

FCC Appendix RF Test Data for BT

FCC ID : 2A9V8-CORE30

Company : CZUR TECH CO., LTD

EUT : Smart Work Station

Model Number : StarryHub Core30

Report No. : CTA25111704302

Reviewed By : Eric Wang

Appendix RF Test Data for BT Module 1

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	2401.541	2402.495	---	---
		2441	0.960	2440.544	2441.504	---	---
		2480	0.957	2479.547	2480.504	---	---
2DH5	Ant1	2402	1.284	2401.379	2402.663	---	---
		2441	1.338	2440.340	2441.678	---	---
		2480	1.290	2479.379	2480.669	---	---
3DH5	Ant1	2402	1.308	2401.355	2402.663	---	---
		2441	1.278	2440.382	2441.660	---	---
		2480	1.332	2479.346	2480.678	---	---

DH5_Ant1_2402

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.40200000 GHz

Ref Offset 0.5 dB
Ref 10.50 dBm

Trig: Free Run
#Att: 20 dB

#Avg Type: RMS
AvgHold: 100/100

Span 3.000 MHz
#Res BW 30 kHz
#VBW 100 kHz
Sweep (#Swp) 3.200 ms (1001 pts)

ΔMkr3 954 kHz
0.871 dB

MKR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401541 GHz	-22.871 dBm			
2	N	1	f	2.401992 GHz	-2.931 dBm			
3	Δ	1	f (Δ)	954 kHz (Δ)	0.871 dB			

DH5_Ant1_2441

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Ref Offset 0.5 dB
Ref 10.50 dBm

Trig: Free Run
#Att: 20 dB

#Avg Type: RMS
AvgHold: 100/100

Span 3.000 MHz
#Res BW 30 kHz
#VBW 100 kHz
Sweep (#Swp) 3.200 ms (1001 pts)

ΔMkr3 960 kHz
-0.106 dB

MKR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440544 GHz	-22.734 dBm			
2	N	1	f	2.440919 GHz	-2.987 dBm			
3	Δ	1	f (Δ)	960 kHz (Δ)	-0.106 dB			



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



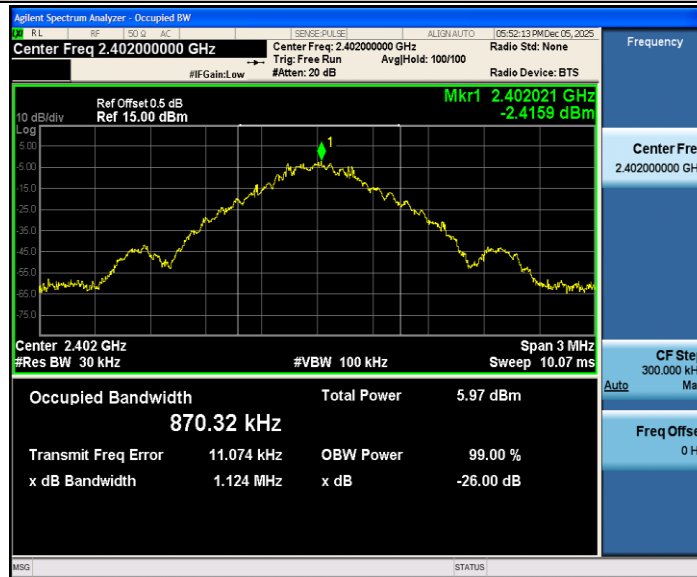
Appendix B: Occupied Channel Bandwidth

Test Result

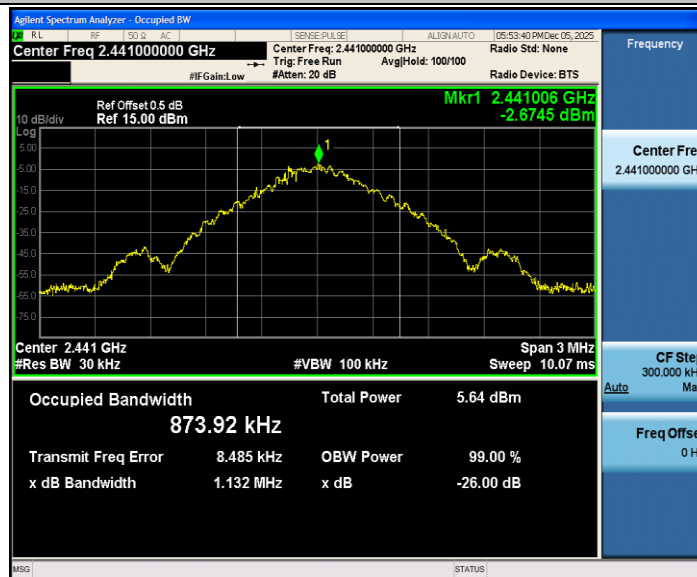
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87032	2401.5759	2402.4462	---	---
		2441	0.87392	2440.5715	2441.4454	---	---
		2480	0.86112	2479.5778	2480.4389	---	---
2DH5	Ant1	2402	1.1873	2401.4171	2402.6044	---	---
		2441	1.1865	2440.4168	2441.6033	---	---
		2480	1.1837	2479.4189	2480.6026	---	---
3DH5	Ant1	2402	1.1880	2401.4161	2402.6041	---	---
		2441	1.1844	2440.4190	2441.6034	---	---
		2480	1.1889	2479.4172	2480.6061	---	---

