

Case No. : <u>GTS20221111005-1-10</u>	
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.1.13</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	0.915	2401.517	2402.432	---	---
		2441	0.933	2440.508	2441.441	---	---
		2480	0.933	2479.511	2480.444	---	---
2DH1	Ant1	2402	1.254	2401.328	2402.582	---	---
		2441	1.242	2440.349	2441.591	---	---
		2480	1.248	2479.334	2480.582	---	---
3DH1	Ant1	2402	1.254	2401.340	2402.594	---	---
		2441	1.236	2440.355	2441.591	---	---
		2480	1.266	2479.328	2480.594	---	---

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	0.85426	2401.539	2402.394	---	---
		2441	0.85057	2440.539	2441.389	---	---
		2480	0.85038	2479.537	2480.387	---	---
2DH1	Ant1	2402	1.1433	2401.387	2402.530	---	---
		2441	1.1510	2440.384	2441.535	---	---
		2480	1.1519	2479.382	2480.534	---	---
3DH1	Ant1	2402	1.1501	2401.398	2402.548	---	---
		2441	1.1507	2440.394	2441.545	---	---
		2480	1.1527	2479.392	2480.545	---	---

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	5.34	≤30.00	PASS
		2441	5.68	≤30.00	PASS
		2480	5.66	≤30.00	PASS
2DH1	Ant1	2402	5.1	≤20.97	PASS
		2441	5.57	≤20.97	PASS
		2480	5.48	≤20.97	PASS
3DH1	Ant1	2402	5.25	≤20.97	PASS
		2441	5.79	≤20.97	PASS
		2480	5.56	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.99	≥ 0.933	PASS
		Hop_2441	0.994	≥ 0.933	PASS
		Hop_2480	0.996	≥ 0.933	PASS
2DH1	Ant1	Hop_2402	1.322	≥ 0.836	PASS
		Hop_2441	0.996	≥ 0.836	PASS
		Hop_2480	0.988	≥ 0.836	PASS
3DH1	Ant1	Hop_2402	1.146	≥ 0.844	PASS
		Hop_2441	0.992	≥ 0.844	PASS
		Hop_2480	1	≥ 0.844	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



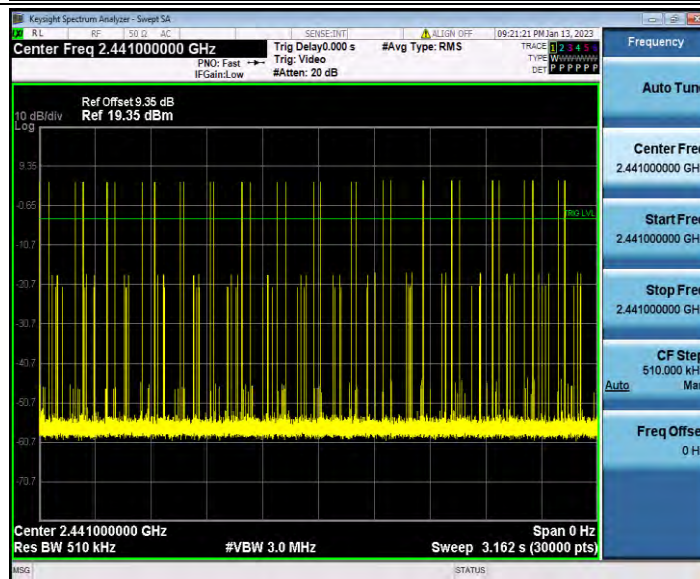
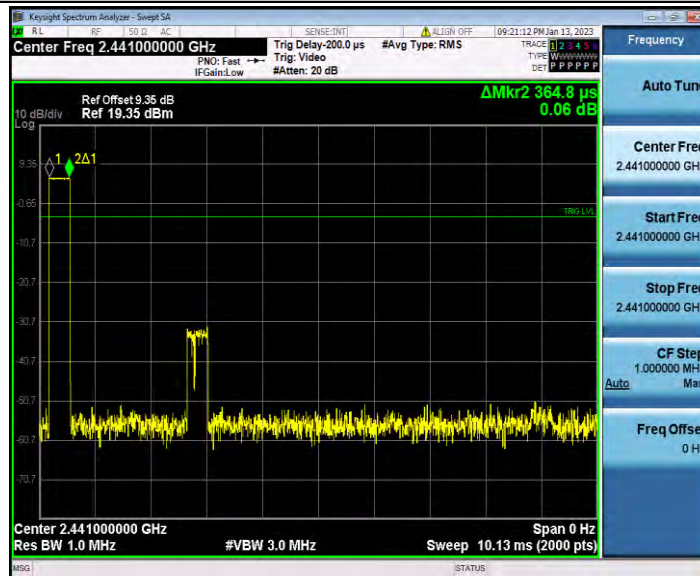
Appendix A.5: Time of occupancy

Test Result

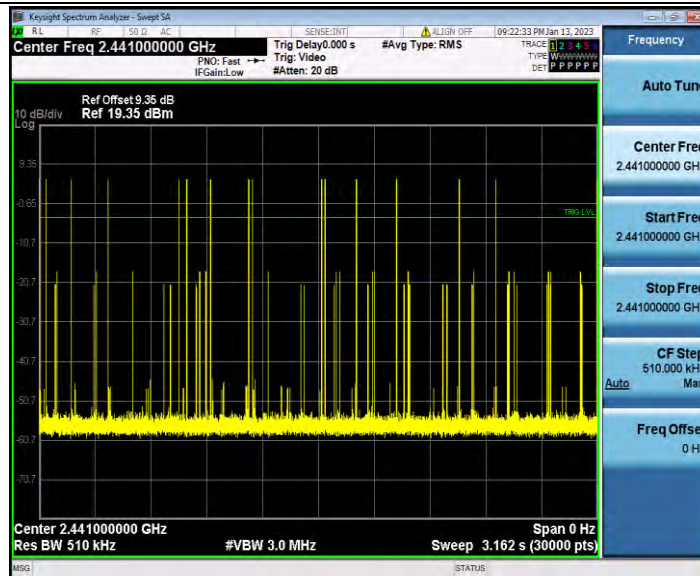
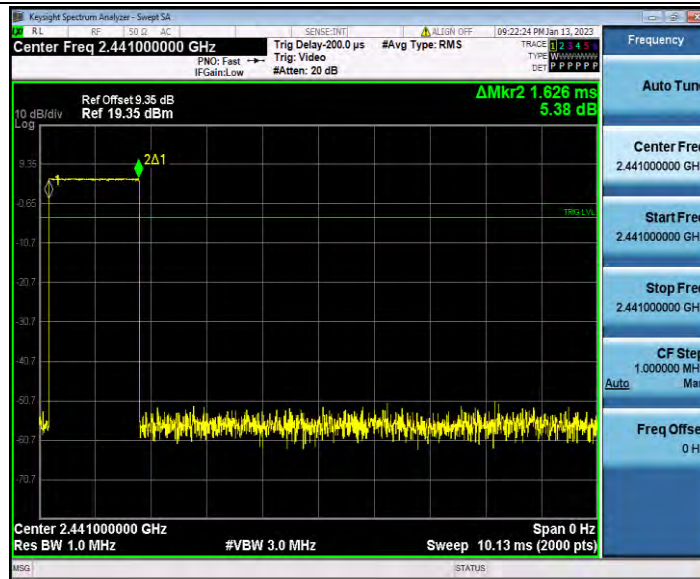
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.36	330	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.87	120	0.345	≤0.4	PASS
2DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.63	180	0.294	≤0.4	PASS
2DH5	Ant1	Hop	2.88	80	0.23	≤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	0.201	≤0.4	PASS

