

Case No. : <u>CTA24081600601</u>	
Ambient Condition: <u>22</u> °C, <u>52</u> %RH	
According Standard: ■PART 15C	
Test Date: <u>2024.8.13</u>	Test Engineer: <u>Lushan Kong</u>

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	0.960	2401.523	2402.483	---	---
		2441	0.963	2440.517	2441.480	---	---
		2480	0.966	2479.520	2480.486	---	---
2DH1	Ant1	2402	1.437	2401.268	2402.705	---	---
		2441	1.437	2440.259	2441.696	---	---
		2480	1.467	2479.232	2480.699	---	---
3DH1	Ant1	2402	1.449	2401.271	2402.720	---	---
		2441	1.449	2440.271	2441.720	---	---
		2480	1.467	2479.271	2480.738	---	---

Test Graphs

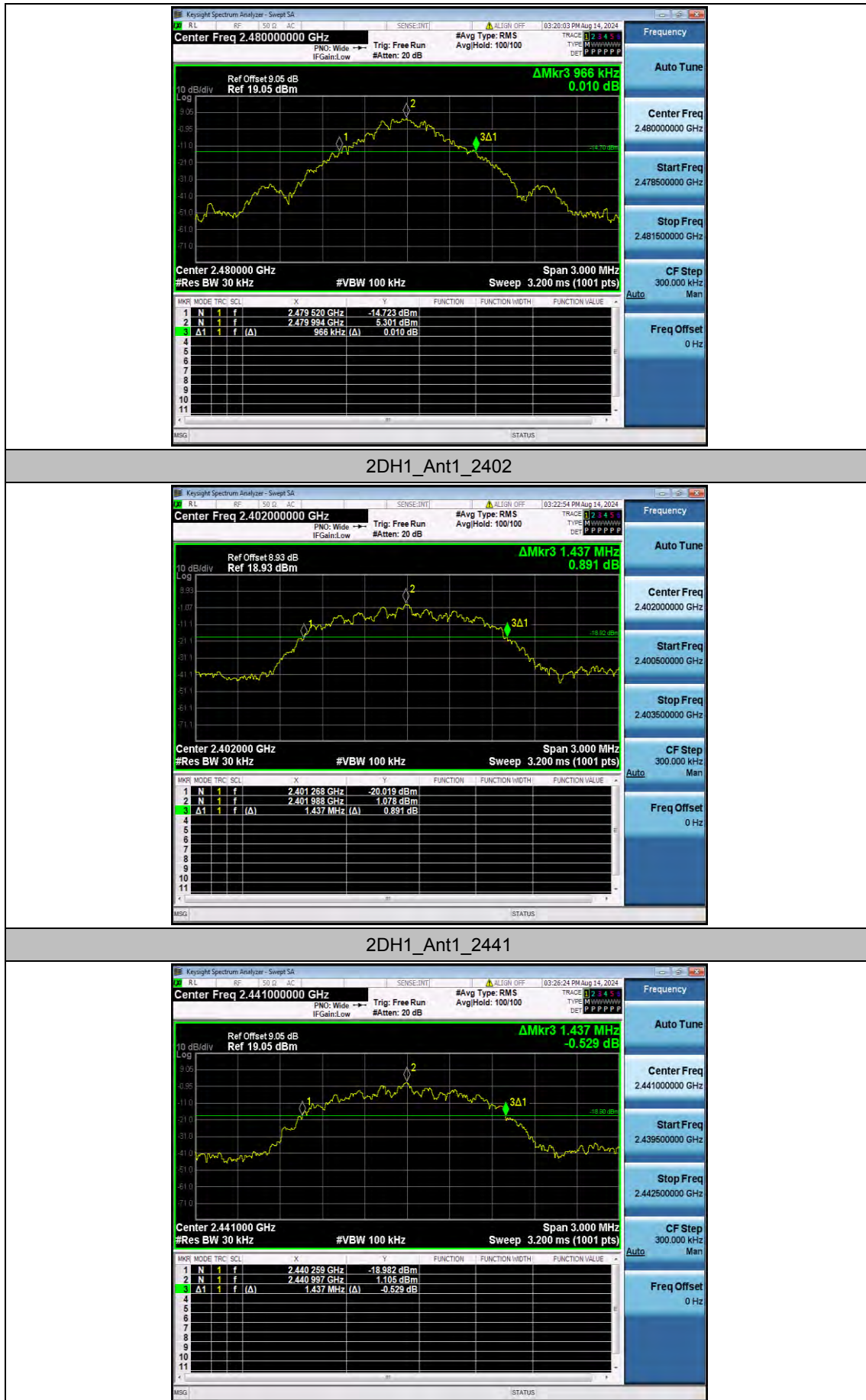
DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



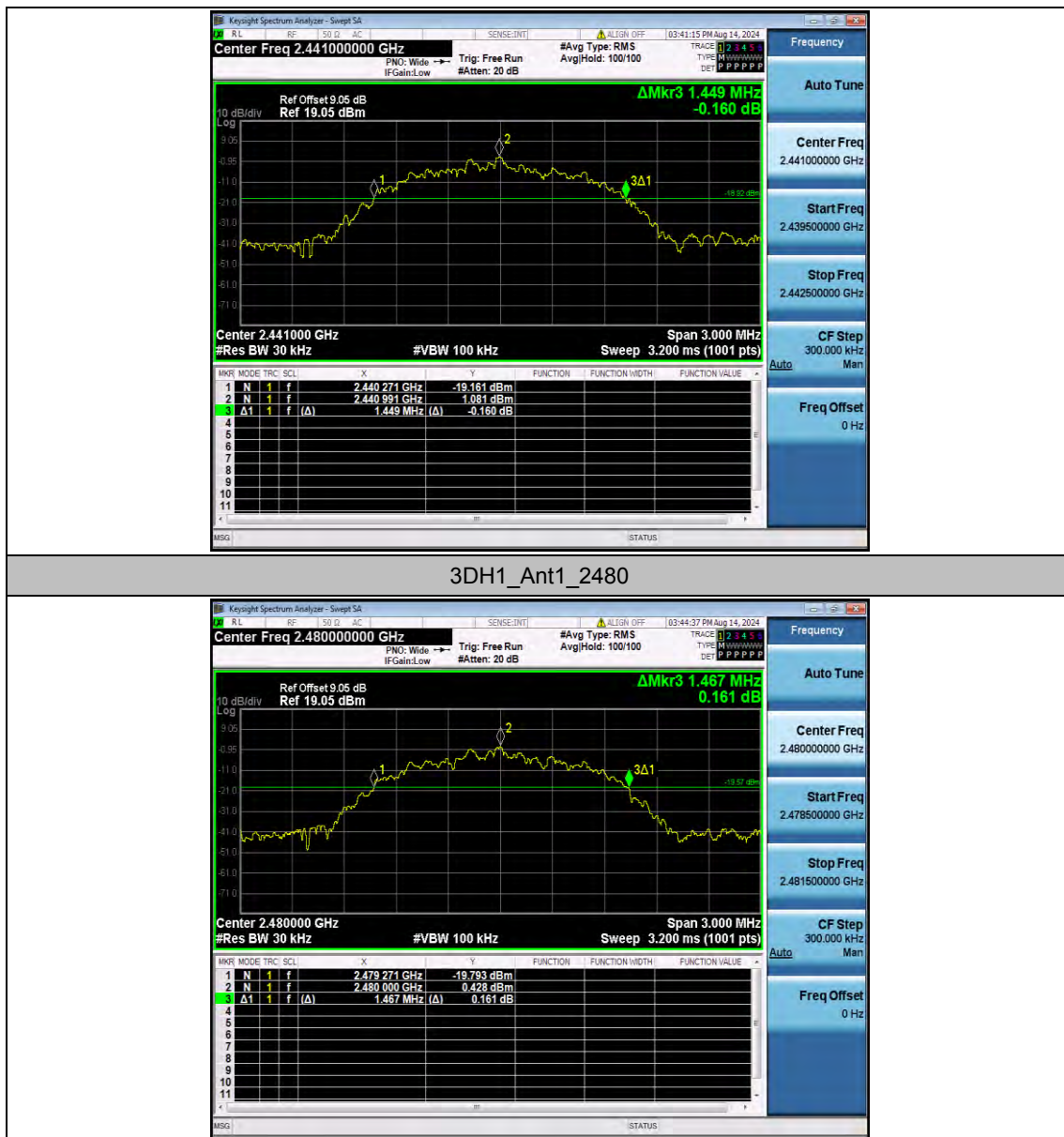
2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



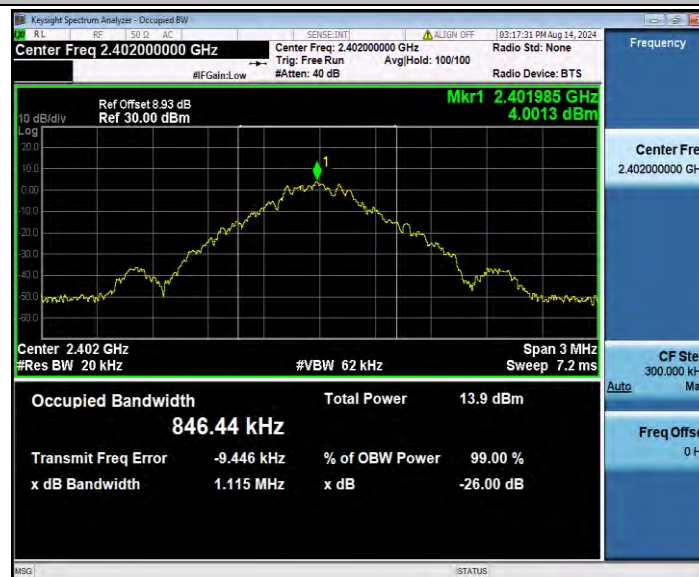
Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.84644	2401.5673	2402.4138	---	---
		2441	0.85965	2440.5618	2441.4215	---	---
		2480	0.86188	2479.5564	2480.4183	---	---
2DH1	Ant1	2402	1.3442	2401.3178	2402.6620	---	---
		2441	1.3534	2440.3111	2441.6645	---	---
		2480	1.3460	2479.3147	2480.6607	---	---
3DH1	Ant1	2402	1.3445	2401.3200	2402.6645	---	---
		2441	1.3440	2440.3172	2441.6612	---	---
		2480	1.3502	2479.3150	2480.6652	---	---

Test Graphs

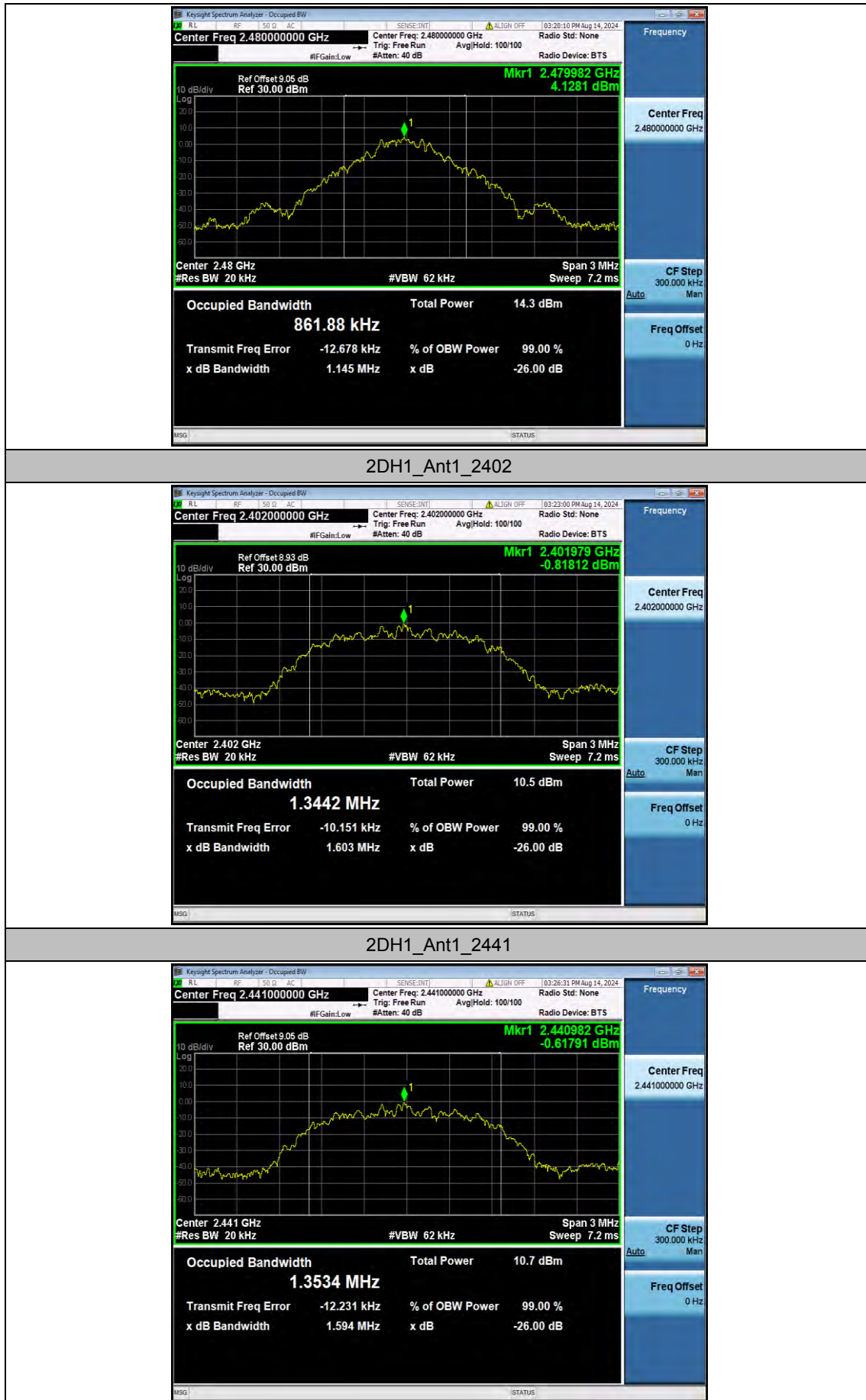
DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



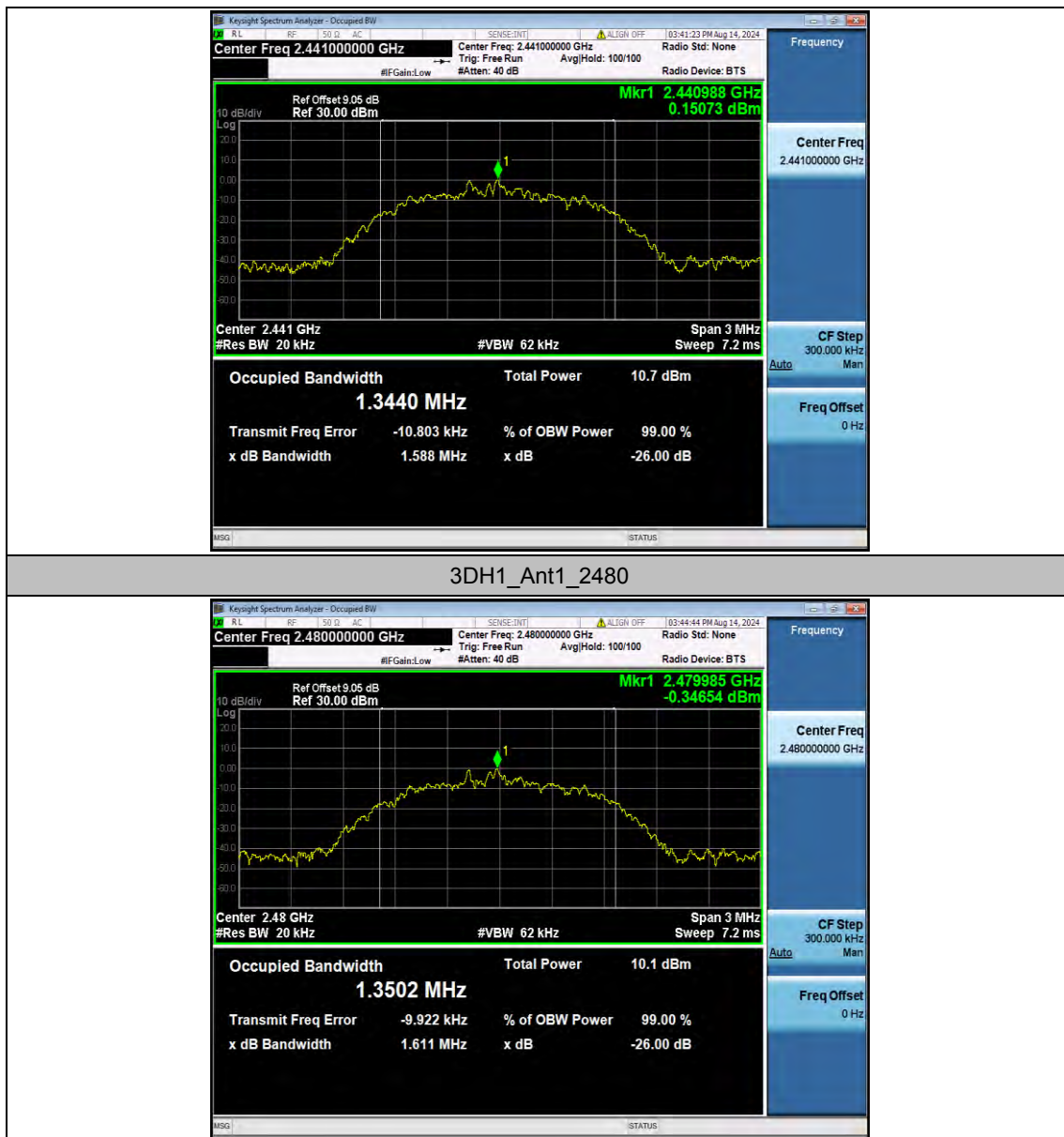
2DH1_Ant1_2480



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	7.89	≤30.00	PASS
		2441	8.80	≤30.00	PASS
		2480	8.44	≤30.00	PASS
2DH1	Ant1	2402	6.09	≤20.97	PASS
		2441	6.35	≤20.97	PASS
		2480	5.85	≤20.97	PASS
3DH1	Ant1	2402	6.27	≤20.97	PASS
		2441	6.58	≤20.97	PASS
		2480	6.05	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	1.15	≥ 0.966	PASS
		Hop_2441	1.158	≥ 0.966	PASS
		Hop_2480	1.184	≥ 0.966	PASS
2DH1	Ant1	Hop_2402	1.024	≥ 0.978	PASS
		Hop_2441	0.984	≥ 0.978	PASS
		Hop_2480	1.184	≥ 0.978	PASS
3DH1	Ant1	Hop_2402	1.168	≥ 0.978	PASS
		Hop_2441	1.156	≥ 0.978	PASS
		Hop_2480	1.16	≥ 0.978	PASS

Test Graphs

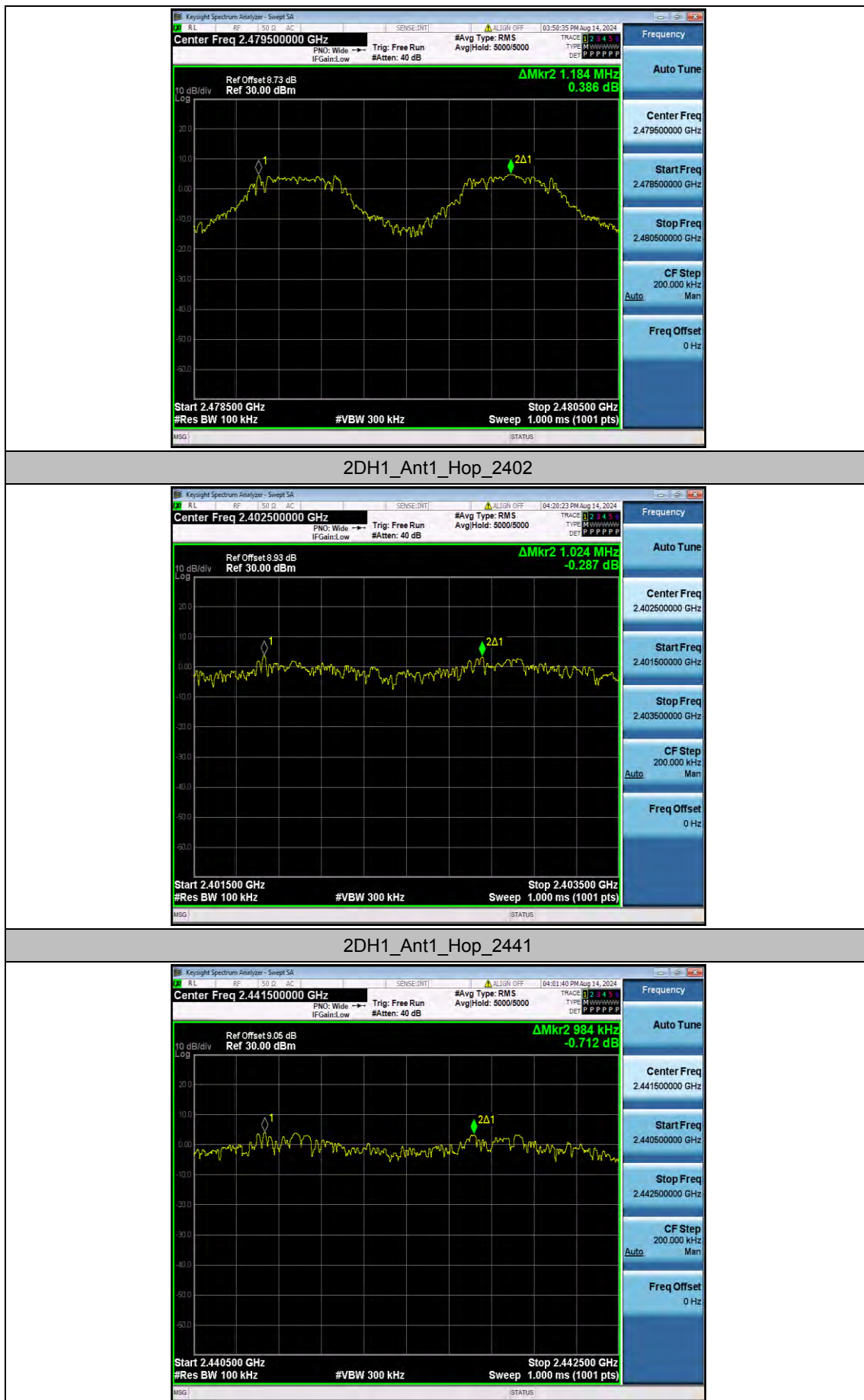
DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



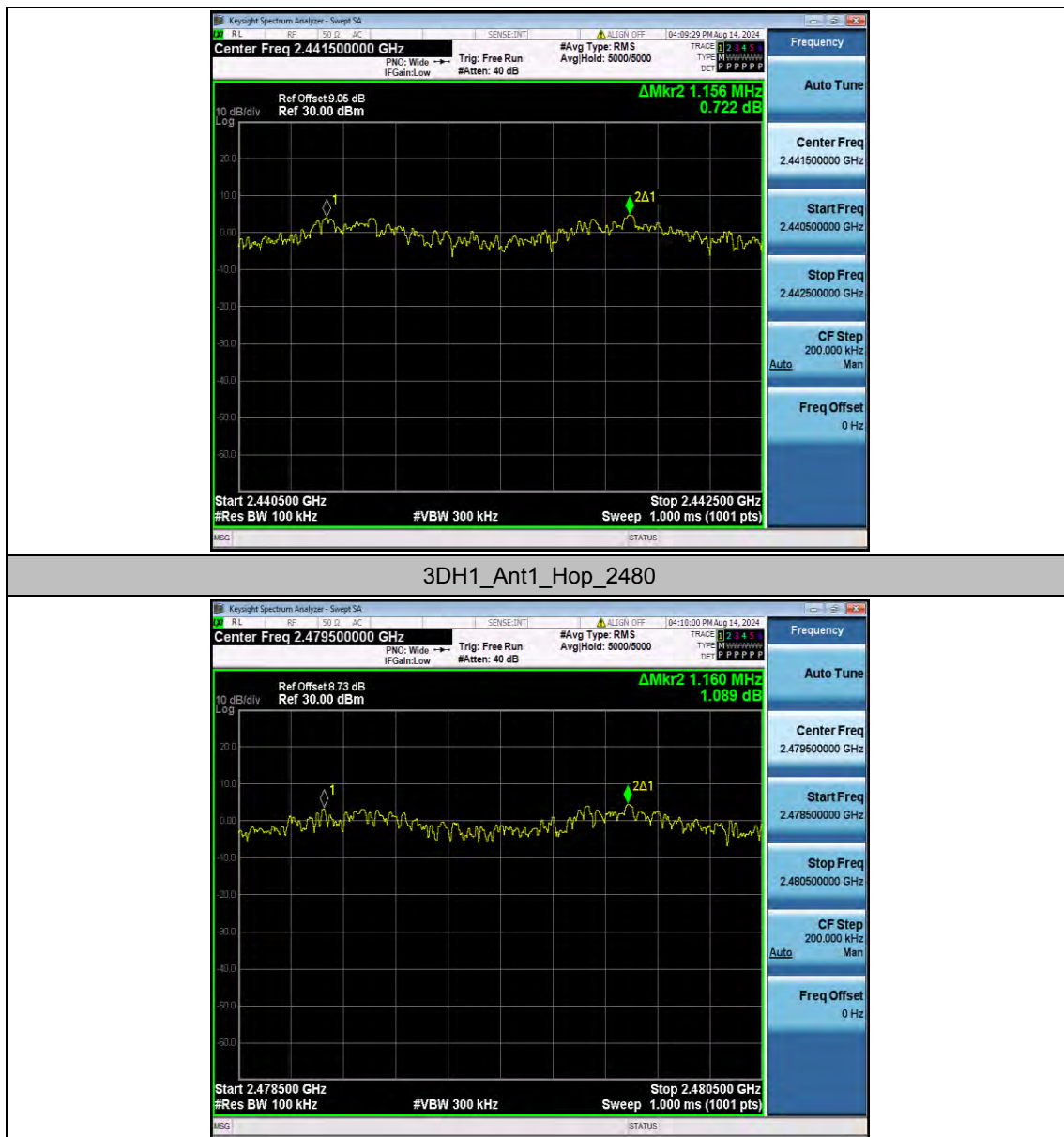
2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

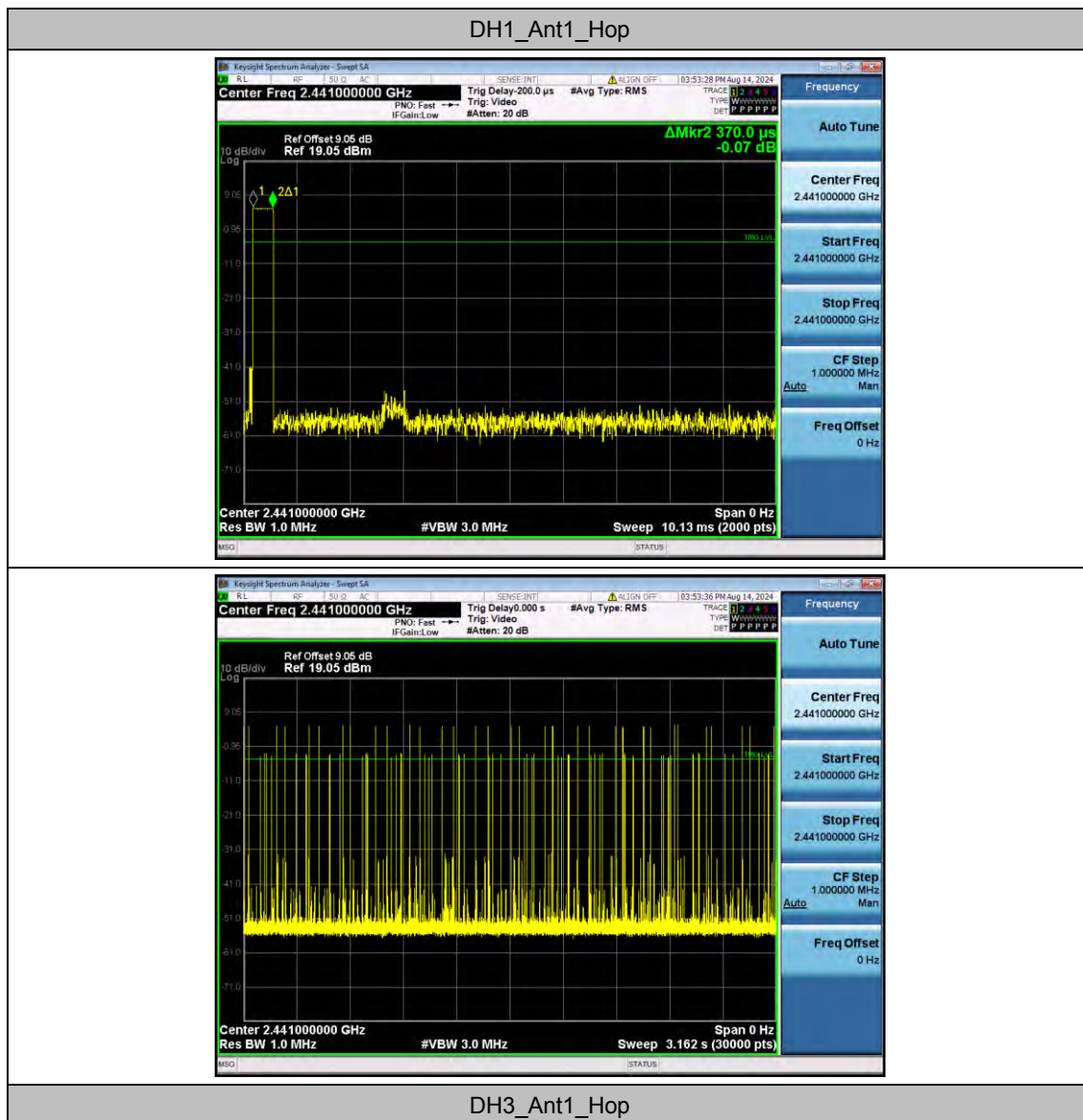


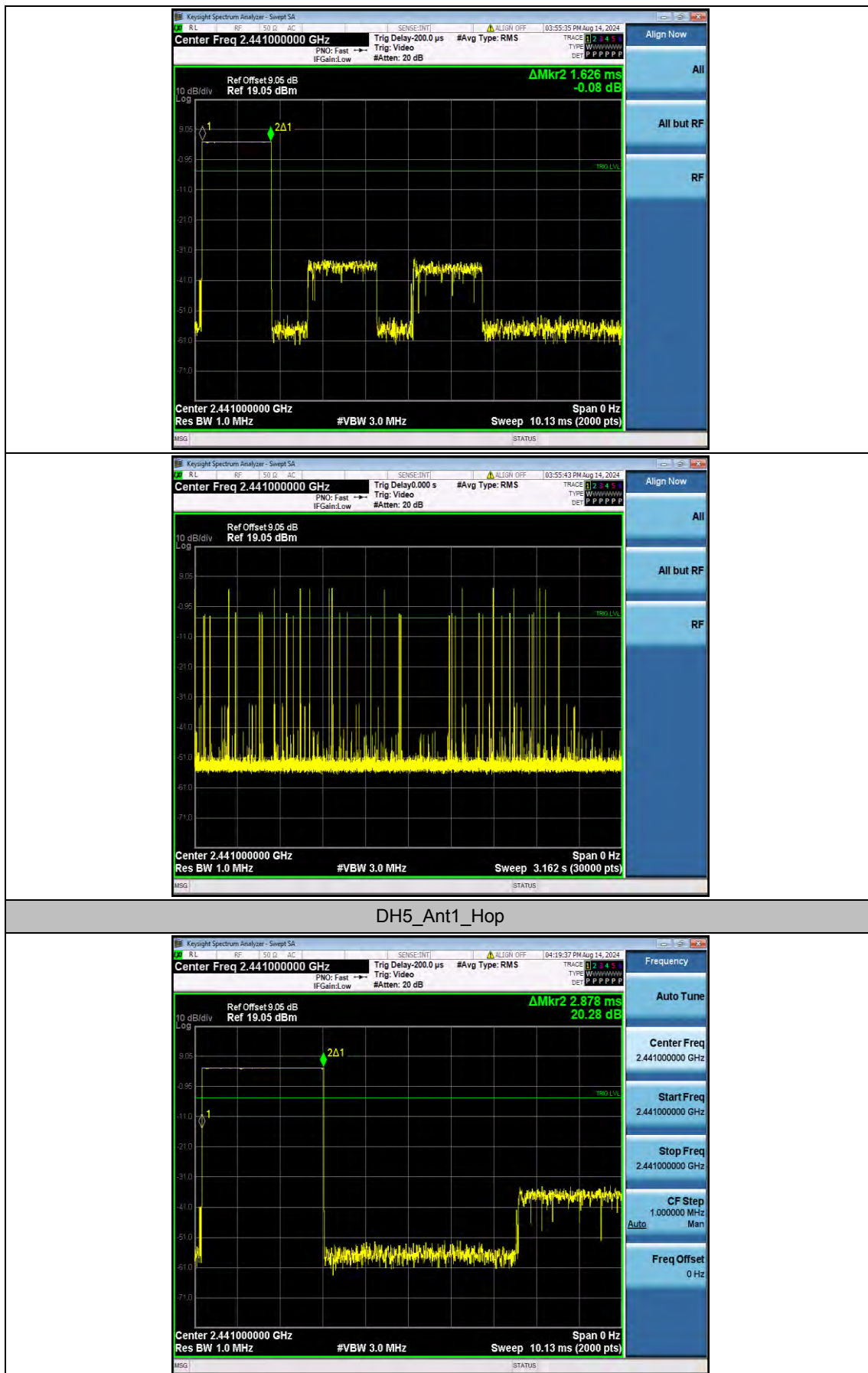
Appendix A.5: Time of occupancy

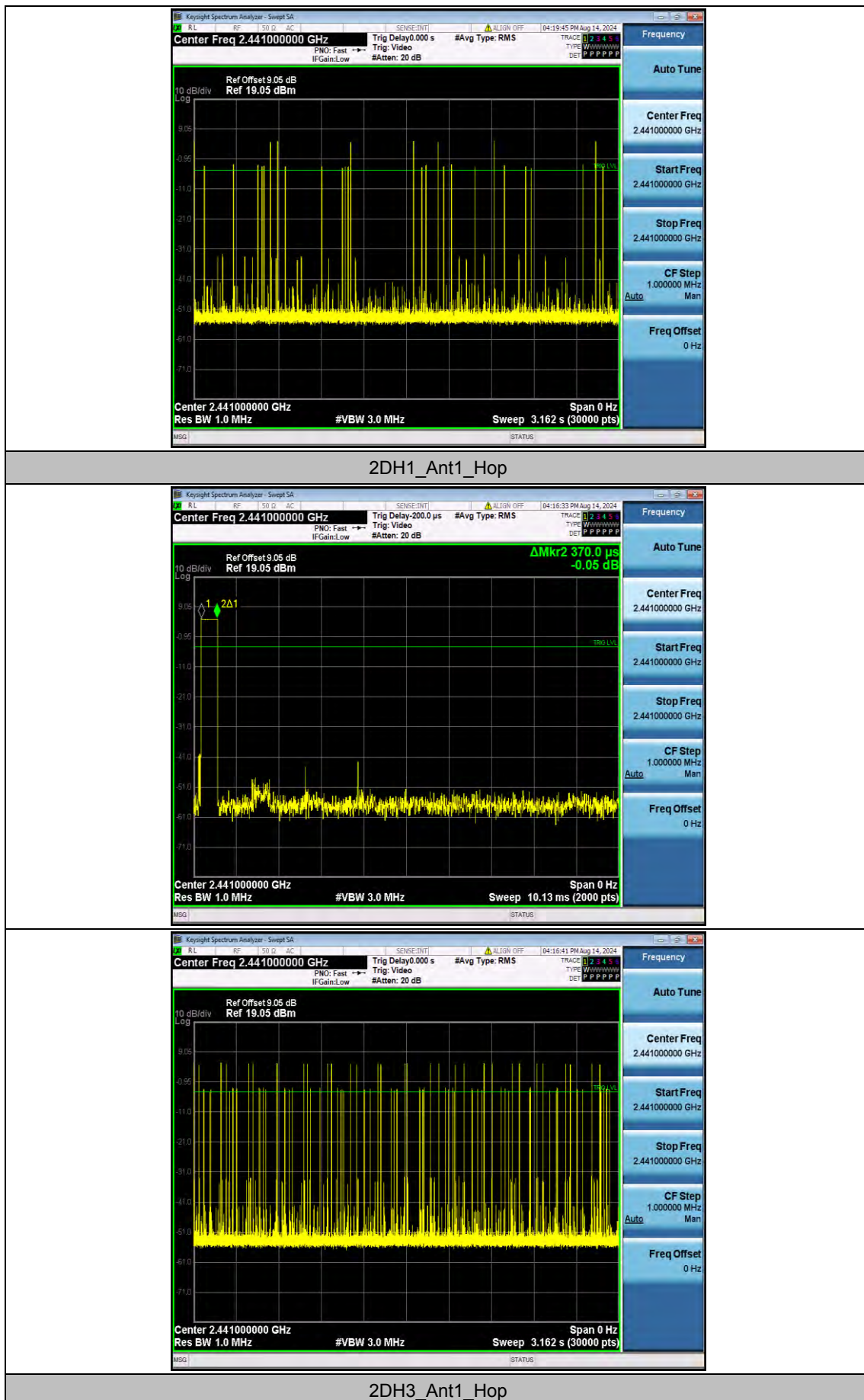
Test Result

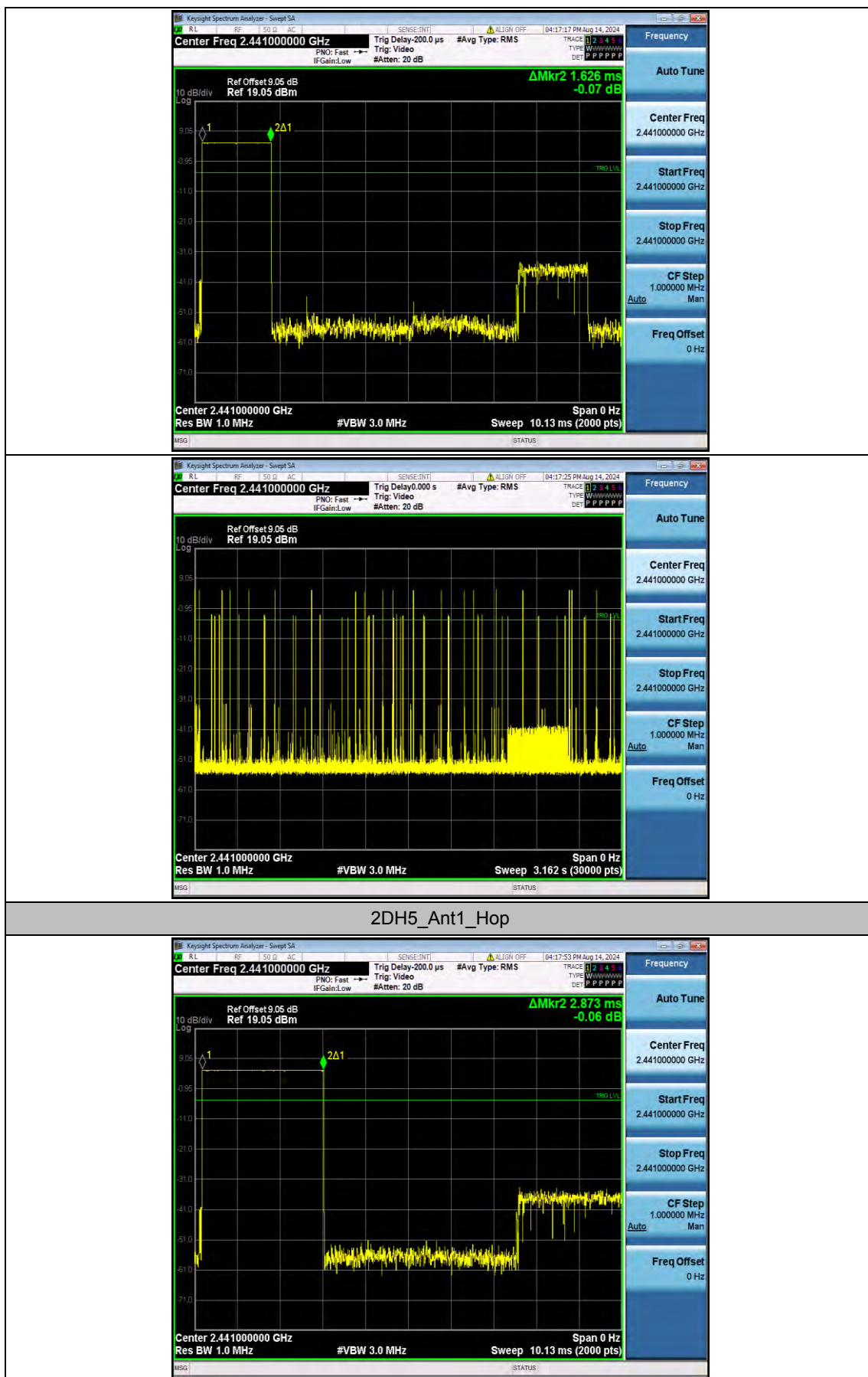
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.370	330	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.626	130	0.211	≤0.4	PASS
DH5	Ant1	Hop	2.878	80	0.23	≤0.4	PASS
2DH1	Ant1	Hop	0.370	320	0.118	≤0.4	PASS
2DH3	Ant1	Hop	1.626	210	0.341	≤0.4	PASS
2DH5	Ant1	Hop	2.873	80	0.23	≤0.4	PASS
3DH1	Ant1	Hop	0.375	320	0.12	≤0.4	PASS
3DH3	Ant1	Hop	1.626	130	0.211	≤0.4	PASS
3DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS

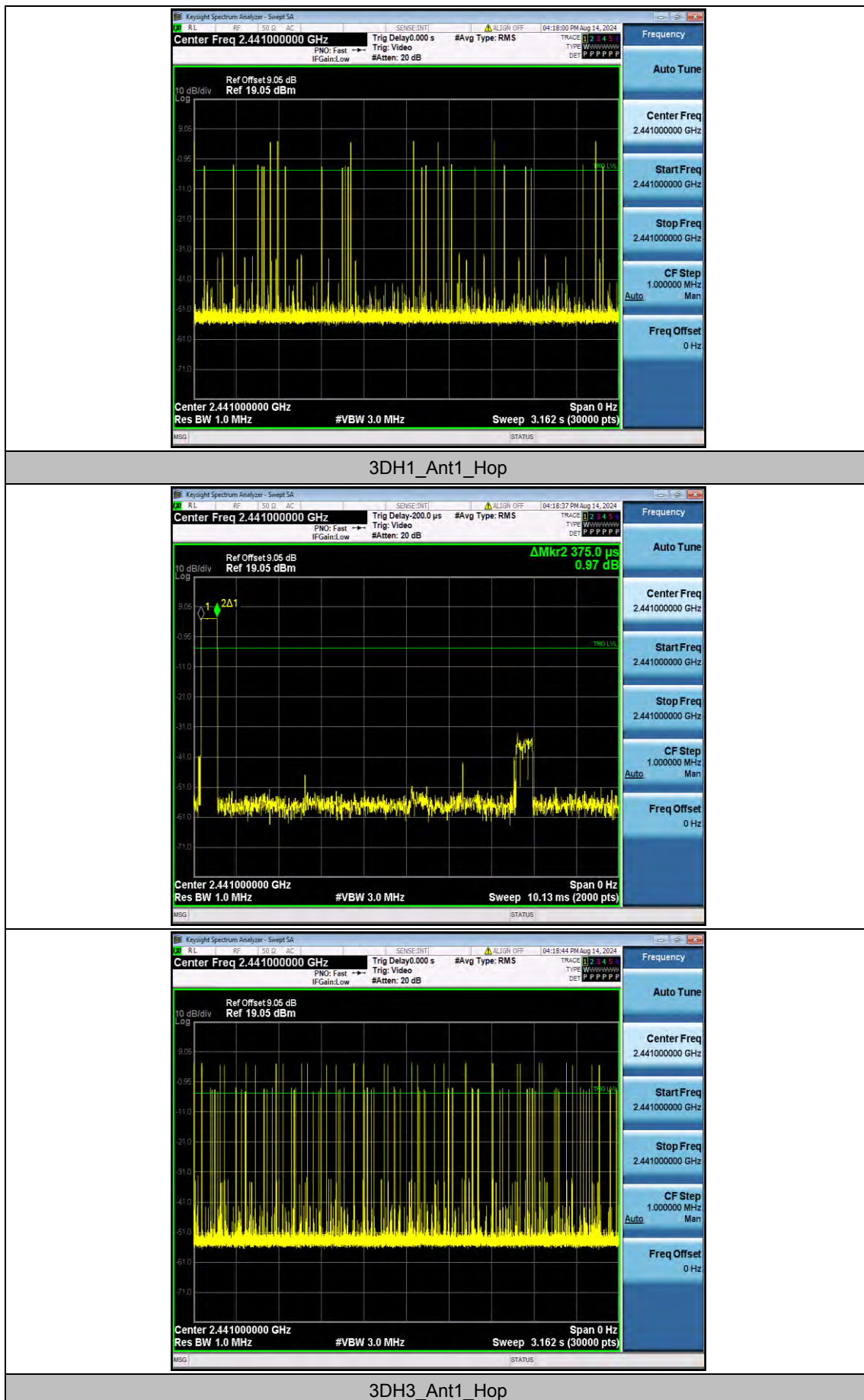
Test Graphs

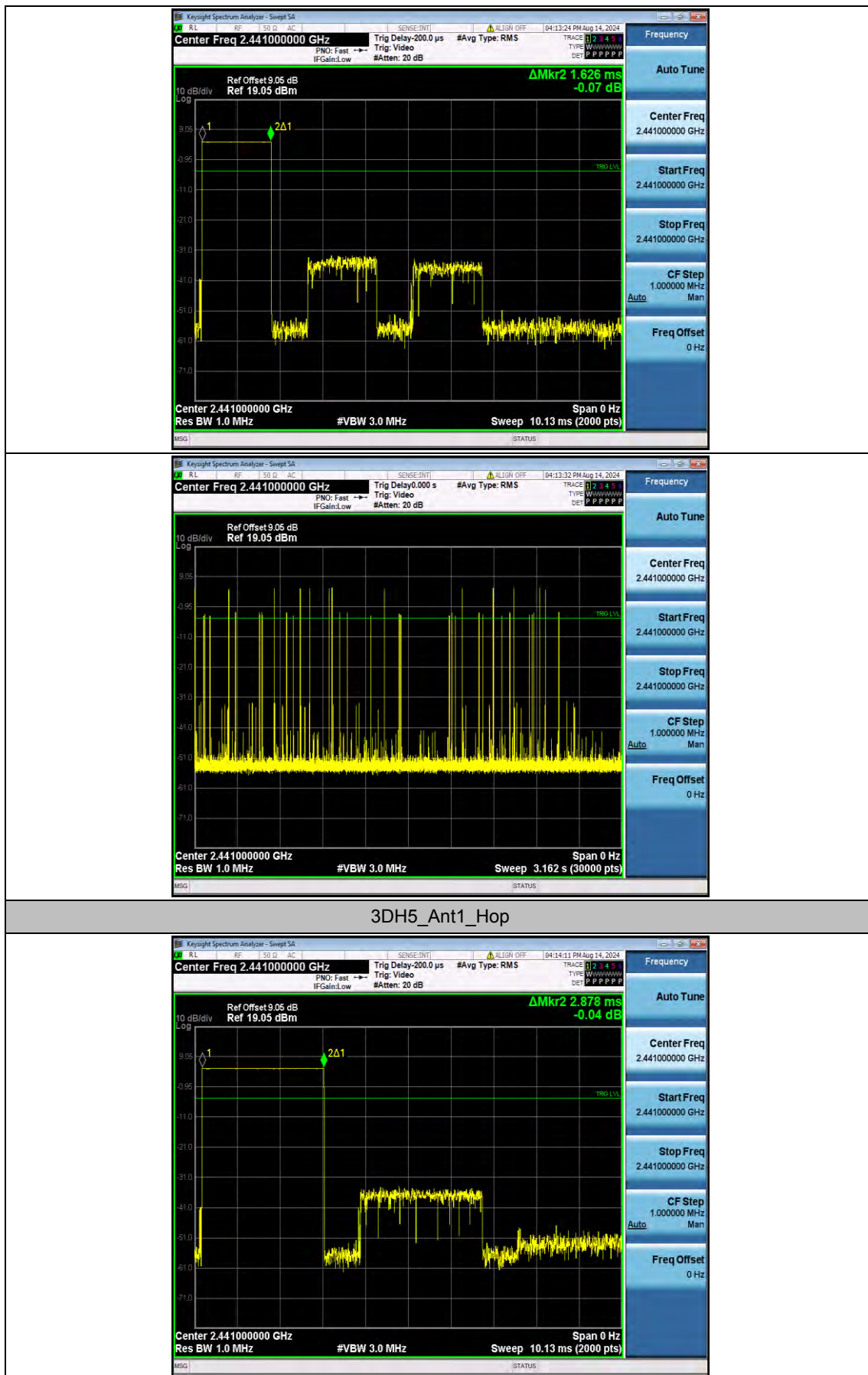


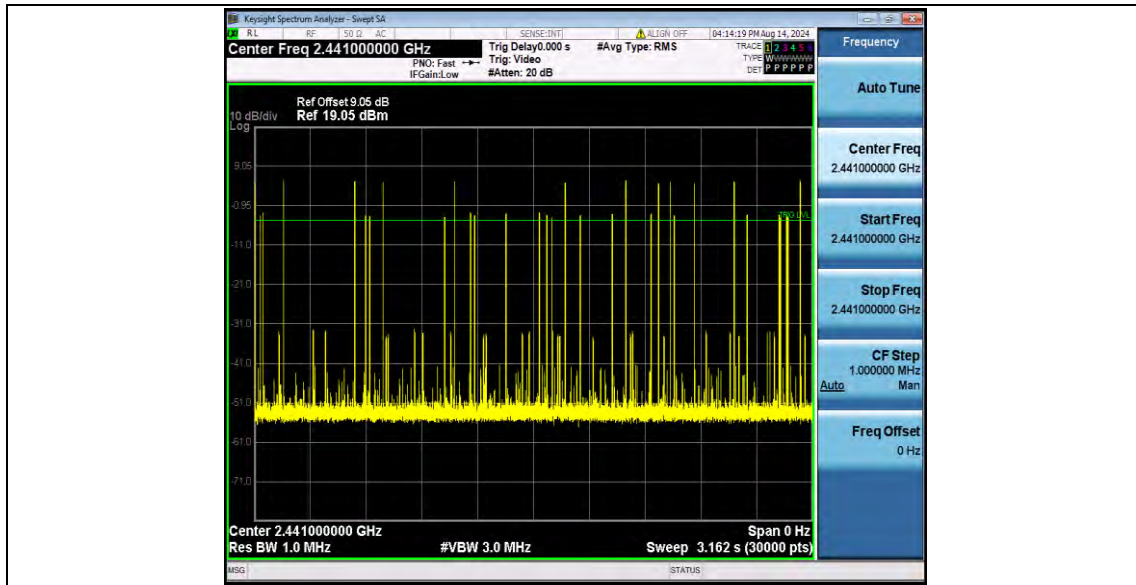










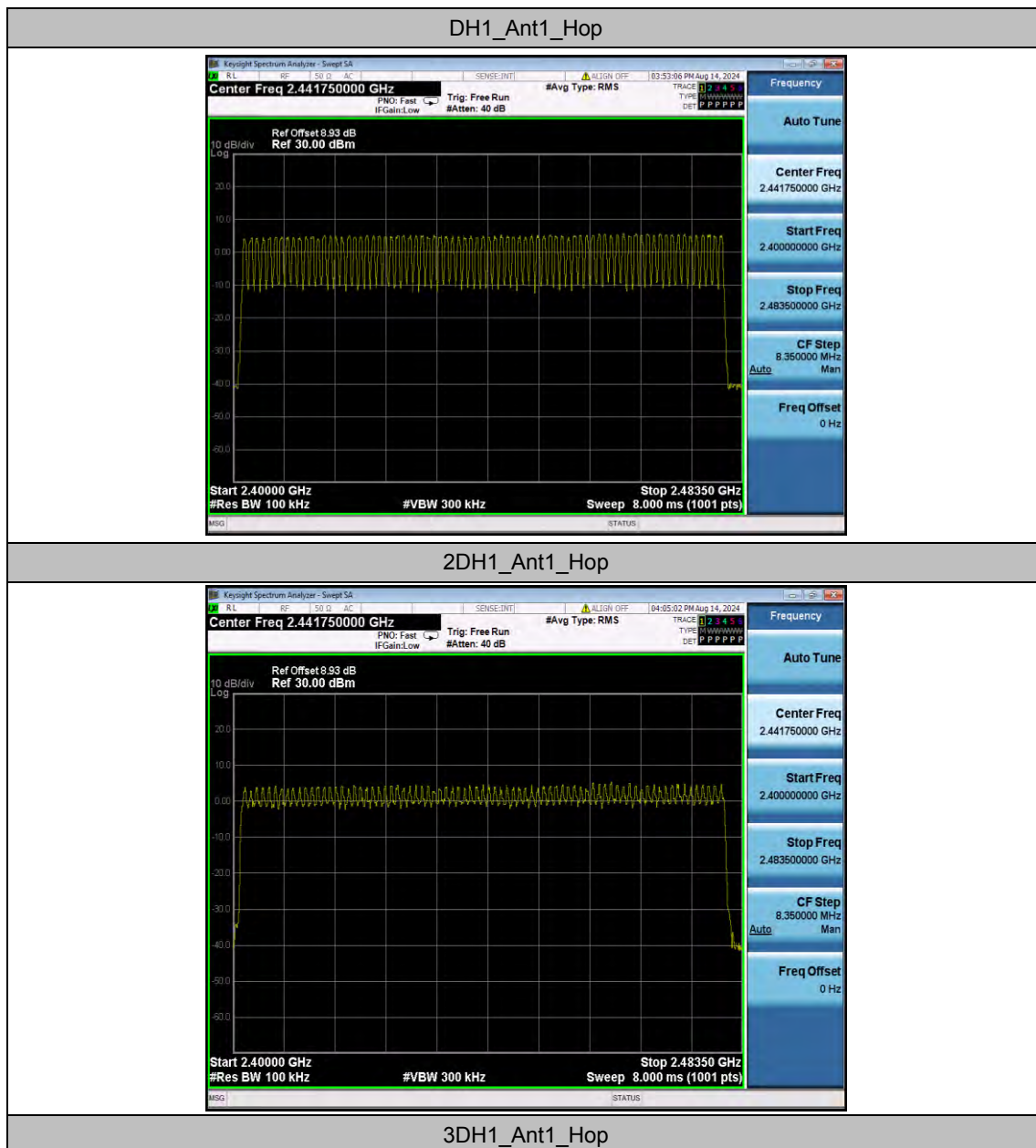


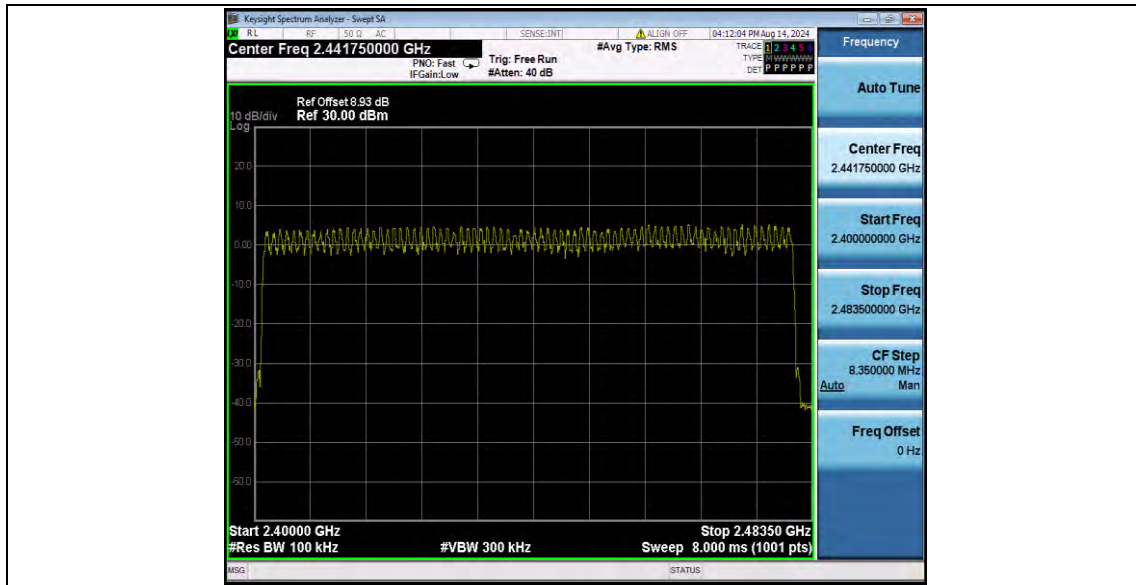
Appendix A.6: Number of hopping channels

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





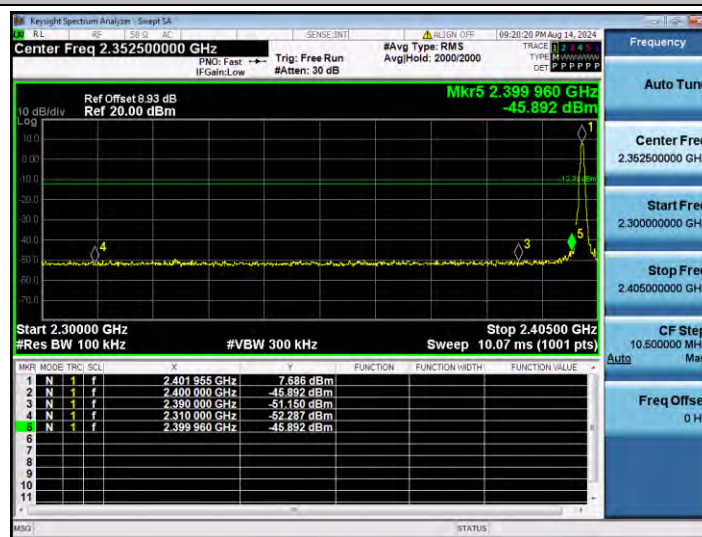
Appendix A.7: Band edge measurements

Test Result

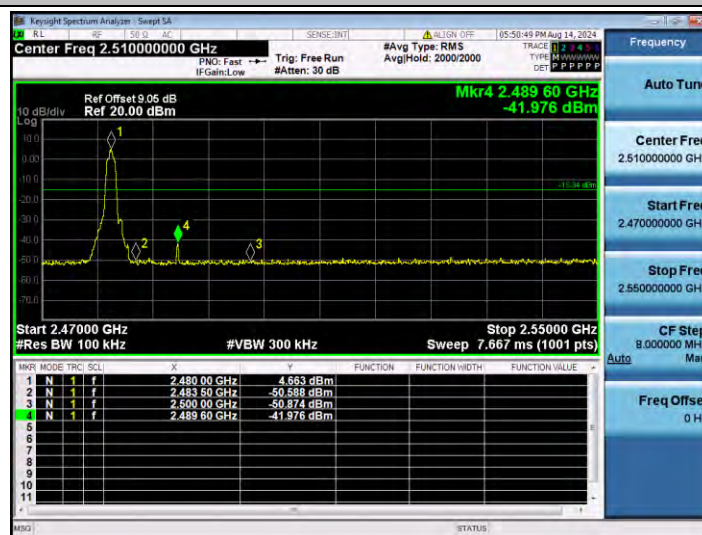
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	7.69	-45.89	≤ -12.31	PASS
		High	2480	4.66	-41.98	≤ -15.34	PASS
		Low	Hop_2402	3.80	-48.04	≤ -16.2	PASS
		High	Hop_2480	5.55	-44.57	≤ -14.45	PASS
2DH1	Ant1	Low	2402	4.03	-42.08	≤ -15.97	PASS
		High	2480	3.68	-40.63	≤ -16.32	PASS
		Low	Hop_2402	3.56	-42.91	≤ -16.44	PASS
		High	Hop_2480	4.43	-48.24	≤ -15.57	PASS
3DH1	Ant1	Low	2402	3.96	-36.11	≤ -16.04	PASS
		High	2480	3.69	-40.61	≤ -16.31	PASS
		Low	Hop_2402	3.91	-40.7	≤ -16.09	PASS
		High	Hop_2480	5.50	-44.84	≤ -14.5	PASS

Test Graphs

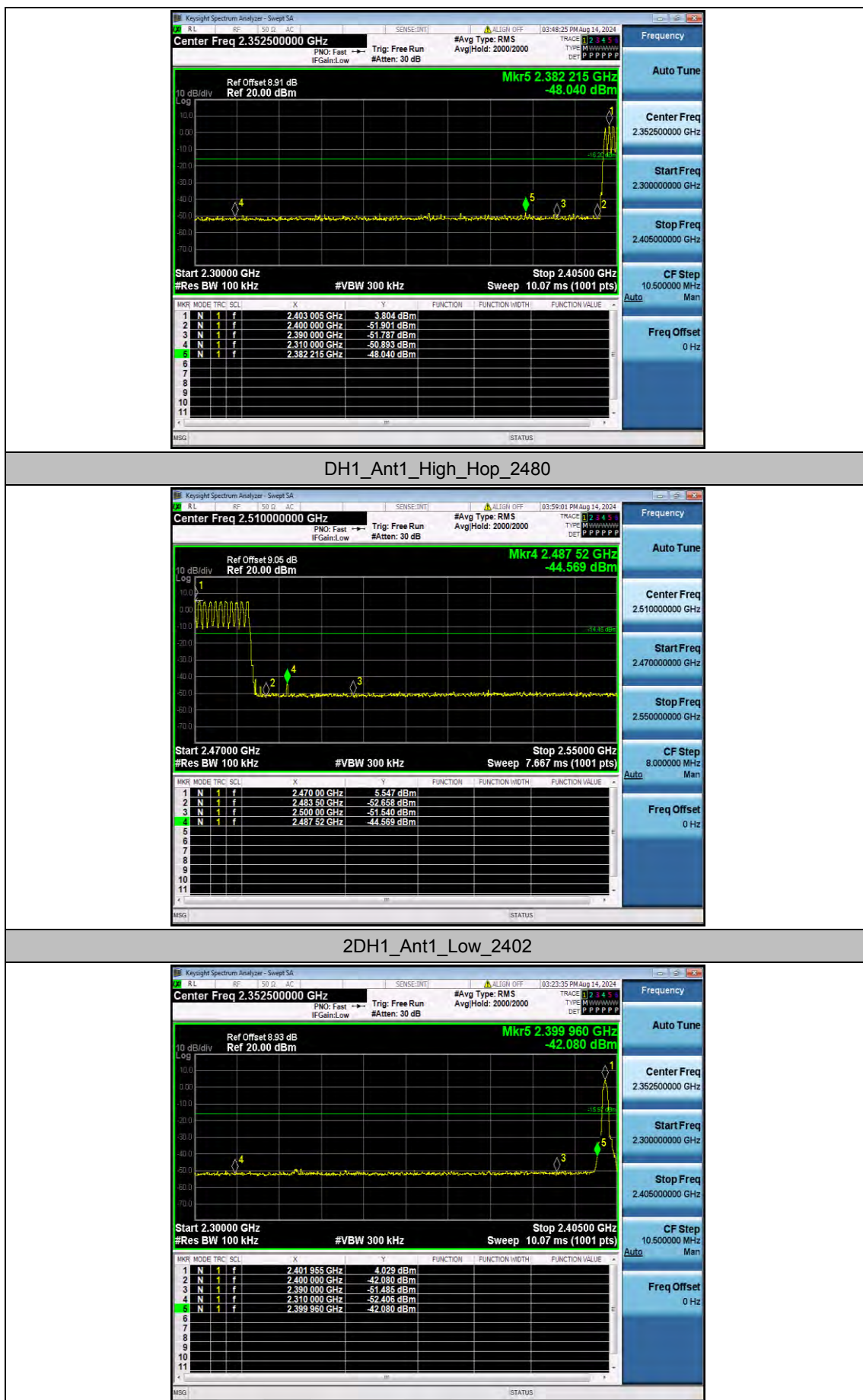
DH1_Ant1_Low_2402



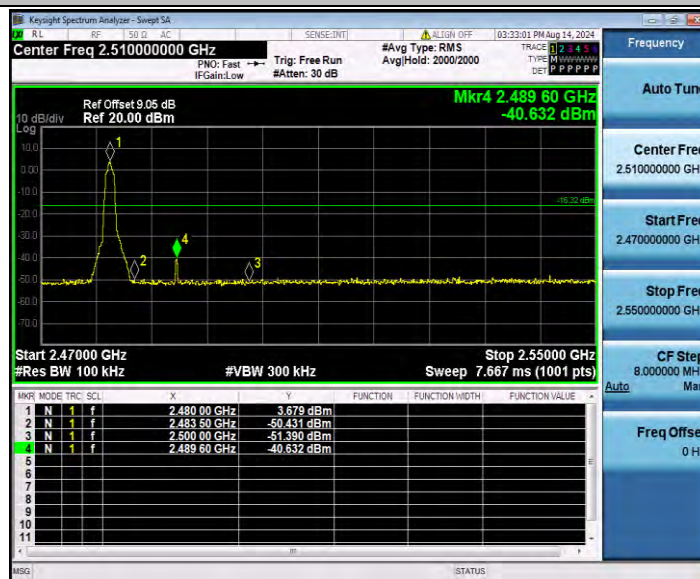
DH1_Ant1_High_2480



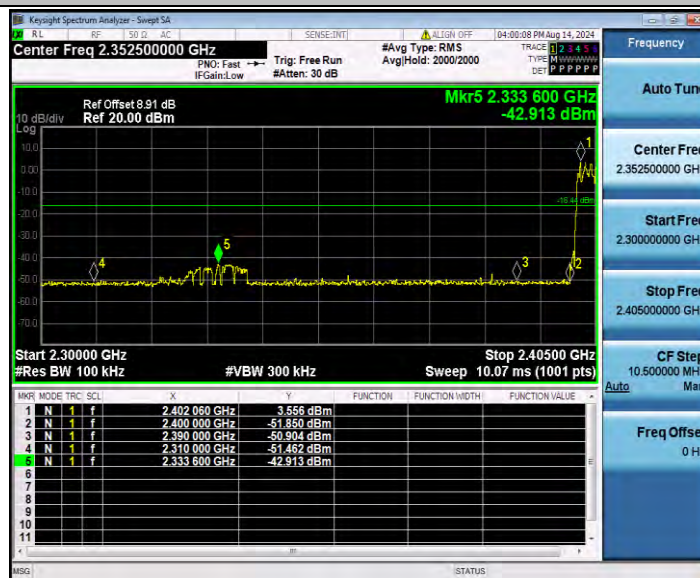
DH1_Ant1_Low_Hop_2402



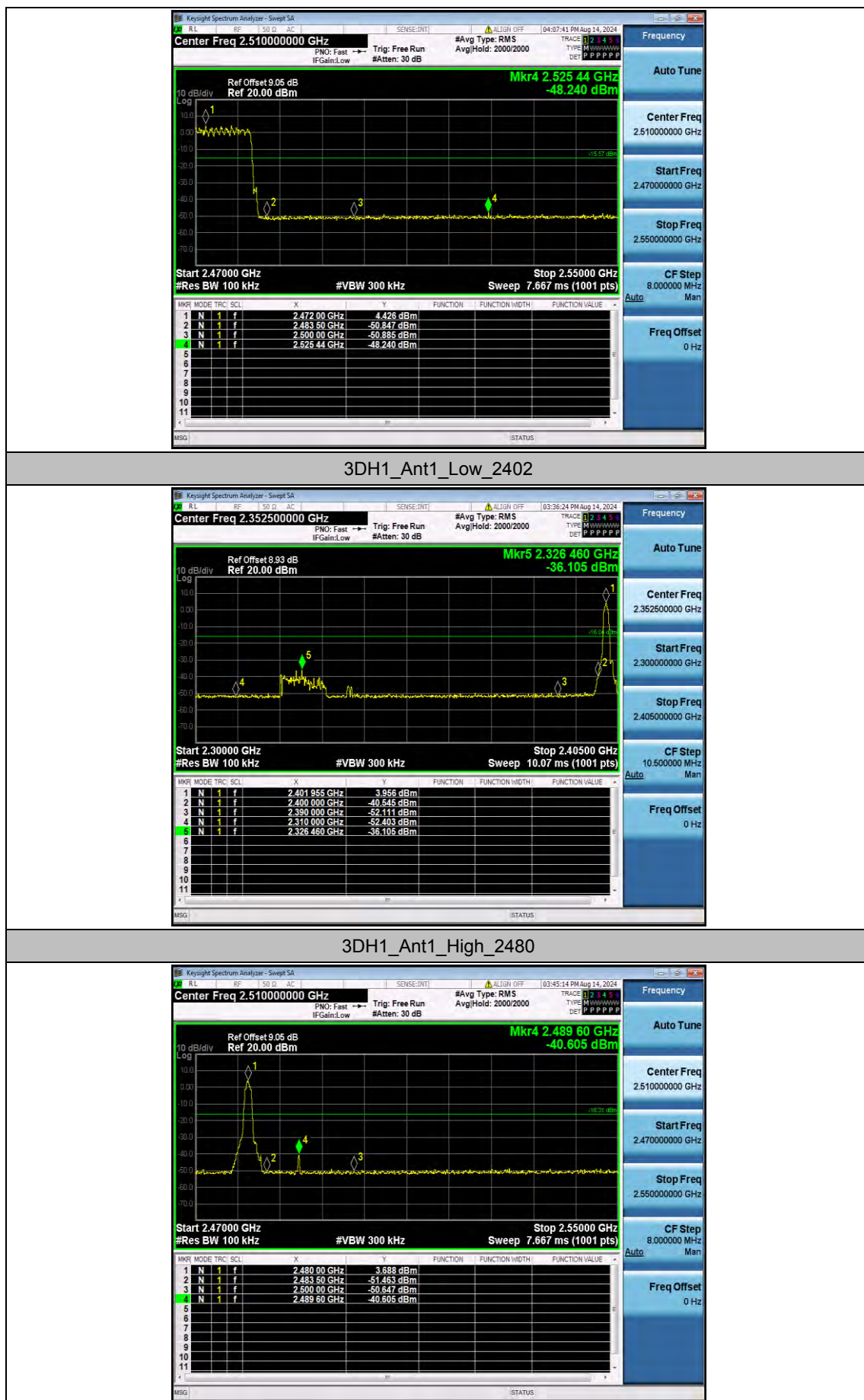
2DH1_Ant1_High_2480



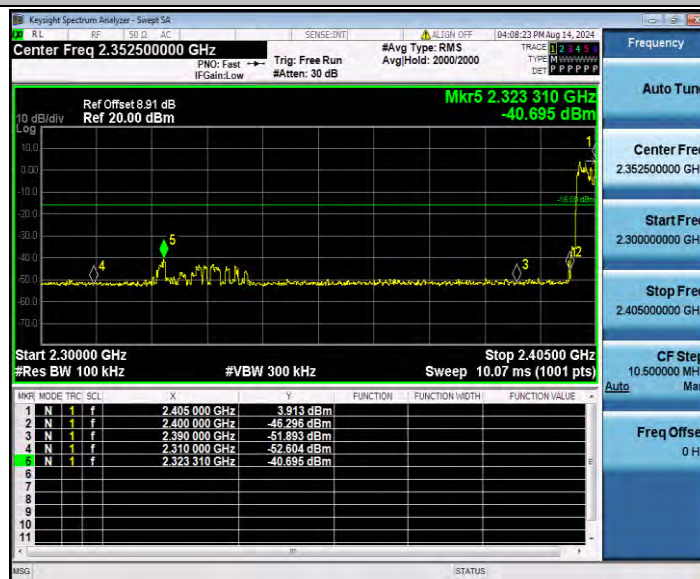
2DH1_Ant1_Low_Hop_2402



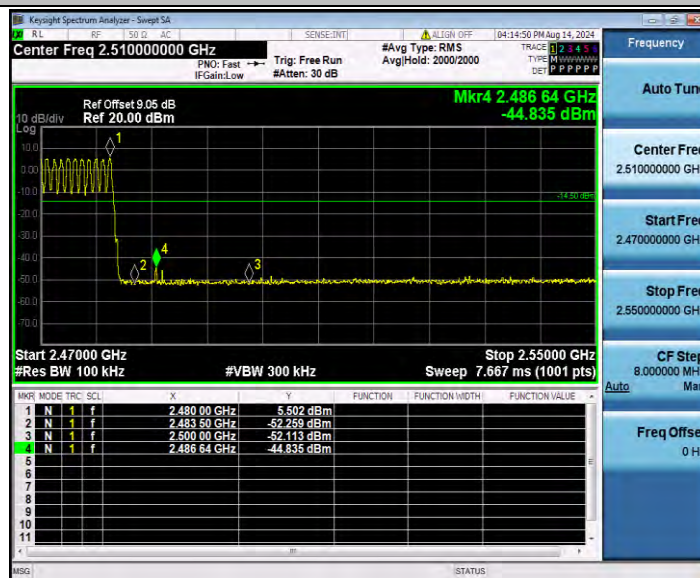
2DH1_Ant1_High_Hop_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

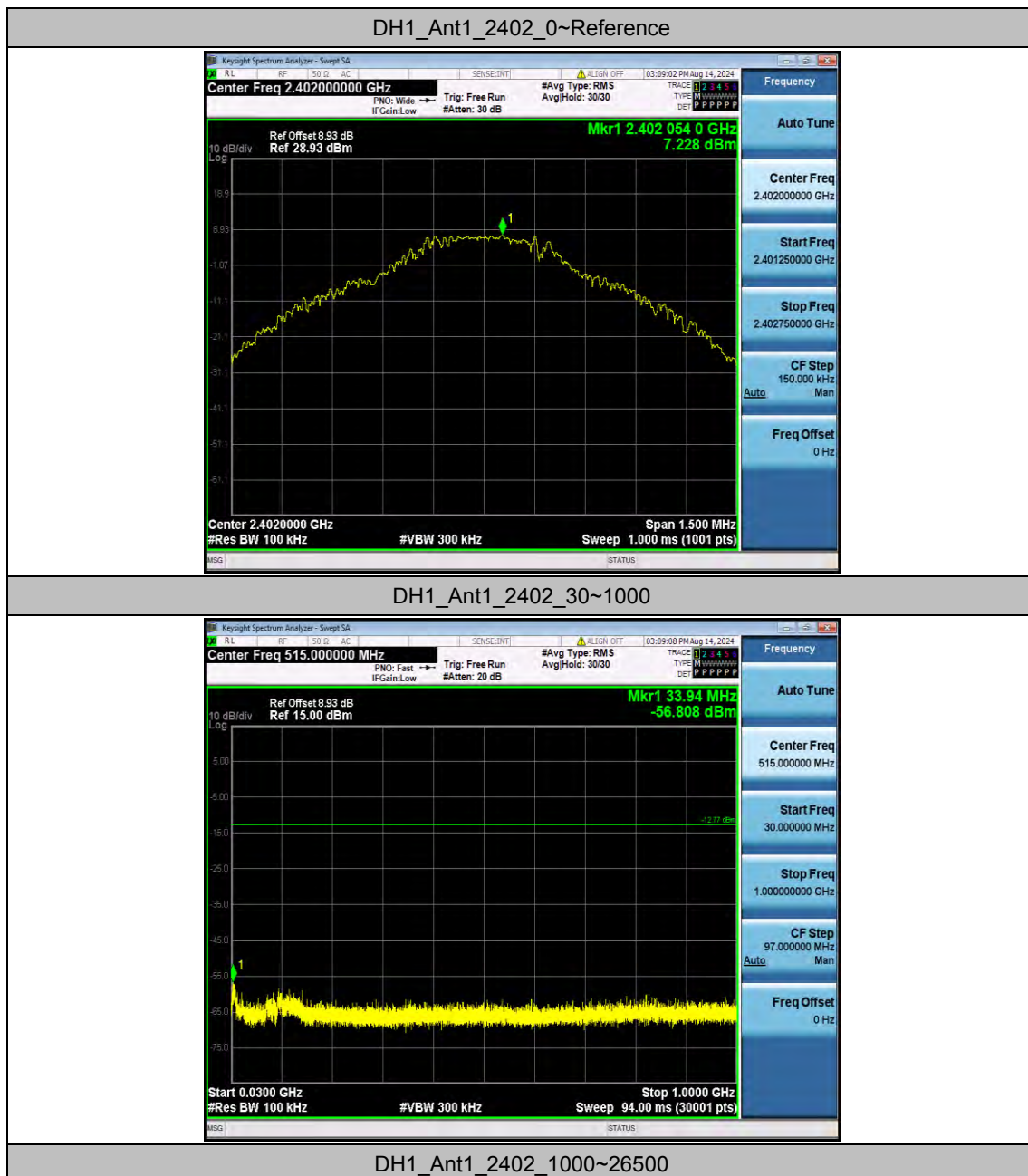


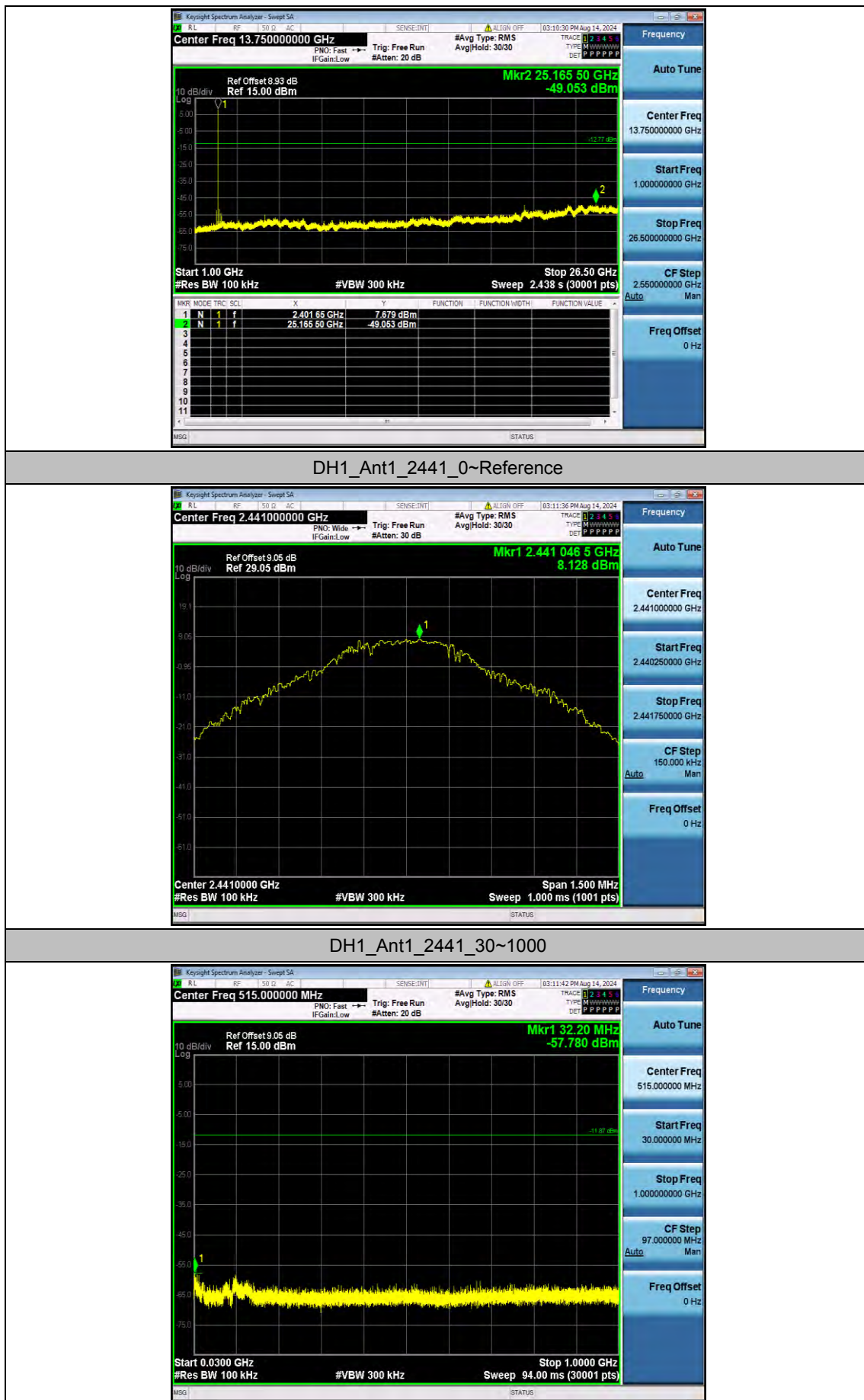
Appendix A.8: Conducted Spurious Emission

Test Result

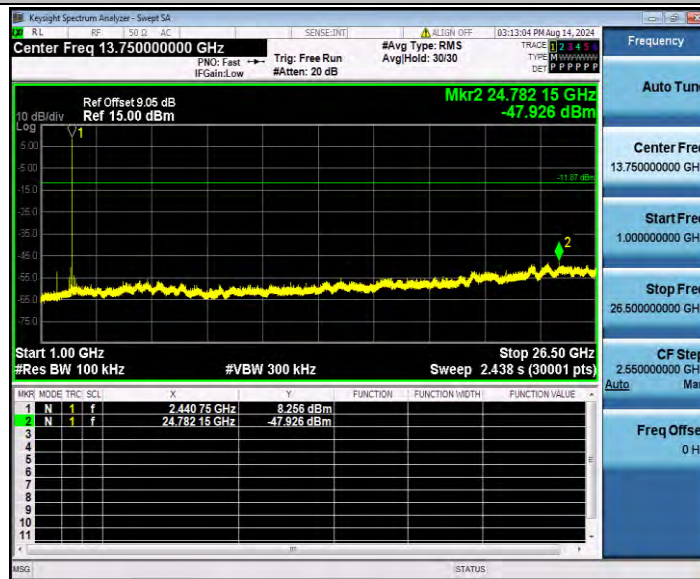
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	7.23	7.23	---	PASS
			30~1000	7.23	-56.81	≤ -12.77	PASS
			1000~26500	7.23	-49.05	≤ -12.77	PASS
		2441	Reference	8.13	8.13	---	PASS
			30~1000	8.13	-57.78	≤ -11.87	PASS
			1000~26500	8.13	-47.93	≤ -11.87	PASS
		2480	Reference	7.77	7.77	---	PASS
			30~1000	7.77	-56.37	≤ -12.23	PASS
			1000~26500	7.77	-48.7	≤ -12.23	PASS
2DH1	Ant1	2402	Reference	2.57	2.57	---	PASS
			30~1000	2.57	-57.07	≤ -17.43	PASS
			1000~26500	2.57	-47.14	≤ -17.43	PASS
		2441	Reference	3.82	3.82	---	PASS
			30~1000	3.82	-56.14	≤ -16.18	PASS
			1000~26500	3.82	-47.01	≤ -16.18	PASS
		2480	Reference	3.52	3.52	---	PASS
			30~1000	3.52	-57.41	≤ -16.48	PASS
			1000~26500	3.52	-47.57	≤ -16.48	PASS
3DH1	Ant1	2402	Reference	3.72	3.72	---	PASS
			30~1000	3.72	-56.84	≤ -16.28	PASS
			1000~26500	3.72	-48.36	≤ -16.28	PASS
		2441	Reference	3.95	3.95	---	PASS
			30~1000	3.95	-54.29	≤ -16.05	PASS
			1000~26500	3.95	-40.54	≤ -16.05	PASS
		2480	Reference	3.49	3.49	---	PASS
			30~1000	3.49	-56.99	≤ -16.51	PASS
			1000~26500	3.49	-38.68	≤ -16.51	PASS

Test Graphs





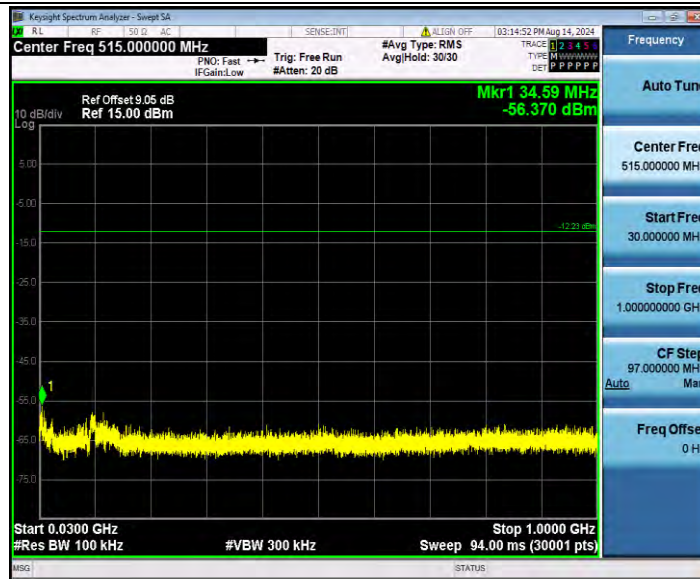
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000



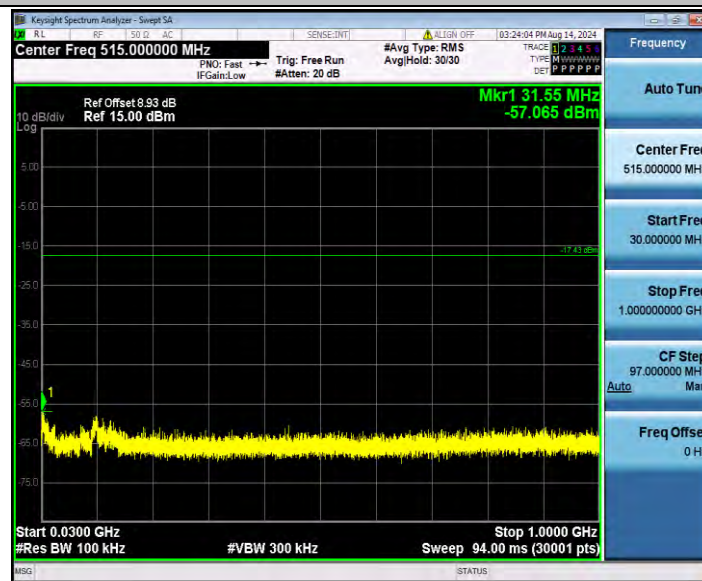
DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



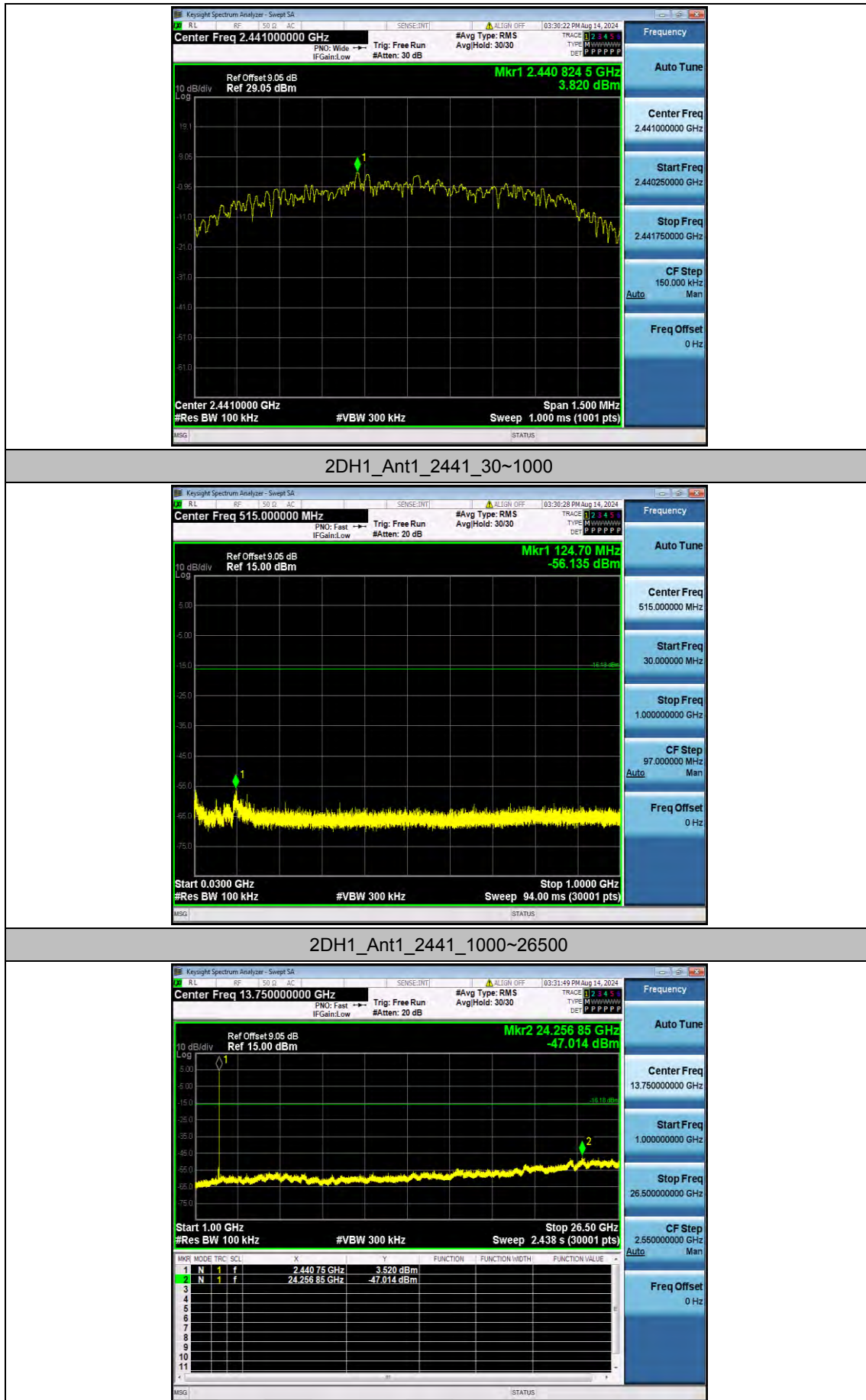
2DH1_Ant1_2402_30~1000



2DH1_Ant1_2402_1000~26500



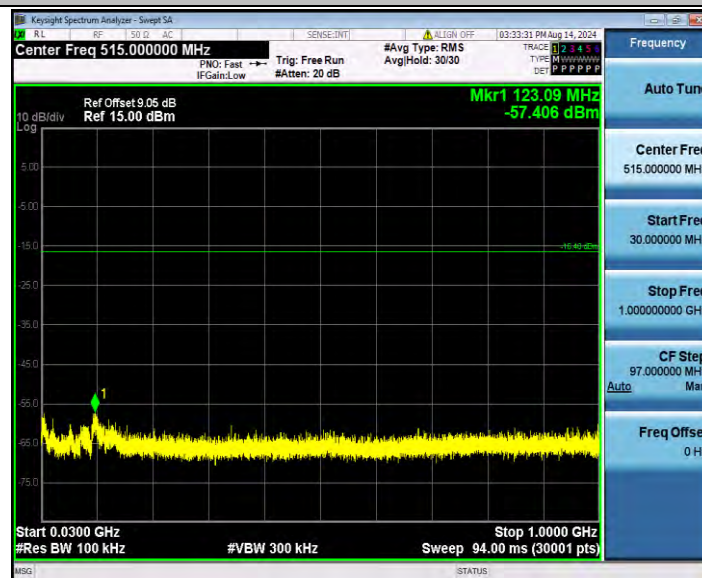
2DH1_Ant1_2441_0~Reference



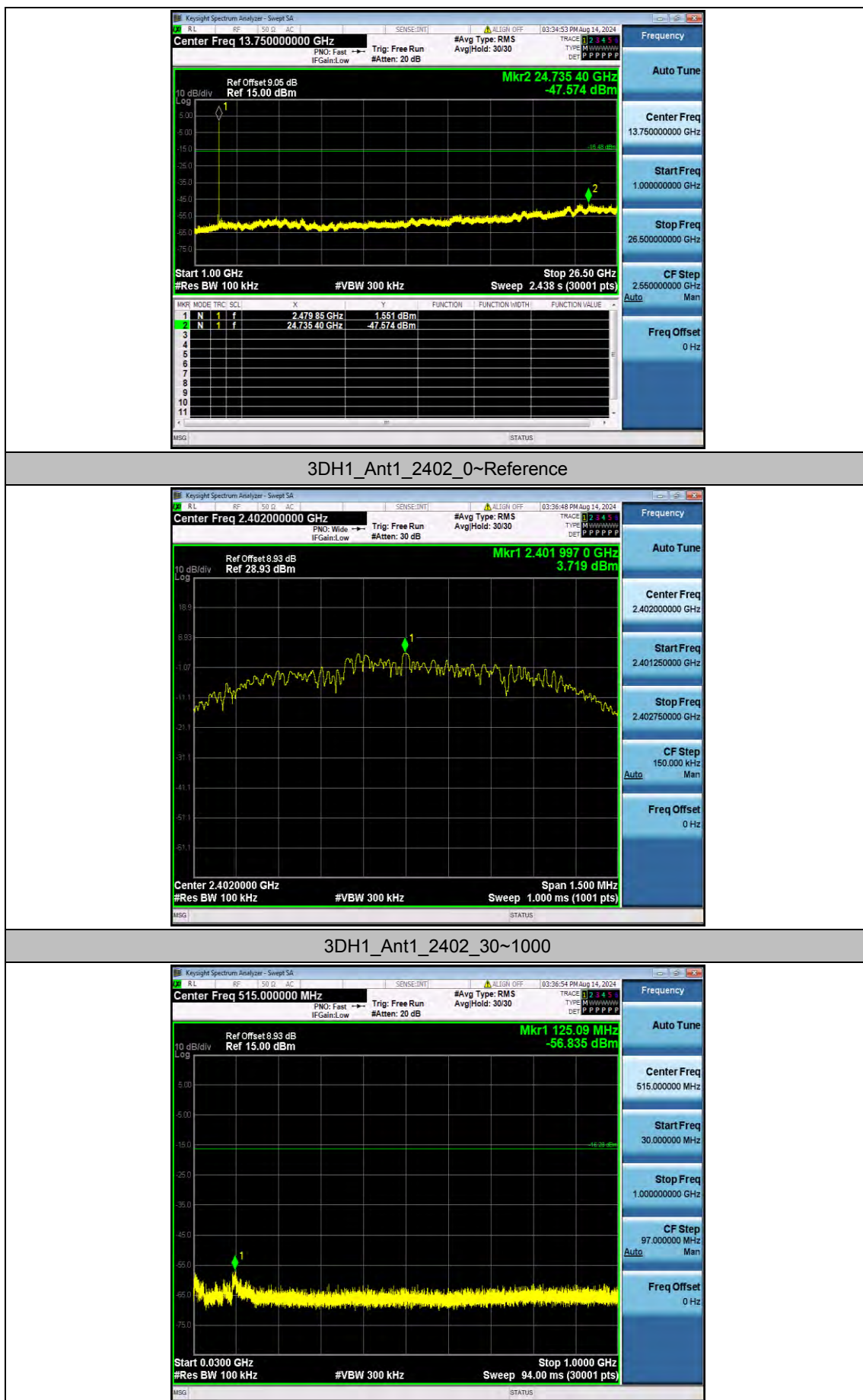
2DH1_Ant1_2480_0~Reference

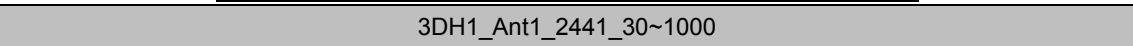
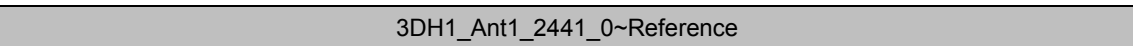


2DH1_Ant1_2480_30~1000

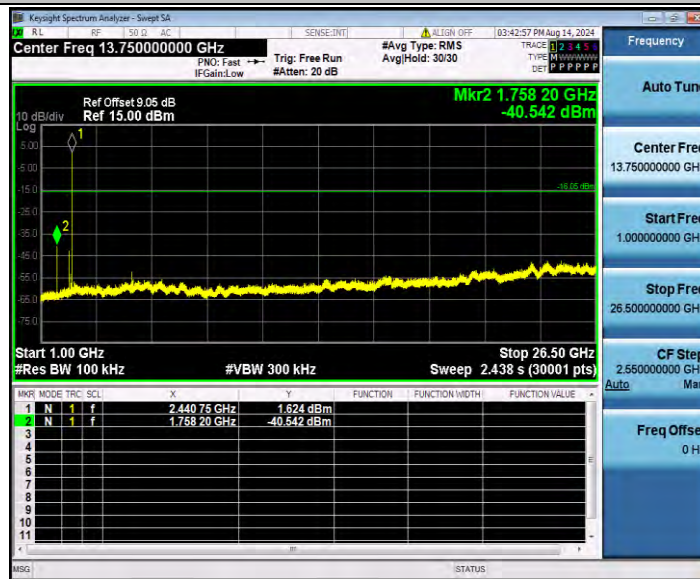


2DH1_Ant1_2480_1000~26500





3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000

