



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

Product Name: 2.4g Bluetooth Headphones+dongle

Trade Mark: SENTRY

Test Model: GX1000

FCC ID: 2ACP4CGX1000

Environmental Conditions

Temperature:	23.5℃
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	0.957	2401.526	2402.483	---	---
DH5	Ant1	2441	1.017	2440.463	2441.480	---	---
DH5	Ant1	2480	0.957	2479.526	2480.483	---	---
2DH5	Ant1	2402	1.194	2401.394	2402.588	---	---
2DH5	Ant1	2441	1.191	2440.391	2441.582	---	---
2DH5	Ant1	2480	1.194	2479.391	2480.585	---	---
3DH5	Ant1	2402	1.281	2401.352	2402.633	---	---
3DH5	Ant1	2441	1.179	2440.403	2441.582	---	---
3DH5	Ant1	2480	1.251	2479.358	2480.609	---	---

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





Test Graphs





DH5-Ant1-2480



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

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.88823	2401.5464	2402.4347	---	---
DH5	Ant1	2441	0.88505	2440.5491	2441.4342	---	---
DH5	Ant1	2480	0.90425	2479.5431	2480.4473	---	---
2DH5	Ant1	2402	1.1501	2401.4147	2402.5648	---	---
2DH5	Ant1	2441	1.1620	2440.4083	2441.5703	---	---
2DH5	Ant1	2480	1.1527	2479.4135	2480.5662	---	---
3DH5	Ant1	2402	1.1549	2401.4158	2402.5707	---	---
3DH5	Ant1	2441	1.1538	2440.4173	2441.5711	---	---
3DH5	Ant1	2480	1.1627	2479.4134	2480.5761	---	---

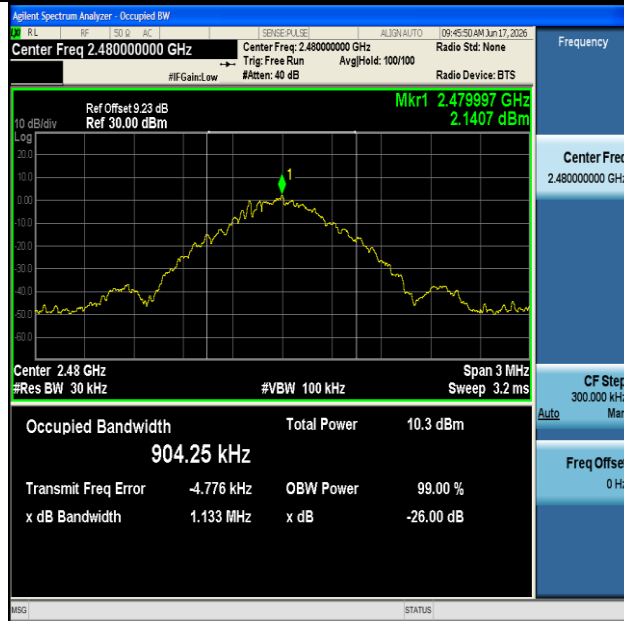
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402



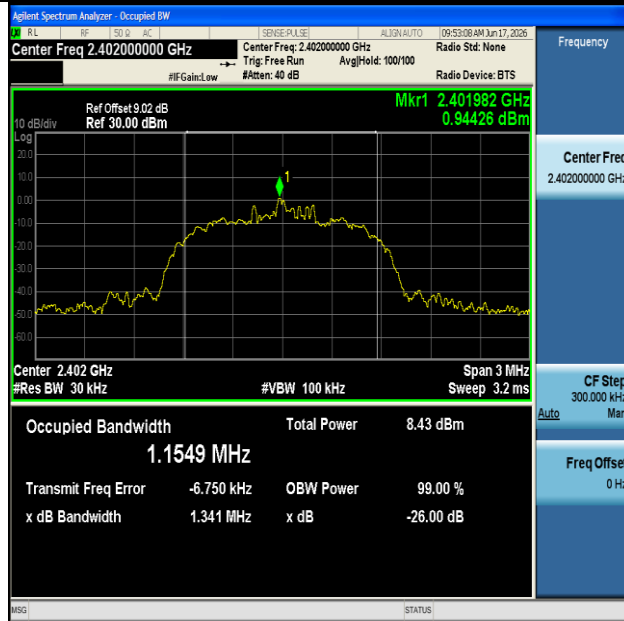


2DH5-Ant1-2441



2DH5-Ant1-2480



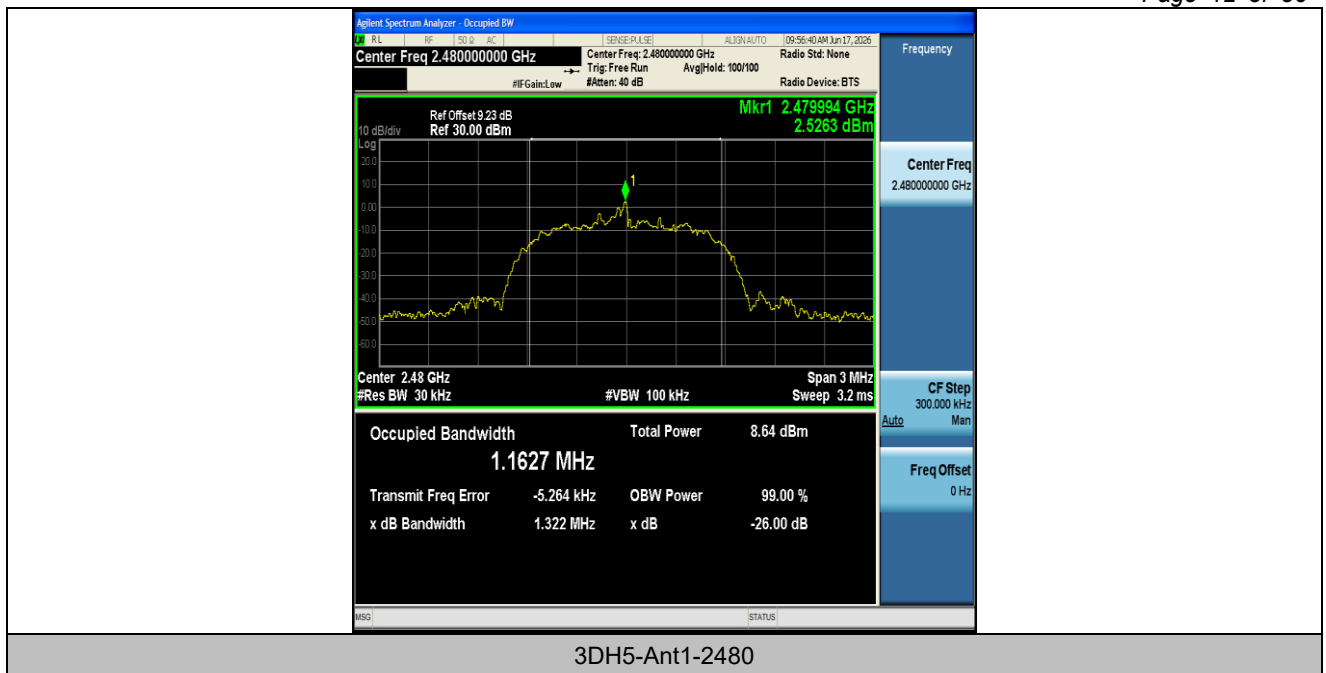


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

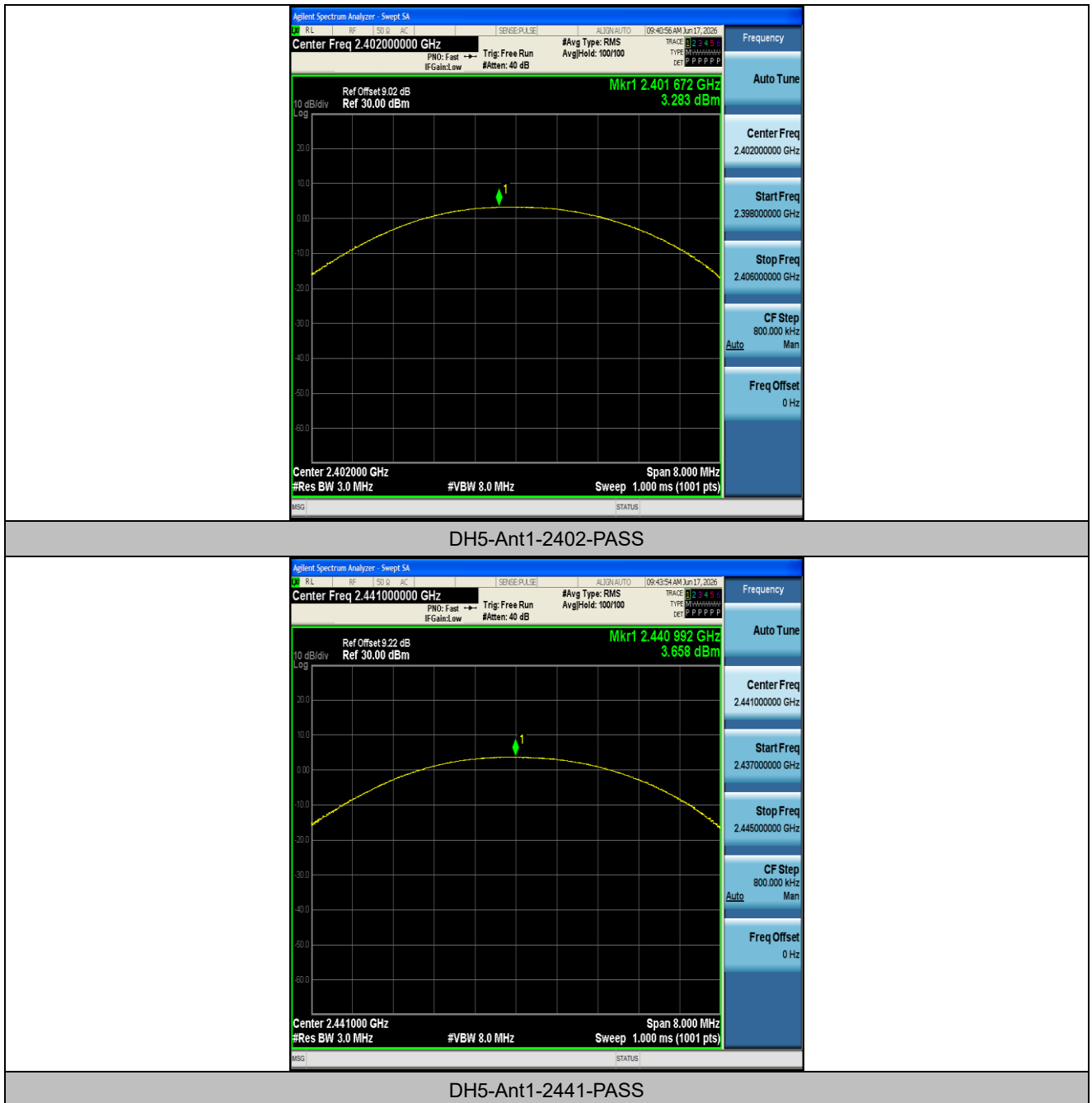
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	3.28	≤20.97	PASS
DH5	Ant1	2441	3.66	≤20.97	PASS
DH5	Ant1	2480	3.99	≤20.97	PASS
2DH5	Ant1	2402	3.25	≤20.97	PASS
2DH5	Ant1	2441	3.64	≤20.97	PASS
2DH5	Ant1	2480	3.97	≤20.97	PASS
3DH5	Ant1	2402	3.24	≤20.97	PASS
3DH5	Ant1	2441	3.63	≤20.97	PASS
3DH5	Ant1	2480	3.95	≤20.97	PASS

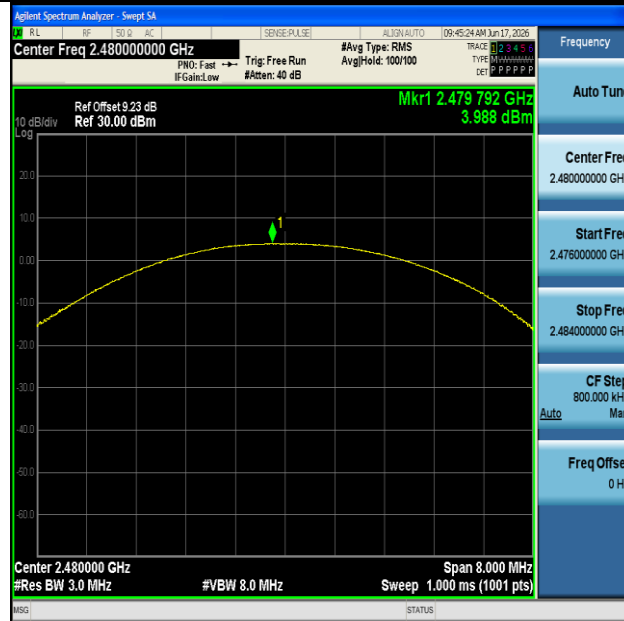
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



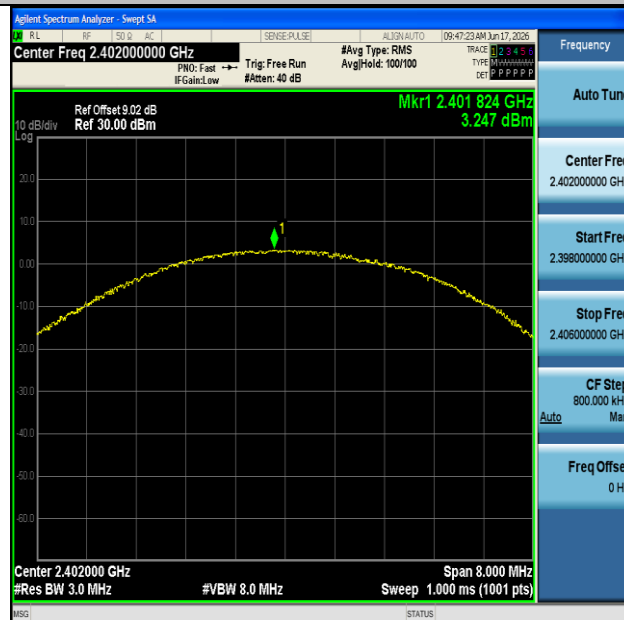


Test Graphs



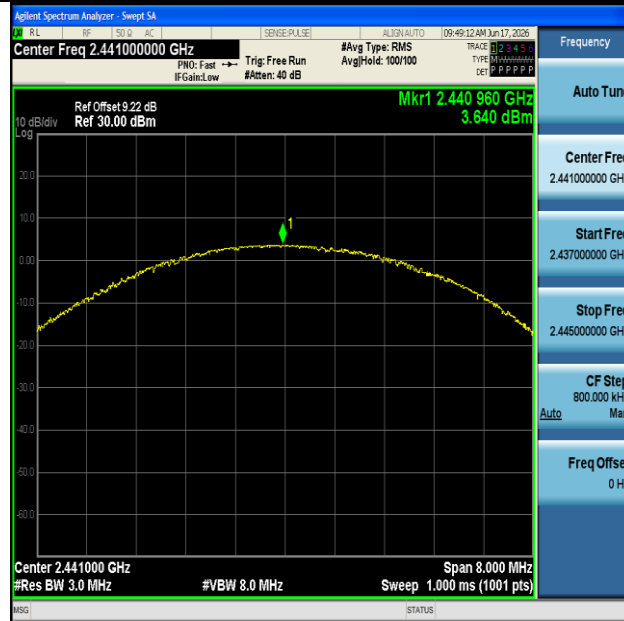


DH5-Ant1-2480-PASS

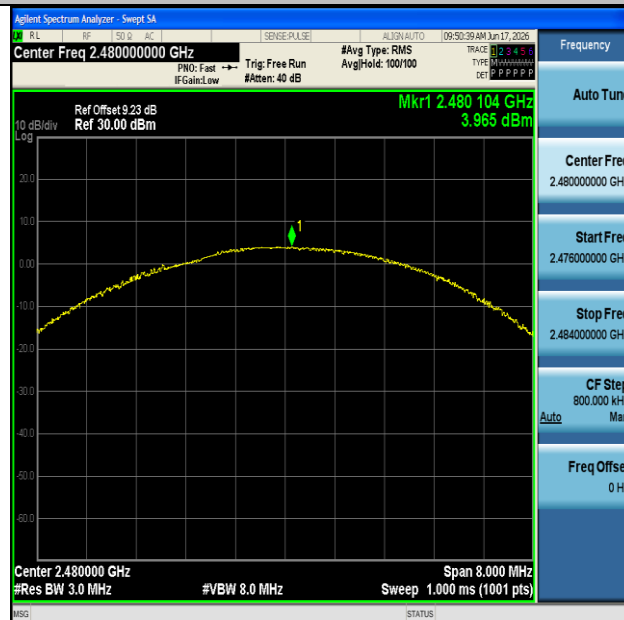


2DH5-Ant1-2402-PASS



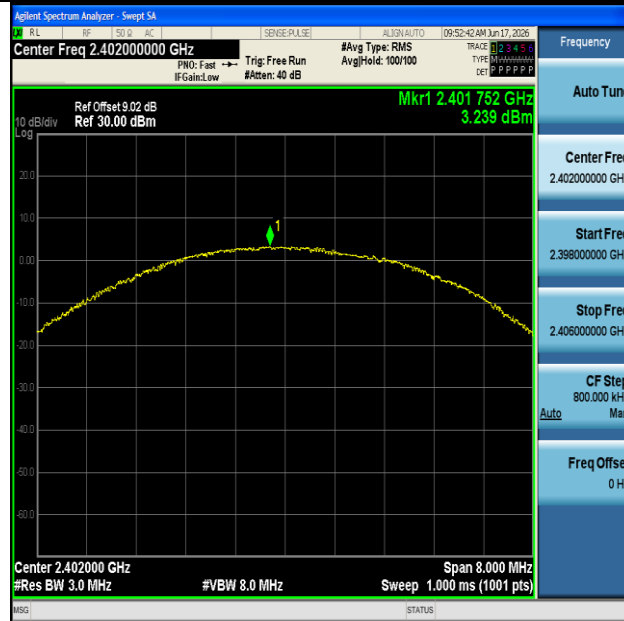


2DH5-Ant1-2441-PASS

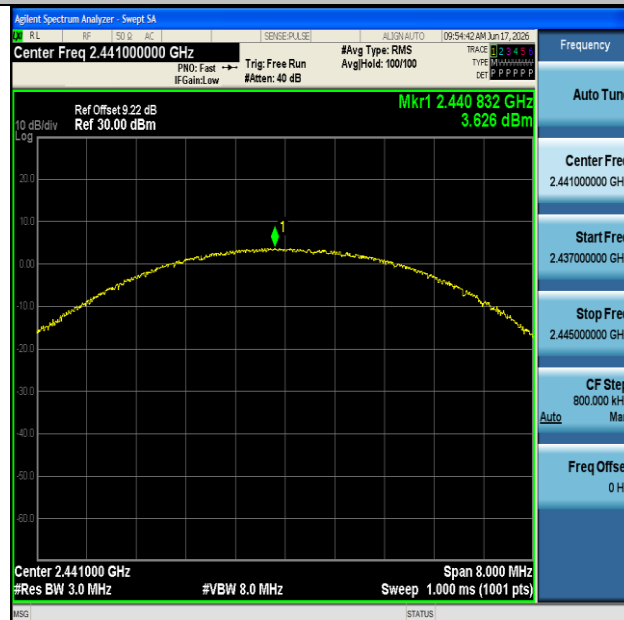


2DH5-Ant1-2480-PASS



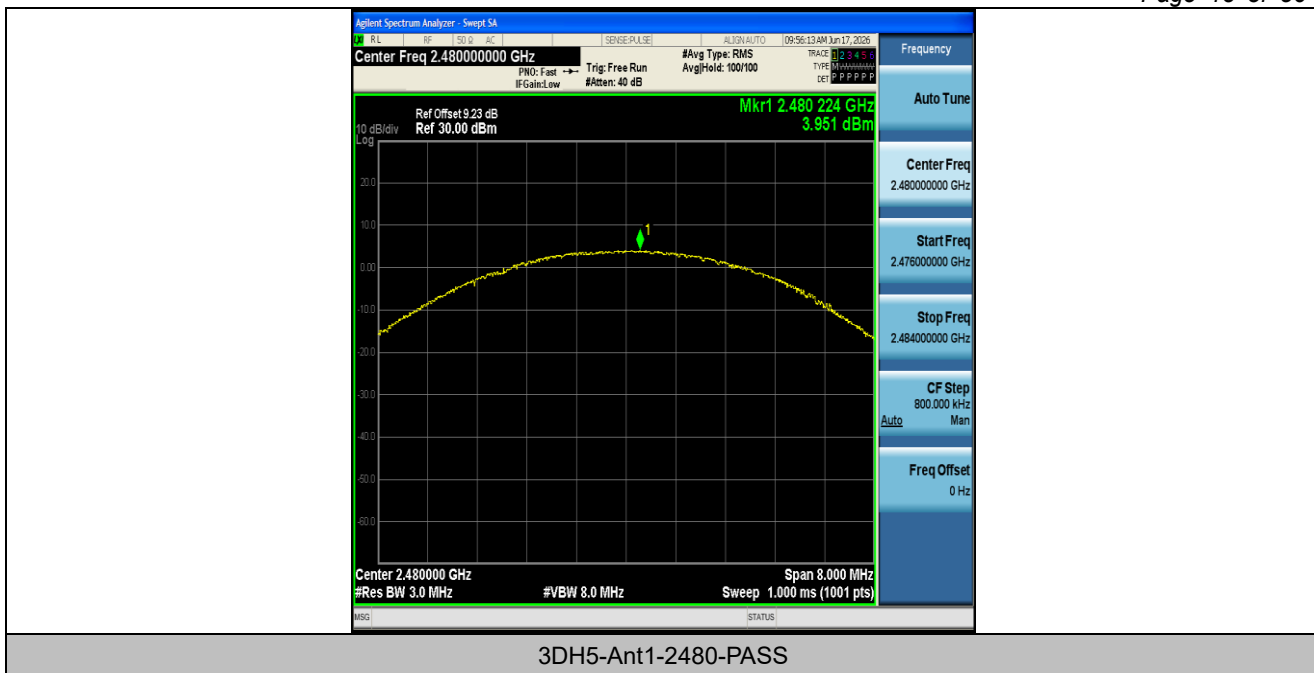


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	1.014	≥ 0.678	PASS
2DH5	Ant1	Hop	0.976	≥ 0.796	PASS
3DH5	Ant1	Hop	1.01	≥ 0.854	PASS

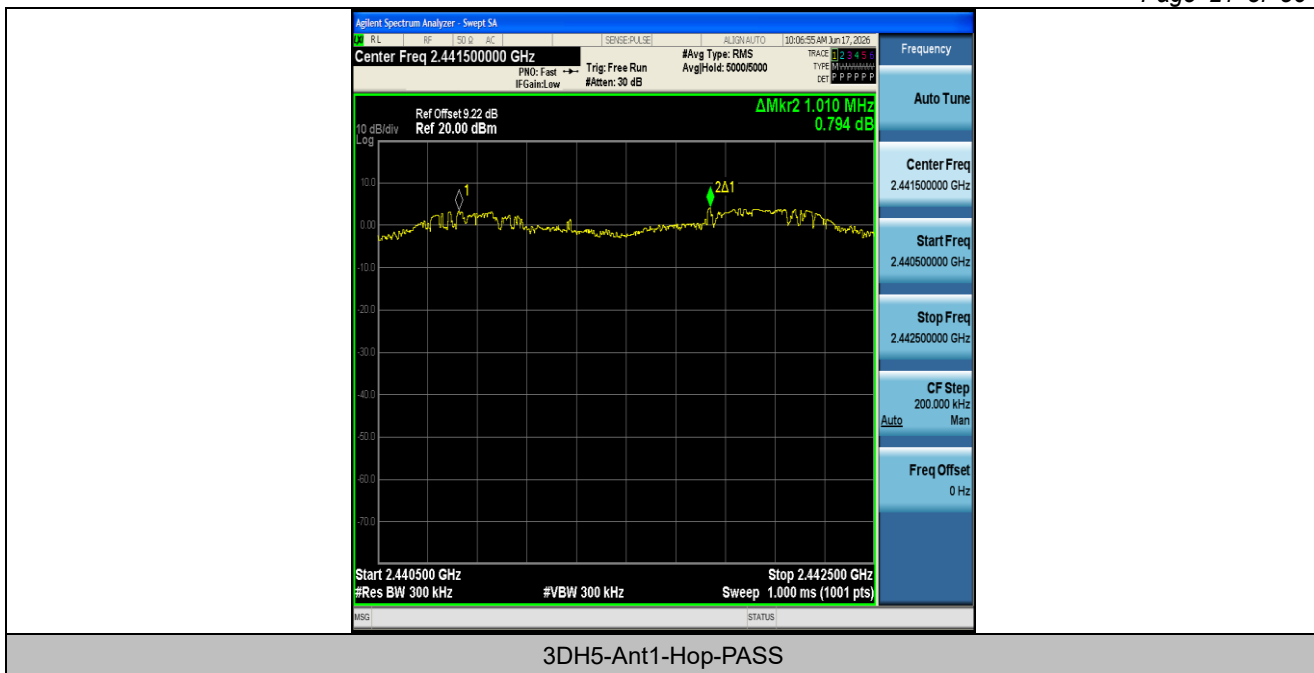
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix E: Time of occupancy

Test Result

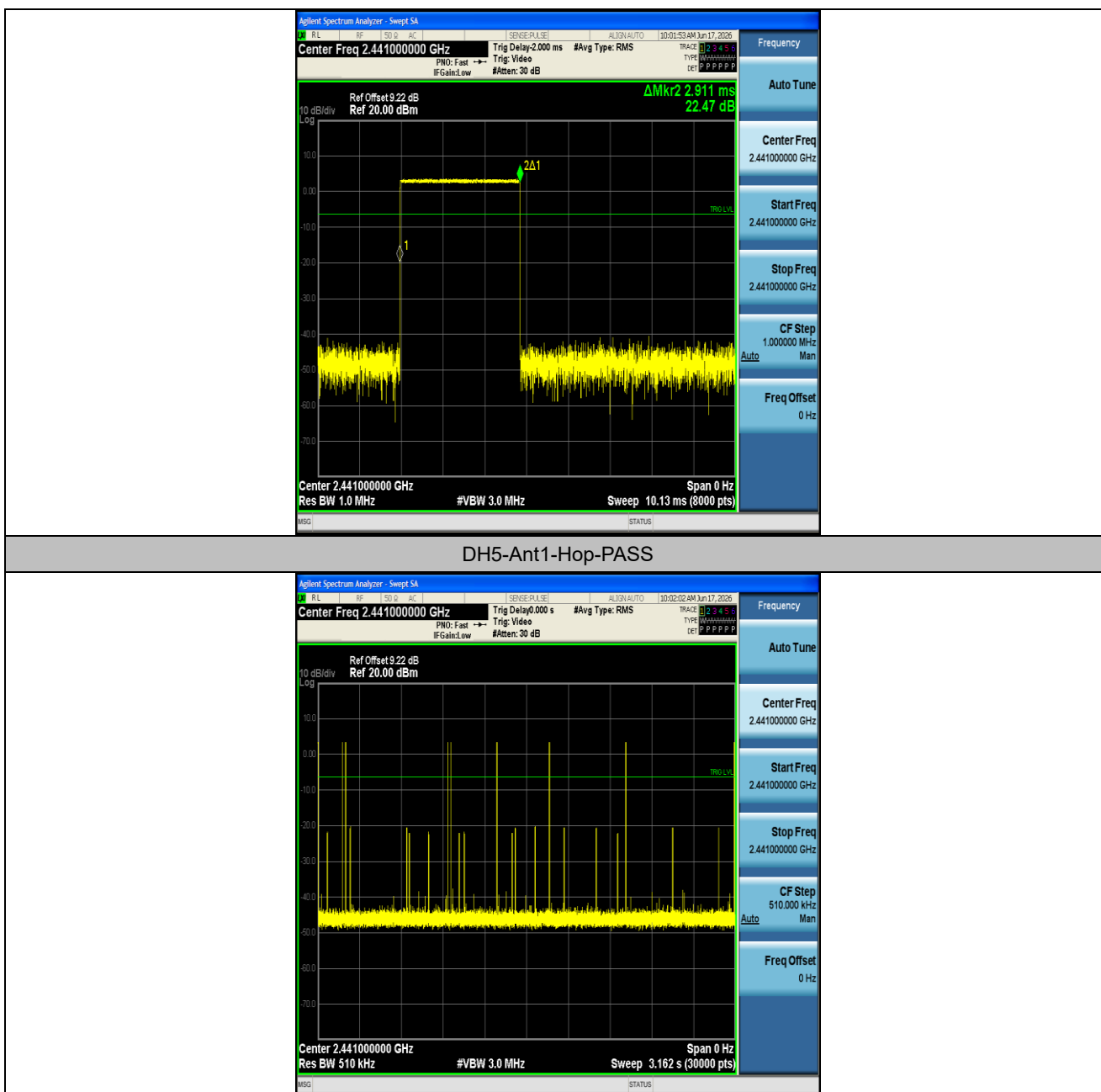
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.911	90	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.917	110	0.321	≤0.4	PASS
3DH5	Ant1	Hop	2.917	120	0.35	≤0.4	PASS

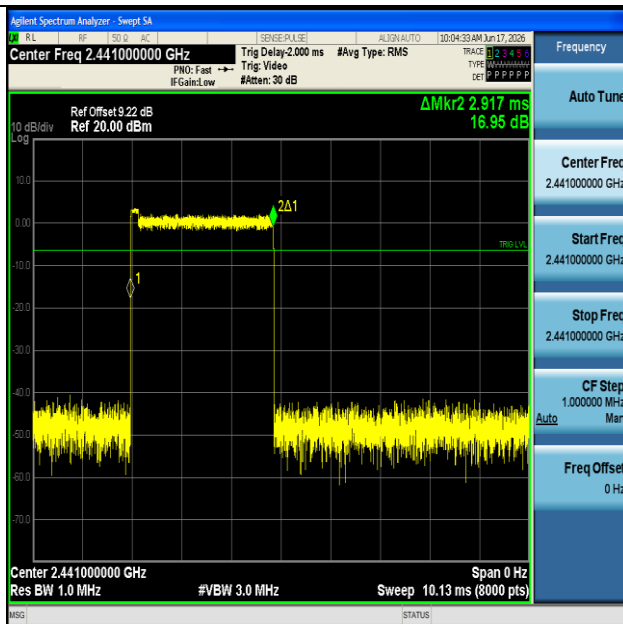
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



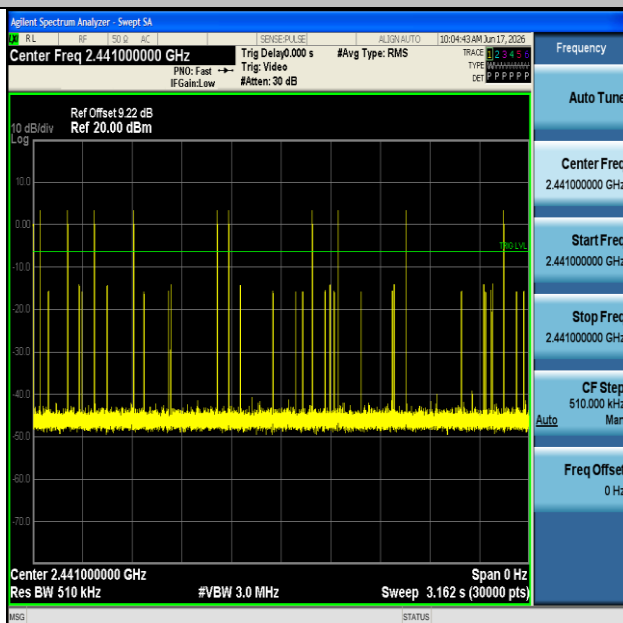


Test Graphs



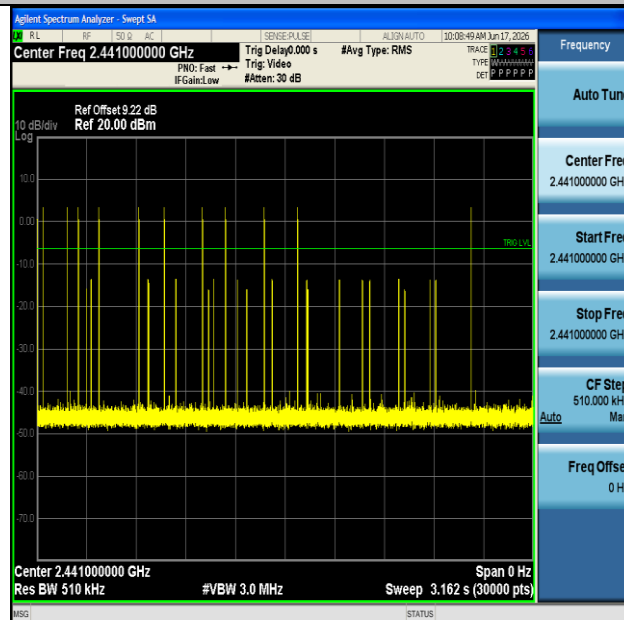


2DH5-Ant1-Hop-PASS





3DH5-Ant1-Hop-PASS





Appendix F: Number of hopping channels

Test Result

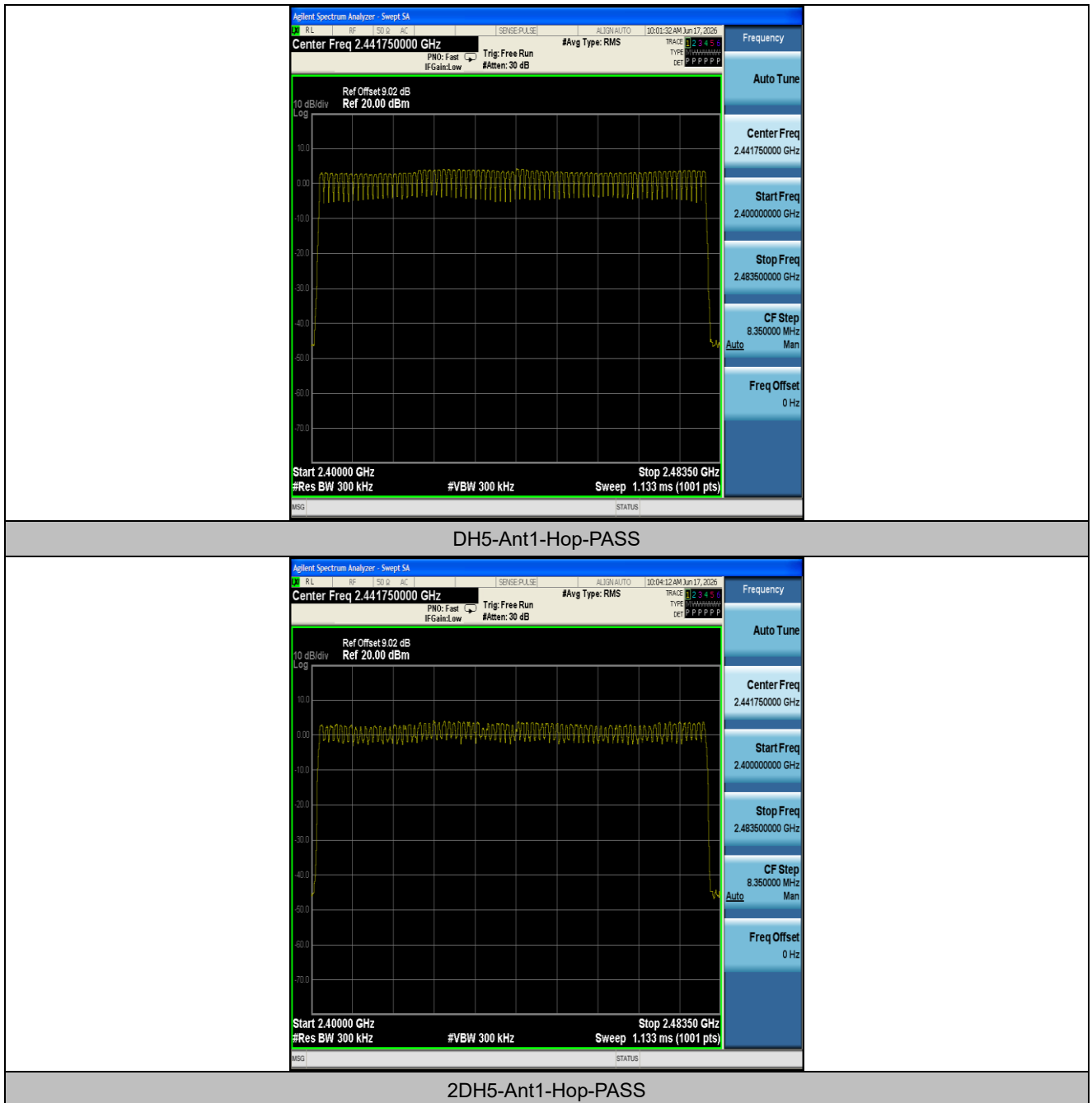
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

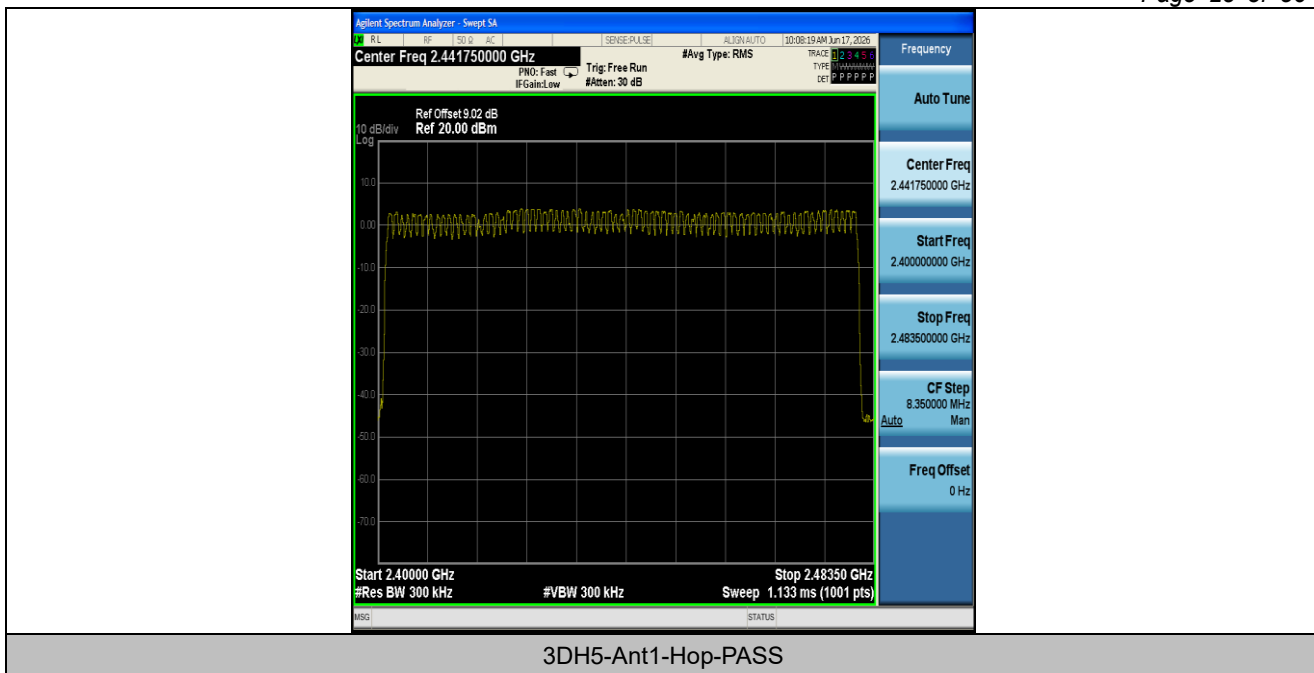
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

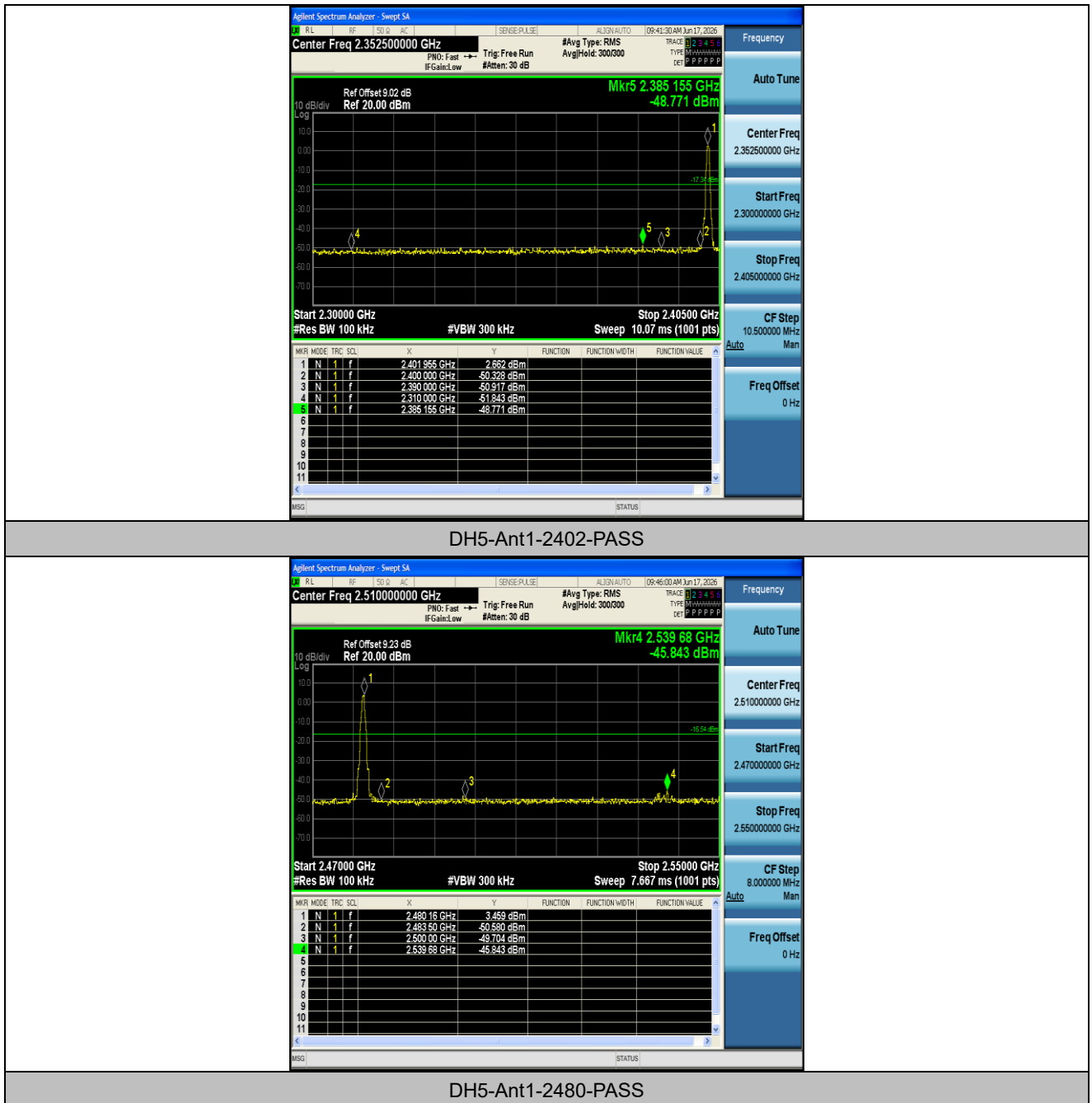
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.66	-48.77	≤-17.34	PASS
DH5	Ant1	High	2480	3.46	-45.84	≤-16.54	PASS
DH5	Ant1	Low	Hop_2402	1.82	-49.26	≤-18.18	PASS
DH5	Ant1	High	Hop_2480	3.40	-48.73	≤-16.6	PASS
2DH5	Ant1	Low	2402	2.67	-48.97	≤-17.33	PASS
2DH5	Ant1	High	2480	3.49	-48.47	≤-16.51	PASS
2DH5	Ant1	Low	Hop_2402	1.07	-48.97	≤-18.93	PASS
2DH5	Ant1	High	Hop_2480	3.34	-41.76	≤-16.66	PASS
3DH5	Ant1	Low	2402	2.49	-48.92	≤-17.52	PASS
3DH5	Ant1	High	2480	3.49	-48.72	≤-16.51	PASS
3DH5	Ant1	Low	Hop_2402	-1.95	-48.28	≤-21.95	PASS
3DH5	Ant1	High	Hop_2480	2.31	-46.44	≤-17.69	PASS

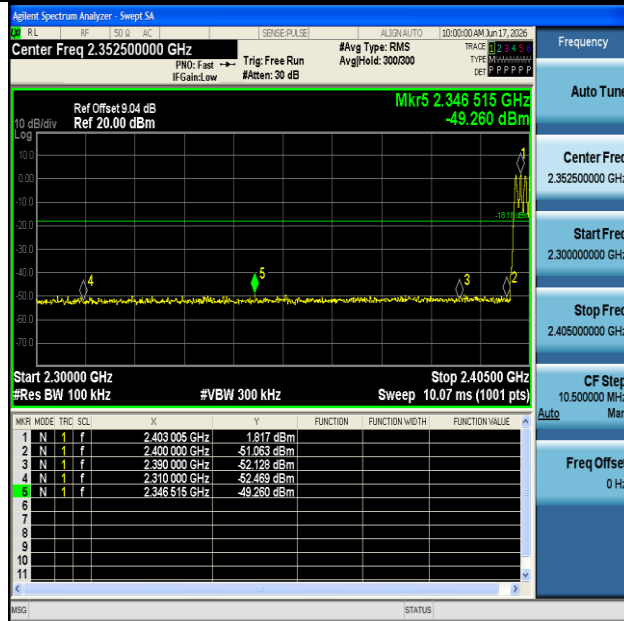
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



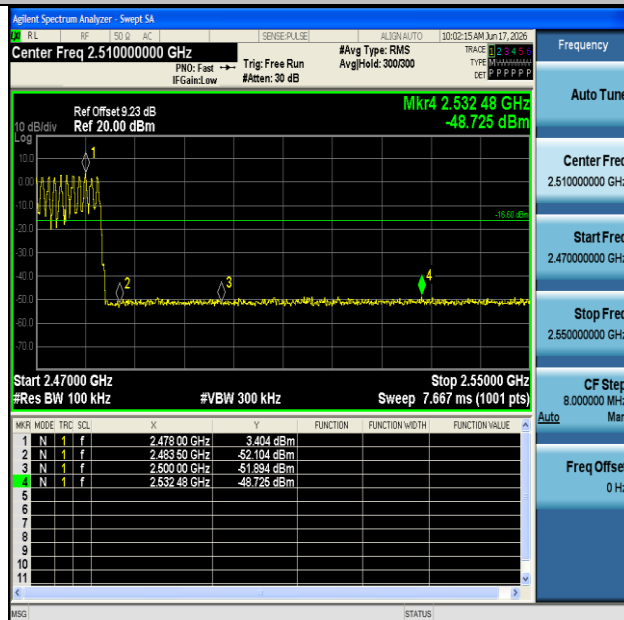


Test Graphs



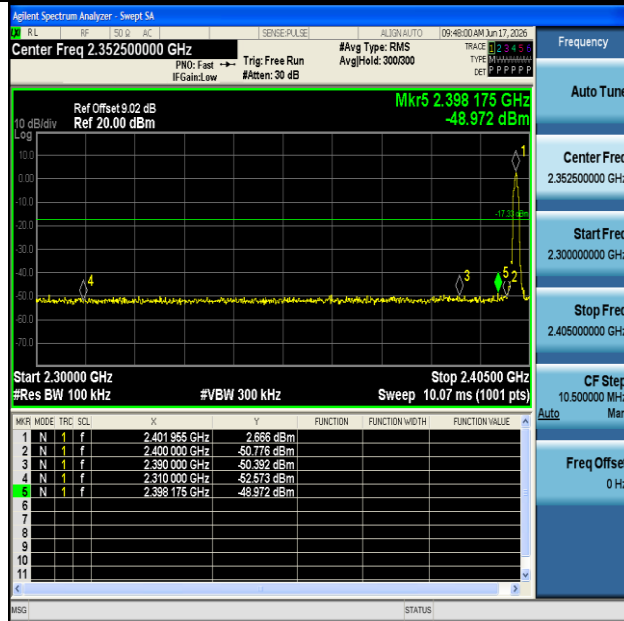


DH5-Ant1-Hop_2402-PASS

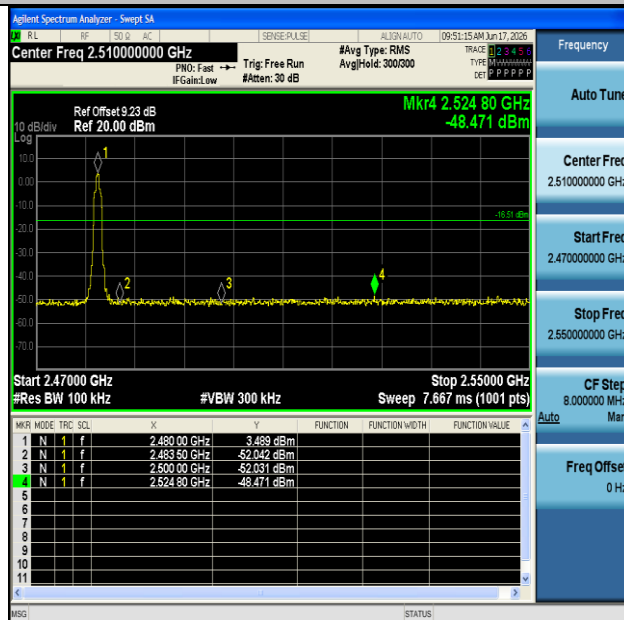


DH5-Ant1-Hop_2480-PASS



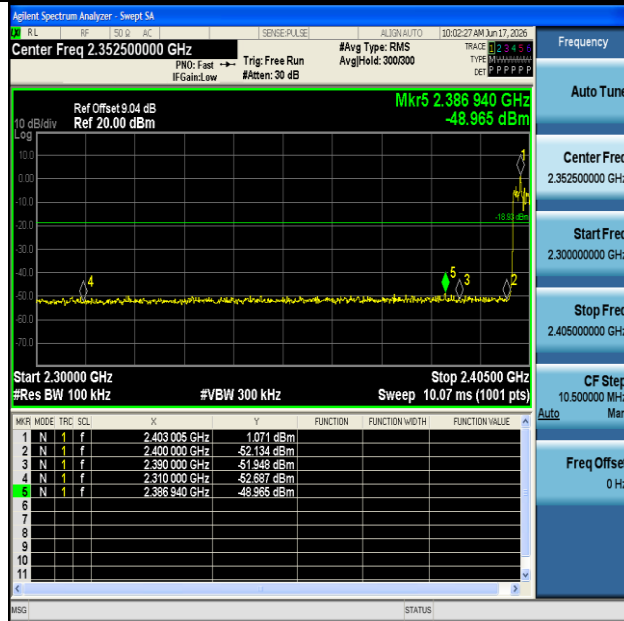


2DH5-Ant1-2402-PASS

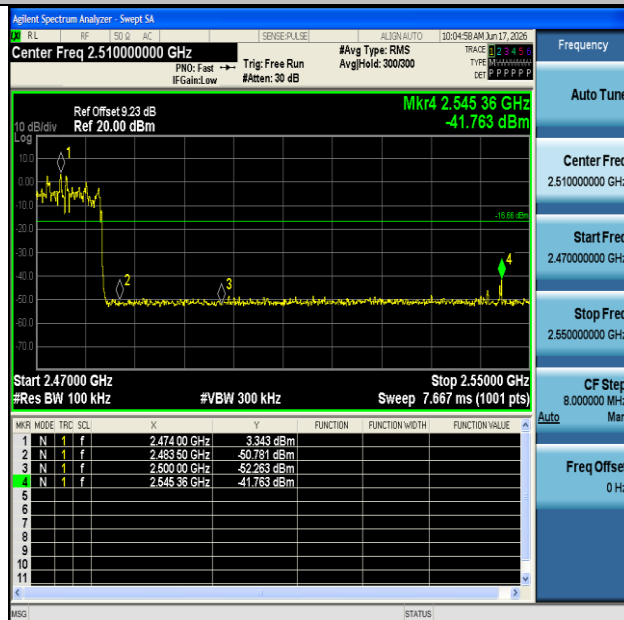


2DH5-Ant1-2480-PASS



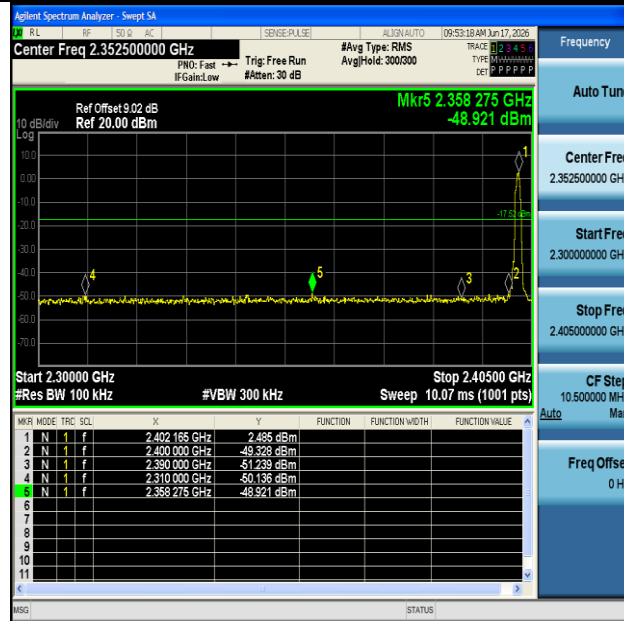


2DH5-Ant1-Hop_2402-PASS

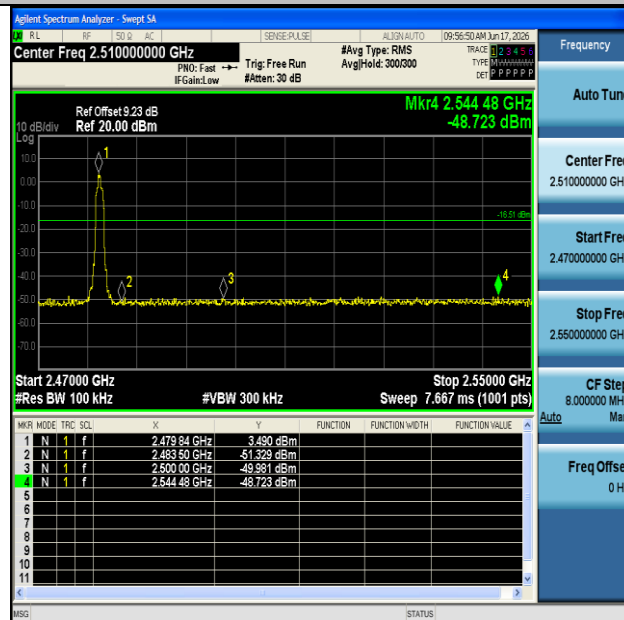


2DH5-Ant1-Hop_2480-PASS



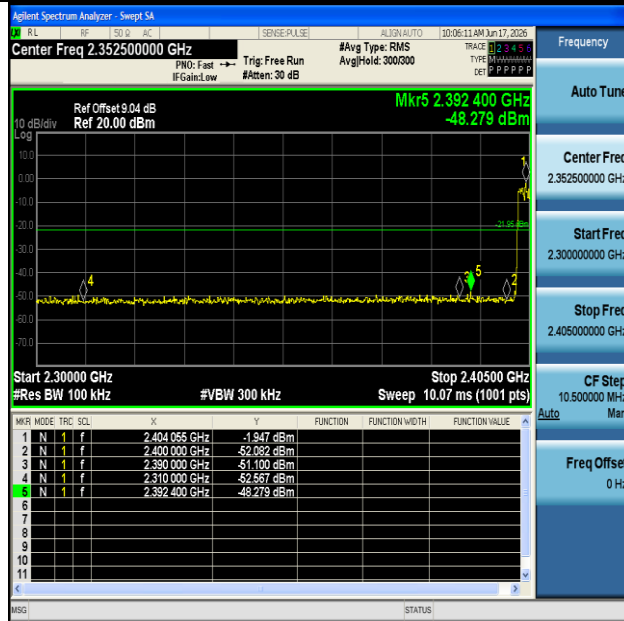


3DH5-Ant1-2402-PASS

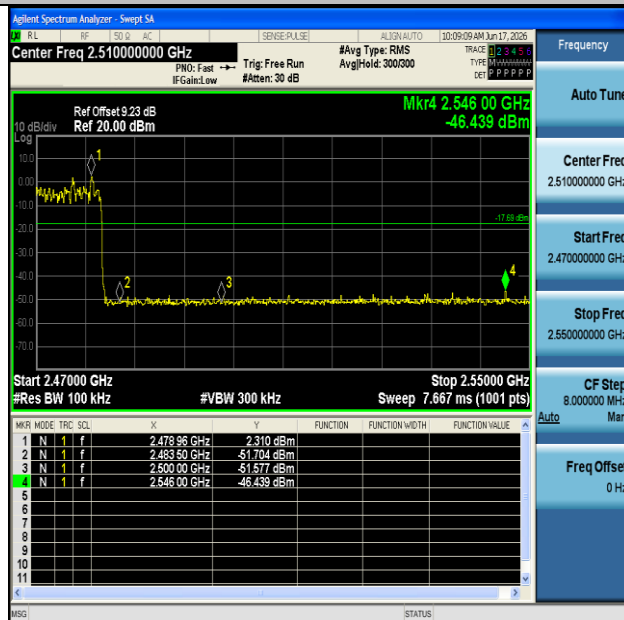


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

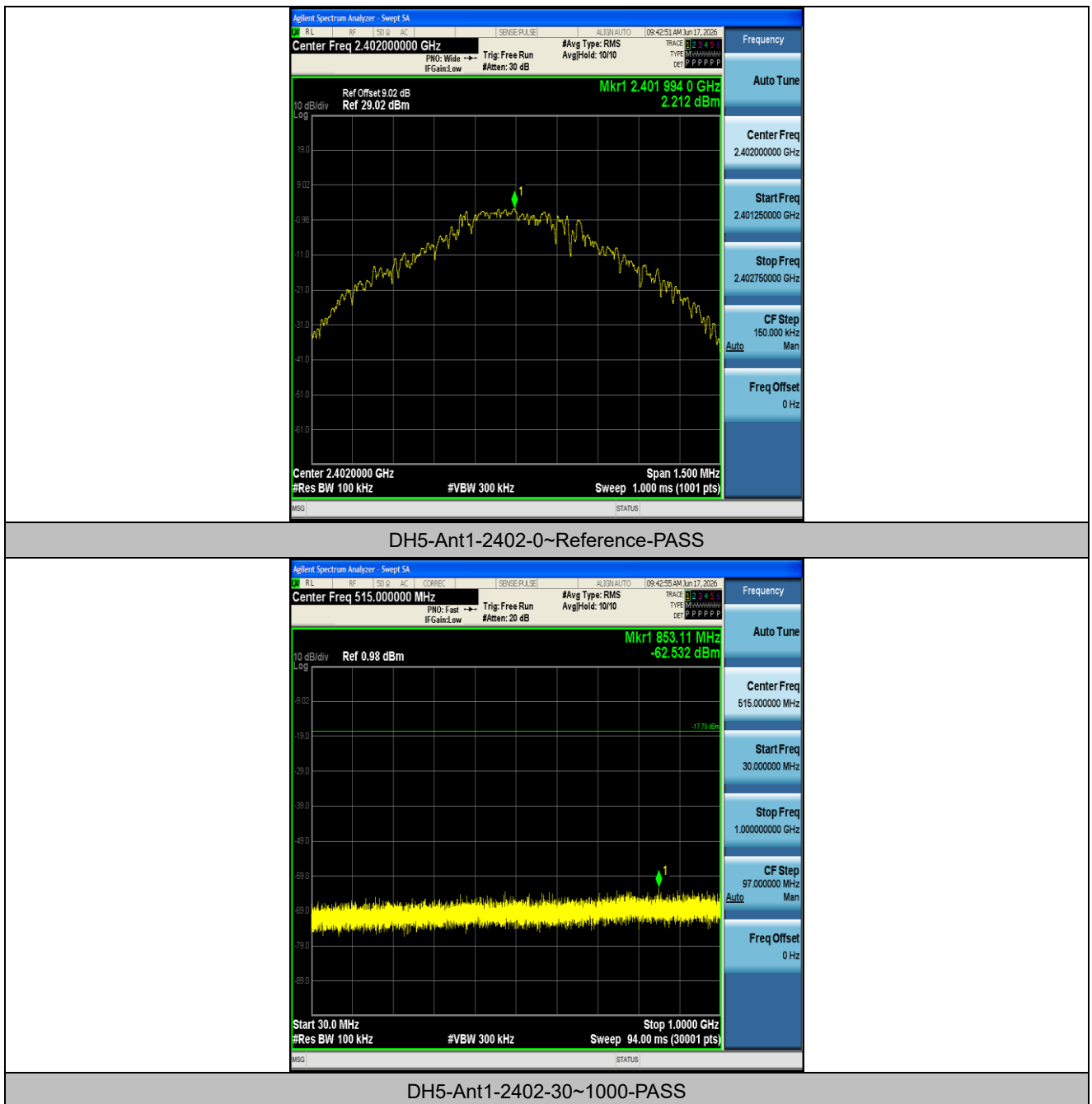
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	2.21	2.21	---	PASS
DH5	Ant1	2402	30~1000	2.21	-62.53	≤-17.79	PASS
DH5	Ant1	2402	1000~26500	2.21	-37.66	≤-17.79	PASS
DH5	Ant1	2441	0~Reference	2.53	2.53	---	PASS
DH5	Ant1	2441	30~1000	2.53	-61.97	≤-17.47	PASS
DH5	Ant1	2441	1000~26500	2.53	-37.21	≤-17.47	PASS
DH5	Ant1	2480	0~Reference	3.43	3.43	---	PASS
DH5	Ant1	2480	30~1000	3.43	-63	≤-16.57	PASS
DH5	Ant1	2480	1000~26500	3.43	-37.5	≤-16.57	PASS
2DH5	Ant1	2402	0~Reference	1.26	1.26	---	PASS
2DH5	Ant1	2402	30~1000	1.26	-63.32	≤-18.74	PASS
2DH5	Ant1	2402	1000~26500	1.26	-37.15	≤-18.74	PASS
2DH5	Ant1	2441	0~Reference	0.11	0.11	---	PASS
2DH5	Ant1	2441	30~1000	0.11	-62.97	≤-19.89	PASS
2DH5	Ant1	2441	1000~26500	0.11	-36.79	≤-19.89	PASS
2DH5	Ant1	2480	0~Reference	2.70	2.70	---	PASS
2DH5	Ant1	2480	30~1000	2.70	-62.31	≤-17.3	PASS
2DH5	Ant1	2480	1000~26500	2.70	-37.7	≤-17.3	PASS
3DH5	Ant1	2402	0~Reference	1.63	1.63	---	PASS
3DH5	Ant1	2402	30~1000	1.63	-62.56	≤-18.37	PASS
3DH5	Ant1	2402	1000~26500	1.63	-36.93	≤-18.37	PASS
3DH5	Ant1	2441	0~Reference	-0.20	-0.20	---	PASS
3DH5	Ant1	2441	30~1000	-0.20	-62.86	≤-20.2	PASS
3DH5	Ant1	2441	1000~26500	-0.20	-36.98	≤-20.2	PASS
3DH5	Ant1	2480	0~Reference	0.90	0.90	---	PASS
3DH5	Ant1	2480	30~1000	0.90	-61.59	≤-19.1	PASS
3DH5	Ant1	2480	1000~26500	0.90	-38.04	≤-19.1	PASS

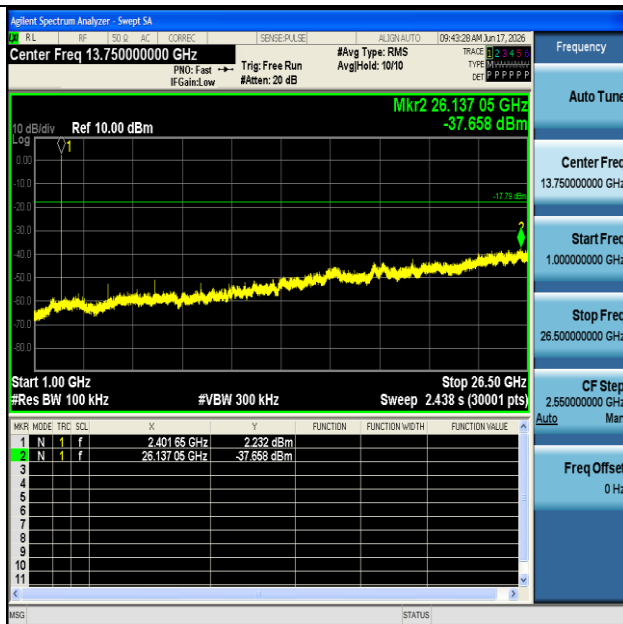
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



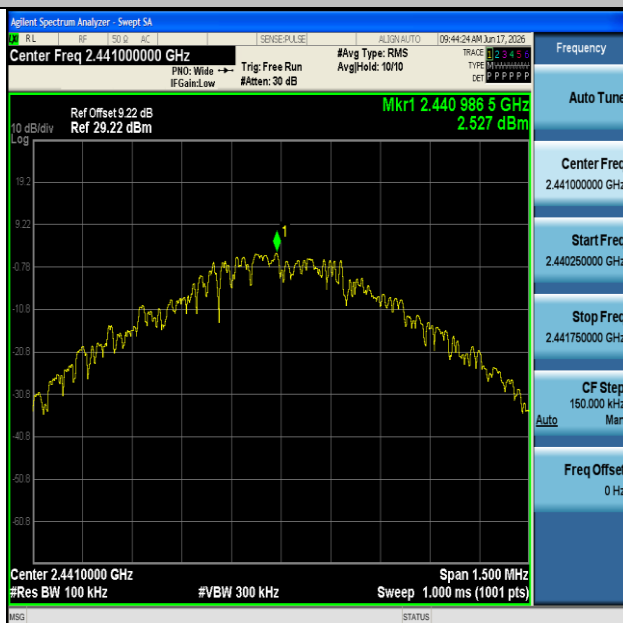


Test Graphs



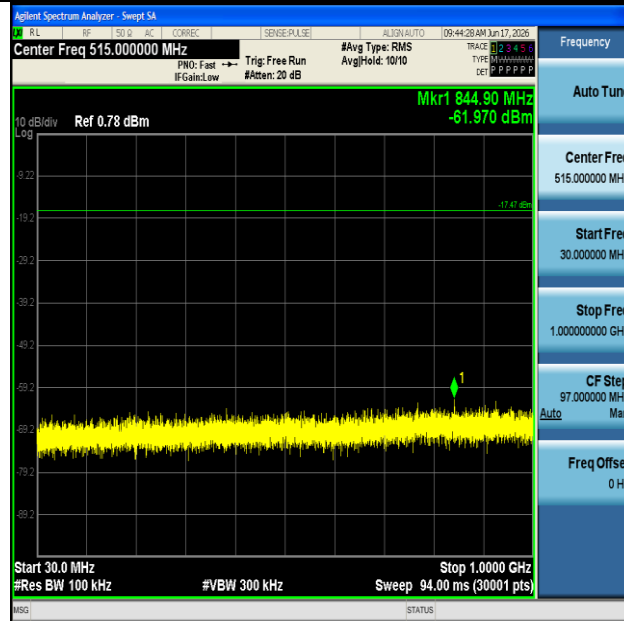


DH5-Ant1-2402-1000~26500-PASS

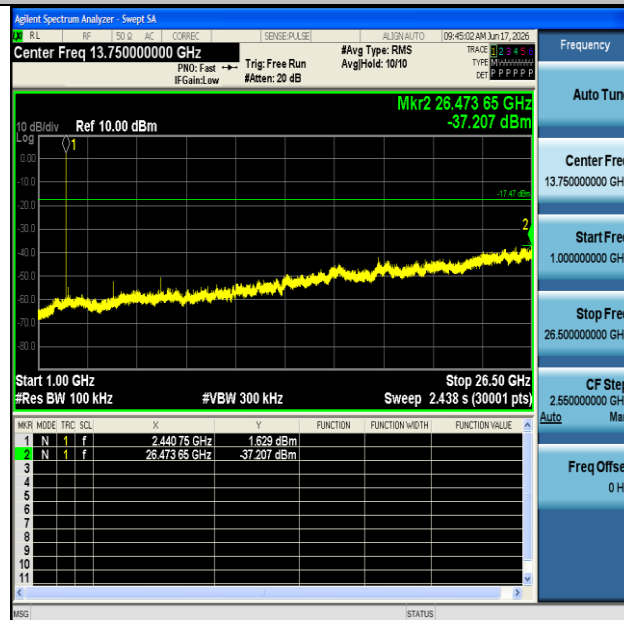


DH5-Ant1-2441-0~Reference-PASS





DH5-Ant1-2441-30~1000-PASS

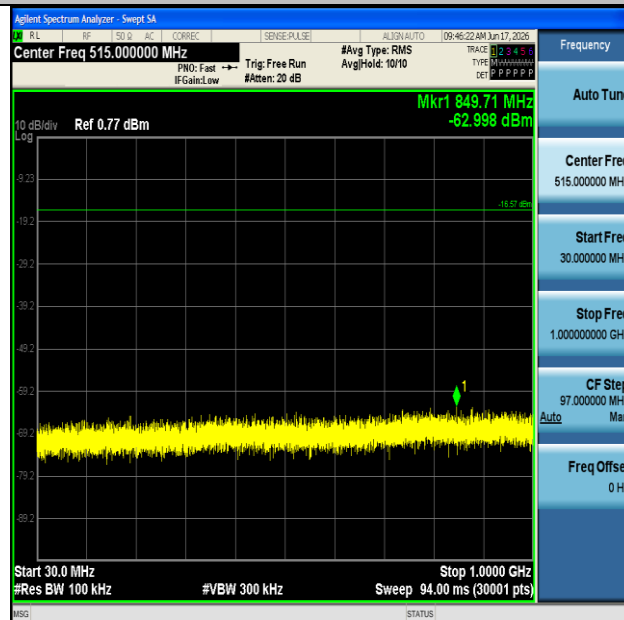


DH5-Ant1-2441-1000~26500-PASS





DH5-Ant1-2480-0~Reference-PASS

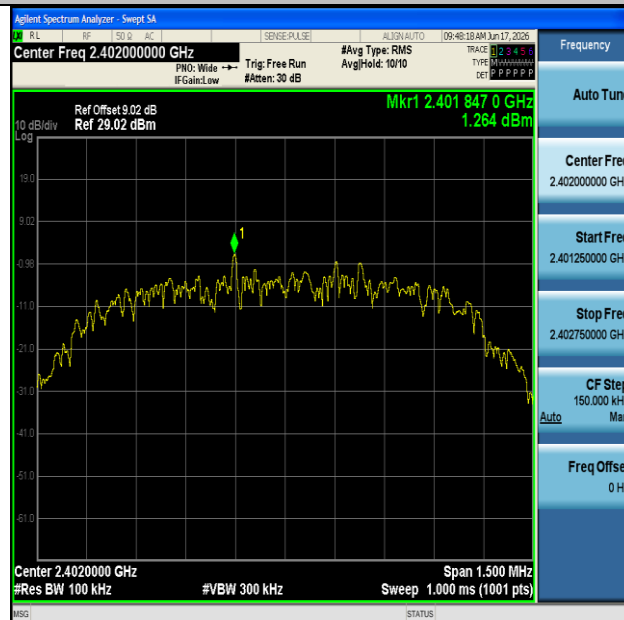


DH5-Ant1-2480-30~1000-PASS





DH5-Ant1-2480-1000~26500-PASS



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



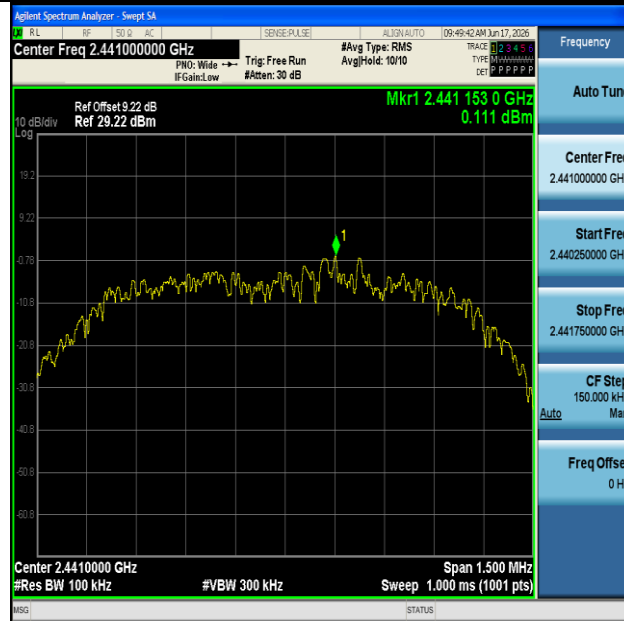


2DH5-Ant1-2402-30~1000-PASS

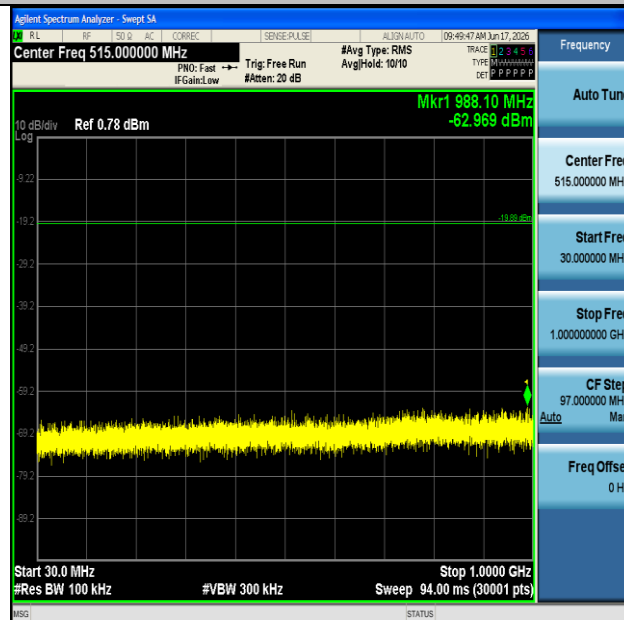


2DH5-Ant1-2402-1000~26500-PASS



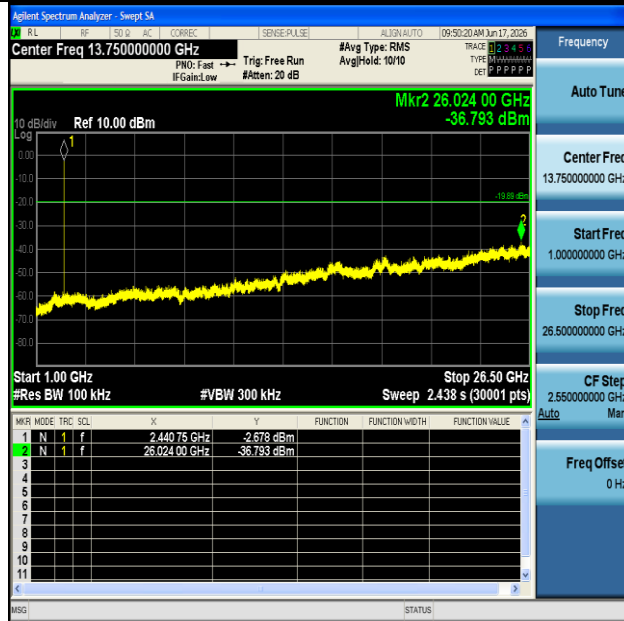


2DH5-Ant1-2441-0~Reference-PASS

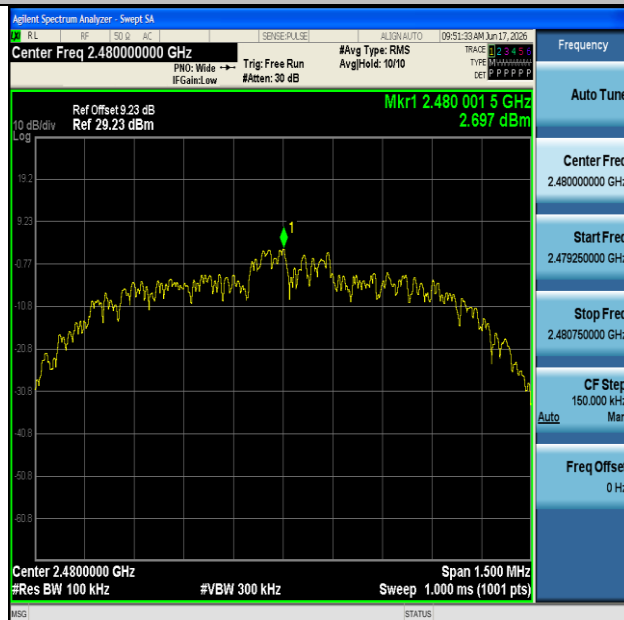


2DH5-Ant1-2441-30~1000-PASS



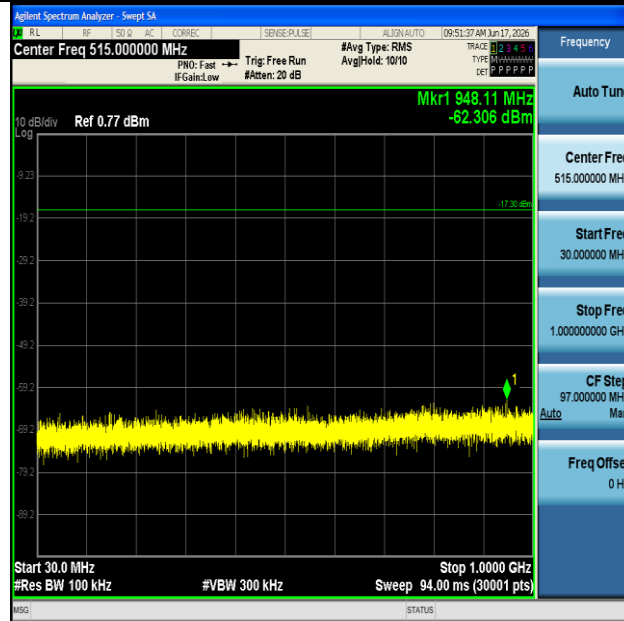


2DH5-Ant1-2441-1000~26500-PASS



2DH5-Ant1-2480-0~Reference-PASS



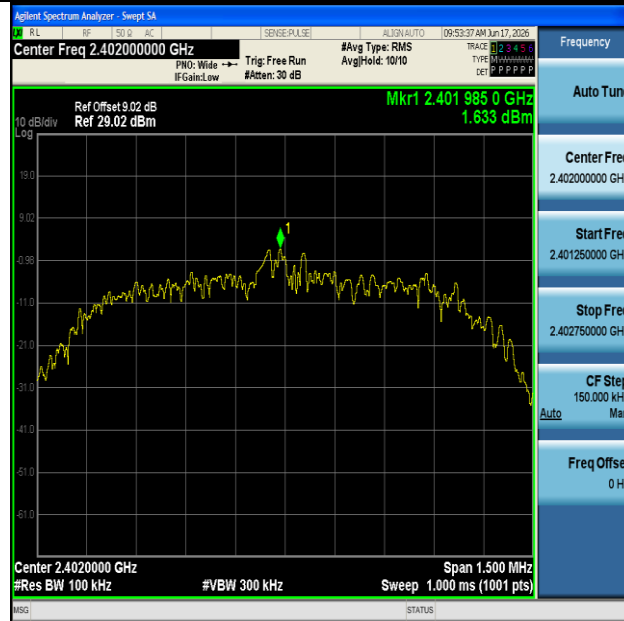


2DH5-Ant1-2480-30~1000-PASS

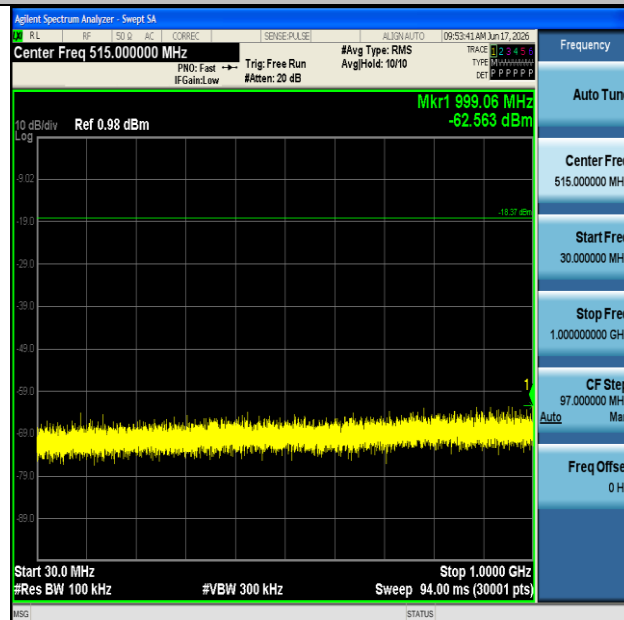


2DH5-Ant1-2480-1000~26500-PASS



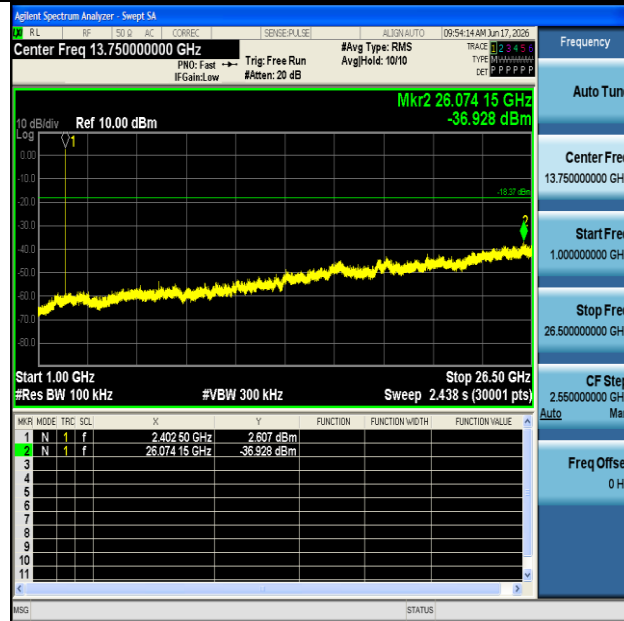


3DH5-Ant1-2402-0~Reference-PASS

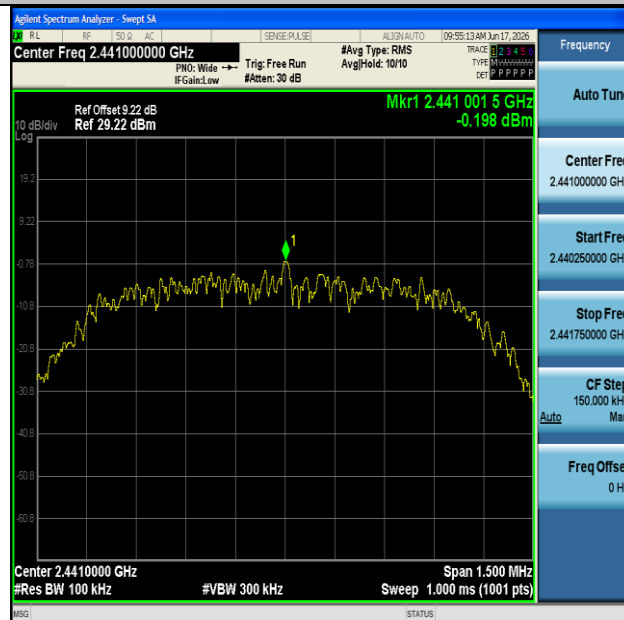


3DH5-Ant1-2402-30~1000-PASS



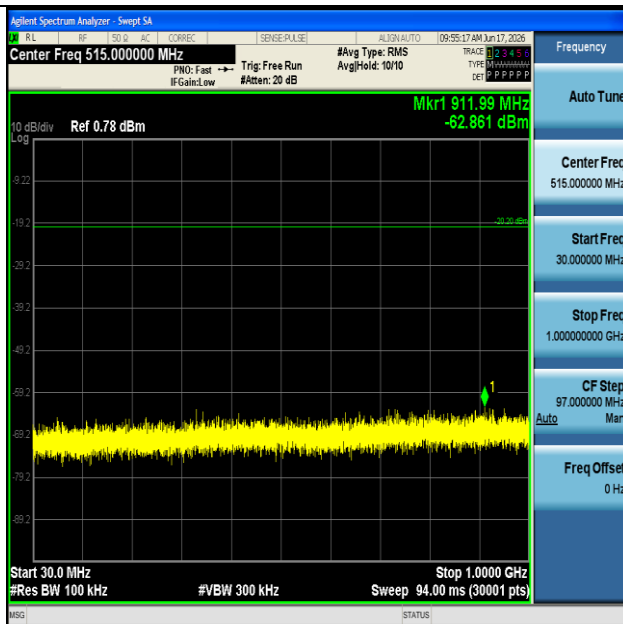


3DH5-Ant1-2402-1000~26500-PASS

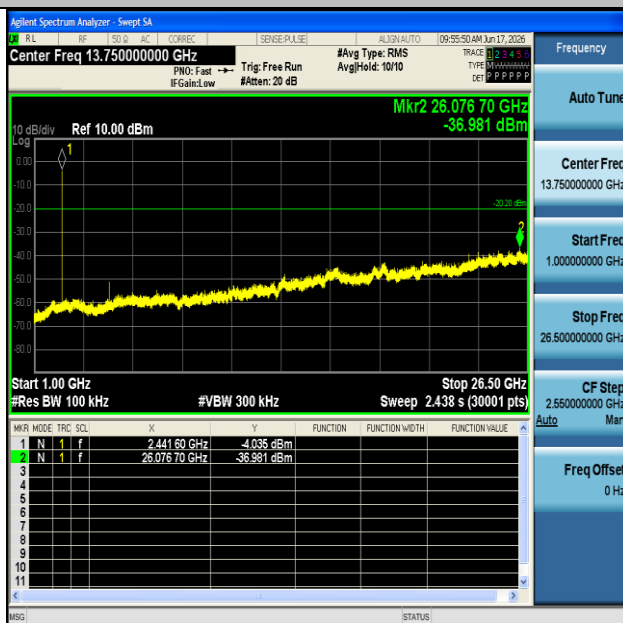


3DH5-Ant1-2441-0~Reference-PASS



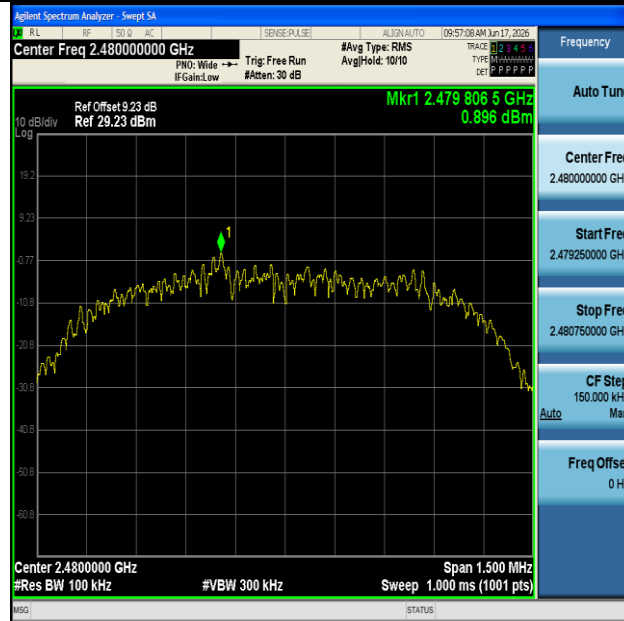


3DH5-Ant1-2441-30~1000-PASS

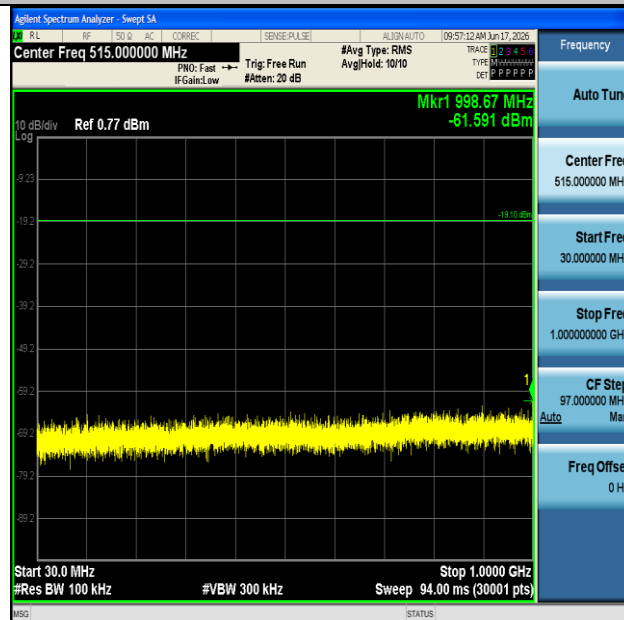


3DH5-Ant1-2441-1000~26500-PASS



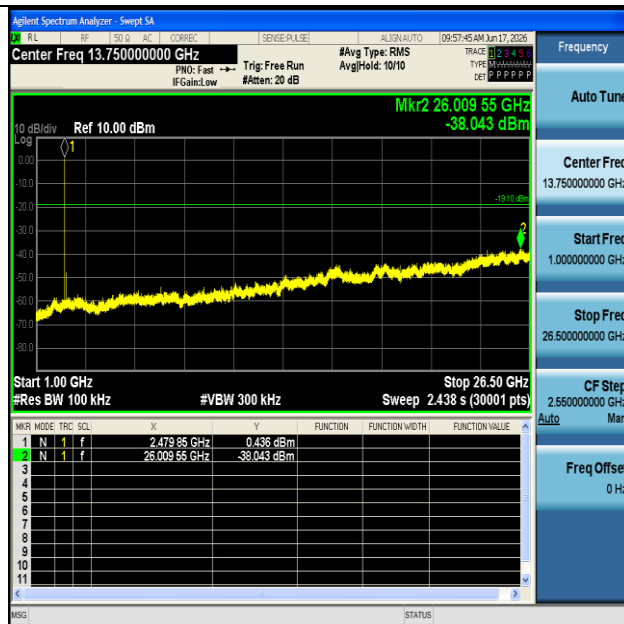


3DH5-Ant1-2480-0~Reference-PASS



3DH5-Ant1-2480-30~1000-PASS





3DH5-Ant1-2480-1000~26500-PASS





Appendix I: Duty Cycle

Test Result

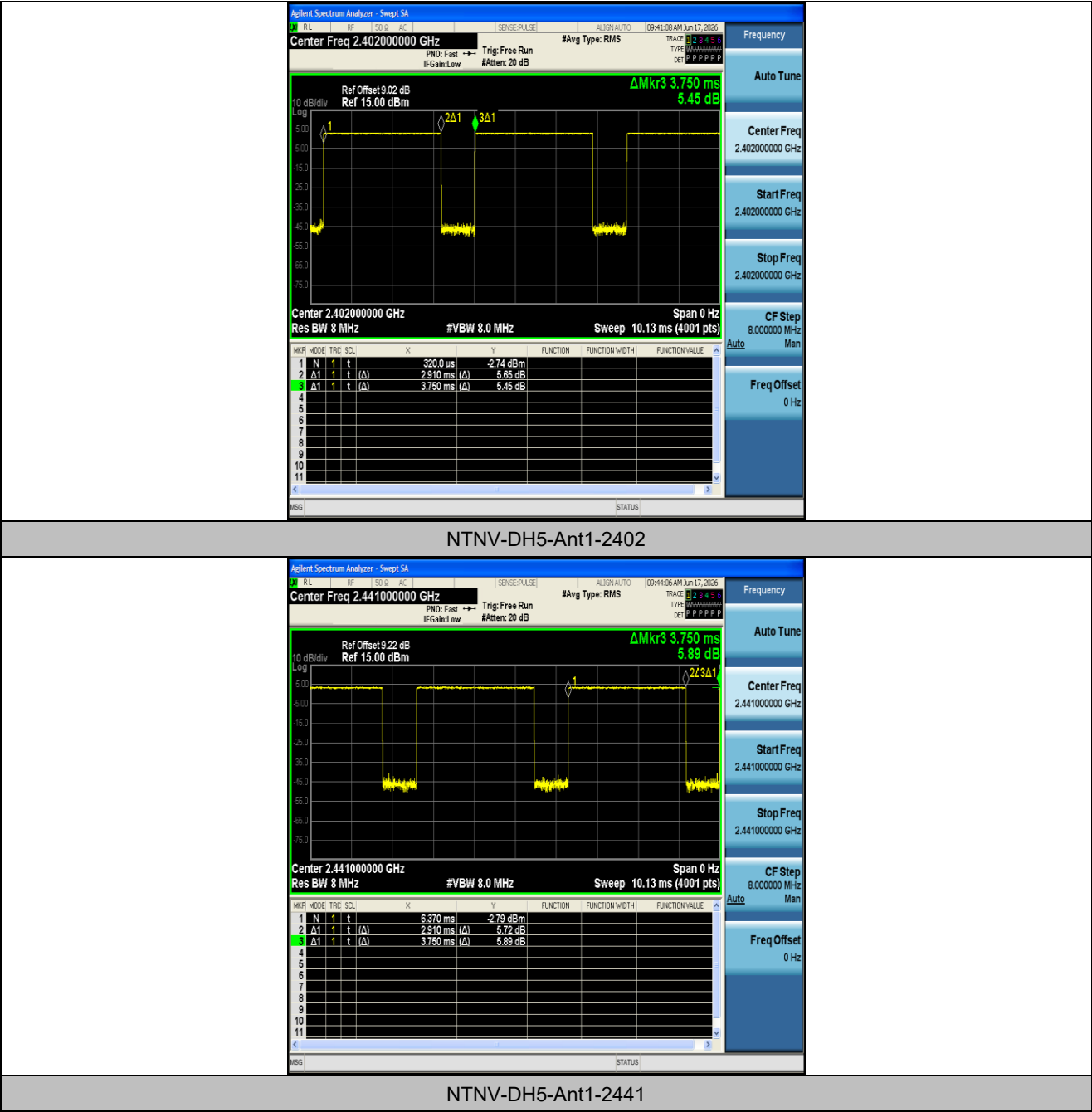
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
DH5	Ant1	2402	2.91	3.75	77.60	1.10
DH5	Ant1	2441	2.91	3.75	77.60	1.10
DH5	Ant1	2480	2.91	3.75	77.60	1.10
2DH5	Ant1	2402	2.91	3.74	77.81	1.09
2DH5	Ant1	2441	2.91	3.75	77.60	1.10
2DH5	Ant1	2480	2.91	3.75	77.60	1.10
3DH5	Ant1	2402	2.91	3.75	77.60	1.10
3DH5	Ant1	2441	2.91	3.75	77.60	1.10
3DH5	Ant1	2480	2.91	3.75	77.60	1.10

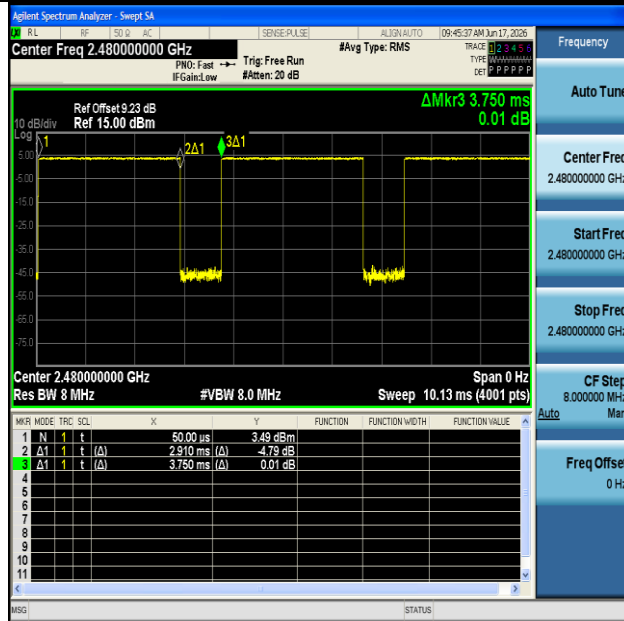
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



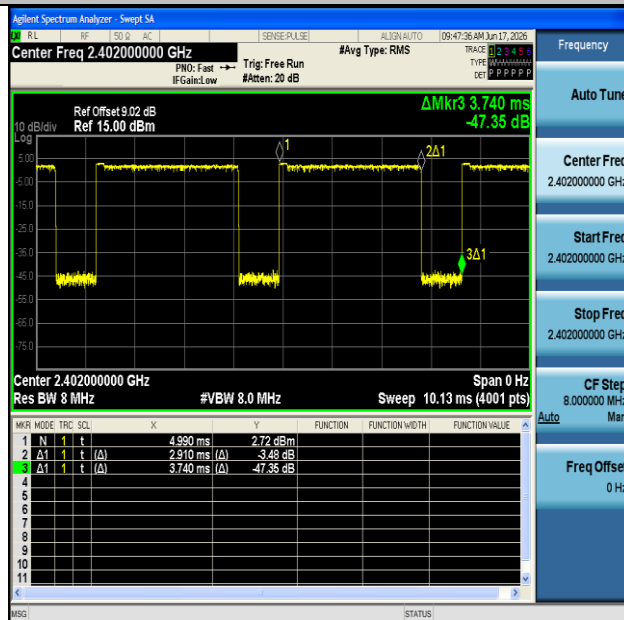


Test Graphs



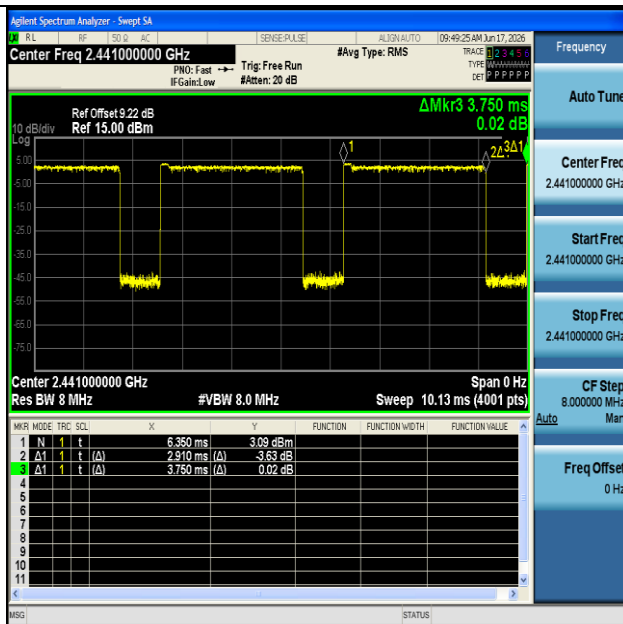


NTNV-DH5-Ant1-2480

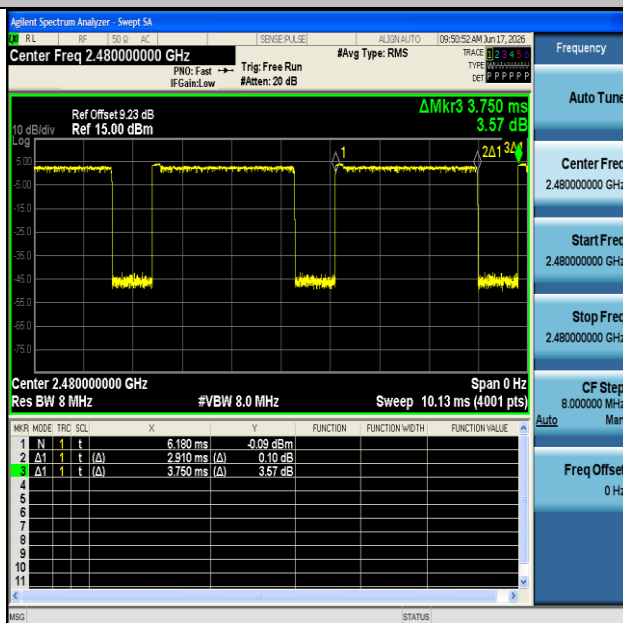


NTNV-2DH5-Ant1-2402



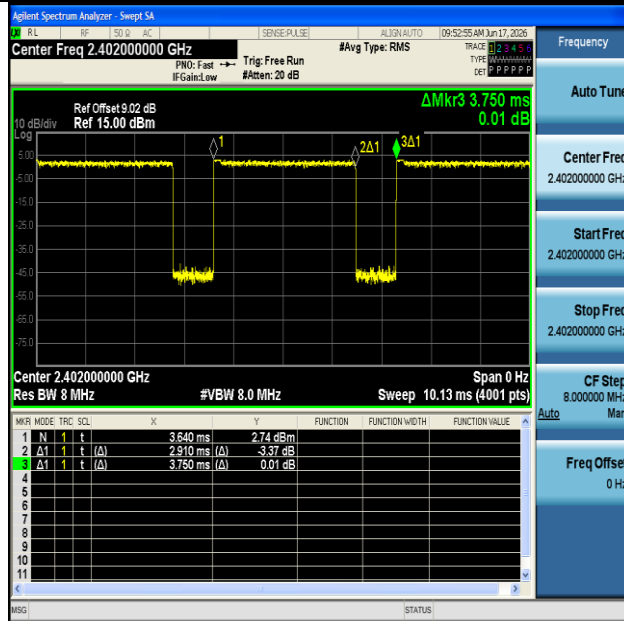


NTNV-2DH5-Ant1-2441

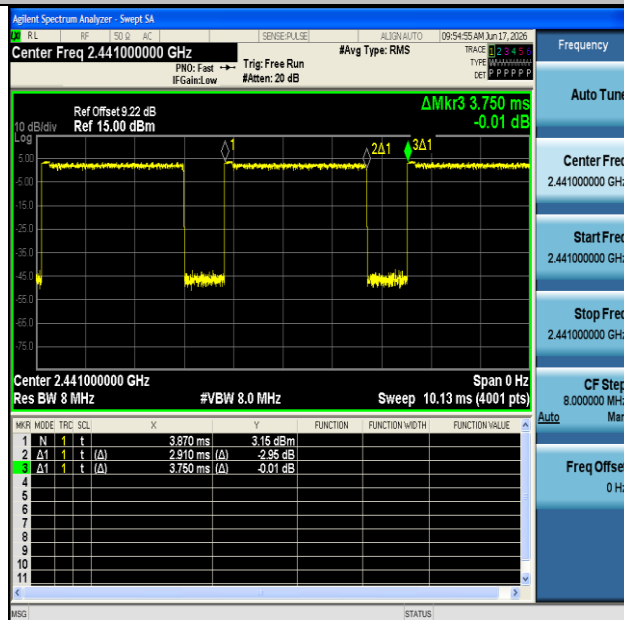


NTNV-2DH5-Ant1-2480



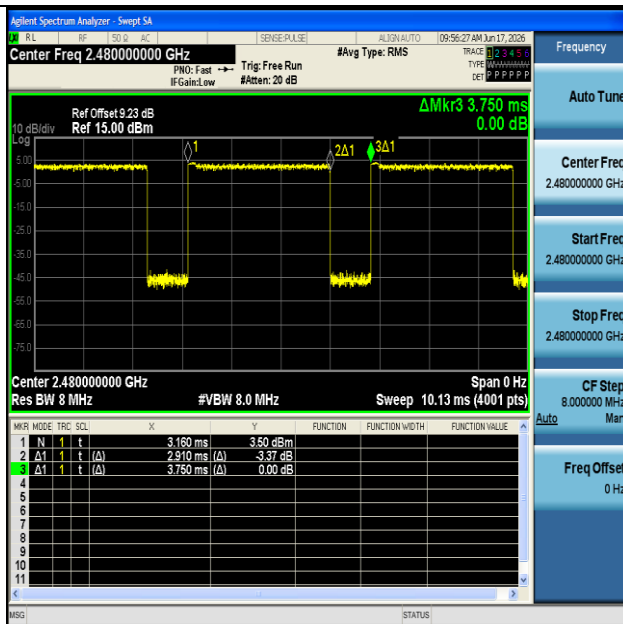


NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441





NTNV-3DH5-Ant1-2480

