

Case No. : <u>GTS20230525016-1-8</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.6.12</u> Test Engineer: <u>Jenny zeng</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	0.870	2401.553	2402.423	---	---
		2441	0.930	2440.538	2441.468	---	---
		2480	0.906	2479.532	2480.438	---	---
2DH1	Ant1	2402	1.452	2401.253	2402.705	---	---
		2441	1.449	2440.256	2441.705	---	---
		2480	1.446	2479.259	2480.705	---	---
3DH1	Ant1	2402	1.473	2401.262	2402.735	---	---
		2441	1.482	2440.262	2441.744	---	---
		2480	1.479	2479.259	2480.738	---	---

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

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.85183	2401.560	2402.412	---	---
		2441	0.84417	2440.566	2441.410	---	---
		2480	0.81959	2479.573	2480.393	---	---
2DH1	Ant1	2402	1.3460	2401.317	2402.663	---	---
		2441	1.3306	2440.324	2441.655	---	---
		2480	1.3341	2479.325	2480.659	---	---
3DH1	Ant1	2402	1.3328	2401.325	2402.658	---	---
		2441	1.3340	2440.327	2441.661	---	---
		2480	1.3331	2479.324	2480.658	---	---

Test Graphs



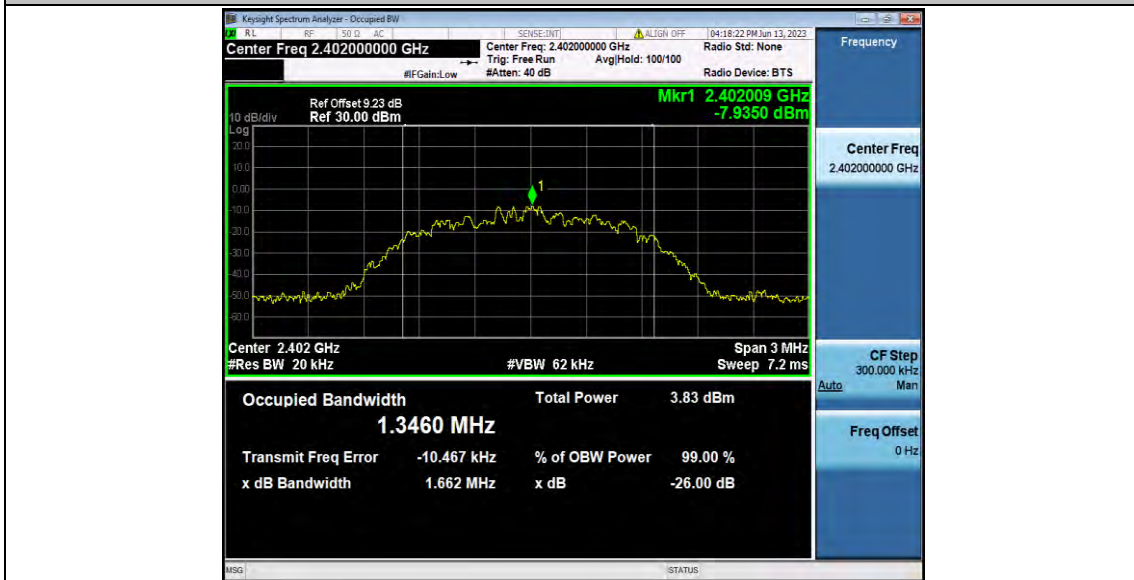
DH1_Ant1_2402



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	2.98	≤20.97	PASS
		2441	3.6	≤20.97	PASS
		2480	4.13	≤20.97	PASS
2DH1	Ant1	2402	-0.63	≤20.97	PASS
		2441	-0.12	≤20.97	PASS
		2480	0.64	≤20.97	PASS
3DH1	Ant1	2402	-0.45	≤20.97	PASS
		2441	0.1	≤20.97	PASS
		2480	0.67	≤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	1.008	≥ 0.620	PASS
		Hop_2441	1.006	≥ 0.620	PASS
		Hop_2480	0.844	≥ 0.620	PASS
2DH1	Ant1	Hop_2402	1	≥ 0.968	PASS
		Hop_2441	0.998	≥ 0.968	PASS
		Hop_2480	1	≥ 0.968	PASS
3DH1	Ant1	Hop_2402	0.992	≥ 0.988	PASS
		Hop_2441	0.998	≥ 0.988	PASS
		Hop_2480	1.174	≥ 0.988	PASS

Test Graphs



DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441

3DH1_Ant1_Hop_2441



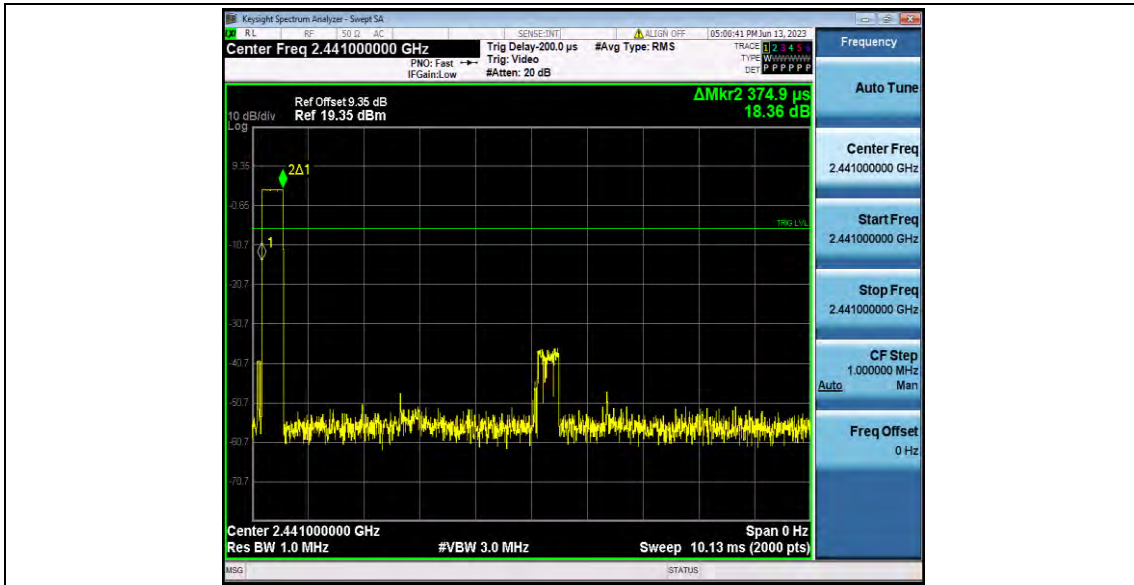
3DH1_Ant1_Hop_2480

Appendix A.5: Time of occupancy

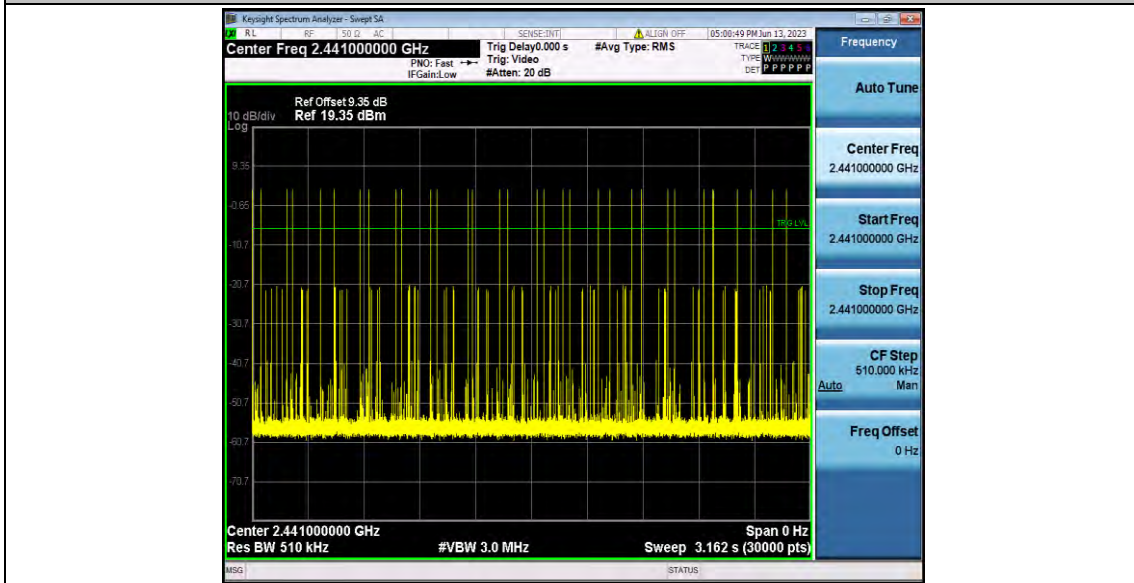
Test Result

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	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.87	80	0.23	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	140	0.228	≤0.4	PASS
2DH5	Ant1	Hop	2.88	30	0.086	≤0.4	PASS
3DH1	Ant1	Hop	0.38	330	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.63	180	0.294	≤0.4	PASS
3DH5	Ant1	Hop	2.88	30	0.086	≤0.4	PASS

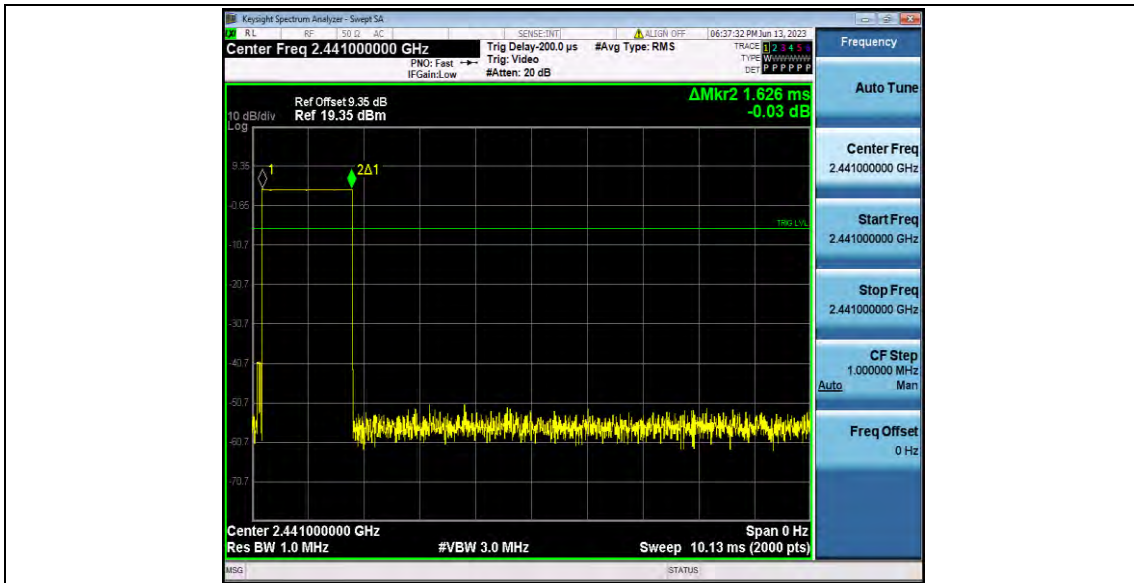
Test Graphs



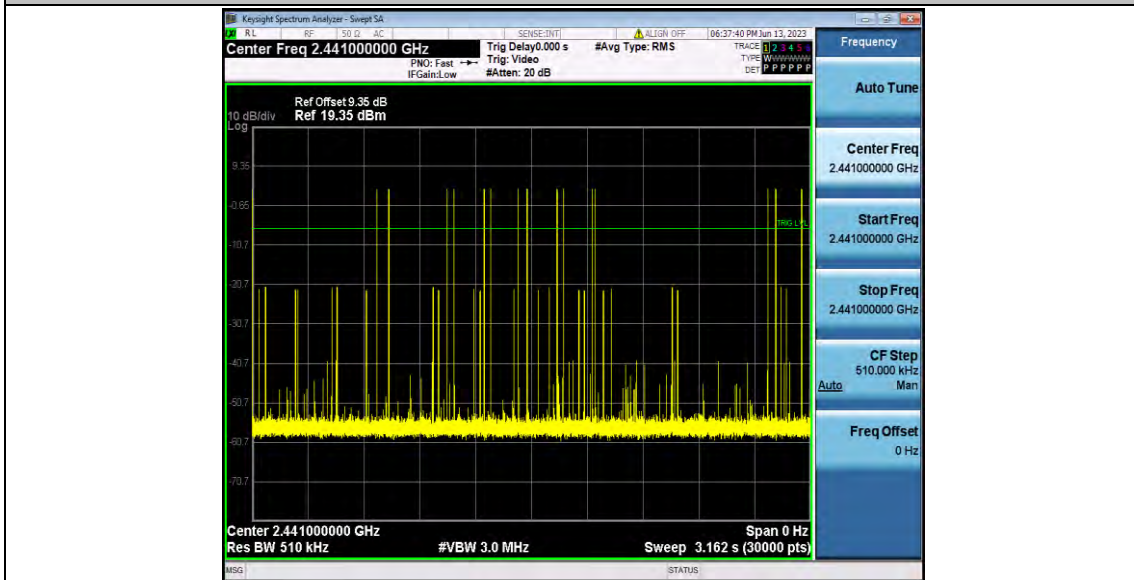
DH1_Ant1_Hop



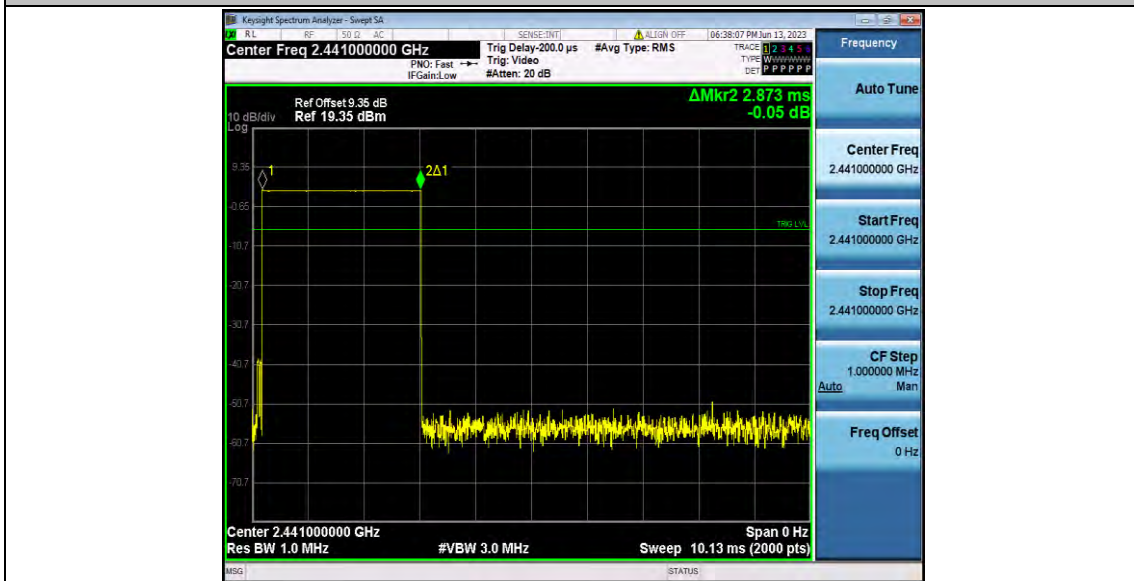
DH1_Ant1_Hop



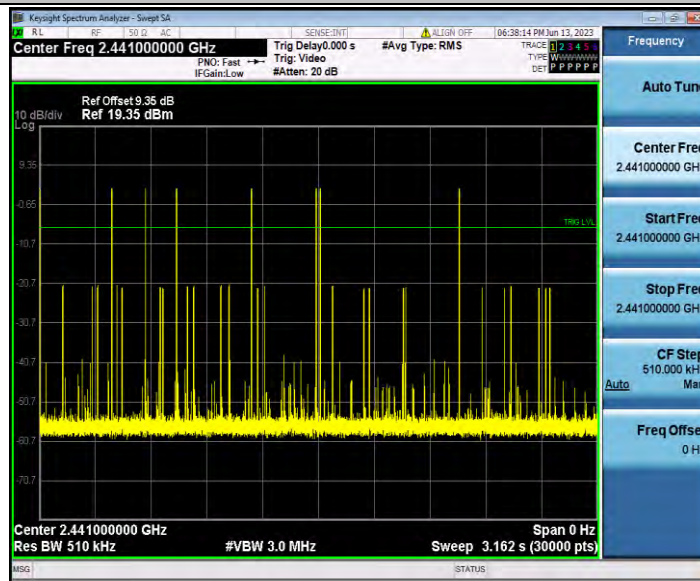
DH3_Ant1_Hop



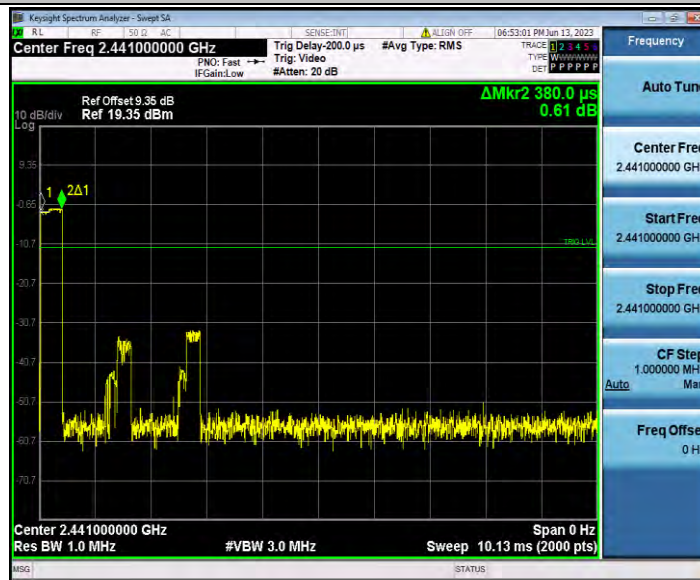
DH3_Ant1_Hop



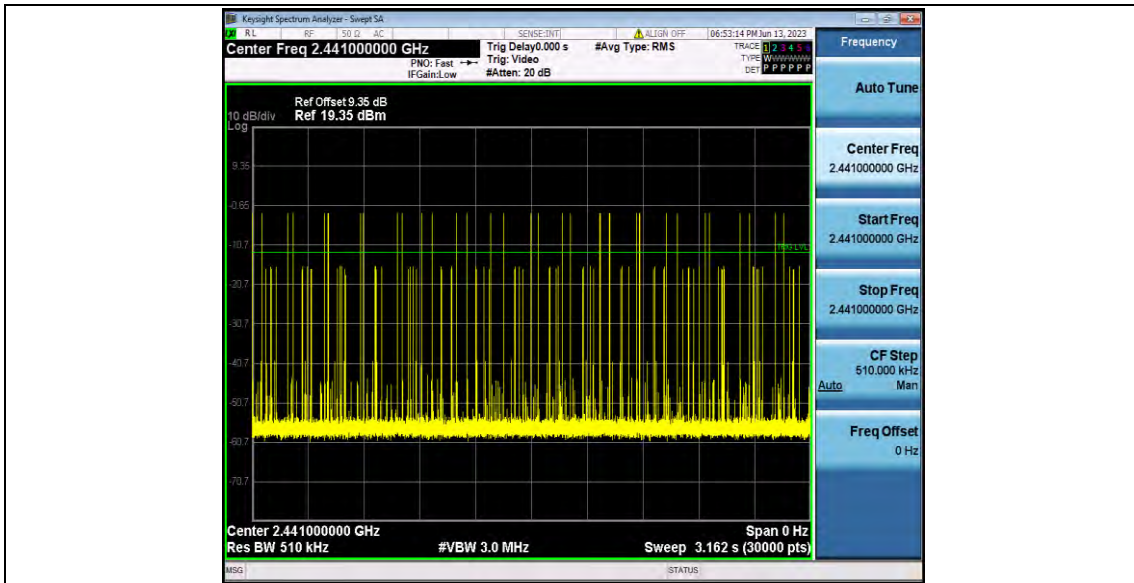
DH5_Ant1_Hop



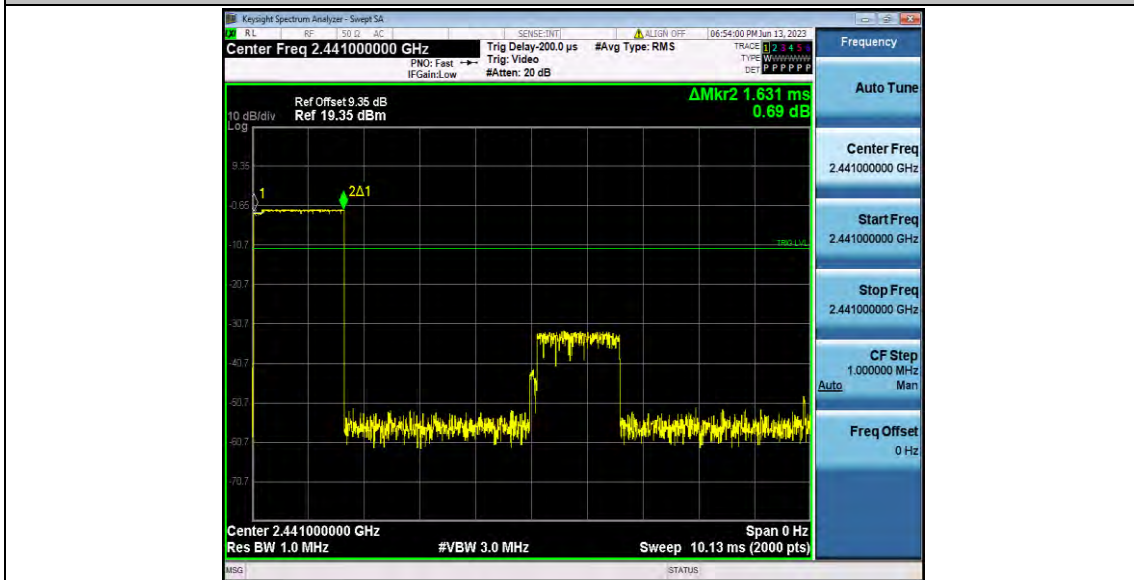
DH5_Ant1_Hop



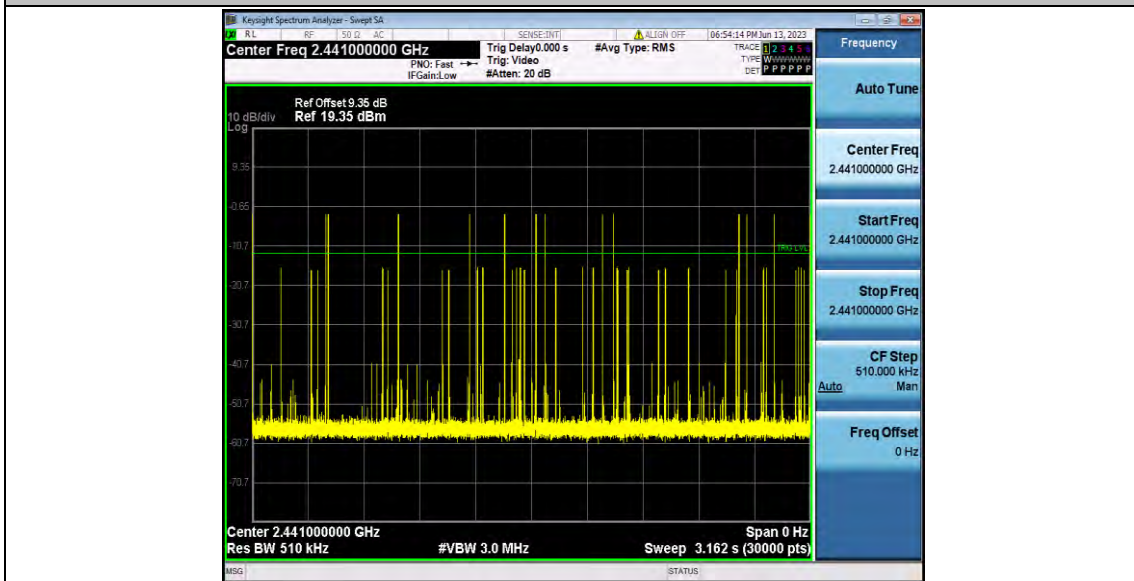
2DH1_Ant1_Hop



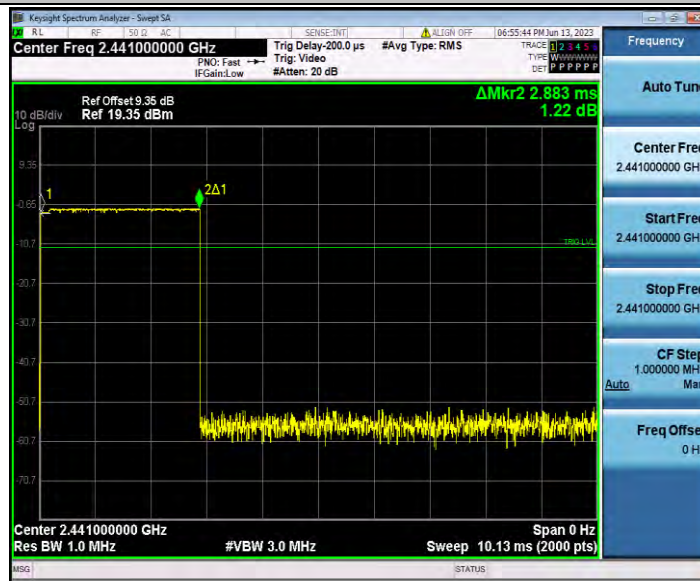
2DH1_Ant1_Hop



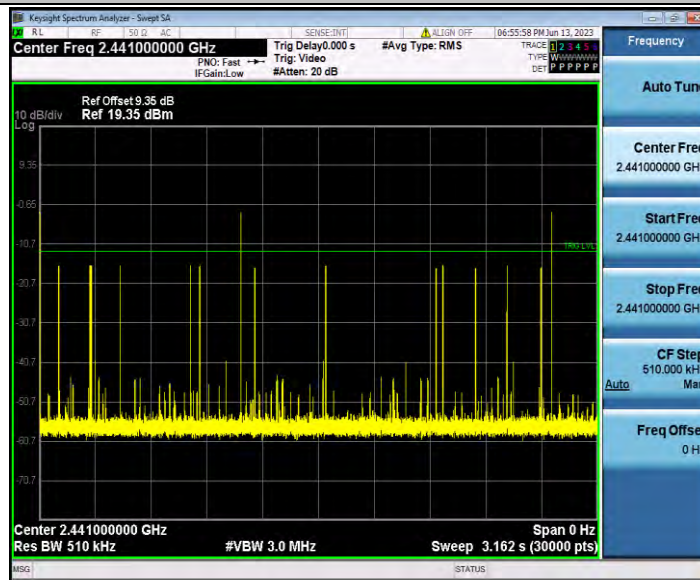
2DH3_Ant1_Hop



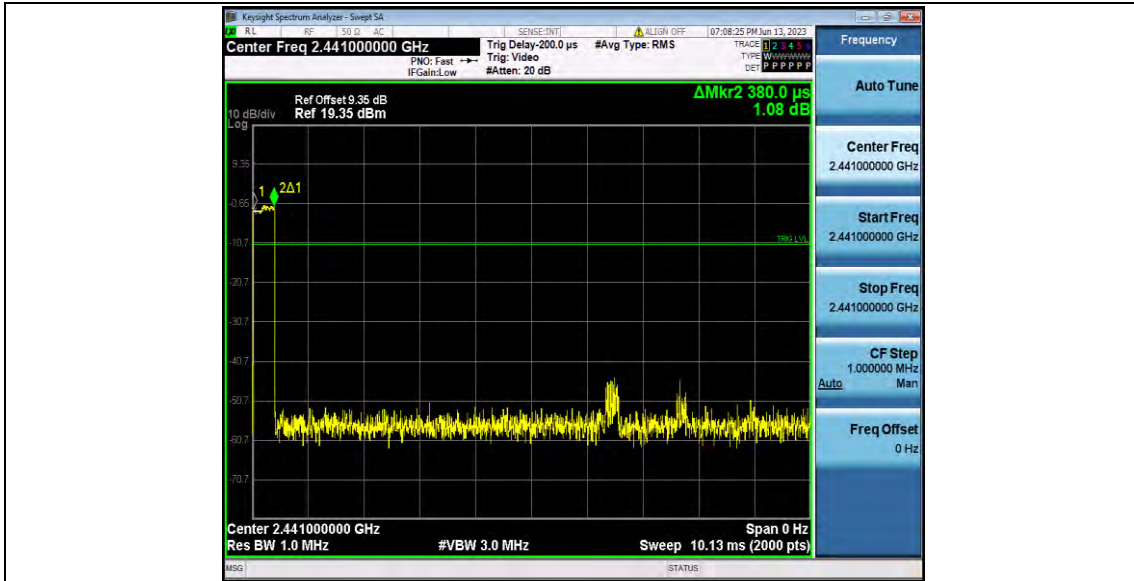
2DH3_Ant1_Hop



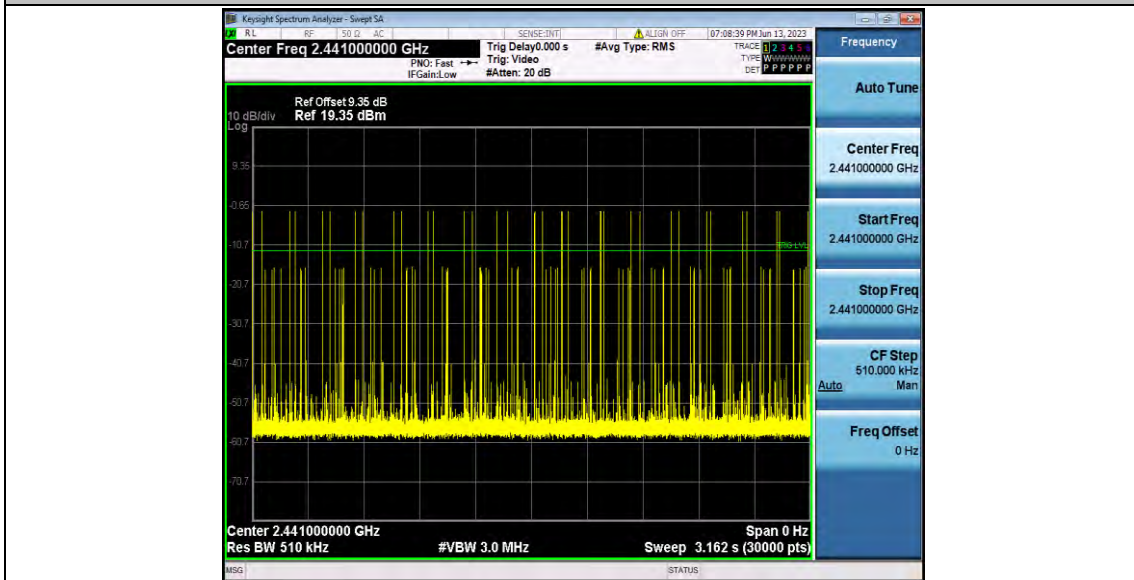
2DH5_Ant1_Hop



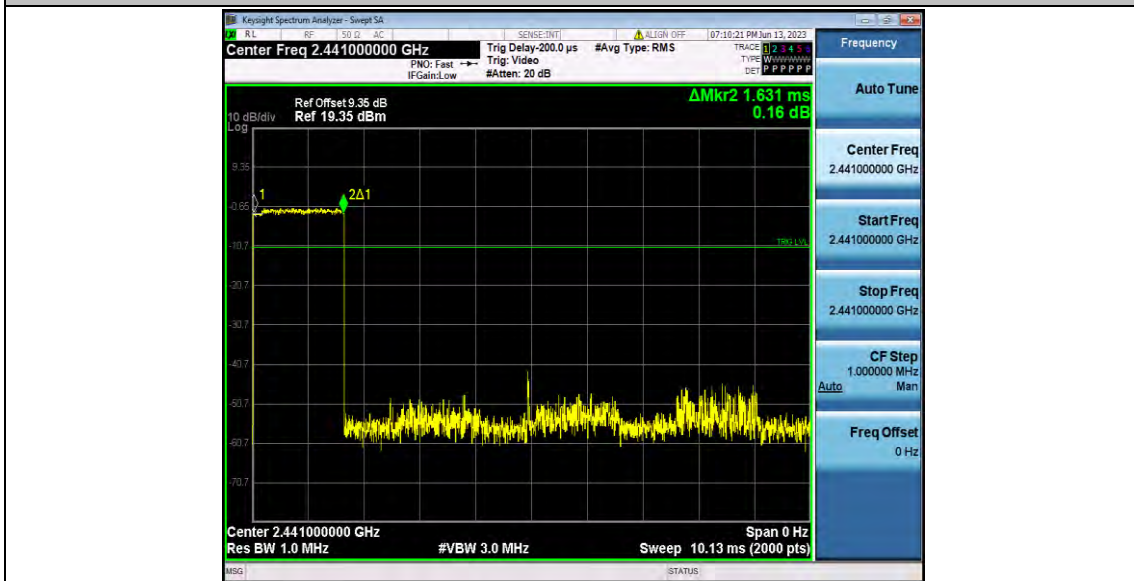
2DH5_Ant1_Hop



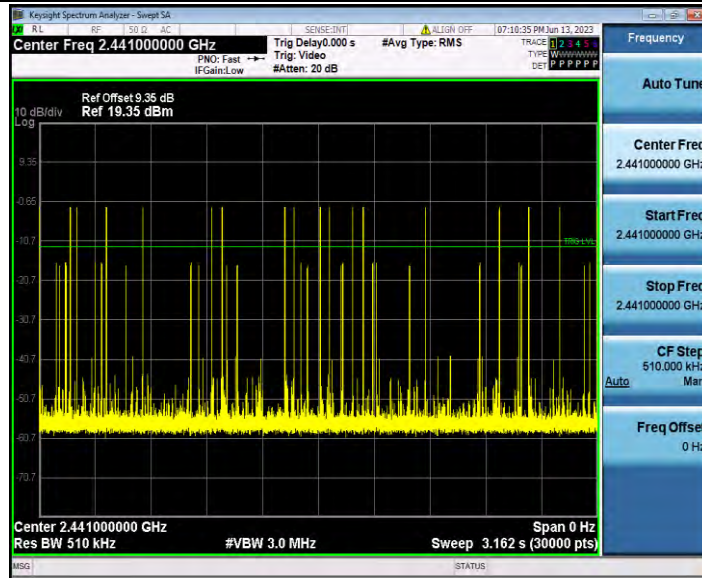
3DH1_Ant1_Hop



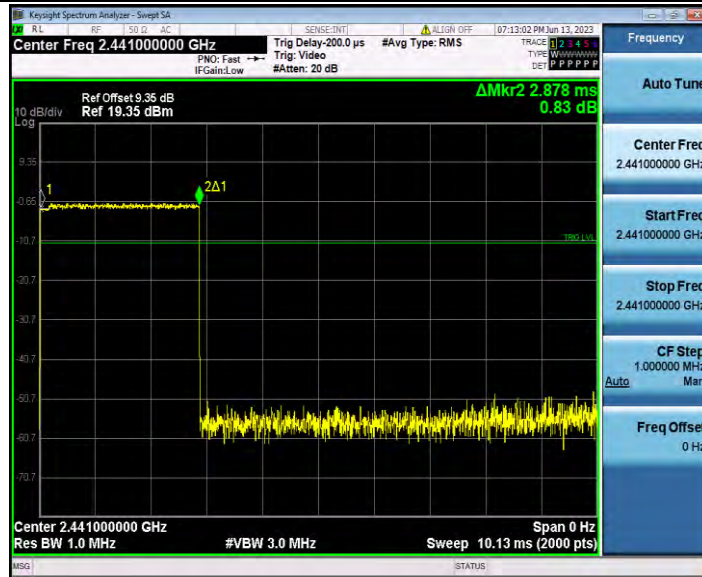
3DH1_Ant1_Hop



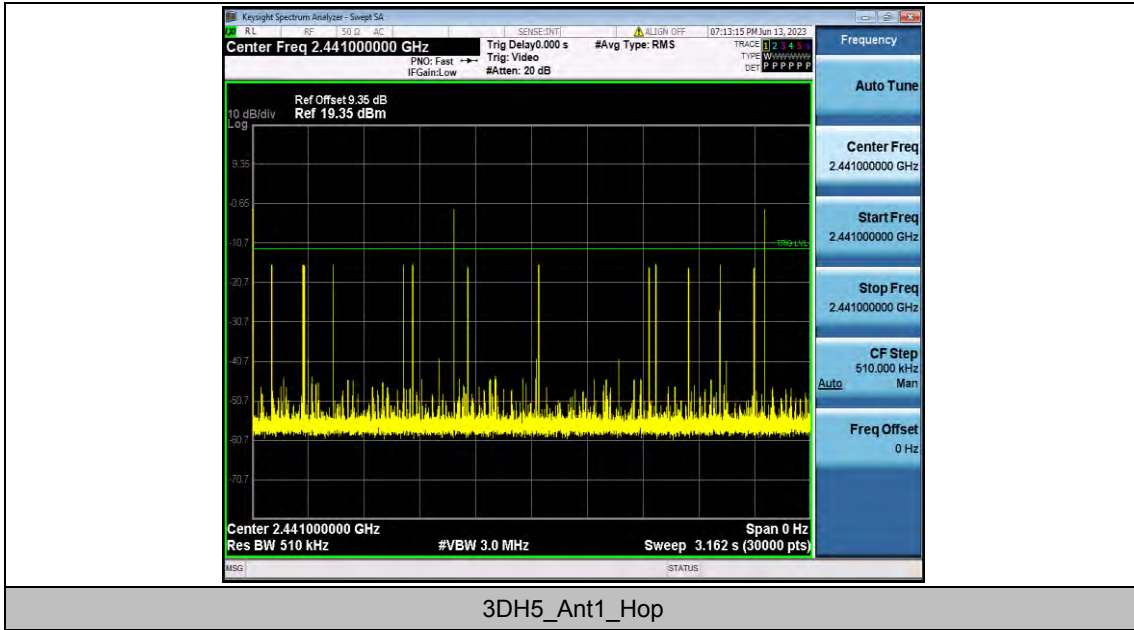
3DH3_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop



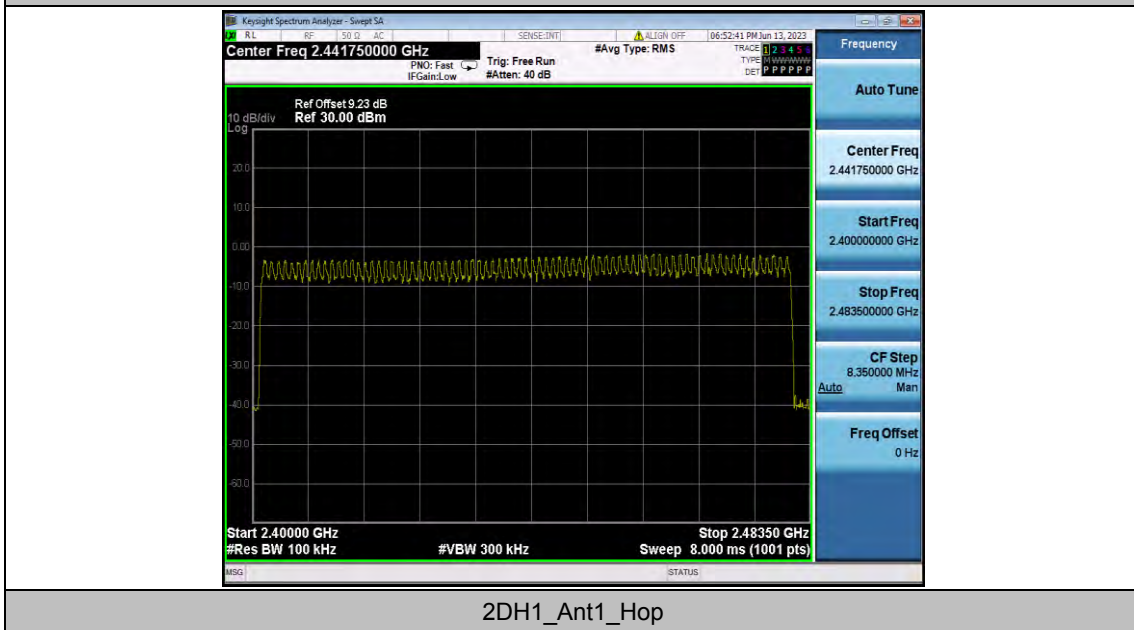
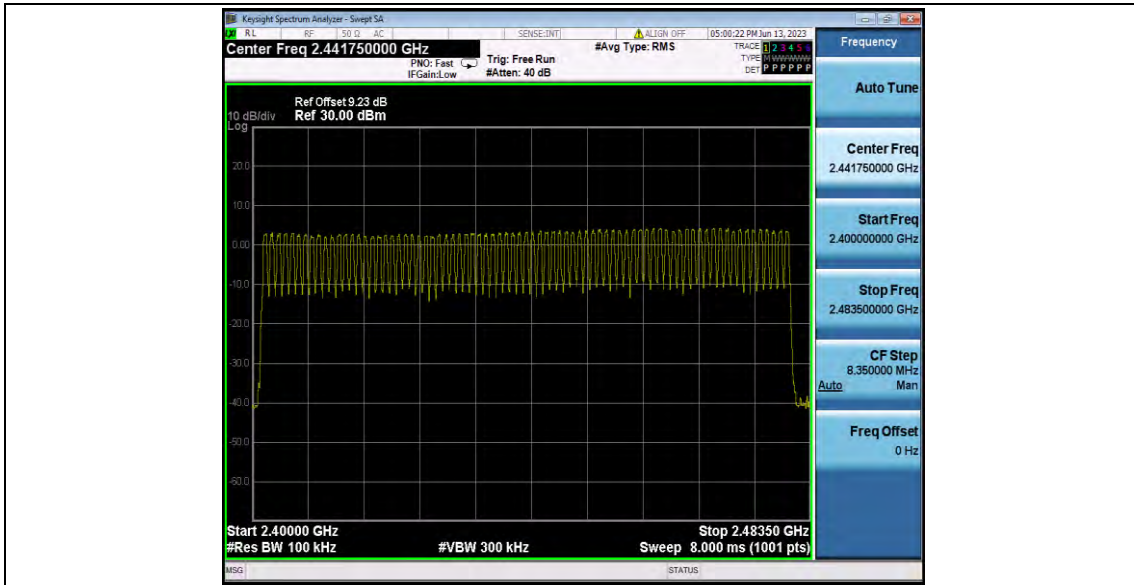
3DH5_Ant1_Hop

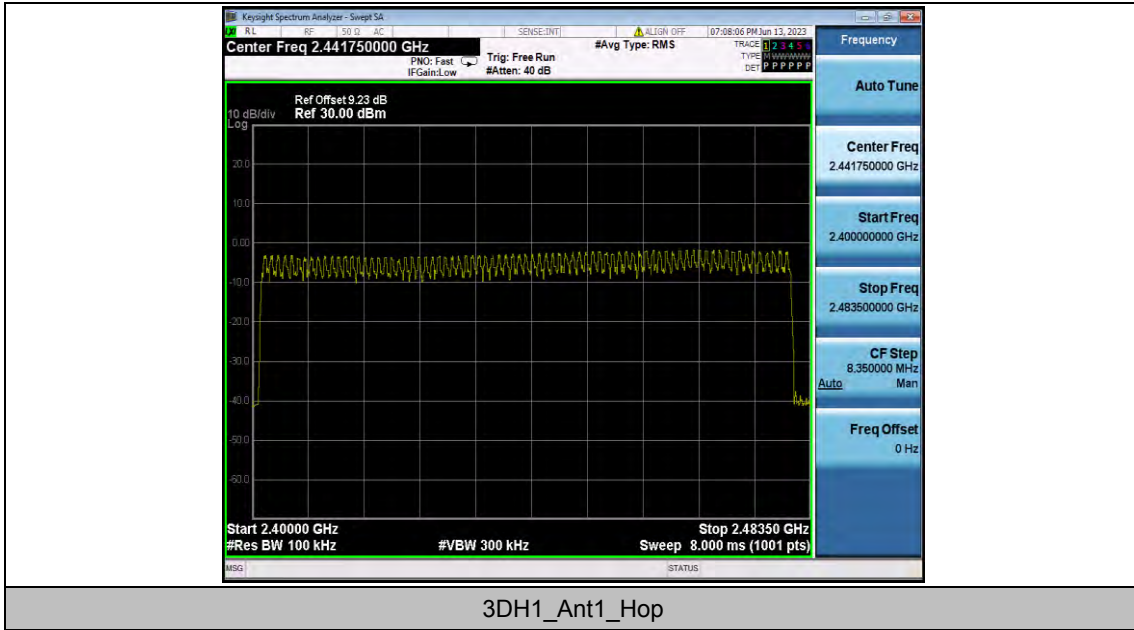
Appendix A.6: Number of hopping channels

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



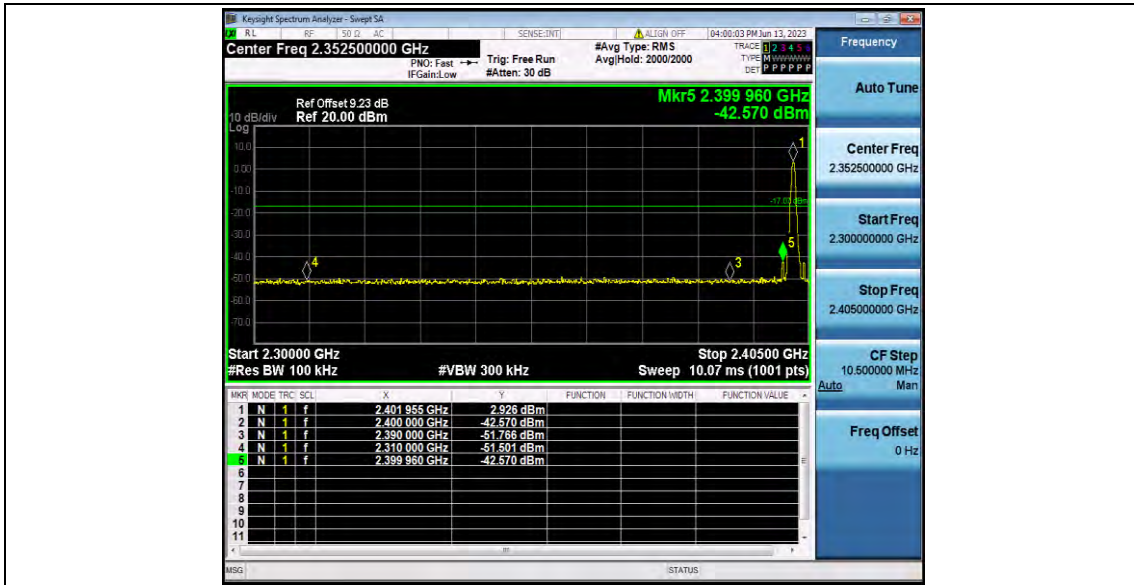


Appendix A.7: Band edge measurements

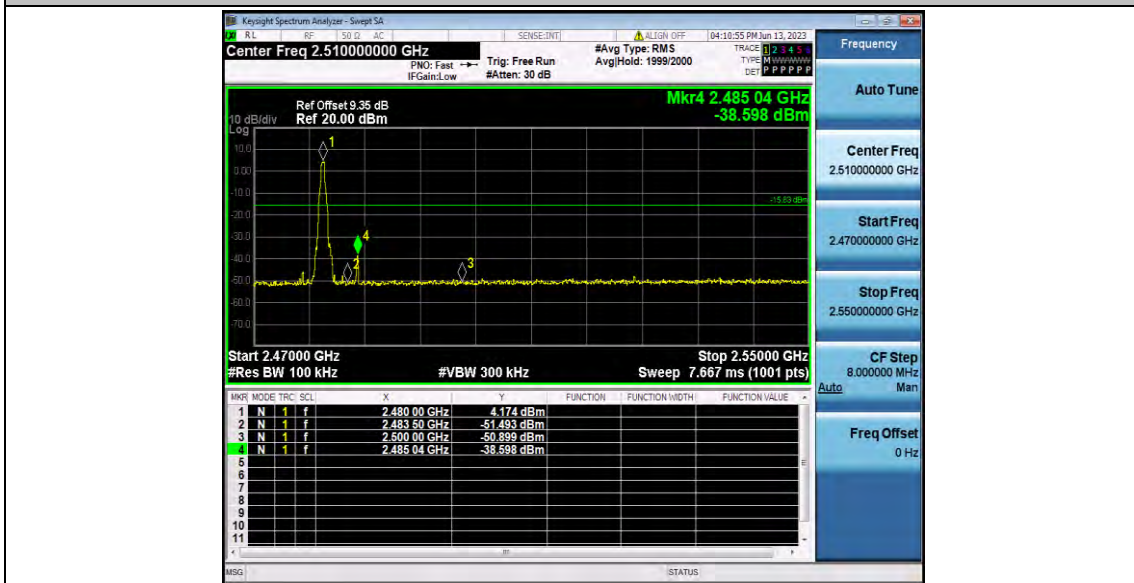
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	2.93	-42.57	≤ -17.07	PASS
		High	2480	4.17	-38.6	≤ -15.83	PASS
		Low	Hop_2402	2.22	-48.7	≤ -17.79	PASS
		High	Hop_2480	4.11	-47.91	≤ -15.89	PASS
2DH1	Ant1	Low	2402	-3.04	-48.26	≤ -23.04	PASS
		High	2480	-1.71	-38.62	≤ -21.71	PASS
		Low	Hop_2402	-3.94	-49.25	≤ -23.94	PASS
		High	Hop_2480	-2.60	-48.55	≤ -22.6	PASS
3DH1	Ant1	Low	2402	-3.00	-47.09	≤ -23	PASS
		High	2480	-1.79	-38.52	≤ -21.79	PASS
		Low	Hop_2402	-3.37	-48.97	≤ -23.37	PASS
		High	Hop_2480	-1.87	-48.45	≤ -21.87	PASS

