

Case No. : <u>GTS20230111005-1-10</u>	
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.2.15</u>	Test Engineer: <u>Jenny zeng</u>

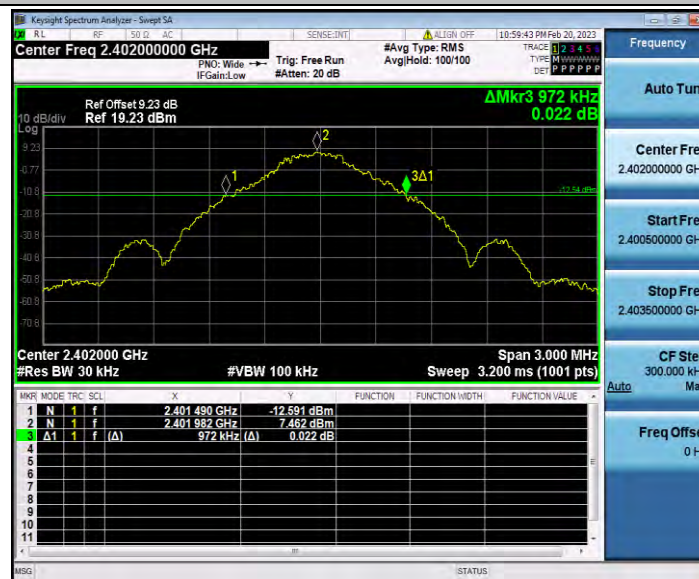
Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.972	2401.490	2402.462	---	---
		2441	1.005	2440.466	2441.471	---	---
		2480	1.014	2479.478	2480.492	---	---
2DH1	Ant1	2402	1.353	2401.316	2402.669	---	---
		2441	1.347	2440.322	2441.669	---	---
		2480	1.353	2479.313	2480.666	---	---
3DH1	Ant1	2402	1.230	2401.394	2402.624	---	---
		2441	1.215	2440.403	2441.618	---	---
		2480	1.224	2479.397	2480.621	---	---

Test Graphs

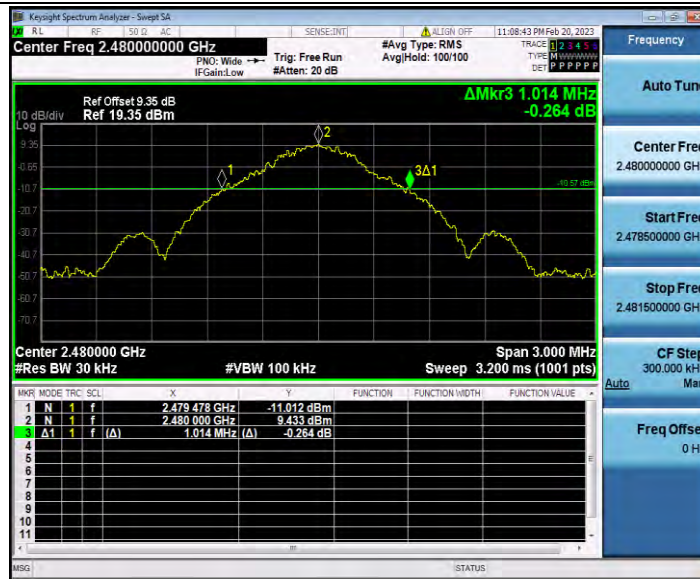
DH1_Ant1_2402



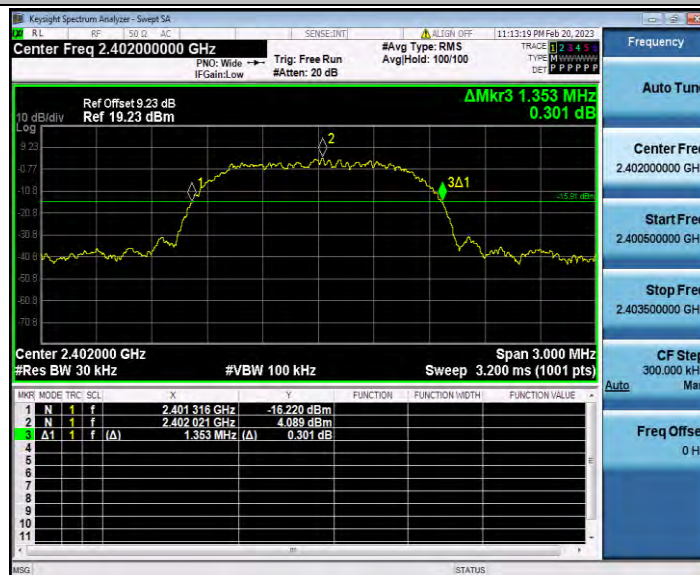
DH1_Ant1_2441



DH1_Ant1_2480



2D H1_Ant1_2402



2D H1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



3DH1_Ant1_2480



Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.88847	2401.550	2402.439	---	---
		2441	0.88544	2440.554	2441.439	---	---
		2480	0.87470	2479.548	2480.423	---	---
2DH1	Ant1	2402	1.1942	2401.392	2402.586	---	---
		2441	1.1968	2440.392	2441.589	---	---
		2480	1.1901	2479.396	2480.587	---	---
3DH1	Ant1	2402	1.1389	2401.436	2402.575	---	---
		2441	1.1273	2440.441	2441.568	---	---
		2480	1.1325	2479.438	2480.571	---	---

Test Graphs

DH1_Ant1_2402



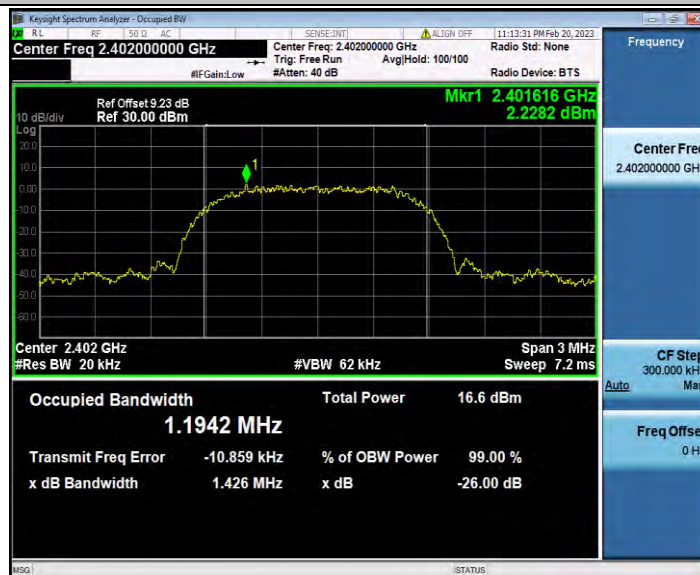
DH1_Ant1_2441



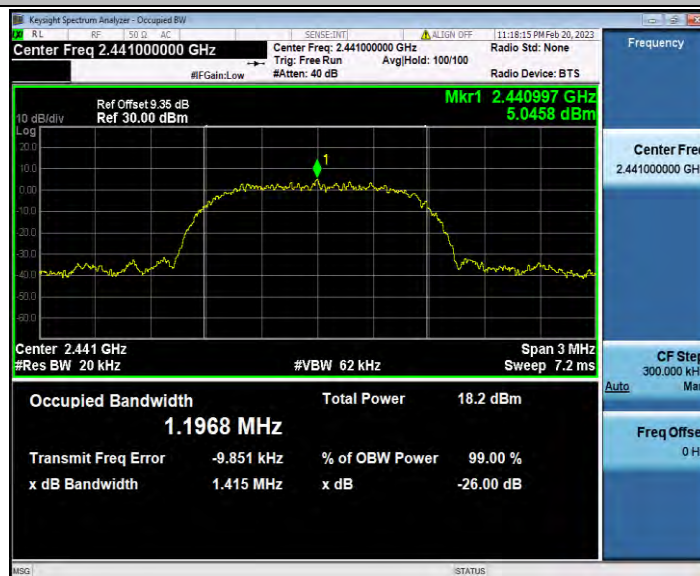
DH1_Ant1_2480



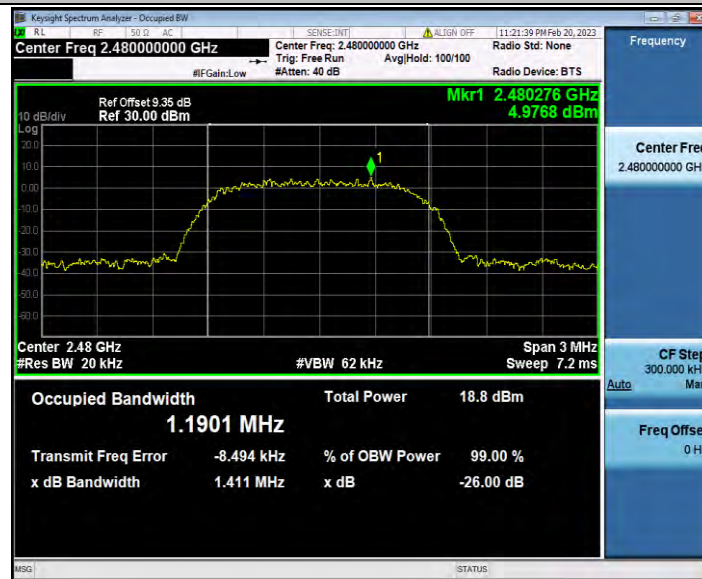
2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



3DH1_Ant1_2480



Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	10.12	≤20.97	PASS
		2441	11.17	≤20.97	PASS
		2480	11.81	≤20.97	PASS
2DH1	Ant1	2402	11.87	≤20.97	PASS
		2441	13.49	≤20.97	PASS
		2480	13.7	≤20.97	PASS
3DH1	Ant1	2402	8.61	≤20.97	PASS
		2441	9.75	≤20.97	PASS
		2480	10.05	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.834	≥ 0.676	PASS
		Hop_2441	1.176	≥ 1.014	PASS
		Hop_2480	1.17	≥ 1.014	PASS
2DH1	Ant1	Hop_2402	1.004	≥ 0.902	PASS
		Hop_2441	1.342	≥ 0.902	PASS
		Hop_2480	1.34	≥ 0.902	PASS
3DH1	Ant1	Hop_2402	0.658	≥ 0.656	PASS
		Hop_2441	1.346	≥ 0.984	PASS
		Hop_2480	0.988	≥ 0.984	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



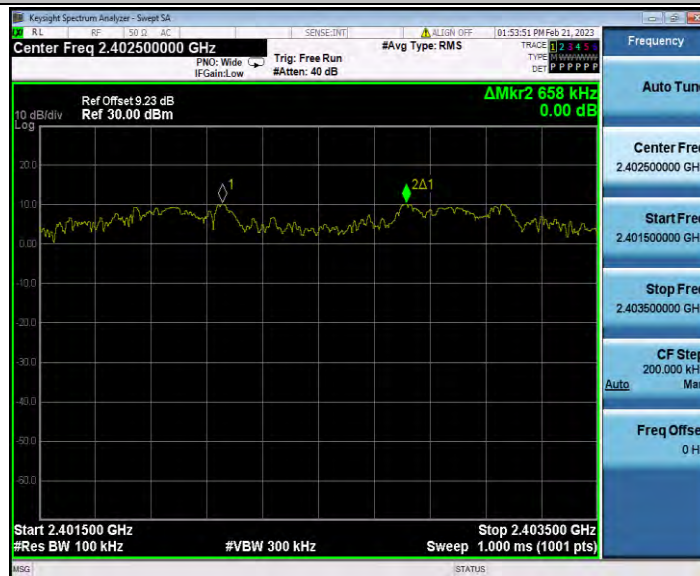
2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



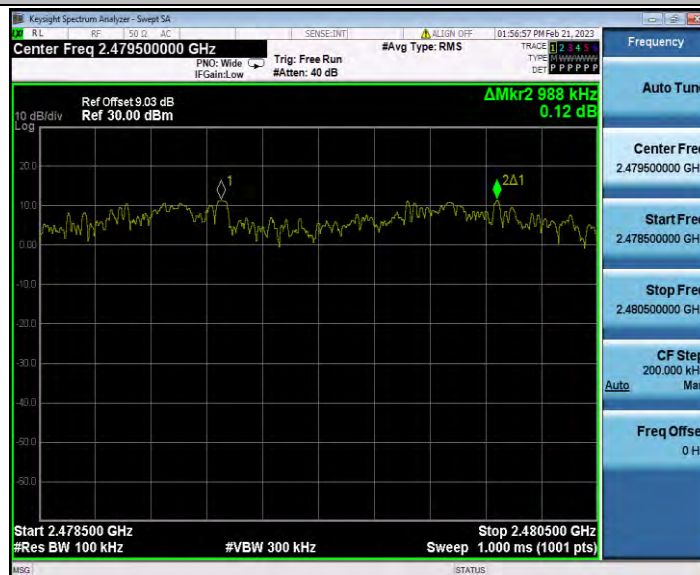
3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441



3DH1_Ant1_Hop_2480

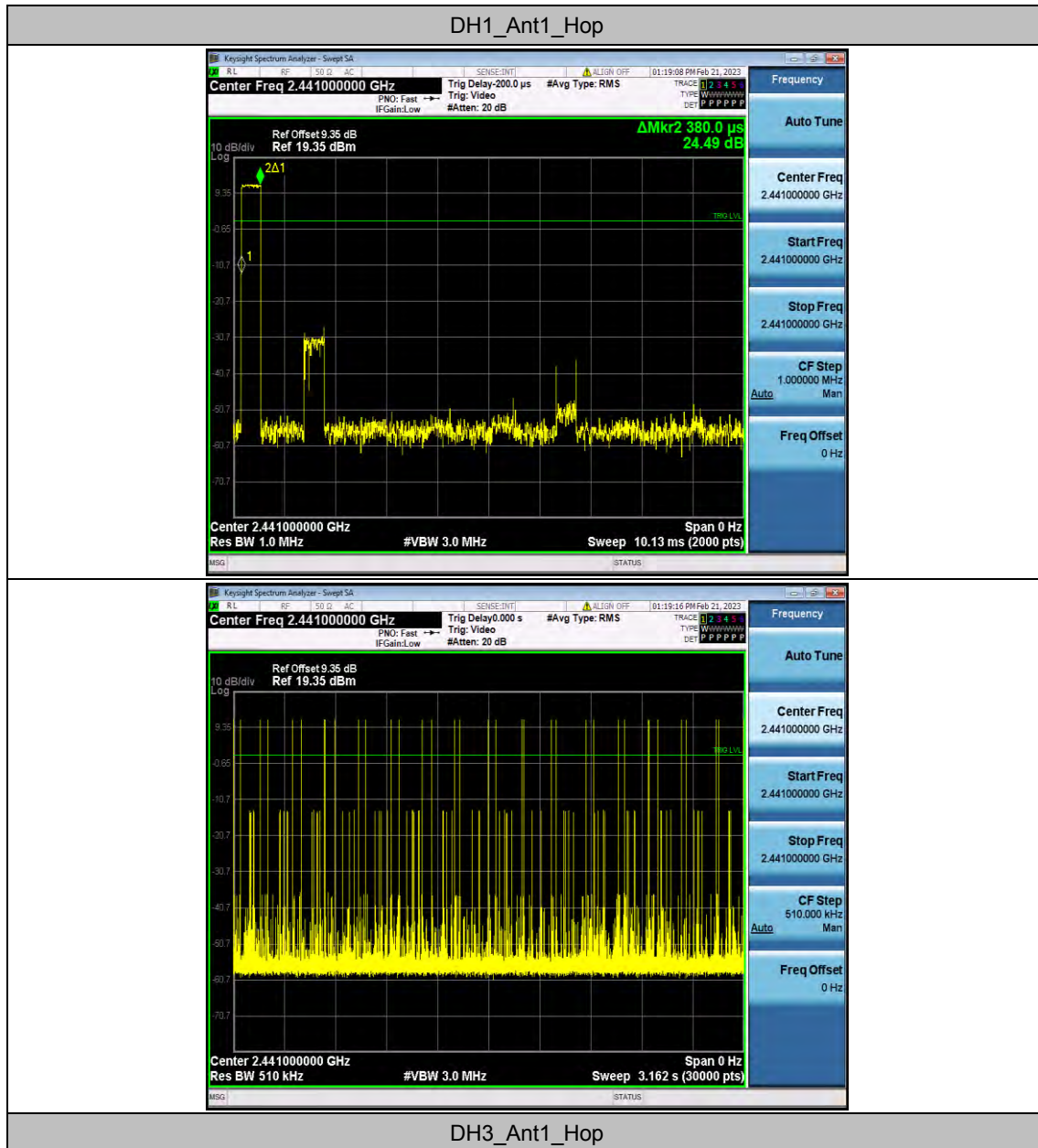


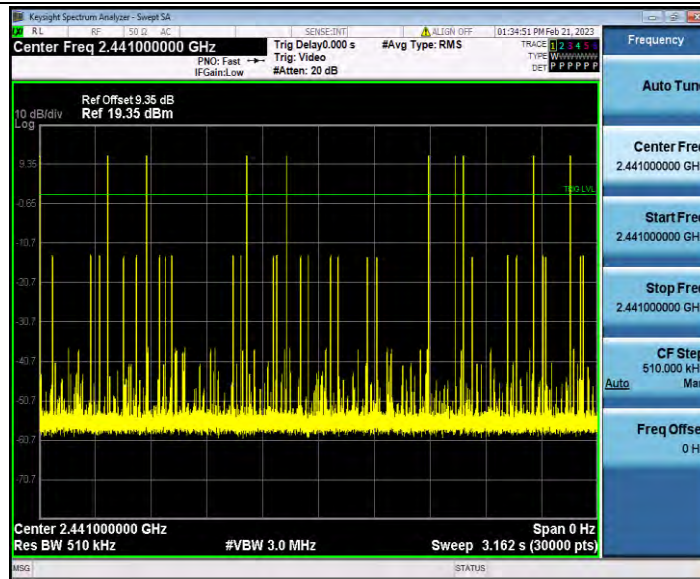
Appendix A.5: Time of occupancy

Test Result

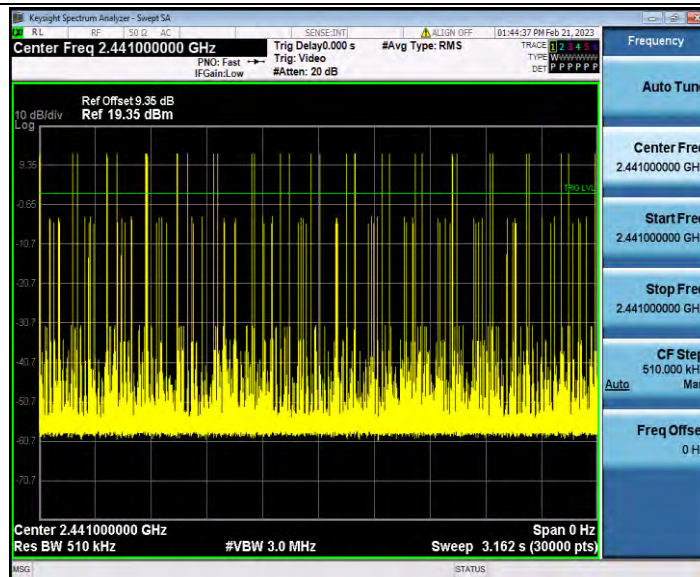
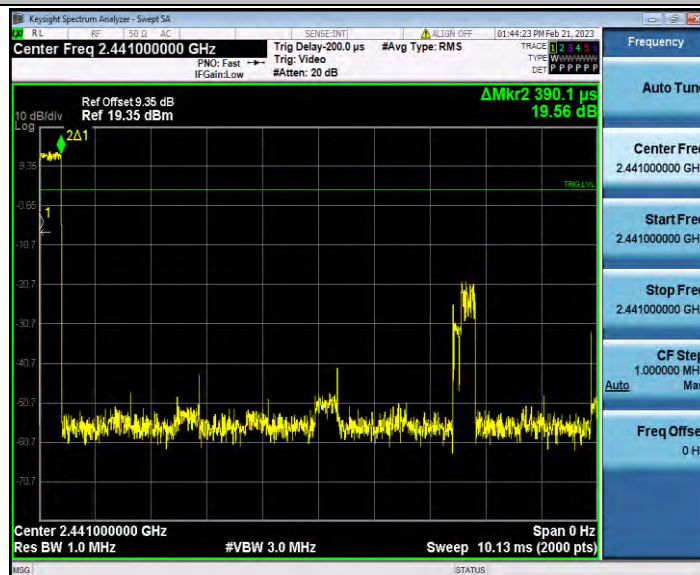
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	330	0.125	≤0.4	PASS
DH3	Ant1	Hop	1.64	180	0.295	≤0.4	PASS
DH5	Ant1	Hop	2.88	100	0.288	≤0.4	PASS
2DH1	Ant1	Hop	0.39	330	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.65	170	0.28	≤0.4	PASS
2DH5	Ant1	Hop	2.89	90	0.26	≤0.4	PASS
3DH1	Ant1	Hop	0.39	330	0.129	≤0.4	PASS
3DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
3DH5	Ant1	Hop	2.89	130	0.376	≤0.4	PASS

Test Graphs

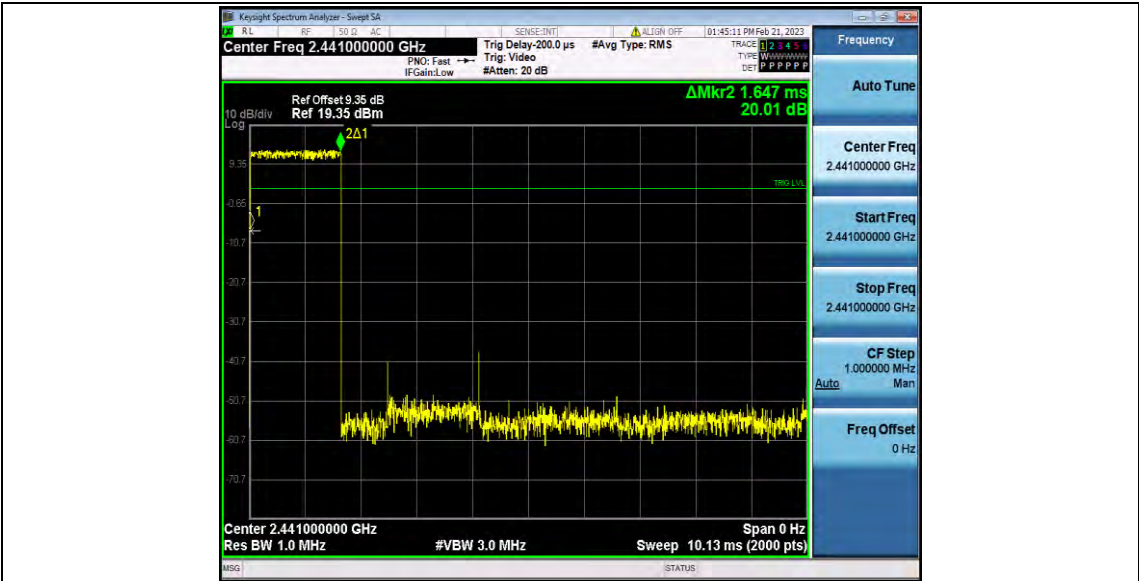




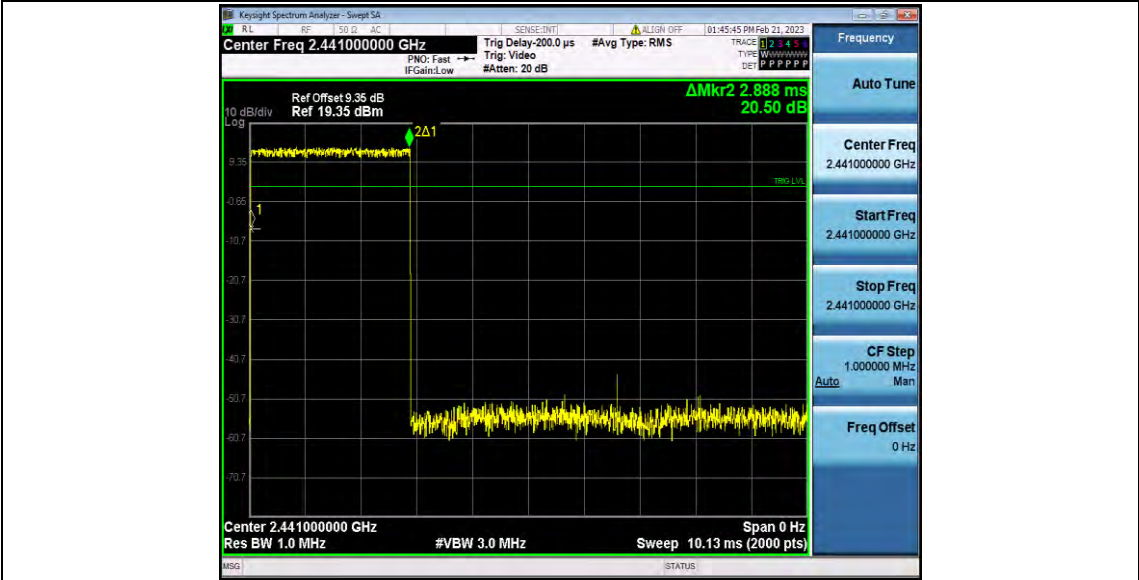
2DH1_Ant1_Hop

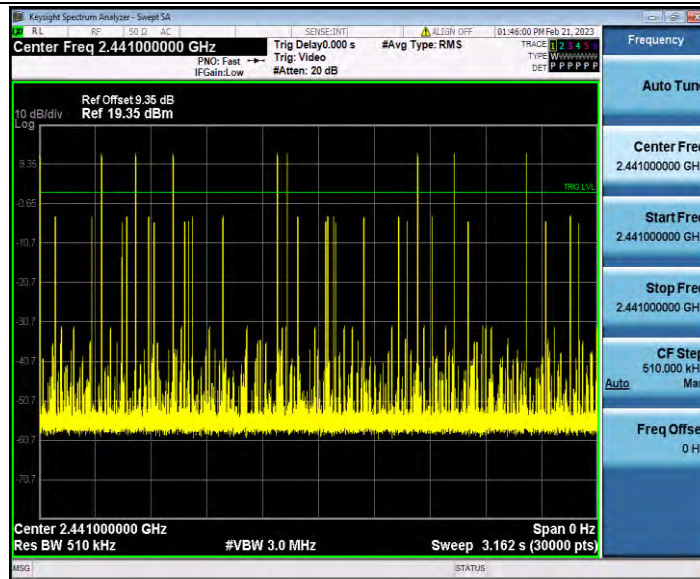


2DH3_Ant1_Hop

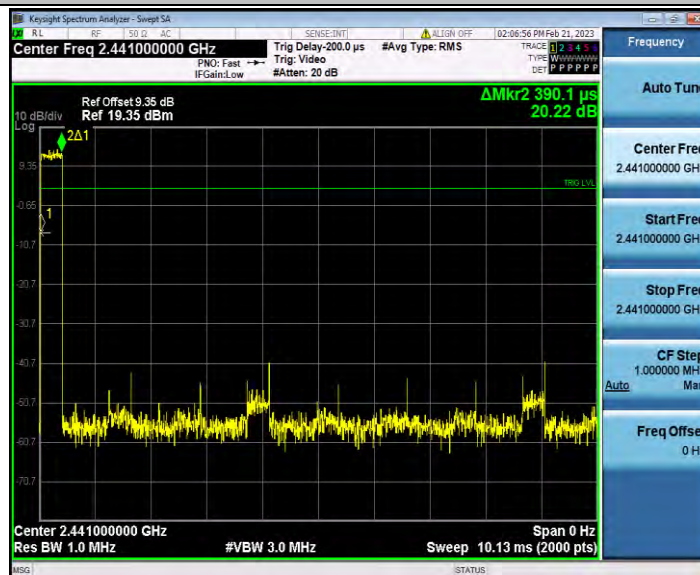


2DH5_Ant1_Hop

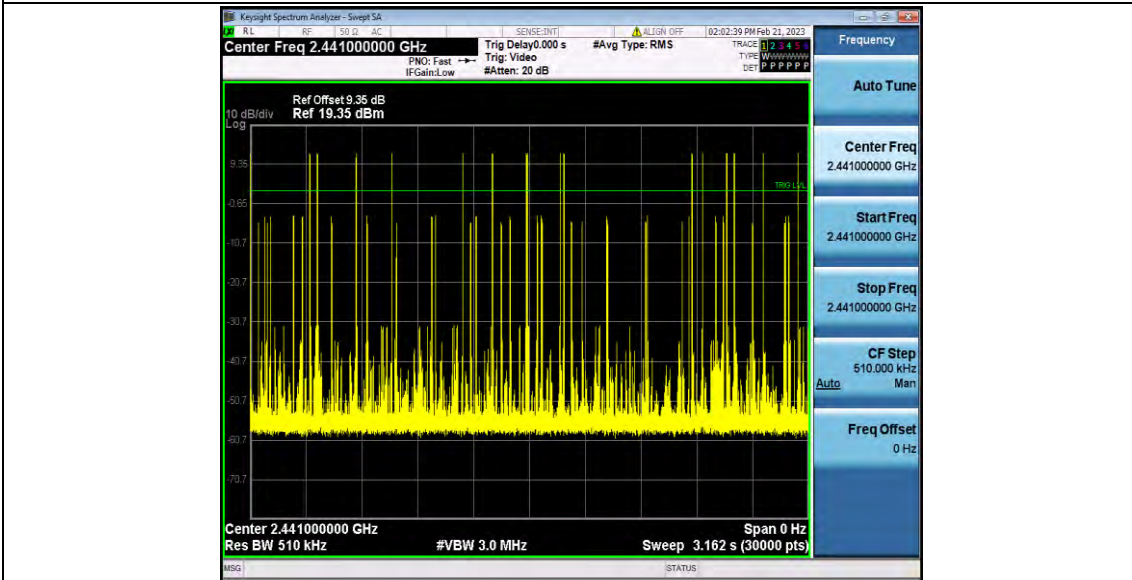
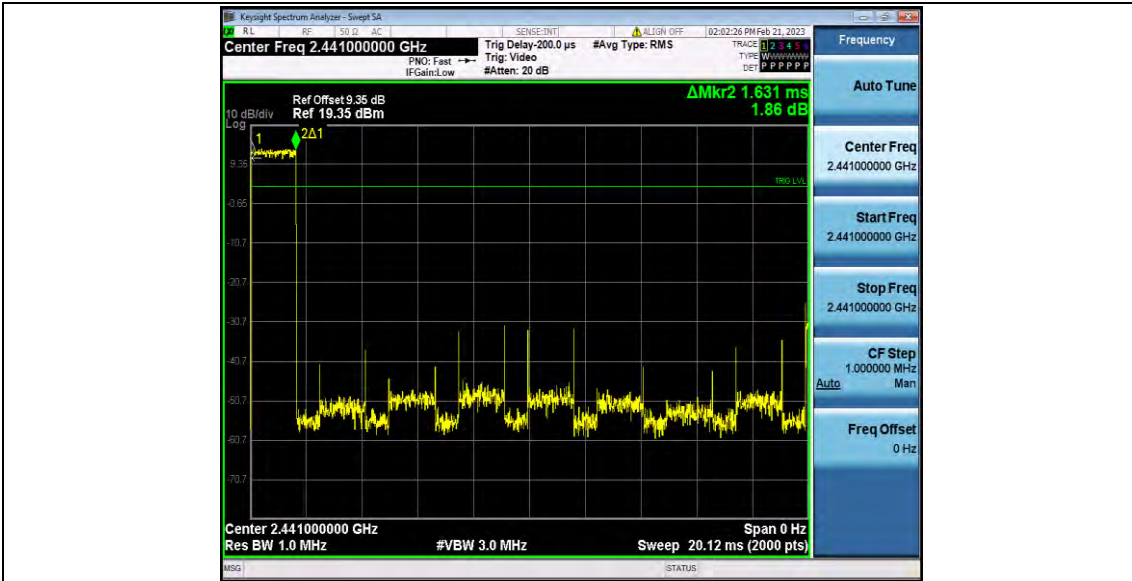




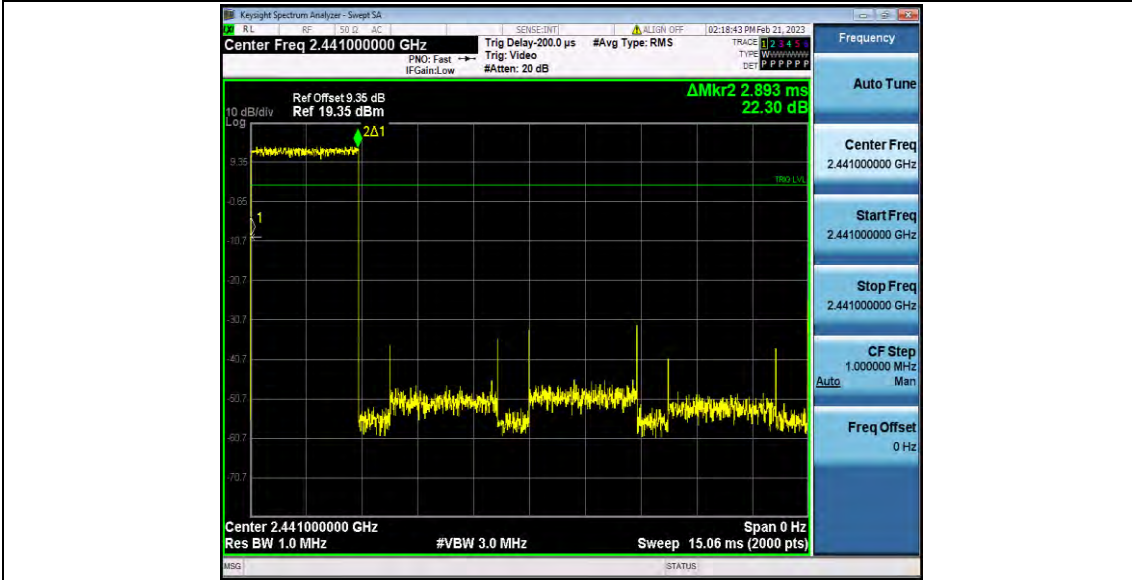
3DH1_Ant1_Hop

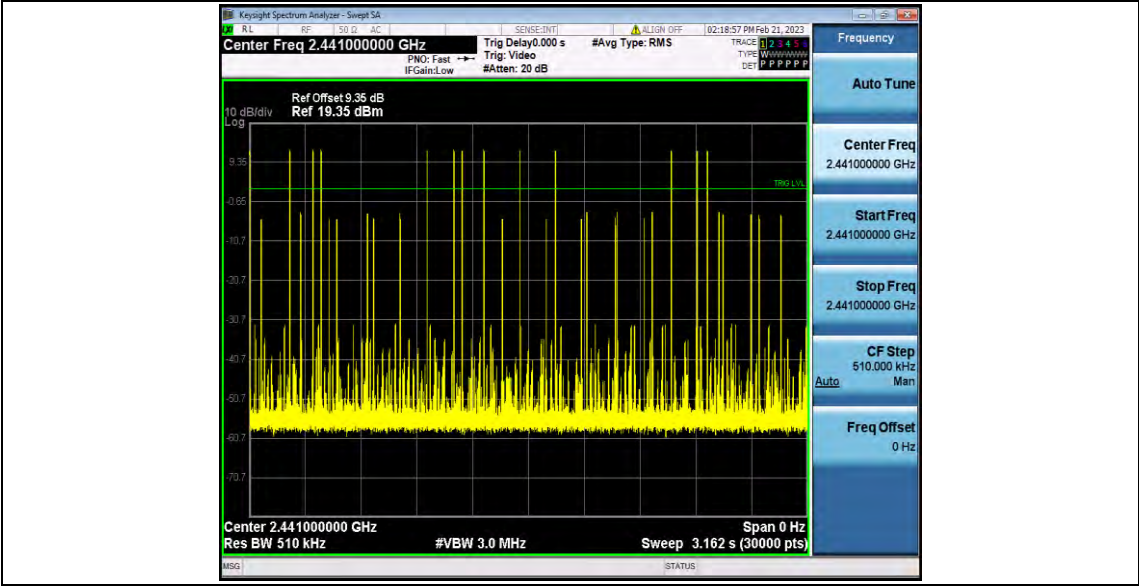


3DH3_Ant1_Hop



3DH5_Ant1_Hop





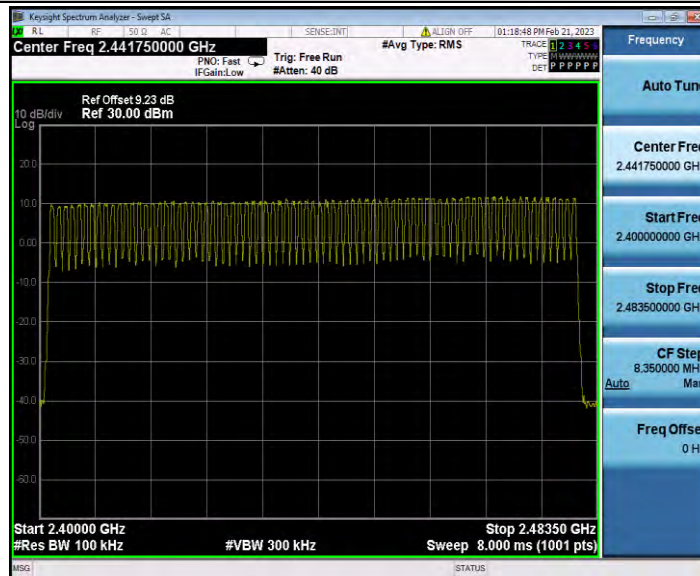
Appendix A.6: Number of hopping channels

Test Result

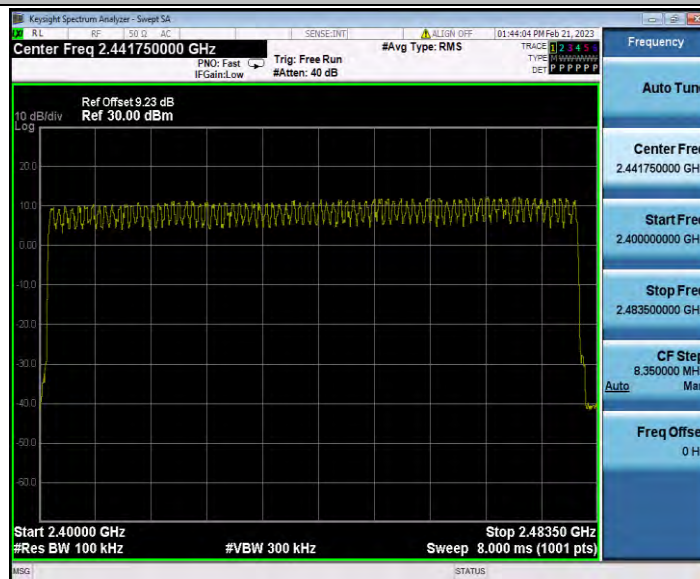
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

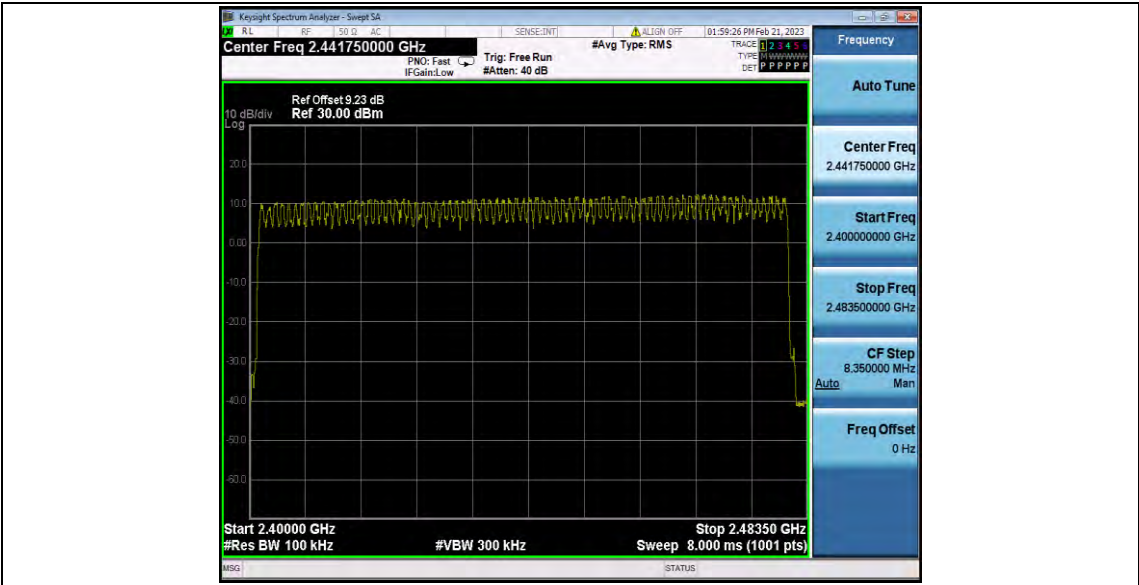
DH1_Ant1_Hop



2DH1_Ant1_Hop



3DH1_Ant1_Hop



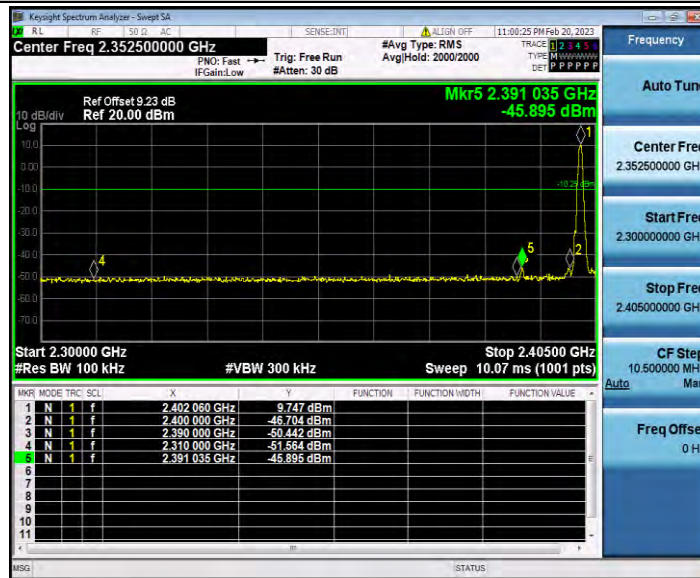
Appendix A.7: Band edge measurements

Test Result

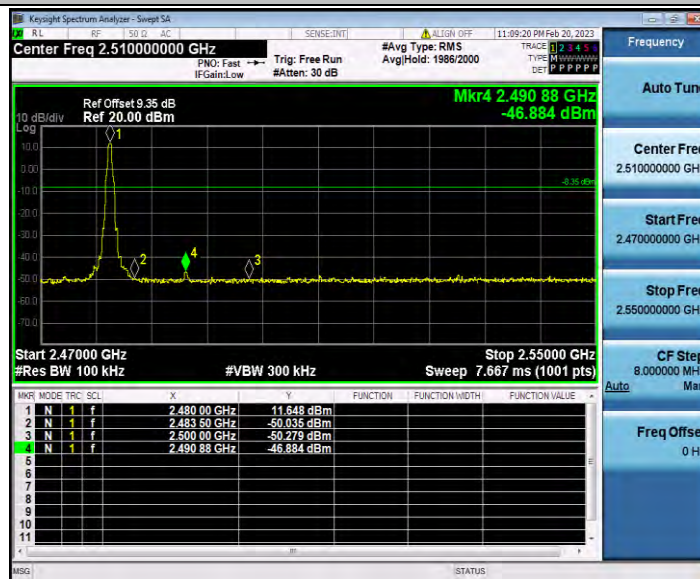
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	9.75	-45.9	≤-10.25	PASS
		High	2480	11.65	-46.88	≤-8.35	PASS
		Low	Hop_2402	9.27	-49.16	≤-10.73	PASS
		High	Hop_2480	11.37	-48.64	≤-8.63	PASS
2DH1	Ant1	Low	2402	8.48	-45.82	≤-11.52	PASS
		High	2480	10.75	-47.23	≤-9.25	PASS
		Low	Hop_2402	9.33	-49.08	≤-10.68	PASS
		High	Hop_2480	10.54	-48.84	≤-9.46	PASS
3DH1	Ant1	Low	2402	7.27	-47.57	≤-12.73	PASS
		High	2480	9.29	-48.57	≤-10.71	PASS
		Low	Hop_2402	9.96	-49.74	≤-10.04	PASS
		High	Hop_2480	11.58	-48.57	≤-8.42	PASS

Test Graphs

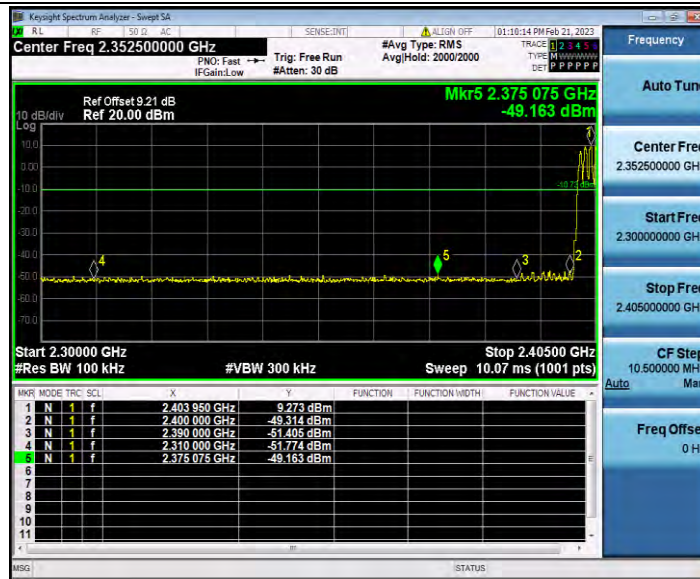
DH1_Ant1_Low_2402



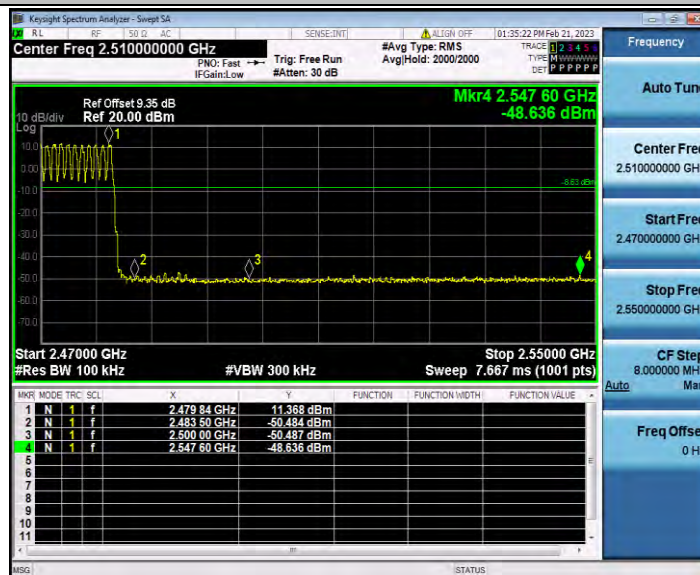
DH1_Ant1_High_2480



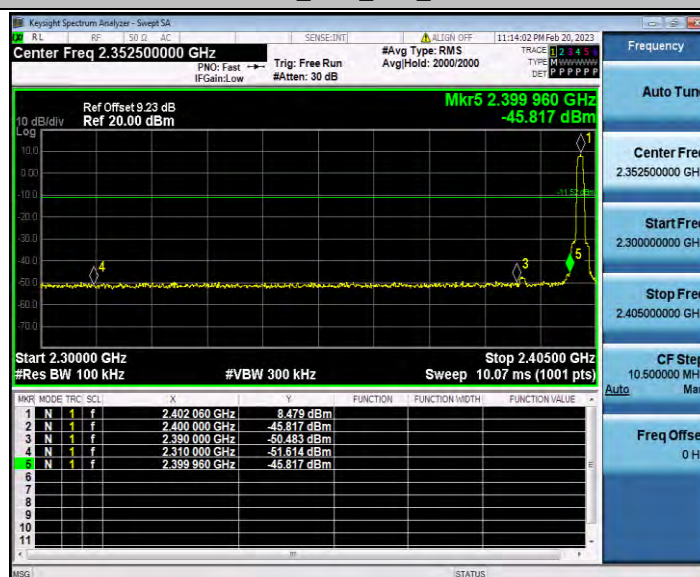
DH1_Ant1_Low_Hop_2402



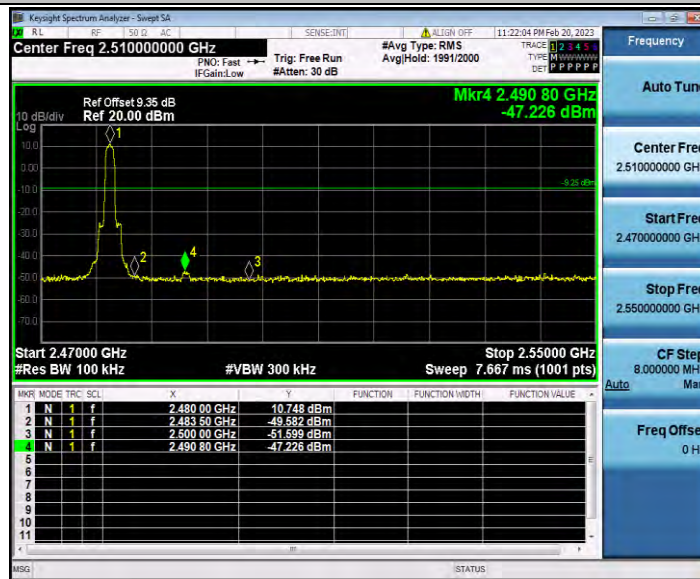
DH1_Ant1_High_Hop_2480



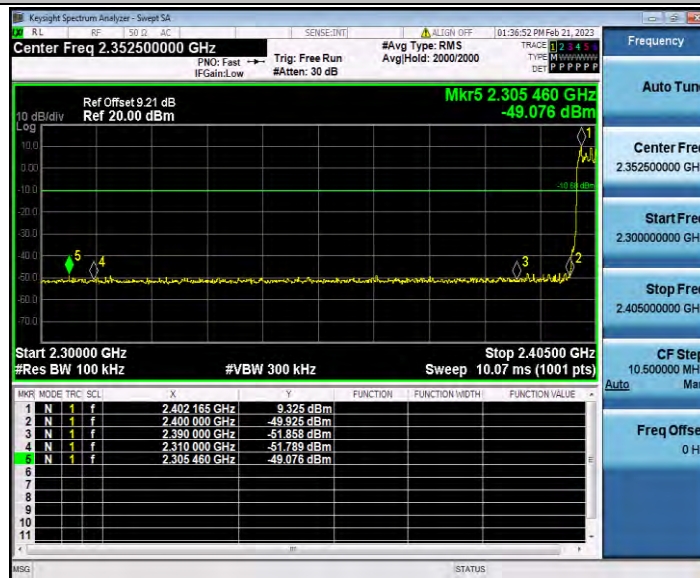
2DH1_Ant1_Low_2402



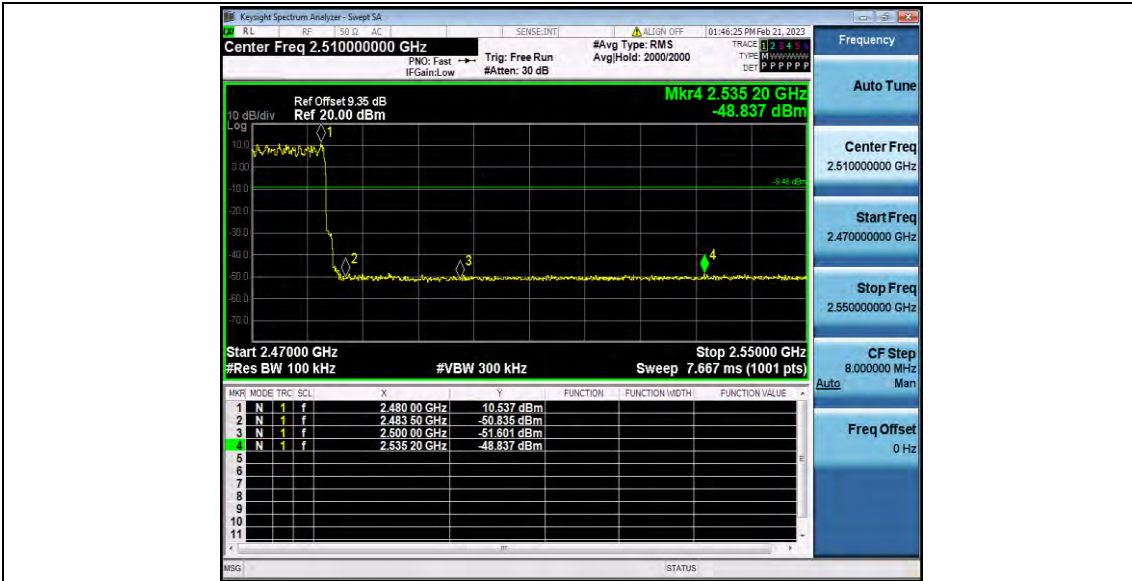
2DH1_Ant1_High_2480



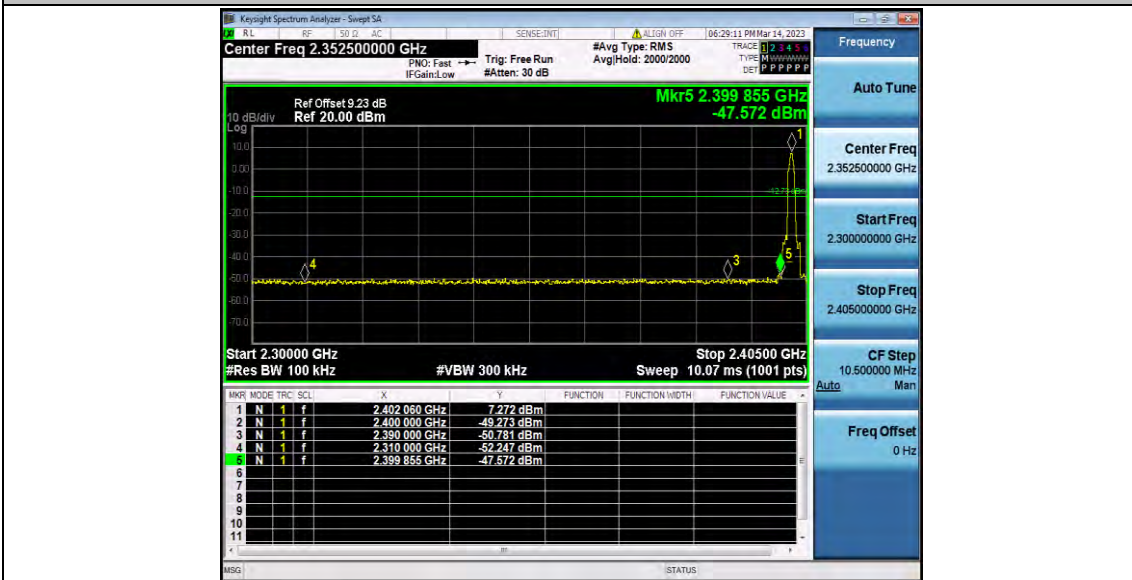
2DH1_Ant1_Low_Hop_2402



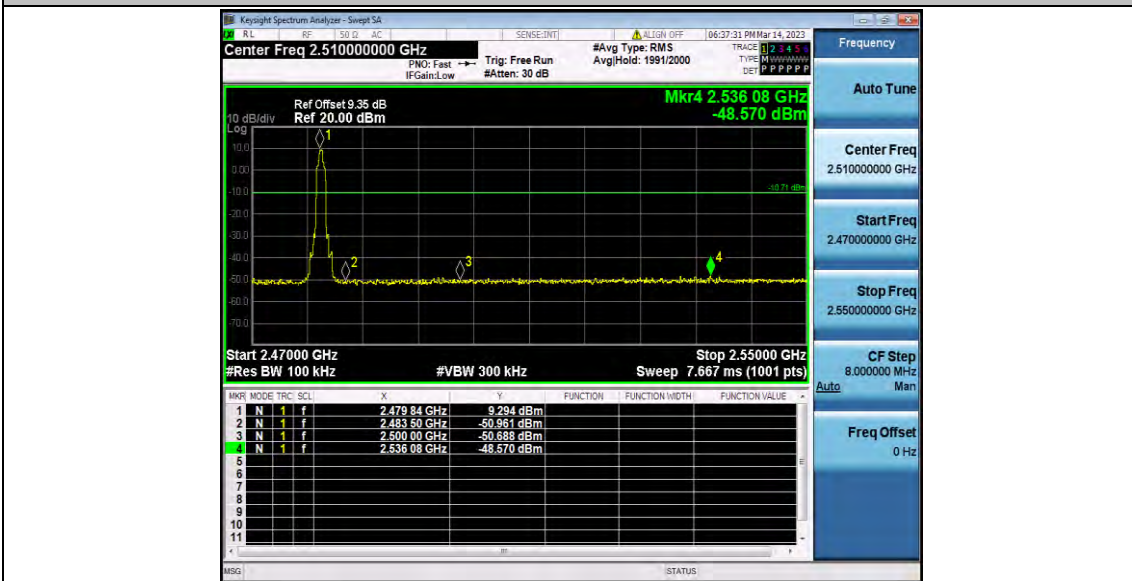
2DH1_Ant1_High_Hop_2480



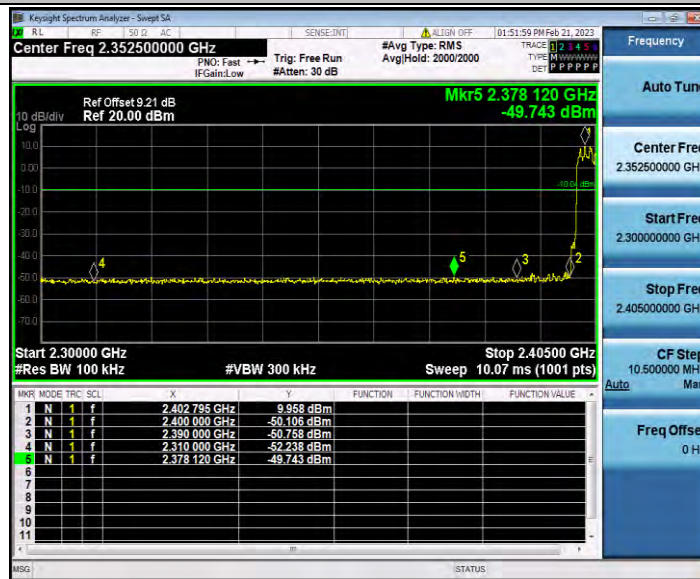
3DH1_Ant1_Low_2402



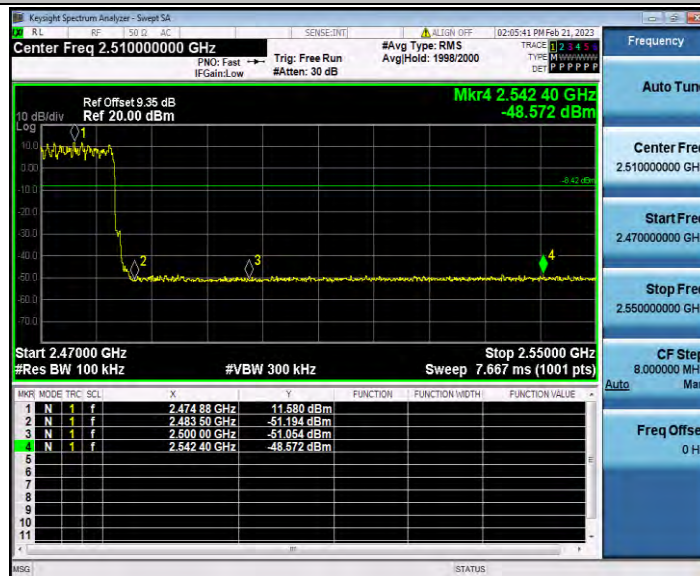
3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	9.08	9.08	---	PASS
			30~1000	9.08	-60.11	≤-10.92	PASS
			1000~26500	9.08	-47.06	≤-10.92	PASS
		2441	Reference	10.30	10.30	---	PASS
			30~1000	10.30	-59.83	≤-9.7	PASS
			1000~26500	10.30	-44.31	≤-9.7	PASS
		2480	Reference	11.20	11.20	---	PASS
			30~1000	11.20	-59.78	≤-8.8	PASS
			1000~26500	11.20	-46.96	≤-8.8	PASS
2DH1	Ant1	2402	Reference	8.56	8.56	---	PASS
			30~1000	8.56	-60.07	≤-11.44	PASS
			1000~26500	8.56	-46.98	≤-11.44	PASS
		2441	Reference	8.97	8.97	---	PASS
			30~1000	8.97	-60	≤-11.03	PASS
			1000~26500	8.97	-46.3	≤-11.03	PASS
		2480	Reference	10.01	10.01	---	PASS
			30~1000	10.01	-59.43	≤-9.99	PASS
			1000~26500	10.01	-47.22	≤-9.99	PASS
3DH1	Ant1	2402	Reference	6.80	6.80	---	PASS
			30~1000	6.80	-60.56	≤-13.2	PASS
			1000~26500	6.80	-48.08	≤-13.2	PASS
		2441	Reference	6.86	6.86	---	PASS
			30~1000	6.86	-59.92	≤-13.14	PASS
			1000~26500	6.86	-47	≤-13.14	PASS
		2480	Reference	8.80	8.80	---	PASS
			30~1000	8.80	-60.37	≤-11.2	PASS
			1000~26500	8.80	-47.14	≤-11.2	PASS

Test Graphs

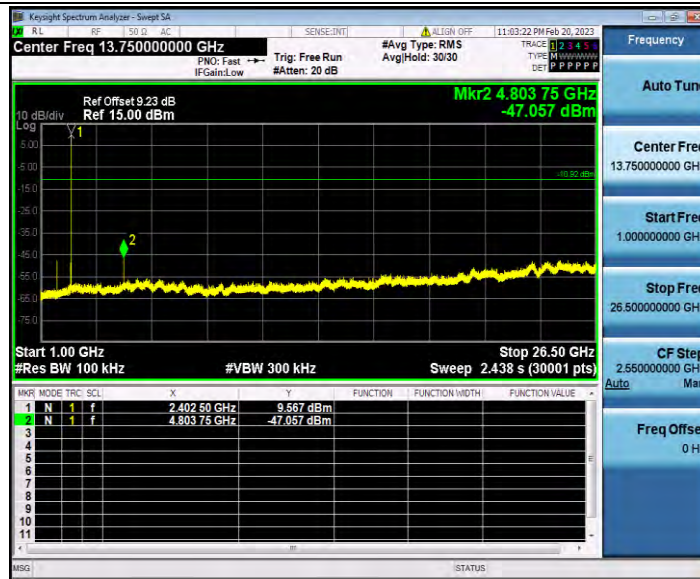
DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



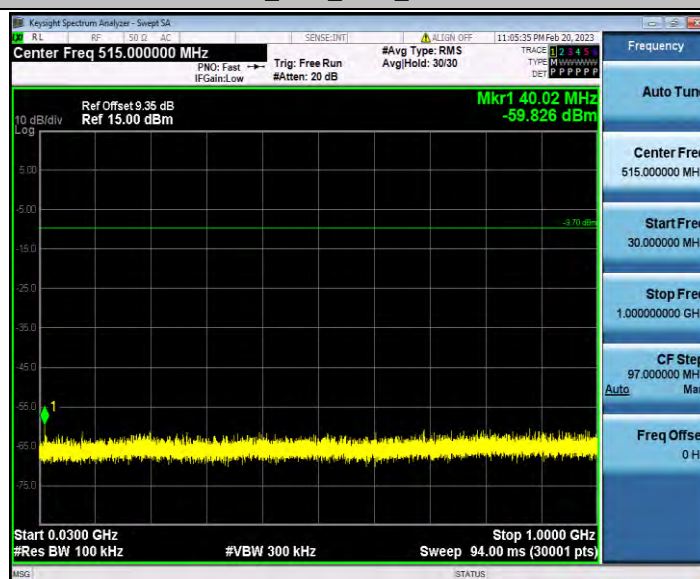
DH1_Ant1_2402_1000~26500



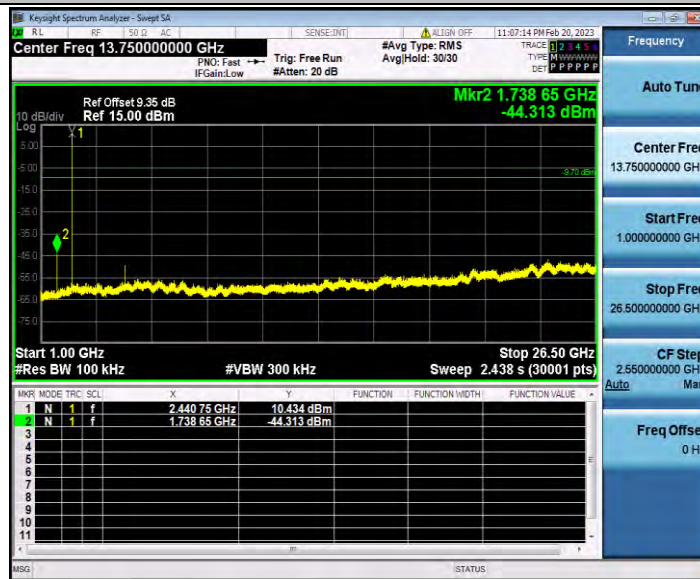
DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



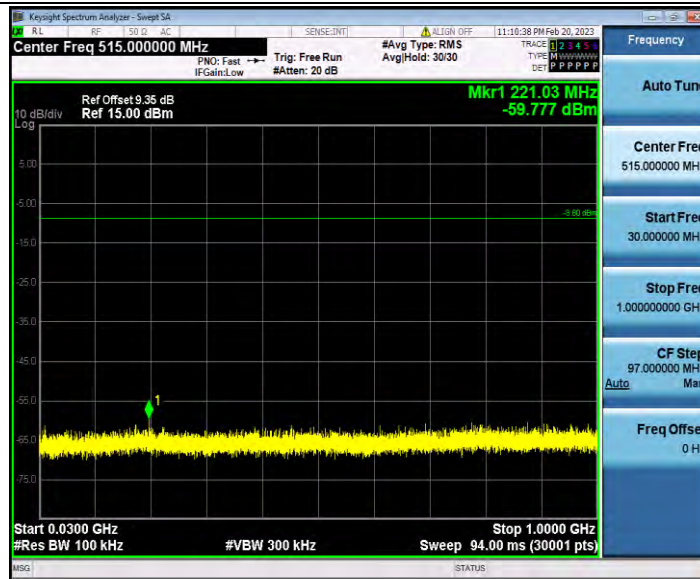
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000



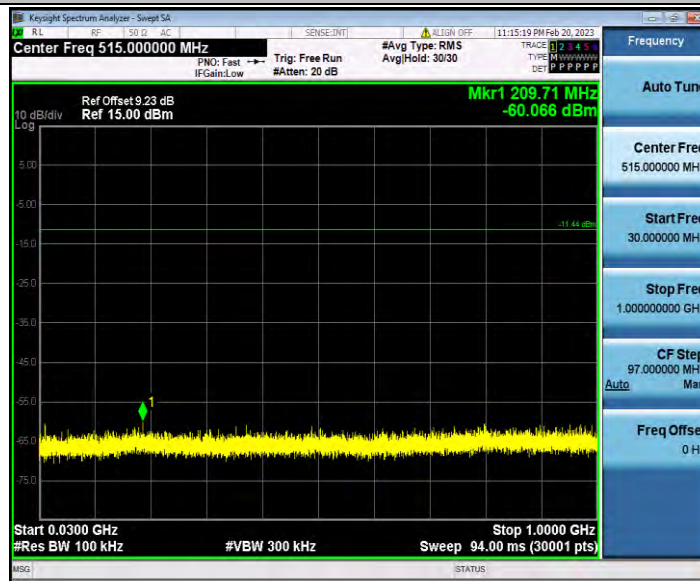
DH1_Ant1_2480_1000~26500



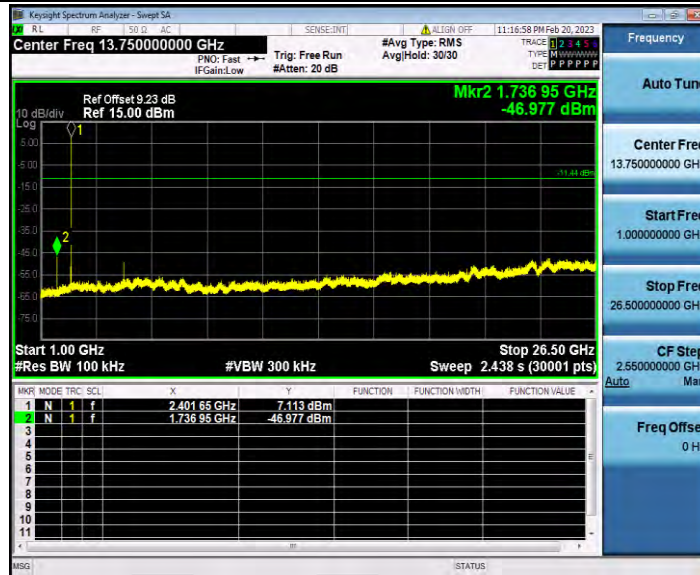
2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



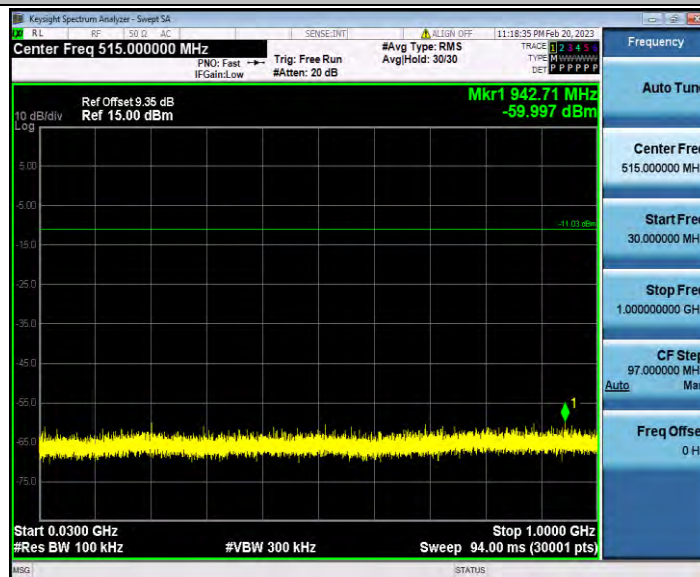
2DH1_Ant1_2402_1000~26500



2DH1_Ant1_2441_0~Reference



2DH1_Ant1_2441_30~1000



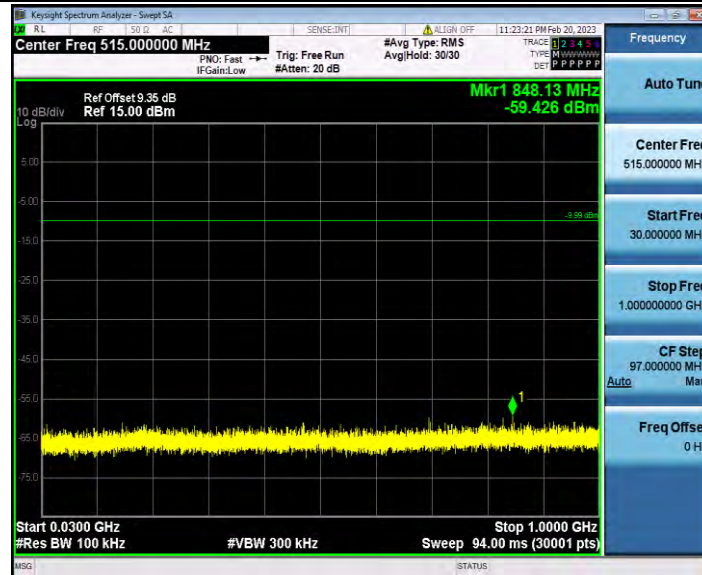
2DH1_Ant1_2441_1000~26500



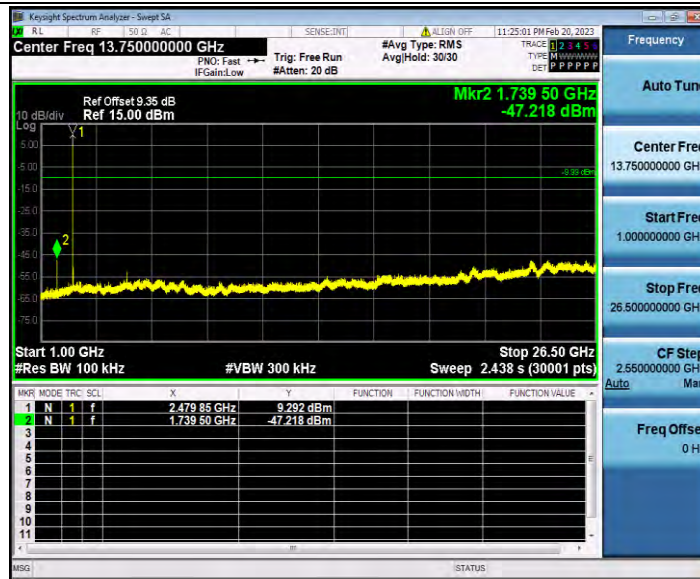
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



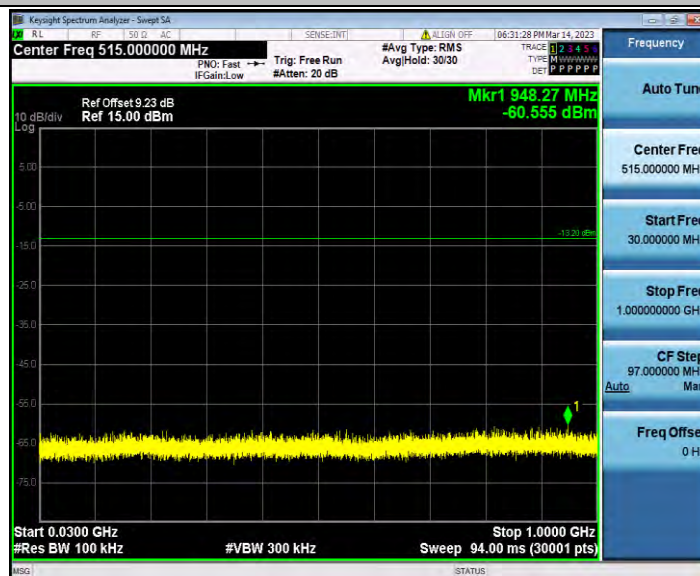
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



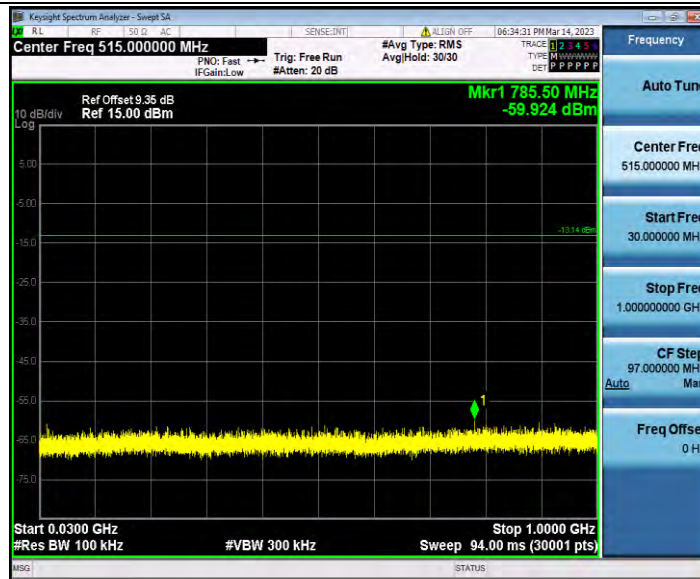
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



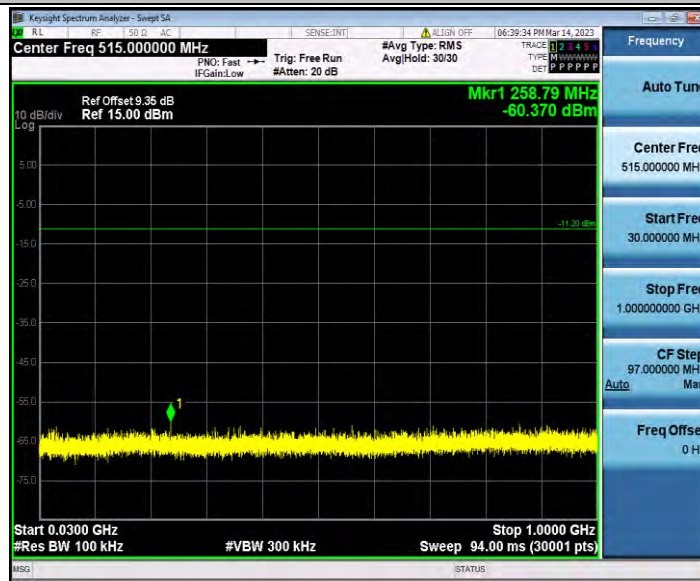
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500

