

FCC Appendix RF Test Data for BT

FCC ID : 2BYOQ-YB418

Company : SHENZHEN JLINK TIMES TECHNOLOGY CO.,LTD

EUT : Electric Vehicle Instrument

Model Number : YB418

Report No. : CTA26090800302

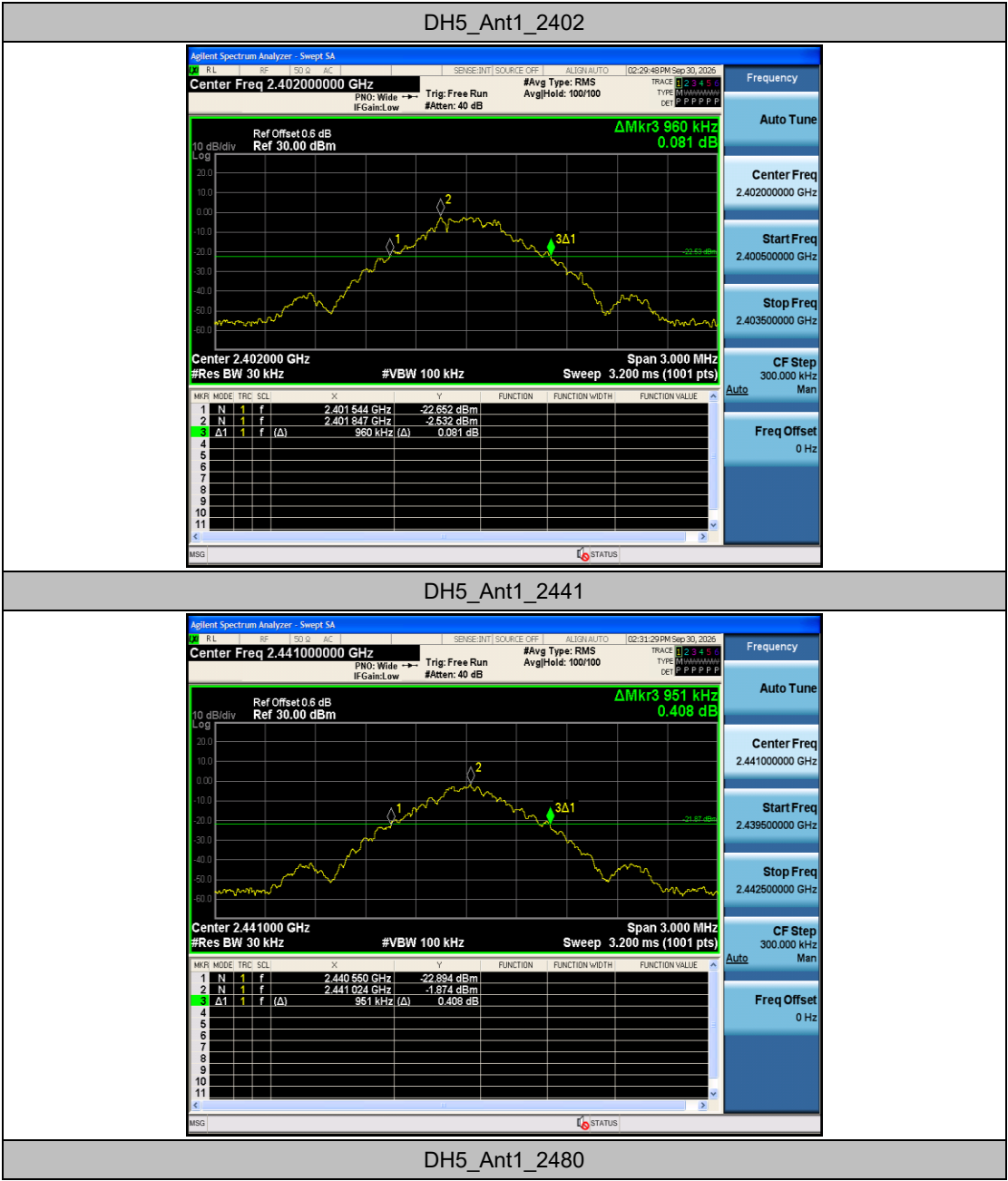
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.960	2401.544	2402.504	---	---
		2441	0.951	2440.550	2441.501	---	---
		2480	0.954	2479.547	2480.501	---	---
2DH5	Ant1	2402	1.290	2401.376	2402.666	---	---
		2441	1.323	2440.346	2441.669	---	---
		2480	1.284	2479.376	2480.660	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

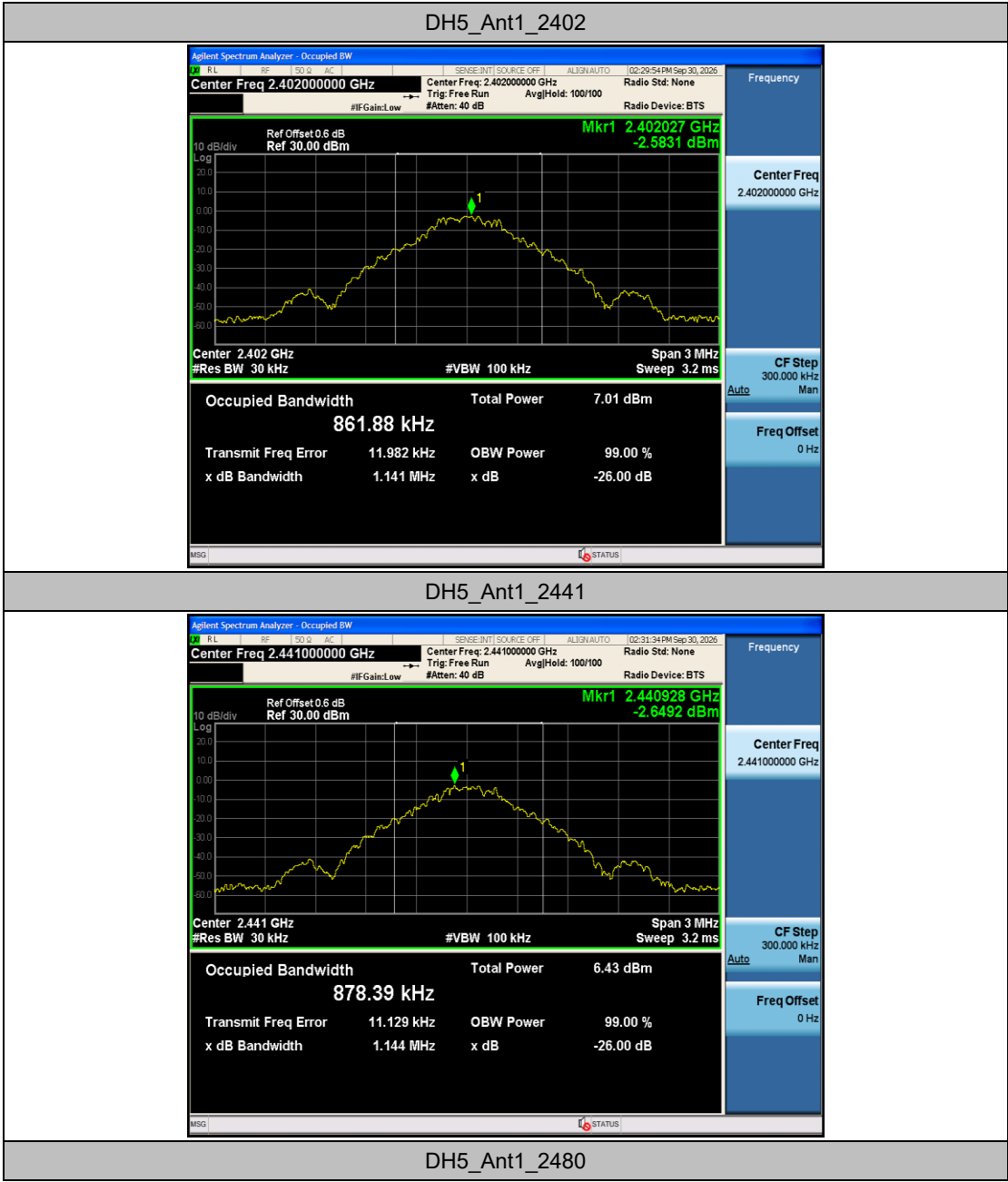


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86188	2401.5810	2402.4429	---	---
		2441	0.87839	2440.5719	2441.4503	---	---
		2480	0.87186	2479.5729	2480.4447	---	---
2DH5	Ant1	2402	1.1976	2401.4101	2402.6077	---	---
		2441	1.1910	2440.4132	2441.6042	---	---
		2480	1.1918	2479.4128	2480.6046	---	---

Test Graphs





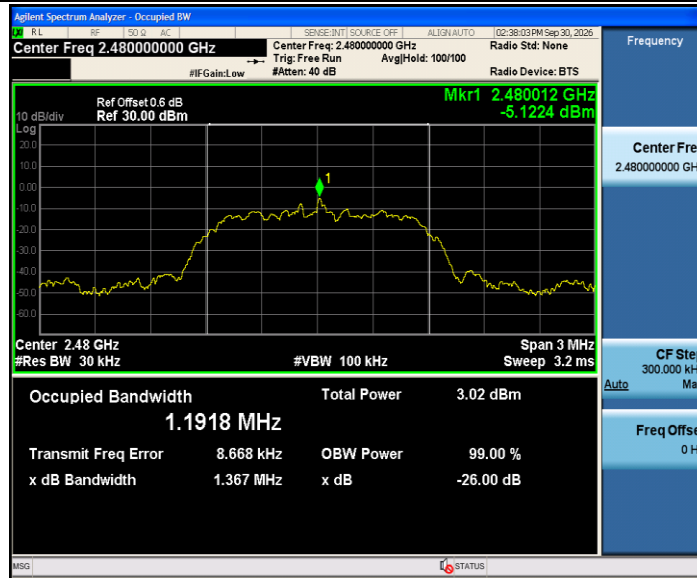
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

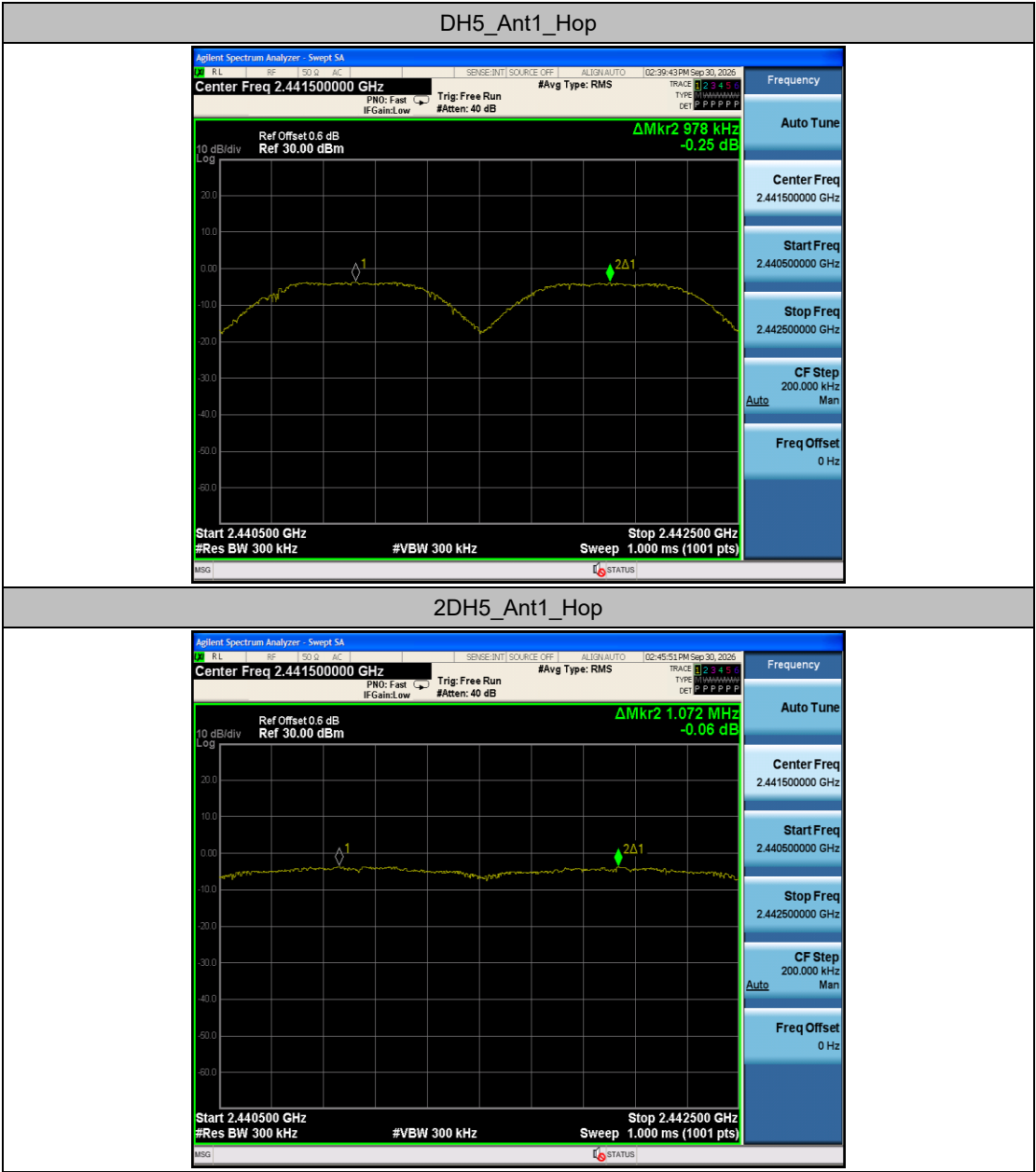
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.27	≤20.97	PASS
		2441	0.15	≤20.97	PASS
		2480	-0.10	≤20.97	PASS
2DH5	Ant1	2402	-0.68	≤20.97	PASS
		2441	-0.70	≤20.97	PASS
		2480	-0.96	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.978	≥ 0.960	PASS
2DH5	Ant1	Hop	1.072	≥ 0.882	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	0.407	312	0.127	≤0.4	PASS
DH3	Ant1	Hop	1.662	154	0.256	≤0.4	PASS
DH5	Ant1	Hop	2.910	94	0.274	≤0.4	PASS
2DH1	Ant1	Hop	0.415	315	0.131	≤0.4	PASS
2DH3	Ant1	Hop	1.667	166	0.277	≤0.4	PASS
2DH5	Ant1	Hop	2.916	106	0.309	≤0.4	PASS

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Trig Delay 2.000 ms

#Avg Type: RMS

Ref Offset 0.6 dB

Ref 30.00 dBm

ΔMkr2 407.0 μs

16.13 dB

2Δ1

1

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 10.13 ms (8000 pts)

Frequency

Auto Tune

Center Freq 2.441000000 GHz

Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

CF Step 1.000000 MHz

Auto Man

Freq Offset 0 Hz

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Trig Delay 0.000 s

#Avg Type: RMS

Ref Offset 0.6 dB

Ref 30.00 dBm

Center 2.441000000 GHz

Res BW 510 kHz

#VBW 3.0 MHz

Sweep 31.60 s (30000 pts)

Frequency

Auto Tune

Center Freq 2.441000000 GHz

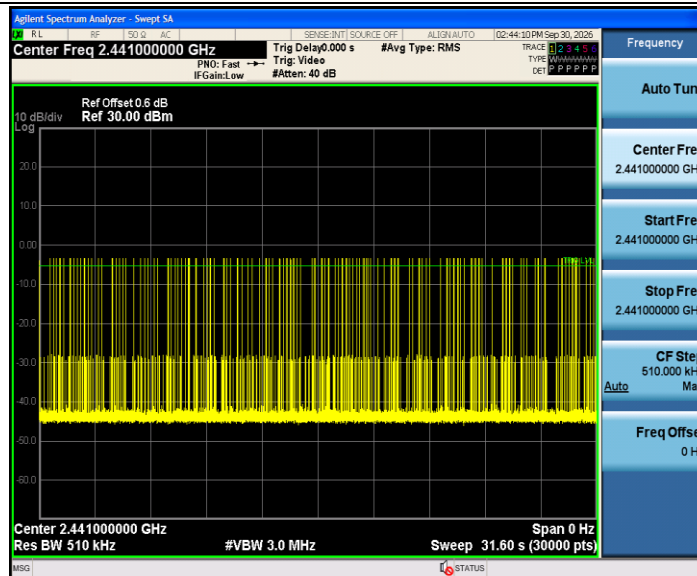
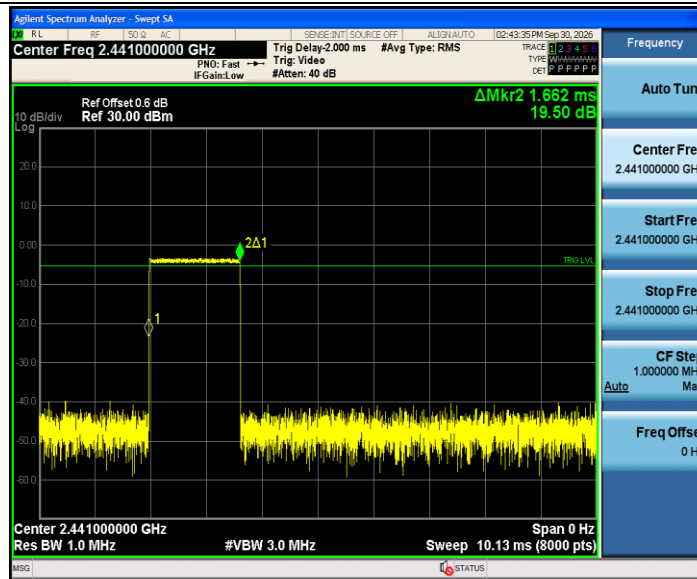
Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

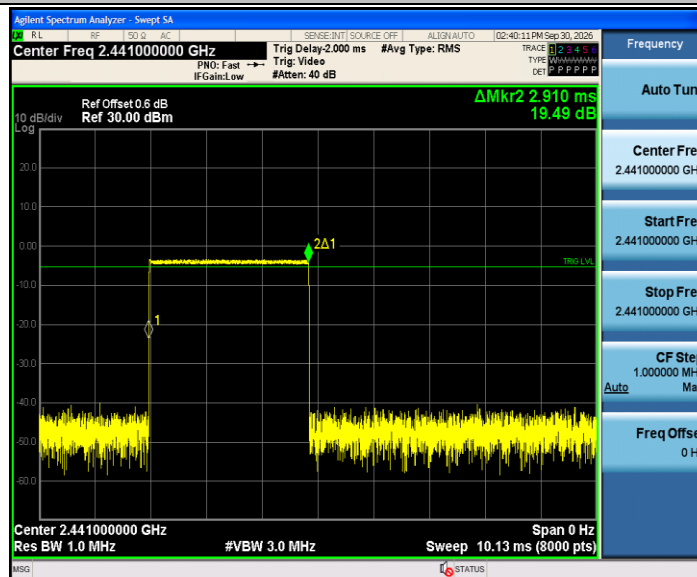
CF Step 510.000 kHz

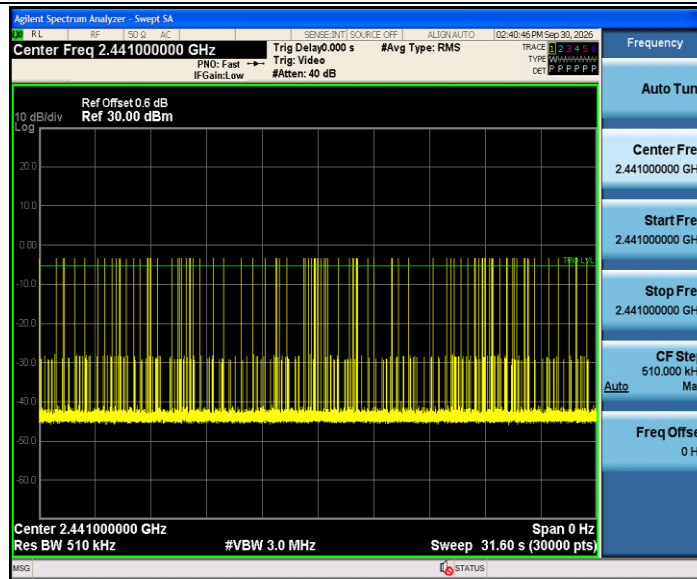
Auto Man

Freq Offset 0 Hz

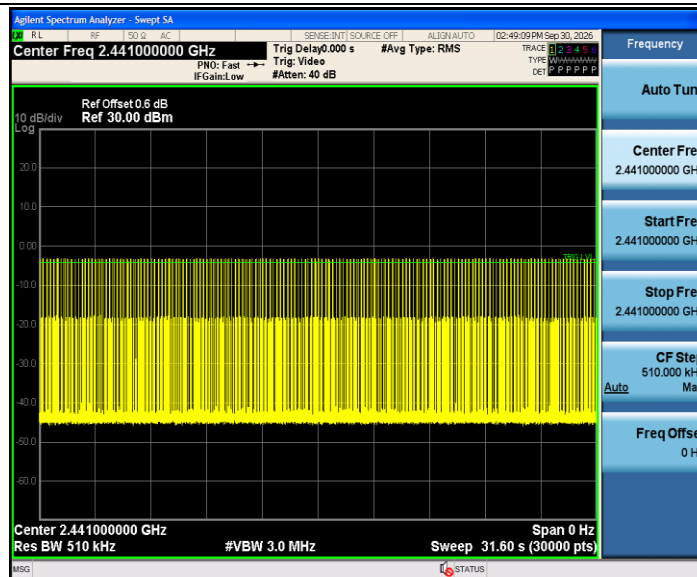
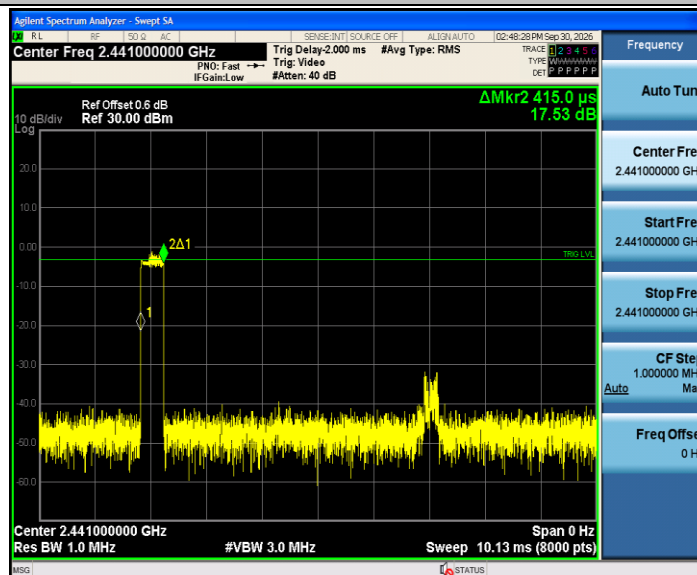


DH5_Ant1_Hop

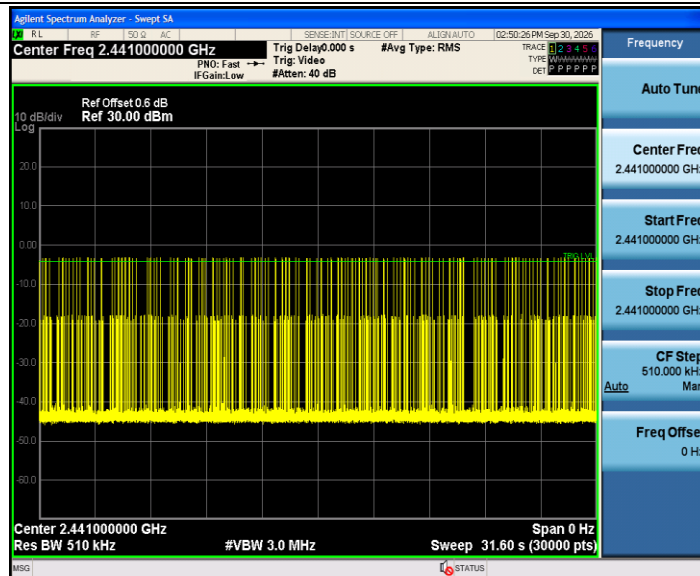
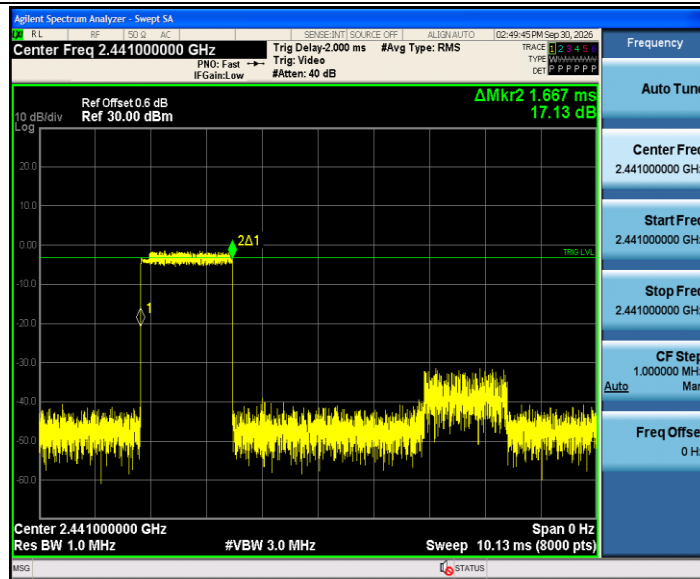




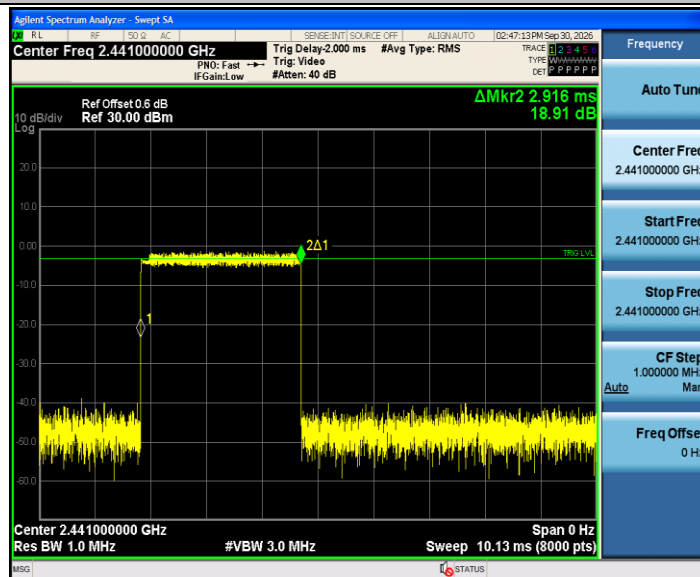
2DH1_Ant1_Hop

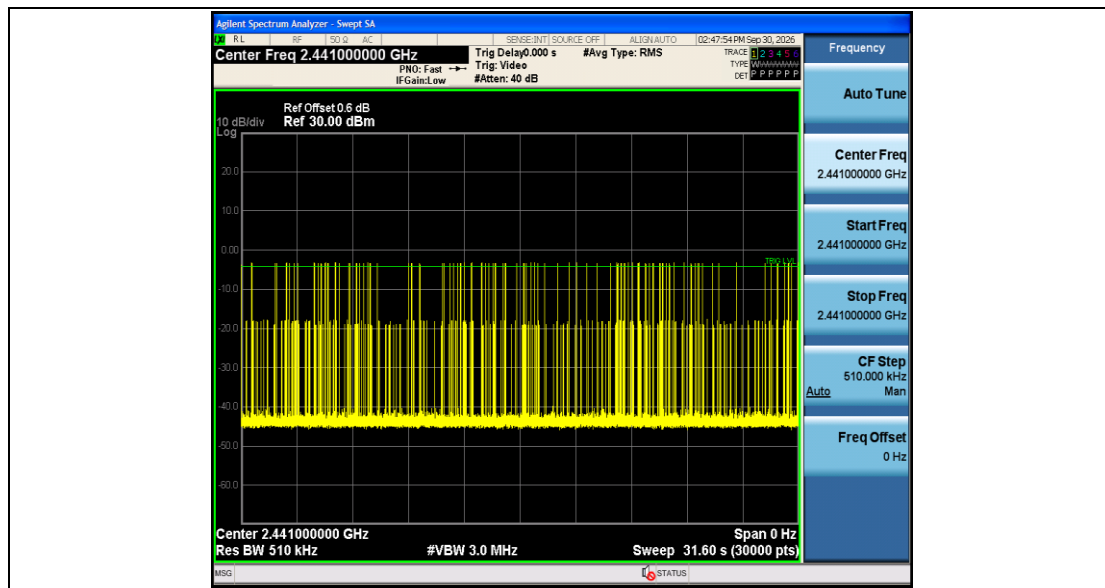


2DH3_Ant1_Hop



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

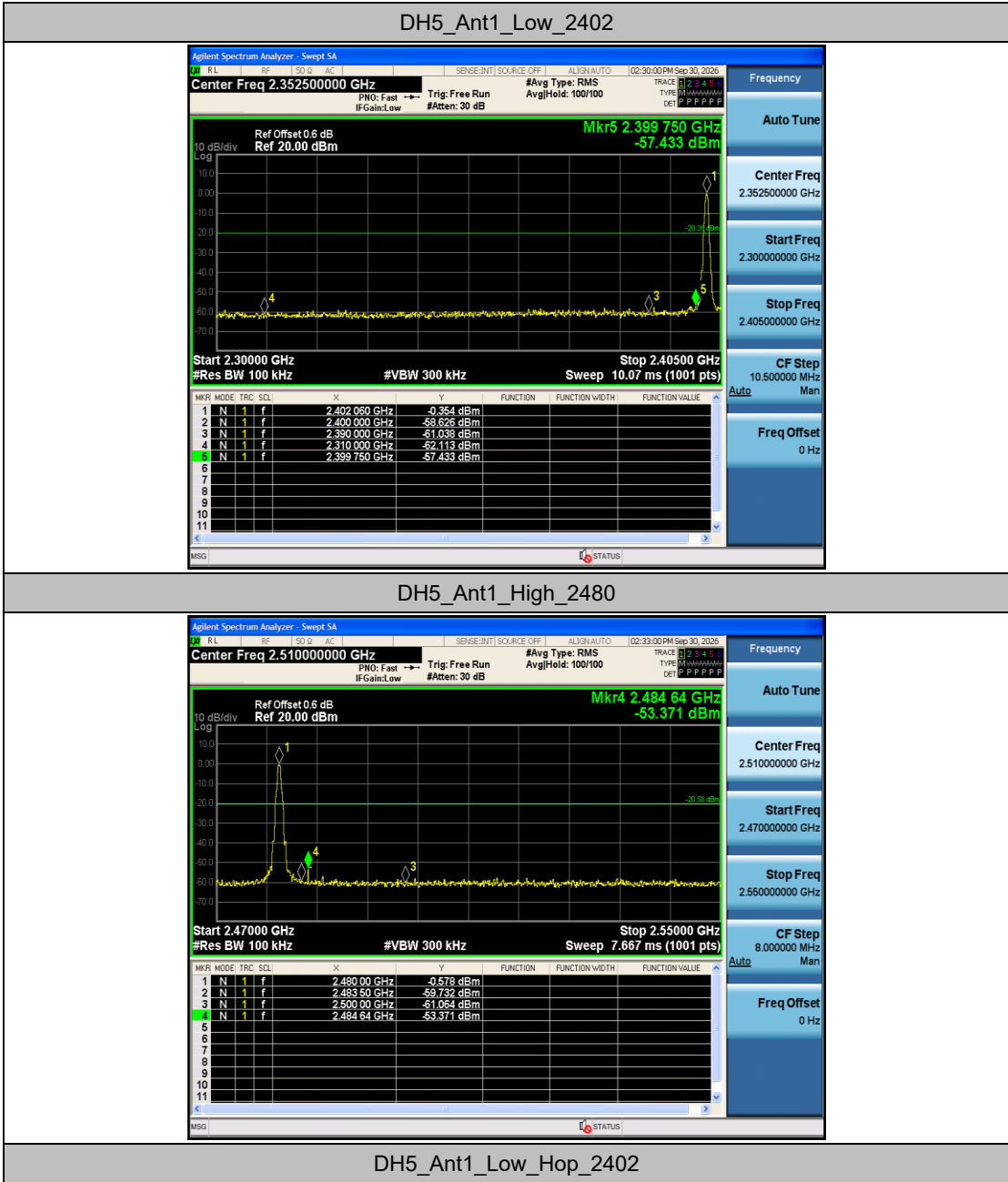


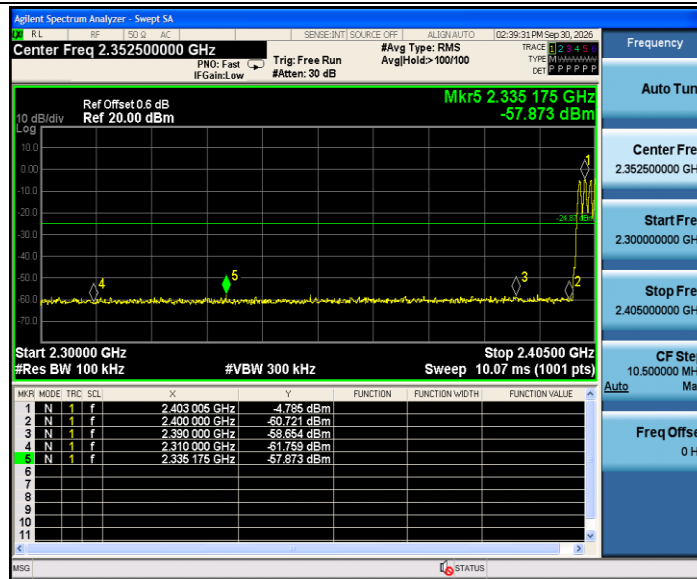
Appendix G: Band edge measurements

Test Result

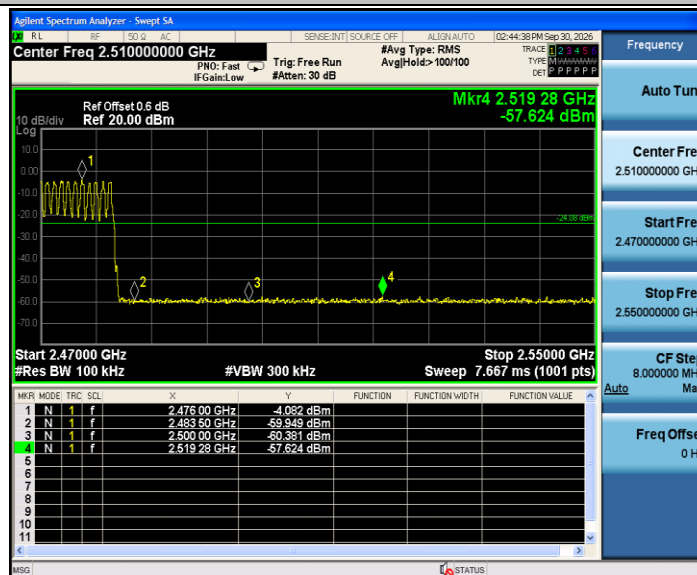
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.35	-57.43	≤-20.35	PASS
		High	2480	-0.58	-53.37	≤-20.58	PASS
		Low	Hop_2402	-4.87	-57.87	≤-24.87	PASS
		High	Hop_2480	-4.08	-57.62	≤-24.08	PASS
2DH5	Ant1	Low	2402	-4.62	-57.45	≤-24.62	PASS
		High	2480	-4.37	-57.64	≤-24.37	PASS
		Low	Hop_2402	-4.50	-57.86	≤-24.5	PASS
		High	Hop_2480	-3.81	-57.23	≤-23.81	PASS

Test Graphs

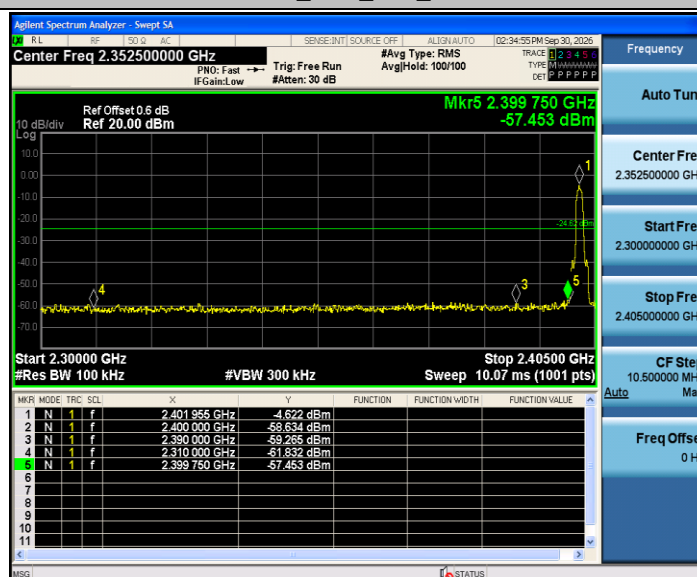




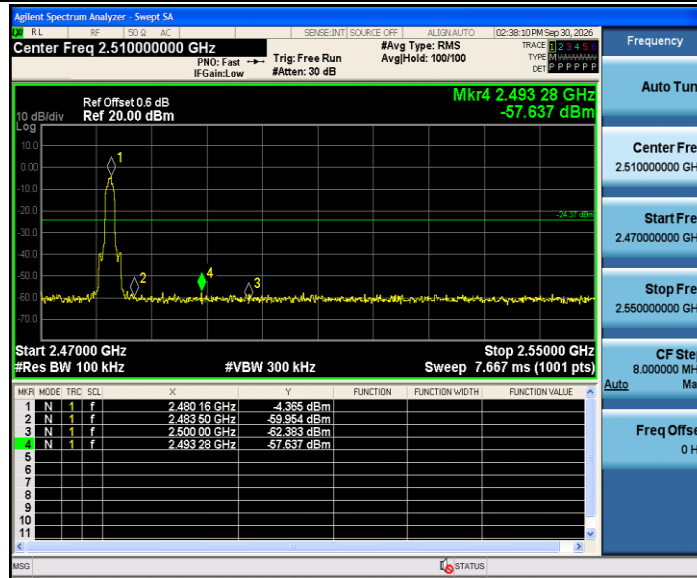
DH5_Ant1_High_Hop_2480



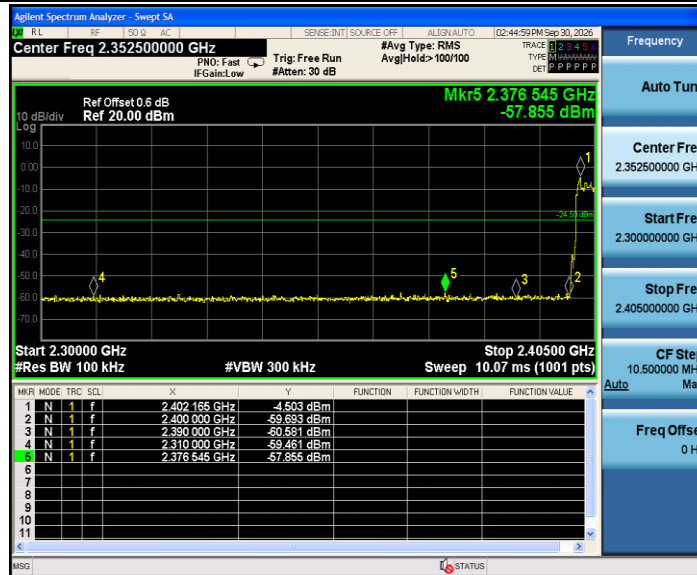
2DH5_Ant1_Low_2402



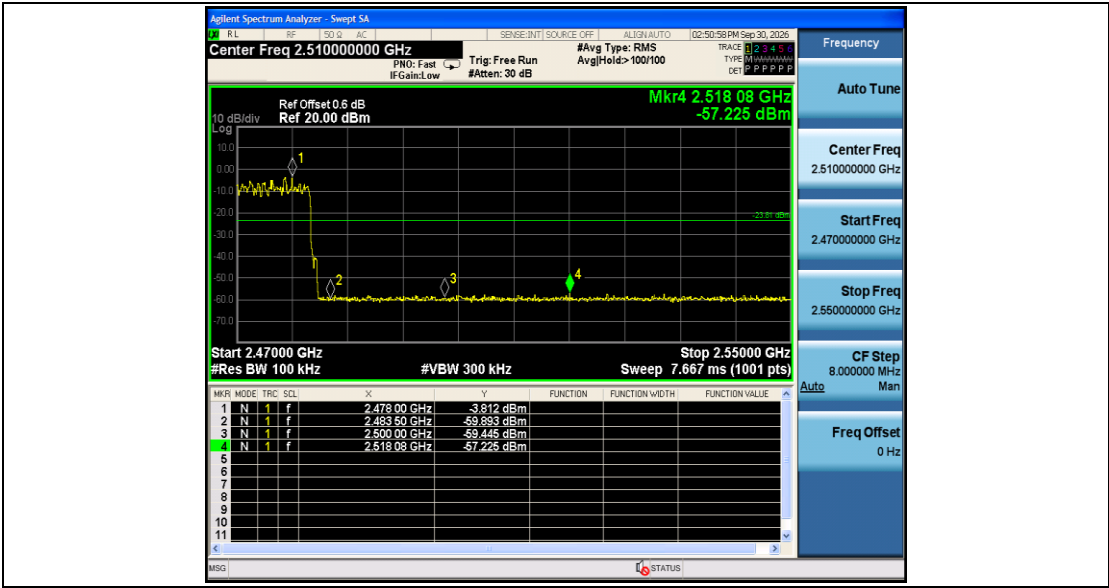
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

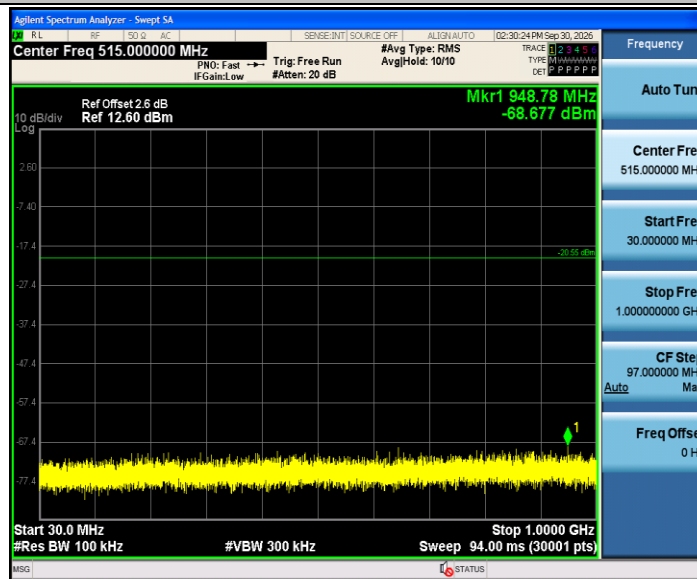
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.55	-0.55	---	PASS
			30~1000	-0.55	-68.68	≤-20.55	PASS
			1000~26500	-0.55	-42.44	≤-20.55	PASS
		2441	Reference	-1.04	-1.04	---	PASS
			30~1000	-1.04	-68.27	≤-21.04	PASS
			1000~26500	-1.04	-42.42	≤-21.04	PASS
		2480	Reference	-1.15	-1.15	---	PASS
			30~1000	-1.15	-68.71	≤-21.15	PASS
			1000~26500	-1.15	-42.23	≤-21.15	PASS
2DH5	Ant1	2402	Reference	-4.98	-4.98	---	PASS
			30~1000	-4.98	-69.27	≤-24.98	PASS
			1000~26500	-4.98	-46.18	≤-24.98	PASS
		2441	Reference	-4.19	-4.19	---	PASS
			30~1000	-4.19	-68.36	≤-24.19	PASS
			1000~26500	-4.19	-46.82	≤-24.19	PASS
		2480	Reference	-4.41	-4.41	---	PASS
			30~1000	-4.41	-68.88	≤-24.41	PASS
			1000~26500	-4.41	-46.33	≤-24.41	PASS

Test Graphs

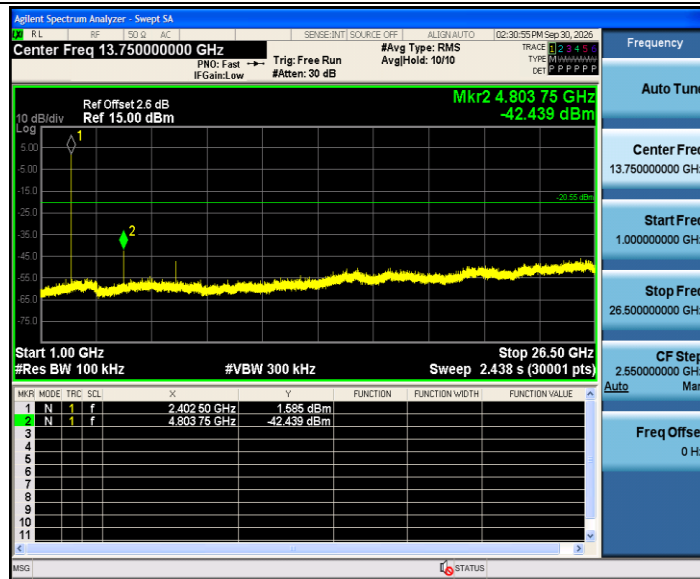
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



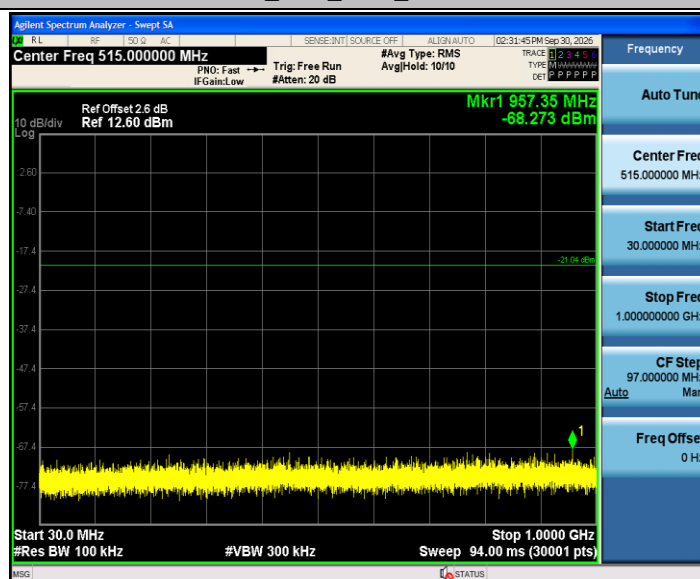
DH5_Ant1_2402_1000~26500



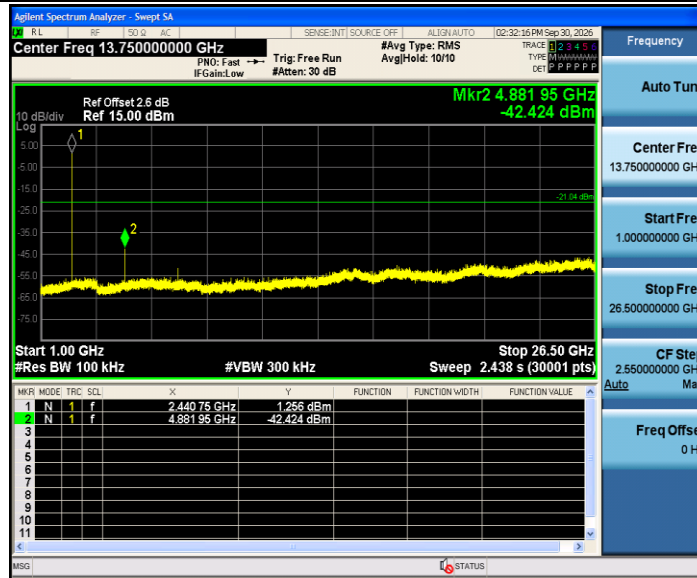
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



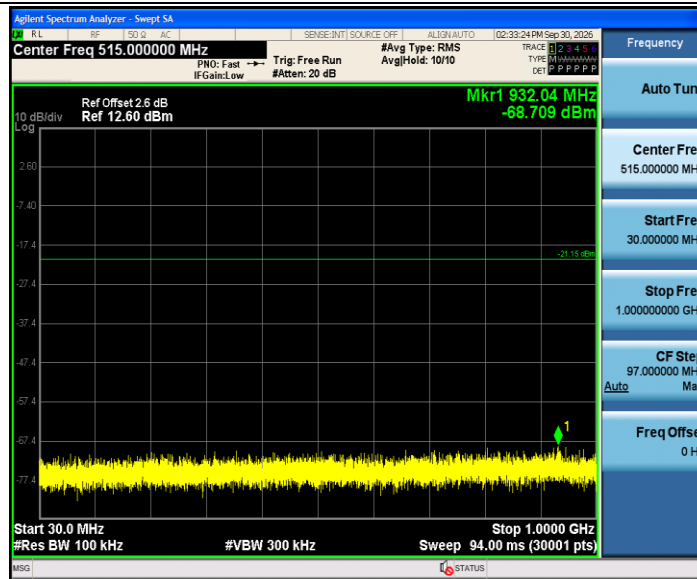
DH5_Ant1_2441_1000~26500



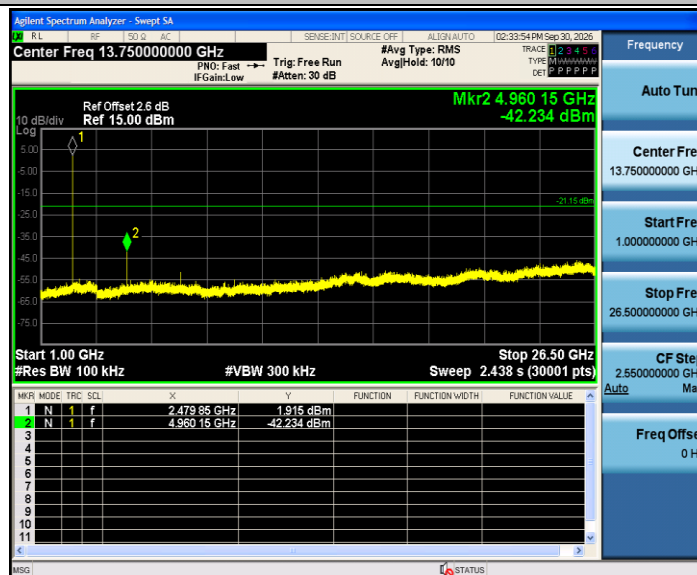
DH5_Ant1_2480_0~Reference



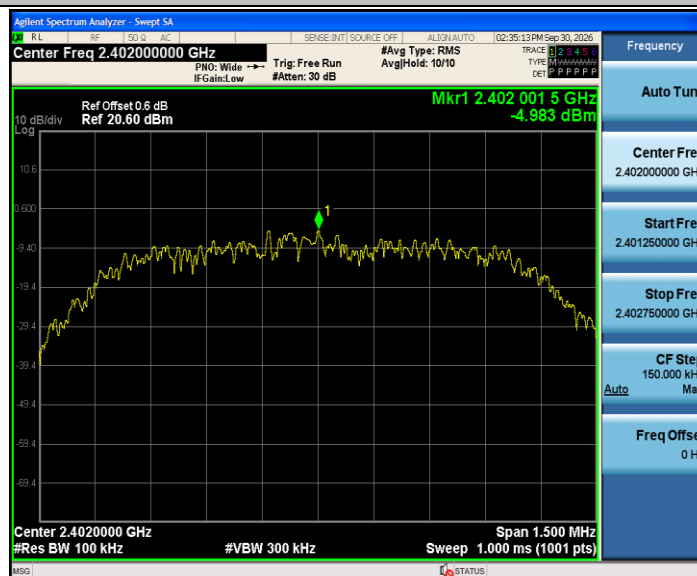
DH5_Ant1_2480_30~1000



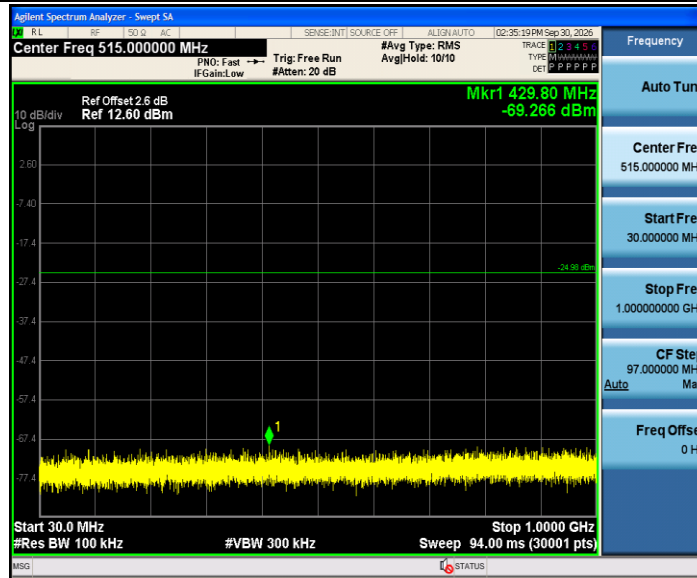
DH5_Ant1_2480_1000~26500



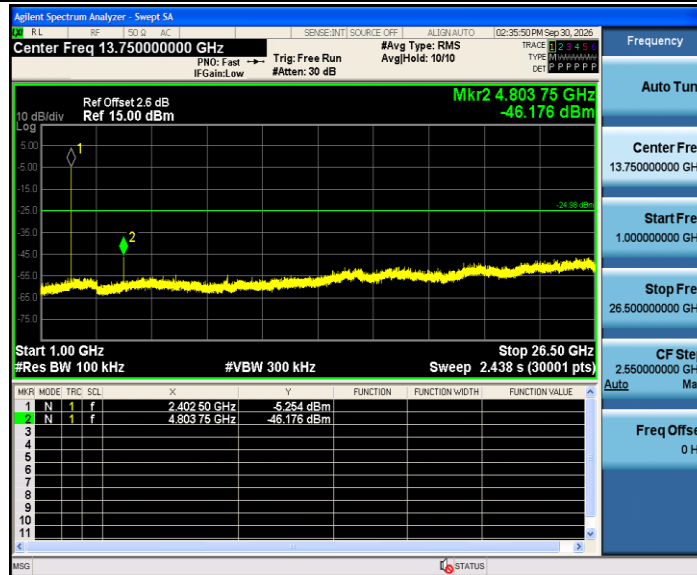
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



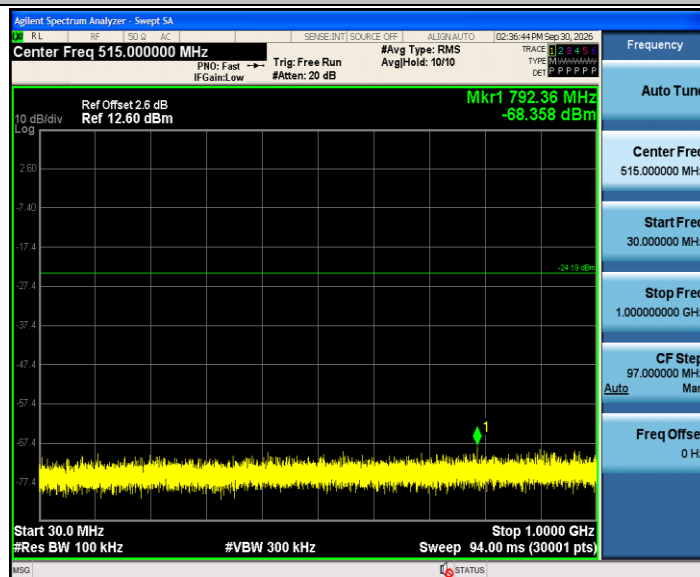
2DH5_Ant1_2402_1000~26500



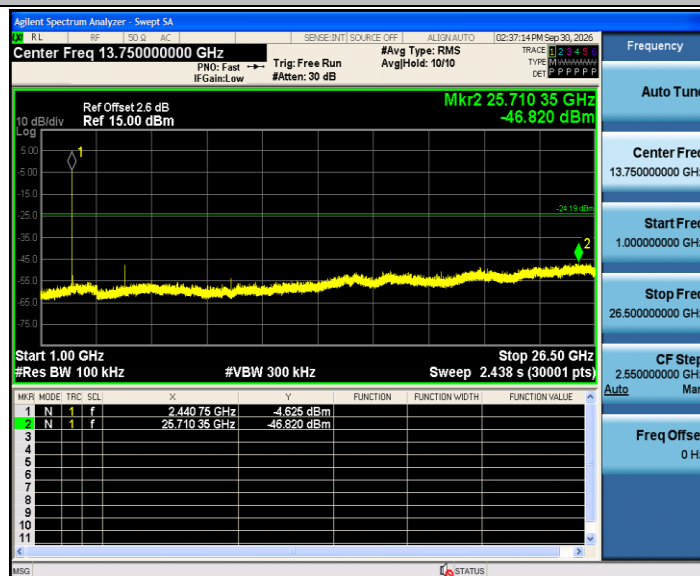
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



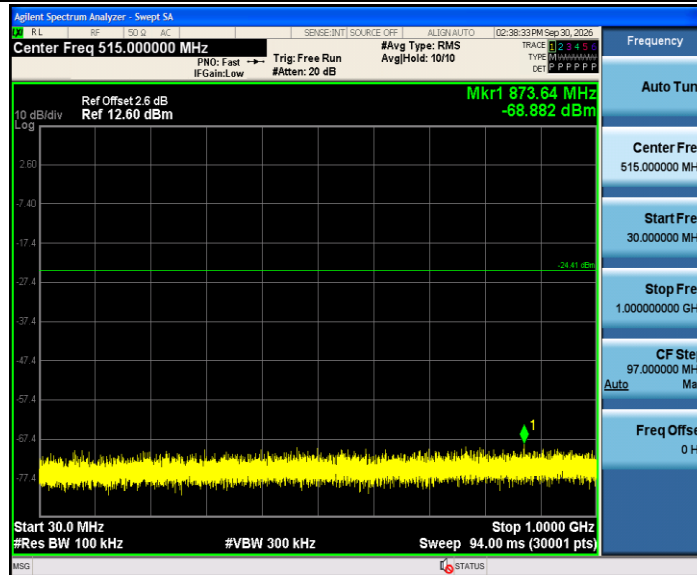
2DH5_Ant1_2441_1000~26500



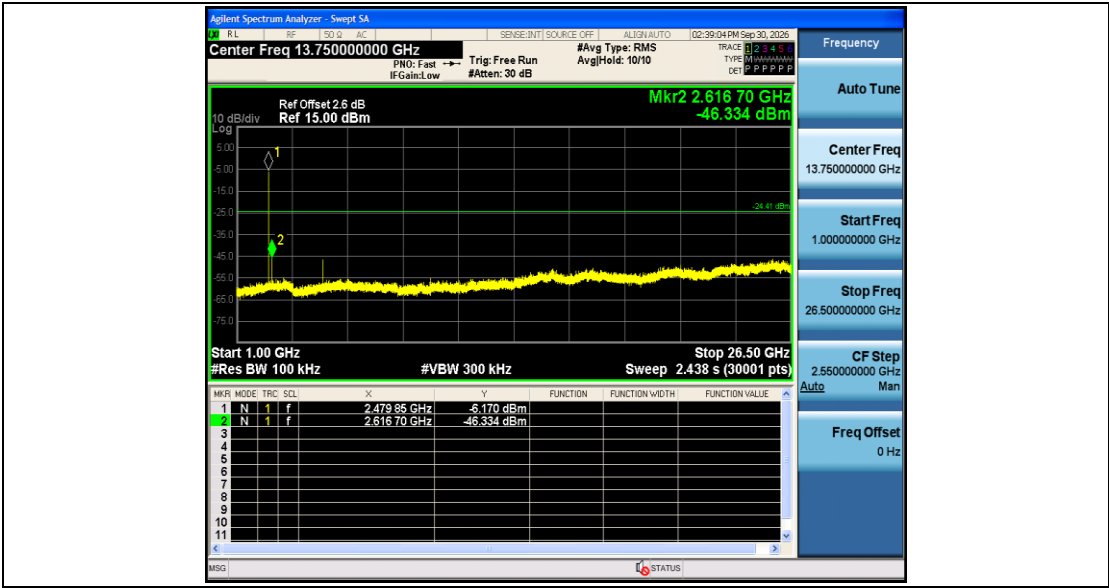
2DH5_Ant1_2480_0~Reference



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	2.92	3.76	77.66	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.91	3.74	77.81	1.09	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---