

Appendix: Bluetooth Classic

Contents

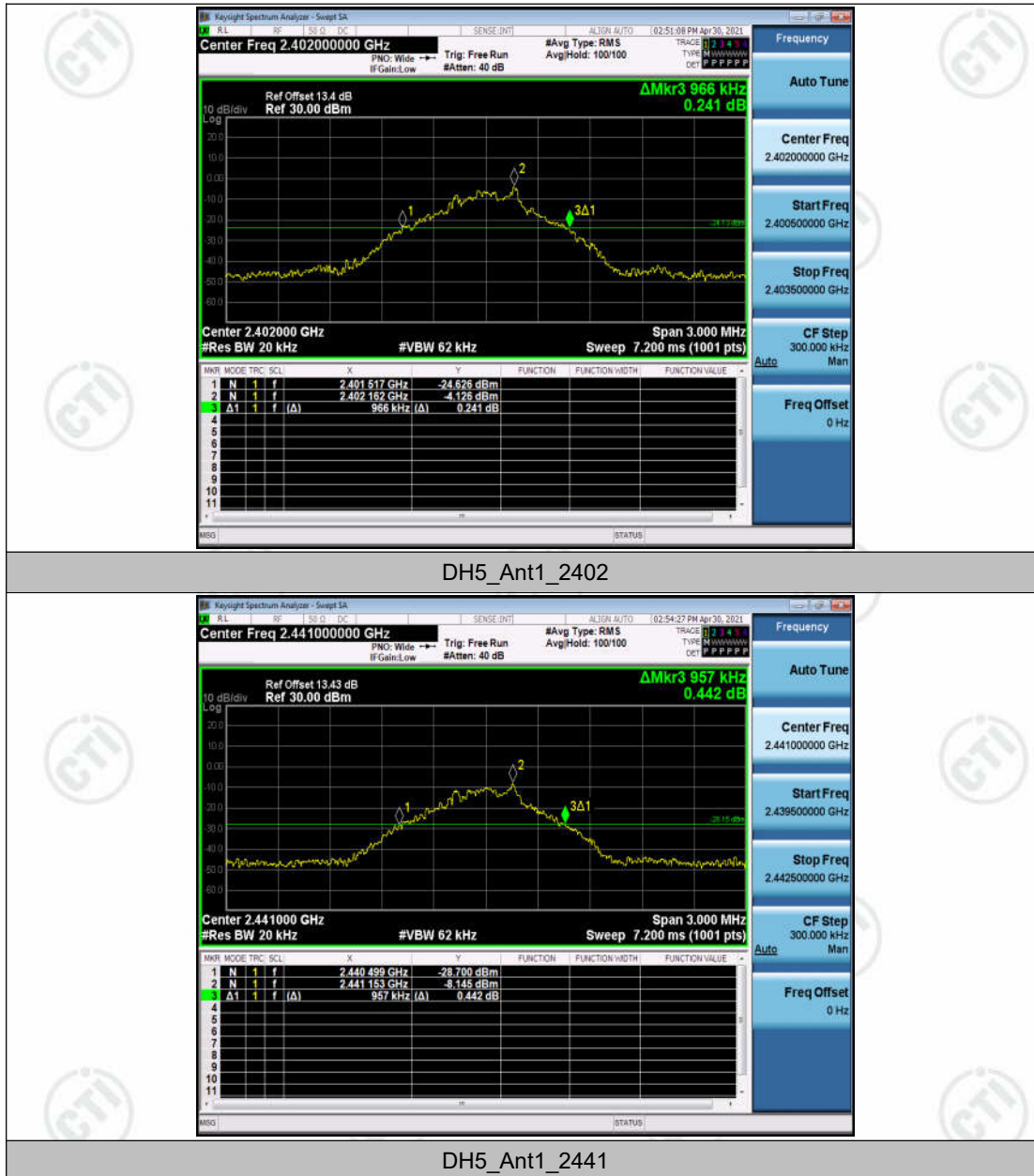
Appendix A: 20dB Emission Bandwidth.....	3
Test Result.....	3
Test Graphs.....	4
Appendix B: Occupied Channel Bandwidth.....	9
Test Result.....	9
Test Graphs.....	10
Appendix C: Maximum conducted output power.....	15
Test Result.....	15
Test Graphs.....	16
Appendix D: Carrier frequency separation.....	21
Test Result.....	21
Test Graphs.....	22
Appendix E: Time of occupancy.....	24
Test Result.....	24
Test Graphs.....	25
Appendix F: Number of hopping channels.....	34
Test Result.....	34
Test Graphs.....	35
Appendix G: Band edge measurements.....	37
Test Result.....	37
Test Graphs.....	38
Appendix H: Conducted Spurious Emission.....	44
Test Result.....	44
Test Graphs.....	46
Appendix I: Duty Cycle.....	60
Test Result.....	60
Test Graphs.....	61

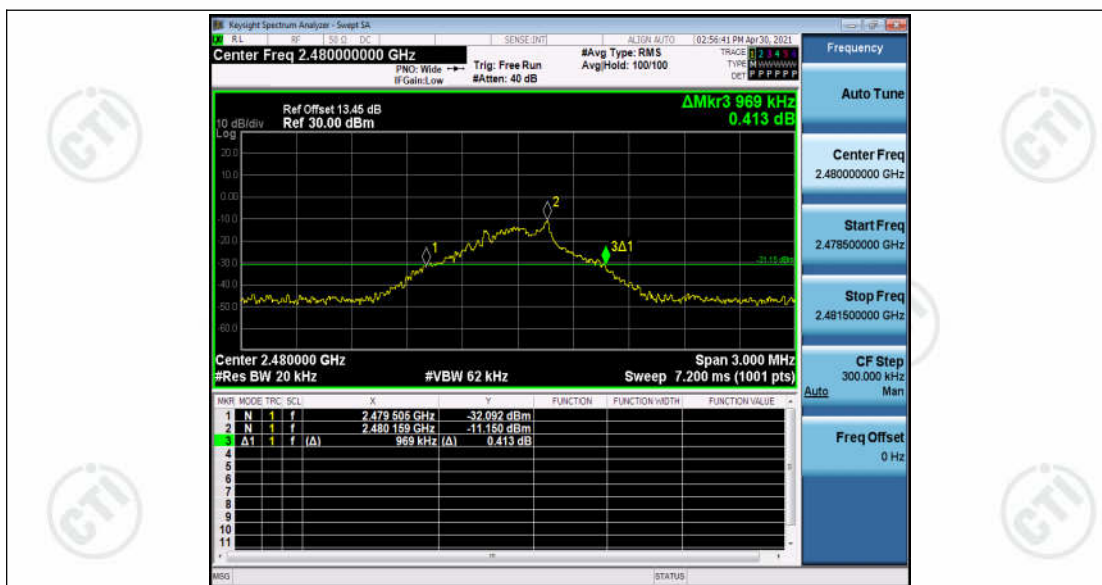
Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.966	2401.517	2402.483	---	PASS
		2441	0.957	2440.499	2441.456	---	PASS
		2480	0.969	2479.505	2480.474	---	PASS
2DH5	Ant1	2402	1.257	2401.364	2402.621	---	PASS
		2441	1.290	2440.364	2441.654	---	PASS
		2480	1.278	2479.379	2480.657	---	PASS
3DH5	Ant1	2402	1.287	2401.343	2402.630	---	PASS
		2441	1.284	2440.340	2441.624	---	PASS
		2480	1.290	2479.337	2480.627	---	PASS

Test Graphs





DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



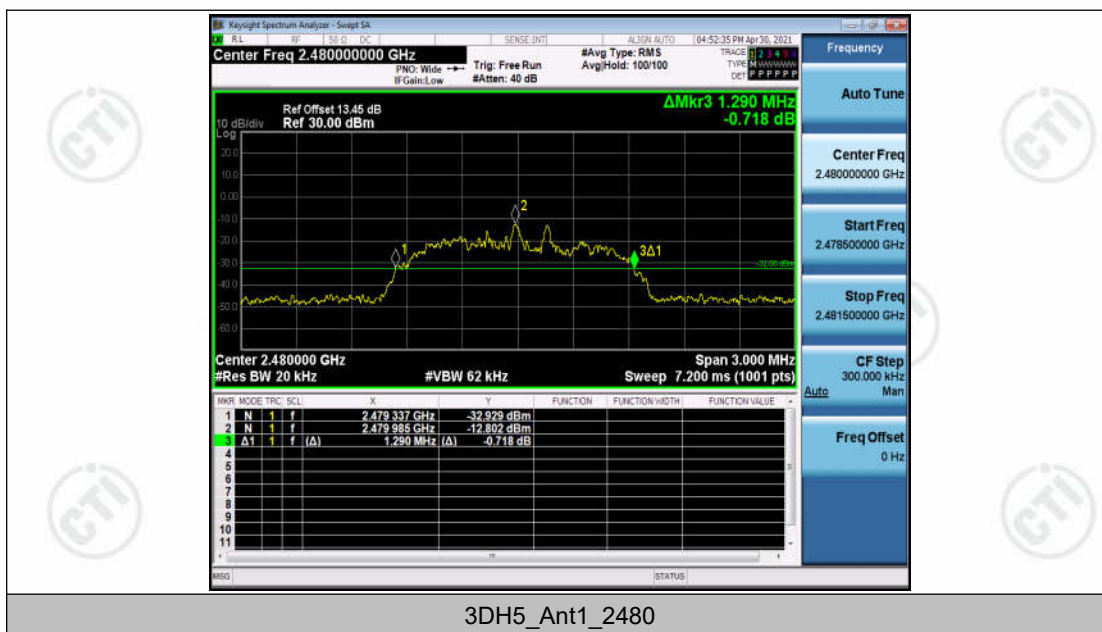
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

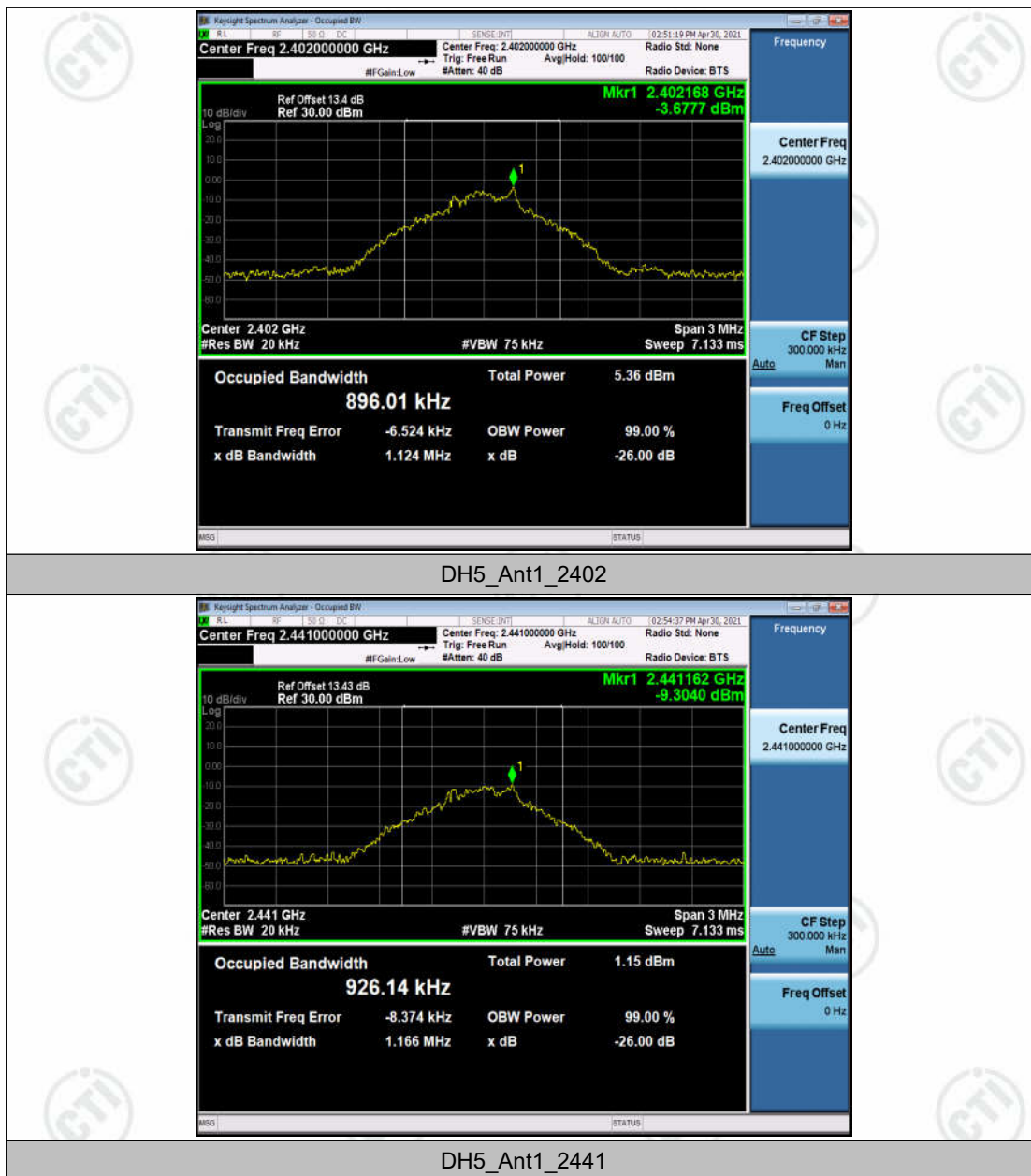


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.89601	2401.54 5	2402.441	---	PASS
		2441	0.92614	2440.52 9	2441.455	---	PASS
		2480	0.95225	2479.50 9	2480.461	---	PASS
2DH5	Ant1	2402	1.2249	2401.38 7	2402.612	---	PASS
		2441	1.2035	2440.39 7	2441.601	---	PASS
		2480	1.2263	2479.38 6	2480.613	---	PASS
3DH5	Ant1	2402	1.2344	2401.38 2	2402.616	---	PASS
		2441	1.2215	2440.38 8	2441.610	---	PASS
		2480	1.2480	2479.36 8	2480.616	---	PASS

Test Graphs





DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



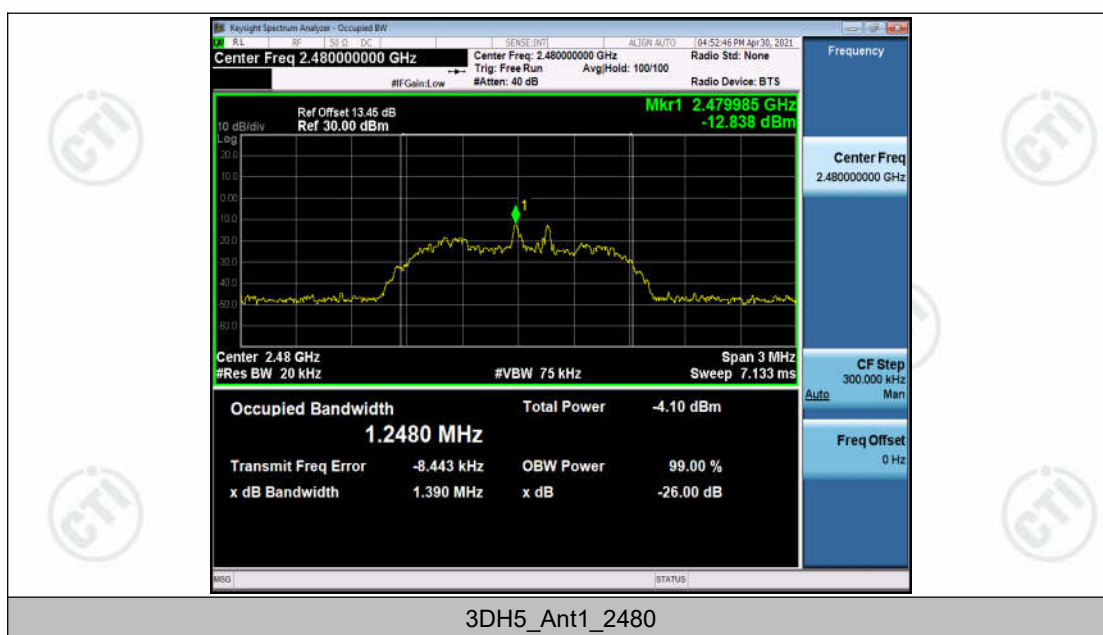
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

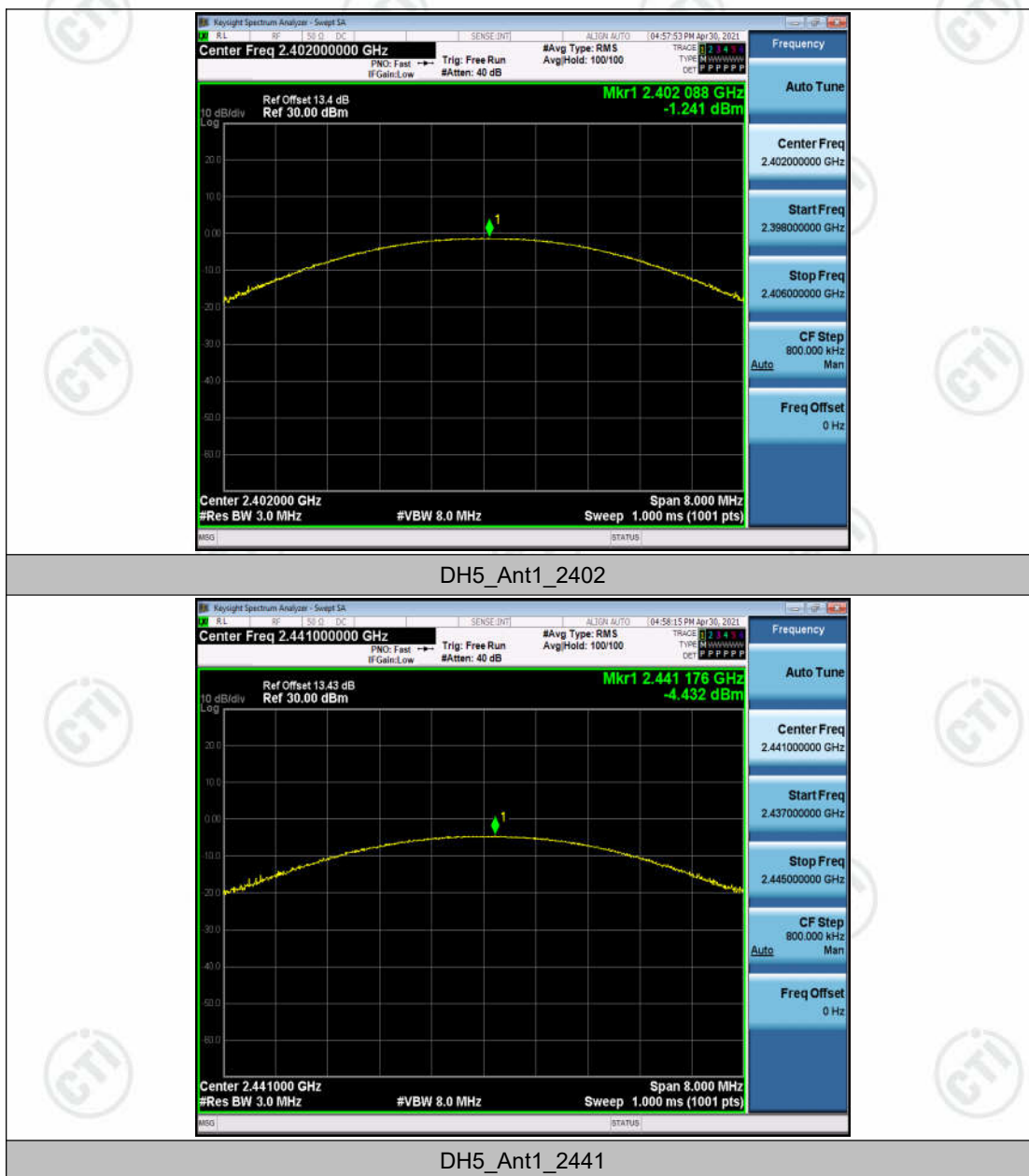


Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-1.24	<=20.97	PASS
		2441	-4.43	<=20.97	PASS
		2480	-7.76	<=20.97	PASS
2DH5	Ant1	2402	-1.34	<=20.97	PASS
		2441	-4.7	<=20.97	PASS
		2480	-8.14	<=20.97	PASS
3DH5	Ant1	2402	-1.31	<=20.97	PASS
		2441	-4.72	<=20.97	PASS
		2480	-7.9	<=20.97	PASS

Test Graphs

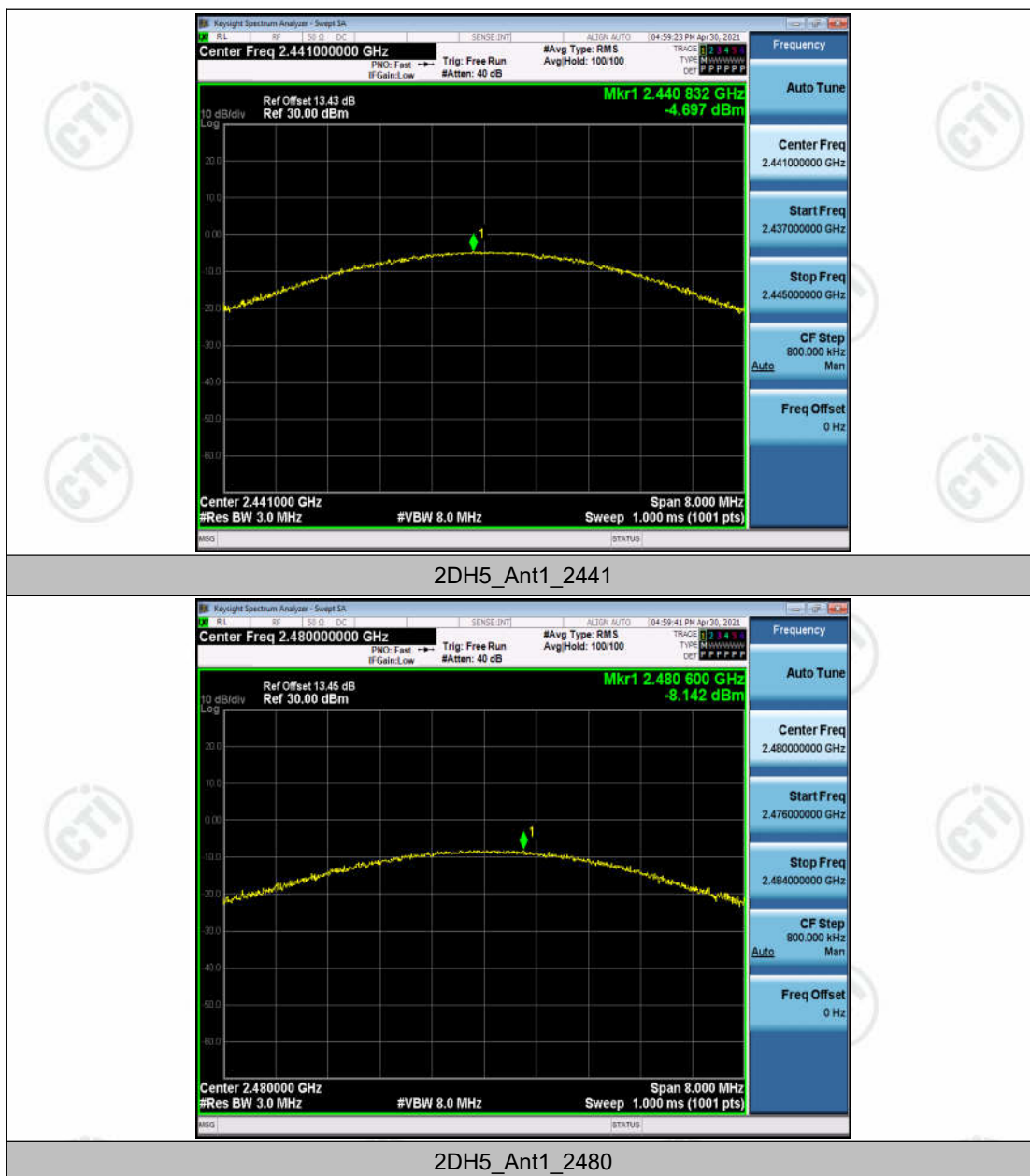


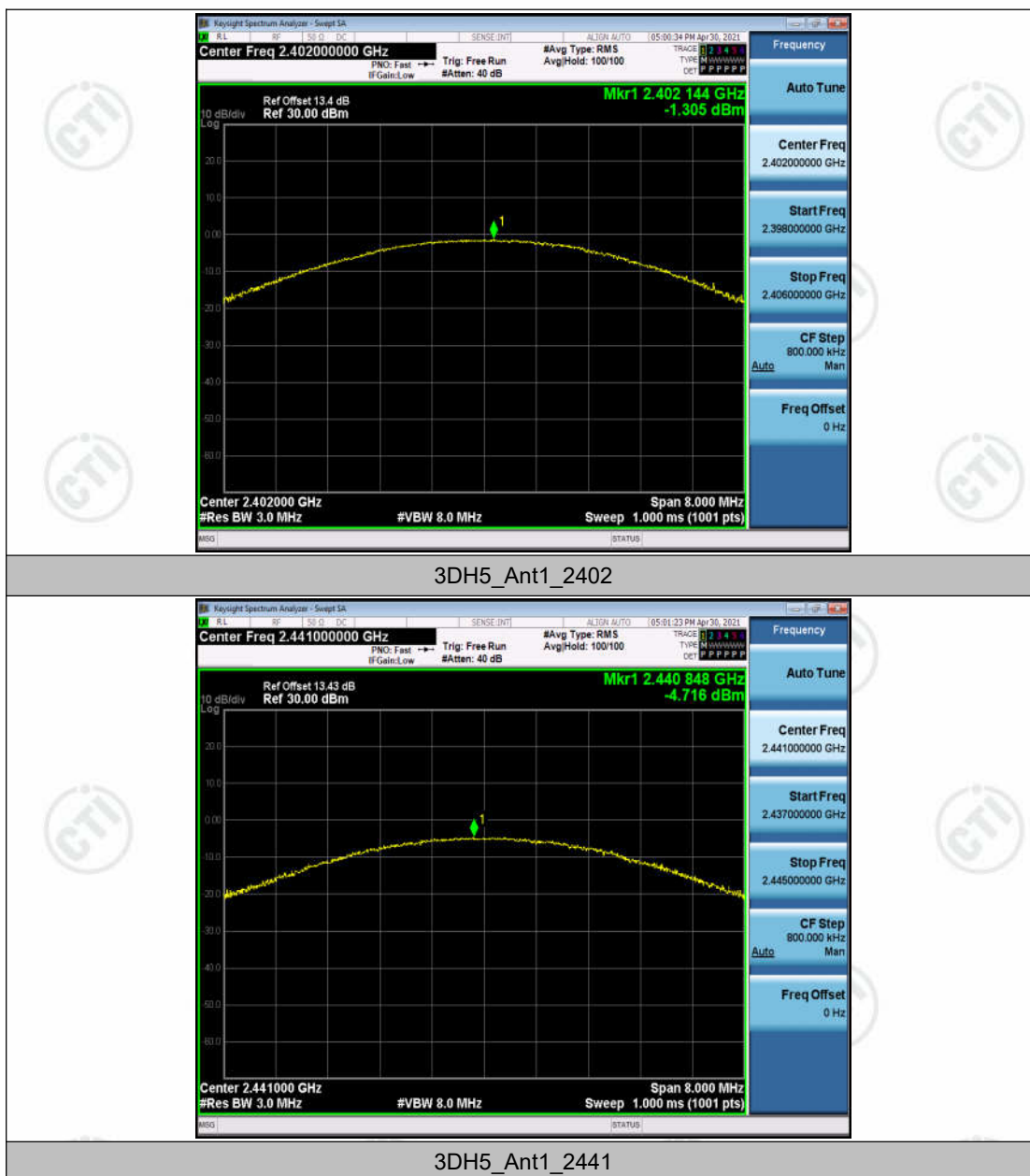


DH5_Ant1_2480



2DH5_Ant1_2402





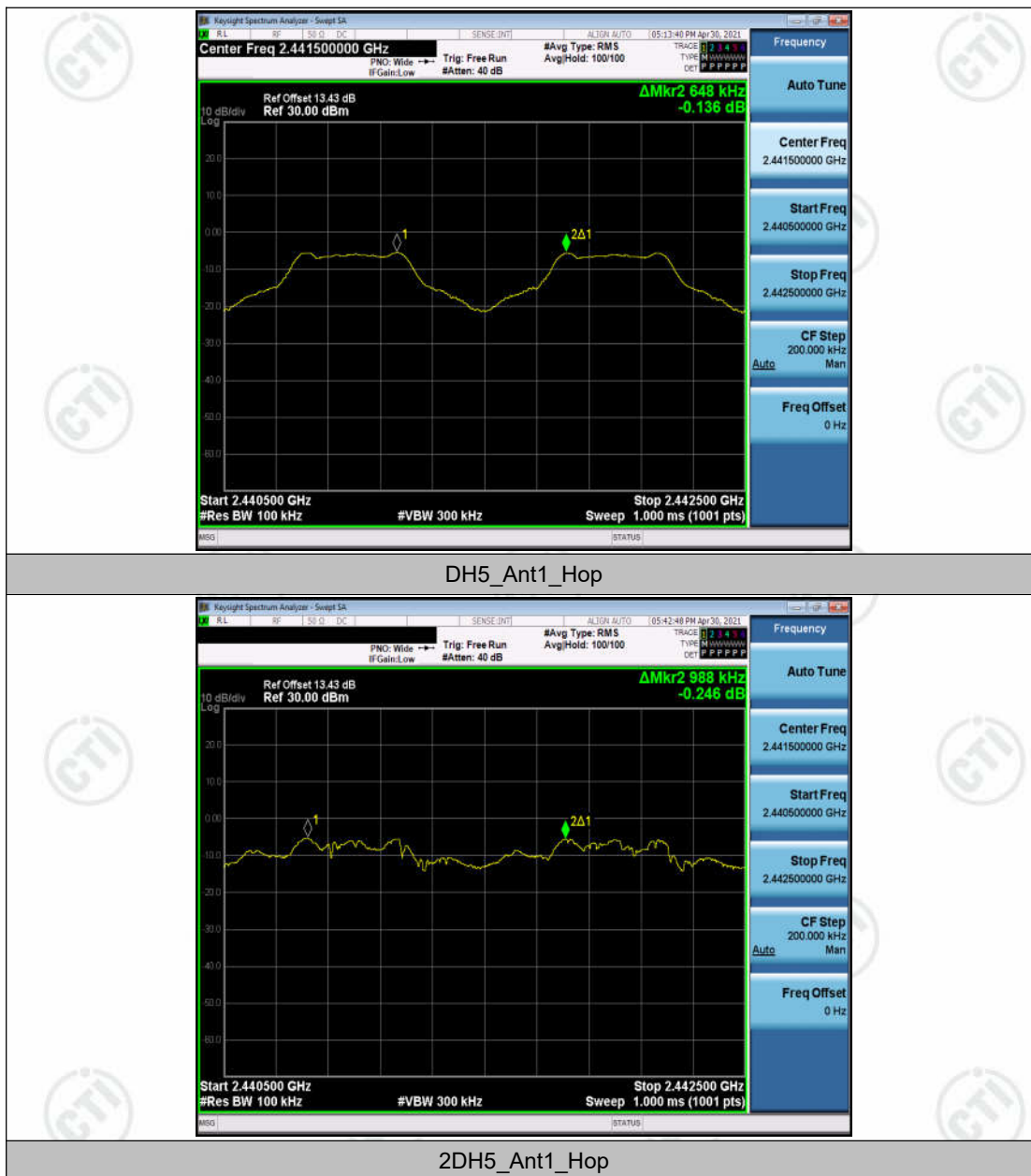


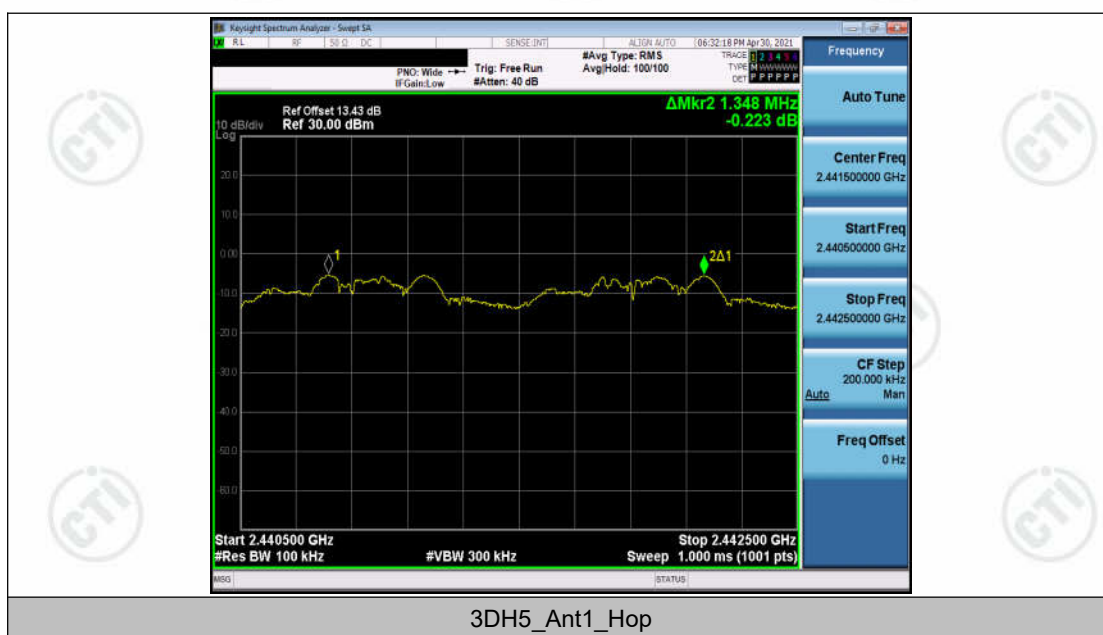
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.648	≥ 0.646	PASS
2DH5	Ant1	Hop	0.988	≥ 0.860	PASS
3DH5	Ant1	Hop	1.348	≥ 1.290	PASS

Test Graphs



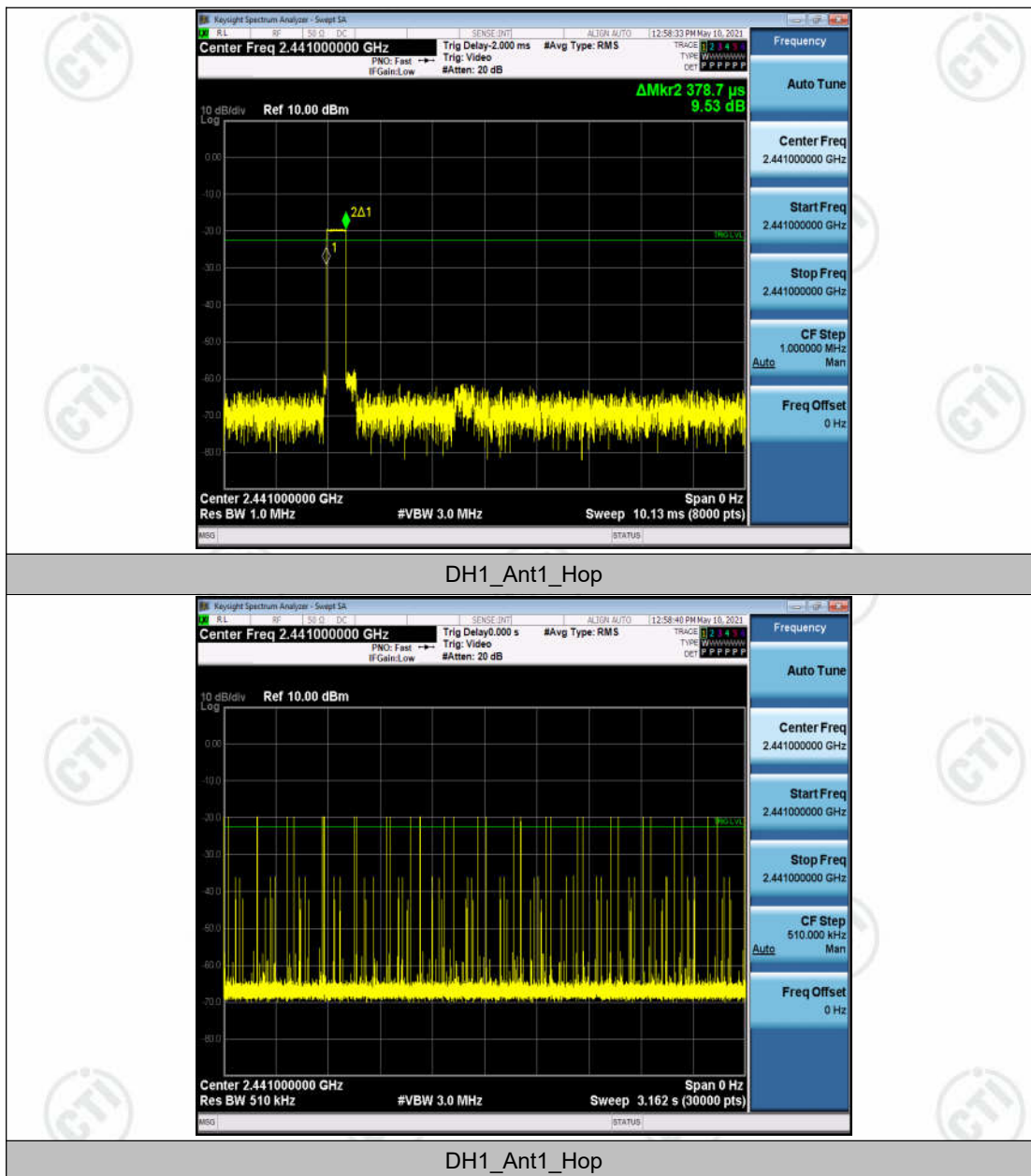


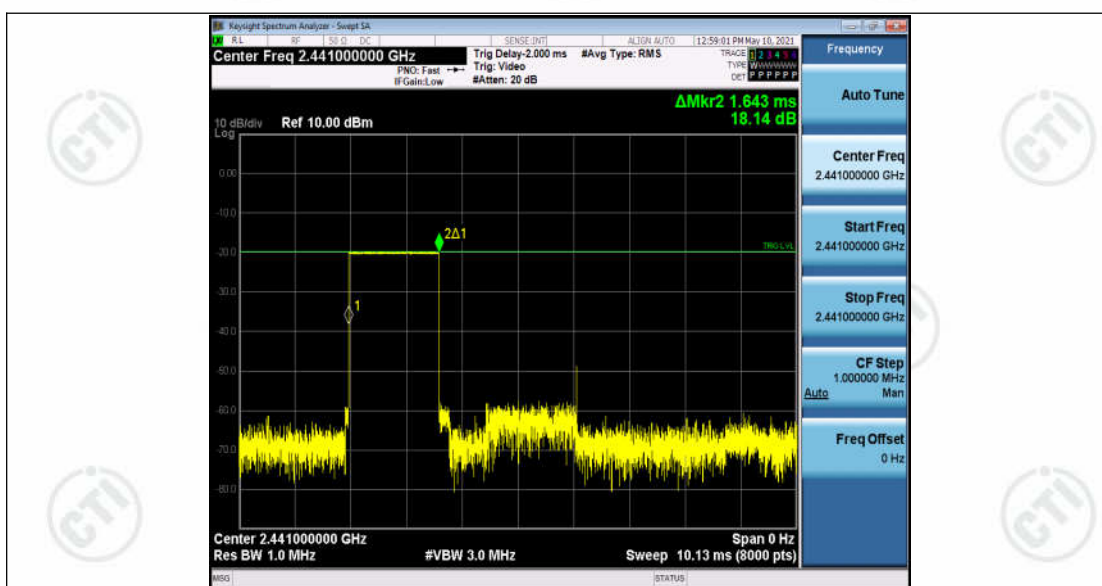
Appendix E: Time of occupancy

Test Result

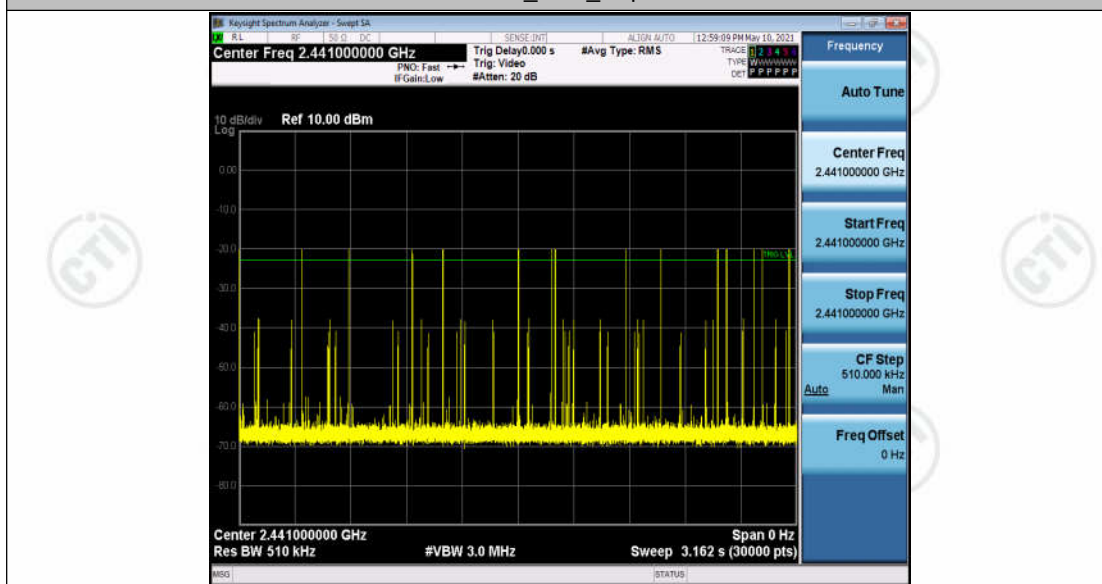
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	330	0.125	≤ 0.4	PASS
DH3	Ant1	Hop	1.64	150	0.246	≤ 0.4	PASS
DH5	Ant1	Hop	2.89	100	0.289	≤ 0.4	PASS
2DH1	Ant1	Hop	0.39	320	0.124	≤ 0.4	PASS
2DH3	Ant1	Hop	1.64	150	0.246	≤ 0.4	PASS
2DH5	Ant1	Hop	2.89	90	0.26	≤ 0.4	PASS
3DH1	Ant1	Hop	0.39	330	0.127	≤ 0.4	PASS
3DH3	Ant1	Hop	1.64	150	0.245	≤ 0.4	PASS
3DH5	Ant1	Hop	2.89	130	0.375	≤ 0.4	PASS

Test Graphs

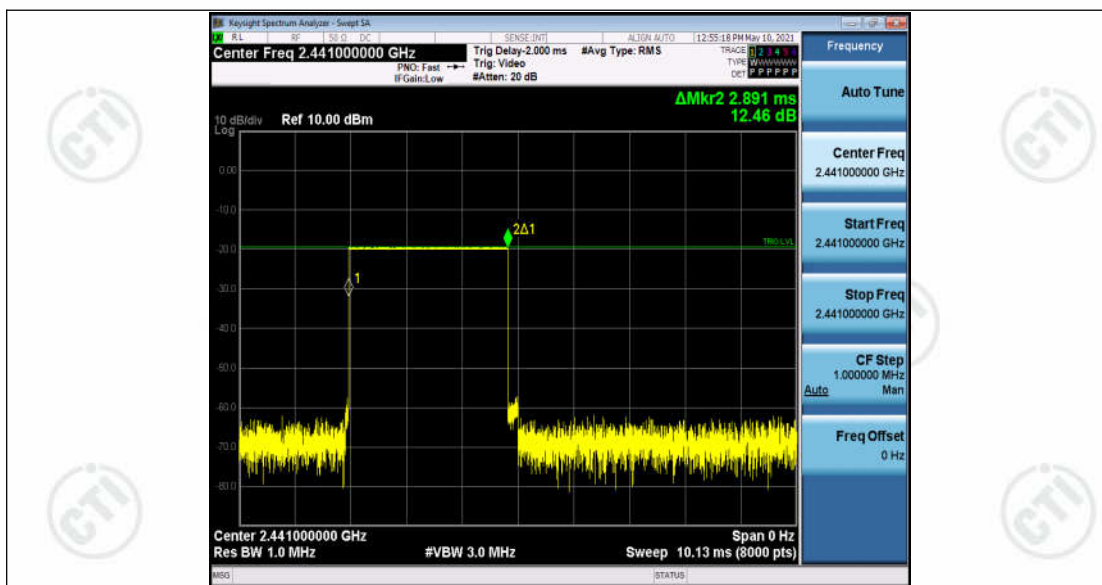




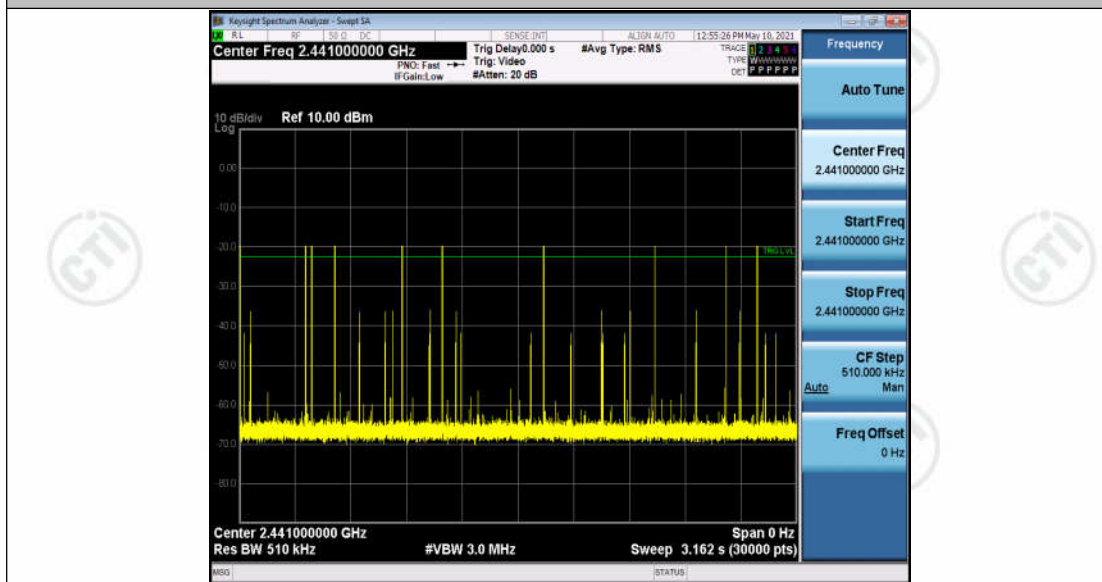
DH3_Ant1_Hop



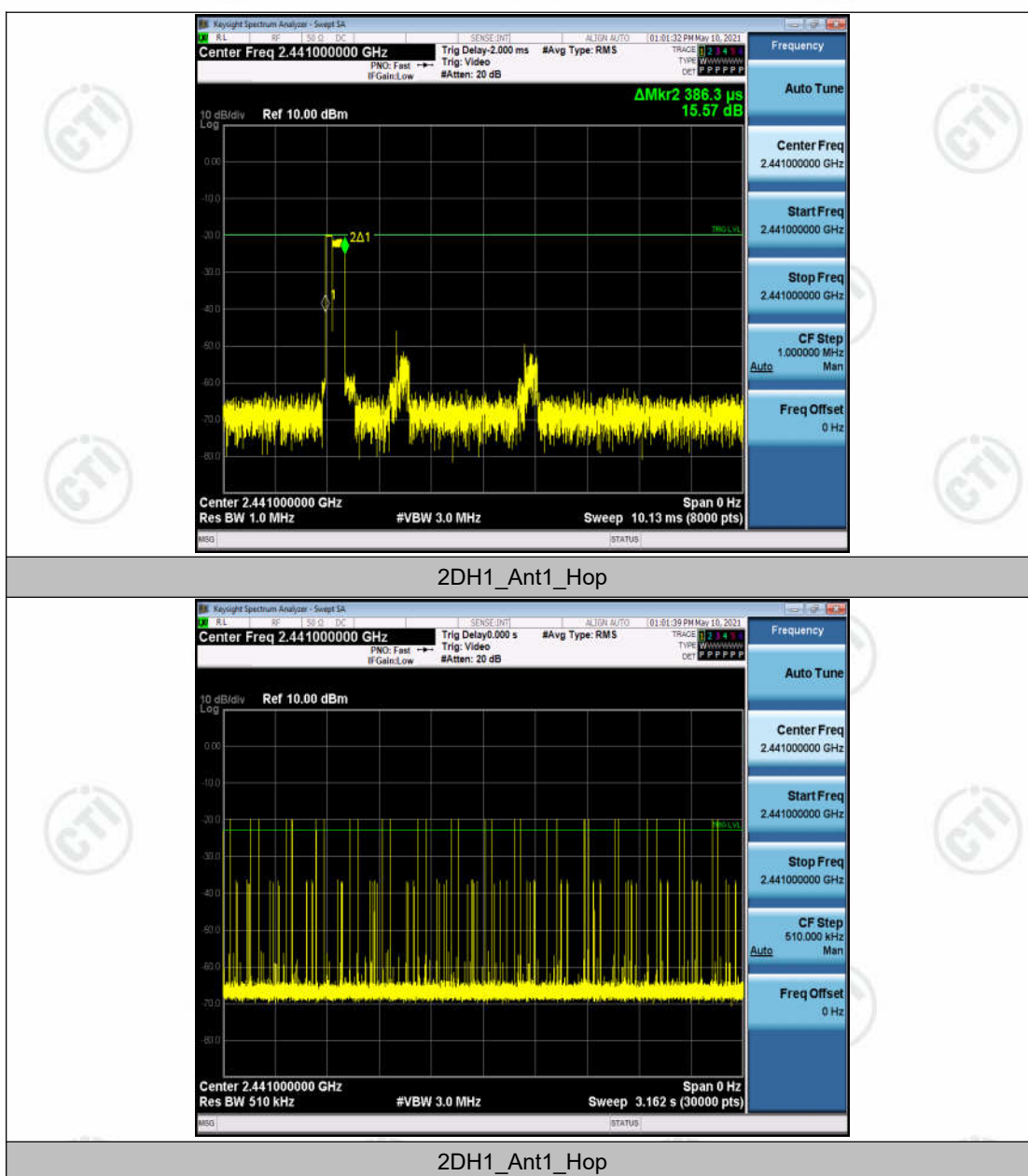
DH3_Ant1_Hop

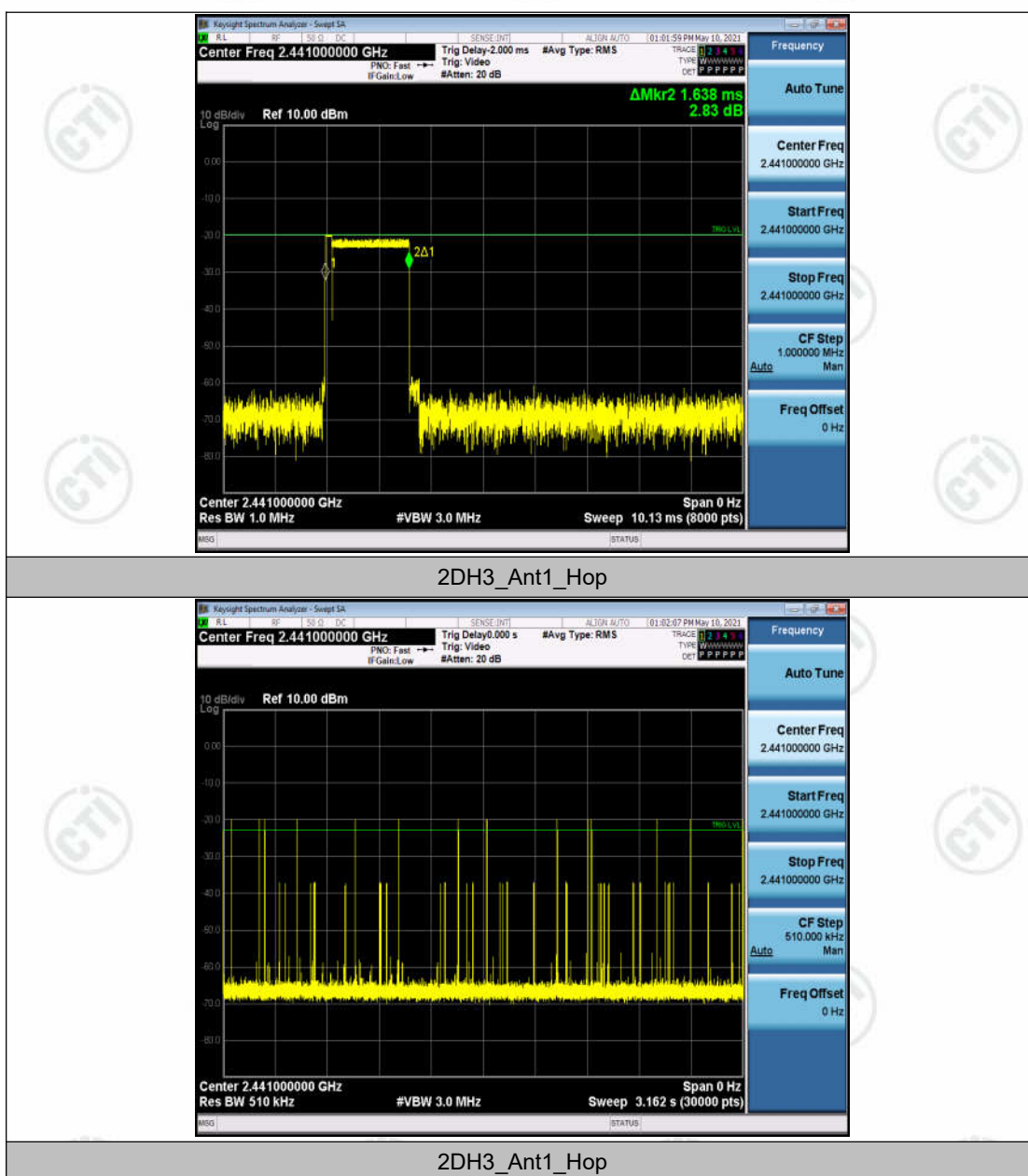


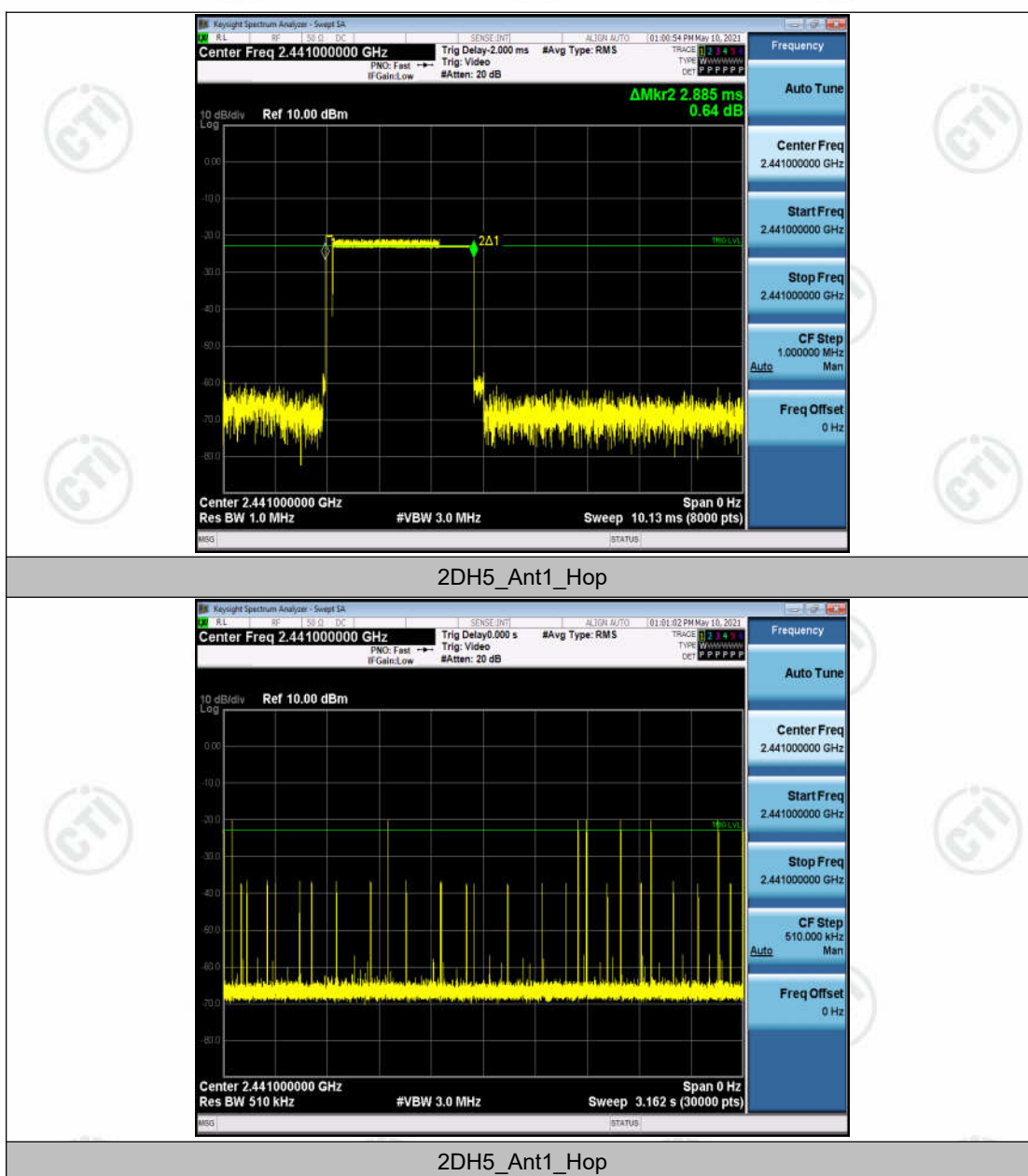
DH5_Ant1_Hop

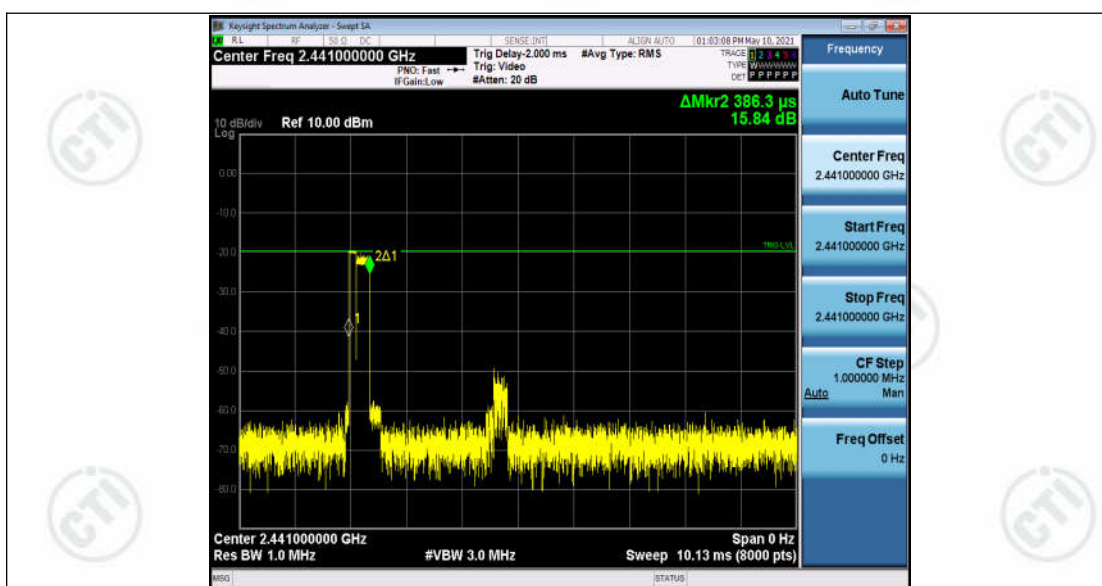


DH5_Ant1_Hop

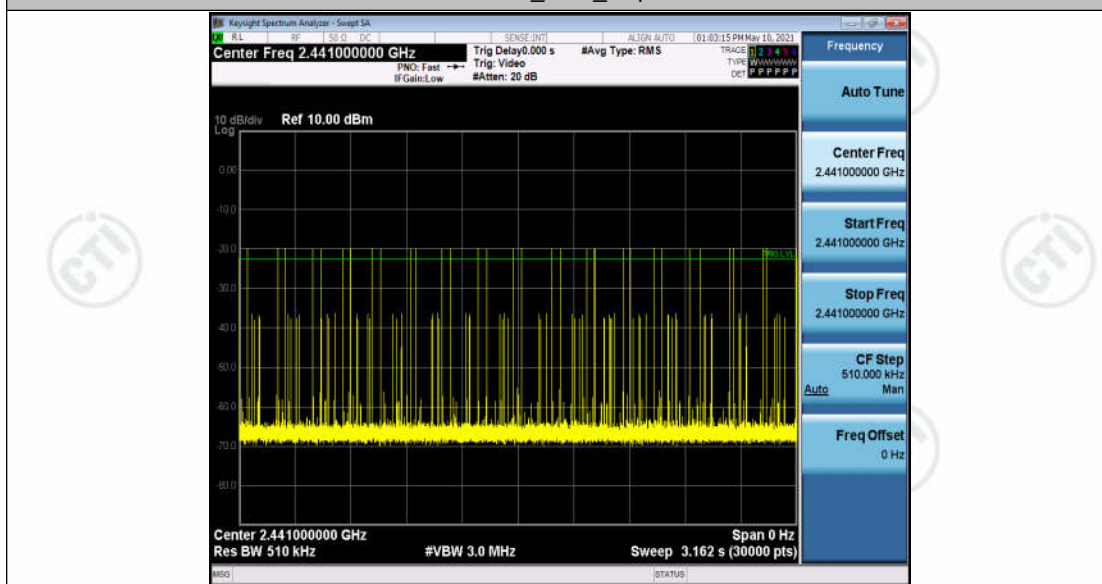




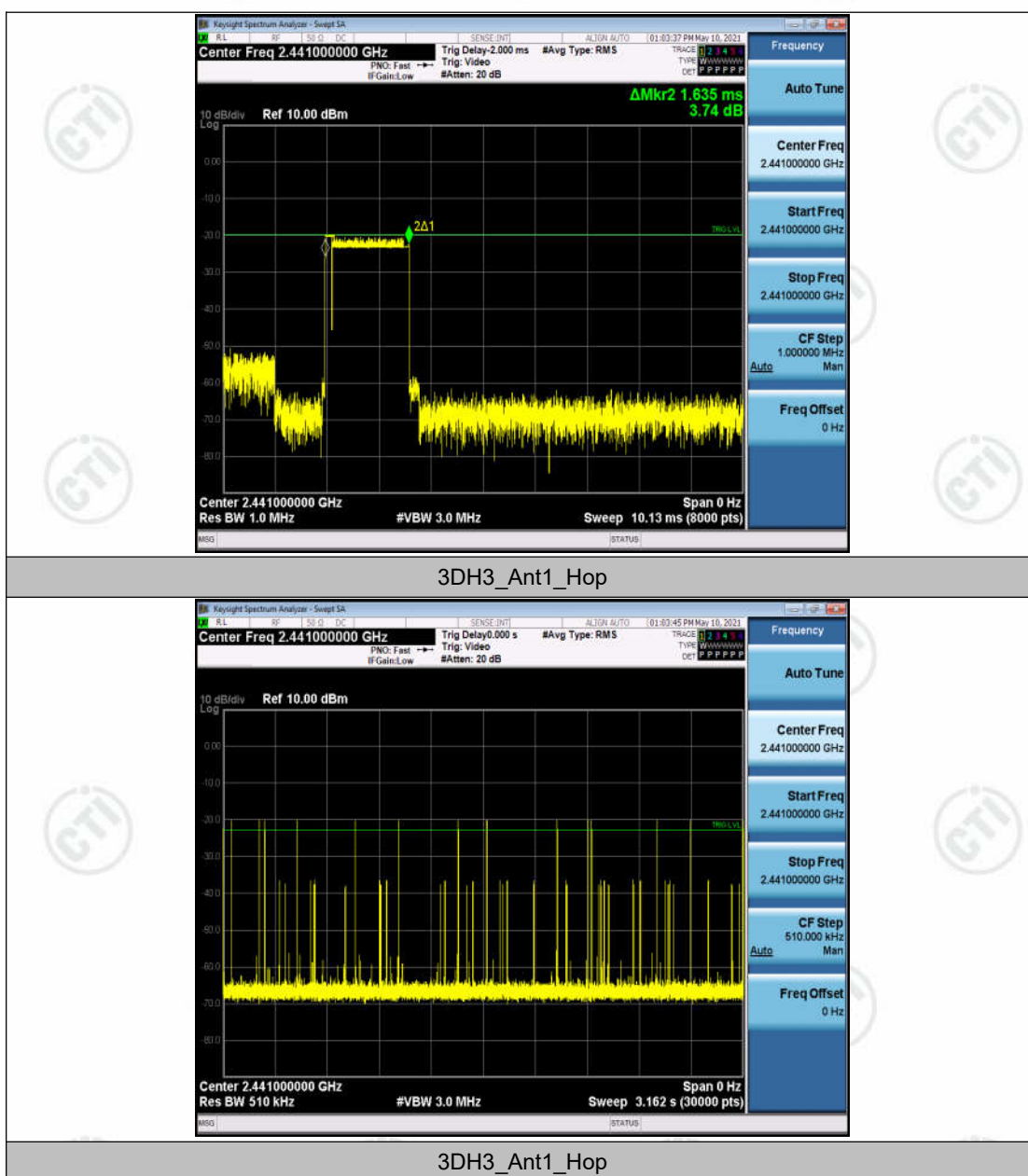


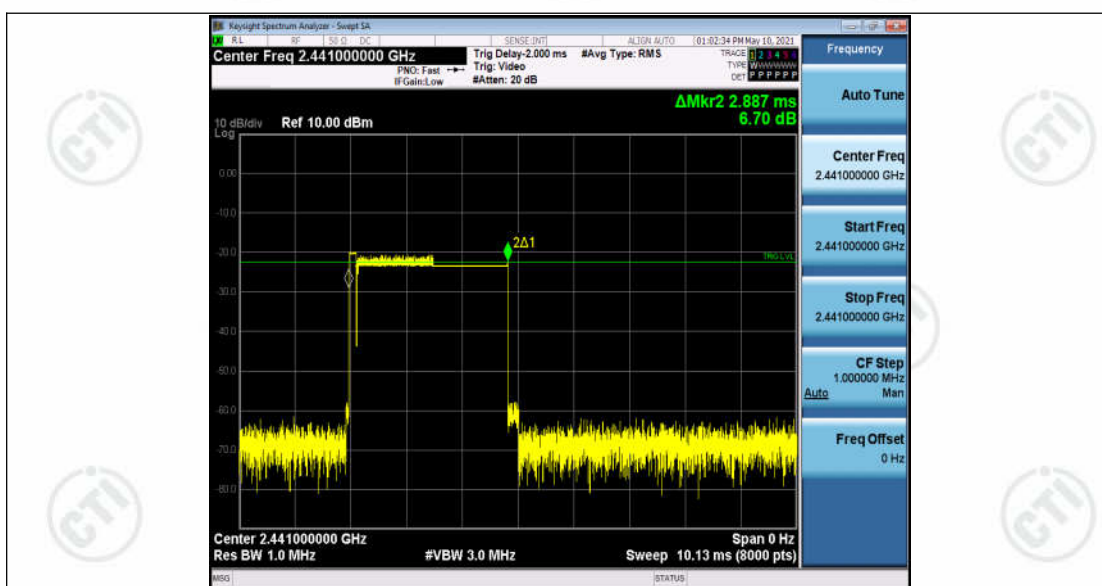


3DH1_Ant1_Hop

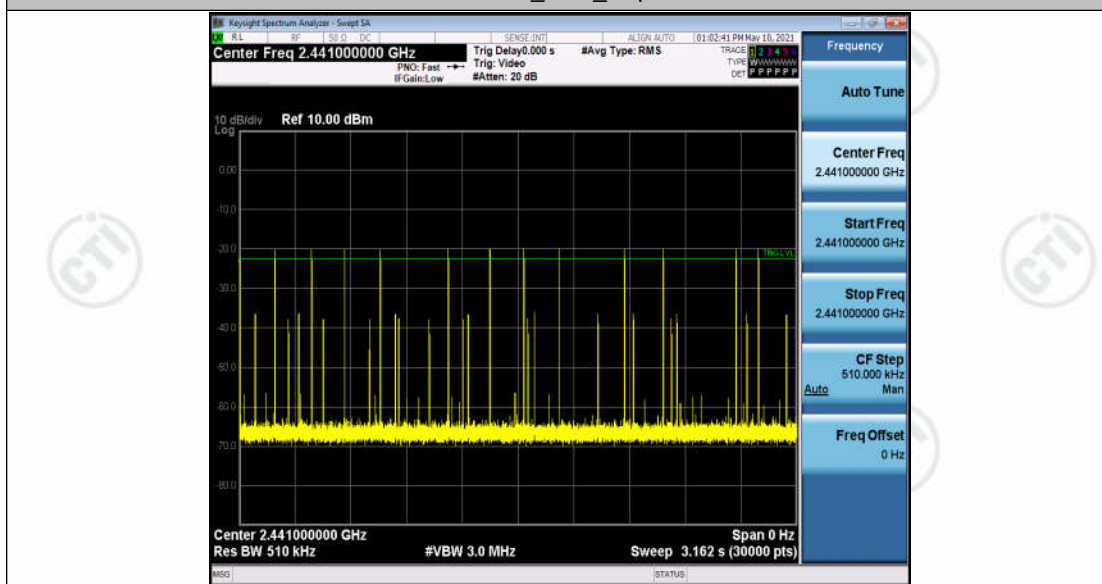


3DH1_Ant1_Hop





3DH5_Ant1_Hop



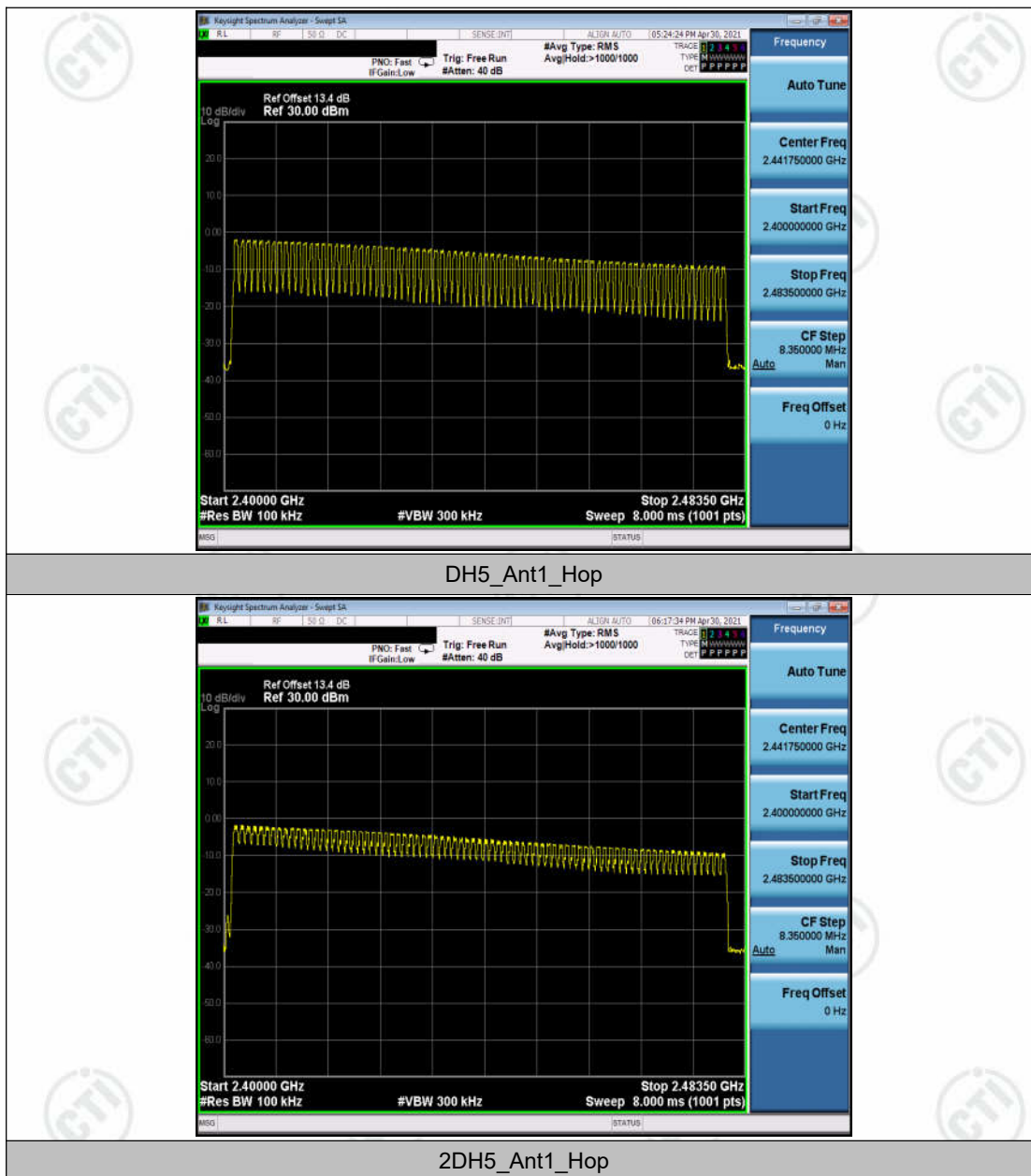
3DH5_Ant1_Hop

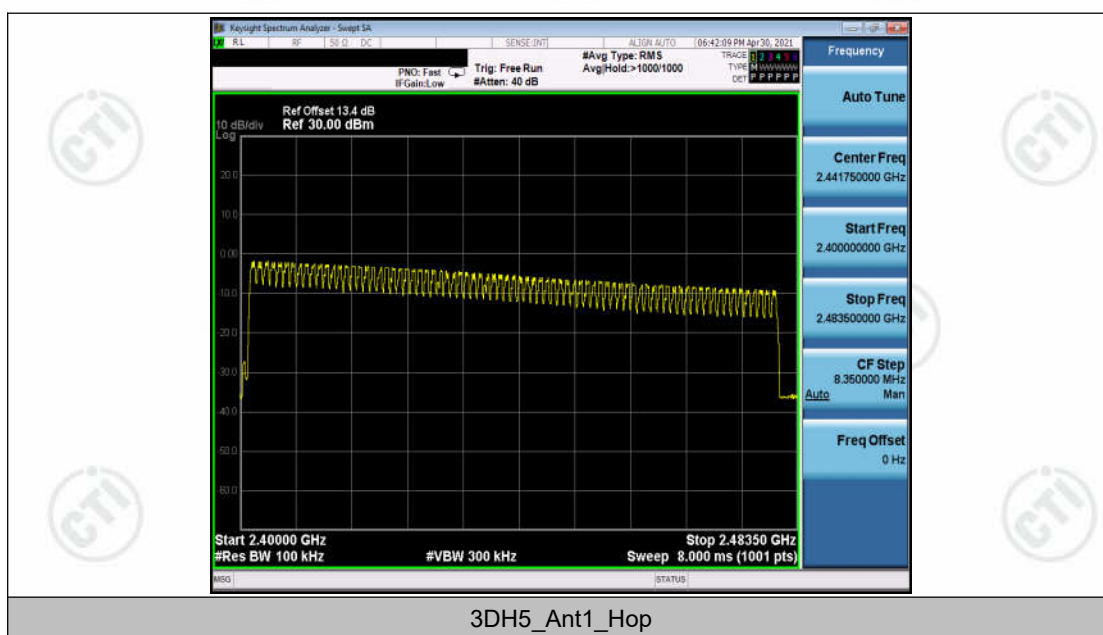
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

Test Graphs



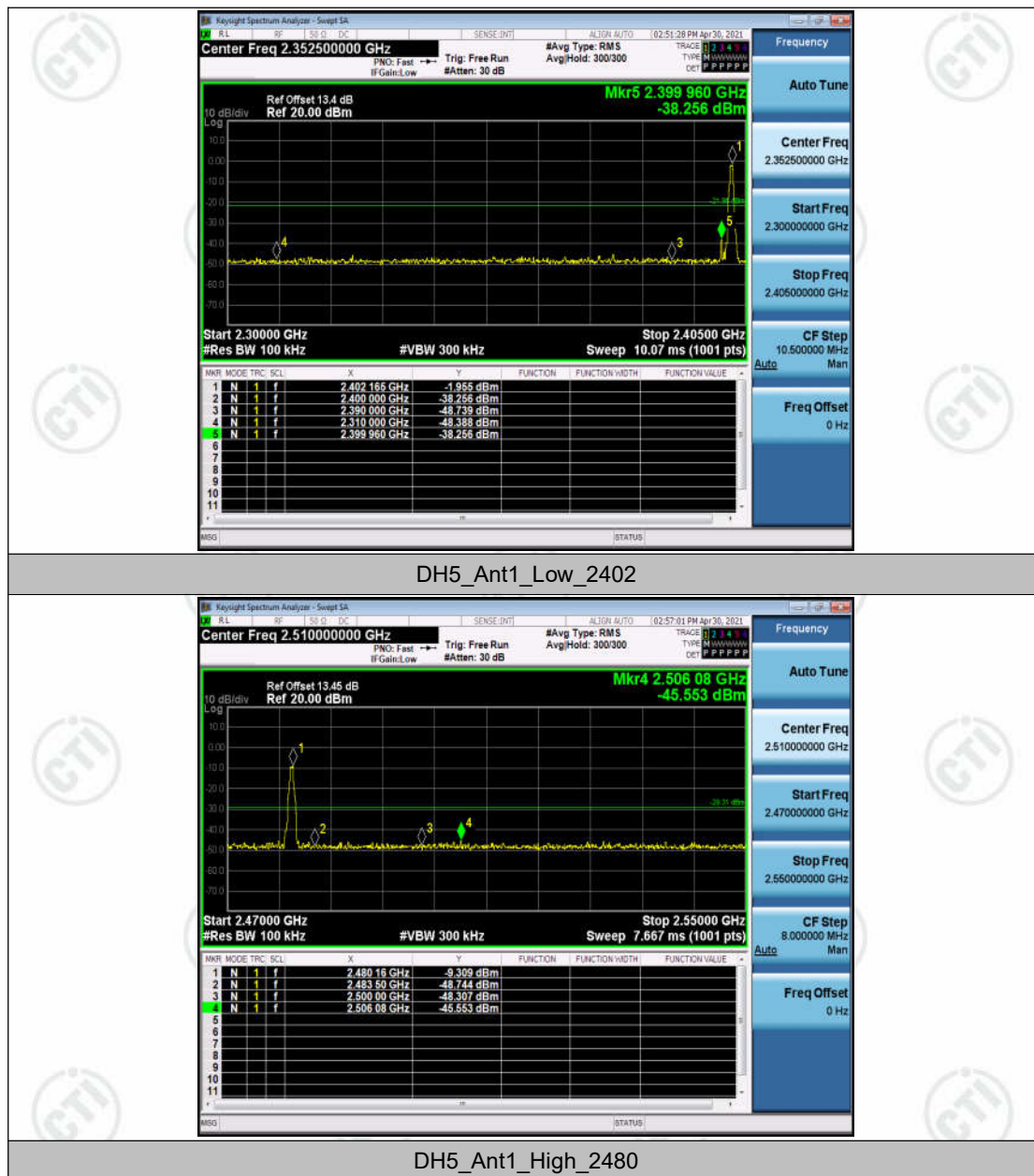


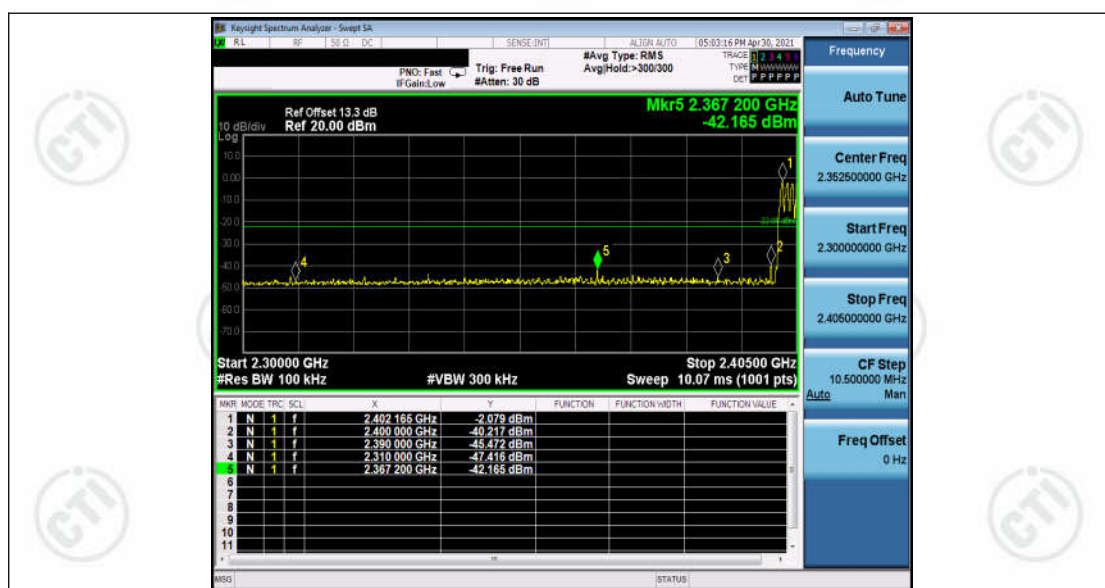
Appendix G: Band edge measurements

Test Result

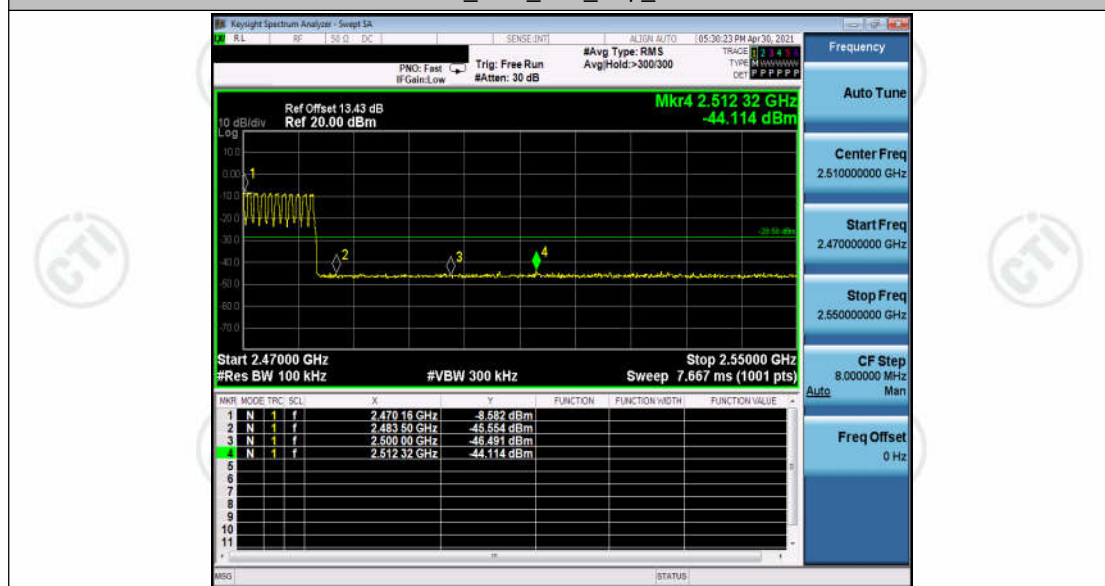
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.96	-38.26	<=-21.96	PASS
		High	2480	-9.31	-45.55	<=-29.31	PASS
		Low	Hop_2402	-2.08	-42.17	<=-22.08	PASS
		High	Hop_2480	-8.58	-44.11	<=-28.58	PASS
2DH5	Ant1	Low	2402	-2.23	-38.46	<=-22.23	PASS
		High	2480	-9.37	-45.85	<=-29.37	PASS
		Low	Hop_2402	-3.13	-43.78	<=-23.13	PASS
		High	Hop_2480	-8.77	-43.95	<=-28.77	PASS
3DH5	Ant1	Low	2402	-2.07	-39.08	<=-22.07	PASS
		High	2480	-9.18	-45.23	<=-29.18	PASS
		Low	Hop_2402	-2.02	-44.02	<=-22.02	PASS
		High	Hop_2480	-8.69	-44.89	<=-28.69	PASS

Test Graphs

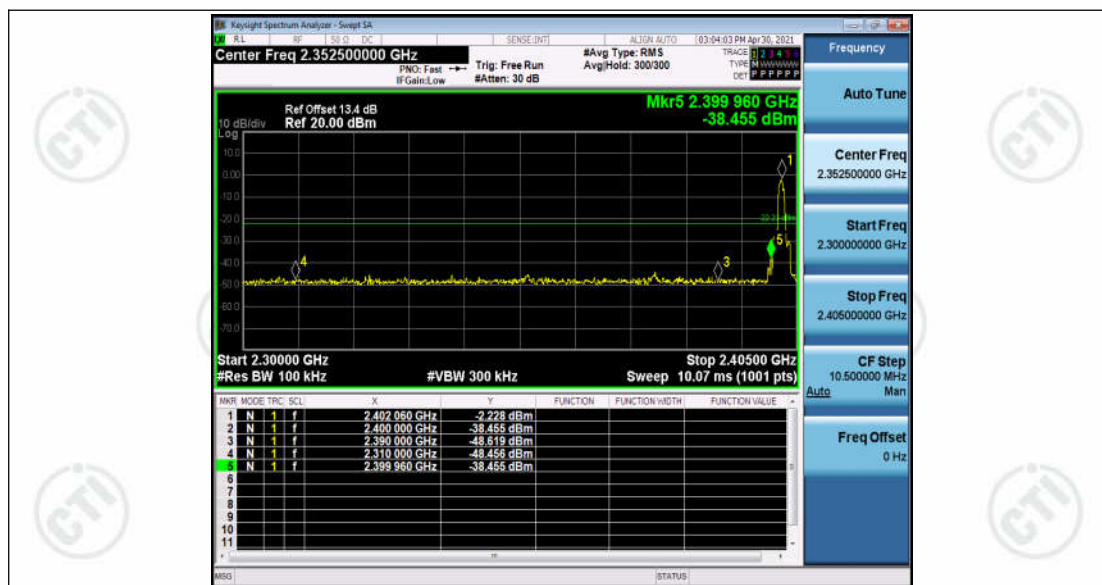




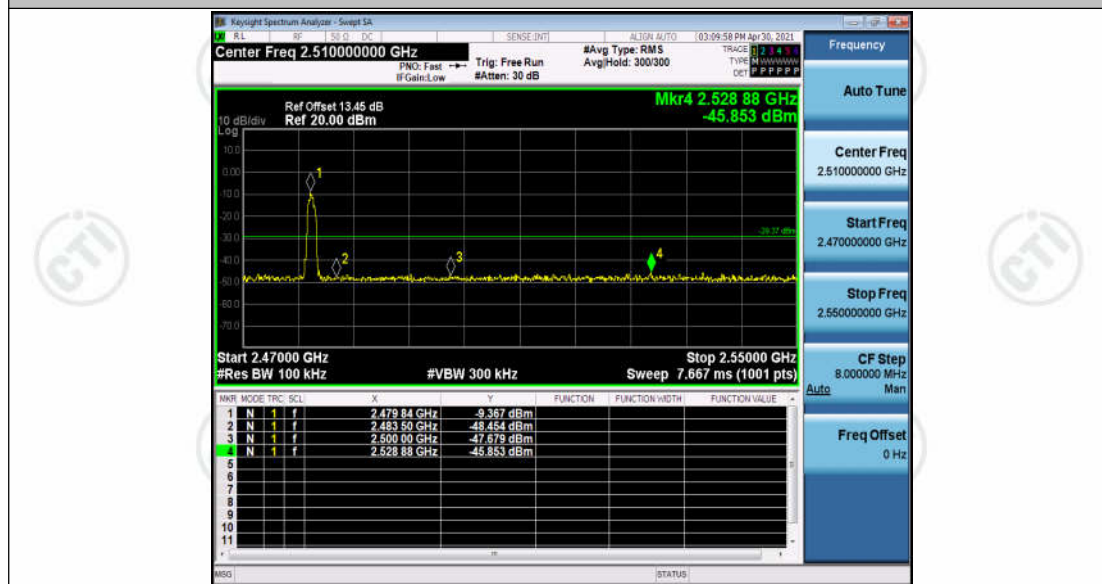
DH5_Ant1_Low_Hop_2402



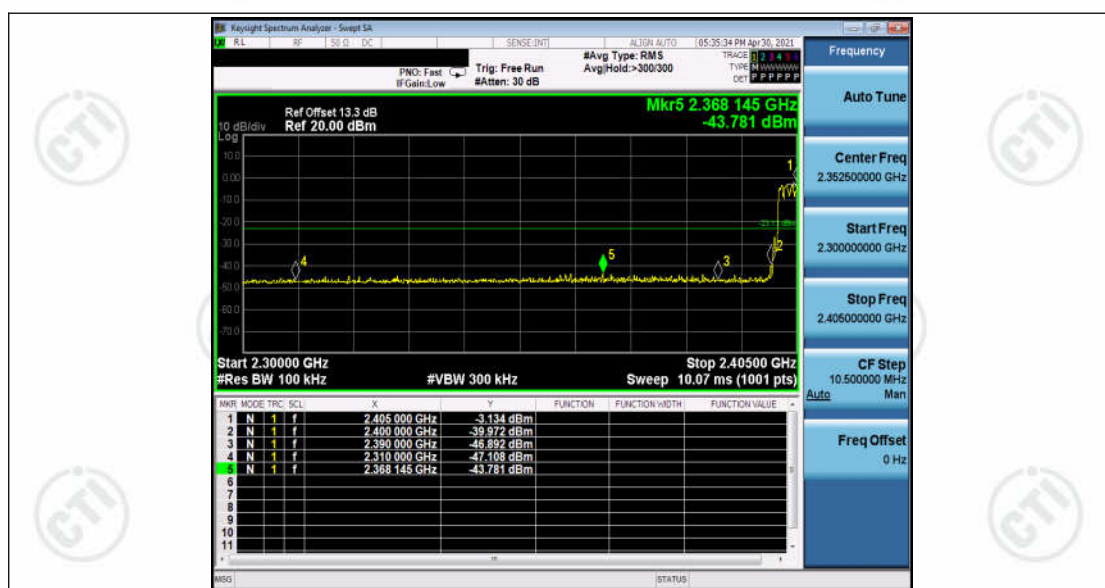
DH5_Ant1_High_Hop_2480



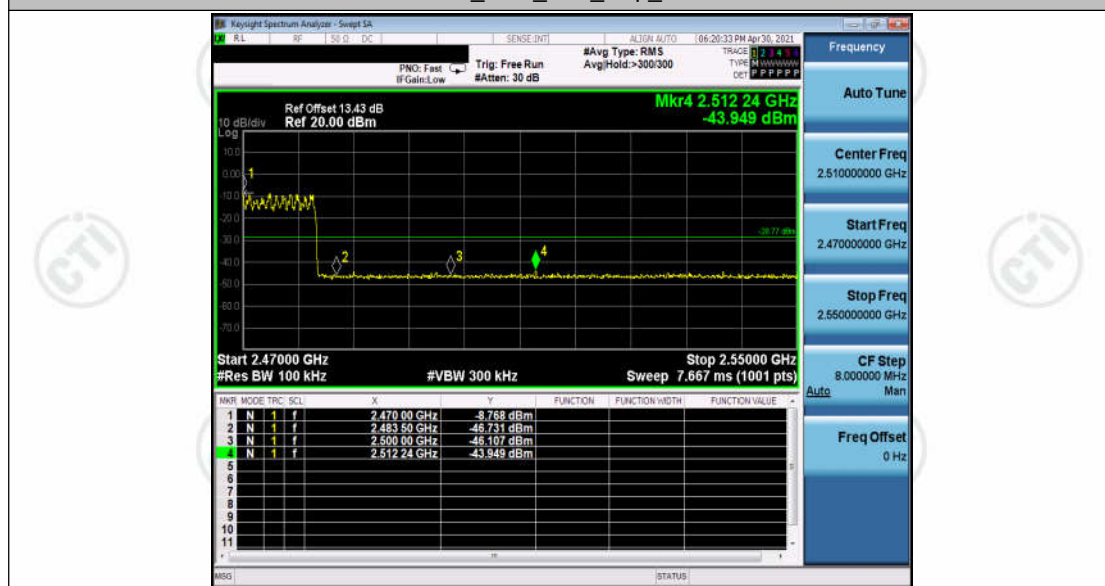
2DH5_Ant1_Low_2402



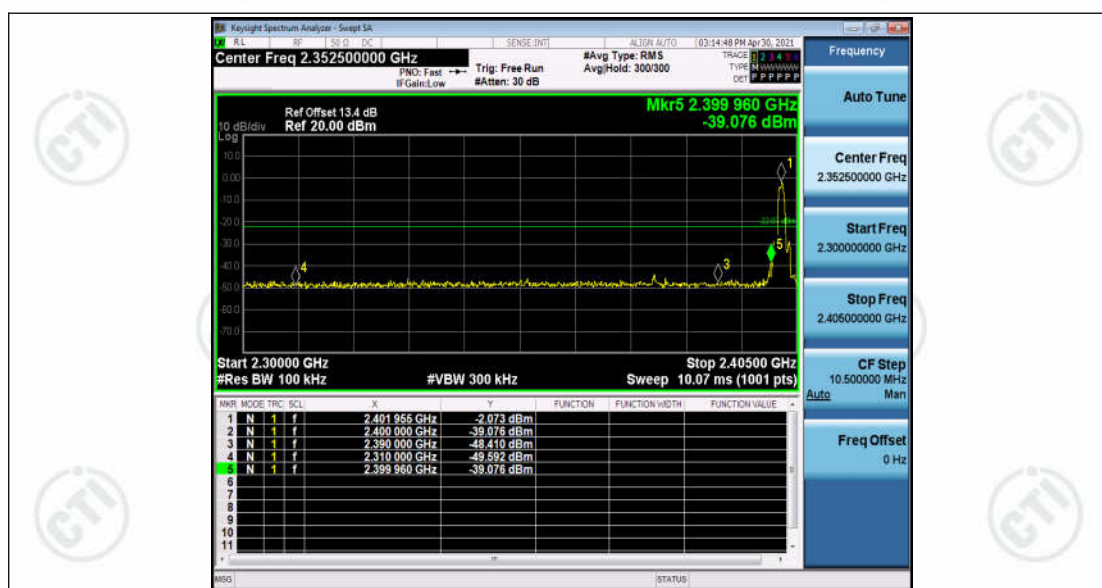
2DH5_Ant1_High_2480



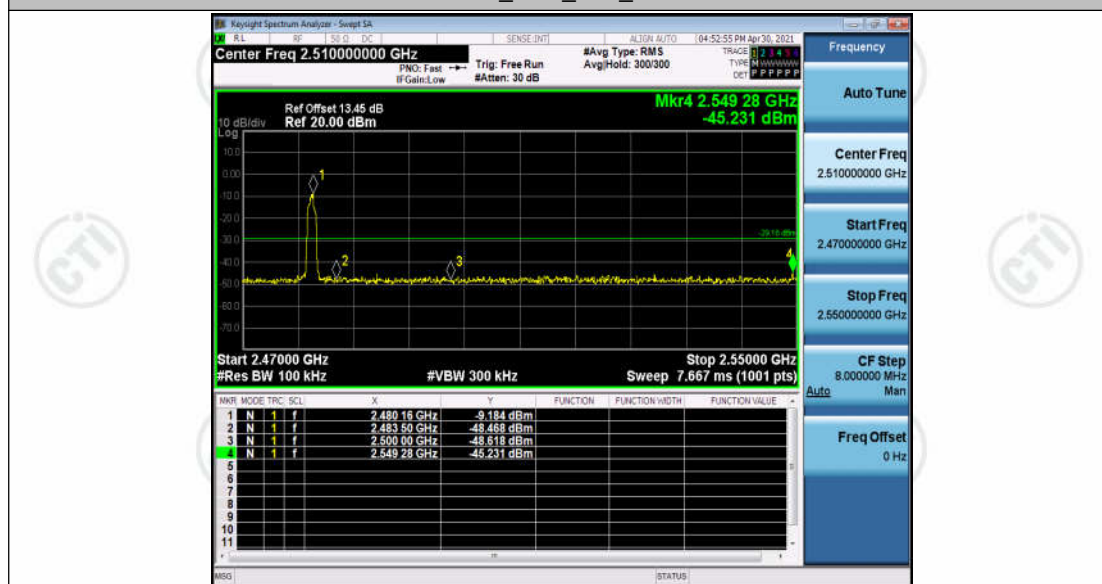
2DH5_Ant1_Low_Hop_2402



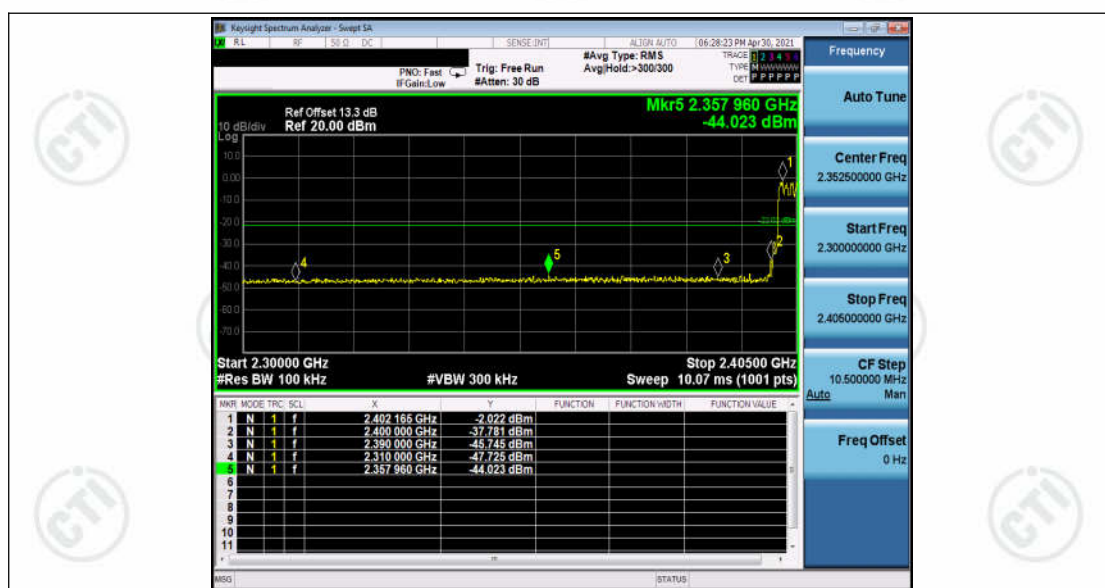
2DH5_Ant1_High_Hop_2480



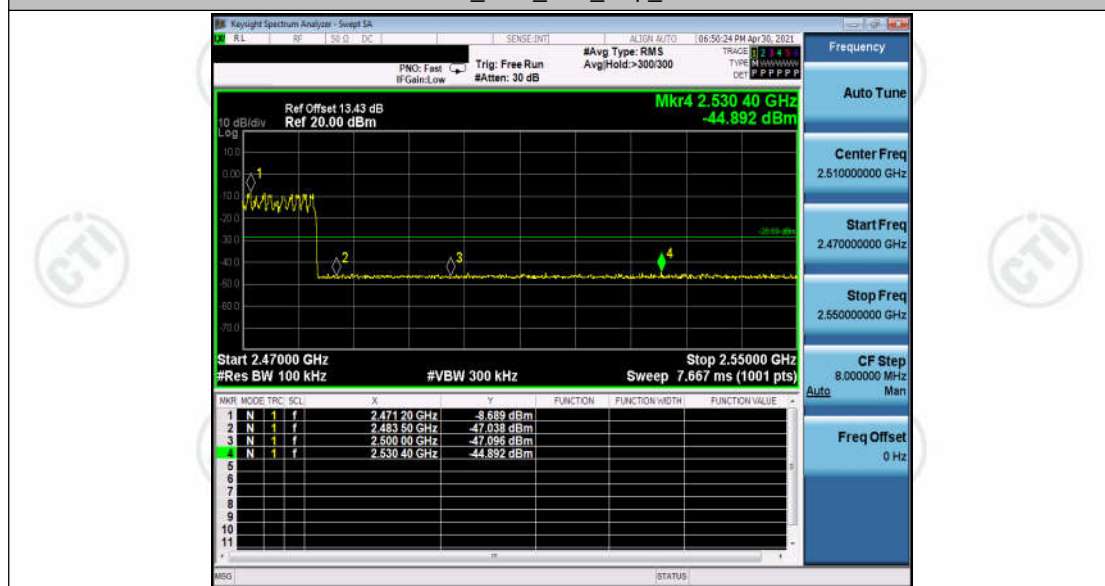
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

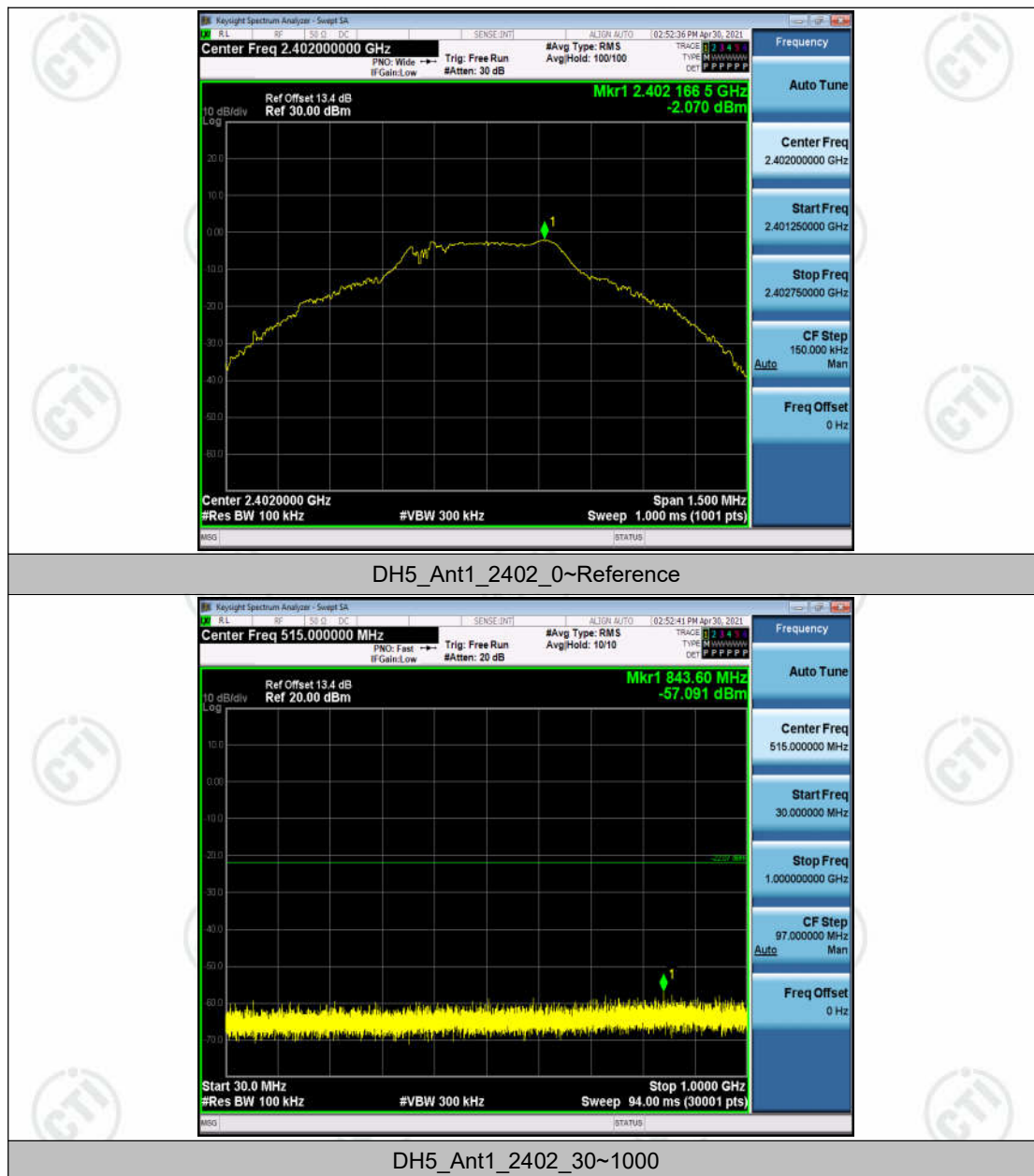
Appendix H: Conducted Spurious Emission

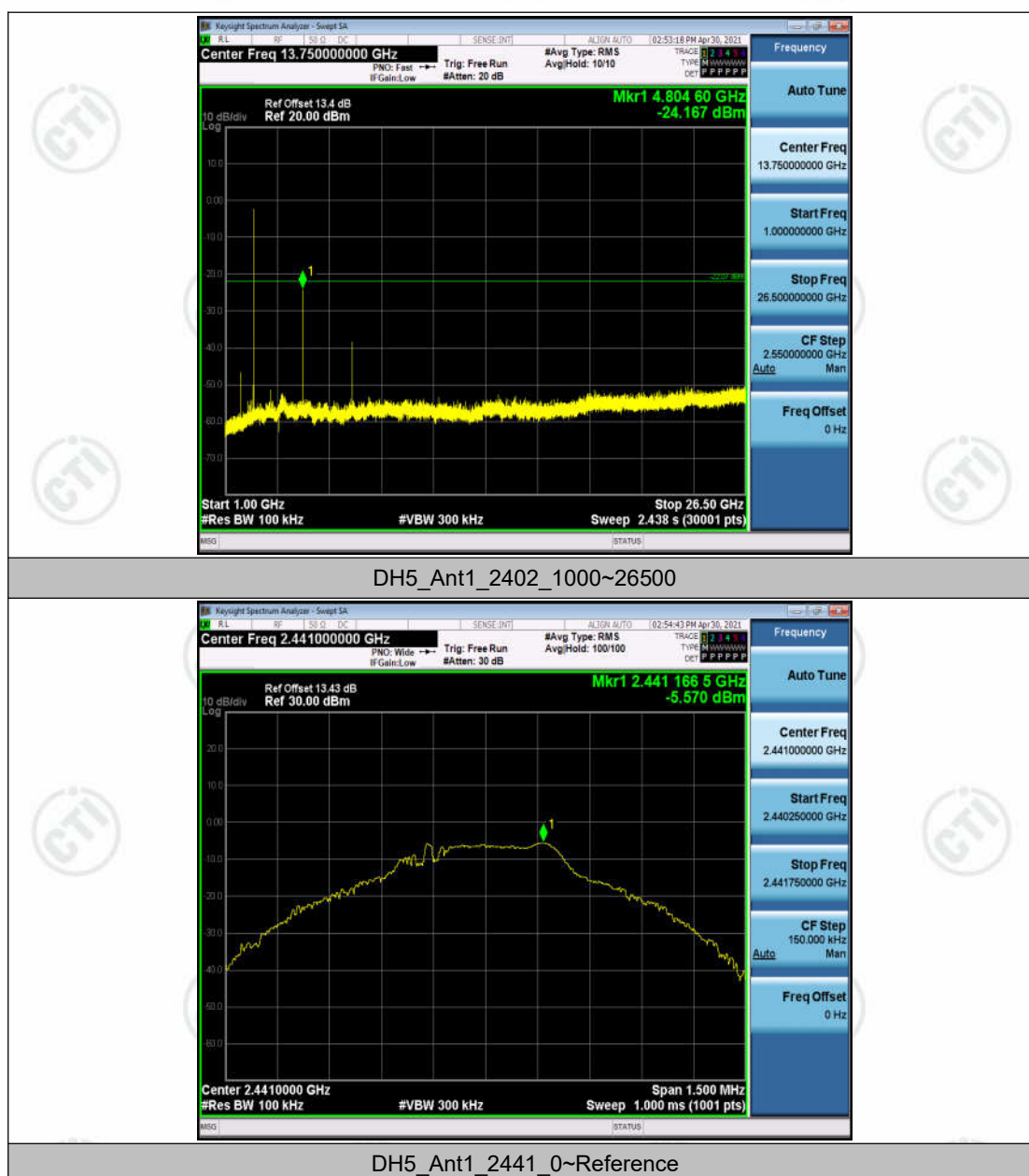
Test Result

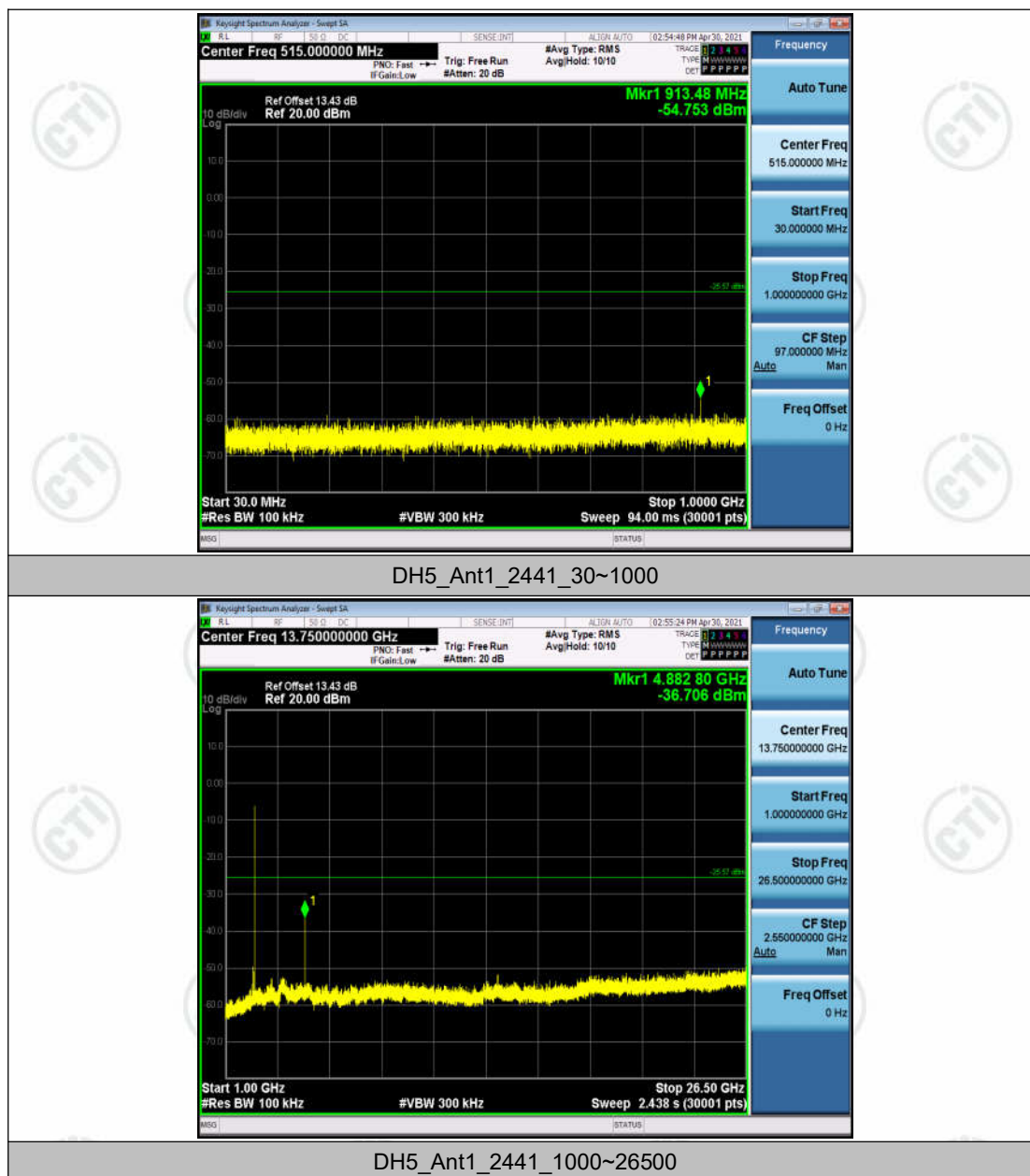
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-2.07	-2.07	---	PASS
			30~1000	30~1000	-57.091	<=-22.07	PASS
			1000~26500	1000~26500	-24.167	<=-22.07	PASS
		2441	Reference	-5.57	-5.57	---	PASS
			30~1000	30~1000	-54.753	<=-25.57	PASS
			1000~26500	1000~26500	-36.706	<=-25.57	PASS
		2480	Reference	-9.38	-9.38	---	PASS
			30~1000	30~1000	-58.141	<=-29.379	PASS
			1000~26500	1000~26500	-37.565	<=-29.379	PASS
2DH5	Ant1	2402	Reference	-2.86	-2.86	---	PASS
			30~1000	30~1000	-57.693	<=-22.861	PASS
			1000~26500	1000~26500	-27.402	<=-22.861	PASS
		2441	Reference	-5.58	-5.58	---	PASS
			30~1000	30~1000	-54.95	<=-25.578	PASS
			1000~26500	1000~26500	-41.238	<=-25.578	PASS
		2480	Reference	-10.36	-10.36	---	PASS
			30~1000	30~1000	-57.494	<=-30.362	PASS
			1000~26500	1000~26500	-43.278	<=-30.362	PASS
3DH5	Ant1	2402	Reference	-2.08	-2.08	---	PASS
			30~1000	30~1000	-57.322	<=-22.079	PASS
			1000~26500	1000~26500	-28.256	<=-22.079	PASS
		2441	Reference	-5.78	-5.78	---	PASS
			30~1000	30~1000	-57.35	<=-25.783	PASS

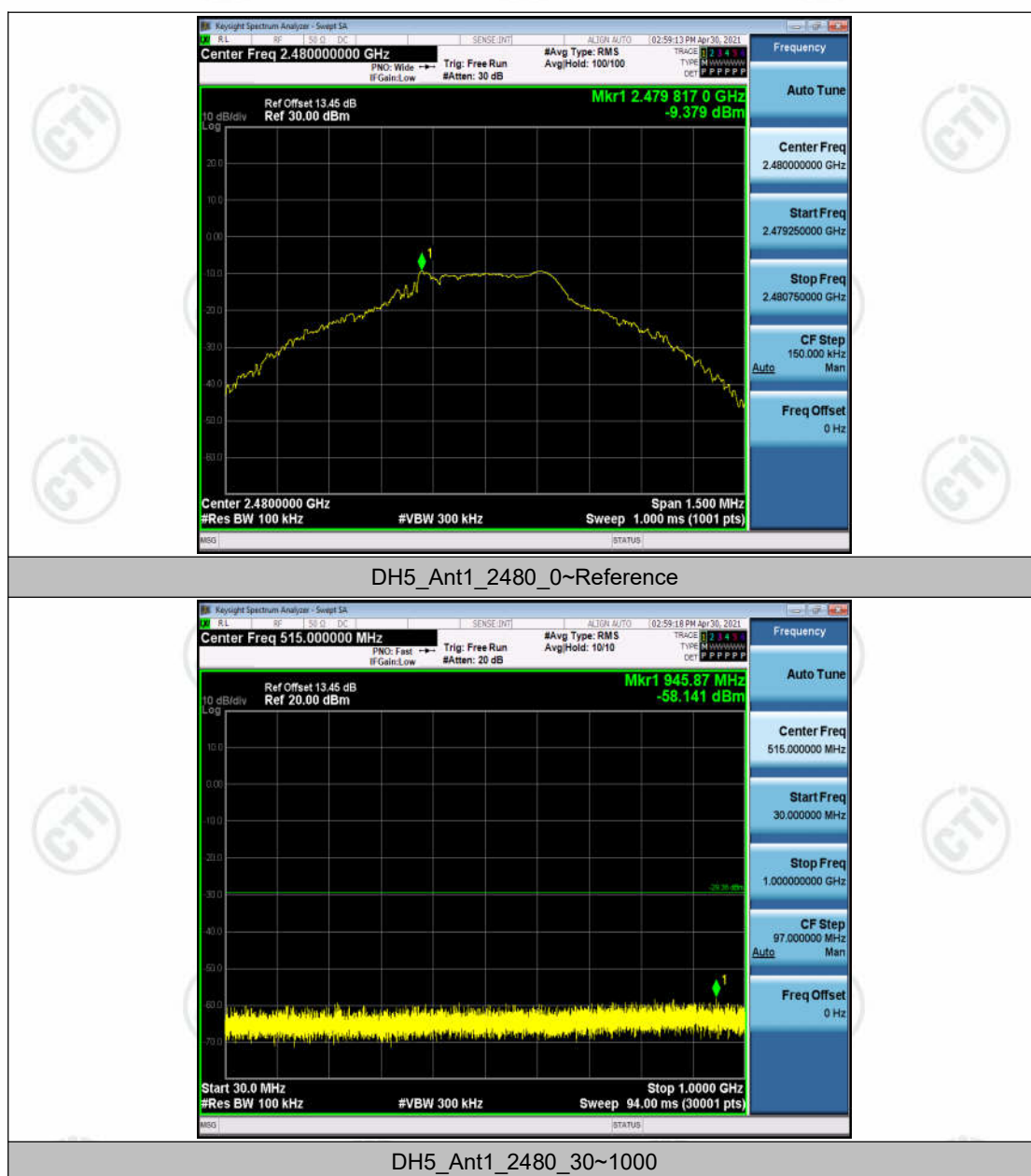
			1000~26500	1000~26500 0	-39.703	<=-25.78 3	PASS
			Reference	-9.44	-9.44	---	PASS
		2480	30~1000	30~1000	-53.546	<=-29.44 4	PASS
			1000~26500	1000~26500 0	-42.941	<=-29.44 4	PASS

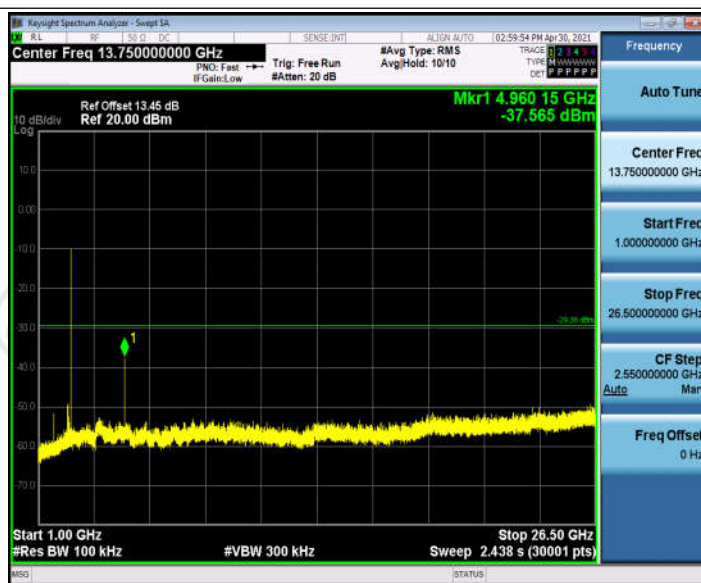
Test Graphs







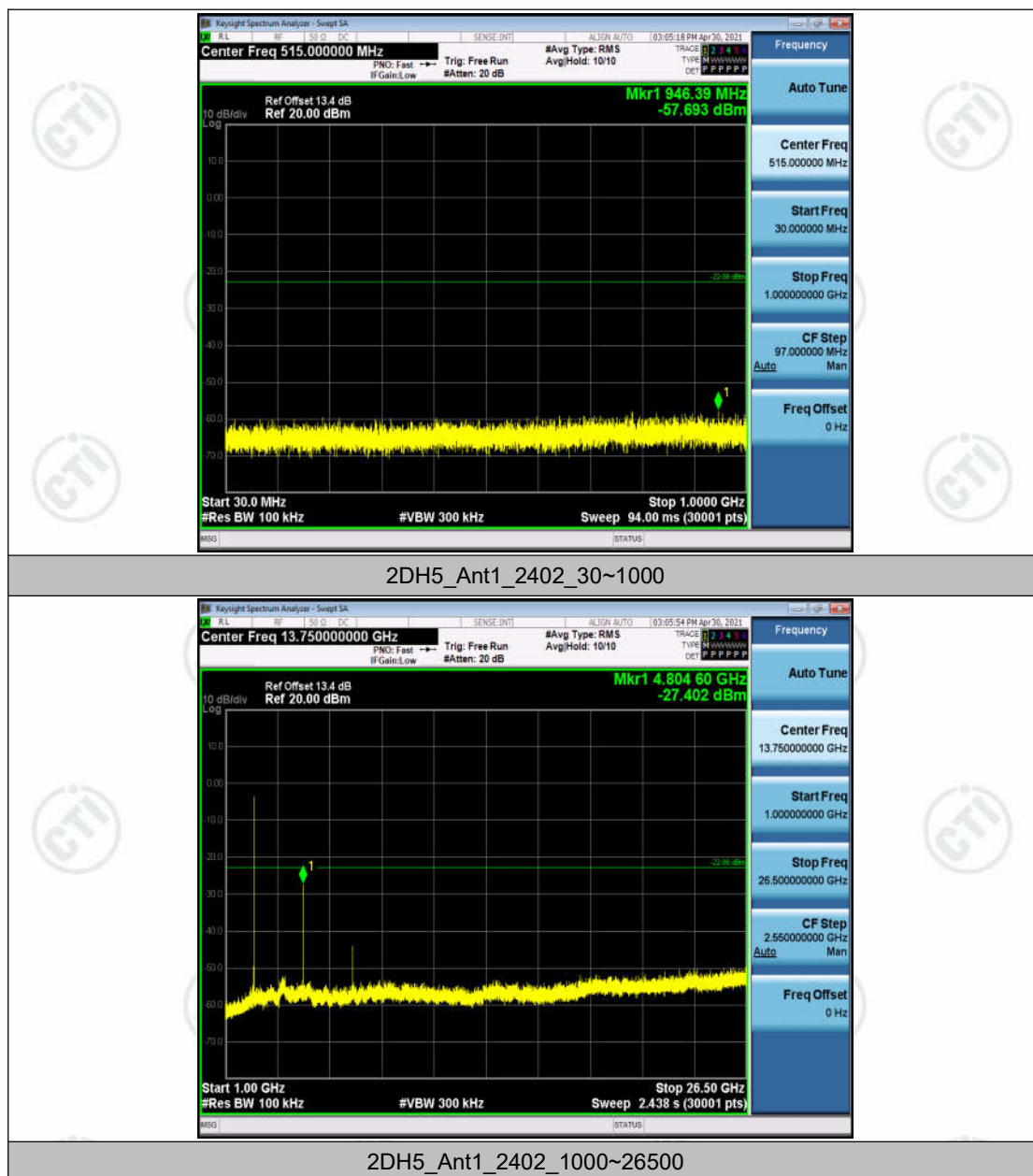


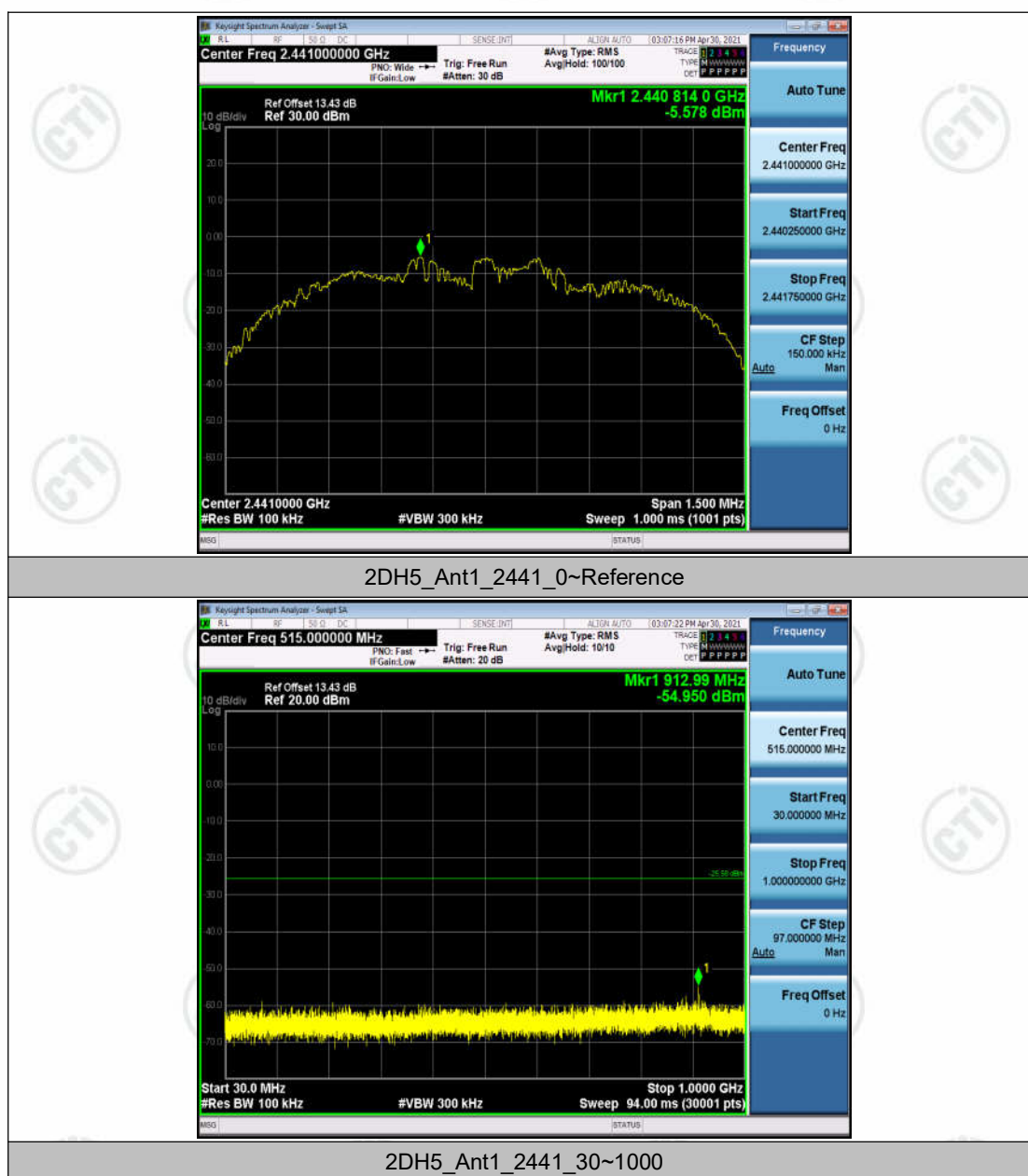


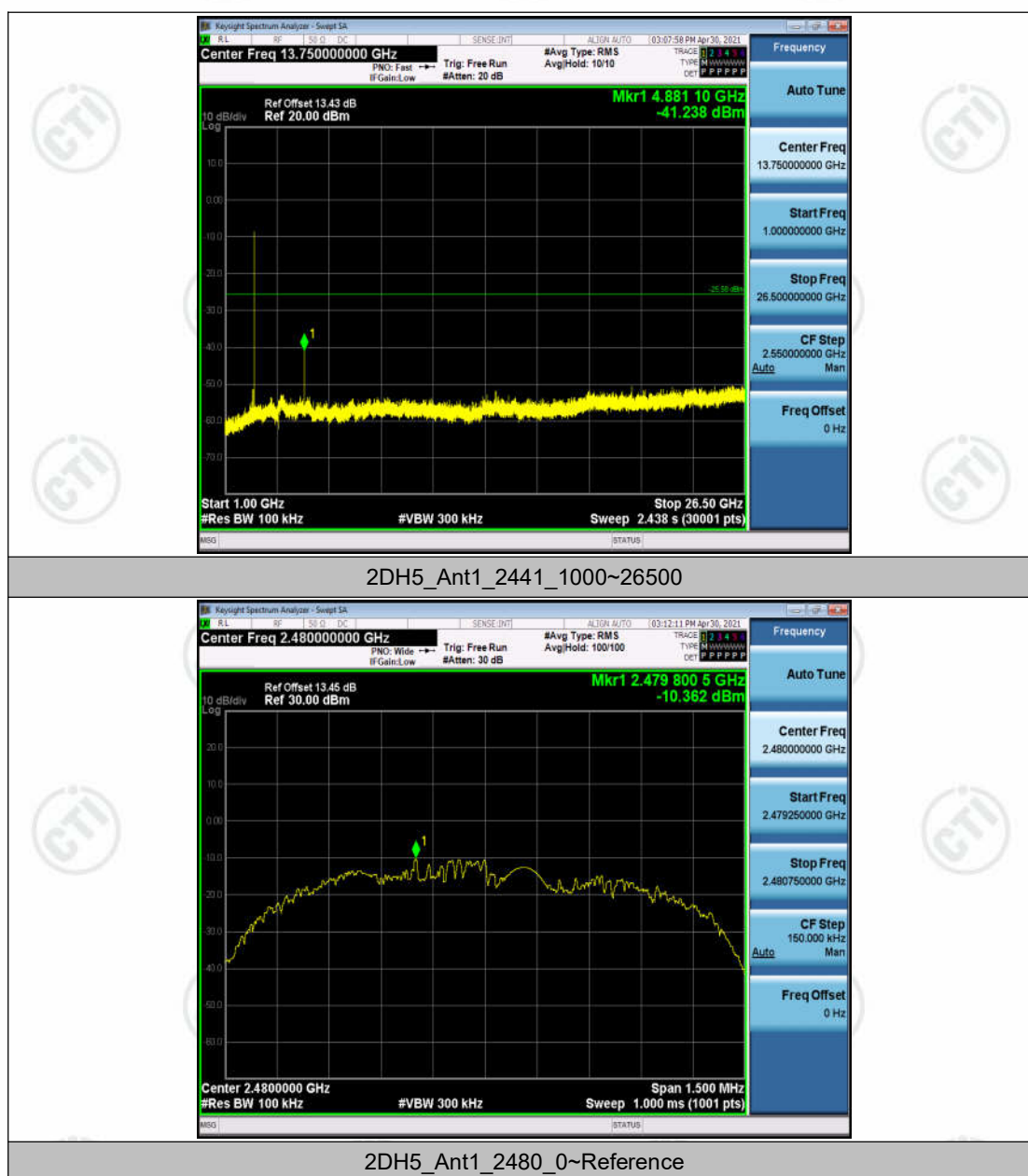
DH5_Ant1_2480_1000~26500

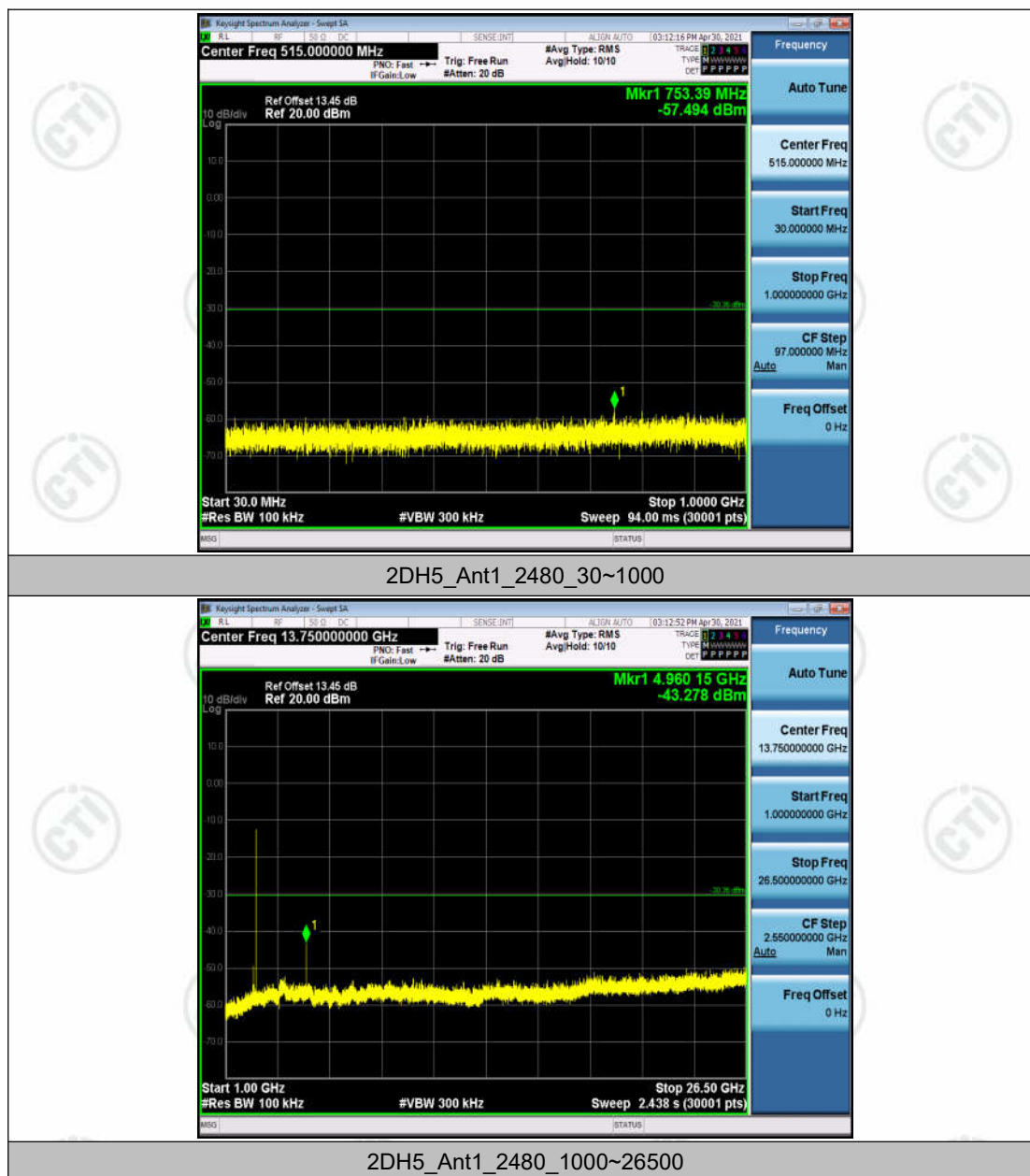


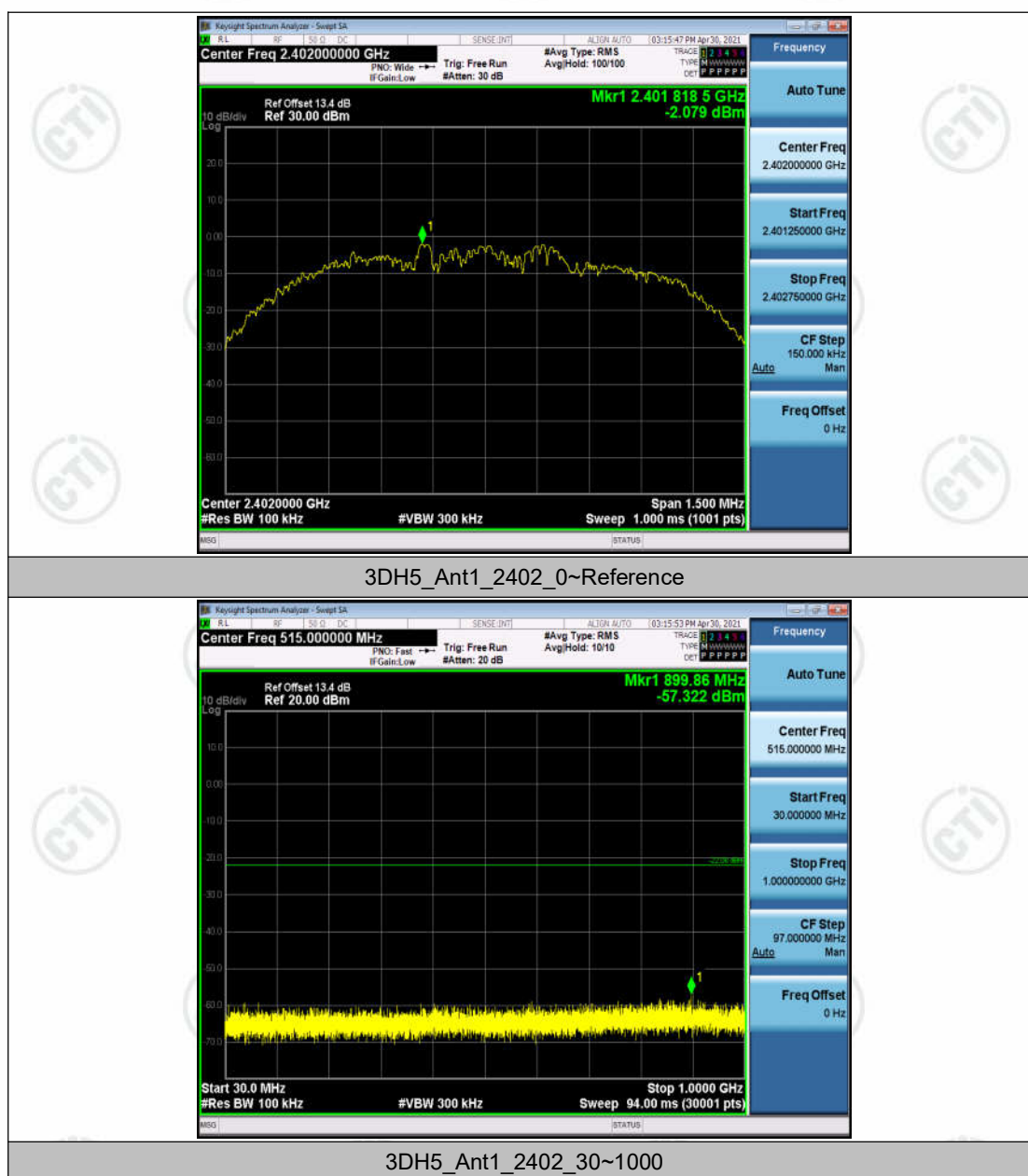
2DH5_Ant1_2402_0~Reference

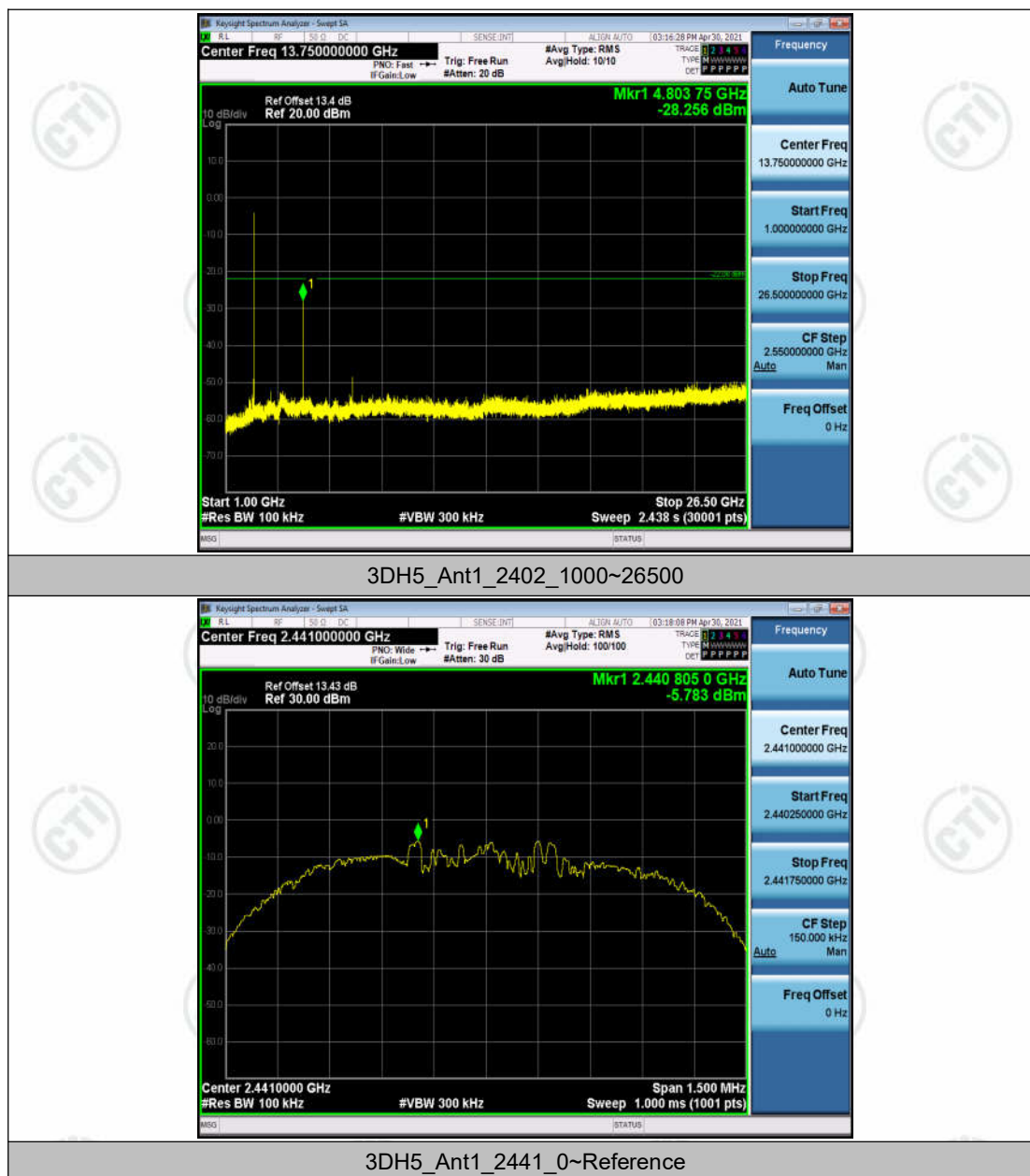


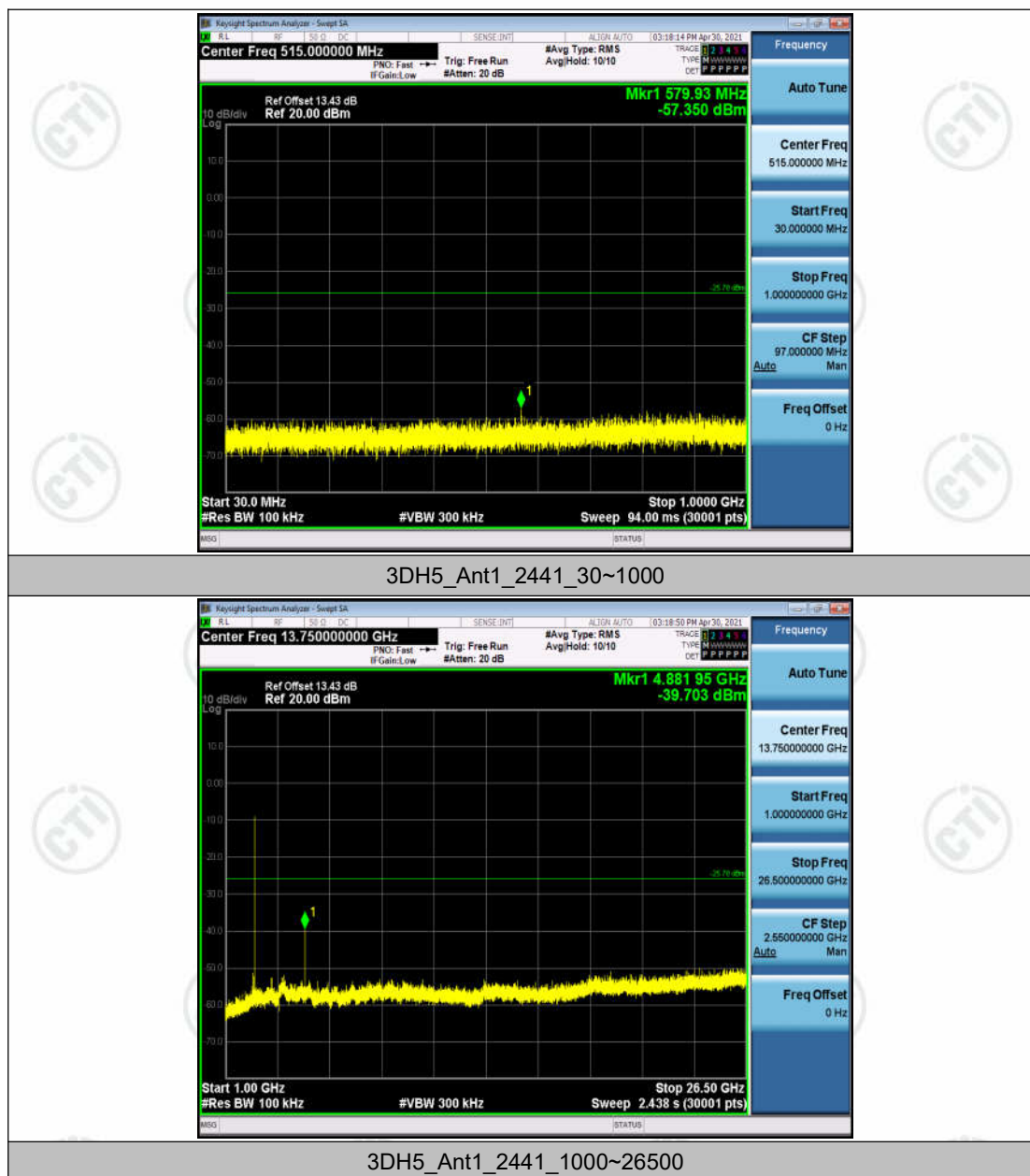


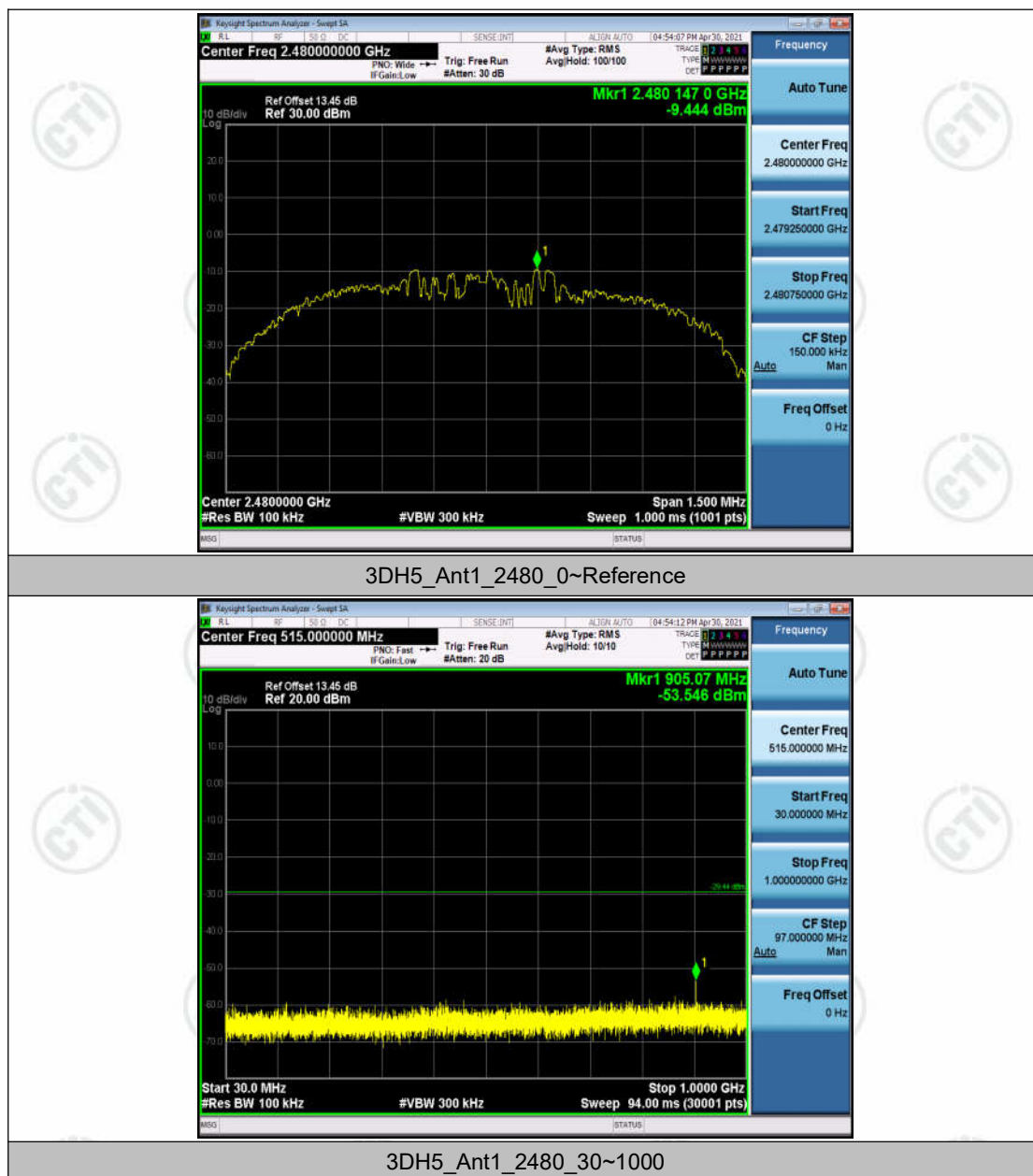


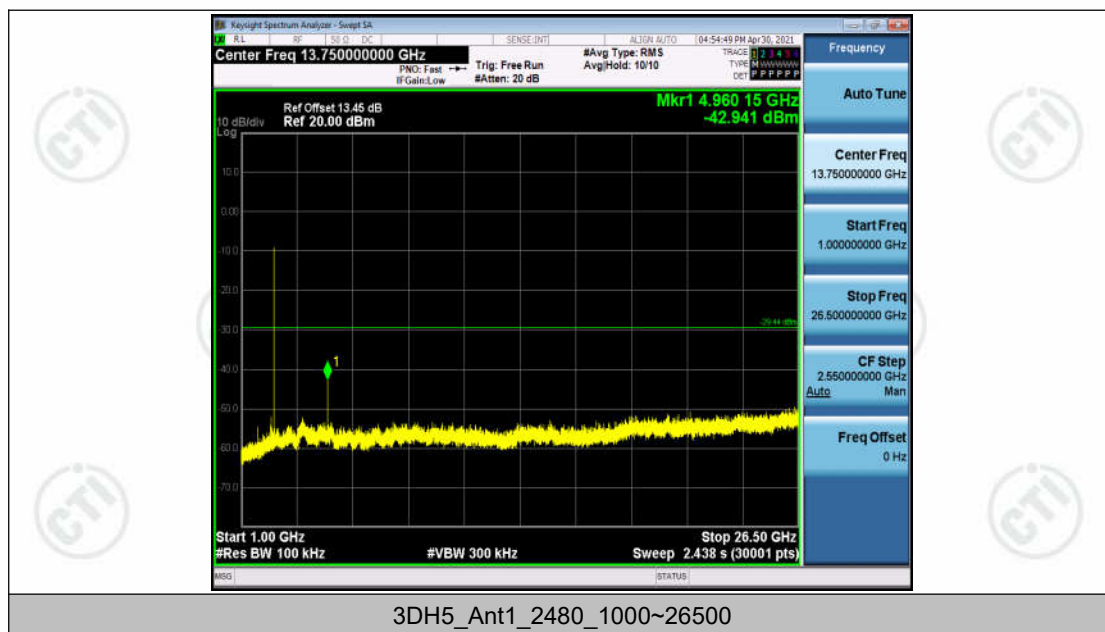










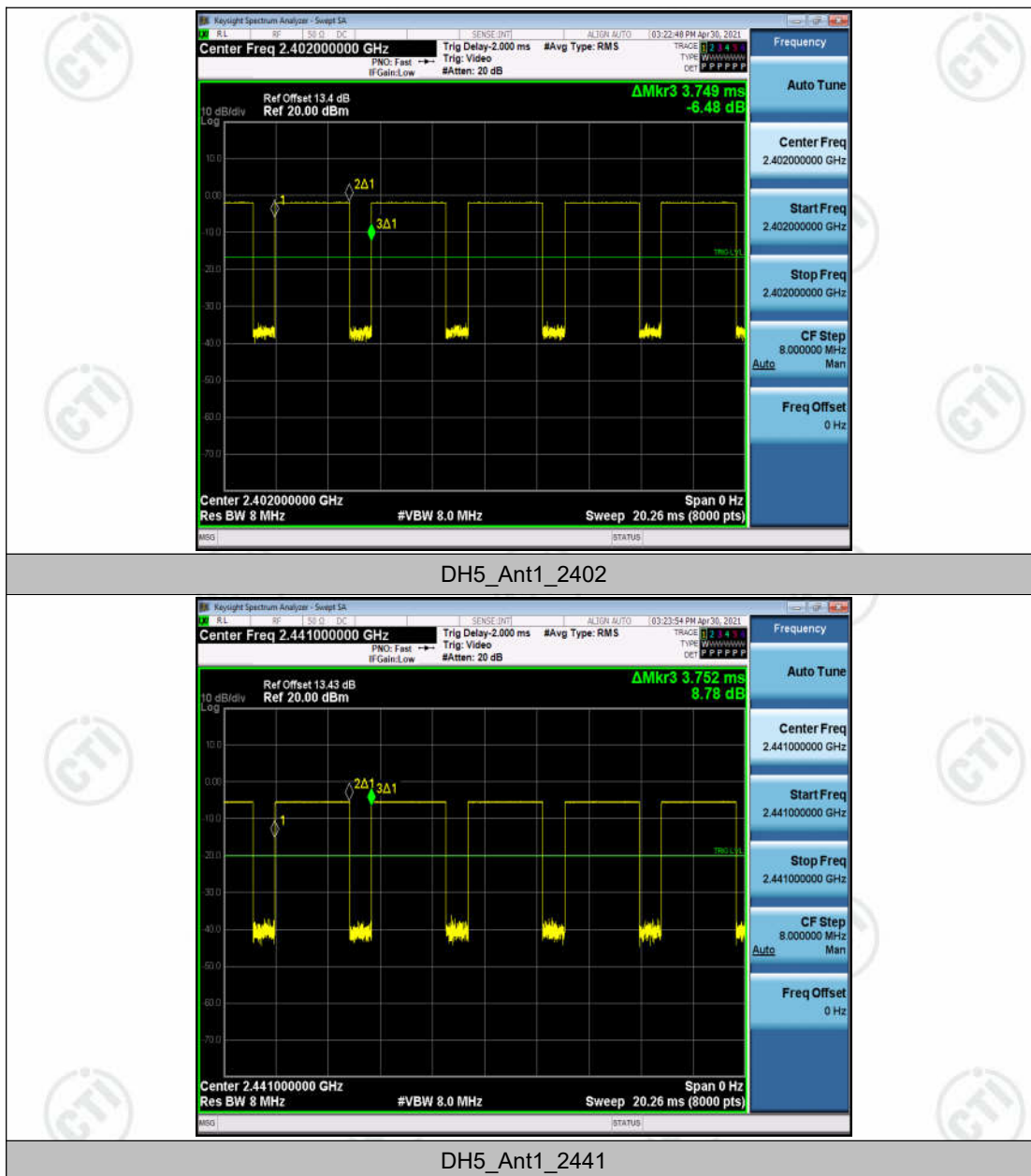


Appendix I: Duty Cycle

Test Result

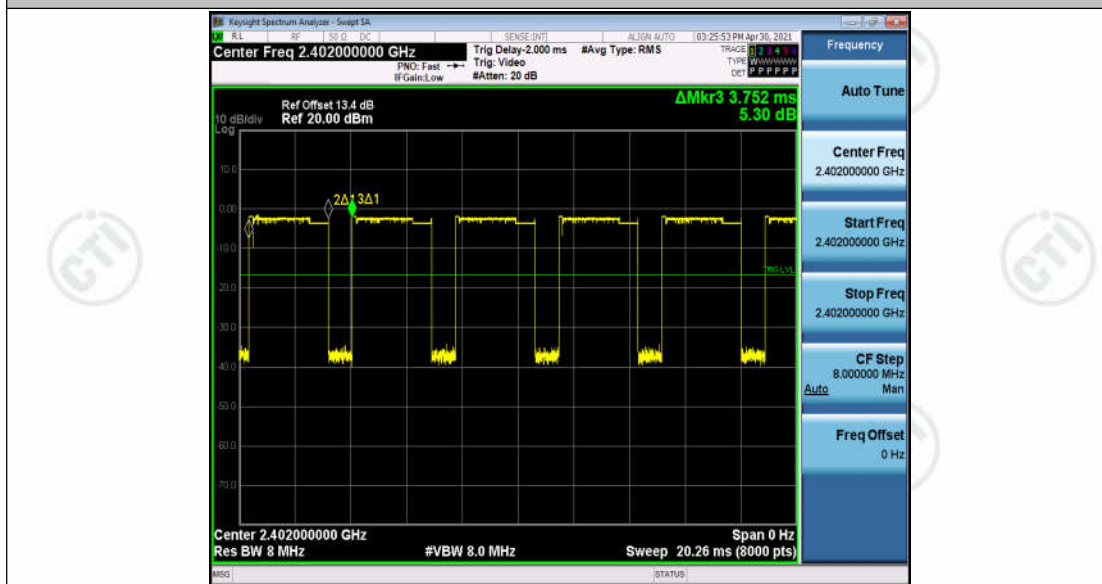
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.89	3.75	77.03	---	PASS
		2441	2.89	3.75	76.98	---	PASS
		2480	2.89	3.75	77.03	---	PASS
2DH5	Ant1	2402	2.88	3.75	76.84	---	PASS
		2441	2.88	3.75	76.89	---	PASS
		2480	2.88	3.75	76.89	---	PASS
3DH5	Ant1	2402	2.88	3.75	76.89	---	PASS
		2441	2.89	3.75	76.91	---	PASS
		2480	2.88	3.75	76.89	---	PASS

Test Graphs

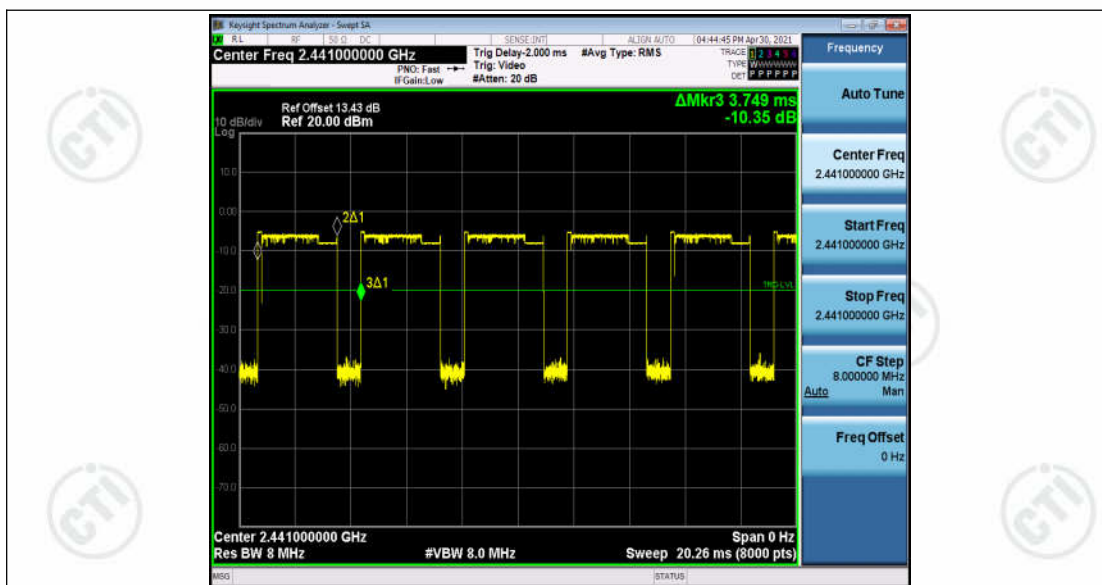




DH5_Ant1_2480



2DH5_Ant1_2402



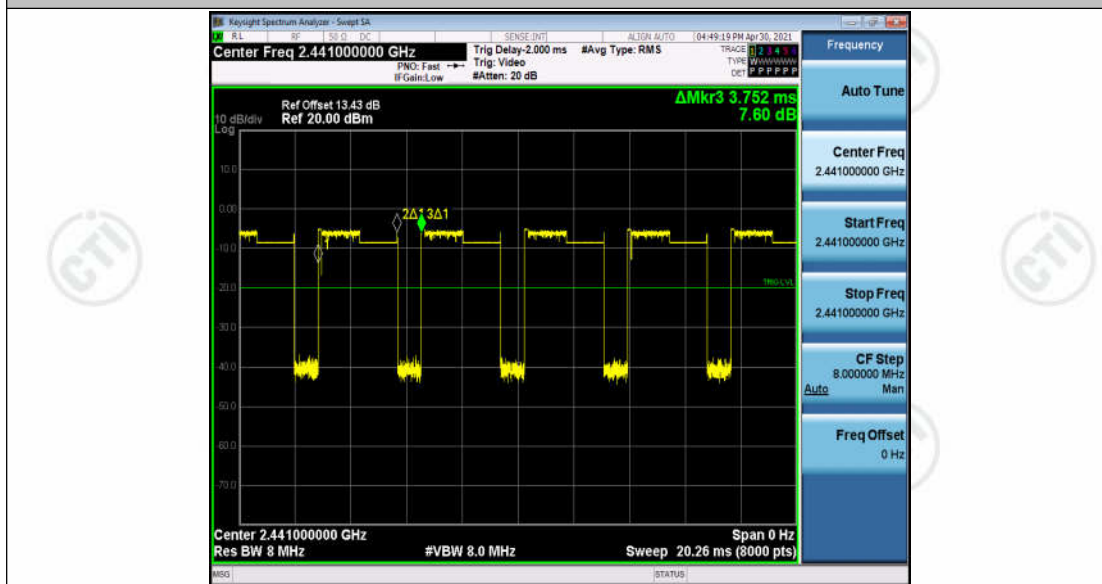
2DH5_Ant1_2441



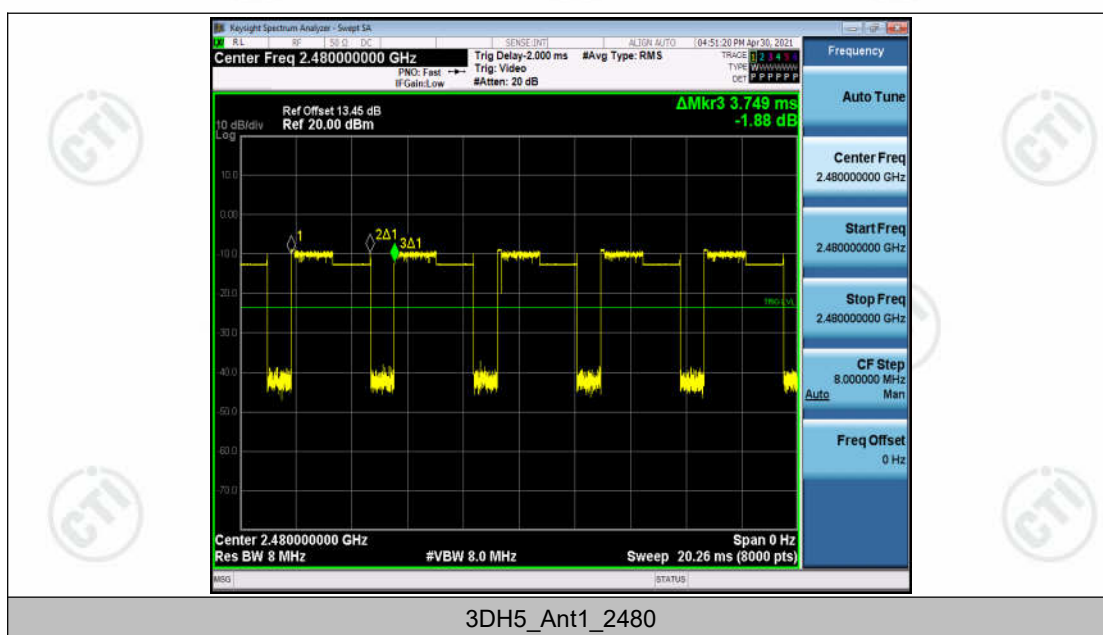
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



*** End of Report ***