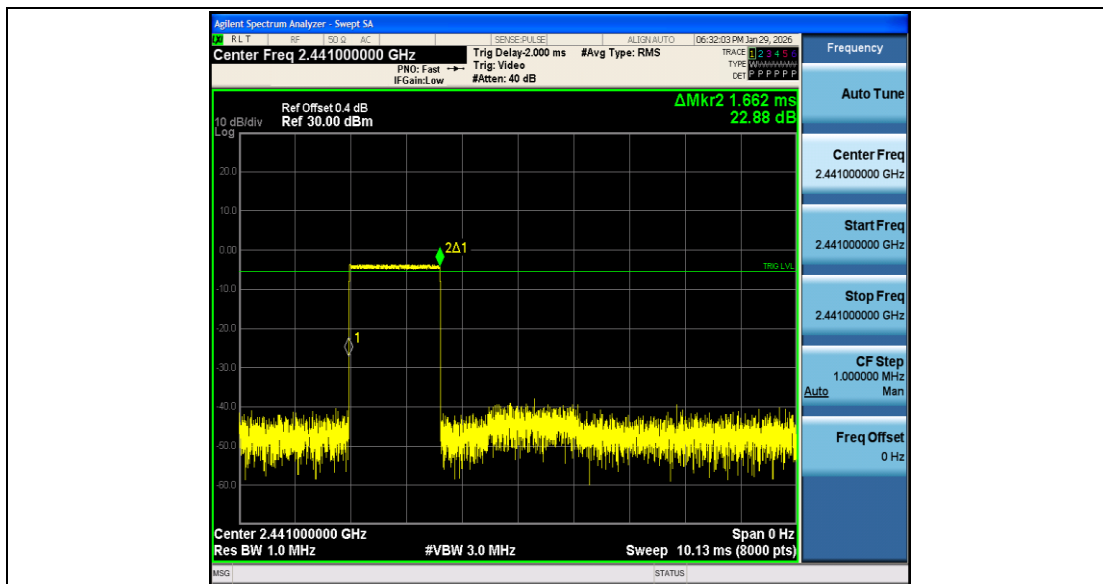
Appendix E: Time of occupancy

Test Result

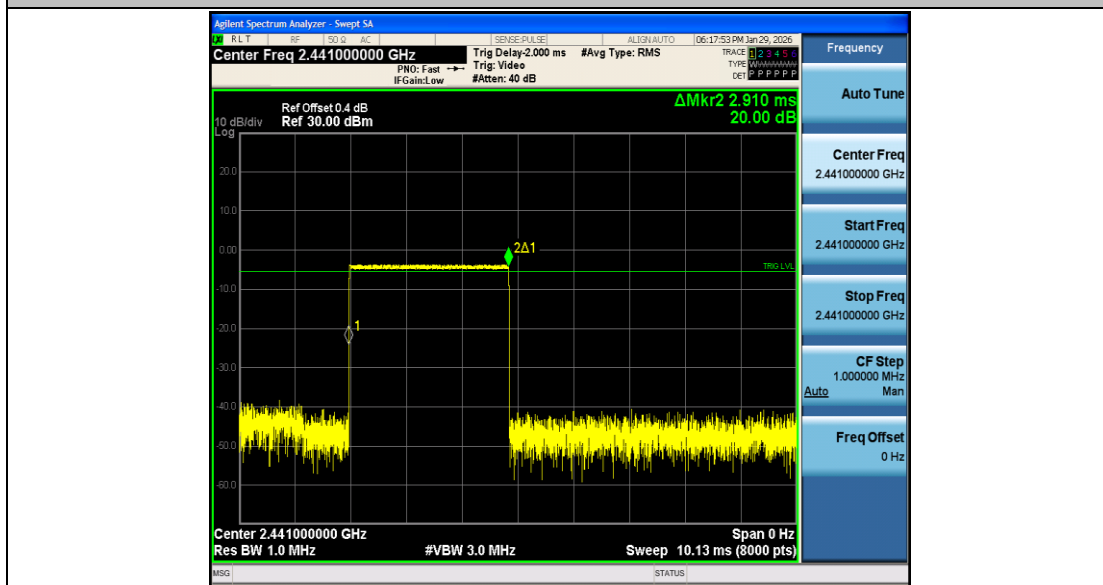
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	319	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	162	0.269	≤0.4	PASS
DH5	Ant1	Hop	2.910	99	0.288	≤0.4	PASS
2DH1	Ant1	Hop	0.407	319	0.13	≤0.4	PASS
2DH3	Ant1	Hop	1.662	159	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.916	95	0.277	≤0.4	PASS
3DH1	Ant1	Hop	0.407	319	0.13	≤0.4	PASS
3DH3	Ant1	Hop	1.662	154	0.256	≤0.4	PASS
3DH5	Ant1	Hop	2.916	108	0.315	≤0.4	PASS

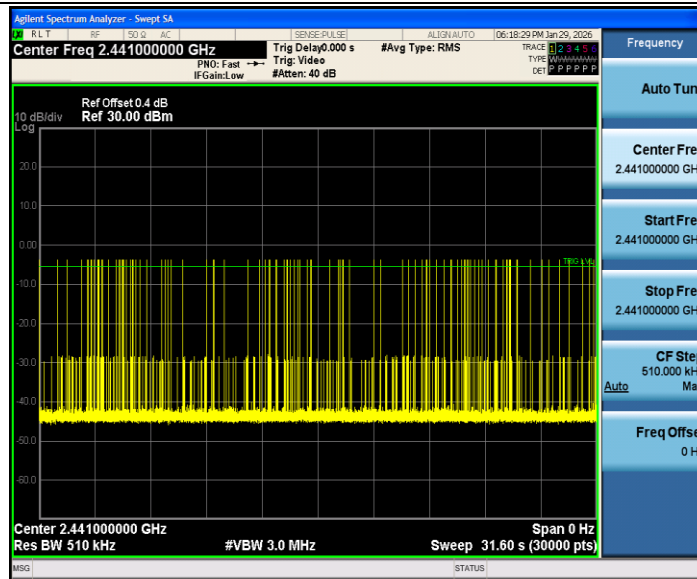
Test Graphs



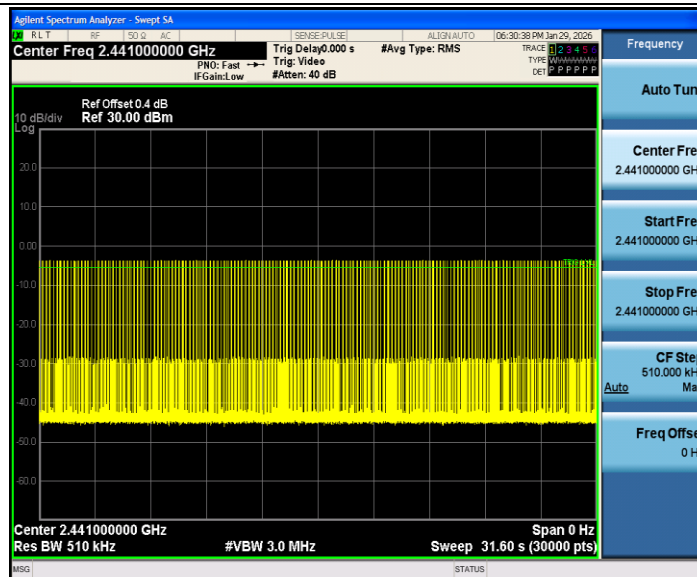
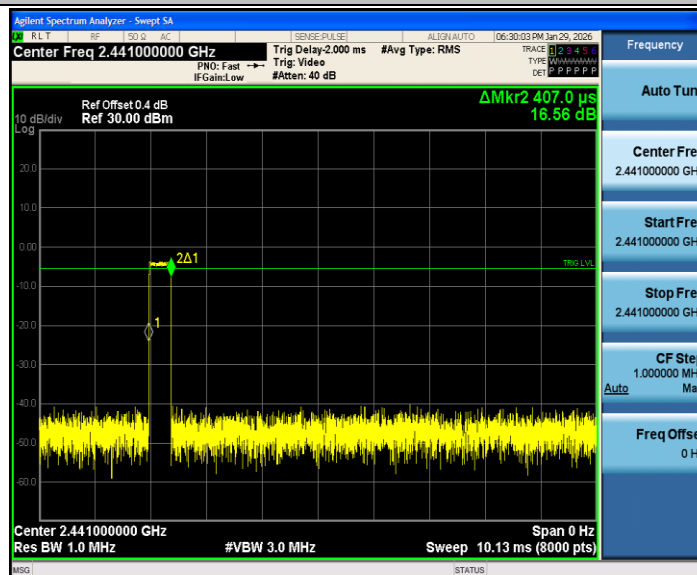


DH5_Ant1_Hop

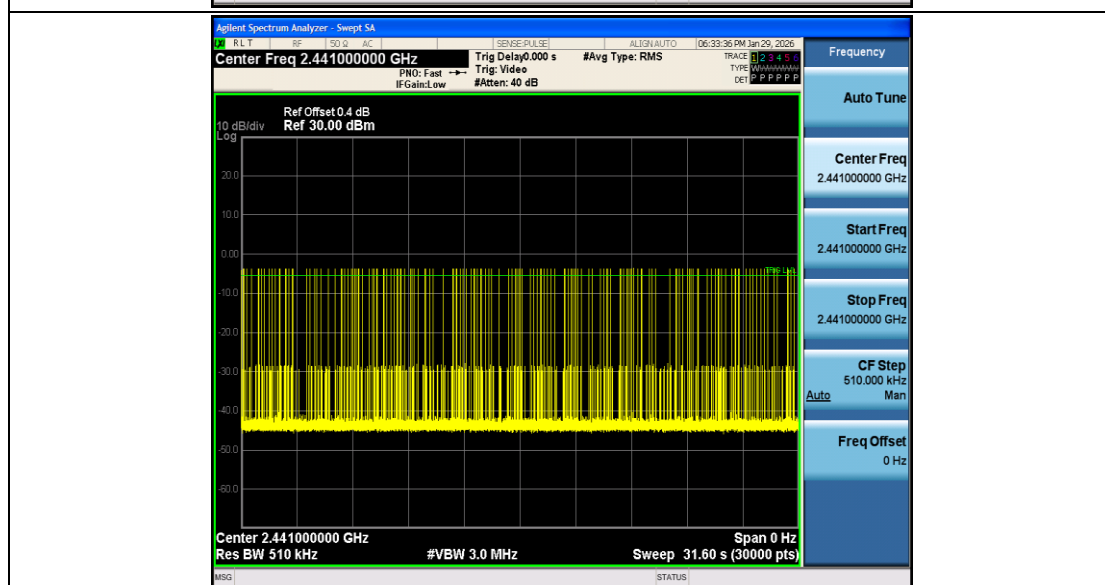
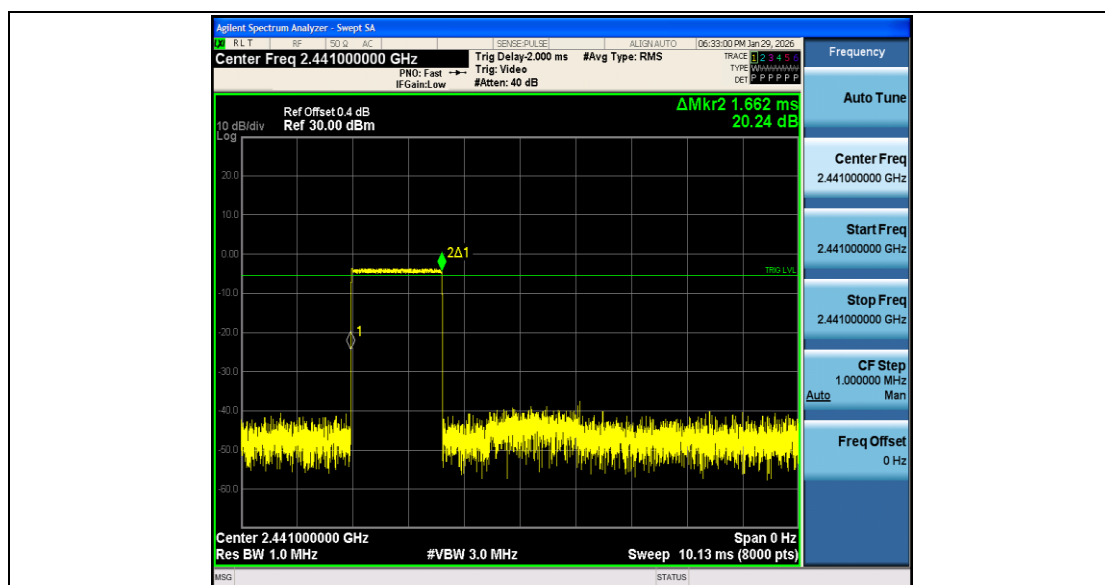




