

Case No. : <u>GTS20221215006-1-1</u>
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, Atmos100.1Kpa,
Test Date: <u>2022.12.28</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	0.840	2401.598	2402.438	---	---
		2441	0.777	2440.631	2441.408	---	---
		2480	0.765	2479.631	2480.396	---	---
2DH1	Ant1	2402	1.263	2401.391	2402.654	---	---
		2441	1.200	2440.418	2441.618	---	---
		2480	1.215	2479.400	2480.615	---	---
3DH1	Ant1	2402	1.218	2401.427	2402.645	---	---
		2441	1.254	2440.394	2441.648	---	---
		2480	1.227	2479.421	2480.648	---	---

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

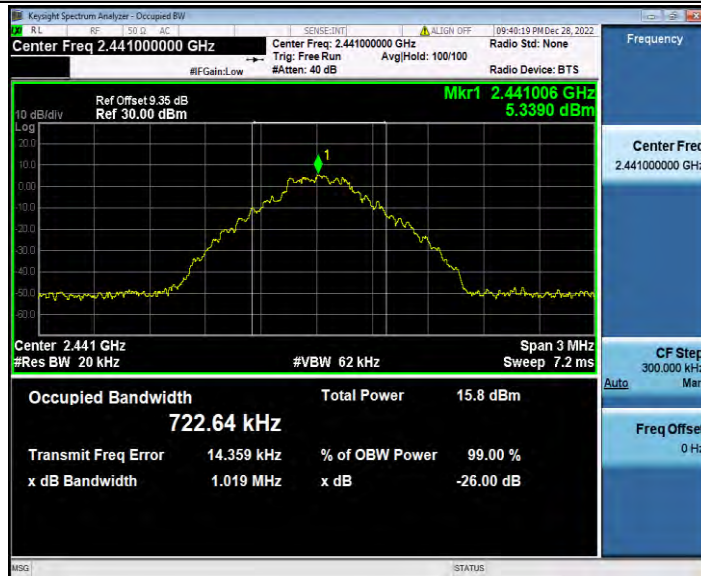
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.71284	2401.656	2402.368	---	---
		2441	0.72264	2440.653	2441.376	---	---
		2480	0.70622	2479.658	2480.364	---	---
2DH1	Ant1	2402	1.1354	2401.457	2402.592	---	---
		2441	1.1423	2440.448	2441.590	---	---
		2480	1.1341	2479.455	2480.589	---	---
3DH1	Ant1	2402	1.1397	2401.462	2402.602	---	---
		2441	1.1341	2440.464	2441.598	---	---
		2480	1.1227	2479.467	2480.589	---	---

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	8.06	≤20.97	PASS
		2441	8.31	≤20.97	PASS
		2480	8.94	≤20.97	PASS
2DH1	Ant1	2402	8.78	≤20.97	PASS
		2441	8.47	≤20.97	PASS
		2480	8.33	≤20.97	PASS
3DH1	Ant1	2402	8.72	≤20.97	PASS
		2441	8.45	≤20.97	PASS
		2480	8.35	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.856	≥ 0.560	PASS
		Hop_2441	1.004	≥ 0.560	PASS
		Hop_2480	0.838	≥ 0.560	PASS
2DH1	Ant1	Hop_2402	0.996	≥ 0.842	PASS
		Hop_2441	1	≥ 0.842	PASS
		Hop_2480	1	≥ 0.842	PASS
3DH1	Ant1	Hop_2402	0.856	≥ 0.836	PASS
		Hop_2441	0.852	≥ 0.836	PASS
		Hop_2480	1.004	≥ 0.836	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



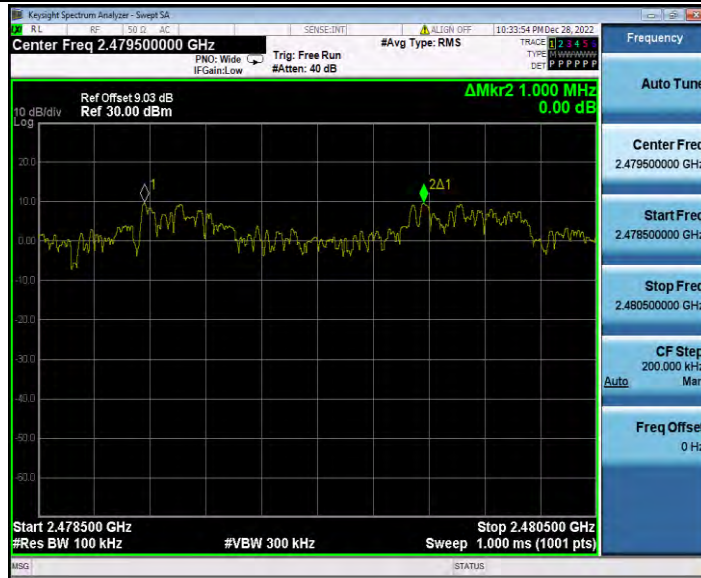
2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441



3DH1_Ant1_Hop_2480



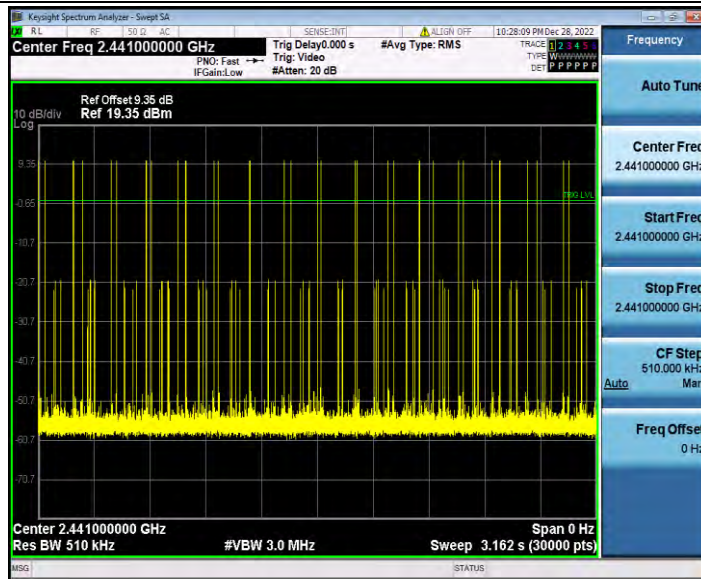
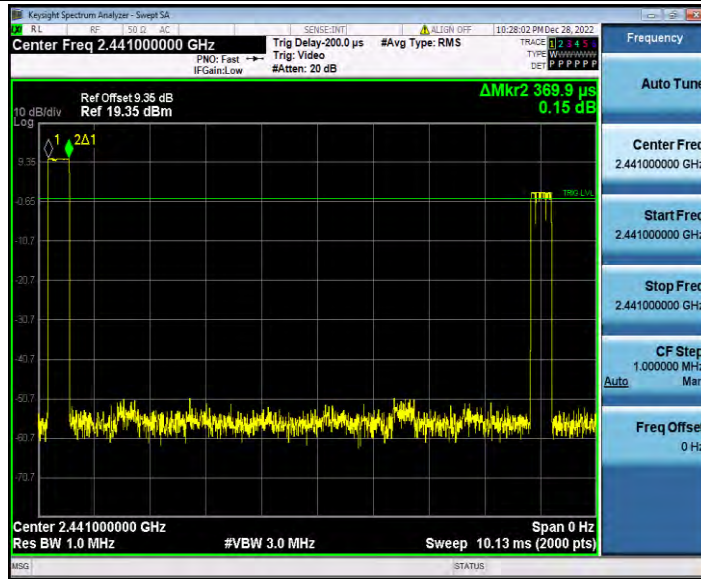
Appendix A.5: Time of occupancy

Test Result

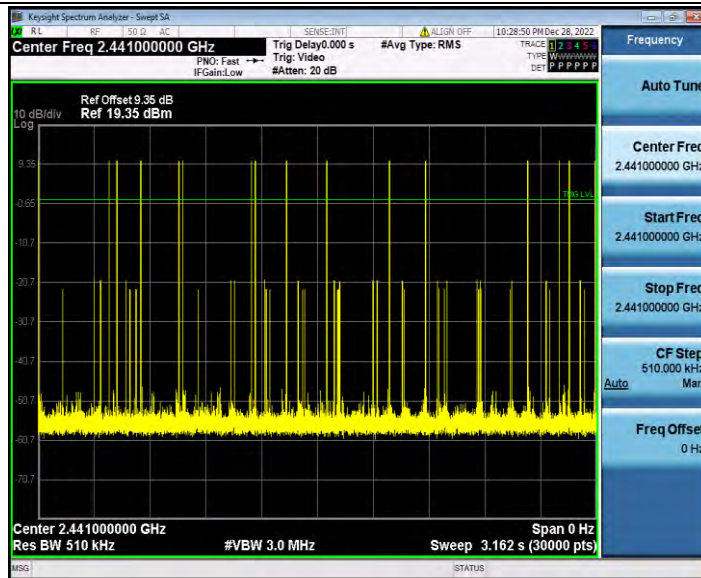
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.118	≤0.4	PASS
DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.87	120	0.345	≤0.4	PASS
2DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.88	130	0.374	≤0.4	PASS
3DH1	Ant1	Hop	0.37	320	0.12	≤0.4	PASS
3DH3	Ant1	Hop	1.63	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.88	90	0.259	≤0.4	PASS

Test Graphs

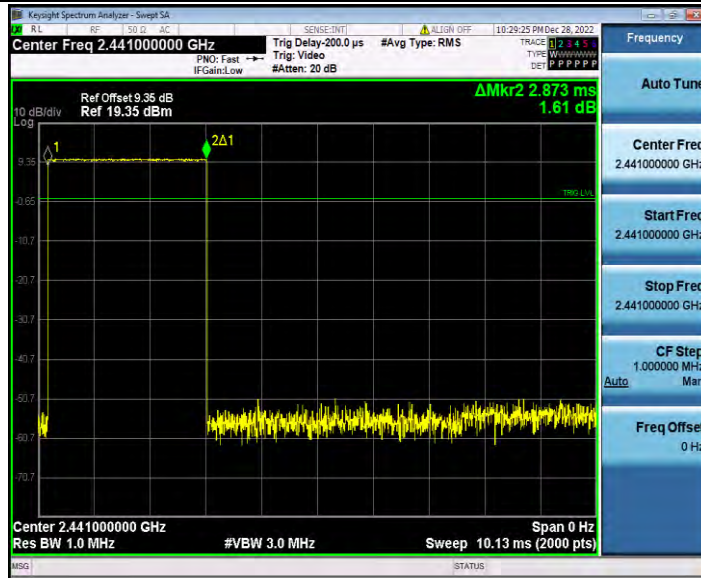
DH1_Ant1_Hop

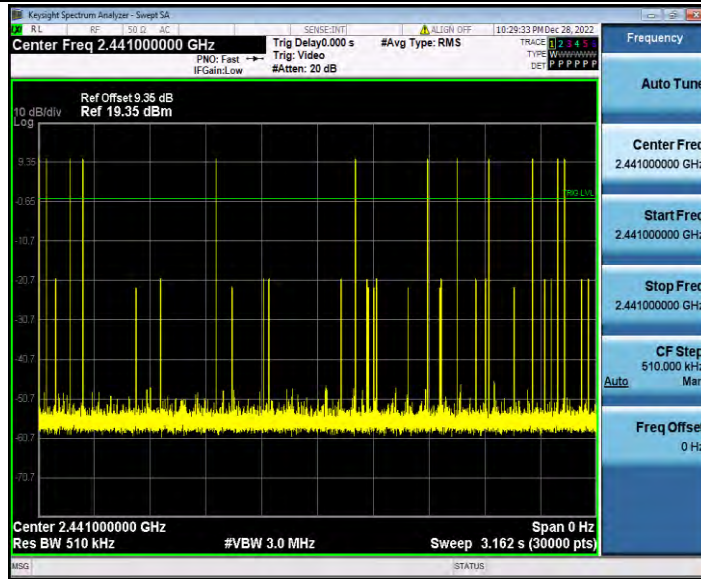


DH3_Ant1_Hop

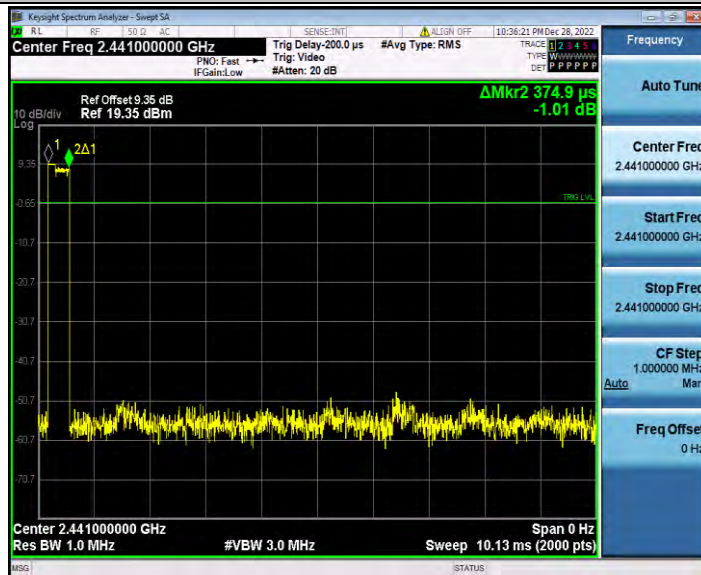


DH5_Ant1_Hop

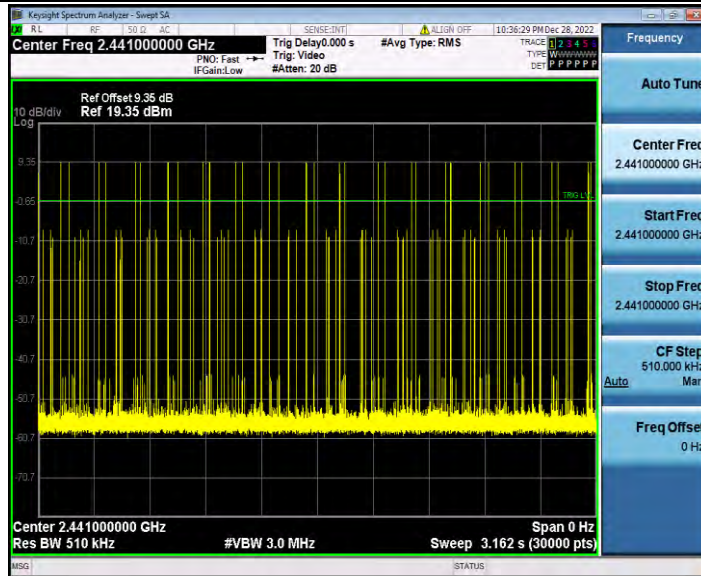


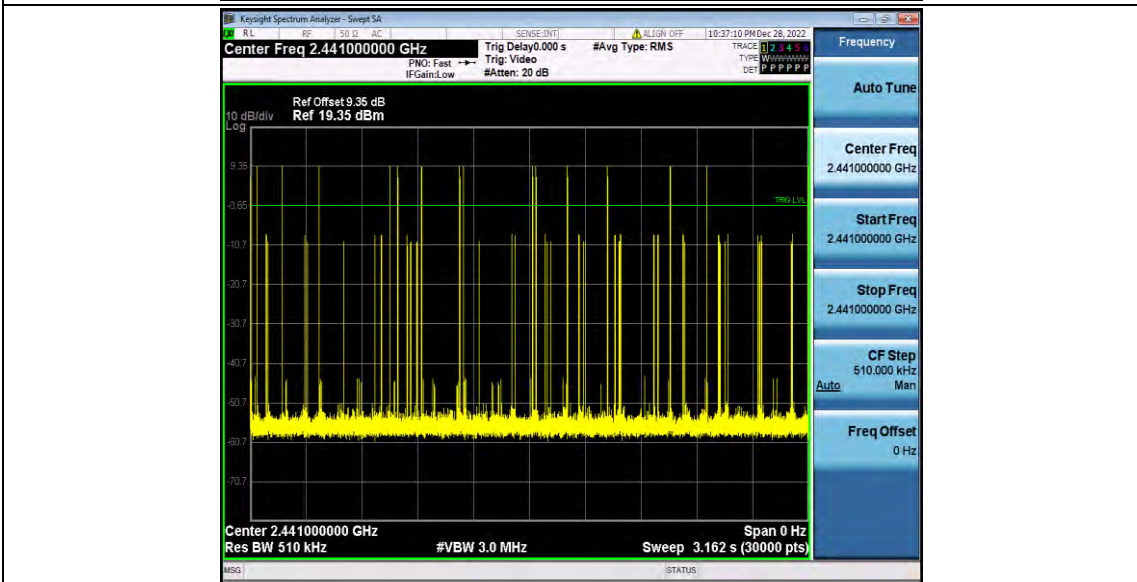


2DH1_Ant1_Hop

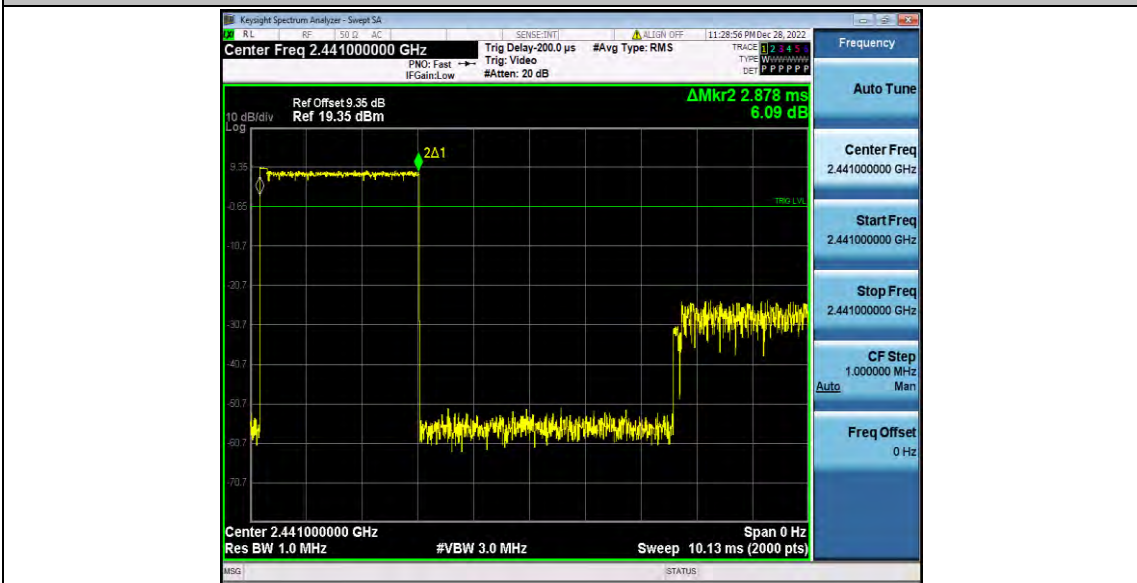


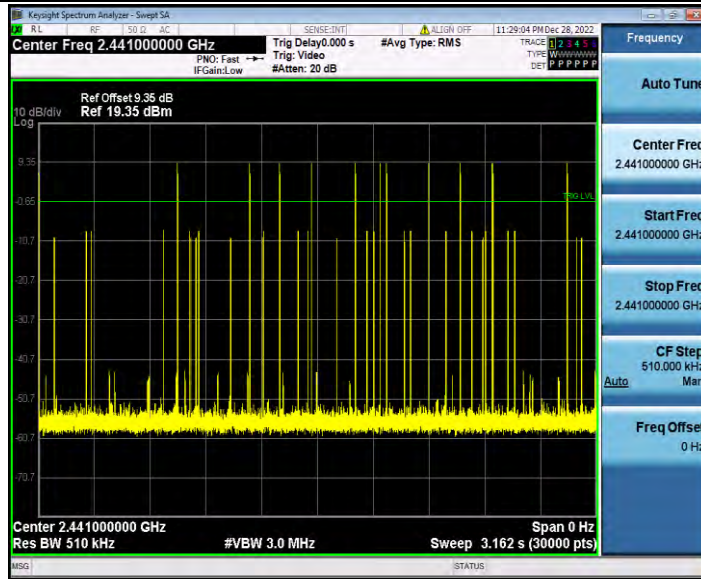
2DH3_Ant1_Hop



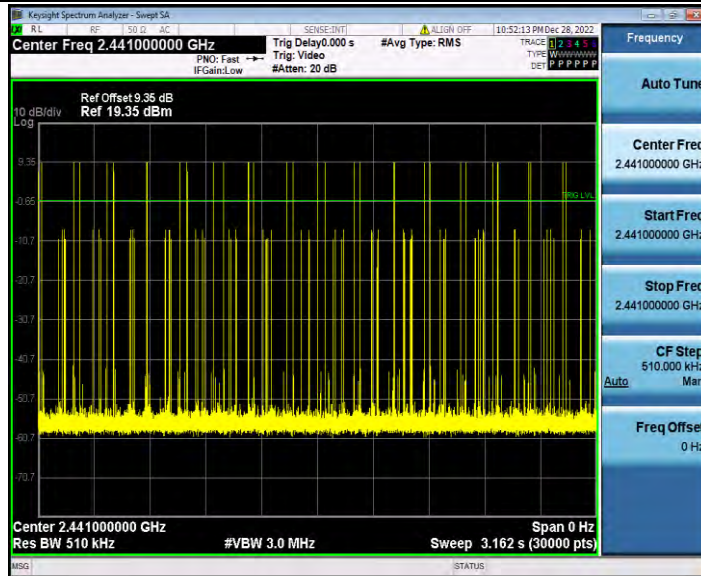
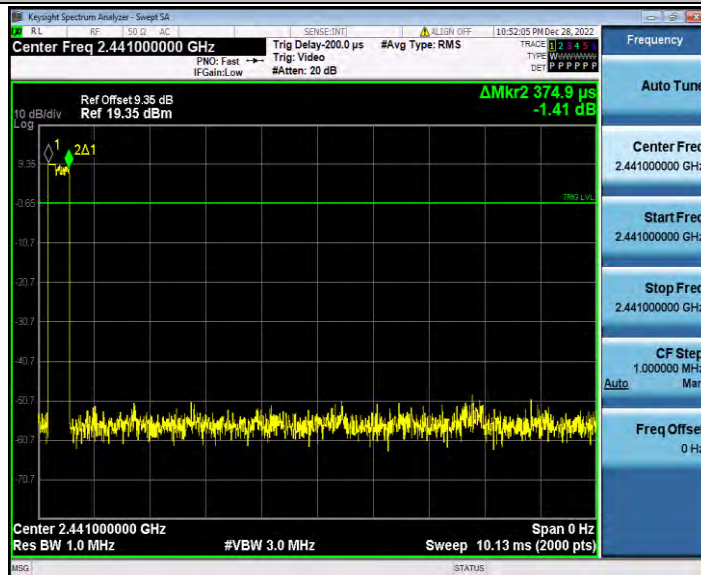


2DH5_Ant1_Hop

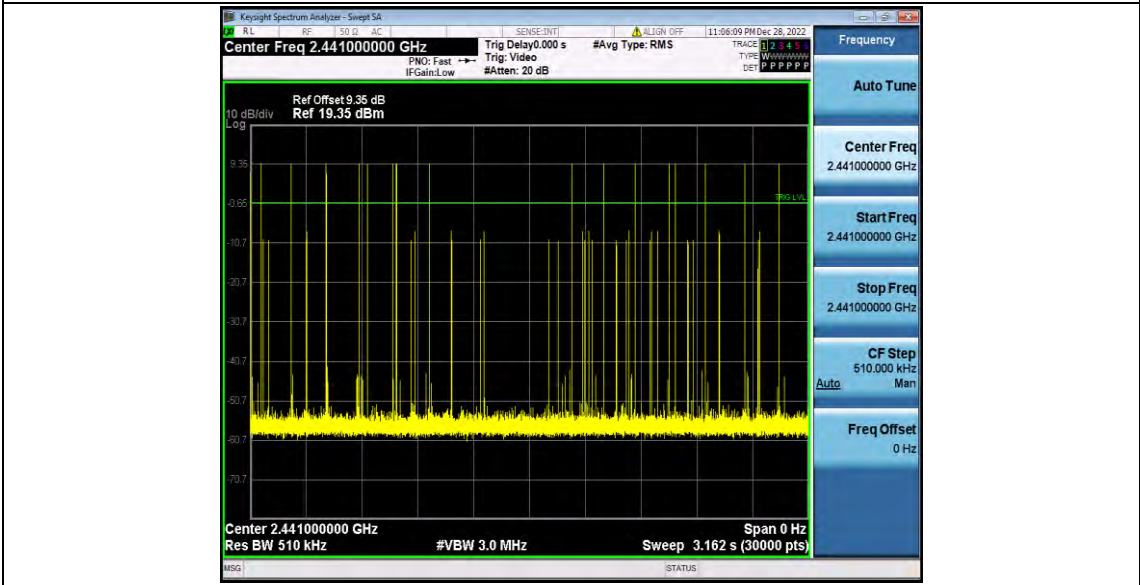
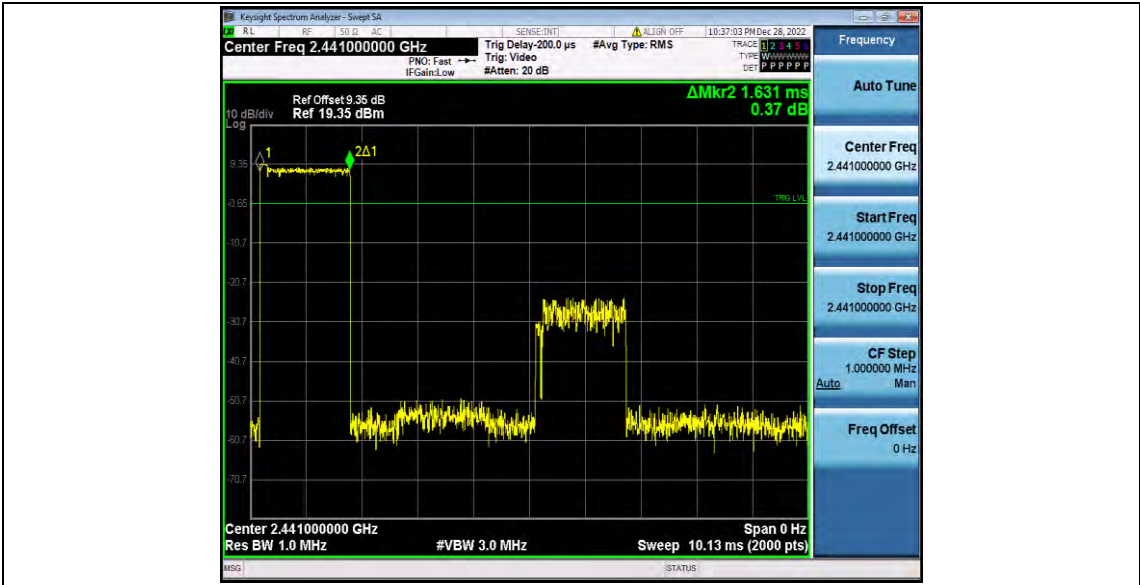




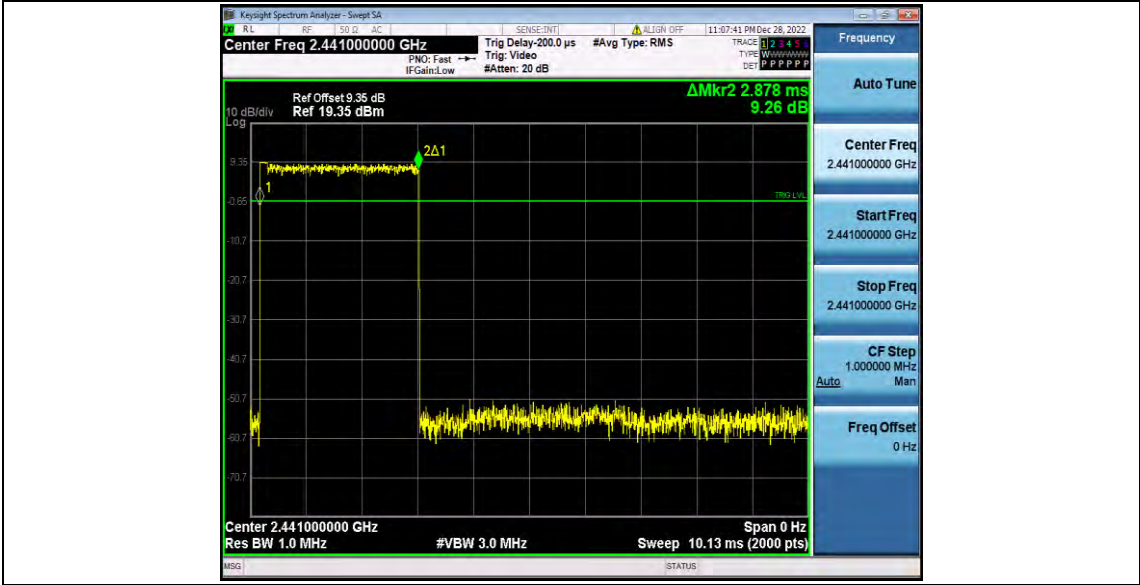
3DH1_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop



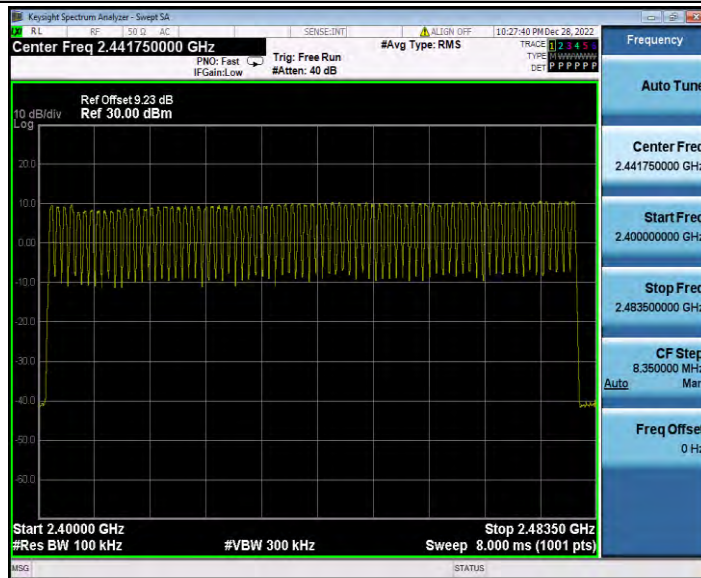
Appendix A.6: Number of hopping channels

Test Result

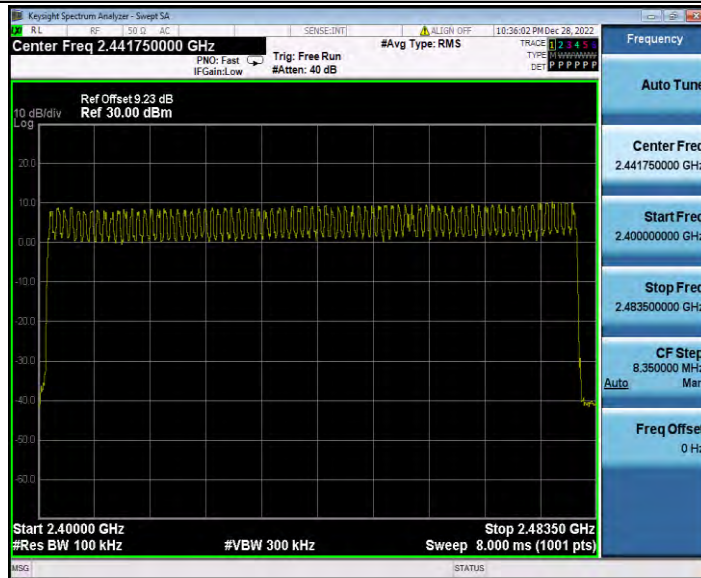
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

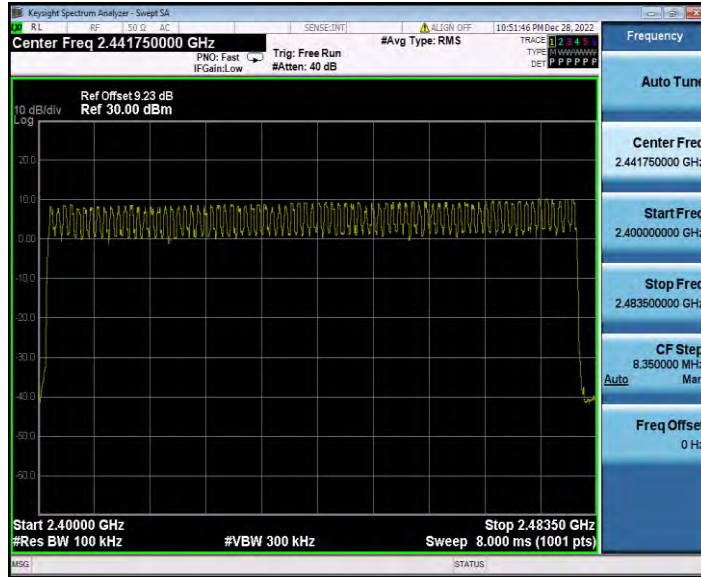
DH1_Ant1_Hop



2DH1_Ant1_Hop



3DH1_Ant1_Hop



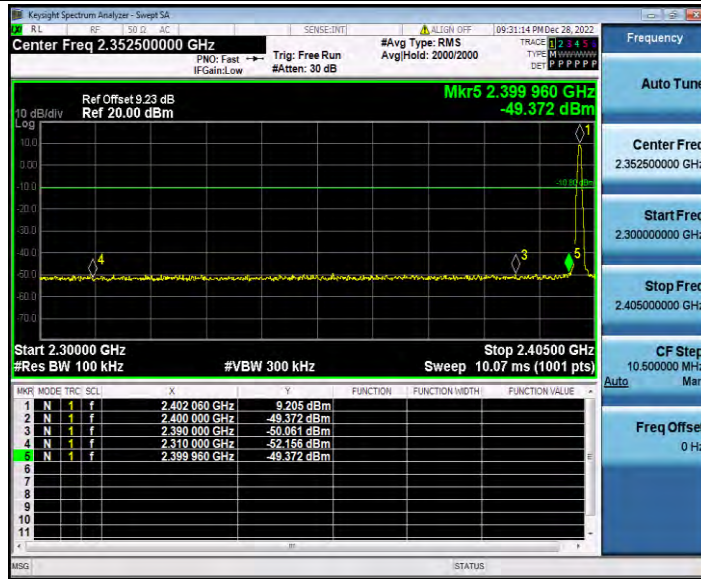
Appendix A.7: Band edge measurements

Test Result

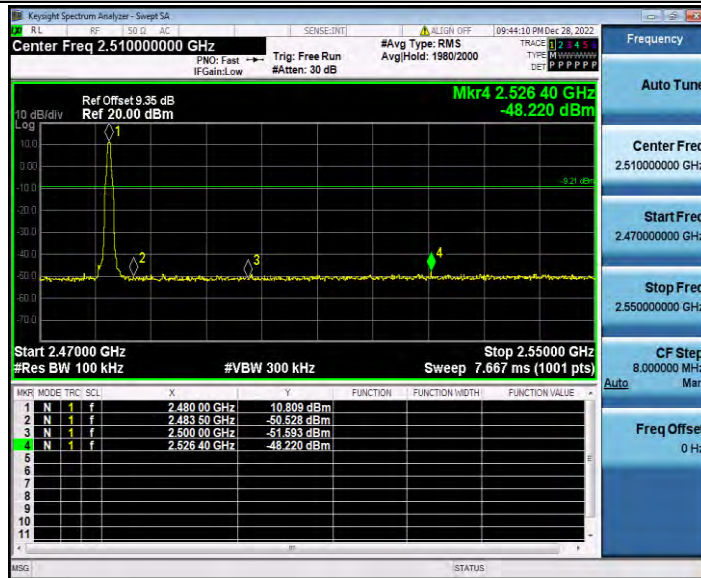
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	9.21	-49.37	≤-10.8	PASS
		High	2480	10.79	-48.22	≤-9.21	PASS
		Low	Hop_2402	9.33	-49.38	≤-10.67	PASS
		High	Hop_2480	10.51	-48.23	≤-9.49	PASS
2DH1	Ant1	Low	2402	8.54	-47.26	≤-11.46	PASS
		High	2480	10.20	-48.61	≤-9.8	PASS
		Low	Hop_2402	8.18	-49.24	≤-11.82	PASS
		High	Hop_2480	10.10	-48.68	≤-9.91	PASS
3DH1	Ant1	Low	2402	8.48	-49.35	≤-11.52	PASS
		High	2480	10.18	-48.87	≤-9.82	PASS
		Low	Hop_2402	7.74	-49.8	≤-12.26	PASS
		High	Hop_2480	10.27	-49.29	≤-9.73	PASS

Test Graphs

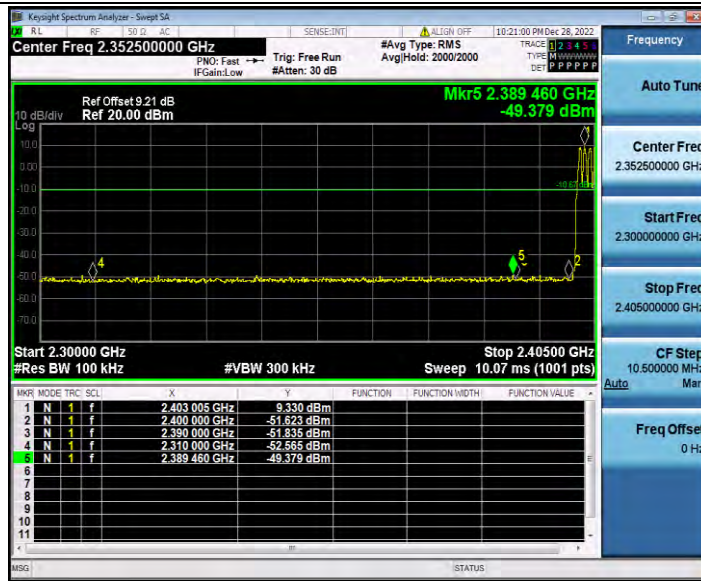
DH1_Ant1_Low_2402



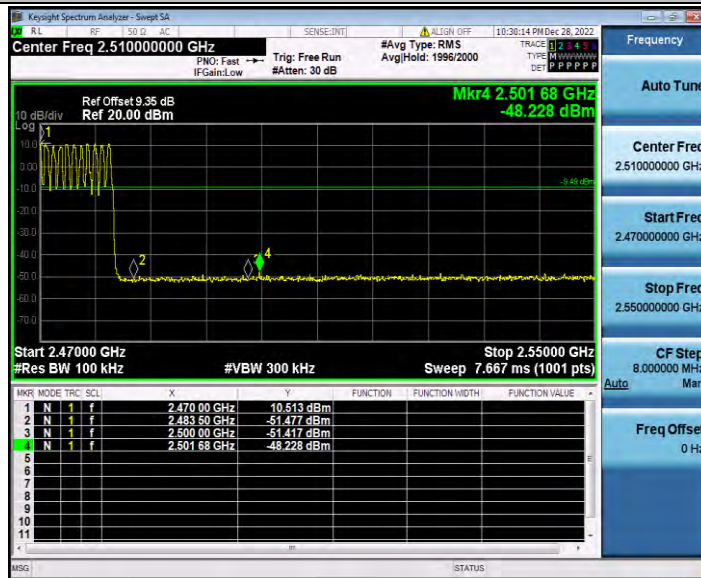
DH1_Ant1_High_2480



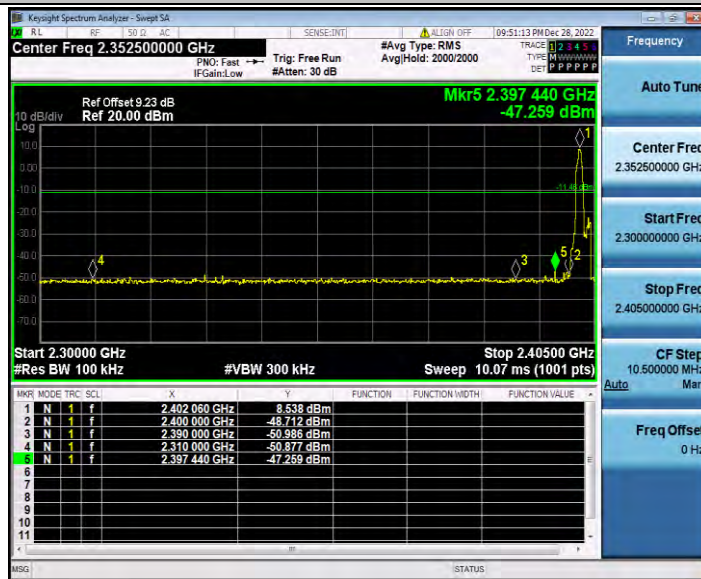
DH1_Ant1_Low_Hop_2402



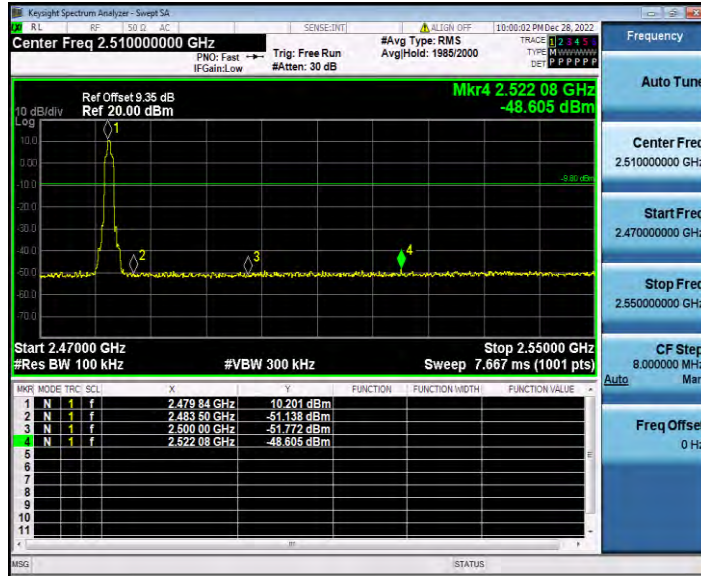
DH1_Ant1_High_Hop_2480



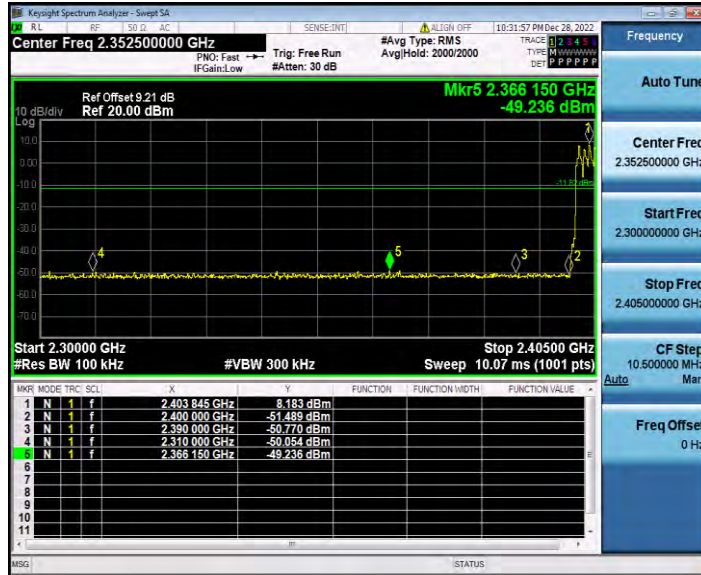
2DH1_Ant1_Low_2402



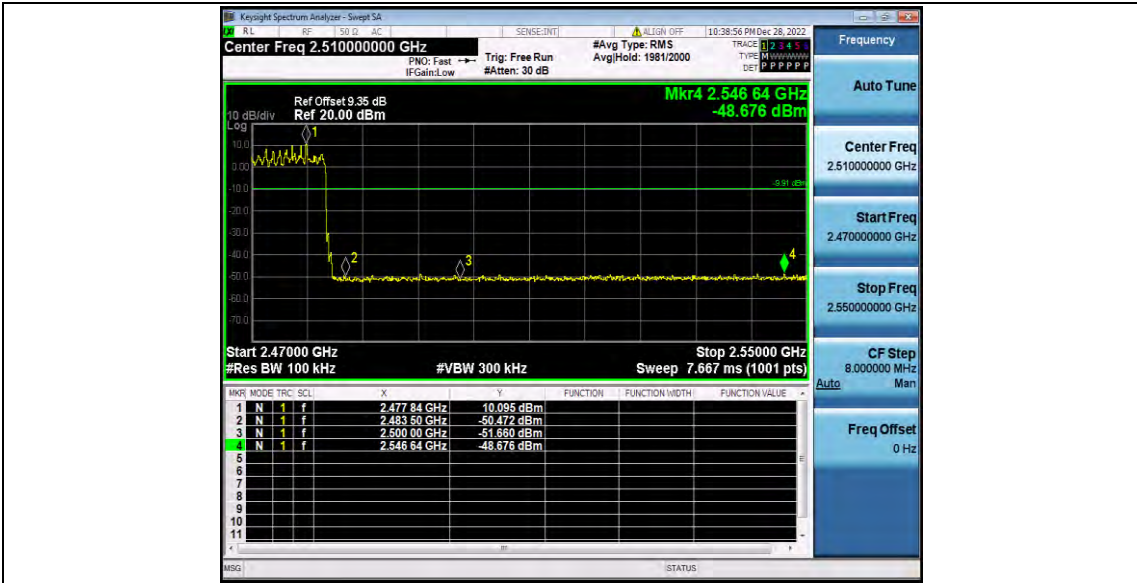
2DH1_Ant1_High_2480



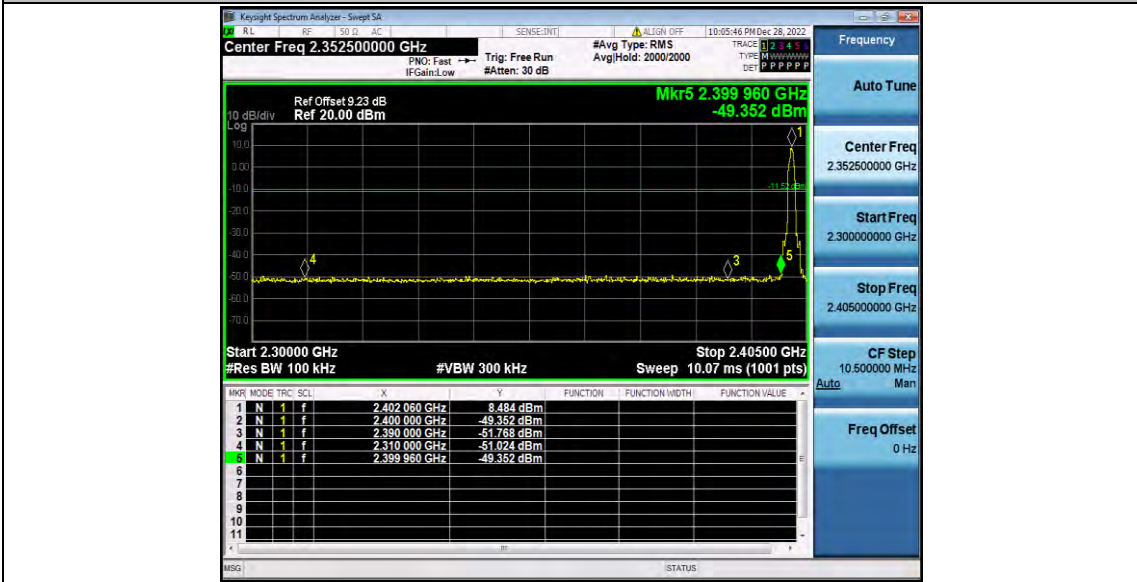
2DH1_Ant1_Low_Hop_2402



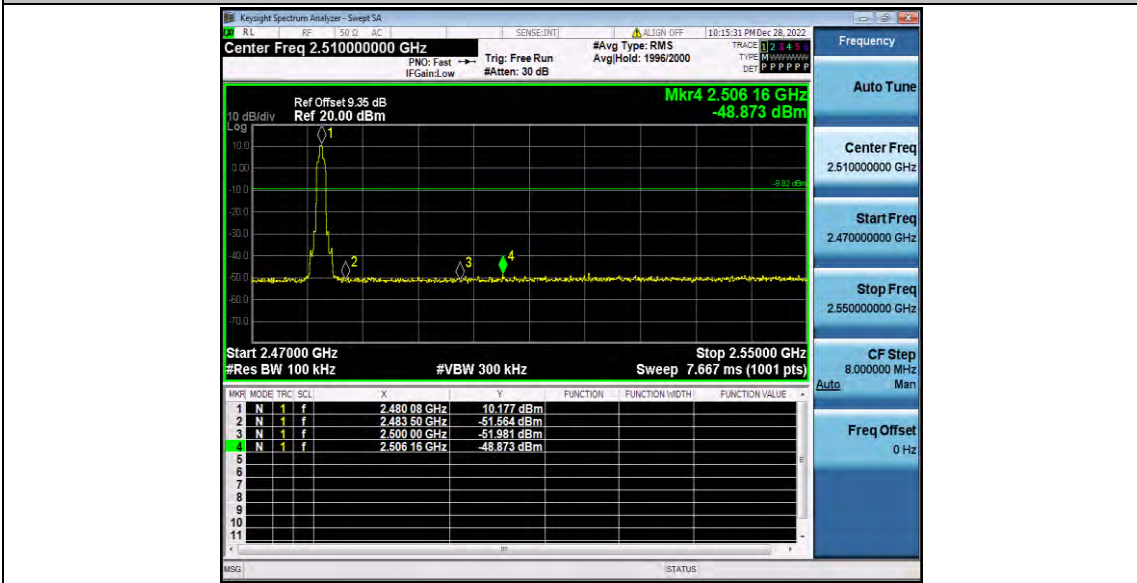
2DH1_Ant1_High_Hop_2480



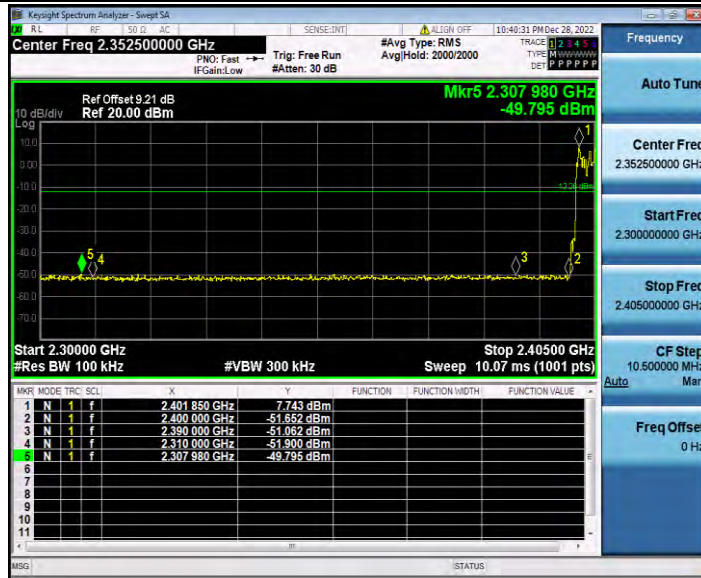
3D H1_Ant1_Low_2402



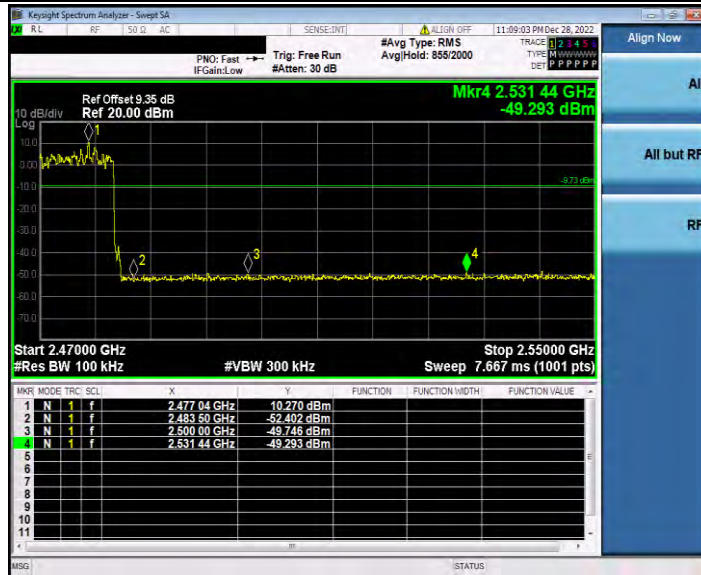
3D H1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

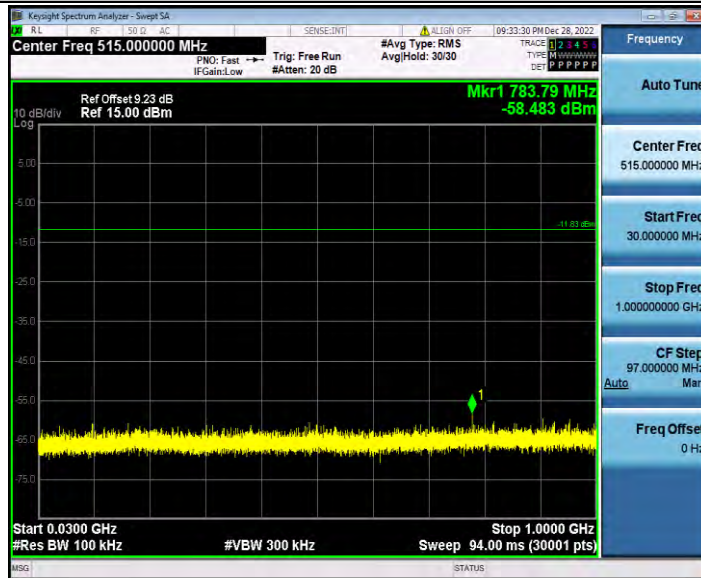
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	8.17	8.17	---	PASS
			30~1000	8.17	-58.48	≤-11.83	PASS
			1000~26500	8.17	-46.89	≤-11.83	PASS
		2441	Reference	9.51	9.51	---	PASS
			30~1000	9.51	-60.24	≤-10.49	PASS
			1000~26500	9.51	-47.81	≤-10.49	PASS
		2480	Reference	10.26	10.26	---	PASS
			30~1000	10.26	-59.66	≤-9.74	PASS
			1000~26500	10.26	-47.3	≤-9.74	PASS
2DH1	Ant1	2402	Reference	8.30	8.30	---	PASS
			30~1000	8.30	-59.01	≤-11.7	PASS
			1000~26500	8.30	-45.86	≤-11.7	PASS
		2441	Reference	8.44	8.44	---	PASS
			30~1000	8.44	-59.51	≤-11.56	PASS
			1000~26500	8.44	-47.83	≤-11.56	PASS
		2480	Reference	10.08	10.08	---	PASS
			30~1000	10.08	-59.87	≤-9.92	PASS
			1000~26500	10.08	-47.12	≤-9.92	PASS
3DH1	Ant1	2402	Reference	7.85	7.85	---	PASS
			30~1000	7.85	-60.07	≤-12.15	PASS
			1000~26500	7.85	-48.14	≤-12.15	PASS
		2441	Reference	8.40	8.40	---	PASS
			30~1000	8.40	-59.26	≤-11.6	PASS
			1000~26500	8.40	-47.98	≤-11.6	PASS
		2480	Reference	9.29	9.29	---	PASS
			30~1000	9.29	-59.76	≤-10.71	PASS
			1000~26500	9.29	-47.66	≤-10.71	PASS

Test Graphs

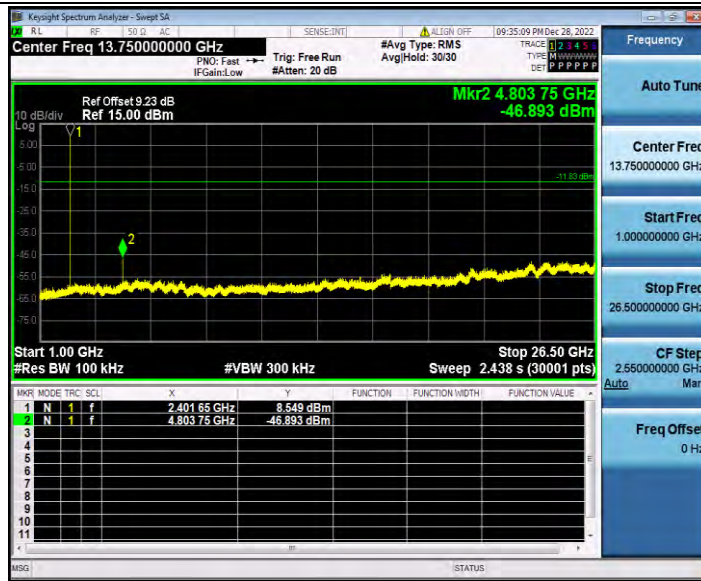
DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



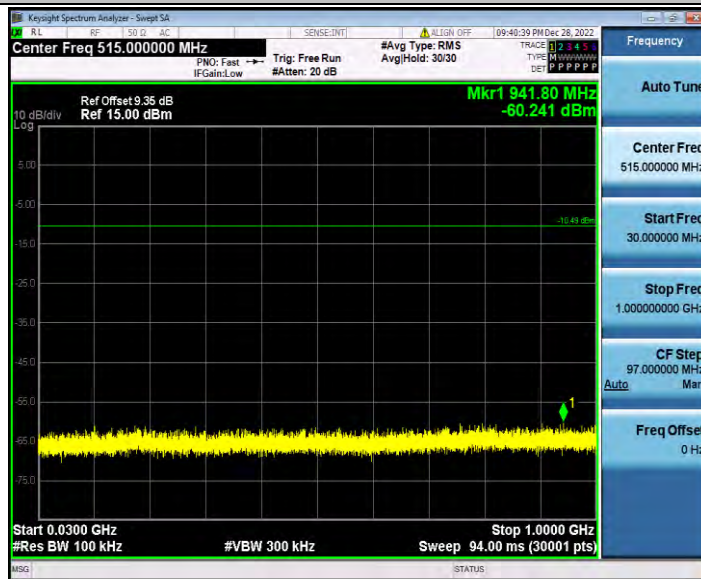
DH1_Ant1_2402_1000~26500



DH1_Ant1_2441_0~Reference



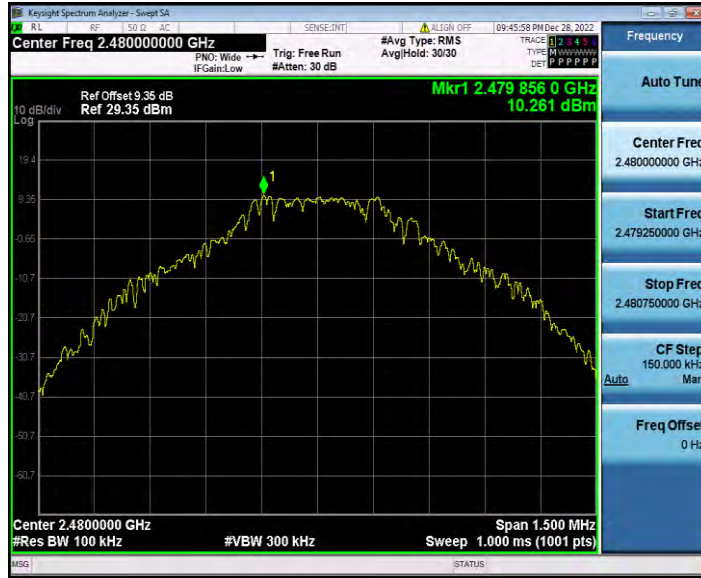
DH1_Ant1_2441_30~1000



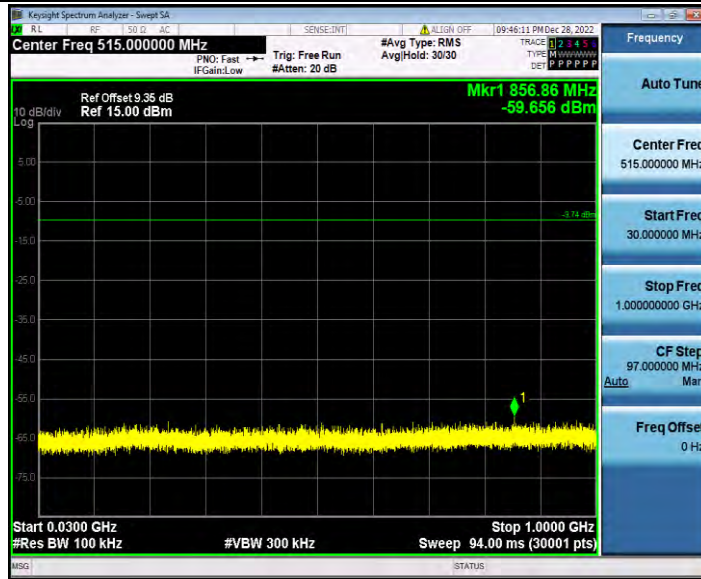
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000



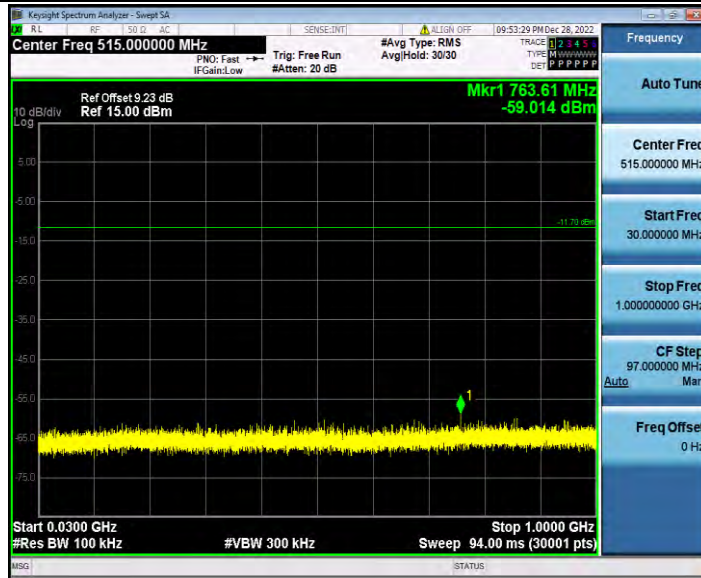
DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



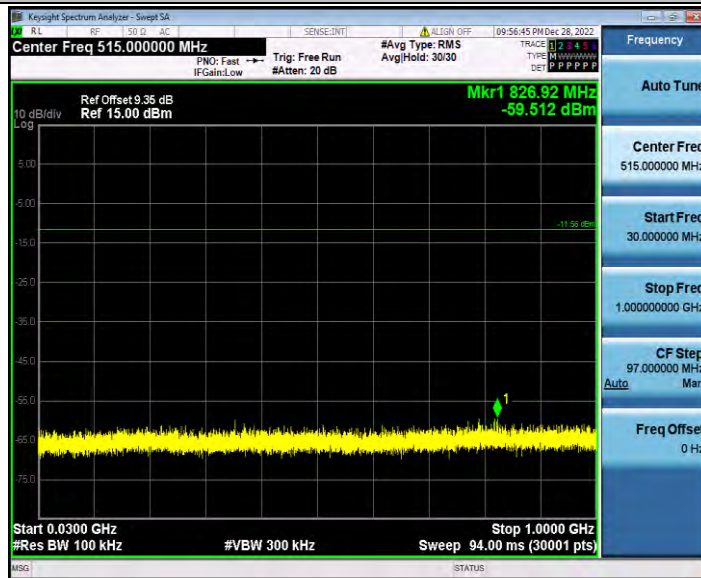
2DH1_Ant1_2402_1000~26500



2DH1_Ant1_2441_0~Reference



2DH1_Ant1_2441_30~100



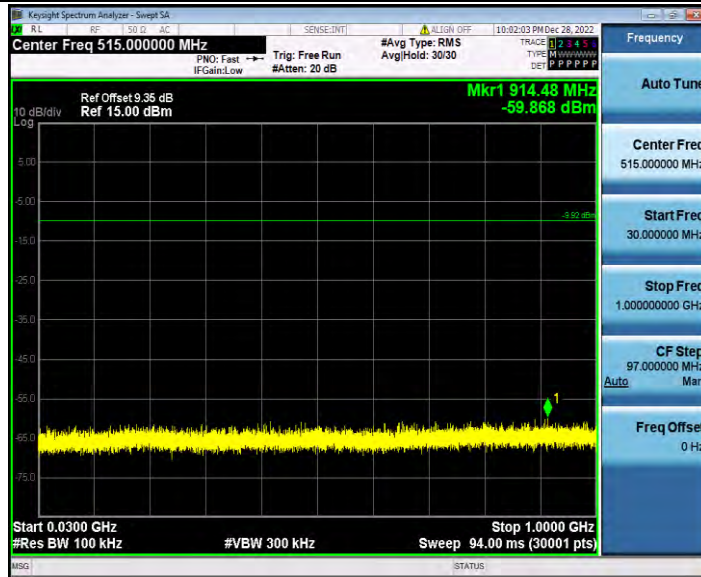
2DH1_Ant1_2441_1000~26500



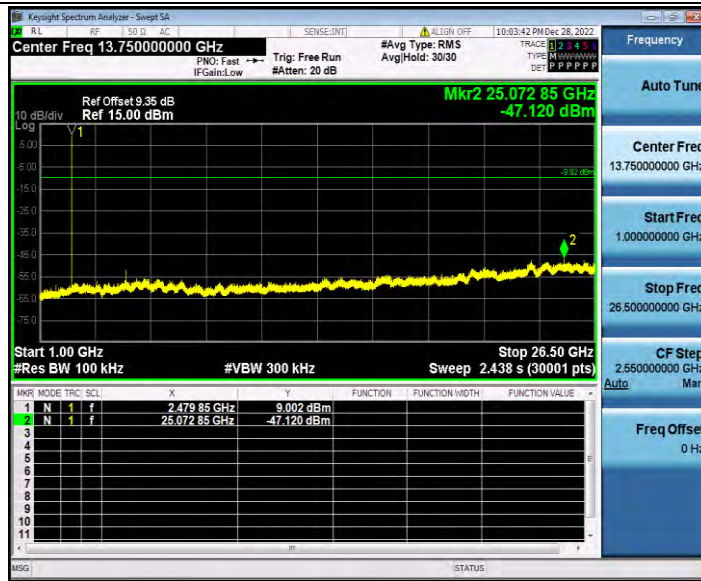
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



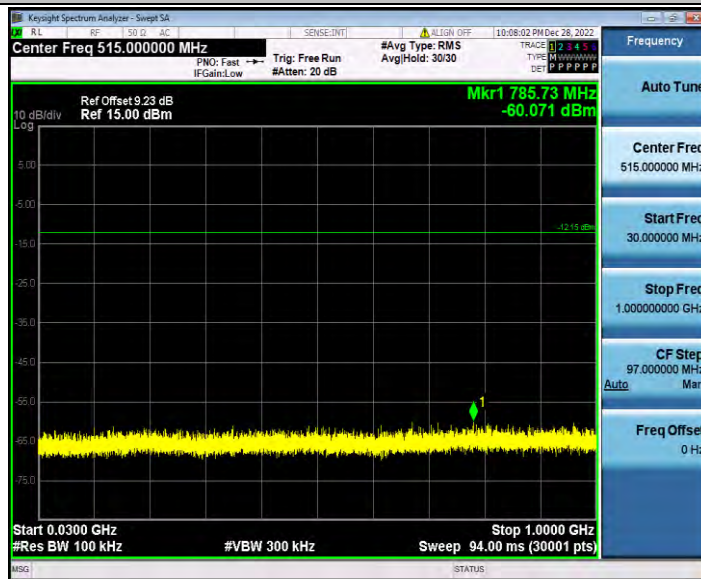
2DH1_Ant1_2480_1000~26500



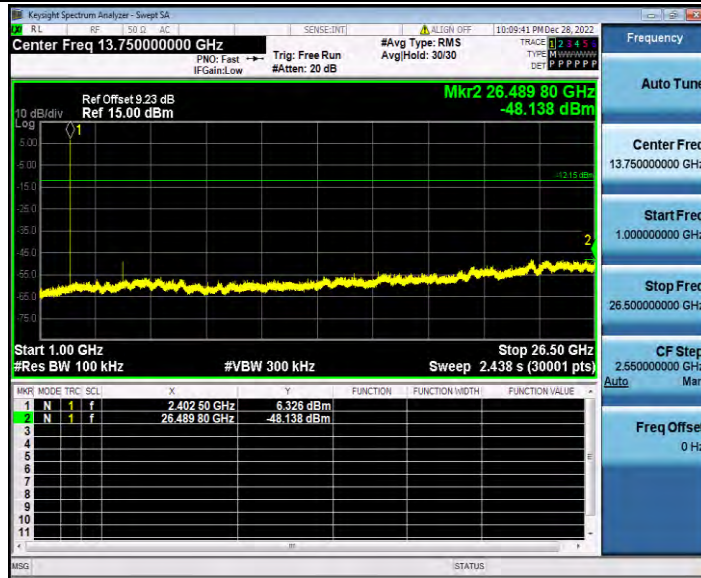
3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



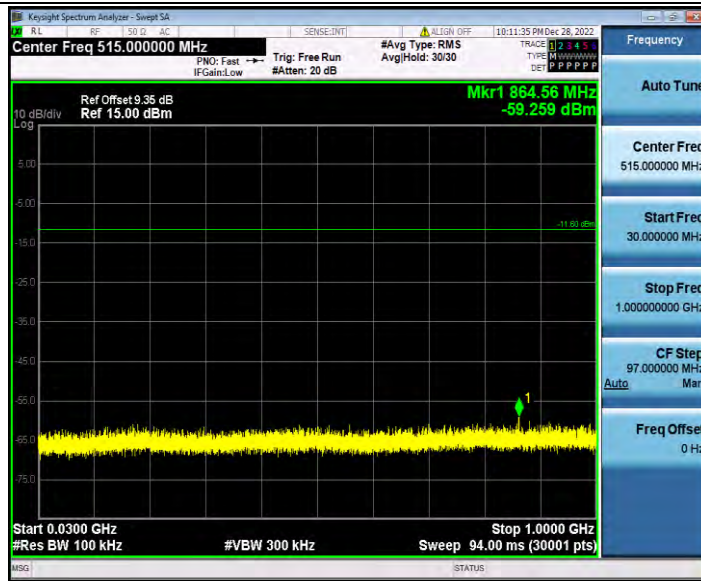
3DH1_Ant1_2402_1000~26500



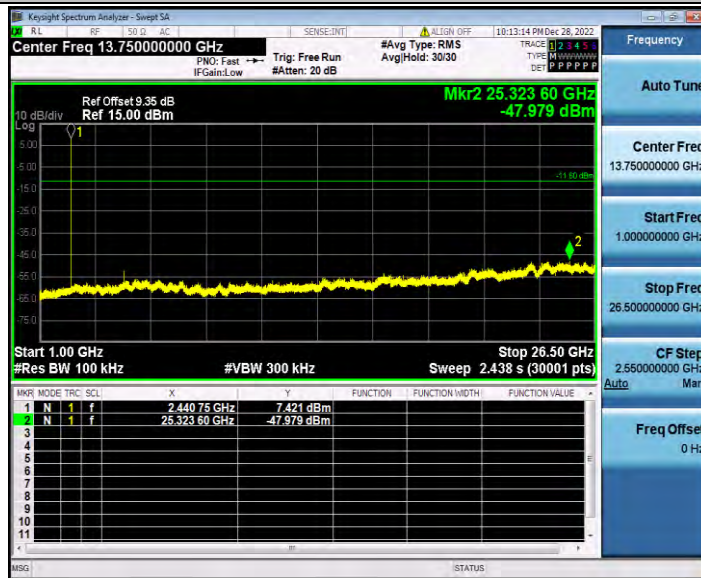
3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



