

Case No. : <u>GTS20231017004-1-21</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.14</u> Test Engineer: <u>Evan ouyang</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.936	2401.544	2402.480	---	---
		2441	0.957	2440.511	2441.468	---	---
		2480	0.915	2479.514	2480.429	---	---
2DH1	Ant1	2402	1.437	2401.268	2402.705	---	---
		2441	1.425	2440.277	2441.702	---	---
		2480	1.431	2479.265	2480.696	---	---
3DH1	Ant1	2402	1.476	2401.274	2402.750	---	---
		2441	1.452	2440.274	2441.726	---	---
		2480	1.437	2479.277	2480.714	---	---

Test Graphs



DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2400



2DH1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



3DH1_Ant1_2480

Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.84503	2401.576	2402.421	---	---
		2441	0.85080	2440.571	2441.421	---	---
		2480	0.85252	2479.567	2480.419	---	---
2DH1	Ant1	2402	1.3414	2401.322	2402.664	---	---
		2441	1.3454	2440.319	2441.664	---	---
		2480	1.3419	2479.323	2480.665	---	---
3DH1	Ant1	2402	1.3461	2401.320	2402.666	---	---
		2441	1.3480	2440.321	2441.669	---	---
		2480	1.3416	2479.325	2480.666	---	---

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

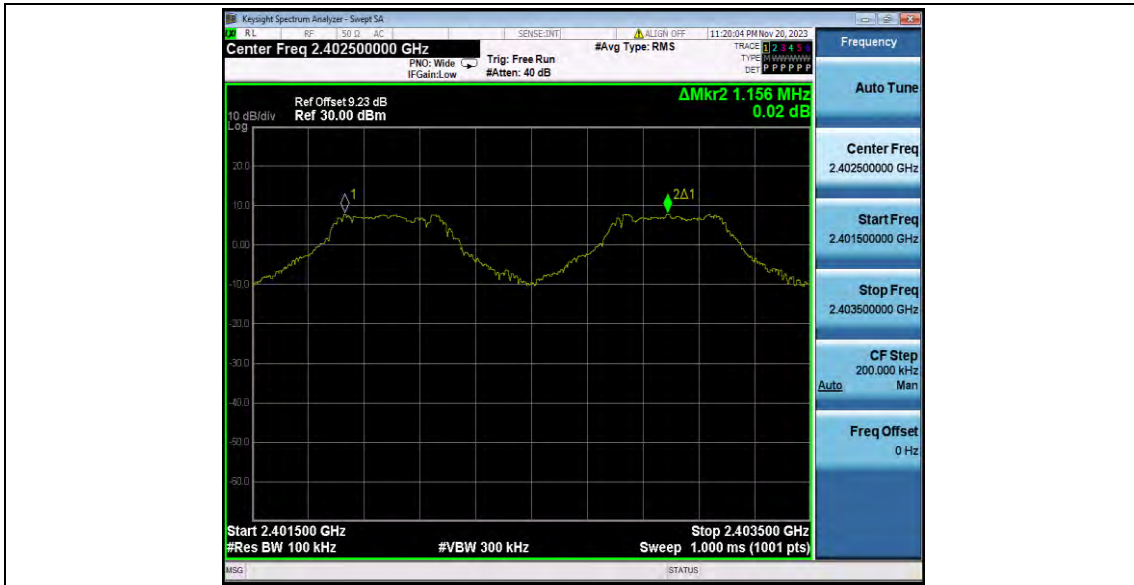
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	8.15	≤30.00	PASS
		2441	9.58	≤30.00	PASS
		2480	10.31	≤30.00	PASS
2DH1	Ant1	2402	6.46	≤20.97	PASS
		2441	7.45	≤20.97	PASS
		2480	7.37	≤20.97	PASS
3DH1	Ant1	2402	6.65	≤20.97	PASS
		2441	7.6	≤20.97	PASS
		2480	7.57	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	1.156	≥ 0.957	PASS
		Hop_2441	1.138	≥ 0.957	PASS
		Hop_2480	1.016	≥ 0.957	PASS
2DH1	Ant1	Hop_2402	1.144	≥ 0.958	PASS
		Hop_2441	0.998	≥ 0.958	PASS
		Hop_2480	1.014	≥ 0.958	PASS
3DH1	Ant1	Hop_2402	1.152	≥ 0.984	PASS
		Hop_2441	1.004	≥ 0.984	PASS
		Hop_2480	1.008	≥ 0.984	PASS

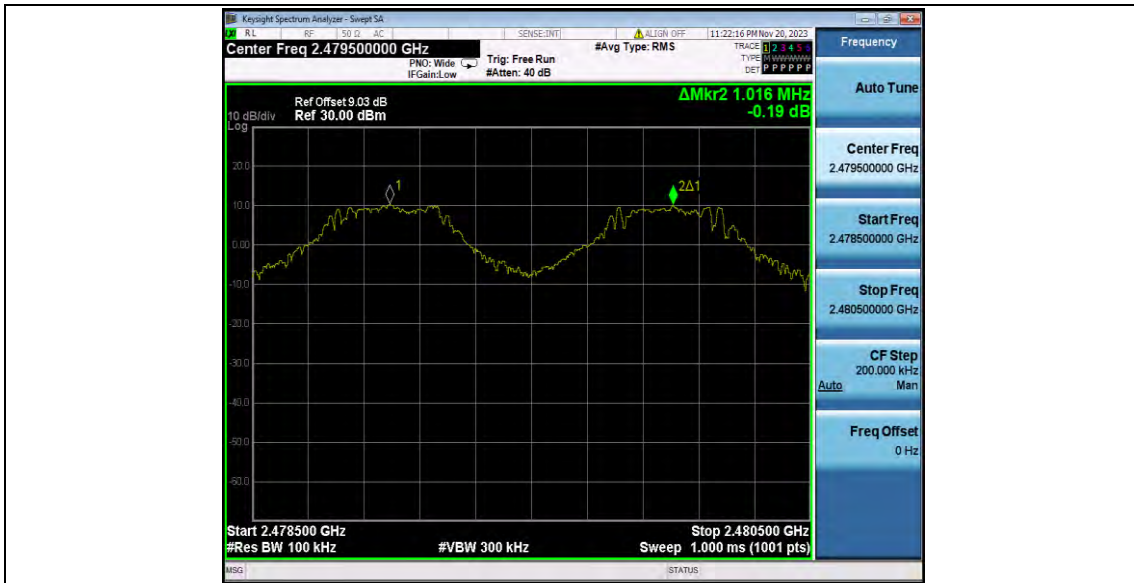
Test Graphs



DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



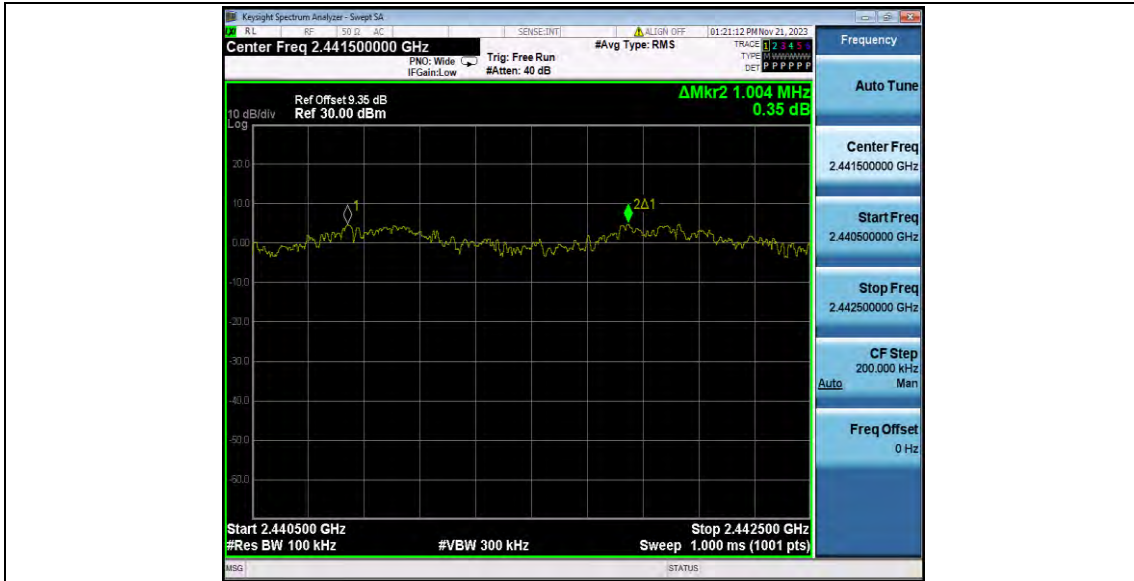
2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441



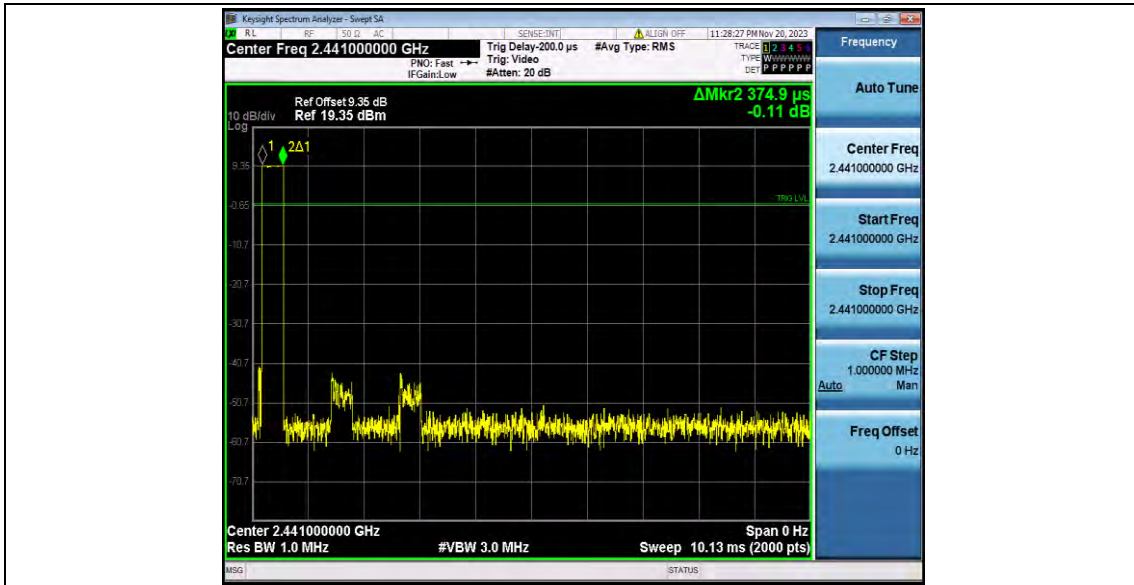
3DH1_Ant1_Hop_2480

Appendix A.5: Time of occupancy

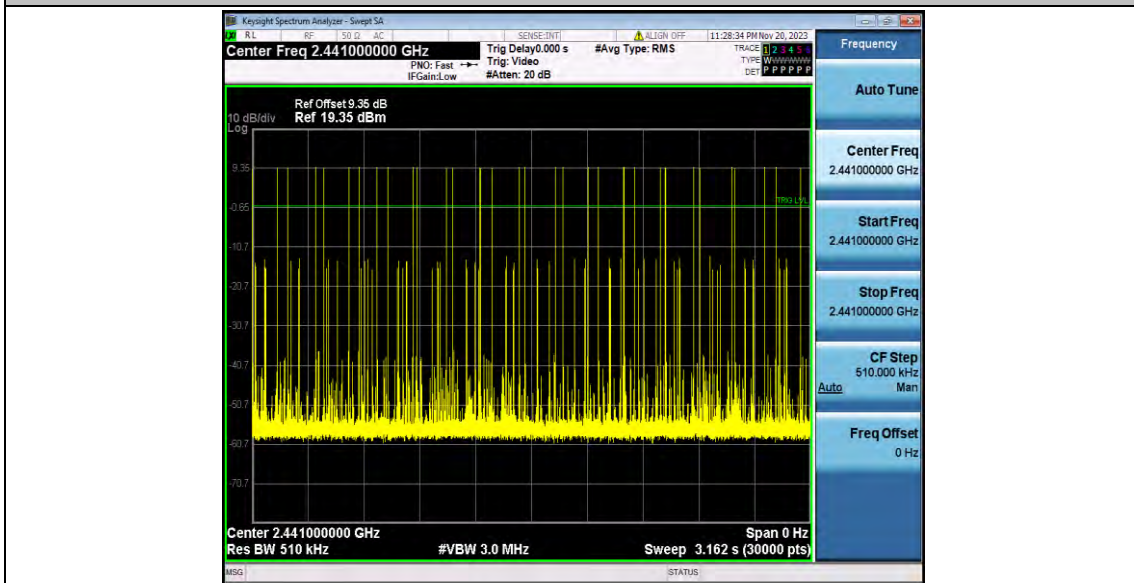
Test Result

Test Mode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.63	170	0.276	≤0.4	PASS
DH5	Ant1	Hop	2.88	110	0.317	≤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	90	0.259	≤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	100	0.288	≤0.4	PASS

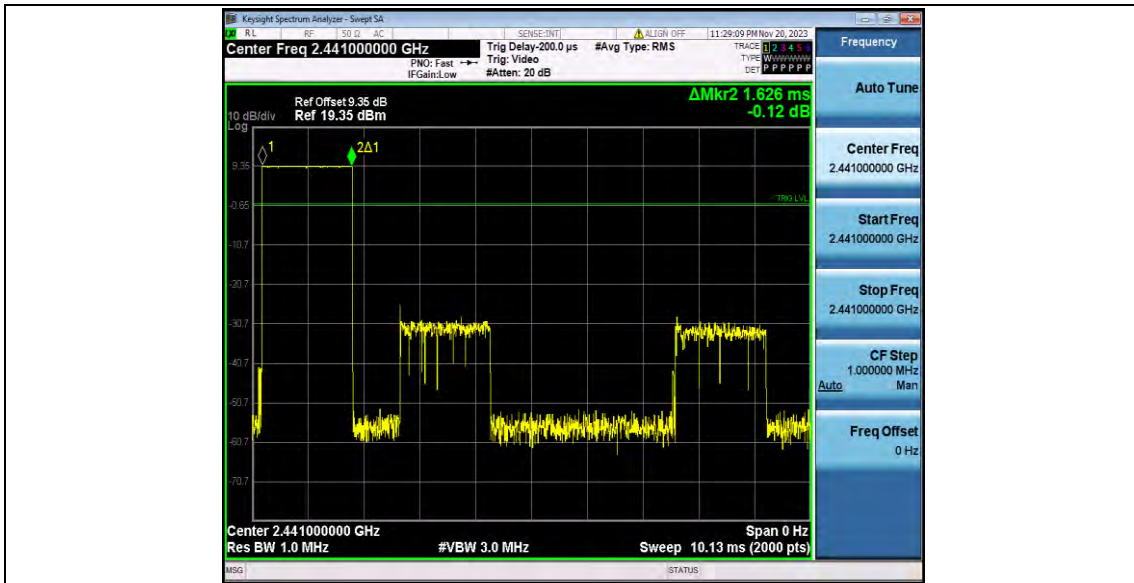
Test Graphs



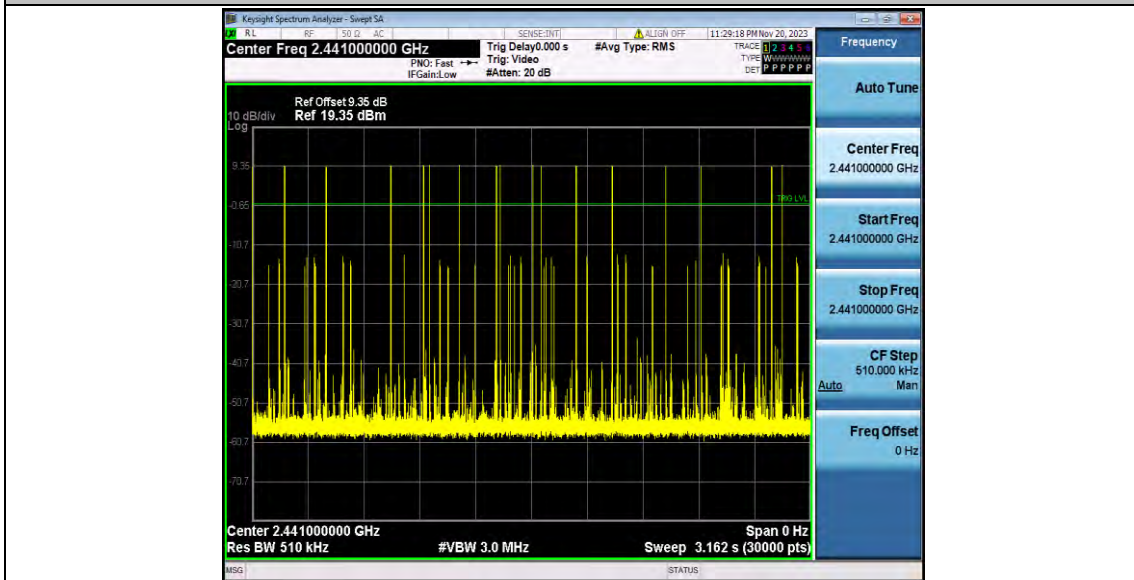
DH1_Ant1_Hop



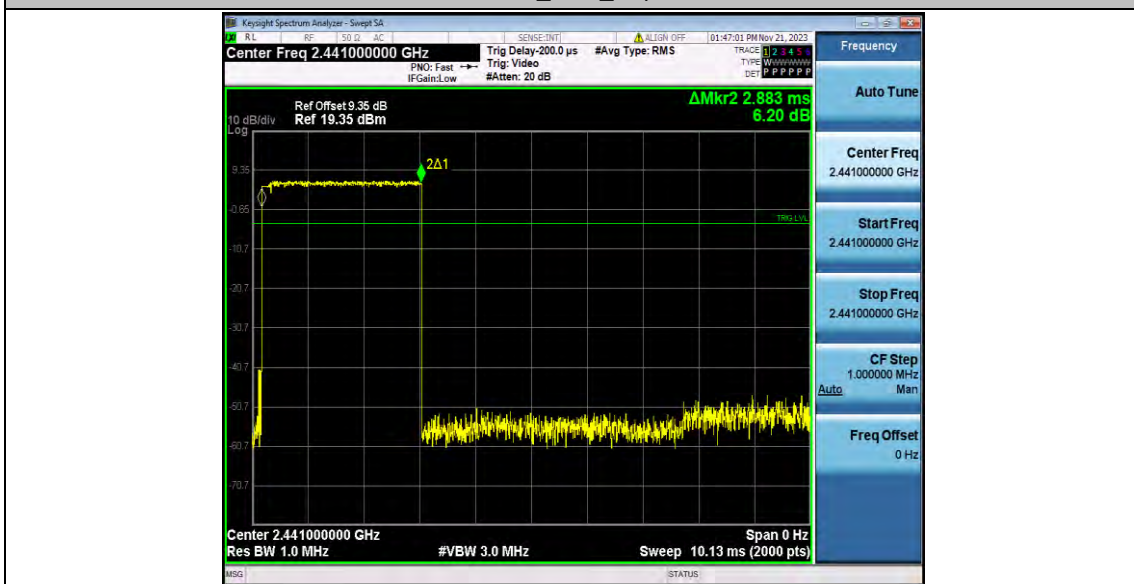
DH1_Ant1_Hop



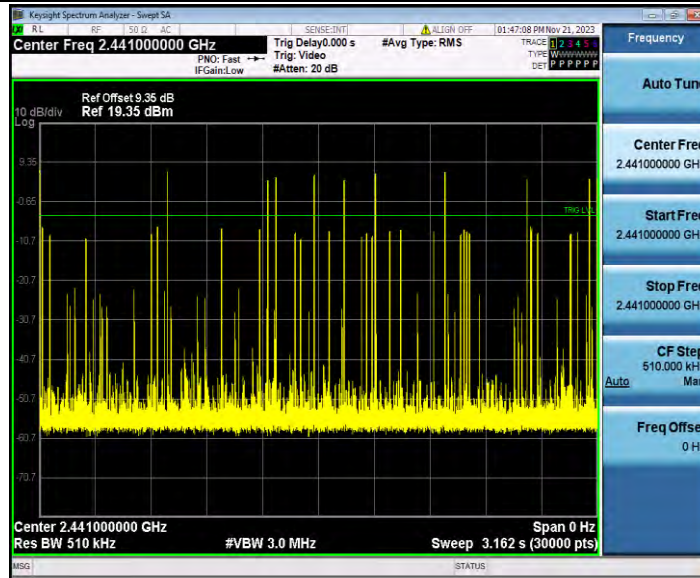
DH3_Ant1_Hop



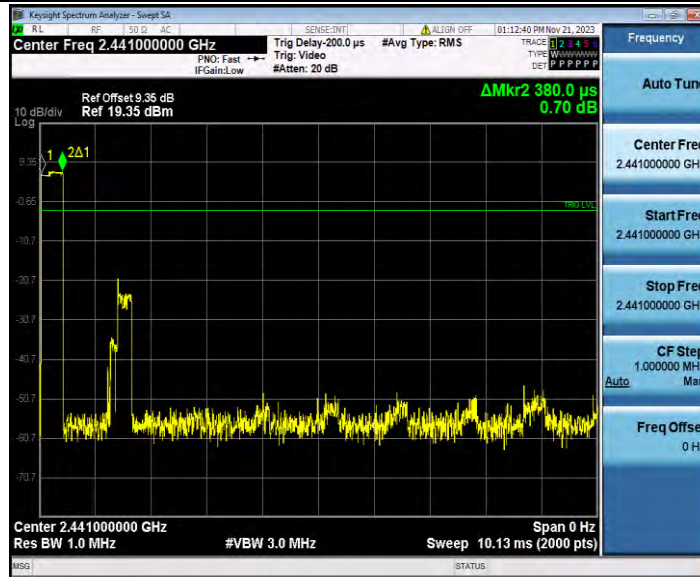
DH3_Ant1_Hop



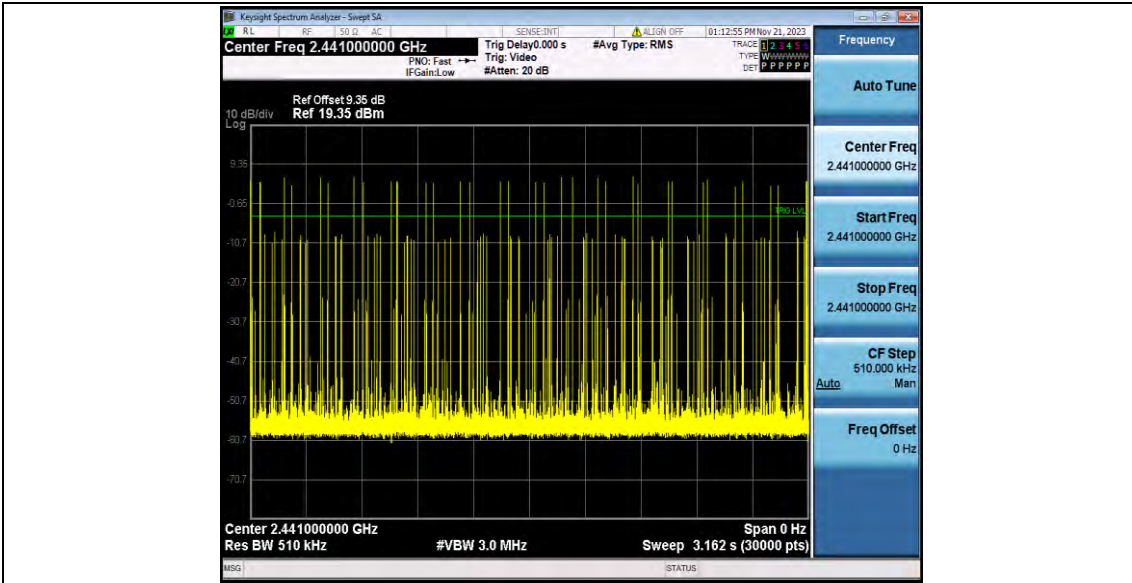
DH5_Ant1_Hop



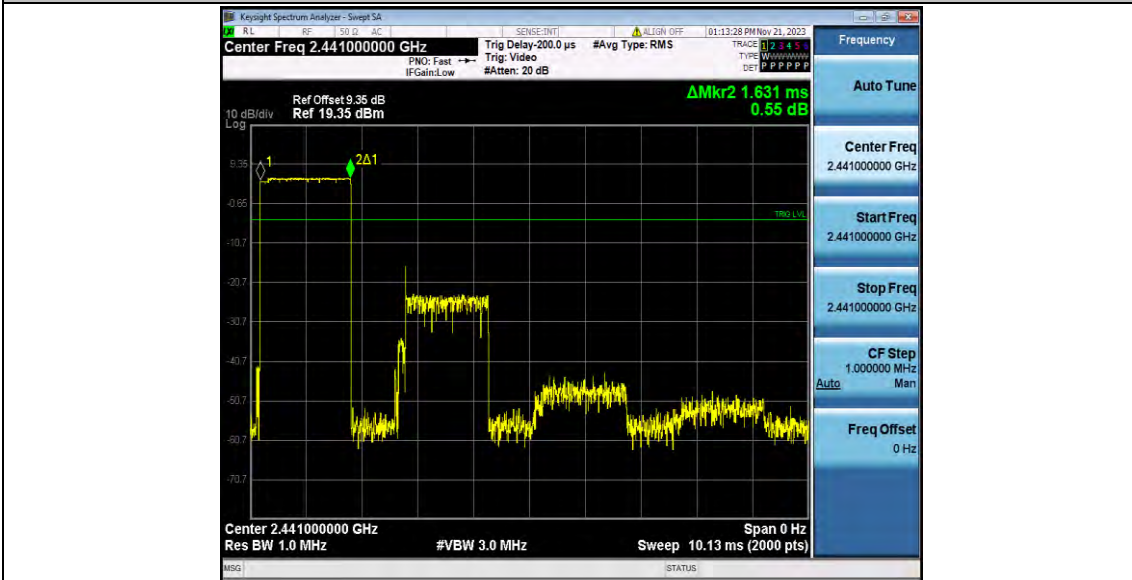
DH5_Ant1_Hop



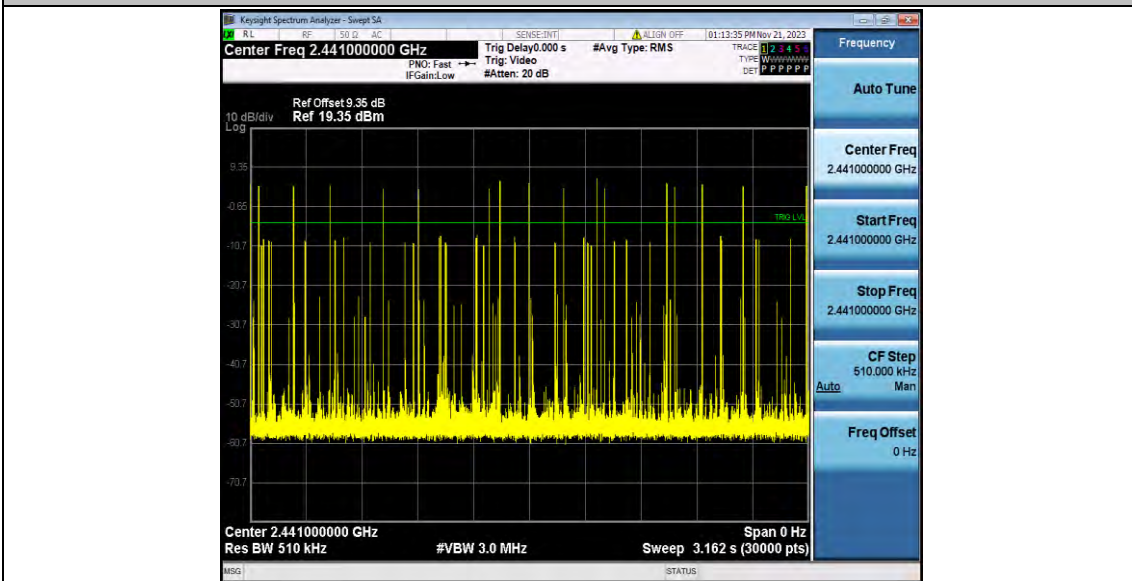
2DH1_Ant1_Hop



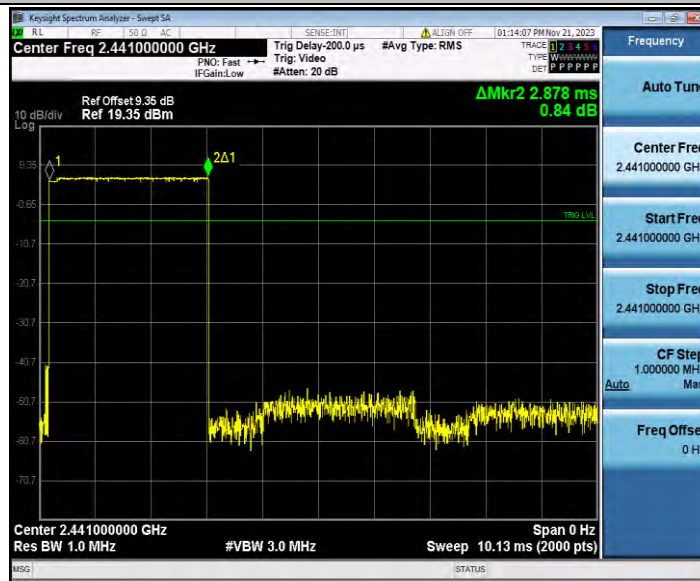
