

FCC Appendix RF Test Data for BT

FCC ID : 2AYZG-MHP6110

Company : ShenZhen litian technology Co.,Ltd

EUT : Alarm Clock with Wireless Charging

Model Number : MHP6110

Report No. : CTA26092002501

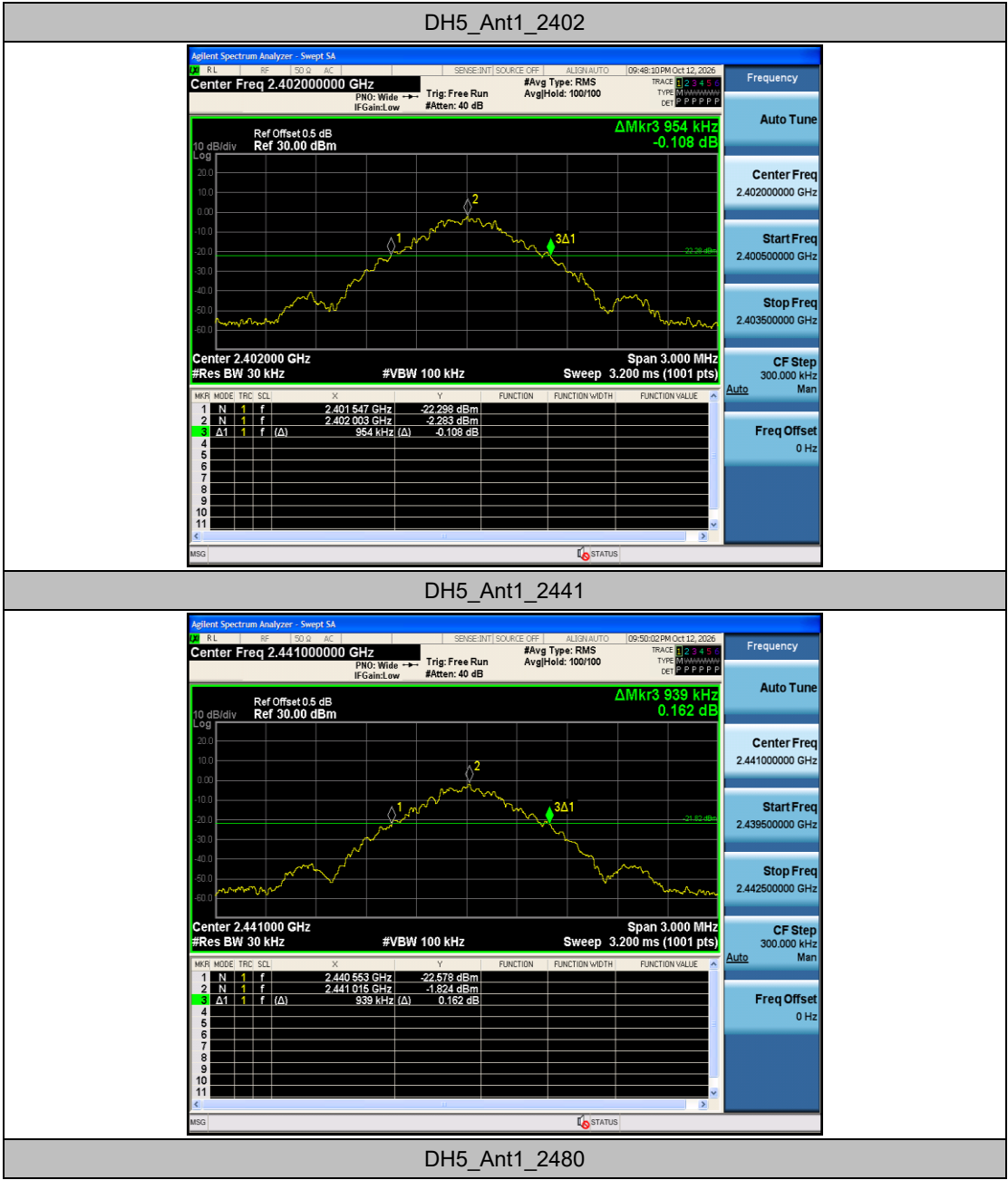
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.547	2402.501	---	---
		2441	0.939	2440.553	2441.492	---	---
		2480	0.963	2479.544	2480.507	---	---
2DH5	Ant1	2402	1.326	2401.343	2402.669	---	---
		2441	1.287	2440.379	2441.666	---	---
		2480	1.350	2479.334	2480.684	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

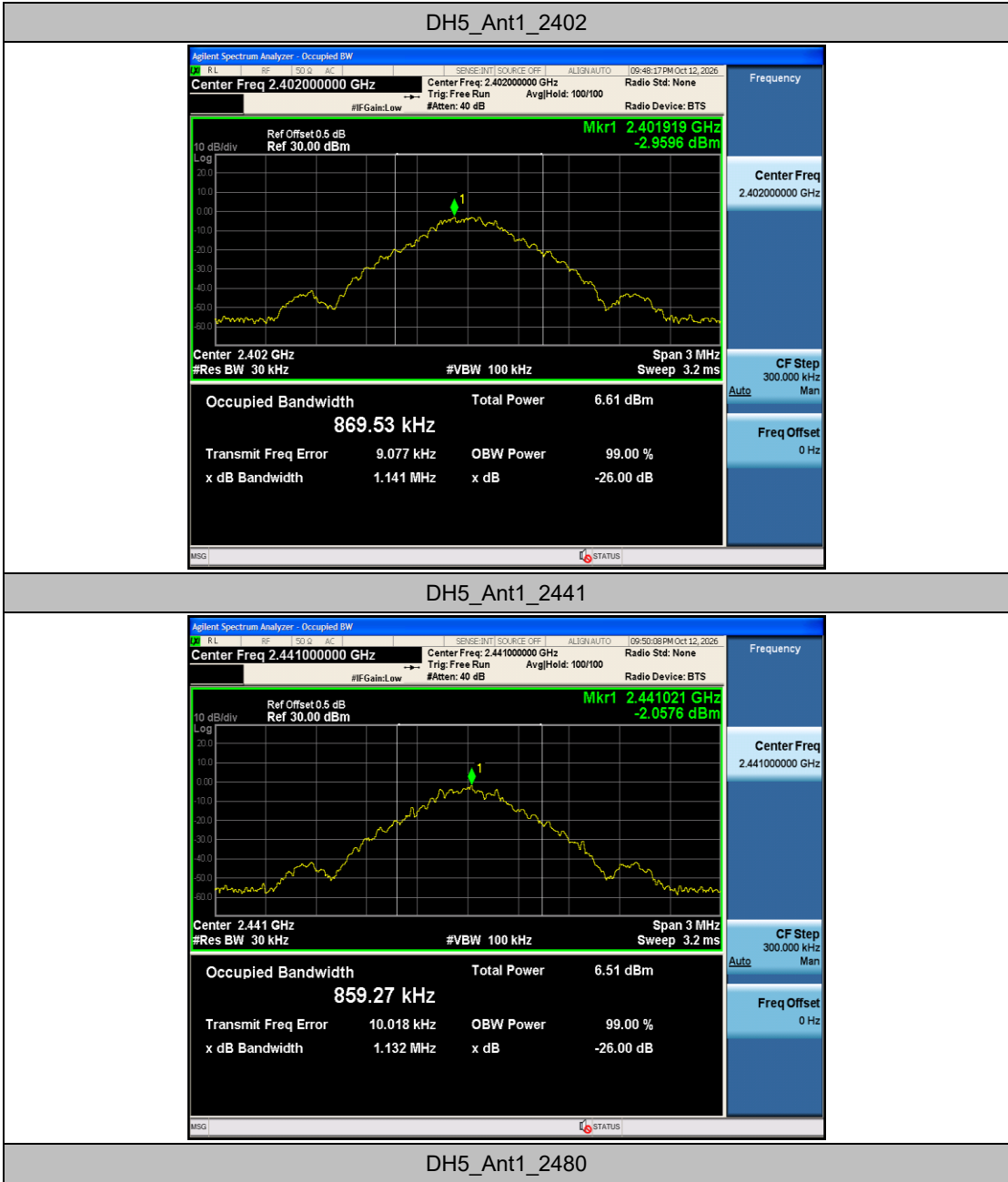


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86953	2401.5743	2402.4438	---	---
		2441	0.85927	2440.5804	2441.4397	---	---
		2480	0.85198	2479.5790	2480.4310	---	---
2DH5	Ant1	2402	1.1923	2401.4144	2402.6067	---	---
		2441	1.1867	2440.4190	2441.6057	---	---
		2480	1.1913	2479.4150	2480.6063	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

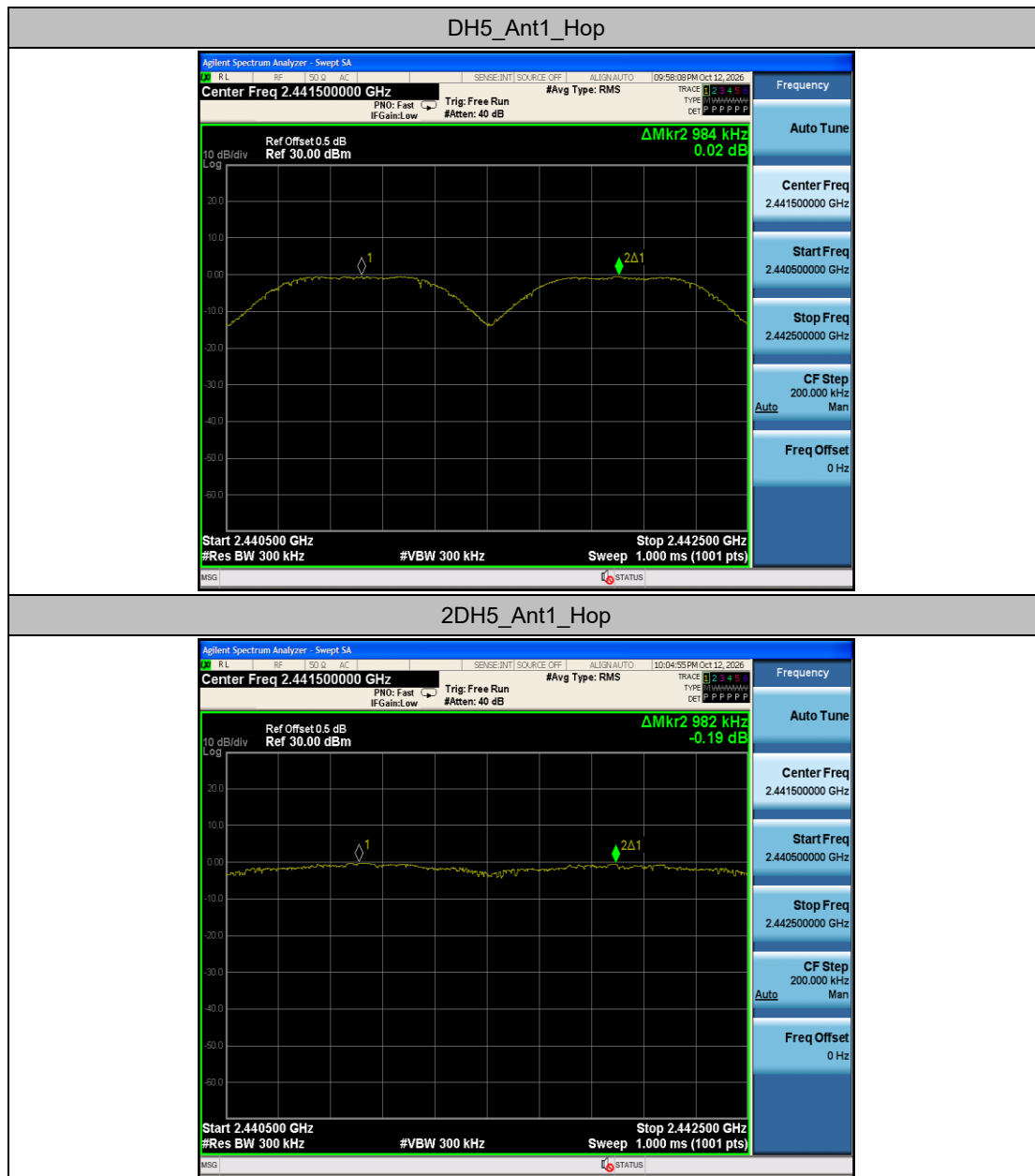
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.02	≤20.97	PASS
		2441	-0.09	≤20.97	PASS
		2480	-0.39	≤20.97	PASS
2DH5	Ant1	2402	2.78	≤20.97	PASS
		2441	2.39	≤20.97	PASS
		2480	2.24	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.984	≥ 0.963	PASS
2DH5	Ant1	Hop	0.982	≥ 0.900	PASS

Test Graphs

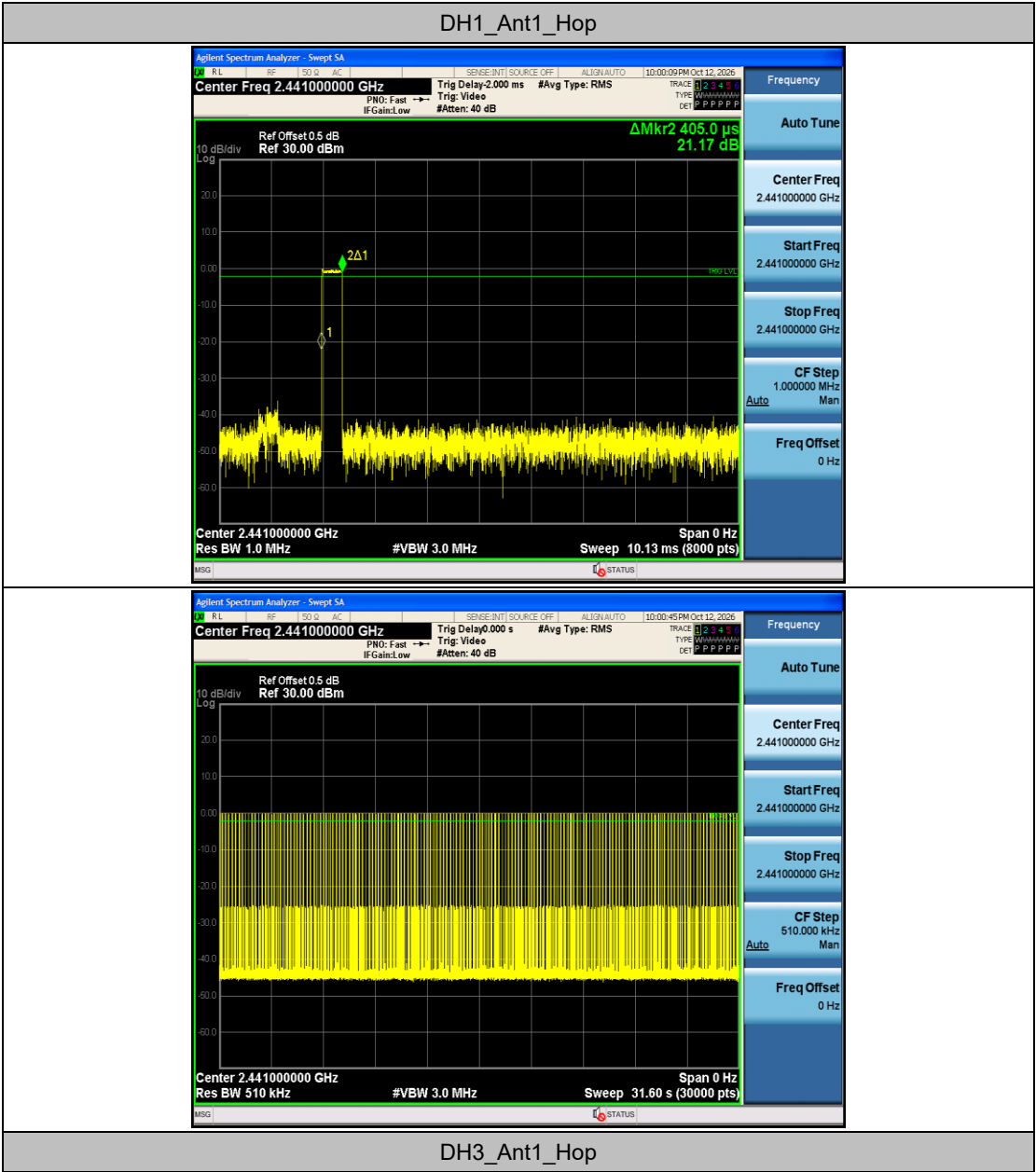


Appendix E: Time of occupancy

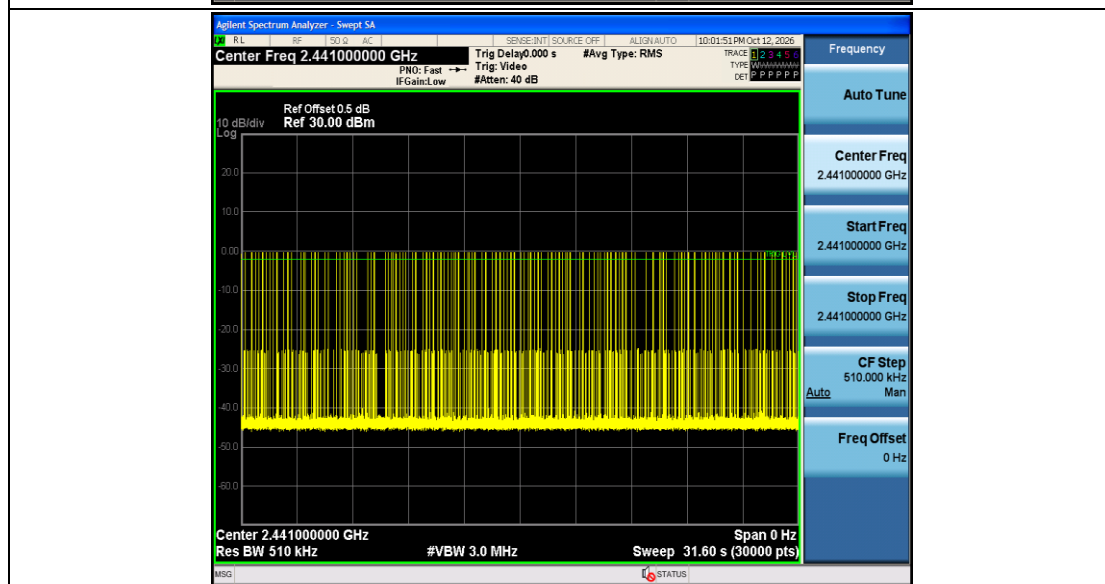
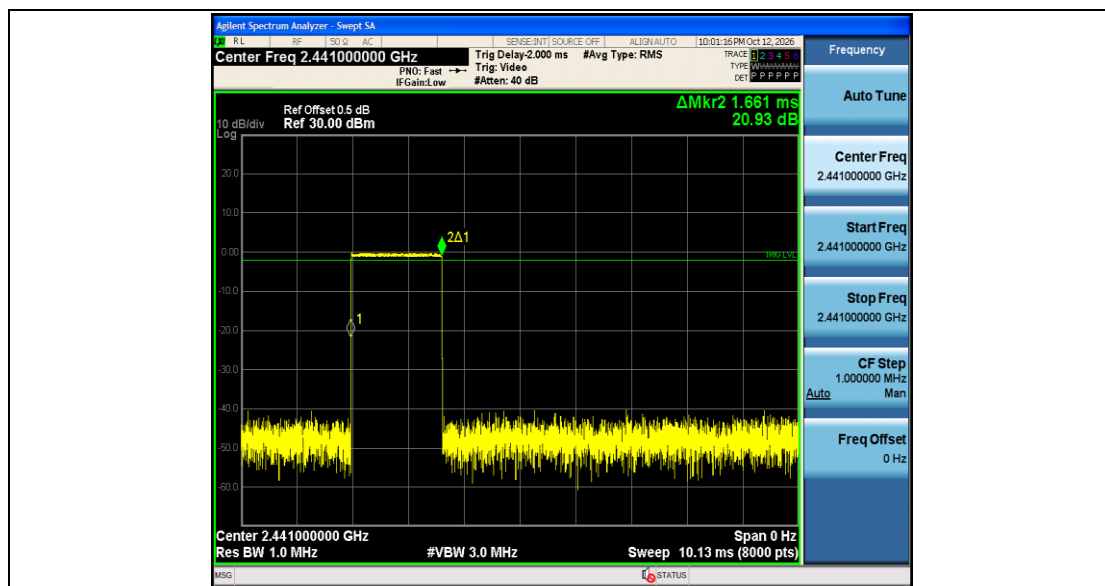
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	314	0.127	≤0.4	PASS
DH3	Ant1	Hop	1.661	164	0.272	≤0.4	PASS
DH5	Ant1	Hop	2.910	105	0.306	≤0.4	PASS
2DH1	Ant1	Hop	0.415	310	0.129	≤0.4	PASS
2DH3	Ant1	Hop	1.667	166	0.277	≤0.4	PASS
2DH5	Ant1	Hop	2.916	109	0.318	≤0.4	PASS

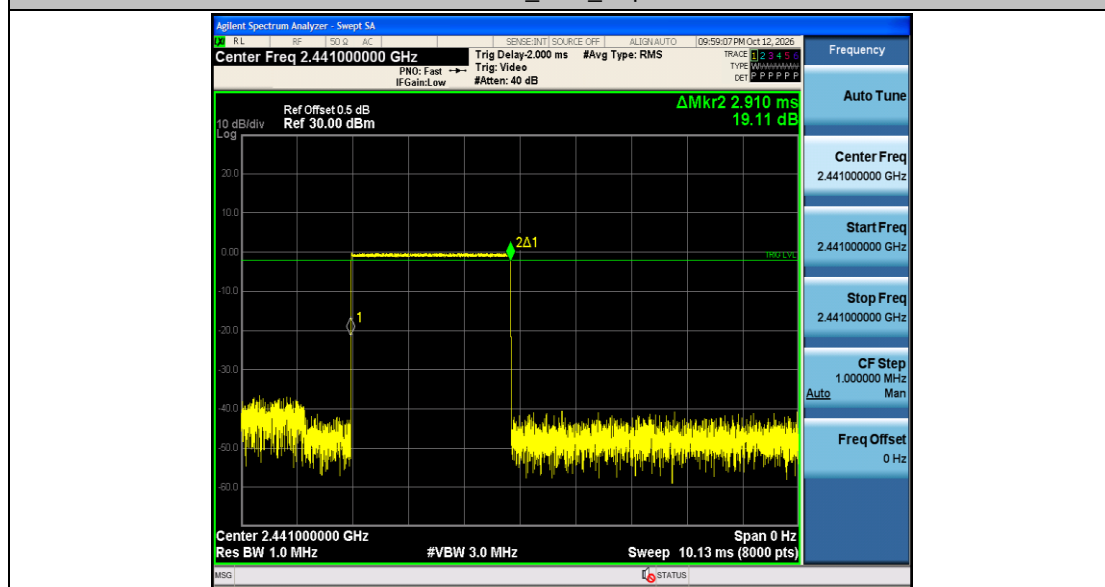
Test Graphs

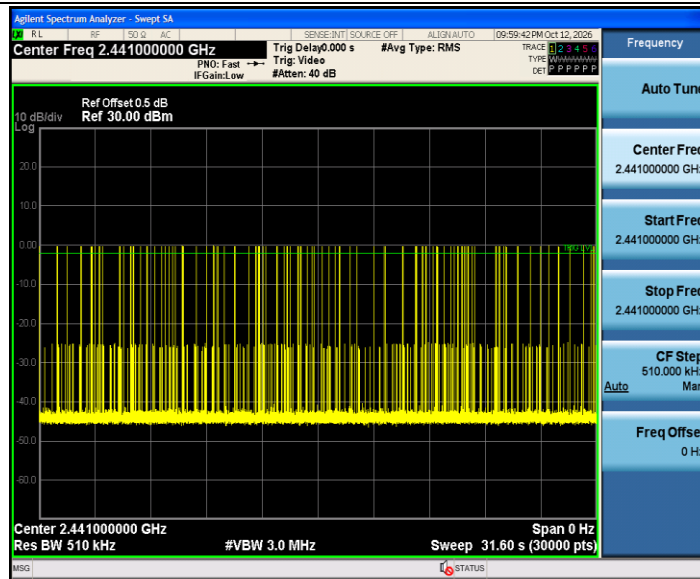


DH3_Ant1_Hop

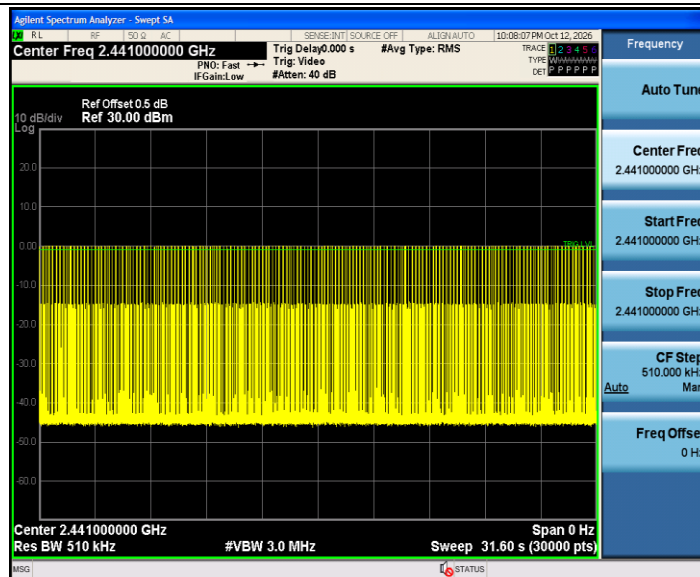
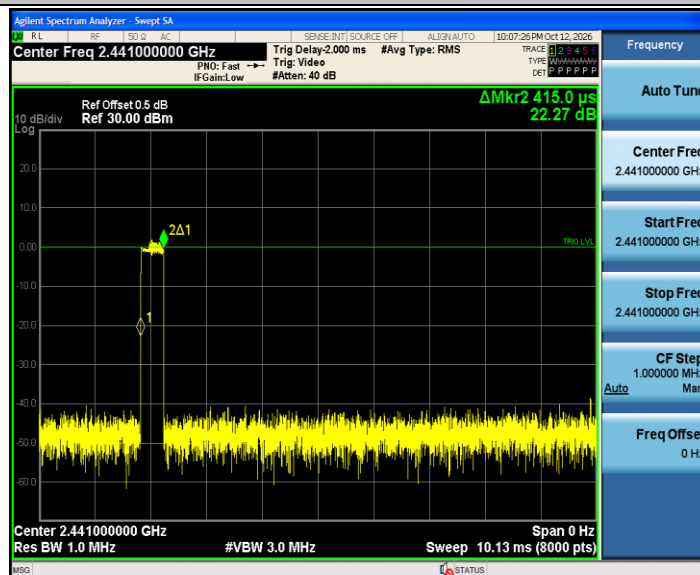


DH5_Ant1_Hop

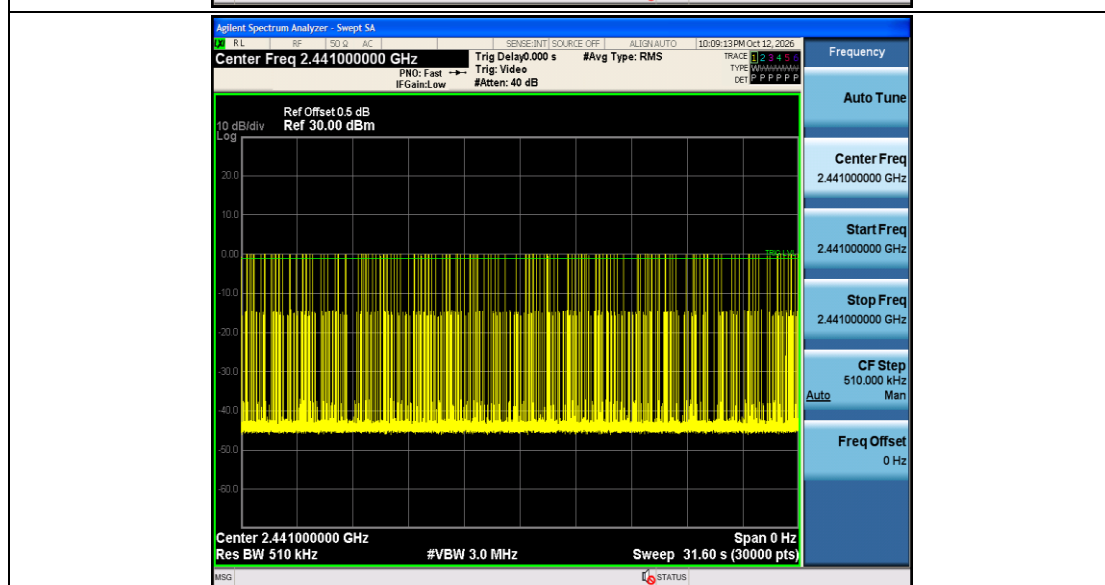
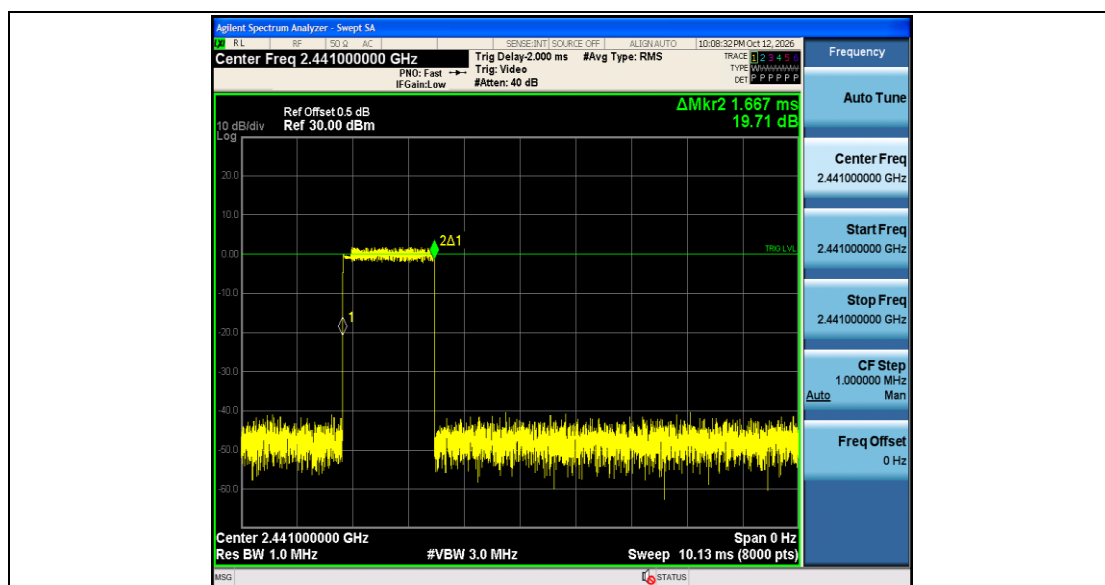




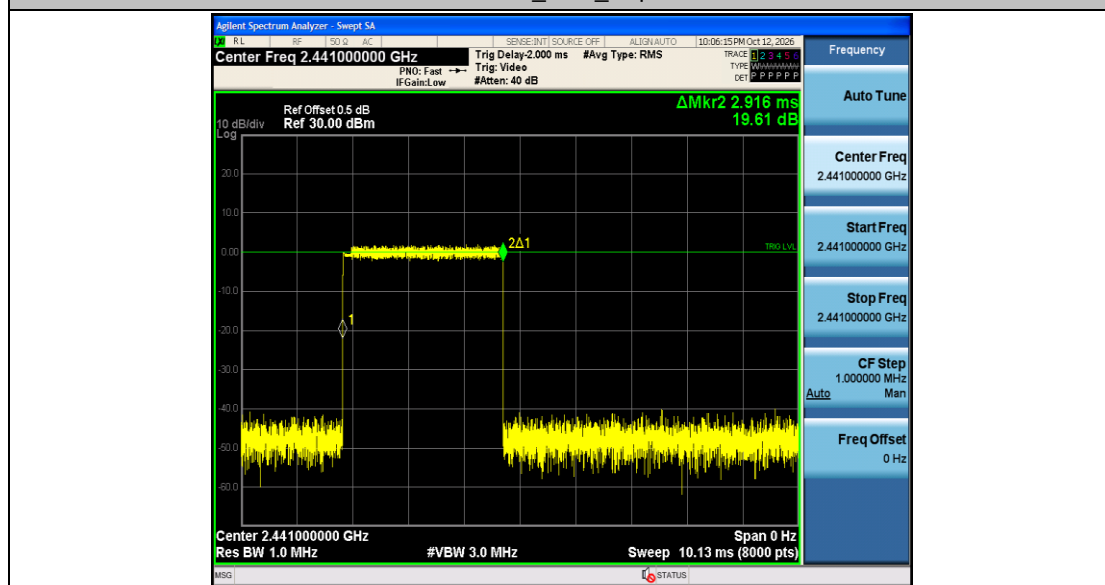
2DH1_Ant1_Hop

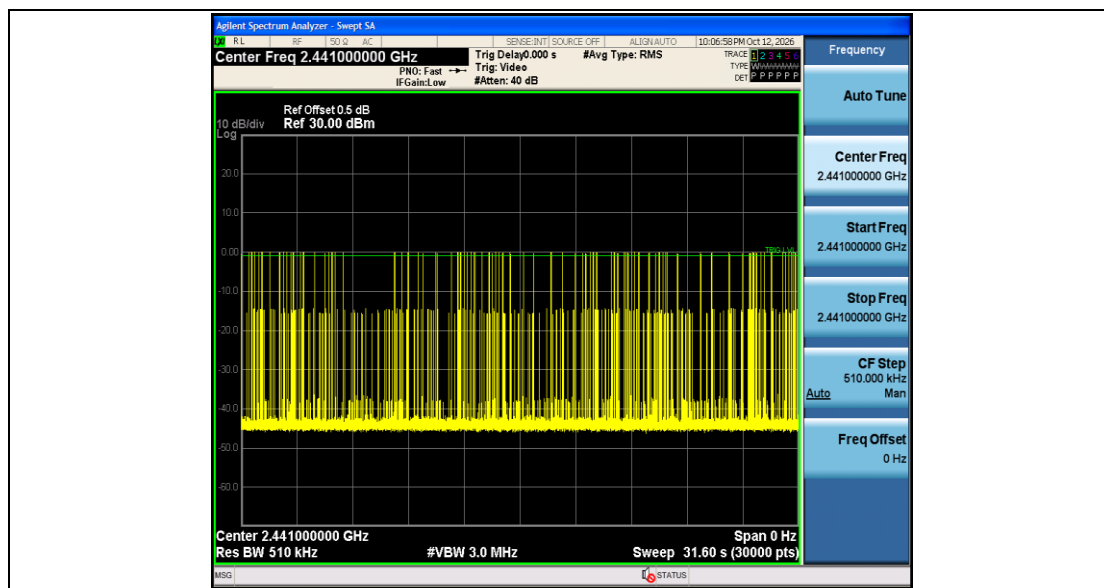


2DH3_Ant1_Hop



2DH5_Ant1_Hop



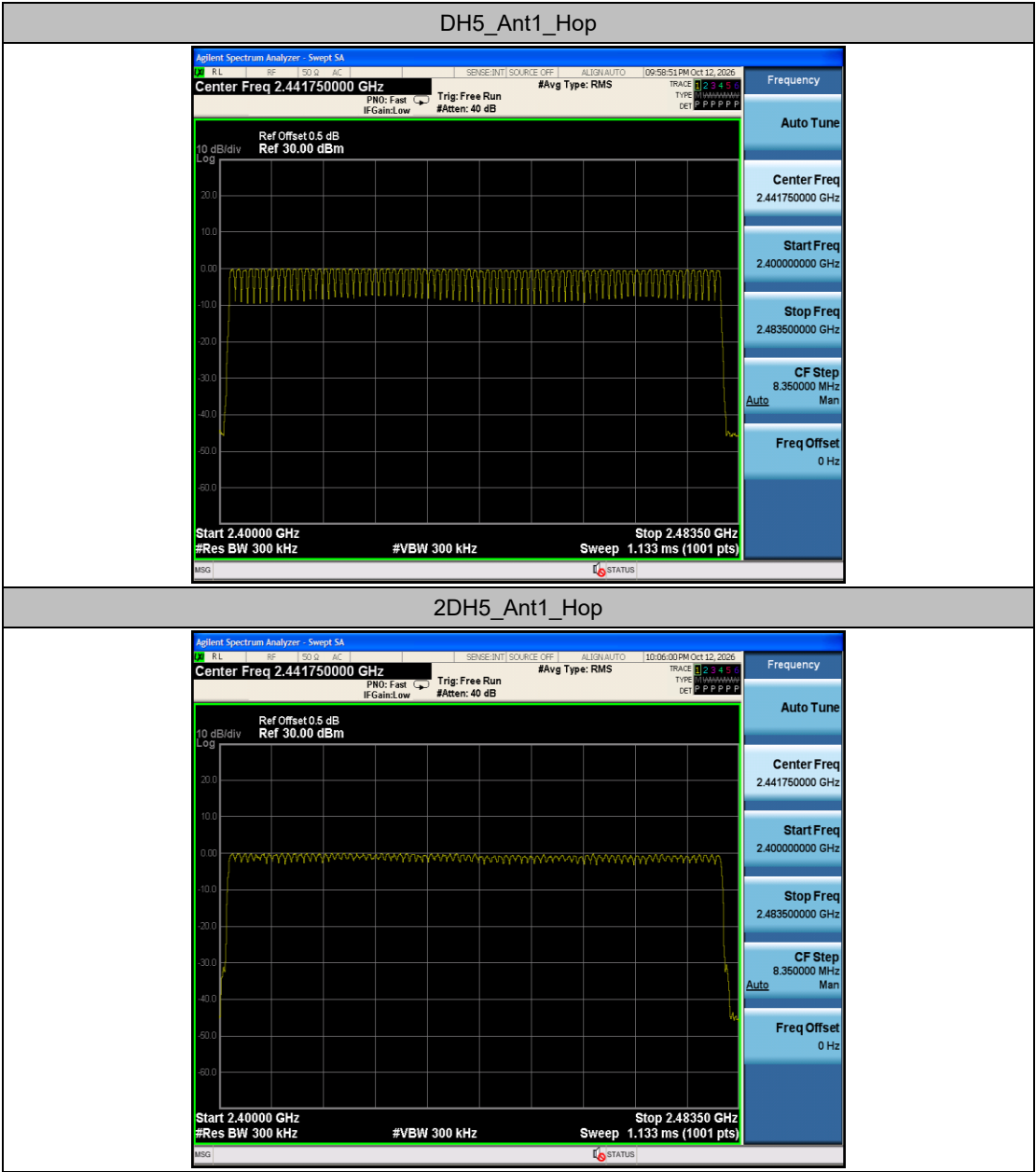


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

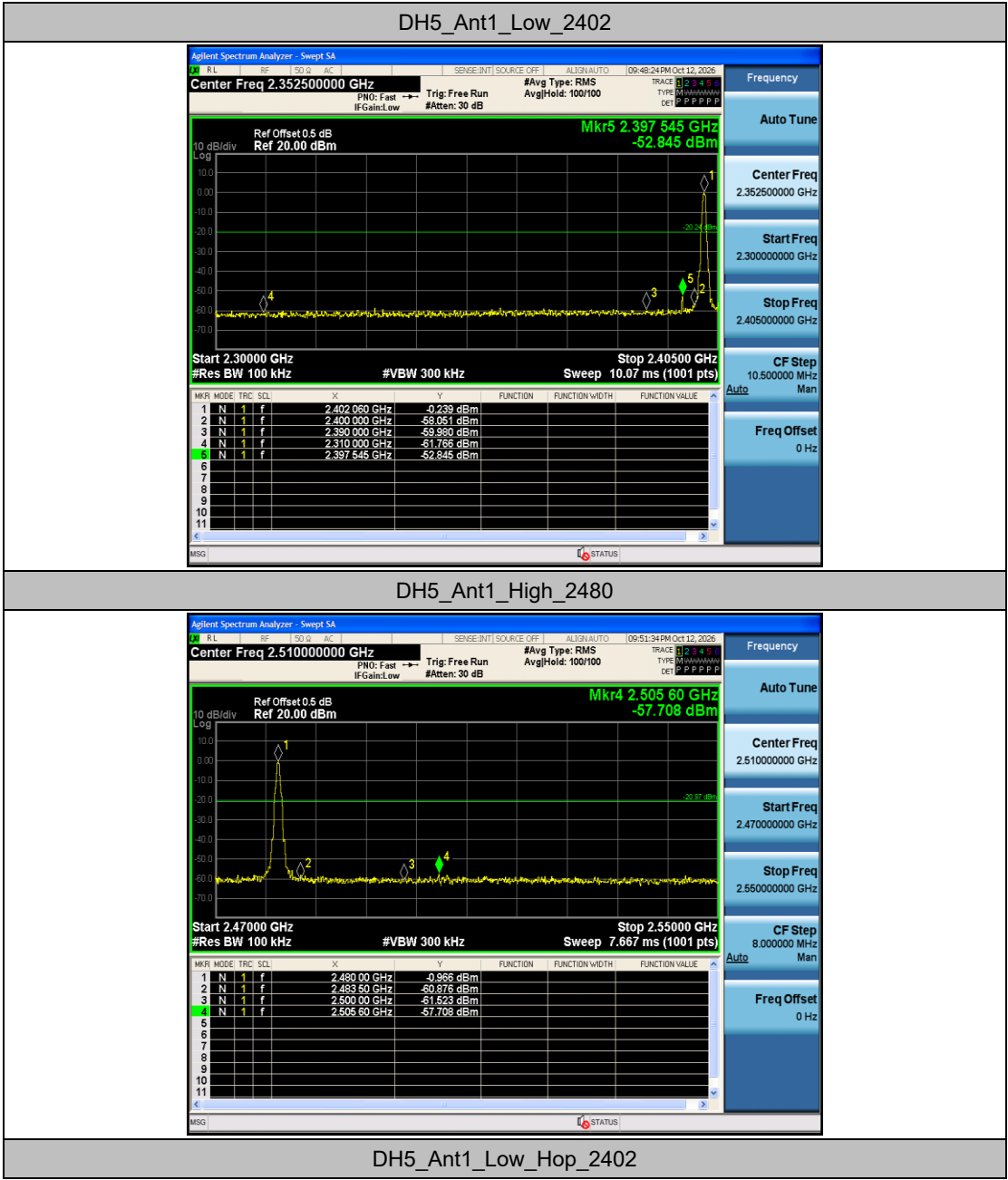


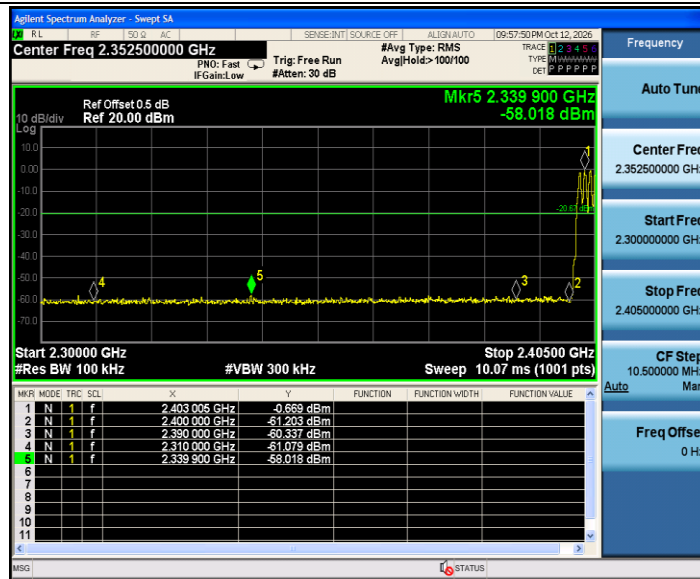
Appendix G: Band edge measurements

Test Result

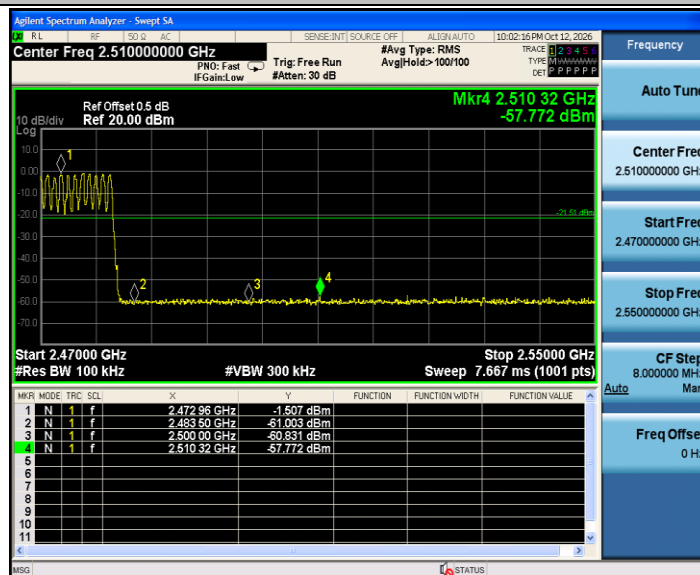
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.24	-52.85	≤ -20.24	PASS
		High	2480	-0.97	-57.71	≤ -20.97	PASS
		Low	Hop_2402	-0.67	-58.02	≤ -20.67	PASS
		High	Hop_2480	-1.51	-57.77	≤ -21.51	PASS
2DH5	Ant1	Low	2402	-0.50	-50.08	≤ -20.5	PASS
		High	2480	-1.84	-52.79	≤ -21.84	PASS
		Low	Hop_2402	-0.24	-51.98	≤ -20.24	PASS
		High	Hop_2480	-0.36	-57.34	≤ -20.36	PASS

Test Graphs

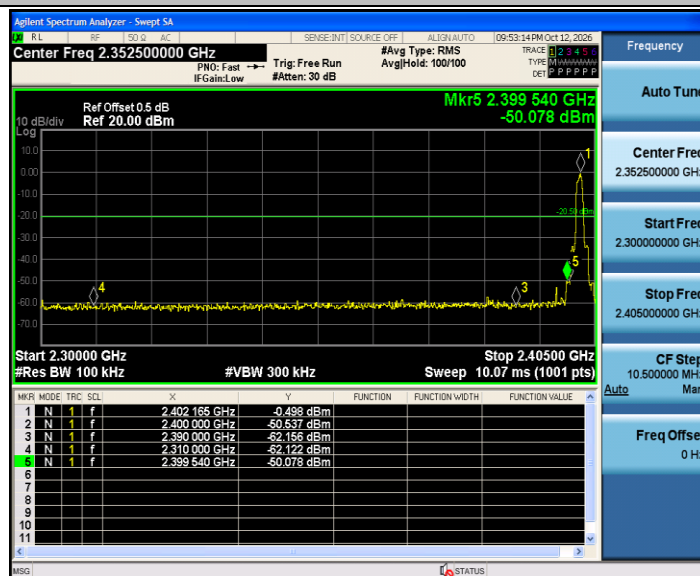




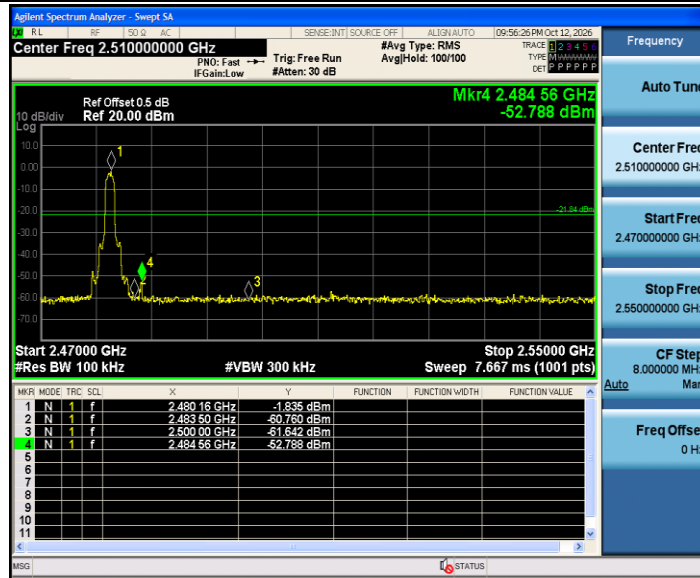
DH5_Ant1_High_Hop_2480



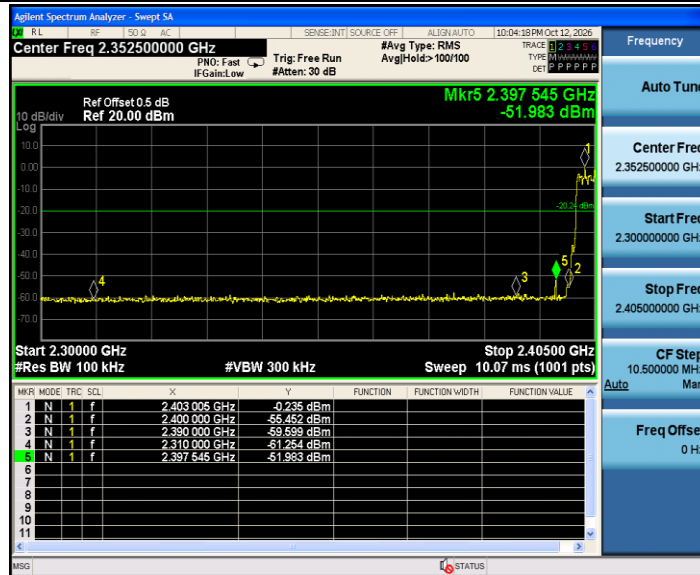
2DH5_Ant1_Low_2402



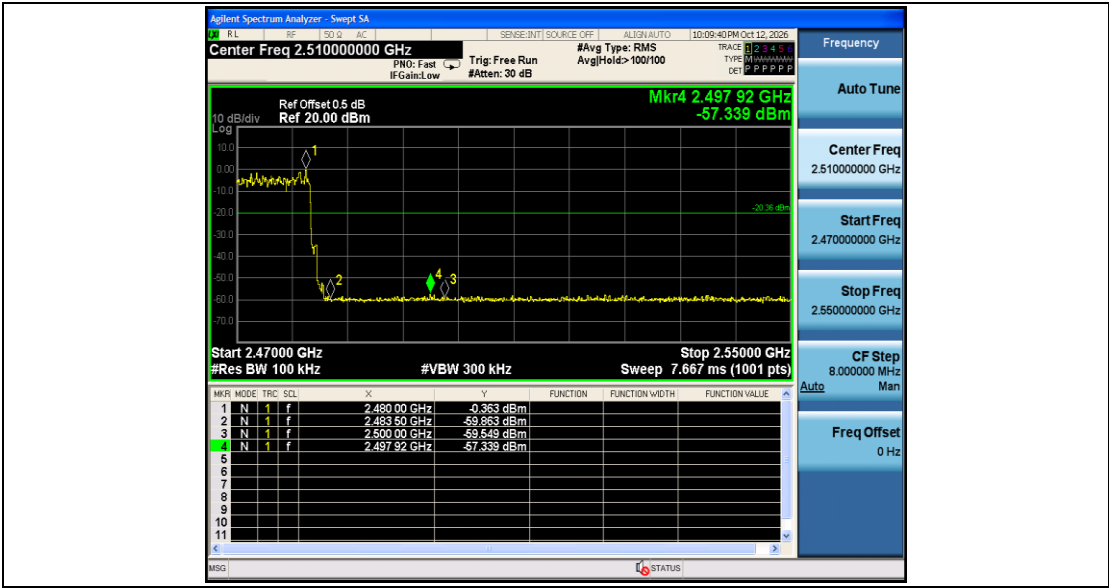
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

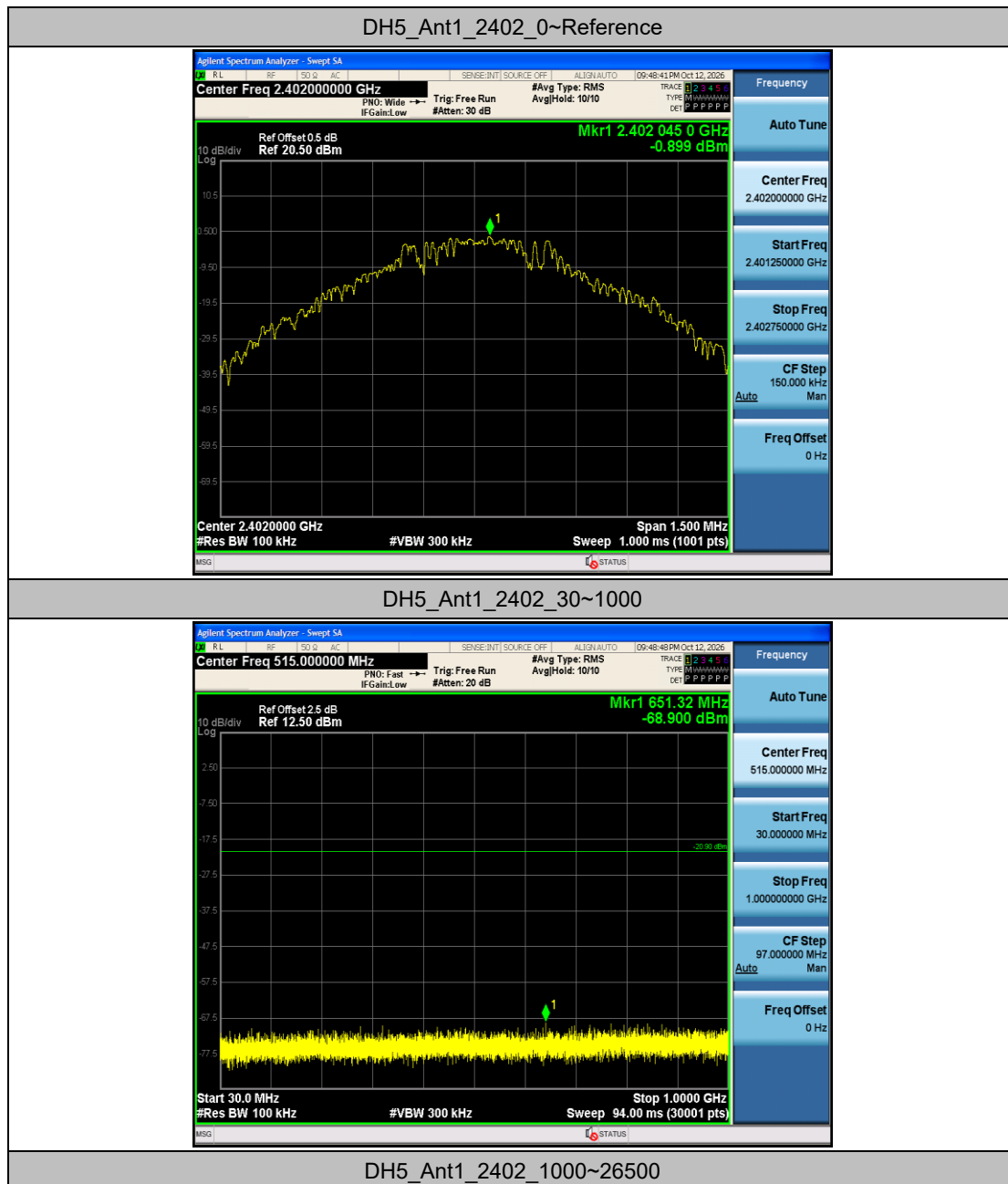


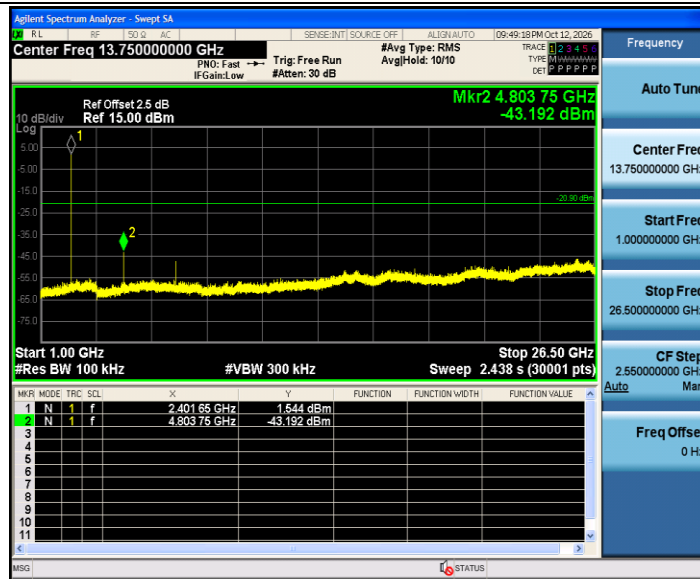
Appendix H: Conducted Spurious Emission

Test Result

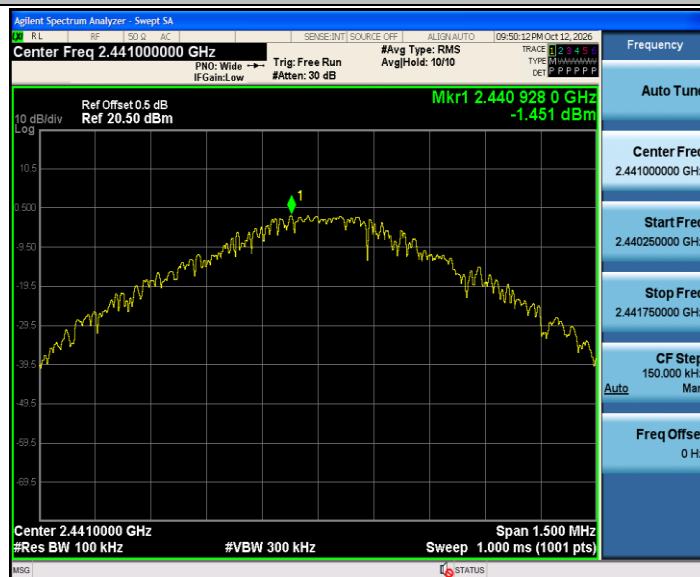
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.90	-0.90	---	PASS
			30~1000	-0.90	-68.9	≤-20.9	PASS
			1000~26500	-0.90	-43.19	≤-20.9	PASS
		2441	Reference	-1.45	-1.45	---	PASS
			30~1000	-1.45	-68.3	≤-21.45	PASS
			1000~26500	-1.45	-43.65	≤-21.45	PASS
		2480	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-65.31	≤-21.5	PASS
			1000~26500	-1.50	-44.9	≤-21.5	PASS
2DH5	Ant1	2402	Reference	-1.62	-1.62	---	PASS
			30~1000	-1.62	-59.87	≤-21.62	PASS
			1000~26500	-1.62	-44.97	≤-21.62	PASS
		2441	Reference	-3.72	-3.72	---	PASS
			30~1000	-3.72	-61.94	≤-23.72	PASS
			1000~26500	-3.72	-45.93	≤-23.72	PASS
		2480	Reference	-0.96	-0.96	---	PASS
			30~1000	-0.96	-68.41	≤-20.96	PASS
			1000~26500	-0.96	-44.92	≤-20.96	PASS

Test Graphs

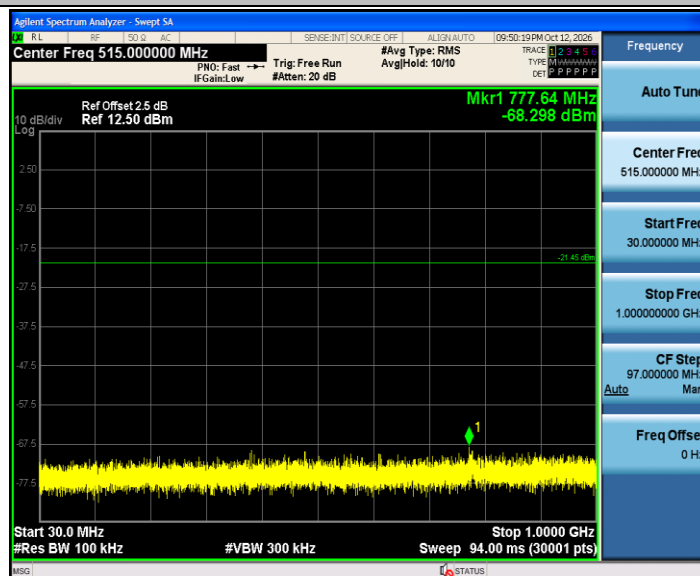




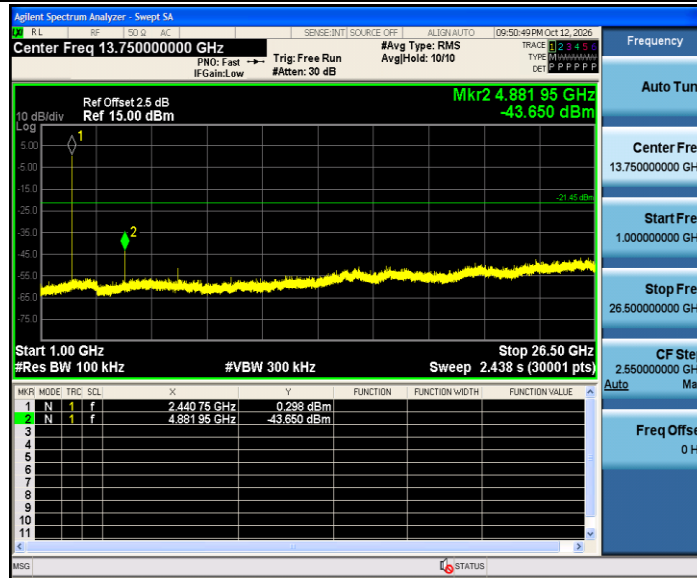
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



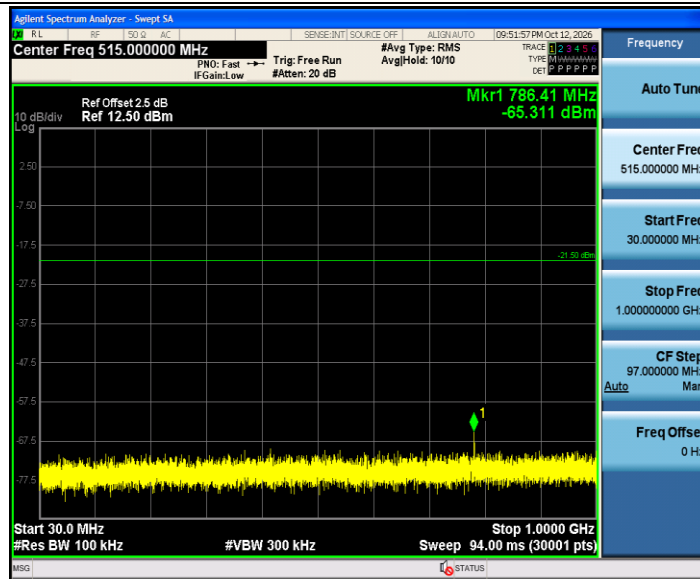
DH5_Ant1_2441_1000~26500



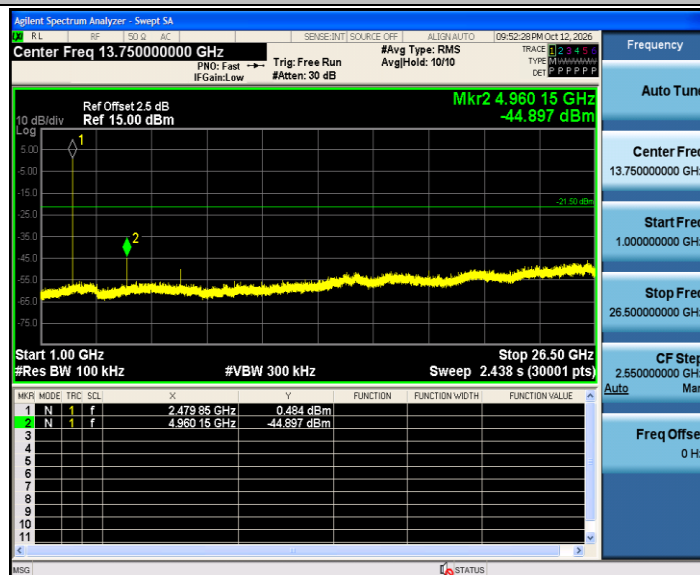
DH5_Ant1_2480_0~Reference



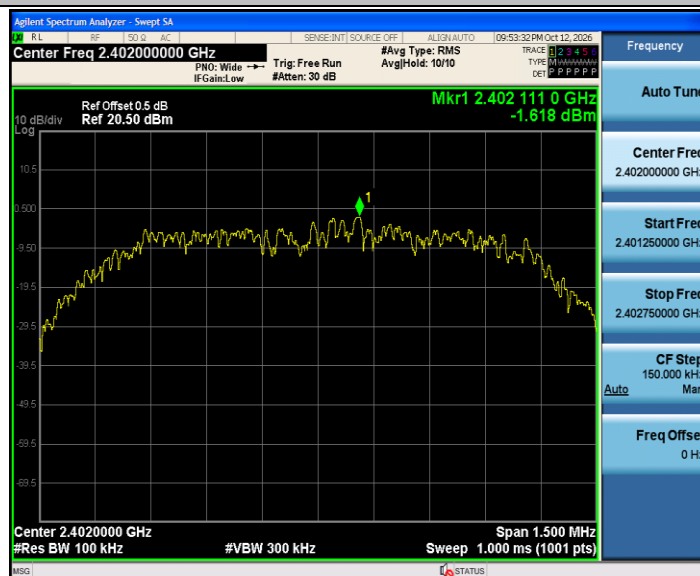
DH5_Ant1_2480_30~1000



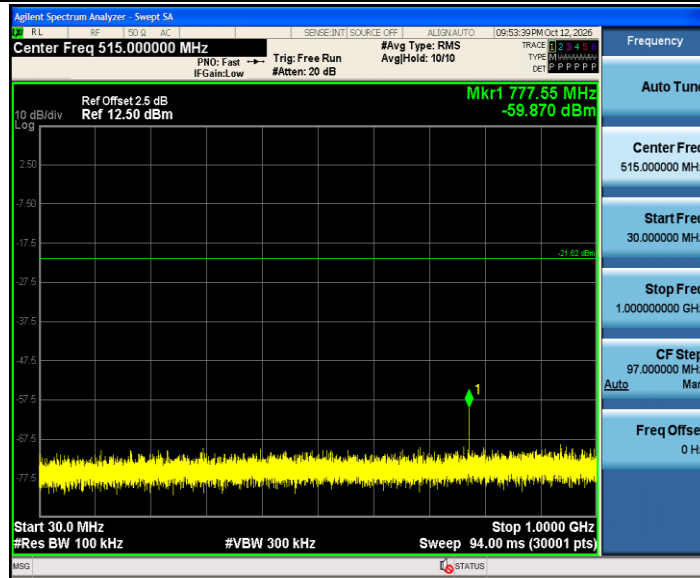
DH5_Ant1_2480_1000~26500



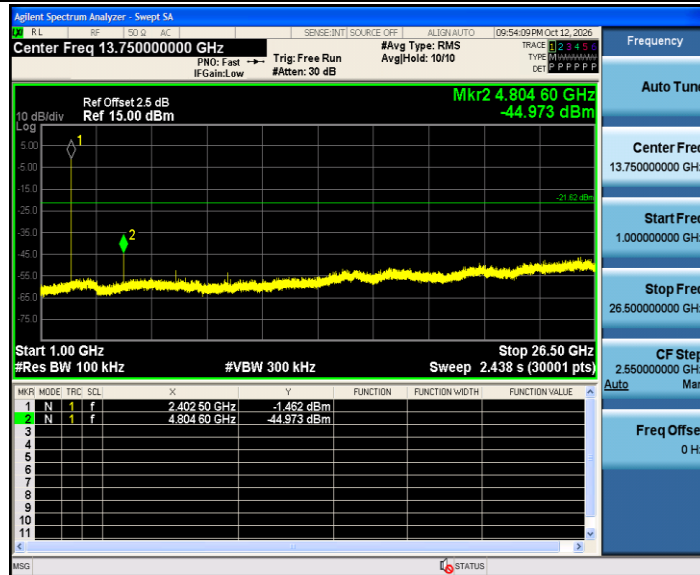
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



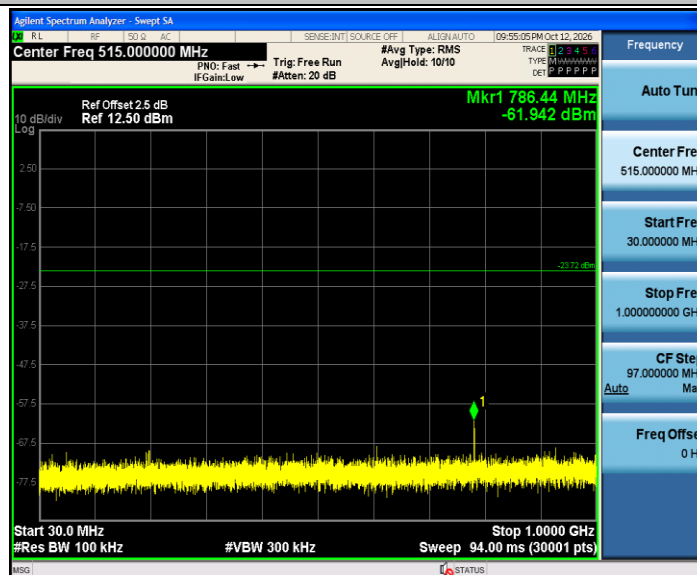
2DH5_Ant1_2402_1000~26500



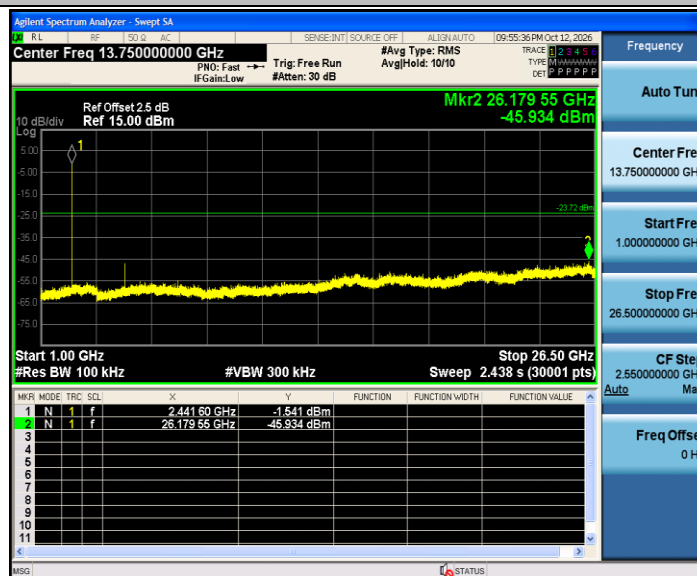
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



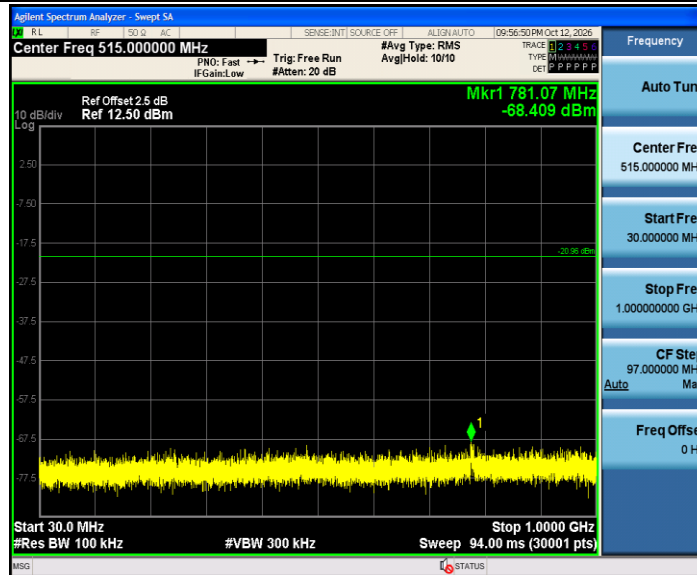
2DH5_Ant1_2441_1000~26500



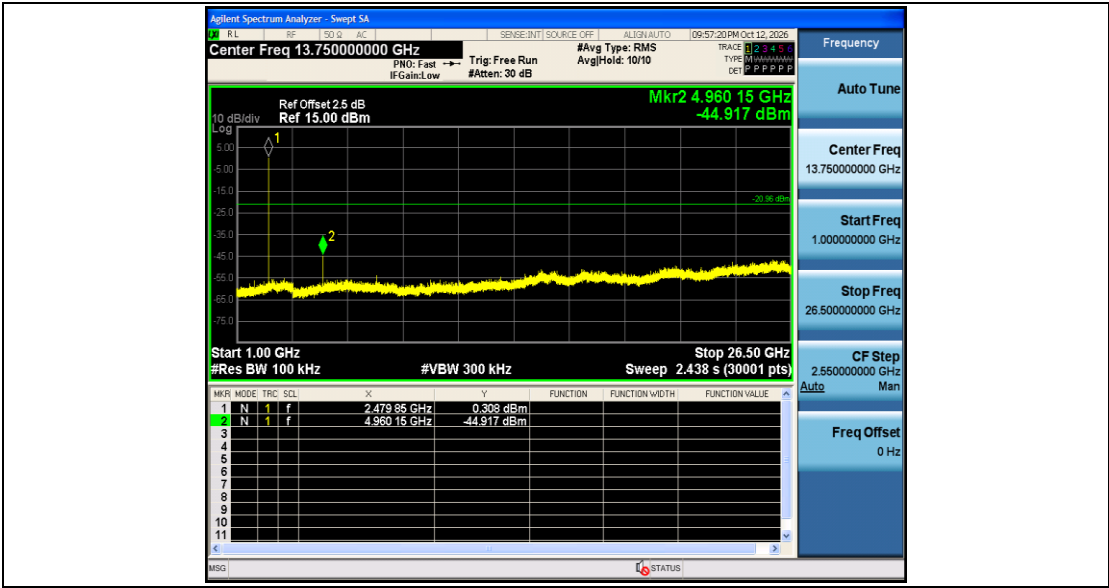
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.76	77.66	1.10	---	---