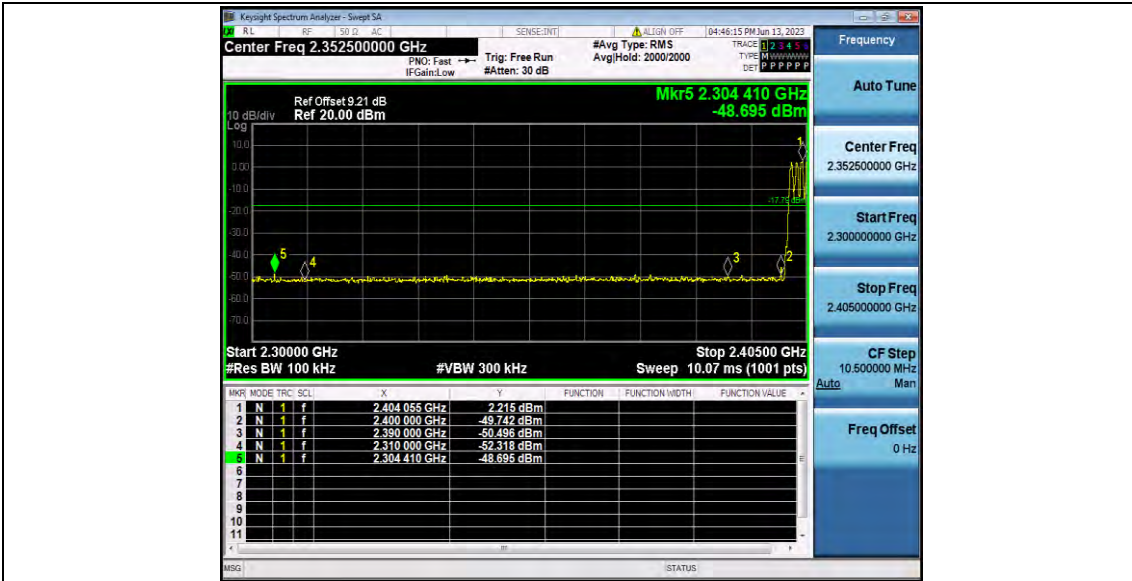
Test Graphs



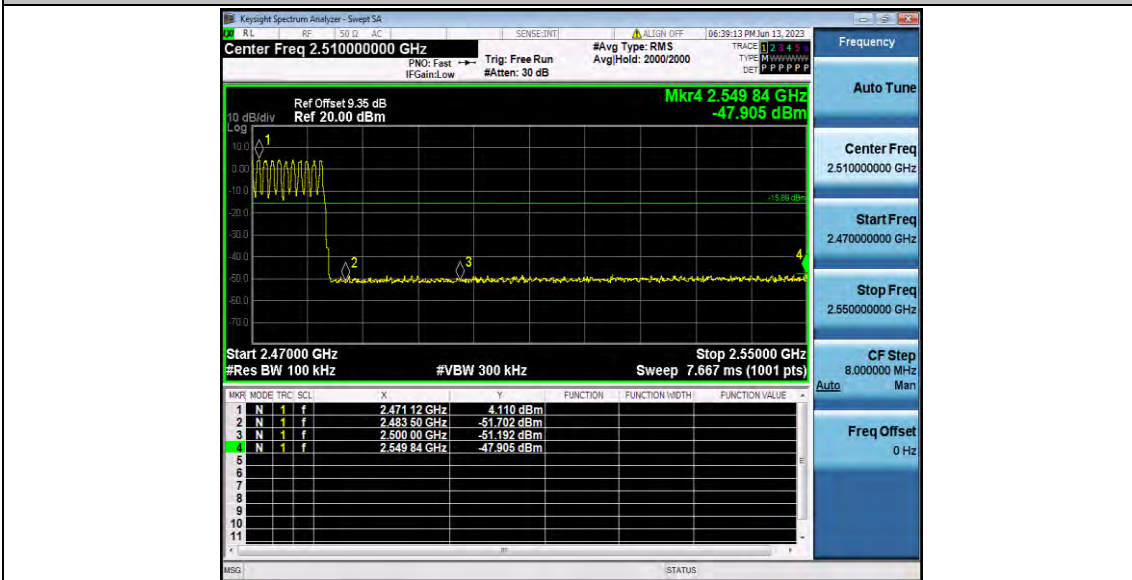
DH1_Ant1_Low_2402



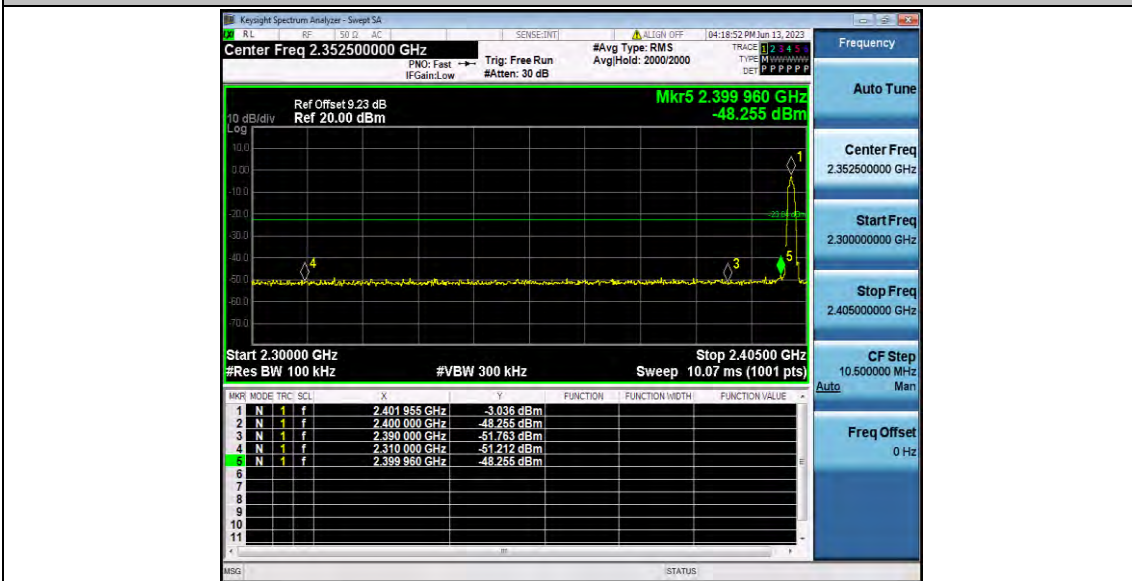
DH1_Ant1_High_2480



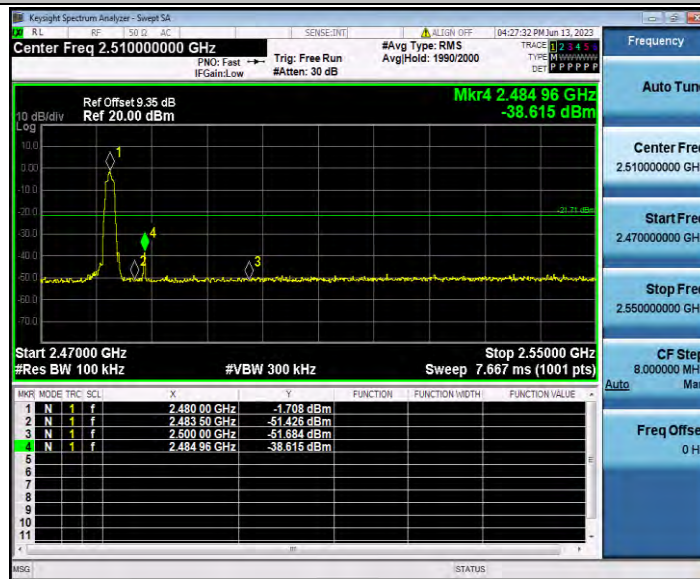
DH1_Ant1_Low_Hop_2402



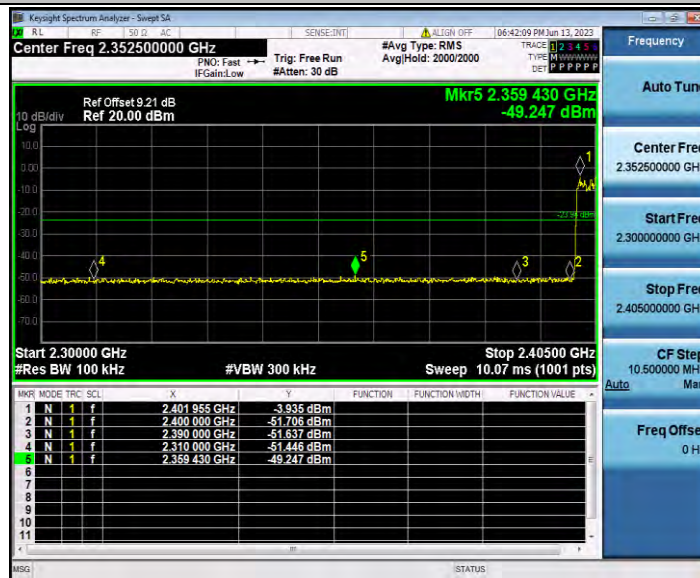
DH1_Ant1_High_Hop_2480



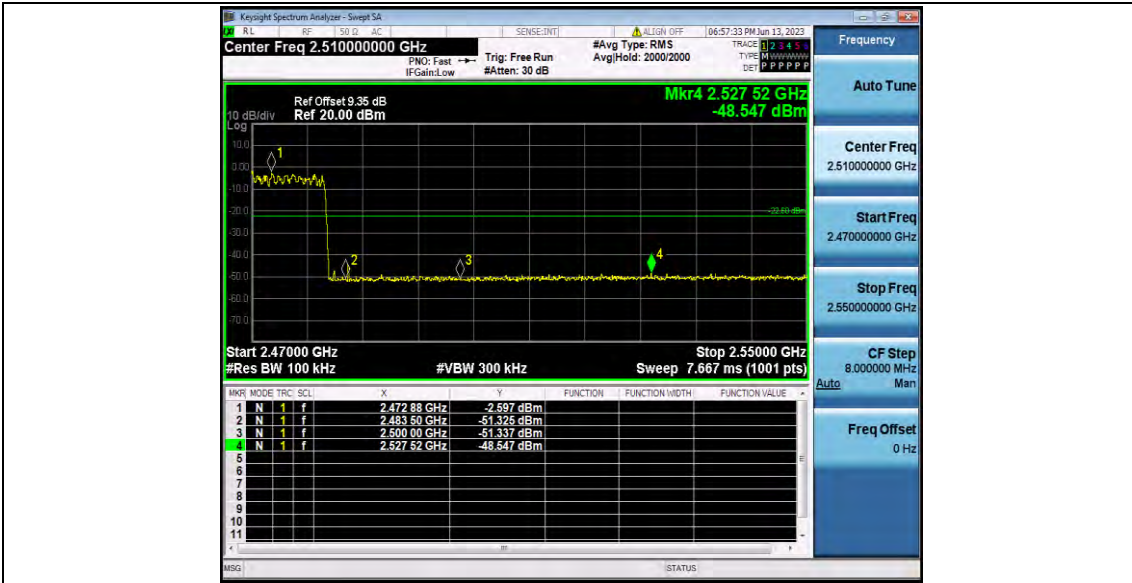
2DH1_Ant1_Low_2402



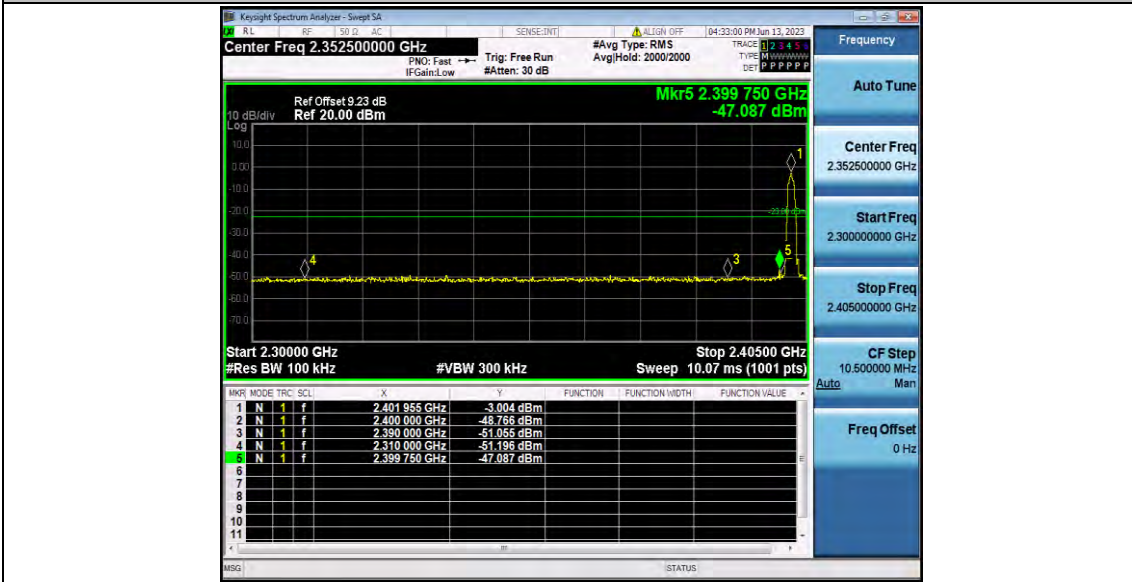
2DH1_Ant1_High_2480



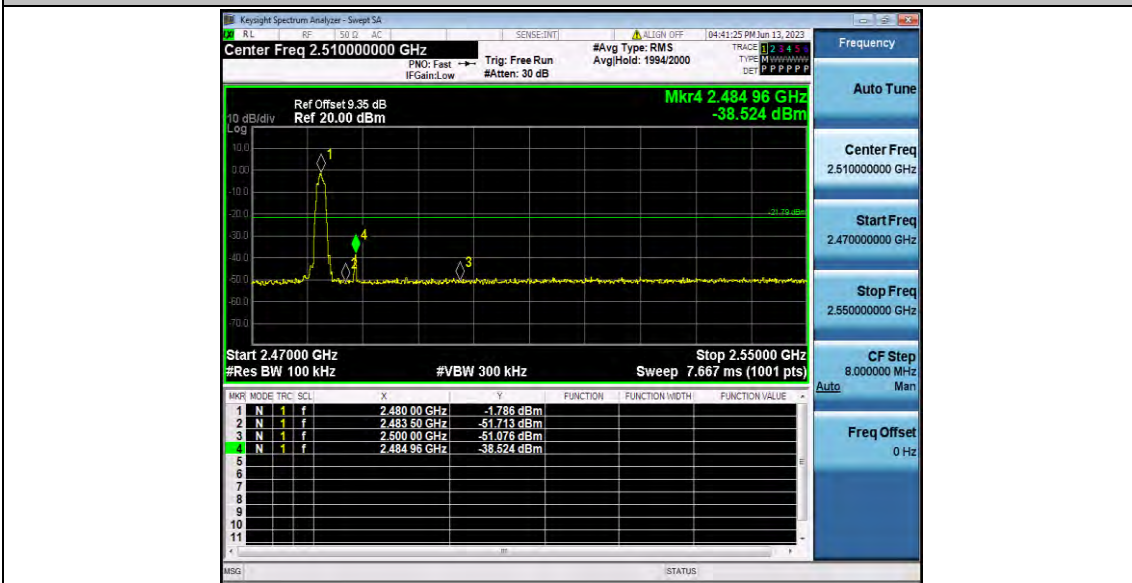
2DH1_Ant1_Low_Hop_2402



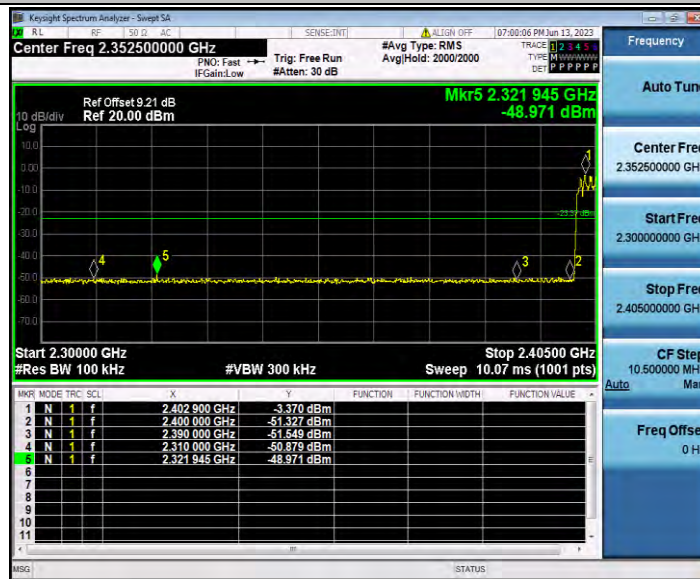
2D11_Ant1_High_Hop_2480



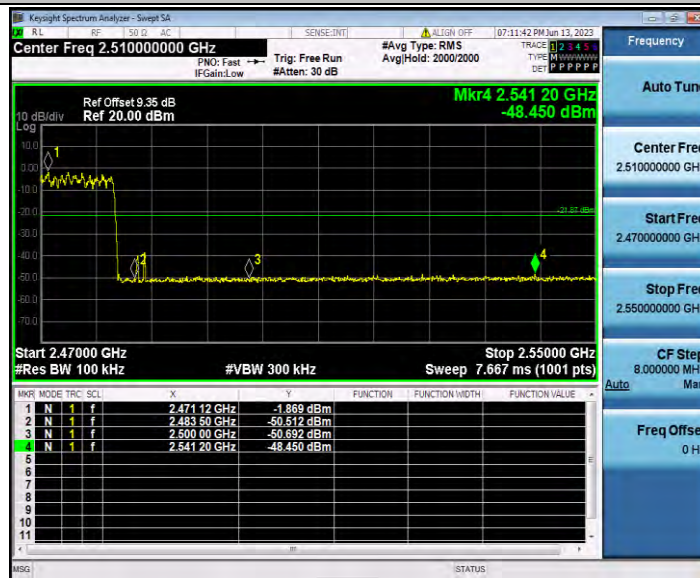
3D11_Ant1_Low_2402



3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

Appendix A.8: Conducted Spurious Emission

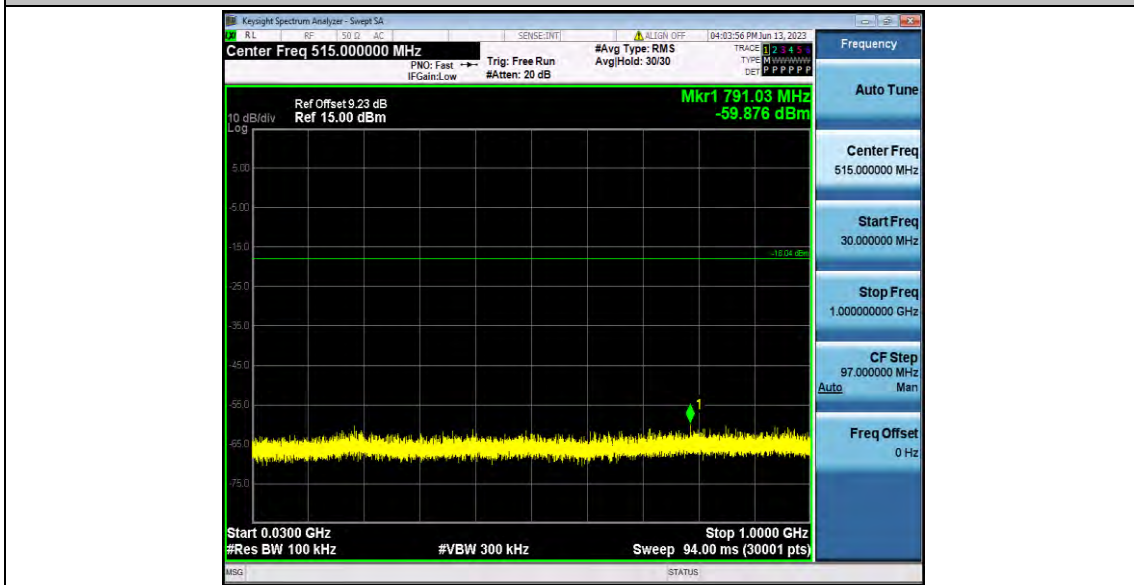
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	1.96	1.96	---	PASS
			30~1000	1.96	-59.88	≤-18.04	PASS
			1000~26500	1.96	-47.66	≤-18.04	PASS
		2441	Reference	2.77	2.77	---	PASS
			30~1000	2.77	-60.28	≤-17.23	PASS
			1000~26500	2.77	-47.42	≤-17.23	PASS
		2480	Reference	3.04	3.04	---	PASS
			30~1000	3.04	-58.38	≤-16.96	PASS
			1000~26500	3.04	-47.36	≤-16.96	PASS
2DH1	Ant1	2402	Reference	-3.50	-3.50	---	PASS
			30~1000	-3.50	-60.65	≤-23.5	PASS
			1000~26500	-3.50	-47.54	≤-23.5	PASS
		2441	Reference	-3.42	-3.42	---	PASS
			30~1000	-3.42	-60.73	≤-23.42	PASS
			1000~26500	-3.42	-47.37	≤-23.42	PASS
		2480	Reference	-2.47	-2.47	---	PASS
			30~1000	-2.47	-59.78	≤-22.47	PASS
			1000~26500	-2.47	-46.25	≤-22.47	PASS
3DH1	Ant1	2402	Reference	-3.24	-3.24	---	PASS
			30~1000	-3.24	-59.81	≤-23.24	PASS
			1000~26500	-3.24	-46.89	≤-23.24	PASS
		2441	Reference	-2.93	-2.93	---	PASS
			30~1000	-2.93	-60.59	≤-22.93	PASS
			1000~26500	-2.93	-47.57	≤-22.93	PASS
		2480	Reference	-1.89	-1.89	---	PASS
			30~1000	-1.89	-59.99	≤-21.89	PASS
			1000~26500	-1.89	-47.69	≤-21.89	PASS

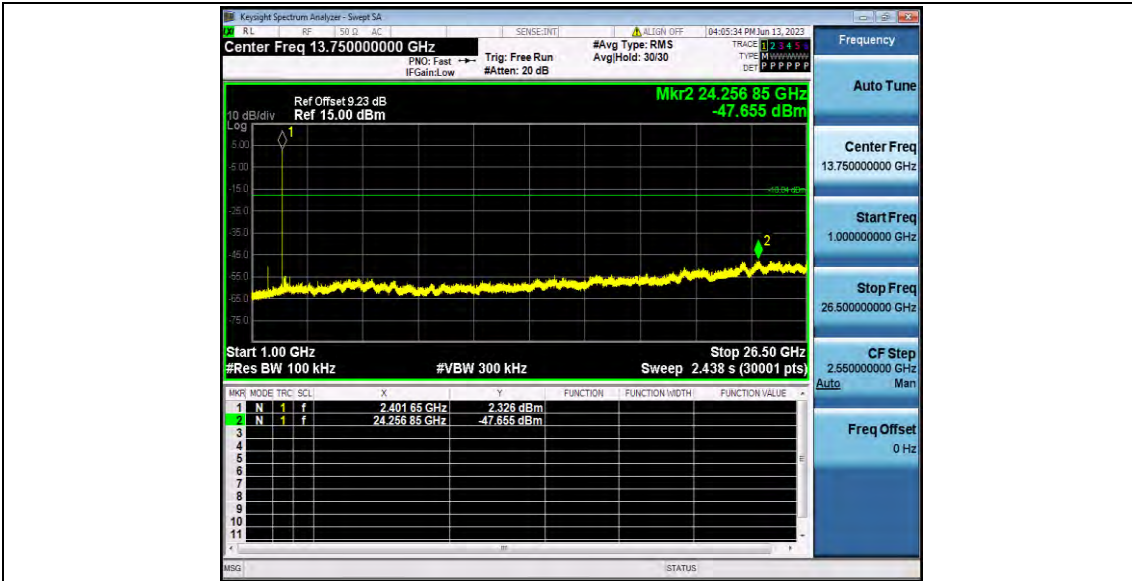
Test Graphs



DH1_Ant1_2402_0~Reference



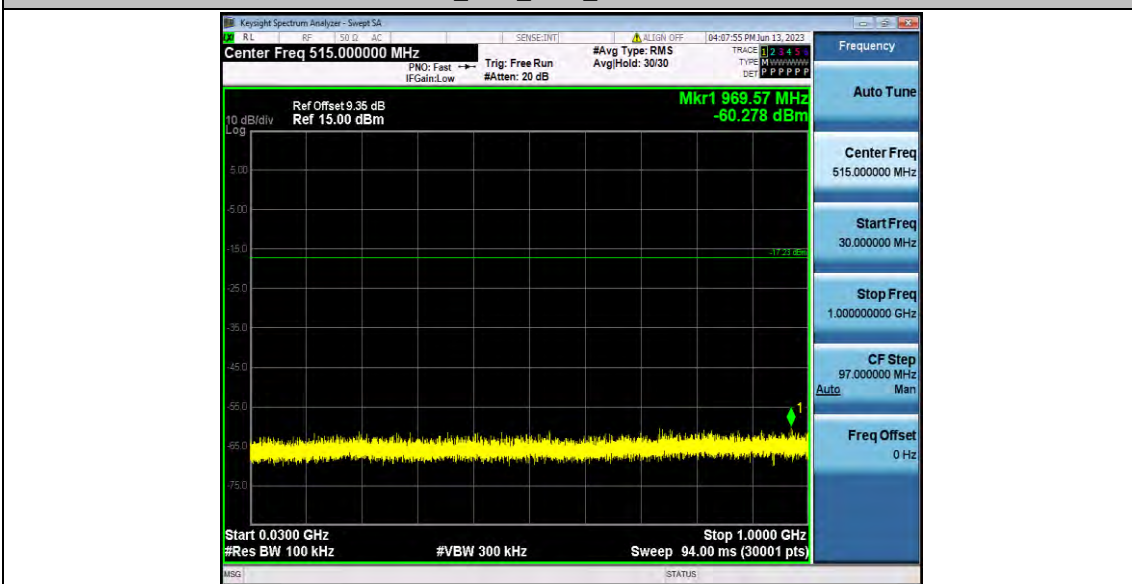
DH1_Ant1_2402_30~1000



DH1_Ant1_2402_1000~26500



DH1_Ant1_2441_0~Reference



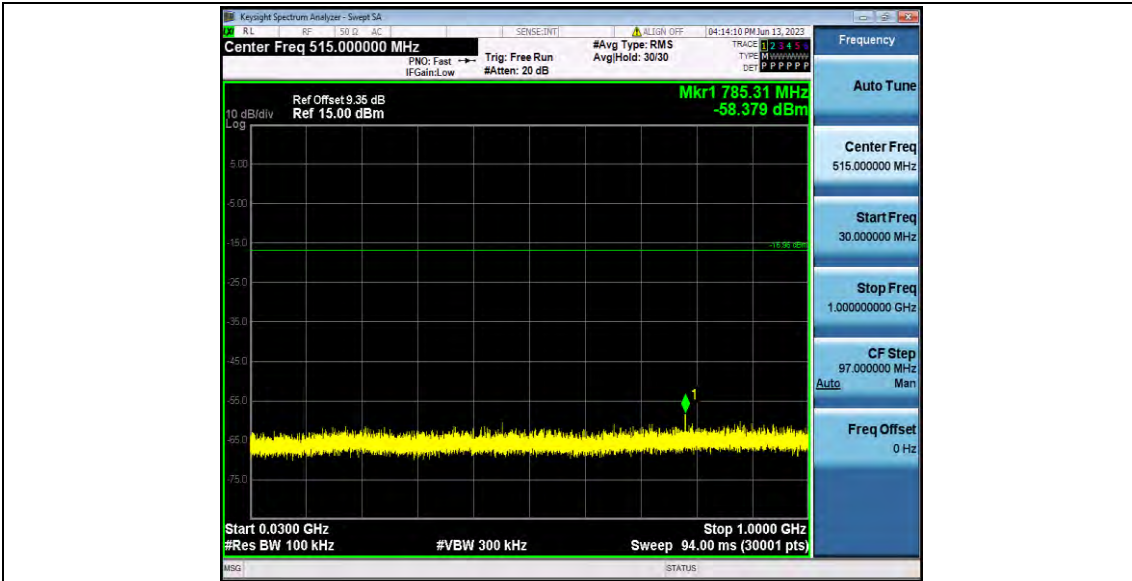
DH1_Ant1_2441_30~1000



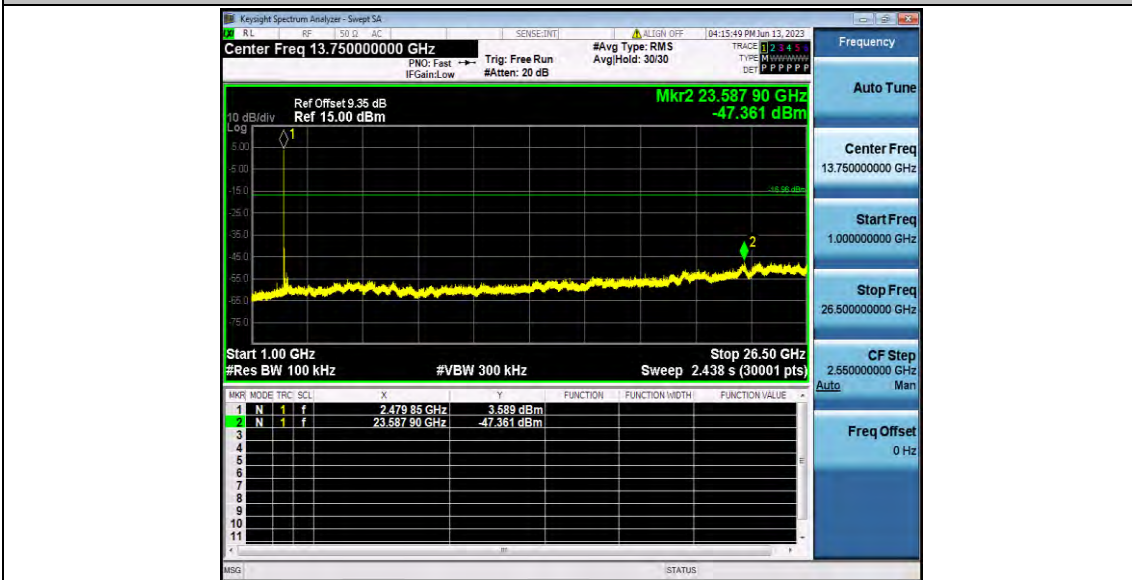
DH1_Ant1_2441_1000~26500



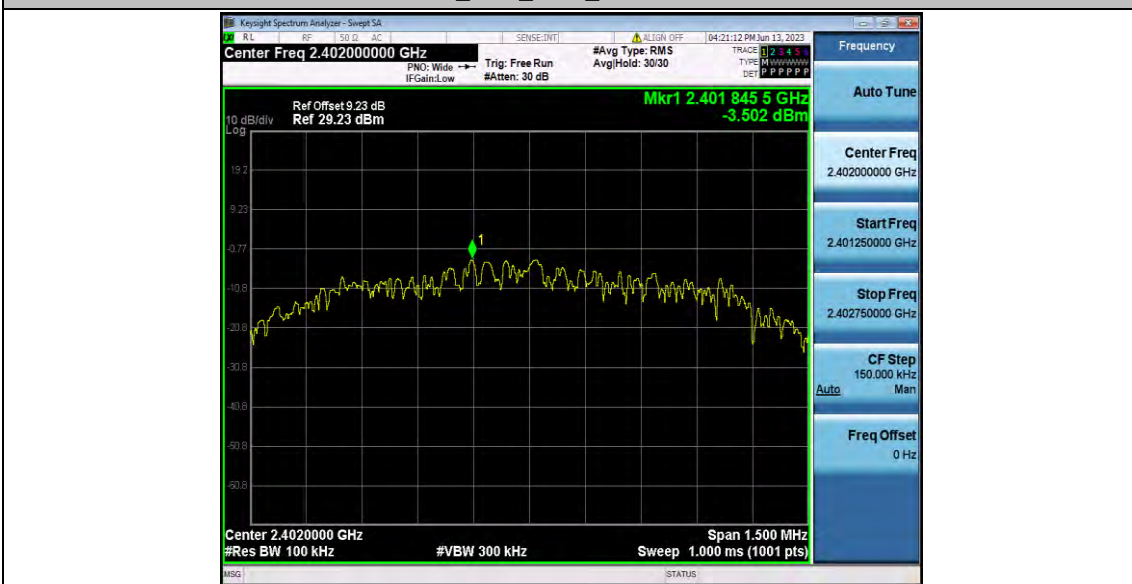
DH1_Ant1_2480_0~Reference



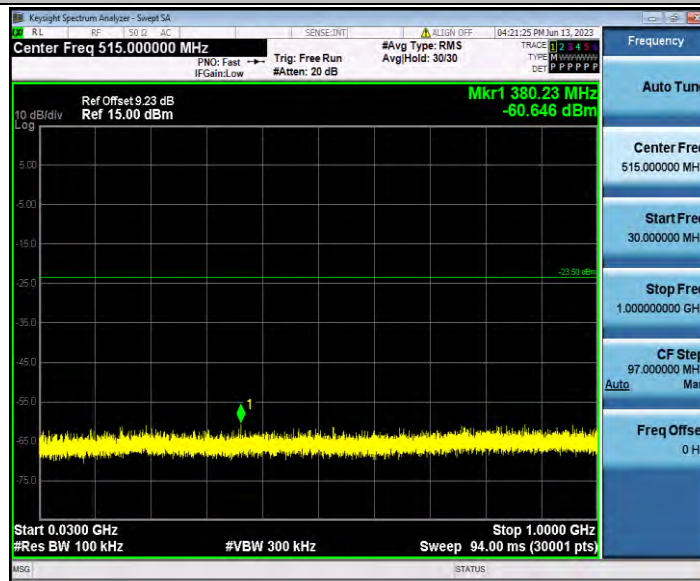
DH1_Ant1_2480_30~1000



DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



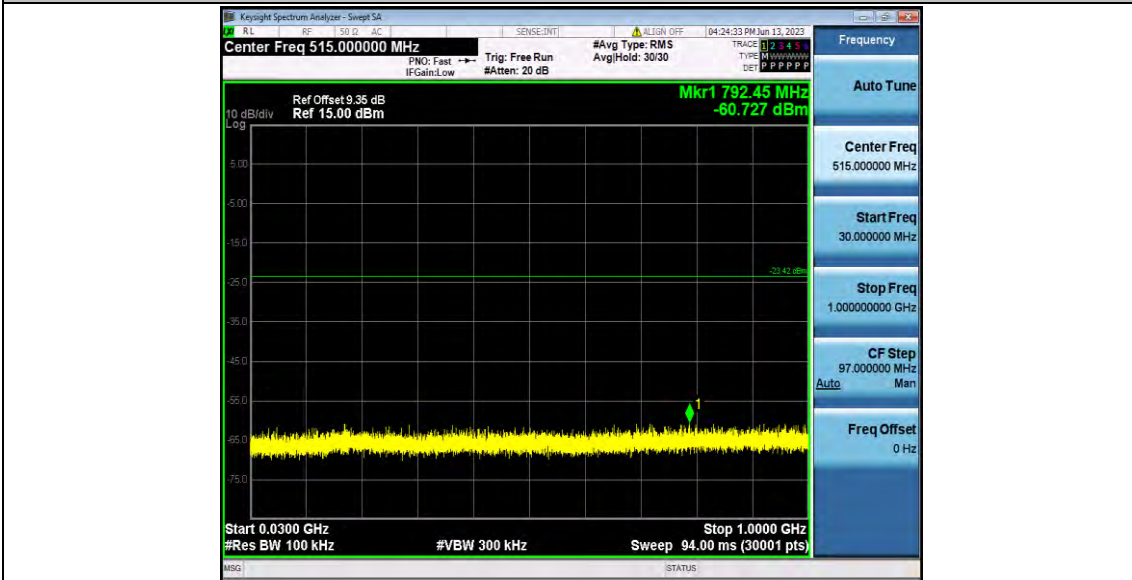
2DH1_Ant1_2402_30~1000



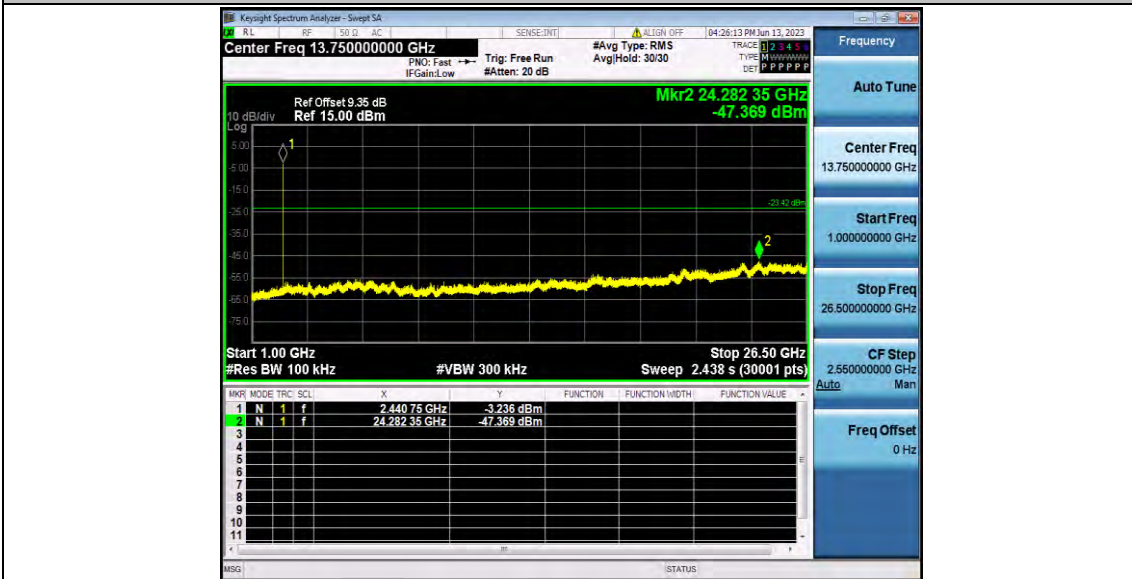
2DH1_Ant1_2402_1000~26500



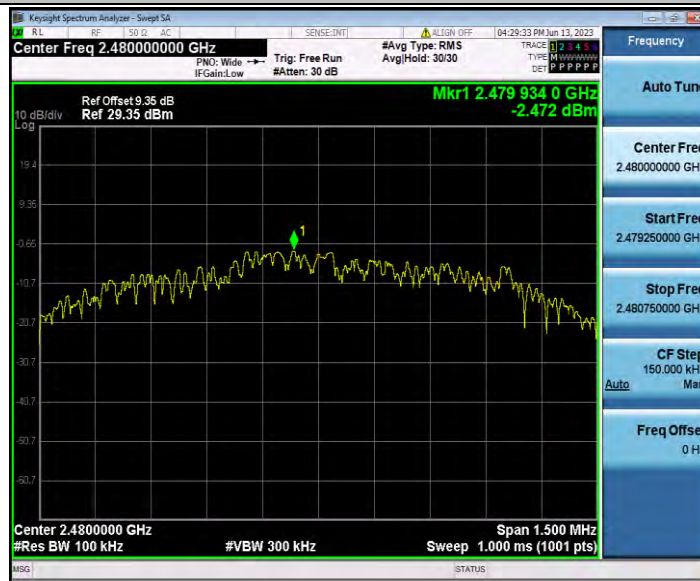
2DH1_Ant1_2441_0~Reference



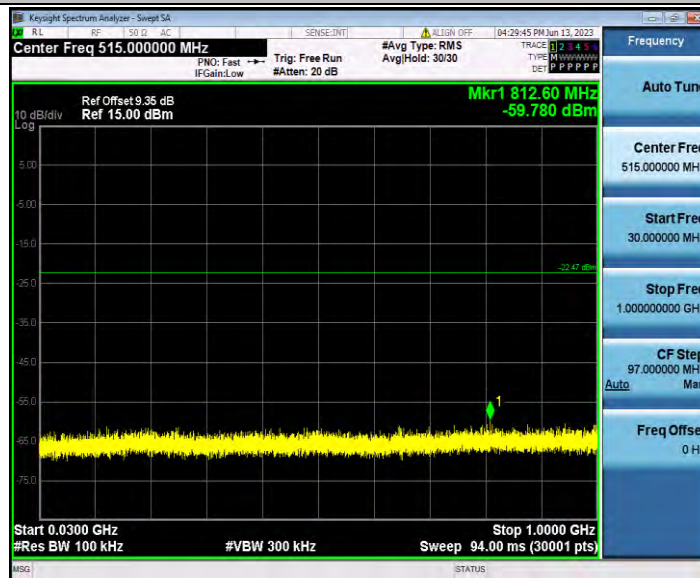
2DH1_Ant1_2441_30~1000



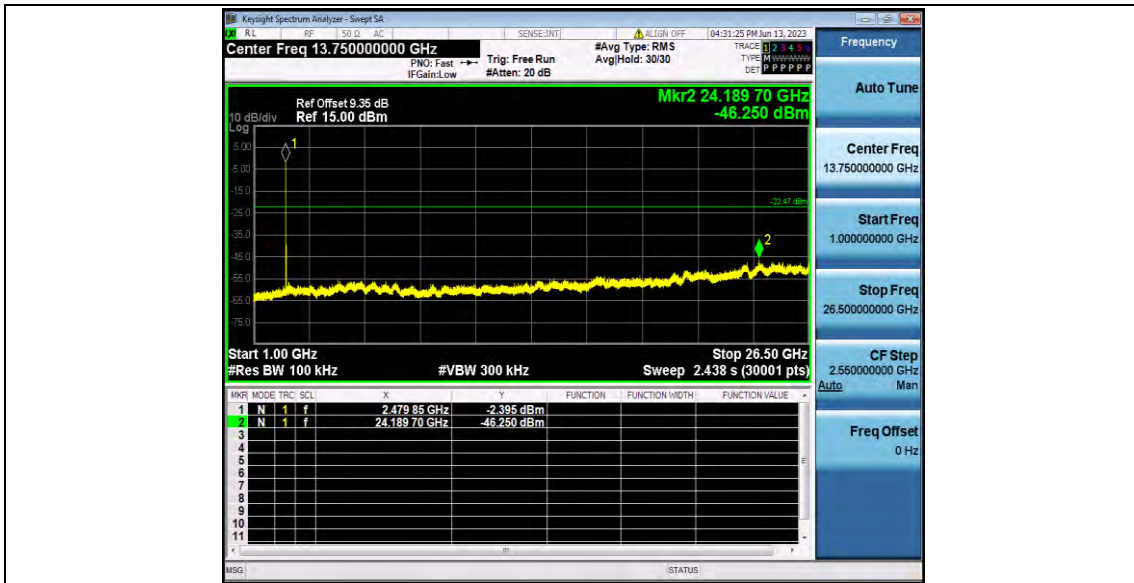
2DH1_Ant1_2441_1000~26500



2DH1_Ant1_2480_0~Reference



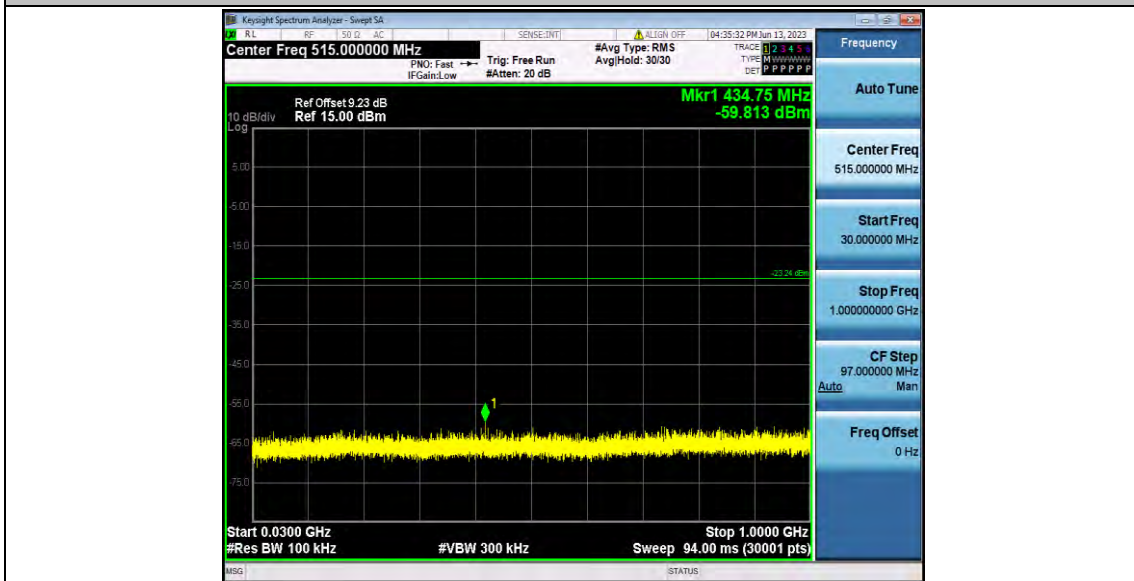
2DH1_Ant1_2480_30~1000



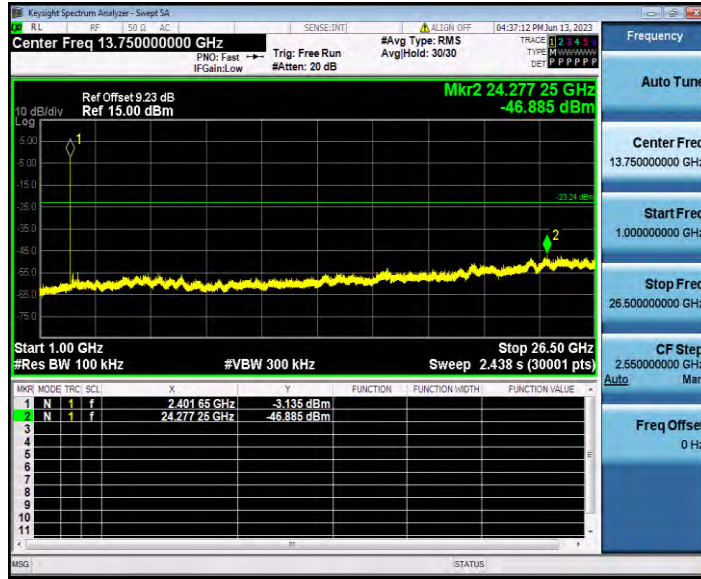
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



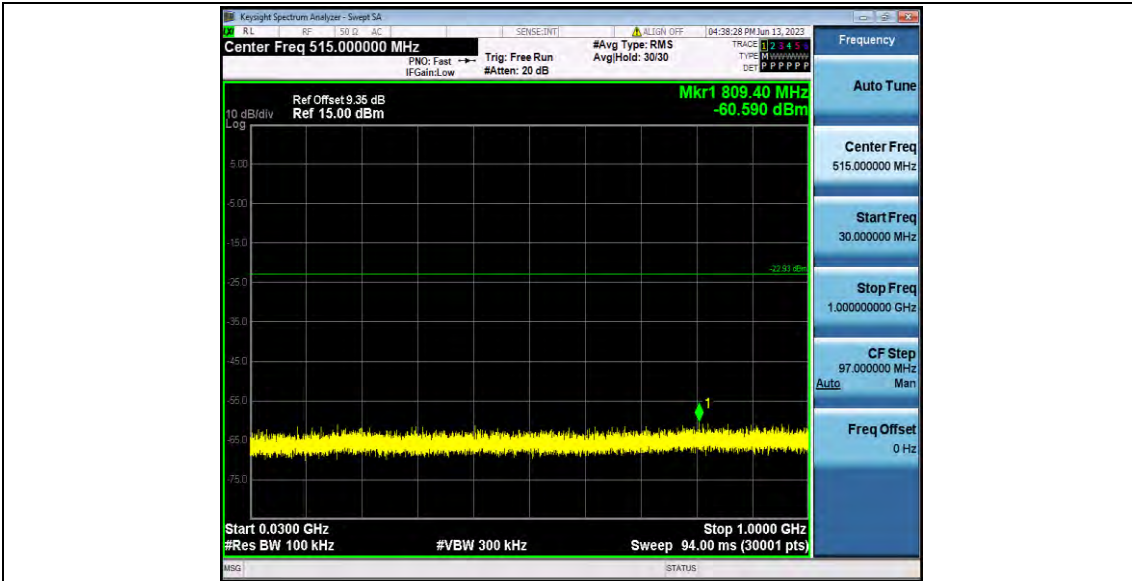
3DH1_Ant1_2402_30~1000



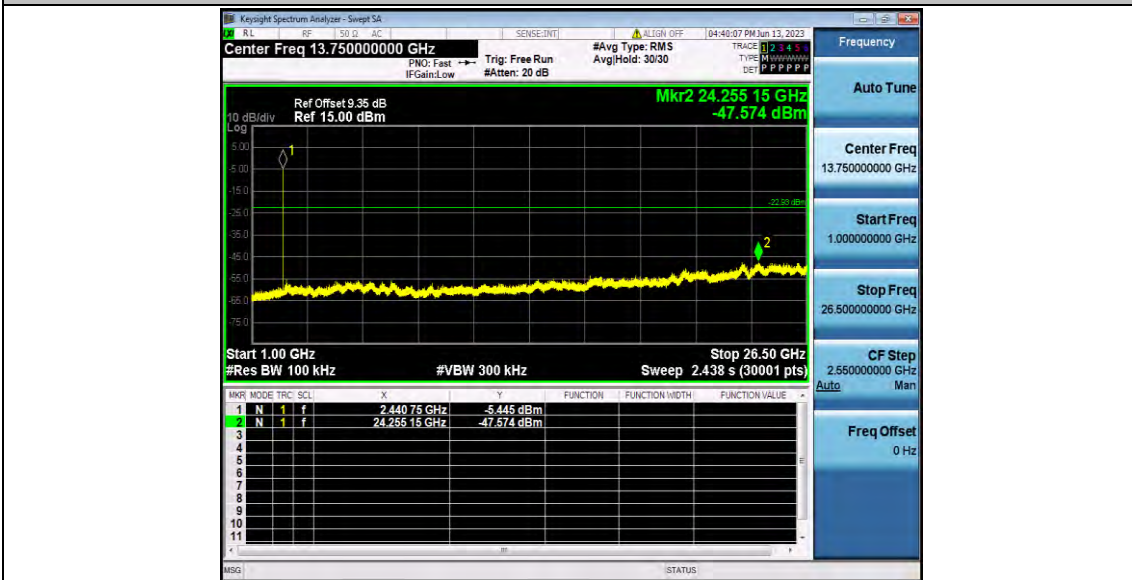
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



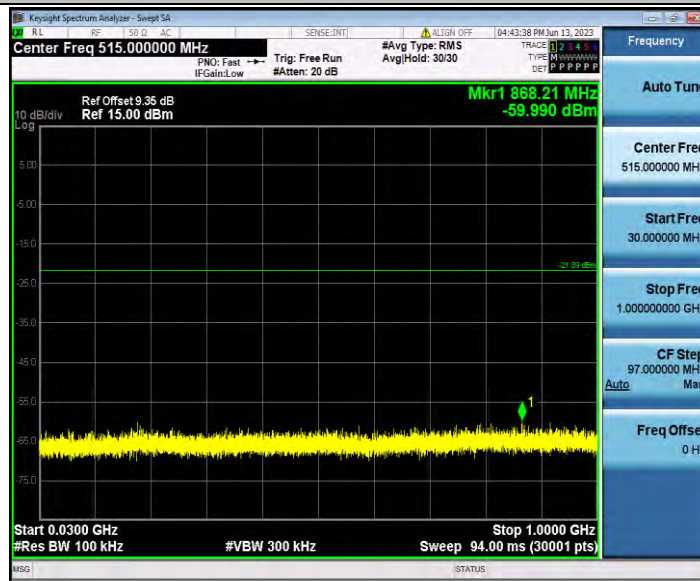
3DH1_Ant1_2441_30~100



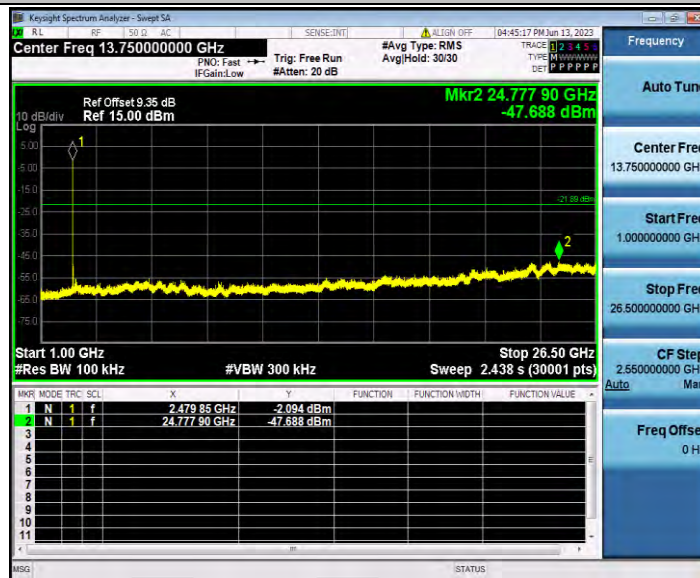
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500