

FCC Appendix RF Test Data for BT

FCC ID : 2BTTP-ZX3300

Company : Zxonic Technology, Inc.

EUT : SOUND LEVEL METER/ANALYZER

Model Number : ZX3300

Report No. : CTA25092602206

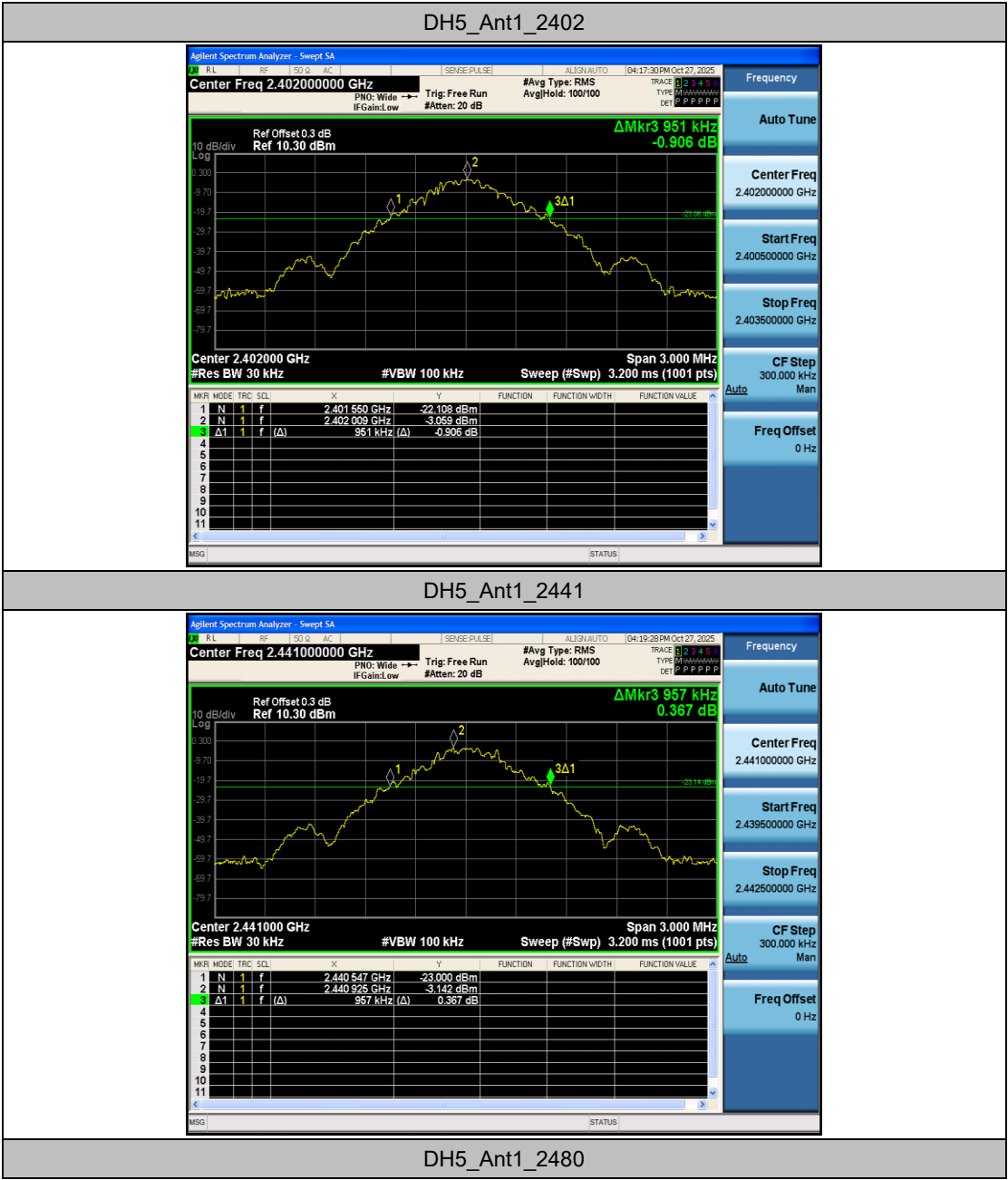
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.550	2402.501	---	---
		2441	0.957	2440.547	2441.504	---	---
		2480	0.942	2479.556	2480.498	---	---
2DH5	Ant1	2402	1.320	2401.349	2402.669	---	---
		2441	1.281	2440.385	2441.666	---	---
		2480	1.287	2479.382	2480.669	---	---
3DH5	Ant1	2402	1.308	2401.364	2402.672	---	---
		2441	1.320	2440.352	2441.672	---	---
		2480	1.317	2479.355	2480.672	---	---

Test Graphs





2DHS_Ant1_2402



2DHS_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

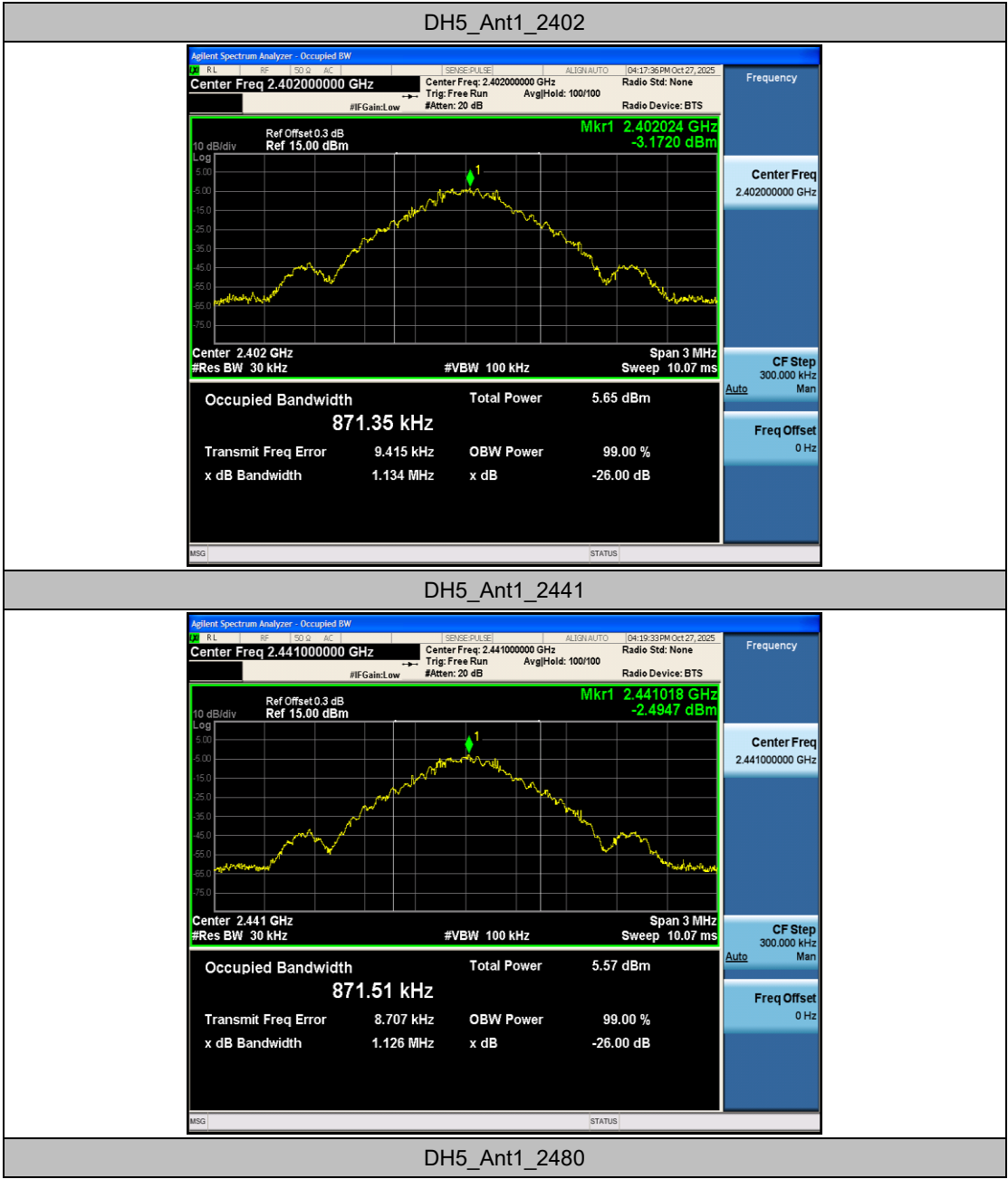


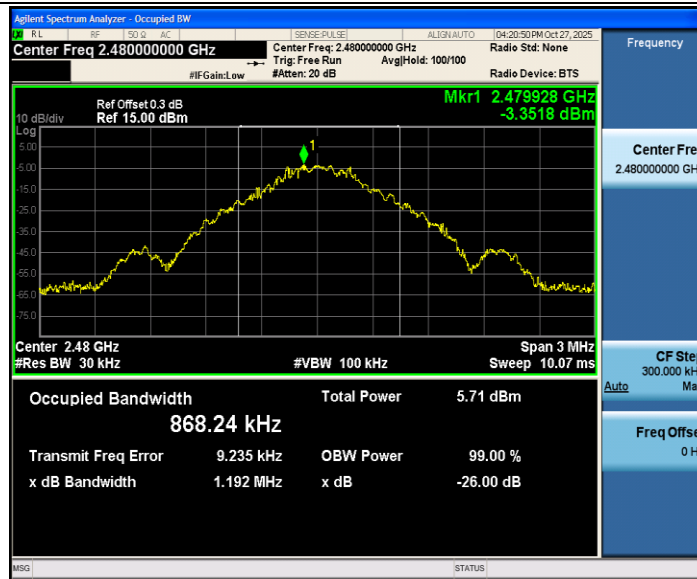
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87135	2401.5737	2402.4451	---	---
		2441	0.87151	2440.5730	2441.4445	---	---
		2480	0.86824	2479.5751	2480.4434	---	---
2DH5	Ant1	2402	1.1916	2401.4171	2402.6087	---	---
		2441	1.1910	2440.4190	2441.6100	---	---
		2480	1.1924	2479.4199	2480.6123	---	---
3DH5	Ant1	2402	1.1938	2401.4174	2402.6112	---	---
		2441	1.1896	2440.4213	2441.6109	---	---
		2480	1.1920	2479.4205	2480.6125	---	---

Test Graphs

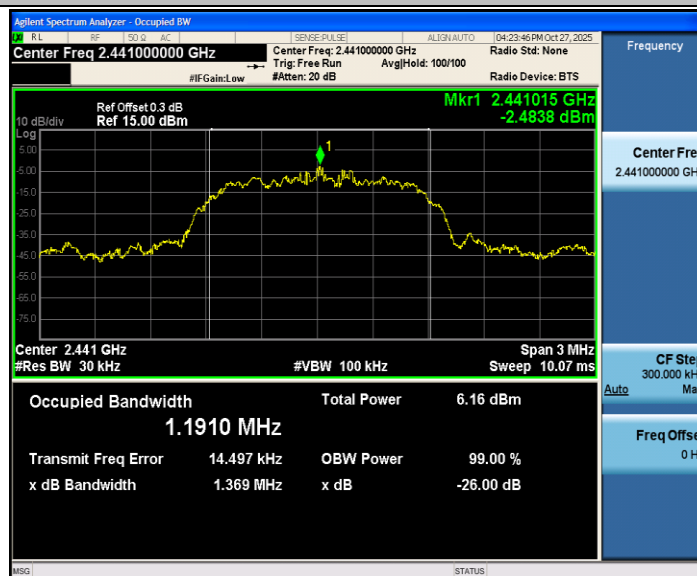




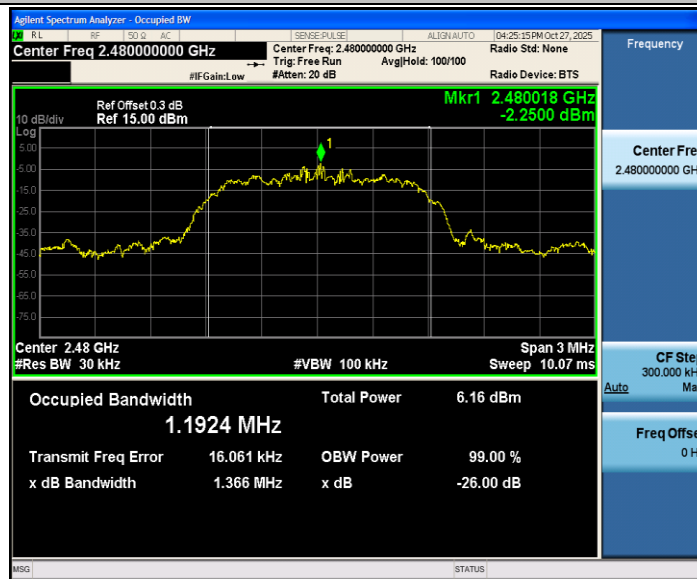
2DH5_Ant1_2402



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	-0.29	≤20.97	PASS
		2441	-0.26	≤20.97	PASS
		2480	-0.19	≤20.97	PASS
2DH5	Ant1	2402	2.67	≤20.97	PASS
		2441	2.57	≤20.97	PASS
		2480	2.64	≤20.97	PASS
3DH5	Ant1	2402	2.79	≤20.97	PASS
		2441	2.60	≤20.97	PASS
		2480	2.62	≤20.97	PASS

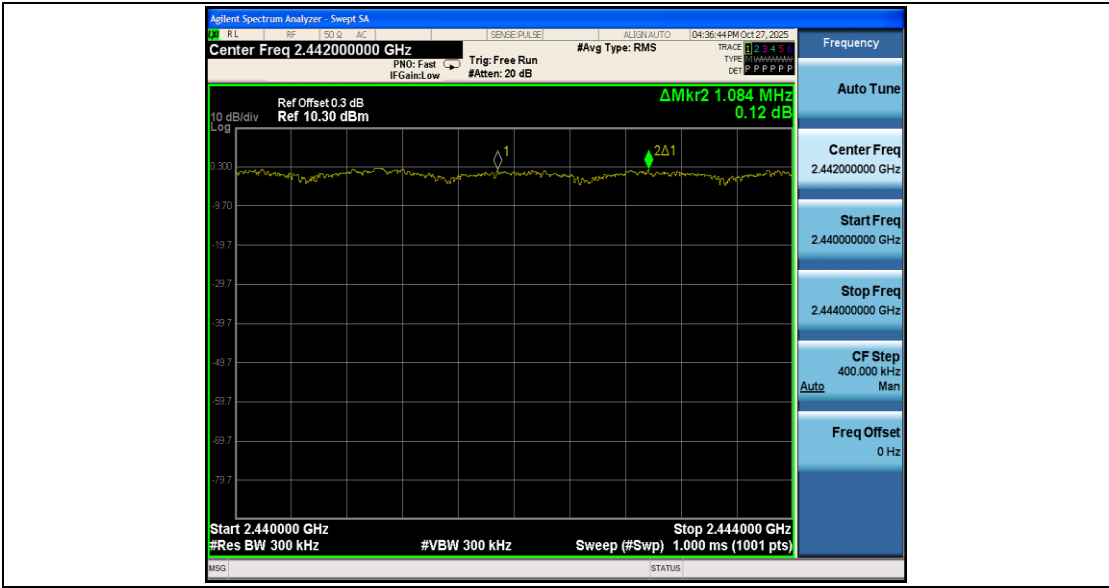
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.008	≥ 0.957	PASS
2DH5	Ant1	Hop	1.148	≥ 0.880	PASS
3DH5	Ant1	Hop	1.084	≥ 0.880	PASS

Test Graphs



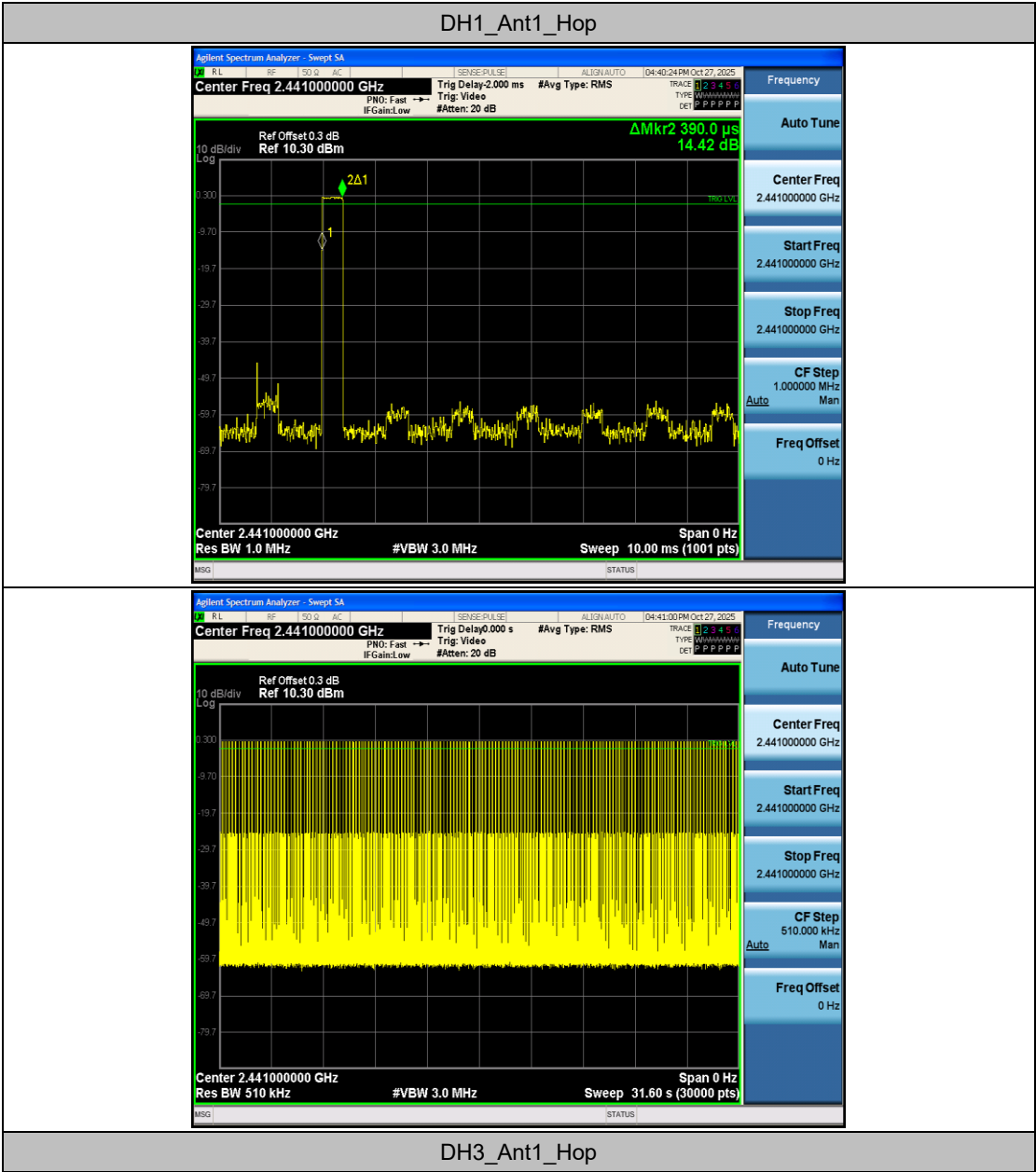


Appendix E: Time of occupancy

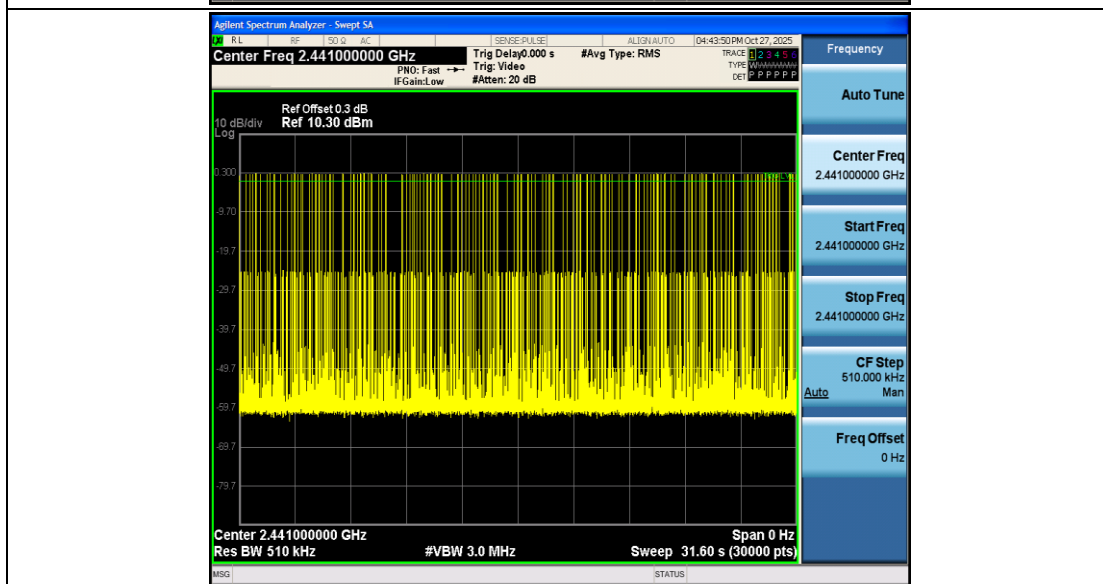
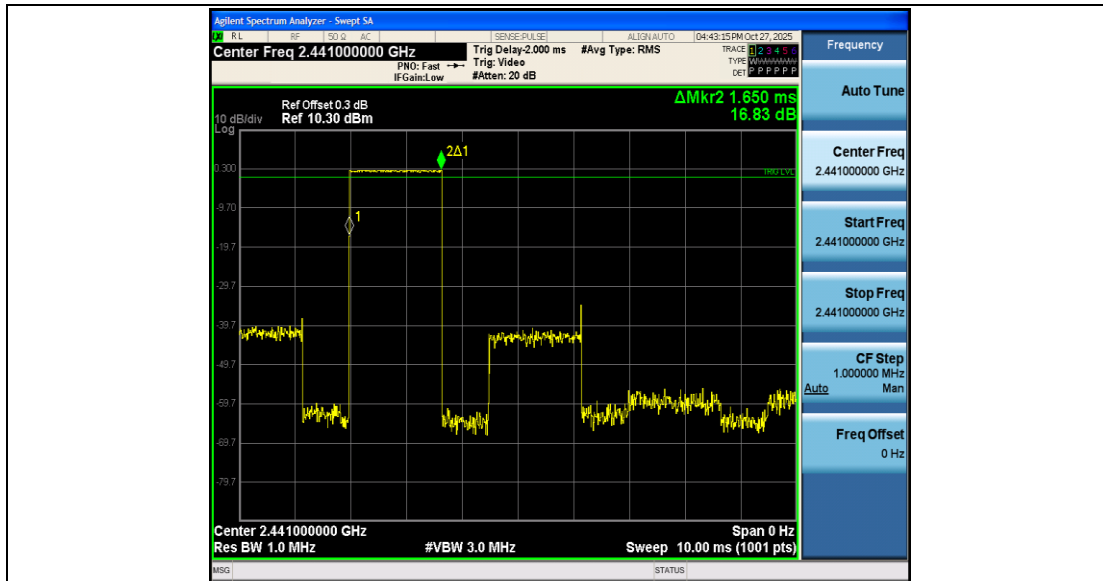
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	315	0.123	≤0.4	PASS
DH3	Ant1	Hop	1.650	168	0.277	≤0.4	PASS
DH5	Ant1	Hop	2.900	109	0.316	≤0.4	PASS
2DH1	Ant1	Hop	0.390	315	0.123	≤0.4	PASS
2DH3	Ant1	Hop	1.640	157	0.257	≤0.4	PASS
2DH5	Ant1	Hop	2.890	107	0.309	≤0.4	PASS
3DH1	Ant1	Hop	0.390	317	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	156	0.256	≤0.4	PASS
3DH5	Ant1	Hop	2.900	103	0.299	≤0.4	PASS

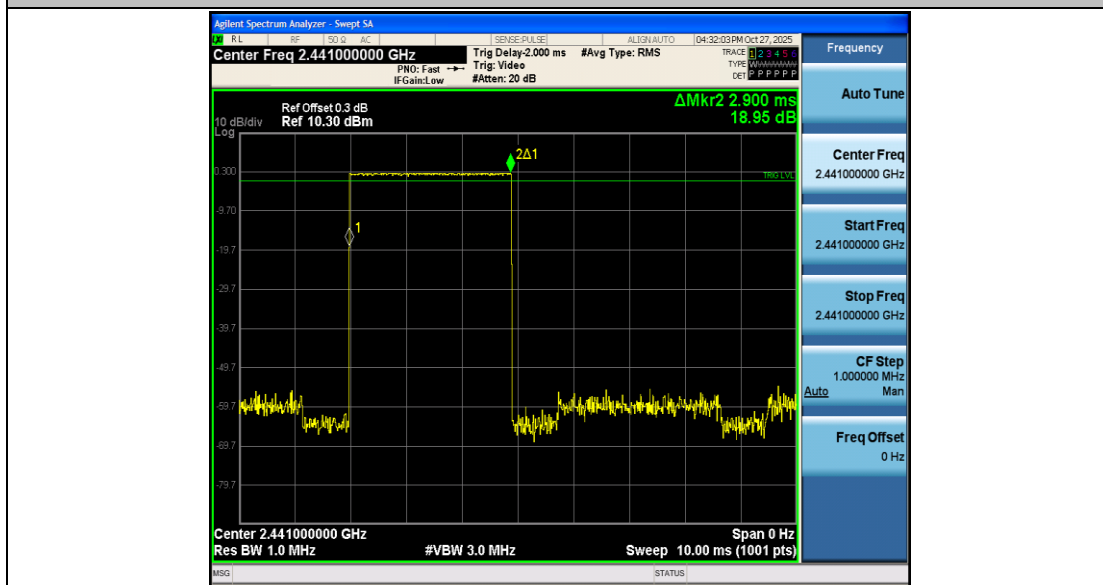
Test Graphs

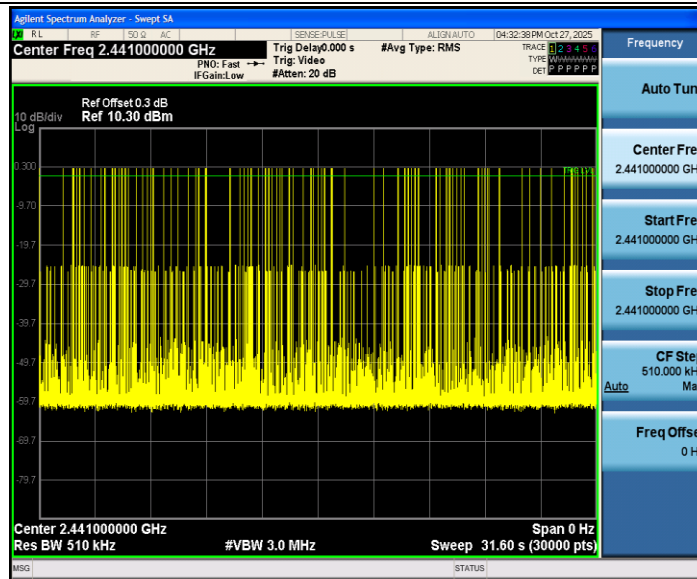


DH3_Ant1_Hop

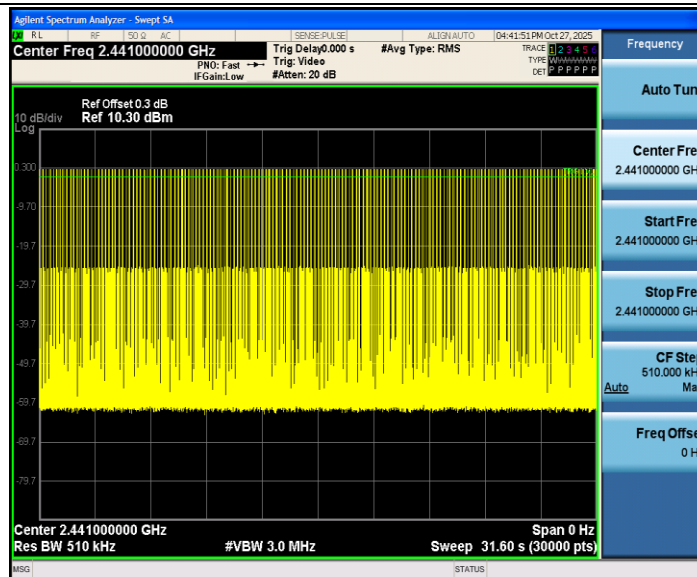
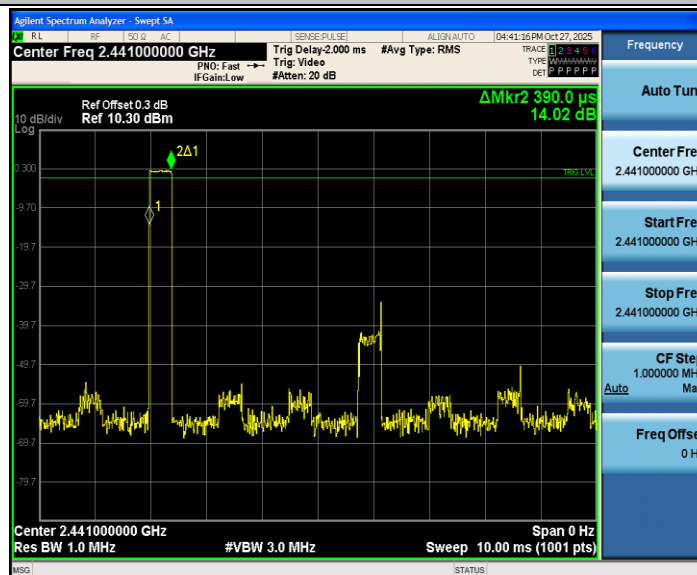


DH5_Ant1_Hop

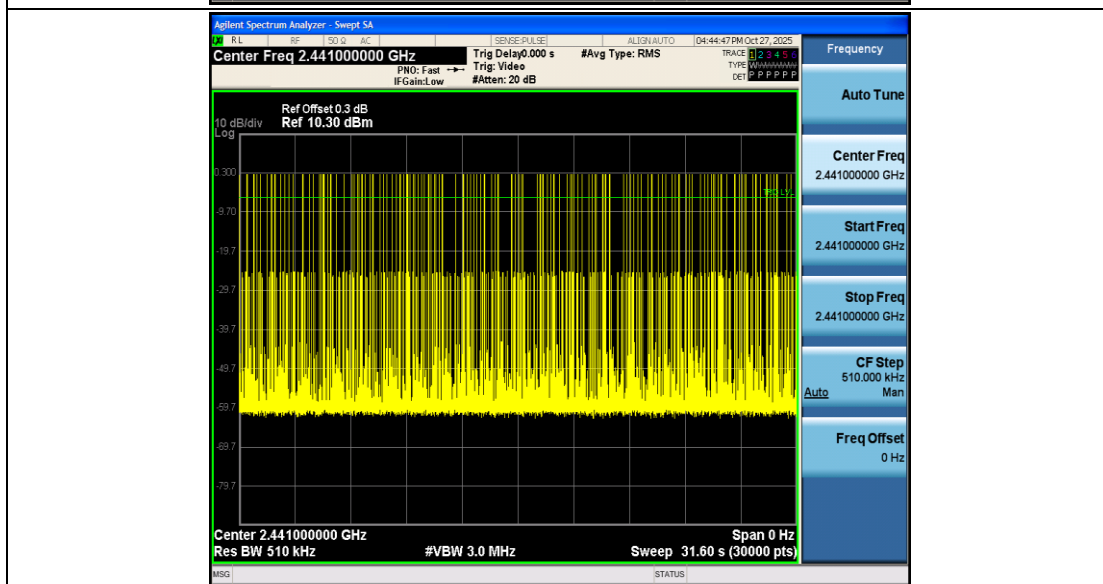
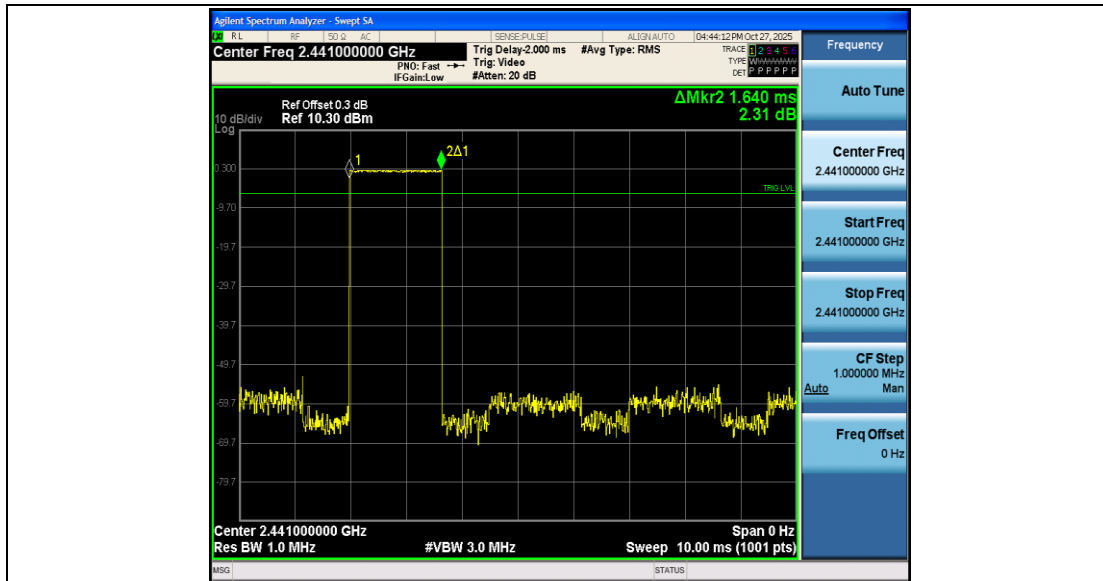




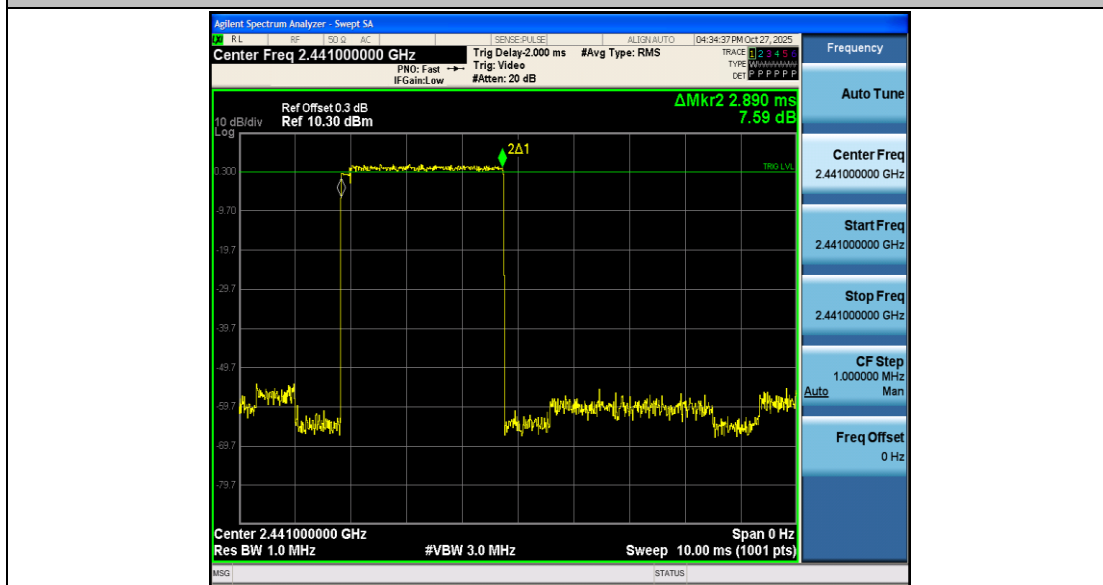
2DH1_Ant1_Hop

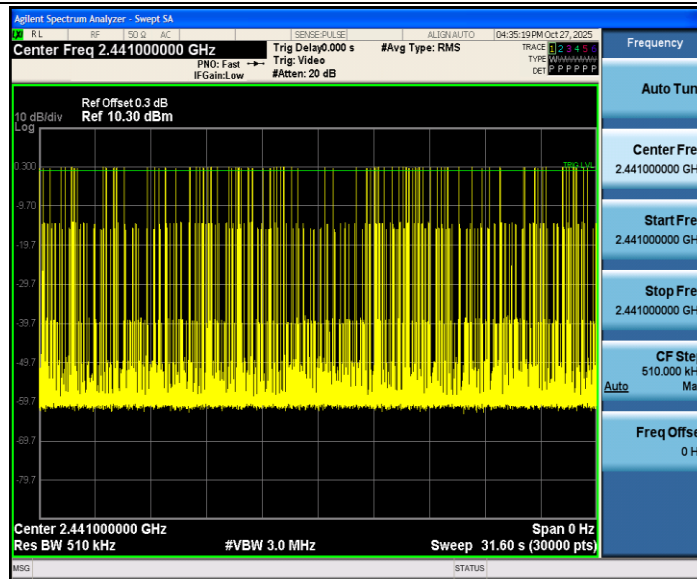


2DH3_Ant1_Hop

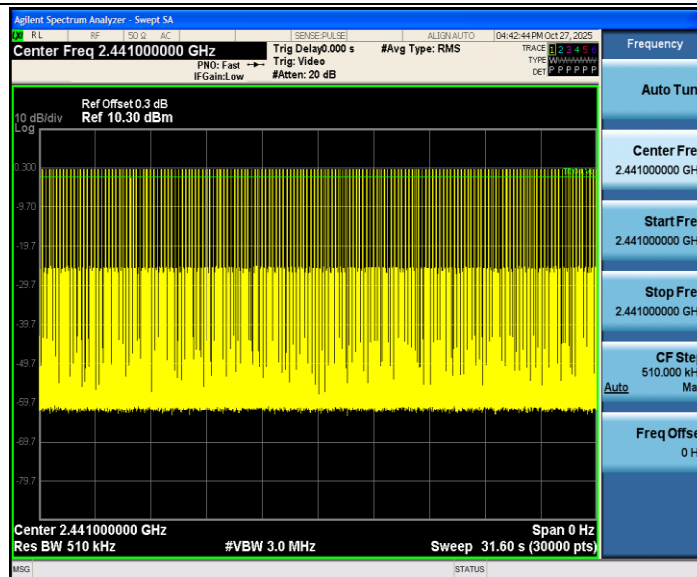
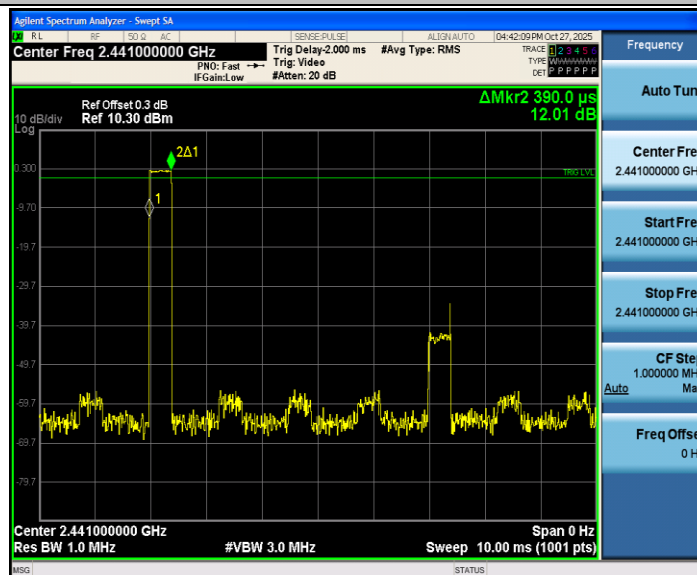


2DH5_Ant1_Hop

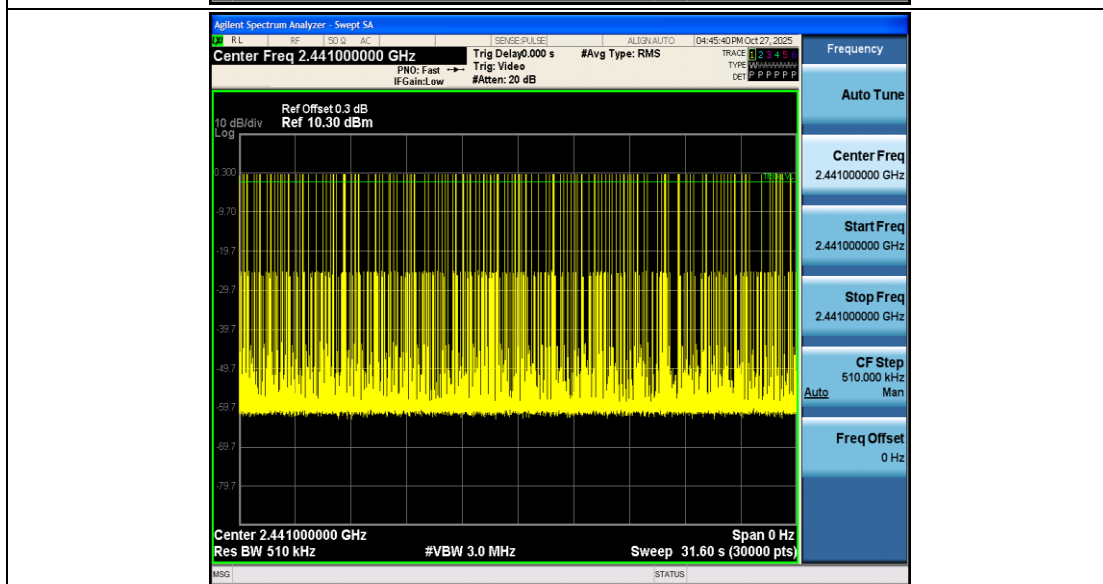
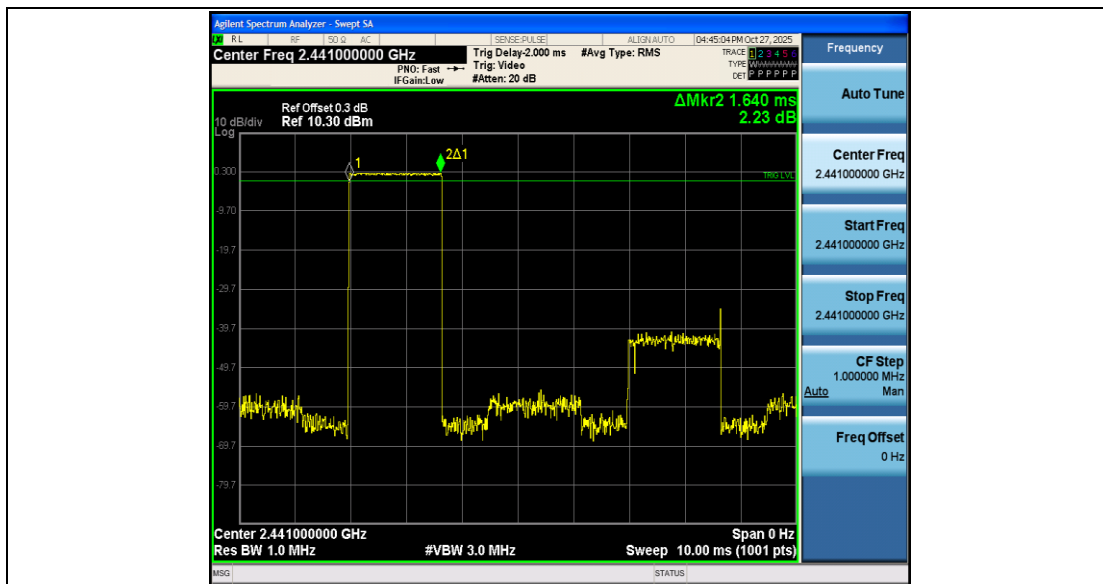




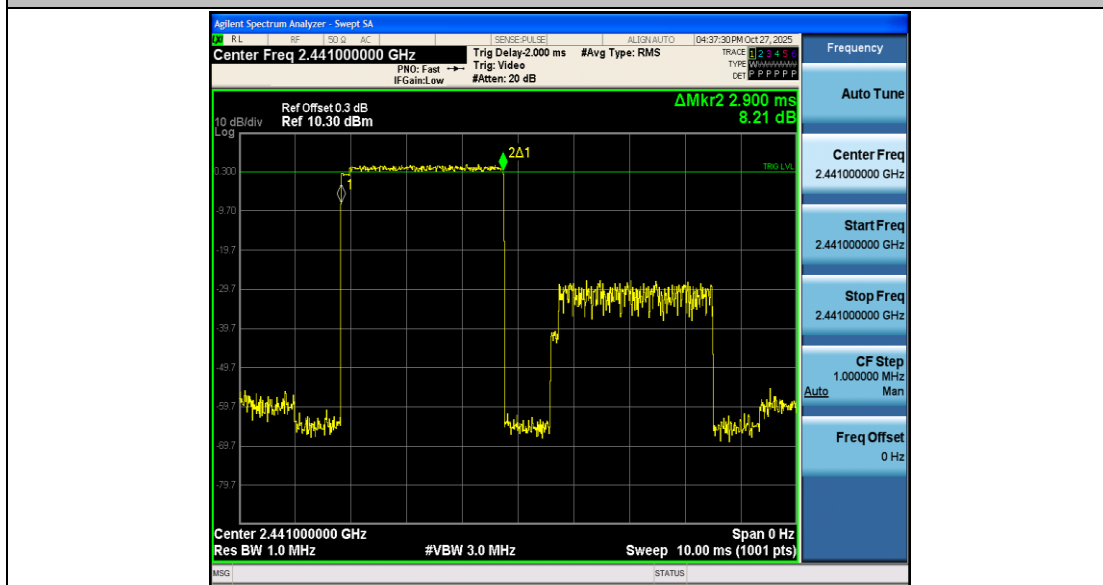
3DH1_Ant1_Hop

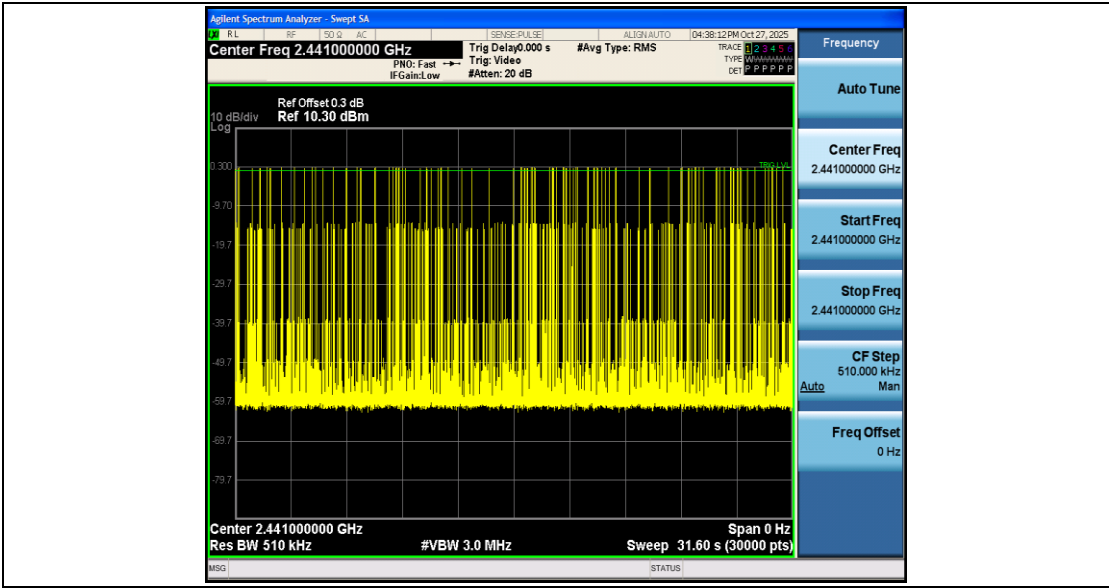


3DH3_Ant1_Hop



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



2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

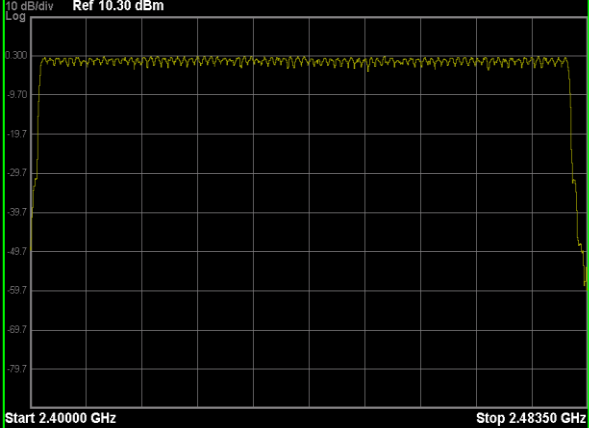
Center Freq 2.441750000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Start 2.400000 GHz
#Res BW 300 kHz

Stop 2.48350 GHz
#VBW 300 kHz
Sweep (#Swp) 1.133 ms (1001 pts)

10 dB/div
Log



Start 2.400000 GHz
#Res BW 300 kHz

Stop 2.48350 GHz
#VBW 300 kHz
Sweep (#Swp) 1.133 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.441750000 GHz

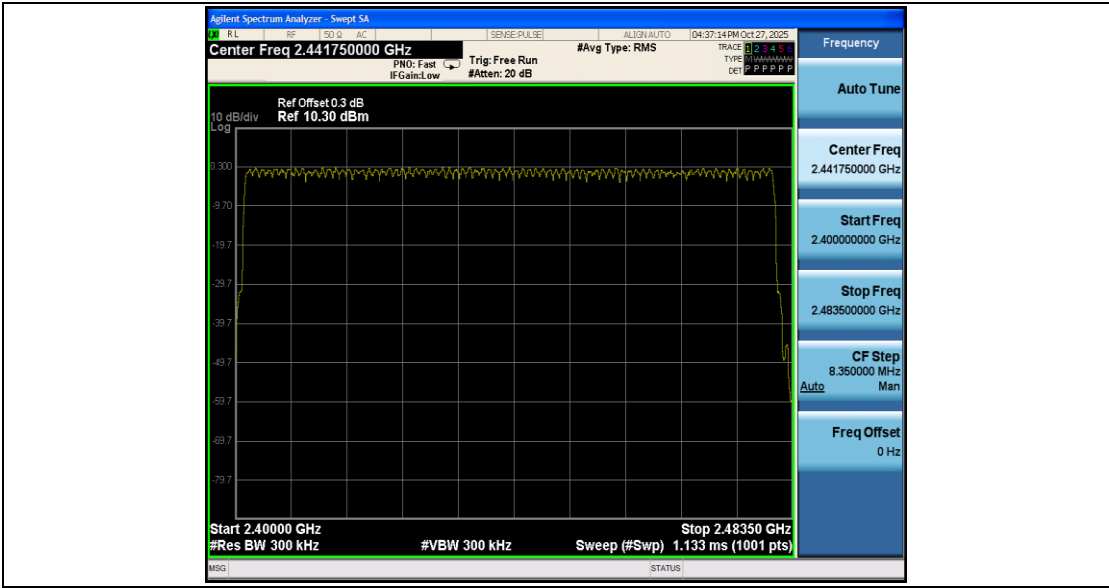
Start Freq
2.400000000 GHz

Stop Freq
2.483500000 GHz

CF Step
8.350000 MHz
Auto

Freq Offset
0 Hz

3DH5_Ant1_Hop

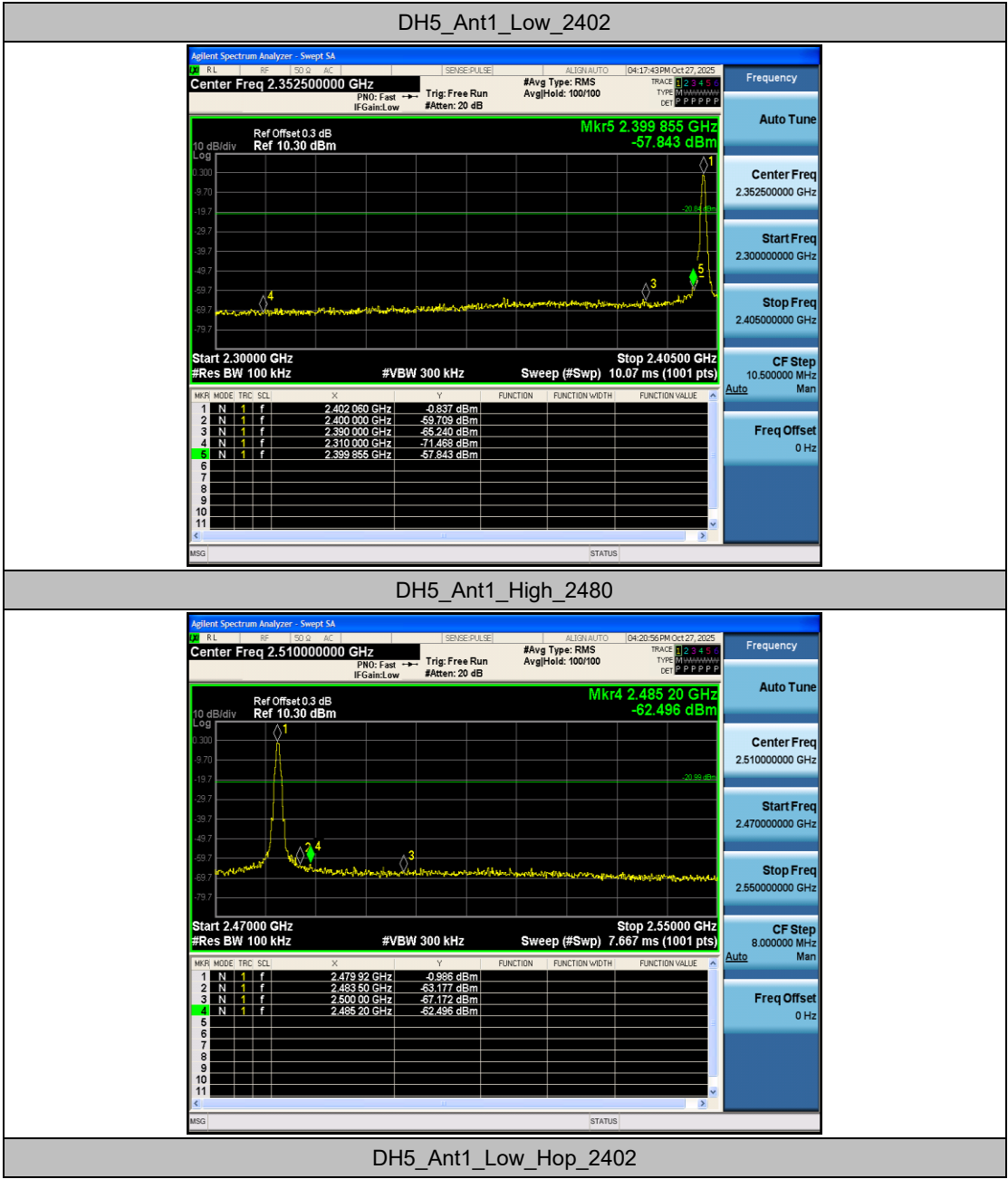


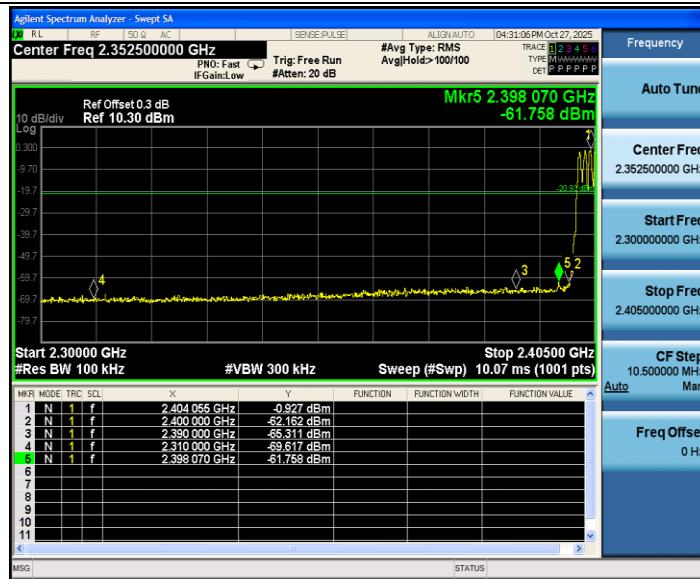
Appendix G: Band edge measurements

Test Result

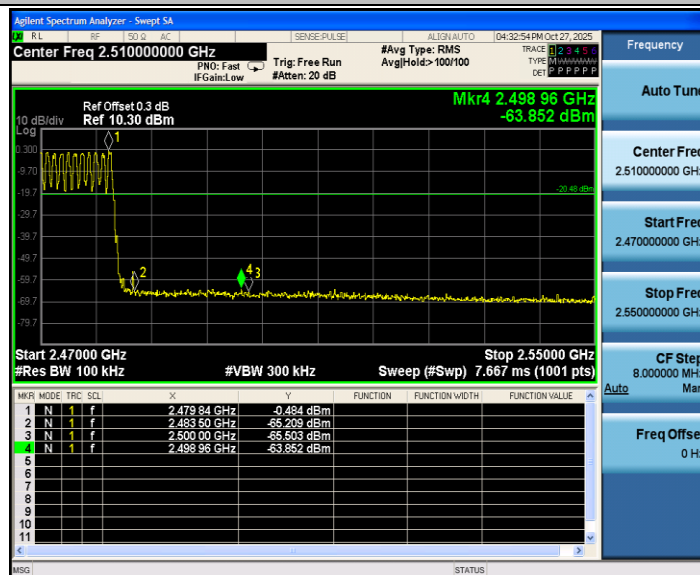
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.84	-57.84	≤-20.84	PASS
		High	2480	-0.99	-62.5	≤-20.99	PASS
		Low	Hop_2402	-0.93	-61.76	≤-20.93	PASS
		High	Hop_2480	-0.48	-63.85	≤-20.48	PASS
2DH5	Ant1	Low	2402	-0.25	-51.45	≤-20.25	PASS
		High	2480	-0.36	-59.08	≤-20.36	PASS
		Low	Hop_2402	-1.92	-52.59	≤-21.92	PASS
		High	Hop_2480	0.04	-52.64	≤-19.96	PASS
3DH5	Ant1	Low	2402	-0.51	-48.95	≤-20.51	PASS
		High	2480	-1.11	-62.35	≤-21.11	PASS
		Low	Hop_2402	-1.47	-53.27	≤-21.47	PASS
		High	Hop_2480	-0.13	-63.33	≤-20.13	PASS

Test Graphs

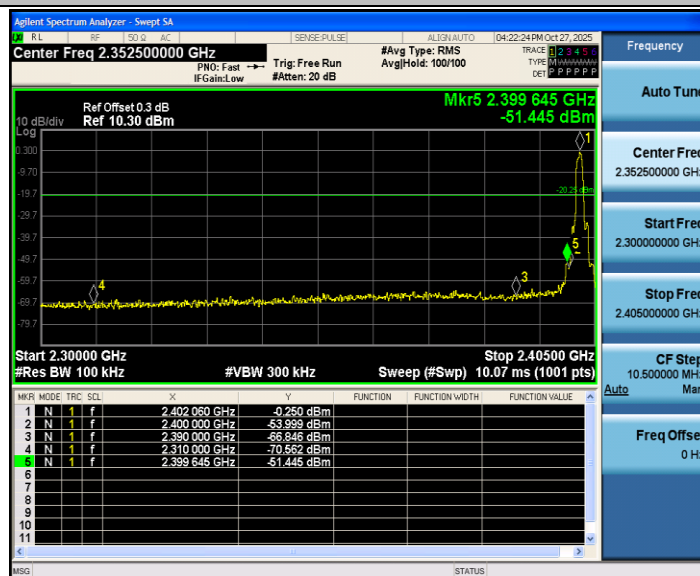




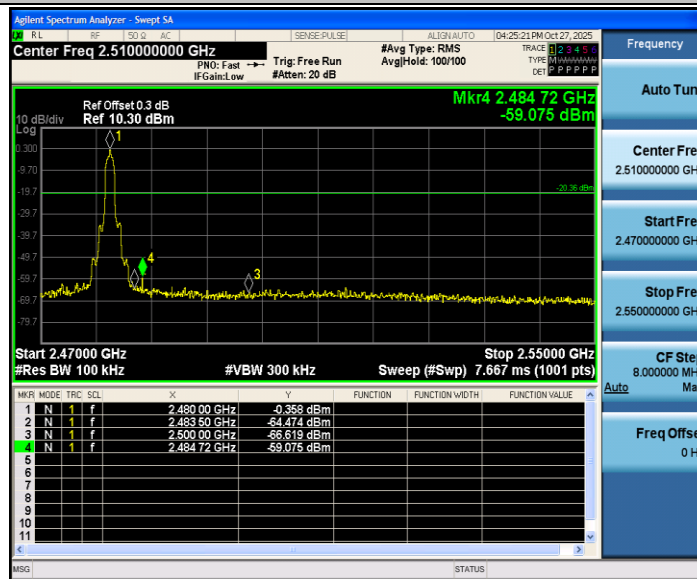
DH5_Ant1_High_Hop_2480



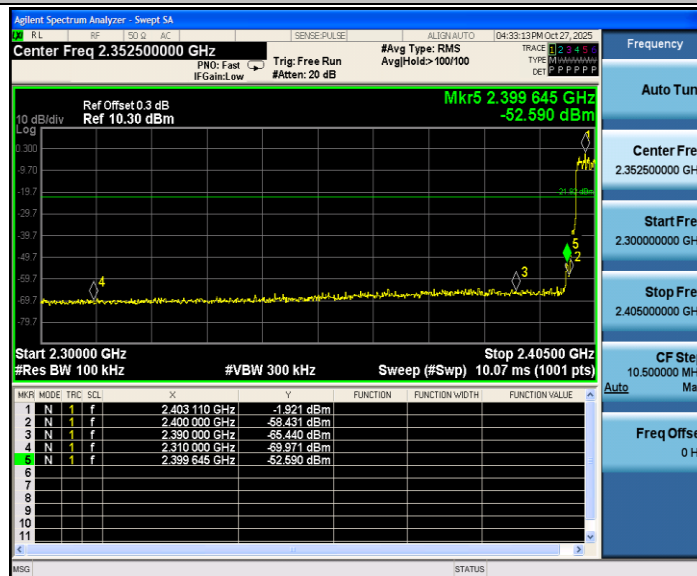
2DH5_Ant1_Low_2402



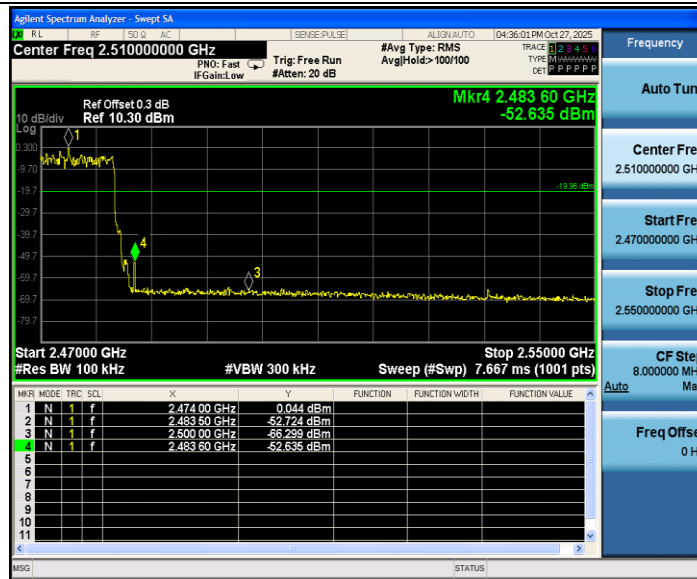
2DH5_Ant1_High_2480



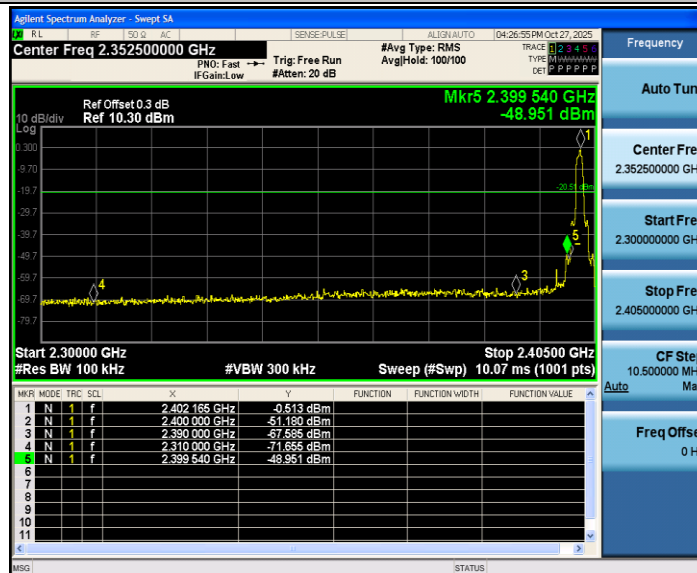
2DH5_Ant1_Low_Hop_2402



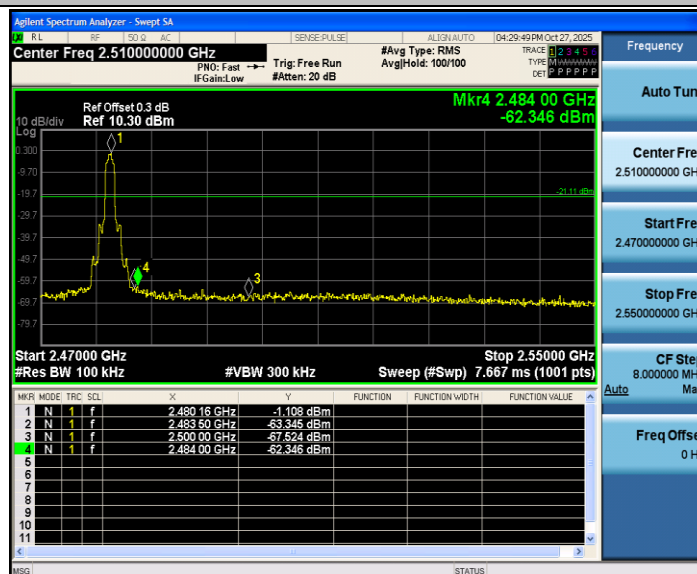
2DH5_Ant1_High_Hop_2480



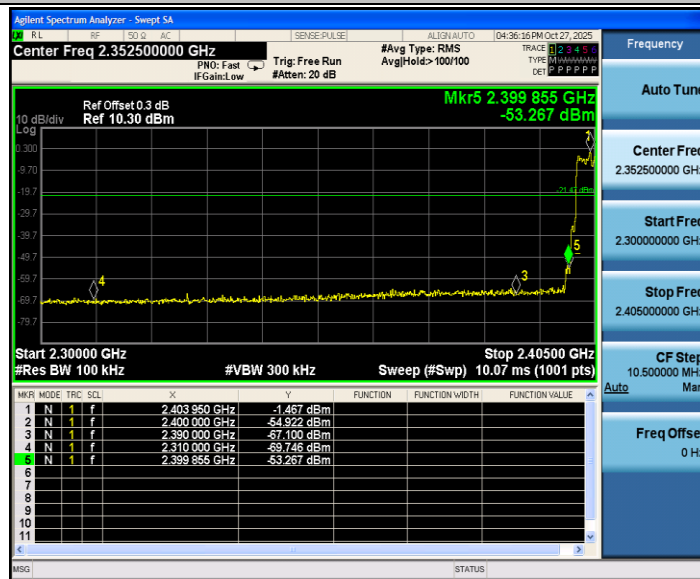
3DH5_Ant1_Low_2402



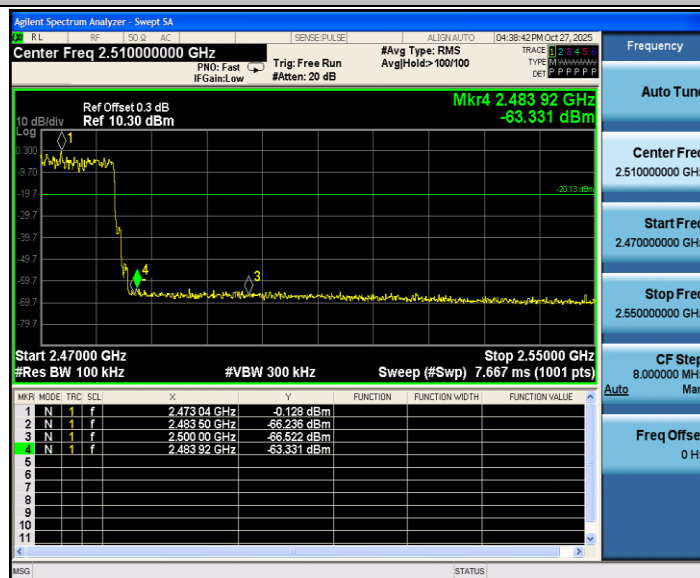
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

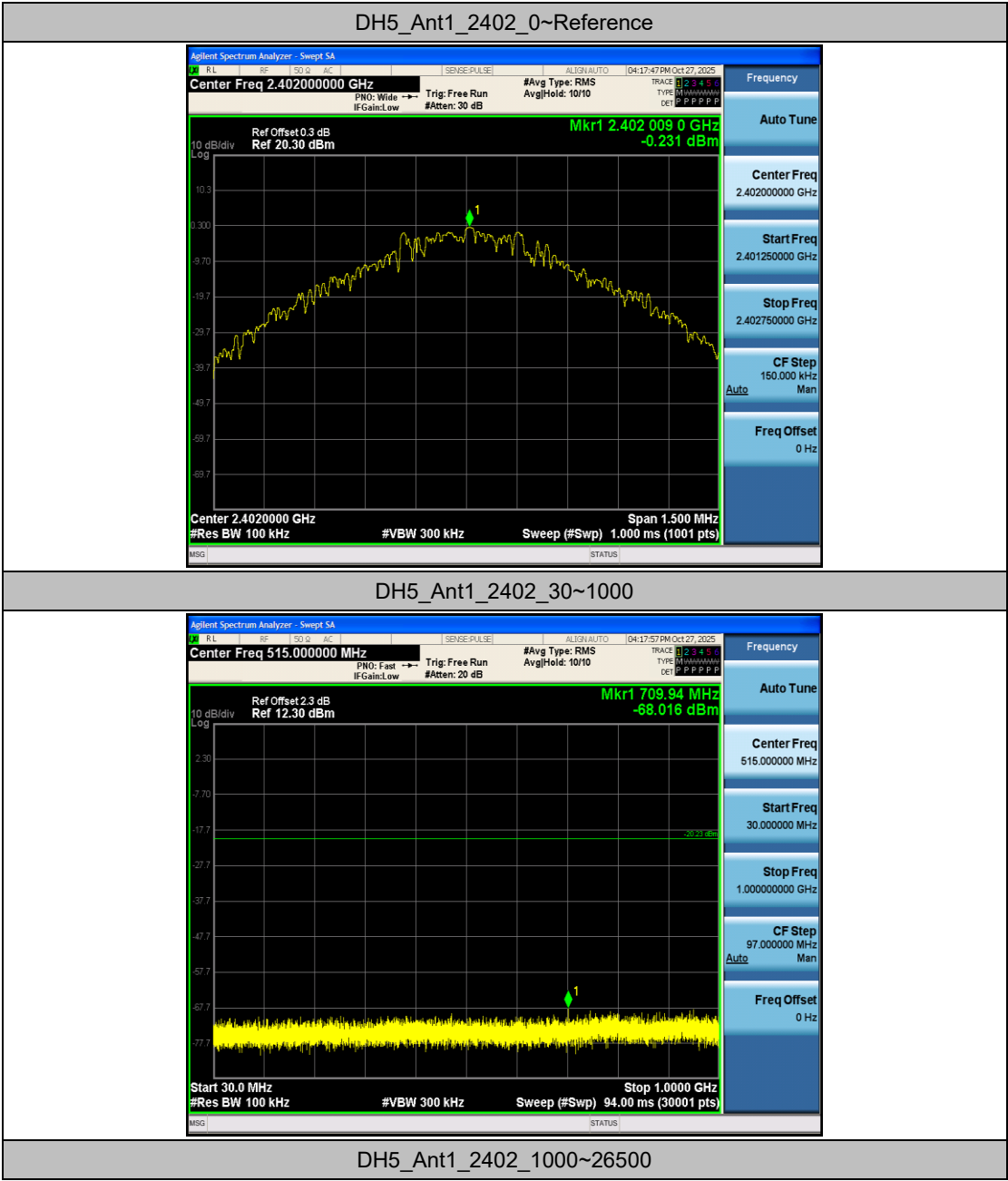


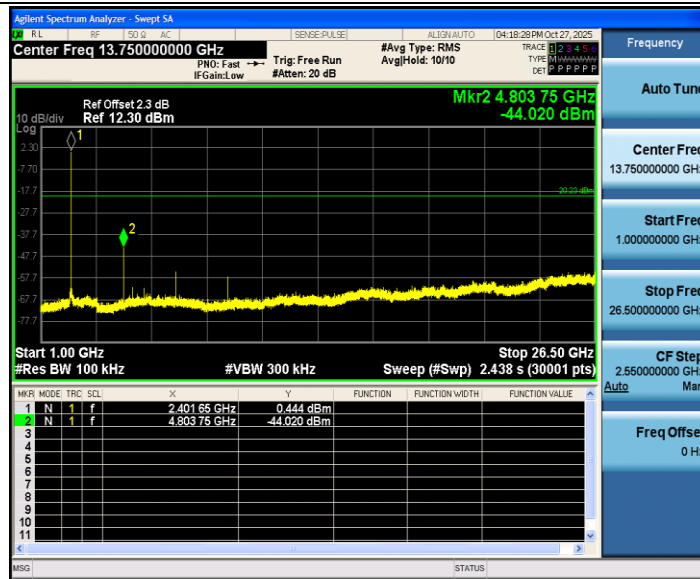
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.23	-0.23	---	PASS
			30~1000	-0.23	-68.02	≤-20.23	PASS
			1000~26500	-0.23	-44.02	≤-20.23	PASS
		2441	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-67.12	≤-21.3	PASS
			1000~26500	-1.30	-43.72	≤-21.3	PASS
		2480	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-67.91	≤-21.3	PASS
			1000~26500	-1.30	-43.99	≤-21.3	PASS
2DH5	Ant1	2402	Reference	-1.08	-1.08	---	PASS
			30~1000	-1.08	-68.29	≤-21.08	PASS
			1000~26500	-1.08	-43.96	≤-21.08	PASS
		2441	Reference	-2.66	-2.66	---	PASS
			30~1000	-2.66	-68.13	≤-22.66	PASS
			1000~26500	-2.66	-44.39	≤-22.66	PASS
		2480	Reference	-2.99	-2.99	---	PASS
			30~1000	-2.99	-68.31	≤-22.99	PASS
			1000~26500	-2.99	-46.03	≤-22.99	PASS
3DH5	Ant1	2402	Reference	-2.09	-2.09	---	PASS
			30~1000	-2.09	-68.53	≤-22.09	PASS
			1000~26500	-2.09	-40.95	≤-22.09	PASS
		2441	Reference	-2.53	-2.53	---	PASS
			30~1000	-2.53	-31.32	≤-22.53	PASS
			1000~26500	-2.53	-43.26	≤-22.53	PASS
		2480	Reference	-0.11	-0.11	---	PASS
			30~1000	-0.11	-68.39	≤-20.11	PASS
			1000~26500	-0.11	-46.28	≤-20.11	PASS

Test Graphs

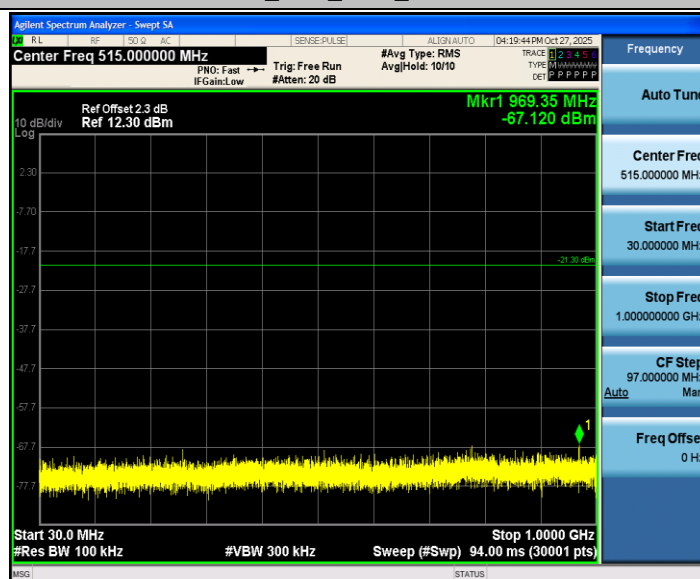




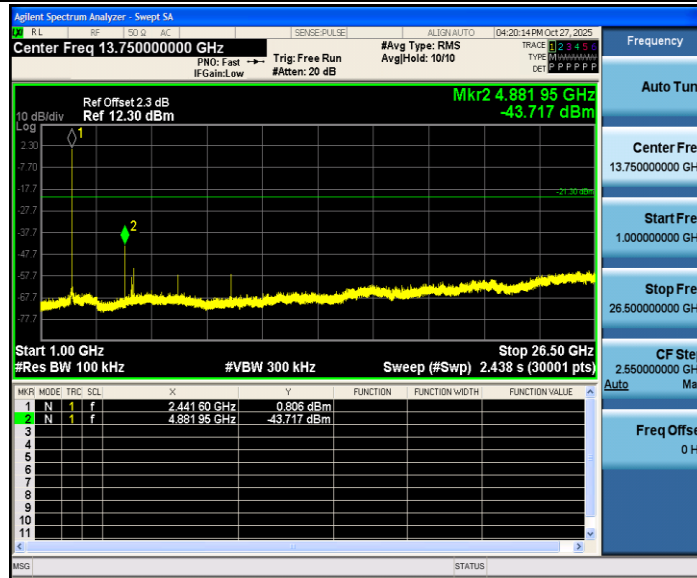
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



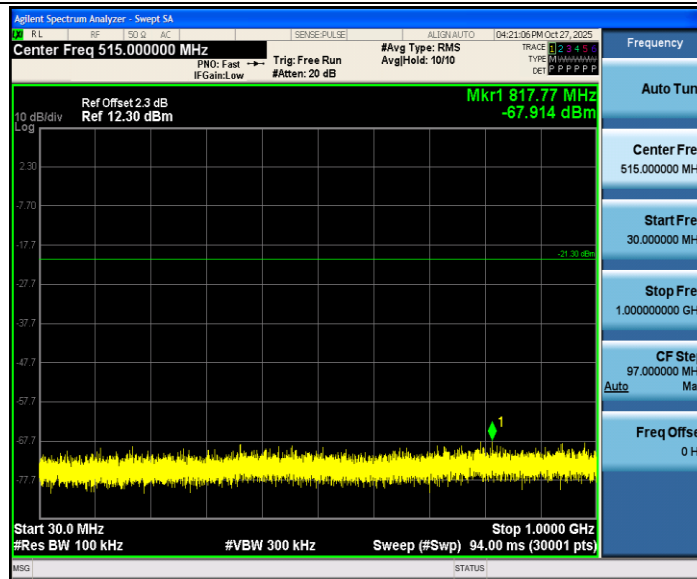
DH5_Ant1_2441_1000~26500



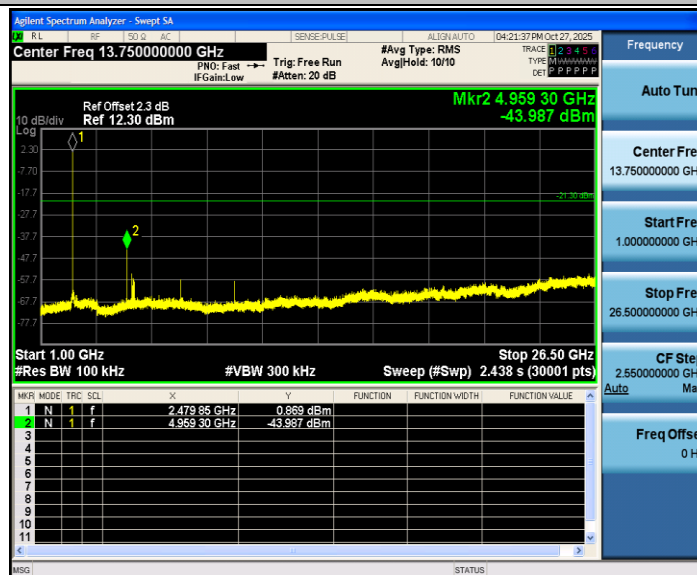
DH5_Ant1_2480_0~Reference



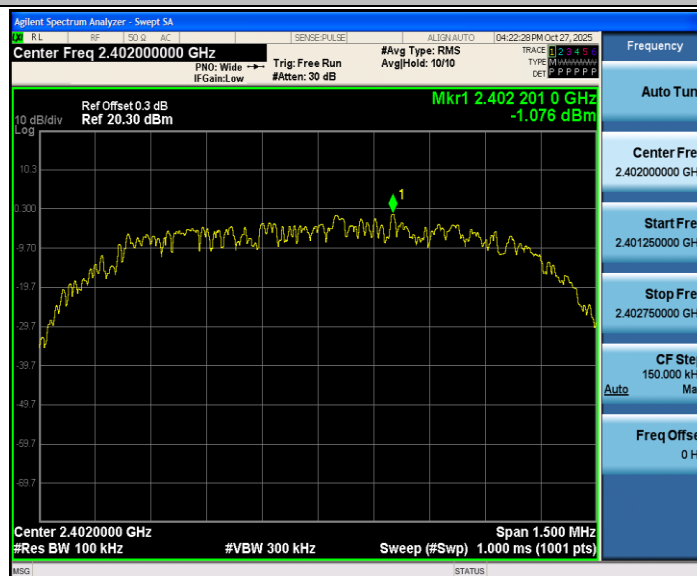
DH5_Ant1_2480_30~1000



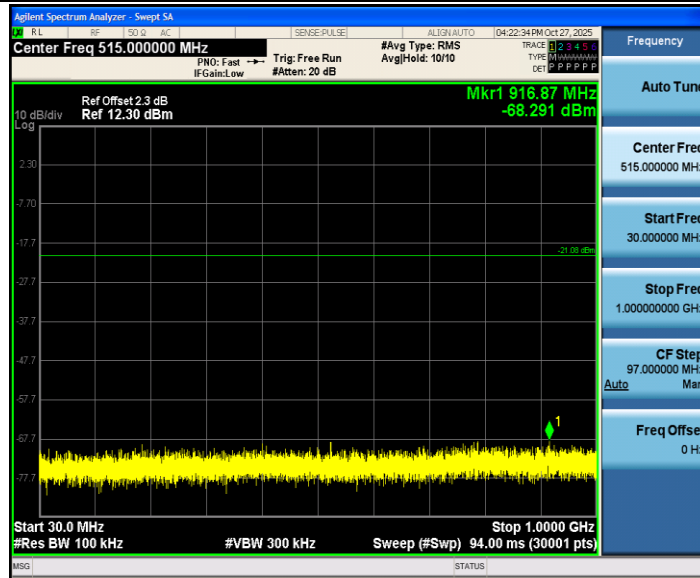
DH5_Ant1_2480_1000~26500



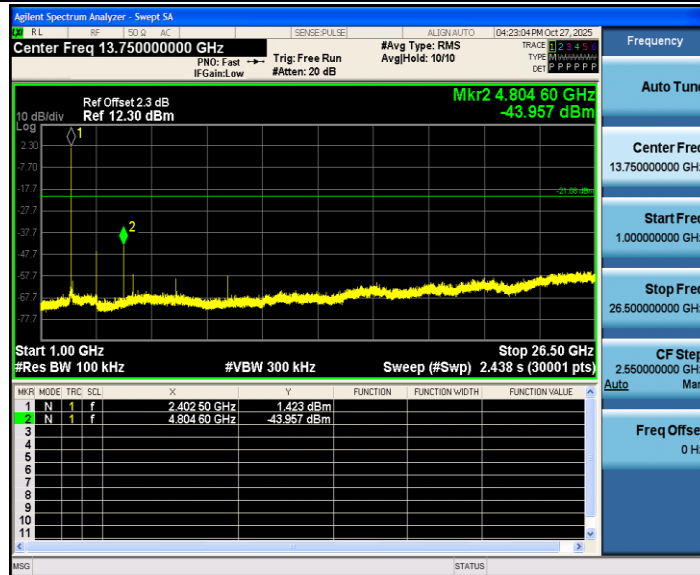
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference