

Case No. : <u>GTS20230105004-1-1</u>	
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.2.2</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	0.906	2401.544	2402.450	---	---
		2441	0.876	2440.547	2441.423	---	---
		2480	0.933	2479.541	2480.474	---	---
2DH1	Ant1	2402	1.416	2401.271	2402.687	---	---
		2441	1.482	2440.220	2441.702	---	---
		2480	1.437	2479.253	2480.690	---	---
3DH1	Ant1	2402	1.473	2401.250	2402.723	---	---
		2441	1.491	2440.247	2441.738	---	---
		2480	1.482	2479.259	2480.741	---	---

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



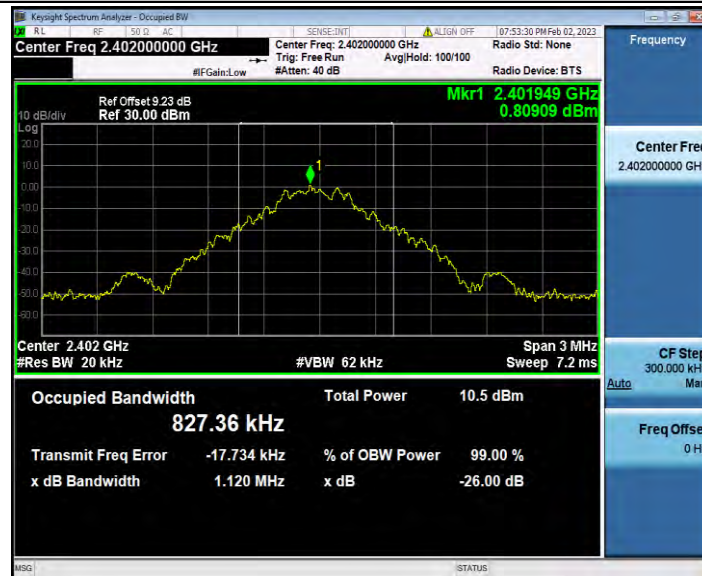
Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.82736	2401.569	2402.396	---	---
		2441	0.83223	2440.567	2441.399	---	---
		2480	0.83755	2479.565	2480.402	---	---
2DH1	Ant1	2402	1.3381	2401.315	2402.653	---	---
		2441	1.3374	2440.314	2441.651	---	---
		2480	1.3417	2479.311	2480.653	---	---
3DH1	Ant1	2402	1.3430	2401.309	2402.652	---	---
		2441	1.3427	2440.307	2441.650	---	---
		2480	1.3513	2479.305	2480.656	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480



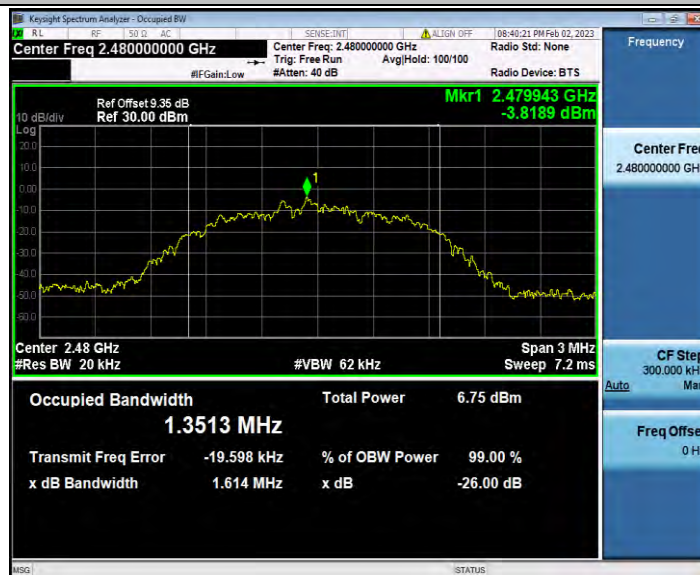
3DH1_Ant1_2402



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	4.37	≤20.97	PASS
		2441	5.17	≤20.97	PASS
		2480	4.3	≤20.97	PASS
2DH1	Ant1	2402	2.74	≤20.97	PASS
		2441	3.51	≤20.97	PASS
		2480	2.54	≤20.97	PASS
3DH1	Ant1	2402	2.83	≤20.97	PASS
		2441	3.63	≤20.97	PASS
		2480	2.71	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

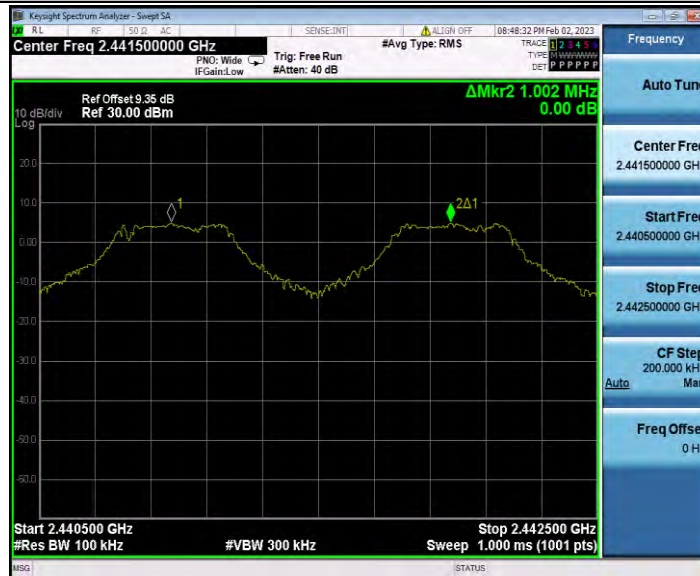
TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	1.004	≥ 0.622	PASS
		Hop_2441	1.002	≥ 0.622	PASS
		Hop_2480	0.838	≥ 0.622	PASS
2DH1	Ant1	Hop_2402	1.188	≥ 0.988	PASS
		Hop_2441	0.992	≥ 0.988	PASS
		Hop_2480	1.02	≥ 0.988	PASS
3DH1	Ant1	Hop_2402	1.006	≥ 0.994	PASS
		Hop_2441	0.996	≥ 0.994	PASS
		Hop_2480	1.304	≥ 0.994	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



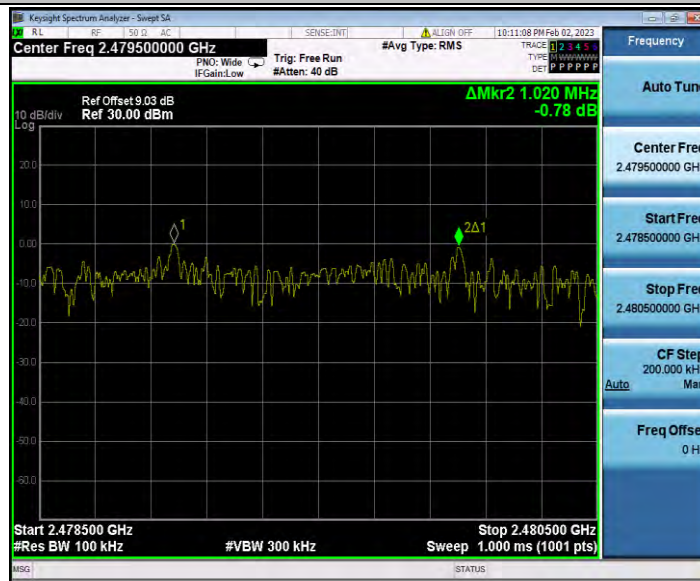
2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



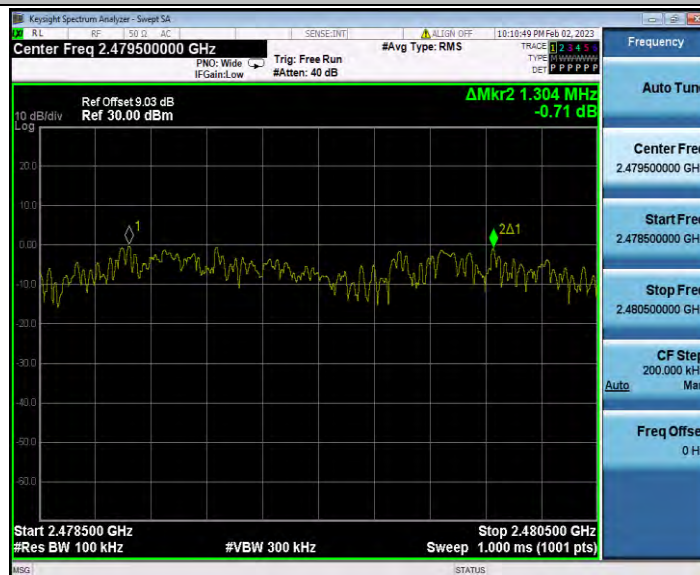
3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441



3DH1_Ant1_Hop_2480



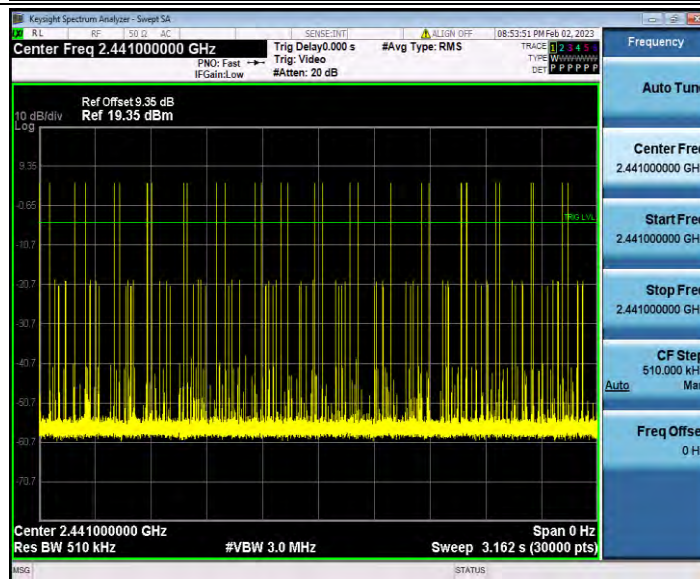
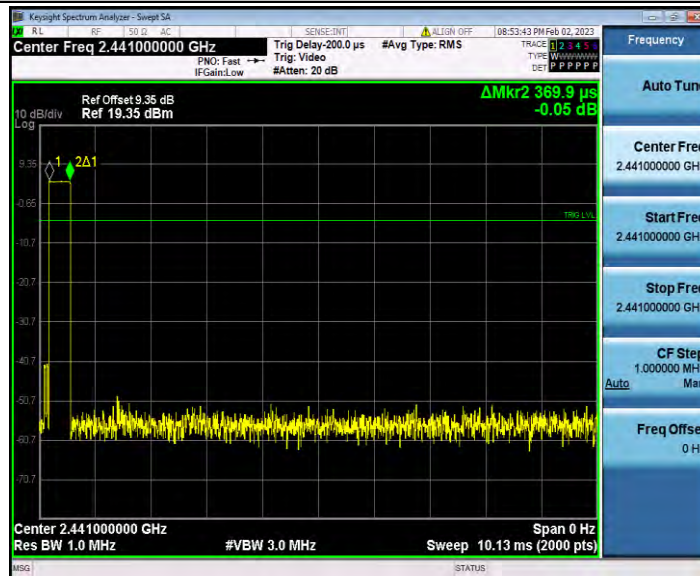
Appendix A.5: Time of occupancy

Test Result

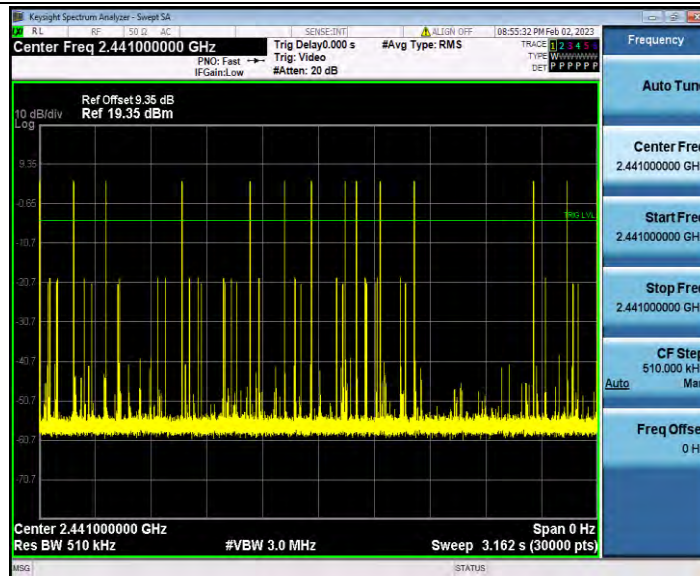
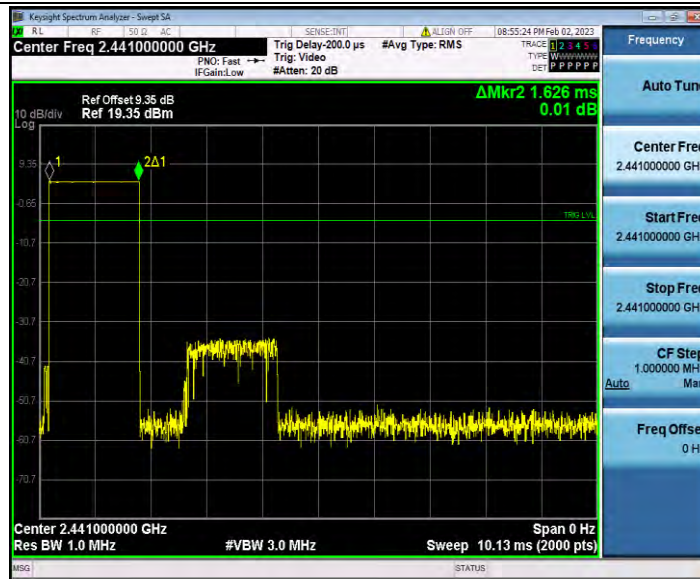
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.118	≤0.4	PASS
DH3	Ant1	Hop	1.63	150	0.244	≤0.4	PASS
DH5	Ant1	Hop	2.87	120	0.345	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.64	190	0.311	≤0.4	PASS
2DH5	Ant1	Hop	2.88	70	0.202	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.88	70	0.202	≤0.4	PASS

Test Graphs

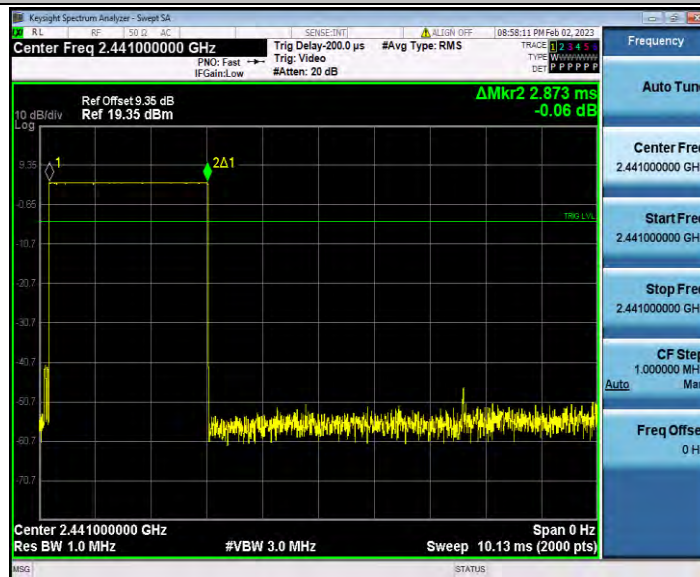
DH1_Ant1_Hop

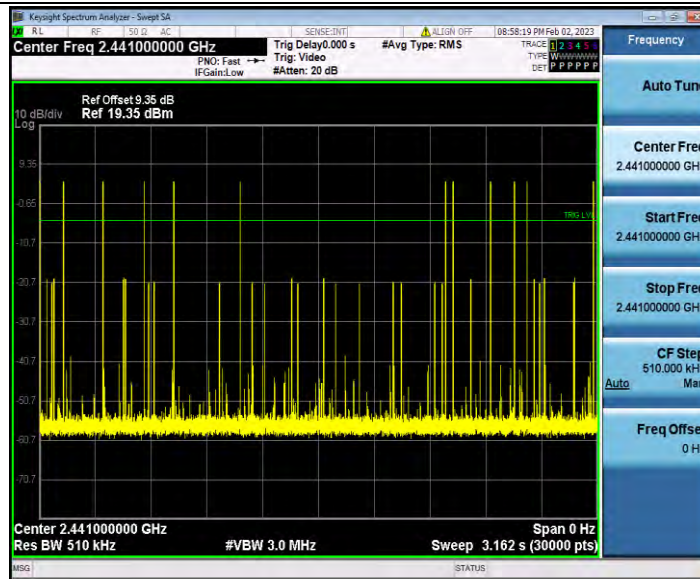


DH3_Ant1_Hop

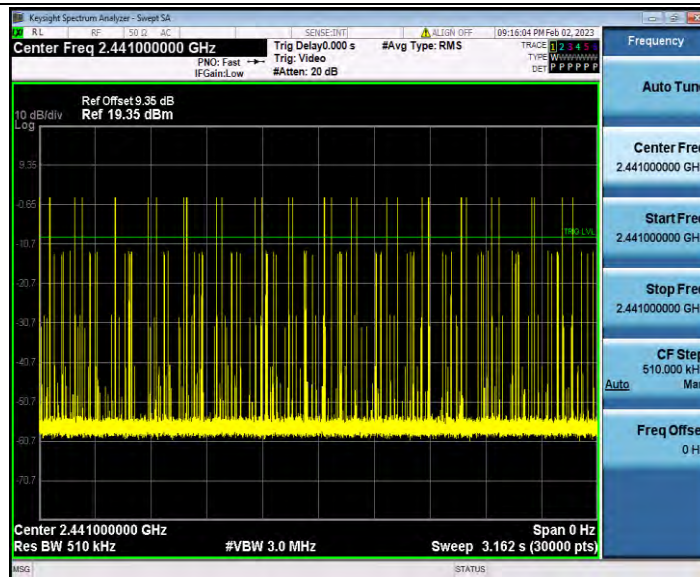
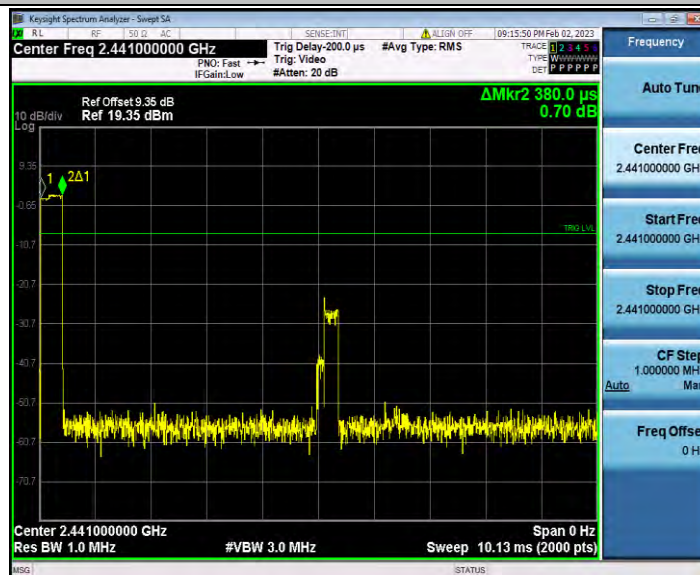


DH5_Ant1_Hop

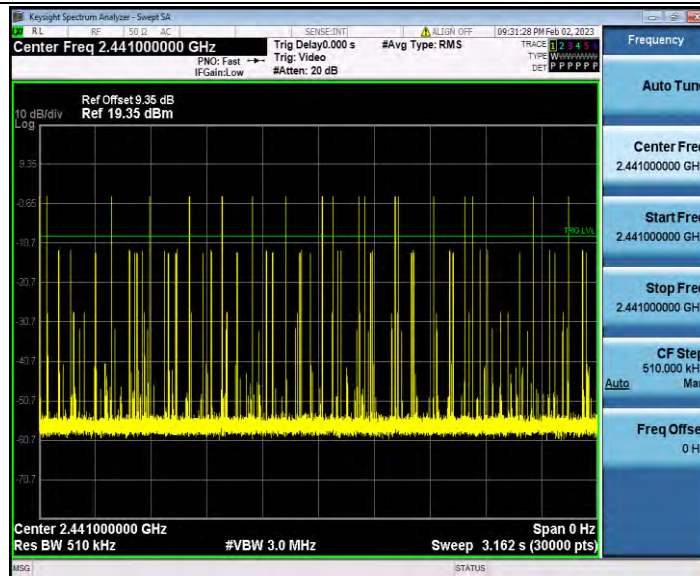
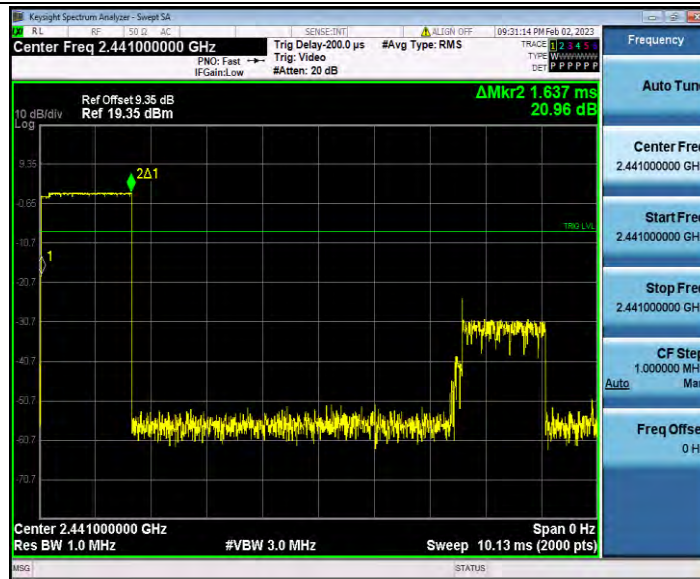




2DH1_Ant1_Hop

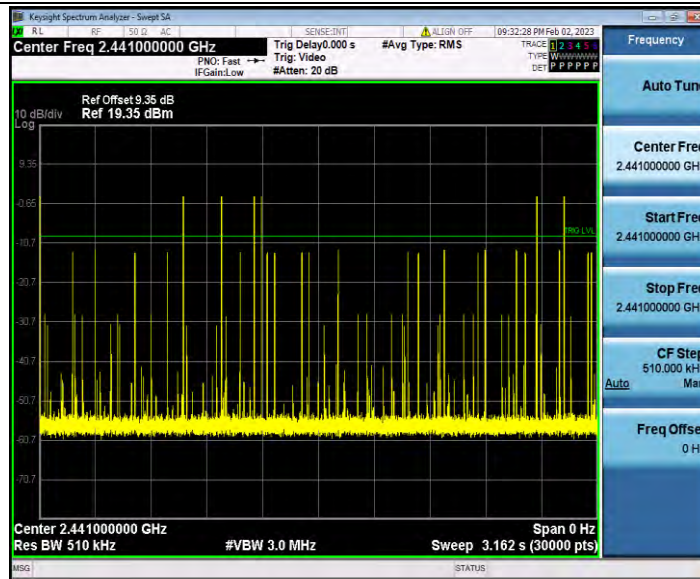


2DH3_Ant1_Hop

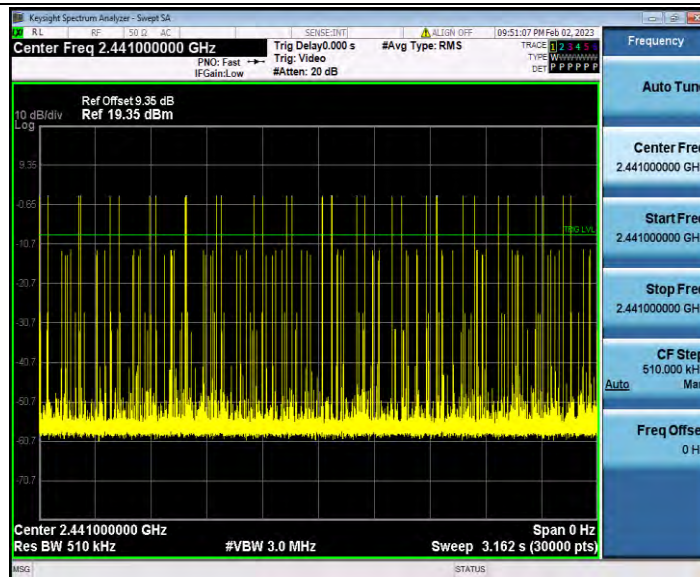
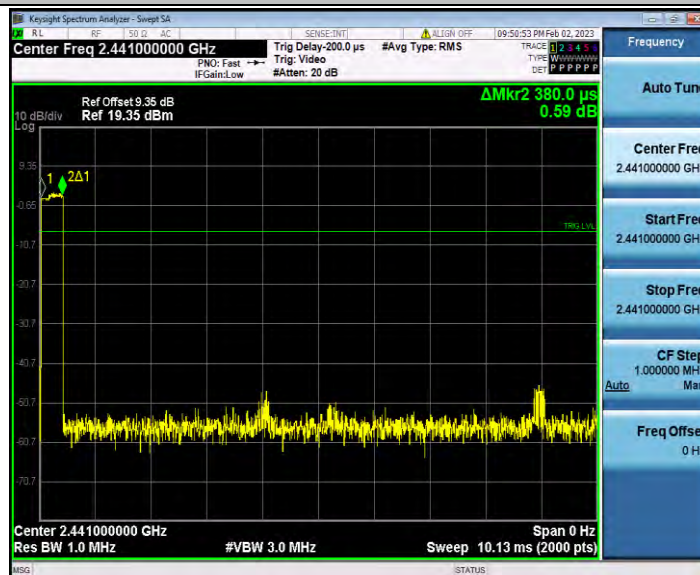


2DH5_Ant1_Hop

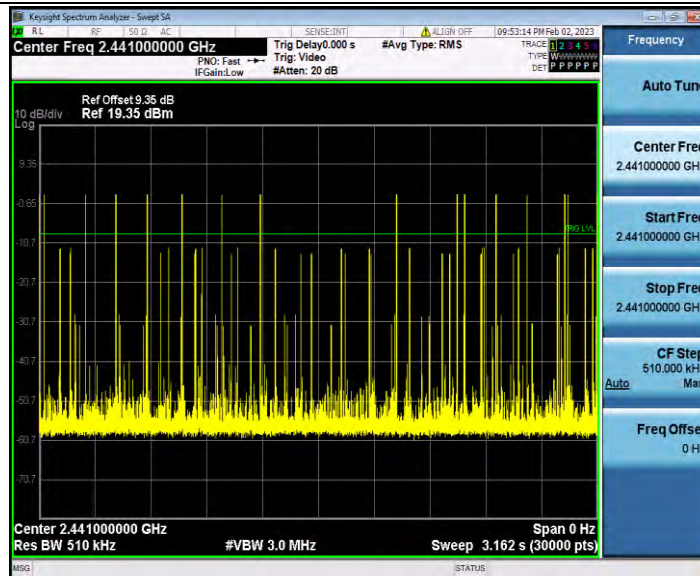
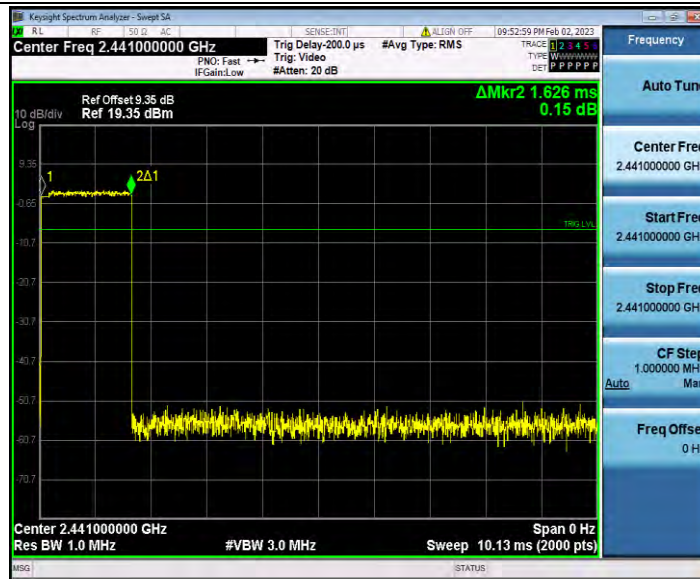




3DH1_Ant1_Hop

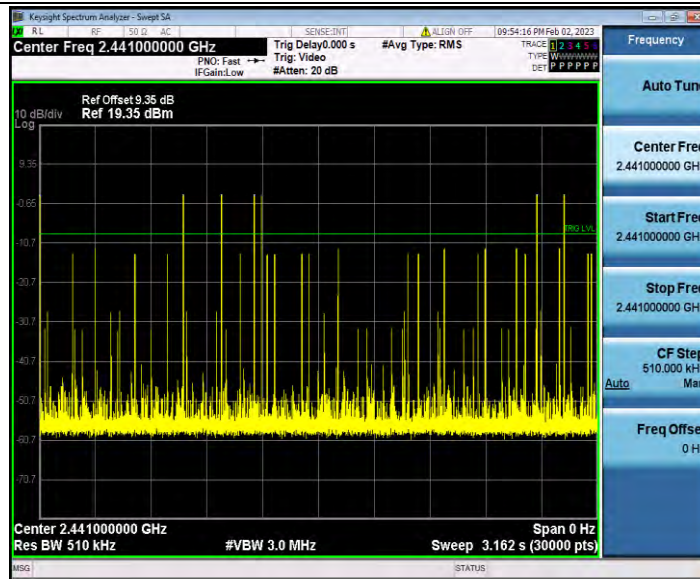


3DH3_Ant1_Hop



3DH5_Ant1_Hop





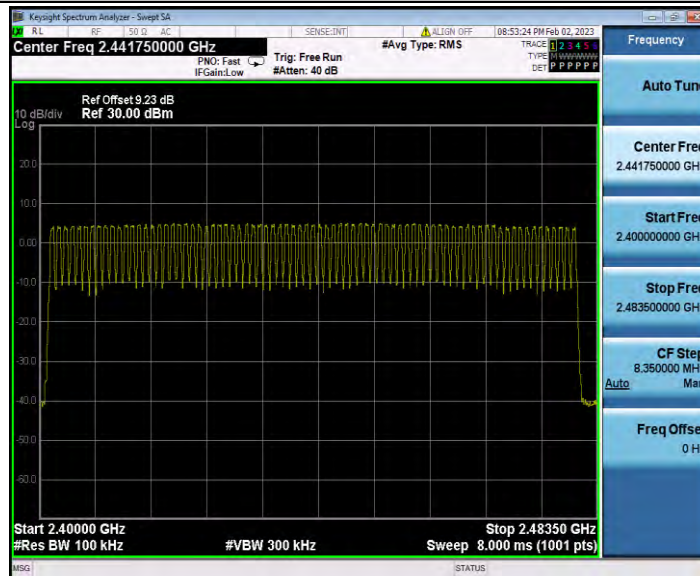
Appendix A.6: Number of hopping channels

Test Result

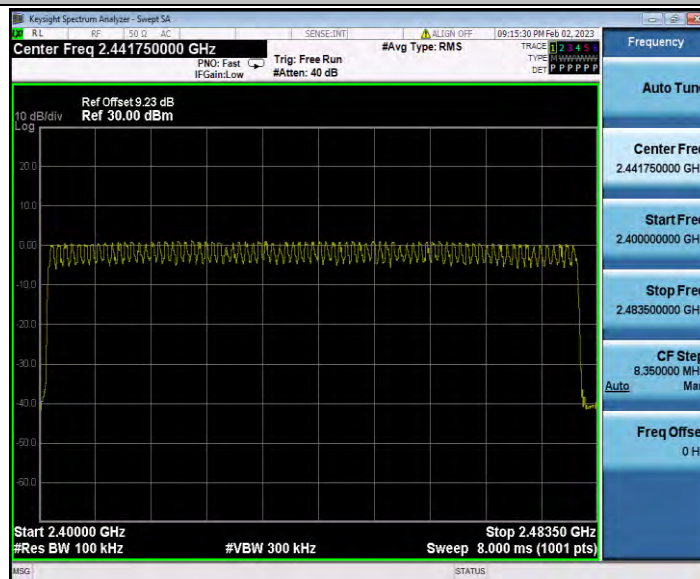
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

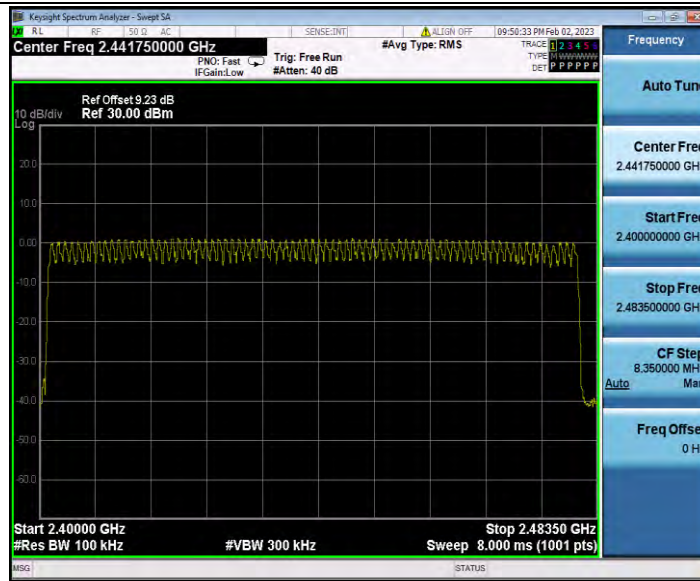
DH1_Ant1_Hop



2DH1_Ant1_Hop



3DH1_Ant1_Hop



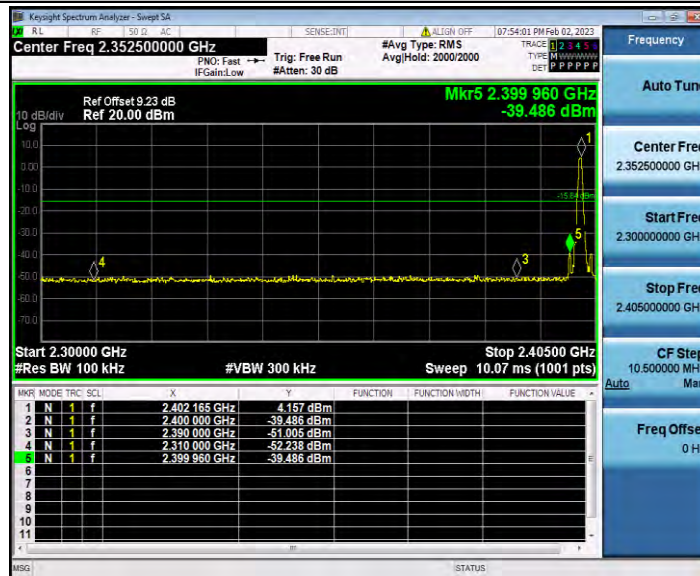
Appendix A.7: Band edge measurements

Test Result

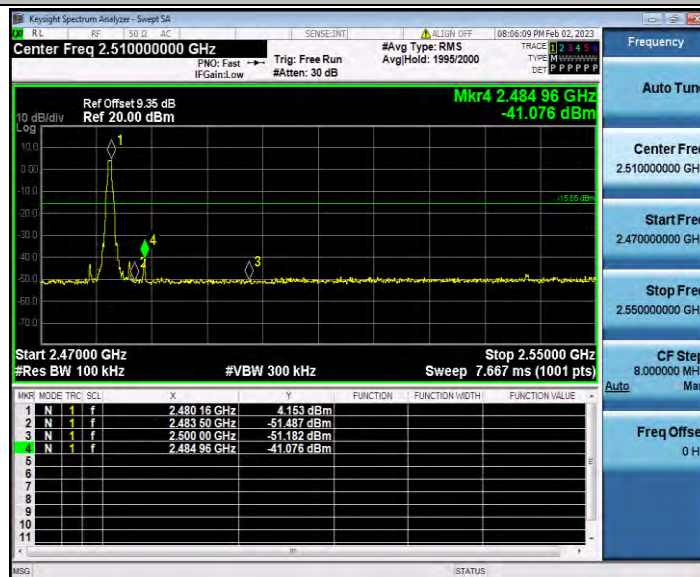
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	4.16	-39.49	≤-15.84	PASS
		High	2480	4.15	-41.08	≤-15.85	PASS
		Low	Hop_2402	3.70	-48.84	≤-16.3	PASS
		High	Hop_2480	4.40	-46.18	≤-15.61	PASS
2DH1	Ant1	Low	2402	0.20	-45.66	≤-19.8	PASS
		High	2480	0.15	-41.23	≤-19.85	PASS
		Low	Hop_2402	0.44	-49.27	≤-19.56	PASS
		High	Hop_2480	0.18	-48.19	≤-19.82	PASS
3DH1	Ant1	Low	2402	0.19	-42.54	≤-19.81	PASS
		High	2480	0.24	-41.22	≤-19.76	PASS
		Low	Hop_2402	0.08	-49.25	≤-19.92	PASS
		High	Hop_2480	0.34	-47.67	≤-19.66	PASS

Test Graphs

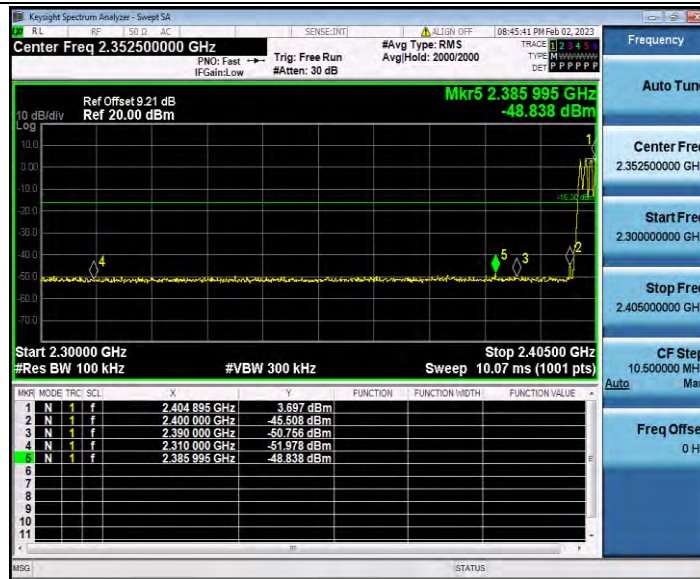
DH1_Ant1_Low_2402



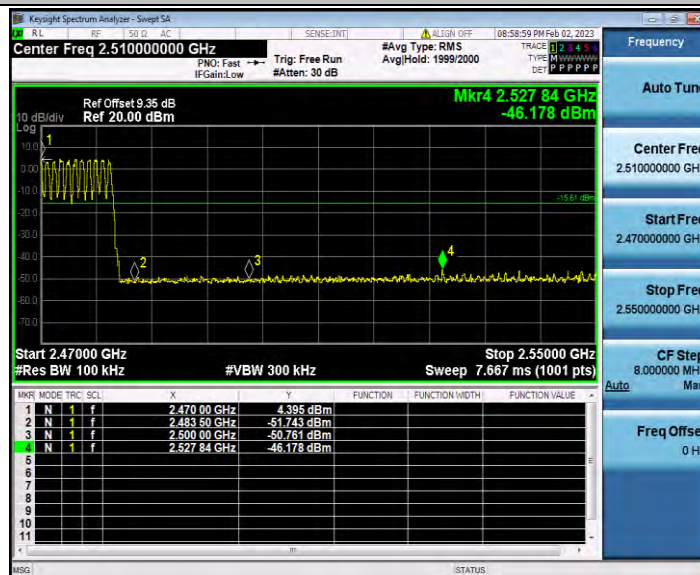
DH1_Ant1_High_2480



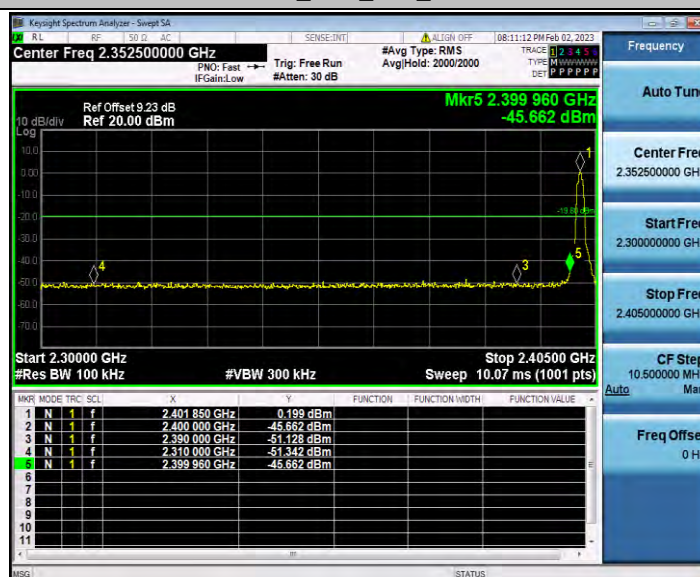
DH1_Ant1_Low_Hop_2402



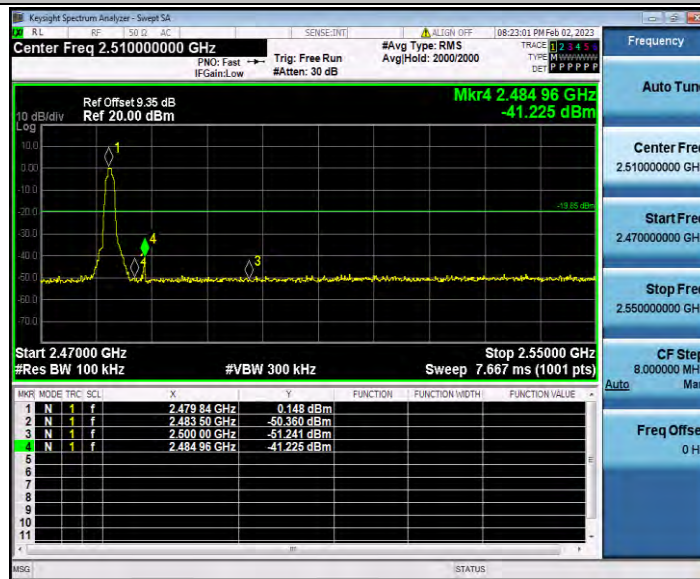
DH1_Ant1_High_Hop_2480



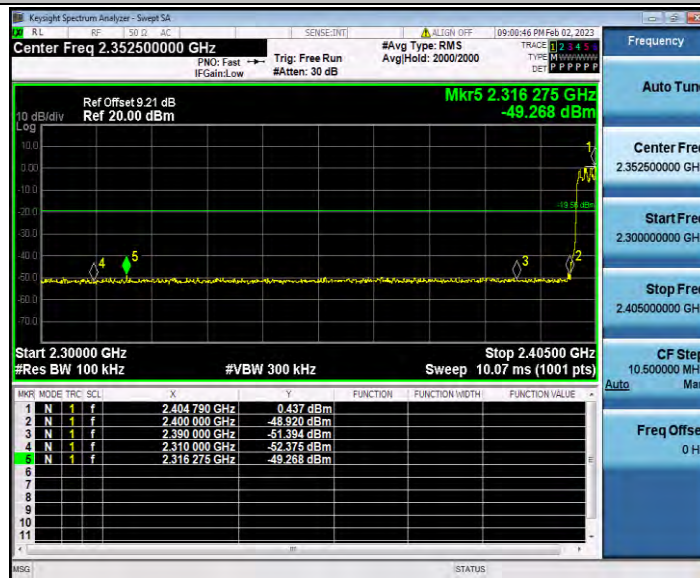
2DH1_Ant1_Low_2402



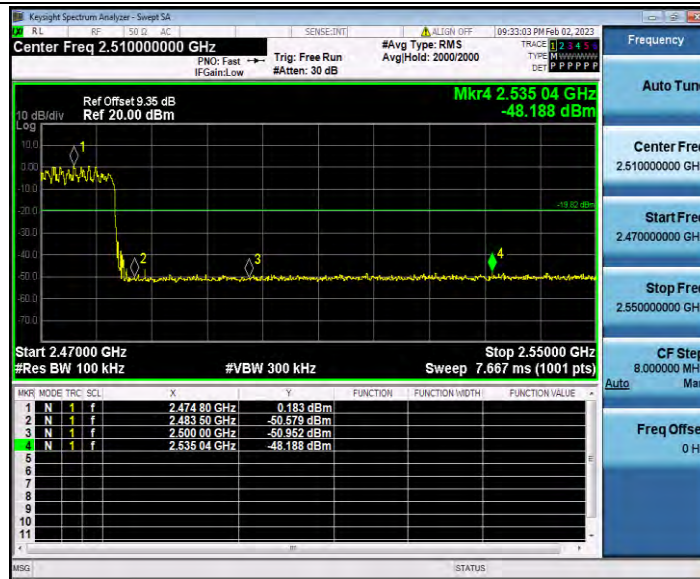
2DH1_Ant1_High_2480



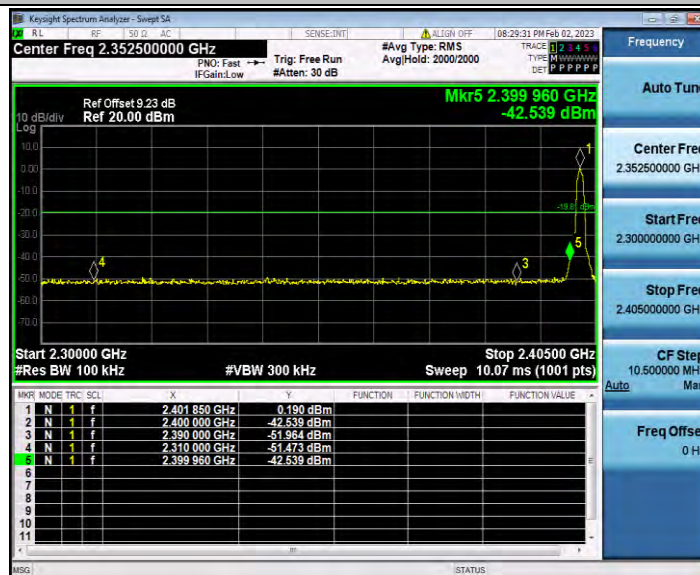
2DH1_Ant1_Low_Hop_2402



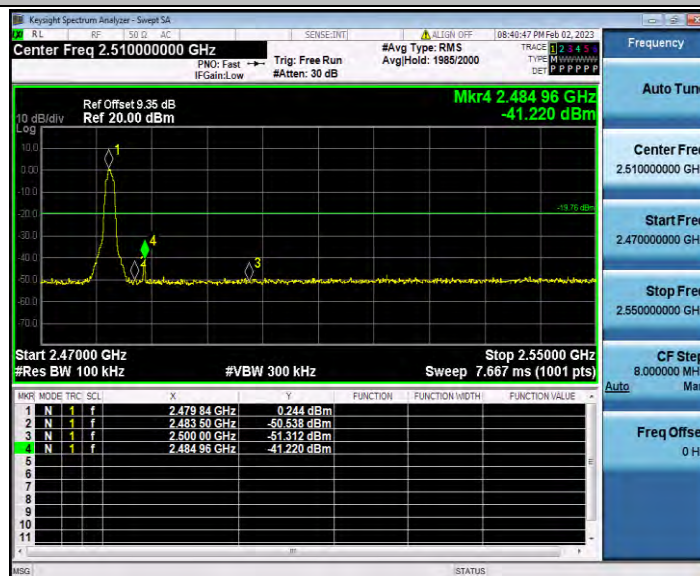
2DH1_Ant1_High_Hop_2480



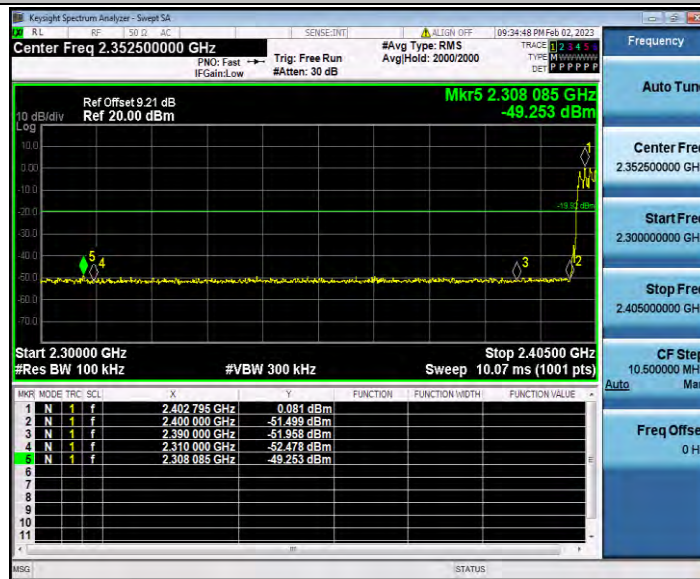
3DH1_Ant1_Low_2402



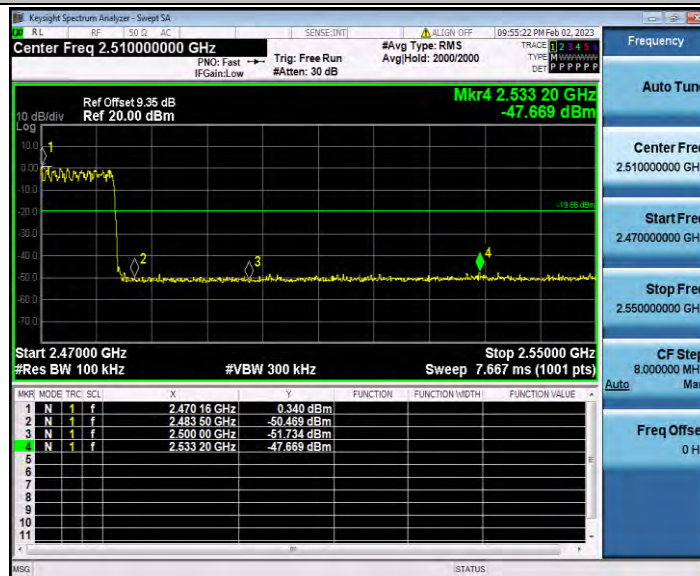
3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

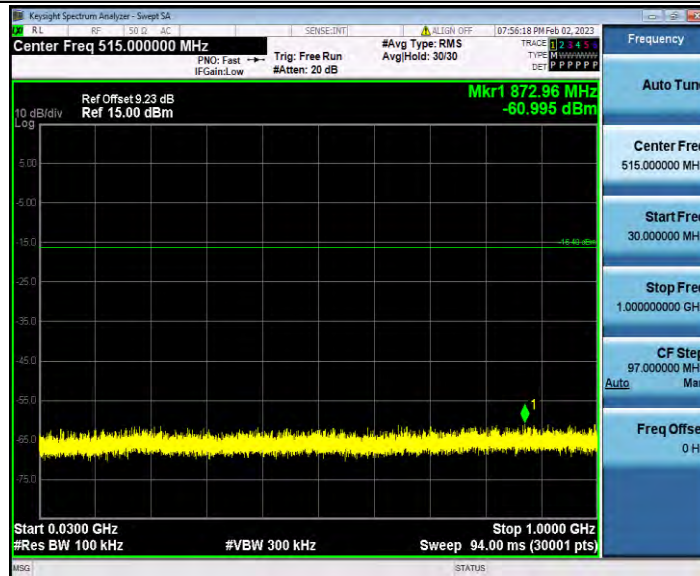
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	3.60	3.60	---	PASS
			30~1000	3.60	-61	≤-16.4	PASS
			1000~26500	3.60	-46.76	≤-16.4	PASS
		2441	Reference	4.70	4.70	---	PASS
			30~1000	4.70	-60.05	≤-15.3	PASS
			1000~26500	4.70	-47.01	≤-15.3	PASS
		2480	Reference	3.93	3.93	---	PASS
			30~1000	3.93	-60.97	≤-16.07	PASS
			1000~26500	3.93	-47.78	≤-16.07	PASS
2DH1	Ant1	2402	Reference	-0.04	-0.04	---	PASS
			30~1000	-0.04	-59.48	≤-20.04	PASS
			1000~26500	-0.04	-47.53	≤-20.04	PASS
		2441	Reference	0.92	0.92	---	PASS
			30~1000	0.92	-60.27	≤-19.08	PASS
			1000~26500	0.92	-48.1	≤-19.08	PASS
		2480	Reference	-0.06	-0.06	---	PASS
			30~1000	-0.06	-60.54	≤-20.06	PASS
			1000~26500	-0.06	-47.91	≤-20.06	PASS
3DH1	Ant1	2402	Reference	0.08	0.08	---	PASS
			30~1000	0.08	-60.54	≤-19.92	PASS
			1000~26500	0.08	-47.97	≤-19.92	PASS
		2441	Reference	1.07	1.07	---	PASS
			30~1000	1.07	-60.83	≤-18.93	PASS
			1000~26500	1.07	-47.56	≤-18.93	PASS
		2480	Reference	-0.02	-0.02	---	PASS
			30~1000	-0.02	-60.24	≤-20.02	PASS
			1000~26500	-0.02	-48	≤-20.02	PASS

Test Graphs

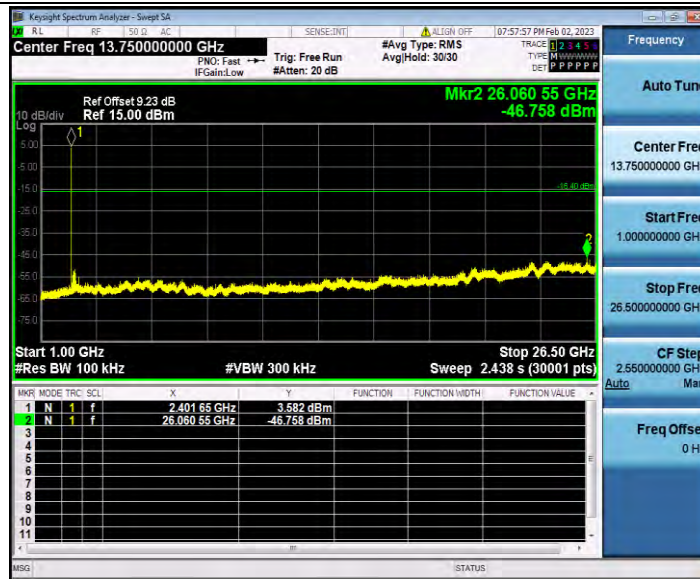
DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



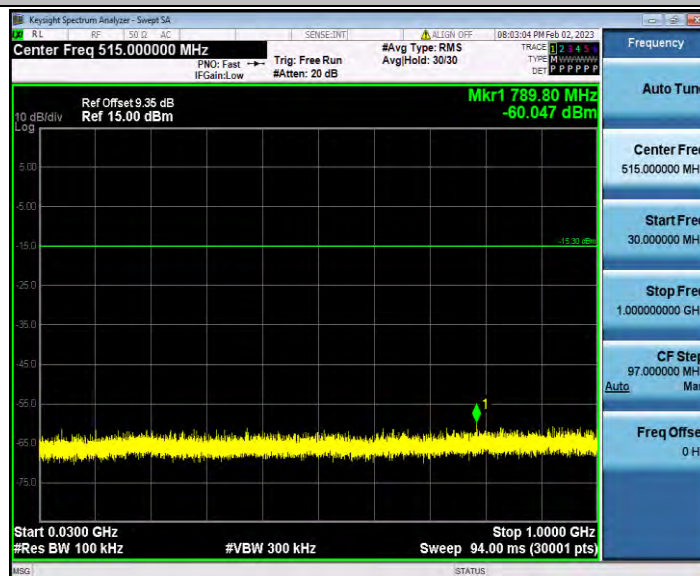
DH1_Ant1_2402_1000~26500



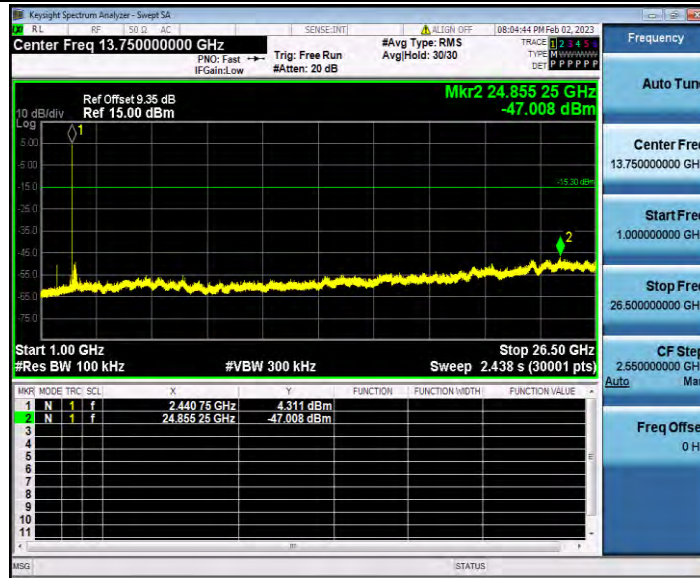
DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



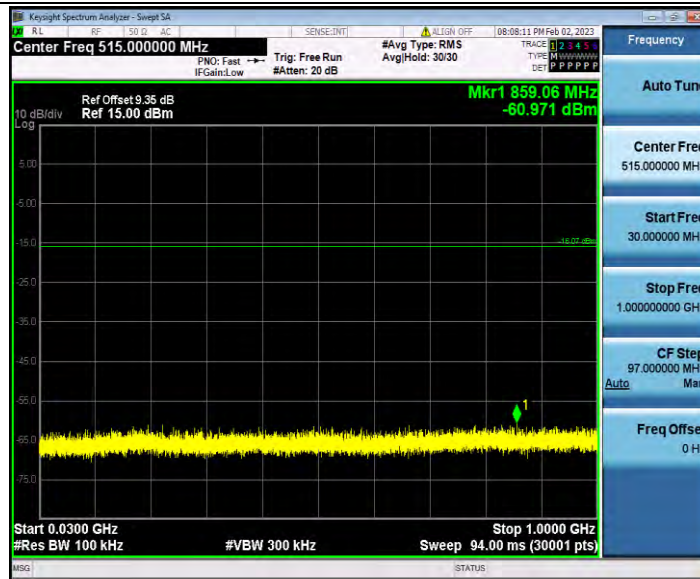
DH1_Ant1_2441_1000~26500



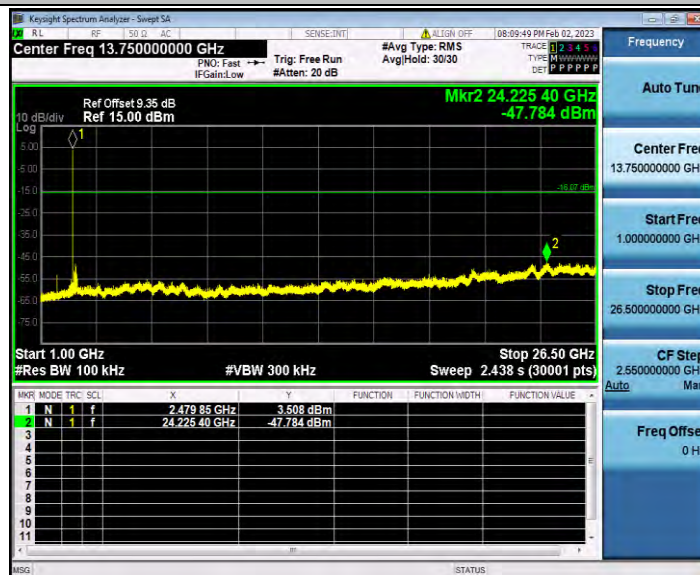
DH1_Ant1_2480_0~Reference



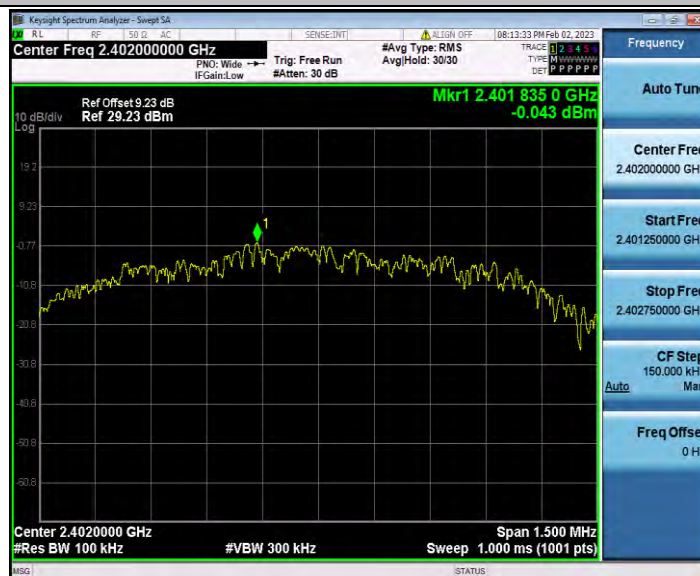
DH1_Ant1_2480_30~1000



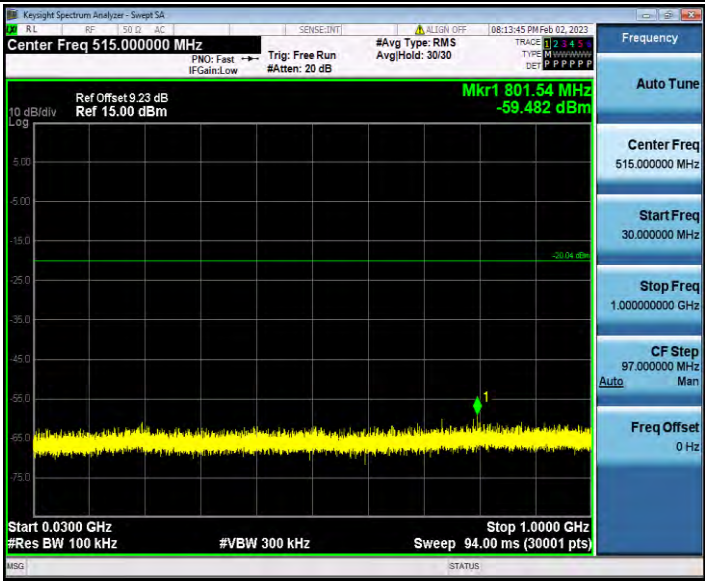
DH1_Ant1_2480_1000~26500



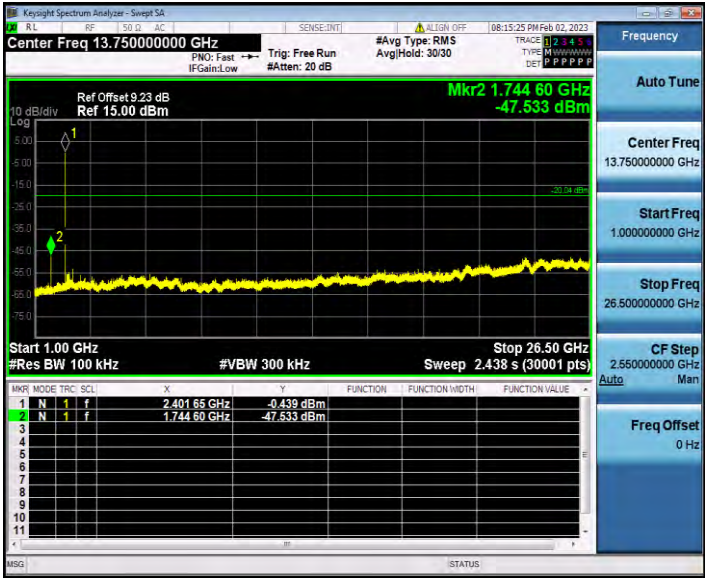
2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



2DH1_Ant1_2402_1000~26500



2DH1_Ant1_2441_0~Reference



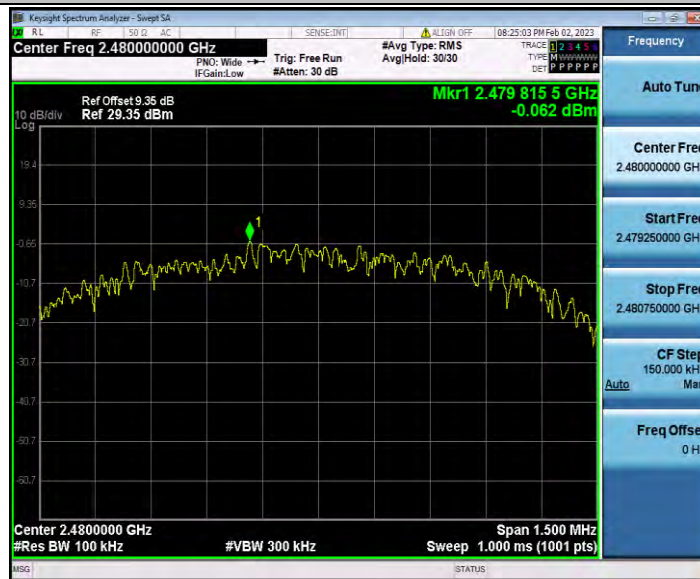
2DH1_Ant1_2441_30~1000



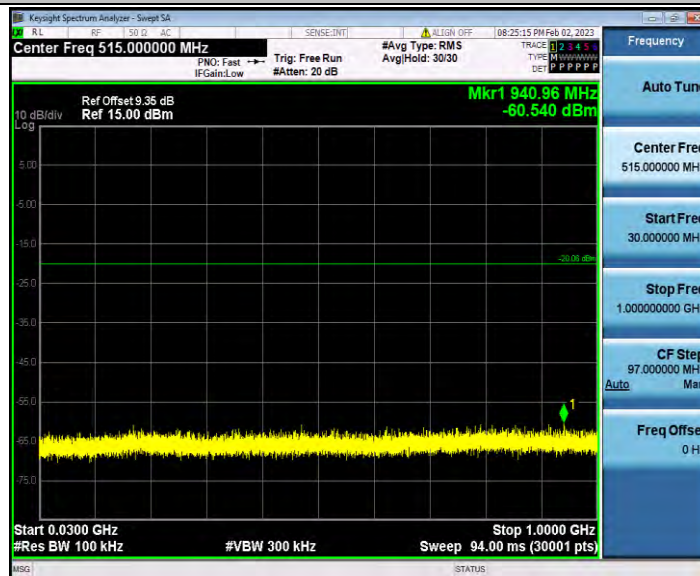
2DH1_Ant1_2441_1000~26500



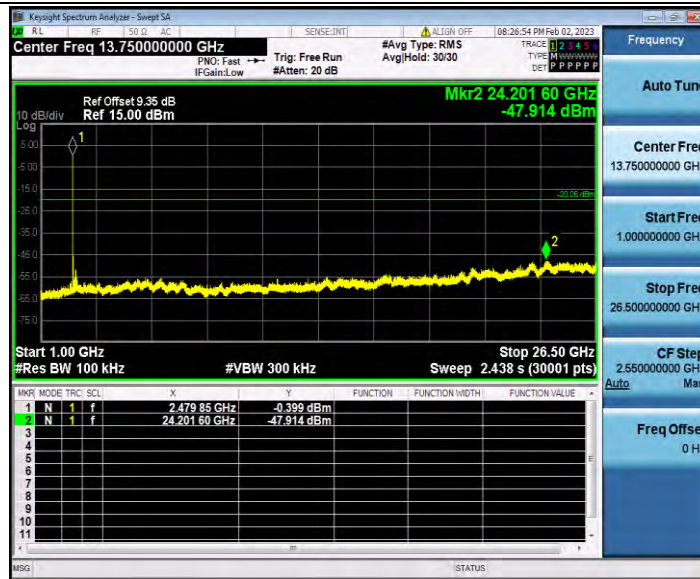
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



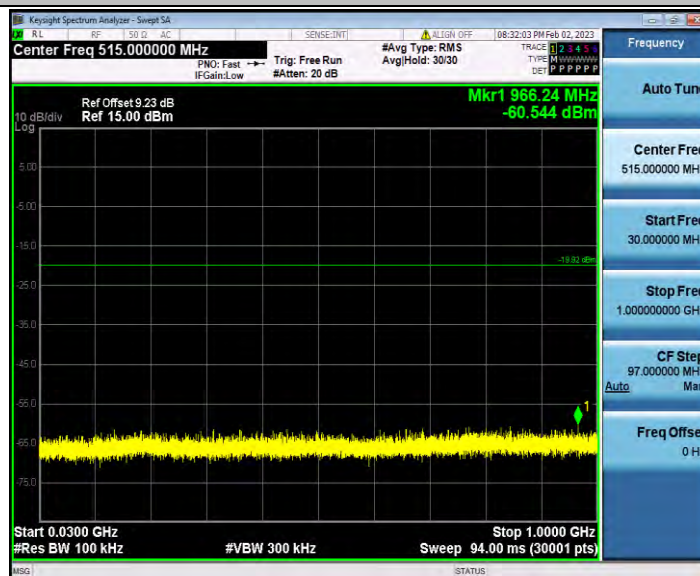
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



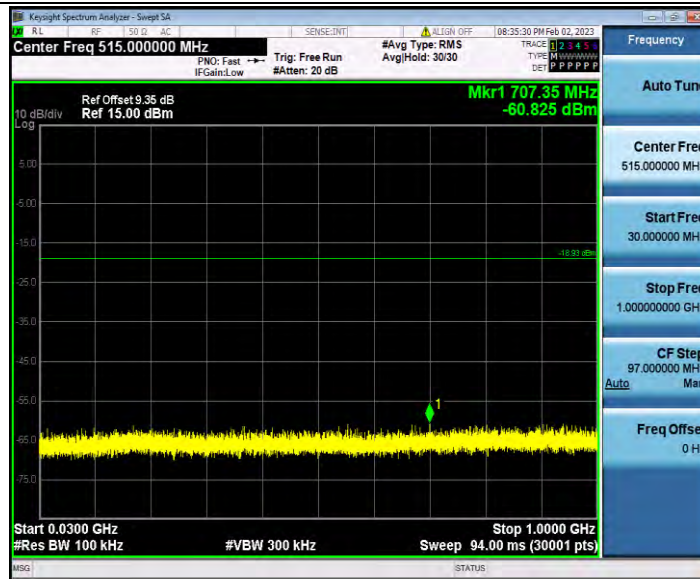
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



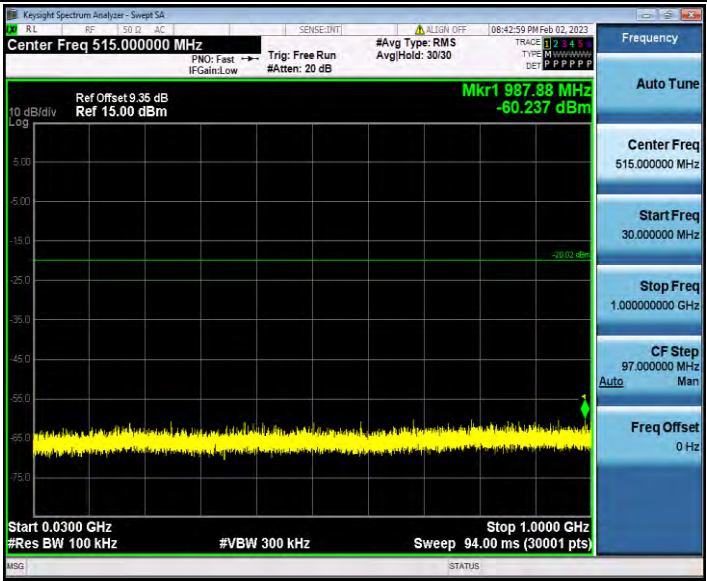
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500

