



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

Product Name: Portable Bluetooth Speaker PEANUTS

Trade Mark: /

Test Model: BT018PN

FCC ID: UU8-BT018PN

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	1.029	2401.487	2402.516	---	---
DH5	Ant1	2441	1.032	2440.478	2441.510	---	---
DH5	Ant1	2480	1.044	2479.469	2480.513	---	---
2DH5	Ant1	2402	1.296	2401.367	2402.663	---	---
2DH5	Ant1	2441	1.329	2440.337	2441.666	---	---
2DH5	Ant1	2480	1.356	2479.331	2480.687	---	---
3DH5	Ant1	2402	1.305	2401.352	2402.657	---	---
3DH5	Ant1	2441	1.308	2440.346	2441.654	---	---
3DH5	Ant1	2480	1.347	2479.319	2480.666	---	---

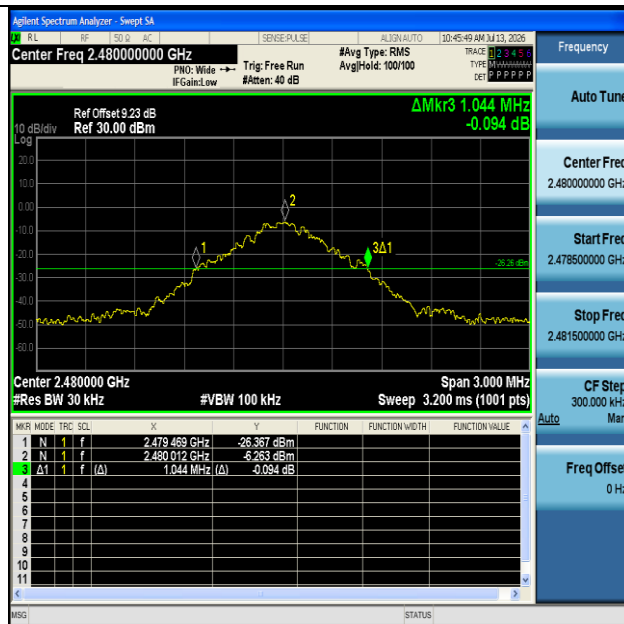
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



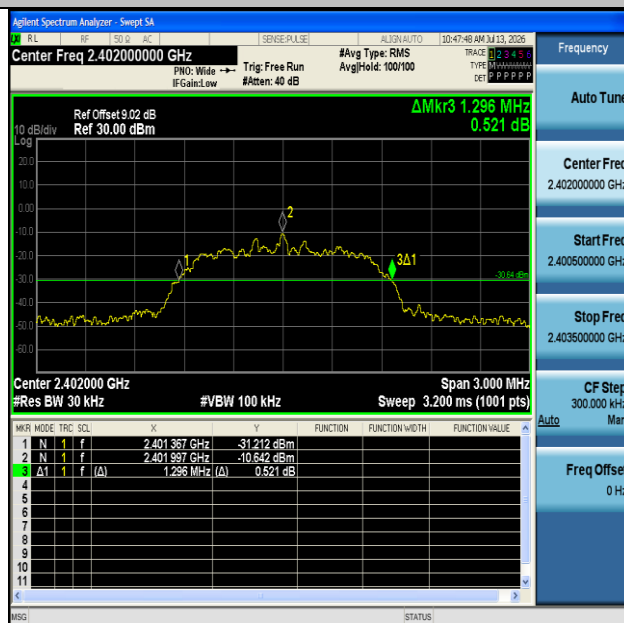


Test Graphs





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	0.93700	2401.5297	2402.4667	---	---
DH5	Ant1	2441	0.94952	2440.5194	2441.4689	---	---
DH5	Ant1	2480	0.93980	2479.5287	2480.4685	---	---
2DH5	Ant1	2402	1.2347	2401.3932	2402.6279	---	---
2DH5	Ant1	2441	1.2116	2440.4005	2441.6121	---	---
2DH5	Ant1	2480	1.2526	2479.3771	2480.6297	---	---
3DH5	Ant1	2402	1.2186	2401.3860	2402.6046	---	---
3DH5	Ant1	2441	1.2294	2440.3819	2441.6113	---	---
3DH5	Ant1	2480	1.2393	2479.3767	2480.6160	---	---

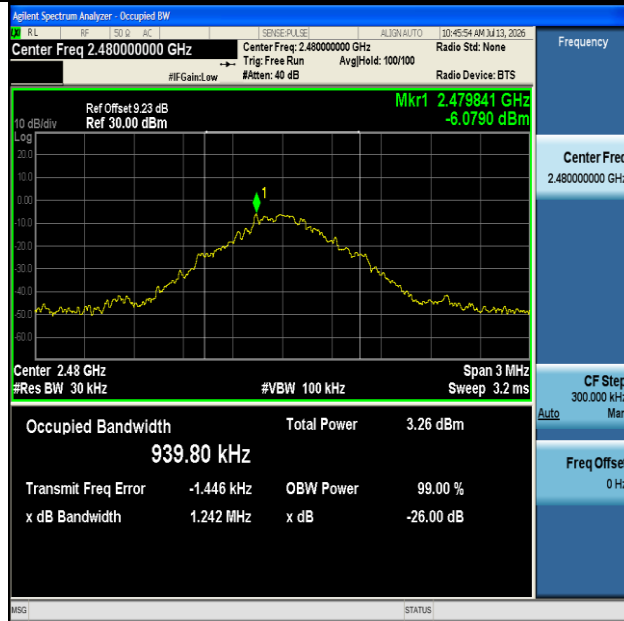
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



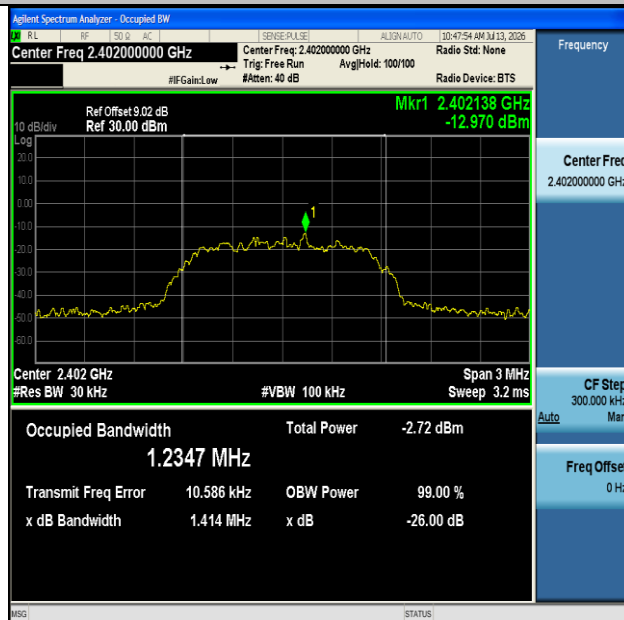


Test Graphs



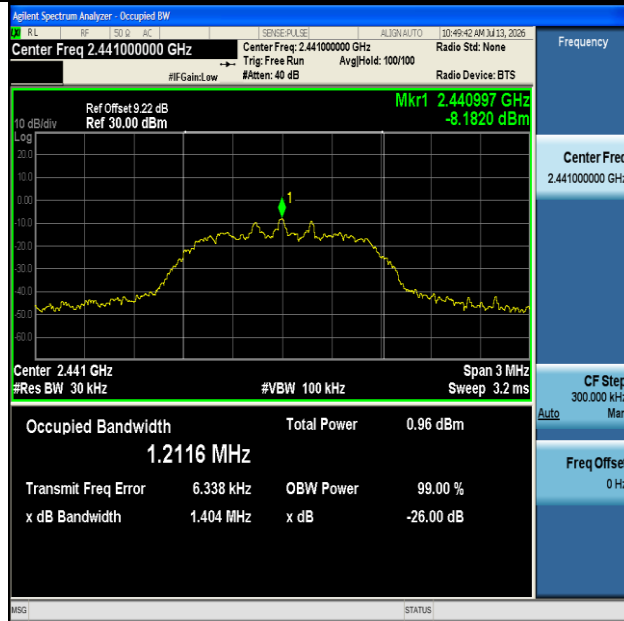


DH5-Ant1-2480

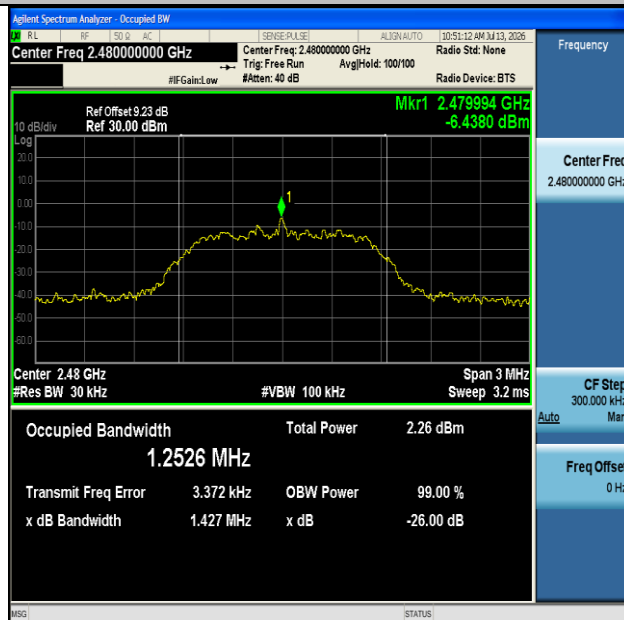


2DH5-Ant1-2402



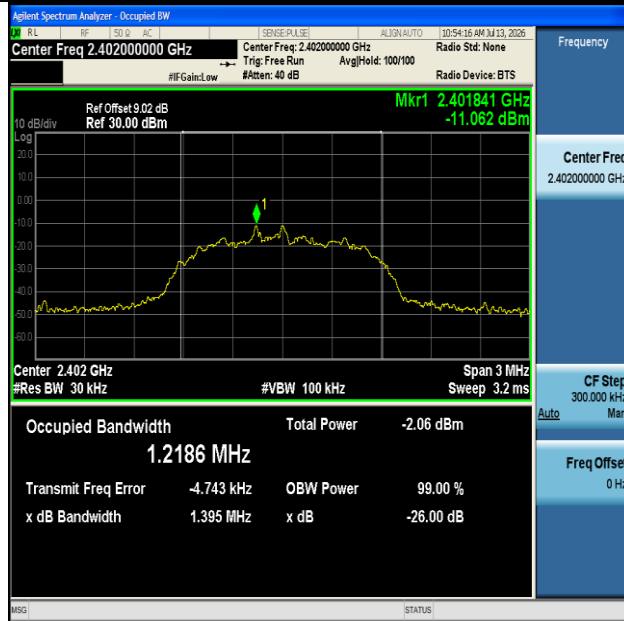


2DH5-Ant1-2441

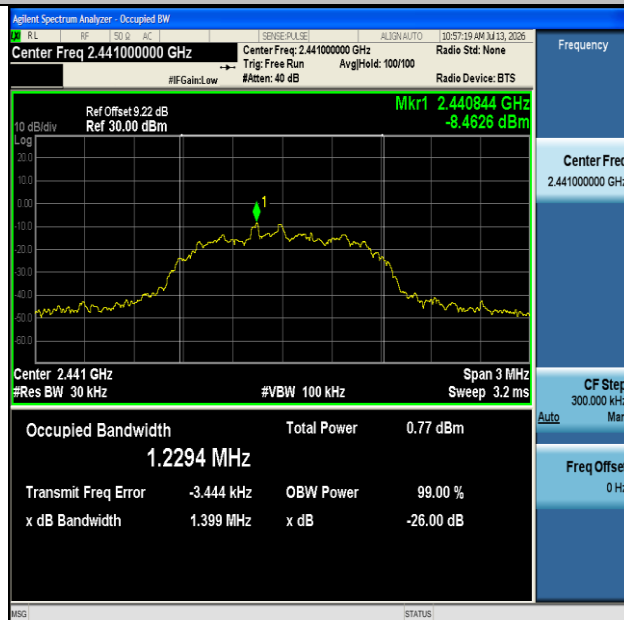


2DH5-Ant1-2480



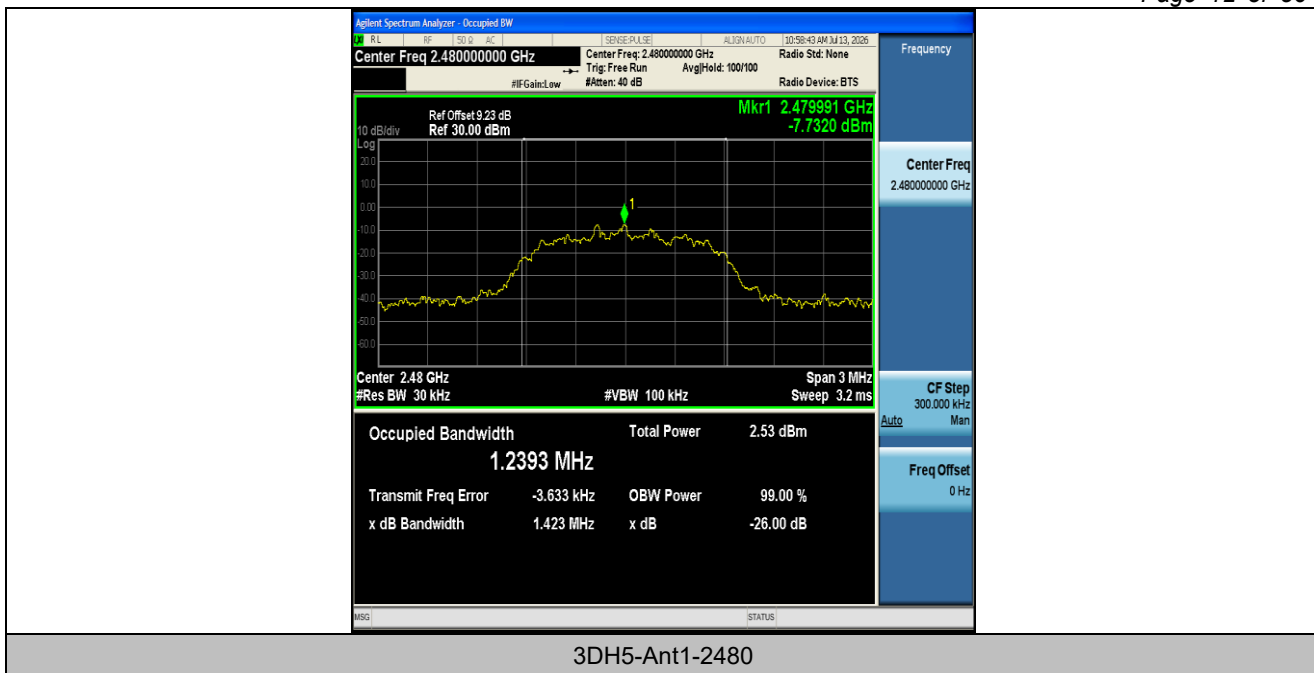


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

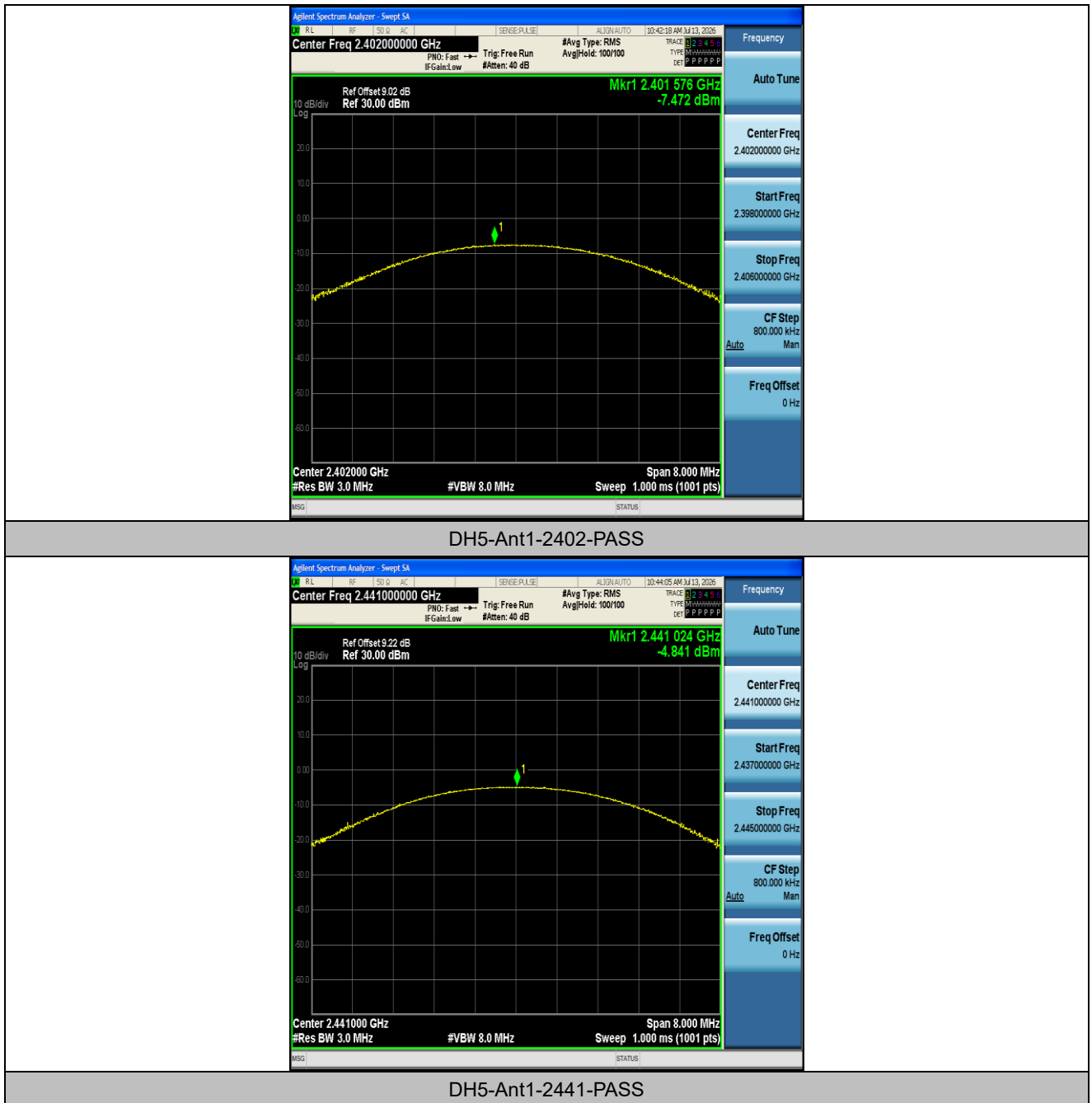
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	-7.47	≤30	PASS
DH5	Ant1	2441	-4.84	≤30	PASS
DH5	Ant1	2480	-3.11	≤30	PASS
2DH5	Ant1	2402	-6.89	≤20.97	PASS
2DH5	Ant1	2441	-4.41	≤20.97	PASS
2DH5	Ant1	2480	-2.85	≤20.97	PASS
3DH5	Ant1	2402	-6.61	≤20.97	PASS
3DH5	Ant1	2441	-4.11	≤20.97	PASS
3DH5	Ant1	2480	-2.60	≤20.97	PASS

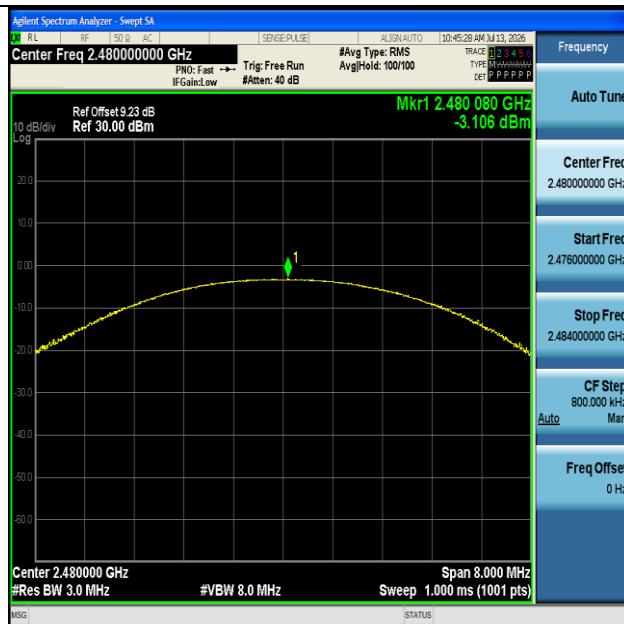
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



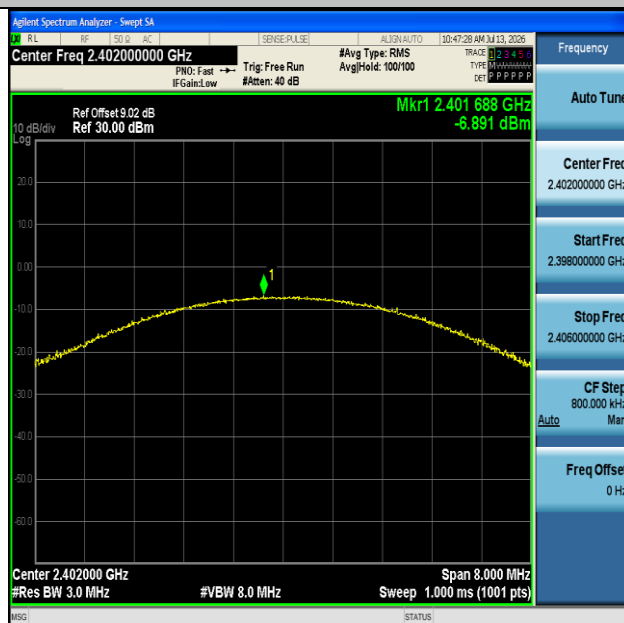


Test Graphs



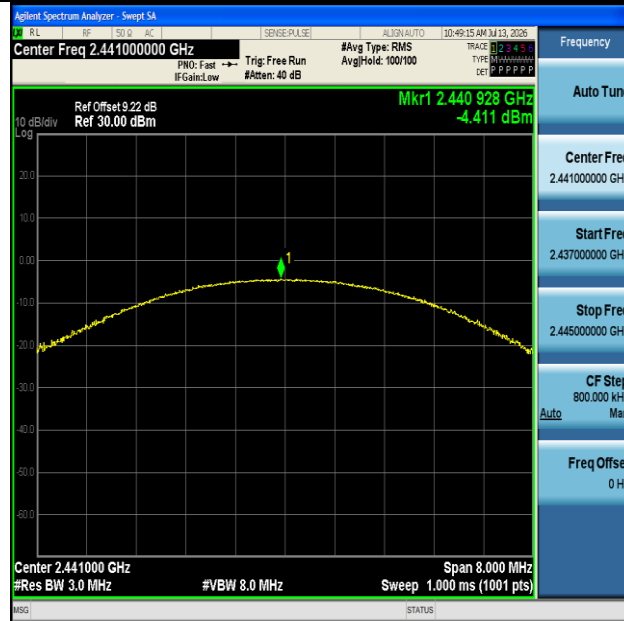


DH5-Ant1-2480-PASS

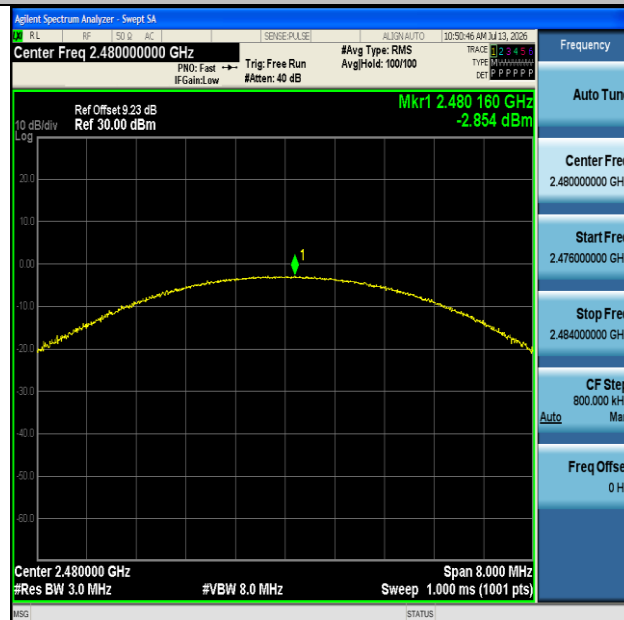


2DH5-Ant1-2402-PASS



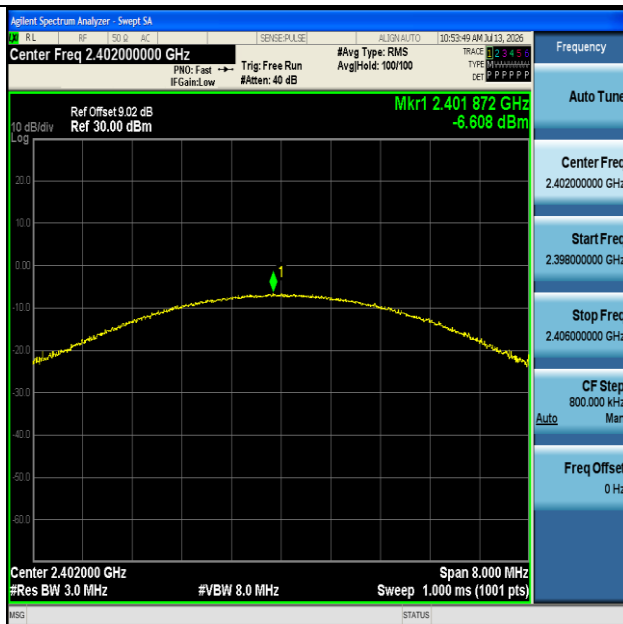


2DH5-Ant1-2441-PASS

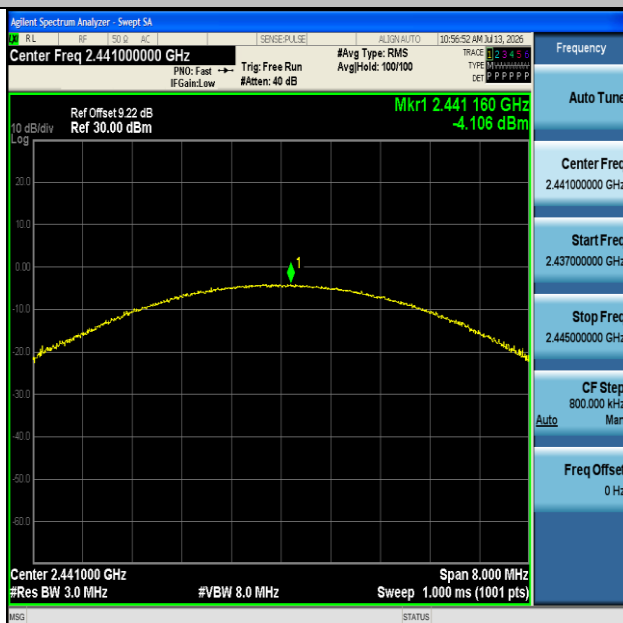


2DH5-Ant1-2480-PASS



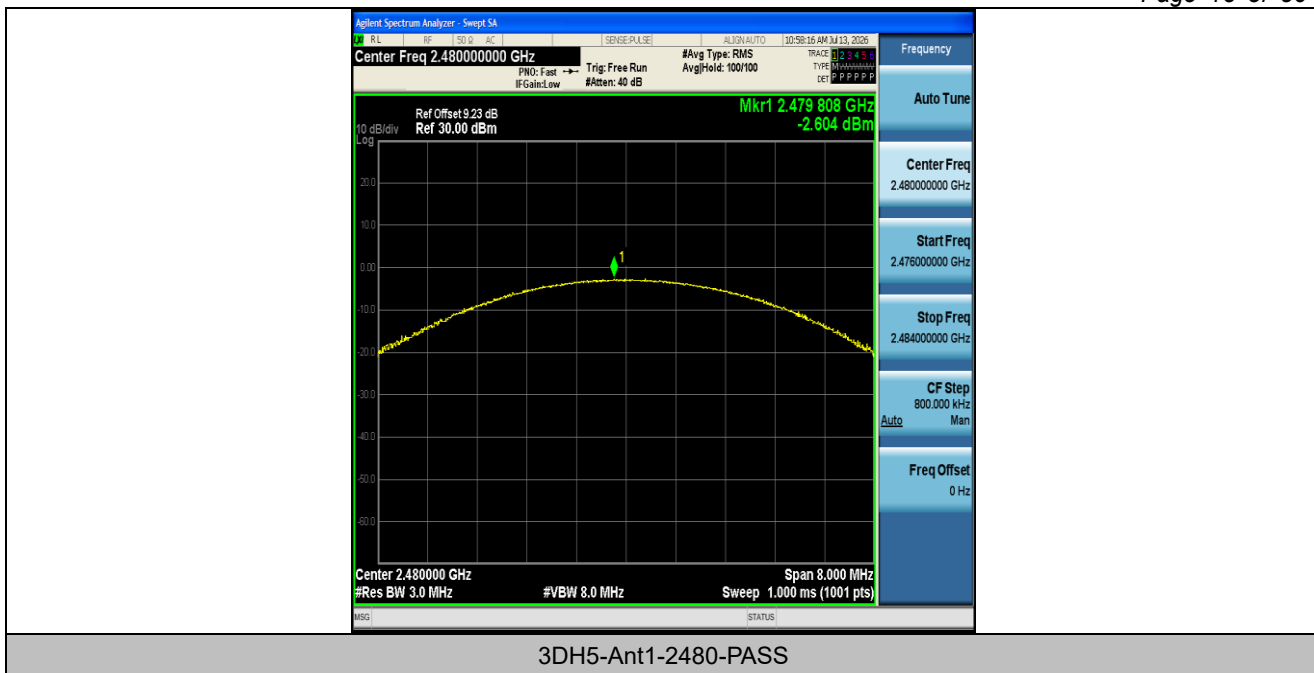


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

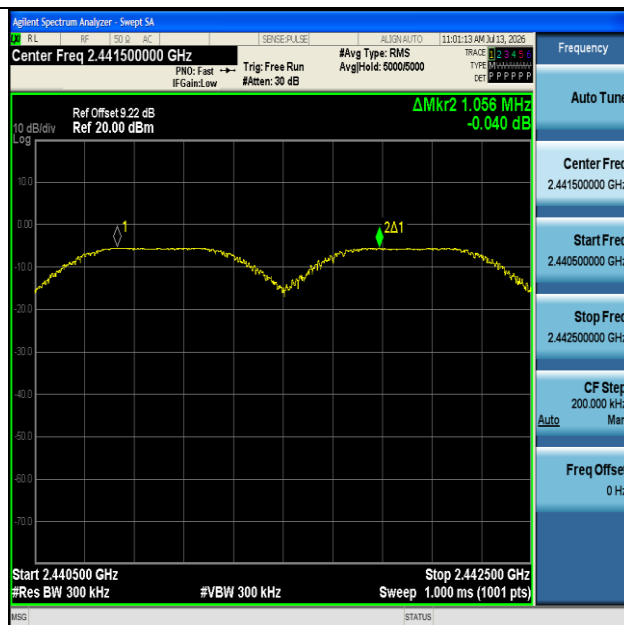
Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	1.056	≥ 1.044	PASS
2DH5	Ant1	Hop	0.984	≥ 0.904	PASS
3DH5	Ant1	Hop	1.136	≥ 0.898	PASS

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





Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS







Appendix E: Time of occupancy

Test Result

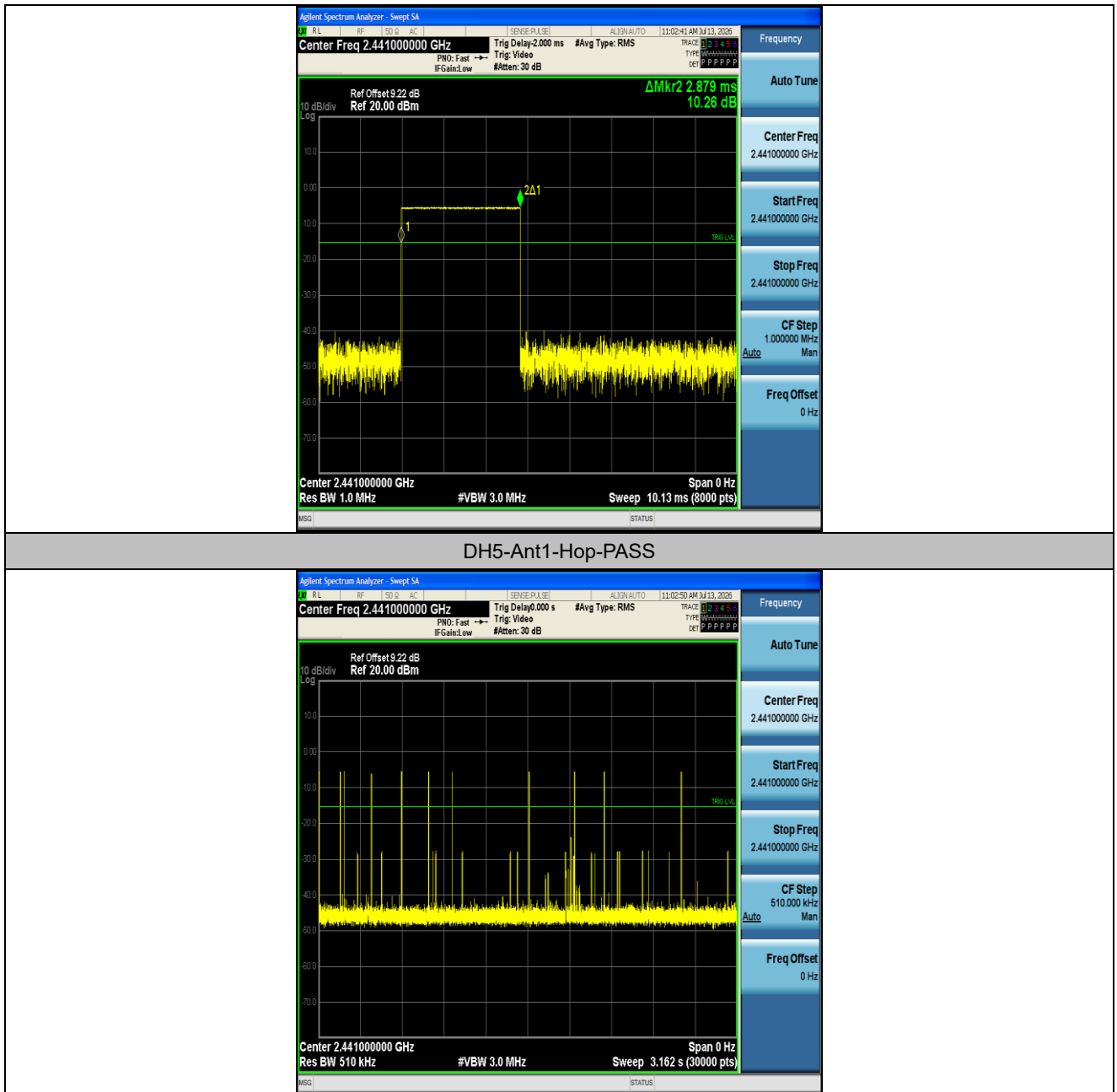
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.879	110	0.317	≤0.4	PASS
2DH5	Ant1	Hop	2.885	90	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.887	120	0.346	≤0.4	PASS

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



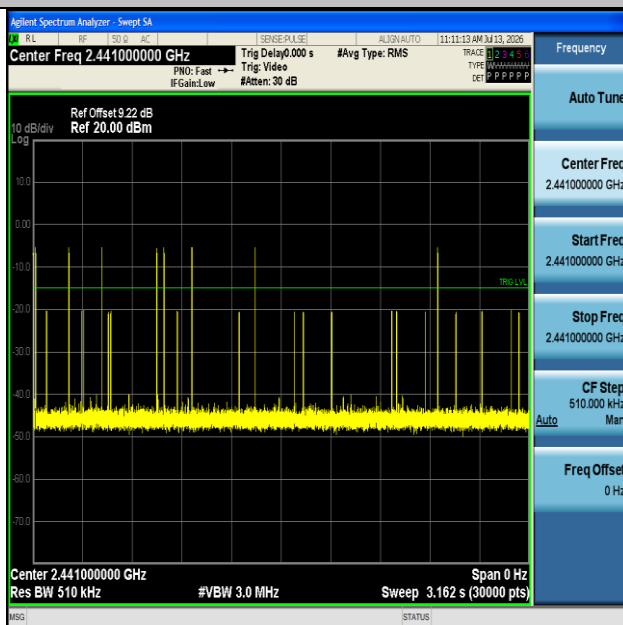


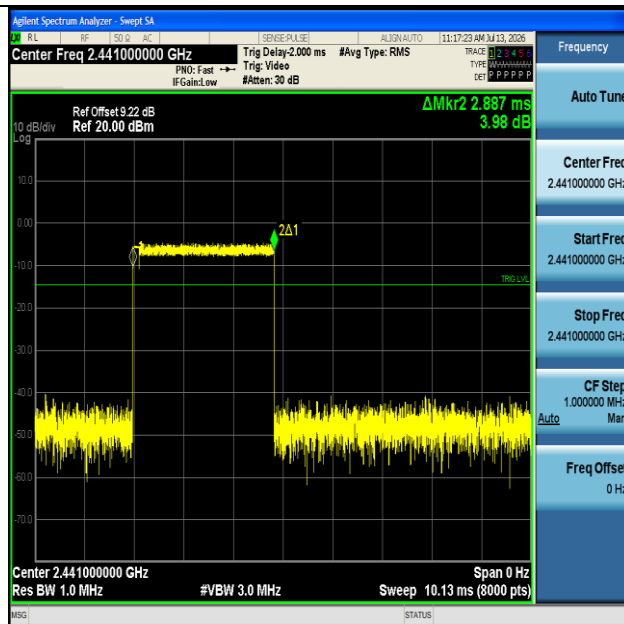
Test Graphs



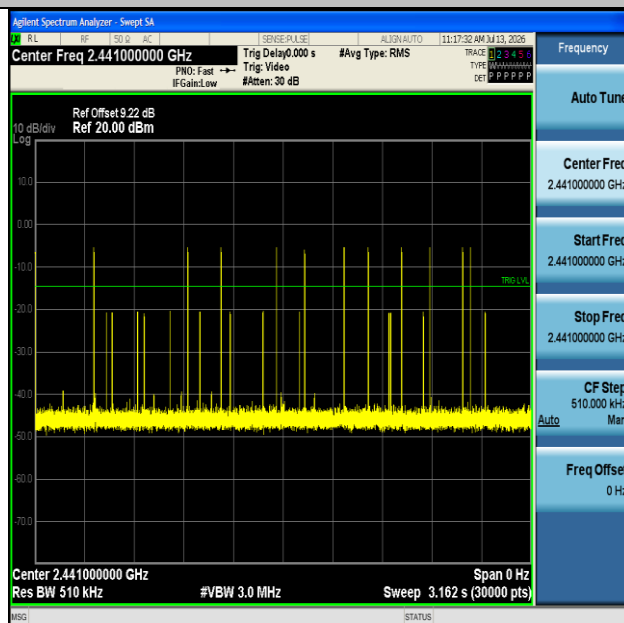


2DH5-Ant1-Hop-PASS





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

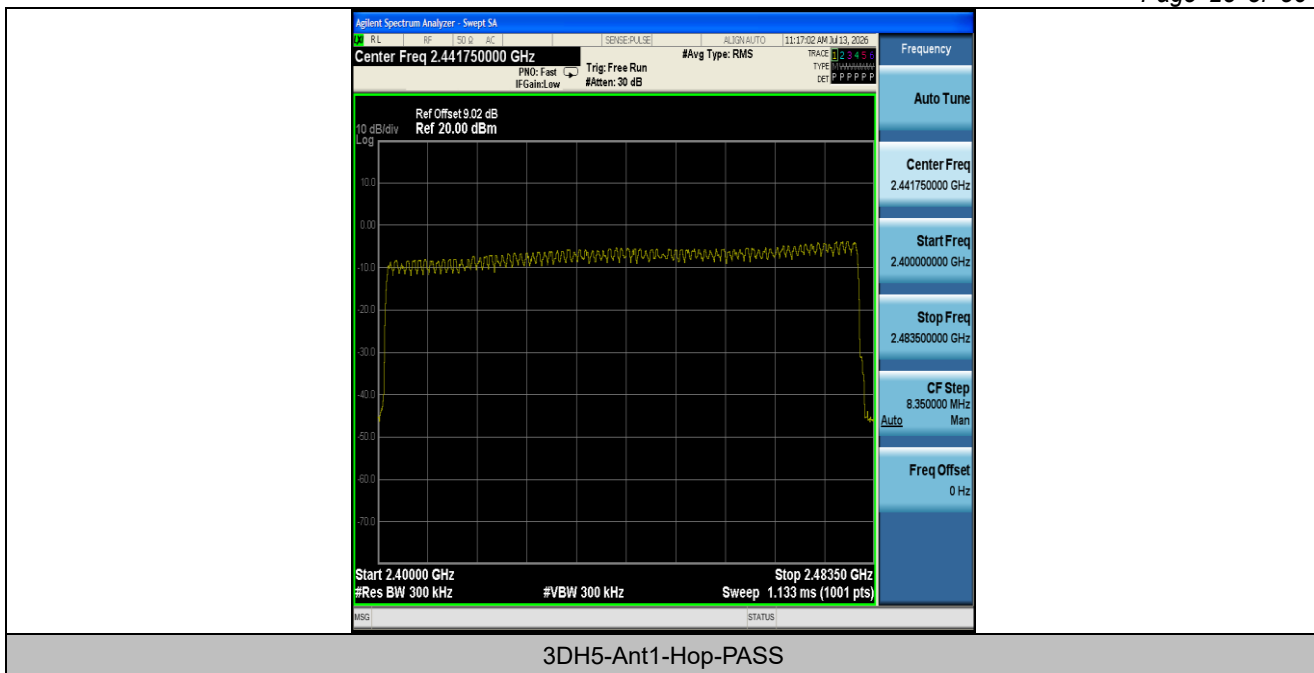
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

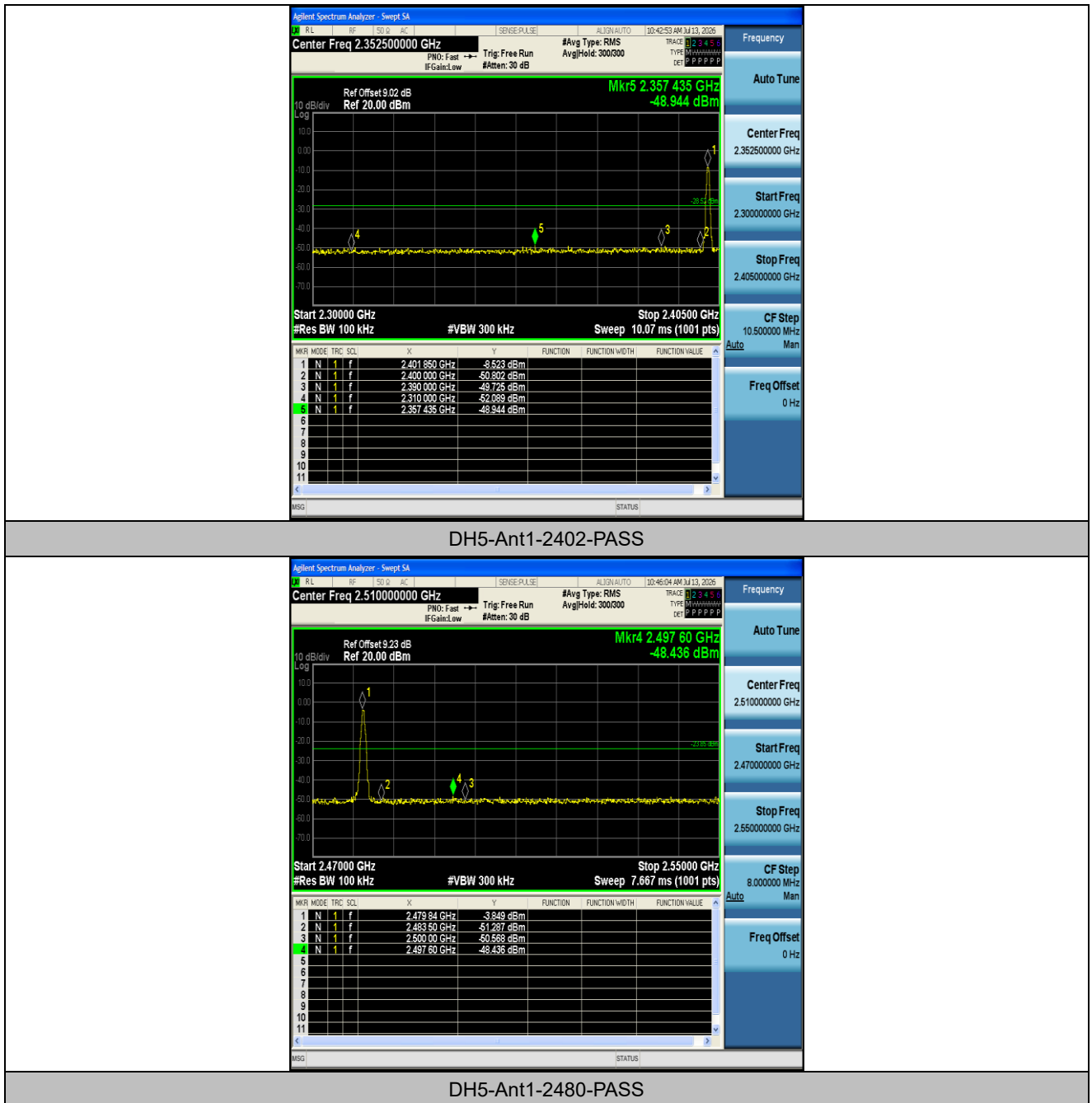
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-8.52	-48.94	≤-28.52	PASS
DH5	Ant1	High	2480	-3.85	-48.44	≤-23.85	PASS
DH5	Ant1	Low	Hop_2402	-8.47	-49.15	≤-28.47	PASS
DH5	Ant1	High	Hop_2480	-4.07	-41.73	≤-24.07	PASS
2DH5	Ant1	Low	2402	-8.94	-49.37	≤-28.94	PASS
2DH5	Ant1	High	2480	-6.35	-48.42	≤-26.35	PASS
2DH5	Ant1	Low	Hop_2402	-12.26	-49	≤-32.26	PASS
2DH5	Ant1	High	Hop_2480	-4.43	-44.35	≤-24.43	PASS
3DH5	Ant1	Low	2402	-9.56	-48.31	≤-29.56	PASS
3DH5	Ant1	High	2480	-6.06	-34.85	≤-26.06	PASS
3DH5	Ant1	Low	Hop_2402	-11.44	-49.42	≤-31.44	PASS
3DH5	Ant1	High	Hop_2480	-5.79	-48.22	≤-25.79	PASS

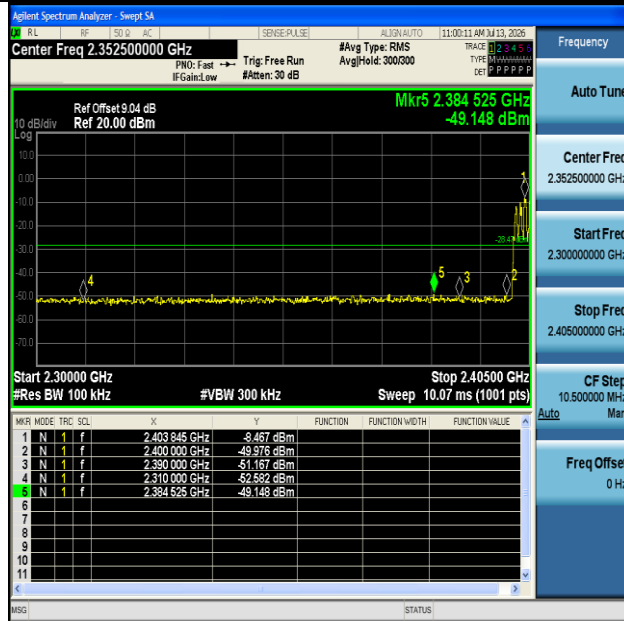
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



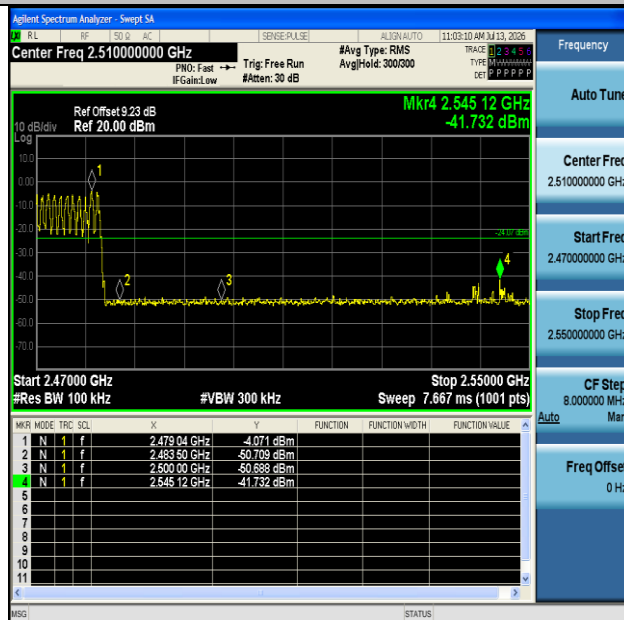


Test Graphs



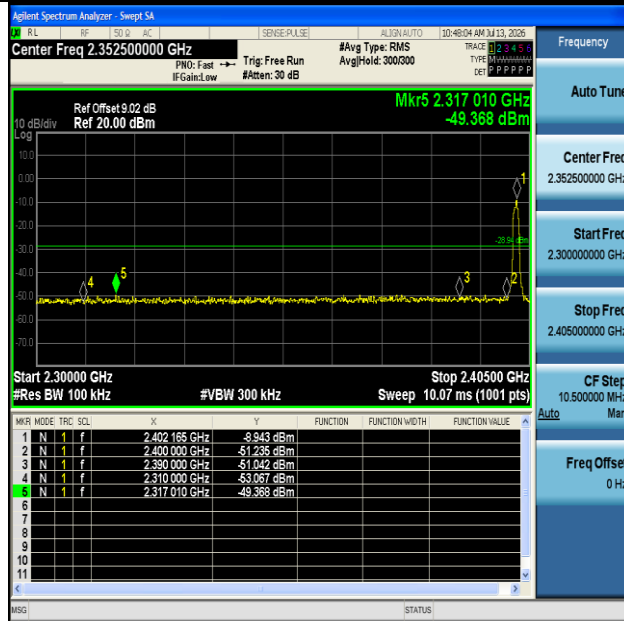


DH5-Ant1-Hop_2402-PASS

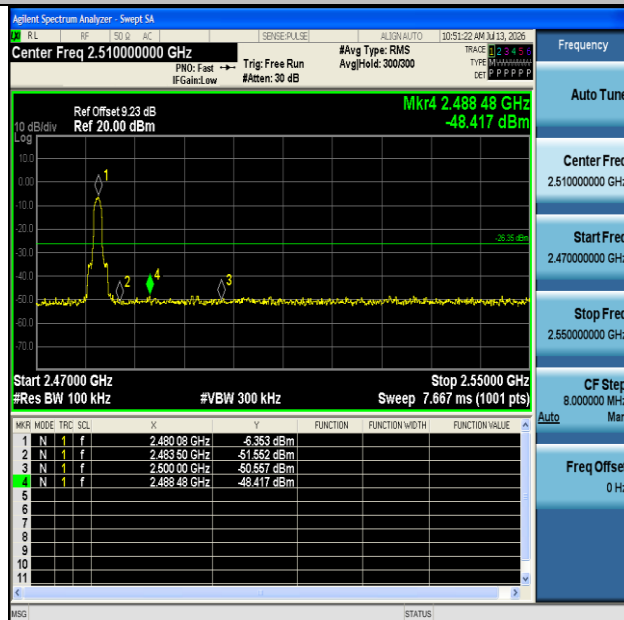


DH5-Ant1-Hop_2480-PASS



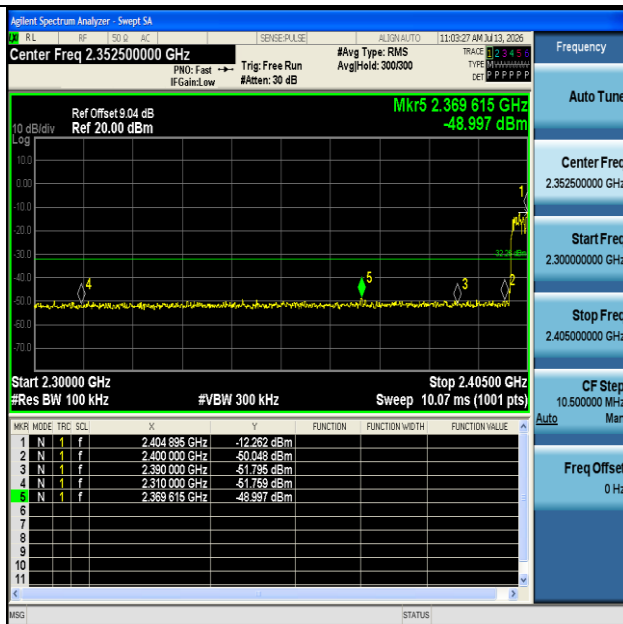


2DH5-Ant1-2402-PASS

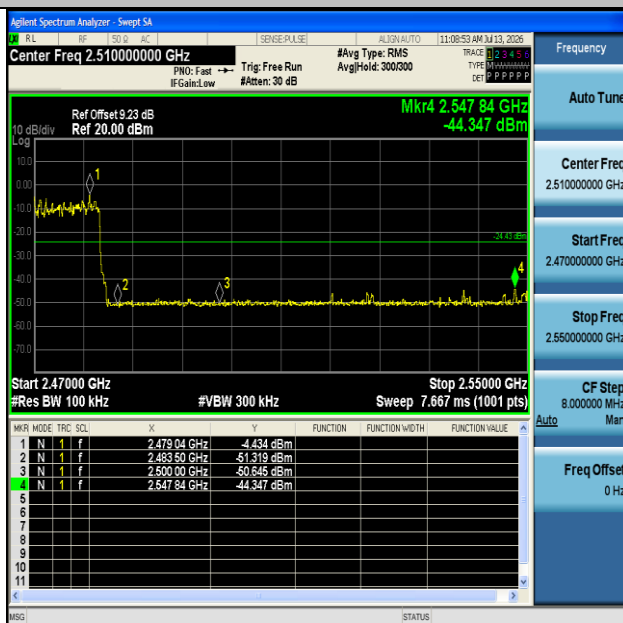


2DH5-Ant1-2480-PASS



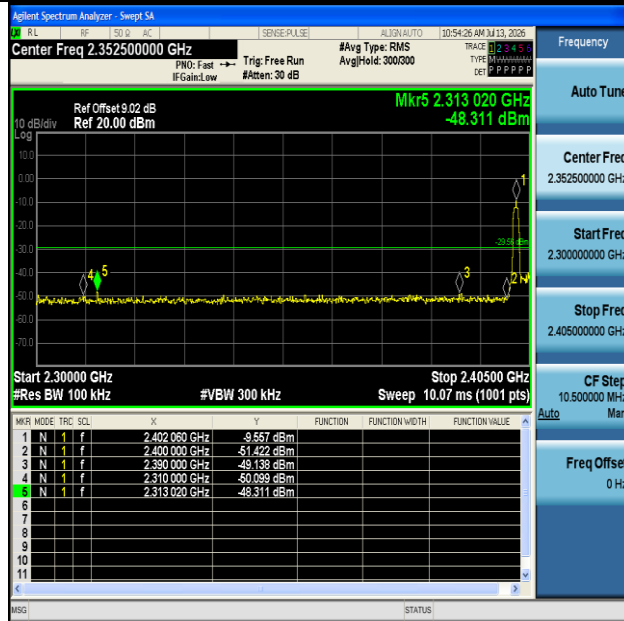


2DH5-Ant1-Hop_2402-PASS

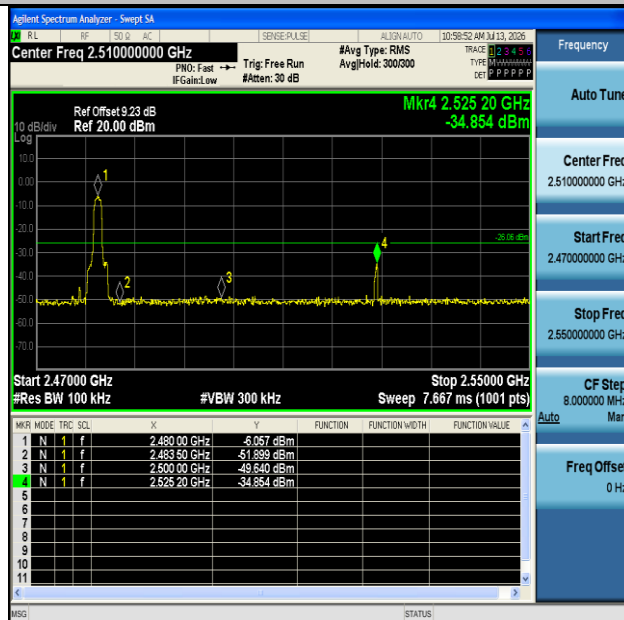


2DH5-Ant1-Hop_2480-PASS



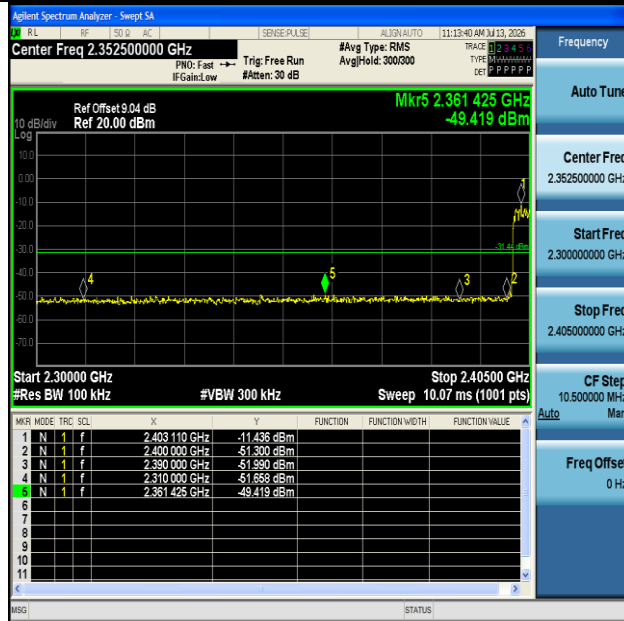


3DH5-Ant1-2402-PASS

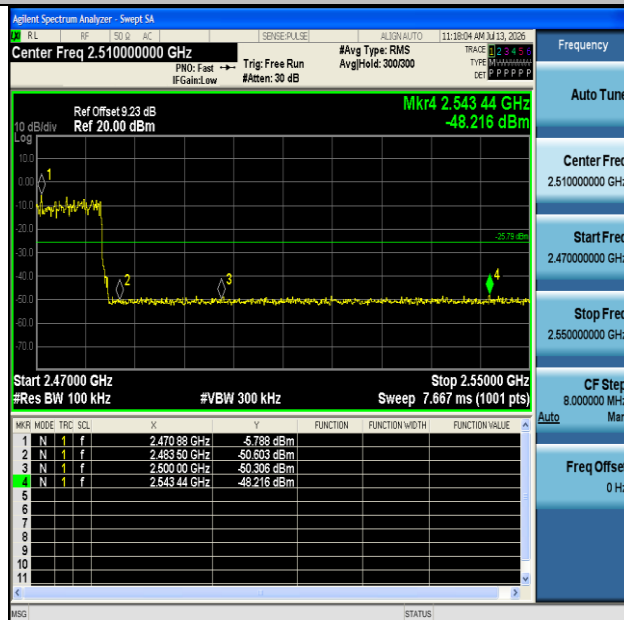


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

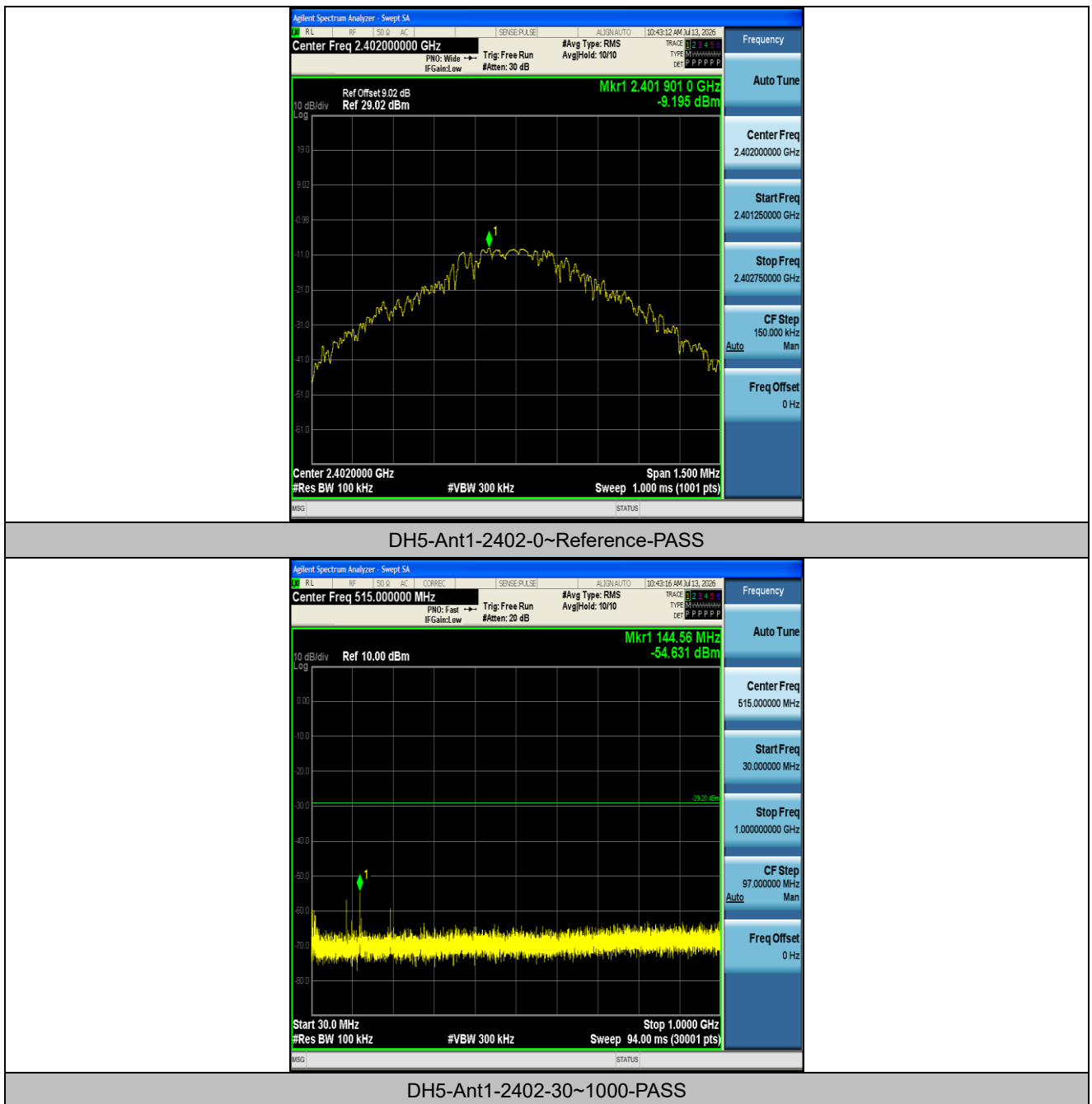
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-9.20	-9.20	---	PASS
DH5	Ant1	2402	30~1000	-9.20	-54.63	≤-29.2	PASS
DH5	Ant1	2402	1000~26500	-9.20	-37.04	≤-29.2	PASS
DH5	Ant1	2441	0~Reference	-6.02	-6.02	---	PASS
DH5	Ant1	2441	30~1000	-6.02	-55.48	≤-26.02	PASS
DH5	Ant1	2441	1000~26500	-6.02	-37.72	≤-26.02	PASS
DH5	Ant1	2480	0~Reference	-4.45	-4.45	---	PASS
DH5	Ant1	2480	30~1000	-4.45	-55.28	≤-24.45	PASS
DH5	Ant1	2480	1000~26500	-4.45	-37.43	≤-24.45	PASS
2DH5	Ant1	2402	0~Reference	-11.73	-11.73	---	PASS
2DH5	Ant1	2402	30~1000	-11.73	-55.14	≤-31.73	PASS
2DH5	Ant1	2402	1000~26500	-11.73	-37.23	≤-31.73	PASS
2DH5	Ant1	2441	0~Reference	-7.28	-7.28	---	PASS
2DH5	Ant1	2441	30~1000	-7.28	-55.65	≤-27.28	PASS
2DH5	Ant1	2441	1000~26500	-7.28	-37.19	≤-27.28	PASS
2DH5	Ant1	2480	0~Reference	-7.89	-7.89	---	PASS
2DH5	Ant1	2480	30~1000	-7.89	-56	≤-27.89	PASS
2DH5	Ant1	2480	1000~26500	-7.89	-37.55	≤-27.89	PASS
3DH5	Ant1	2402	0~Reference	-12.17	-12.17	---	PASS
3DH5	Ant1	2402	30~1000	-12.17	-55.84	≤-32.17	PASS
3DH5	Ant1	2402	1000~26500	-12.17	-37.39	≤-32.17	PASS
3DH5	Ant1	2441	0~Reference	-6.98	-6.98	---	PASS
3DH5	Ant1	2441	30~1000	-6.98	-56.66	≤-26.98	PASS
3DH5	Ant1	2441	1000~26500	-6.98	-37.43	≤-26.98	PASS
3DH5	Ant1	2480	0~Reference	-6.87	-6.87	---	PASS
3DH5	Ant1	2480	30~1000	-6.87	-56.14	≤-26.87	PASS
3DH5	Ant1	2480	1000~26500	-6.87	-37.71	≤-26.87	PASS

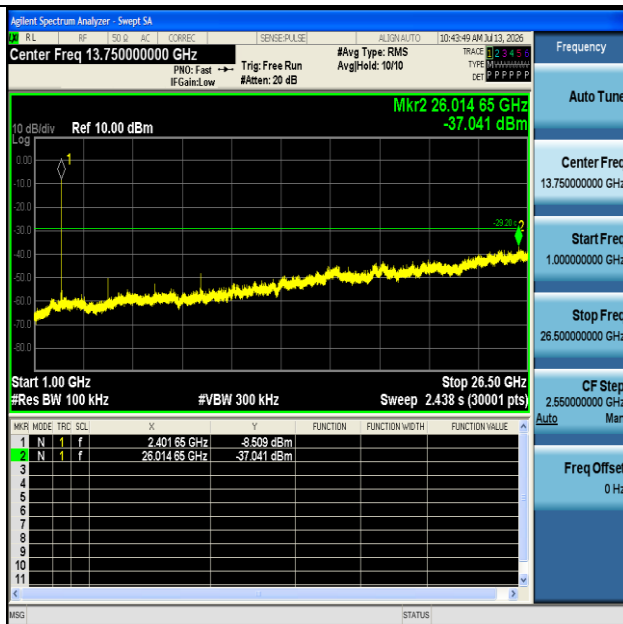
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



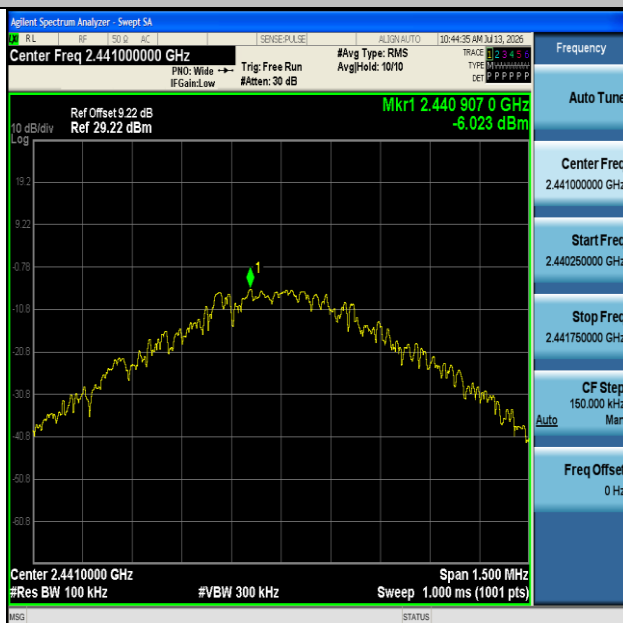


Test Graphs



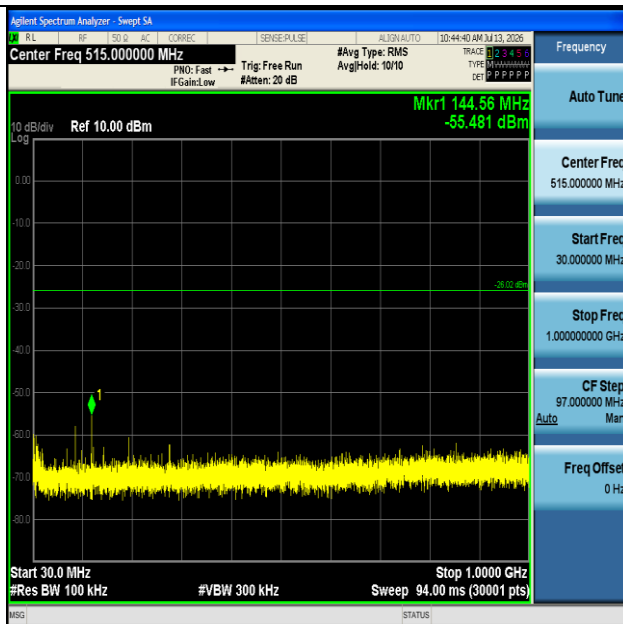


DH5-Ant1-2402-1000~26500-PASS

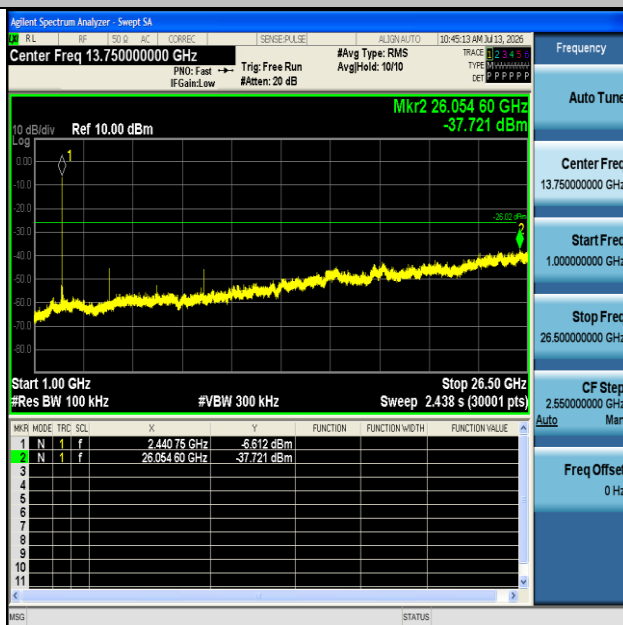


DH5-Ant1-2441-0~Reference-PASS



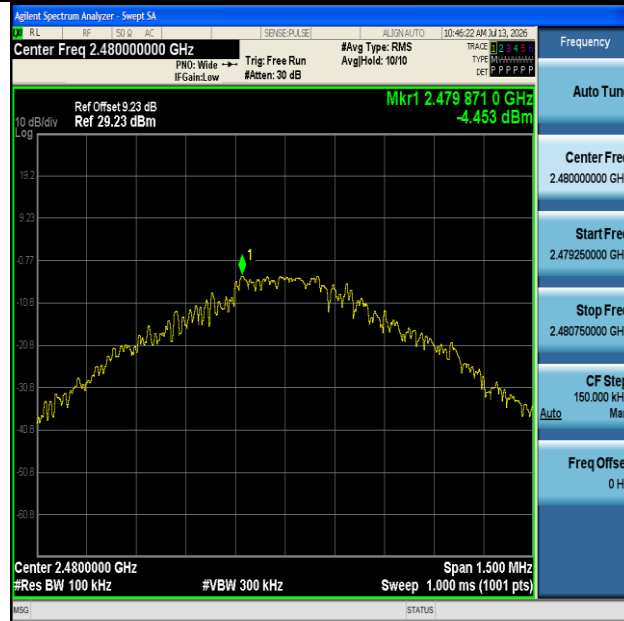


DH5-Ant1-2441-30~1000-PASS

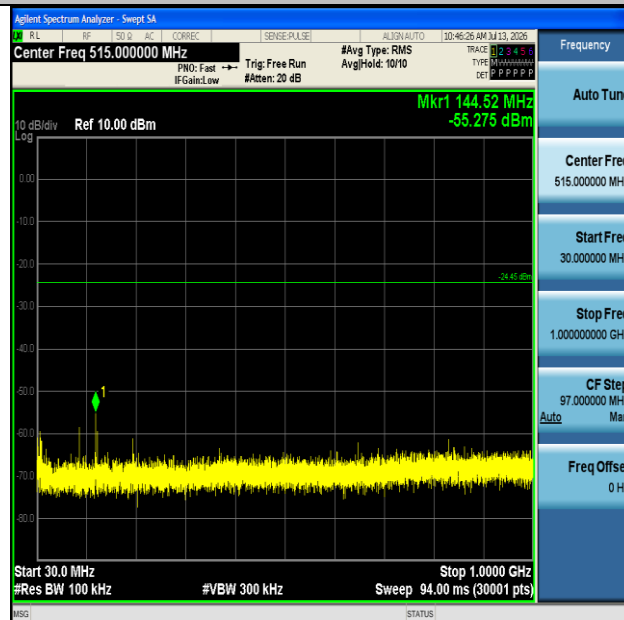


DH5-Ant1-2441-1000~26500-PASS



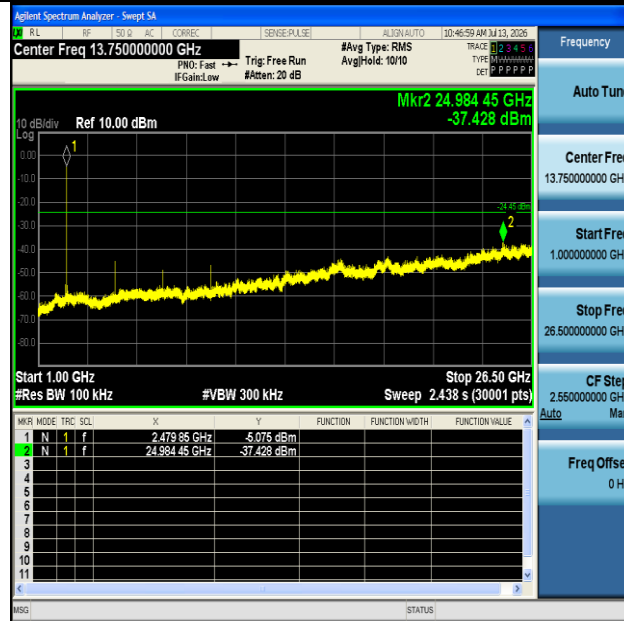


DH5-Ant1-2480-0~Reference-PASS

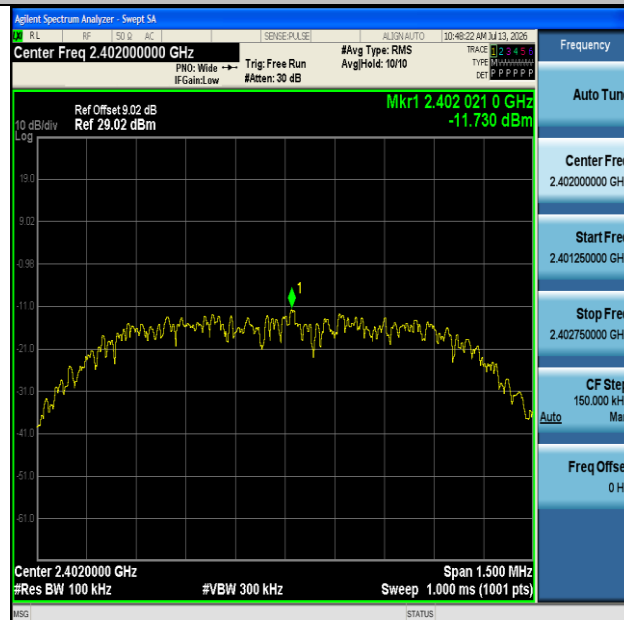


DH5-Ant1-2480-30~1000-PASS



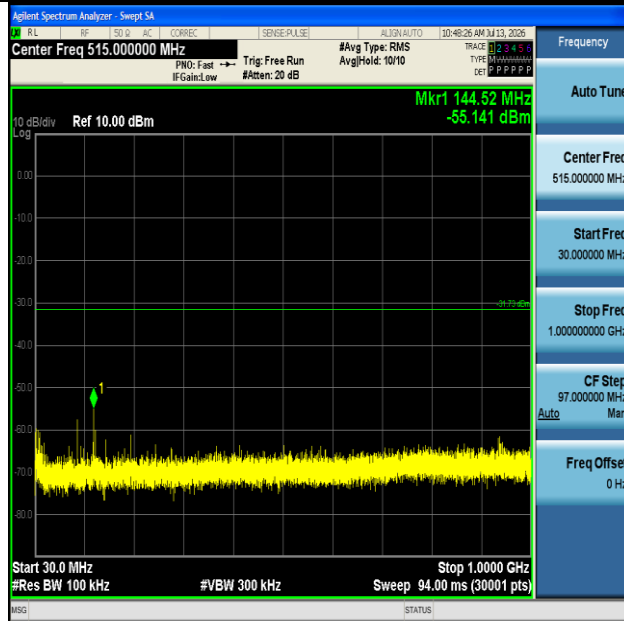


DH5-Ant1-2480-1000~26500-PASS

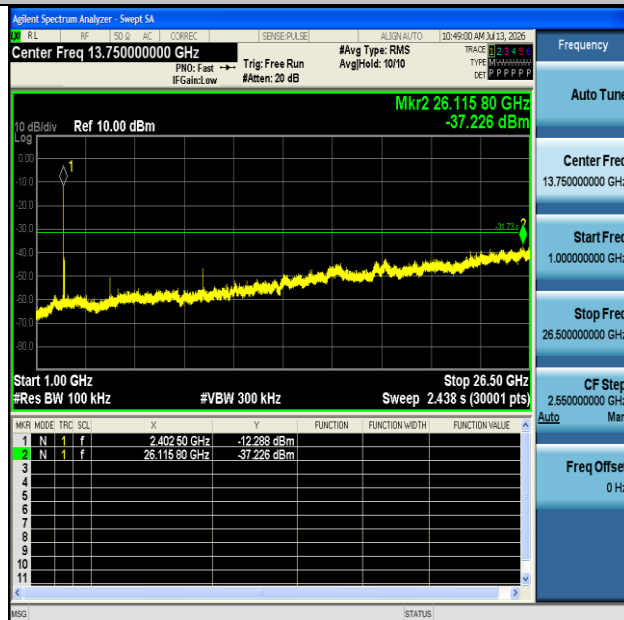


2DH5-Ant1-2402-0~Reference-PASS



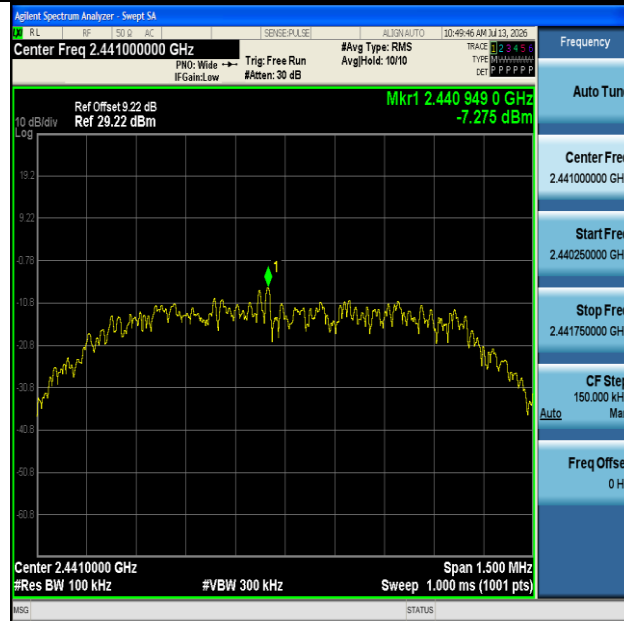


2DH5-Ant1-2402-30~1000-PASS

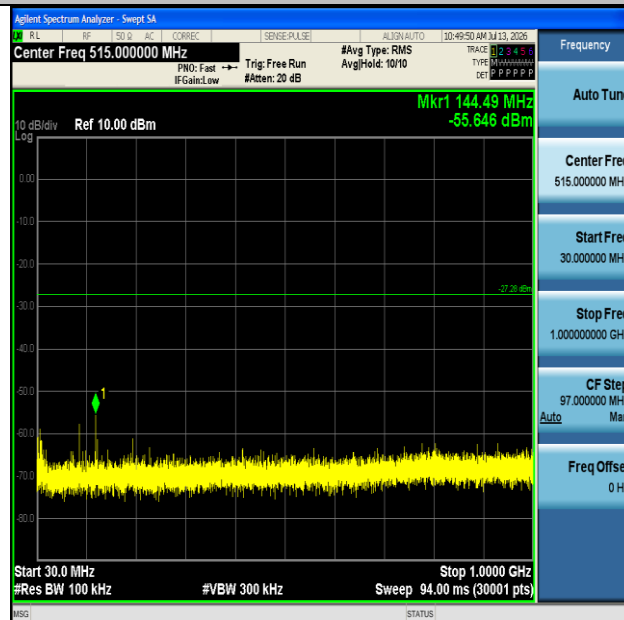


2DH5-Ant1-2402-1000~26500-PASS



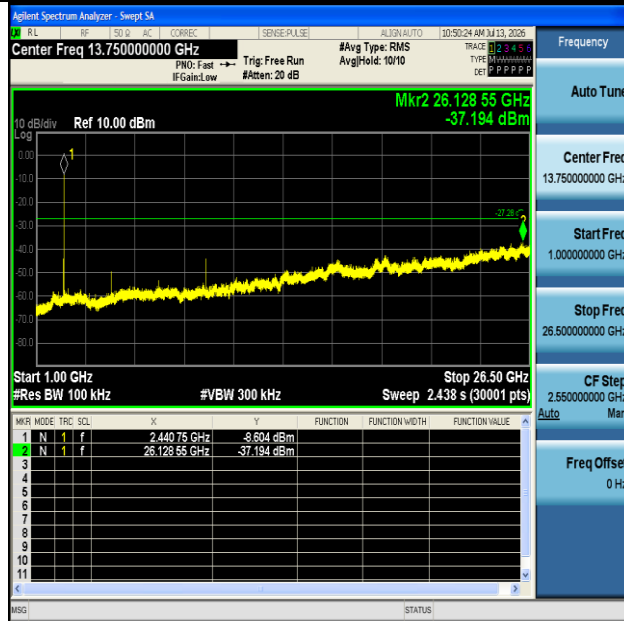


2DH5-Ant1-2441-0~Reference-PASS



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



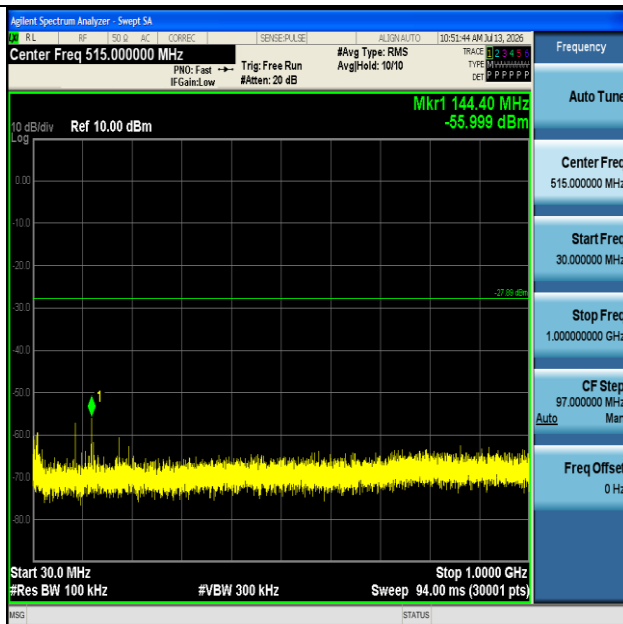


2DH5-Ant1-2441-1000~26500-PASS

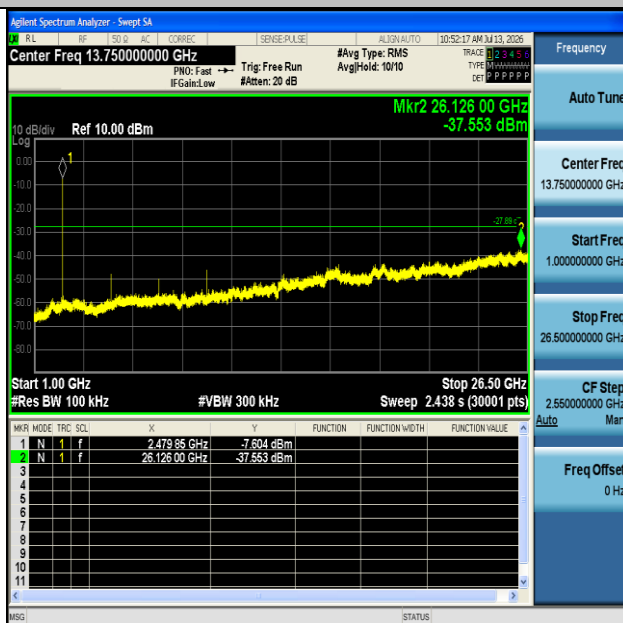


2DH5-Ant1-2480-0~Reference-PASS



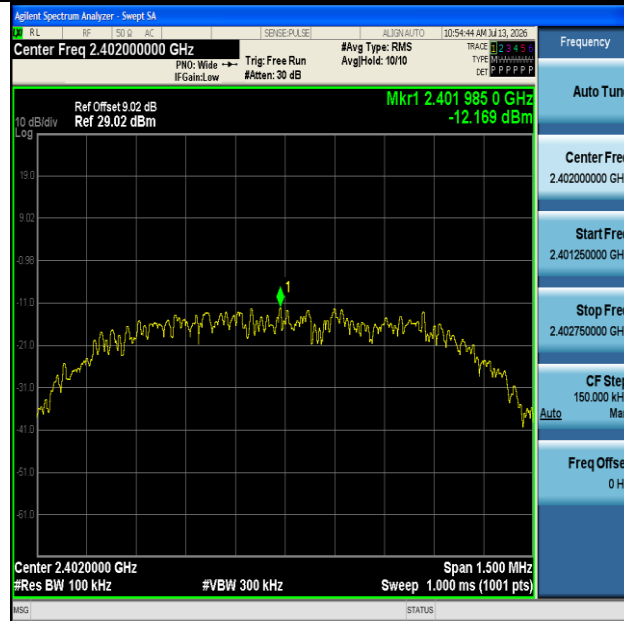


2DH5-Ant1-2480-30~1000-PASS

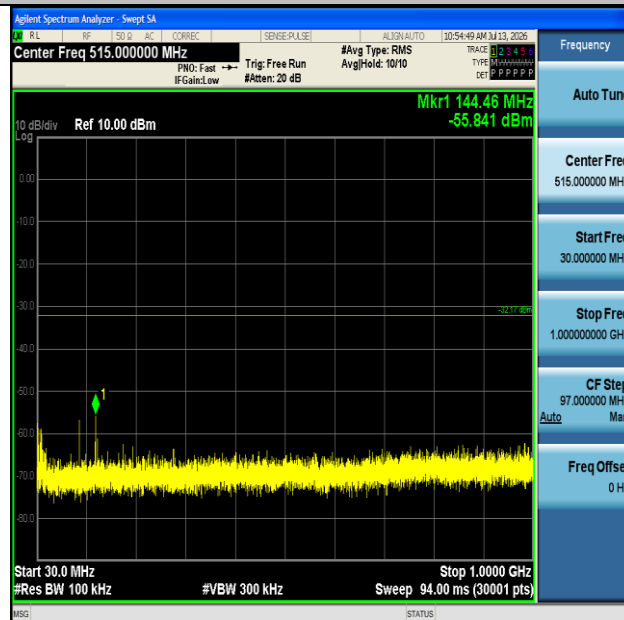


2DH5-Ant1-2480-1000~26500-PASS



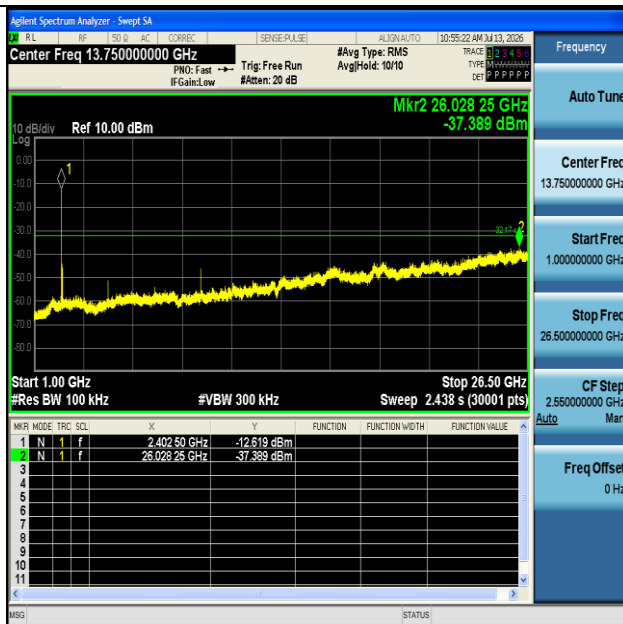


3DH5-Ant1-2402-0~Reference-PASS

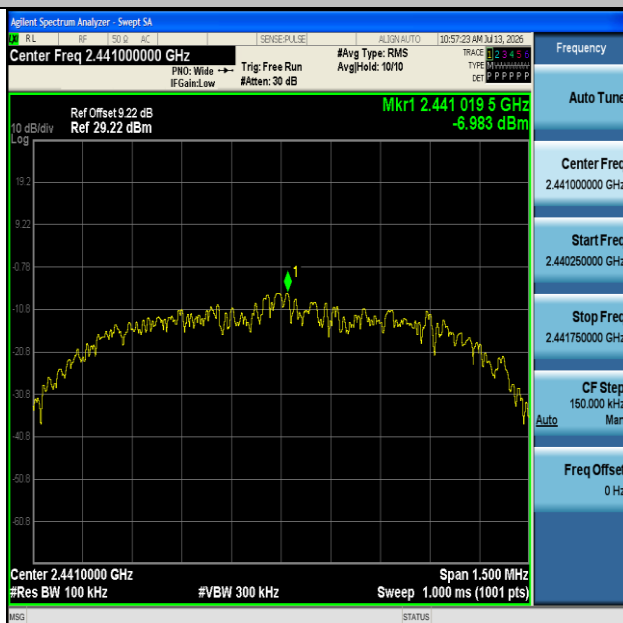


3DH5-Ant1-2402-30~1000-PASS



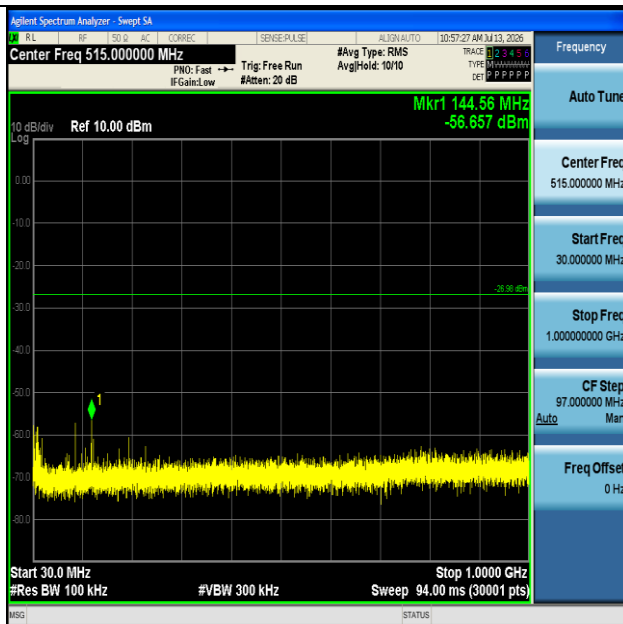


3DH5-Ant1-2402-1000~26500-PASS

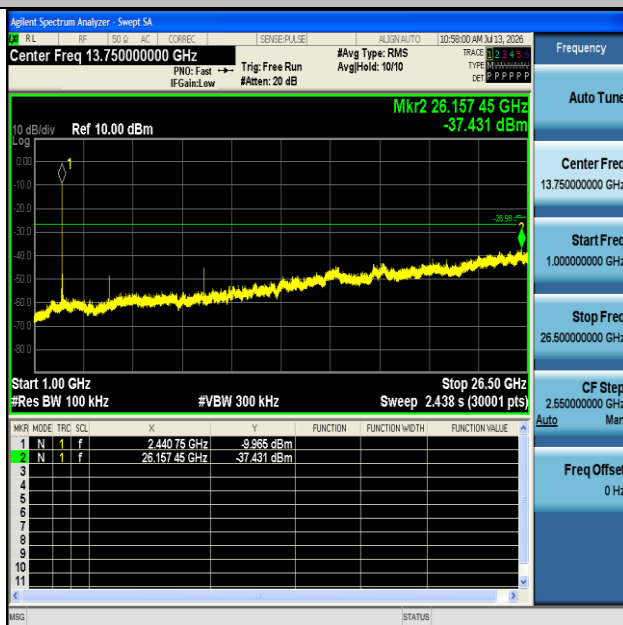


3DH5-Ant1-2441-0~Reference-PASS





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

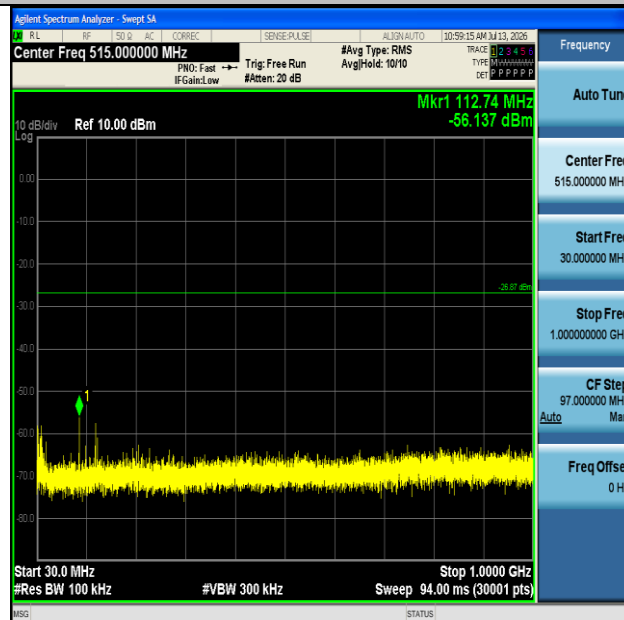


3DH5-Ant1-2441-1000~26500-PASS



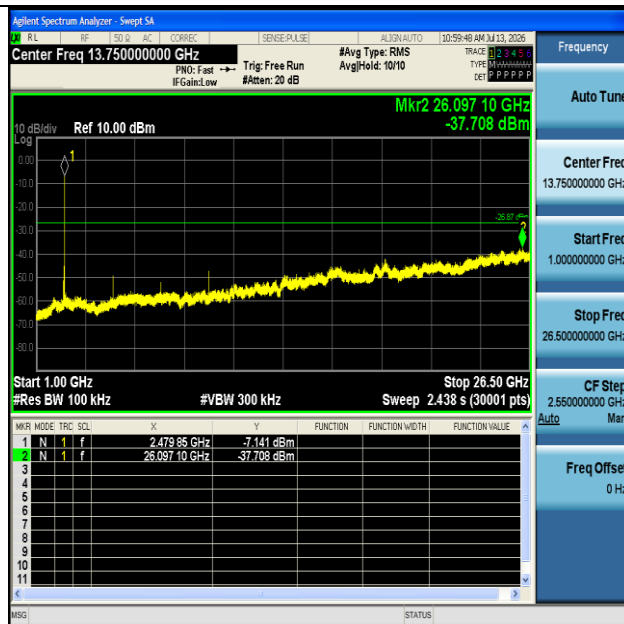


3DH5-Ant1-2480-0~Reference-PASS



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





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





Appendix I: Duty Cycle

Test Result

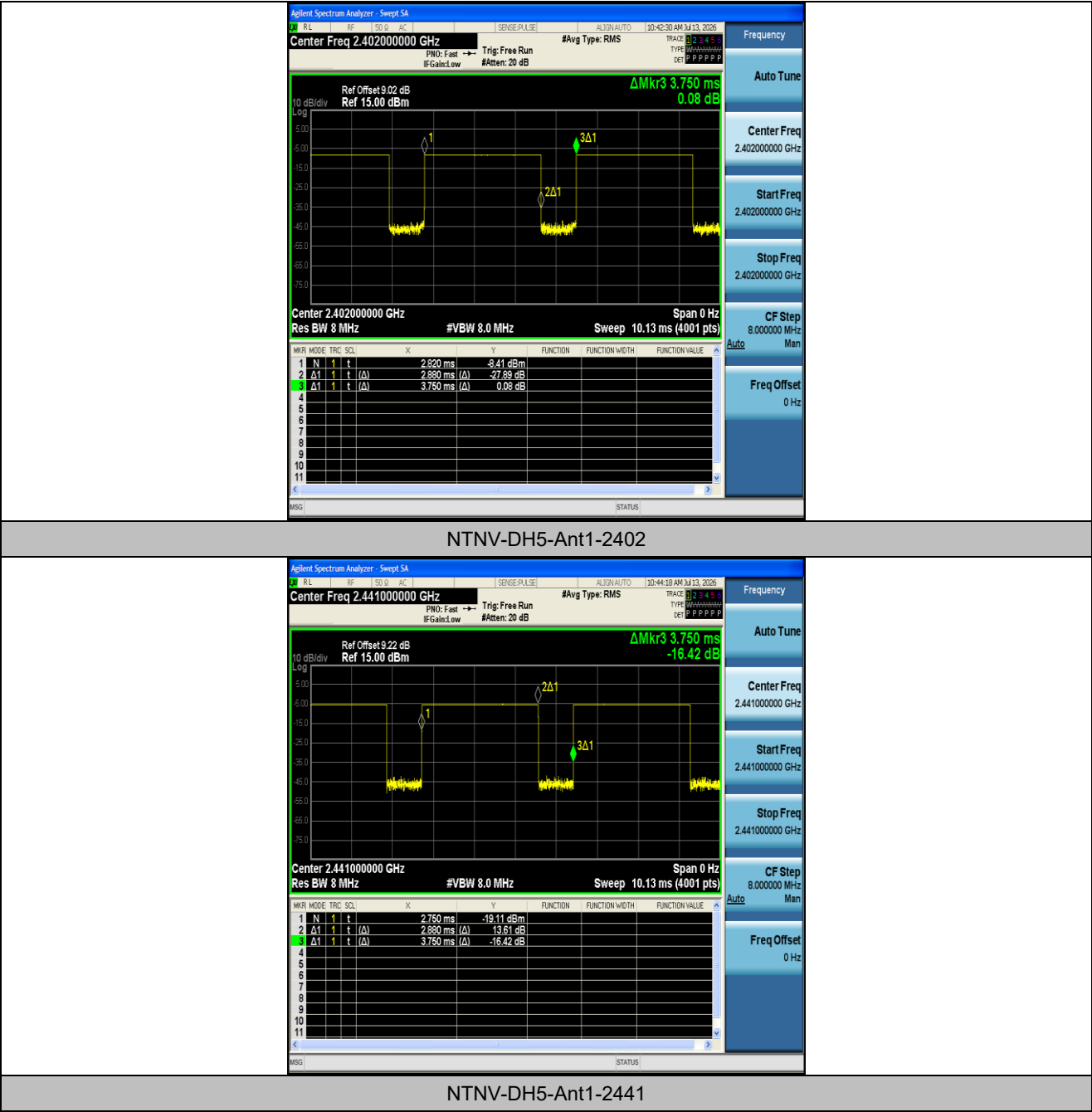
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
DH5	Ant1	2402	2.88	3.75	76.80	1.15
DH5	Ant1	2441	2.88	3.75	76.80	1.15
DH5	Ant1	2480	2.88	3.75	76.80	1.15
2DH5	Ant1	2402	2.88	3.75	76.80	1.15
2DH5	Ant1	2441	2.88	3.75	76.80	1.15
2DH5	Ant1	2480	2.88	3.75	76.80	1.15
3DH5	Ant1	2402	2.89	3.75	77.07	1.13
3DH5	Ant1	2441	2.89	3.75	77.07	1.13
3DH5	Ant1	2480	2.88	3.74	77.01	1.13

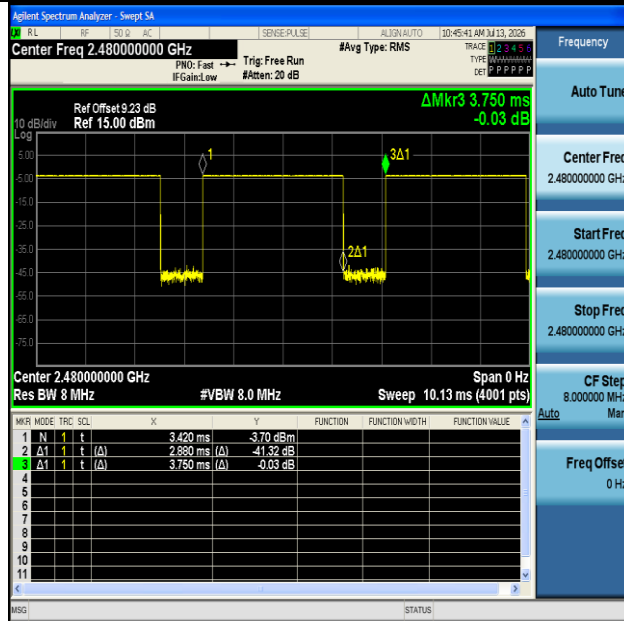
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



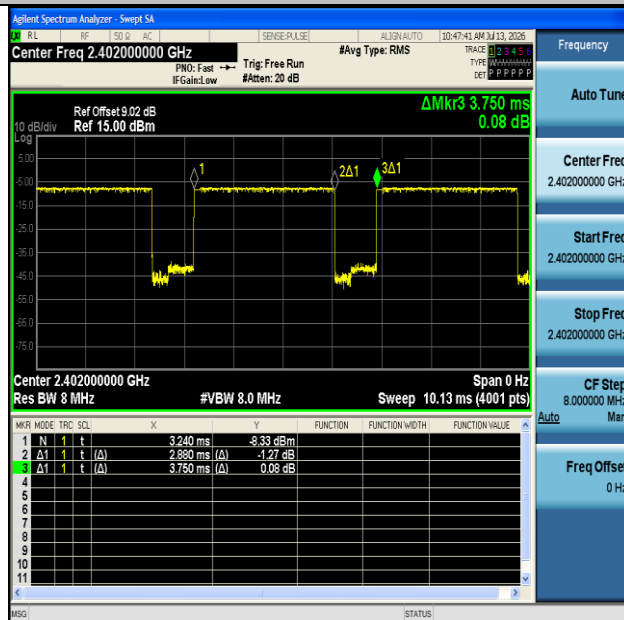


Test Graphs



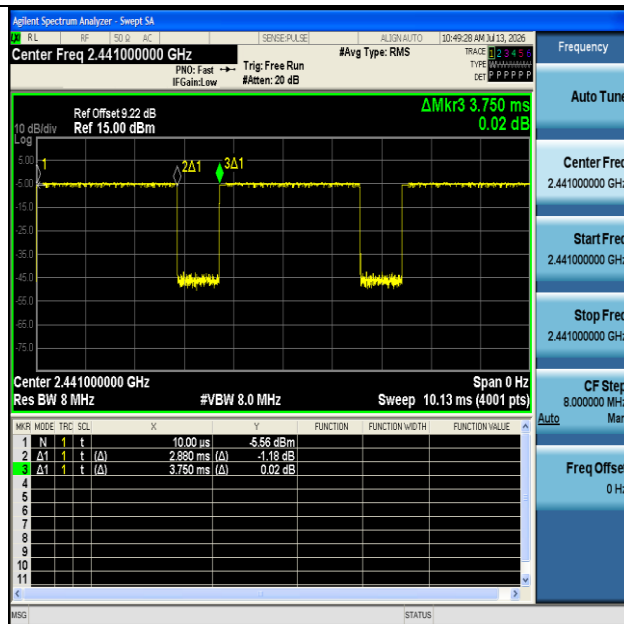


NTNV-DH5-Ant1-2480

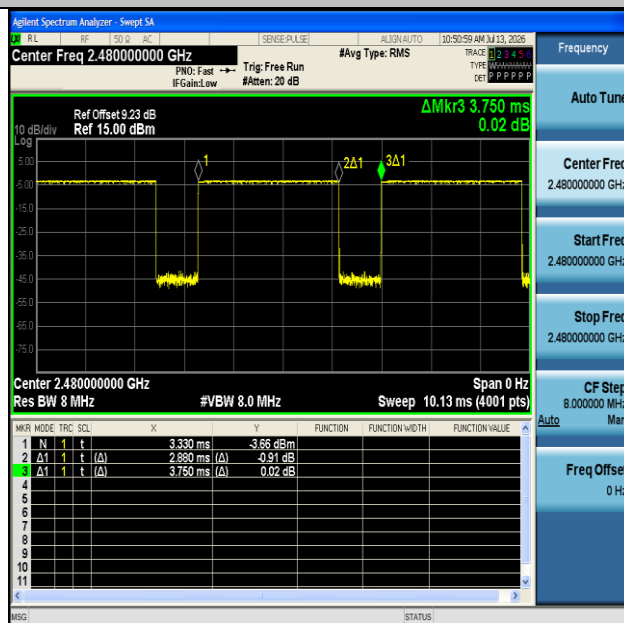


NTNV-2DH5-Ant1-2402



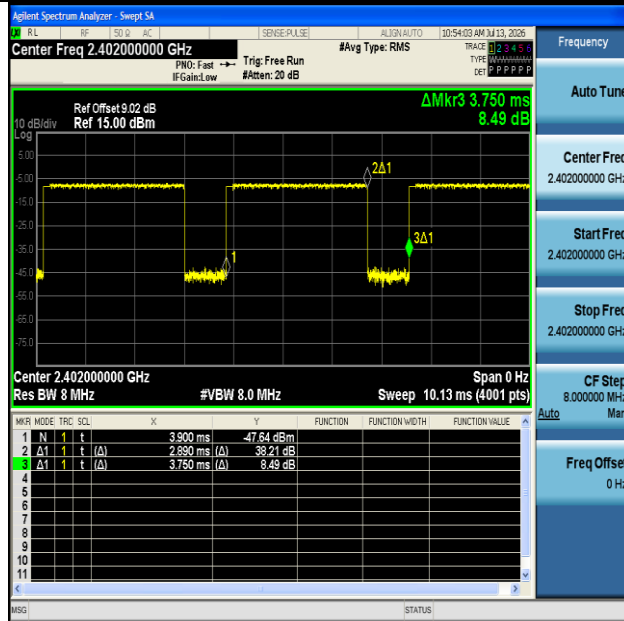


NTNV-2DH5-Ant1-2441

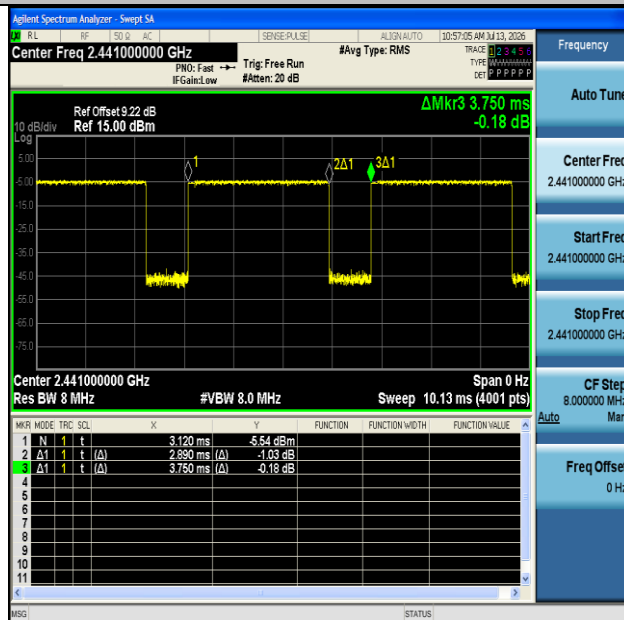


NTNV-2DH5-Ant1-2480



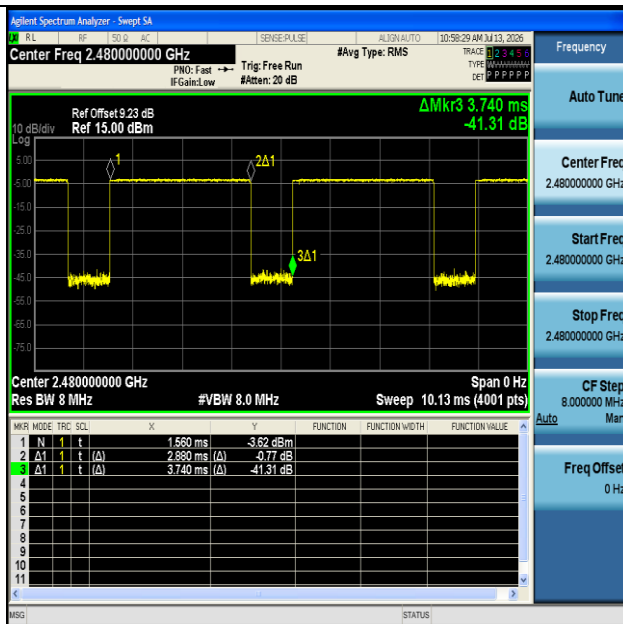


NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441





NTNV-3DH5-Ant1-2480