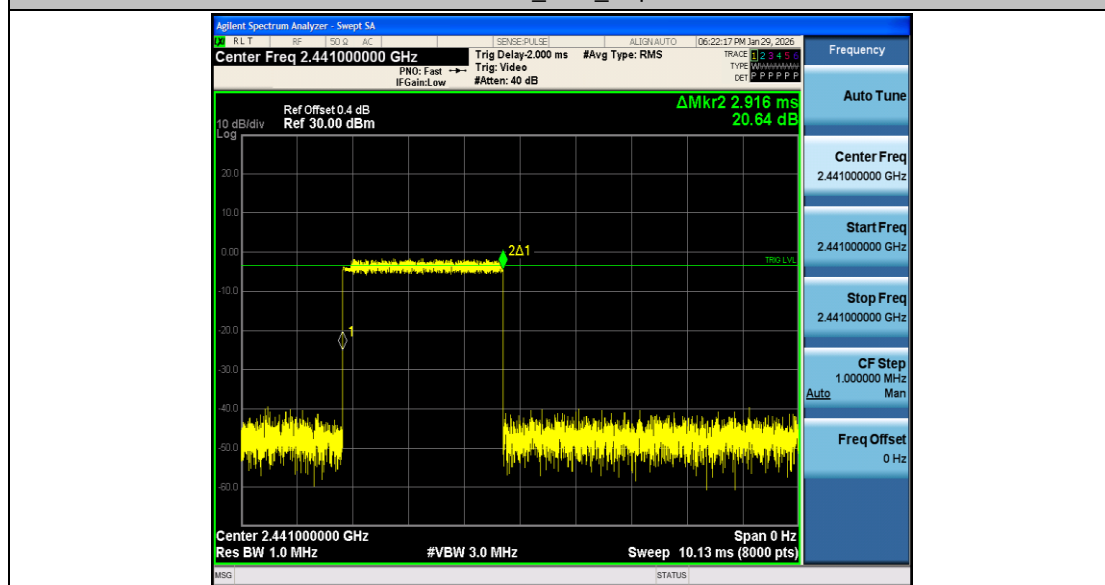
2DH1_Ant1_Hop

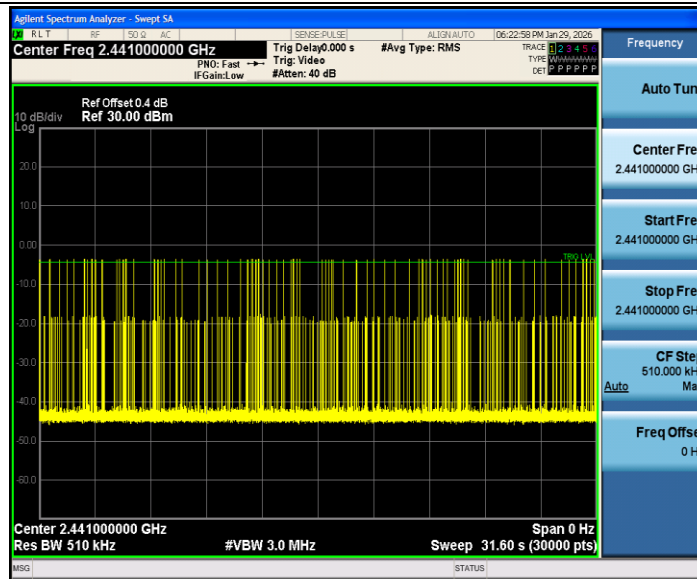


2DH3_Ant1_Hop

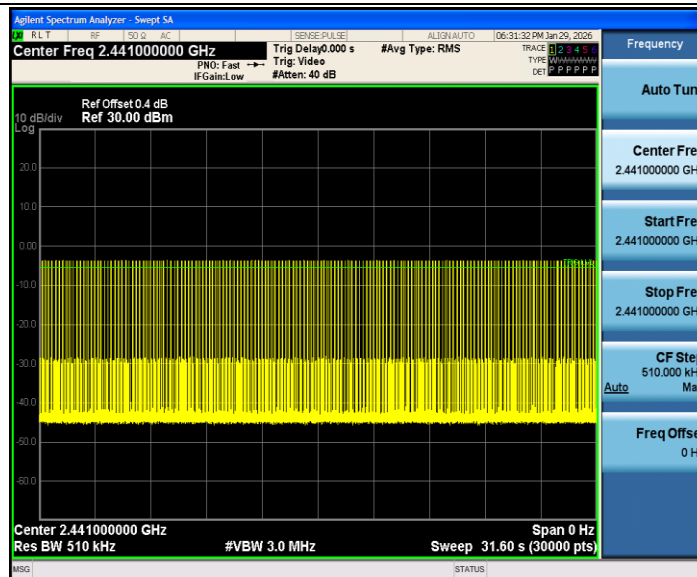
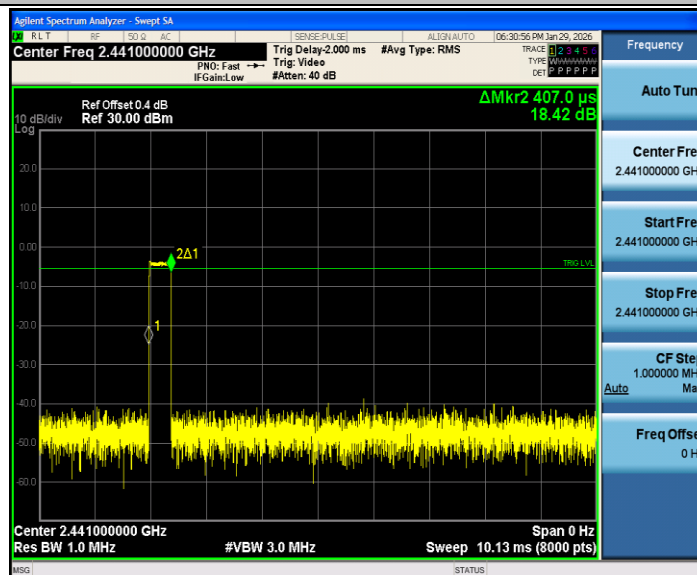


2DH5_Ant1_Hop

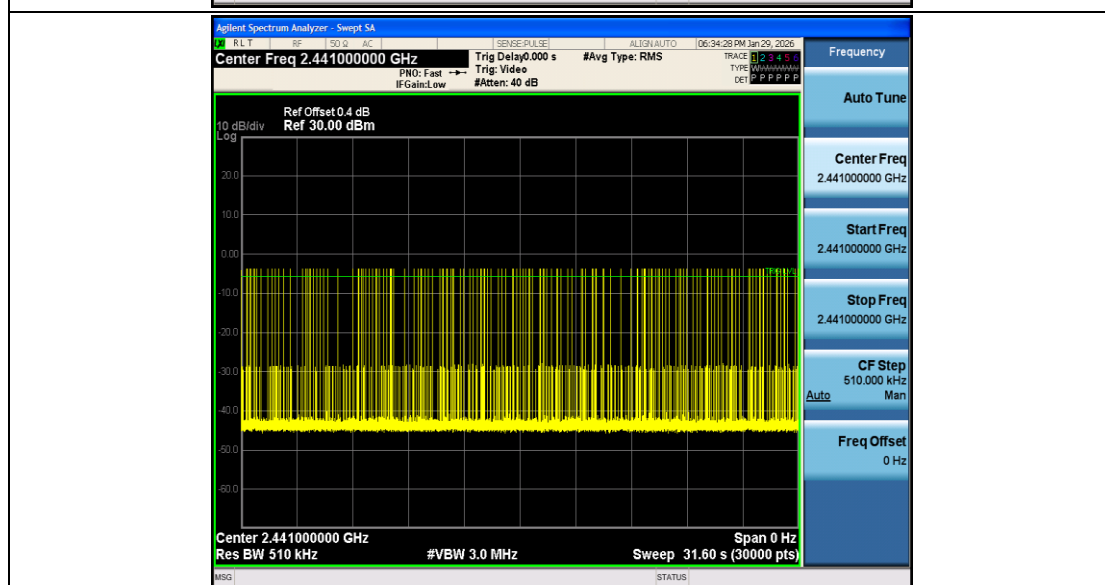
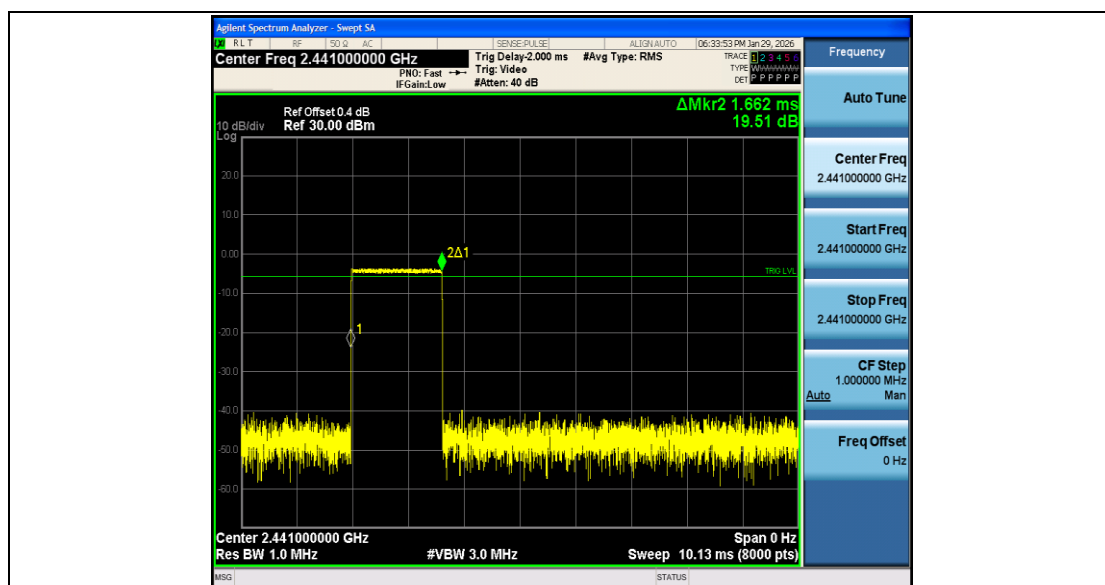




