

Appendix RF Test Data for BT

FCC ID : 2A4BG-AIRHUG19

Company : Feifan Innovation E-commerce (Shenzhen) Co.,Ltd.

EUT : Speakerphone device

Model Number : AIRHUG 19

Report No. : CTA25081300901

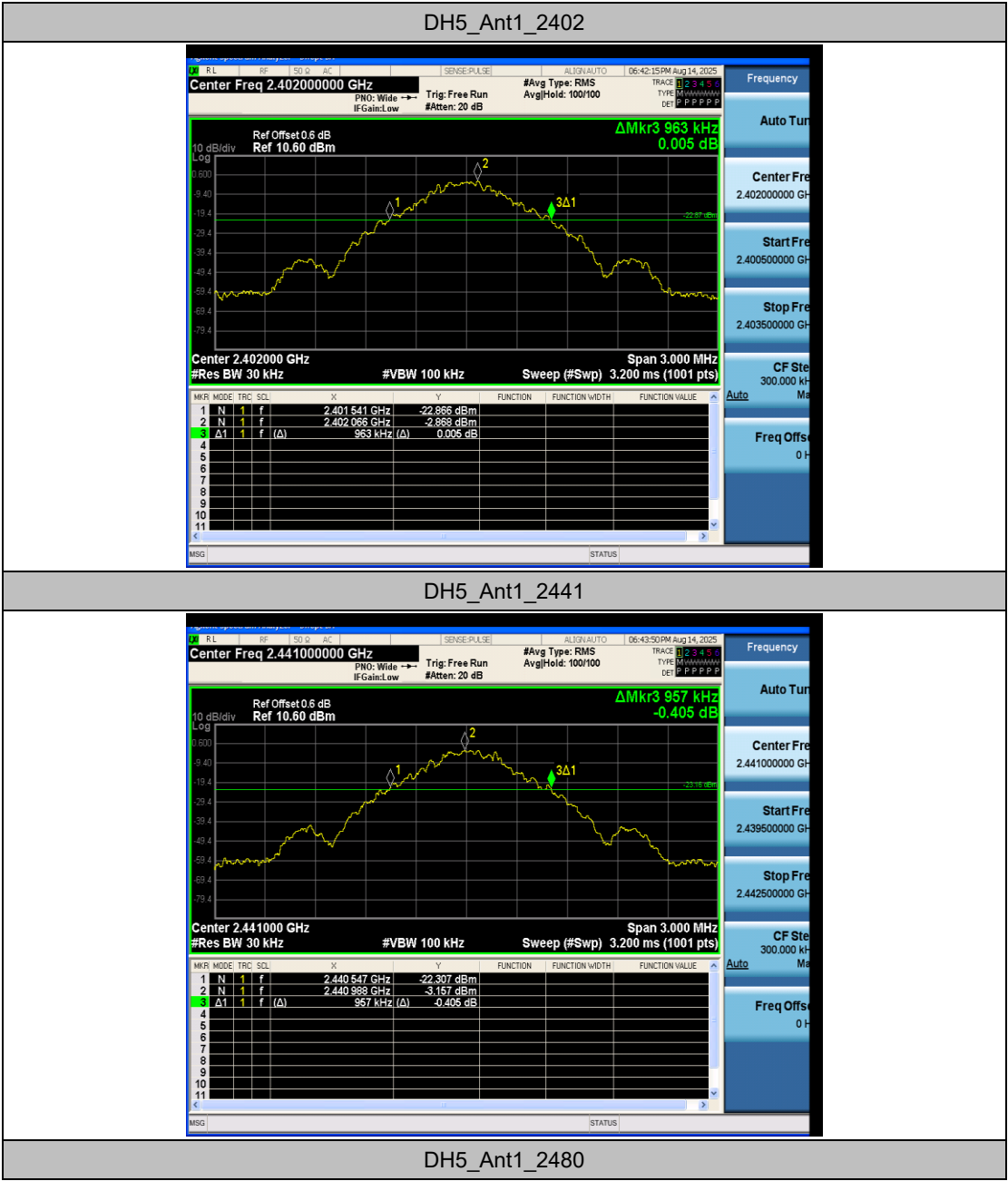
Reviewed By : Eric Wang

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	0.957	2440.547	2441.504	---	---
		2480	0.948	2479.550	2480.498	---	---
2DH5	Ant1	2402	1.257	2401.397	2402.654	---	---
		2441	1.311	2440.355	2441.666	---	---
		2480	1.278	2479.382	2480.660	---	---
3DH5	Ant1	2402	1.302	2401.364	2402.666	---	---
		2441	1.275	2440.367	2441.642	---	---
		2480	1.293	2479.364	2480.657	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

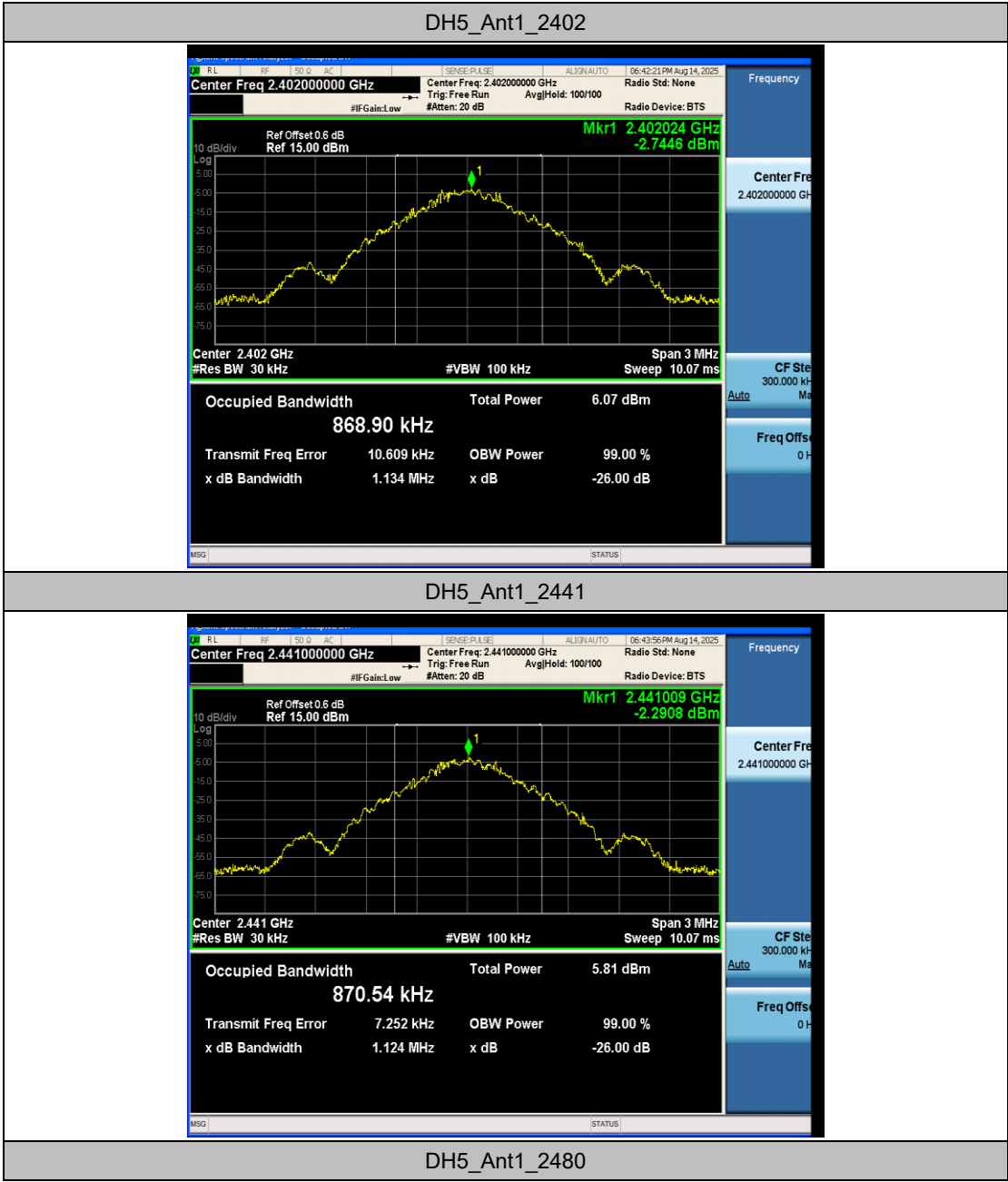


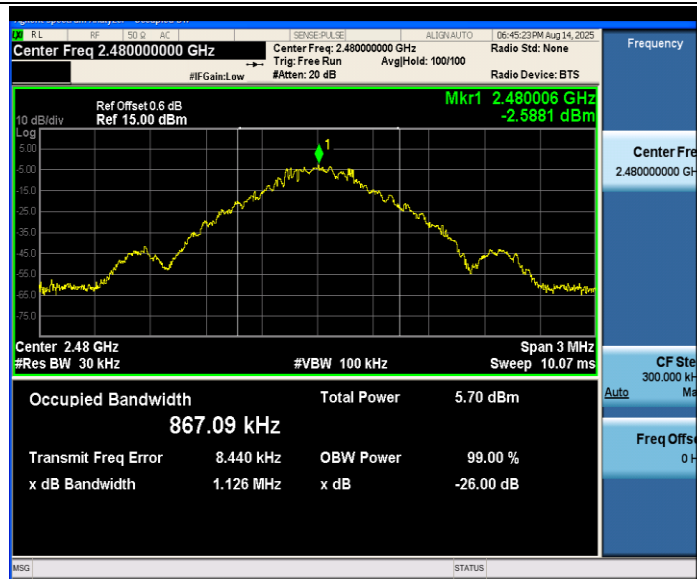
Appendix B: Occupied Channel Bandwidth

Test Result

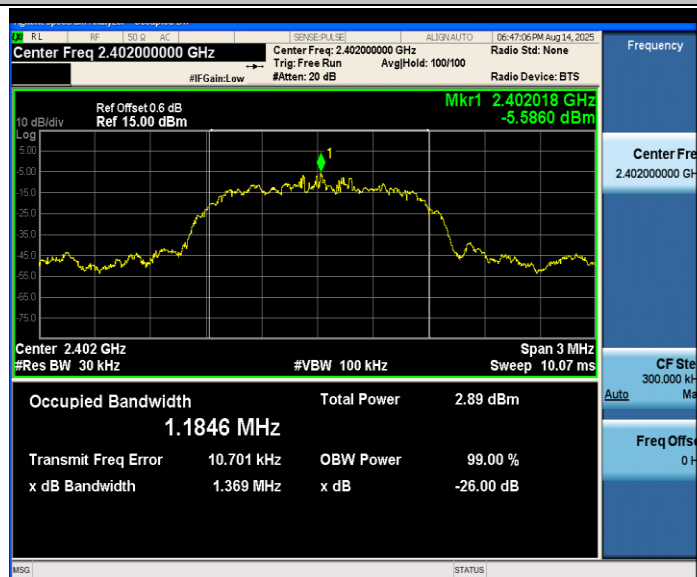
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86890	2401.5762	2402.4451	---	---
		2441	0.87054	2440.5720	2441.4425	---	---
		2480	0.86709	2479.5749	2480.4420	---	---
2DH5	Ant1	2402	1.1846	2401.4184	2402.6030	---	---
		2441	1.1915	2440.4136	2441.6051	---	---
		2480	1.1878	2479.4171	2480.6049	---	---
3DH5	Ant1	2402	1.1868	2401.4171	2402.6039	---	---
		2441	1.1833	2440.4194	2441.6027	---	---
		2480	1.1860	2479.4180	2480.6040	---	---

Test Graphs

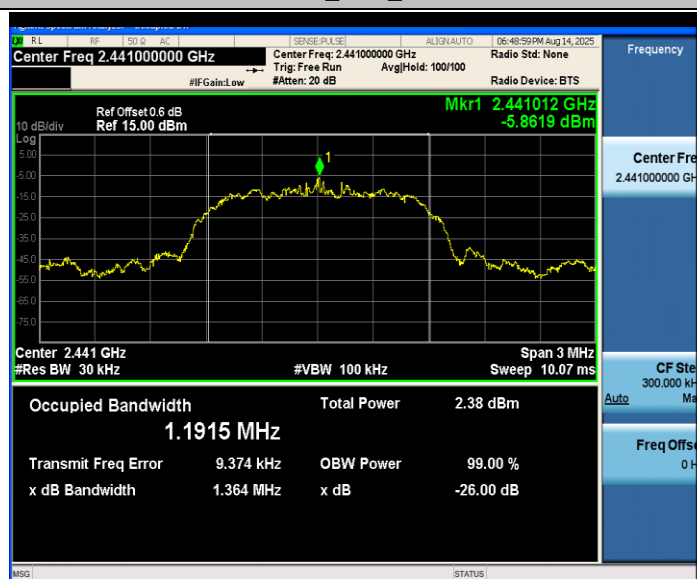




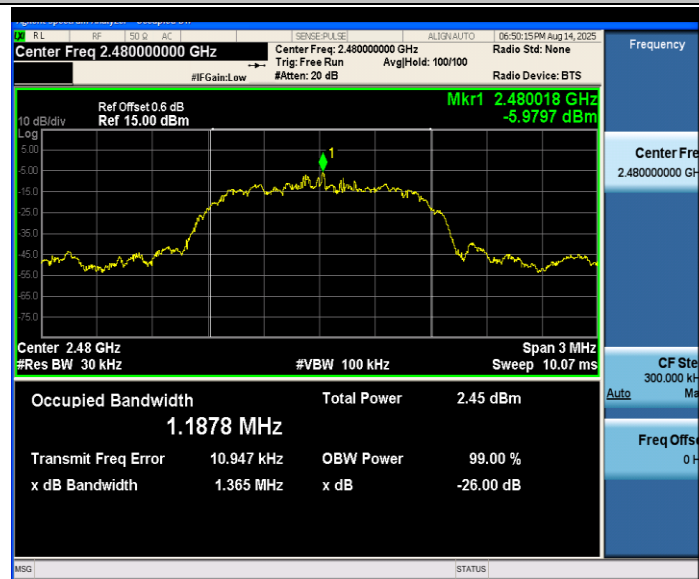
2DH5_Ant1_2402



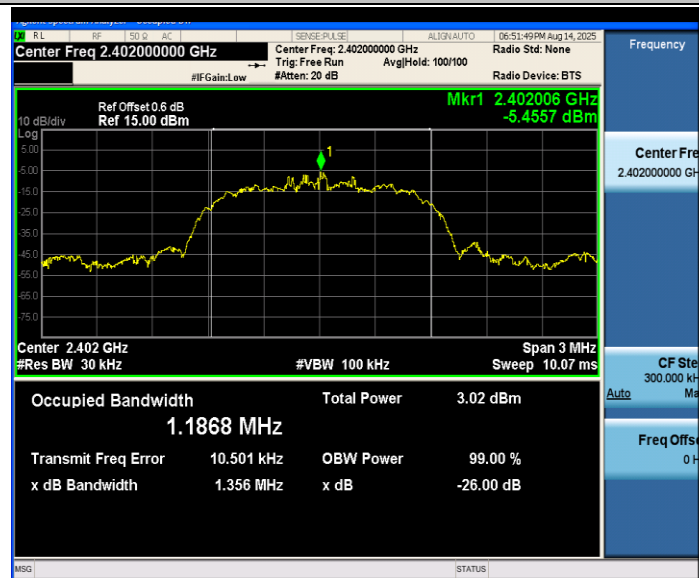
2DH5_Ant1_2441



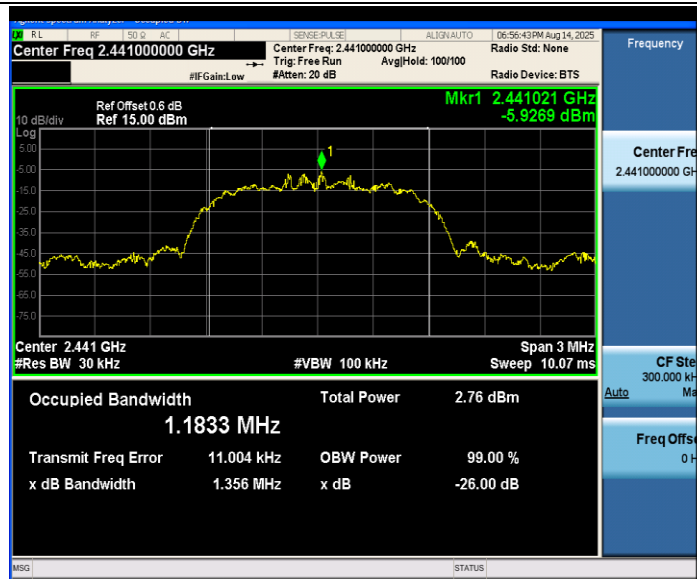
2DH5_Ant1_2480



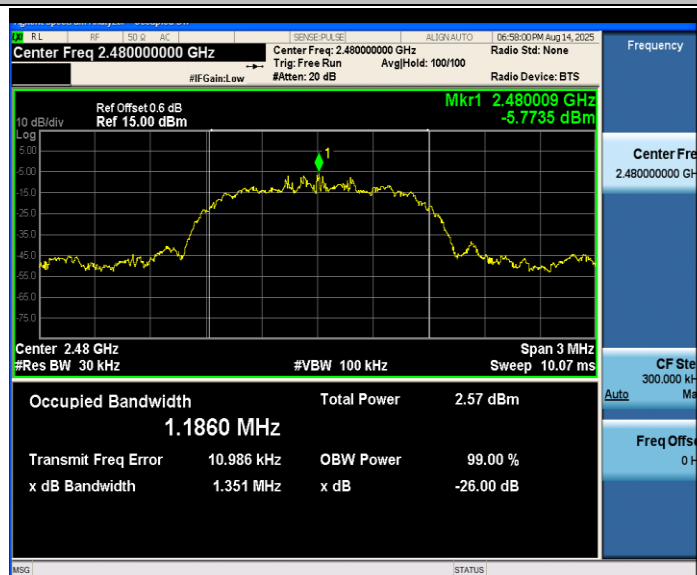
3DH5_Ant1_2402



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	0.15	≤20.97	PASS
		2441	-0.11	≤20.97	PASS
		2480	-0.20	≤20.97	PASS
2DH5	Ant1	2402	-0.65	≤20.97	PASS
		2441	-0.90	≤20.97	PASS
		2480	-0.98	≤20.97	PASS
3DH5	Ant1	2402	-0.28	≤20.97	PASS
		2441	-0.52	≤20.97	PASS
		2480	-0.62	≤20.97	PASS

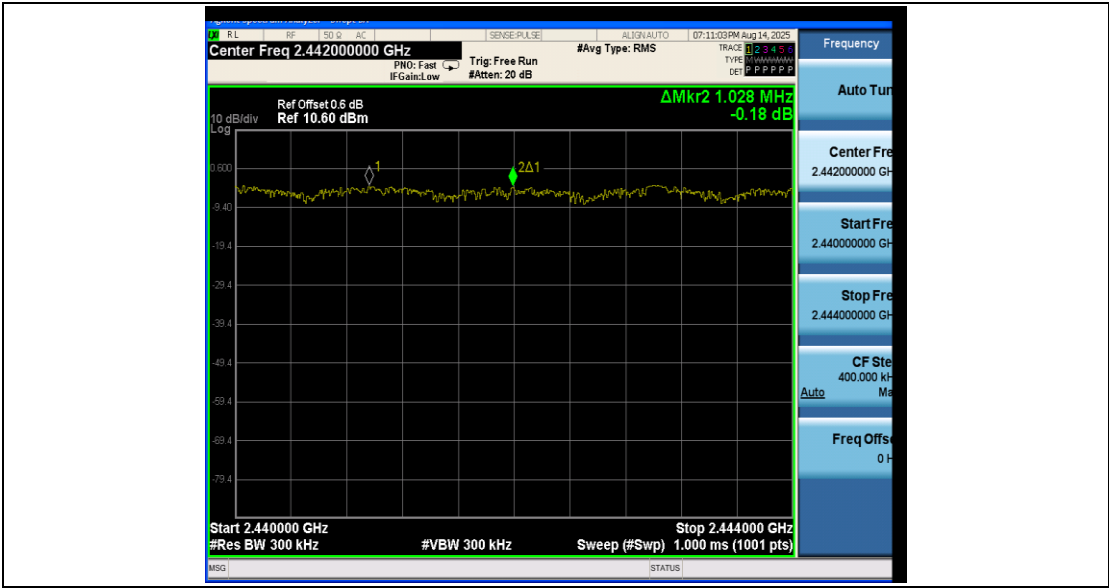
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.028	≥ 0.963	PASS
2DH5	Ant1	Hop	0.952	≥ 0.874	PASS
3DH5	Ant1	Hop	1.028	≥ 0.868	PASS

Test Graphs



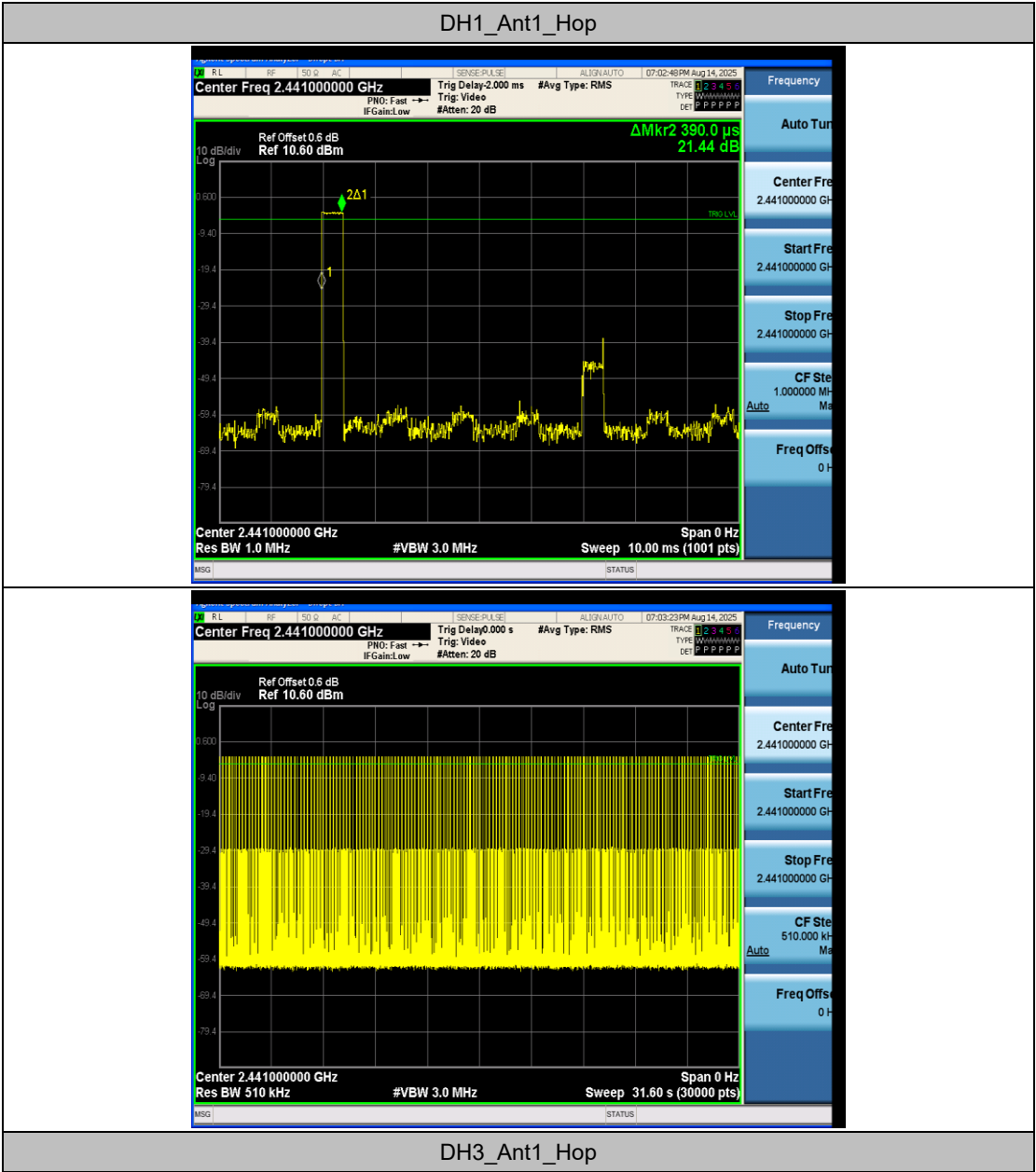


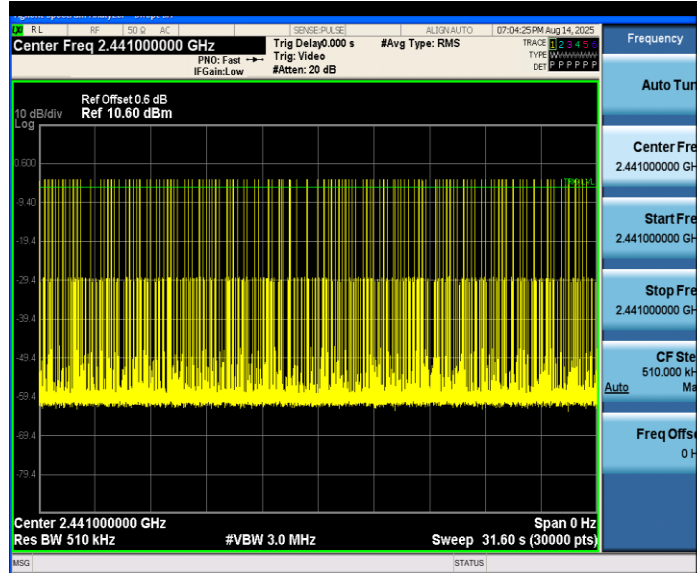
Appendix E: Time of occupancy

Test Result

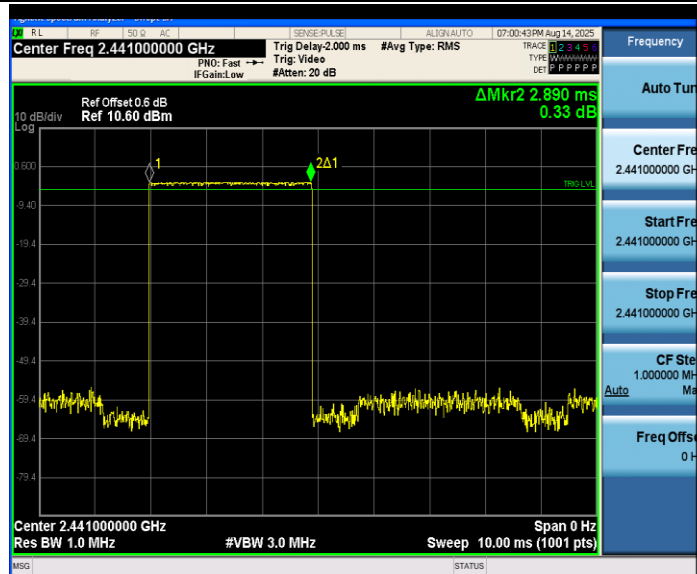
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
DH3	Ant1	Hop	1.640	158	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.890	103	0.298	≤0.4	PASS
2DH1	Ant1	Hop	0.400	317	0.127	≤0.4	PASS
2DH3	Ant1	Hop	1.650	168	0.277	≤0.4	PASS
2DH5	Ant1	Hop	2.900	115	0.334	≤0.4	PASS
3DH1	Ant1	Hop	0.400	318	0.127	≤0.4	PASS
3DH3	Ant1	Hop	1.650	160	0.264	≤0.4	PASS
3DH5	Ant1	Hop	2.900	111	0.322	≤0.4	PASS

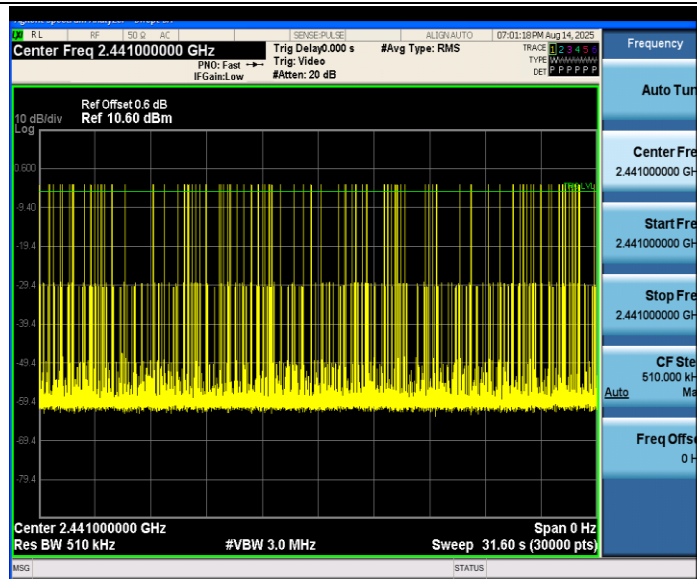
Test Graphs



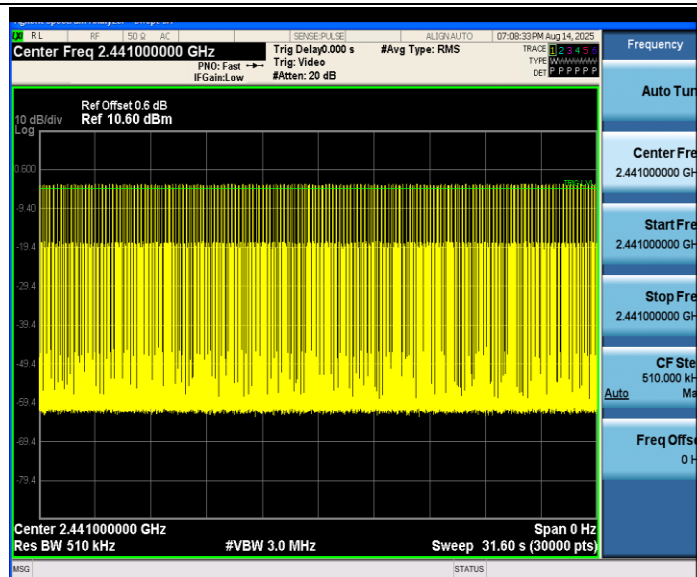
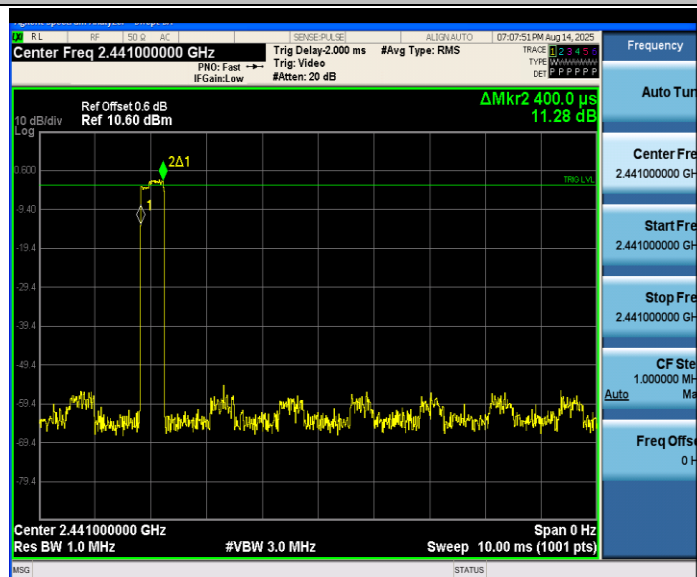


DH5_Ant1_Hop

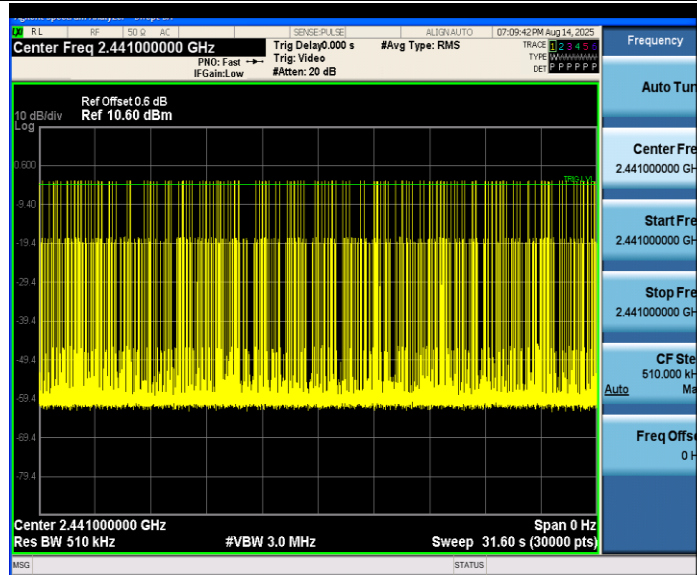




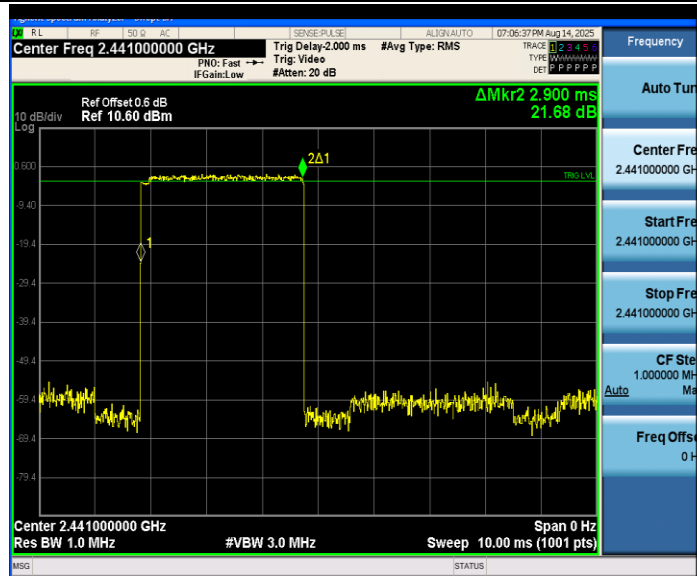
2DH1_Ant1_Hop

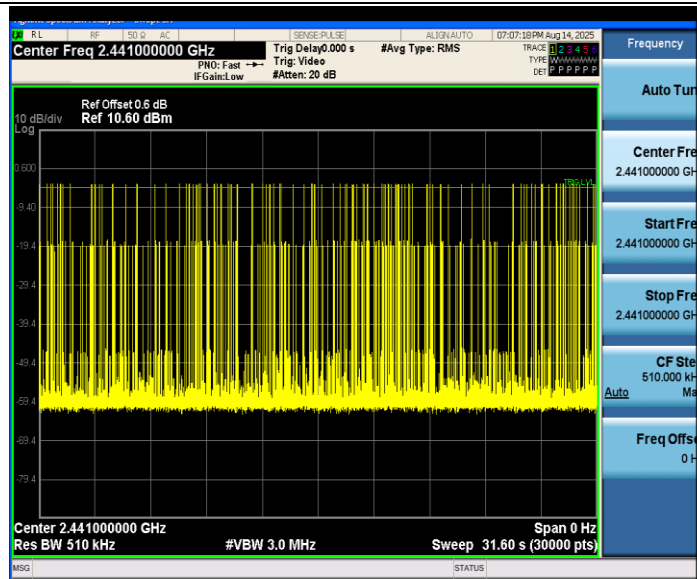


2DH3_Ant1_Hop

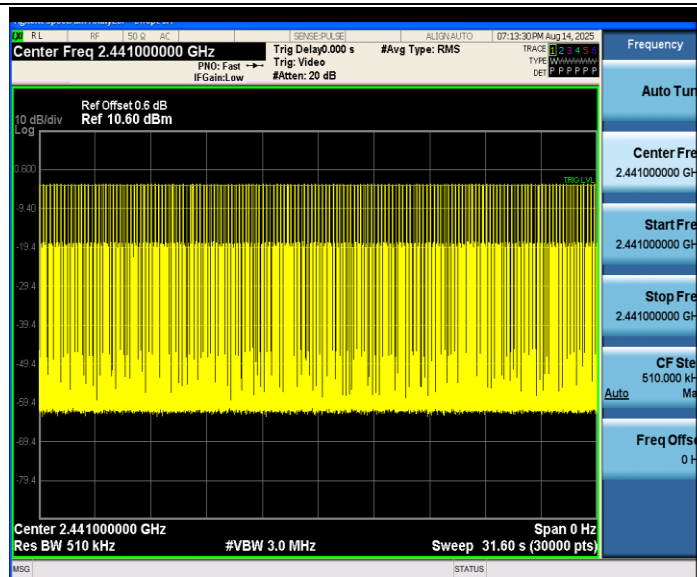
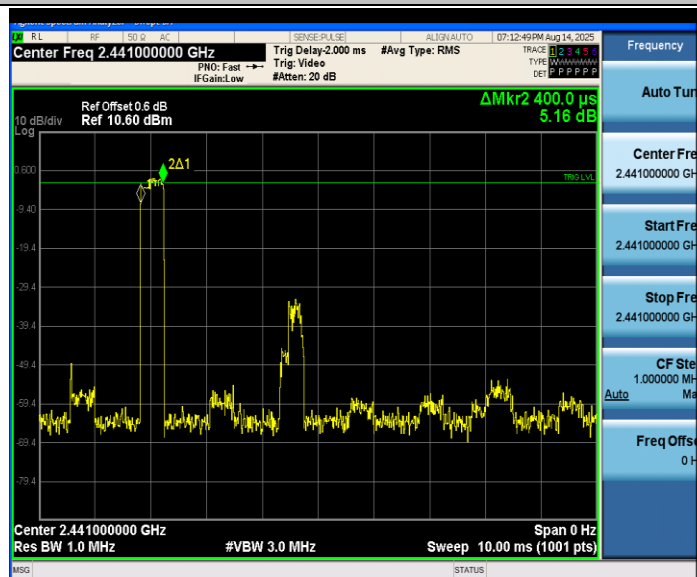


2DH5_Ant1_Hop

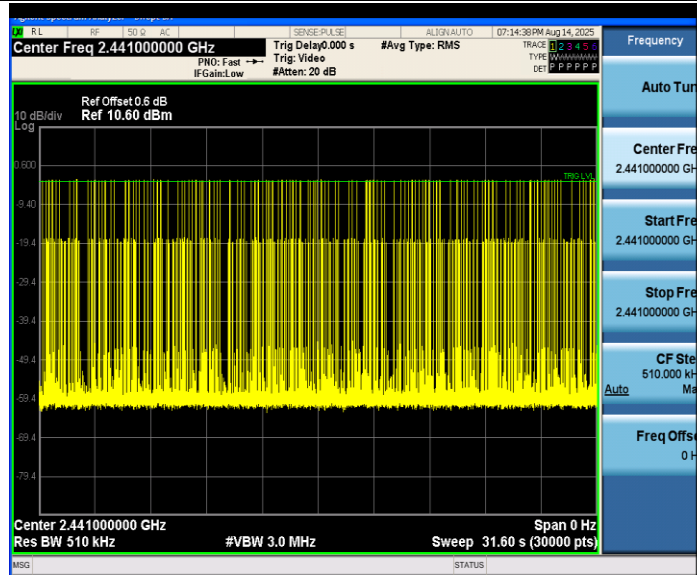
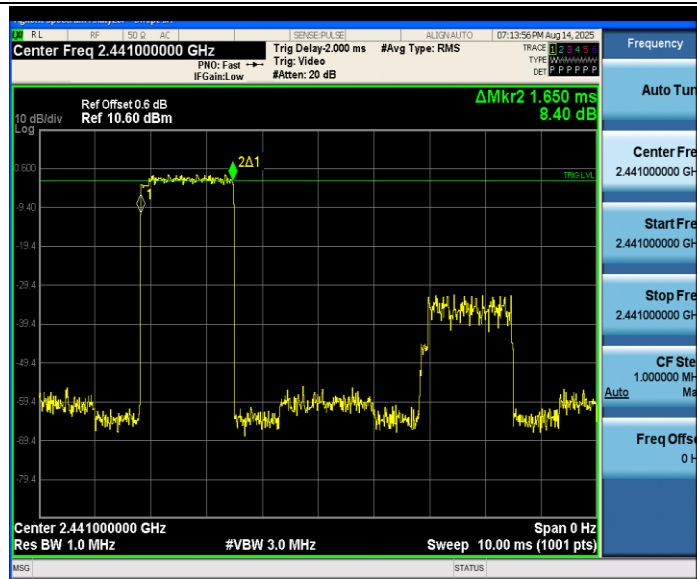




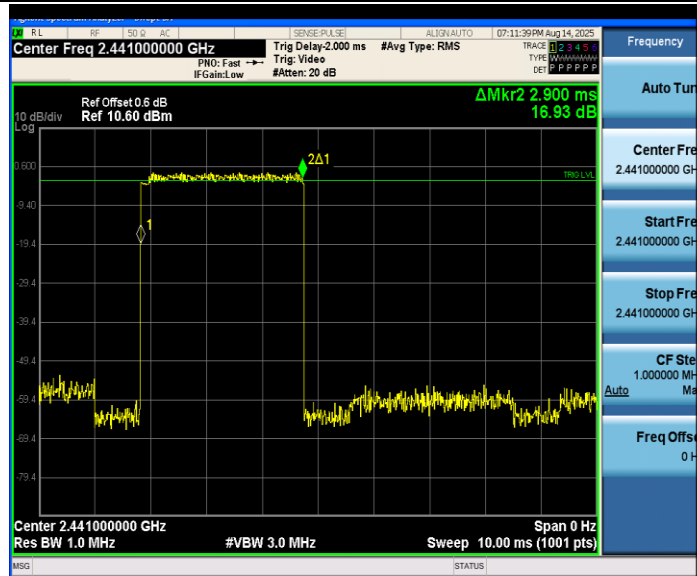
3DH1_Ant1_Hop

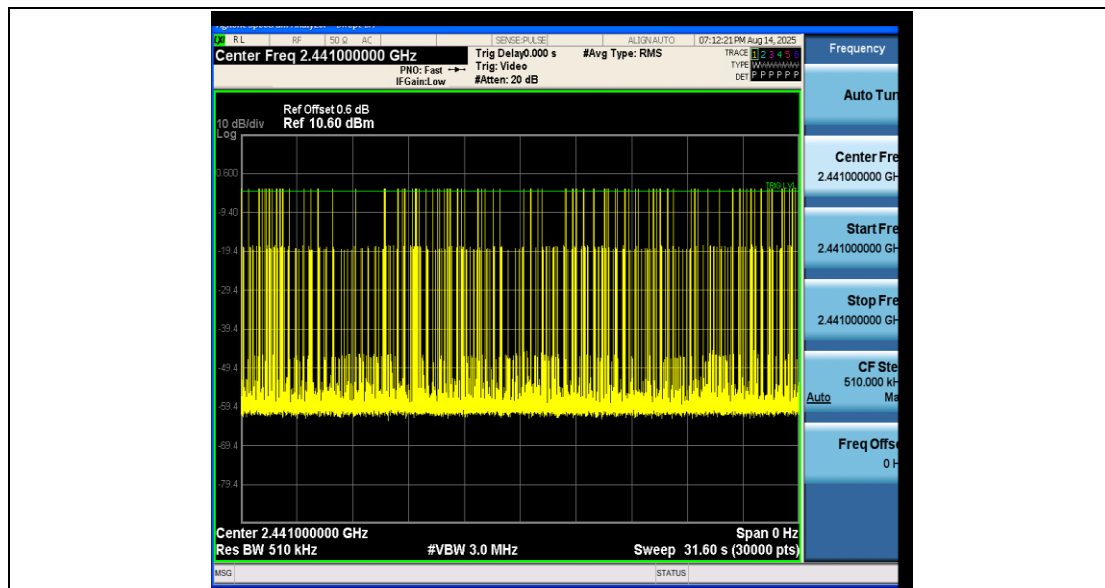


3DH3_Ant1_Hop



3DH5_Ant1_Hop





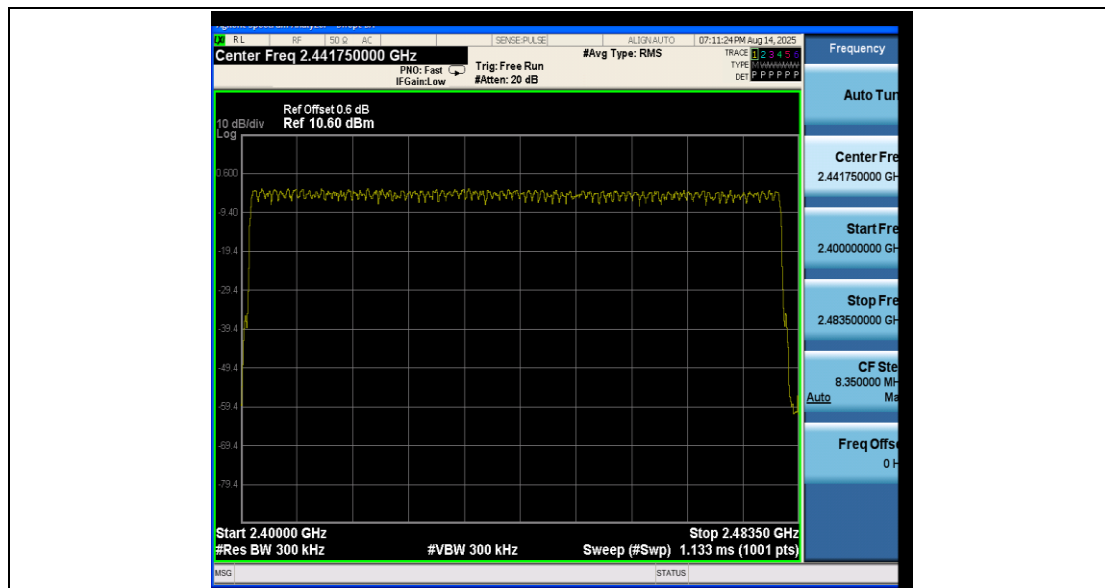
Appendix F: Number of hopping channels

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





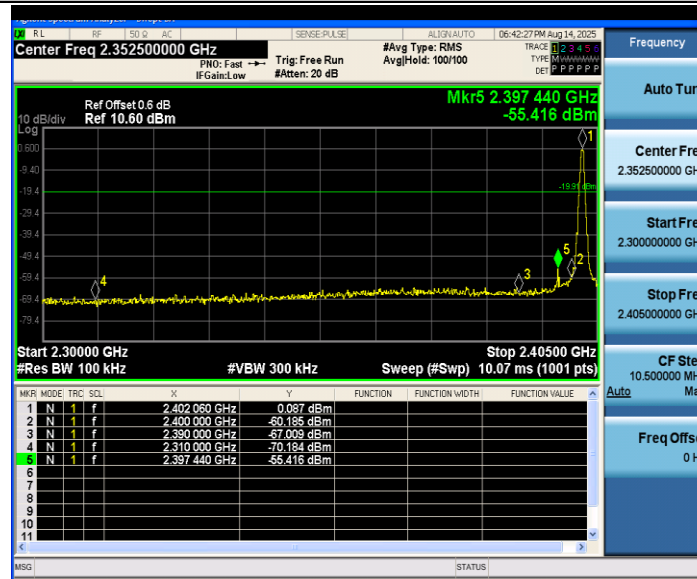
Appendix G: Band edge measurements

Test Result

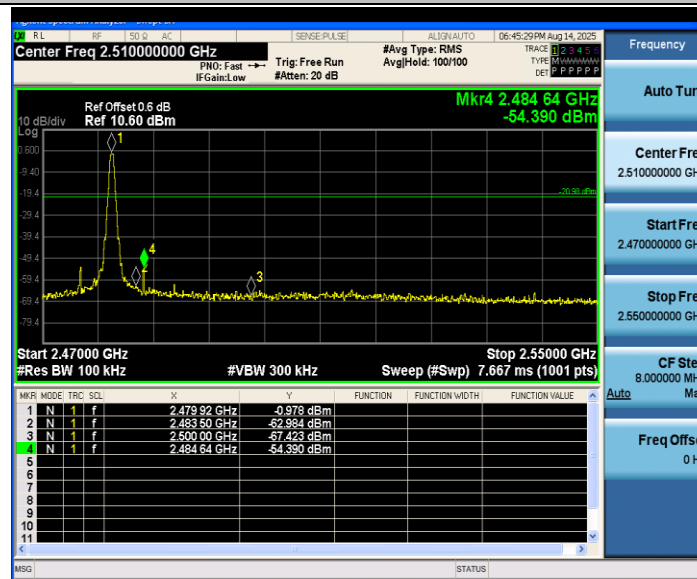
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.09	-55.42	≤-19.91	PASS
		High	2480	-0.98	-54.39	≤-20.98	PASS
		Low	Hop_2402	-4.14	-62.27	≤-24.14	PASS
		High	Hop_2480	-3.79	-64.07	≤-23.79	PASS
2DH5	Ant1	Low	2402	-3.46	-57	≤-23.46	PASS
		High	2480	-4.82	-63.21	≤-24.82	PASS
		Low	Hop_2402	-6.24	-62.98	≤-26.24	PASS
		High	Hop_2480	-3.66	-56.55	≤-23.66	PASS
3DH5	Ant1	Low	2402	-3.28	-57.55	≤-23.28	PASS
		High	2480	-4.27	-56.48	≤-24.27	PASS
		Low	Hop_2402	-5.93	-62.58	≤-25.93	PASS
		High	Hop_2480	-3.85	-63.56	≤-23.85	PASS

Test Graphs

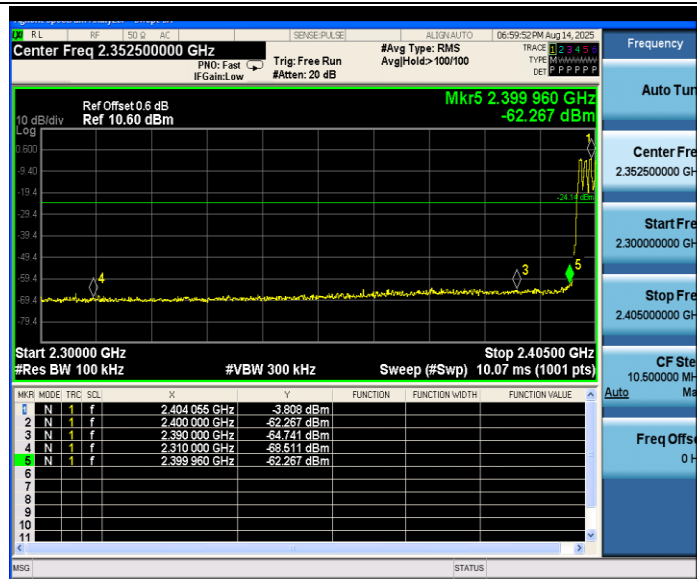
DH5_Ant1_Low_2402



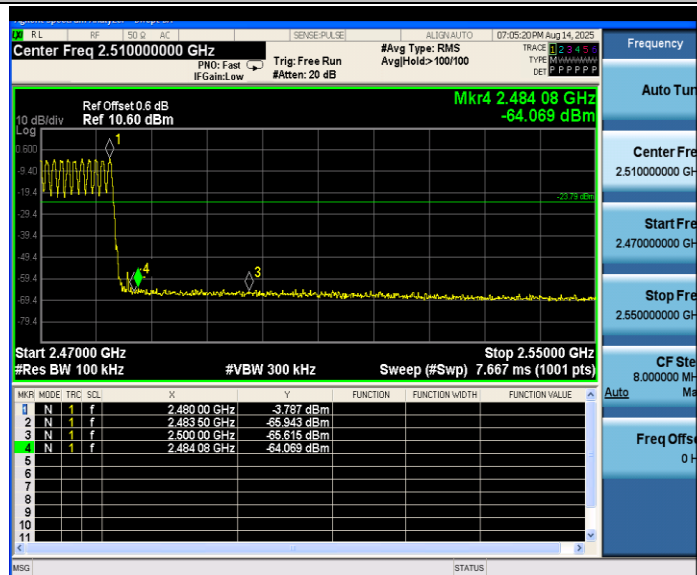
DH5_Ant1_High_2480



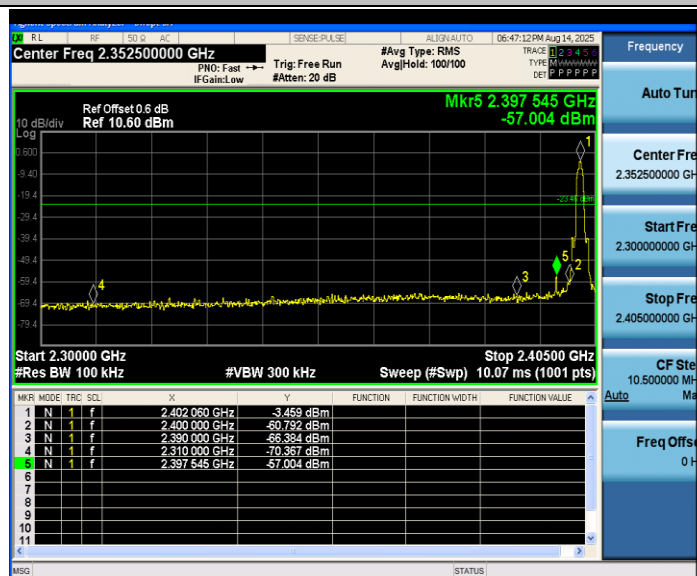
DH5_Ant1_Low_Hop_2402



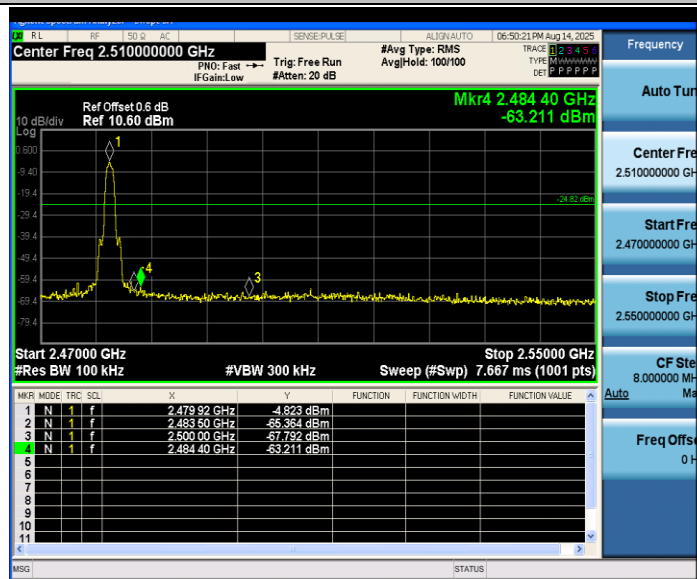
DH5_Ant1_High_Hop_2480



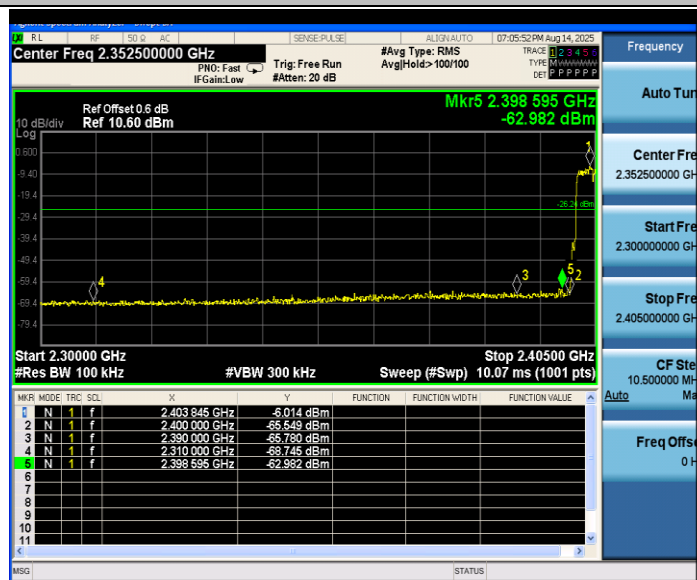
2DH5_Ant1_Low_2402



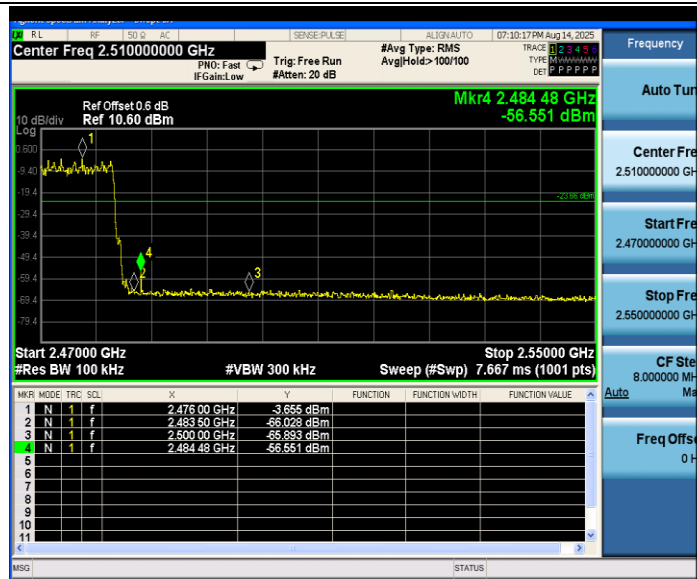
2DH5_Ant1_High_2480



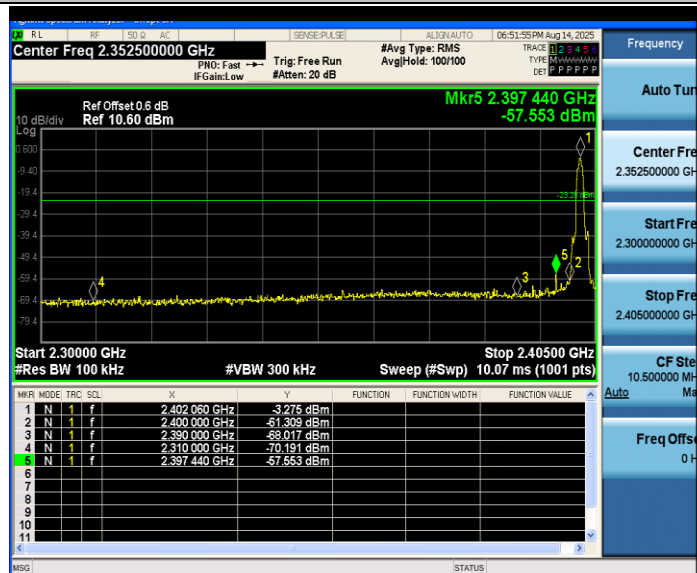
2DH5_Ant1_Low_Hop_2402



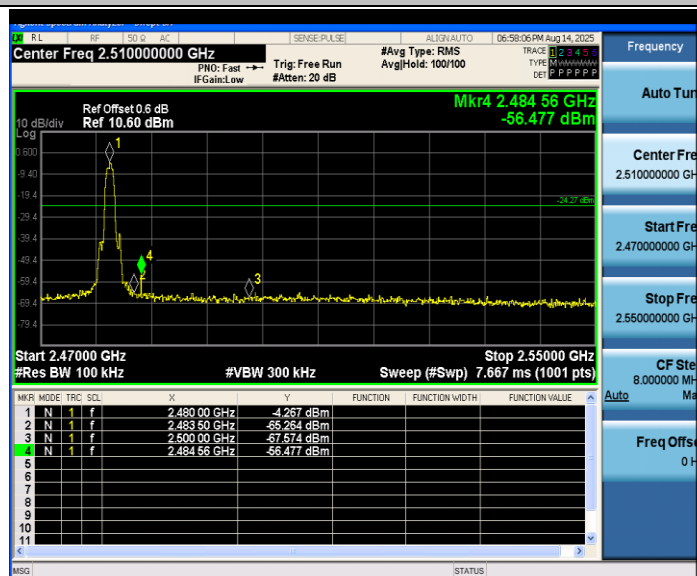
2DH5_Ant1_High_Hop_2480



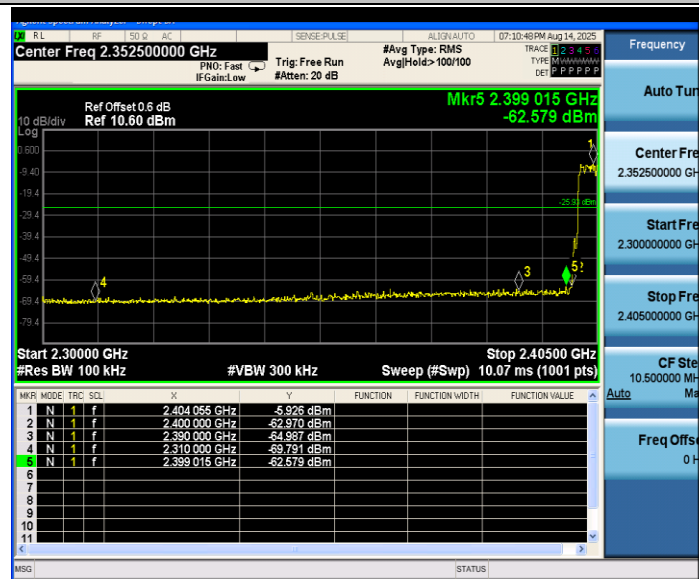
3DH5_Ant1_Low_2402



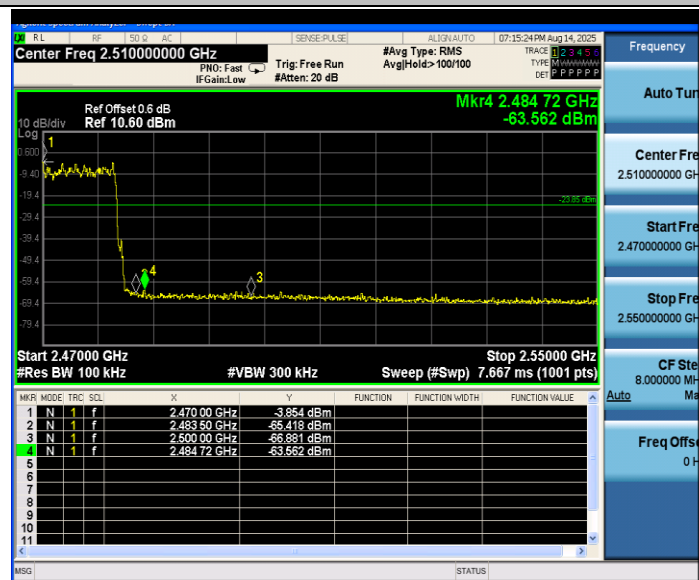
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

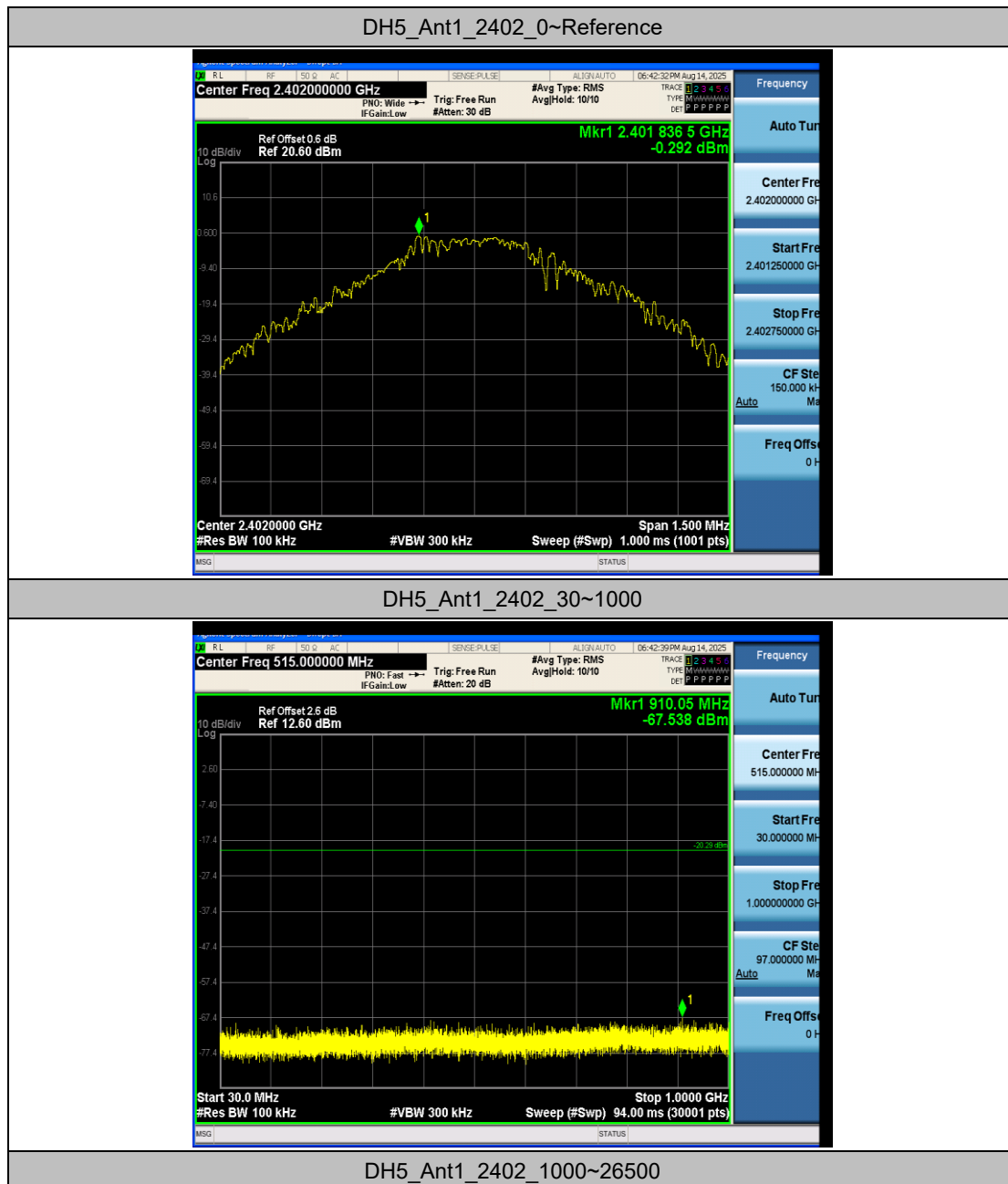


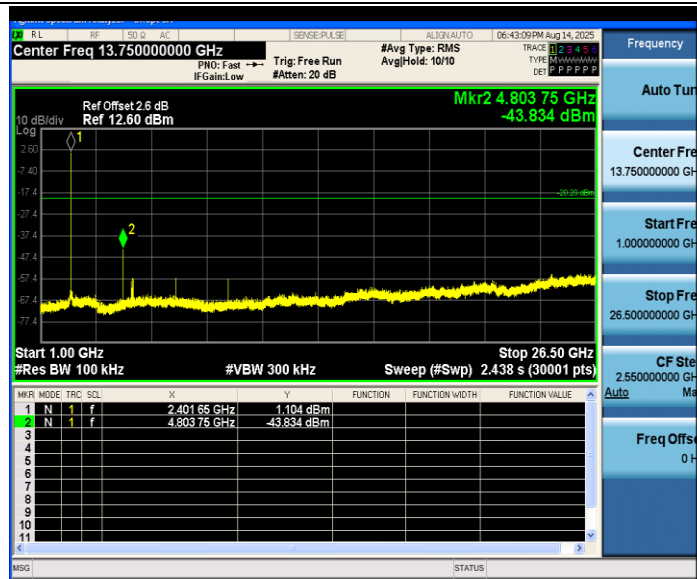
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.29	-0.29	---	PASS
			30~1000	-0.29	-67.54	≤-20.29	PASS
			1000~26500	-0.29	-43.83	≤-20.29	PASS
		2441	Reference	-1.10	-1.10	---	PASS
			30~1000	-1.10	-67.22	≤-21.1	PASS
			1000~26500	-1.10	-43.69	≤-21.1	PASS
		2480	Reference	-1.40	-1.40	---	PASS
			30~1000	-1.40	-67.62	≤-21.4	PASS
			1000~26500	-1.40	-44.72	≤-21.4	PASS
2DH5	Ant1	2402	Reference	-4.80	-4.80	---	PASS
			30~1000	-4.80	-66.08	≤-24.8	PASS
			1000~26500	-4.80	-47.65	≤-24.8	PASS
		2441	Reference	-5.51	-5.51	---	PASS
			30~1000	-5.51	-67.81	≤-25.51	PASS
			1000~26500	-5.51	-50.17	≤-25.51	PASS
		2480	Reference	-5.55	-5.55	---	PASS
			30~1000	-5.55	-67.76	≤-25.55	PASS
			1000~26500	-5.55	-50.2	≤-25.55	PASS
3DH5	Ant1	2402	Reference	-6.25	-6.25	---	PASS
			30~1000	-6.25	-67.94	≤-26.25	PASS
			1000~26500	-6.25	-50.93	≤-26.25	PASS
		2441	Reference	-7.06	-7.06	---	PASS
			30~1000	-7.06	-68.16	≤-27.06	PASS
			1000~26500	-7.06	-49.18	≤-27.06	PASS
		2480	Reference	-3.77	-3.77	---	PASS
			30~1000	-3.77	-66.96	≤-23.77	PASS
			1000~26500	-3.77	-49.9	≤-23.77	PASS

Test Graphs

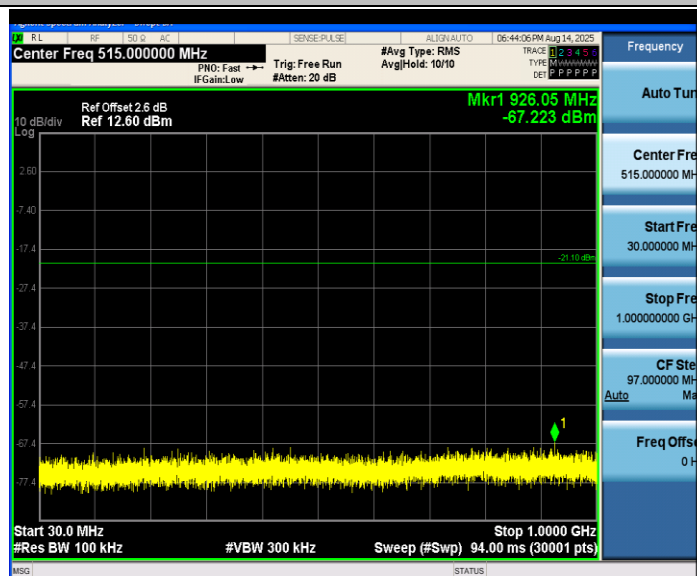




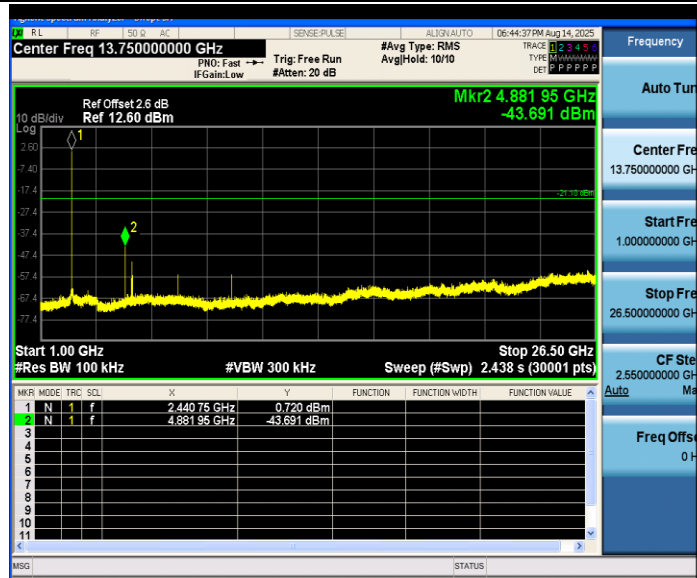
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



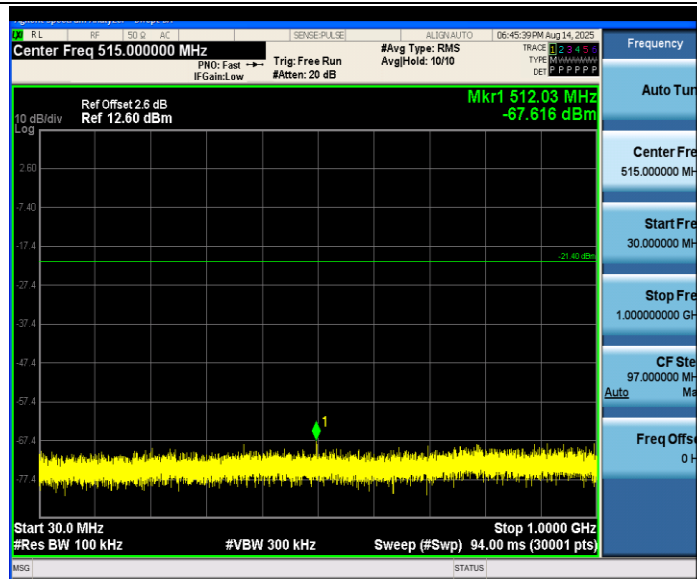
DH5_Ant1_2441_1000~26500



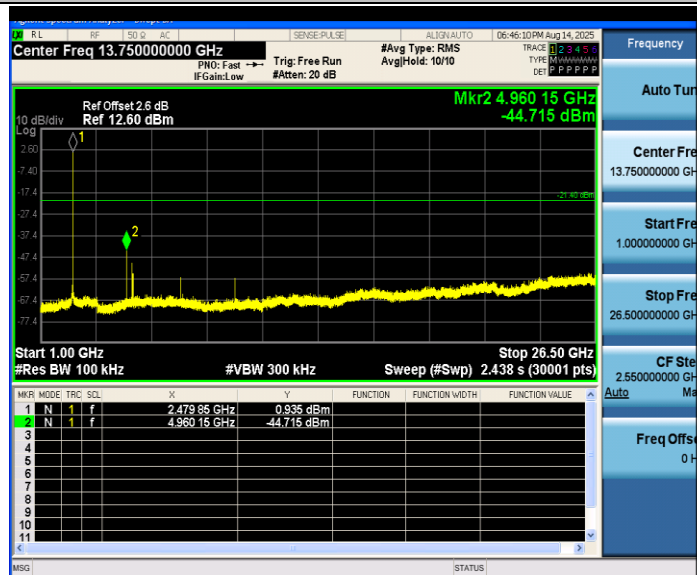
DH5_Ant1_2480_0~Reference



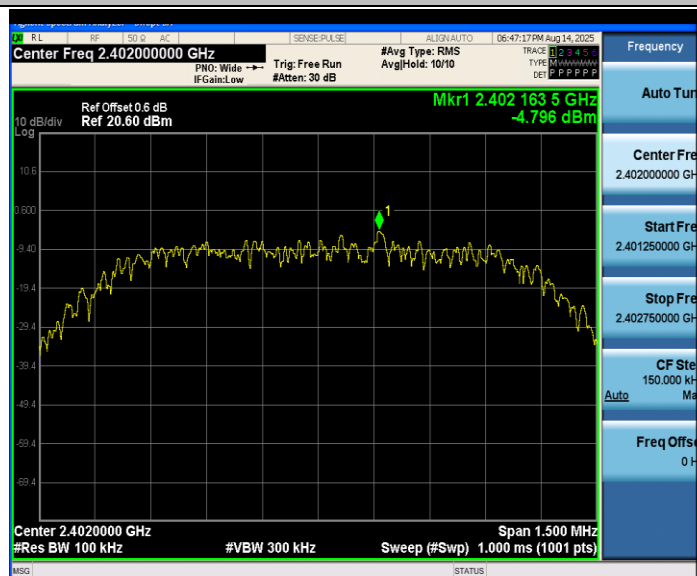
DH5_Ant1_2480_30~1000



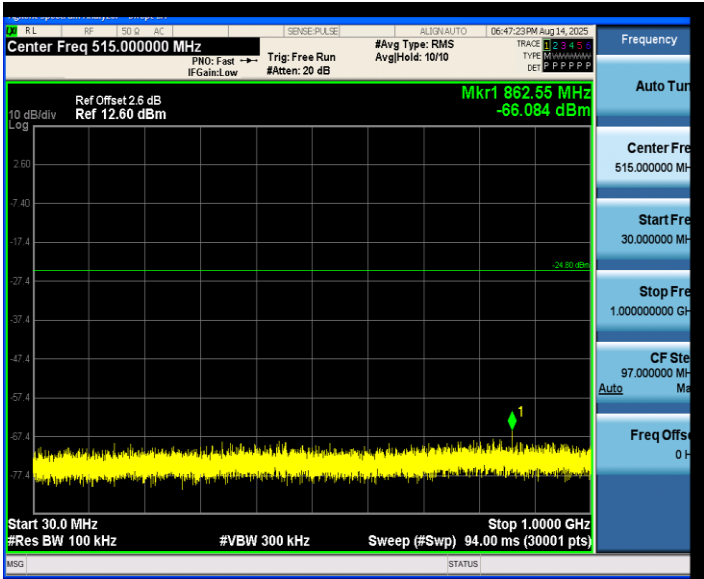
DH5_Ant1_2480_1000~26500



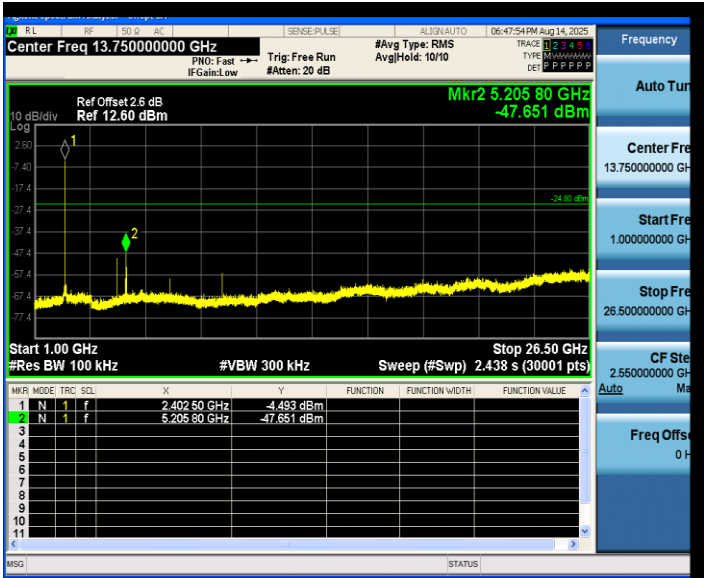
2DH5_Ant1_2402_0~Reference



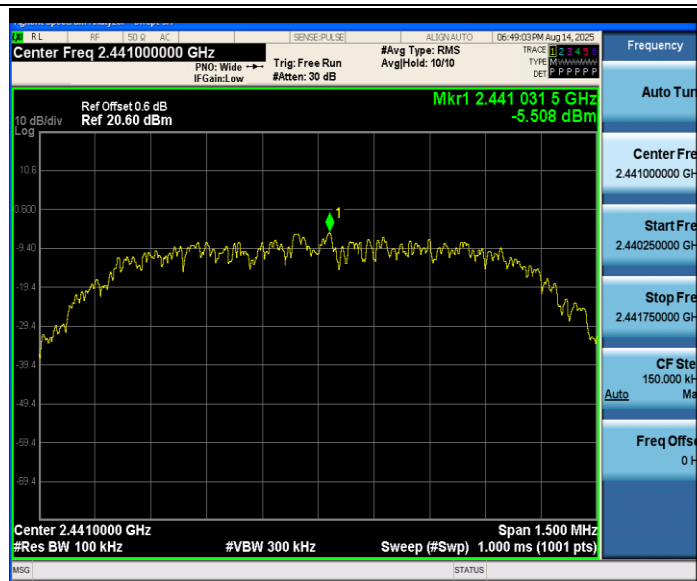
2DH5_Ant1_2402_30~1000



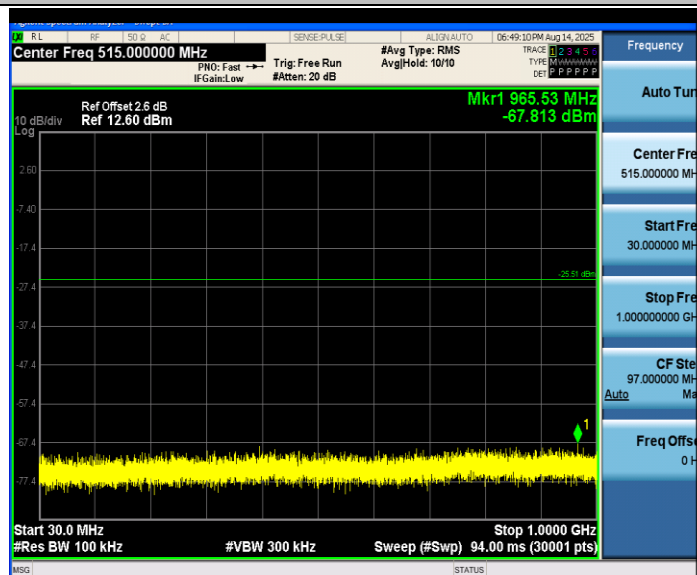
2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



2DH5_Ant1_2441_1000~26500

