



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

Product Name: Bluetooth Headphones+Transmitter

Trade Mark: SENTRY

Test Model: BTX100

FCC ID: 2ACP4CBTXCASE

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	1.026	2401.451	2402.477	---	---
DH5	Ant1	2441	1.029	2440.448	2441.477	---	---
DH5	Ant1	2480	0.963	2479.514	2480.477	---	---
2DH5	Ant1	2402	1.206	2401.379	2402.585	---	---
2DH5	Ant1	2441	1.269	2440.358	2441.627	---	---
2DH5	Ant1	2480	1.191	2479.385	2480.576	---	---
3DH5	Ant1	2402	1.242	2401.355	2402.597	---	---
3DH5	Ant1	2441	1.236	2440.355	2441.591	---	---
3DH5	Ant1	2480	1.209	2479.391	2480.600	---	---

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





Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402



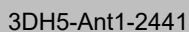
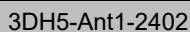


2DH5-Ant1-2441



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	0.88531	2401.5375	2402.4228	---	---
DH5	Ant1	2441	0.90044	2440.5322	2441.4326	---	---
DH5	Ant1	2480	0.89026	2479.5398	2480.4301	---	---
2DH5	Ant1	2402	1.1574	2401.4041	2402.5615	---	---
2DH5	Ant1	2441	1.1598	2440.4019	2441.5617	---	---
2DH5	Ant1	2480	1.1501	2479.4074	2480.5575	---	---
3DH5	Ant1	2402	1.1568	2401.4064	2402.5632	---	---
3DH5	Ant1	2441	1.1773	2440.3969	2441.5742	---	---
3DH5	Ant1	2480	1.1469	2479.4141	2480.5610	---	---

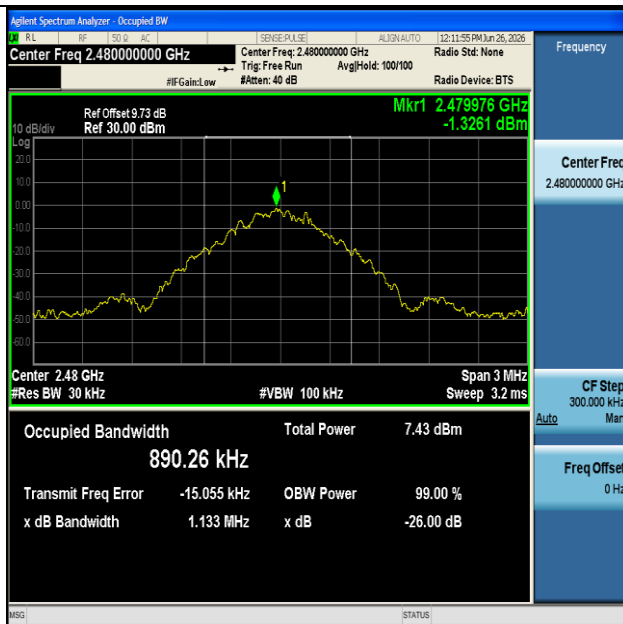
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



