

FCC Appendix RF Test Data for BT

FCC ID : 2AYZG-LT286

Company : ShenZhen litian technology Co.,Ltd

EUT : Sunrise Alarm Clock Radio With Bed Shaker

Model Number : LT286

Report No. : CTA26090900201

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	0.933	2401.550	2402.483	---	---
		2441	0.951	2440.541	2441.492	---	---
		2480	0.948	2479.553	2480.501	---	---
2DH5	Ant1	2402	1.281	2401.385	2402.666	---	---
		2441	1.326	2440.346	2441.672	---	---
		2480	1.326	2479.346	2480.672	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

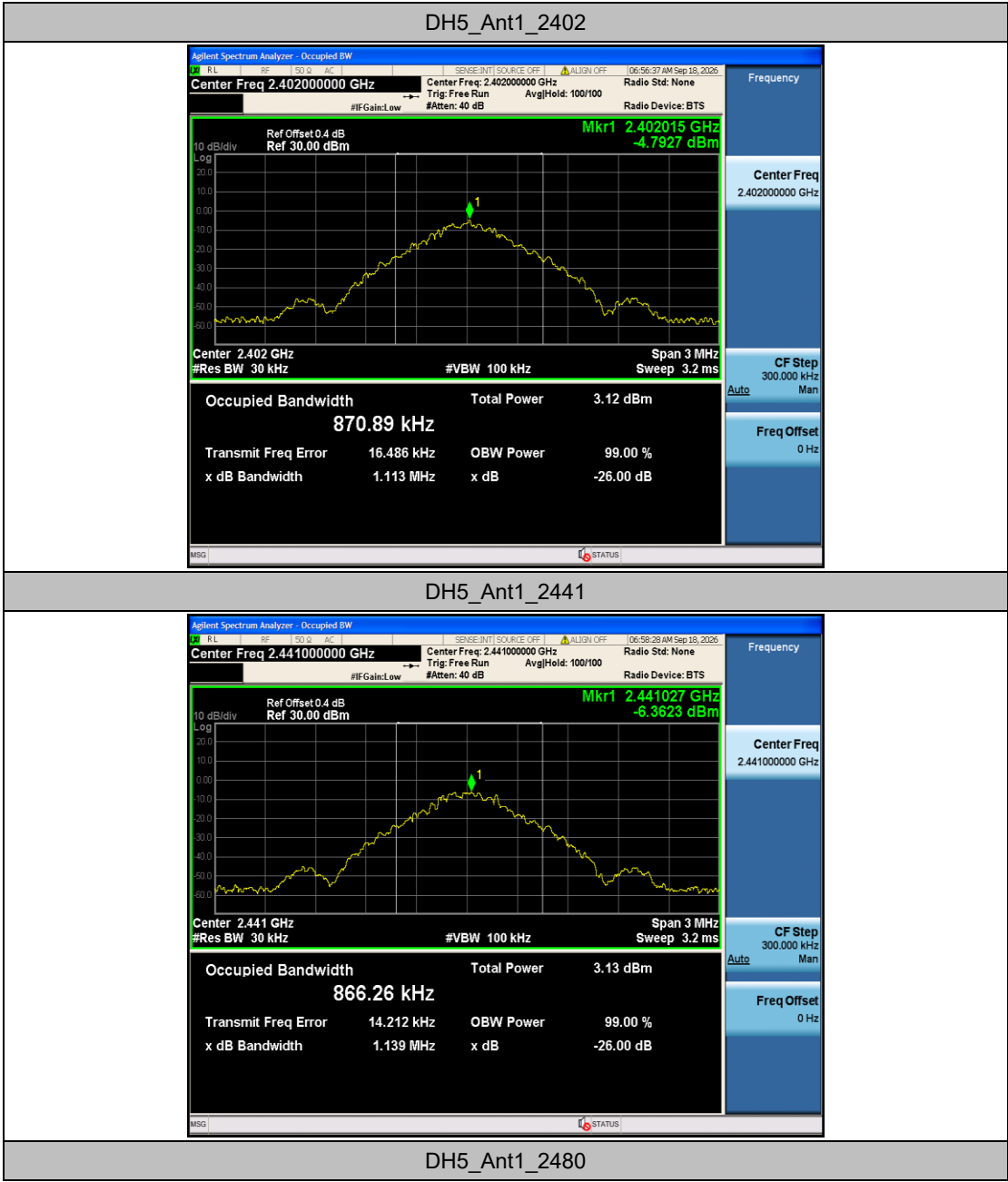


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87089	2401.5810	2402.4519	---	---
		2441	0.86626	2440.5811	2441.4473	---	---
		2480	0.85656	2479.5821	2480.4387	---	---
2DH5	Ant1	2402	1.1833	2401.4218	2402.6051	---	---
		2441	1.1863	2440.4173	2441.6036	---	---
		2480	1.1933	2479.4143	2480.6076	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

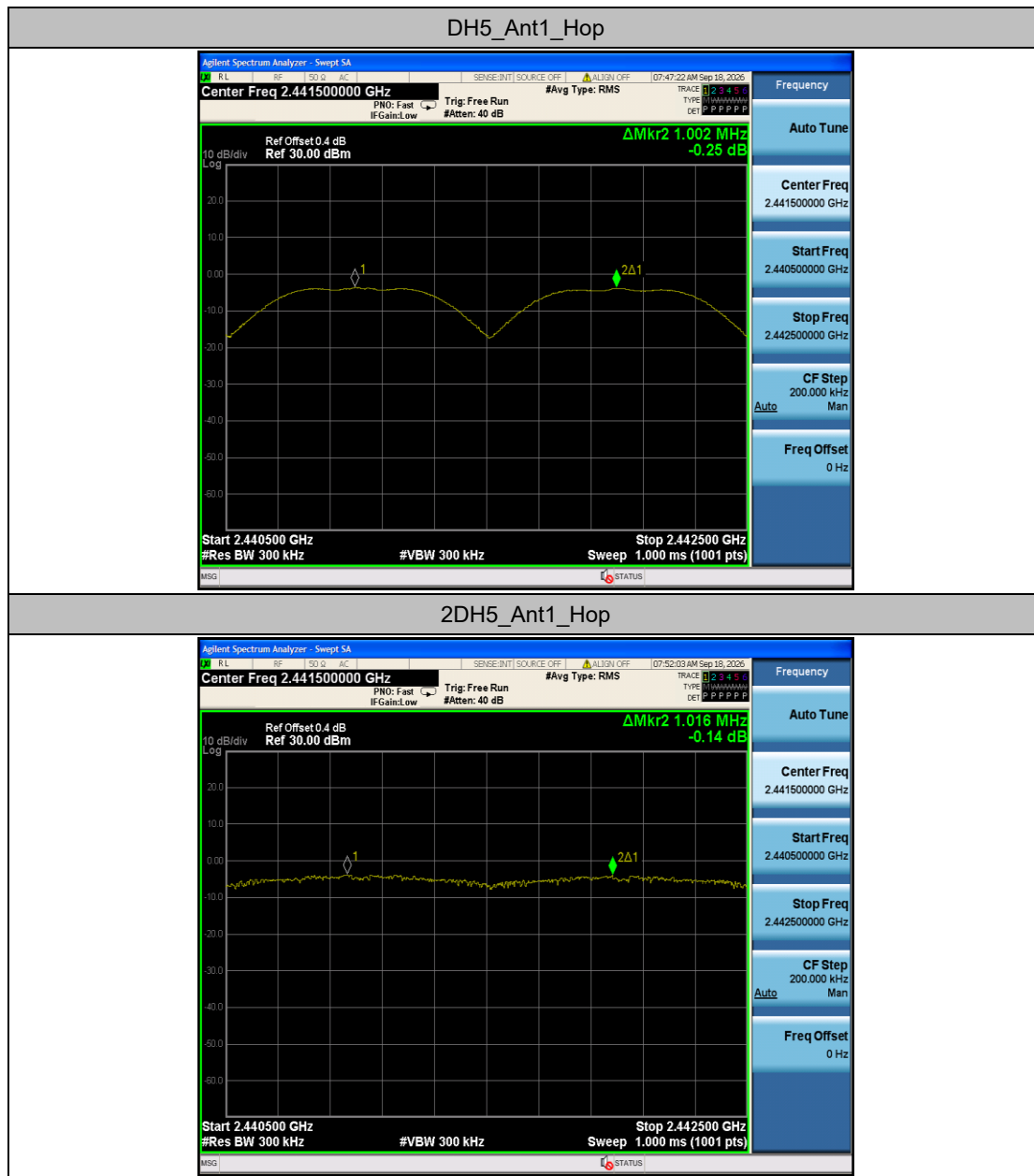
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-3.31	≤20.97	PASS
		2441	-3.39	≤20.97	PASS
		2480	-3.68	≤20.97	PASS
2DH5	Ant1	2402	-0.69	≤20.97	PASS
		2441	-0.85	≤20.97	PASS
		2480	-1.06	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.002	≥ 0.951	PASS
2DH5	Ant1	Hop	1.016	≥ 0.884	PASS

Test Graphs

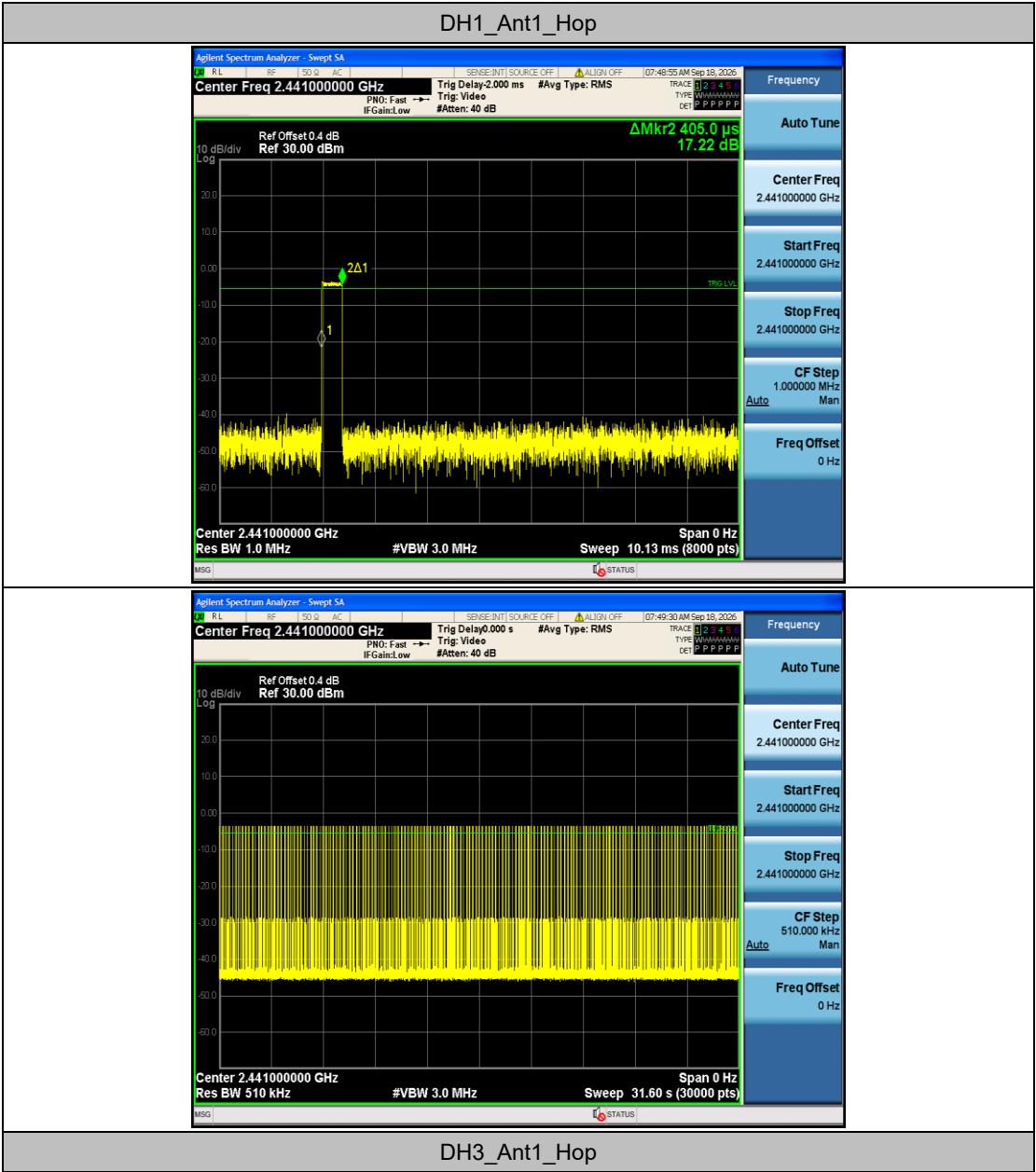


Appendix E: Time of occupancy

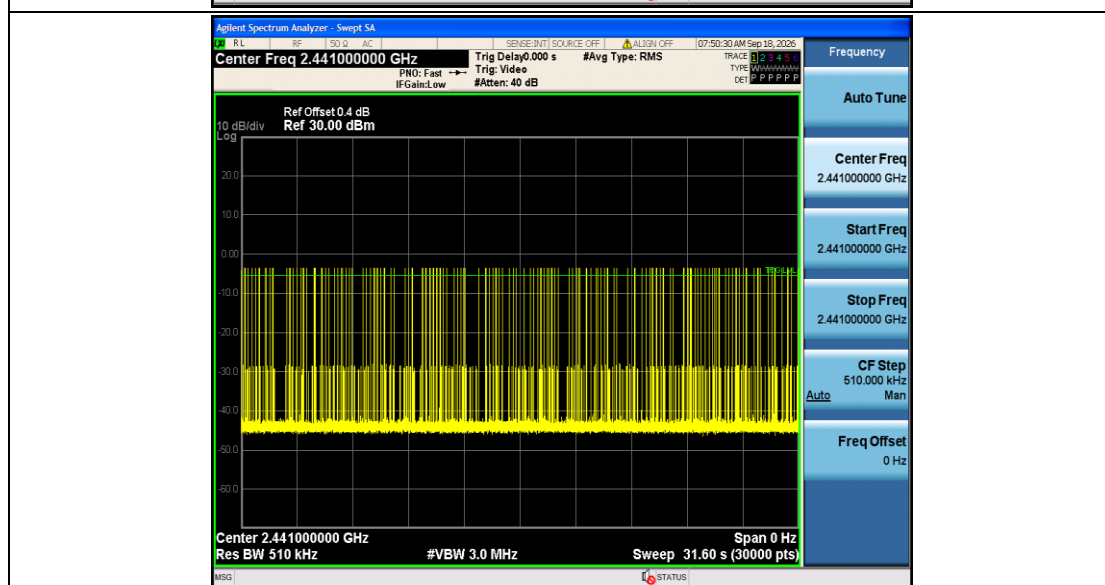
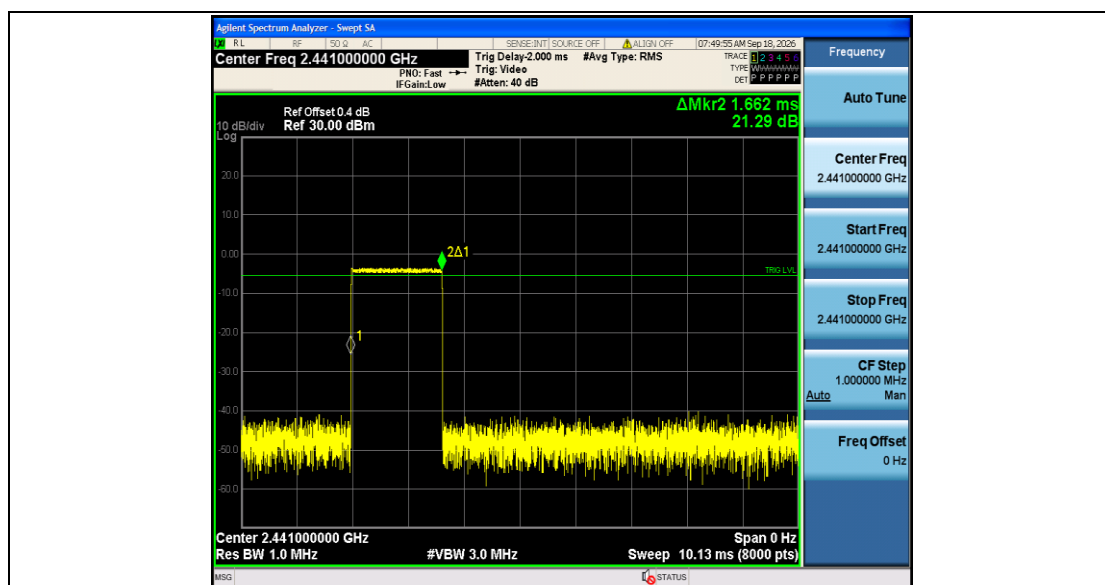
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	319	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	162	0.269	≤0.4	PASS
DH5	Ant1	Hop	2.910	112	0.326	≤0.4	PASS
2DH1	Ant1	Hop	0.417	319	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.667	160	0.267	≤0.4	PASS
2DH5	Ant1	Hop	2.916	107	0.312	≤0.4	PASS

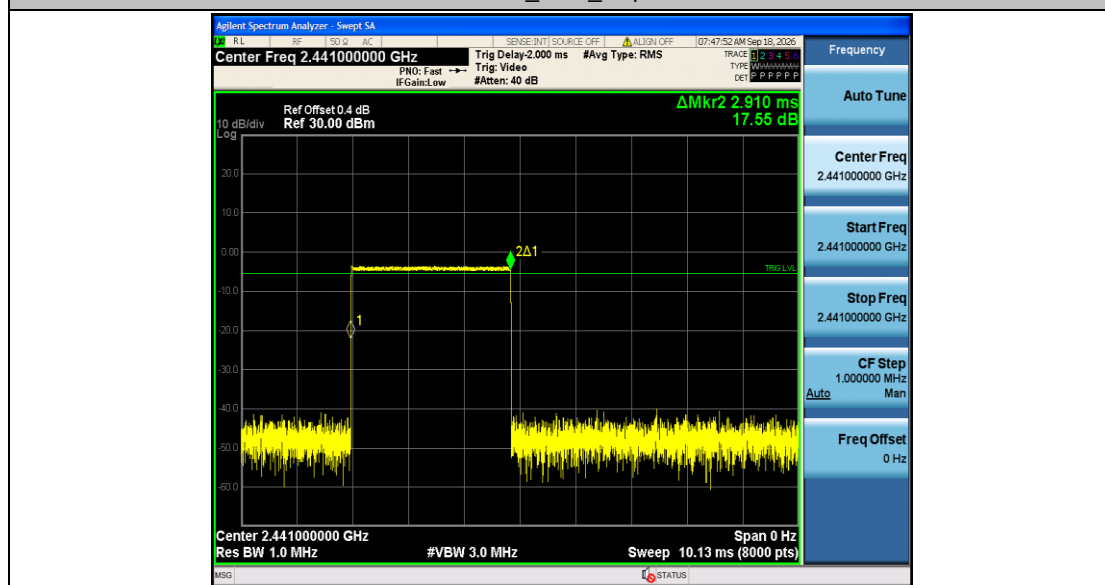
Test Graphs

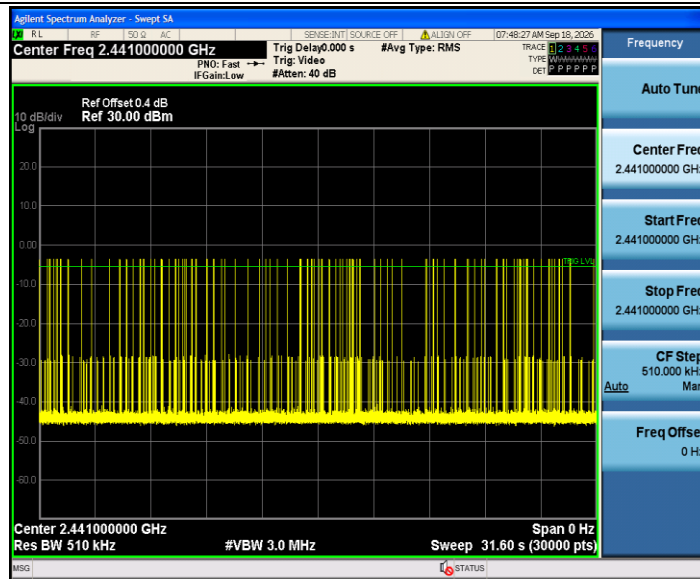


DH3_Ant1_Hop

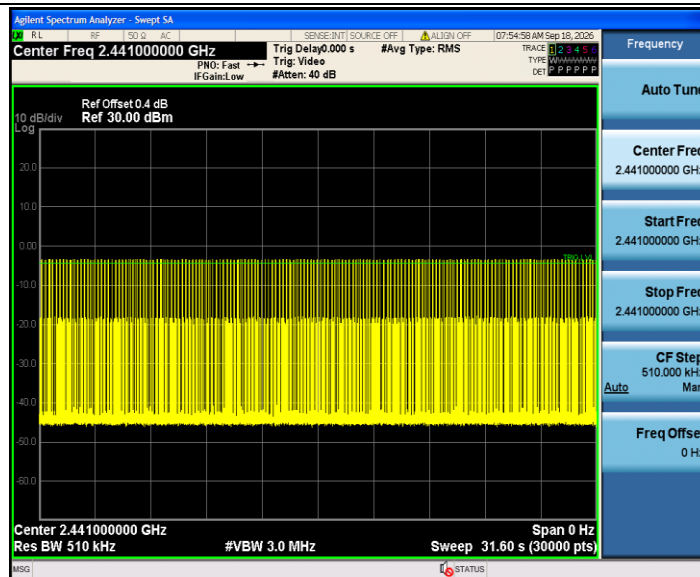
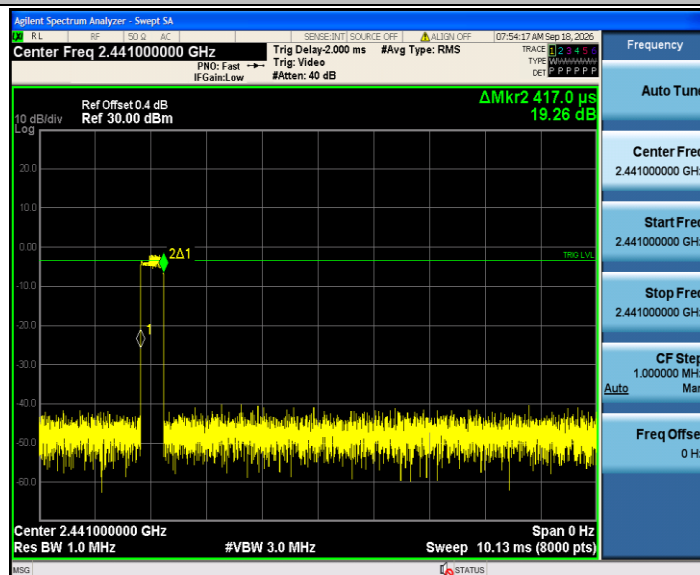


DH5_Ant1_Hop

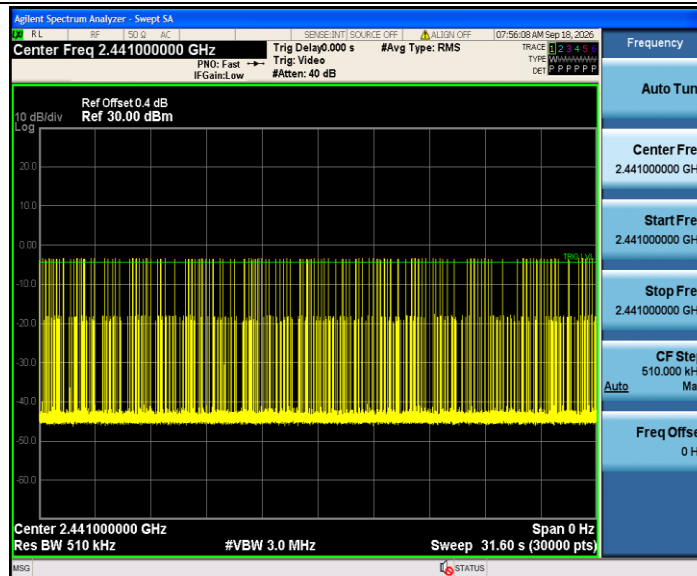
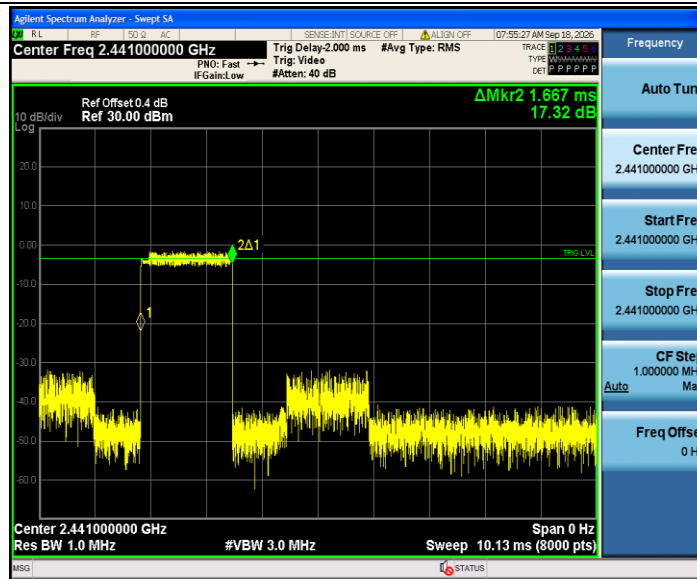




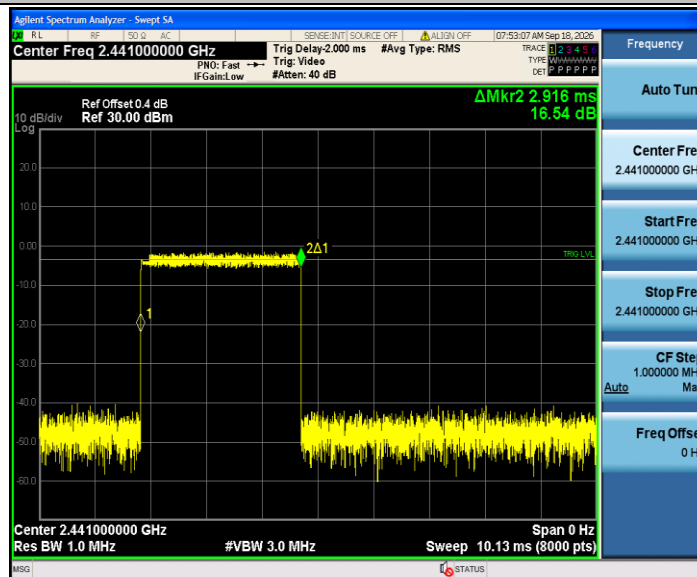
2DH1_Ant1_Hop

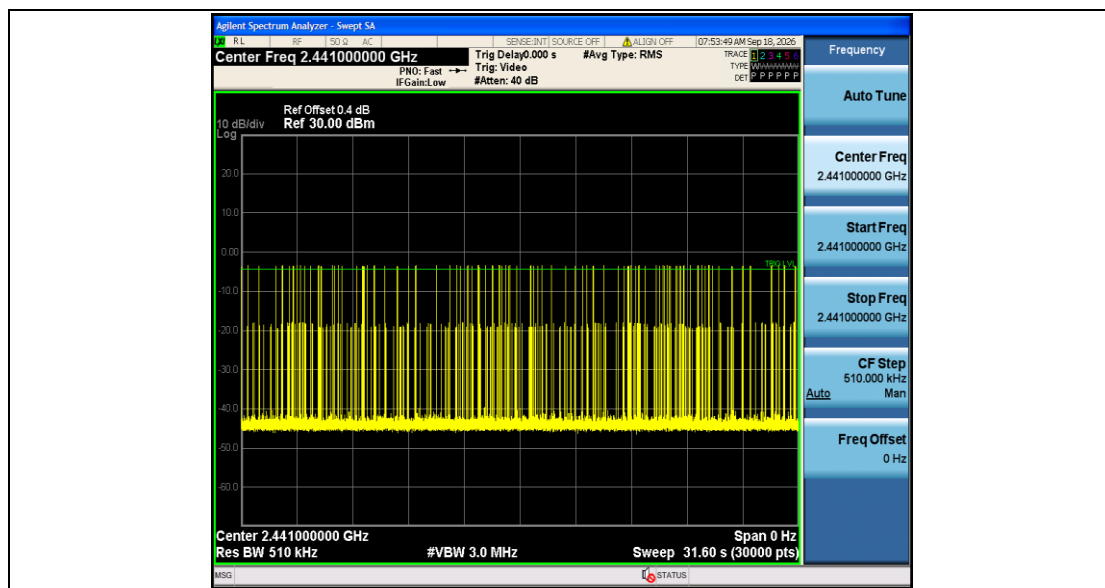


2DH3_Ant1_Hop



2DH5_Ant1_Hop



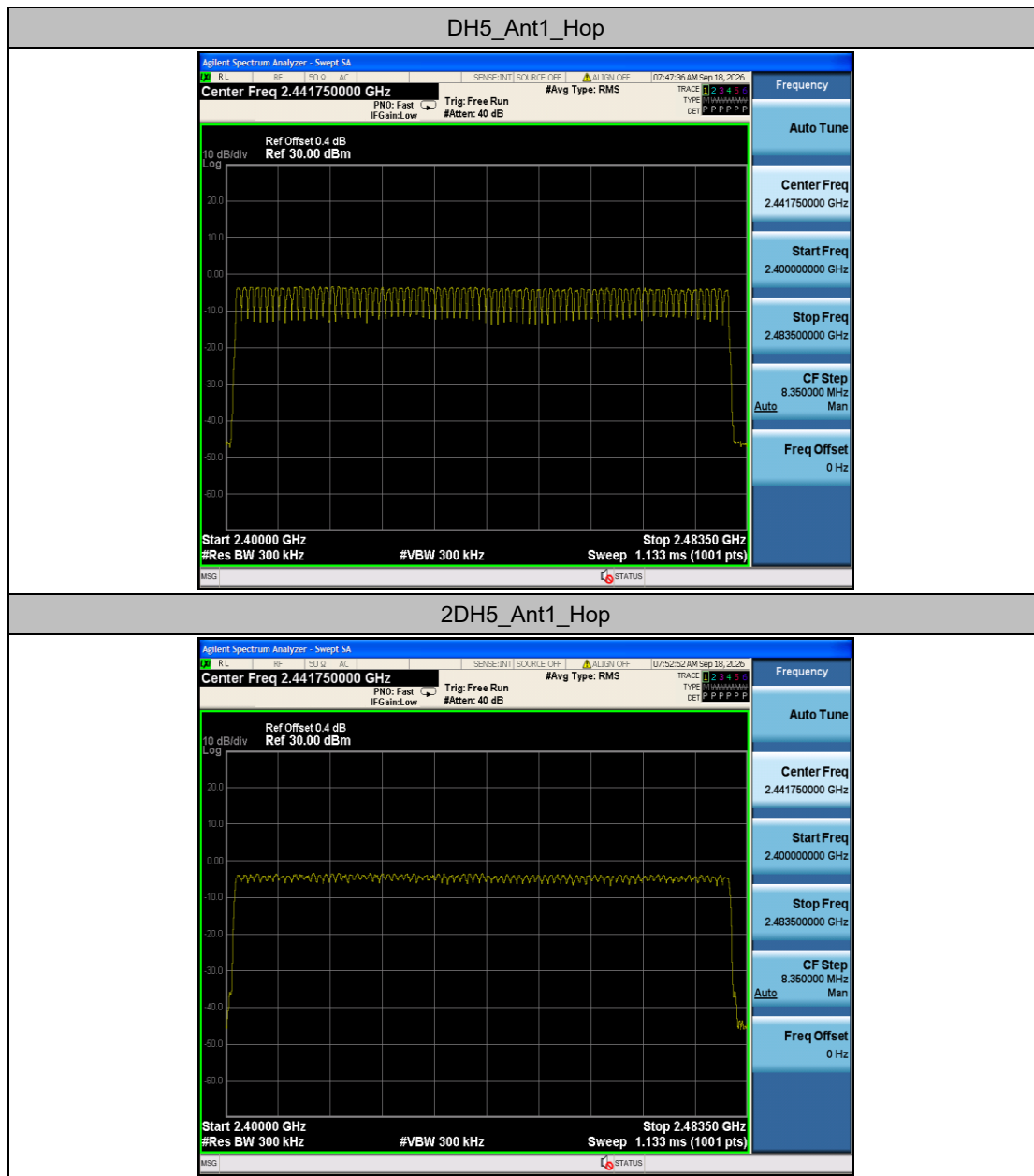


Appendix F: Number of hopping channels

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

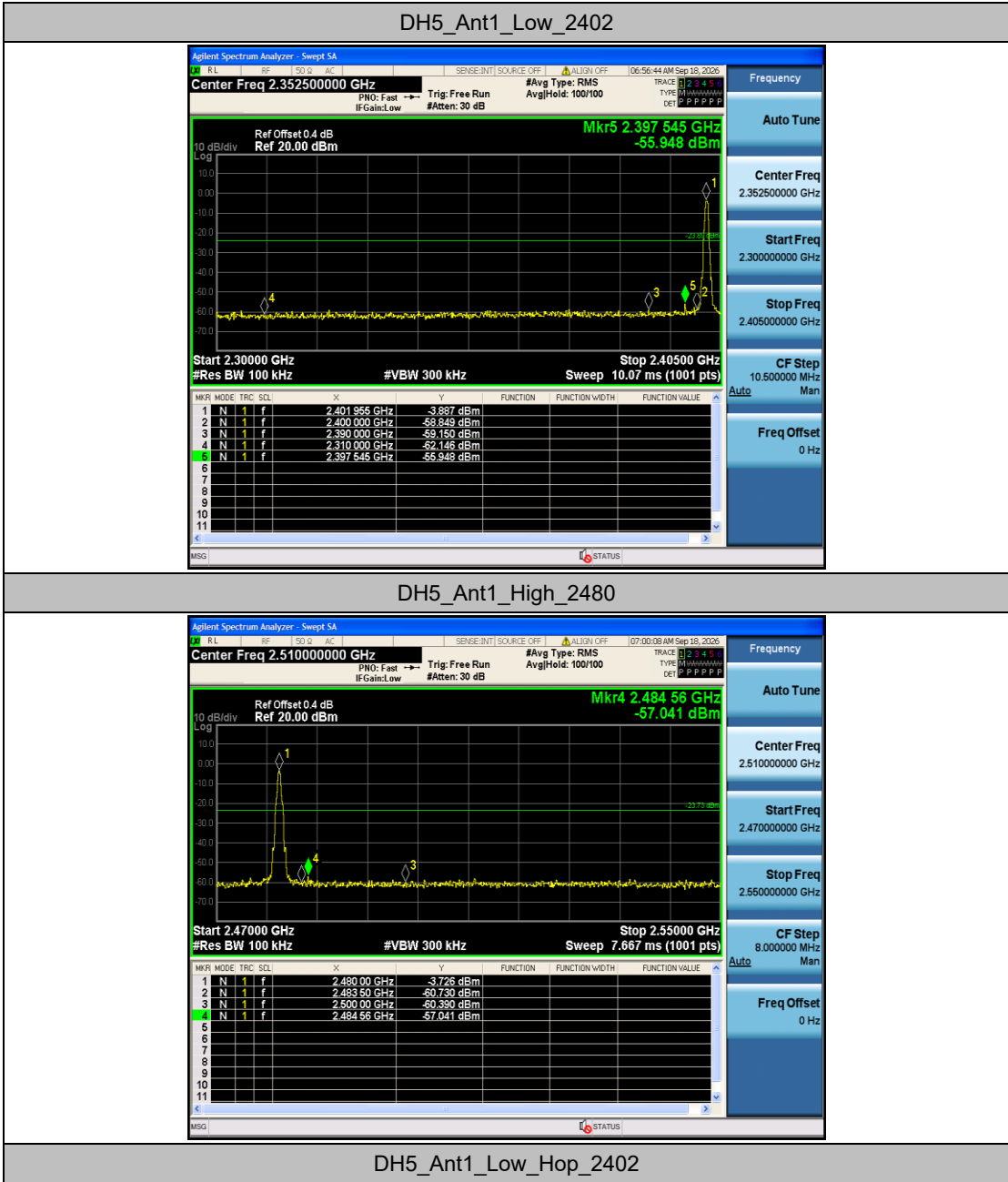


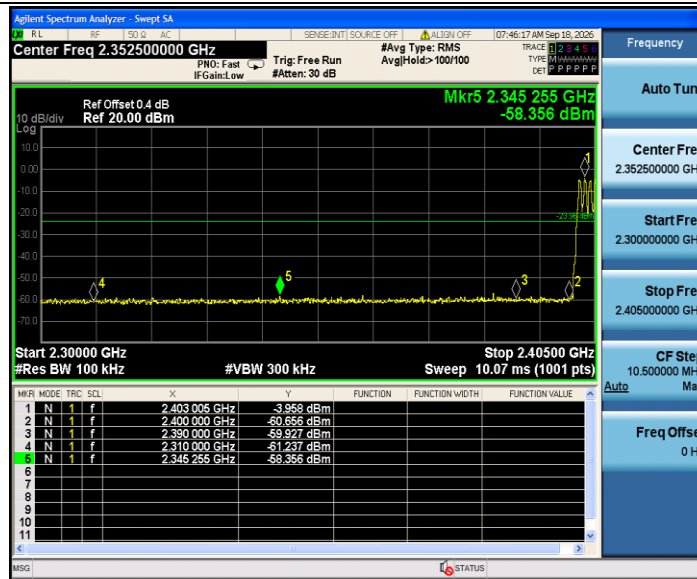
Appendix G: Band edge measurements

Test Result

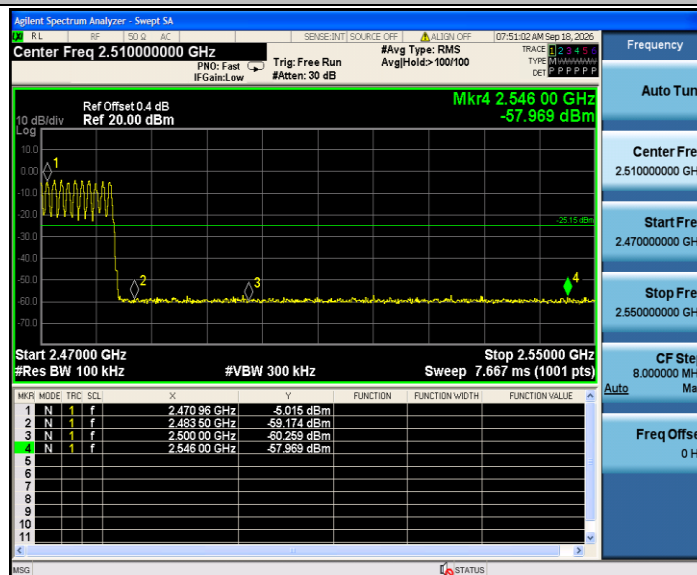
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.89	-55.95	≤ -23.89	PASS
		High	2480	-3.73	-57.04	≤ -23.73	PASS
		Low	Hop_2402	-3.96	-58.36	≤ -23.96	PASS
		High	Hop_2480	-5.15	-57.97	≤ -25.15	PASS
2DH5	Ant1	Low	2402	-6.26	-54.96	≤ -26.26	PASS
		High	2480	-5.04	-57.24	≤ -25.04	PASS
		Low	Hop_2402	-6.00	-57.79	≤ -26	PASS
		High	Hop_2480	-7.69	-58.15	≤ -27.69	PASS

Test Graphs

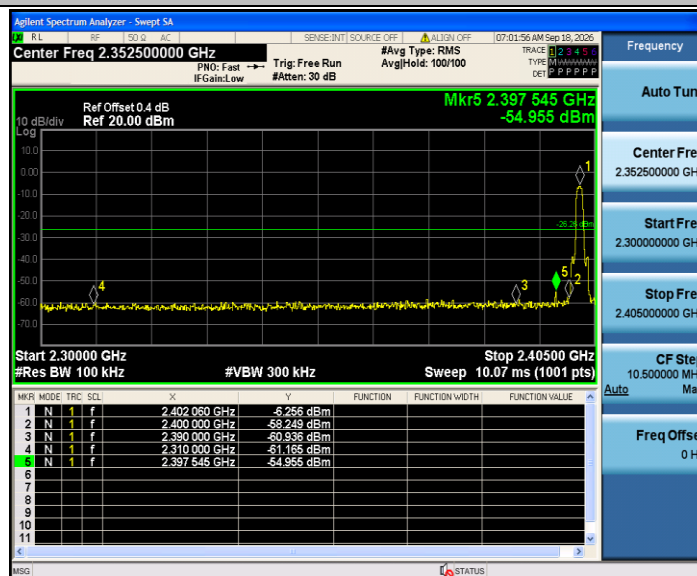




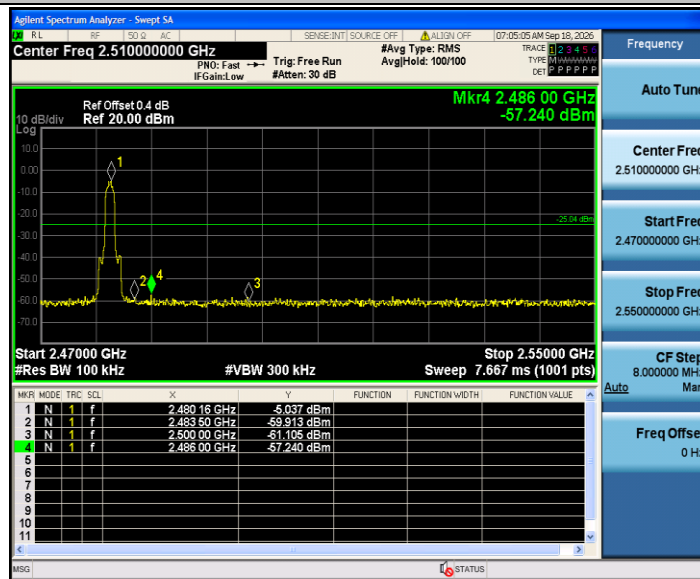
DH5_Ant1_High_Hop_2480



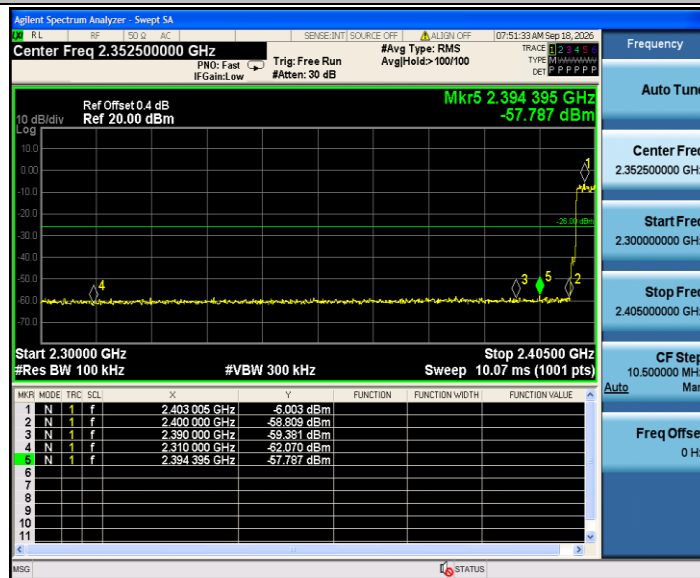
2DH5_Ant1_Low_2402



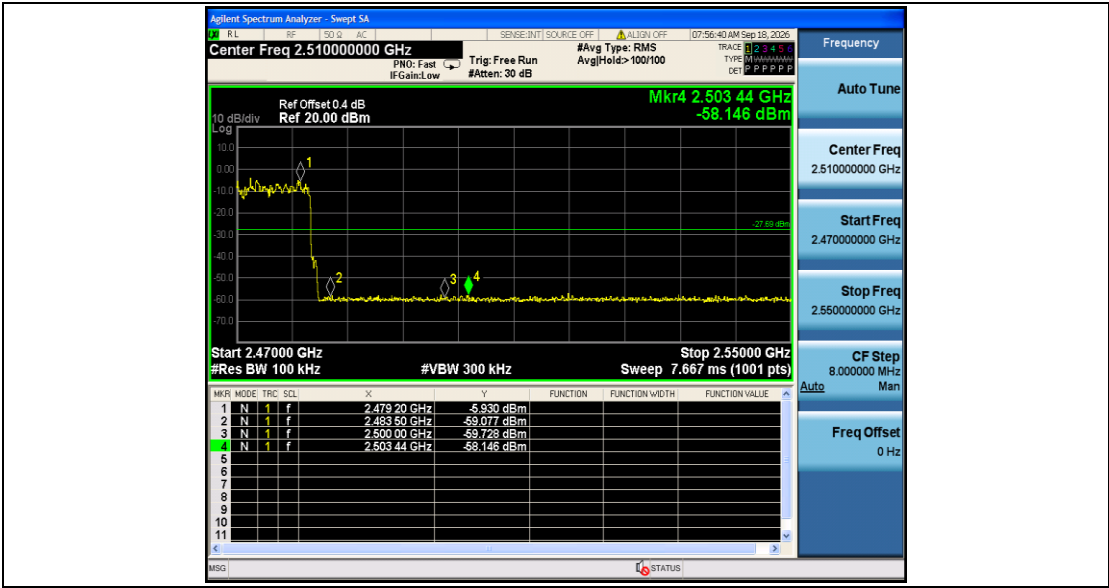
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

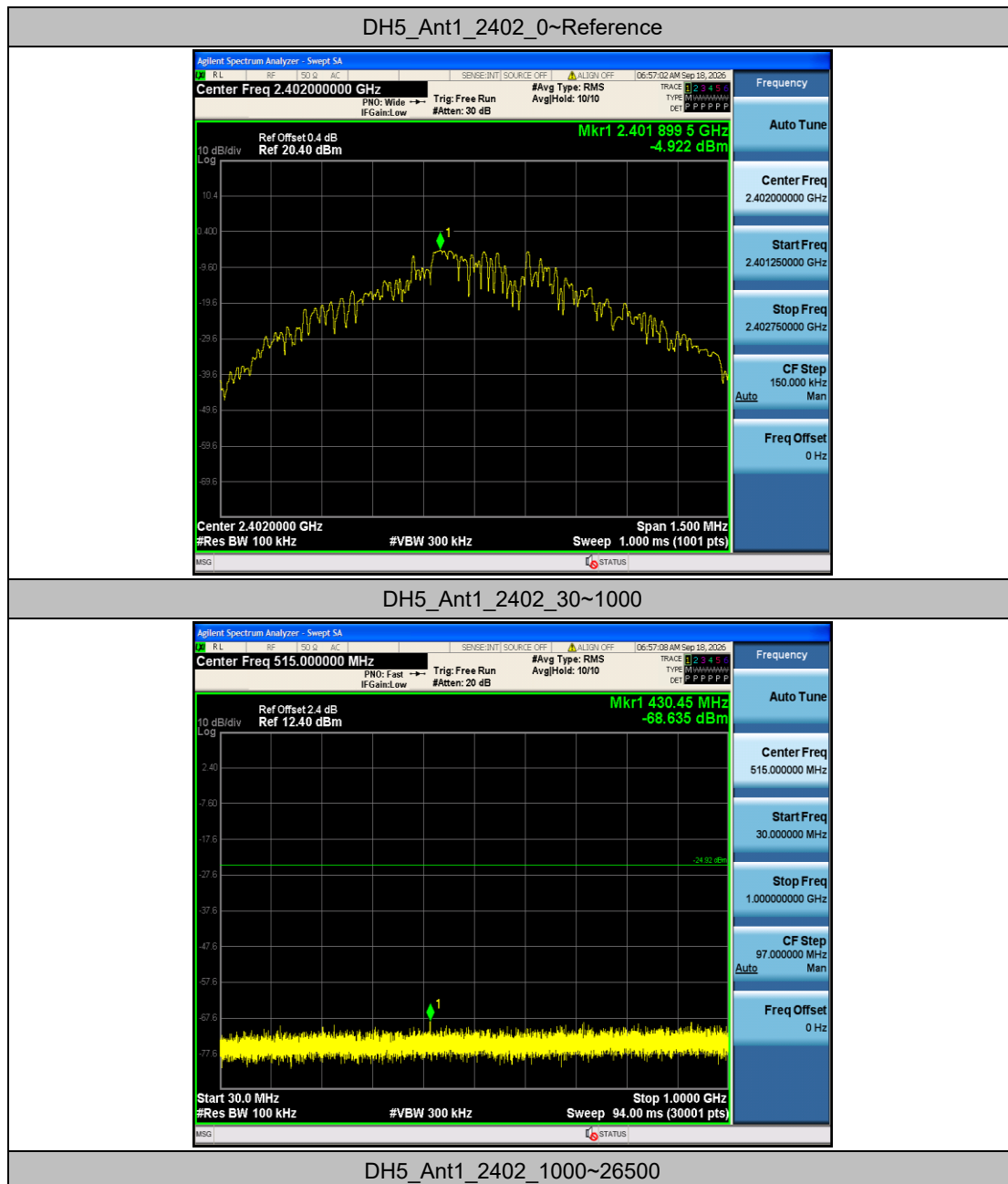


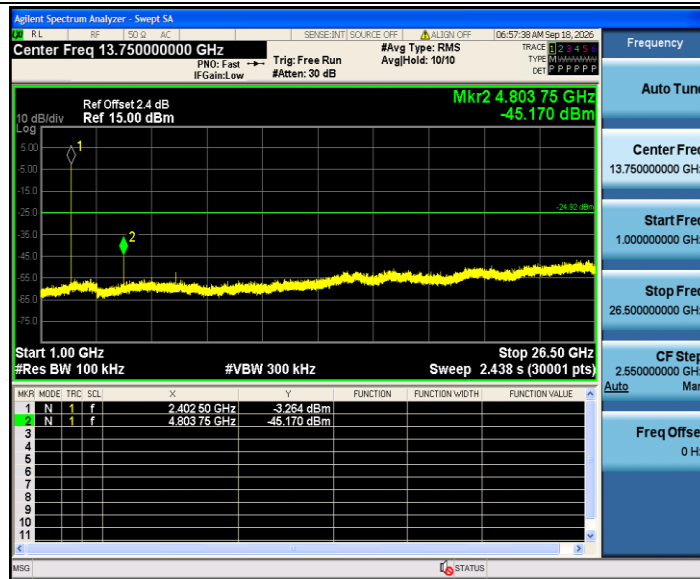
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.92	-4.92	---	PASS
			30~1000	-4.92	-68.64	≤-24.92	PASS
			1000~26500	-4.92	-45.17	≤-24.92	PASS
		2441	Reference	-4.89	-4.89	---	PASS
			30~1000	-4.89	-68.12	≤-24.89	PASS
			1000~26500	-4.89	-46.56	≤-24.89	PASS
		2480	Reference	-3.83	-3.83	---	PASS
			30~1000	-3.83	-68.28	≤-23.83	PASS
			1000~26500	-3.83	-46.37	≤-23.83	PASS
2DH5	Ant1	2402	Reference	-3.58	-3.58	---	PASS
			30~1000	-3.58	-68.76	≤-23.58	PASS
			1000~26500	-3.58	-46.61	≤-23.58	PASS
		2441	Reference	-5.74	-5.74	---	PASS
			30~1000	-5.74	-68.01	≤-25.74	PASS
			1000~26500	-5.74	-46.47	≤-25.74	PASS
		2480	Reference	-5.17	-5.17	---	PASS
			30~1000	-5.17	-68.49	≤-25.17	PASS
			1000~26500	-5.17	-46	≤-25.17	PASS

Test Graphs

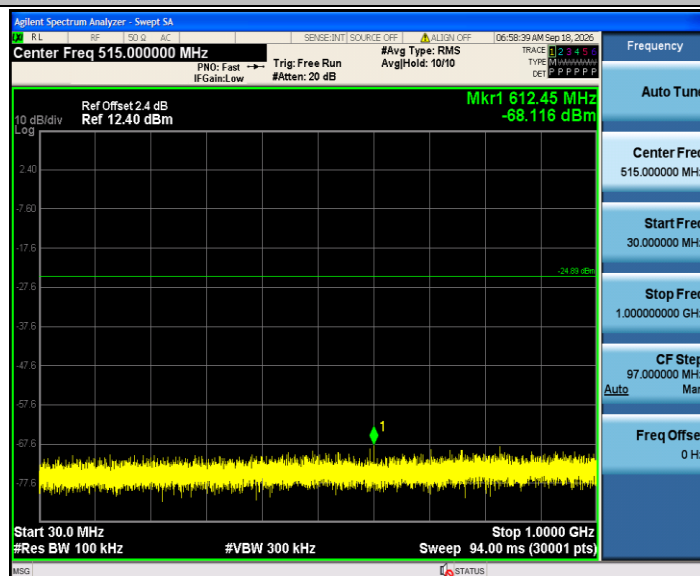




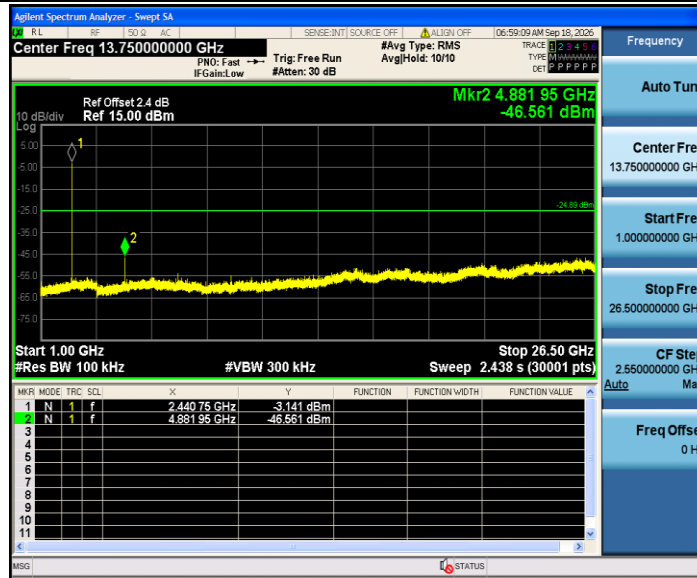
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



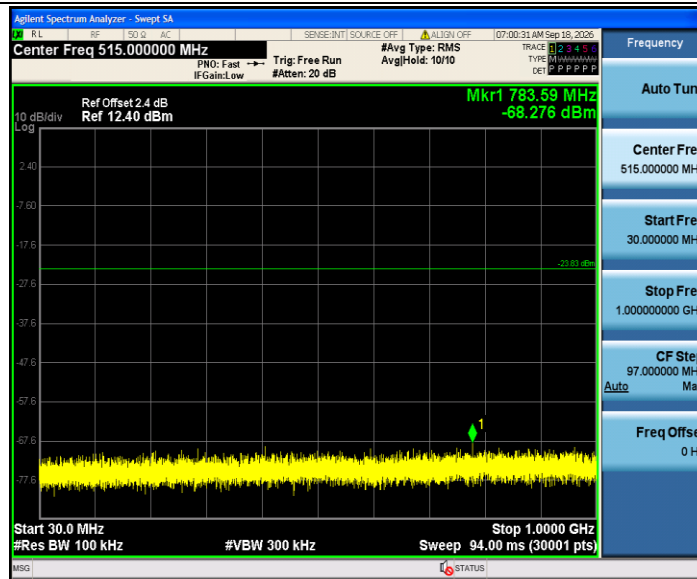
DH5_Ant1_2441_1000~26500



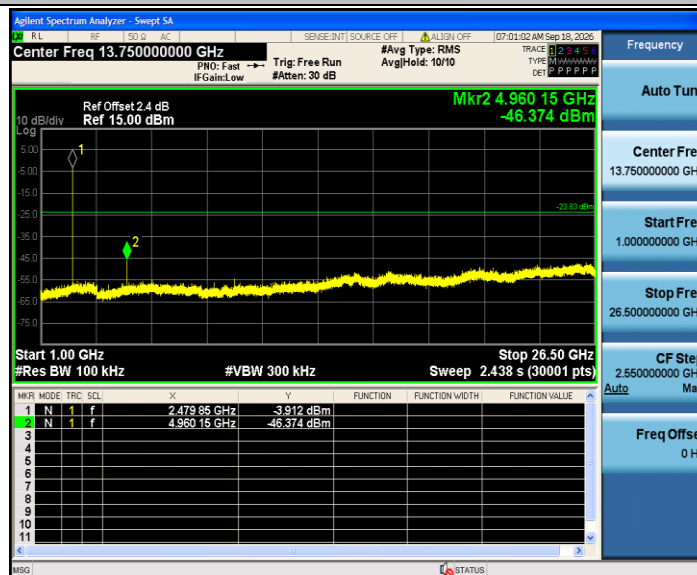
DH5_Ant1_2480_0~Reference



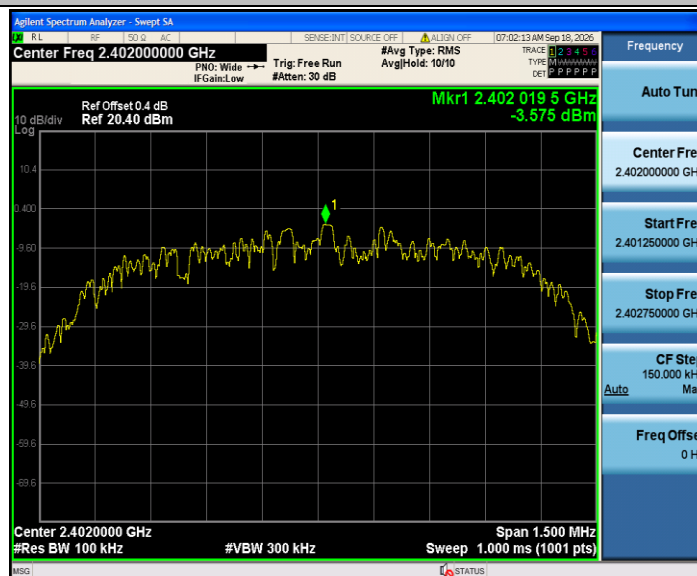
DH5_Ant1_2480_30~1000



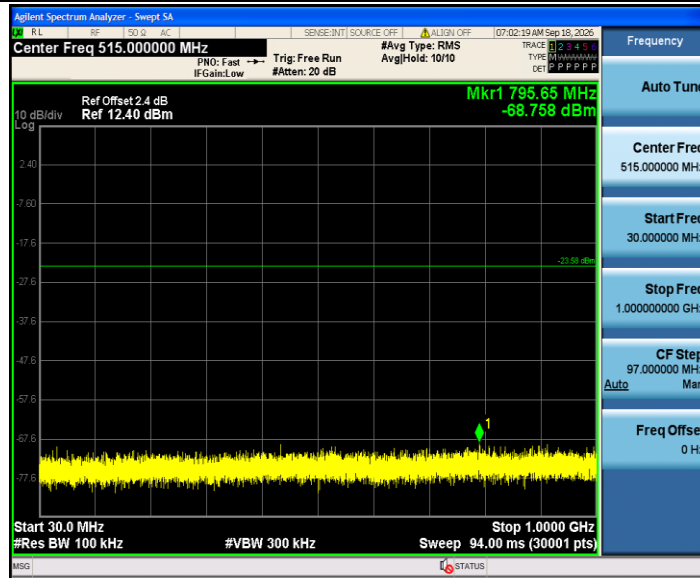
DH5_Ant1_2480_1000~26500



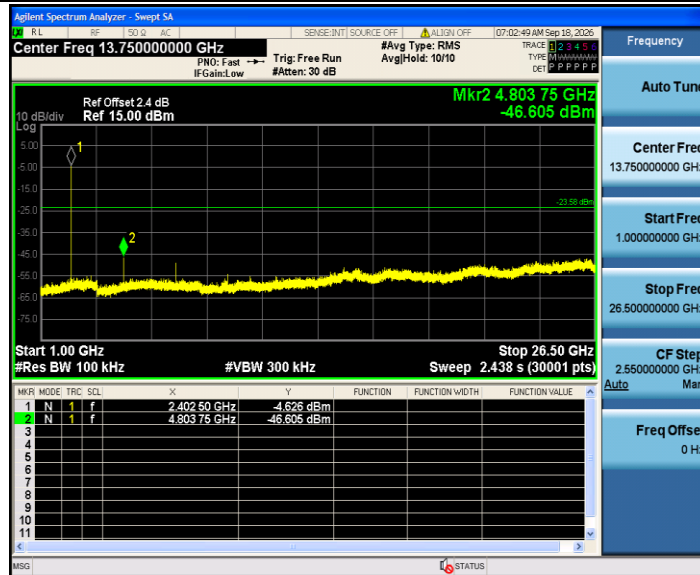
2DH5_Ant1_2402_0~Reference



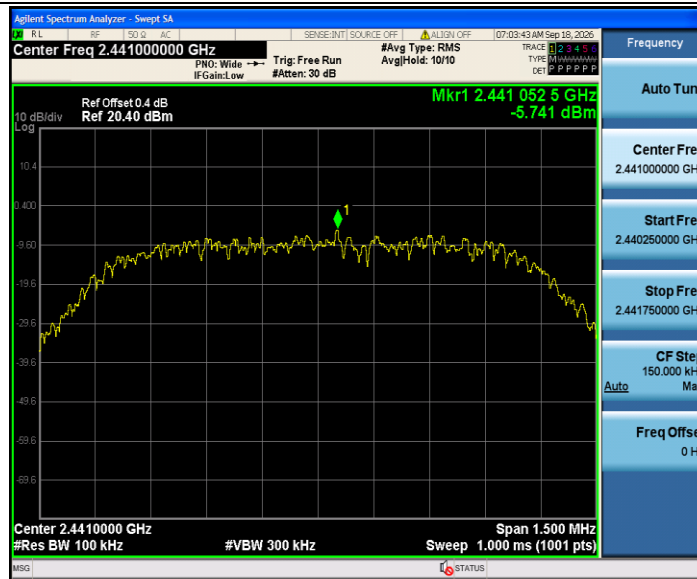
2DH5_Ant1_2402_30~1000



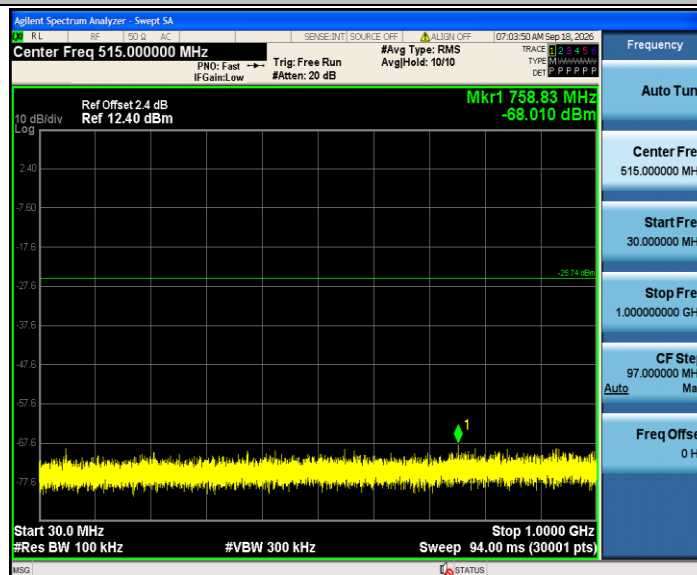
2DH5_Ant1_2402_1000~26500



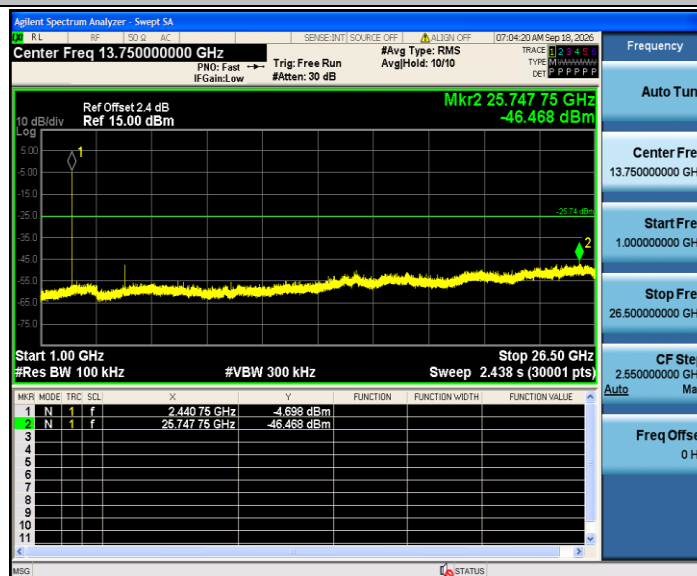
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



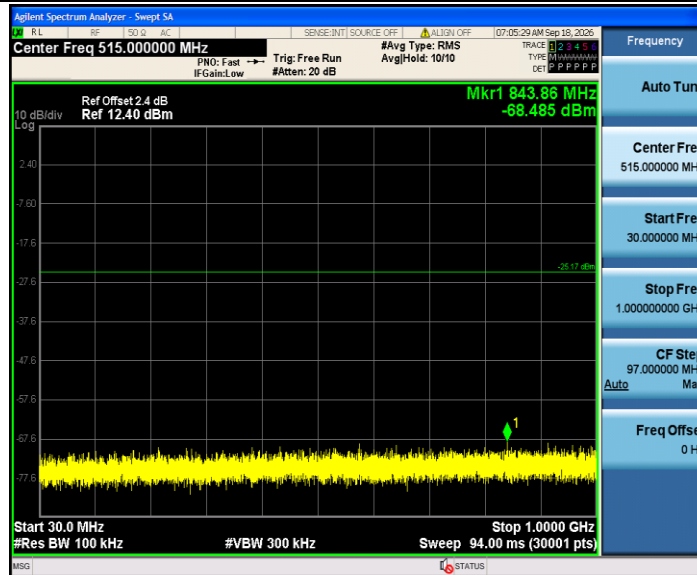
2DH5_Ant1_2441_1000~26500



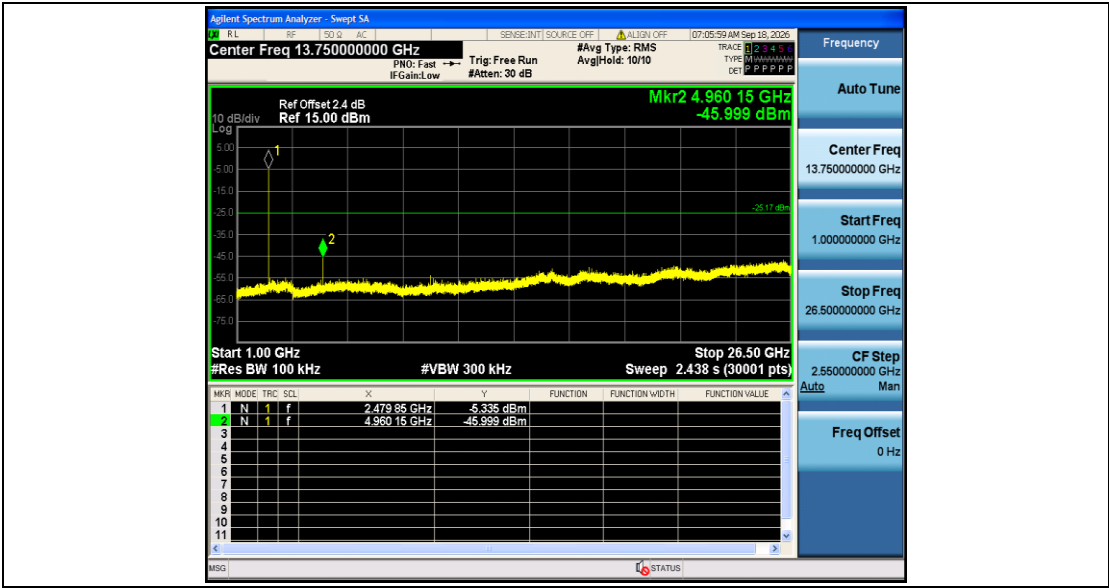
2DH5_Ant1_2480_0~Reference



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	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.74	78.07	1.08	---	---