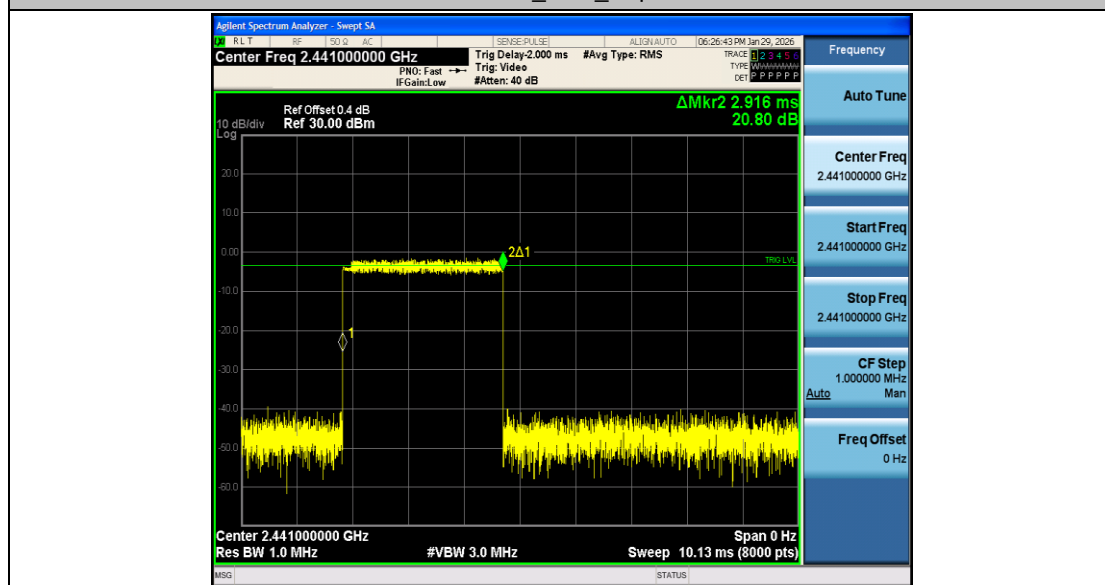
3DH1_Ant1_Hop

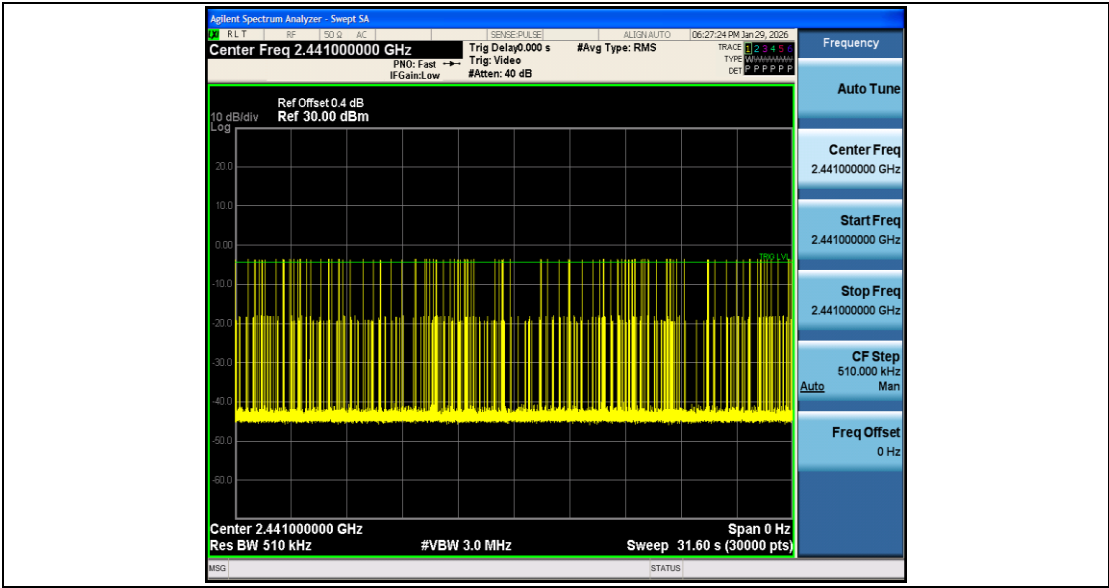


3DH3_Ant1_Hop



3DH5_Ant1_Hop



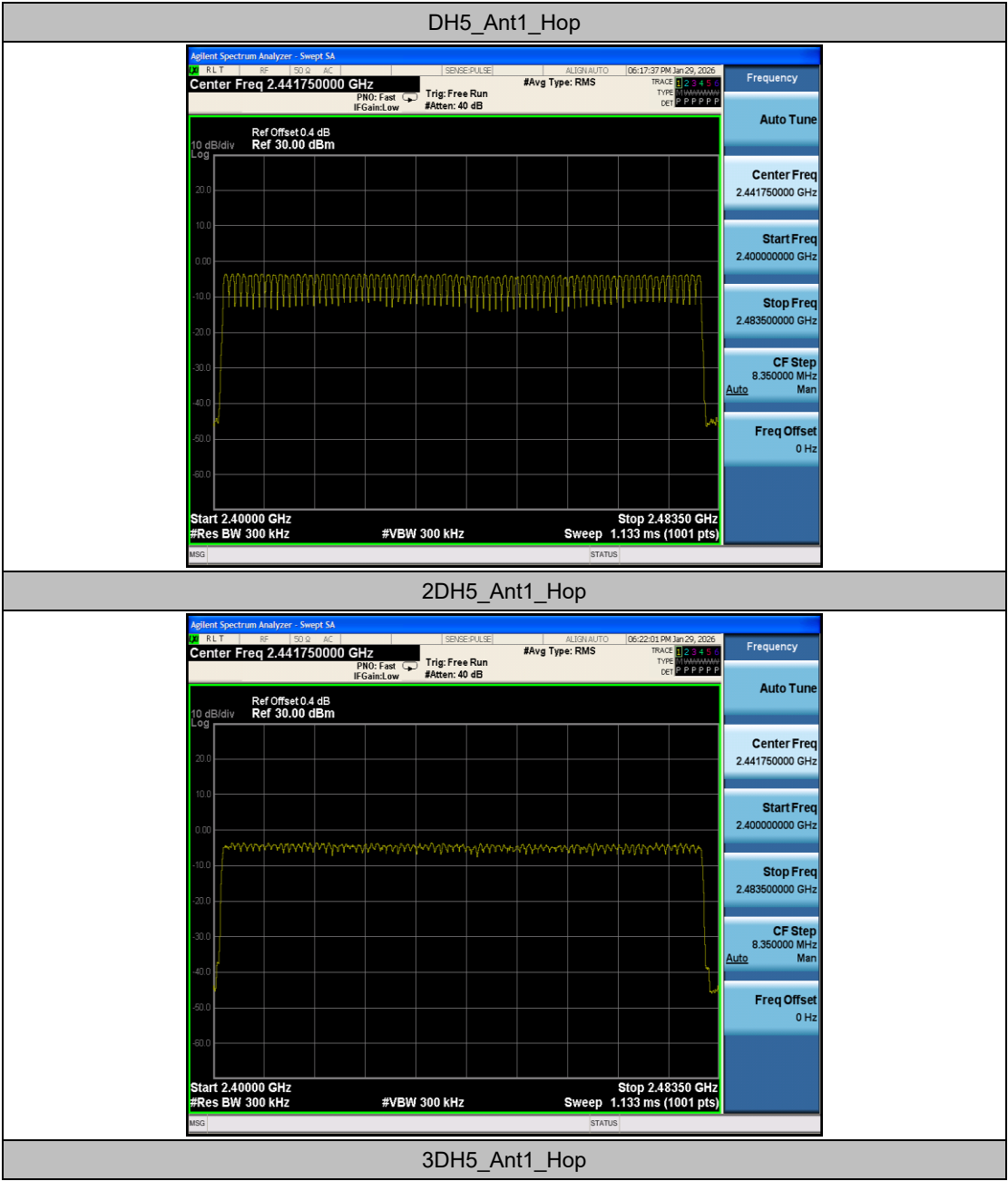


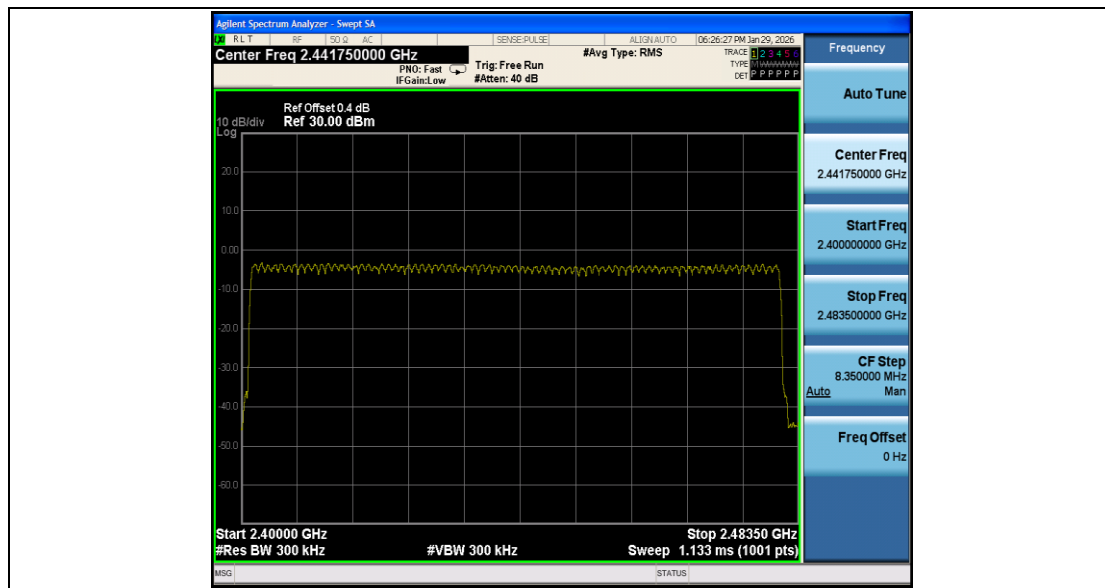
Appendix F: Number of hopping channels

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



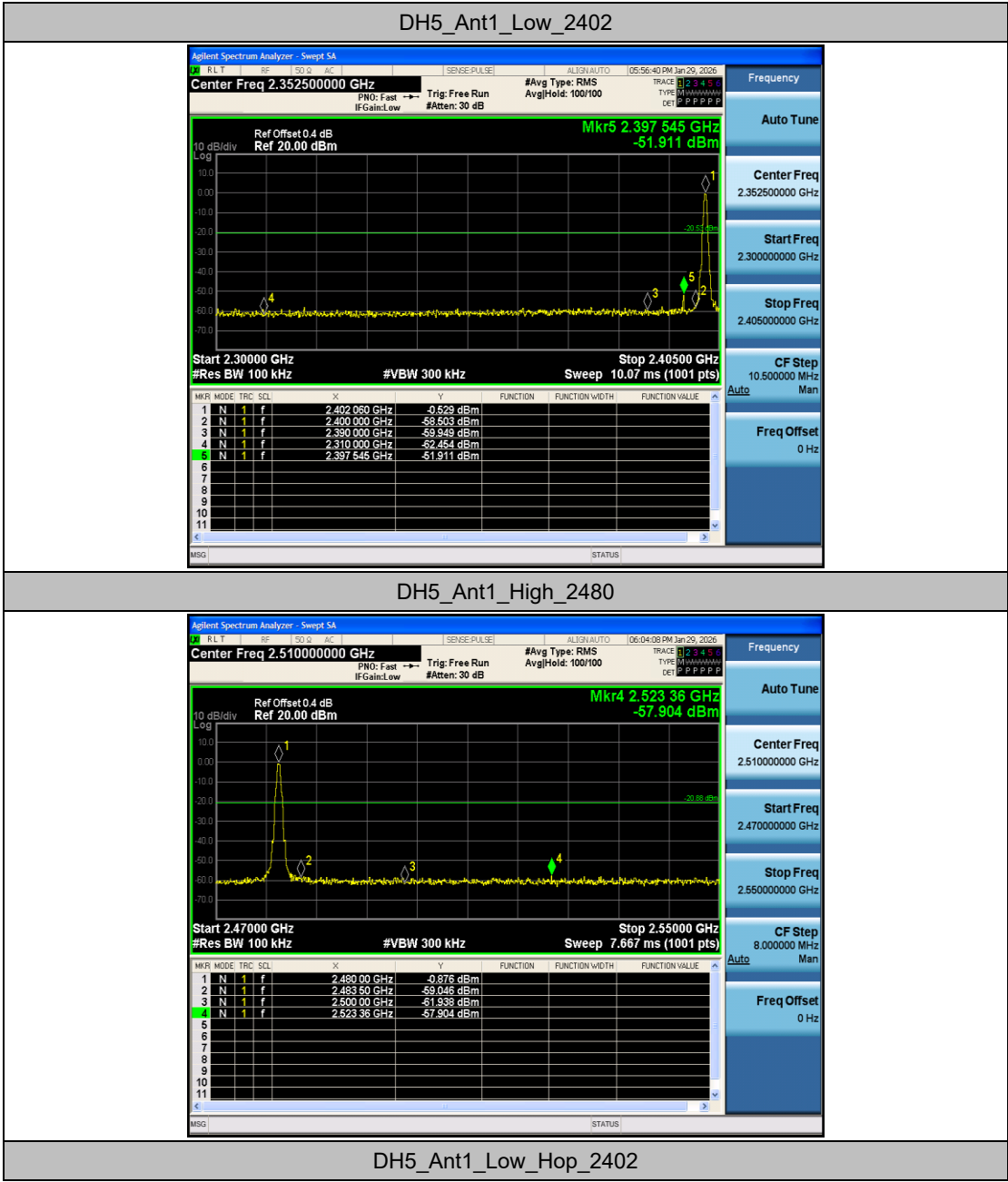


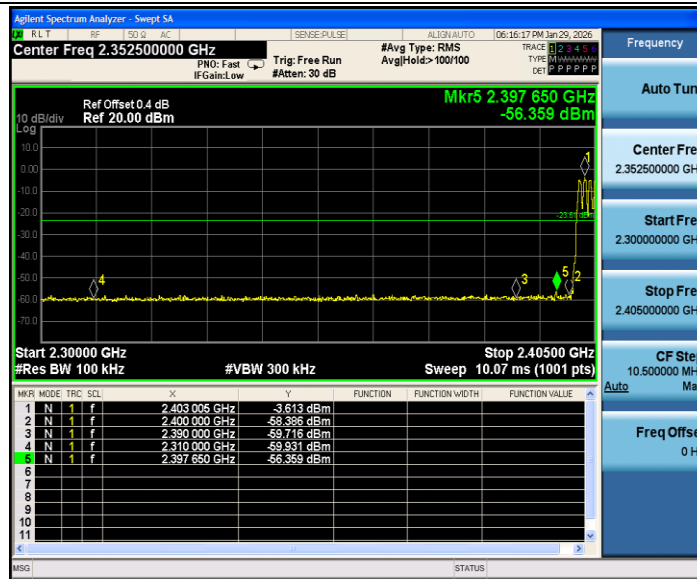
Appendix G: Band edge measurements

Test Result

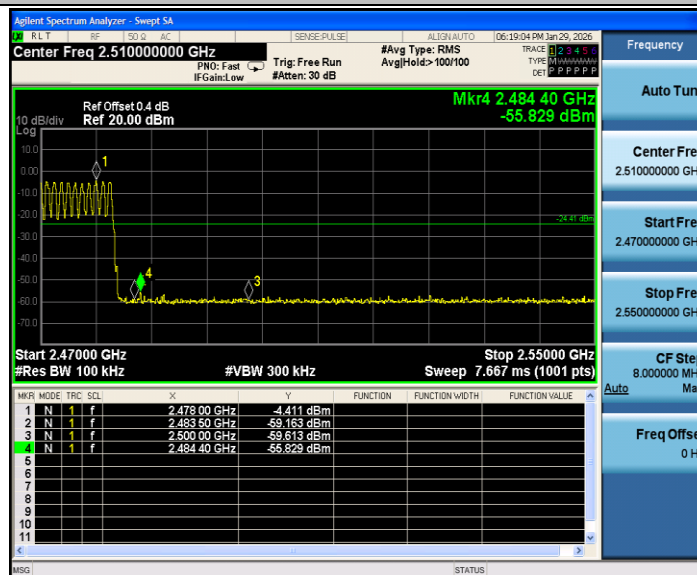
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.53	-51.91	≤-20.53	PASS
		High	2480	-0.88	-57.9	≤-20.88	PASS
		Low	Hop_2402	-3.61	-56.36	≤-23.61	PASS
		High	Hop_2480	-4.41	-55.83	≤-24.41	PASS
2DH5	Ant1	Low	2402	-3.56	-57.22	≤-23.56	PASS
		High	2480	-4.28	-56.99	≤-24.28	PASS
		Low	Hop_2402	-4.54	-57.14	≤-24.54	PASS
		High	Hop_2480	-5.66	-56.74	≤-25.66	PASS
3DH5	Ant1	Low	2402	-4.67	-57.03	≤-24.67	PASS
		High	2480	-5.01	-57.8	≤-25.01	PASS
		Low	Hop_2402	-4.54	-56.82	≤-24.54	PASS
		High	Hop_2480	-3.70	-56.59	≤-23.7	PASS

Test Graphs

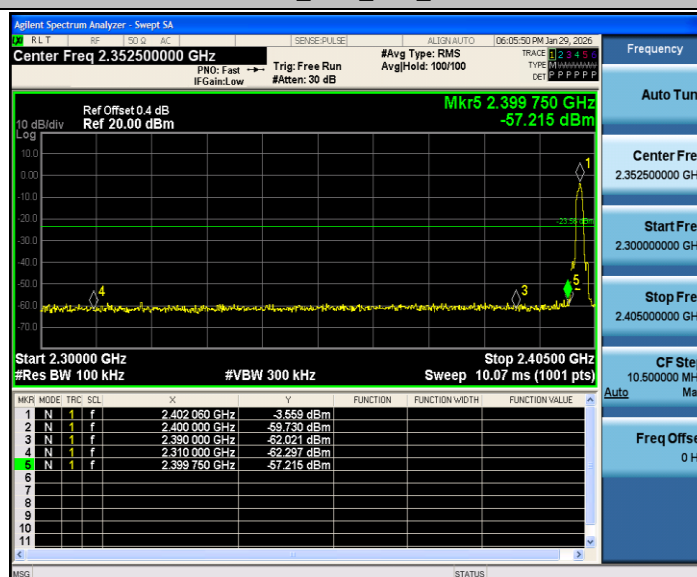




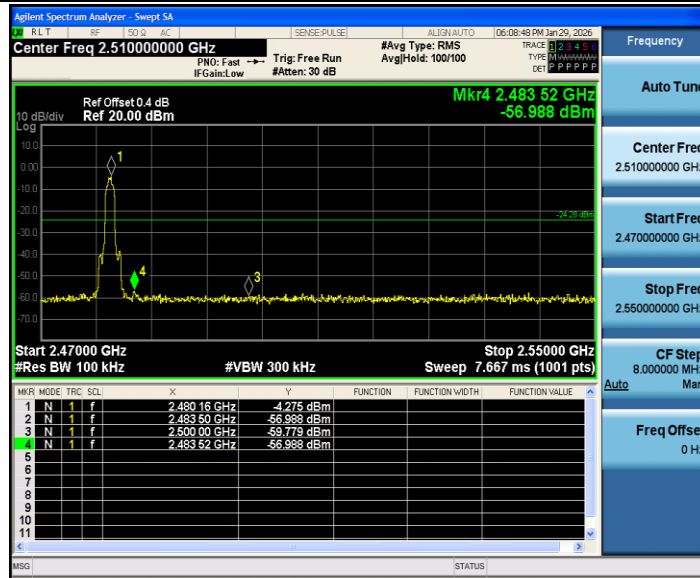
DH5_Ant1_High_Hop_2480



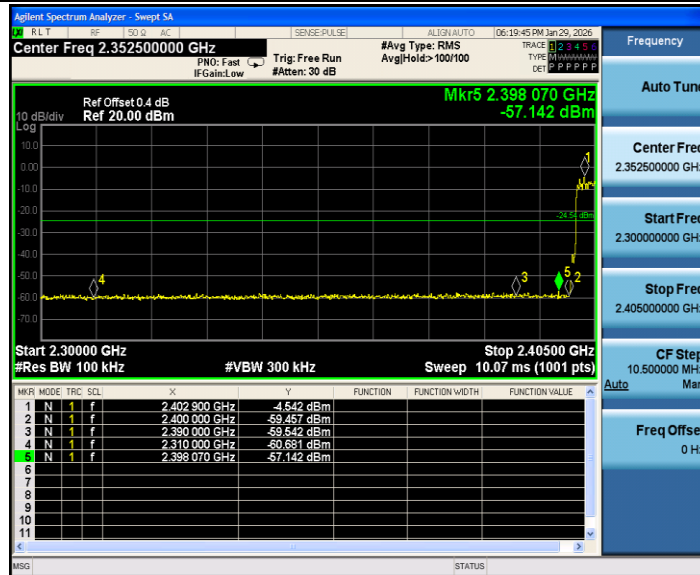
2DH5_Ant1_Low_2402



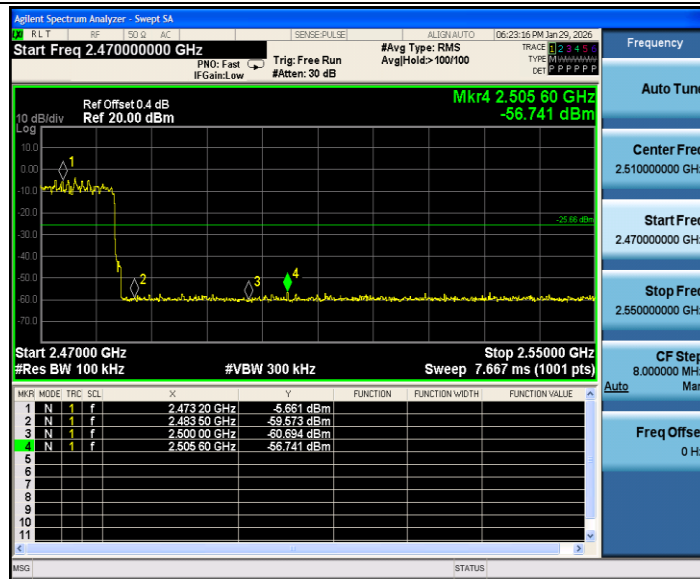
2DH5_Ant1_High_2480



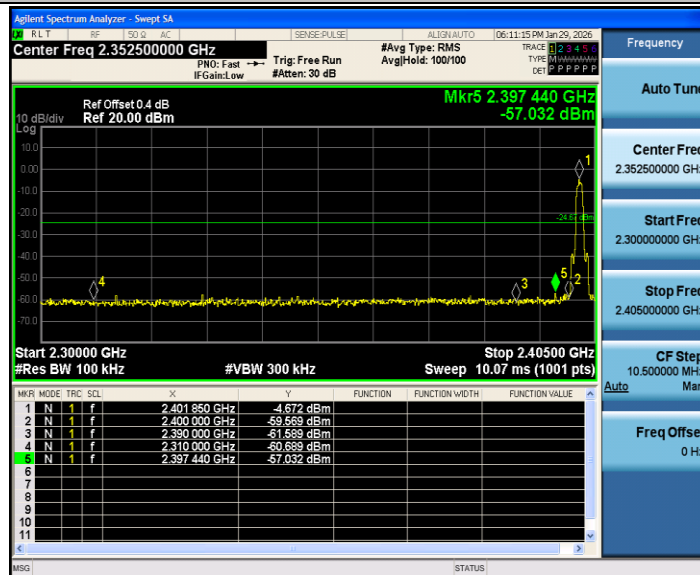
2DH5_Ant1_Low_Hop_2402



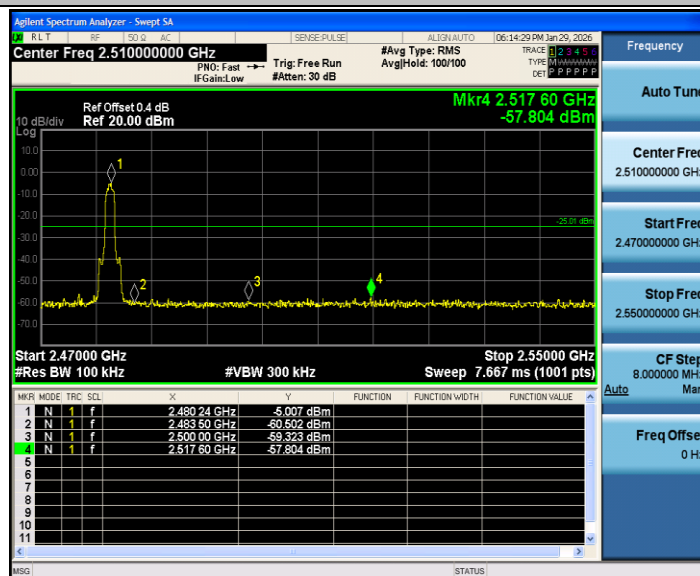
2DH5_Ant1_High_Hop_2480



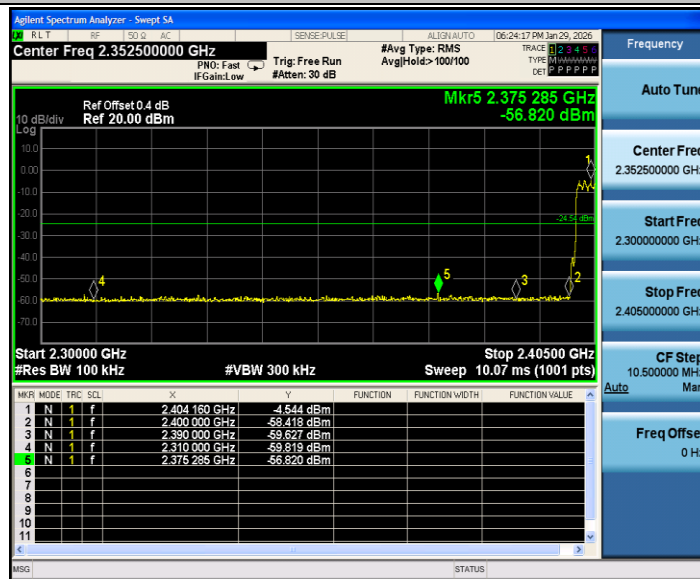
3DH5_Ant1_Low_2402



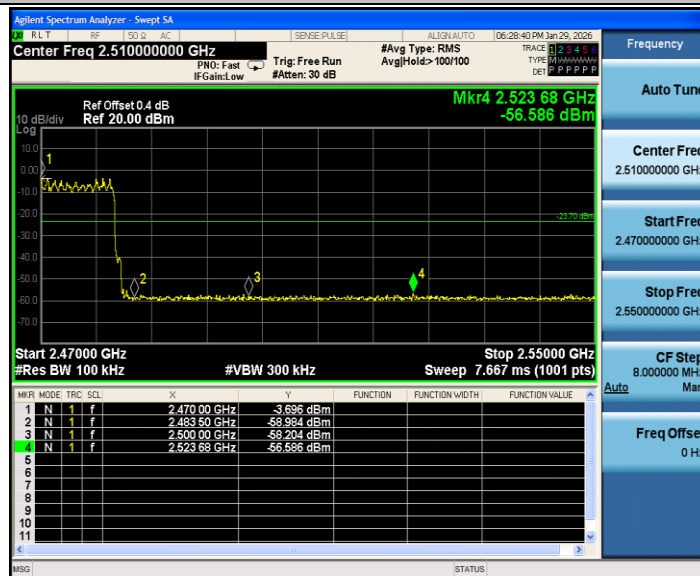
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

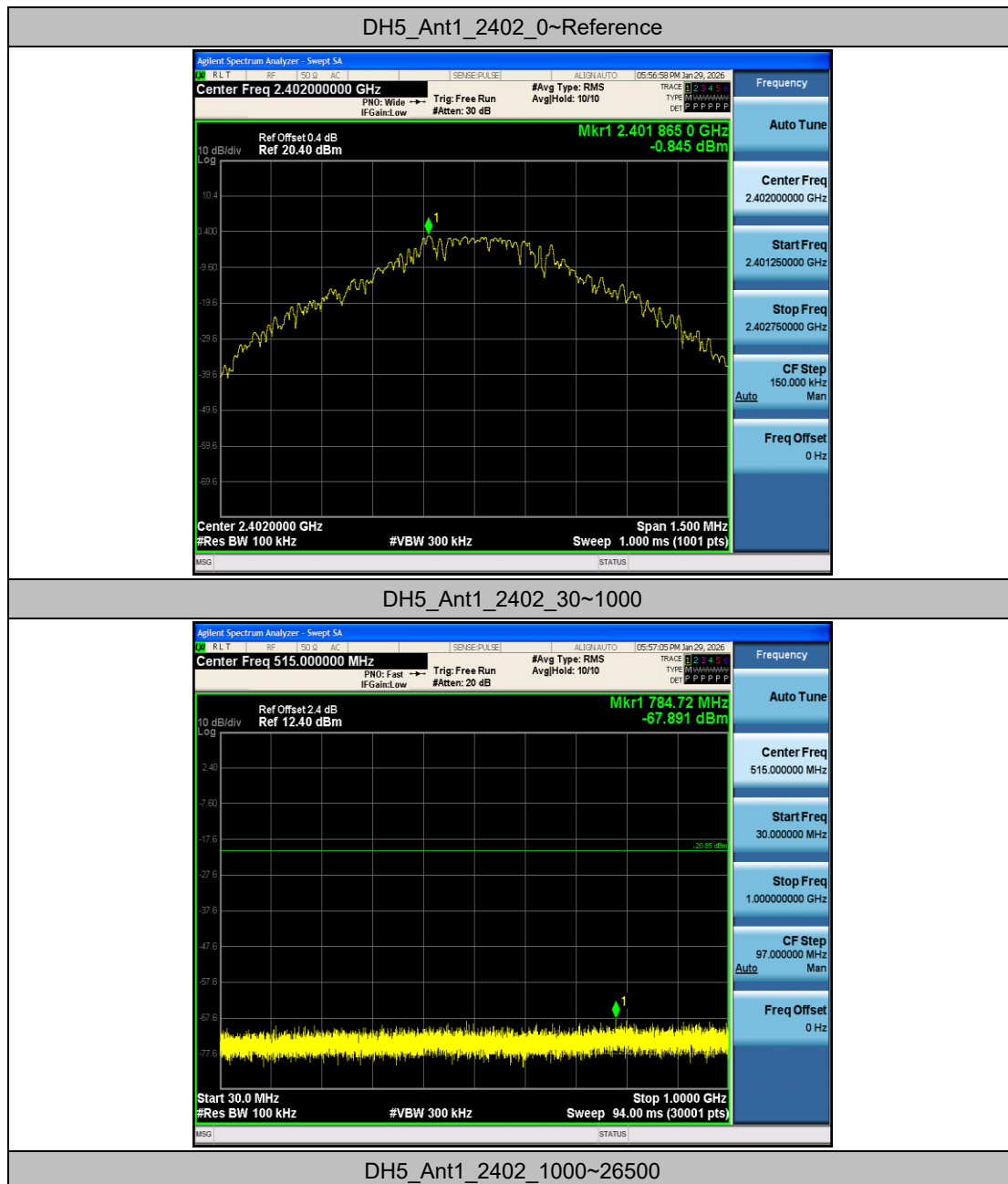


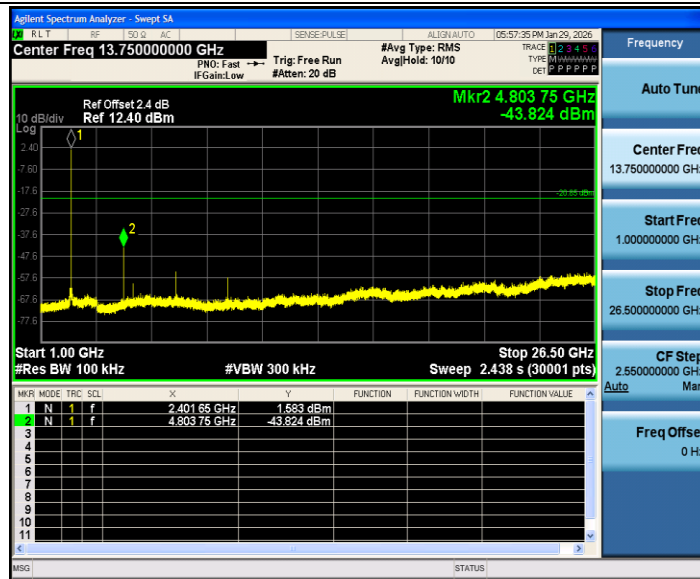
Appendix H: Conducted Spurious Emission

Test Result

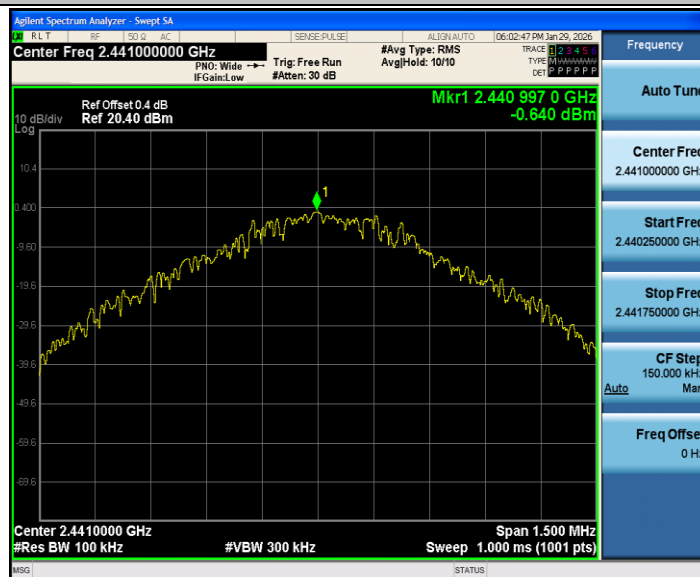
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.85	-0.85	---	PASS
			30~1000	-0.85	-67.89	≤-20.85	PASS
			1000~26500	-0.85	-43.82	≤-20.85	PASS
		2441	Reference	-0.64	-0.64	---	PASS
			30~1000	-0.64	-66.85	≤-20.64	PASS
			1000~26500	-0.64	-42.36	≤-20.64	PASS
		2480	Reference	-1.23	-1.23	---	PASS
			30~1000	-1.23	-67.93	≤-21.23	PASS
			1000~26500	-1.23	-42.72	≤-21.23	PASS
2DH5	Ant1	2402	Reference	-5.32	-5.32	---	PASS
			30~1000	-5.32	-67.47	≤-25.32	PASS
			1000~26500	-5.32	-48.99	≤-25.32	PASS
		2441	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-68.19	≤-26.37	PASS
			1000~26500	-6.37	-50.85	≤-26.37	PASS
		2480	Reference	-6.26	-6.26	---	PASS
			30~1000	-6.26	-67.83	≤-26.26	PASS
			1000~26500	-6.26	-49.85	≤-26.26	PASS
3DH5	Ant1	2402	Reference	-6.89	-6.89	---	PASS
			30~1000	-6.89	-64.44	≤-26.89	PASS
			1000~26500	-6.89	-49.9	≤-26.89	PASS
		2441	Reference	-3.85	-3.85	---	PASS
			30~1000	-3.85	-68.29	≤-23.85	PASS
			1000~26500	-3.85	-46.01	≤-23.85	PASS
		2480	Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-68.52	≤-24.44	PASS
			1000~26500	-4.44	-47.28	≤-24.44	PASS