2DH1_Ant1_Hop



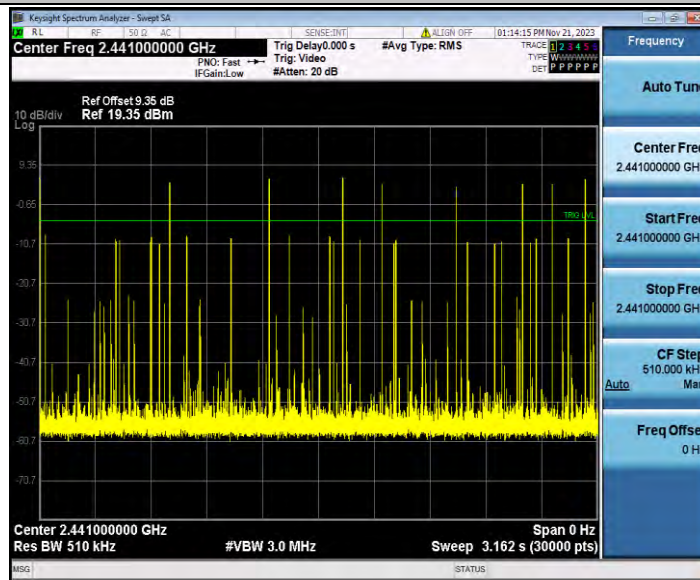
2DH3_Ant1_Hop



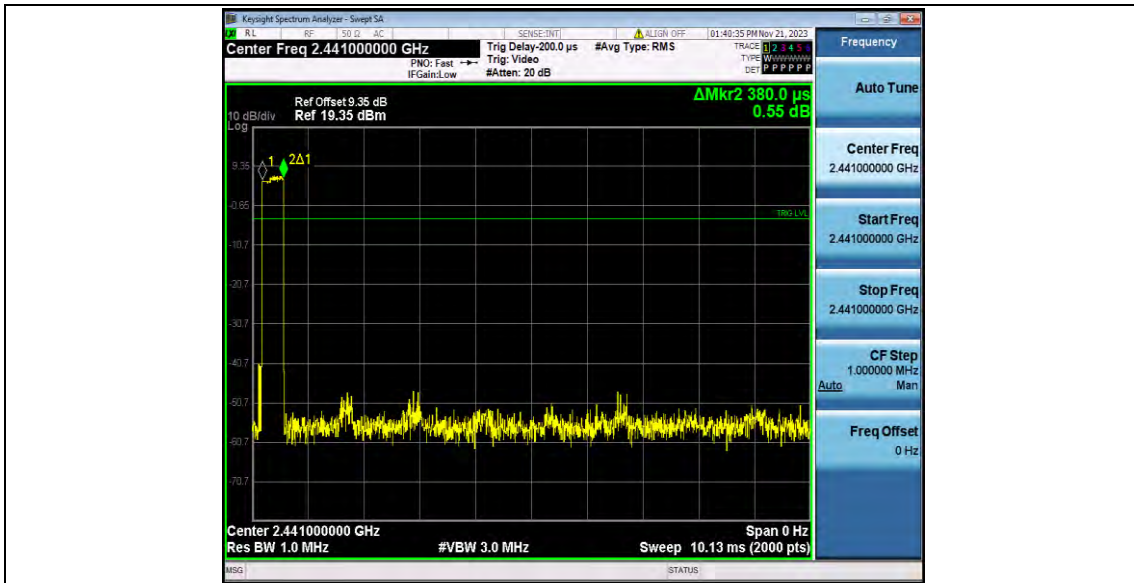
2DH3_Ant1_Hop



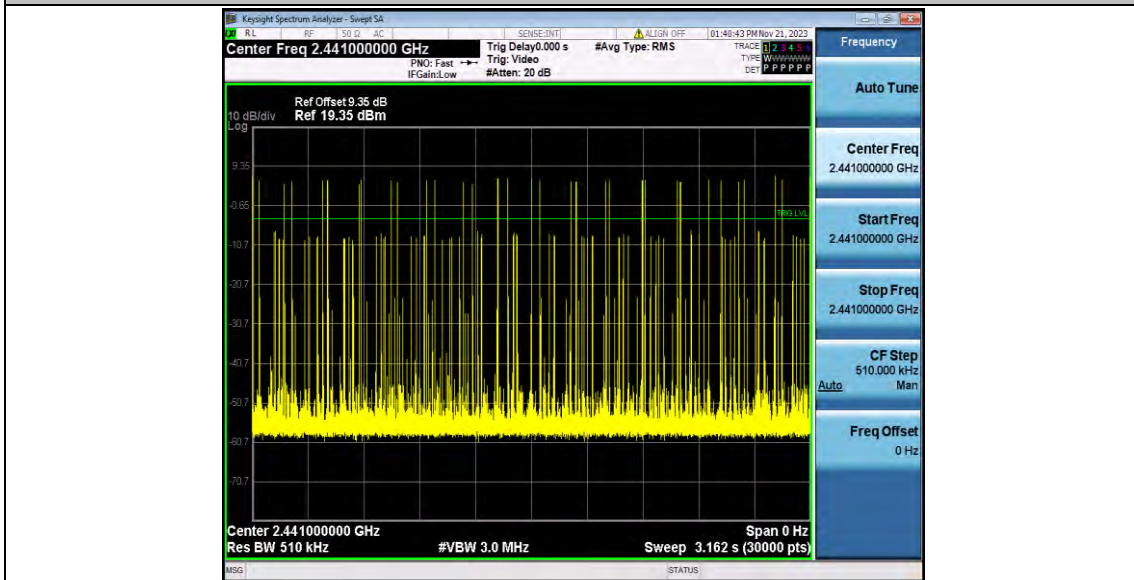
2DH5_Ant1_Hop



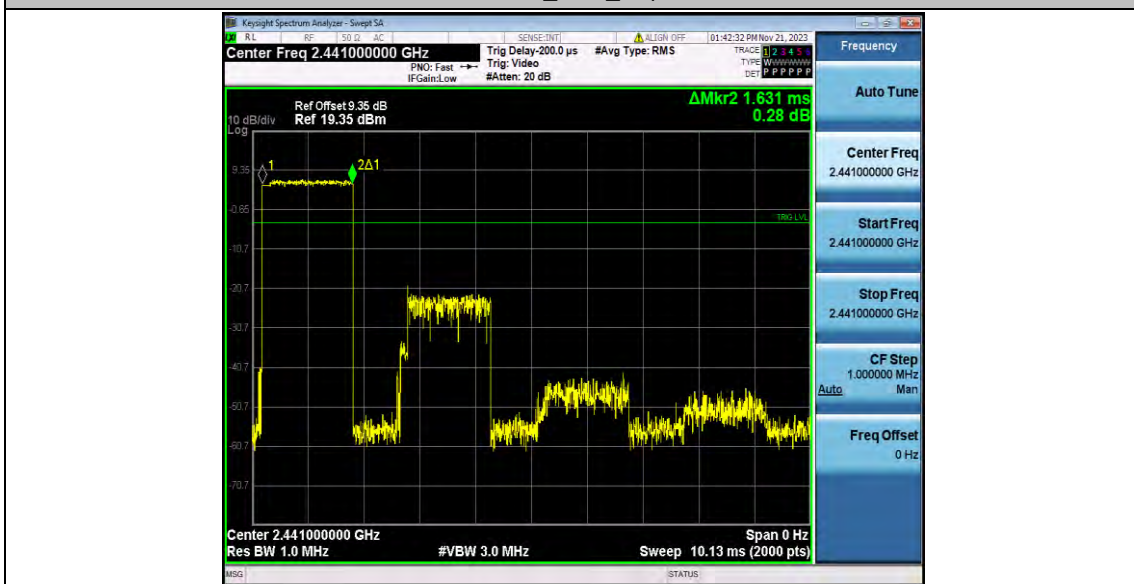
2DH5_Ant1_Hop



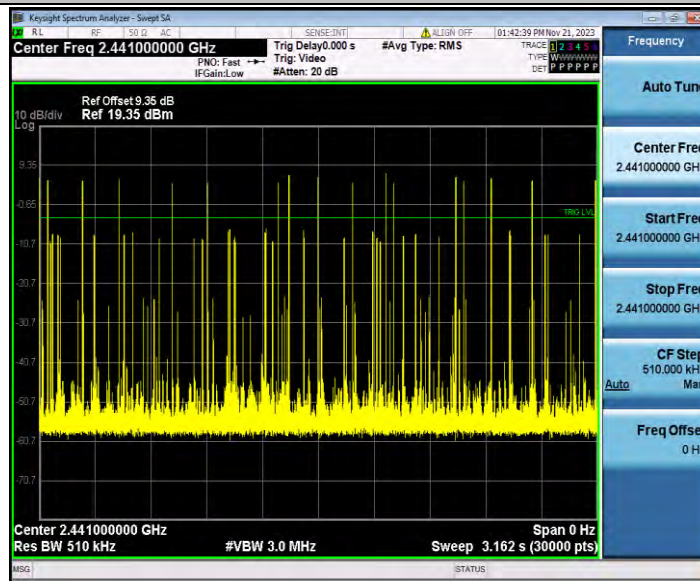
3DH1_Ant1_Hop



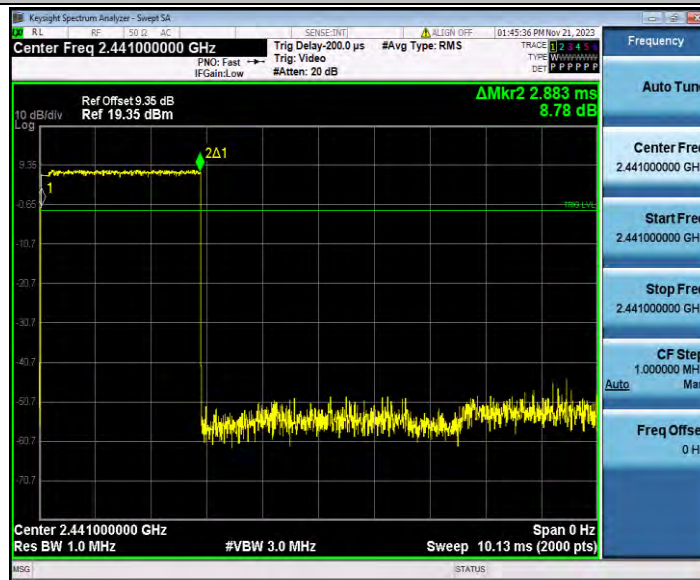
3DH1_Ant1_Hop



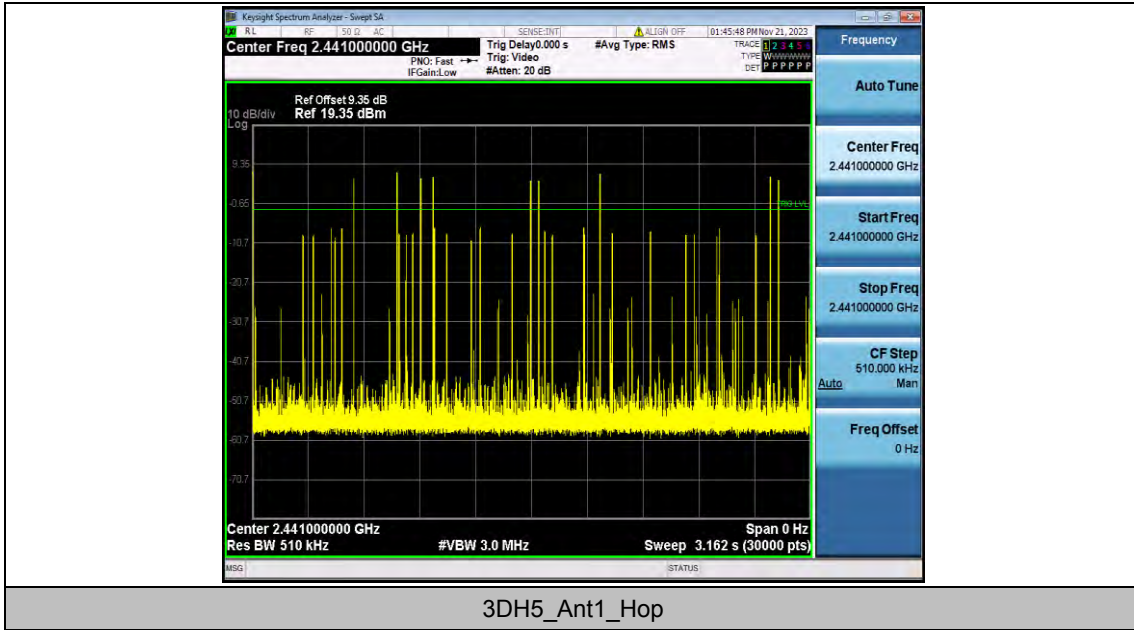
3DH3_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop



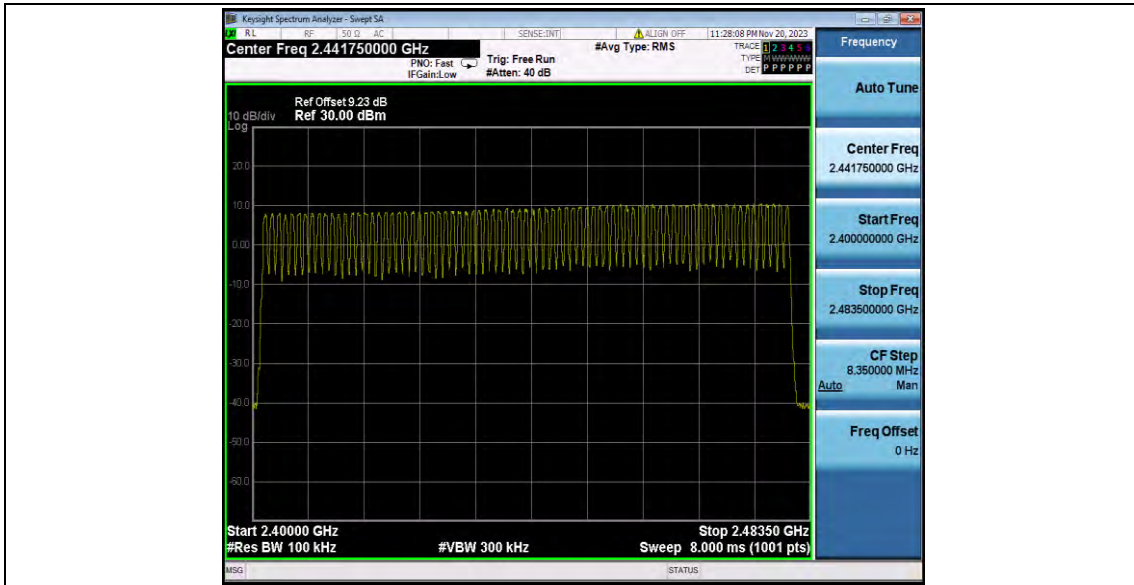
3DH5_Ant1_Hop

Appendix A.6: Number of hopping channels

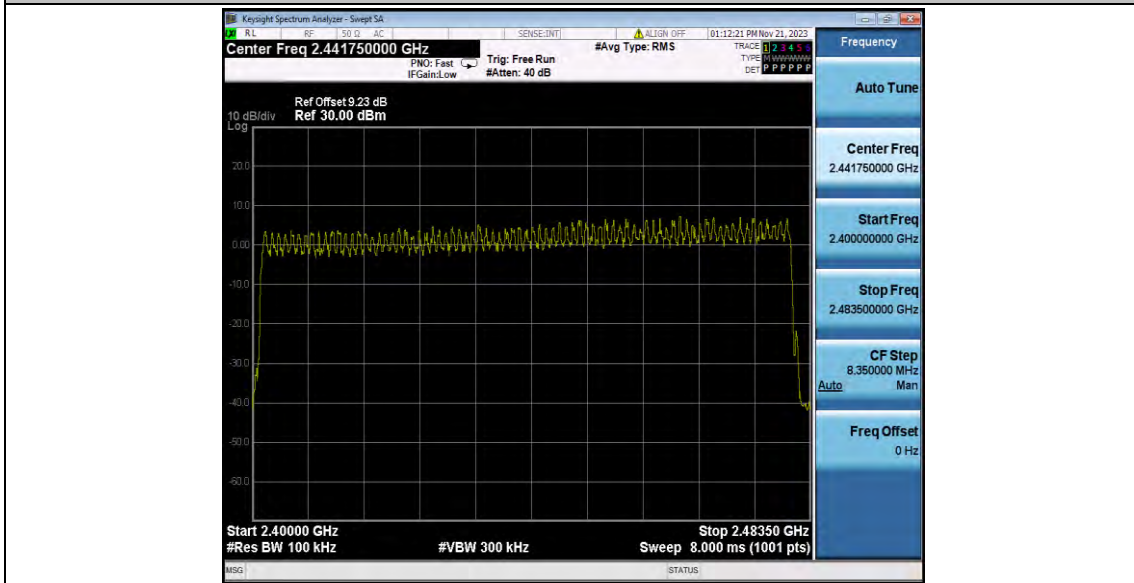
Test Result

Test Mode	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

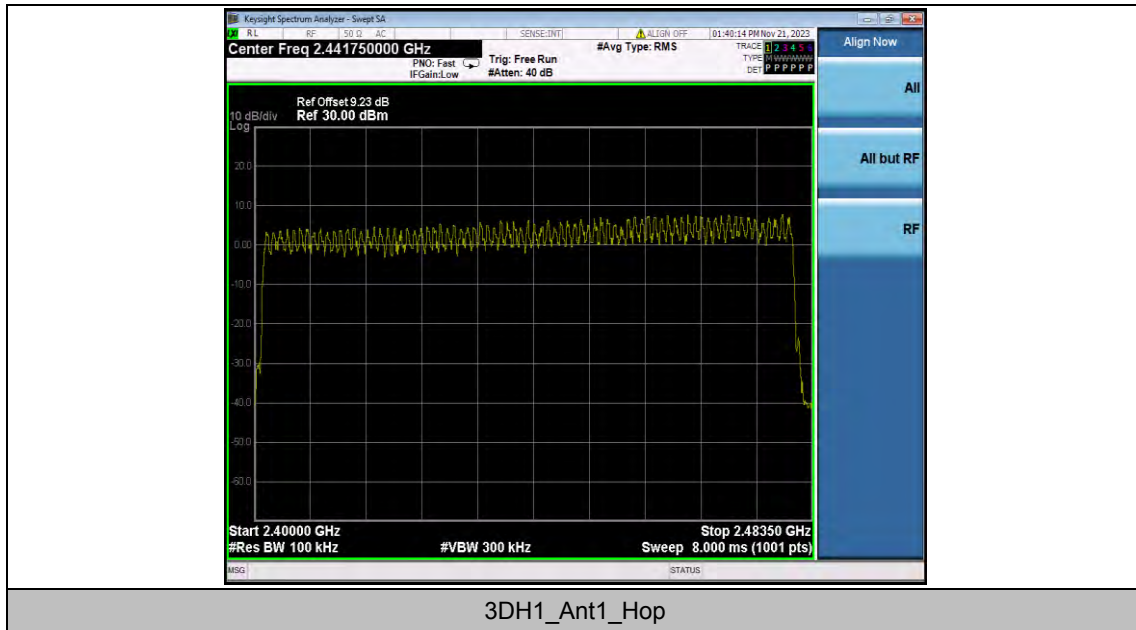
Test Graphs



DH1_Ant1_Hop



2DH1_Ant1_Hop



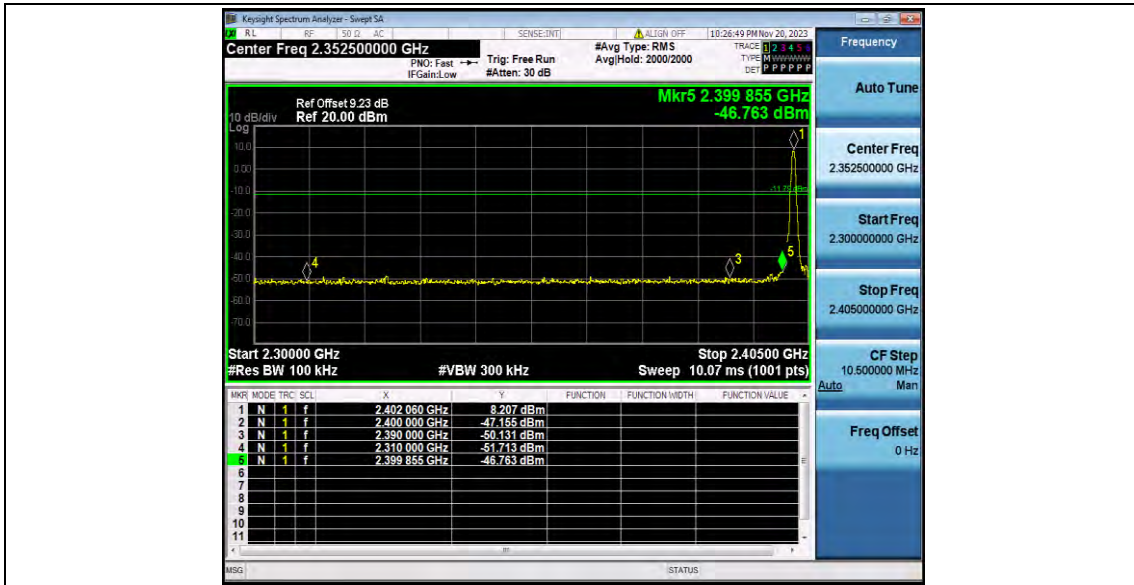
3DH1_Ant1_Hop

Appendix A.7: Band edge measurements

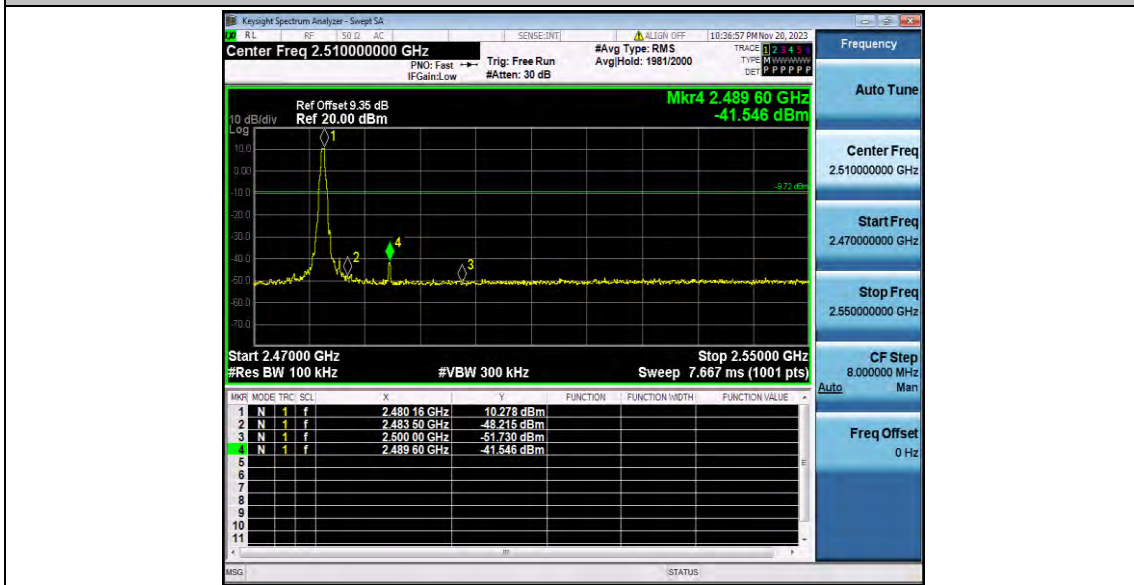
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	8.21	-46.76	≤-11.79	PASS
		High	2480	10.28	-41.62	≤-9.72	PASS
		Low	Hop_2402	7.70	-48.45	≤-12.3	PASS
		High	Hop_2480	10.52	-45.96	≤-9.48	PASS
2DH1	Ant1	Low	2402	4.39	-39.85	≤-15.61	PASS
		High	2480	5.27	-41.02	≤-14.74	PASS
		Low	Hop_2402	2.89	-49.16	≤-17.11	PASS
		High	Hop_2480	5.15	-47.61	≤-14.85	PASS
3DH1	Ant1	Low	2402	4.34	-42.94	≤-15.66	PASS
		High	2480	5.27	-40.49	≤-14.73	PASS
		Low	Hop_2402	3.23	-49.5	≤-16.78	PASS
		High	Hop_2480	7.03	-47.38	≤-12.97	PASS