Test Graphs

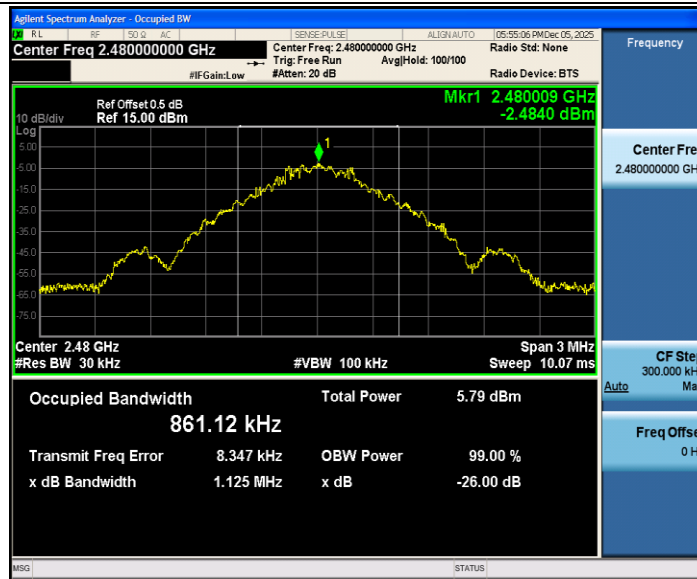
DH5_Ant1_2402



DH5_Ant1_2441



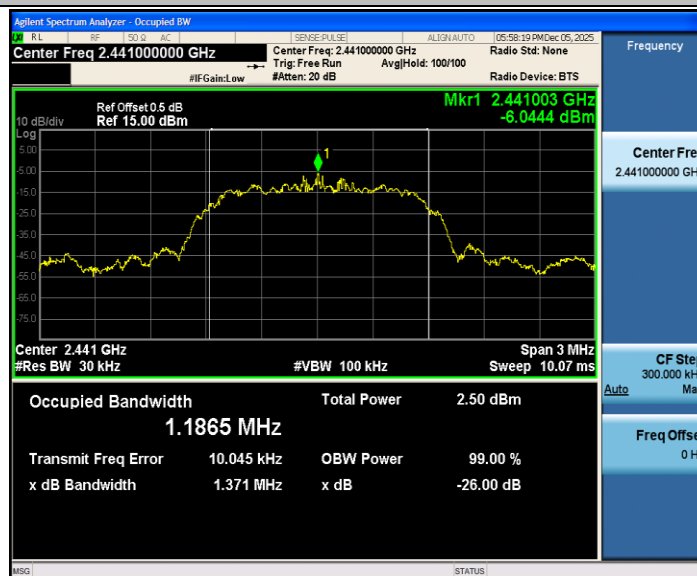
DH5_Ant1_2480



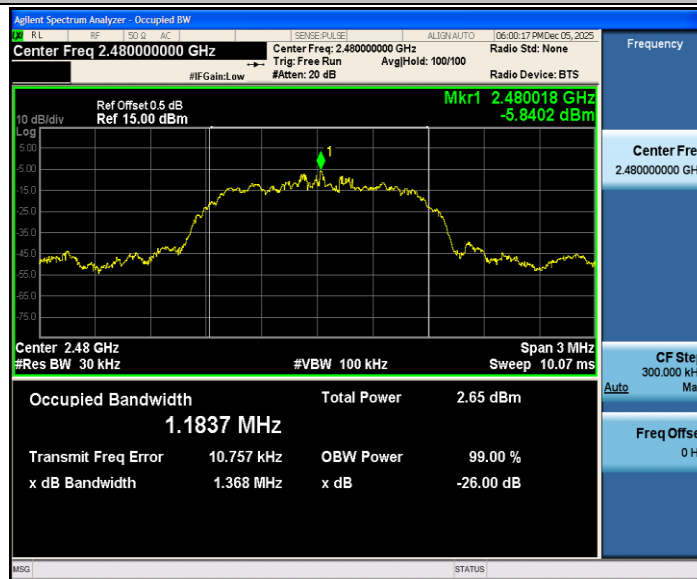
2DH5_Ant1_2402



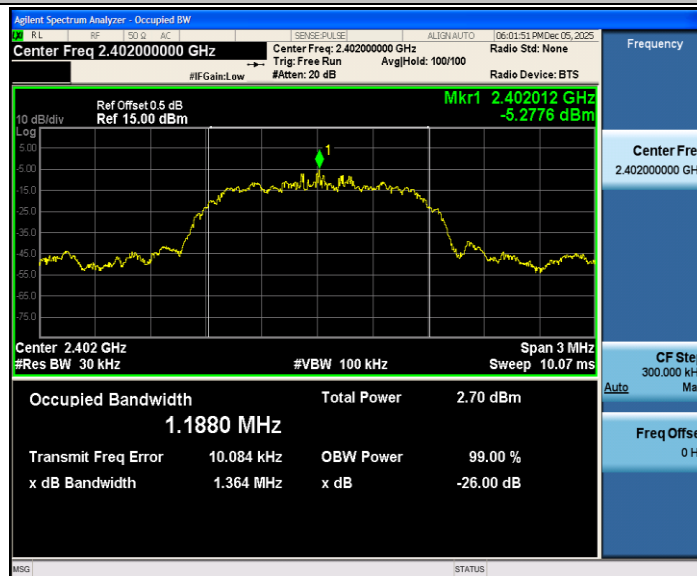
2DH5_Ant1_2441



2DH5_Ant1_2480



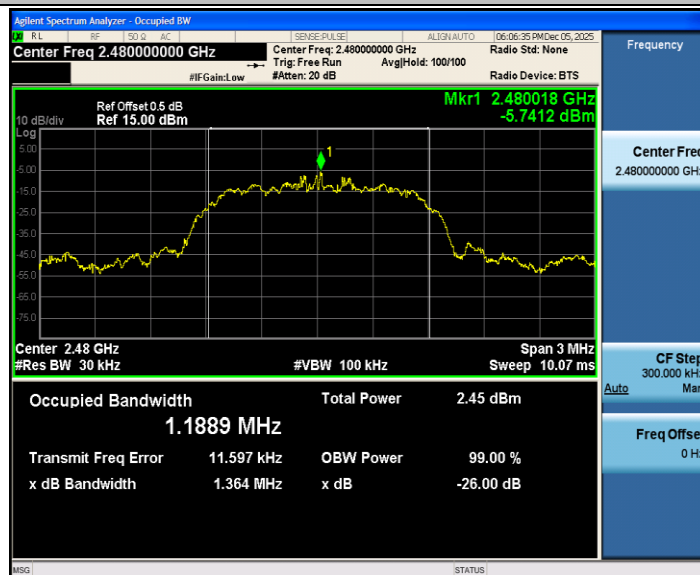
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.08	≤20.97	PASS
		2441	-0.14	≤20.97	PASS
		2480	-0.20	≤20.97	PASS
2DH5	Ant1	2402	-0.74	≤20.97	PASS
		2441	-0.98	≤20.97	PASS
		2480	-1.02	≤20.97	PASS
3DH5	Ant1	2402	-0.76	≤20.97	PASS
		2441	-0.93	≤20.97	PASS
		2480	-1.02	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.024	≥ 0.960	PASS
2DH5	Ant1	Hop	0.968	≥ 0.892	PASS
3DH5	Ant1	Hop	1.096	≥ 0.888	PASS

Test Graphs



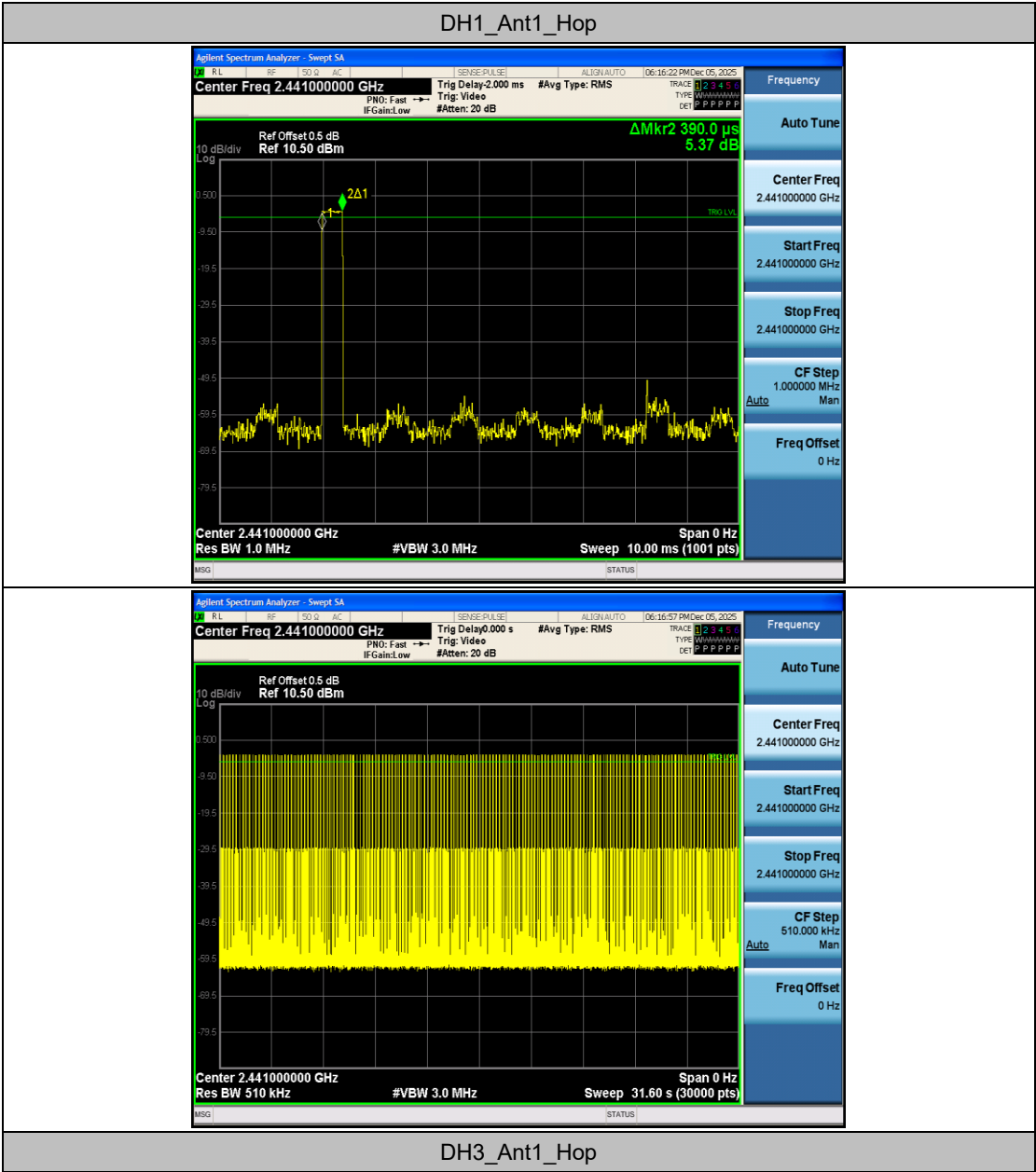


Appendix E: Time of occupancy

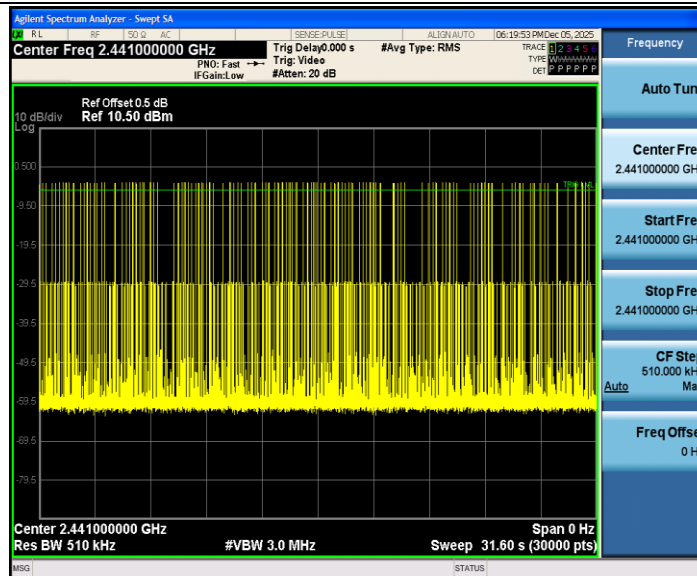
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	157	0.257	≤0.4	PASS
DH5	Ant1	Hop	2.890	104	0.301	≤0.4	PASS
2DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.650	166	0.274	≤0.4	PASS
2DH5	Ant1	Hop	2.900	109	0.316	≤0.4	PASS
3DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	158	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.900	110	0.319	≤0.4	PASS

