

FCC Appendix RF Test Data for BT

FCC ID : 2BXLD-CD8828-1

Company : Shantou Chenghai Huaxuan Toys Factory

EUT : Hook Punch Boxing Target

Model Number : CD8828-1

Report No. : CTA26081903201

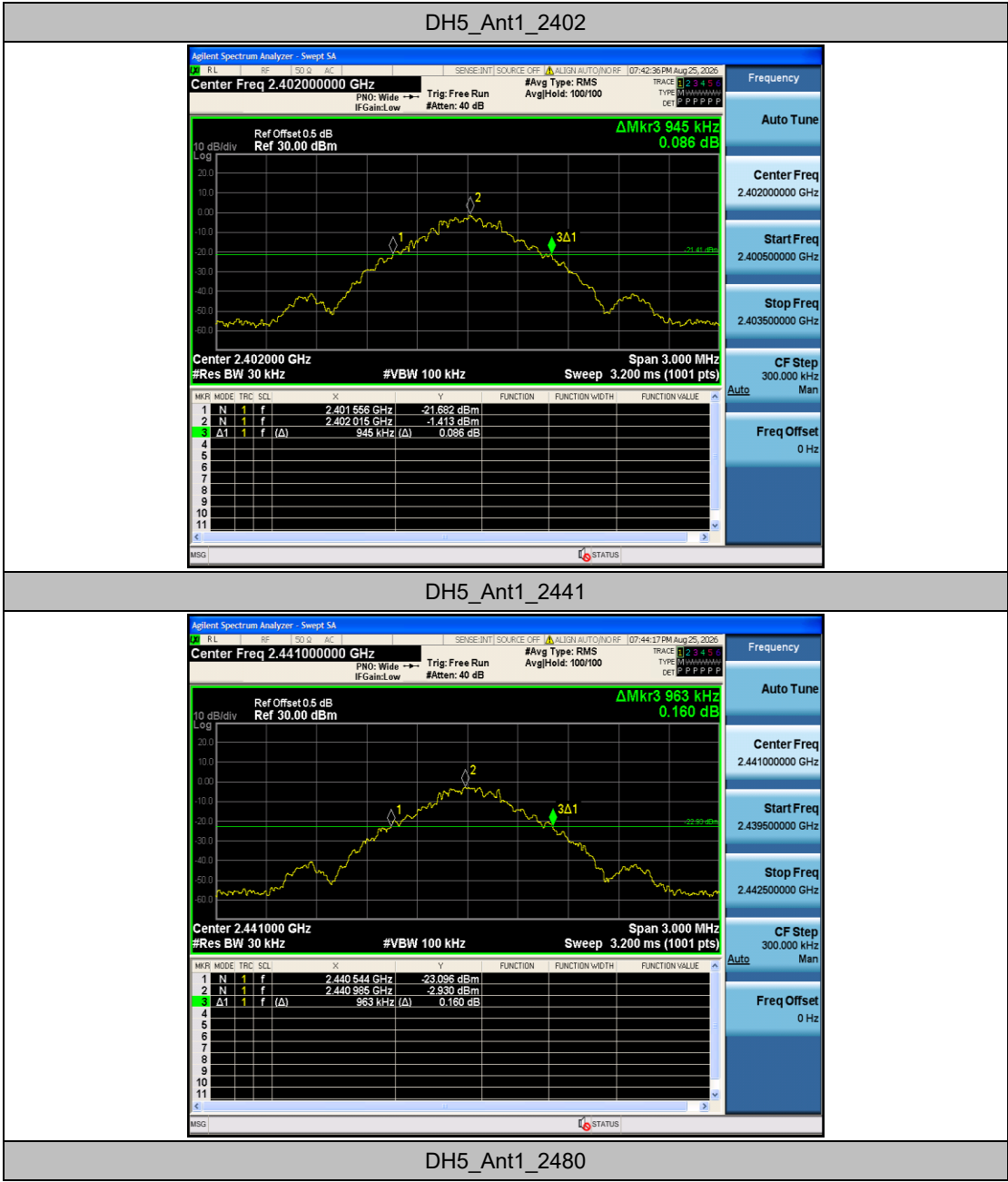
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.556	2402.501	---	---
		2441	0.963	2440.544	2441.507	---	---
		2480	0.954	2479.547	2480.501	---	---
2DH5	Ant1	2402	1.287	2401.376	2402.663	---	---
		2441	1.272	2440.382	2441.654	---	---
		2480	1.329	2479.343	2480.672	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

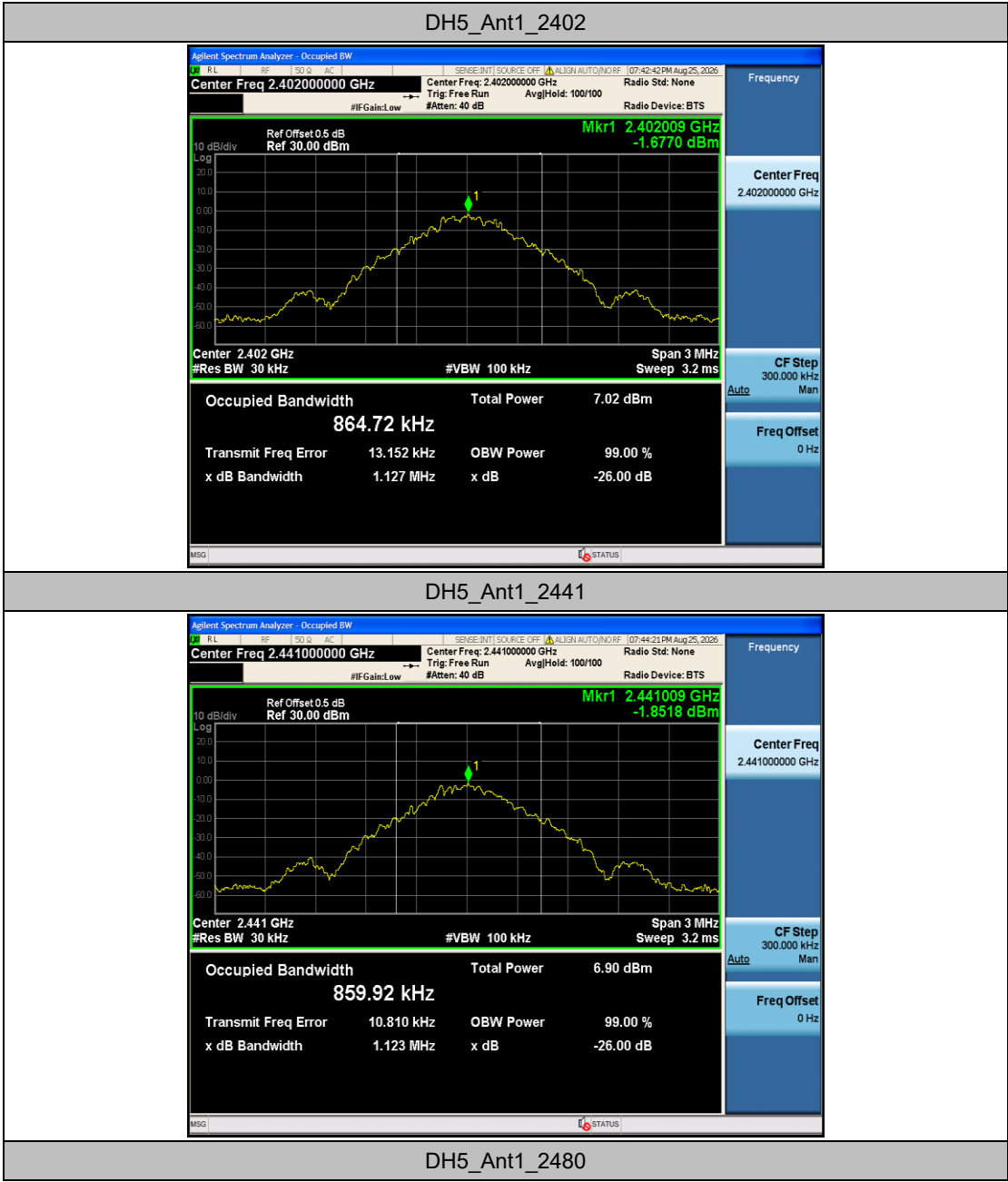


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86472	2401.5808	2402.4455	---	---
		2441	0.85992	2440.5809	2441.4408	---	---
		2480	0.87262	2479.5781	2480.4507	---	---
2DH5	Ant1	2402	1.1917	2401.4130	2402.6047	---	---
		2441	1.1866	2440.4152	2441.6018	---	---
		2480	1.1893	2479.4188	2480.6081	---	---

Test Graphs





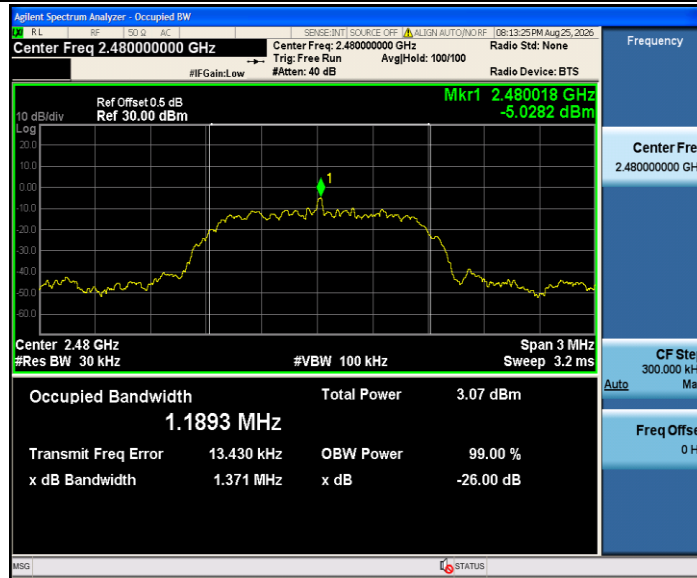
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

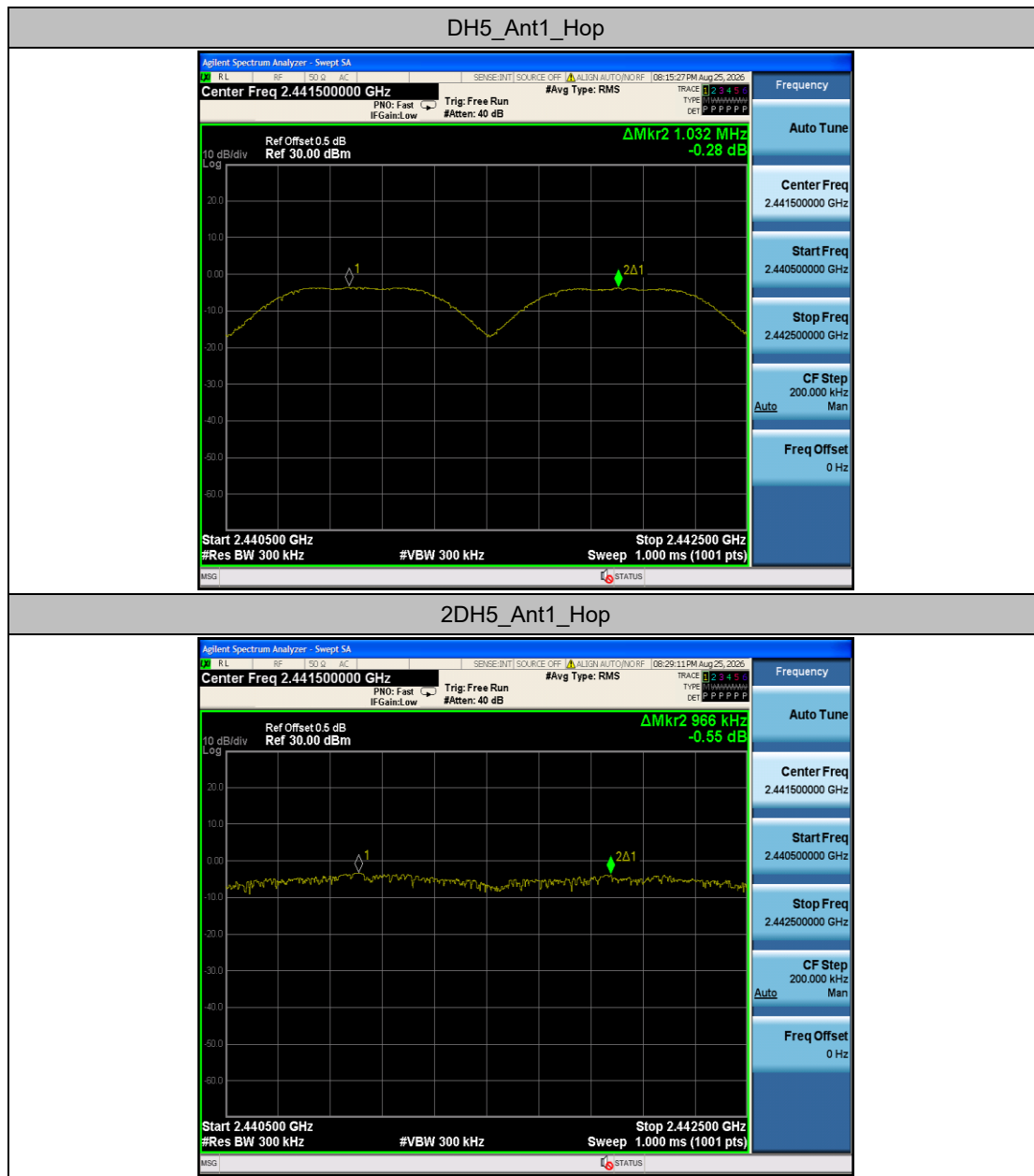
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.29	≤20.97	PASS
		2441	0.22	≤20.97	PASS
		2480	-0.04	≤20.97	PASS
2DH5	Ant1	2402	-0.63	≤20.97	PASS
		2441	-0.63	≤20.97	PASS
		2480	-0.85	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.032	≥ 0.963	PASS
2DH5	Ant1	Hop	0.966	≥ 0.886	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	318	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	156	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.910	101	0.294	≤0.4	PASS
2DH1	Ant1	Hop	0.415	320	0.133	≤0.4	PASS
2DH3	Ant1	Hop	1.668	171	0.285	≤0.4	PASS
2DH5	Ant1	Hop	2.916	107	0.312	≤0.4	PASS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.5 dB
Ref 30.00 dBm

Trig Delay 2.000 ms
Trig: Video
#Atten: 40 dB

ΔMkr2 405.0 μs
17.94 dB

2d1

1

Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 10.13 ms (8000 pts)

Frequency

Auto Tune

Center Freq
2.441000000 GHz

Start Freq
2.441000000 GHz

Stop Freq
2.441000000 GHz

CF Step
1.000000 MHz
Auto Man

Freq Offset
0 Hz

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.5 dB
Ref 30.00 dBm

Trig Delay 0.000 s
Trig: Video
#Atten: 40 dB

Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Sweep 31.60 s (30000 pts)

Frequency

Auto Tune

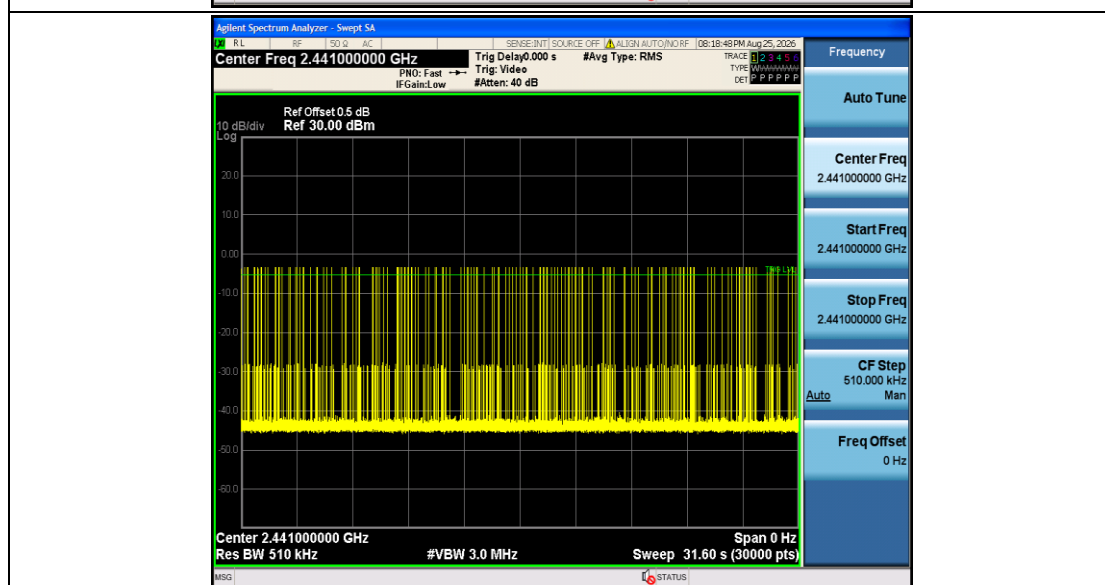
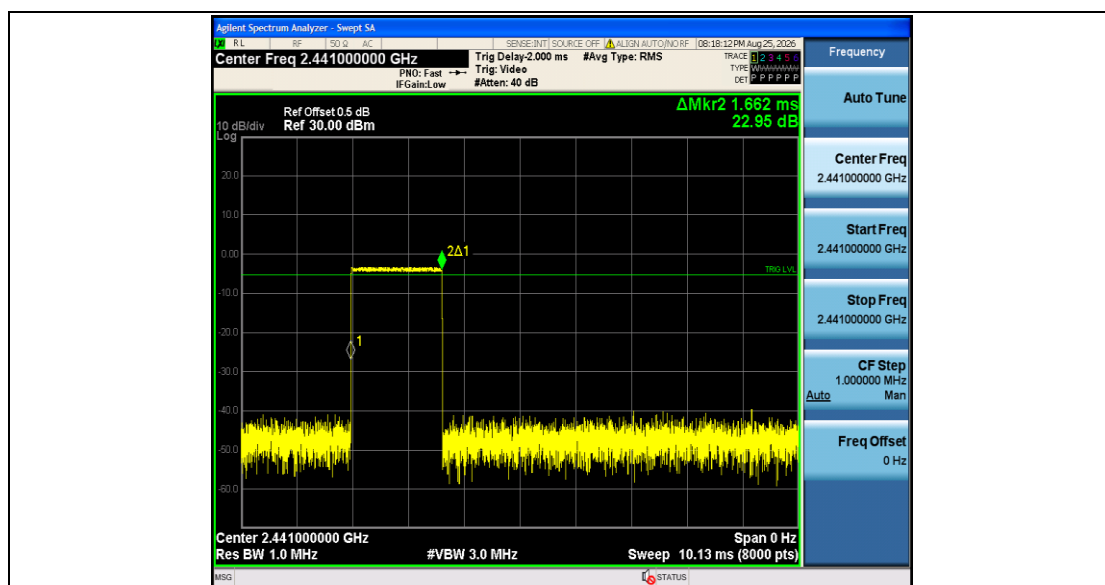
Center Freq
2.441000000 GHz

Start Freq
2.441000000 GHz

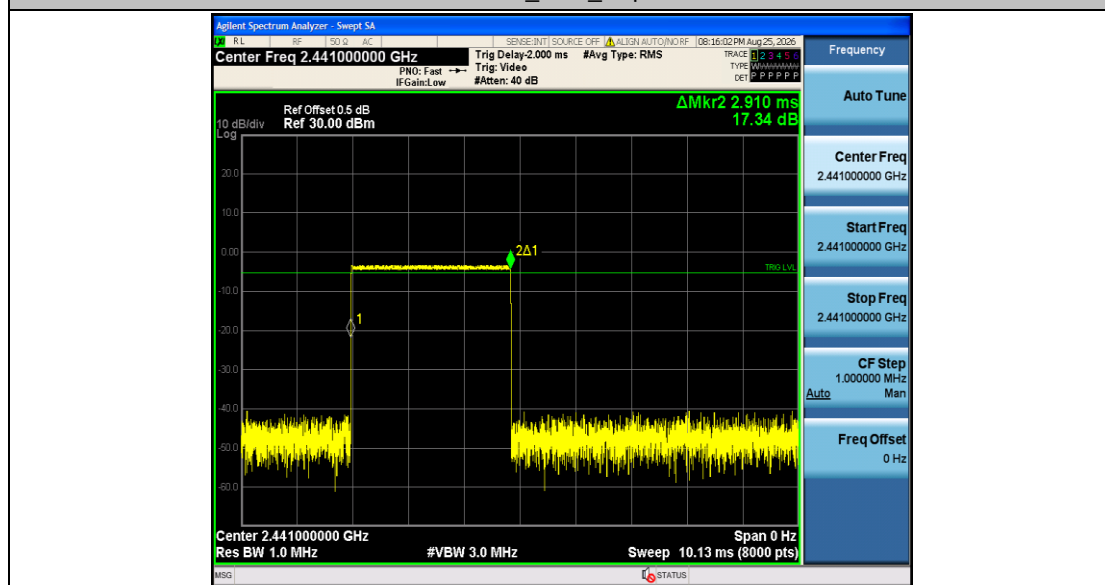
Stop Freq
2.441000000 GHz

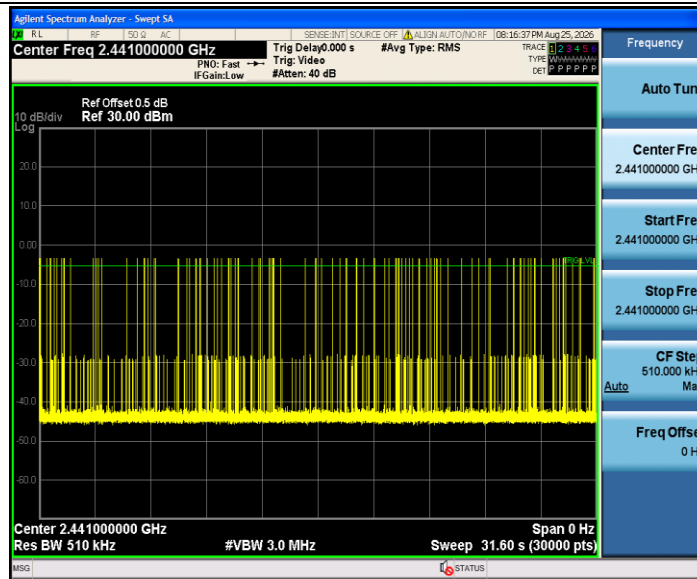
CF Step
510.000 kHz
Auto Man

Freq Offset
0 Hz

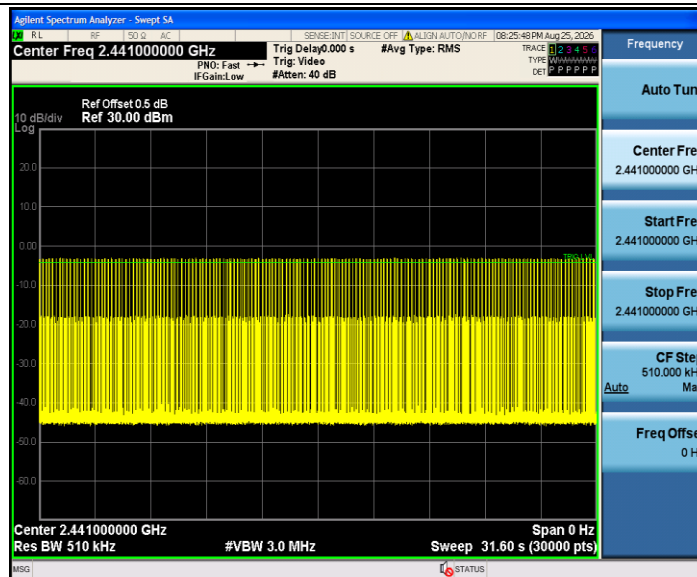
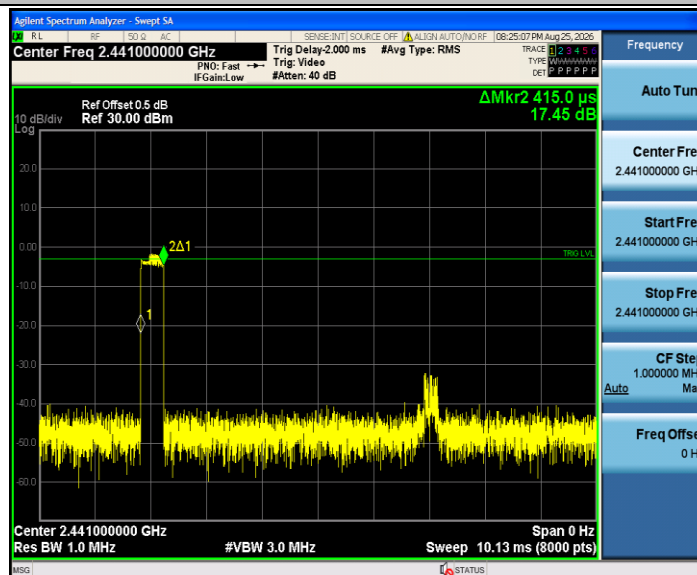


DH5_Ant1_Hop

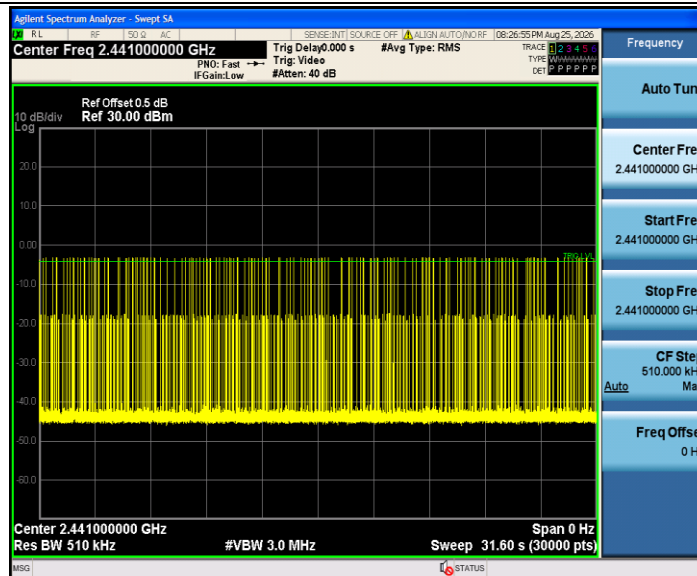
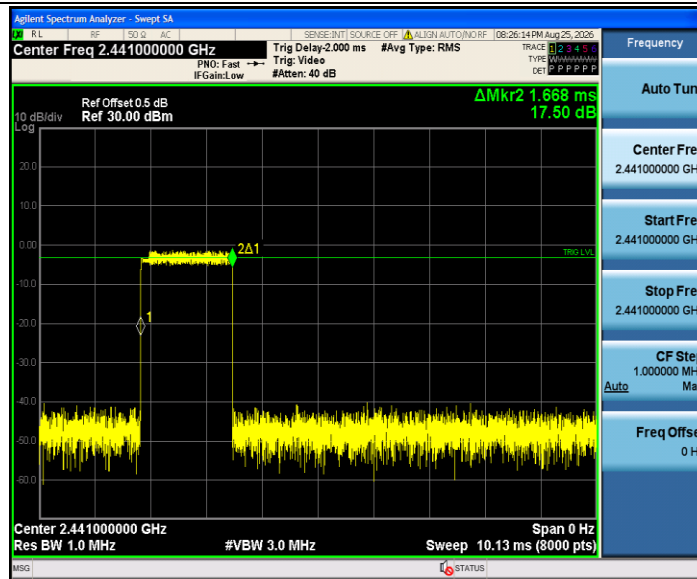




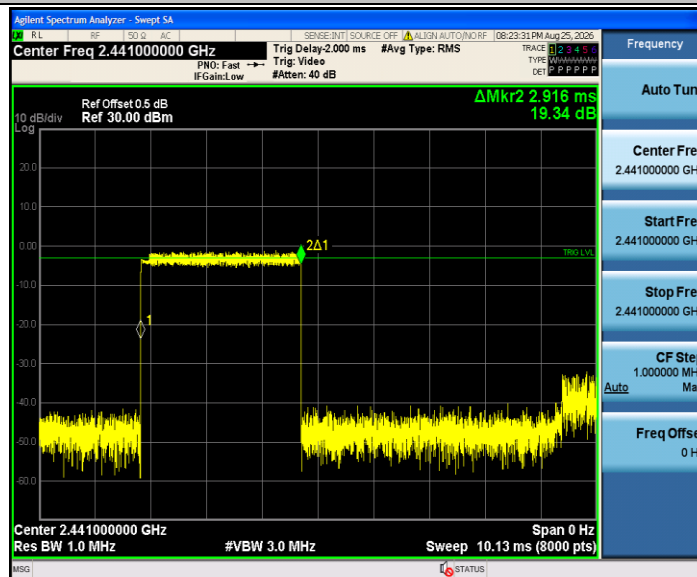
2DH1_Ant1_Hop

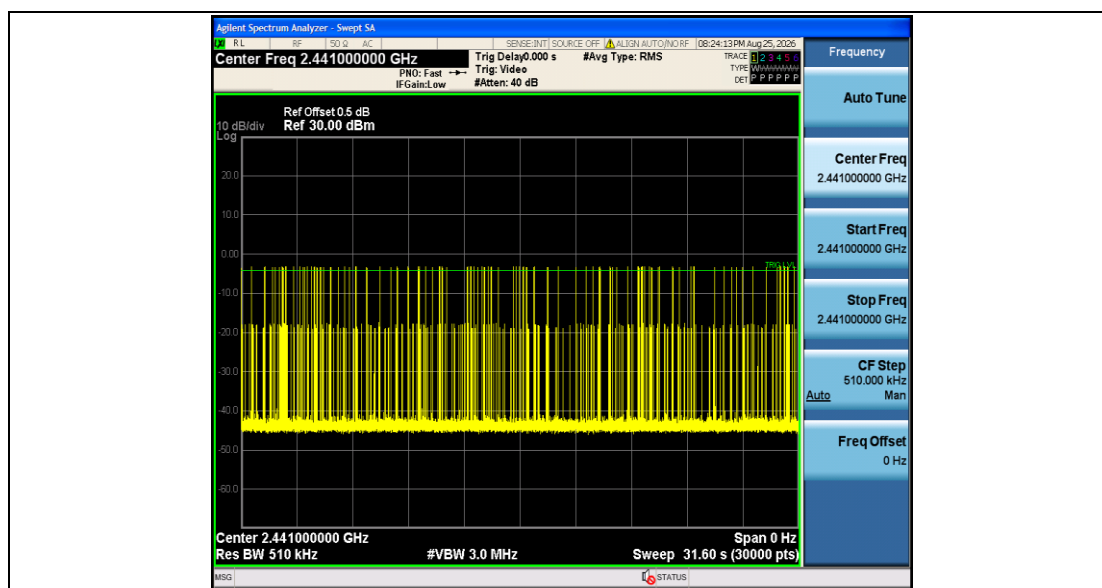


2DH3_Ant1_Hop



2DH5_Ant1_Hop



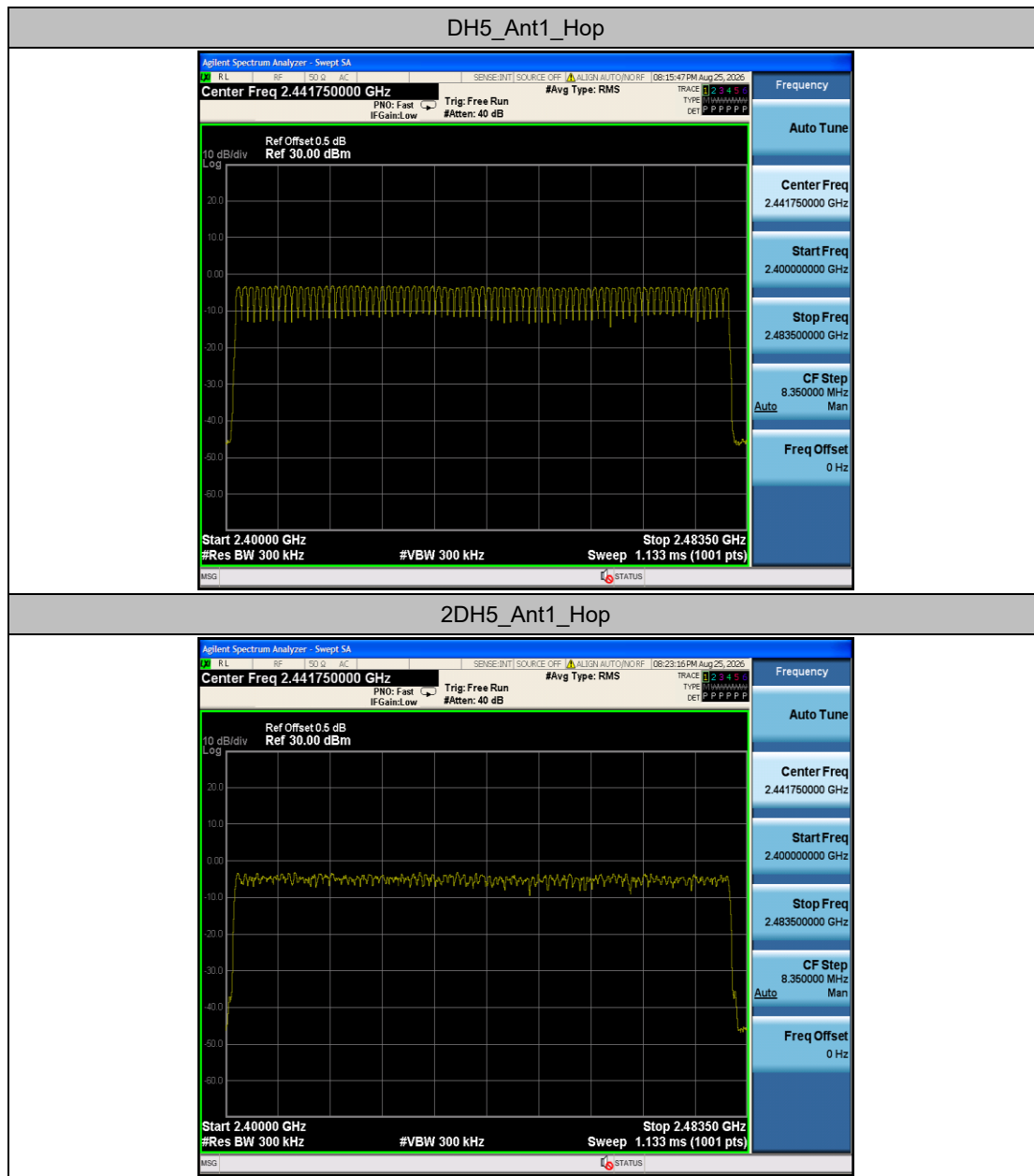


Appendix F: Number of hopping channels

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

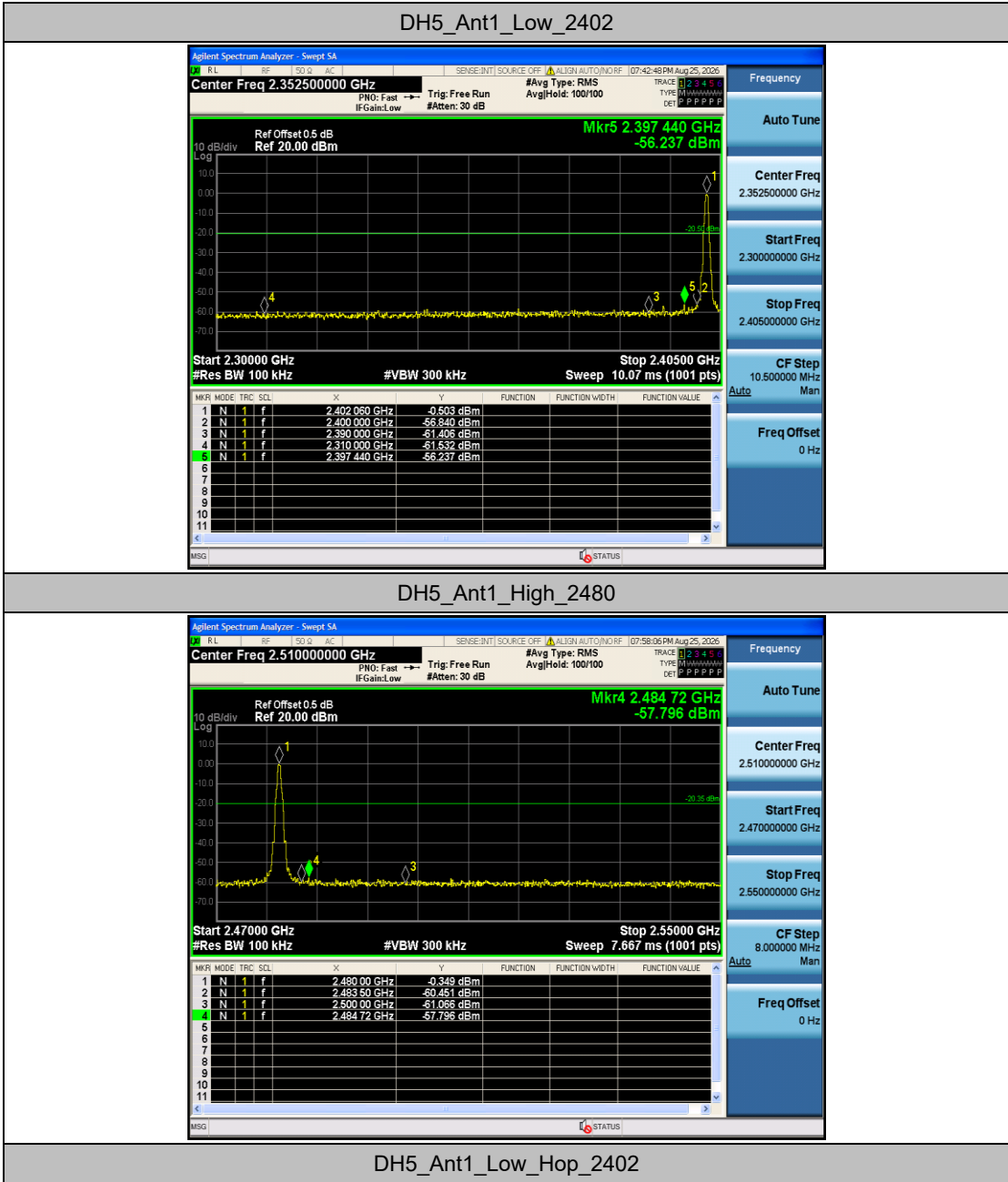


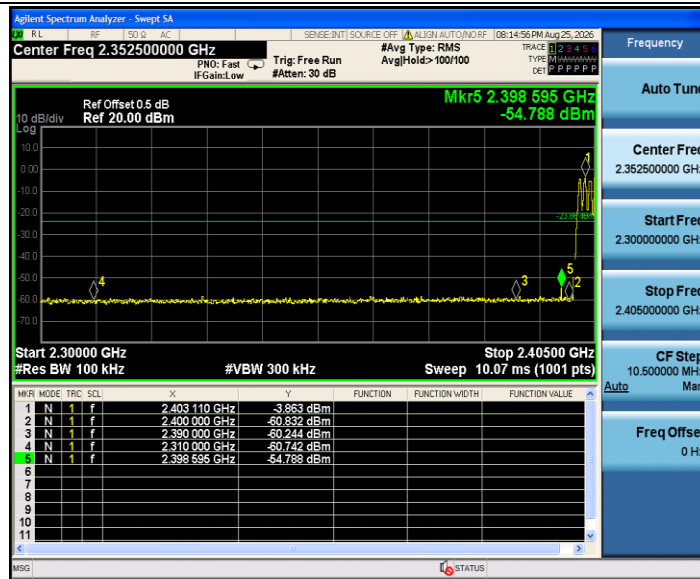
Appendix G: Band edge measurements

Test Result

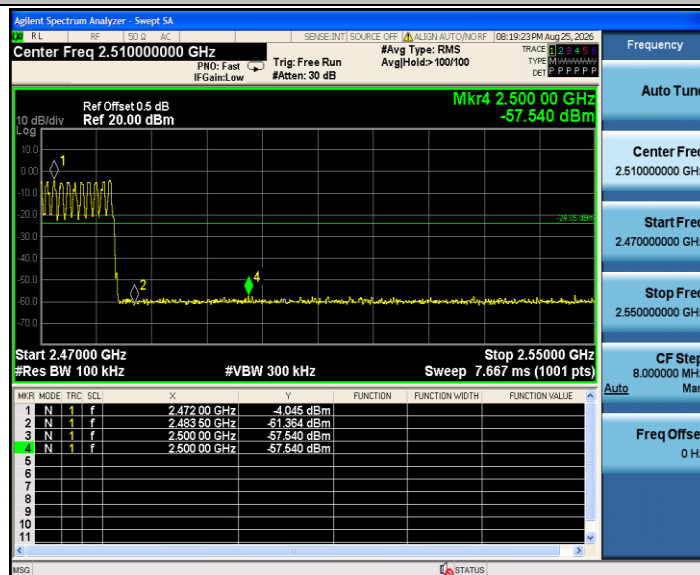
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.50	-56.24	≤-20.5	PASS
		High	2480	-0.35	-57.8	≤-20.35	PASS
		Low	Hop_2402	-3.86	-54.79	≤-23.86	PASS
		High	Hop_2480	-4.05	-57.54	≤-24.05	PASS
2DH5	Ant1	Low	2402	-4.34	-56.57	≤-24.34	PASS
		High	2480	-3.55	-55.74	≤-23.55	PASS
		Low	Hop_2402	-6.73	-58.12	≤-26.73	PASS
		High	Hop_2480	-4.40	-55.54	≤-24.4	PASS

Test Graphs

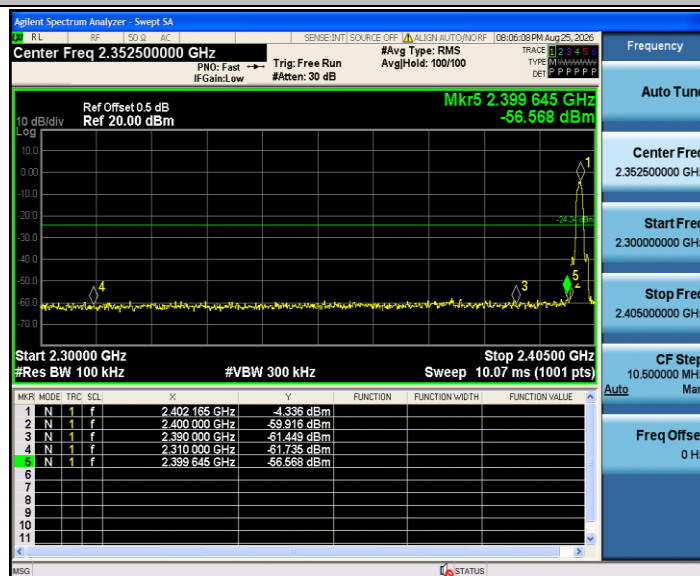




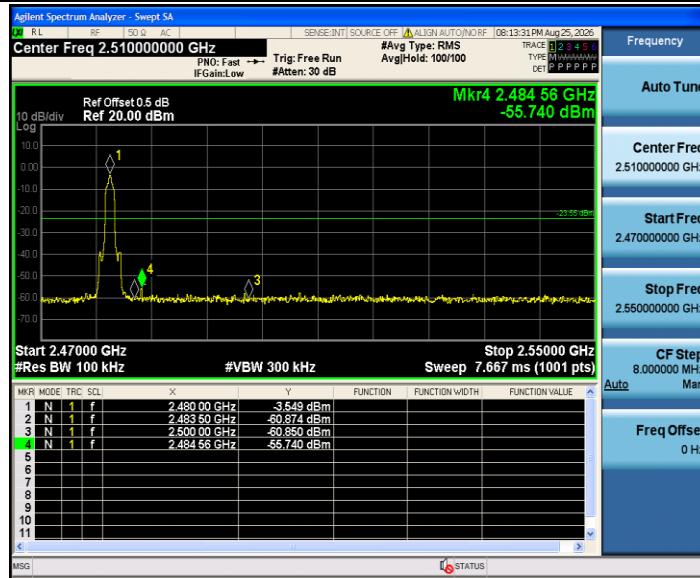
DH5_Ant1_High_Hop_2480



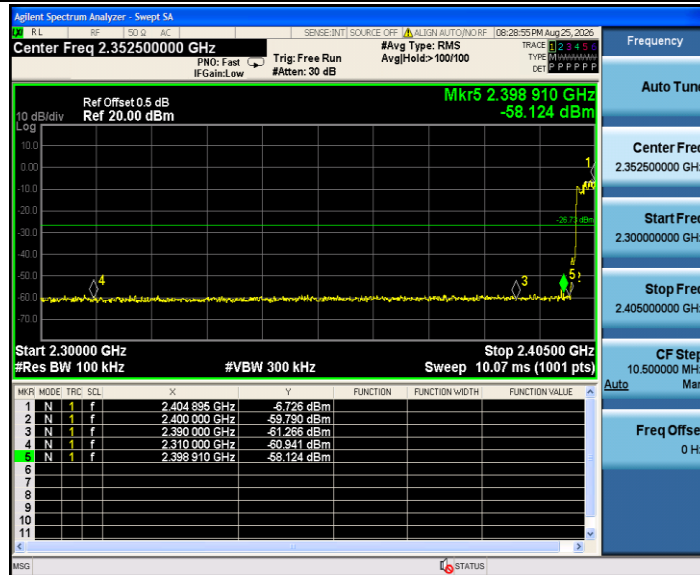
2DH5_Ant1_Low_2402



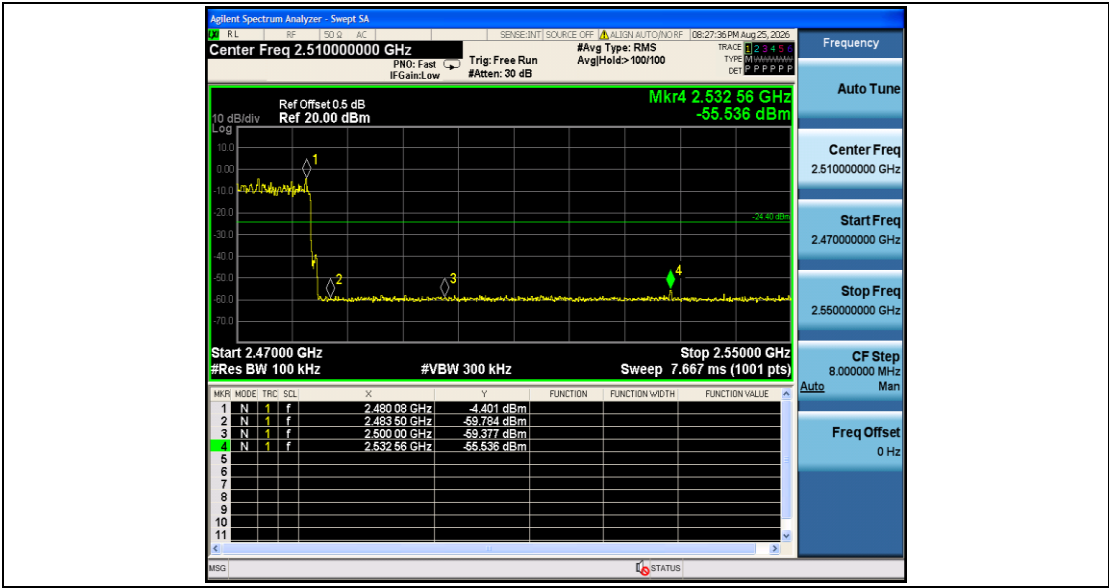
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

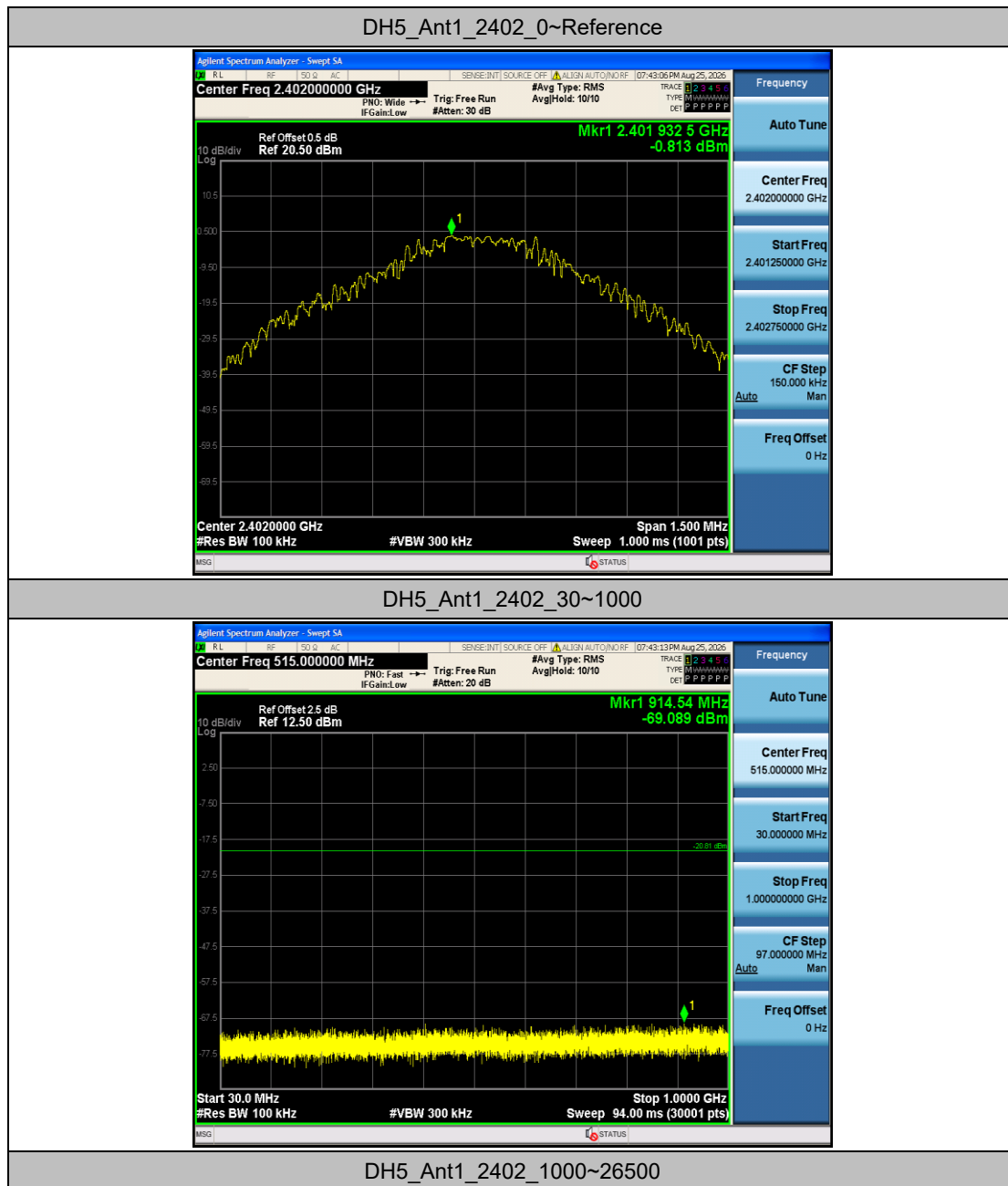


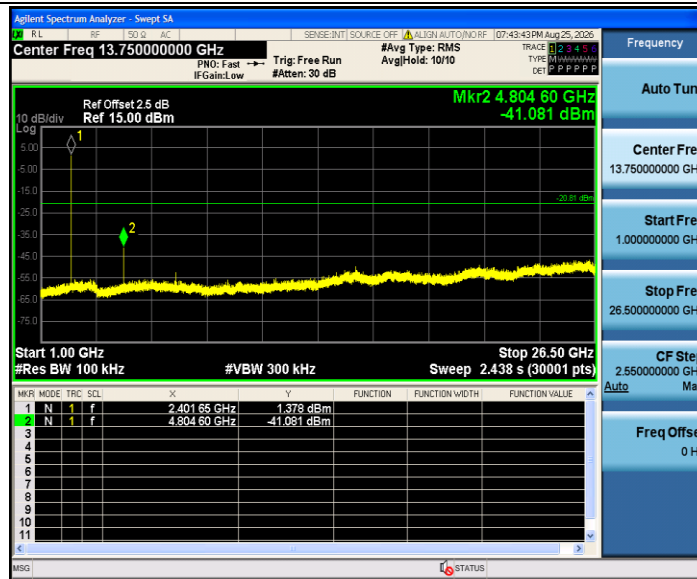
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.81	-0.81	---	PASS
			30~1000	-0.81	-69.09	≤-20.81	PASS
			1000~26500	-0.81	-41.08	≤-20.81	PASS
		2441	Reference	-0.73	-0.73	---	PASS
			30~1000	-0.73	-67.91	≤-20.73	PASS
			1000~26500	-0.73	-39.53	≤-20.73	PASS
		2480	Reference	-0.80	-0.80	---	PASS
			30~1000	-0.80	-68.96	≤-20.8	PASS
			1000~26500	-0.80	-42.36	≤-20.8	PASS
2DH5	Ant1	2402	Reference	-4.95	-4.95	---	PASS
			30~1000	-4.95	-68.74	≤-24.95	PASS
			1000~26500	-4.95	-46.61	≤-24.95	PASS
		2441	Reference	-4.84	-4.84	---	PASS
			30~1000	-4.84	-68.45	≤-24.84	PASS
			1000~26500	-4.84	-46.74	≤-24.84	PASS
		2480	Reference	-6.43	-6.43	---	PASS
			30~1000	-6.43	-68.72	≤-26.43	PASS
			1000~26500	-6.43	-46.66	≤-26.43	PASS

Test Graphs

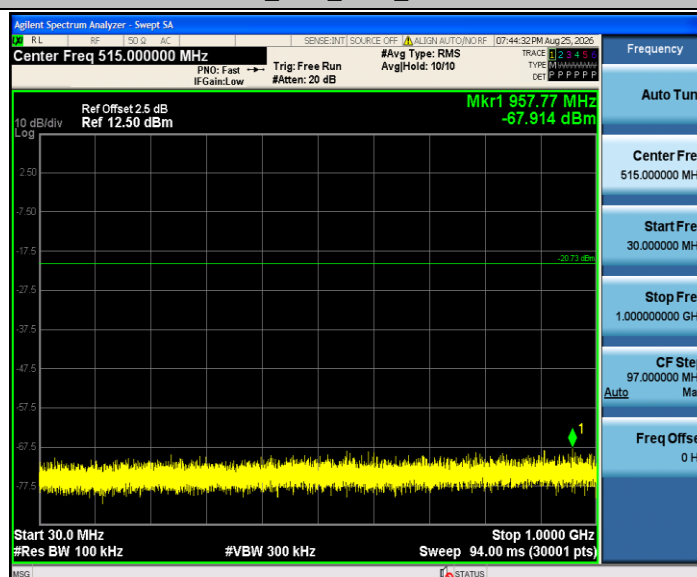




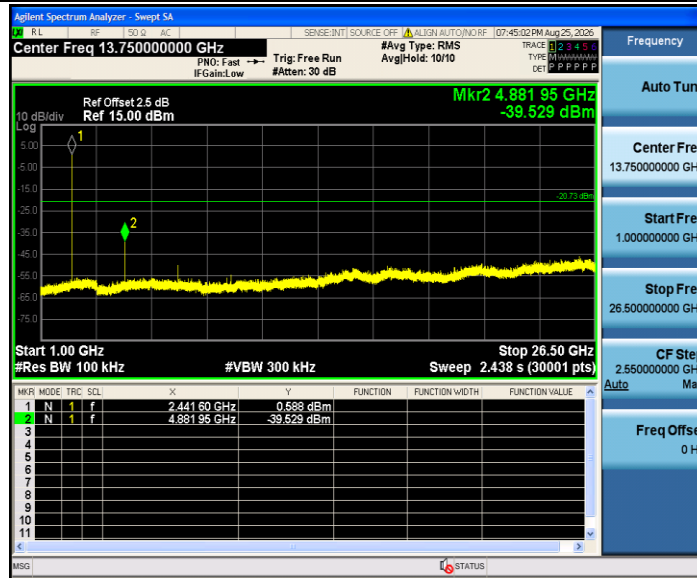
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



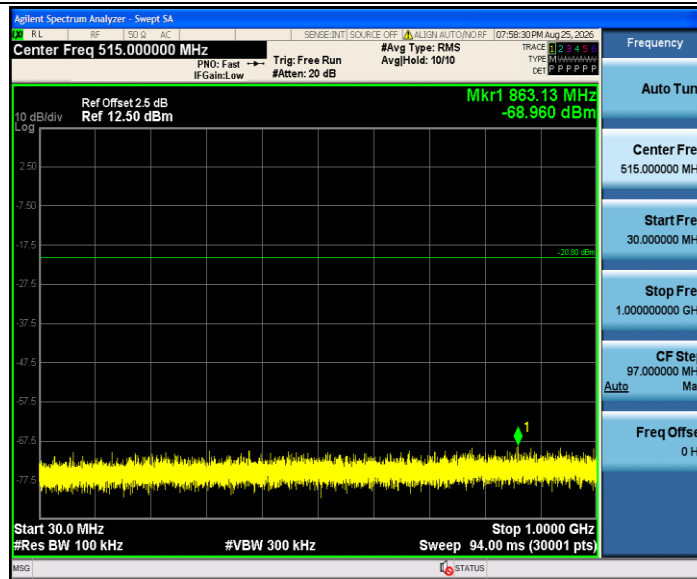
DH5_Ant1_2441_1000~26500



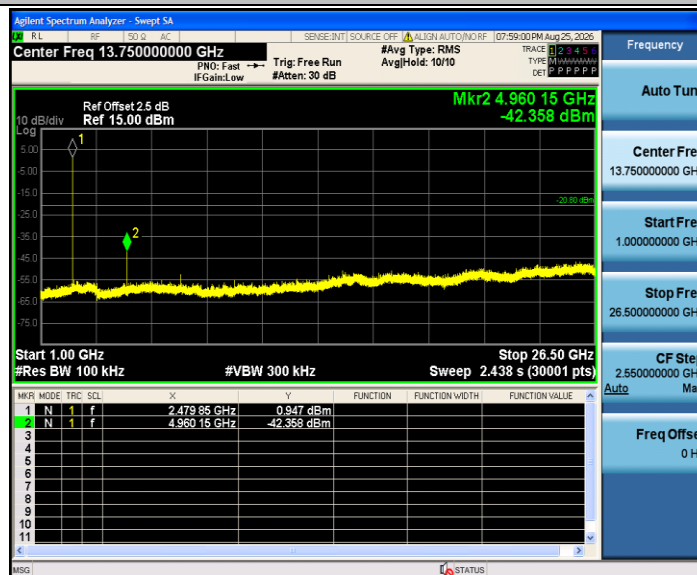
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



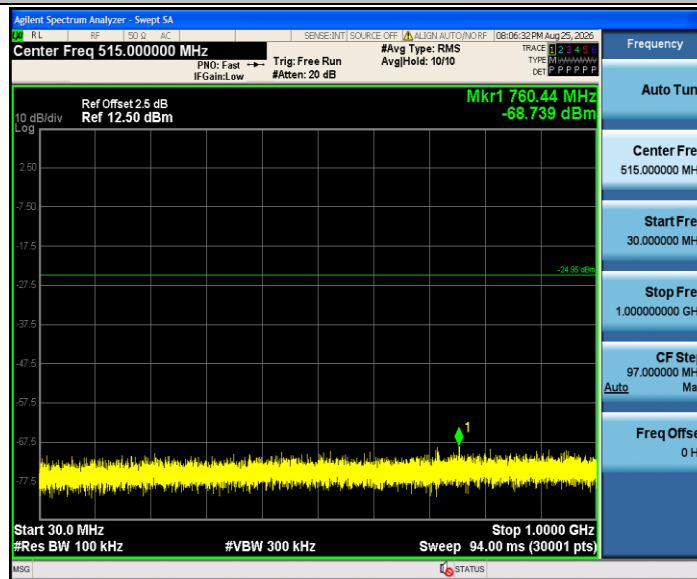
DH5_Ant1_2480_1000~26500



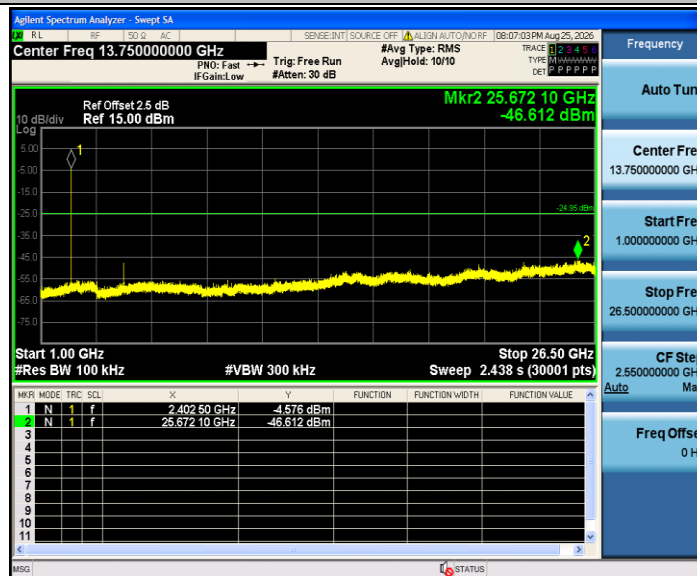
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



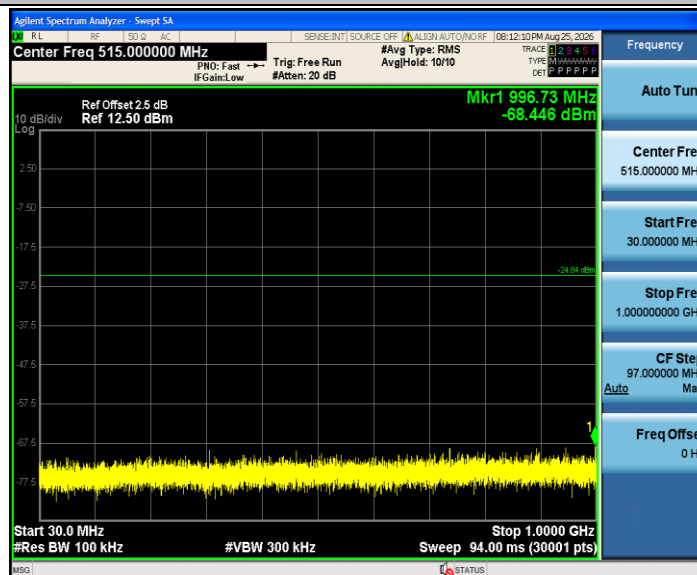
2DH5_Ant1_2402_1000~26500



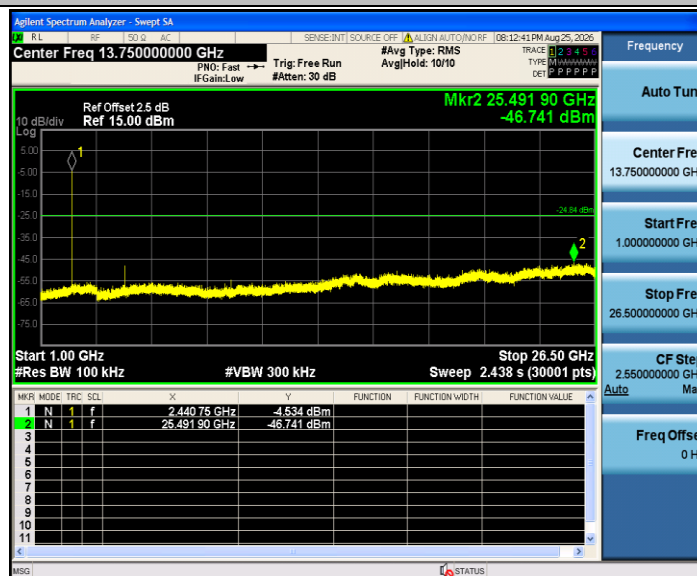
2DH5_Ant1_2441_0~Reference



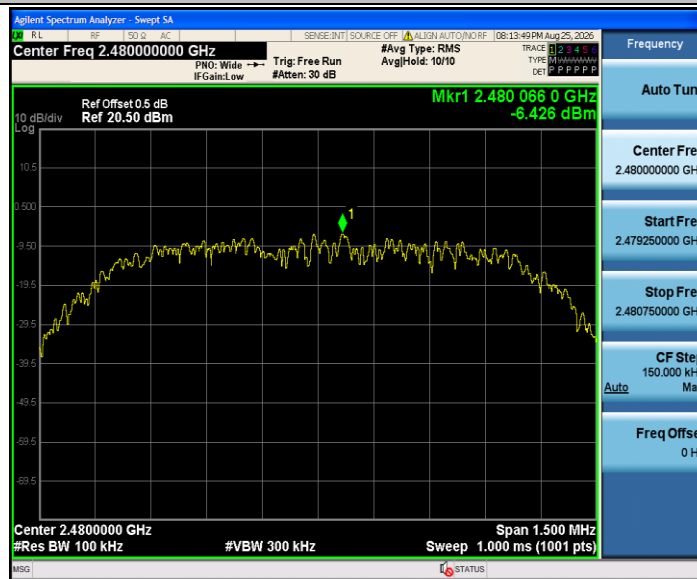
2DH5_Ant1_2441_30~1000



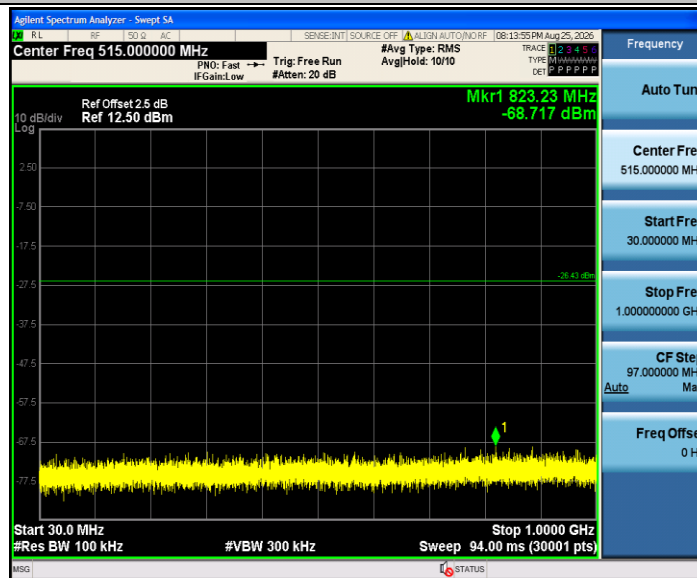
2DH5_Ant1_2441_1000~26500



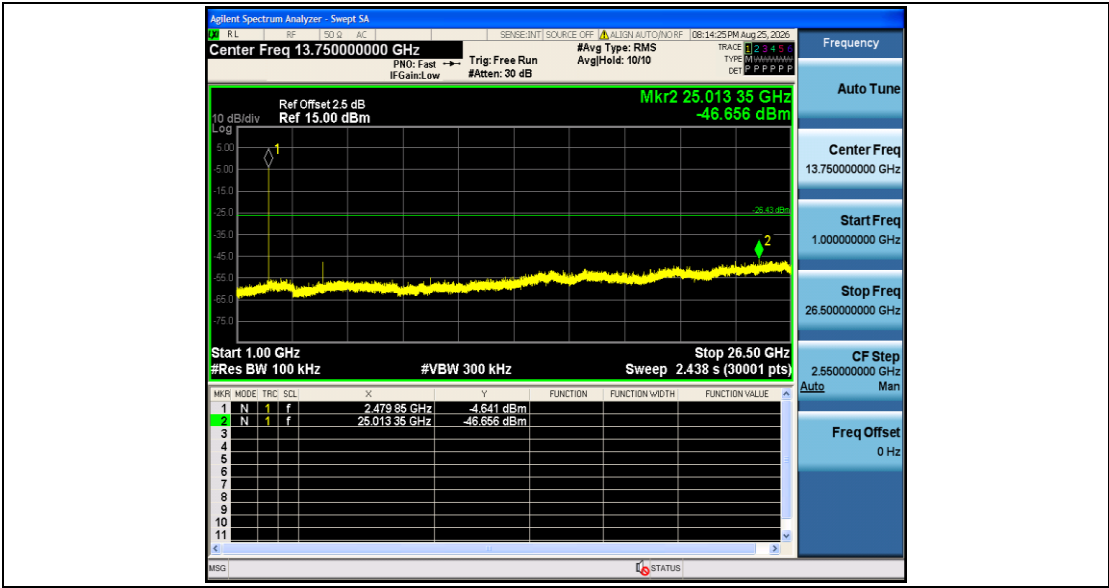
2DH5_Ant1_2480_0~Reference



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	3.76	77.66	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---