

FCC Appendix RF Test Data

FCC ID : 2BQOX-K02

Company : Shenzhen dabai zhilian technology Co.,Ltd.

EUT : K02 Transparent Speaker

Model Number : K02

Report No. : CTA25062500201

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	0.957	2440.547	2441.504	---	---
		2480	0.951	2479.547	2480.498	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.275	2440.382	2441.657	---	---
		2480	1.275	2479.382	2480.657	---	---
3DH5	Ant1	2402	1.308	2401.358	2402.666	---	---
		2441	1.317	2440.355	2441.672	---	---
		2480	1.287	2479.373	2480.660	---	---

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

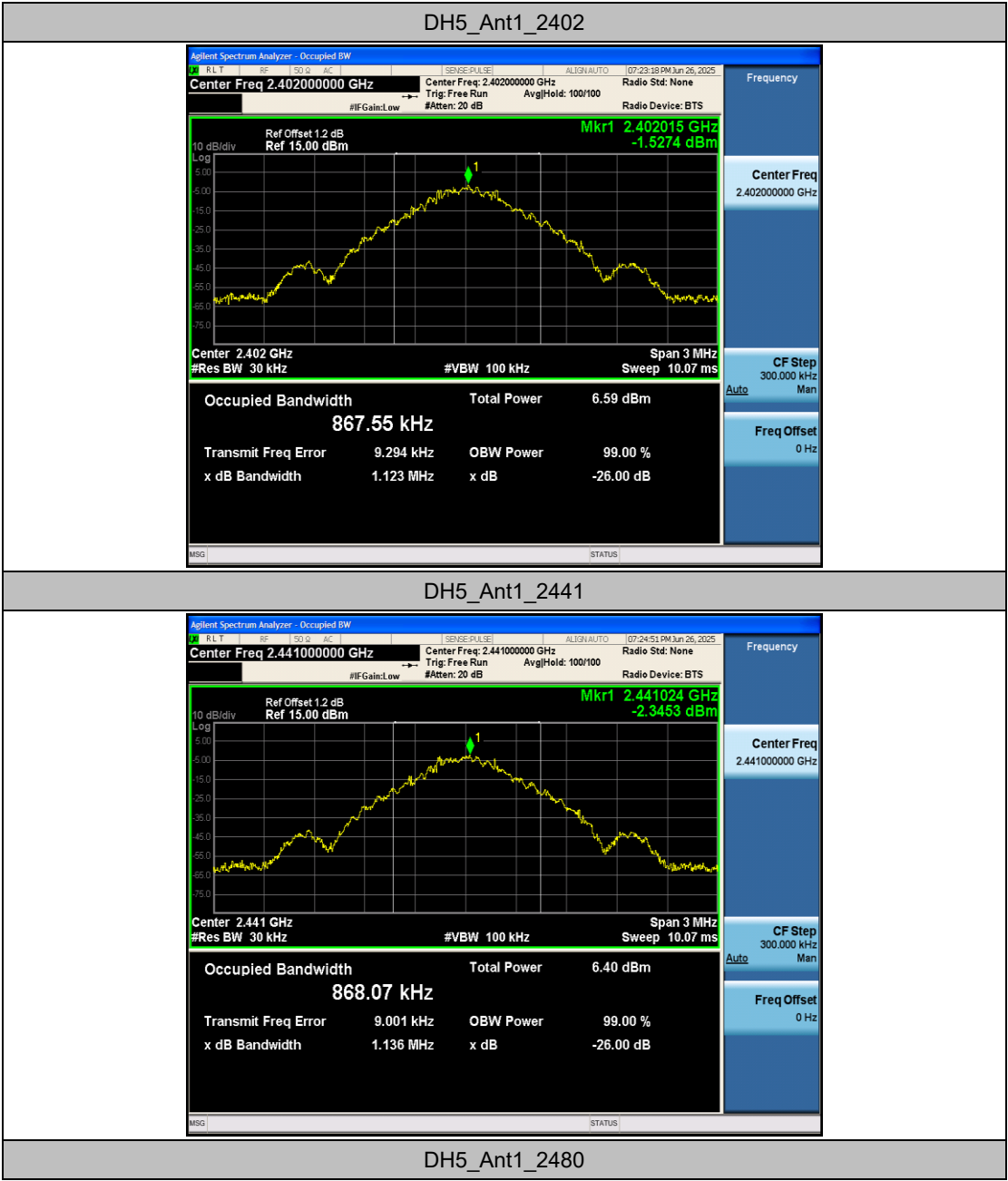


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86755	2401.5755	2402.4431	---	---
		2441	0.86807	2440.5750	2441.4430	---	---
		2480	0.87527	2479.5715	2480.4467	---	---
2DH5	Ant1	2402	1.1915	2401.4146	2402.6061	---	---
		2441	1.1876	2440.4161	2441.6037	---	---
		2480	1.1903	2479.4150	2480.6053	---	---
3DH5	Ant1	2402	1.1854	2401.4177	2402.6031	---	---
		2441	1.1865	2440.4165	2441.6030	---	---
		2480	1.1836	2479.4208	2480.6044	---	---

Test Graphs



DH5_Ant1_2441

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.441000000 GHz

Center Freq: 2.441000000 GHz
Trig: Free Run
#F-Gain: Low
#Atten: 20 dB

SENSE: PULSE
ALIGN: AUTO
Avg/Hold: 100/100
Radio Std: None
Radio Device: BTS

107:24:51 PM Jun 26, 2025

Ref Offset 1.2 dB
Ref 15.00 dBm

Mkr1 2.441024 GHz
-2.3453 dBm

1

Log

10 dB/div

5.00

0.00

-5.00

-10.00

-15.00

-20.00

-25.00

-30.00

-35.00

-40.00

-45.00

-50.00

-55.00

-60.00

-65.00

-70.00

-75.00

Center 2.441 GHz

#Res BW 30 kHz

#VBW 100 kHz

Span 3 MHz

Sweep 10.07 ms

Occupied Bandwidth

868.07 kHz

Total Power

6.40 dBm

Transmit Freq Error

9.001 kHz

OBW Power

99.00 %

x dB Bandwidth

1.136 MHz

x dB

-26.00 dB

MSG

STATUS

Frequency

Center Freq

2.441000000 GHz

CF Step

300.000 kHz

Man

Freq Offset

0 Hz

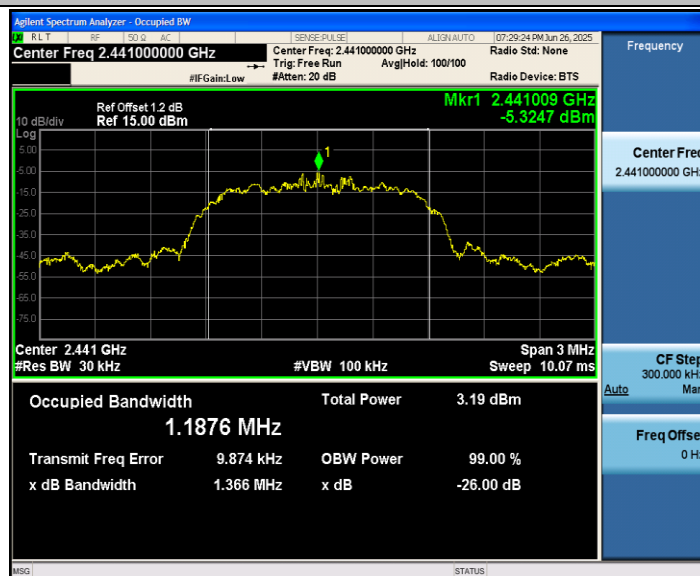
DH5_Ant1_2480



2DH5_Ant1_2402



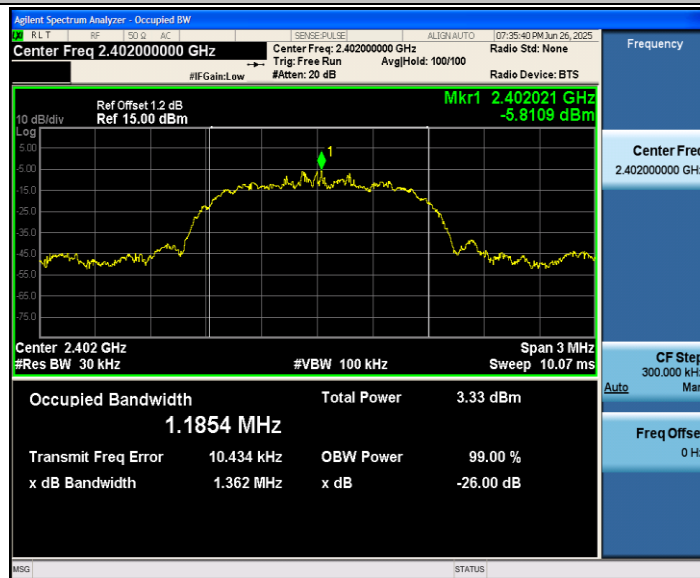
2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

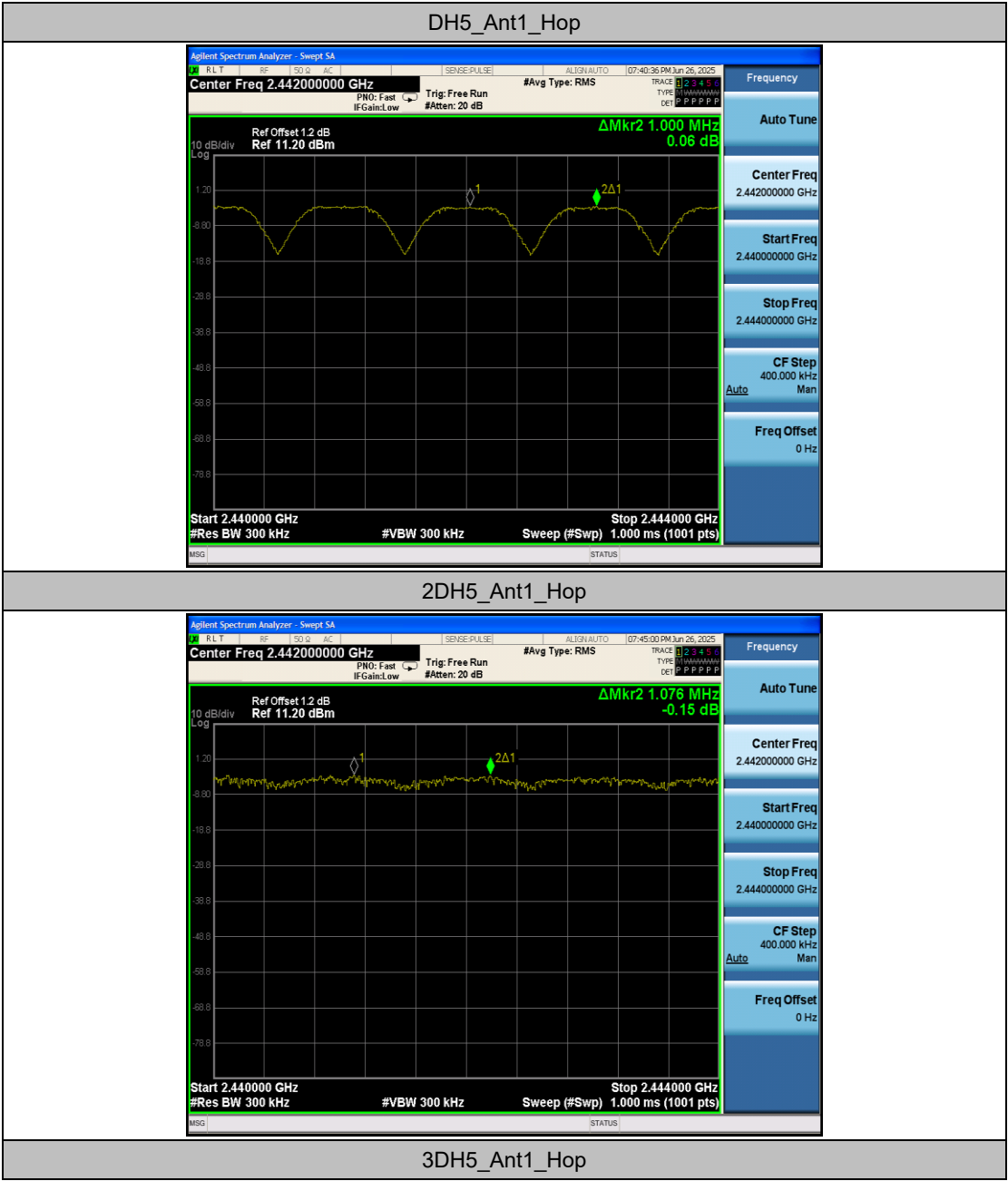
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.64	≤20.97	PASS
		2441	0.50	≤20.97	PASS
		2480	0.46	≤20.97	PASS
2DH5	Ant1	2402	-0.15	≤20.97	PASS
		2441	-0.38	≤20.97	PASS
		2480	-0.33	≤20.97	PASS
3DH5	Ant1	2402	0.23	≤20.97	PASS
		2441	0.05	≤20.97	PASS
		2480	0.04	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	≥ 0.957	PASS
2DH5	Ant1	Hop	1.076	≥ 0.854	PASS
3DH5	Ant1	Hop	1.152	≥ 0.878	PASS

Test Graphs



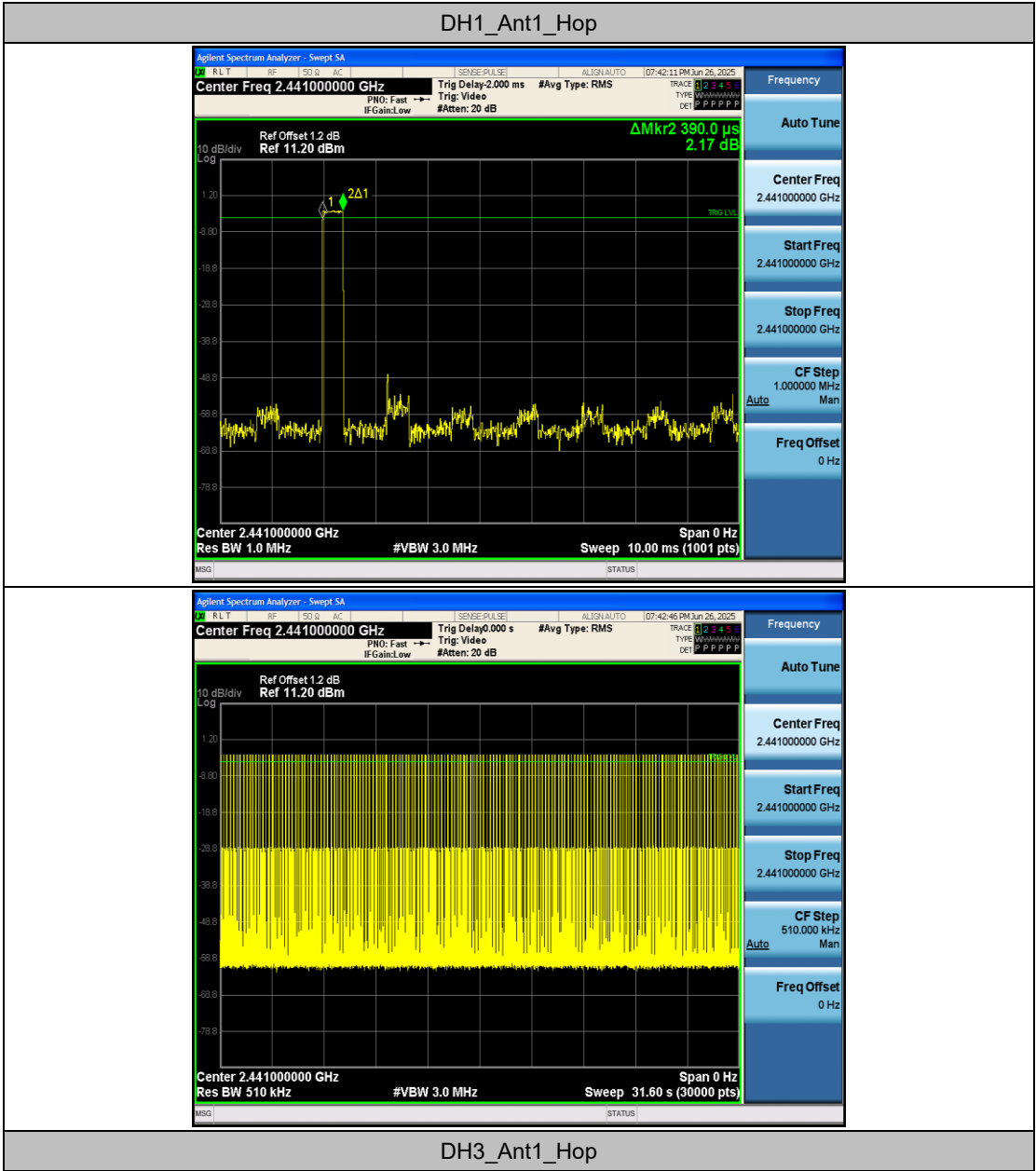


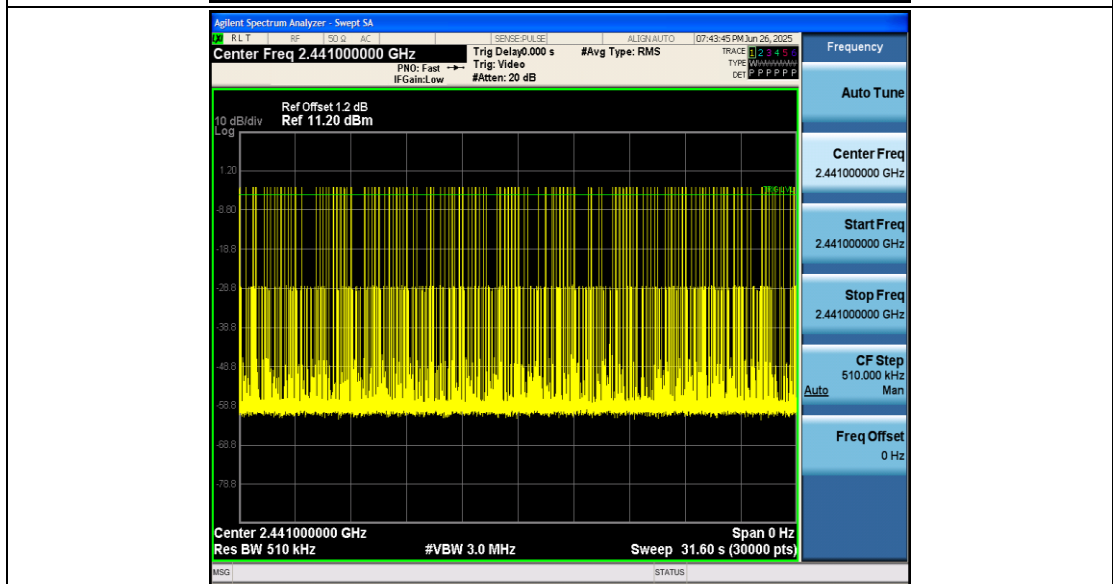
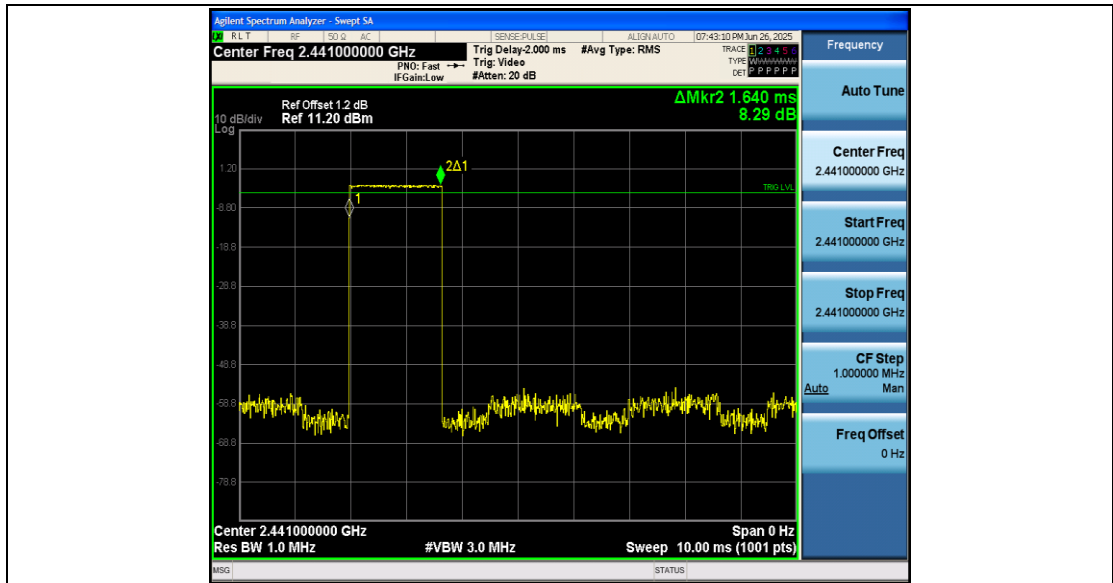
Appendix E: Time of occupancy

Test Result

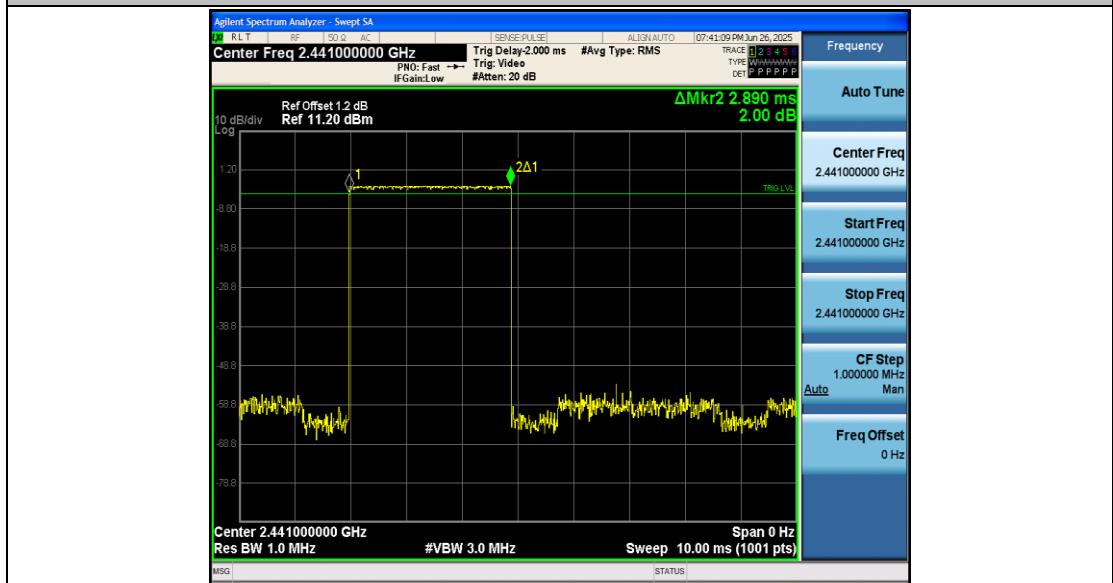
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	168	0.276	≤0.4	PASS
DH5	Ant1	Hop	2.890	111	0.321	≤0.4	PASS
2DH1	Ant1	Hop	0.400	318	0.127	≤0.4	PASS
2DH3	Ant1	Hop	1.650	161	0.266	≤0.4	PASS
2DH5	Ant1	Hop	2.900	99	0.287	≤0.4	PASS
3DH1	Ant1	Hop	0.400	318	0.127	≤0.4	PASS
3DH3	Ant1	Hop	1.650	156	0.257	≤0.4	PASS
3DH5	Ant1	Hop	2.900	106	0.307	≤0.4	PASS

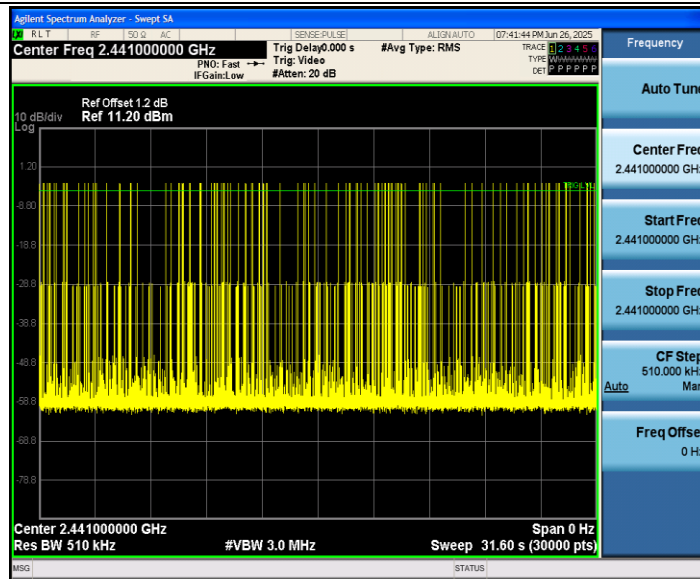
Test Graphs



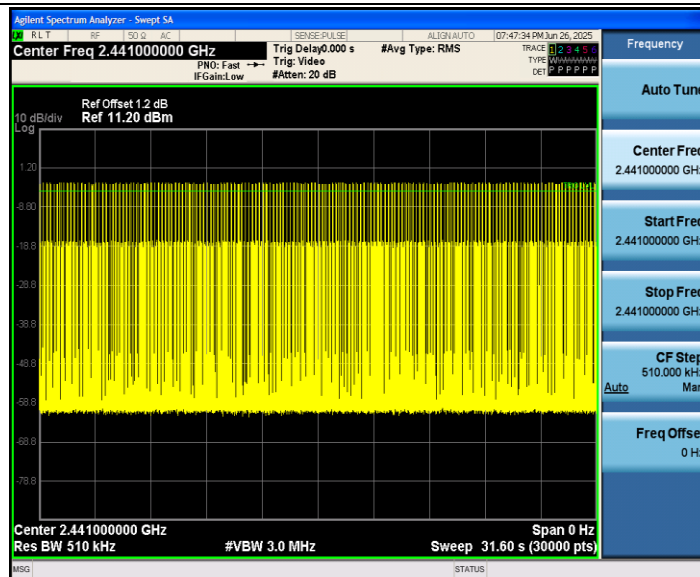
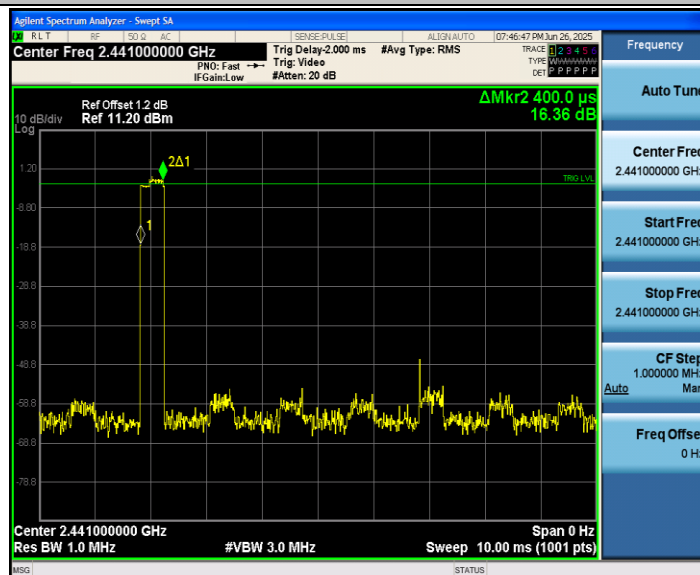


DH5_Ant1_Hop

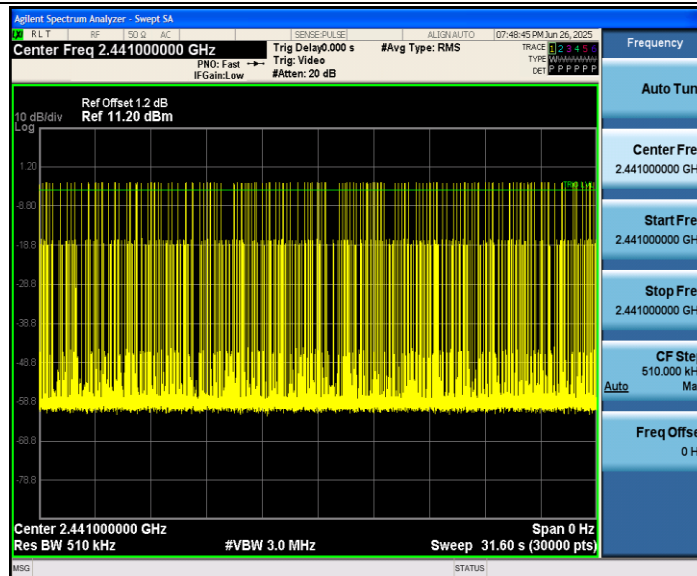




2DH1_Ant1_Hop

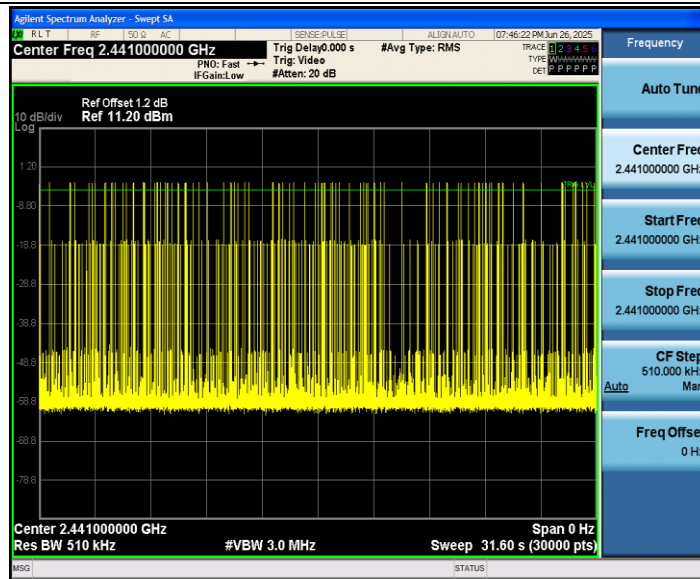


2DH3_Ant1_Hop

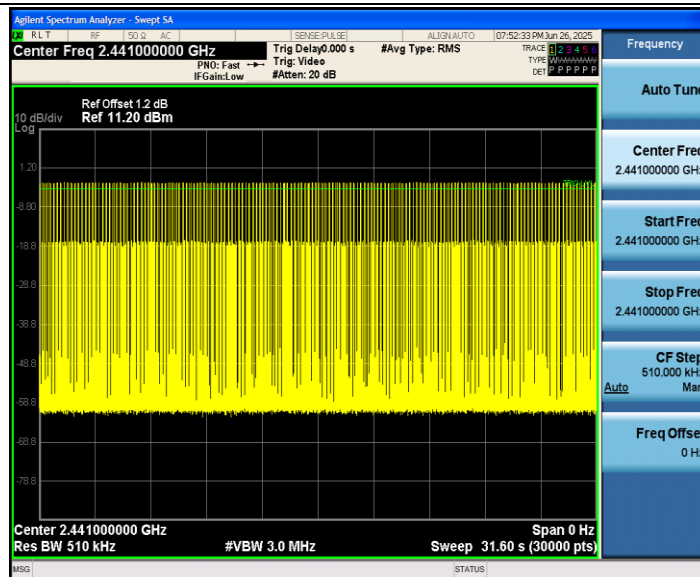
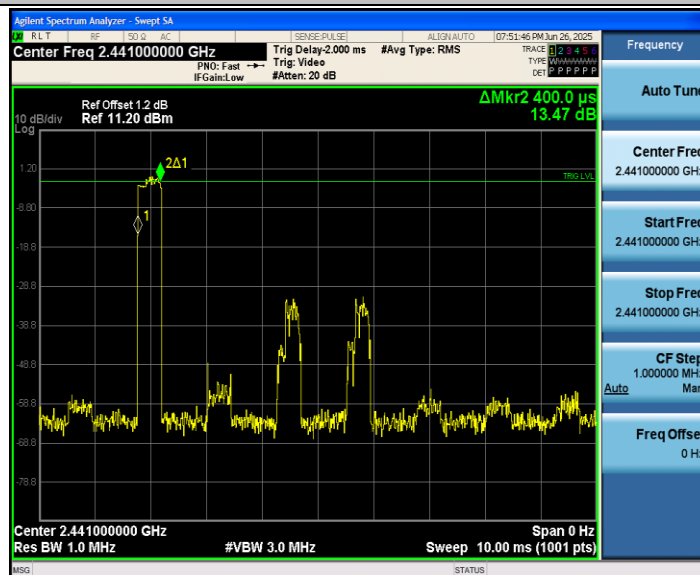


2DH5_Ant1_Hop

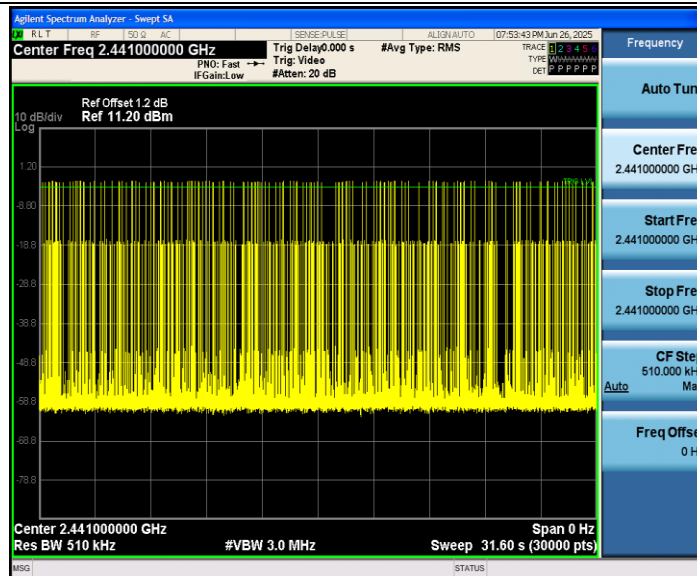
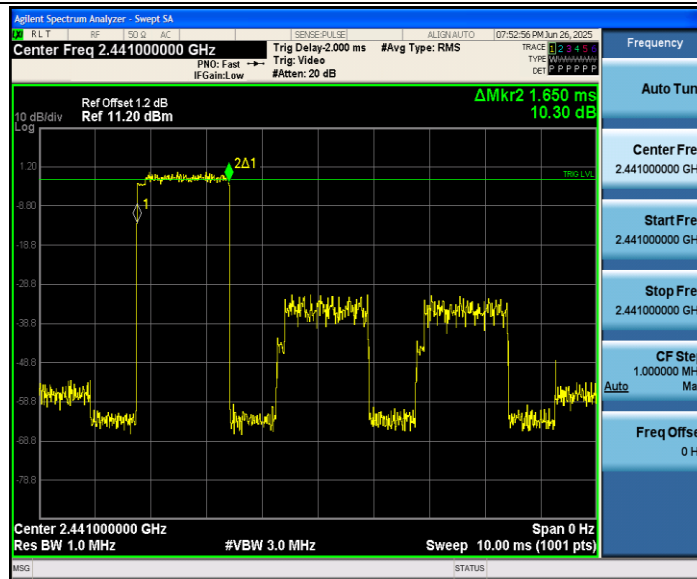




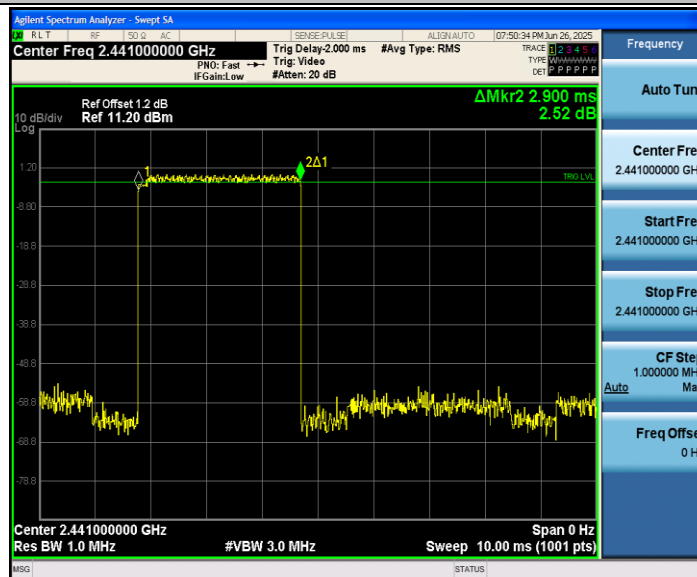
3DH1_Ant1_Hop

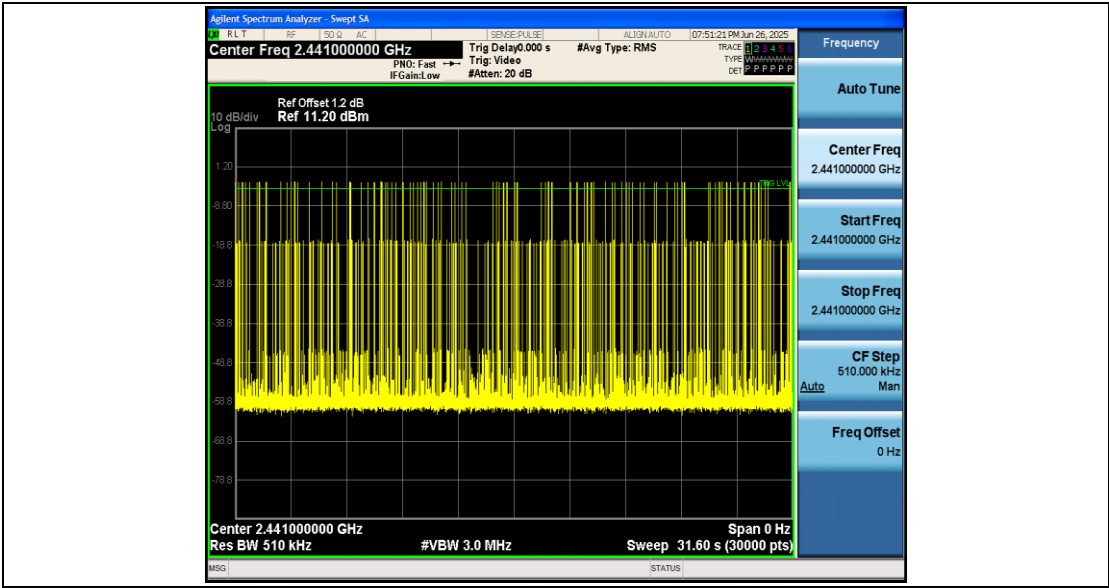


3DH3_Ant1_Hop



3DH5_Ant1_Hop





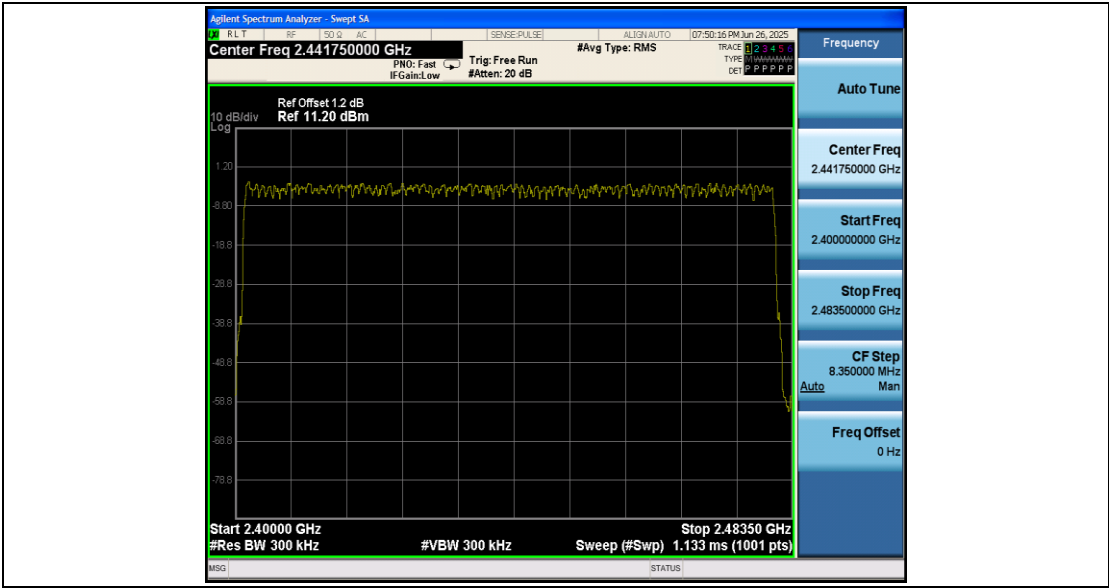
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



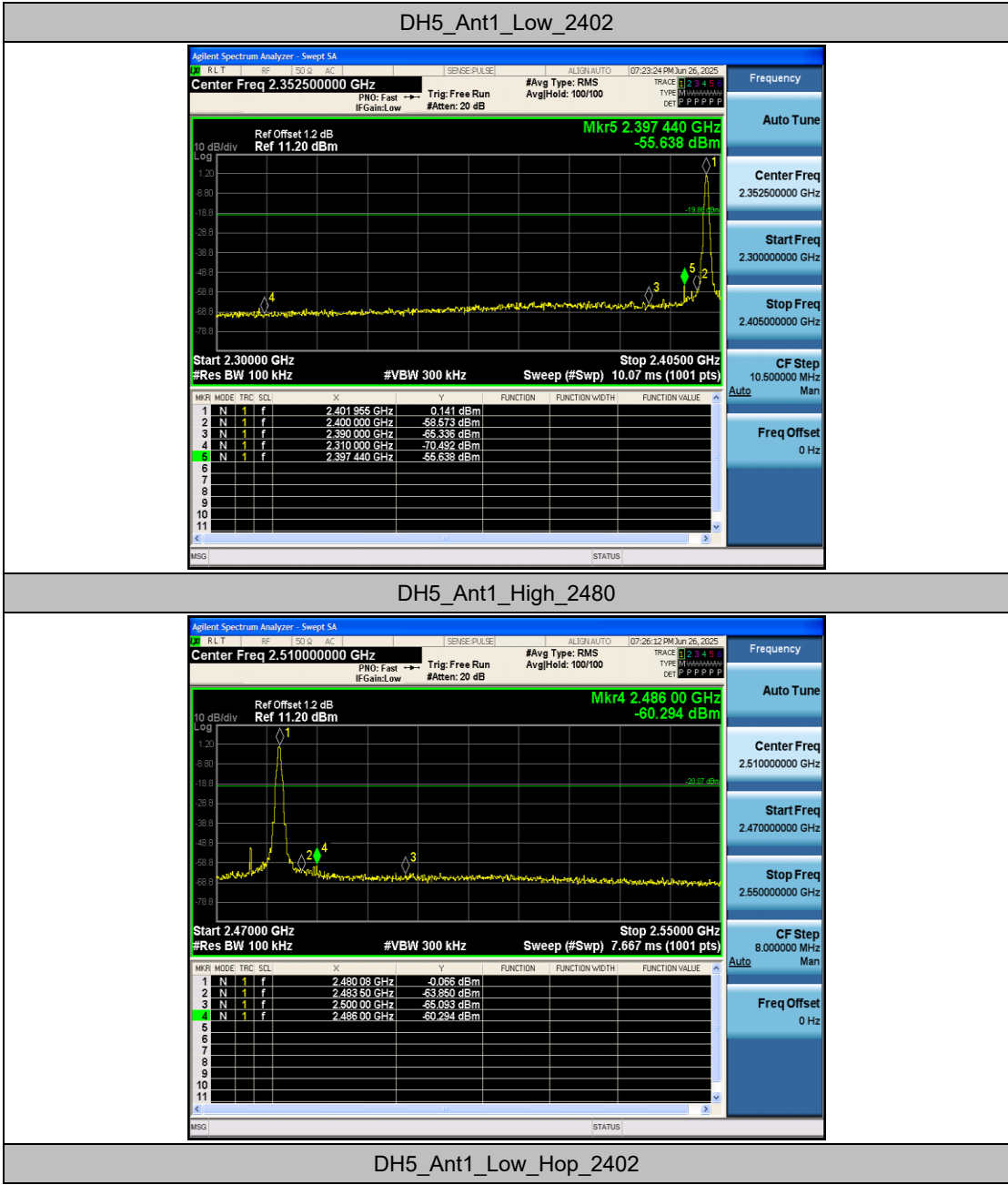


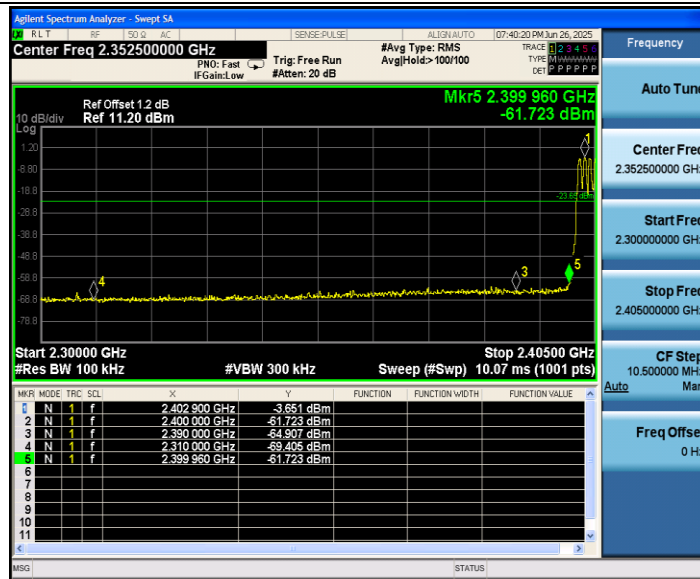
Appendix G: Band edge measurements

Test Result

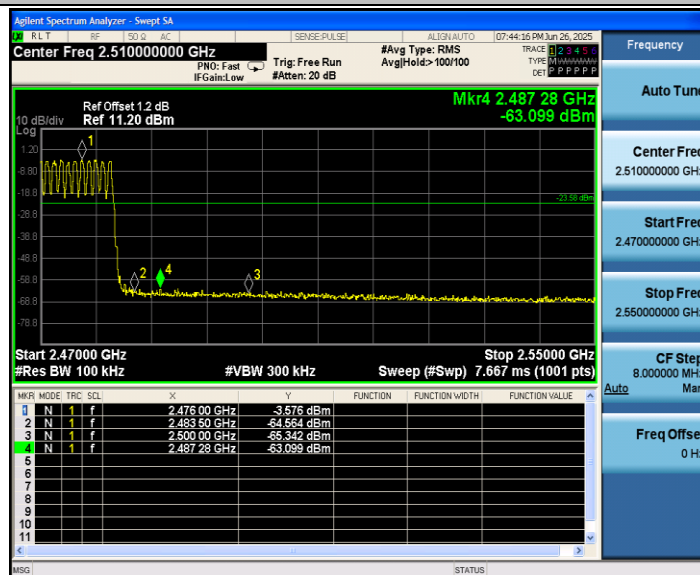
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.14	-55.64	≤-19.86	PASS
		High	2480	-0.07	-60.29	≤-20.07	PASS
		Low	Hop_2402	-3.65	-61.72	≤-23.65	PASS
		High	Hop_2480	-3.58	-63.1	≤-23.58	PASS
2DH5	Ant1	Low	2402	-5.49	-59.4	≤-25.49	PASS
		High	2480	-4.15	-58.76	≤-24.15	PASS
		Low	Hop_2402	-3.45	-56.29	≤-23.45	PASS
		High	Hop_2480	-3.64	-62.94	≤-23.64	PASS
3DH5	Ant1	Low	2402	-3.37	-59.15	≤-23.37	PASS
		High	2480	-3.24	-62.3	≤-23.24	PASS
		Low	Hop_2402	-3.11	-60.55	≤-23.11	PASS
		High	Hop_2480	-3.03	-63.32	≤-23.03	PASS

Test Graphs

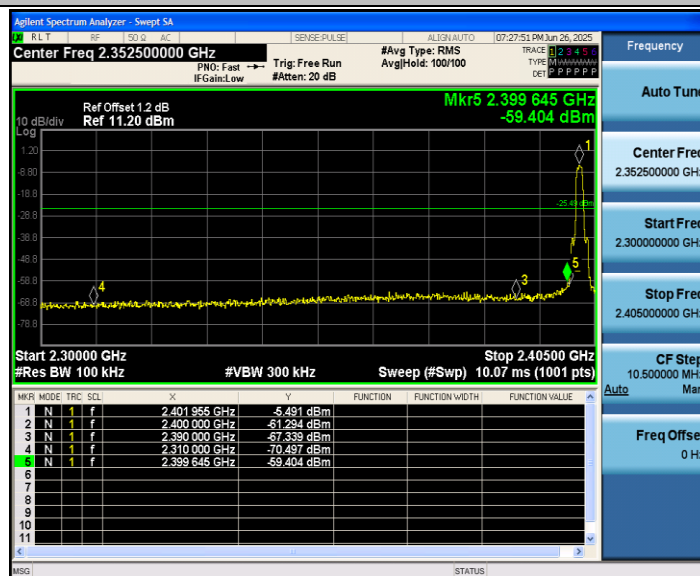




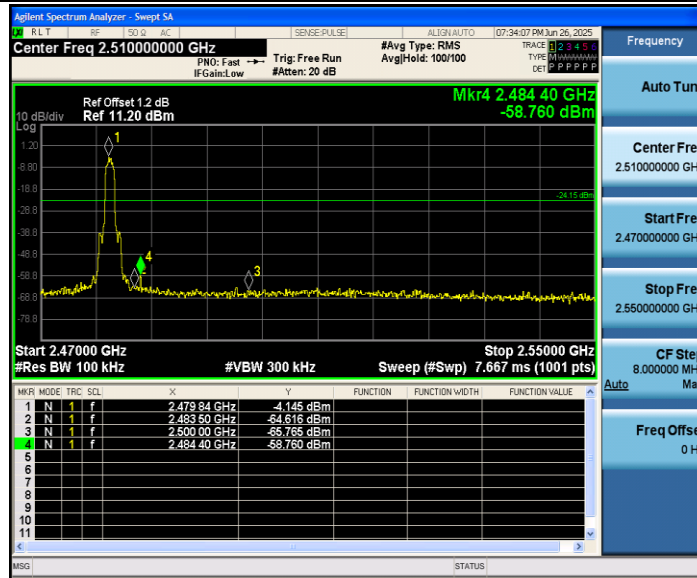
DH5_Ant1_High_Hop_2480



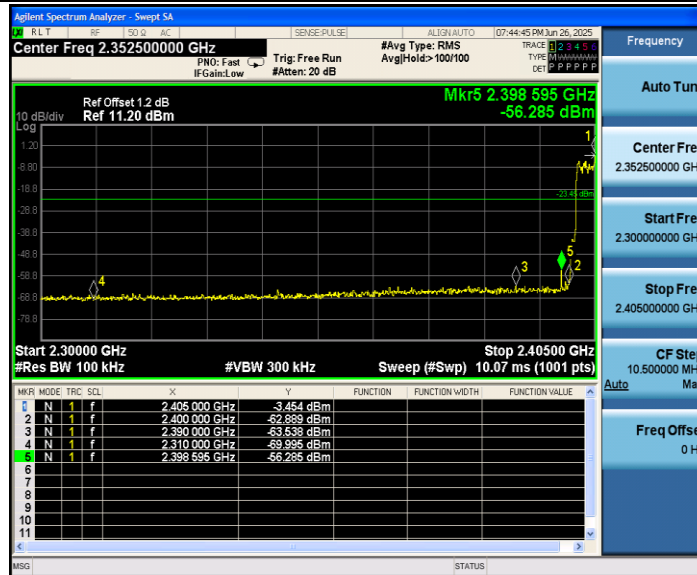
2DH5_Ant1_Low_2402



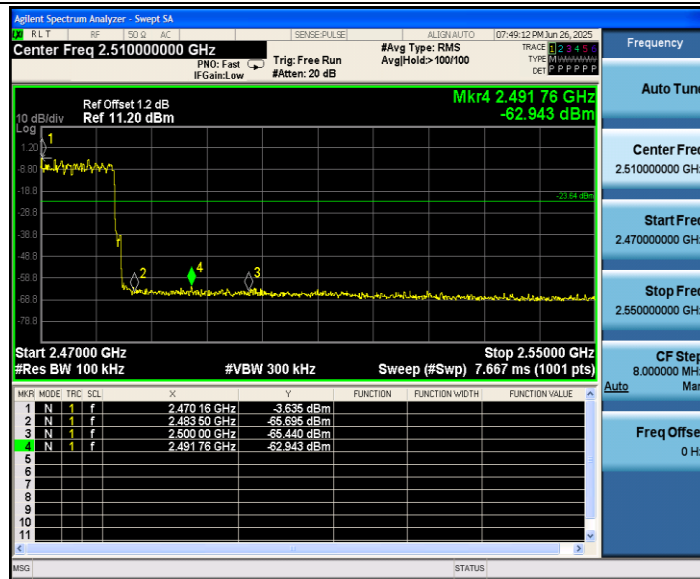
2DH5_Ant1_High_2480



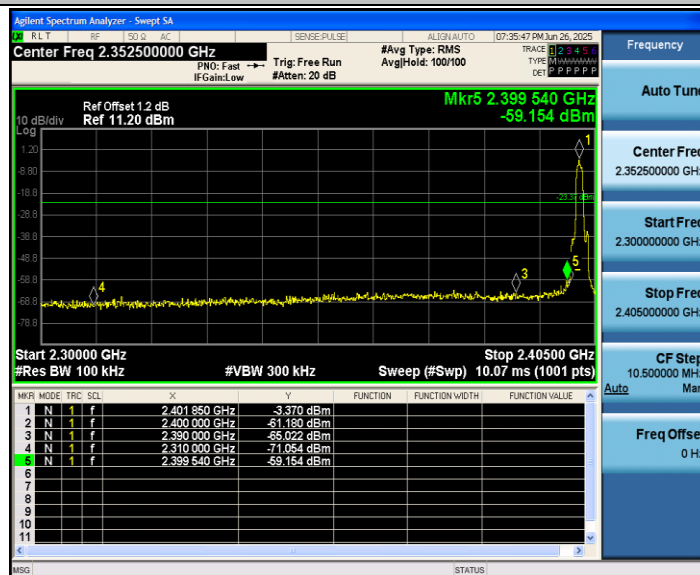
2DH5_Ant1_Low_Hop_2402



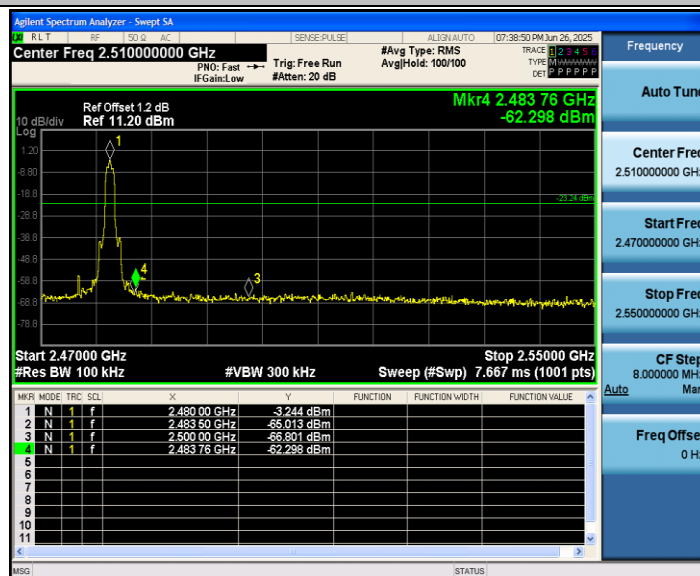
2DH5_Ant1_High_Hop_2480



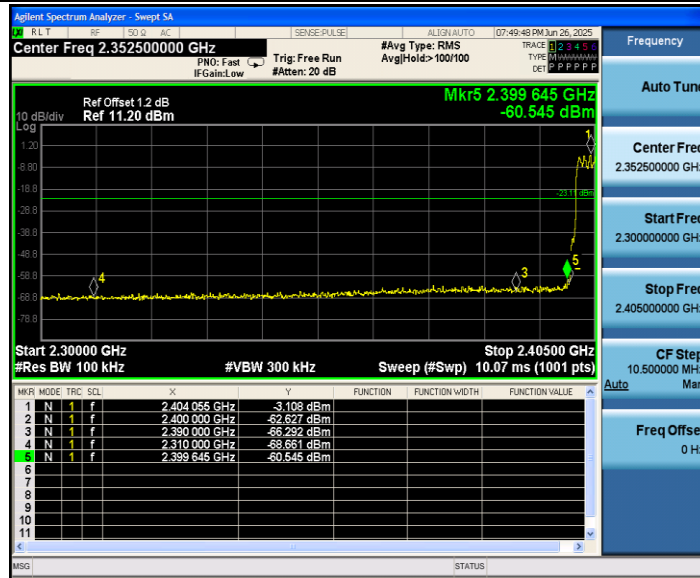
3DH5_Ant1_Low_2402



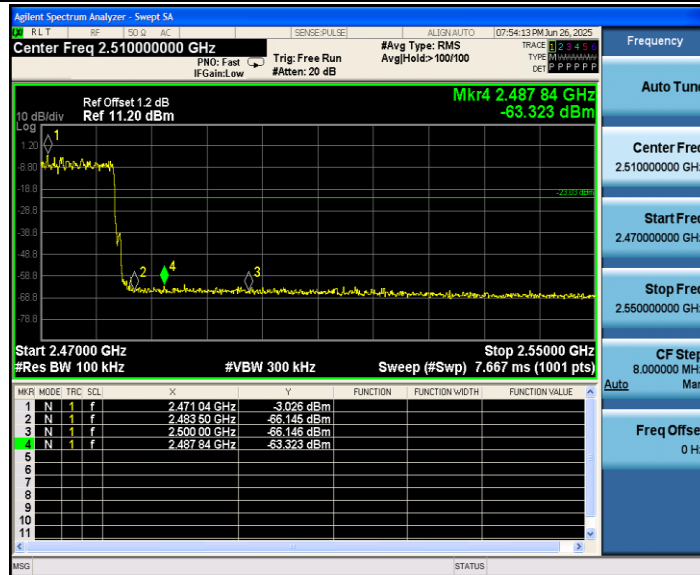
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

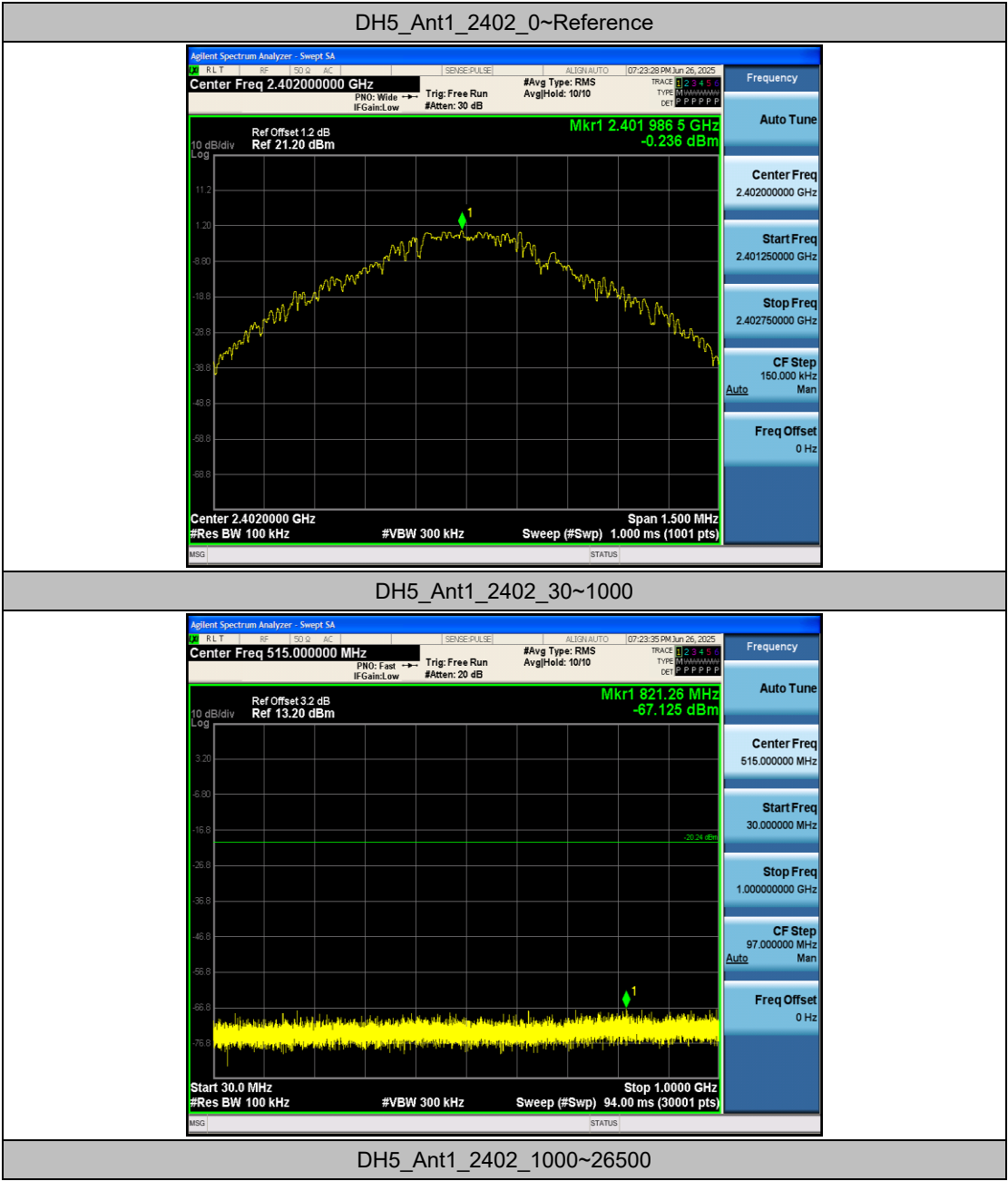


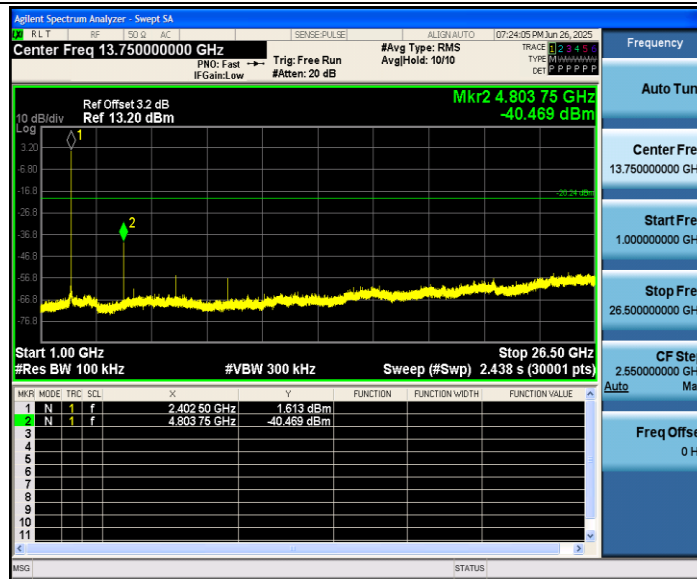
Appendix H: Conducted Spurious Emission

Test Result

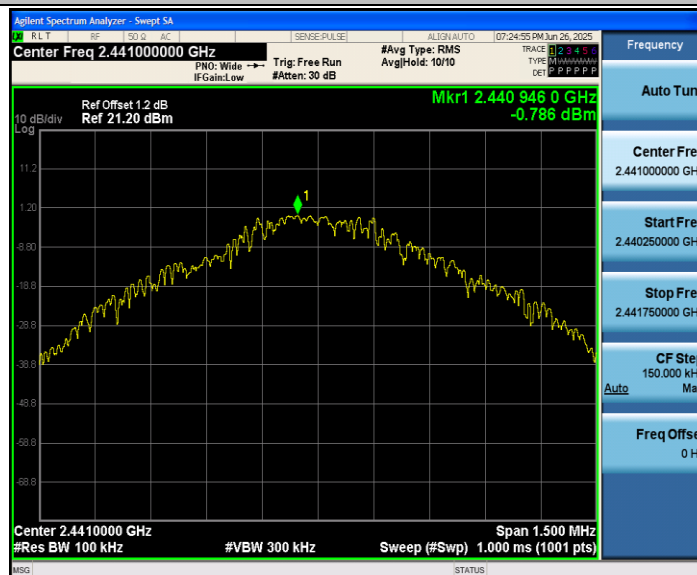
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.24	-0.24	---	PASS
			30~1000	-0.24	-67.13	≤-20.24	PASS
			1000~26500	-0.24	-40.47	≤-20.24	PASS
		2441	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-66.65	≤-20.79	PASS
			1000~26500	-0.79	-42.11	≤-20.79	PASS
		2480	Reference	-0.69	-0.69	---	PASS
			30~1000	-0.69	-67.37	≤-20.69	PASS
			1000~26500	-0.69	-43.66	≤-20.69	PASS
2DH5	Ant1	2402	Reference	-5.17	-5.17	---	PASS
			30~1000	-5.17	-67.2	≤-25.17	PASS
			1000~26500	-5.17	-49.32	≤-25.17	PASS
		2441	Reference	-4.40	-4.40	---	PASS
			30~1000	-4.40	-66.55	≤-24.4	PASS
			1000~26500	-4.40	-45.99	≤-24.4	PASS
		2480	Reference	-6.75	-6.75	---	PASS
			30~1000	-6.75	-67.06	≤-26.75	PASS
			1000~26500	-6.75	-47.81	≤-26.75	PASS
3DH5	Ant1	2402	Reference	-5.11	-5.11	---	PASS
			30~1000	-5.11	-64.2	≤-25.11	PASS
			1000~26500	-5.11	-46.05	≤-25.11	PASS
		2441	Reference	-5.99	-5.99	---	PASS
			30~1000	-5.99	-65.97	≤-25.99	PASS
			1000~26500	-5.99	-48.77	≤-25.99	PASS
		2480	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-61.13	≤-24.16	PASS
			1000~26500	-4.16	-48.01	≤-24.16	PASS

Test Graphs

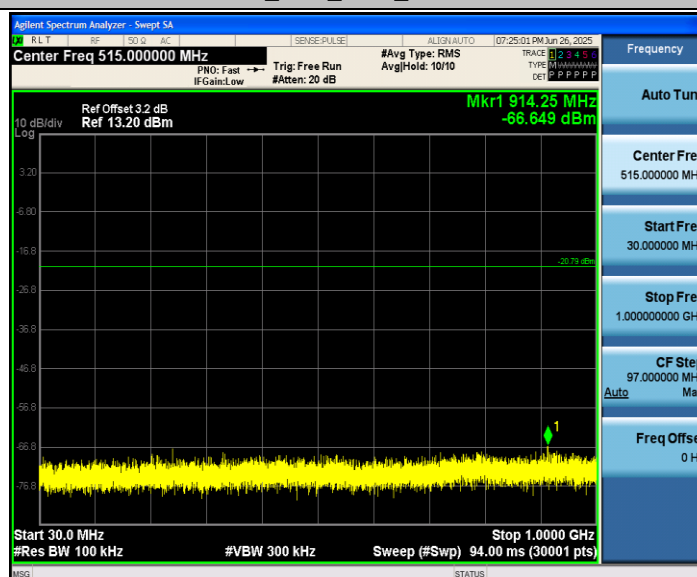




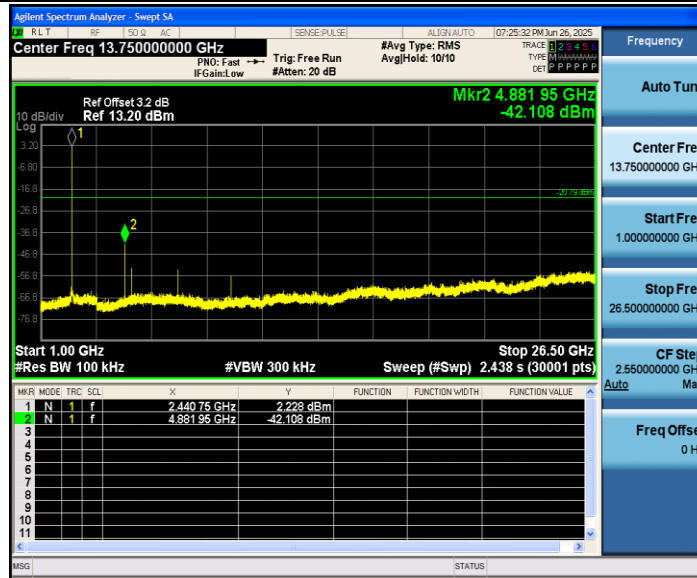
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000