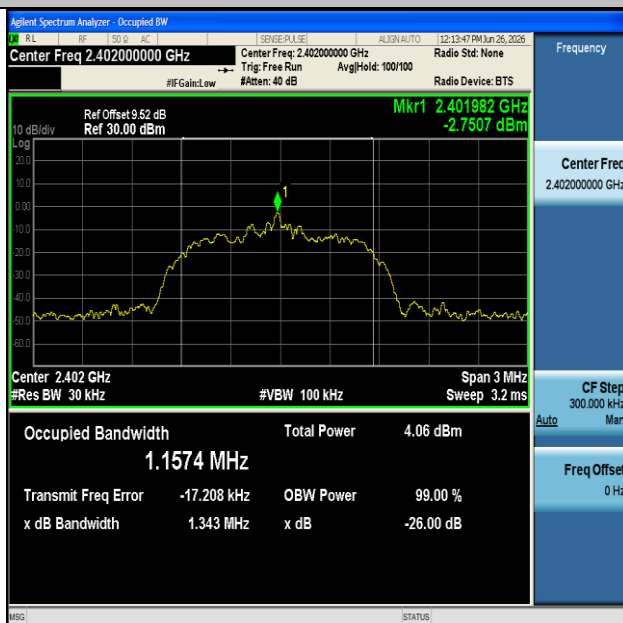


Test Graphs



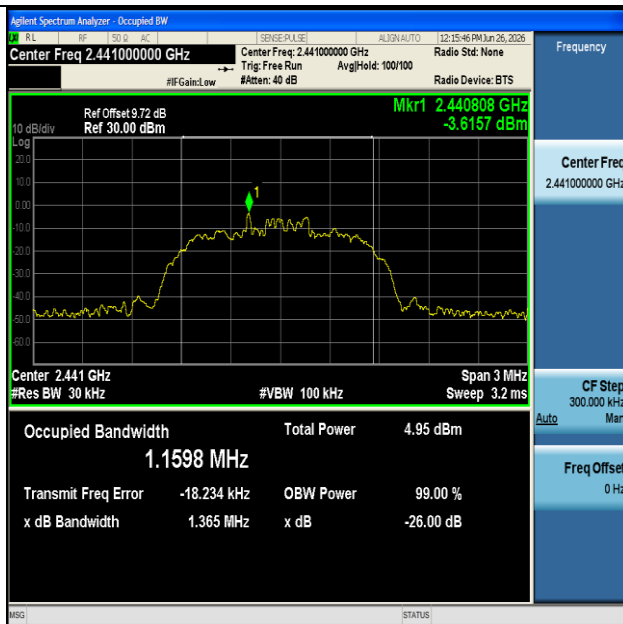


DH5-Ant1-2480

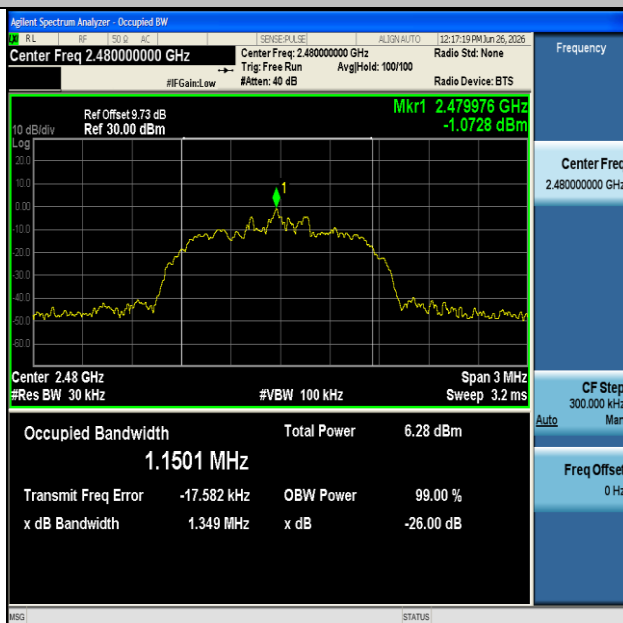


2DH5-Ant1-2402



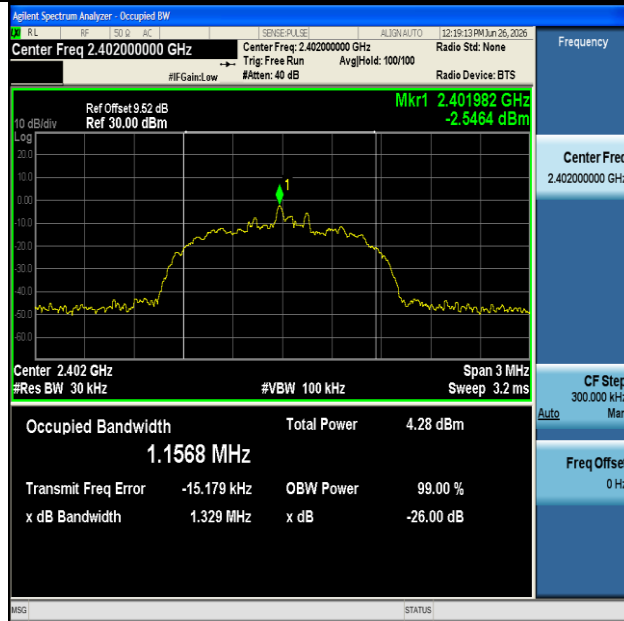


2DH5-Ant1-2441

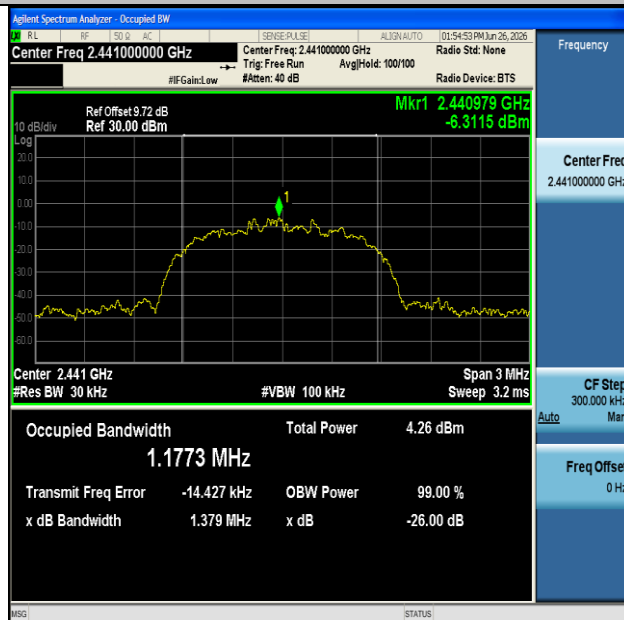


2DH5-Ant1-2480



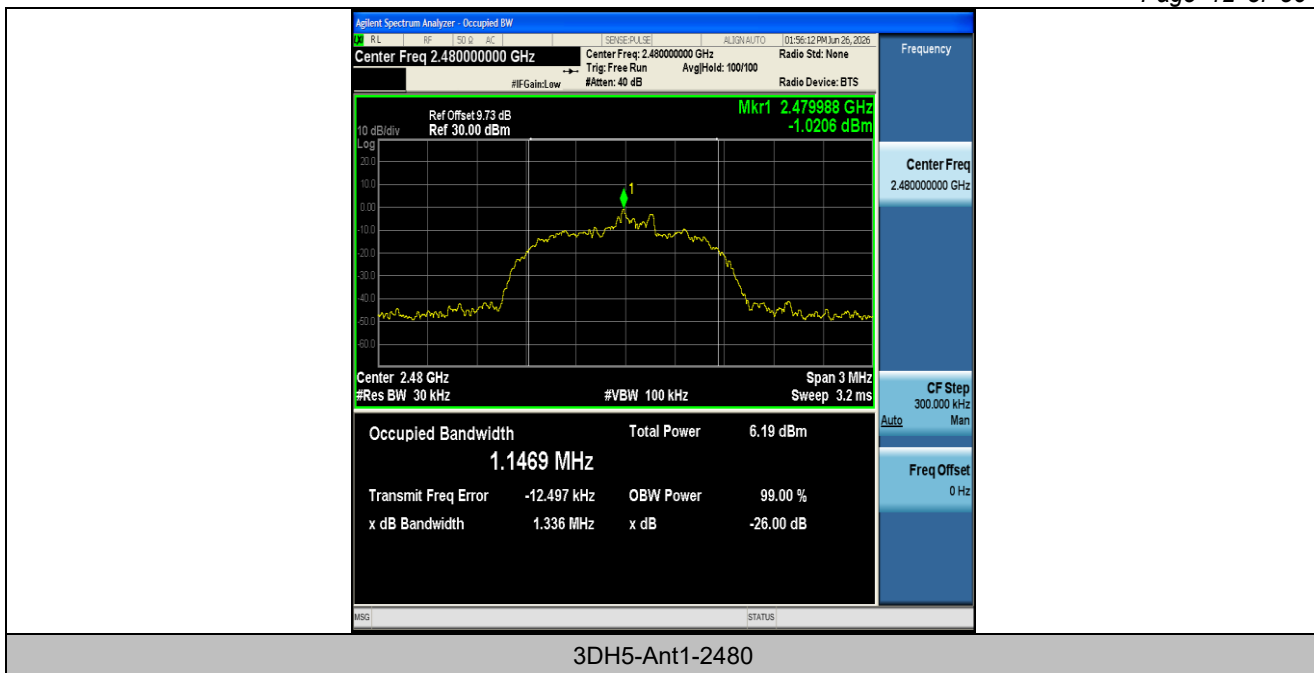


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

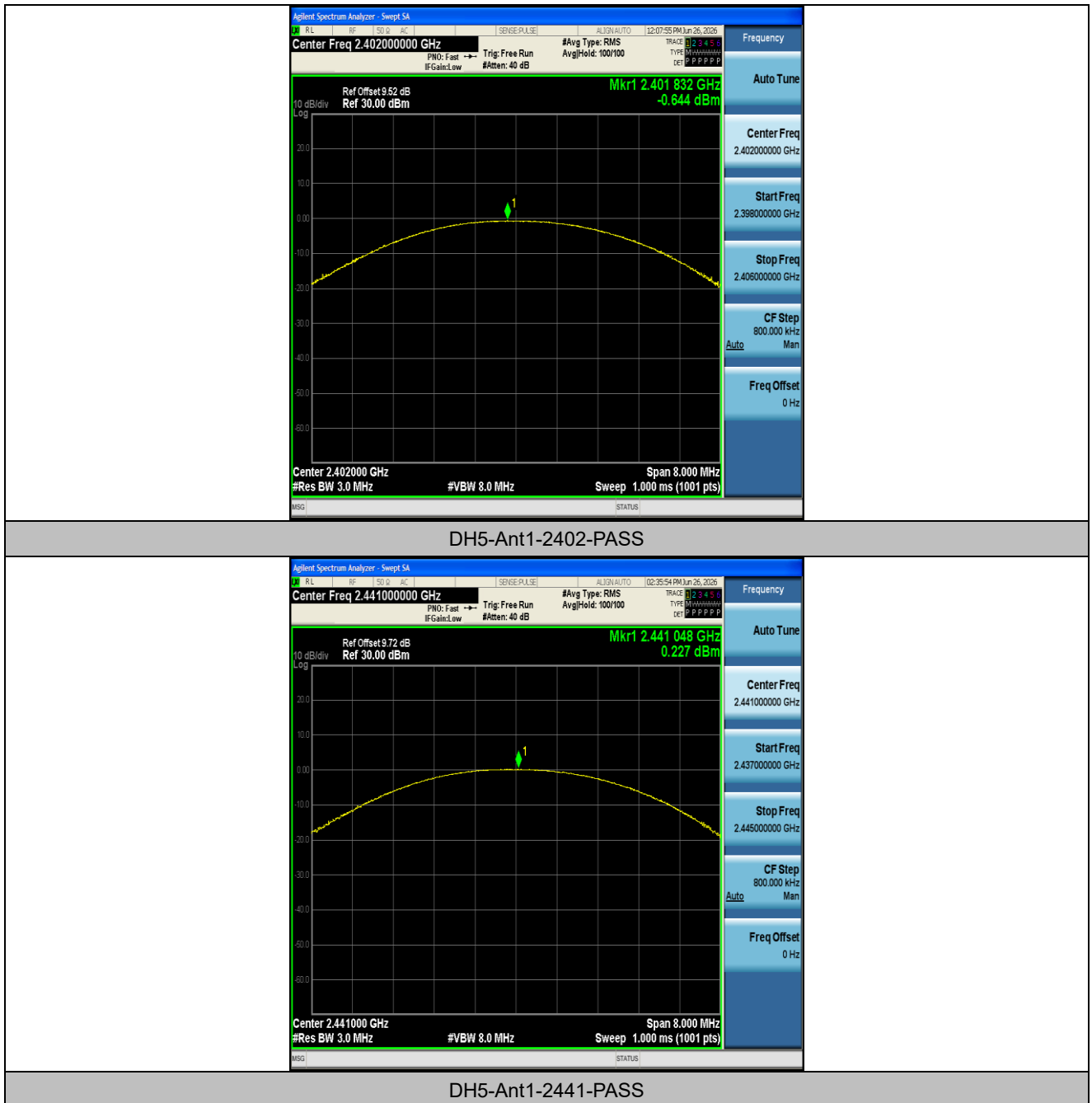
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	-0.64	≤20.97	PASS
DH5	Ant1	2441	0.23	≤20.97	PASS
DH5	Ant1	2480	1.15	≤20.97	PASS
2DH5	Ant1	2402	-0.80	≤20.97	PASS
2DH5	Ant1	2441	0.15	≤20.97	PASS
2DH5	Ant1	2480	1.02	≤20.97	PASS
3DH5	Ant1	2402	-0.81	≤20.97	PASS
3DH5	Ant1	2441	0.14	≤20.97	PASS
3DH5	Ant1	2480	0.94	≤20.97	PASS

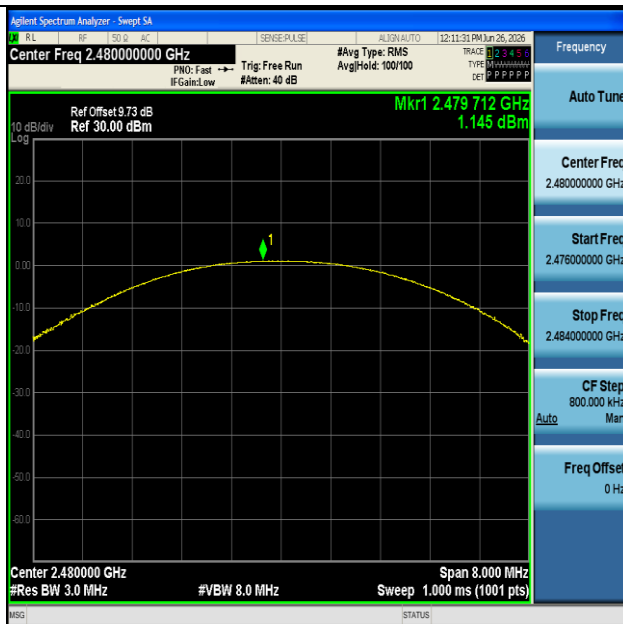
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



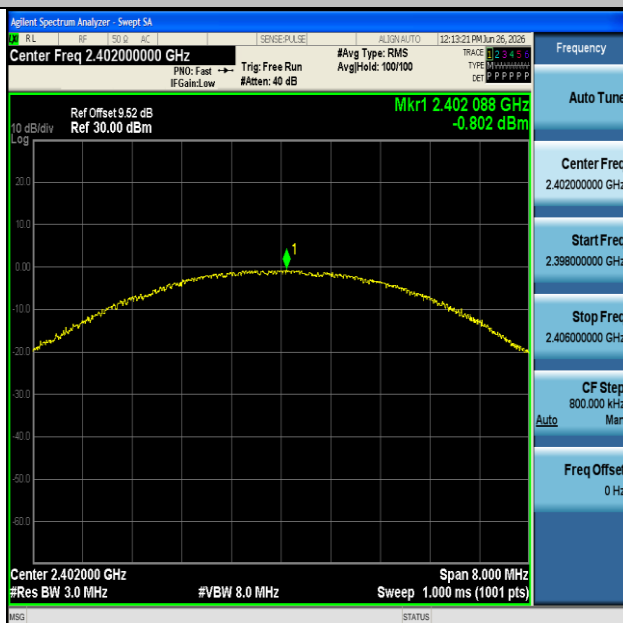


Test Graphs



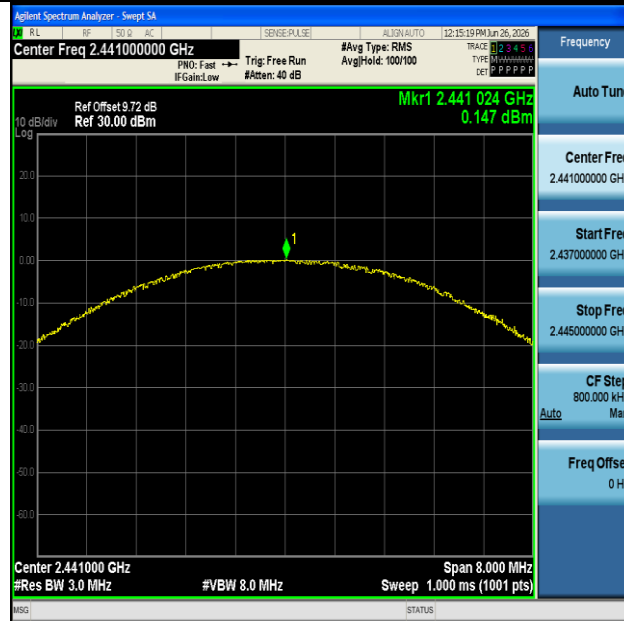


DH5-Ant1-2480-PASS

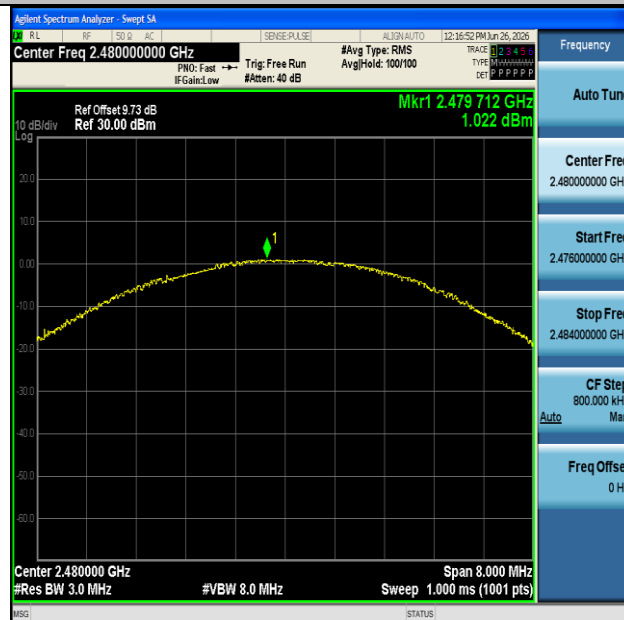


2DH5-Ant1-2402-PASS



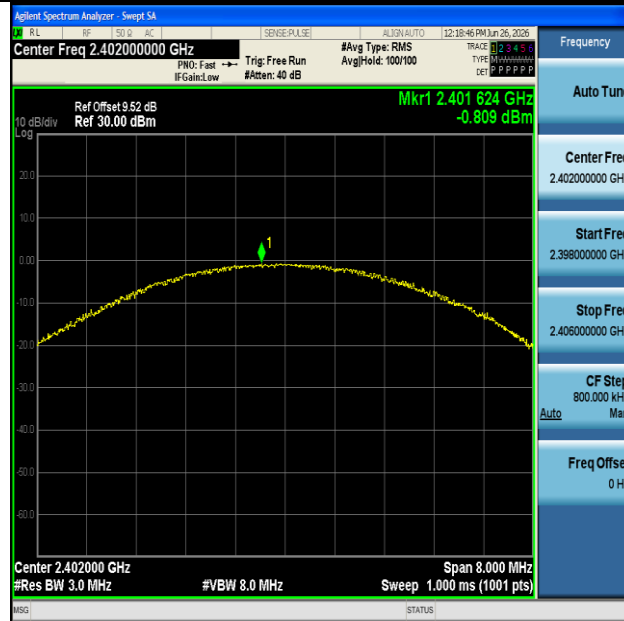


2DH5-Ant1-2441-PASS

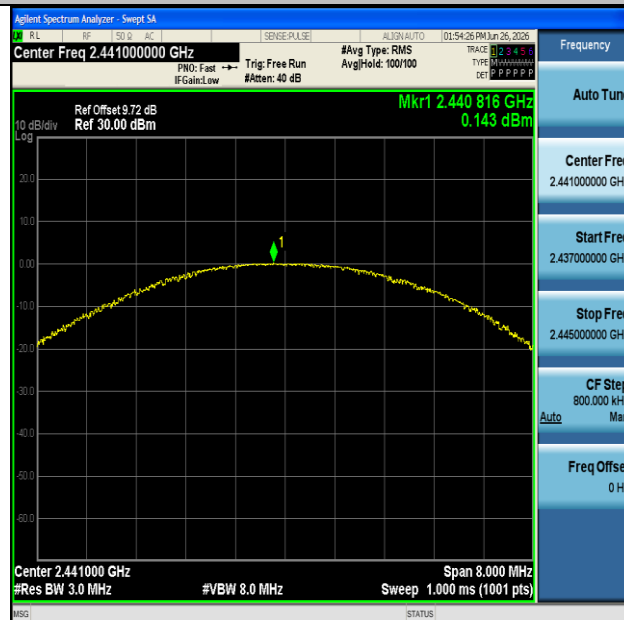


2DH5-Ant1-2480-PASS



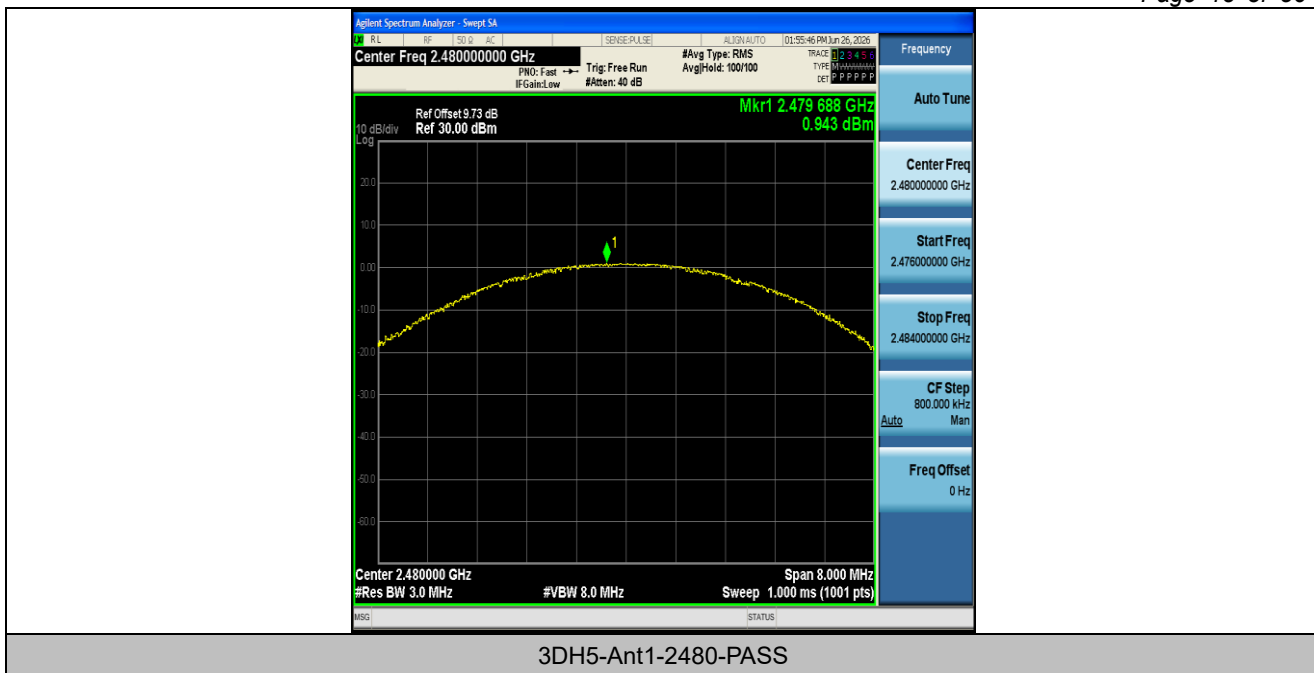


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.988	≥ 0.684	PASS
2DH5	Ant1	Hop	1	≥ 0.846	PASS
3DH5	Ant1	Hop	1.018	≥ 0.828	PASS

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





Test Graphs







Appendix E: Time of occupancy

Test Result

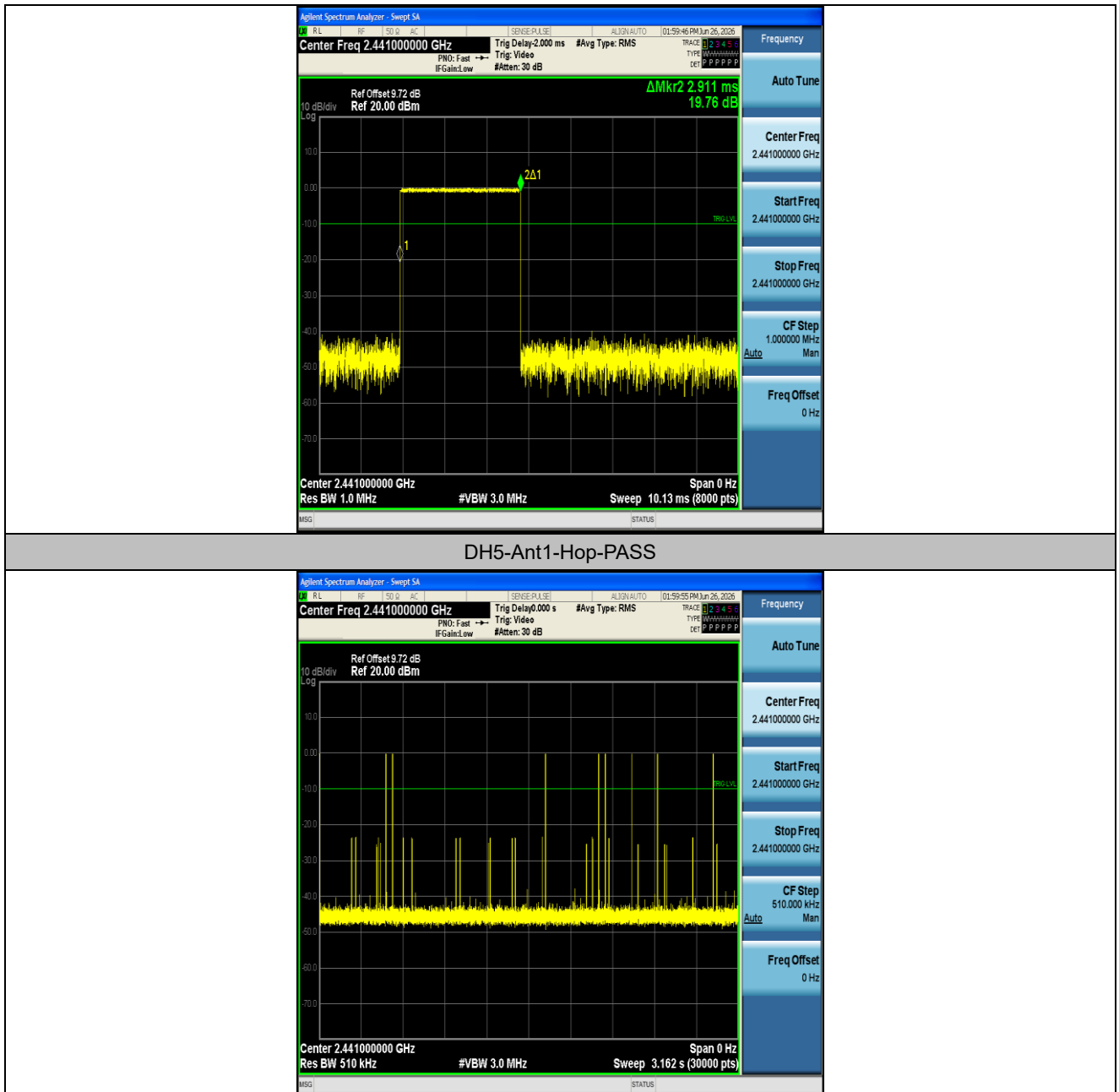
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.911	90	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.916	80	0.233	≤0.4	PASS
3DH5	Ant1	Hop	2.916	120	0.35	≤0.4	PASS

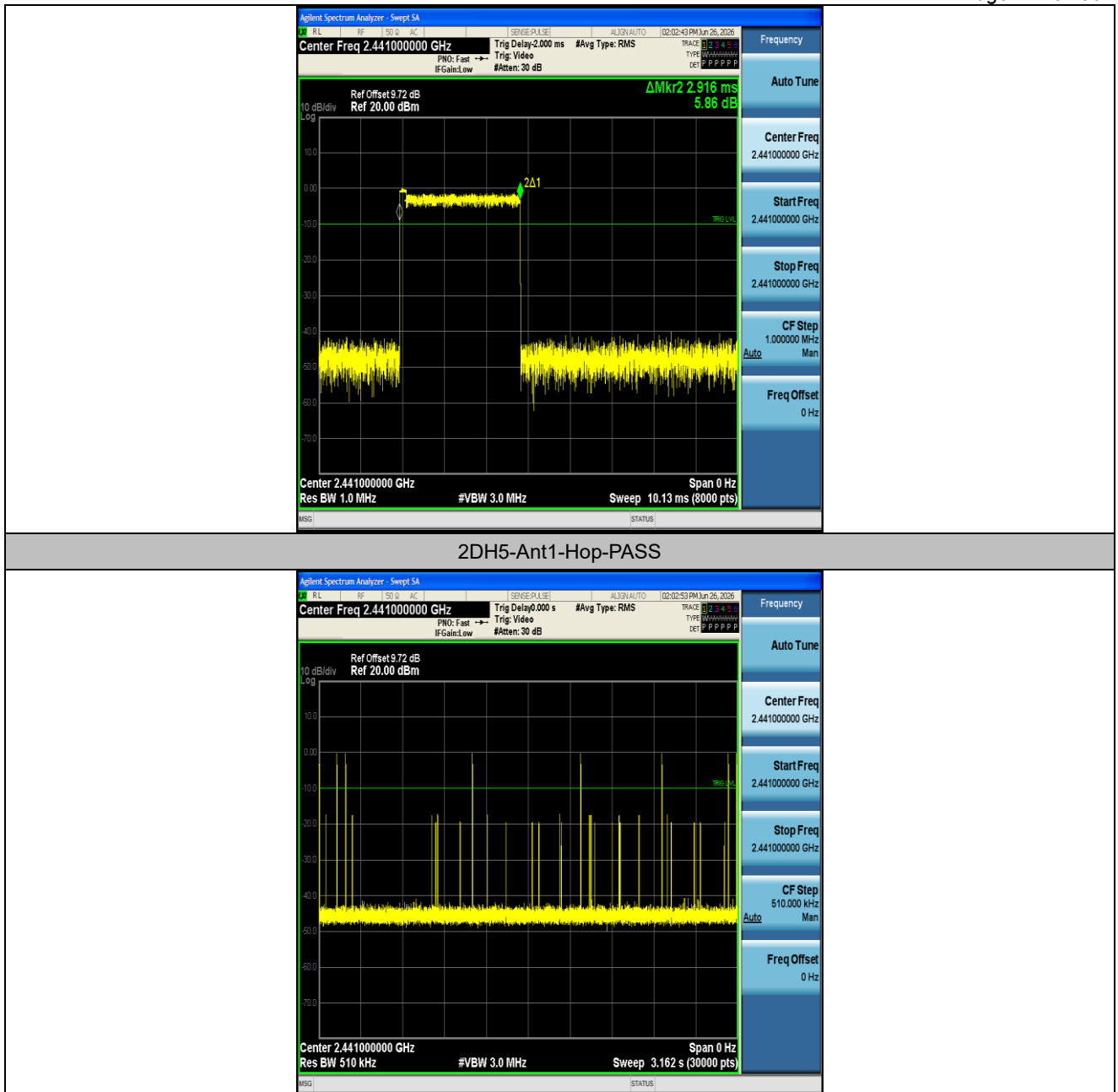
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

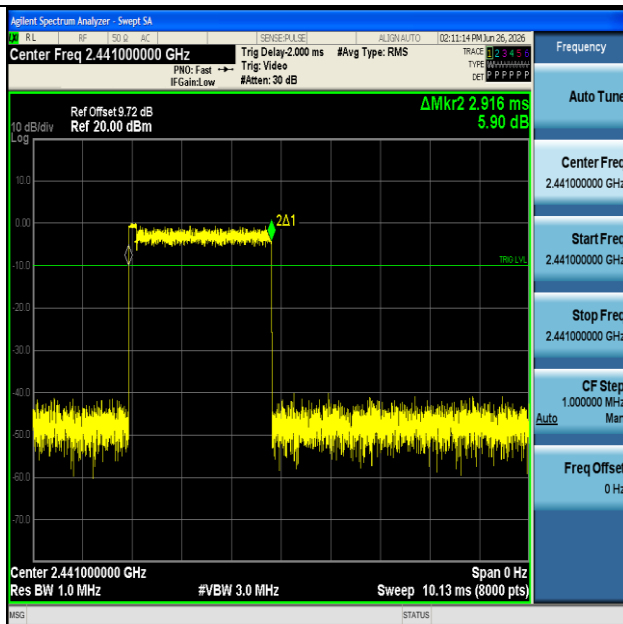




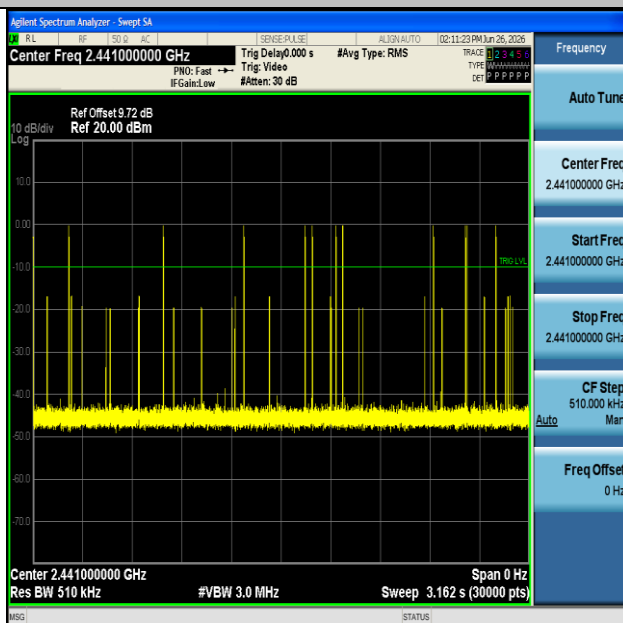
Test Graphs







3DH5-Ant1-Hop-PASS





Appendix F: Number of hopping channels

Test Result

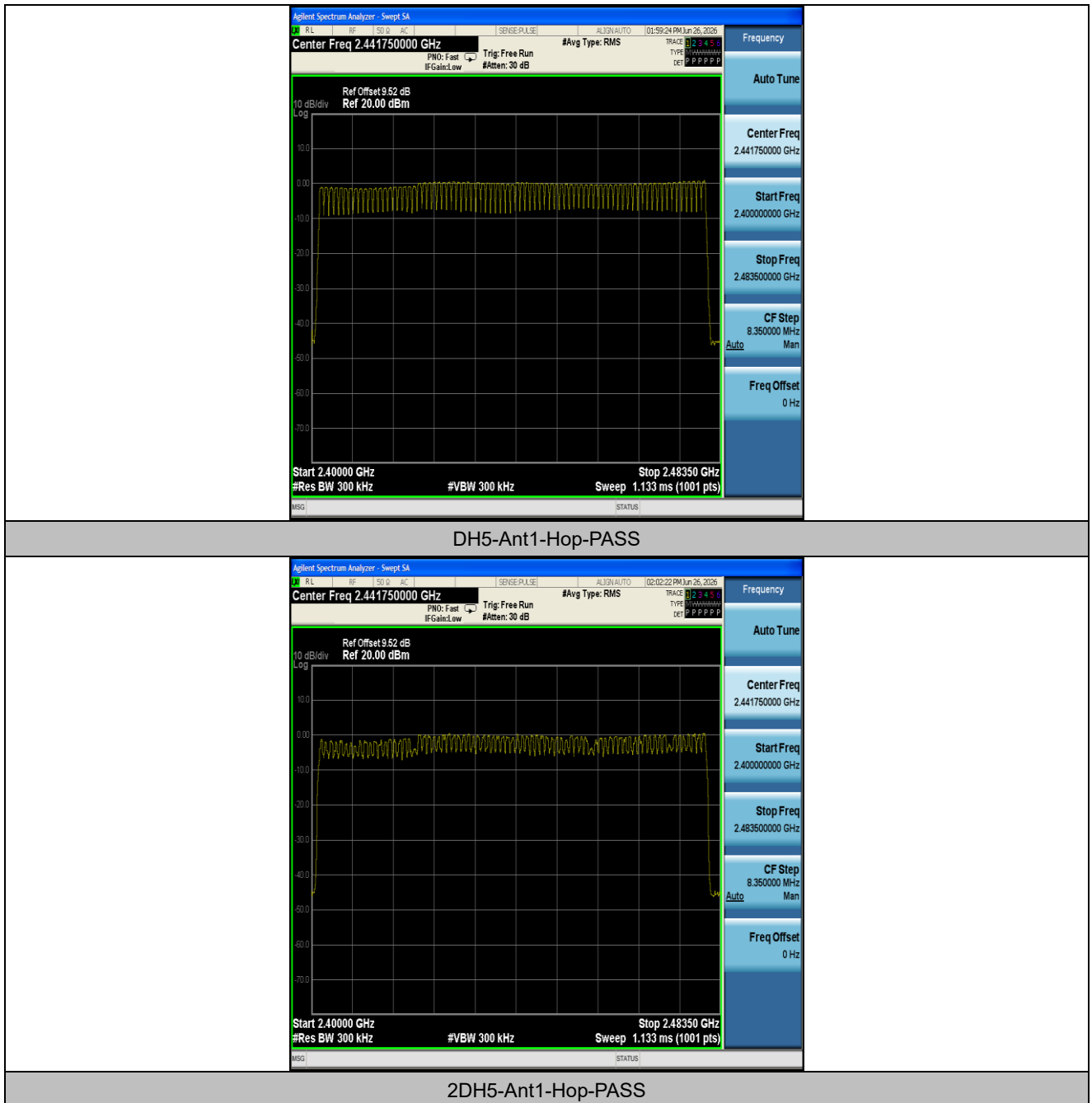
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

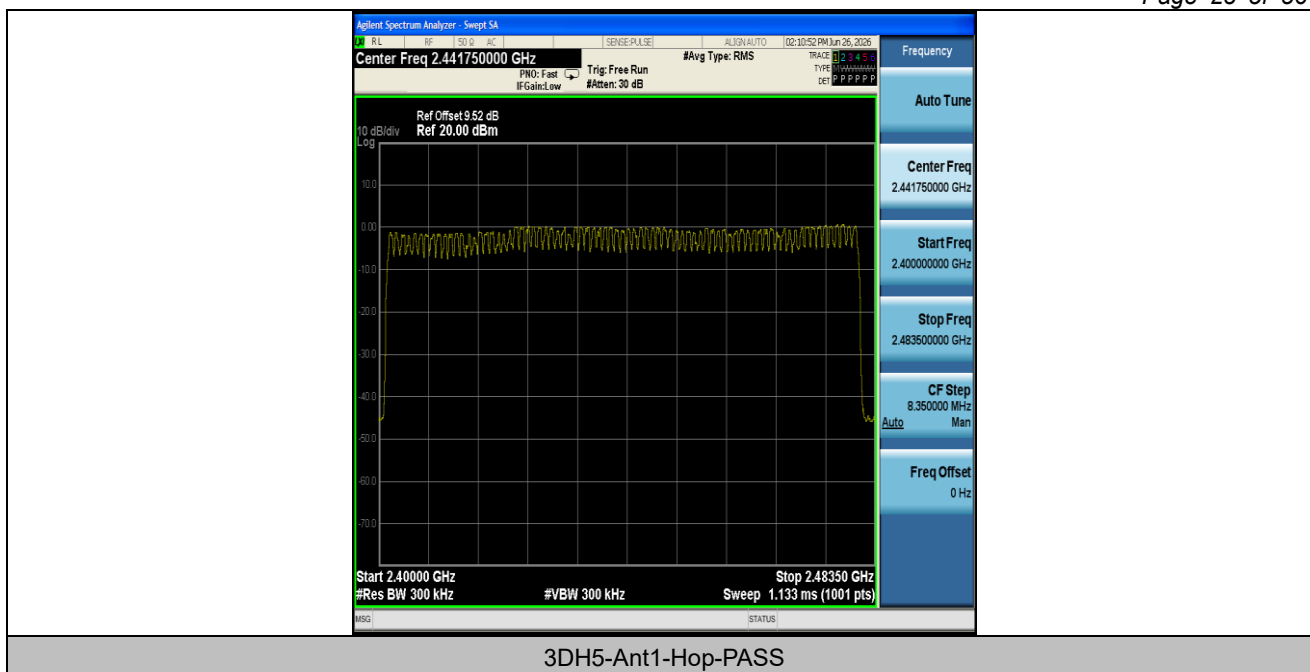
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

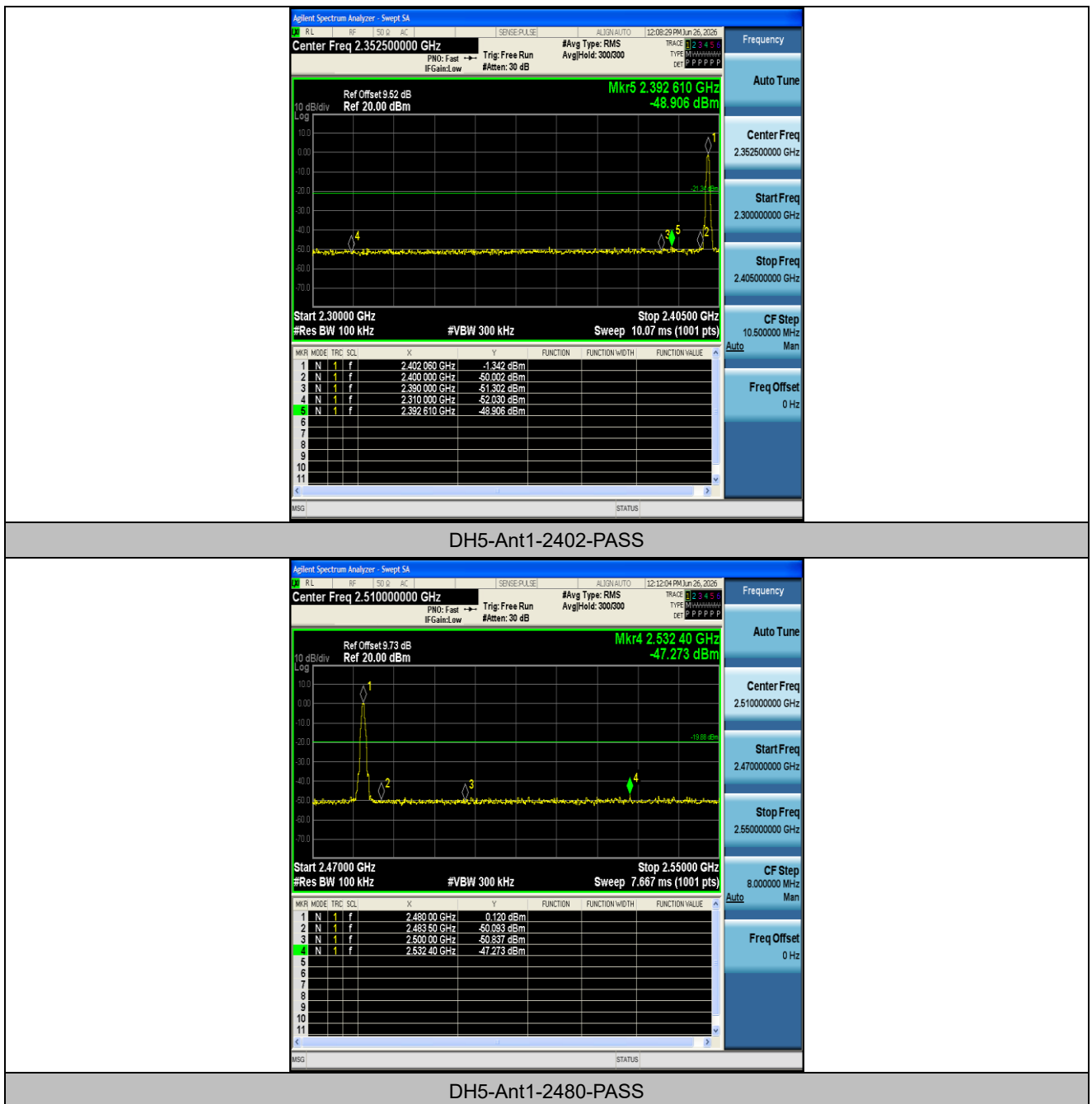
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.34	-48.91	≤-21.34	PASS
DH5	Ant1	High	2480	0.12	-47.27	≤-19.88	PASS
DH5	Ant1	Low	Hop_2402	-1.83	-48.22	≤-21.83	PASS
DH5	Ant1	High	Hop_2480	-0.14	-47.69	≤-20.14	PASS
2DH5	Ant1	Low	2402	-1.63	-47.46	≤-21.63	PASS
2DH5	Ant1	High	2480	0.23	-47.84	≤-19.77	PASS
2DH5	Ant1	Low	Hop_2402	-7.89	-48.58	≤-27.89	PASS
2DH5	Ant1	High	Hop_2480	0.16	-48.18	≤-19.84	PASS
3DH5	Ant1	Low	2402	-1.62	-48.29	≤-21.62	PASS
3DH5	Ant1	High	2480	0.14	-48.06	≤-19.86	PASS
3DH5	Ant1	Low	Hop_2402	-7.18	-48.86	≤-27.18	PASS
3DH5	Ant1	High	Hop_2480	-0.85	-48.07	≤-20.85	PASS

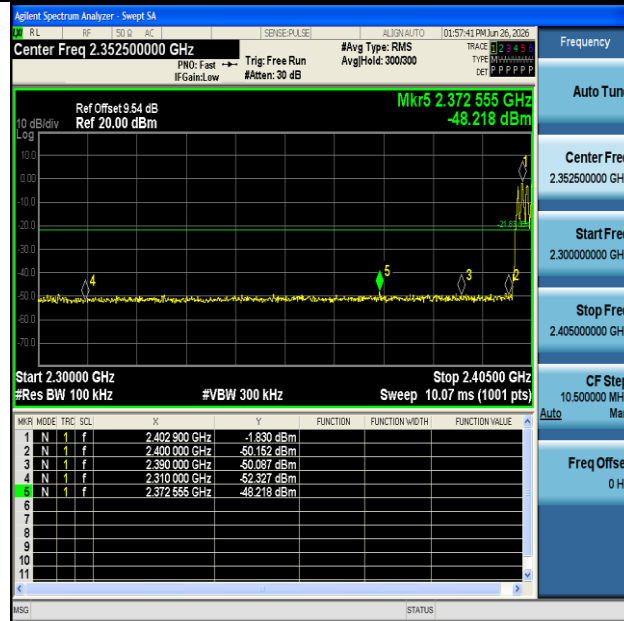
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



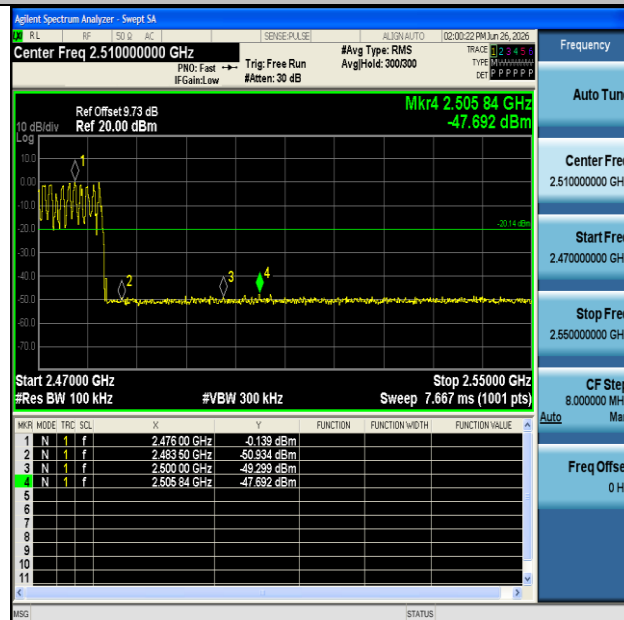


Test Graphs



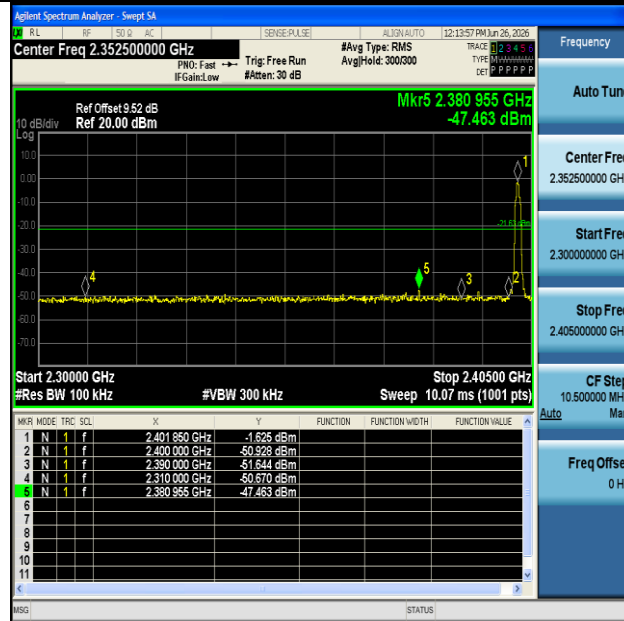


DH5-Ant1-Hop_2402-PASS

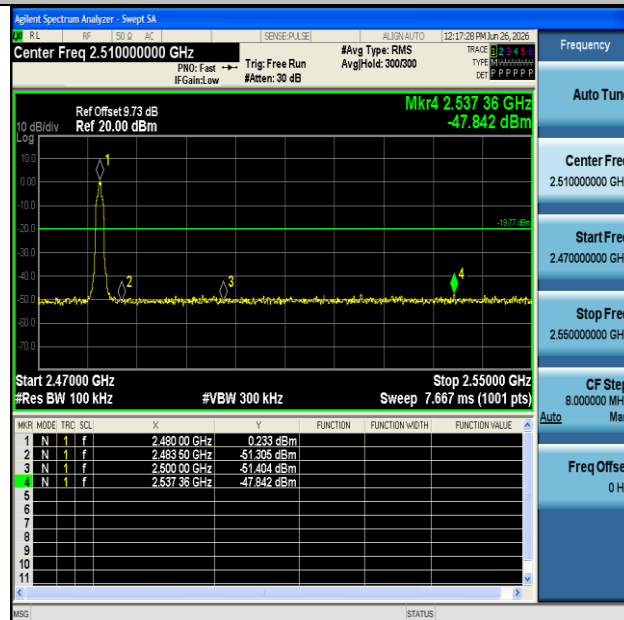


DH5-Ant1-Hop_2480-PASS



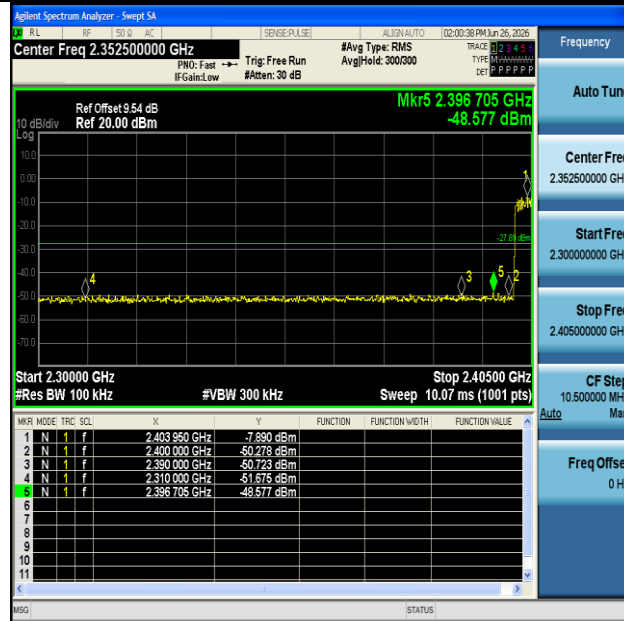


2DH5-Ant1-2402-PASS

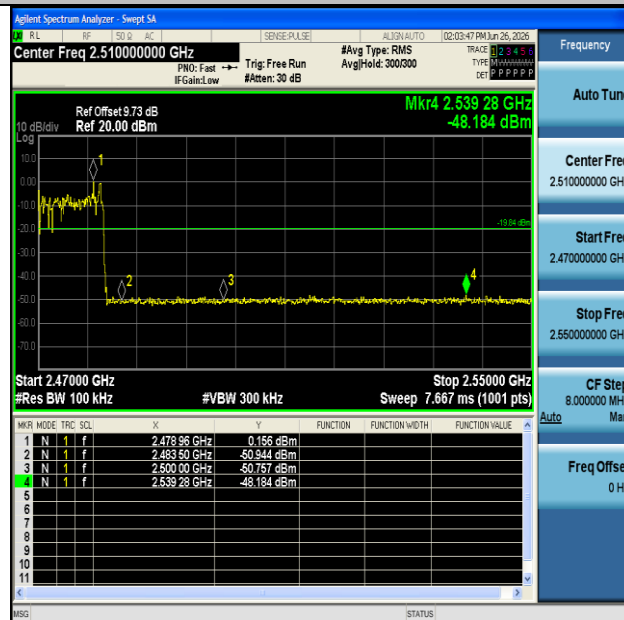


2DH5-Ant1-2480-PASS



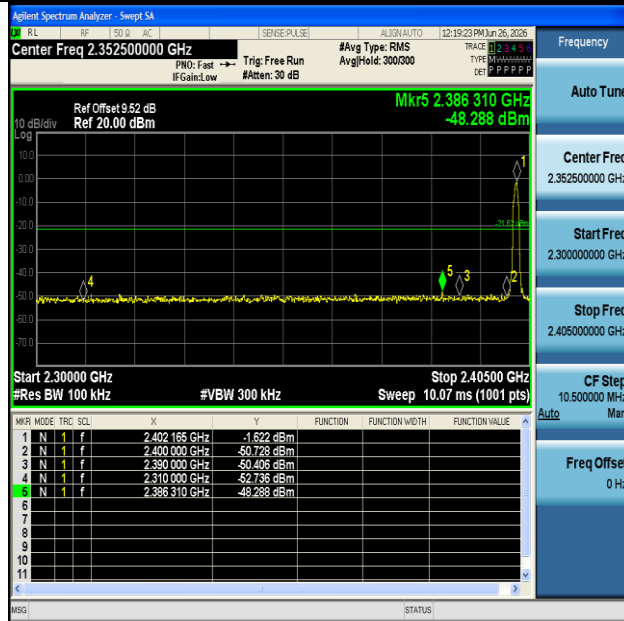


2DH5-Ant1-Hop_2402-PASS

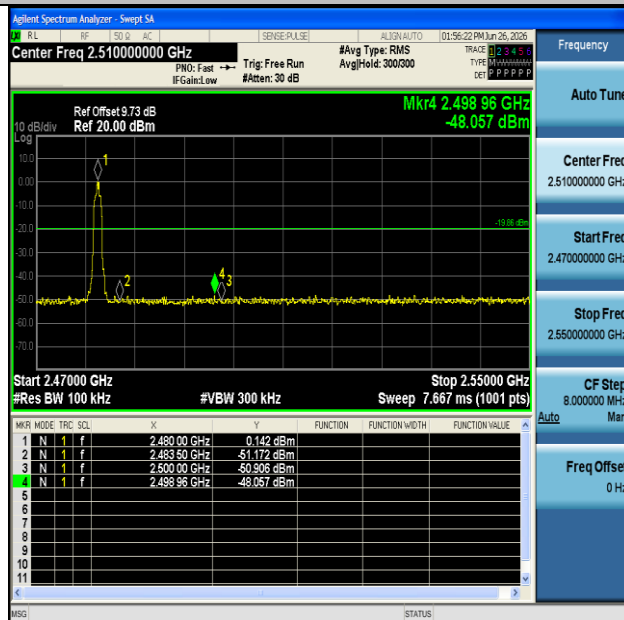


2DH5-Ant1-Hop_2480-PASS



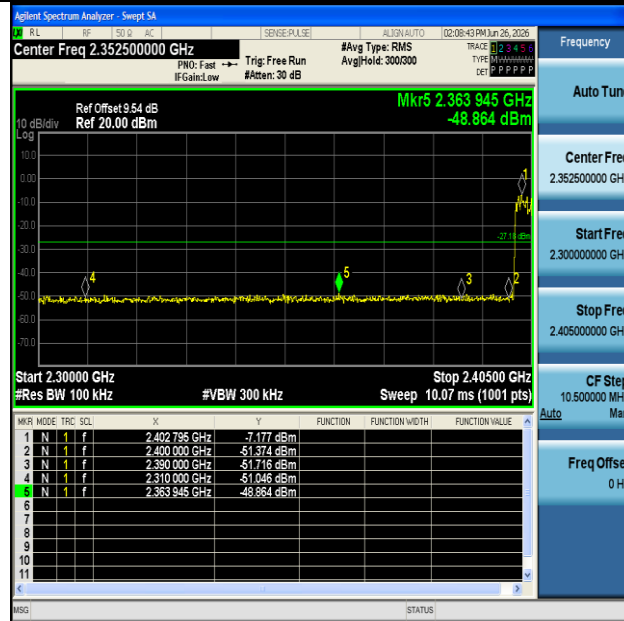


3DH5-Ant1-2402-PASS

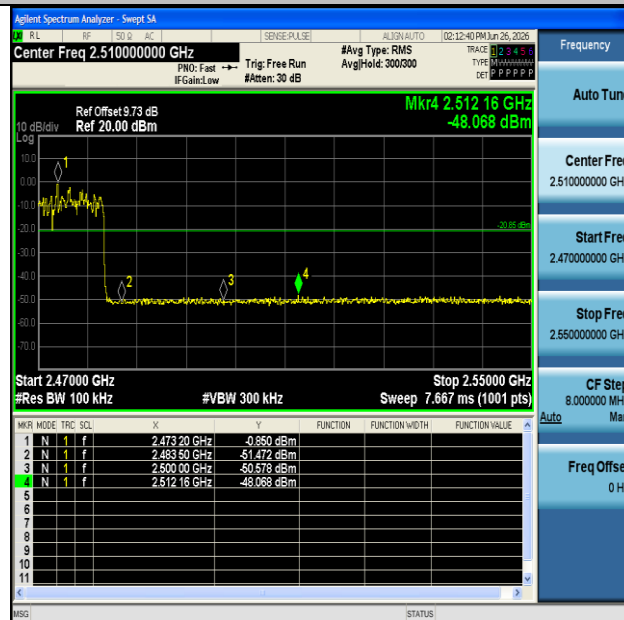


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

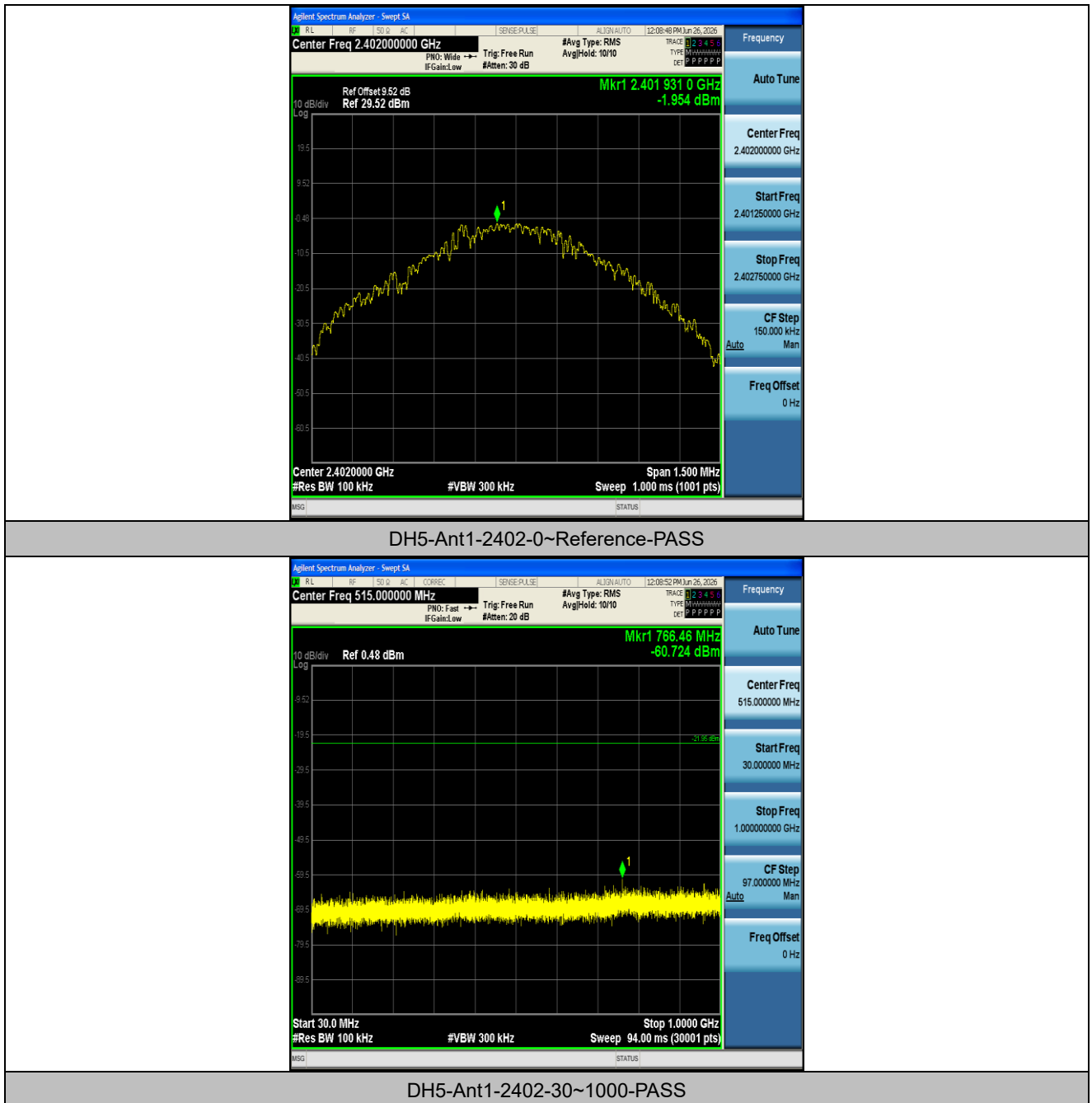
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-1.95	-1.95	---	PASS
DH5	Ant1	2402	30~1000	-1.95	-60.72	≤-21.95	PASS
DH5	Ant1	2402	1000~26500	-1.95	-37.04	≤-21.95	PASS
DH5	Ant1	2441	0~Reference	-1.00	-1.00	---	PASS
DH5	Ant1	2441	30~1000	-1.00	-62.48	≤-21	PASS
DH5	Ant1	2441	1000~26500	-1.00	-36.64	≤-21	PASS
DH5	Ant1	2480	0~Reference	-0.01	-0.01	---	PASS
DH5	Ant1	2480	30~1000	-0.01	-62.1	≤-20.01	PASS
DH5	Ant1	2480	1000~26500	-0.01	-35.8	≤-20.01	PASS
2DH5	Ant1	2402	0~Reference	-3.37	-3.37	---	PASS
2DH5	Ant1	2402	30~1000	-3.37	-62.24	≤-23.37	PASS
2DH5	Ant1	2402	1000~26500	-3.37	-37.16	≤-23.37	PASS
2DH5	Ant1	2441	0~Reference	-6.38	-6.38	---	PASS
2DH5	Ant1	2441	30~1000	-6.38	-62	≤-26.38	PASS
2DH5	Ant1	2441	1000~26500	-6.38	-36.37	≤-26.38	PASS
2DH5	Ant1	2480	0~Reference	-0.73	-0.73	---	PASS
2DH5	Ant1	2480	30~1000	-0.73	-60.87	≤-20.73	PASS
2DH5	Ant1	2480	1000~26500	-0.73	-37.02	≤-20.73	PASS
3DH5	Ant1	2402	0~Reference	-4.15	-4.15	---	PASS
3DH5	Ant1	2402	30~1000	-4.15	-61.49	≤-24.15	PASS
3DH5	Ant1	2402	1000~26500	-4.15	-37.19	≤-24.15	PASS
3DH5	Ant1	2441	0~Reference	-2.15	-2.15	---	PASS
3DH5	Ant1	2441	30~1000	-2.15	-61.87	≤-22.15	PASS
3DH5	Ant1	2441	1000~26500	-2.15	-37.31	≤-22.15	PASS
3DH5	Ant1	2480	0~Reference	0.20	0.20	---	PASS
3DH5	Ant1	2480	30~1000	0.20	-61.59	≤-19.8	PASS
3DH5	Ant1	2480	1000~26500	0.20	-36.87	≤-19.8	PASS

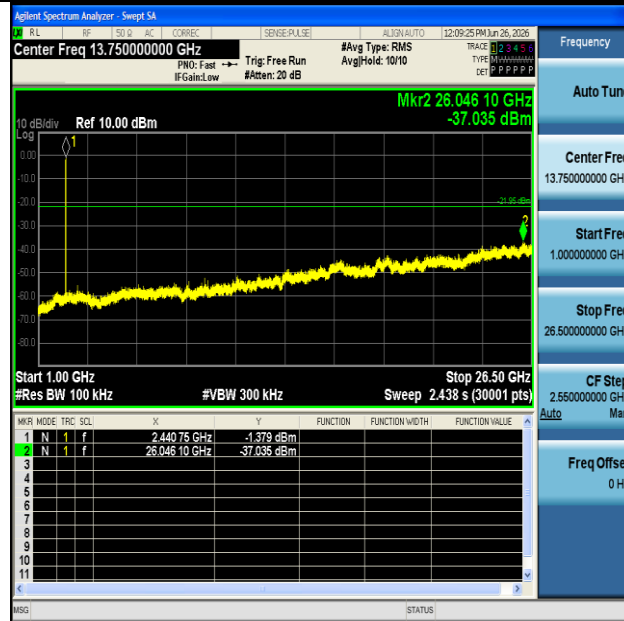
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



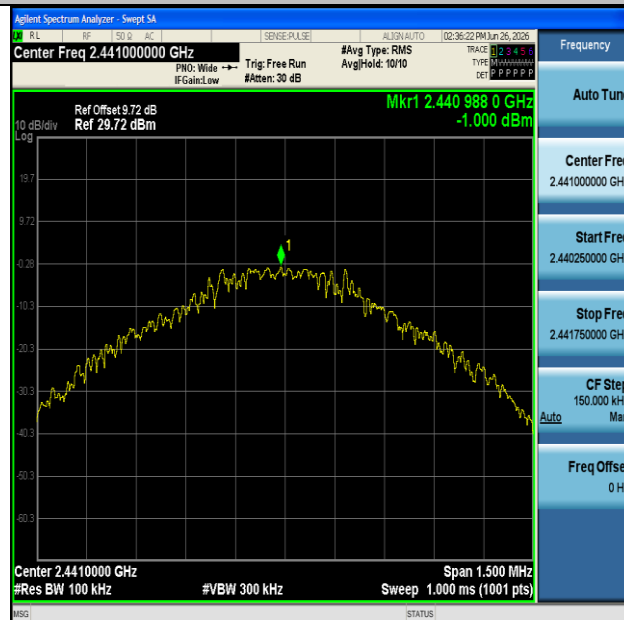


Test Graphs



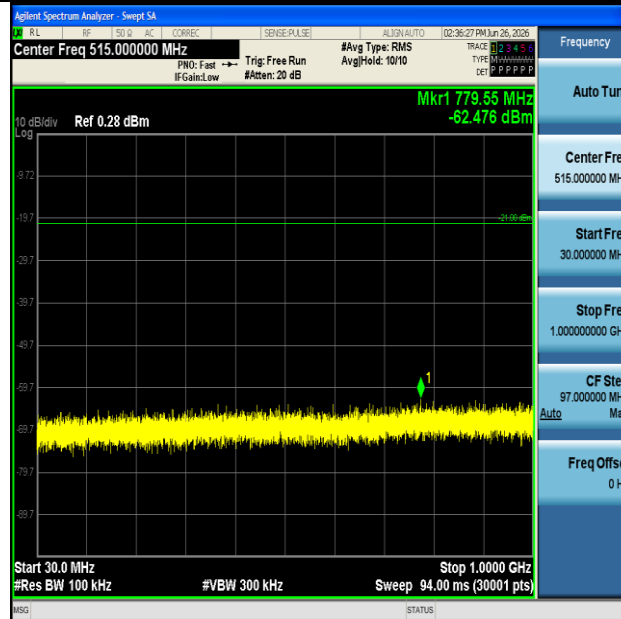


DH5-Ant1-2402-1000~26500-PASS

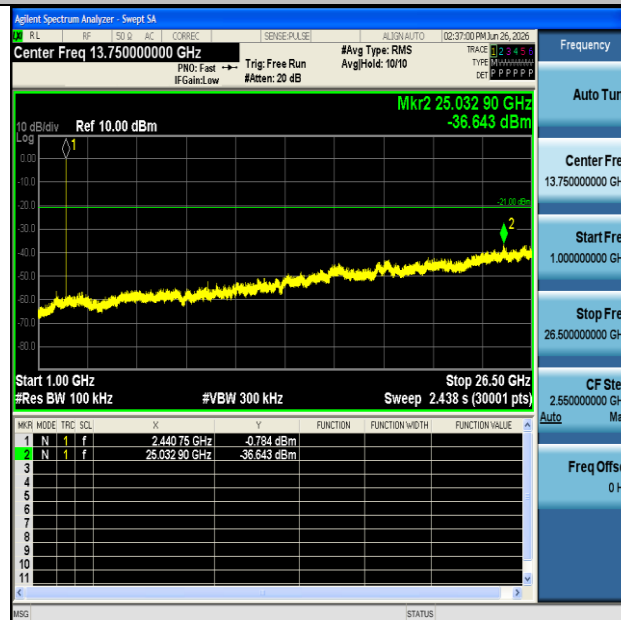


DH5-Ant1-2441-0~Reference-PASS





DH5-Ant1-2441-30~1000-PASS

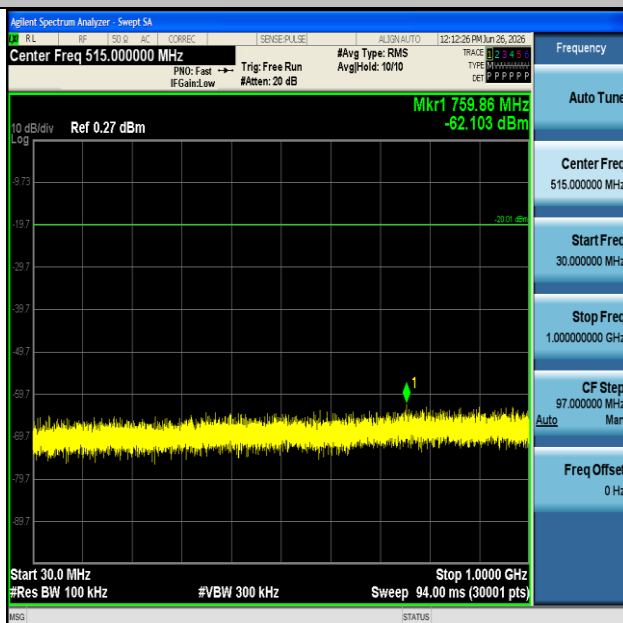


DH5-Ant1-2441-1000~26500-PASS





DH5-Ant1-2480-0~Reference-PASS

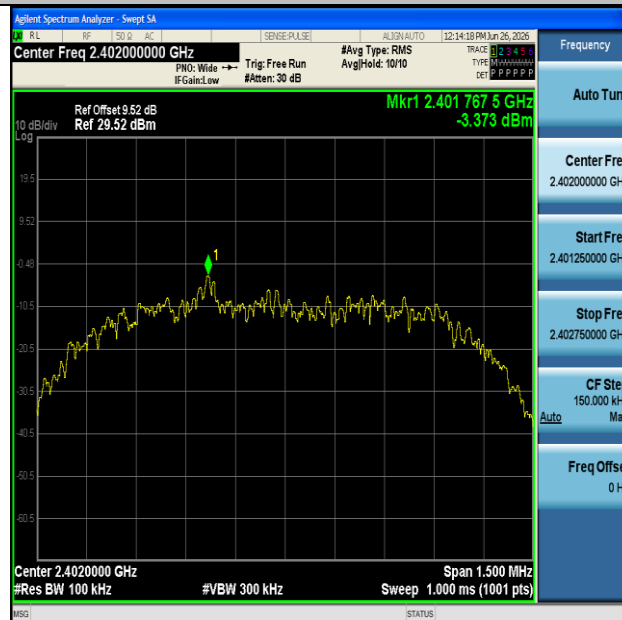


DH5-Ant1-2480-30~1000-PASS



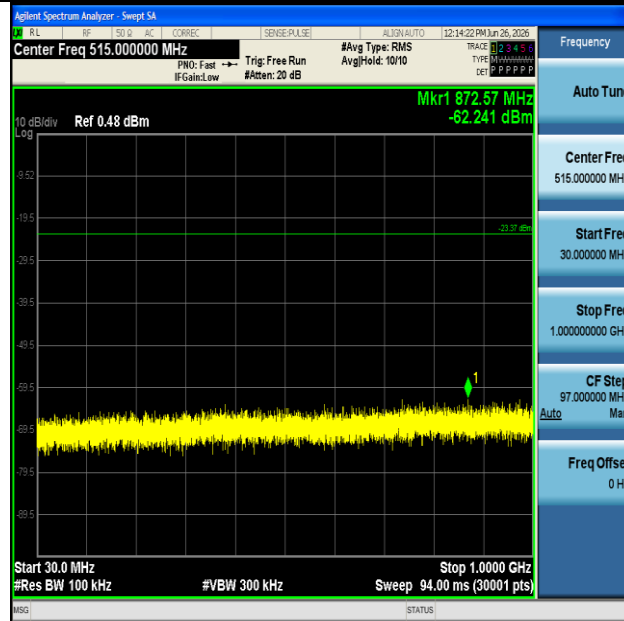


DH5-Ant1-2480-1000~26500-PASS

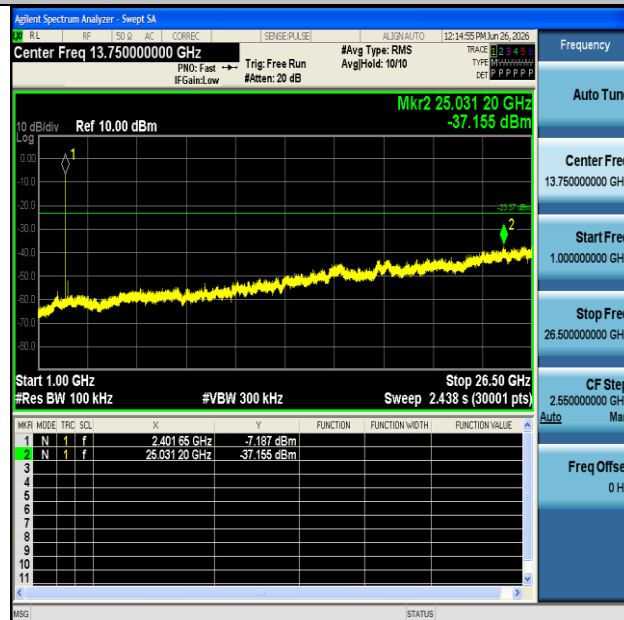


2DH5-Ant1-2402-0~Reference-PASS



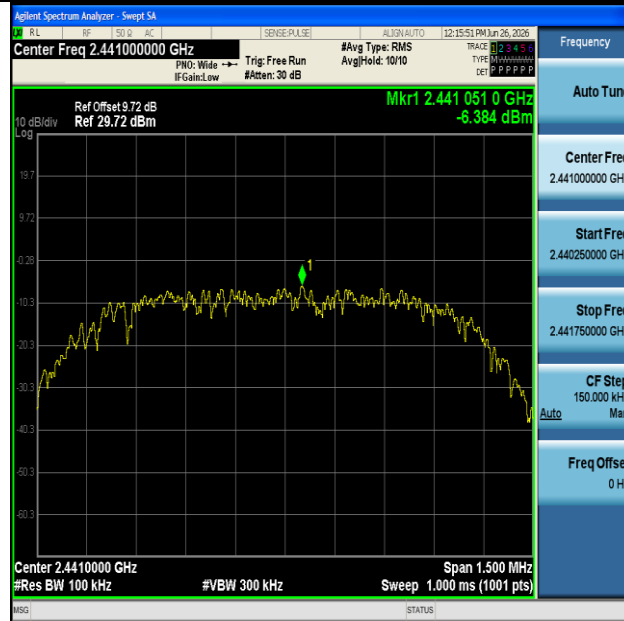


2DH5-Ant1-2402-30~1000-PASS

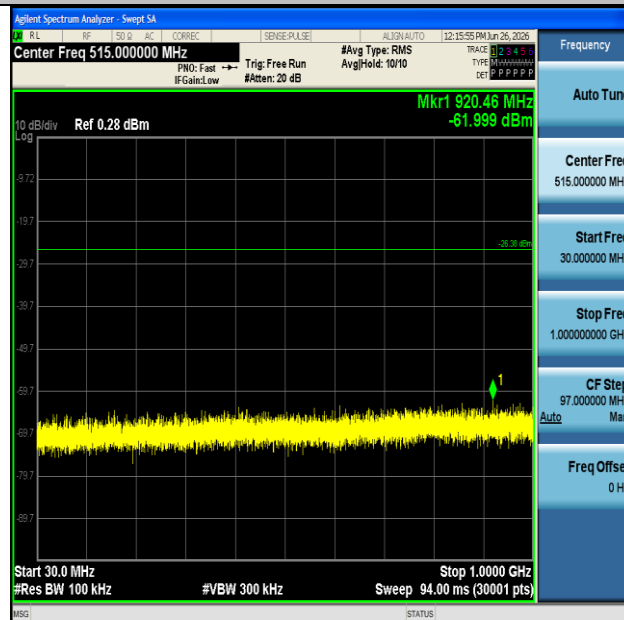


2DH5-Ant1-2402-1000~26500-PASS





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



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



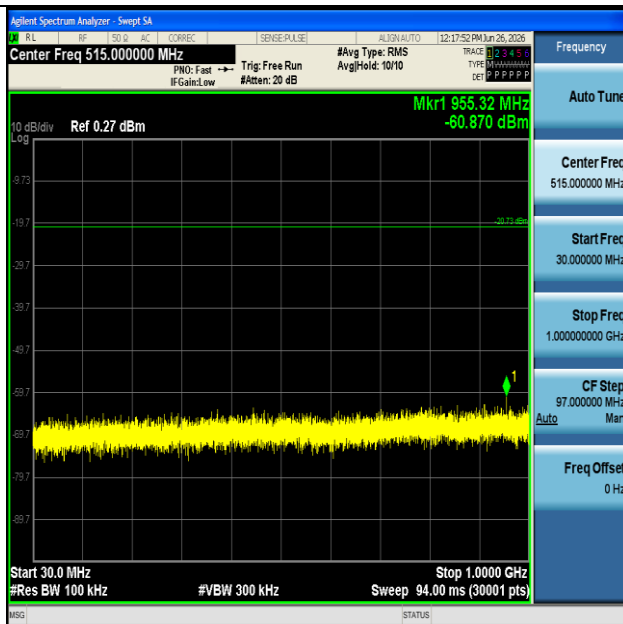


2DH5-Ant1-2441-1000~26500-PASS

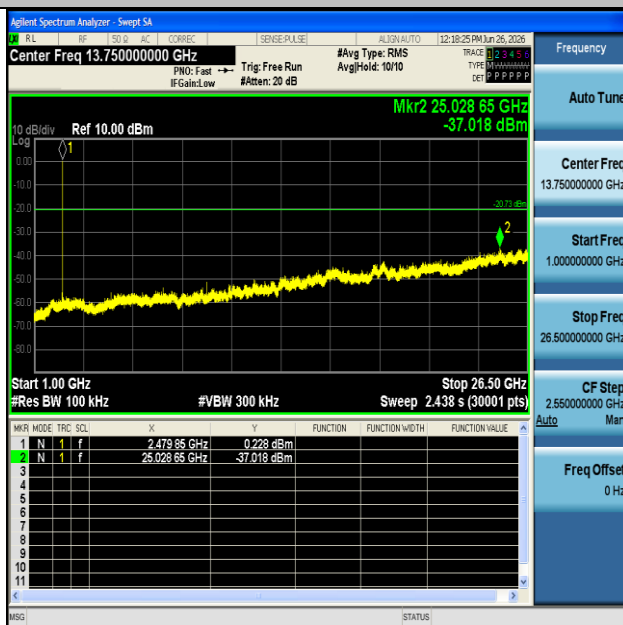


2DH5-Ant1-2480-0~Reference-PASS





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

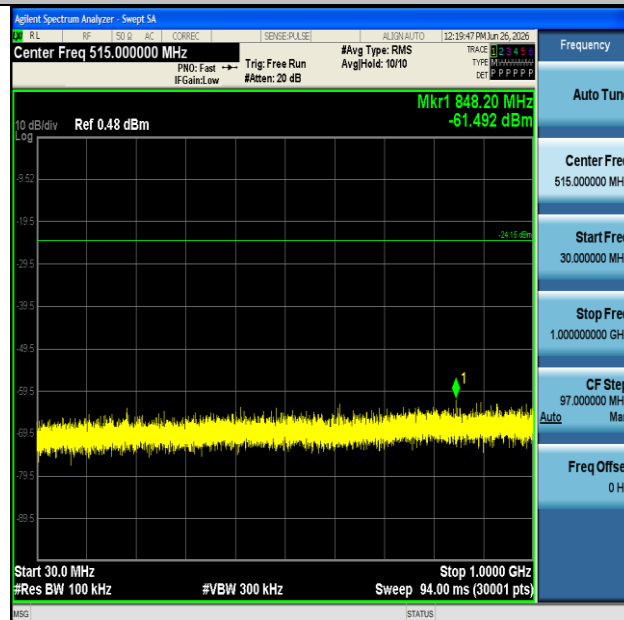


2DH5-Ant1-2480-1000~26500-PASS





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

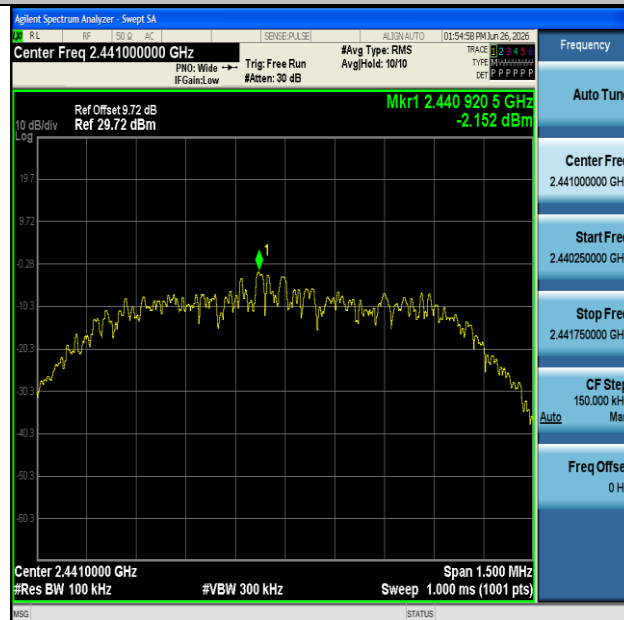


3DH5-Ant1-2402-30~1000-PASS



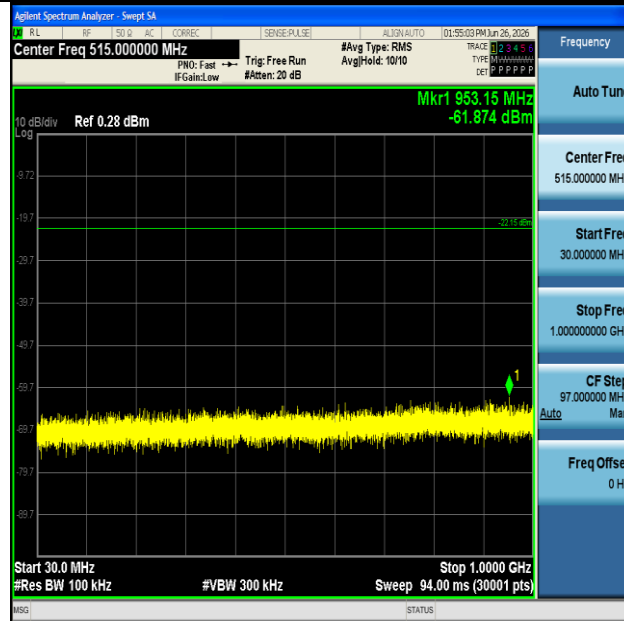


3DH5-Ant1-2402-1000~26500-PASS

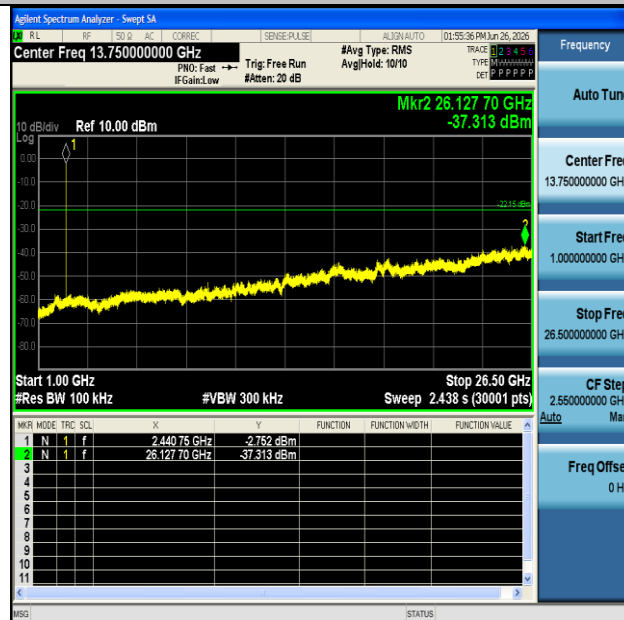


3DH5-Ant1-2441-0~Reference-PASS



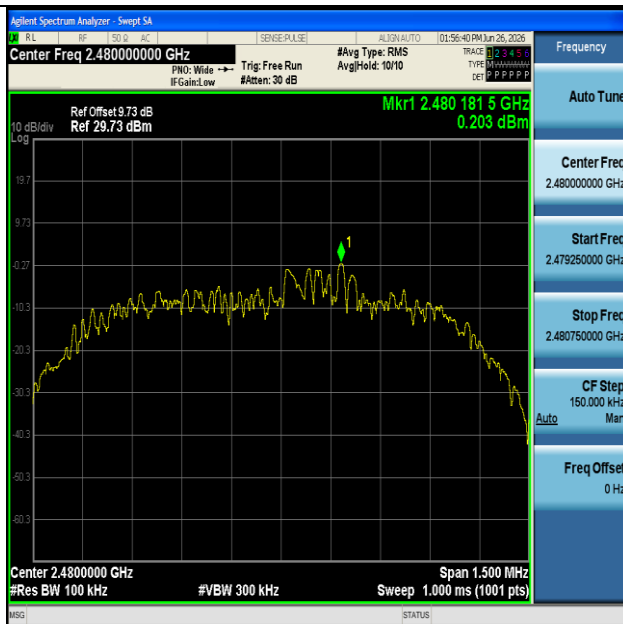


3DH5-Ant1-2441-30~1000-PASS

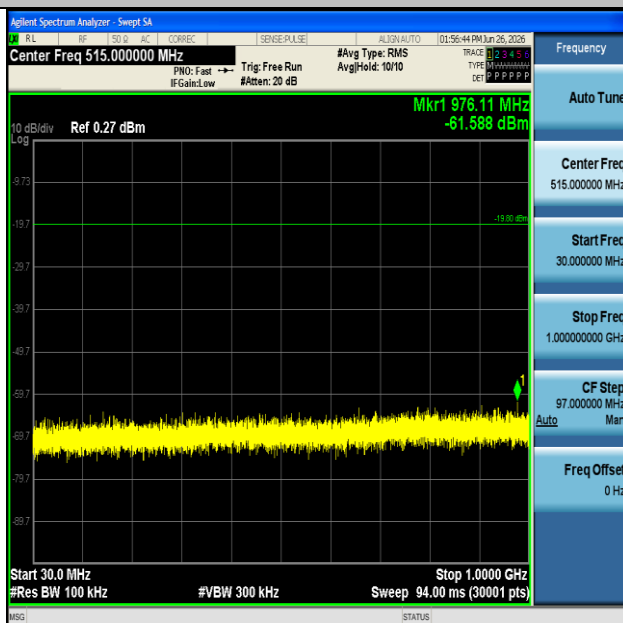


3DH5-Ant1-2441-1000~26500-PASS



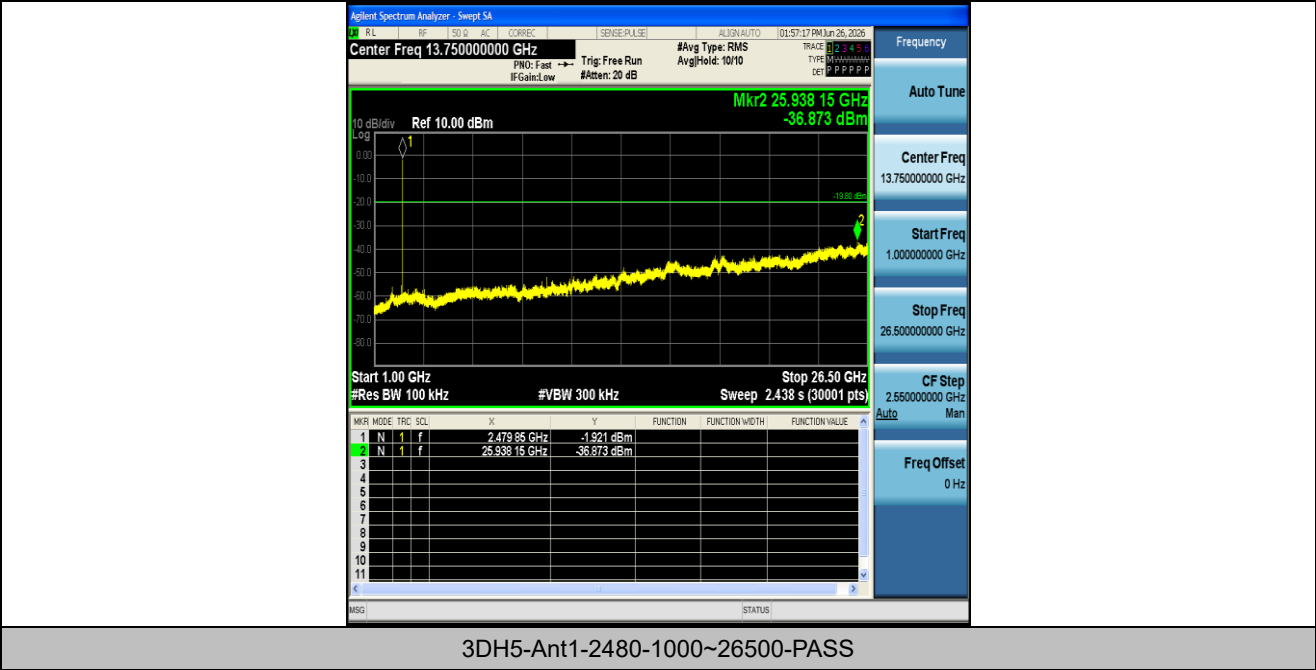


3DH5-Ant1-2480-0~Reference-PASS



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







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	3.75	77.60	1.10
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	2.92	3.75	77.87	1.09
3DH5	Ant1	2480	2.91	3.75	77.60	1.10

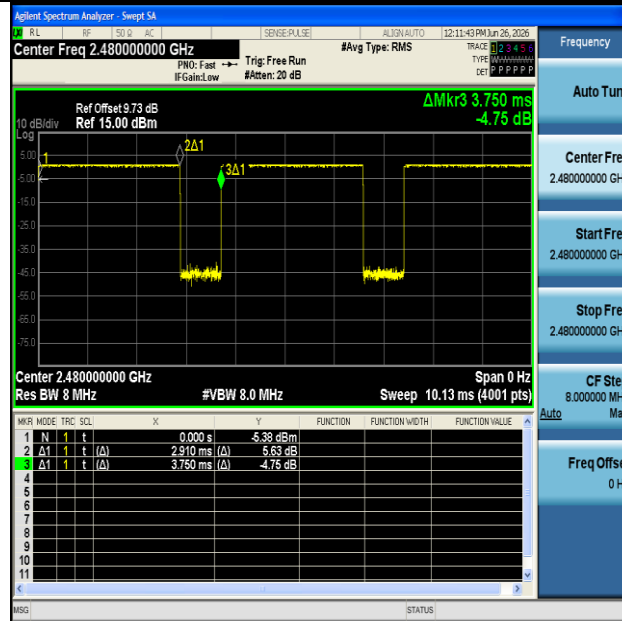
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



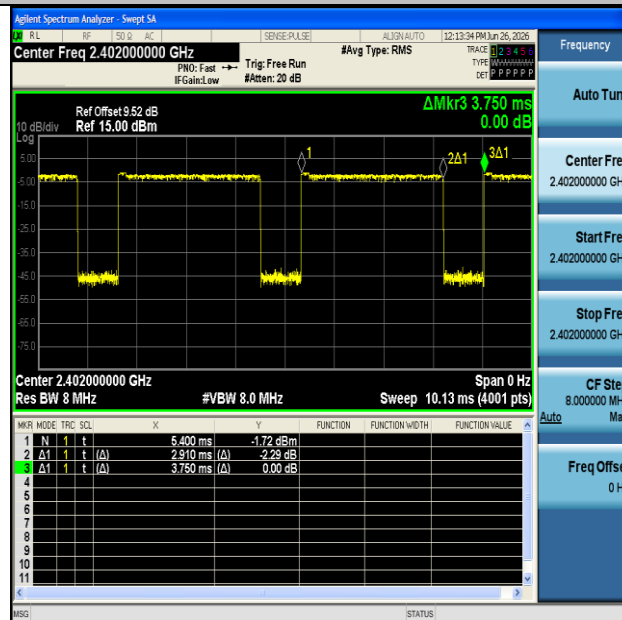


Test Graphs



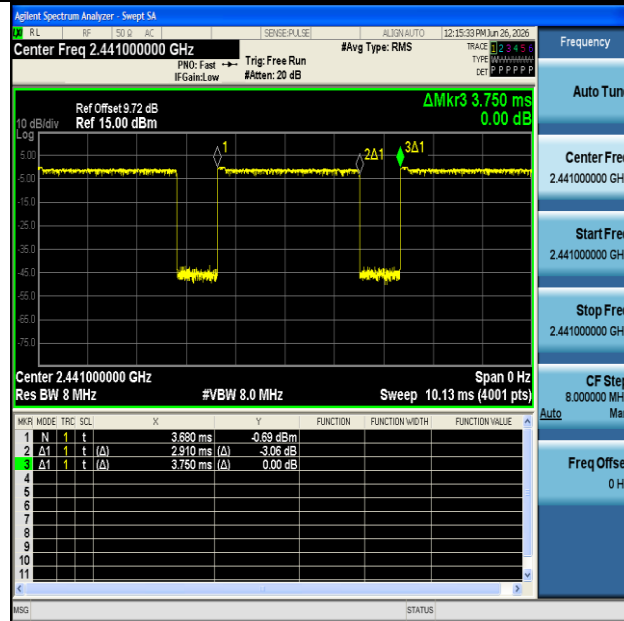


NTNV-DH5-Ant1-2480

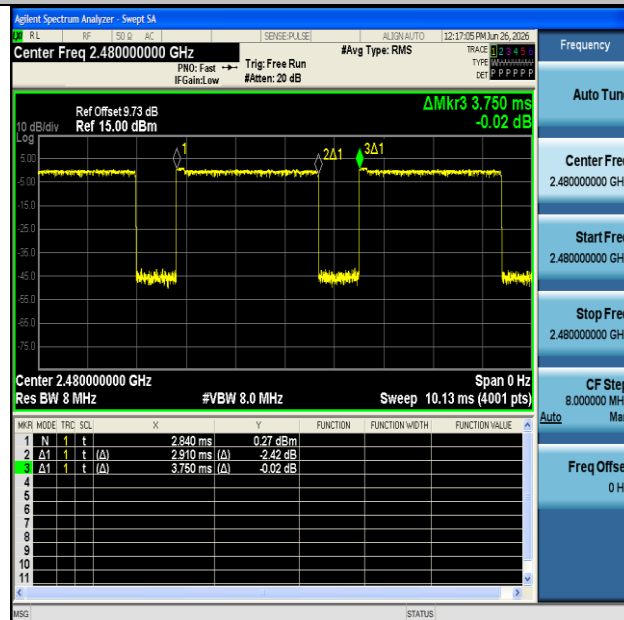


NTNV-2DH5-Ant1-2402



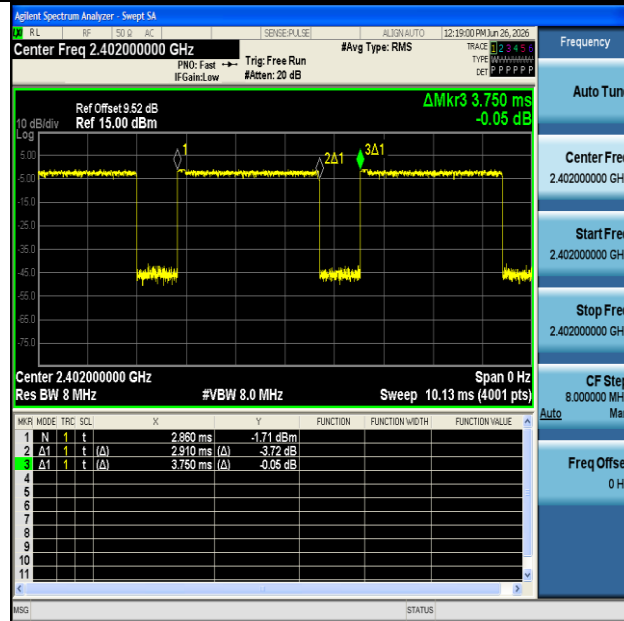


NTNV-2DH5-Ant1-2441

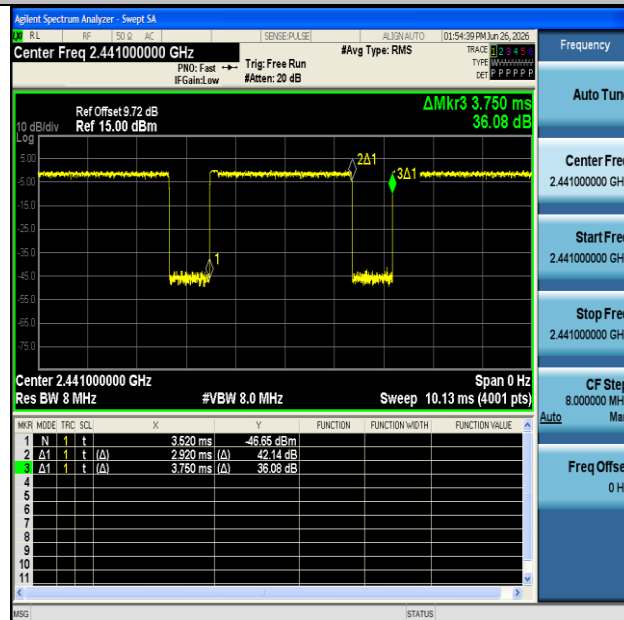


NTNV-2DH5-Ant1-2480





NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441



