

Case No. : <u>GTS20230203009-1-30</u>	
Ambient Condition: <u>22</u> °C, <u>51</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.3.9</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	0.930	2401.532	2402.462	---	---
		2441	0.969	2440.502	2441.471	---	---
		2480	0.933	2479.508	2480.441	---	---
2DH1	Ant1	2402	1.365	2401.298	2402.663	---	---
		2441	1.368	2440.289	2441.657	---	---
		2480	1.359	2479.286	2480.645	---	---
3DH1	Ant1	2402	1.302	2401.346	2402.648	---	---
		2441	1.302	2440.310	2441.612	---	---
		2480	1.362	2479.274	2480.636	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



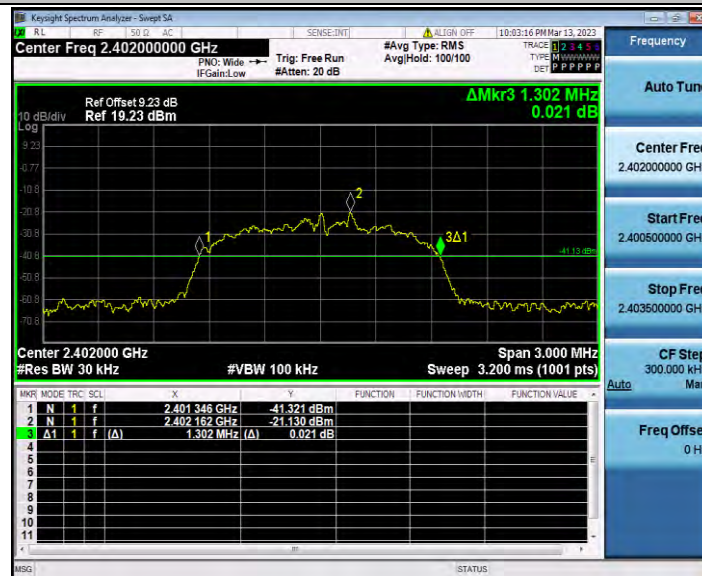
DH1_Ant1_2480



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441

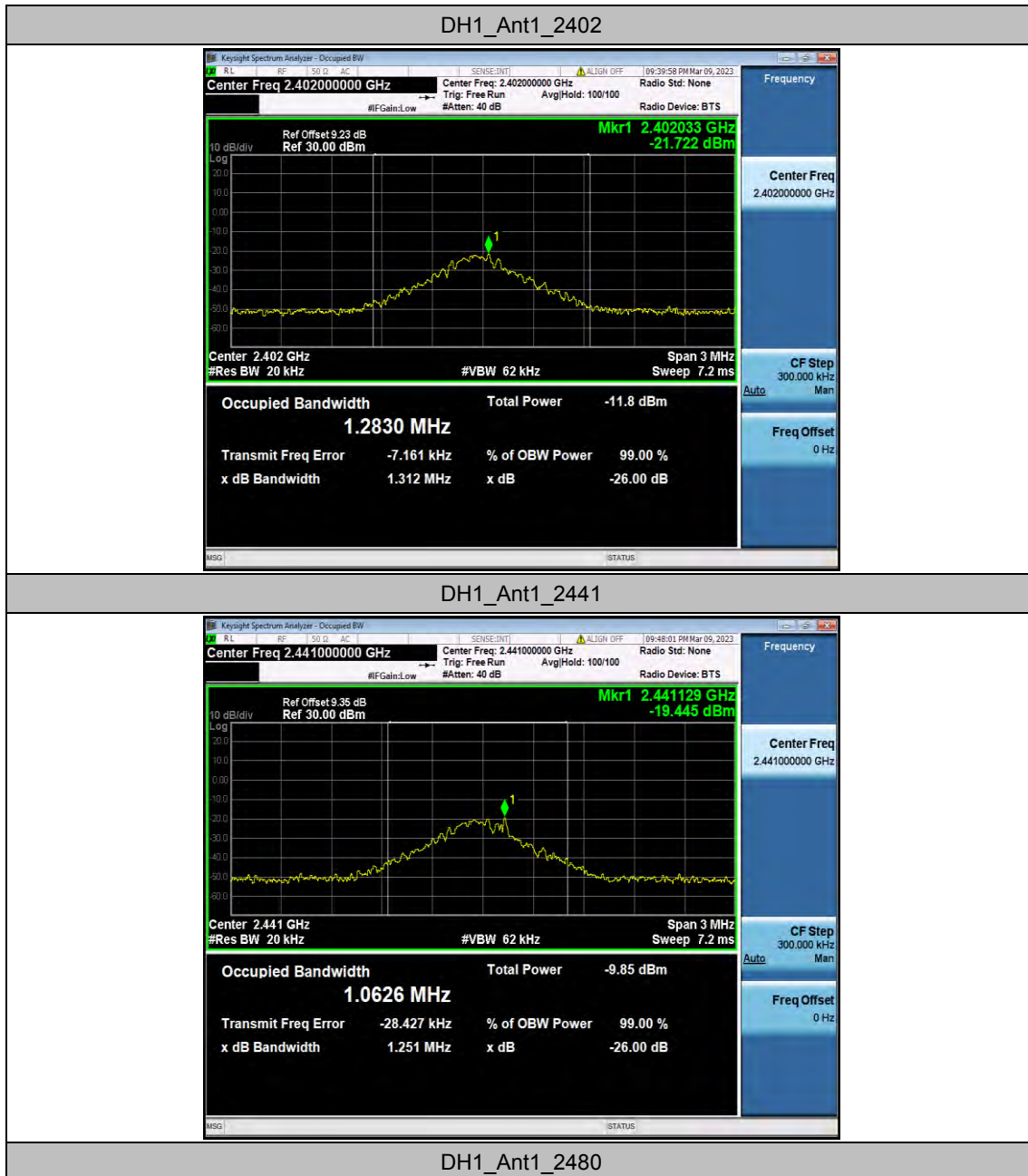


Appendix A.2: Occupied Channel Bandwidth

Test Result

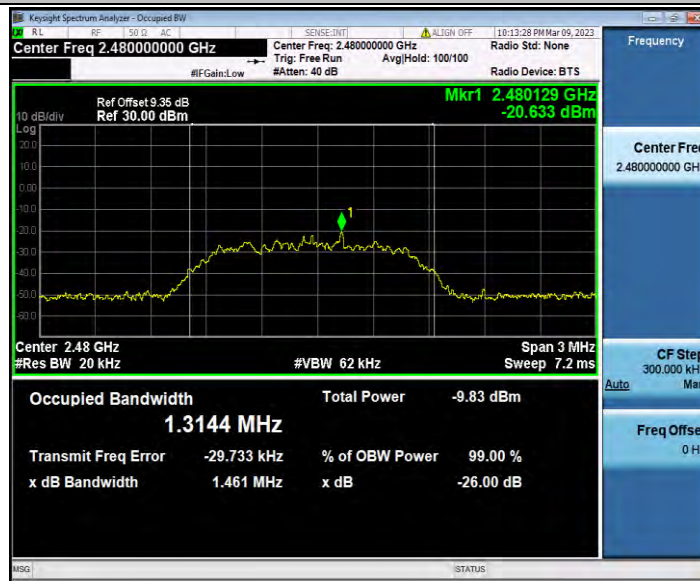
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	1.2830	2401.351	2402.634	---	---
		2441	1.0626	2440.440	2441.503	---	---
		2480	0.98096	2479.477	2480.458	---	---
2DH1	Ant1	2402	1.6561	2401.187	2402.843	---	---
		2441	1.3865	2440.299	2441.686	---	---
		2480	1.3144	2479.313	2480.627	---	---
3DH1	Ant1	2402	1.3416	2401.335	2402.677	---	---
		2441	1.3475	2440.297	2441.644	---	---
		2480	1.2899	2479.317	2480.607	---	---

Test Graphs

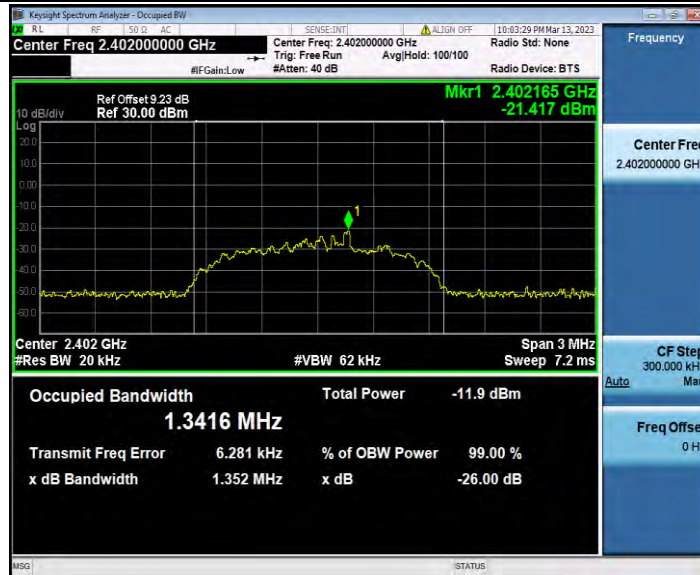




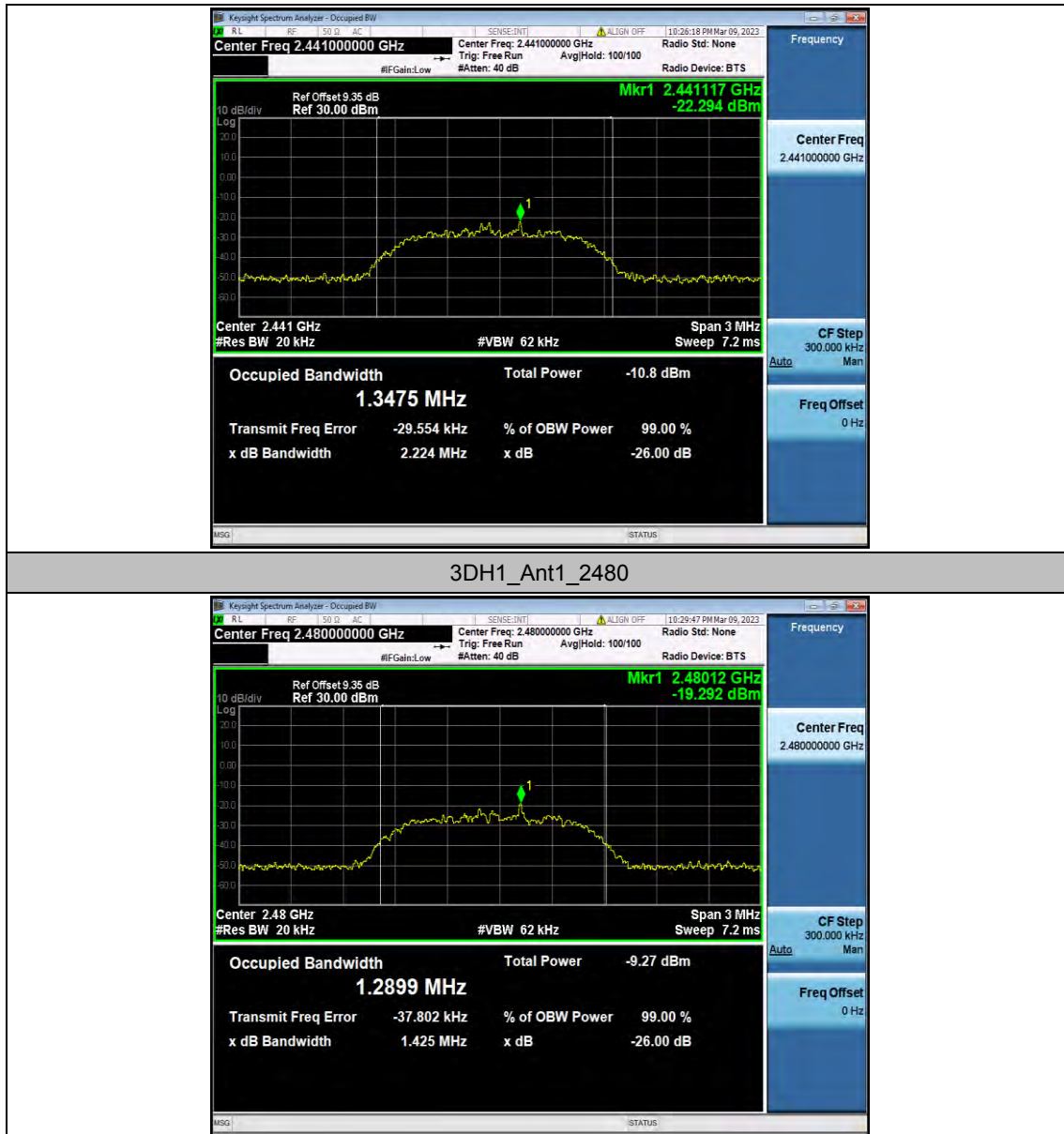
2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



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	-12.67	≤30.00	PASS
		2441	-12.39	≤30.00	PASS
		2480	-12.86	≤30.00	PASS
2DH1	Ant1	2402	-12.62	≤20.97	PASS
		2441	-12.63	≤20.97	PASS
		2480	-12.16	≤20.97	PASS
3DH1	Ant1	2402	-12.51	≤20.97	PASS
		2441	-12.71	≤20.97	PASS
		2480	-12.15	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.992	≥ 0.969	PASS
		Hop_2441	0.998	≥ 0.969	PASS
		Hop_2480	1.016	≥ 0.969	PASS
2DH1	Ant1	Hop_2402	1.006	≥ 0.912	PASS
		Hop_2441	0.994	≥ 0.912	PASS
		Hop_2480	0.958	≥ 0.912	PASS
3DH1	Ant1	Hop_2402	0.952	≥ 0.908	PASS
		Hop_2441	1.002	≥ 0.908	PASS
		Hop_2480	1.002	≥ 0.908	PASS

Test Graphs

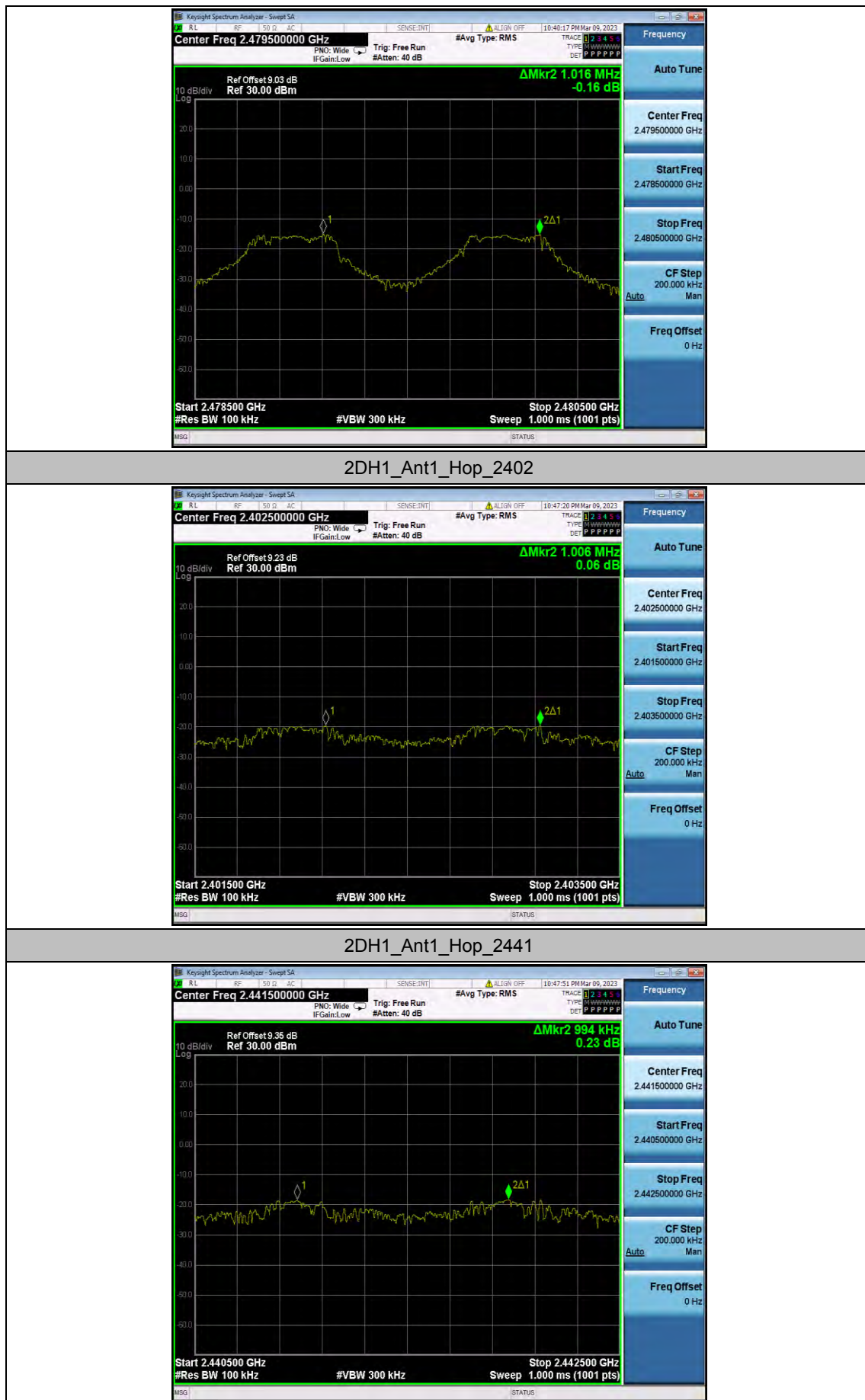
DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



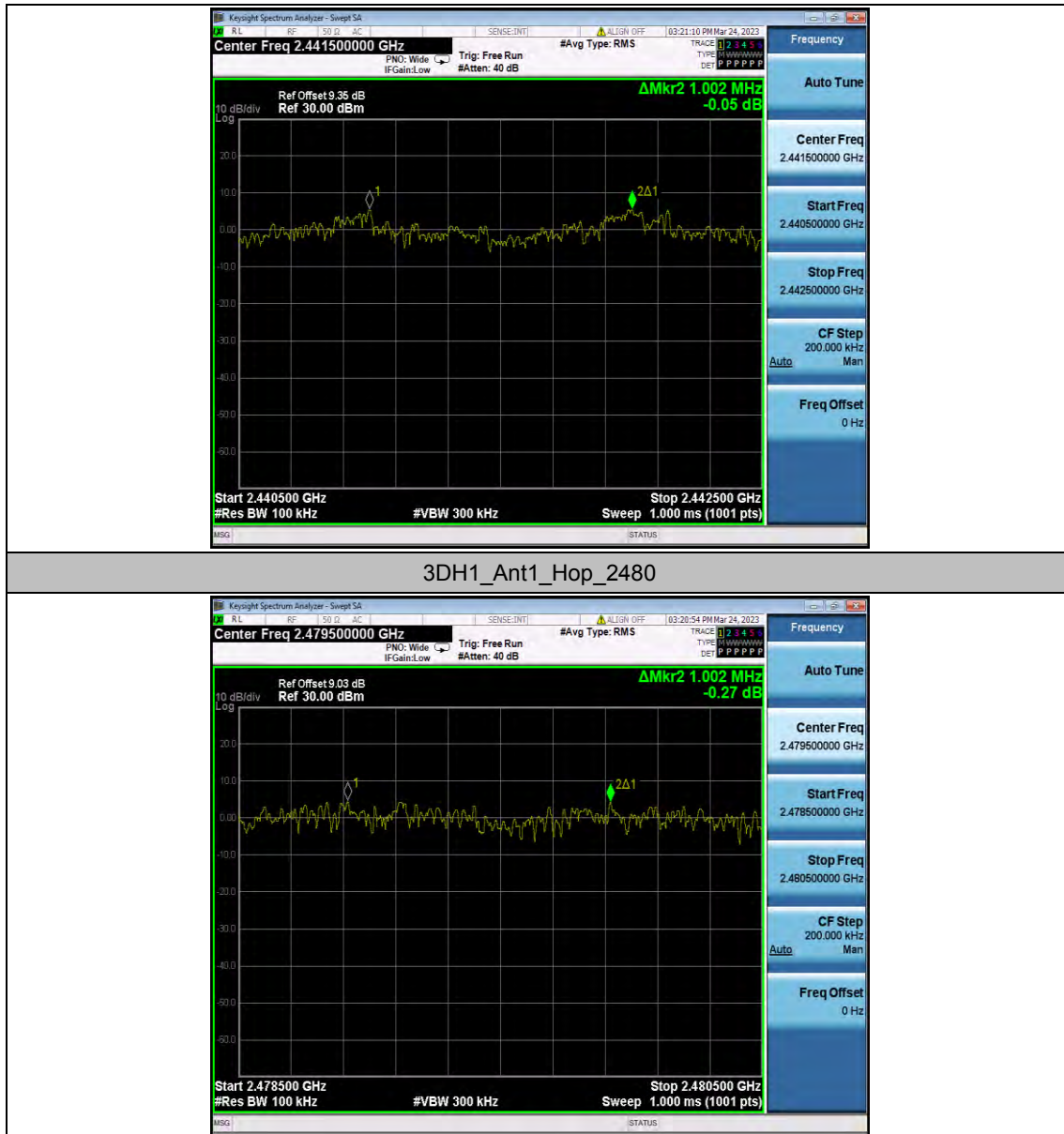
2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

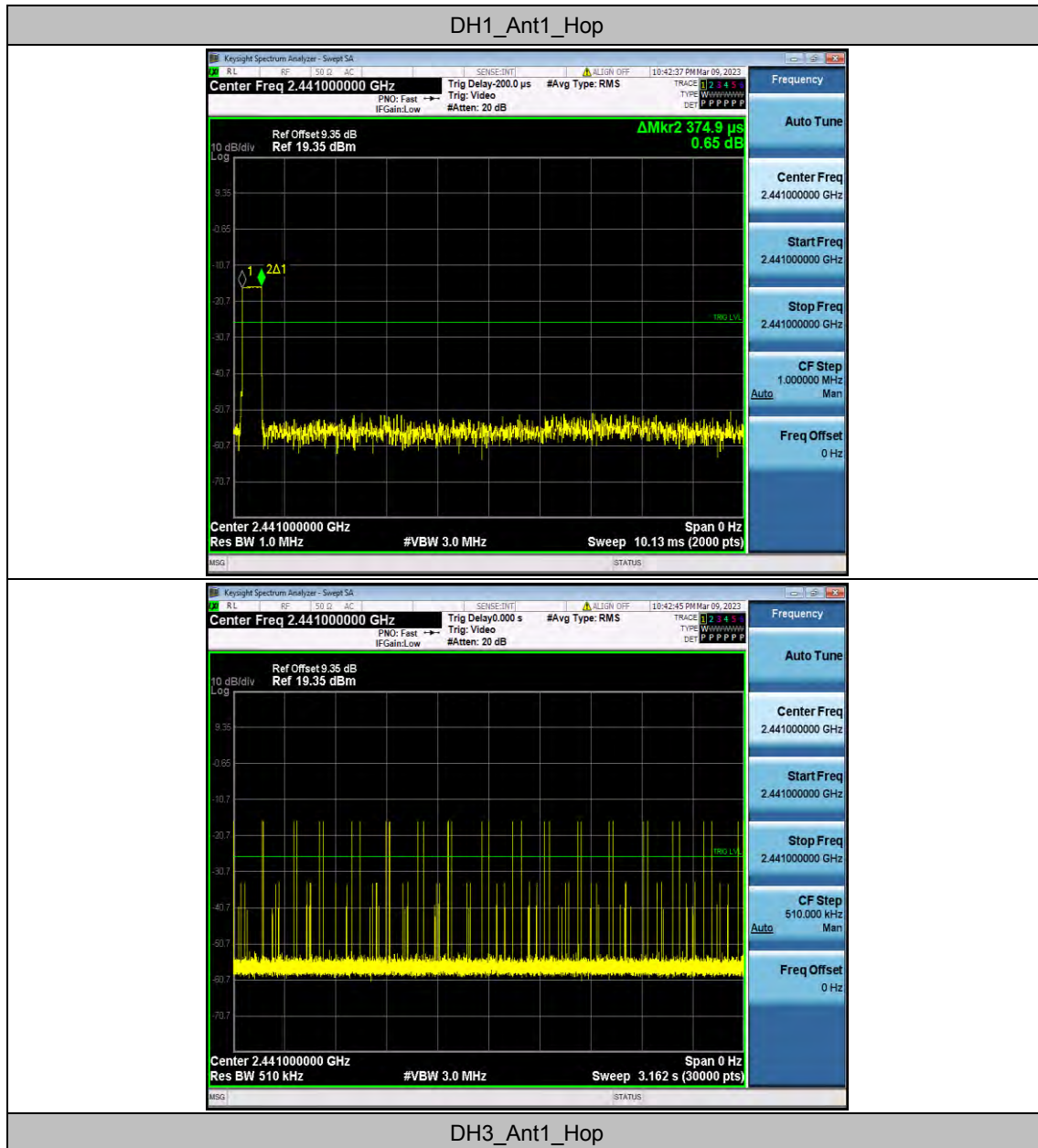


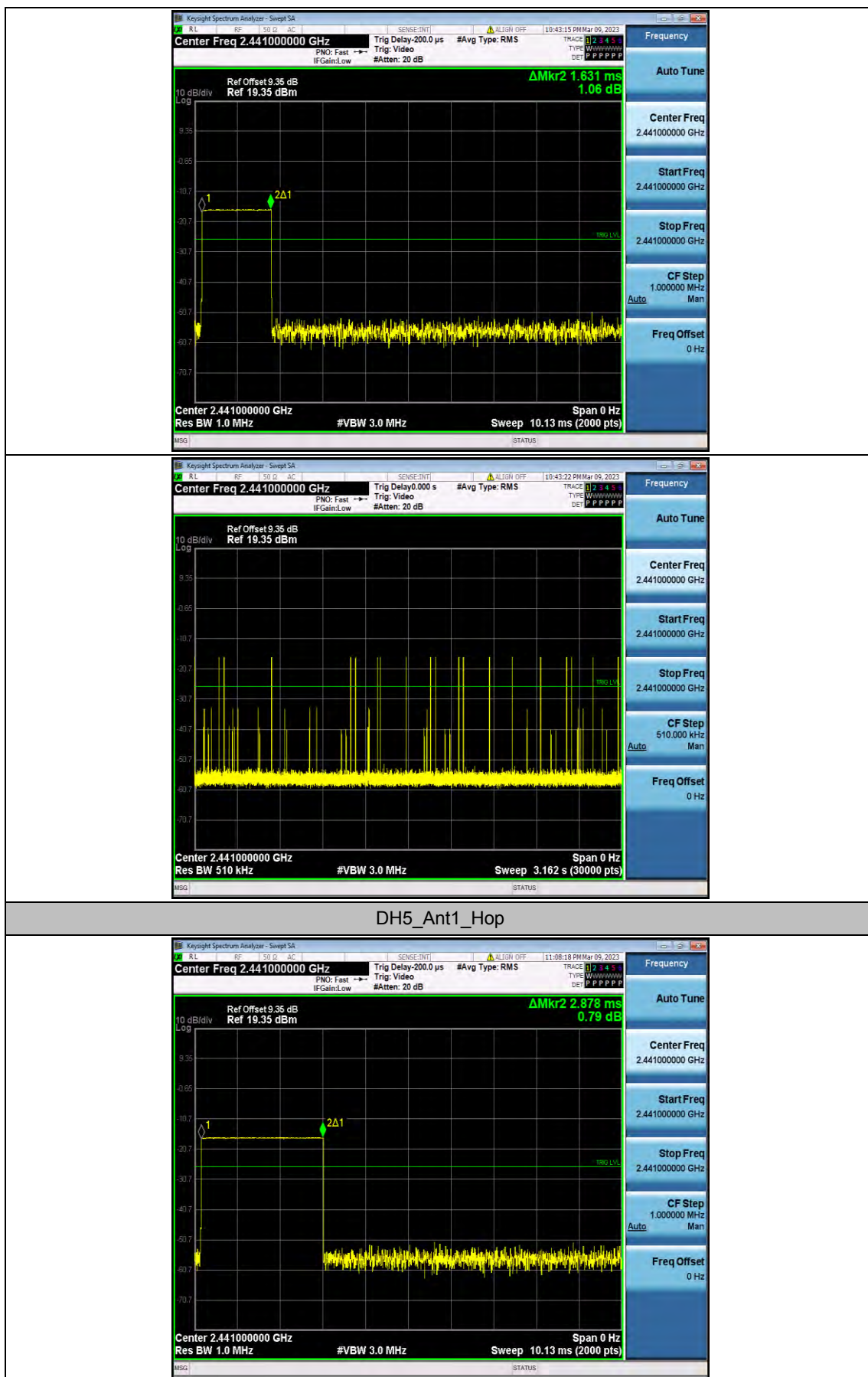
Appendix A.5: Time of occupancy

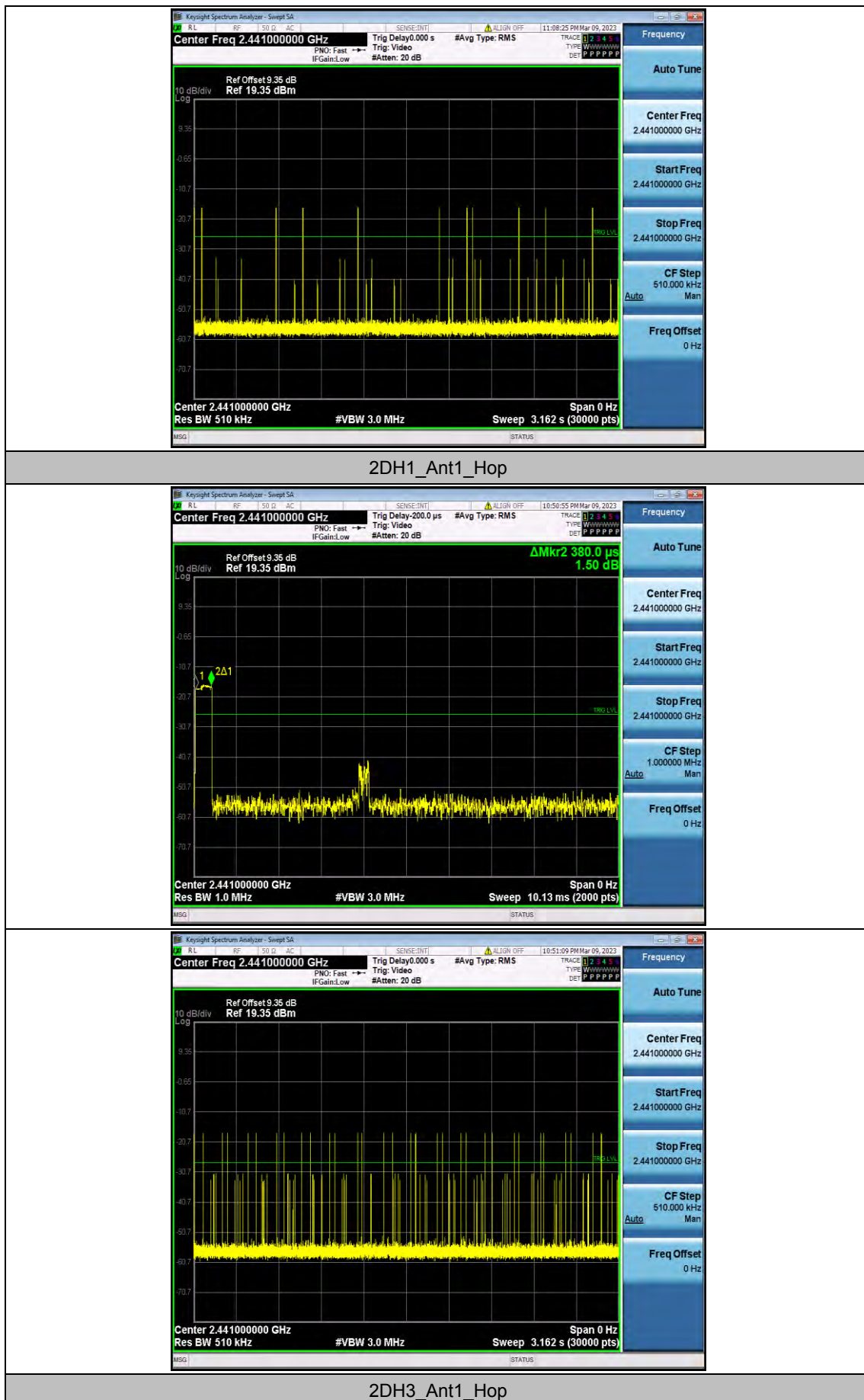
Test Result

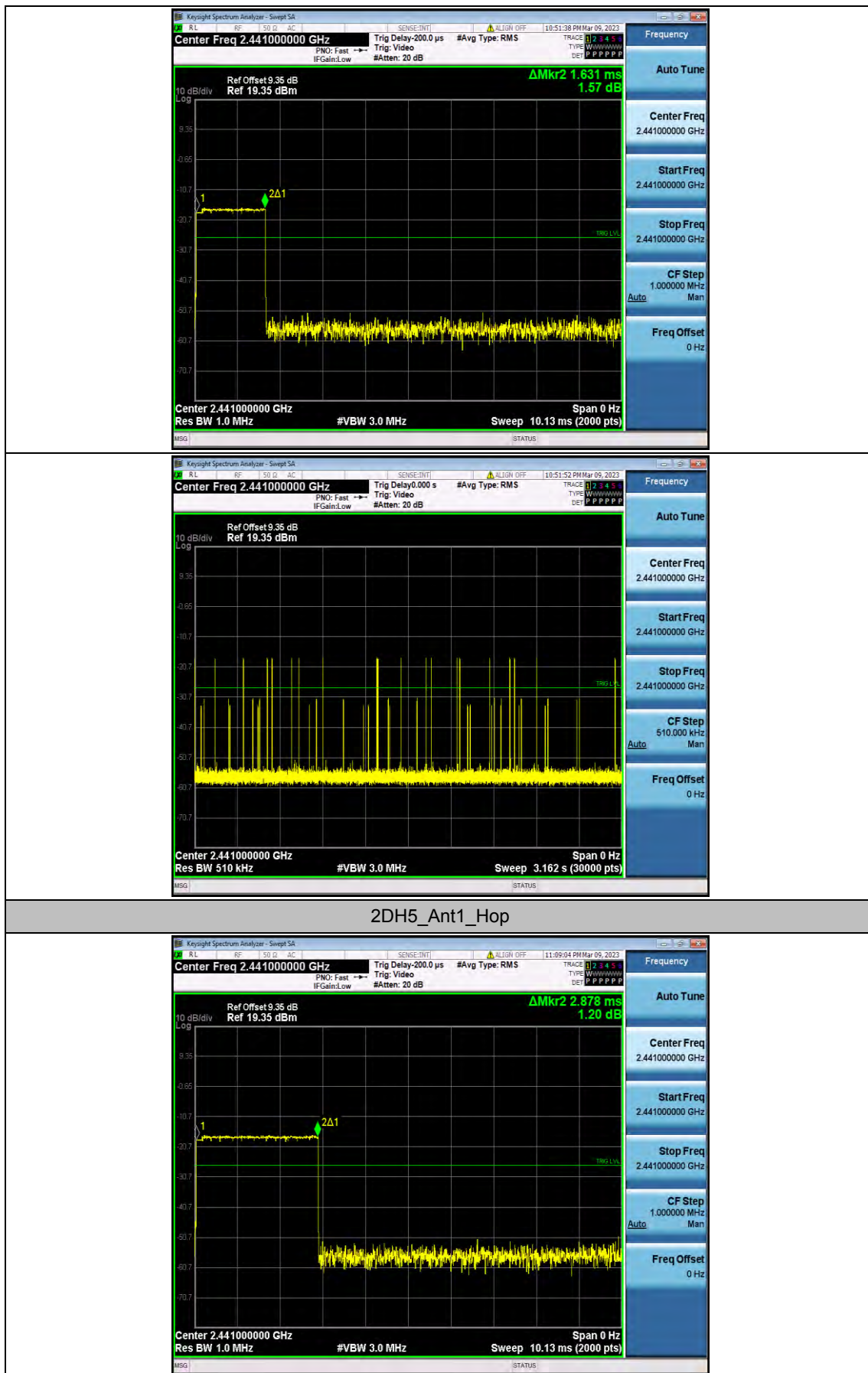
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.63	200	0.326	≤0.4	PASS
DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	200	0.326	≤0.4	PASS
2DH5	Ant1	Hop	2.88	120	0.345	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.63	170	0.277	≤0.4	PASS
3DH5	Ant1	Hop	2.88	100	0.288	≤0.4	PASS

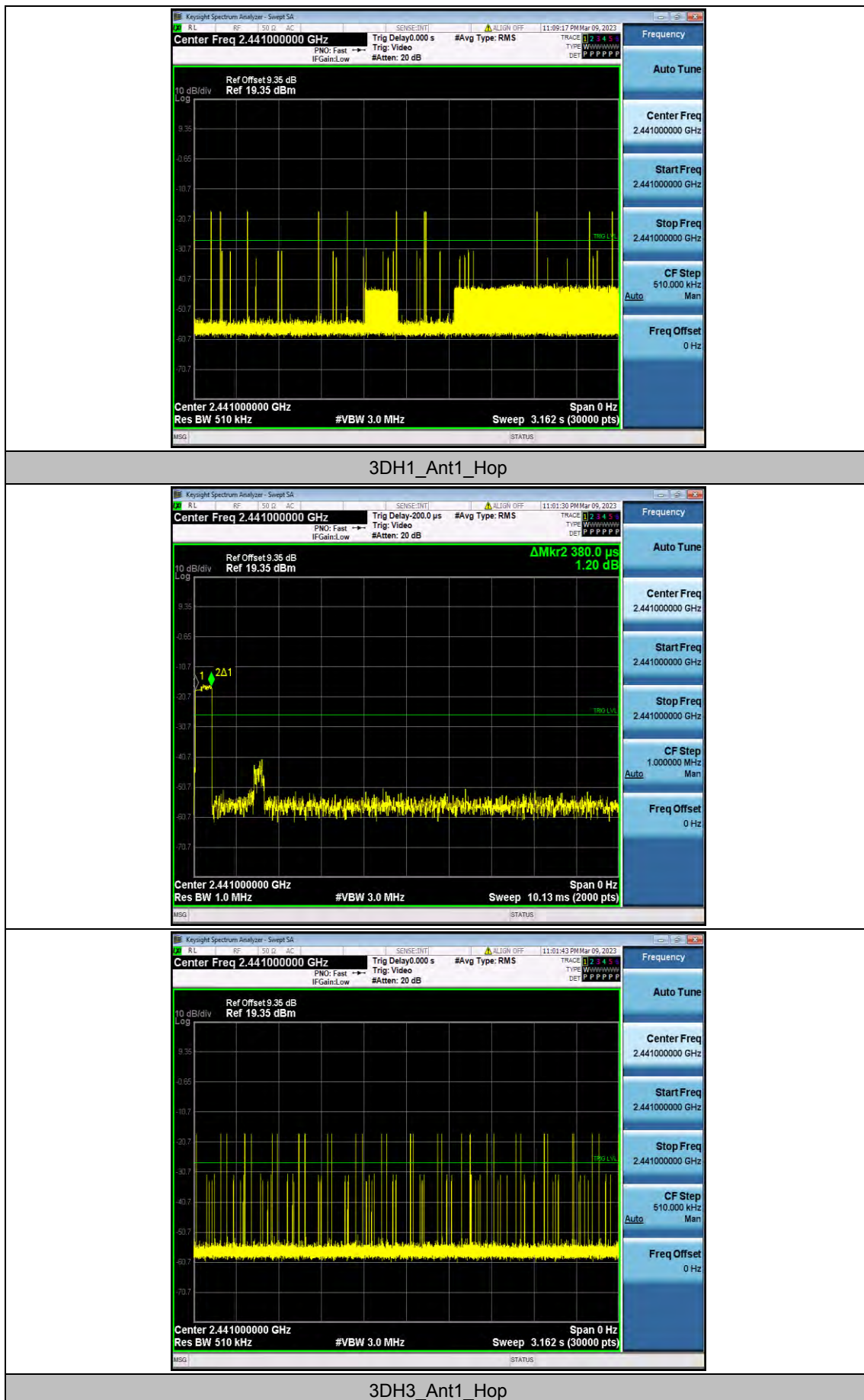
Test Graphs

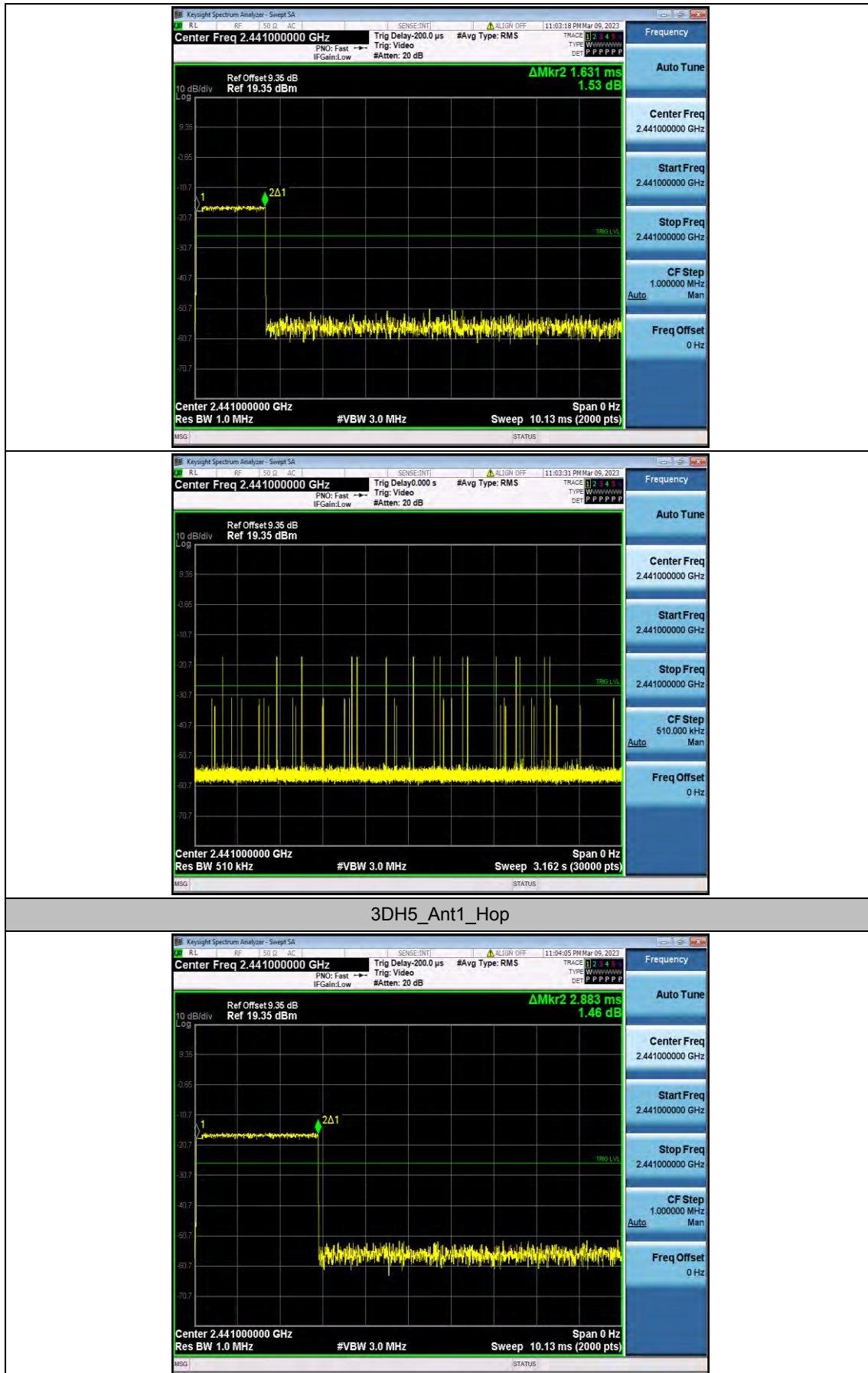


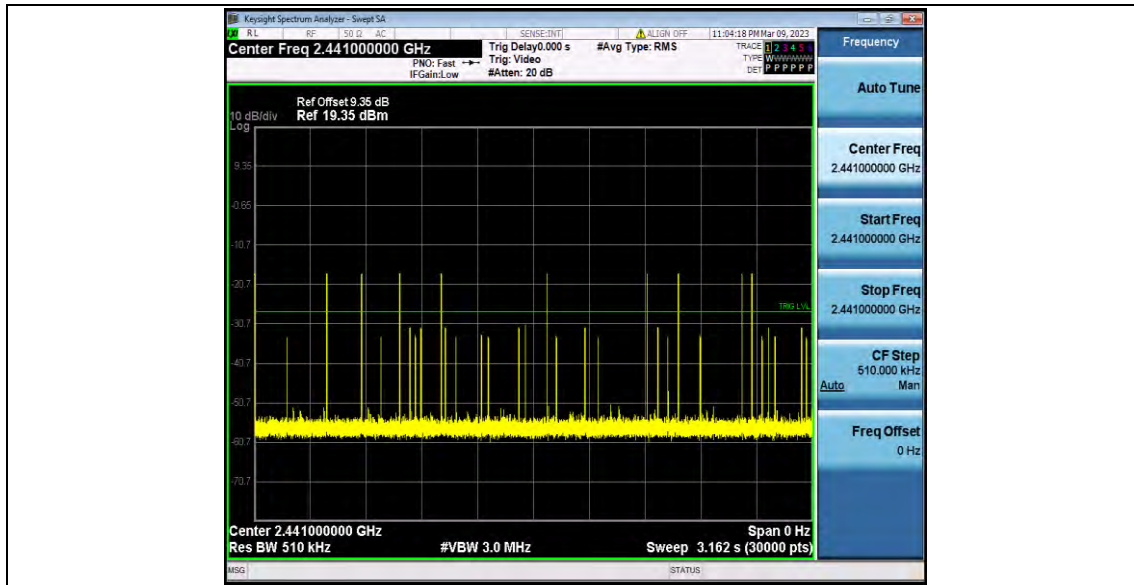










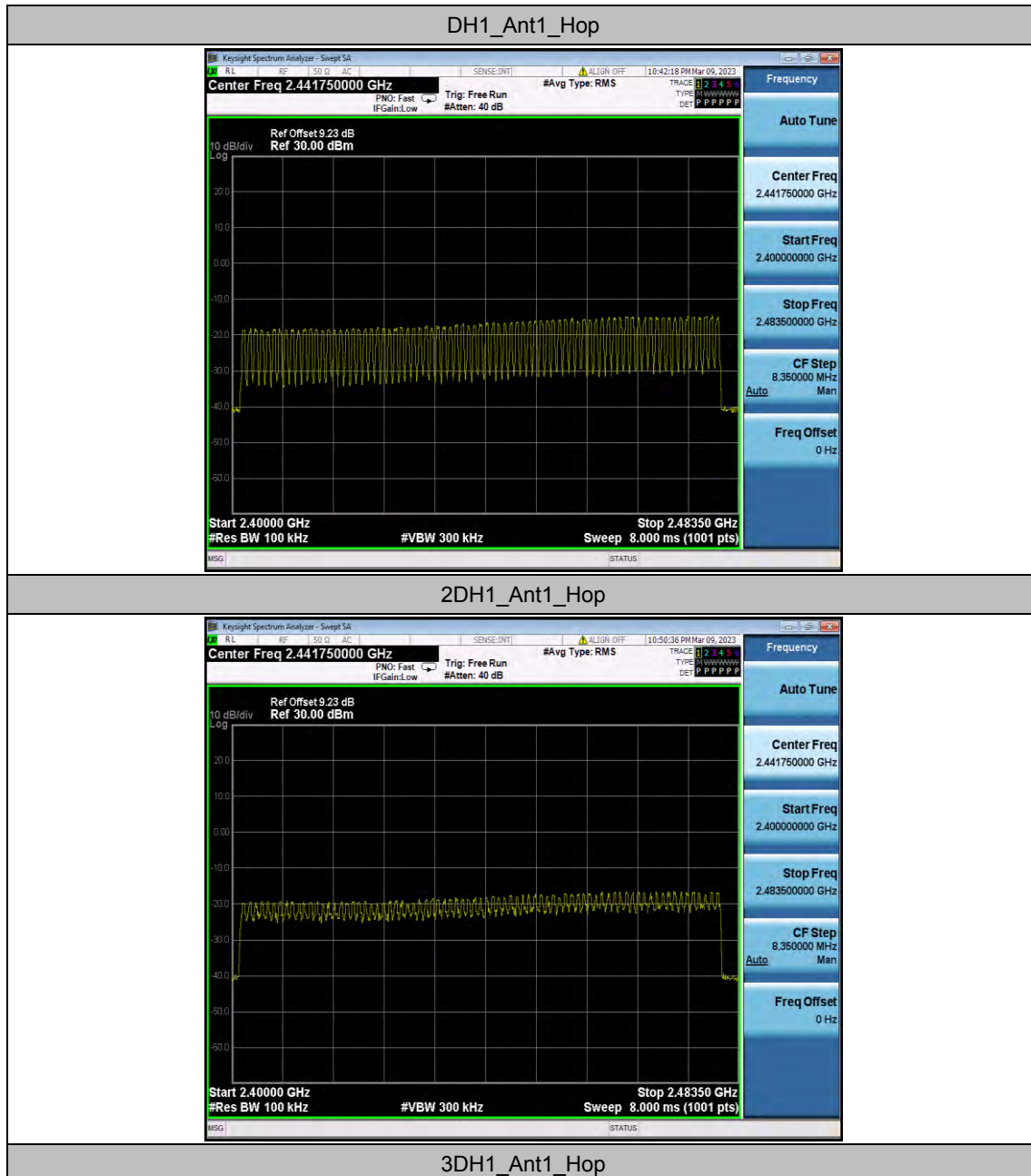


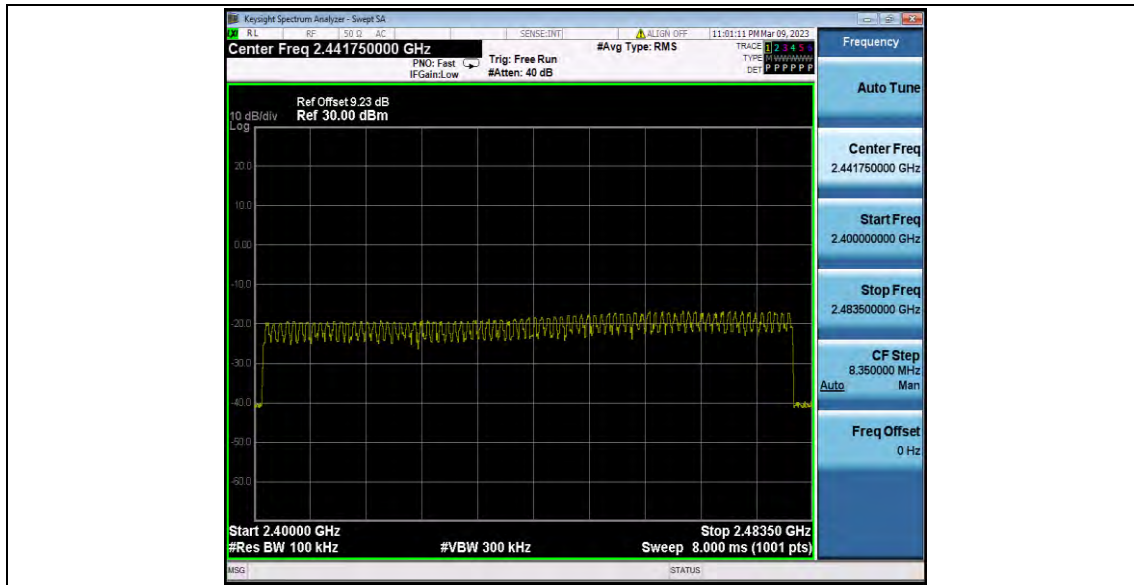
Appendix A.6: Number of hopping channels

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





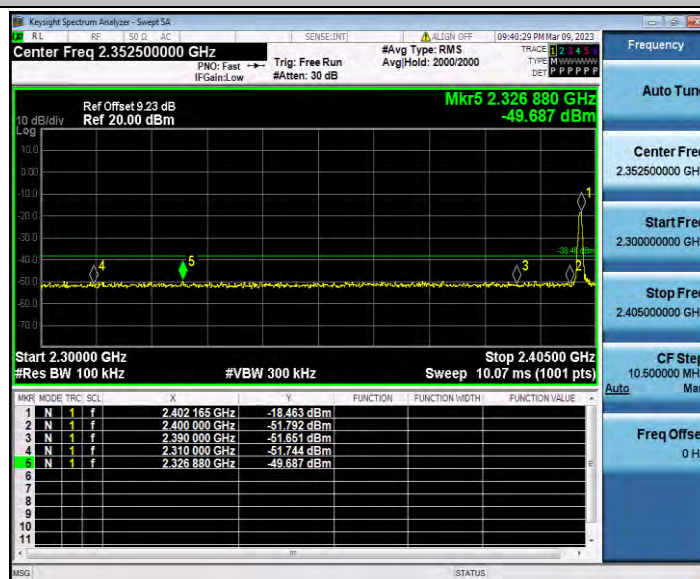
Appendix A.7: Band edge measurements

Test Result

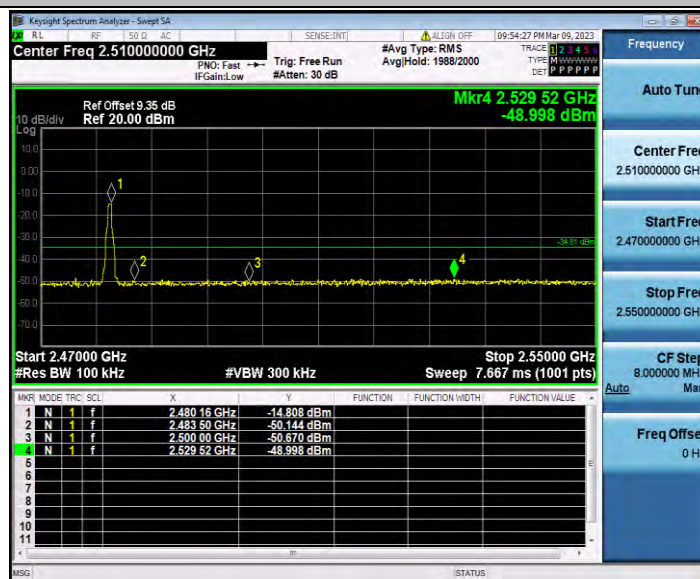
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	-18.46	-49.69	≤ -38.46	PASS
		High	2480	-14.81	-49	≤ -34.81	PASS
		Low	Hop_2402	-18.45	-49.79	≤ -38.45	PASS
		High	Hop_2480	-16.54	-48.32	≤ -36.54	PASS
2DH1	Ant1	Low	2402	-19.35	-48.78	≤ -39.35	PASS
		High	2480	-16.76	-48.64	≤ -36.76	PASS
		Low	Hop_2402	-19.69	-49.46	≤ -39.69	PASS
		High	Hop_2480	-16.81	-48.66	≤ -36.81	PASS
3DH1	Ant1	Low	2402	-17.28	-48.38	≤ -37.28	PASS
		High	2480	-16.68	-48.3	≤ -36.68	PASS
		Low	Hop_2402	-19.72	-49.59	≤ -39.72	PASS
		High	Hop_2480	-16.84	-48.67	≤ -36.84	PASS

Test Graphs

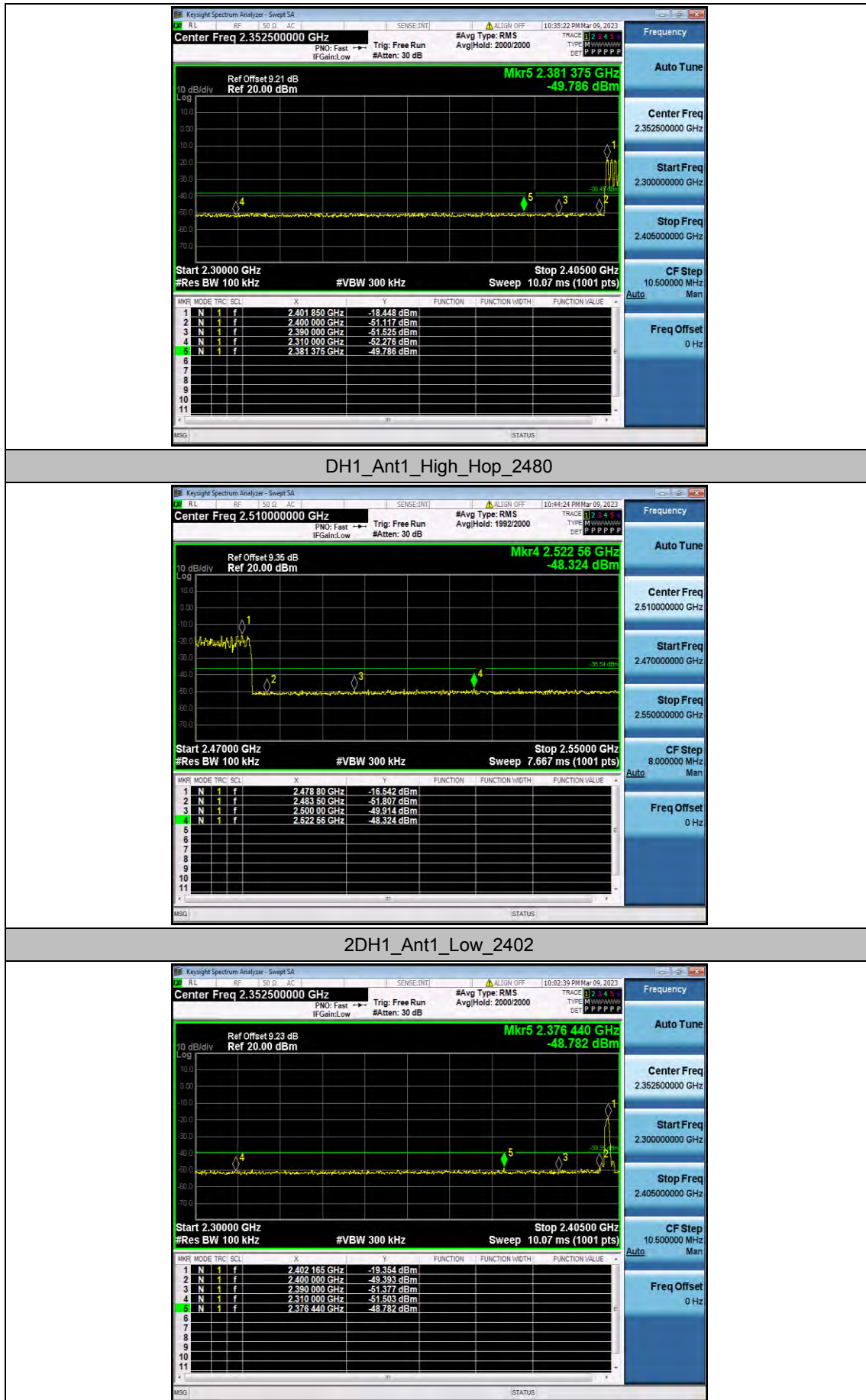
DH1_Ant1_Low_2402



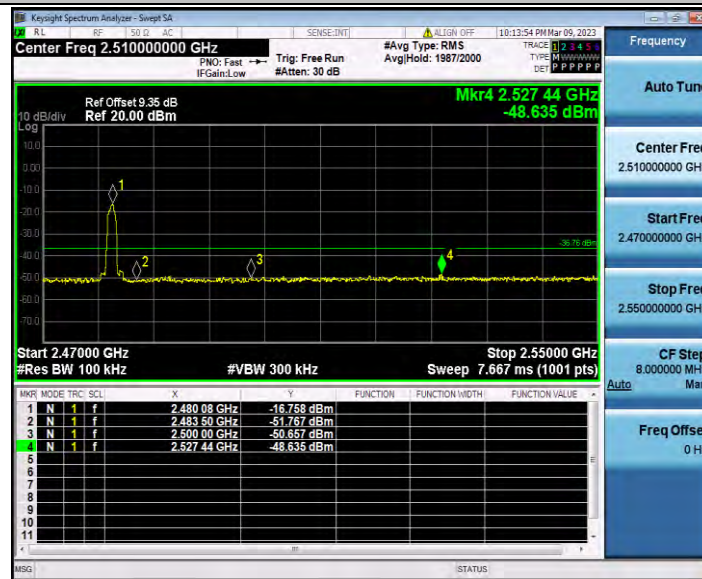
DH1_Ant1_High_2480



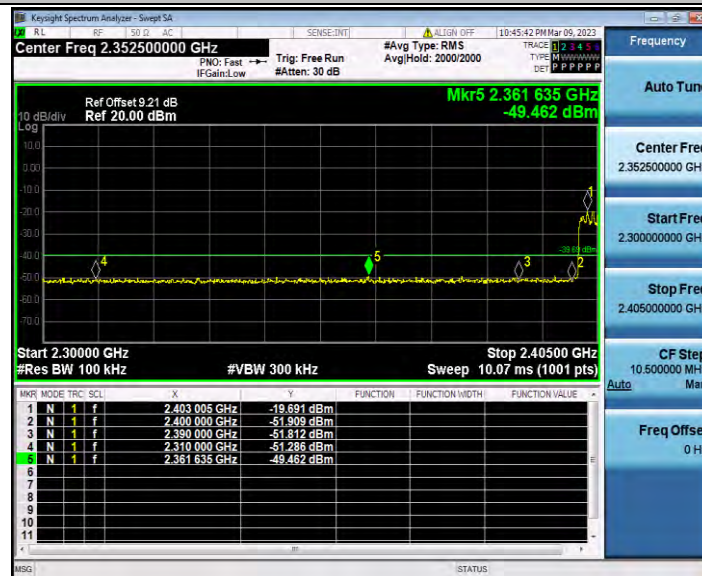
DH1_Ant1_Low_Hop_2402



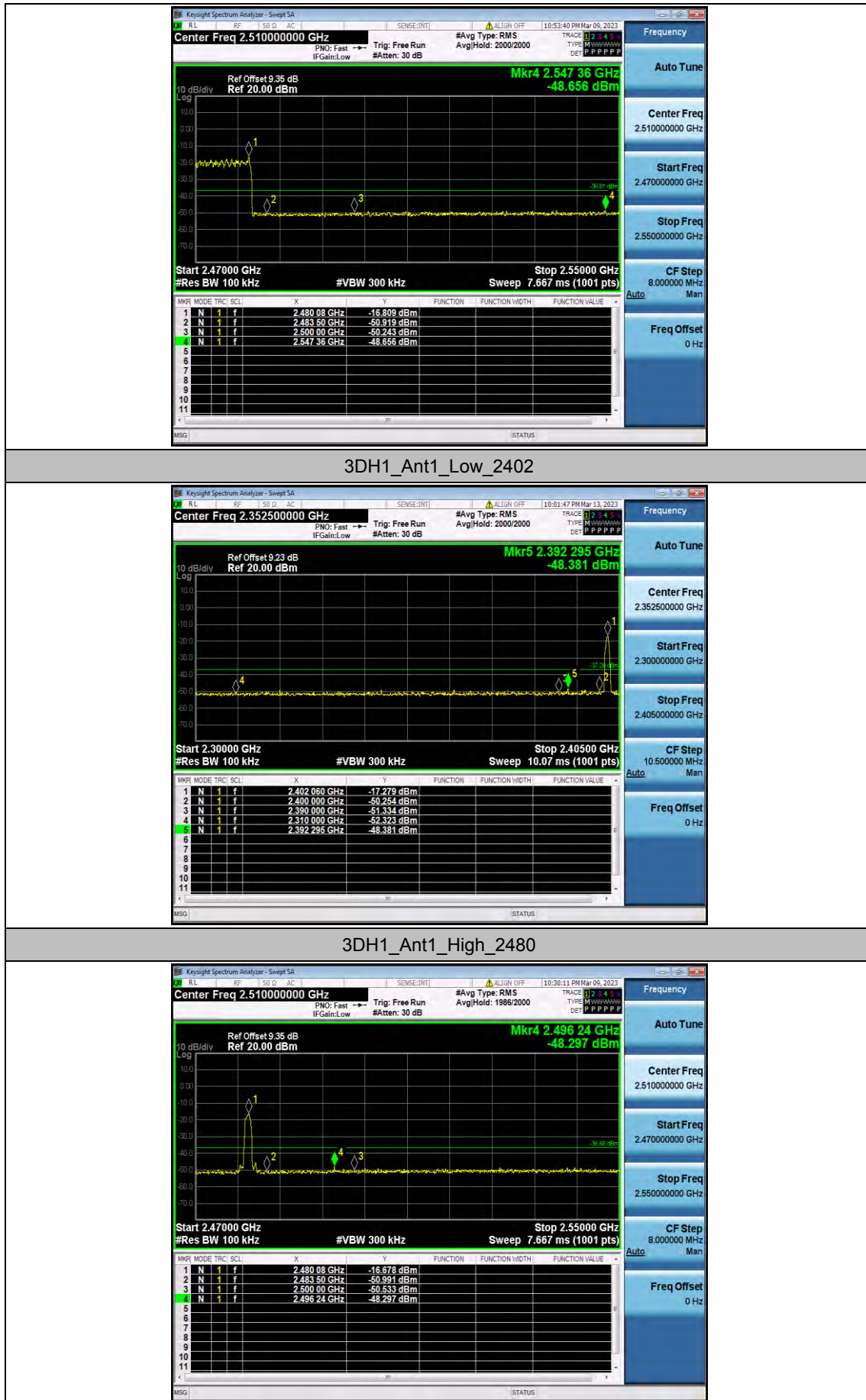
2DH1_Ant1_High_2480



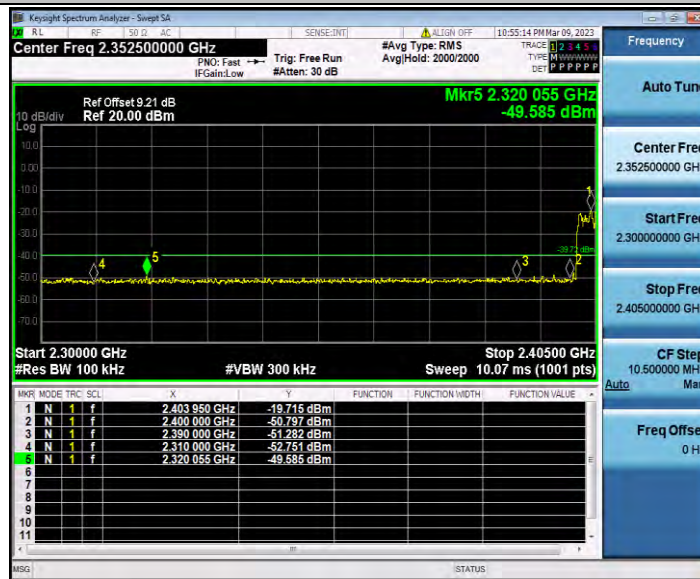
2DH1_Ant1_Low_Hop_2402



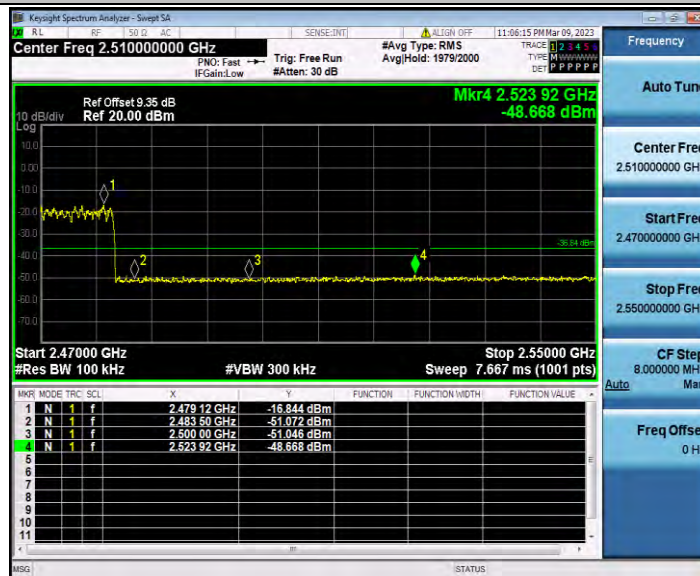
2DH1_Ant1_High_Hop_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

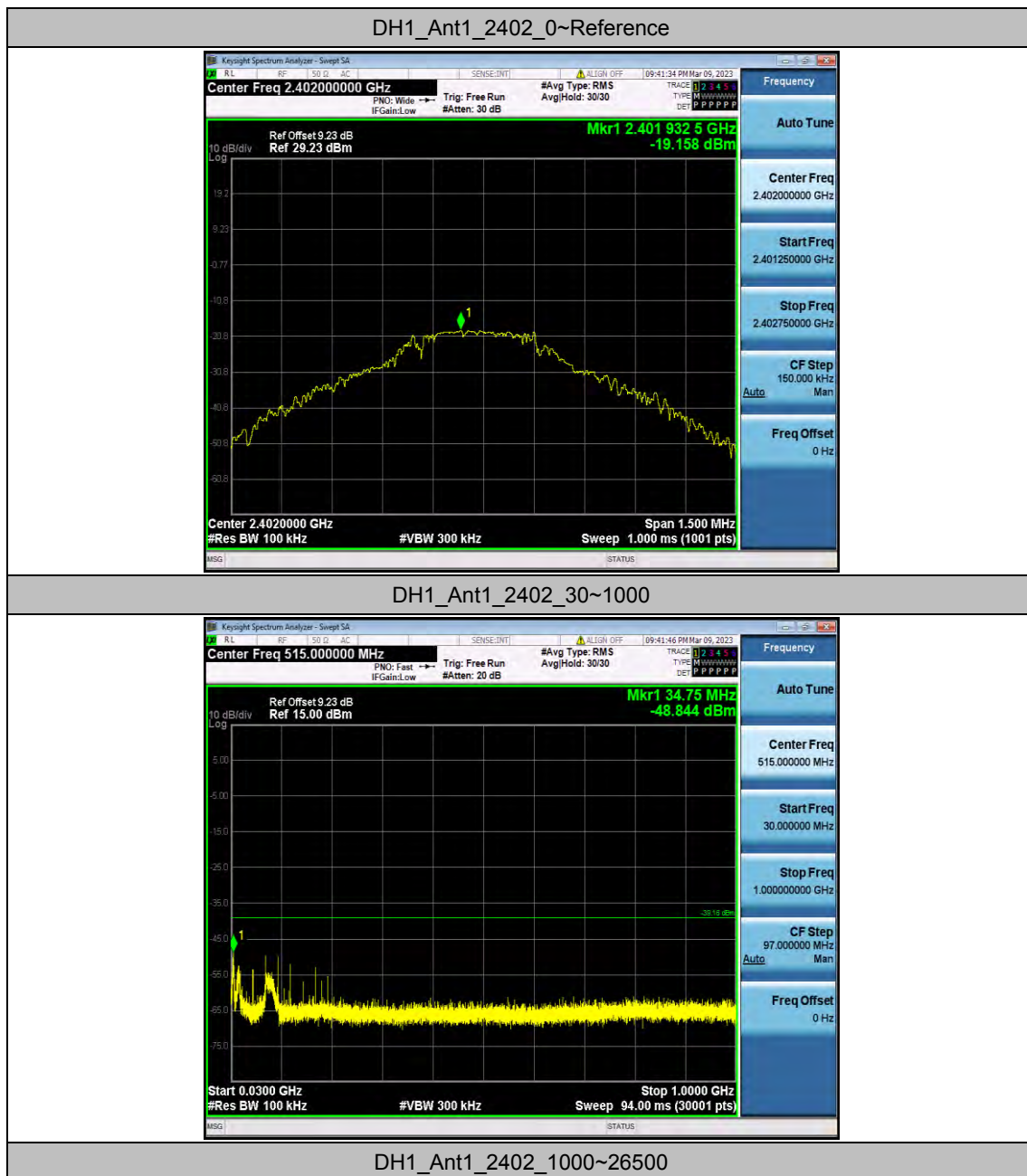


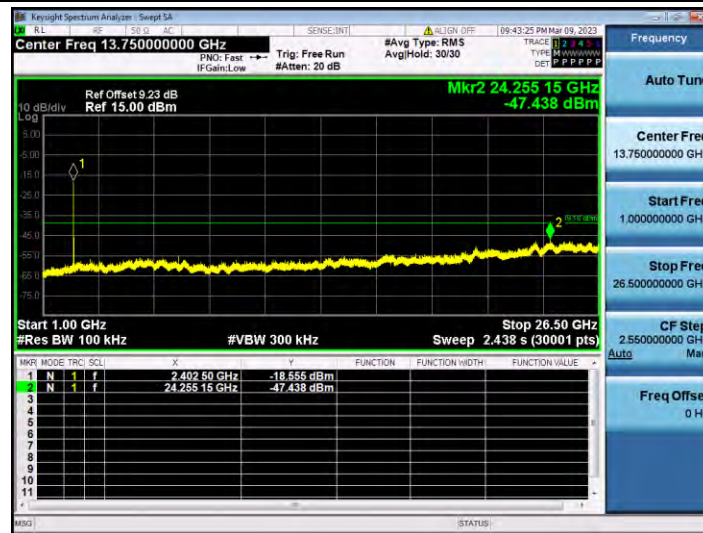
Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	-19.16	-19.16	---	PASS
			30~1000	-19.16	-48.84	≤ -39.16	PASS
			1000~26500	-19.16	-47.44	≤ -39.16	PASS
		2441	Reference	-17.34	-17.34	---	PASS
			30~1000	-17.34	-49.86	≤ -37.34	PASS
			1000~26500	-17.34	-47.9	≤ -37.34	PASS
		2480	Reference	-15.51	-15.51	---	PASS
			30~1000	-15.51	-49.73	≤ -35.51	PASS
			1000~26500	-15.51	-47.57	≤ -35.51	PASS
2DH1	Ant1	2402	Reference	-20.04	-20.04	---	PASS
			30~1000	-20.04	-51.48	≤ -40.04	PASS
			1000~26500	-20.04	-47.74	≤ -40.04	PASS
		2441	Reference	-16.56	-16.56	---	PASS
			30~1000	-16.56	-60.24	≤ -36.56	PASS
			1000~26500	-16.56	-47.74	≤ -36.56	PASS
		2480	Reference	-16.90	-16.90	---	PASS
			30~1000	-16.90	-49.43	≤ -36.9	PASS
			1000~26500	-16.90	-47.42	≤ -36.9	PASS
3DH1	Ant1	2402	Reference	-17.74	-17.74	---	PASS
			30~1000	-17.74	-59.27	≤ -37.74	PASS
			1000~26500	-17.74	-47.58	≤ -37.74	PASS
		2441	Reference	-16.19	-16.19	---	PASS
			30~1000	-16.19	-60.52	≤ -36.19	PASS
			1000~26500	-16.19	-47.76	≤ -36.19	PASS
		2480	Reference	-17.38	-17.38	---	PASS
			30~1000	-17.38	-50.27	≤ -37.38	PASS
			1000~26500	-17.38	-47.09	≤ -37.38	PASS

Test Graphs

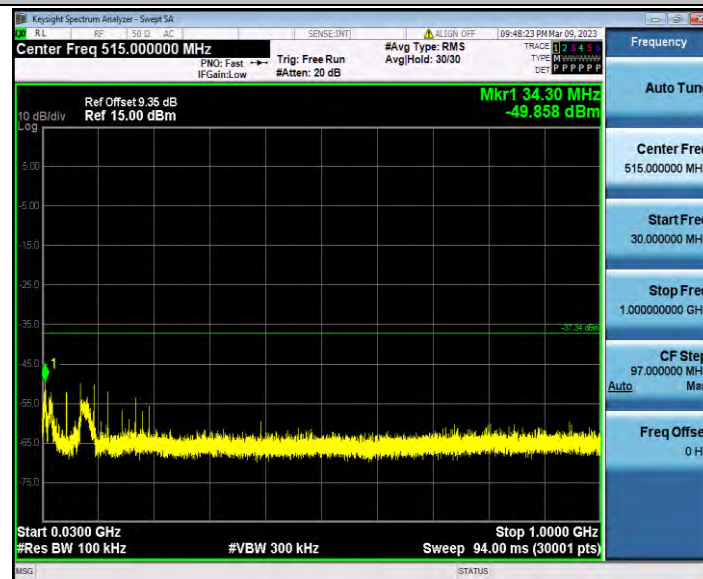




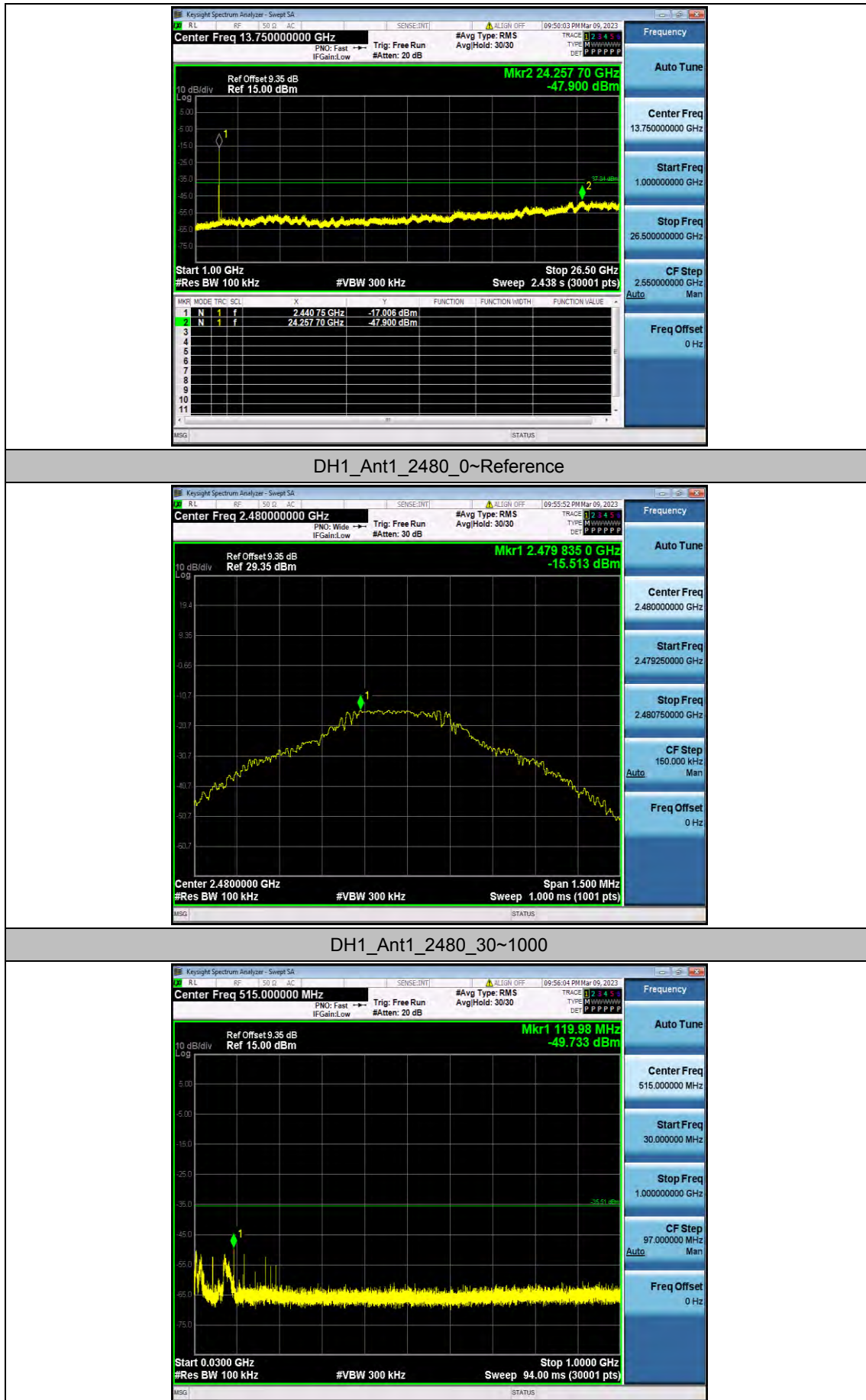
DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



DH1_Ant1_2441_1000~26500



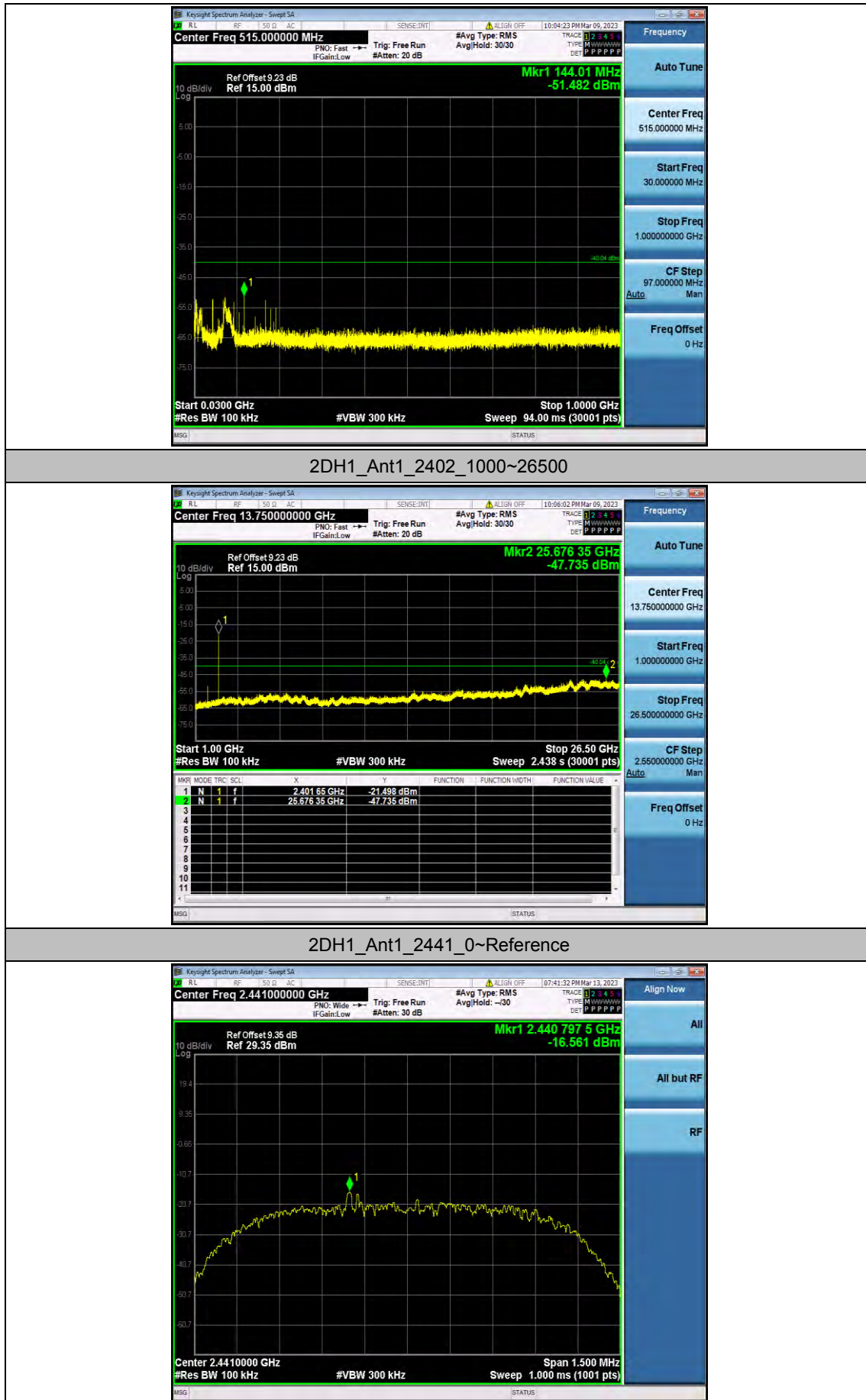
DH1_Ant1_2480_1000~26500

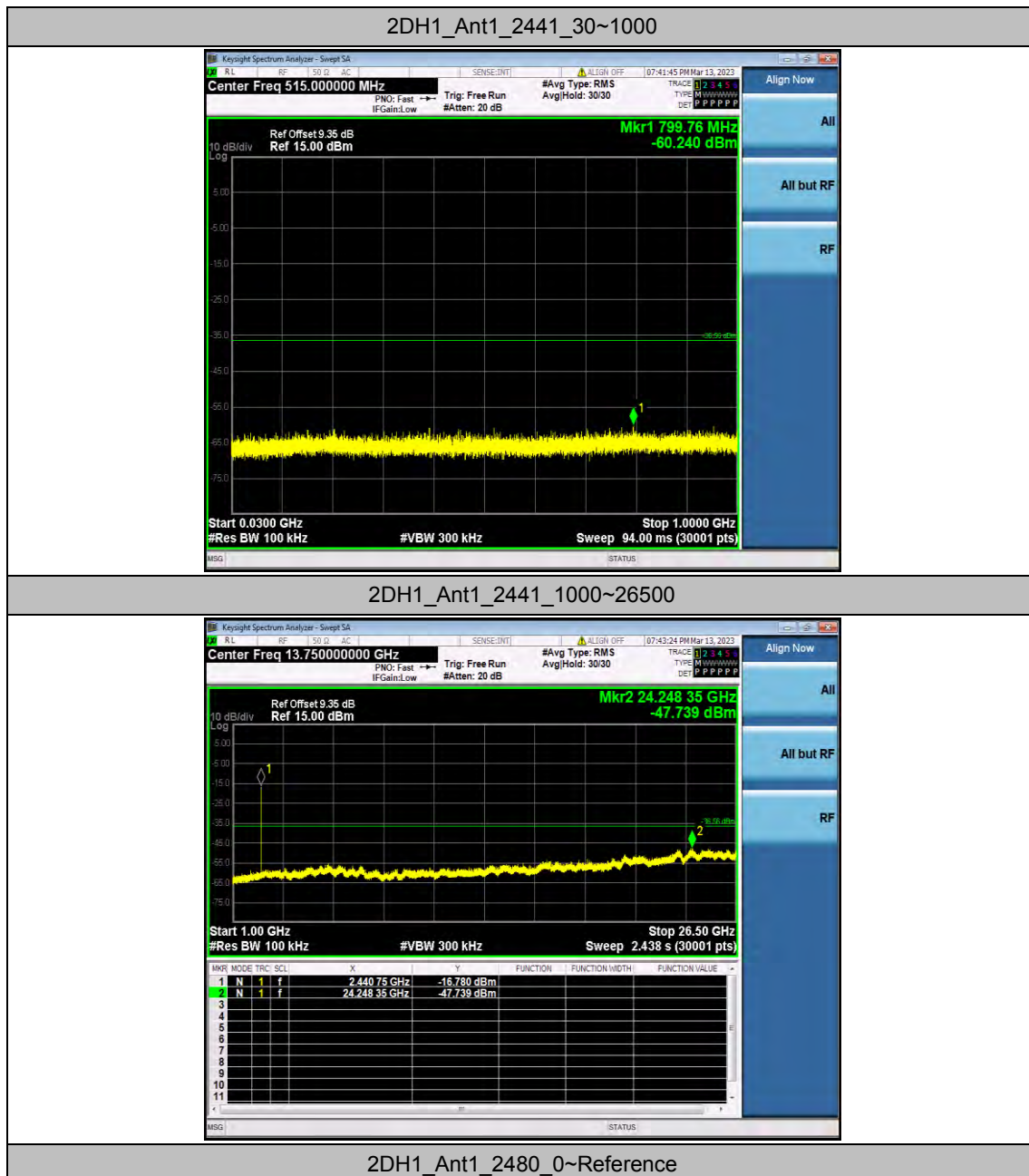


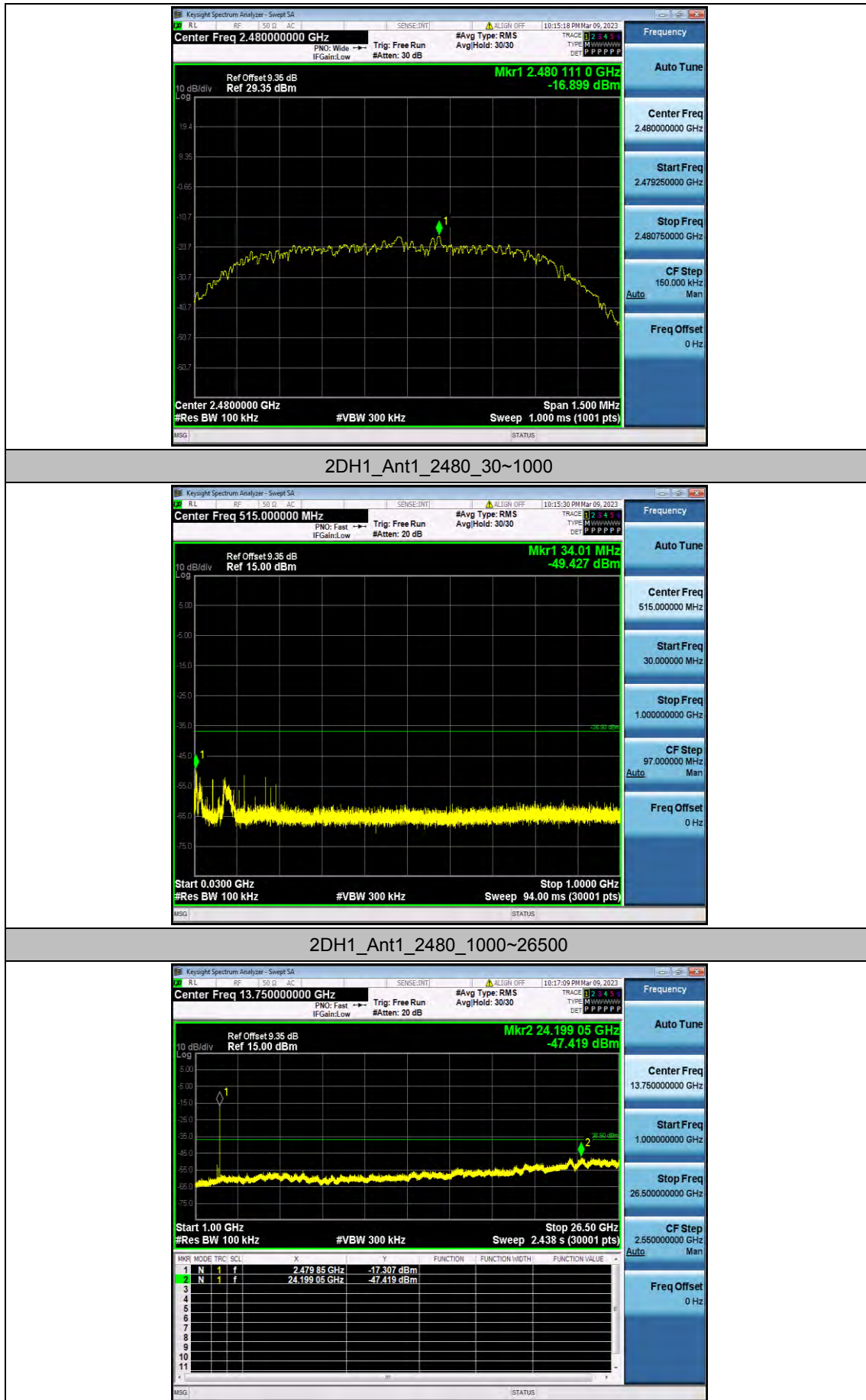
2DH1_Ant1_2402_0~Reference

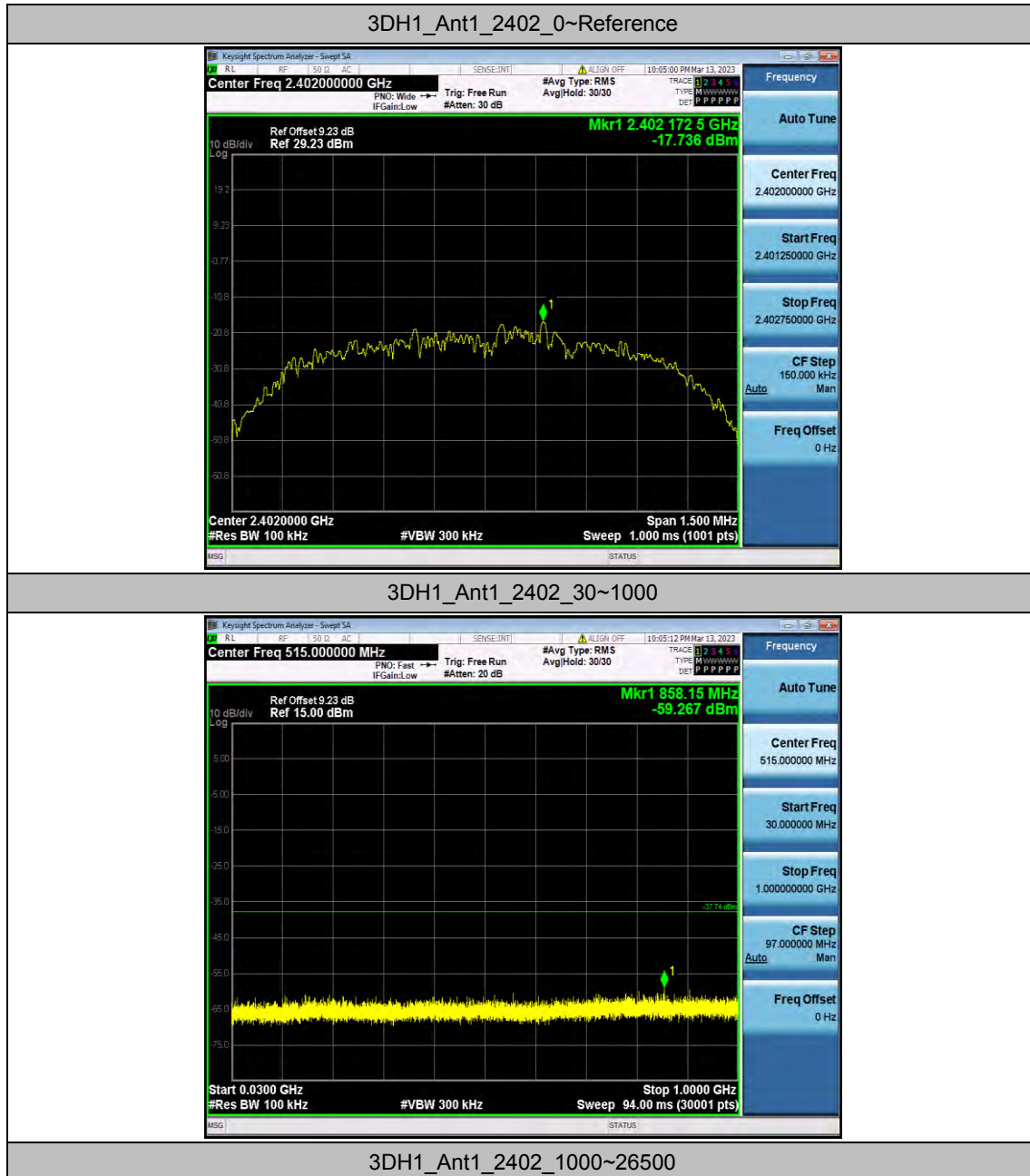


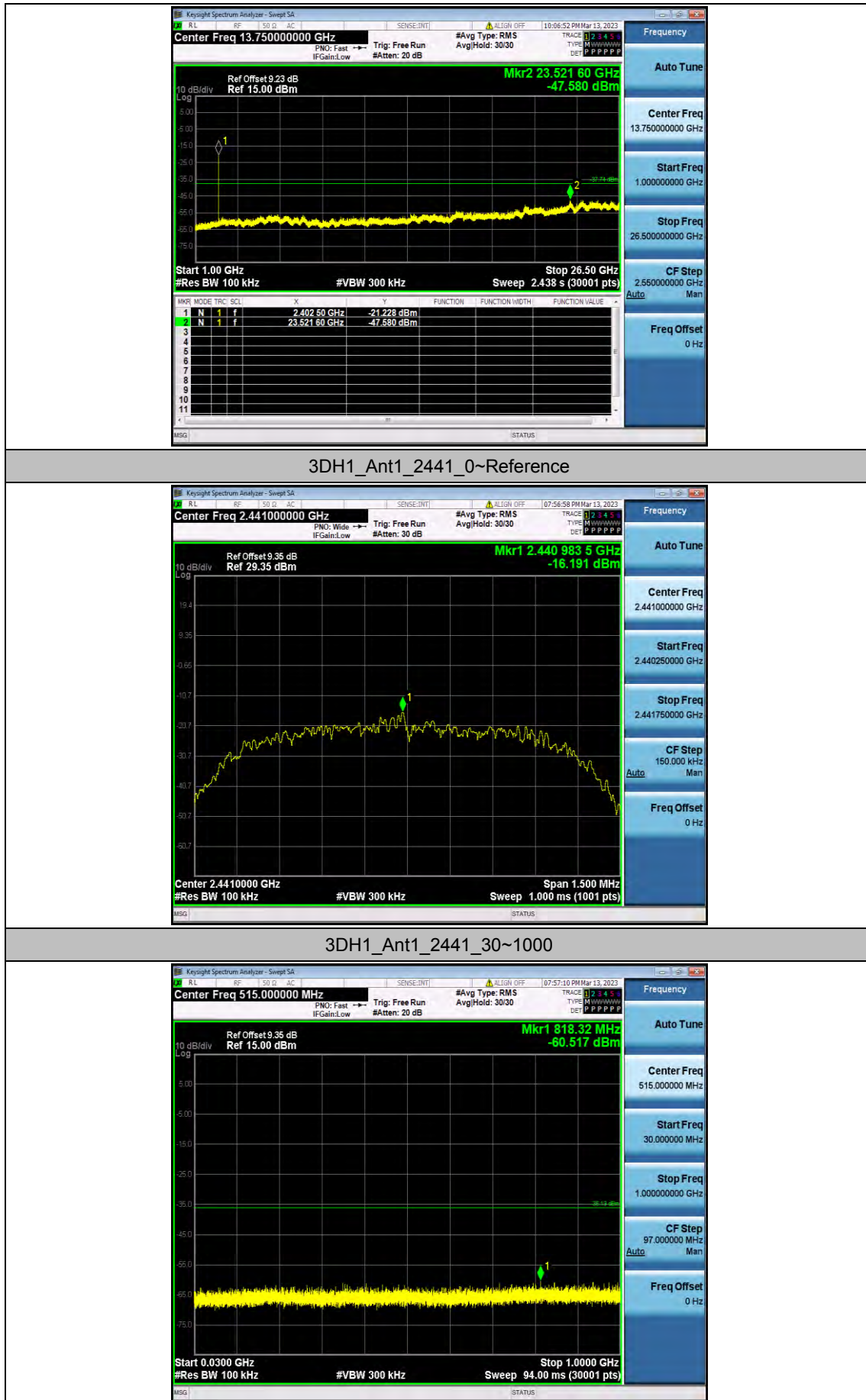
2DH1_Ant1_2402_30~1000











3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000

