

Case No. : <u>GTS20230704026-1-38</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.8.23</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	Ant2	2402	0.789	2401.607	2402.396	---	---
		2441	0.810	2440.568	2441.378	---	---
		2480	0.822	2479.568	2480.390	---	---
2DH1	Ant2	2402	1.230	2401.385	2402.615	---	---
		2441	1.254	2440.379	2441.633	---	---
		2480	1.254	2479.370	2480.624	---	---
3DH1	Ant2	2402	1.233	2401.394	2402.627	---	---
		2441	1.221	2440.400	2441.621	---	---
		2480	1.218	2479.397	2480.615	---	---

Test Graphs



DH1_Ant2_2402



DH1_Ant2_2441



DH1_Ant2_2480



2DH1_Ant2_2402



2DH1_Ant2_2441



2DH1_Ant2_2480



3DH1_Ant2_2402



3DH1_Ant2_2441



3DH1_Ant2_2480

Appendix A.2: Occupied Channel Bandwidth

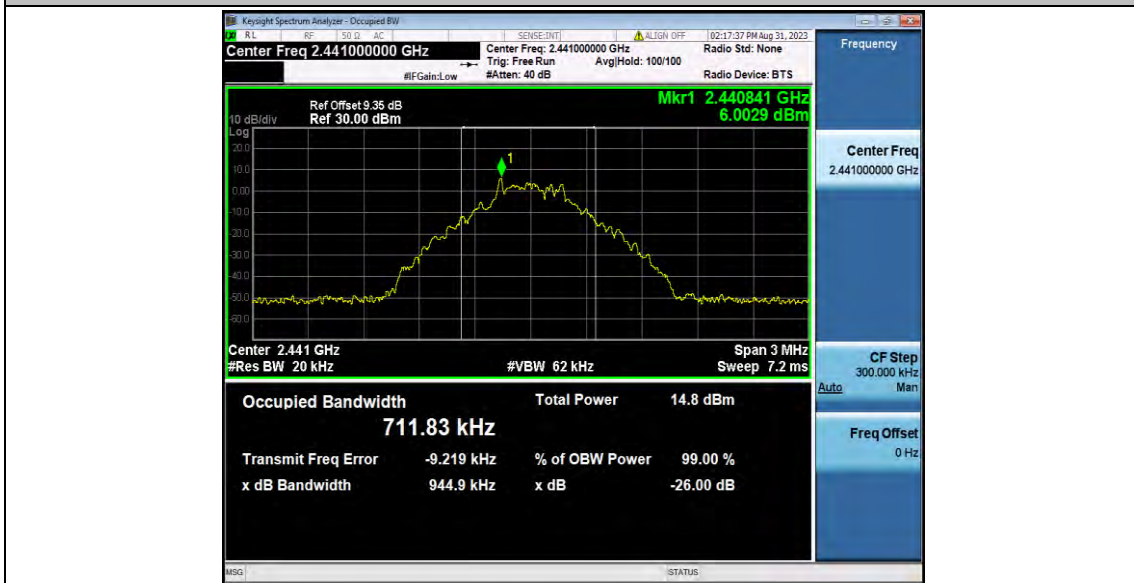
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant2	2402	0.70816	2401.640	2402.348	---	---
		2441	0.71183	2440.635	2441.347	---	---
		2480	0.70855	2479.636	2480.345	---	---
2DH1	Ant2	2402	1.1395	2401.429	2402.568	---	---
		2441	1.1358	2440.430	2441.566	---	---
		2480	1.1310	2479.430	2480.561	---	---
3DH1	Ant2	2402	1.1328	2401.442	2402.574	---	---
		2441	1.1317	2440.443	2441.575	---	---
		2480	1.1318	2479.441	2480.573	---	---

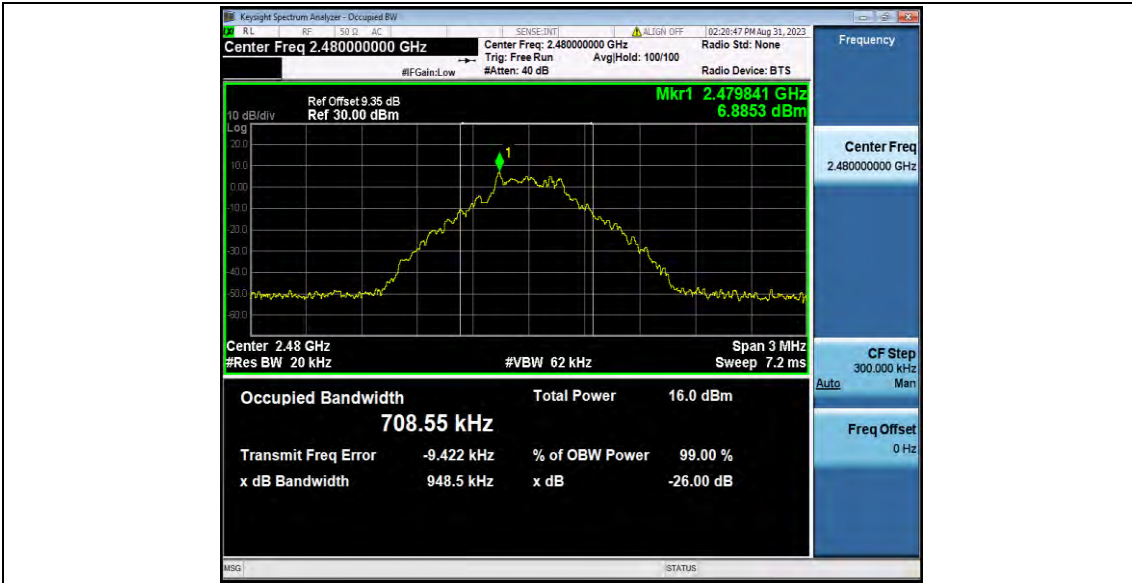
Test Graphs



DH1_Ant2_2402



DH1_Ant2_2441



DH1_Ant2_2480



2DH1_Ant2_2402



2DH1_Ant2_2441



2DH1_Ant2_2480



3DH1_Ant2_2402



3DH1_Ant2_2441



3DH1_Ant2_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	Ant2	2402	7.73	≤30.00	PASS
		2441	8.83	≤30.00	PASS
		2480	10.33	≤30.00	PASS
2DH1	Ant2	2402	7.72	≤20.97	PASS
		2441	8.78	≤20.97	PASS
		2480	9.61	≤20.97	PASS
3DH1	Ant2	2402	7.77	≤20.97	PASS
		2441	8.93	≤20.97	PASS
		2480	9.67	≤20.97	PASS

Appendix A.4: Carrier frequency separation

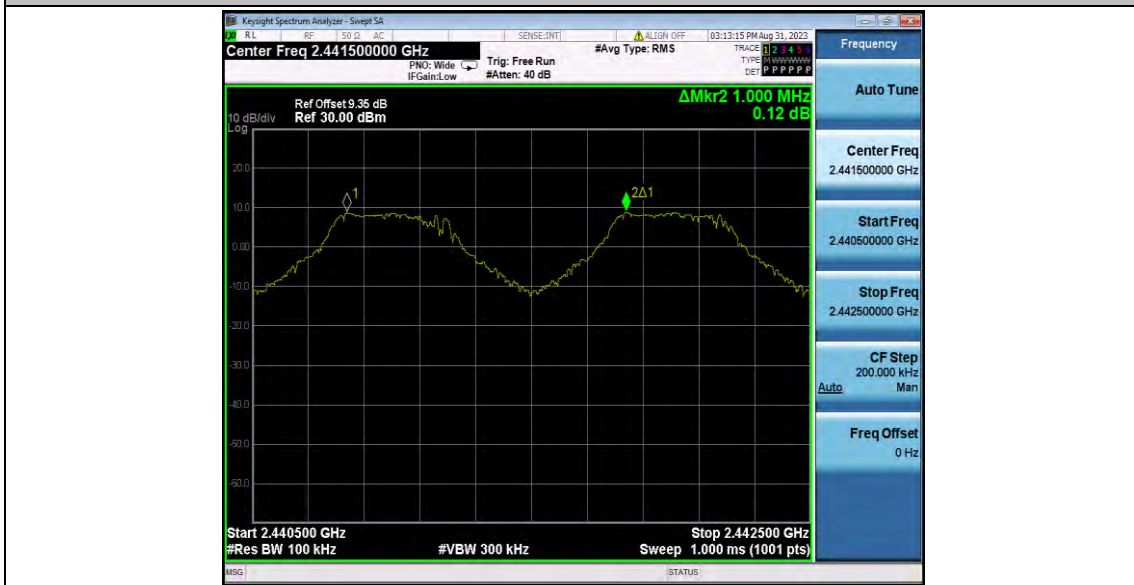
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant2	Hop_2402	0.998	≥ 0.822	PASS
		Hop_2441	1	≥ 0.822	PASS
		Hop_2480	1	≥ 0.822	PASS
2DH1	Ant2	Hop_2402	0.98	≥ 0.836	PASS
		Hop_2441	1.002	≥ 0.836	PASS
		Hop_2480	0.992	≥ 0.836	PASS
3DH1	Ant2	Hop_2402	1.006	≥ 0.822	PASS
		Hop_2441	1.344	≥ 0.822	PASS
		Hop_2480	0.996	≥ 0.822	PASS