Test Graphs

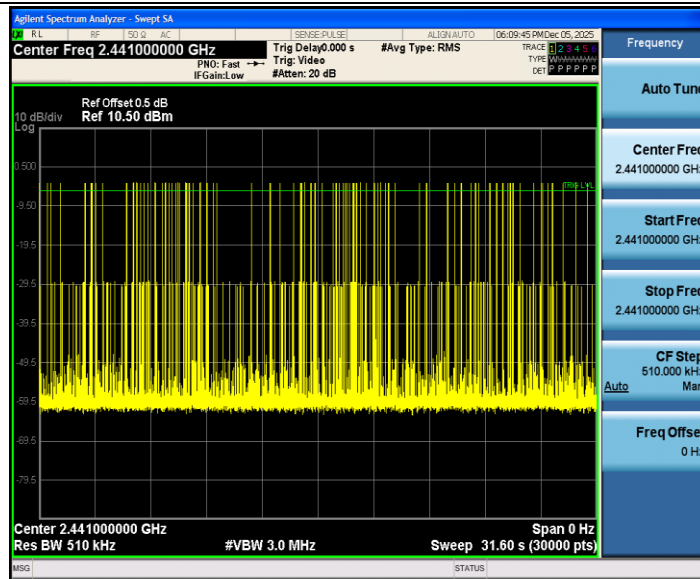


DH3_Ant1_Hop

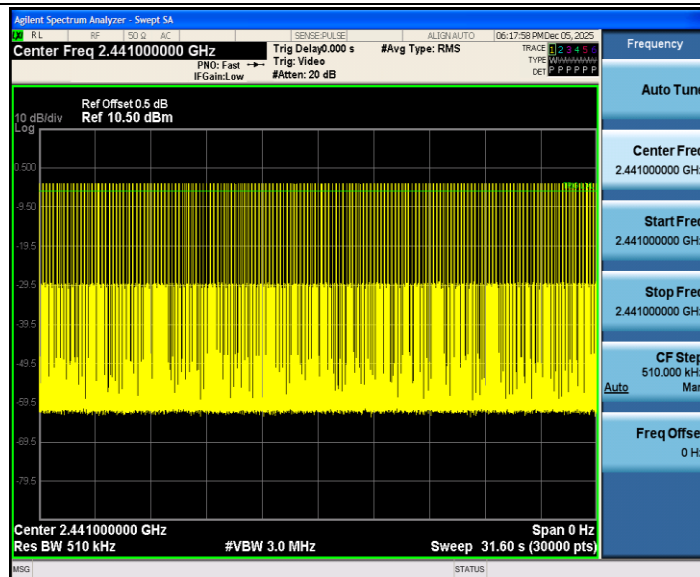
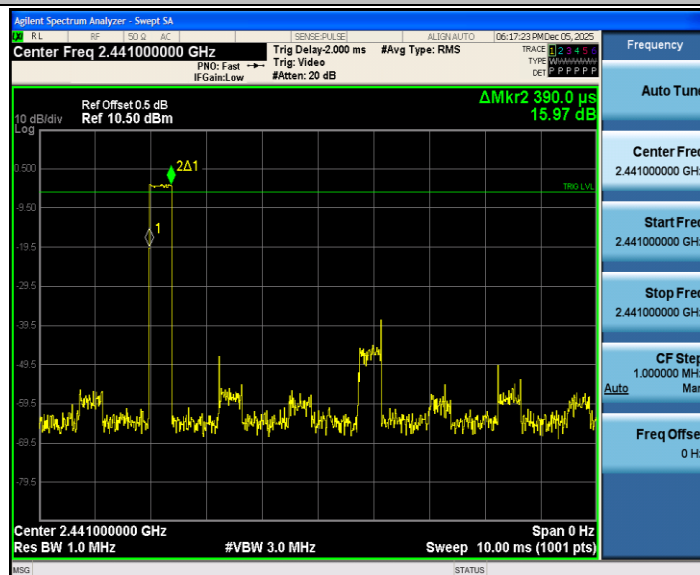


DH5_Ant1_Hop

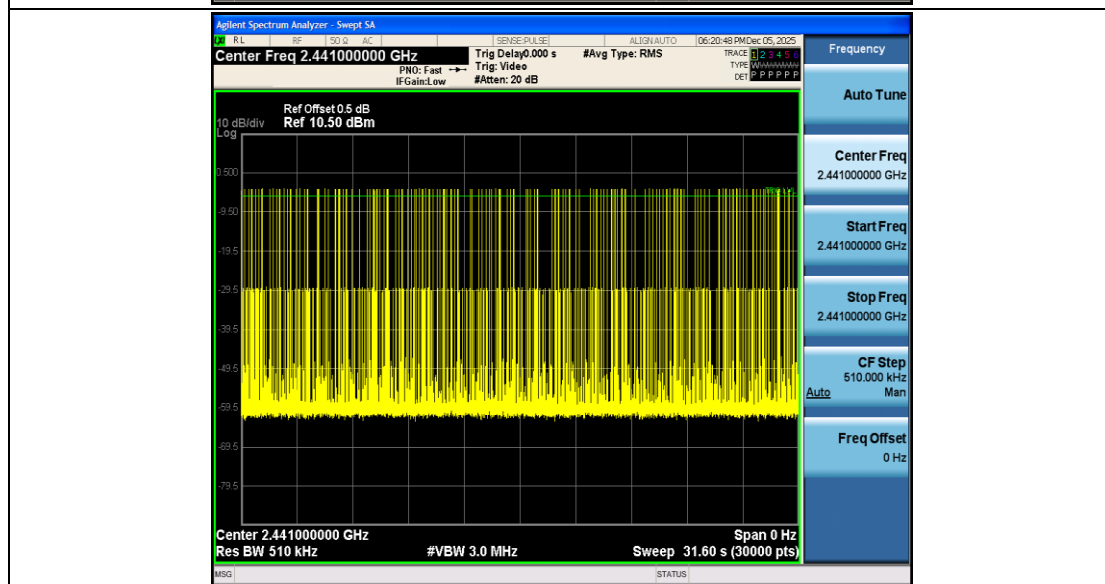




2DH1_Ant1_Hop

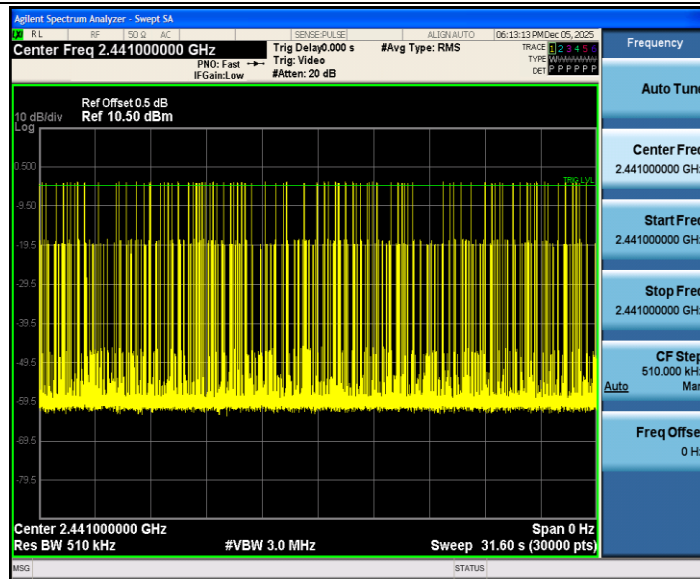


2DH3_Ant1_Hop

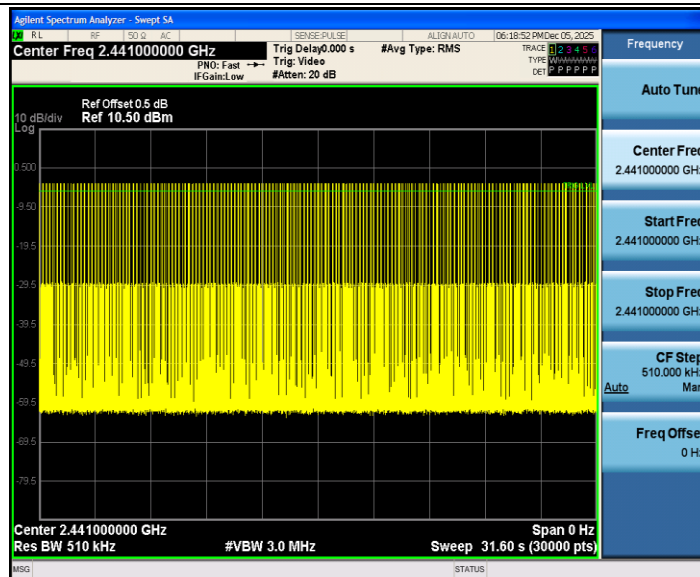
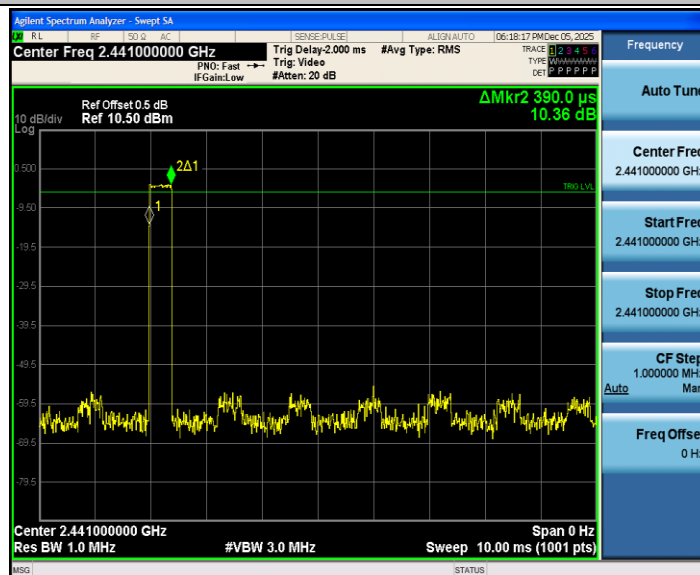


