

FCC Appendix RF Test Data

FCC ID : 2BECA-EP-521

Company: : Guangdong Jingge New Energy Technology Co.,Ltd

EUT : Solar power system

Model Number : EP-521

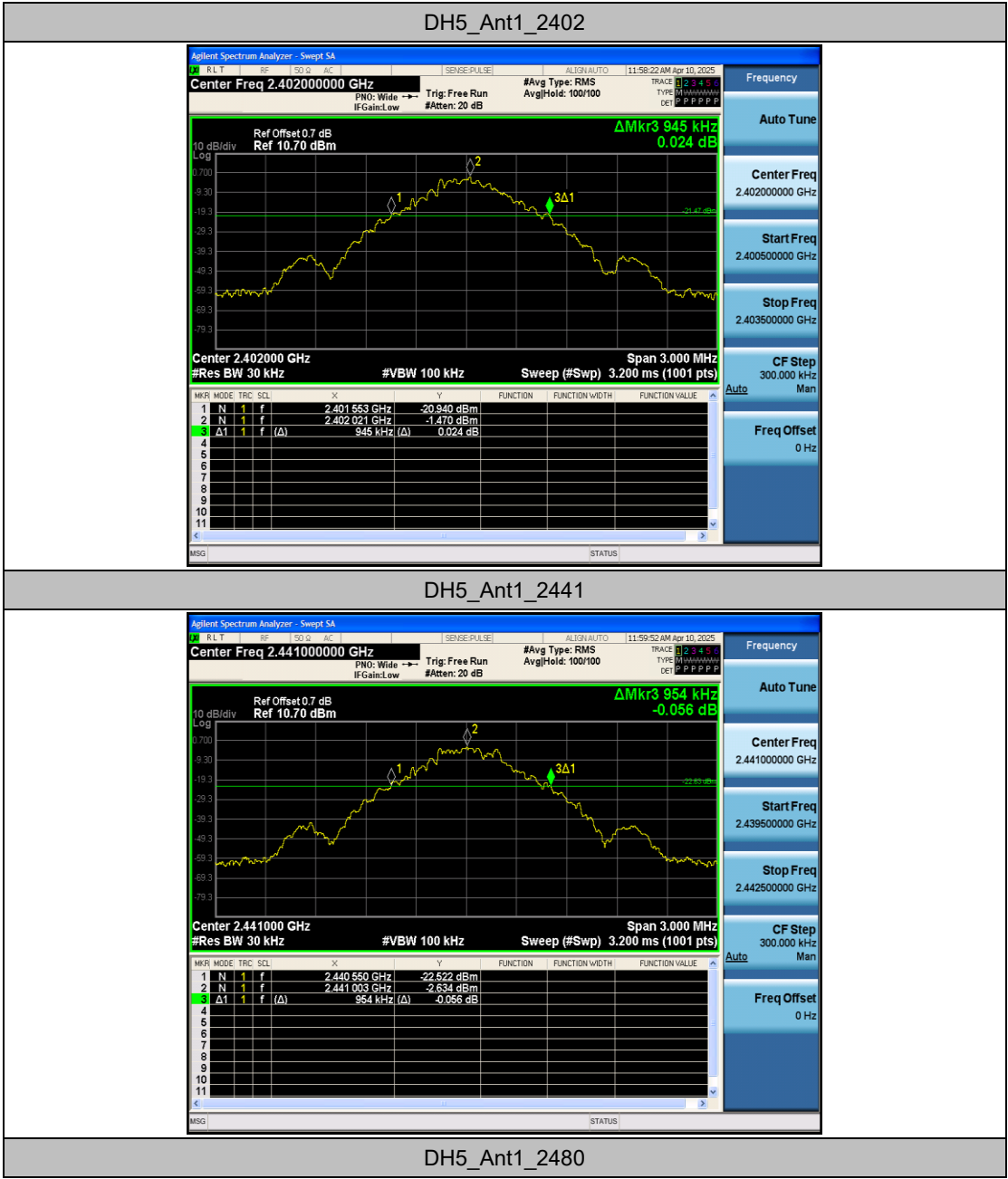
Reviewed By : Eric Wang

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	0.954	2440.550	2441.504	---	---
		2480	0.960	2479.544	2480.504	---	---
2DH5	Ant1	2402	1.278	2401.382	2402.660	---	---
		2441	1.305	2440.361	2441.666	---	---
		2480	1.278	2479.382	2480.660	---	---
3DH5	Ant1	2402	1.323	2401.346	2402.669	---	---
		2441	1.308	2440.355	2441.663	---	---
		2480	1.317	2479.352	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

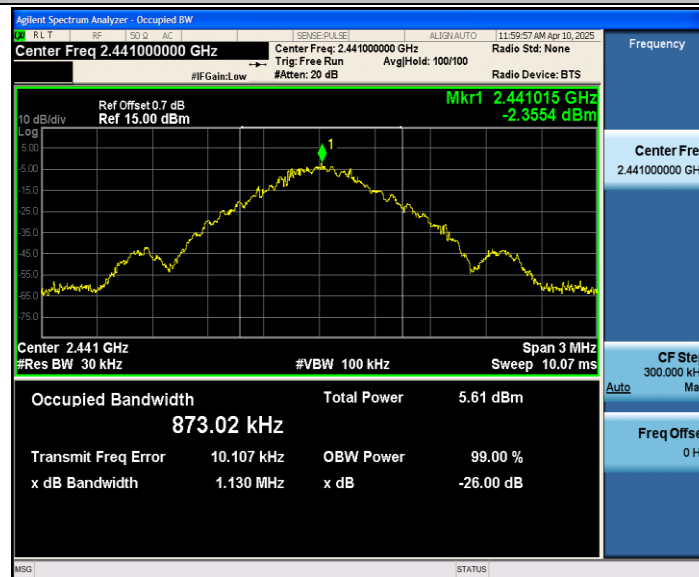
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87295	2401.5729	2402.4458	---	---
		2441	0.87302	2440.5736	2441.4466	---	---
		2480	0.87455	2479.5720	2480.4466	---	---
2DH5	Ant1	2402	1.1921	2401.4152	2402.6073	---	---
		2441	1.1908	2440.4152	2441.6060	---	---
		2480	1.1888	2479.4163	2480.6051	---	---
3DH5	Ant1	2402	1.1741	2401.4228	2402.5969	---	---
		2441	1.1925	2440.4145	2441.6070	---	---
		2480	1.1868	2479.4181	2480.6049	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



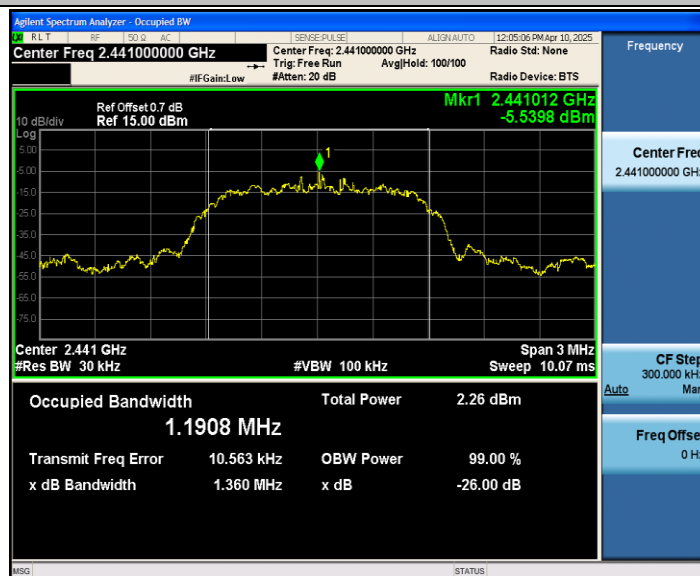
DH5_Ant1_2480



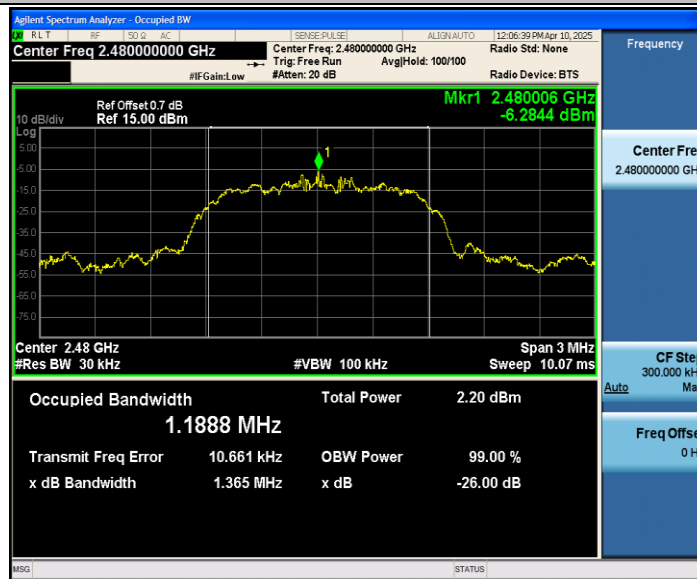
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



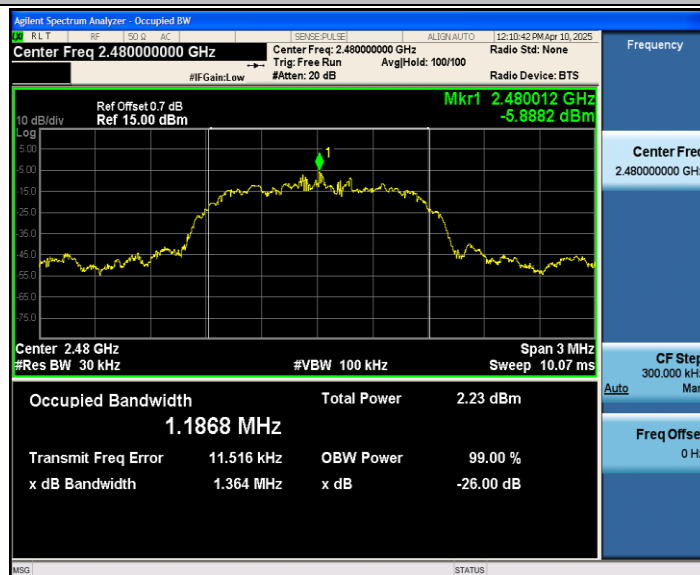
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

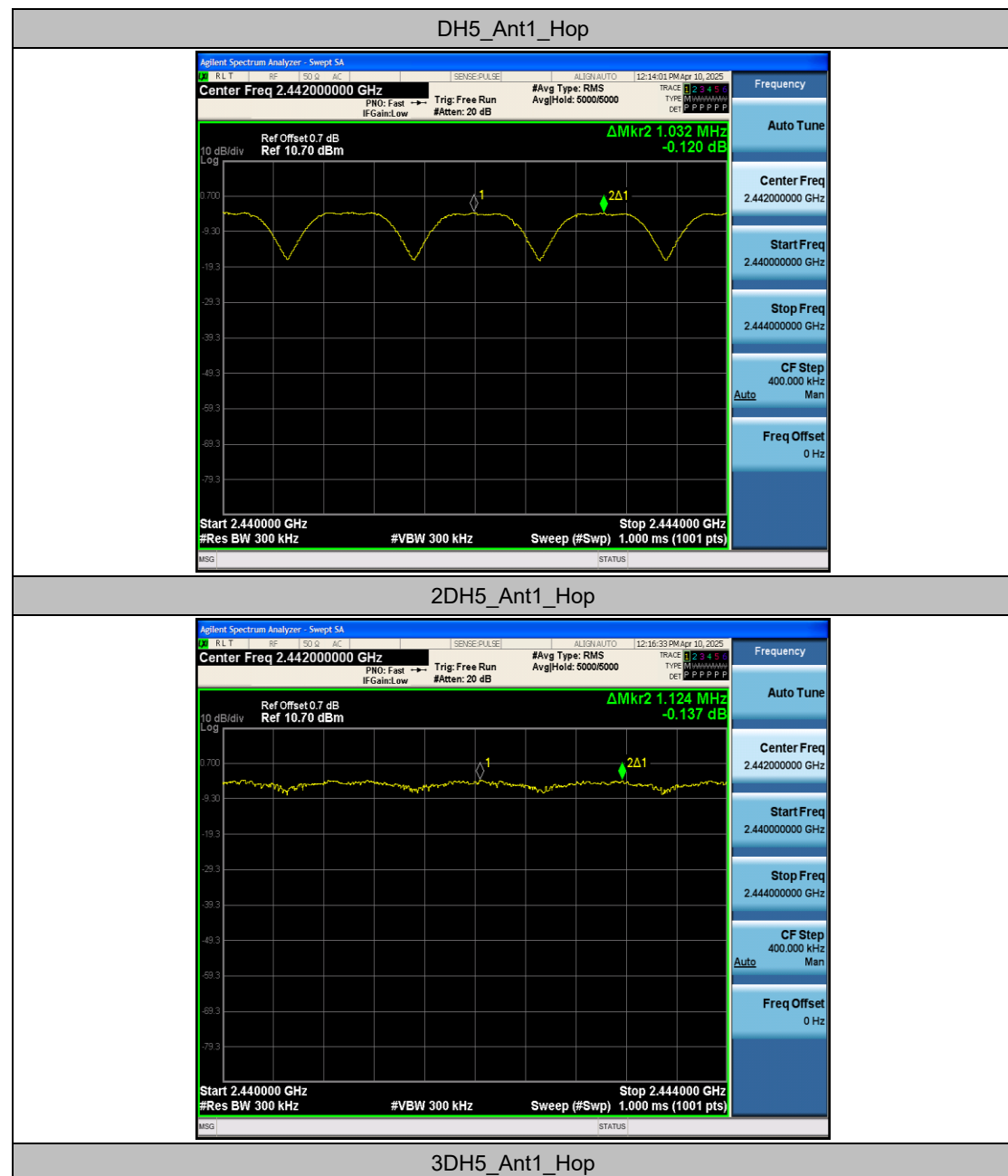
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.32	≤20.97	PASS
		2441	-0.20	≤20.97	PASS
		2480	-0.50	≤20.97	PASS
2DH5	Ant1	2402	-0.49	≤20.97	PASS
		2441	-1.11	≤20.97	PASS
		2480	-1.29	≤20.97	PASS
3DH5	Ant1	2402	-0.52	≤20.97	PASS
		2441	-1.04	≤20.97	PASS
		2480	-1.30	≤20.97	PASS

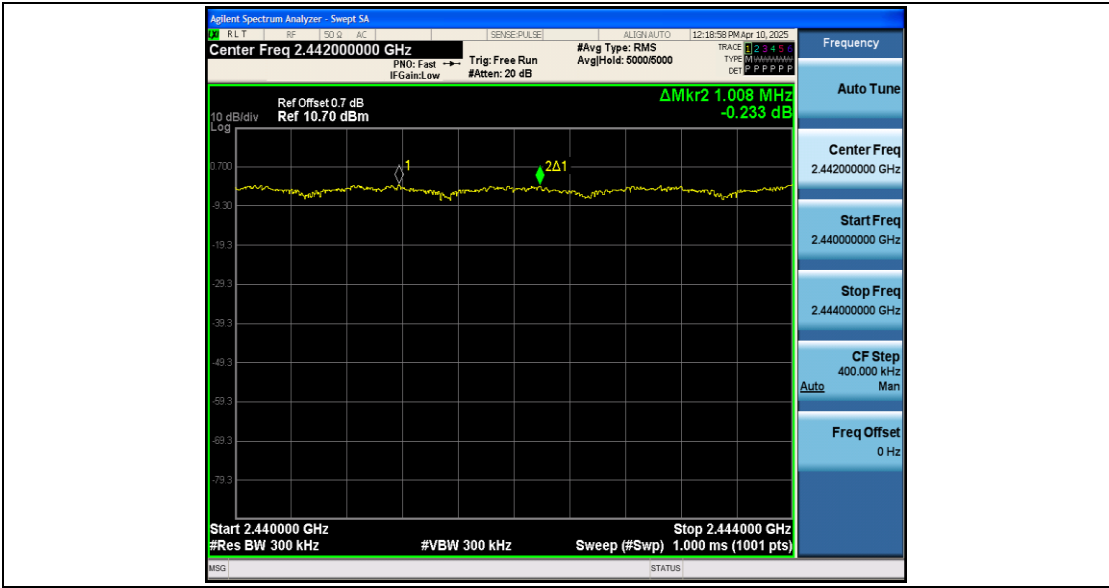
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.032	≥ 0.960	PASS
2DH5	Ant1	Hop	1.124	≥ 0.870	PASS
3DH5	Ant1	Hop	1.008	≥ 0.882	PASS

Test Graphs



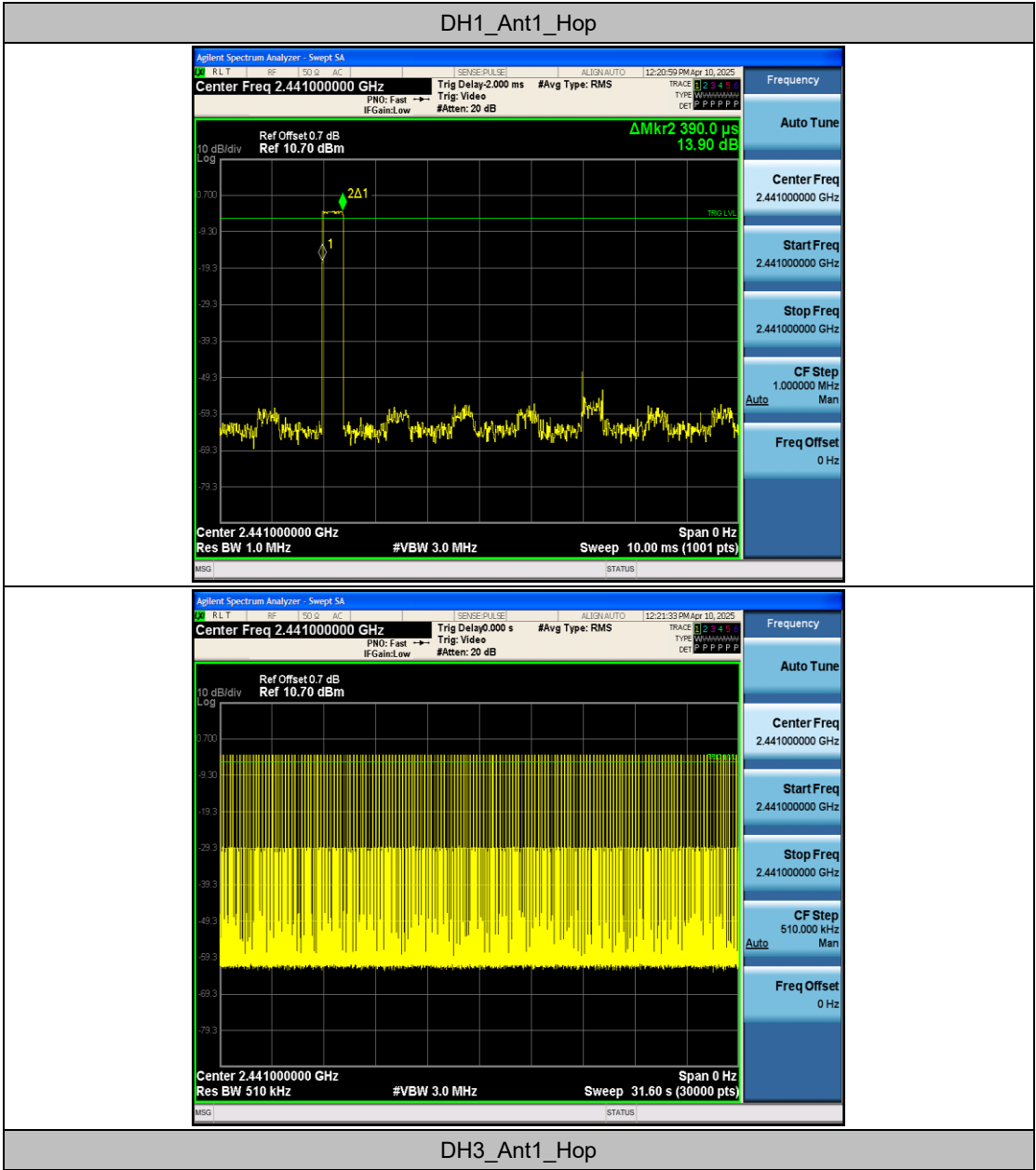


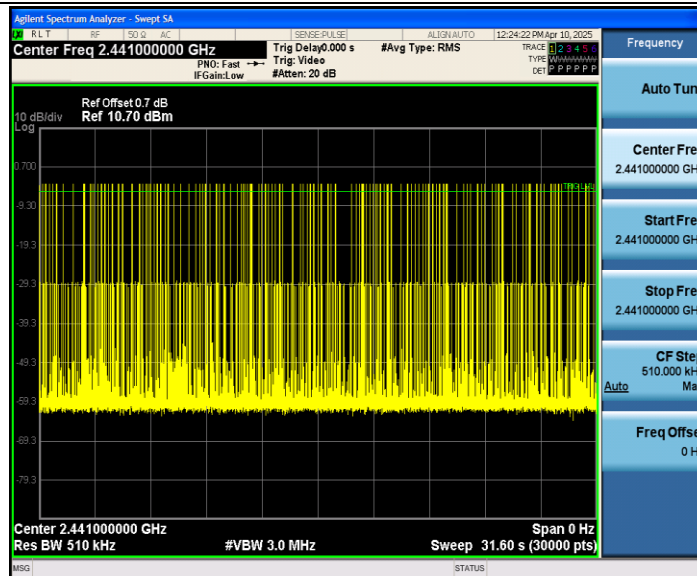
Appendix E: Time of occupancy

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	1.650	163	0.269	≤0.4	PASS
DH5	Ant1	Hop	2.900	102	0.296	≤0.4	PASS
2DH1	Ant1	Hop	0.390	314	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.640	153	0.251	≤0.4	PASS
2DH5	Ant1	Hop	2.890	103	0.298	≤0.4	PASS
3DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	161	0.264	≤0.4	PASS
3DH5	Ant1	Hop	2.900	109	0.316	≤0.4	PASS

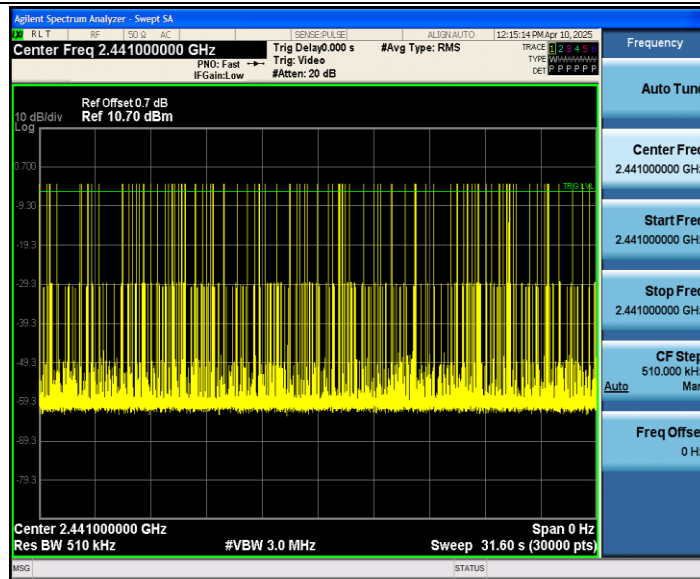
Test Graphs



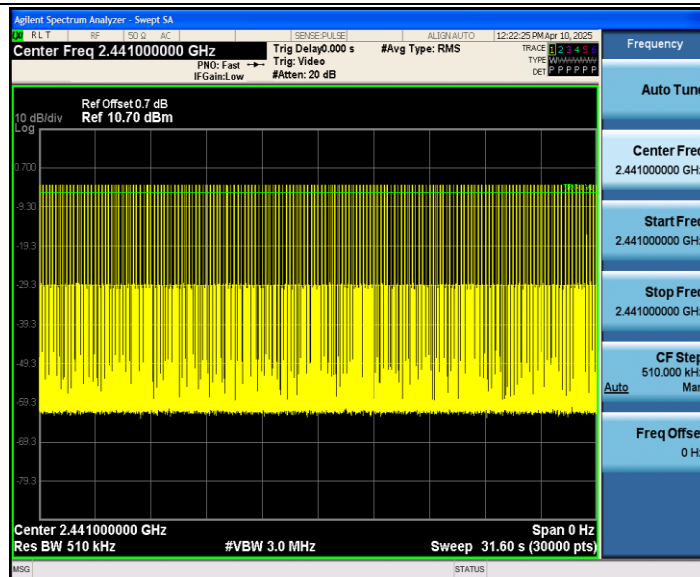
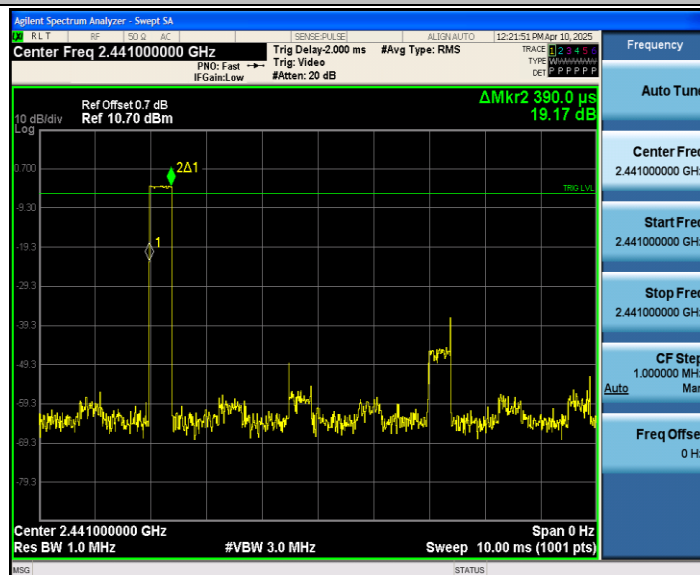


DH5_Ant1_Hop

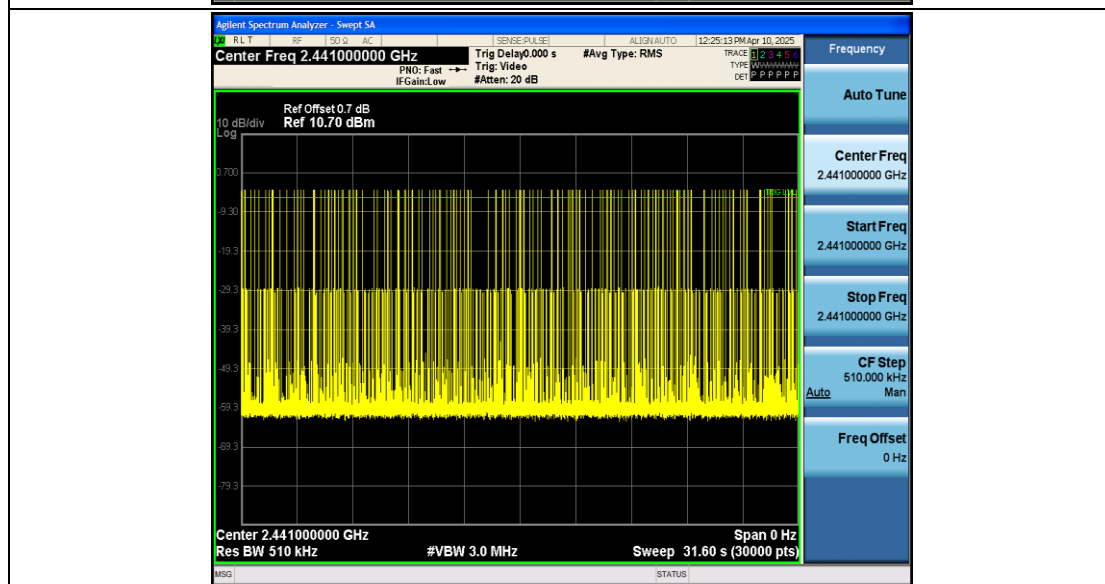




2DH1_Ant1_Hop

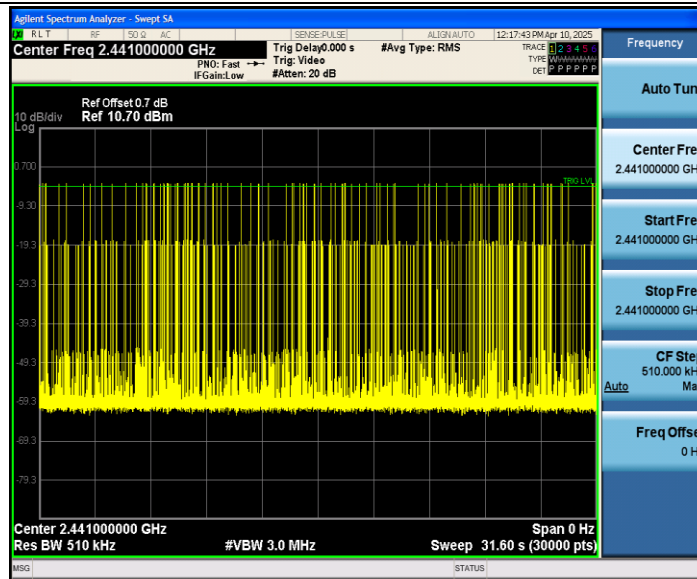


2DH3_Ant1_Hop

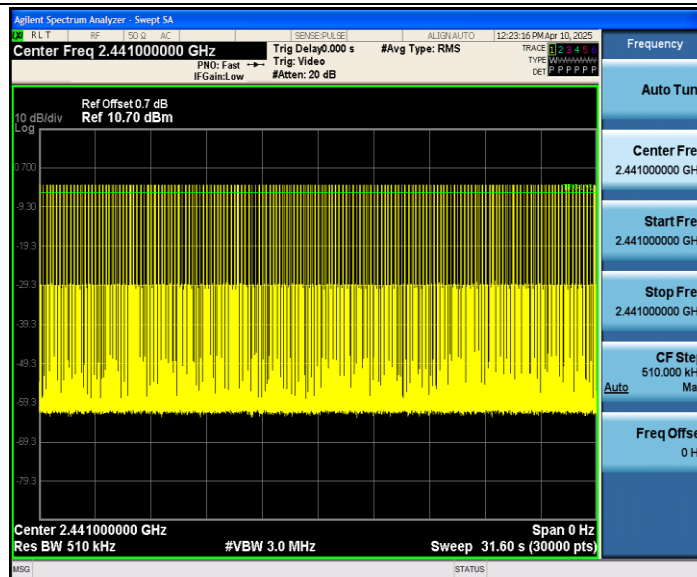
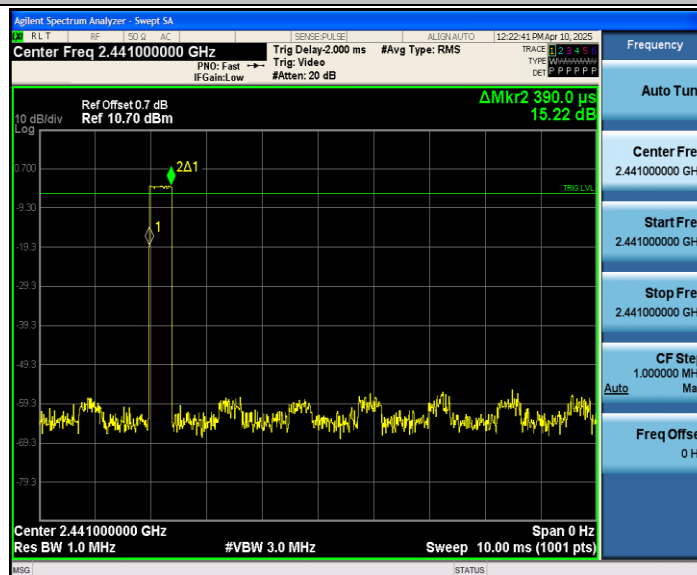


2DH5_Ant1_Hop

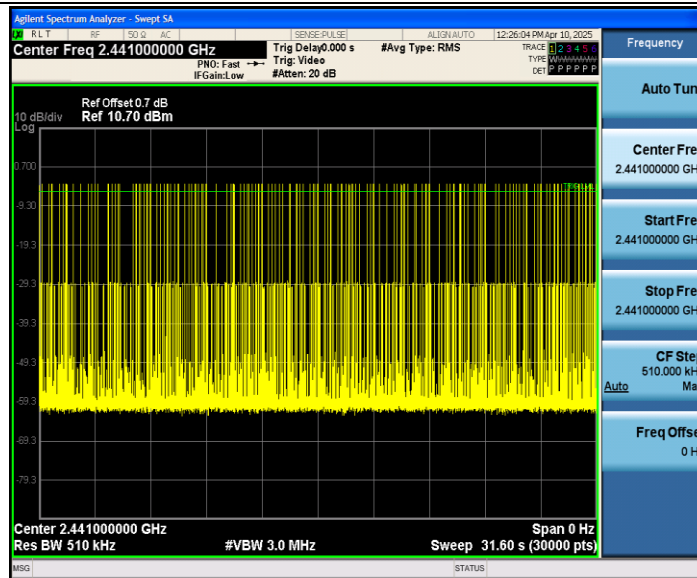




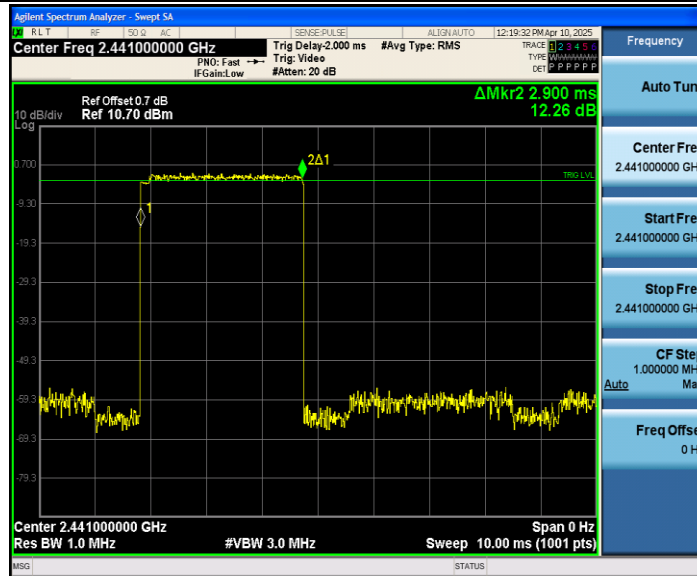
3DH1_Ant1_Hop

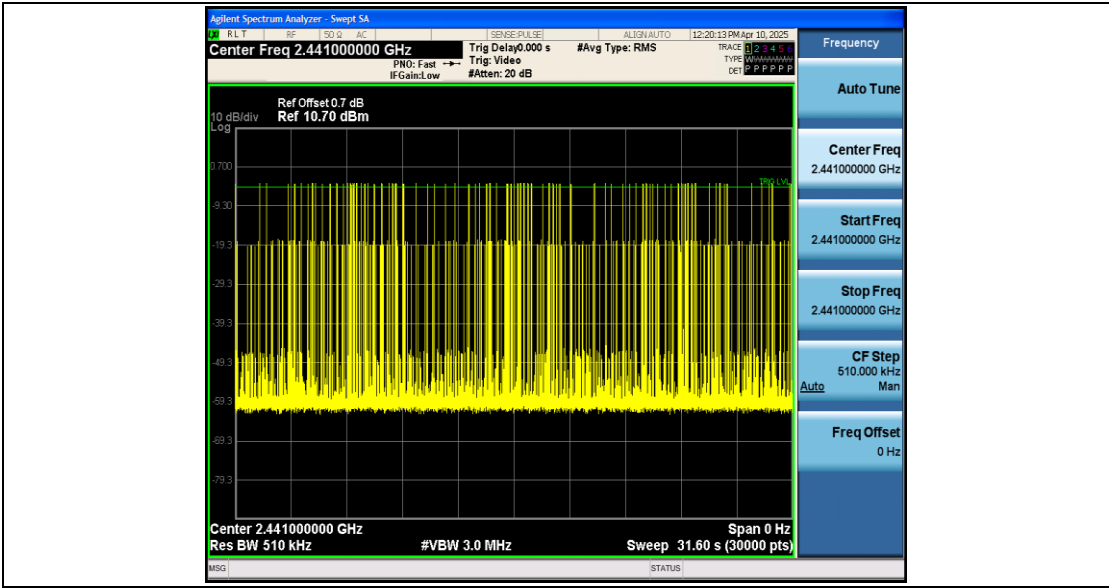


3DH3_Ant1_Hop



3DH5_Ant1_Hop





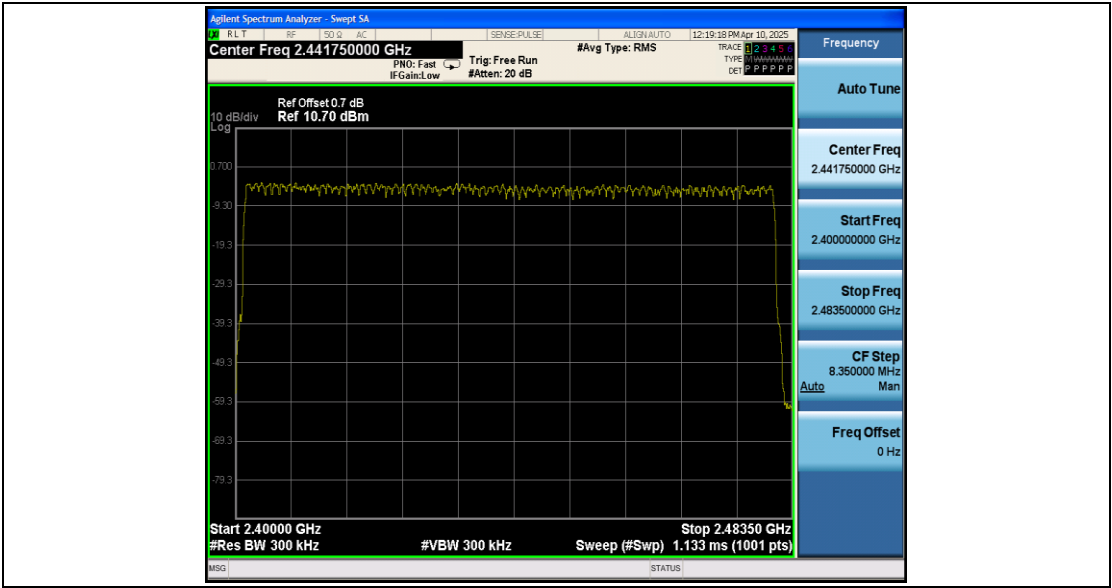
Appendix F: Number of hopping channels

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





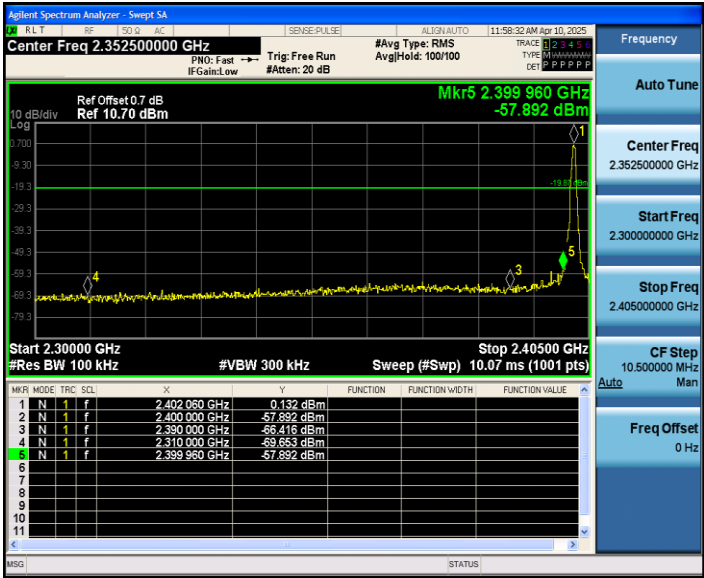
Appendix G: Band edge measurements

Test Result

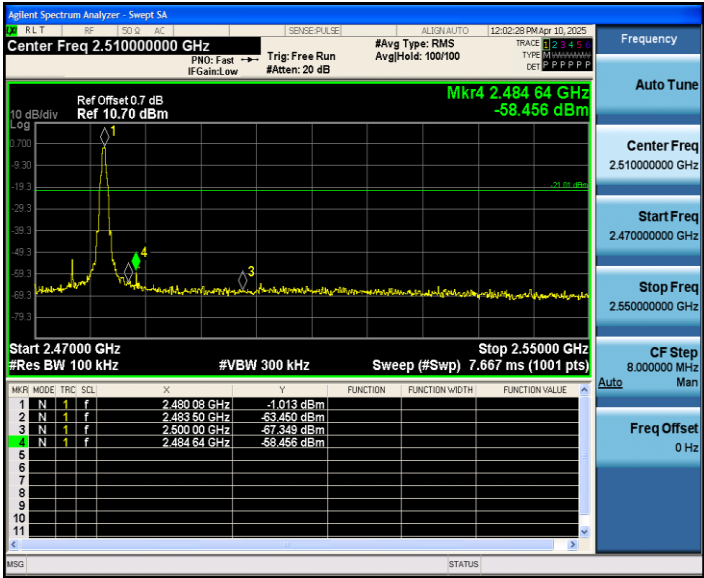
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.13	-57.89	≤-19.87	PASS
		High	2480	-1.01	-58.46	≤-21.01	PASS
		Low	Hop_2402	-4.45	-62.44	≤-24.45	PASS
		High	Hop_2480	-4.12	-64.24	≤-24.12	PASS
2DH5	Ant1	Low	2402	-3.53	-58.79	≤-23.53	PASS
		High	2480	-4.69	-64.27	≤-24.69	PASS
		Low	Hop_2402	-3.14	-62.75	≤-23.14	PASS
		High	Hop_2480	-5.21	-64.52	≤-25.21	PASS
3DH5	Ant1	Low	2402	-3.15	-54.66	≤-23.15	PASS
		High	2480	-4.18	-58.59	≤-24.18	PASS
		Low	Hop_2402	-6.14	-63.38	≤-26.14	PASS
		High	Hop_2480	-4.06	-63.9	≤-24.06	PASS

Test Graphs

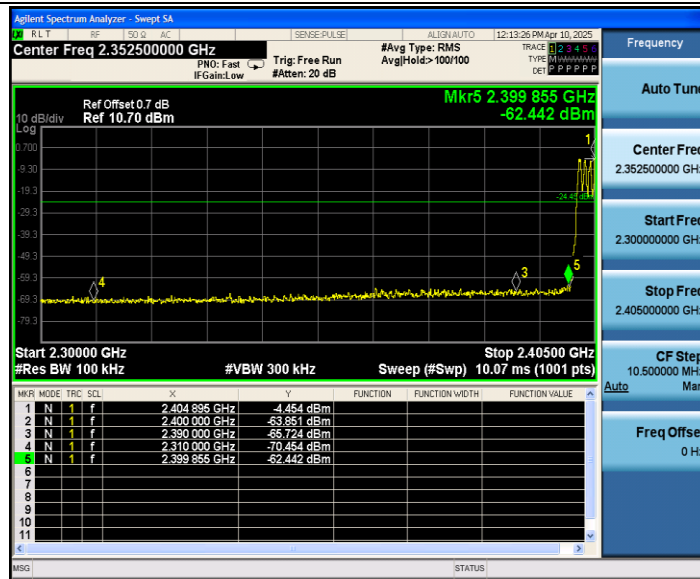
DH5_Ant1_Low_2402



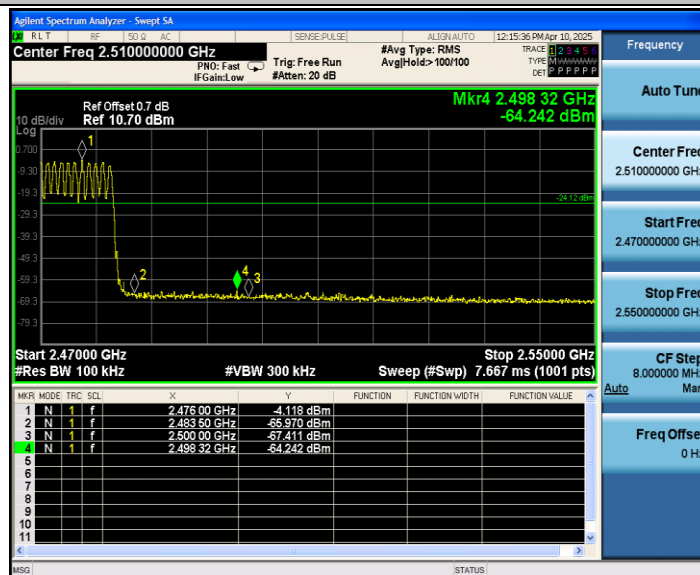
DH5_Ant1_High_2480



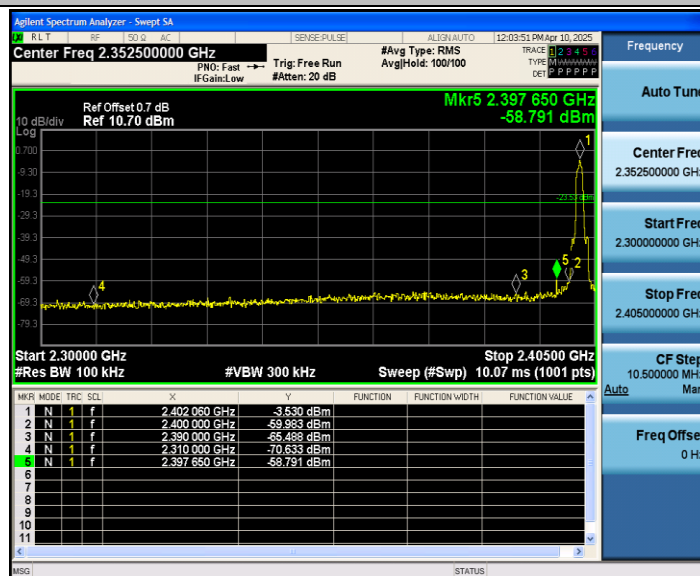
DH5_Ant1_Low_Hop_2402



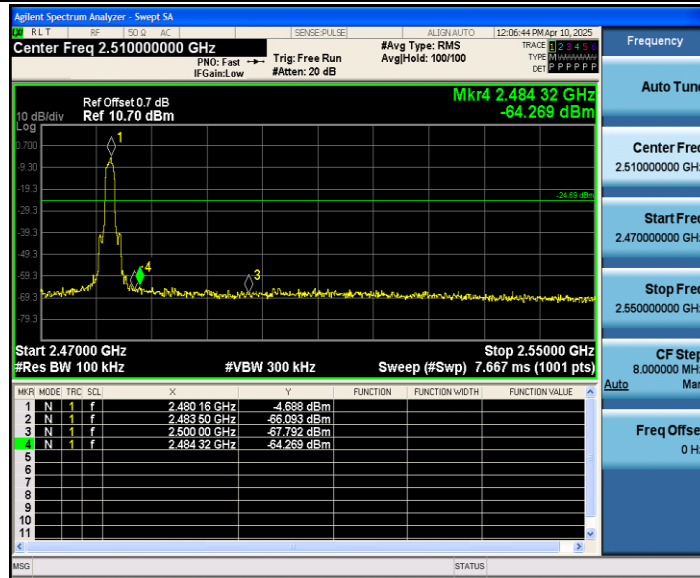
DH5_Ant1_High_Hop_2480



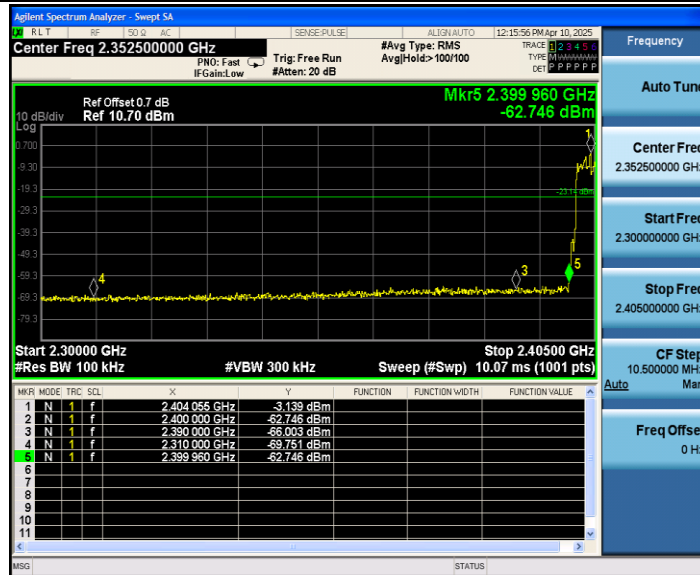
2DH5_Ant1_Low_2402



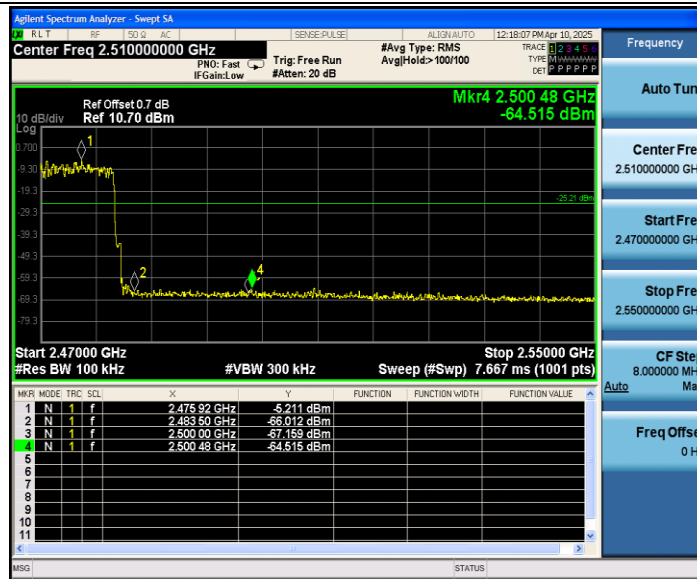
2DH5_Ant1_High_2480



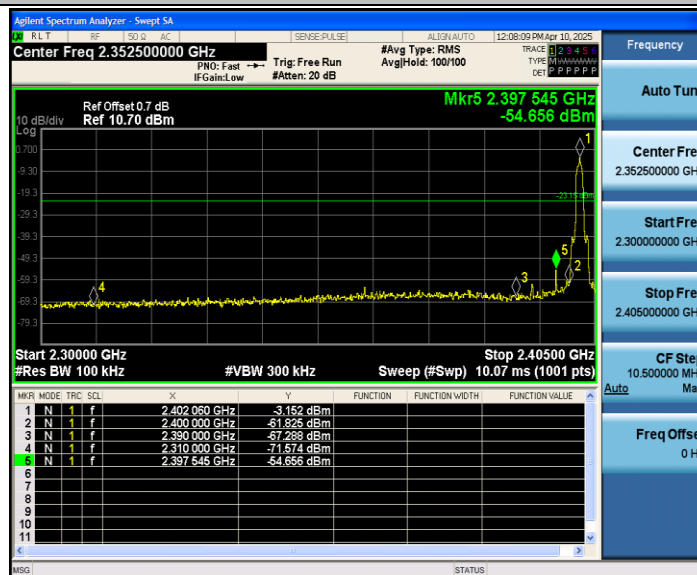
2DH5_Ant1_Low_Hop_2402



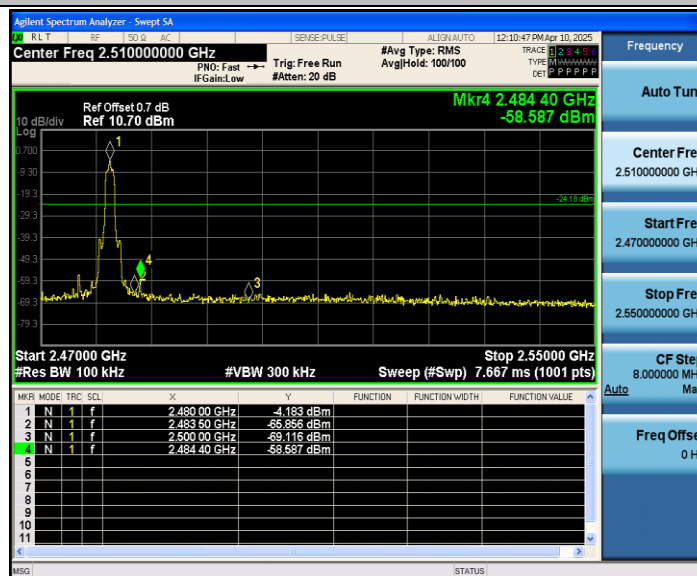
2DH5_Ant1_High_Hop_2480



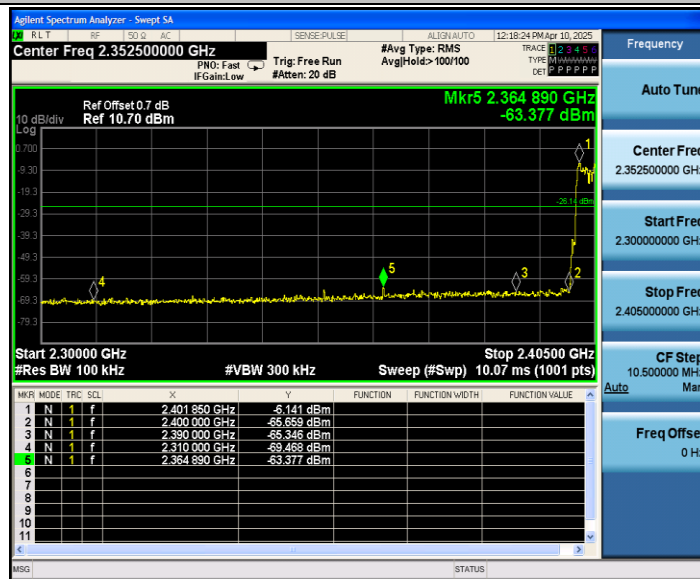
3DH5_Ant1_Low_2402



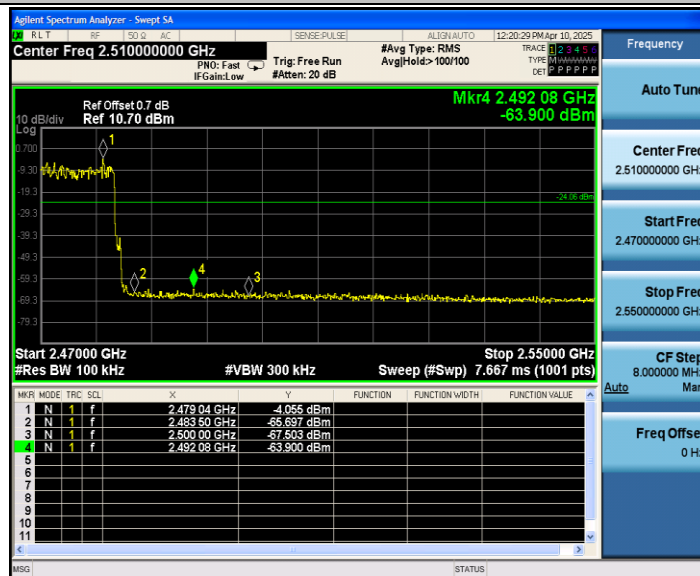
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

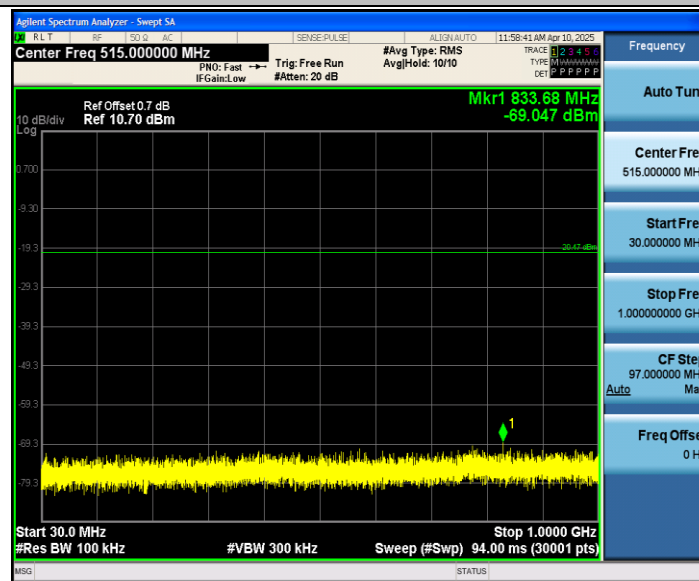
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.47	-0.47	---	PASS
			30~1000	-0.47	-69.05	≤-20.47	PASS
			1000~26500	-0.47	-44.5	≤-20.47	PASS
		2441	Reference	-1.09	-1.09	---	PASS
			30~1000	-1.09	-69.73	≤-21.09	PASS
			1000~26500	-1.09	-44.93	≤-21.09	PASS
		2480	Reference	-1.56	-1.56	---	PASS
			30~1000	-1.56	-69.42	≤-21.56	PASS
			1000~26500	-1.56	-44.41	≤-21.56	PASS
2DH5	Ant1	2402	Reference	-6.63	-6.63	---	PASS
			30~1000	-6.63	-69.36	≤-26.63	PASS
			1000~26500	-6.63	-51.84	≤-26.63	PASS
		2441	Reference	-7.30	-7.30	---	PASS
			30~1000	-7.30	-69.79	≤-27.3	PASS
			1000~26500	-7.30	-48.95	≤-27.3	PASS
		2480	Reference	-4.38	-4.38	---	PASS
			30~1000	-4.38	-69.46	≤-24.38	PASS
			1000~26500	-4.38	-50.84	≤-24.38	PASS
3DH5	Ant1	2402	Reference	-3.43	-3.43	---	PASS
			30~1000	-3.43	-70.5	≤-23.43	PASS
			1000~26500	-3.43	-50.29	≤-23.43	PASS
		2441	Reference	-3.82	-3.82	---	PASS
			30~1000	-3.82	-69.93	≤-23.82	PASS
			1000~26500	-3.82	-52.06	≤-23.82	PASS
		2480	Reference	-5.12	-5.12	---	PASS
			30~1000	-5.12	-69.14	≤-25.12	PASS
			1000~26500	-5.12	-52.84	≤-25.12	PASS

Test Graphs

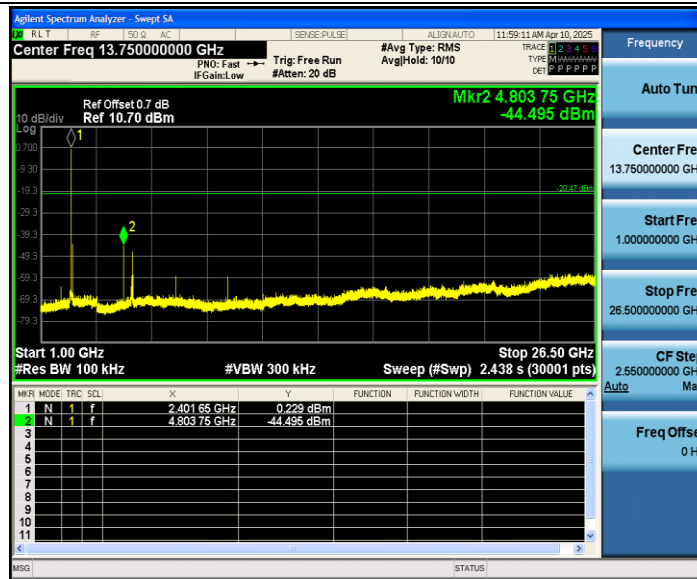
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