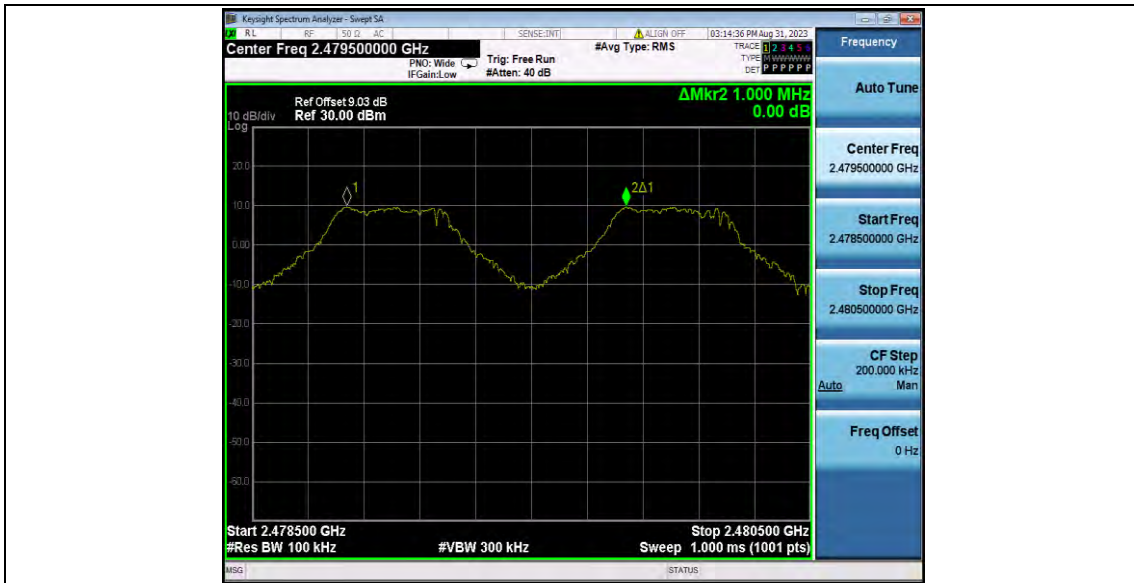
Test Graphs



DH1_Ant2_Hop_2402



DH1_Ant2_Hop_2441



DH1_Ant2_Hop_2480



2DH1_Ant2_Hop_2402



2DH1_Ant2_Hop_2441



2DH1_Ant2_Hop_2480



3DH1_Ant2_Hop_2402



3DH1_Ant2_Hop_2441



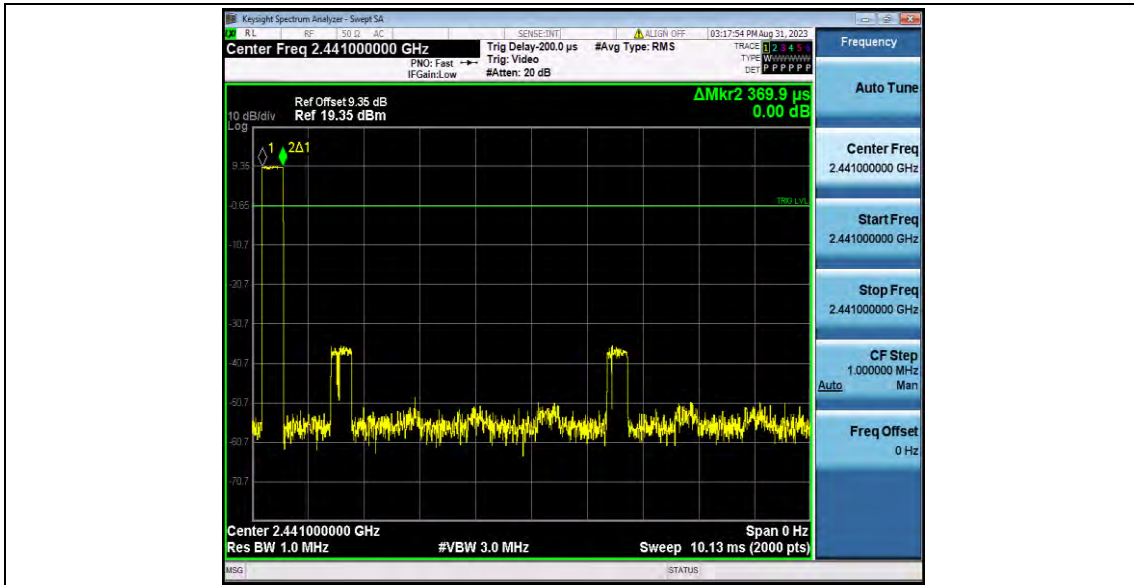
3DH1_Ant2_Hop_2480

Appendix A.5: Time of occupancy

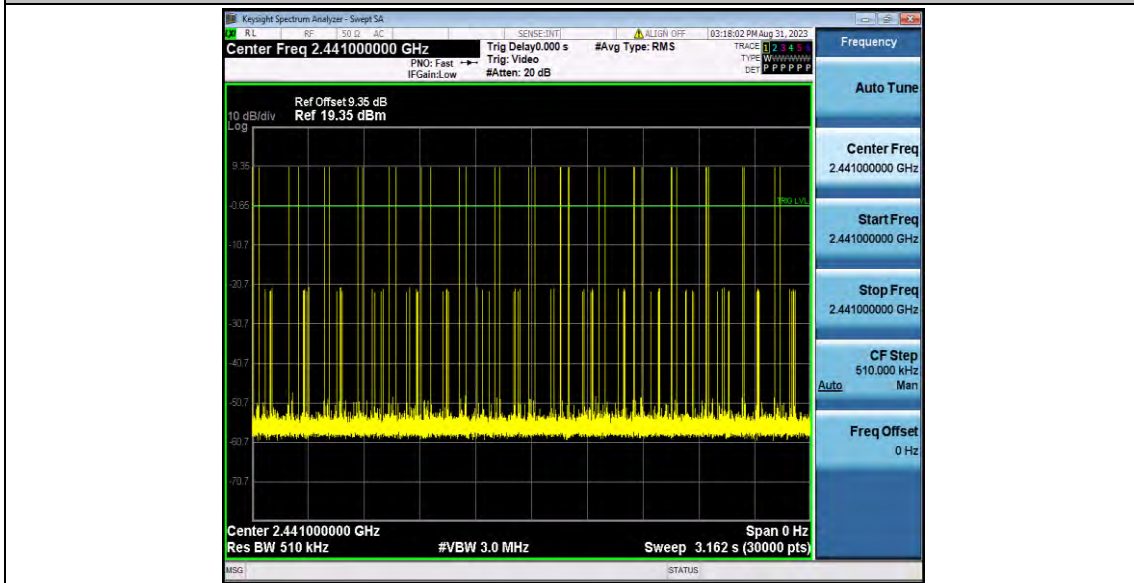
Test Result

Test Mode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant2	Hop	0.37	320	0.118	≤0.4	PASS
DH3	Ant2	Hop	1.62	160	0.259	≤0.4	PASS
DH5	Ant2	Hop	2.88	120	0.345	≤0.4	PASS
2DH1	Ant2	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant2	Hop	1.63	160	0.261	≤0.4	PASS
2DH5	Ant2	Hop	2.88	120	0.345	≤0.4	PASS
3DH1	Ant2	Hop	0.37	330	0.124	≤0.4	PASS
3DH3	Ant2	Hop	1.63	160	0.26	≤0.4	PASS
3DH5	Ant2	Hop	2.88	120	0.345	≤0.4	PASS

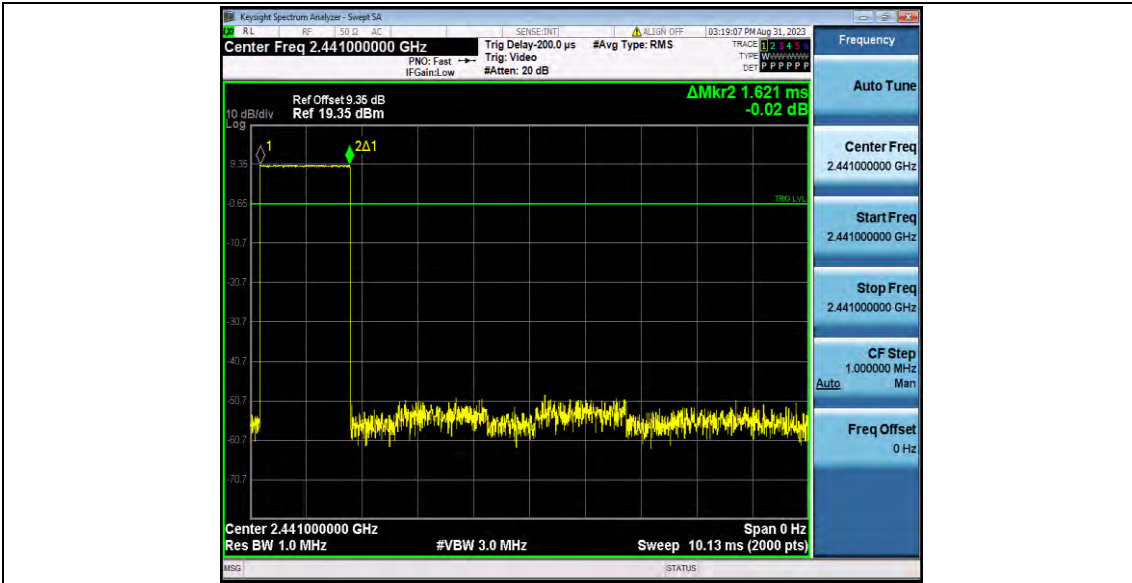
Test Graphs



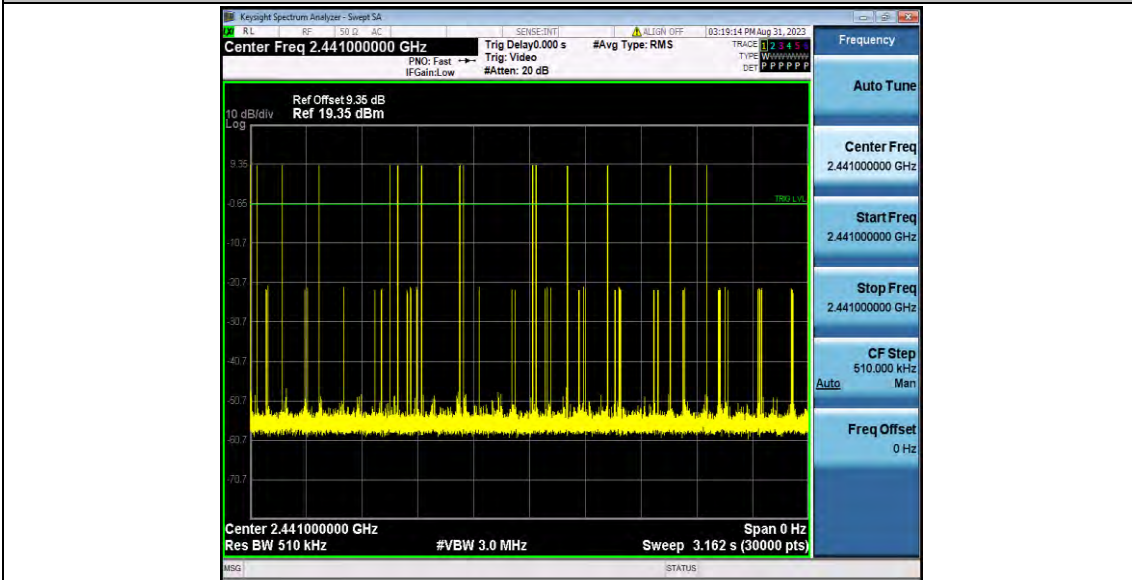
DH1_Ant2_Hop



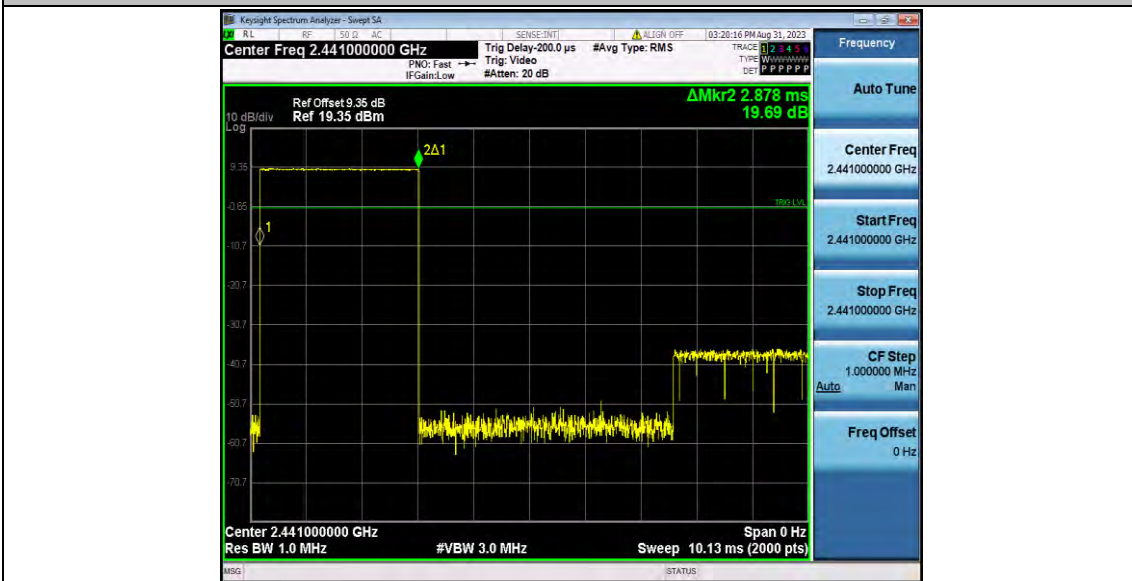
DH1_Ant2_Hop



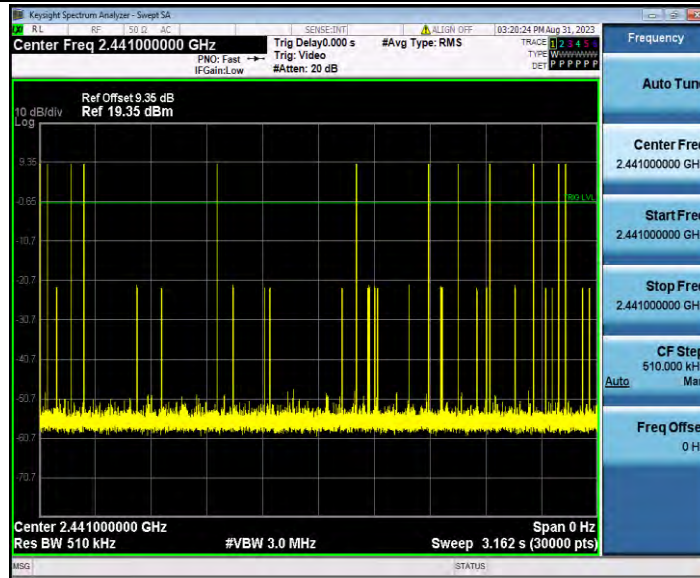
DH3_Ant2_Hop



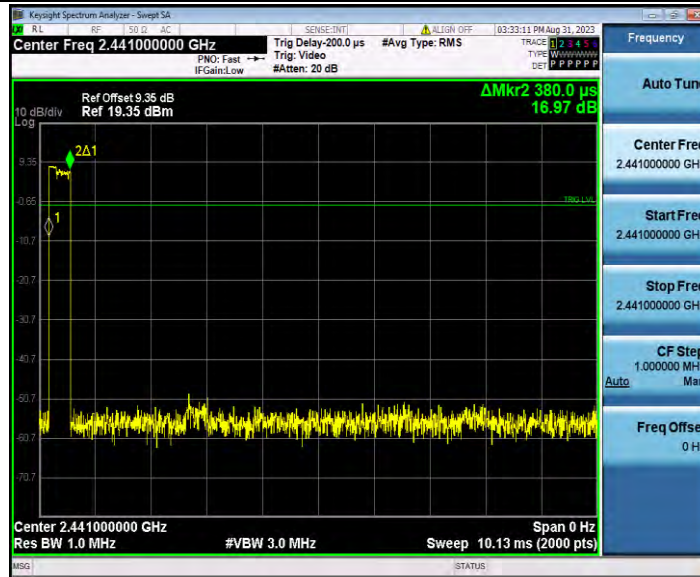
DH3_Ant2_Hop



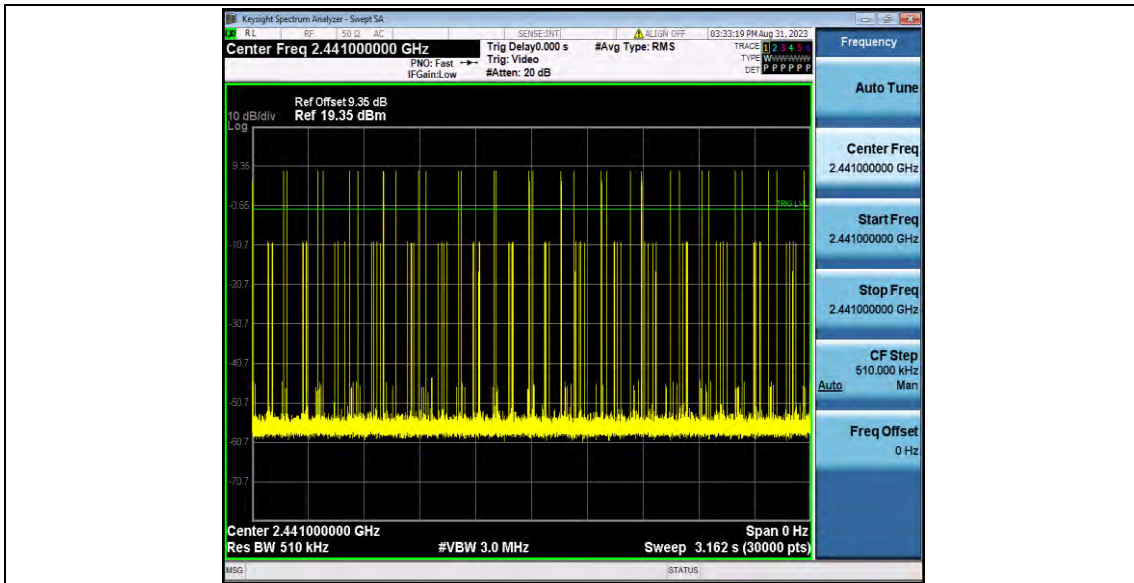
DH5_Ant2_Hop



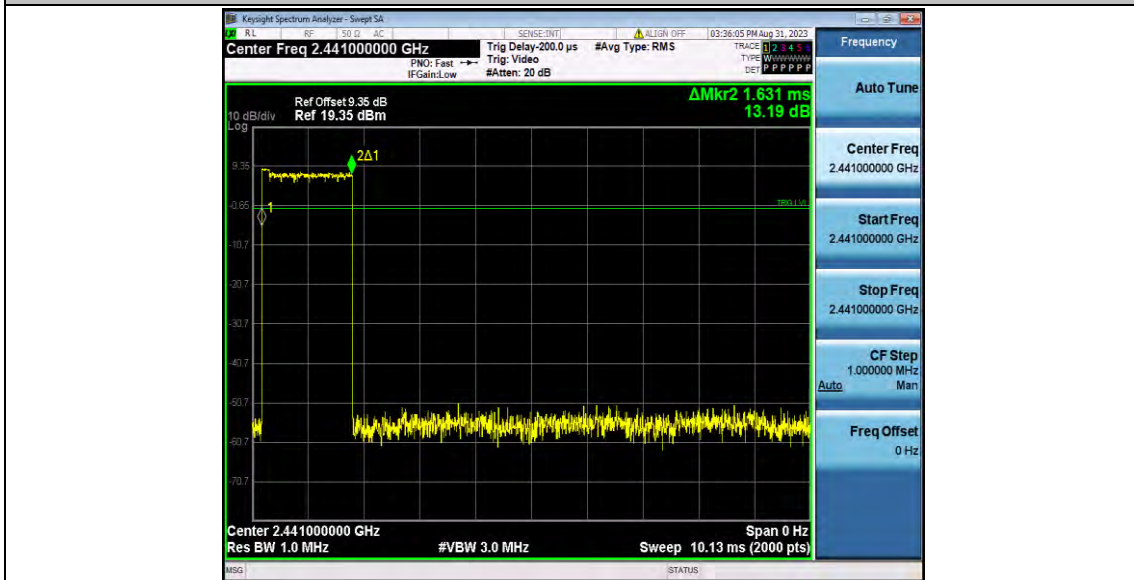
DH5_Ant2_Hop



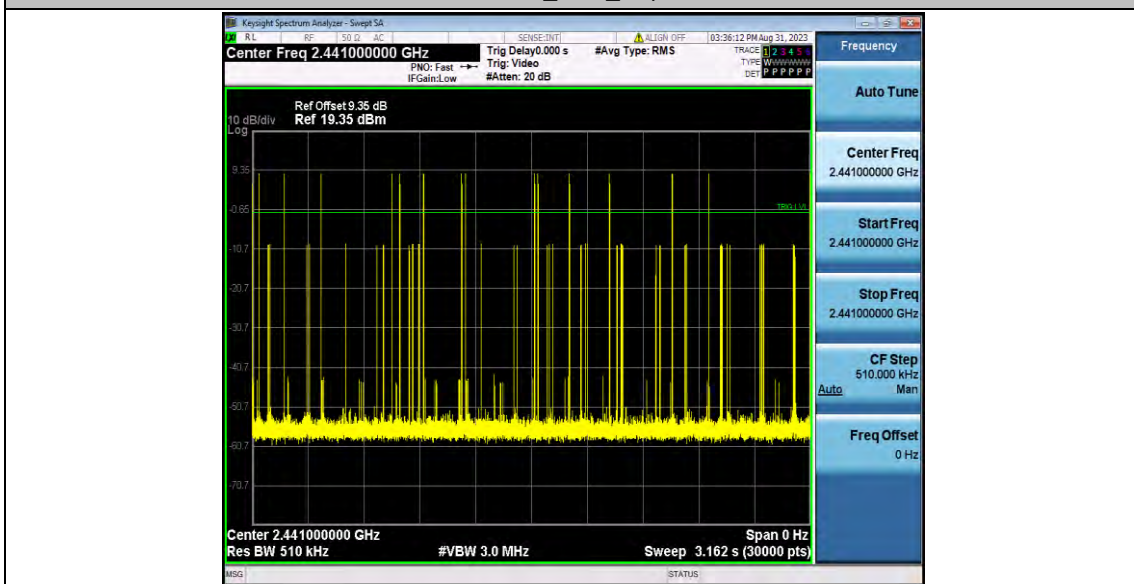
2DH1_Ant2_Hop



2DH1_Ant2_Hop



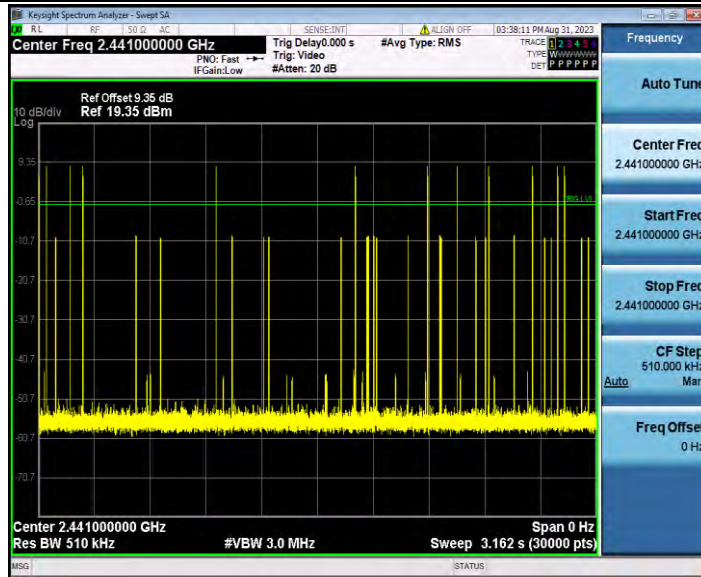
2DH3_Ant2_Hop



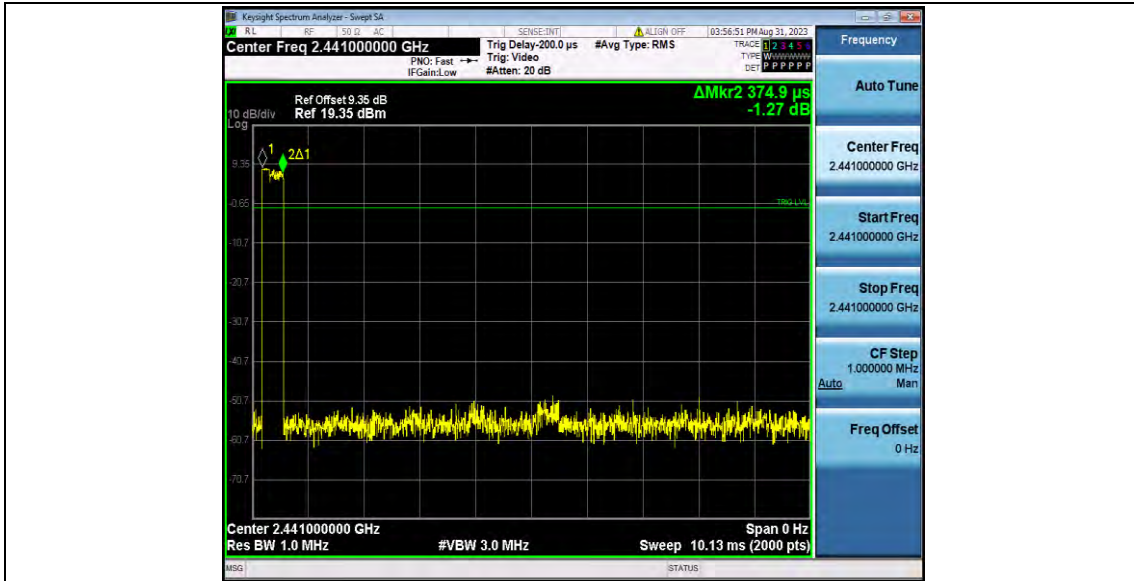
2DH3_Ant2_Hop



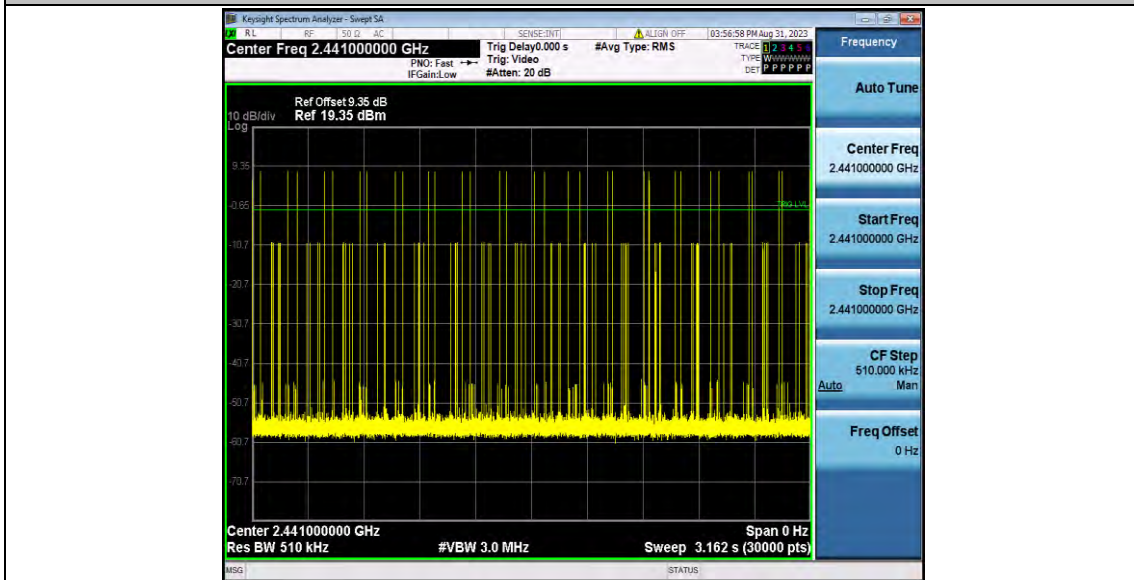
2DH5_Ant2_Hop



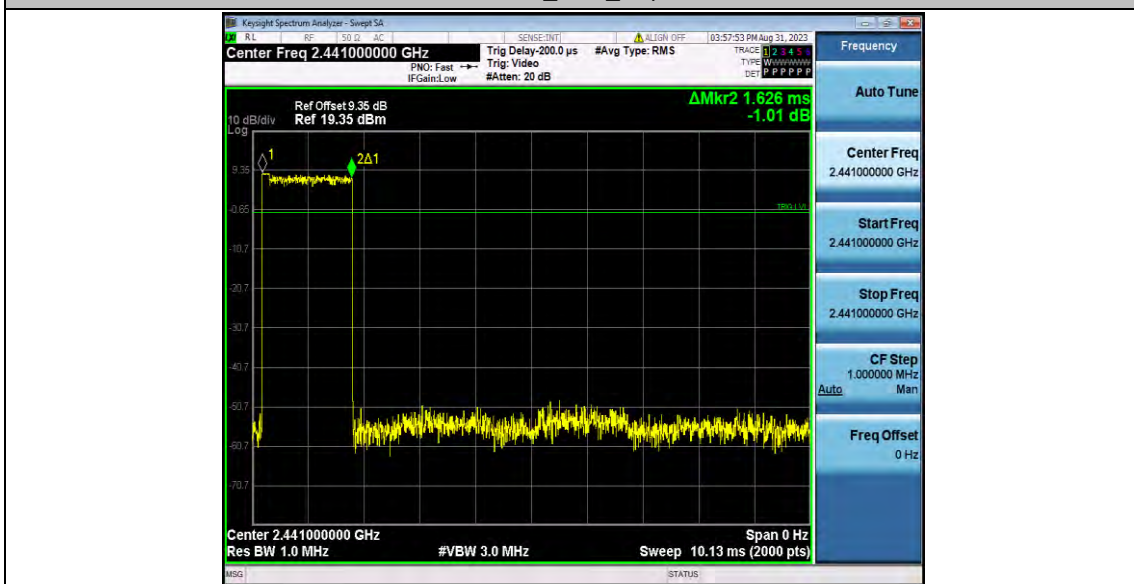
2DH5_Ant2_Hop



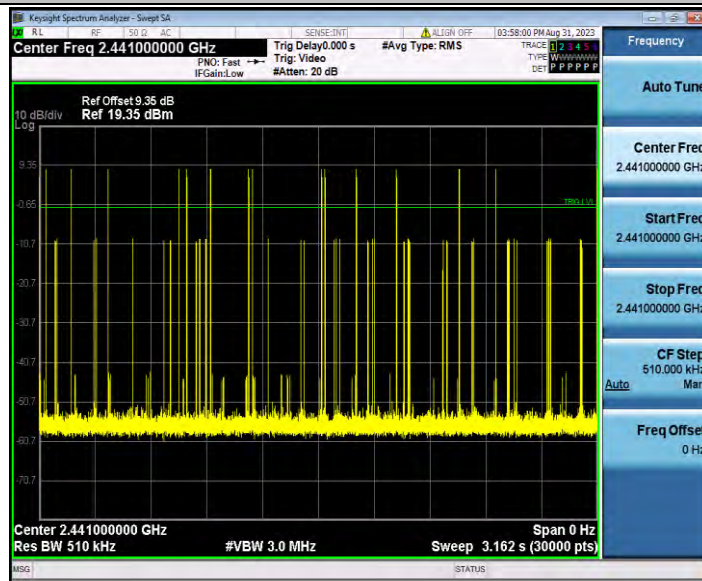
3DH1_Ant2_Hop



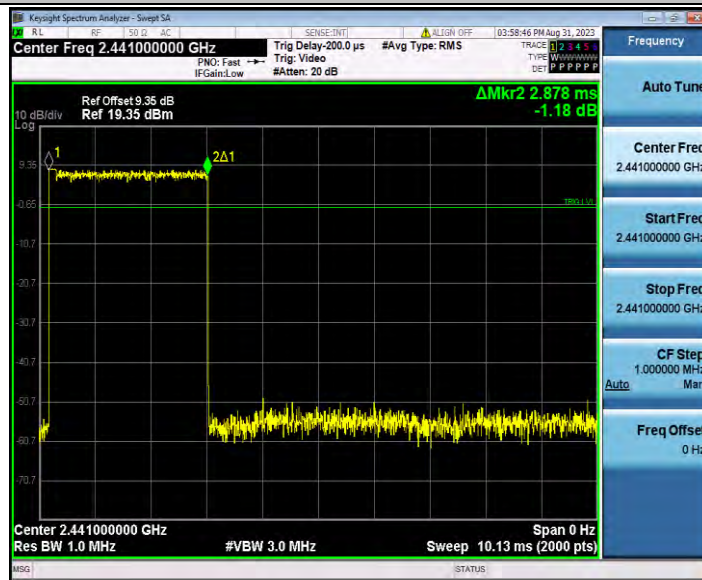
3DH1_Ant2_Hop



3DH3_Ant2_Hop



3DH3_Ant2_Hop



3DH5_Ant2_Hop



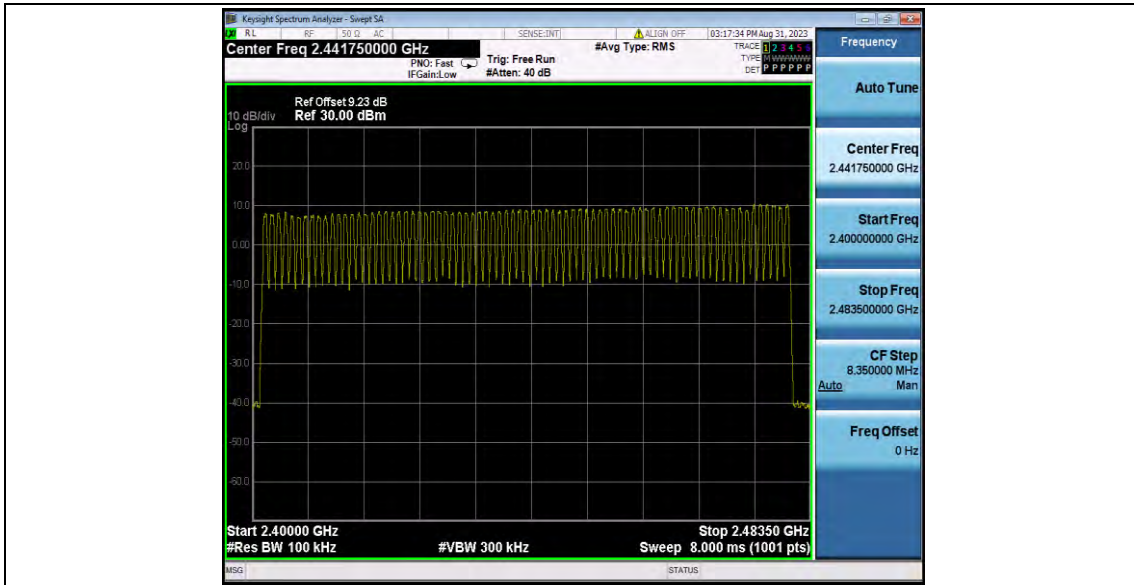
3DH5_Ant2_Hop

Appendix A.6: Number of hopping channels

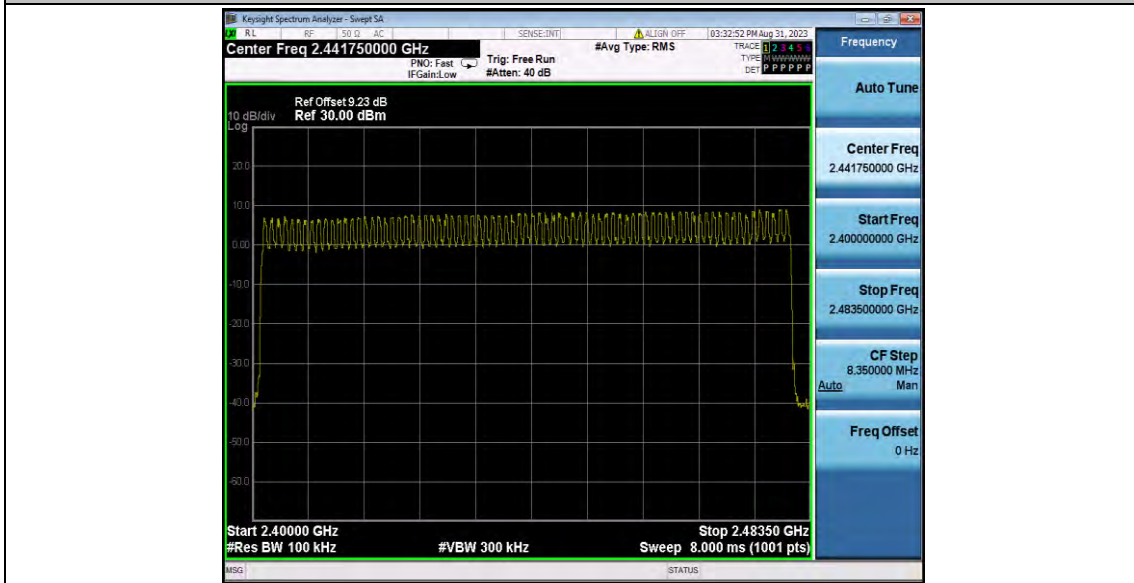
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant2	Hop	79	≥15	PASS
2DH1	Ant2	Hop	79	≥15	PASS
3DH1	Ant2	Hop	79	≥15	PASS

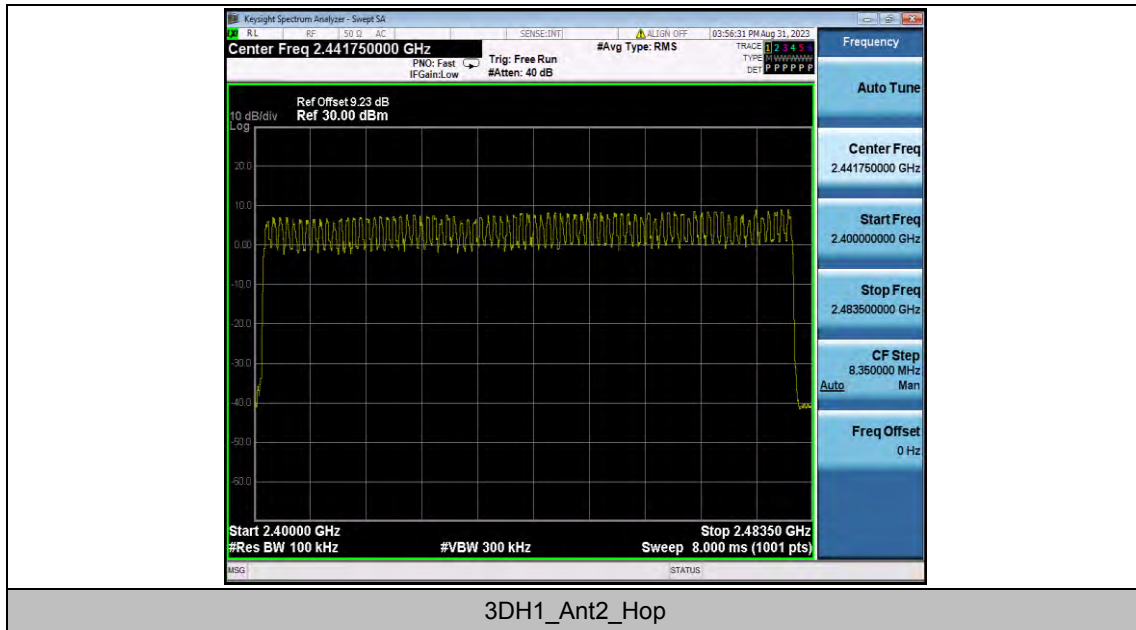
Test Graphs



DH1_Ant2_Hop



2DH1_Ant2_Hop



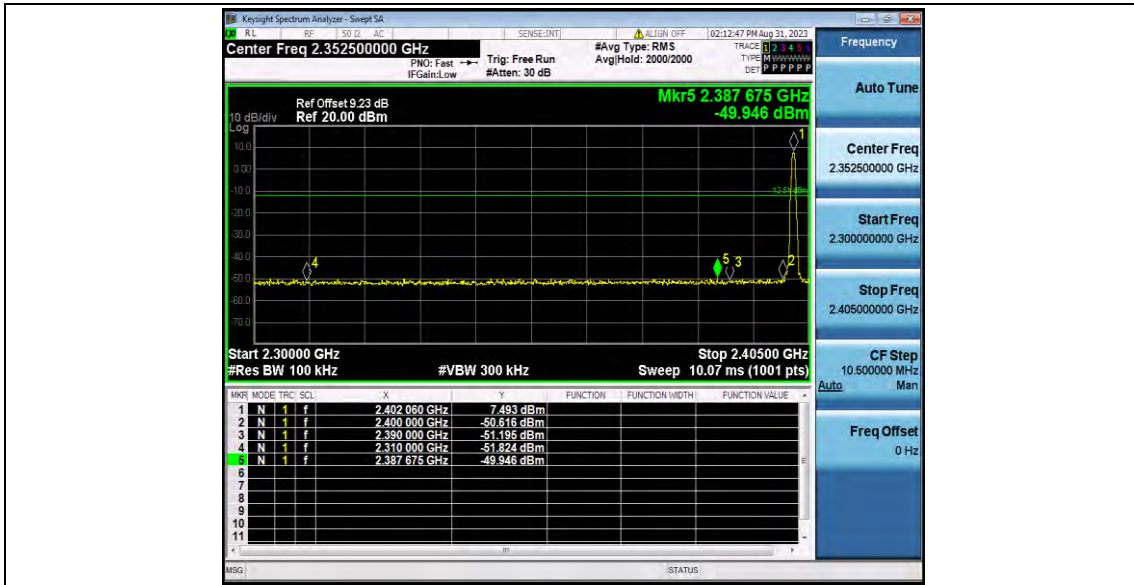
3DH1_Ant2_Hop

Appendix A.7: Band edge measurements

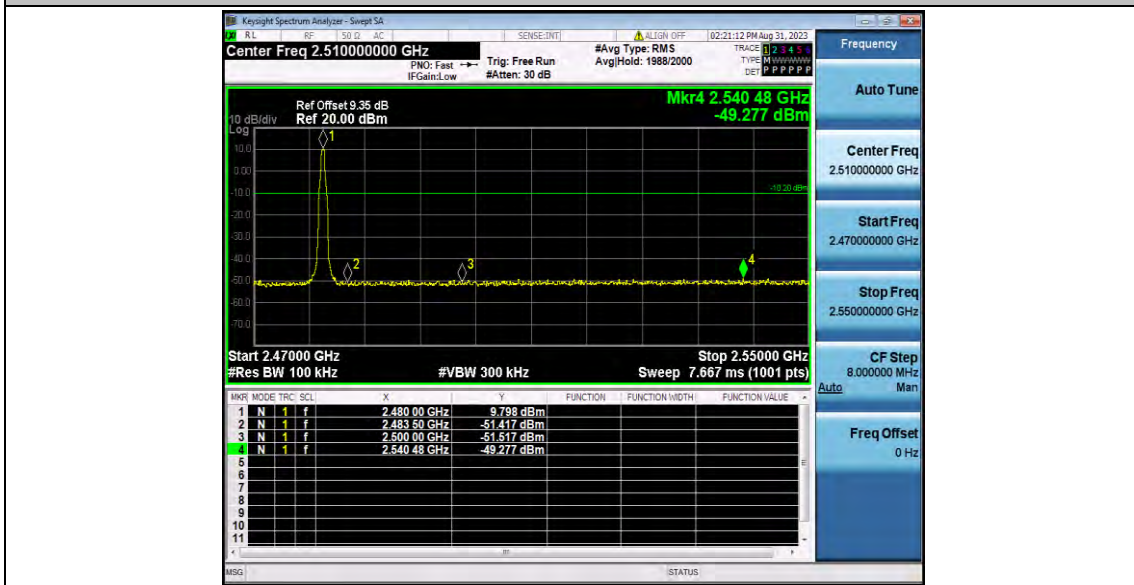
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant2	Low	2402	7.49	-49.95	≤ -12.51	PASS
		High	2480	9.80	-49.28	≤ -10.2	PASS
		Low	Hop_2402	7.26	-49.46	≤ -12.74	PASS
		High	Hop_2480	9.78	-45.4	≤ -10.22	PASS
2DH1	Ant2	Low	2402	7.35	-48.79	≤ -12.65	PASS
		High	2480	9.39	-48.66	≤ -10.61	PASS
		Low	Hop_2402	7.36	-49.62	≤ -12.64	PASS
		High	Hop_2480	8.55	-45.11	≤ -11.45	PASS
3DH1	Ant2	Low	2402	7.43	-47.38	≤ -12.57	PASS
		High	2480	9.45	-48.75	≤ -10.55	PASS
		Low	Hop_2402	7.03	-43.03	≤ -12.97	PASS
		High	Hop_2480	8.93	-48.44	≤ -11.07	PASS

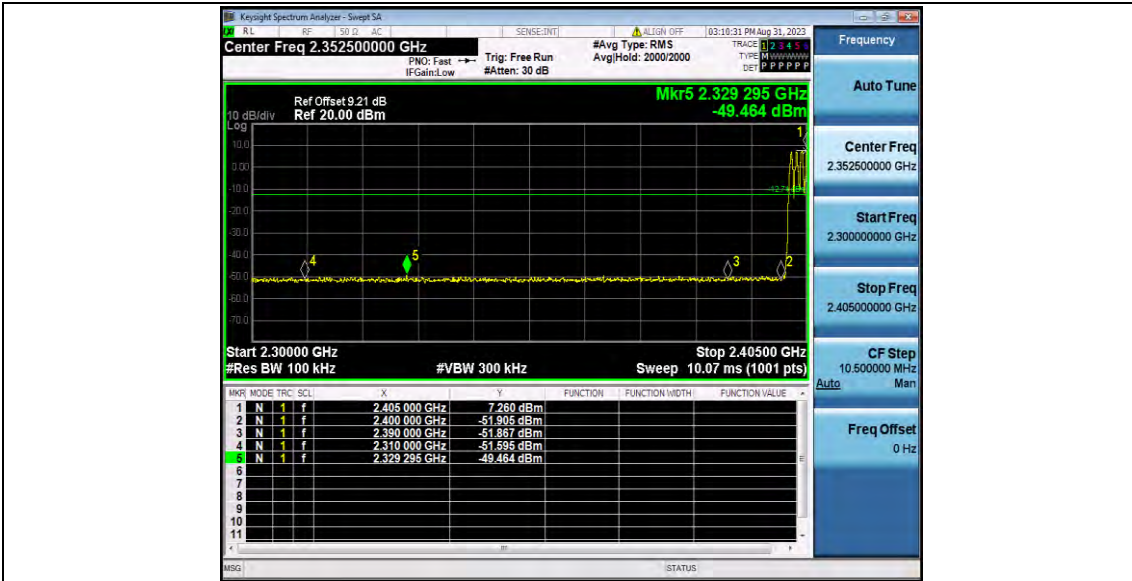
Test Graphs



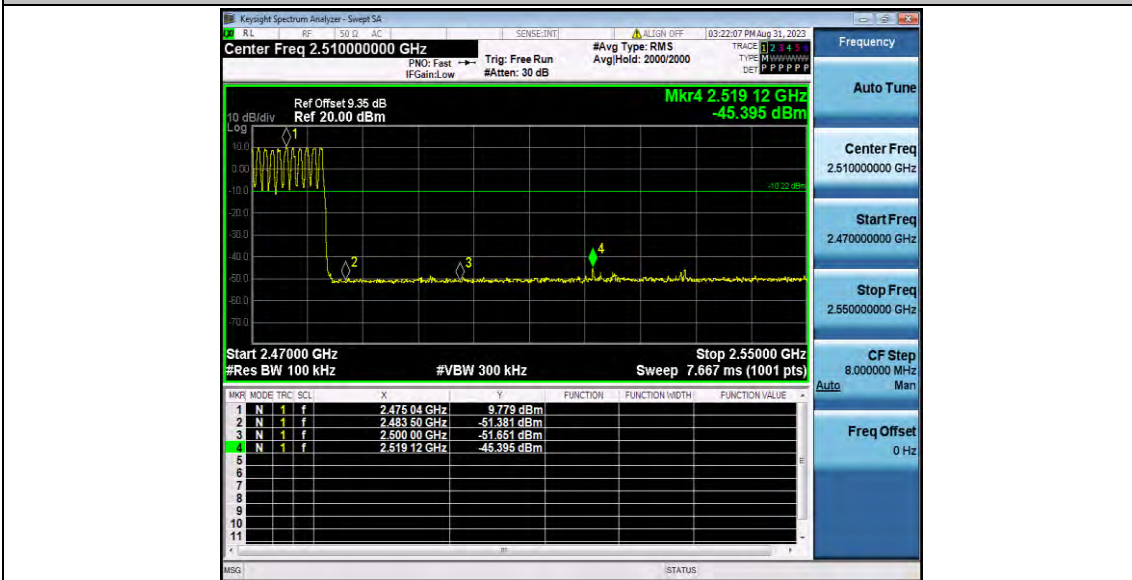
DH1_Ant2_Low_2402



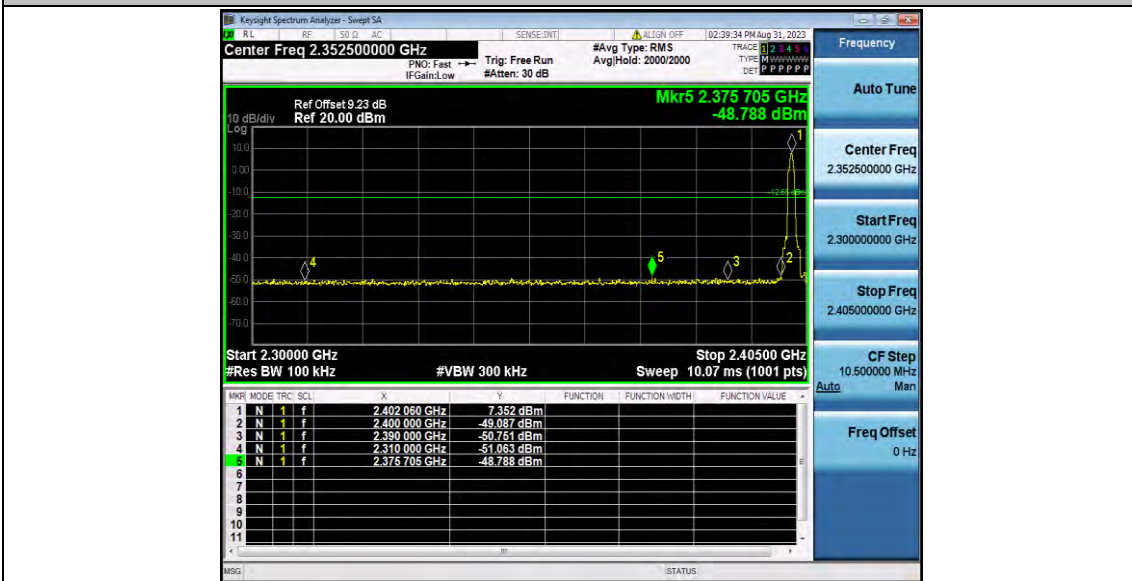
DH1_Ant2_High_2480



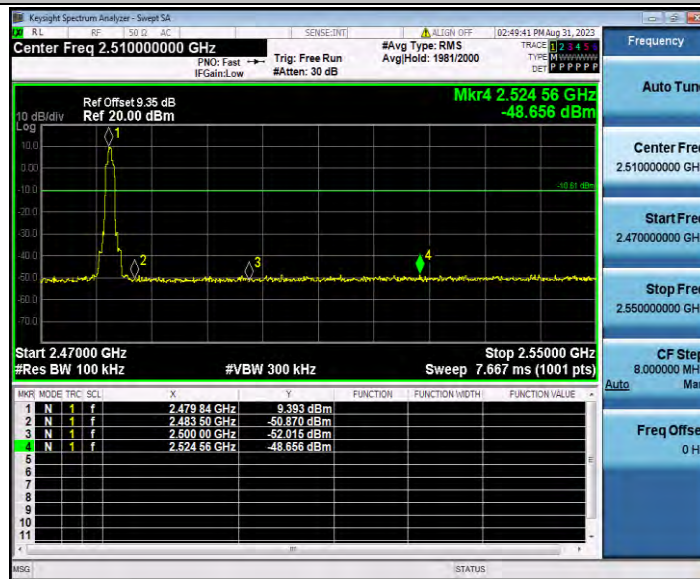
DH1_Ant2_Low_Hop_2402



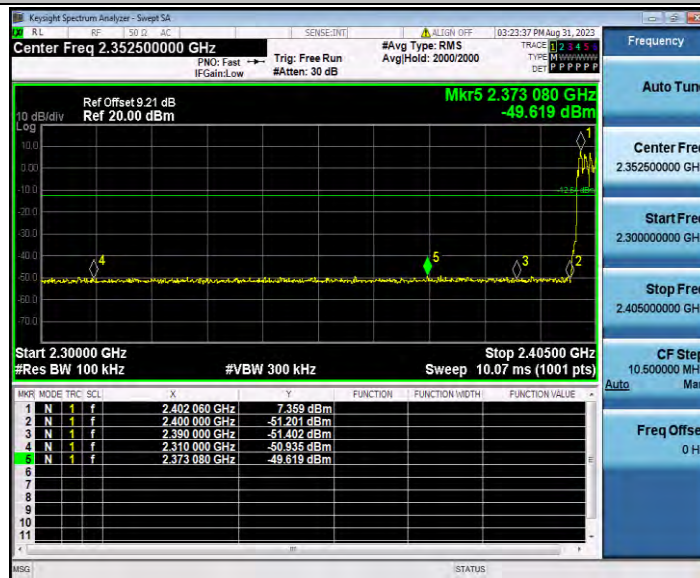
DH1_Ant2_High_Hop_2480



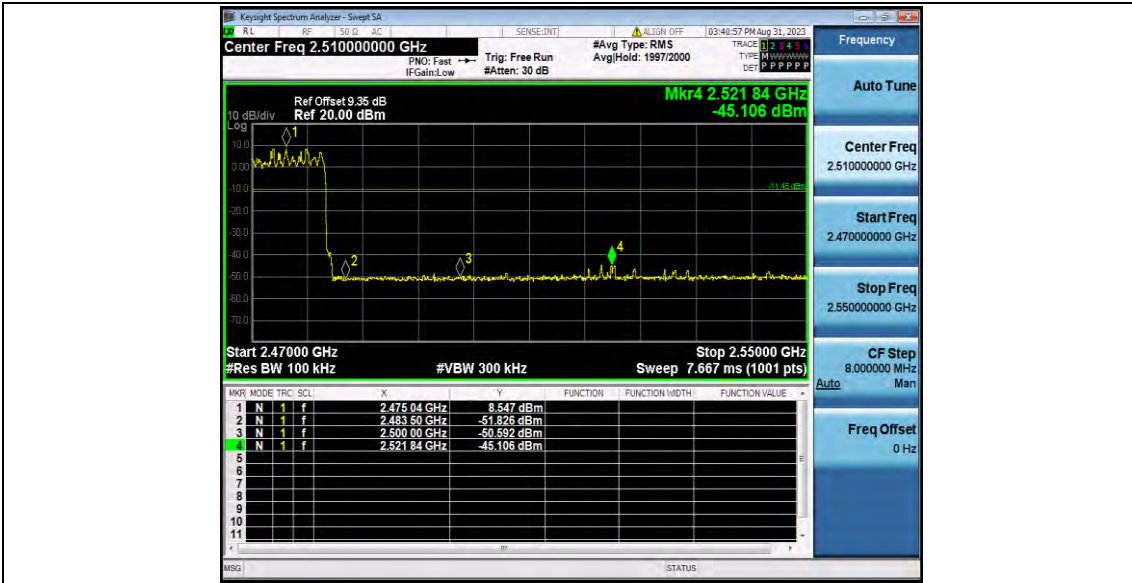
2DH1_Ant2_Low_2402



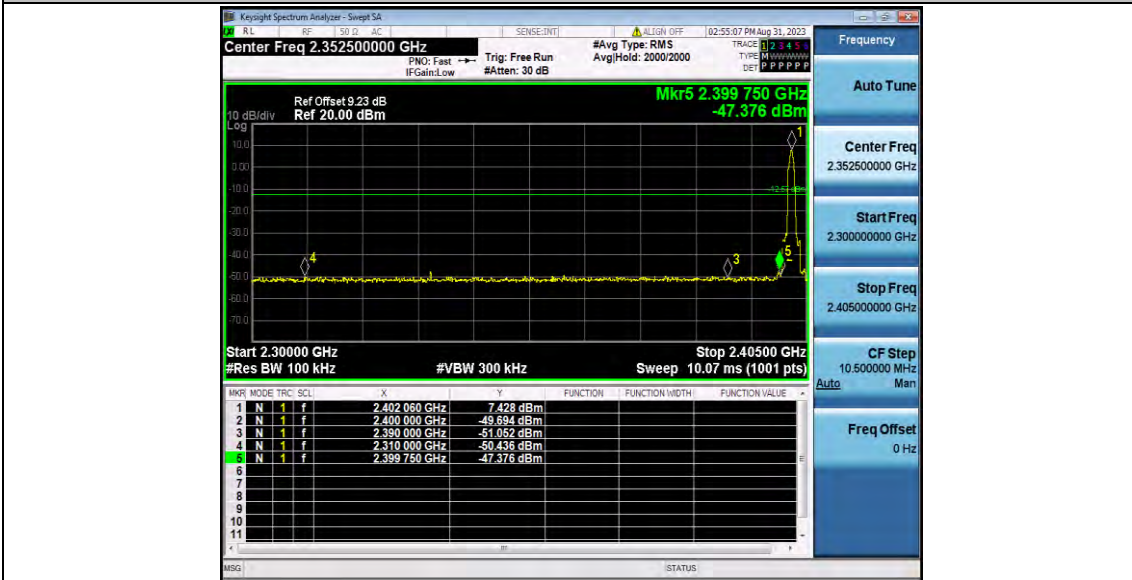
2DH1_Ant2_High_2480



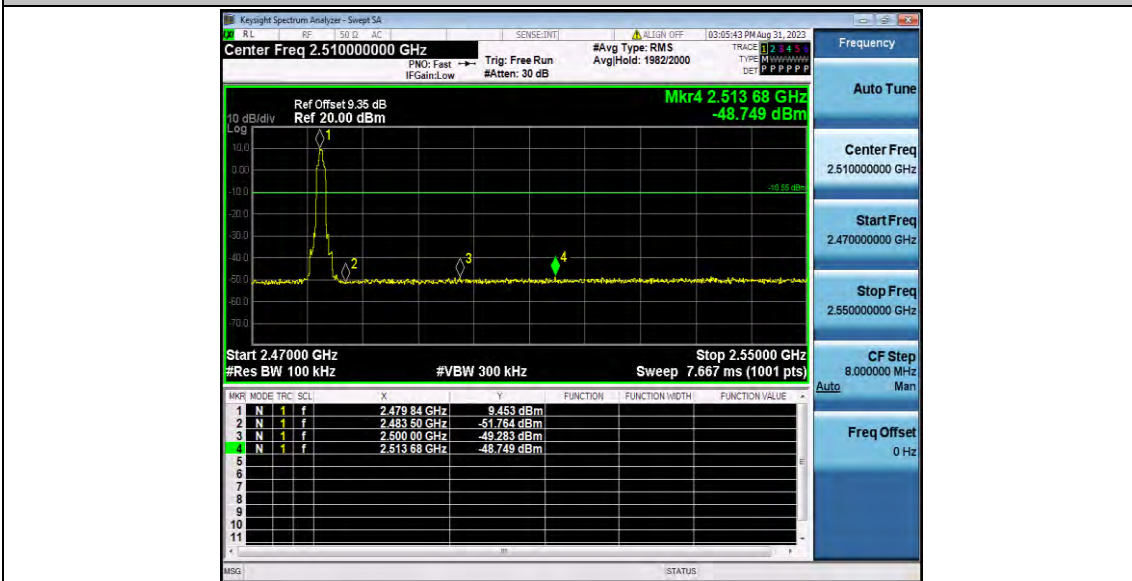
2DH1_Ant2_Low_Hop_2402



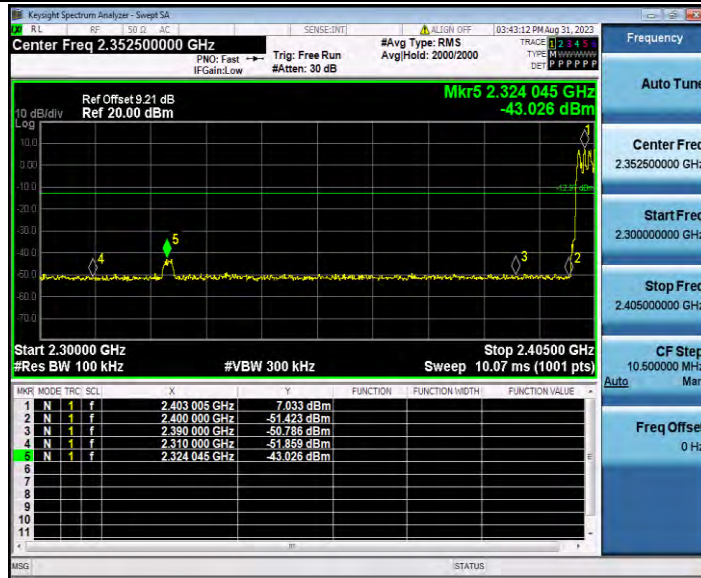
2DH1_Ant2_High_Hop_2480



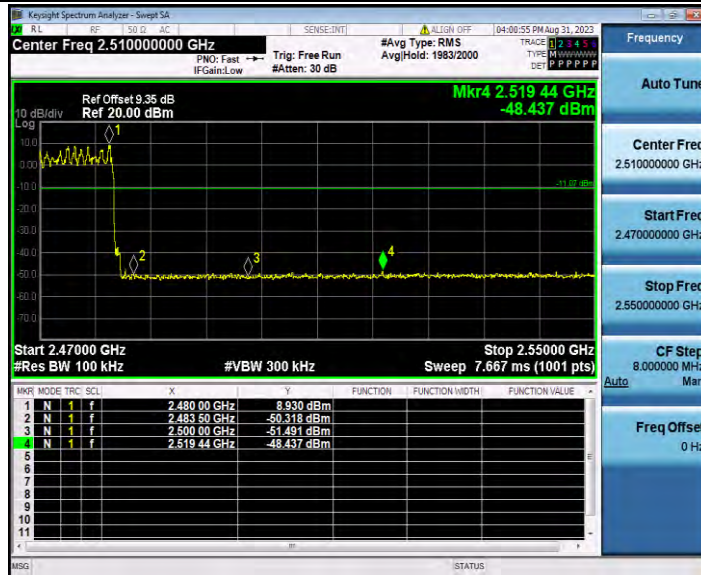
3DH1_Ant2_Low_2402



3DH1_Ant2_High_2480



3DH1_Ant2_Low_Hop_2402



3DH1_Ant2_High_Hop_2480

Appendix A.8: Conducted Spurious Emission

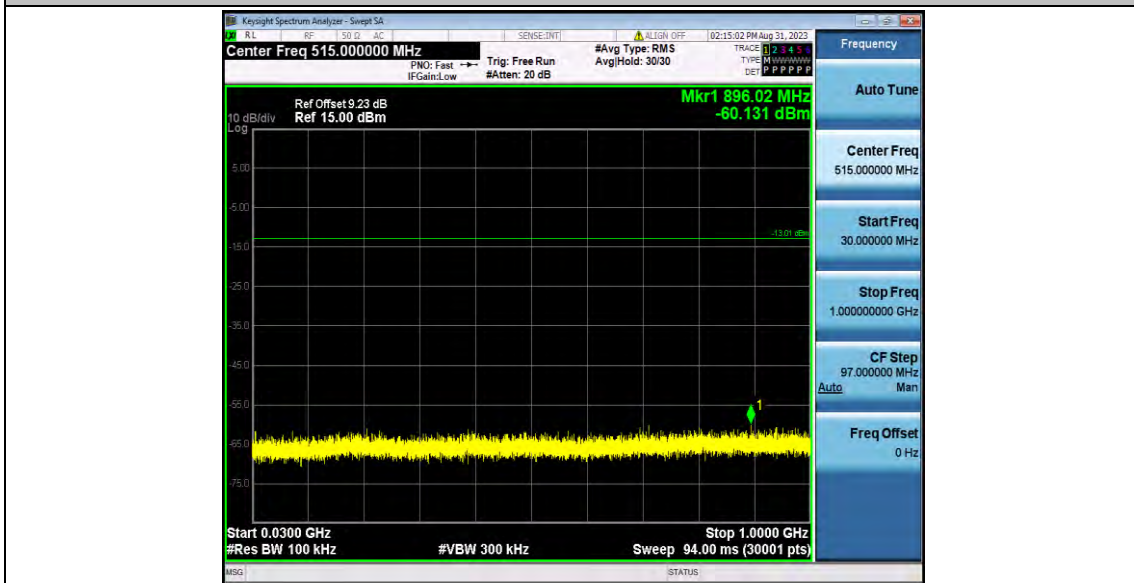
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant2	2402	Reference	6.99	6.99	---	PASS
			30~1000	6.99	-60.13	≤-13.01	PASS
			1000~26500	6.99	-47.81	≤-13.01	PASS
		2441	Reference	7.55	7.55	---	PASS
			30~1000	7.55	-60.37	≤-12.45	PASS
			1000~26500	7.55	-47.74	≤-12.45	PASS
		2480	Reference	9.74	9.74	---	PASS
			30~1000	9.74	-60.56	≤-10.26	PASS
			1000~26500	9.74	-47.71	≤-10.26	PASS
2DH1	Ant2	2402	Reference	7.26	7.26	---	PASS
			30~1000	7.26	-60.49	≤-12.74	PASS
			1000~26500	7.26	-47.16	≤-12.74	PASS
		2441	Reference	7.06	7.06	---	PASS
			30~1000	7.06	-59.97	≤-12.94	PASS
			1000~26500	7.06	-47.32	≤-12.94	PASS
		2480	Reference	9.35	9.35	---	PASS
			30~1000	9.35	-59.72	≤-10.65	PASS
			1000~26500	9.35	-47.17	≤-10.65	PASS
3DH1	Ant2	2402	Reference	6.91	6.91	---	PASS
			30~1000	6.91	-60.4	≤-13.09	PASS
			1000~26500	6.91	-47.09	≤-13.09	PASS
		2441	Reference	8.57	8.57	---	PASS
			30~1000	8.57	-54.76	≤-11.43	PASS
			1000~26500	8.57	-47.4	≤-11.43	PASS
		2480	Reference	8.91	8.91	---	PASS
			30~1000	8.91	-60.22	≤-11.09	PASS
			1000~26500	8.91	-47	≤-11.09	PASS

Test Graphs



DH1_Ant2_2402_0~Reference



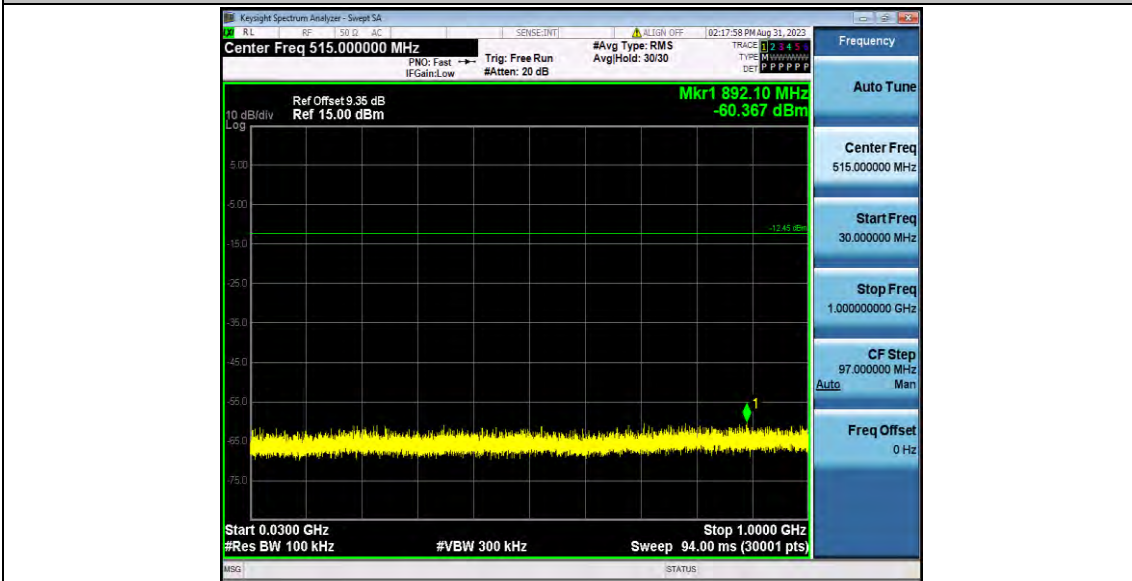
DH1_Ant2_2402_30~1000



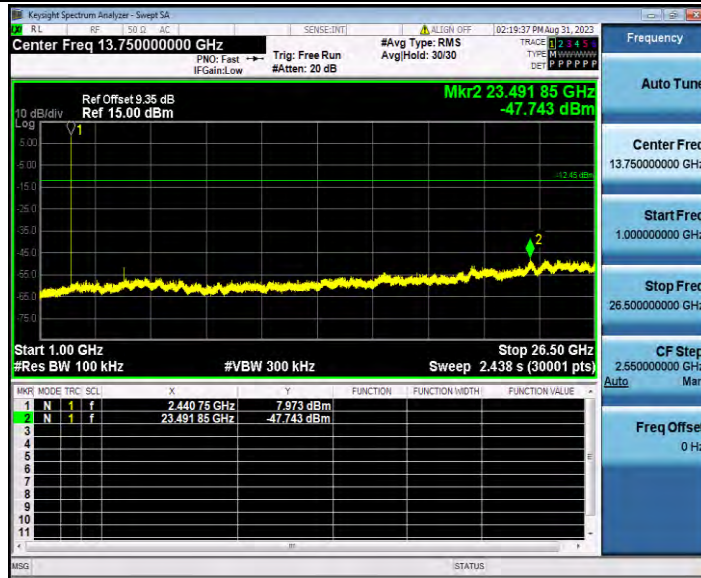
DH1_Ant2_2402_1000~26500



DH1_Ant2_2441_0~Reference



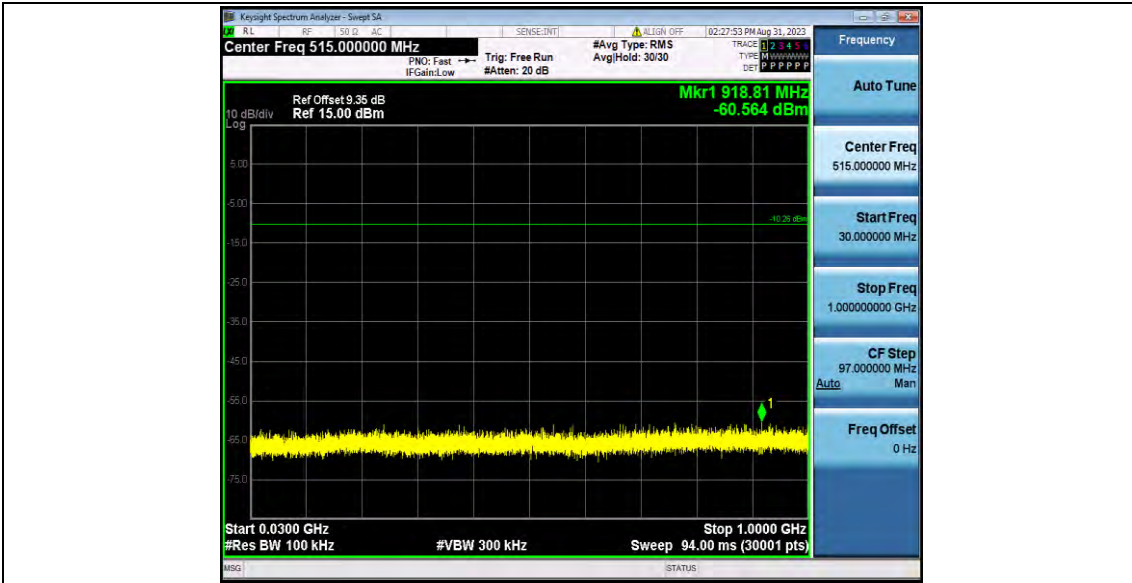
DH1_Ant2_2441_30~1000



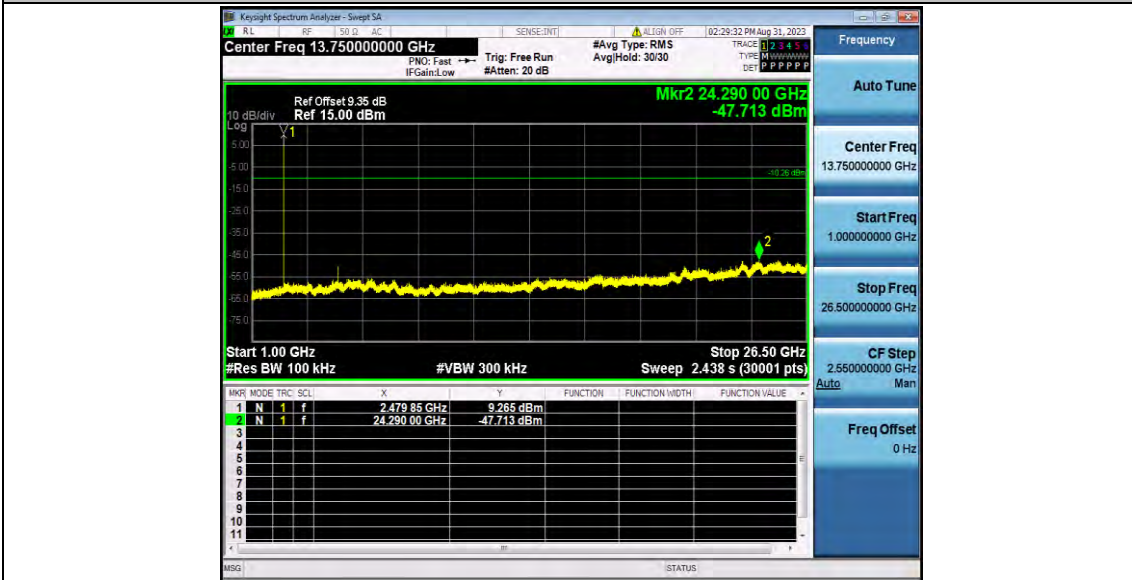
DH1_Ant2_2441_1000~26500



DH1_Ant2_2480_0~Reference



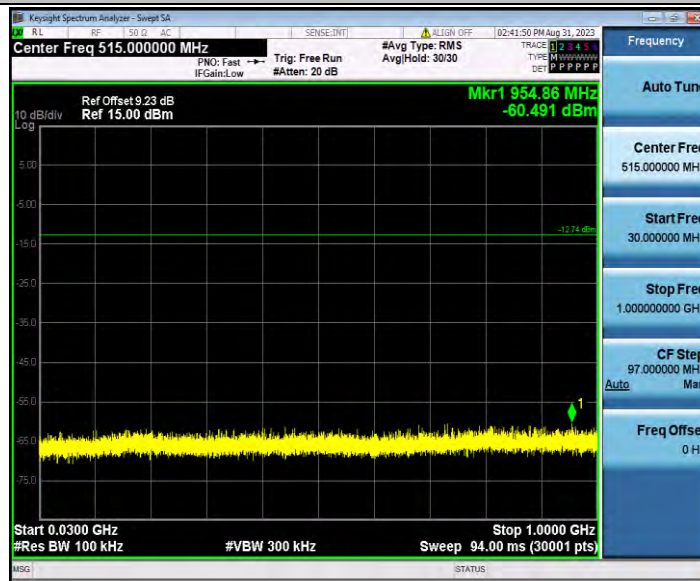
DH1_Ant2_2480_30~1000



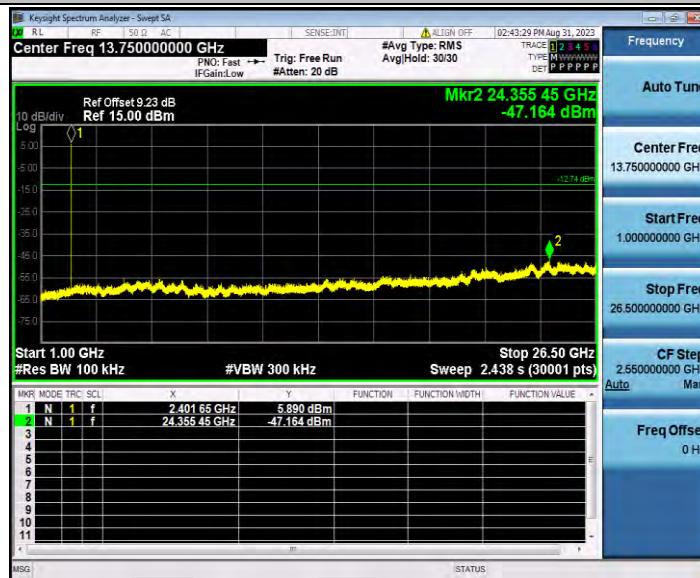
DH1_Ant2_2480_1000~26500



2DH1_Ant2_2402_0~Reference



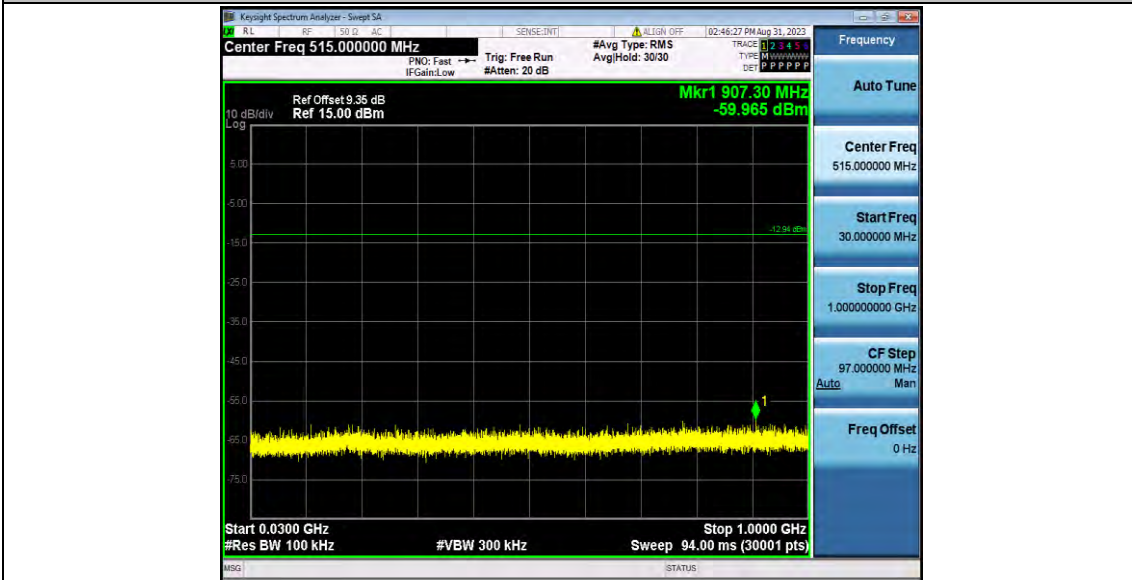
2DH1_Ant2_2402_30~1000



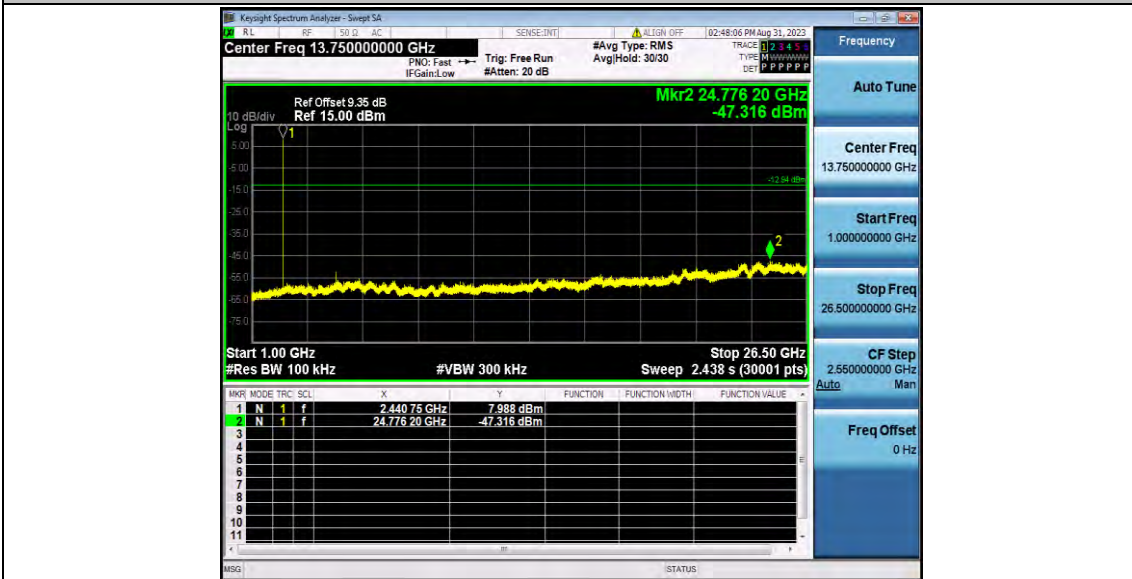
2DH1_Ant2_2402_1000~26500



2DH1_Ant2_2441_0~Reference



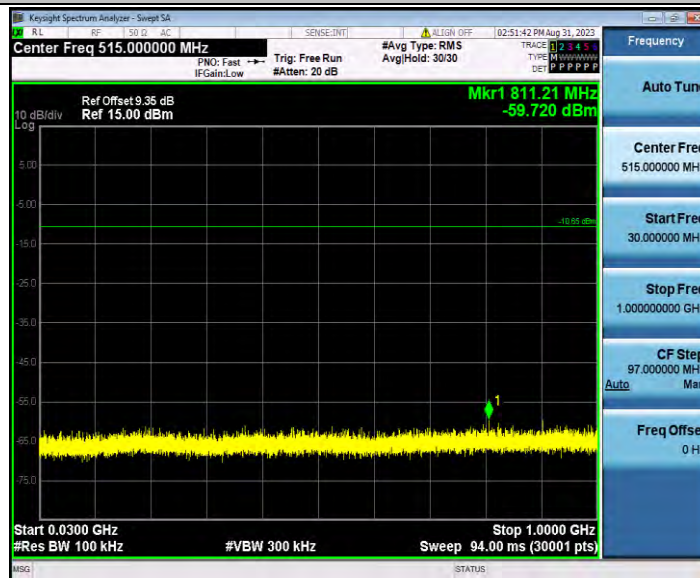
2DH1_Ant2_2441_30~1000



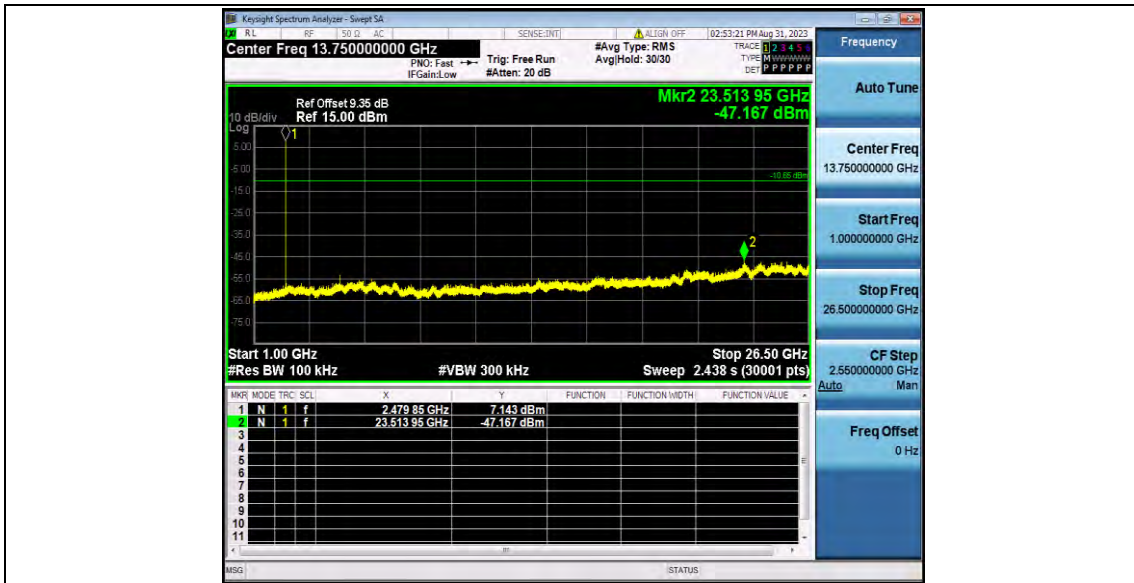
2DH1_Ant2_2441_1000~26500



2DH1_Ant2_2480_0~Reference



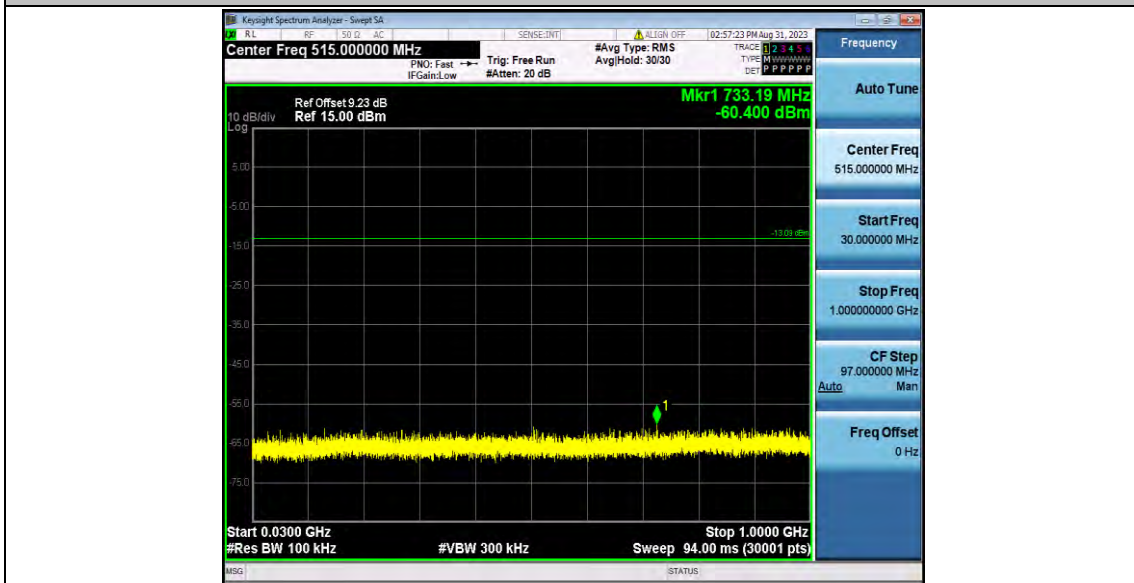
2DH1_Ant2_2480_30~1000



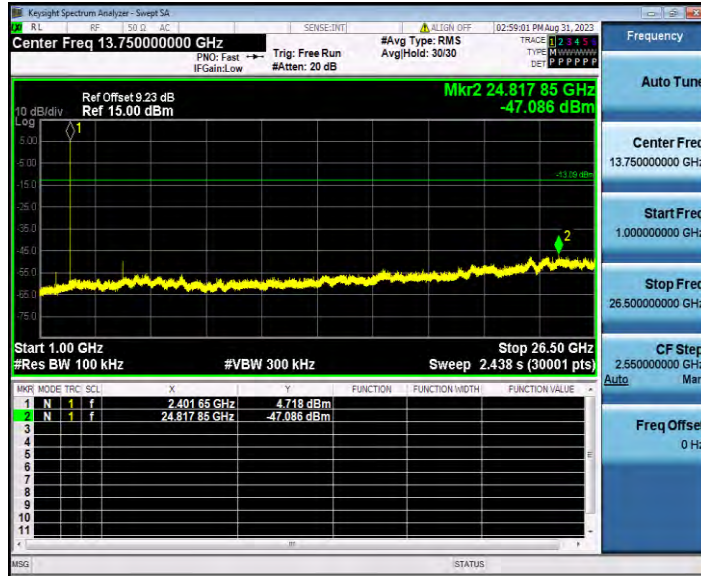
2DH1_Ant2_2480_1000~26500



3DH1_Ant2_2402_0~Reference



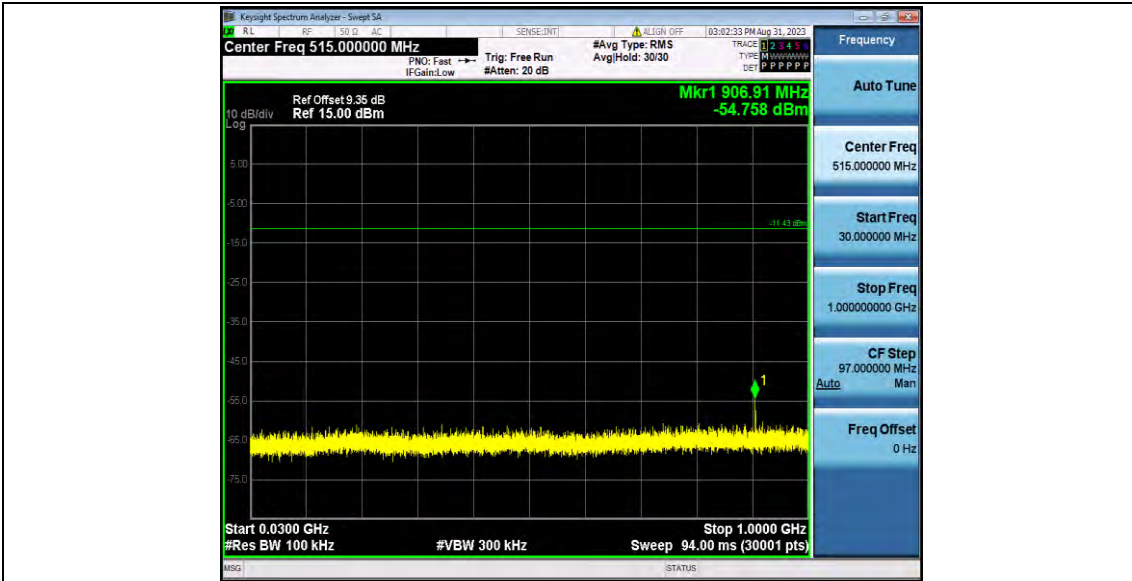
3DH1_Ant2_2402_30~1000



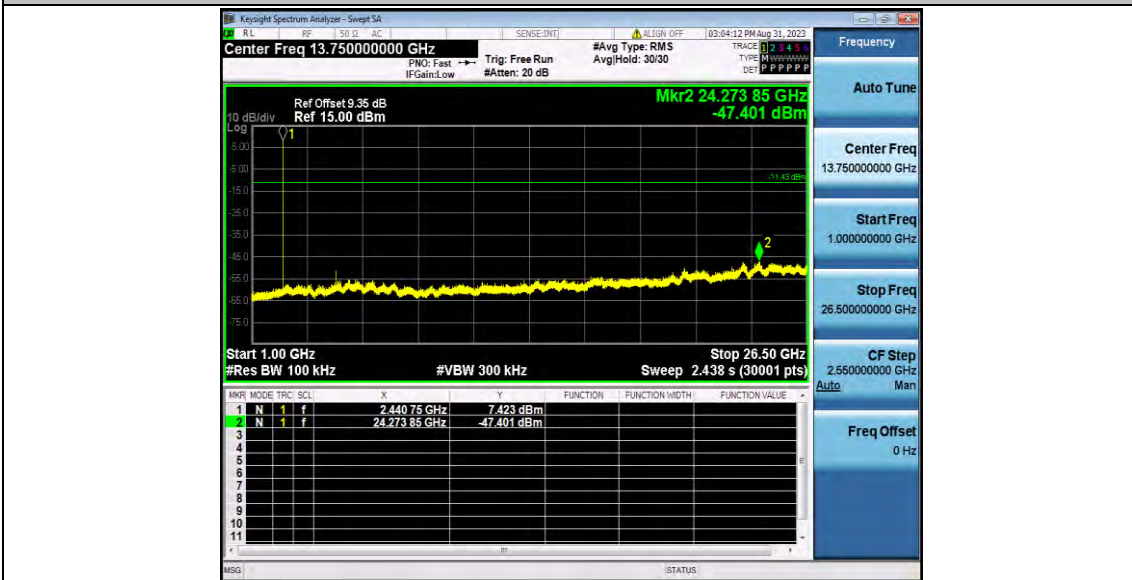
3DH1_Ant2_2402_1000~26500



3DH1_Ant2_2441_0~Reference



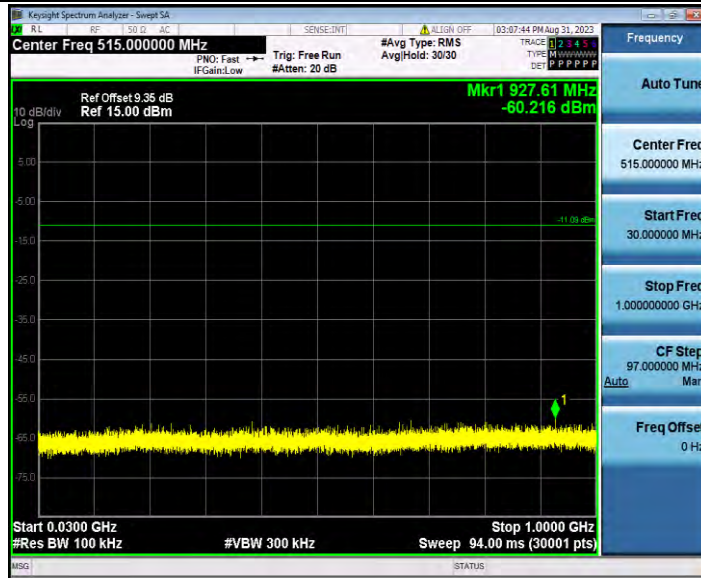
3DH1_Ant2_2441_30~100



3DH1_Ant2_2441_1000~26500



3DH1_Ant2_2480_0~Reference



3DH1_Ant2_2480_30~1000



3DH1_Ant2_2480_1000~26500