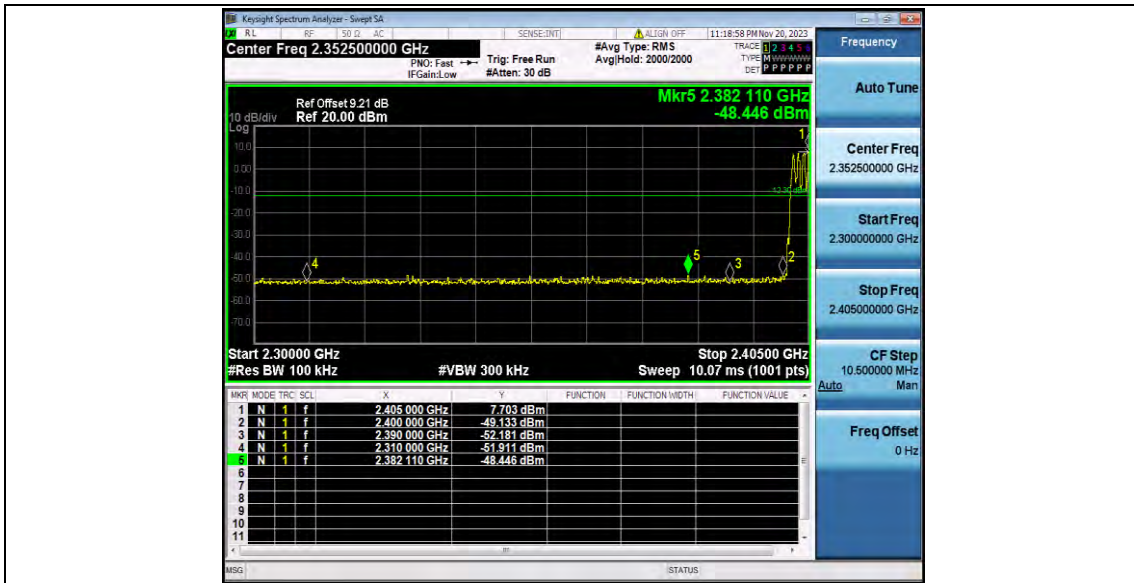
Test Graphs



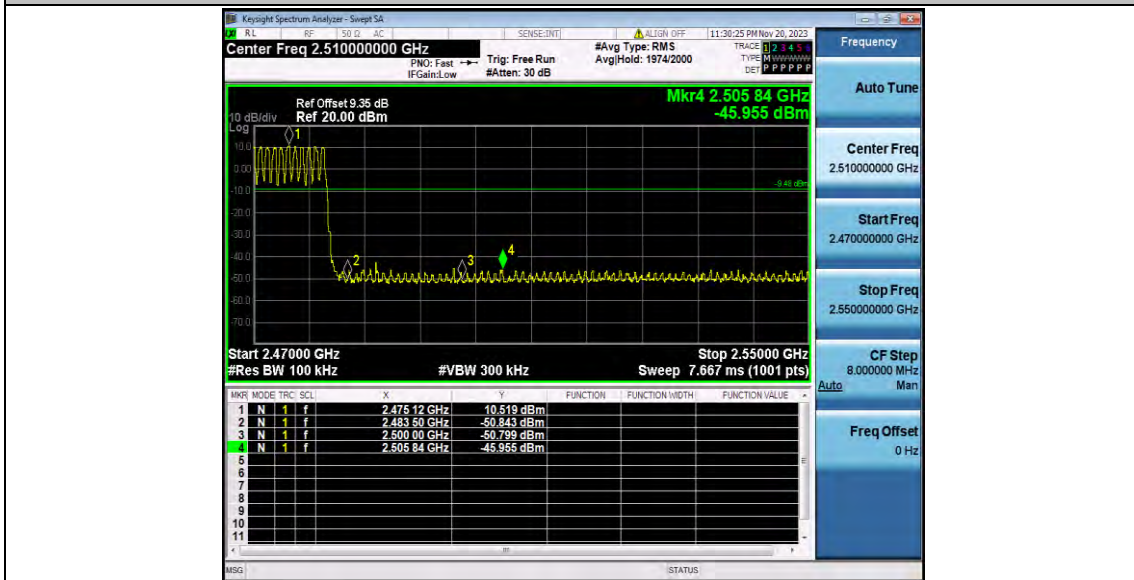
DH1_Ant1_Low_2402



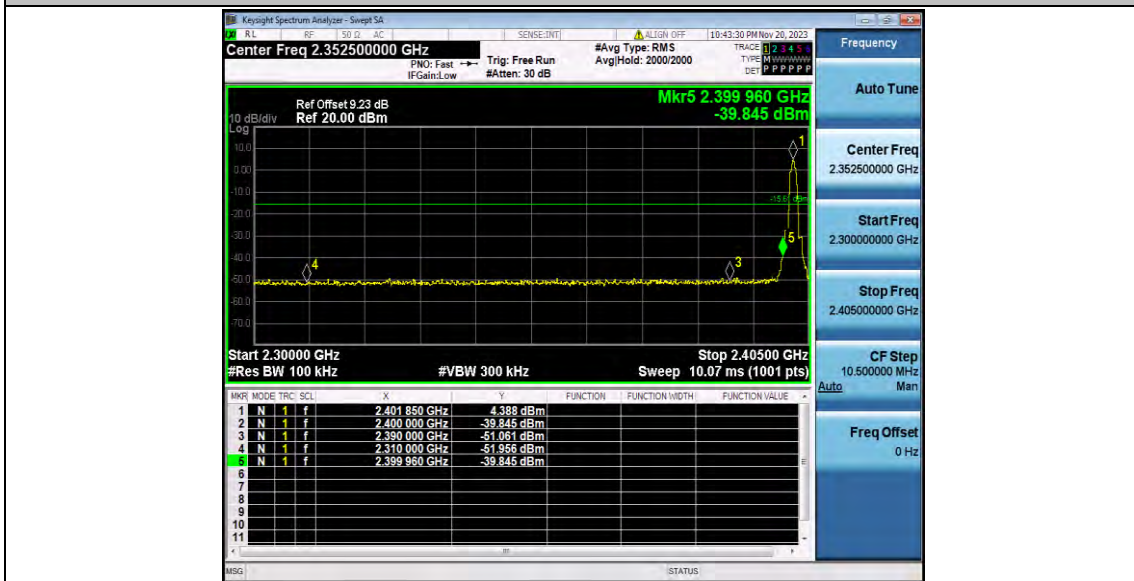
DH1_Ant1_High_2480



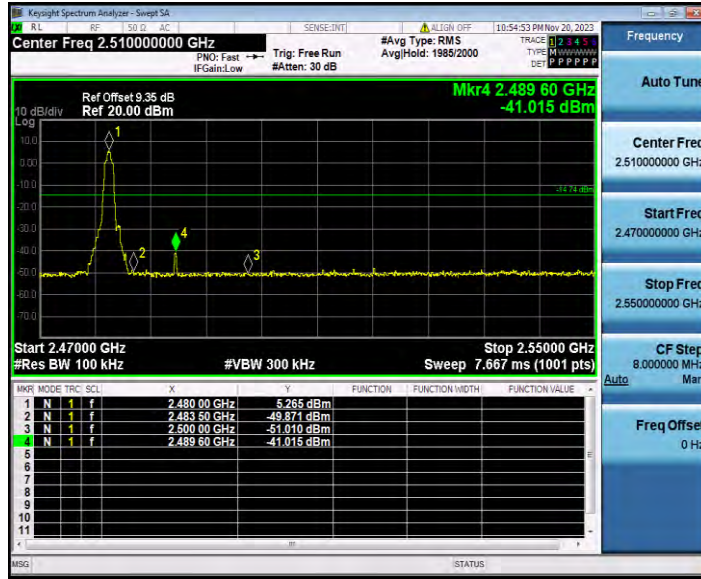
DH1_Ant1_Low_Hop_2402



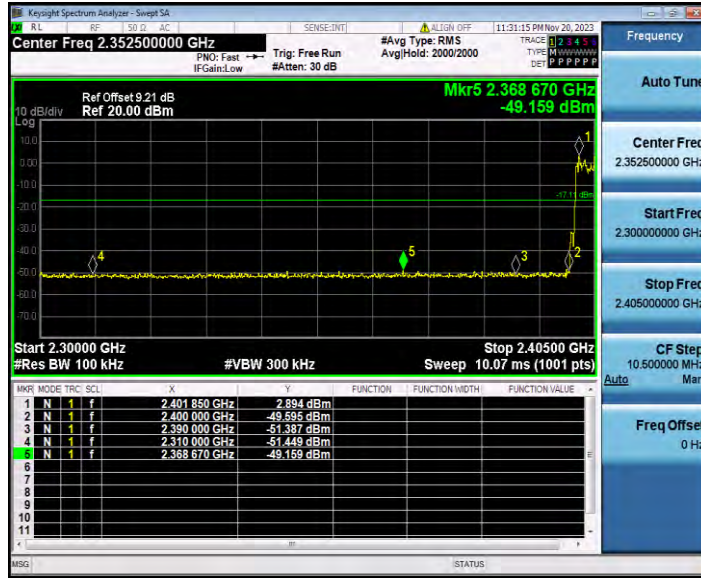
DH1_Ant1_High_Hop_2480



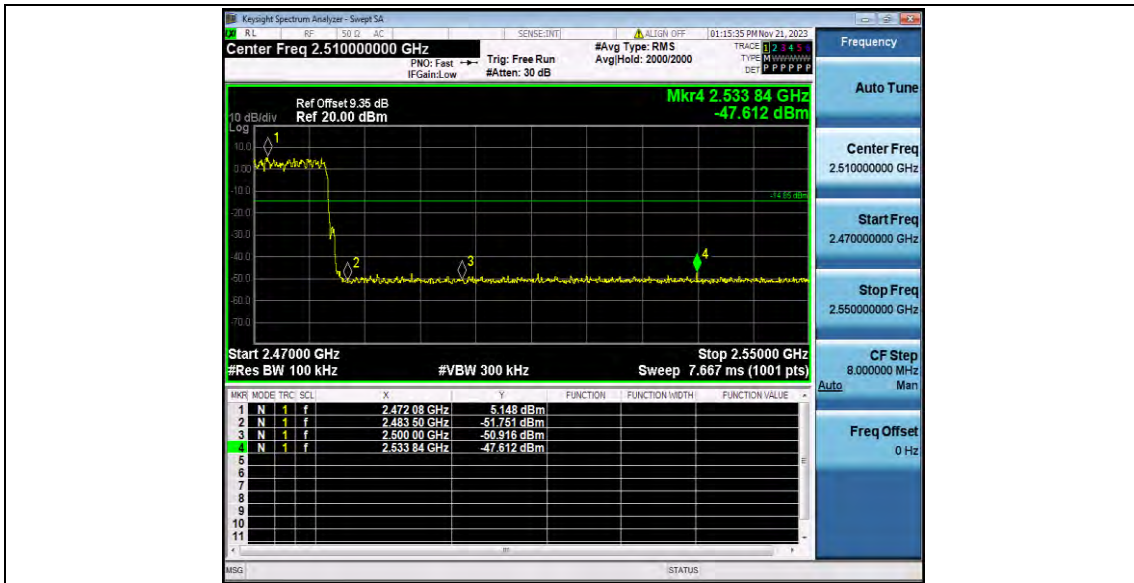
2DH1_Ant1_Low_2402



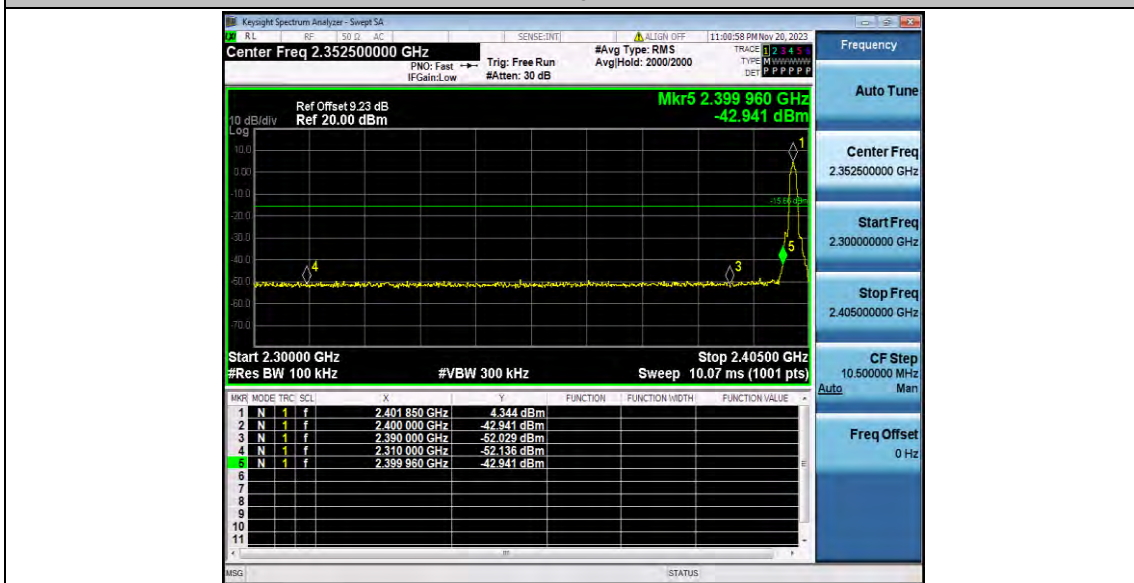
2DH1_Ant1_High_2480



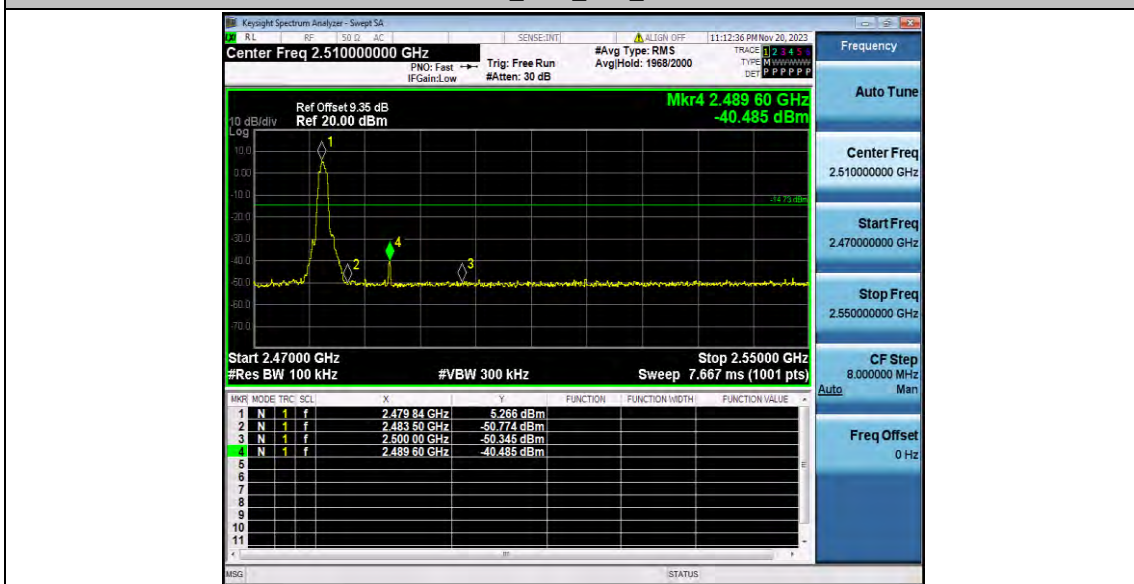
2DH1_Ant1_Low_Hop_2402



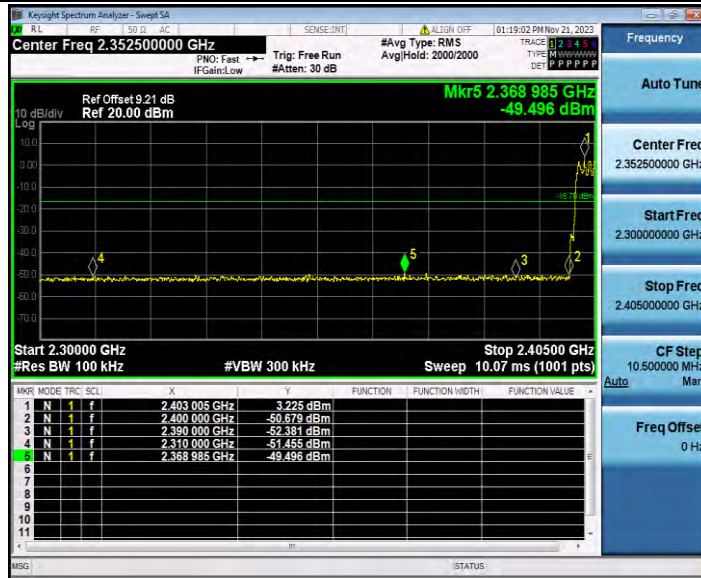
2DH1_Ant1_High_Hop_2480



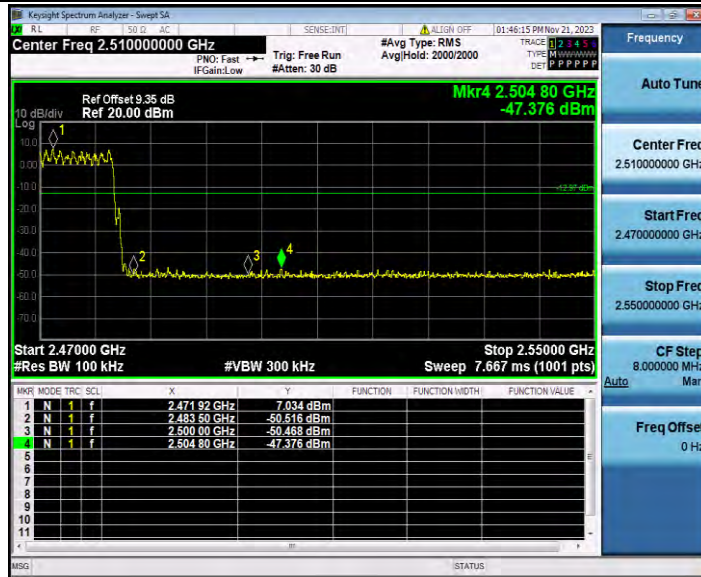
3DH1_Ant1_Low_2402



3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

Appendix A.8: Conducted Spurious Emission

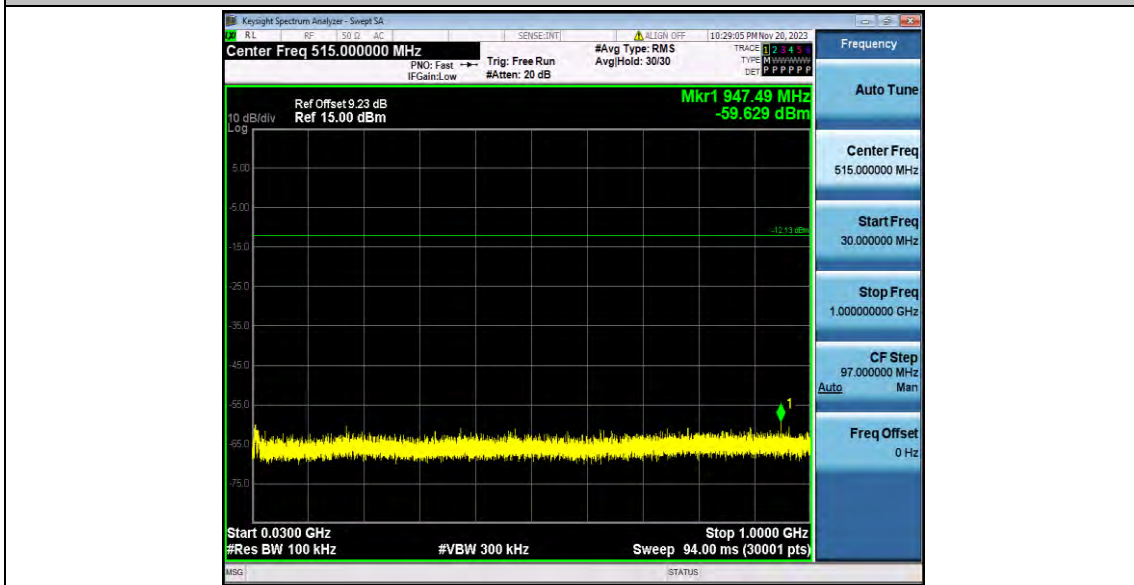
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	7.87	7.87	---	PASS
			30~1000	7.87	-59.63	≤-12.13	PASS
			1000~26500	7.87	-46.75	≤-12.13	PASS