2DH5_Ant1_Hop

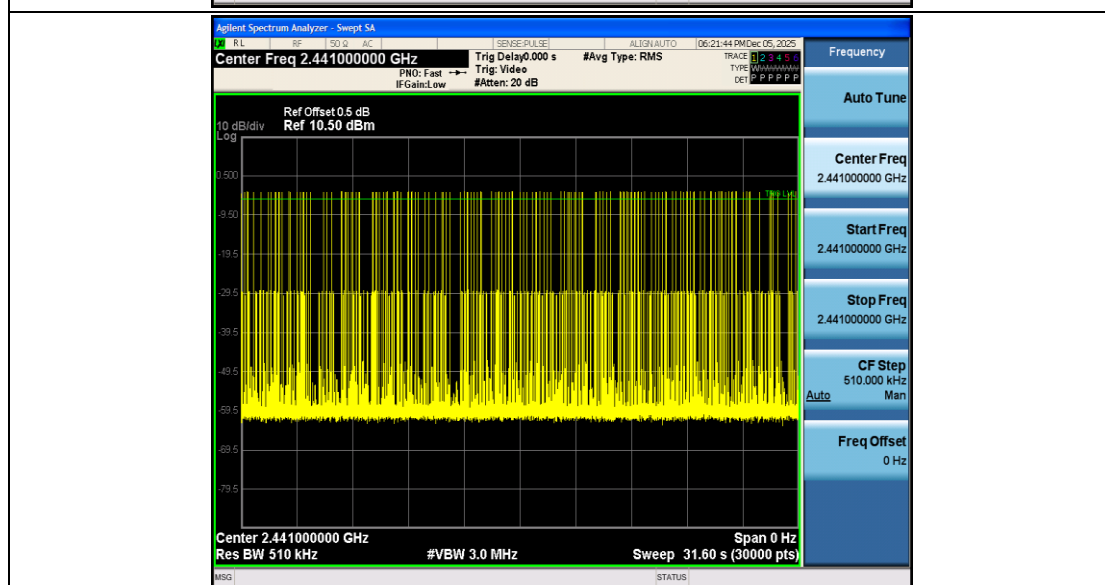




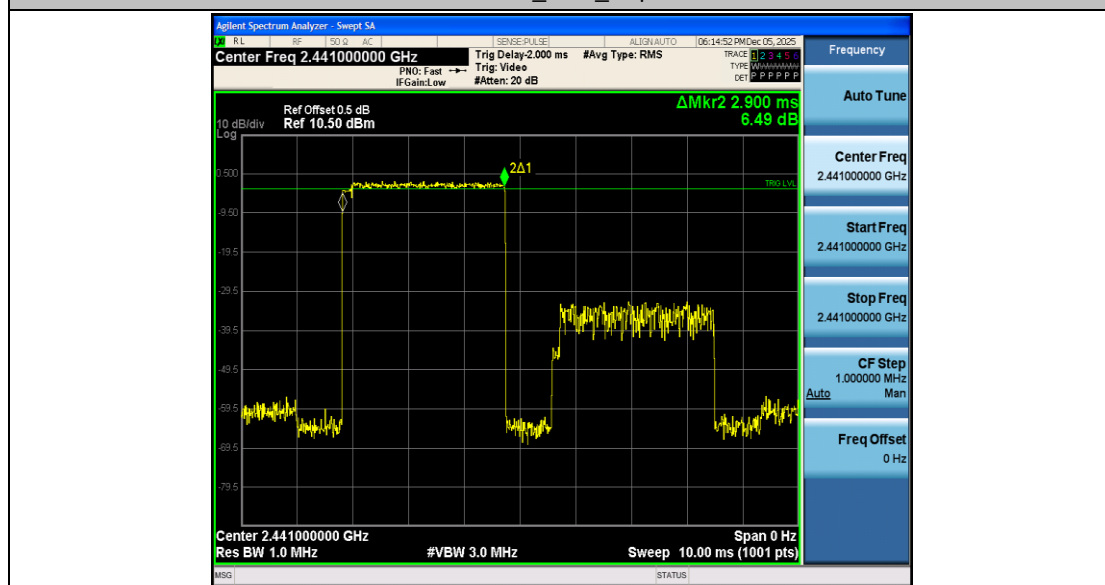
3DH1_Ant1_Hop

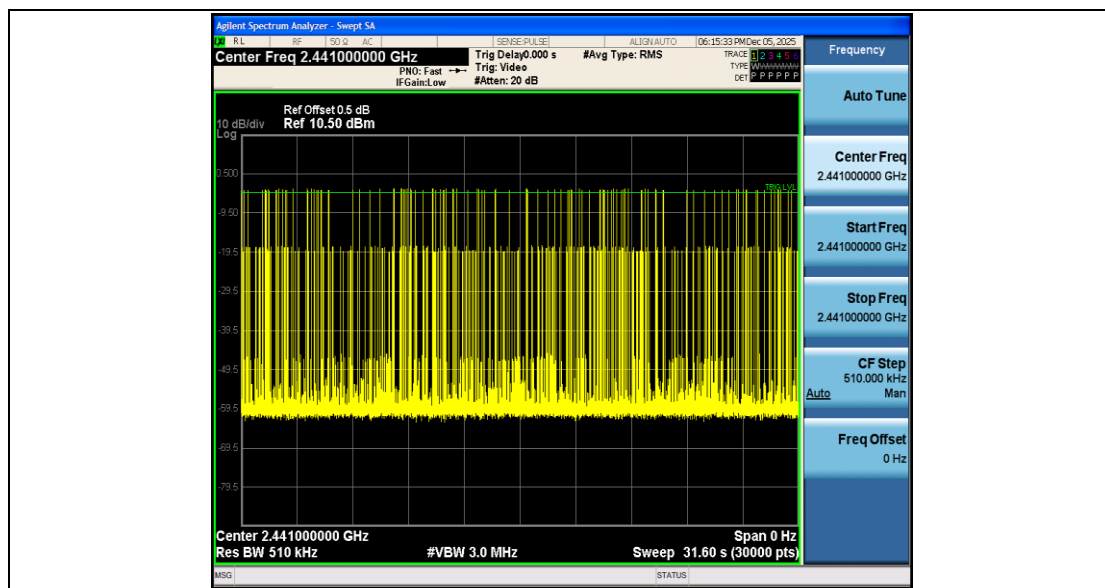


3DH3_Ant1_Hop



3DH5_Ant1_Hop





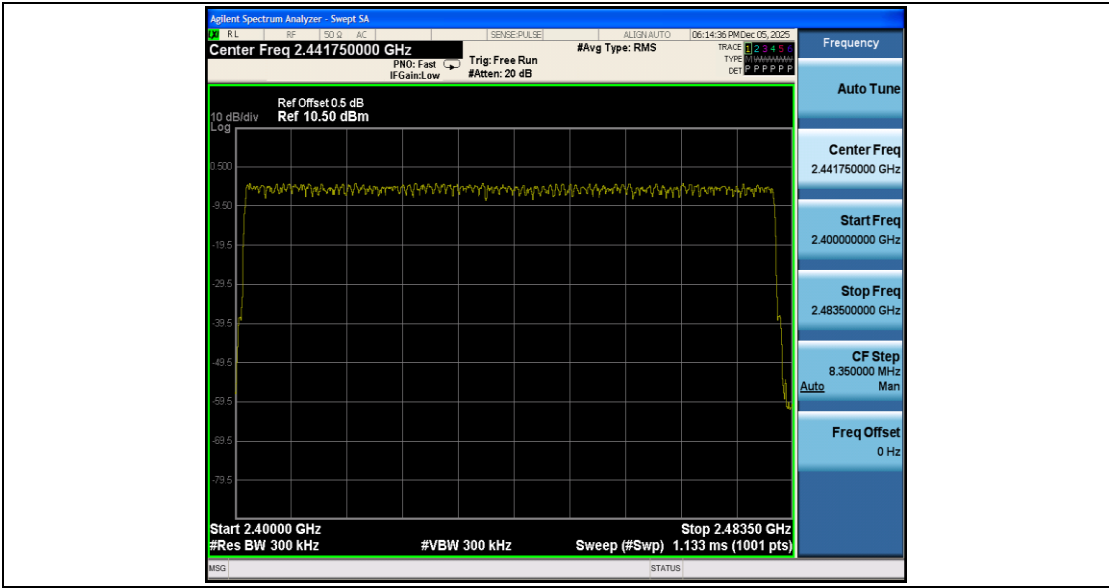
Appendix F: Number of hopping channels

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



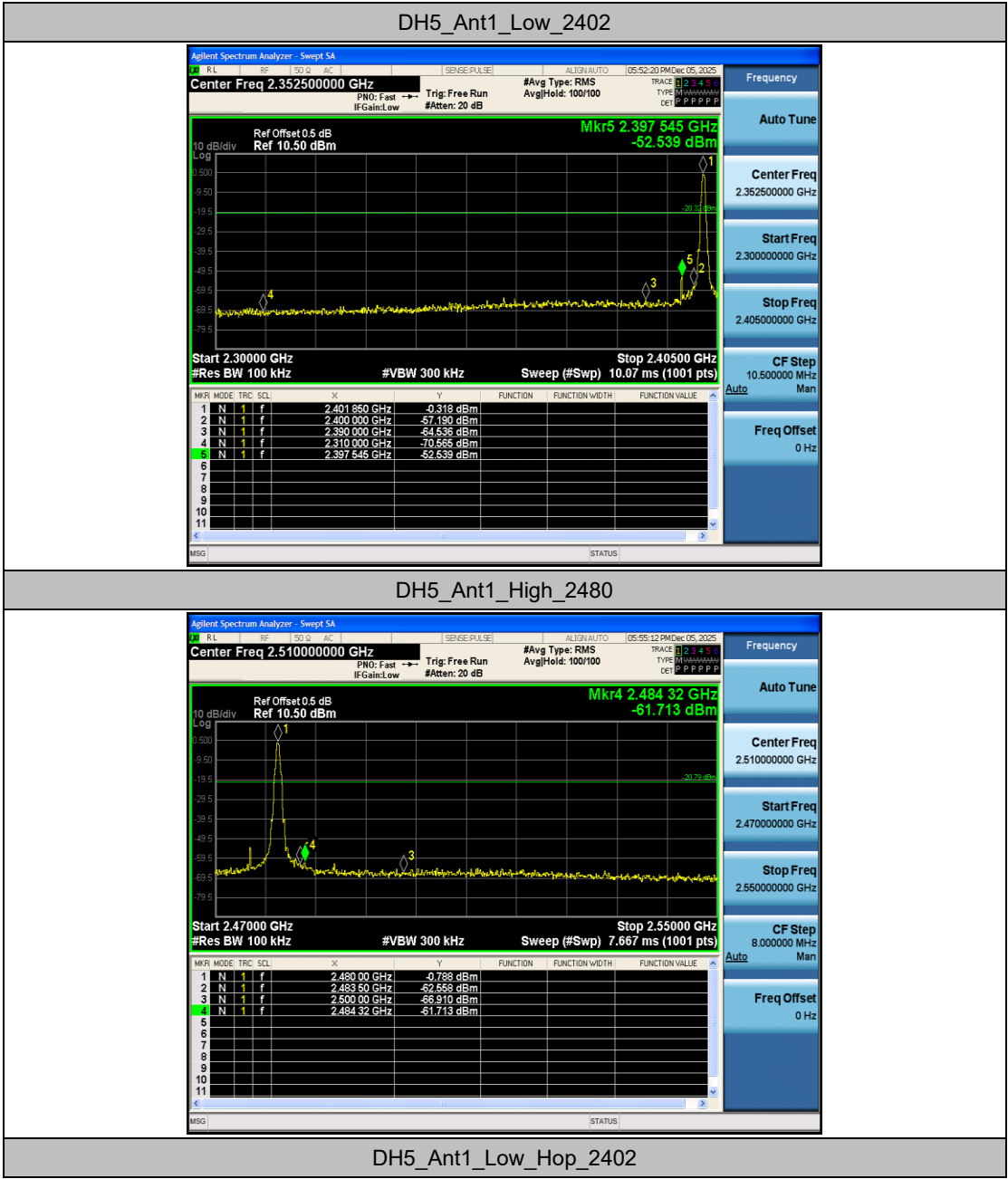


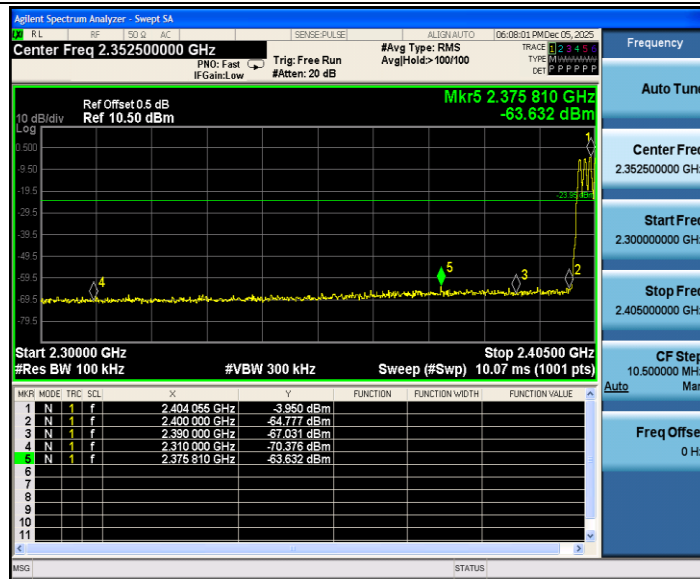
Appendix G: Band edge measurements

Test Result

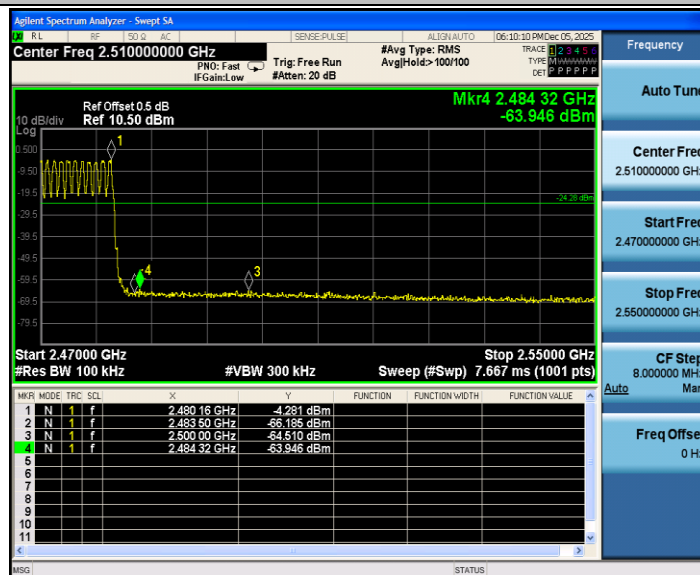
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.32	-52.54	≤-20.32	PASS
		High	2480	-0.79	-61.71	≤-20.79	PASS
		Low	Hop_2402	-3.95	-63.63	≤-23.95	PASS
		High	Hop_2480	-4.28	-63.95	≤-24.28	PASS
2DH5	Ant1	Low	2402	-4.22	-56.16	≤-24.22	PASS
		High	2480	-3.86	-59.12	≤-23.86	PASS
		Low	Hop_2402	-5.93	-61.94	≤-25.93	PASS
		High	Hop_2480	-5.28	-63.7	≤-25.28	PASS
3DH5	Ant1	Low	2402	-4.01	-60.3	≤-24.01	PASS
		High	2480	-3.95	-64.07	≤-23.95	PASS
		Low	Hop_2402	-3.34	-63.49	≤-23.34	PASS
		High	Hop_2480	-3.87	-64.43	≤-23.87	PASS

Test Graphs

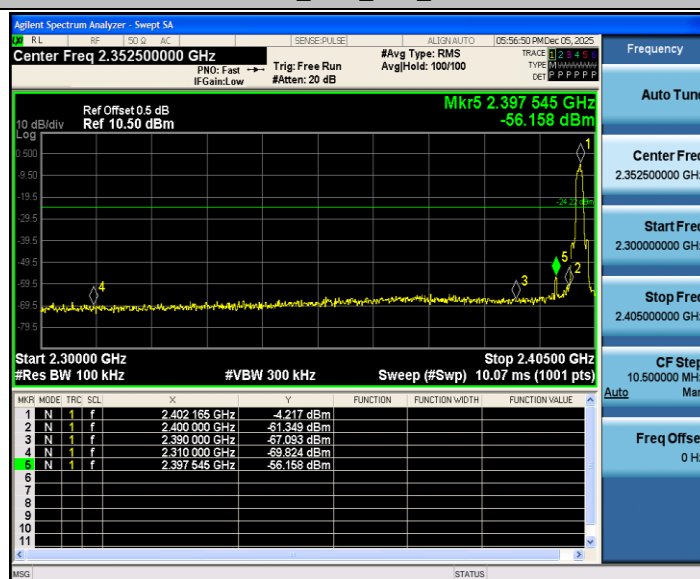




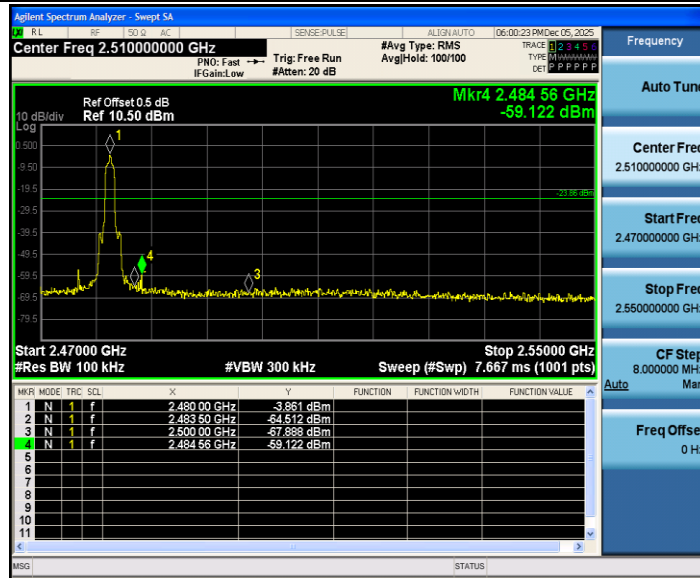
DH5_Ant1_High_Hop_2480



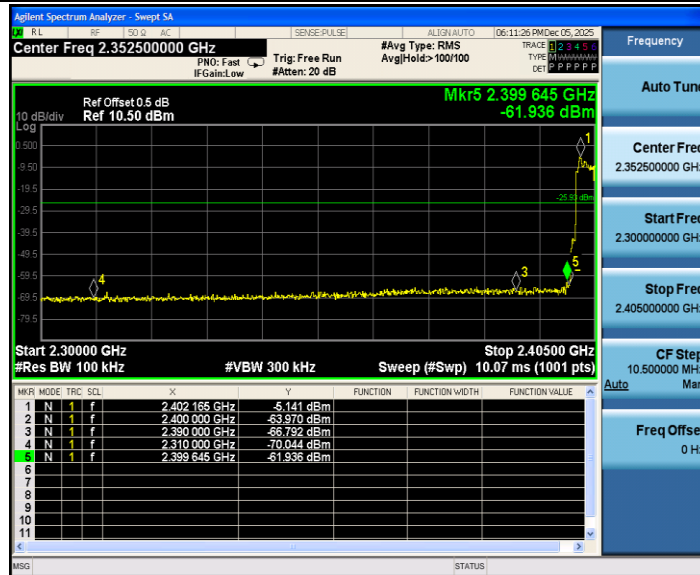
2DH5_Ant1_Low_2402



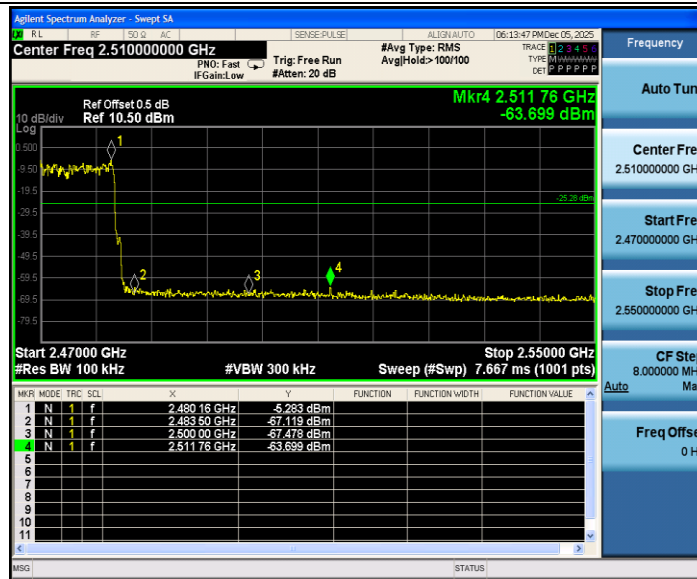
2DH5_Ant1_High_2480



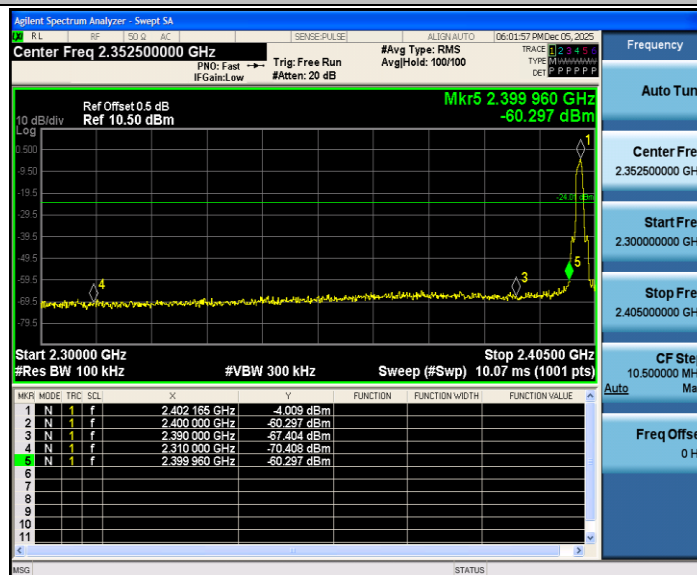
2DH5_Ant1_Low_Hop_2402



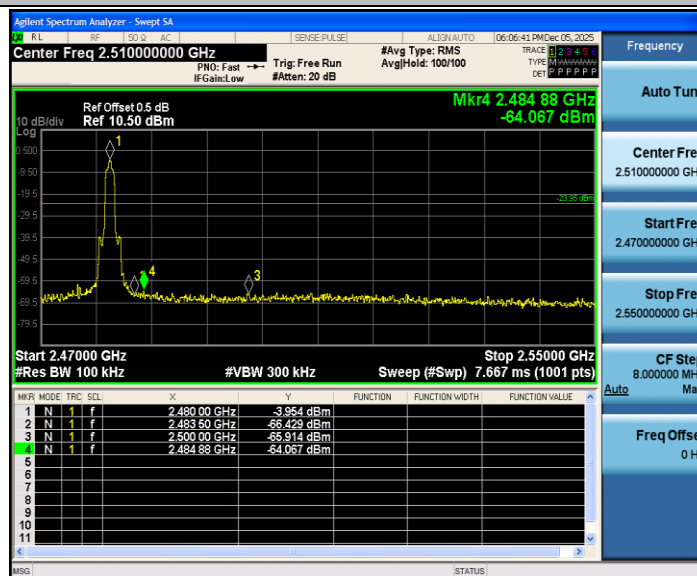
2DH5_Ant1_High_Hop_2480



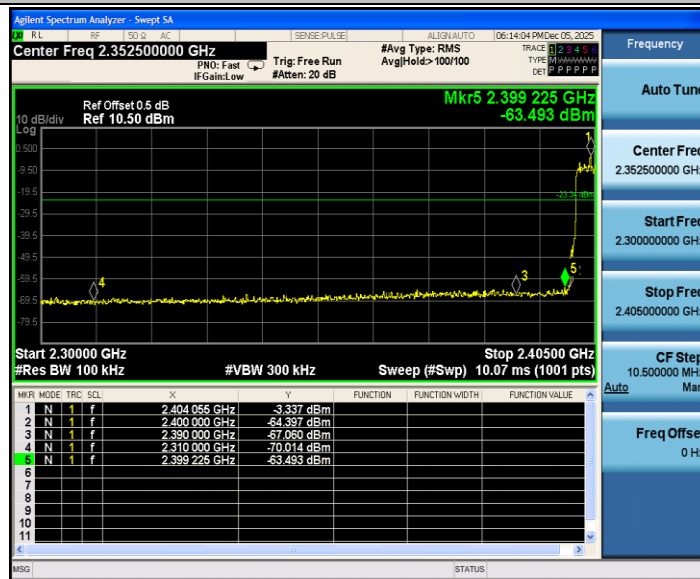
3DH5_Ant1_Low_2402



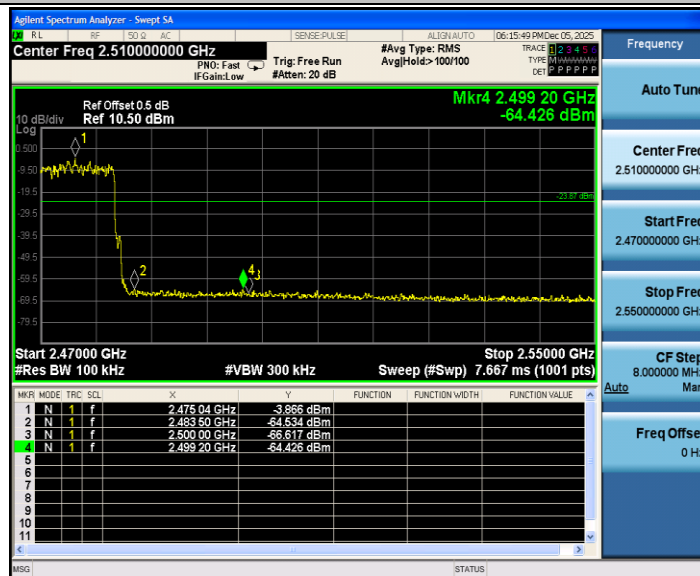
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

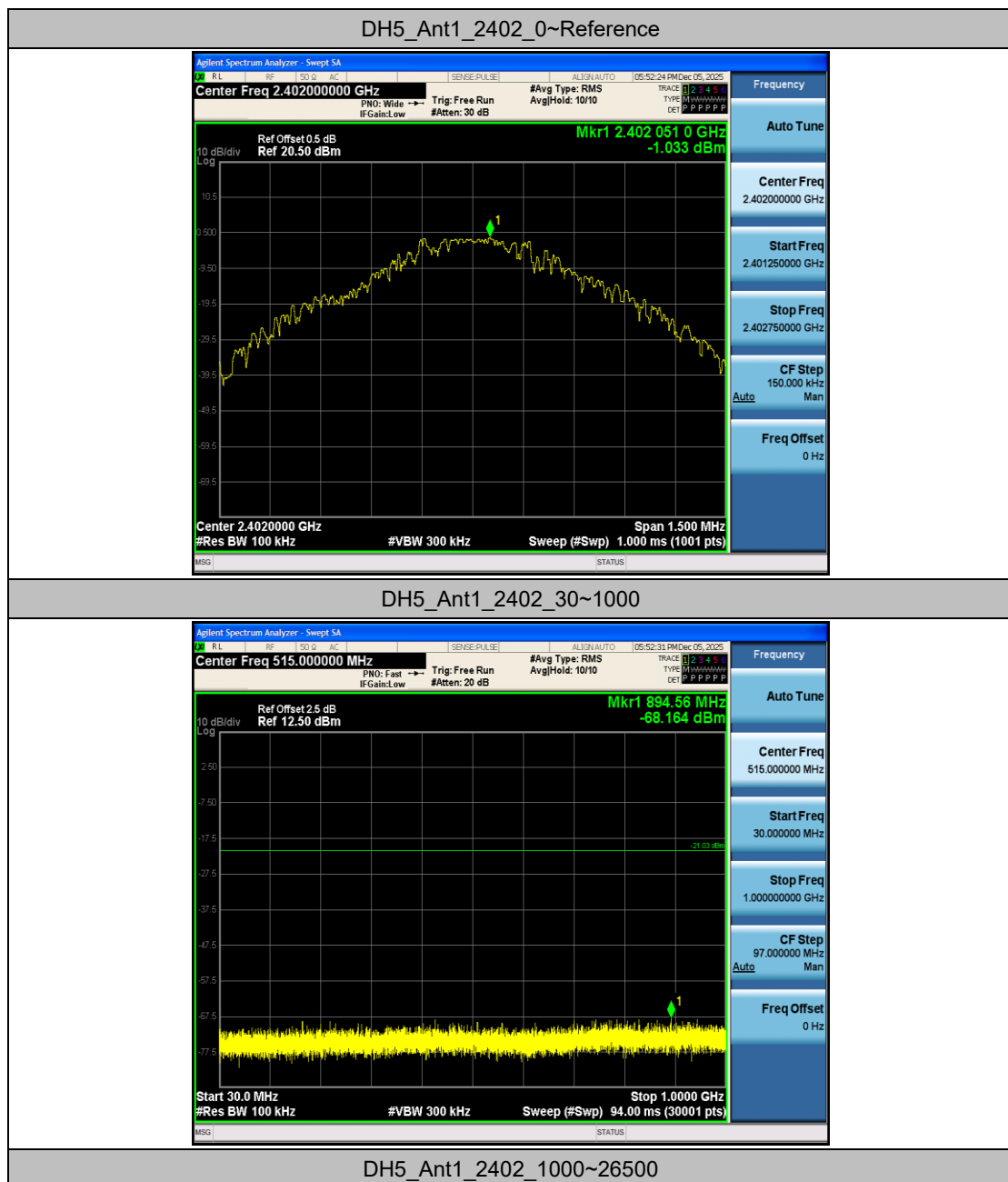


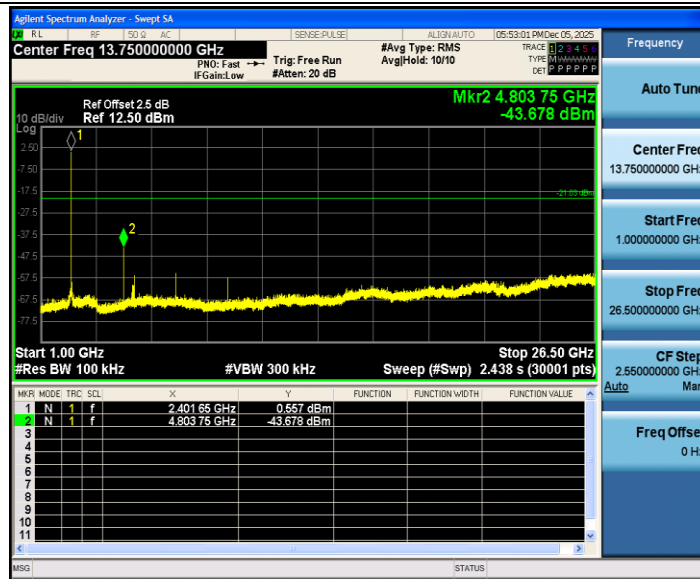
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.03	-1.03	---	PASS
			30~1000	-1.03	-68.16	≤-21.03	PASS
			1000~26500	-1.03	-43.68	≤-21.03	PASS
		2441	Reference	-0.80	-0.80	---	PASS
			30~1000	-0.80	-67.89	≤-20.8	PASS
			1000~26500	-0.80	-44.49	≤-20.8	PASS
		2480	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-67.99	≤-20.21	PASS
			1000~26500	-0.21	-42.37	≤-20.21	PASS
2DH5	Ant1	2402	Reference	-6.14	-6.14	---	PASS
			30~1000	-6.14	-67.49	≤-26.14	PASS
			1000~26500	-6.14	-47.52	≤-26.14	PASS
		2441	Reference	-5.56	-5.56	---	PASS
			30~1000	-5.56	-67.63	≤-25.56	PASS
			1000~26500	-5.56	-50.36	≤-25.56	PASS
		2480	Reference	-6.19	-6.19	---	PASS
			30~1000	-6.19	-67.68	≤-26.19	PASS
			1000~26500	-6.19	-50.3	≤-26.19	PASS
3DH5	Ant1	2402	Reference	-5.88	-5.88	---	PASS
			30~1000	-5.88	-67.62	≤-25.88	PASS
			1000~26500	-5.88	-50.41	≤-25.88	PASS
		2441	Reference	-5.13	-5.13	---	PASS
			30~1000	-5.13	-57.6	≤-25.13	PASS
			1000~26500	-5.13	-48.61	≤-25.13	PASS
		2480	Reference	-3.85	-3.85	---	PASS
			30~1000	-3.85	-67.65	≤-23.85	PASS
			1000~26500	-3.85	-50.36	≤-23.85	PASS

Test Graphs

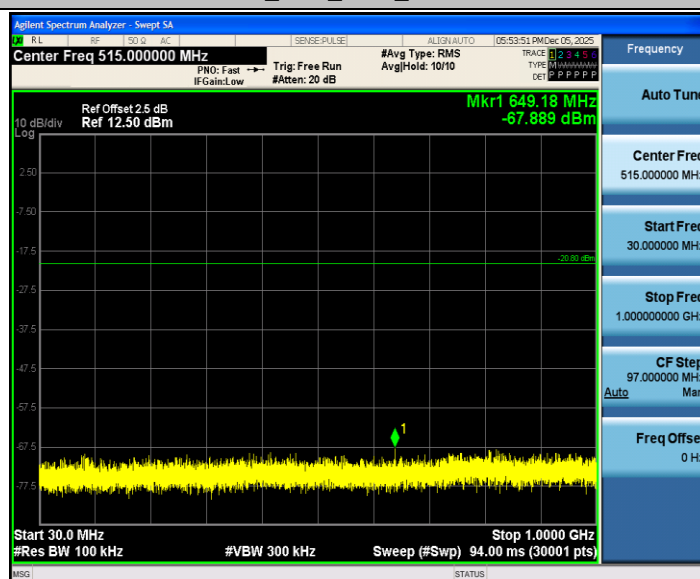




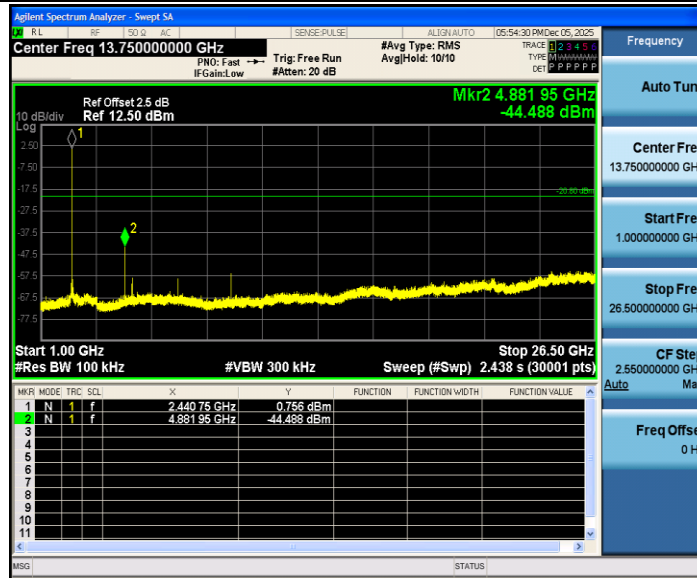
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



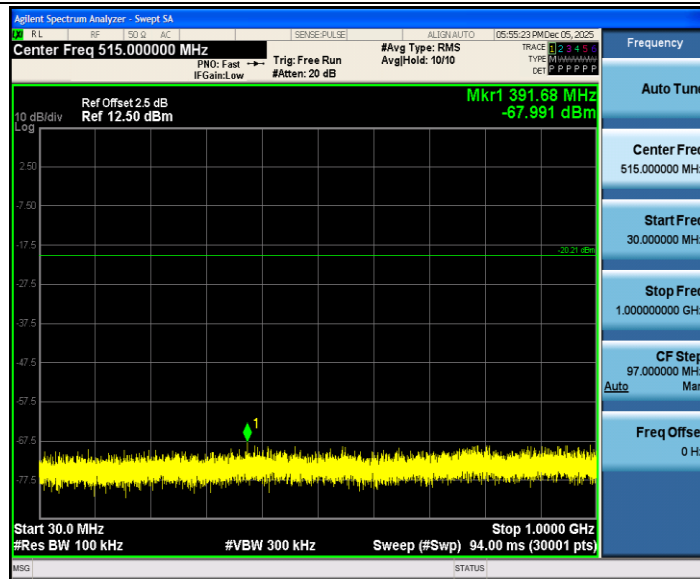
DH5_Ant1_2441_1000~26500



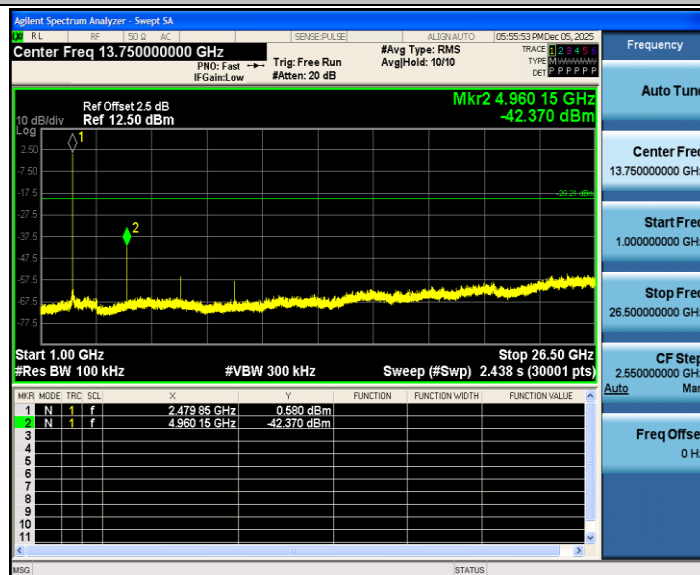
DH5_Ant1_2480_0~Reference



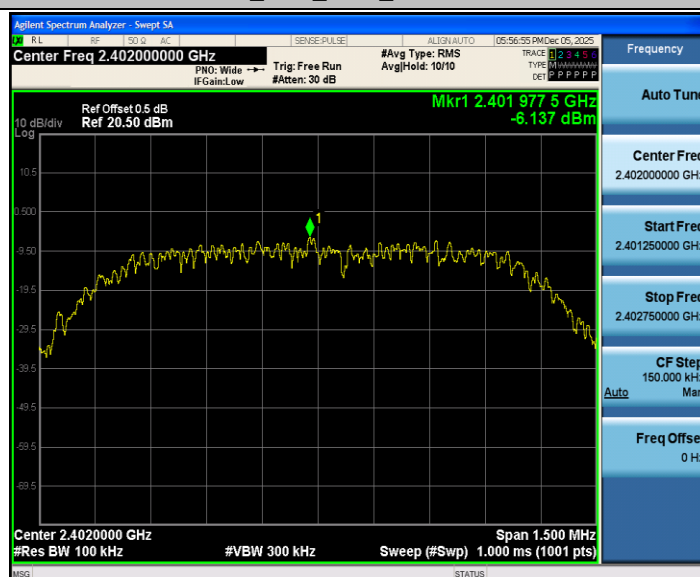
DH5_Ant1_2480_30~1000



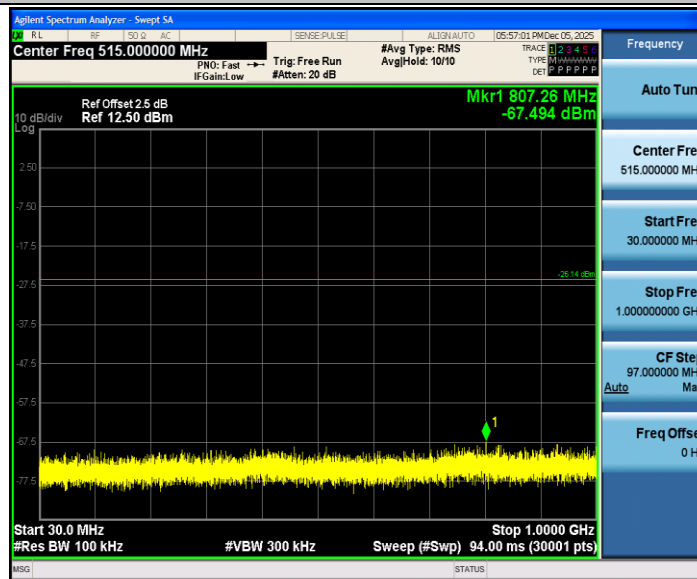
DH5_Ant1_2480_1000~26500



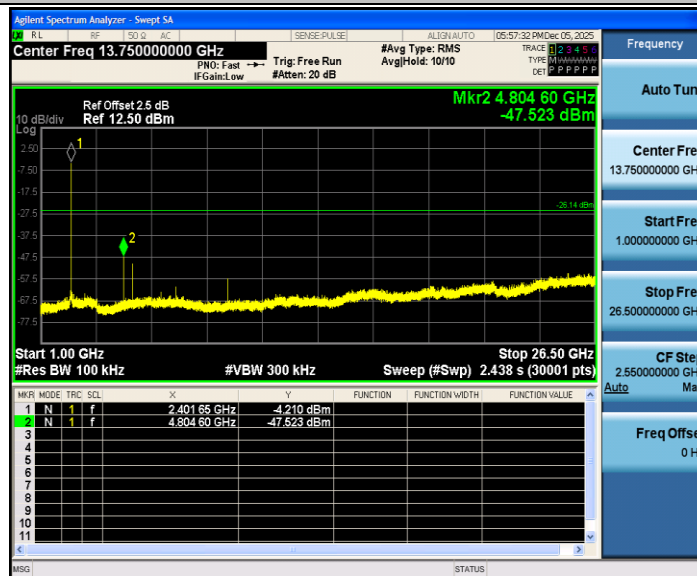
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference