

Appendix: Bluetooth Classic

Contents

Contents.....	2
AppendixA: 20dB Emission Bandwidth.....	3
Test Result.....	3
Test Graphs.....	4
AppendixB: Occupied Channel Bandwidth.....	9
Test Result.....	9
Test Graphs.....	10
AppendixC: Maximum conducted output power.....	15
Test Result.....	15
Test Graphs.....	16
AppendixD: Carrier frequency separation.....	21
Test Result.....	21
Test Graphs.....	22
AppendixE: Time of occupancy.....	27
Test Result.....	27
Test Graphs.....	28
AppendixF: Number of hopping channels.....	37
Test Result.....	37
Test Graphs.....	38
AppendixG: Band edge measurements.....	40
Test Result.....	40
Test Graphs.....	41
AppendixH: Conducted Spurious Emission.....	47
Test Result.....	47
Test Graphs.....	48
AppendixI: Duty Cycle.....	62
Test Result.....	62
Test Graphs.....	63

AppendixA: 20dBEmission Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.942	2401.511	2402.453	---	PASS
		2441	0.945	2440.511	2441.456	---	PASS
		2480	0.948	2479.508	2480.456	---	PASS
2DH5	Ant1	2402	1.338	2401.307	2402.645	---	PASS
		2441	1.260	2440.340	2441.600	---	PASS
		2480	1.320	2479.310	2480.630	---	PASS
3DH5	Ant1	2402	1.317	2401.304	2402.621	---	PASS
		2441	1.338	2440.298	2441.636	---	PASS
		2480	1.284	2479.340	2480.624	---	PASS

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



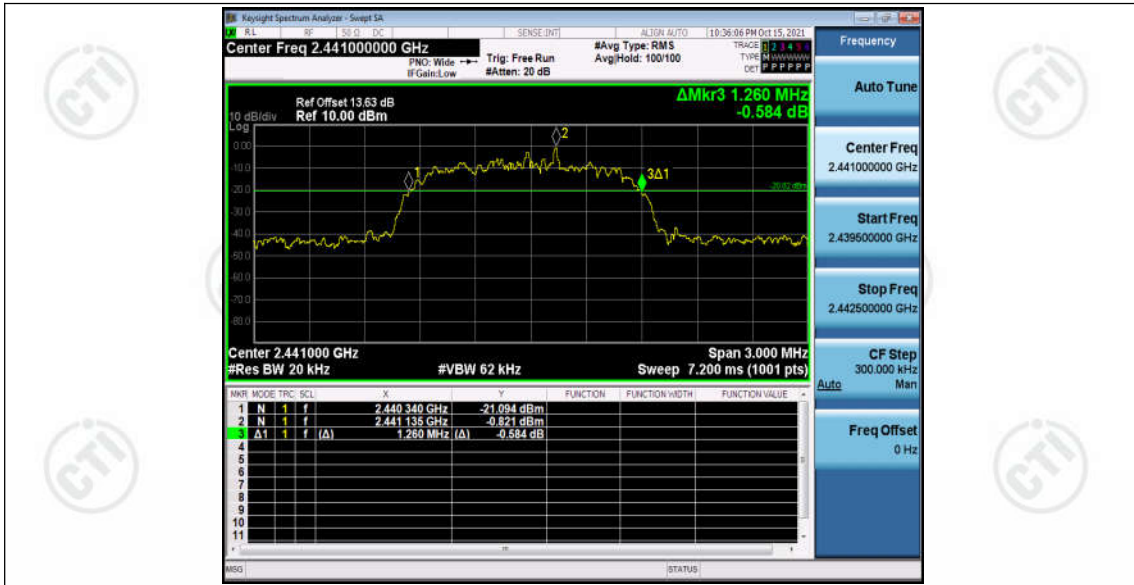
DH5_Ant1_2480



2DH5_Ant1_2402



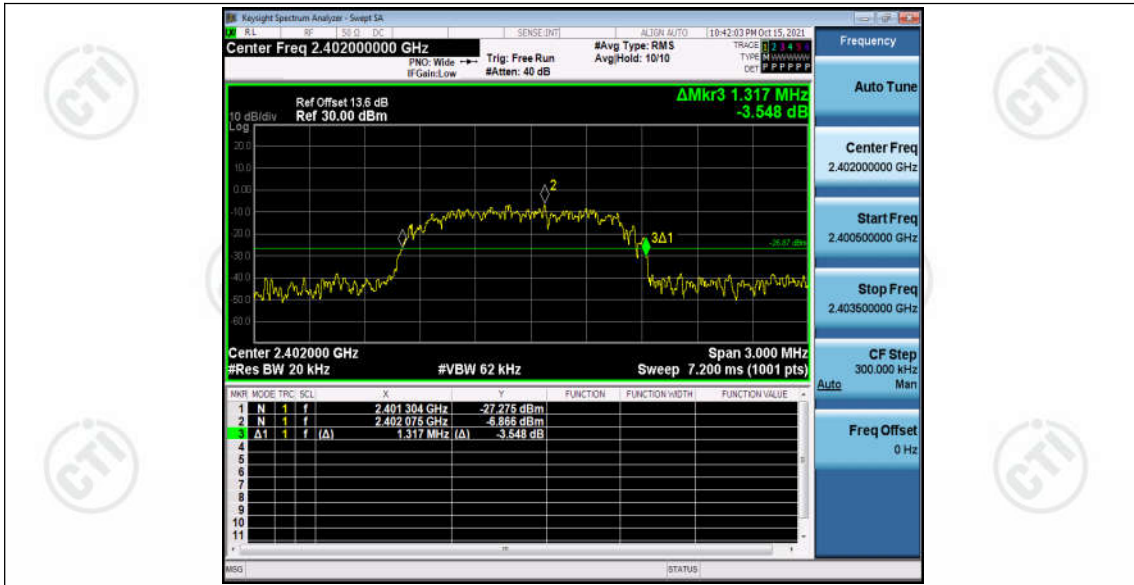
2DH5_Ant1_2441



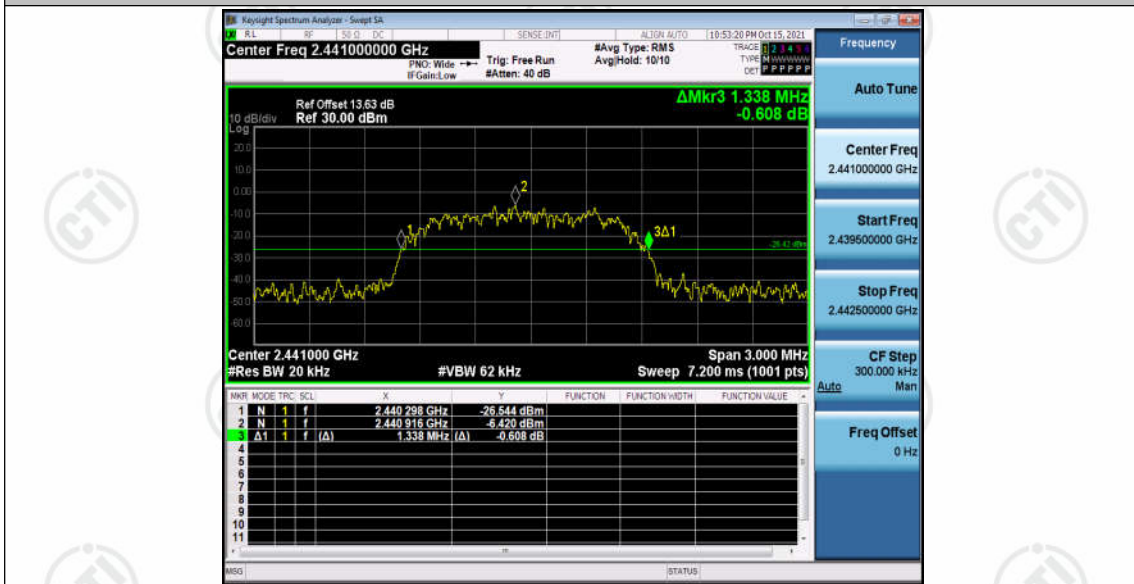
2DH5_Ant1_2480



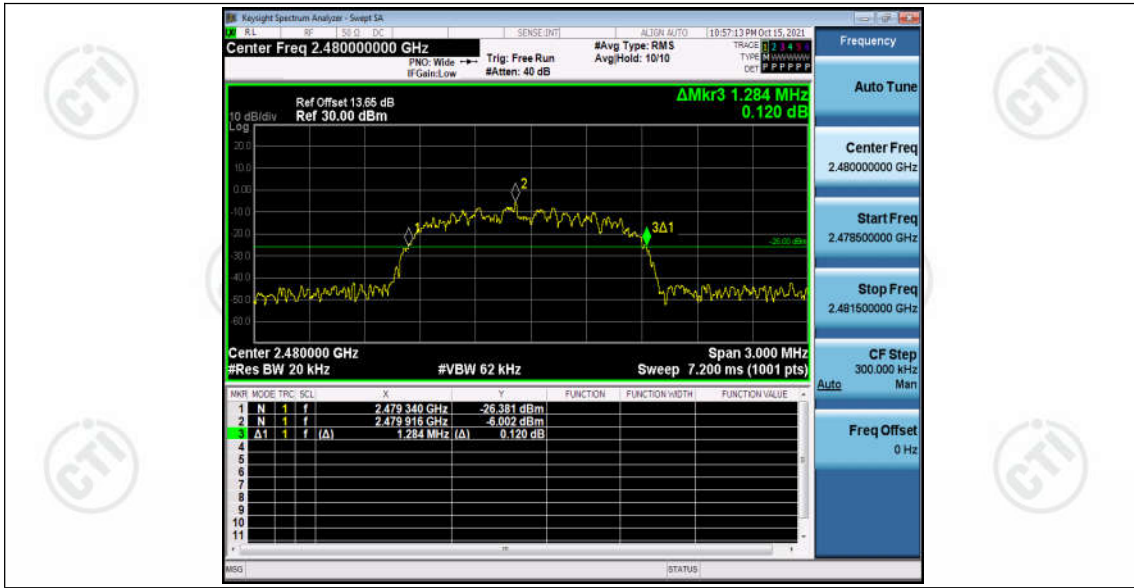
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

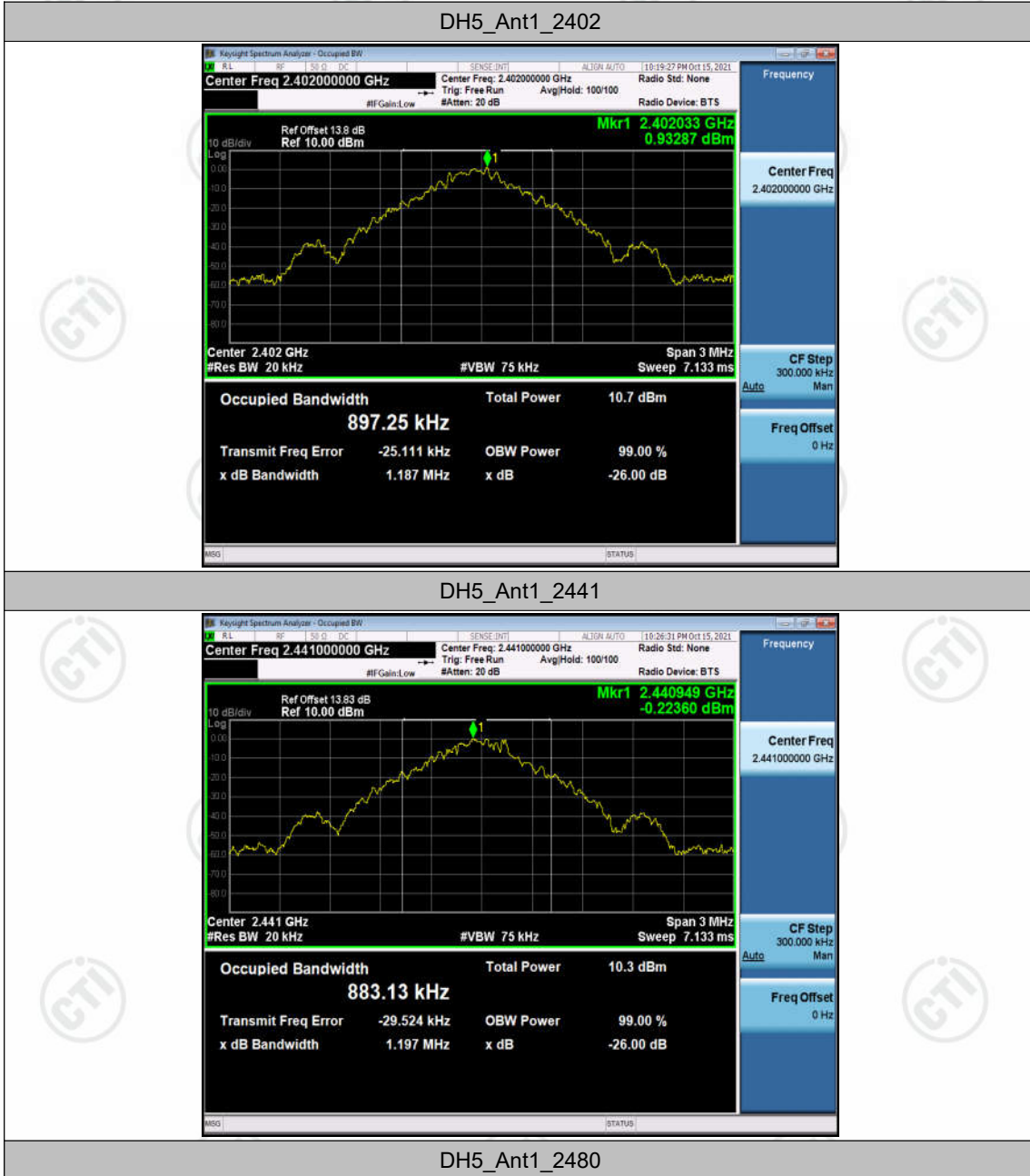


AppendixB: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.89725	2401.52 6	2402.424	---	PASS
		2441	0.88313	2440.52 9	2441.412	---	PASS
		2480	0.89395	2479.52 9	2480.423	---	PASS
2DH5	Ant1	2402	1.1757	2401.38 5	2402.560	---	PASS
		2441	1.1880	2440.37 7	2441.565	---	PASS
		2480	1.1859	2479.37 8	2480.564	---	PASS
3DH5	Ant1	2402	1.1884	2401.39 1	2402.580	---	PASS
		2441	1.1871	2440.38 6	2441.573	---	PASS
		2480	1.2108	2479.36 1	2480.571	---	PASS

Test Graphs

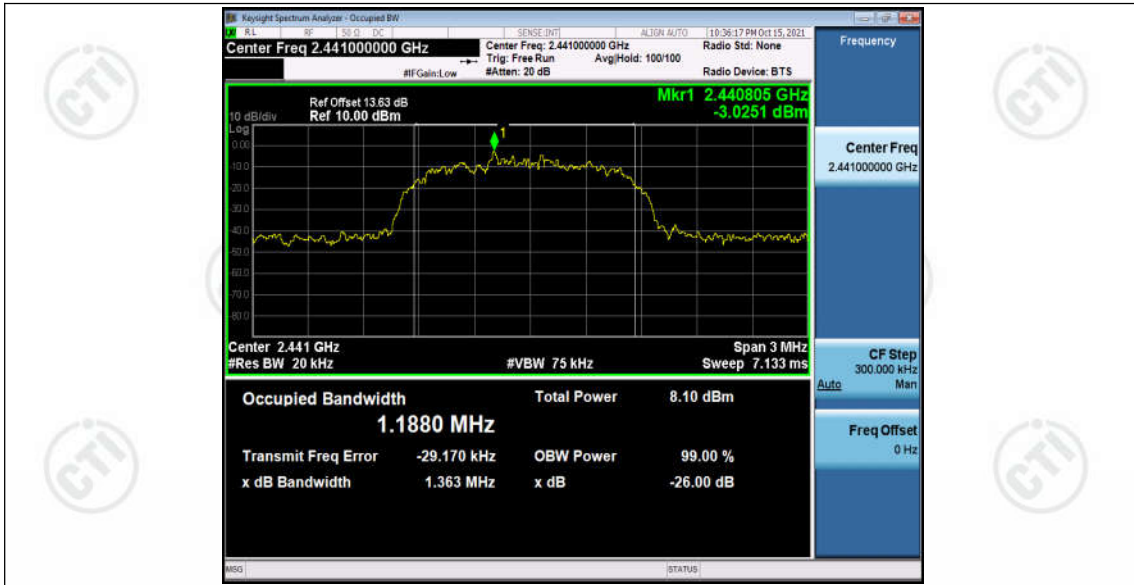




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



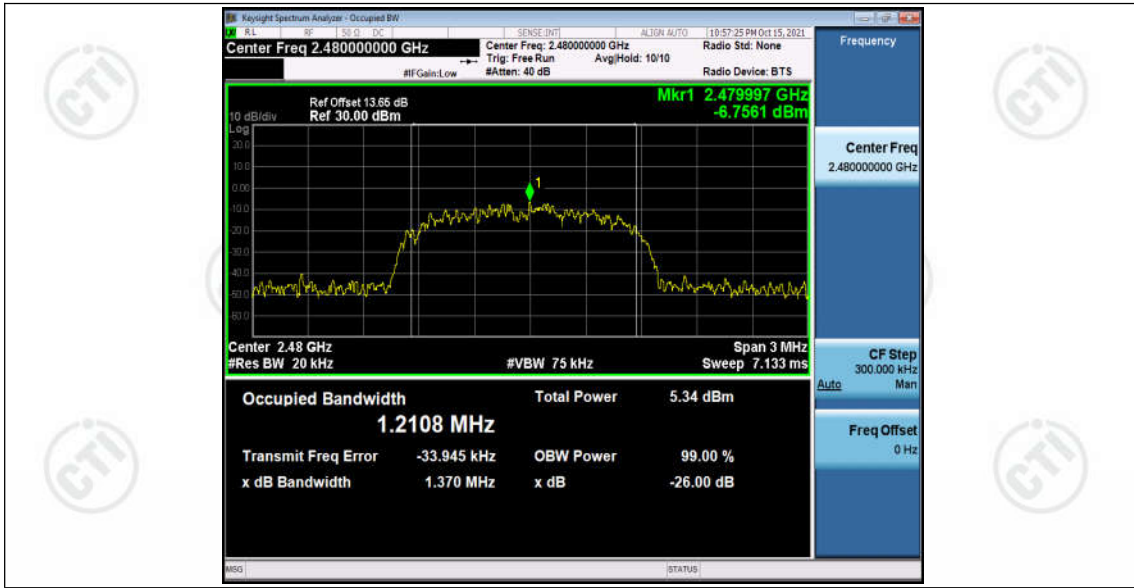
3DH5_Ant1_2402



3DH5_Ant1_2441



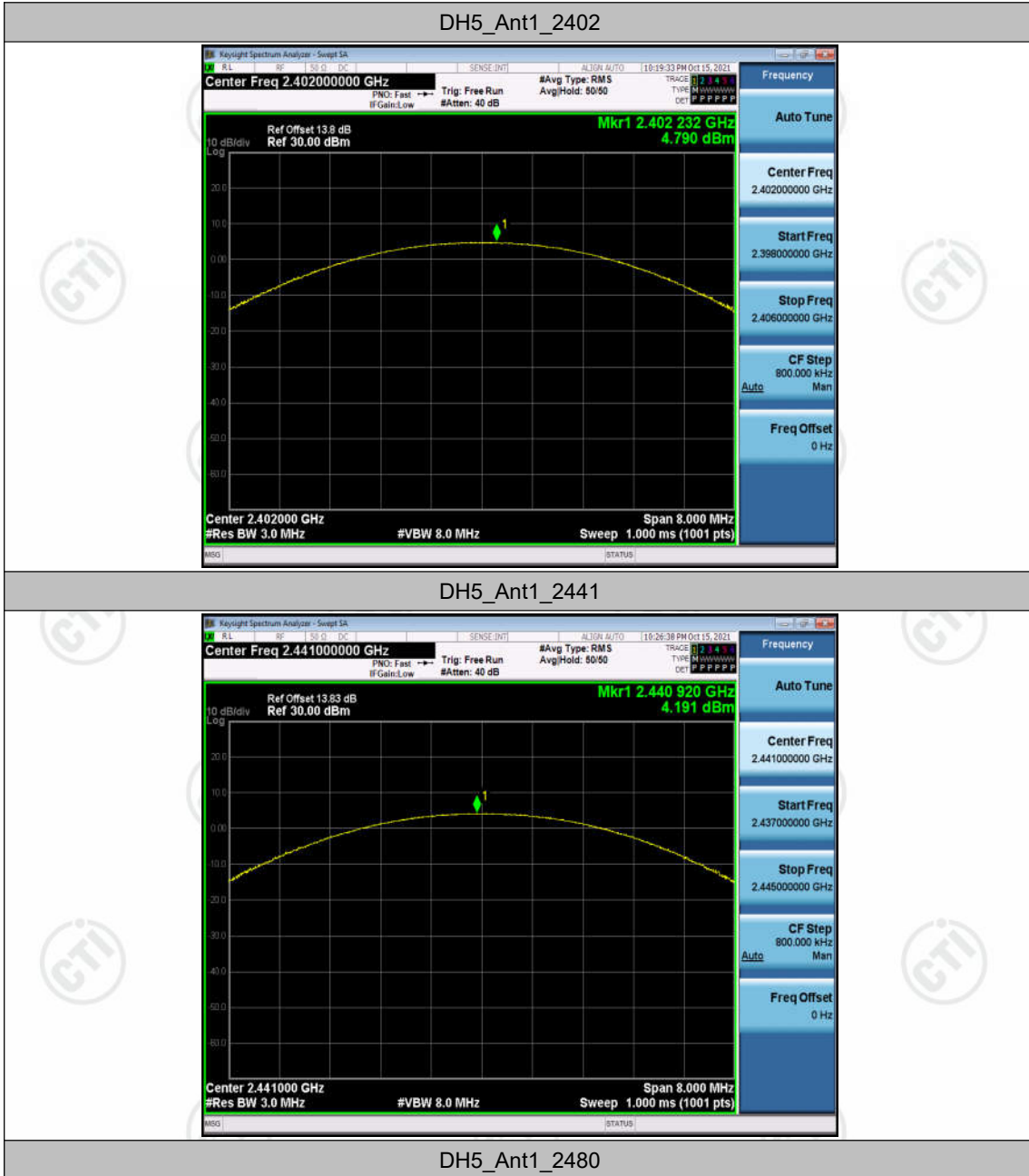
3DH5_Ant1_2480



AppendixC: Maximum conducted output power**Test Result**

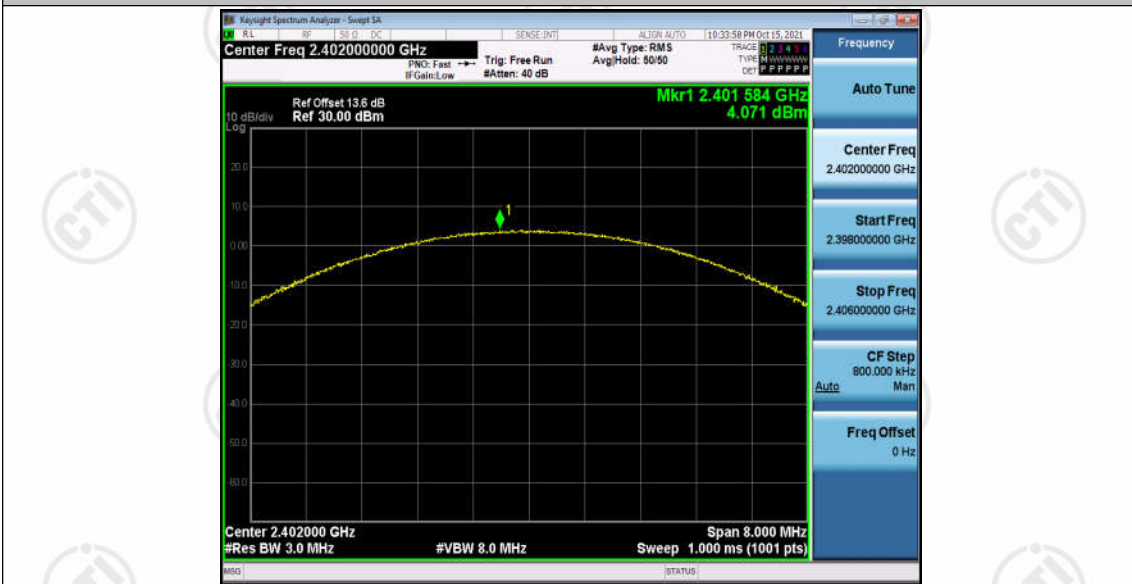
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	4.79	<=20.97	PASS
		2441	4.19	<=20.97	PASS
		2480	3.95	<=20.97	PASS
2DH5	Ant1	2402	4.07	<=20.97	PASS
		2441	3.6	<=20.97	PASS
		2480	3.24	<=20.97	PASS
3DH5	Ant1	2402	4.05	<=20.97	PASS
		2441	3.43	<=20.97	PASS
		2480	3.19	<=20.97	PASS

Test Graphs





2DH5_Ant1_2402



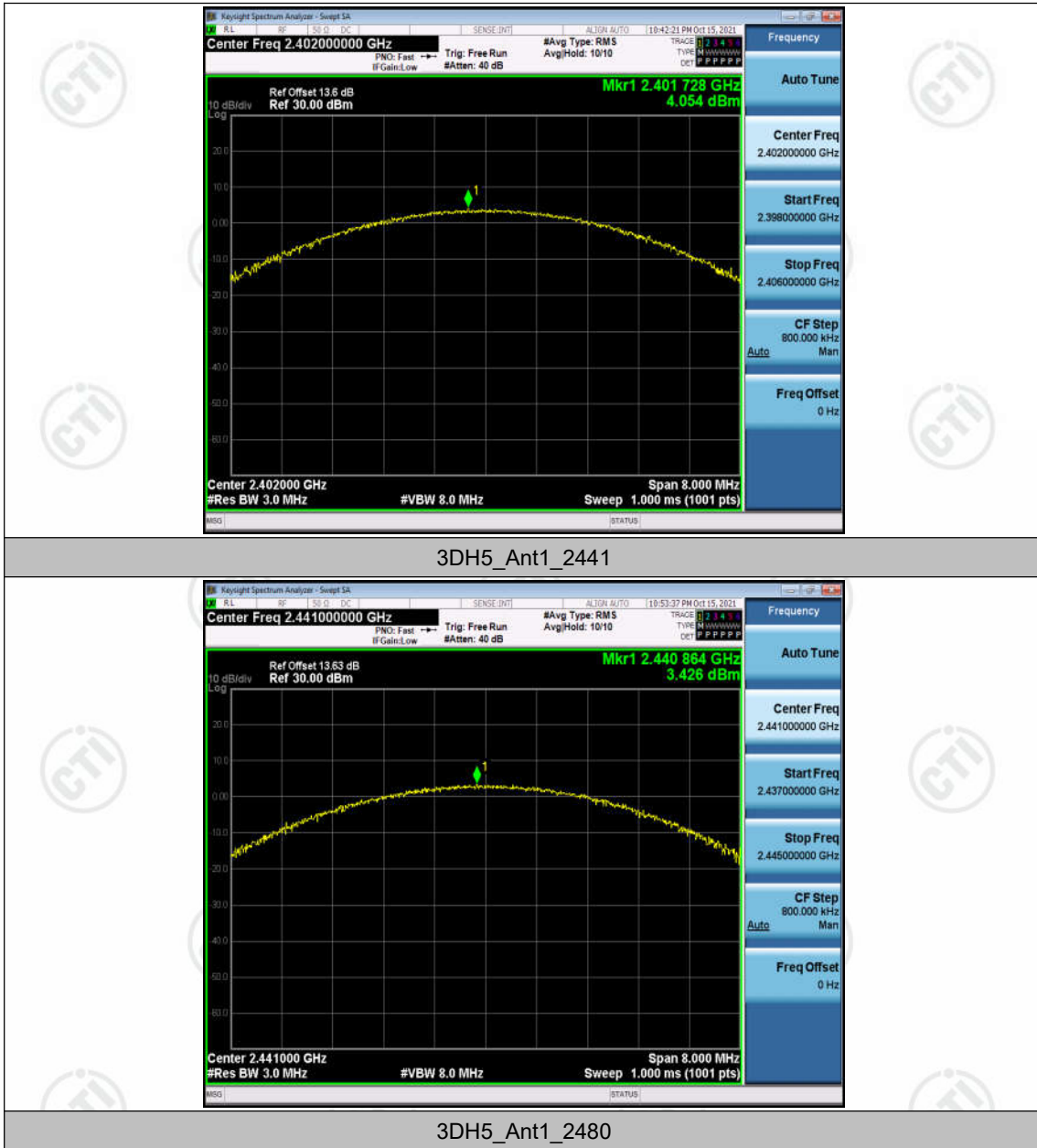
2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2420

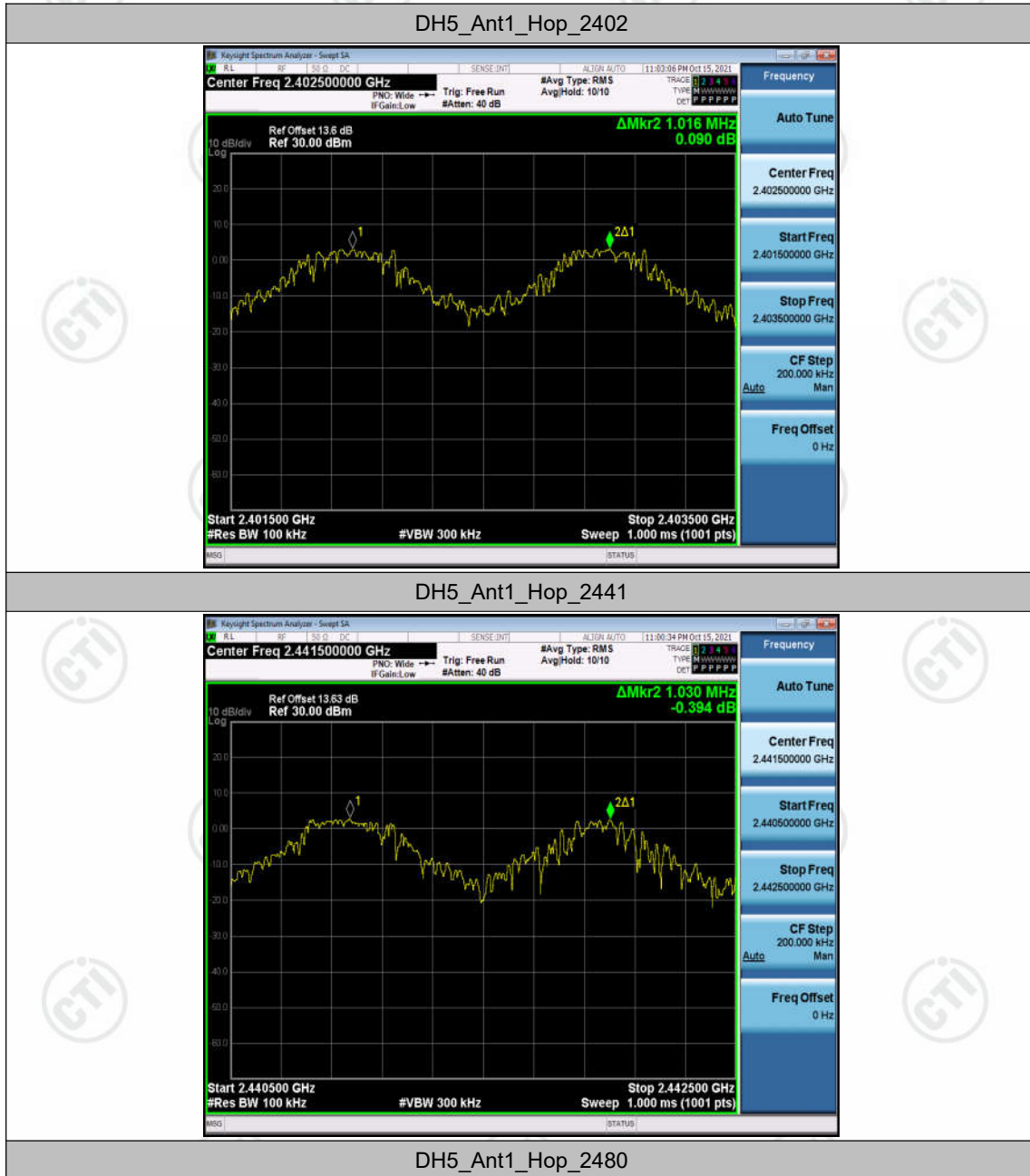




AppendixD: Carrier frequency separation**Test Result**

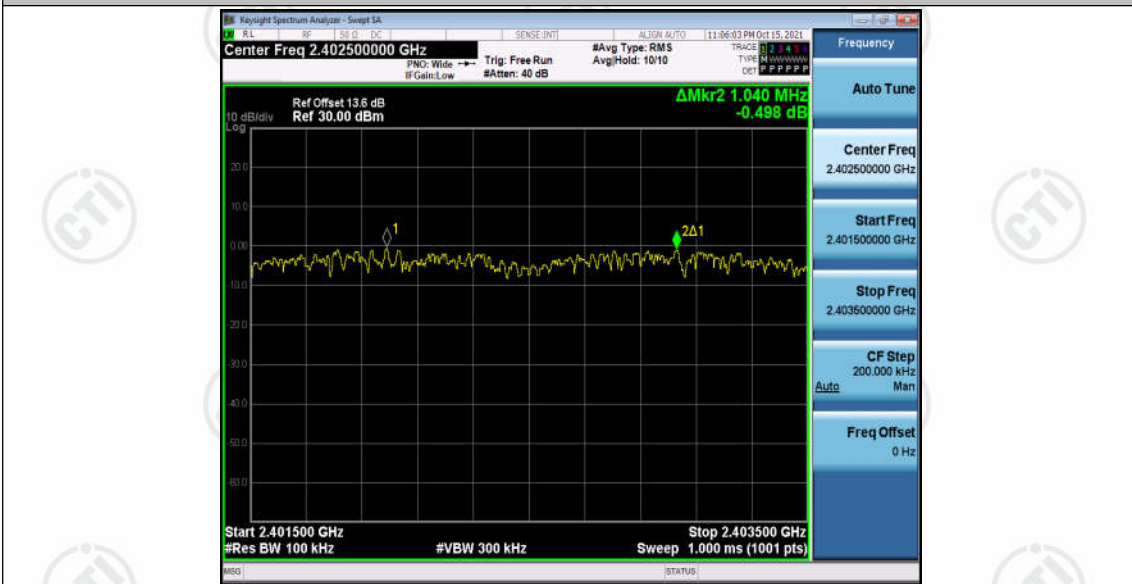
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop_2402	1.016	≥ 0.948	PASS
		Hop_2441	1.03	≥ 0.948	PASS
		Hop_2480	0.984	≥ 0.948	PASS
2DH5	Ant1	Hop_2402	1.04	≥ 0.892	PASS
		Hop_2441	0.998	≥ 0.892	PASS
		Hop_2480	0.944	≥ 0.892	PASS
3DH5	Ant1	Hop_2402	1.154	≥ 0.892	PASS
		Hop_2441	1.02	≥ 0.892	PASS
		Hop_2480	0.988	≥ 0.892	PASS

Test Graphs

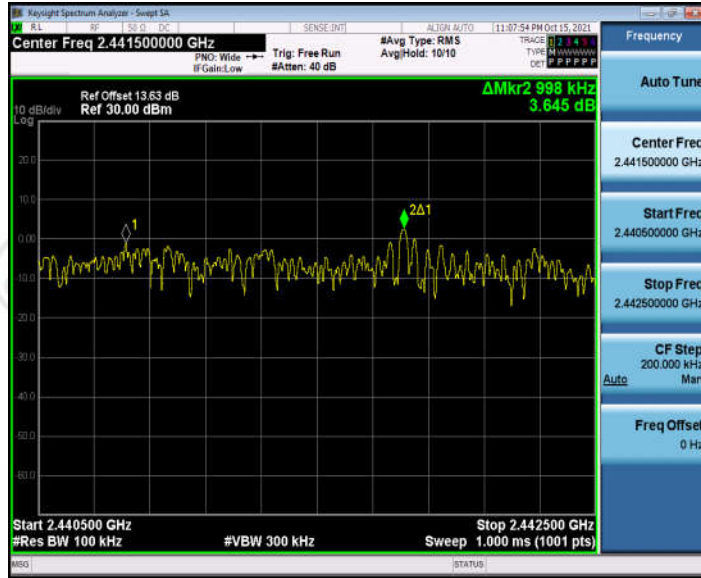




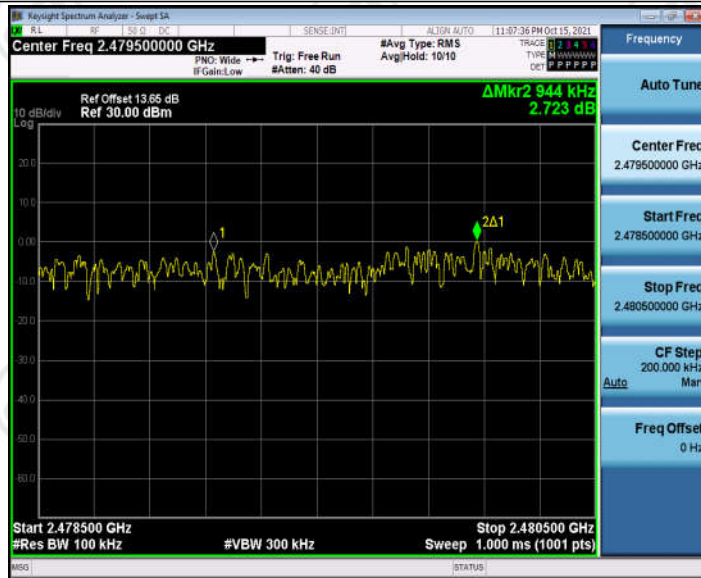
2DH5_Ant1_Hop_2402



2DH5_Ant1_Hop_2441



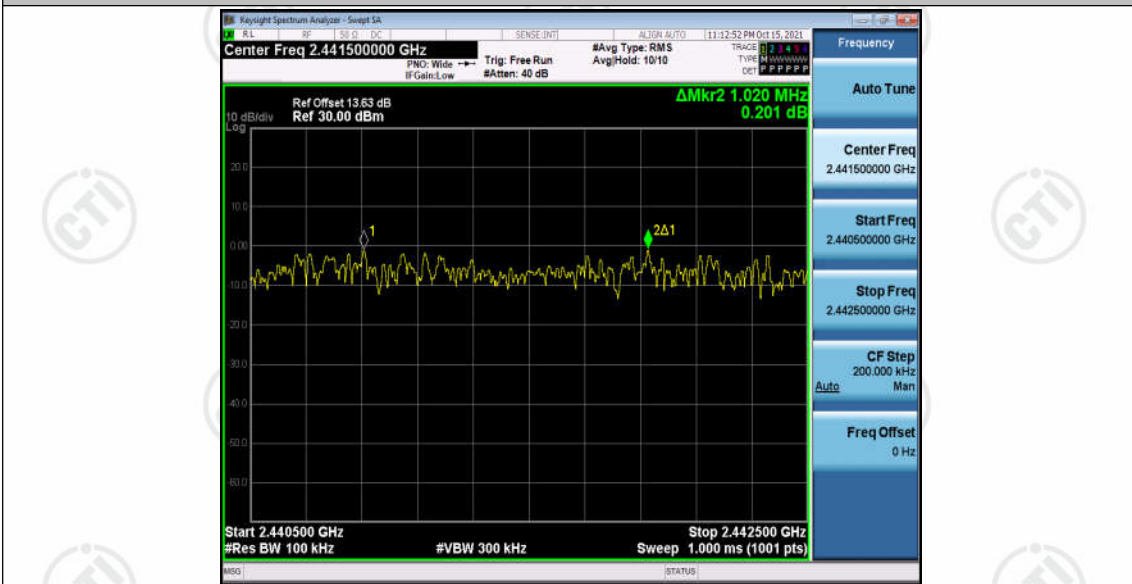
2DH5_Ant1_Hop_2480



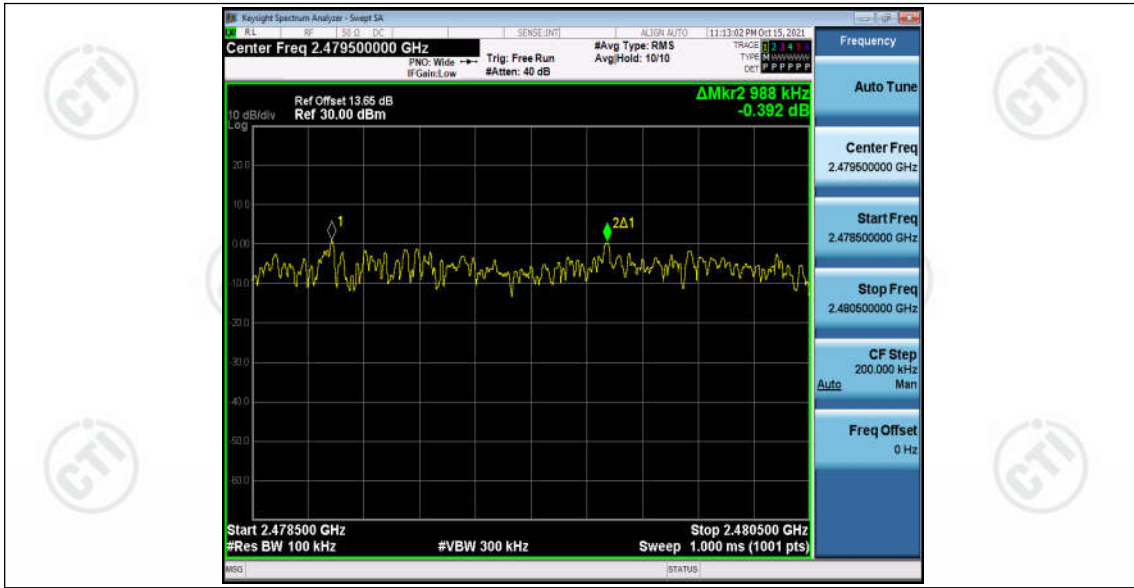
3DH5_Ant1_Hop_2402



3DH5_Ant1_Hop_2441



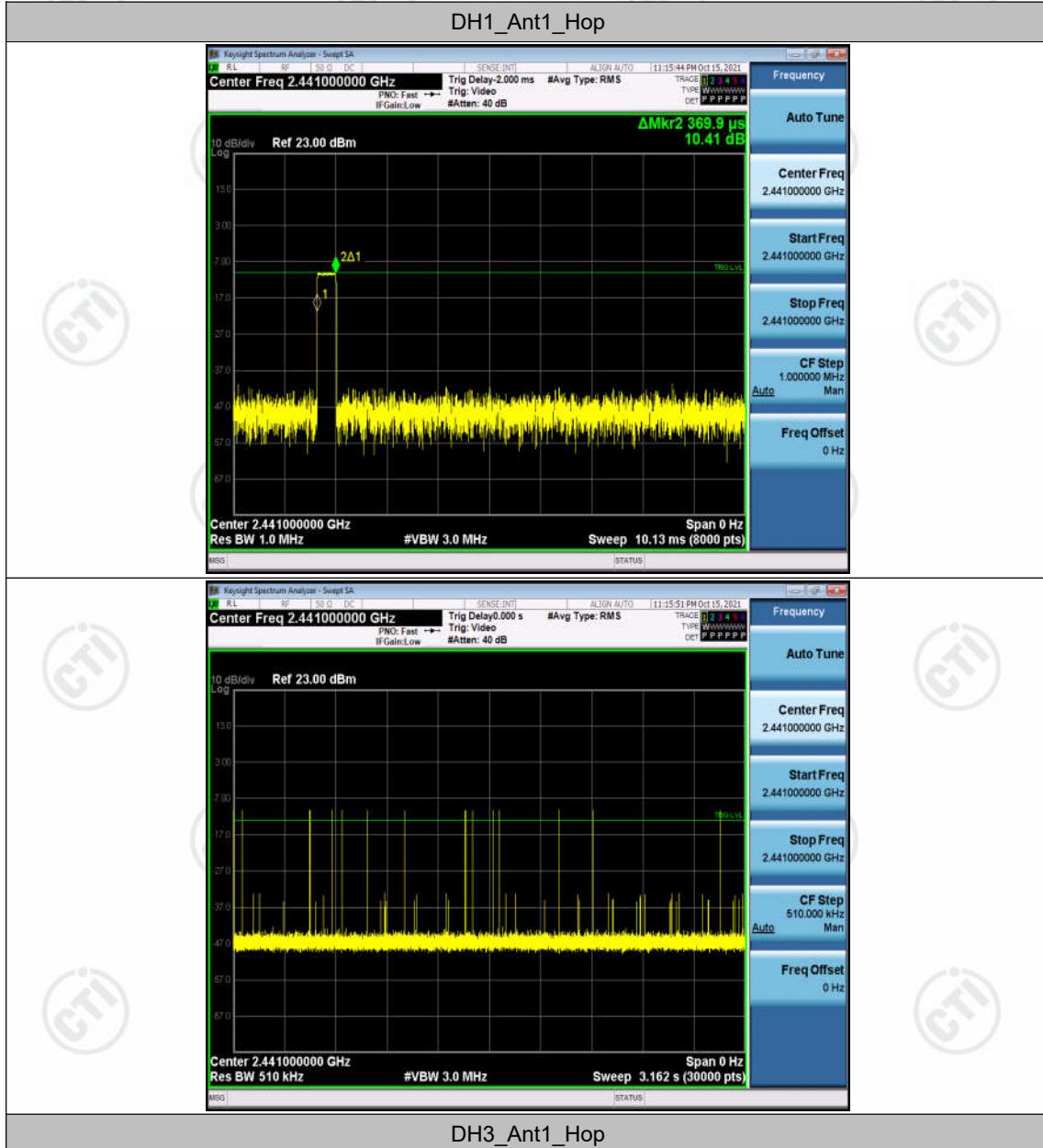
3DH5_Ant1_Hop_2480

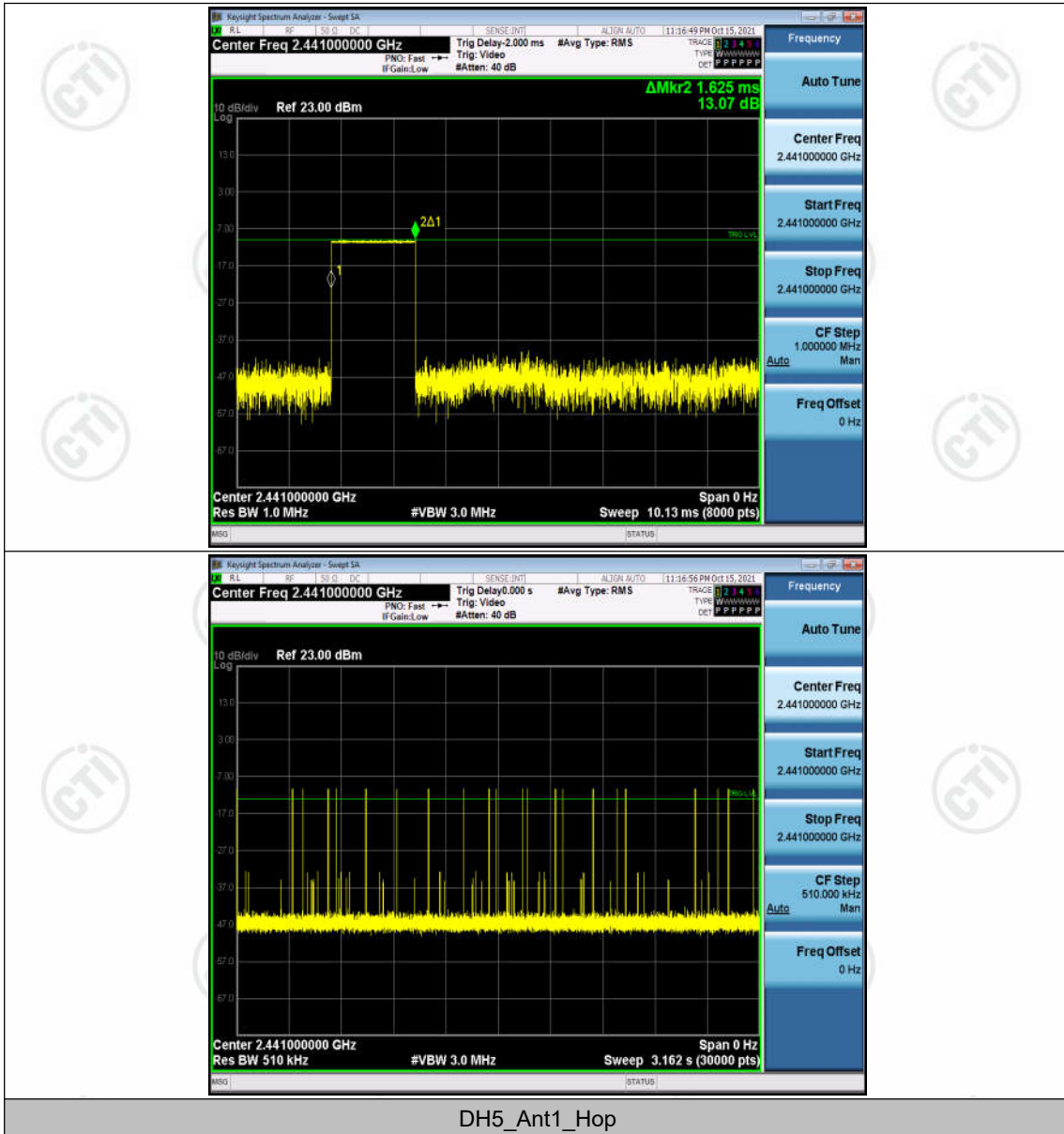


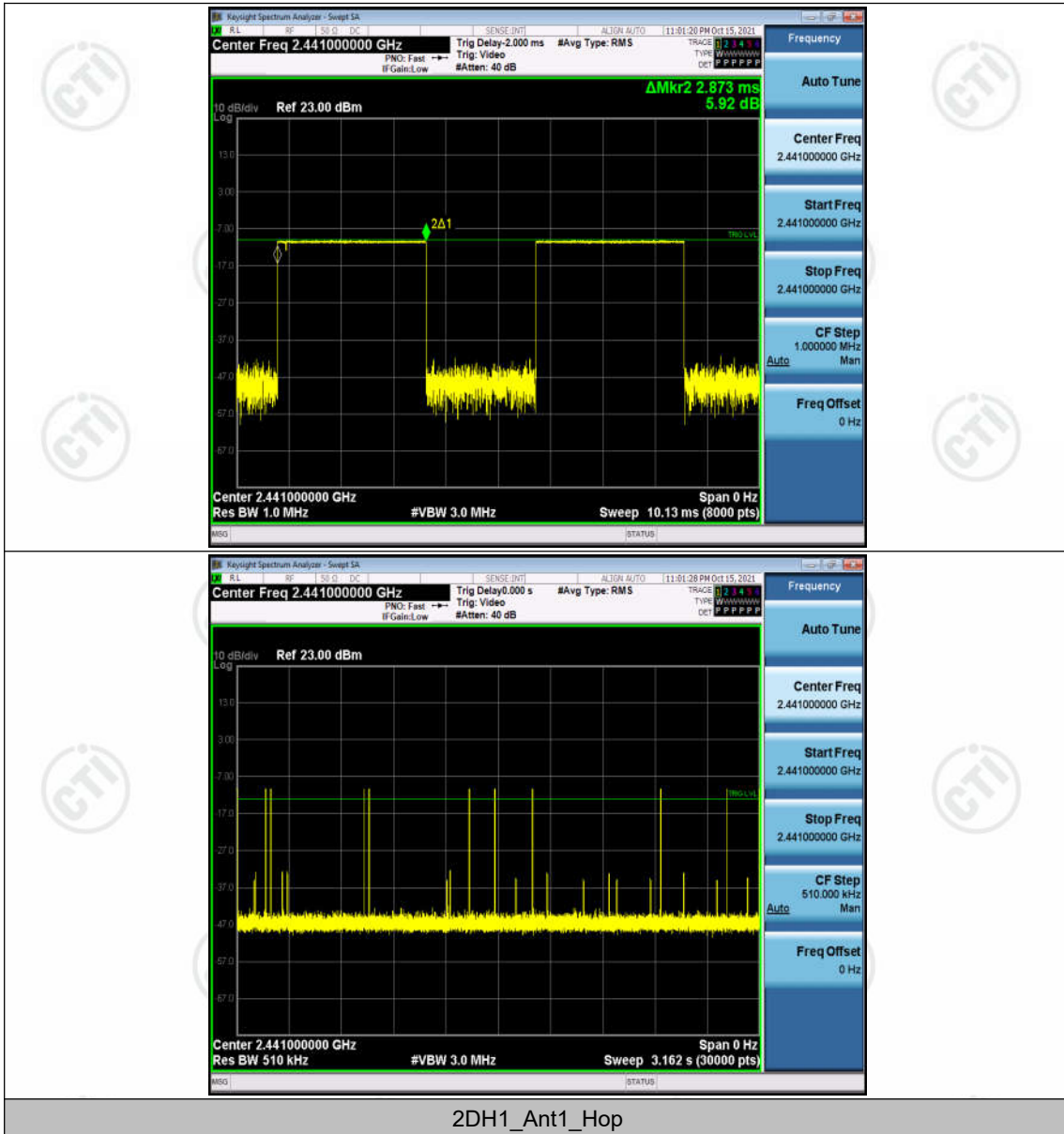
AppendixE: Time of occupancy**Test Result**

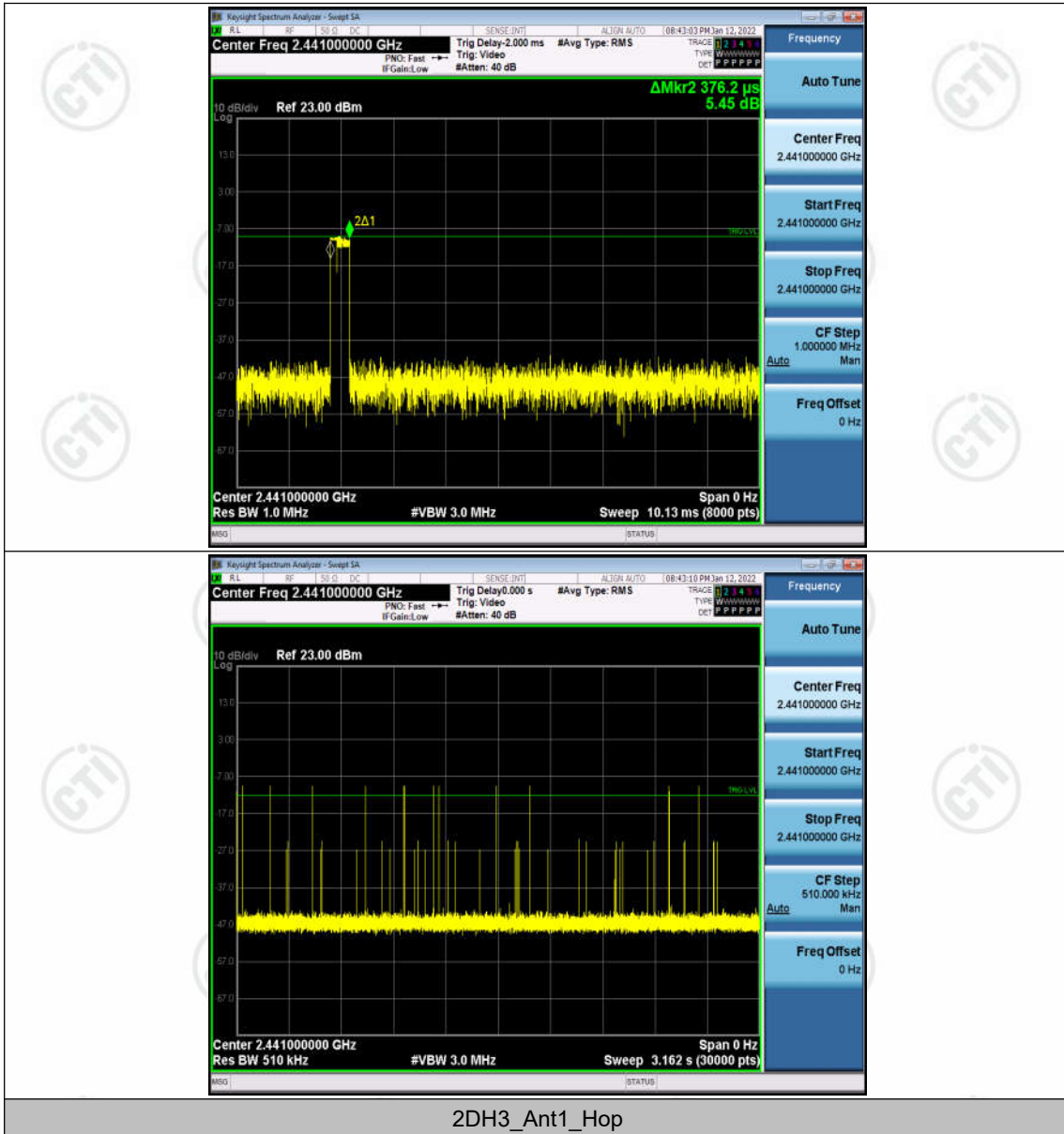
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	140	0.052	<=0.4	PASS
DH3	Ant1	Hop	1.63	220	0.358	<=0.4	PASS
DH5	Ant1	Hop	2.87	100	0.287	<=0.4	PASS
2DH1	Ant1	Hop	0.38	120	0.045	<=0.4	PASS
2DH3	Ant1	Hop	1.63	140	0.228	<=0.4	PASS
2DH5	Ant1	Hop	2.88	100	0.288	<=0.4	PASS
3DH1	Ant1	Hop	0.38	170	0.064	<=0.4	PASS
3DH3	Ant1	Hop	1.63	160	0.26	<=0.4	PASS
3DH5	Ant1	Hop	2.88	70	0.202	<=0.4	PASS

Test Graphs

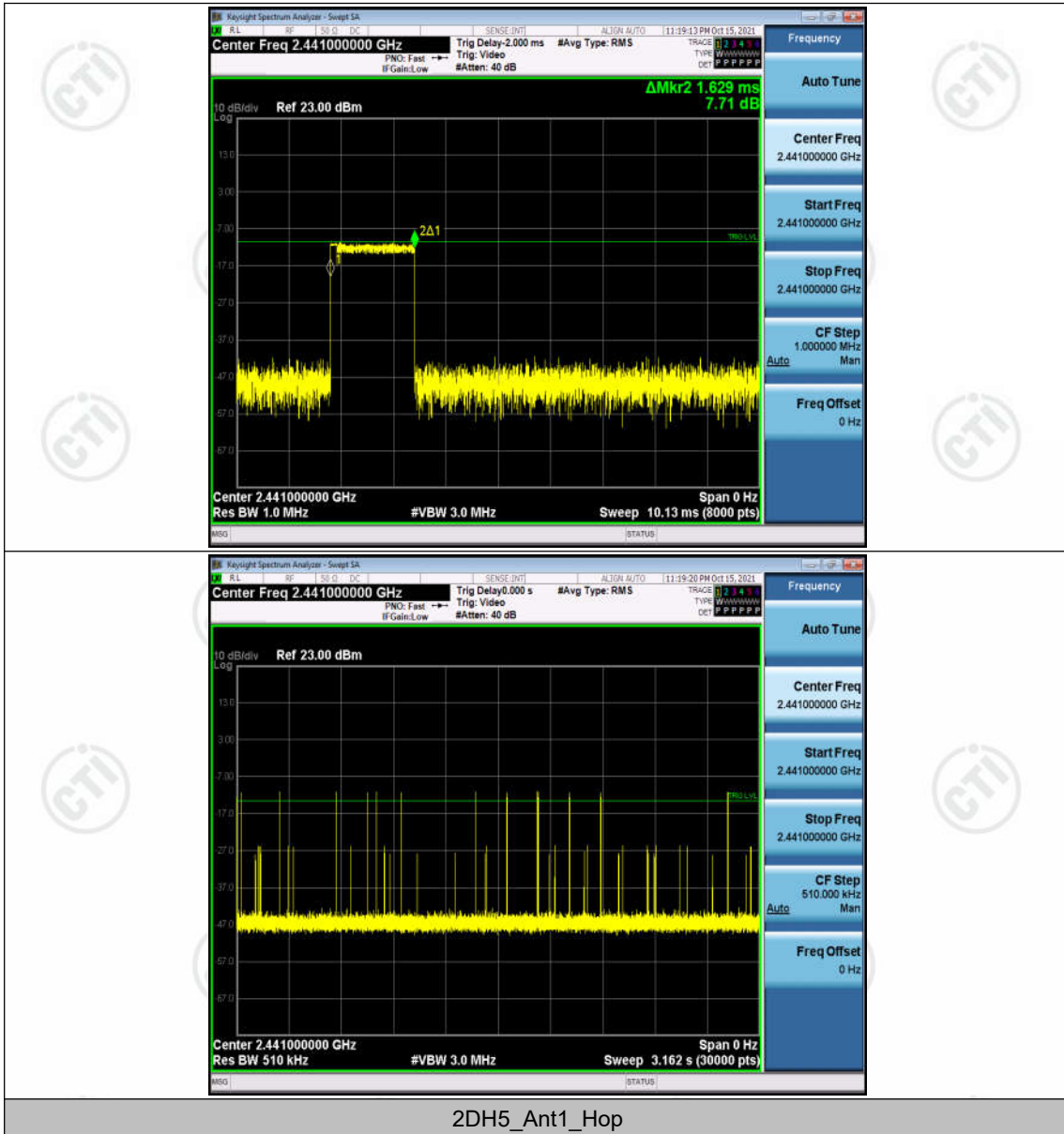


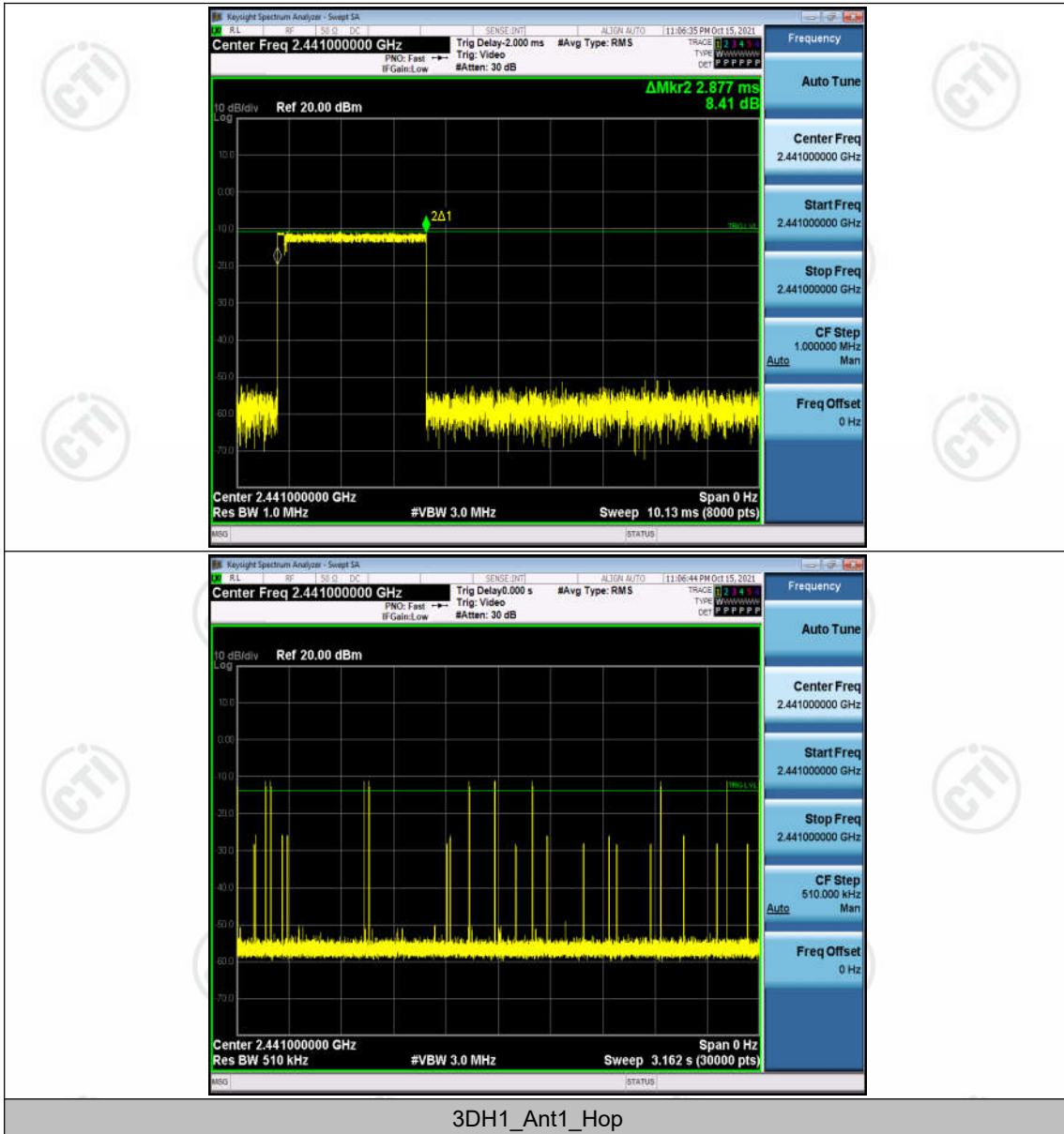


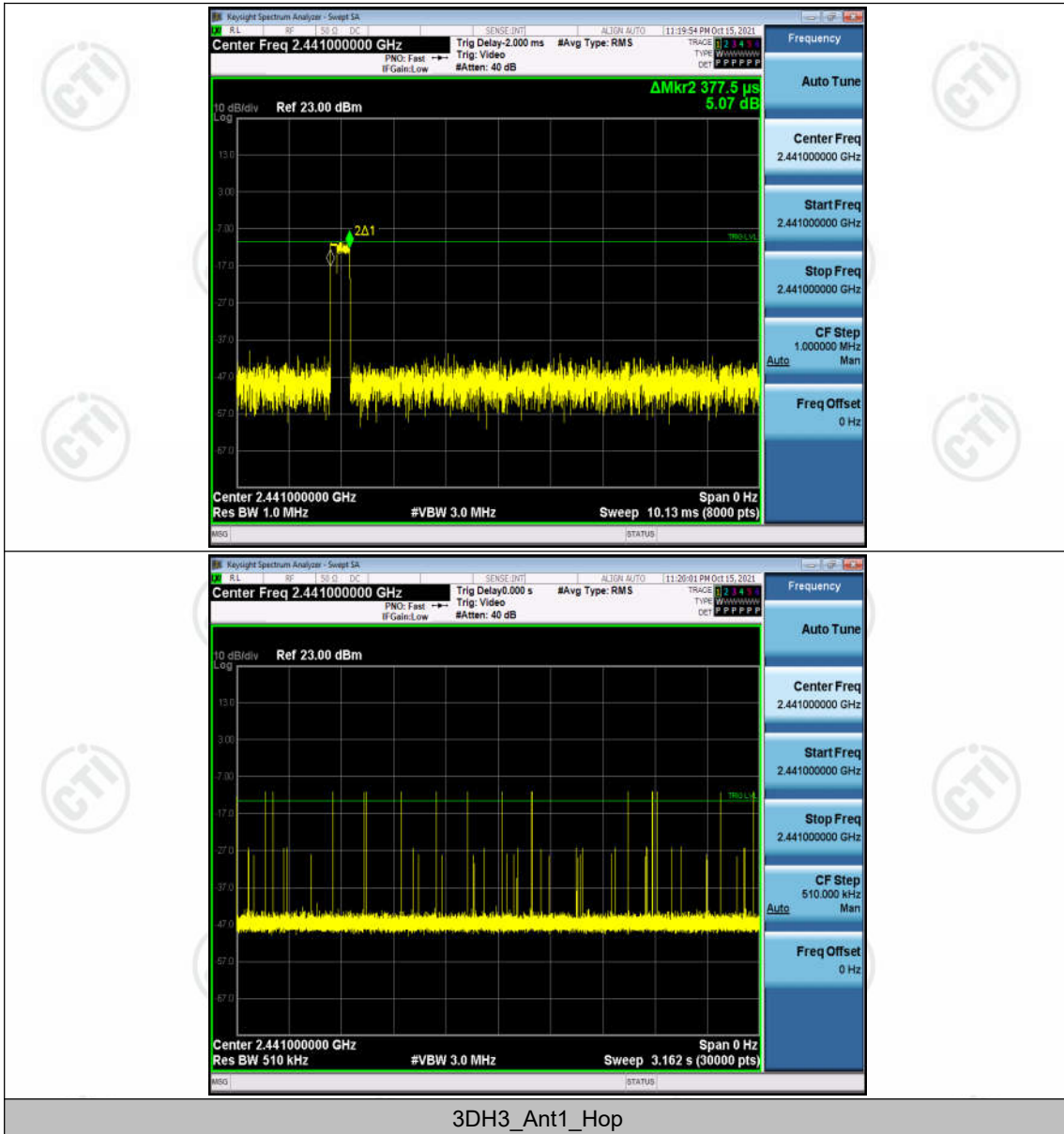


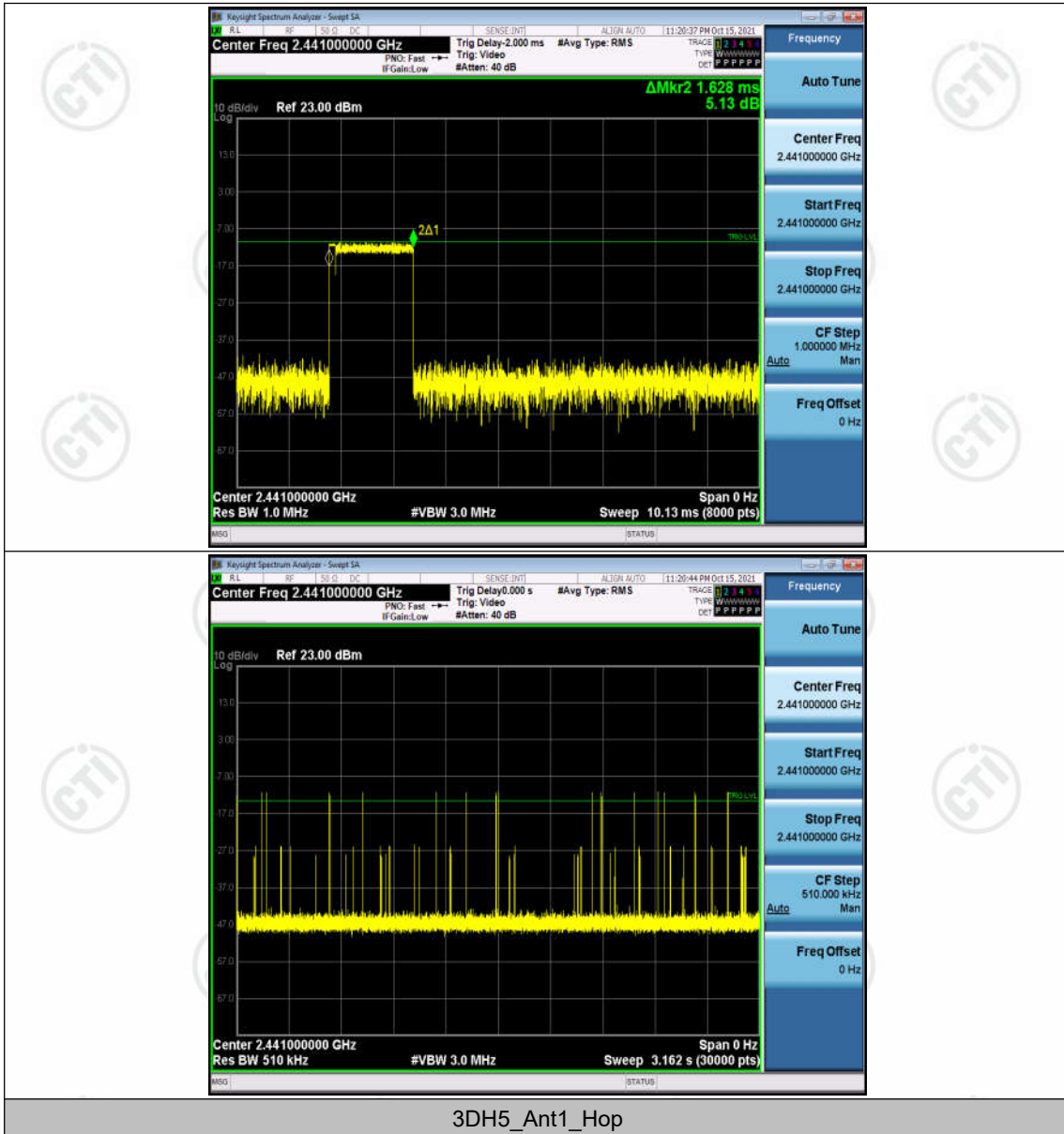


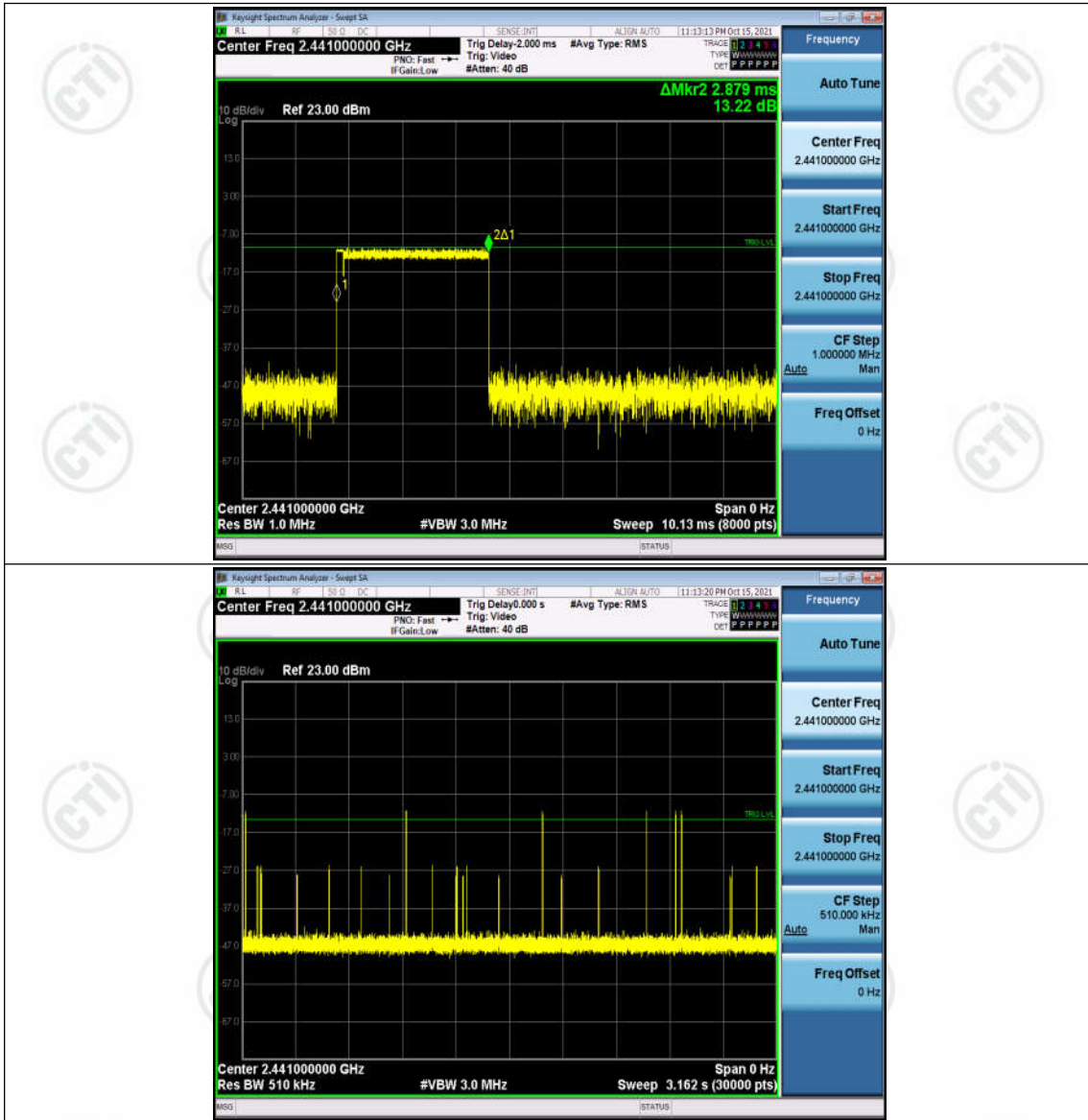
2DH3_Ant1_Hop







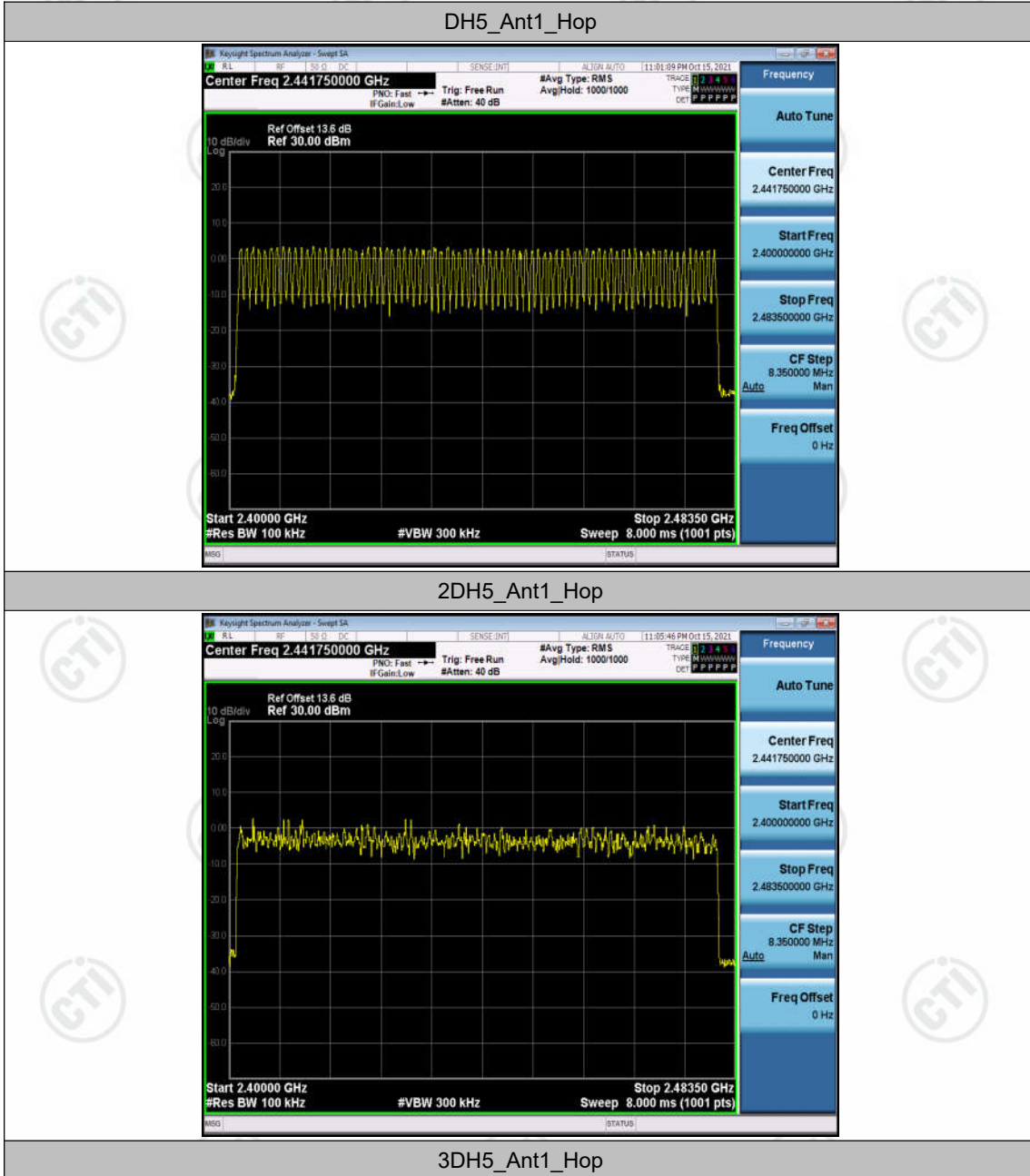


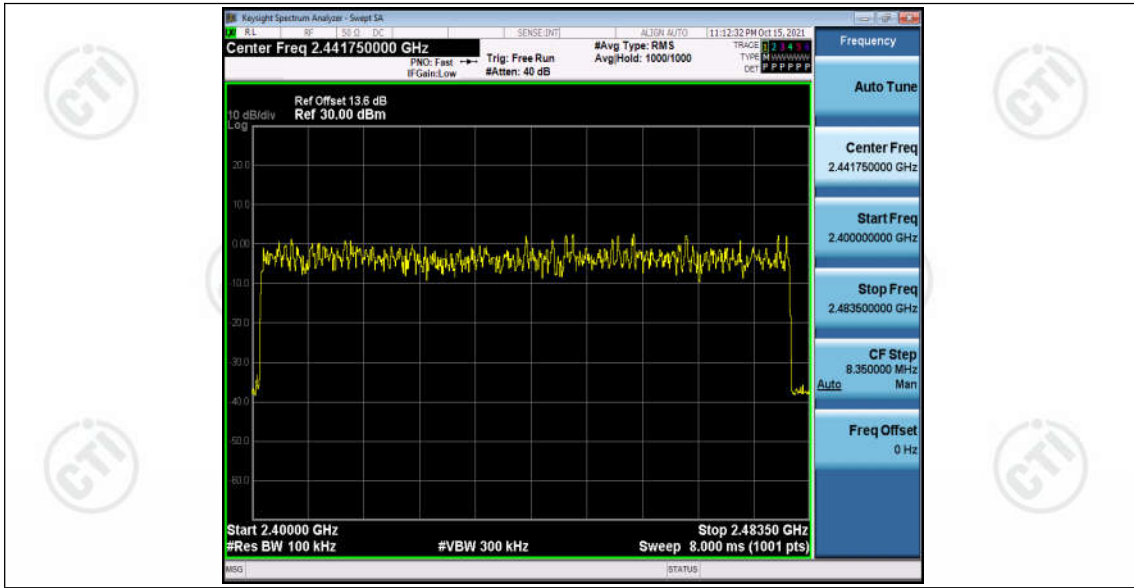


AppendixF: Number of hopping channels**Test Result**

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



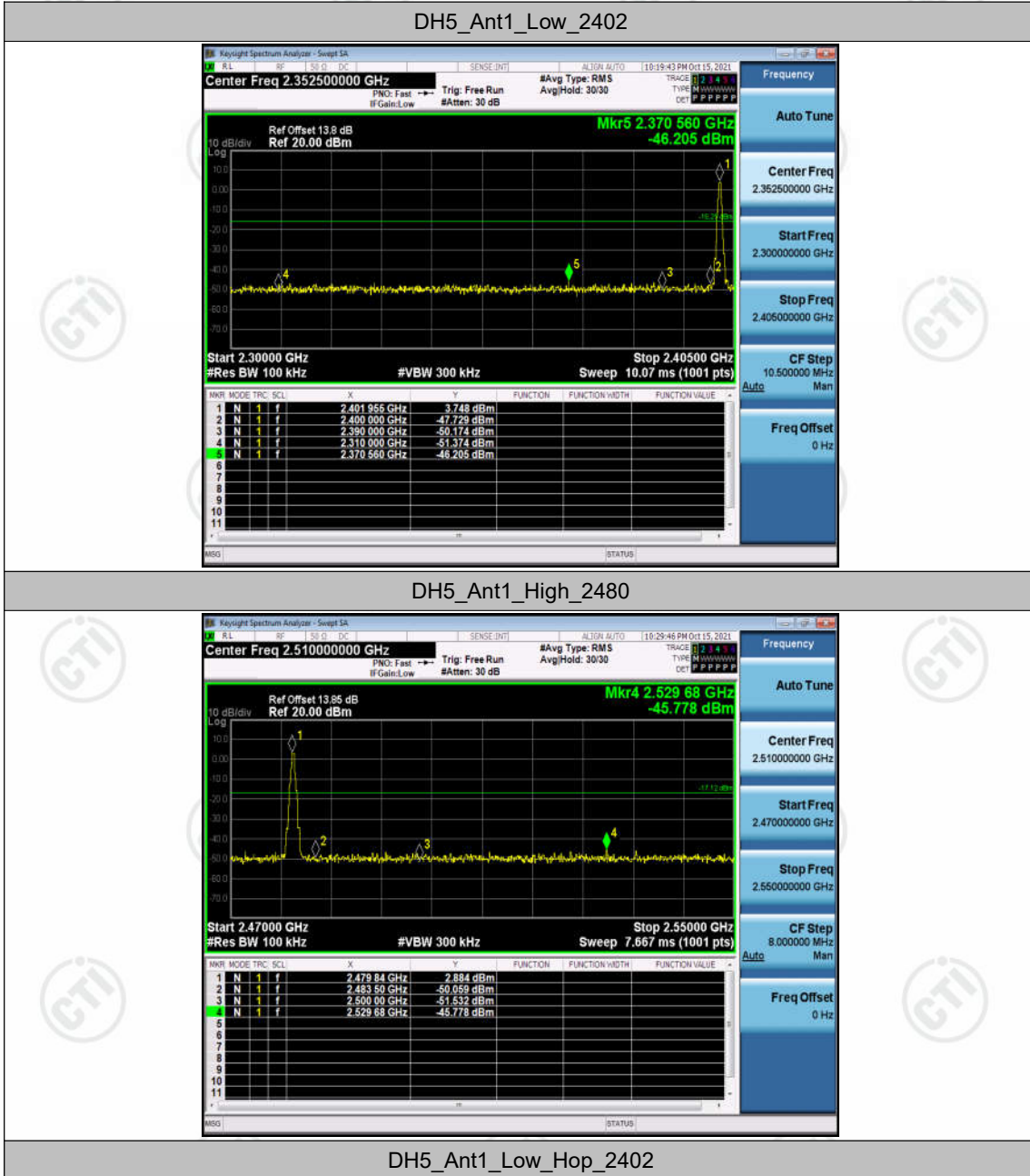


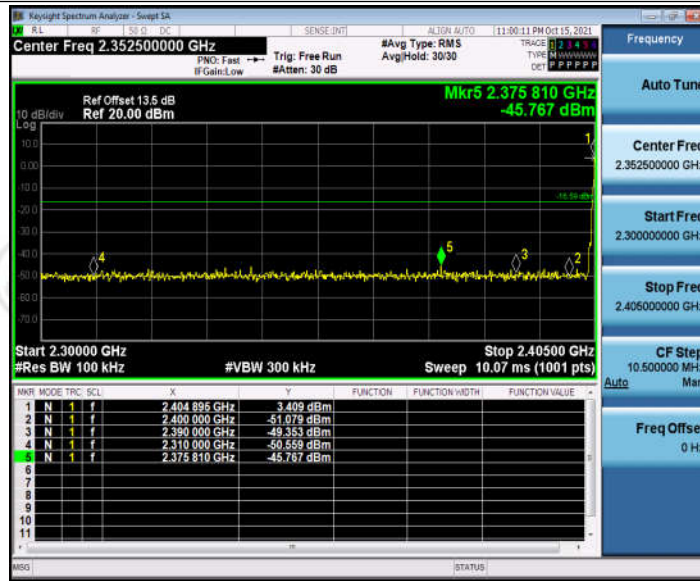
AppendixG:Band edge measurements

Test Result

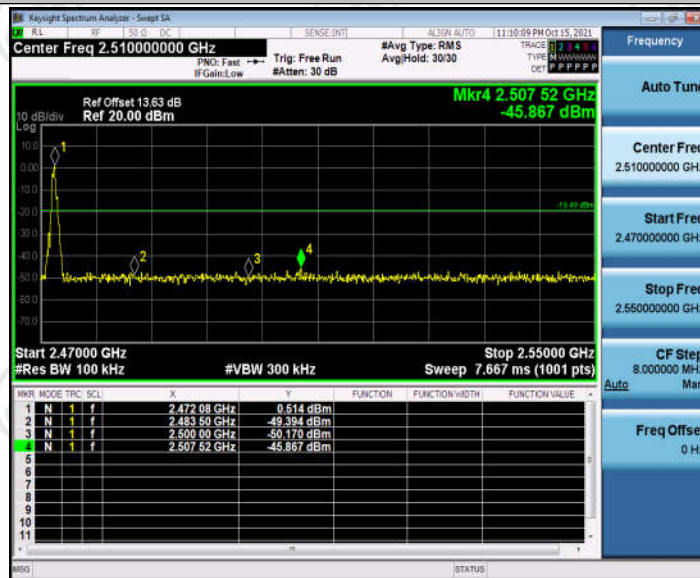
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.75	-46.21	<=-16.25	PASS
		High	2480	2.88	-45.78	<=-17.12	PASS
		Low	Hop_2402	3.41	-45.77	<=-16.59	PASS
		High	Hop_2480	0.51	-45.87	<=-19.49	PASS
2DH5	Ant1	Low	2402	-0.44	-46.13	<=-20.44	PASS
		High	2480	-0.02	-46.47	<=-20.02	PASS
		Low	Hop_2402	-3.66	-46.37	<=-23.66	PASS
		High	Hop_2480	-3.49	-47.02	<=-23.49	PASS
3DH5	Ant1	Low	2402	1.03	-46.16	<=-18.97	PASS
		High	2480	0.82	-46.56	<=-19.18	PASS
		Low	Hop_2402	-5.59	-46.21	<=-25.59	PASS
		High	Hop_2480	-2.95	-46.52	<=-22.95	PASS

Test Graphs

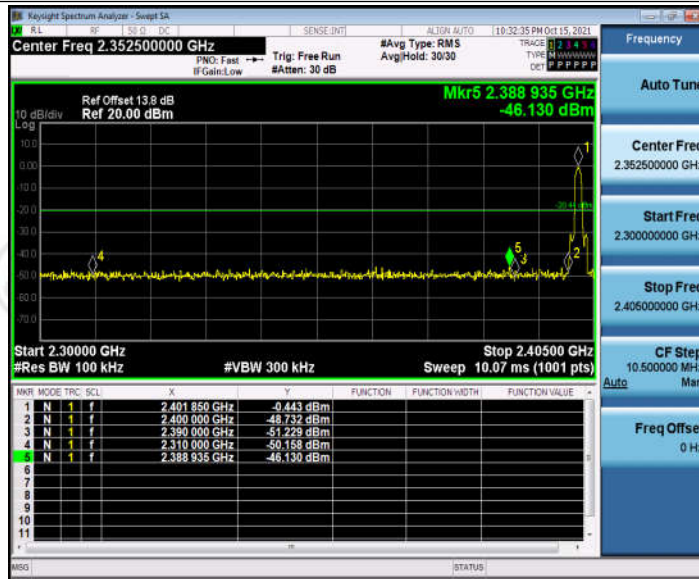




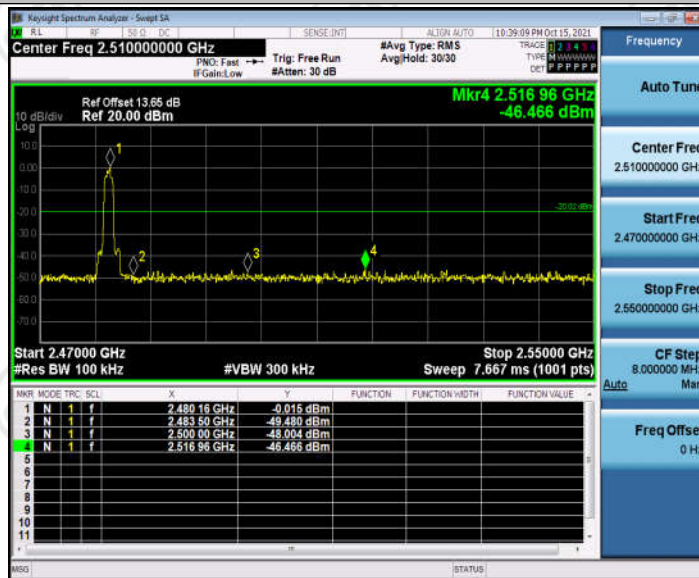
DH5_Ant1_High_Hop_2480



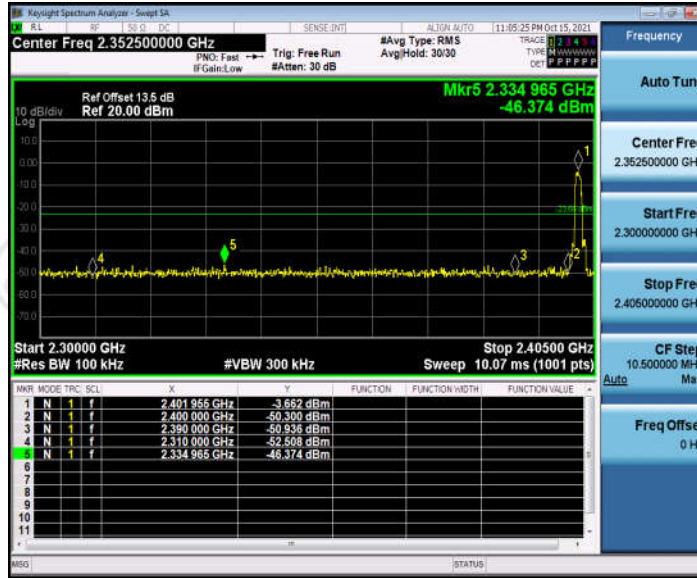
2DH5_Ant1_Low_2402



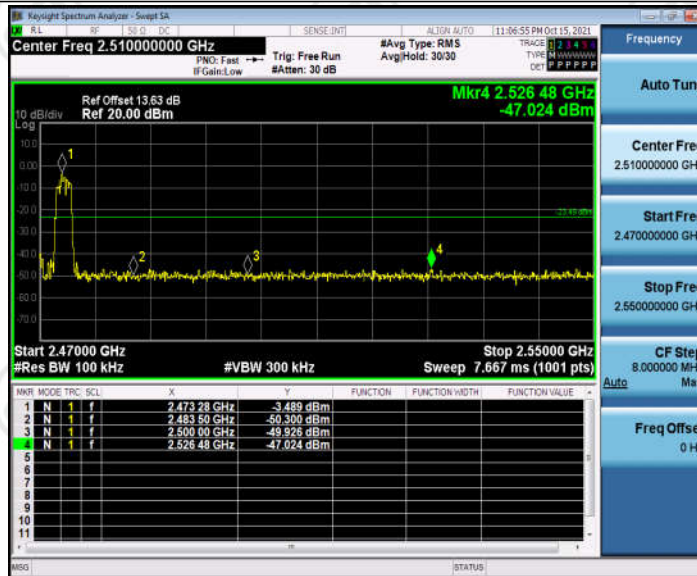
2DH5_Ant1_High_2480



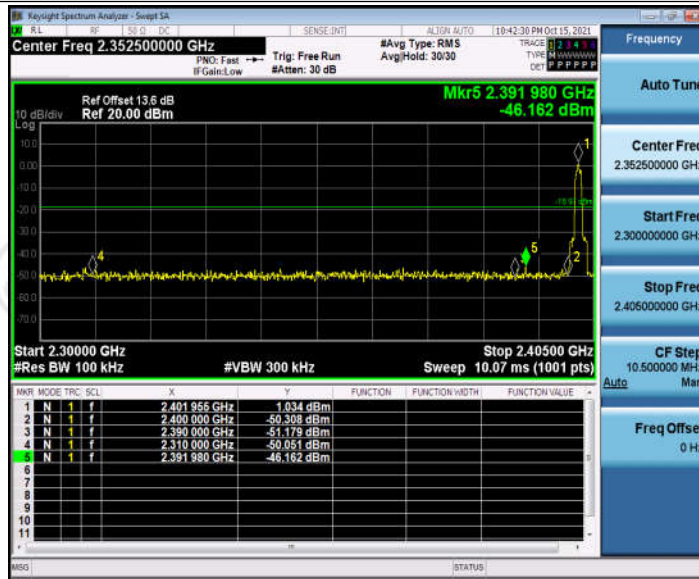
2DH5_Ant1_Low_Hop_2402



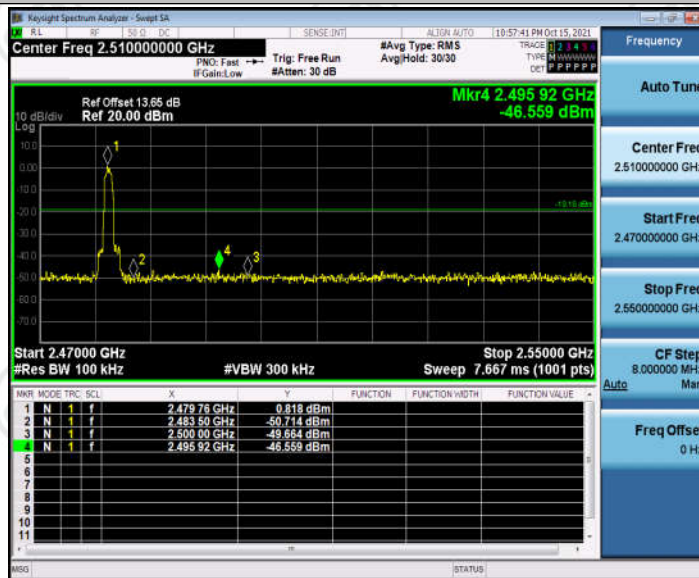
2DH5_Ant1_High_Hop_2480



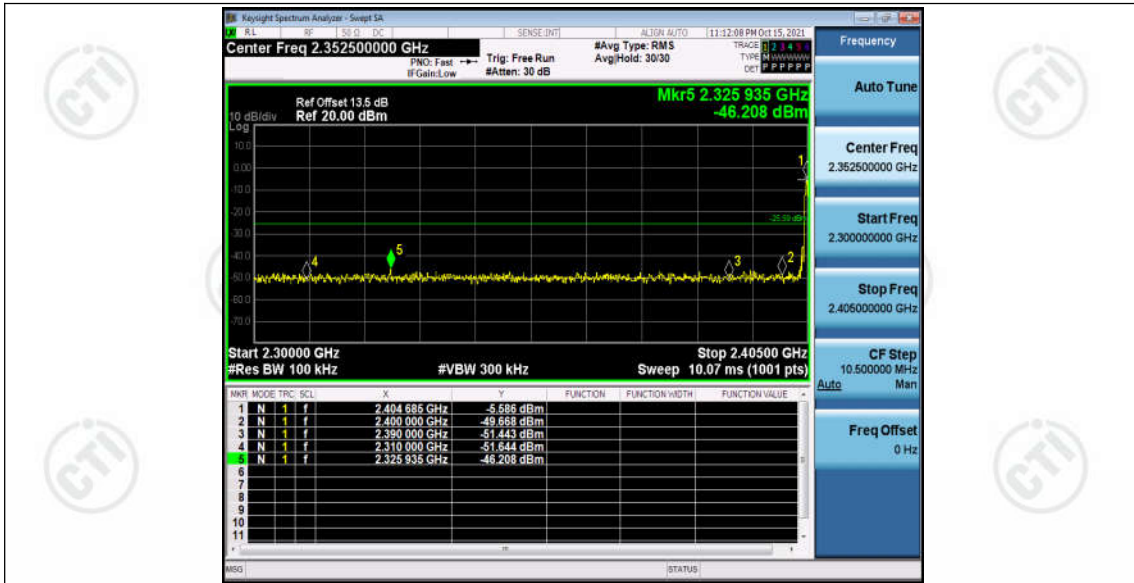
3DH5_Ant1_Low_2402



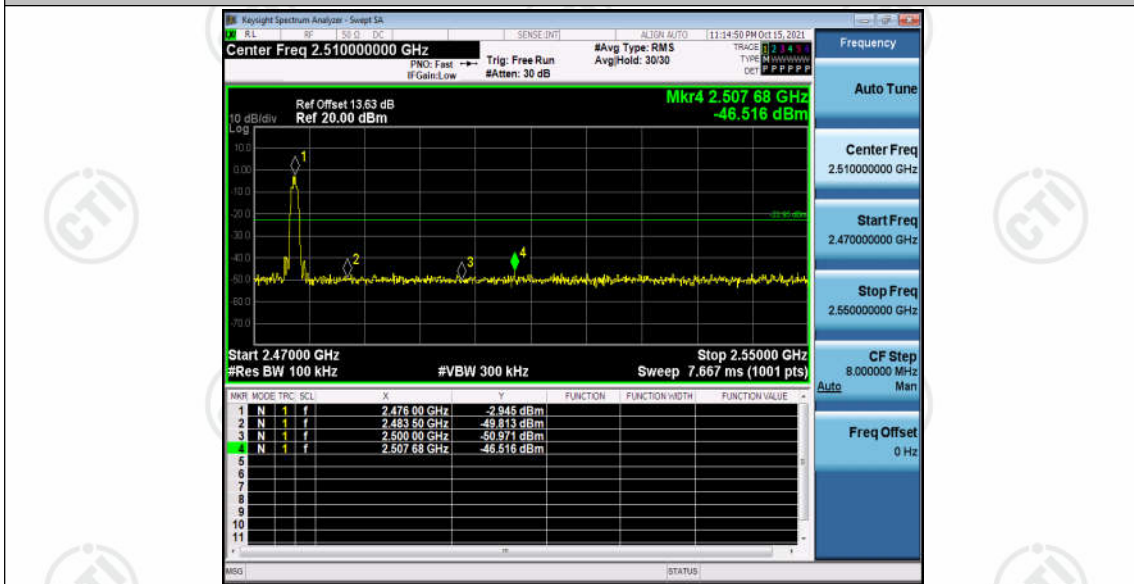
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

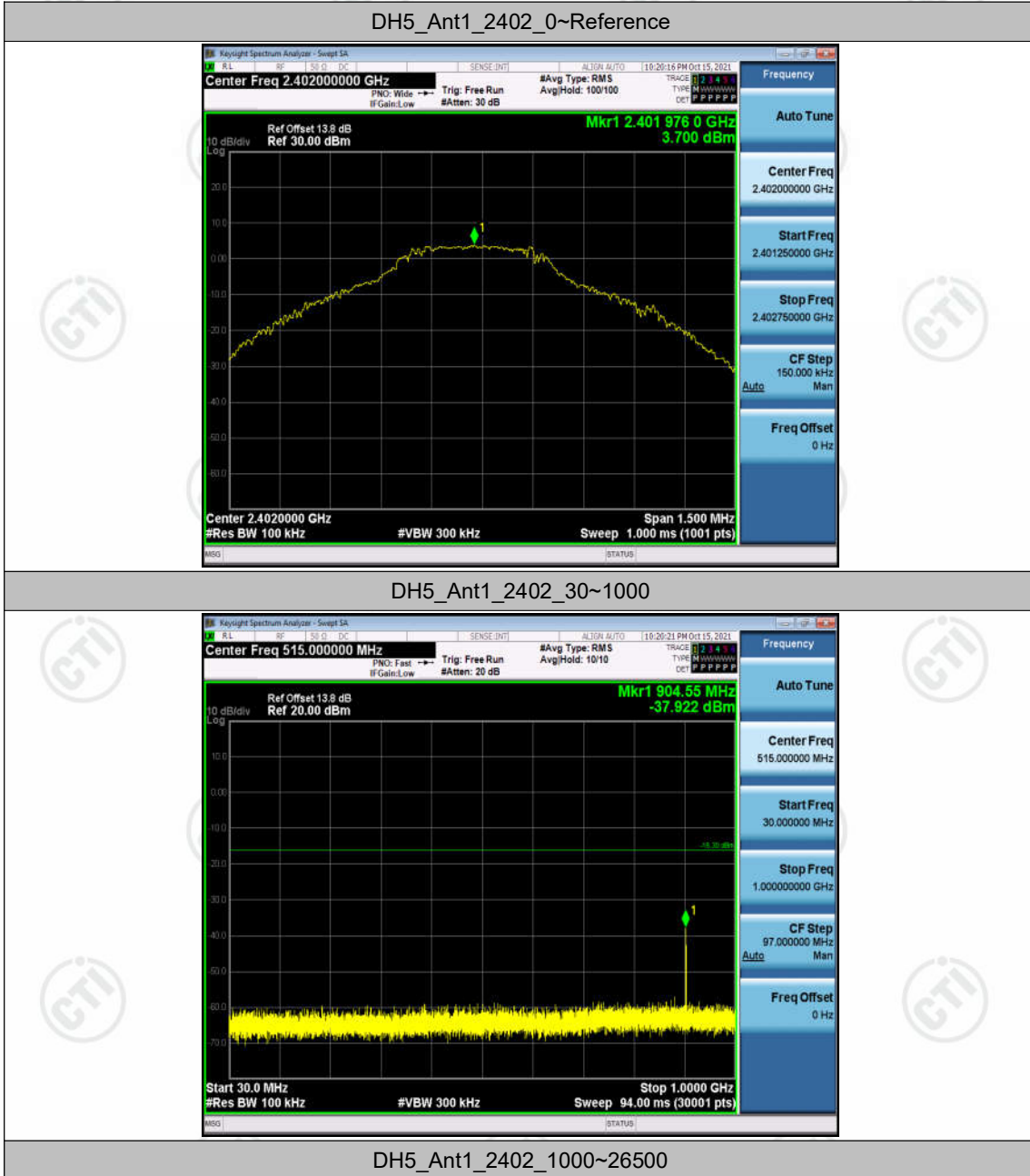


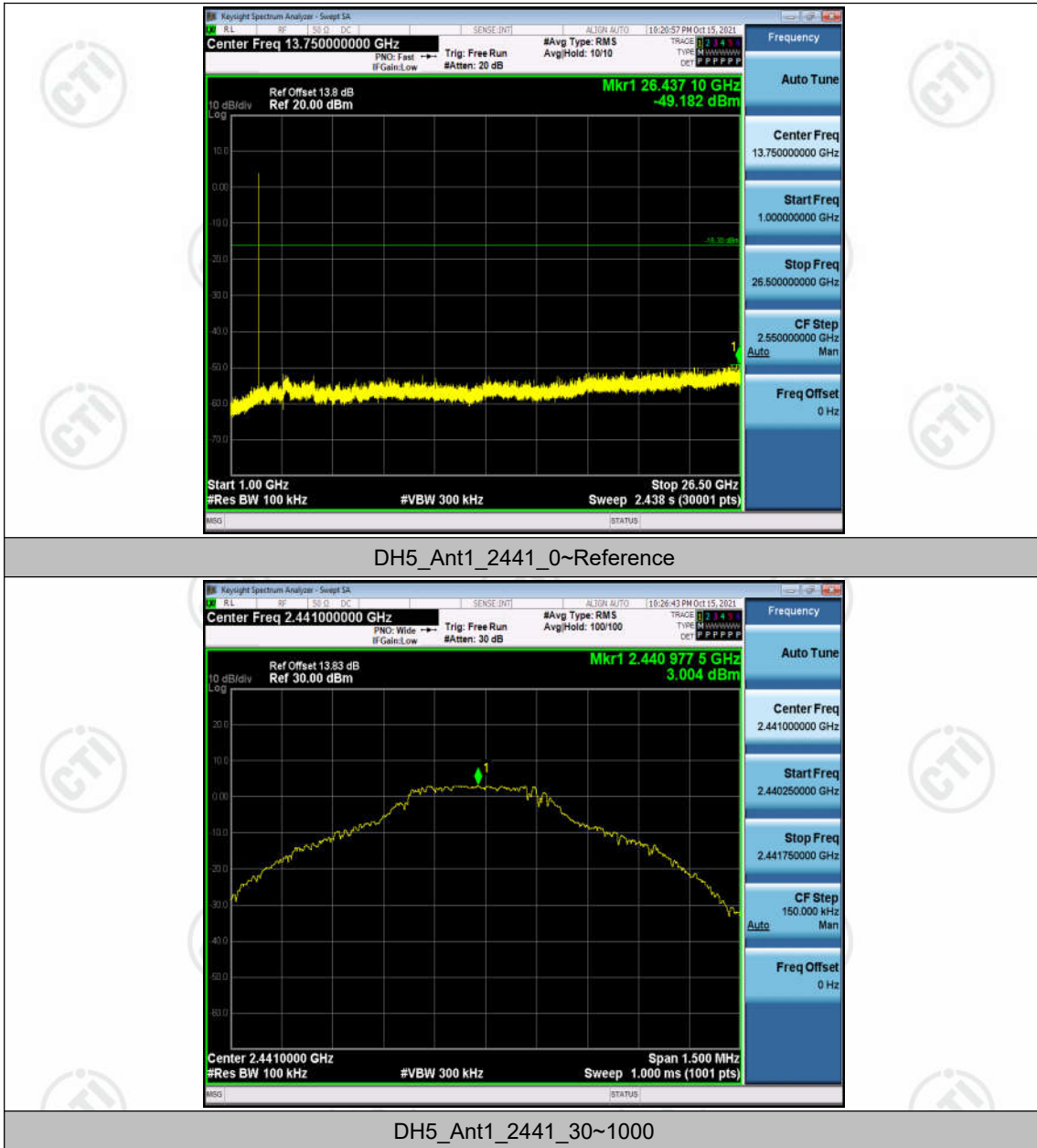
AppendixH:Conducted SpuriousEmission

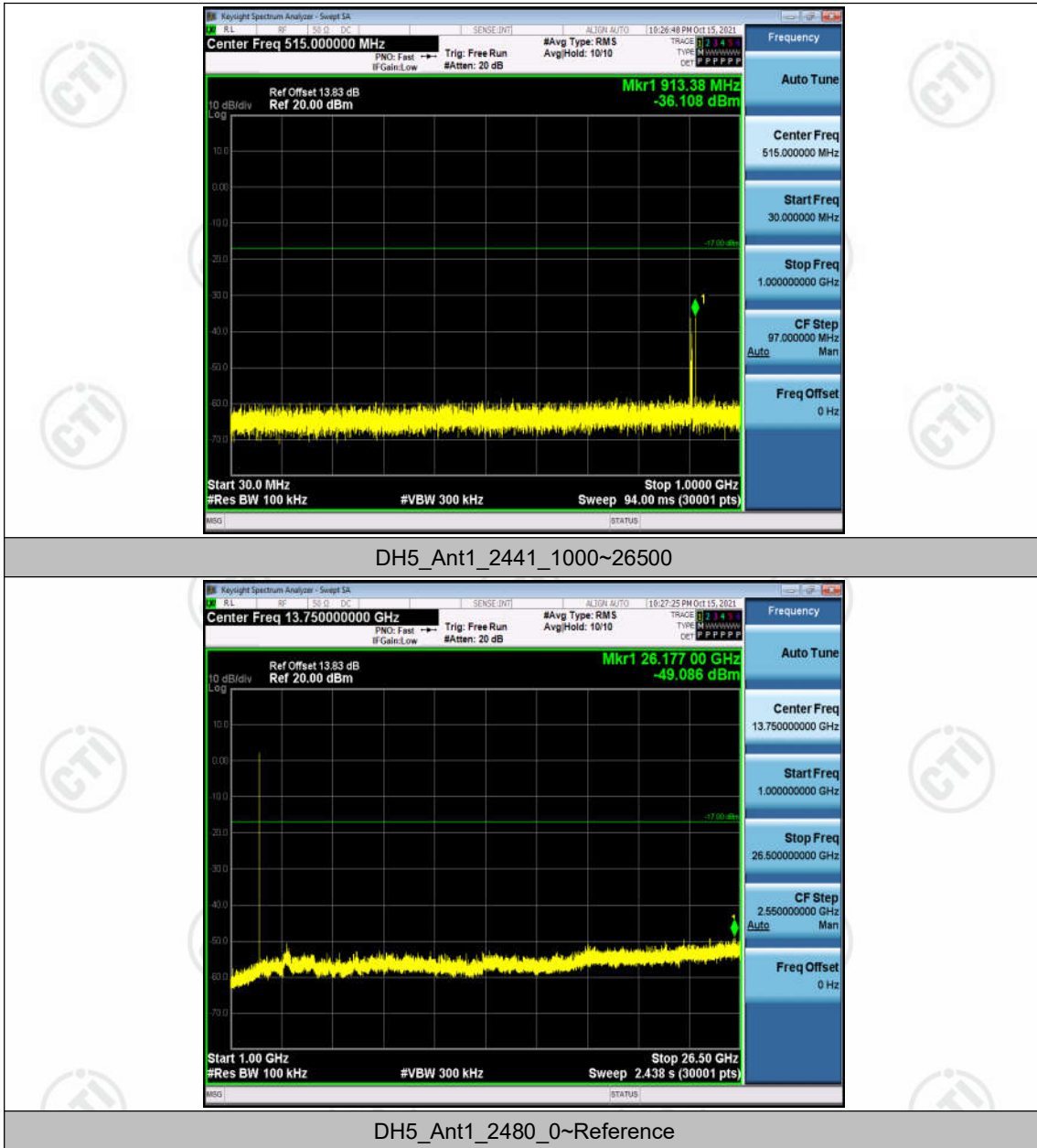
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	3.70	3.70	---	PASS
			30~1000	30~1000	-37.922	<=-16.3	PASS
			1000~26500	1000~26500	-49.182	<=-16.3	PASS
		2441	Reference	3.00	3.00	---	PASS
			30~1000	30~1000	-36.108	<=-16.996	PASS
			1000~26500	1000~26500	-49.086	<=-16.996	PASS
		2480	Reference	3.17	3.17	---	PASS
			30~1000	30~1000	-57.843	<=-16.832	PASS
			1000~26500	1000~26500	-49.22	<=-16.832	PASS
2DH5	Ant1	2402	Reference	3.23	3.23	---	PASS
			30~1000	30~1000	-50.179	<=-16.771	PASS
			1000~26500	1000~26500	-49.546	<=-16.771	PASS
		2441	Reference	-0.69	-0.69	---	PASS
			30~1000	30~1000	-57.881	<=-20.688	PASS
			1000~26500	1000~26500	-49.147	<=-20.688	PASS
		2480	Reference	2.08	2.08	---	PASS
			30~1000	30~1000	-58.059	<=-17.919	PASS
			1000~26500	1000~26500	-49.774	<=-17.919	PASS
3DH5	Ant1	2402	Reference	2.89	2.89	---	PASS
			30~1000	30~1000	-58.271	<=-17.106	PASS
			1000~26500	1000~26500	-48.8	<=-17.106	PASS
		2441	Reference	2.01	2.01	---	PASS
			30~1000	30~1000	-31.445	<=-17.993	PASS
			1000~26500	1000~26500	-48.783	<=-17.993	PASS
		2480	Reference	1.70	1.70	---	PASS
			30~1000	30~1000	-50.638	<=-18.298	PASS
			1000~26500	1000~26500	-48.782	<=-18.298	PASS

Test Graphs

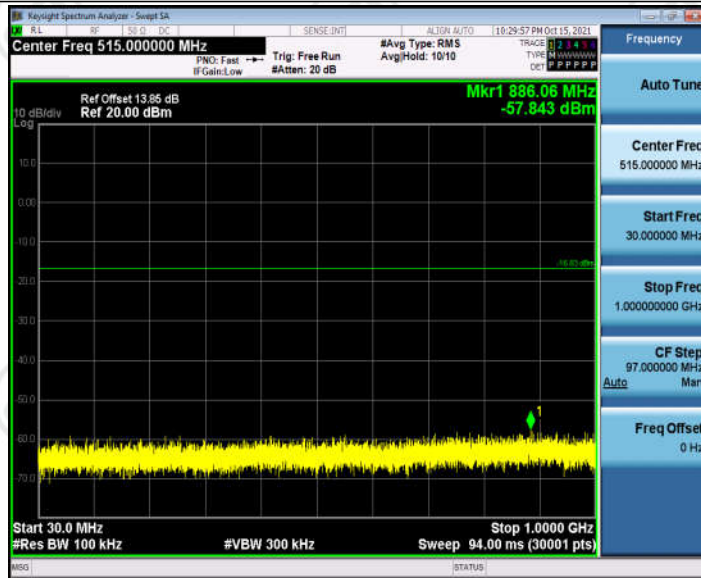




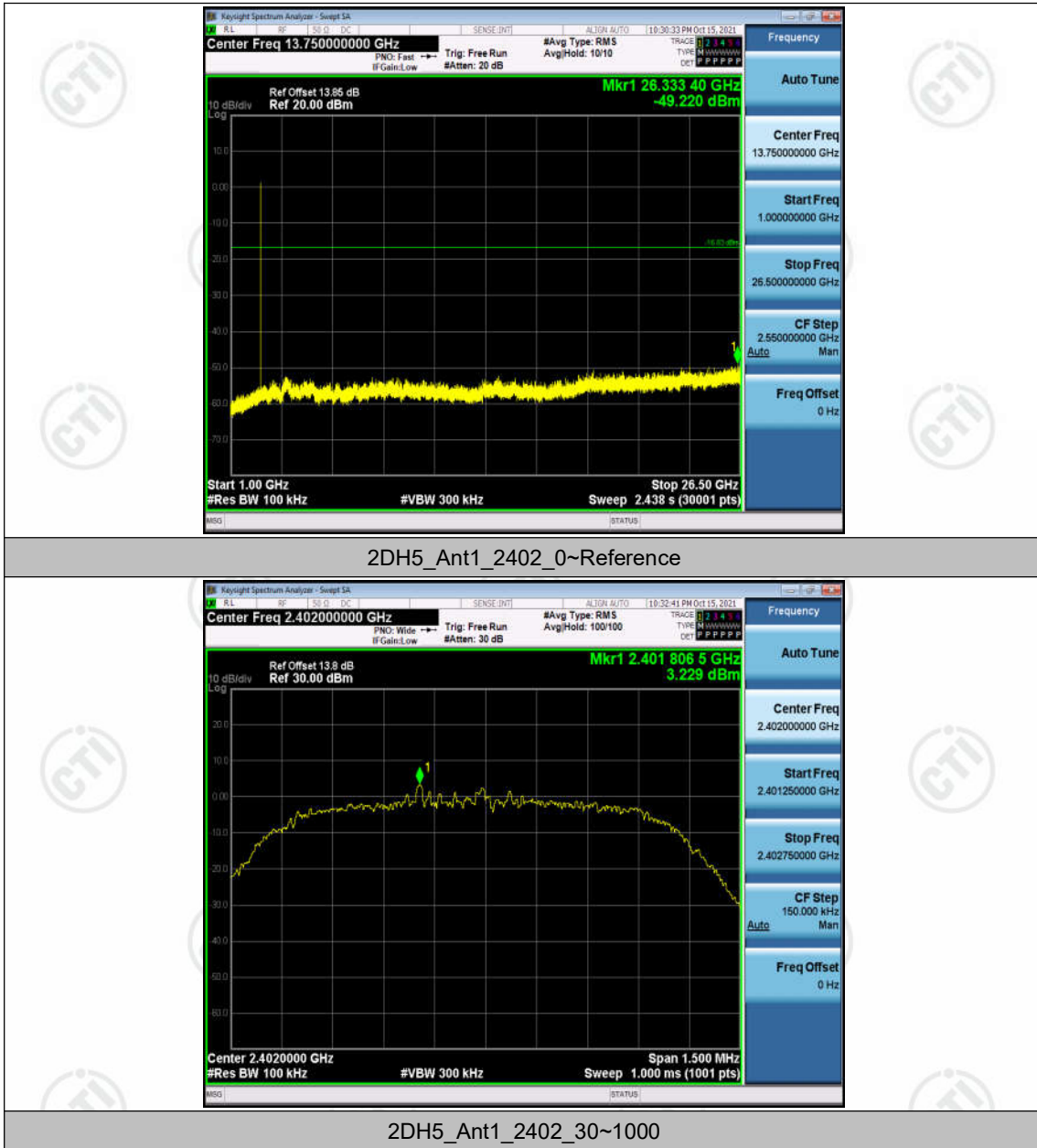


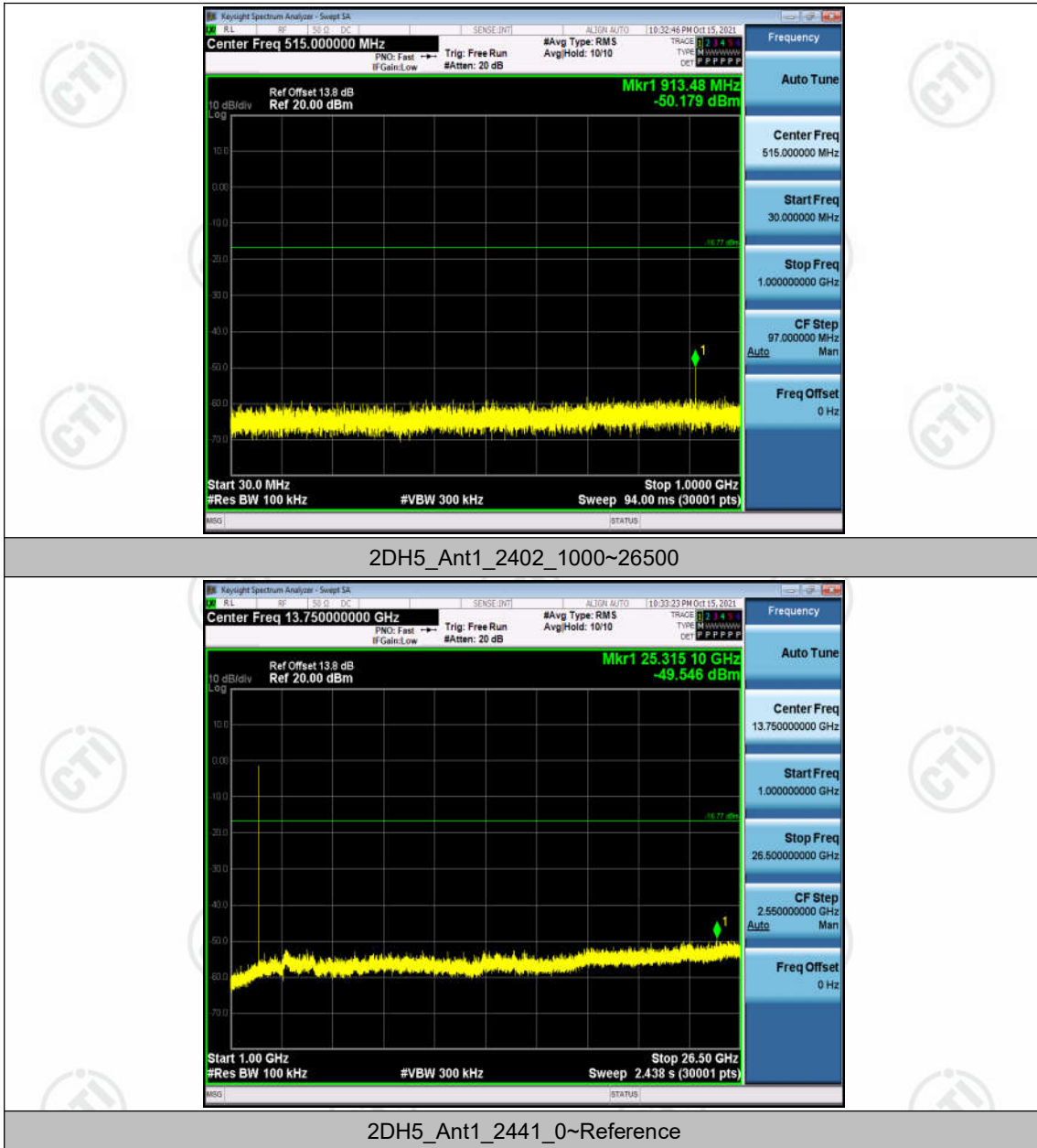


DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500







2DH5_Ant1_2441_30~1000



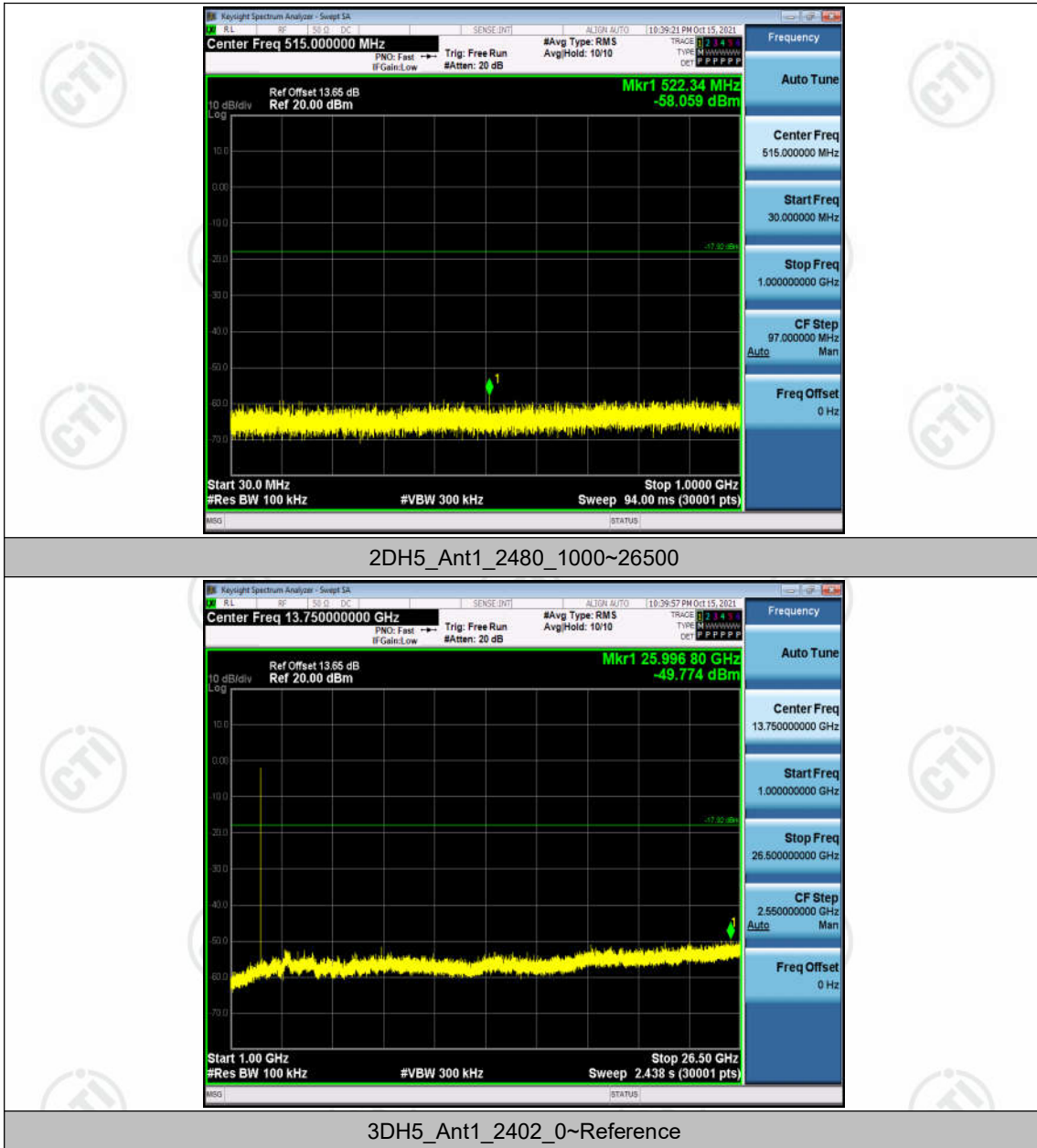
2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference

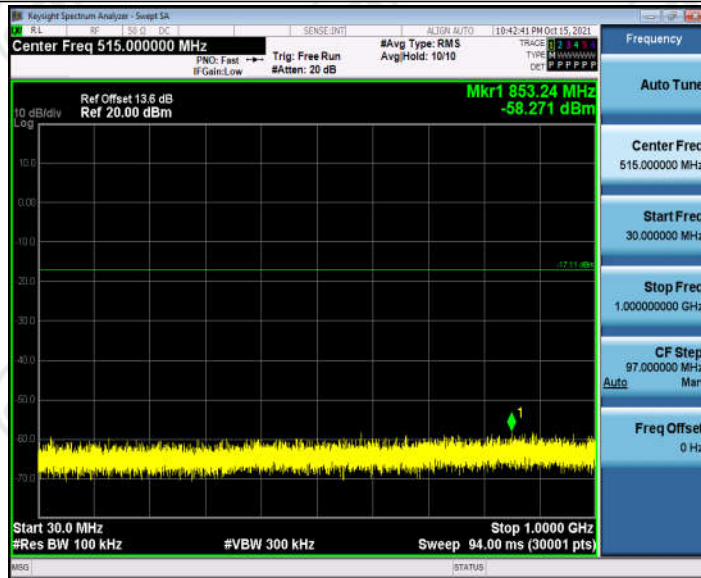


2DH5_Ant1_2480_30~1000

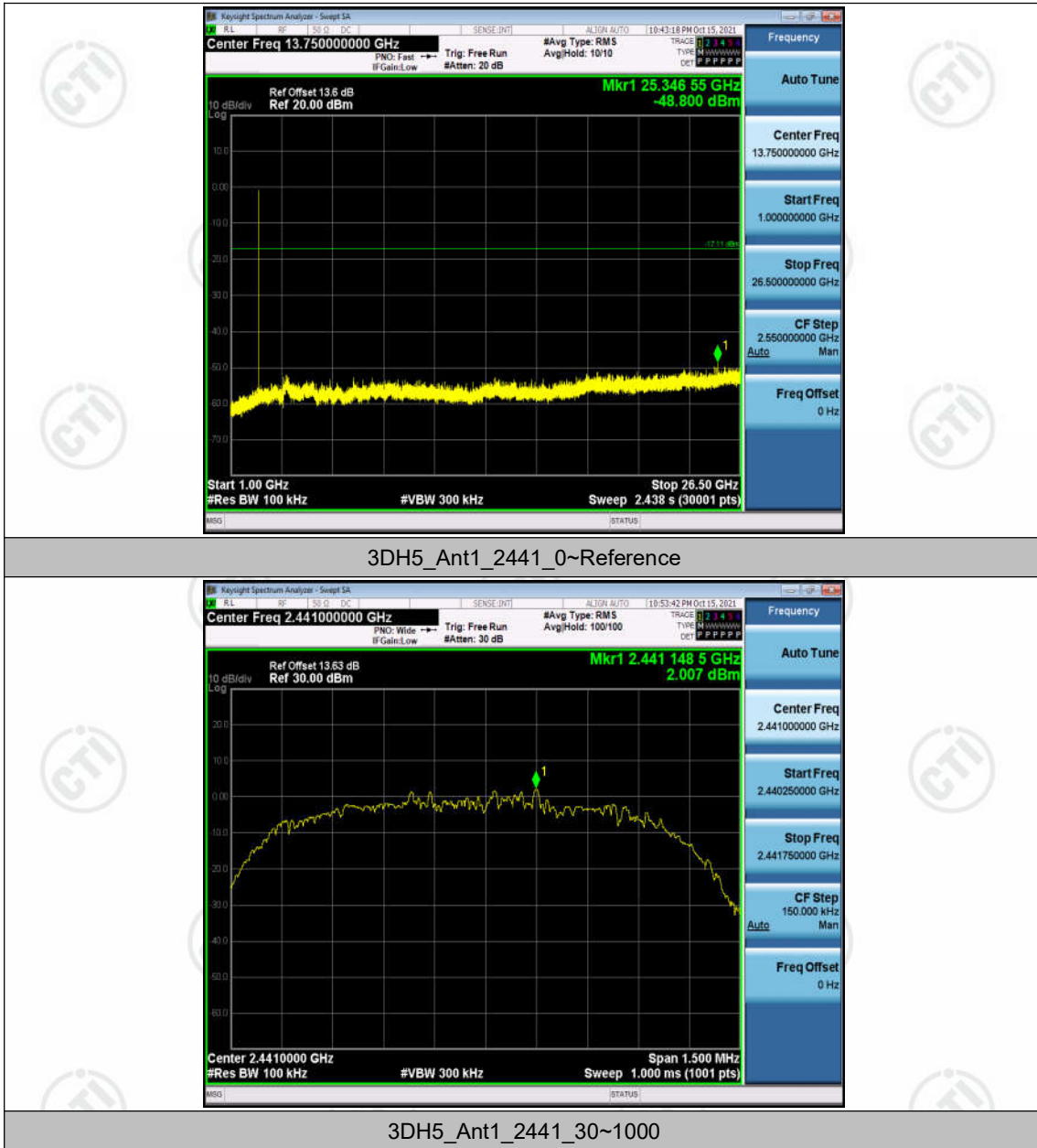


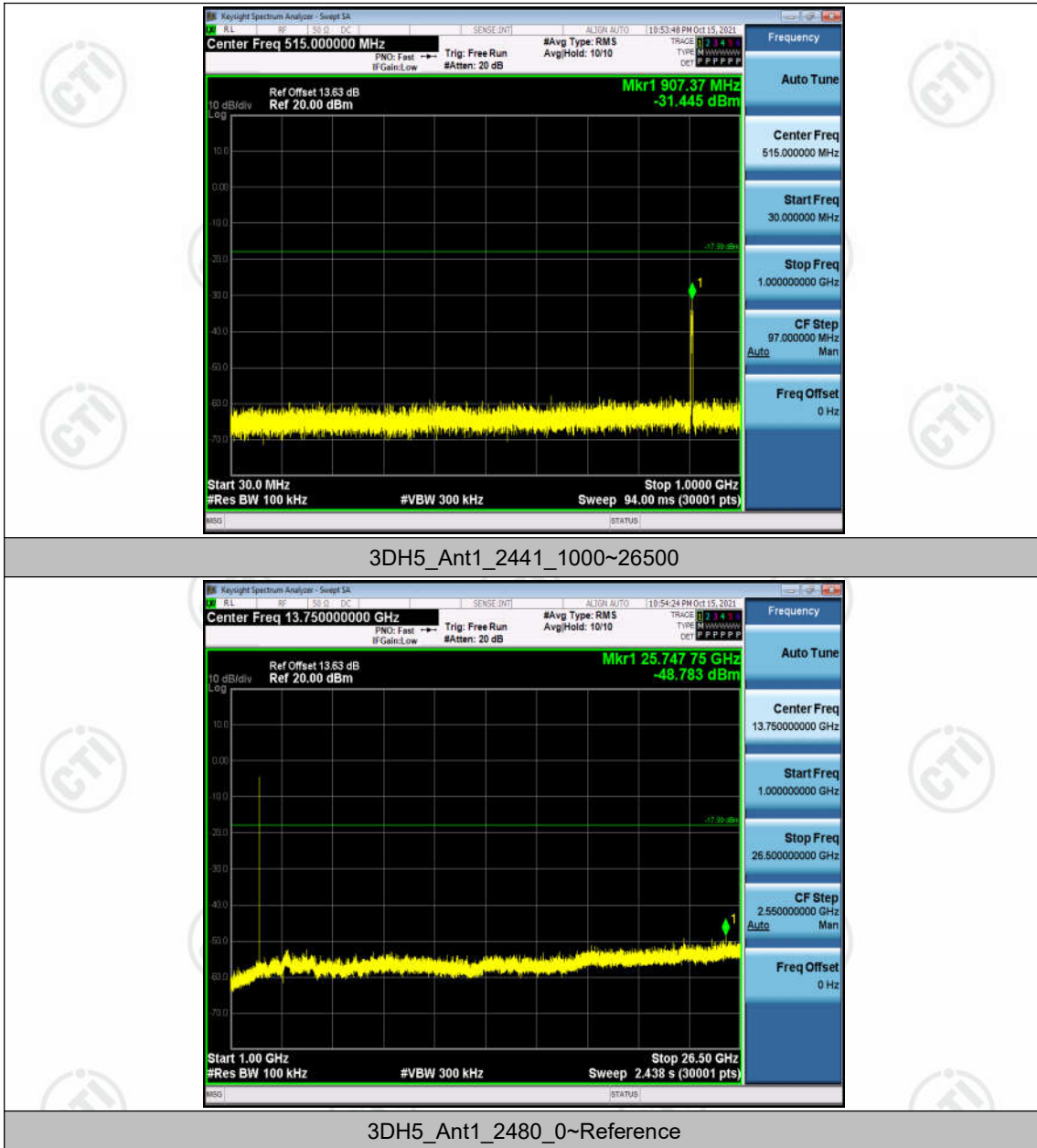


3DH5_Ant1_2402_30~1000



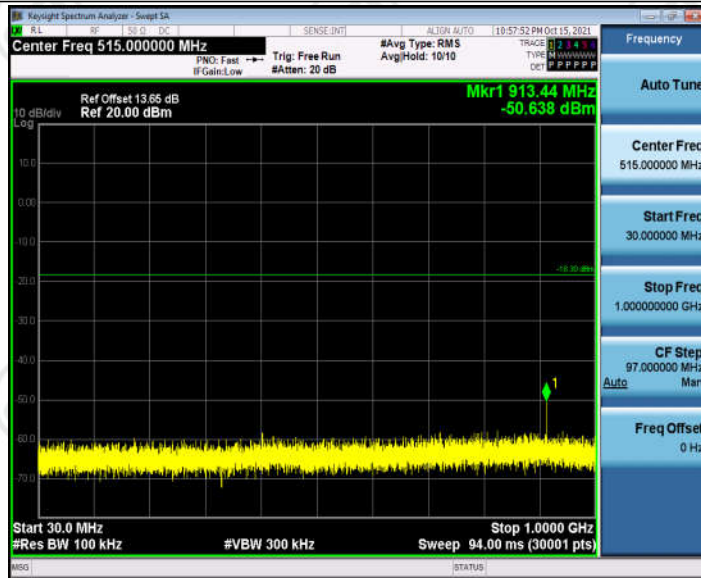
3DH5_Ant1_2402_1000~26500



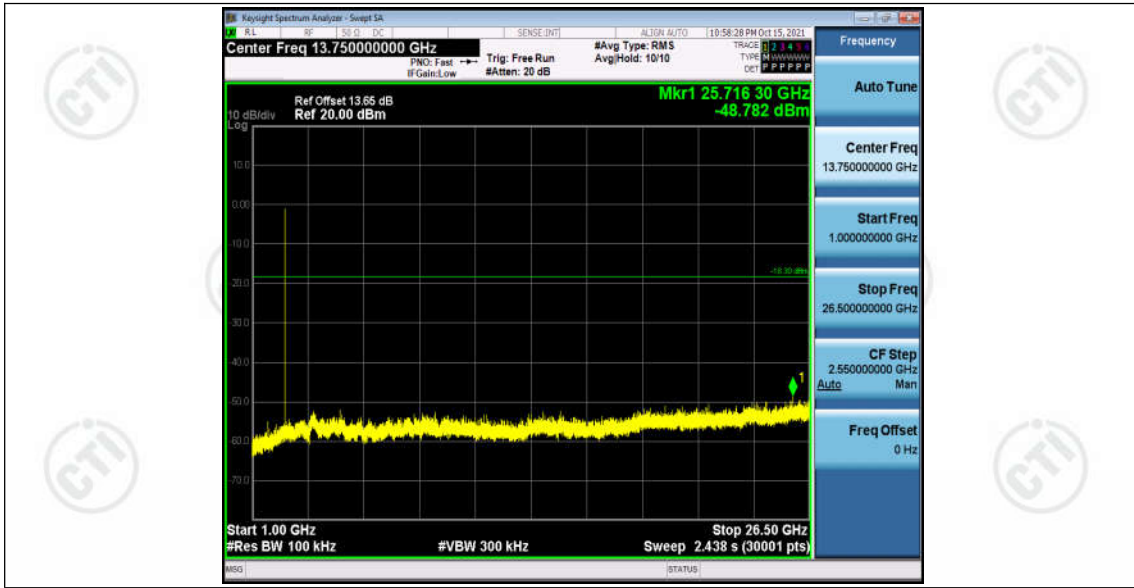




3DH5_Ant1_2480_30~1000



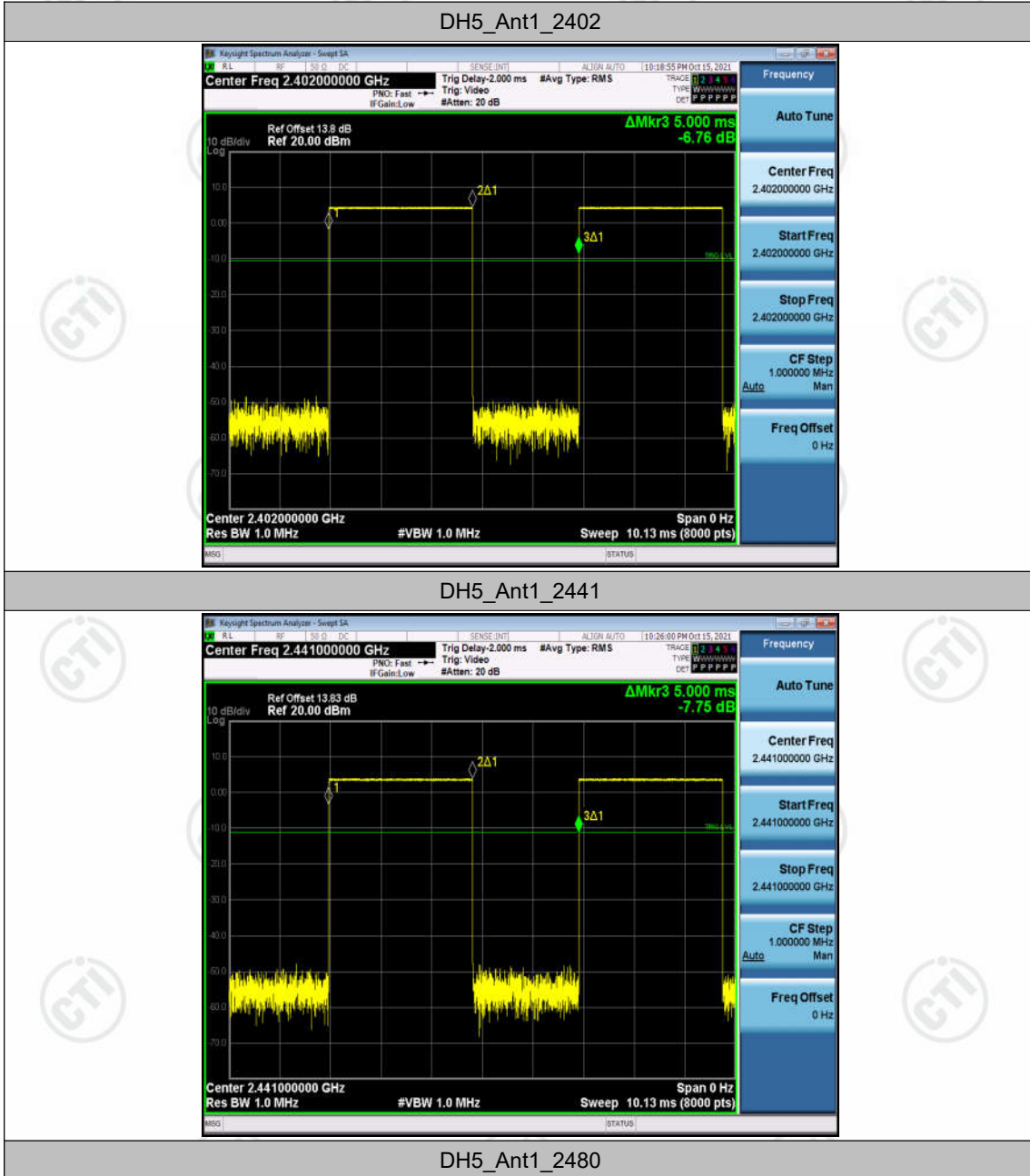
3DH5_Ant1_2480_1000~26500



AppendixI: DutyCycle**Test Result**

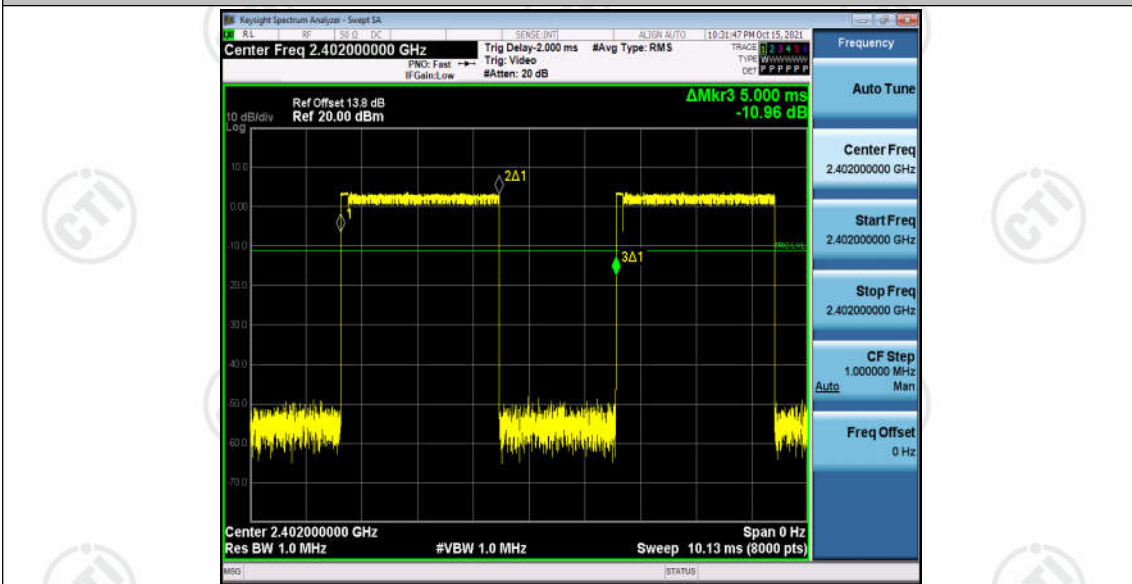
TestMode	Antenna	Channel	TransmissionDuration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.87	5.00	57.46	---	PASS
		2441	2.87	5.00	57.46	---	PASS
		2480	2.87	5.00	57.47	---	PASS
2DH5	Ant1	2402	2.88	5.00	57.54	---	PASS
		2441	2.88	5.00	57.54	---	PASS
		2480	2.88	5.00	57.54	---	PASS
3DH5	Ant1	2402	2.88	5.00	57.59	---	PASS
		2441	2.88	5.00	57.56	---	PASS
		2480	2.88	5.00	57.57	---	PASS

Test Graphs

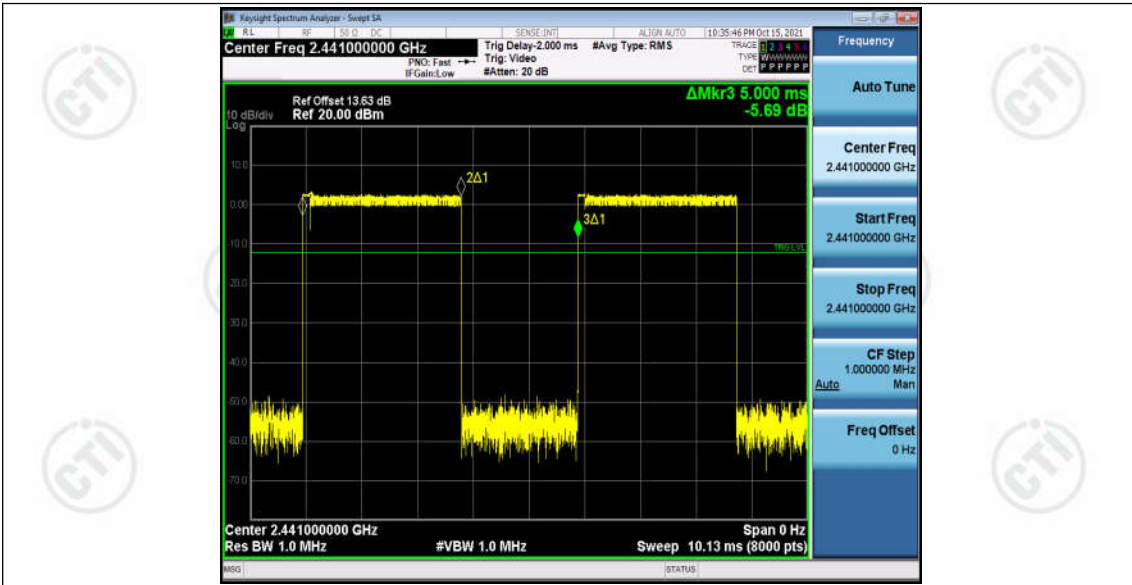




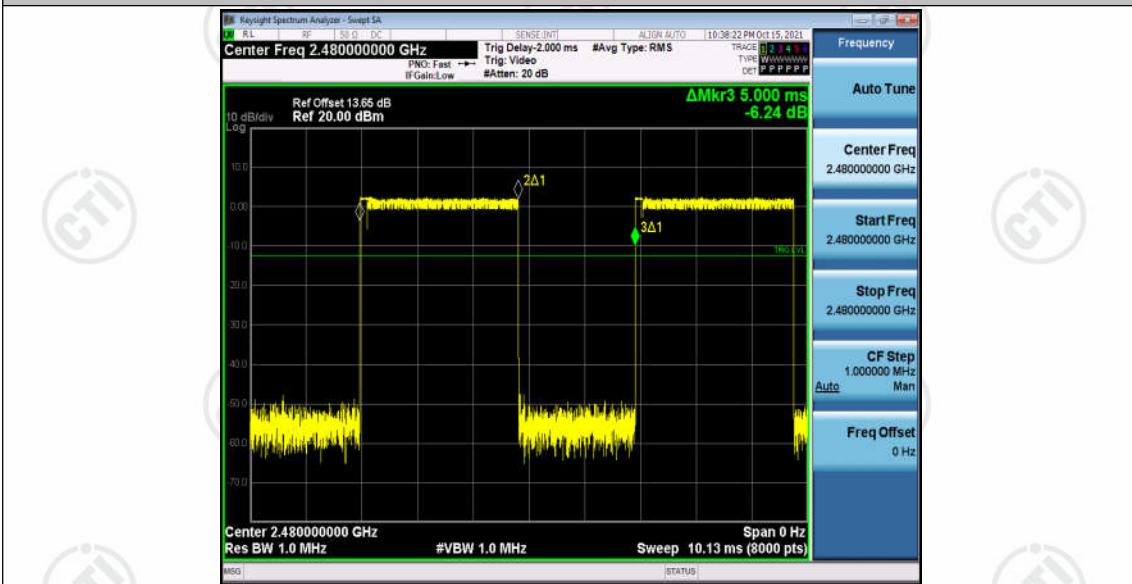
2DH5_Ant1_2402



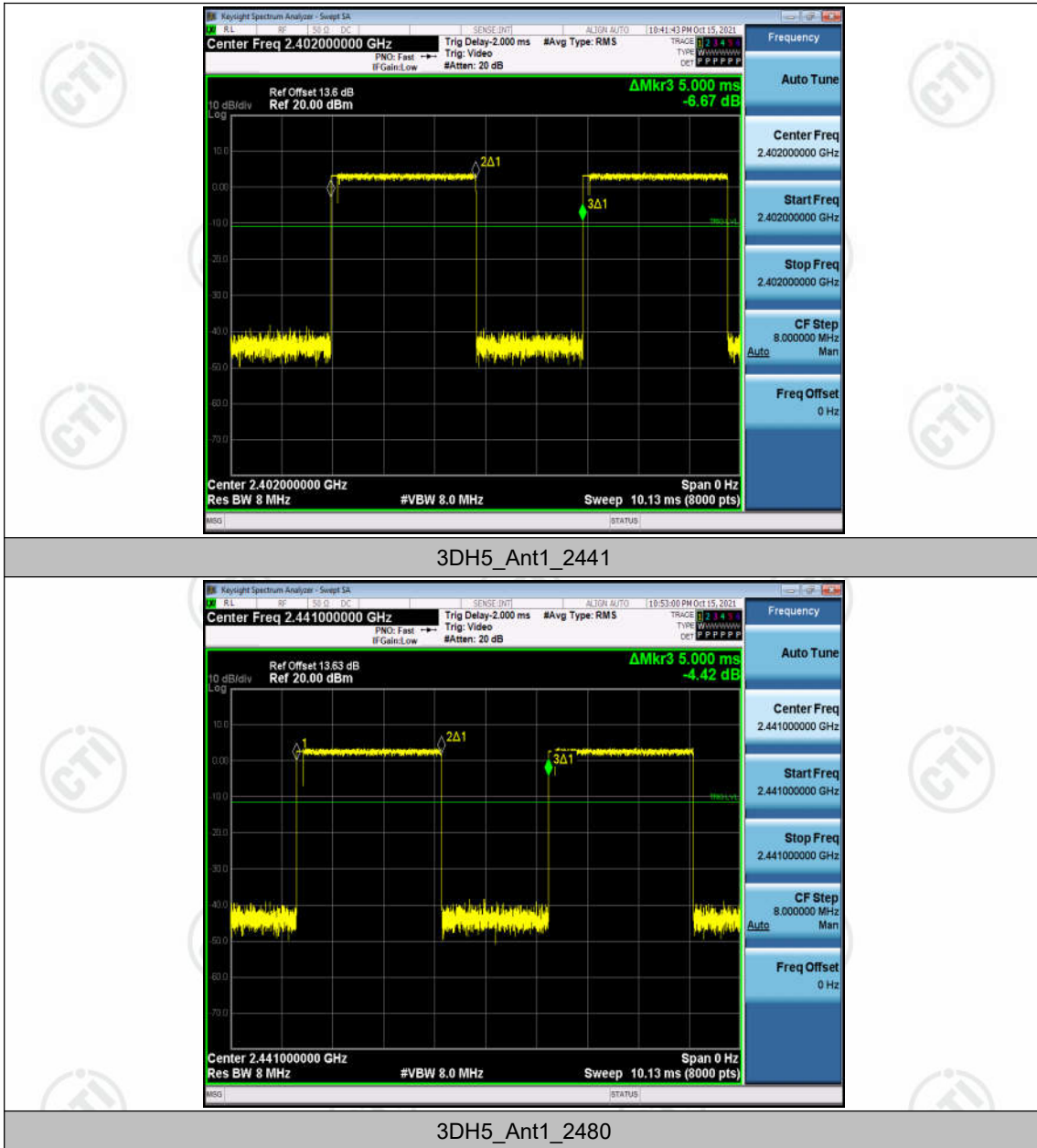
2DH5_Ant1_2441

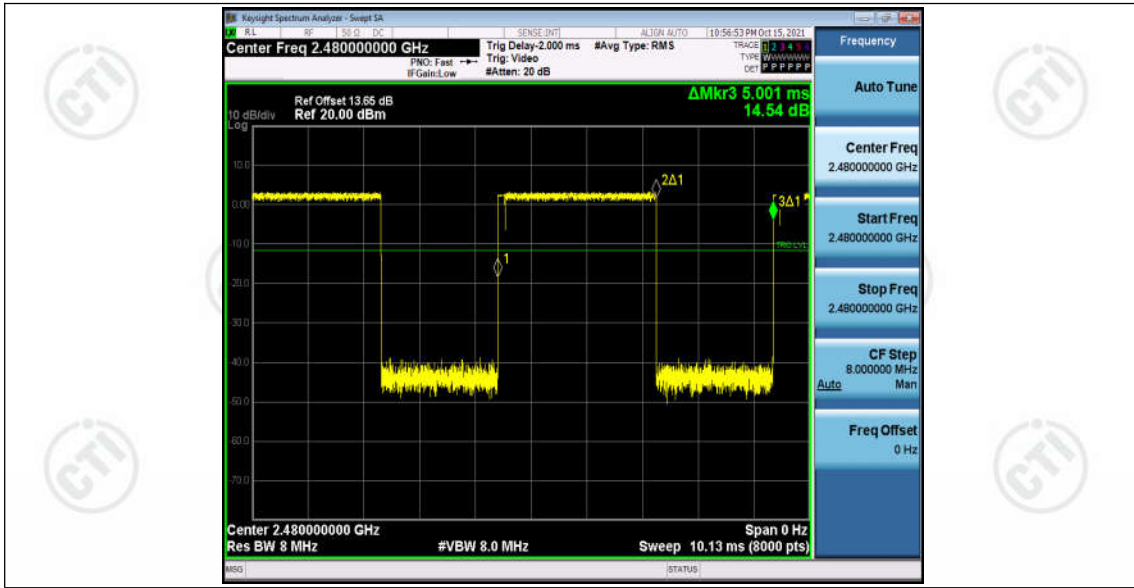


2DH5_Ant1_2480



3DH5_Ant1_2402





*** End of Report ***