

Case No. : <u>GTS20240118008-1-28</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2024.3.13</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	Ant1	2402	0.927	2401.526	2402.453	---	---
		2441	0.987	2440.505	2441.492	---	---
		2480	1.017	2479.499	2480.516	---	---
2DH1	Ant1	2402	1.266	2401.382	2402.648	---	---
		2441	1.248	2440.382	2441.630	---	---
		2480	1.296	2479.343	2480.639	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402



2DH1_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	0.85773	2401.5804	2402.4381	---	---
		2441	0.87813	2440.5685	2441.4466	---	---
		2480	0.93617	2479.5363	2480.4725	---	---
2DH1	Ant1	2402	1.1653	2401.4224	2402.5877	---	---
		2441	1.1729	2440.4206	2441.5935	---	---
		2480	1.1677	2479.4153	2480.5830	---	---

Test Graphs

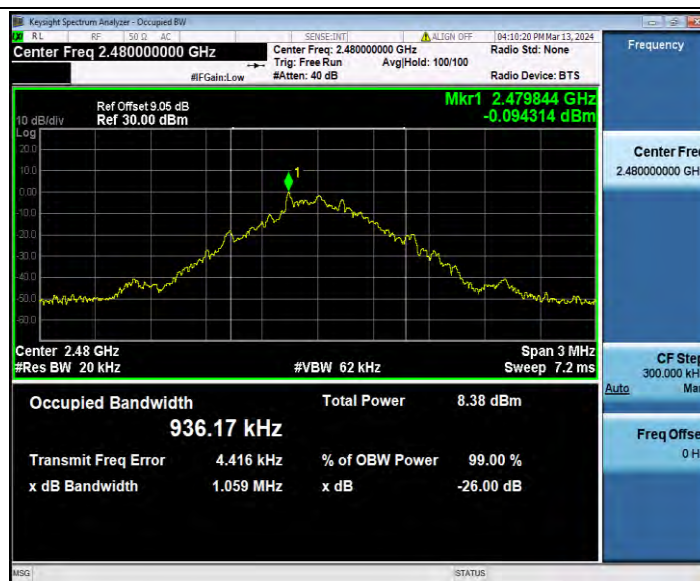
DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480



Appendix A.3: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	1.49	≤20.97	PASS
		2441	2.96	≤20.97	PASS
		2480	2.55	≤20.97	PASS
2DH1	Ant1	2402	2.30	≤20.97	PASS
		2441	3.65	≤20.97	PASS
		2480	3.20	≤20.97	PASS

Note:

1.The Duty Cycle Factor and RBW Factor is compensated in the data.

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.91	≥ 0.678	PASS
		Hop_2441	1.01	≥ 0.678	PASS
		Hop_2480	1	≥ 0.678	PASS
2DH1	Ant1	Hop_2402	1.004	≥ 0.864	PASS
		Hop_2441	0.992	≥ 0.864	PASS
		Hop_2480	0.984	≥ 0.864	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

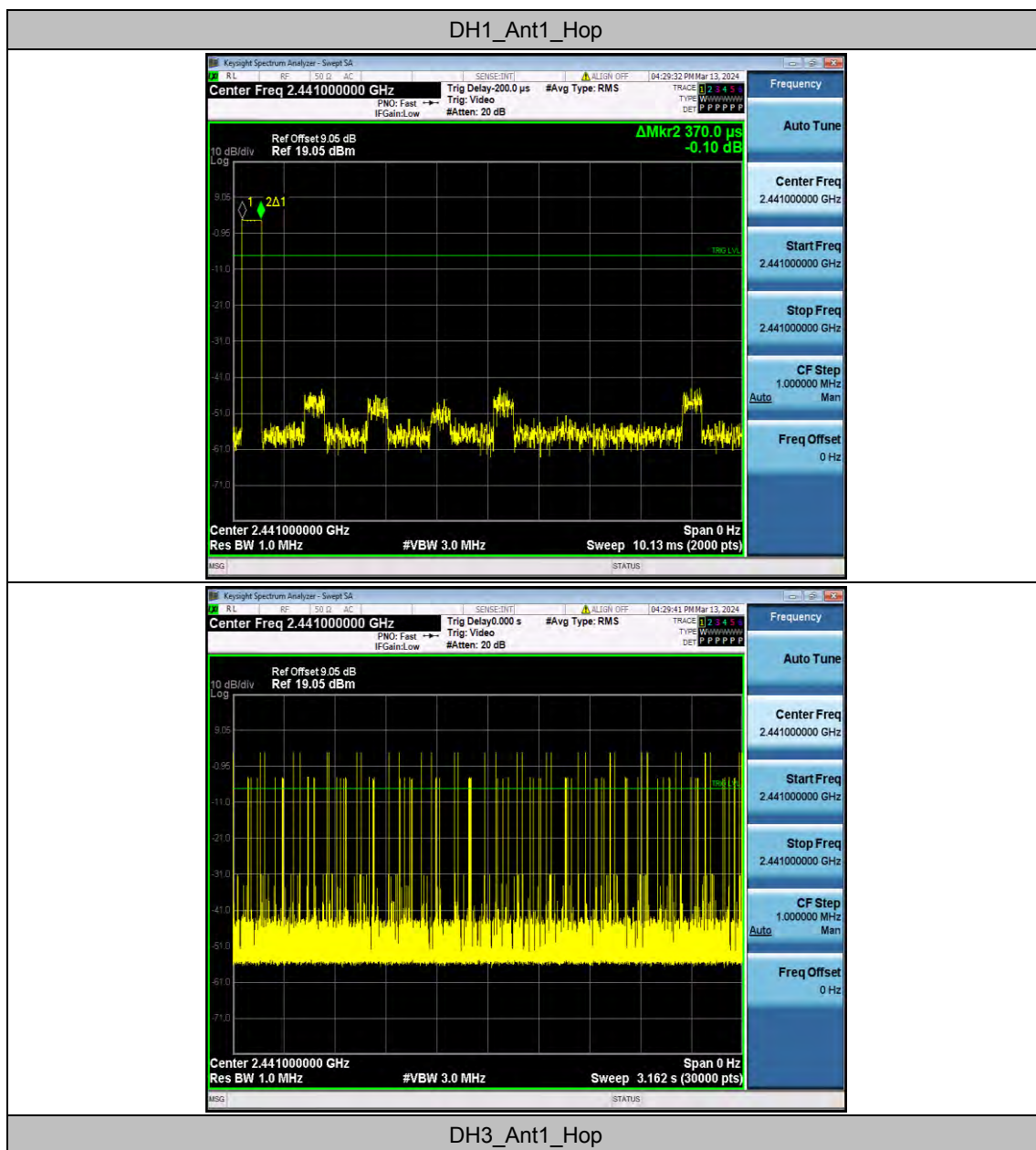


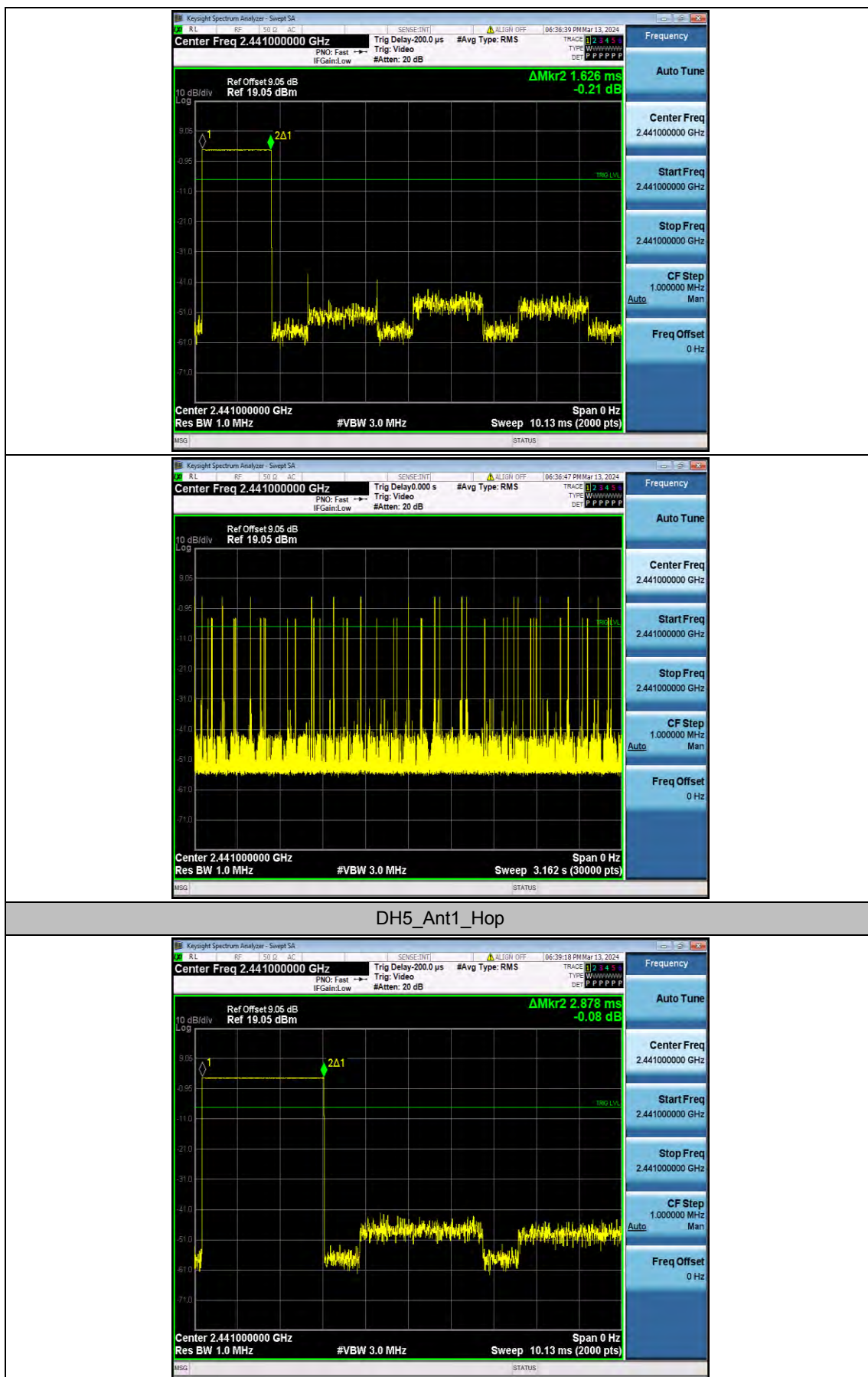
Appendix A.5: Time of occupancy

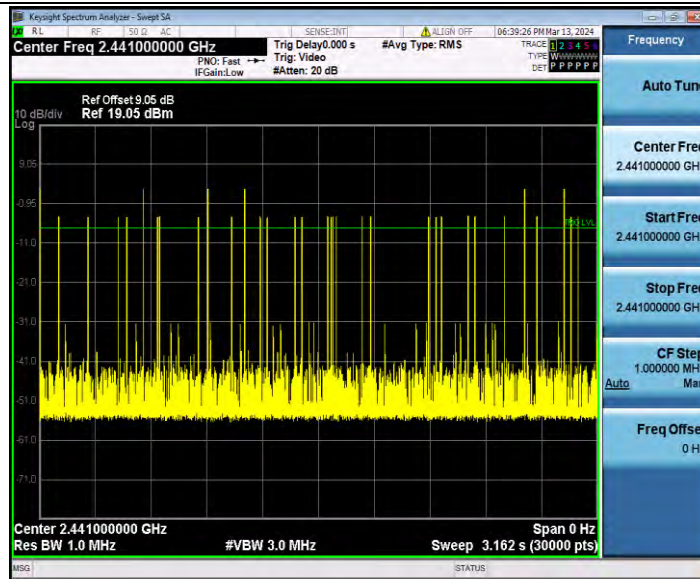
Test Result

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	170	0.276	≤0.4	PASS
DH5	Ant1	Hop	2.878	60	0.173	≤0.4	PASS
2DH1	Ant1	Hop	0.380	650	0.247	≤0.4	PASS
2DH3	Ant1	Hop	1.626	180	0.293	≤0.4	PASS
2DH5	Ant1	Hop	2.878	100	0.288	≤0.4	PASS

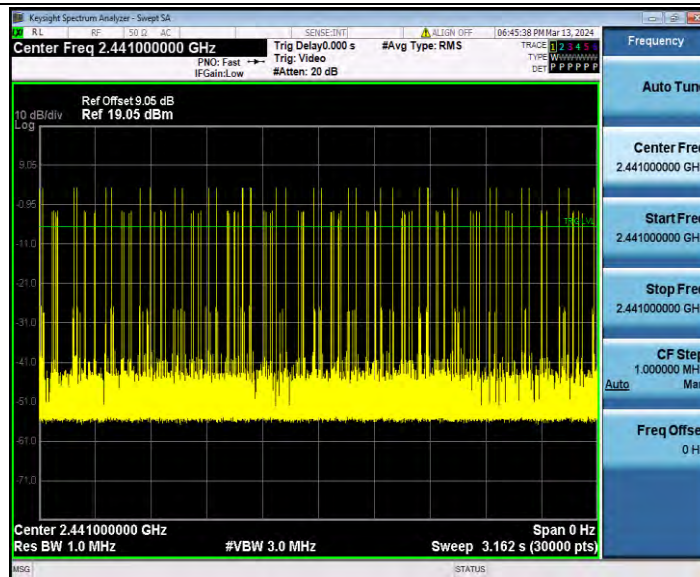
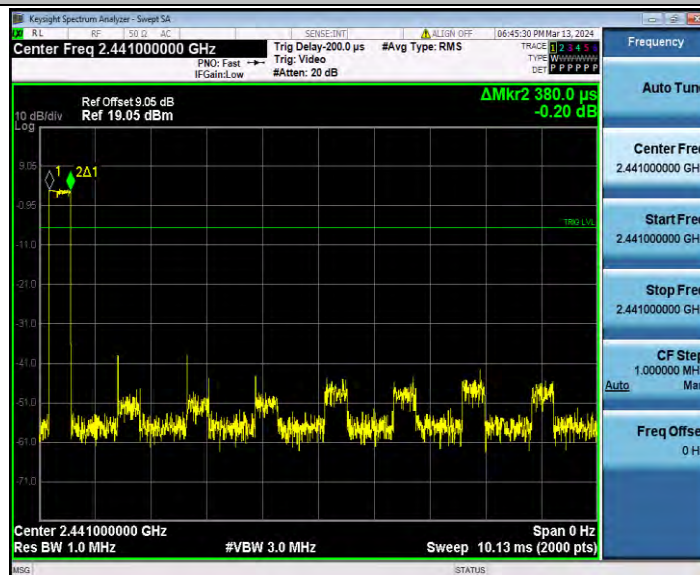
Test Graphs



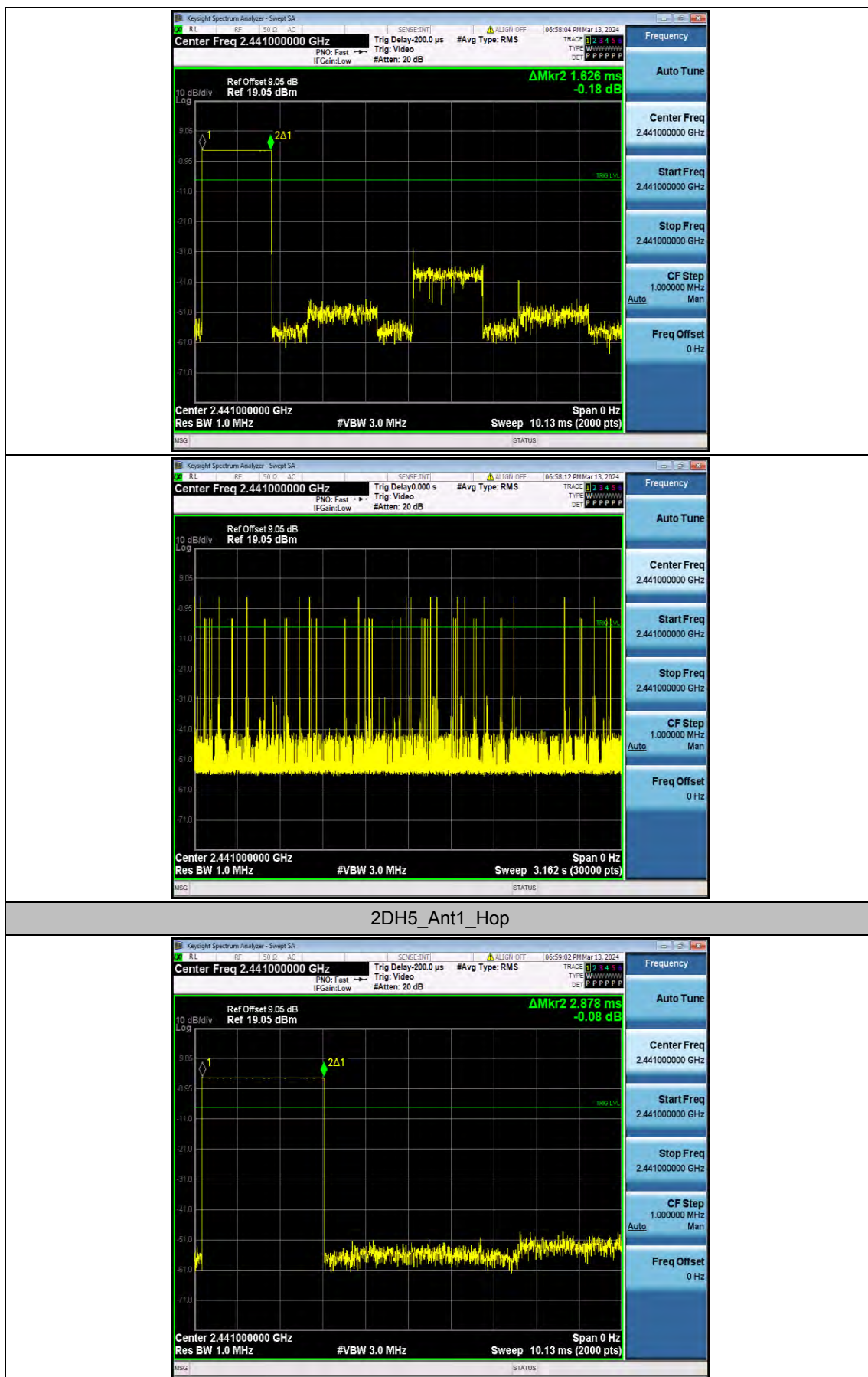




2DH1_Ant1_Hop



2DH3_Ant1_Hop



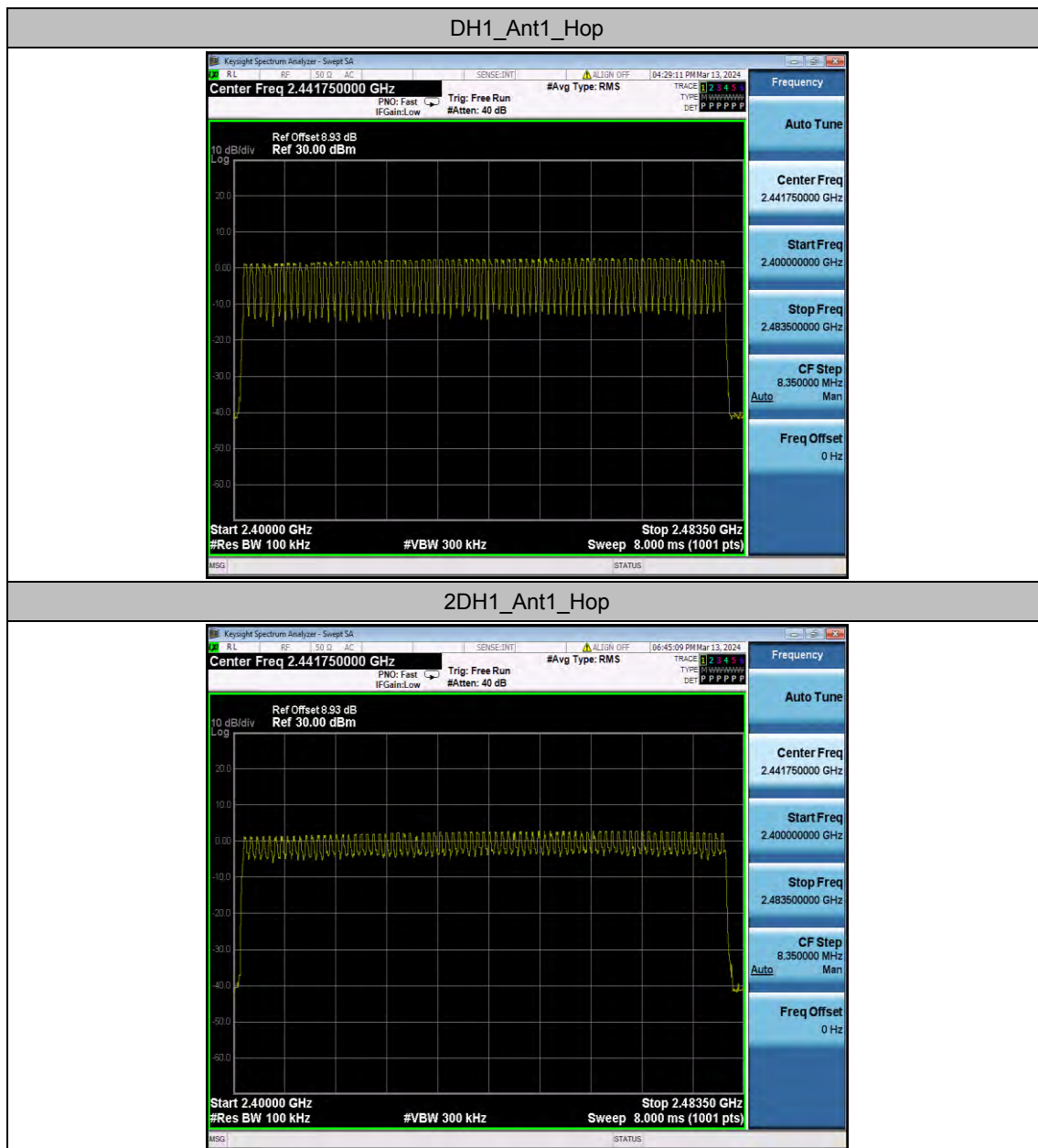


Appendix A.6: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS

Test Graphs



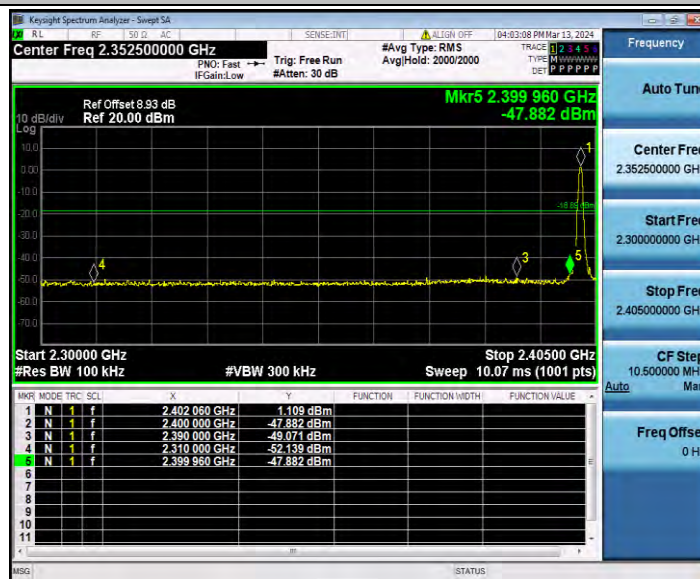
Appendix A.7: Band edge measurements

Test Result

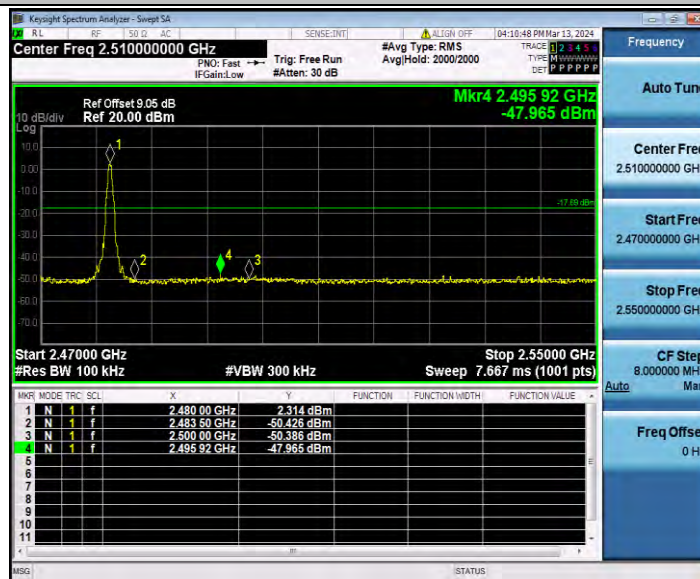
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	1.11	-47.88	≤ -18.89	PASS
		High	2480	2.31	-47.97	≤ -17.69	PASS
		Low	Hop_2402	1.02	-48.51	≤ -18.98	PASS
		High	Hop_2480	2.52	-48.44	≤ -17.48	PASS
2DH1	Ant1	Low	2402	1.12	-47.1	≤ -18.88	PASS
		High	2480	2.21	-48.01	≤ -17.79	PASS
		Low	Hop_2402	1.06	-49.11	≤ -18.94	PASS
		High	Hop_2480	2.54	-47.66	≤ -17.47	PASS

Test Graphs

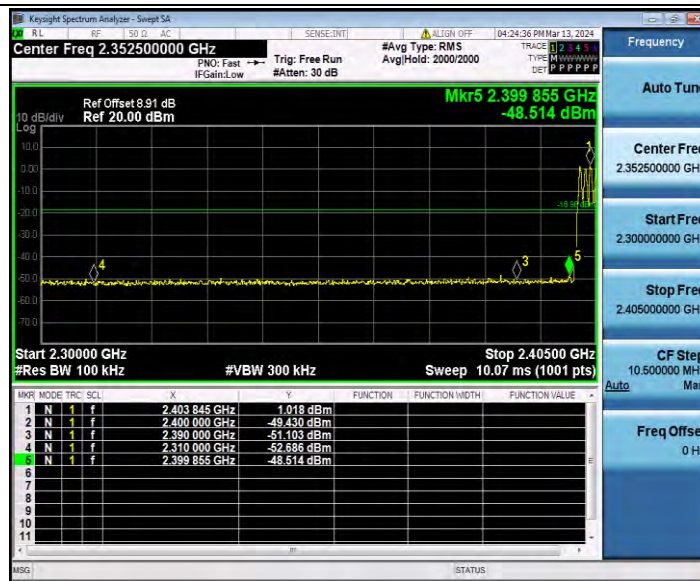
DH1_Ant1_Low_2402



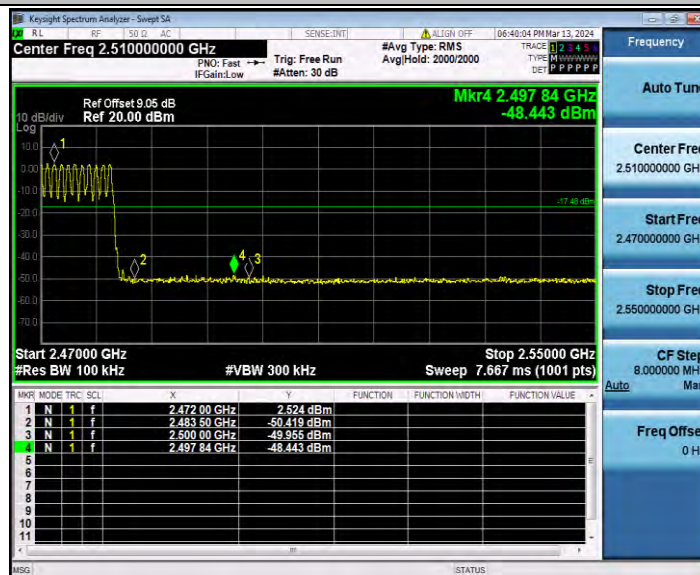
DH1_Ant1_High_2480



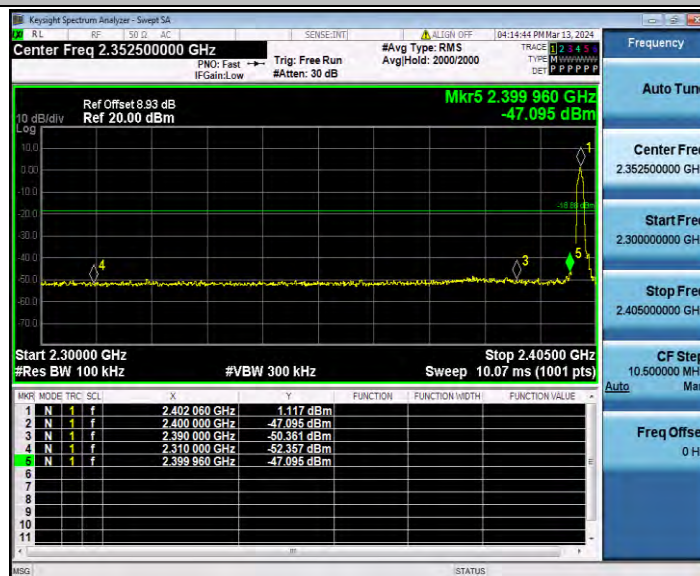
DH1_Ant1_Low_Hop_2402



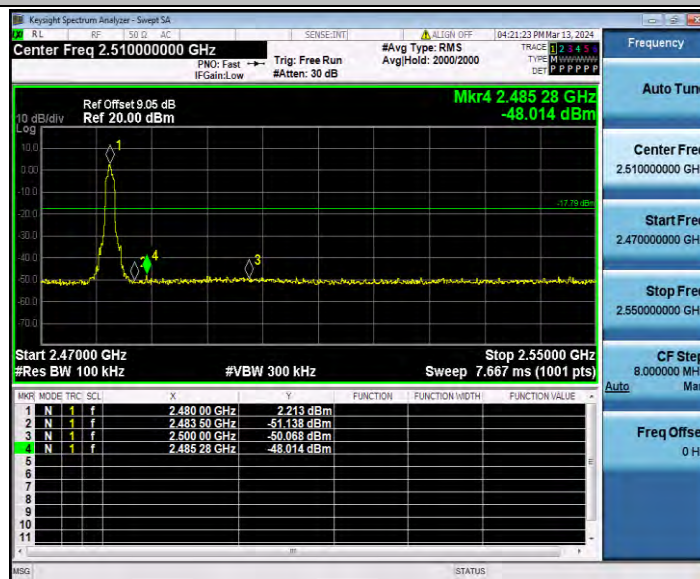
DH1_Ant1_High_Hop_2480



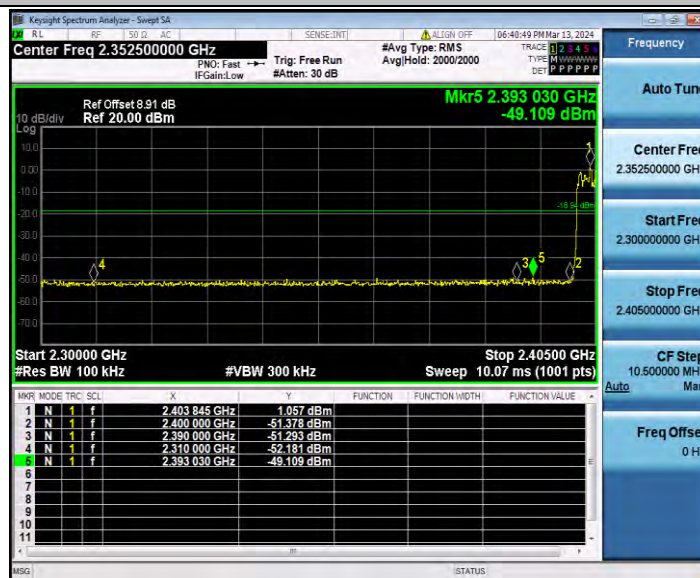
2DH1_Ant1_Low_2402



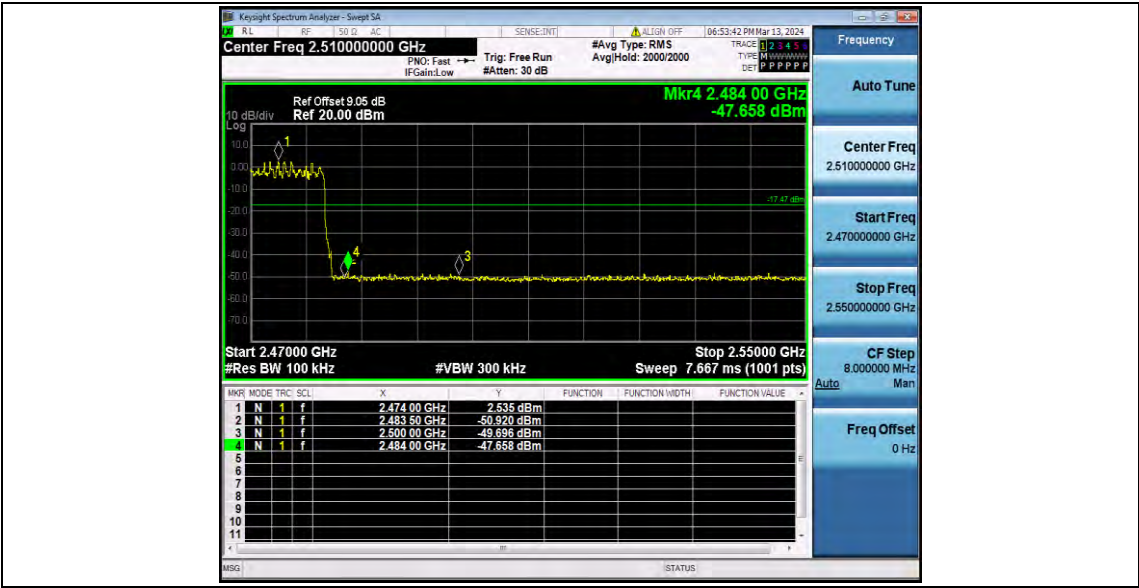
2DH1_Ant1_High_2480



2DH1_Ant1_Low_Hop_2402



2DH1_Ant1_High_Hop_2480

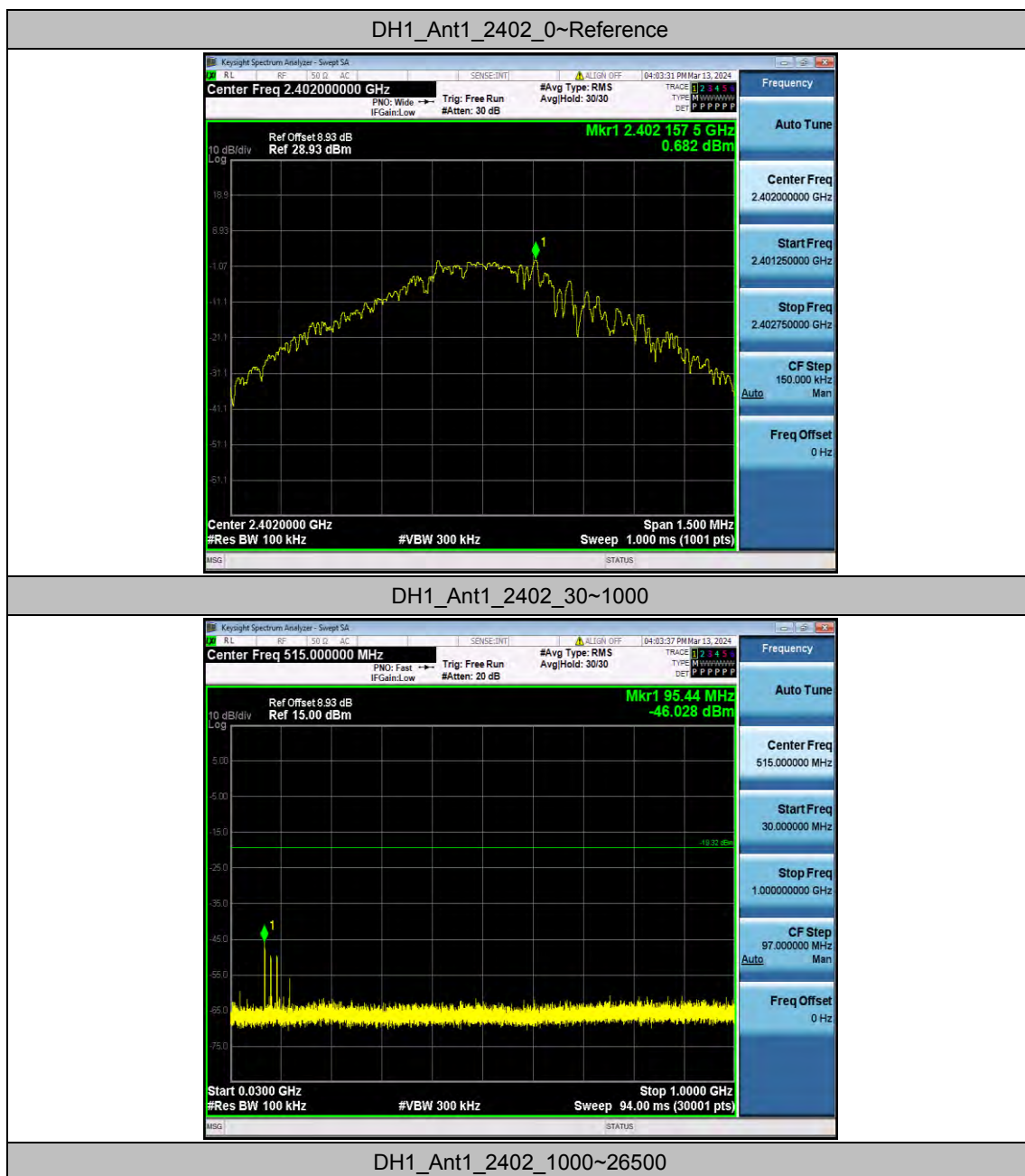


Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	0.68	0.68	---	PASS
			30~1000	0.68	-46.03	≤ -19.32	PASS
			1000~26500	0.68	-48.07	≤ -19.32	PASS
		2441	Reference	2.60	2.60	---	PASS
			30~1000	2.60	-45.78	≤ -17.4	PASS
			1000~26500	2.60	-47.82	≤ -17.4	PASS
		2480	Reference	1.62	1.62	---	PASS
			30~1000	1.62	-46.8	≤ -18.38	PASS
			1000~26500	1.62	-43.67	≤ -18.38	PASS
2DH1	Ant1	2402	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-46.92	≤ -18.97	PASS
			1000~26500	1.03	-47.43	≤ -18.97	PASS
		2441	Reference	2.56	2.56	---	PASS
			30~1000	2.56	-46.3	≤ -17.44	PASS
			1000~26500	2.56	-46.1	≤ -17.44	PASS
		2480	Reference	2.09	2.09	---	PASS
			30~1000	2.09	-46.01	≤ -17.91	PASS
			1000~26500	2.09	-46.51	≤ -17.91	PASS

Test Graphs

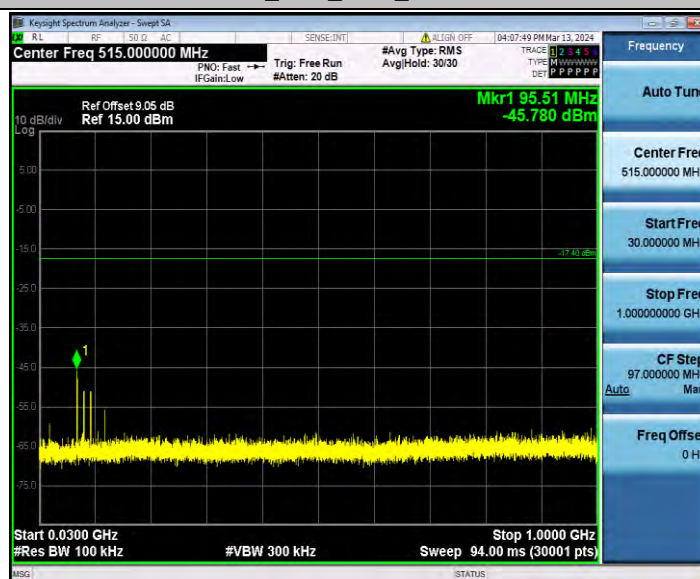




DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



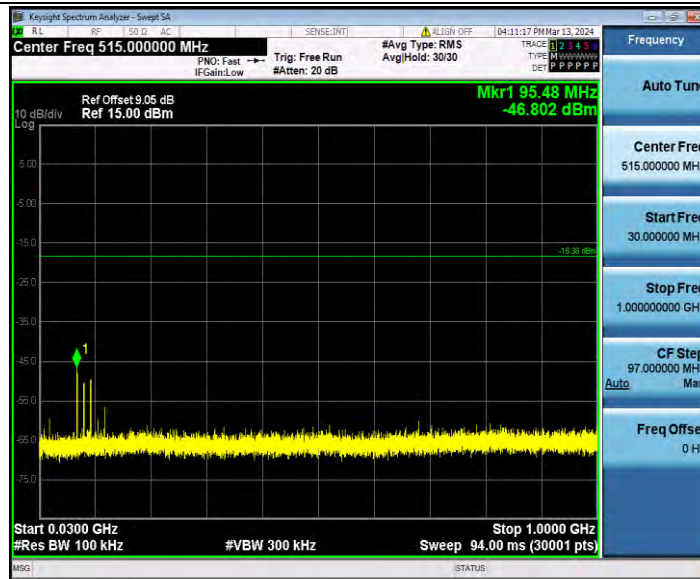
DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000

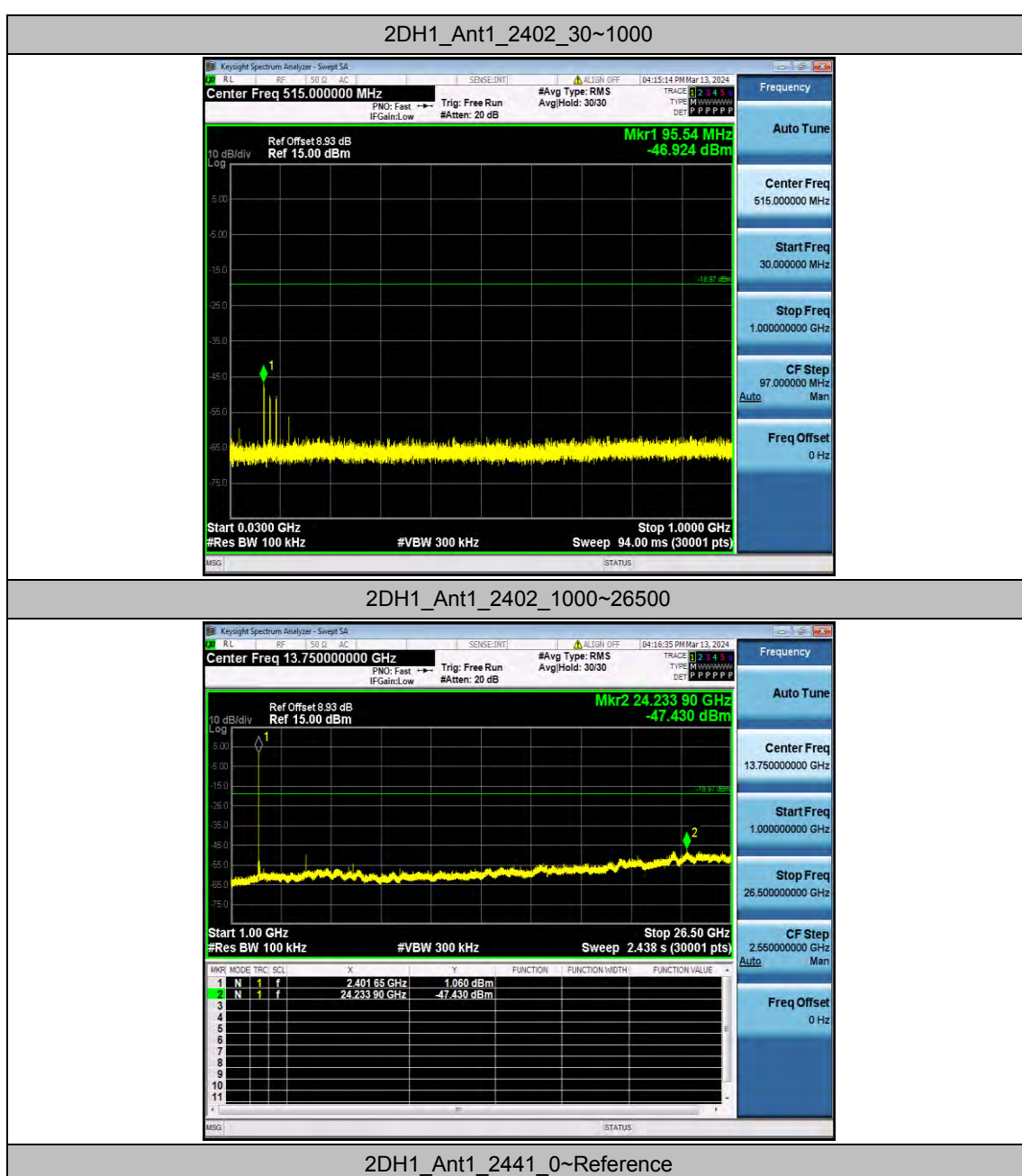


DH1_Ant1_2480_1000~26500



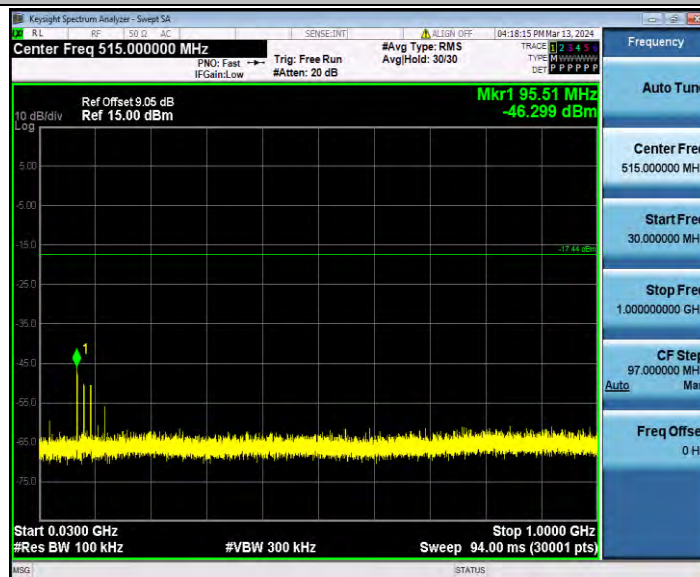
2DH1_Ant1_2402_0~Reference







2DH1_Ant1_2441_30~1000



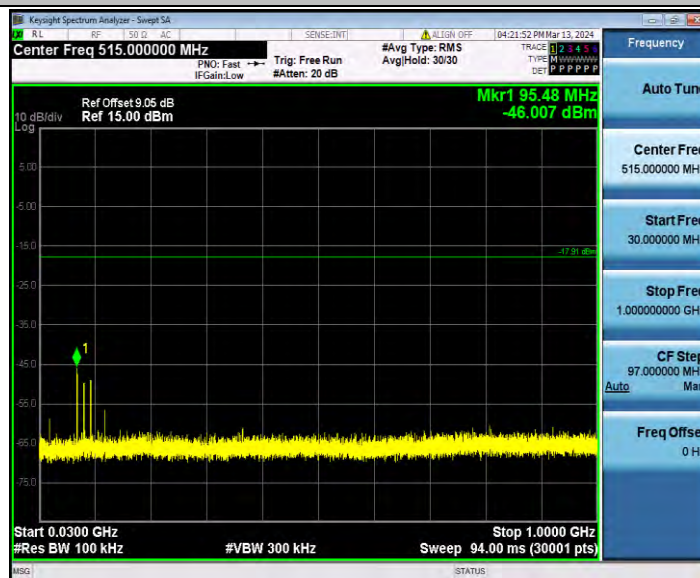
2DH1_Ant1_2441_1000~26500



2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



2DH1_Ant1_2480_1000~26500



Appendix A.9: Emissions in Restricted Bands

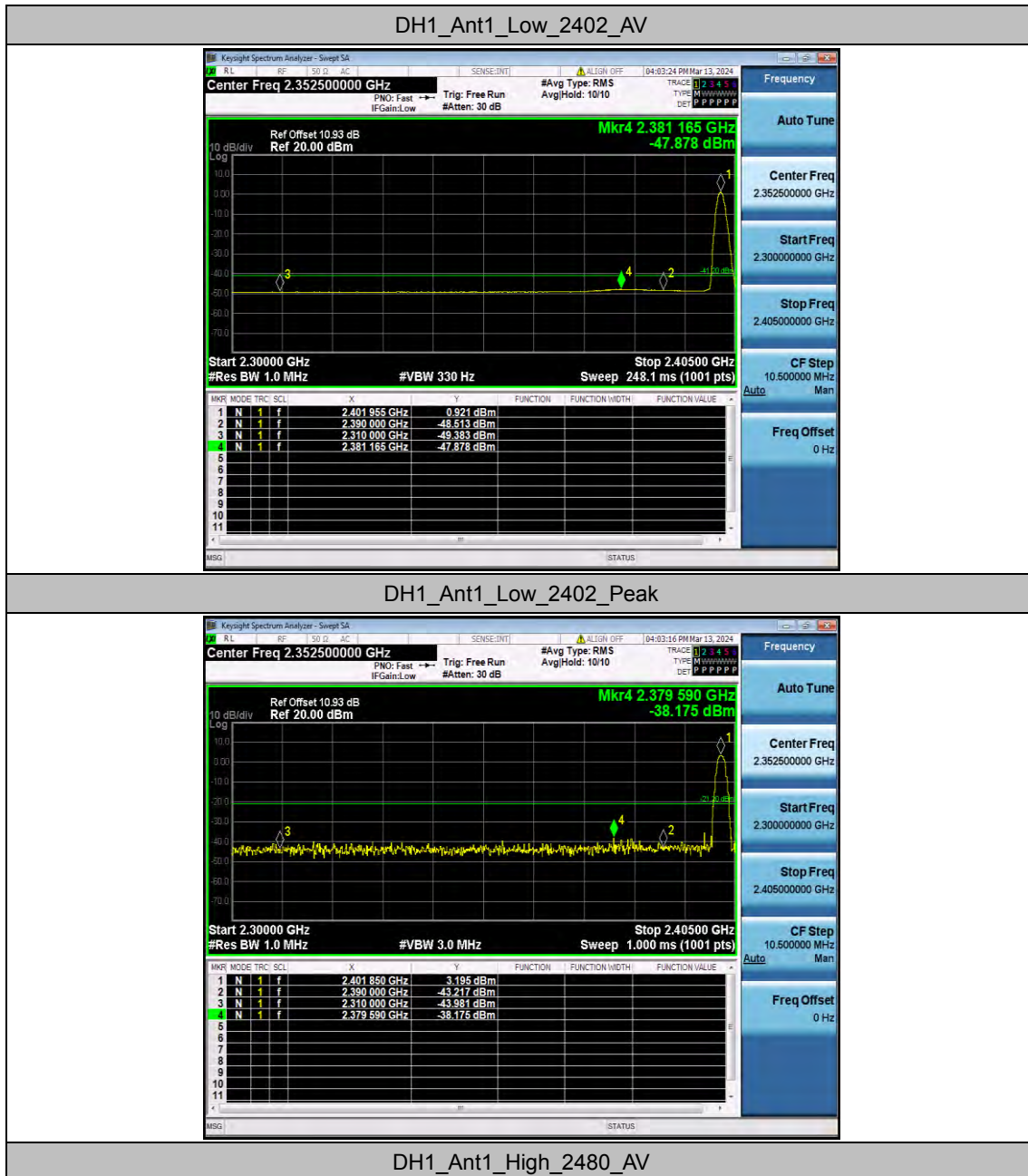
Test Result

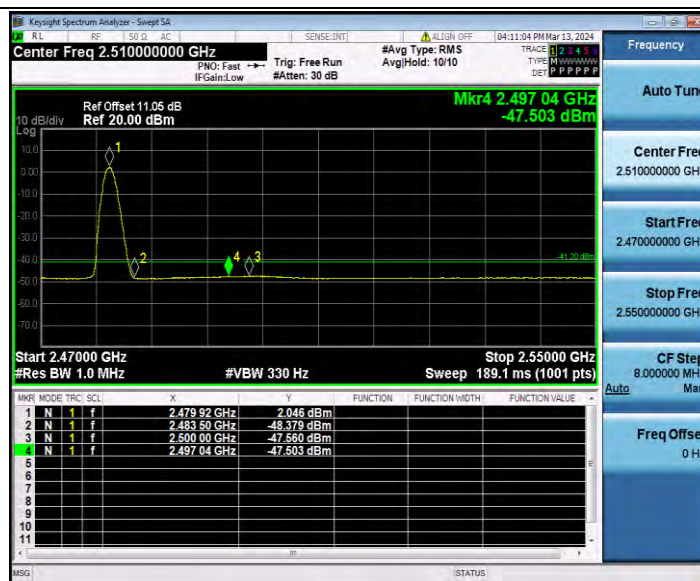
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH1	Ant1	Low	2402	AV	2310.000	-49.38	≤-41.20	45.82	≤54	PASS
				AV	2381.165	-47.88	≤-41.20	47.32	≤54	PASS
				AV	2390.000	-48.51	≤-41.20	46.69	≤54	PASS
				Peak	2310.000	-43.98	≤-21.20	51.22	≤74	PASS
				Peak	2379.590	-38.18	≤-21.20	57.02	≤74	PASS
				Peak	2390.000	-43.22	≤-21.20	51.98	≤74	PASS
		High	2480	AV	2483.500	-48.38	≤-41.20	46.82	≤54	PASS
				AV	2497.040	-47.5	≤-41.20	47.70	≤54	PASS
				AV	2500.000	-47.56	≤-41.20	47.64	≤54	PASS
				Peak	2483.500	-39.48	≤-21.20	55.72	≤74	PASS
				Peak	2486.880	-37.27	≤-21.20	57.93	≤74	PASS
				Peak	2500.000	-38.45	≤-21.20	56.75	≤74	PASS
2DH1	Ant1	Low	2402	AV	2310.000	-49.34	≤-41.20	45.86	≤54	PASS
				AV	2385.890	-47.88	≤-41.20	47.32	≤54	PASS
				AV	2390.000	-48.43	≤-41.20	46.77	≤54	PASS
				Peak	2310.000	-41.37	≤-21.20	53.83	≤74	PASS
				Peak	2389.565	-37.68	≤-21.20	57.52	≤74	PASS
				Peak	2390.000	-40.49	≤-21.20	54.71	≤74	PASS
		High	2480	AV	2483.500	-48.23	≤-41.20	46.97	≤54	PASS
				AV	2498.640	-47.43	≤-41.20	47.77	≤54	PASS
				AV	2500.000	-47.74	≤-41.20	47.46	≤54	PASS
				Peak	2483.500	-38.6	≤-21.20	56.60	≤74	PASS
				Peak	2484.000	-35.81	≤-21.20	59.39	≤74	PASS
				Peak	2500.000	-40.26	≤-21.20	54.94	≤74	PASS

Note:

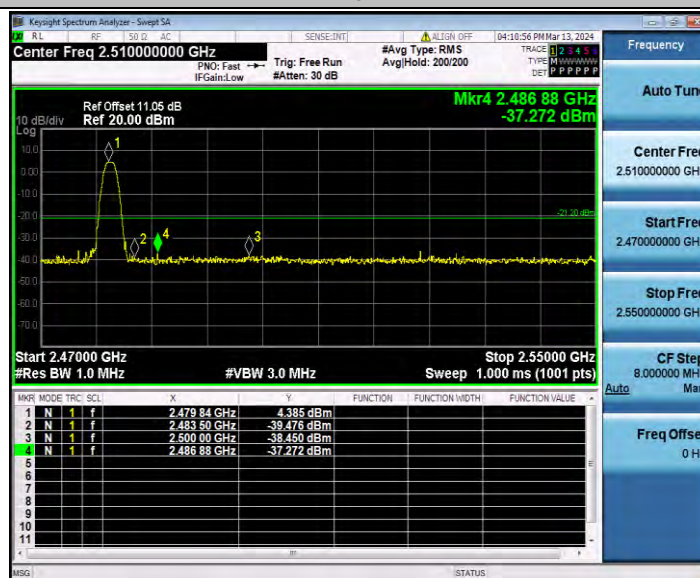
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

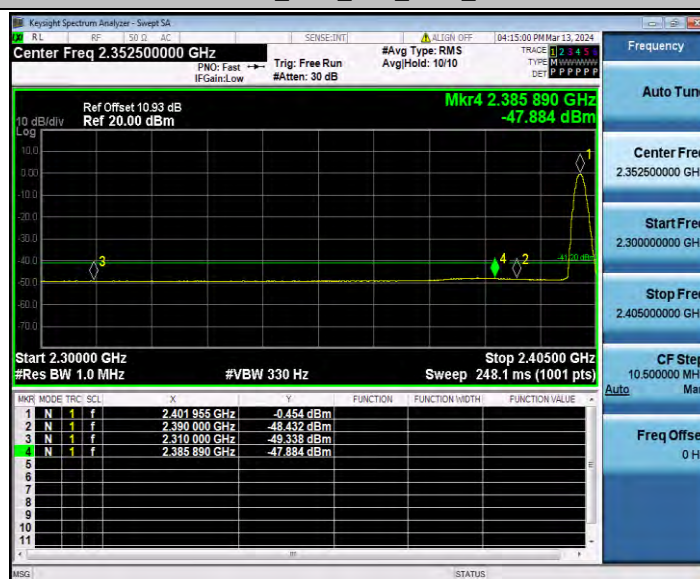




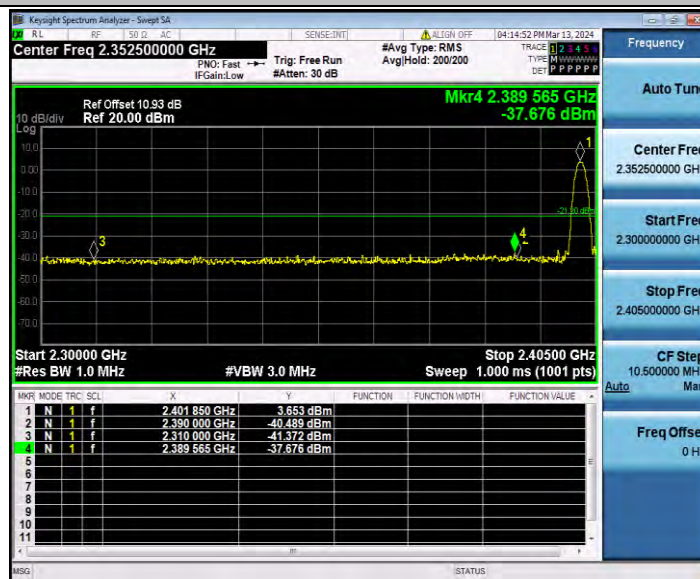
DH1_Ant1_High_2480_Peak



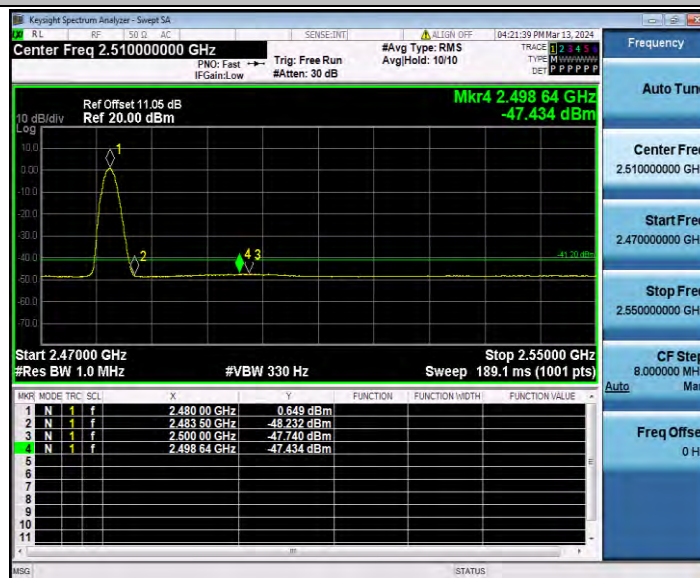
2DH1_Ant1_Low_2402_AV



2DH1_Ant1_Low_2402_Peak



2DH1_Ant1_High_2480_AV



2DH1_Ant1_High_2480_Peak

