

FCC Appendix RF Test Data for BT

FCC ID : 2BM7C-GD-88

Company : Xiamen Deyin Technology Co.,Ltd

EUT : Thermal printer

Model Number : GD-88

Report No. : CTA25091802402

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	2401.547	2402.504	---	---
		2441	0.948	2440.547	2441.495	---	---
		2480	0.951	2479.547	2480.498	---	---
2DH5	Ant1	2402	1.308	2401.358	2402.666	---	---
		2441	1.323	2440.346	2441.669	---	---
		2480	1.314	2479.352	2480.666	---	---
3DH5	Ant1	2402	1.338	2401.340	2402.678	---	---
		2441	1.320	2440.346	2441.666	---	---
		2480	1.281	2479.379	2480.660	---	---

DH5_Ant1_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.402000000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Atten: 20 dB

#Avg Type: RMS
Avg/Hold: 100/100

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

ΔMkr3 957 kHz
-0.079 dB

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401547 GHz	-18.950 dBm			
2	N	1	f	2.402000 GHz	0.494 dBm			
3	Δ	1	f (Δ)	957 kHz (Δ)	-0.079 dB			

DH5_Ant1_2441

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Atten: 20 dB

#Avg Type: RMS
Avg/Hold: 100/100

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

ΔMkr3 948 kHz
0.437 dB

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440547 GHz	-19.018 dBm			
2	N	1	f	2.441018 GHz	0.888 dBm			
3	Δ	1	f (Δ)	948 kHz (Δ)	0.437 dB			



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



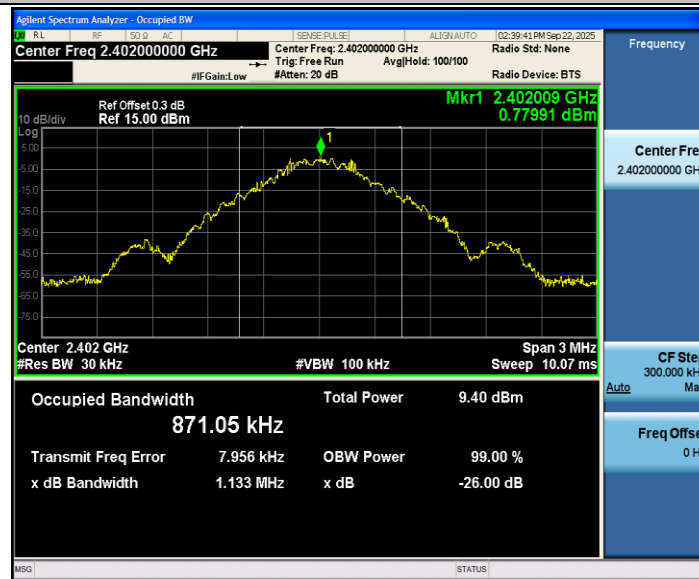
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87105	2401.5724	2402.4435	---	---
		2441	0.87545	2440.5716	2441.4470	---	---
		2480	0.87104	2479.5713	2480.4424	---	---
2DH5	Ant1	2402	1.1936	2401.4134	2402.6070	---	---
		2441	1.1967	2440.4112	2441.6079	---	---
		2480	1.1850	2479.4178	2480.6028	---	---
3DH5	Ant1	2402	1.1914	2401.4135	2402.6049	---	---
		2441	1.1928	2440.4131	2441.6059	---	---
		2480	1.1866	2479.4163	2480.6029	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



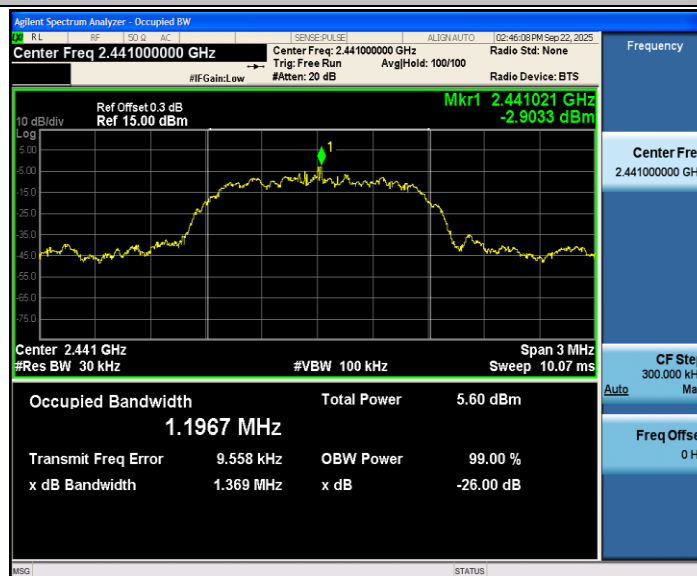
DH5_Ant1_2480



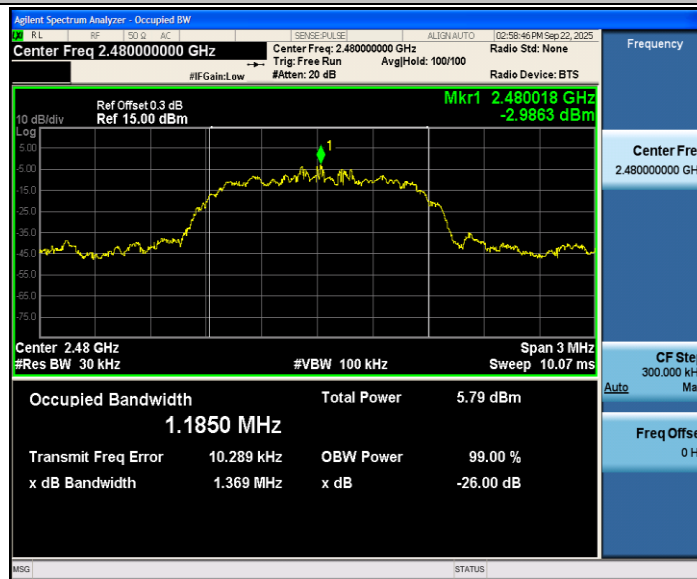
2DH5_Ant1_2402



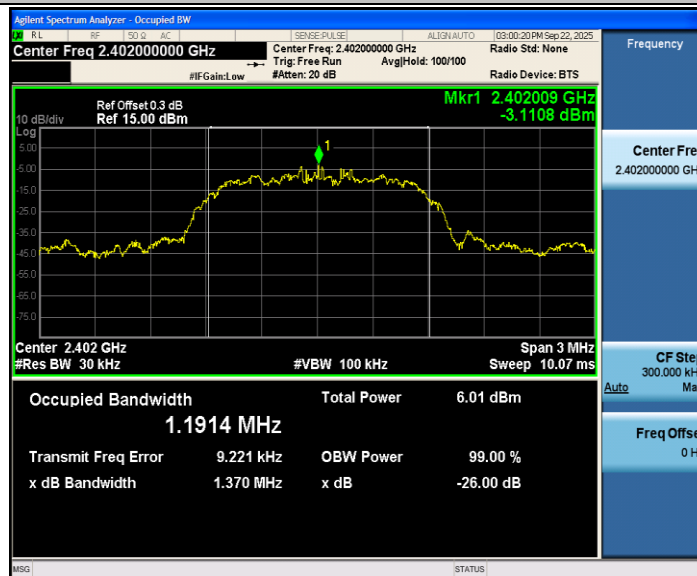
2DH5_Ant1_2441



2DH5_Ant1_2480



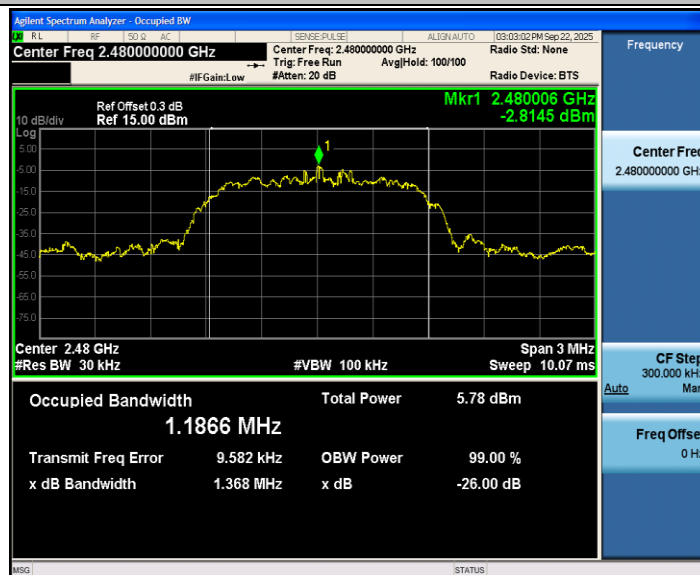
3DH5_Ant1_2402



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	3.28	≤20.97	PASS
		2441	2.96	≤20.97	PASS
		2480	2.86	≤20.97	PASS
2DH5	Ant1	2402	2.61	≤20.97	PASS
		2441	2.26	≤20.97	PASS
		2480	2.15	≤20.97	PASS
3DH5	Ant1	2402	2.58	≤20.97	PASS
		2441	2.24	≤20.97	PASS
		2480	2.15	≤20.97	PASS

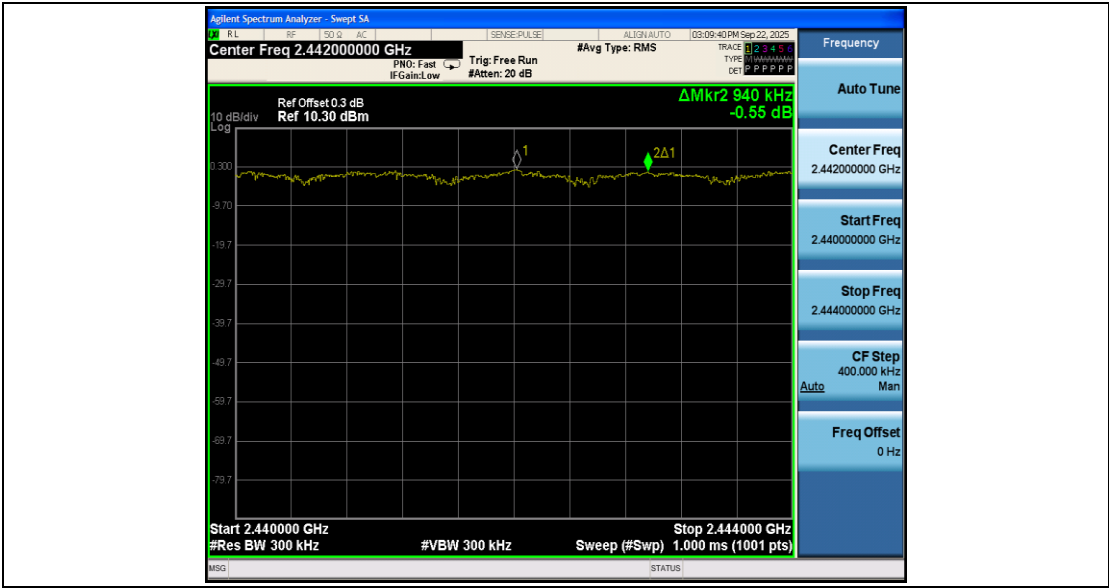
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥ 0.957	PASS
2DH5	Ant1	Hop	0.98	≥ 0.882	PASS
3DH5	Ant1	Hop	0.94	≥ 0.892	PASS

Test Graphs



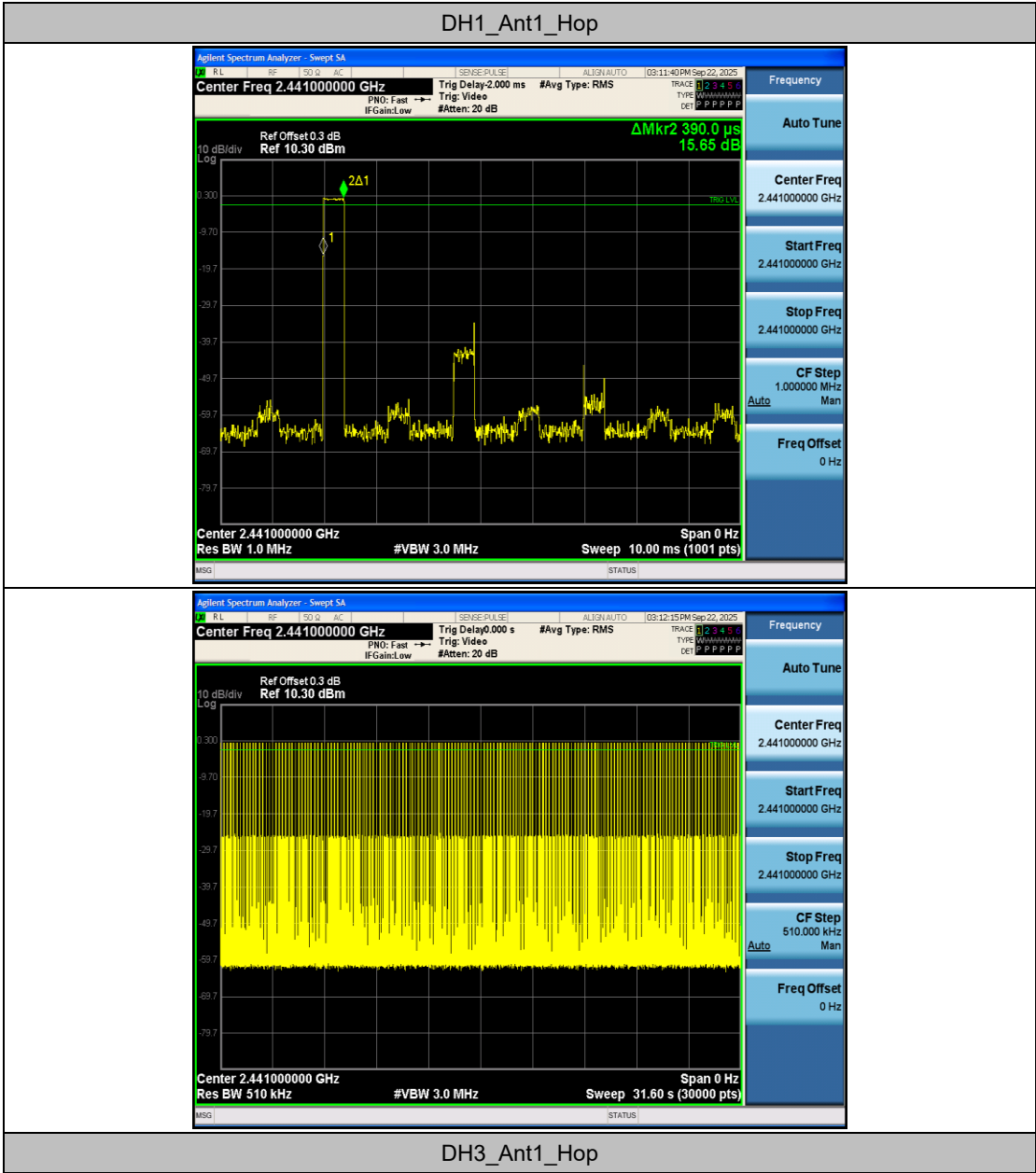


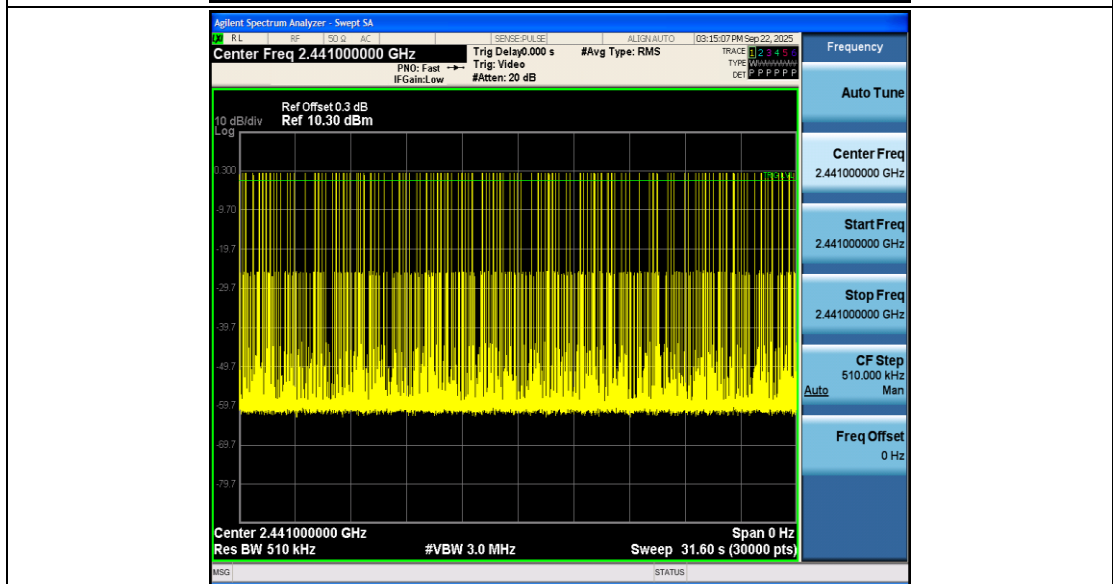
Appendix E: Time of occupancy

Test Result

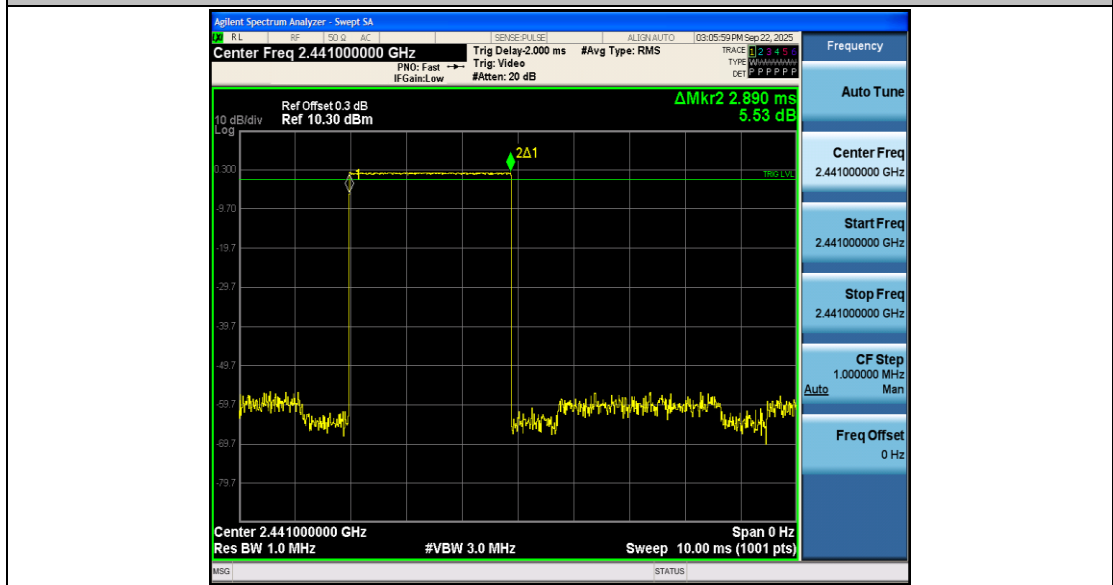
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	155	0.254	≤0.4	PASS
DH5	Ant1	Hop	2.890	114	0.329	≤0.4	PASS
2DH1	Ant1	Hop	0.390	314	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.650	161	0.266	≤0.4	PASS
2DH5	Ant1	Hop	2.900	110	0.319	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.640	150	0.246	≤0.4	PASS
3DH5	Ant1	Hop	2.900	97	0.281	≤0.4	PASS

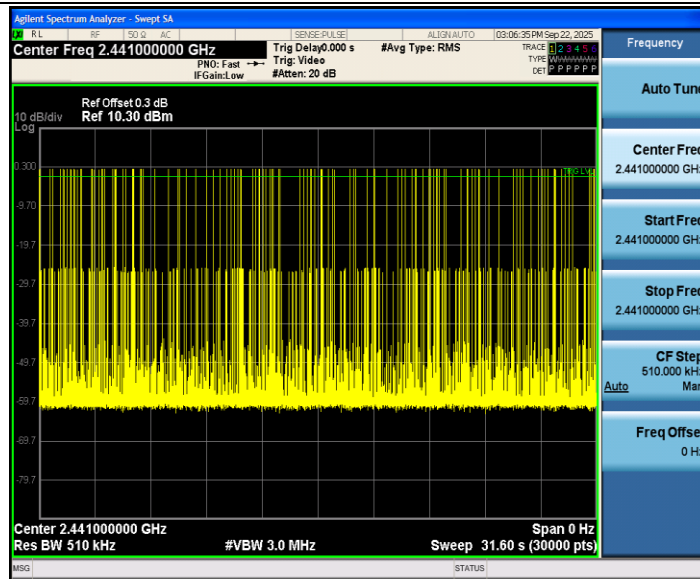
Test Graphs



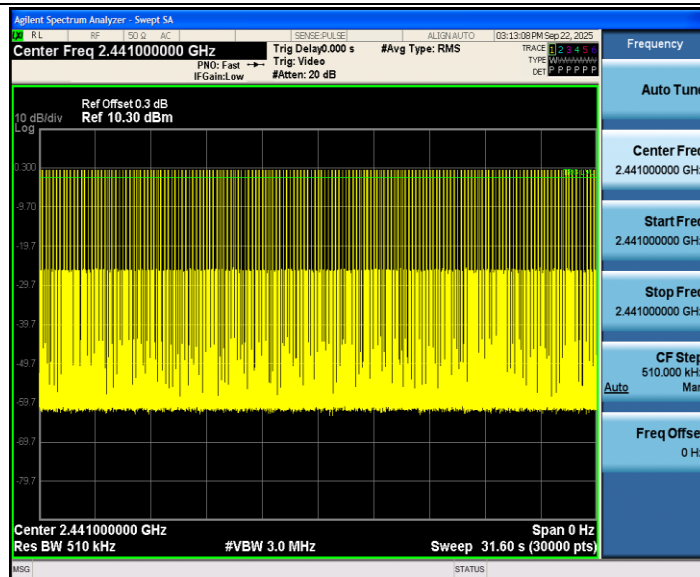
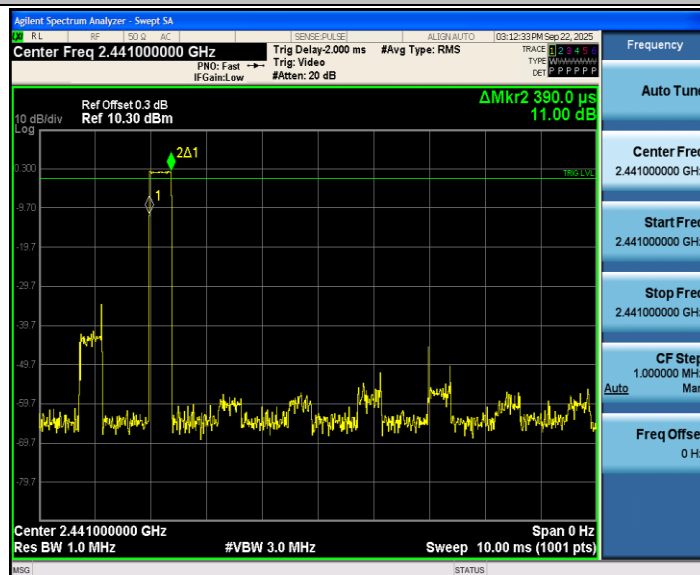