Test Graphs

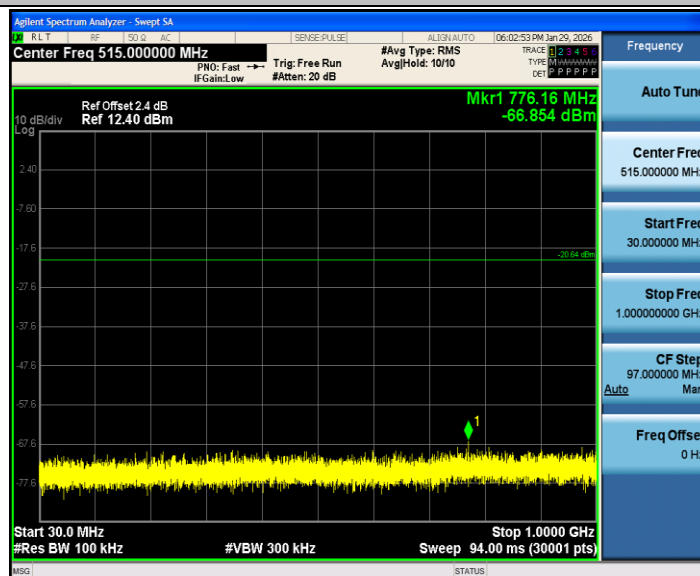




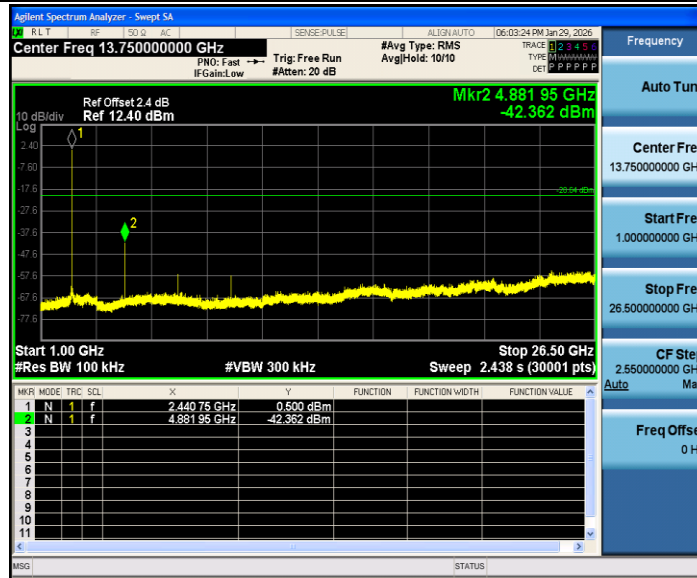
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



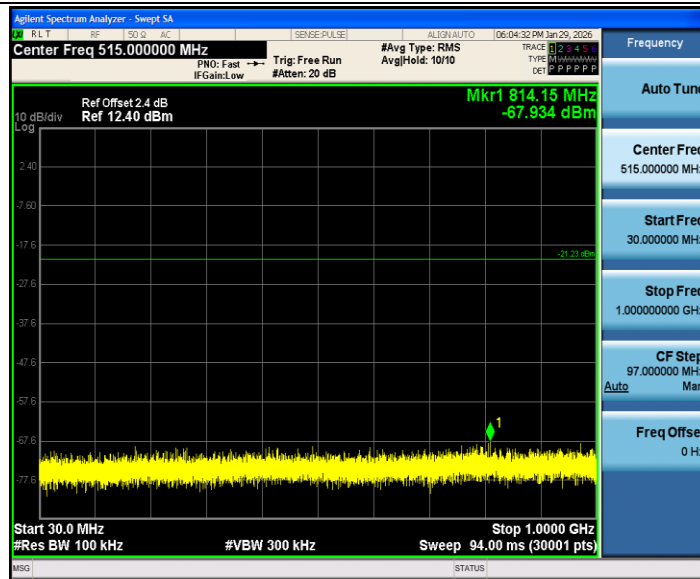
DH5_Ant1_2441_1000~26500



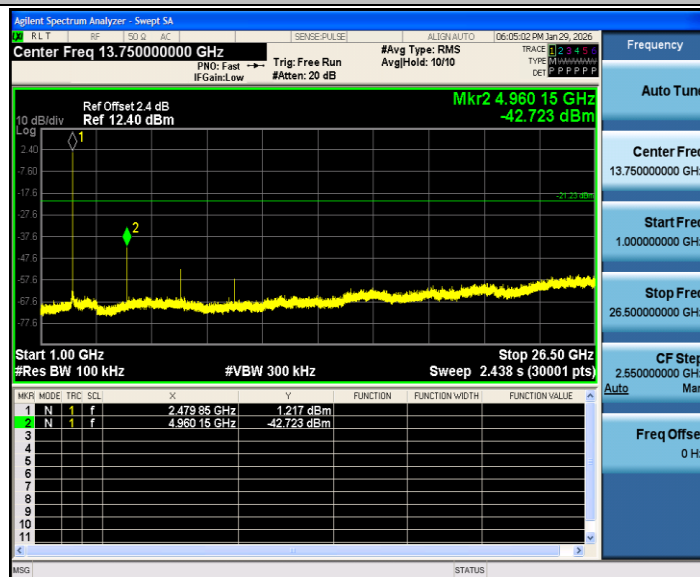
DH5_Ant1_2480_0~Reference



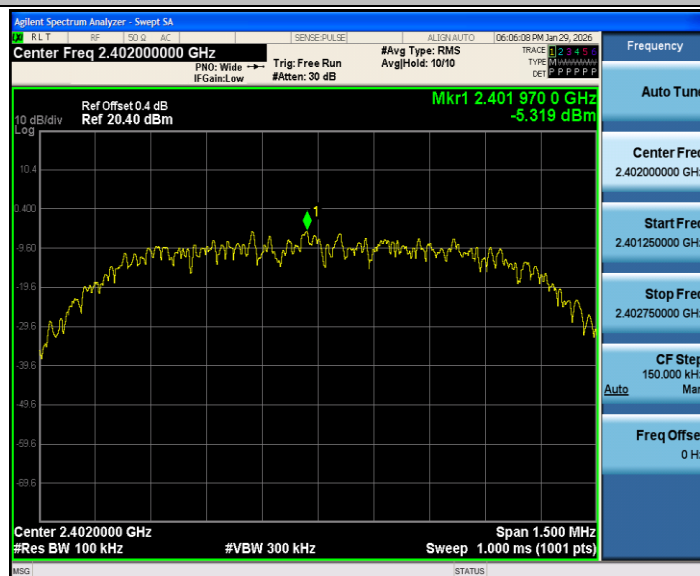
DH5_Ant1_2480_30~1000



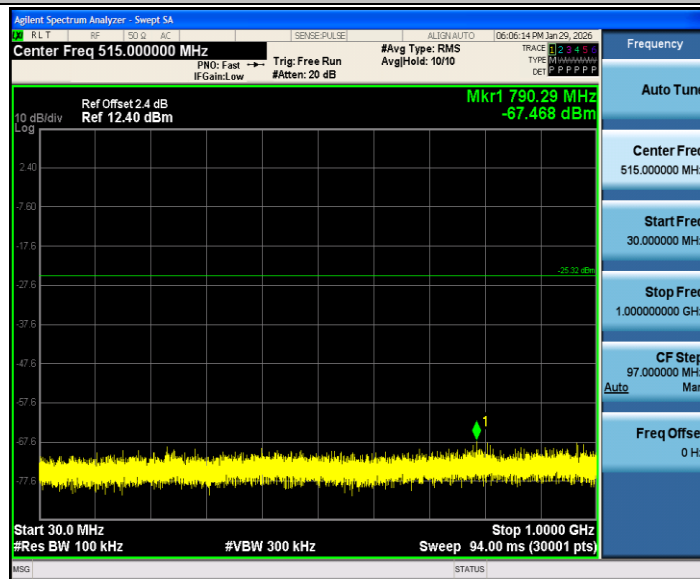
DH5_Ant1_2480_1000~26500



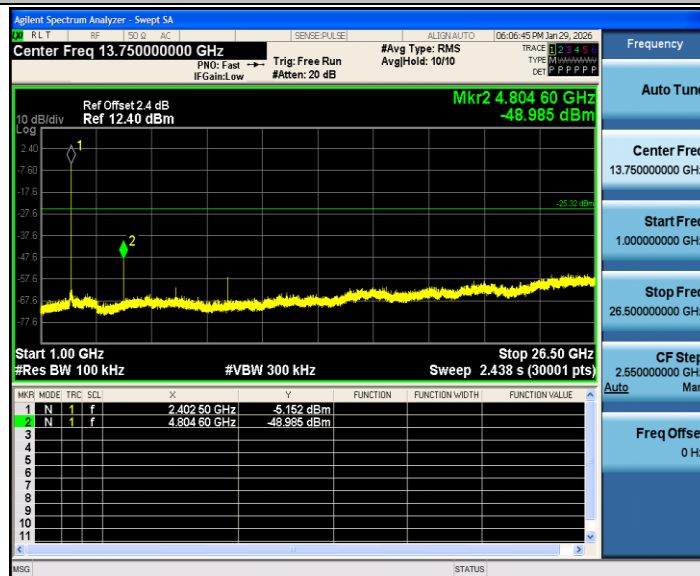
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference