

FCC Appendix RF Test Data for BT

FCC ID : 2BTRQ-KSW-1108

Company : MITZU GLOBAL LLC

EUT : Speaker

Model Number : KSW-1108

Report No. : CTA25120801801

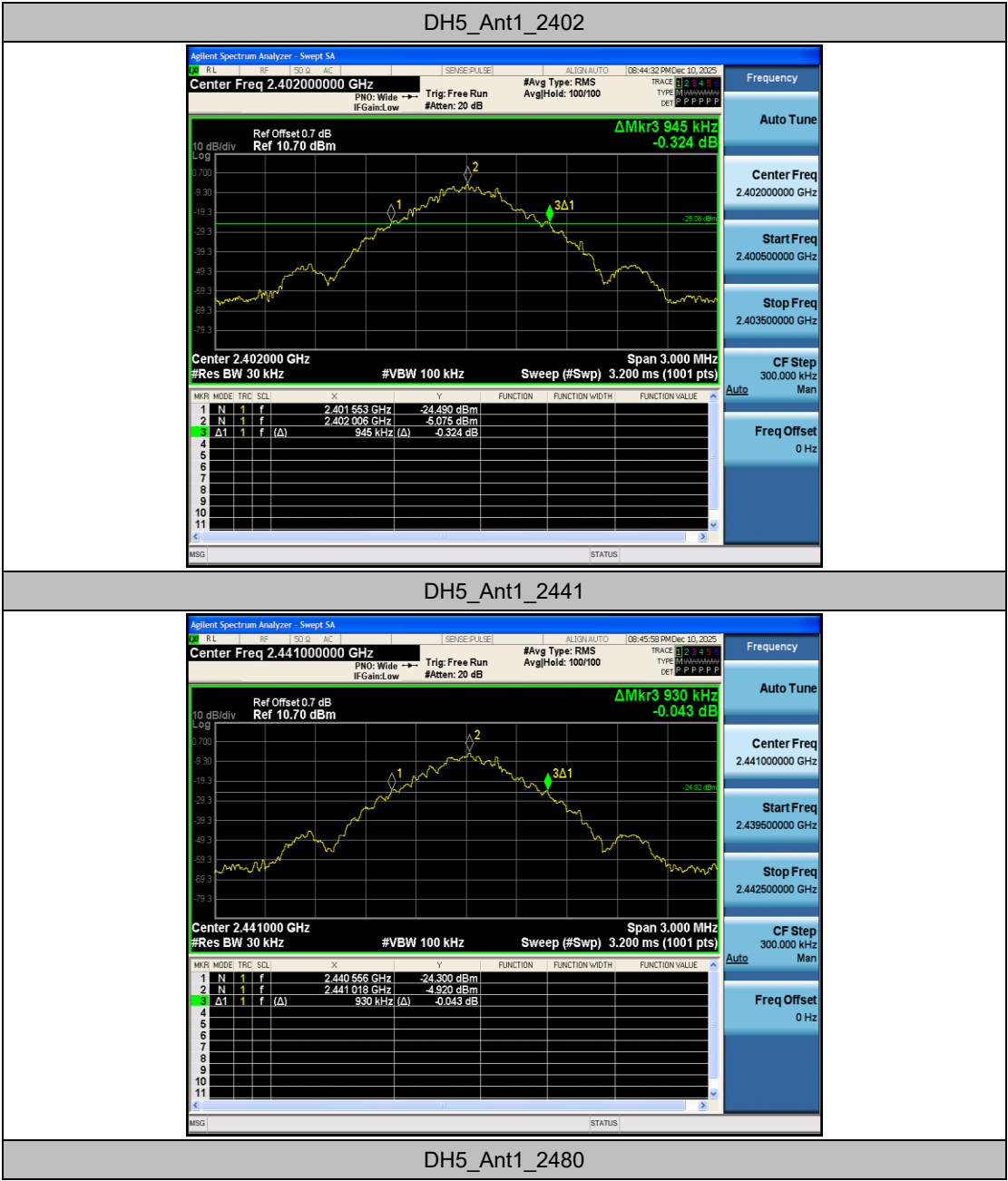
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.553	2402.498	---	---
		2441	0.930	2440.556	2441.486	---	---
		2480	0.939	2479.550	2480.489	---	---
2DH5	Ant1	2402	1.317	2401.352	2402.669	---	---
		2441	1.332	2440.343	2441.675	---	---
		2480	1.278	2479.382	2480.660	---	---
3DH5	Ant1	2402	1.320	2401.355	2402.675	---	---
		2441	1.281	2440.364	2441.645	---	---
		2480	1.266	2479.379	2480.645	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

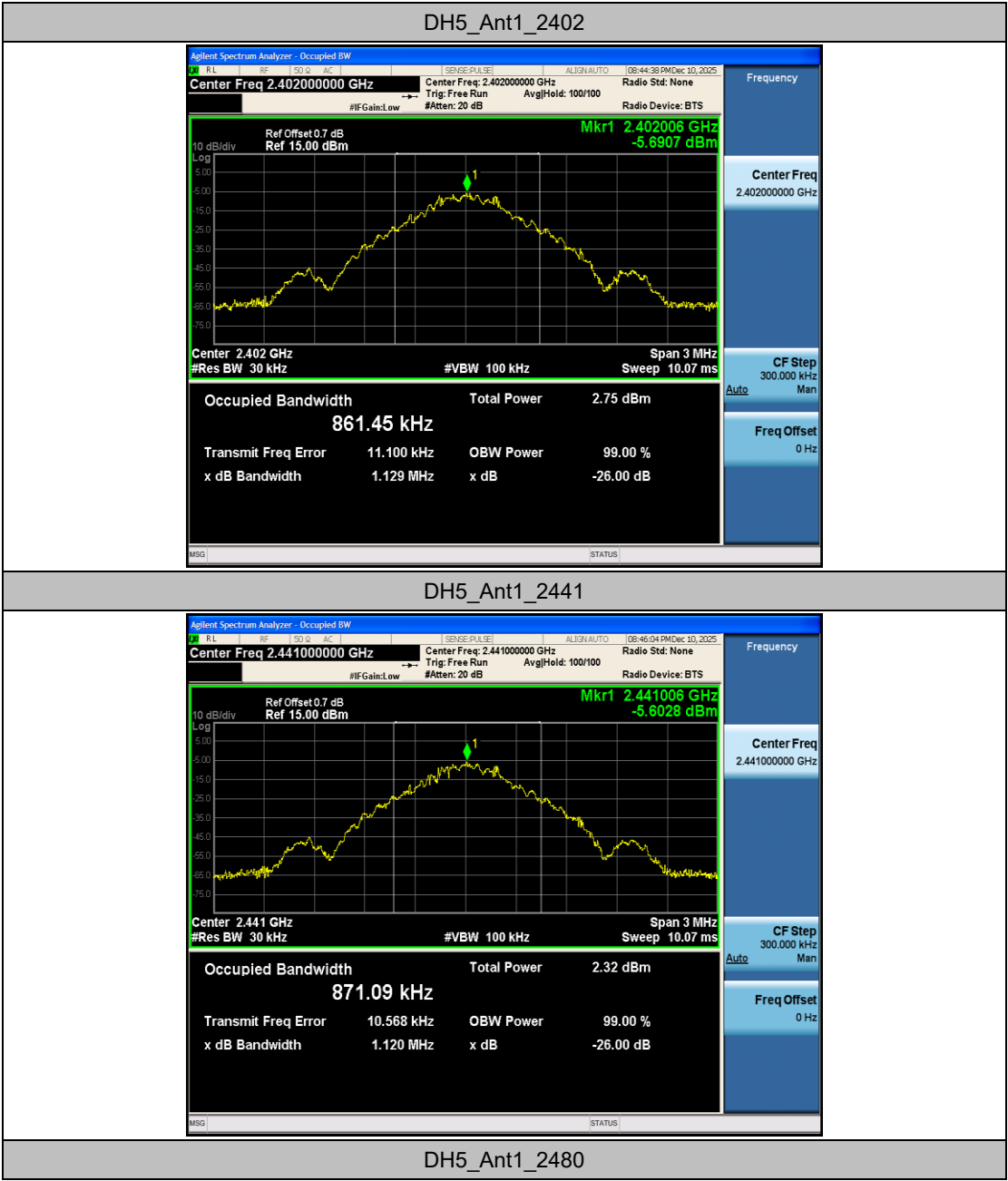


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86145	2401.5804	2402.4418	---	---
		2441	0.87109	2440.5750	2441.4461	---	---
		2480	0.87254	2479.5732	2480.4457	---	---
2DH5	Ant1	2402	1.1860	2401.4175	2402.6035	---	---
		2441	1.1852	2440.4177	2441.6029	---	---
		2480	1.1861	2479.4193	2480.6054	---	---
3DH5	Ant1	2402	1.1834	2401.4202	2402.6036	---	---
		2441	1.1921	2440.4132	2441.6053	---	---
		2480	1.1892	2479.4158	2480.6050	---	---

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	-3.25	≤20.97	PASS
		2441	-3.42	≤20.97	PASS
		2480	-3.55	≤20.97	PASS
2DH5	Ant1	2402	-3.92	≤20.97	PASS
		2441	-4.14	≤20.97	PASS
		2480	-4.25	≤20.97	PASS
3DH5	Ant1	2402	-3.66	≤20.97	PASS
		2441	-3.87	≤20.97	PASS
		2480	-3.93	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.945	PASS
2DH5	Ant1	Hop	1.12	≥ 0.888	PASS
3DH5	Ant1	Hop	1	≥ 0.880	PASS

Test Graphs



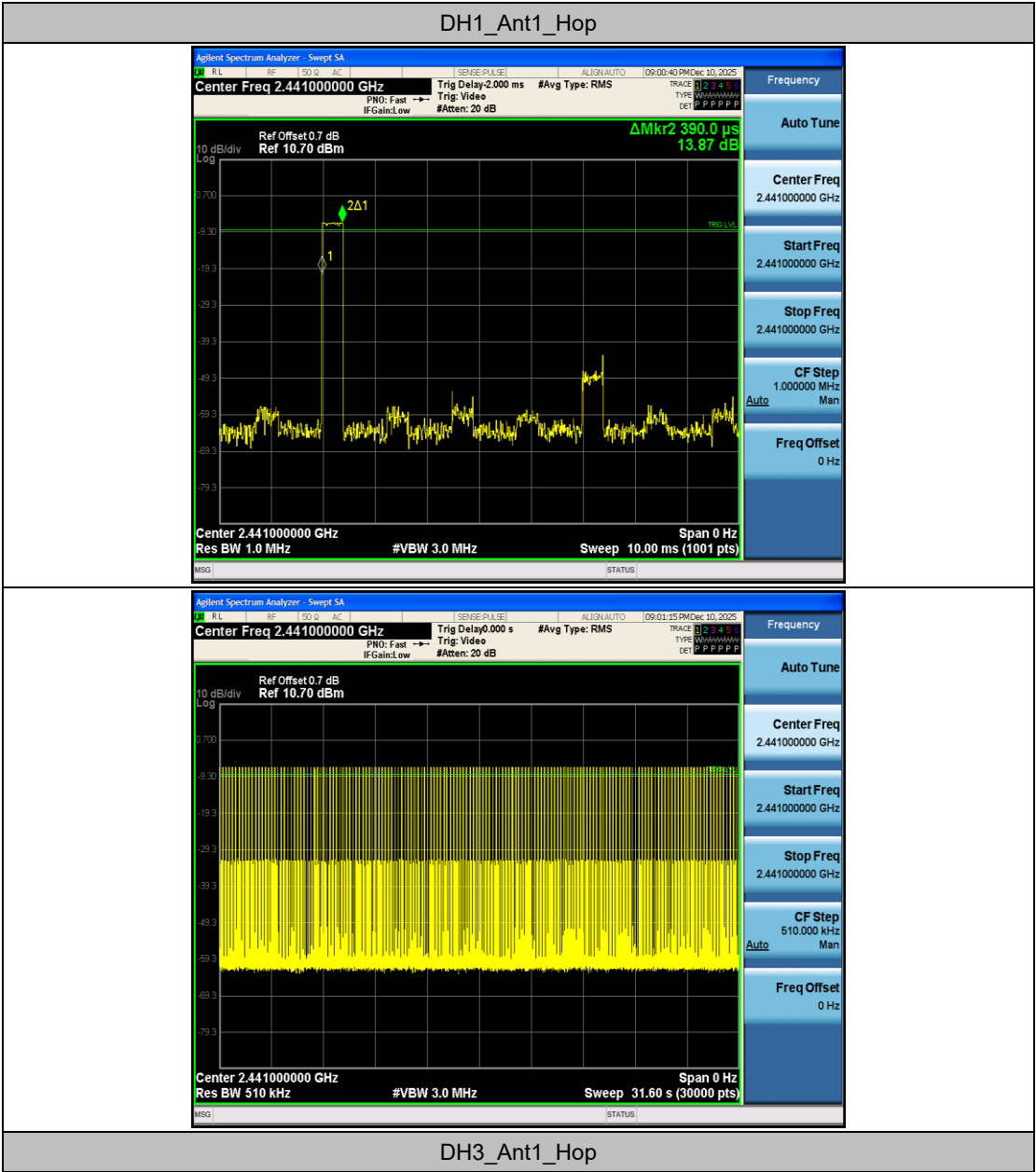


Appendix E: Time of occupancy

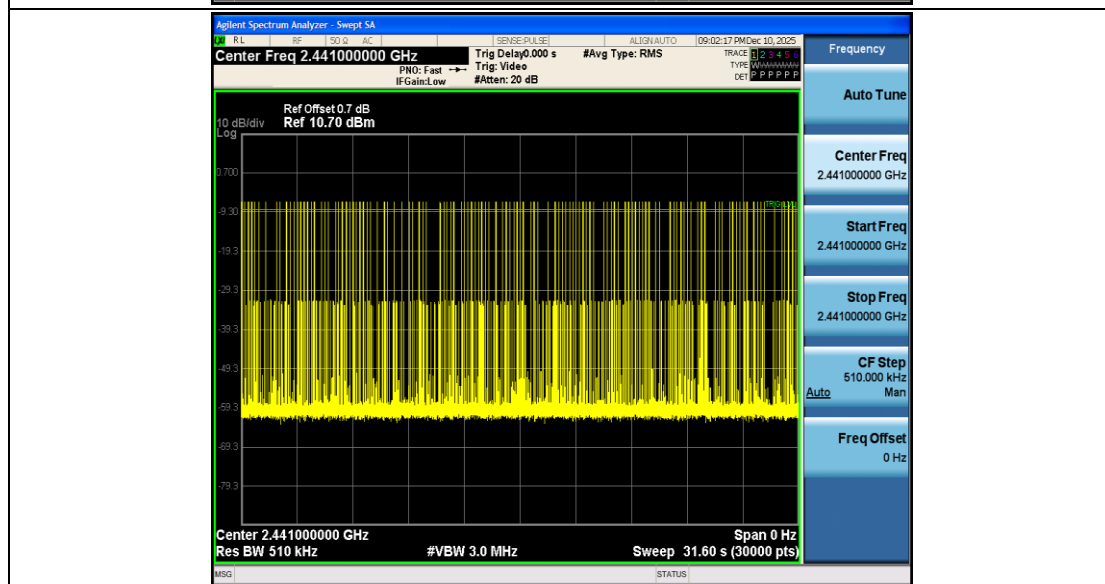
Test Result

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	1.650	168	0.277	≤0.4	PASS
DH5	Ant1	Hop	2.890	112	0.324	≤0.4	PASS
2DH1	Ant1	Hop	0.400	316	0.126	≤0.4	PASS
2DH3	Ant1	Hop	1.650	154	0.254	≤0.4	PASS
2DH5	Ant1	Hop	2.900	110	0.319	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.650	162	0.267	≤0.4	PASS
3DH5	Ant1	Hop	2.900	115	0.334	≤0.4	PASS

Test Graphs

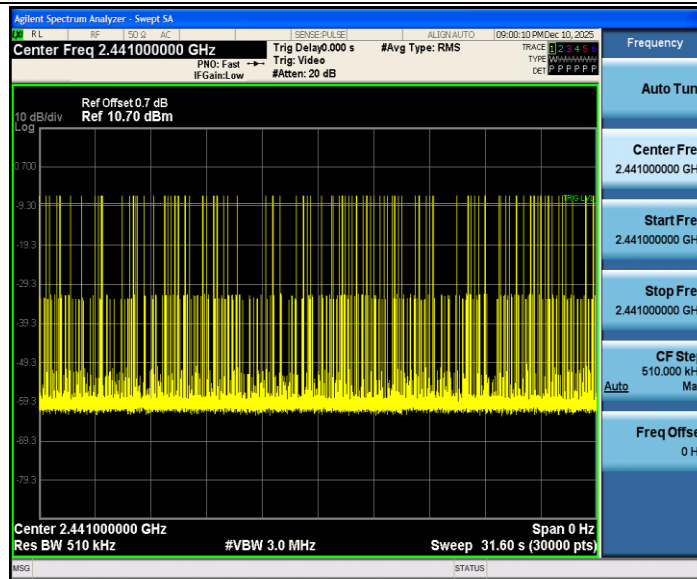


DH3_Ant1_Hop

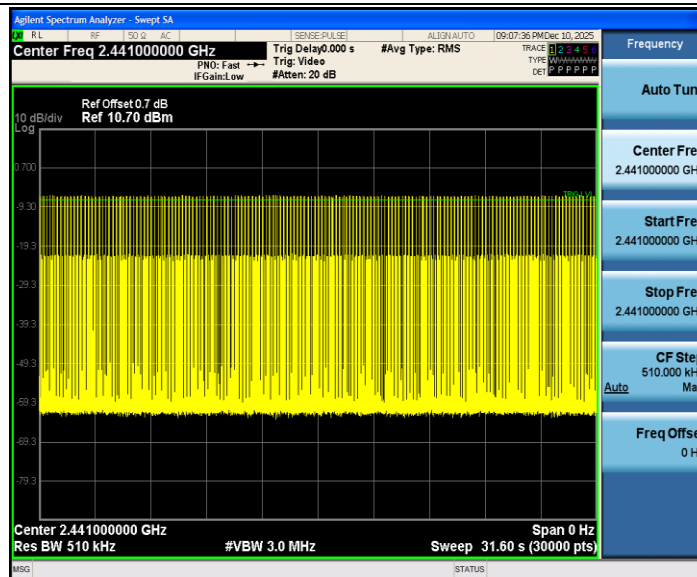
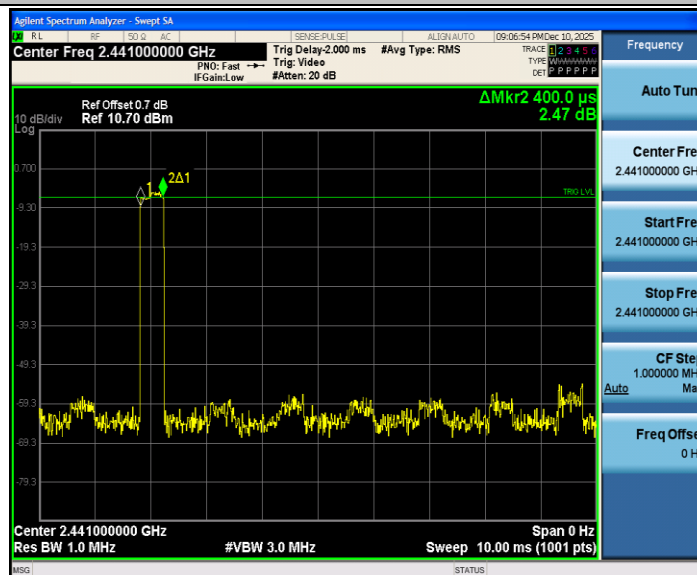


DH5_Ant1_Hop

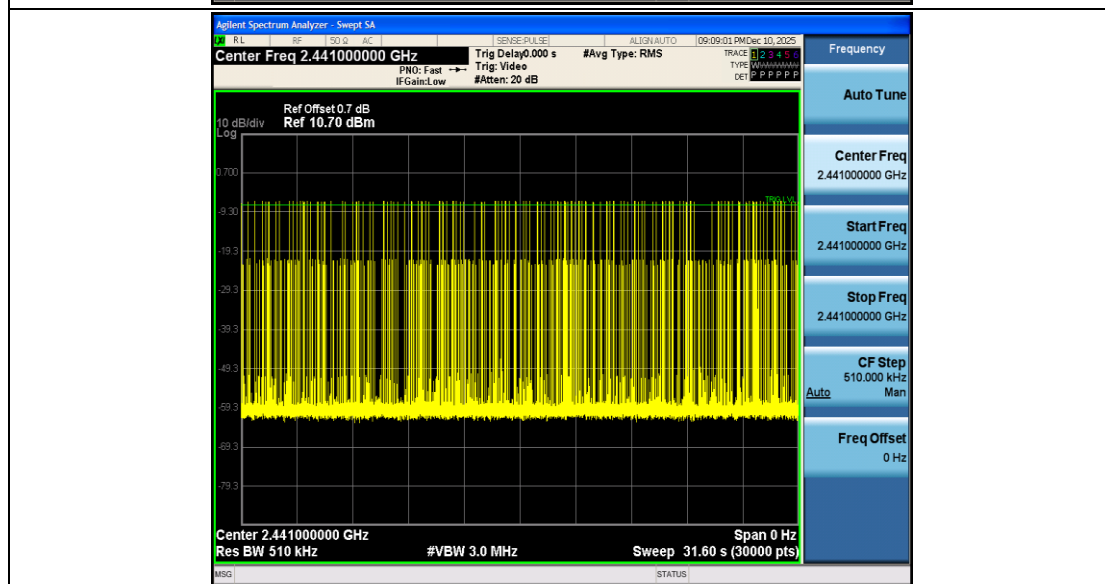




2DH1_Ant1_Hop

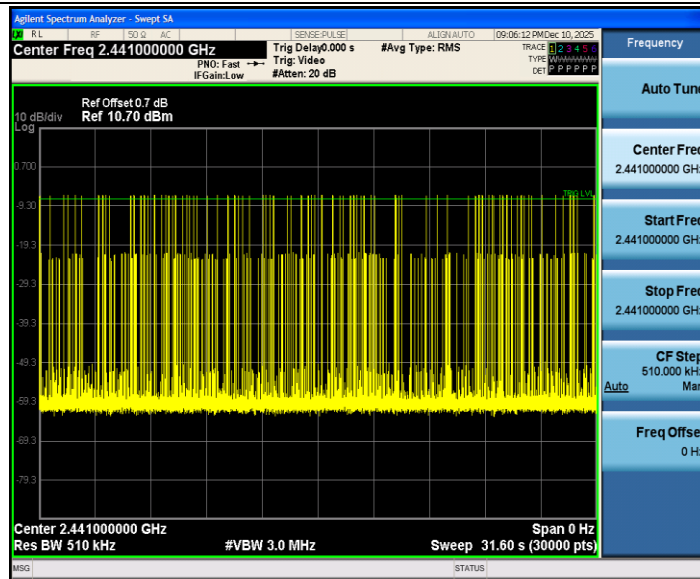


2DH3_Ant1_Hop

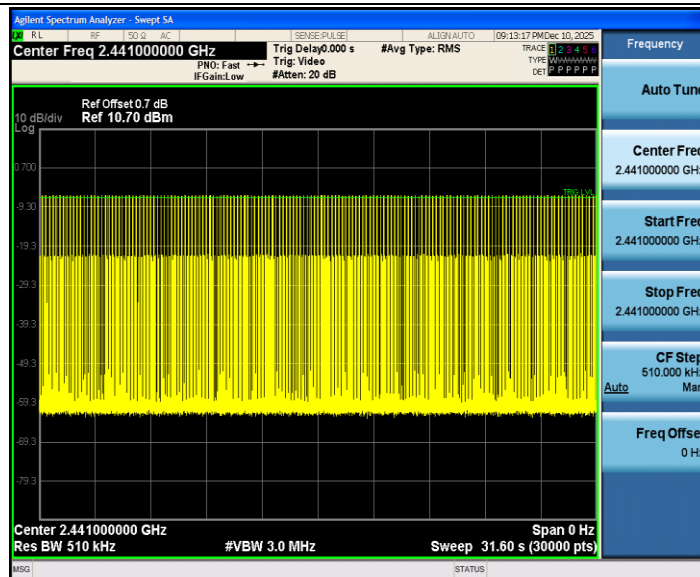
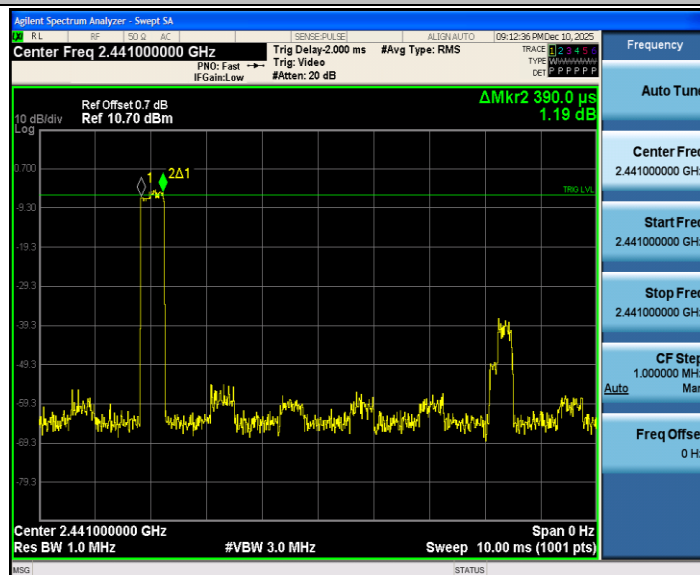


2DH5_Ant1_Hop

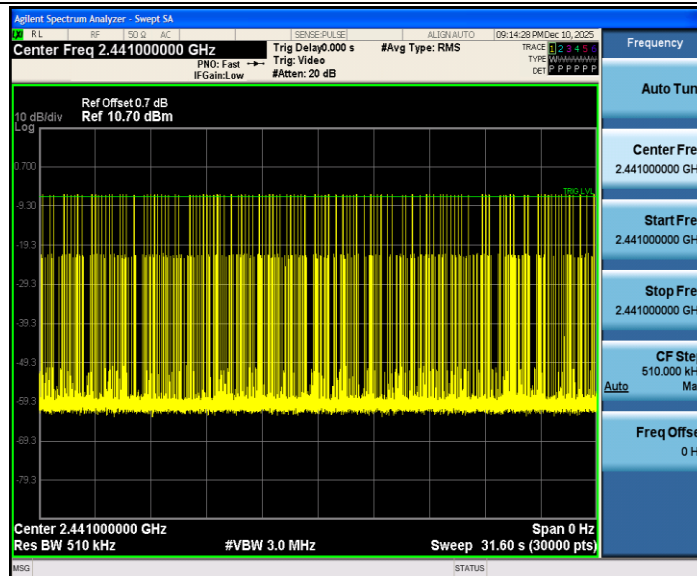




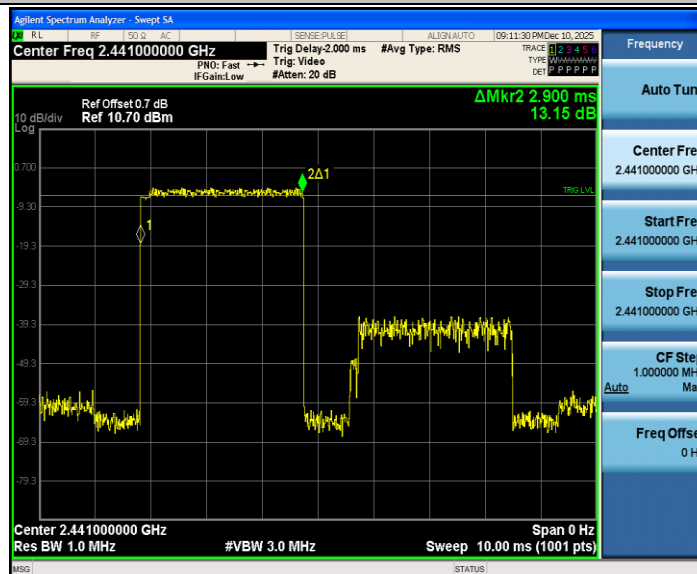
3DH1_Ant1_Hop

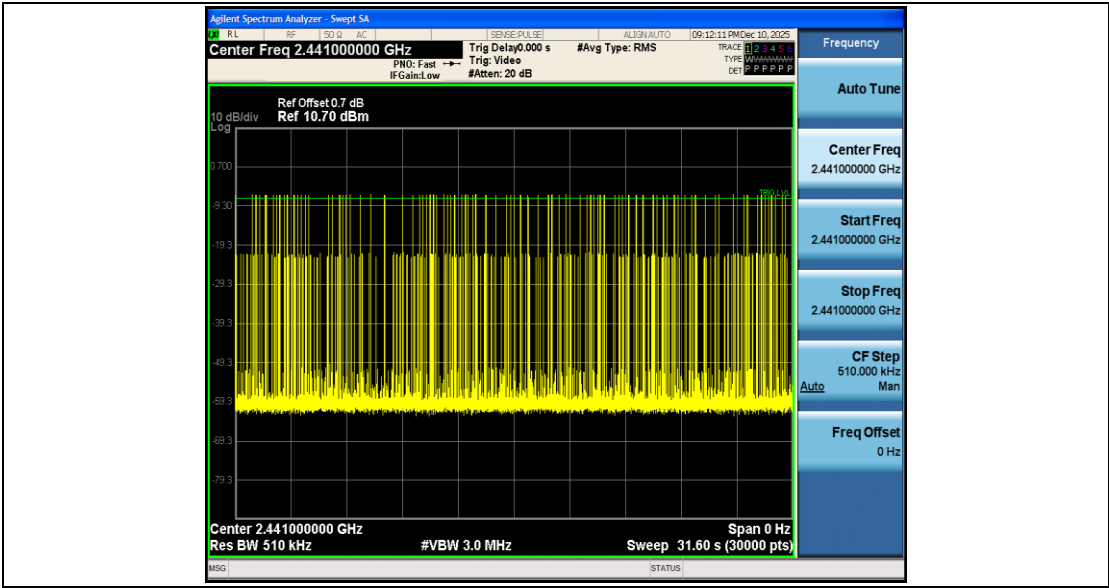


3DH3_Ant1_Hop



3DH5_Ant1_Hop



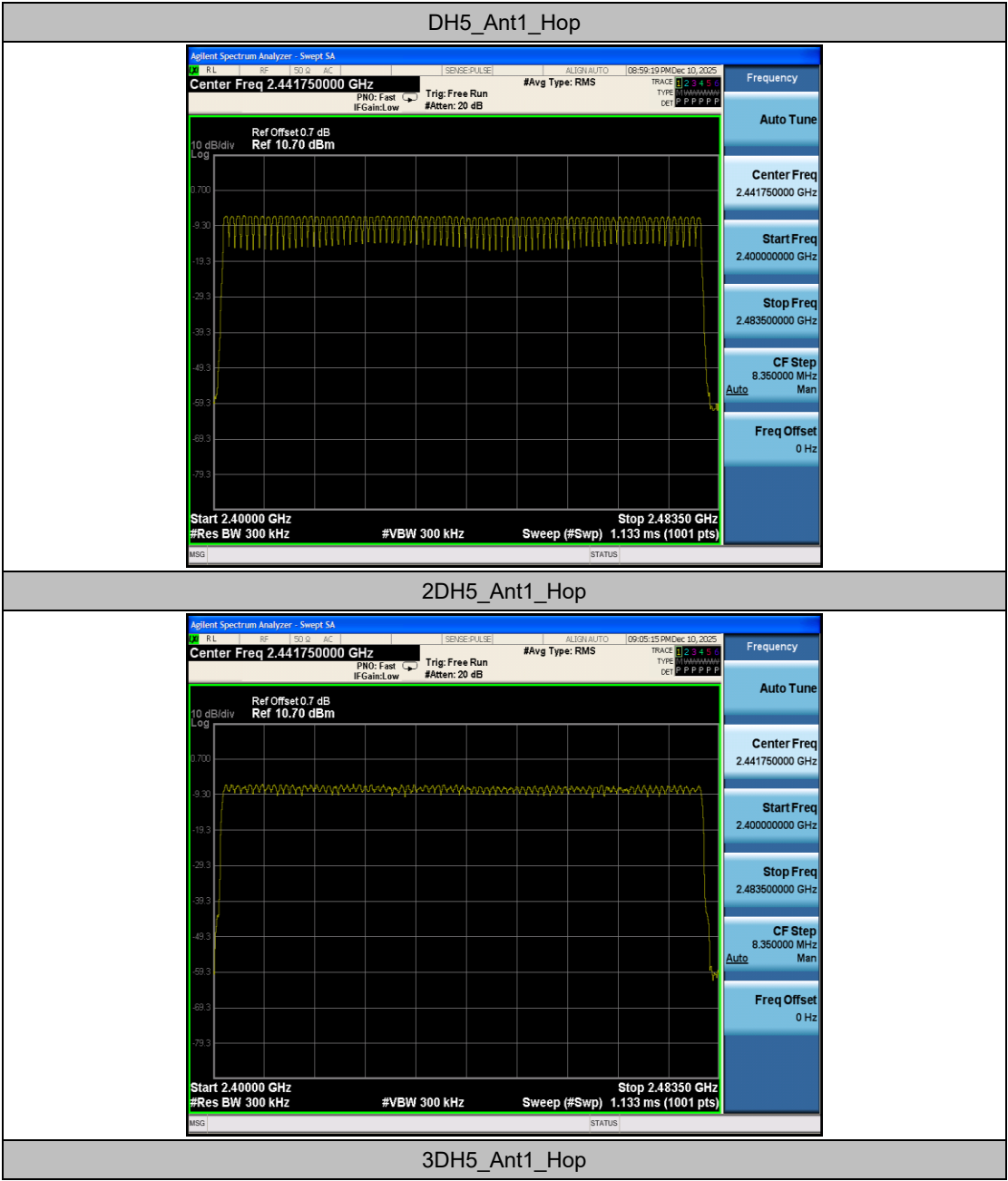


Appendix F: Number of hopping channels

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



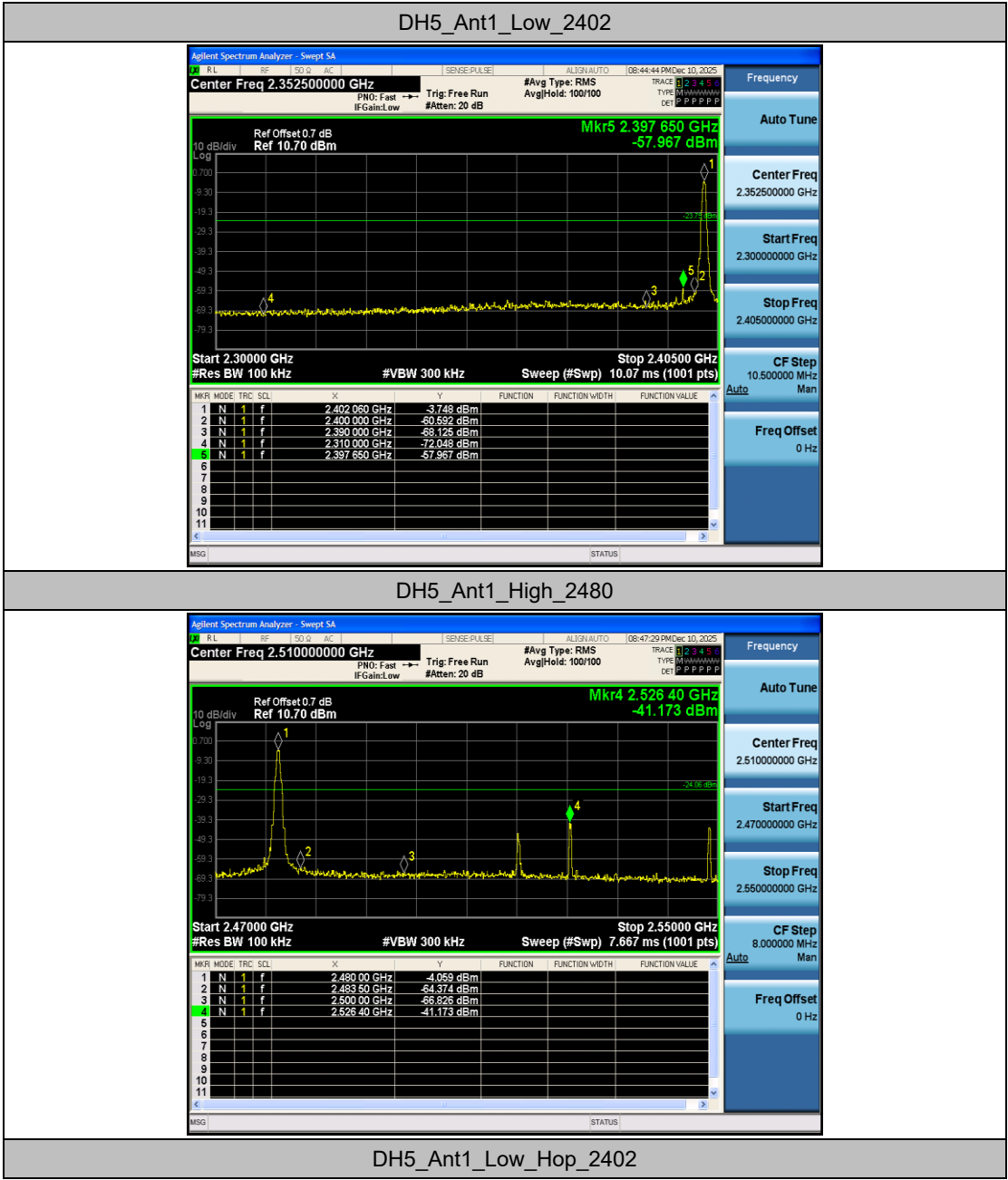


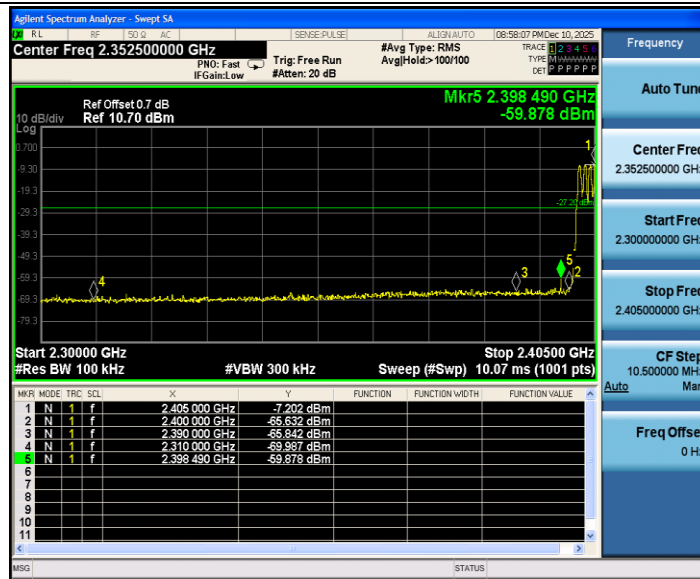
Appendix G: Band edge measurements

Test Result

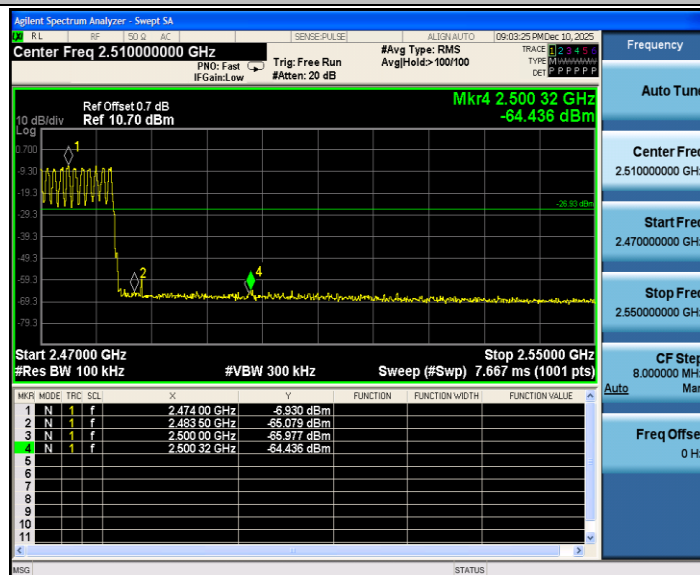
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.75	-57.97	≤ -23.75	PASS
		High	2480	-4.06	-41.17	≤ -24.06	PASS
		Low	Hop_2402	-7.20	-59.88	≤ -27.2	PASS
		High	Hop_2480	-6.93	-64.44	≤ -26.93	PASS
2DH5	Ant1	Low	2402	-7.85	-61.4	≤ -27.85	PASS
		High	2480	-7.54	-64.26	≤ -27.54	PASS
		Low	Hop_2402	-7.21	-63.9	≤ -27.21	PASS
		High	Hop_2480	-7.64	-64.07	≤ -27.64	PASS
3DH5	Ant1	Low	2402	-6.57	-63.16	≤ -26.57	PASS
		High	2480	-6.89	-64.42	≤ -26.89	PASS
		Low	Hop_2402	-8.69	-63.39	≤ -28.69	PASS
		High	Hop_2480	-7.50	-64.61	≤ -27.5	PASS

Test Graphs

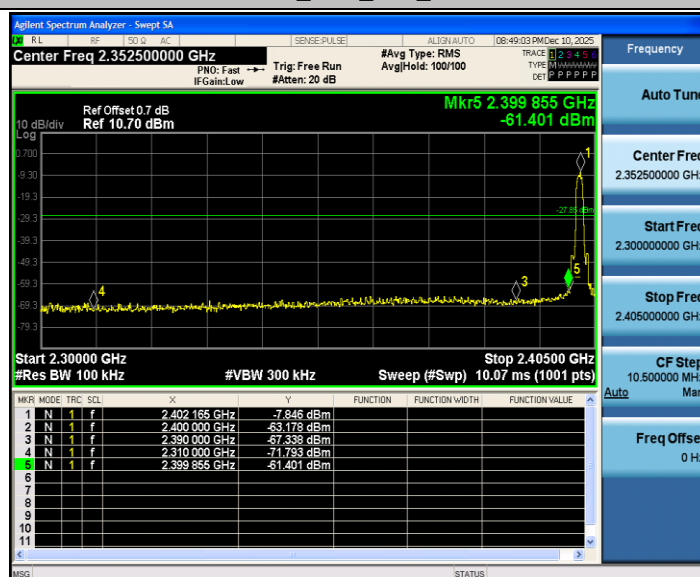




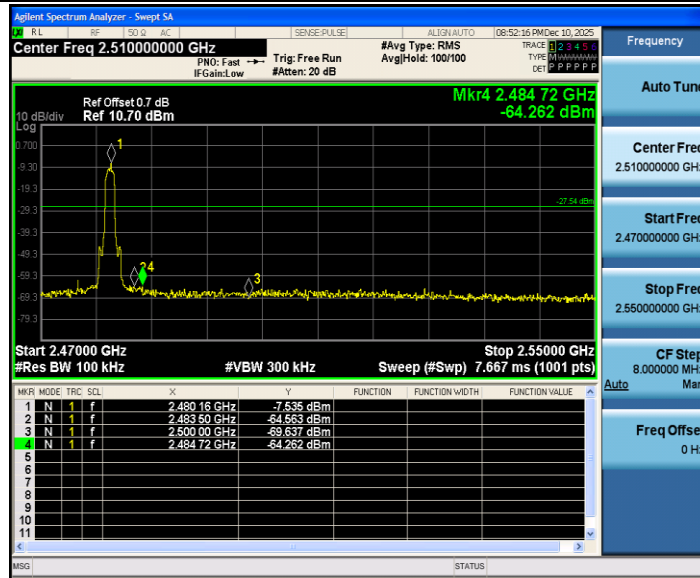
DH5_Ant1_High_Hop_2480



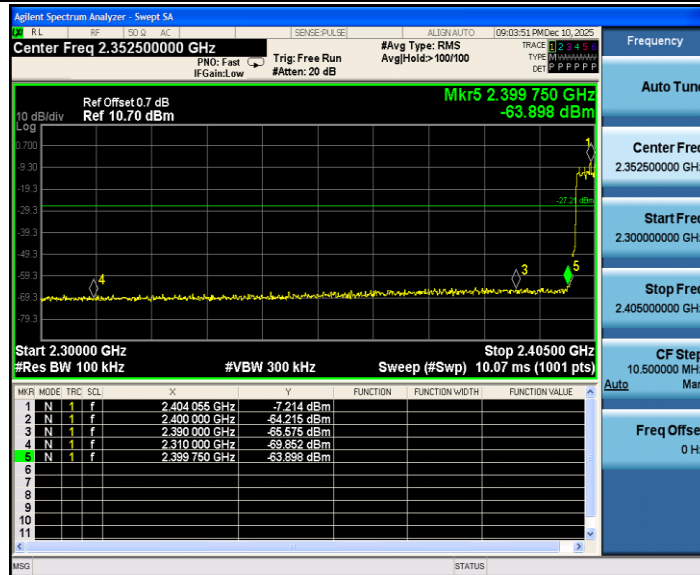
2DH5_Ant1_Low_2402



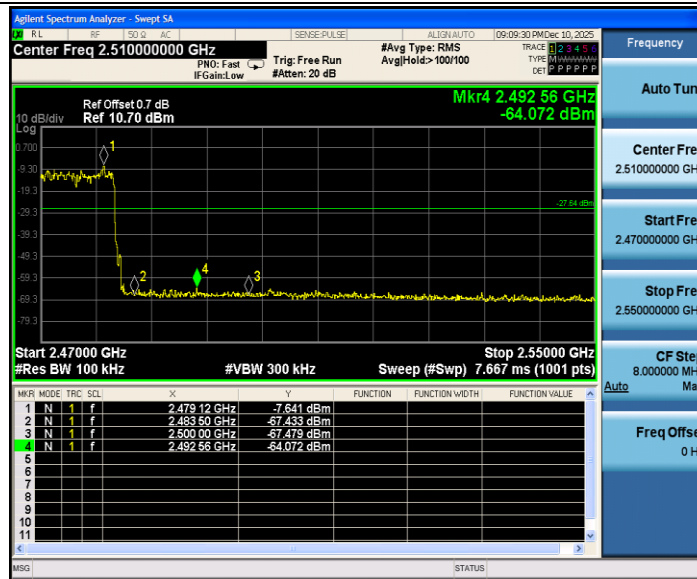
2DH5_Ant1_High_2480



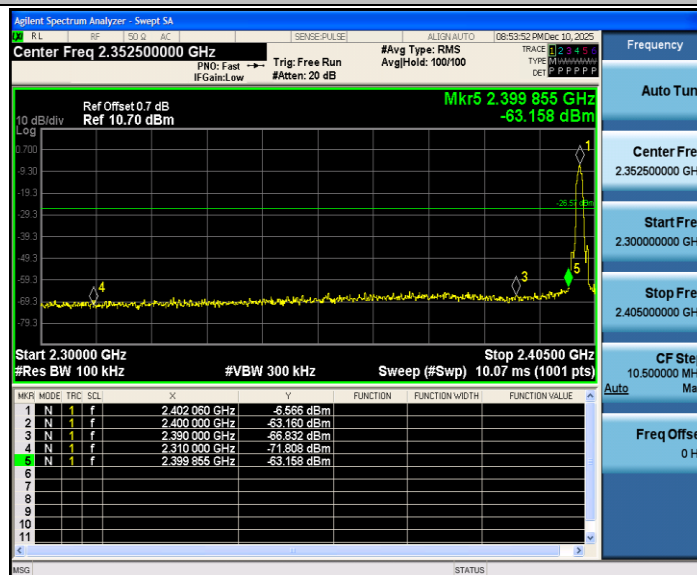
2DH5_Ant1_Low_Hop_2402



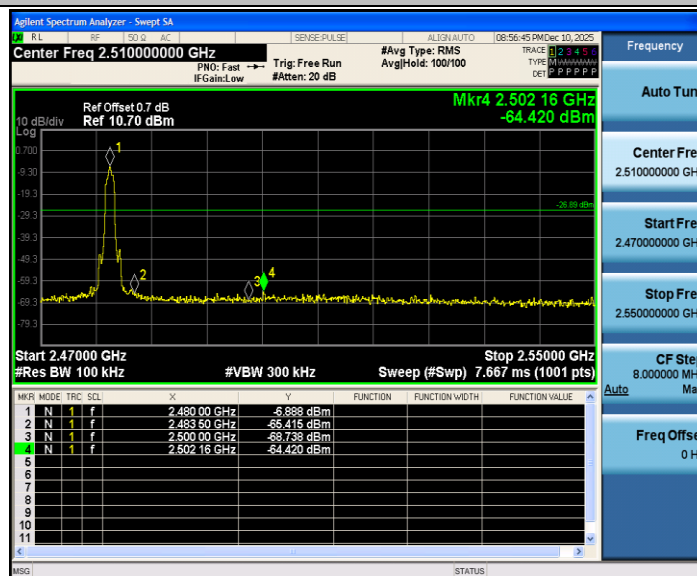
2DH5_Ant1_High_Hop_2480



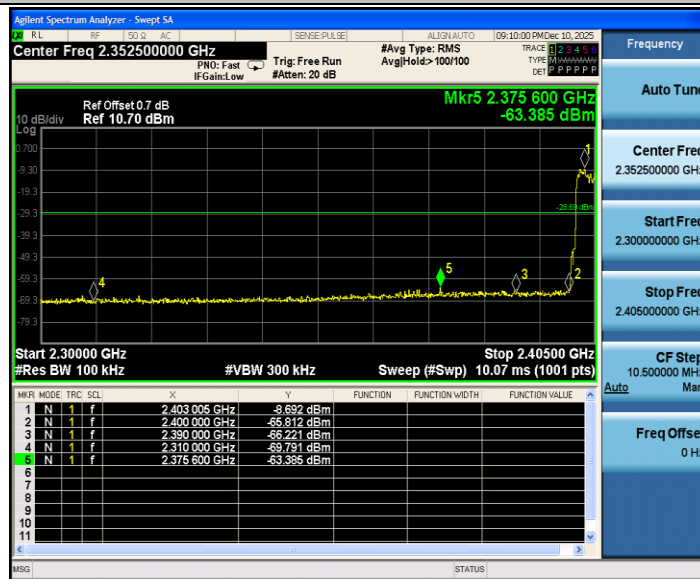
3DH5_Ant1_Low_2402



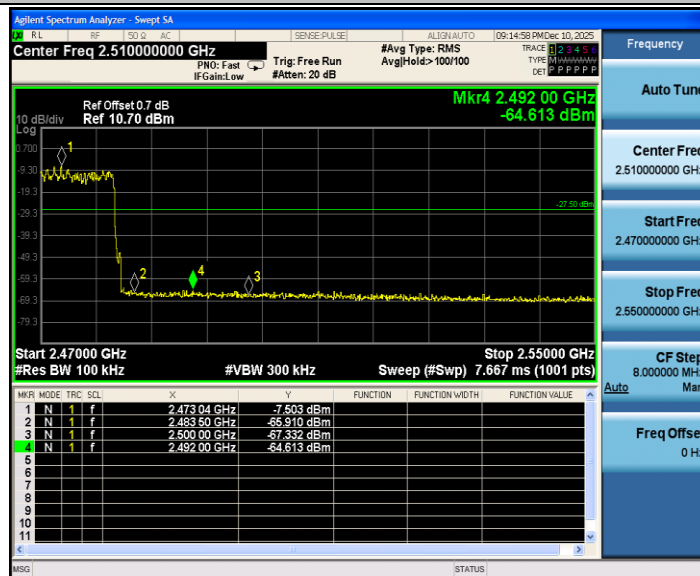
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

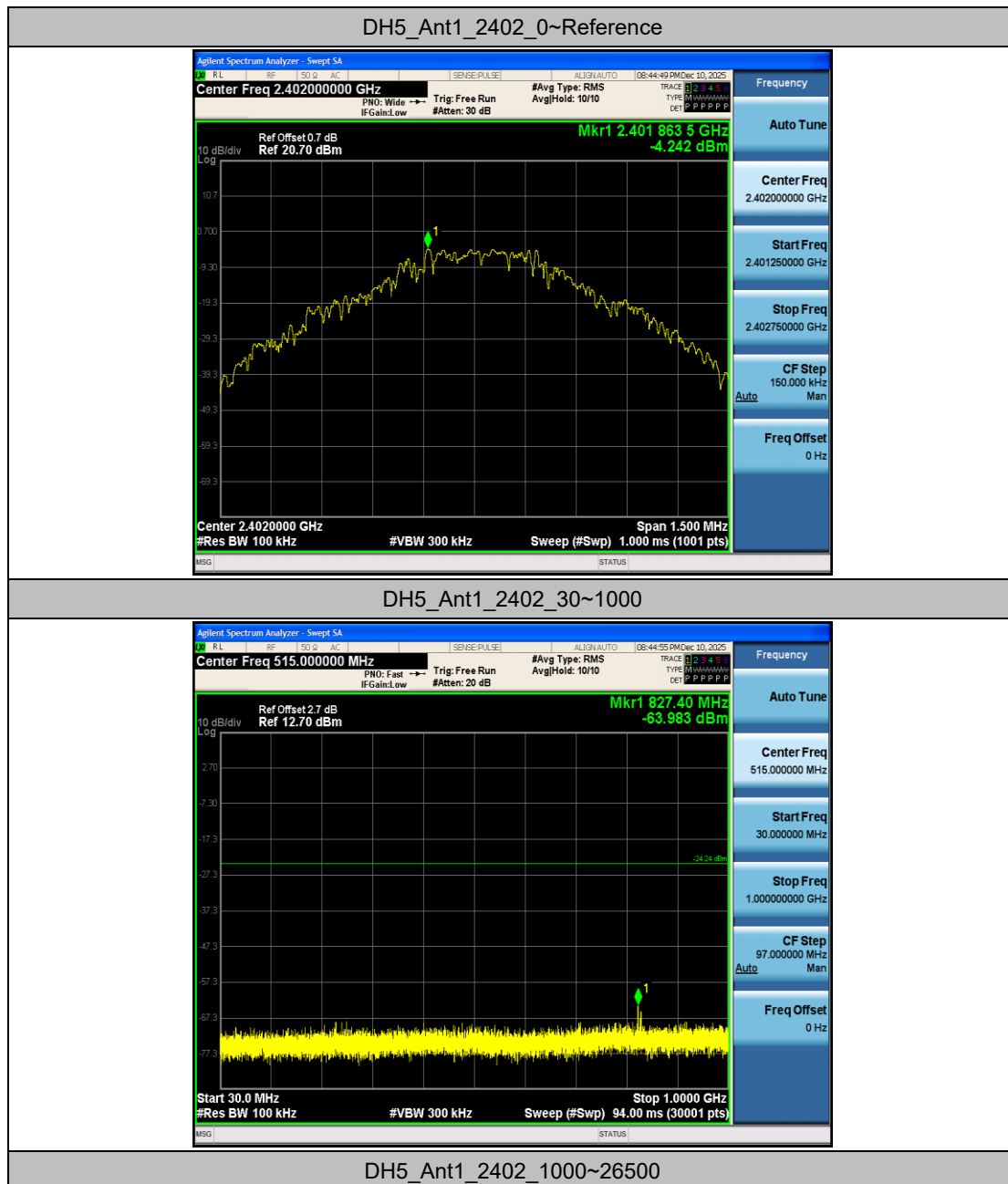


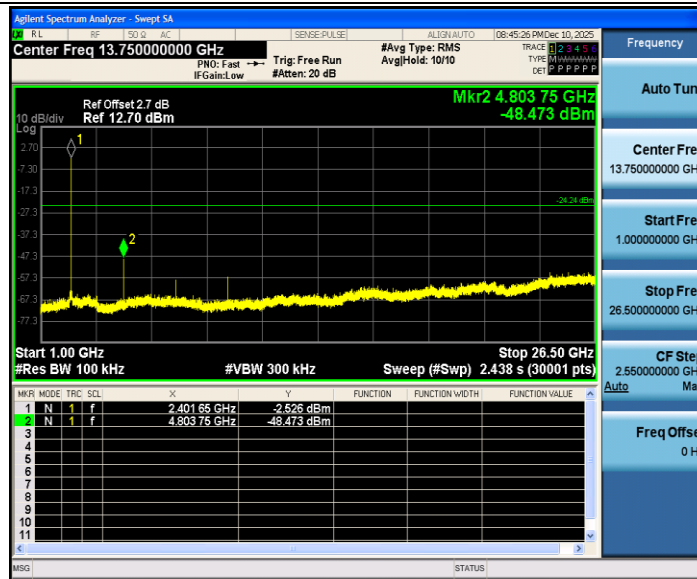
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.24	-4.24	---	PASS
			30~1000	-4.24	-63.98	≤-24.24	PASS
			1000~26500	-4.24	-48.47	≤-24.24	PASS
		2441	Reference	-4.93	-4.93	---	PASS
			30~1000	-4.93	-61.18	≤-24.93	PASS
			1000~26500	-4.93	-47.41	≤-24.93	PASS
		2480	Reference	-4.68	-4.68	---	PASS
			30~1000	-4.68	-63.69	≤-24.68	PASS
			1000~26500	-4.68	-48.54	≤-24.68	PASS
2DH5	Ant1	2402	Reference	-6.67	-6.67	---	PASS
			30~1000	-6.67	-67.72	≤-26.67	PASS
			1000~26500	-6.67	-49.04	≤-26.67	PASS
		2441	Reference	-9.94	-9.94	---	PASS
			30~1000	-9.94	-67.87	≤-29.94	PASS
			1000~26500	-9.94	-54.29	≤-29.94	PASS
		2480	Reference	-10.15	-10.15	---	PASS
			30~1000	-10.15	-67.76	≤-30.15	PASS
			1000~26500	-10.15	-54.32	≤-30.15	PASS
3DH5	Ant1	2402	Reference	-9.18	-9.18	---	PASS
			30~1000	-9.18	-67.53	≤-29.18	PASS
			1000~26500	-9.18	-54.57	≤-29.18	PASS
		2441	Reference	-7.17	-7.17	---	PASS
			30~1000	-7.17	-61.52	≤-27.17	PASS
			1000~26500	-7.17	-47.65	≤-27.17	PASS
		2480	Reference	-8.09	-8.09	---	PASS
			30~1000	-8.09	-68.15	≤-28.09	PASS
			1000~26500	-8.09	-53.6	≤-28.09	PASS

Test Graphs

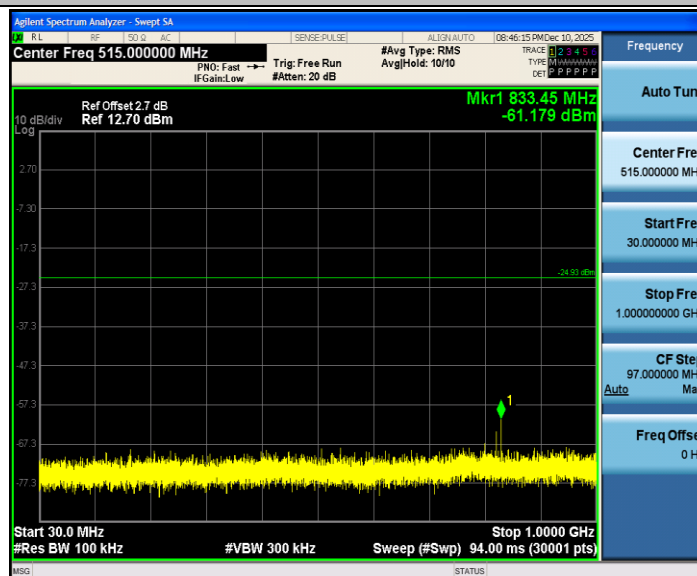




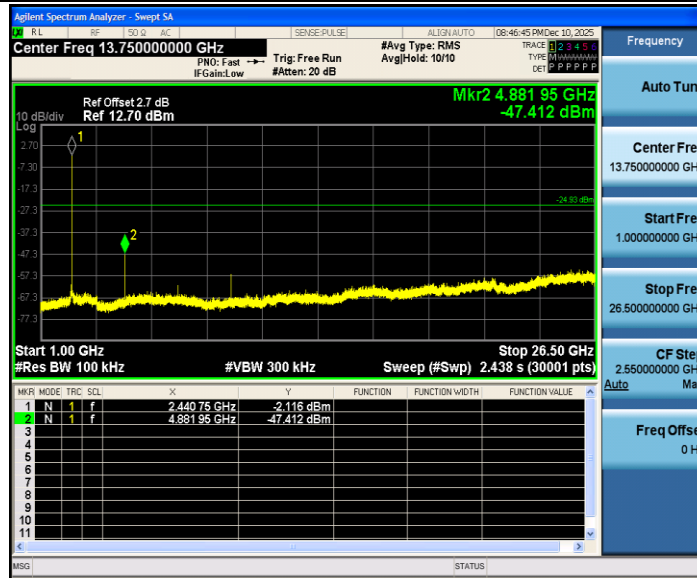
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000