

Case No. : <u>GTS20230105011-1-44</u>
Ambient Condition: <u>23</u> °C, <u>50</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.3.1</u> Test Engineer: <u>Jenny zeng</u>

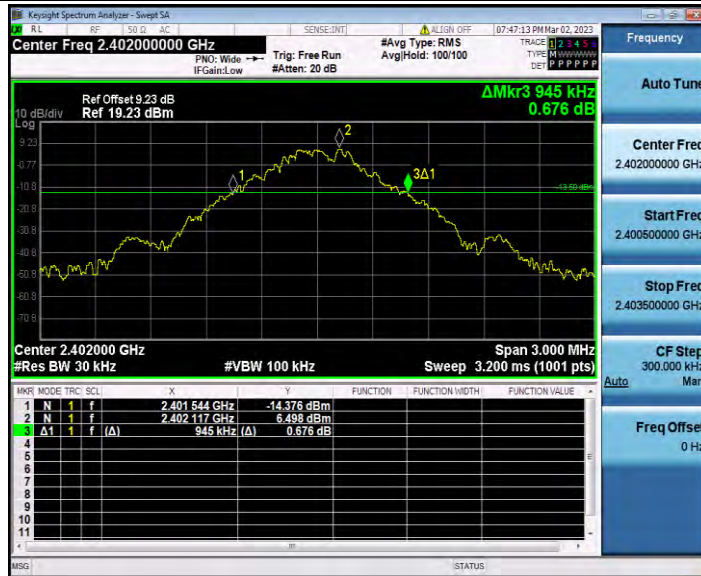
Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.945	2401.544	2402.489	---	---
		2441	0.948	2440.547	2441.495	---	---
		2480	0.945	2479.544	2480.489	---	---
2DH1	Ant1	2402	1.473	2401.241	2402.714	---	---
		2441	1.467	2440.247	2441.714	---	---
		2480	1.500	2479.235	2480.735	---	---
3DH1	Ant1	2402	1.491	2401.271	2402.762	---	---
		2441	1.458	2440.280	2441.738	---	---
		2480	1.464	2479.271	2480.735	---	---

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



3D1_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	0.83994	2401.581	2402.421	---	---
		2441	0.82681	2440.590	2441.417	---	---
		2480	0.83845	2479.575	2480.413	---	---
2DH1	Ant1	2402	1.3337	2401.329	2402.663	---	---
		2441	1.3252	2440.336	2441.661	---	---
		2480	1.3359	2479.333	2480.669	---	---
3DH1	Ant1	2402	1.3446	2401.328	2402.672	---	---
		2441	1.3252	2440.335	2441.660	---	---
		2480	1.3423	2479.327	2480.669	---	---

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	9.58	≤30.00	PASS
		2441	10.65	≤30.00	PASS
		2480	10.48	≤30.00	PASS
2DH1	Ant1	2402	7.65	≤20.97	PASS
		2441	8.88	≤20.97	PASS
		2480	8.48	≤20.97	PASS
3DH1	Ant1	2402	7.76	≤20.97	PASS
		2441	8.94	≤20.97	PASS
		2480	8.64	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	1.004	≥ 0.948	PASS
		Hop_2441	0.992	≥ 0.948	PASS
		Hop_2480	0.998	≥ 0.948	PASS
2DH1	Ant1	Hop_2402	1.038	≥ 1.000	PASS
		Hop_2441	1.002	≥ 1.000	PASS
		Hop_2480	1.152	≥ 1.000	PASS
3DH1	Ant1	Hop_2402	0.998	≥ 0.994	PASS
		Hop_2441	1.16	≥ 0.994	PASS
		Hop_2480	1.018	≥ 0.994	PASS

Test Graphs

DH1_Ant1_Hop_2402



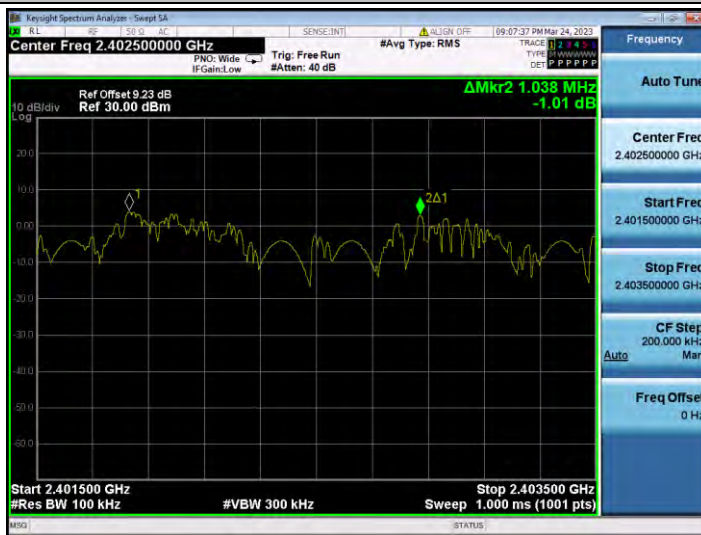
DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



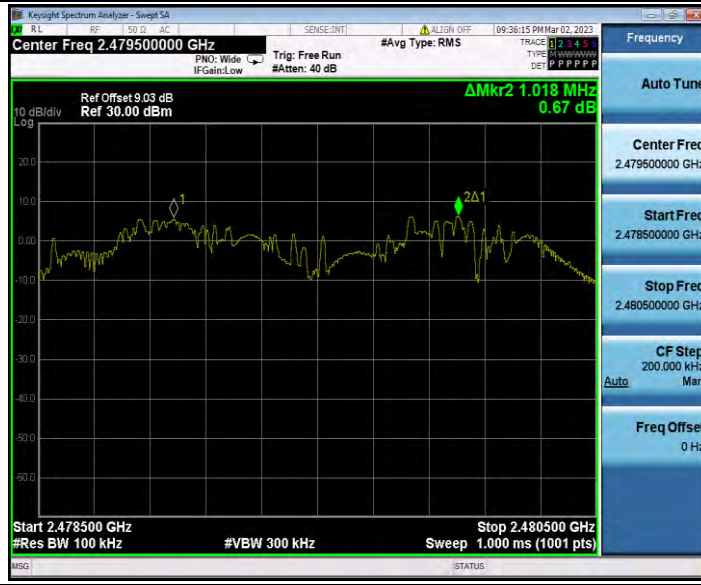
3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441



3DH1_Ant1_Hop_2480



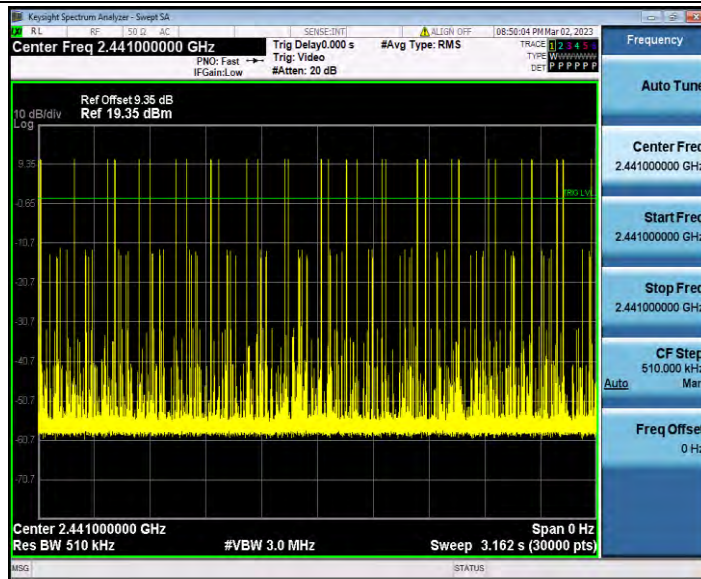
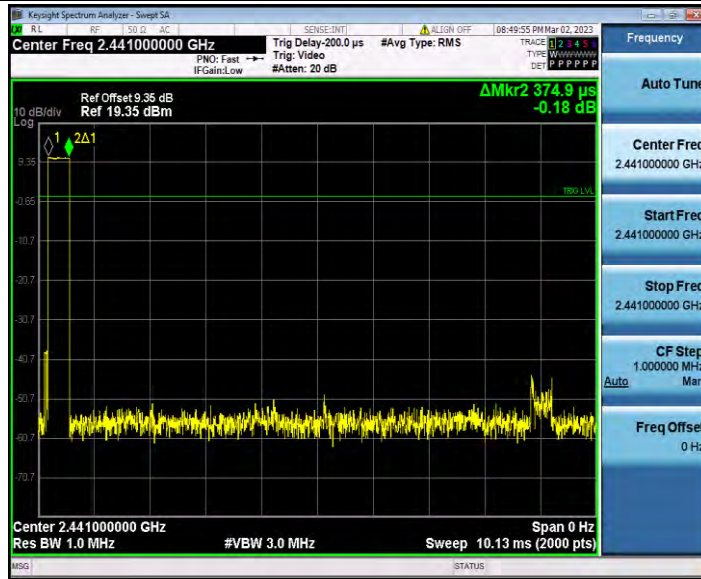
Appendix A.5: Time of occupancy

Test Result

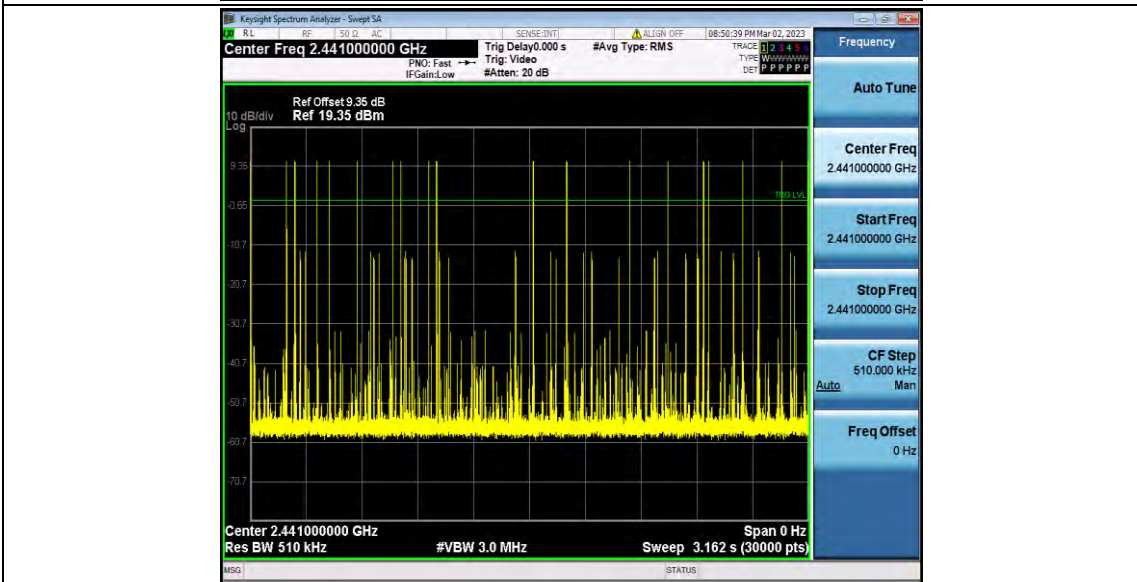
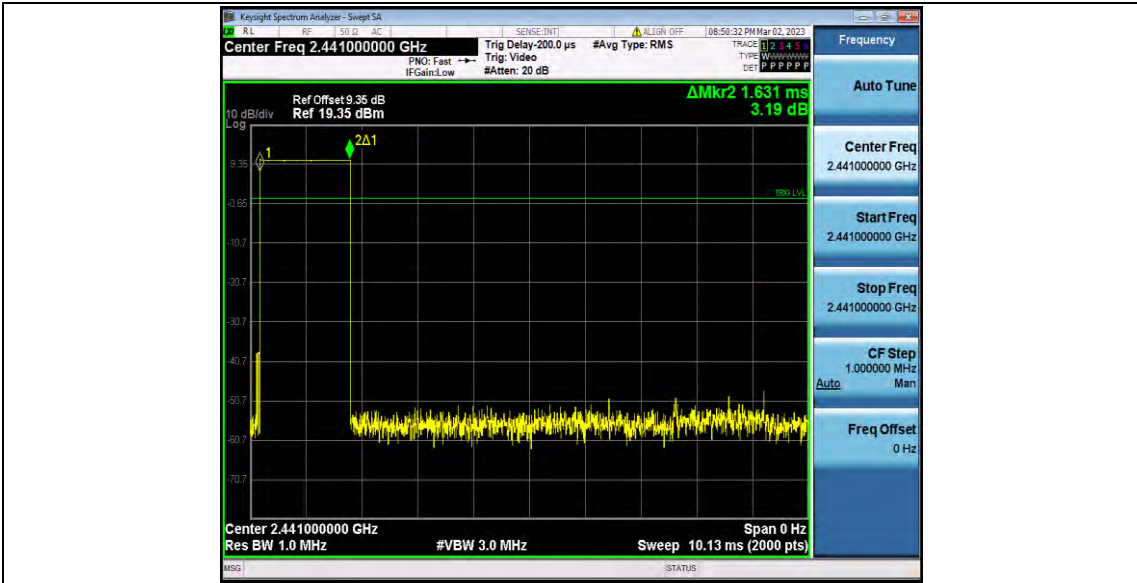
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.63	190	0.31	≤0.4	PASS
DH5	Ant1	Hop	2.87	130	0.373	≤0.4	PASS
2DH1	Ant1	Hop	0.38	330	0.125	≤0.4	PASS
2DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
2DH5	Ant1	Hop	2.88	120	0.345	≤0.4	PASS
3DH1	Ant1	Hop	0.38	330	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
3DH5	Ant1	Hop	2.88	120	0.345	≤0.4	PASS

Test Graphs

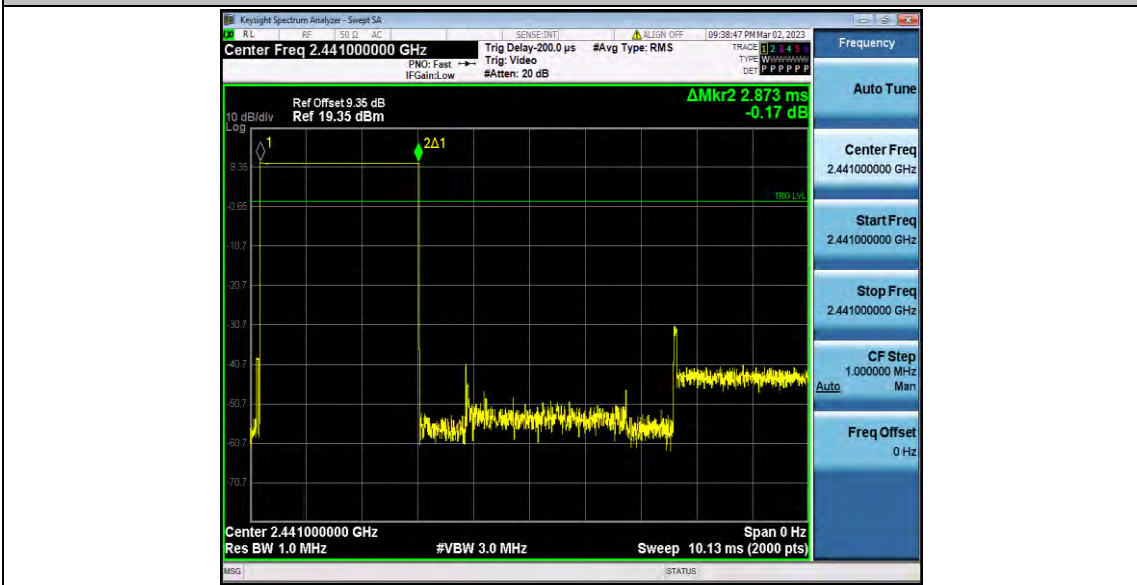
DH1_Ant1_Hop

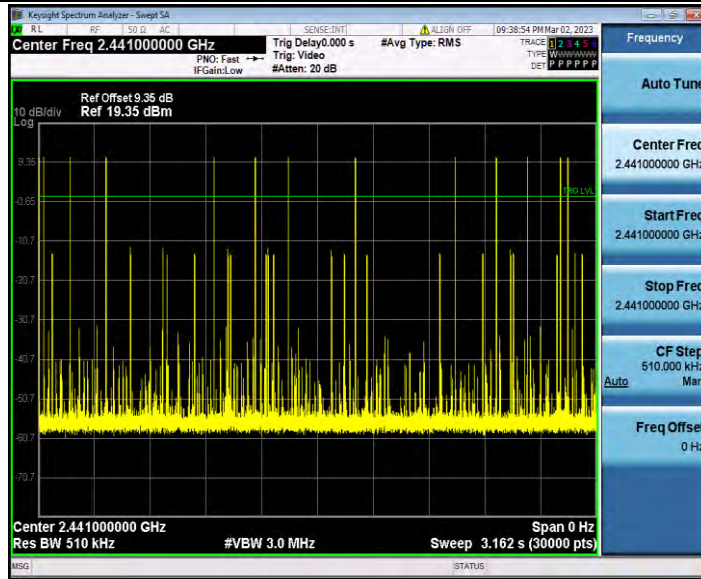


DH3_Ant1_Hop

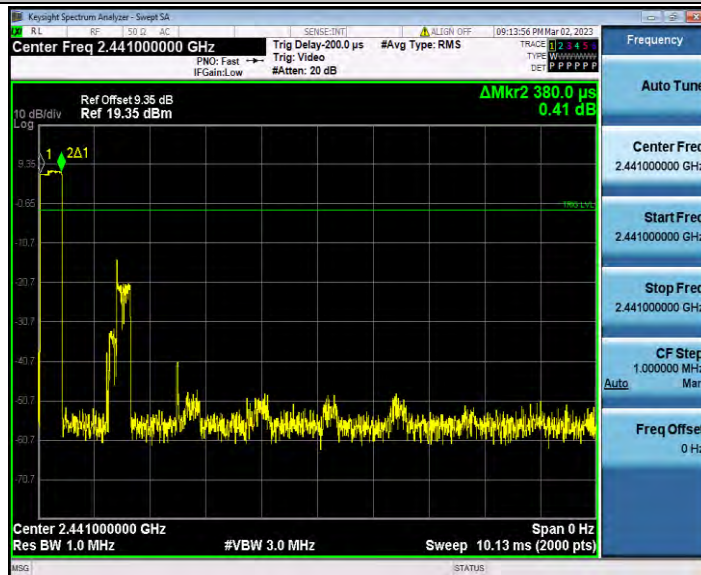


DH5_Ant1_Hop

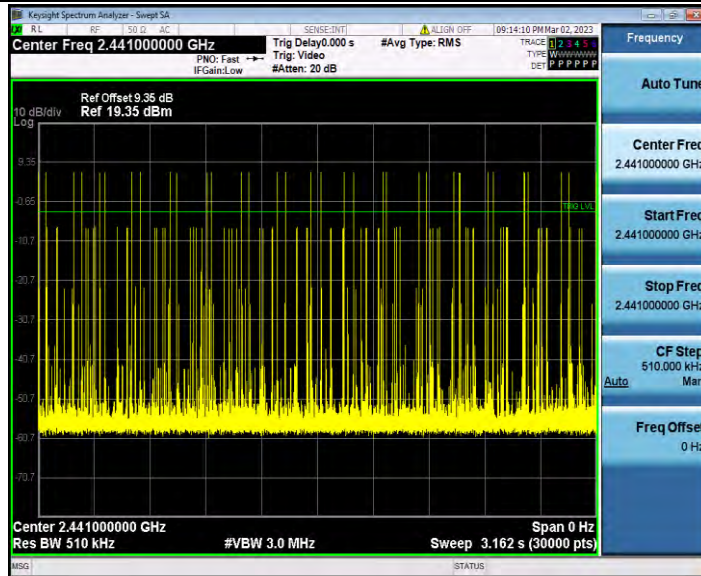


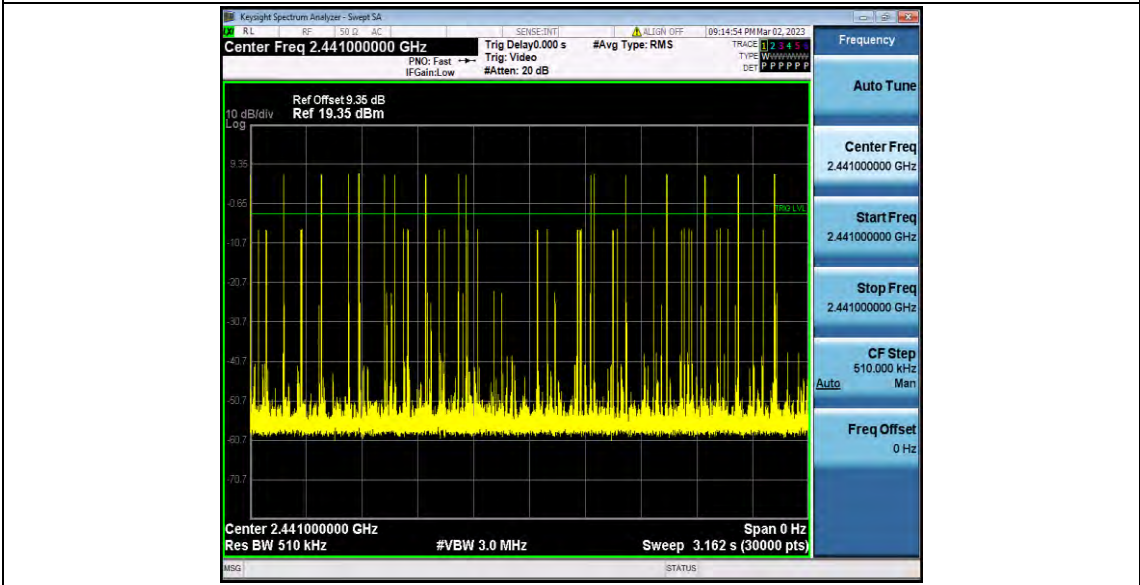
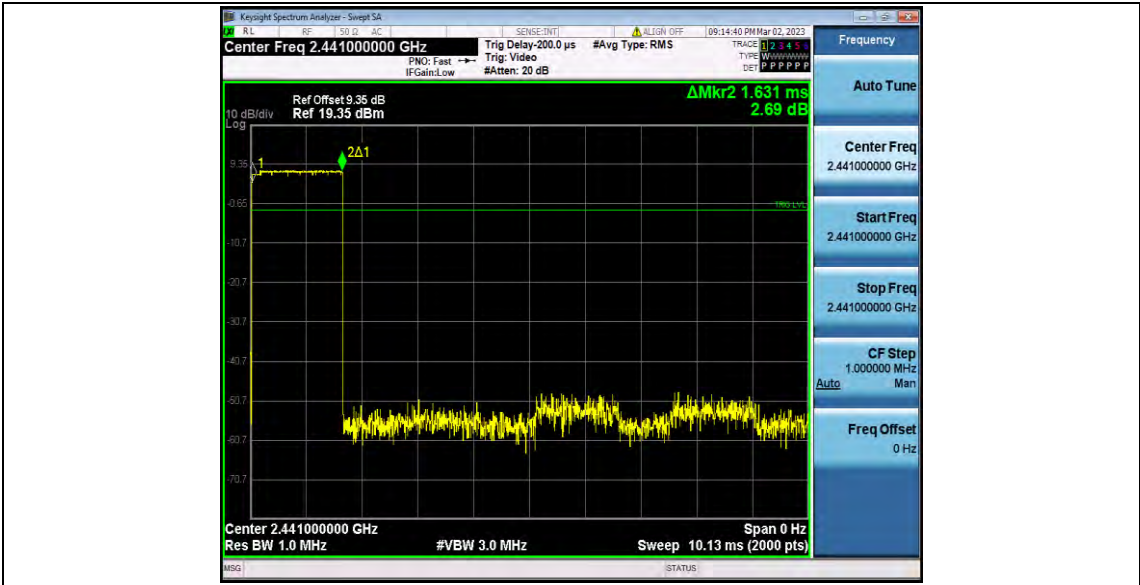


2DH1_Ant1_Hop

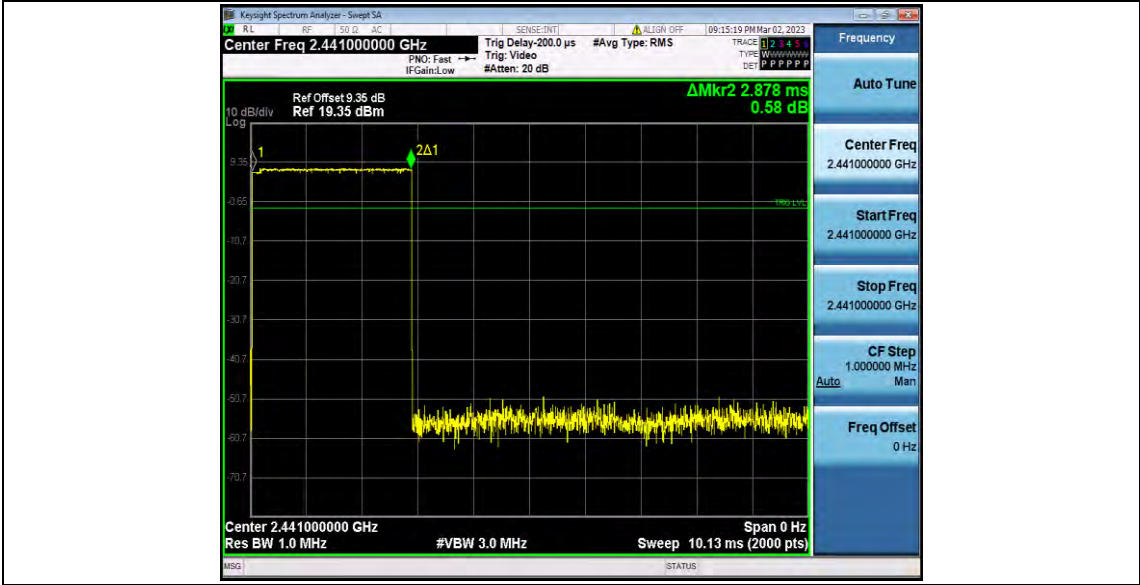


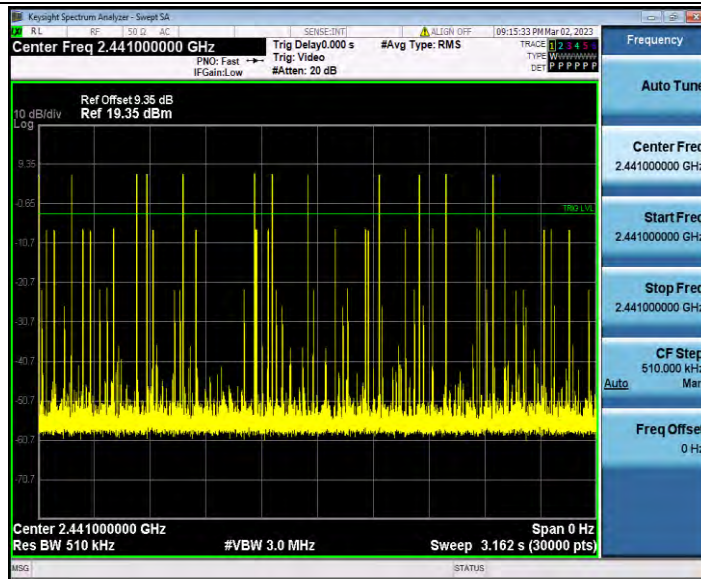
2DH3_Ant1_Hop



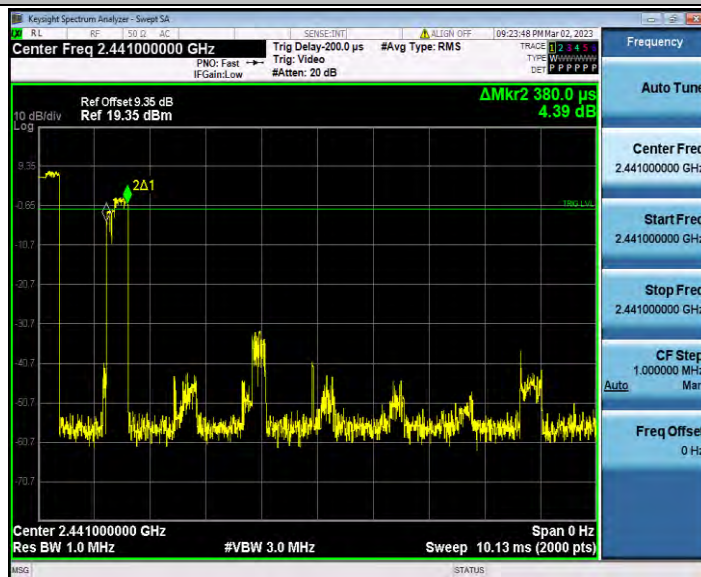


2DH5_Ant1_Hop

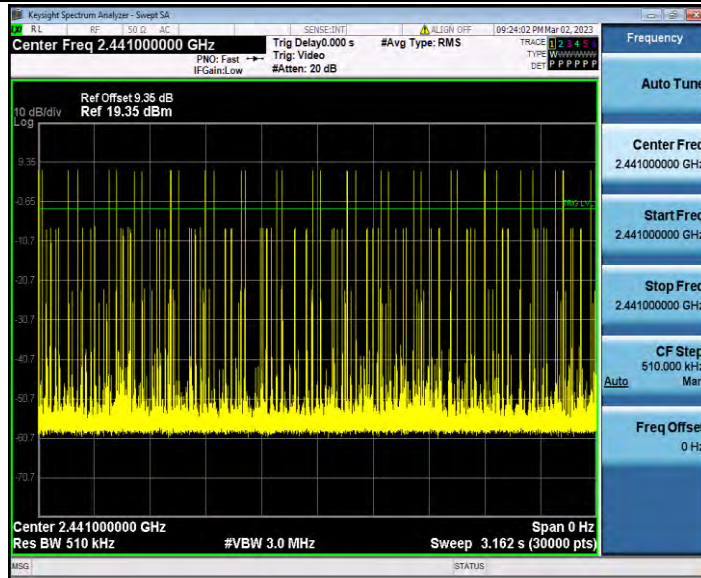


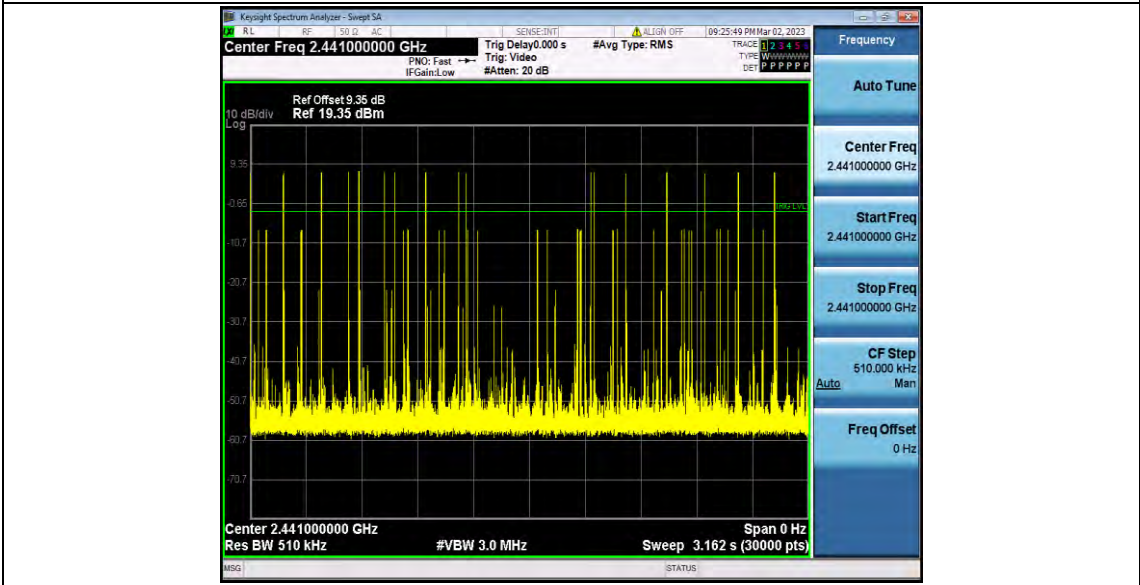
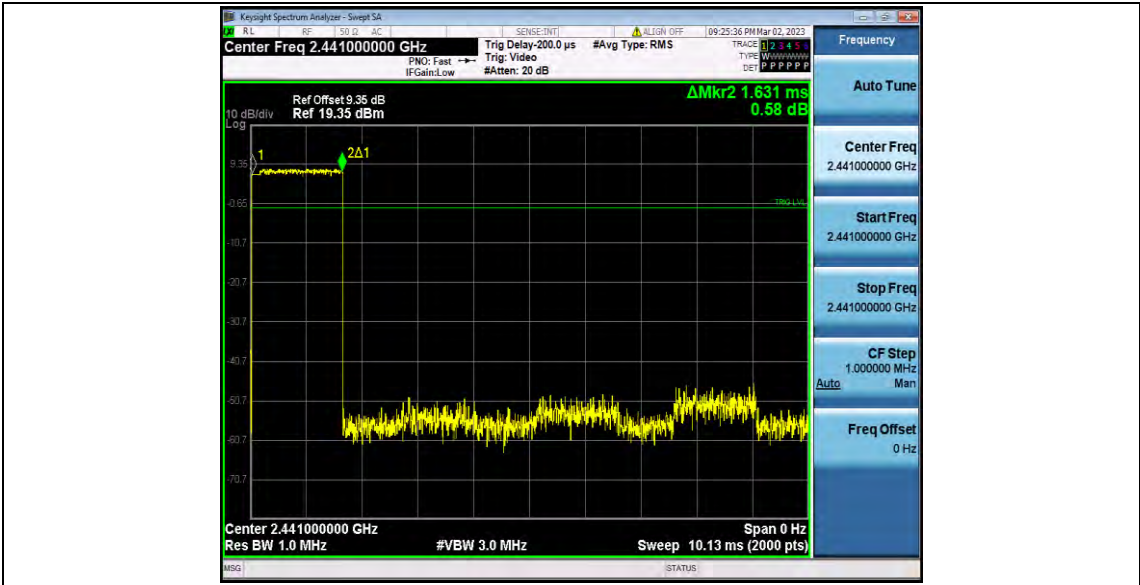


3DH1_Ant1_Hop



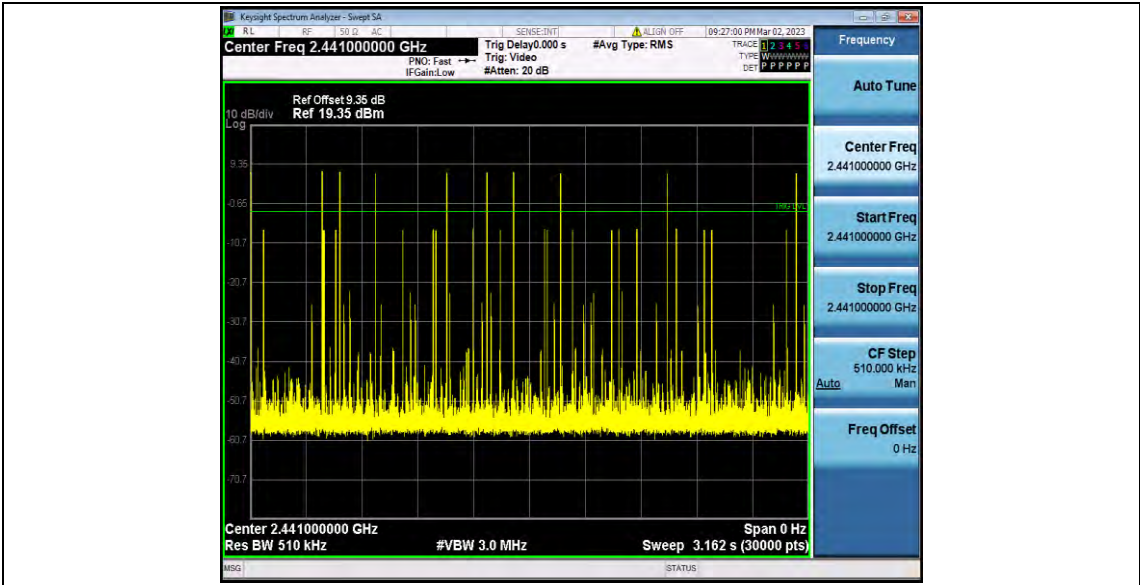
3DH3_Ant1_Hop





3DH5_Ant1_Hop





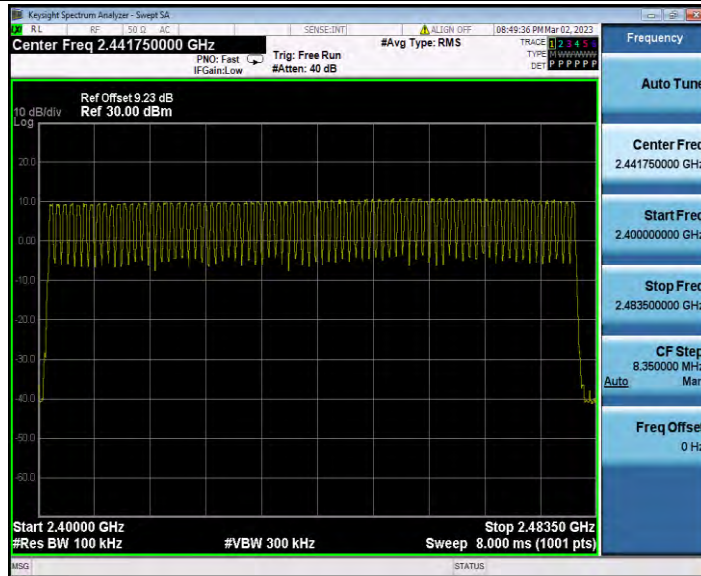
Appendix A.6: Number of hopping channels

Test Result

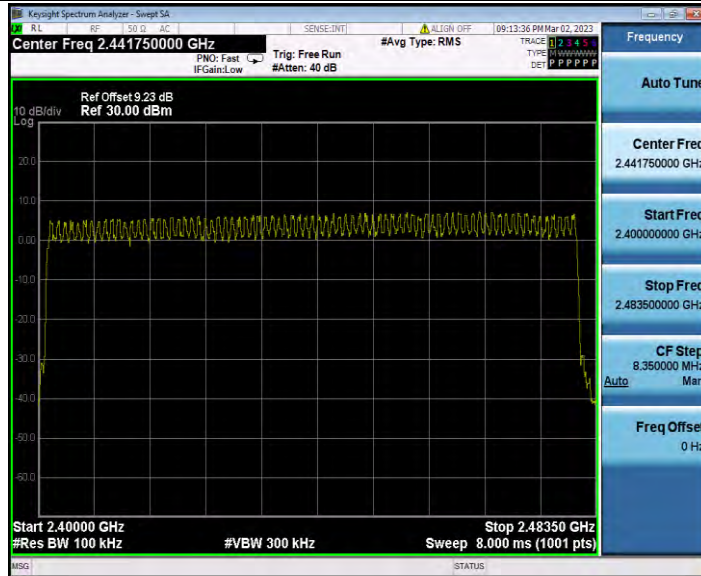
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

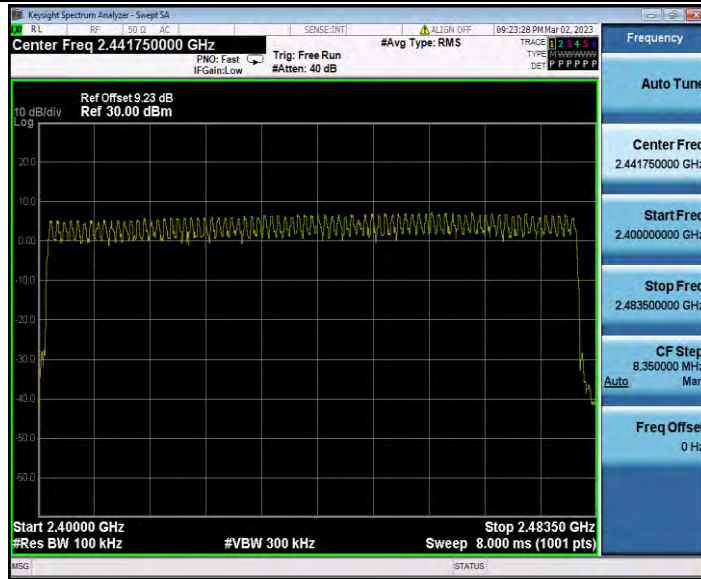
DH1_Ant1_Hop



2DH1_Ant1_Hop



3DH1_Ant1_Hop



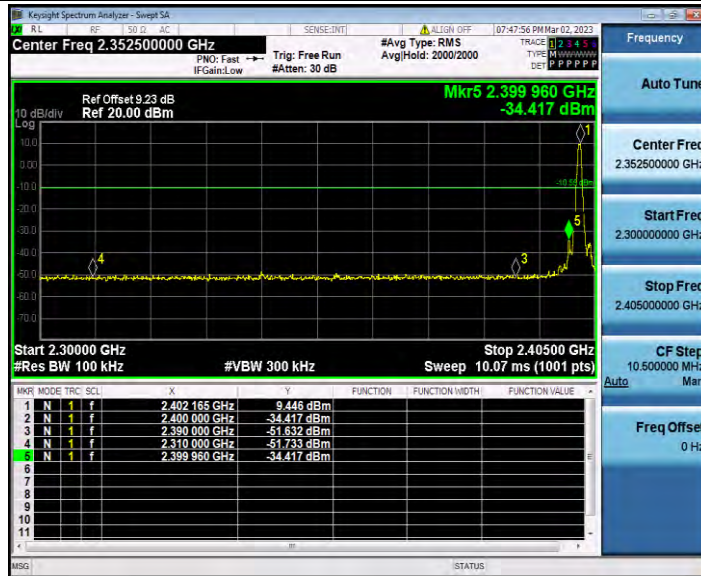
Appendix A.7: Band edge measurements

Test Result

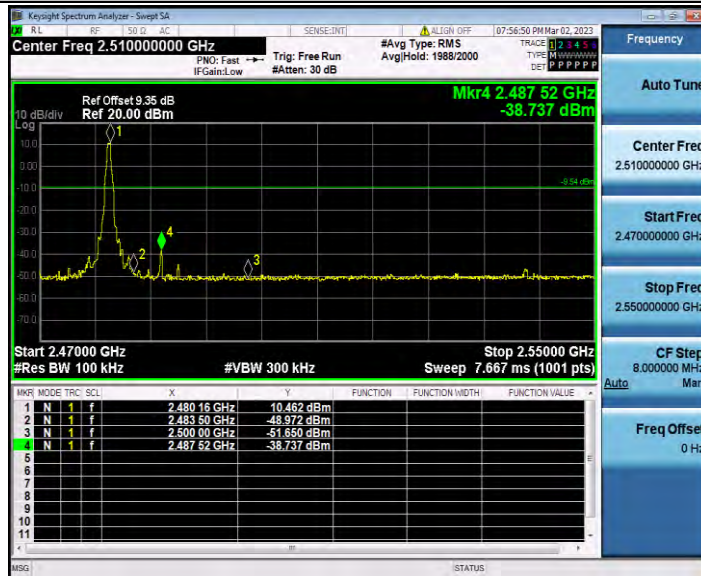
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	9.45	-34.42	≤-10.55	PASS
		High	2480	10.46	-38.74	≤-9.54	PASS
		Low	Hop_2402	9.34	-48.62	≤-10.66	PASS
		High	Hop_2480	10.43	-47.45	≤-9.57	PASS
2DH1	Ant1	Low	2402	5.40	-38.62	≤-14.6	PASS
		High	2480	6.41	-38.57	≤-13.59	PASS
		Low	Hop_2402	4.30	-48.39	≤-15.7	PASS
		High	Hop_2480	6.67	-48.79	≤-13.33	PASS
3DH1	Ant1	Low	2402	5.31	-38.27	≤-14.69	PASS
		High	2480	6.42	-38.67	≤-13.58	PASS
		Low	Hop_2402	4.72	-48.02	≤-15.28	PASS
		High	Hop_2480	6.44	-48.44	≤-13.56	PASS

Test Graphs

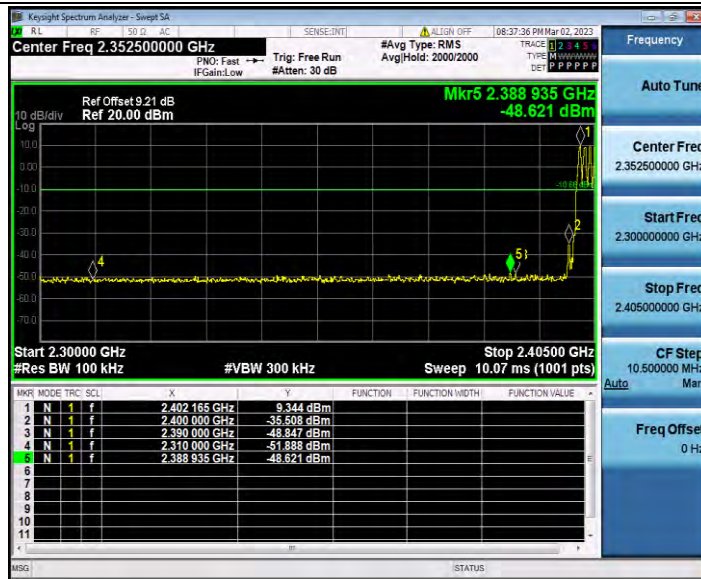
DH1_Ant1_Low_2402



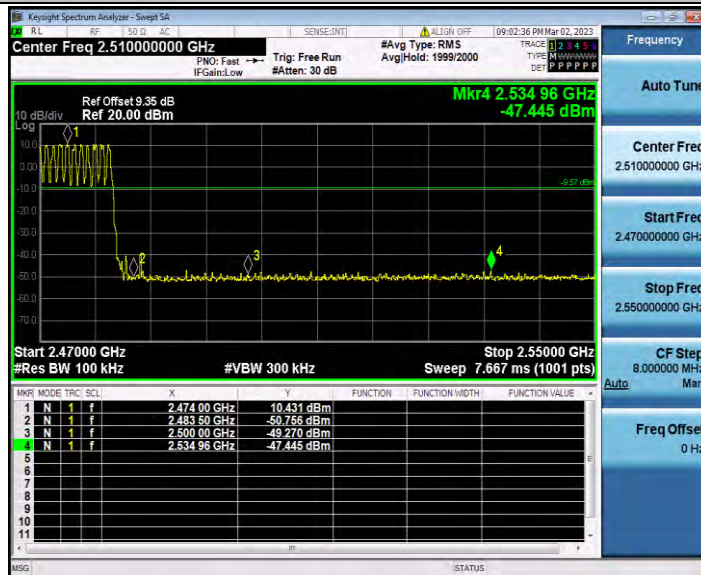
DH1_Ant1_High_2480



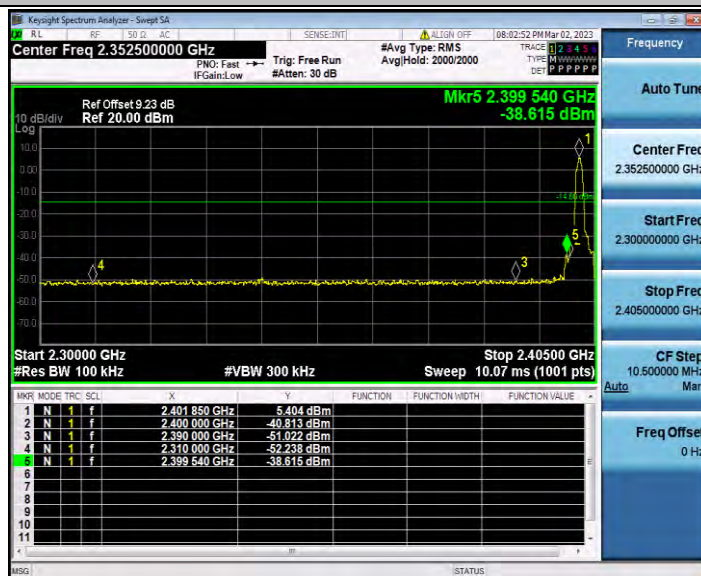
DH1_Ant1_Low_Hop_2402



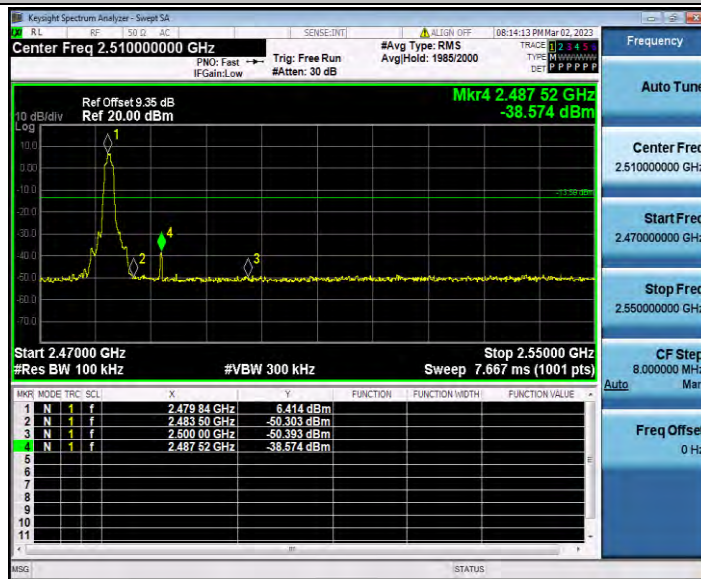
DH1_Ant1_High_Hop_2480



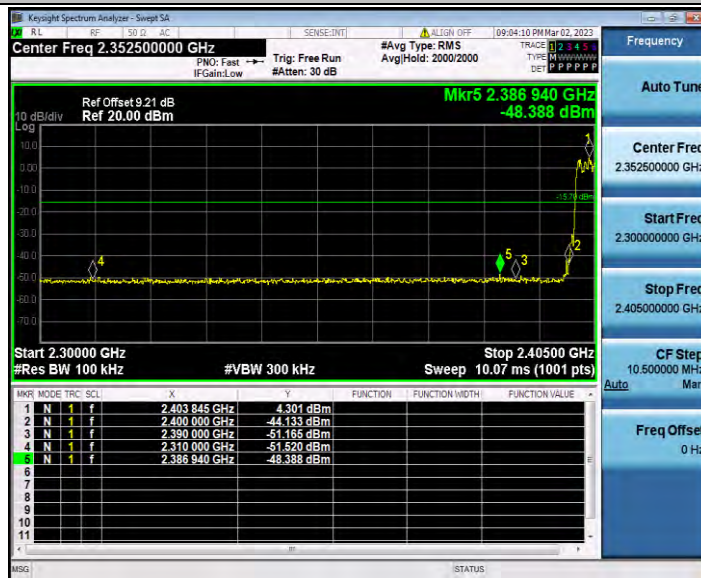
2DH1_Ant1_Low_2402



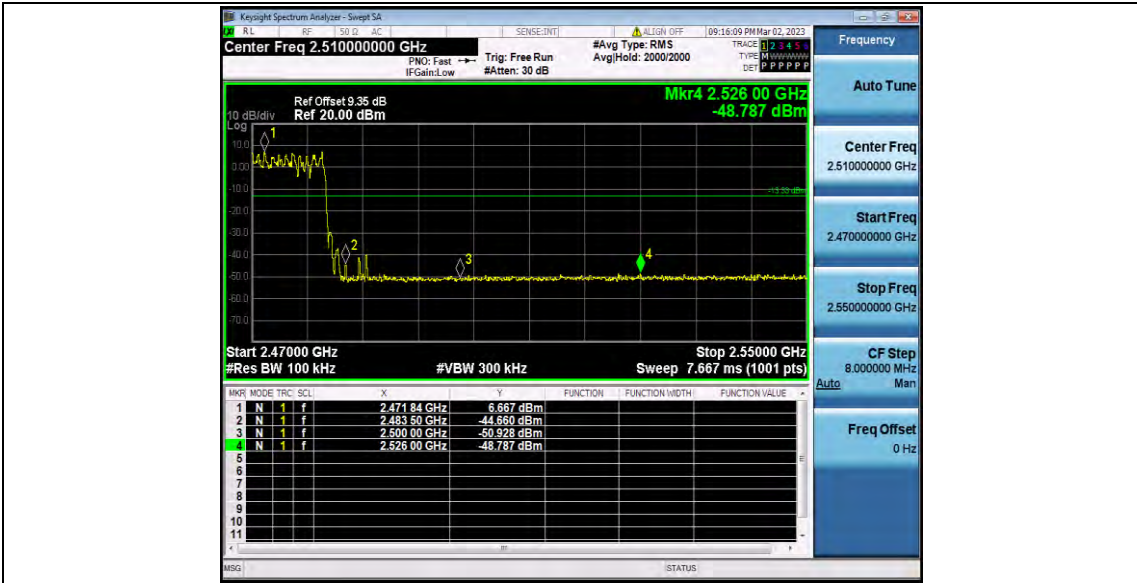
2DH1_Ant1_High_2480



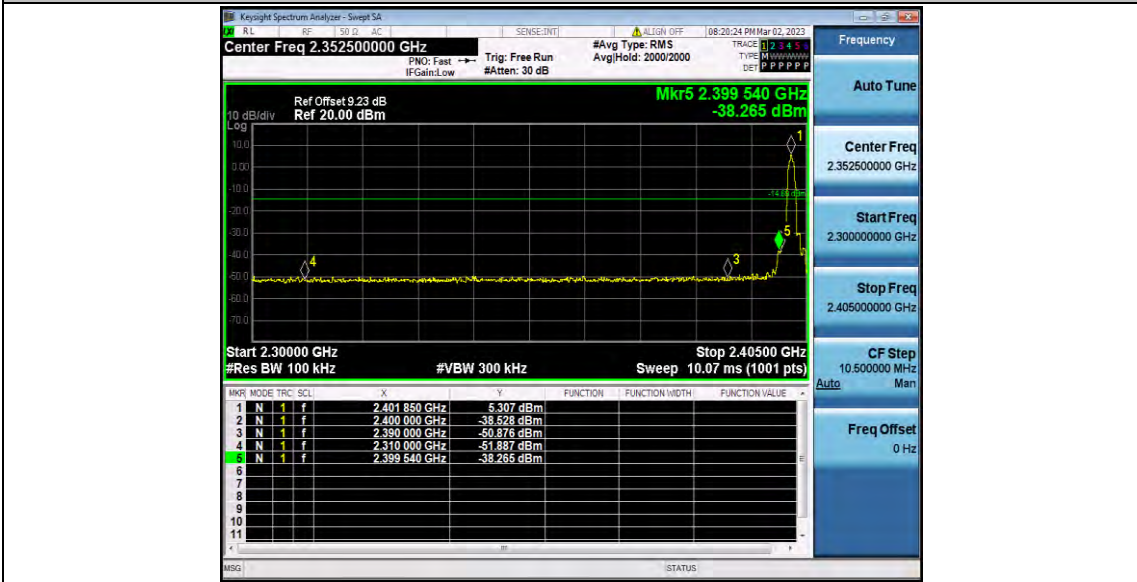
2DH1_Ant1_Low_Hop_2402



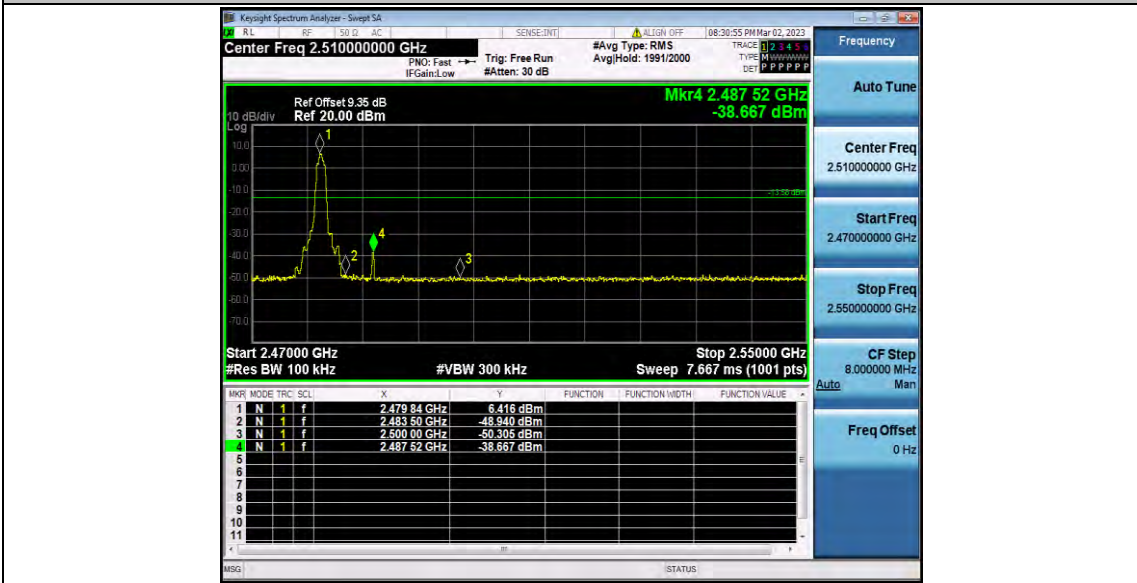
2DH1_Ant1_High_Hop_2480



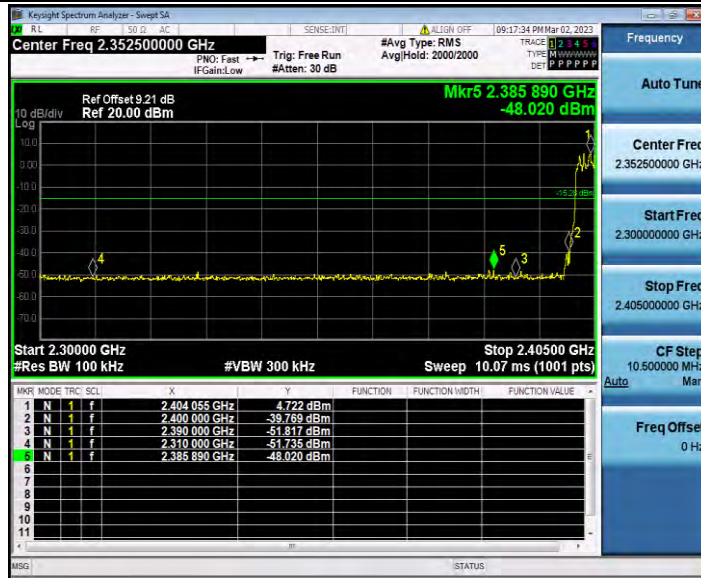
3DH1_Ant1_Low_2402



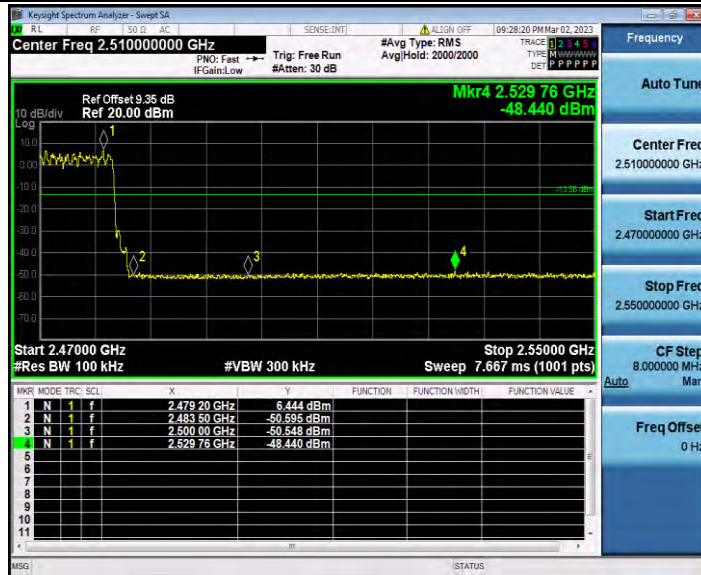
3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

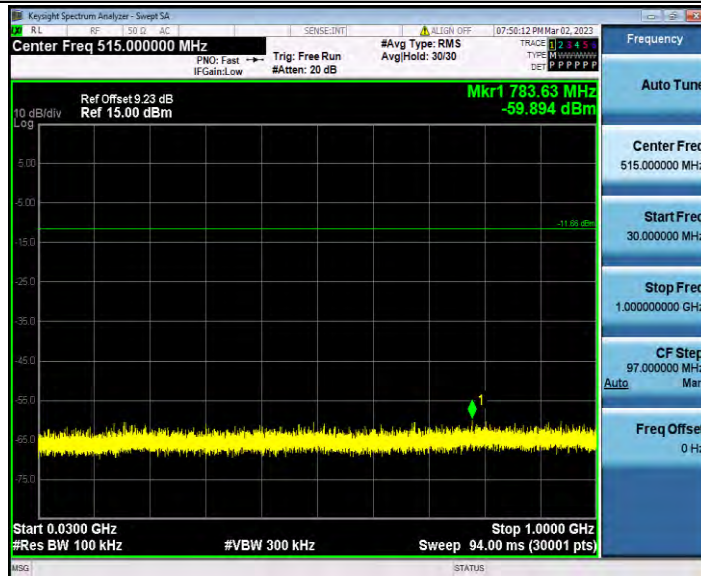
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	8.34	8.34	---	PASS
			30~1000	8.34	-59.89	≤-11.66	PASS
			1000~26500	8.34	-48.17	≤-11.66	PASS
		2441	Reference	10.36	10.36	---	PASS
			30~1000	10.36	-58.9	≤-9.64	PASS
			1000~26500	10.36	-46.82	≤-9.64	PASS
		2480	Reference	10.18	10.18	---	PASS
			30~1000	10.18	-59.92	≤-9.82	PASS
			1000~26500	10.18	-47.2	≤-9.82	PASS
2DH1	Ant1	2402	Reference	5.16	5.16	---	PASS
			30~1000	5.16	-59.66	≤-14.84	PASS
			1000~26500	5.16	-47.08	≤-14.84	PASS
		2441	Reference	6.59	6.59	---	PASS
			30~1000	6.59	-60.11	≤-13.41	PASS
			1000~26500	6.59	-47.23	≤-13.41	PASS
		2480	Reference	6.12	6.12	---	PASS
			30~1000	6.12	-60.17	≤-13.88	PASS
			1000~26500	6.12	-47.22	≤-13.88	PASS
3DH1	Ant1	2402	Reference	5.05	5.05	---	PASS
			30~1000	5.05	-60.01	≤-14.95	PASS
			1000~26500	5.05	-47.89	≤-14.95	PASS
		2441	Reference	6.30	6.30	---	PASS
			30~1000	6.30	-59.99	≤-13.7	PASS
			1000~26500	6.30	-47.13	≤-13.7	PASS
		2480	Reference	6.26	6.26	---	PASS
			30~1000	6.26	-57.65	≤-13.74	PASS
			1000~26500	6.26	-47.94	≤-13.74	PASS

Test Graphs

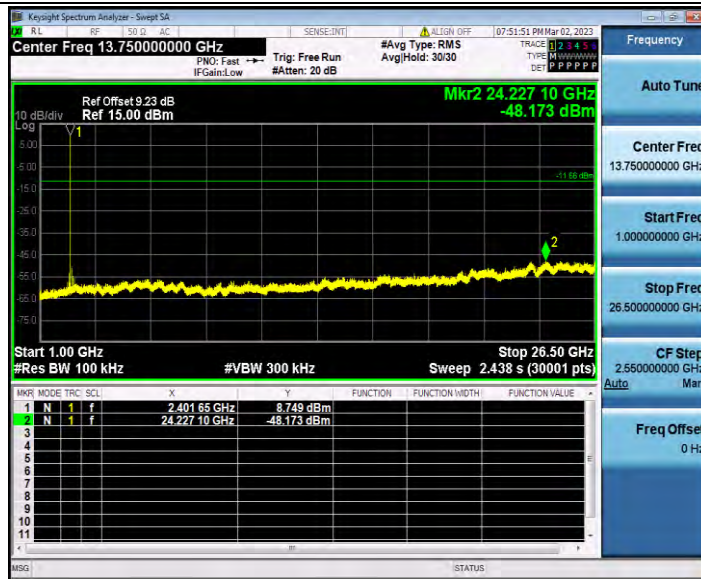
DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



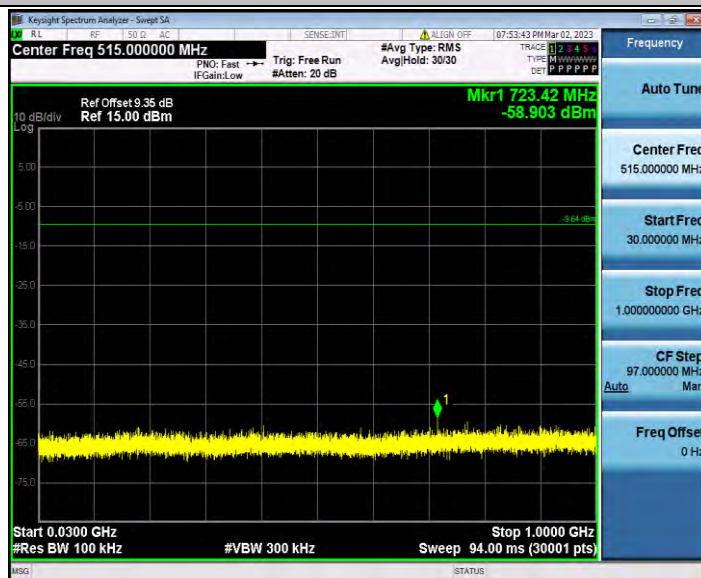
DH1_Ant1_2402_1000~26500



DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



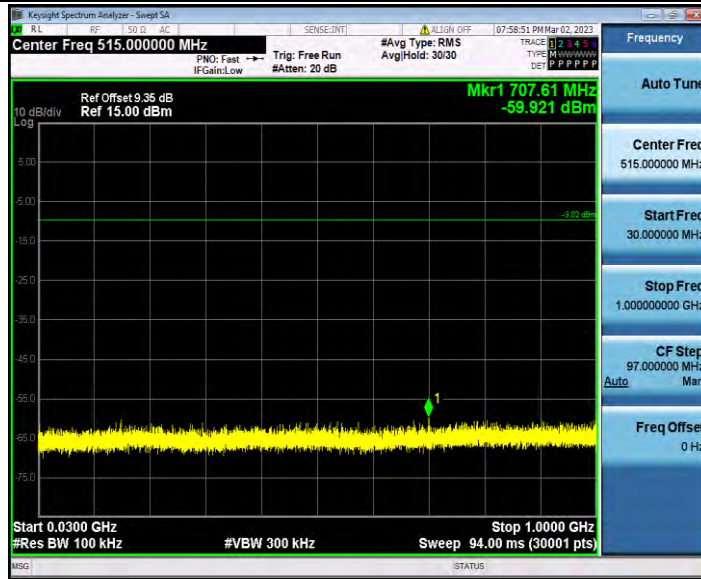
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



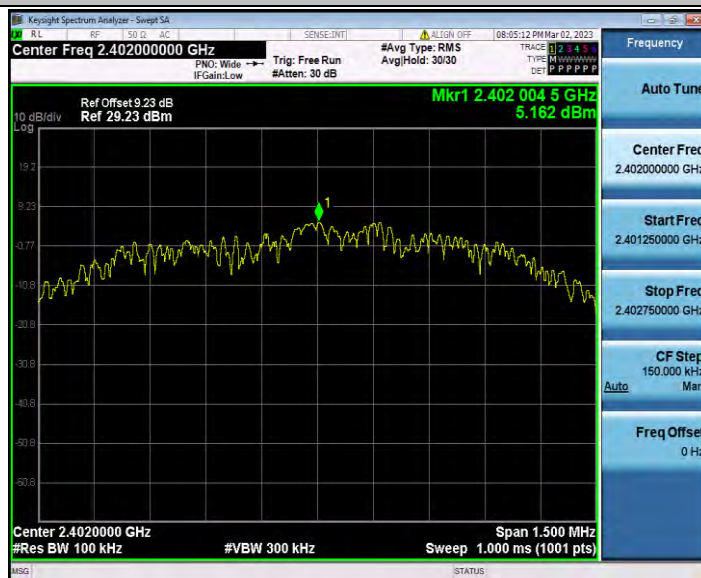
DH1_Ant1_2480_30~1000



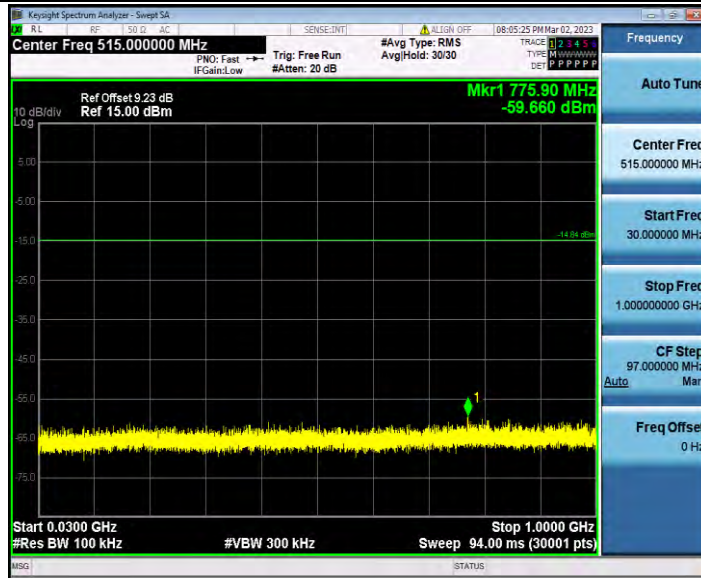
DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



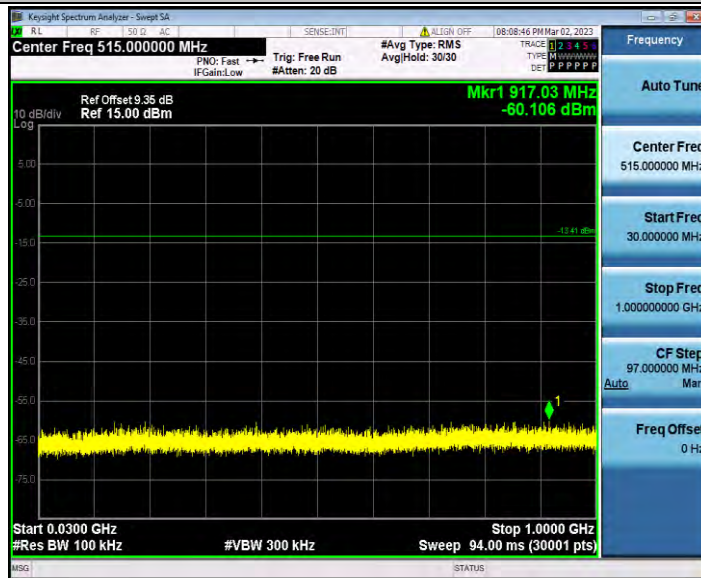
2DH1_Ant1_2402_1000~26500



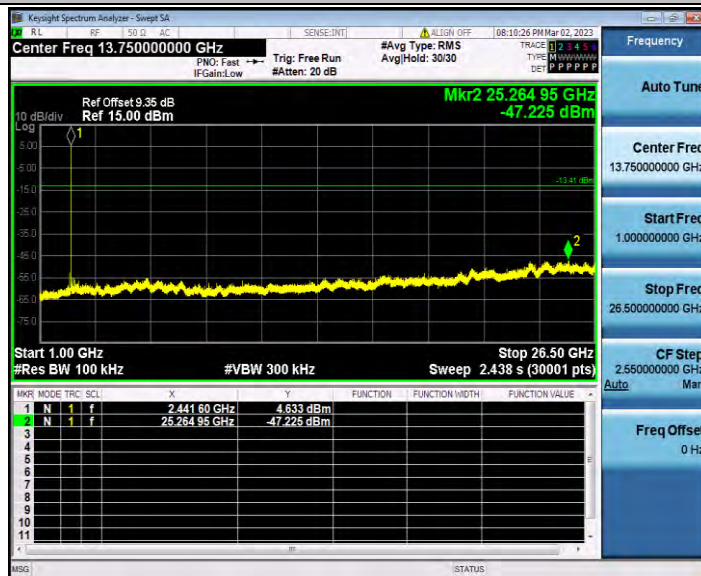
2DH1_Ant1_2441_0~Reference



2DH1_Ant1_2441_30~100



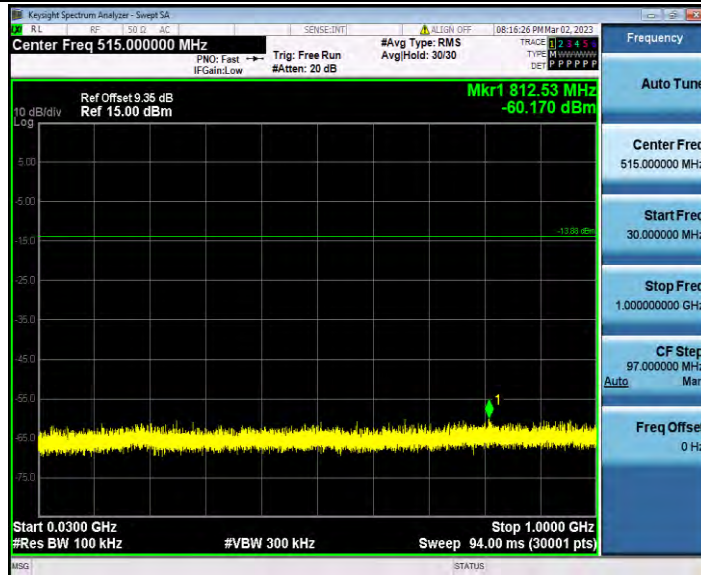
2DH1_Ant1_2441_1000~26500



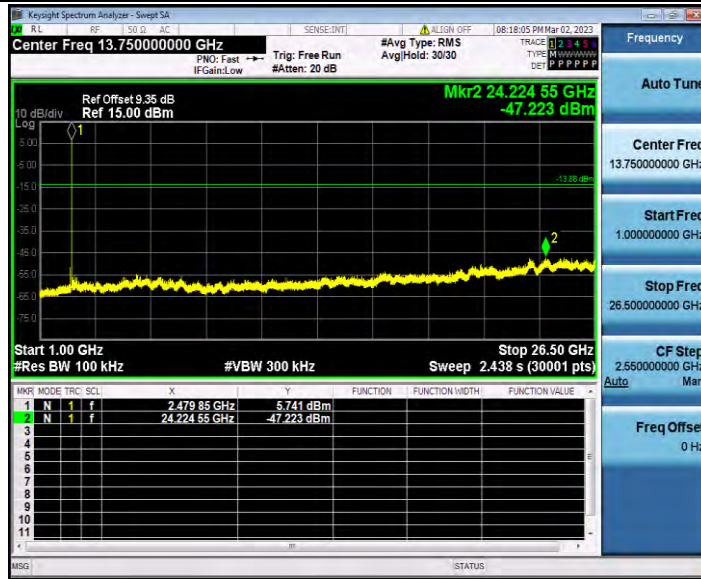
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



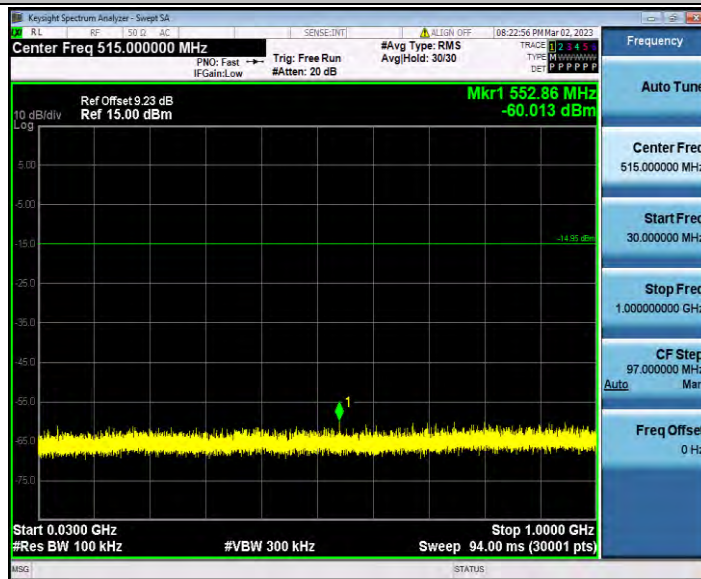
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



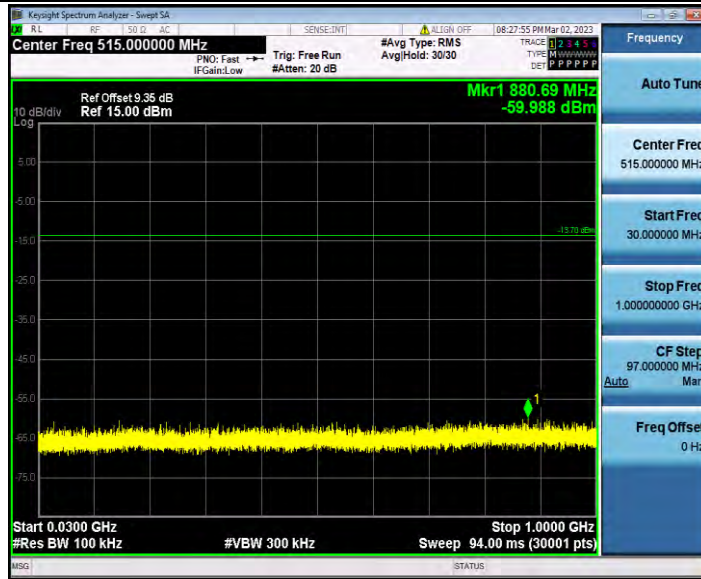
3DH1_Ant1_2402_1000~26500



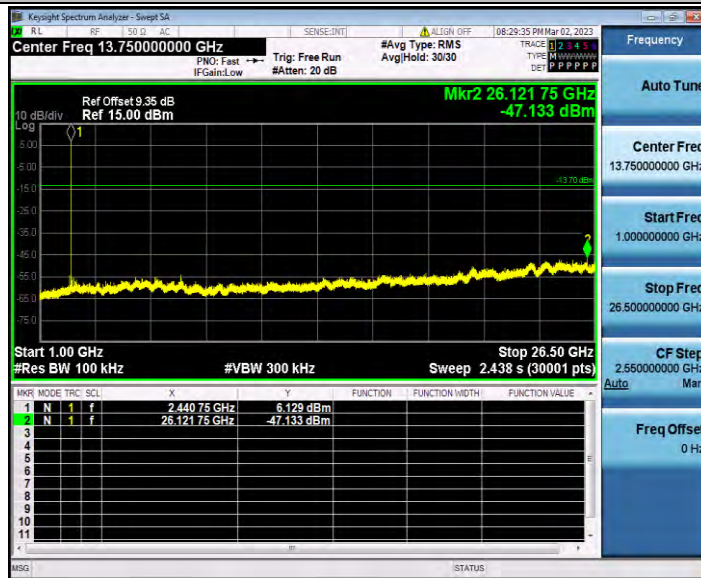
3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



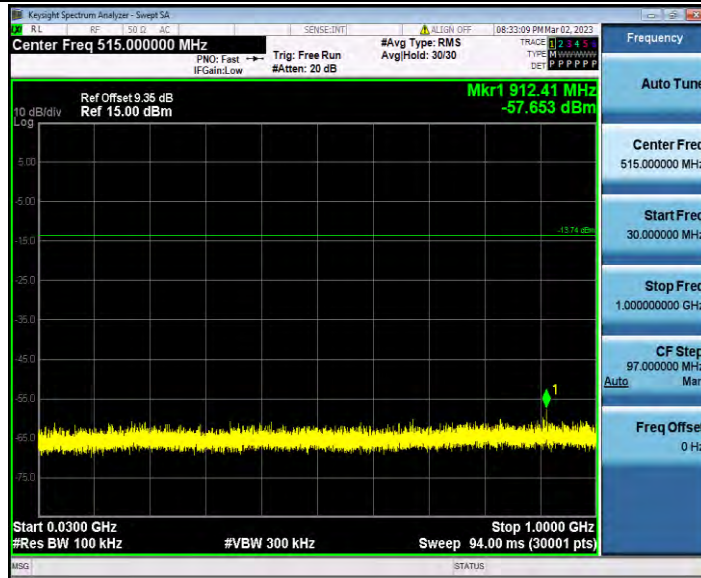
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500