DH5_Ant1_Hop

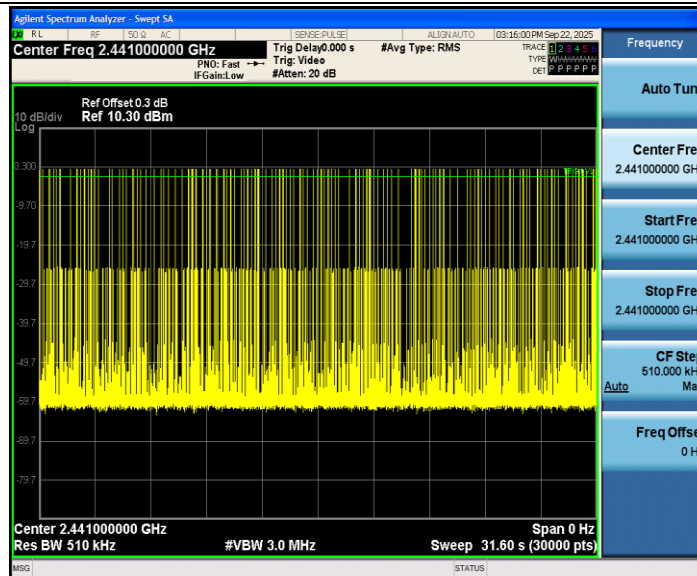
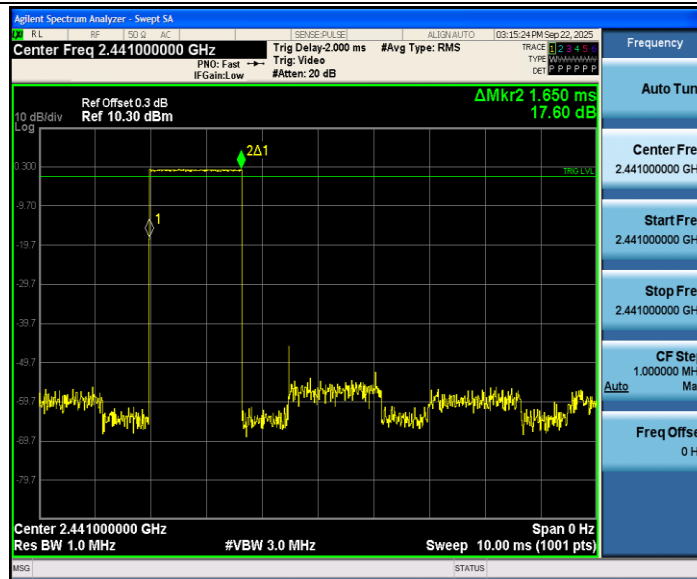




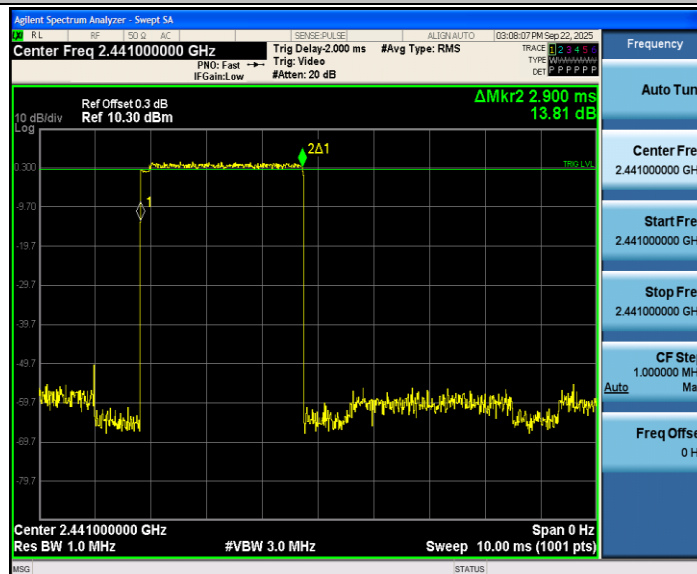
2DH1_Ant1_Hop

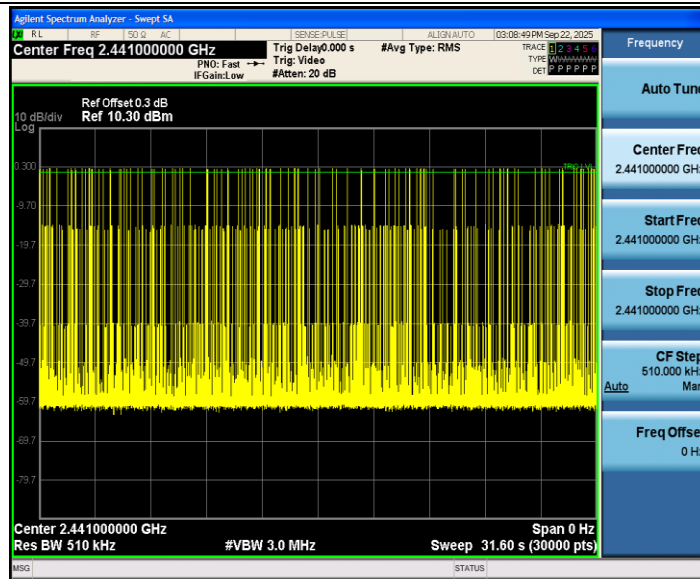


2DH3_Ant1_Hop

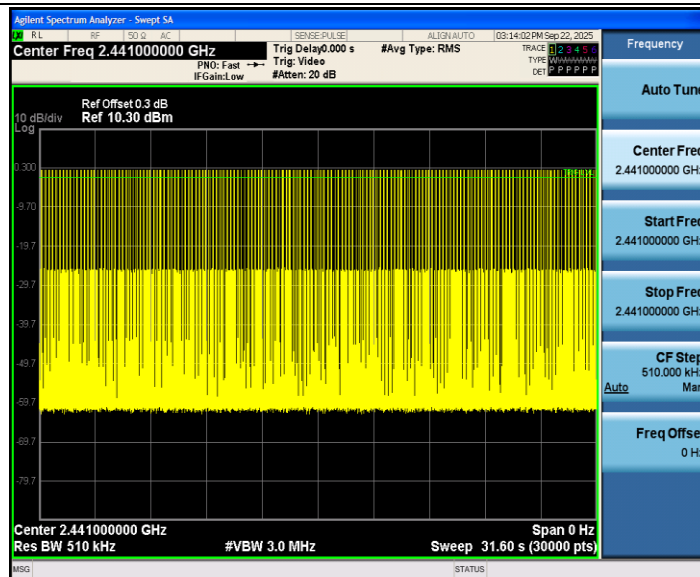
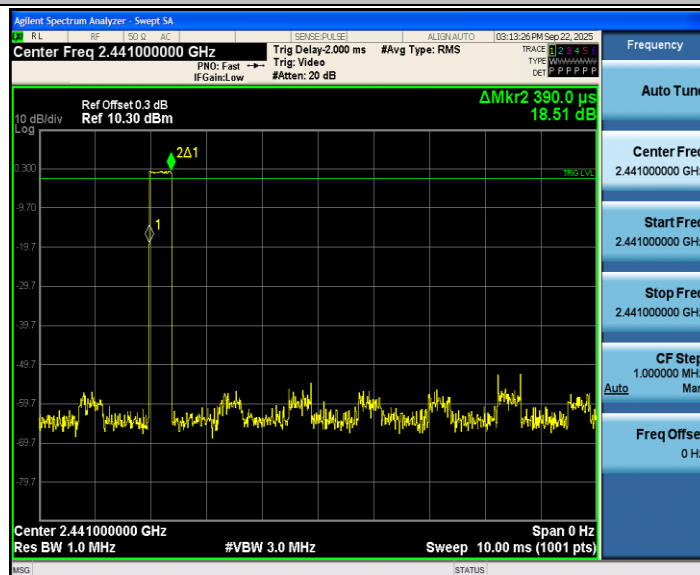


2DH5_Ant1_Hop

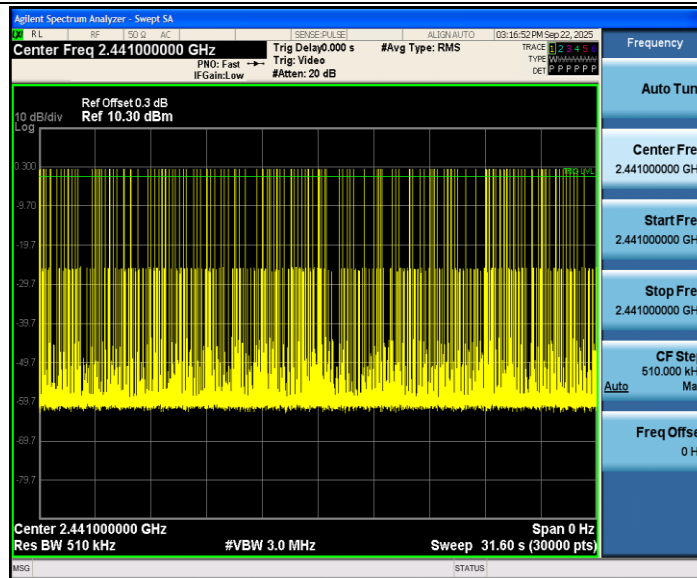
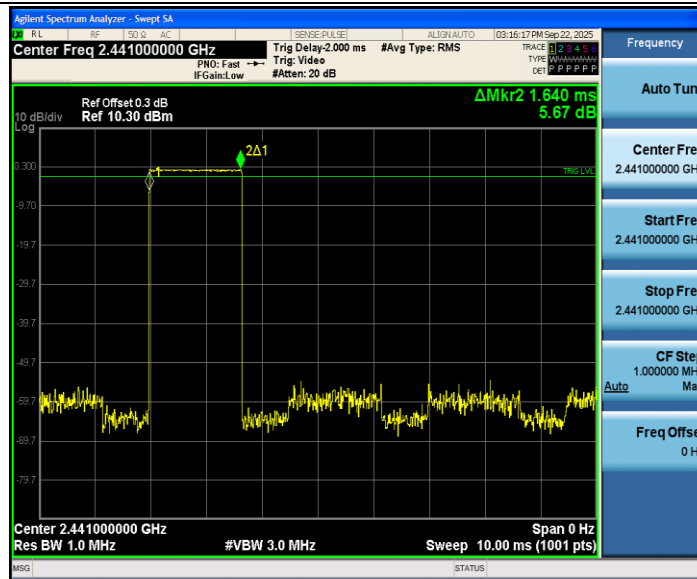




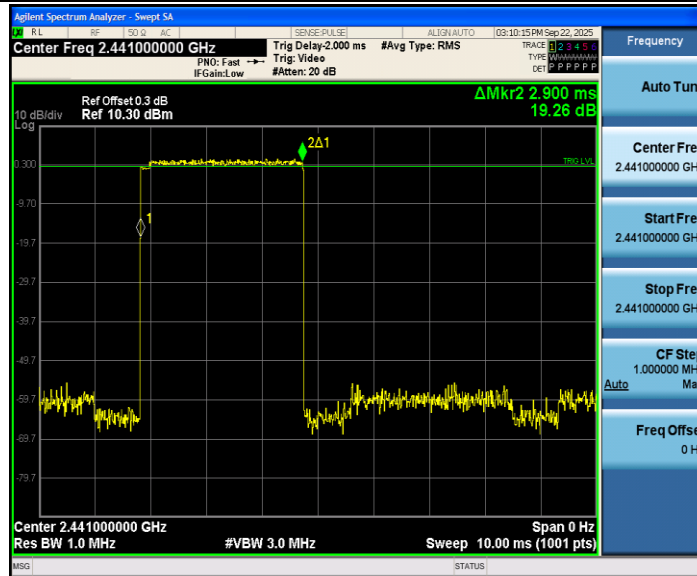
3DH1_Ant1_Hop

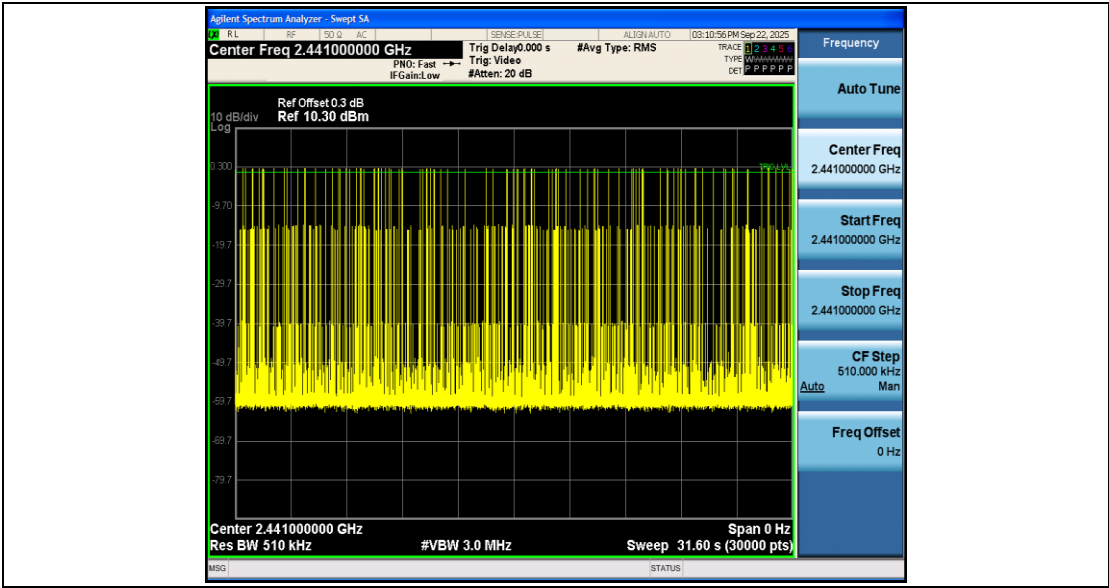


3DH3_Ant1_Hop



3DH5_Ant1_Hop





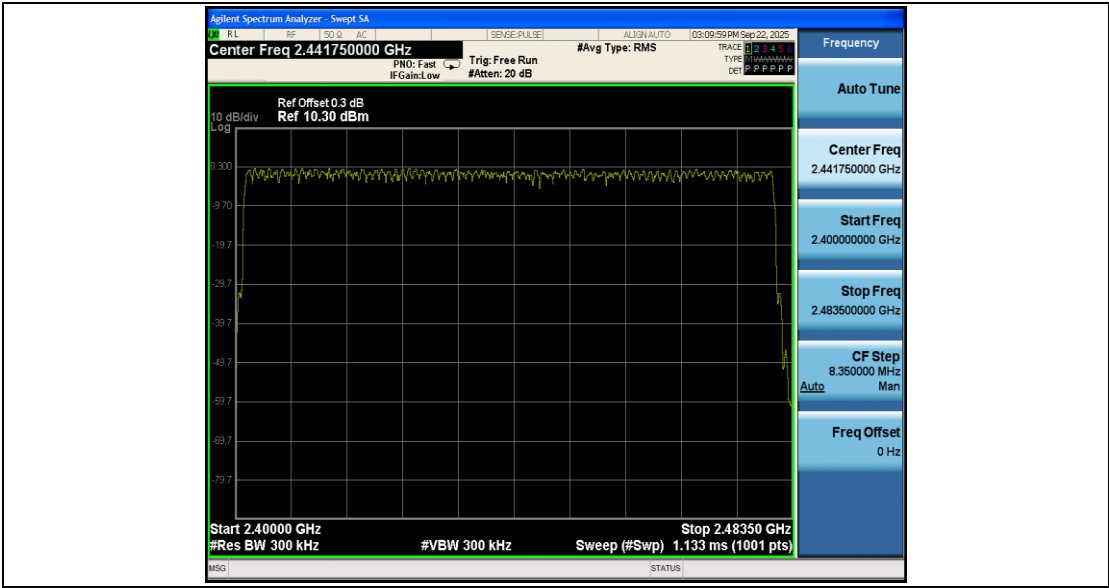
Appendix F: Number of hopping channels

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



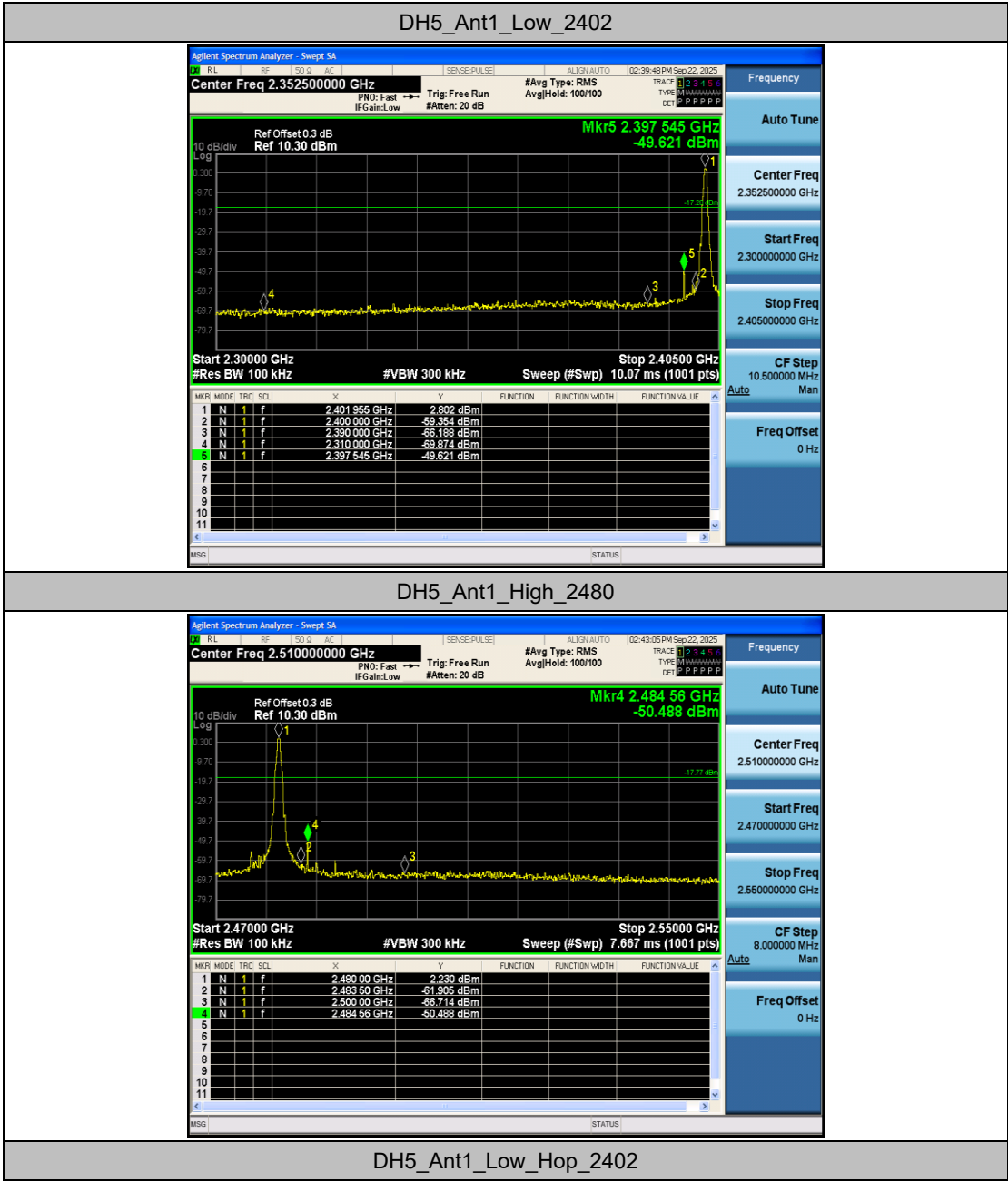


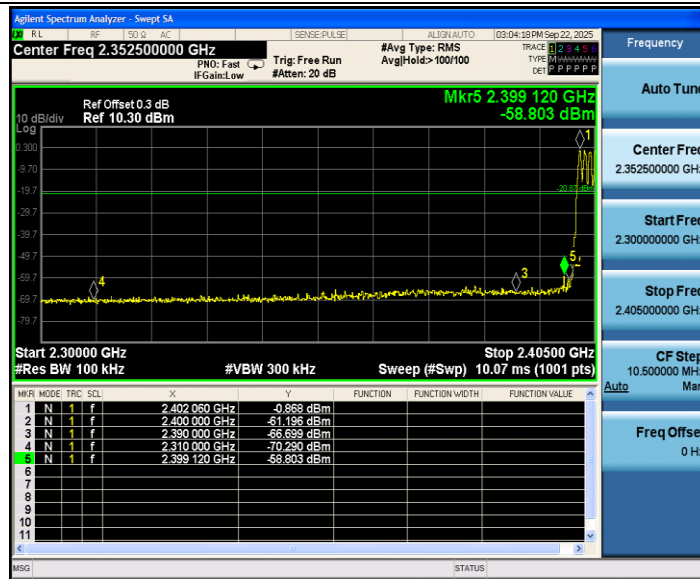
Appendix G: Band edge measurements

Test Result

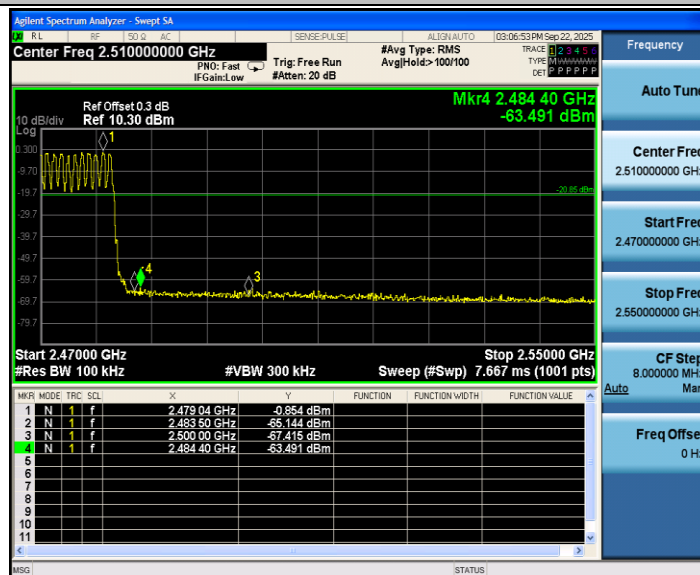
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.80	-49.62	≤-17.2	PASS
		High	2480	2.23	-50.49	≤-17.77	PASS
		Low	Hop_2402	-0.87	-58.8	≤-20.87	PASS
		High	Hop_2480	-0.85	-63.49	≤-20.85	PASS
2DH5	Ant1	Low	2402	-1.09	-50.18	≤-21.09	PASS
		High	2480	-0.68	-60.95	≤-20.68	PASS
		Low	Hop_2402	-2.41	-54.4	≤-22.41	PASS
		High	Hop_2480	-1.20	-63.25	≤-21.2	PASS
3DH5	Ant1	Low	2402	-0.62	-48.62	≤-20.62	PASS
		High	2480	-1.14	-52.57	≤-21.14	PASS
		Low	Hop_2402	-1.70	-56.2	≤-21.7	PASS
		High	Hop_2480	-0.53	-64.04	≤-20.53	PASS

Test Graphs

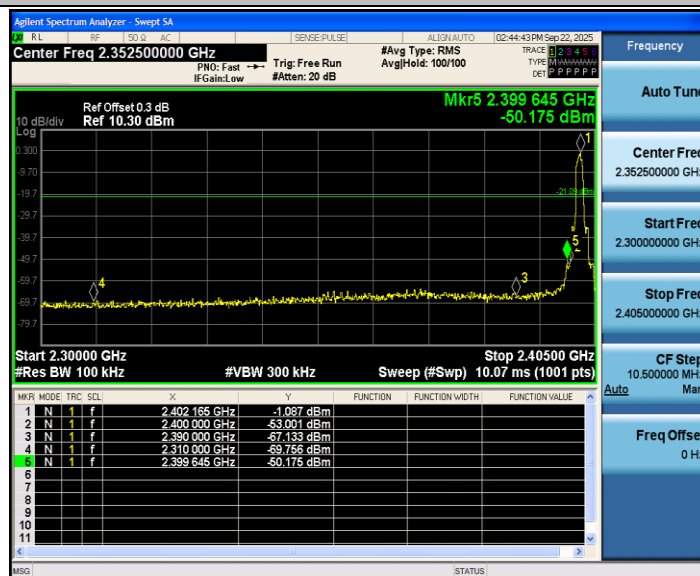




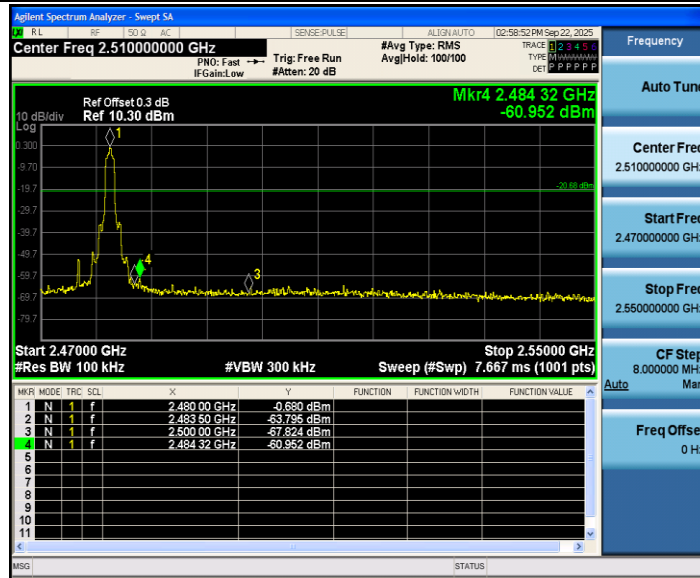
DH5_Ant1_High_Hop_2480



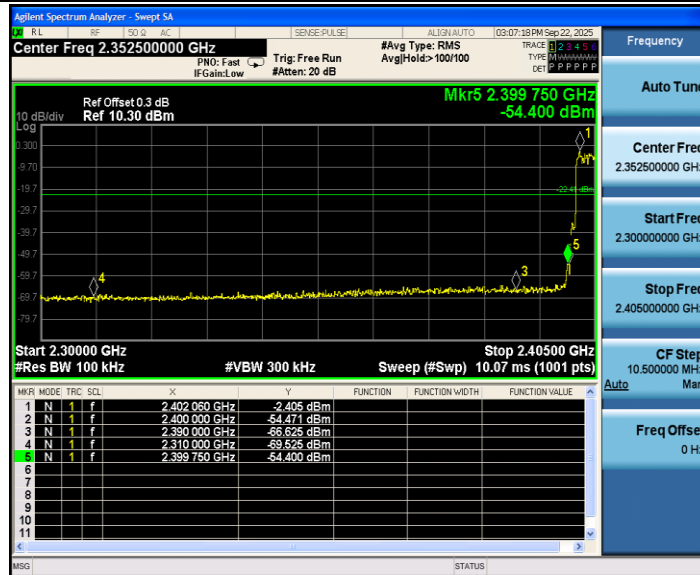
2DH5_Ant1_Low_2402



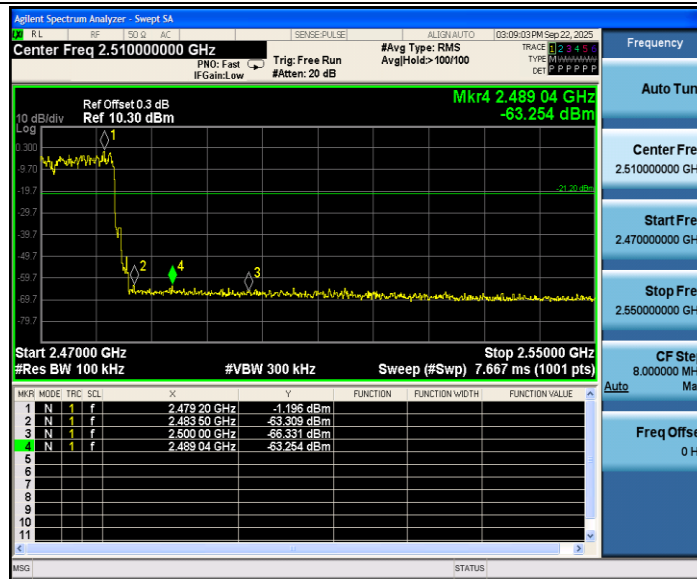
2DH5_Ant1_High_2480



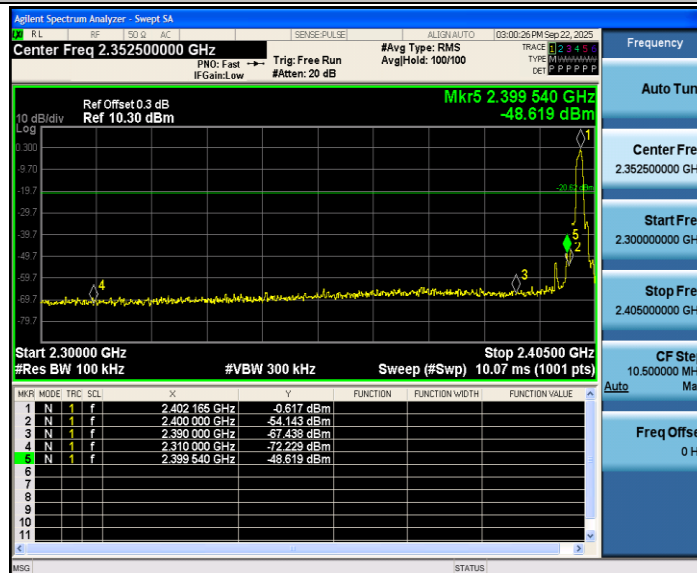
2DH5_Ant1_Low_Hop_2402



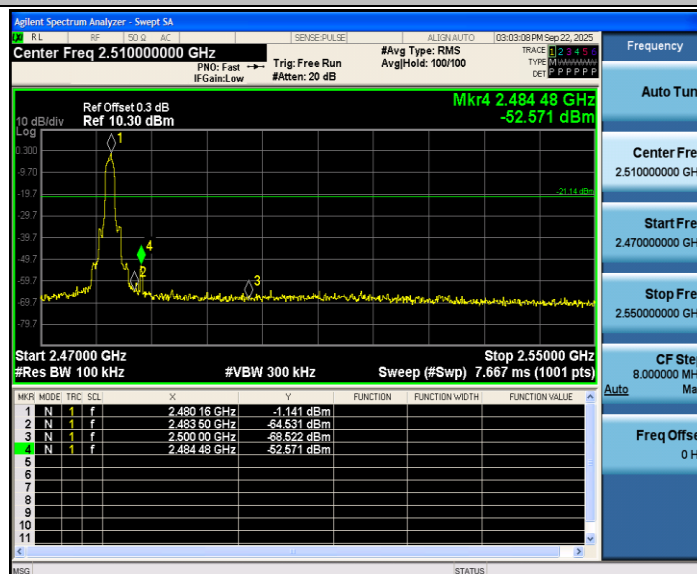
2DH5_Ant1_High_Hop_2480



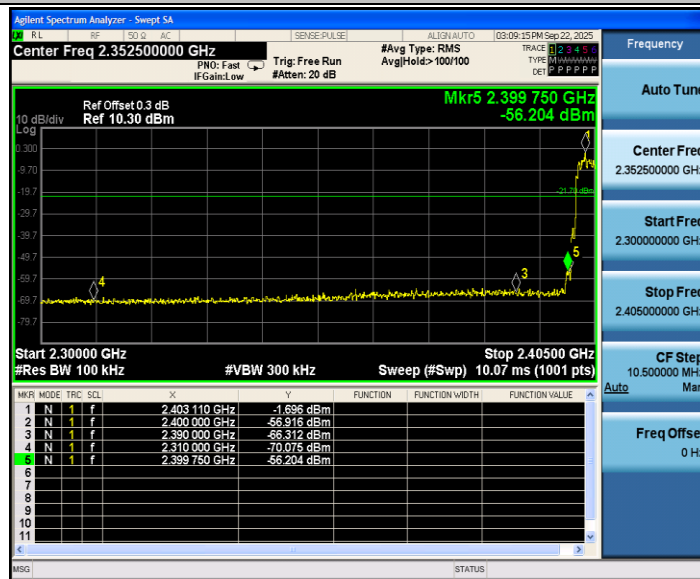
3DH5_Ant1_Low_2402



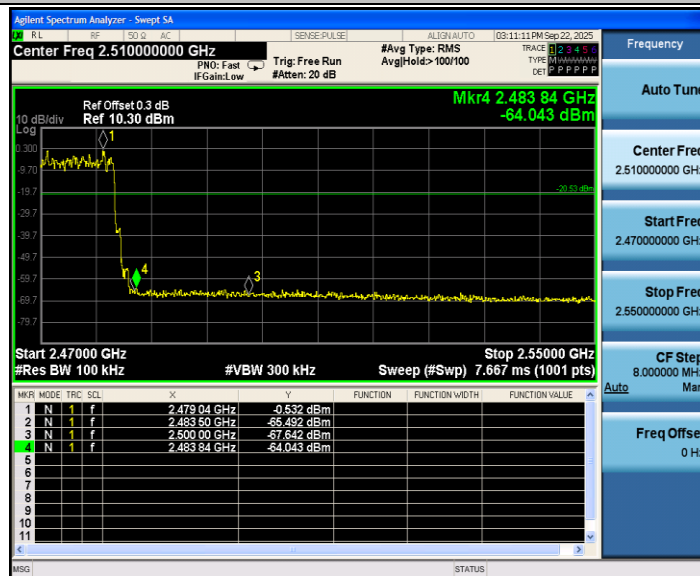
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

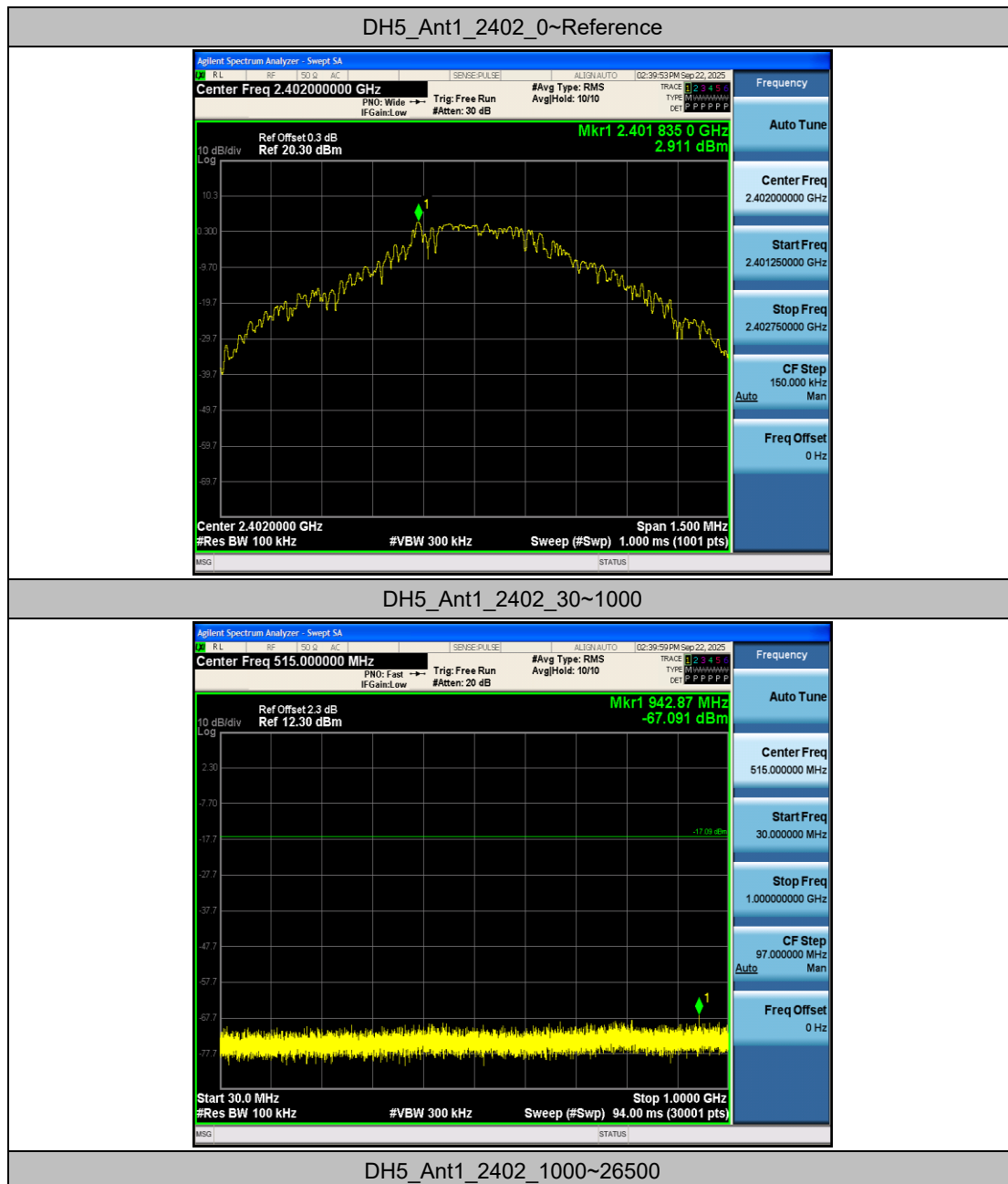


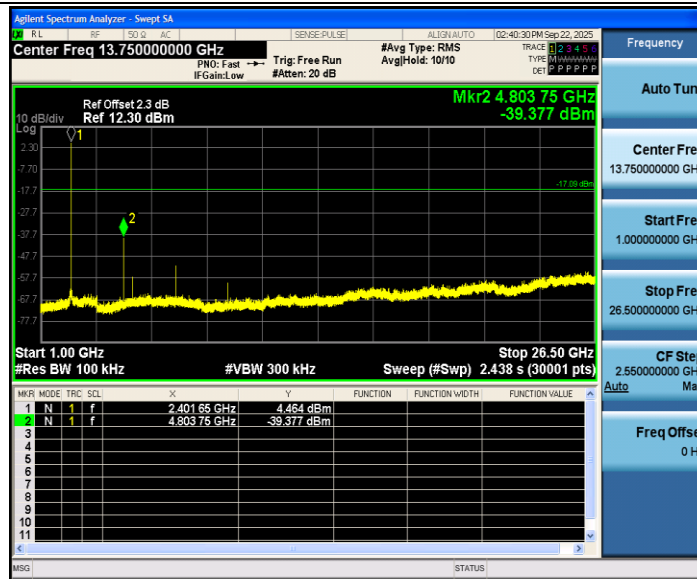
Appendix H: Conducted Spurious Emission

Test Result

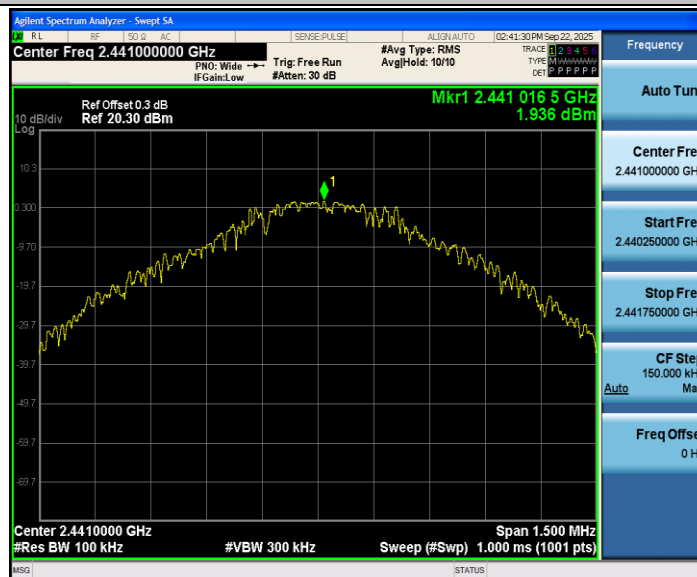
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.91	2.91	---	PASS
			30~1000	2.91	-67.09	≤-17.09	PASS
			1000~26500	2.91	-39.38	≤-17.09	PASS
		2441	Reference	1.94	1.94	---	PASS
			30~1000	1.94	-68.04	≤-18.06	PASS
			1000~26500	1.94	-40.02	≤-18.06	PASS
		2480	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-67.51	≤-18.13	PASS
			1000~26500	1.87	-41.36	≤-18.13	PASS
2DH5	Ant1	2402	Reference	-0.92	-0.92	---	PASS
			30~1000	-0.92	-67.5	≤-20.92	PASS
			1000~26500	-0.92	-45.3	≤-20.92	PASS
		2441	Reference	-1.65	-1.65	---	PASS
			30~1000	-1.65	-67.93	≤-21.65	PASS
			1000~26500	-1.65	-45.07	≤-21.65	PASS
		2480	Reference	-1.88	-1.88	---	PASS
			30~1000	-1.88	-67.98	≤-21.88	PASS
			1000~26500	-1.88	-44.12	≤-21.88	PASS
3DH5	Ant1	2402	Reference	-3.27	-3.27	---	PASS
			30~1000	-3.27	-61.58	≤-23.27	PASS
			1000~26500	-3.27	-45.71	≤-23.27	PASS
		2441	Reference	-1.82	-1.82	---	PASS
			30~1000	-1.82	-67.76	≤-21.82	PASS
			1000~26500	-1.82	-44.04	≤-21.82	PASS
		2480	Reference	-1.60	-1.60	---	PASS
			30~1000	-1.60	-68.36	≤-21.6	PASS
			1000~26500	-1.60	-46.53	≤-21.6	PASS

Test Graphs





DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

