

Appendix Test Data

Report No.:	CTA23101700501	Test Sample No.:	1-2-2
Start Test Date:	2023.09.18	Finish Test Date:	2023.09.19
Temperature:	25.3°C	Relative Humidity:	48.1%
Pressure:	101 kPa		

Appendix A: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	0.999	2401.472	2402.471
		2441	0.978	2440.481	2441.459
		2480	1.008	2479.460	2480.468
2DH5	Ant1	2402	1.302	2401.337	2402.639
		2441	1.332	2440.313	2441.645
		2480	1.287	2479.343	2480.630

Test Graphs



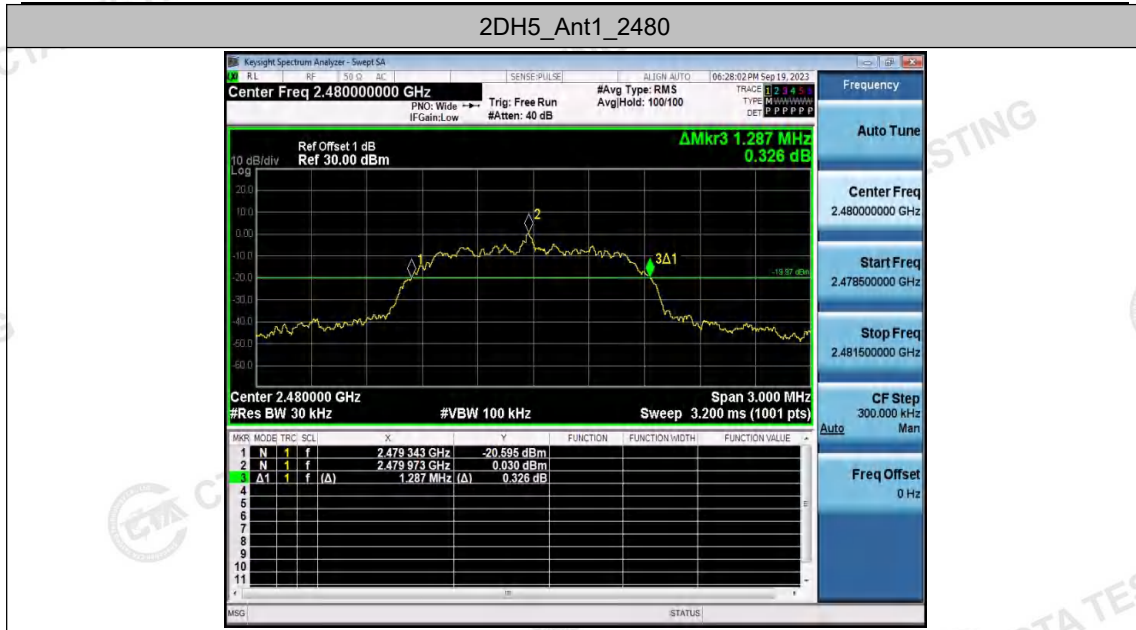


2DH5_Ant1_2402



2DH5_Ant1_2441



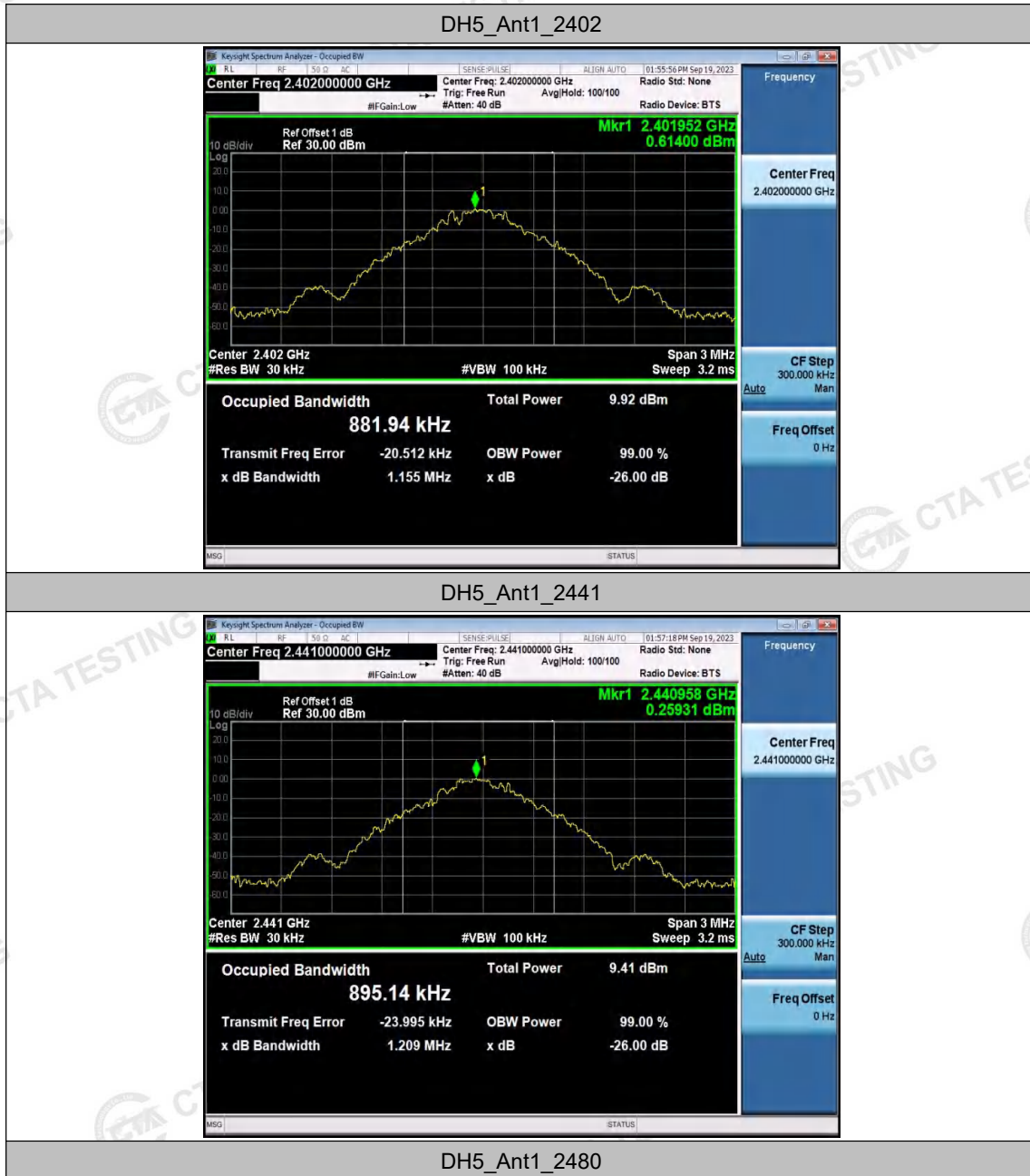


Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	0.88194	2401.5385	2402.4205
		2441	0.89514	2440.5284	2441.4236
		2480	0.89441	2479.5281	2480.4225
2DH5	Ant1	2402	1.2003	2401.3792	2402.5795
		2441	1.1974	2440.3784	2441.5758
		2480	1.1884	2479.3832	2480.5716

Test Graphs



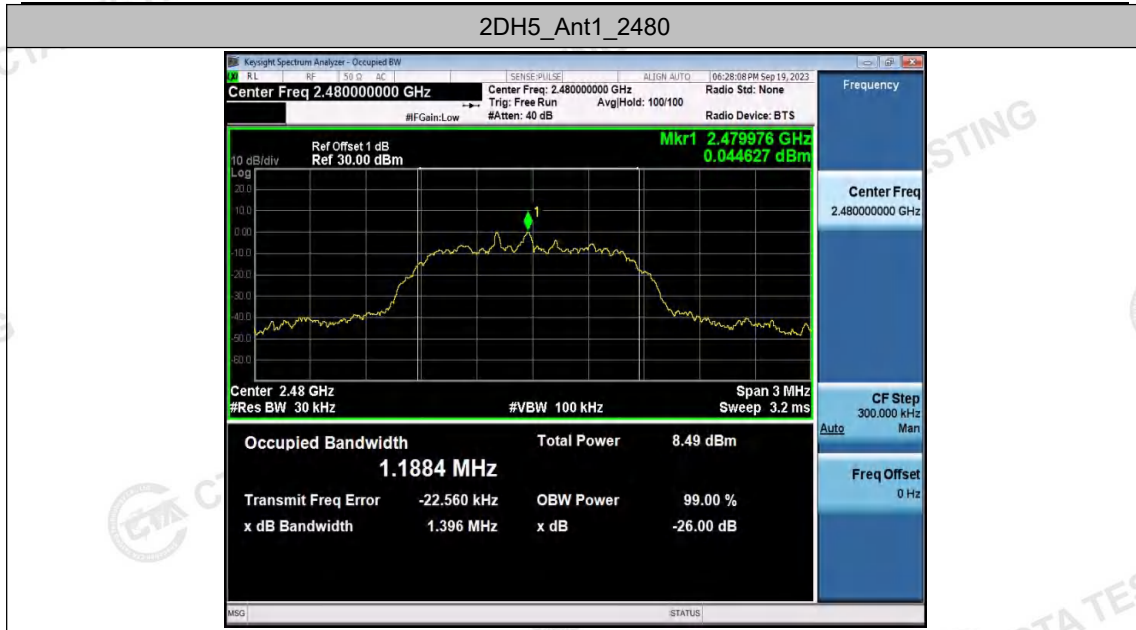


2DH5_Ant1_2402



2DH5_Ant1_2441



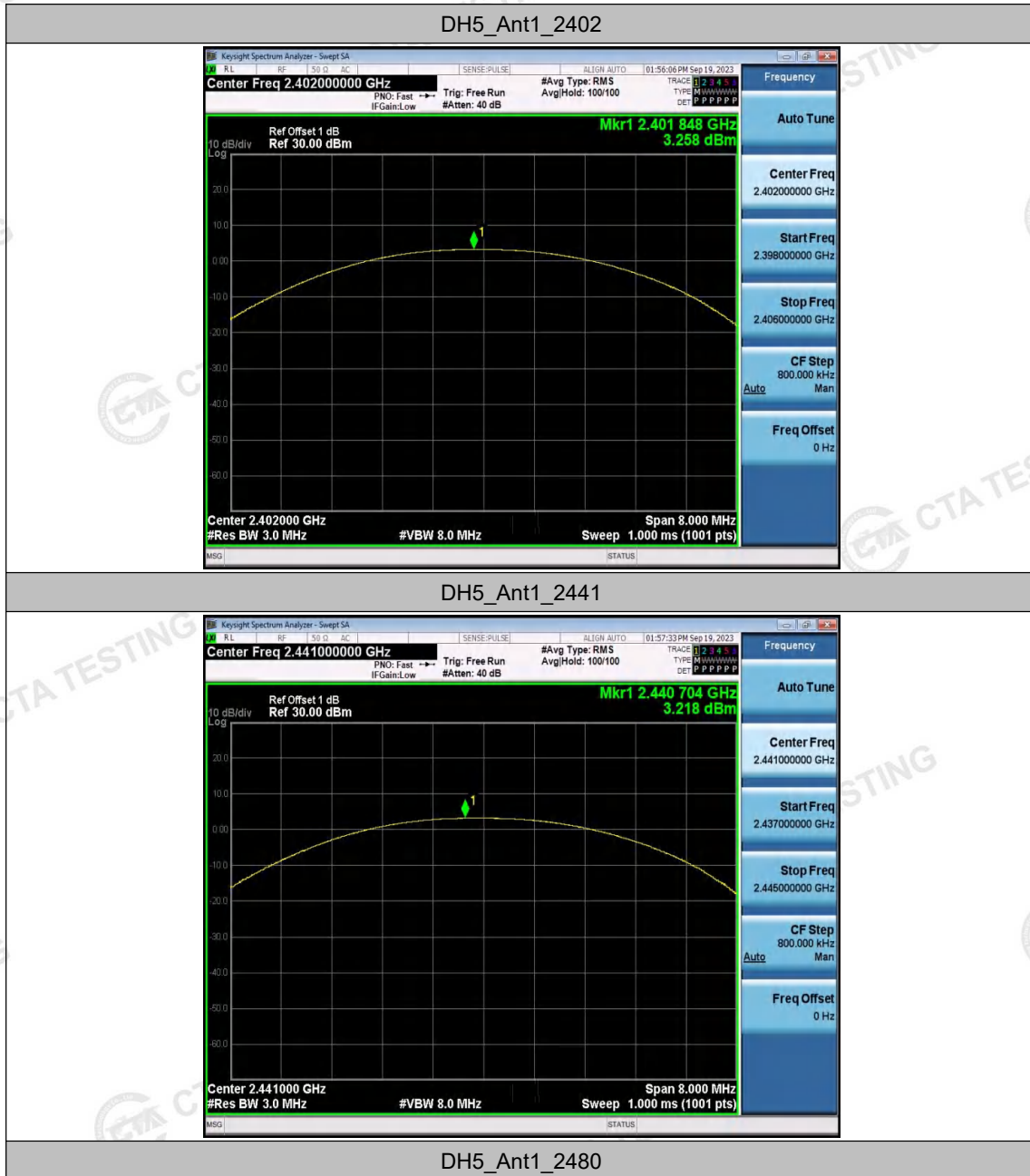


Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	3.26	≤20.97	PASS
		2441	3.22	≤20.97	PASS
		2480	2.38	≤20.97	PASS
2DH5	Ant1	2402	4.04	≤20.97	PASS
		2441	3.98	≤20.97	PASS
		2480	3.06	≤20.97	PASS

Test Graphs

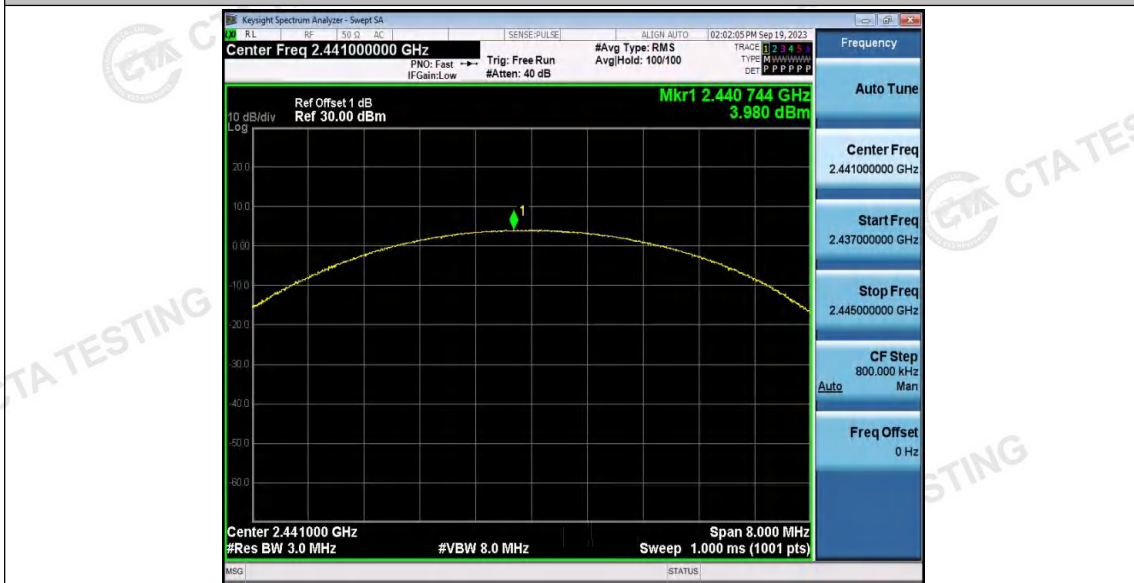


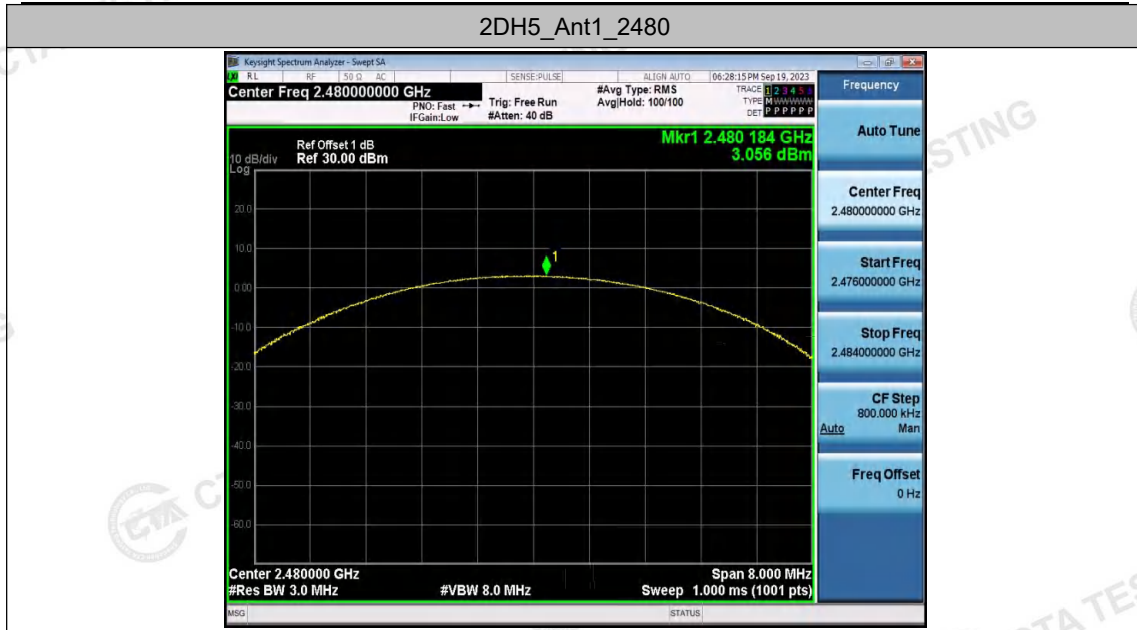


2DH5_Ant1_2402



2DH5_Ant1_2441



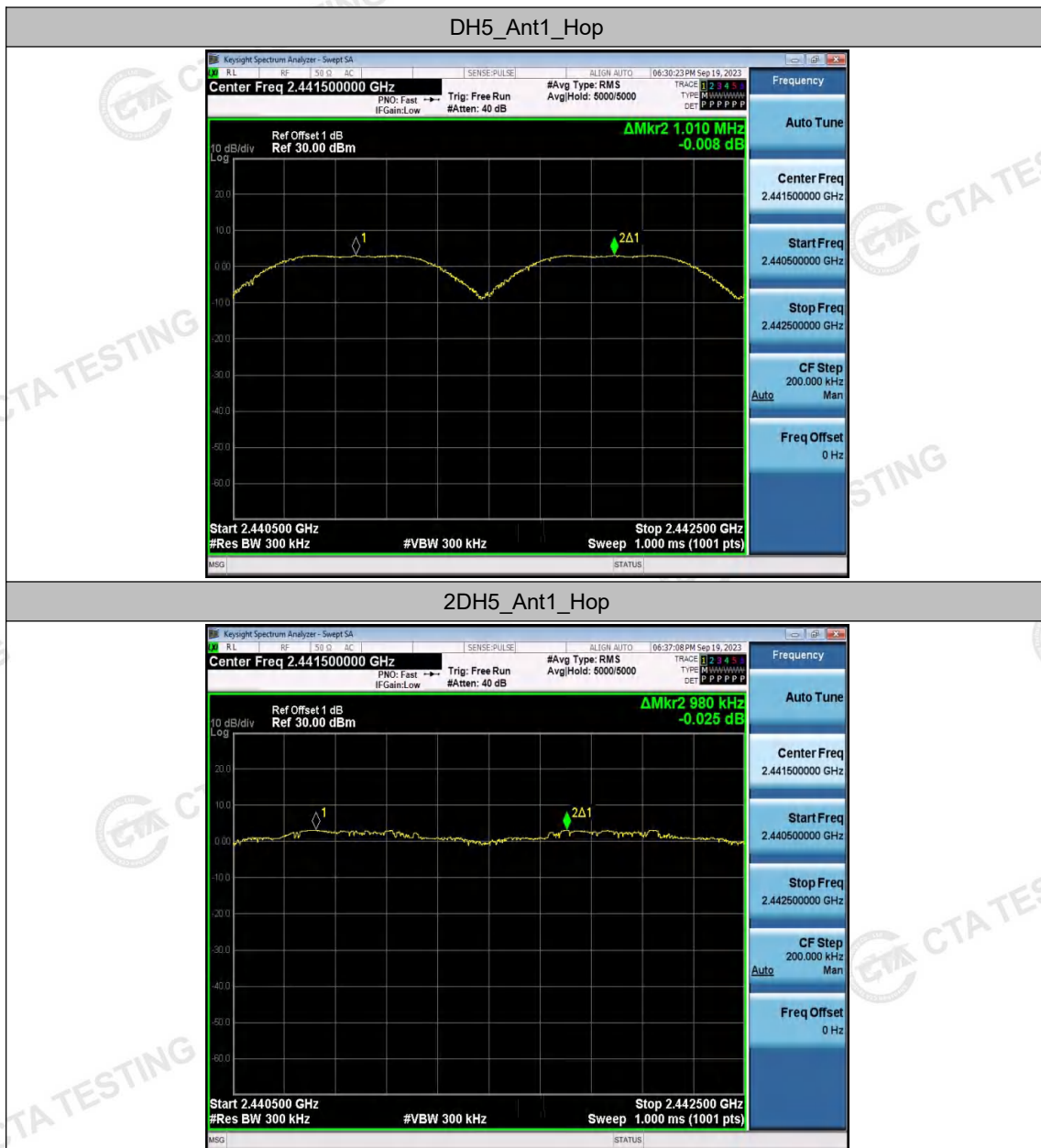


Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.010	≥1.008	PASS
2DH5	Ant1	Hop	0.980	≥0.888	PASS

Test Graphs

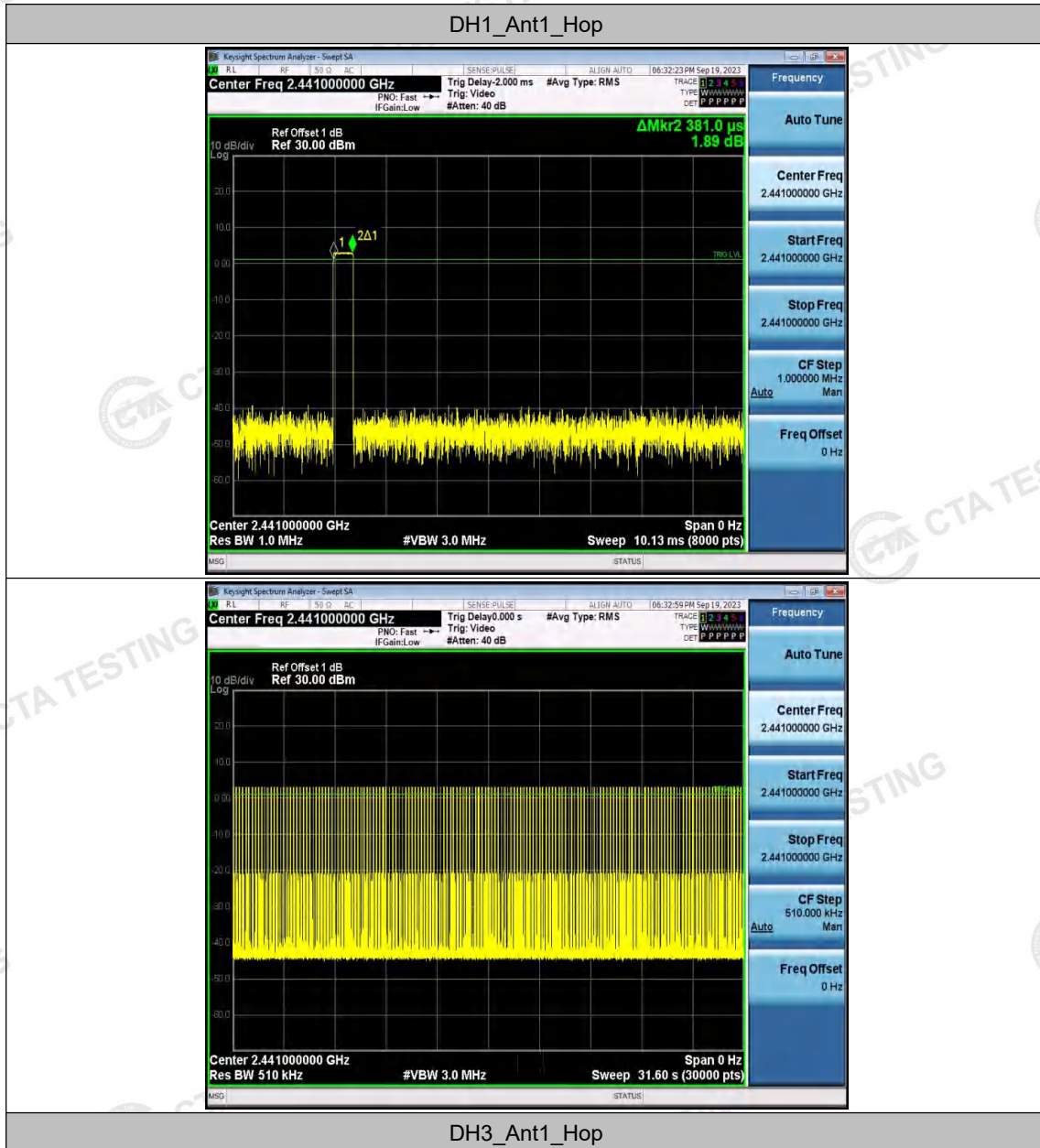


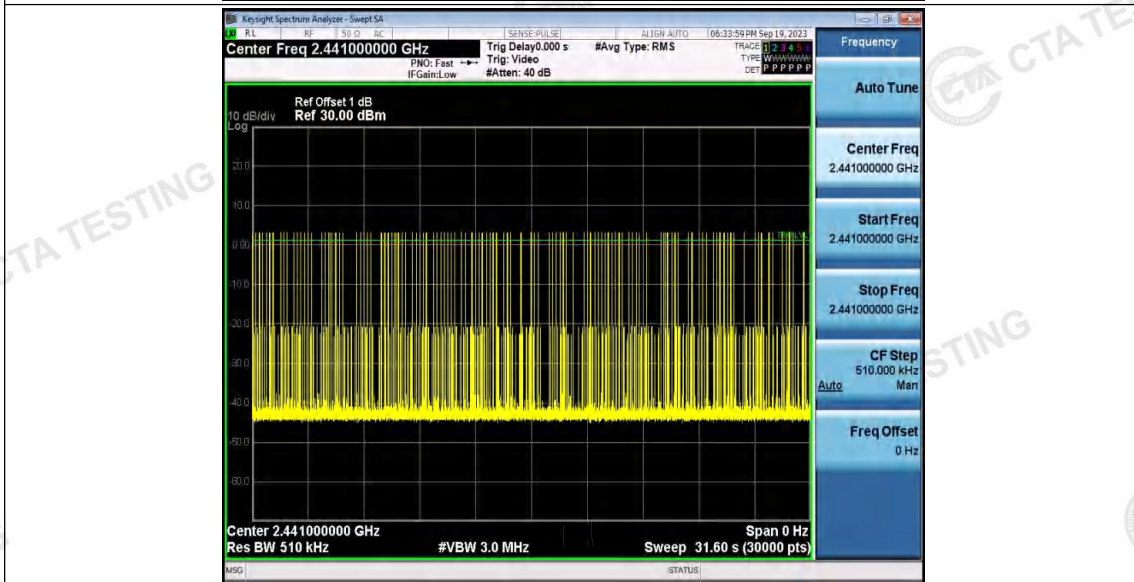
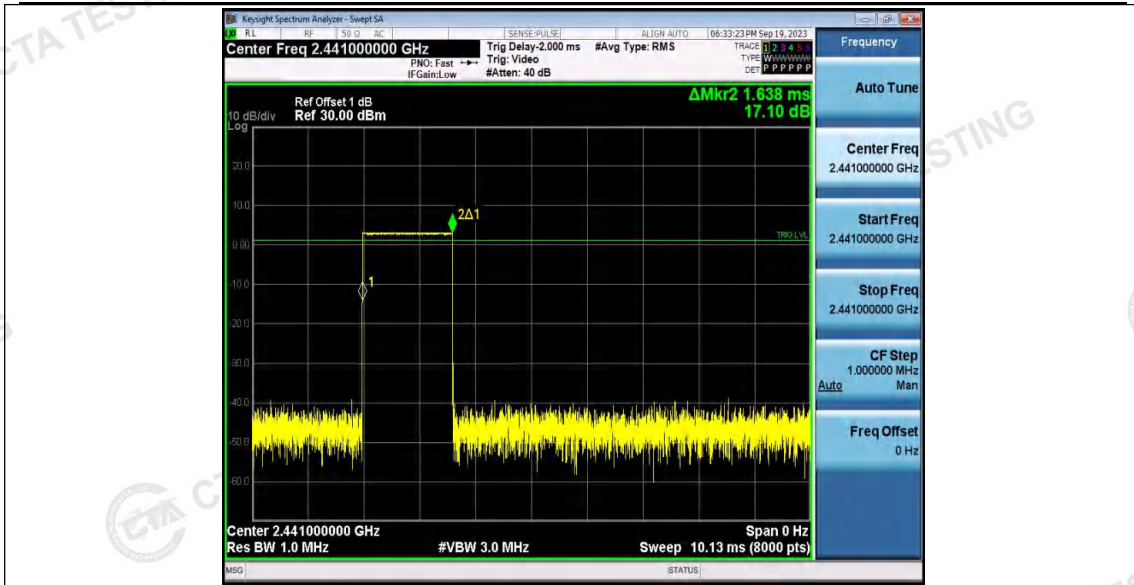
Appendix E: Time of occupancy

Test Result

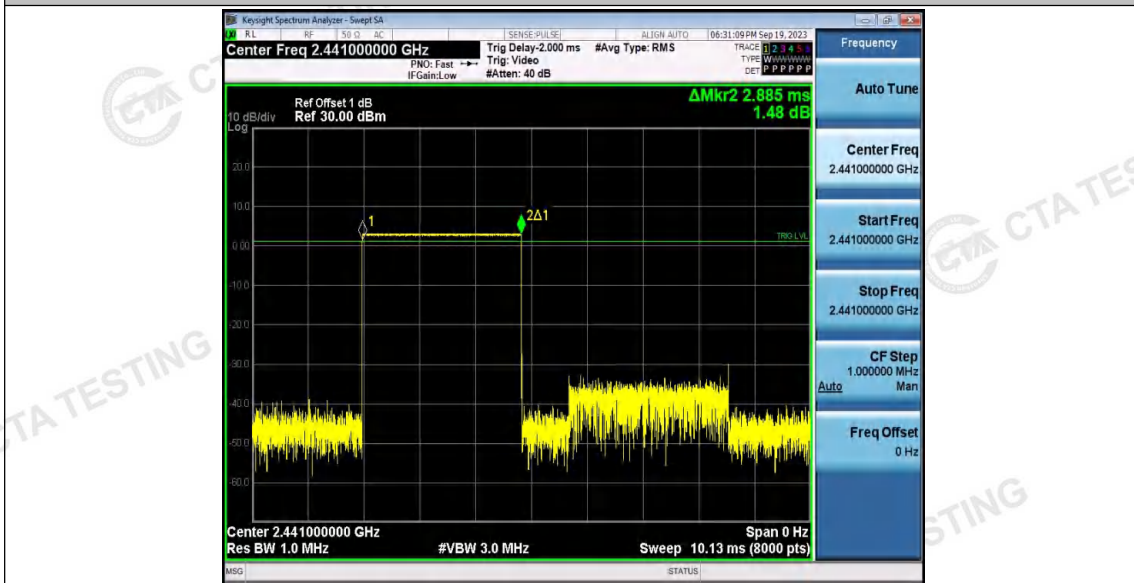
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.381	318	0.121	≤0.4	PASS
DH3	Ant1	Hop	1.638	159	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.885	125	0.361	≤0.4	PASS
2DH1	Ant1	Hop	0.390	317	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.643	154	0.253	≤0.4	PASS
2DH5	Ant1	Hop	2.891	95	0.275	≤0.4	PASS

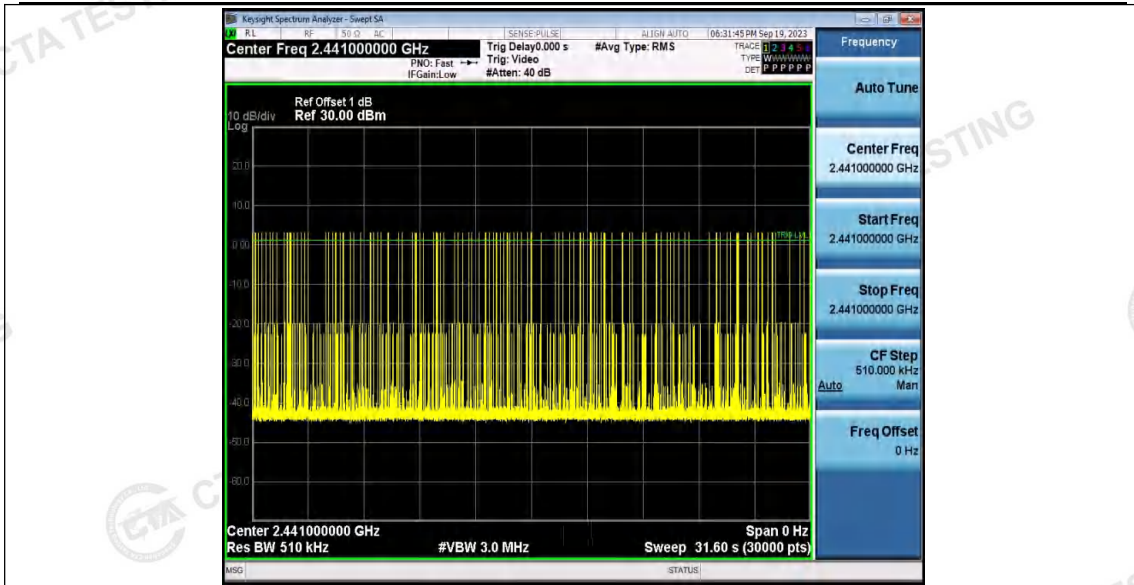
Test Graphs



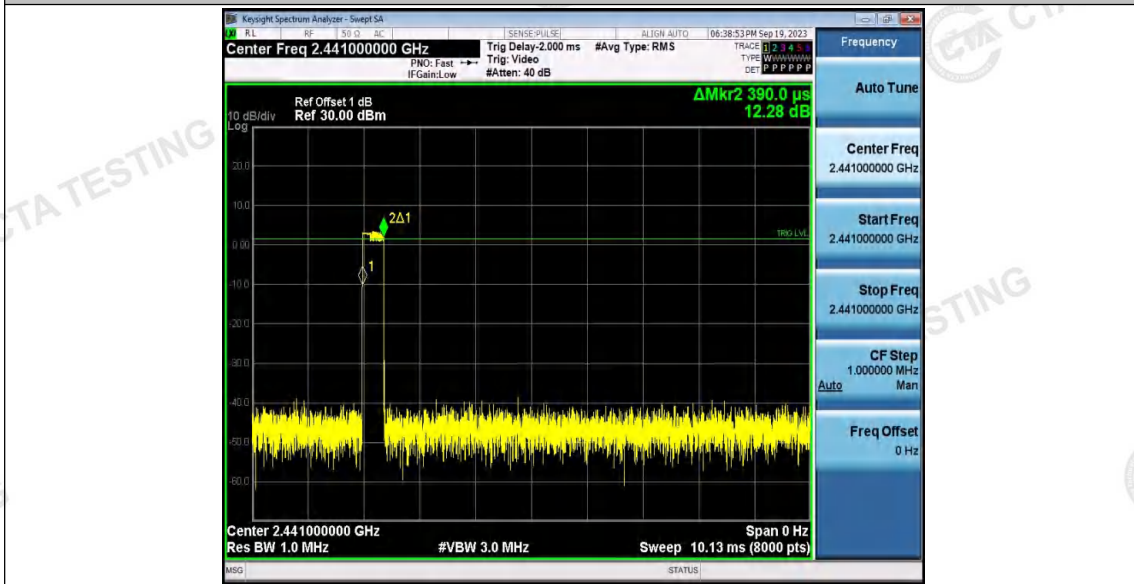


DH5_Ant1_Hop

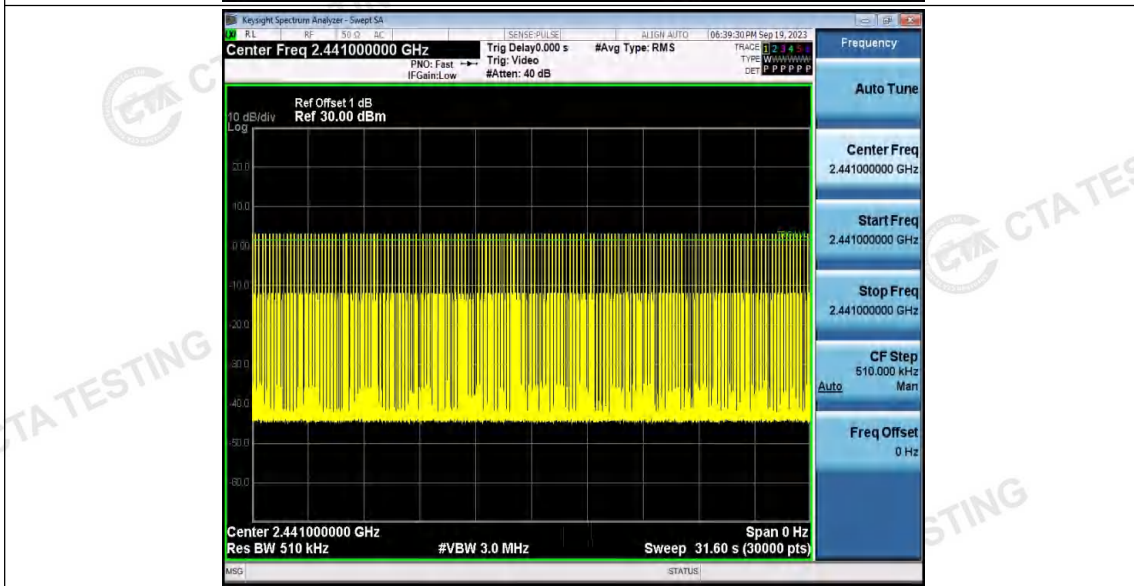


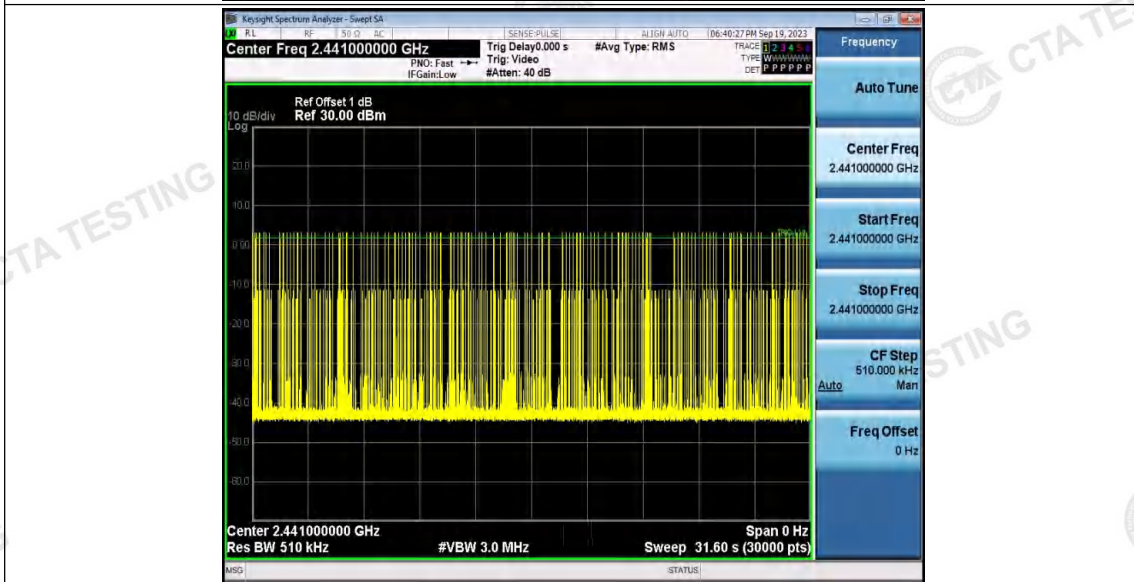
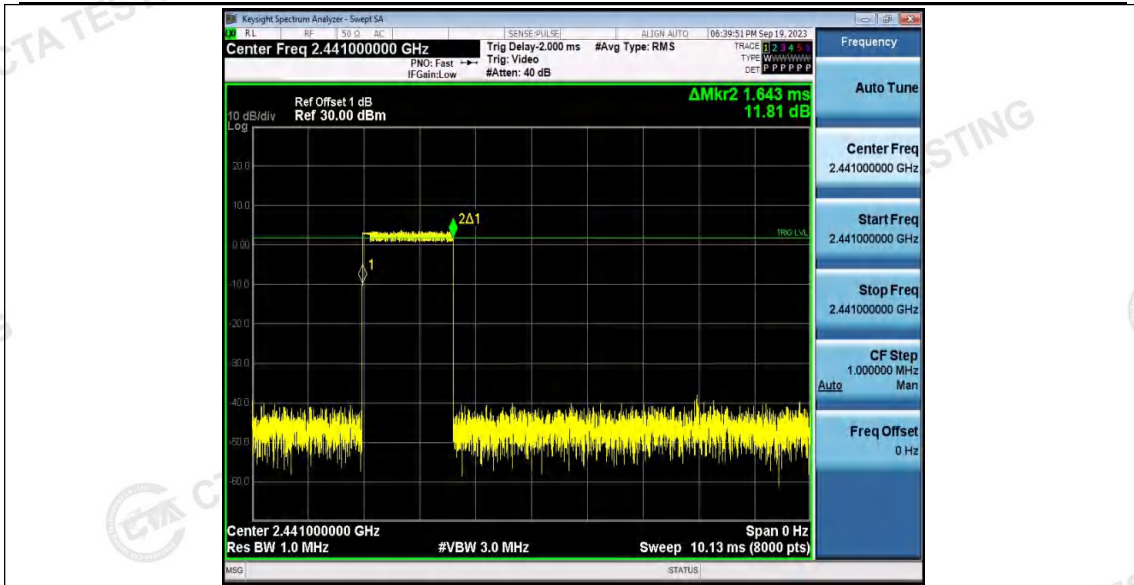


2DH1_Ant1_Hop

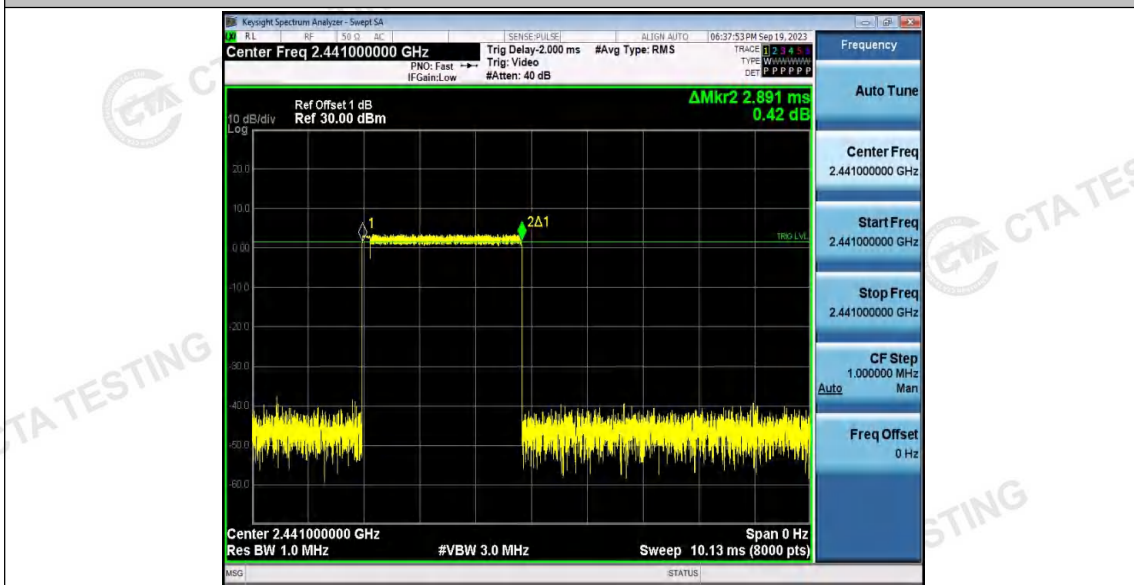


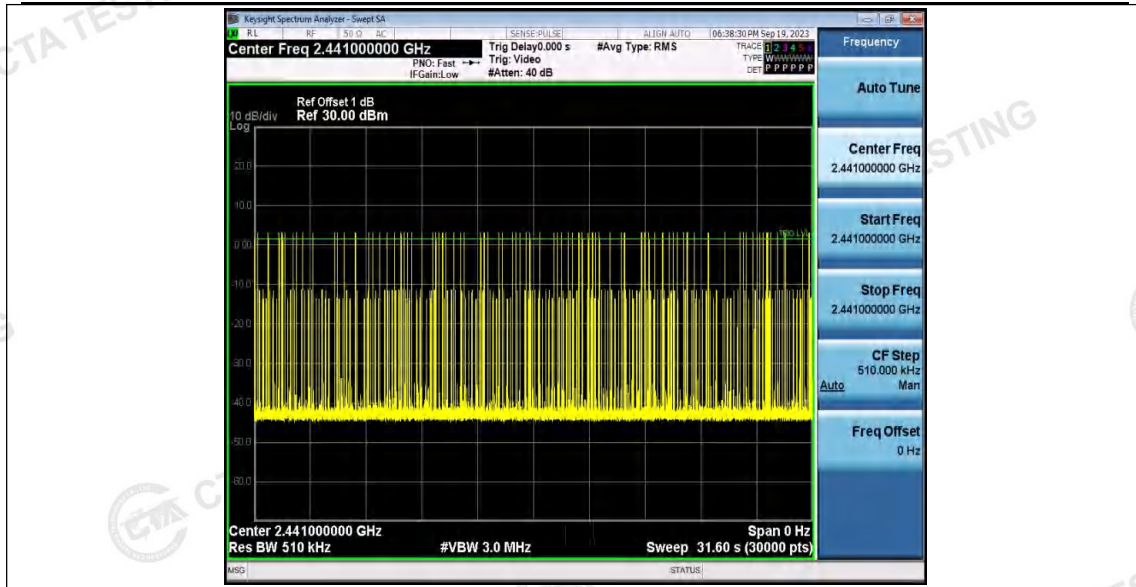
2DH3_Ant1_Hop





2DH5_Ant1_Hop



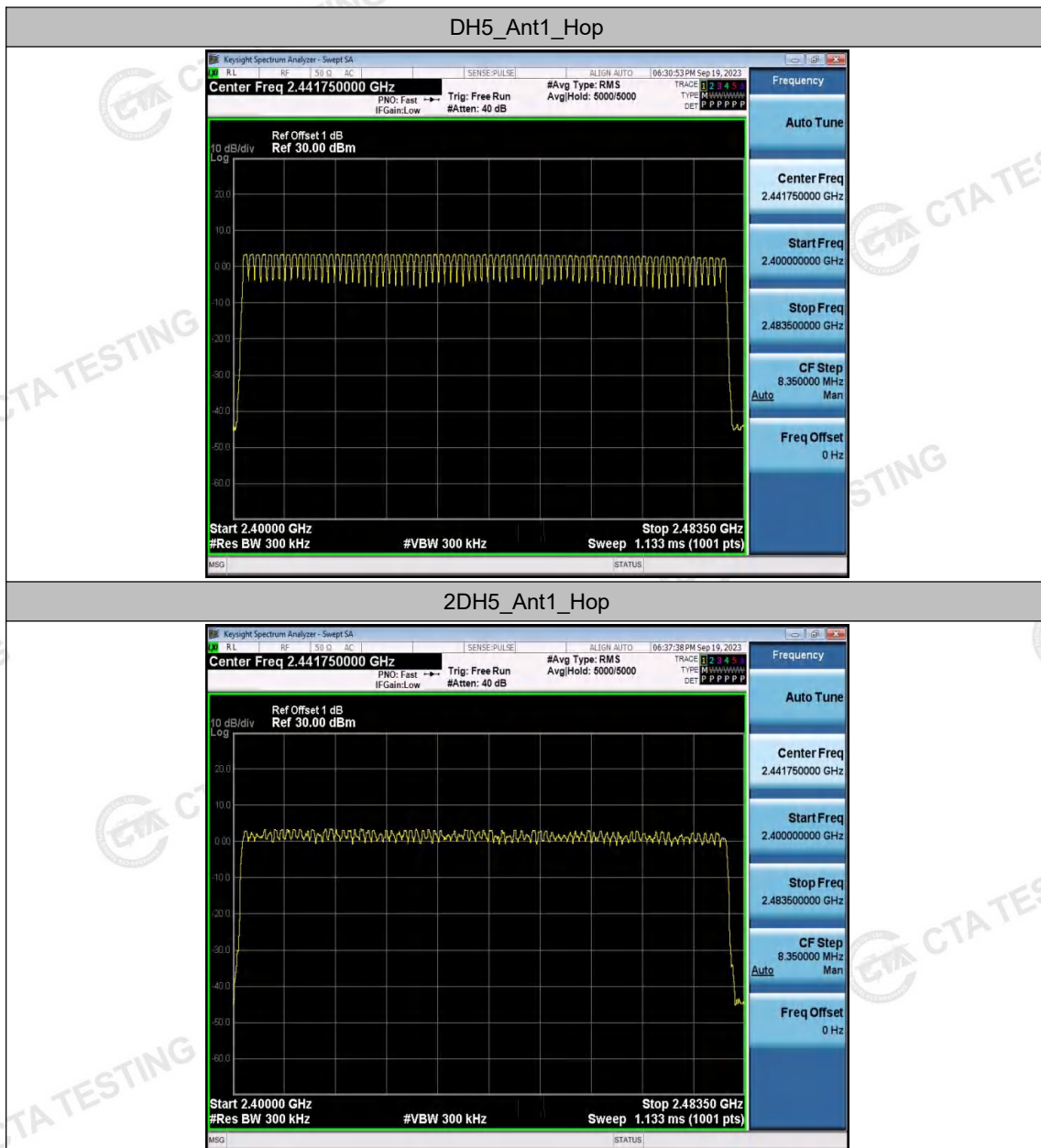


Appendix F: Number of hopping channels

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

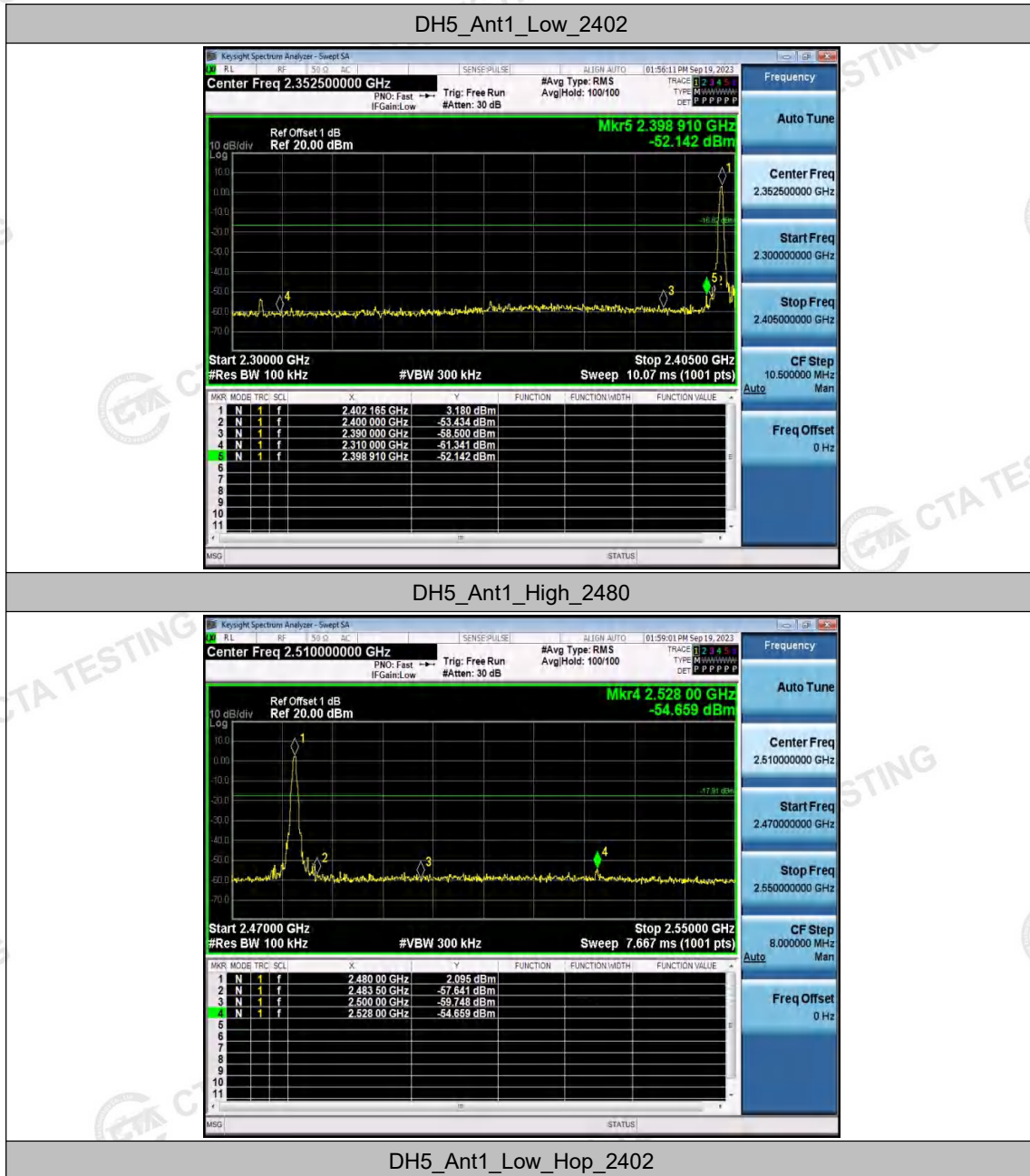


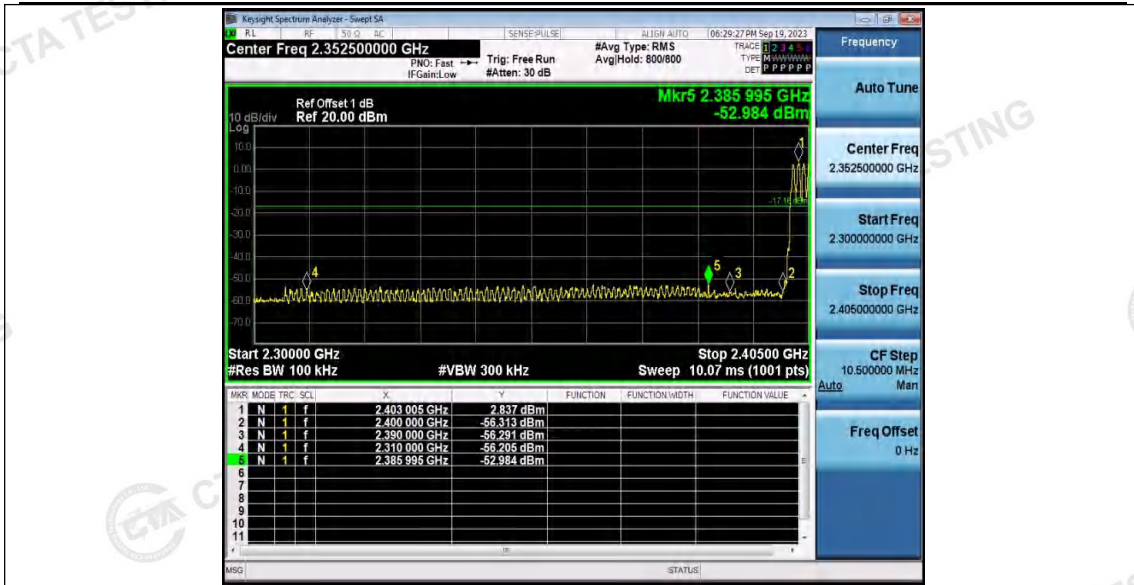
Appendix G: Band edge measurements

Test Result

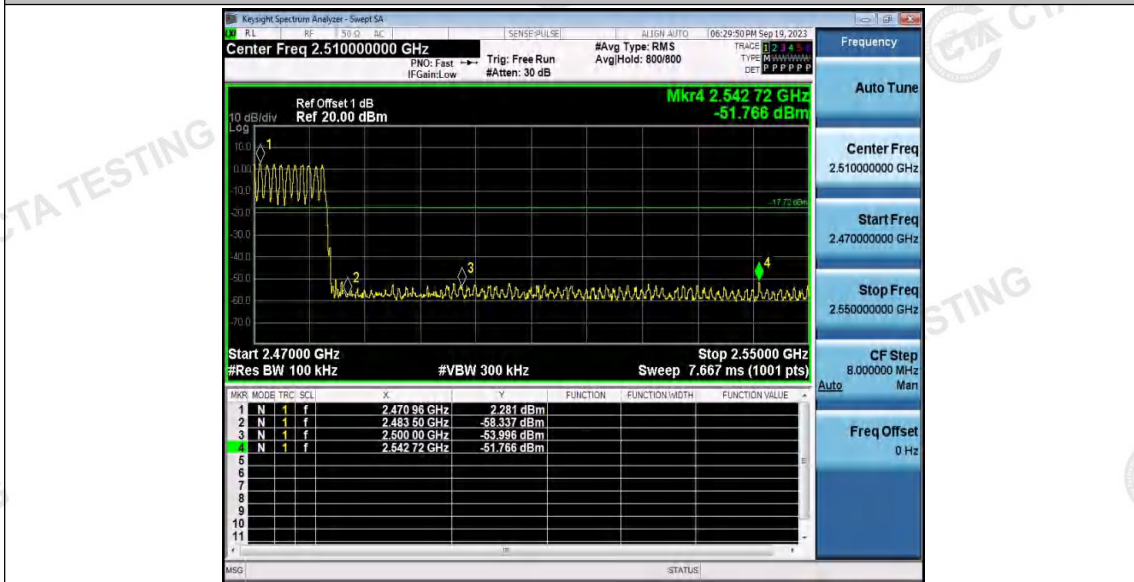
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.18	-52.14	≤-16.82	PASS
		High	2480	2.10	-54.66	≤-17.91	PASS
		Low	Hop_2402	2.84	-52.98	≤-17.16	PASS
		High	Hop_2480	2.28	-51.77	≤-17.72	PASS
2DH5	Ant1	Low	2402	2.34	-51.22	≤-17.66	PASS
		High	2480	1.50	-54.89	≤-18.5	PASS
		Low	Hop_2402	1.96	-53.34	≤-18.04	PASS
		High	Hop_2480	2.41	-53.21	≤-17.59	PASS

Test Graphs

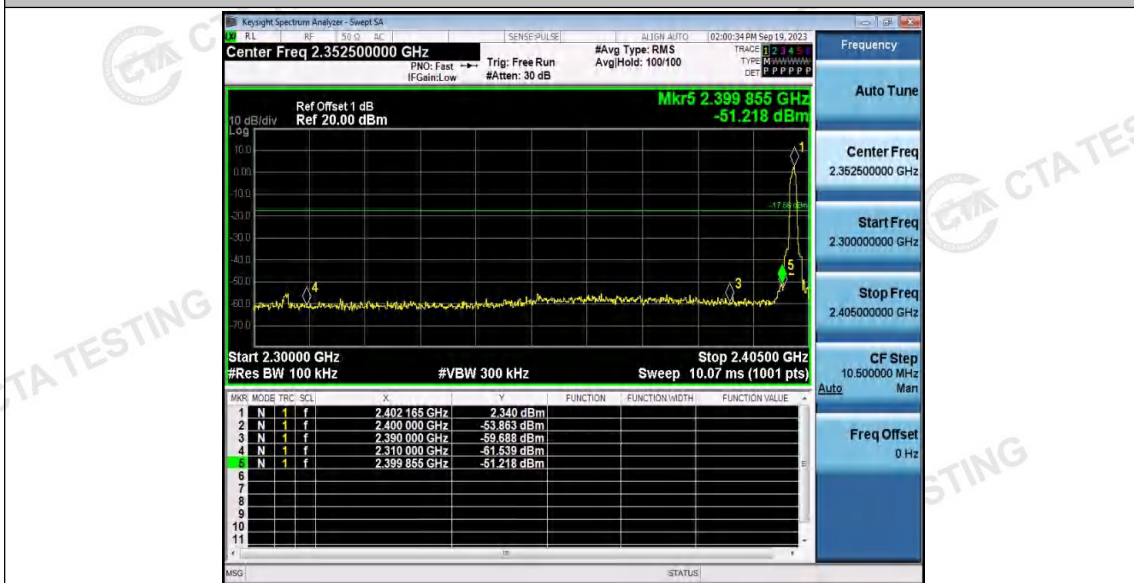




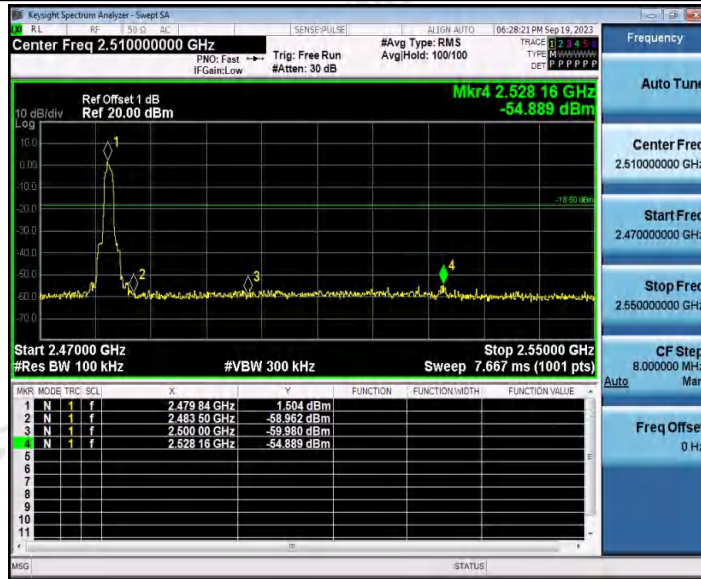
DH5_Ant1_High_Hop_2480



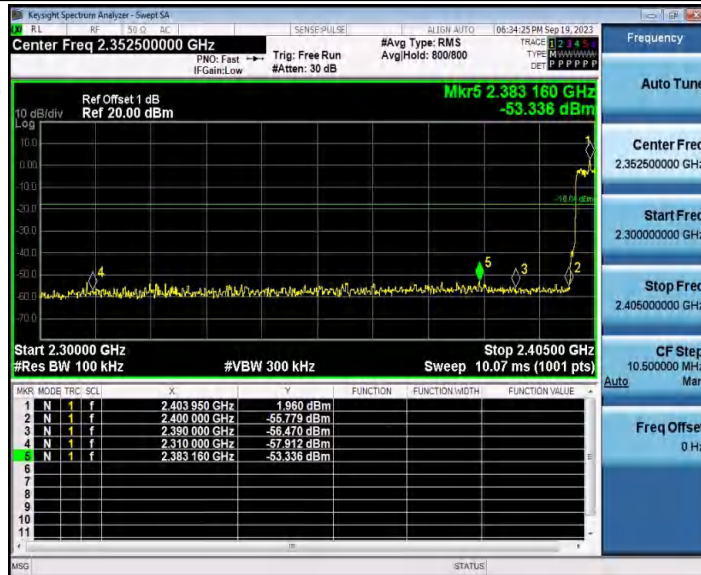
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



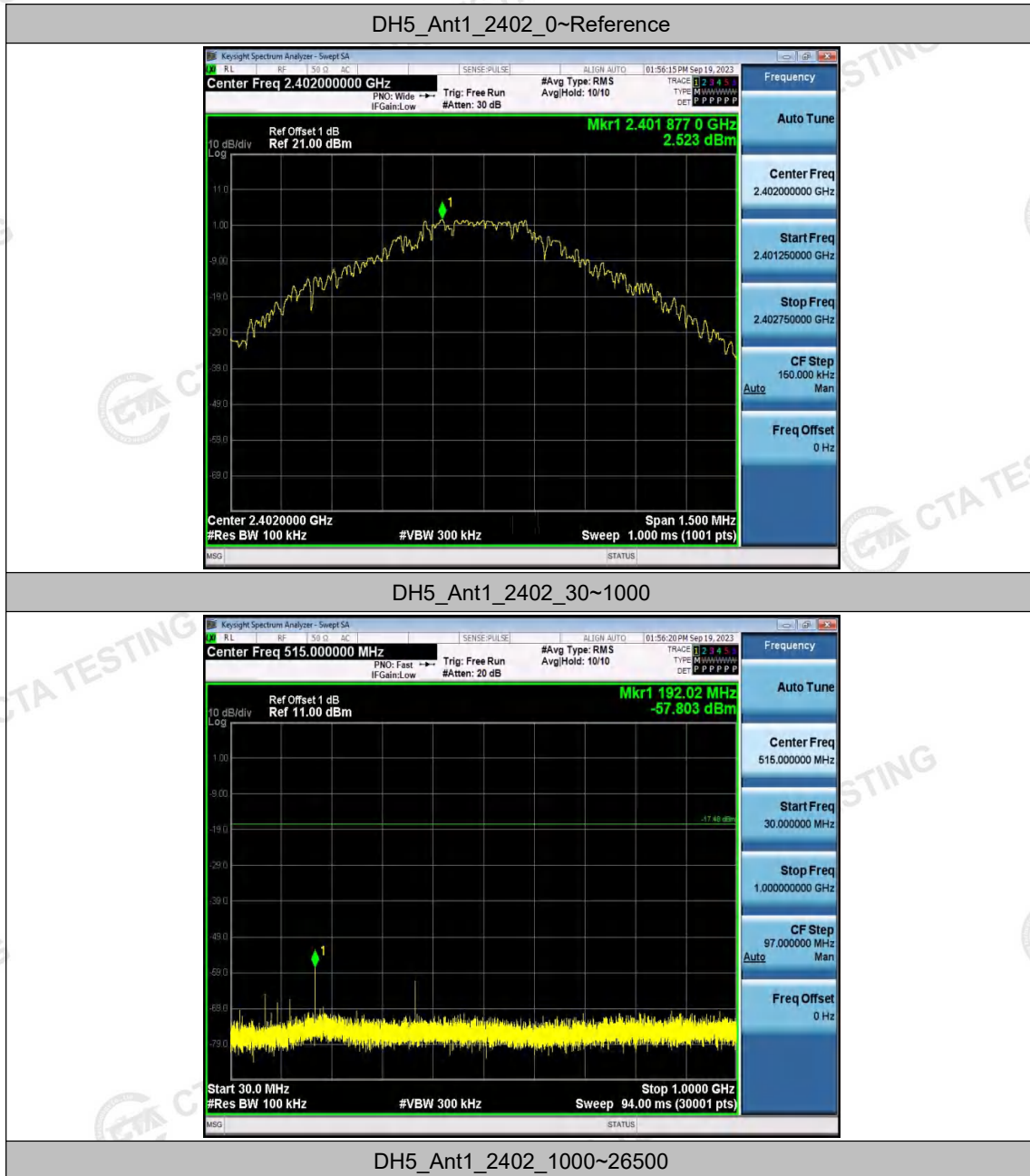
2DH5_Ant1_High_Hop_2480

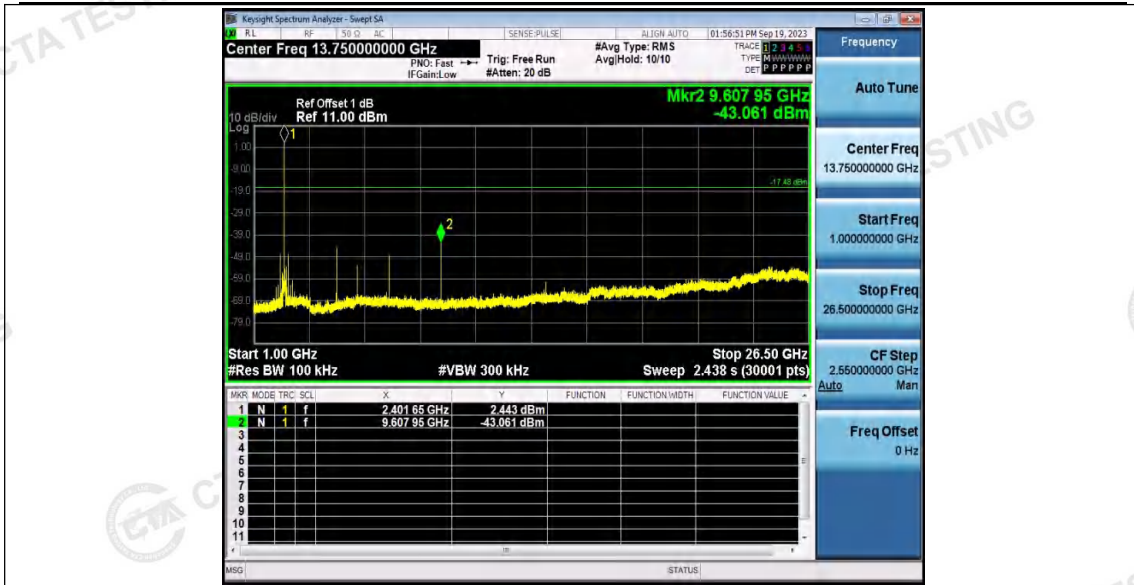
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.52	2.52	---	PASS
			30~1000	2.52	-57.8	≤-17.48	PASS
			1000~26500	2.52	-43.06	≤-17.48	PASS
		2441	Reference	2.49	2.49	---	PASS
			30~1000	2.49	-42.44	≤-17.51	PASS
			1000~26500	2.49	-40.78	≤-17.51	PASS
		2480	Reference	1.45	1.45	---	PASS
			30~1000	1.45	-55.33	≤-18.55	PASS
			1000~26500	1.45	-39.94	≤-18.55	PASS
2DH5	Ant1	2402	Reference	1.98	1.98	---	PASS
			30~1000	1.98	-42.54	≤-18.02	PASS
			1000~26500	1.98	-42.11	≤-18.02	PASS
		2441	Reference	-0.69	-0.69	---	PASS
			30~1000	-0.69	-62.29	≤-20.69	PASS
			1000~26500	-0.69	-40.89	≤-20.69	PASS
		2480	Reference	2.02	2.02	---	PASS
			30~1000	2.02	-42.43	≤-17.98	PASS
			1000~26500	2.02	-40.32	≤-17.98	PASS

Test Graphs

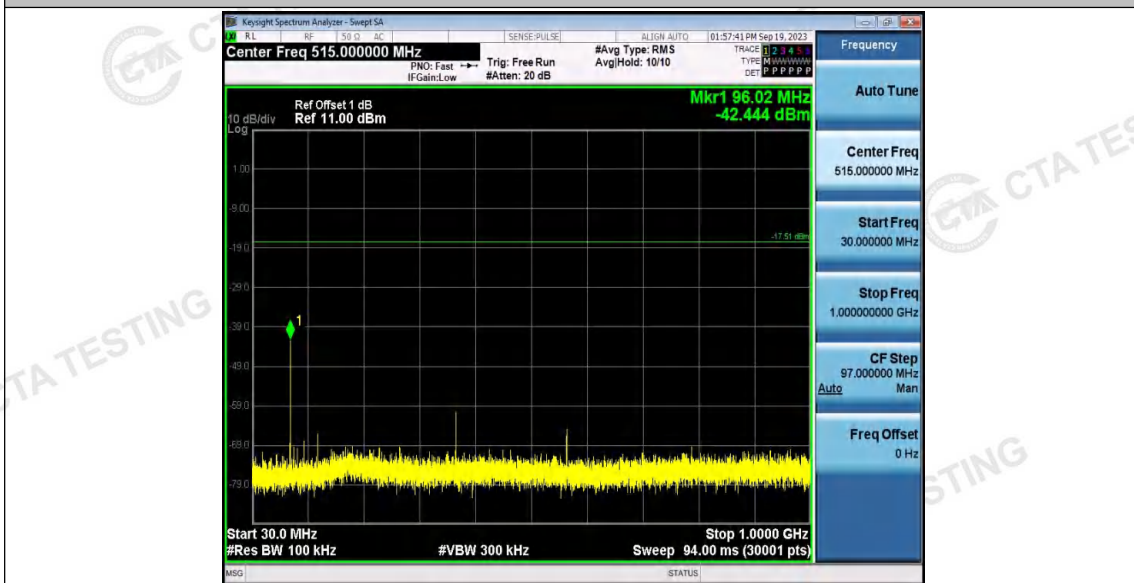




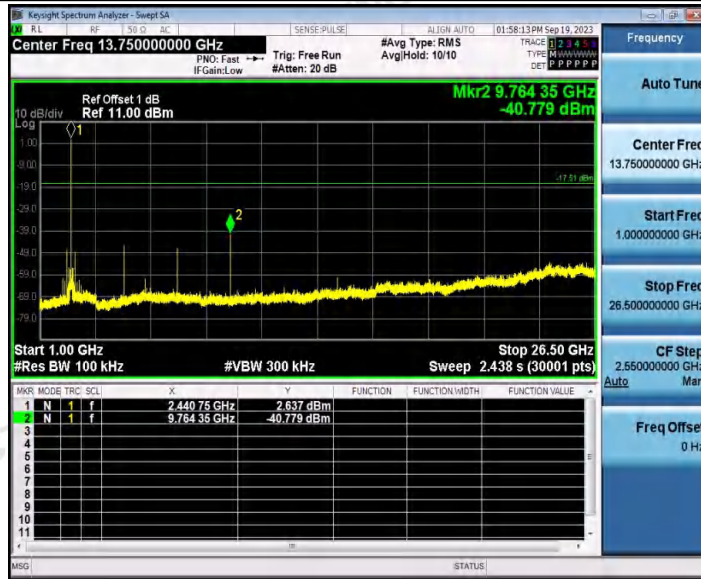
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



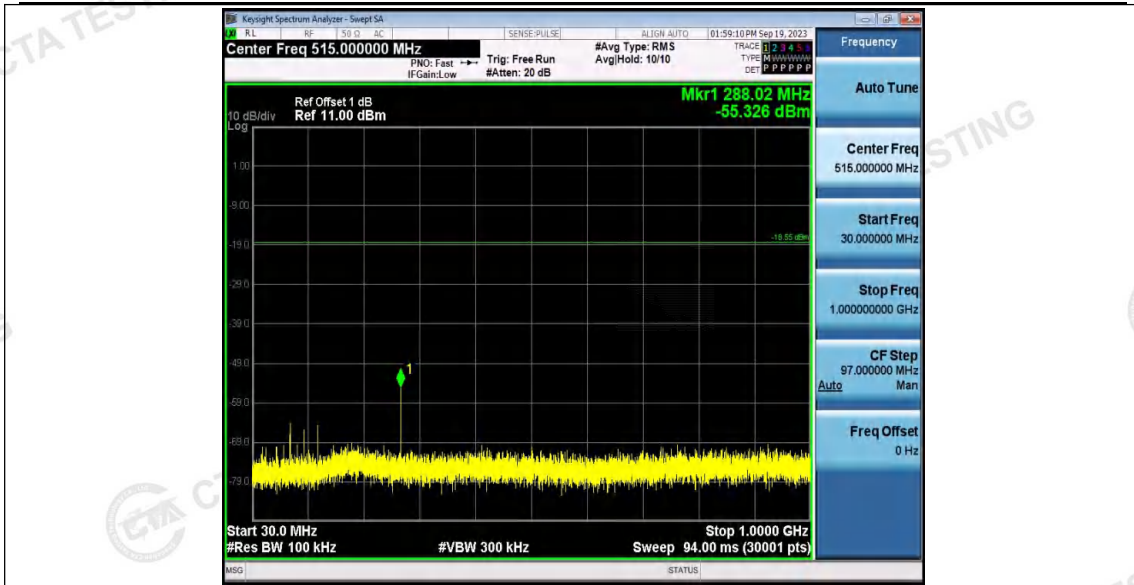
DH5_Ant1_2441_1000~26500



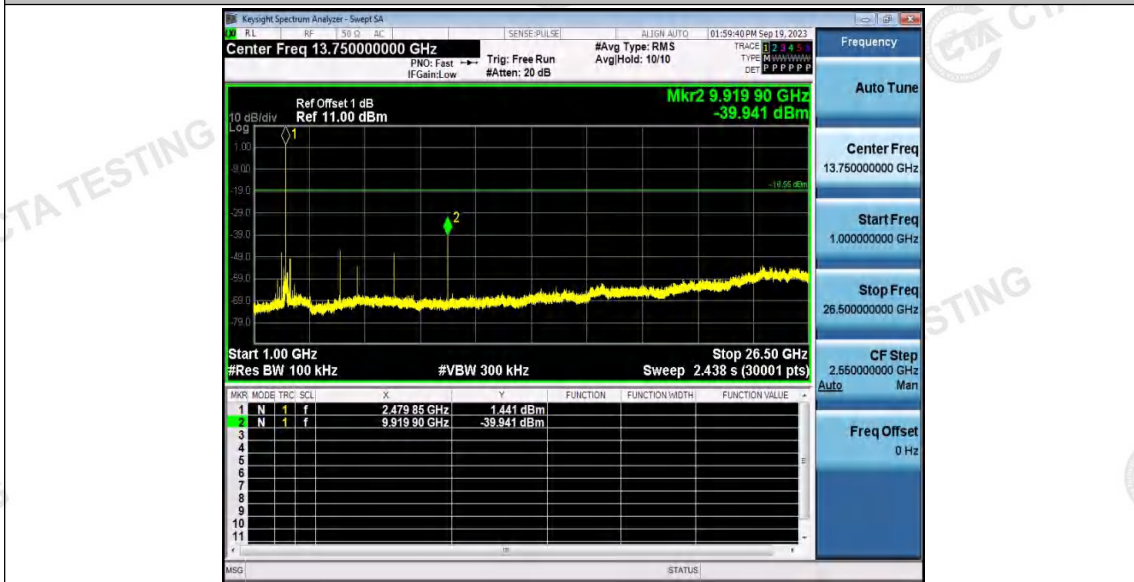
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000

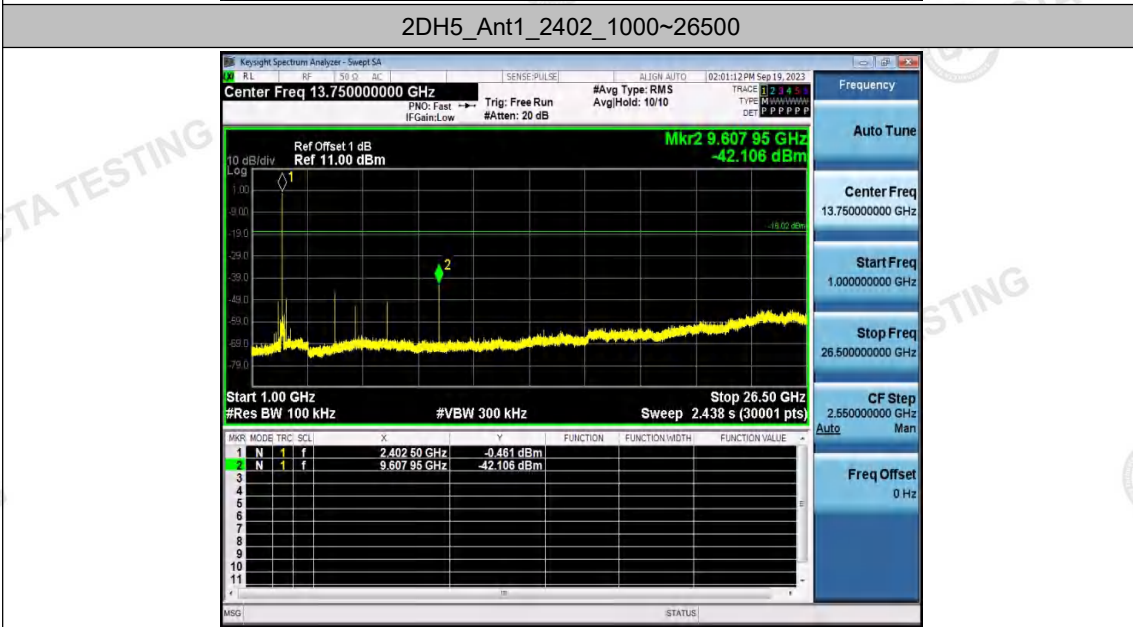
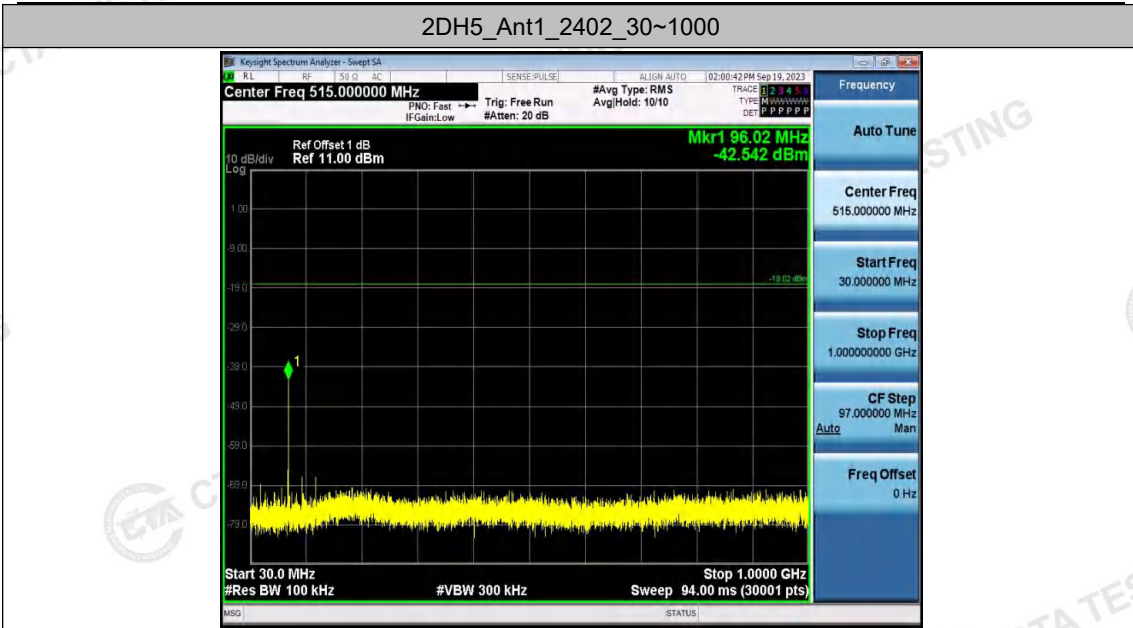


DH5_Ant1_2480_1000~26500



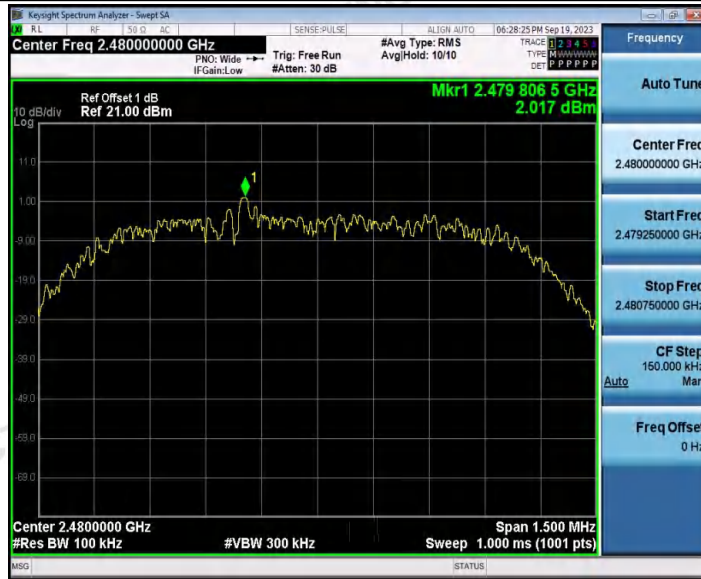
2DH5_Ant1_2402_0~Reference



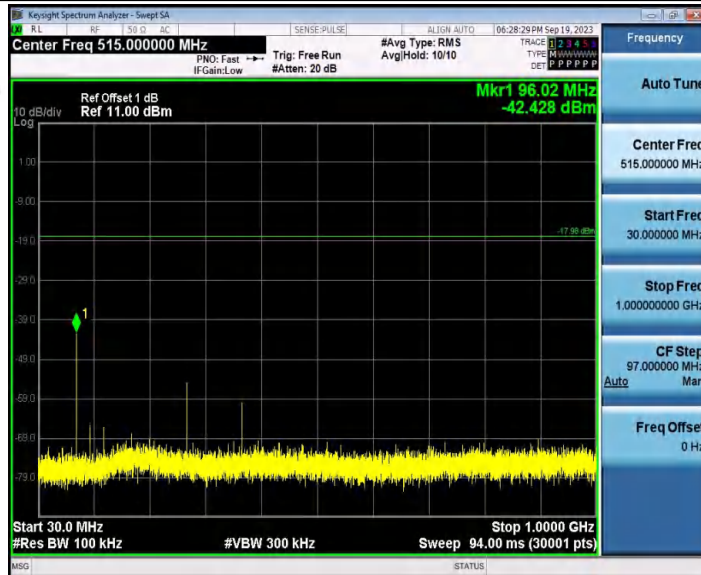


2DH5_Ant1_2441_0~Reference

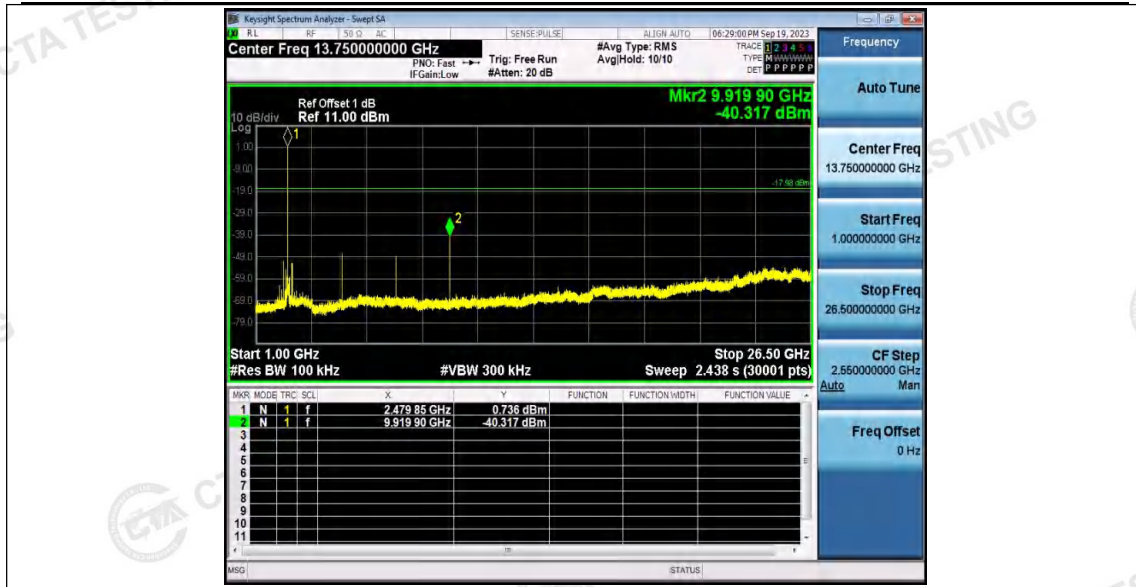
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

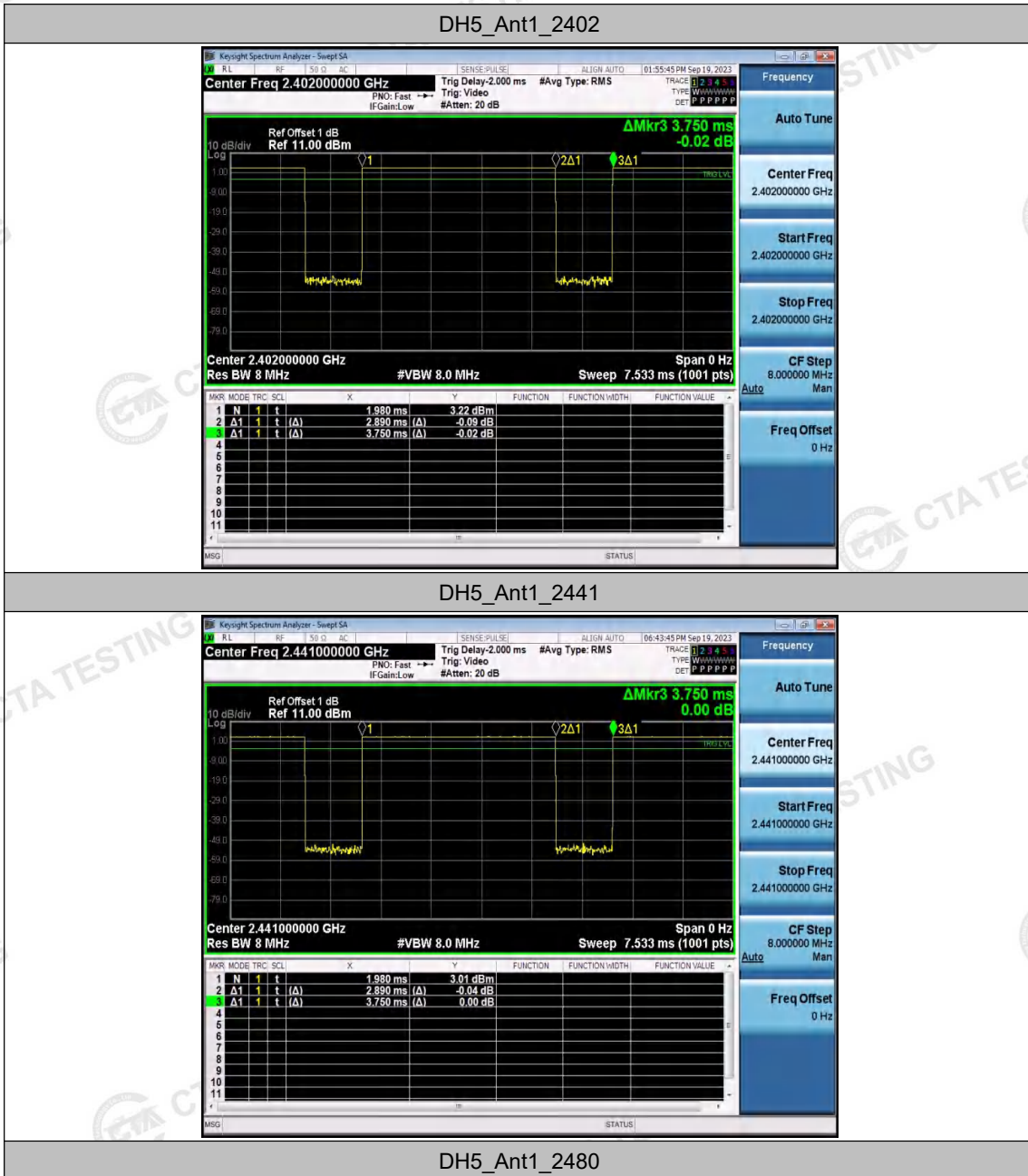


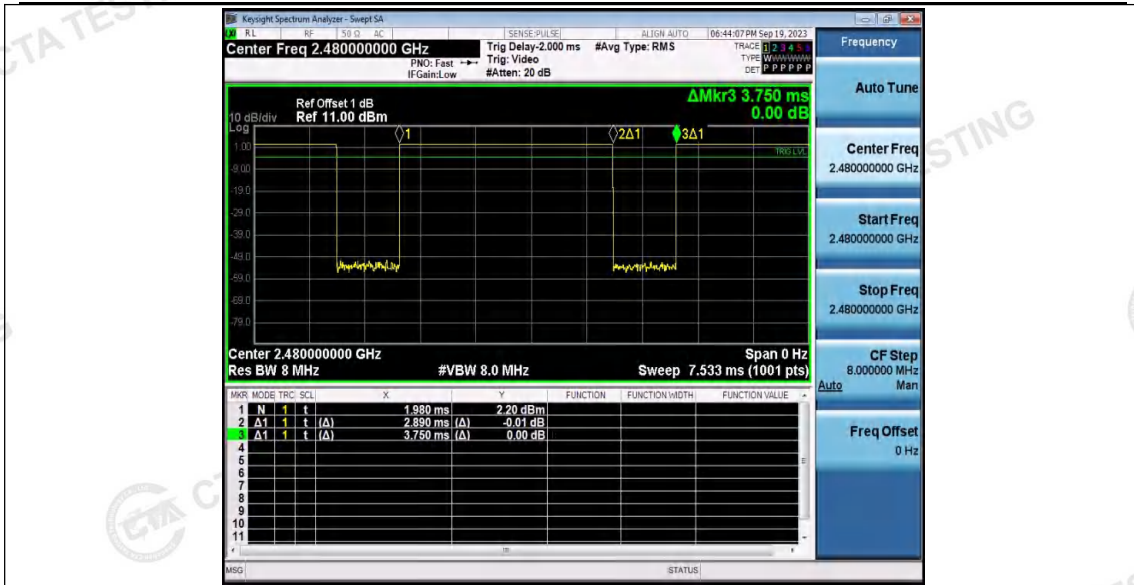
Appendix I: Duty Cycle

Test Result

Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.89	3.75	77.07	1.13
		2441	2.89	3.75	77.07	1.13
		2480	2.89	3.75	77.07	1.13
2DH5	Ant1	2402	2.89	3.75	77.07	1.13
		2441	2.89	3.75	77.07	1.13
		2480	2.90	3.75	77.33	1.12

Test Graphs

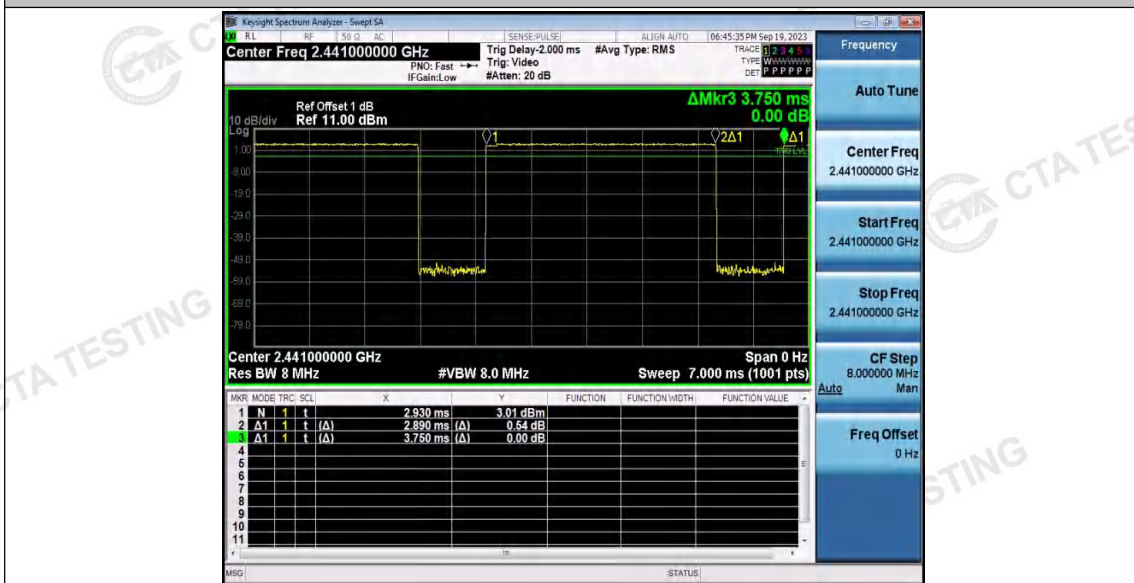


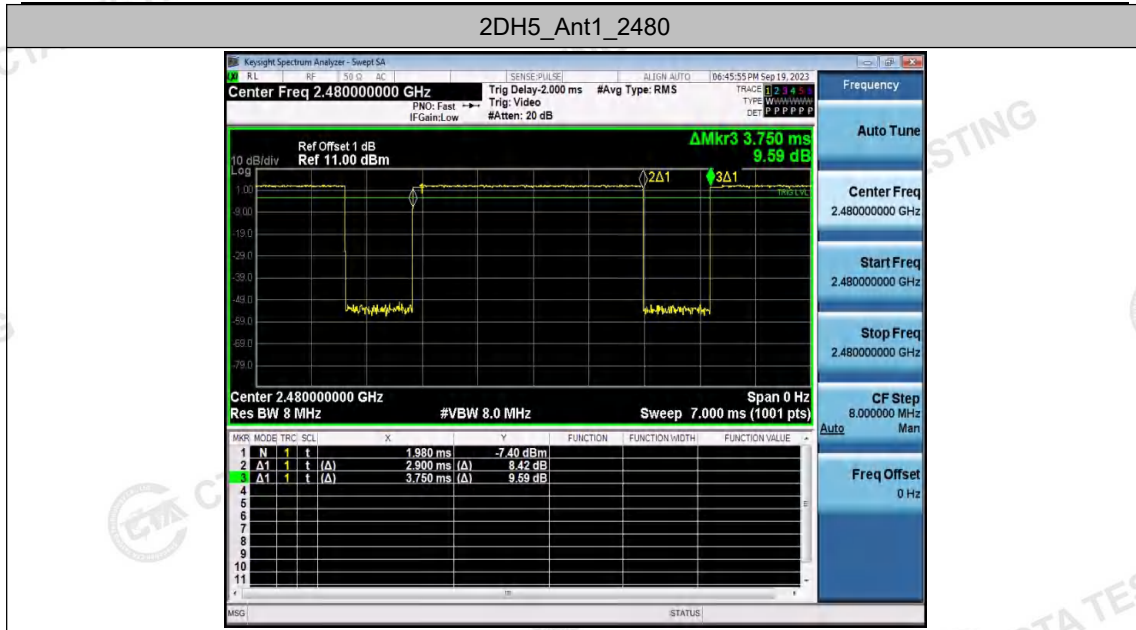


2DH5_Ant1_2402



2DH5_Ant1_2441





---End---