

FCC Appendix RF Test Data

FCC ID : 2BF3Z-E03

Company : Shenzhen Taiyang Technology Co., Ltd

EUT : Smart Glasses

Model Number : E03

Report No. : CTA25060900702

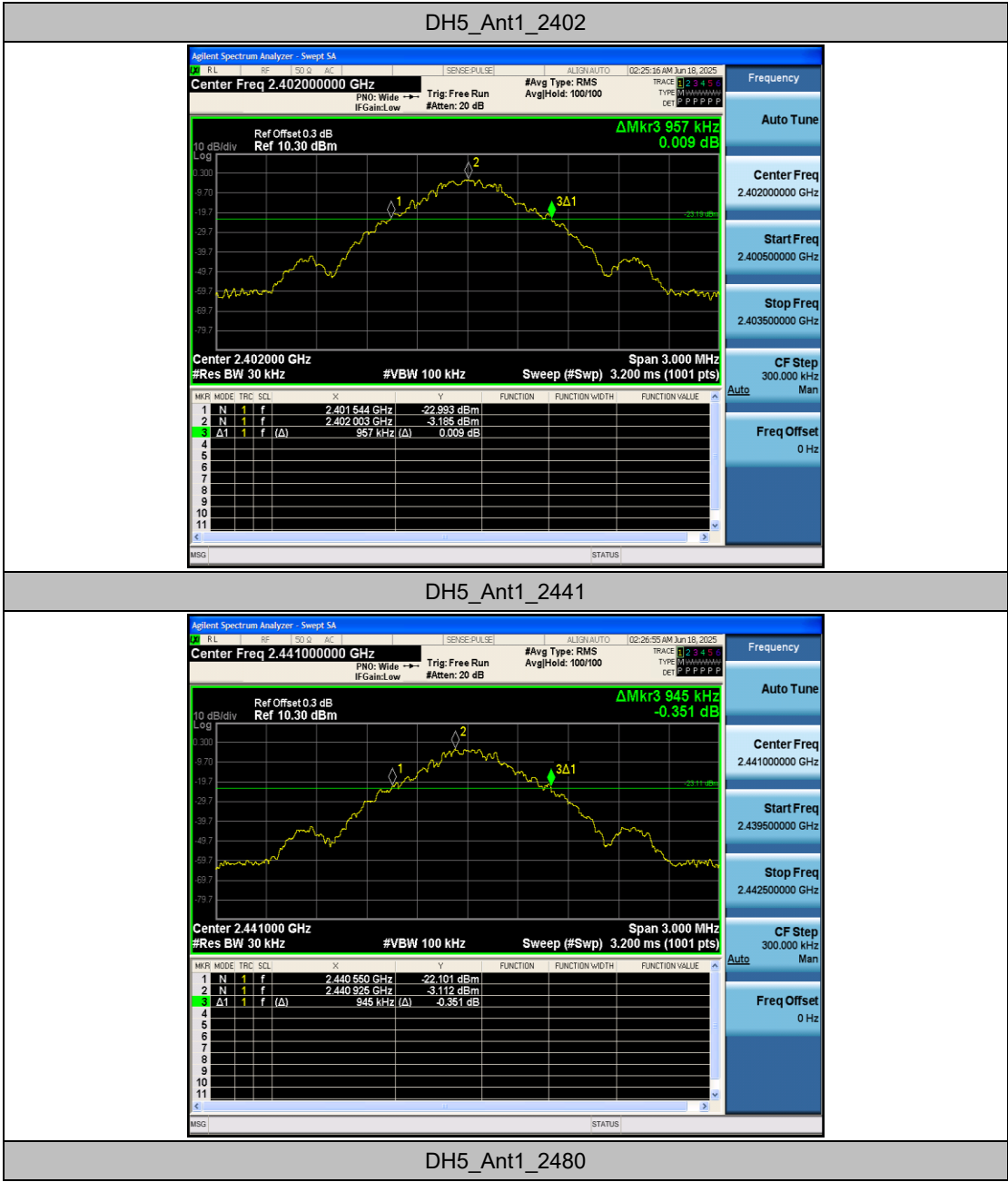
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.957	2401.544	2402.501	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.933	2479.559	2480.492	---	---
2DH5	Ant1	2402	1.278	2401.382	2402.660	---	---
		2441	1.338	2440.340	2441.678	---	---
		2480	1.311	2479.355	2480.666	---	---
3DH5	Ant1	2402	1.311	2401.358	2402.669	---	---
		2441	1.311	2440.358	2441.669	---	---
		2480	1.266	2479.367	2480.633	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

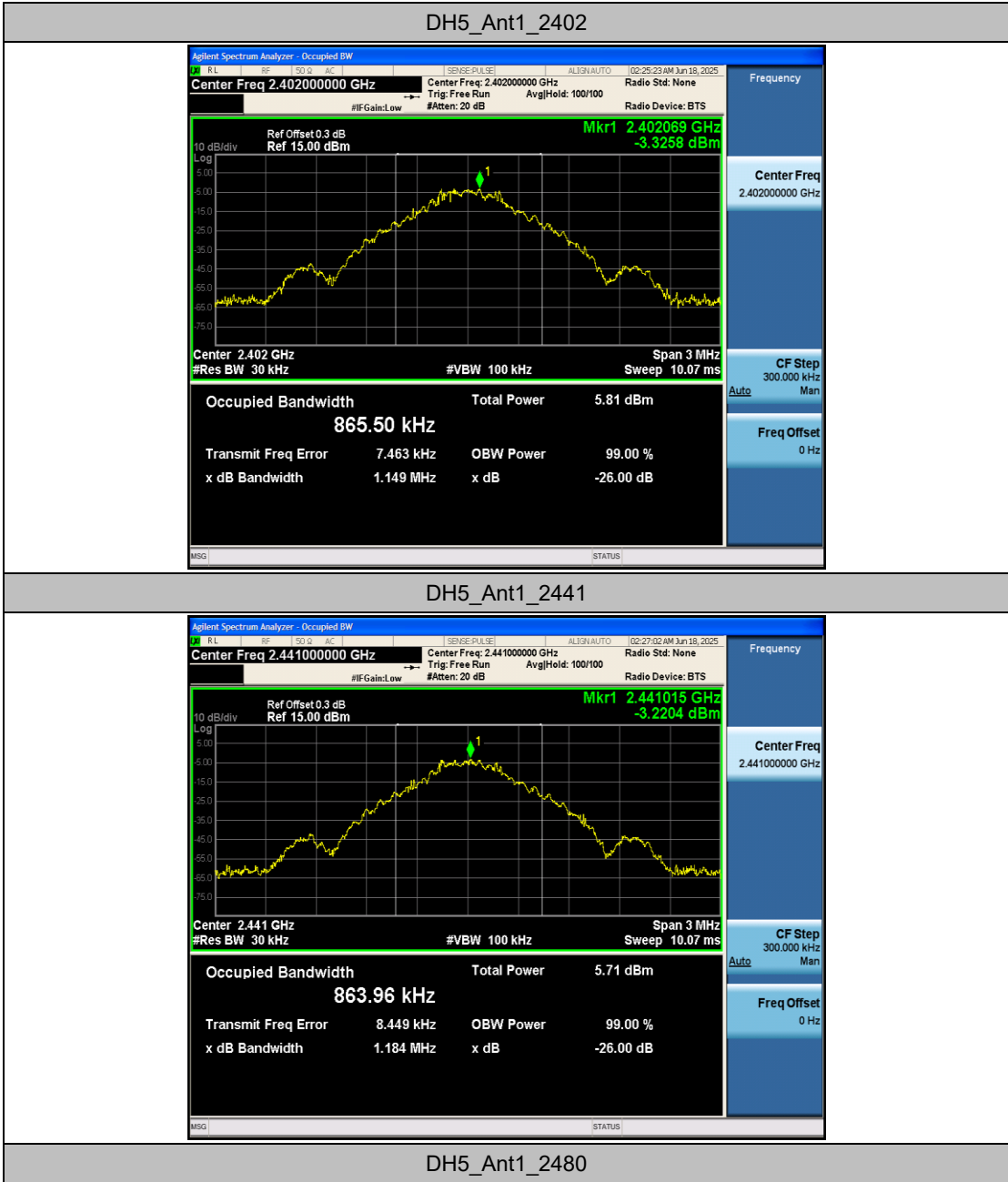


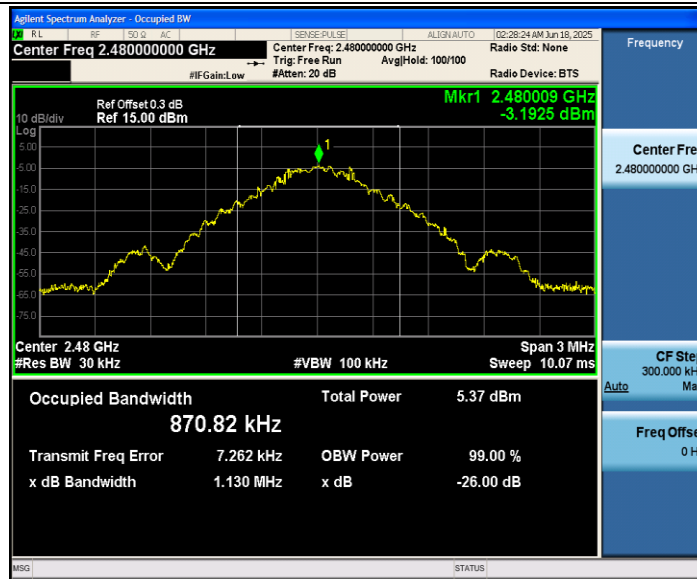
Appendix B: Occupied Channel Bandwidth

Test Result

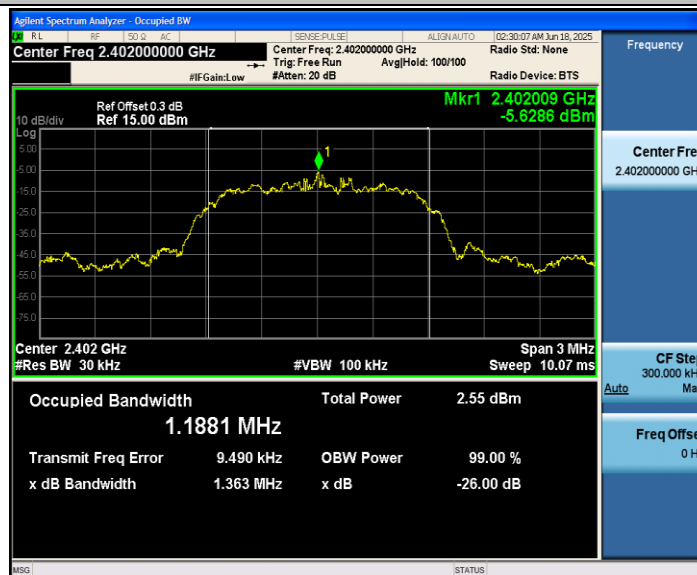
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86550	2401.5747	2402.4402	---	---
		2441	0.86396	2440.5765	2441.4404	---	---
		2480	0.87082	2479.5719	2480.4427	---	---
2DH5	Ant1	2402	1.1881	2401.4154	2402.6035	---	---
		2441	1.1860	2440.4178	2441.6038	---	---
		2480	1.1862	2479.4169	2480.6031	---	---
3DH5	Ant1	2402	1.1892	2401.4153	2402.6045	---	---
		2441	1.1904	2440.4149	2441.6053	---	---
		2480	1.1881	2479.4164	2480.6045	---	---

Test Graphs

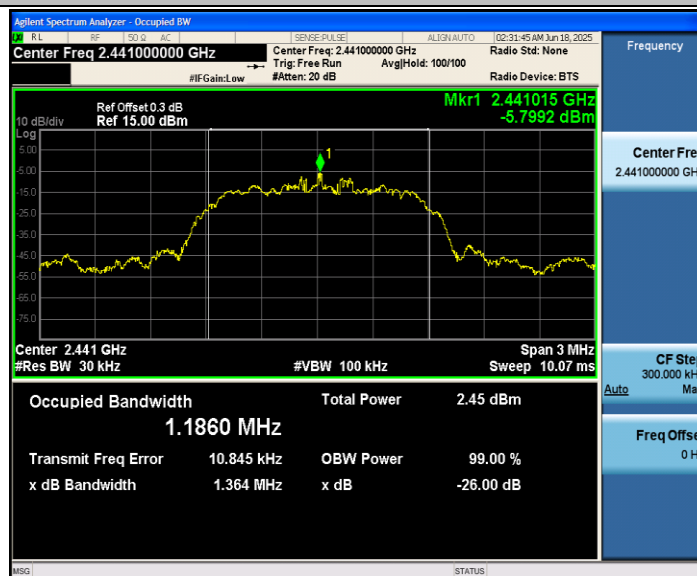




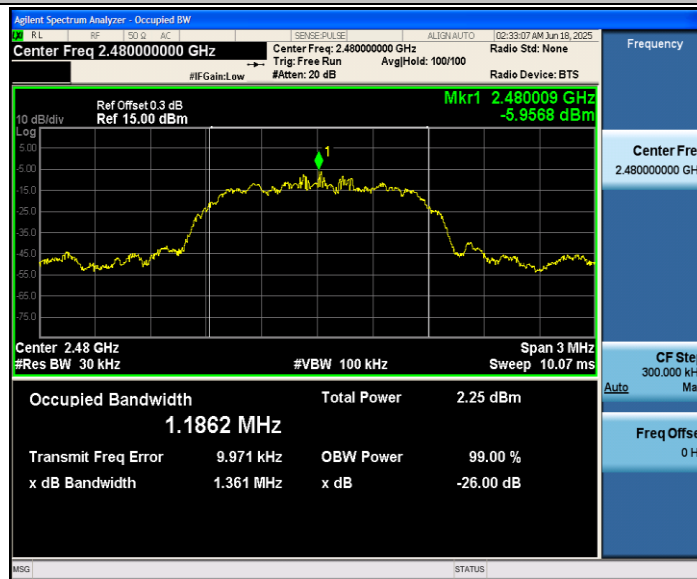
2DH5_Ant1_2402



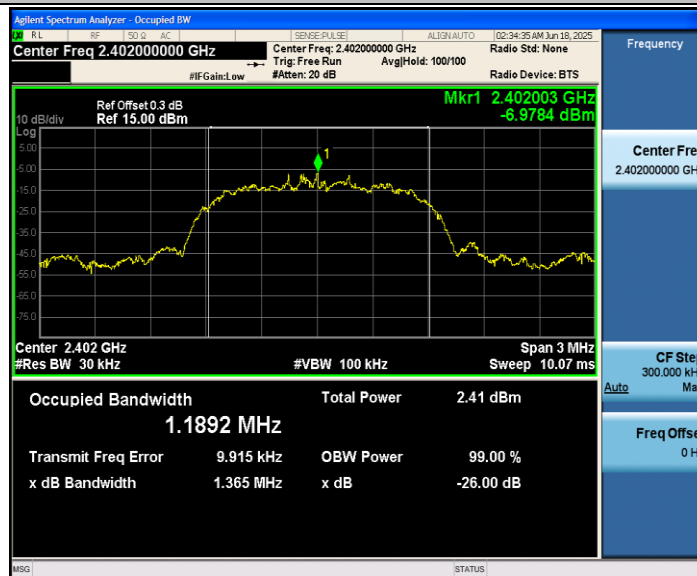
2DH5_Ant1_2441



2DH5_Ant1_2480



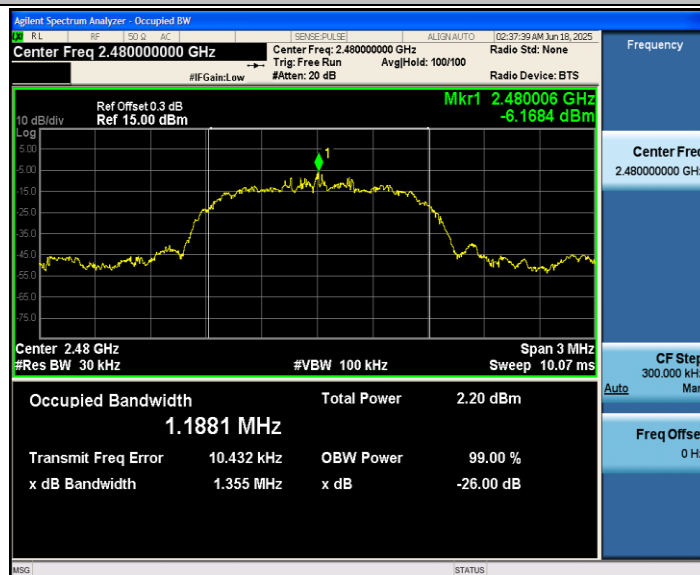
3DH5_Ant1_2402



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	-0.15	≤20.97	PASS
		2441	-0.41	≤20.97	PASS
		2480	-0.49	≤20.97	PASS
2DH5	Ant1	2402	-1.03	≤20.97	PASS
		2441	-1.19	≤20.97	PASS
		2480	-1.31	≤20.97	PASS
3DH5	Ant1	2402	-0.61	≤20.97	PASS
		2441	-0.81	≤20.97	PASS
		2480	-0.87	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥ 0.957	PASS
2DH5	Ant1	Hop	1.188	≥ 0.892	PASS
3DH5	Ant1	Hop	1.3	≥ 0.874	PASS

DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.44200000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

ΔMkr2 1.012 MHz
-0.02 dB

Start 2.440000 GHz
#Res BW 300 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Stop 2.444000 GHz

Frequency

Auto Tune

Center Freq 2.44200000 GHz

Start Freq 2.44000000 GHz

Stop Freq 2.44400000 GHz

CF Step 400.000 kHz
Auto Man

Freq Offset 0 Hz

2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.44200000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

ΔMkr2 1.188 MHz
0.32 dB

Start 2.440000 GHz
#Res BW 300 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Stop 2.444000 GHz

Frequency

Auto Tune

Center Freq 2.44200000 GHz

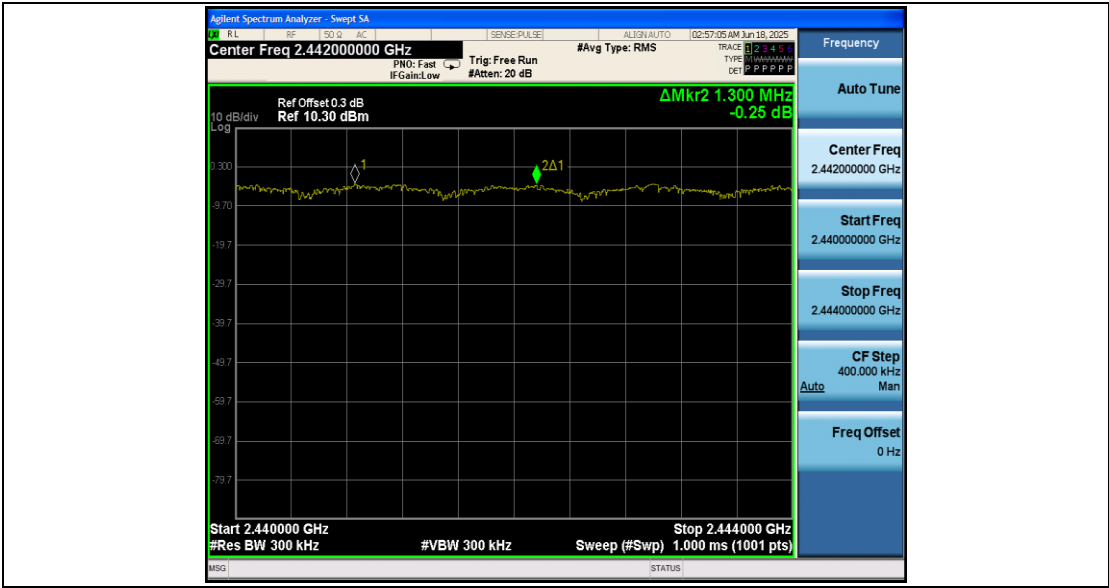
Start Freq 2.44000000 GHz

Stop Freq 2.44400000 GHz

CF Step 400.000 kHz
Auto Man

Freq Offset 0 Hz

3DH5_Ant1_Hop

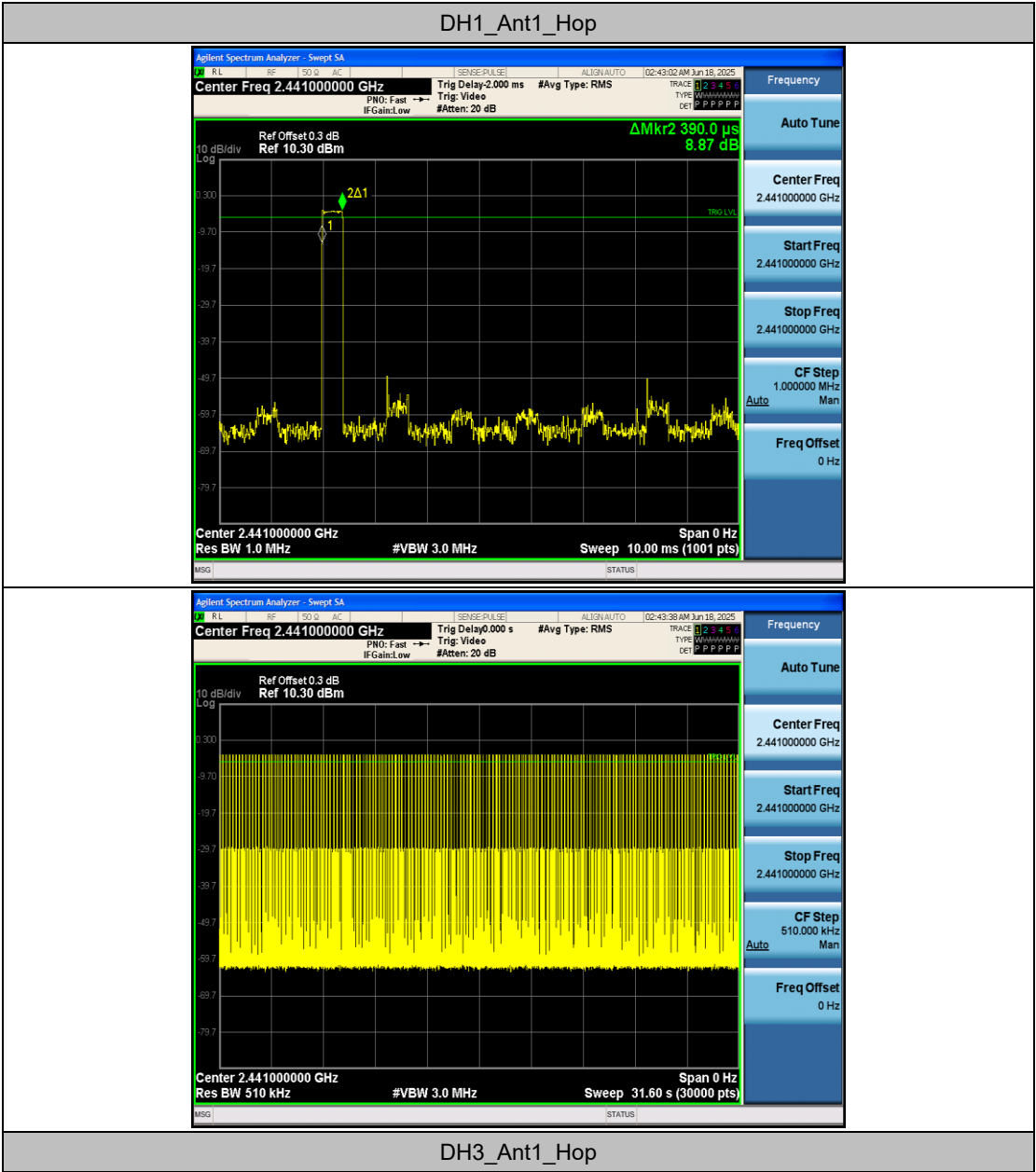


Appendix E: Time of occupancy

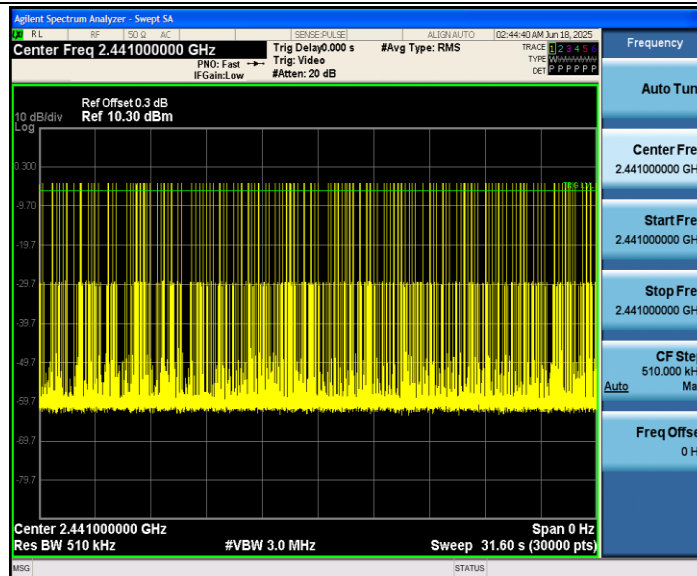
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	165	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.900	107	0.31	≤0.4	PASS
2DH1	Ant1	Hop	0.380	318	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.640	154	0.253	≤0.4	PASS
2DH5	Ant1	Hop	2.890	118	0.341	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.650	172	0.284	≤0.4	PASS
3DH5	Ant1	Hop	2.900	106	0.307	≤0.4	PASS

Test Graphs

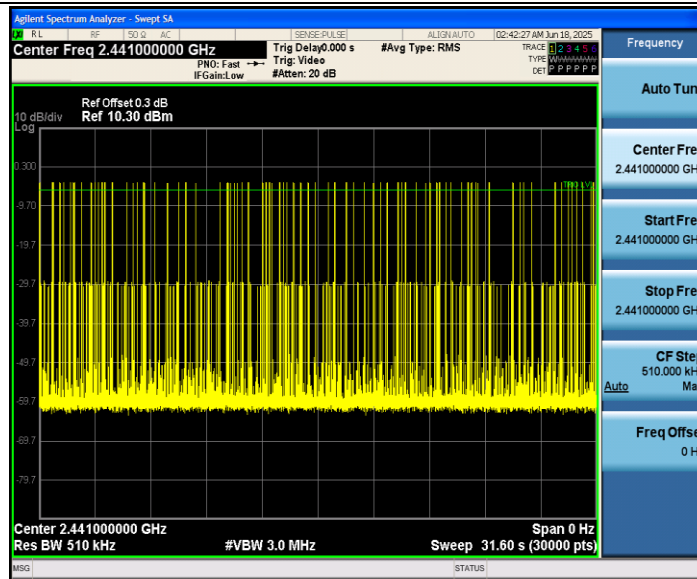


DH3_Ant1_Hop

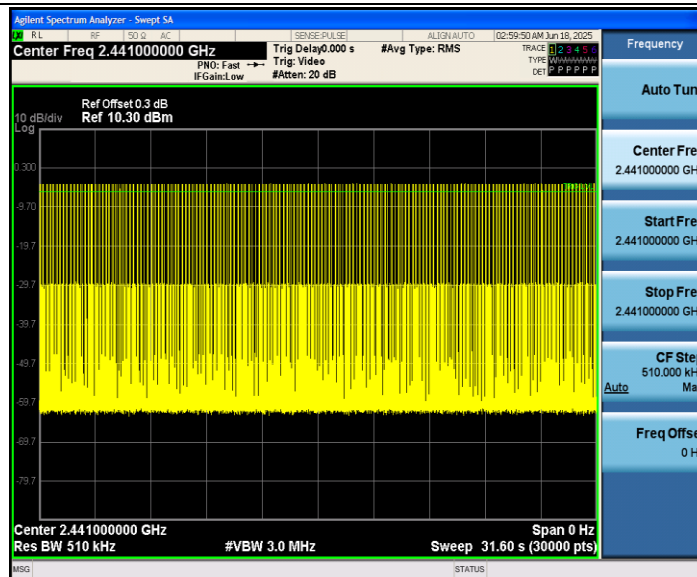
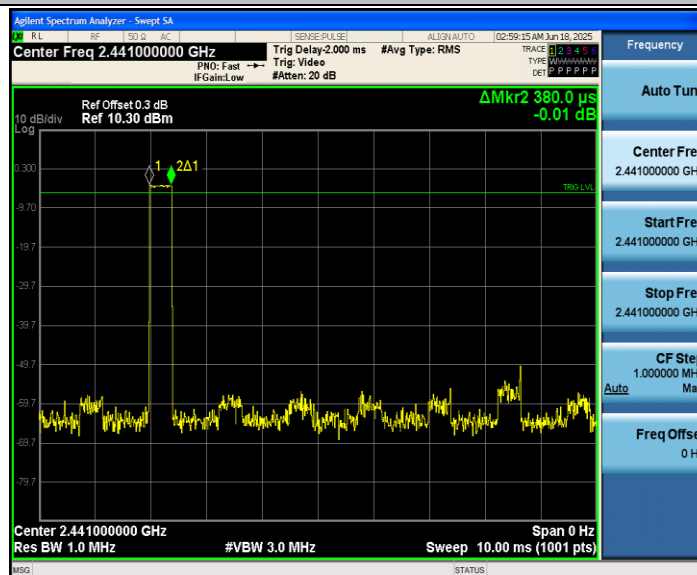


DH5_Ant1_Hop

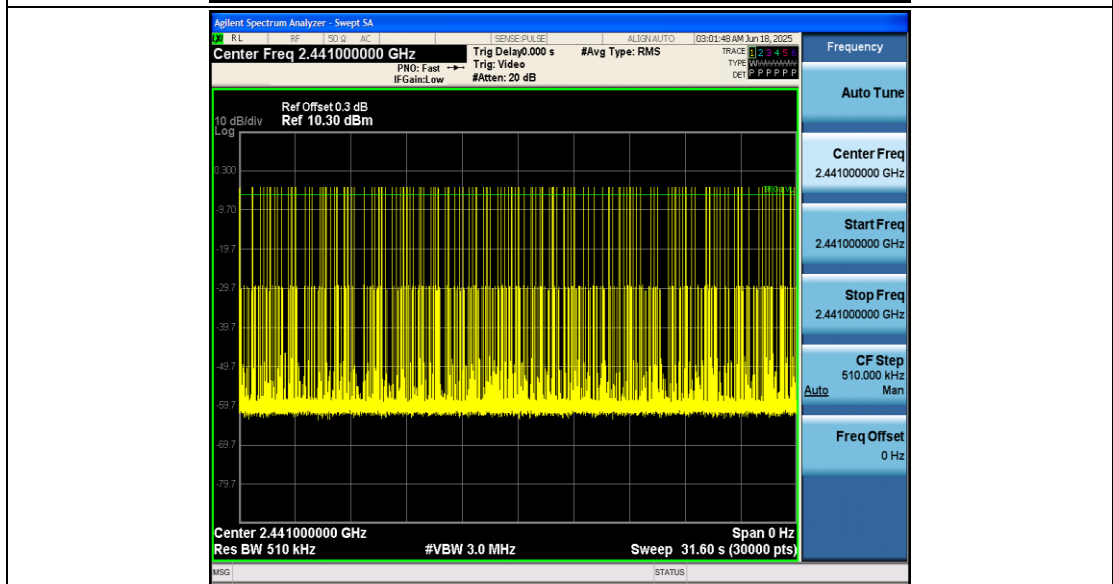
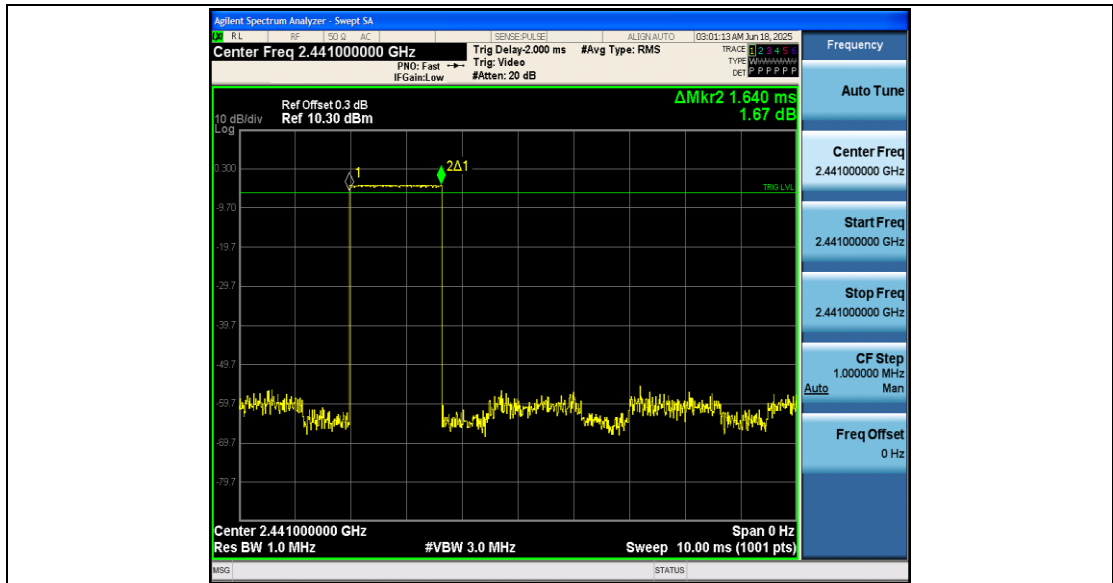




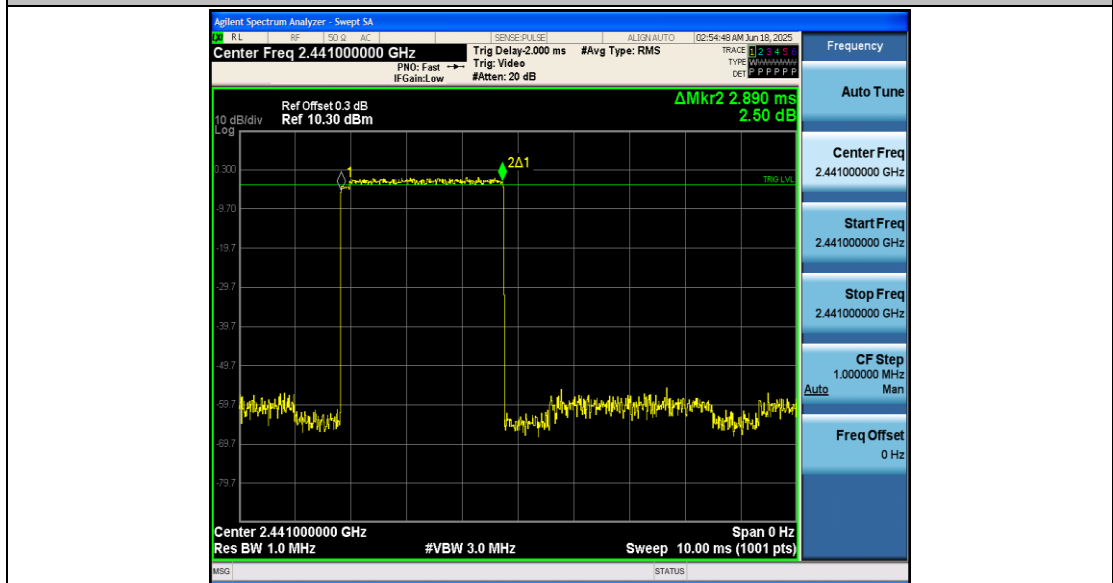
2DH1_Ant1_Hop

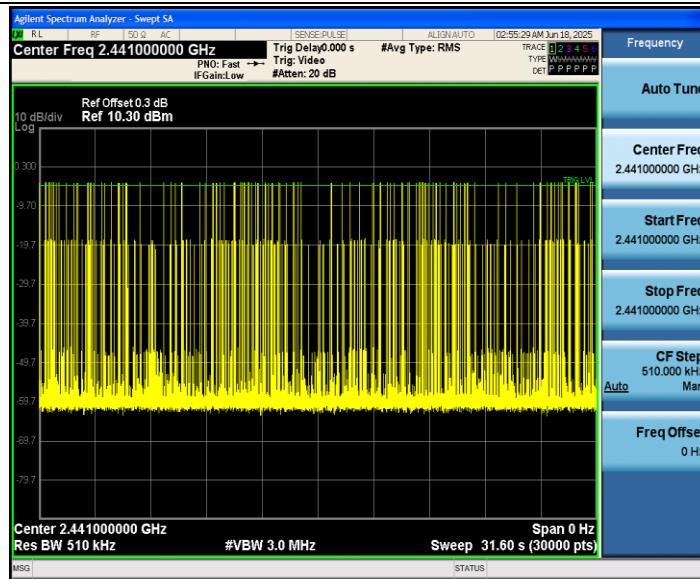


2DH3_Ant1_Hop

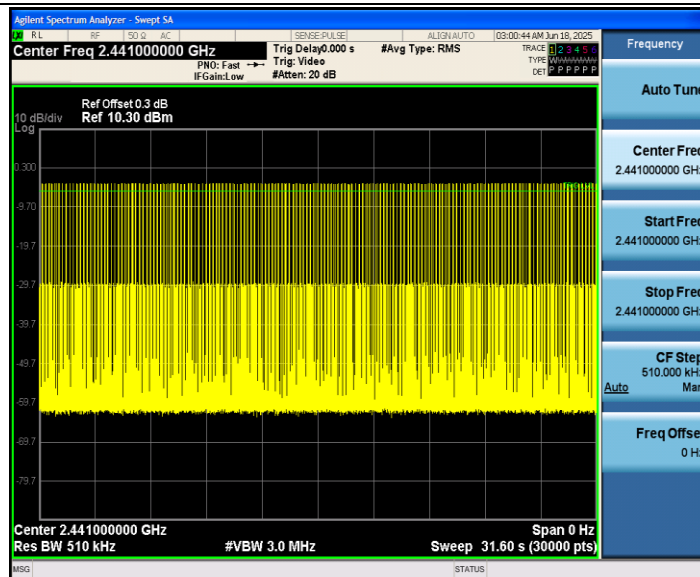
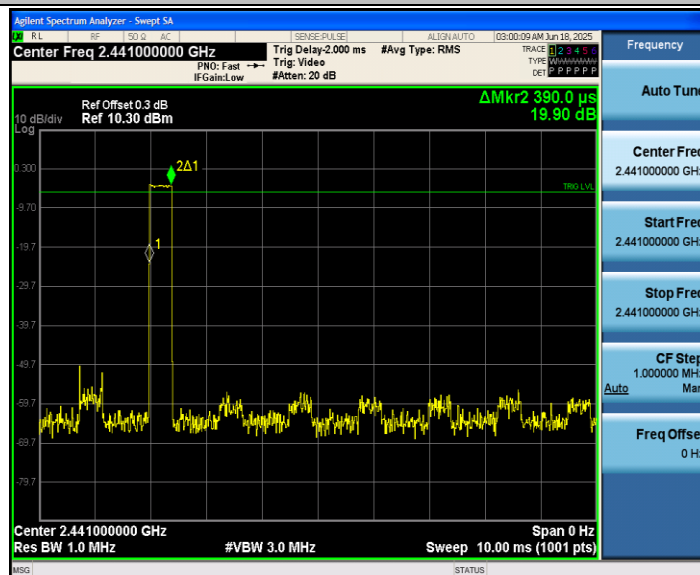


2DH5_Ant1_Hop

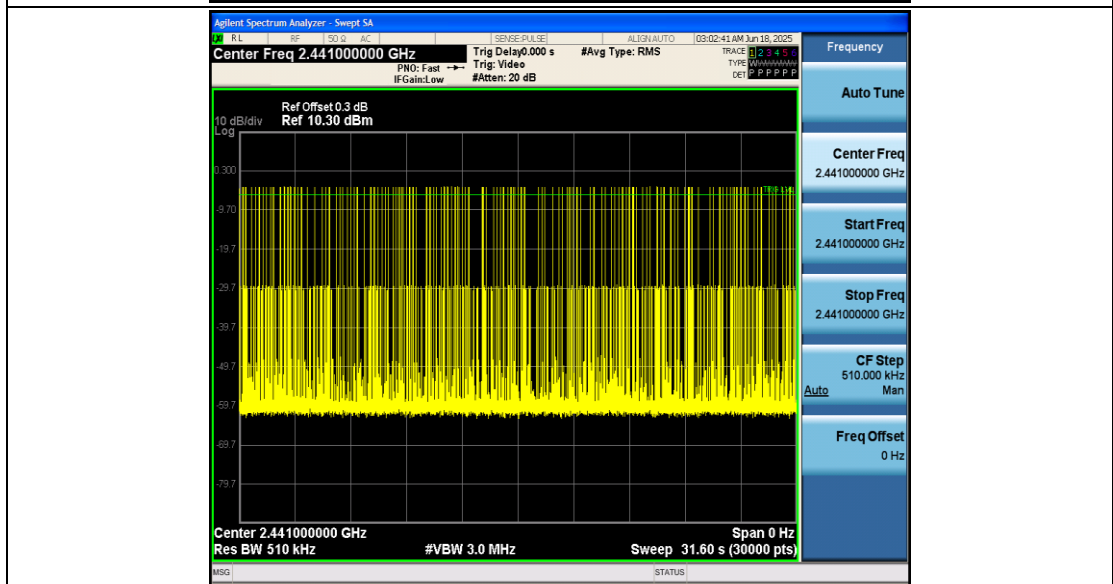
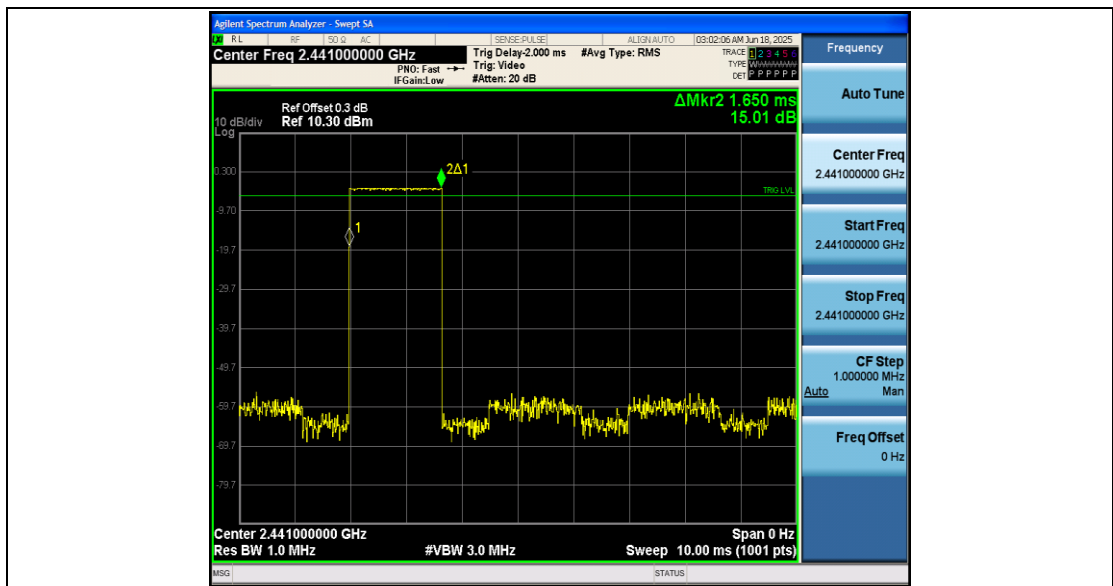




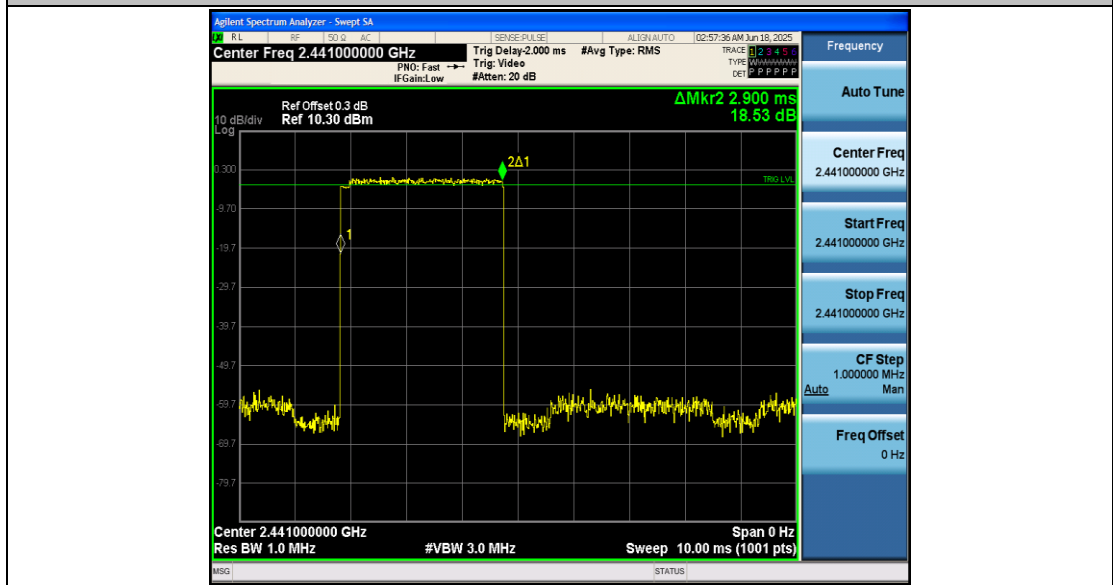
3DH1_Ant1_Hop

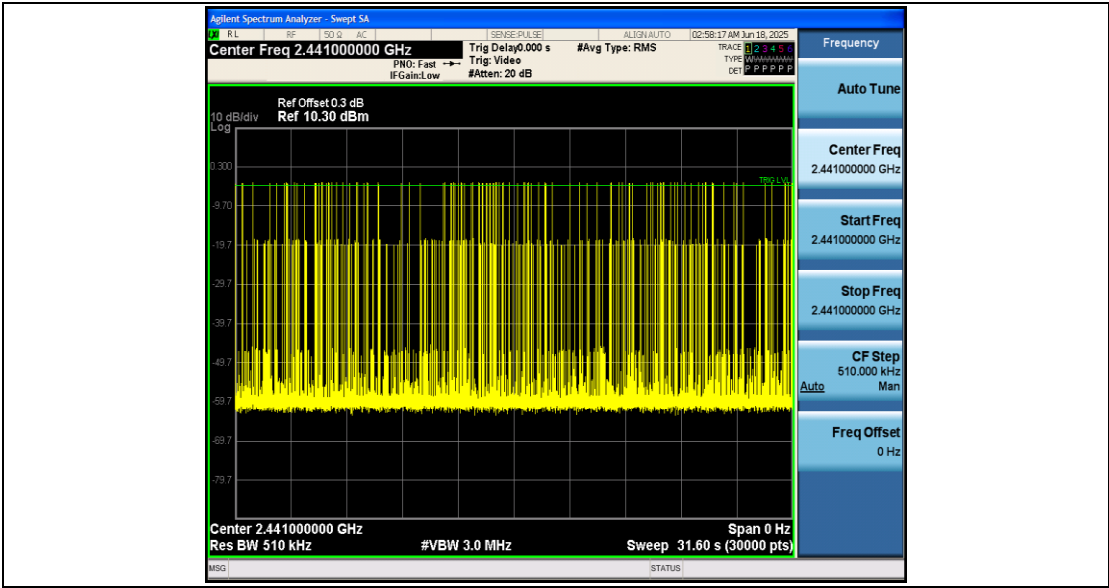


3DH3_Ant1_Hop



3DH5_Ant1_Hop





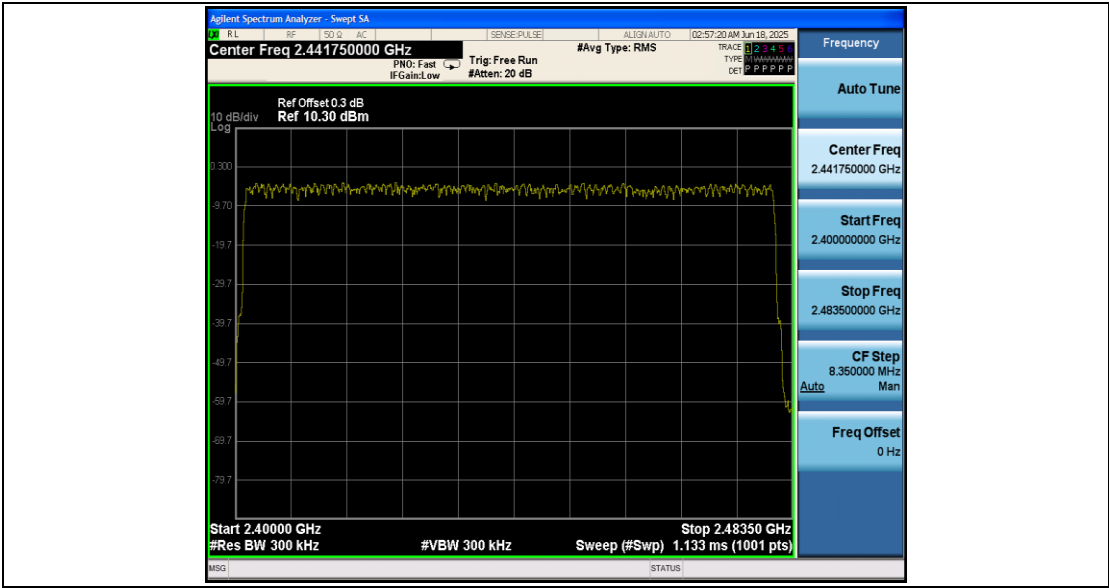
Appendix F: Number of hopping channels

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



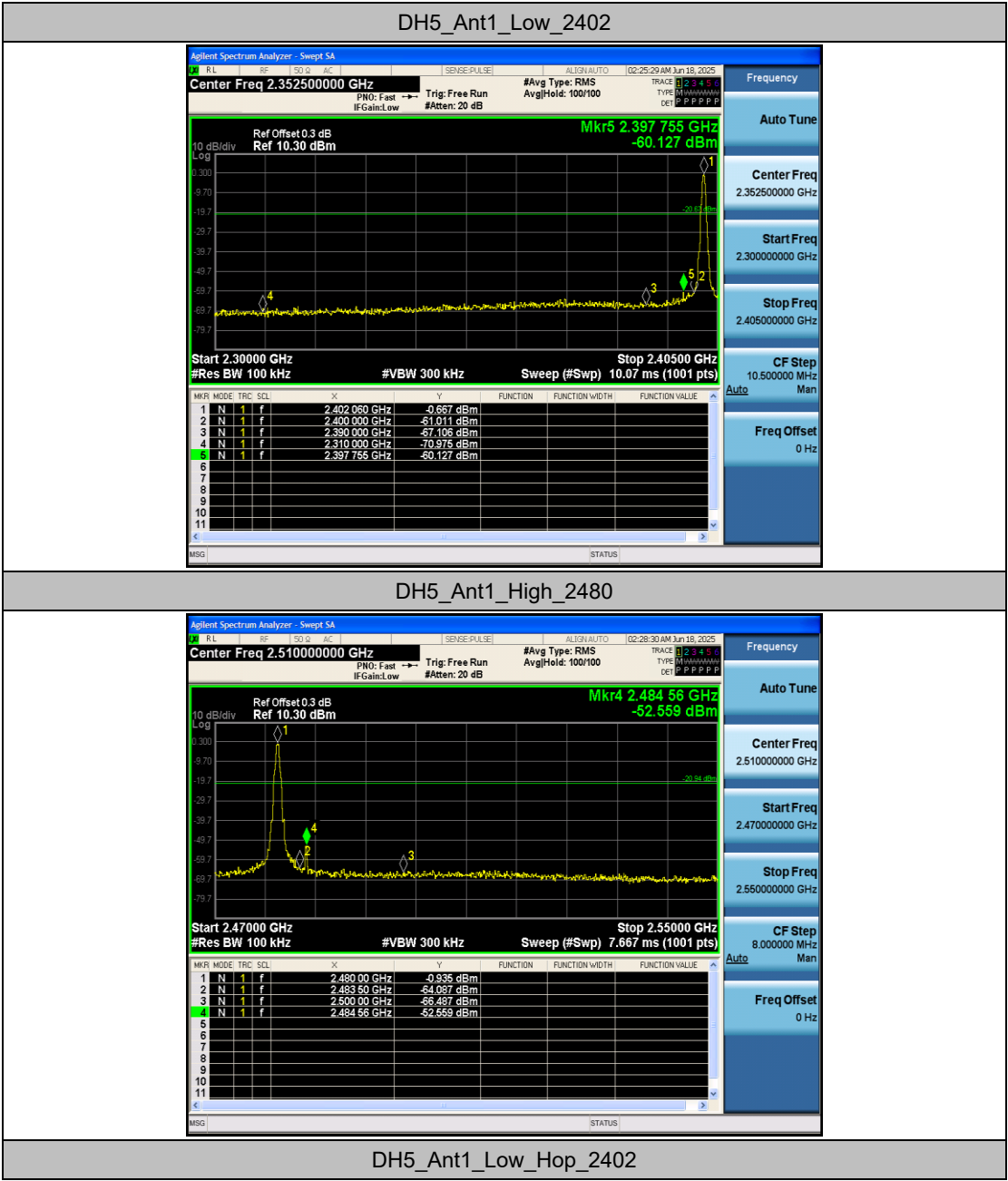


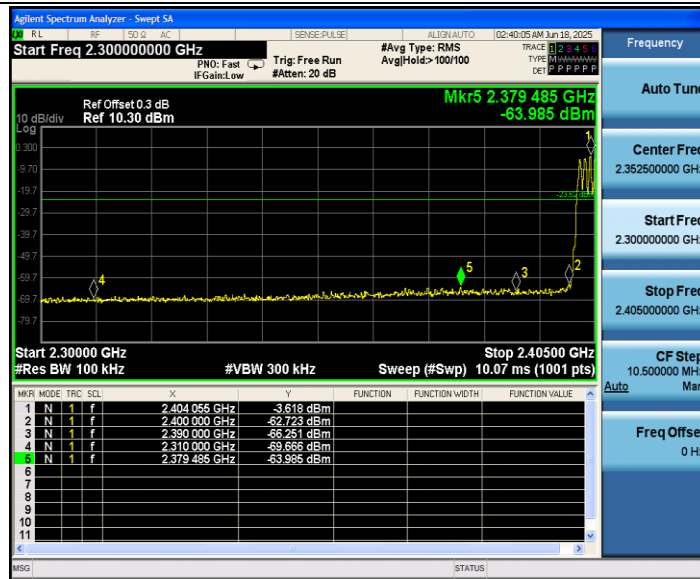
Appendix G: Band edge measurements

Test Result

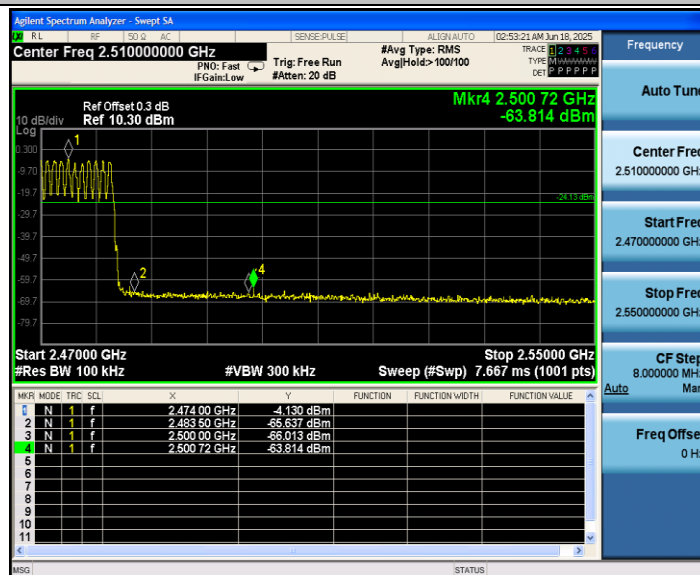
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.67	-60.13	≤-20.67	PASS
		High	2480	-0.94	-52.56	≤-20.94	PASS
		Low	Hop_2402	-3.62	-63.99	≤-23.62	PASS
		High	Hop_2480	-4.13	-63.81	≤-24.13	PASS
2DH5	Ant1	Low	2402	-5.36	-60.51	≤-25.36	PASS
		High	2480	-3.85	-62.08	≤-23.85	PASS
		Low	Hop_2402	-6.48	-63.91	≤-26.48	PASS
		High	Hop_2480	-4.25	-63.88	≤-24.25	PASS
3DH5	Ant1	Low	2402	-4.20	-59.74	≤-24.2	PASS
		High	2480	-4.55	-63.82	≤-24.55	PASS
		Low	Hop_2402	-6.47	-62.27	≤-26.47	PASS
		High	Hop_2480	-4.05	-64.1	≤-24.05	PASS

Test Graphs

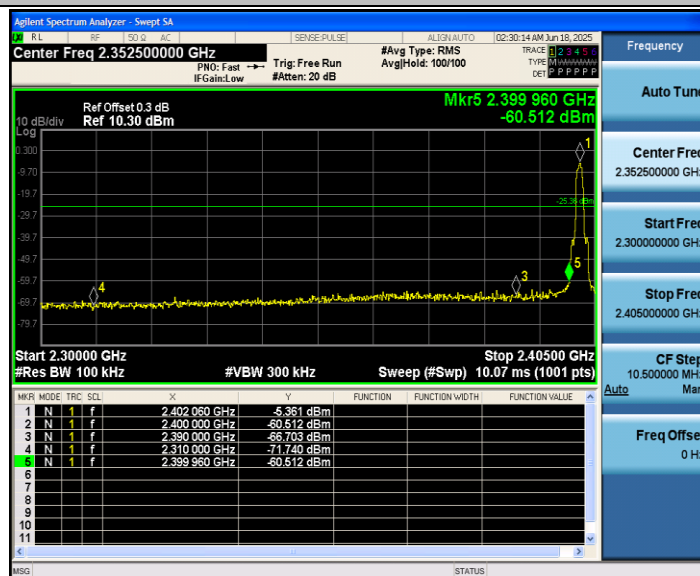




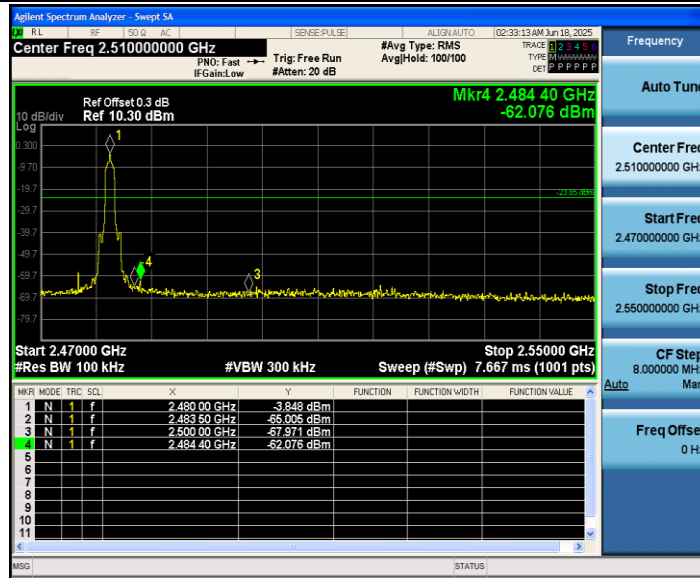
DH5_Ant1_High_Hop_2480



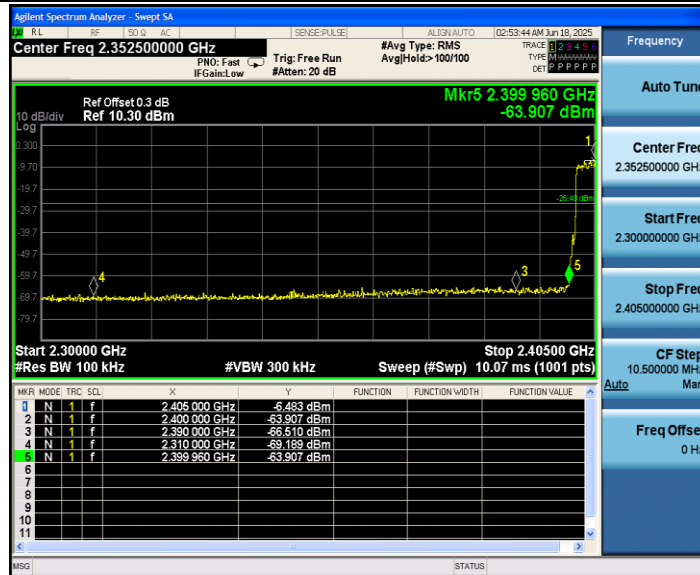
2DH5_Ant1_Low_2402



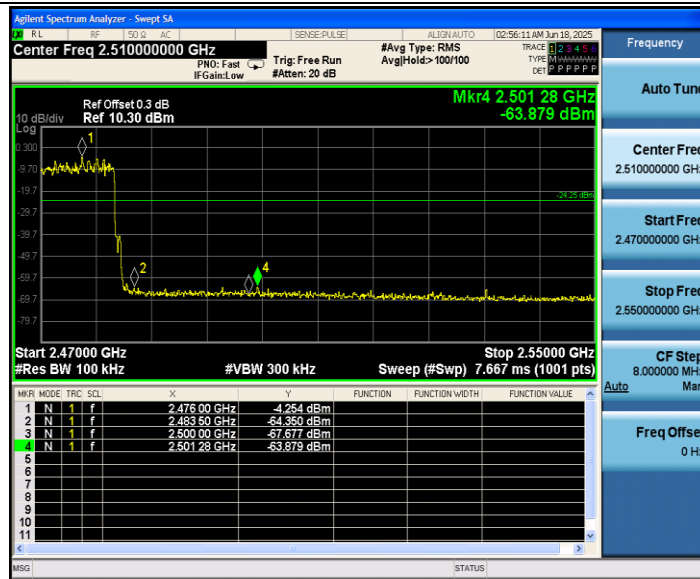
2DH5_Ant1_High_2480



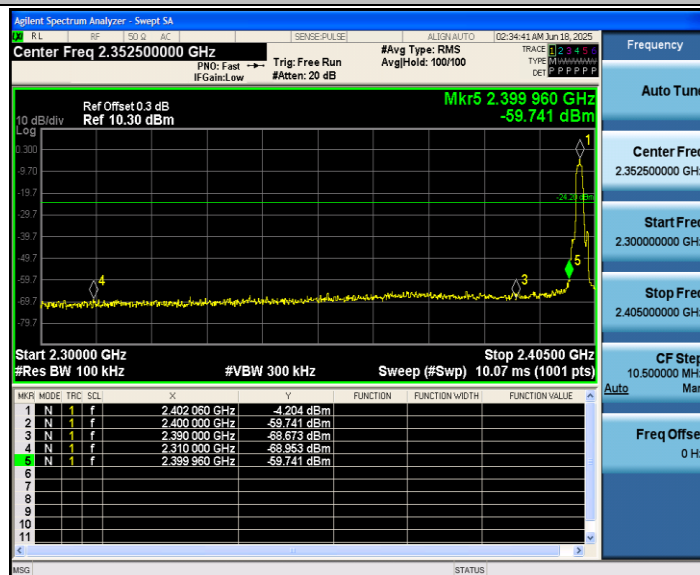
2DH5_Ant1_Low_Hop_2402



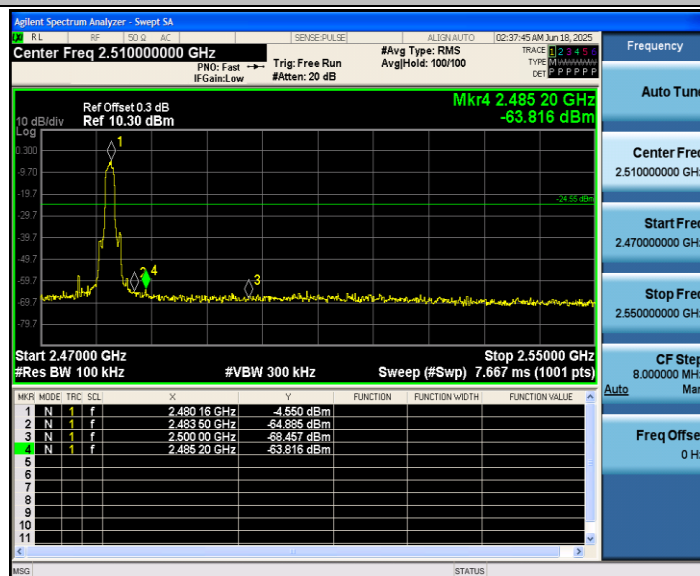
2DH5_Ant1_High_Hop_2480



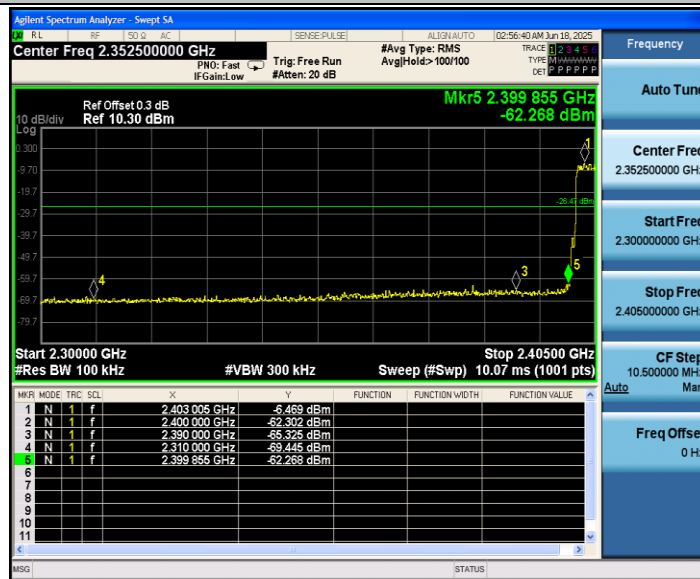
3DH5_Ant1_Low_2402



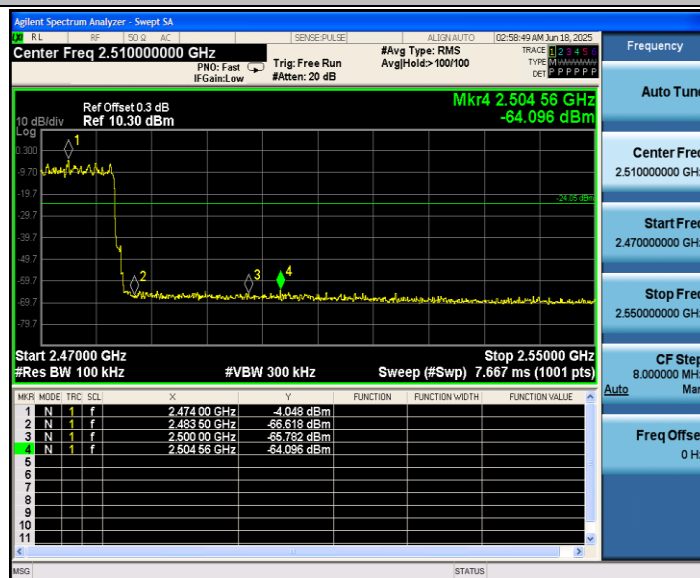
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

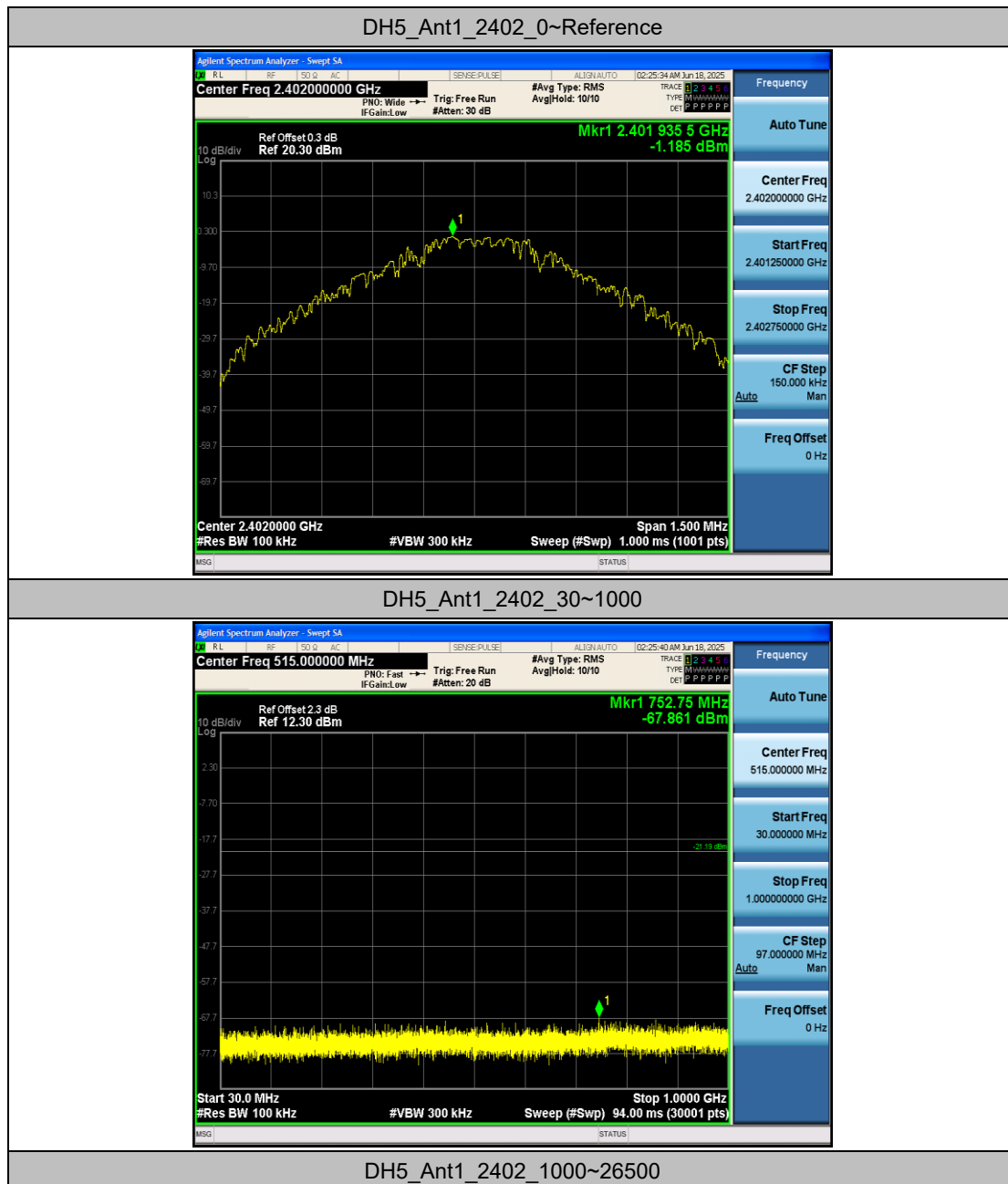


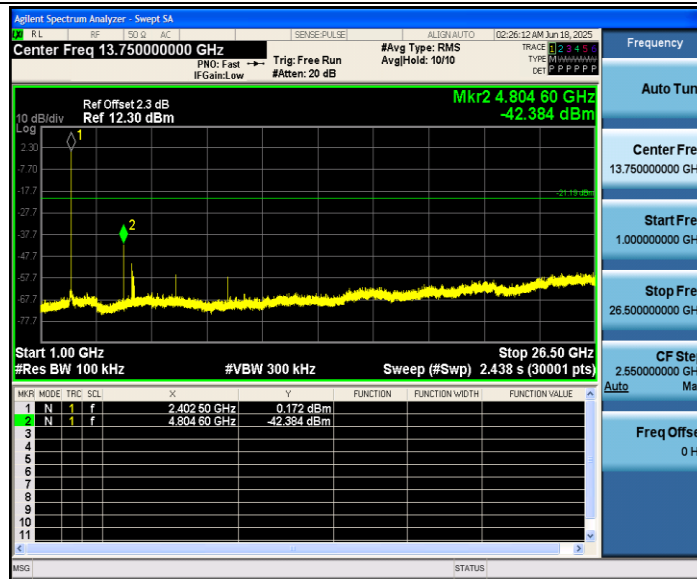
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-67.86	≤-21.19	PASS
			1000~26500	-1.19	-42.38	≤-21.19	PASS
		2441	Reference	-1.33	-1.33	---	PASS
			30~1000	-1.33	-68.18	≤-21.33	PASS
			1000~26500	-1.33	-44.51	≤-21.33	PASS
		2480	Reference	-1.66	-1.66	---	PASS
			30~1000	-1.66	-68.19	≤-21.66	PASS
			1000~26500	-1.66	-45.12	≤-21.66	PASS
2DH5	Ant1	2402	Reference	-5.71	-5.71	---	PASS
			30~1000	-5.71	-66.7	≤-25.71	PASS
			1000~26500	-5.71	-50.38	≤-25.71	PASS
		2441	Reference	-5.98	-5.98	---	PASS
			30~1000	-5.98	-68.13	≤-25.98	PASS
			1000~26500	-5.98	-47.88	≤-25.98	PASS
		2480	Reference	-7.61	-7.61	---	PASS
			30~1000	-7.61	-67.96	≤-27.61	PASS
			1000~26500	-7.61	-49.21	≤-27.61	PASS
3DH5	Ant1	2402	Reference	-5.28	-5.28	---	PASS
			30~1000	-5.28	-67.61	≤-25.28	PASS
			1000~26500	-5.28	-50.92	≤-25.28	PASS
		2441	Reference	-4.11	-4.11	---	PASS
			30~1000	-4.11	-67.93	≤-24.11	PASS
			1000~26500	-4.11	-50.9	≤-24.11	PASS
		2480	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-67.94	≤-24.16	PASS
			1000~26500	-4.16	-48.81	≤-24.16	PASS

Test Graphs

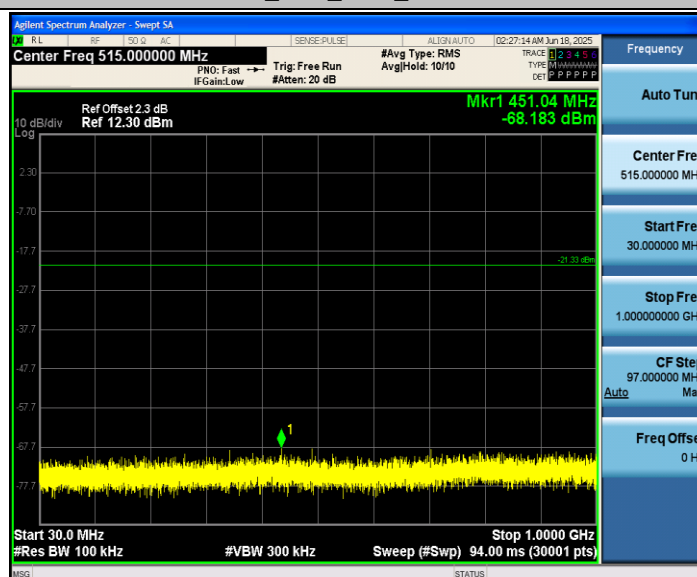




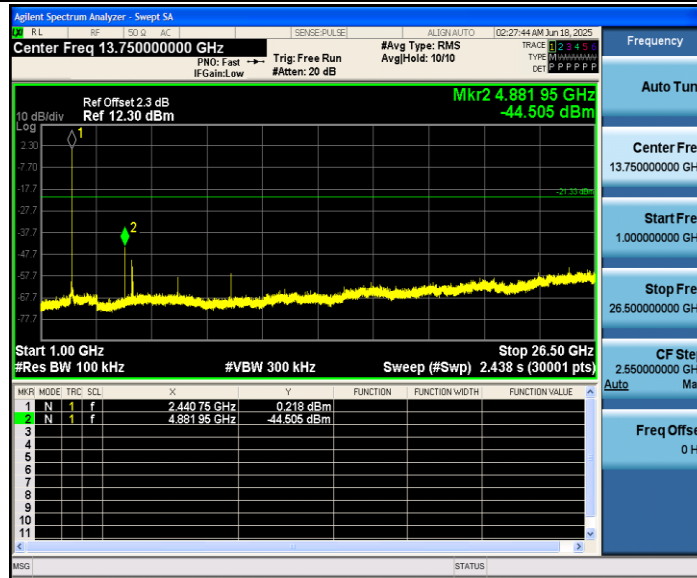
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



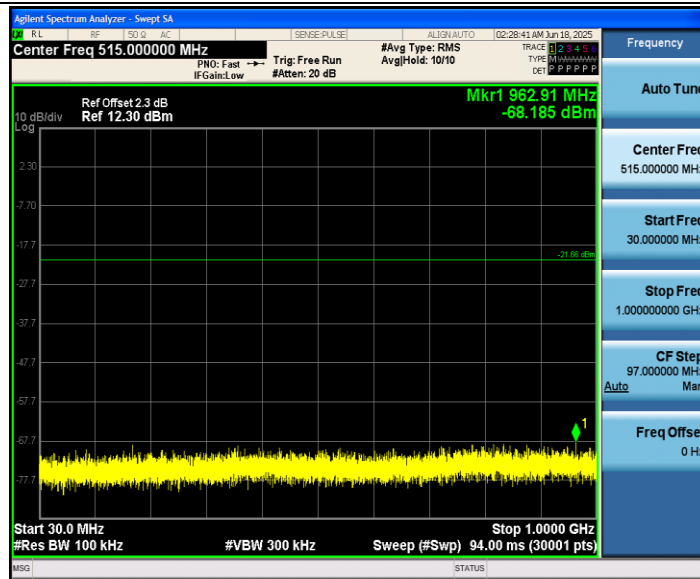
DH5_Ant1_2441_1000~26500



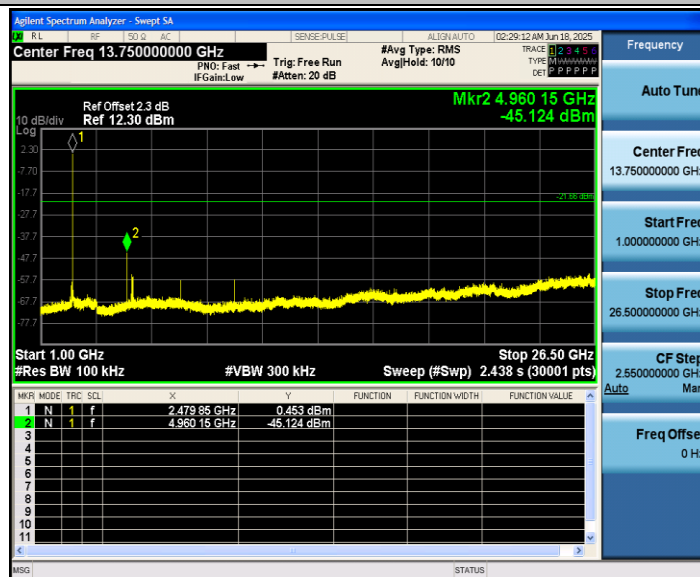
DH5_Ant1_2480_0~Reference



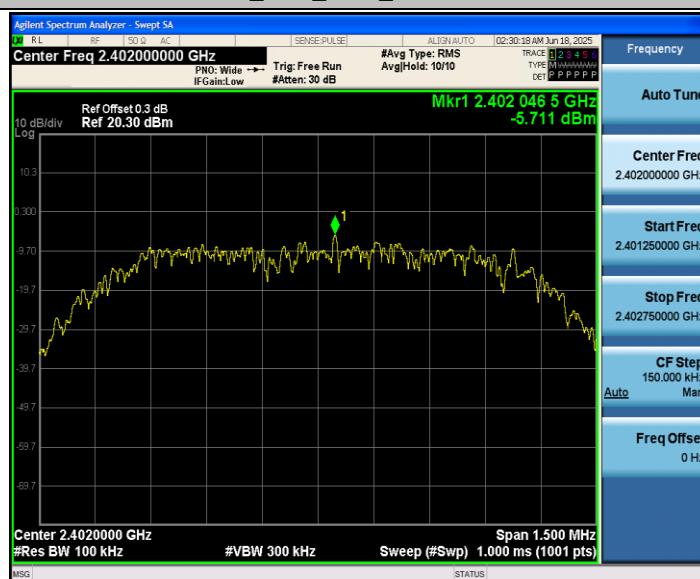
DH5_Ant1_2480_30~1000



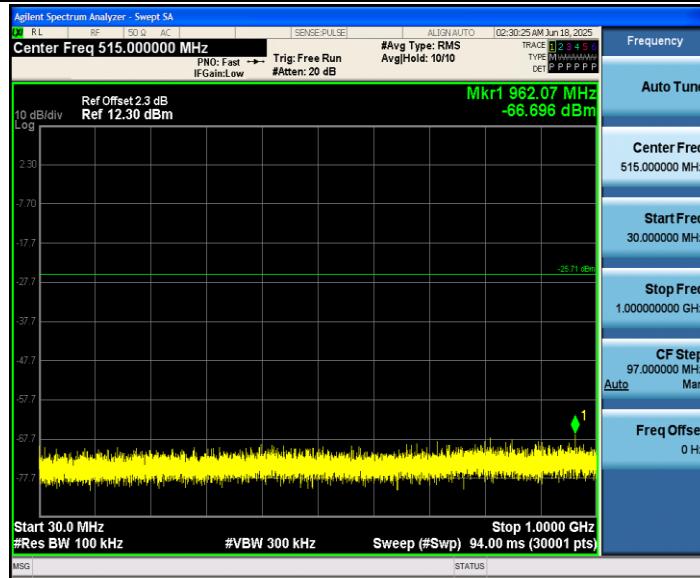
DH5_Ant1_2480_1000~26500



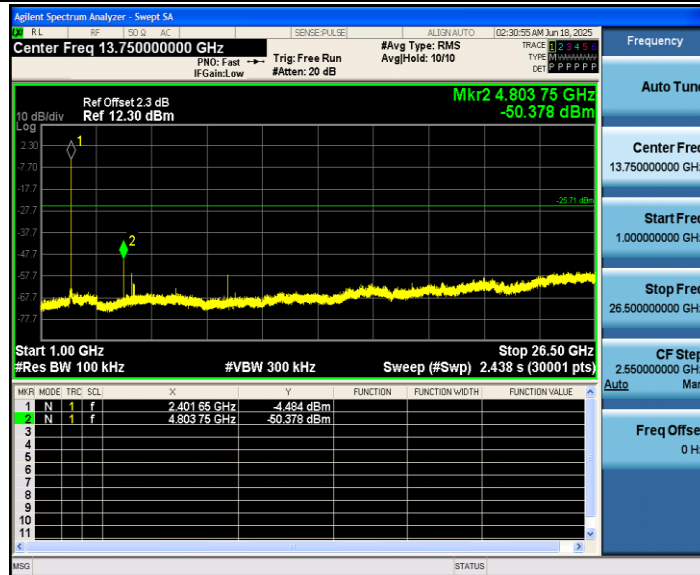
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference