

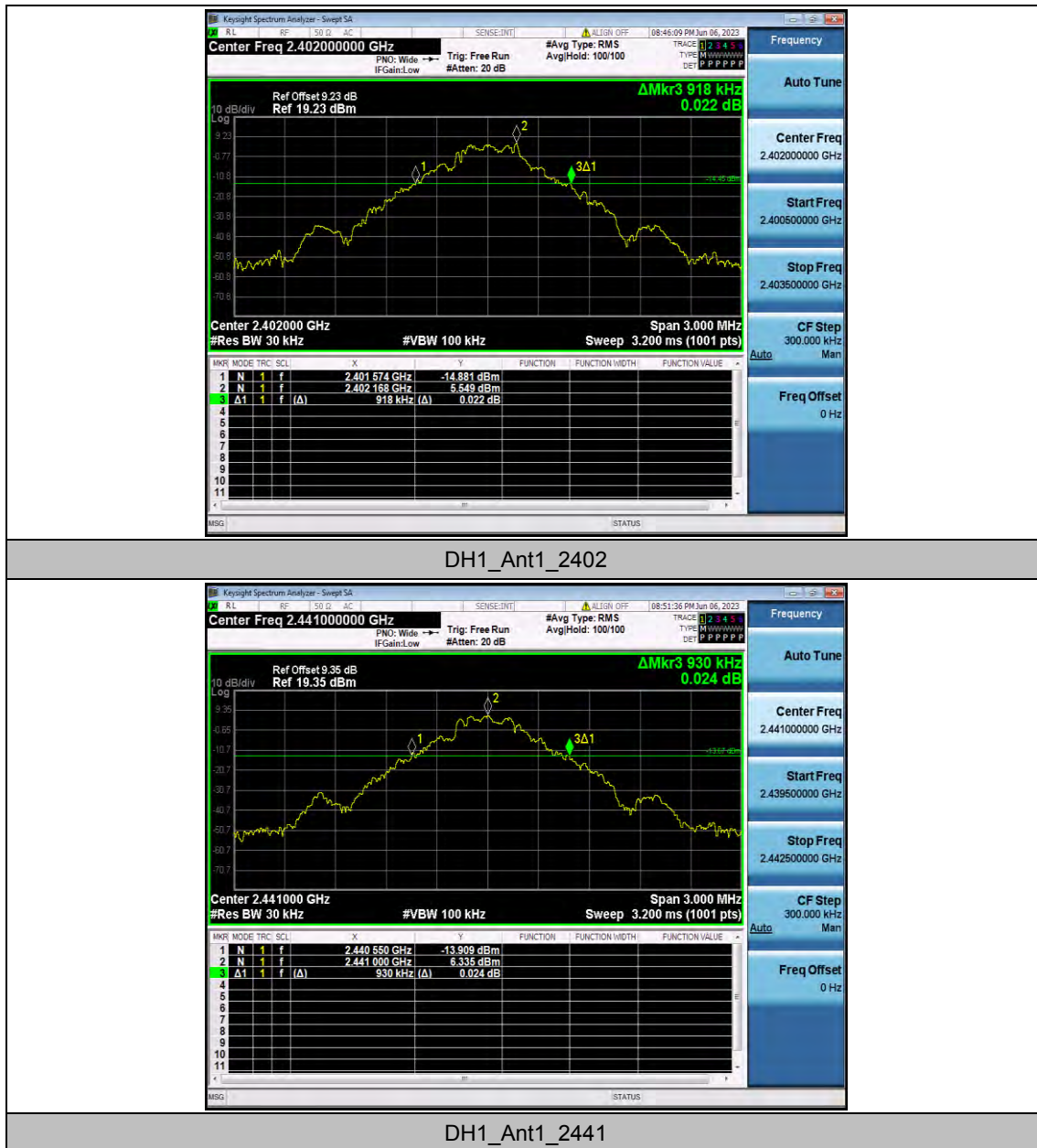
Case No. : <u>GTS20230508024-1-43</u>	
Ambient Condition: <u>23</u> °C, <u>48</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.6.5</u>	Test Engineer: <u>Jenny zeng</u>

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	0.918	2401.574	2402.492	---	---
		2441	0.930	2440.550	2441.480	---	---
		2480	0.888	2479.550	2480.438	---	---
2DH1	Ant1	2402	1.410	2401.292	2402.702	---	---
		2441	1.425	2440.280	2441.705	---	---
		2480	1.416	2479.292	2480.708	---	---
3DH1	Ant1	2402	1.470	2401.271	2402.741	---	---
		2441	1.470	2440.280	2441.750	---	---
		2480	1.470	2479.268	2480.738	---	---

Test Graphs





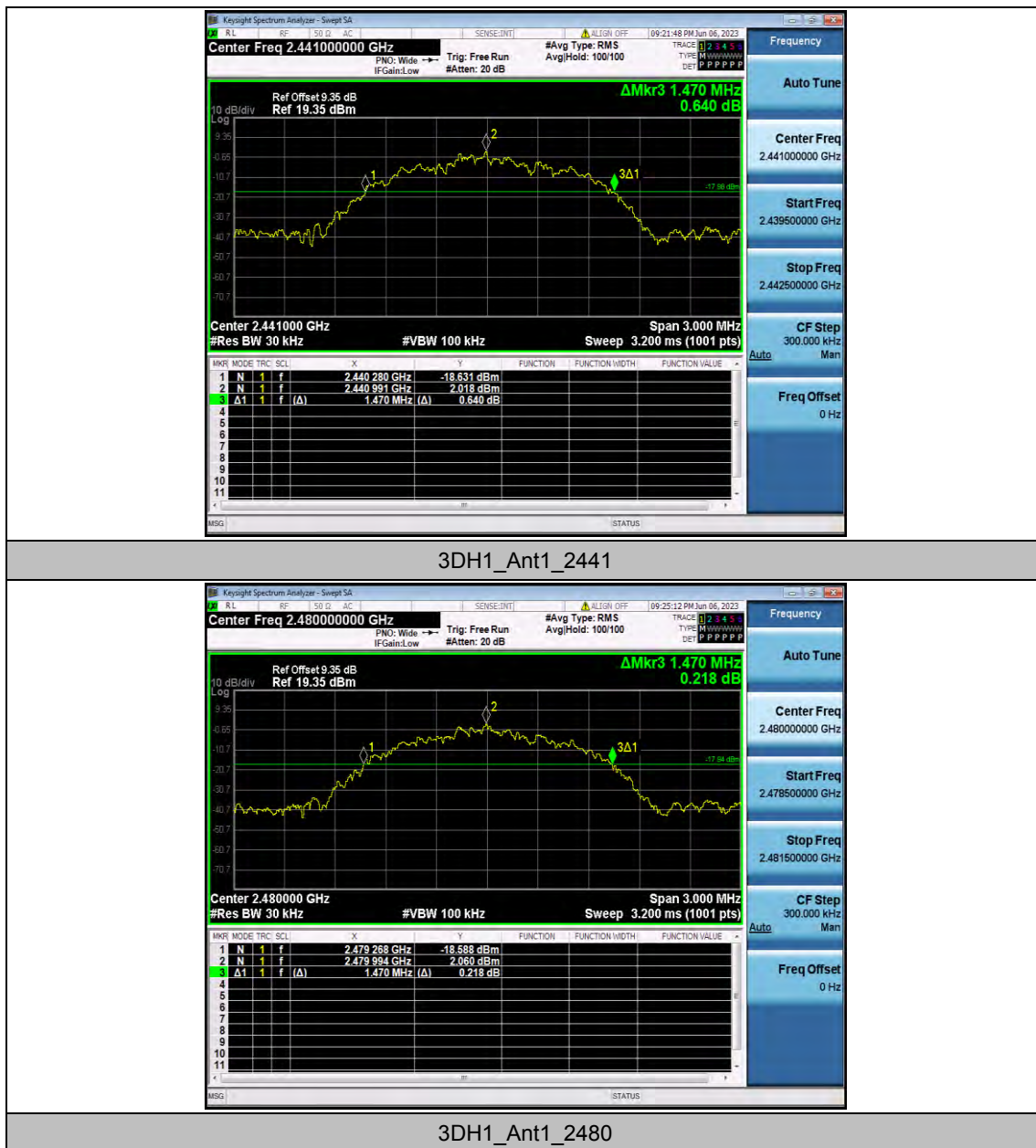
2DH1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402

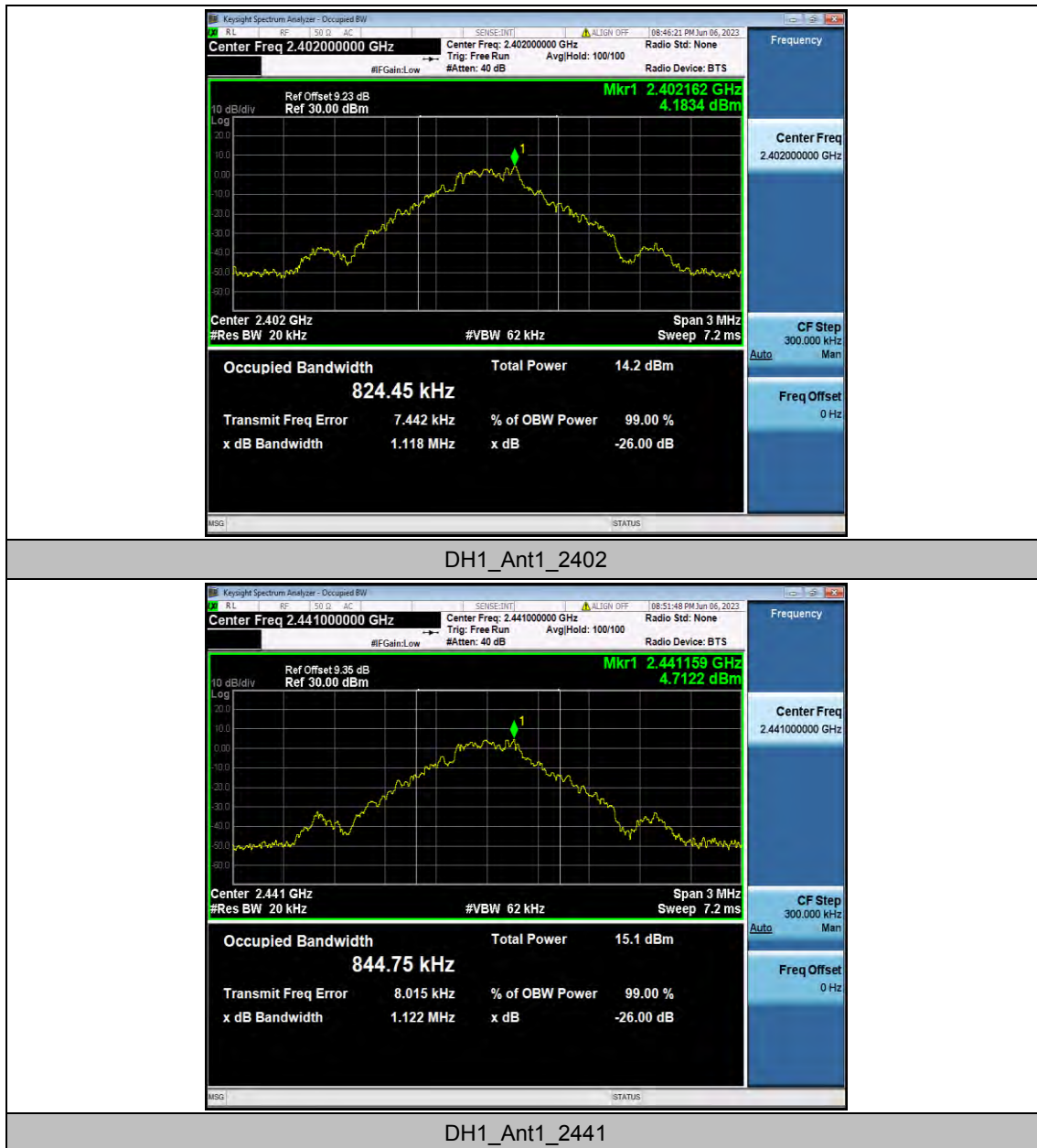


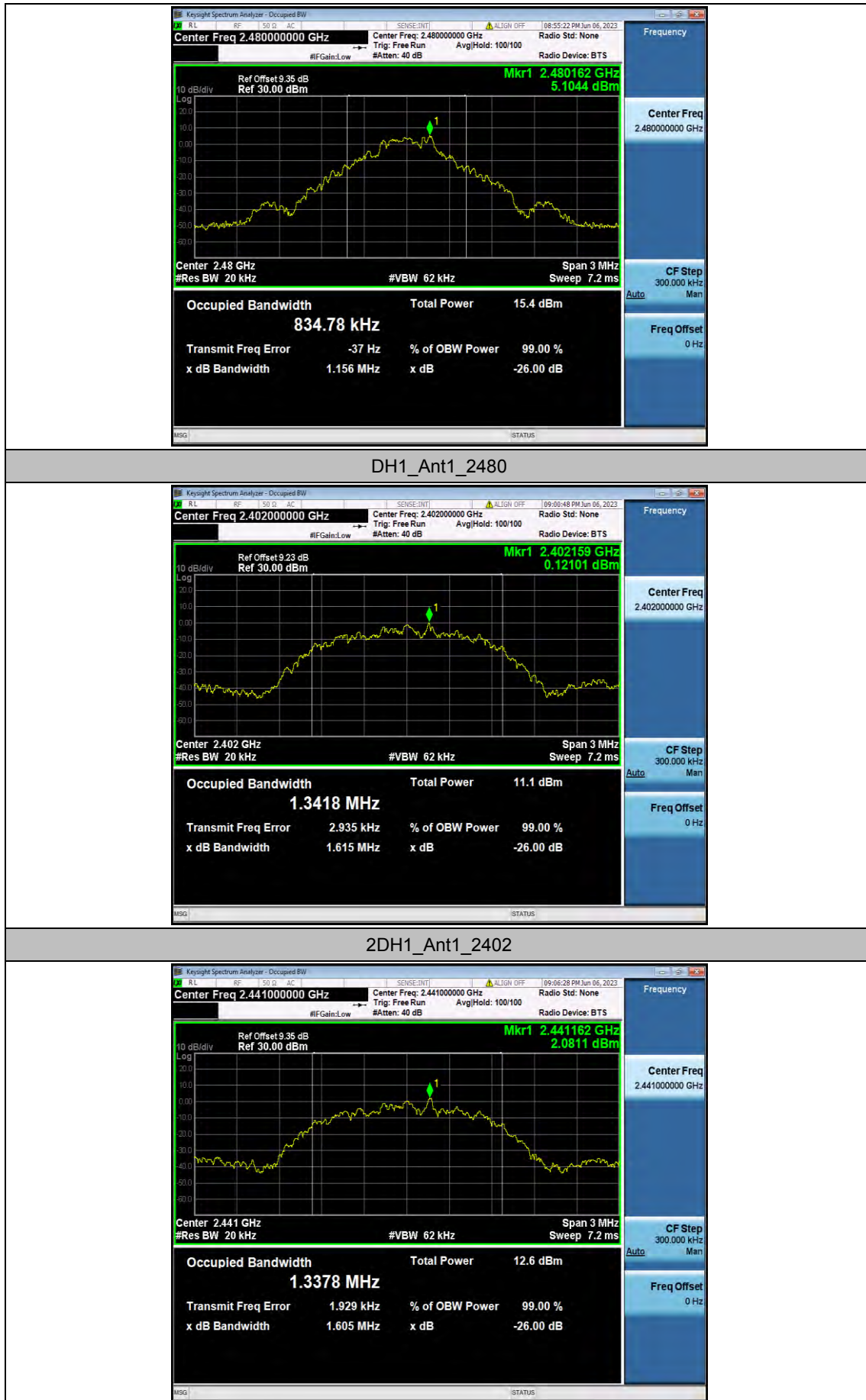
Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.82445	2401.595	2402.420	---	---
		2441	0.84475	2440.586	2441.430	---	---
		2480	0.83478	2479.583	2480.417	---	---
2DH1	Ant1	2402	1.3418	2401.332	2402.674	---	---
		2441	1.3378	2440.333	2441.671	---	---
		2480	1.3353	2479.333	2480.668	---	---
3DH1	Ant1	2402	1.3467	2401.332	2402.678	---	---
		2441	1.3480	2440.330	2441.678	---	---
		2480	1.3481	2479.328	2480.676	---	---

Test Graphs

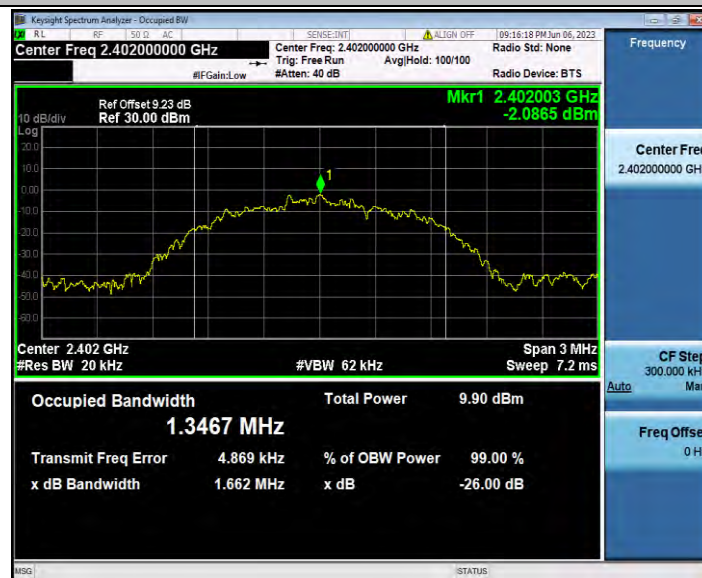




2DH1_Ant1_2441



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	8.02	≤30.00	PASS
		2441	9.07	≤30.00	PASS
		2480	9.12	≤30.00	PASS
2DH1	Ant1	2402	6.33	≤20.97	PASS
		2441	7.58	≤20.97	PASS
		2480	7.5	≤20.97	PASS
3DH1	Ant1	2402	5.65	≤20.97	PASS
		2441	7.04	≤20.97	PASS
		2480	7.08	≤20.97	PASS

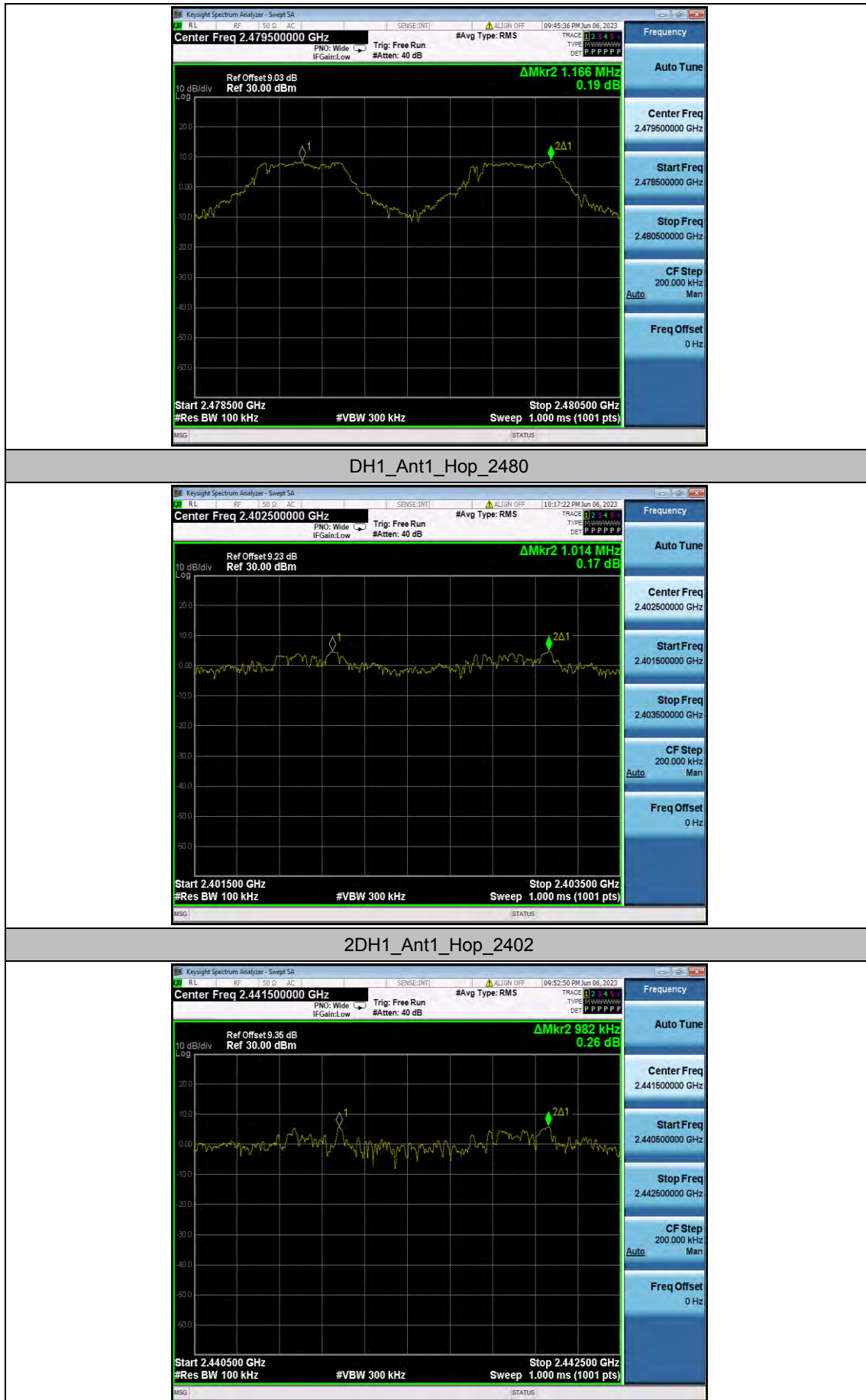
Appendix A.4: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.992	≥ 0.930	PASS
		Hop_2441	1.012	≥ 0.930	PASS
		Hop_2480	1.166	≥ 0.930	PASS
2DH1	Ant1	Hop_2402	1.014	≥ 0.950	PASS
		Hop_2441	0.982	≥ 0.950	PASS
		Hop_2480	1.176	≥ 0.950	PASS
3DH1	Ant1	Hop_2402	1.108	≥ 0.980	PASS
		Hop_2441	1.004	≥ 0.980	PASS
		Hop_2480	1.002	≥ 0.980	PASS

Test Graphs





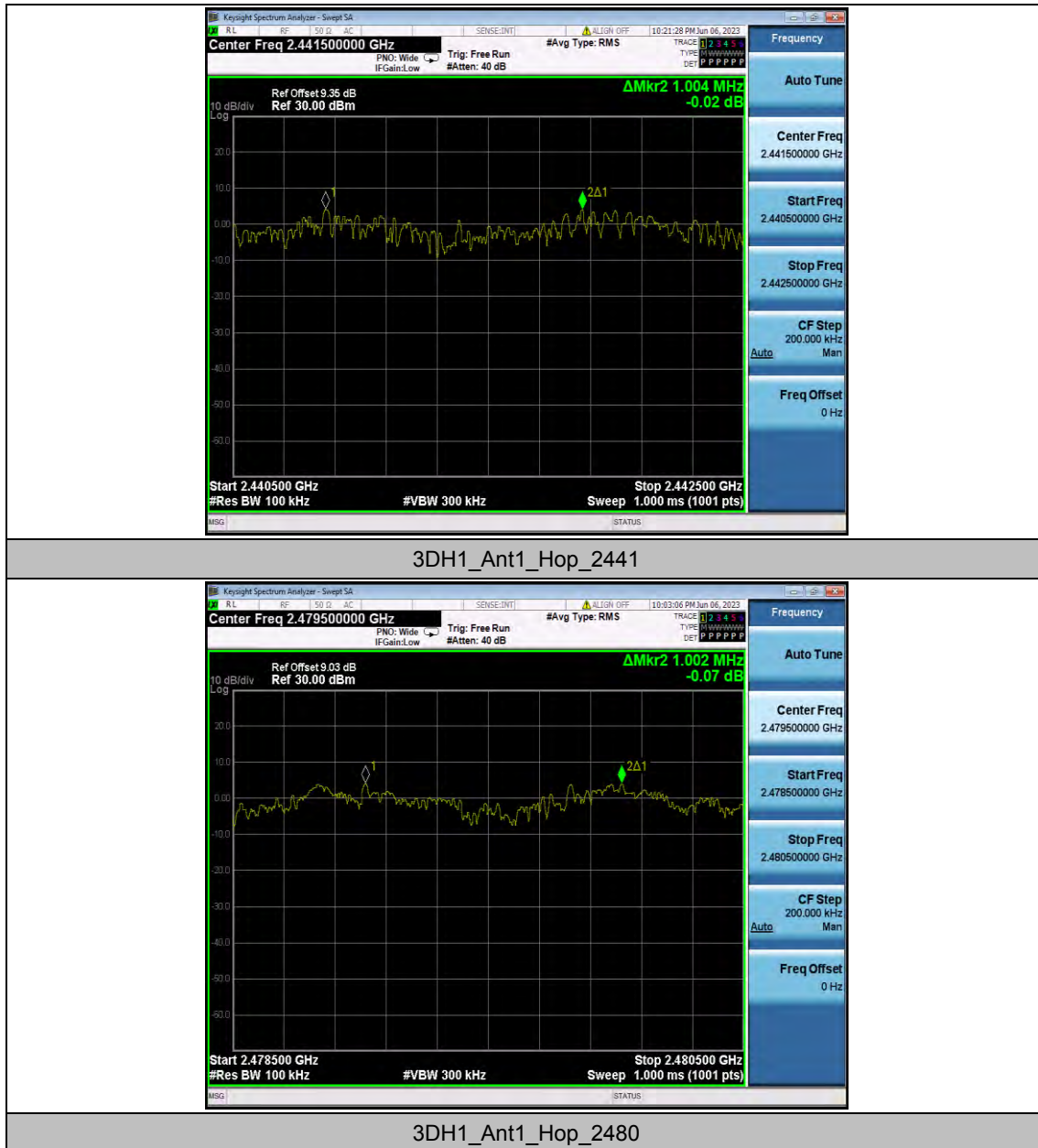
2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402

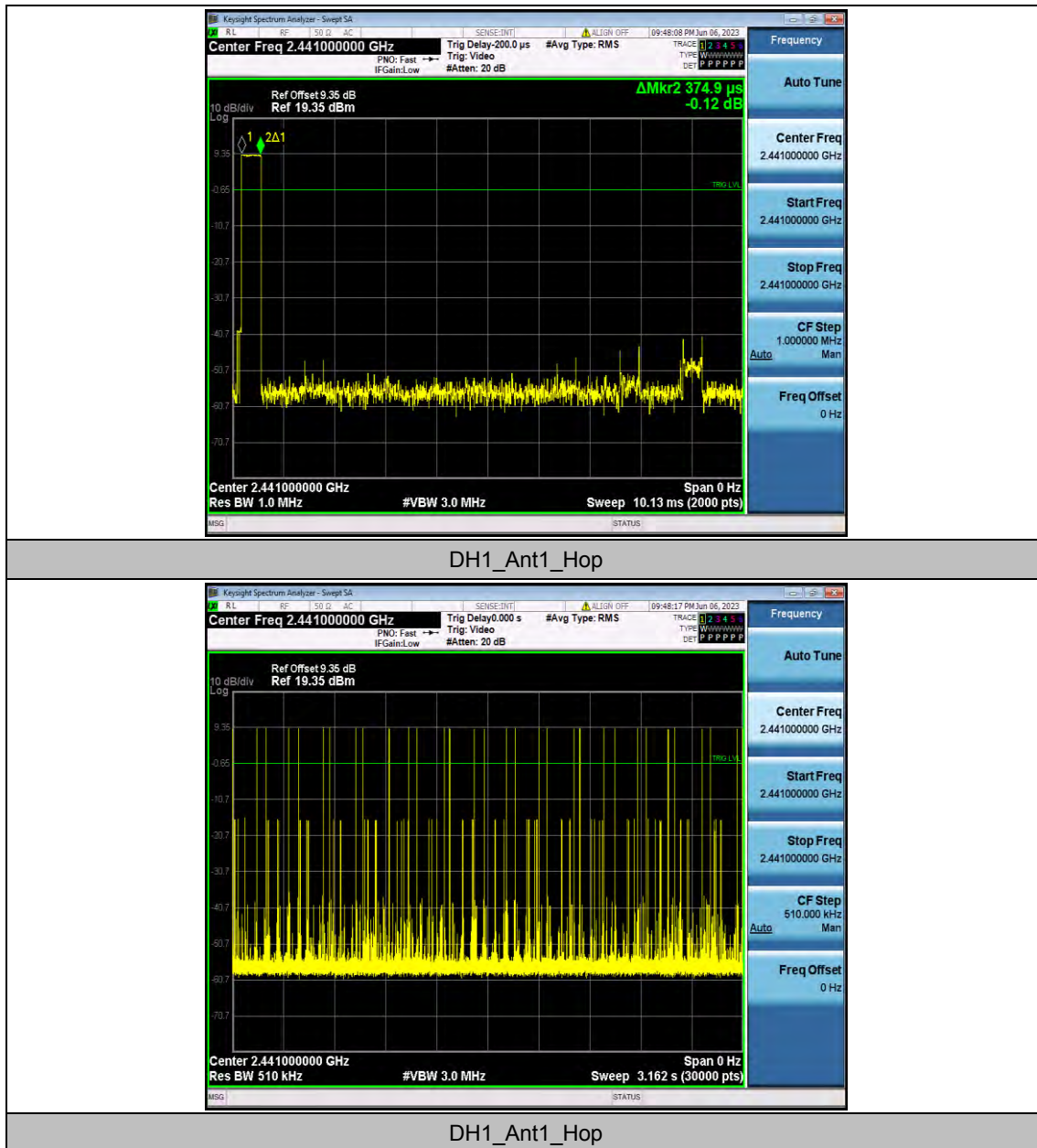


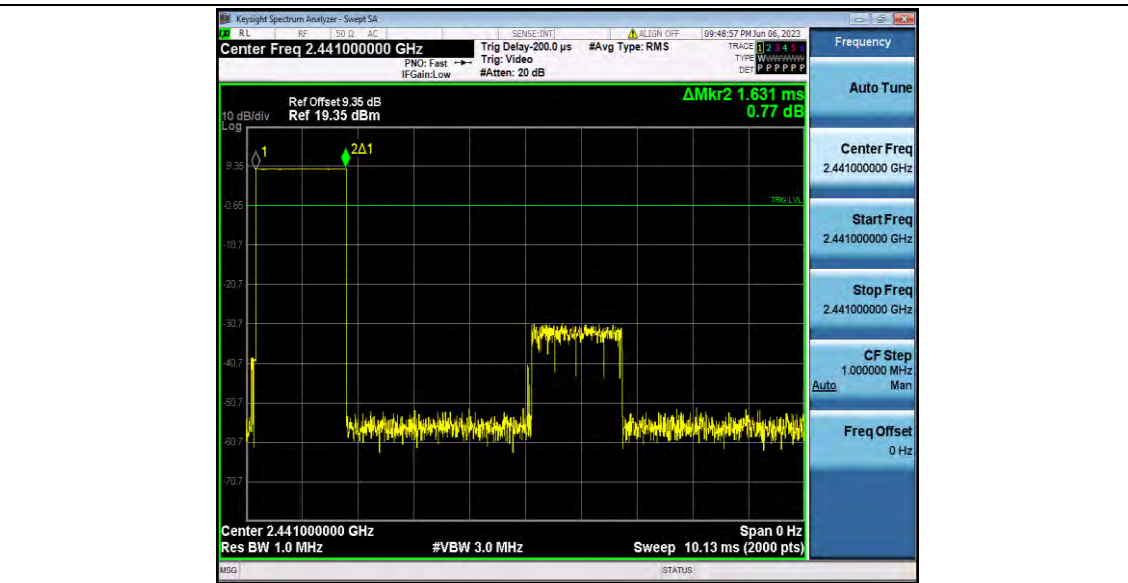
Appendix A.5: Time of occupancy

Test Result

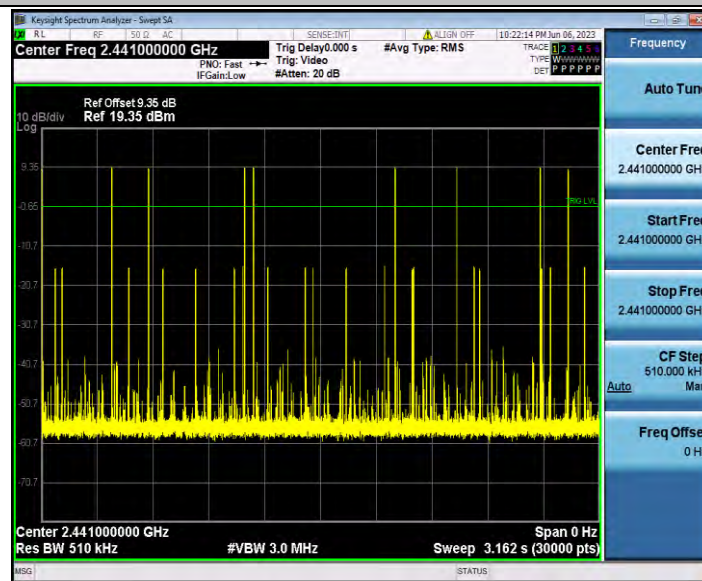
Test Mode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.63	190	0.31	≤0.4	PASS
DH5	Ant1	Hop	2.88	90	0.259	≤0.4	PASS
2DH1	Ant1	Hop	0.38	330	0.125	≤0.4	PASS
2DH3	Ant1	Hop	1.63	180	0.294	≤0.4	PASS
2DH5	Ant1	Hop	2.88	120	0.345	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.62	170	0.275	≤0.4	PASS
3DH5	Ant1	Hop	2.88	90	0.259	≤0.4	PASS

Test Graphs

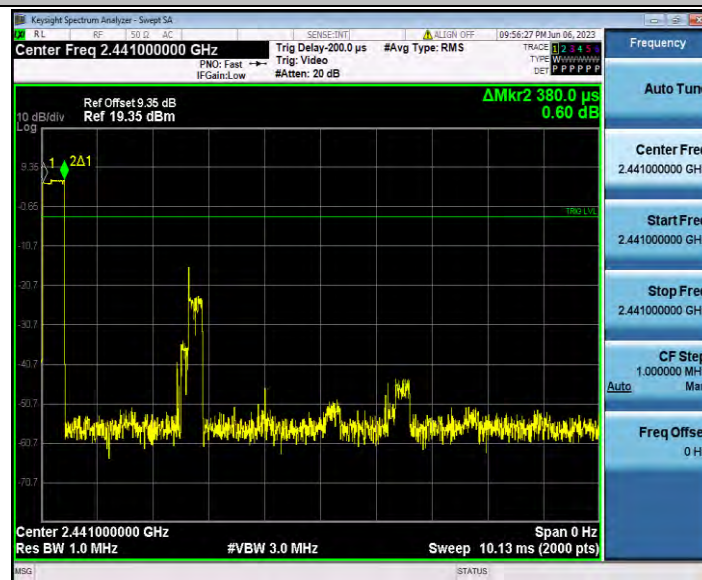




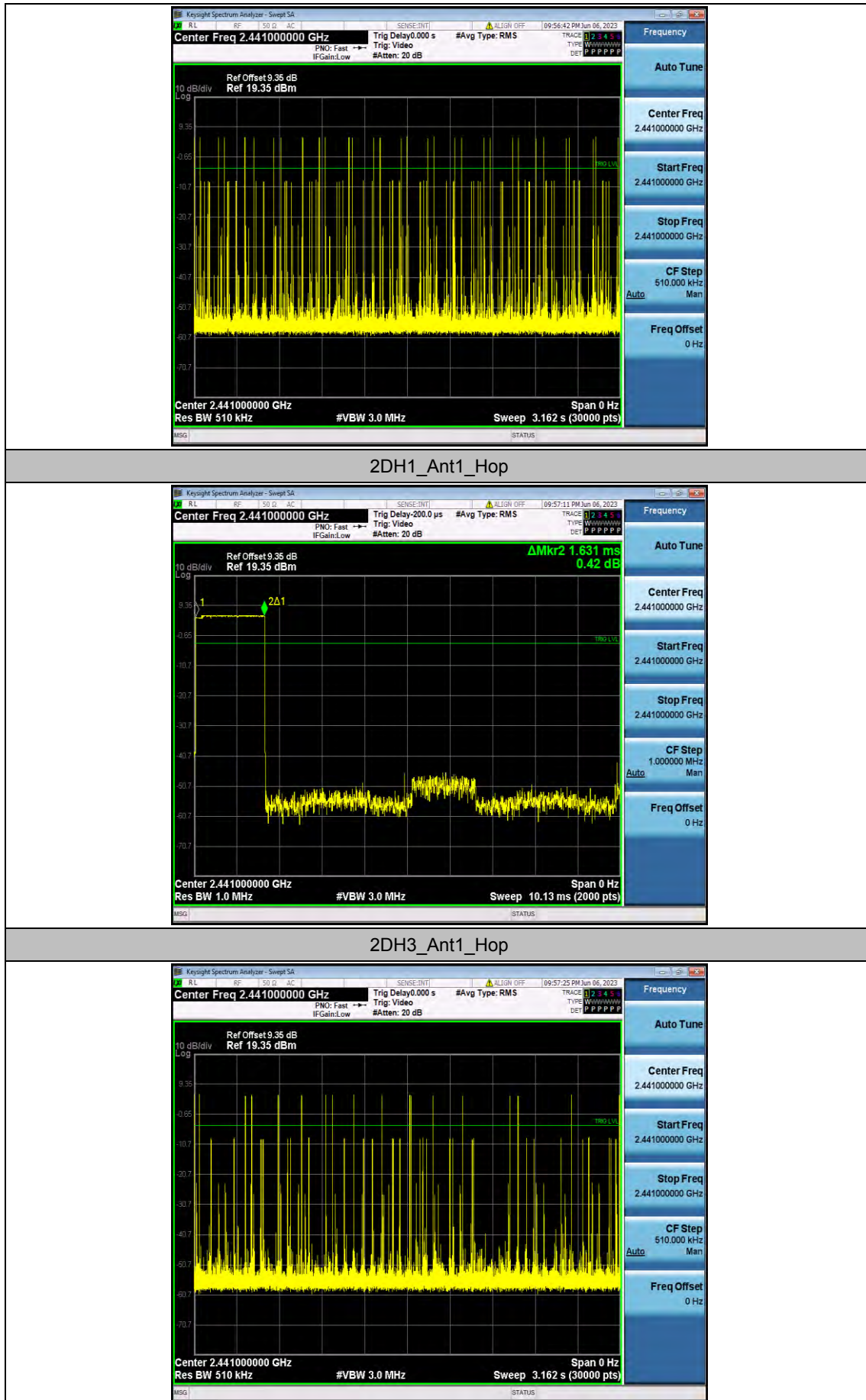
DH5_Ant1_Hop



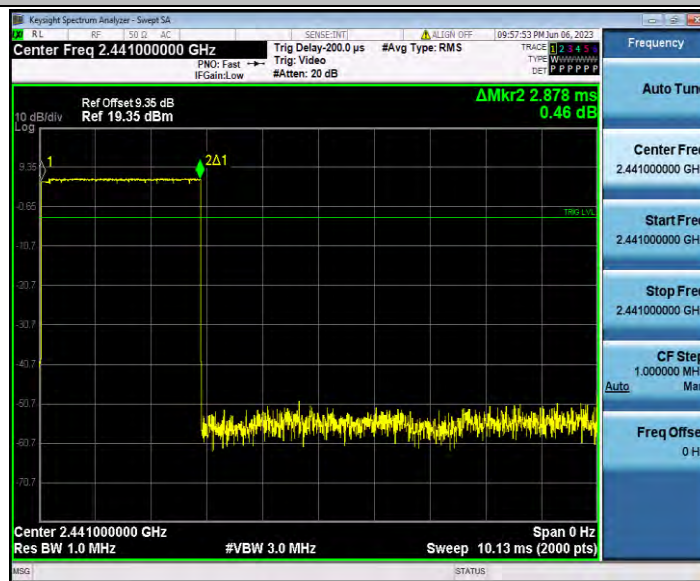
DH5_Ant1_Hop



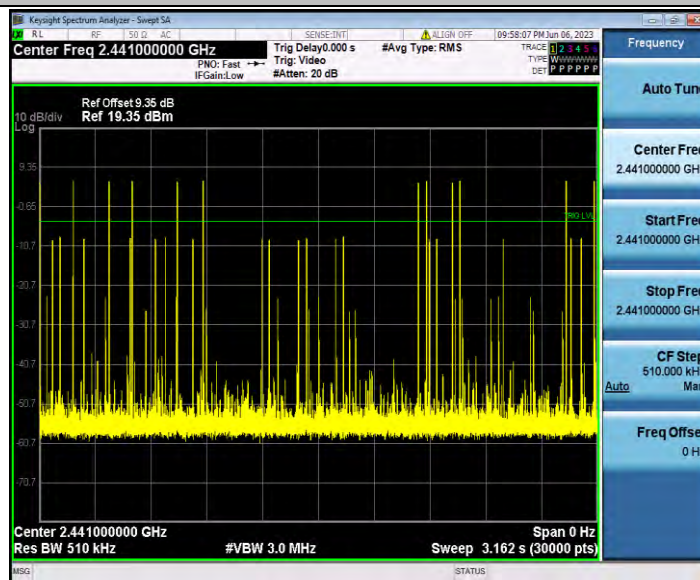
2DH1_Ant1_Hop



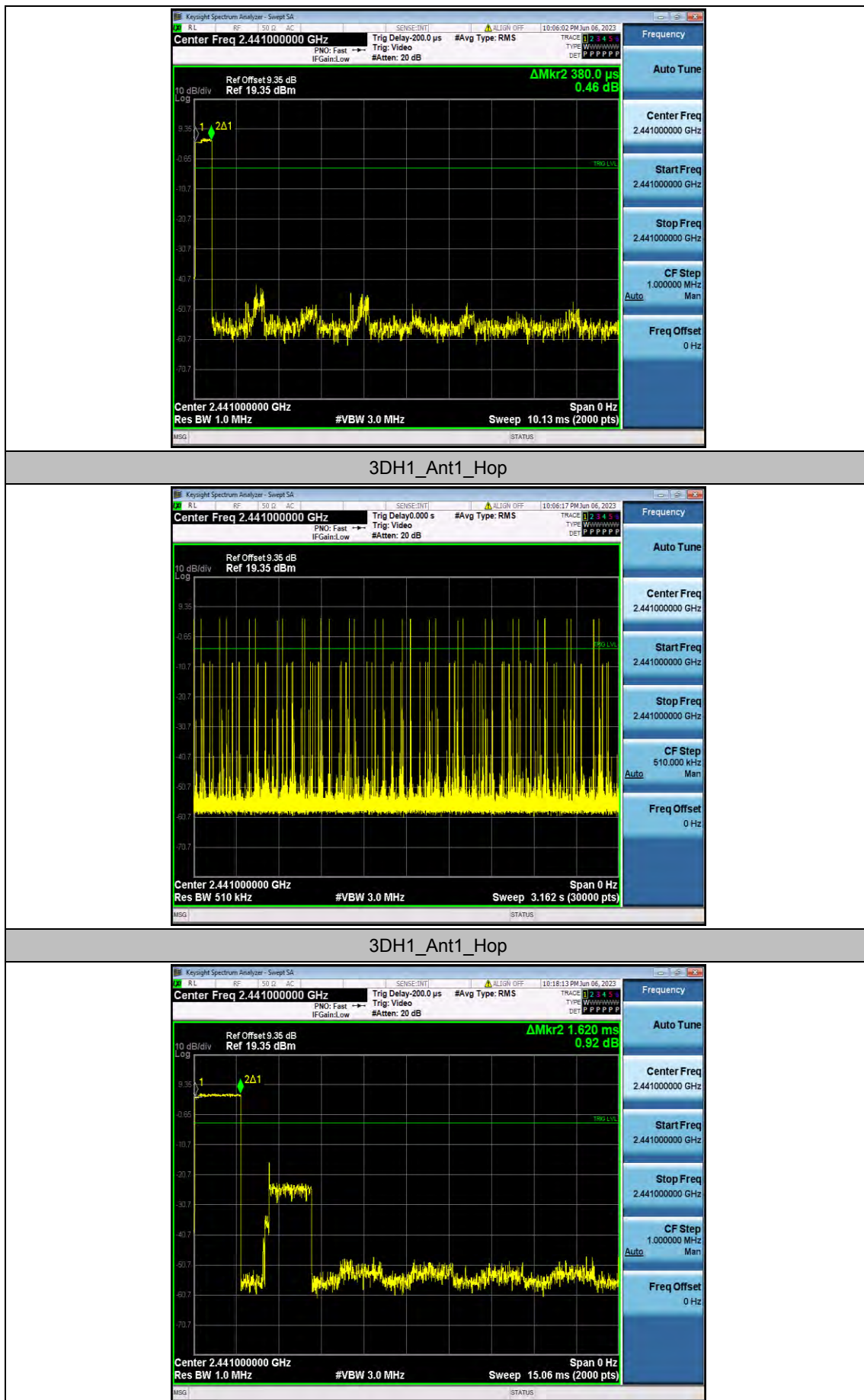
2DH3_Ant1_Hop



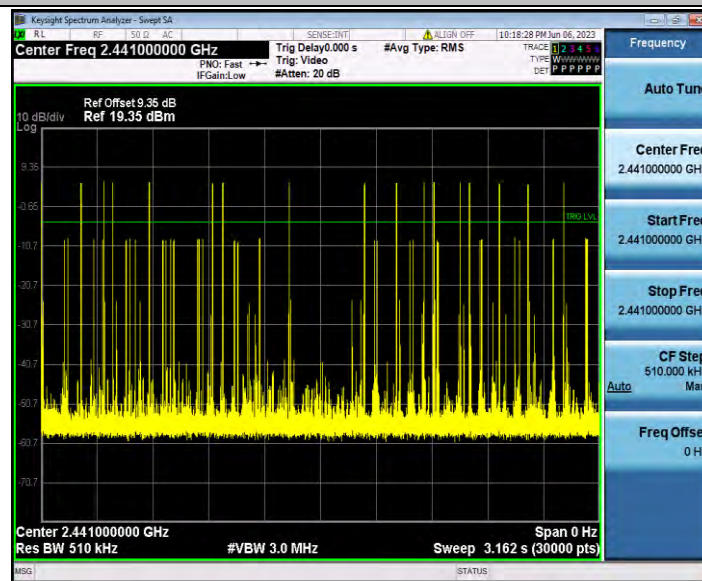
2DH5_Ant1_Hop



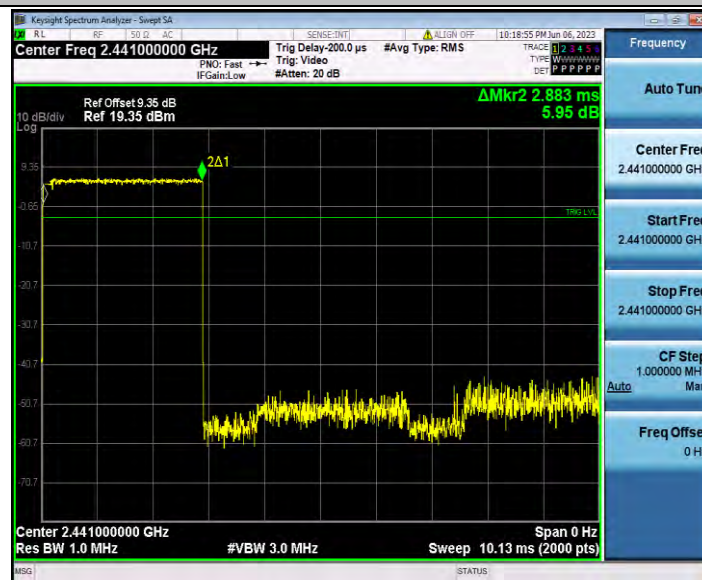
2DH5_Ant1_Hop



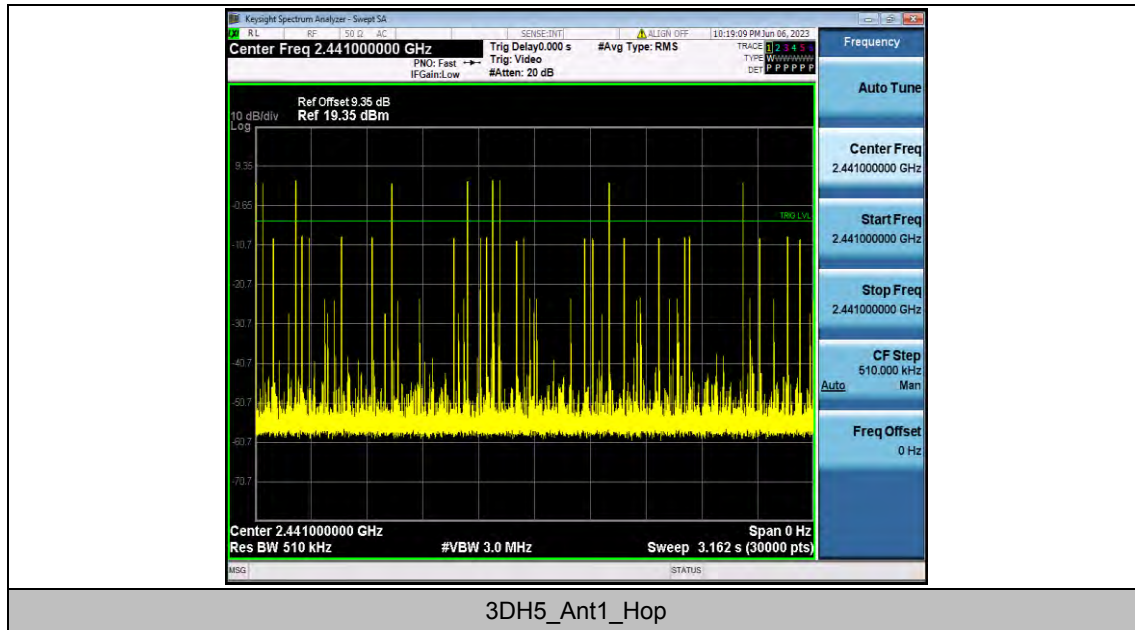
3DH3_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop

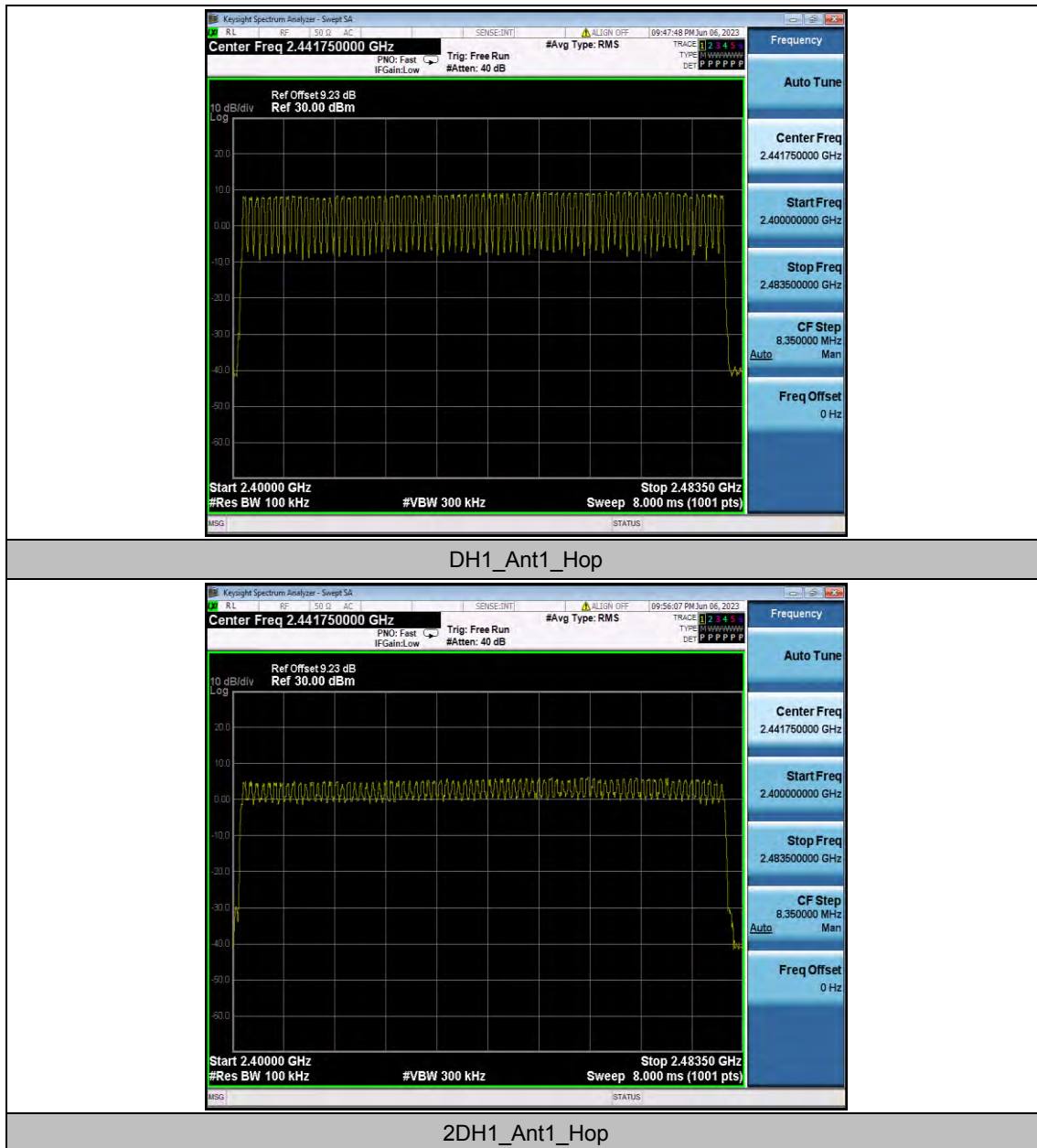


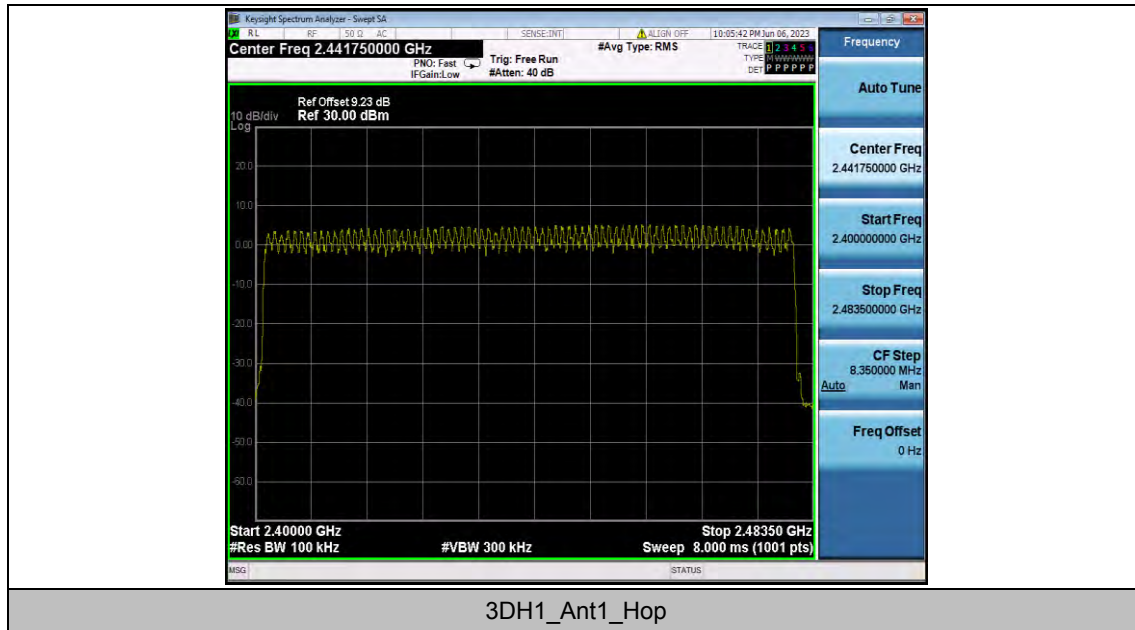
Appendix A.6: Number of hopping channels

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



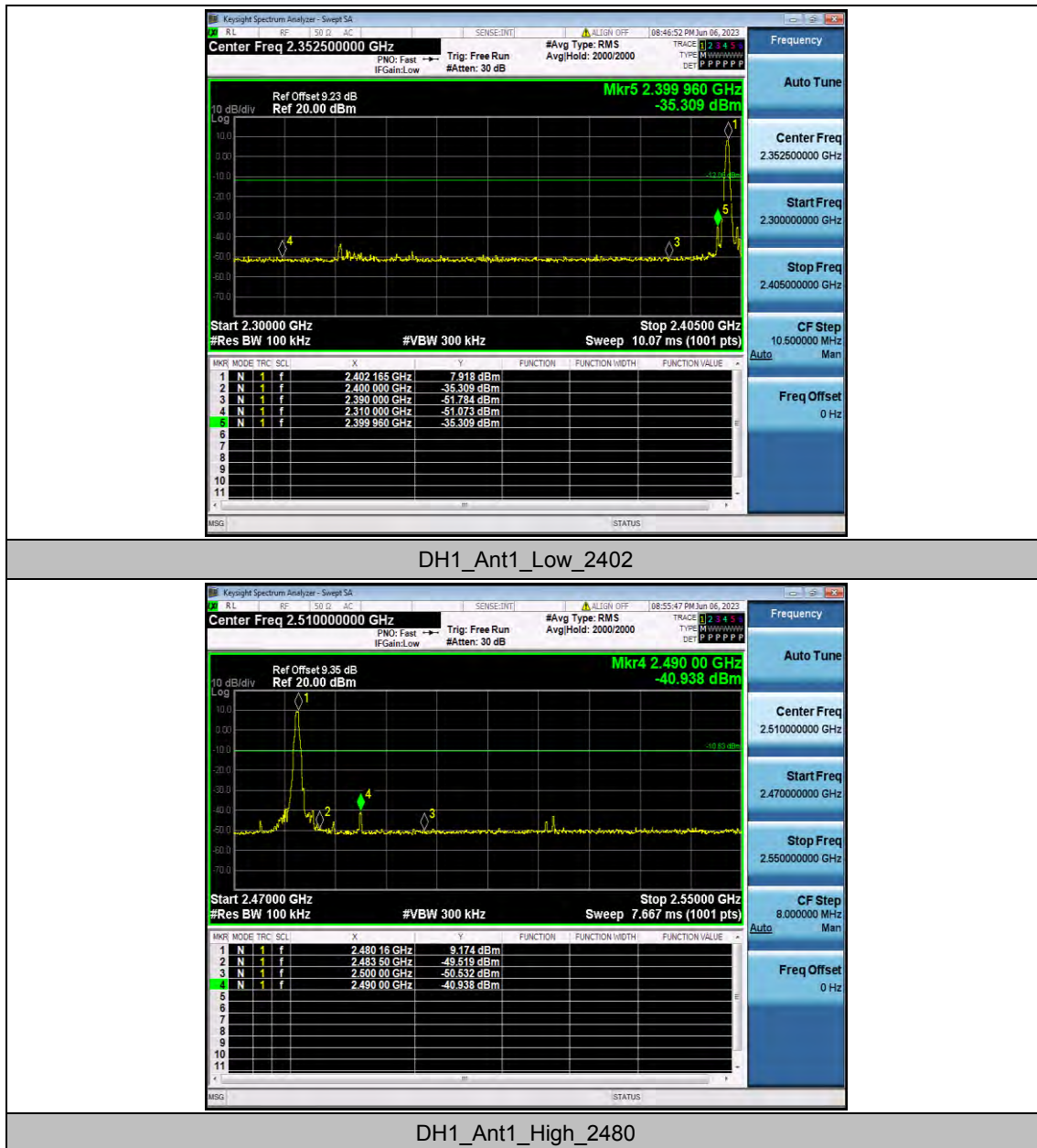


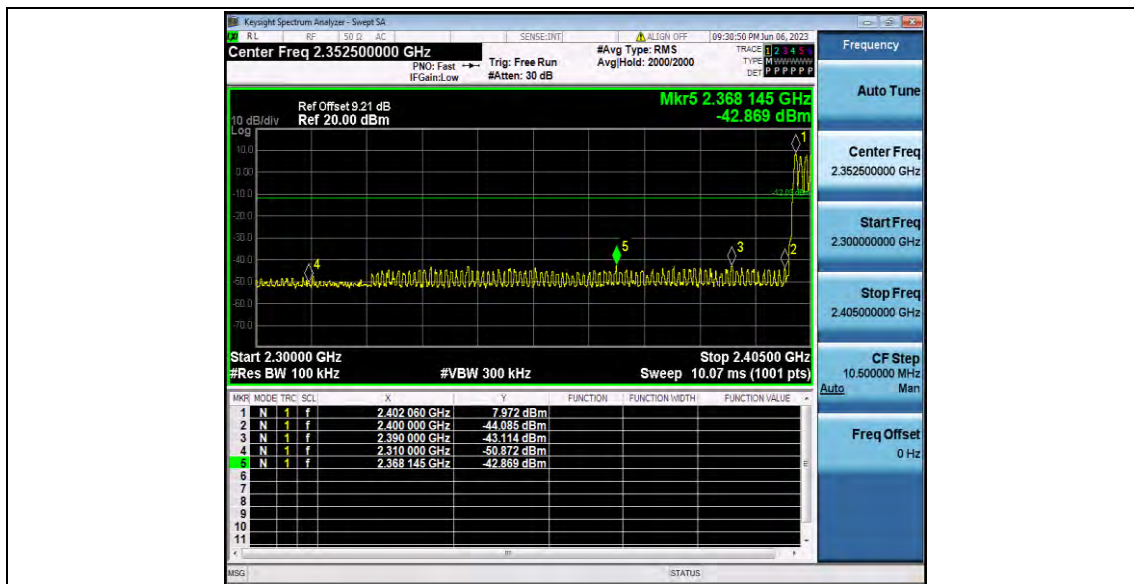
Appendix A.7: Band edge measurements

Test Result

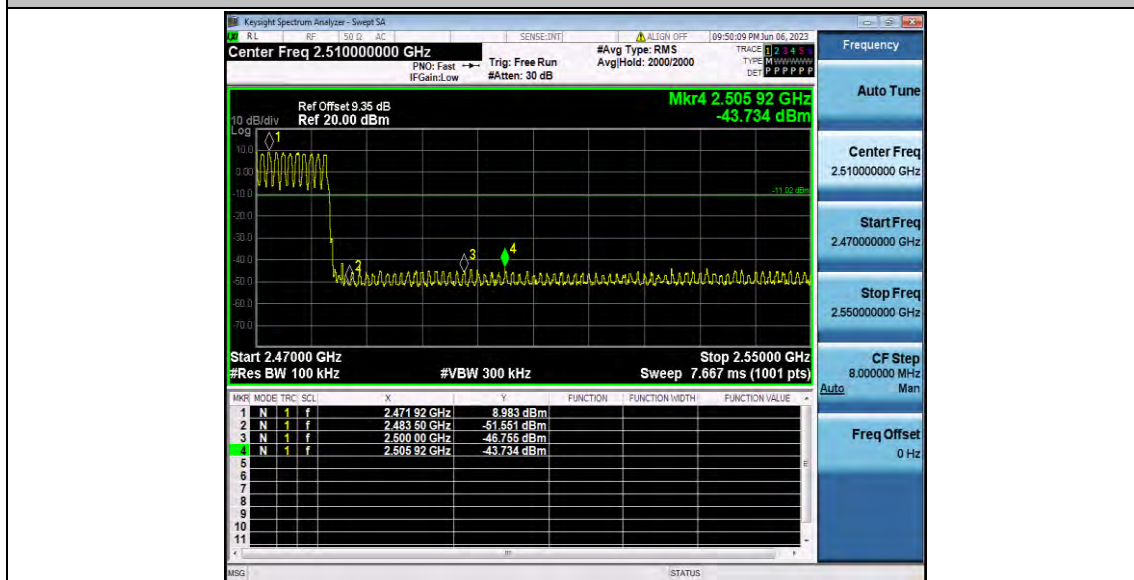
Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	7.92	-35.31	≤-12.08	PASS
		High	2480	9.17	-40.94	≤-10.83	PASS
		Low	Hop_2402	7.97	-42.87	≤-12.03	PASS
		High	Hop_2480	8.98	-43.73	≤-11.02	PASS
2DH1	Ant1	Low	2402	4.36	-40.69	≤-15.64	PASS
		High	2480	5.70	-40.12	≤-14.3	PASS
		Low	Hop_2402	3.89	-45.89	≤-16.11	PASS
		High	Hop_2480	5.78	-46.5	≤-14.22	PASS
3DH1	Ant1	Low	2402	3.37	-39.92	≤-16.63	PASS
		High	2480	4.93	-40.56	≤-15.07	PASS
		Low	Hop_2402	4.09	-45.76	≤-15.91	PASS
		High	Hop_2480	4.48	-41	≤-15.52	PASS

Test Graphs

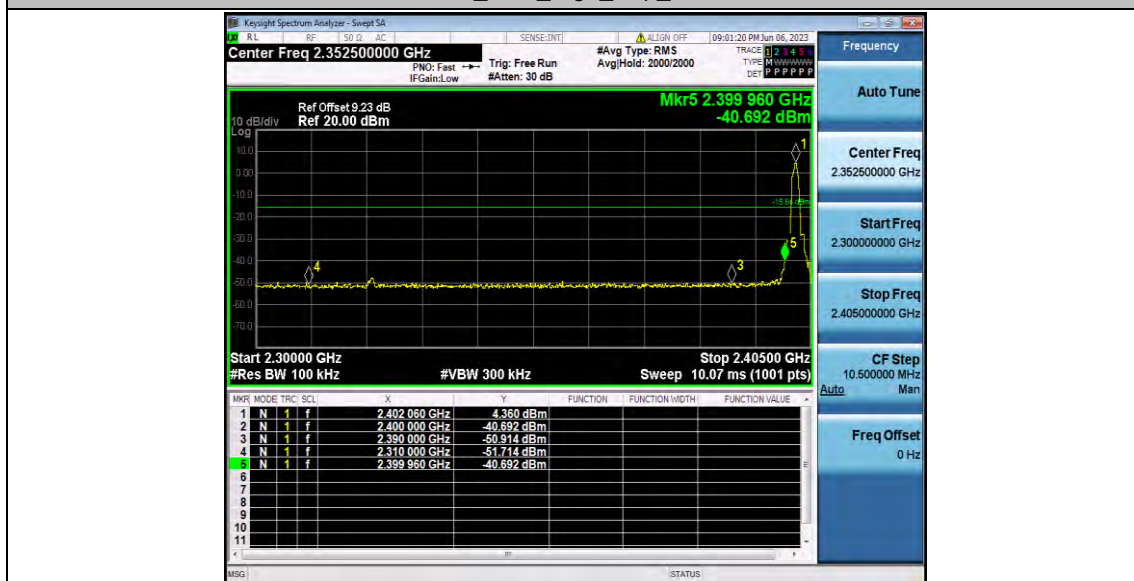




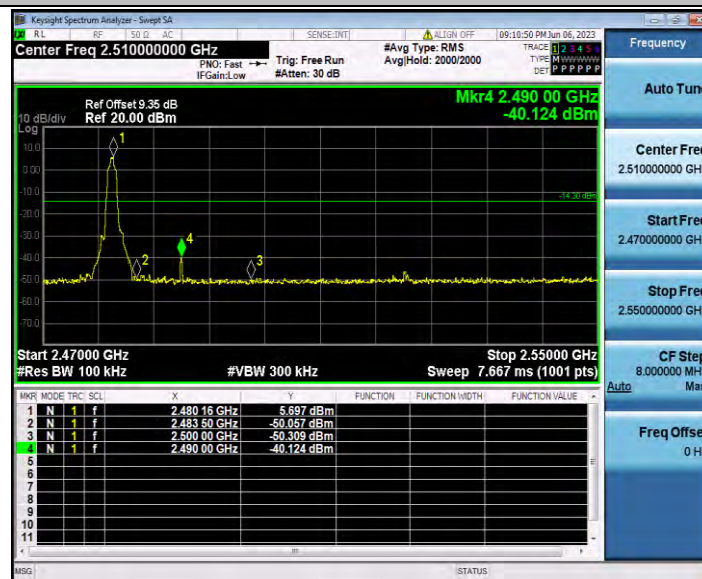
DH1_Ant1_Low_Hop_2402



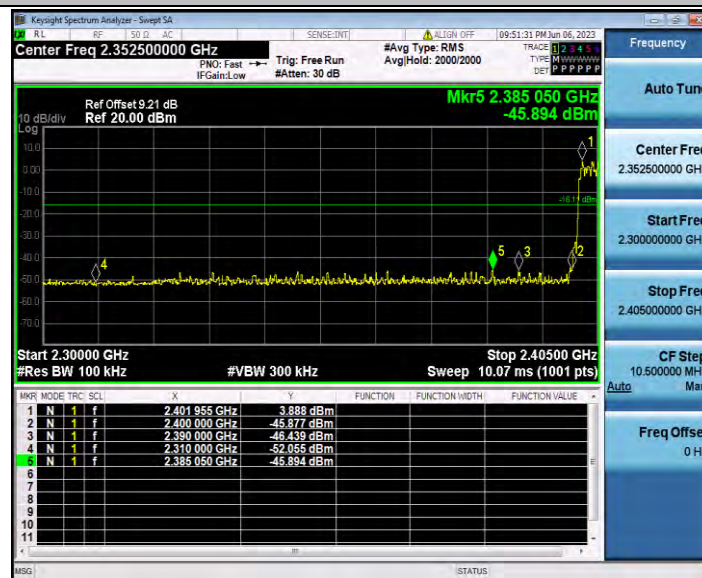
DH1_Ant1_High_Hop_2480



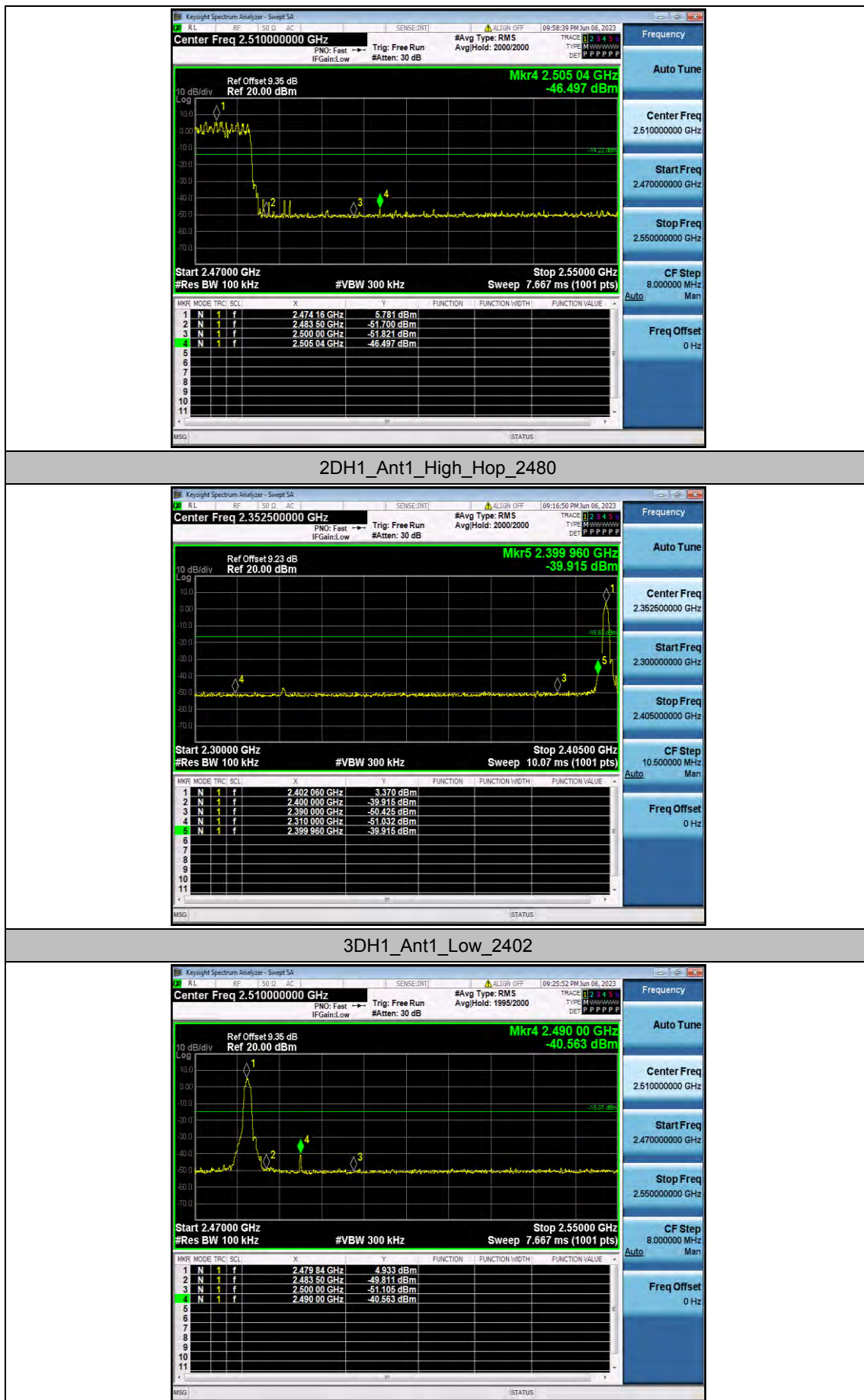
2DH1_Ant1_Low_2402



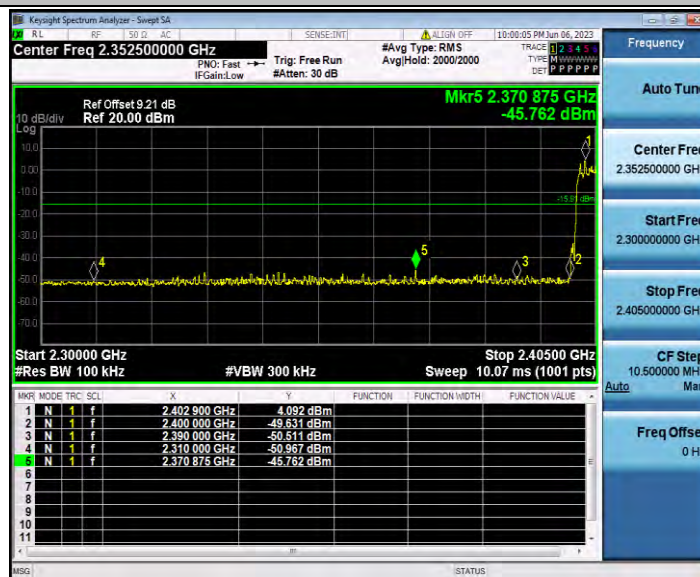
2DH1_Ant1_High_2480



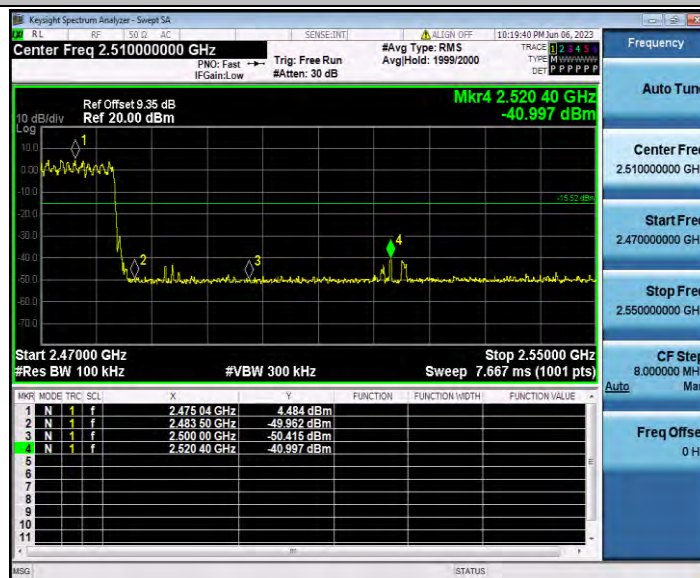
2DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



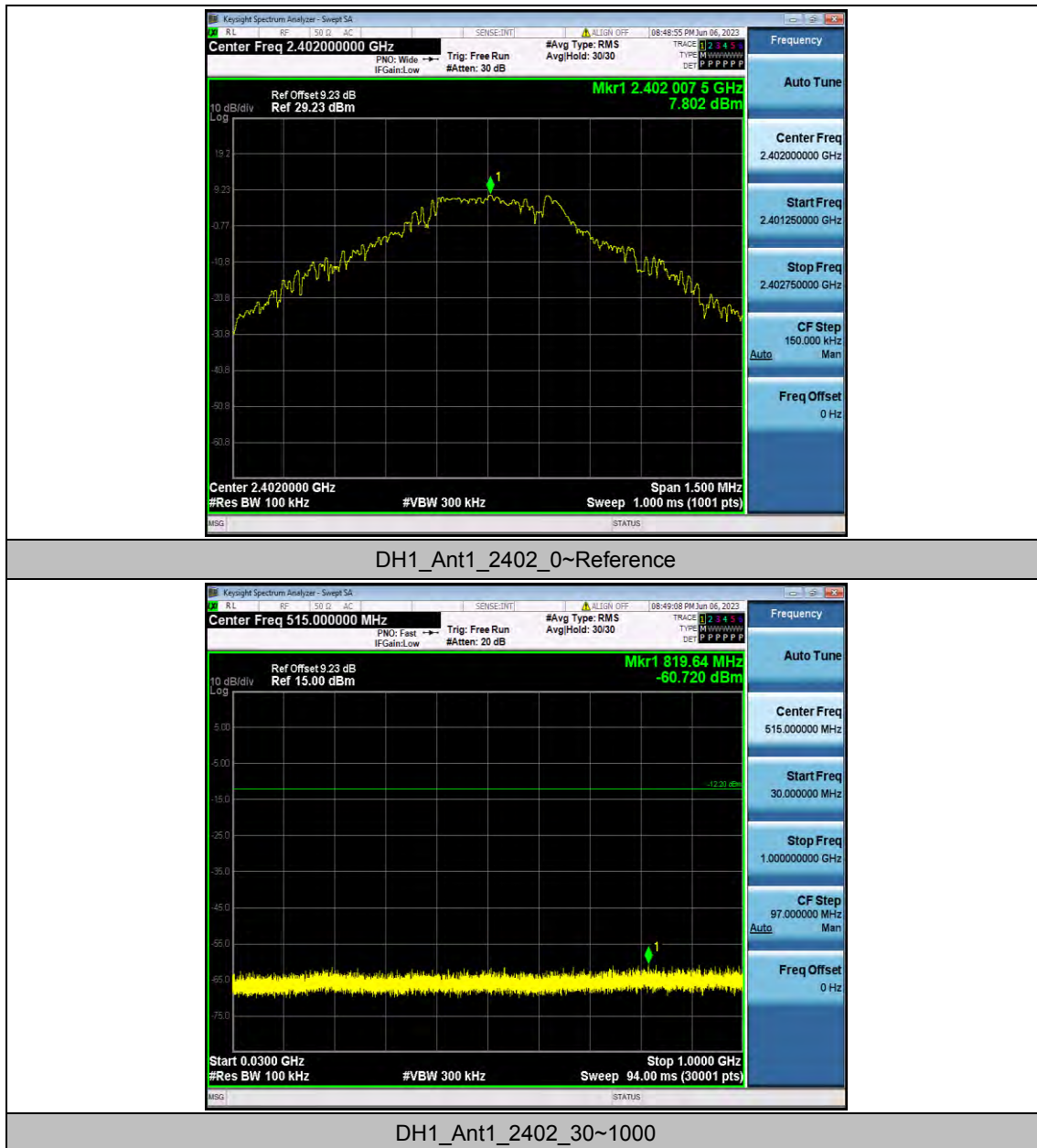
3DH1_Ant1_High_Hop_2480

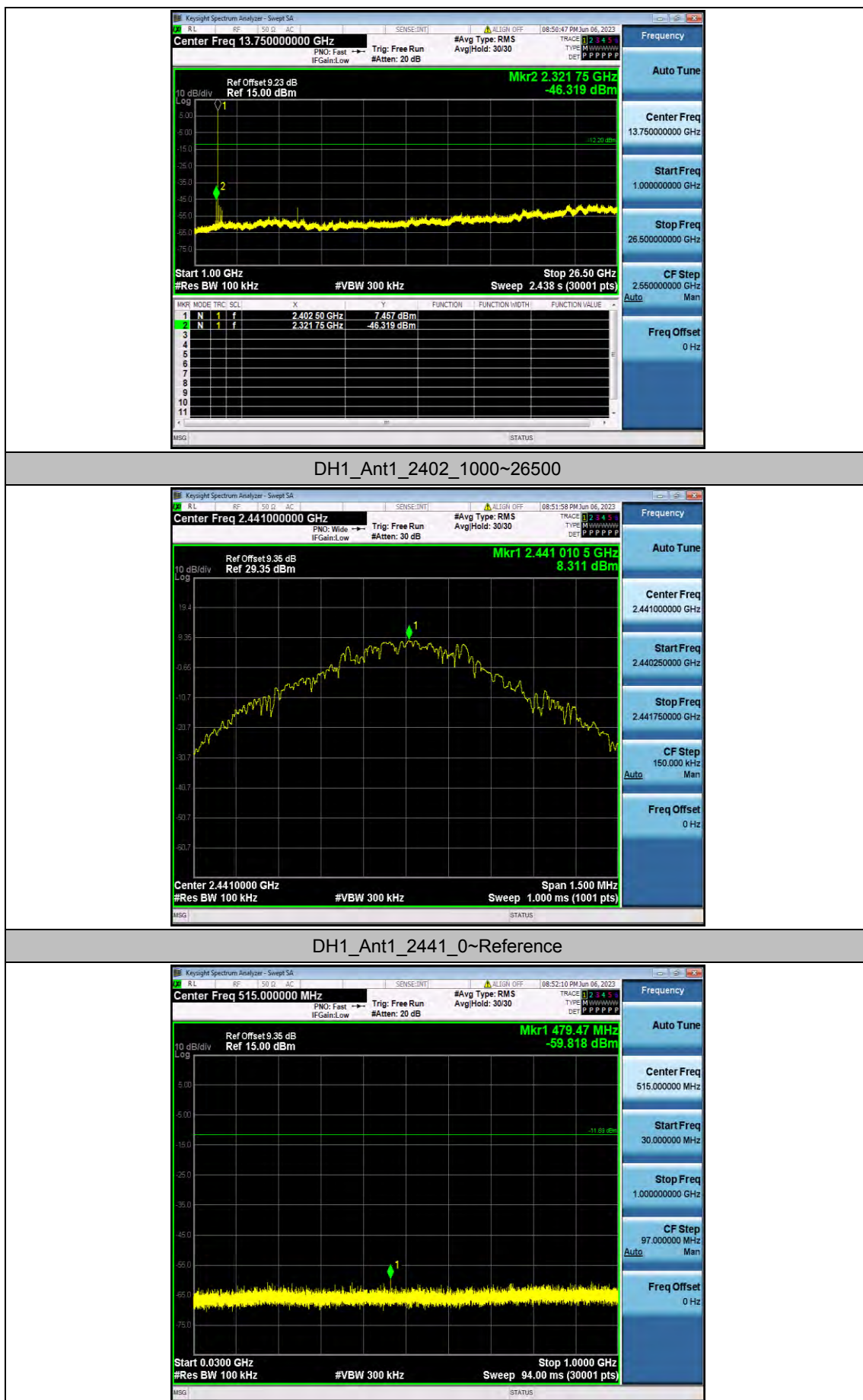
Appendix A.8: Conducted Spurious Emission

Test Result

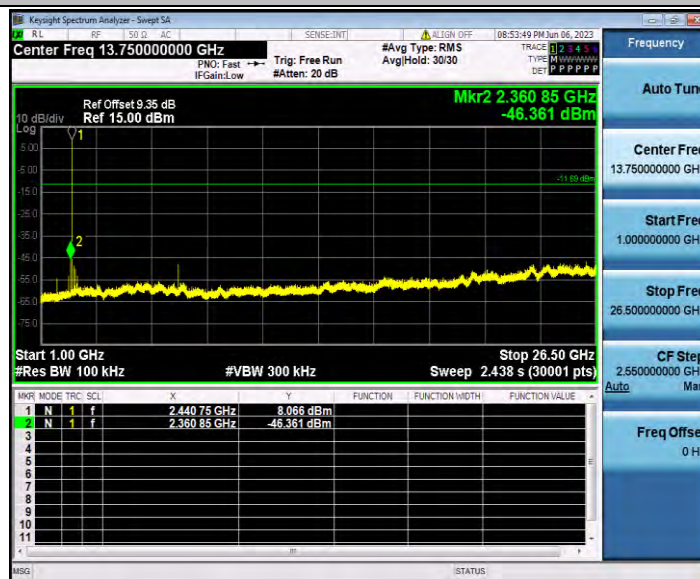
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	7.80	7.80	---	PASS
			30~1000	7.80	-60.72	≤ -12.2	PASS
			1000~26500	7.80	-46.32	≤ -12.2	PASS
		2441	Reference	8.31	8.31	---	PASS
			30~1000	8.31	-59.82	≤ -11.69	PASS
			1000~26500	8.31	-46.36	≤ -11.69	PASS
		2480	Reference	8.87	8.87	---	PASS
			30~1000	8.87	-60.59	≤ -11.13	PASS
			1000~26500	8.87	-46.34	≤ -11.13	PASS
2DH1	Ant1	2402	Reference	4.28	4.28	---	PASS
			30~1000	4.28	-60.79	≤ -15.72	PASS
			1000~26500	4.28	-47.62	≤ -15.72	PASS
		2441	Reference	5.74	5.74	---	PASS
			30~1000	5.74	-59.8	≤ -14.26	PASS
			1000~26500	5.74	-46.64	≤ -14.26	PASS
		2480	Reference	4.71	4.71	---	PASS
			30~1000	4.71	-59.83	≤ -15.29	PASS
			1000~26500	4.71	-48.14	≤ -15.29	PASS
3DH1	Ant1	2402	Reference	3.20	3.20	---	PASS
			30~1000	3.20	-60.44	≤ -16.8	PASS
			1000~26500	3.20	-47.62	≤ -16.8	PASS
		2441	Reference	4.45	4.45	---	PASS
			30~1000	4.45	-59.86	≤ -15.55	PASS
			1000~26500	4.45	-46.8	≤ -15.55	PASS
		2480	Reference	4.81	4.81	---	PASS
			30~1000	4.81	-60	≤ -15.19	PASS
			1000~26500	4.81	-47.35	≤ -15.19	PASS

Test Graphs





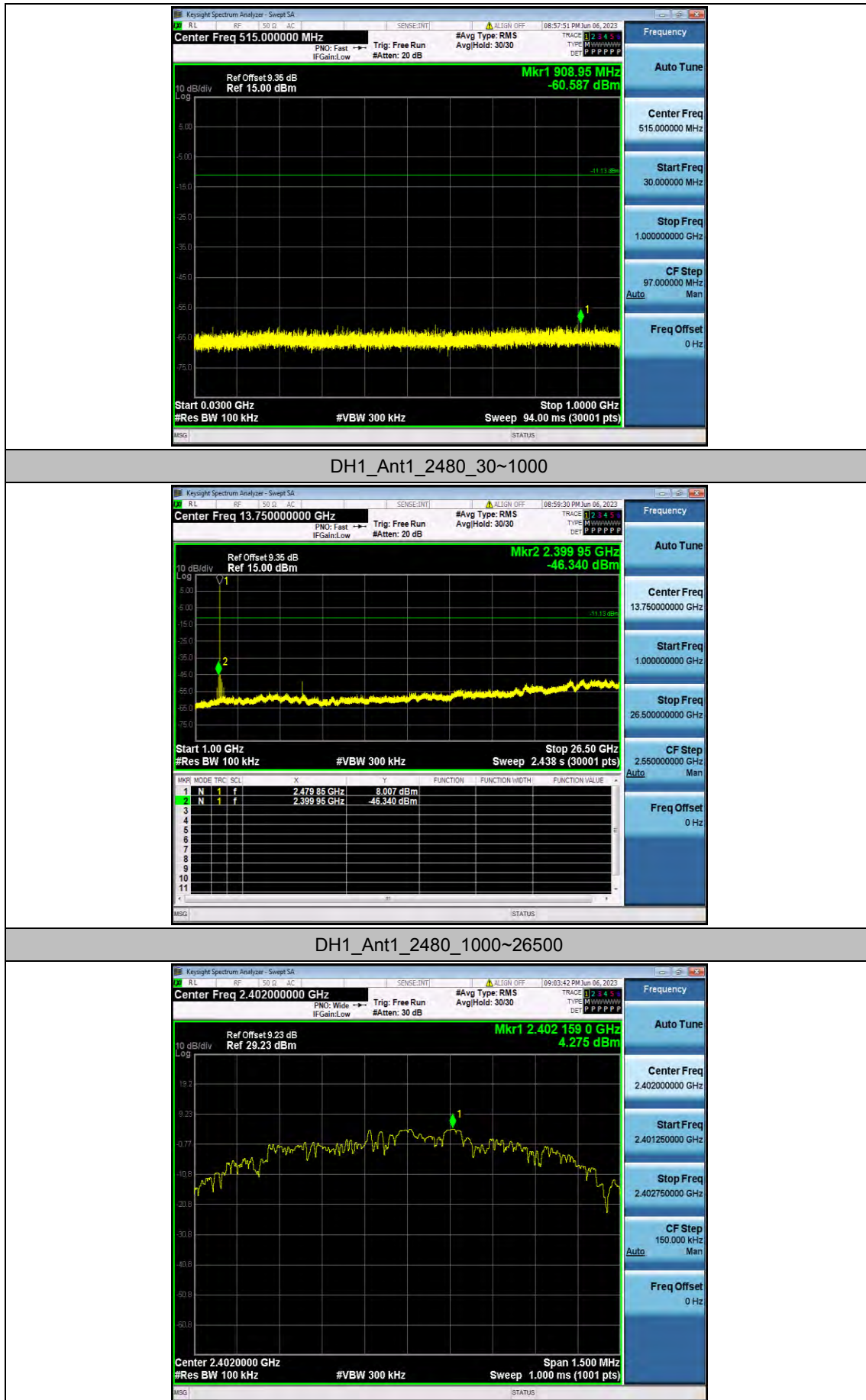
DH1_Ant1_2441_30~1000



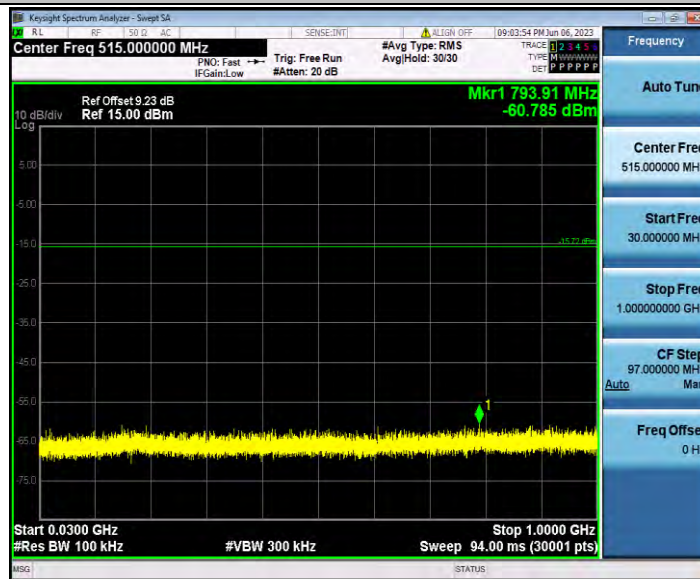
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



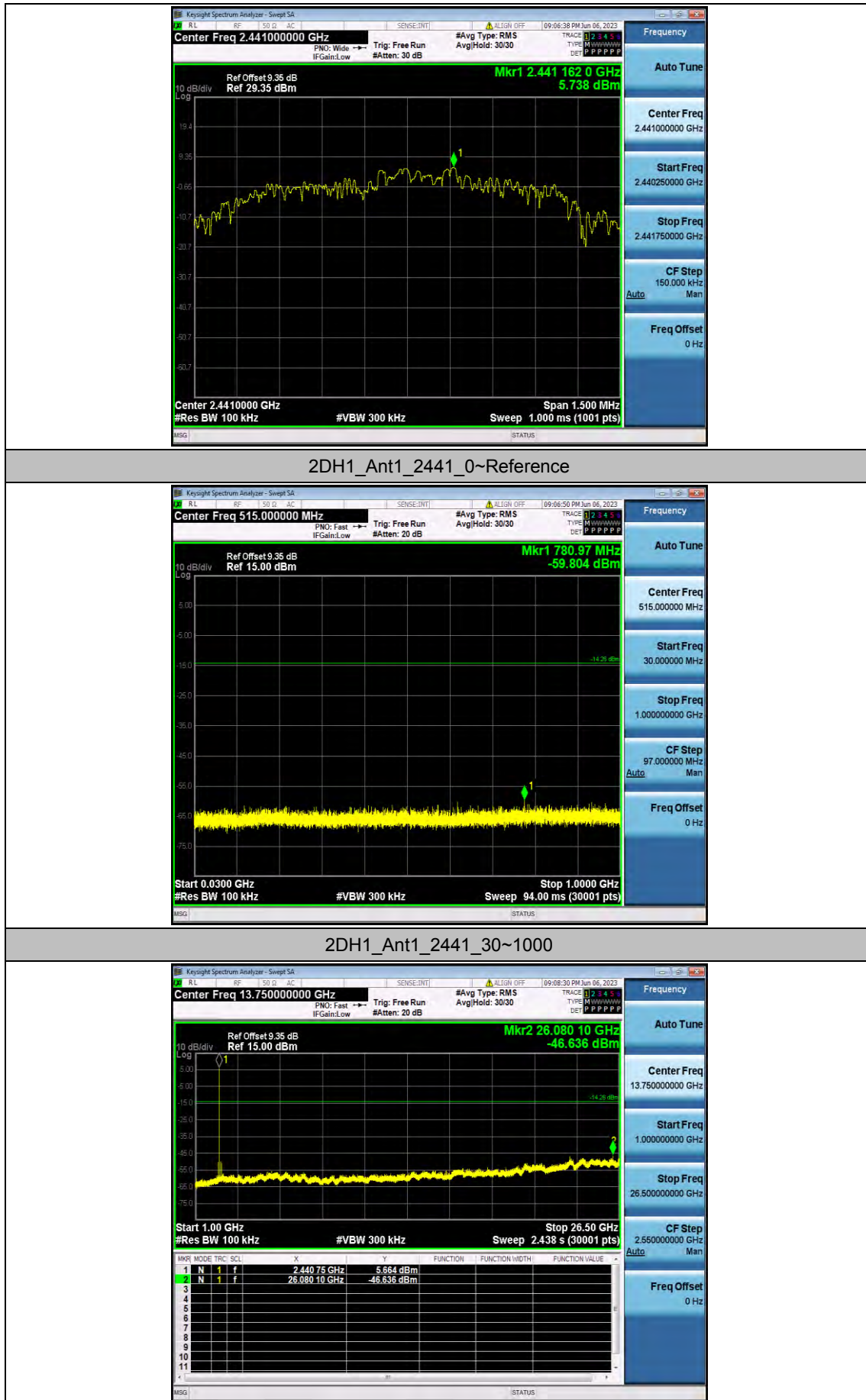
2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



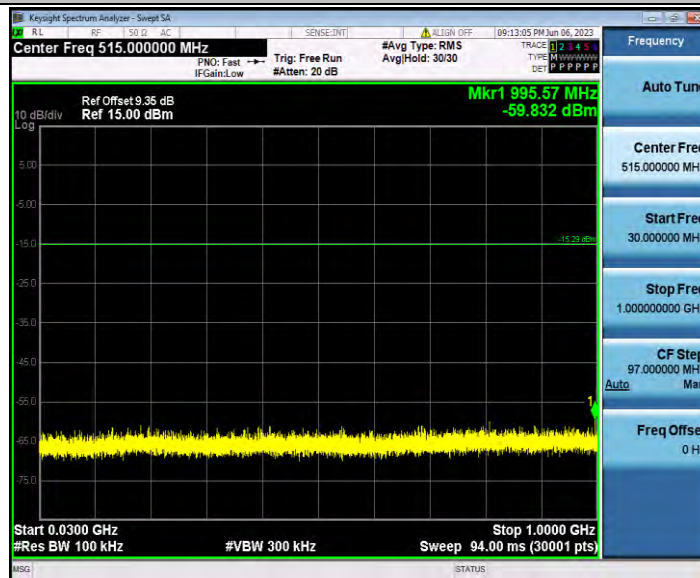
2DH1_Ant1_2402_1000~26500



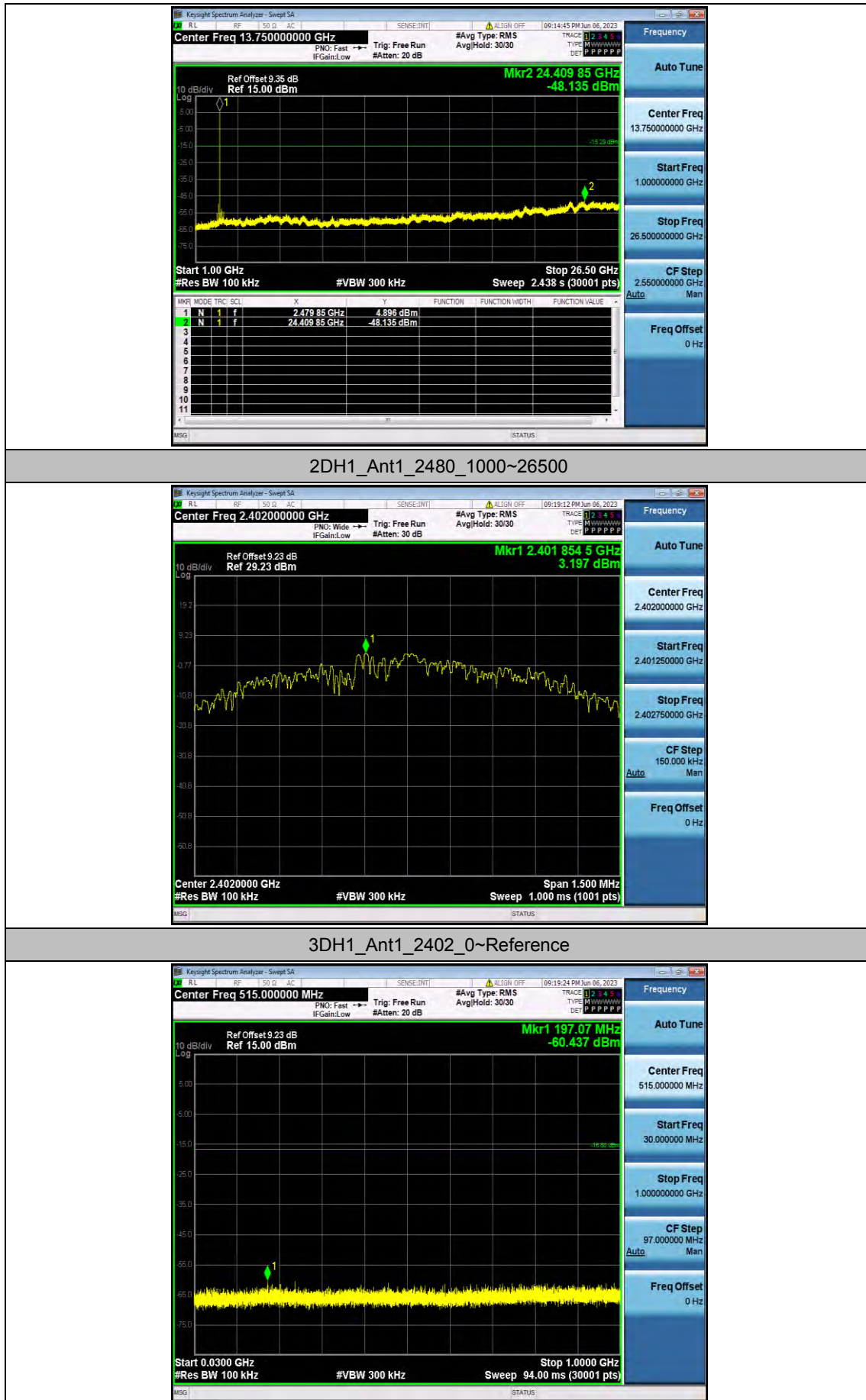
2DH1_Ant1_2441_1000~26500

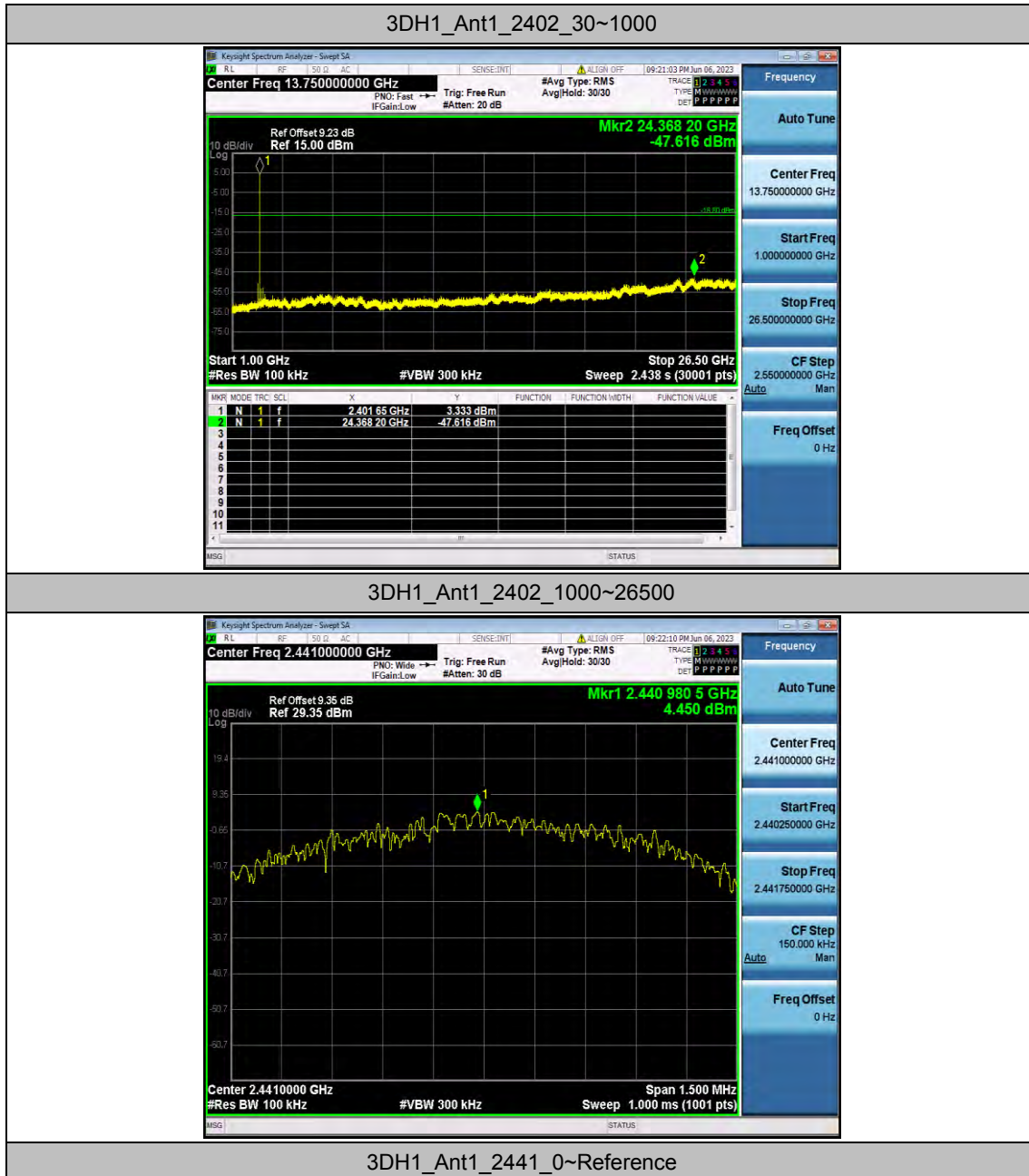


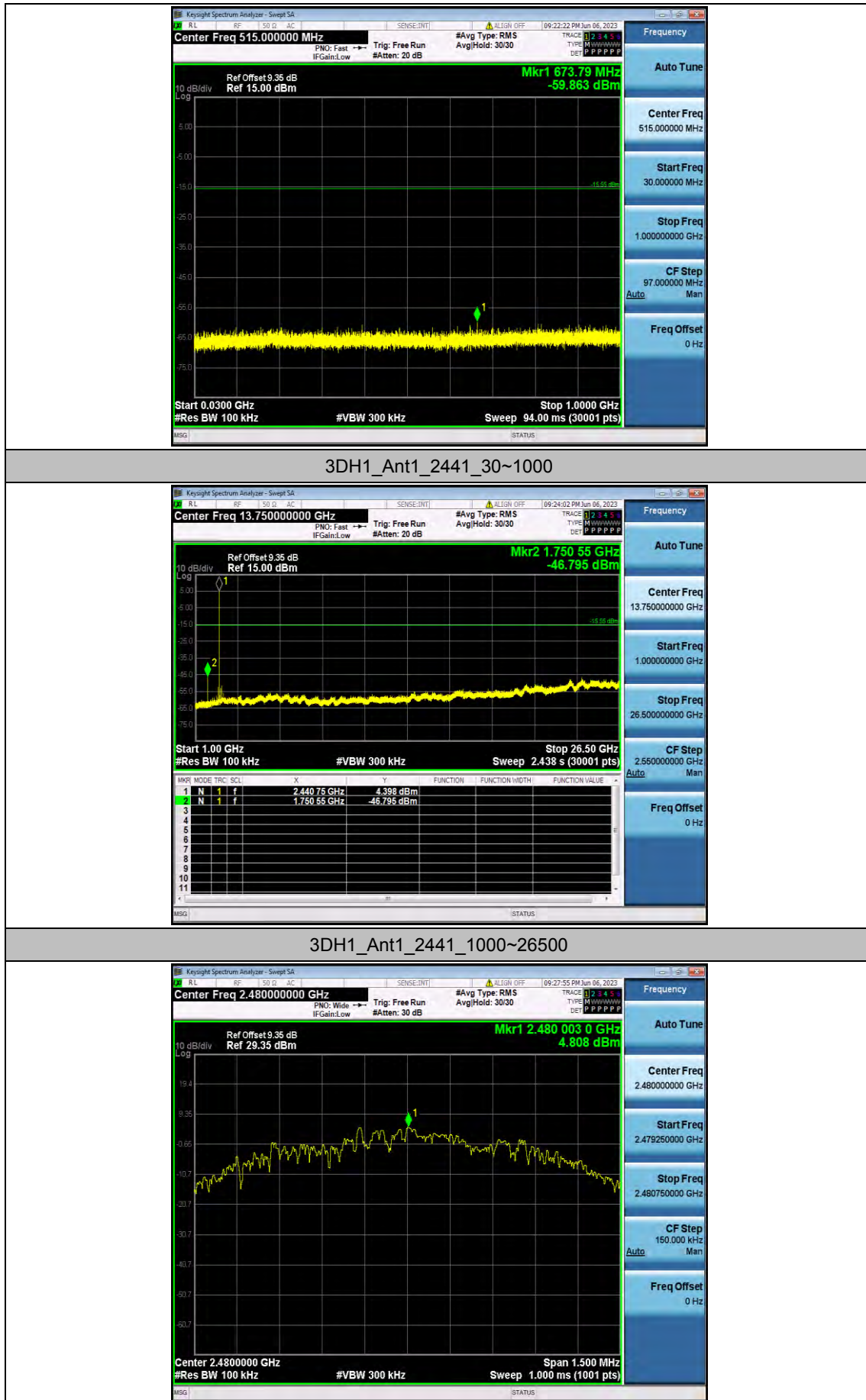
2DH1_Ant1_2480_0~Reference



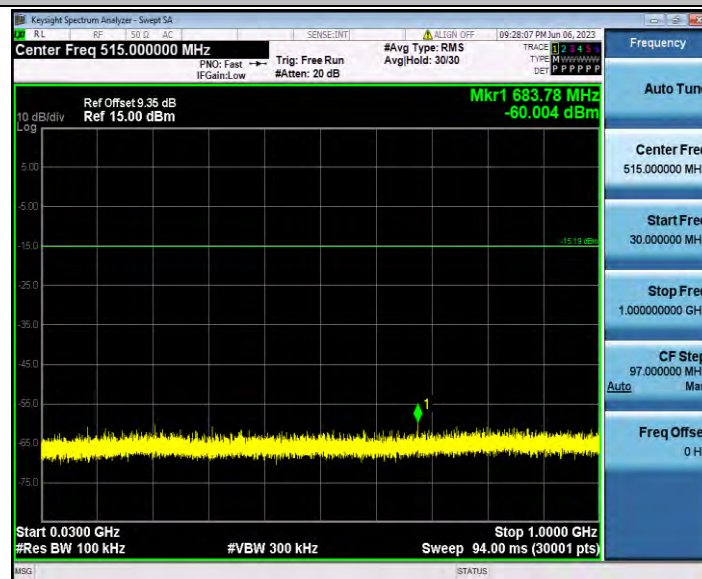
2DH1_Ant1_2480_30~1000







3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500