

Case No. : <u>GTS20250107026-2-02</u>	
Ambient Condition: <u>23</u> °C, <u>50</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2025.1.17</u>	Test Engineer: <u>Evan ouyang</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant2	2402	0.957	2401.550	2402.507	---	---
		2441	0.930	2440.538	2441.468	---	---
		2480	0.951	2479.556	2480.507	---	---
2DH1	Ant2	2402	1.404	2401.316	2402.720	---	---
		2441	1.443	2440.286	2441.729	---	---
		2480	1.443	2479.280	2480.723	---	---
3DH1	Ant2	2402	1.431	2401.304	2402.735	---	---
		2441	1.452	2440.295	2441.747	---	---
		2480	1.467	2479.289	2480.756	---	---

Test Graphs

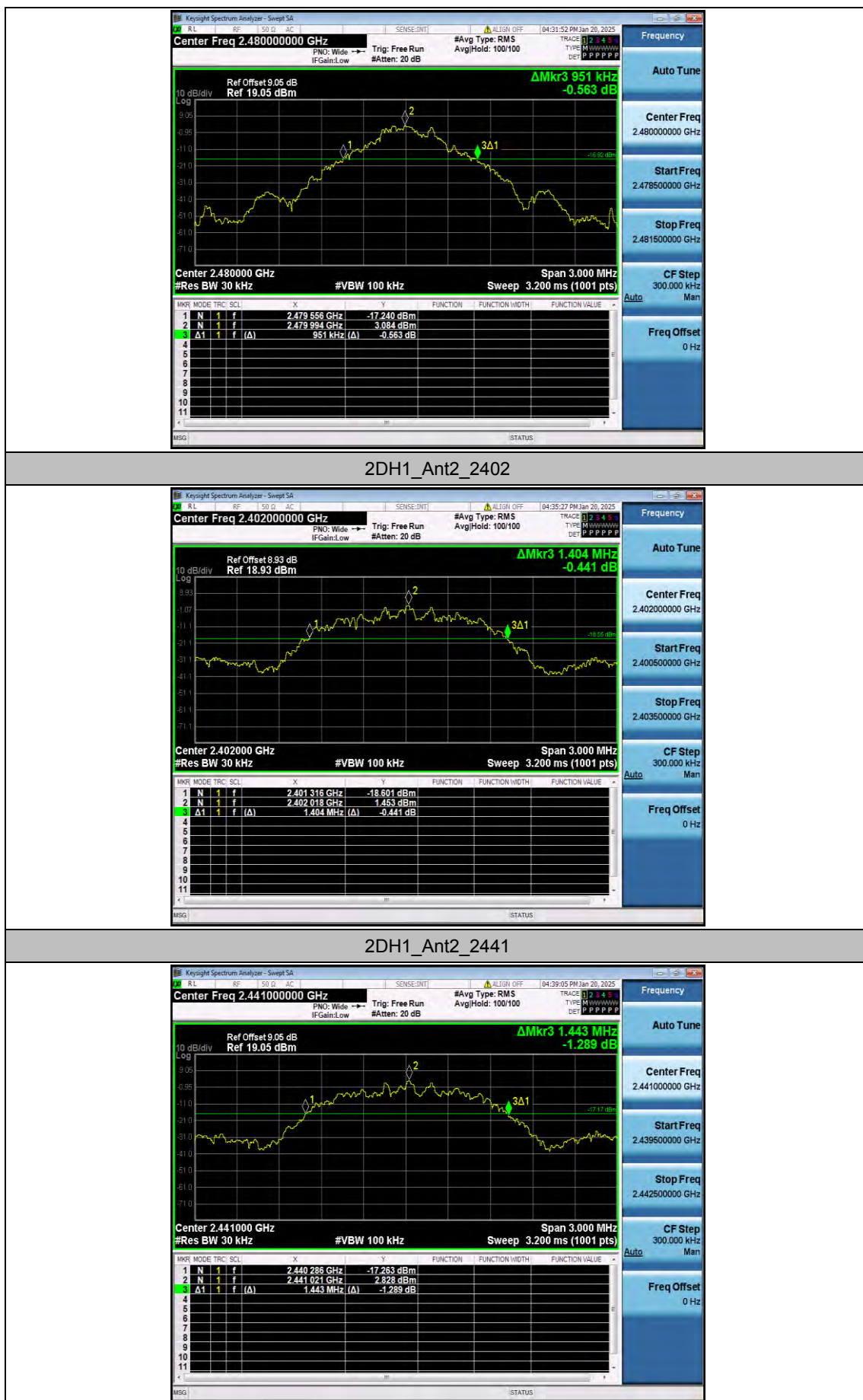
DH1_Ant2_2402



DH1_Ant2_2441



DH1_Ant2_2480



2DH1_Ant2_2480



3DH1_Ant2_2402



3DH1_Ant2_2441



3DH1_Ant2_2480



Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant2	2402	0.86903	2401.5819	2402.4509	---	---
		2441	0.85108	2440.5884	2441.4395	---	---
		2480	0.85431	2479.5845	2480.4388	---	---
2DH1	Ant2	2402	1.3514	2401.3366	2402.6880	---	---
		2441	1.3502	2440.3443	2441.6945	---	---
		2480	1.3525	2479.3386	2480.6911	---	---
3DH1	Ant2	2402	1.3458	2401.3382	2402.6840	---	---
		2441	1.3566	2440.3437	2441.7003	---	---
		2480	1.3542	2479.3419	2480.6961	---	---

Test Graphs

DH1_Ant2_2402



DH1_Ant2_2441



DH1_Ant2_2480



2DH1_Ant2_2402



2DH1_Ant2_2441



2DH1_Ant2_2480



3DH1_Ant2_2402



3DH1_Ant2_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	Ant2	2402	8.15	≤30.00	PASS
		2441	6.48	≤30.00	PASS
		2480	6.35	≤30.00	PASS
2DH1	Ant2	2402	5.91	≤20.97	PASS
		2441	7.18	≤20.97	PASS
		2480	6.68	≤20.97	PASS
3DH1	Ant2	2402	5.94	≤20.97	PASS
		2441	7.23	≤20.97	PASS
		2480	6.82	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant2	Hop_2402	1.16	≥ 0.957	PASS
		Hop_2441	0.996	≥ 0.957	PASS
		Hop_2480	1.016	≥ 0.957	PASS
2DH1	Ant2	Hop_2402	1.03	≥ 0.962	PASS
		Hop_2441	1.162	≥ 0.962	PASS
		Hop_2480	1.002	≥ 0.962	PASS
3DH1	Ant2	Hop_2402	1.144	≥ 0.978	PASS
		Hop_2441	1.008	≥ 0.978	PASS
		Hop_2480	1.156	≥ 0.978	PASS

Test Graphs

DH1_Ant2_Hop_2402



DH1_Ant2_Hop_2441



DH1_Ant2_Hop_2480



2D11_Ant2_Hop_2402



2D11_Ant2_Hop_2441



2DH1_Ant2_Hop_2480



3DH1_Ant2_Hop_2402



3DH1_Ant2_Hop_2441

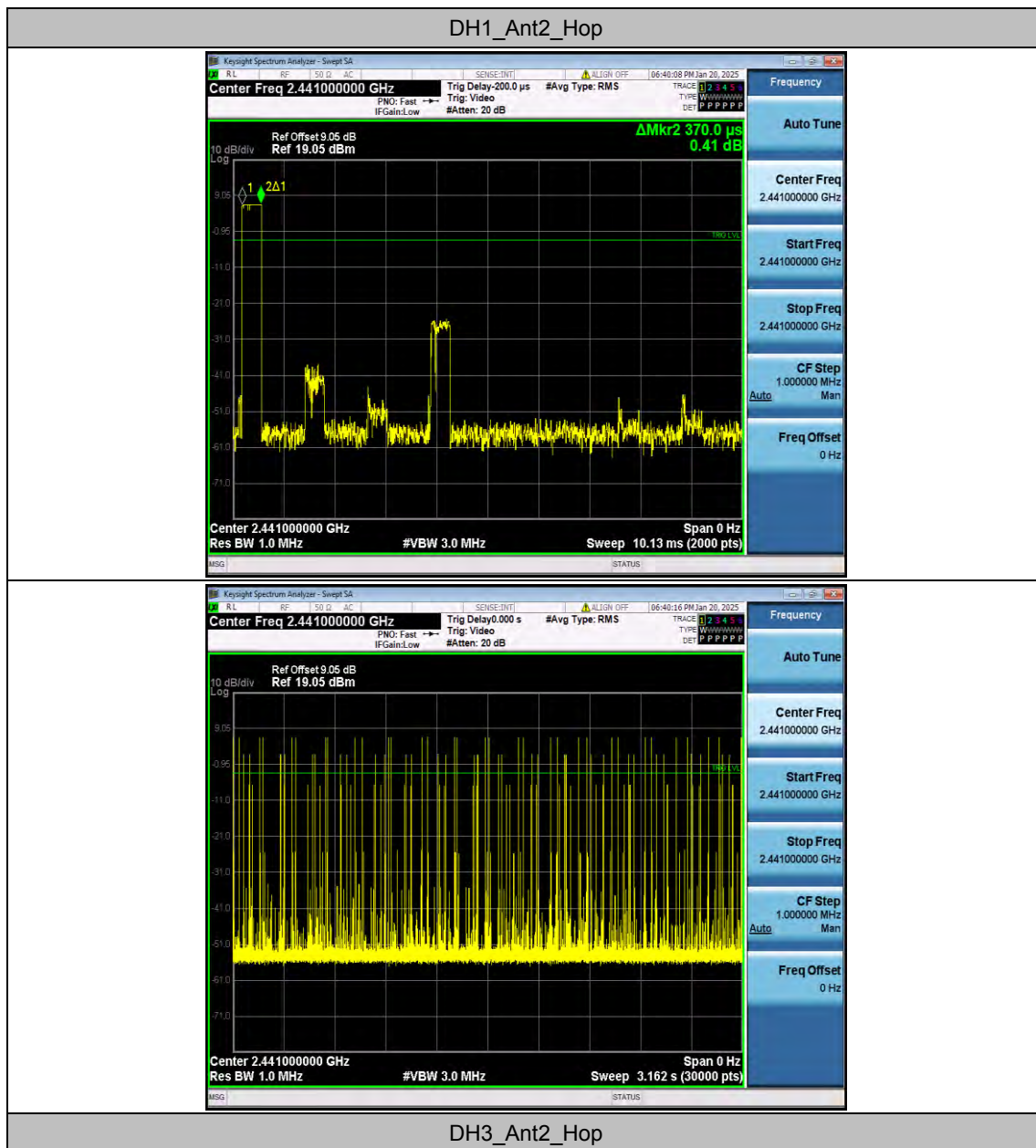


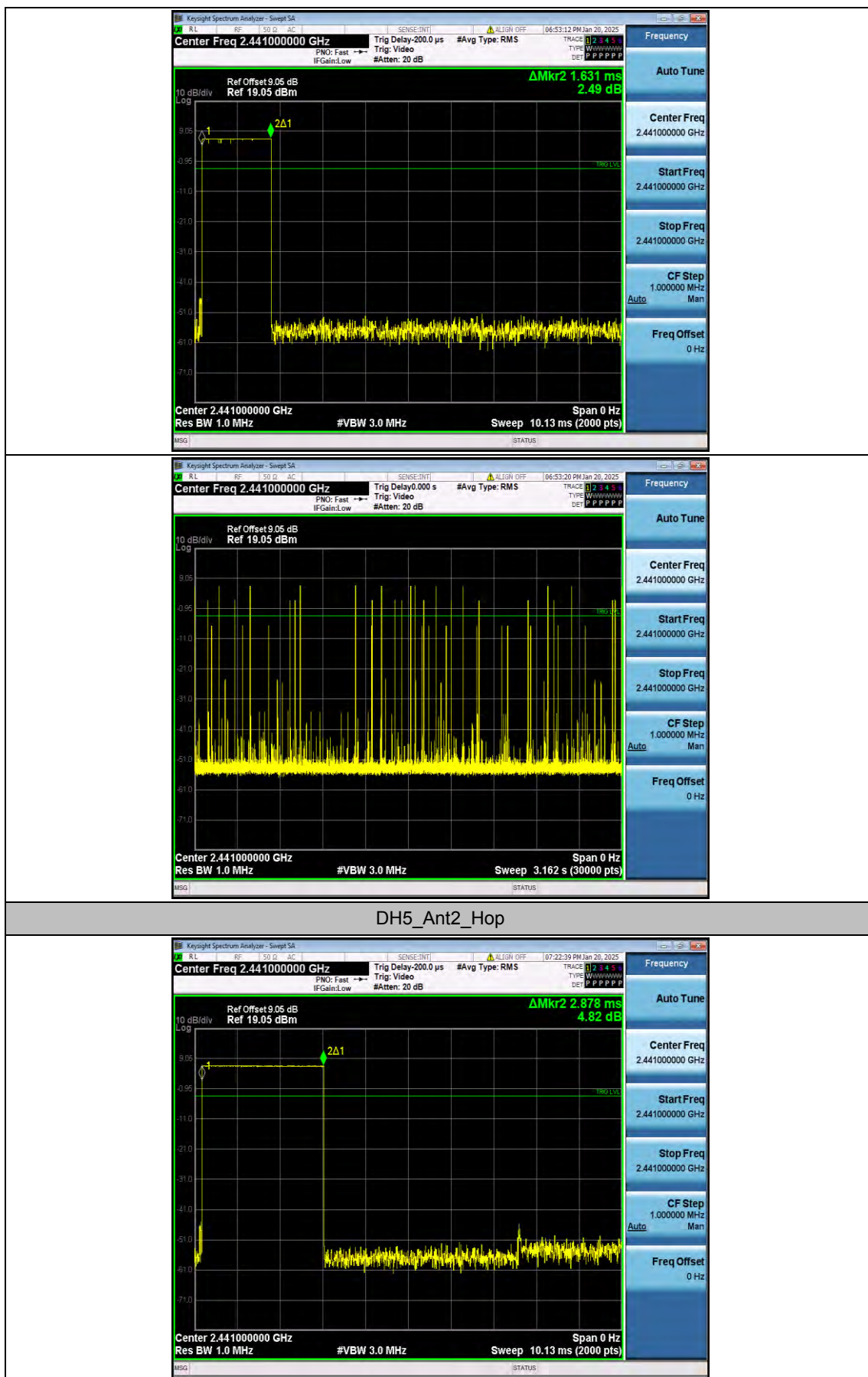
Appendix A.5: Time of occupancy

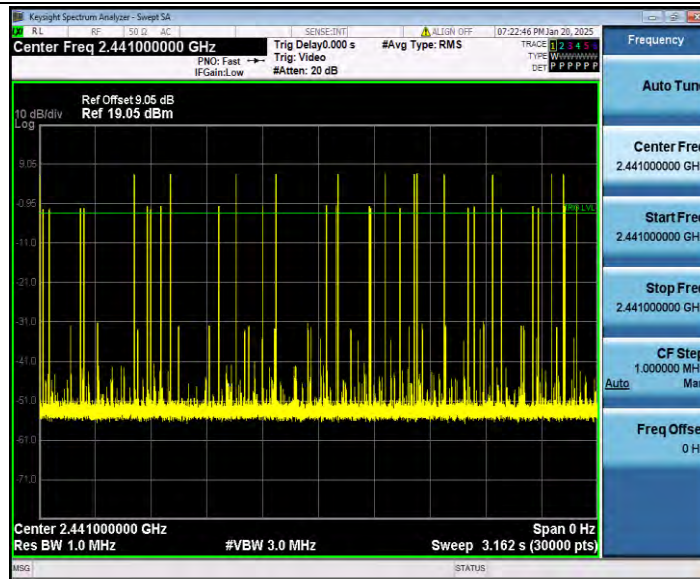
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant2	Hop	0.370	650	0.241	≤0.4	PASS
DH3	Ant2	Hop	1.631	130	0.212	≤0.4	PASS
DH5	Ant2	Hop	2.878	130	0.374	≤0.4	PASS
2DH1	Ant2	Hop	0.380	640	0.243	≤0.4	PASS
2DH3	Ant2	Hop	1.631	200	0.326	≤0.4	PASS
2DH5	Ant2	Hop	2.878	130	0.374	≤0.4	PASS
3DH1	Ant2	Hop	0.380	650	0.247	≤0.4	PASS
3DH3	Ant2	Hop	1.626	160	0.26	≤0.4	PASS
3DH5	Ant2	Hop	2.873	110	0.316	≤0.4	PASS

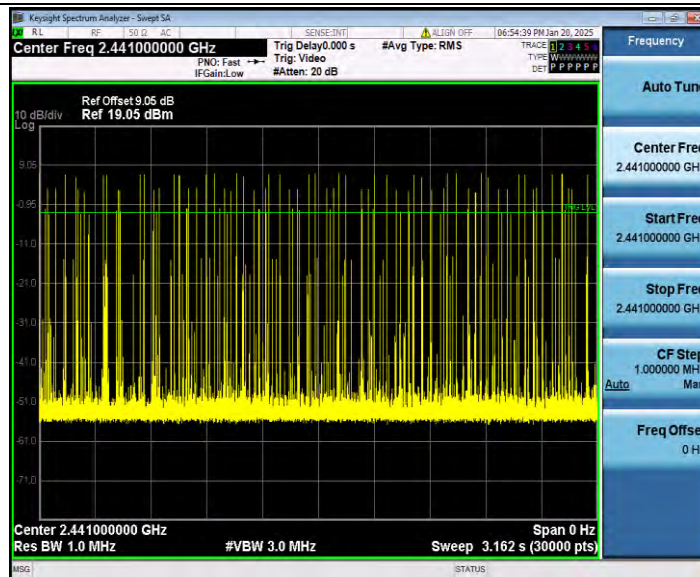
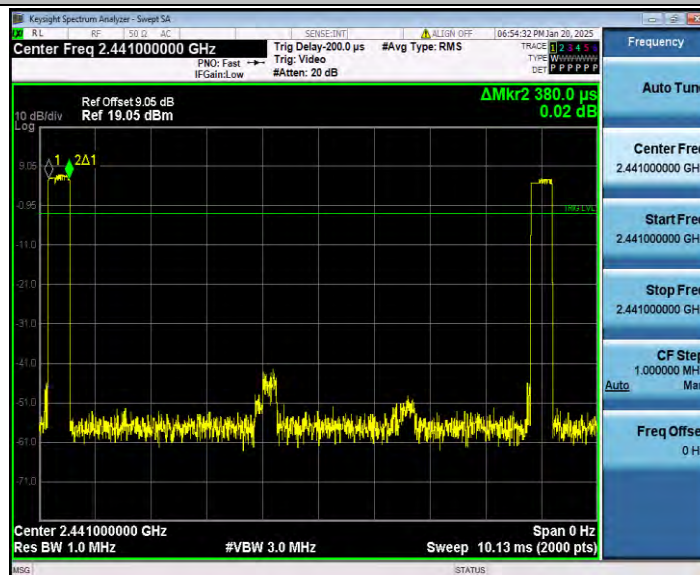
Test Graphs



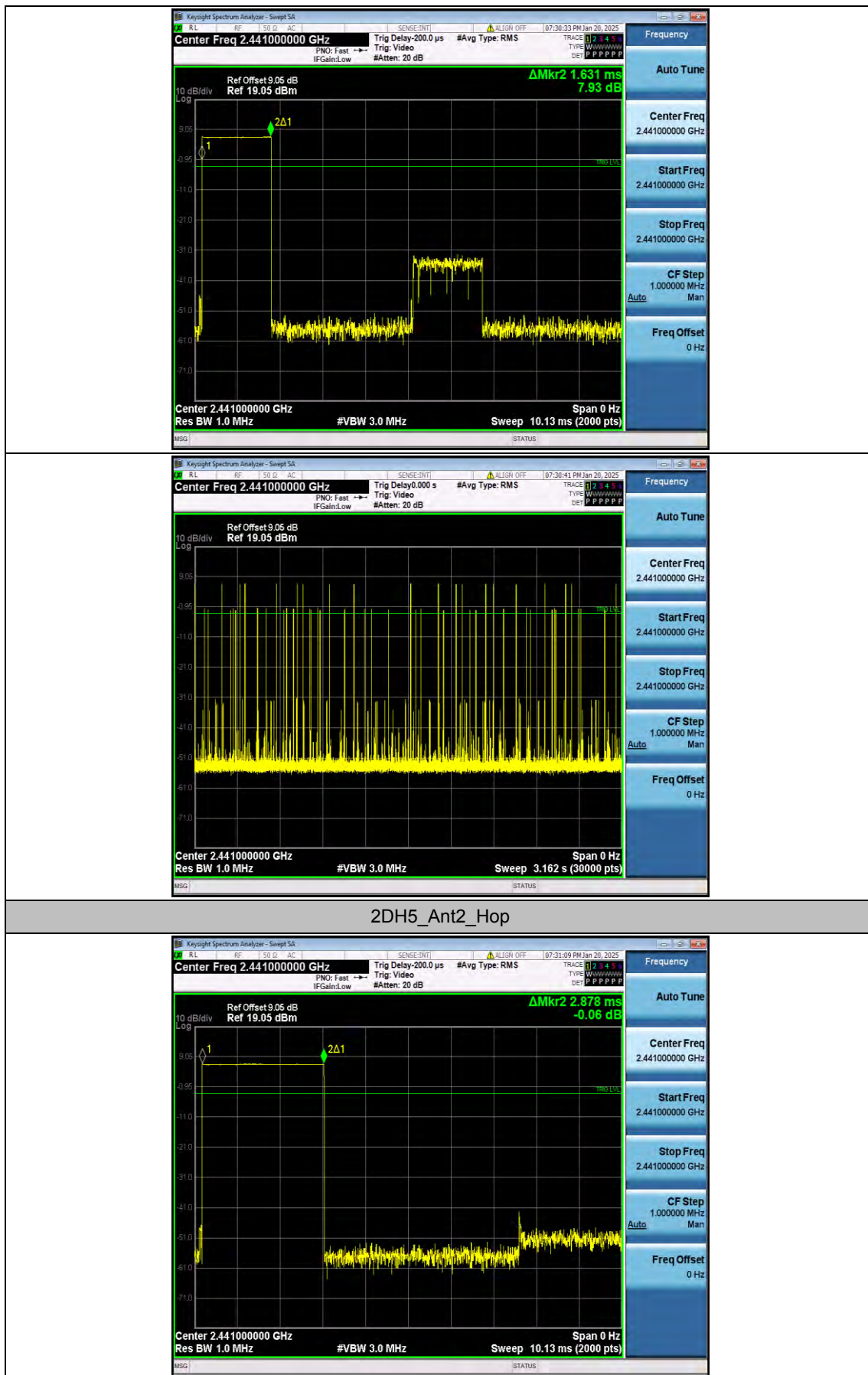


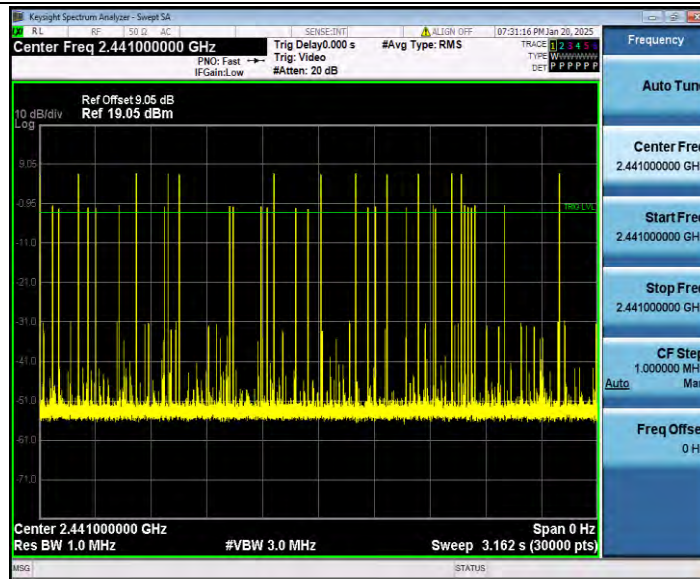


2DH1_Ant2_Hop

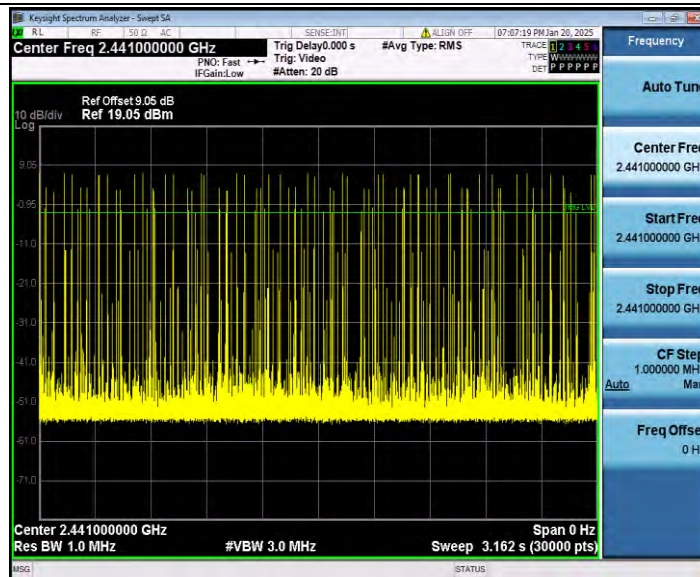
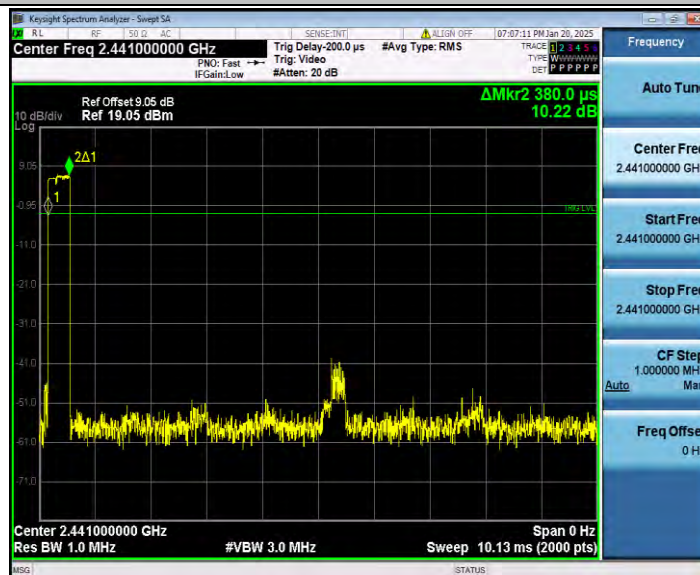


2DH3_Ant2_Hop

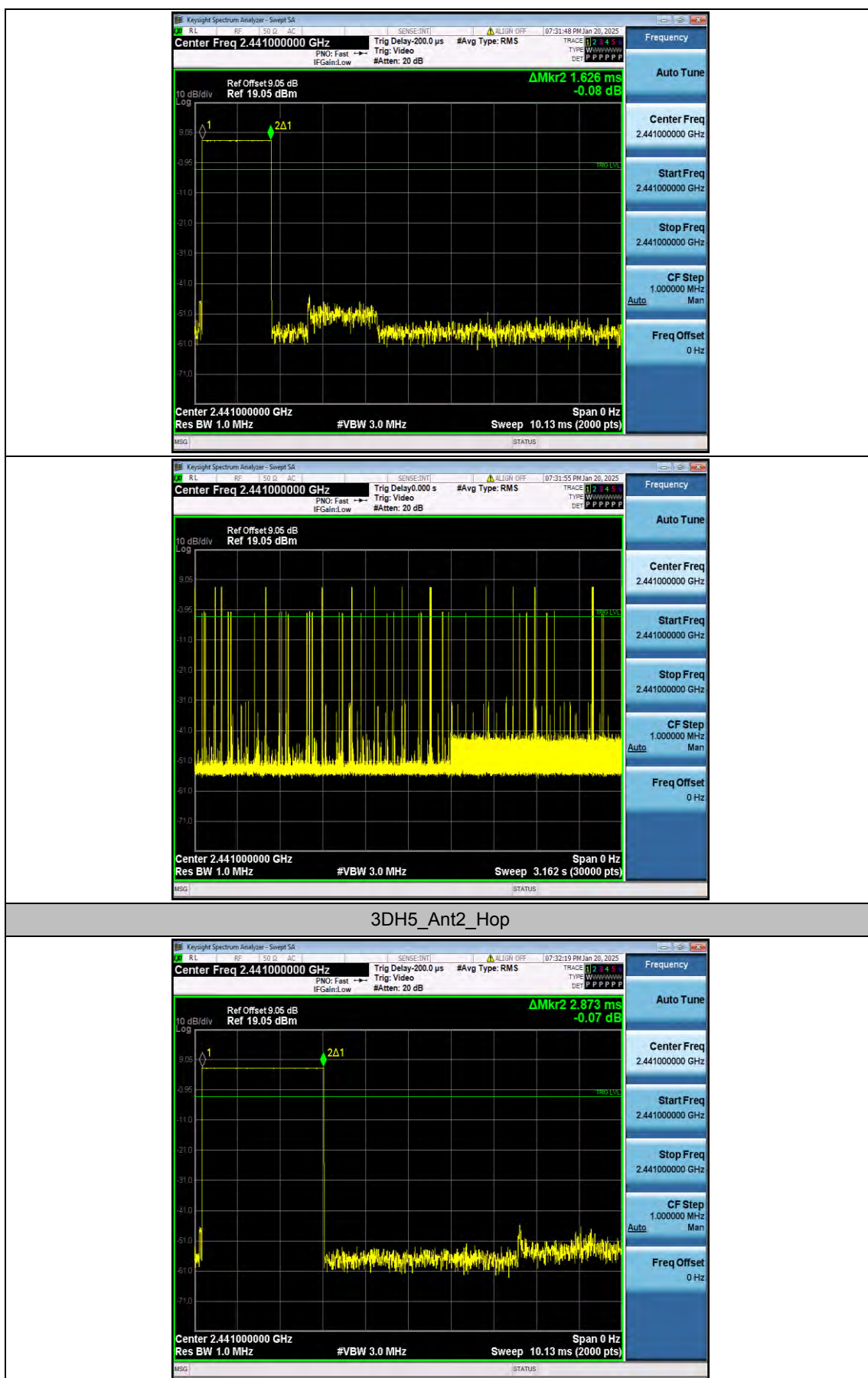


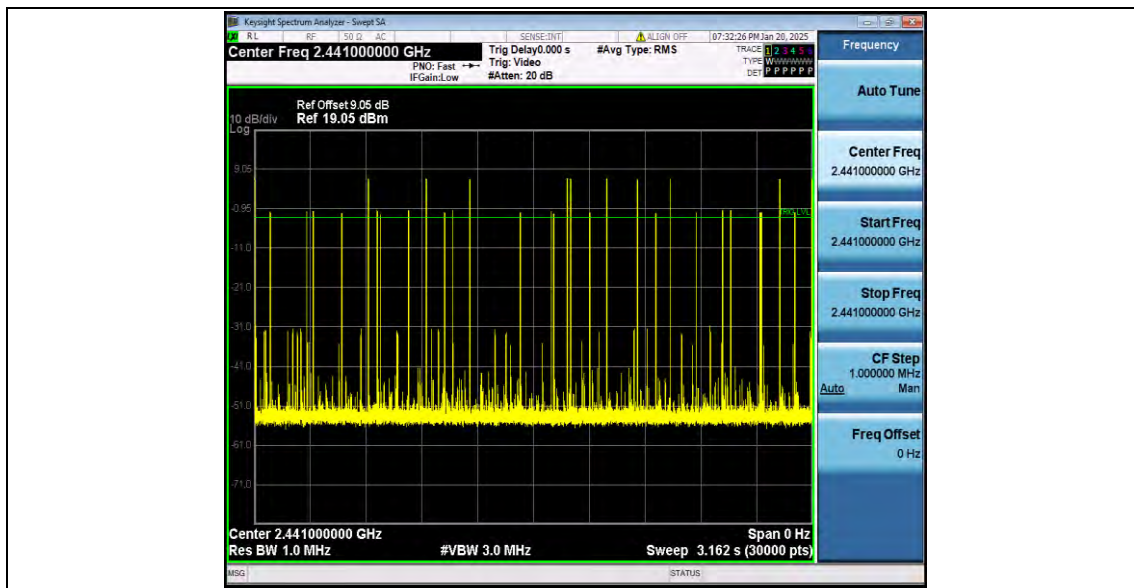


3DH1_Ant2_Hop



3DH3_Ant2_Hop



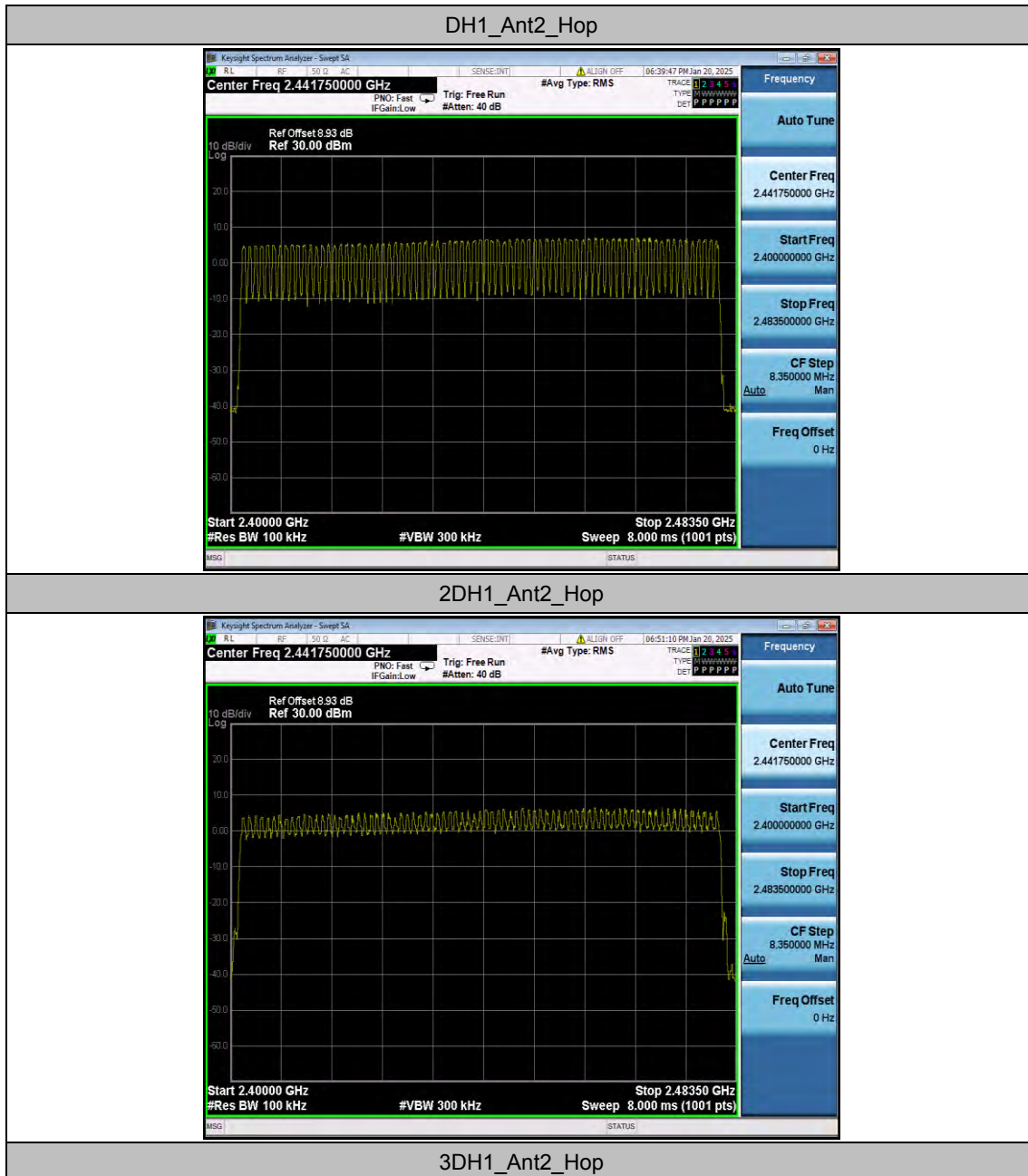


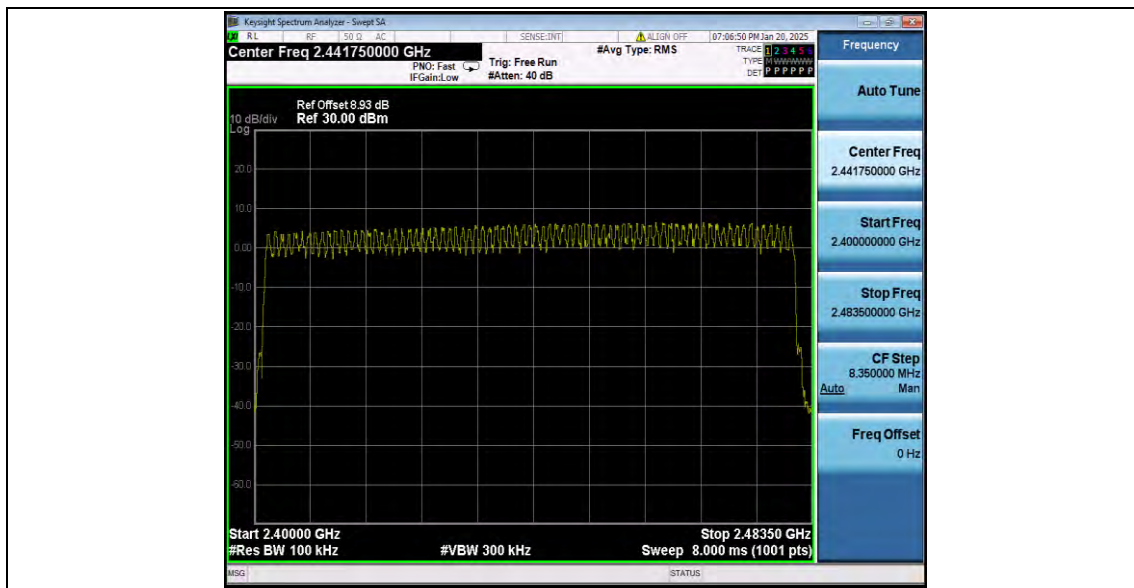
Appendix A.6: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH1	Ant2	Hop	79	≥15	PASS
2DH1	Ant2	Hop	79	≥15	PASS
3DH1	Ant2	Hop	79	≥15	PASS

Test Graphs





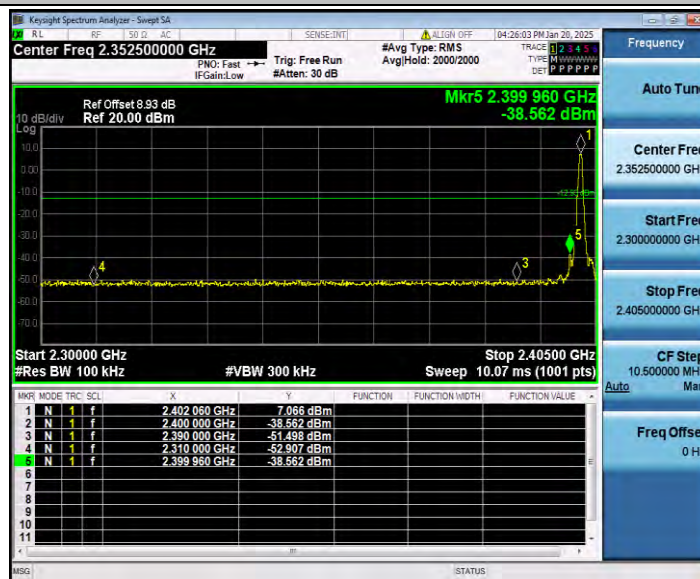
Appendix A.7: Band edge measurements

Test Result

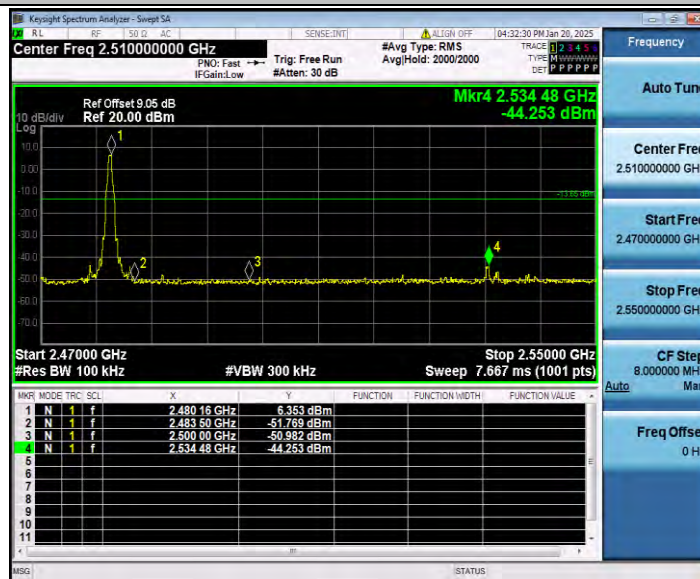
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant2	Low	2402	7.07	-38.56	≤ -12.93	PASS
		High	2480	6.35	-44.25	≤ -13.65	PASS
		Low	Hop_2402	4.63	-49.88	≤ -15.37	PASS
		High	Hop_2480	6.78	-48.93	≤ -13.22	PASS
2DH1	Ant2	Low	2402	4.43	-39.7	≤ -15.57	PASS
		High	2480	5.04	-43.45	≤ -14.96	PASS
		Low	Hop_2402	3.74	-45.14	≤ -16.26	PASS
		High	Hop_2480	6.06	-48.58	≤ -13.94	PASS
3DH1	Ant2	Low	2402	4.38	-42.67	≤ -15.62	PASS
		High	2480	5.11	-47.57	≤ -14.89	PASS
		Low	Hop_2402	2.80	-42.06	≤ -17.2	PASS
		High	Hop_2480	6.23	-39.82	≤ -13.77	PASS

Test Graphs

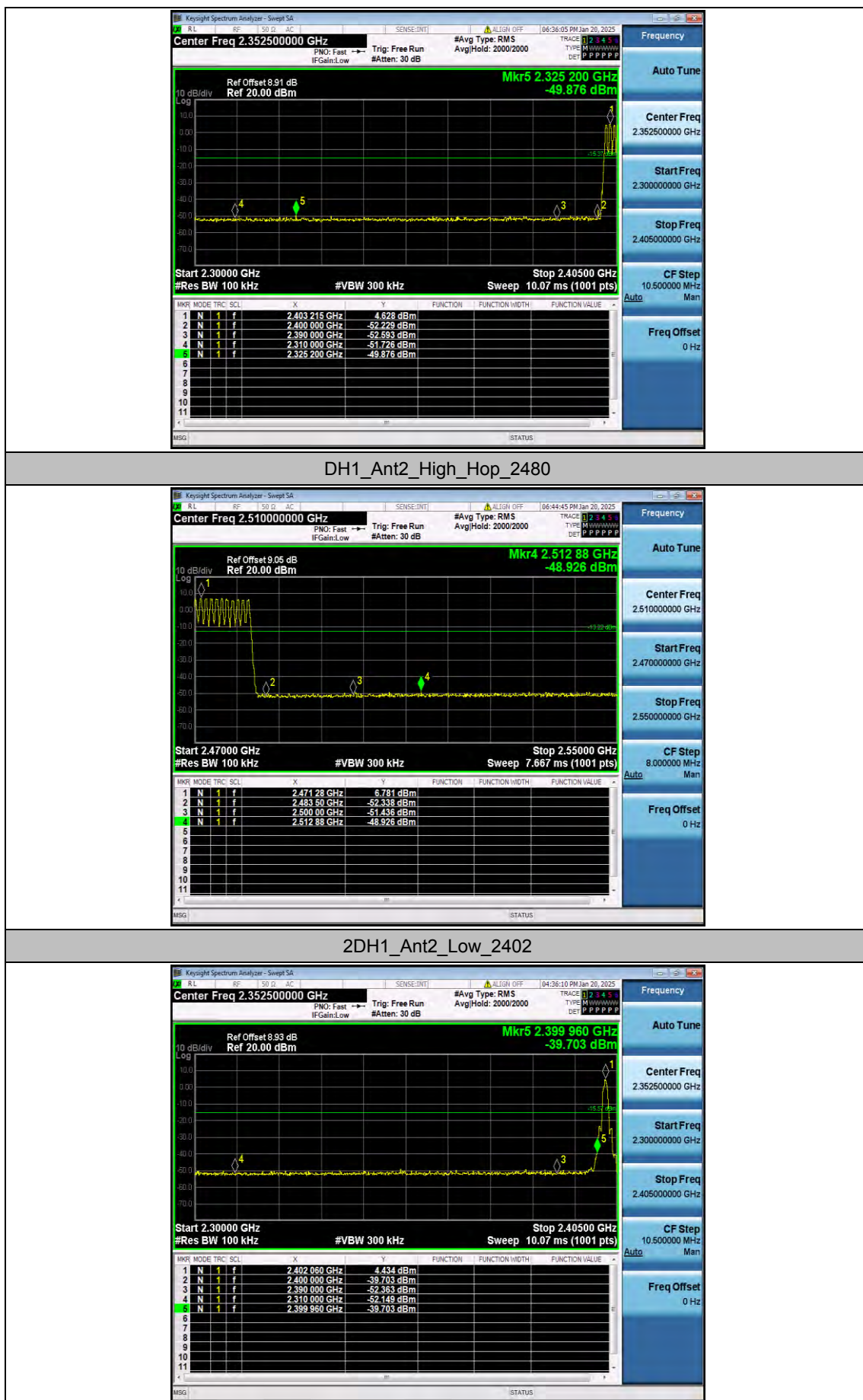
DH1_Ant2_Low_2402



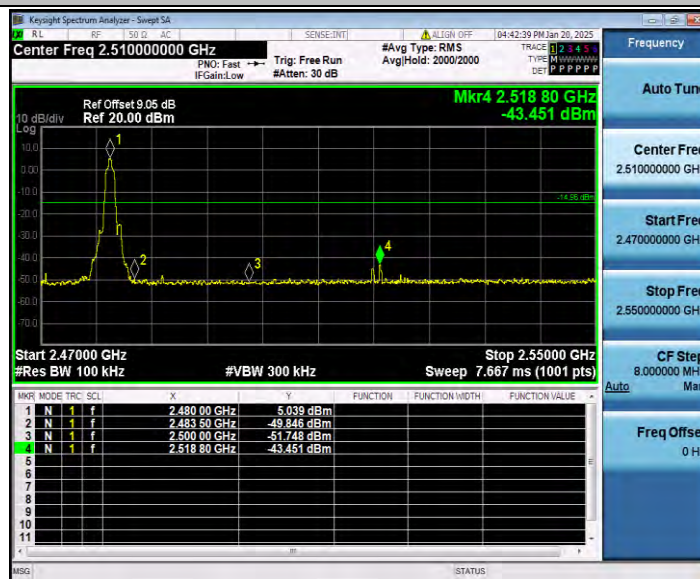
DH1_Ant2_High_2480



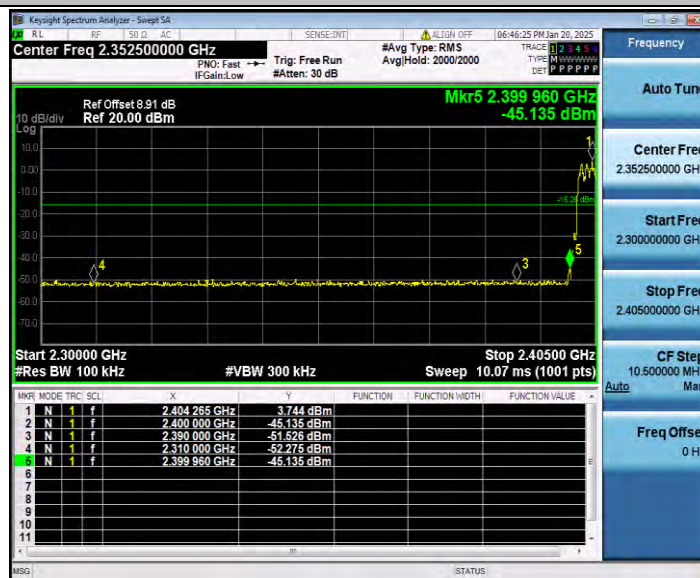
DH1_Ant2_Low_Hop_2402



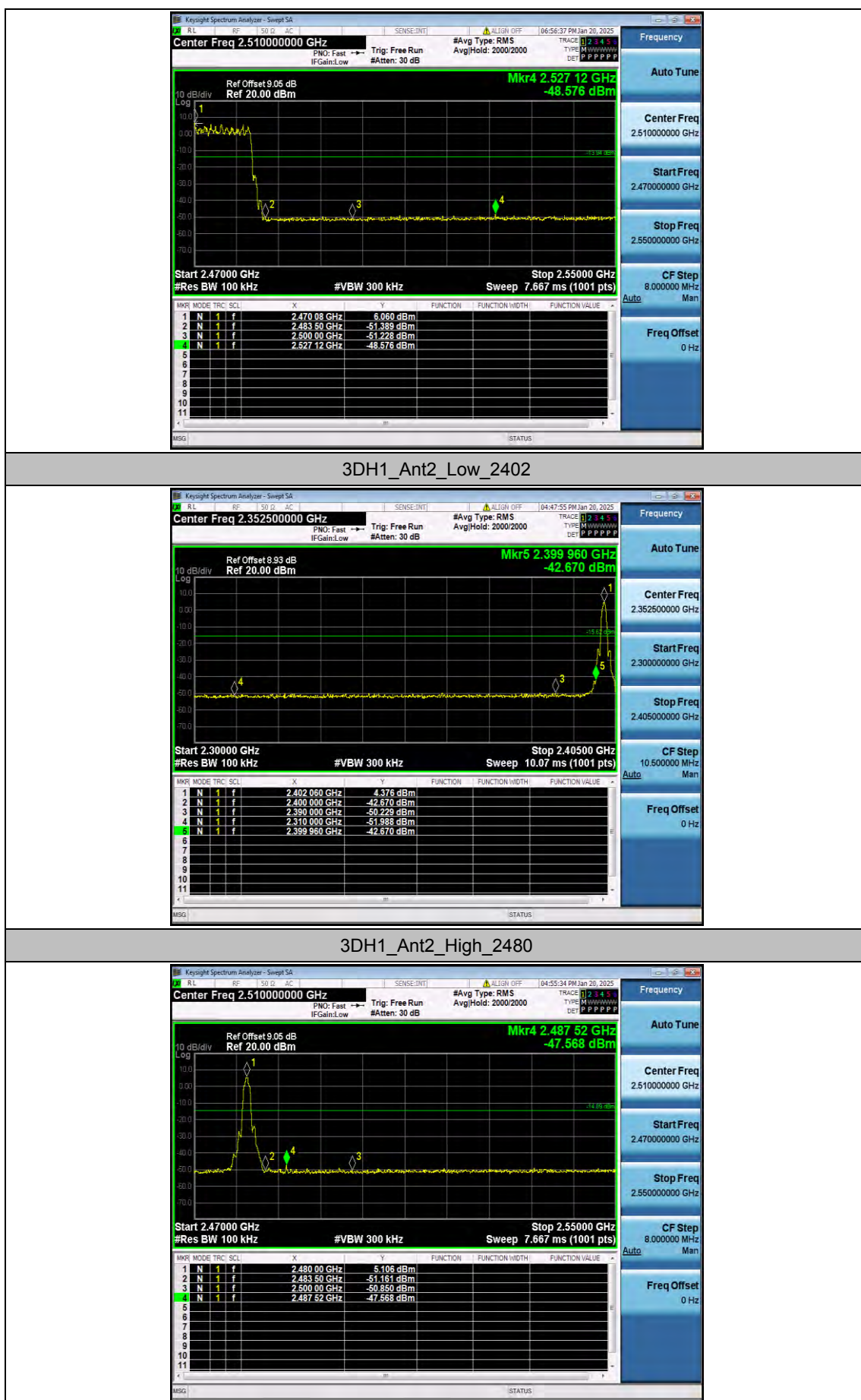
2DH1_Ant2_High_2480



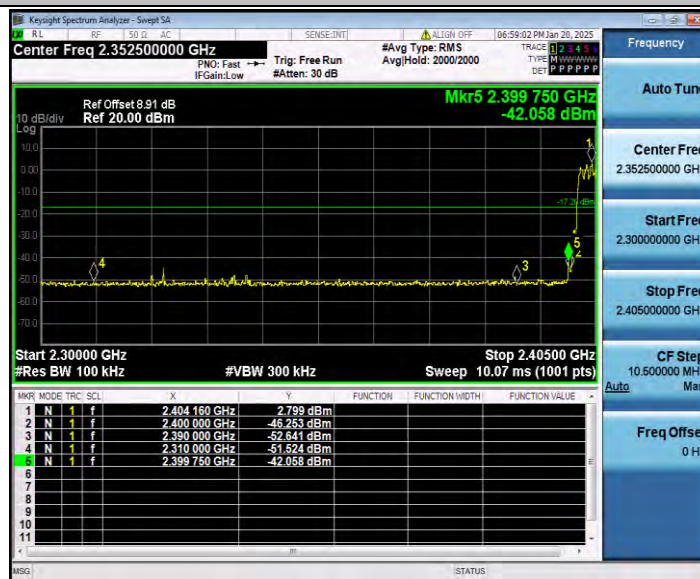
2DH1_Ant2_Low_Hop_2402



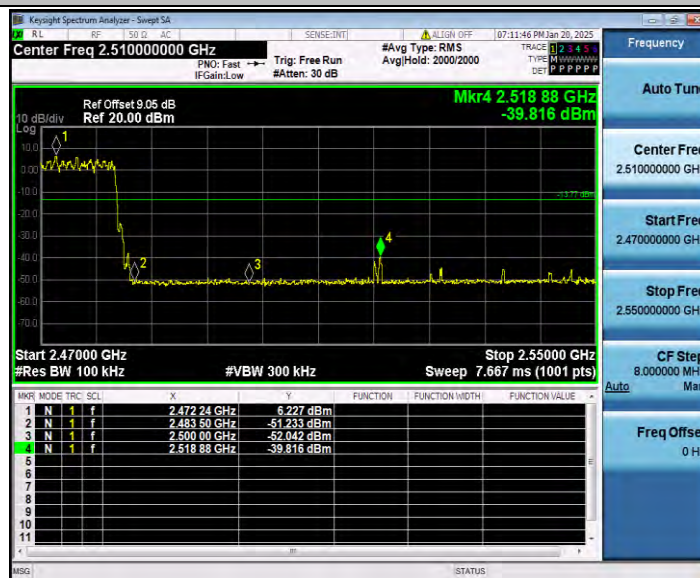
2DH1_Ant2_High_Hop_2480



3DH1_Ant2_Low_Hop_2402



3DH1_Ant2_High_Hop_2480

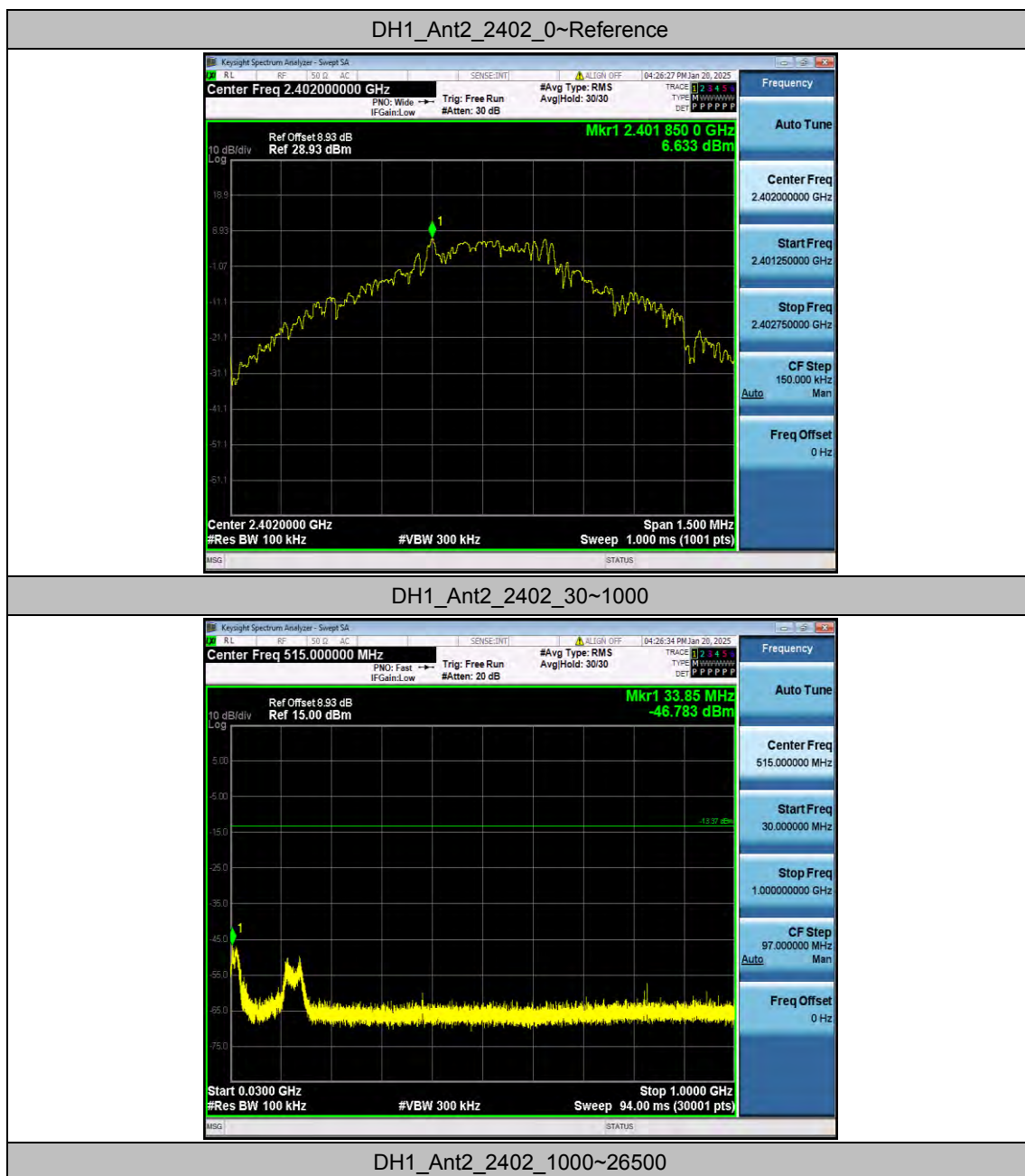


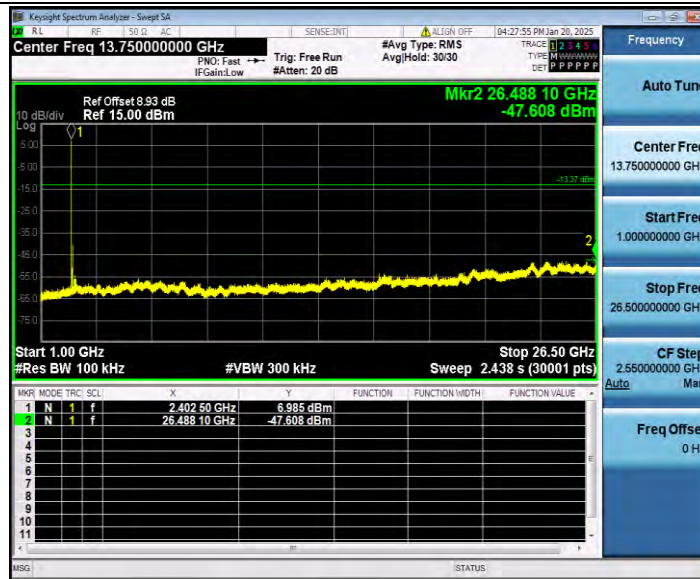
Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant2	2402	Reference	6.63	6.63	---	PASS
			30~1000	6.63	-46.78	≤-13.37	PASS
			1000~26500	6.63	-47.61	≤-13.37	PASS
		2441	Reference	7.80	7.80	---	PASS
			30~1000	7.80	-46.28	≤-12.2	PASS
			1000~26500	7.80	-34.78	≤-12.2	PASS
		2480	Reference	5.97	5.97	---	PASS
			30~1000	5.97	-46.94	≤-14.03	PASS
			1000~26500	5.97	-36.57	≤-14.03	PASS
2DH1	Ant2	2402	Reference	3.52	3.52	---	PASS
			30~1000	3.52	-46.84	≤-16.48	PASS
			1000~26500	3.52	-43.44	≤-16.48	PASS
		2441	Reference	5.38	5.38	---	PASS
			30~1000	5.38	-46.08	≤-14.62	PASS
			1000~26500	5.38	-35.58	≤-14.62	PASS
		2480	Reference	4.59	4.59	---	PASS
			30~1000	4.59	-46.68	≤-15.41	PASS
			1000~26500	4.59	-41.82	≤-15.41	PASS
3DH1	Ant2	2402	Reference	4.22	4.22	---	PASS
			30~1000	4.22	-45.62	≤-15.78	PASS
			1000~26500	4.22	-41.59	≤-15.78	PASS
		2441	Reference	5.40	5.40	---	PASS
			30~1000	5.40	-45.63	≤-14.6	PASS
			1000~26500	5.40	-42.22	≤-14.6	PASS
		2480	Reference	4.89	4.89	---	PASS
			30~1000	4.89	-45.2	≤-15.11	PASS
			1000~26500	4.89	-43.57	≤-15.11	PASS

