

Case No. : CTA24081600401	
Ambient Condition: 22 °C, 51 %RH	
According Standard: ■Part15C	
Test Date: 2024.8.21	Test Engineer: Lushan Kong

Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.867	2401.553	2402.420	---	---
		2441	0.891	2440.541	2441.432	---	---
		2480	0.882	2479.550	2480.432	---	---
2DH1	Ant1	2402	1.395	2401.292	2402.687	---	---
		2441	1.425	2440.262	2441.687	---	---
		2480	1.434	2479.256	2480.690	---	---
3DH1	Ant1	2402	1.488	2401.253	2402.741	---	---
		2441	1.434	2440.262	2441.696	---	---
		2480	1.422	2479.277	2480.699	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441

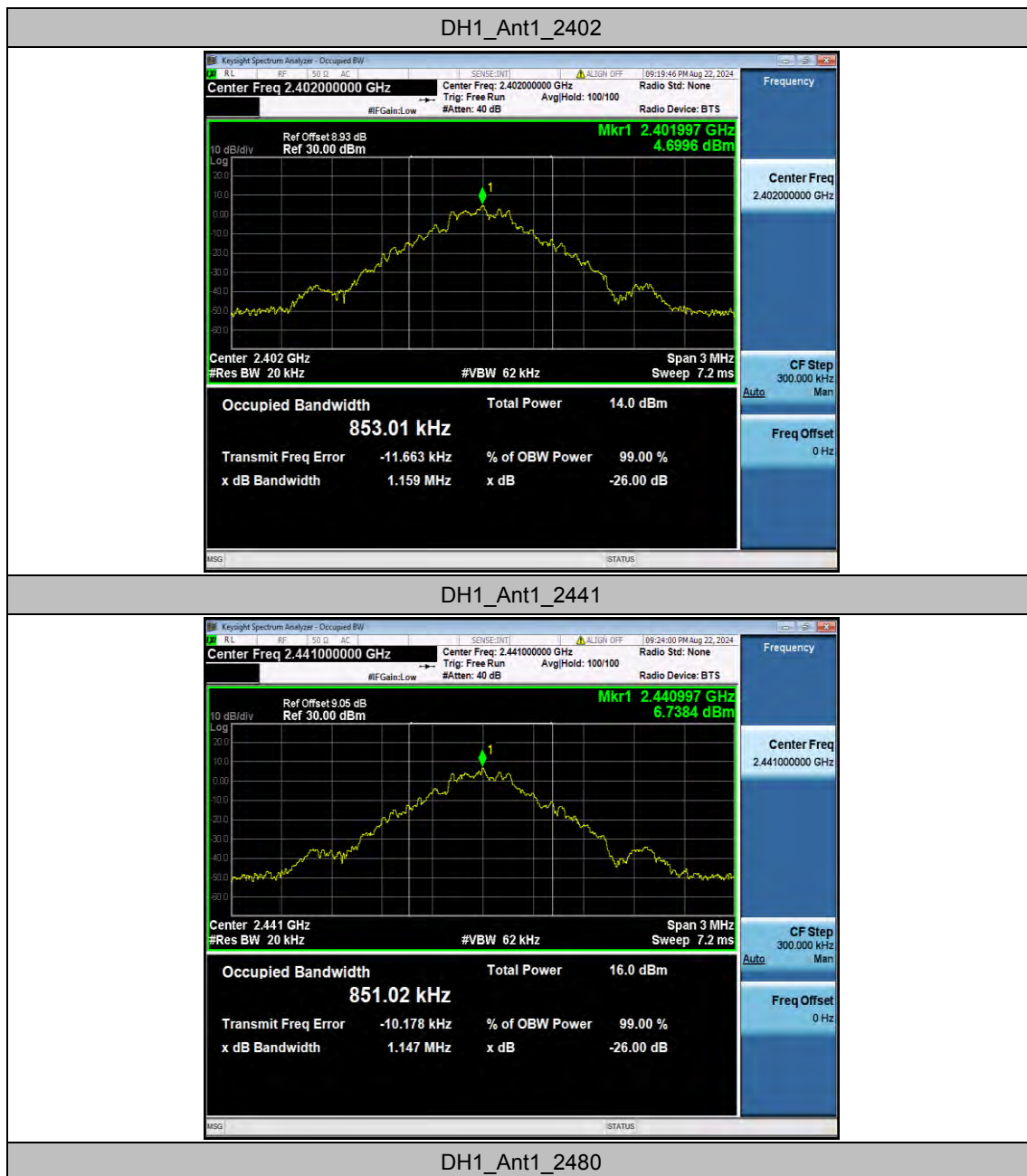


Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.85301	2401.5618	2402.4148	---	---
		2441	0.85102	2440.5643	2441.4153	---	---
		2480	0.85988	2479.5595	2480.4194	---	---
2DH1	Ant1	2402	1.3457	2401.3127	2402.6584	---	---
		2441	1.3421	2440.3139	2441.6560	---	---
		2480	1.3448	2479.3115	2480.6563	---	---
3DH1	Ant1	2402	1.3426	2401.3196	2402.6622	---	---
		2441	1.3408	2440.3190	2441.6598	---	---
		2480	1.3452	2479.3126	2480.6578	---	---

Test Graphs





2DH1_Ant1_2402



2DH1_Ant1_2441



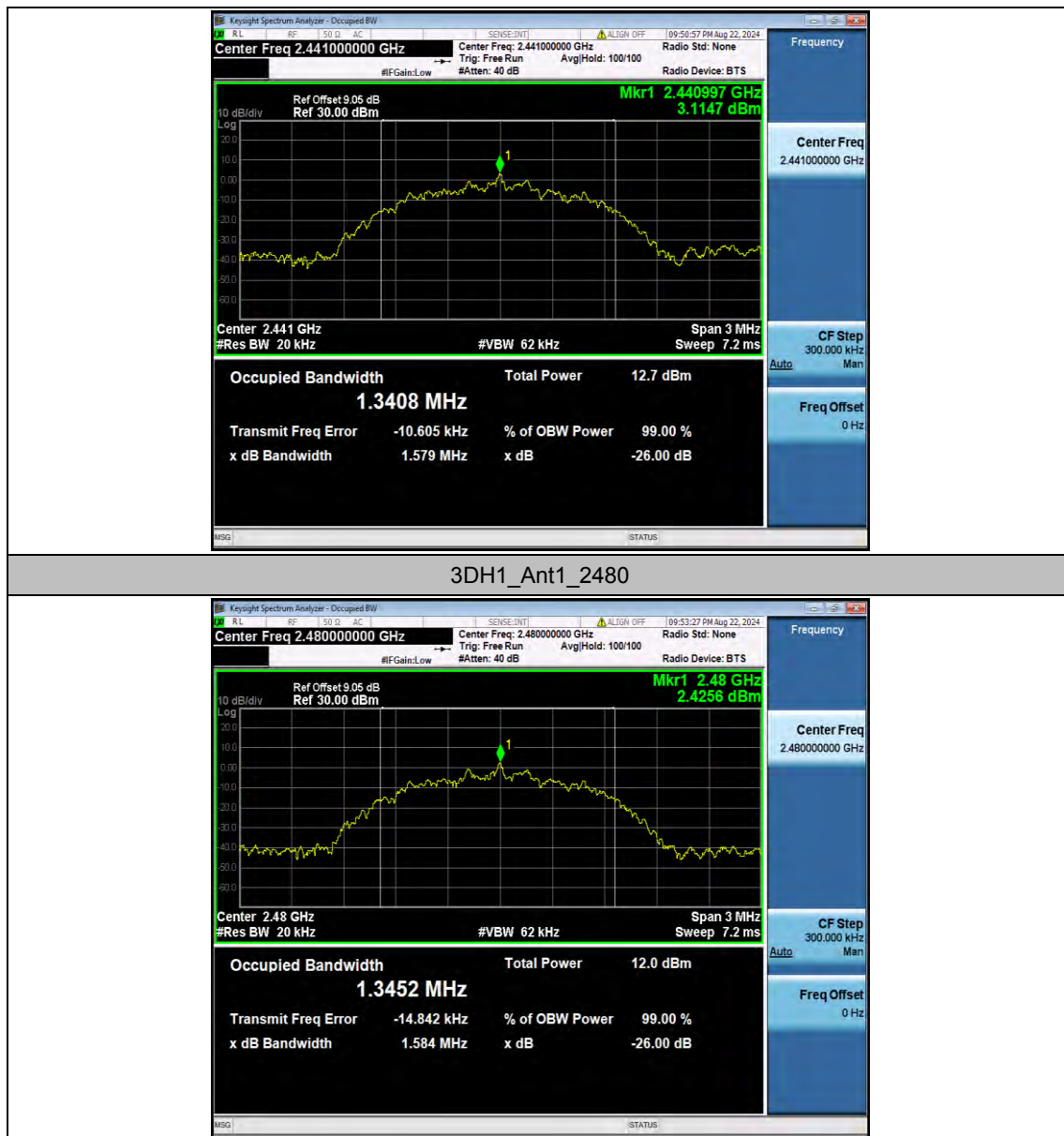
2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	7.78	≤30.00	PASS
		2441	9.76	≤30.00	PASS
		2480	10.96	≤30.00	PASS
2DH1	Ant1	2402	6.28	≤20.97	PASS
		2441	7.70	≤20.97	PASS
		2480	7.46	≤20.97	PASS
3DH1	Ant1	2402	6.42	≤20.97	PASS
		2441	7.78	≤20.97	PASS
		2480	7.64	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.98	≥ 0.891	PASS
		Hop_2441	1.14	≥ 0.891	PASS
		Hop_2480	1.034	≥ 0.891	PASS
2DH1	Ant1	Hop_2402	1.164	≥ 0.956	PASS
		Hop_2441	1.16	≥ 0.956	PASS
		Hop_2480	1.008	≥ 0.956	PASS
3DH1	Ant1	Hop_2402	1.014	≥ 0.992	PASS
		Hop_2441	1.014	≥ 0.992	PASS
		Hop_2480	1.33	≥ 0.992	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441



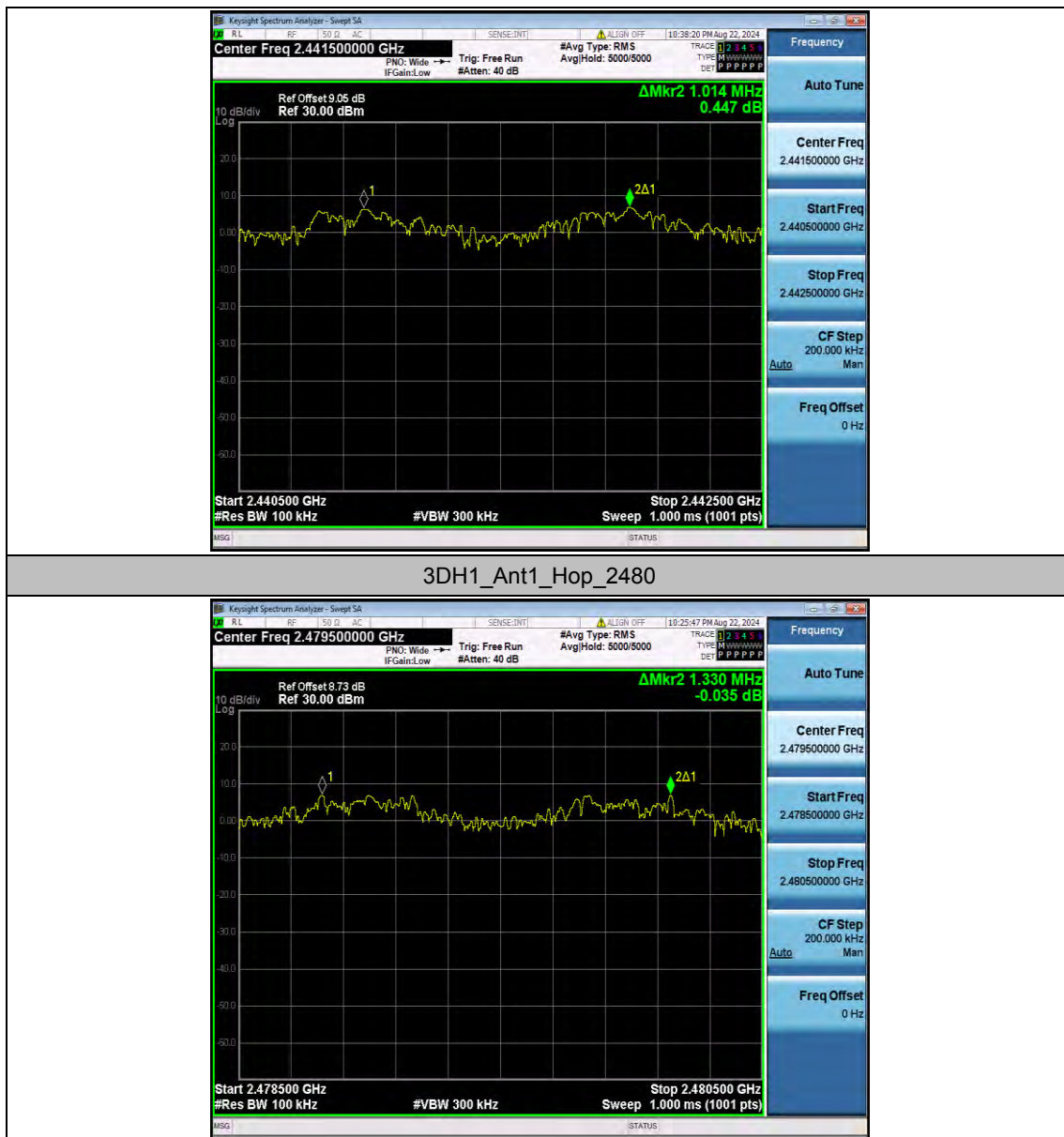
2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

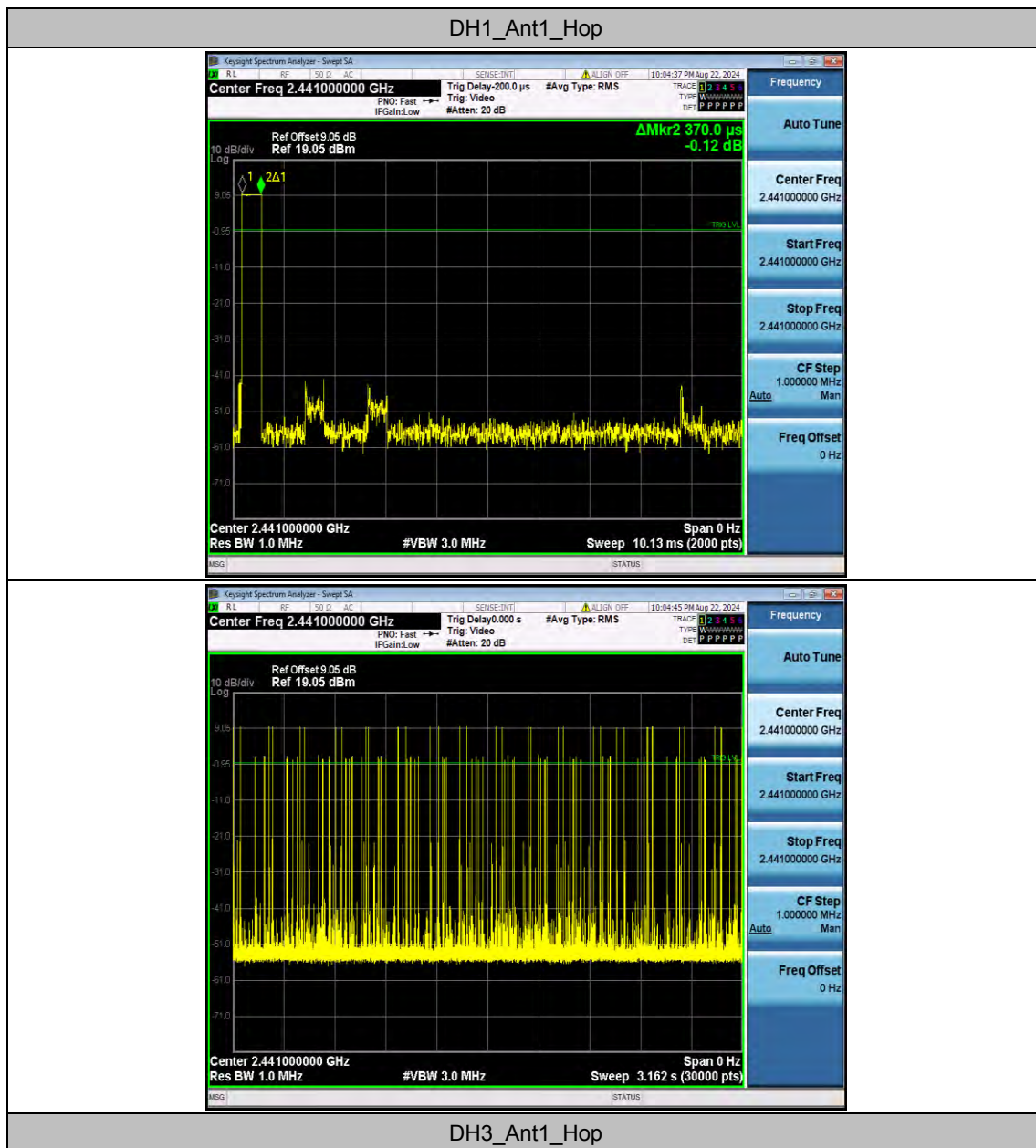


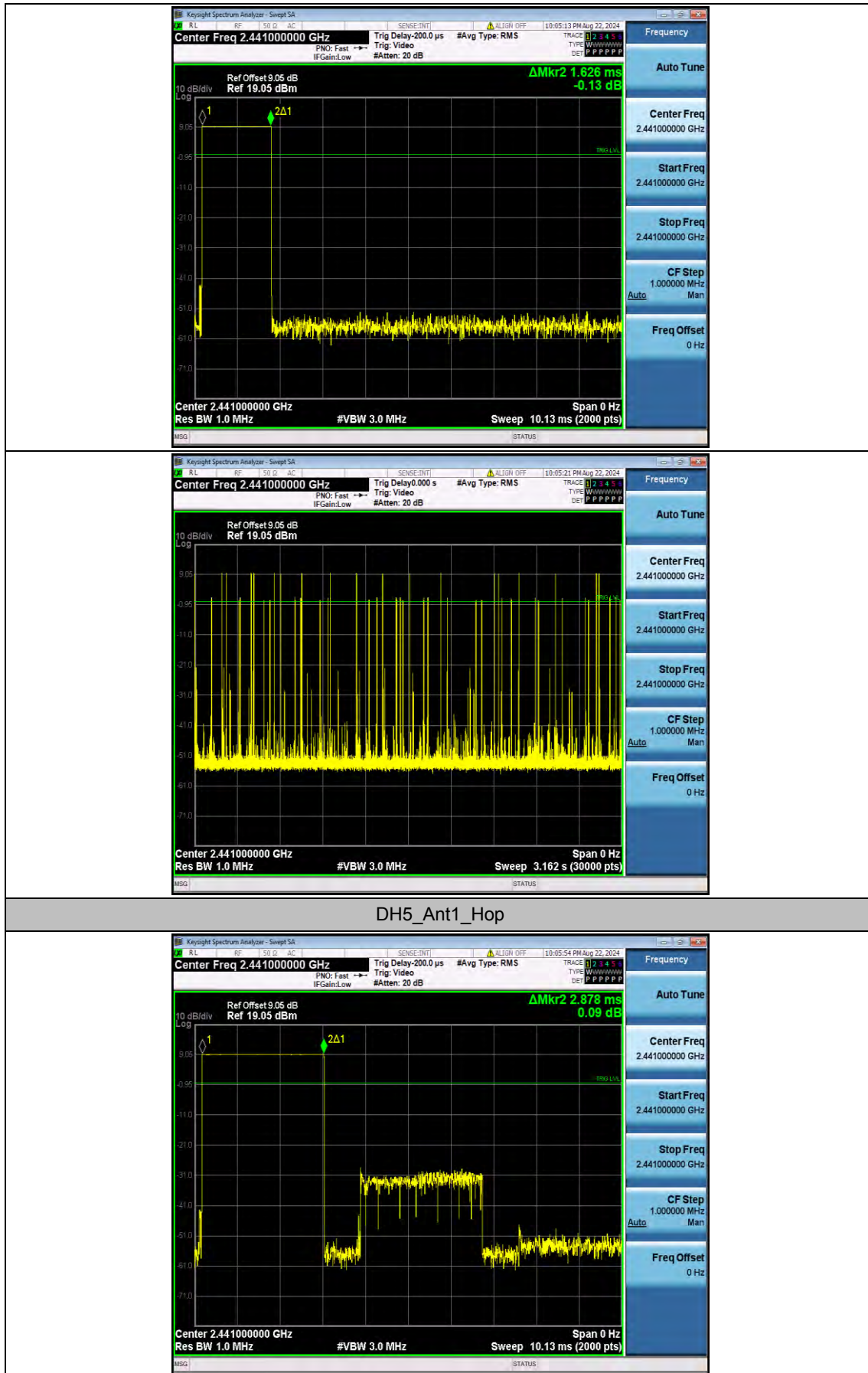
Appendix A.5: Time of occupancy

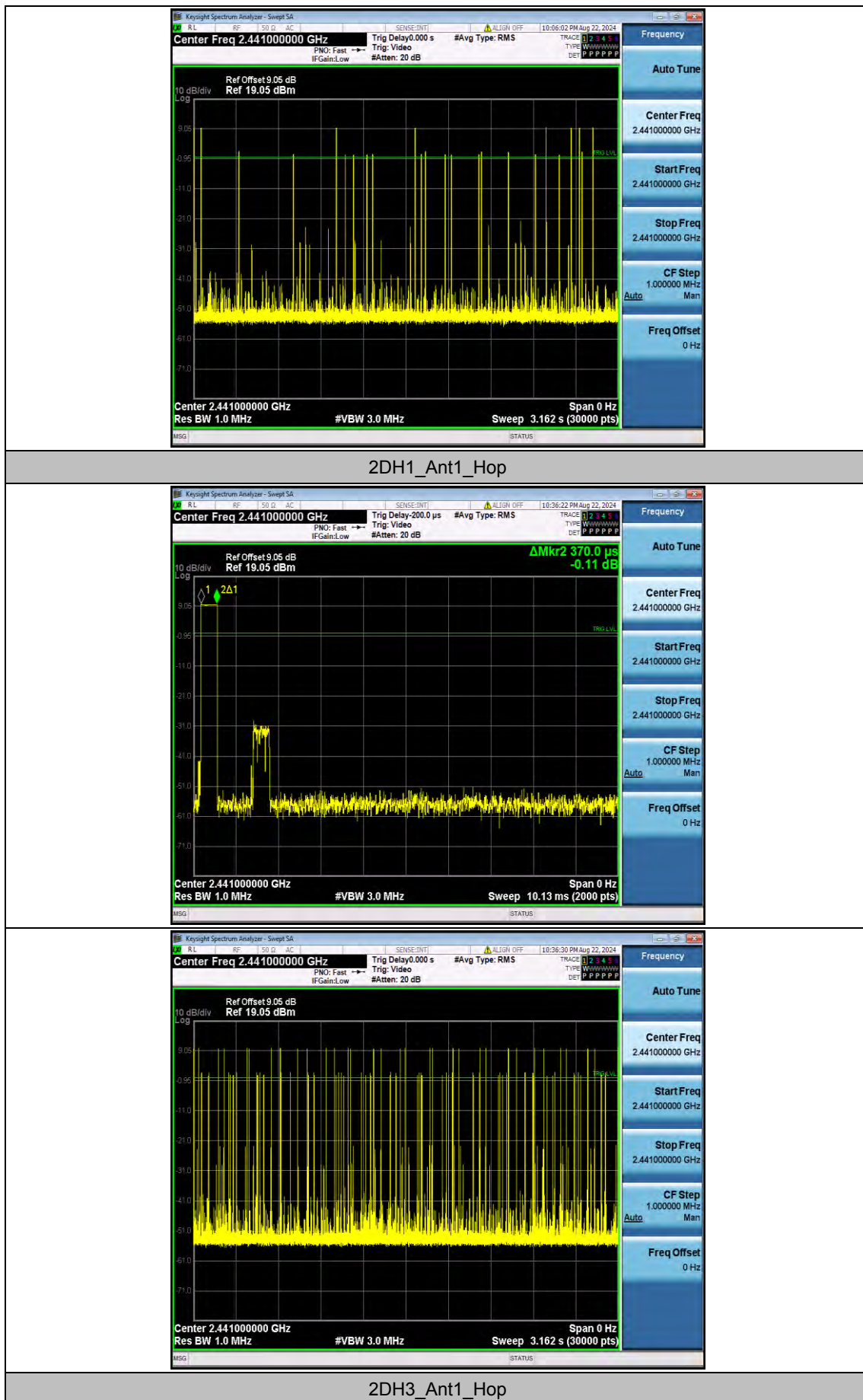
Test Result

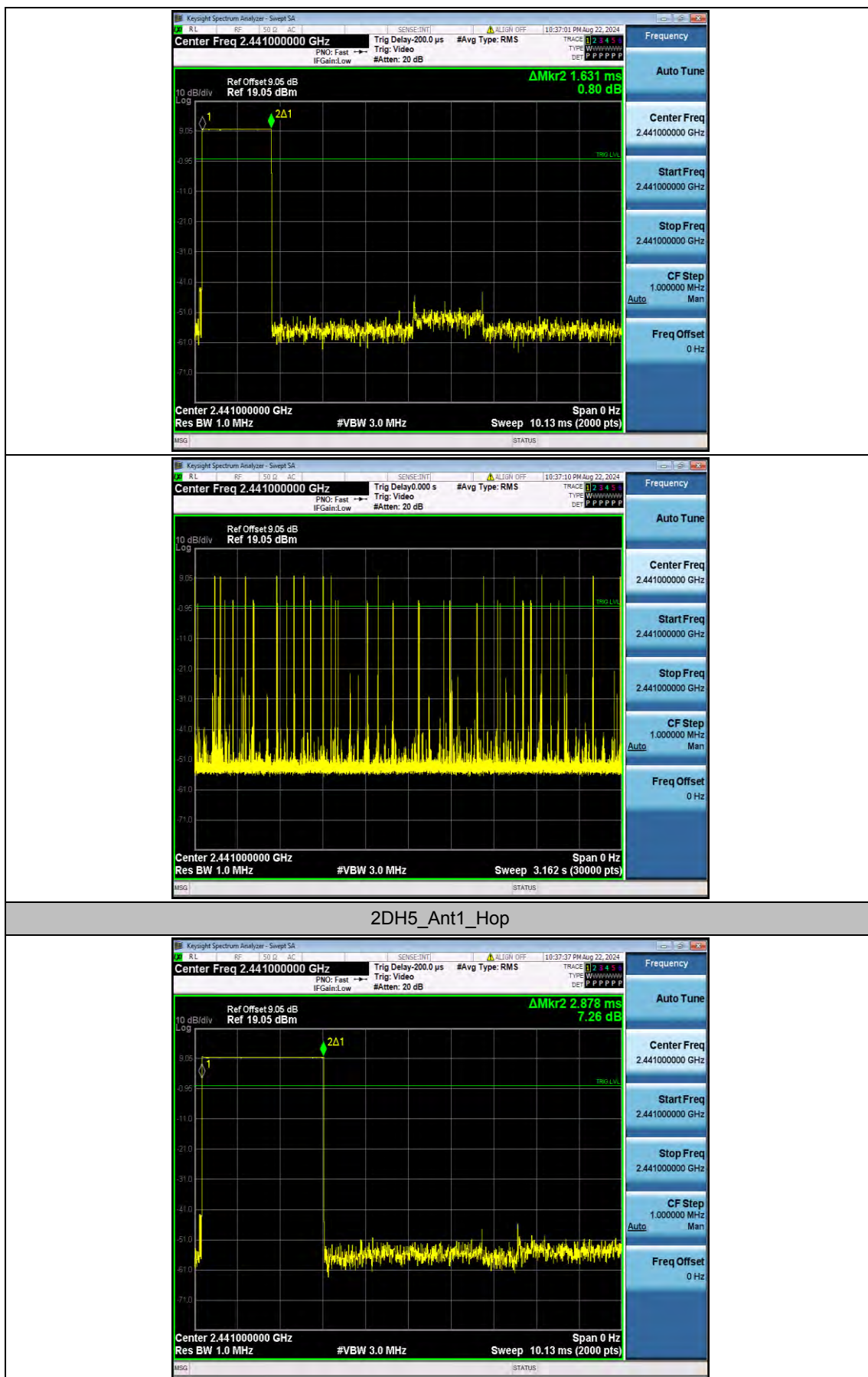
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.370	330	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.626	190	0.309	≤0.4	PASS
DH5	Ant1	Hop	2.878	80	0.23	≤0.4	PASS
2DH1	Ant1	Hop	0.370	330	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.631	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.878	50	0.144	≤0.4	PASS
3DH1	Ant1	Hop	0.370	330	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.626	160	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.878	60	0.173	≤0.4	PASS

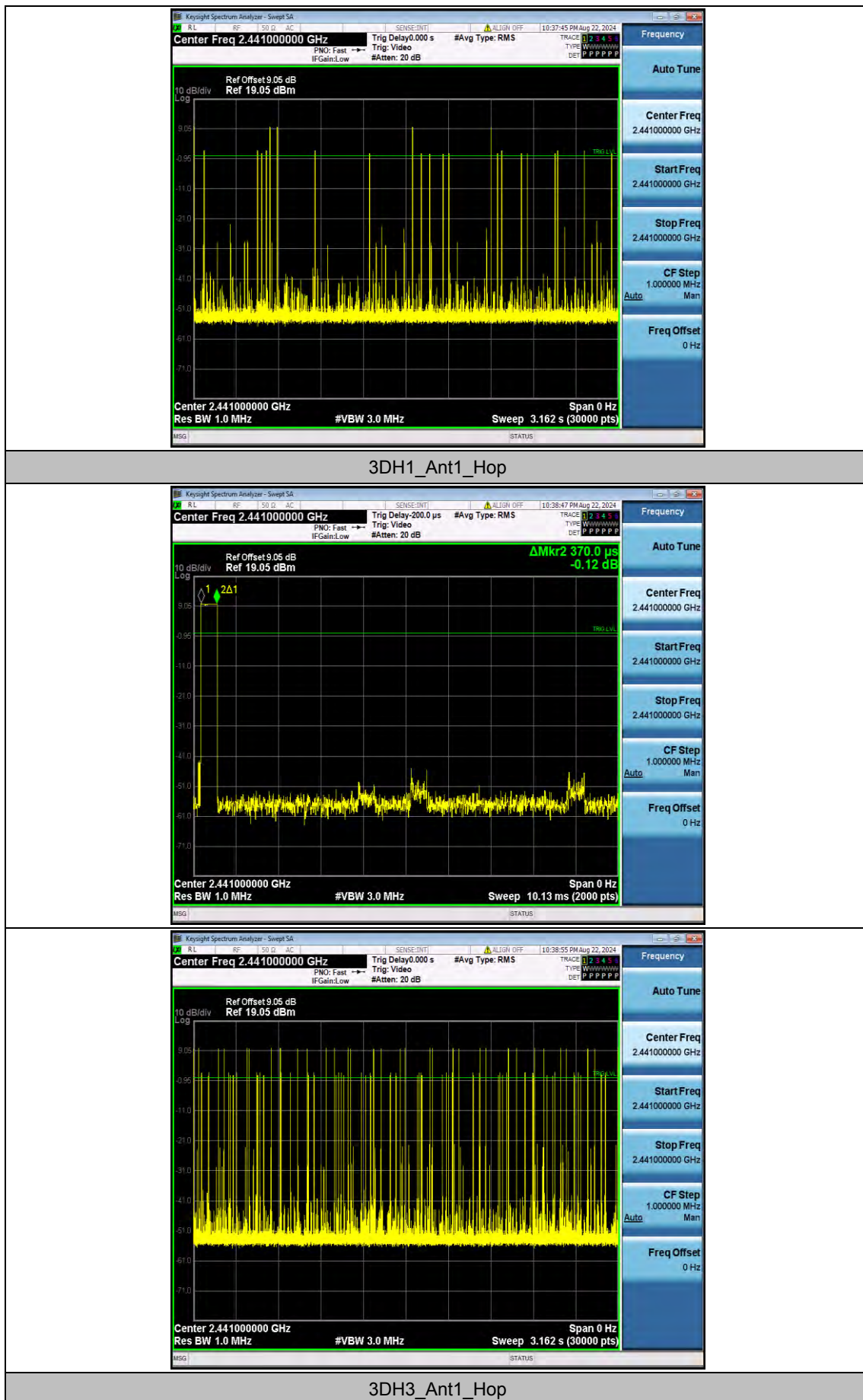
Test Graphs

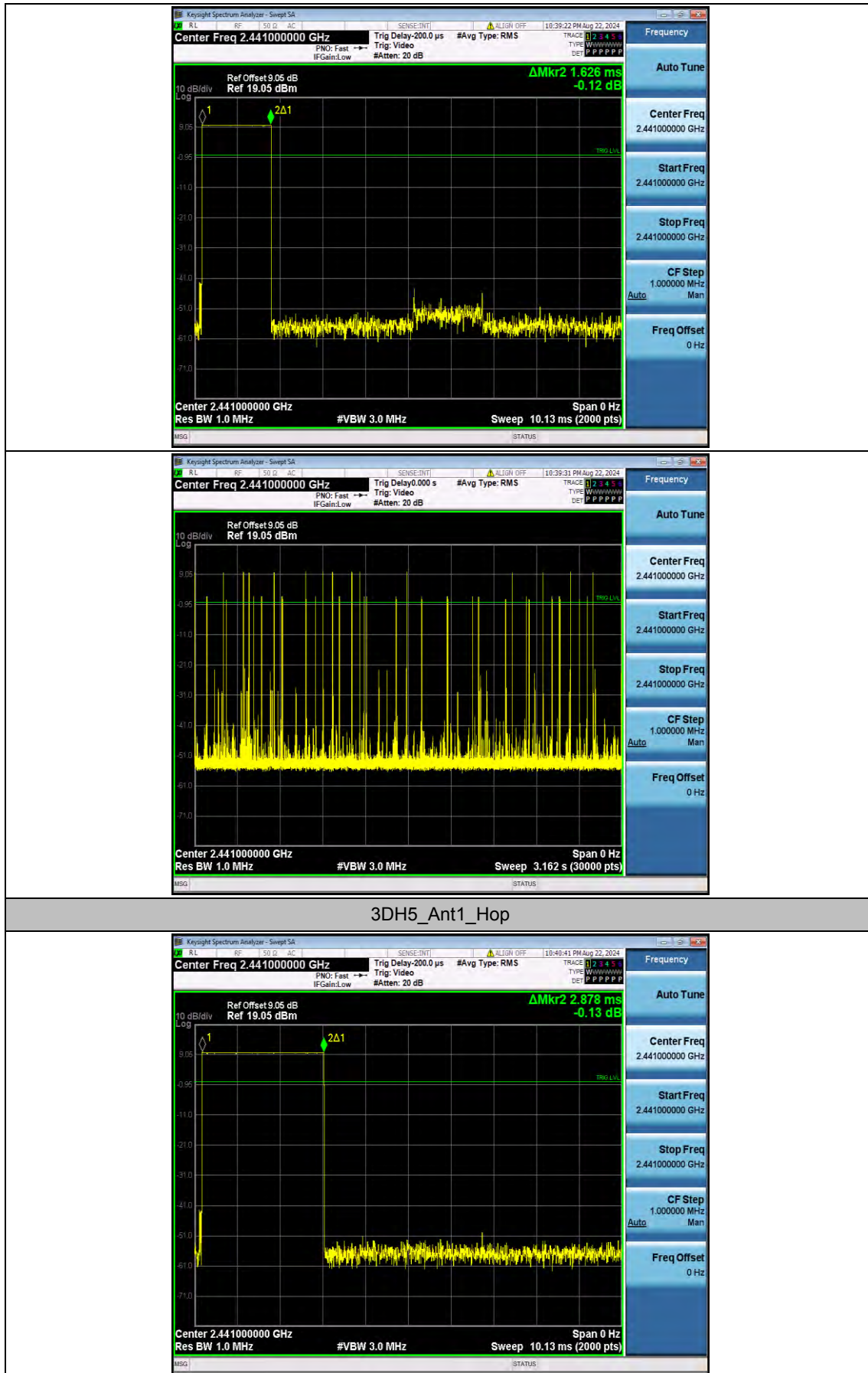


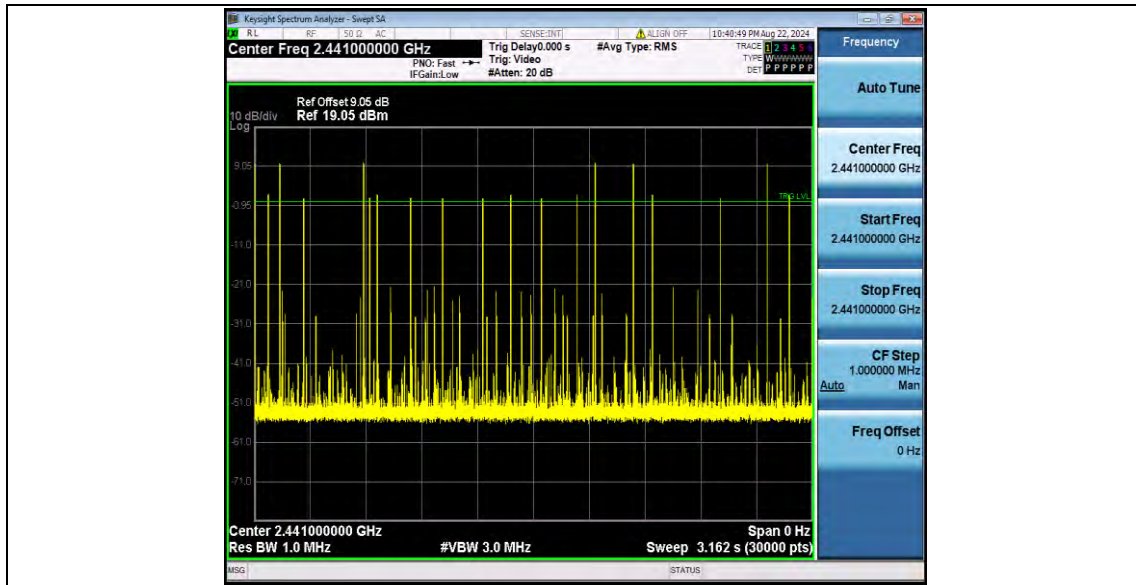










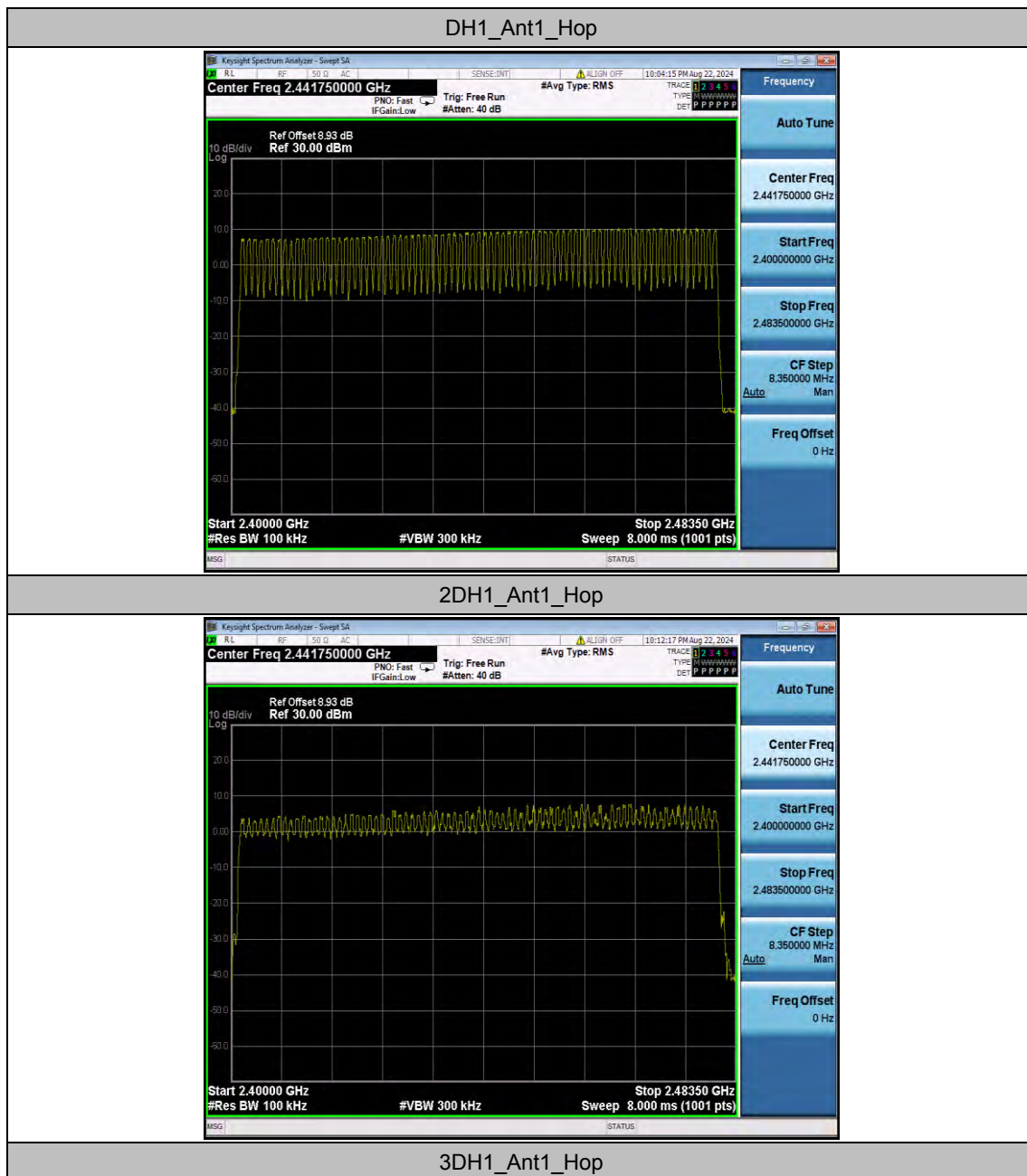


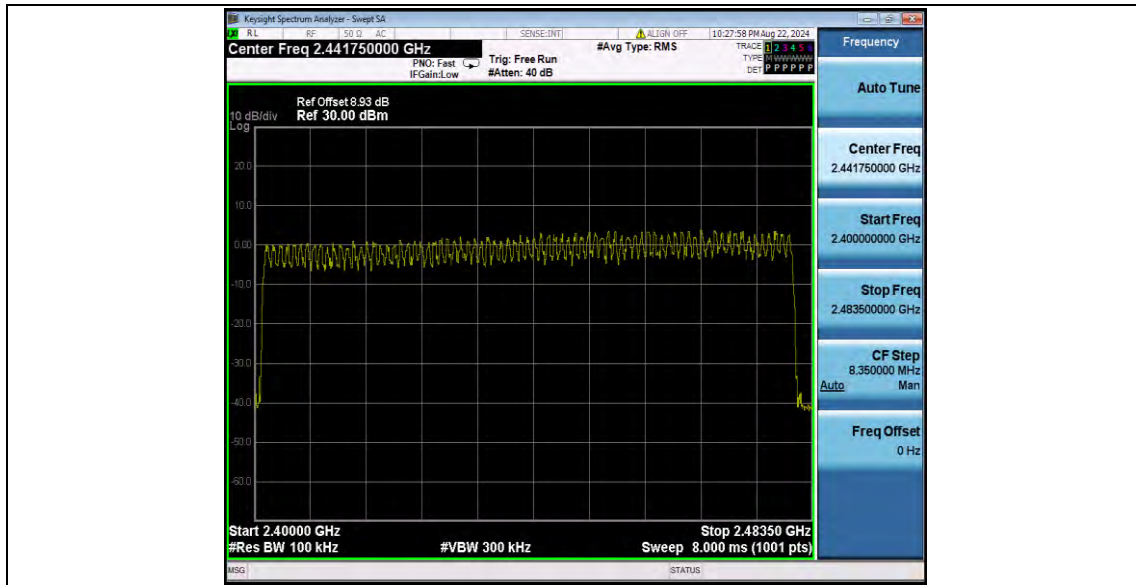
Appendix A.6: Number of hopping channels

Test Result

TestMode	Antenna	Freq(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





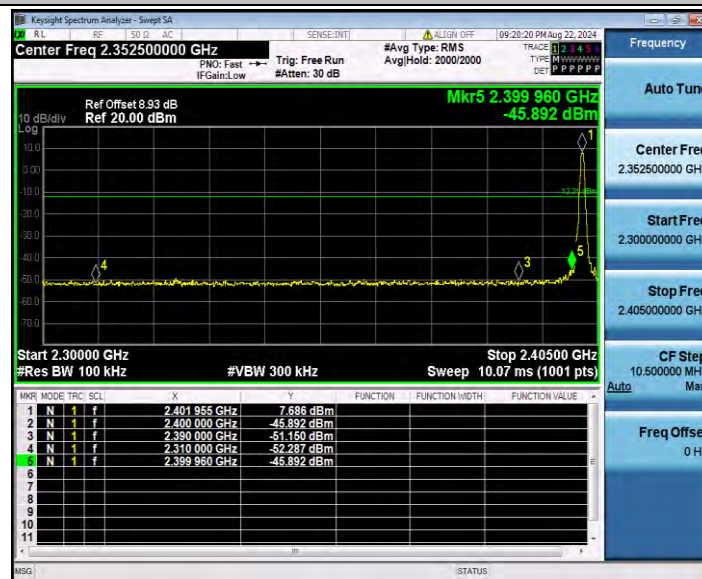
Appendix A.7: Band edge measurements

Test Result

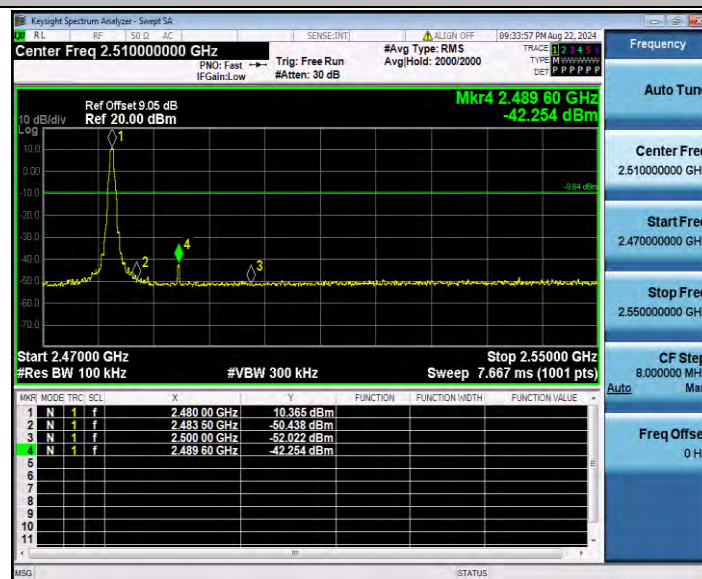
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	7.69	-45.89	≤ -12.31	PASS
		High	2480	10.37	-42.25	≤ -9.64	PASS
		Low	Hop_2402	7.04	-48.52	≤ -12.96	PASS
		High	Hop_2480	10.12	-47.21	≤ -9.88	PASS
2DH1	Ant1	Low	2402	4.50	-40.48	≤ -15.5	PASS
		High	2480	5.32	-43.36	≤ -14.68	PASS
		Low	Hop_2402	3.82	-44.84	≤ -16.18	PASS
		High	Hop_2480	7.31	-44.83	≤ -12.69	PASS
3DH1	Ant1	Low	2402	4.52	-39.91	≤ -15.48	PASS
		High	2480	5.28	-43.45	≤ -14.72	PASS
		Low	Hop_2402	4.28	-46.73	≤ -15.72	PASS
		High	Hop_2480	6.56	-48.62	≤ -13.44	PASS