		2441	Reference	9.32	9.32	---	PASS
			30~1000	9.32	-59.09	≤-10.68	PASS
			1000~26500	9.32	-47.58	≤-10.68	PASS
		2480	Reference	9.92	9.92	---	PASS
			30~1000	9.92	-60.44	≤-10.08	PASS
			1000~26500	9.92	-47.07	≤-10.08	PASS
2DH1	Ant1	2402	Reference	3.37	3.37	---	PASS
			30~1000	3.37	-59.82	≤-16.63	PASS
			1000~26500	3.37	-47.19	≤-16.63	PASS
		2441	Reference	4.89	4.89	---	PASS
			30~1000	4.89	-60.81	≤-15.11	PASS
			1000~26500	4.89	-46.78	≤-15.11	PASS
		2480	Reference	4.20	4.20	---	PASS
			30~1000	4.20	-60.39	≤-15.8	PASS
			1000~26500	4.20	-47.82	≤-15.8	PASS
3DH1	Ant1	2402	Reference	4.24	4.24	---	PASS
			30~1000	4.24	-60.59	≤-15.76	PASS
			1000~26500	4.24	-48.13	≤-15.76	PASS
		2441	Reference	5.19	5.19	---	PASS
			30~1000	5.19	-59.95	≤-14.81	PASS
			1000~26500	5.19	-47.37	≤-14.81	PASS
		2480	Reference	3.43	3.43	---	PASS
			30~1000	3.43	-60.47	≤-16.57	PASS
			1000~26500	3.43	-47.55	≤-16.57	PASS

Test Graphs



DH1_Ant1_2402_0~Reference



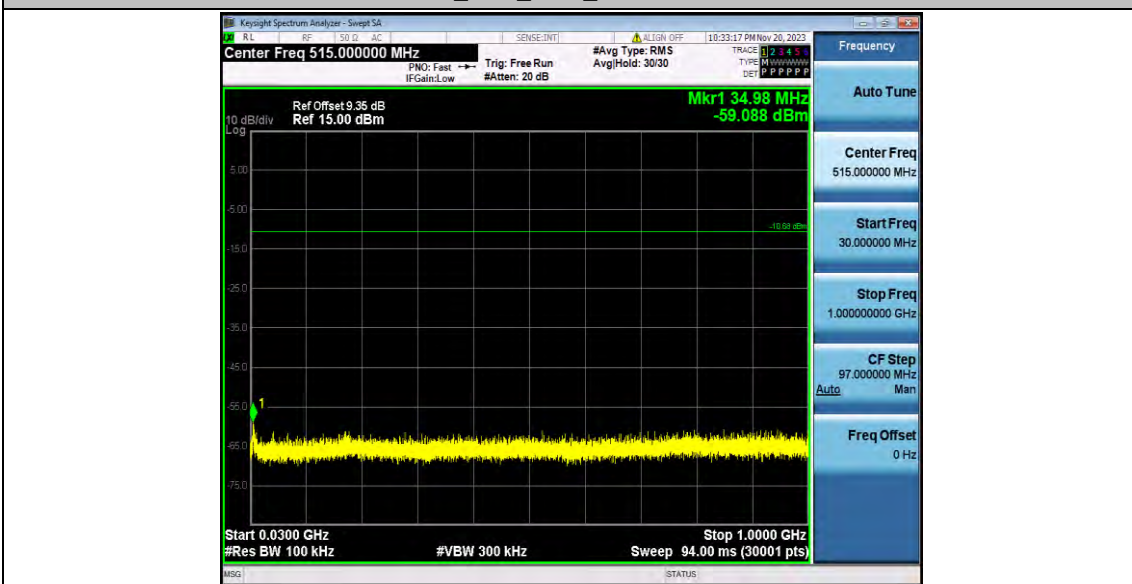
DH1_Ant1_2402_30~1000



DH1_Ant1_2402_1000~26500



DH1_Ant1_2441_0~Reference



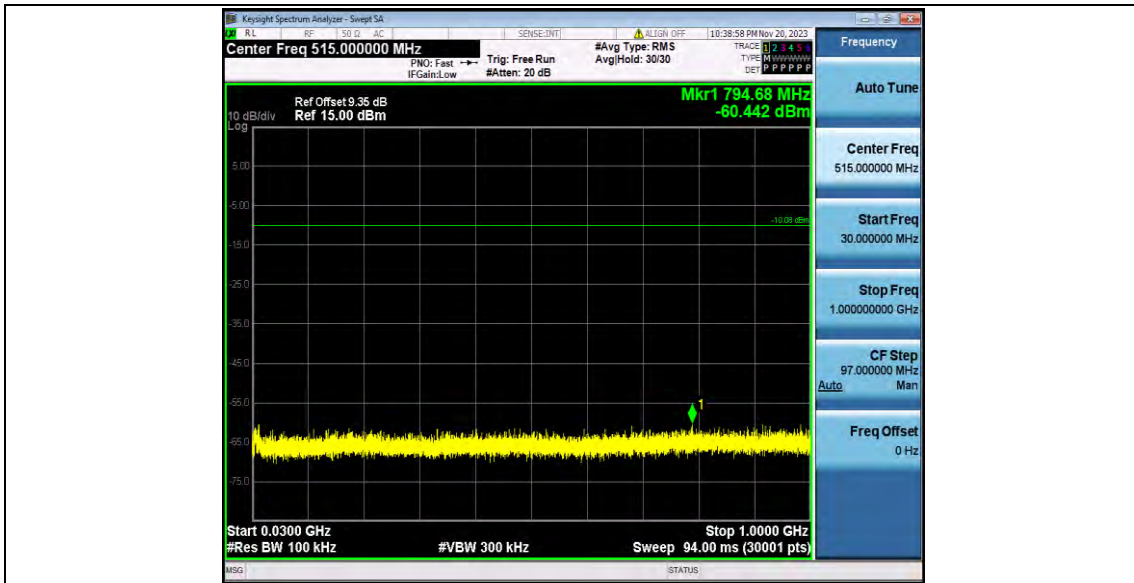
DH1_Ant1_2441_30~1000



DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



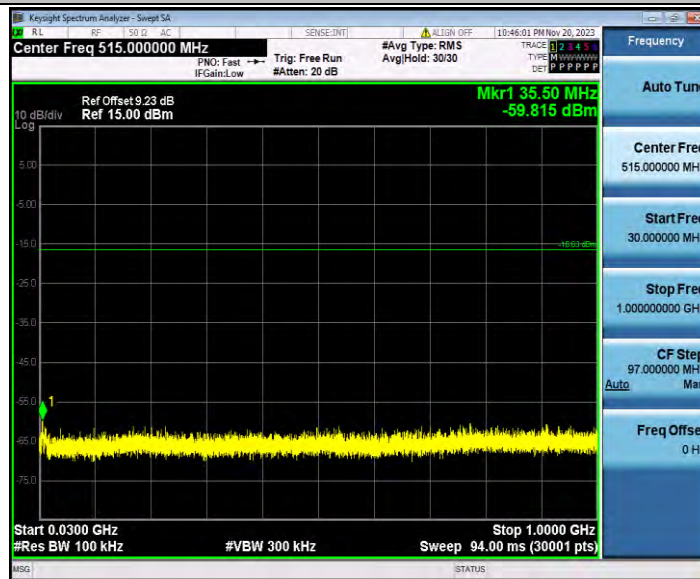
DH1_Ant1_2480_30~1000



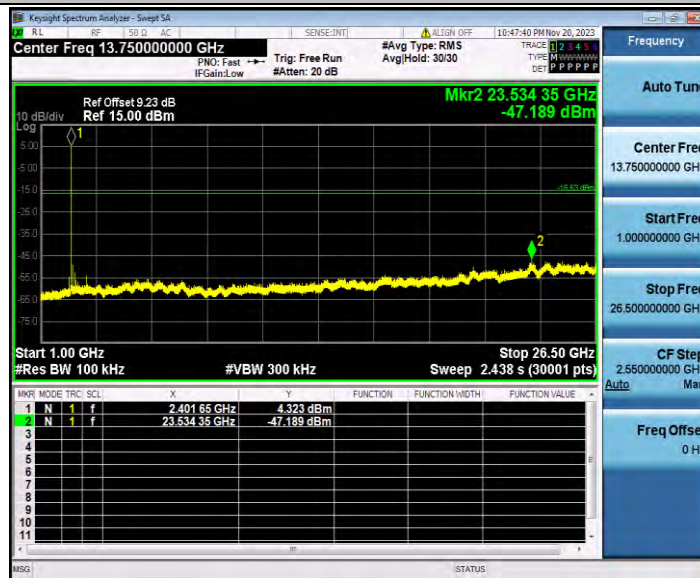
DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



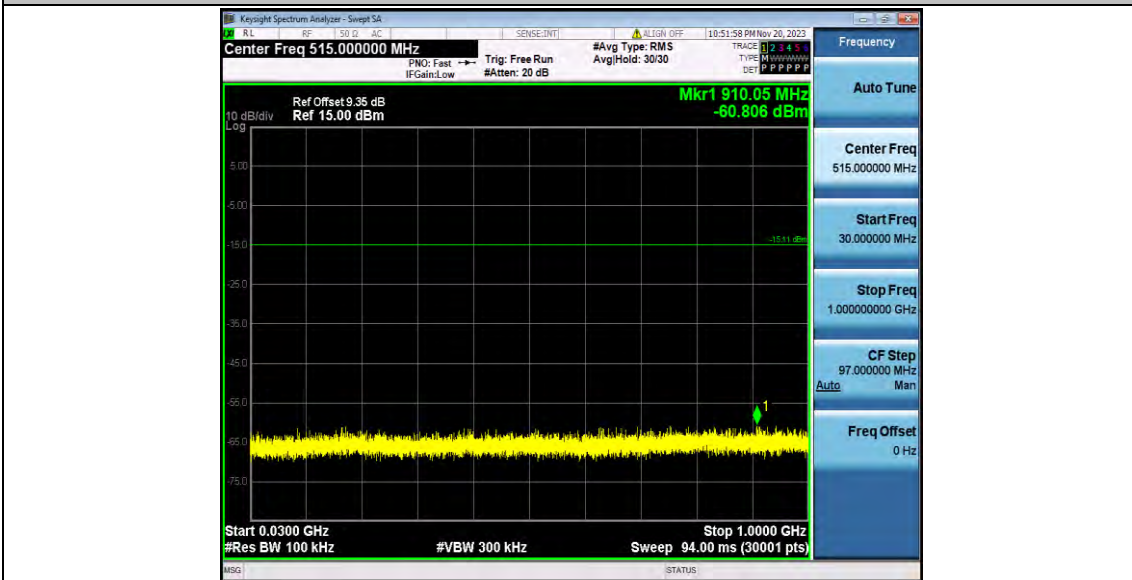
2DH1_Ant1_2402_30~1000



2DH1_Ant1_2402_1000~26500



2DH1_Ant1_2441_0~Reference



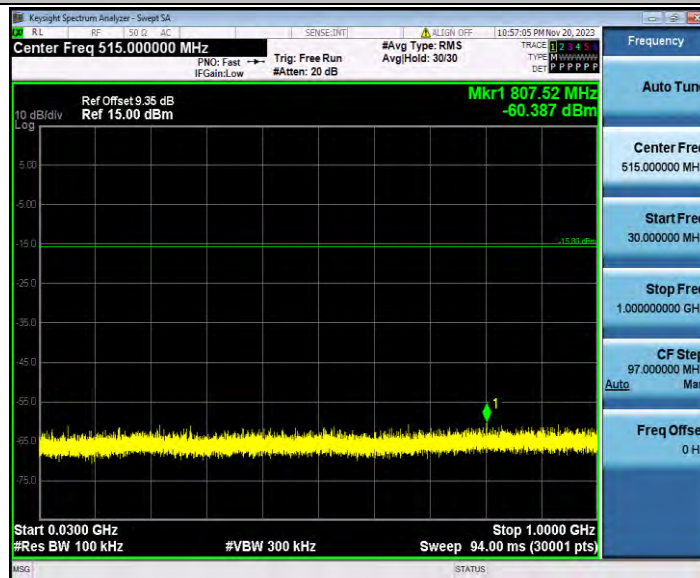
2DH1_Ant1_2441_30~1000



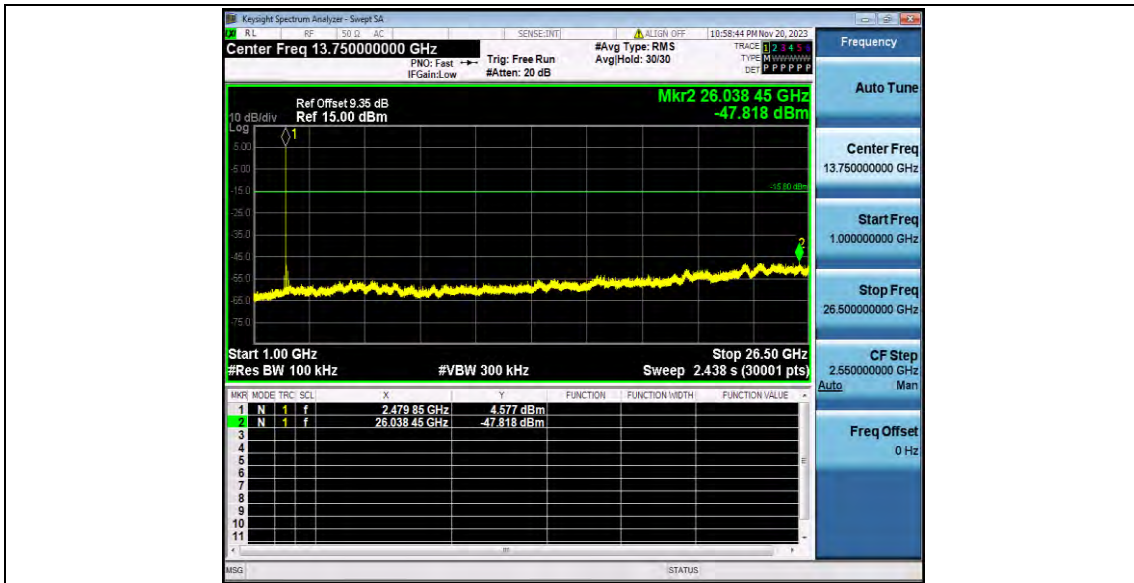
2DH1_Ant1_2441_1000~26500



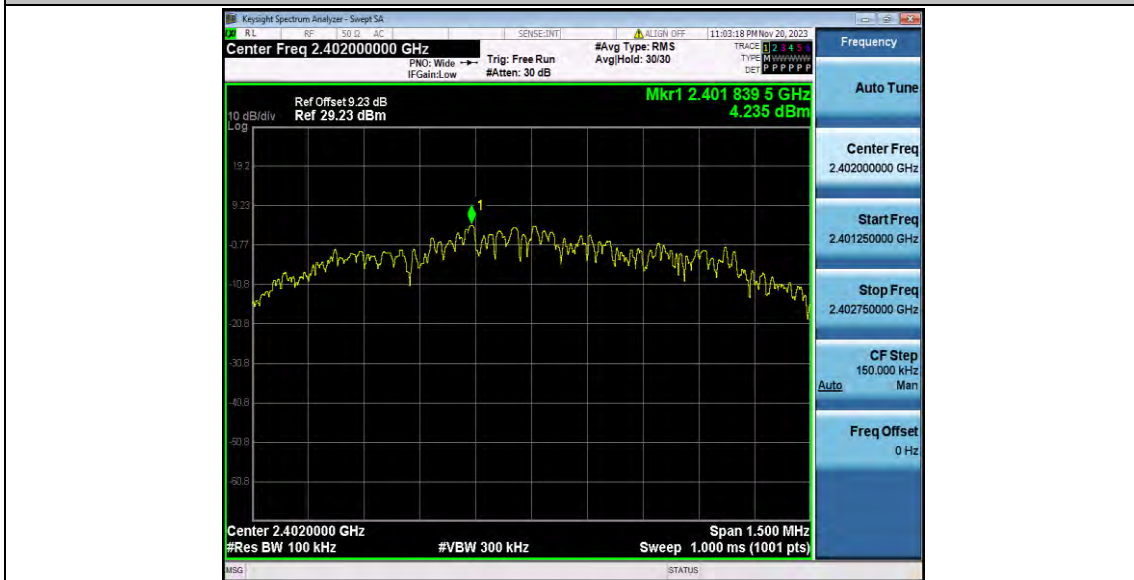
2DH1_Ant1_2480_0~Reference



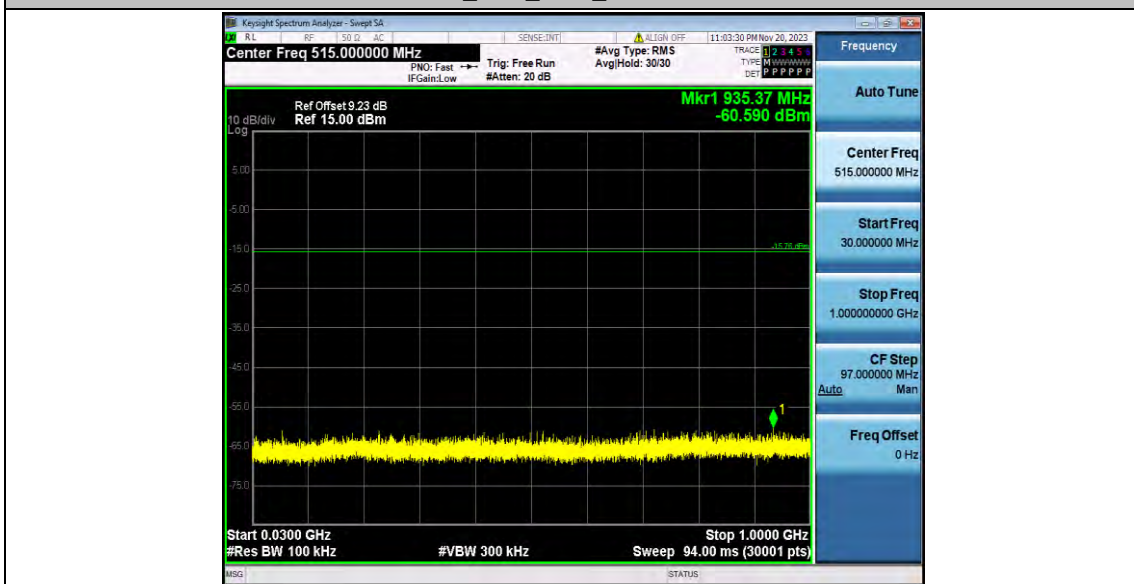
2DH1_Ant1_2480_30~1000



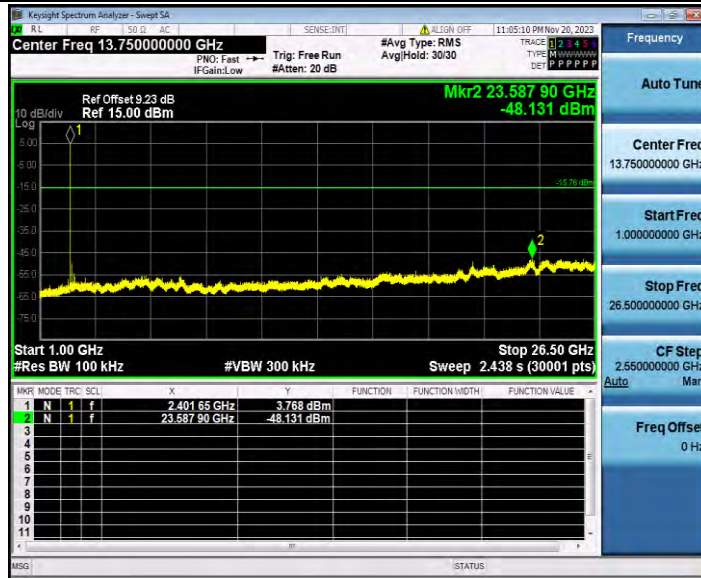
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



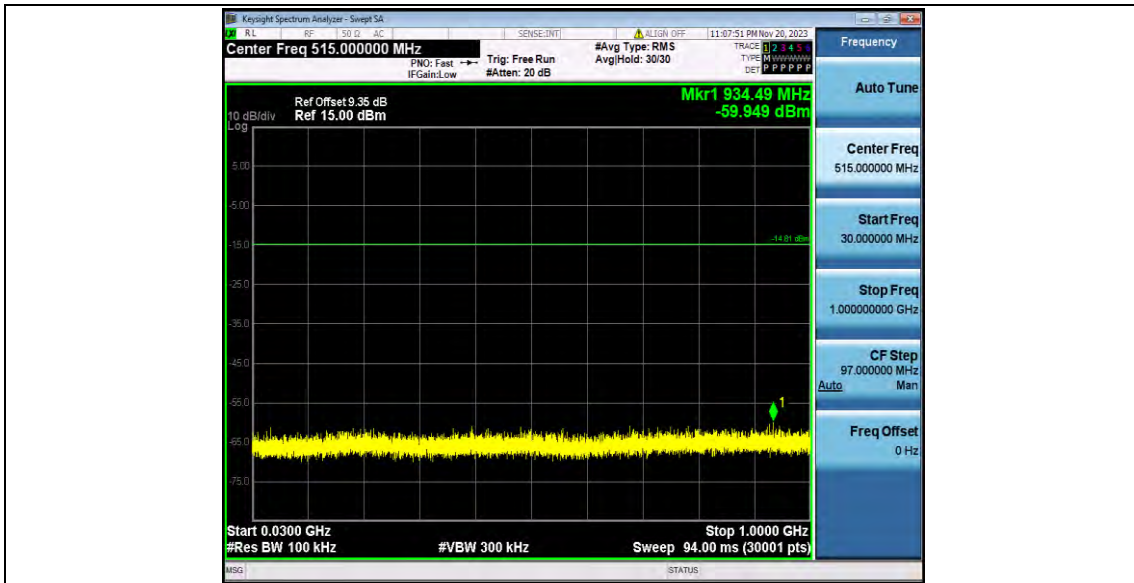
3DH1_Ant1_2402_30~1000



3DH1_Ant1_2402_1000~26500



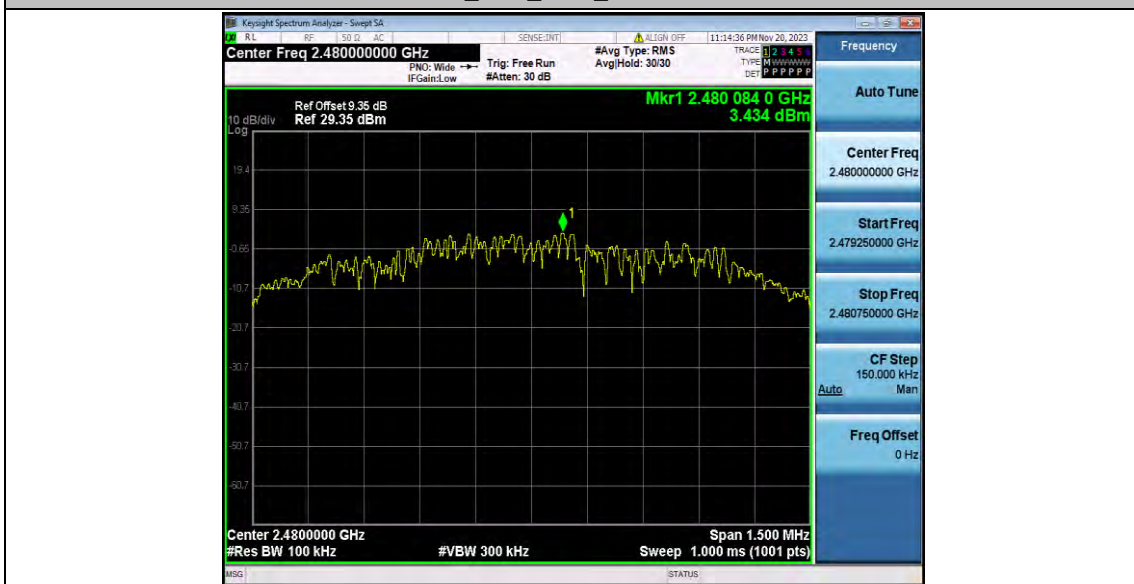
3DH1_Ant1_2441_0~Reference



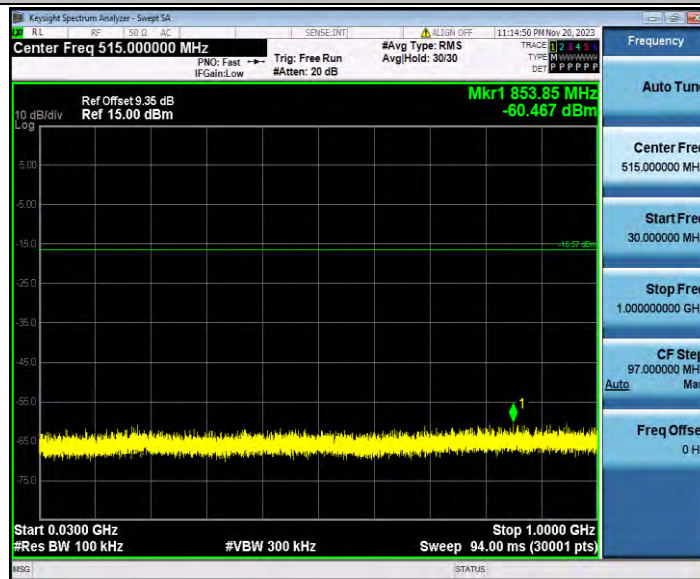
3DH1_Ant1_2441_30~100



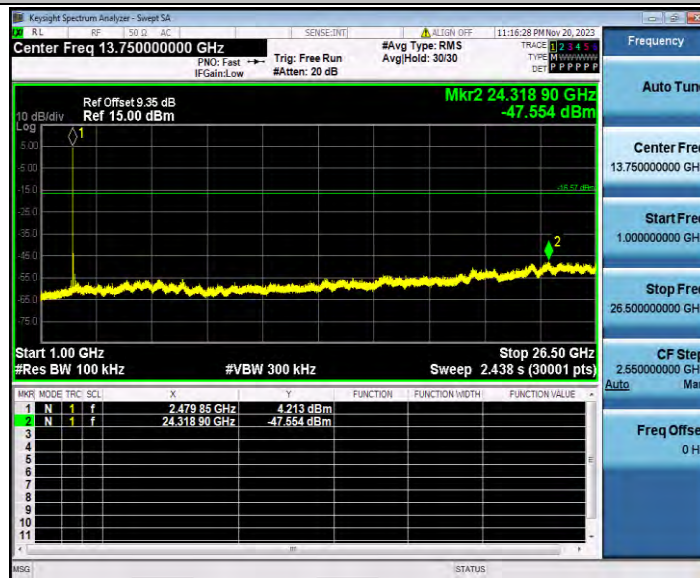
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500