

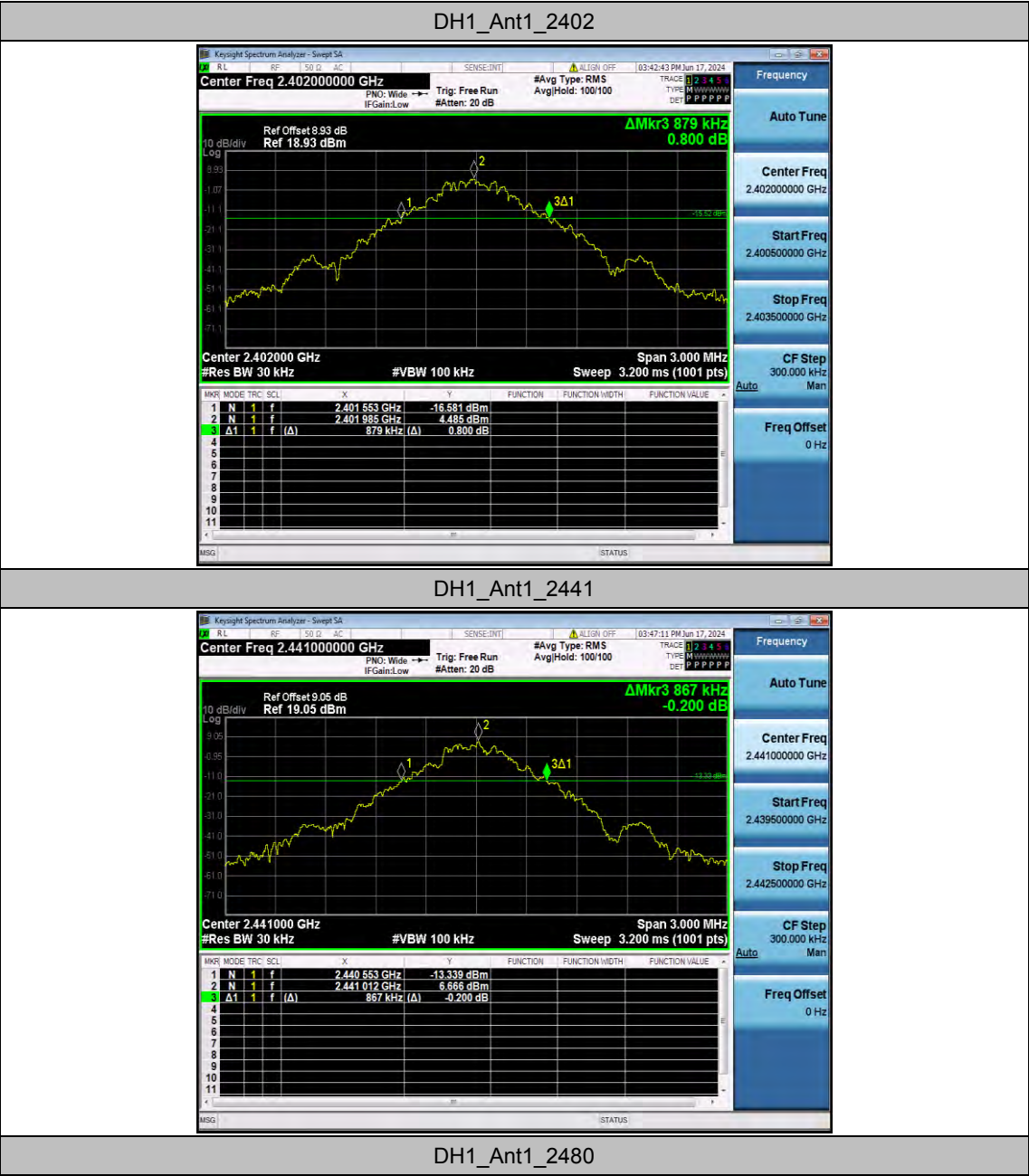
Case No. : <u>CTA24070301901</u>	
Ambient Condition: <u>24</u> °C, <u>51</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2024.7.8</u>	Test Engineer: <u>Lushan Kong</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]
DH1	Ant1	2402	0.879	2401.553	2402.432
		2441	0.867	2440.553	2441.420
		2480	0.957	2479.535	2480.492
2DH1	Ant1	2402	1.488	2401.241	2402.729
		2441	1.416	2440.265	2441.681
		2480	1.422	2479.274	2480.696
3DH1	Ant1	2402	1.395	2401.292	2402.687
		2441	1.419	2440.283	2441.702
		2480	1.440	2479.265	2480.705

Test Graphs



DH1_Ant1_2441

Frequency

Auto Tune

Center Freq
2.441000000 GHz

Start Freq
2.439500000 GHz

Stop Freq
2.442500000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

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	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
DH1	Ant1	2402	0.83780	2401.5769	2402.4147
		2441	0.85890	2440.5605	2441.4194
		2480	0.86320	2479.5601	2480.4233
2DH1	Ant1	2402	1.3474	2401.3177	2402.6651
		2441	1.3493	2440.3150	2441.6643
		2480	1.3486	2479.3150	2480.6636
3DH1	Ant1	2402	1.3462	2401.3201	2402.6663
		2441	1.3449	2440.3214	2441.6663
		2480	1.3438	2479.3177	2480.6615

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



3D H1_Ant1_2480



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	7.62	≤30.00	PASS
		2441	8.45	≤30.00	PASS
		2480	9.01	≤30.00	PASS
2DH1	Ant1	2402	6.41	≤20.97	PASS
		2441	6.46	≤20.97	PASS
		2480	6.48	≤20.97	PASS
3DH1	Ant1	2402	6.38	≤20.97	PASS
		2441	6.57	≤20.97	PASS
		2480	6.61	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.992	≥ 0.957	PASS
		Hop_2441	1.15	≥ 0.957	PASS
		Hop_2480	1.192	≥ 0.957	PASS
2DH1	Ant1	Hop_2402	0.994	≥ 0.992	PASS
		Hop_2441	0.998	≥ 0.992	PASS
		Hop_2480	1.026	≥ 0.992	PASS
3DH1	Ant1	Hop_2402	1.008	≥ 0.960	PASS
		Hop_2441	0.988	≥ 0.960	PASS
		Hop_2480	0.98	≥ 0.960	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



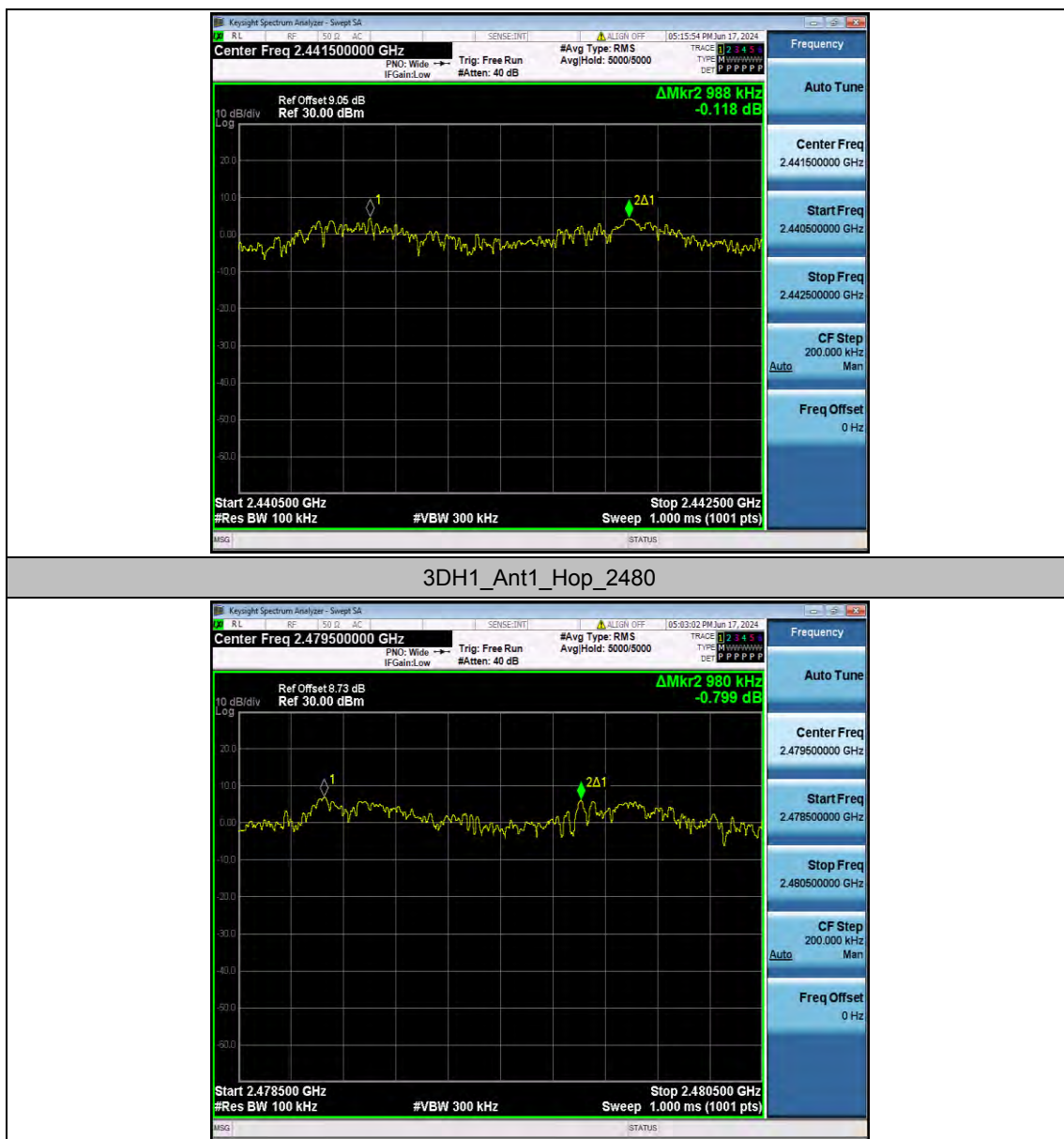
2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

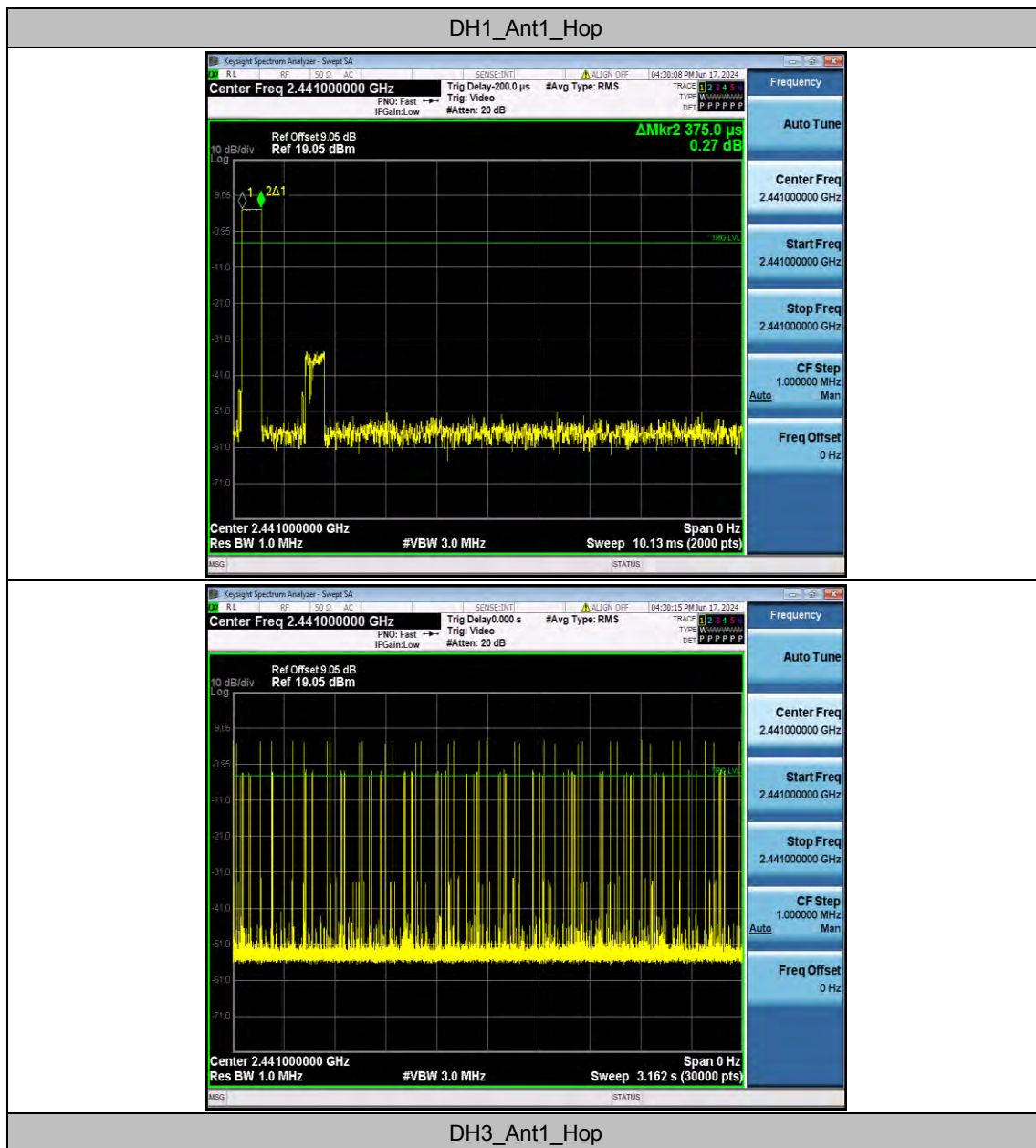


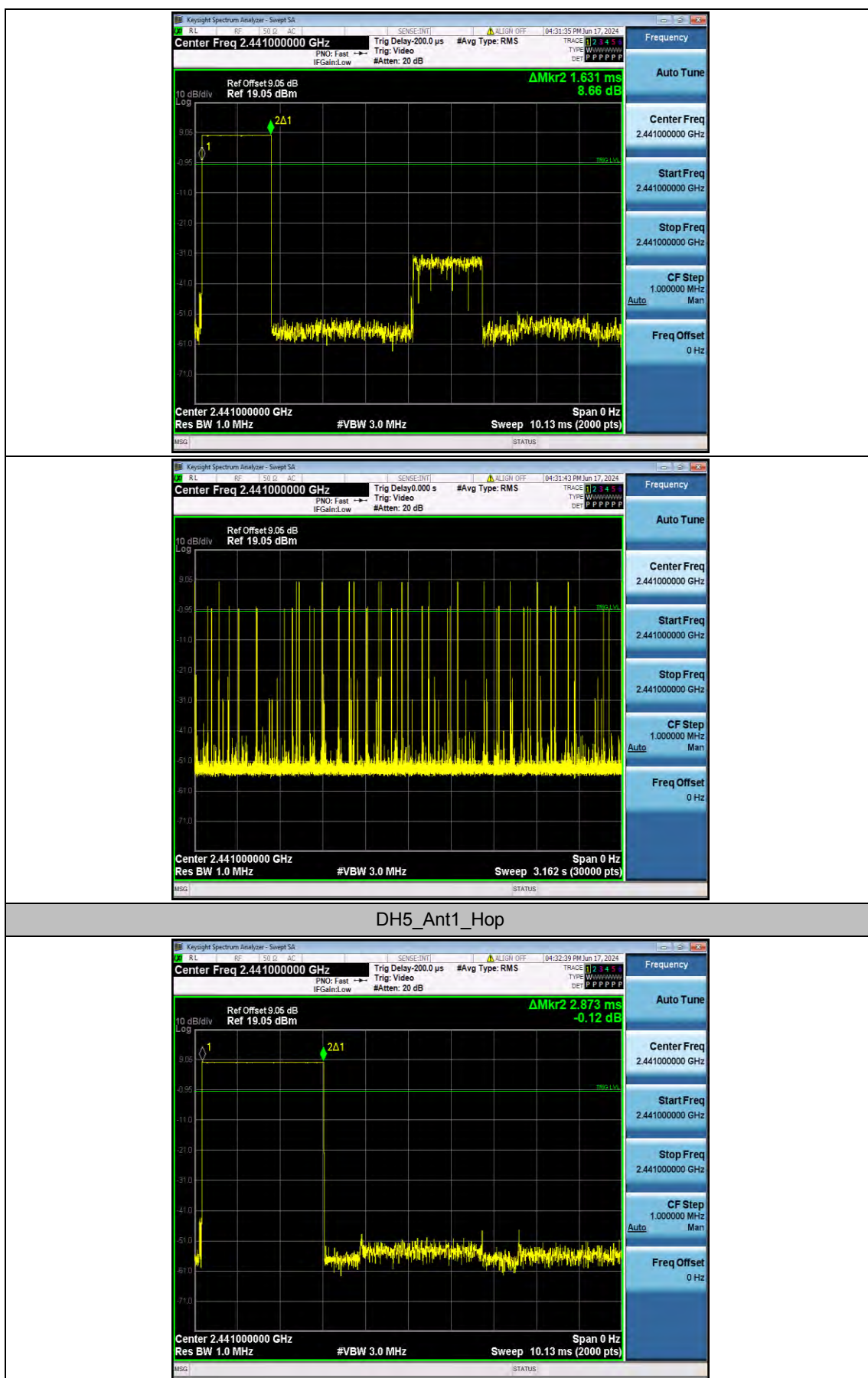
Appendix A.5: Time of occupancy

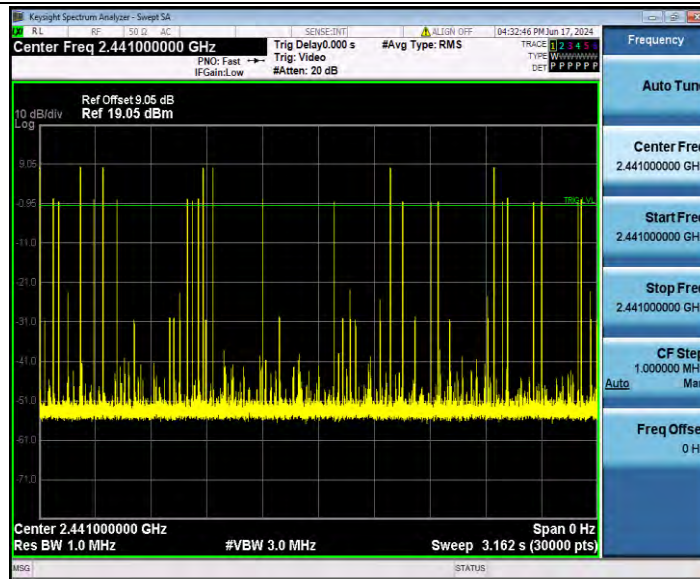
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.375	330	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.631	180	0.294	≤0.4	PASS
DH5	Ant1	Hop	2.873	70	0.201	≤0.4	PASS
2DH1	Ant1	Hop	0.375	220	0.083	≤0.4	PASS
2DH3	Ant1	Hop	1.620	180	0.292	≤0.4	PASS
2DH5	Ant1	Hop	2.873	120	0.345	≤0.4	PASS
3DH1	Ant1	Hop	0.375	330	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.626	160	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.873	110	0.316	≤0.4	PASS

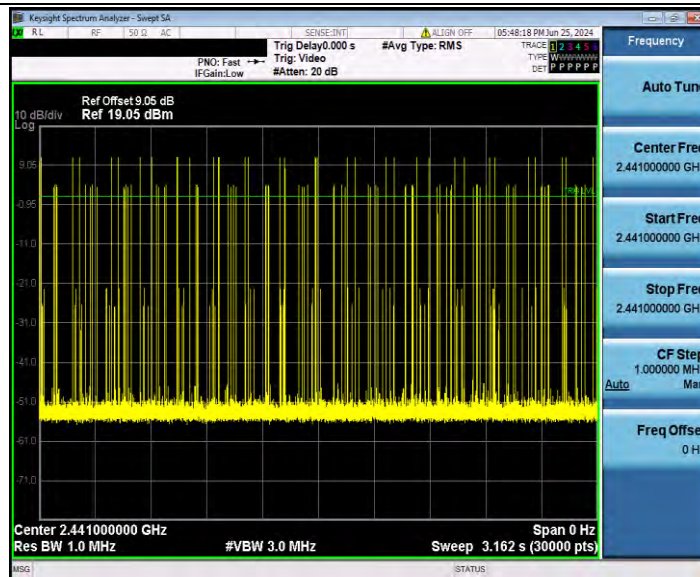
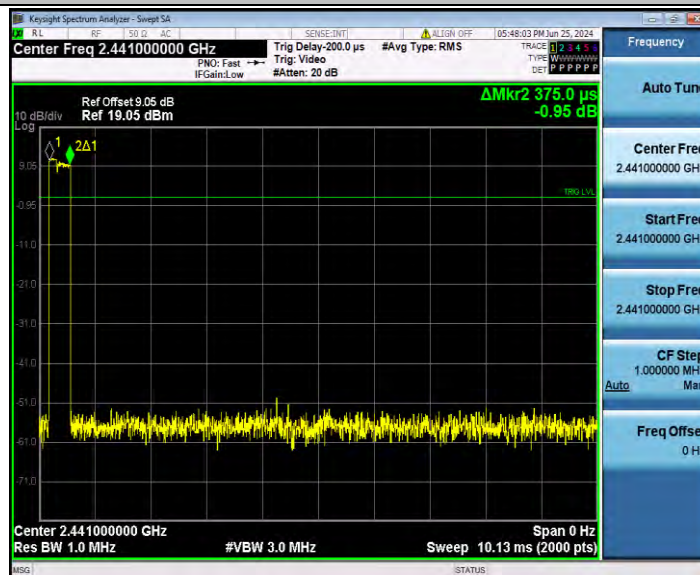
Test Graphs



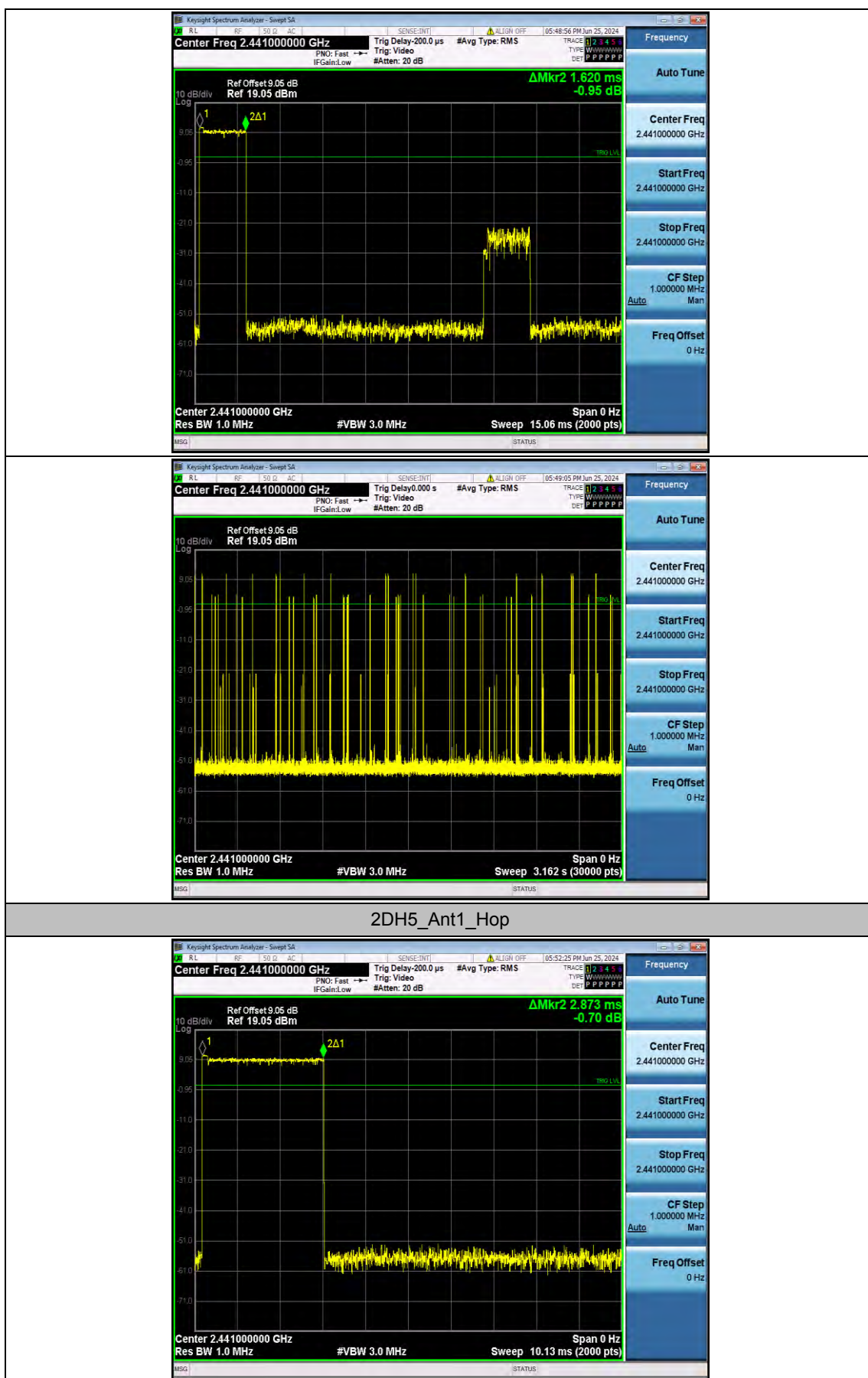


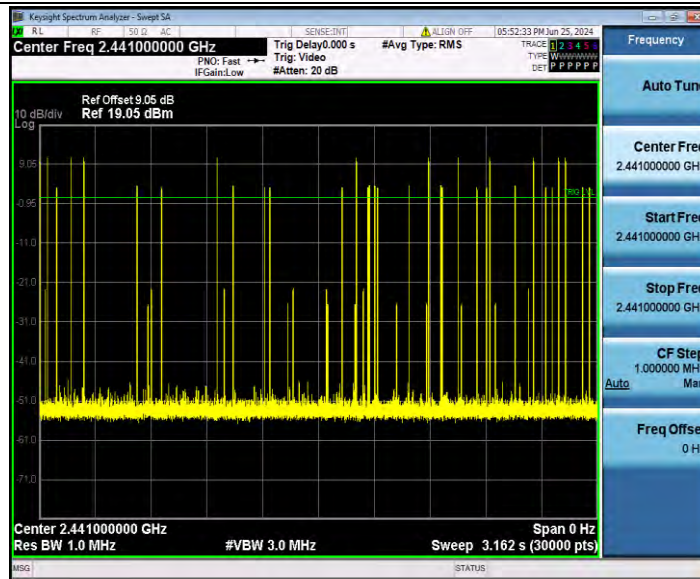


2DH1_Ant1_Hop

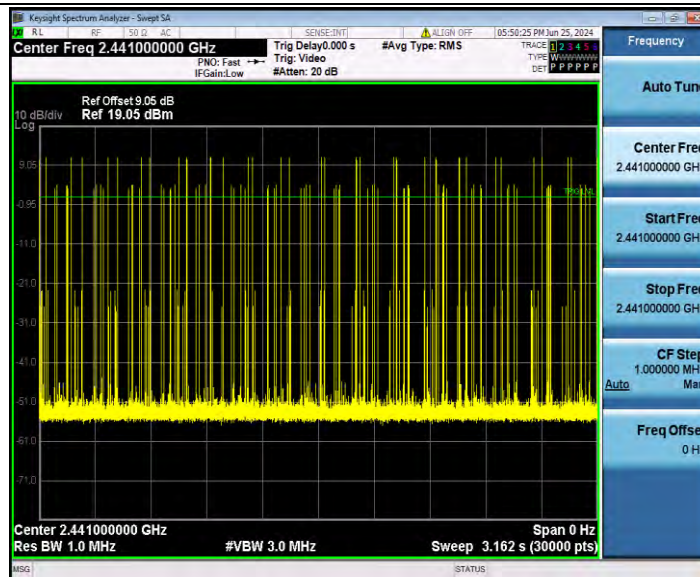
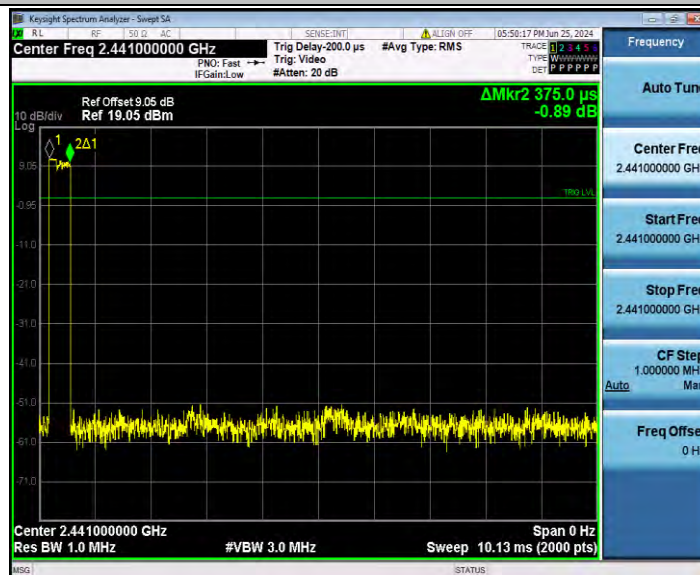


2DH3_Ant1_Hop

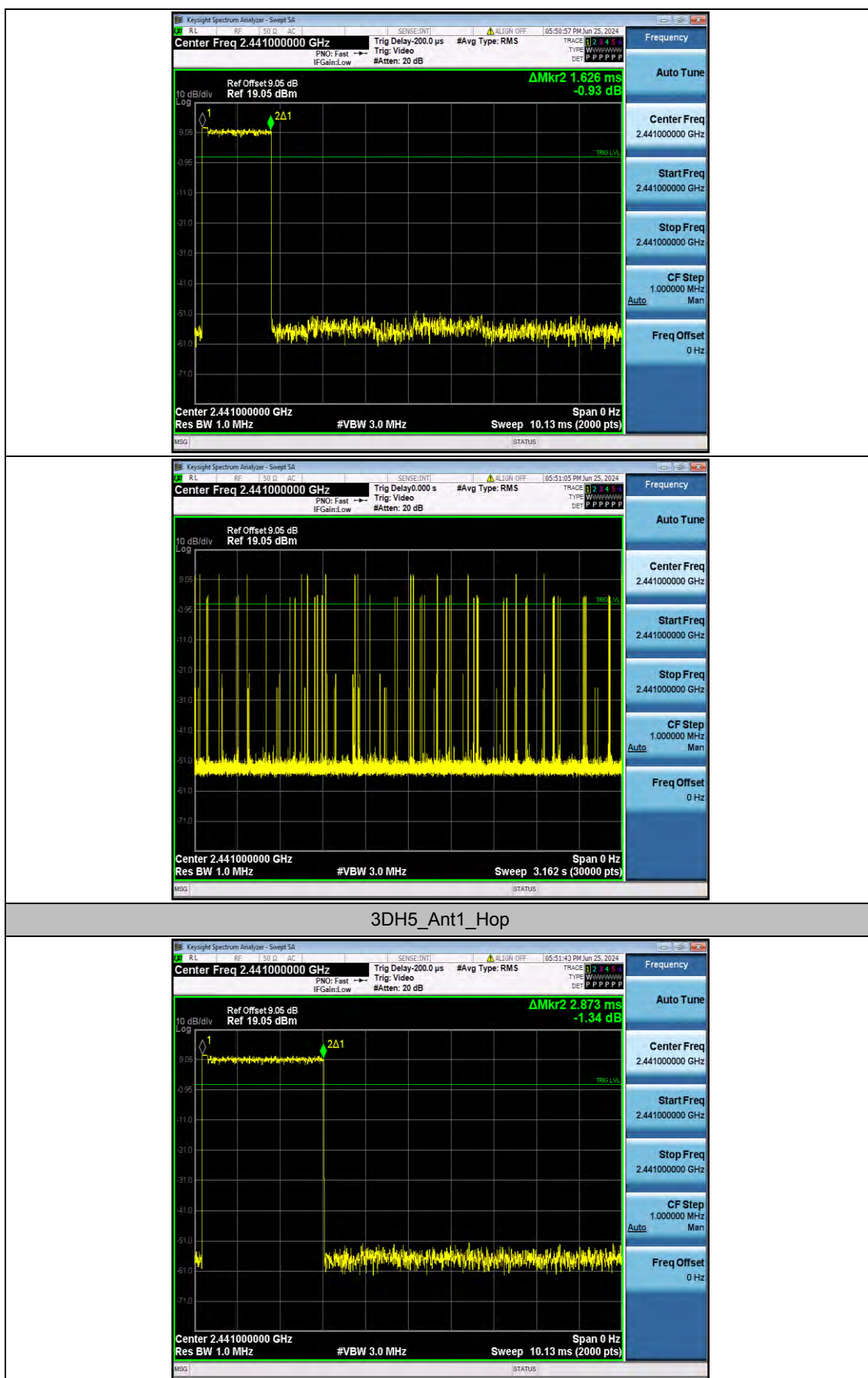


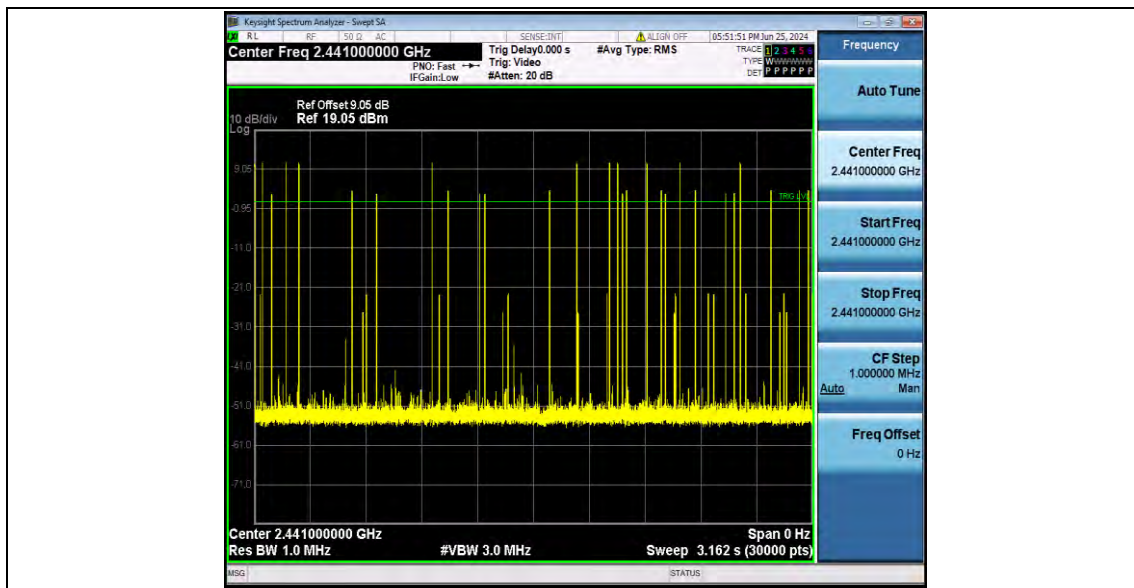


3DH1_Ant1_Hop



3DH3_Ant1_Hop



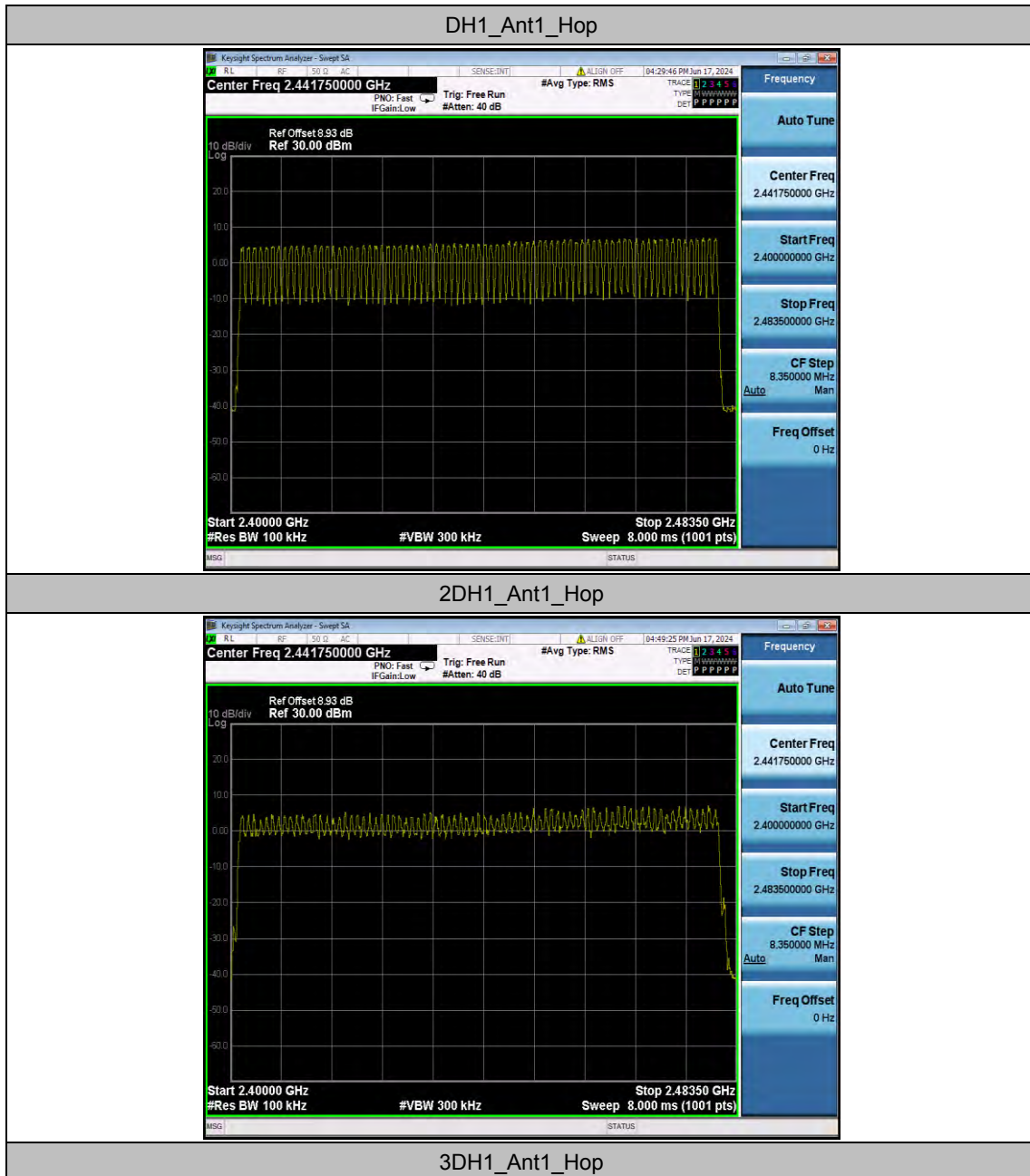


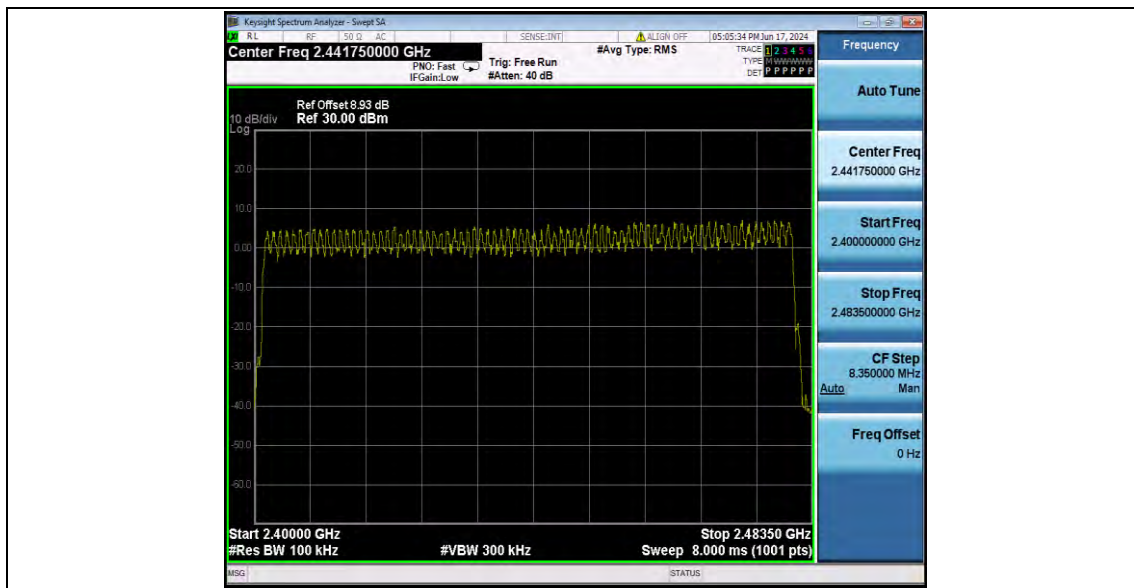
Appendix A.6: Number of hopping channels

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



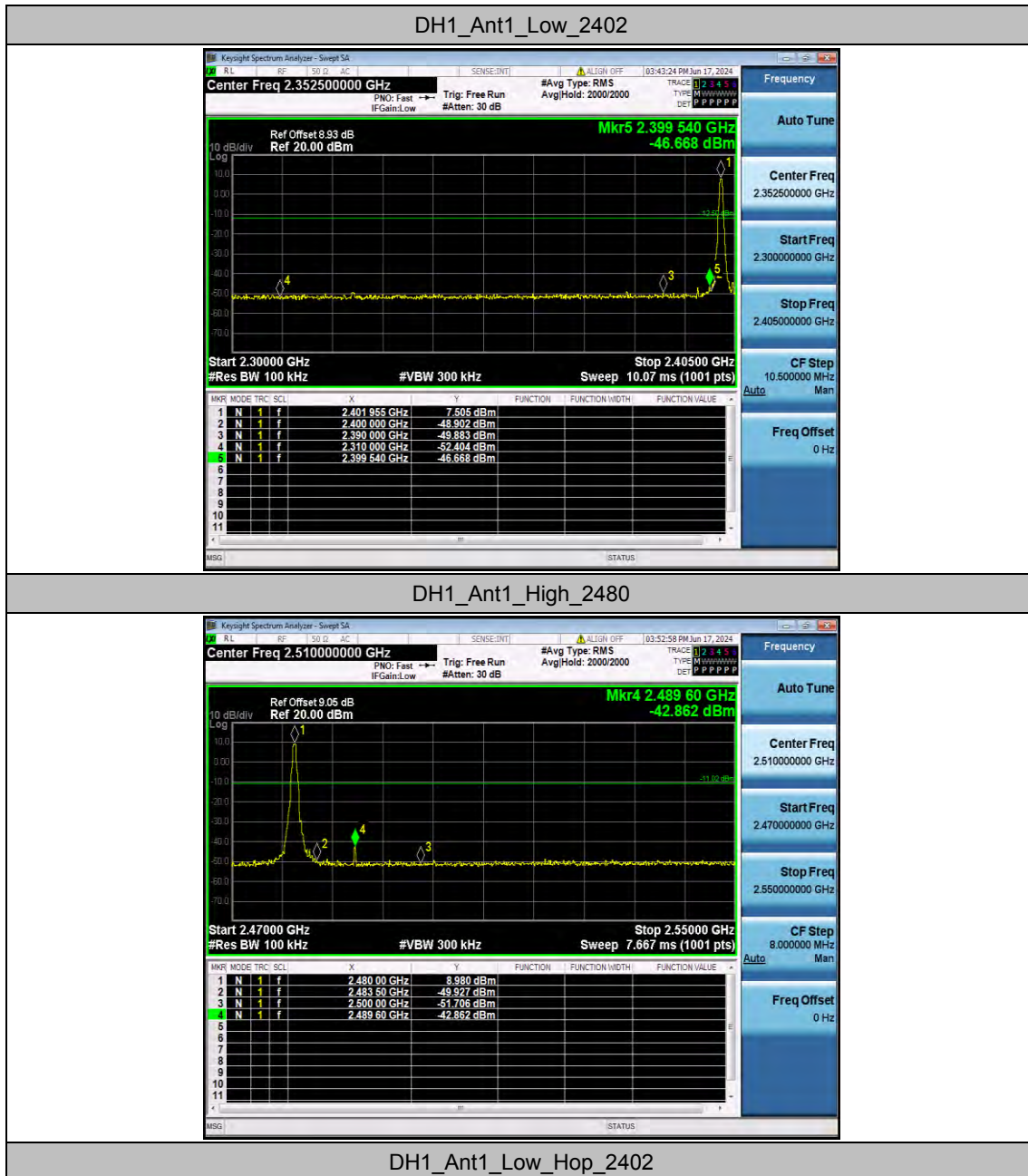


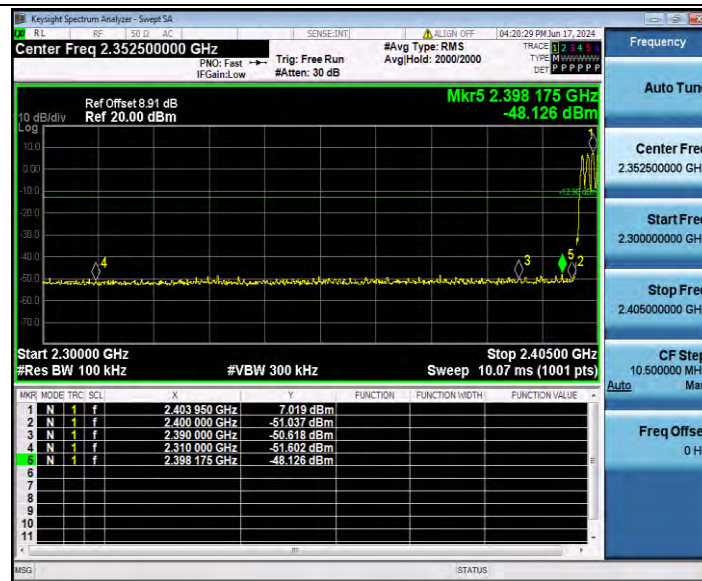
Appendix A.7: Band edge measurements

Test Result

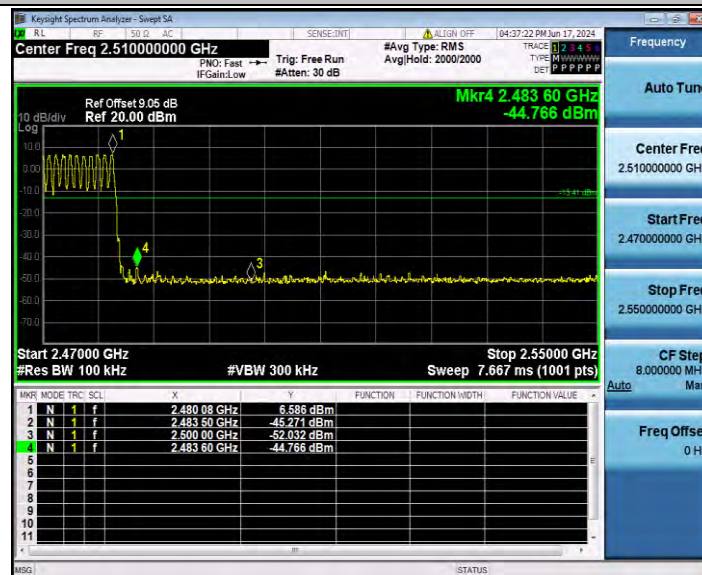
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	7.51	-46.67	≤ -12.5	PASS
		High	2480	8.98	-42.86	≤ -11.02	PASS
		Low	Hop_2402	7.02	-48.13	≤ -12.98	PASS
		High	Hop_2480	6.59	-44.77	≤ -13.41	PASS
2DH1	Ant1	Low	2402	4.56	-41.09	≤ -15.44	PASS
		High	2480	4.48	-43.63	≤ -15.52	PASS
		Low	Hop_2402	4.14	-45.42	≤ -15.86	PASS
		High	Hop_2480	6.17	-47.64	≤ -13.83	PASS
3DH1	Ant1	Low	2402	4.61	-40.64	≤ -15.39	PASS
		High	2480	4.45	-42.57	≤ -15.55	PASS
		Low	Hop_2402	4.05	-41.24	≤ -15.95	PASS
		High	Hop_2480	6.80	-48.7	≤ -13.2	PASS

Test Graphs

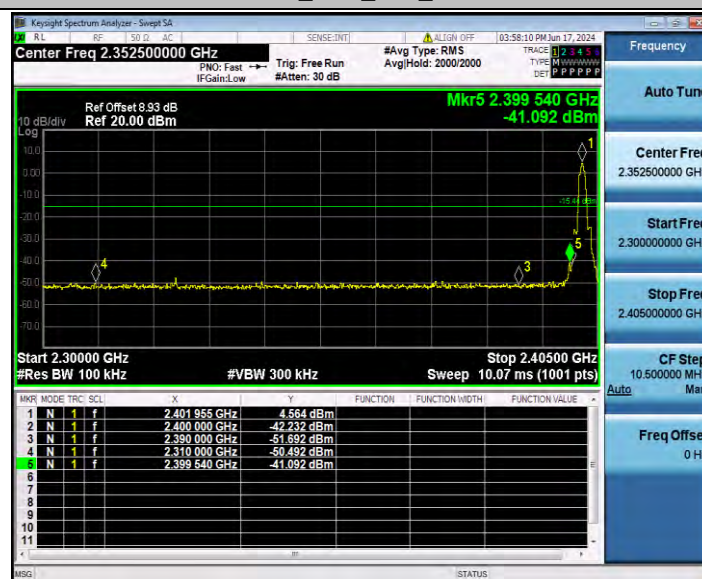




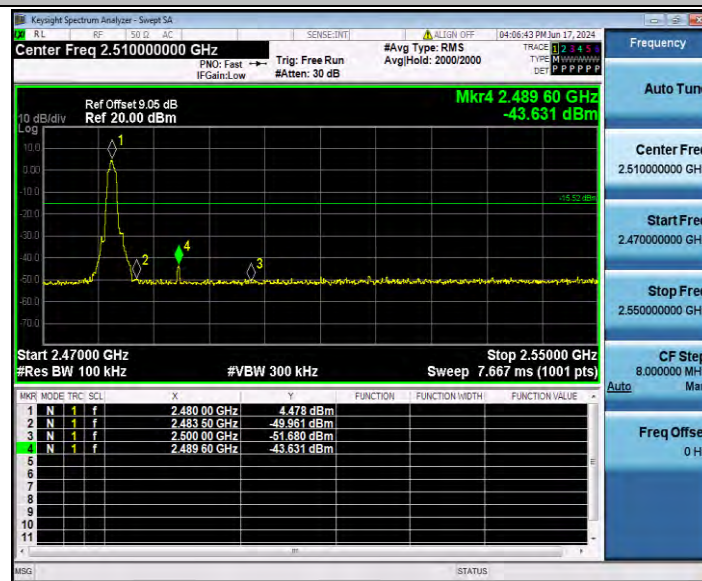
DH1_Ant1_High_Hop_2480



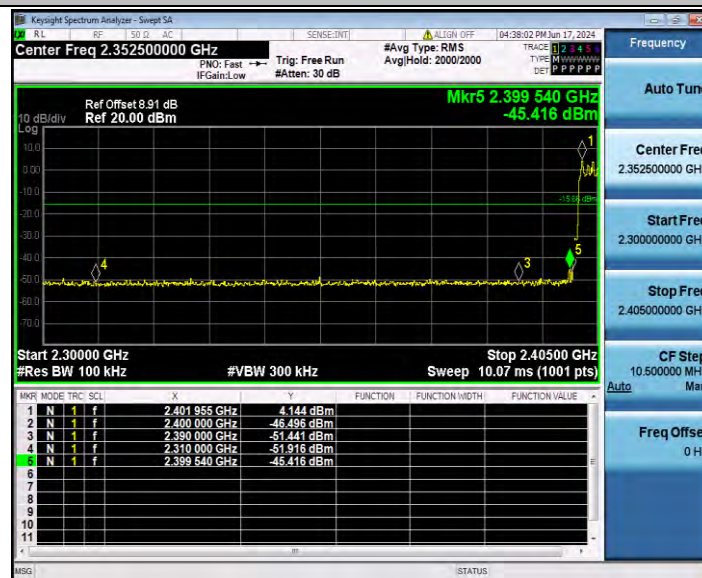
2DH1_Ant1_Low_2402



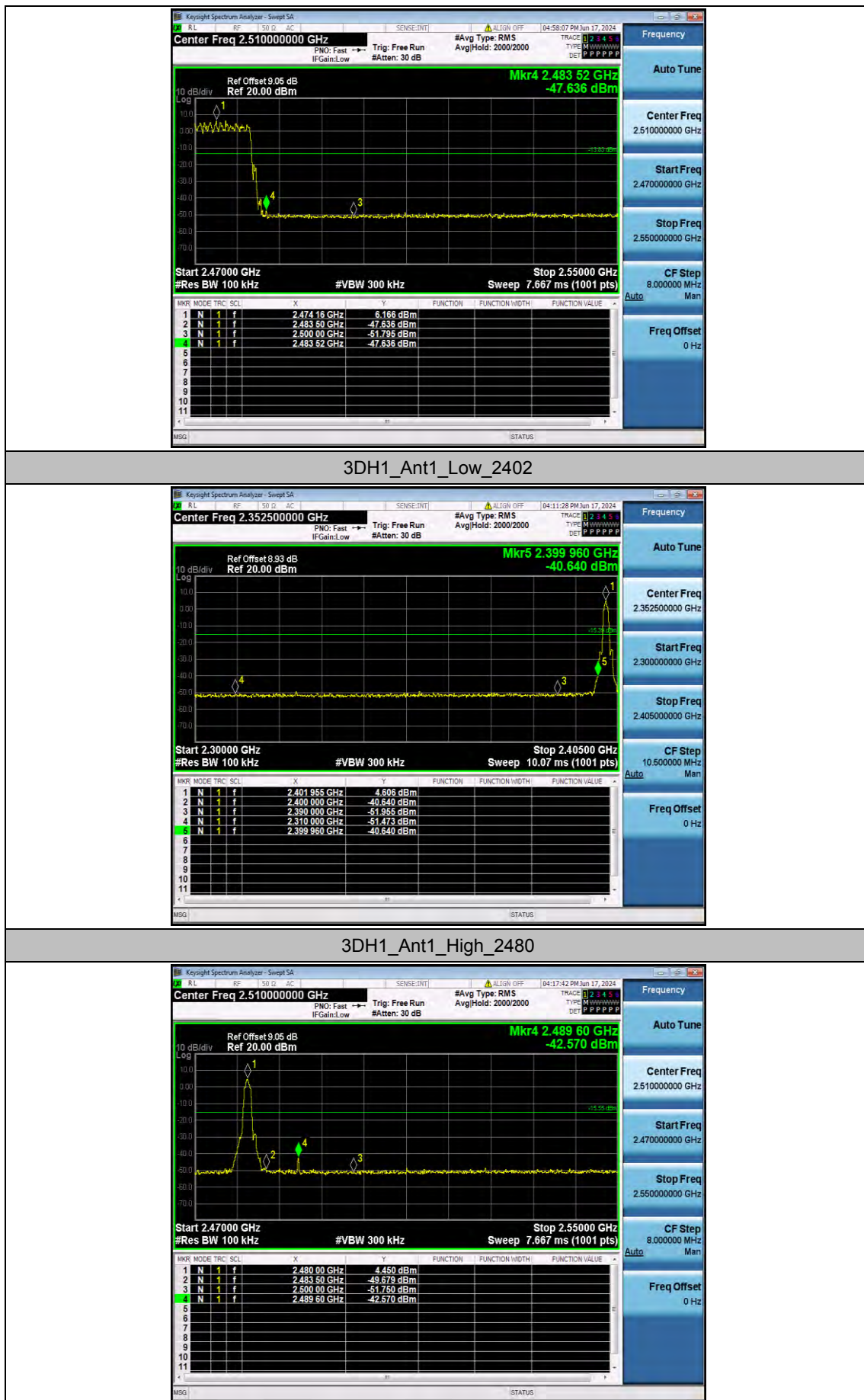
2DH1_Ant1_High_2480



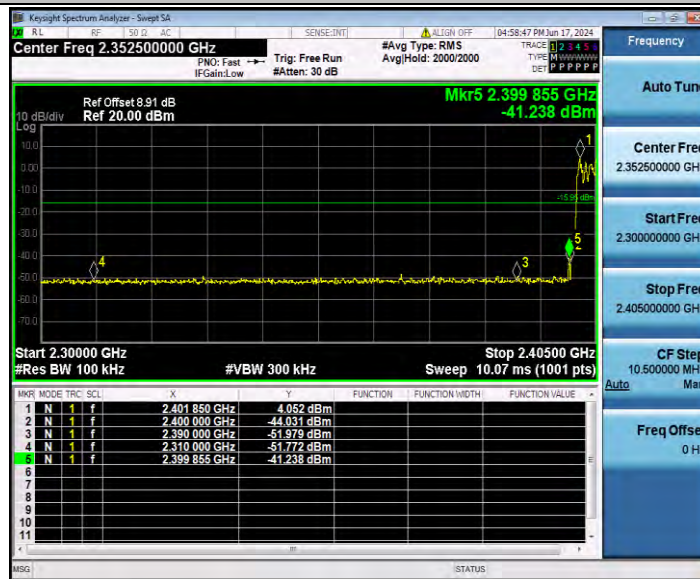
2DH1_Ant1_Low_Hop_2402



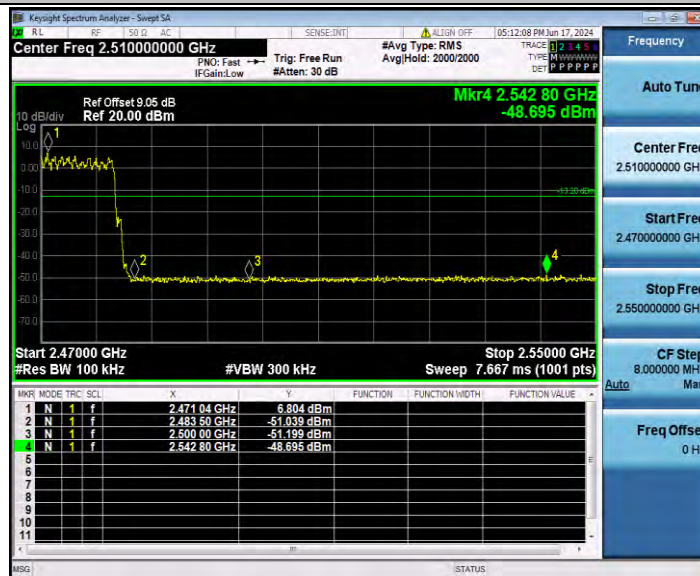
2DH1_Ant1_High_Hop_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

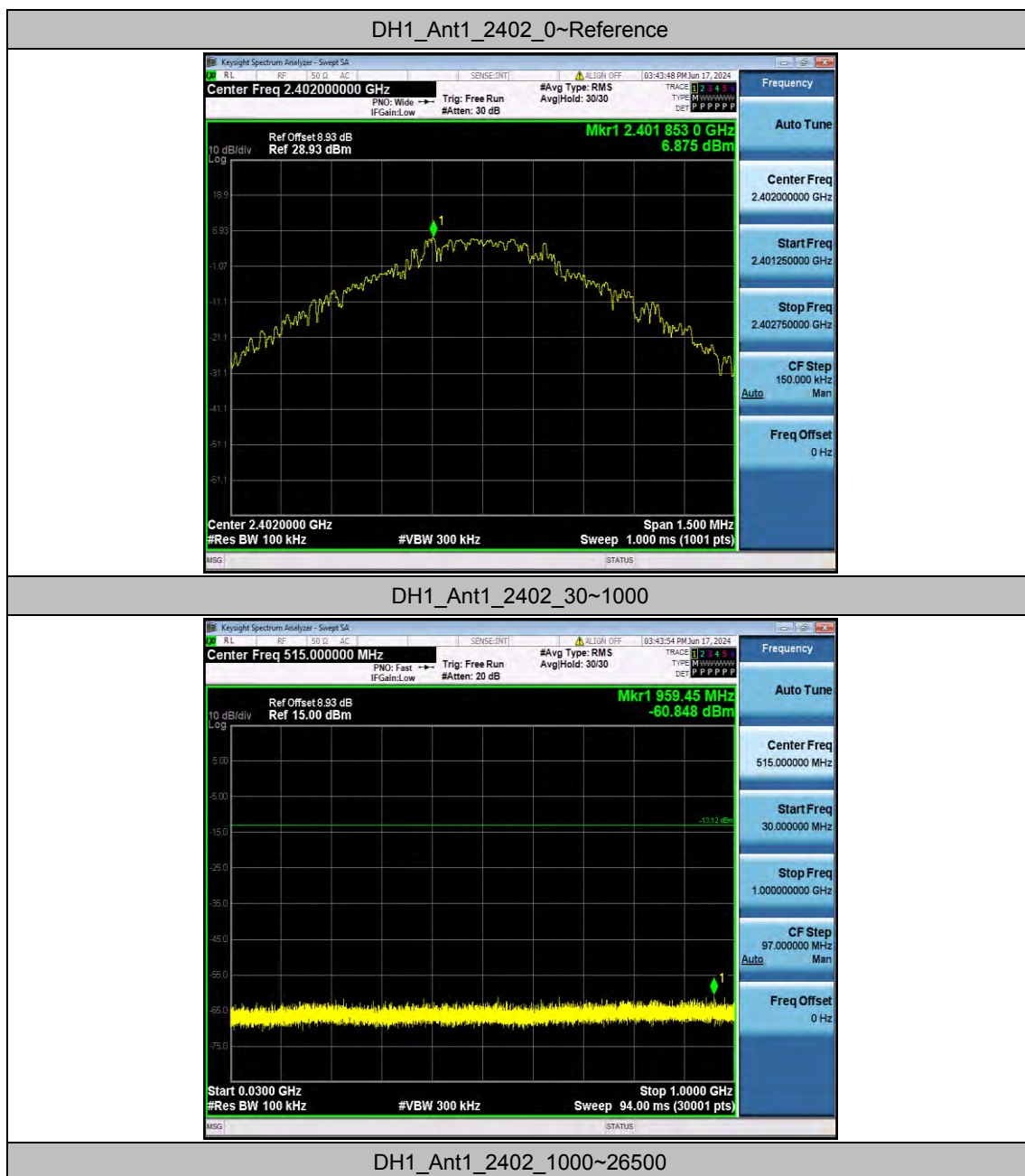


Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	6.88	6.88	---	PASS
			30~1000	6.88	-60.85	≤ -13.12	PASS
			1000~26500	6.88	-46.9	≤ -13.12	PASS
		2441	Reference	8.20	8.20	---	PASS
			30~1000	8.20	-58.9	≤ -11.8	PASS
			1000~26500	8.20	-47.67	≤ -11.8	PASS
		2480	Reference	8.80	8.80	---	PASS
			30~1000	8.80	-59.59	≤ -11.2	PASS
			1000~26500	8.80	-47.6	≤ -11.2	PASS
2DH1	Ant1	2402	Reference	4.15	4.15	---	PASS
			30~1000	4.15	-60.83	≤ -15.85	PASS
			1000~26500	4.15	-48.13	≤ -15.85	PASS
		2441	Reference	4.21	4.21	---	PASS
			30~1000	4.21	-60.13	≤ -15.79	PASS
			1000~26500	4.21	-47.76	≤ -15.79	PASS
		2480	Reference	4.14	4.14	---	PASS
			30~1000	4.14	-60.36	≤ -15.86	PASS
			1000~26500	4.14	-47.51	≤ -15.86	PASS
3DH1	Ant1	2402	Reference	3.36	3.36	---	PASS
			30~1000	3.36	-60.75	≤ -16.64	PASS
			1000~26500	3.36	-47.69	≤ -16.64	PASS
		2441	Reference	4.32	4.32	---	PASS
			30~1000	4.32	-60.02	≤ -15.68	PASS
			1000~26500	4.32	-48.21	≤ -15.68	PASS
		2480	Reference	4.25	4.25	---	PASS
			30~1000	4.25	-60.76	≤ -15.75	PASS
			1000~26500	4.25	-47.49	≤ -15.75	PASS

Test Graphs

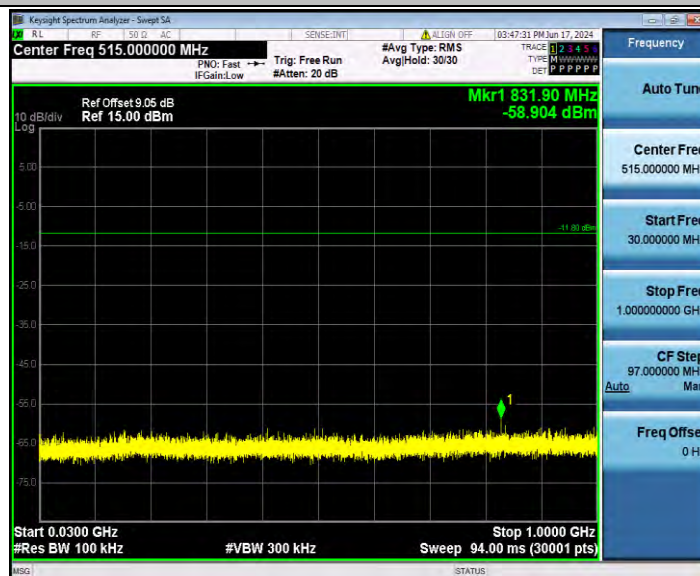




DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



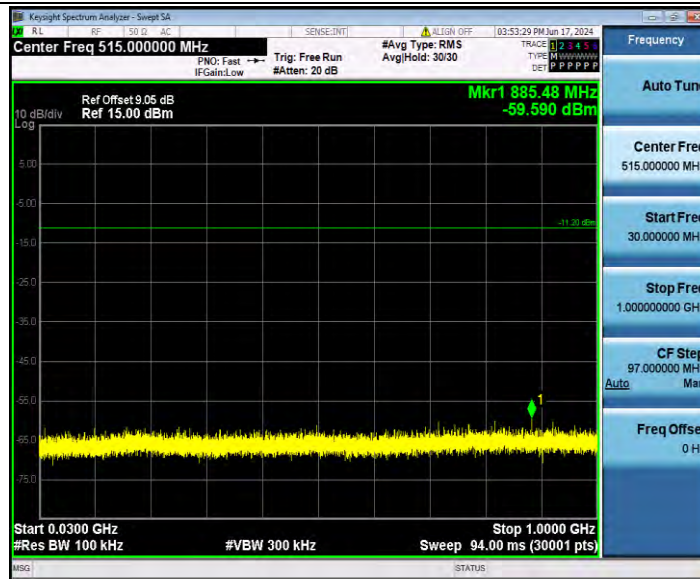
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000

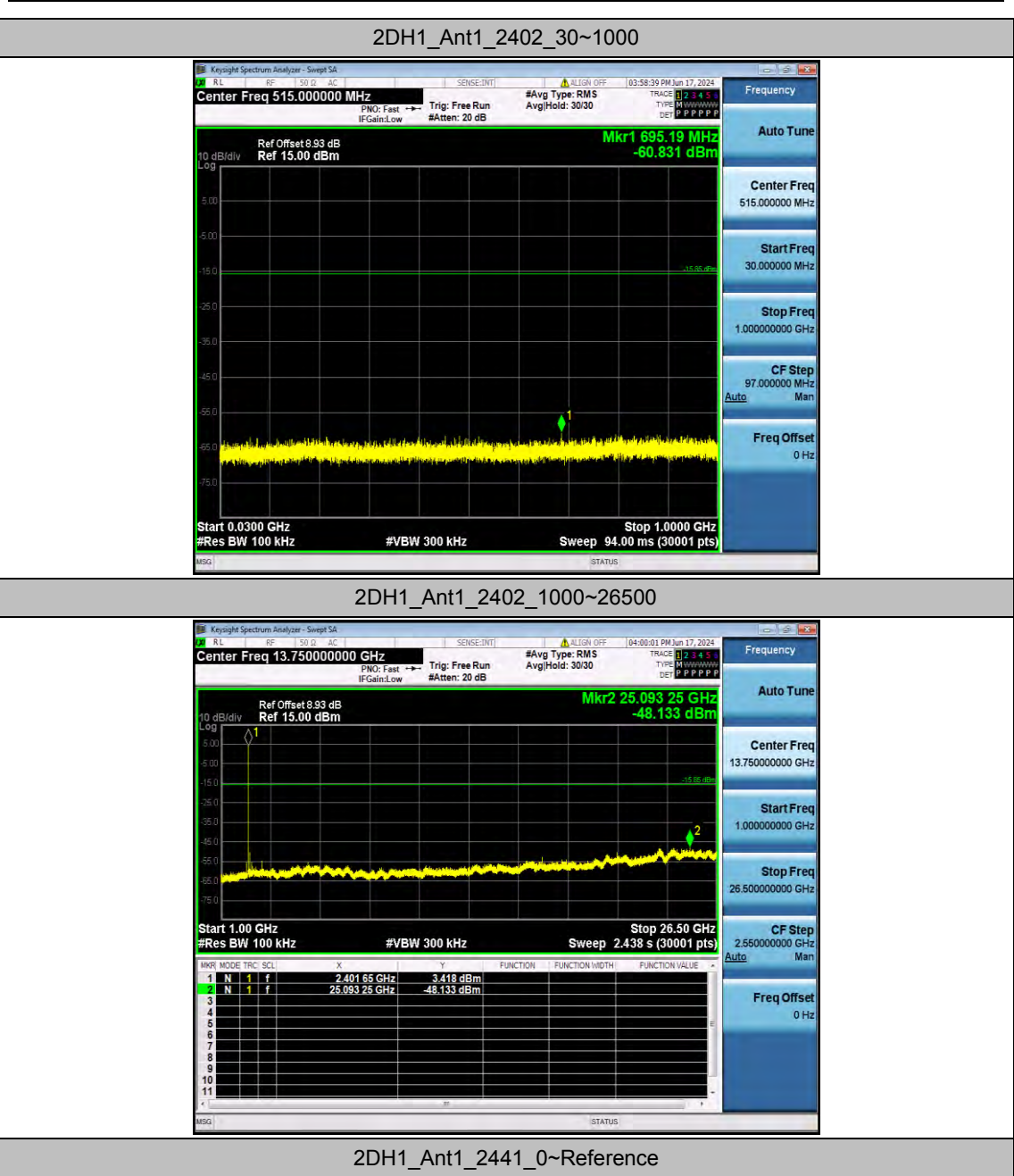


DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference







2DH1_Ant1_2441_30~1000



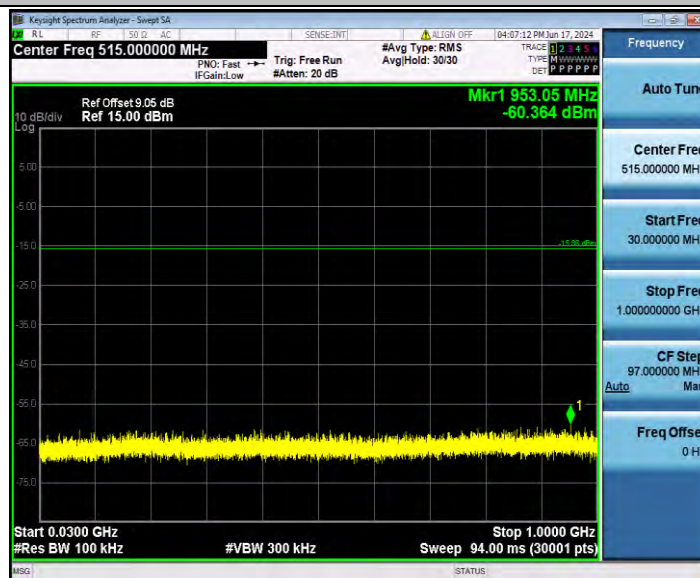
2DH1_Ant1_2441_1000~26500



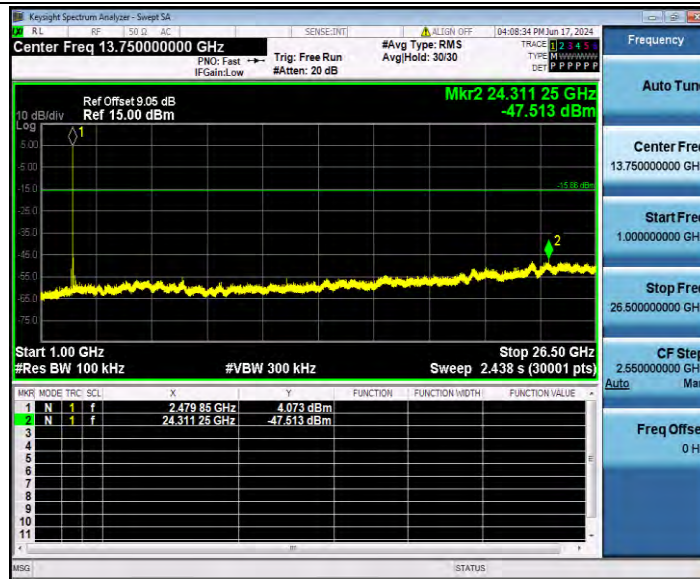
2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



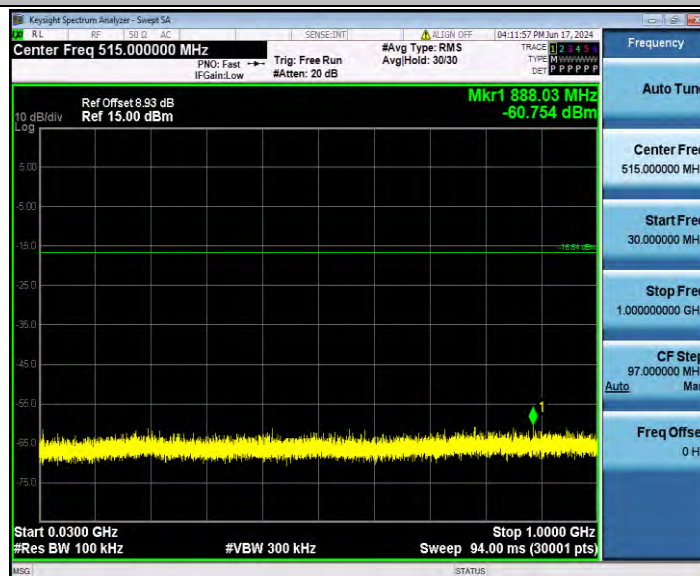
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



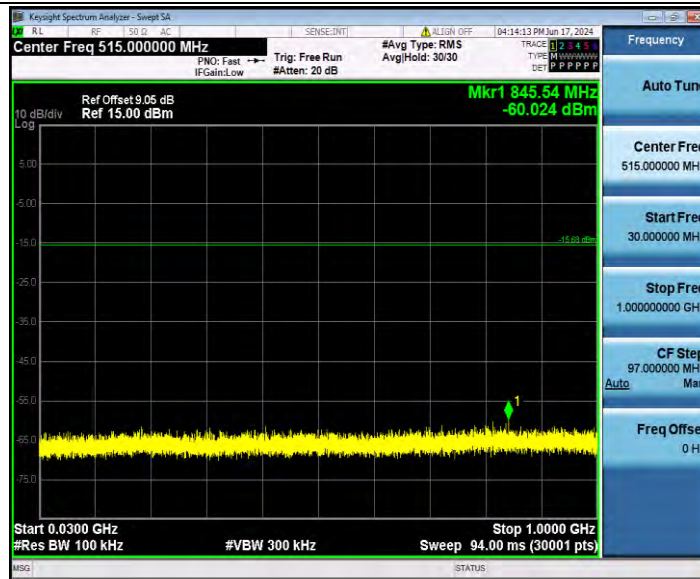
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