Test Graphs

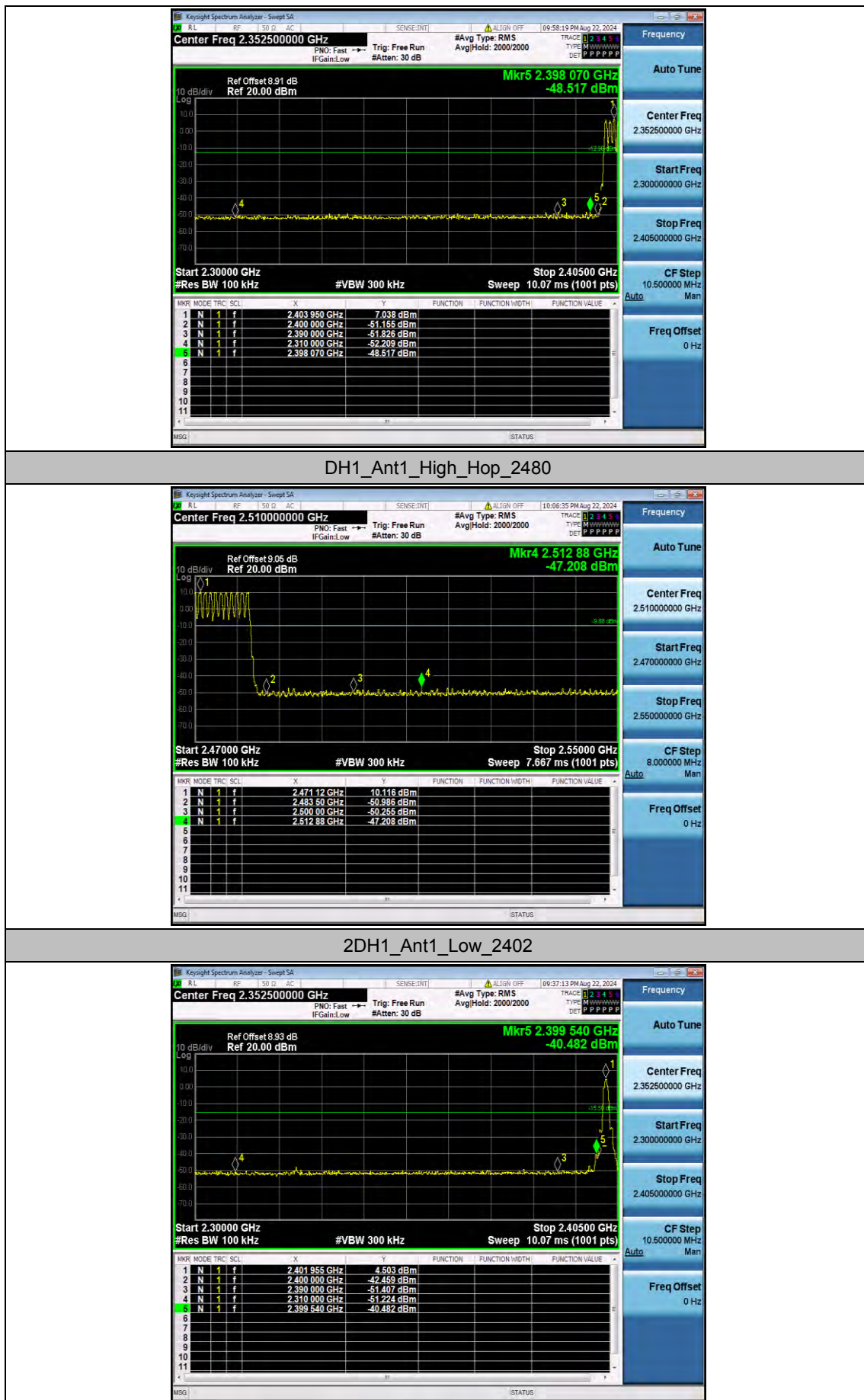
DH1_Ant1_Low_2402



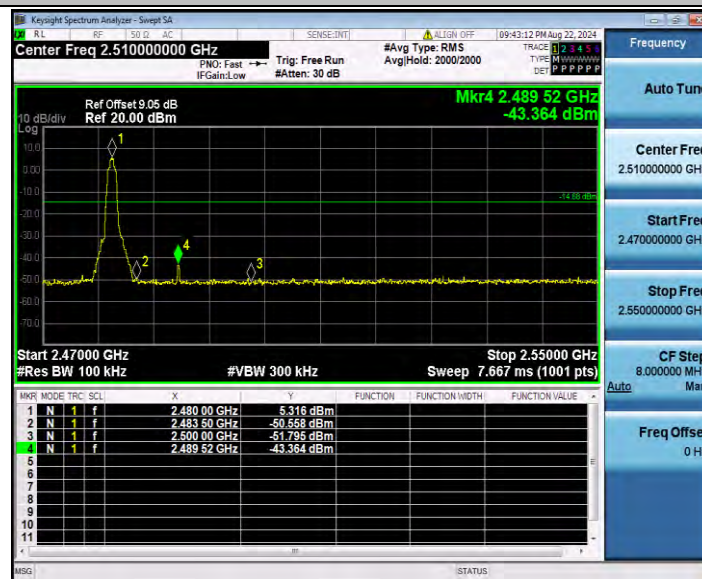
DH1_Ant1_High_2480



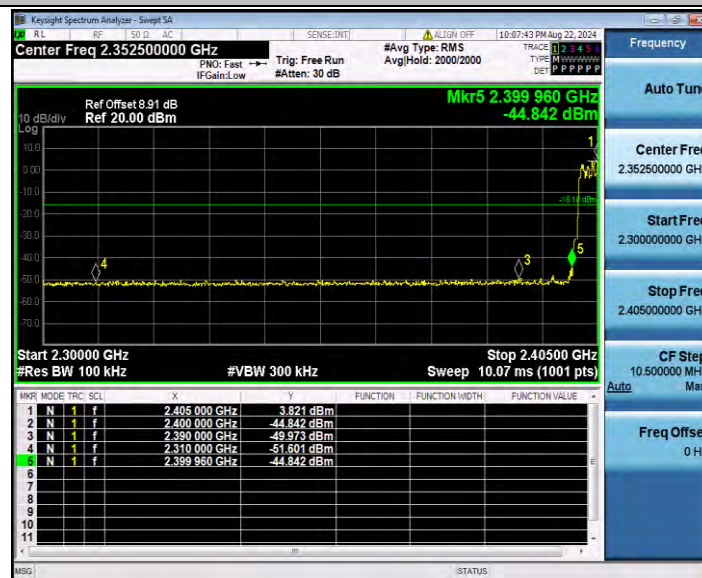
DH1_Ant1_Low_Hop_2402



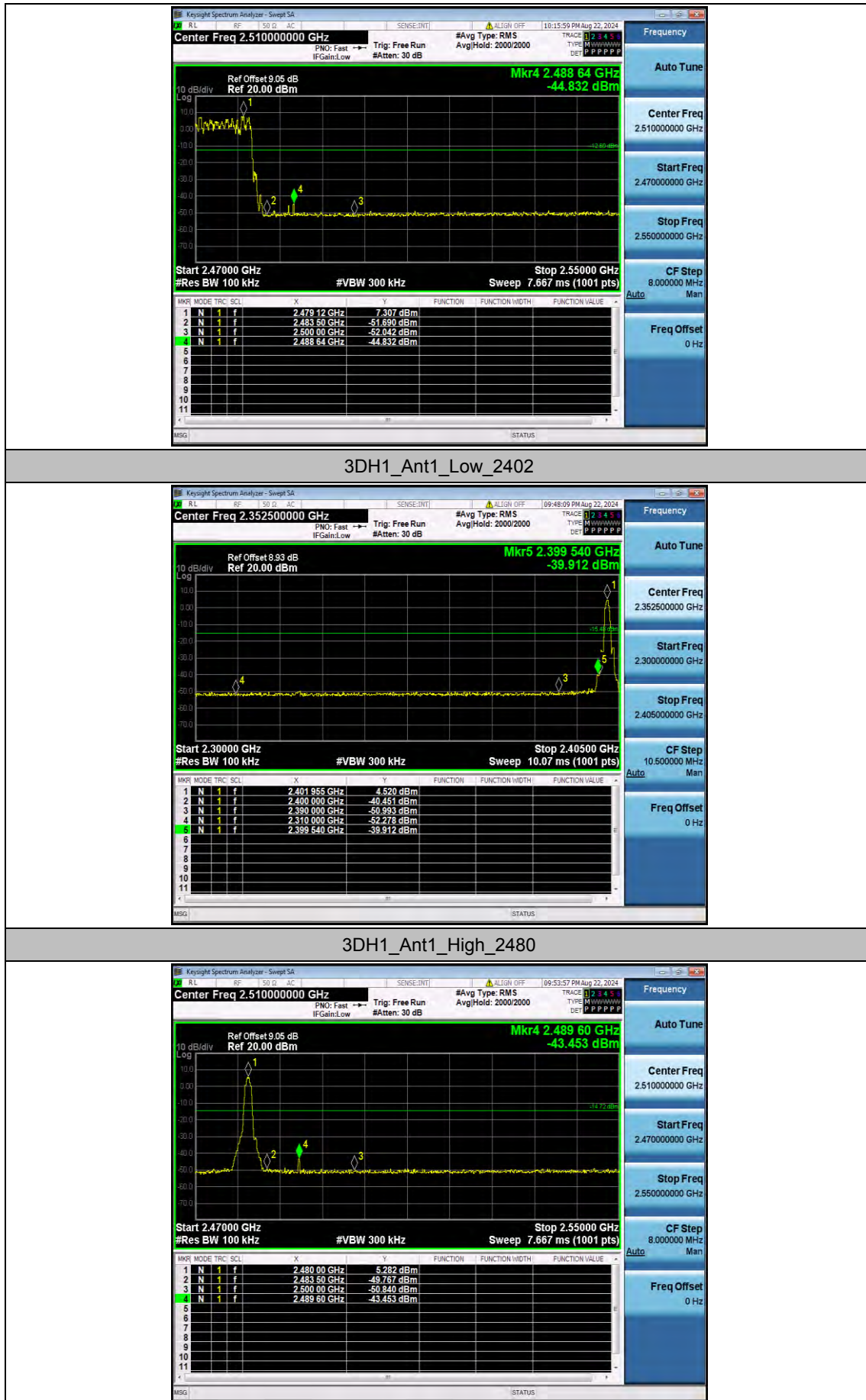
2DH1_Ant1_High_2480



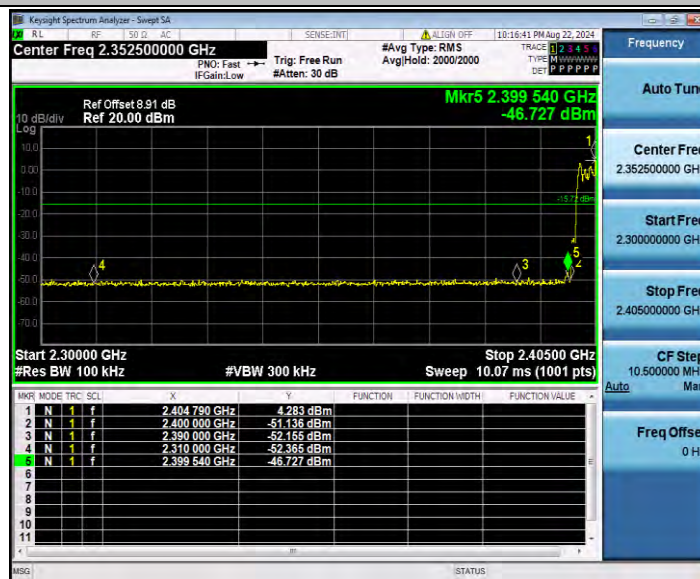
2DH1_Ant1_Low_Hop_2402



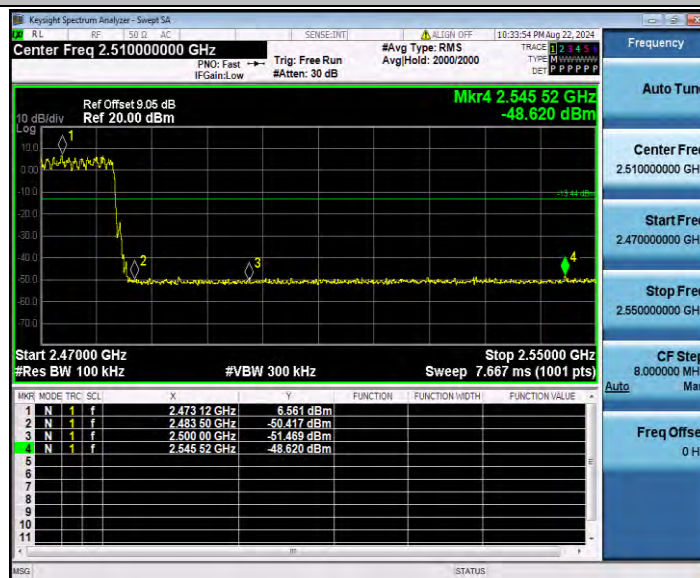
2DH1_Ant1_High_Hop_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

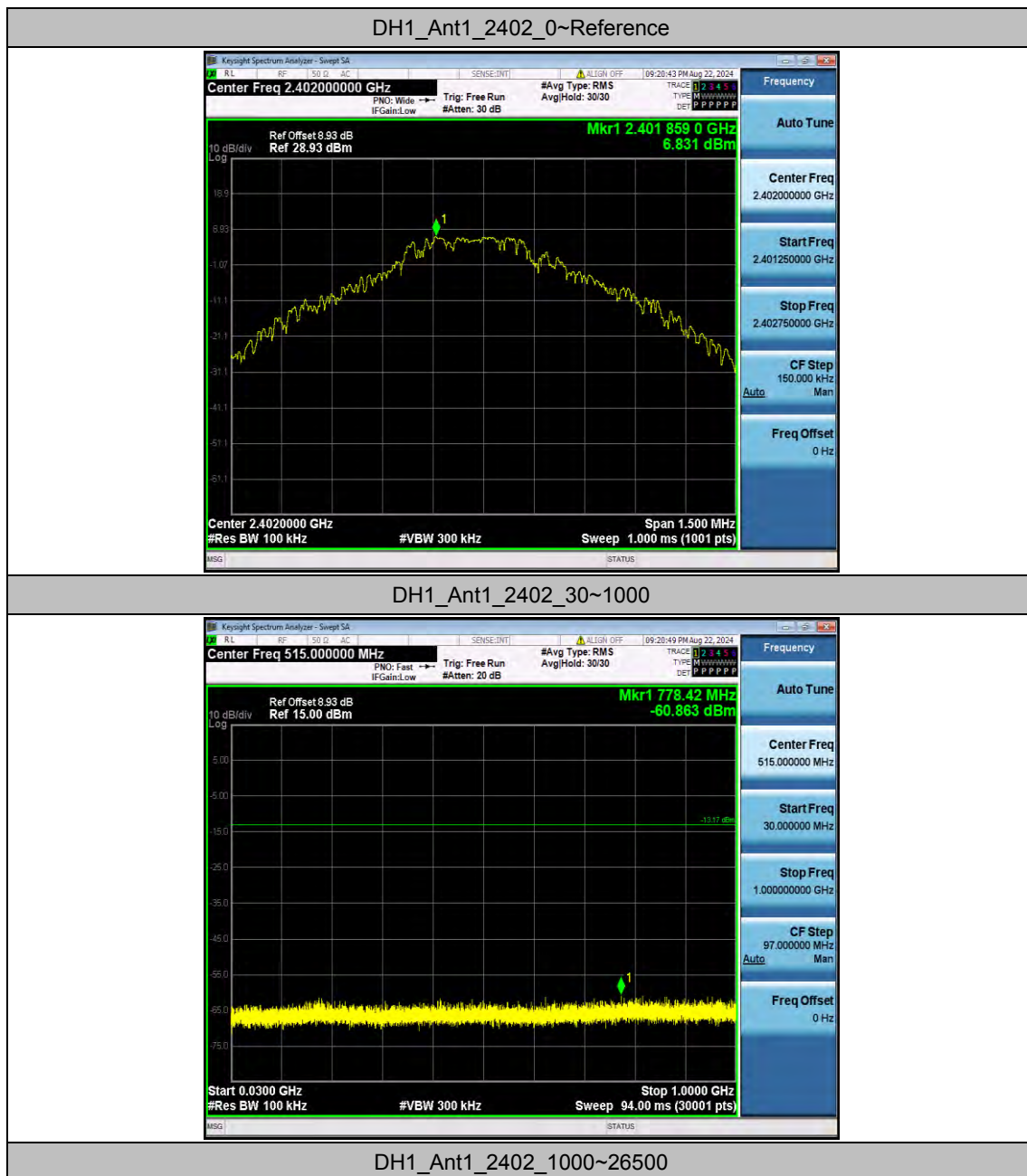


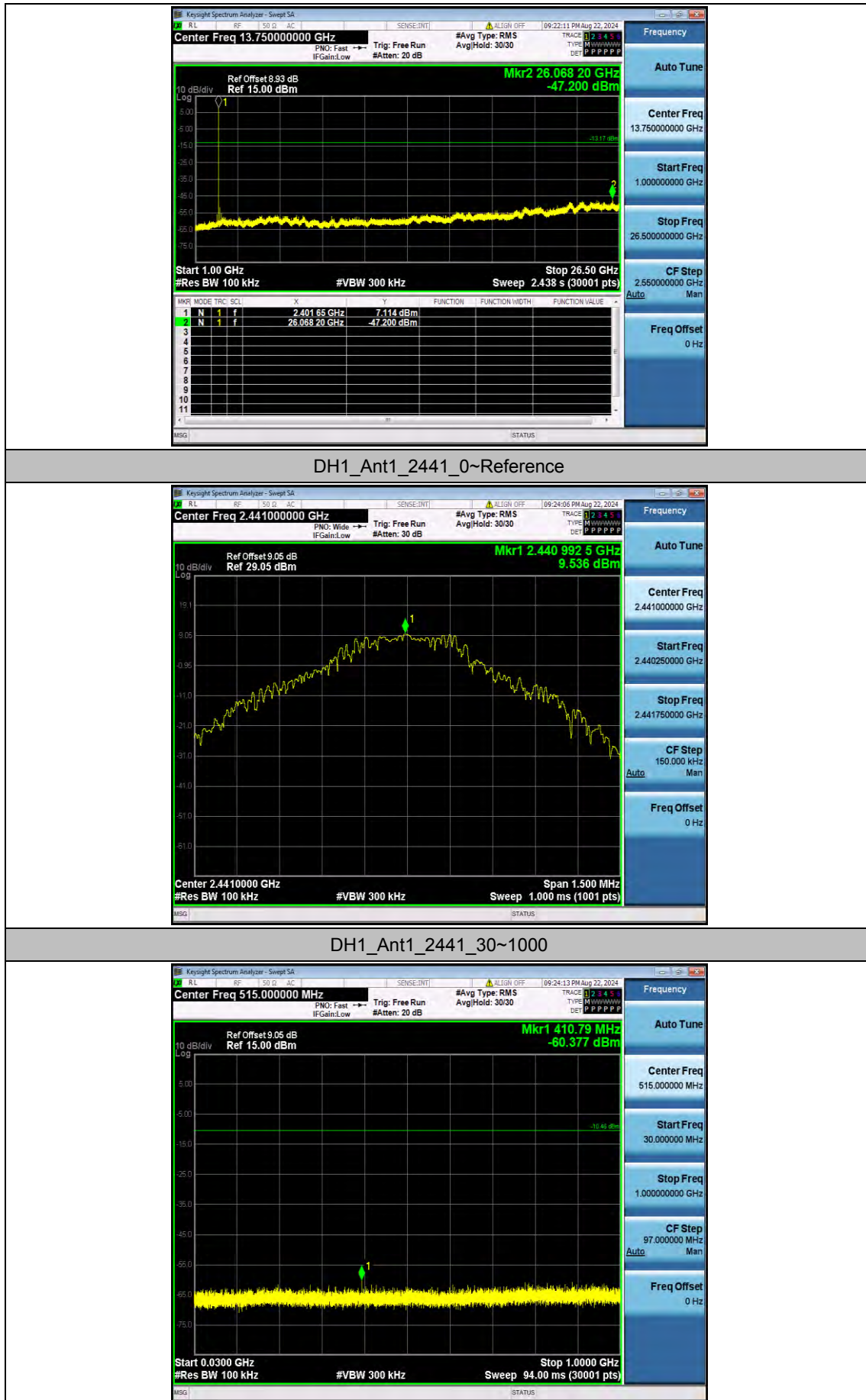
Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	6.83	6.83	---	PASS
			30~1000	6.83	-60.86	≤ -13.17	PASS
			1000~26500	6.83	-47.2	≤ -13.17	PASS
		2441	Reference	9.54	9.54	---	PASS
			30~1000	9.54	-60.38	≤ -10.46	PASS
			1000~26500	9.54	-48.08	≤ -10.46	PASS
		2480	Reference	9.81	9.81	---	PASS
			30~1000	9.81	-43.77	≤ -10.19	PASS
			1000~26500	9.81	-47.59	≤ -10.19	PASS
2DH1	Ant1	2402	Reference	4.17	4.17	---	PASS
			30~1000	4.17	-43.99	≤ -15.83	PASS
			1000~26500	4.17	-48.3	≤ -15.83	PASS
		2441	Reference	5.78	5.78	---	PASS
			30~1000	5.78	-59.53	≤ -14.22	PASS
			1000~26500	5.78	-48.18	≤ -14.22	PASS
		2480	Reference	4.61	4.61	---	PASS
			30~1000	4.61	-60.71	≤ -15.39	PASS
			1000~26500	4.61	-47.91	≤ -15.39	PASS
3DH1	Ant1	2402	Reference	3.68	3.68	---	PASS
			30~1000	3.68	-60.92	≤ -16.32	PASS
			1000~26500	3.68	-48.16	≤ -16.32	PASS
		2441	Reference	5.76	5.76	---	PASS
			30~1000	5.76	-60.66	≤ -14.24	PASS
			1000~26500	5.76	-47.42	≤ -14.24	PASS
		2480	Reference	5.14	5.14	---	PASS
			30~1000	5.14	-60.86	≤ -14.86	PASS
			1000~26500	5.14	-47.7	≤ -14.86	PASS

Test Graphs





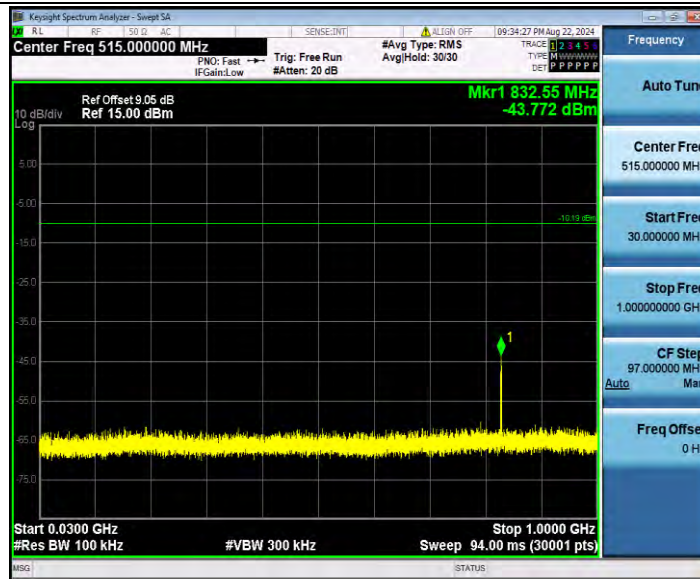
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000

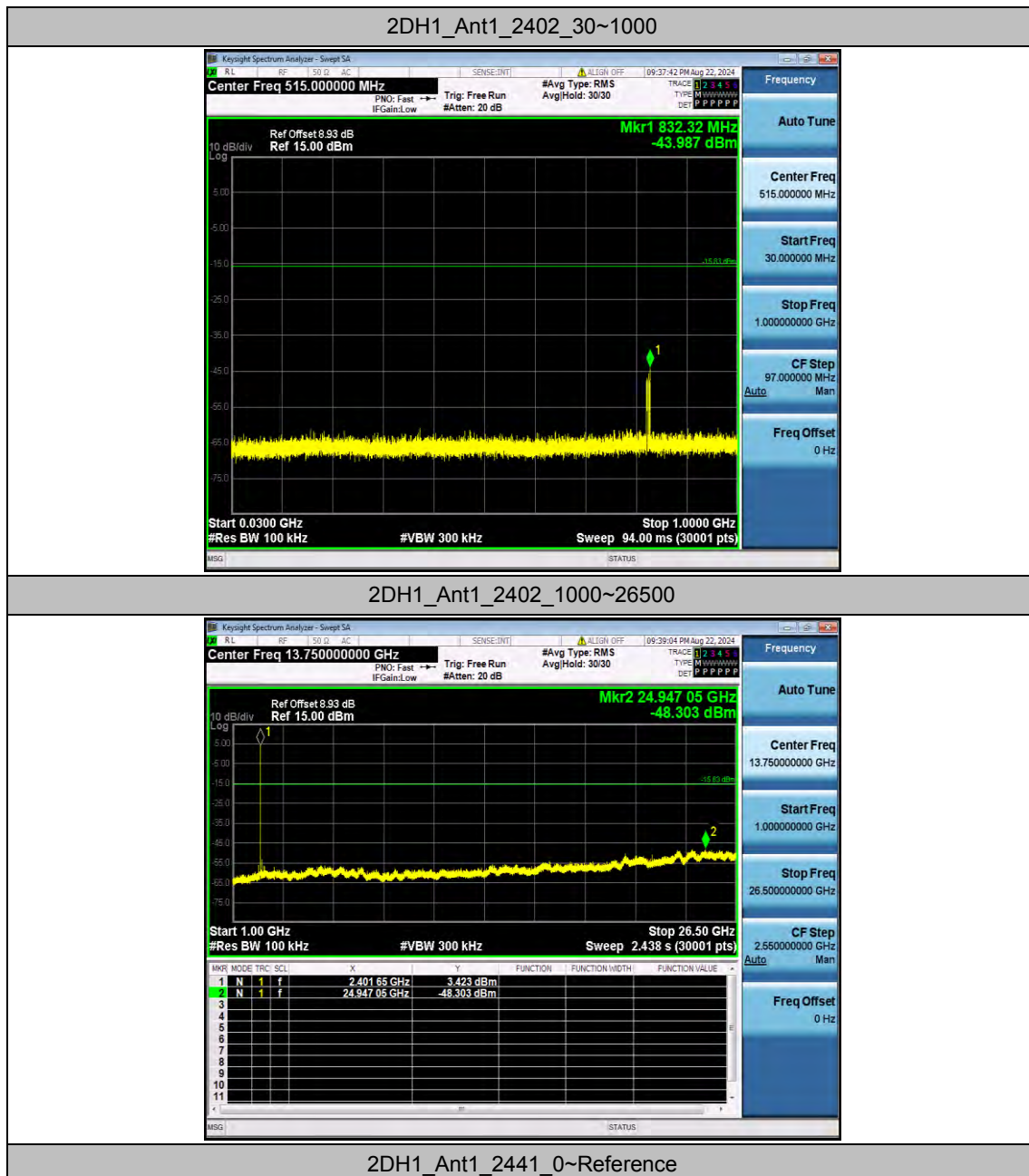


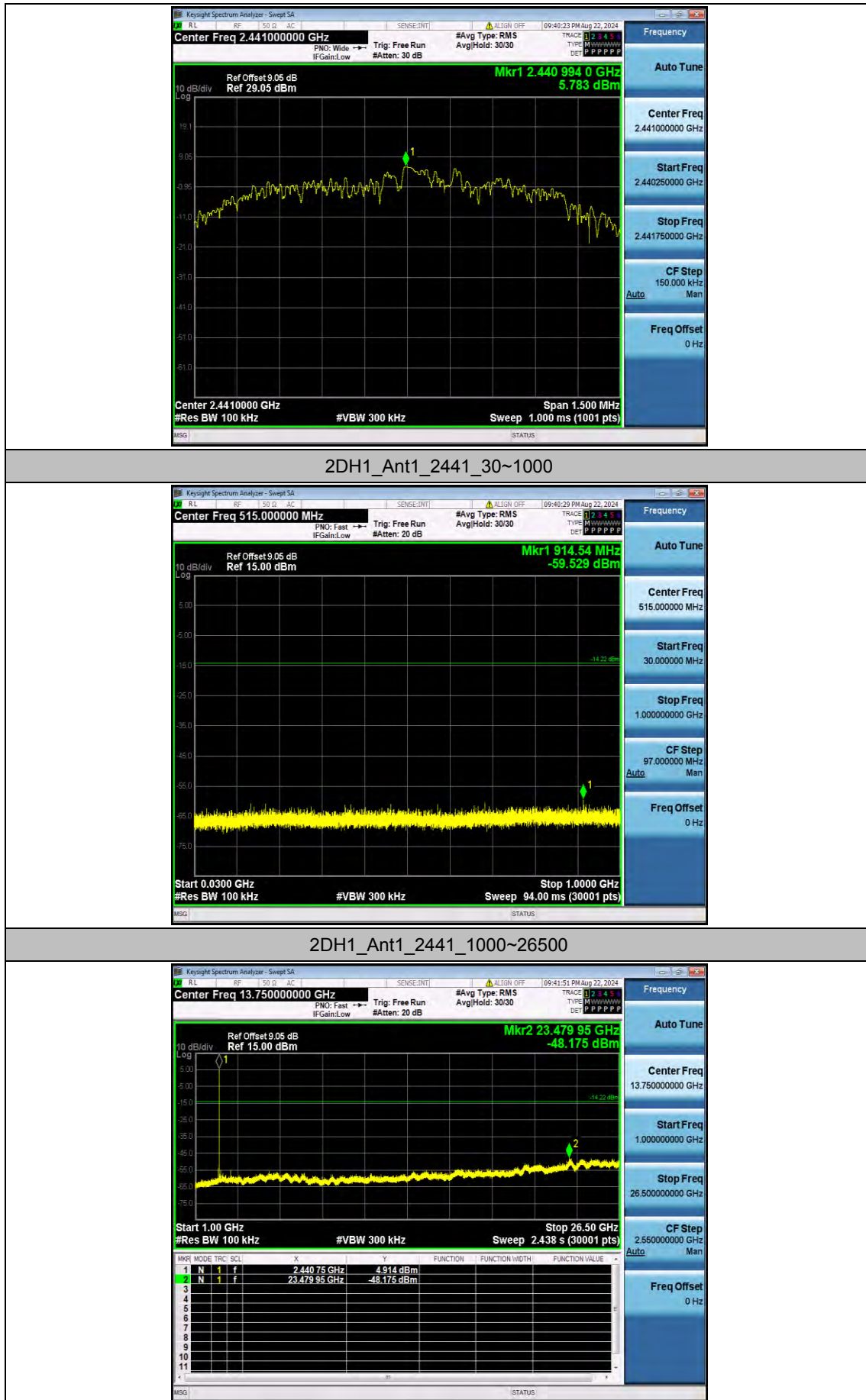
DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



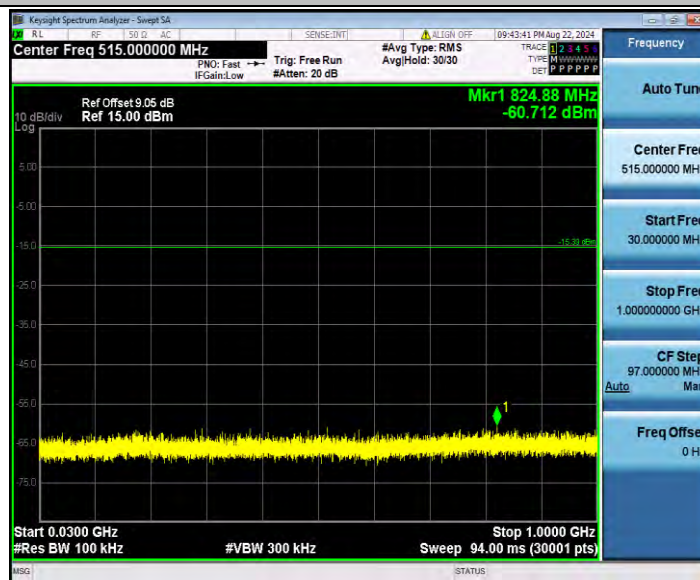




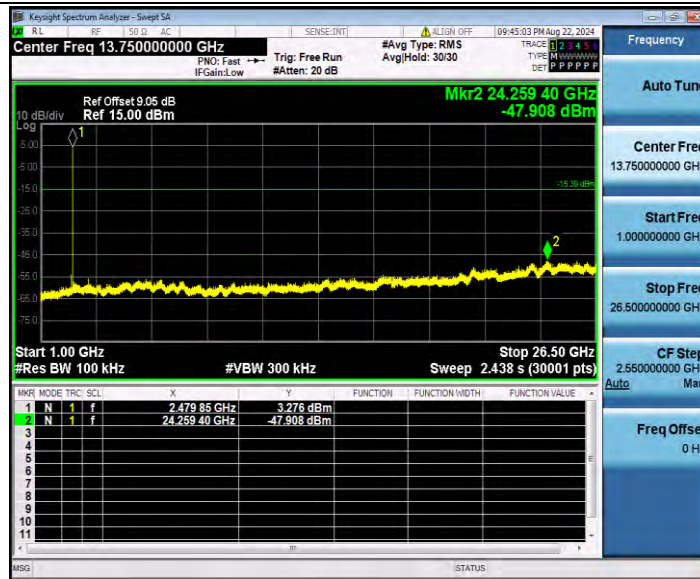
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



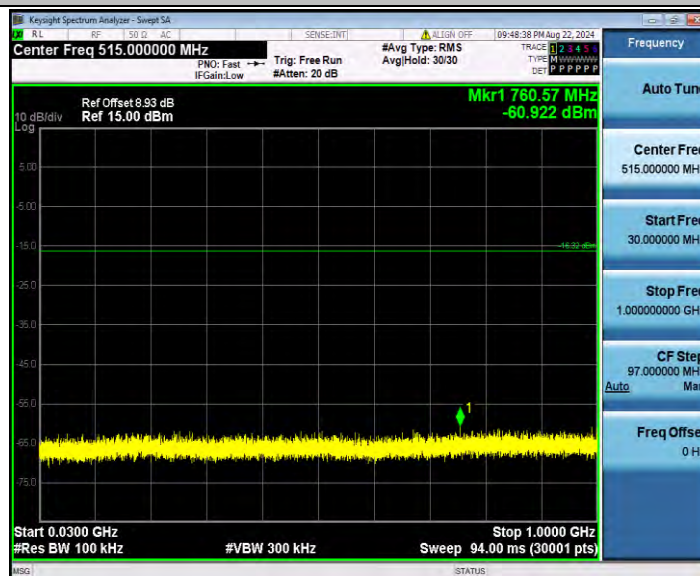
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



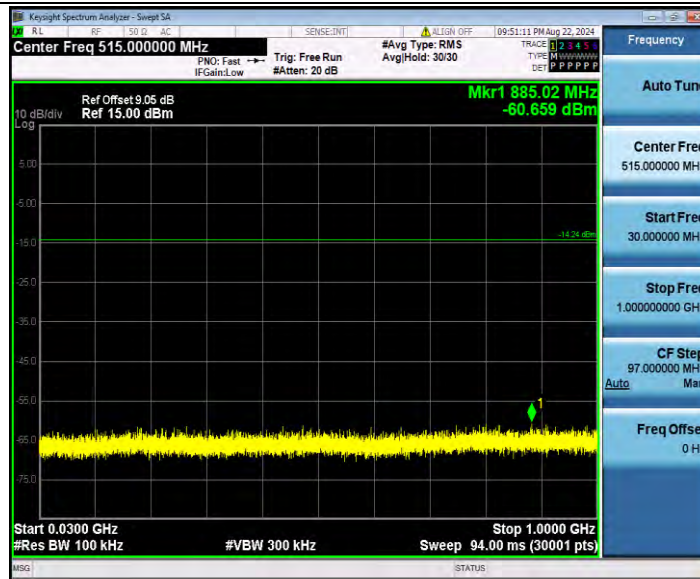
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



