



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

Product Name: 2.4g Bluetooth Headphones+dongle

Trade Mark: SENTRY

Test Model: GX1000

FCC ID: 2ACP4DONGLE

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	0.951	2401.541	2402.492	---	---
DH5	Ant1	2441	0.936	2440.541	2441.477	---	---
DH5	Ant1	2480	0.951	2479.541	2480.492	---	---
2DH5	Ant1	2402	1.176	2401.412	2402.588	---	---
2DH5	Ant1	2441	1.218	2440.388	2441.606	---	---
2DH5	Ant1	2480	1.314	2479.343	2480.657	---	---
3DH5	Ant1	2402	1.248	2401.376	2402.624	---	---
3DH5	Ant1	2441	1.191	2440.421	2441.612	---	---
3DH5	Ant1	2480	1.263	2479.364	2480.627	---	---

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 B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.90696	2401.5560	2402.4630	---	---
DH5	Ant1	2441	0.88727	2440.5611	2441.4484	---	---
DH5	Ant1	2480	0.90065	2479.5568	2480.4574	---	---
2DH5	Ant1	2402	1.1397	2401.4367	2402.5764	---	---
2DH5	Ant1	2441	1.1551	2440.4264	2441.5815	---	---
2DH5	Ant1	2480	1.1457	2479.4270	2480.5727	---	---
3DH5	Ant1	2402	1.1451	2401.4398	2402.5849	---	---
3DH5	Ant1	2441	1.1349	2440.4399	2441.5748	---	---
3DH5	Ant1	2480	1.1483	2479.4332	2480.5815	---	---

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





Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402





2DH5-Ant1-2441



2DH5-Ant1-2480



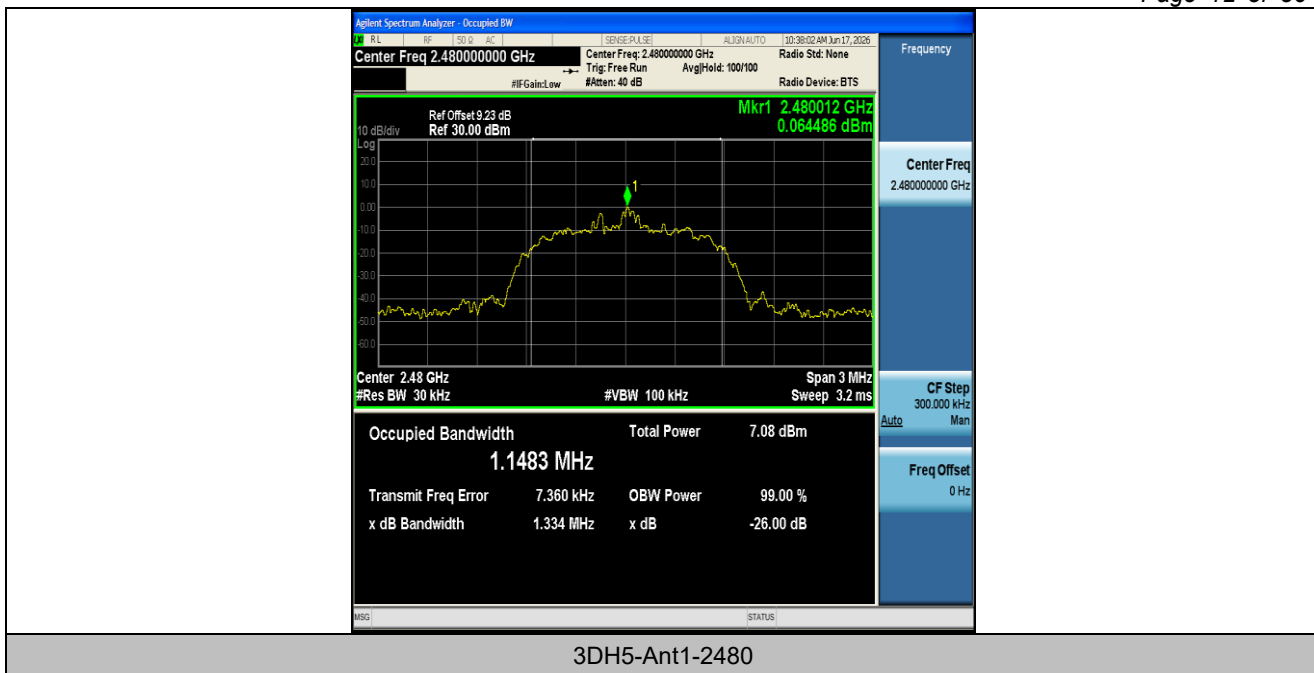


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

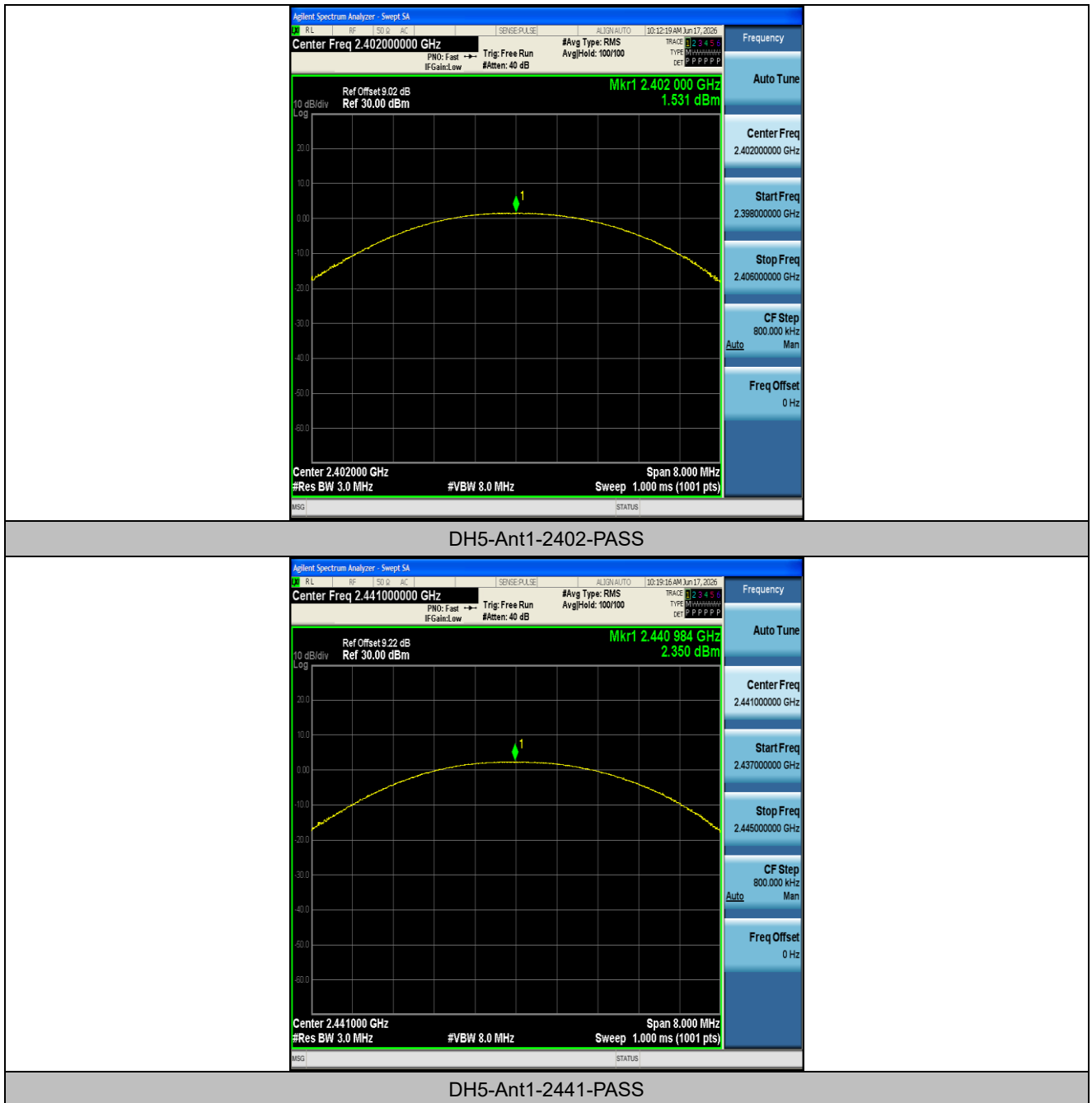
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	1.53	≤30	PASS
DH5	Ant1	2441	2.35	≤30	PASS
DH5	Ant1	2480	2.53	≤30	PASS
2DH5	Ant1	2402	1.48	≤20.97	PASS
2DH5	Ant1	2441	2.32	≤20.97	PASS
2DH5	Ant1	2480	2.46	≤20.97	PASS
3DH5	Ant1	2402	1.53	≤20.97	PASS
3DH5	Ant1	2441	2.28	≤20.97	PASS
3DH5	Ant1	2480	2.45	≤20.97	PASS

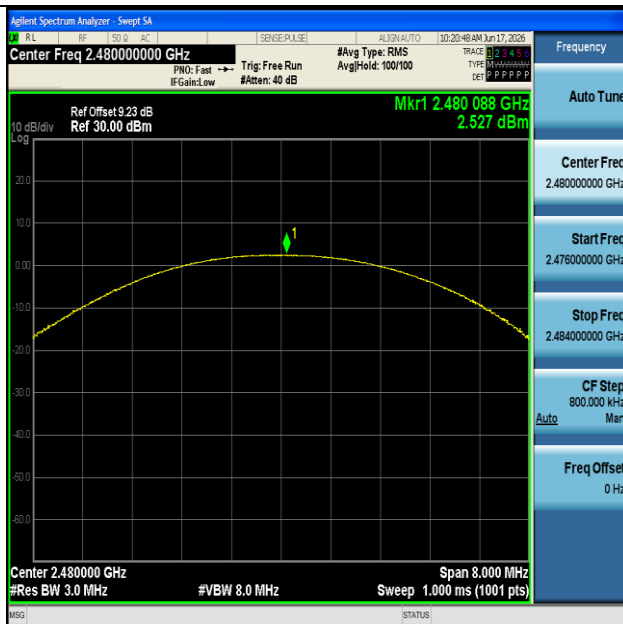
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



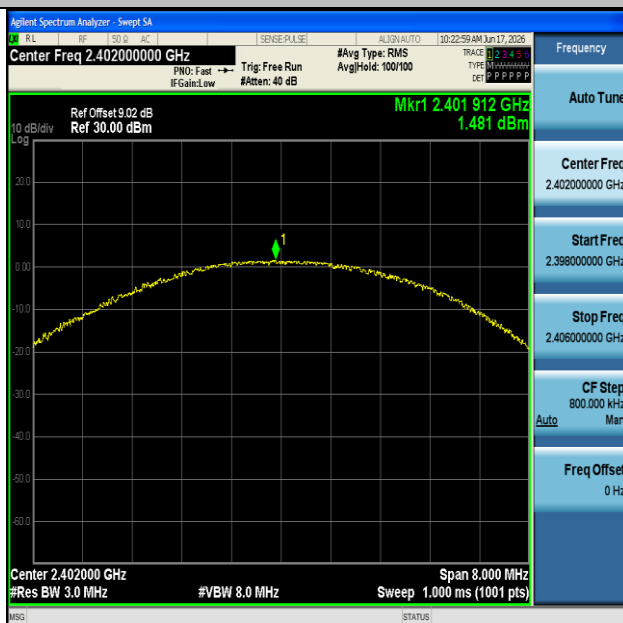


Test Graphs



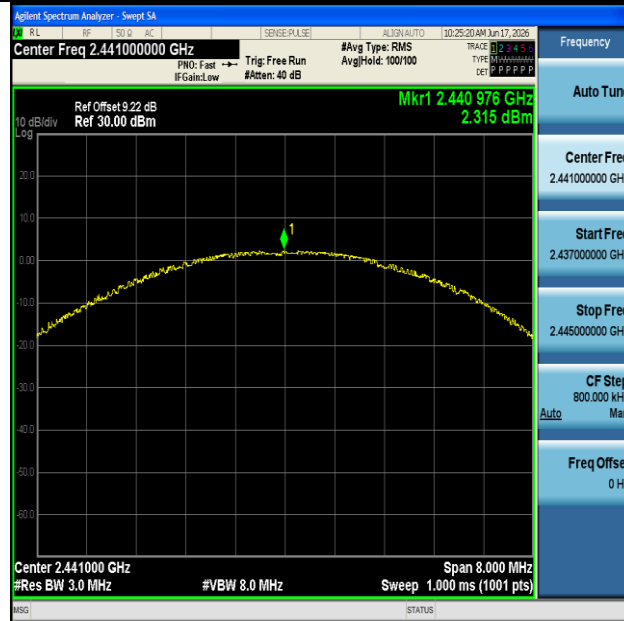


DH5-Ant1-2480-PASS

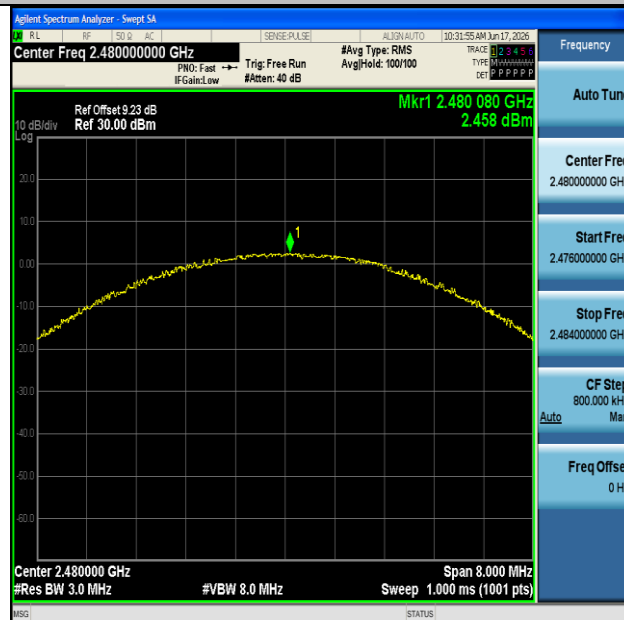


2DH5-Ant1-2402-PASS





2DH5-Ant1-2441-PASS

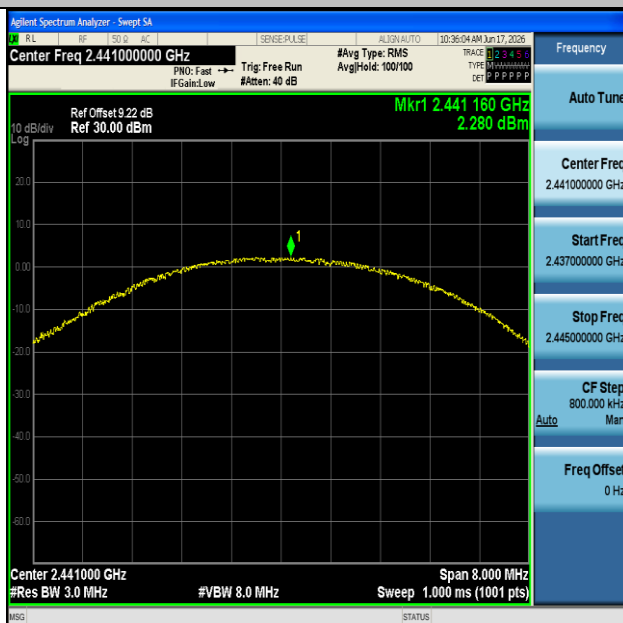


2DH5-Ant1-2480-PASS



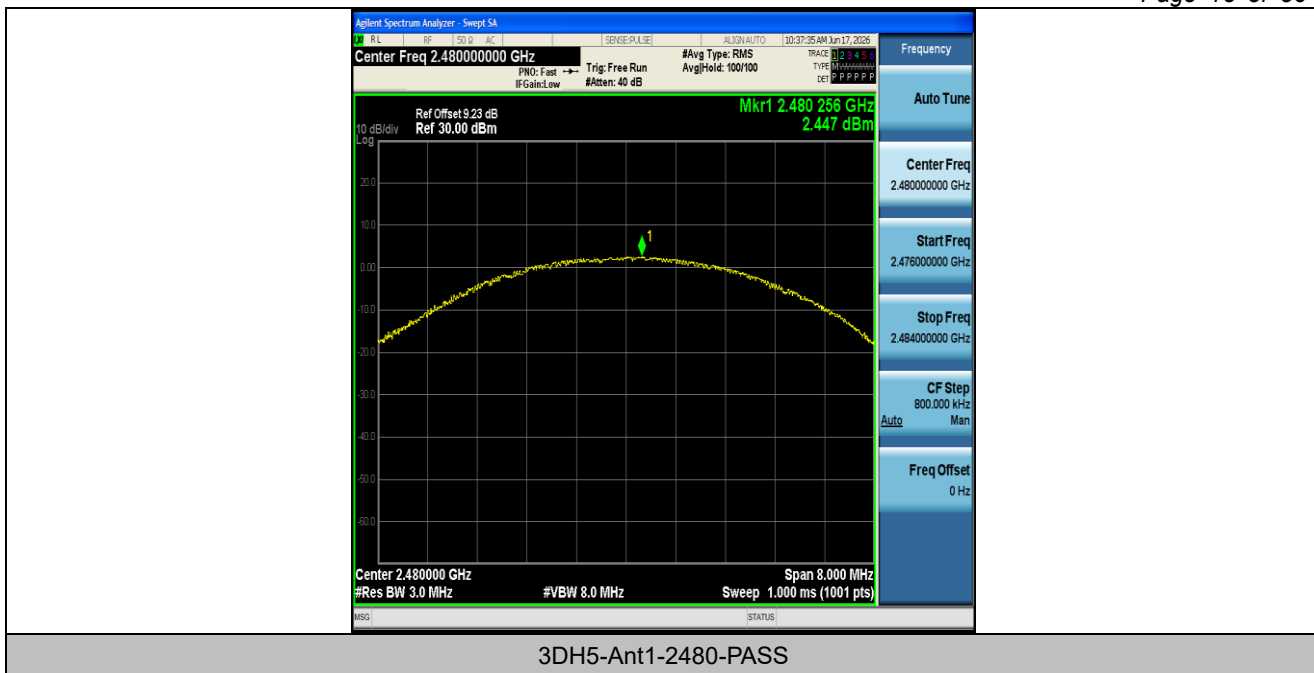


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.982	≥0.951	PASS
2DH5	Ant1	Hop	0.998	≥0.876	PASS
3DH5	Ant1	Hop	1.11	≥0.842	PASS

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





Test Graphs







Appendix E: Time of occupancy

Test Result

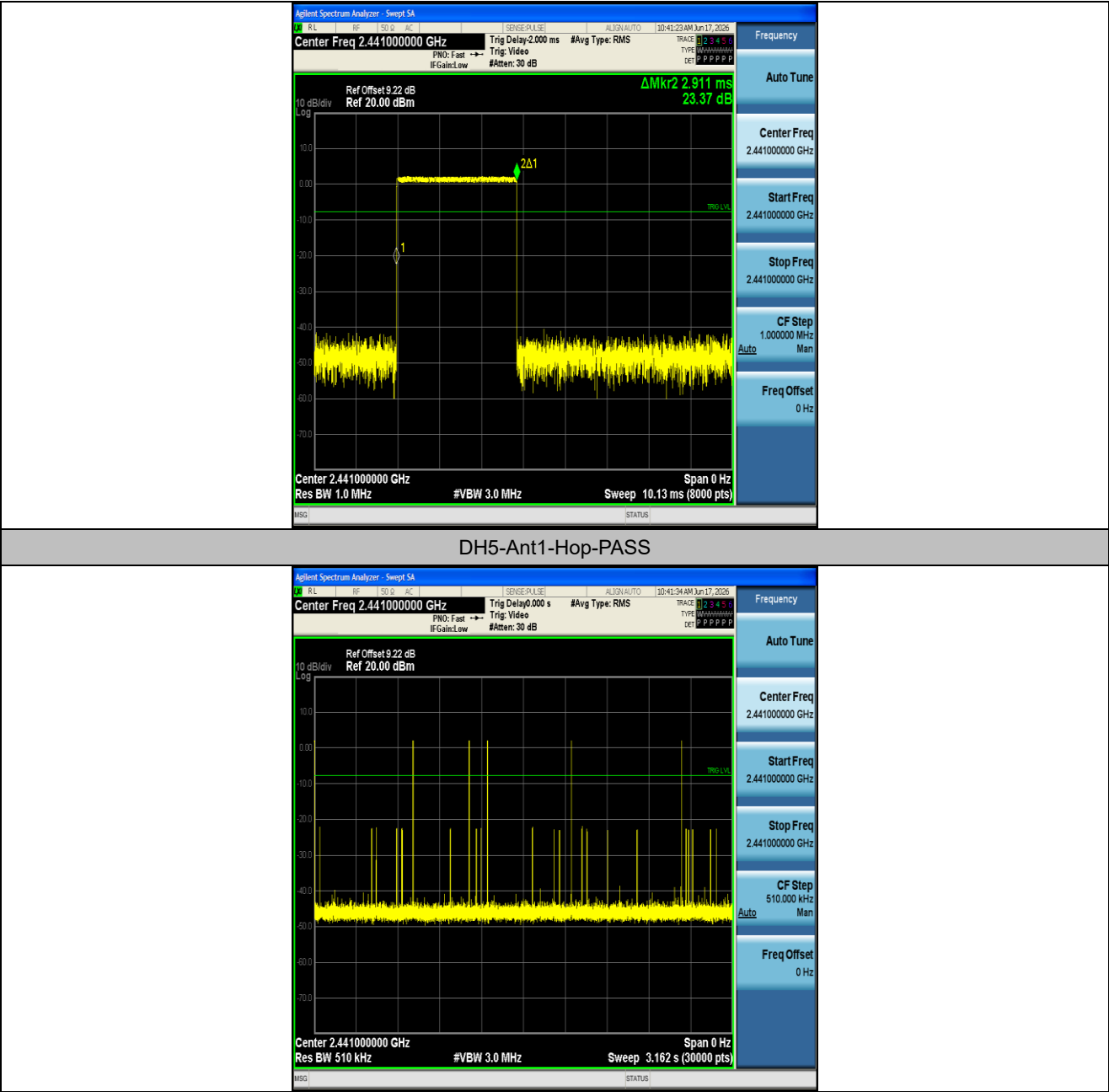
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.911	60	0.175	≤0.4	PASS
2DH5	Ant1	Hop	2.917	90	0.263	≤0.4	PASS
3DH5	Ant1	Hop	2.918	130	0.379	≤0.4	PASS

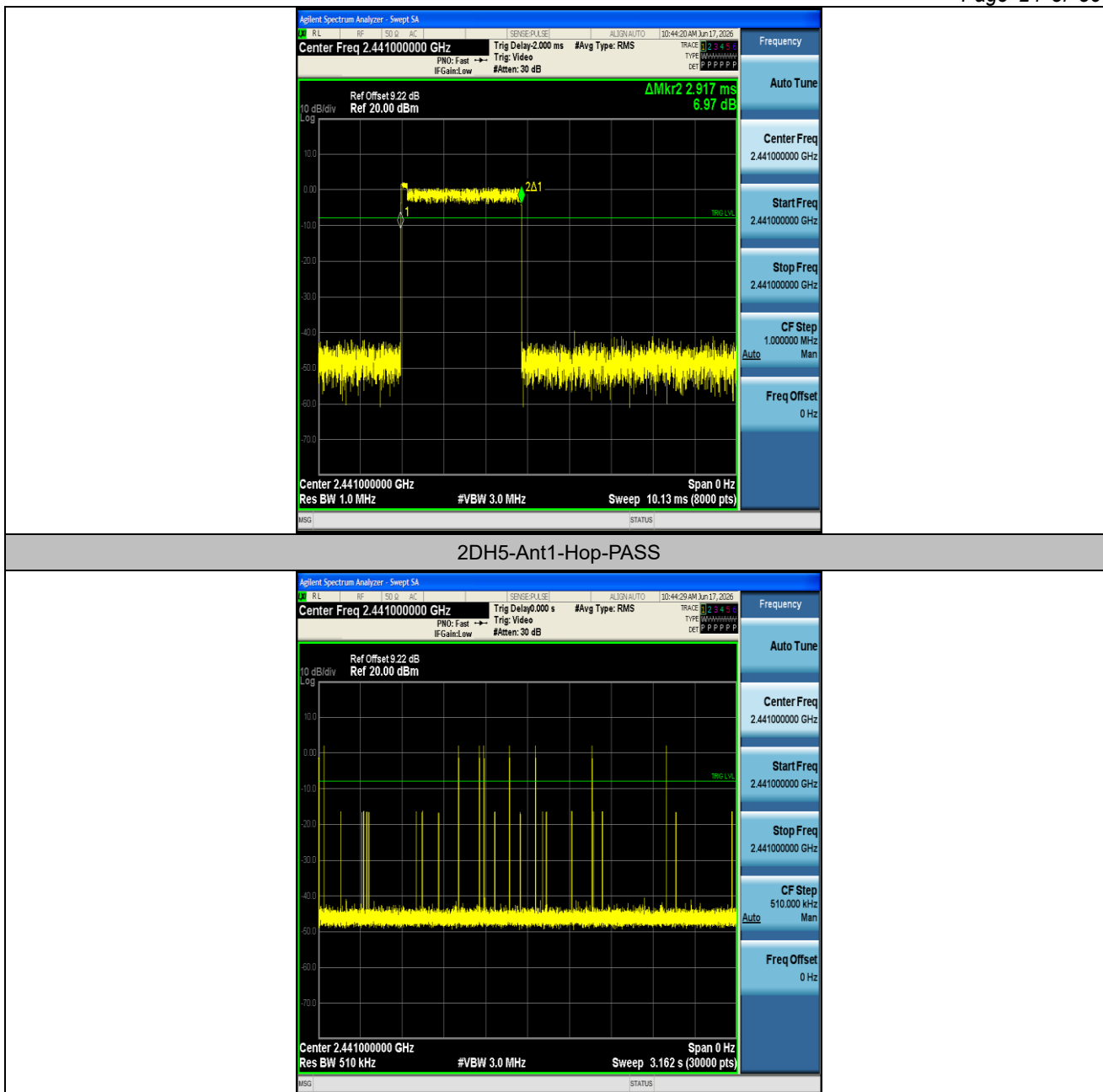
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

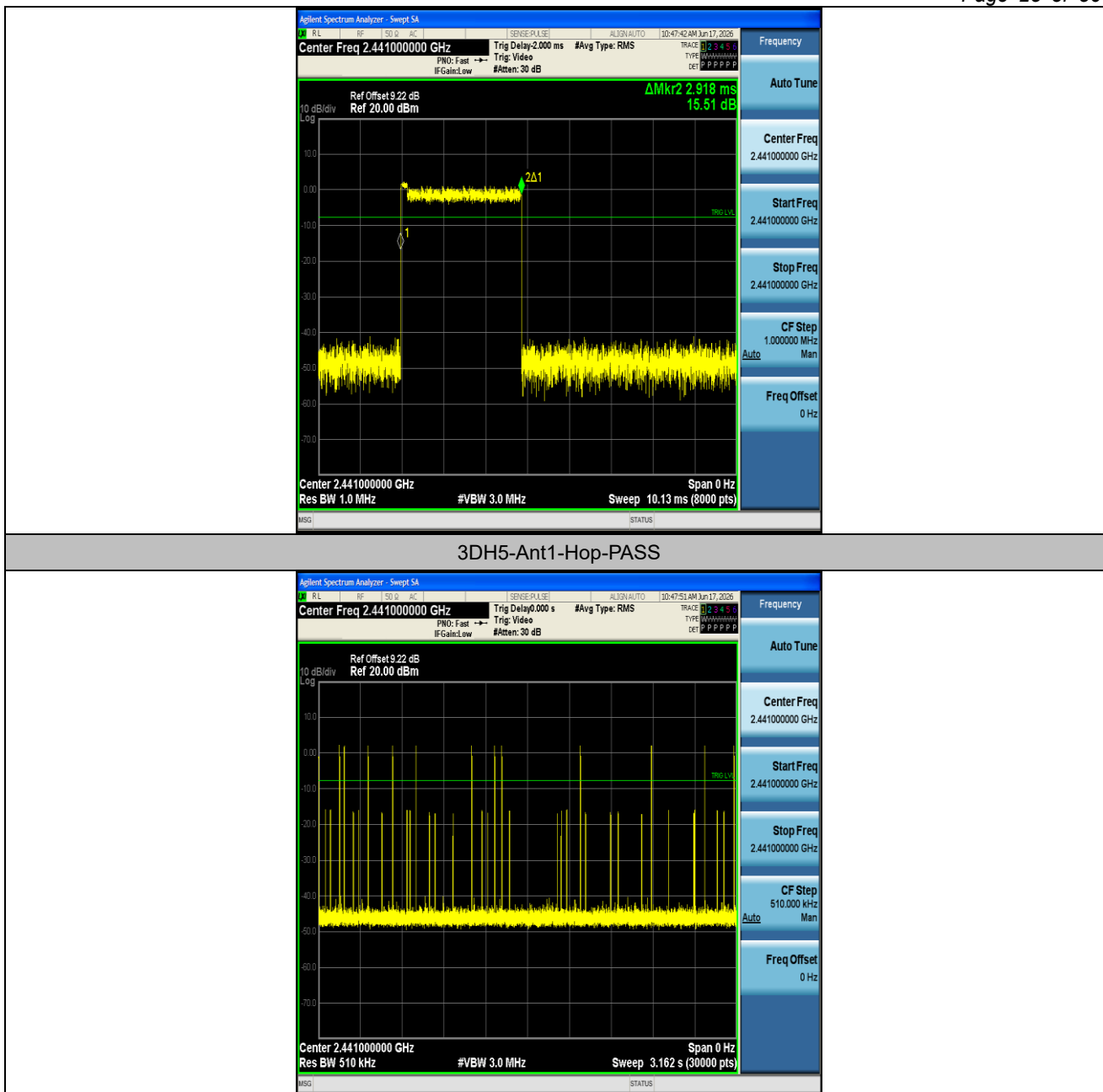




Test Graphs









Appendix F: Number of hopping channels

Test Result

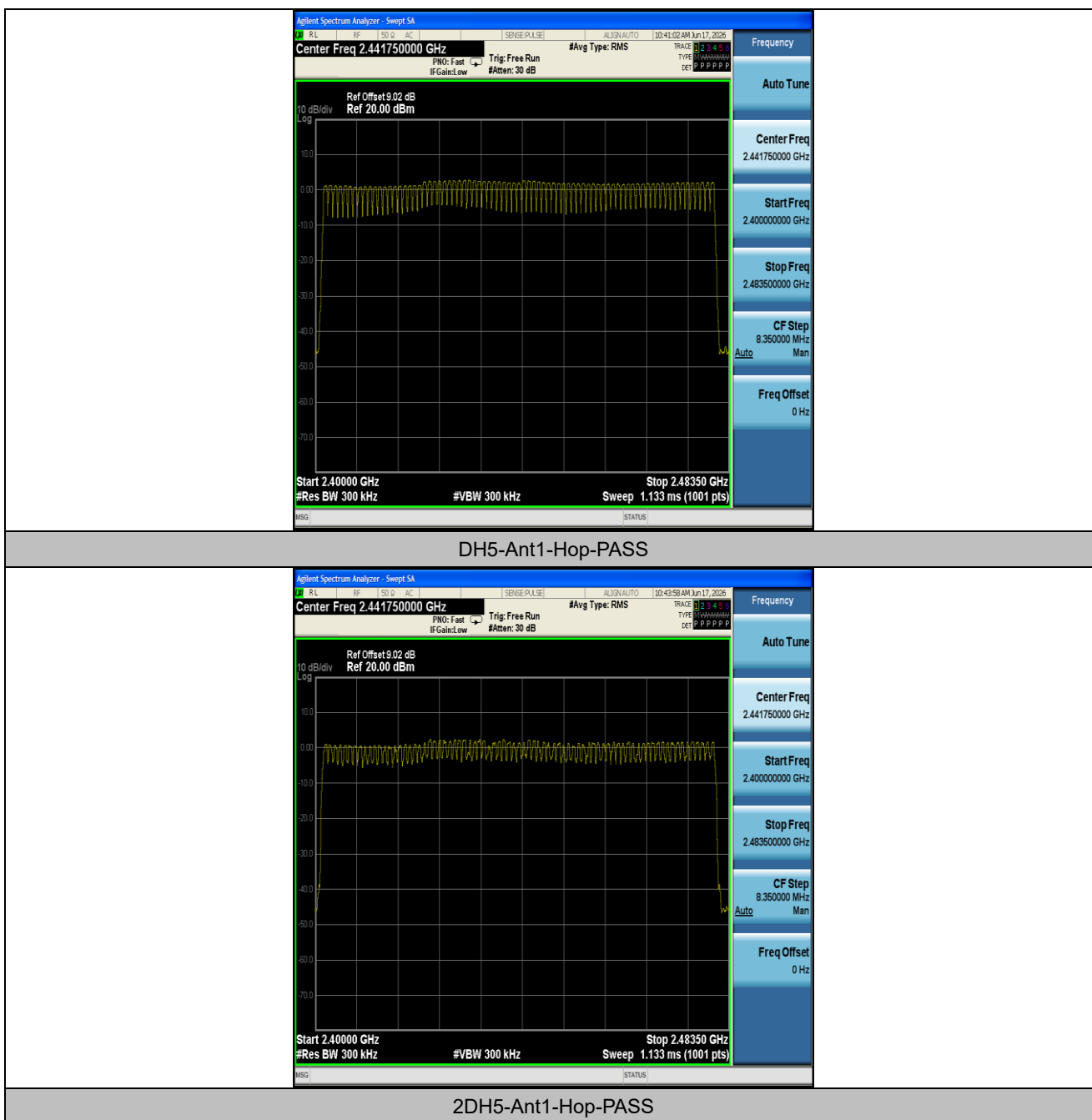
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

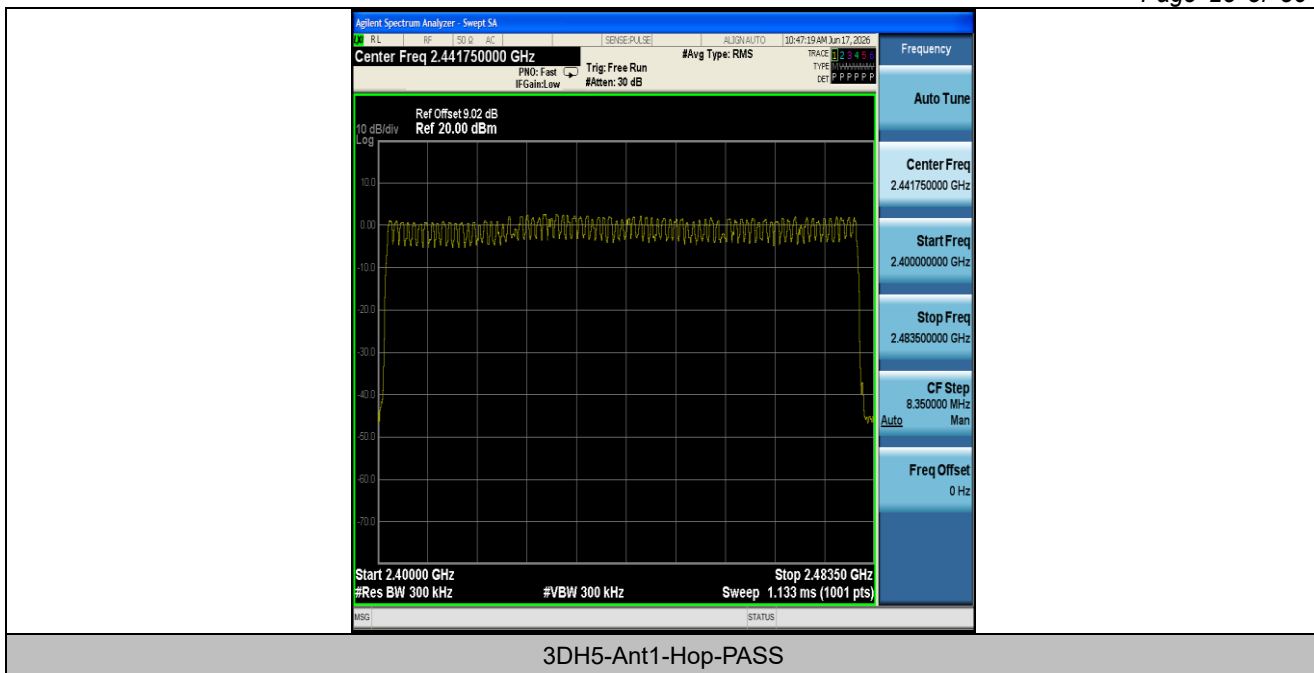
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

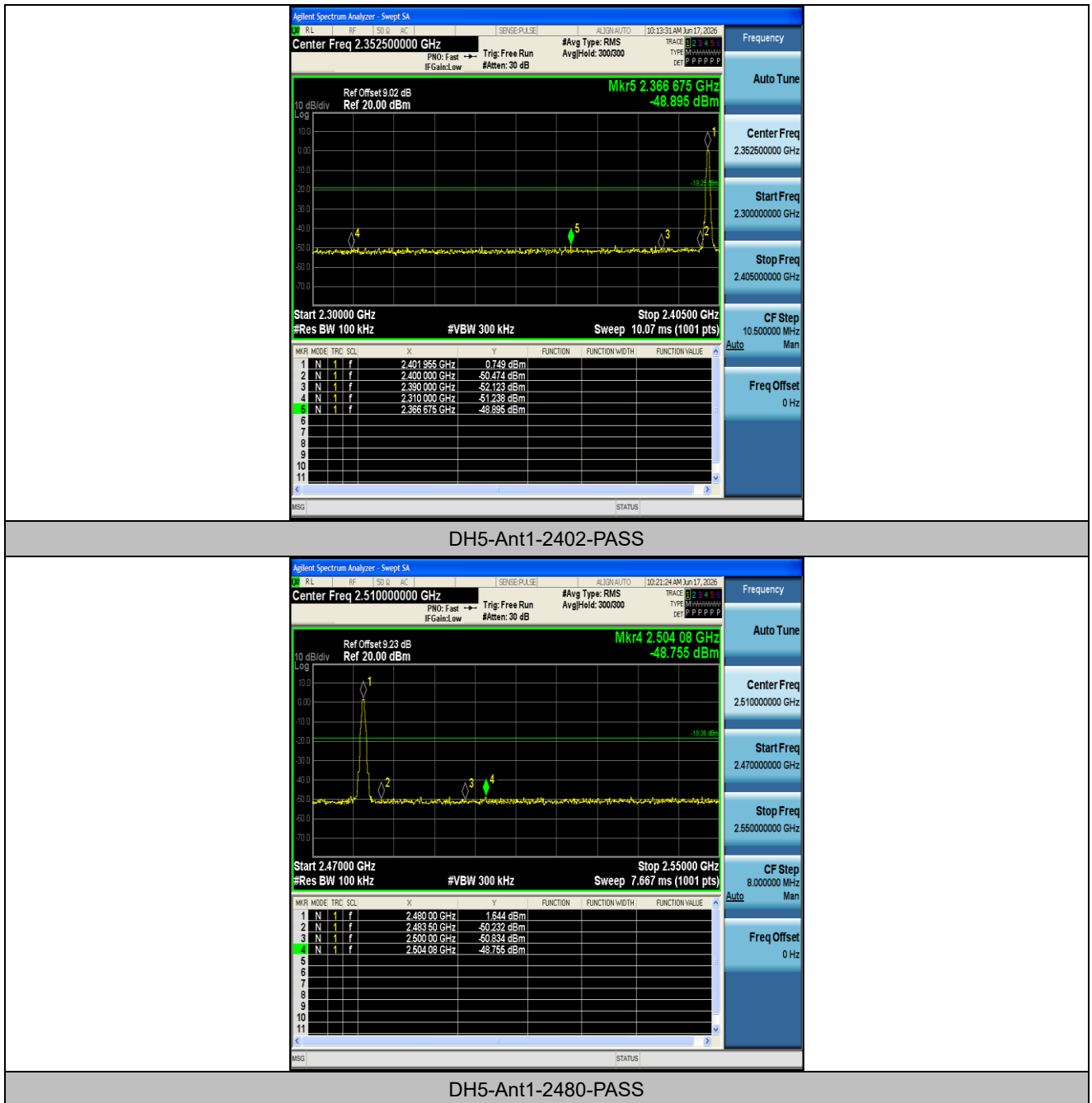
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.75	-48.9	≤-19.25	PASS
DH5	Ant1	High	2480	1.64	-48.76	≤-18.36	PASS
DH5	Ant1	Low	Hop_2402	-0.01	-49.23	≤-20.01	PASS
DH5	Ant1	High	Hop_2480	1.75	-47.67	≤-18.25	PASS
2DH5	Ant1	Low	2402	-0.11	-49.32	≤-20.11	PASS
2DH5	Ant1	High	2480	0.97	-46.45	≤-19.03	PASS
2DH5	Ant1	Low	Hop_2402	-1.73	-48.38	≤-21.73	PASS
2DH5	Ant1	High	Hop_2480	1.73	-48.1	≤-18.27	PASS
3DH5	Ant1	Low	2402	0.86	-48.37	≤-19.14	PASS
3DH5	Ant1	High	2480	1.44	-45.12	≤-18.56	PASS
3DH5	Ant1	Low	Hop_2402	0.41	-49.36	≤-19.59	PASS
3DH5	Ant1	High	Hop_2480	1.74	-47.51	≤-18.26	PASS

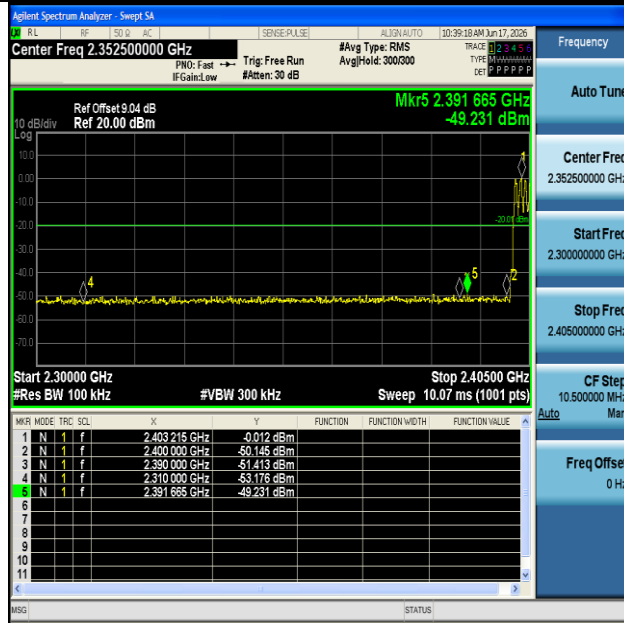
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



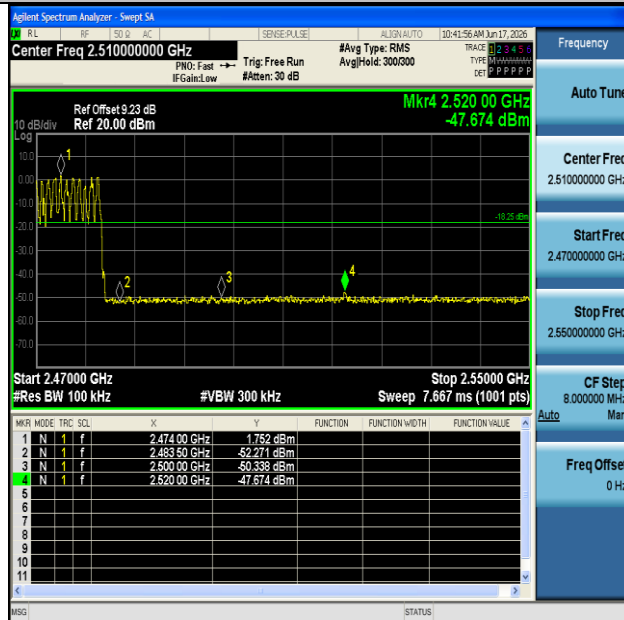


Test Graphs



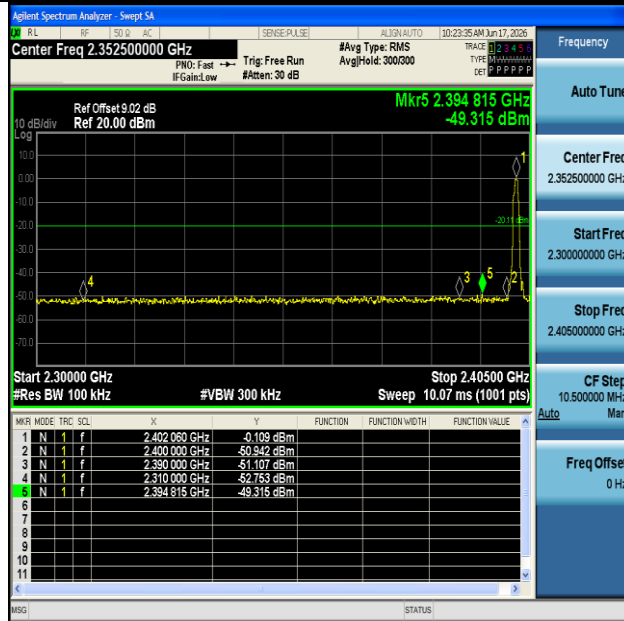


DH5-Ant1-Hop_2402-PASS

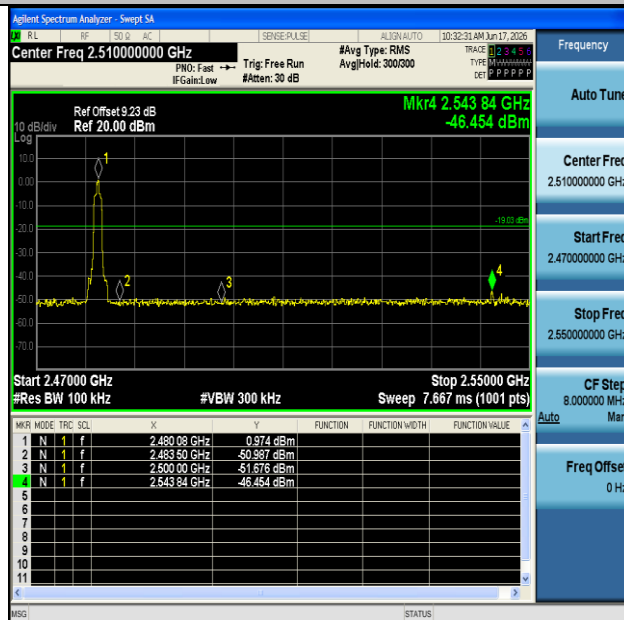


DH5-Ant1-Hop_2480-PASS



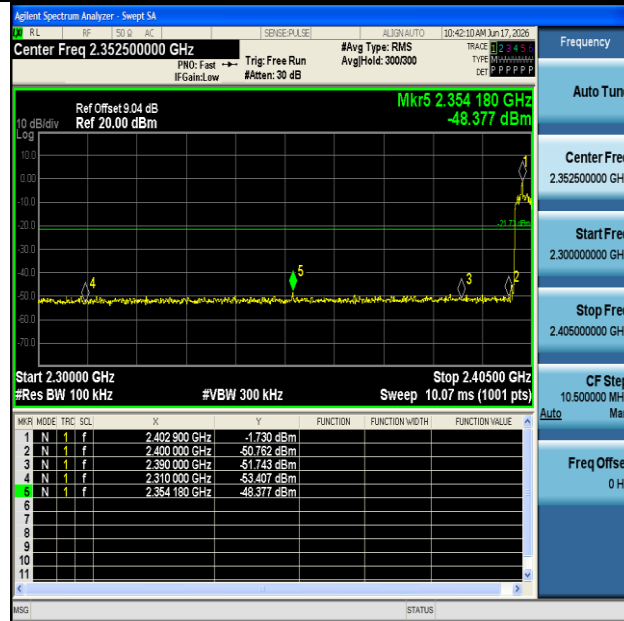


2DH5-Ant1-2402-PASS

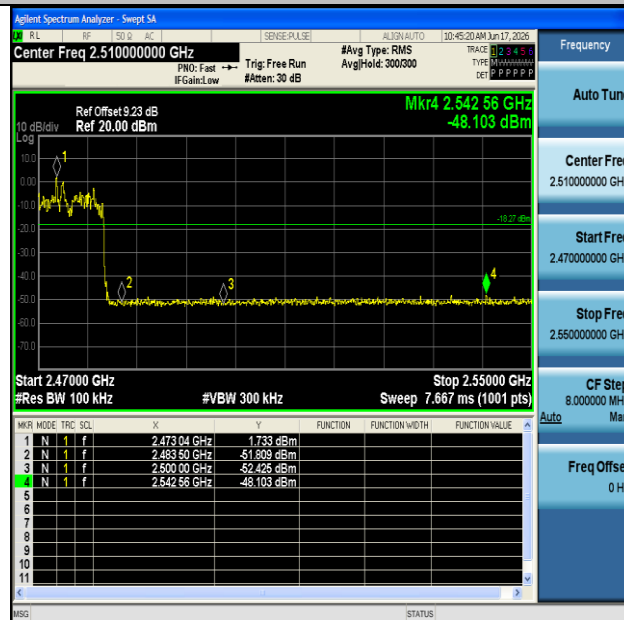


2DH5-Ant1-2480-PASS



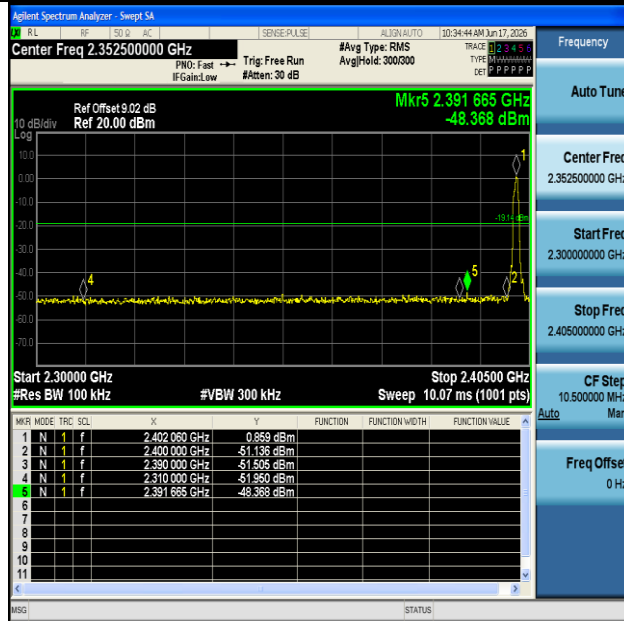


2DH5-Ant1-Hop_2402-PASS

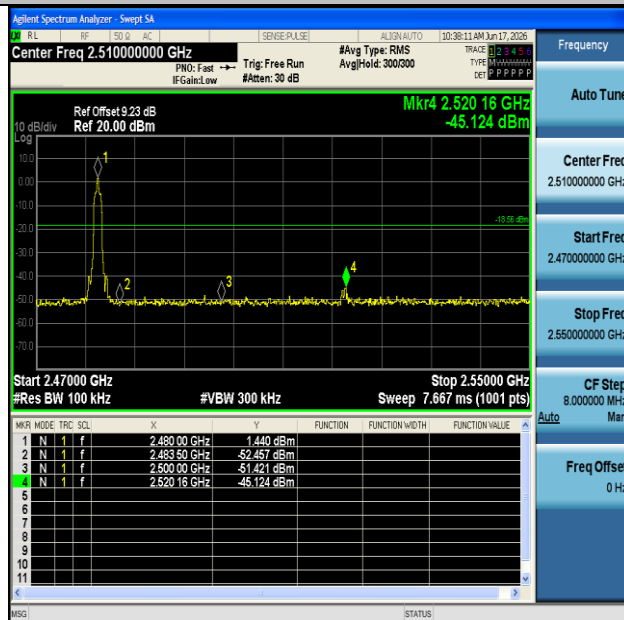


2DH5-Ant1-Hop_2480-PASS



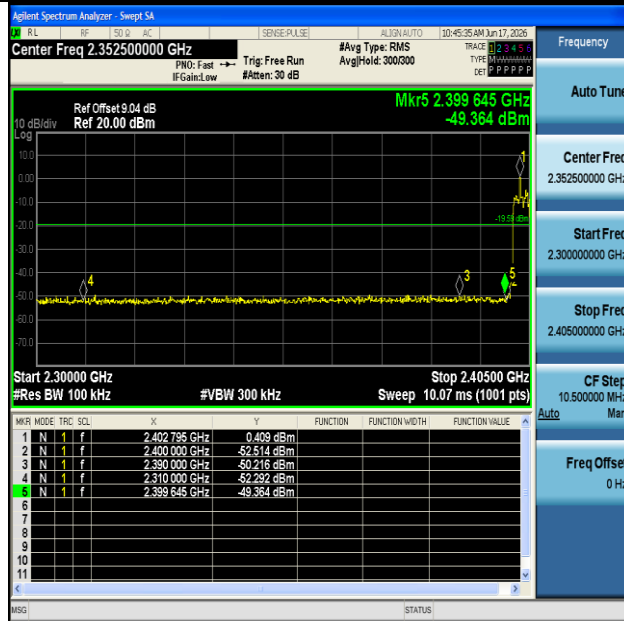


3DH5-Ant1-2402-PASS

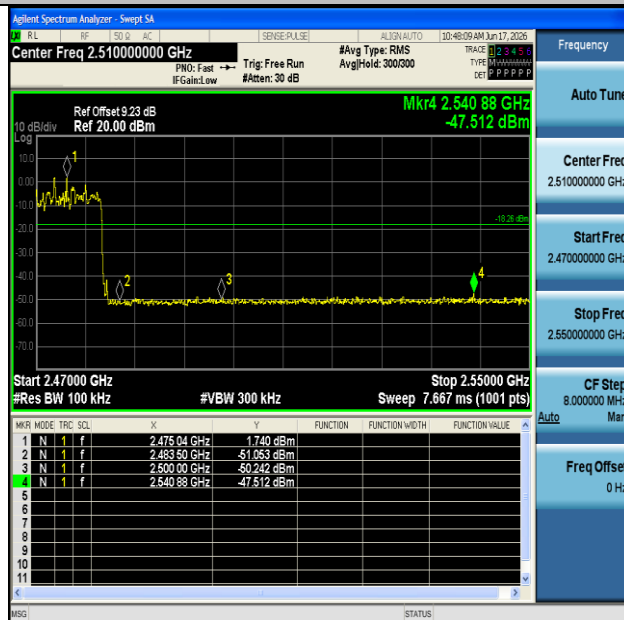


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

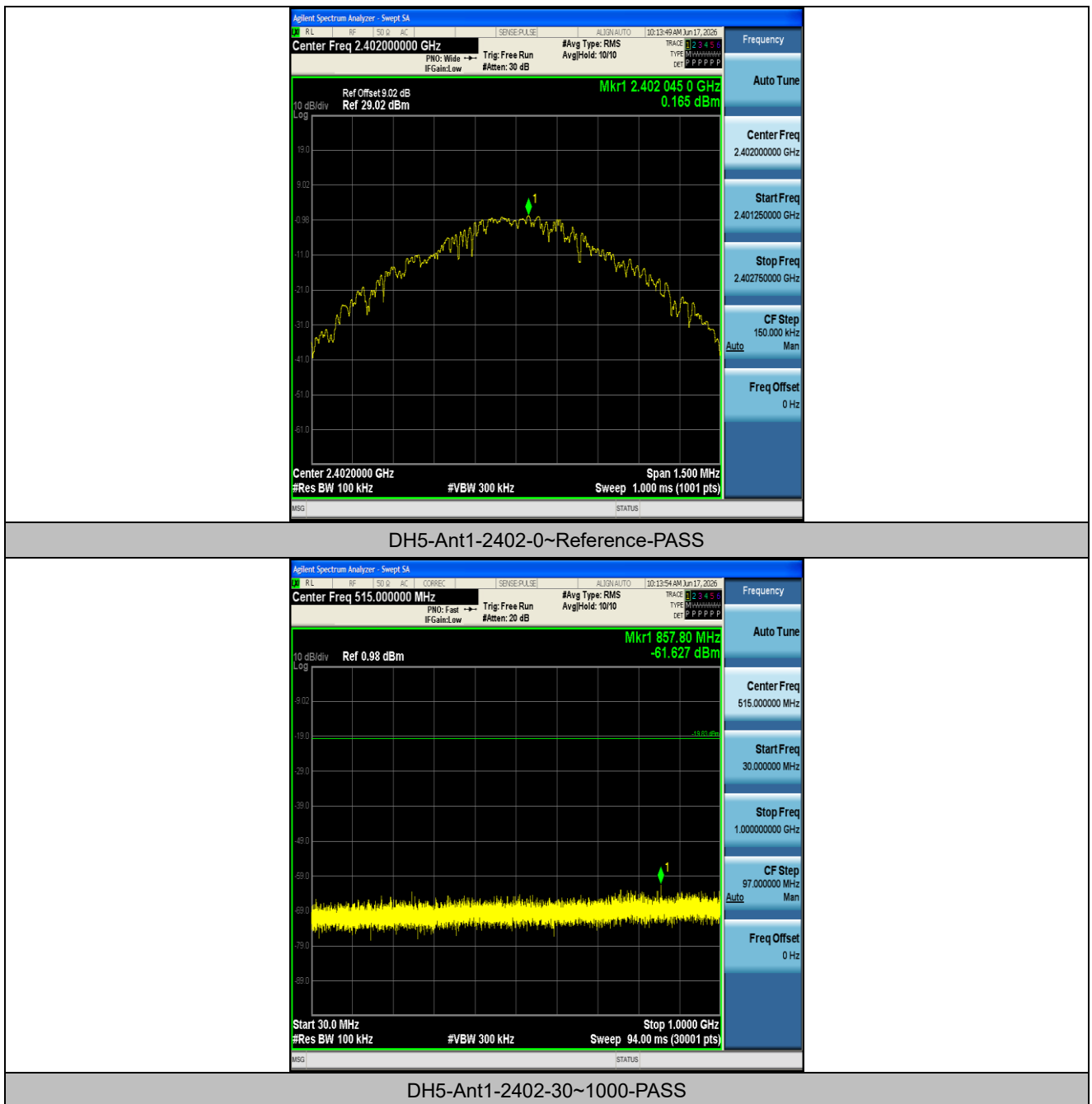
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	0.17	0.17	---	PASS
DH5	Ant1	2402	30~1000	0.17	-61.63	≤-19.83	PASS
DH5	Ant1	2402	1000~26500	0.17	-37.61	≤-19.83	PASS
DH5	Ant1	2441	0~Reference	1.22	1.22	---	PASS
DH5	Ant1	2441	30~1000	1.22	-62.85	≤-18.78	PASS
DH5	Ant1	2441	1000~26500	1.22	-37.35	≤-18.78	PASS
DH5	Ant1	2480	0~Reference	1.24	1.24	---	PASS
DH5	Ant1	2480	30~1000	1.24	-62.54	≤-18.76	PASS
DH5	Ant1	2480	1000~26500	1.24	-37.07	≤-18.76	PASS
2DH5	Ant1	2402	0~Reference	-2.48	-2.48	---	PASS
2DH5	Ant1	2402	30~1000	-2.48	-61.95	≤-22.48	PASS
2DH5	Ant1	2402	1000~26500	-2.48	-36.9	≤-22.48	PASS
2DH5	Ant1	2441	0~Reference	-4.94	-4.94	---	PASS
2DH5	Ant1	2441	30~1000	-4.94	-63.28	≤-24.94	PASS
2DH5	Ant1	2441	1000~26500	-4.94	-37.2	≤-24.94	PASS
2DH5	Ant1	2480	0~Reference	1.07	1.07	---	PASS
2DH5	Ant1	2480	30~1000	1.07	-62.81	≤-18.93	PASS
2DH5	Ant1	2480	1000~26500	1.07	-36.7	≤-18.93	PASS
3DH5	Ant1	2402	0~Reference	-1.73	-1.73	---	PASS
3DH5	Ant1	2402	30~1000	-1.73	-61.91	≤-21.73	PASS
3DH5	Ant1	2402	1000~26500	-1.73	-37.28	≤-21.73	PASS
3DH5	Ant1	2441	0~Reference	-3.40	-3.40	---	PASS
3DH5	Ant1	2441	30~1000	-3.40	-61.64	≤-23.4	PASS
3DH5	Ant1	2441	1000~26500	-3.40	-37.45	≤-23.4	PASS
3DH5	Ant1	2480	0~Reference	1.78	1.78	---	PASS
3DH5	Ant1	2480	30~1000	1.78	-62.43	≤-18.22	PASS
3DH5	Ant1	2480	1000~26500	1.78	-36.71	≤-18.22	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.



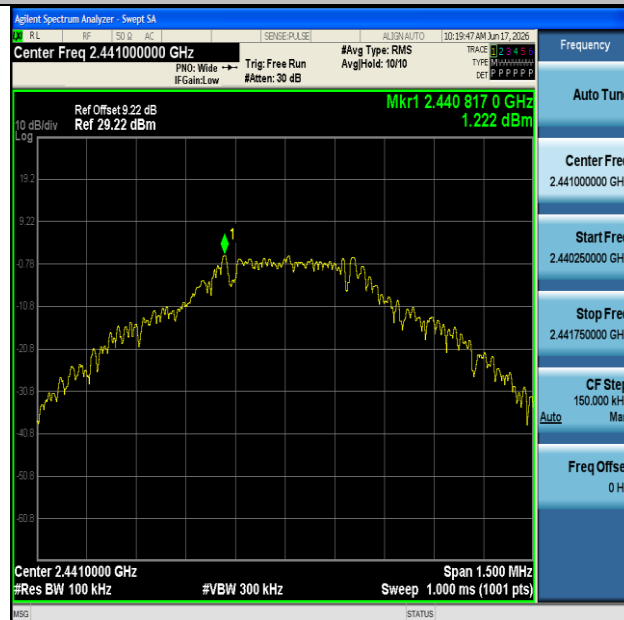


Test Graphs



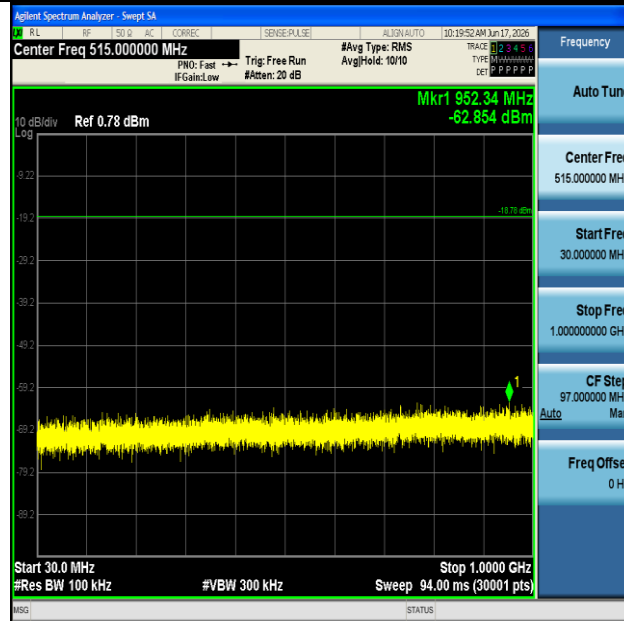


DH5-Ant1-2402-1000~26500-PASS

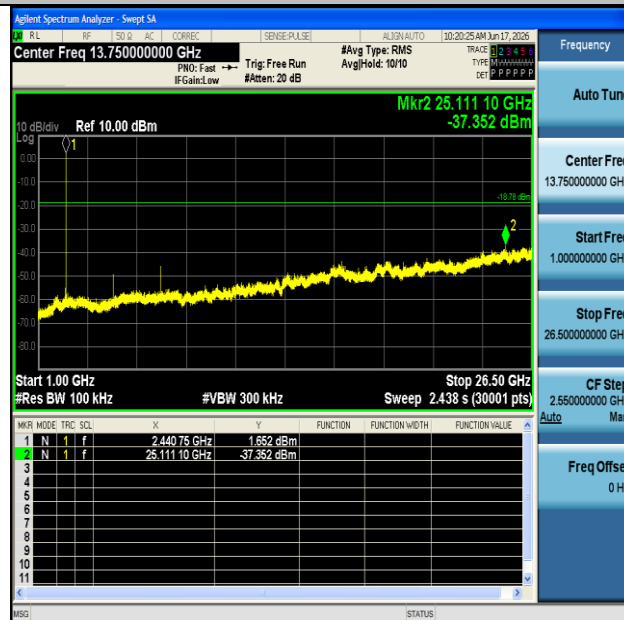


DH5-Ant1-2441-0~Reference-PASS





DH5-Ant1-2441-30~1000-PASS

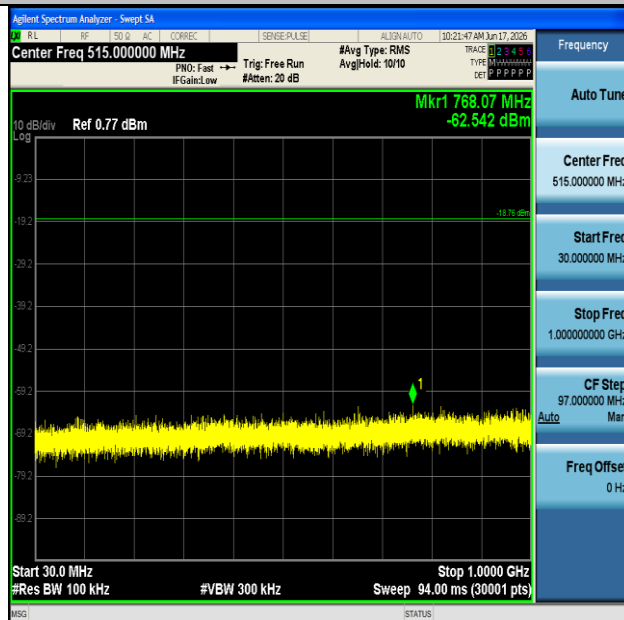


DH5-Ant1-2441-1000~26500-PASS



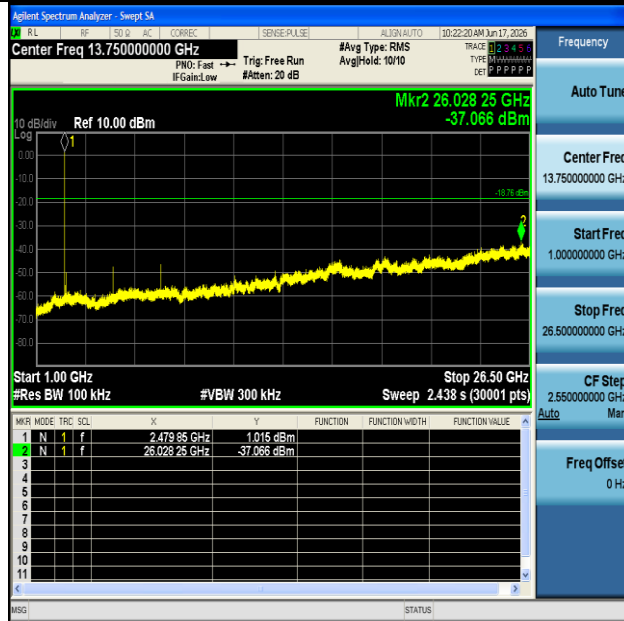


DH5-Ant1-2480-0~Reference-PASS



DH5-Ant1-2480-30~1000-PASS



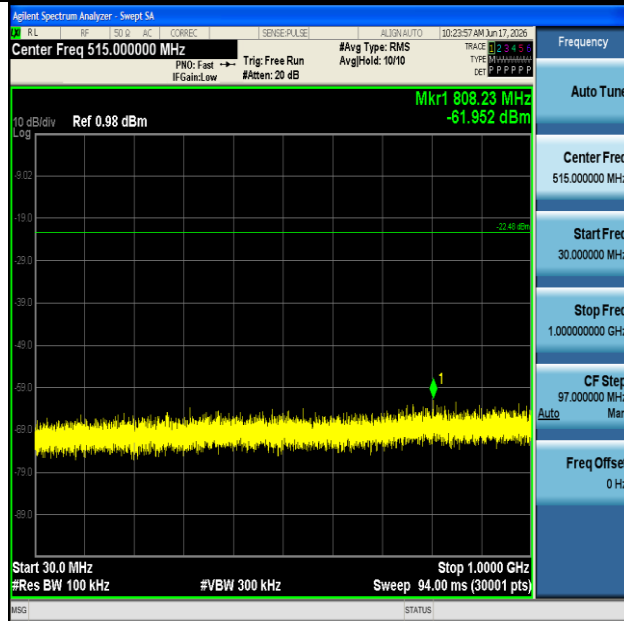


DH5-Ant1-2480-1000~26500-PASS

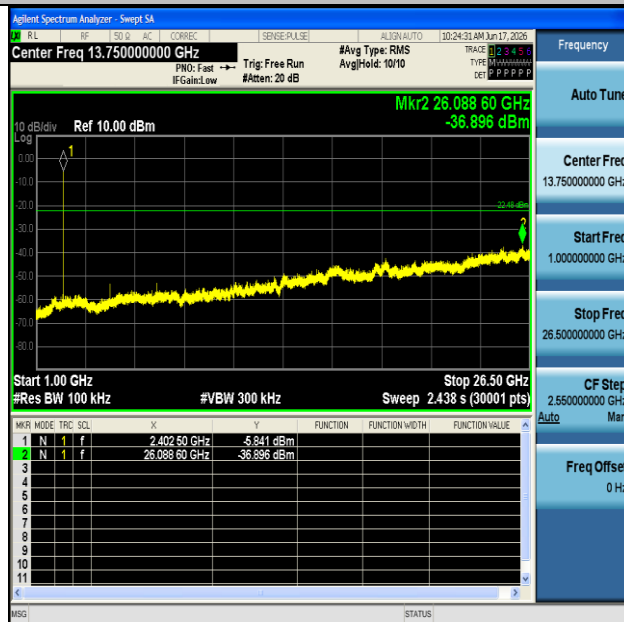


2DH5-Ant1-2402-0~Reference-PASS



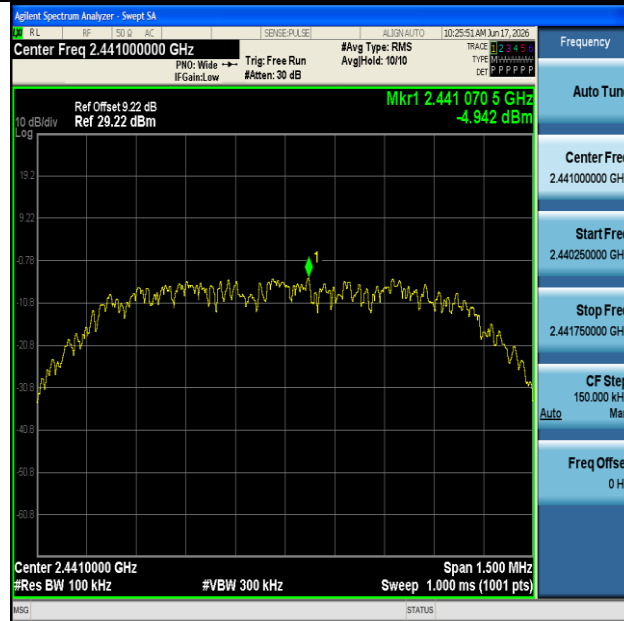


2DH5-Ant1-2402-30~1000-PASS

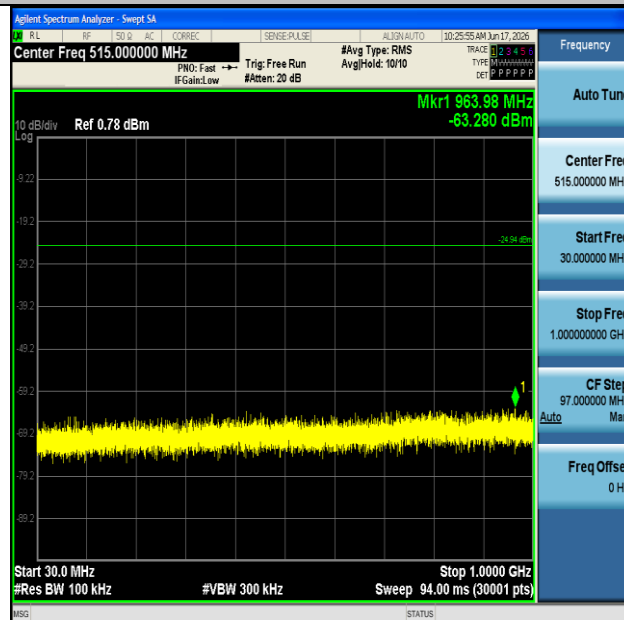


2DH5-Ant1-2402-1000~26500-PASS



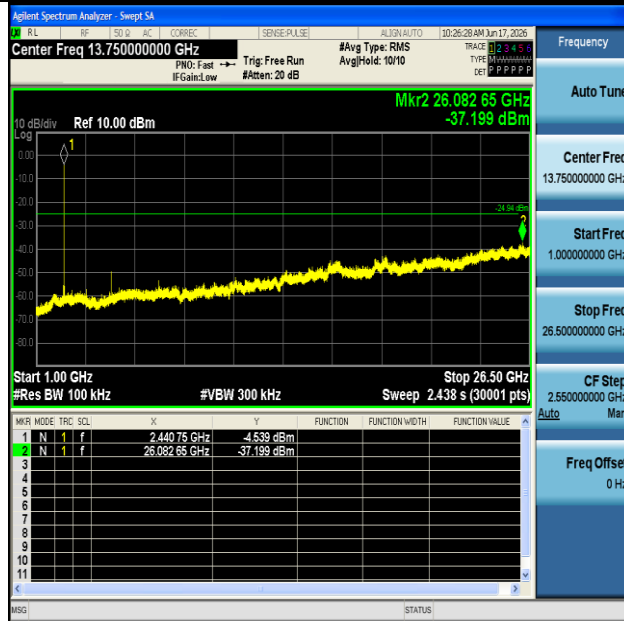


2DH5-Ant1-2441-0~Reference-PASS



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



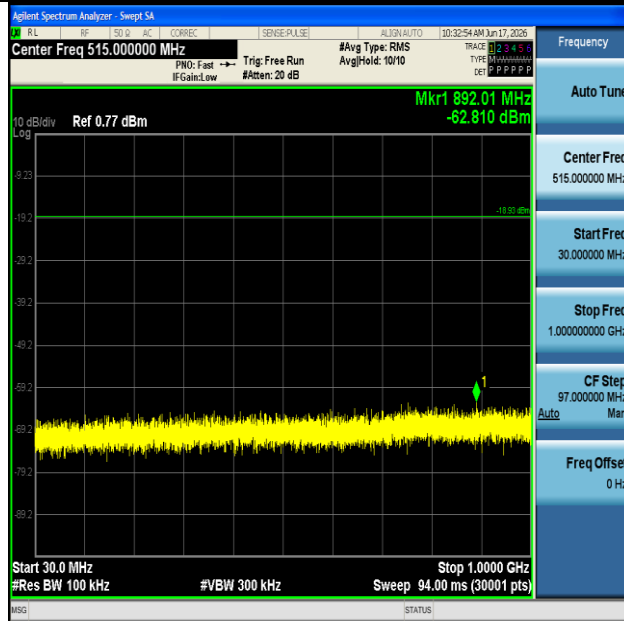


2DH5-Ant1-2441-1000~26500-PASS

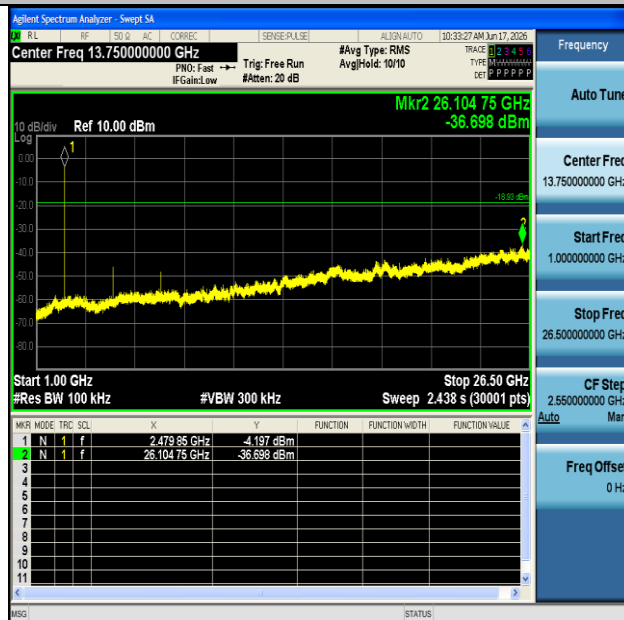


2DH5-Ant1-2480-0~Reference-PASS





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

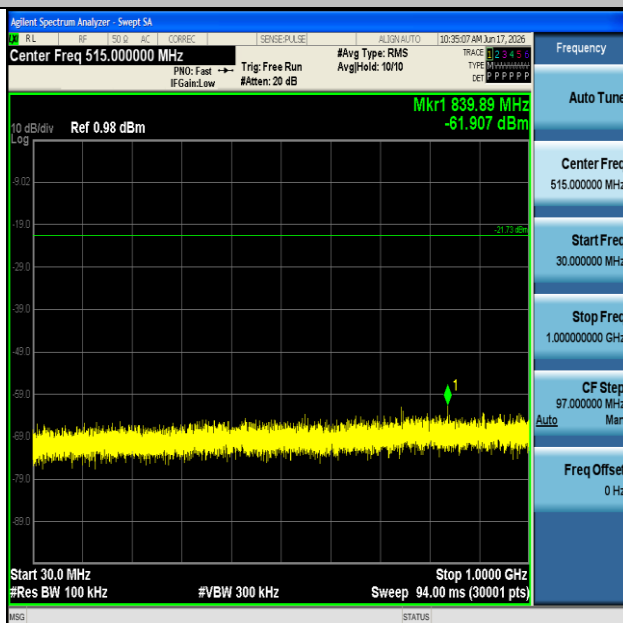


2DH5-Ant1-2480-1000~26500-PASS



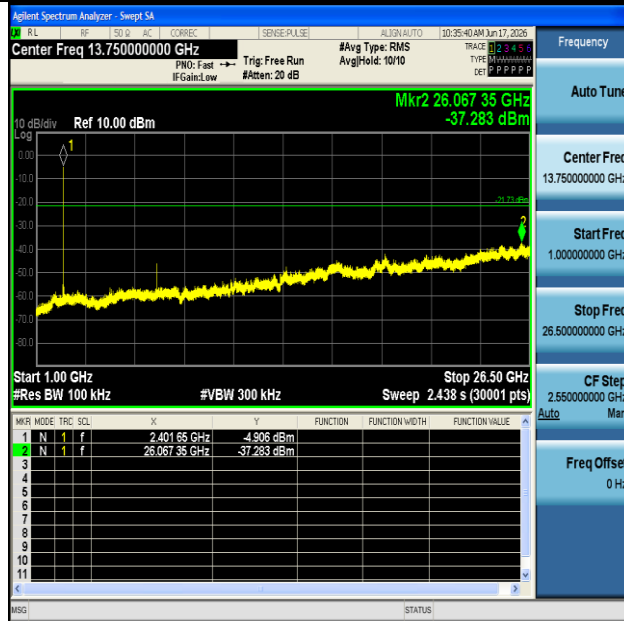


3DH5-Ant1-2402-0~Reference-PASS

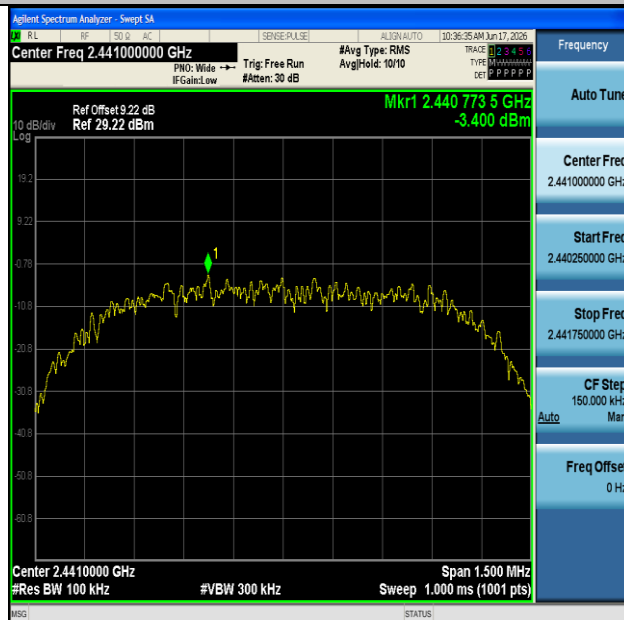


3DH5-Ant1-2402-30~1000-PASS





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

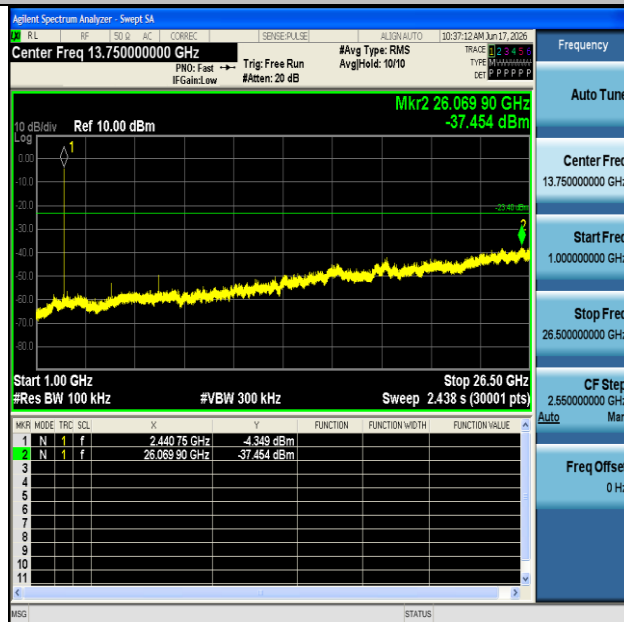


3DH5-Ant1-2441-0~Reference-PASS





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

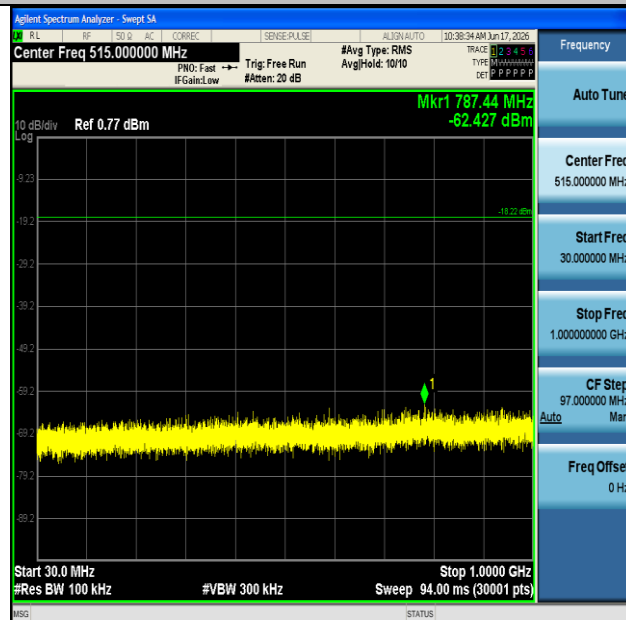


3DH5-Ant1-2441-1000~26500-PASS



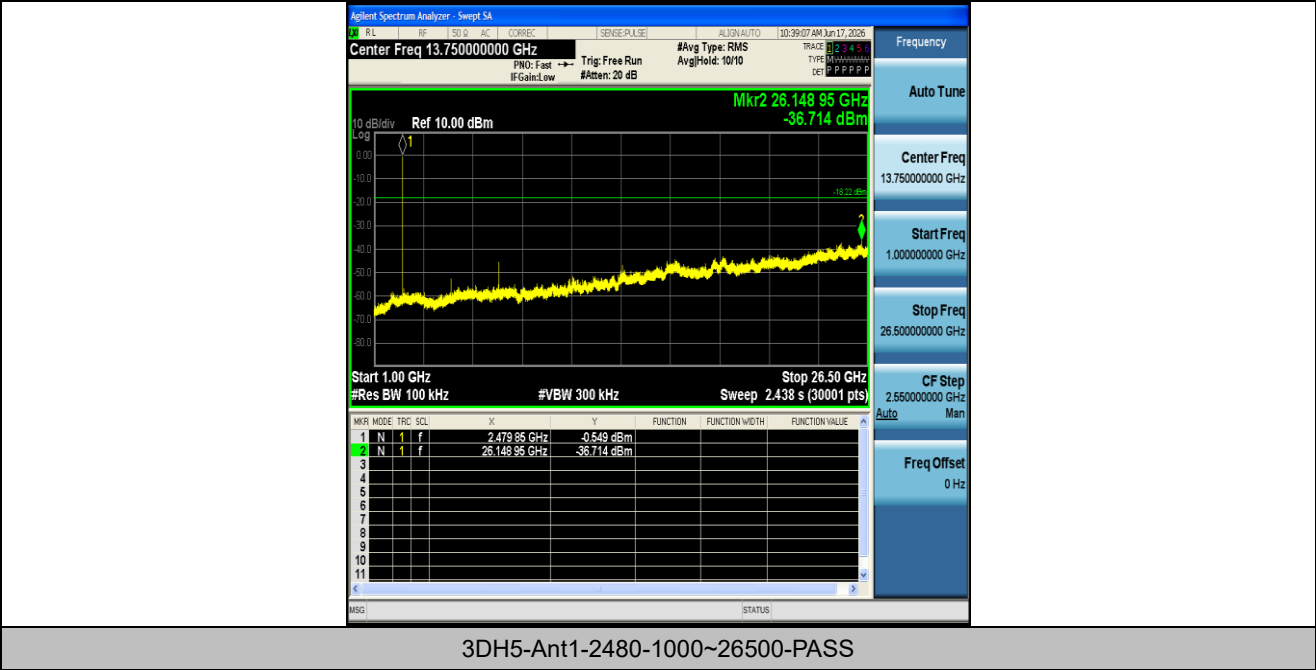


3DH5-Ant1-2480-0~Reference-PASS



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







Appendix I: Duty Cycle

Test Result

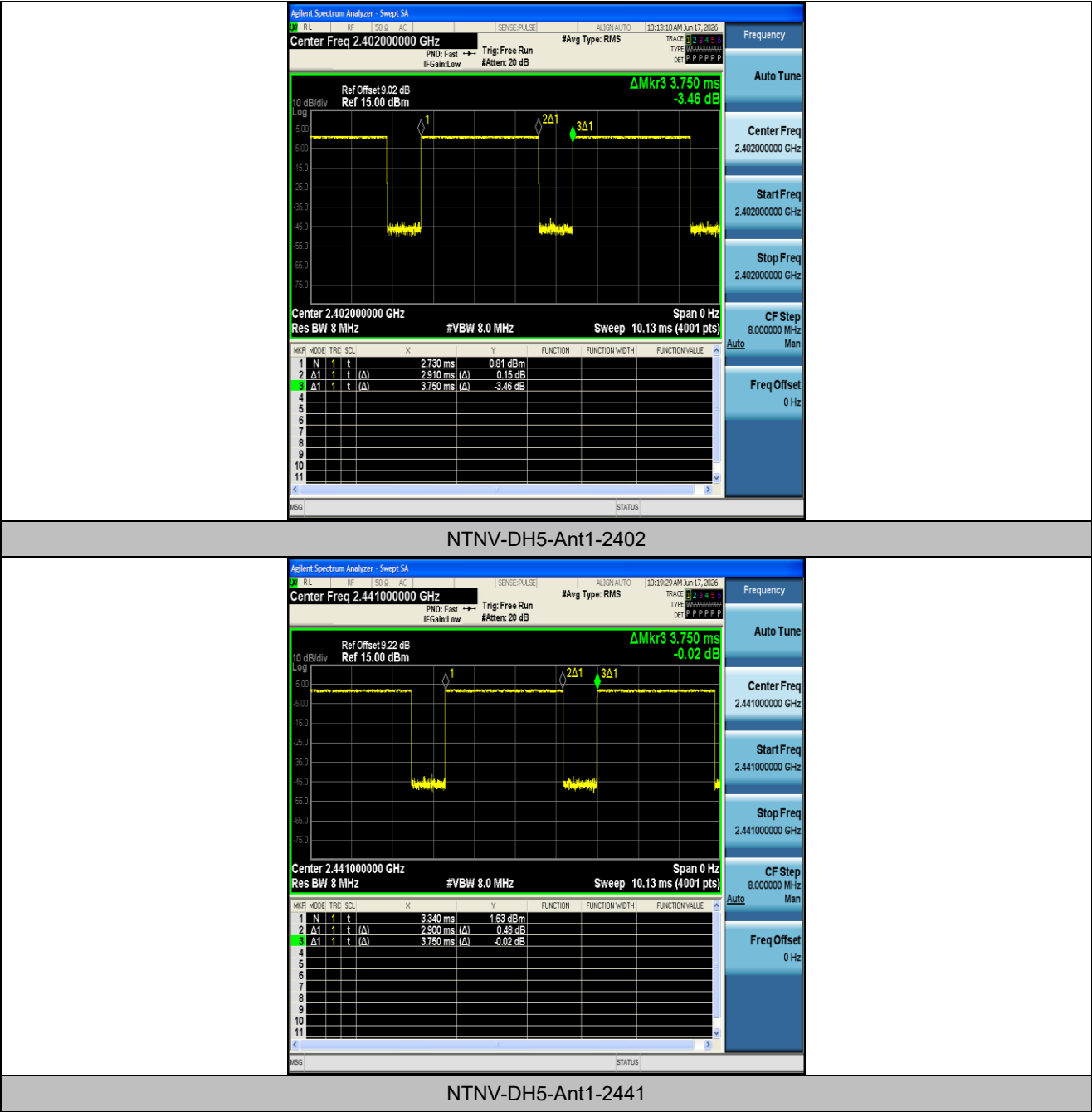
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
DH5	Ant1	2402	2.91	3.75	77.60	1.10
DH5	Ant1	2441	2.90	3.75	77.33	1.12
DH5	Ant1	2480	2.91	3.75	77.60	1.10
2DH5	Ant1	2402	2.92	3.75	77.87	1.09
2DH5	Ant1	2441	2.91	3.75	77.60	1.10
2DH5	Ant1	2480	2.91	3.75	77.60	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	2.92	3.76	77.66	1.10

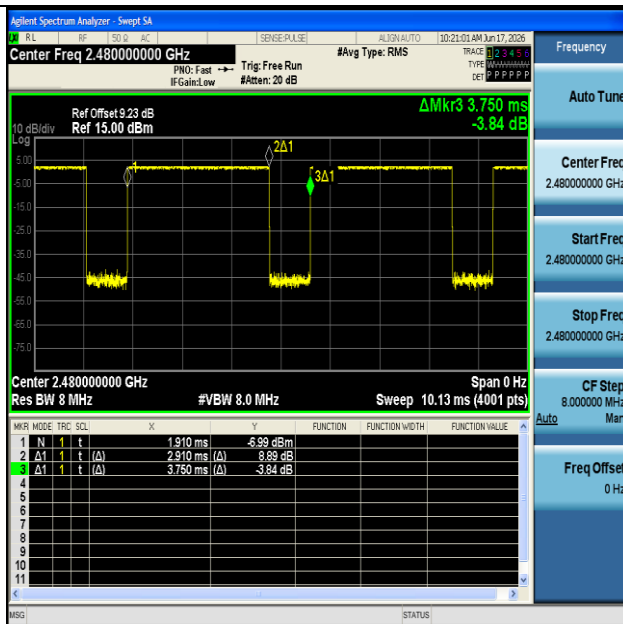
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



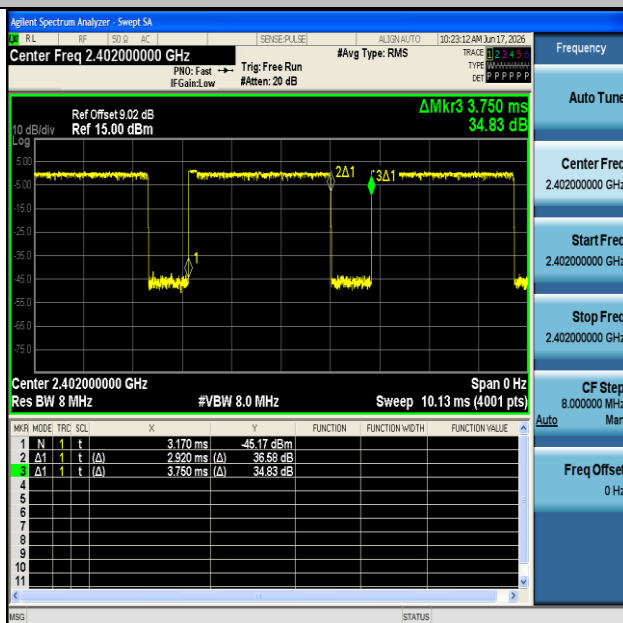


Test Graphs



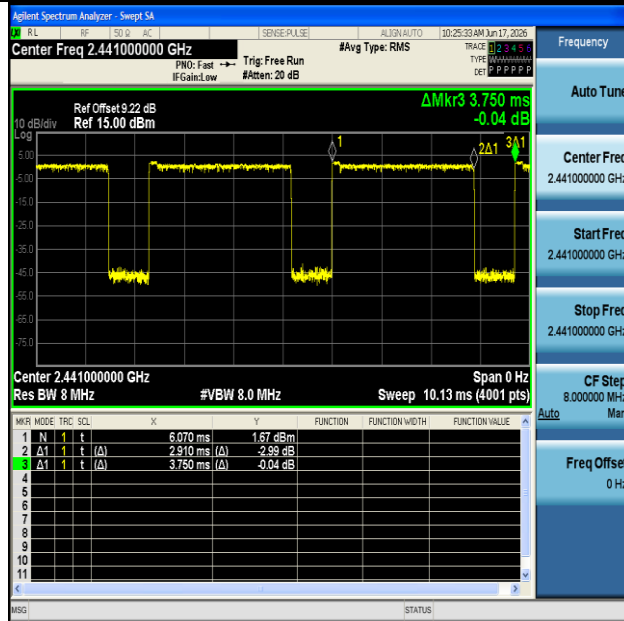


NTNV-DH5-Ant1-2480

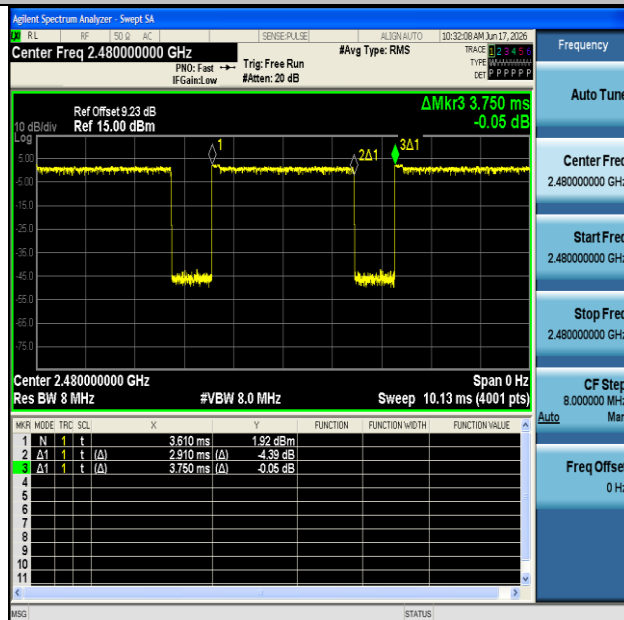


NTNV-2DH5-Ant1-2402



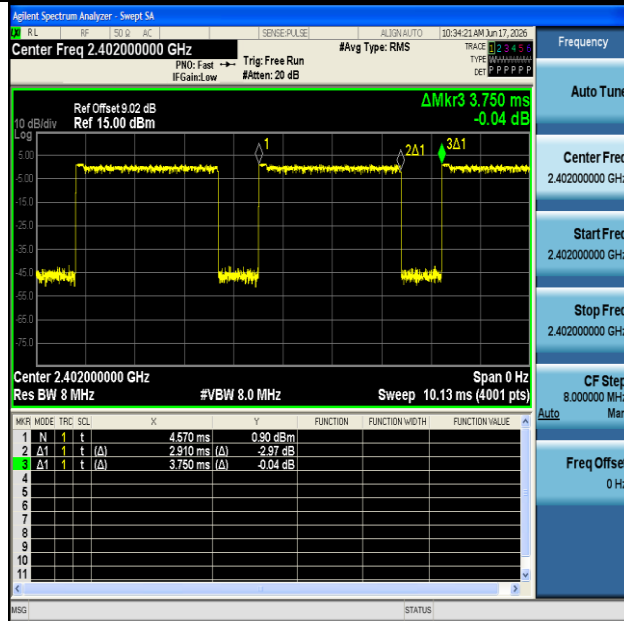


NTNV-2DH5-Ant1-2441

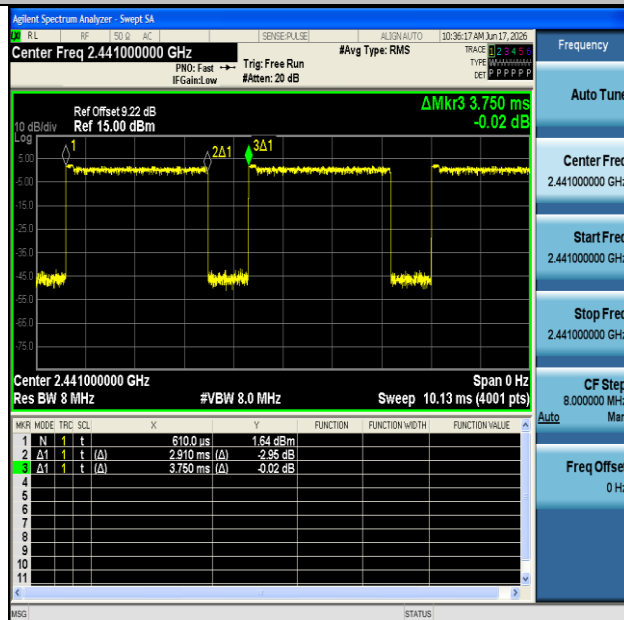


NTNV-2DH5-Ant1-2480



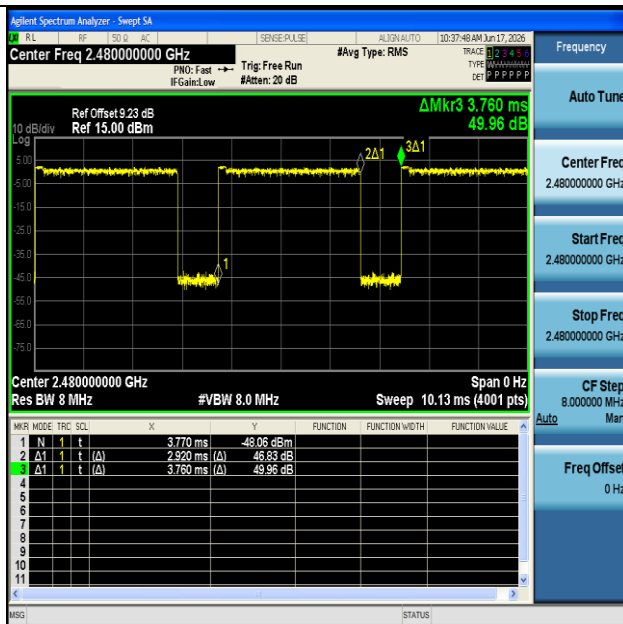


NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441





NTNV-3DH5-Ant1-2480