Test Graphs

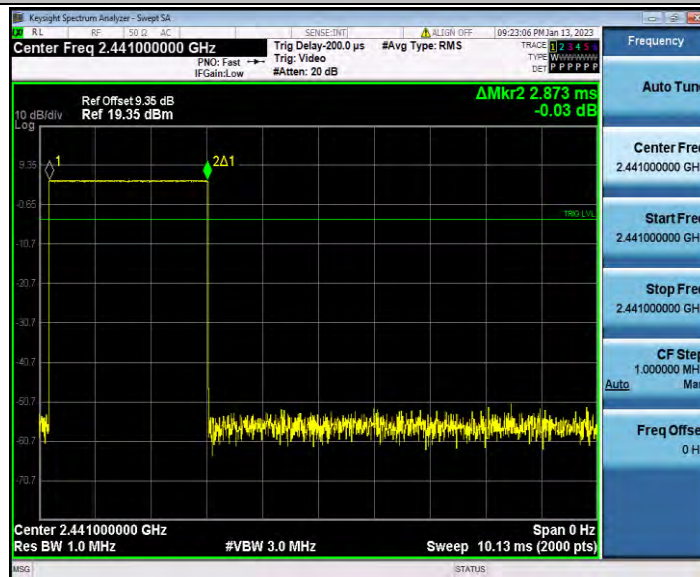
DH1_Ant1_Hop

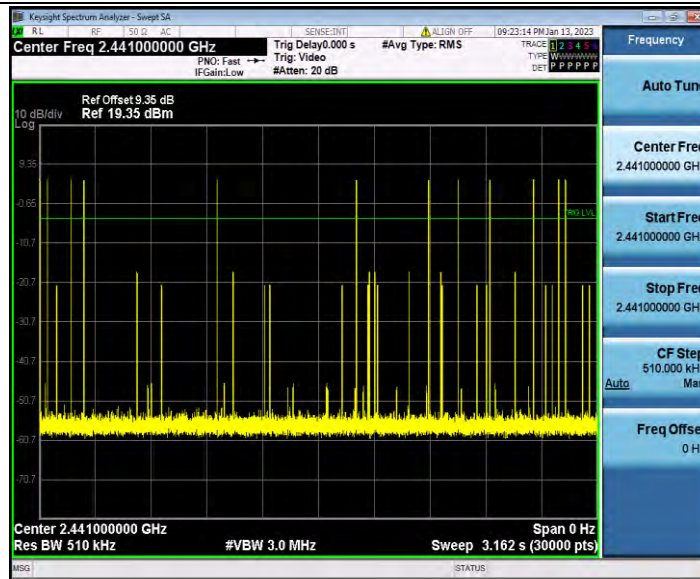


DH3_Ant1_Hop

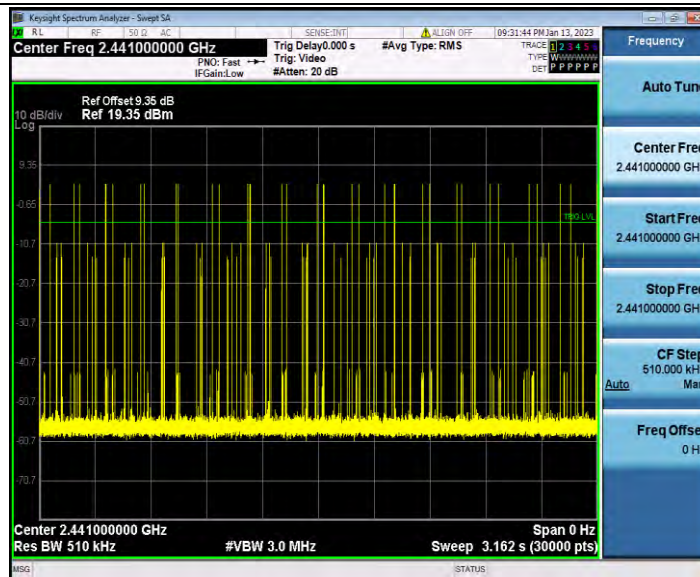
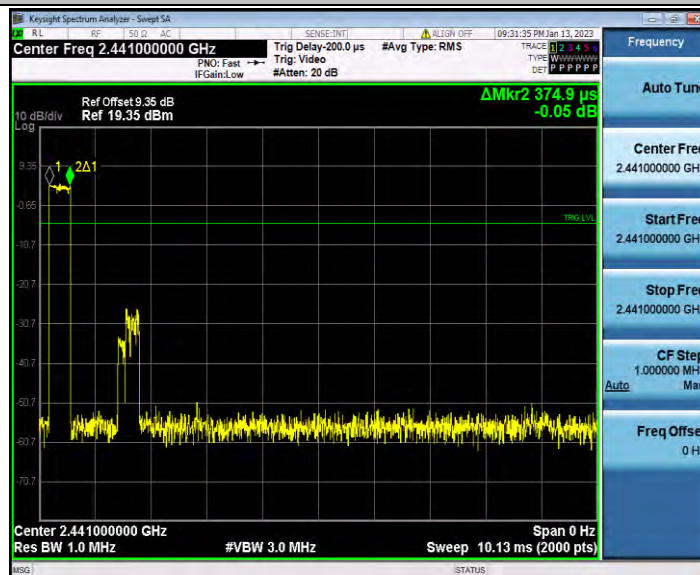


DH5_Ant1_Hop

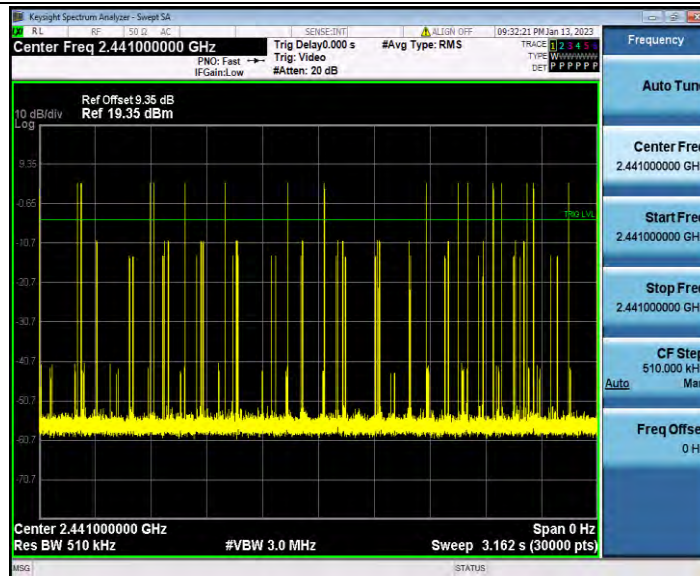
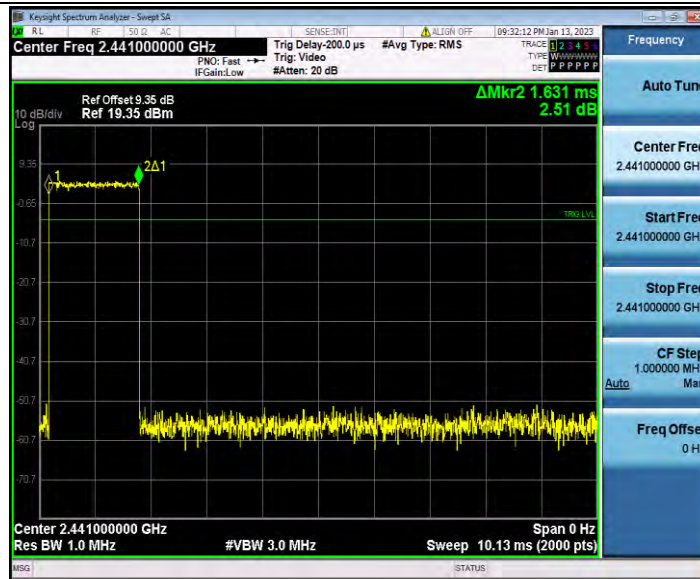




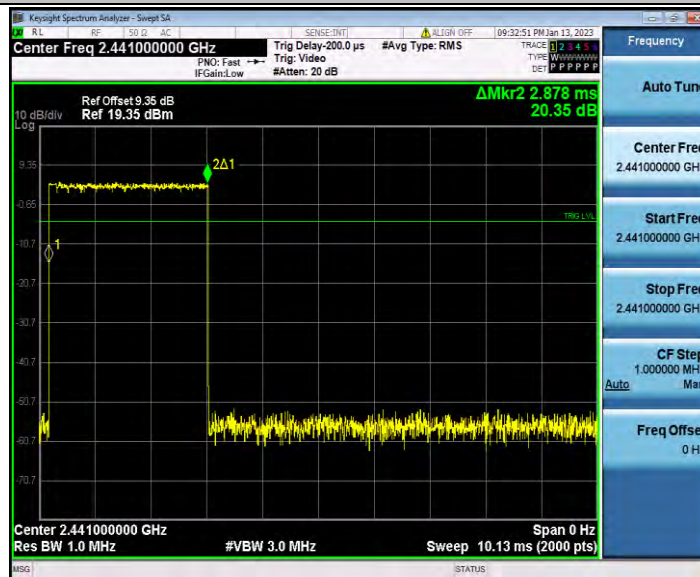
2DH1_Ant1_Hop

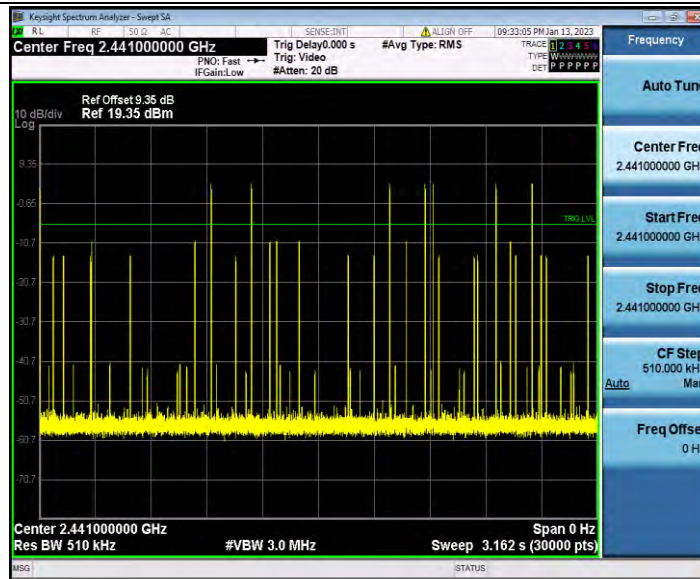


2DH3_Ant1_Hop

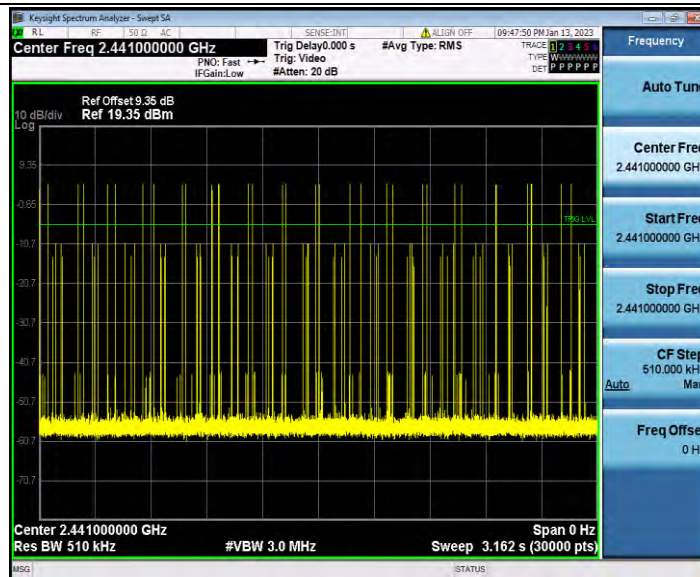
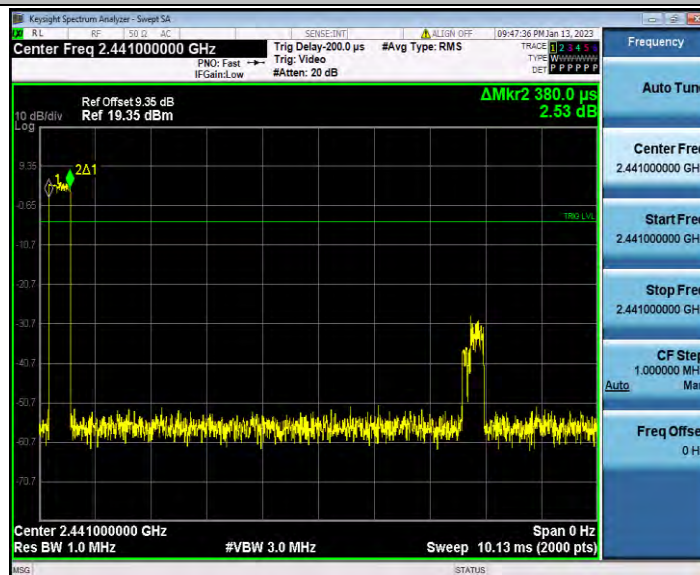


2DH5_Ant1_Hop

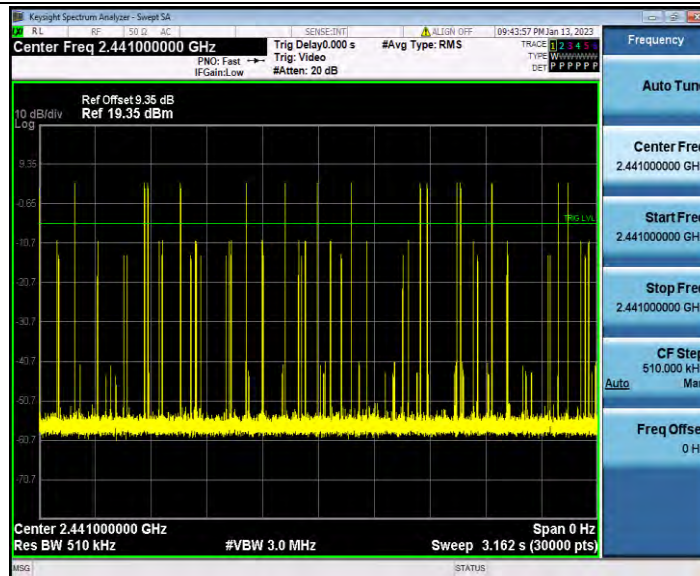
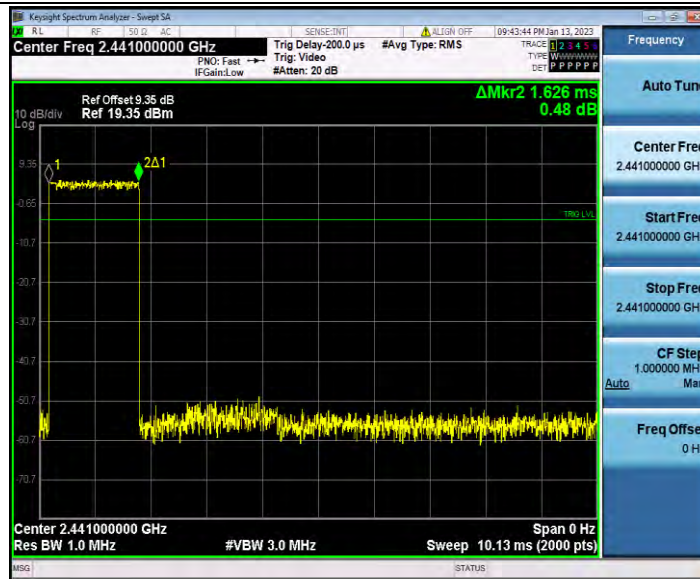




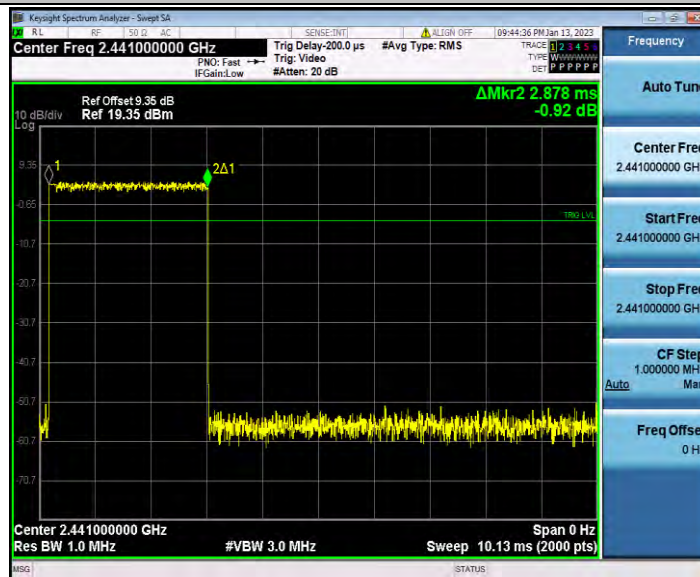
3DH1_Ant1_Hop

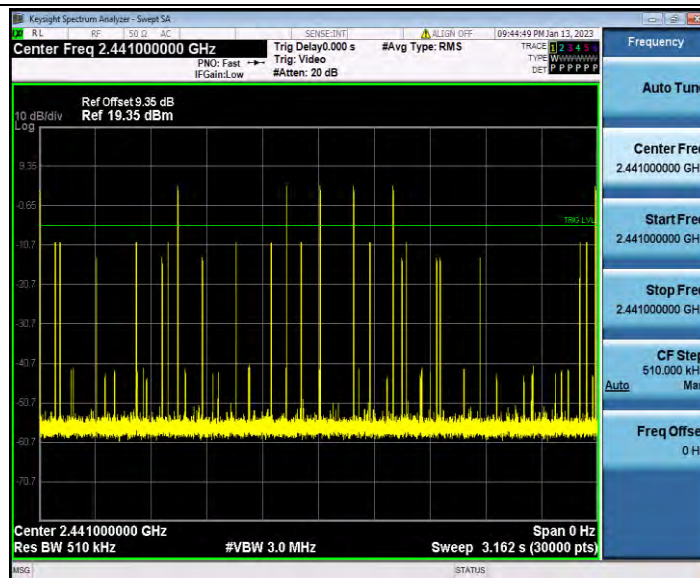


3DH3_Ant1_Hop



3DH5_Ant1_Hop



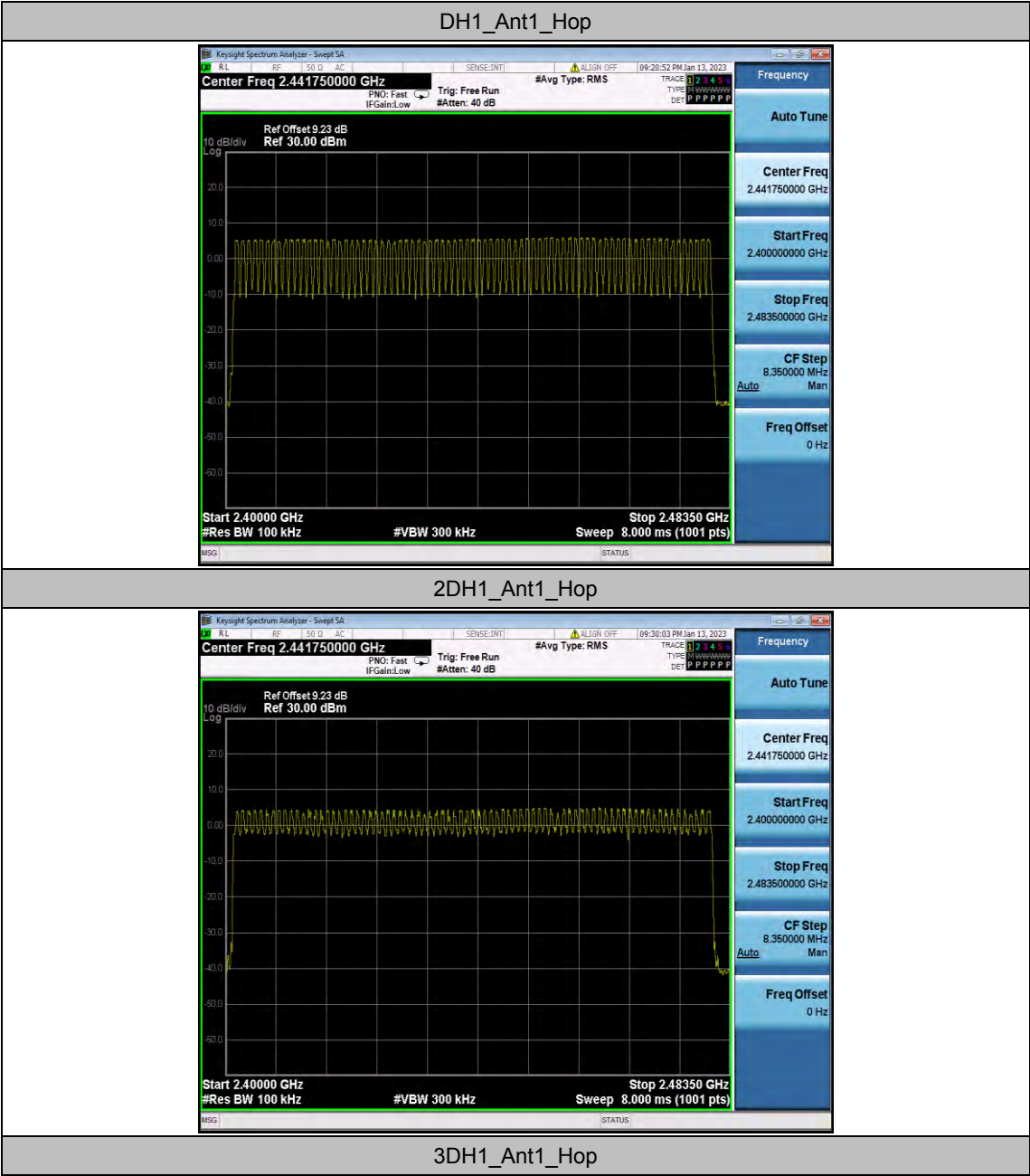


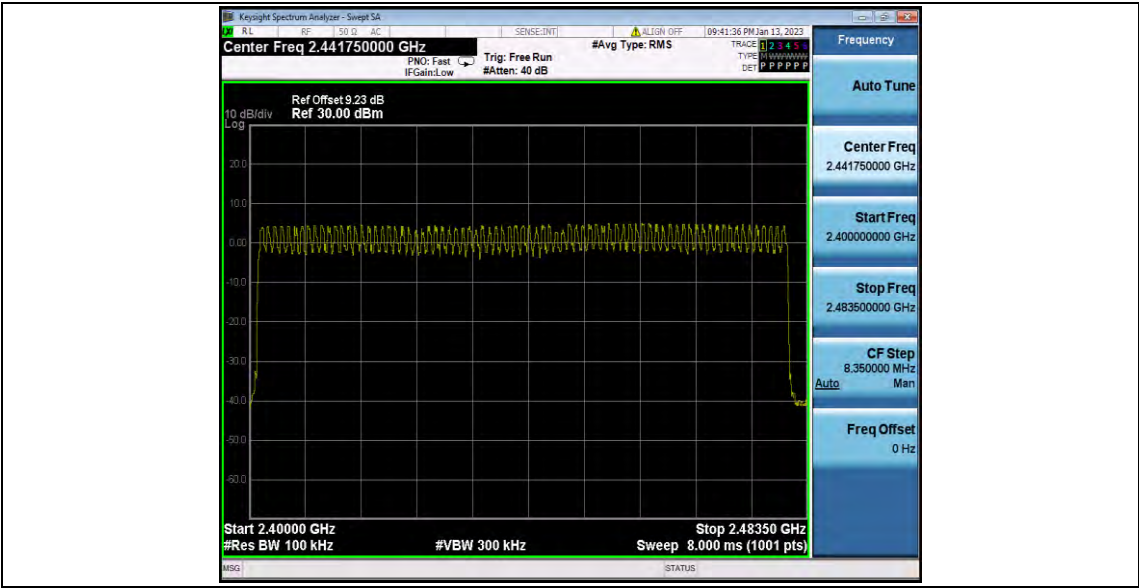
Appendix A.6: Number of hopping channels

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





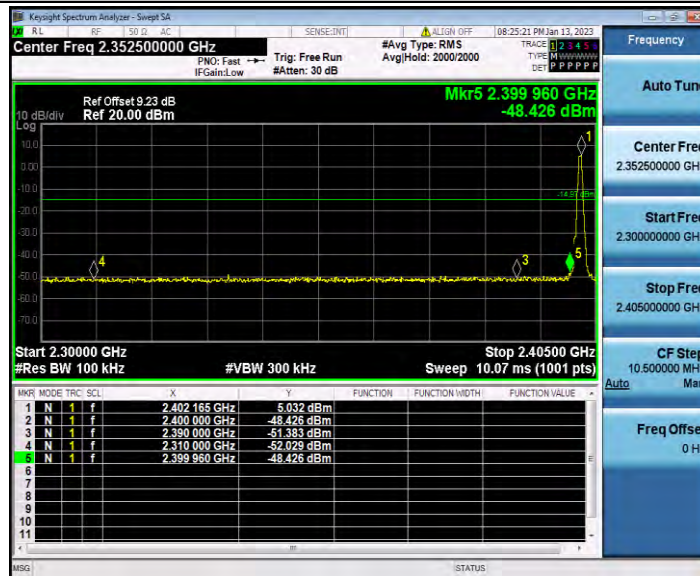
Appendix A.7: Band edge measurements

Test Result

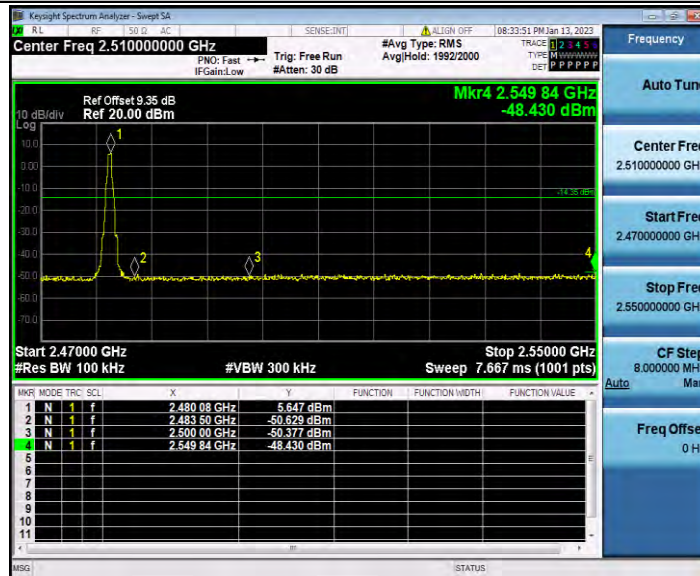
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	5.03	-48.43	≤-14.97	PASS
		High	2480	5.65	-48.43	≤-14.35	PASS
		Low	Hop_2402	4.82	-49.05	≤-15.18	PASS
		High	Hop_2480	5.85	-48.58	≤-14.15	PASS
2DH1	Ant1	Low	2402	4.09	-48.9	≤-15.92	PASS
		High	2480	4.68	-48.64	≤-15.32	PASS
		Low	Hop_2402	3.87	-48.68	≤-16.13	PASS
		High	Hop_2480	4.04	-48.71	≤-15.96	PASS
3DH1	Ant1	Low	2402	4.07	-46.31	≤-15.94	PASS
		High	2480	4.57	-48.85	≤-15.44	PASS
		Low	Hop_2402	3.46	-49.25	≤-16.54	PASS
		High	Hop_2480	4.63	-47.82	≤-15.37	PASS

Test Graphs

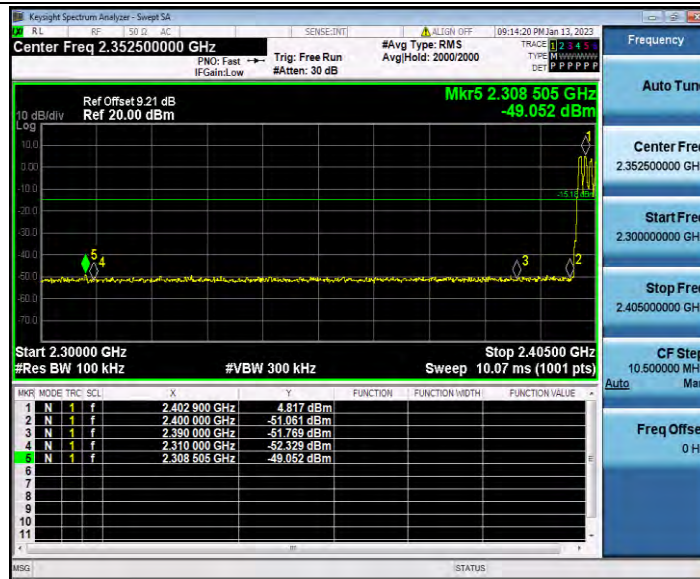
DH1_Ant1_Low_2402



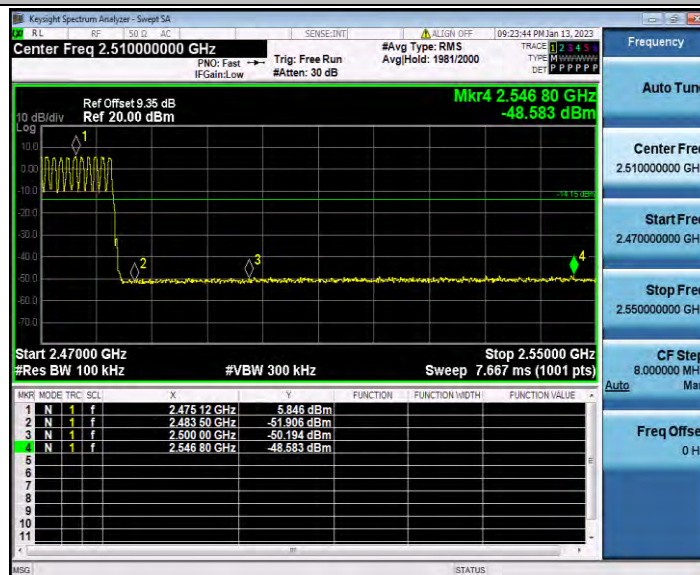
DH1_Ant1_High_2480



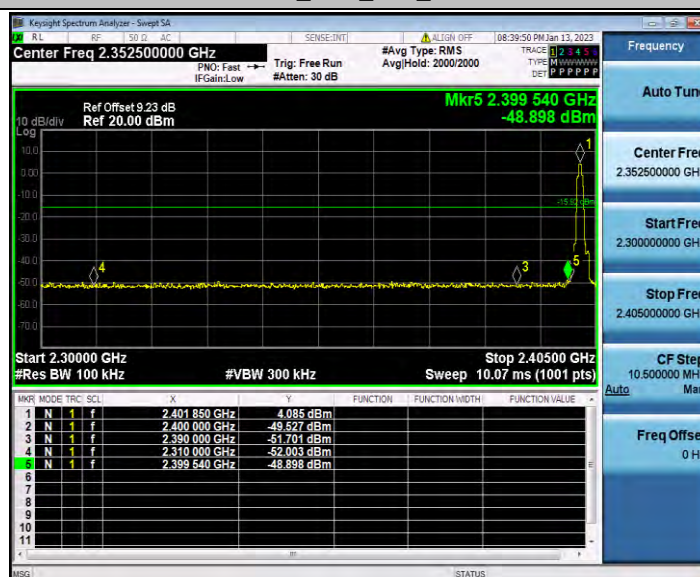
DH1_Ant1_Low_Hop_2402



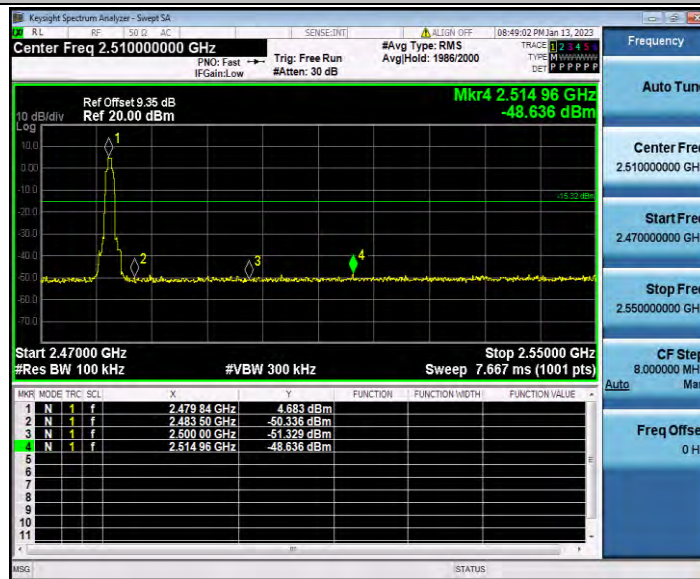
DH1_Ant1_High_Hop_2480



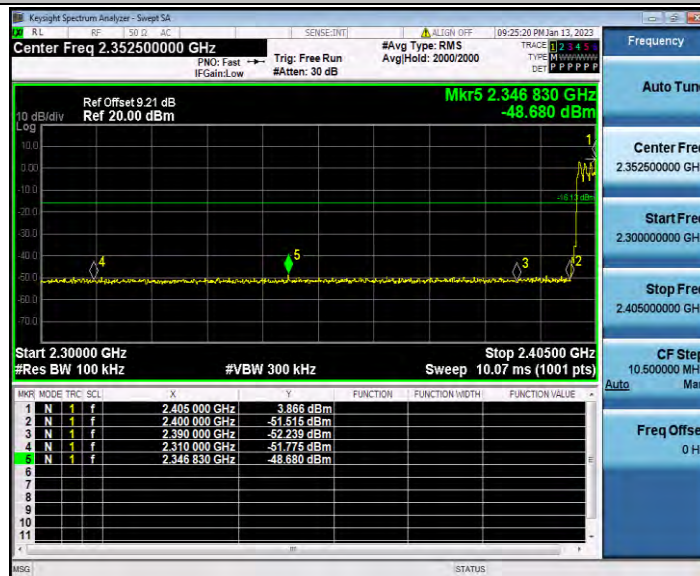
2DH1_Ant1_Low_2402



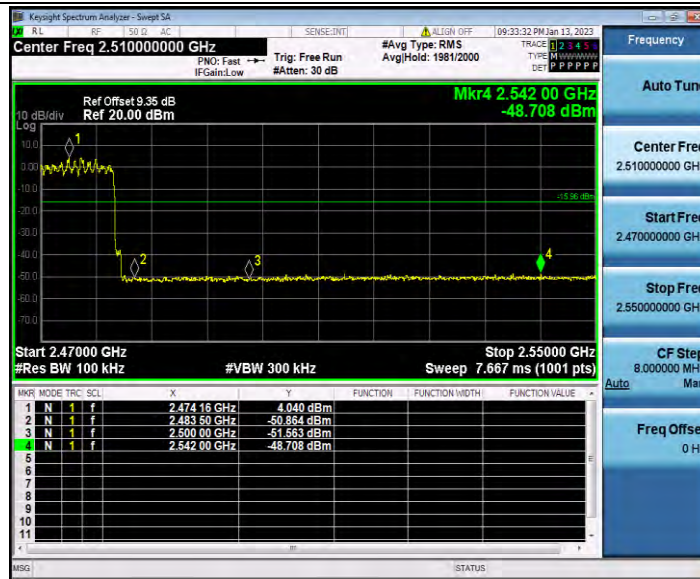
2DH1_Ant1_High_2480



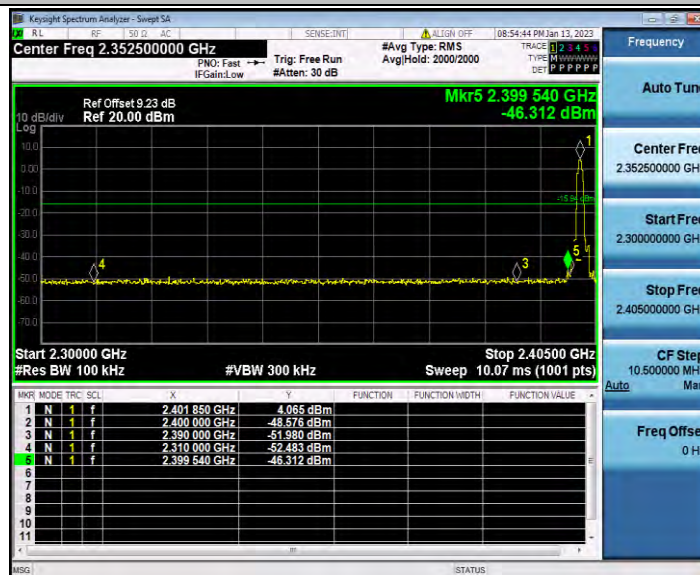
2DH1_Ant1_Low_Hop_2402



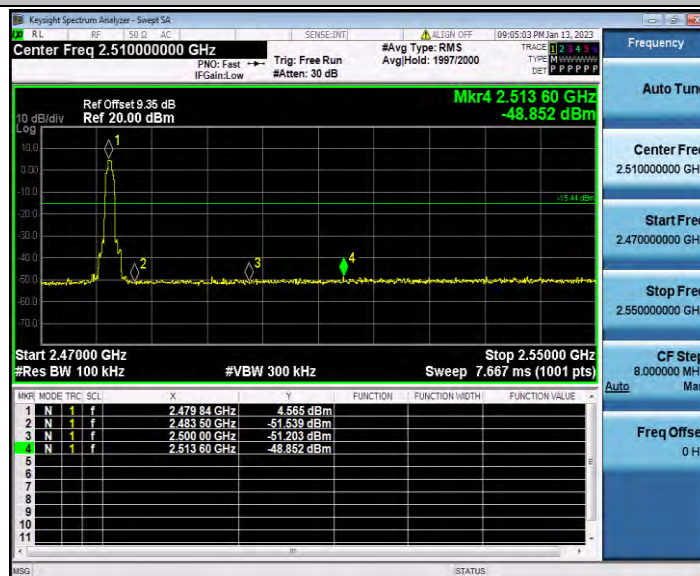
2DH1_Ant1_High_Hop_2480



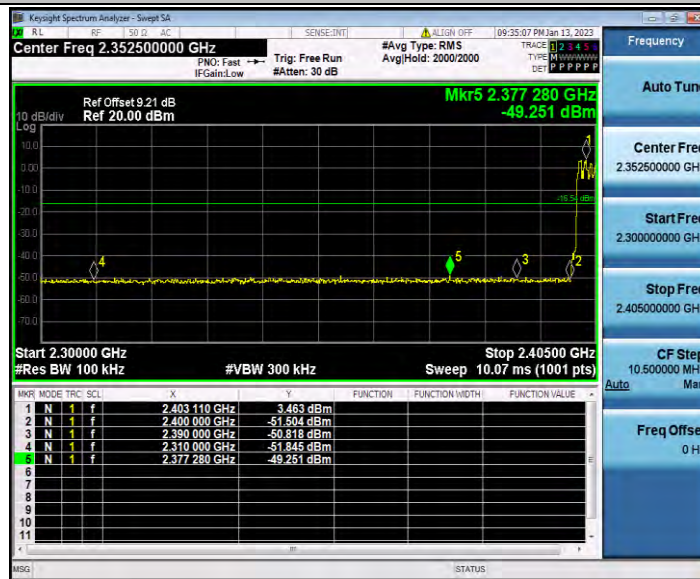
3DH1_Ant1_Low_2402



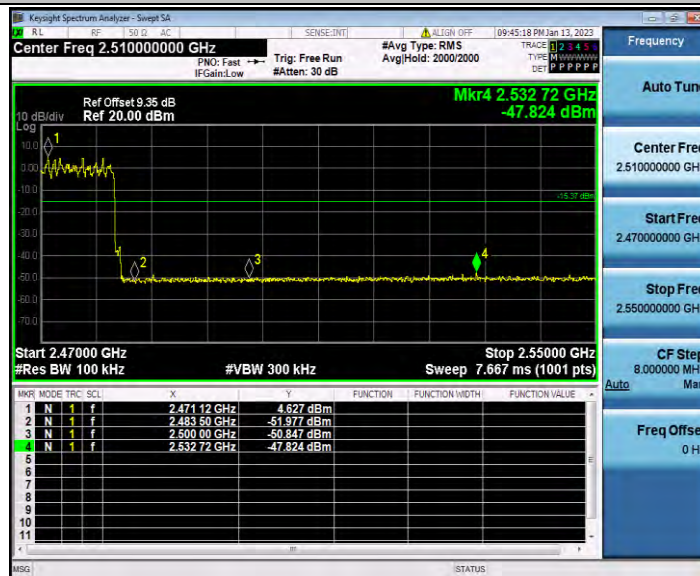
3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

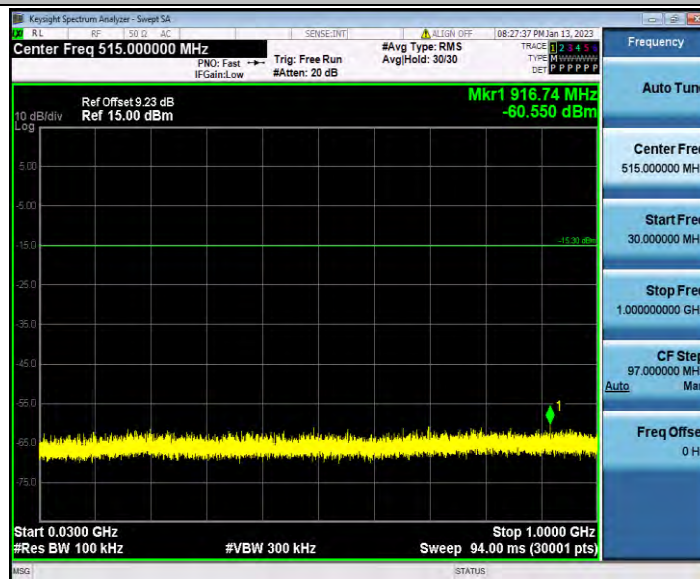
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	4.70	4.70	---	PASS
			30~1000	4.70	-60.55	≤-15.3	PASS
			1000~26500	4.70	-47.37	≤-15.3	PASS
		2441	Reference	5.07	5.07	---	PASS
			30~1000	5.07	-60.13	≤-14.93	PASS
			1000~26500	5.07	-44.06	≤-14.93	PASS
		2480	Reference	5.53	5.53	---	PASS
			30~1000	5.53	-60.33	≤-14.47	PASS
			1000~26500	5.53	-47.56	≤-14.47	PASS
2DH1	Ant1	2402	Reference	3.44	3.44	---	PASS
			30~1000	3.44	-60.42	≤-16.56	PASS
			1000~26500	3.44	-46.15	≤-16.56	PASS
		2441	Reference	3.95	3.95	---	PASS
			30~1000	3.95	-60.96	≤-16.05	PASS
			1000~26500	3.95	-47.22	≤-16.05	PASS
		2480	Reference	4.56	4.56	---	PASS
			30~1000	4.56	-60.56	≤-15.44	PASS
			1000~26500	4.56	-47.36	≤-15.44	PASS
3DH1	Ant1	2402	Reference	3.55	3.55	---	PASS
			30~1000	3.55	-60.62	≤-16.45	PASS
			1000~26500	3.55	-39.79	≤-16.45	PASS
		2441	Reference	4.16	4.16	---	PASS
			30~1000	4.16	-60.45	≤-15.84	PASS
			1000~26500	4.16	-47.48	≤-15.84	PASS
		2480	Reference	3.81	3.81	---	PASS
			30~1000	3.81	-60.69	≤-16.19	PASS
			1000~26500	3.81	-47.66	≤-16.19	PASS

Test Graphs

DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



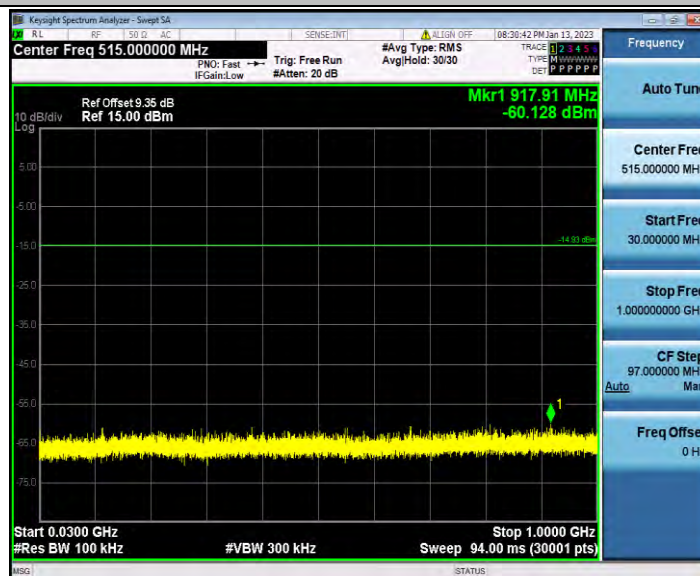
DH1_Ant1_2402_1000~26500



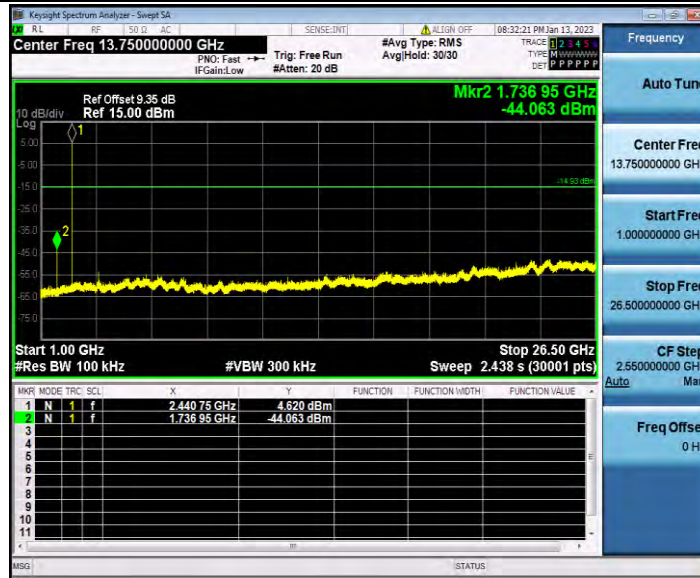
DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



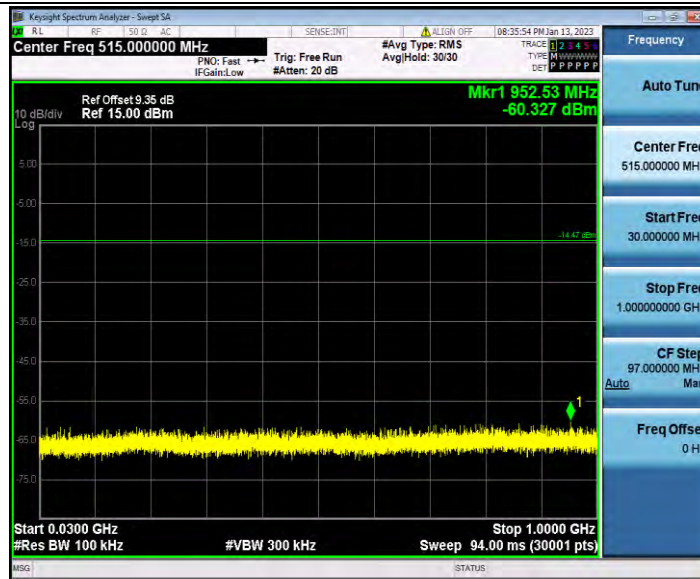
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000



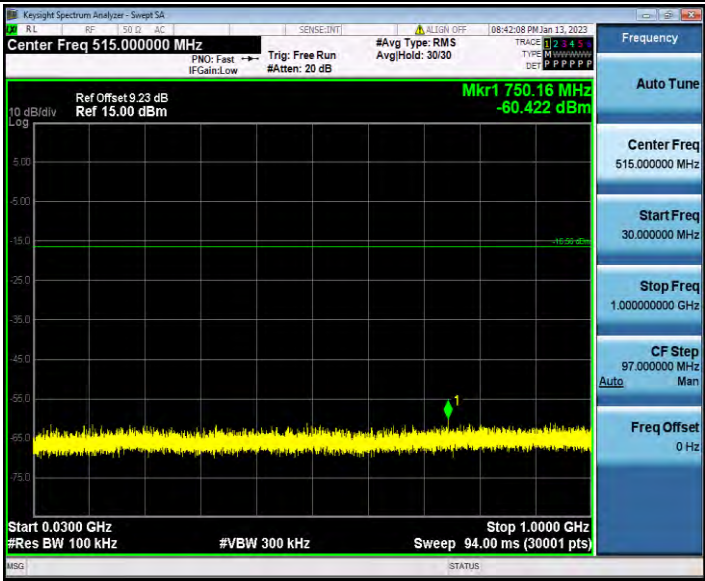
DH1_Ant1_2480_1000~26500



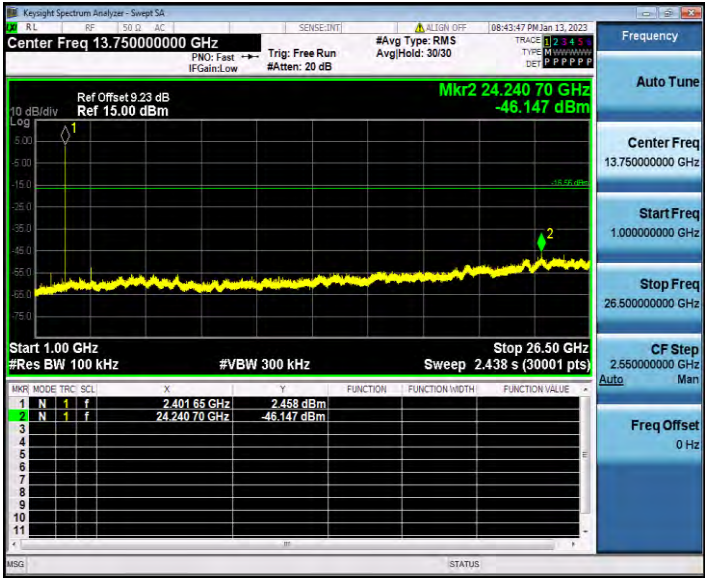
2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



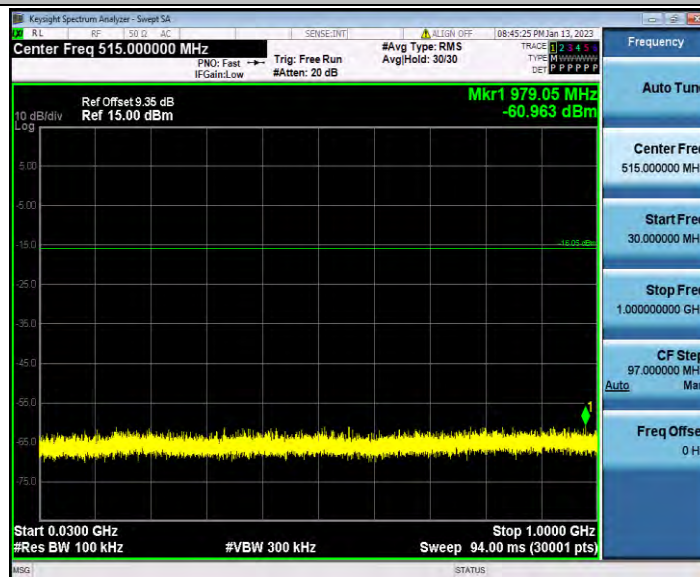
2DH1_Ant1_2402_1000~26500



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



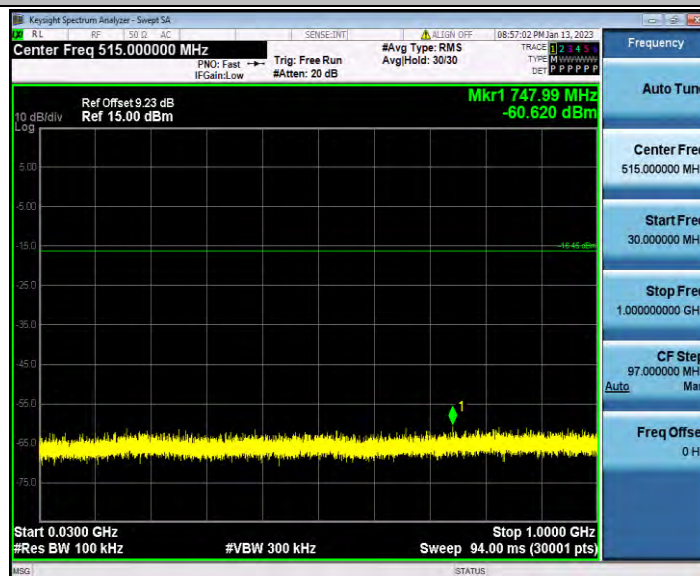
2DH1_Ant1_2480_1000~26500



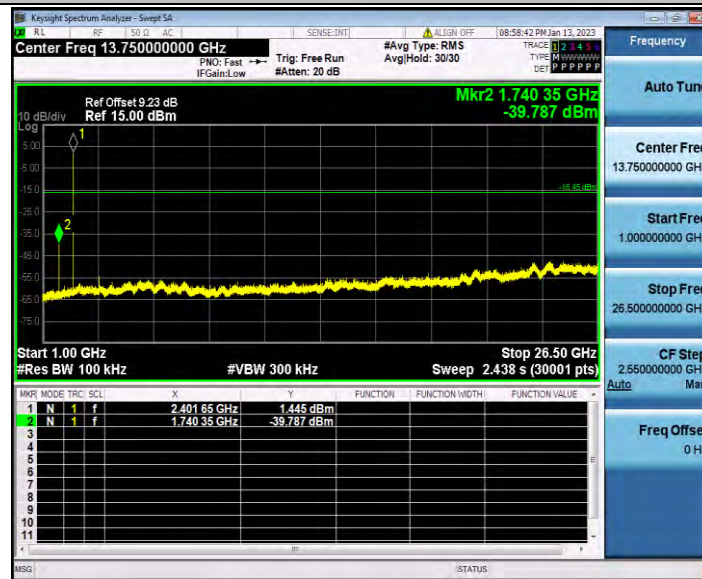
3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



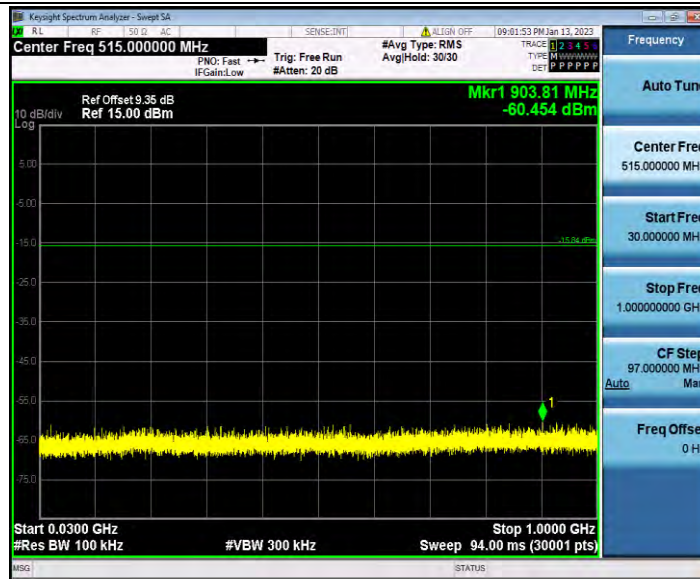
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



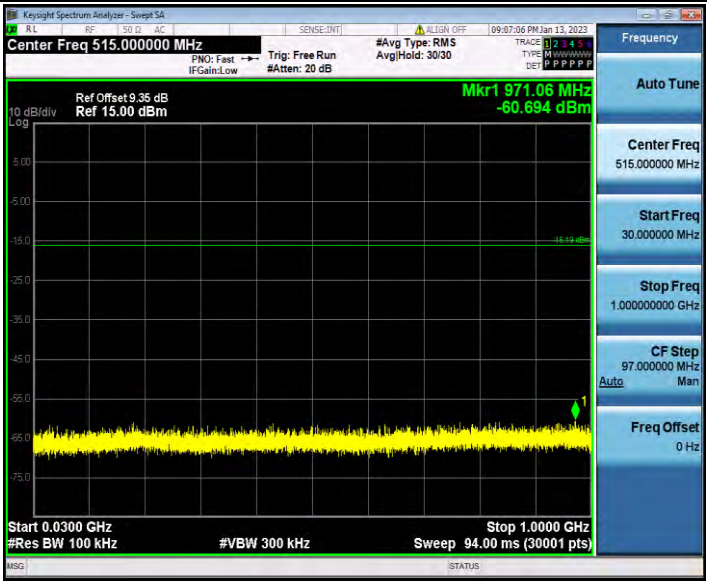
3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500

