

FCC Appendix RF Test Data for BT

FCC ID : 2AOMX-PBX-1020

Company : QFX Inc.

EUT : Speaker

Model Number : PBX-1020

Report No. : CTA26060300301

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	0.933	2401.556	2402.489	---	---
		2441	0.942	2440.553	2441.495	---	---
		2480	0.960	2479.544	2480.504	---	---
2DH5	Ant1	2402	1.290	2401.376	2402.666	---	---
		2441	1.284	2440.379	2441.663	---	---
		2480	1.341	2479.343	2480.684	---	---
3DH5	Ant1	2402	1.302	2401.364	2402.666	---	---
		2441	1.299	2440.361	2441.660	---	---
		2480	1.293	2479.355	2480.648	---	---

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.40200000 GHz

Ref Offset 0.3 dB
Ref 30.00 dBm

Trig: Free Run
#Atten: 40 dB

#Avg Type: RMS
AvgHold: 100/100

Span 3.000 MHz
Sweep 3.200 ms (1001 pts)

#Res BW 30 kHz
#VBW 100 kHz

ΔMkr3 933 kHz
-0.678 dB

Frequency

Auto Tune

Center Freq
2.40200000 GHz

Start Freq
2.40050000 GHz

Stop Freq
2.40350000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

MSO

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Ref Offset 0.3 dB
Ref 30.00 dBm

Trig: Free Run
#Atten: 40 dB

#Avg Type: RMS
AvgHold: 100/100

Span 3.000 MHz
Sweep 3.200 ms (1001 pts)

#Res BW 30 kHz
#VBW 100 kHz

ΔMkr3 942 kHz
0.063 dB

Frequency

Auto Tune

Center Freq
2.441000000 GHz

Start Freq
2.439500000 GHz

Stop Freq
2.442500000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

MSO



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

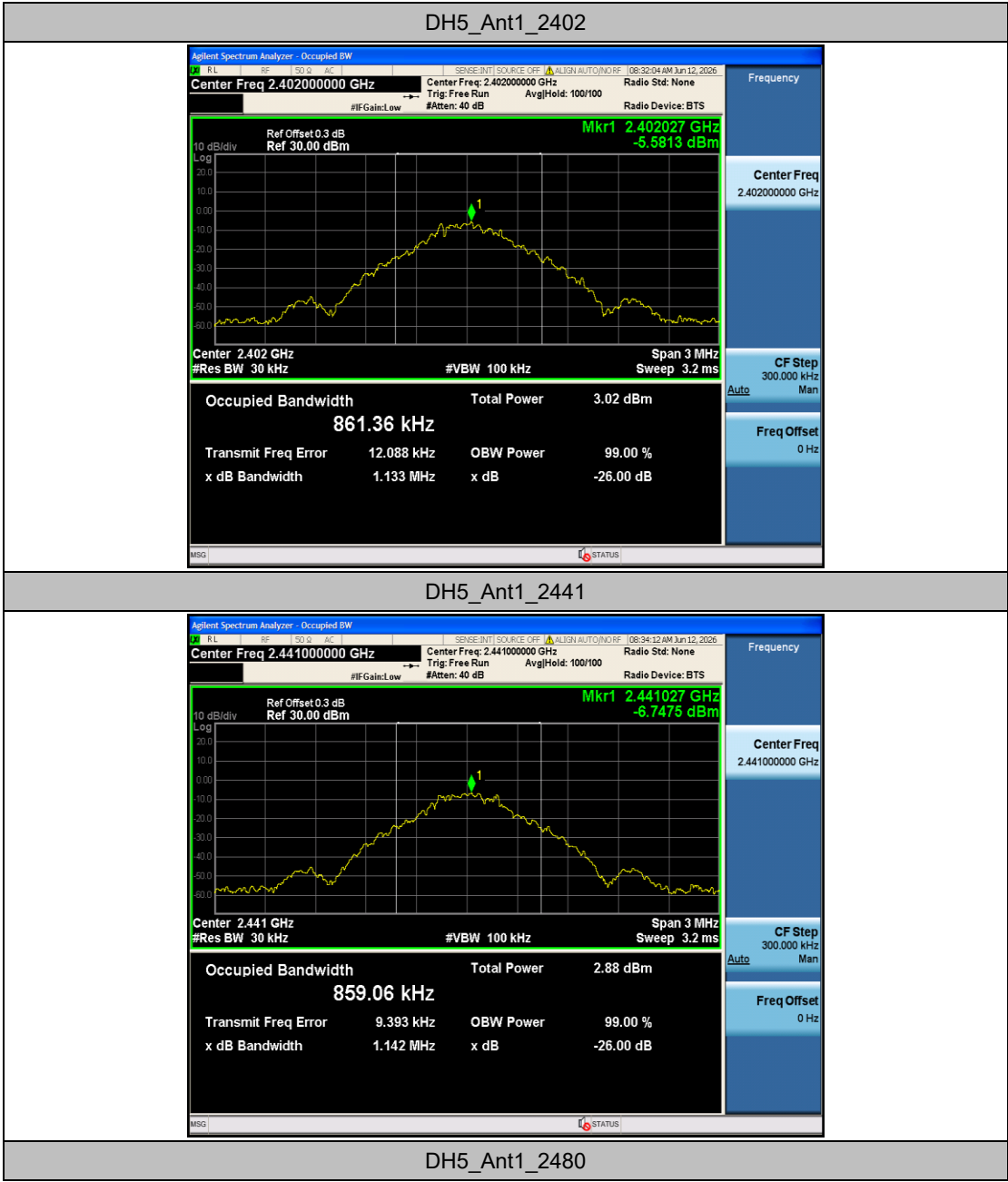


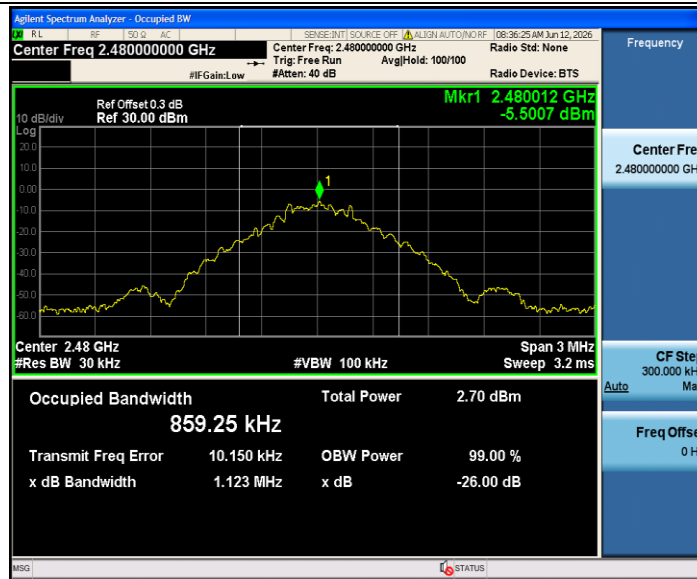
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86136	2401.5814	2402.4428	---	---
		2441	0.85906	2440.5799	2441.4389	---	---
		2480	0.85925	2479.5805	2480.4398	---	---
2DH5	Ant1	2402	1.1875	2401.4167	2402.6042	---	---
		2441	1.1912	2440.4141	2441.6053	---	---
		2480	1.1823	2479.4202	2480.6025	---	---
3DH5	Ant1	2402	1.1853	2401.4204	2402.6057	---	---
		2441	1.2093	2440.4039	2441.6132	---	---
		2480	1.1826	2479.4225	2480.6051	---	---

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	-3.44	≤20.97	PASS
		2441	-3.59	≤20.97	PASS
		2480	-3.89	≤20.97	PASS
2DH5	Ant1	2402	-0.77	≤20.97	PASS
		2441	-1.03	≤20.97	PASS
		2480	-1.26	≤20.97	PASS
3DH5	Ant1	2402	-0.44	≤20.97	PASS
		2441	-0.66	≤20.97	PASS
		2480	-0.95	≤20.97	PASS

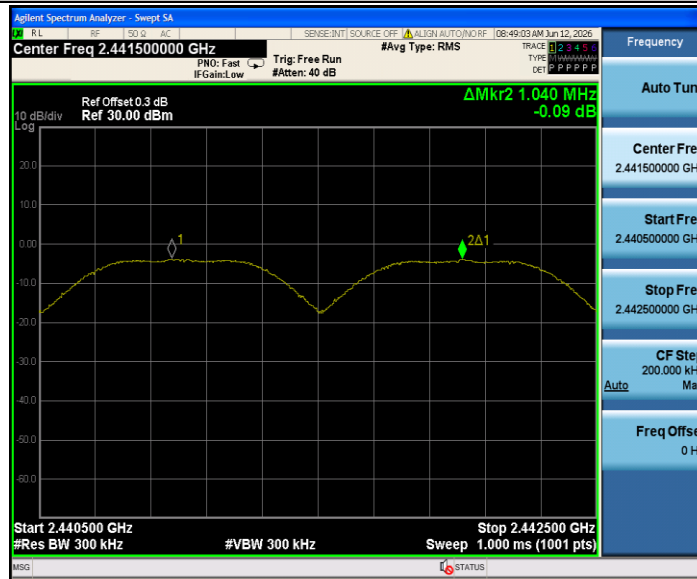
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.04	≥ 0.960	PASS
2DH5	Ant1	Hop	0.972	≥ 0.894	PASS
3DH5	Ant1	Hop	1.066	≥ 0.868	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

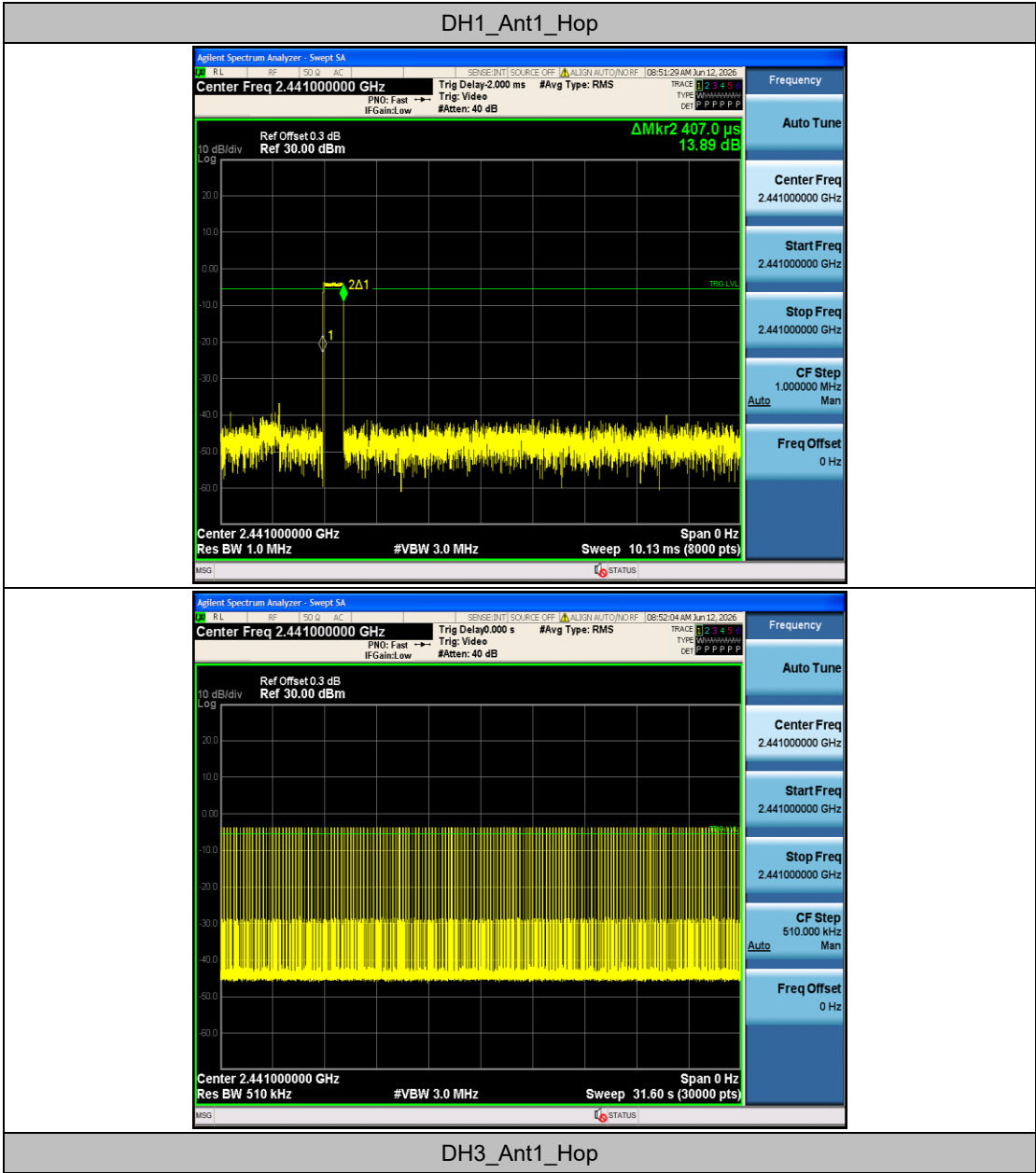


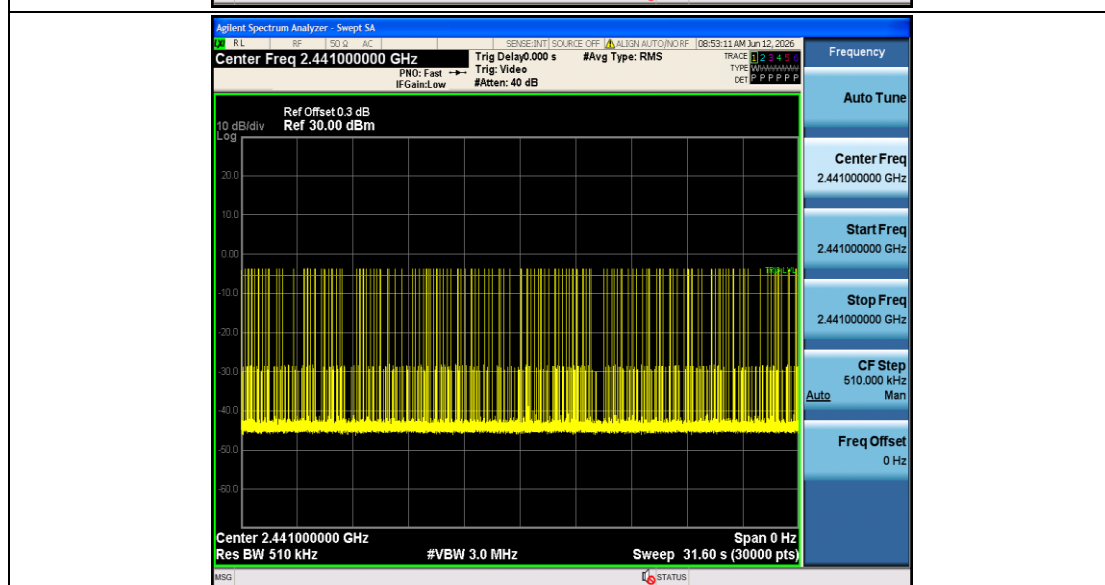
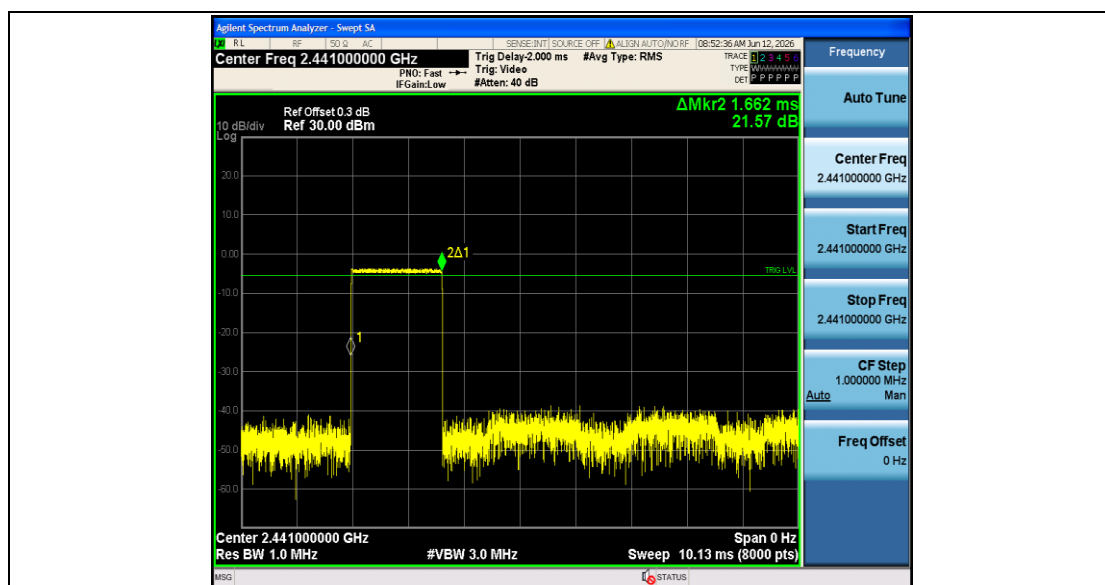
Appendix E: Time of occupancy

Test Result

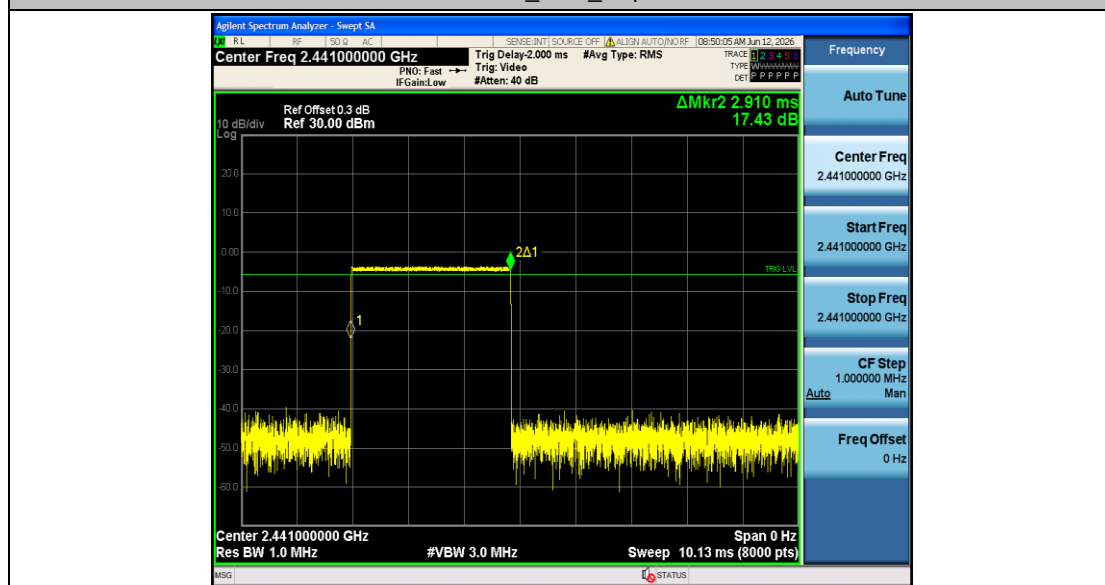
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	315	0.128	≤0.4	PASS
DH3	Ant1	Hop	1.662	153	0.254	≤0.4	PASS
DH5	Ant1	Hop	2.910	108	0.314	≤0.4	PASS
2DH1	Ant1	Hop	0.415	317	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	158	0.264	≤0.4	PASS
2DH5	Ant1	Hop	2.915	99	0.289	≤0.4	PASS
3DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.666	162	0.27	≤0.4	PASS
3DH5	Ant1	Hop	2.917	109	0.318	≤0.4	PASS

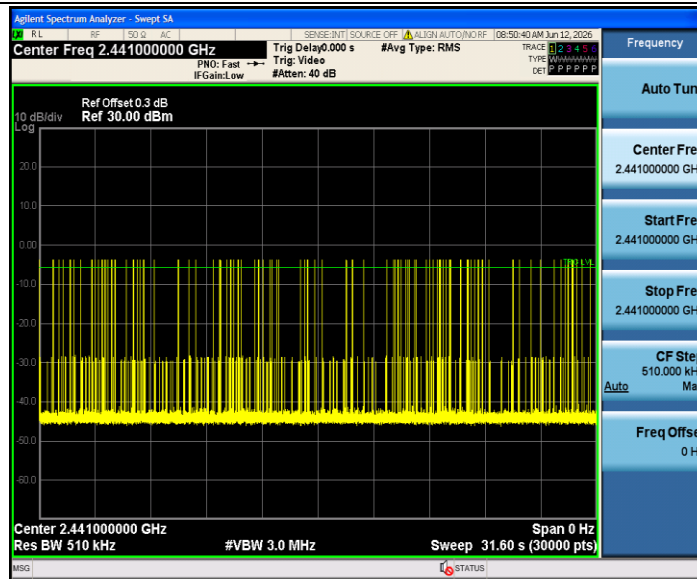
Test Graphs



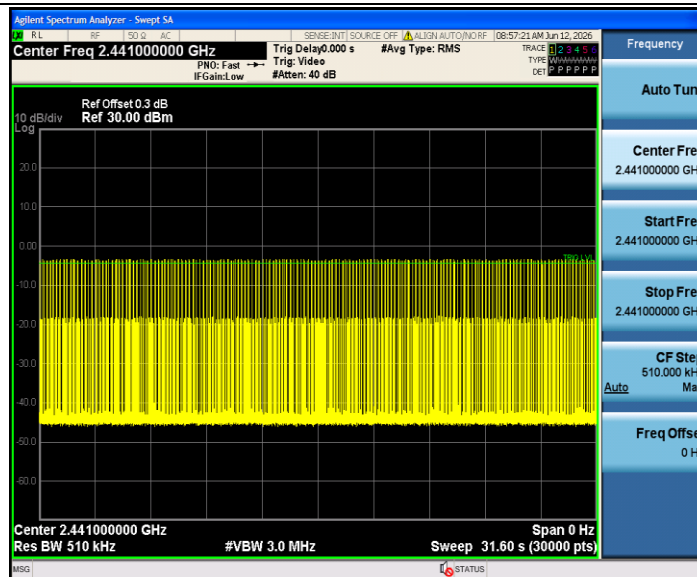
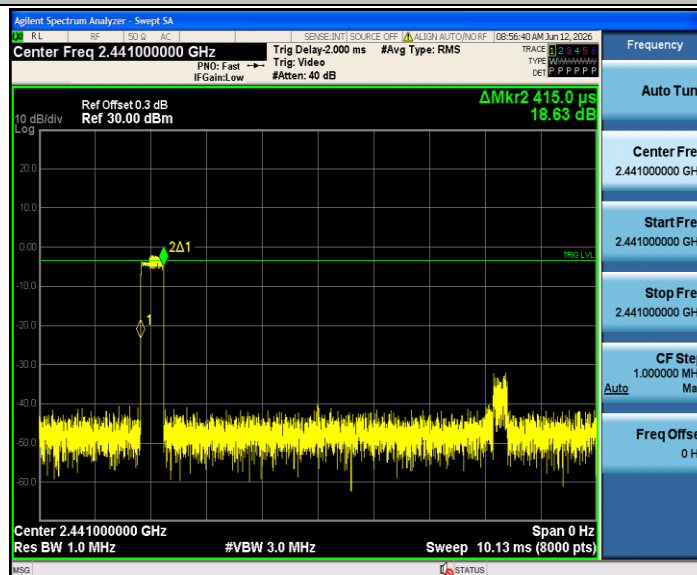


DH5_Ant1_Hop

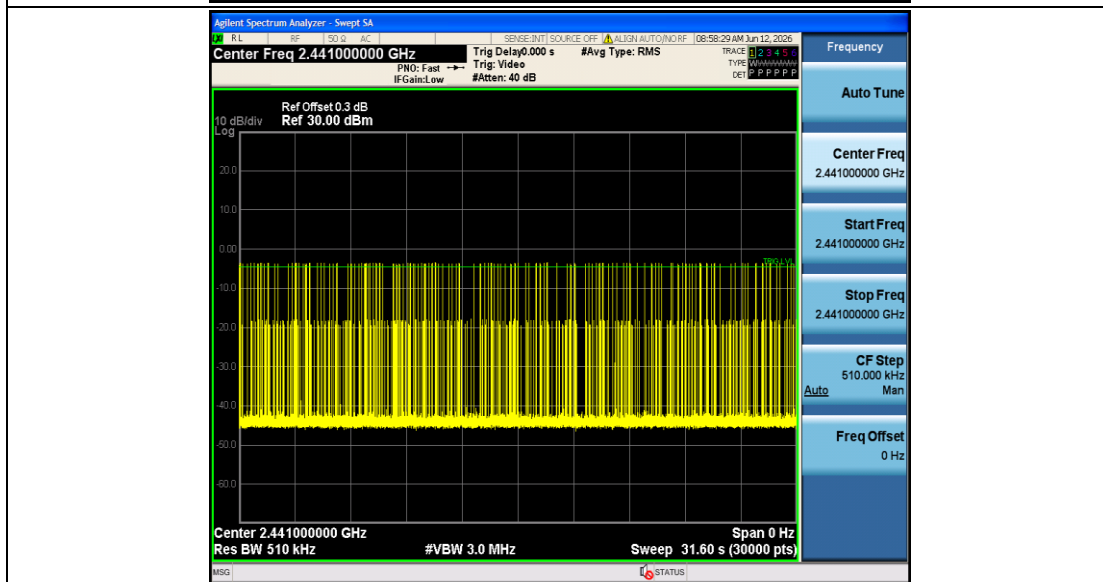
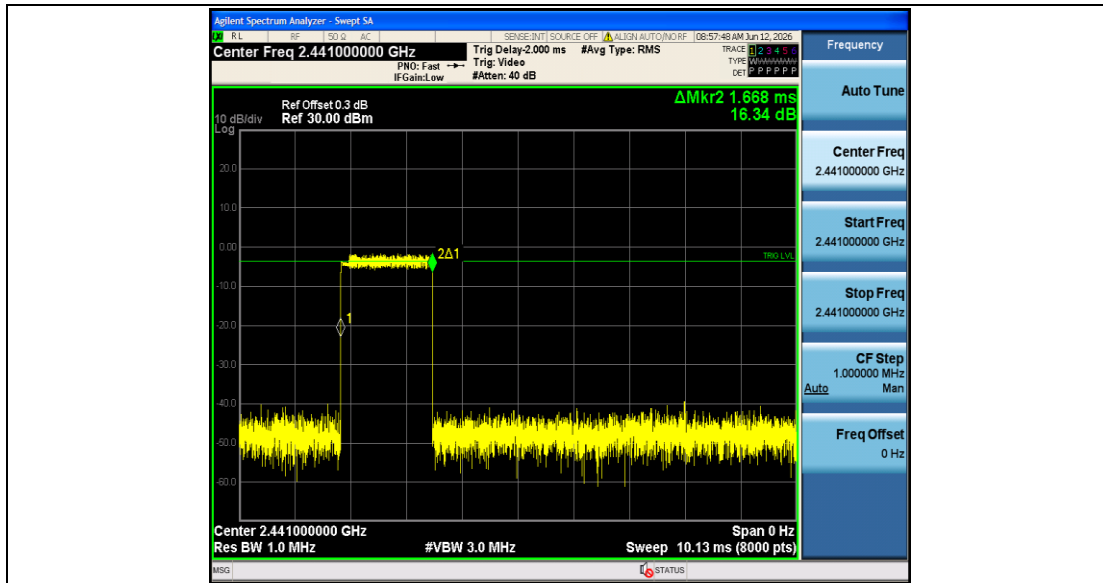




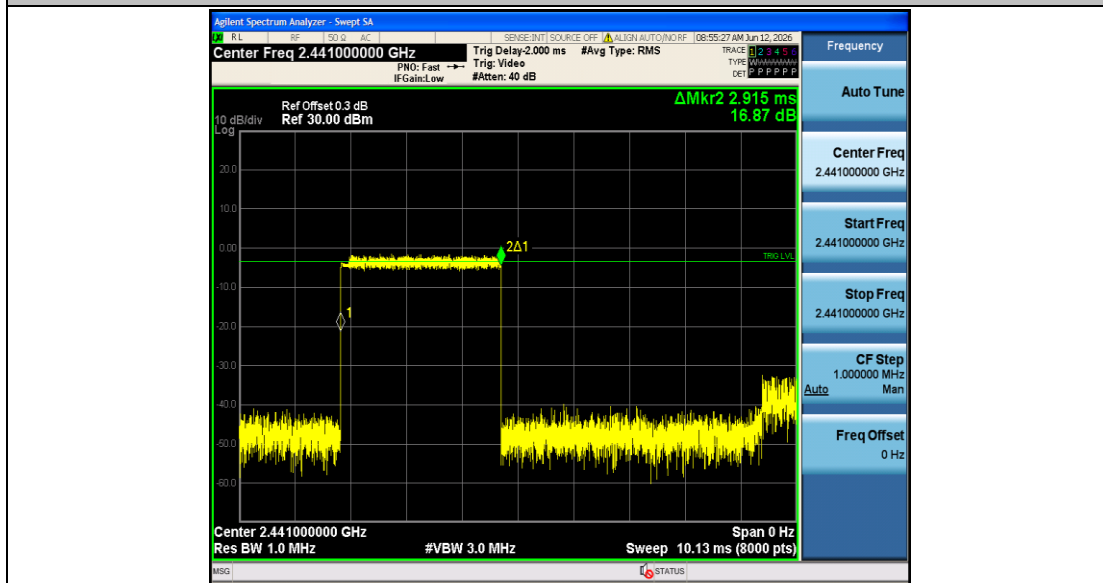
2DH1_Ant1_Hop

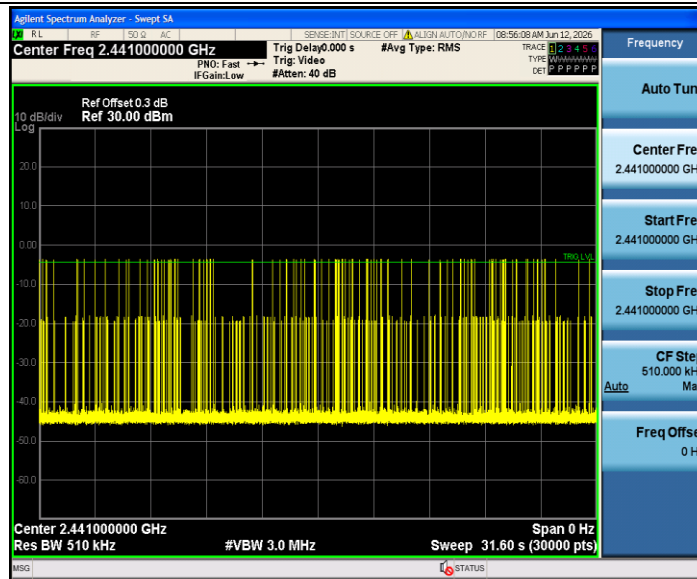


2DH3_Ant1_Hop

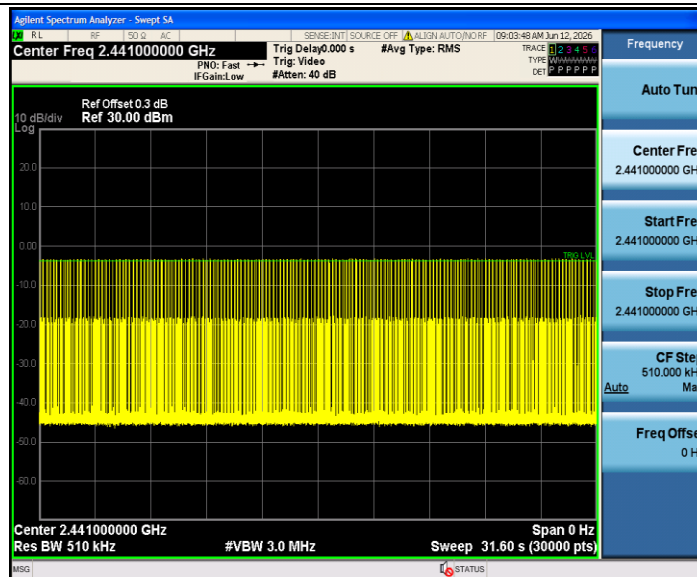
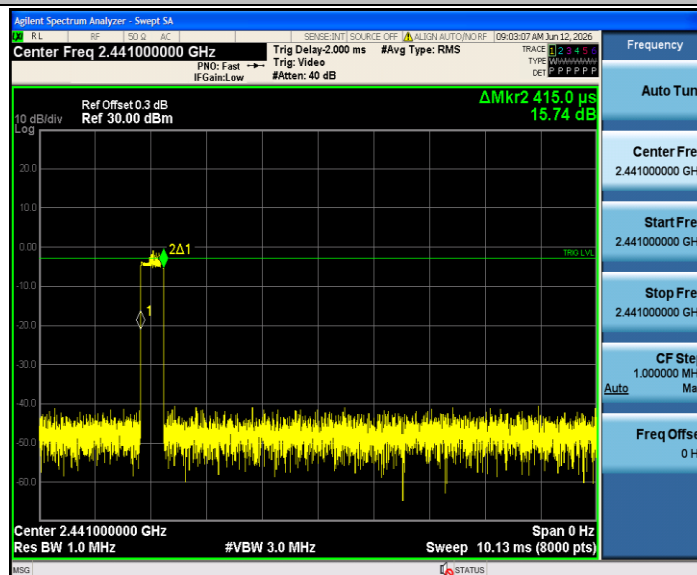


2DH5_Ant1_Hop

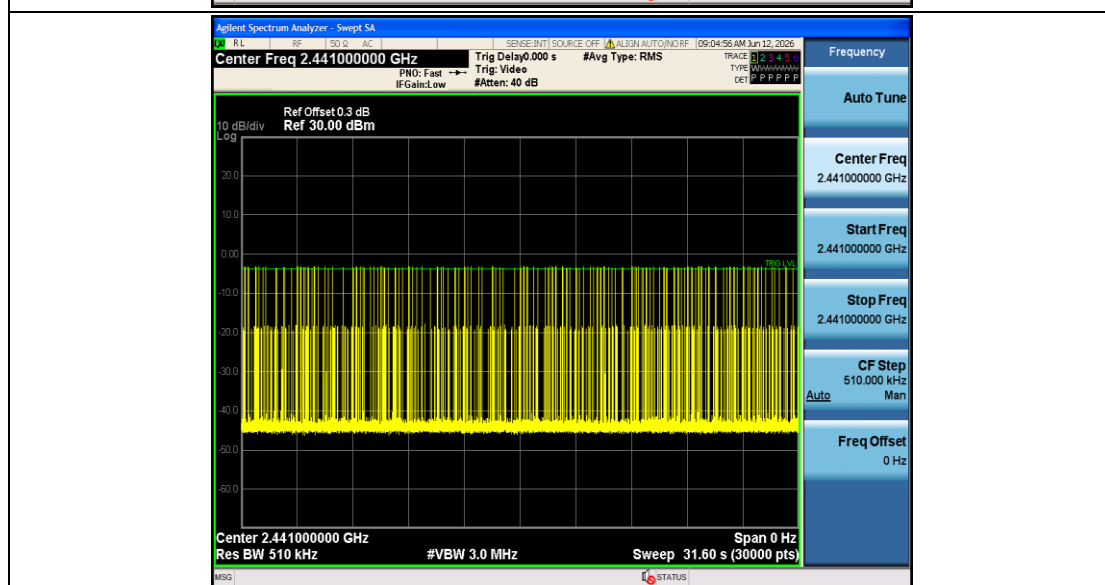
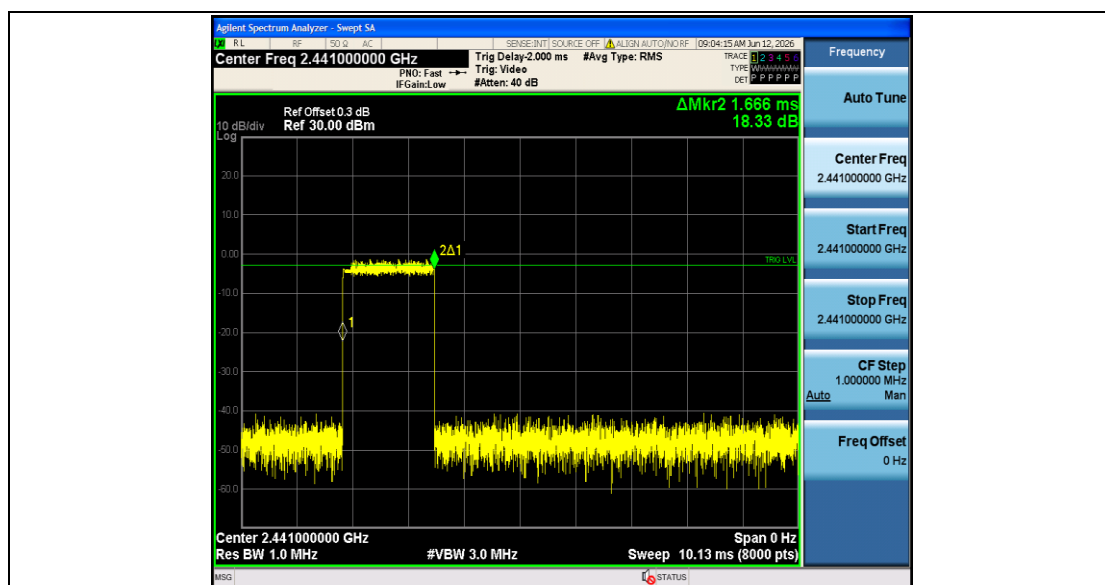




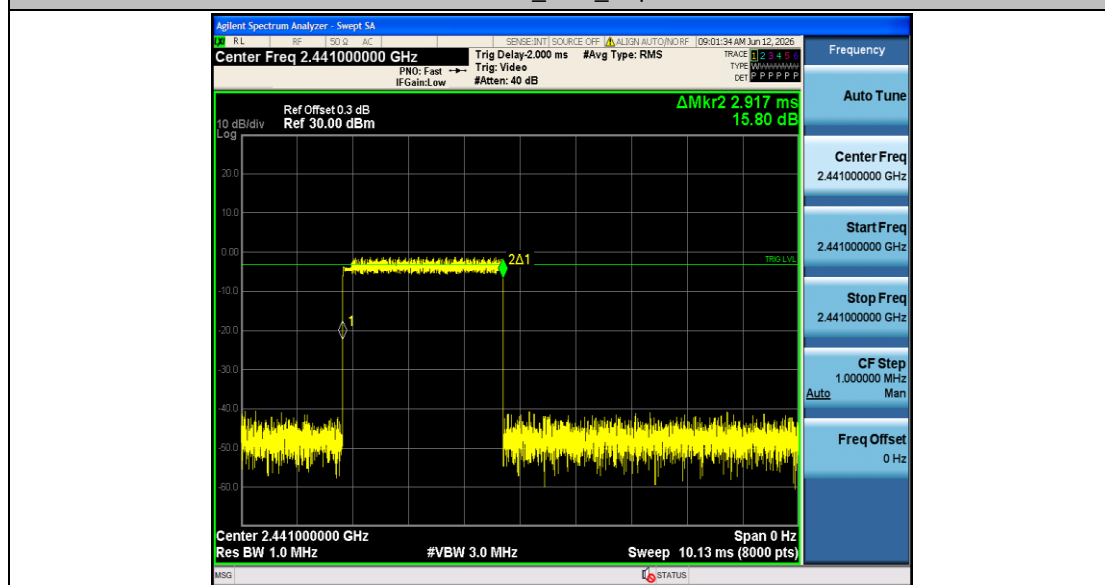
3DH1_Ant1_Hop

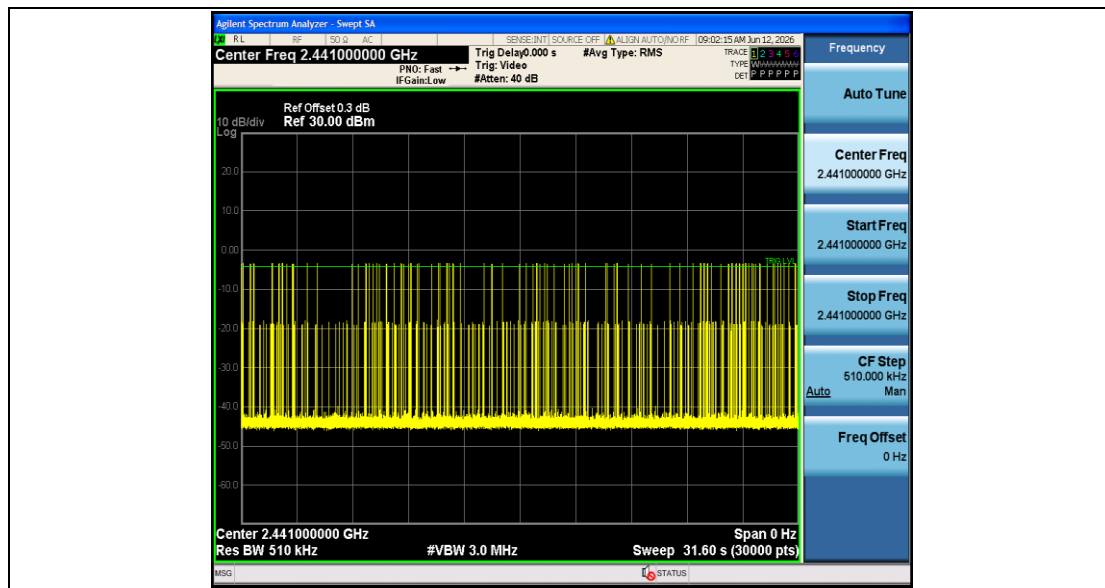


3DH3_Ant1_Hop



3DH5_Ant1_Hop



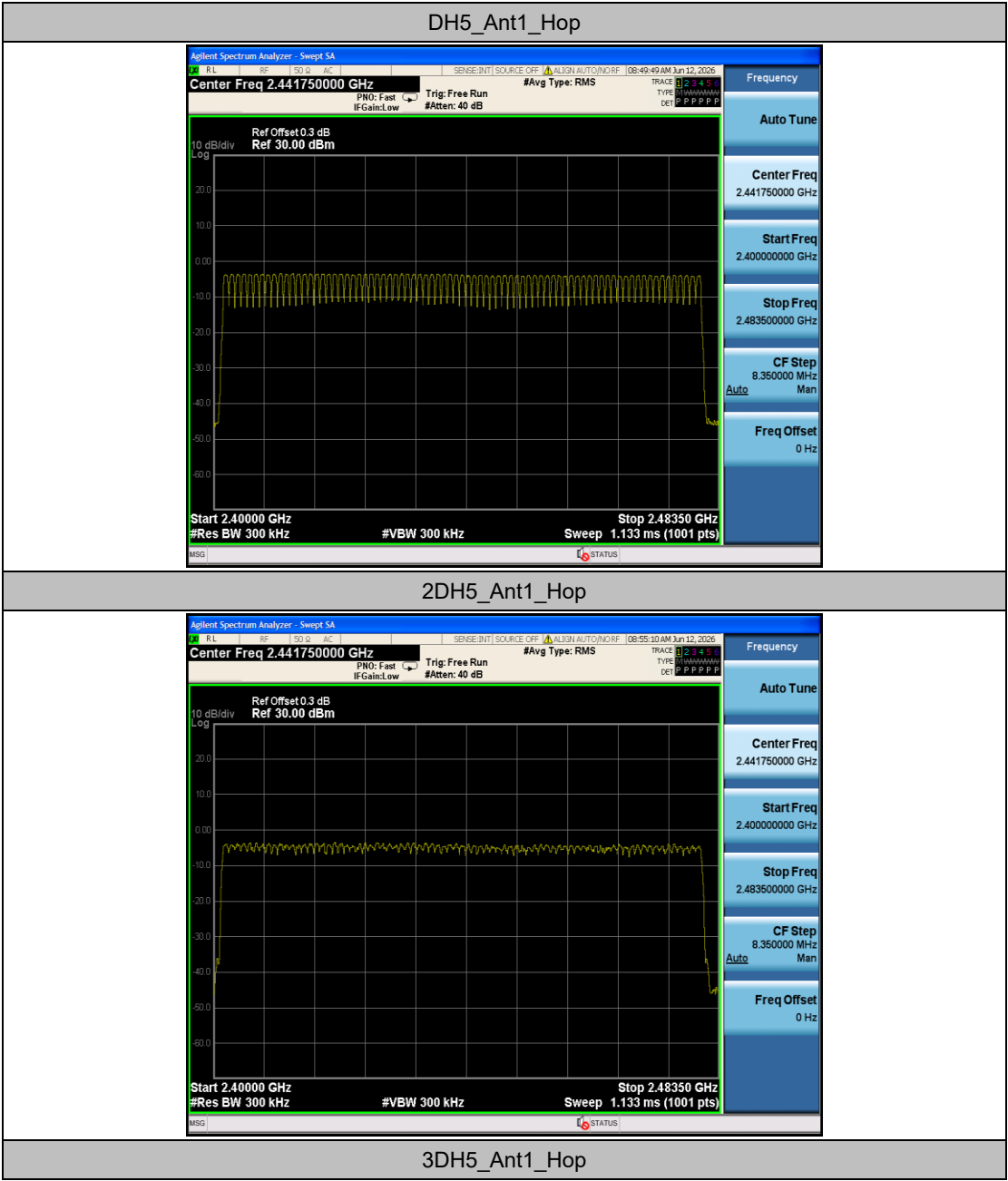


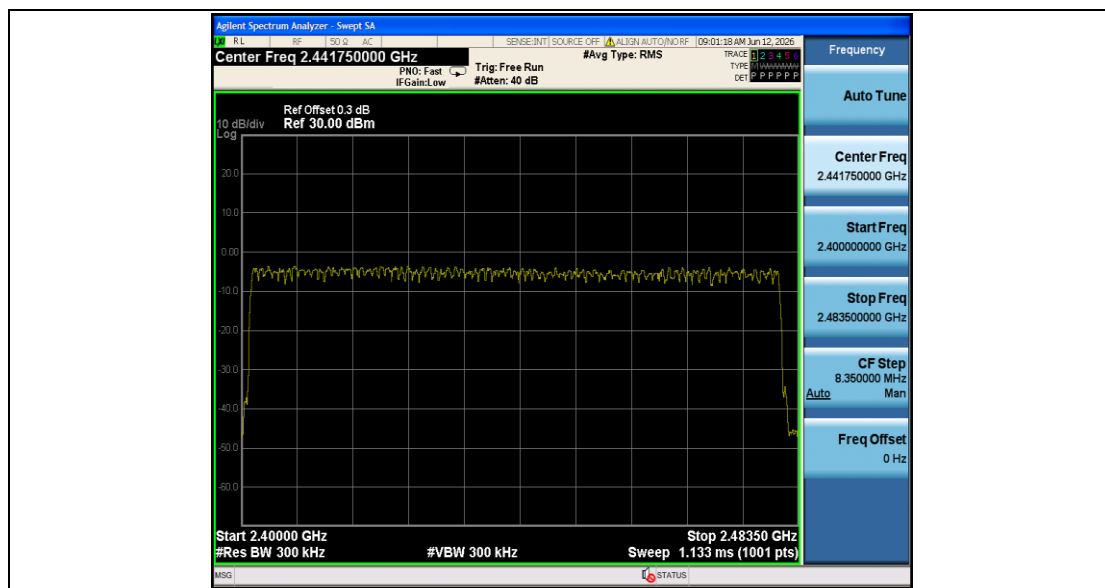
Appendix F: Number of hopping channels

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



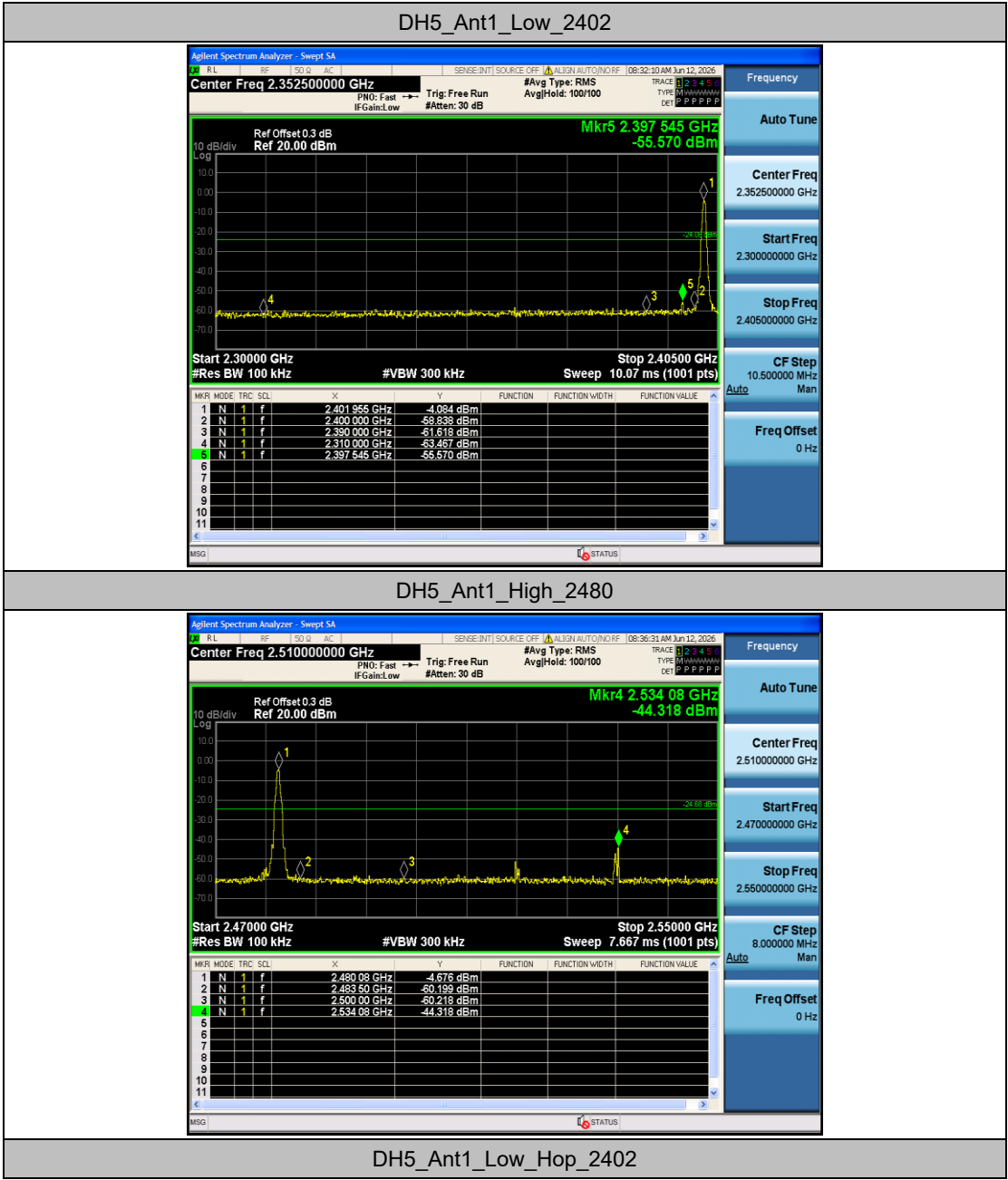


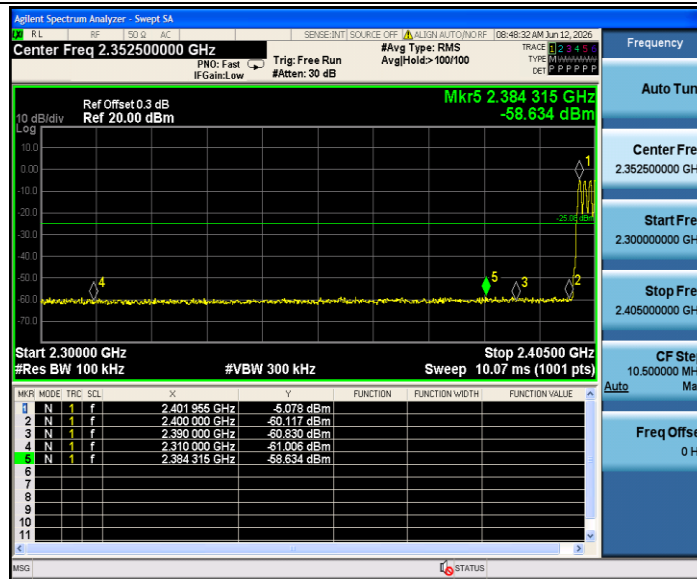
Appendix G: Band edge measurements

Test Result

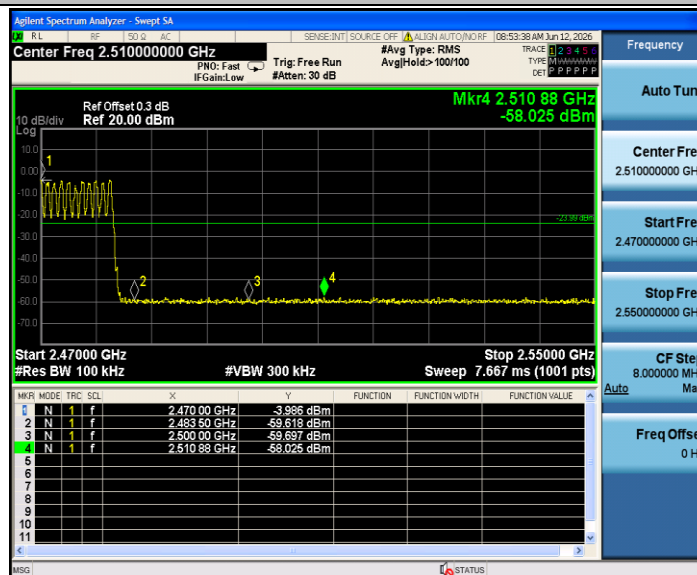
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.08	-55.57	≤-24.08	PASS
		High	2480	-4.68	-44.32	≤-24.68	PASS
		Low	Hop_2402	-5.08	-58.63	≤-25.08	PASS
		High	Hop_2480	-3.99	-58.03	≤-23.99	PASS
2DH5	Ant1	Low	2402	-4.14	-54.98	≤-24.14	PASS
		High	2480	-4.05	-43.35	≤-24.05	PASS
		Low	Hop_2402	-4.30	-57.99	≤-24.3	PASS
		High	Hop_2480	-4.41	-56.84	≤-24.41	PASS
3DH5	Ant1	Low	2402	-4.38	-58.39	≤-24.38	PASS
		High	2480	-5.22	-47.11	≤-25.22	PASS
		Low	Hop_2402	-6.19	-57.66	≤-26.19	PASS
		High	Hop_2480	-5.26	-57.2	≤-25.26	PASS

Test Graphs

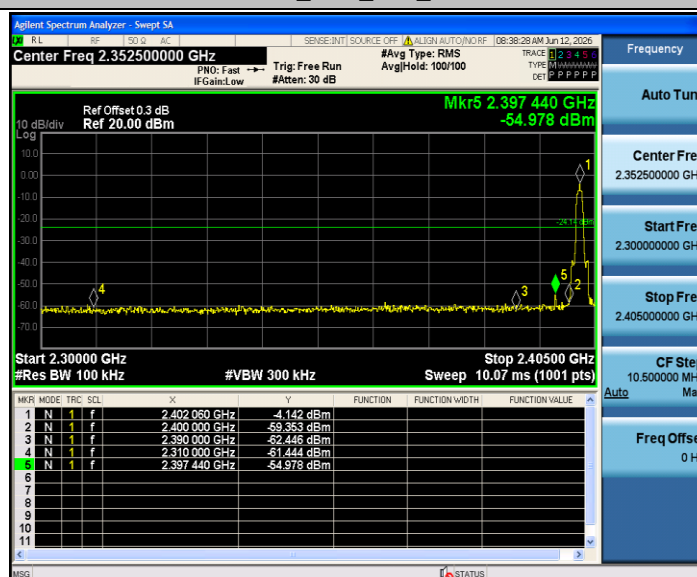




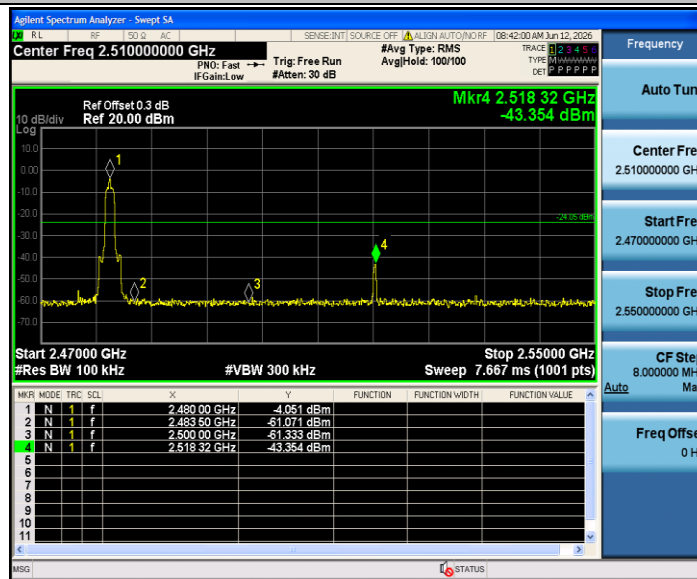
DH5_Ant1_High_Hop_2480



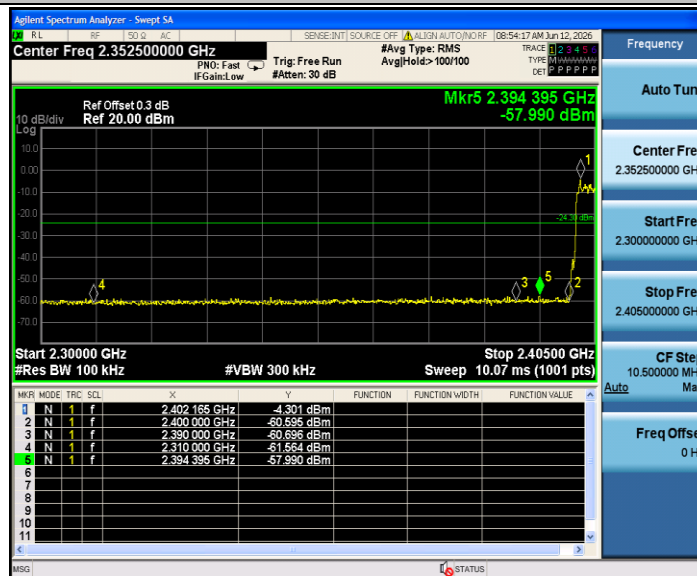
2DH5_Ant1_Low_2402



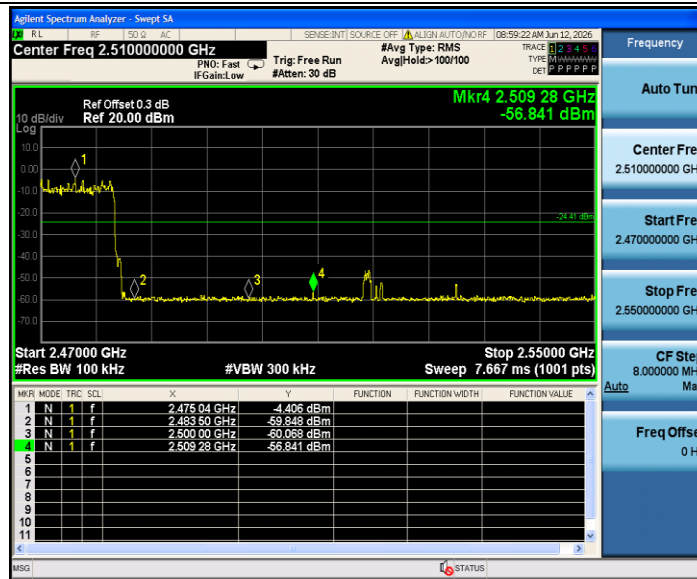
2DH5_Ant1_High_2480



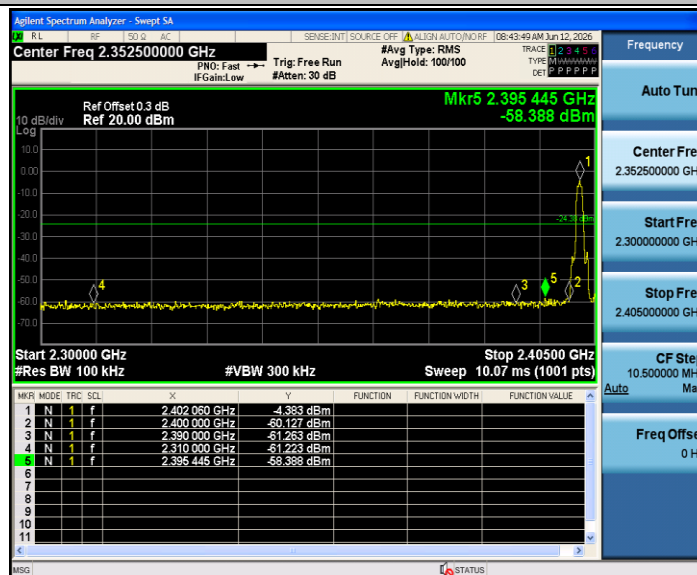
2DH5_Ant1_Low_Hop_2402



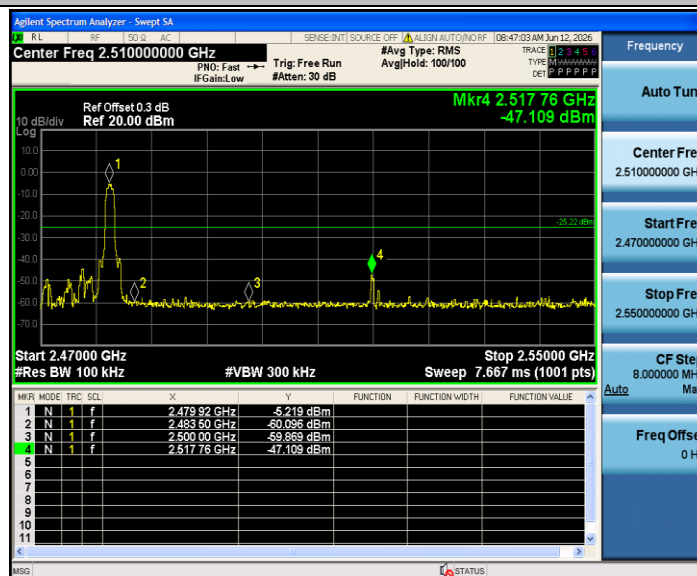
2DH5_Ant1_High_Hop_2480



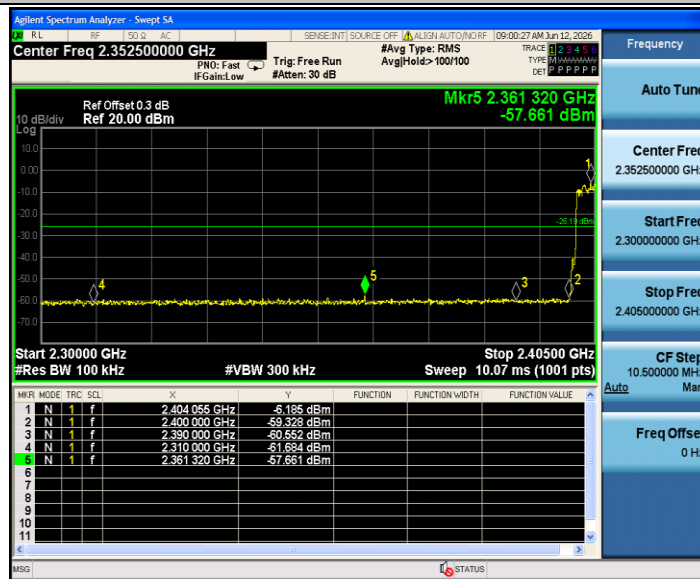
3DH5_Ant1_Low_2402



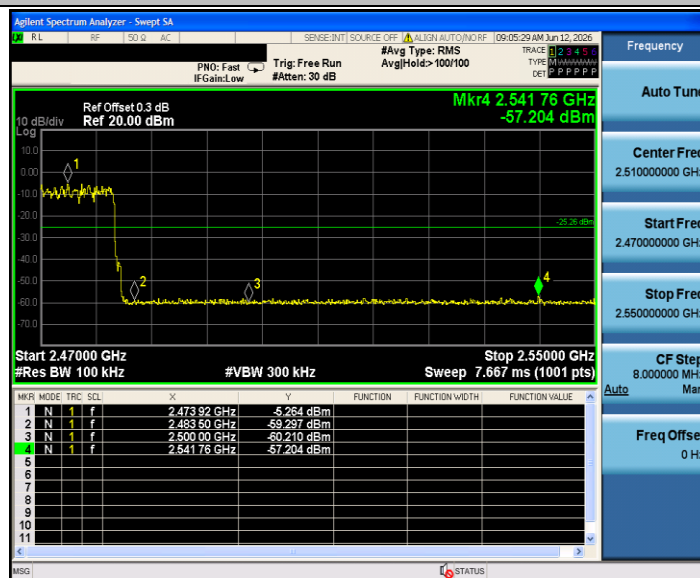
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

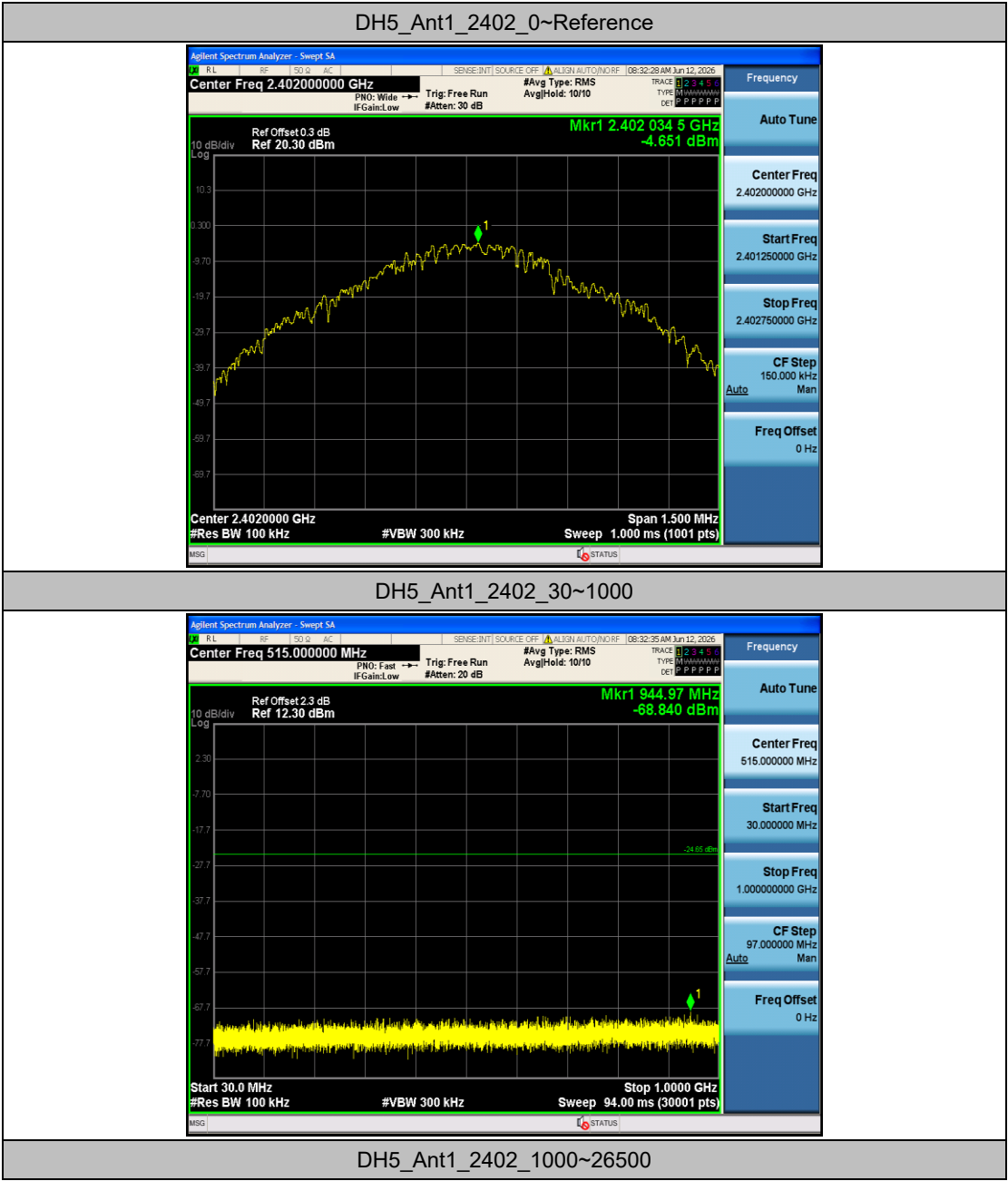


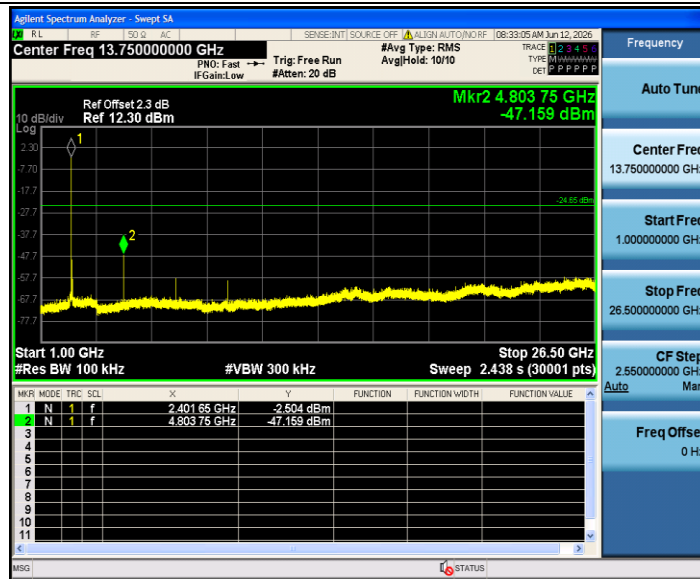
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.65	-4.65	---	PASS
			30~1000	-4.65	-68.84	≤-24.65	PASS
			1000~26500	-4.65	-47.16	≤-24.65	PASS
		2441	Reference	-5.05	-5.05	---	PASS
			30~1000	-5.05	-56.53	≤-25.05	PASS
			1000~26500	-5.05	-50.62	≤-25.05	PASS
		2480	Reference	-5.35	-5.35	---	PASS
			30~1000	-5.35	-69.49	≤-25.35	PASS
			1000~26500	-5.35	-50.26	≤-25.35	PASS
2DH5	Ant1	2402	Reference	-6.46	-6.46	---	PASS
			30~1000	-6.46	-69	≤-26.46	PASS
			1000~26500	-6.46	-49.17	≤-26.46	PASS
		2441	Reference	-5.38	-5.38	---	PASS
			30~1000	-5.38	-69.85	≤-25.38	PASS
			1000~26500	-5.38	-53.1	≤-25.38	PASS
		2480	Reference	-5.57	-5.57	---	PASS
			30~1000	-5.57	-69.17	≤-25.57	PASS
			1000~26500	-5.57	-51.95	≤-25.57	PASS
3DH5	Ant1	2402	Reference	-6.16	-6.16	---	PASS
			30~1000	-6.16	-69.36	≤-26.16	PASS
			1000~26500	-6.16	-49.11	≤-26.16	PASS
		2441	Reference	-5.44	-5.44	---	PASS
			30~1000	-5.44	-68.67	≤-25.44	PASS
			1000~26500	-5.44	-53.38	≤-25.44	PASS
		2480	Reference	-6.44	-6.44	---	PASS
			30~1000	-6.44	-69.23	≤-26.44	PASS
			1000~26500	-6.44	-52.27	≤-26.44	PASS

Test Graphs

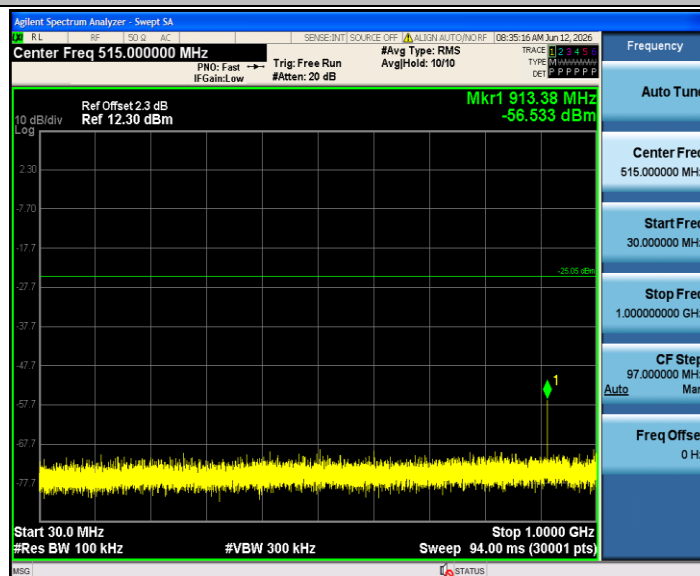




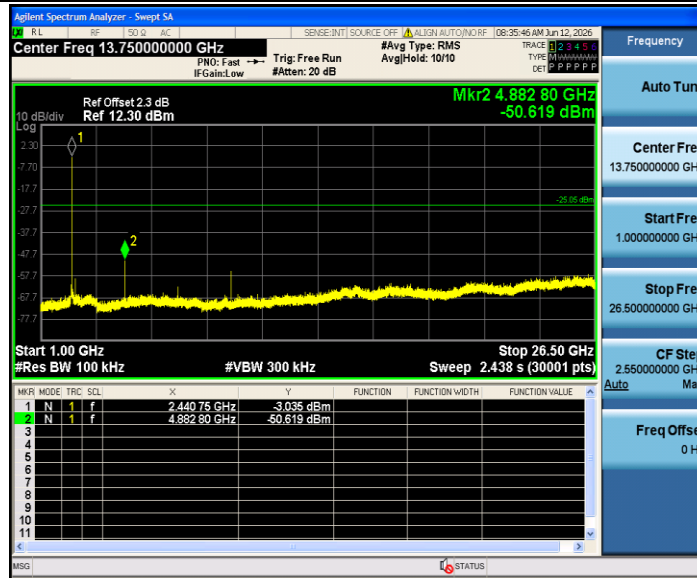
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



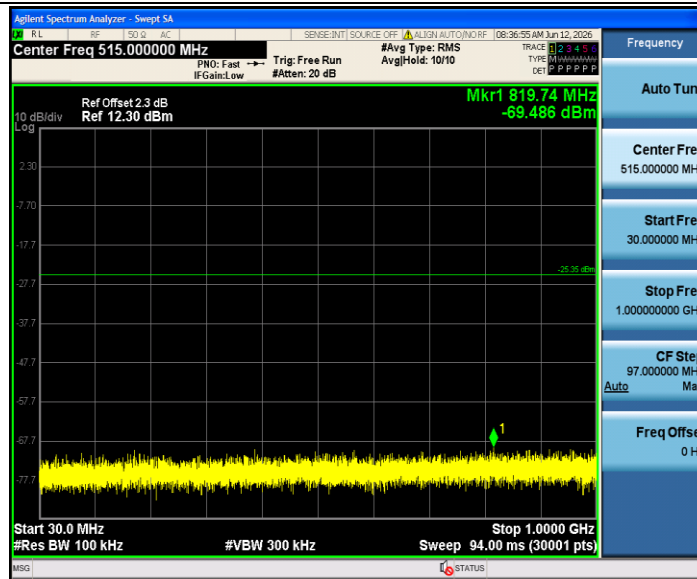
DH5_Ant1_2441_1000~26500



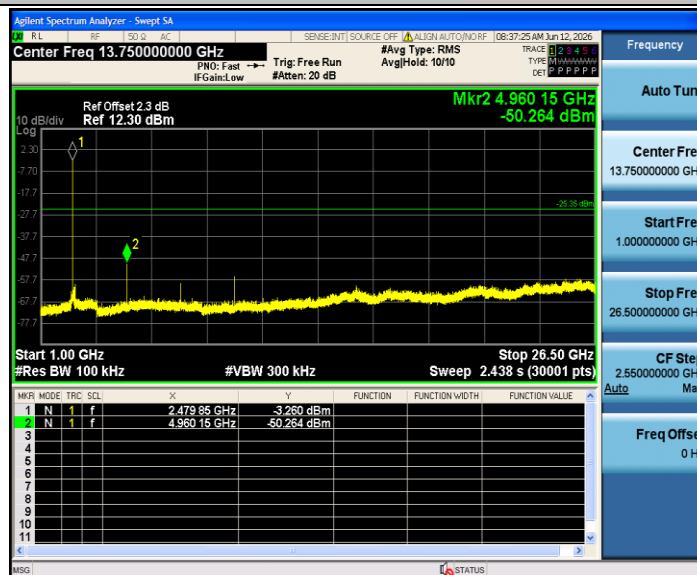
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