Test Graphs

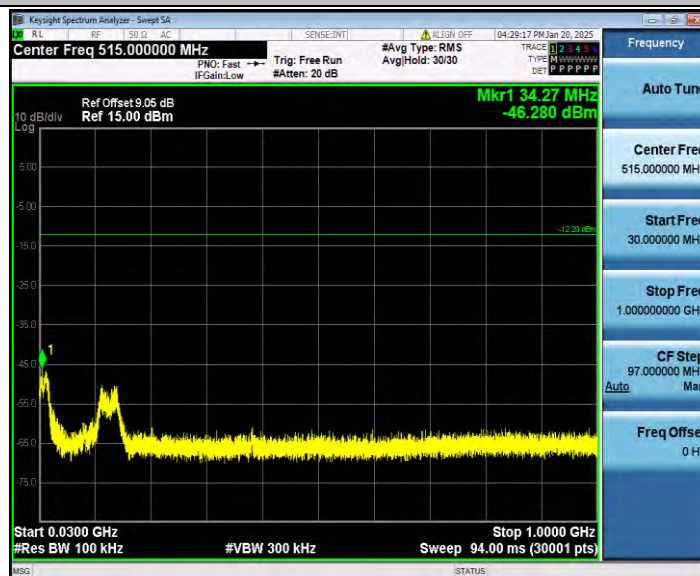




DH1_Ant2_2441_0~Reference



DH1_Ant2_2441_30~1000



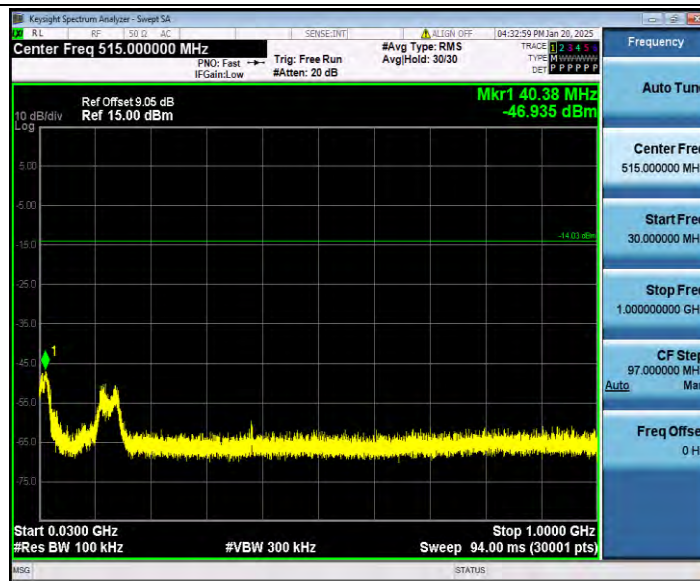
DH1_Ant2_2441_1000~26500



DH1_Ant2_2480_0~Reference



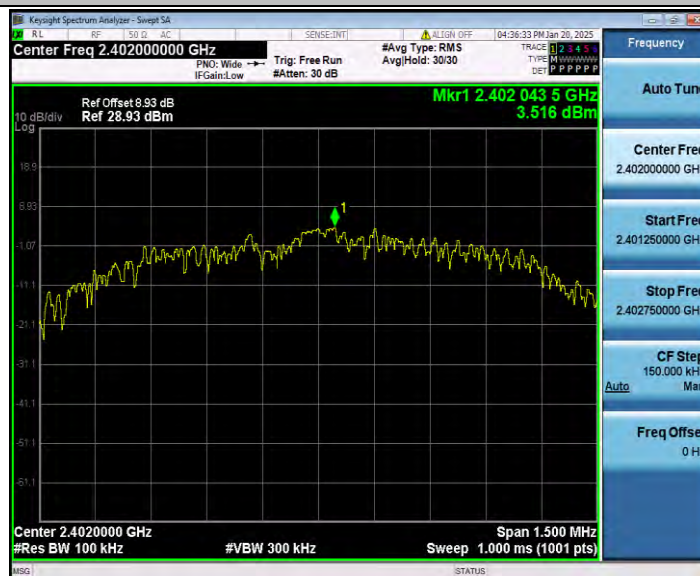
DH1_Ant2_2480_30~1000

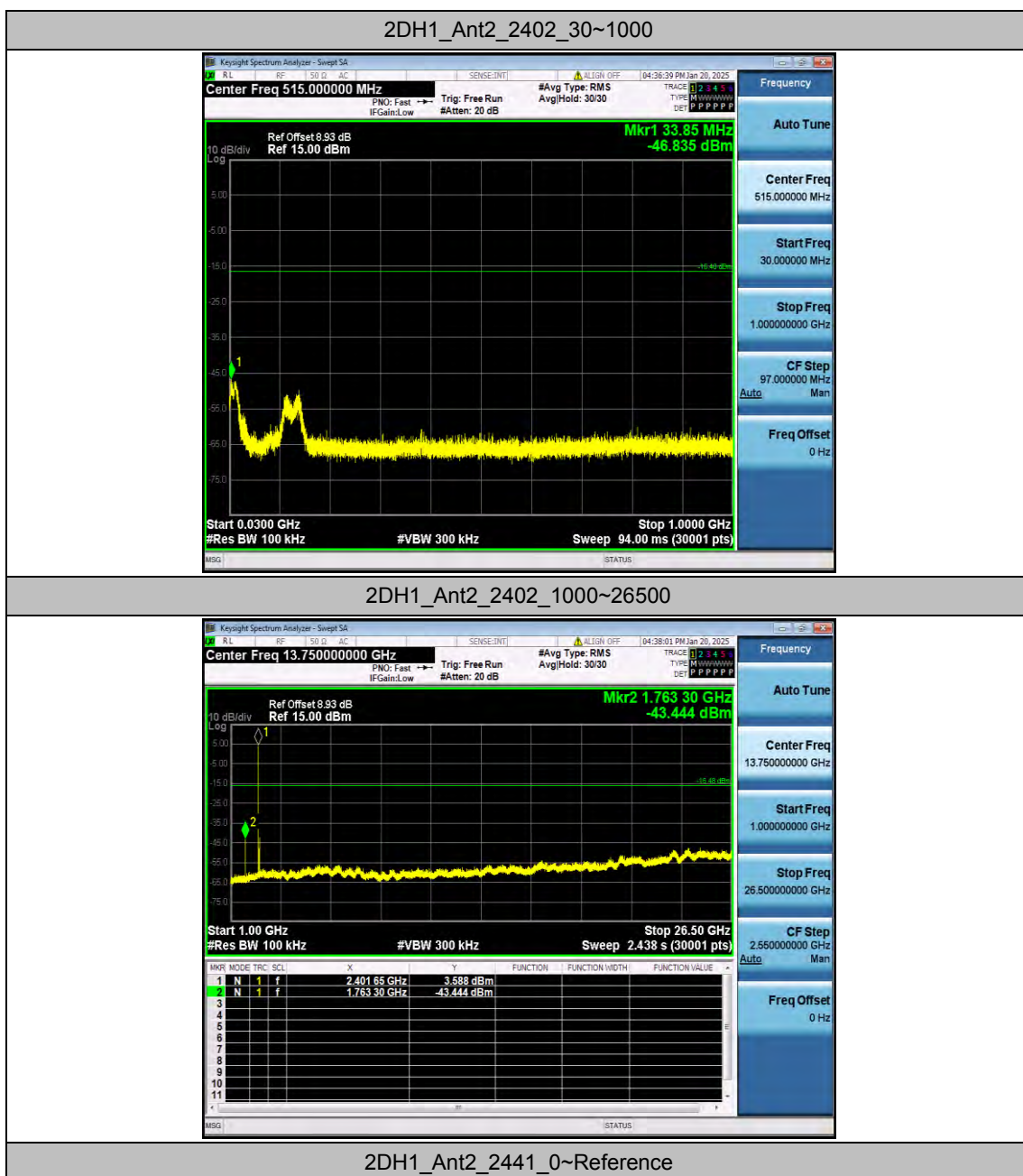


DH1_Ant2_2480_1000~26500



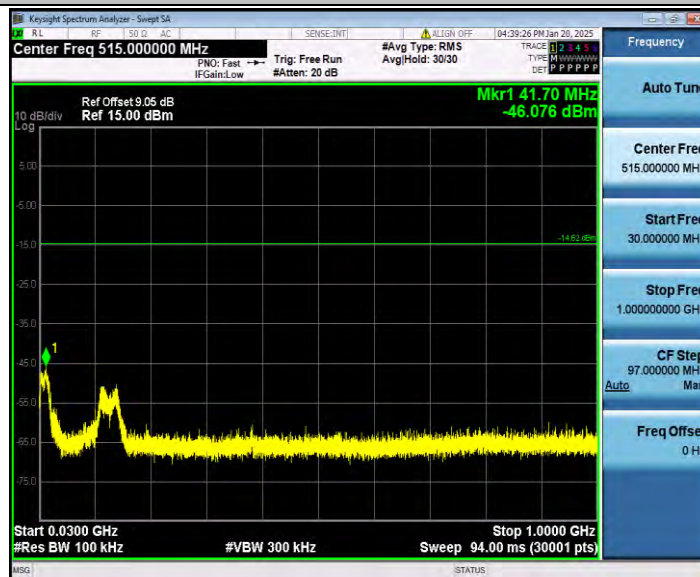
2DH1_Ant2_2402_0~Reference







2DH1_Ant2_2441_30~1000



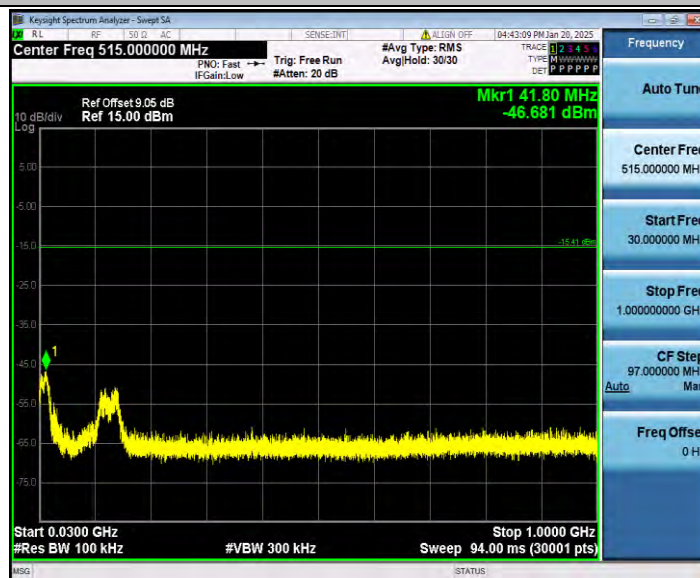
2DH1_Ant2_2441_1000~26500



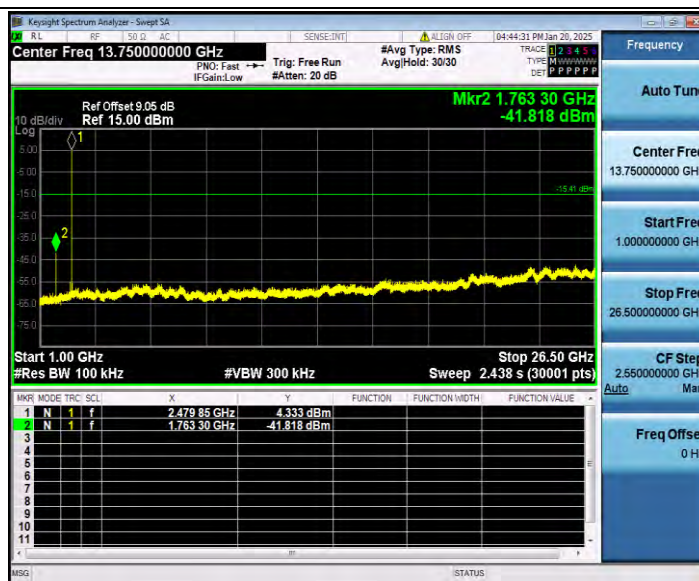
2DH1_Ant2_2480_0~Reference



2DH1_Ant2_2480_30~1000



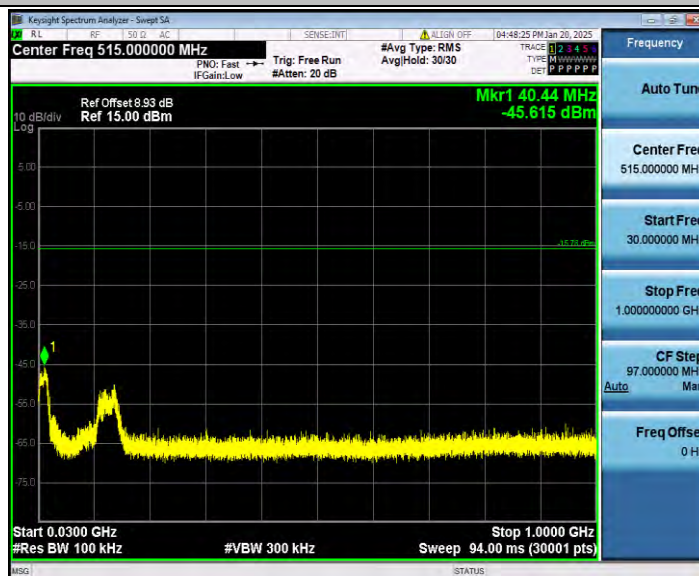
2DH1_Ant2_2480_1000~26500



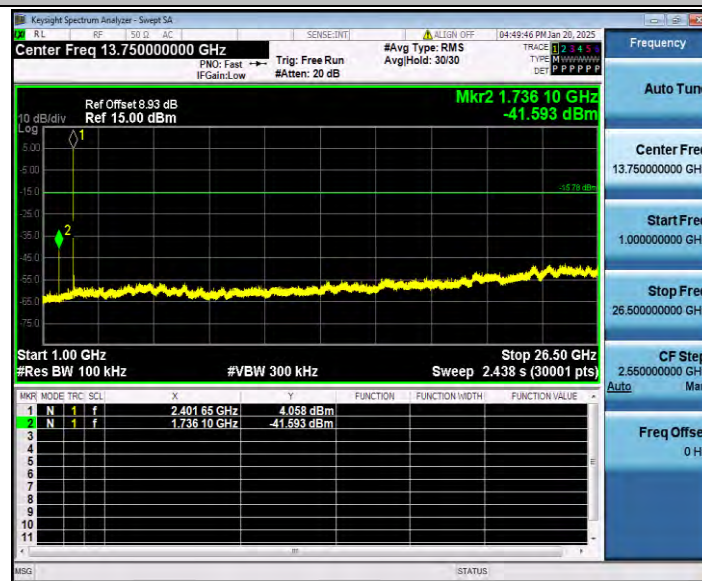
3DH1_Ant2_2402_0~Reference



3DH1_Ant2_2402_30~1000



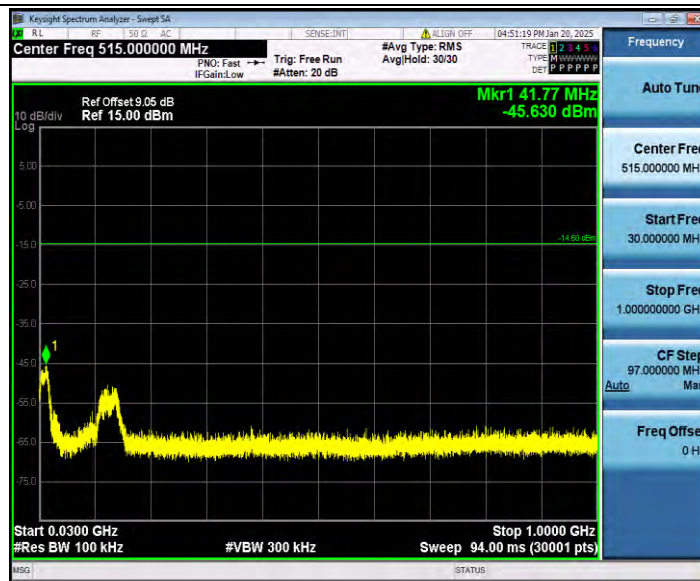
3DH1_Ant2_2402_1000~26500



3DH1_Ant2_2441_0~Reference



3DH1_Ant2_2441_30~1000

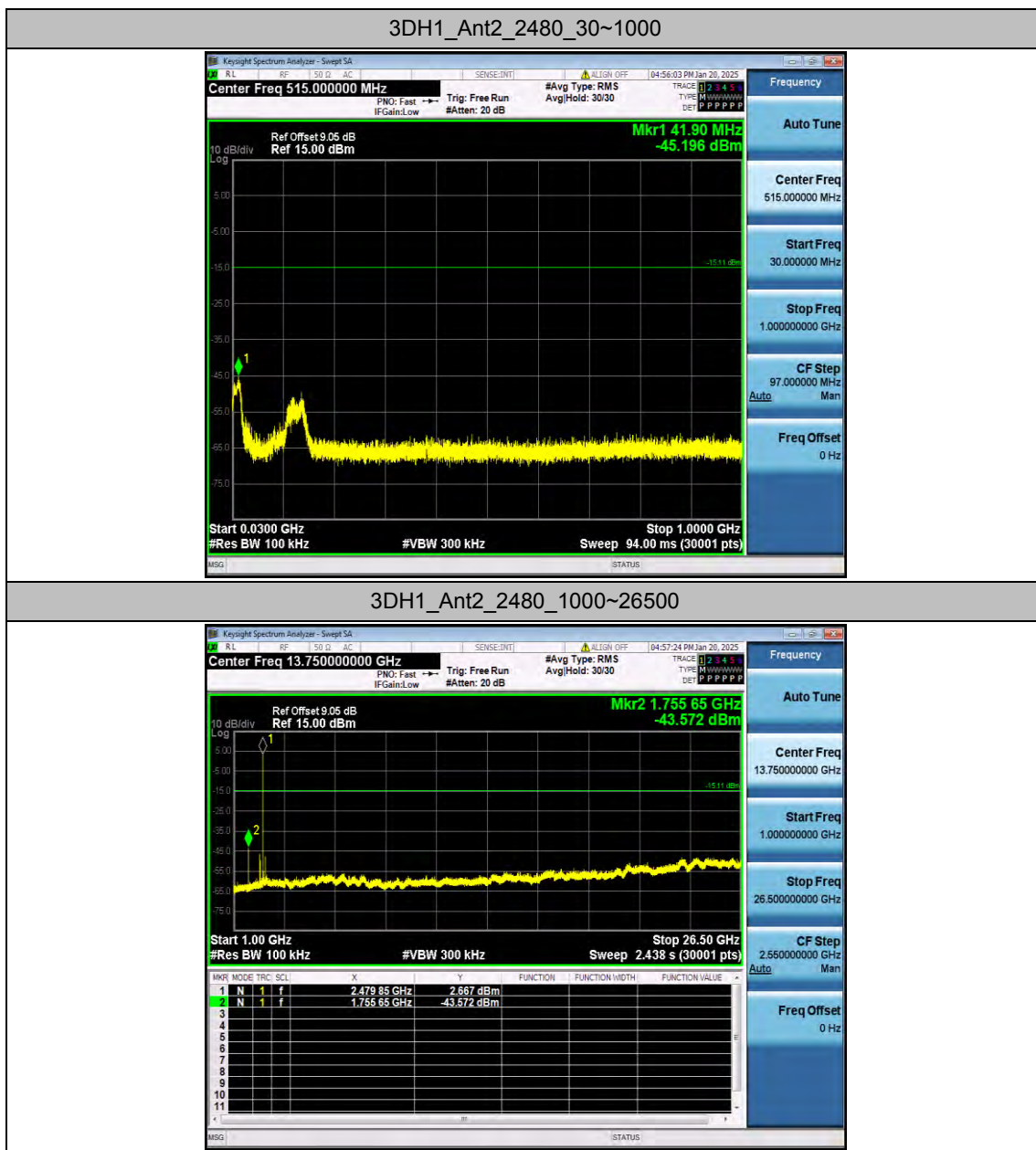


3DH1_Ant2_2441_1000~26500



3DH1_Ant2_2480_0~Reference





Appendix A.9: Emissions in Restricted Bands

Test Result

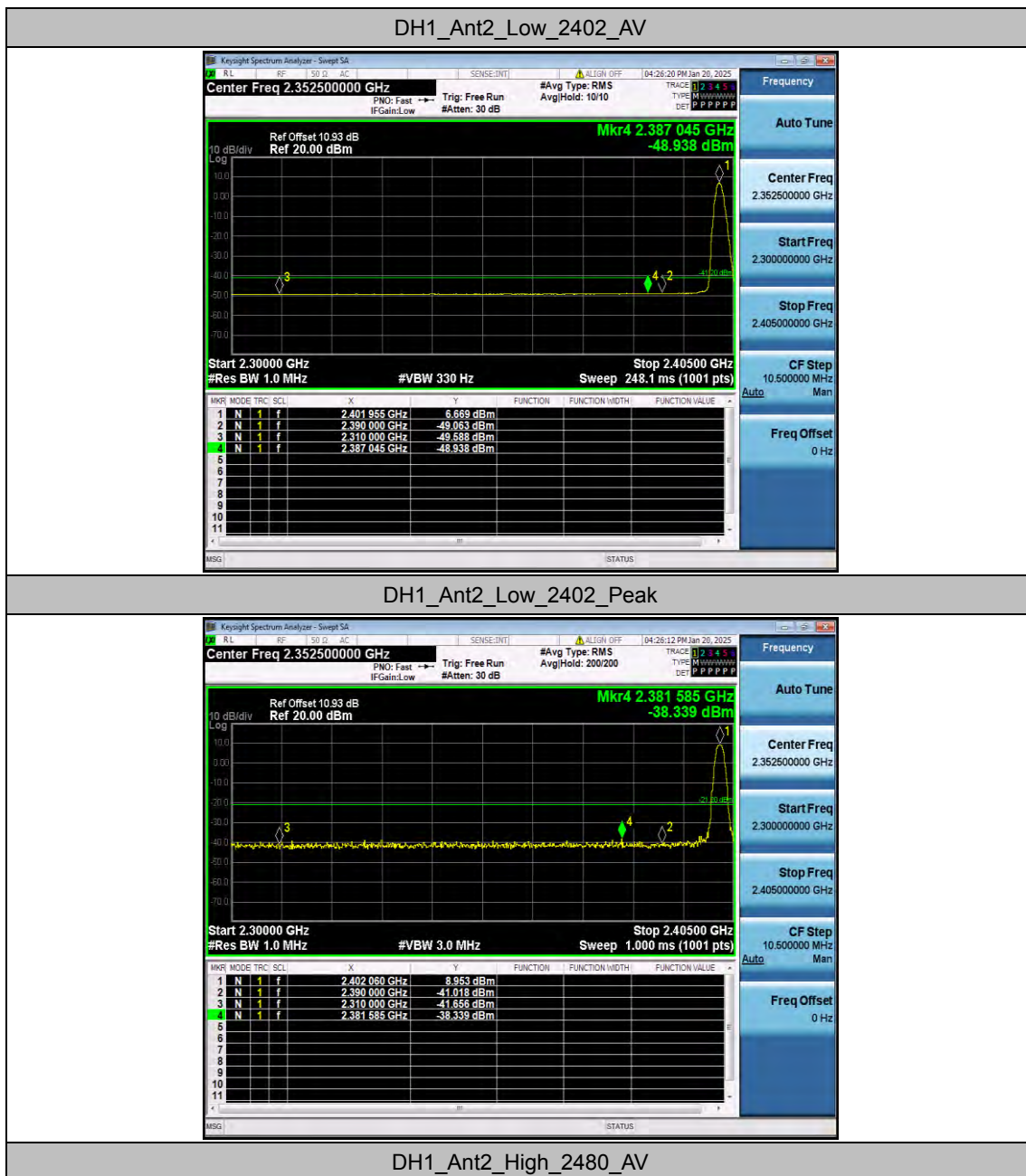
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH1	Ant2	Low	2402	AV	2310.000	-49.59	≤-41.20	45.61	≤54	PASS
				AV	2387.045	-48.94	≤-41.20	46.26	≤54	PASS
				AV	2390.000	-49.06	≤-41.20	46.14	≤54	PASS
				Peak	2310.000	-41.66	≤-21.20	53.54	≤74	PASS
				Peak	2381.585	-38.34	≤-21.20	56.86	≤74	PASS
				Peak	2390.000	-41.02	≤-21.20	54.18	≤74	PASS
		High	2480	AV	2483.500	-47.7	≤-41.20	47.50	≤54	PASS
				AV	2483.520	-47.7	≤-41.20	47.50	≤54	PASS
				AV	2500.000	-48.79	≤-41.20	46.41	≤54	PASS
				Peak	2483.500	-40.92	≤-21.20	54.28	≤74	PASS
				Peak	2496.000	-38.48	≤-21.20	56.72	≤74	PASS
				Peak	2500.000	-40.46	≤-21.20	54.74	≤74	PASS
2DH1	Ant2	Low	2402	AV	2310.000	-49.44	≤-41.20	45.76	≤54	PASS
				AV	2380.535	-48.93	≤-41.20	46.27	≤54	PASS
				AV	2390.000	-49.02	≤-41.20	46.18	≤54	PASS
				Peak	2310.000	-41.82	≤-21.20	53.38	≤74	PASS
				Peak	2378.330	-38.93	≤-21.20	56.27	≤74	PASS
				Peak	2390.000	-42.5	≤-21.20	52.70	≤74	PASS
		High	2480	AV	2483.500	-47.21	≤-41.20	47.99	≤54	PASS
				AV	2483.520	-47.21	≤-41.20	47.99	≤54	PASS
				AV	2500.000	-48.65	≤-41.20	46.55	≤54	PASS
				Peak	2483.500	-39.66	≤-21.20	55.54	≤74	PASS
				Peak	2484.080	-38.99	≤-21.20	56.21	≤74	PASS
				Peak	2500.000	-41	≤-21.20	54.20	≤74	PASS
3DH1	Ant2	Low	2402	AV	2310.000	-49.49	≤-41.20	45.71	≤54	PASS
				AV	2388.095	-48.88	≤-41.20	46.32	≤54	PASS
				AV	2390.000	-48.96	≤-41.20	46.24	≤54	PASS
				Peak	2310.000	-41.61	≤-21.20	53.59	≤74	PASS
				Peak	2380.220	-38.63	≤-21.20	56.57	≤74	PASS
				Peak	2390.000	-40.91	≤-21.20	54.29	≤74	PASS
		High	2480	AV	2483.500	-47.15	≤-41.20	48.05	≤54	PASS
				AV	2483.520	-47.15	≤-41.20	48.05	≤54	PASS
				AV	2500.000	-48.64	≤-41.20	46.56	≤54	PASS
				Peak	2483.500	-39.17	≤-21.20	56.03	≤74	PASS
				Peak	2489.360	-38.47	≤-21.20	56.73	≤74	PASS

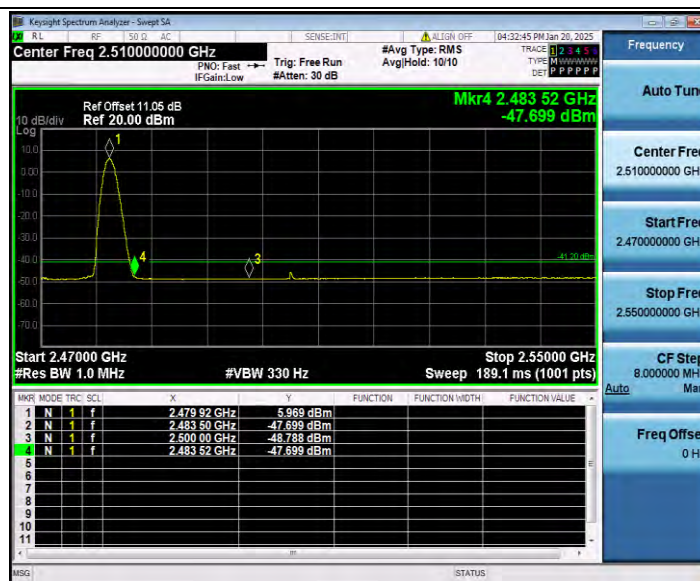
				Peak	2500.000	-40.85	≤-21.20	54.35	≤74	PASS
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Note:

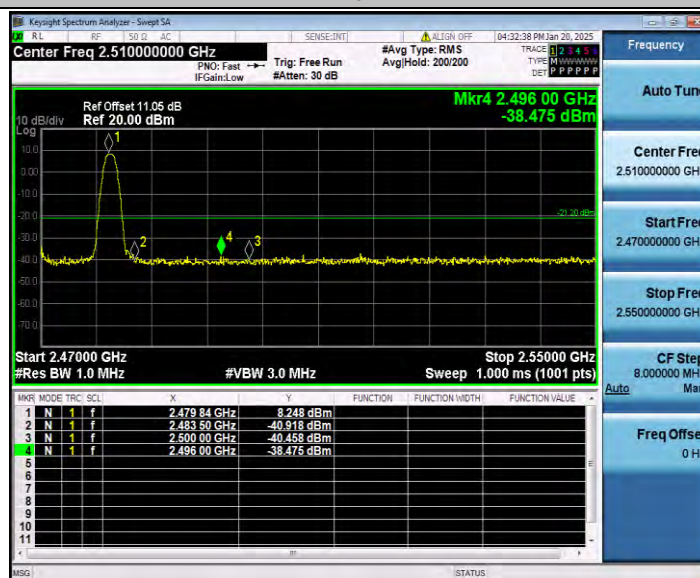
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

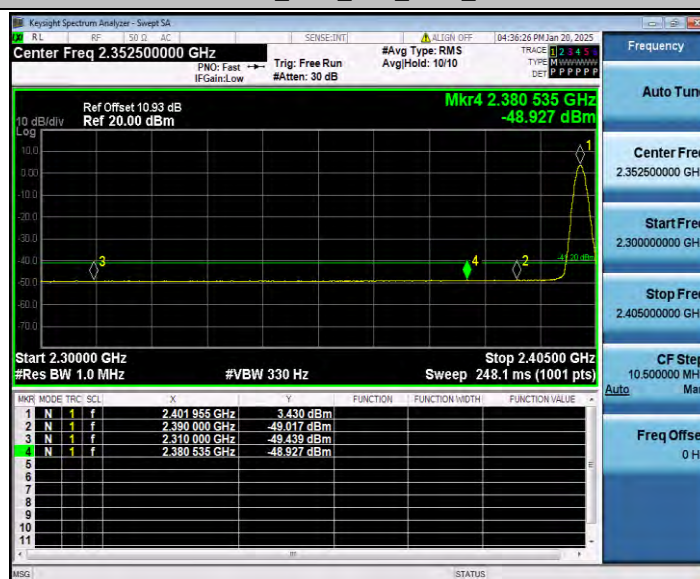




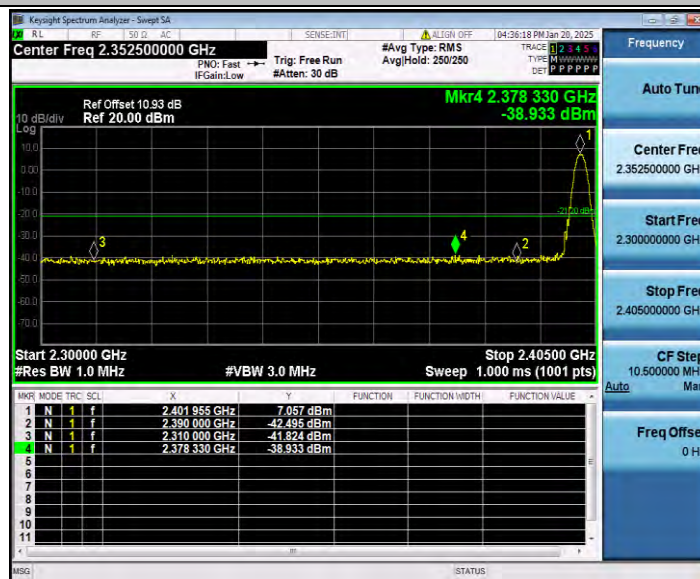
DH1_Ant2_High_2480_Peak



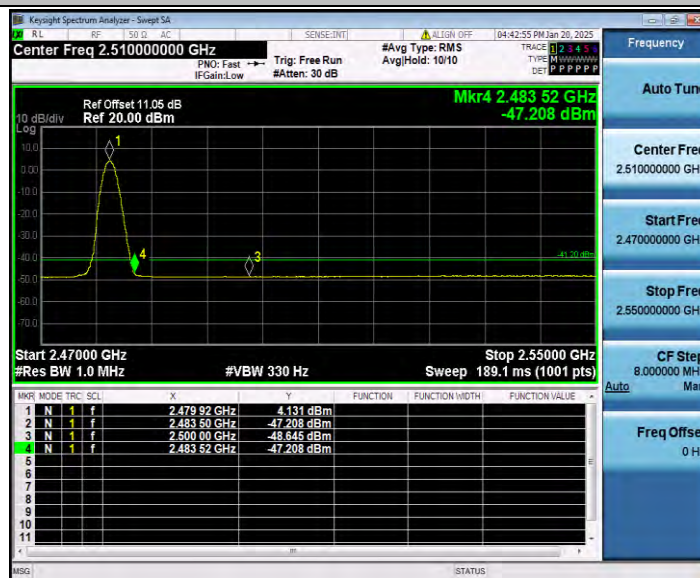
2DH1_Ant2_Low_2402_AV



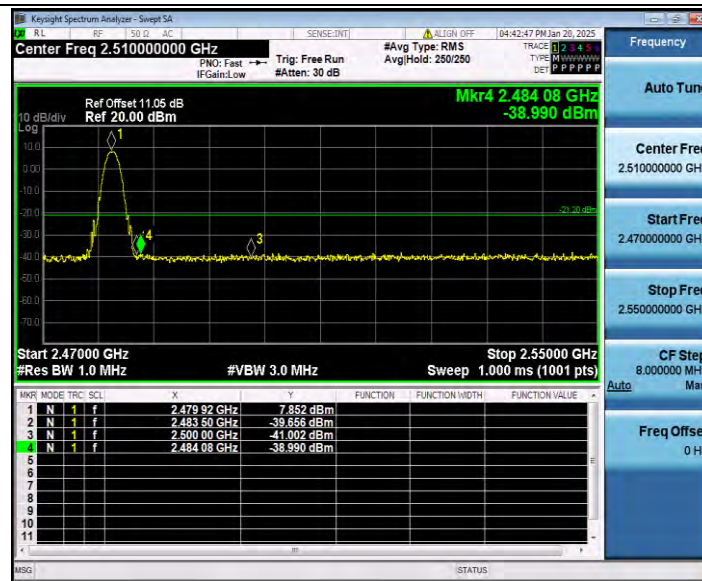
2DH1_Ant2_Low_2402_Peak



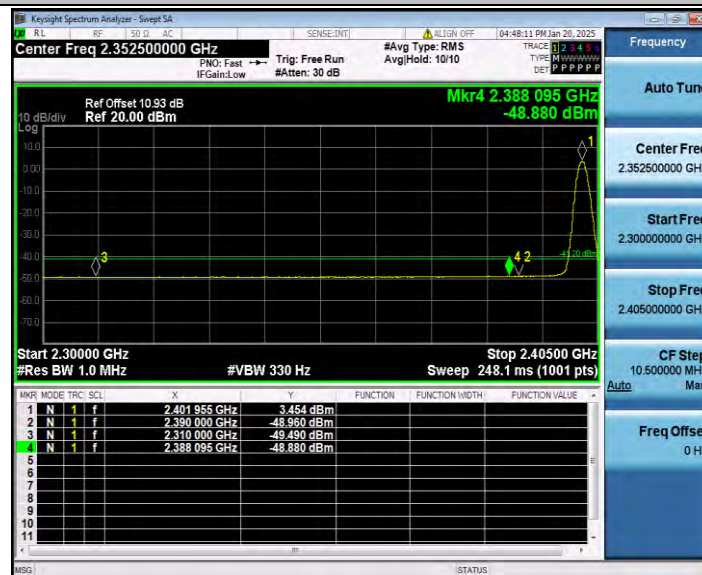
2DH1_Ant2_High_2480_AV



2DH1_Ant2_High_2480_Peak



3DH1_Ant2_Low_2402_AV



3DH1_Ant2_Low_2402_Peak

