

FCC Appendix RF Test Data

FCC ID : 2BO7G-M8

Company: : Shenzhen Yiwei Technology Co., LTD

EUT : Wireless Earphone

Model Number : M8

Report No. : CTA25042903302

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	0.954	2440.547	2441.501	---	---
		2480	0.957	2479.547	2480.504	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.317	2440.349	2441.666	---	---
		2480	1.314	2479.355	2480.669	---	---
3DH5	Ant1	2402	1.302	2401.373	2402.675	---	---
		2441	1.323	2440.346	2441.669	---	---
		2480	1.326	2479.352	2480.678	---	---

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

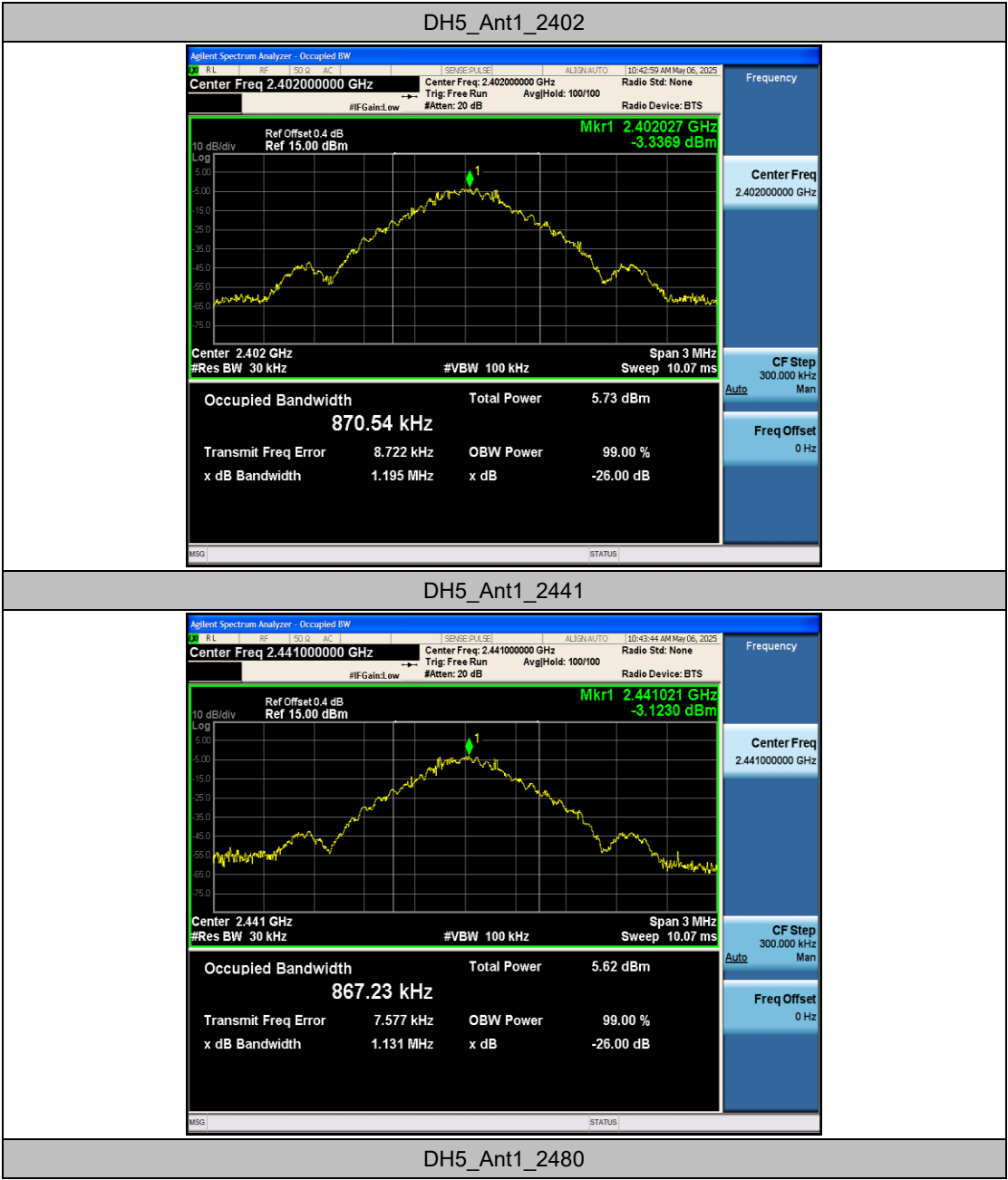


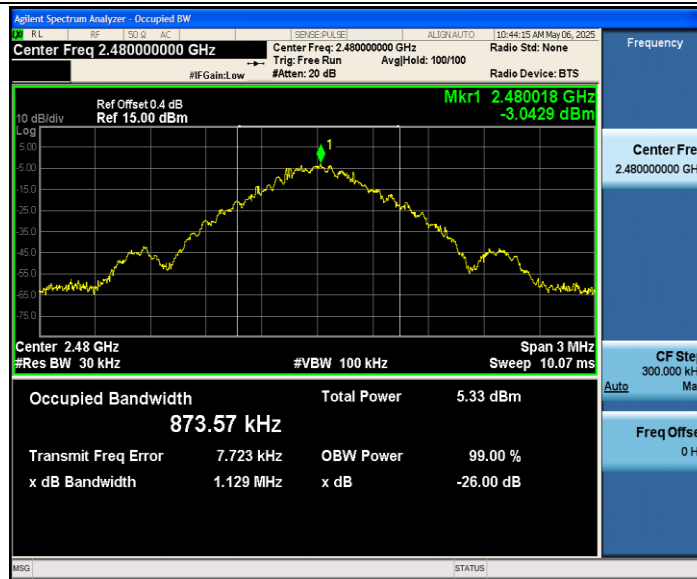
Appendix B: Occupied Channel Bandwidth

Test Result

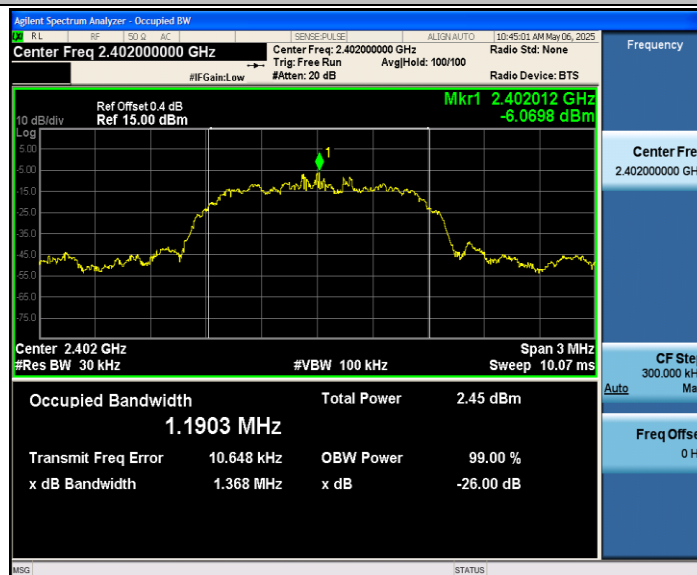
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87054	2401.5735	2402.4440	---	---
		2441	0.86723	2440.5740	2441.4412	---	---
		2480	0.87357	2479.5709	2480.4445	---	---
2DH5	Ant1	2402	1.1903	2401.4155	2402.6058	---	---
		2441	1.1882	2440.4163	2441.6045	---	---
		2480	1.1875	2479.4169	2480.6044	---	---
3DH5	Ant1	2402	1.1882	2401.4173	2402.6055	---	---
		2441	1.1831	2440.4175	2441.6006	---	---
		2480	1.1865	2479.4181	2480.6046	---	---

Test Graphs

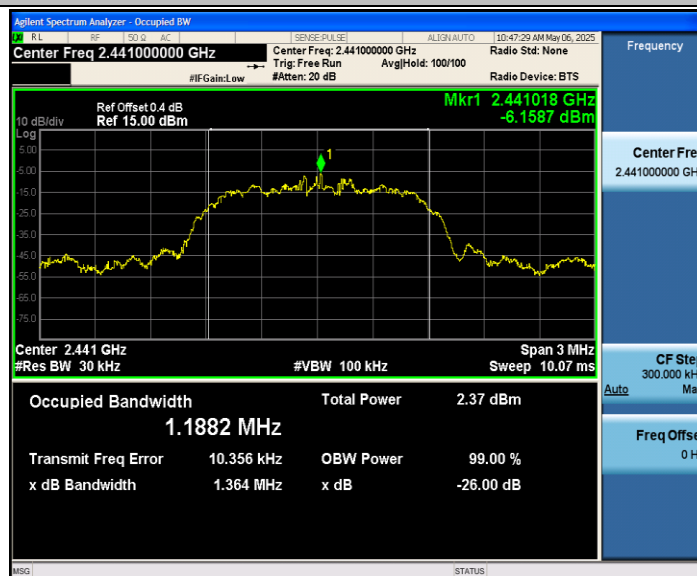




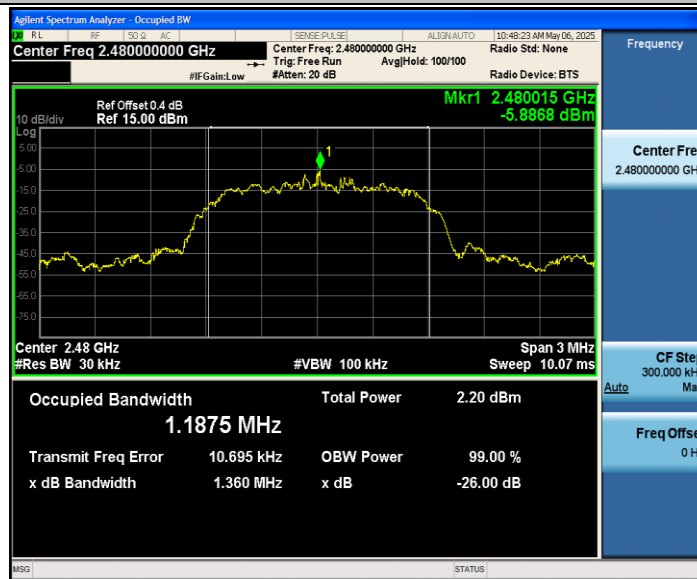
2DH5_Ant1_2402



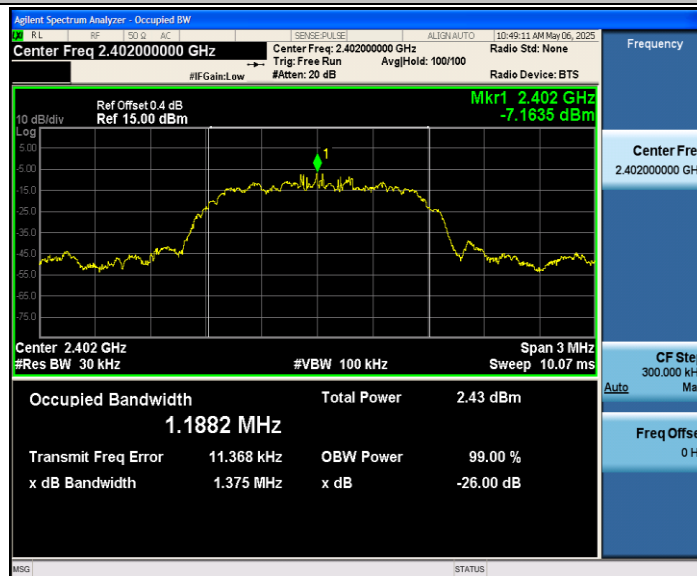
2DH5_Ant1_2441



2DH5_Ant1_2480



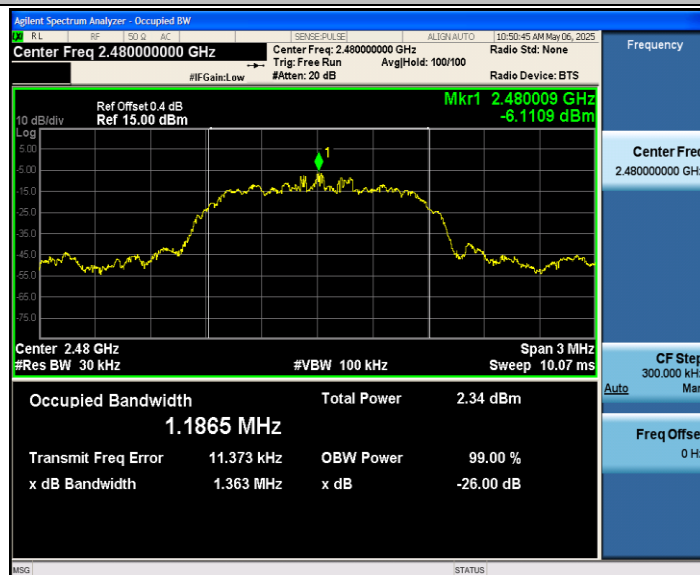
3DH5_Ant1_2402



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	-0.11	≤20.97	PASS
		2441	-0.32	≤20.97	PASS
		2480	-0.45	≤20.97	PASS
2DH5	Ant1	2402	-0.94	≤20.97	PASS
		2441	-1.13	≤20.97	PASS
		2480	-1.23	≤20.97	PASS
3DH5	Ant1	2402	-0.95	≤20.97	PASS
		2441	-1.15	≤20.97	PASS
		2480	-1.24	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.024	≥ 0.957	PASS
2DH5	Ant1	Hop	1.128	≥ 0.878	PASS
3DH5	Ant1	Hop	0.992	≥ 0.884	PASS

Test Graphs



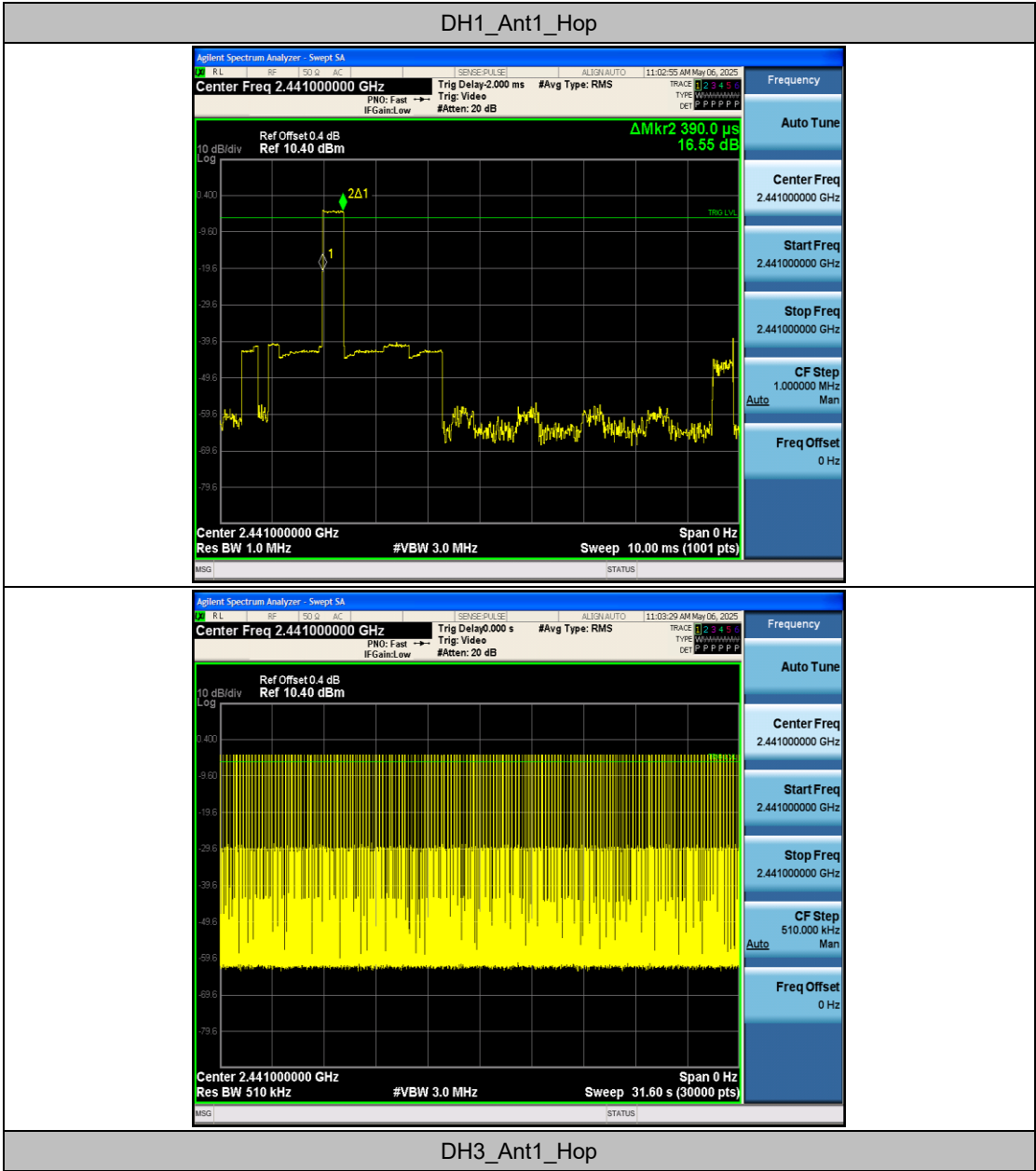


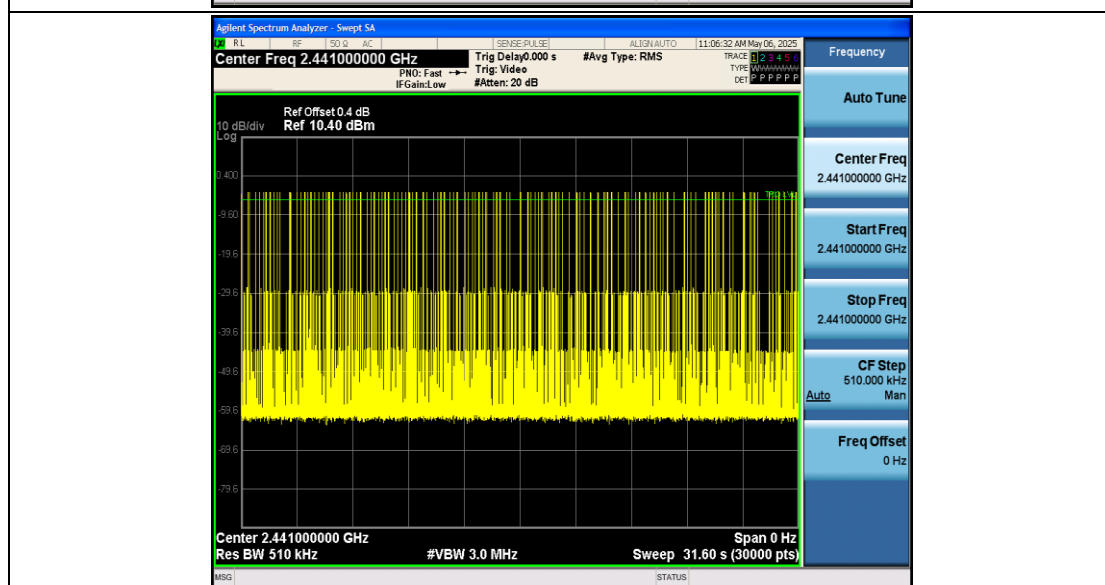
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	316	0.123	≤0.4	PASS
DH3	Ant1	Hop	1.640	164	0.269	≤0.4	PASS
DH5	Ant1	Hop	2.890	107	0.309	≤0.4	PASS
2DH1	Ant1	Hop	0.390	316	0.123	≤0.4	PASS
2DH3	Ant1	Hop	1.650	157	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.890	99	0.286	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.640	164	0.269	≤0.4	PASS
3DH5	Ant1	Hop	2.900	118	0.342	≤0.4	PASS

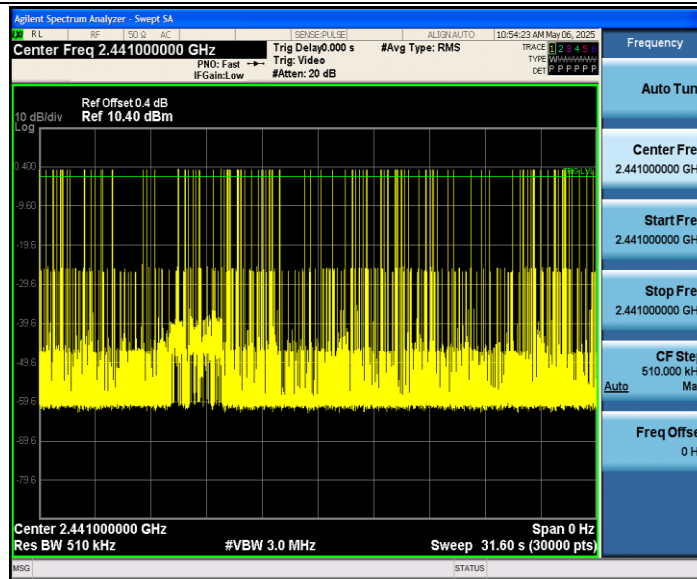
Test Graphs



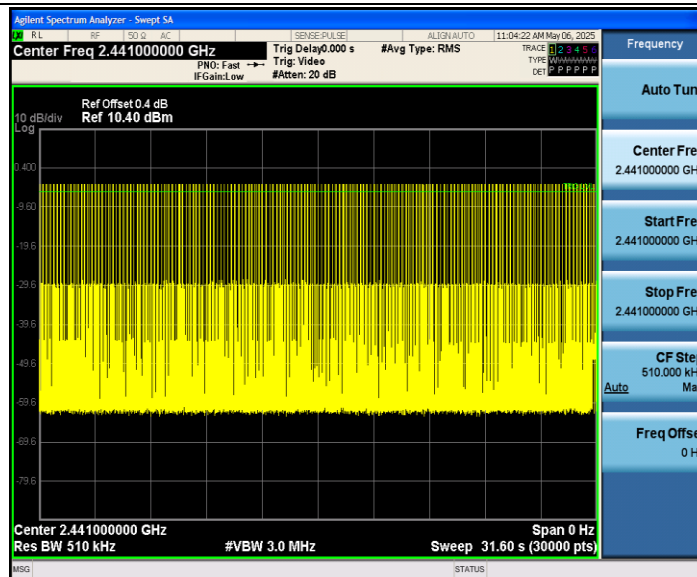
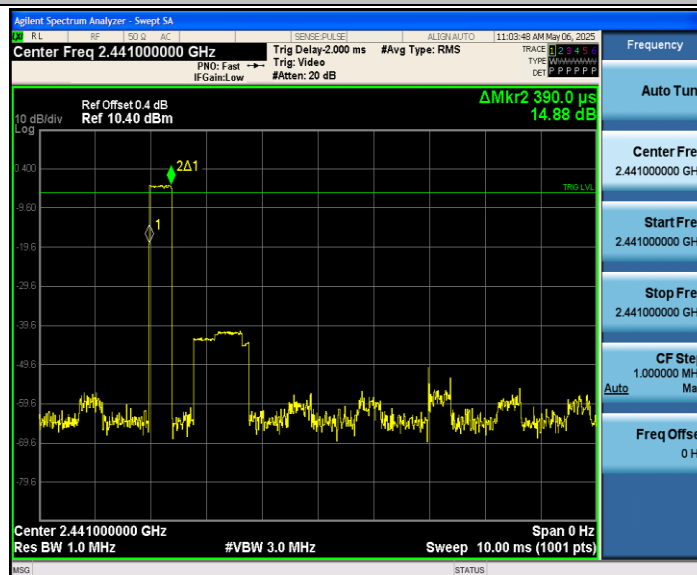


DH5_Ant1_Hop

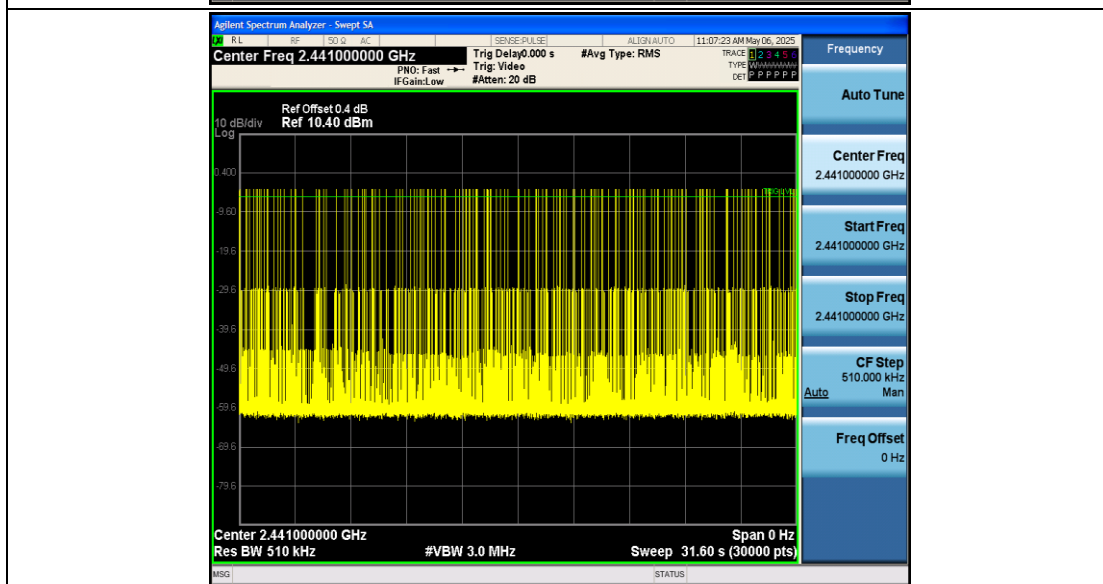




2DH1_Ant1_Hop

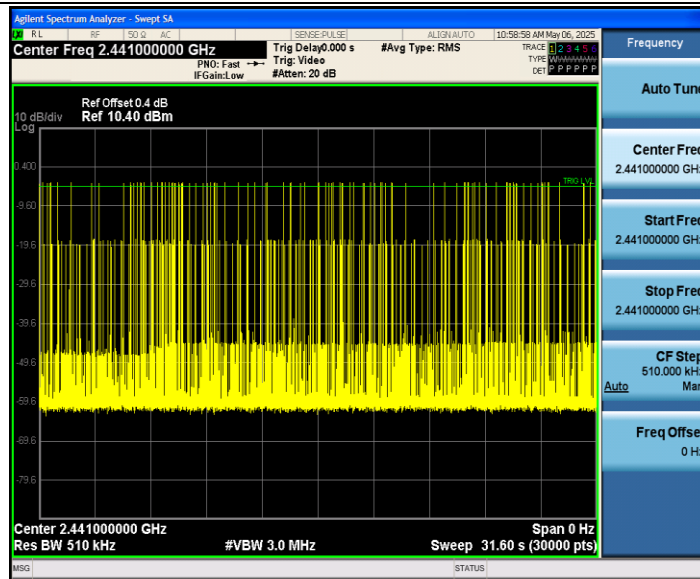


2DH3_Ant1_Hop

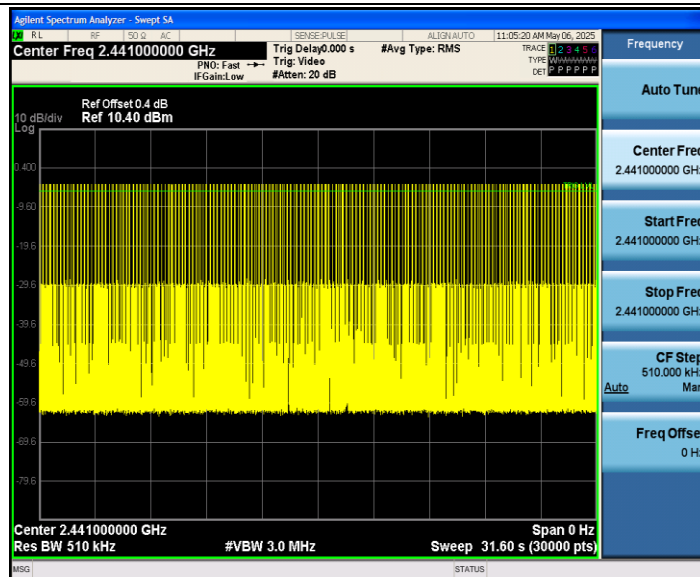
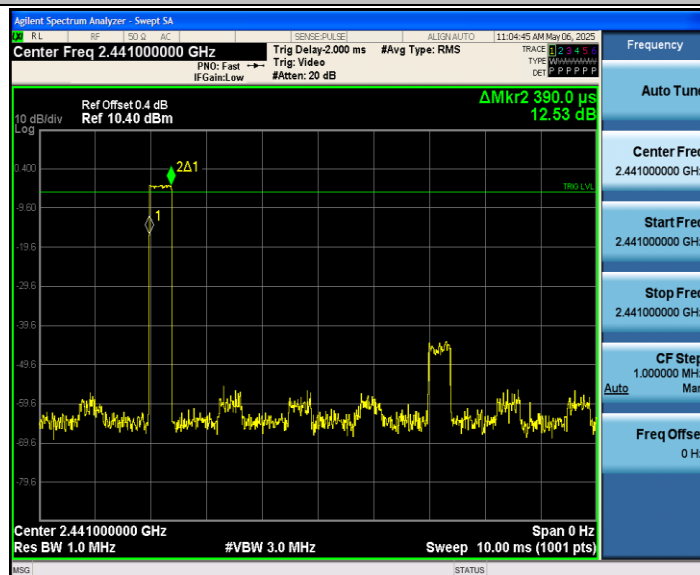


2DH5_Ant1_Hop

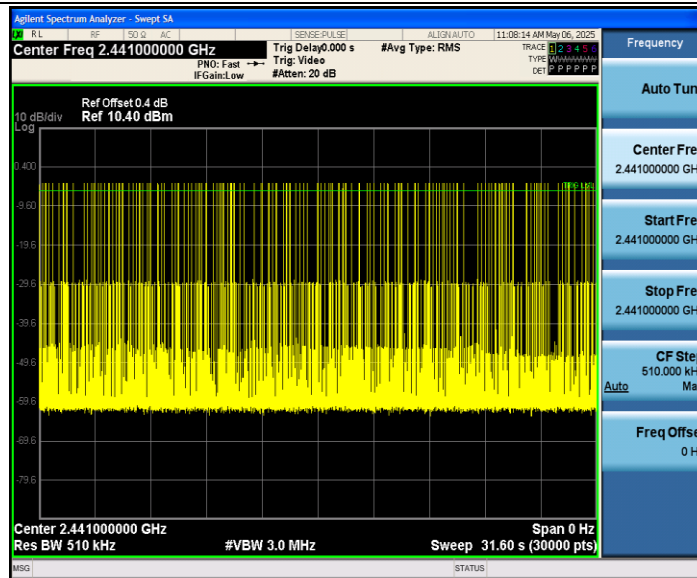
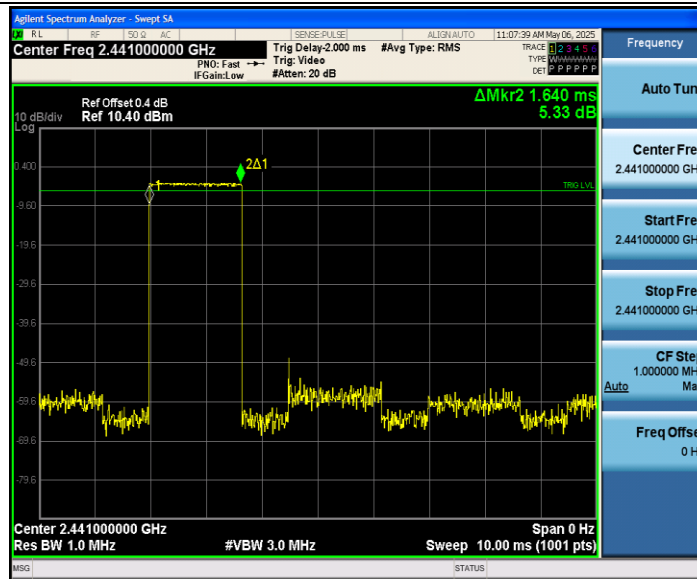




3DH1_Ant1_Hop

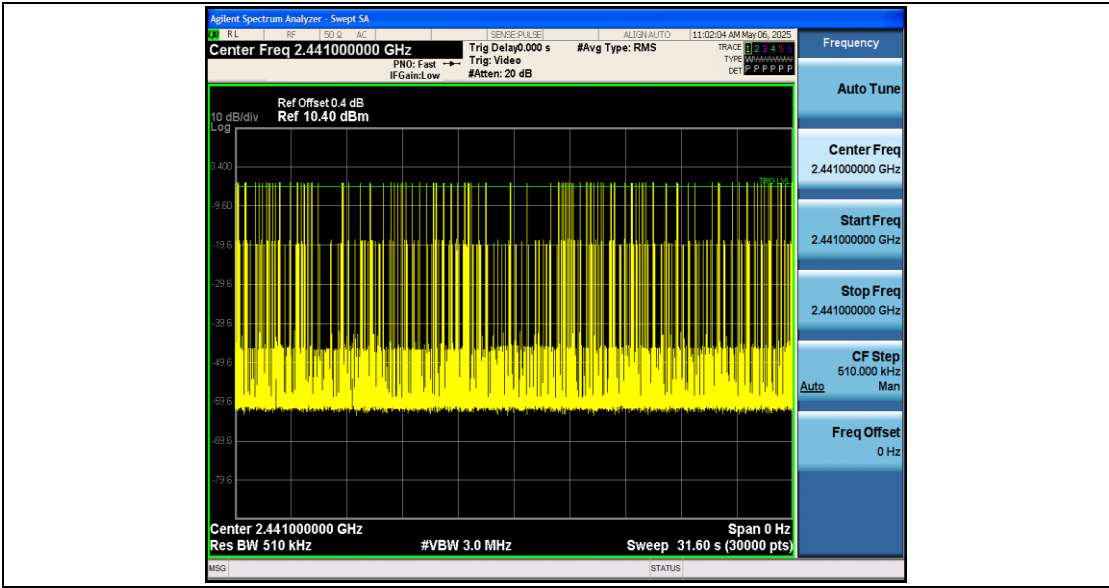


3DH3_Ant1_Hop



3DH5_Ant1_Hop



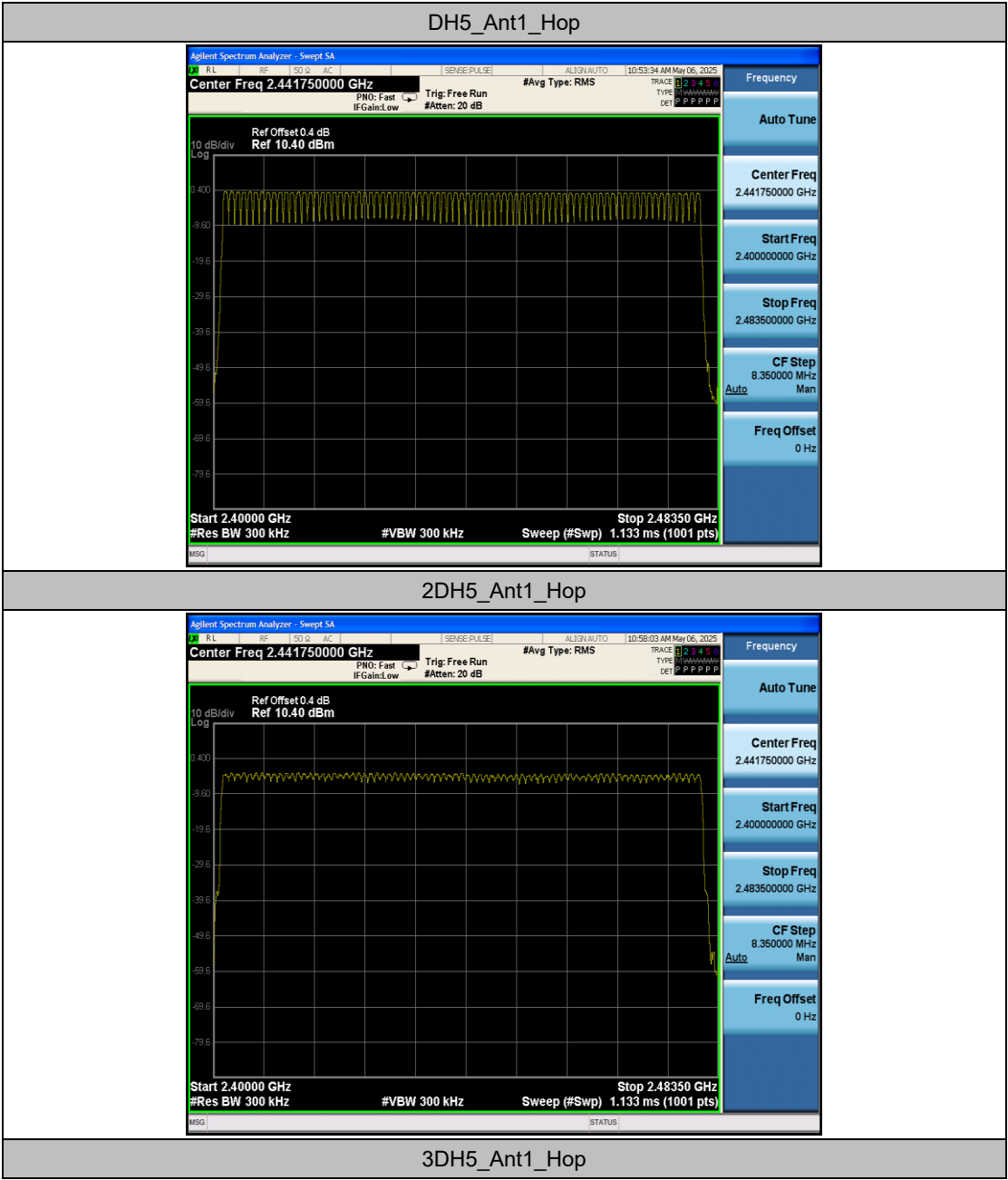


Appendix F: Number of hopping channels

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



2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

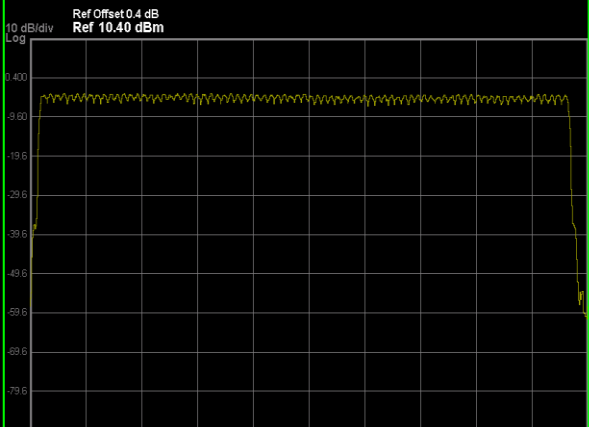
Center Freq 2.441750000 GHz

Ref Offset 0.4 dB
Ref 10.40 dBm

Start 2.400000 GHz
#Res BW 300 kHz

Stop 2.48350 GHz
#VBW 300 kHz
Sweep (#Swp) 1.133 ms (1001 pts)

10 dB/div
Log



Start 2.400000 GHz
#Res BW 300 kHz

Stop 2.48350 GHz
#VBW 300 kHz
Sweep (#Swp) 1.133 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.441750000 GHz

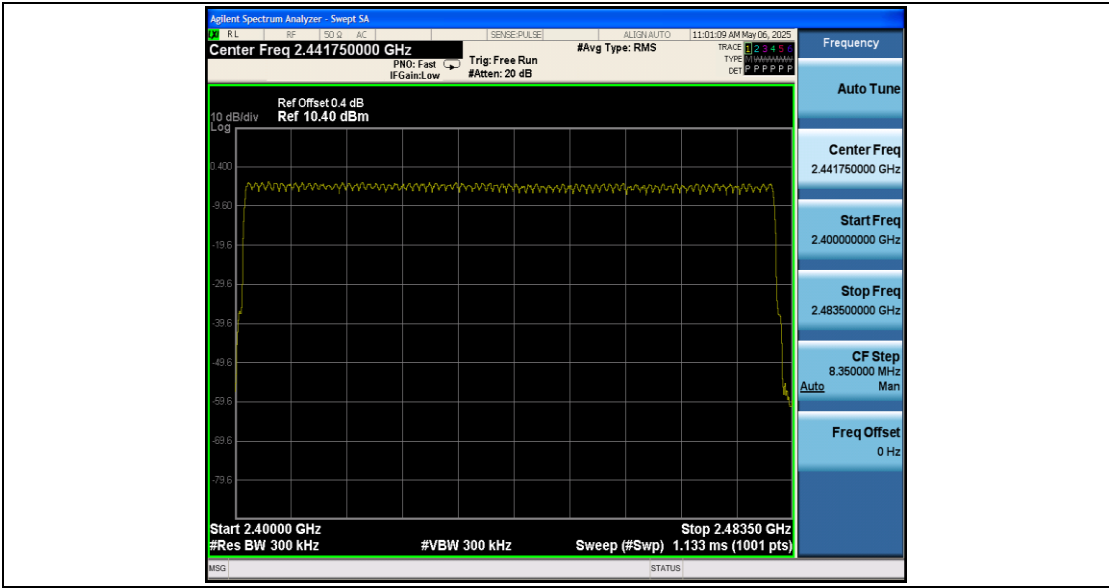
Start Freq
2.400000000 GHz

Stop Freq
2.483500000 GHz

CF Step
8.350000 MHz
Auto

Freq Offset
0 Hz

3DH5_Ant1_Hop



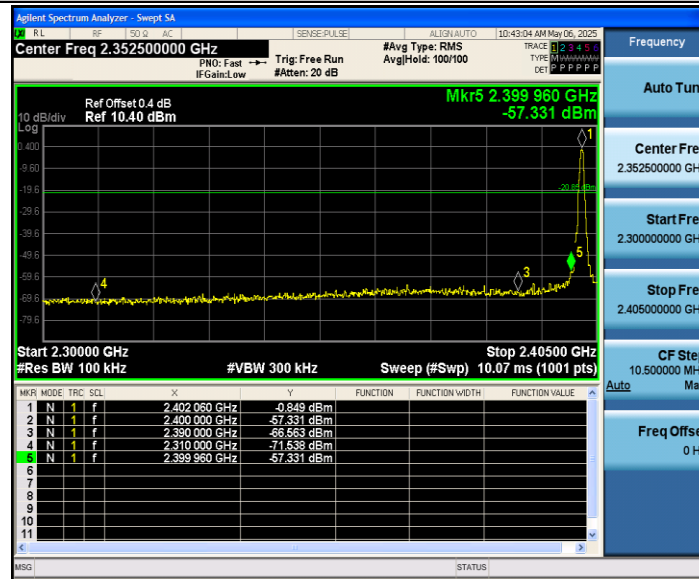
Appendix G: Band edge measurements

Test Result

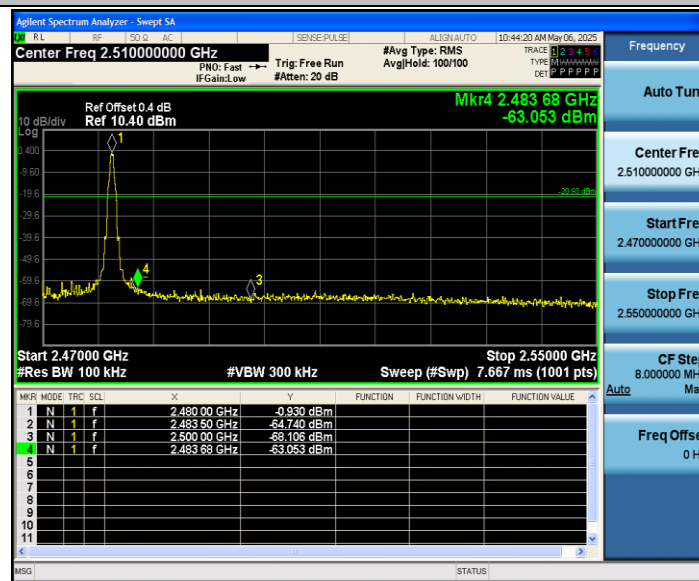
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.85	-57.33	≤ -20.85	PASS
		High	2480	-0.93	-63.05	≤ -20.93	PASS
		Low	Hop_2402	-0.52	-58.63	≤ -20.52	PASS
		High	Hop_2480	-0.40	-62.46	≤ -20.4	PASS
2DH5	Ant1	Low	2402	-4.52	-57.88	≤ -24.52	PASS
		High	2480	-4.50	-63.53	≤ -24.5	PASS
		Low	Hop_2402	-5.15	-63.82	≤ -25.15	PASS
		High	Hop_2480	-4.70	-64.18	≤ -24.7	PASS
3DH5	Ant1	Low	2402	-4.24	-60.92	≤ -24.24	PASS
		High	2480	-5.24	-63.86	≤ -25.24	PASS
		Low	Hop_2402	-6.75	-63.01	≤ -26.75	PASS
		High	Hop_2480	-4.90	-64.19	≤ -24.9	PASS

Test Graphs

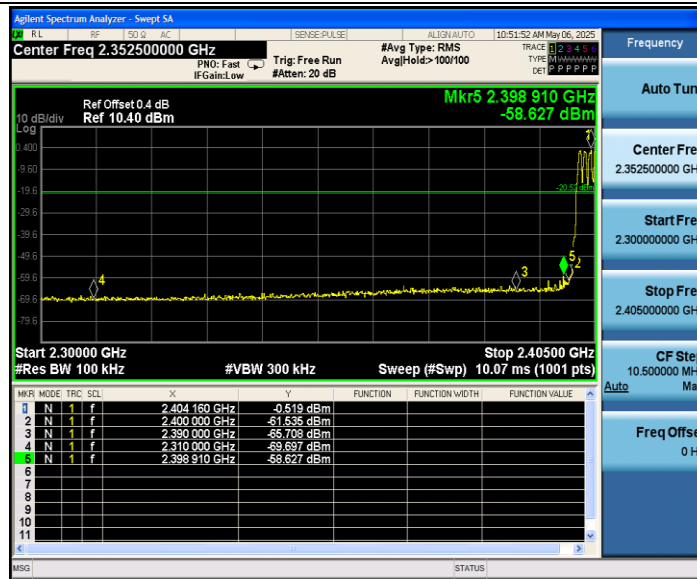
DH5_Ant1_Low_2402



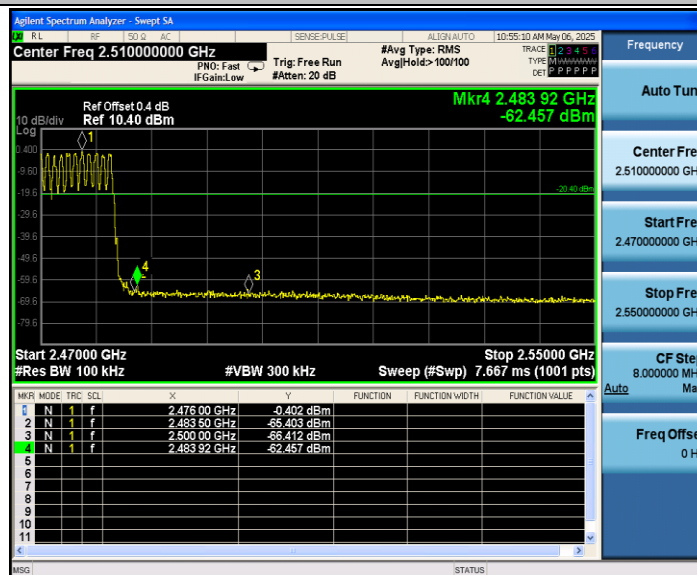
DH5_Ant1_High_2480



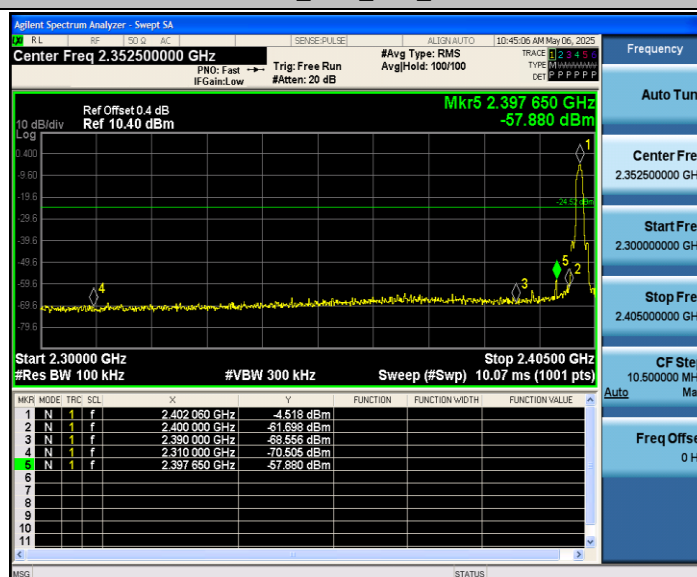
DH5_Ant1_Low_Hop_2402



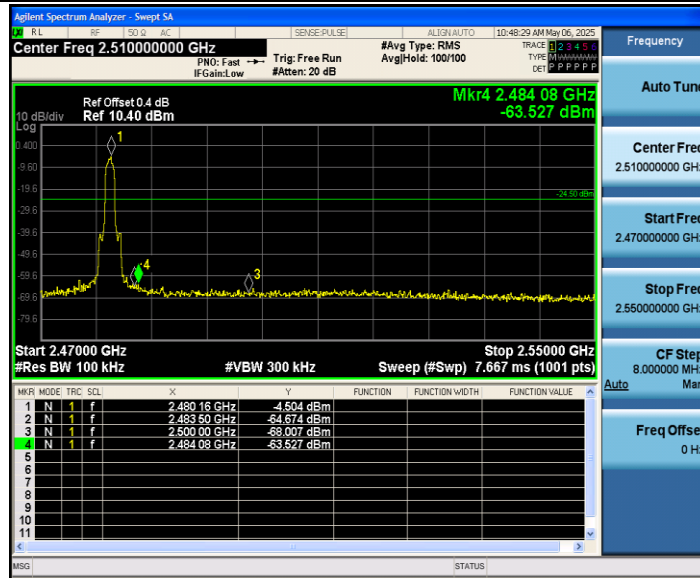
DH5_Ant1_High_Hop_2480



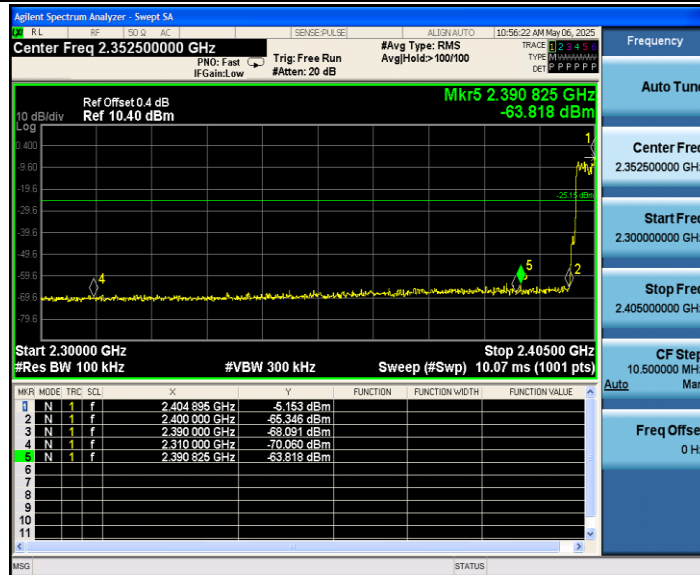
2DH5_Ant1_Low_2402



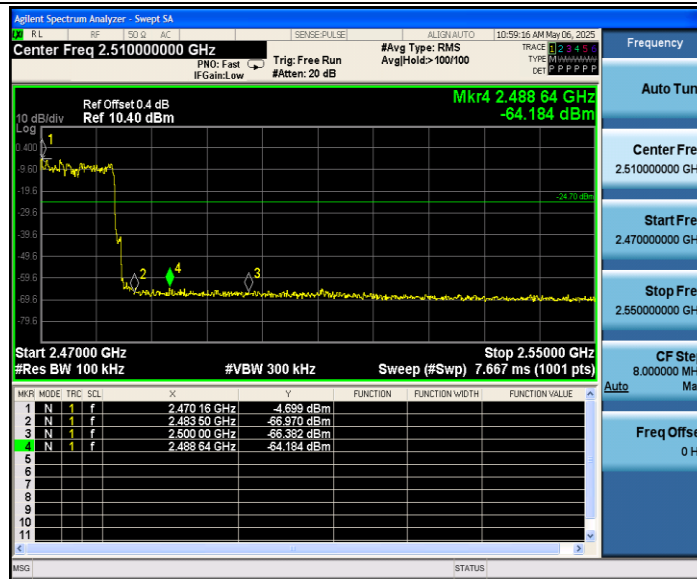
2DH5_Ant1_High_2480



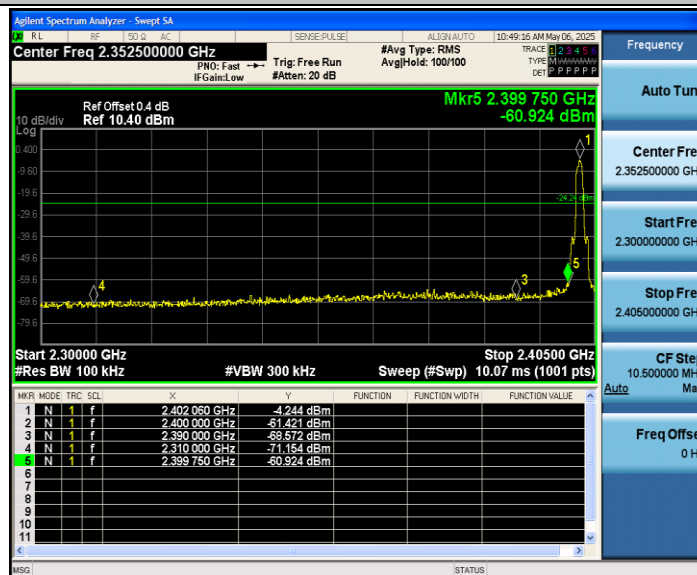
2DH5_Ant1_Low_Hop_2402



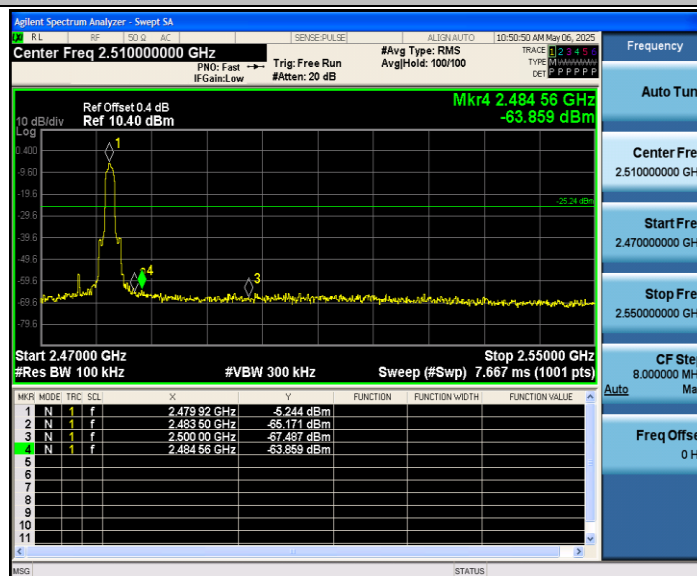
2DH5_Ant1_High_Hop_2480



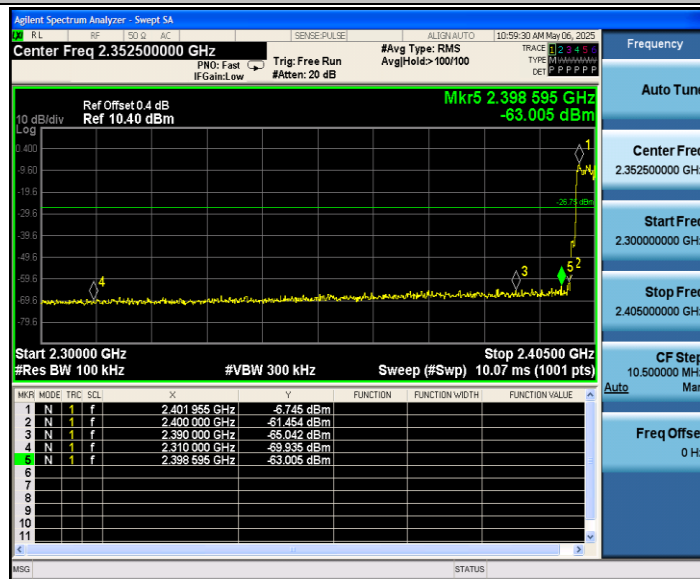
3DH5_Ant1_Low_2402



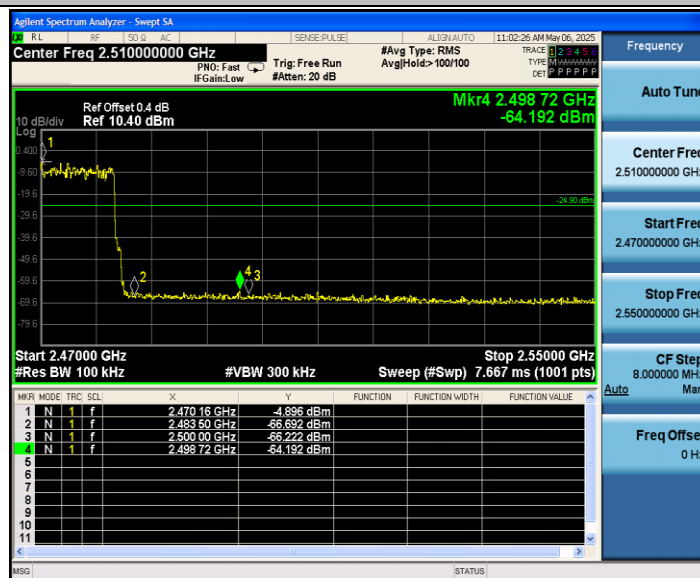
3DH5_Ant1_High_2480



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	1.55	1.55	---	PASS
			30~1000	1.55	-68.02	≤-18.45	PASS
			1000~26500	1.55	-42.78	≤-18.45	PASS
		2441	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-68.21	≤-18.97	PASS
			1000~26500	1.03	-41.9	≤-18.97	PASS
		2480	Reference	0.49	0.49	---	PASS
			30~1000	0.49	-66.23	≤-19.51	PASS
			1000~26500	0.49	-43.51	≤-19.51	PASS
2DH5	Ant1	2402	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-68.16	≤-23.65	PASS
			1000~26500	-3.65	-49.78	≤-23.65	PASS
		2441	Reference	-5.10	-5.10	---	PASS
			30~1000	-5.10	-67.69	≤-25.1	PASS
			1000~26500	-5.10	-41.37	≤-25.1	PASS
		2480	Reference	-2.83	-2.83	---	PASS
			30~1000	-2.83	-68.07	≤-22.83	PASS
			1000~26500	-2.83	-49.61	≤-22.83	PASS
3DH5	Ant1	2402	Reference	-1.58	-1.58	---	PASS
			30~1000	-1.58	-67.76	≤-21.58	PASS
			1000~26500	-1.58	-43.3	≤-21.58	PASS
		2441	Reference	-2.97	-2.97	---	PASS
			30~1000	-2.97	-68.07	≤-22.97	PASS
			1000~26500	-2.97	-47.29	≤-22.97	PASS
		2480	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-67.85	≤-23.29	PASS
			1000~26500	-3.29	-51.06	≤-23.29	PASS