

Appendix: Bluetooth Classic

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Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.029	2401.457	2402.486	---	---
		2441	0.969	2440.520	2441.489	---	---
		2480	1.029	2479.457	2480.486	---	---
2DH5	Ant1	2402	1.233	2401.361	2402.594	---	---
		2441	1.272	2440.355	2441.627	---	---
		2480	1.281	2479.349	2480.630	---	---
3DH5	Ant1	2402	1.284	2401.337	2402.621	---	---
		2441	1.269	2440.343	2441.612	---	---
		2480	1.248	2479.361	2480.609	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



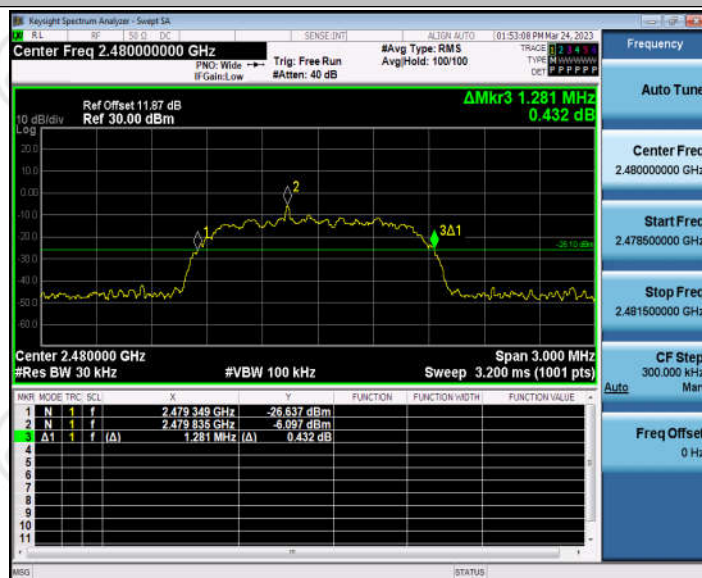
2DH5_Ant1_2402



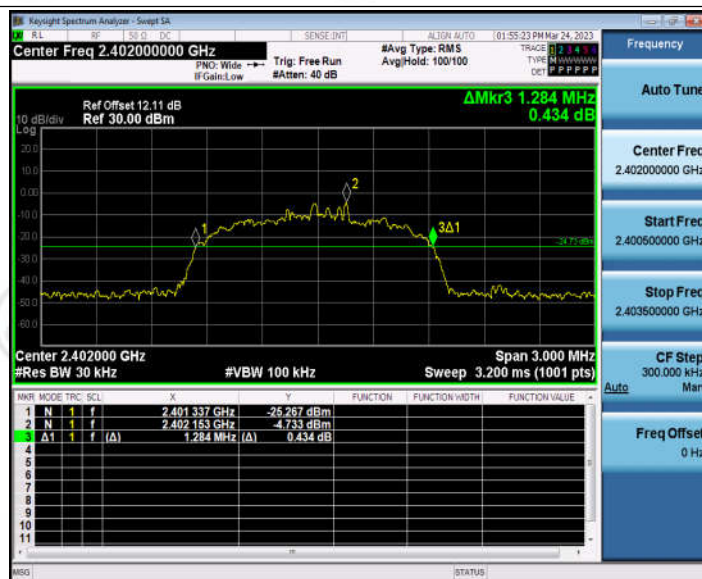
2DH5_Ant1_2441



2DH5_Ant1_2480



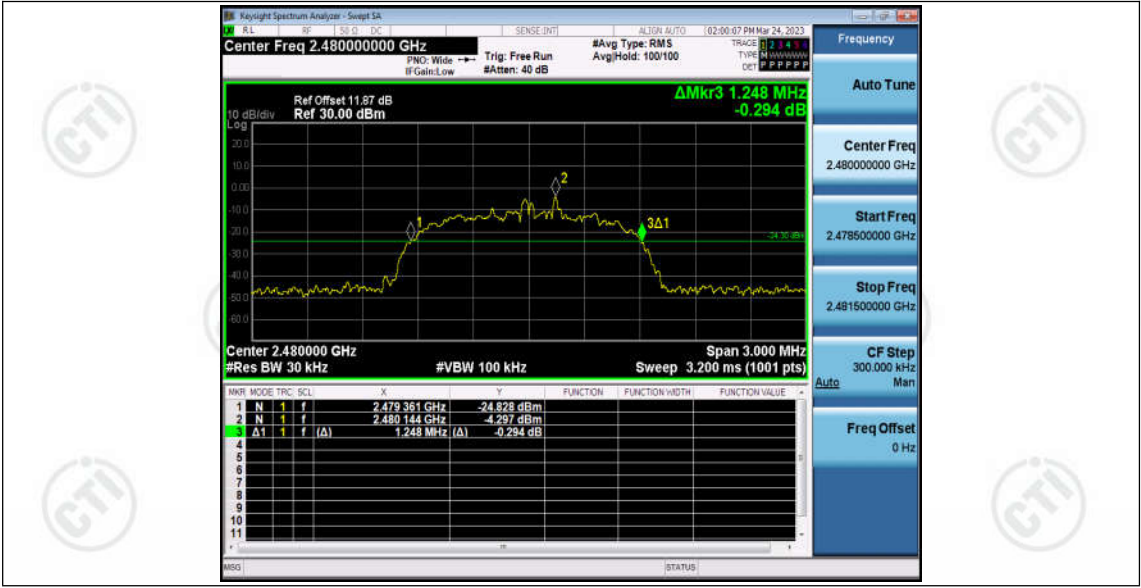
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

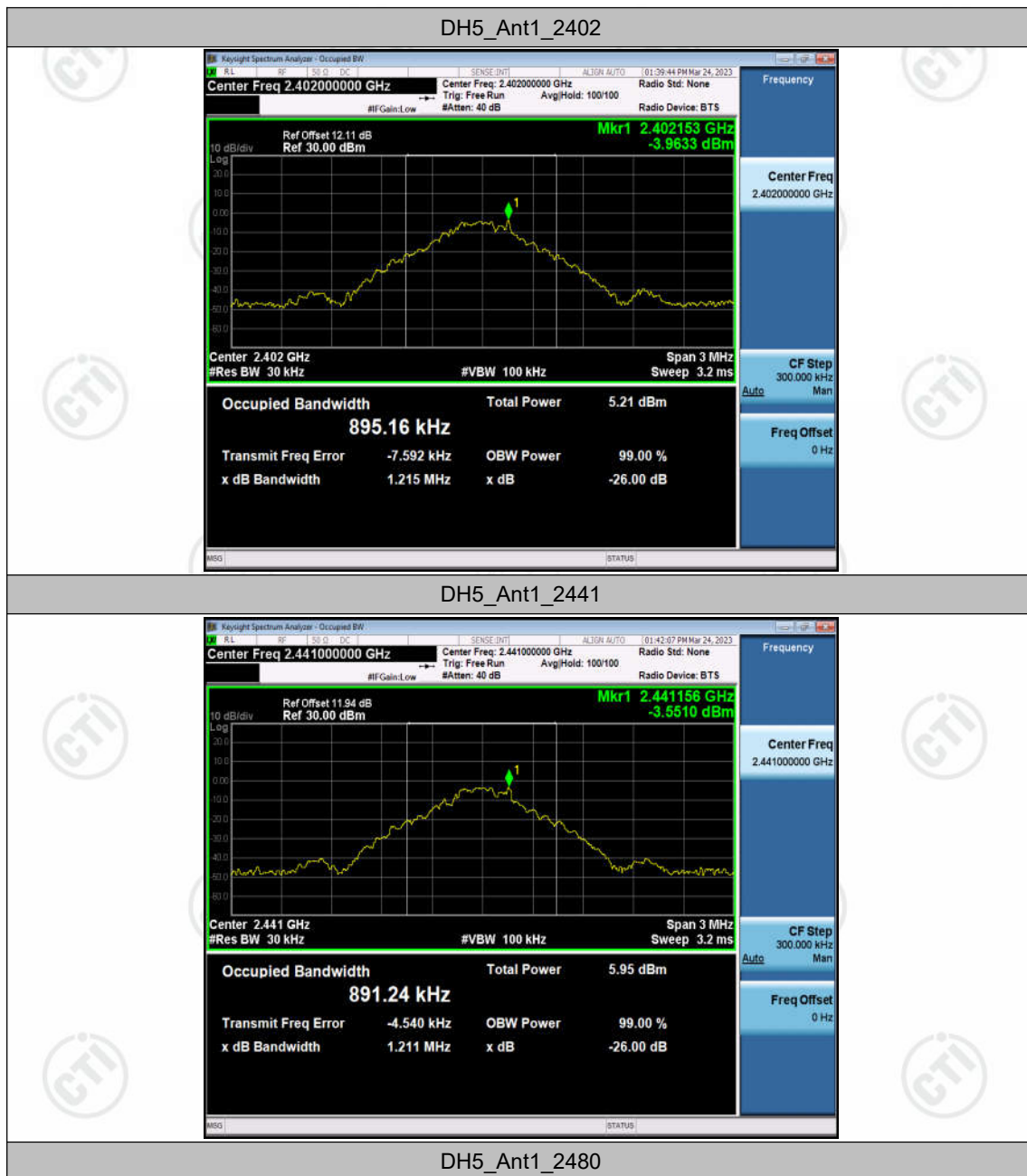


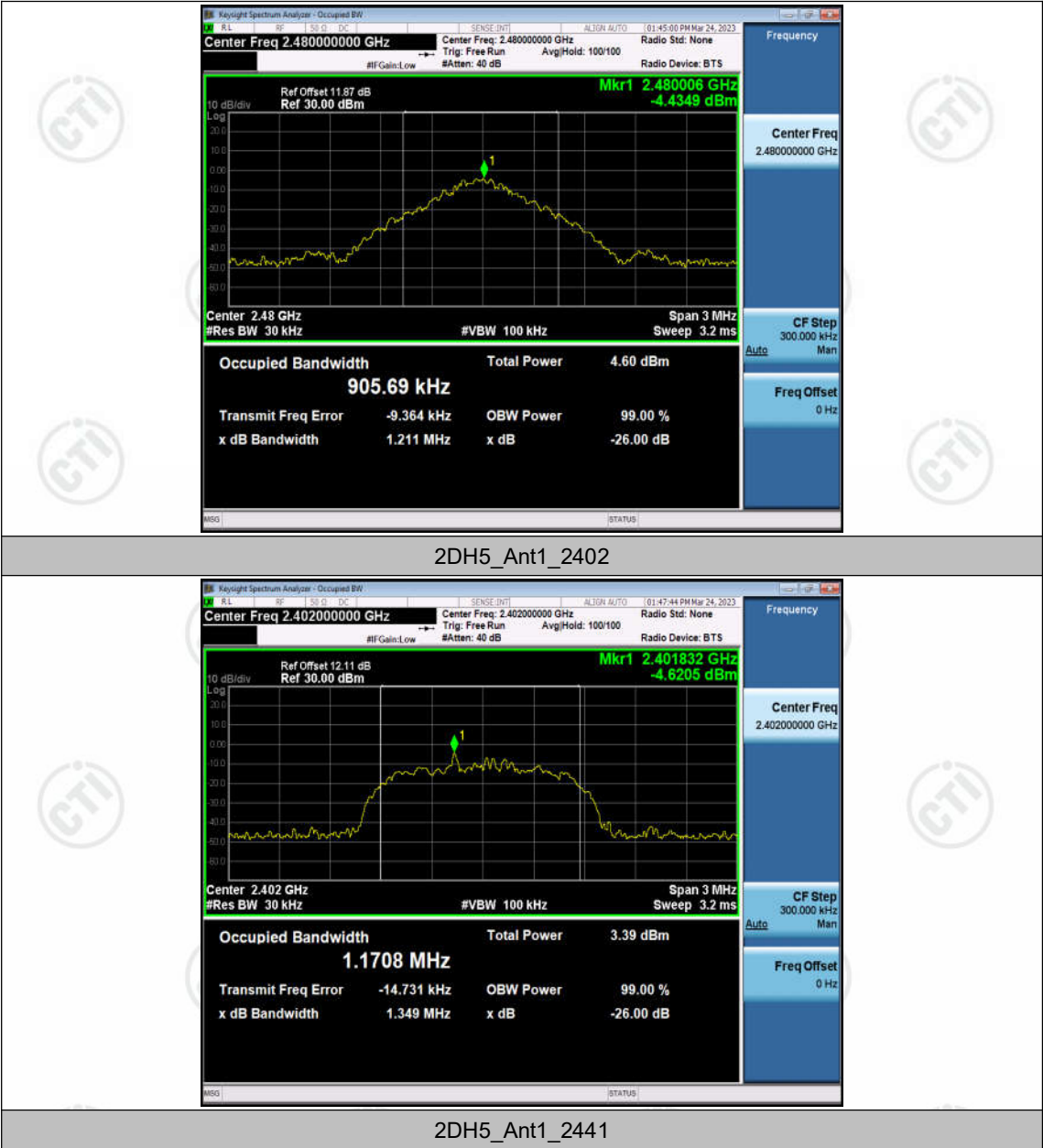
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.89516	2401.54 48	2402.44 00	---	---
		2441	0.89124	2440.54 98	2441.44 11	---	---
		2480	0.90569	2479.53 78	2480.44 35	---	---
2DH5	Ant1	2402	1.1708	2401.39 99	2402.57 07	---	---
		2441	1.1784	2440.39 36	2441.57 20	---	---
		2480	1.1709	2479.39 65	2480.56 74	---	---
3DH5	Ant1	2402	1.1727	2401.39 88	2402.57 15	---	---
		2441	1.1638	2440.40 56	2441.56 94	---	---
		2480	1.1838	2479.39 14	2480.57 52	---	---

Test Graphs



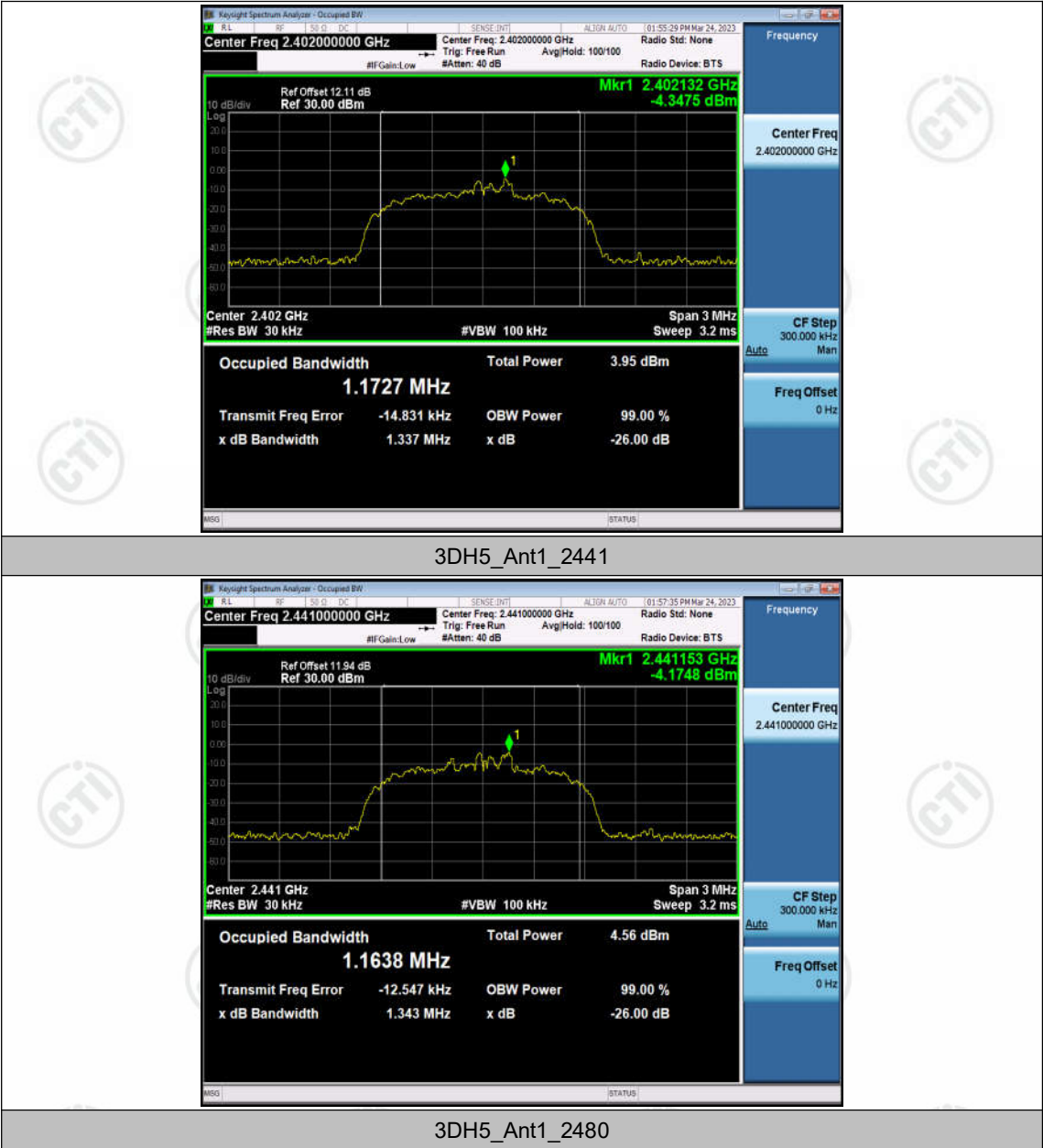


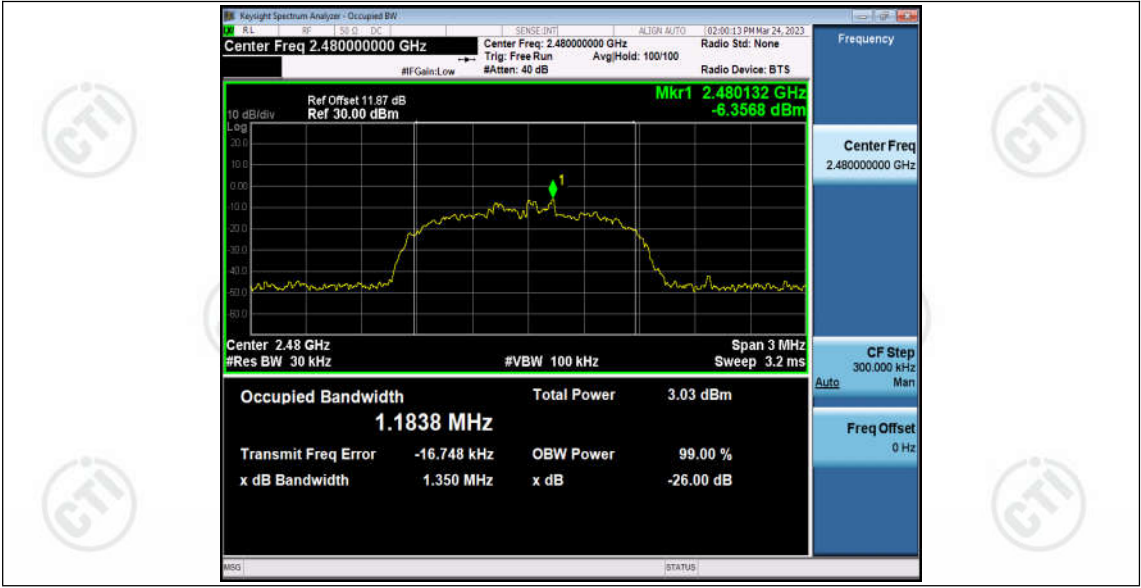


2DH5_Ant1_2480



3DH5_Ant1_2402



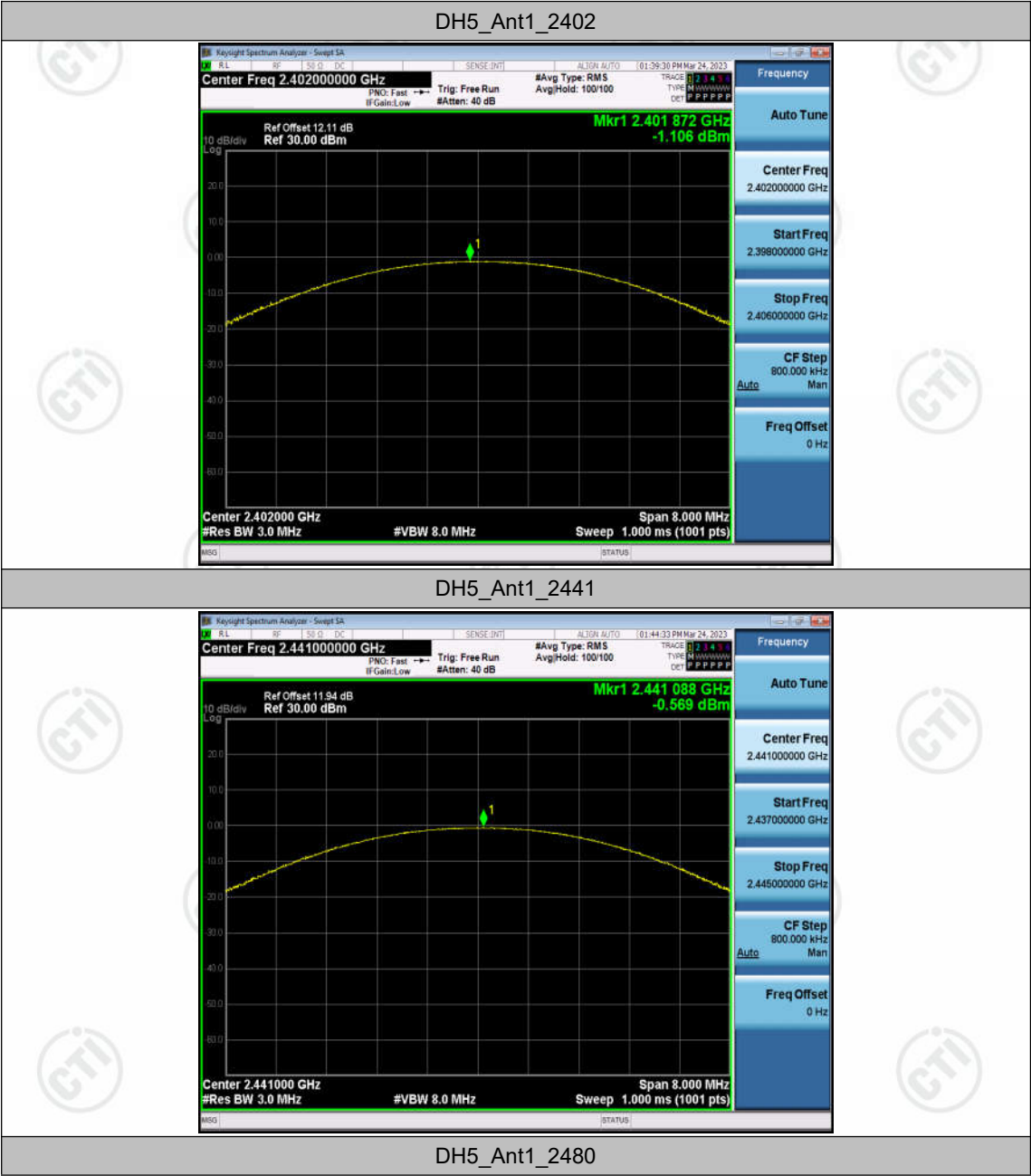


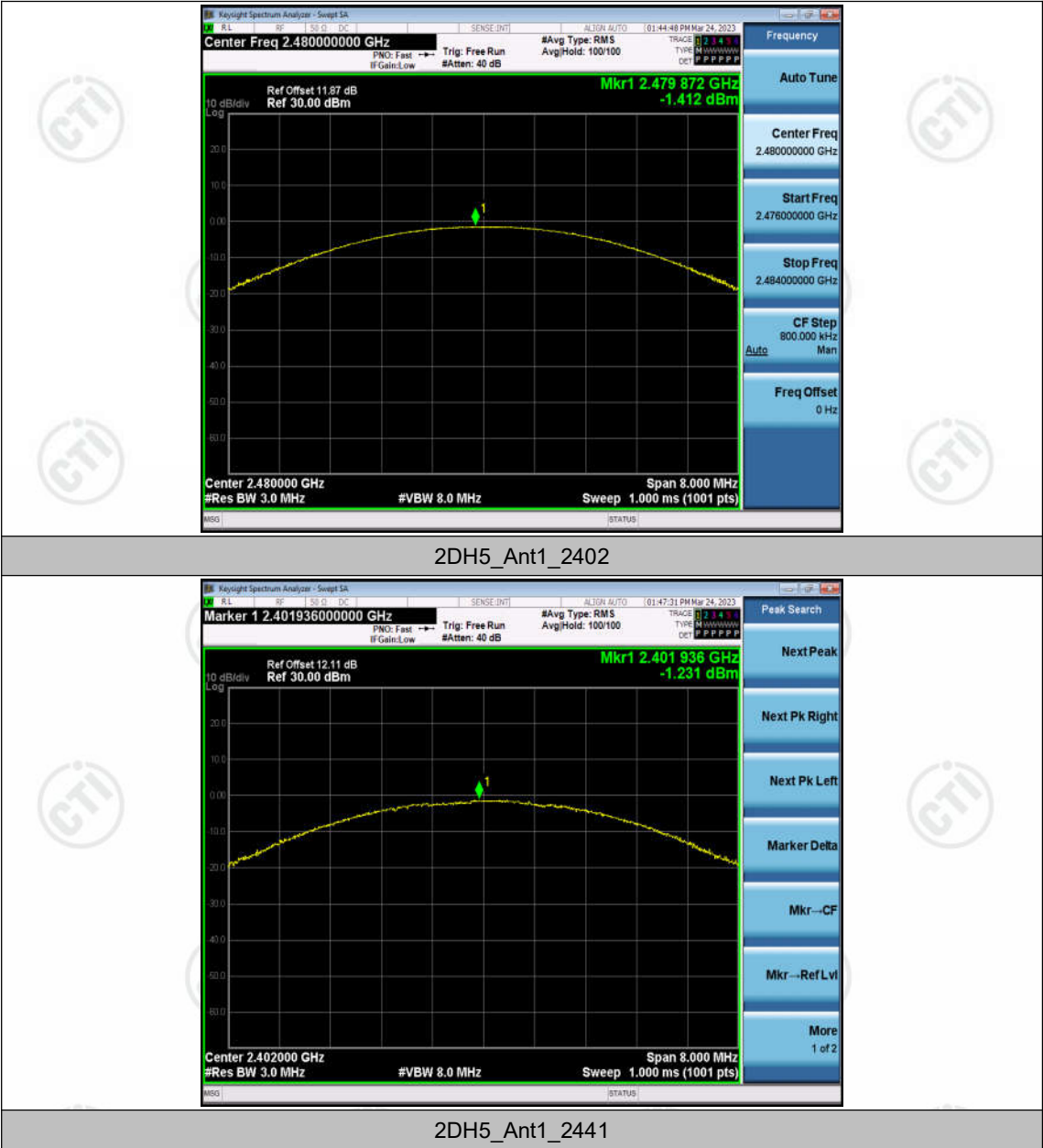
Appendix C: Maximum conducted output power

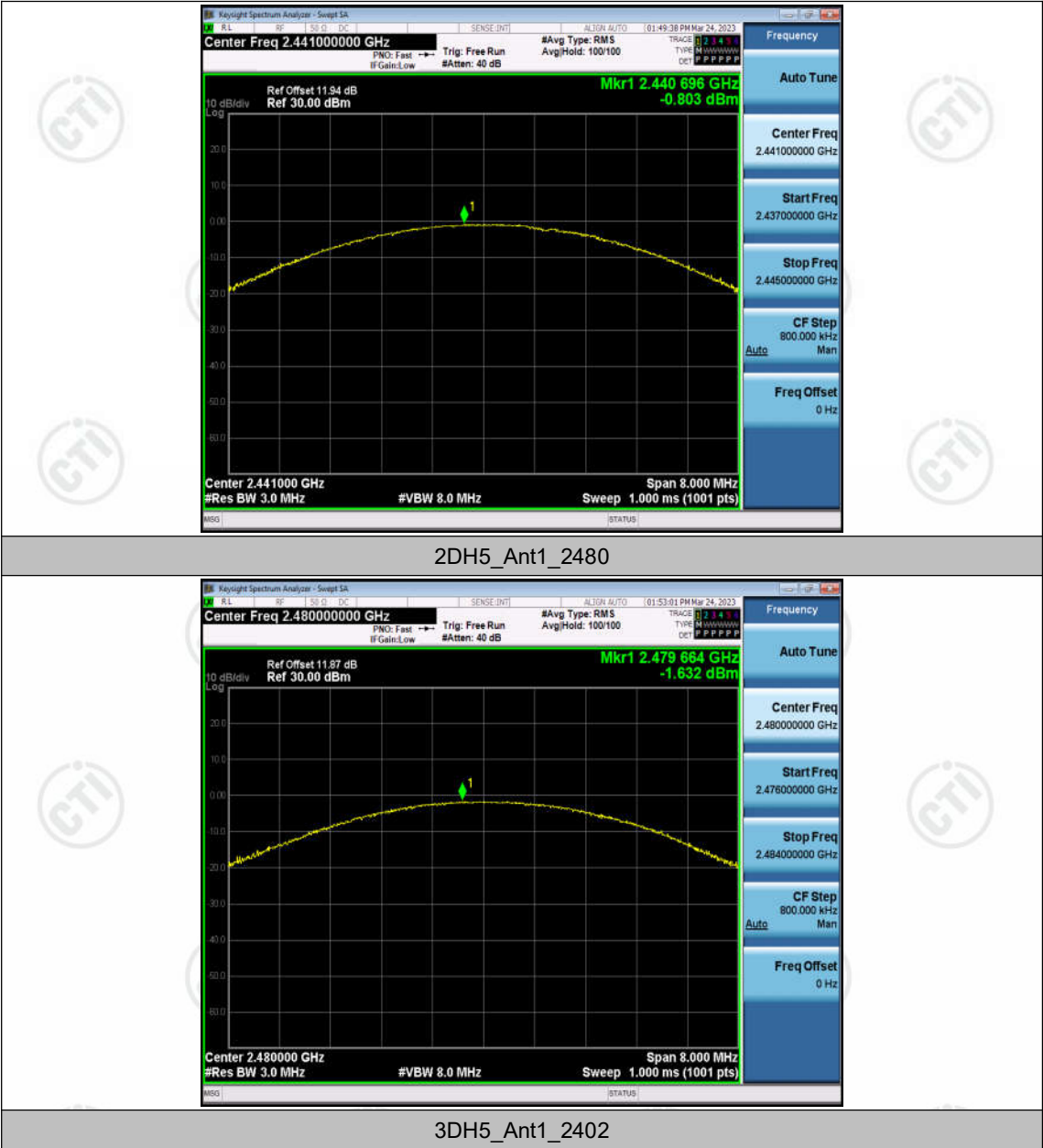
Test Result Peak

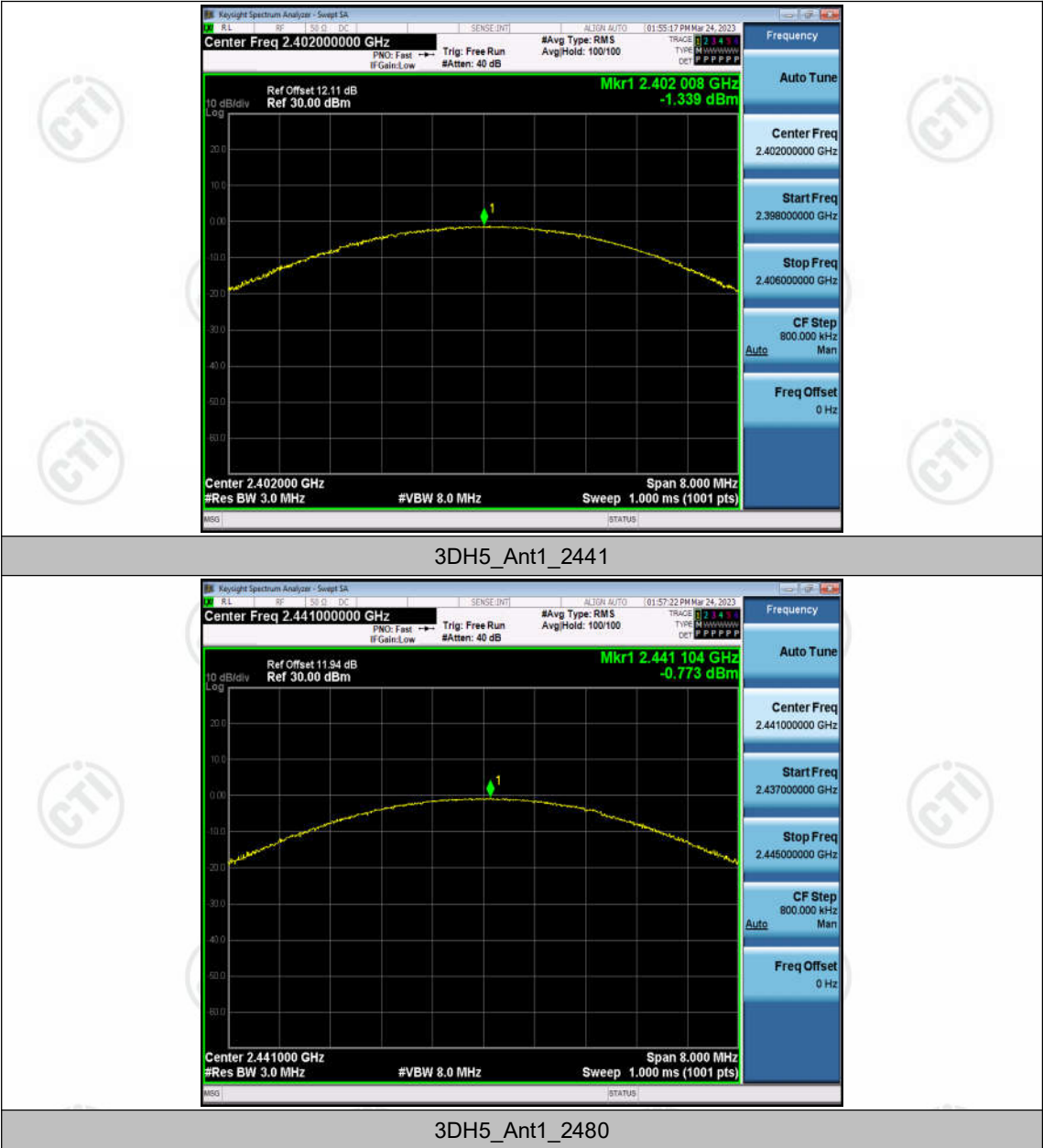
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-1.11	≤30	PASS
		2441	-0.57	≤20.97	PASS
		2480	-1.41	≤20.97	PASS
2DH5	Ant1	2402	-1.23	≤30	PASS
		2441	-0.8	≤20.97	PASS
		2480	-1.63	≤20.97	PASS
3DH5	Ant1	2402	-1.34	≤30	PASS
		2441	-0.77	≤30	PASS
		2480	-1.64	≤30	PASS

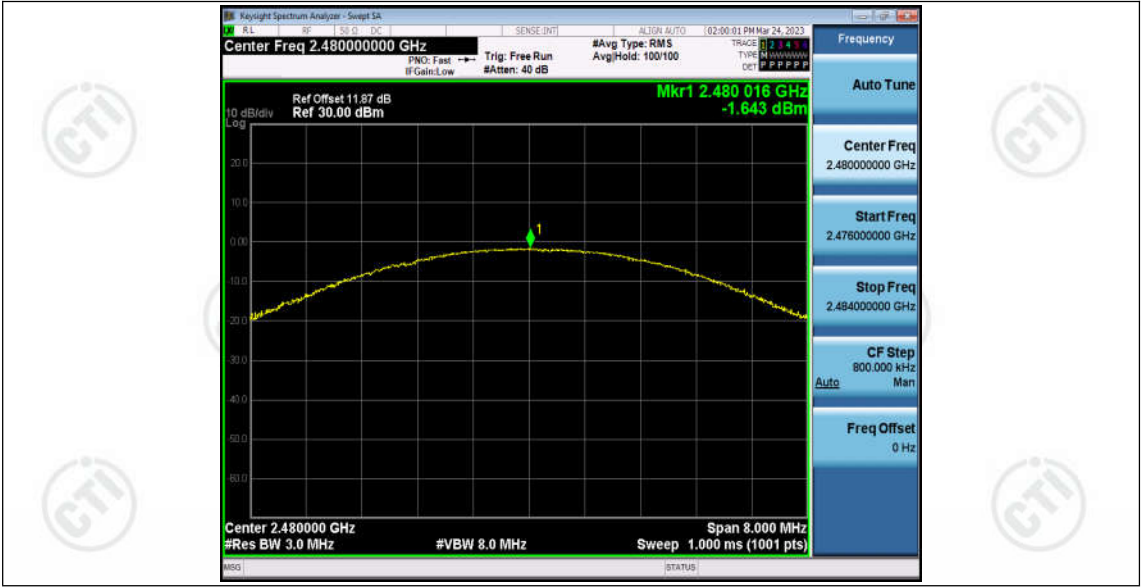
Test Graphs









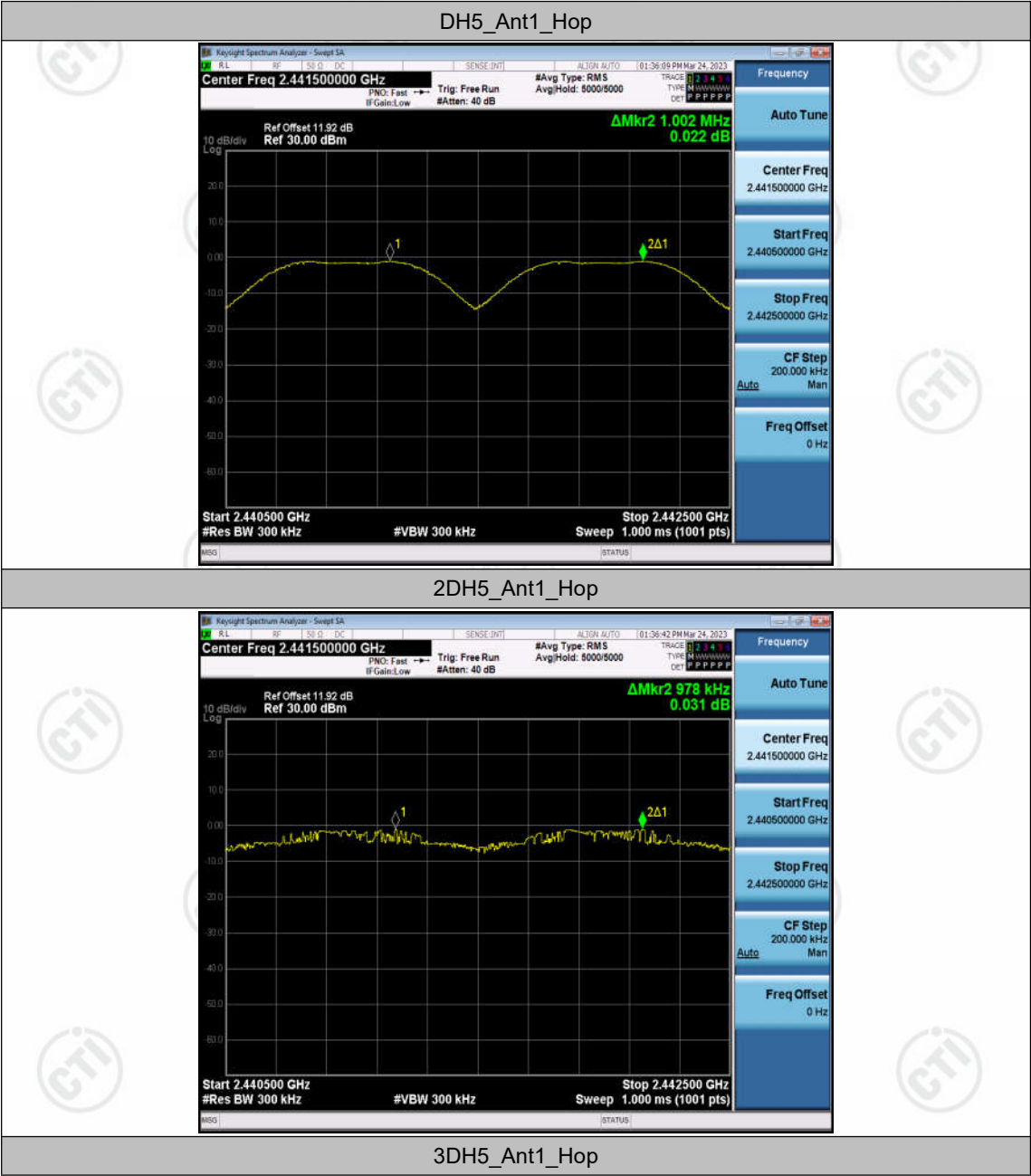


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.002	≥0.025	PASS
2DH5	Ant1	Hop	0.978	≥0.025	PASS
3DH5	Ant1	Hop	1.31	≥0.025	PASS

Test Graphs



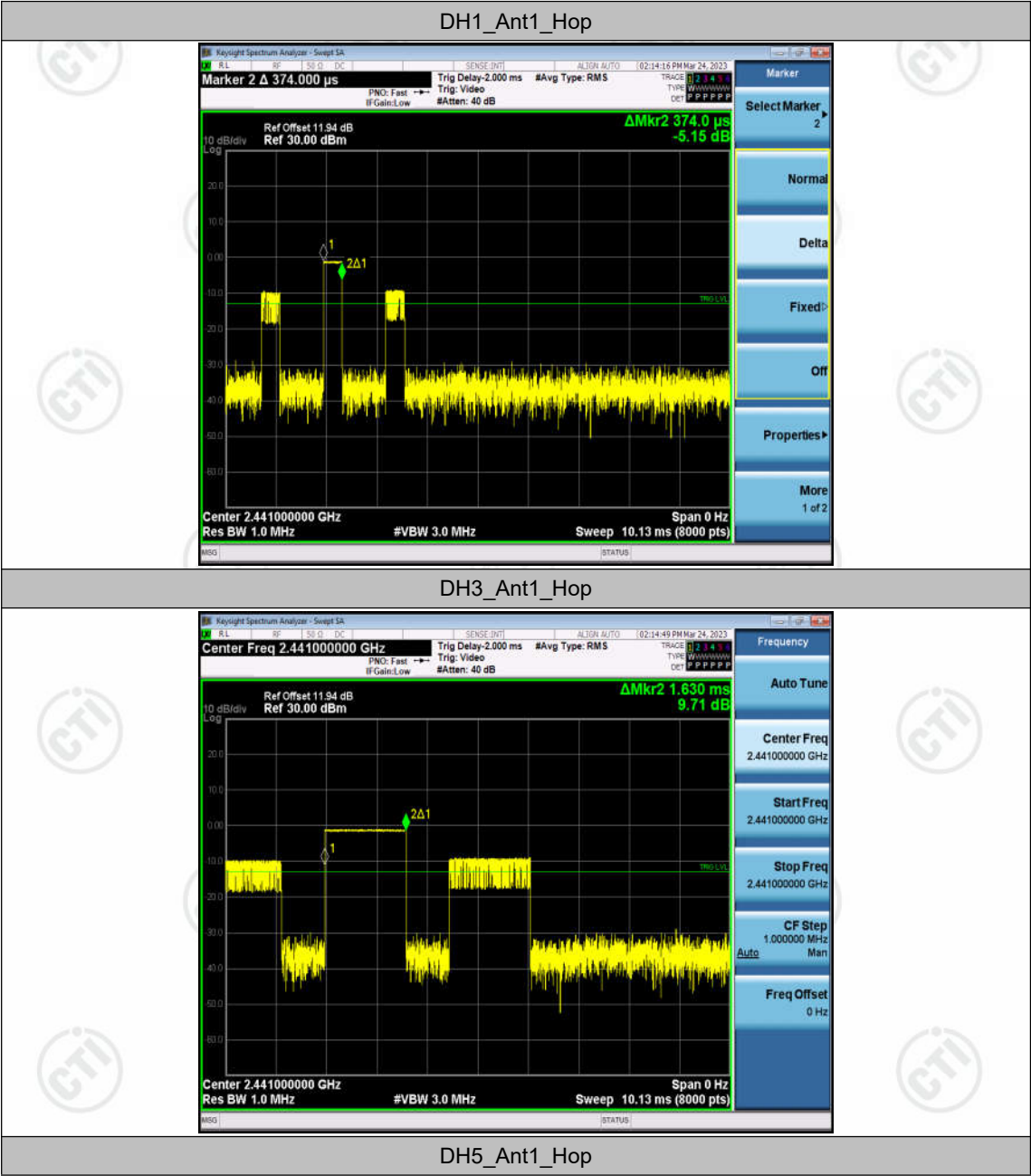


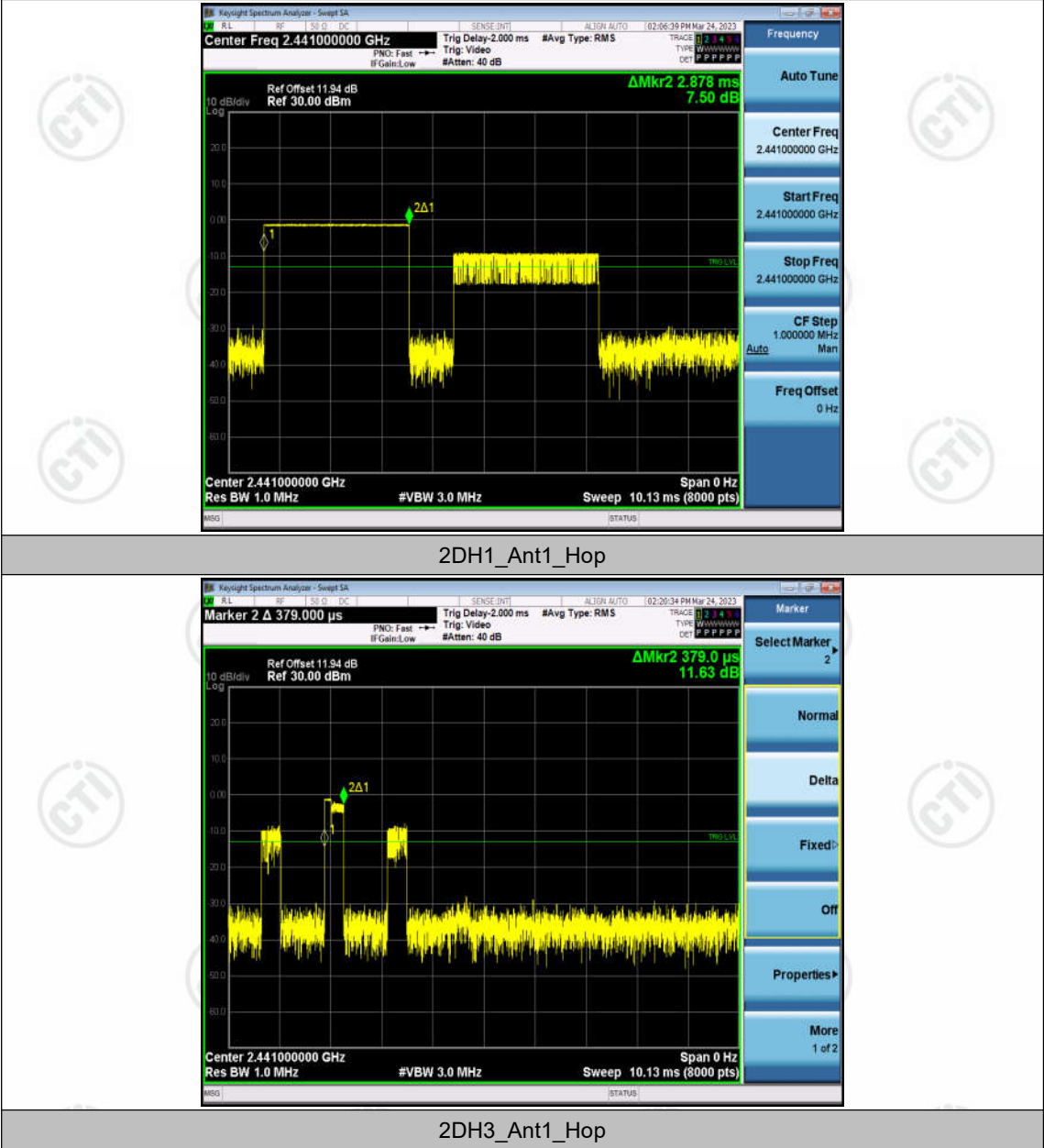
Appendix E: Time of occupancy

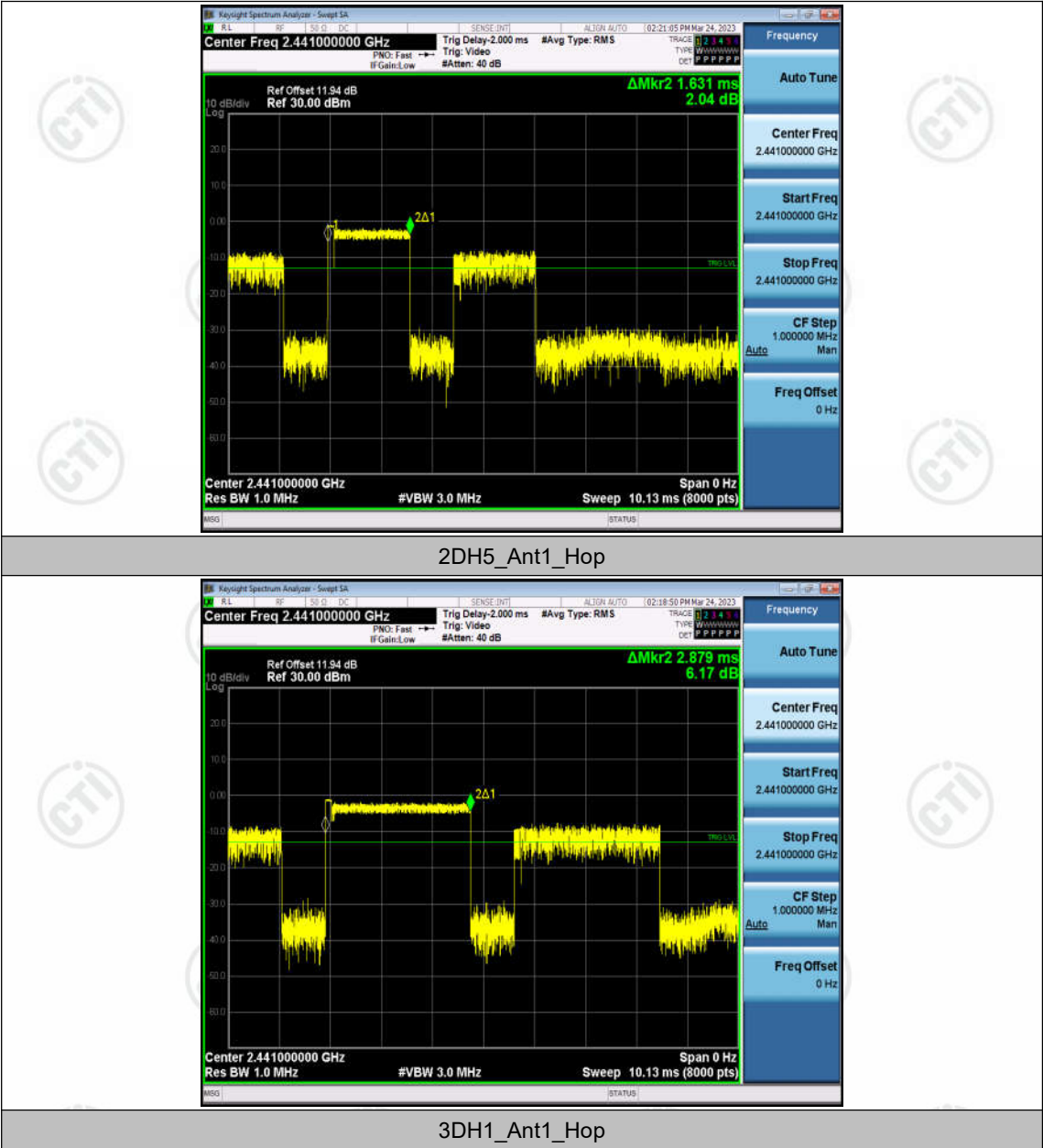
Test Result

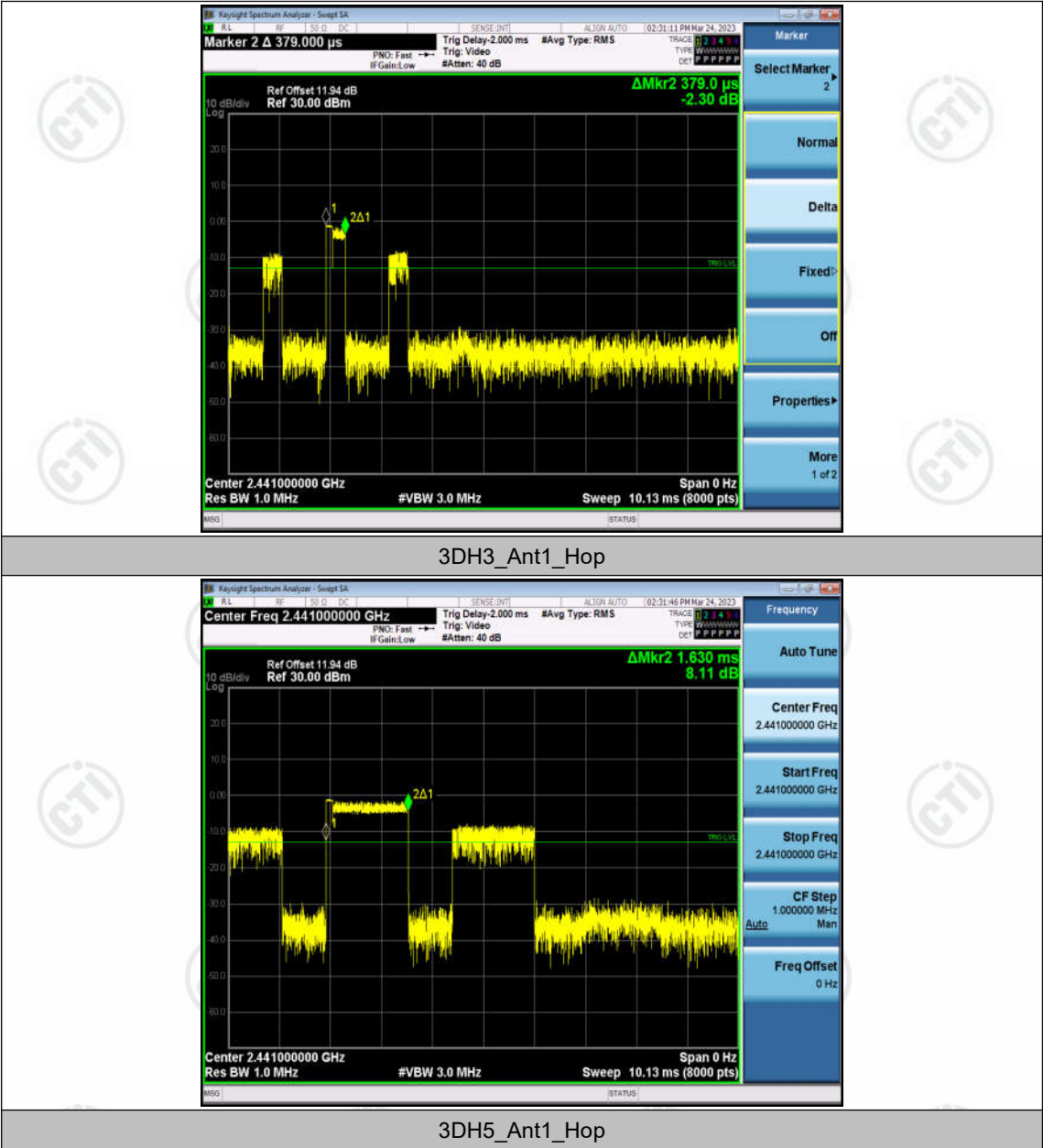
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.374	320	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.630	160	0.261	≤0.4	PASS
DH5	Ant1	Hop	2.878	106.67	0.307	≤0.4	PASS
2DH1	Ant1	Hop	0.379	320	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.631	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.879	106.67	0.307	≤0.4	PASS
3DH1	Ant1	Hop	0.379	320	0.121	≤0.4	PASS
3DH3	Ant1	Hop	1.630	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.882	106.67	0.307	≤0.4	PASS

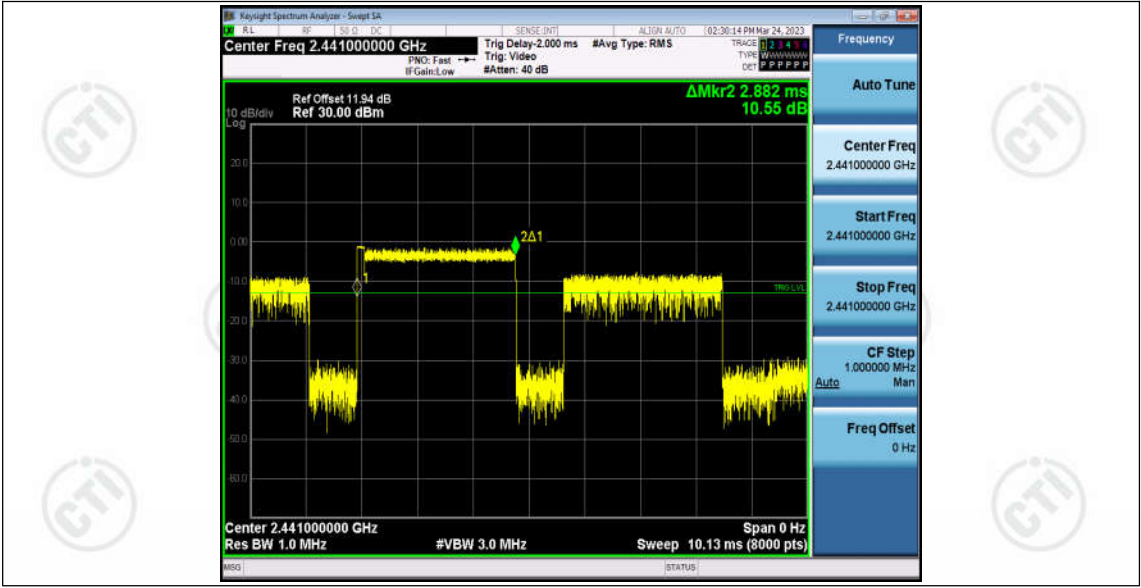
Test Graphs









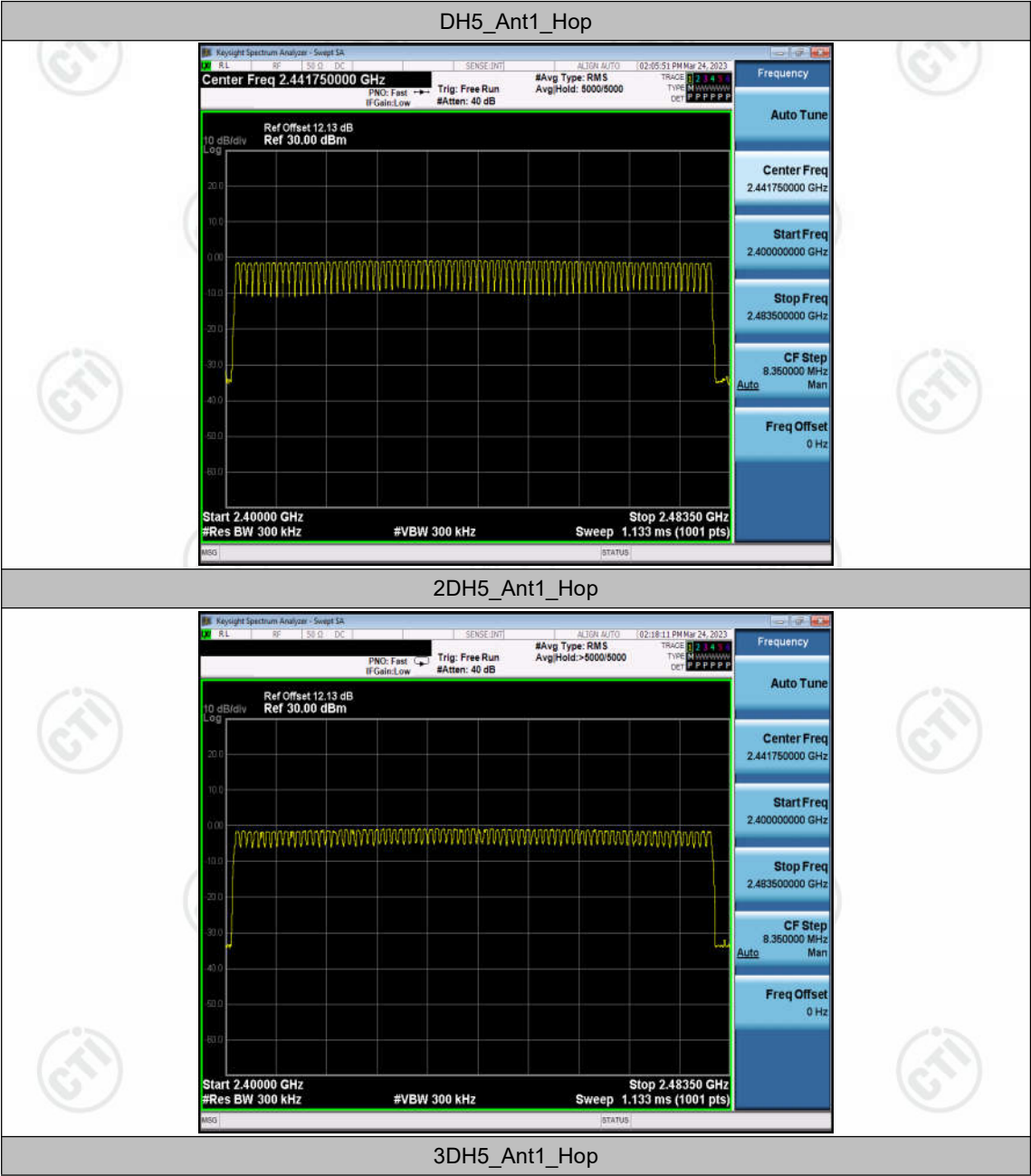


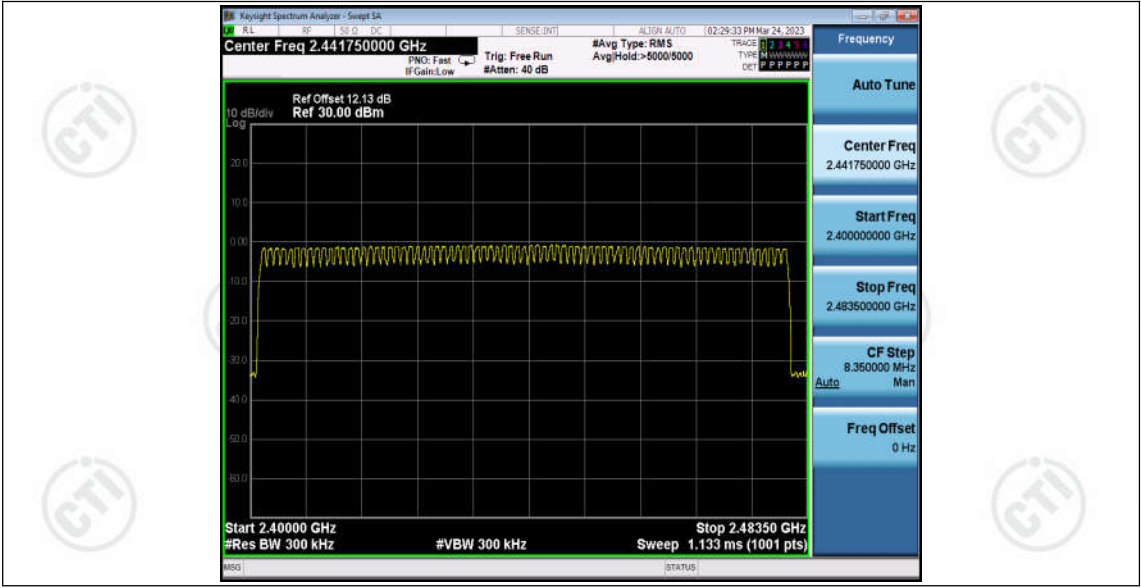
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Frequency[MHz]	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



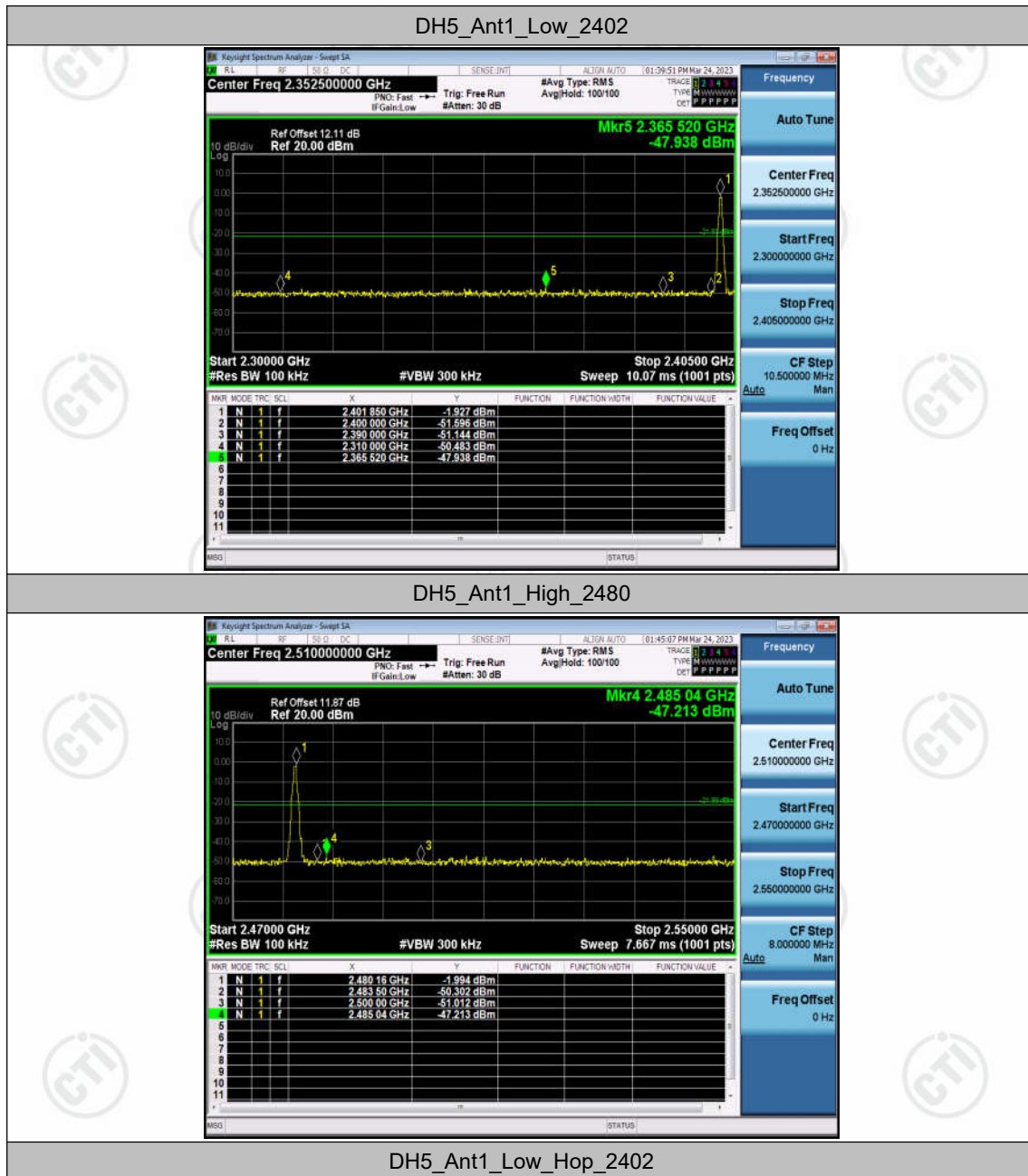


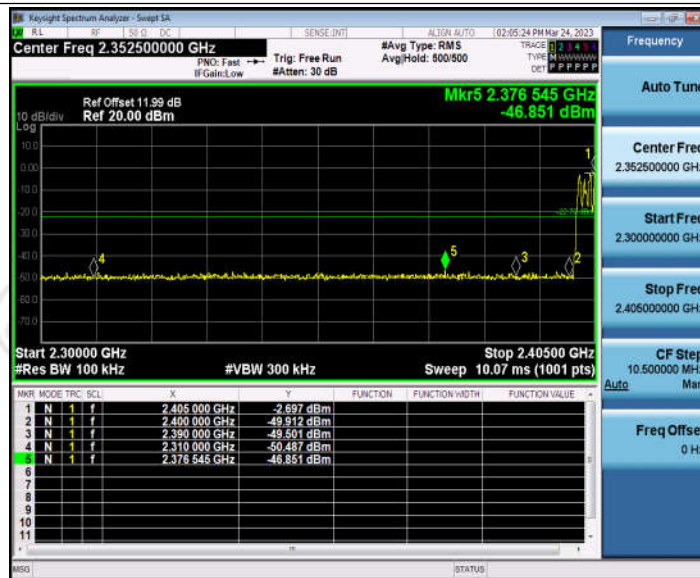
Appendix G: Band edge measurements

Test Result

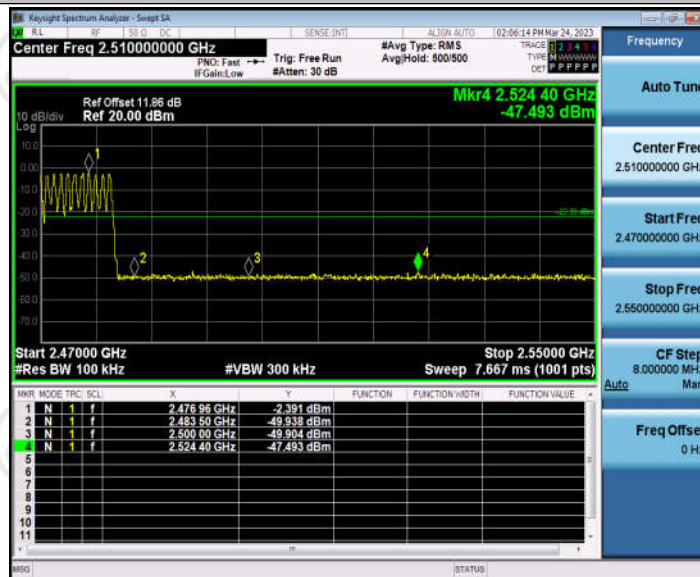
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.93	-47.94	≤-21.93	PASS
		High	2480	-1.99	-47.21	≤-21.99	PASS
		Low	Hop_2402	-2.70	-46.85	≤-22.7	PASS
		High	Hop_2480	-2.39	-47.49	≤-22.39	PASS
2DH5	Ant1	Low	2402	-2.65	-47.67	≤-22.65	PASS
		High	2480	-2.40	-48.43	≤-22.4	PASS
		Low	Hop_2402	-2.73	-47.51	≤-22.73	PASS
		High	Hop_2480	-6.30	-47.33	≤-26.3	PASS
3DH5	Ant1	Low	2402	-6.53	-47.45	≤-26.53	PASS
		High	2480	-5.38	-47.96	≤-25.38	PASS
		Low	Hop_2402	-7.46	-47.07	≤-27.46	PASS
		High	Hop_2480	-3.35	-47.07	≤-23.35	PASS

Test Graphs

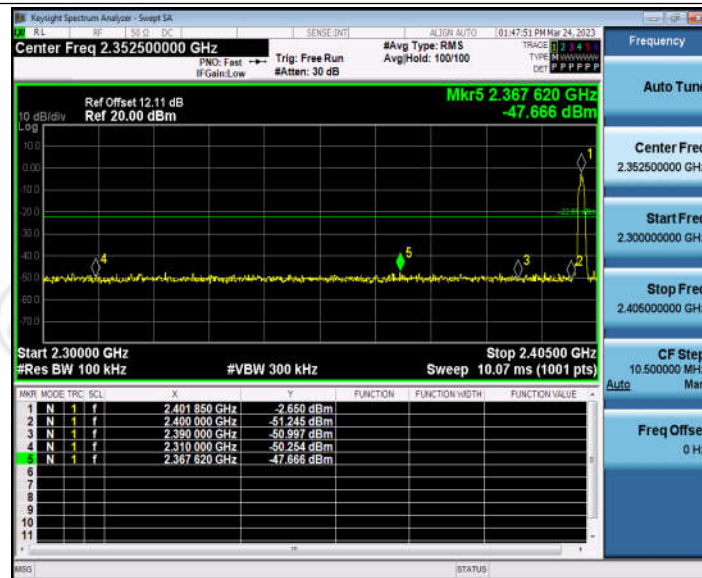




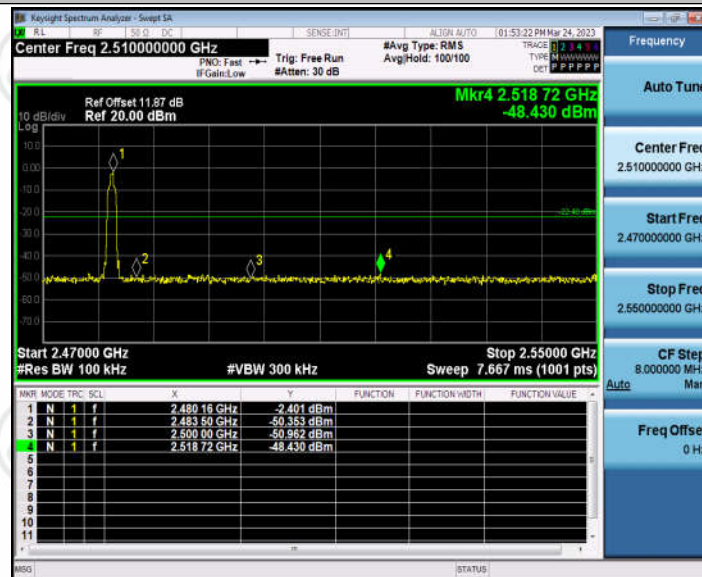
DH5_Ant1_High_Hop_2480



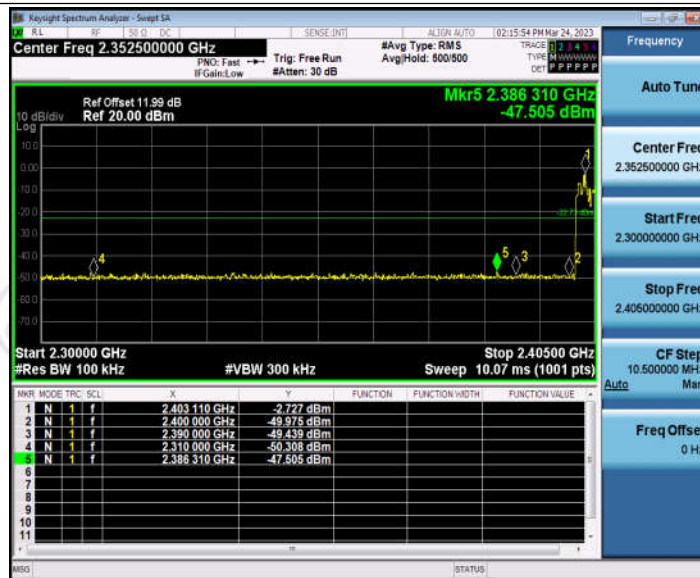
2DH5_Ant1_Low_2402



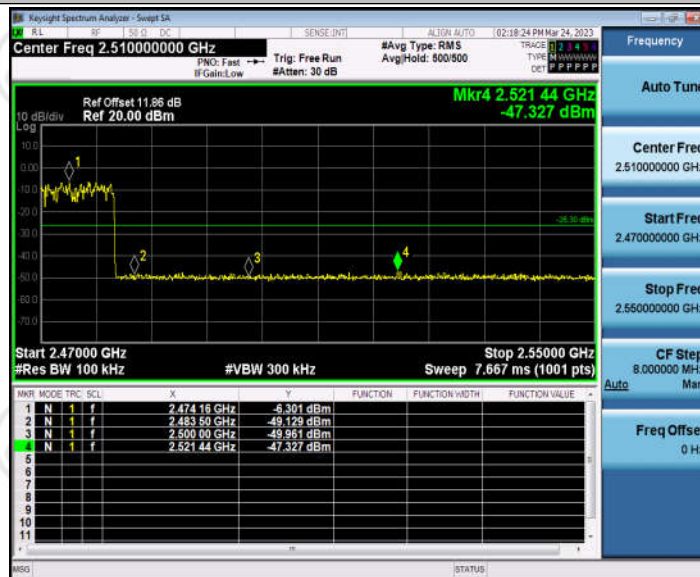
2DH5_Ant1_High_2480



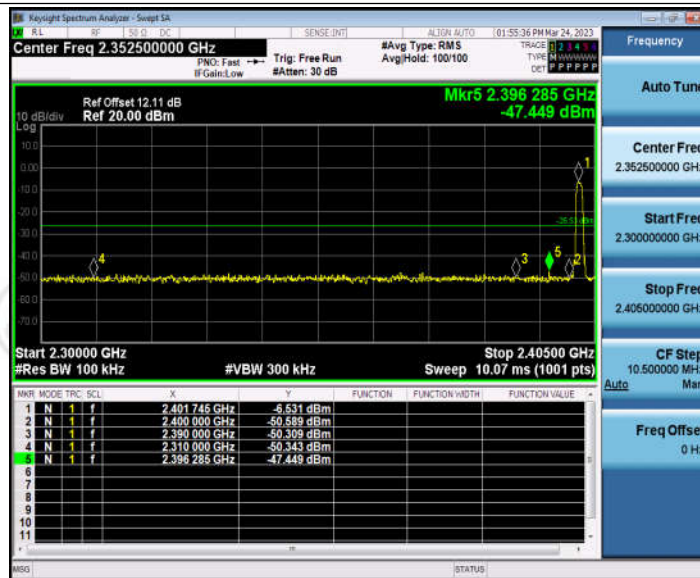
2DH5_Ant1_Low_Hop_2402



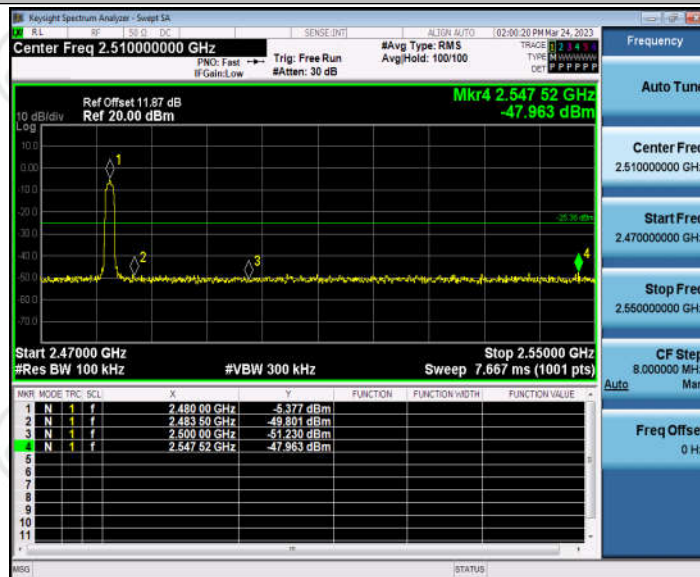
2DH5_Ant1_High_Hop_2480



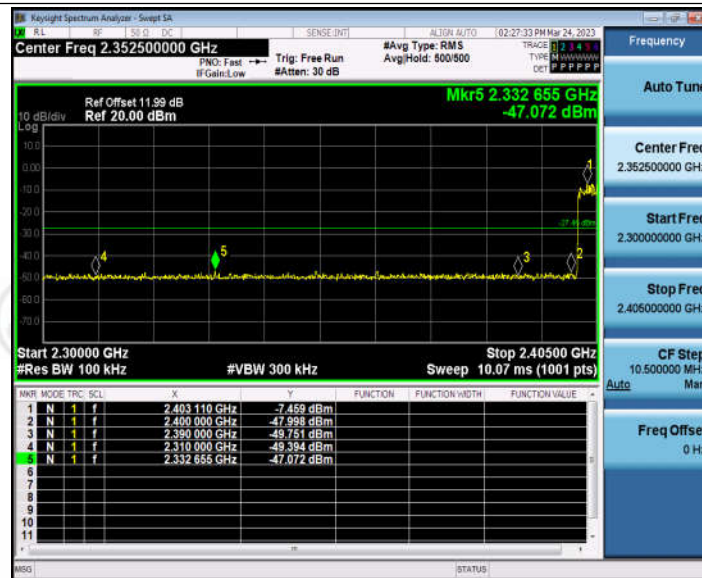
3DH5_Ant1_Low_2402



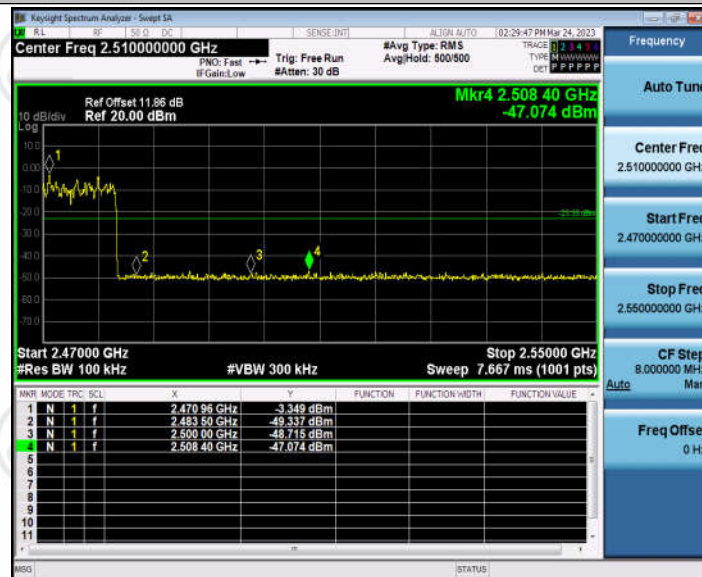
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

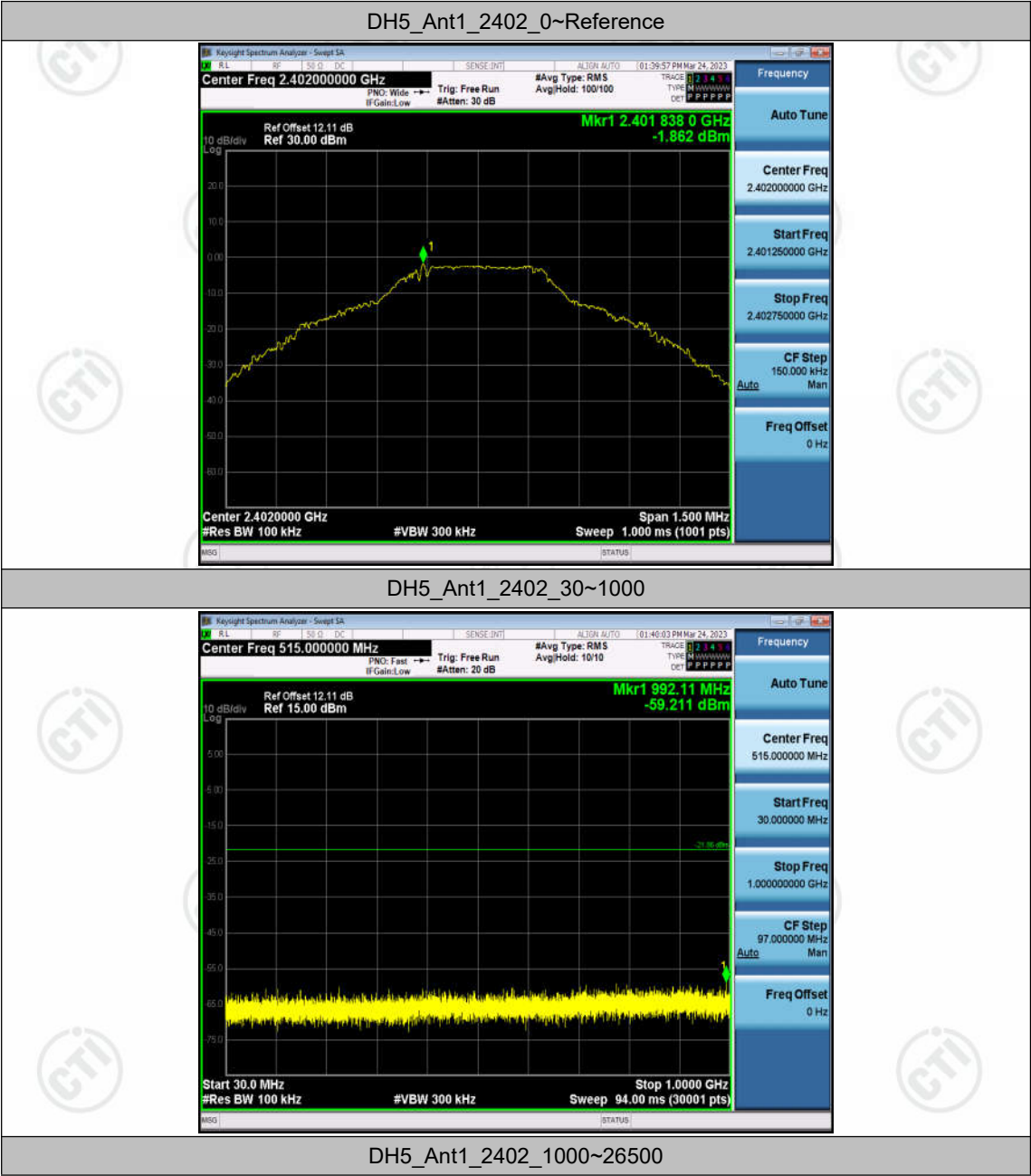


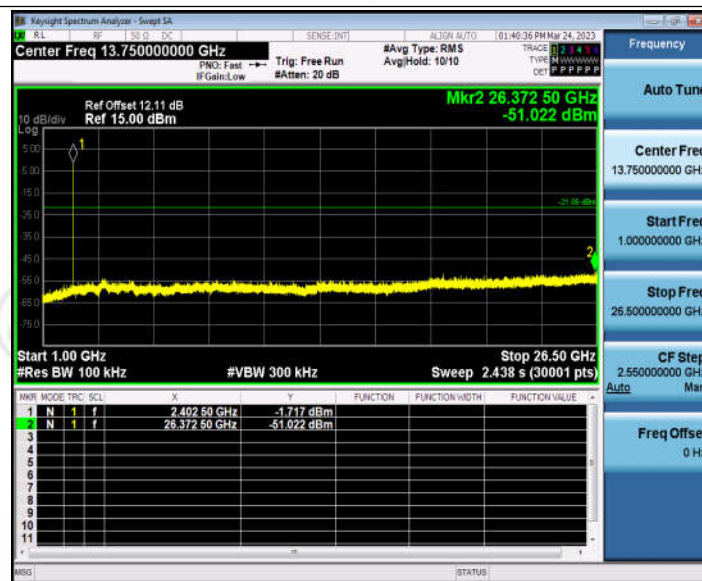
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.86	-1.86	---	PASS
			30~1000	-1.86	-59.21	≤-21.86	PASS
			1000~26500	-1.86	-51.02	≤-21.86	PASS
		2441	Reference	-1.20	-1.20	---	PASS
			30~1000	-1.20	-59.36	≤-21.2	PASS
			1000~26500	-1.20	-51.1	≤-21.2	PASS
		2480	Reference	-2.16	-2.16	---	PASS
			30~1000	-2.16	-59.8	≤-22.16	PASS
			1000~26500	-2.16	-51.13	≤-22.16	PASS
2DH5	Ant1	2402	Reference	-1.92	-1.92	---	PASS
			30~1000	-1.92	-59.54	≤-21.92	PASS
			1000~26500	-1.92	-49.88	≤-21.92	PASS
		2441	Reference	-1.26	-1.26	---	PASS
			30~1000	-1.26	-58.55	≤-21.26	PASS
			1000~26500	-1.26	-51.6	≤-21.26	PASS
		2480	Reference	-2.18	-2.18	---	PASS
			30~1000	-2.18	-59.52	≤-22.18	PASS
			1000~26500	-2.18	-50.87	≤-22.18	PASS
3DH5	Ant1	2402	Reference	-1.84	-1.84	---	PASS
			30~1000	-1.84	-59.12	≤-21.84	PASS
			1000~26500	-1.84	-50.73	≤-21.84	PASS
		2441	Reference	-1.45	-1.45	---	PASS
			30~1000	-1.45	-59.08	≤-21.45	PASS
			1000~26500	-1.45	-51.03	≤-21.45	PASS
		2480	Reference	-2.24	-2.24	---	PASS
			30~1000	-2.24	-59.06	≤-22.24	PASS
			1000~26500	-2.24	-51.71	≤-22.24	PASS

Test Graphs

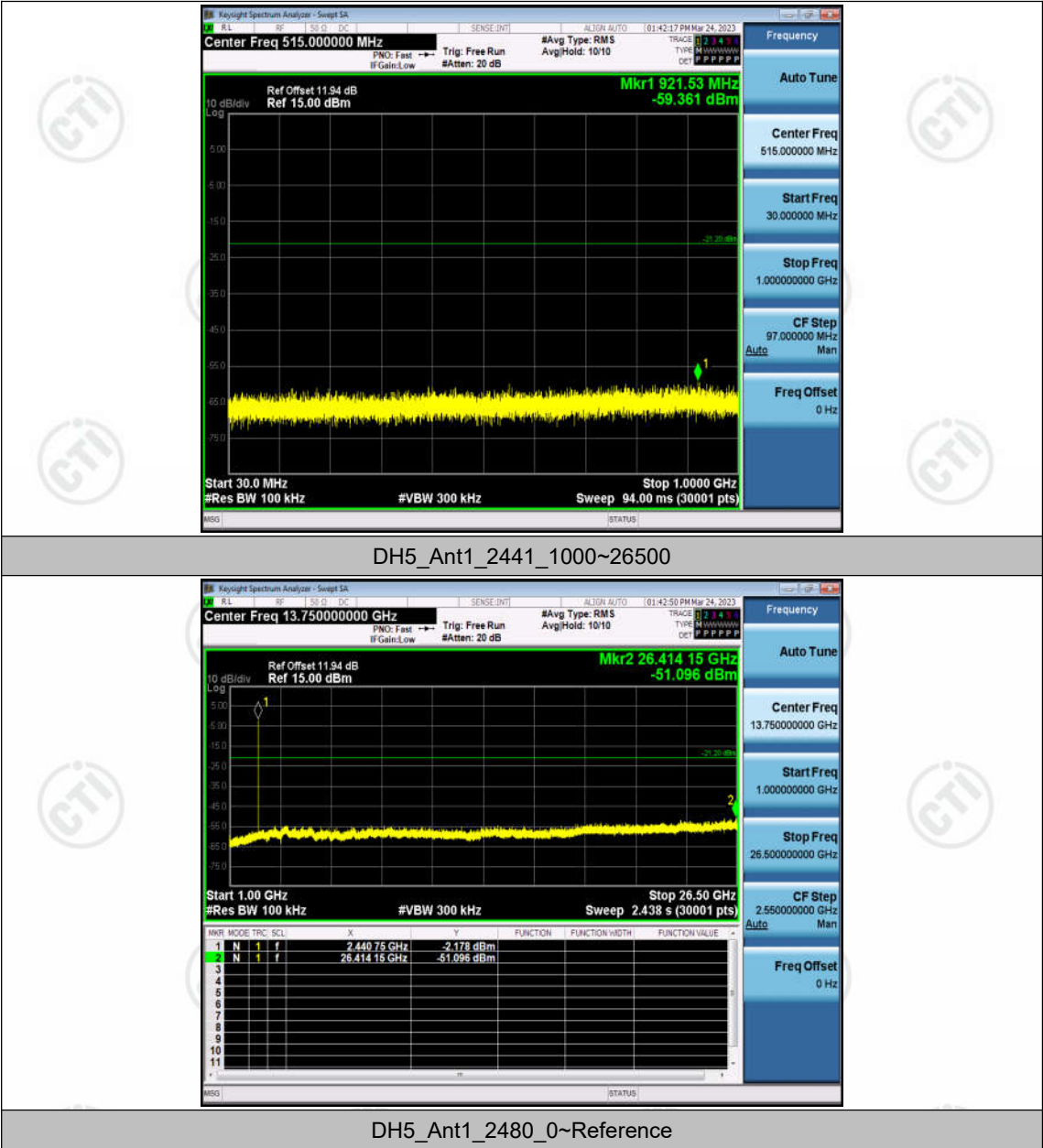


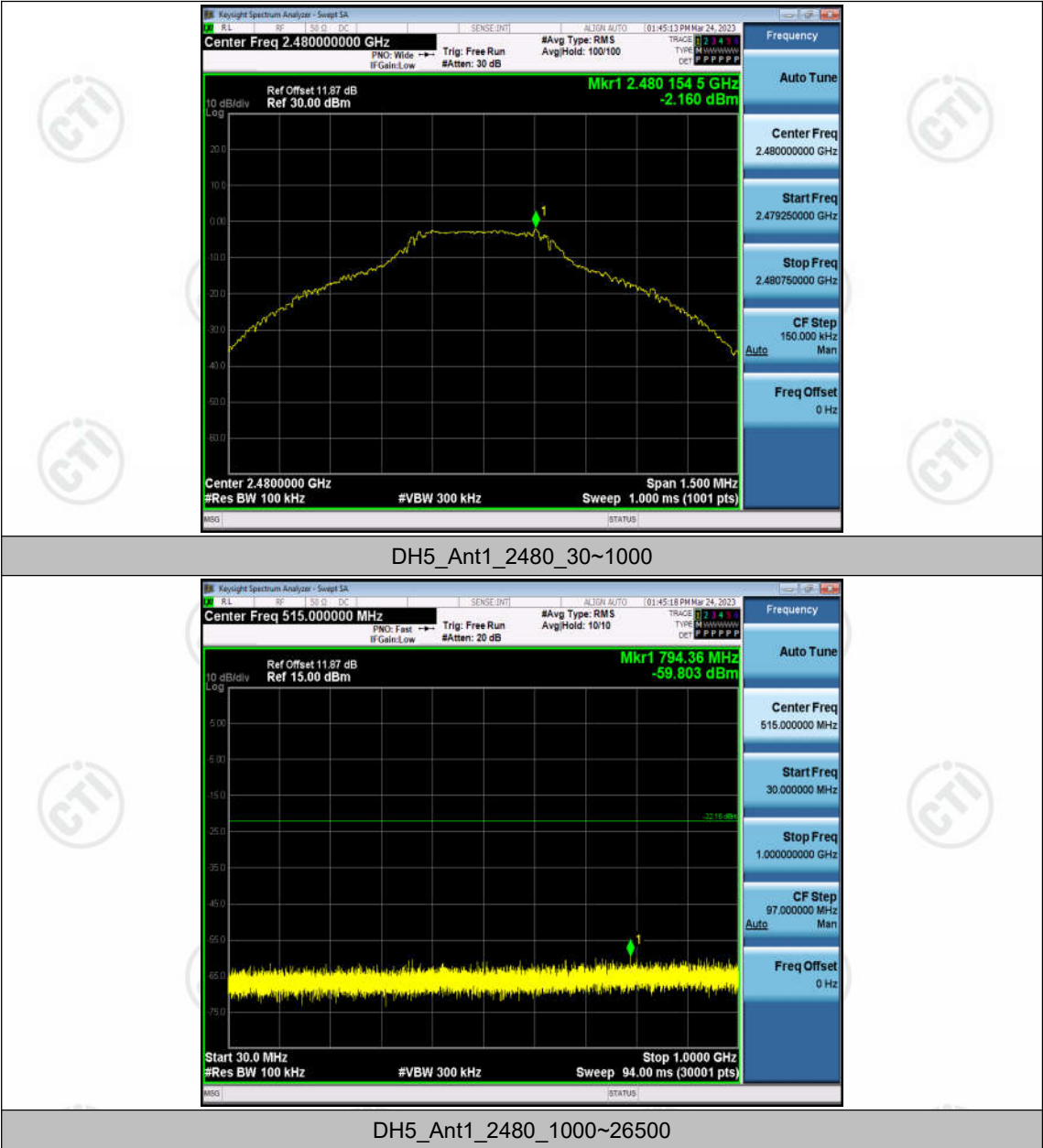


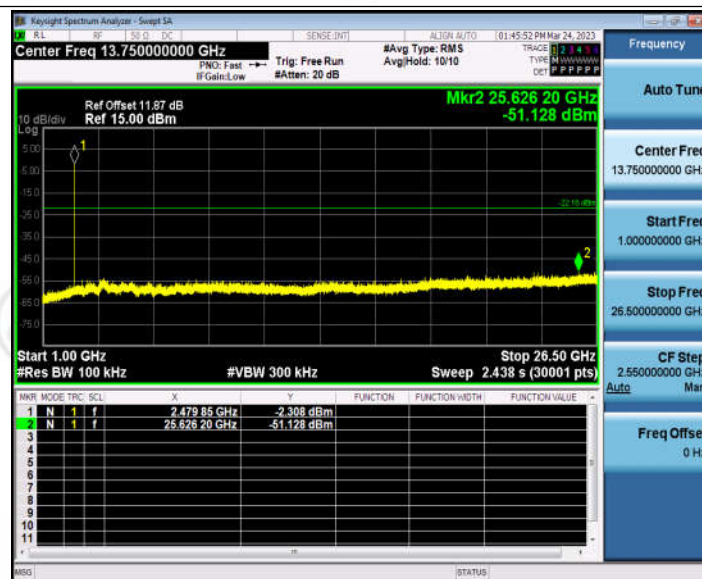
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



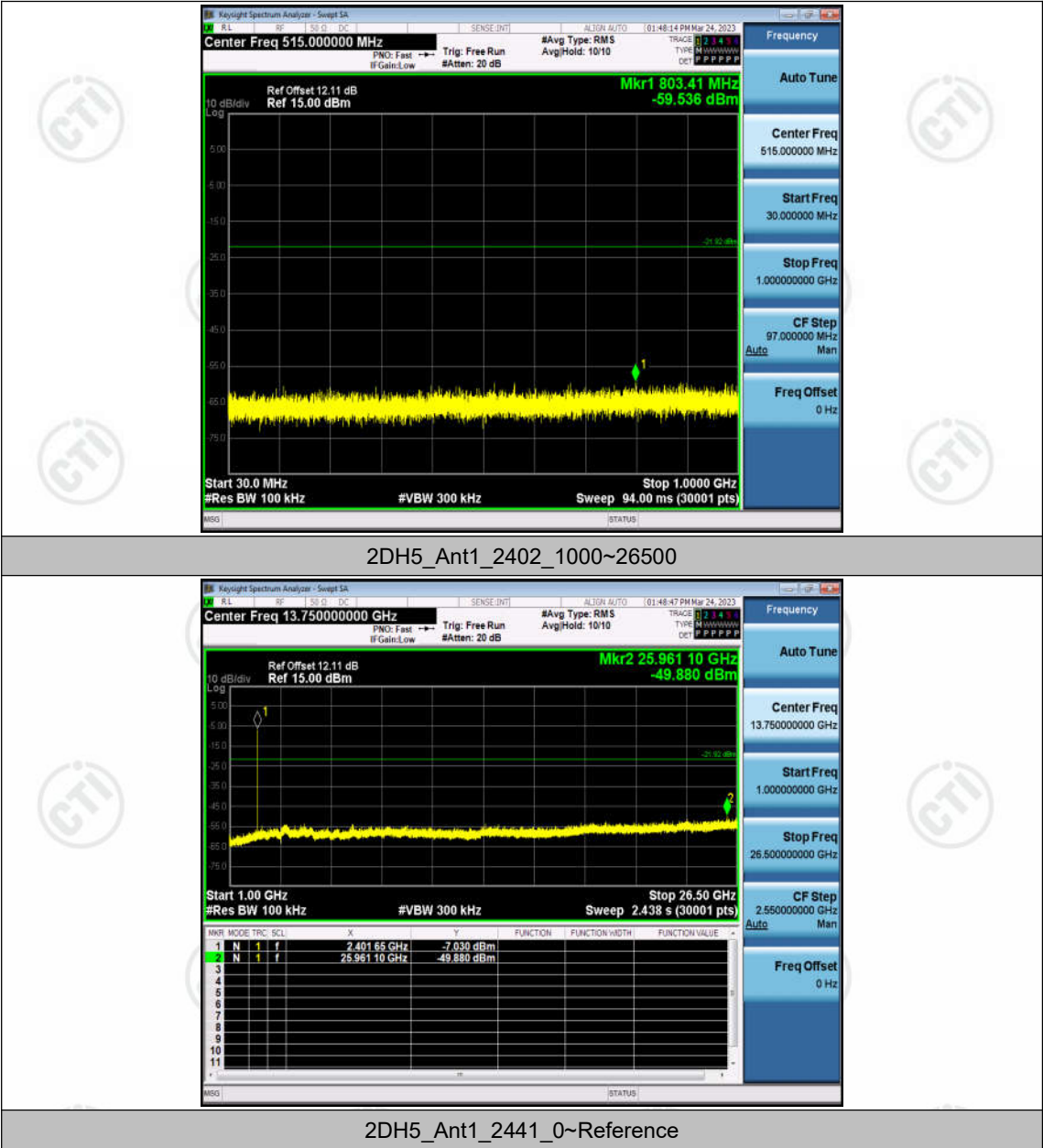


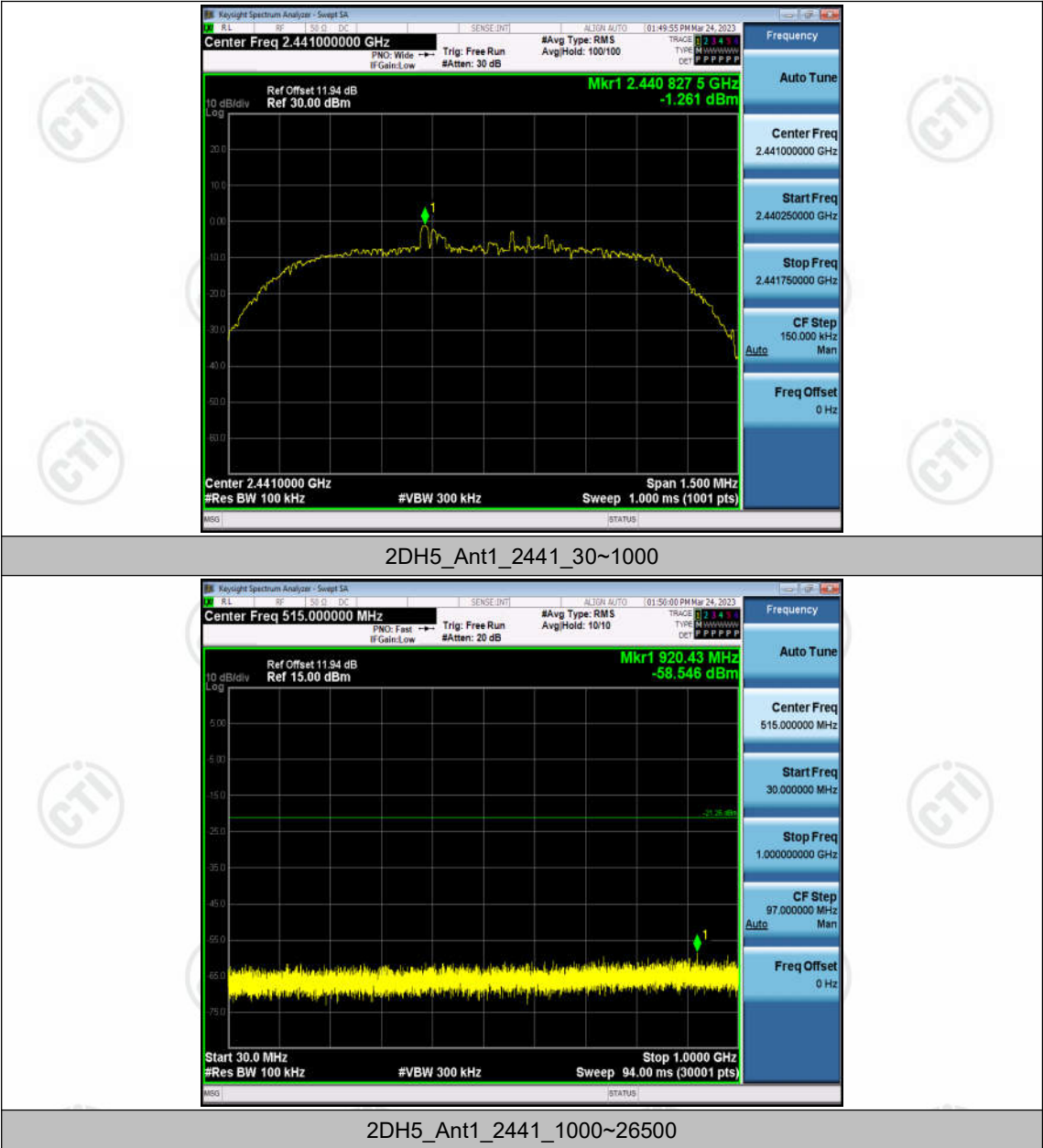


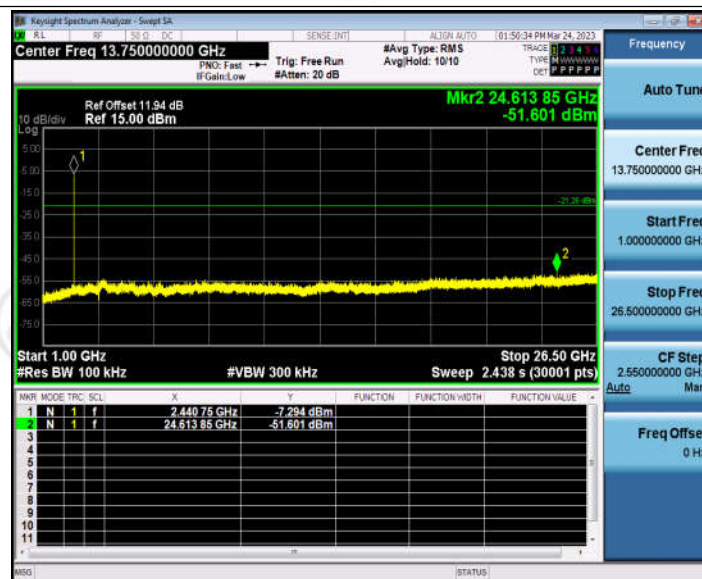
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



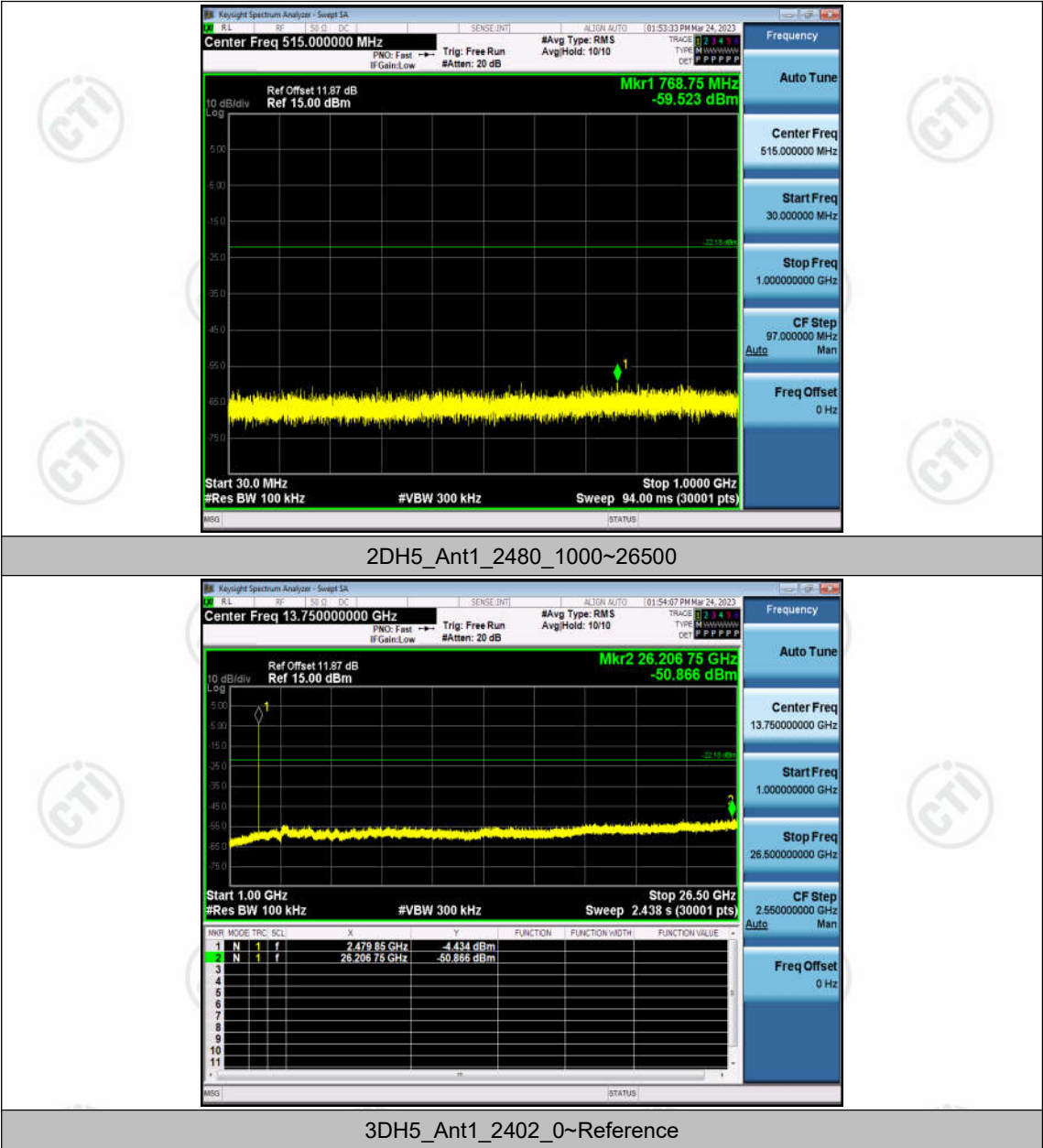




2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000

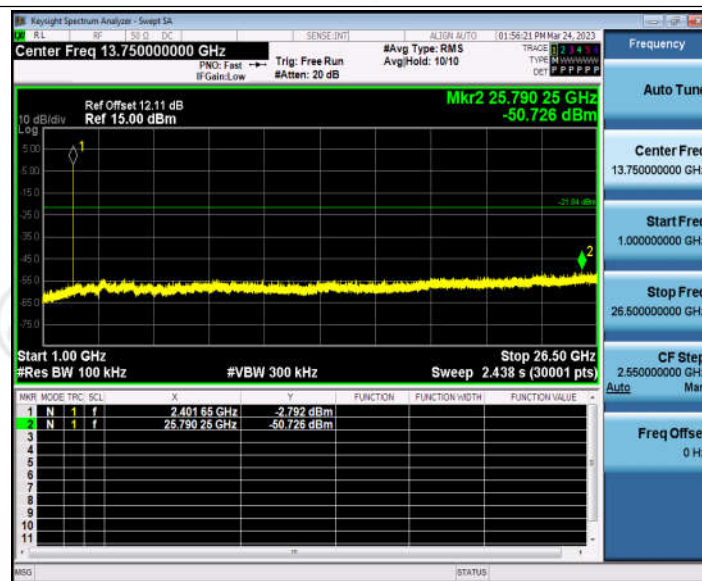




3DH5_Ant1_2402_30~1000



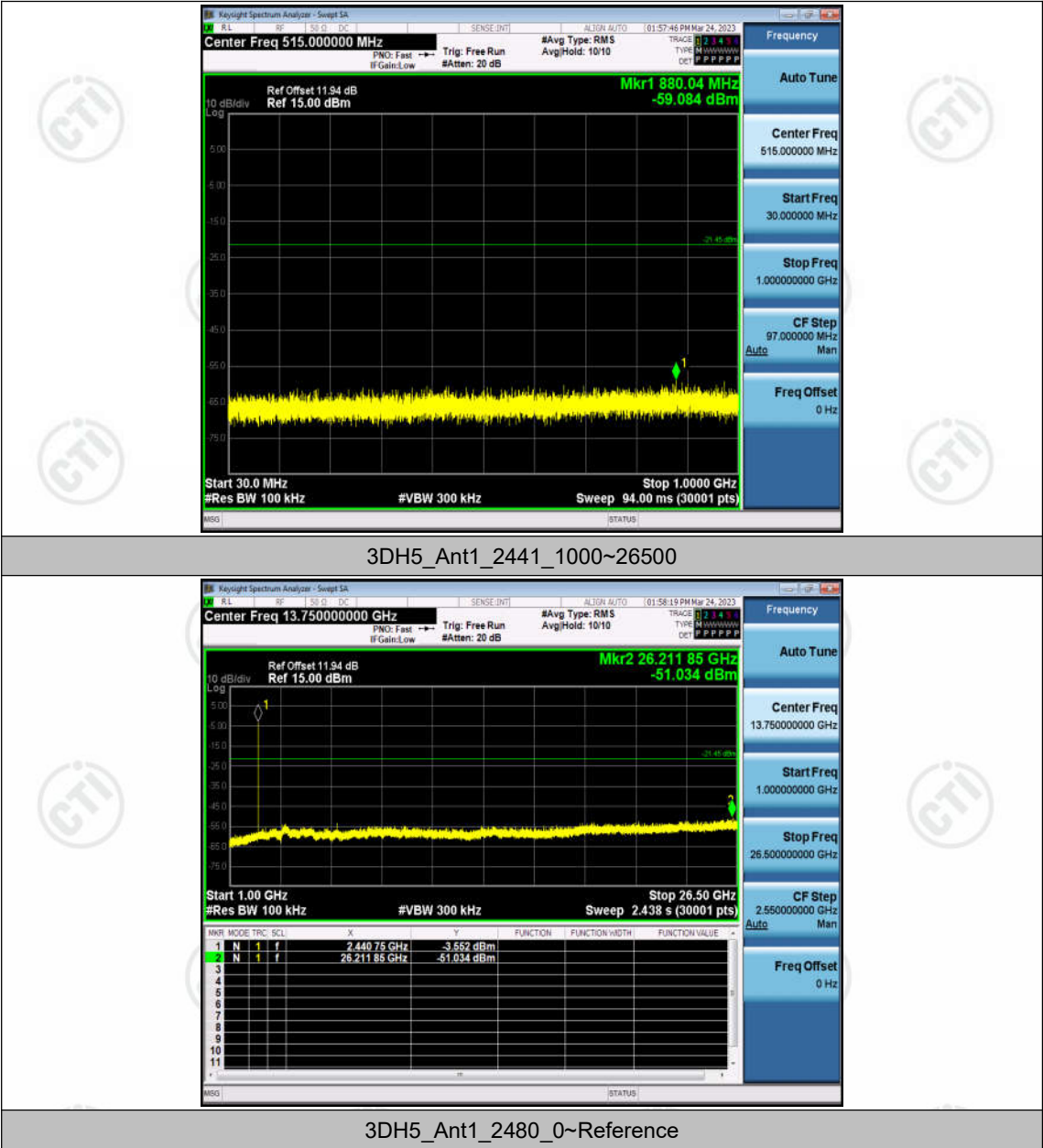
3DH5_Ant1_2402_1000~26500



3DH5_Ant1_2441_0~Reference

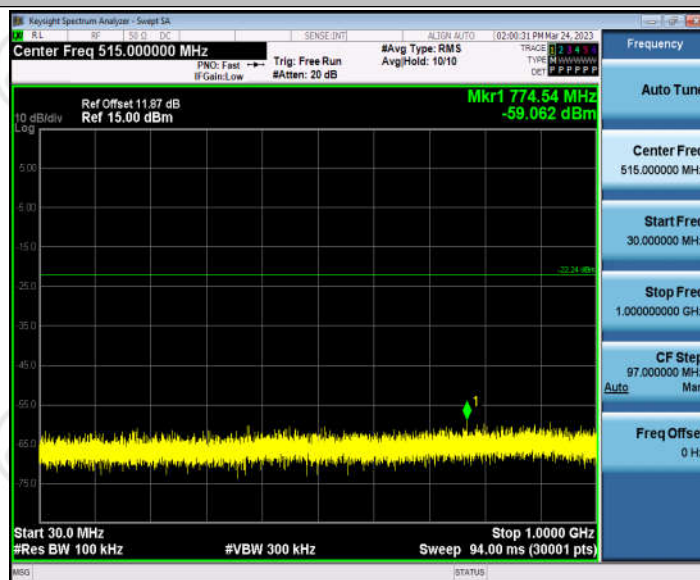


3DH5_Ant1_2441_30~1000

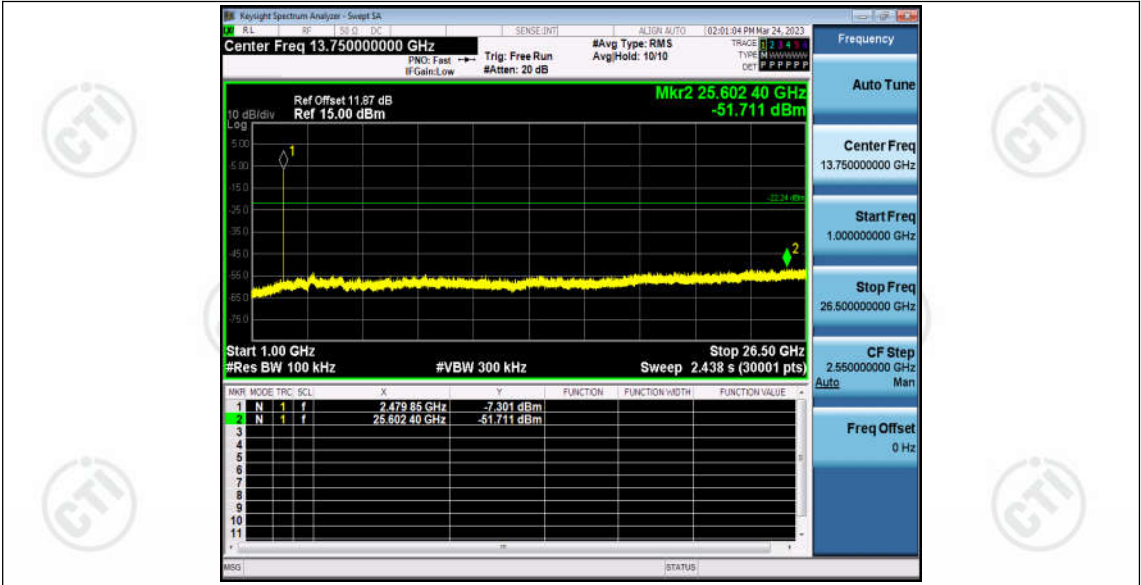




3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500

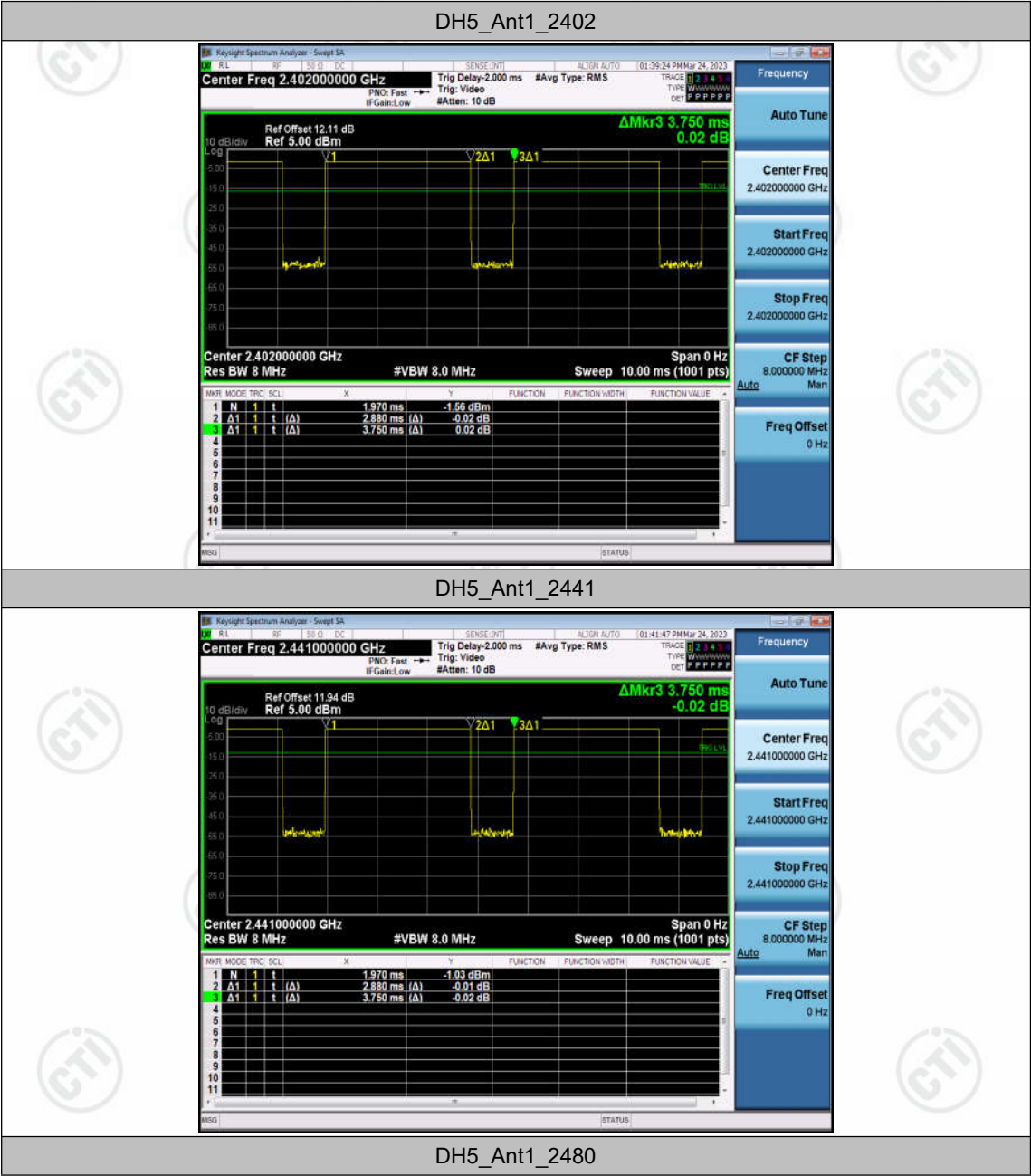


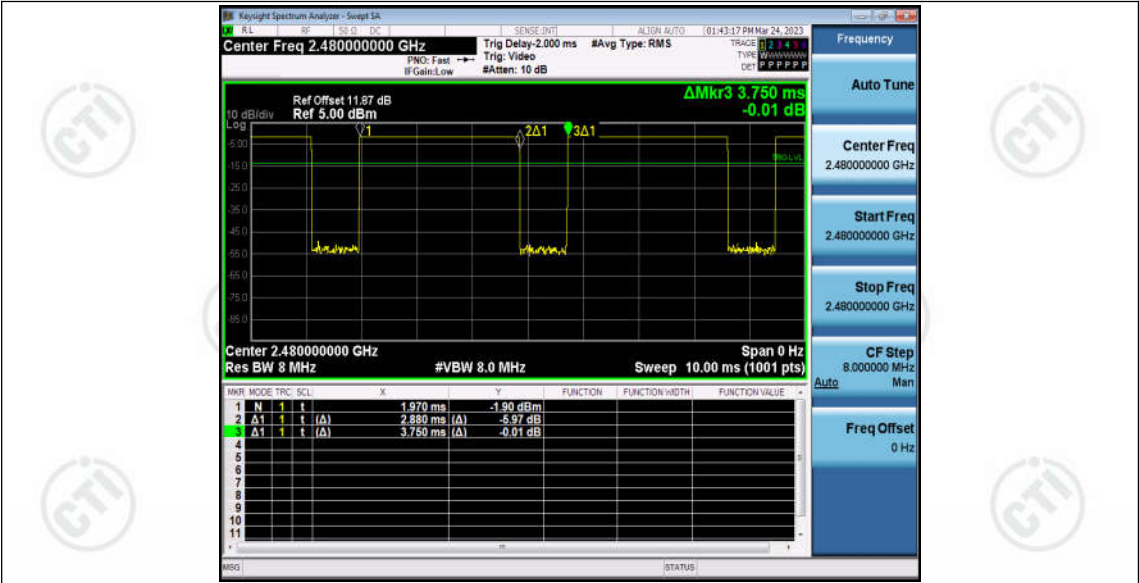
Appendix I: Duty Cycle

Test Result

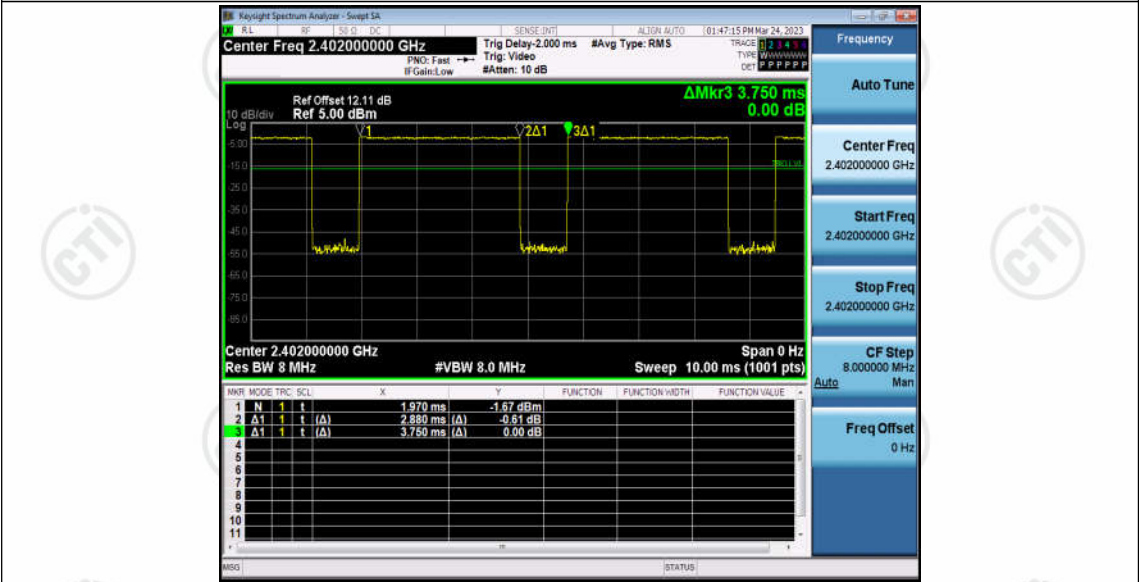
TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.88	3.75	76.80	1.15
		2441	2.88	3.75	76.80	1.15
		2480	2.88	3.75	76.80	1.15
2DH5	Ant1	2402	2.88	3.75	76.80	1.15
		2441	2.88	3.75	76.80	1.15
		2480	2.88	3.75	76.80	1.15
3DH5	Ant1	2402	2.89	3.75	77.07	1.13
		2441	2.88	3.75	76.80	1.15
		2480	2.89	3.75	77.07	1.13

Test Graphs

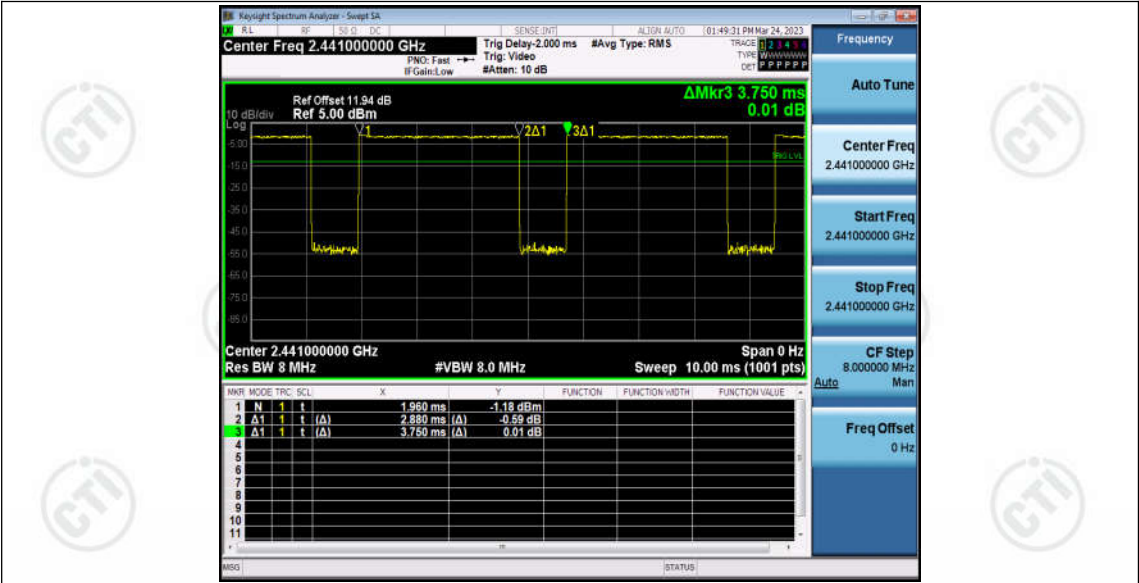




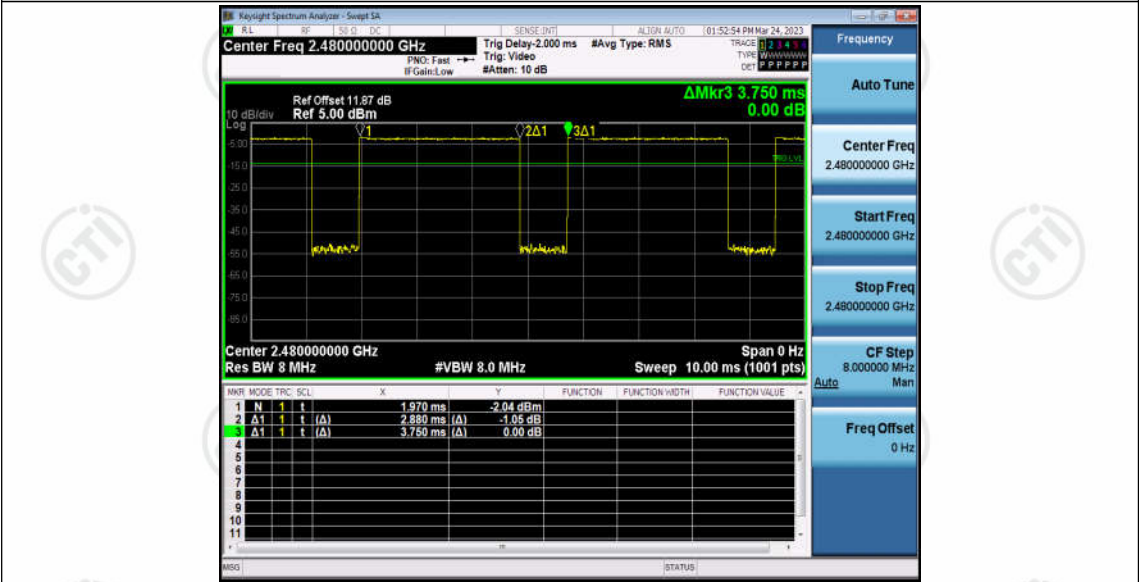
2DH5_Ant1_2402



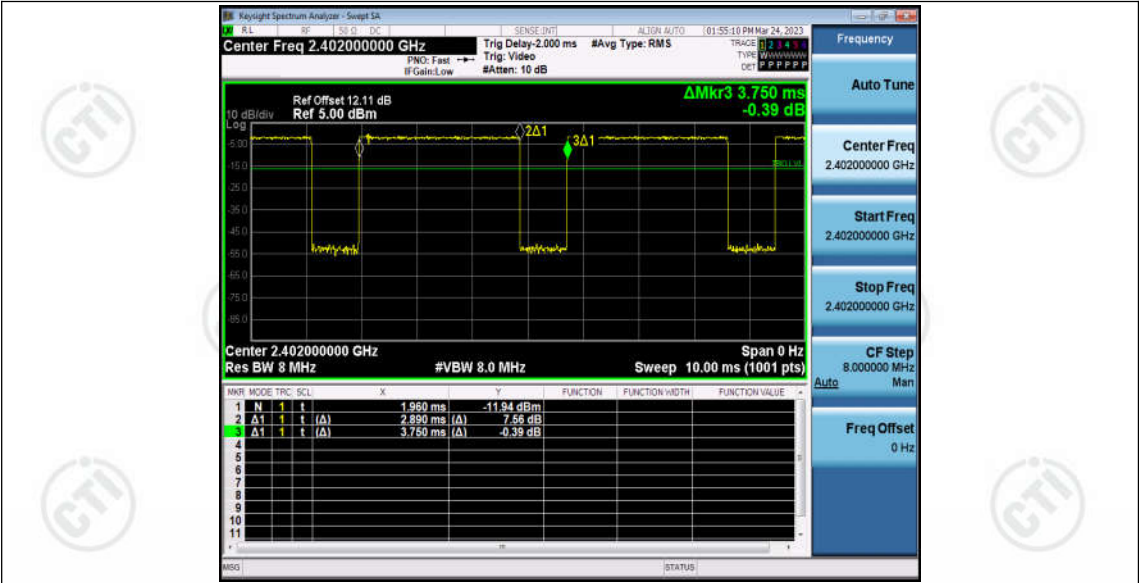
2DH5_Ant1_2441



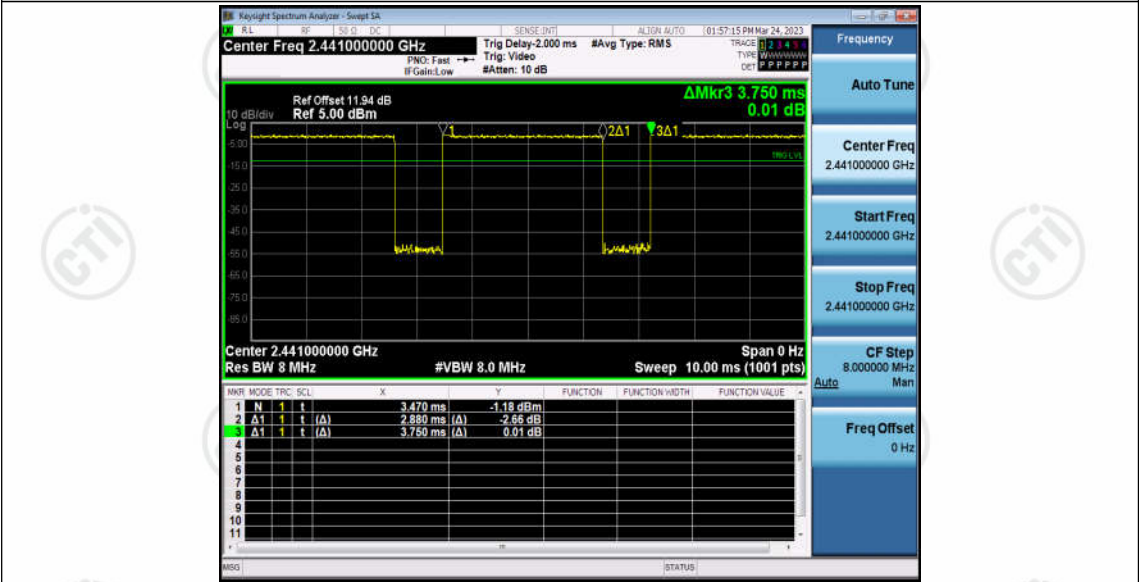
2DH5_Ant1_2480



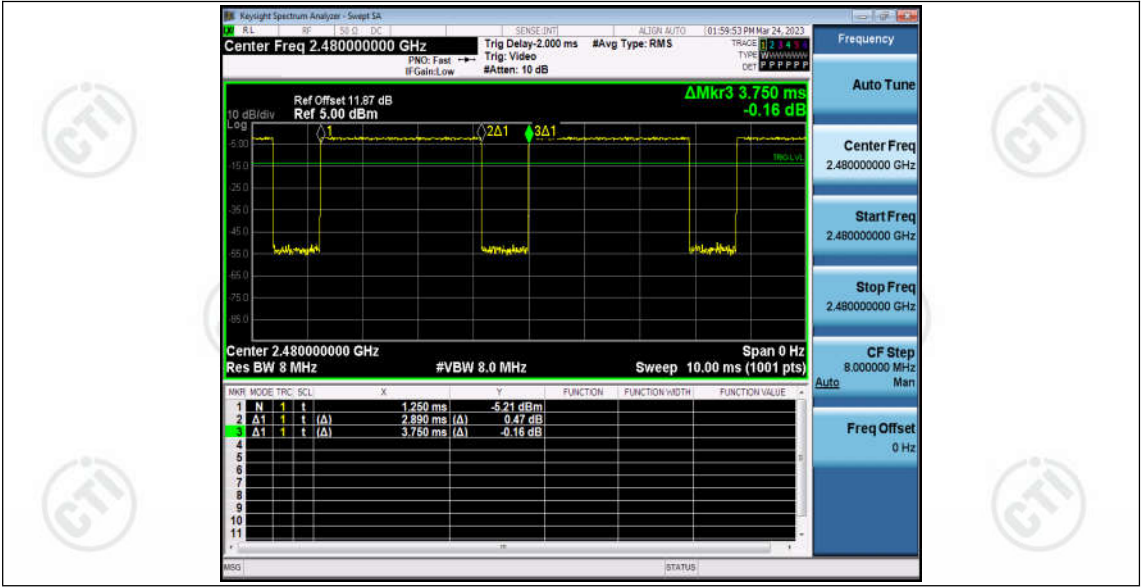
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



*** End of Report ***