

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: DETACHABLE WIRELESS SPEAKER

Trade Mark: /

Test Model: AD001

FCC ID: 2BQSM-AD001

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	20db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	1.005	2401.511	2402.516	---	---
DH5	Ant1	2441	1.005	2440.511	2441.516	---	---
DH5	Ant1	2480	1.002	2479.508	2480.510	---	---
2DH5	Ant1	2402	1.350	2401.352	2402.702	---	---
2DH5	Ant1	2441	1.314	2440.364	2441.678	---	---
2DH5	Ant1	2480	1.317	2479.364	2480.681	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



2DH5-Ant1-2480

Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.90288	2401.5664	2402.4692	---	---
DH5	Ant1	2441	0.90665	2440.5657	2441.4723	---	---
DH5	Ant1	2480	0.90226	2479.5736	2480.4759	---	---
2DH5	Ant1	2402	1.2002	2401.4202	2402.6204	---	---
2DH5	Ant1	2441	1.1965	2440.4261	2441.6226	---	---
2DH5	Ant1	2480	1.2036	2479.4204	2480.6240	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs







2DH5-Ant1-2441



2DH5-Ant1-2480

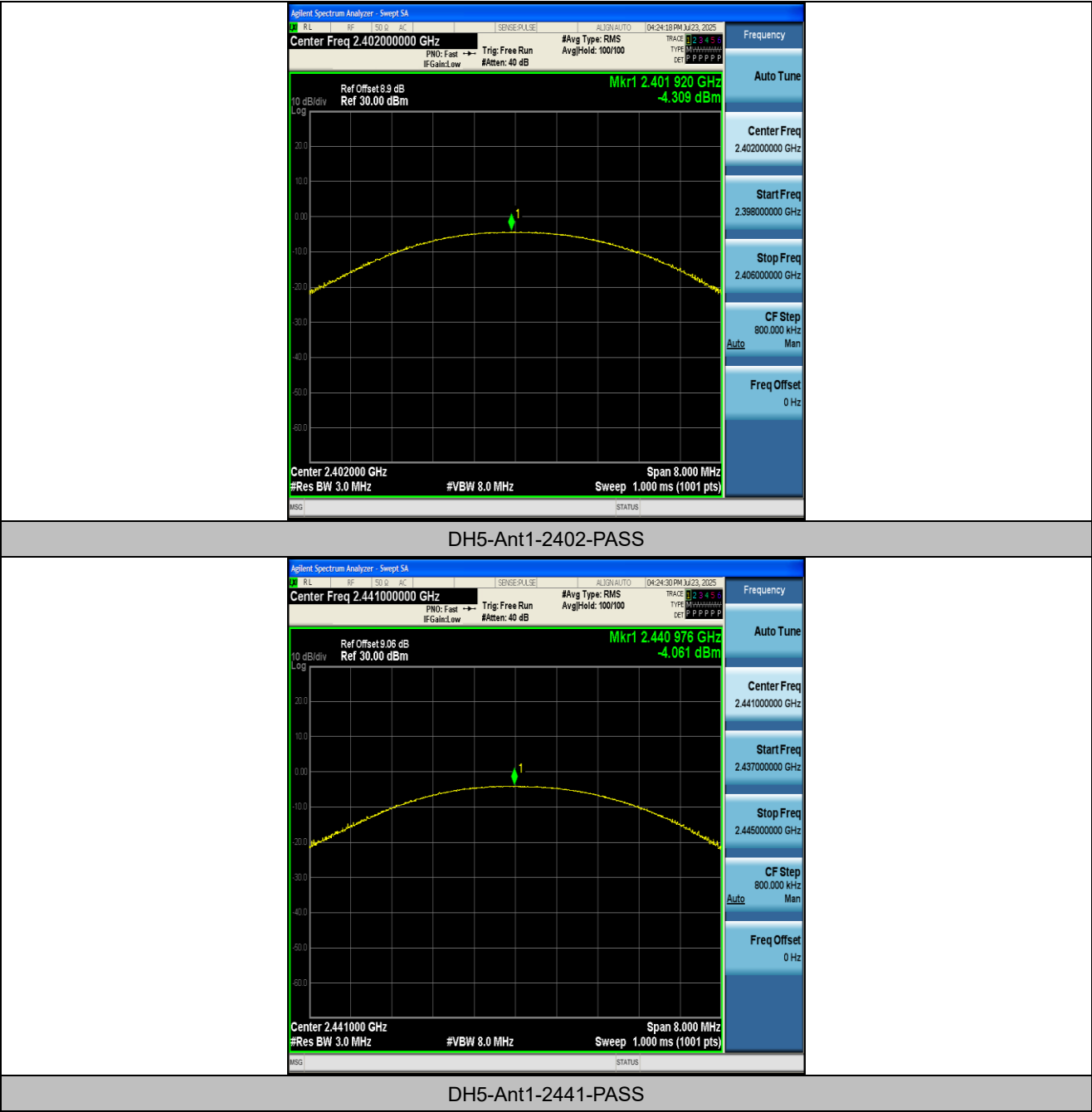
Appendix C: Maximum peak conducted output power

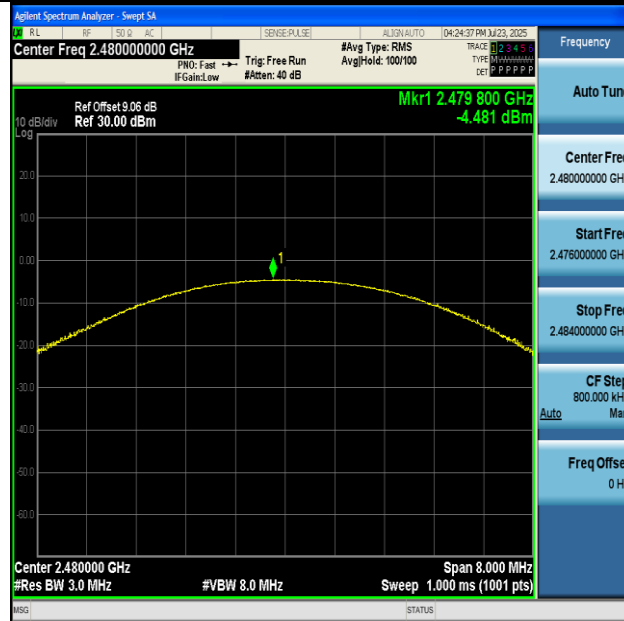
Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	-4.31	≤20.97	PASS
DH5	Ant1	2441	-4.06	≤20.97	PASS
DH5	Ant1	2480	-4.48	≤20.97	PASS
2DH5	Ant1	2402	-3.68	≤20.97	PASS
2DH5	Ant1	2441	-3.26	≤20.97	PASS
2DH5	Ant1	2480	-3.92	≤20.97	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

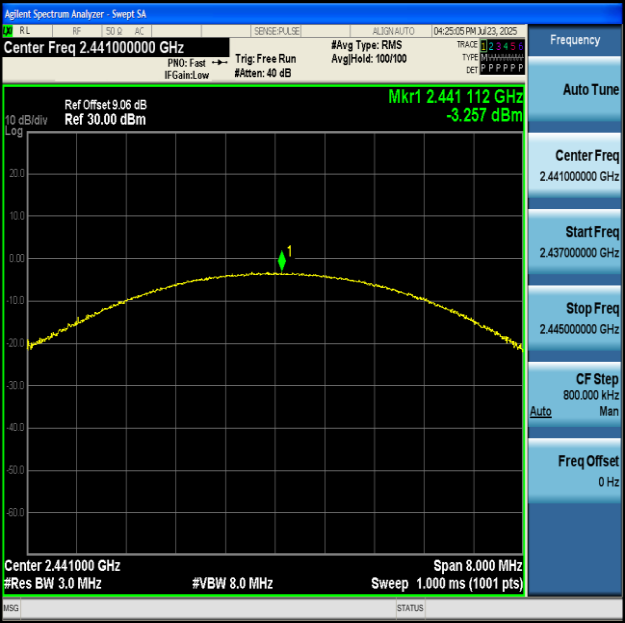




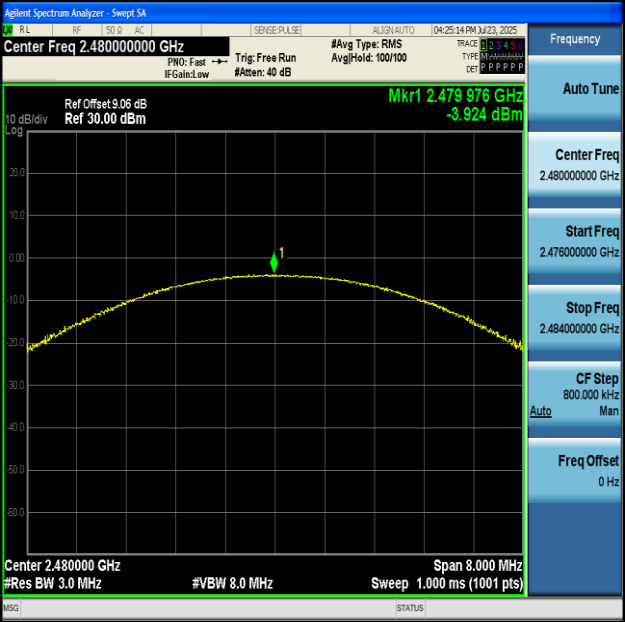
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS



2DH5-Ant1-2480-PASS

Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.998	≥0.670	PASS
2DH5	Ant1	Hop	1	≥0.900	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



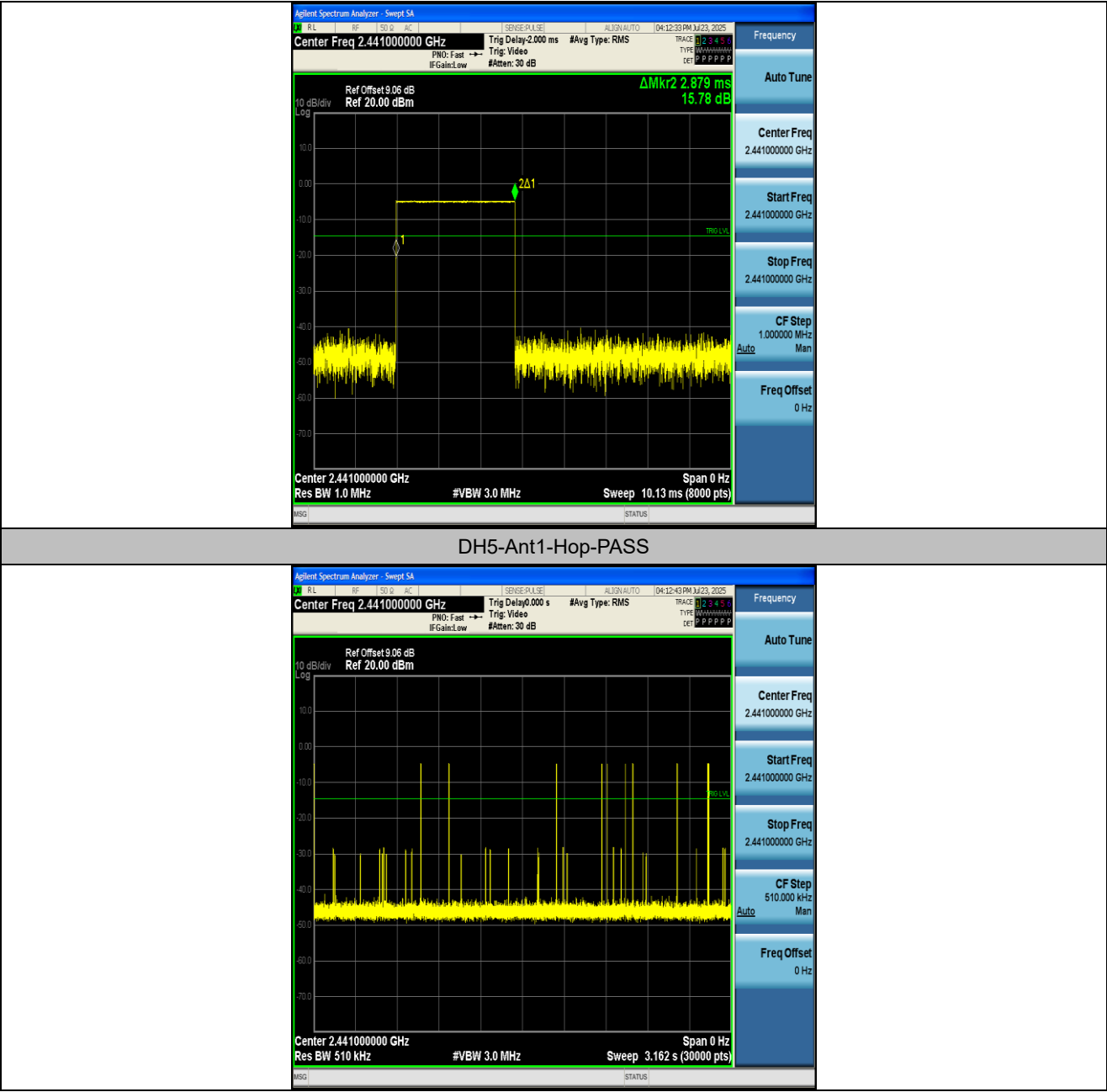
Appendix E: Time of occupancy

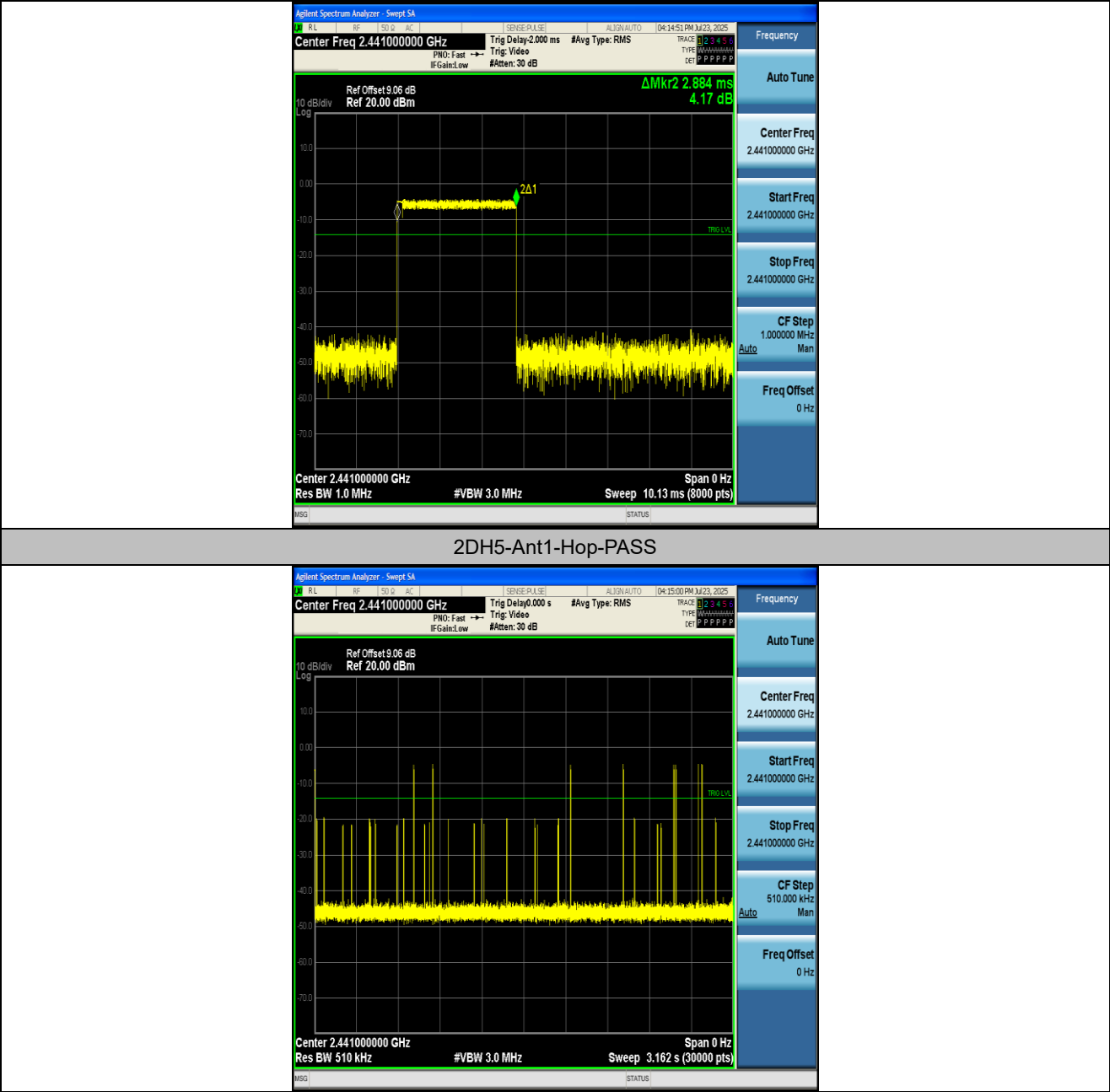
Test Result

Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.879	110	0.317	≤0.4	PASS
2DH5	Ant1	Hop	2.884	90	0.26	≤0.4	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





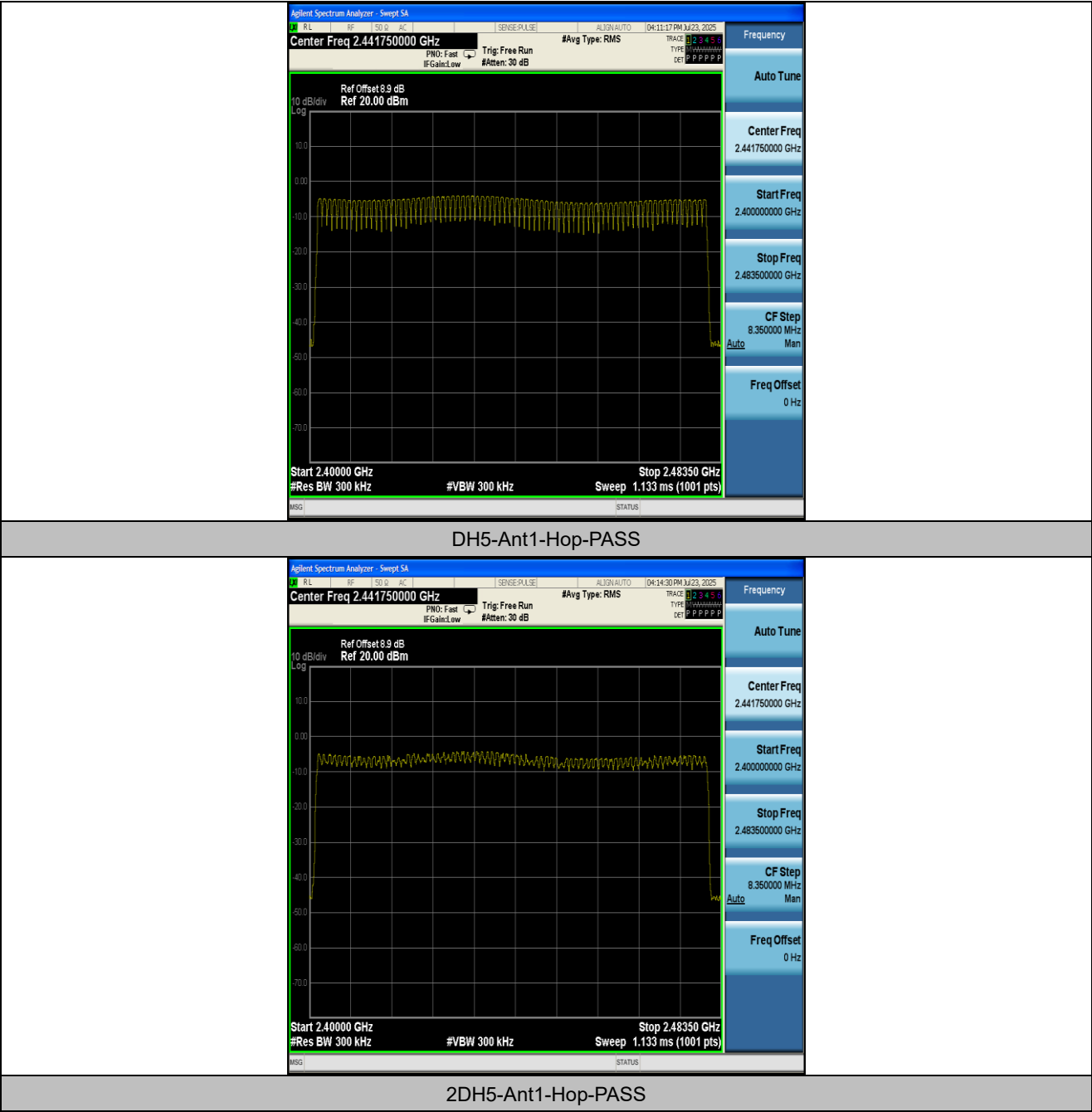
Appendix F: Number of hopping channels

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



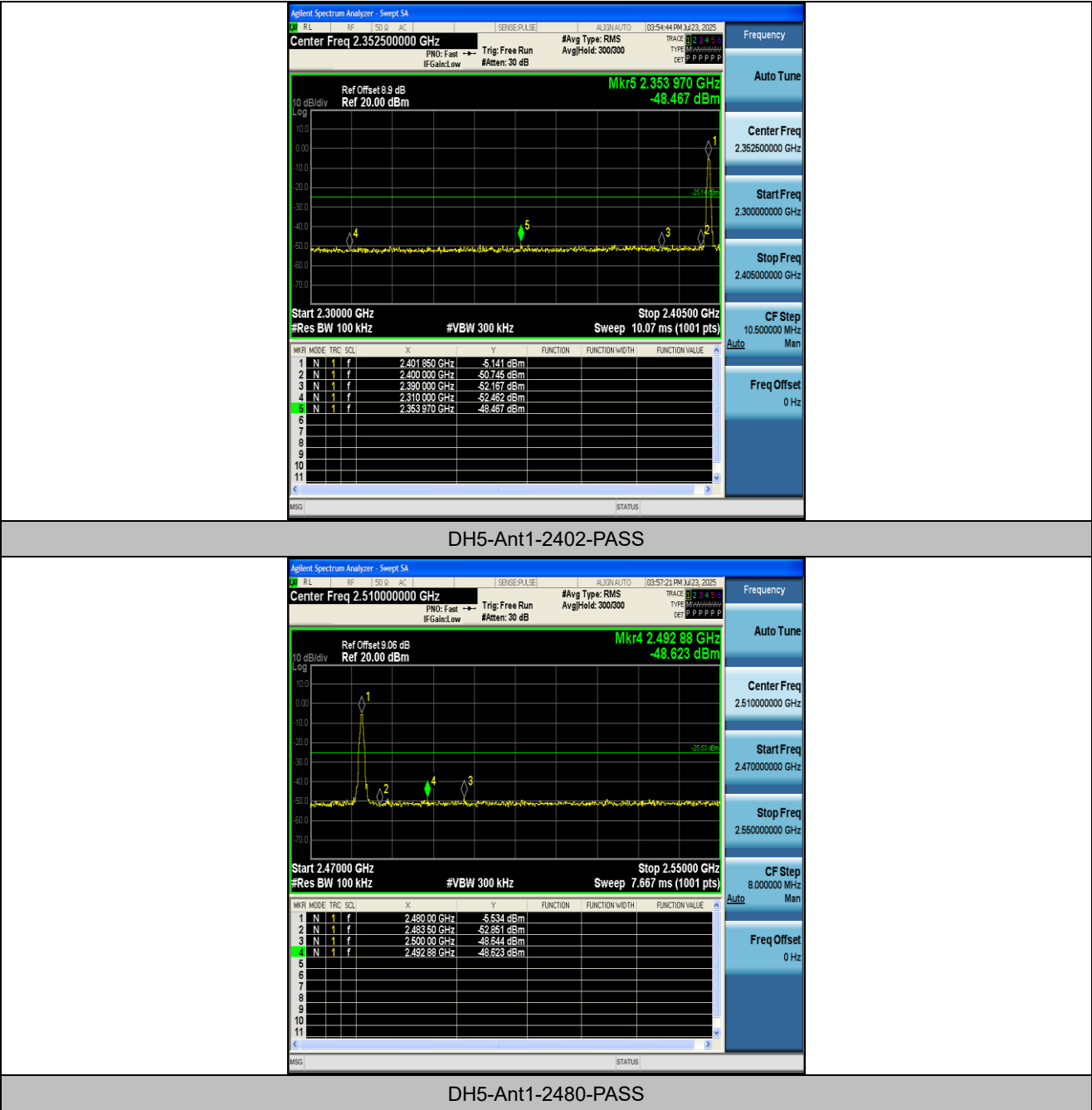
Appendix G: Band edge measurements

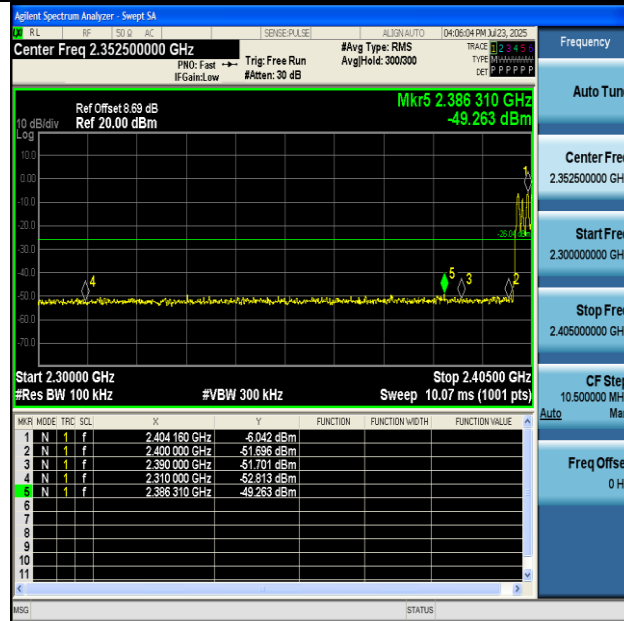
Test Result

Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-5.14	-48.47	≤-25.14	PASS
DH5	Ant1	High	2480	-5.53	-48.62	≤-25.53	PASS
DH5	Ant1	Low	Hop_2402	-6.04	-49.26	≤-26.04	PASS
DH5	Ant1	High	Hop_2480	-5.87	-48.37	≤-25.87	PASS
2DH5	Ant1	Low	2402	-6.15	-49.16	≤-26.15	PASS
2DH5	Ant1	High	2480	-5.48	-48.91	≤-25.48	PASS
2DH5	Ant1	Low	Hop_2402	-10.41	-49.03	≤-30.41	PASS
2DH5	Ant1	High	Hop_2480	-6.77	-48.57	≤-26.77	PASS

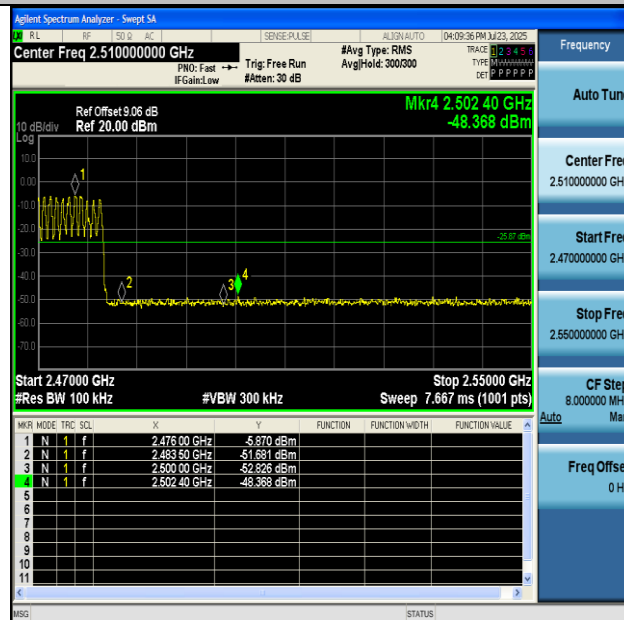
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

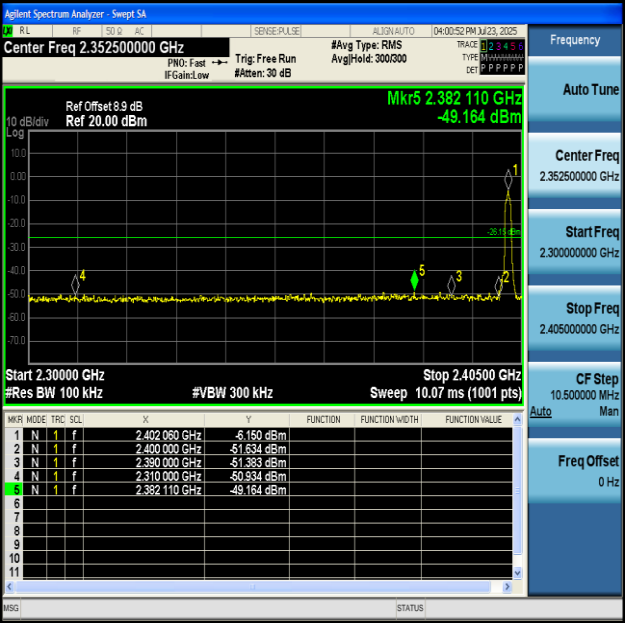




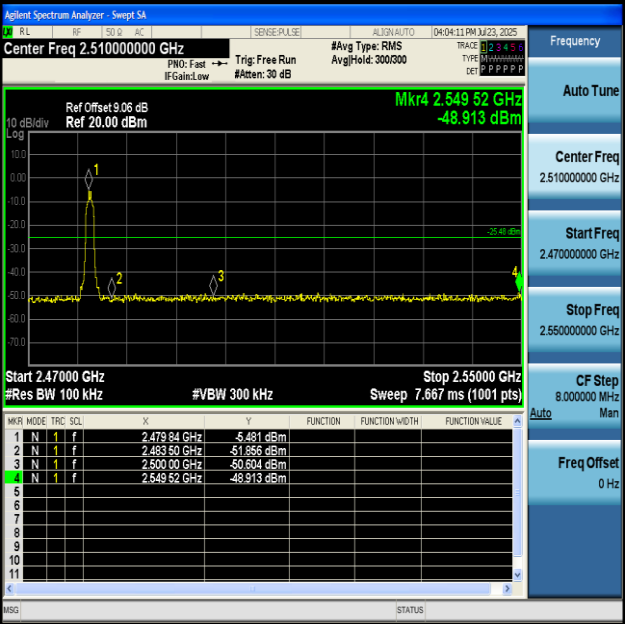
DH5-Ant1-Hop_2402-PASS



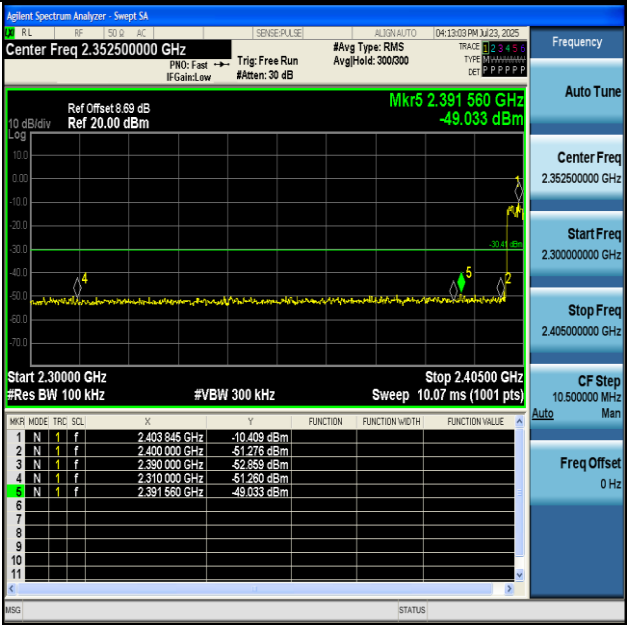
DH5-Ant1-Hop_2480-PASS



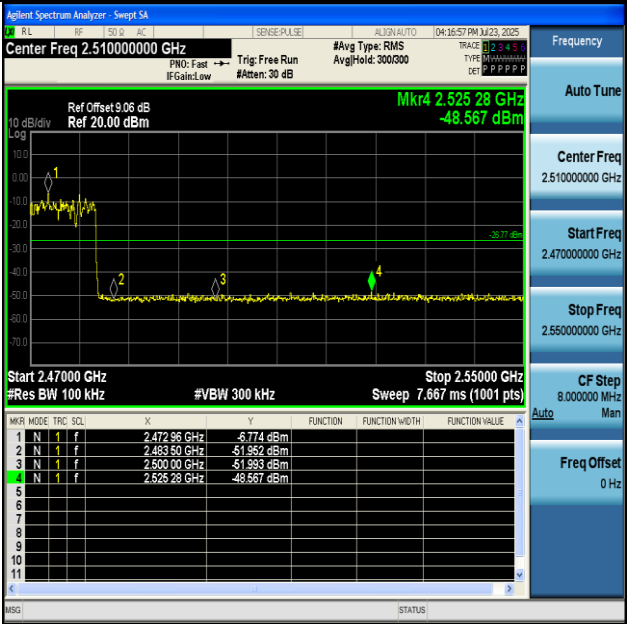
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



2DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

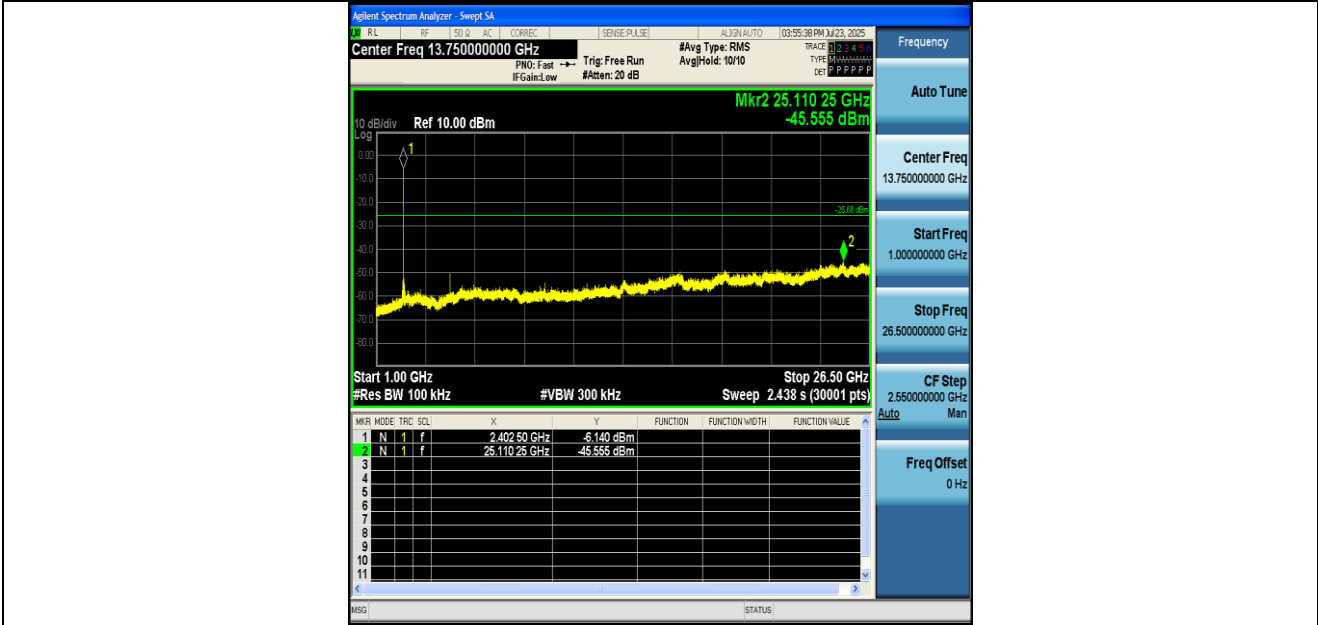
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-5.68	-5.68	---	PASS
DH5	Ant1	2402	30~1000	-5.68	-55.01	≤-25.68	PASS
DH5	Ant1	2402	1000~26500	-5.68	-45.56	≤-25.68	PASS
DH5	Ant1	2441	0~Reference	-5.48	-5.48	---	PASS
DH5	Ant1	2441	30~1000	-5.48	-53.84	≤-25.48	PASS
DH5	Ant1	2441	1000~26500	-5.48	-45.7	≤-25.48	PASS
DH5	Ant1	2480	0~Reference	-6.36	-6.36	---	PASS
DH5	Ant1	2480	30~1000	-6.36	-55.5	≤-26.36	PASS
DH5	Ant1	2480	1000~26500	-6.36	-44.96	≤-26.36	PASS
2DH5	Ant1	2402	0~Reference	-5.84	-5.84	---	PASS
2DH5	Ant1	2402	30~1000	-5.84	-53.84	≤-25.84	PASS
2DH5	Ant1	2402	1000~26500	-5.84	-45.09	≤-25.84	PASS
2DH5	Ant1	2441	0~Reference	-9.32	-9.32	---	PASS
2DH5	Ant1	2441	30~1000	-9.32	-51.42	≤-29.32	PASS
2DH5	Ant1	2441	1000~26500	-9.32	-45.6	≤-29.32	PASS
2DH5	Ant1	2480	0~Reference	-6.44	-6.44	---	PASS
2DH5	Ant1	2480	30~1000	-6.44	-55.31	≤-26.44	PASS
2DH5	Ant1	2480	1000~26500	-6.44	-45.17	≤-26.44	PASS

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

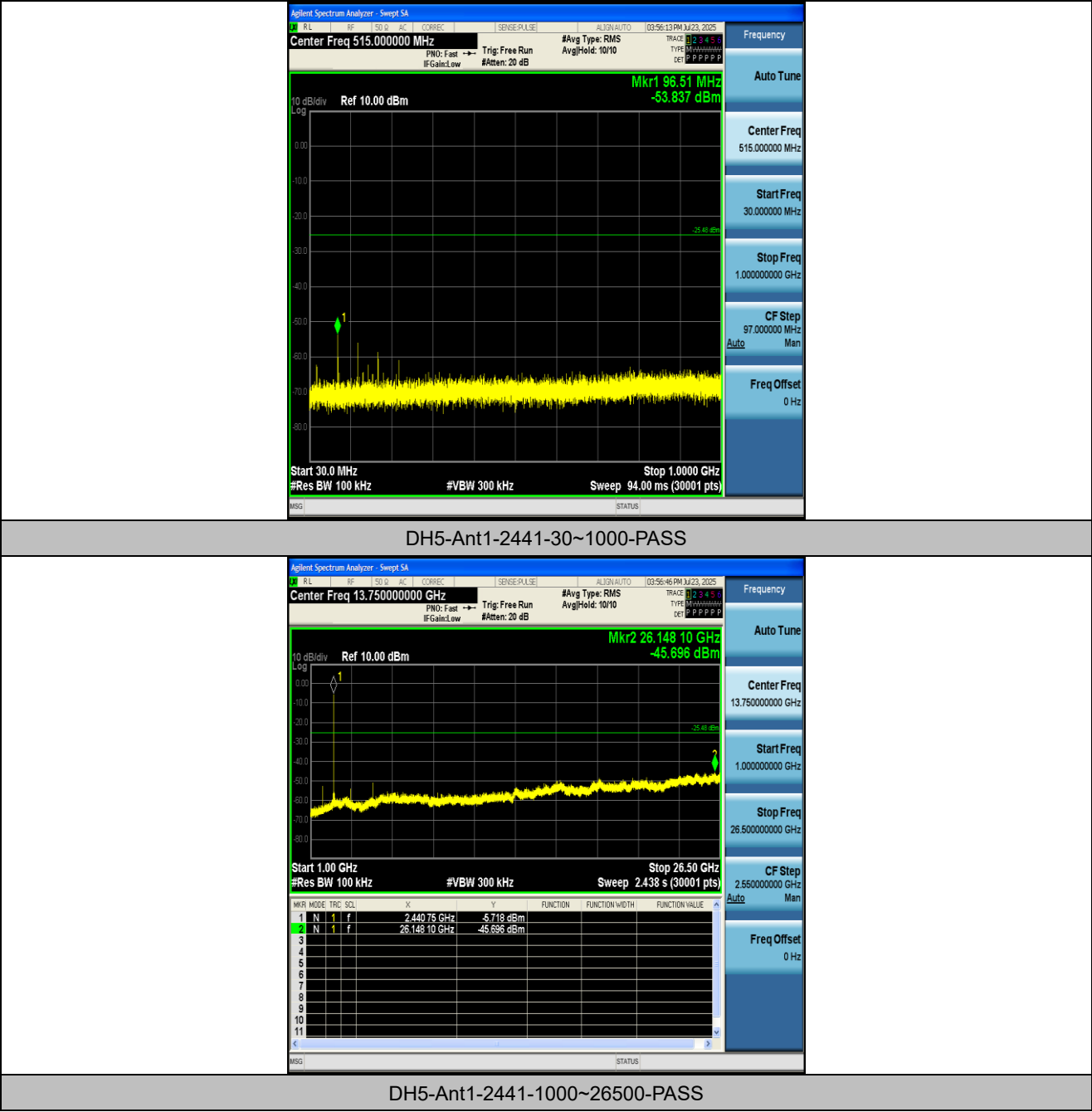




DH5-Ant1-2402-1000~26500-PASS

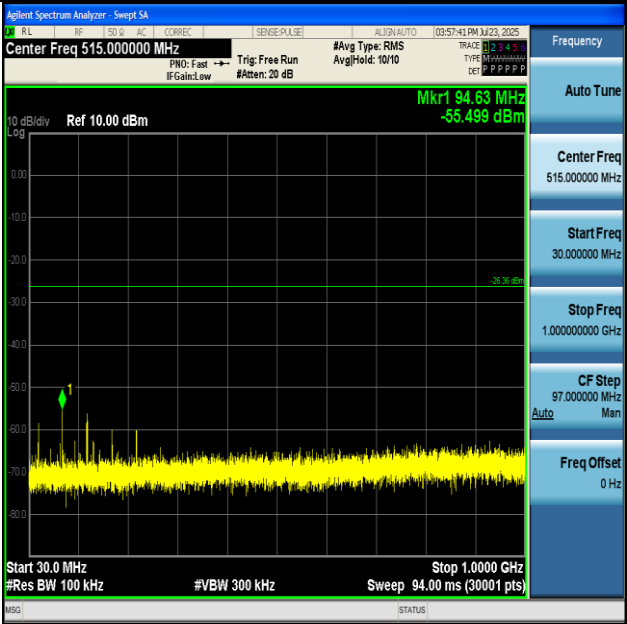


DH5-Ant1-2441-0~Reference-PASS

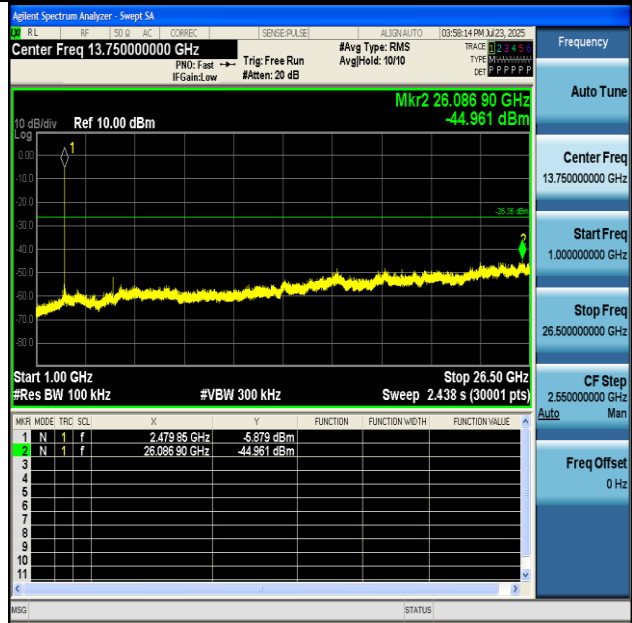




DH5-Ant1-2480-0~Reference-PASS



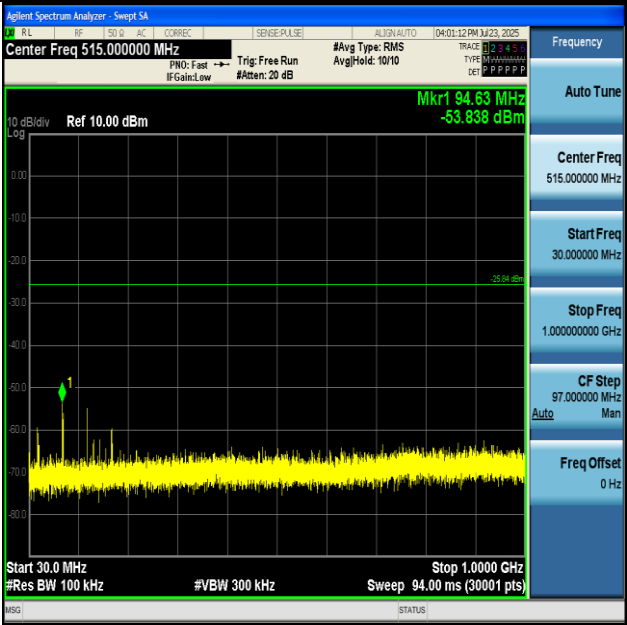
DH5-Ant1-2480-30~1000-PASS



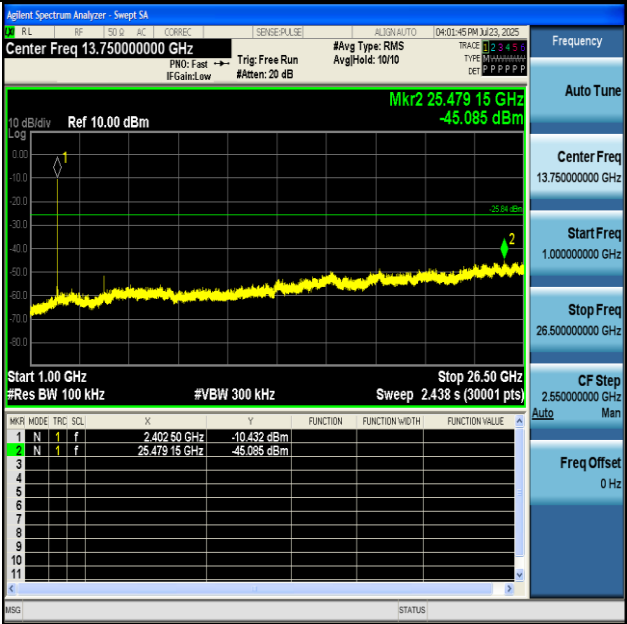
DH5-Ant1-2480-1000~26500-PASS



2DH5-Ant1-2402-0~Reference-PASS



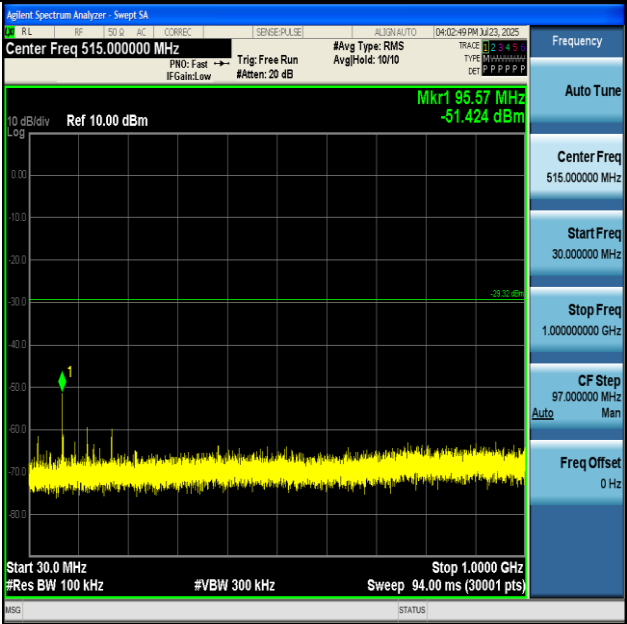
2DH5-Ant1-2402-30~1000-PASS



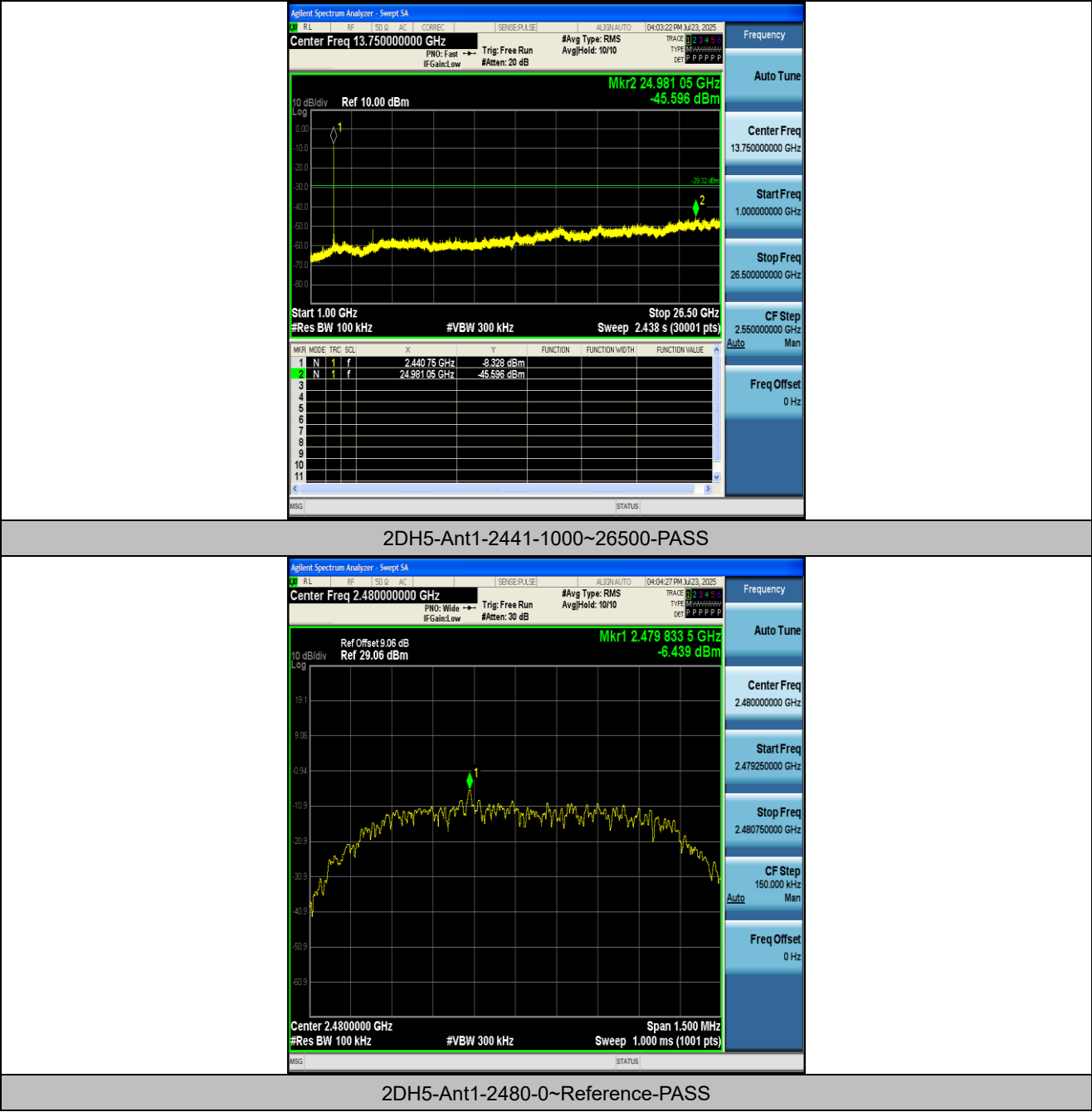
2DH5-Ant1-2402-1000~26500-PASS

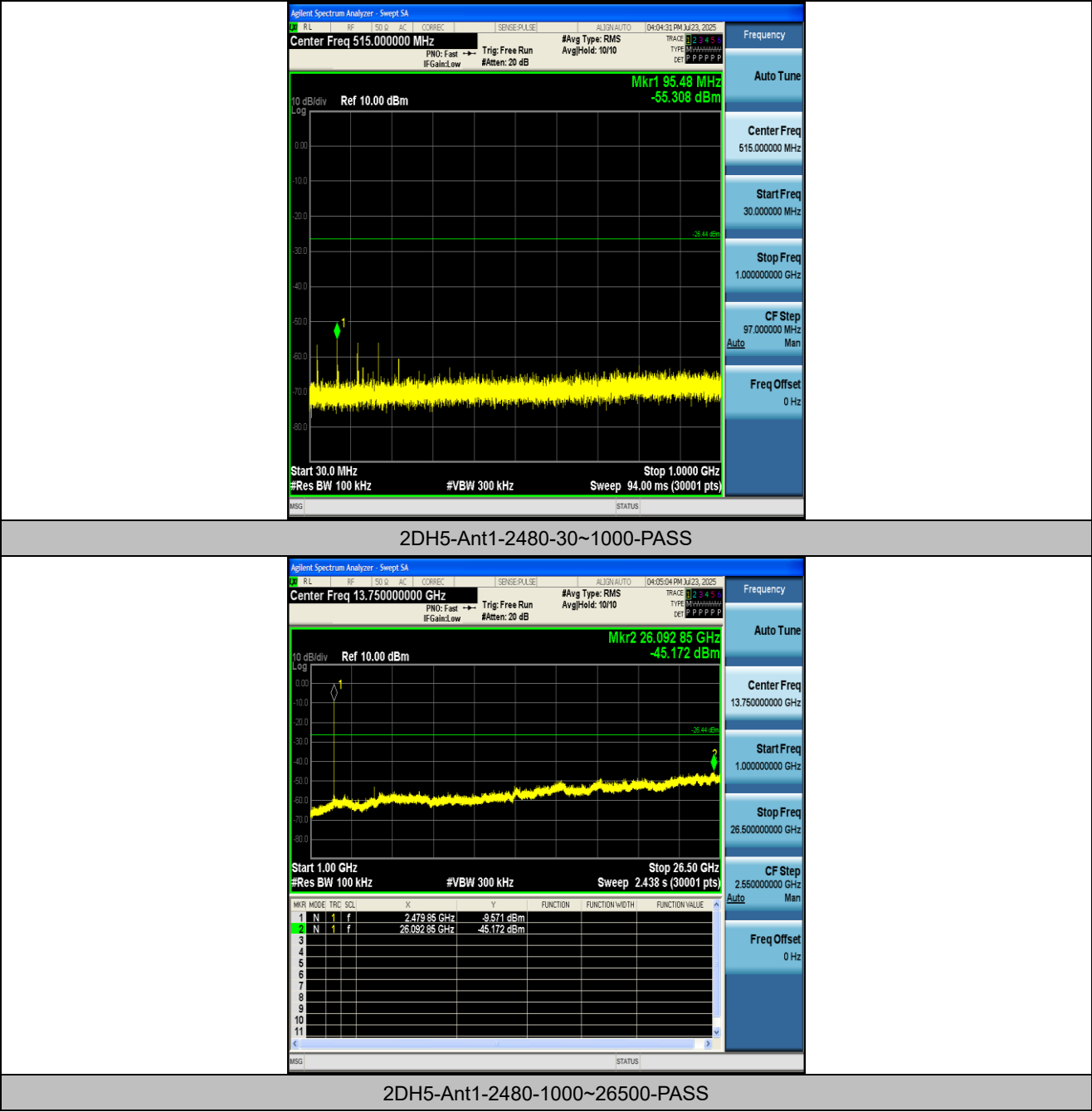


2DH5-Ant1-2441-0~Reference-PASS



2DH5-Ant1-2441-30~1000-PASS





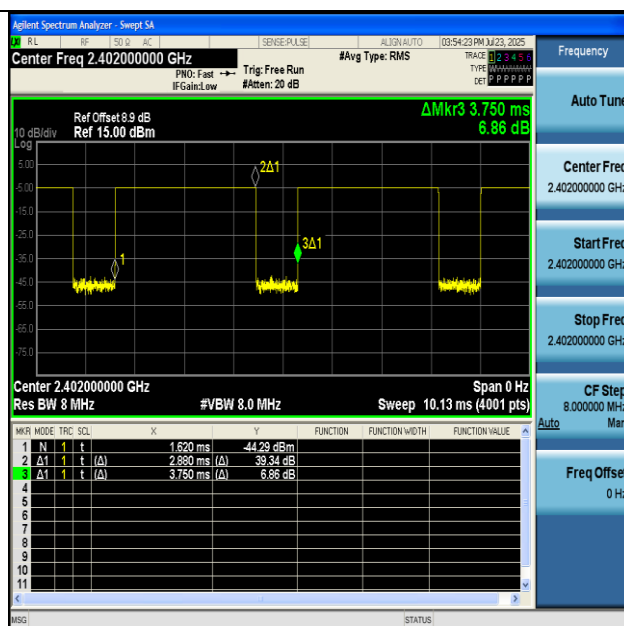
Appendix I: Duty Cycle

Test Result

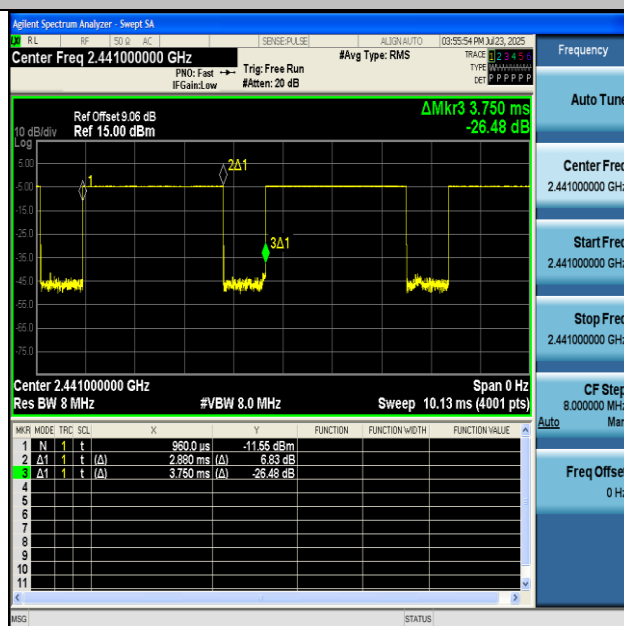
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
DH5	Ant1	2402	2.88	3.75	76.80	1.15
DH5	Ant1	2441	2.88	3.75	76.80	1.15
DH5	Ant1	2480	2.88	3.75	76.80	1.15
2DH5	Ant1	2402	2.88	3.75	76.80	1.15
2DH5	Ant1	2441	2.89	3.75	77.07	1.13
2DH5	Ant1	2480	2.88	3.75	76.80	1.15

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

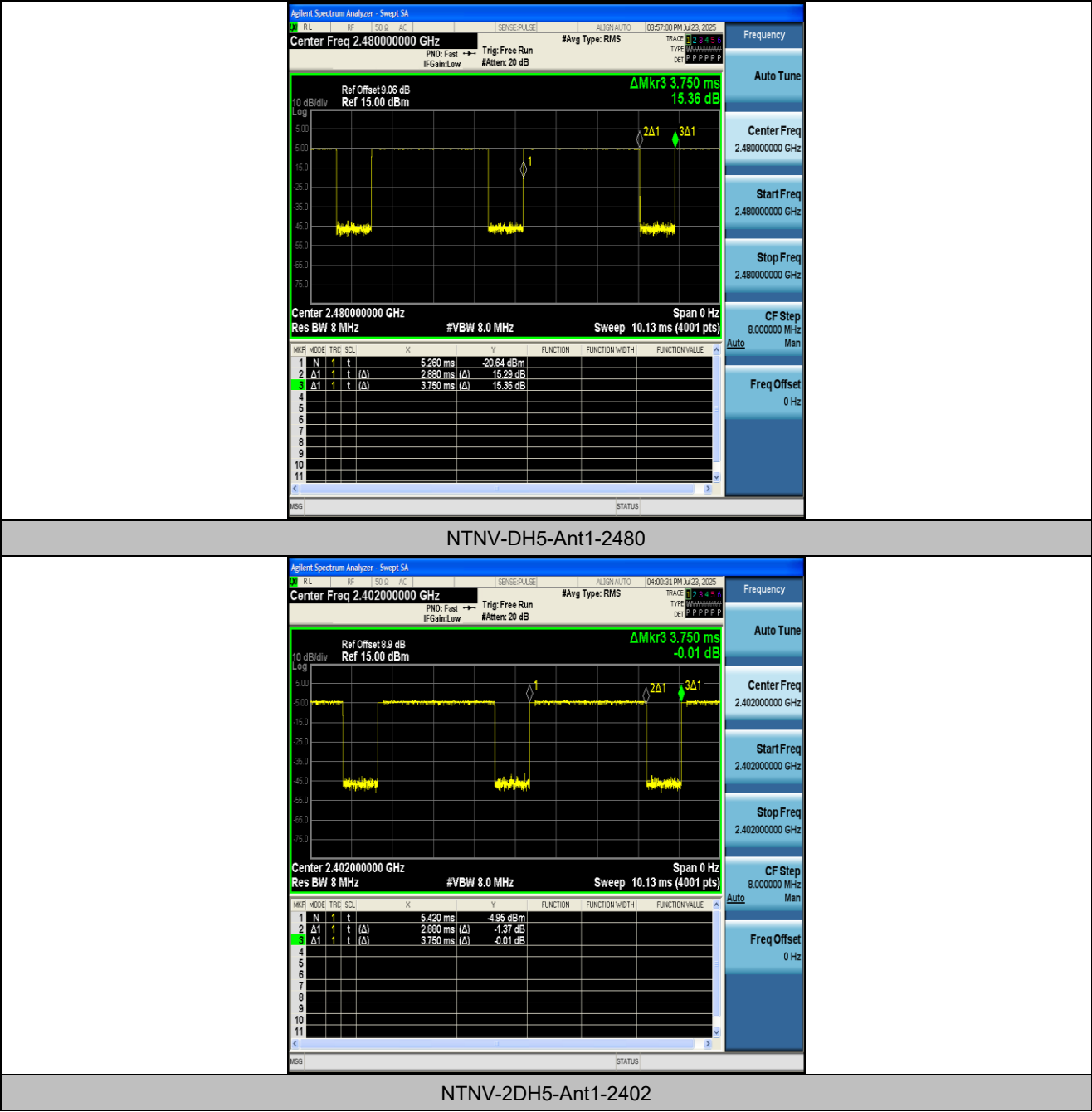
Test Graphs

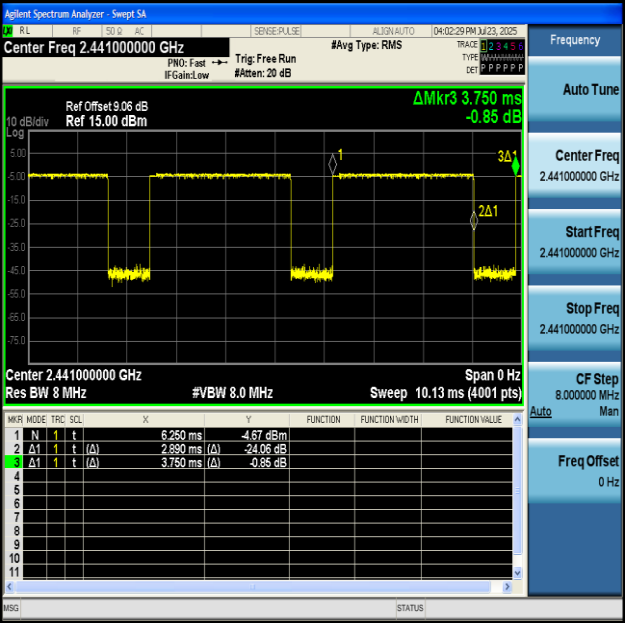


NTNV-DH5-Ant1-2402

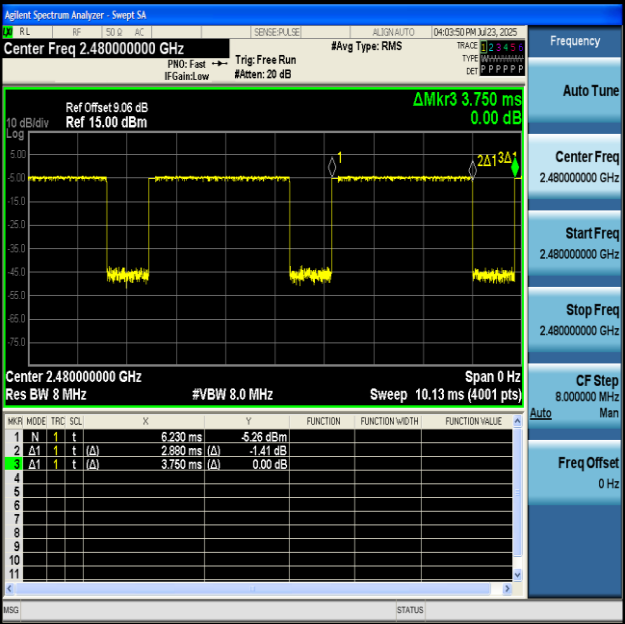


NTNV-DH5-Ant1-2441





NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480