

FCC Appendix RF Test Data for BT

FCC ID : 2BAQY-HE1000WIFI

Company : HIFIMAN KUNSHAN TECHNOLOGY GROUP CO., LTD.

EUT : WiFi Planar Magnetic Headphones

Model Number : HE1000 WiFi

Report No. : CTA25111402702

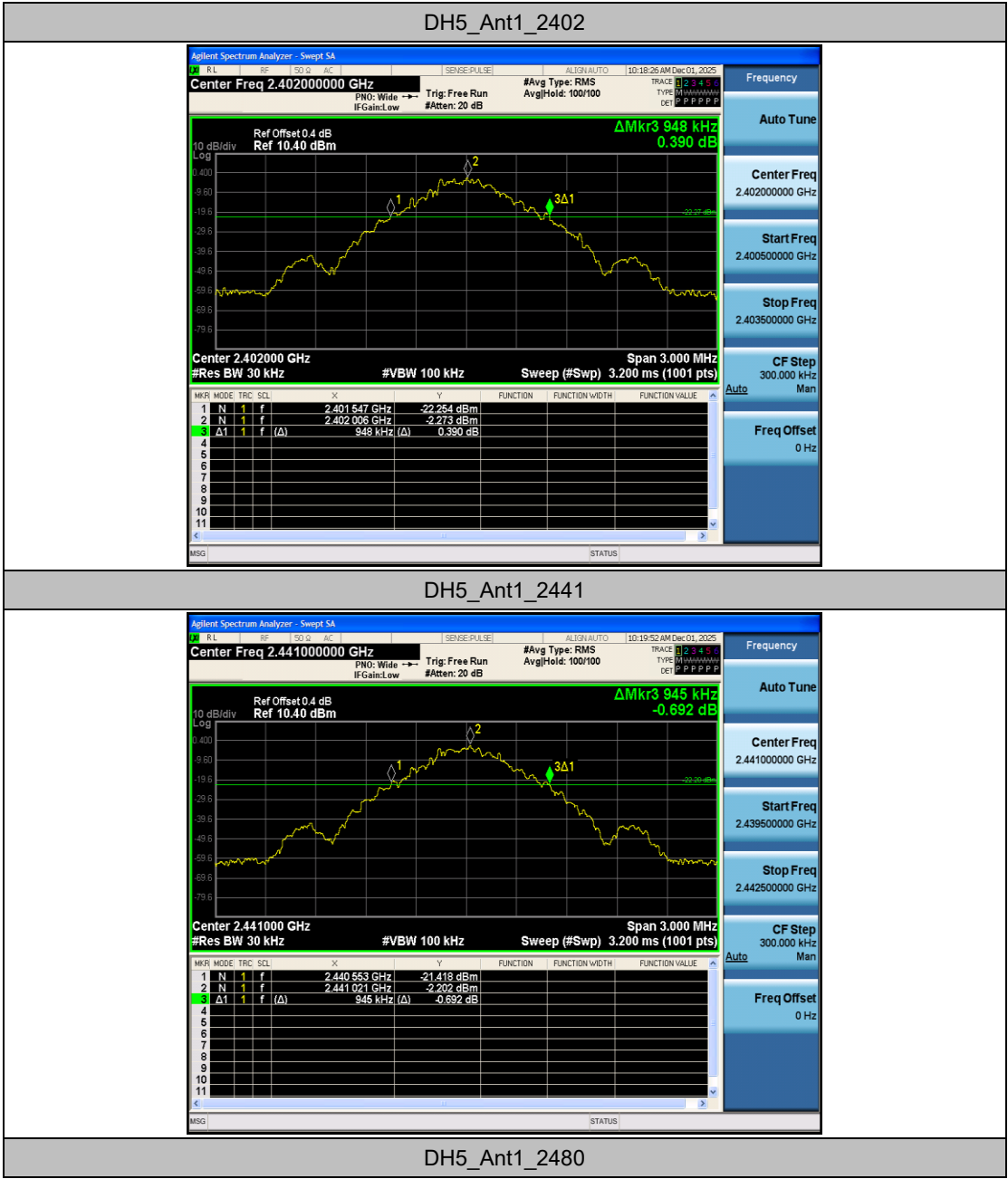
Reviewed By : Eric Wang

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	0.945	2440.553	2441.498	---	---
		2480	0.942	2479.553	2480.495	---	---
2DH5	Ant1	2402	1.266	2401.388	2402.654	---	---
		2441	1.278	2440.382	2441.660	---	---
		2480	1.281	2479.382	2480.663	---	---
3DH5	Ant1	2402	1.335	2401.343	2402.678	---	---
		2441	1.320	2440.349	2441.669	---	---
		2480	1.323	2479.346	2480.669	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

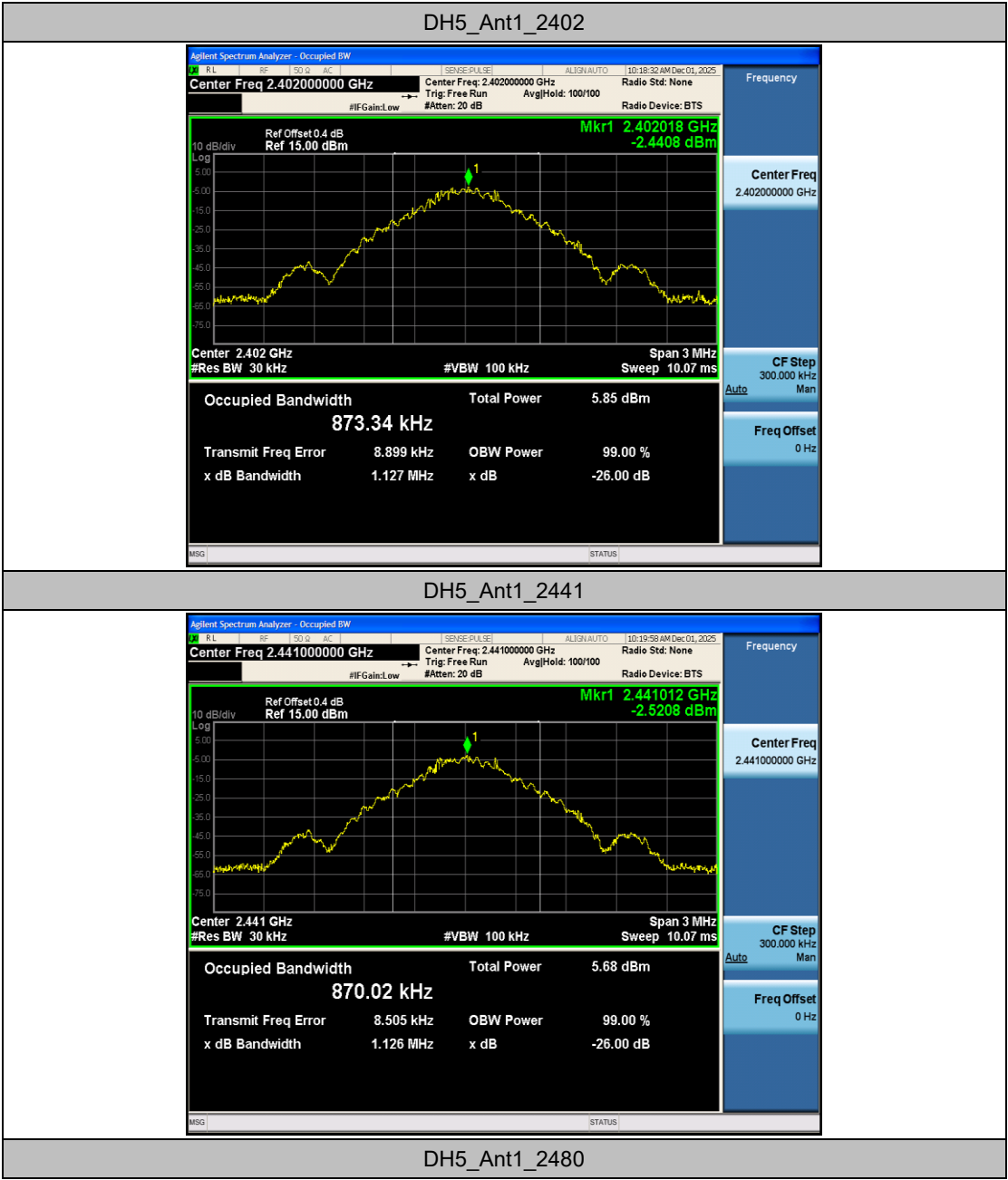


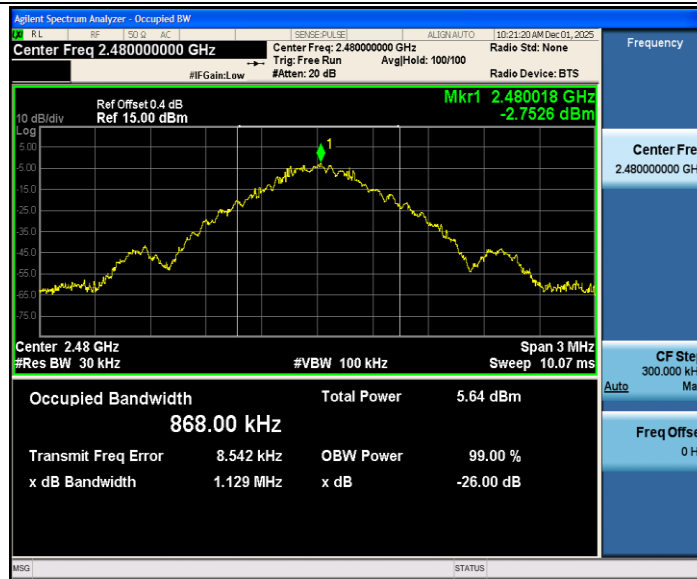
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87334	2401.5722	2402.4456	---	---
		2441	0.87002	2440.5735	2441.4435	---	---
		2480	0.86800	2479.5745	2480.4425	---	---
2DH5	Ant1	2402	1.1875	2401.4170	2402.6045	---	---
		2441	1.1882	2440.4159	2441.6041	---	---
		2480	1.1907	2479.4136	2480.6043	---	---
3DH5	Ant1	2402	1.1849	2401.4177	2402.6026	---	---
		2441	1.1884	2440.4175	2441.6059	---	---
		2480	1.1918	2479.4161	2480.6079	---	---

Test Graphs

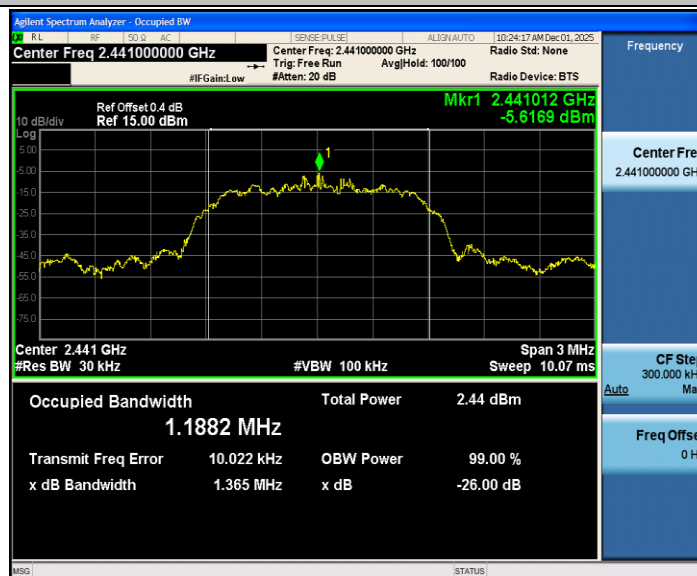




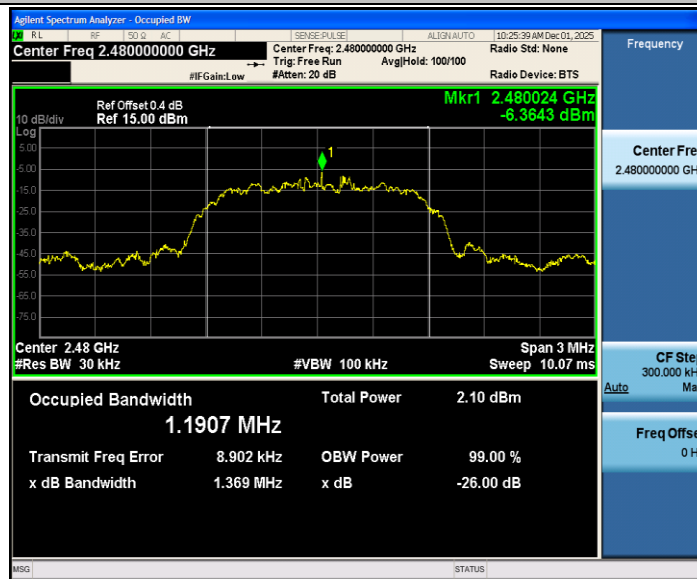
2DH5_Ant1_2402



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	-0.01	≤20.97	PASS
		2441	-0.24	≤20.97	PASS
		2480	-0.34	≤20.97	PASS
2DH5	Ant1	2402	-0.80	≤20.97	PASS
		2441	-1.05	≤20.97	PASS
		2480	-1.17	≤20.97	PASS
3DH5	Ant1	2402	-0.82	≤20.97	PASS
		2441	-1.04	≤20.97	PASS
		2480	-1.13	≤20.97	PASS

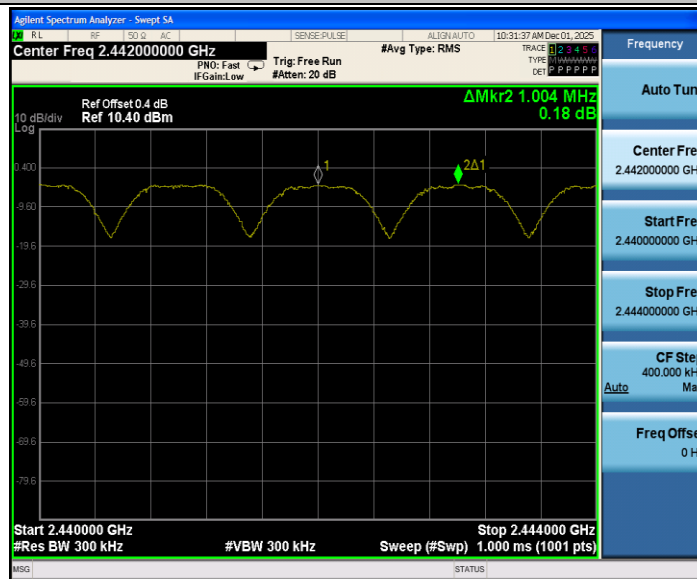
Appendix D: Carrier frequency separation

Test Result

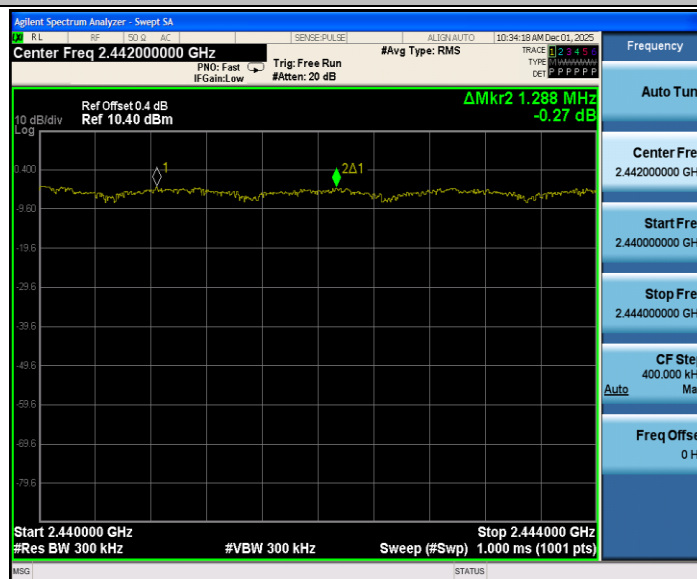
TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥ 0.948	PASS
2DH5	Ant1	Hop	1.288	≥ 1.281	PASS
3DH5	Ant1	Hop	1.012	≥ 0.890	PASS

Test Graphs

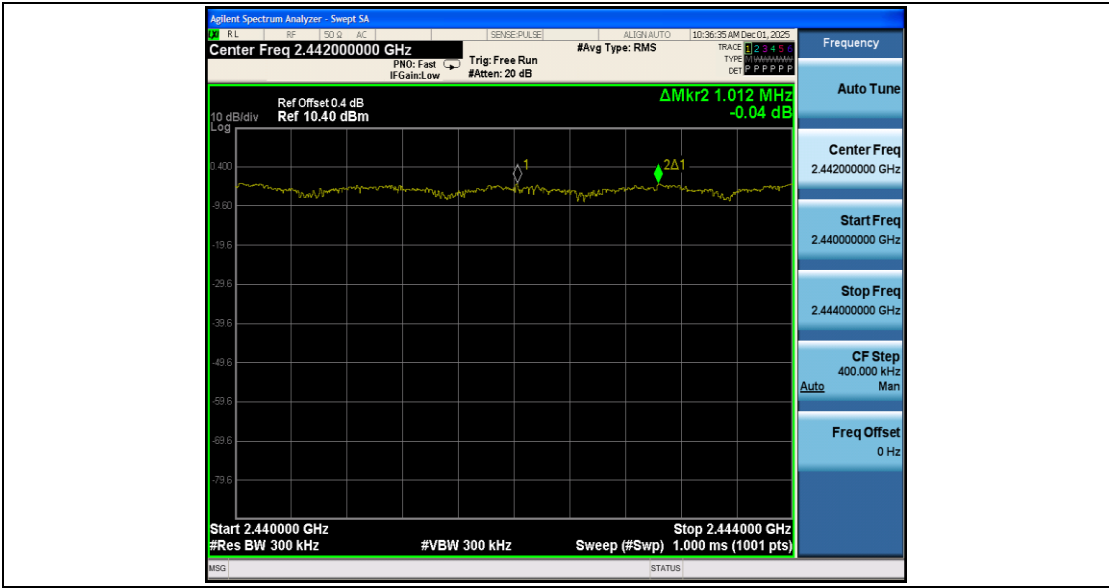
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

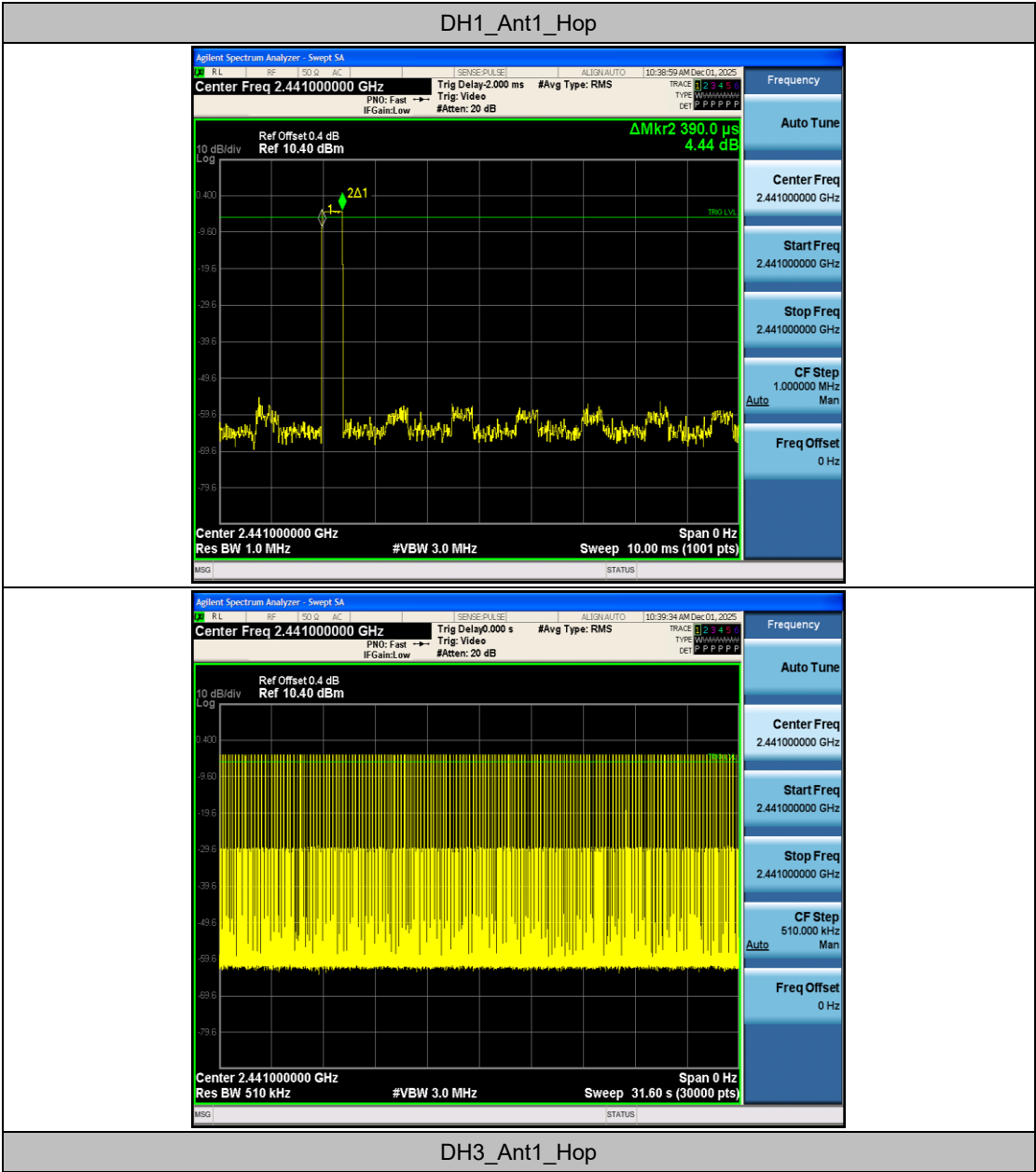


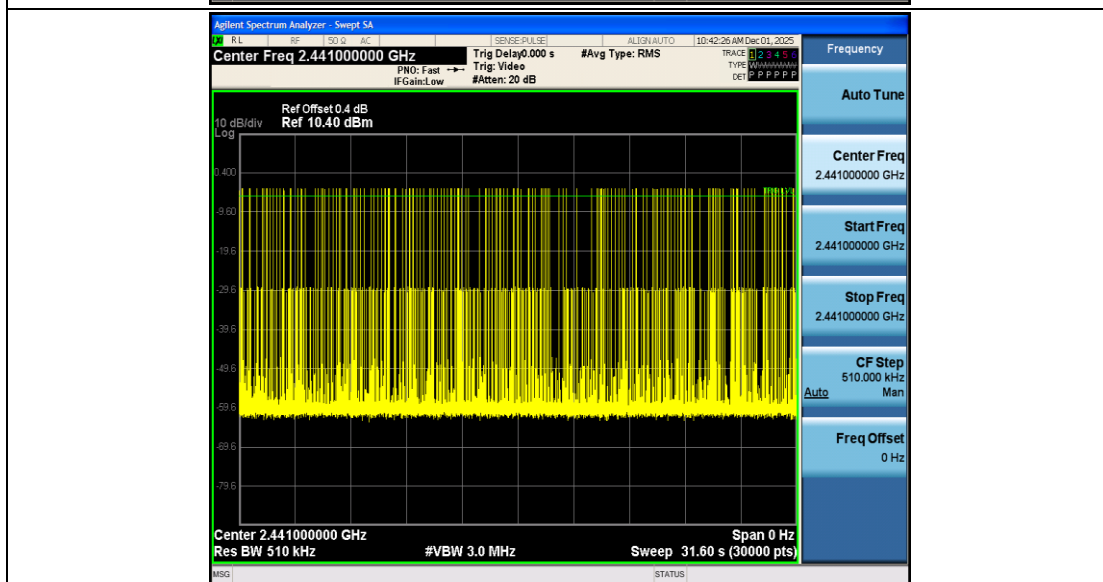
Appendix E: Time of occupancy

Test Result

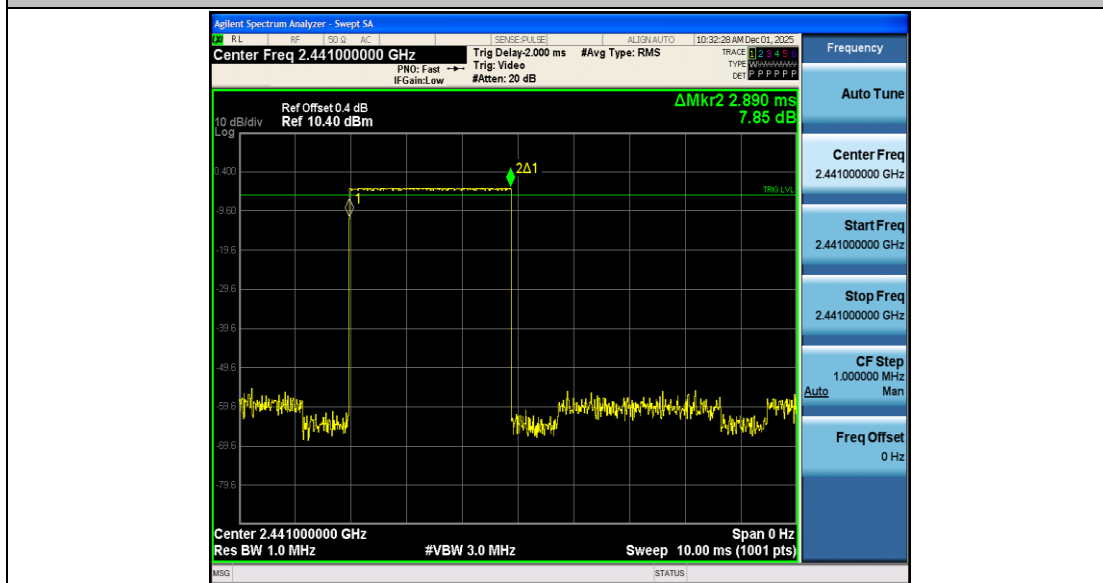
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
DH3	Ant1	Hop	1.640	171	0.28	≤0.4	PASS
DH5	Ant1	Hop	2.890	105	0.303	≤0.4	PASS
2DH1	Ant1	Hop	0.390	315	0.123	≤0.4	PASS
2DH3	Ant1	Hop	1.650	160	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.890	106	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.640	152	0.249	≤0.4	PASS
3DH5	Ant1	Hop	2.890	100	0.289	≤0.4	PASS

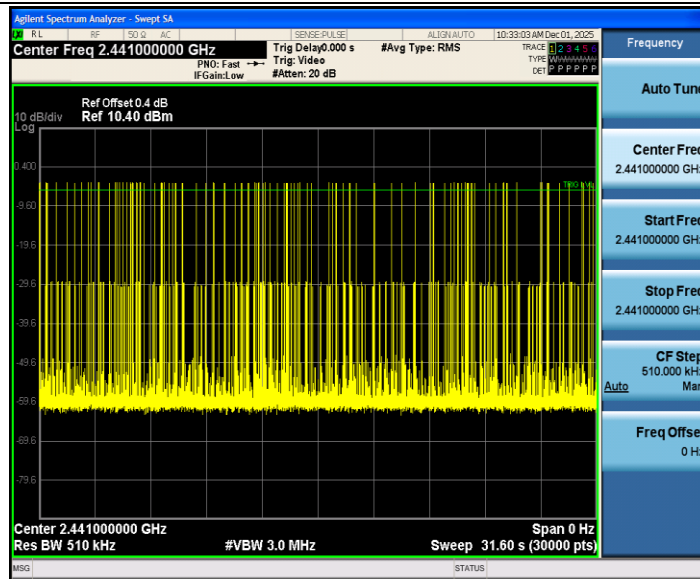
Test Graphs



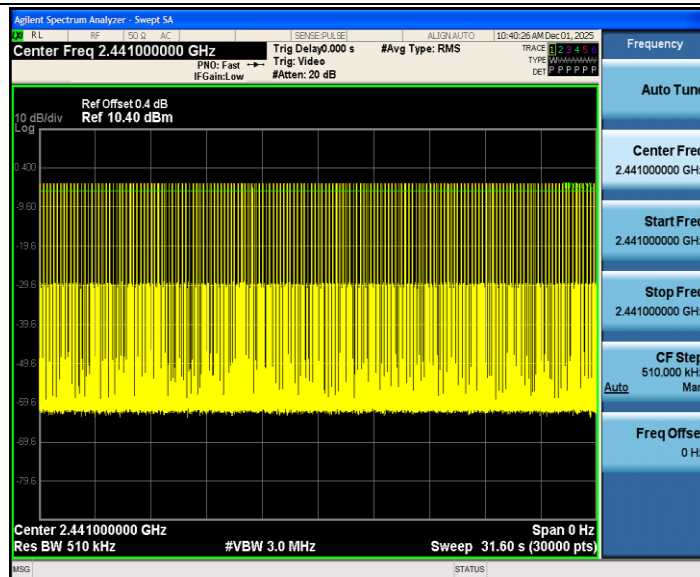
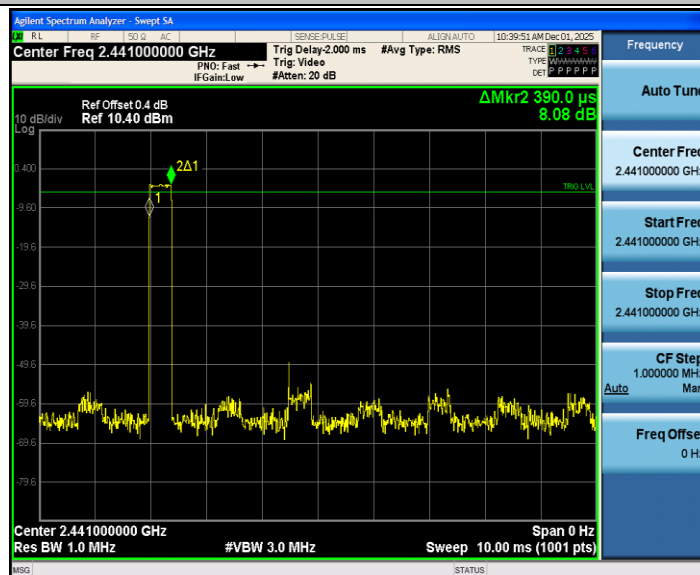


DH5_Ant1_Hop

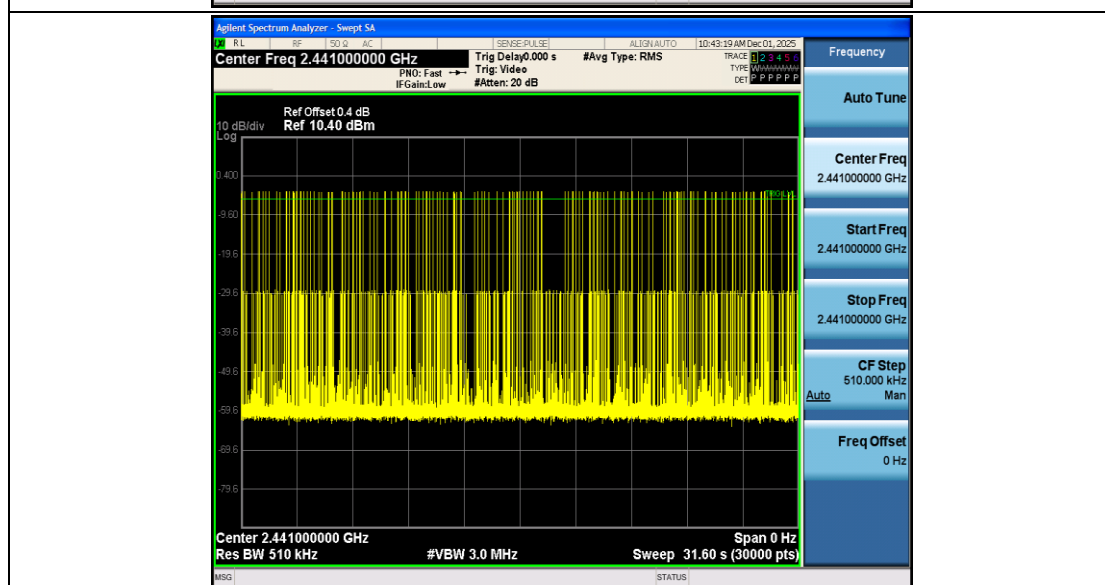




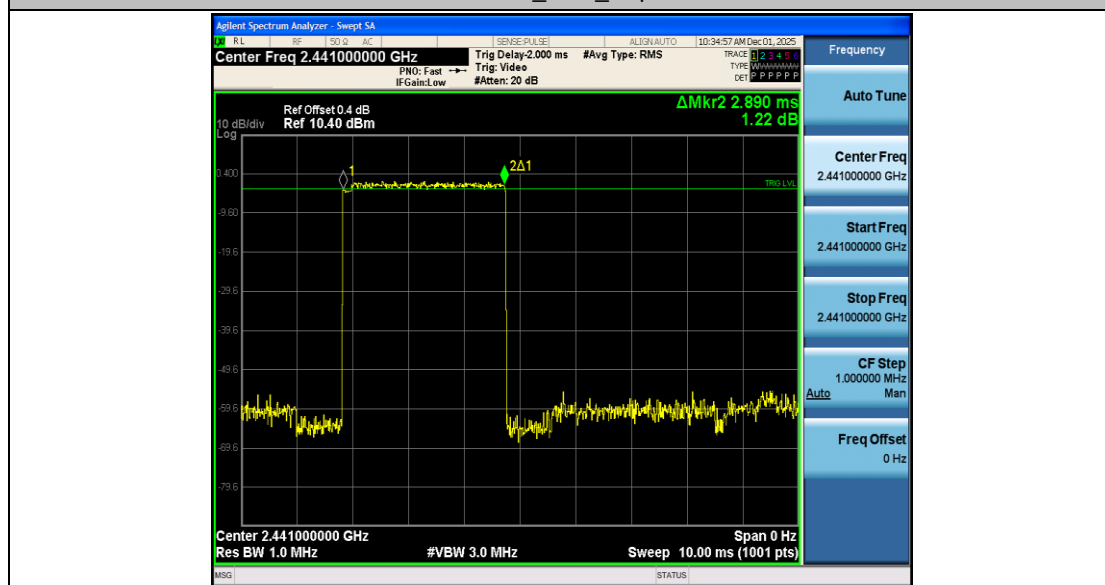
2DH1_Ant1_Hop

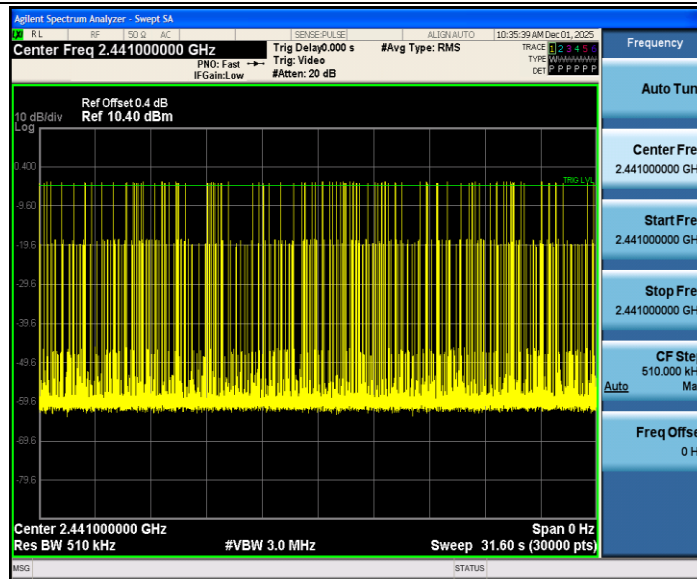


2DH3_Ant1_Hop

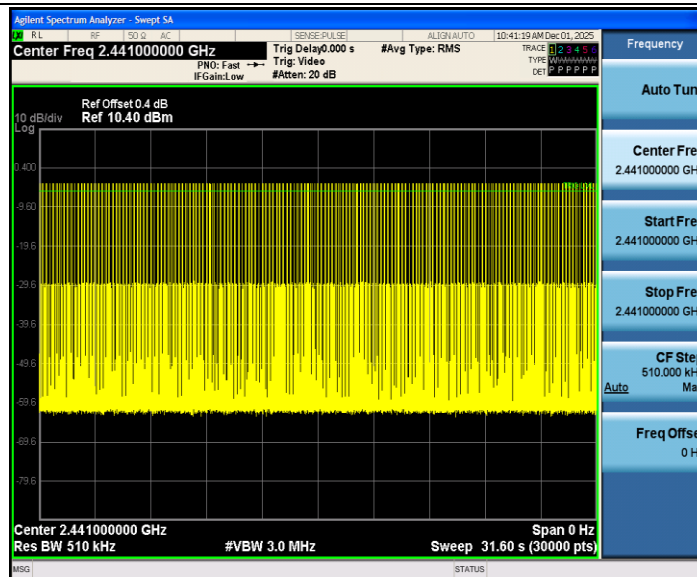
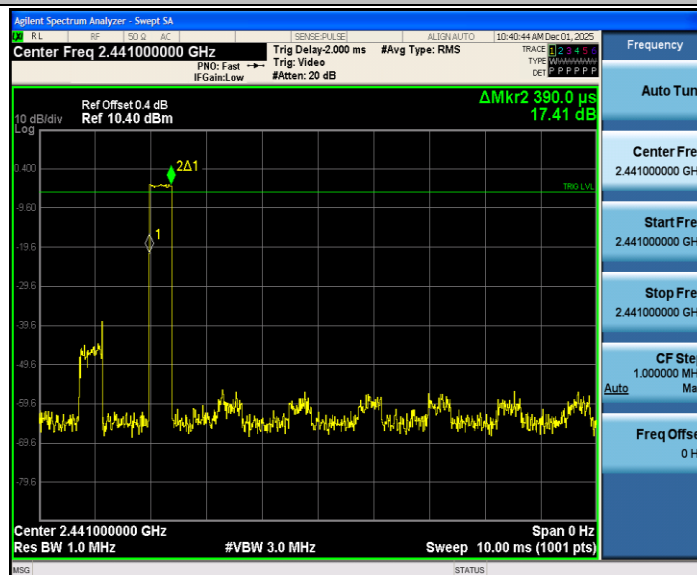


2DH5_Ant1_Hop

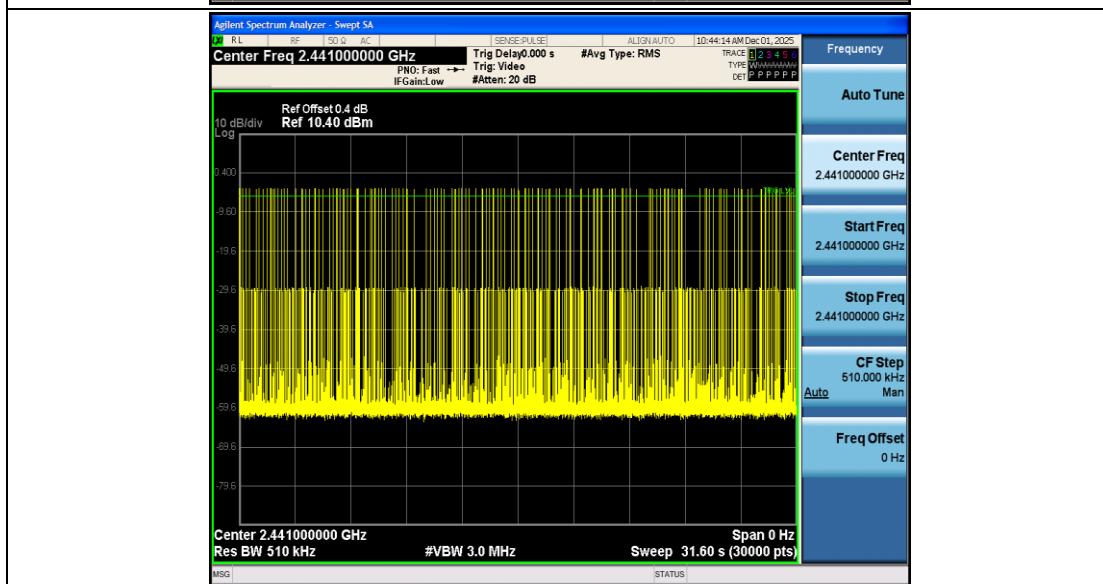




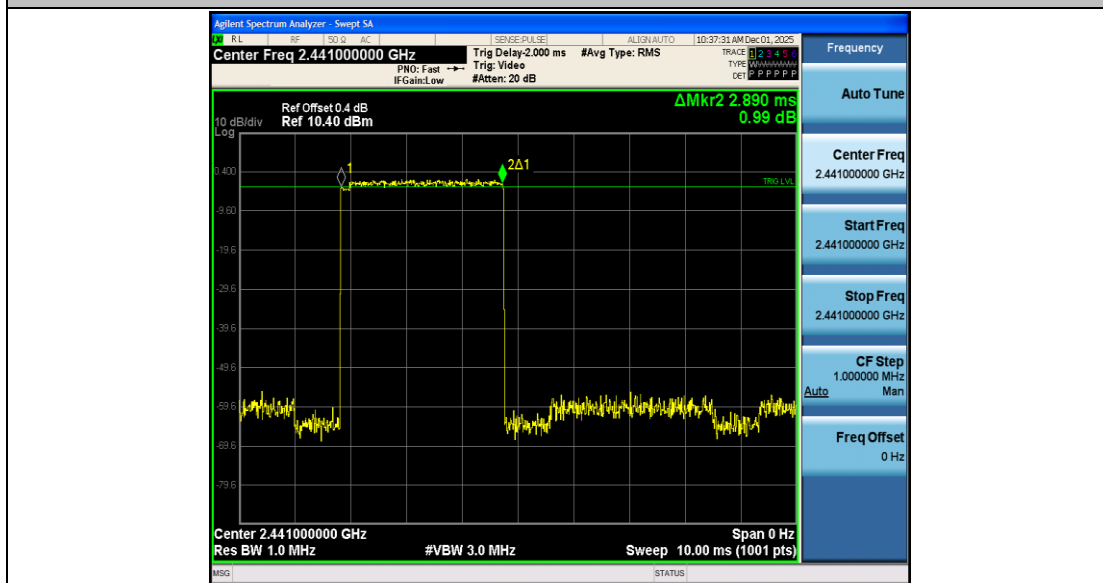
3DH1_Ant1_Hop

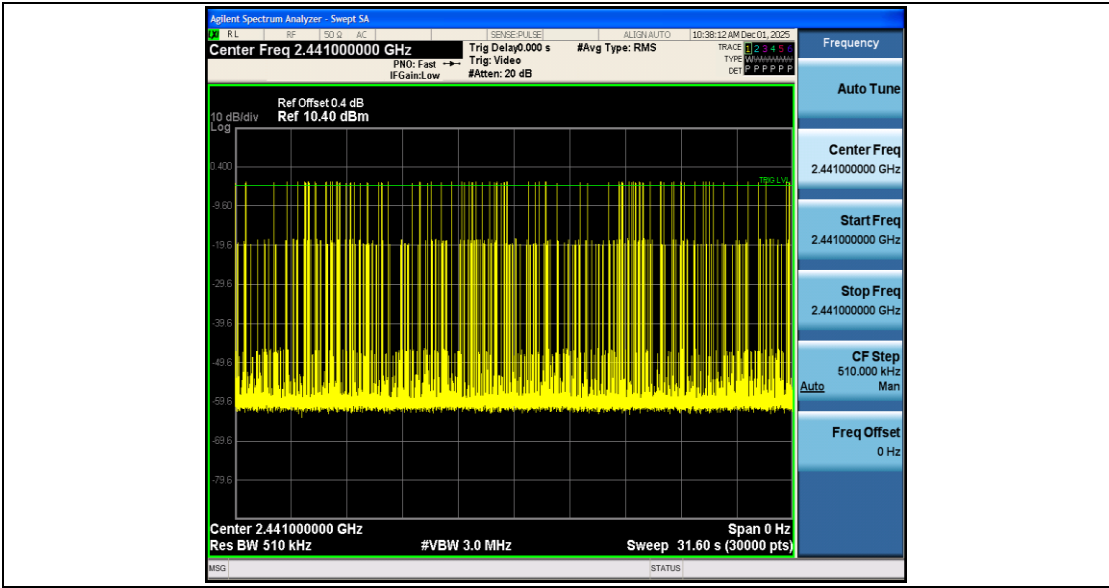


3DH3_Ant1_Hop



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

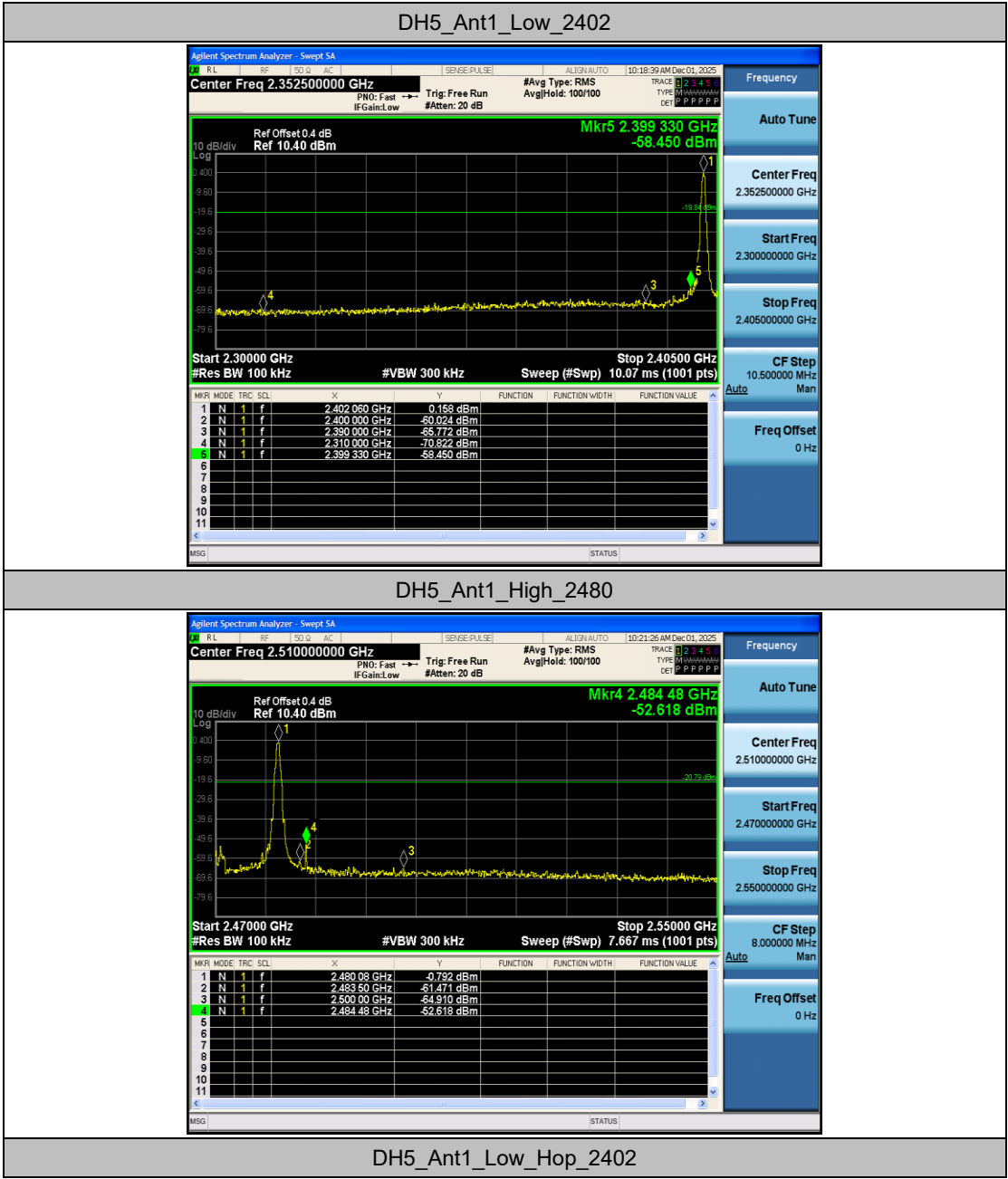


Appendix G: Band edge measurements

Test Result

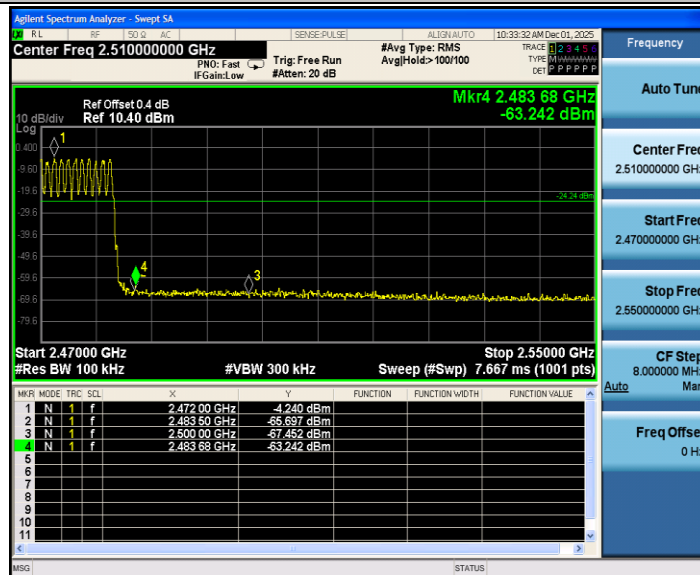
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.16	-58.45	≤-19.84	PASS
		High	2480	-0.79	-52.62	≤-20.79	PASS
		Low	Hop_2402	-3.59	-64.12	≤-23.59	PASS
		High	Hop_2480	-4.24	-63.24	≤-24.24	PASS
2DH5	Ant1	Low	2402	-4.47	-58.29	≤-24.47	PASS
		High	2480	-5.06	-63.6	≤-25.06	PASS
		Low	Hop_2402	-4.80	-59.23	≤-24.8	PASS
		High	Hop_2480	-4.45	-63.34	≤-24.45	PASS
3DH5	Ant1	Low	2402	-6.38	-56.51	≤-26.38	PASS
		High	2480	-6.62	-63.03	≤-26.62	PASS
		Low	Hop_2402	-4.98	-63.29	≤-24.98	PASS
		High	Hop_2480	-4.19	-63.81	≤-24.19	PASS

Test Graphs

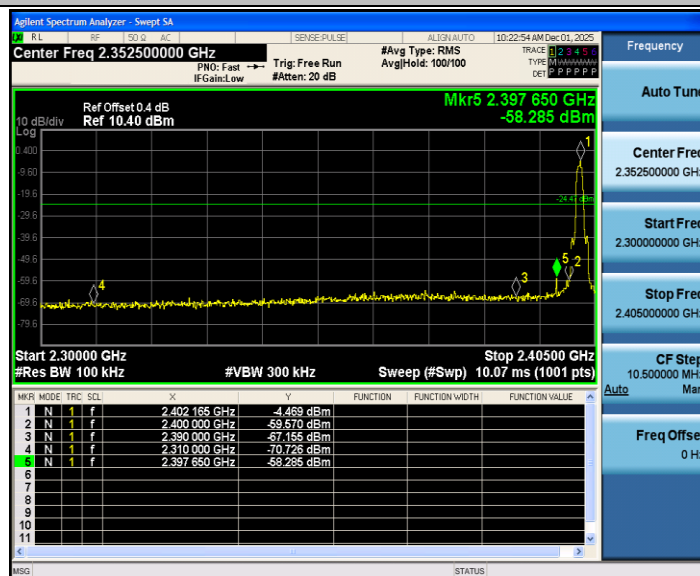




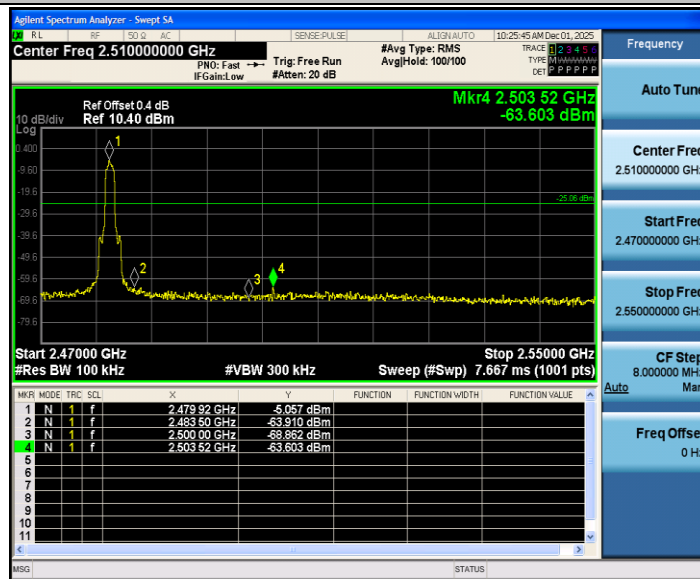
DH5_Ant1_High_Hop_2480



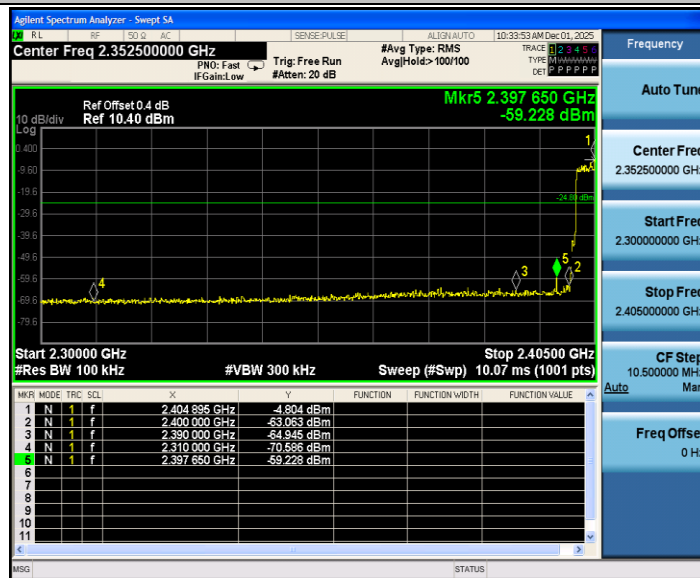
2DH5_Ant1_Low_2402



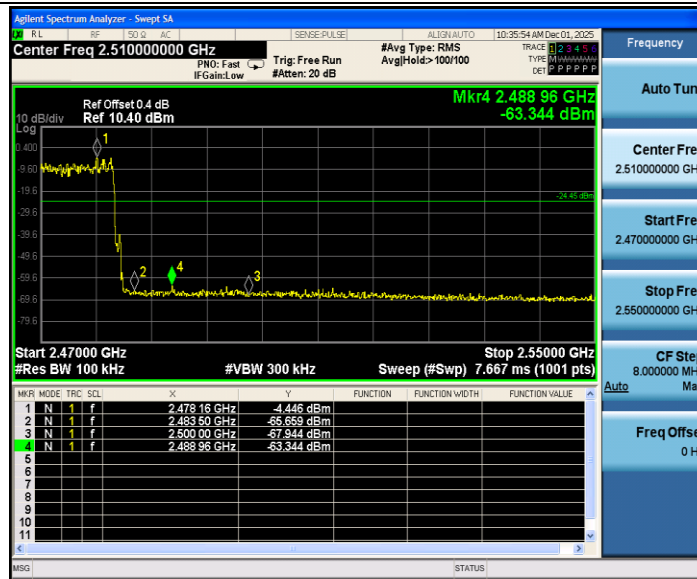
2DH5_Ant1_High_2480



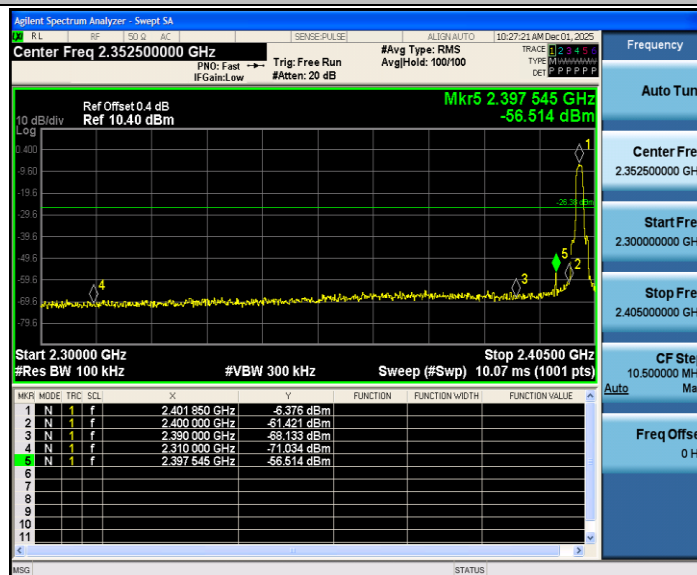
2DH5_Ant1_Low_Hop_2402



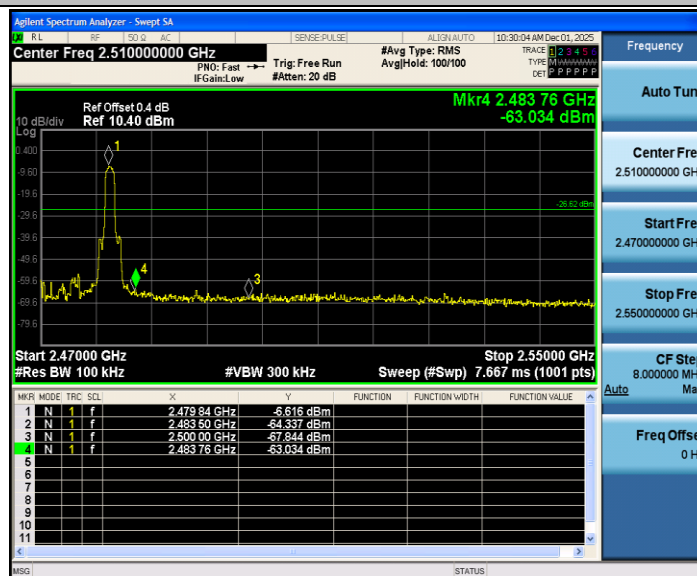
2DH5_Ant1_High_Hop_2480



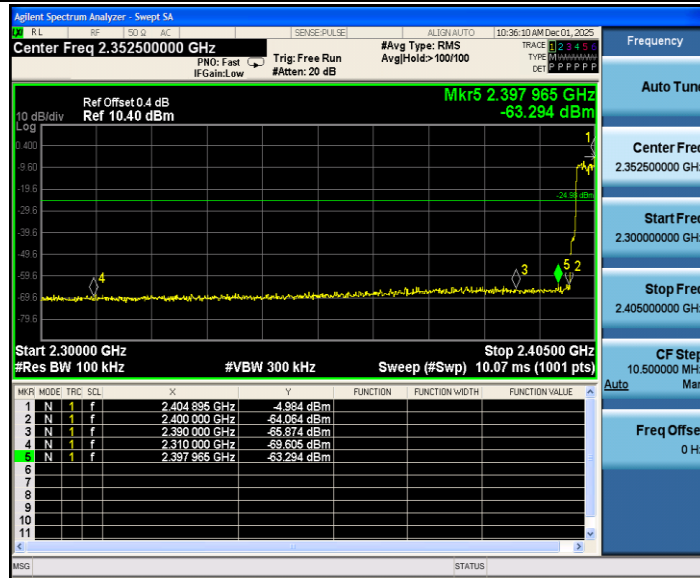
3DH5_Ant1_Low_2402



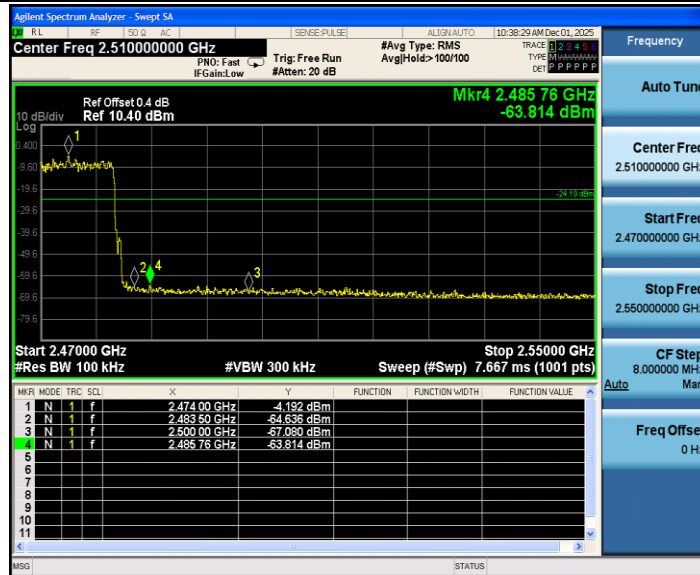
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

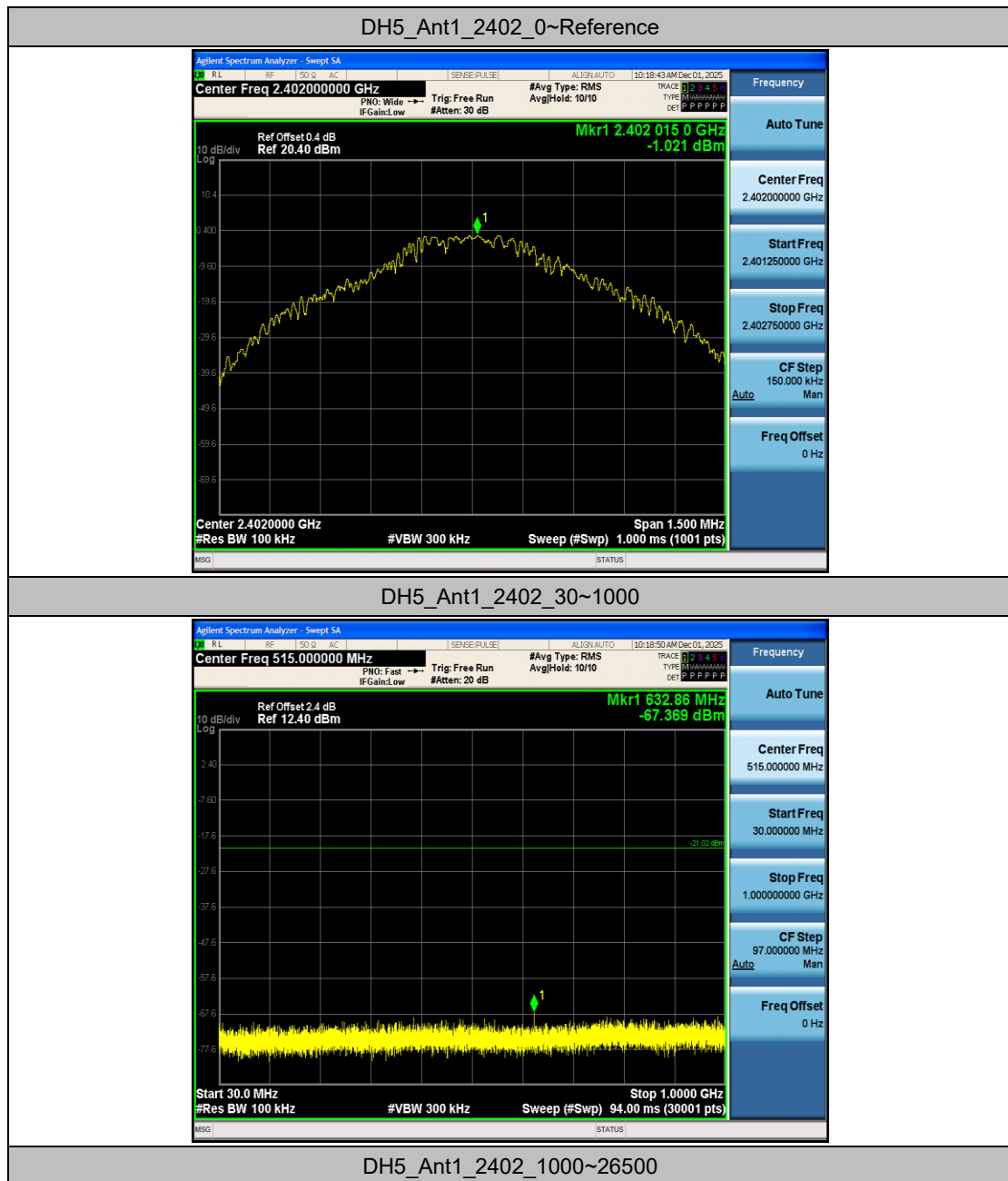


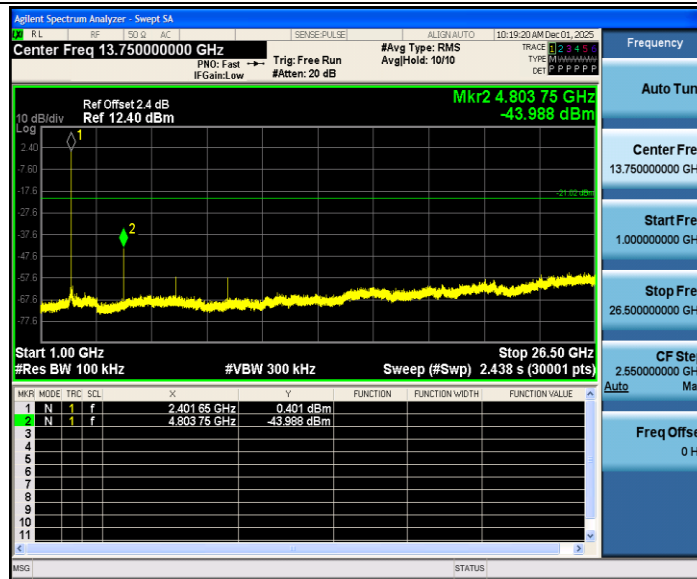
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.02	-1.02	---	PASS
			30~1000	-1.02	-67.37	≤-21.02	PASS
			1000~26500	-1.02	-43.99	≤-21.02	PASS
		2441	Reference	-1.17	-1.17	---	PASS
			30~1000	-1.17	-68.75	≤-21.17	PASS
			1000~26500	-1.17	-45.59	≤-21.17	PASS
		2480	Reference	-0.77	-0.77	---	PASS
			30~1000	-0.77	-67.5	≤-20.77	PASS
			1000~26500	-0.77	-44.42	≤-20.77	PASS
2DH5	Ant1	2402	Reference	-5.62	-5.62	---	PASS
			30~1000	-5.62	-66.98	≤-25.62	PASS
			1000~26500	-5.62	-49.9	≤-25.62	PASS
		2441	Reference	-6.94	-6.94	---	PASS
			30~1000	-6.94	-60.12	≤-26.94	PASS
			1000~26500	-6.94	-46.47	≤-26.94	PASS
		2480	Reference	-5.66	-5.66	---	PASS
			30~1000	-5.66	-64.69	≤-25.66	PASS
			1000~26500	-5.66	-42.66	≤-25.66	PASS
3DH5	Ant1	2402	Reference	-5.22	-5.22	---	PASS
			30~1000	-5.22	-57.29	≤-25.22	PASS
			1000~26500	-5.22	-48.76	≤-25.22	PASS
		2441	Reference	-5.05	-5.05	---	PASS
			30~1000	-5.05	-60.77	≤-25.05	PASS
			1000~26500	-5.05	-50.4	≤-25.05	PASS
		2480	Reference	-5.03	-5.03	---	PASS
			30~1000	-5.03	-67.81	≤-25.03	PASS
			1000~26500	-5.03	-50.78	≤-25.03	PASS

Test Graphs

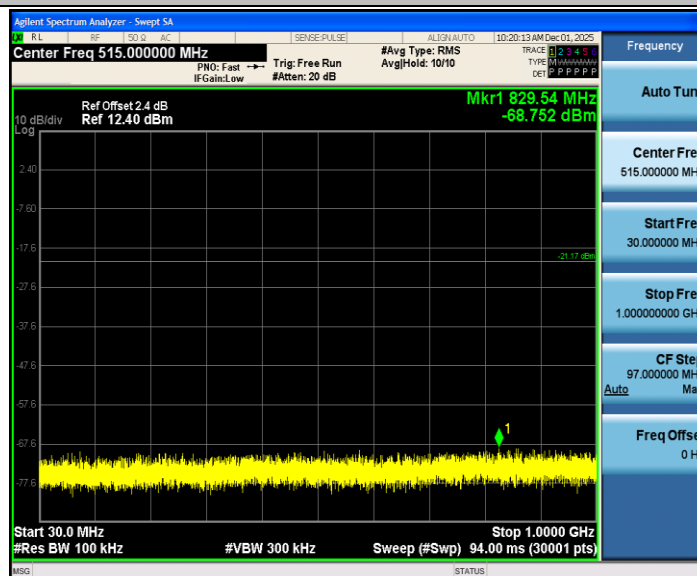




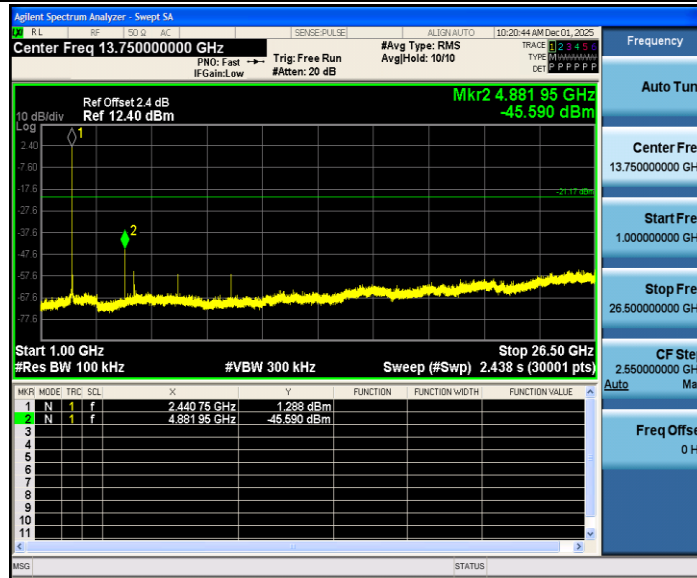
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



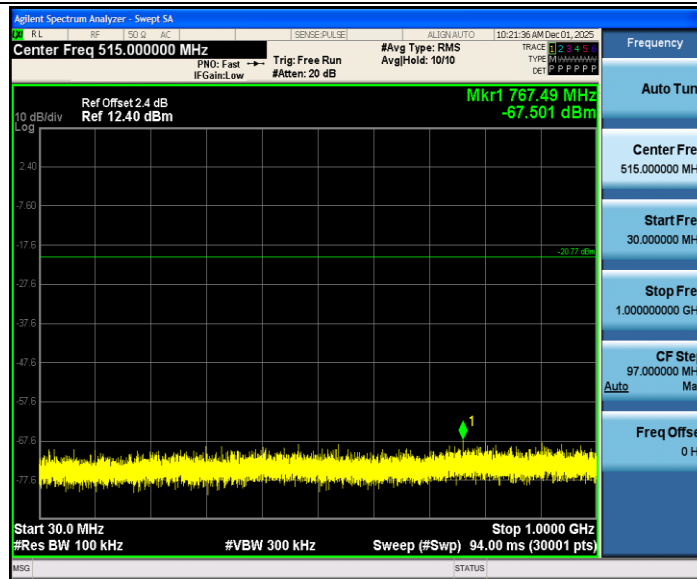
DH5_Ant1_2441_1000~26500



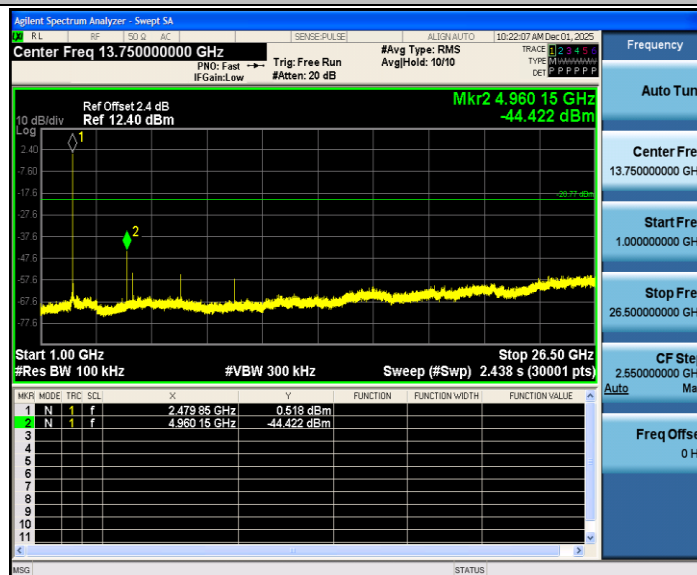
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



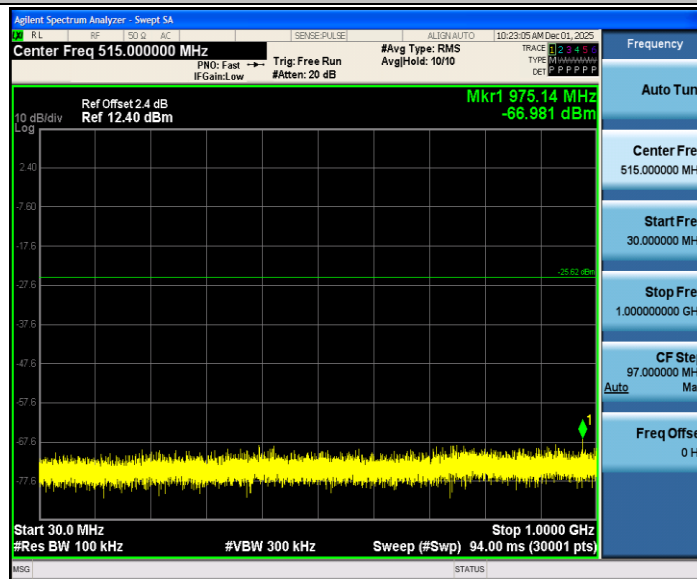
DH5_Ant1_2480_1000~26500



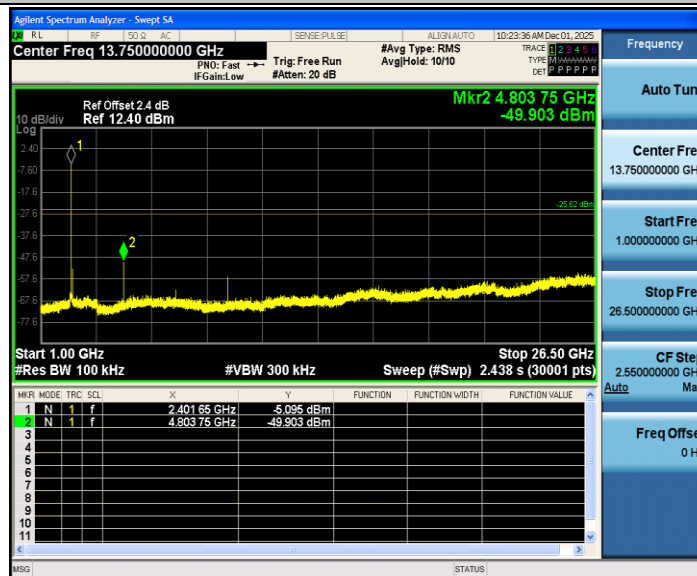
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference