

FCC Appendix RF Test Data for BT

FCC ID : 2A9JD-Q3

Company : Shenzhen Jingyun Wulian Technology CO.,Ltd

EUT : Smart glasses

Model Number : Q3

Report No. : CTA25103001501

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	0.948	2401.550	2402.498	---	---
		2441	0.948	2440.547	2441.495	---	---
		2480	0.924	2479.568	2480.492	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.311	2440.355	2441.666	---	---
		2480	1.308	2479.355	2480.663	---	---

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Ave 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
0.314 dB

Frequency

Auto Tune

Center Freq
2.40200000 GHz

Start Freq
2.400500000 GHz

Stop Freq
2.403500000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

MSO

STATUS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Ave 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
0.328 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

STATUS



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

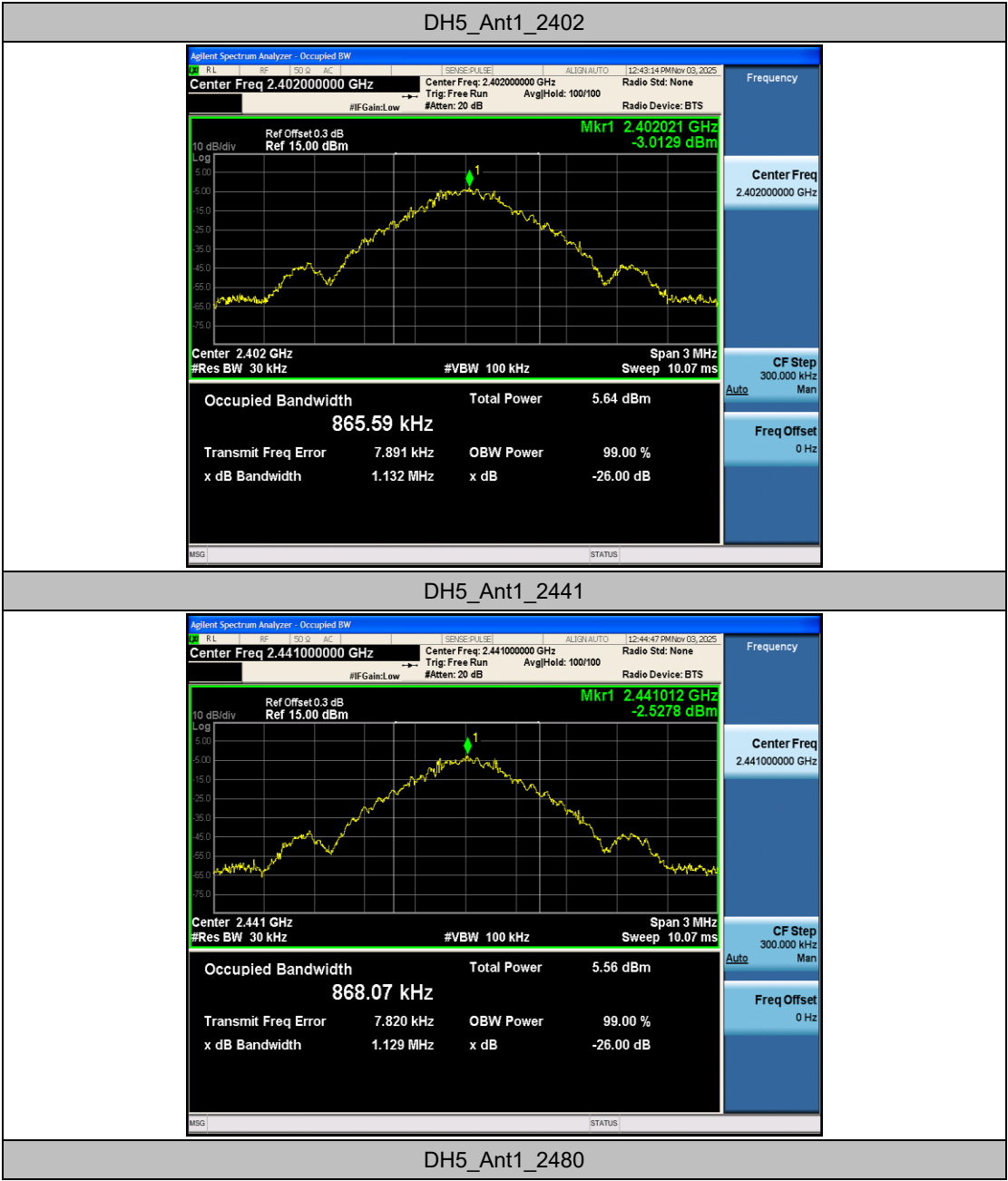


Appendix B: Occupied Channel Bandwidth

Test Result

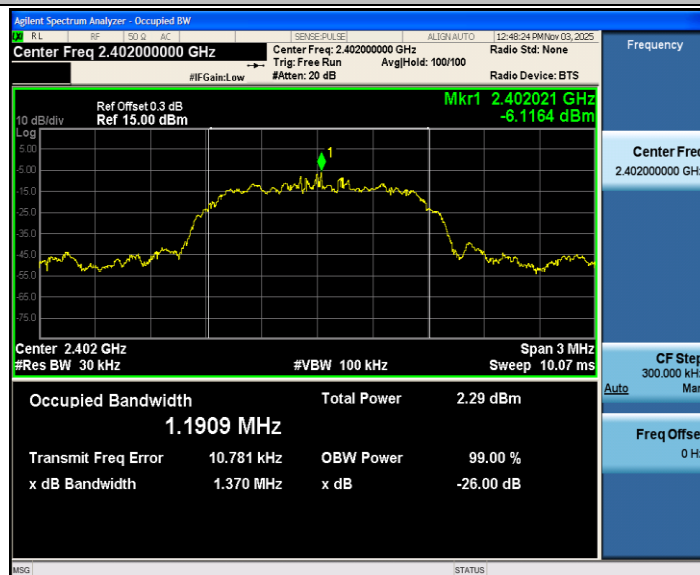
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86559	2401.5751	2402.4407	---	---
		2441	0.86807	2440.5738	2441.4419	---	---
		2480	0.86562	2479.5757	2480.4414	---	---
2DH5	Ant1	2402	1.1909	2401.4153	2402.6062	---	---
		2441	1.1896	2440.4151	2441.6047	---	---
		2480	1.1837	2479.4189	2480.6026	---	---

Test Graphs

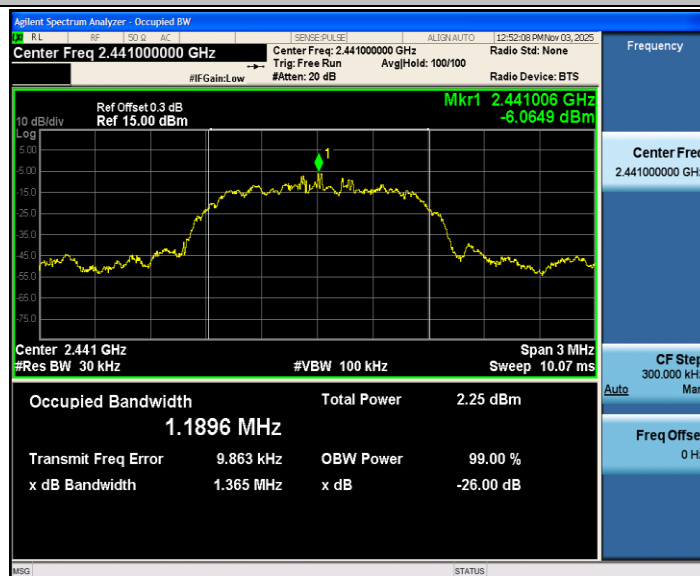




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_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	-0.27	≤20.97	PASS
		2441	-0.38	≤20.97	PASS
		2480	-0.40	≤20.97	PASS
2DH5	Ant1	2402	-1.08	≤20.97	PASS
		2441	-1.15	≤20.97	PASS
		2480	-1.18	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.02	≥ 0.948	PASS
2DH5	Ant1	Hop	1.176	≥ 0.874	PASS

Test Graphs

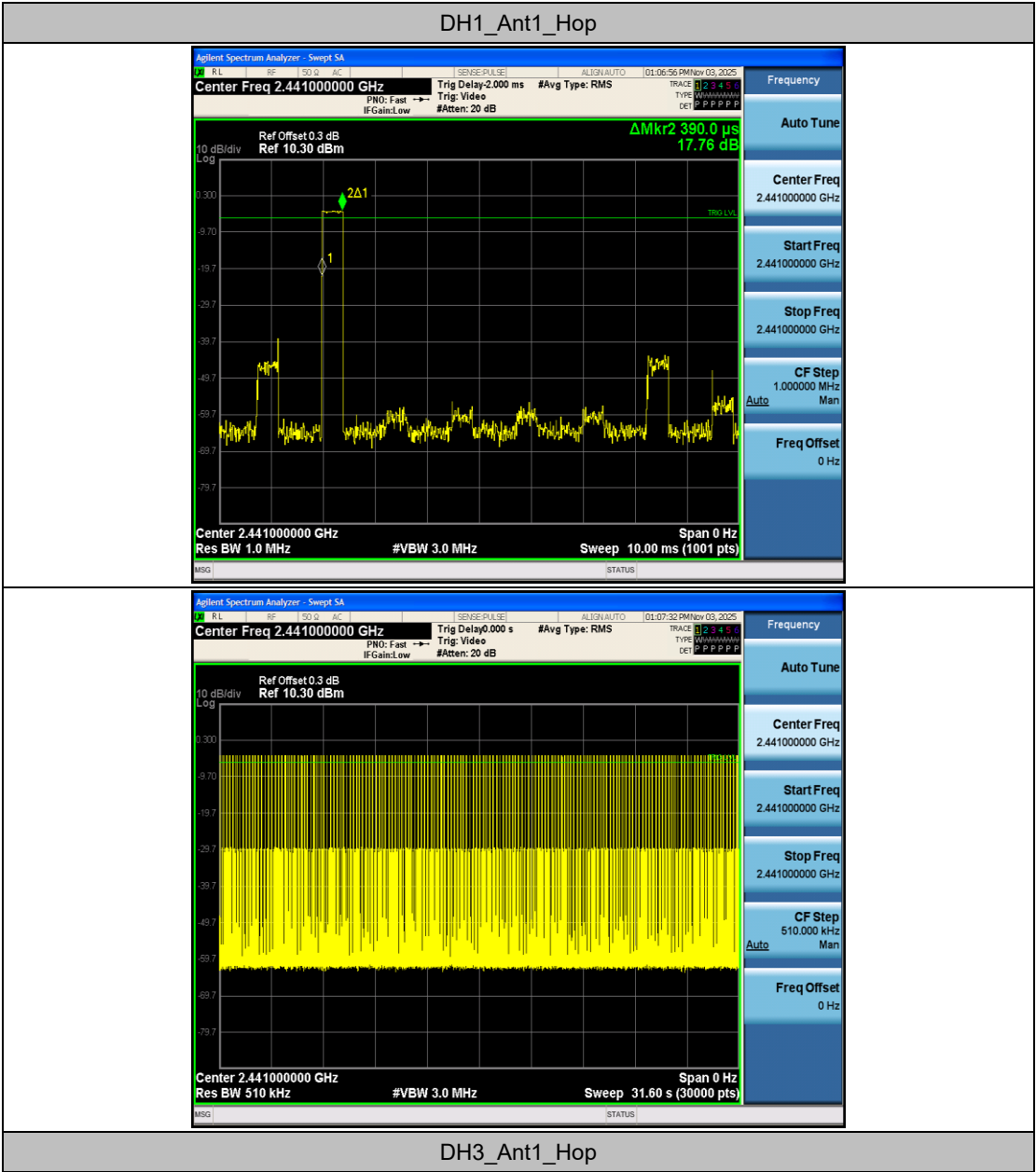


Appendix E: Time of occupancy

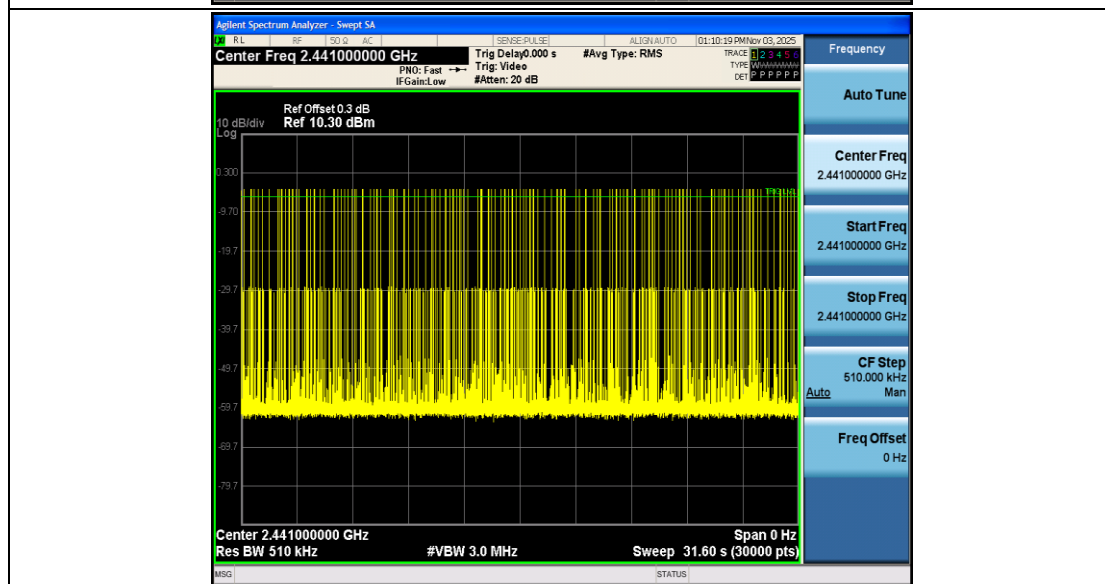
Test Result

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	160	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.890	106	0.306	≤0.4	PASS
2DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
2DH3	Ant1	Hop	1.640	154	0.253	≤0.4	PASS
2DH5	Ant1	Hop	2.900	107	0.31	≤0.4	PASS

Test Graphs

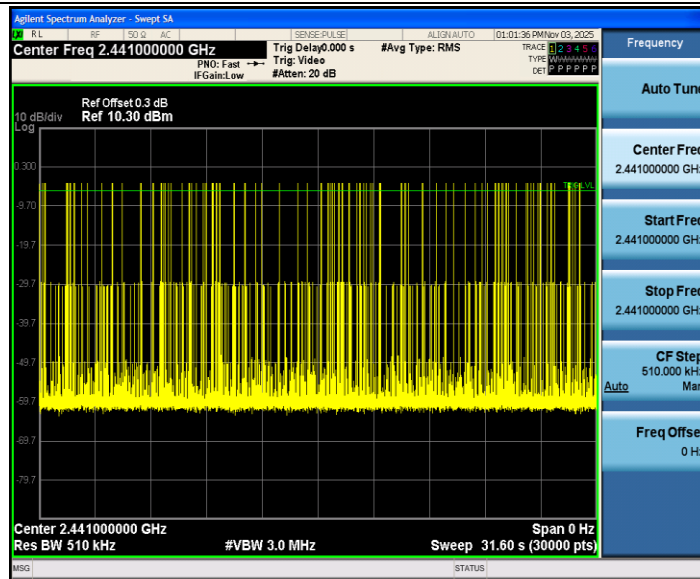


DH3_Ant1_Hop

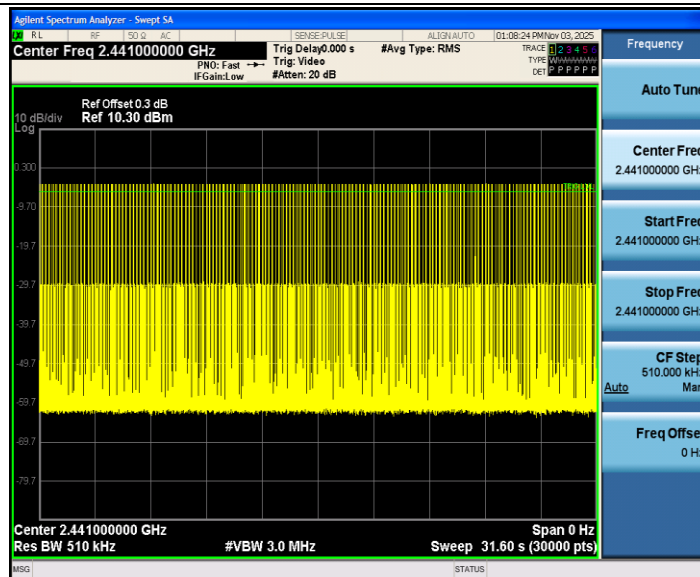
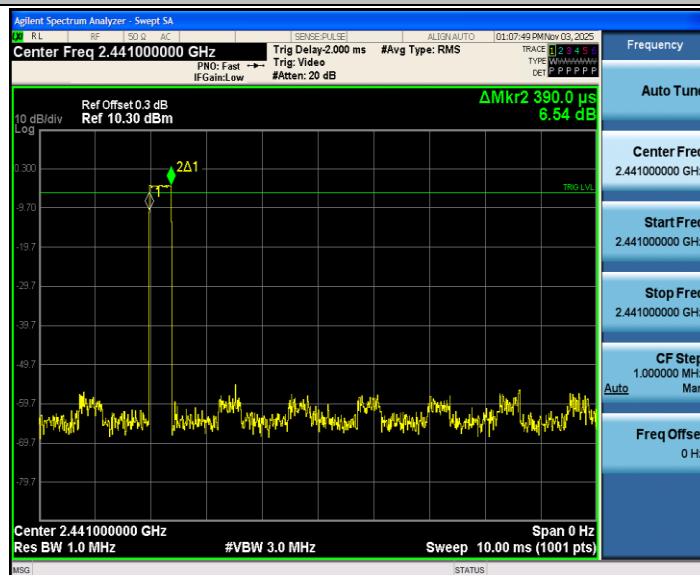


DH5_Ant1_Hop

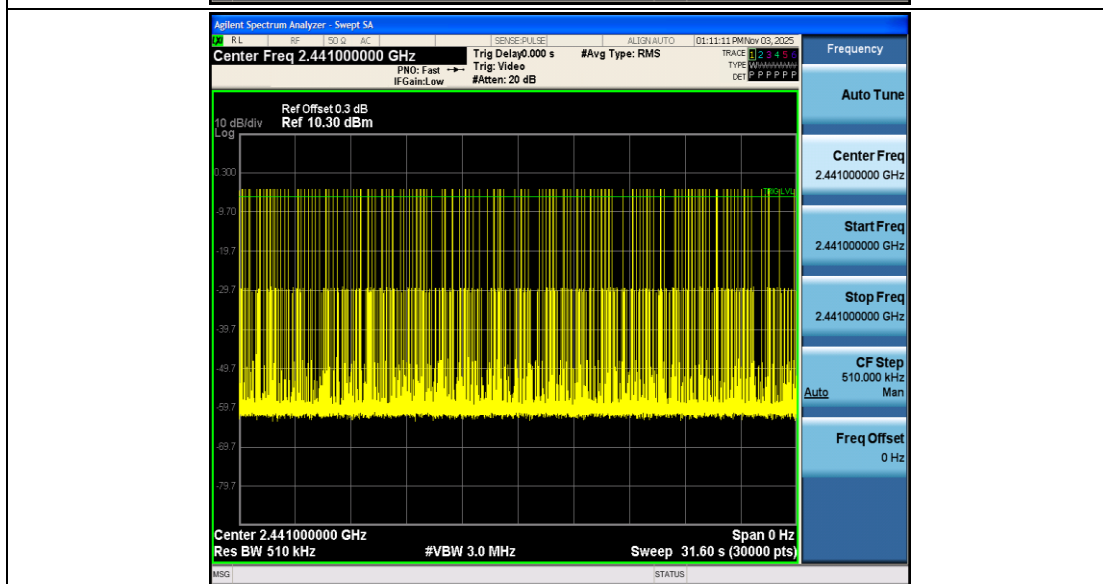




2DH1_Ant1_Hop

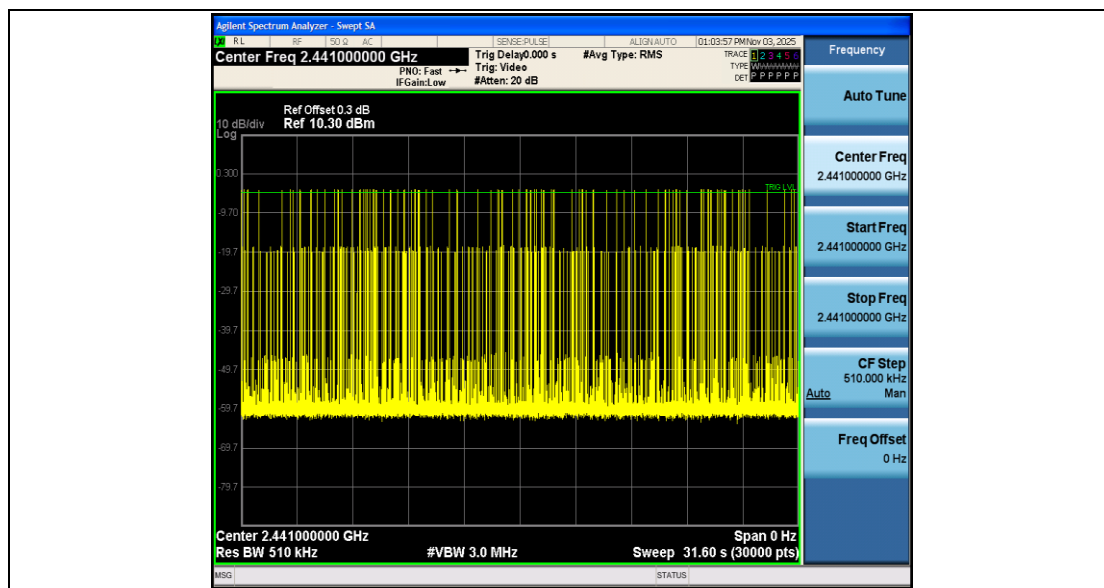


2DH3_Ant1_Hop



2DH5_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

Test Graphs

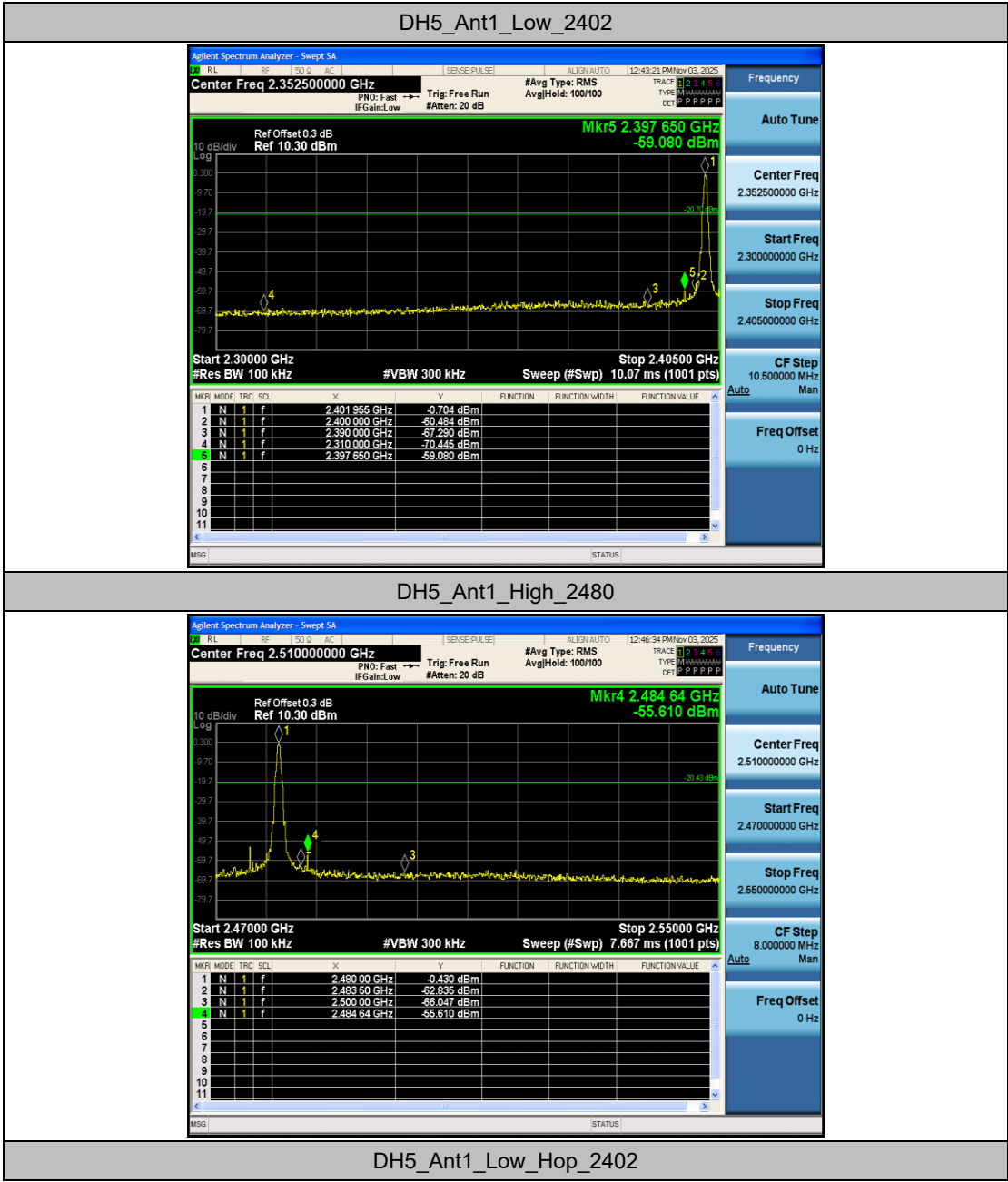


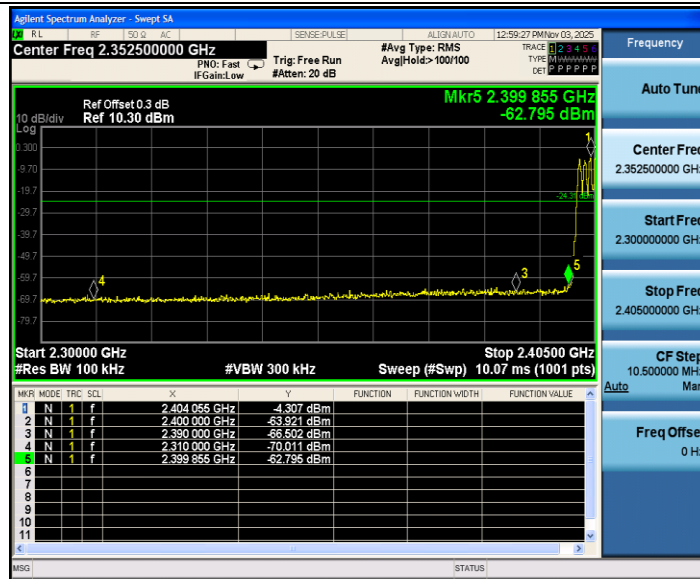
Appendix G: Band edge measurements

Test Result

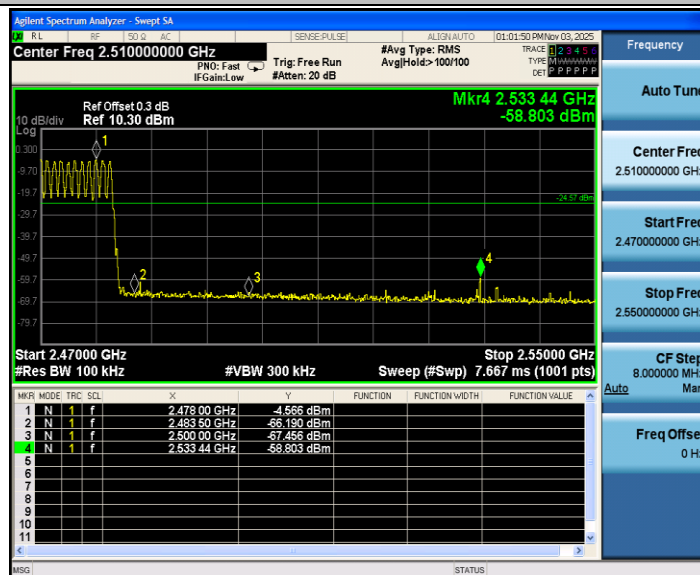
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.70	-59.08	≤-20.7	PASS
		High	2480	-0.43	-55.61	≤-20.43	PASS
		Low	Hop_2402	-4.31	-62.8	≤-24.31	PASS
		High	Hop_2480	-4.57	-58.8	≤-24.57	PASS
2DH5	Ant1	Low	2402	-4.51	-58.97	≤-24.51	PASS
		High	2480	-4.11	-64.23	≤-24.11	PASS
		Low	Hop_2402	-6.90	-63.29	≤-26.9	PASS
		High	Hop_2480	-6.07	-63.95	≤-26.07	PASS

Test Graphs

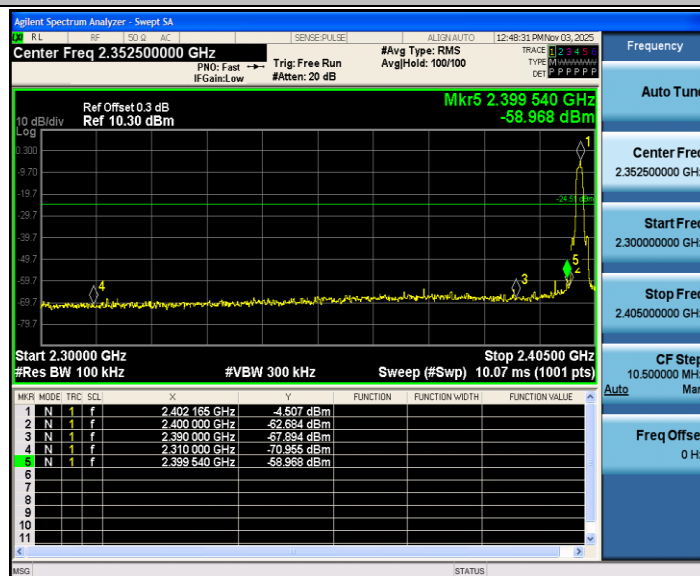




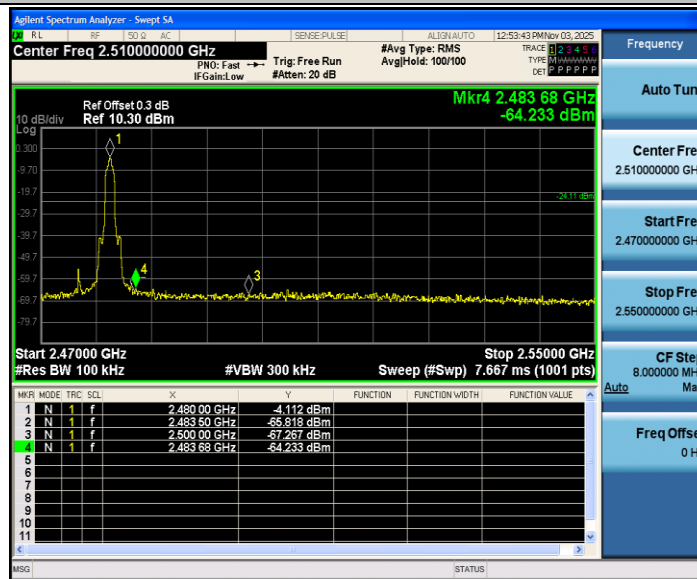
DH5_Ant1_High_Hop_2480



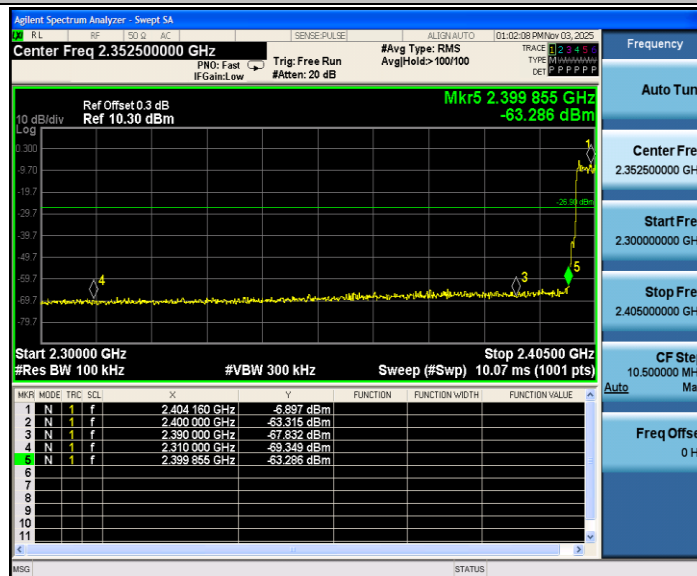
2DH5_Ant1_Low_2402



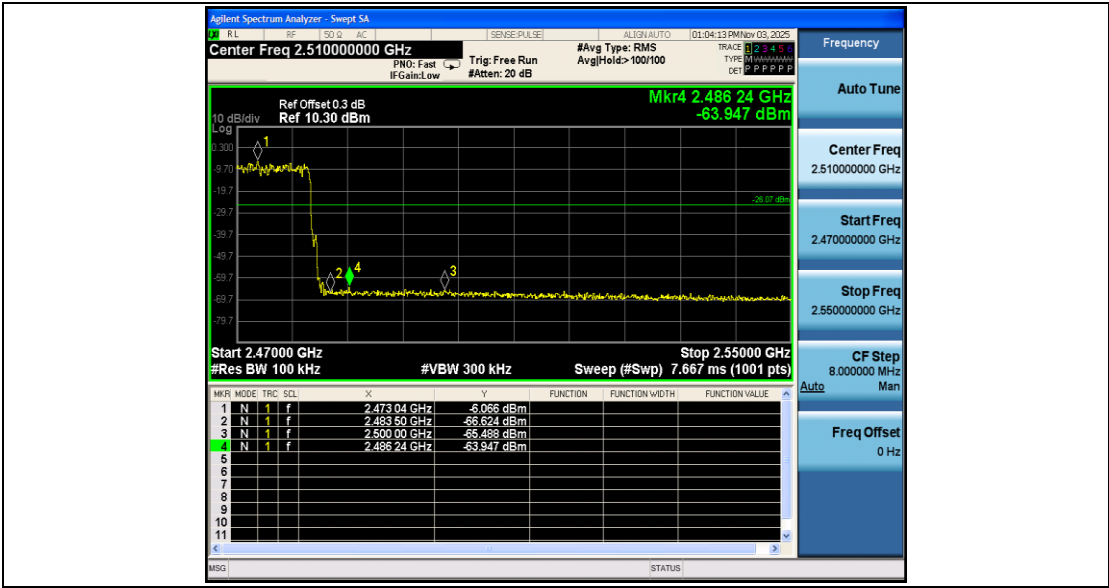
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

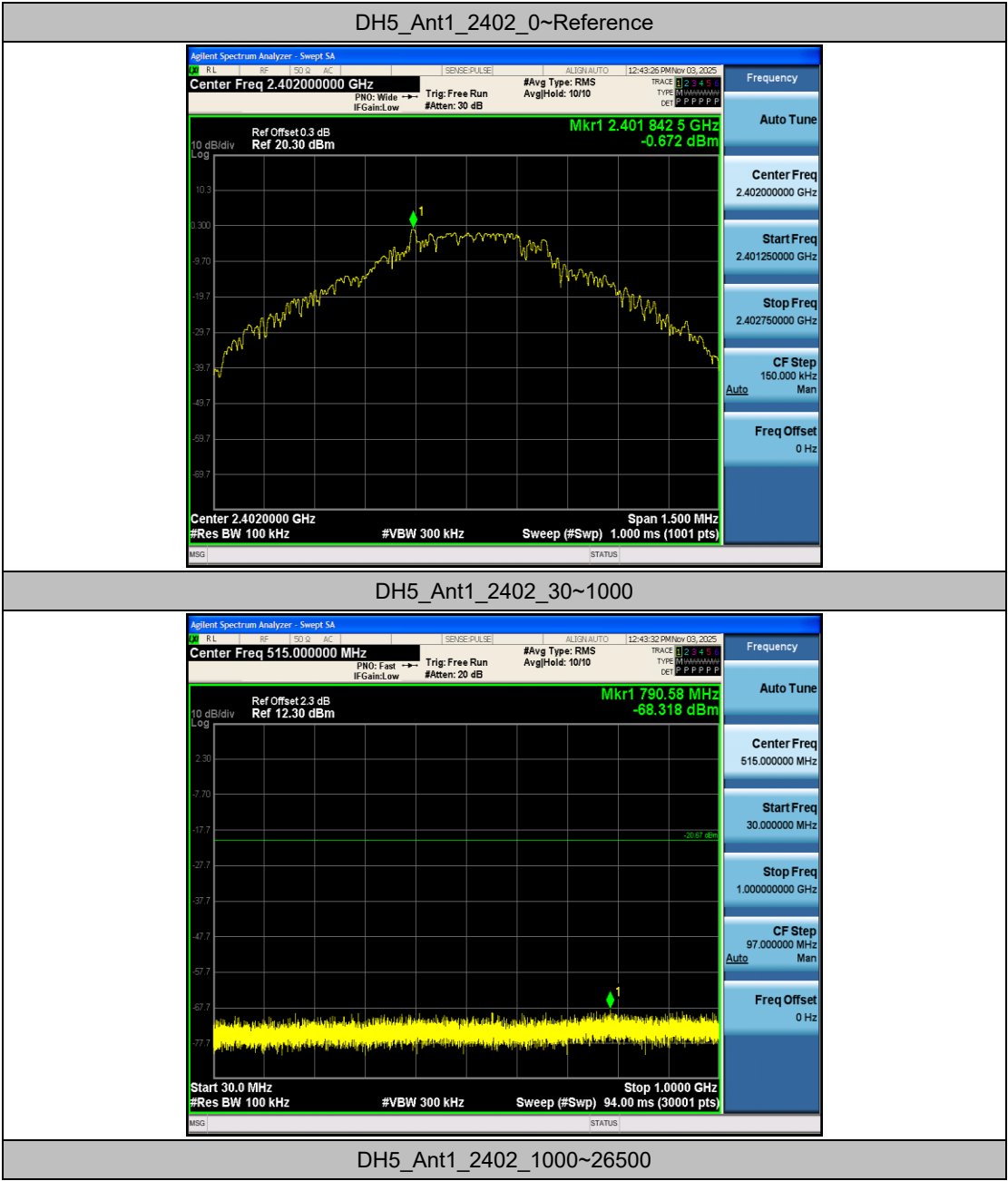


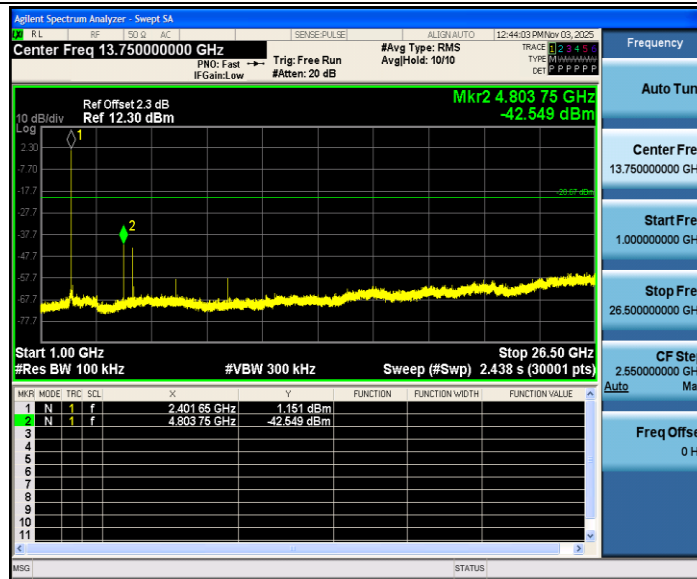
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.67	-0.67	---	PASS
			30~1000	-0.67	-68.32	≤-20.67	PASS
			1000~26500	-0.67	-42.55	≤-20.67	PASS
		2441	Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-68.39	≤-21.64	PASS
			1000~26500	-1.64	-41.48	≤-21.64	PASS
		2480	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-68.36	≤-21.3	PASS
			1000~26500	-1.30	-42.49	≤-21.3	PASS
2DH5	Ant1	2402	Reference	-6.22	-6.22	---	PASS
			30~1000	-6.22	-68.04	≤-26.22	PASS
			1000~26500	-6.22	-45.43	≤-26.22	PASS
		2441	Reference	-4.00	-4.00	---	PASS
			30~1000	-4.00	-63.29	≤-24	PASS
			1000~26500	-4.00	-50.33	≤-24	PASS
		2480	Reference	-6.35	-6.35	---	PASS
			30~1000	-6.35	-68.25	≤-26.35	PASS
			1000~26500	-6.35	-50.15	≤-26.35	PASS

Test Graphs

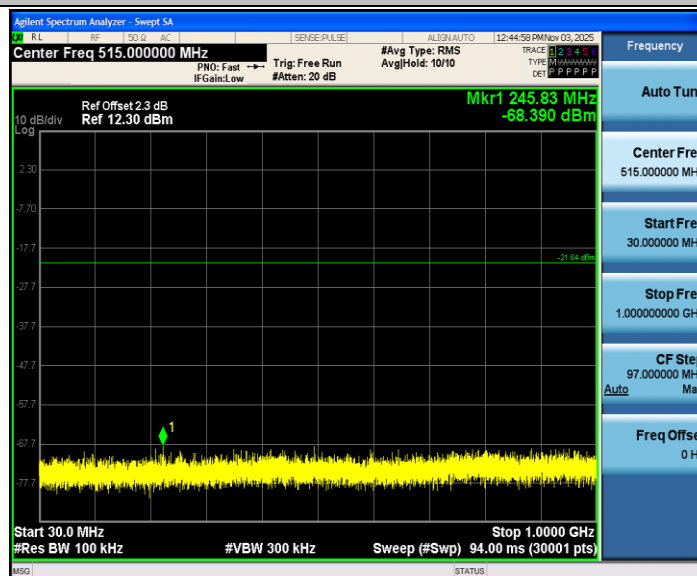




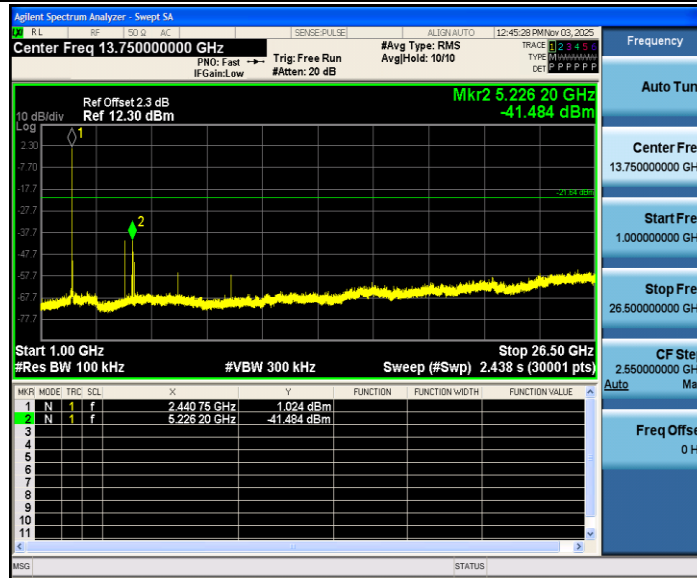
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



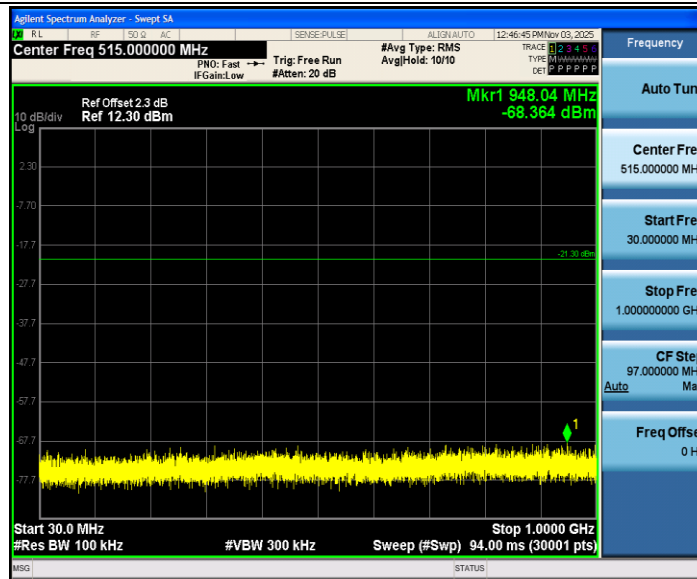
DH5_Ant1_2441_1000~26500



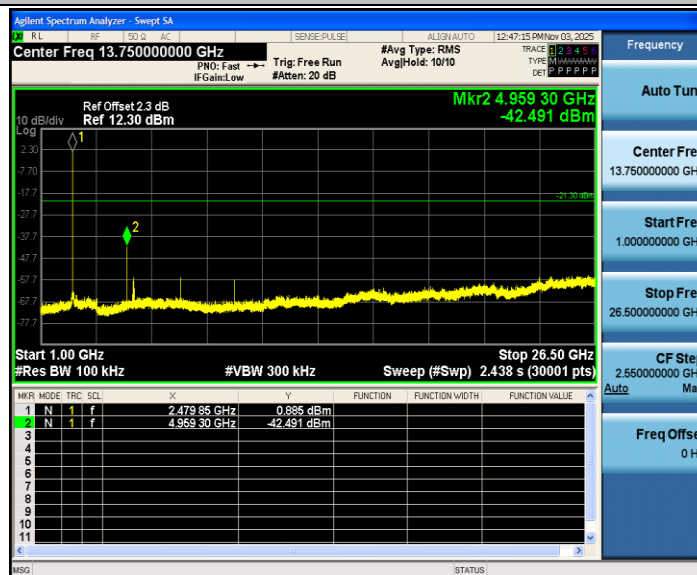
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



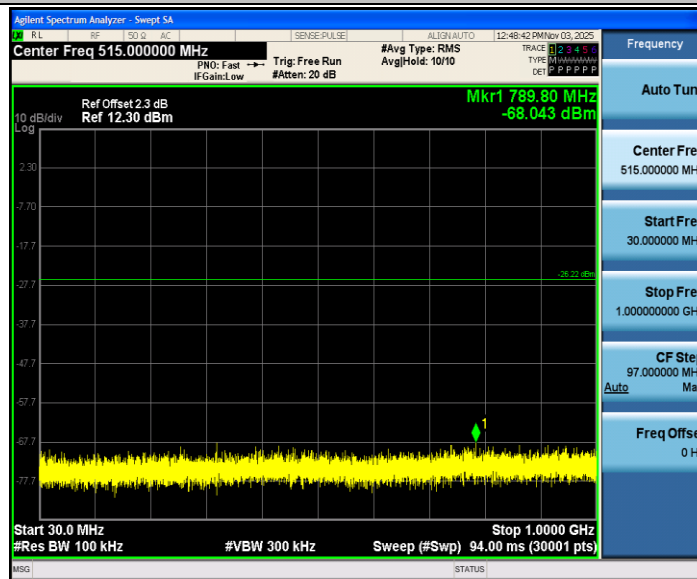
DH5_Ant1_2480_1000~26500



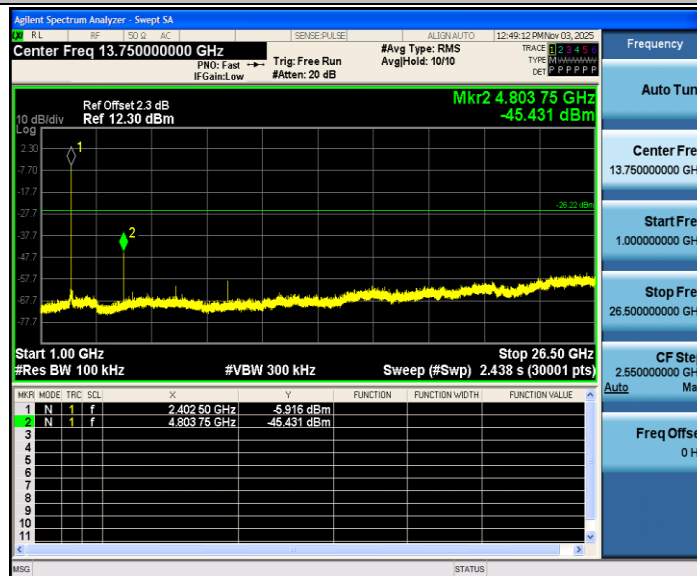
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



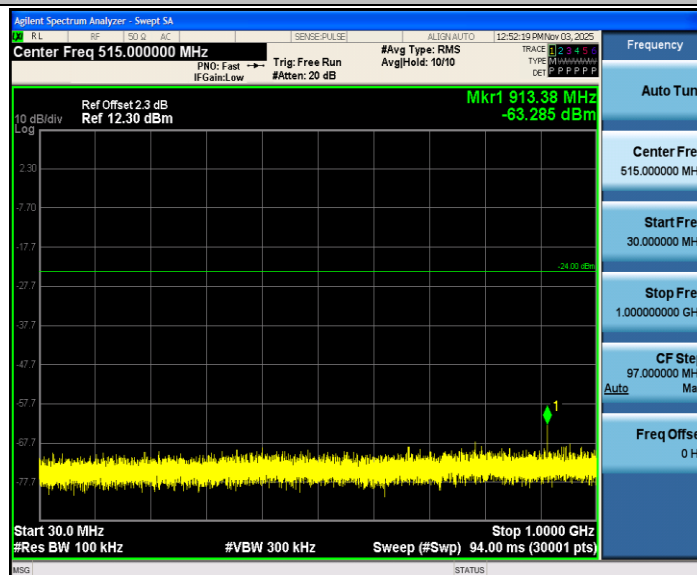
2DH5_Ant1_2402_1000~26500



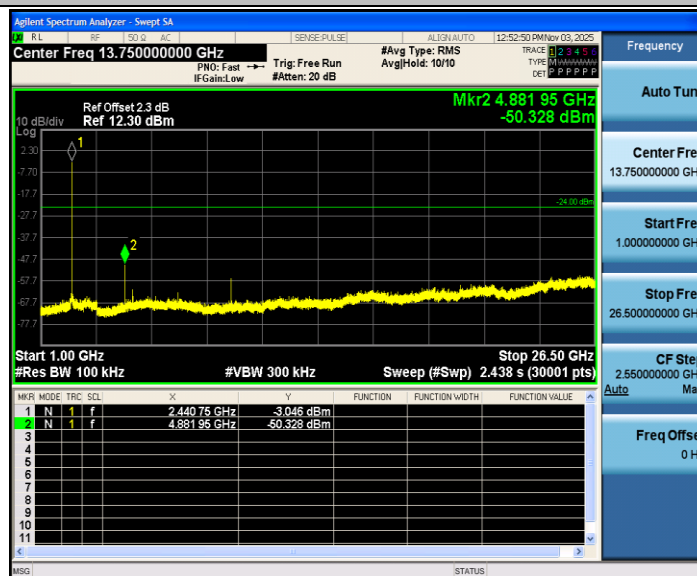
2DH5_Ant1_2441_0~Reference



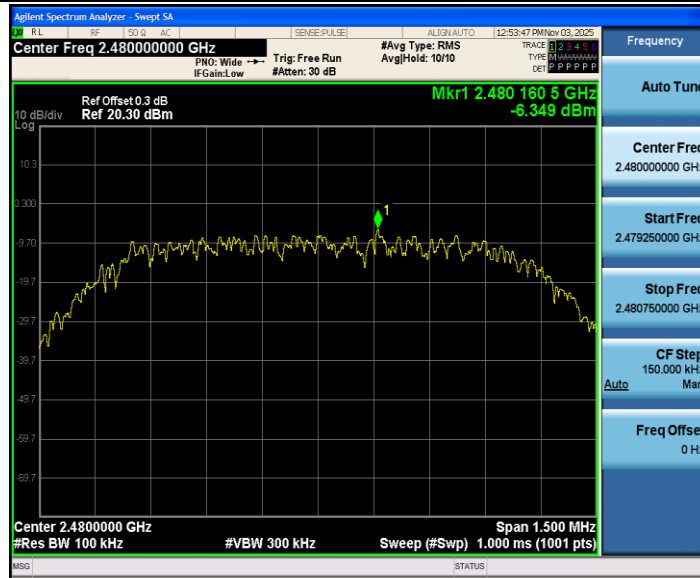
2DH5_Ant1_2441_30~1000



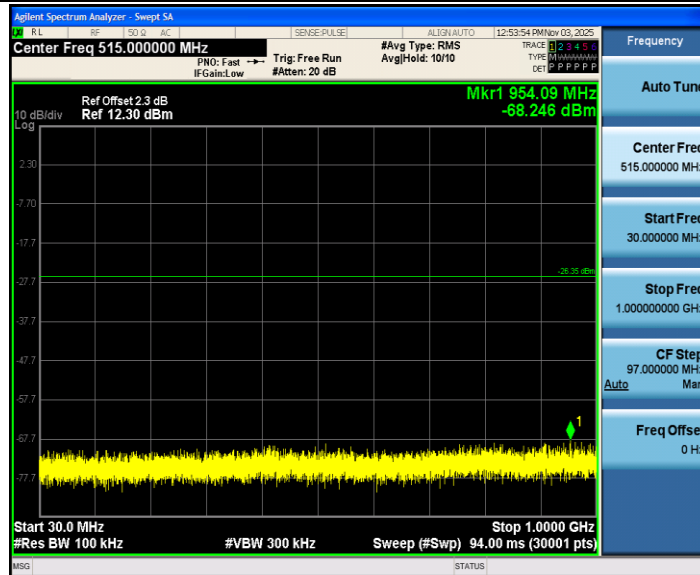
2DH5_Ant1_2441_1000~26500



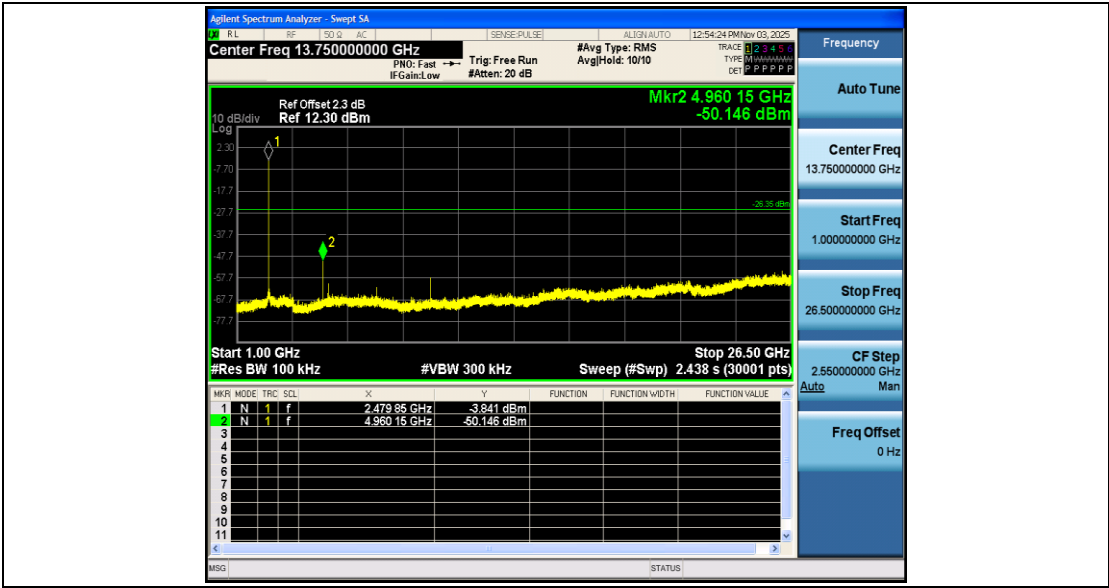
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

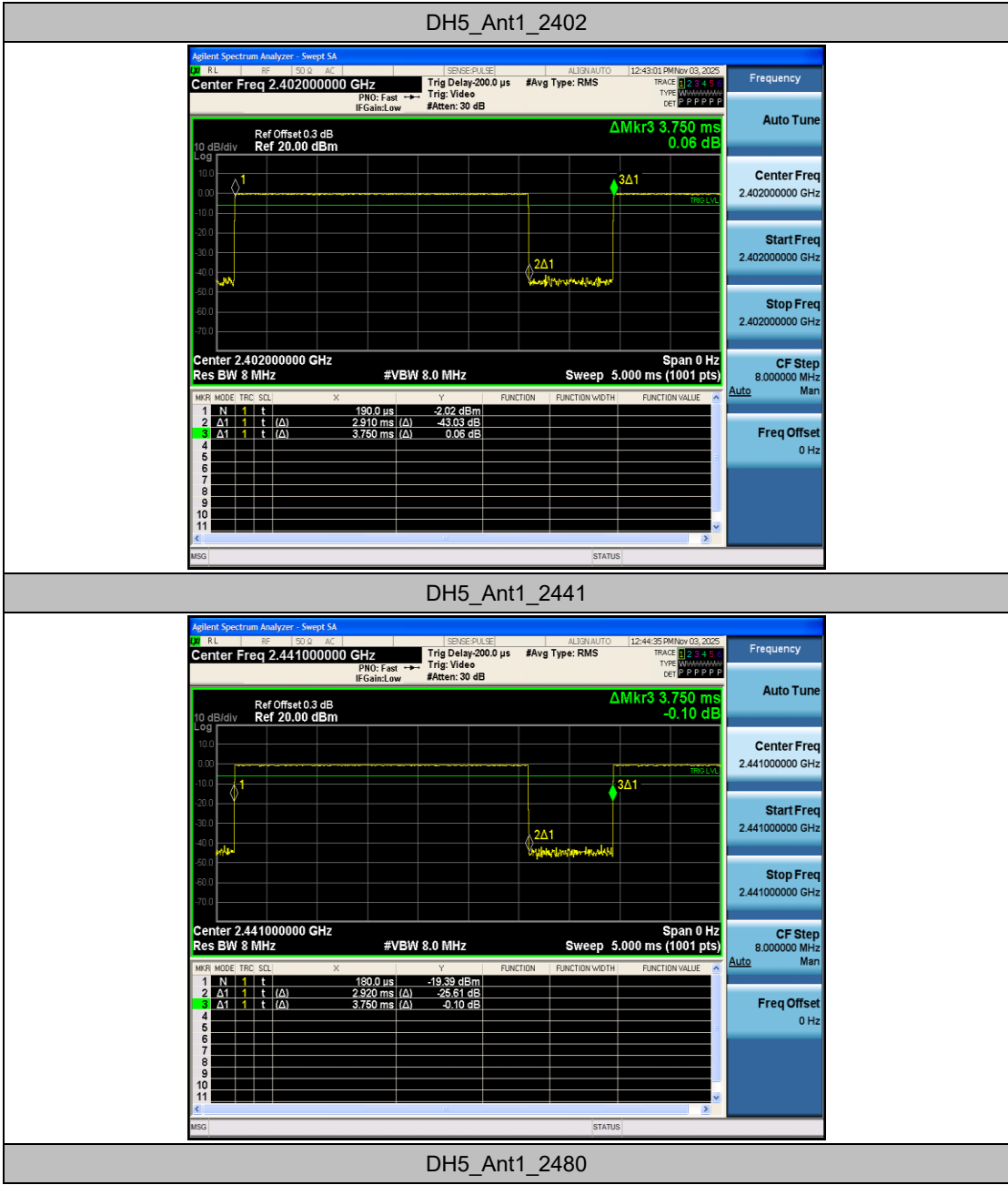


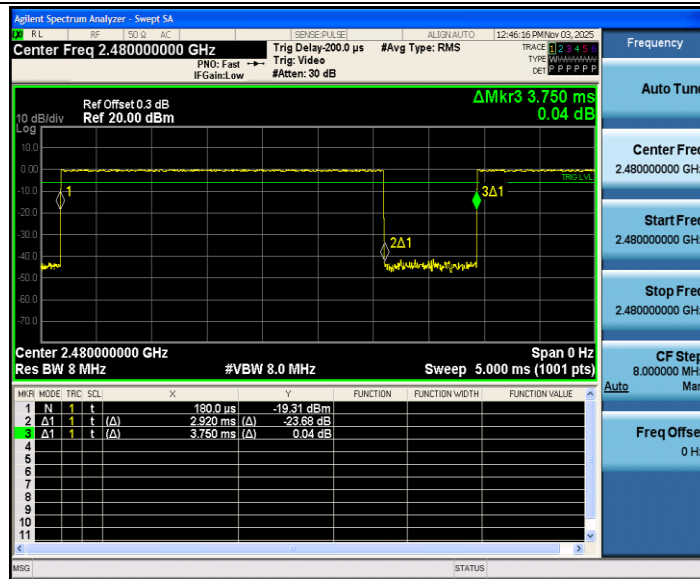
Appendix I: Duty Cycle

Test Result

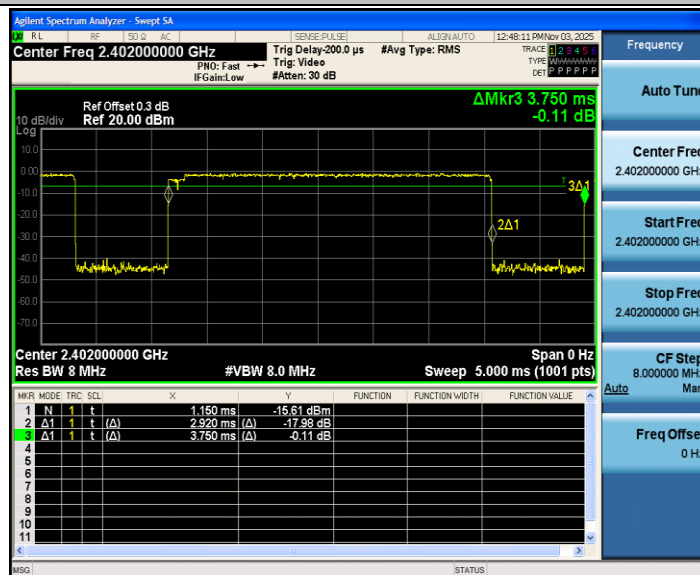
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---

Test Graphs

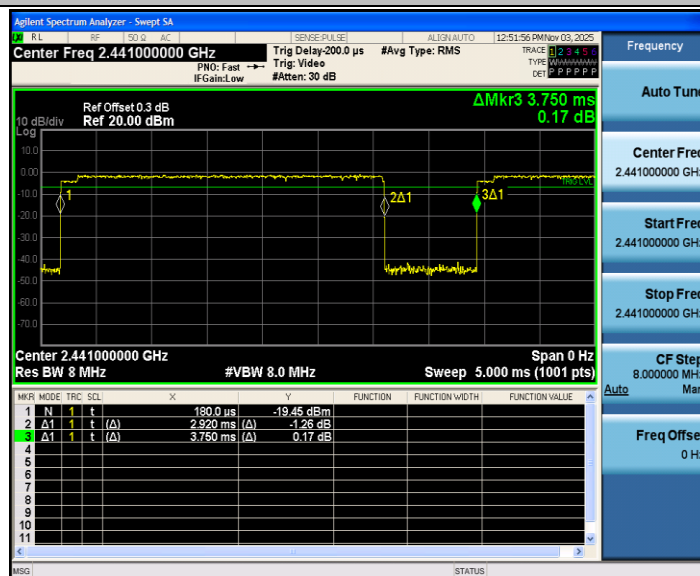




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

