



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

Product Name: TOMATIS GROUP HEADPHONE-TGH

Trade Mark: /

Test Model: TOMATIS GROUP HEADPHONE-TGH

FCC ID: 2AQR2-TGH

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	0.963	2401.541	2402.504	---	---
DH5	Ant1	2441	0.963	2440.535	2441.498	---	---
DH5	Ant1	2480	0.960	2479.538	2480.498	---	---
2DH5	Ant1	2402	1.323	2401.340	2402.663	---	---
2DH5	Ant1	2441	1.272	2440.373	2441.645	---	---
2DH5	Ant1	2480	1.278	2479.373	2480.651	---	---
3DH5	Ant1	2402	1.302	2401.355	2402.657	---	---
3DH5	Ant1	2441	1.293	2440.358	2441.651	---	---
3DH5	Ant1	2480	1.278	2479.370	2480.648	---	---

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	0.87744	2401.5710	2402.4484	---	---
DH5	Ant1	2441	0.87683	2440.5663	2441.4431	---	---
DH5	Ant1	2480	0.85670	2479.5731	2480.4298	---	---
2DH5	Ant1	2402	1.1669	2401.4190	2402.5859	---	---
2DH5	Ant1	2441	1.1563	2440.4263	2441.5826	---	---
2DH5	Ant1	2480	1.1689	2479.4201	2480.5890	---	---
3DH5	Ant1	2402	1.1691	2401.4213	2402.5904	---	---
3DH5	Ant1	2441	1.1883	2440.4151	2441.6034	---	---
3DH5	Ant1	2480	1.1824	2479.4164	2480.5988	---	---

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





Test Graphs



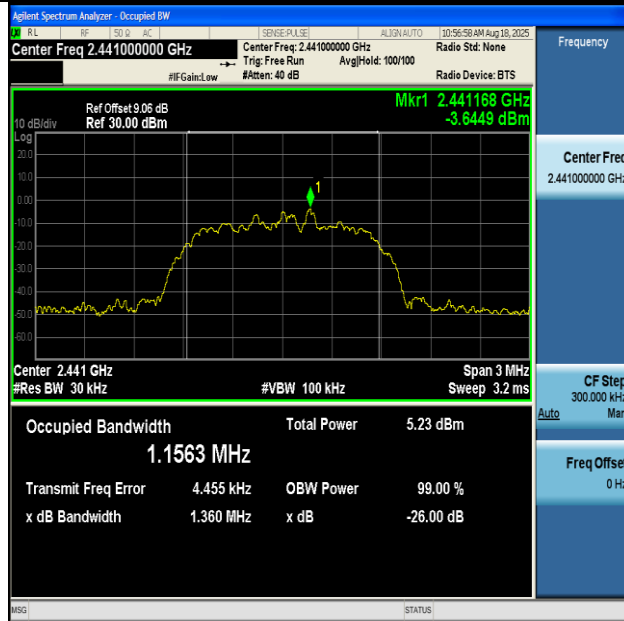


DH5-Ant1-2480



2DH5-Ant1-2402



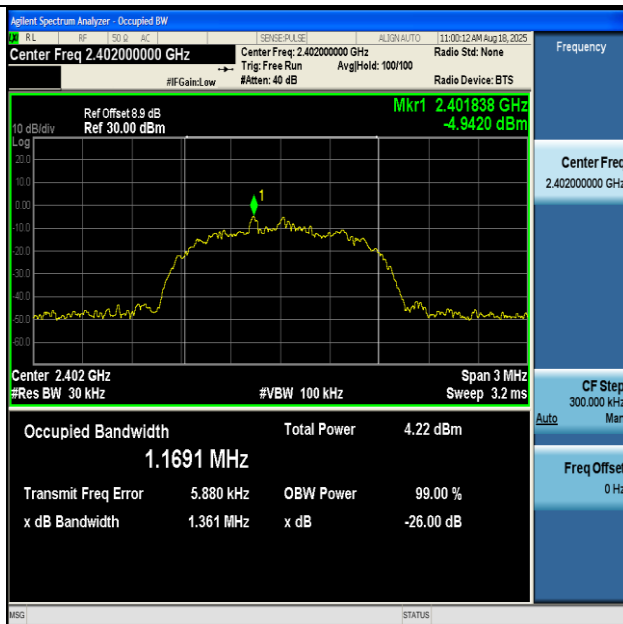


2DH5-Ant1-2441

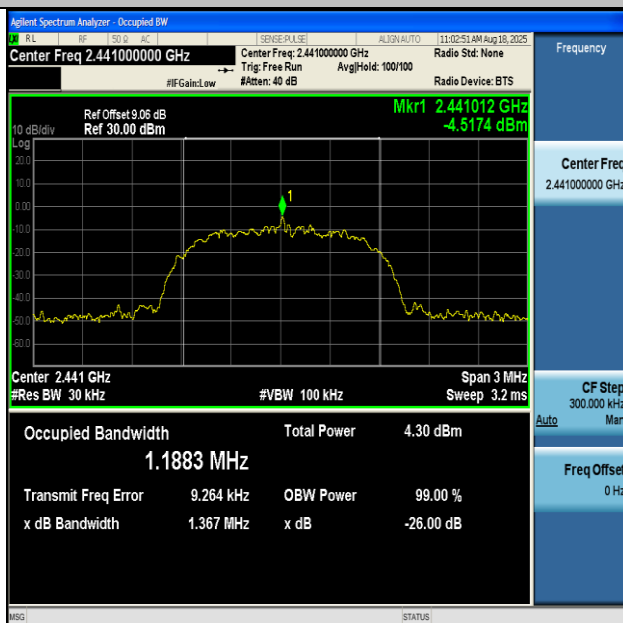


2DH5-Ant1-2480



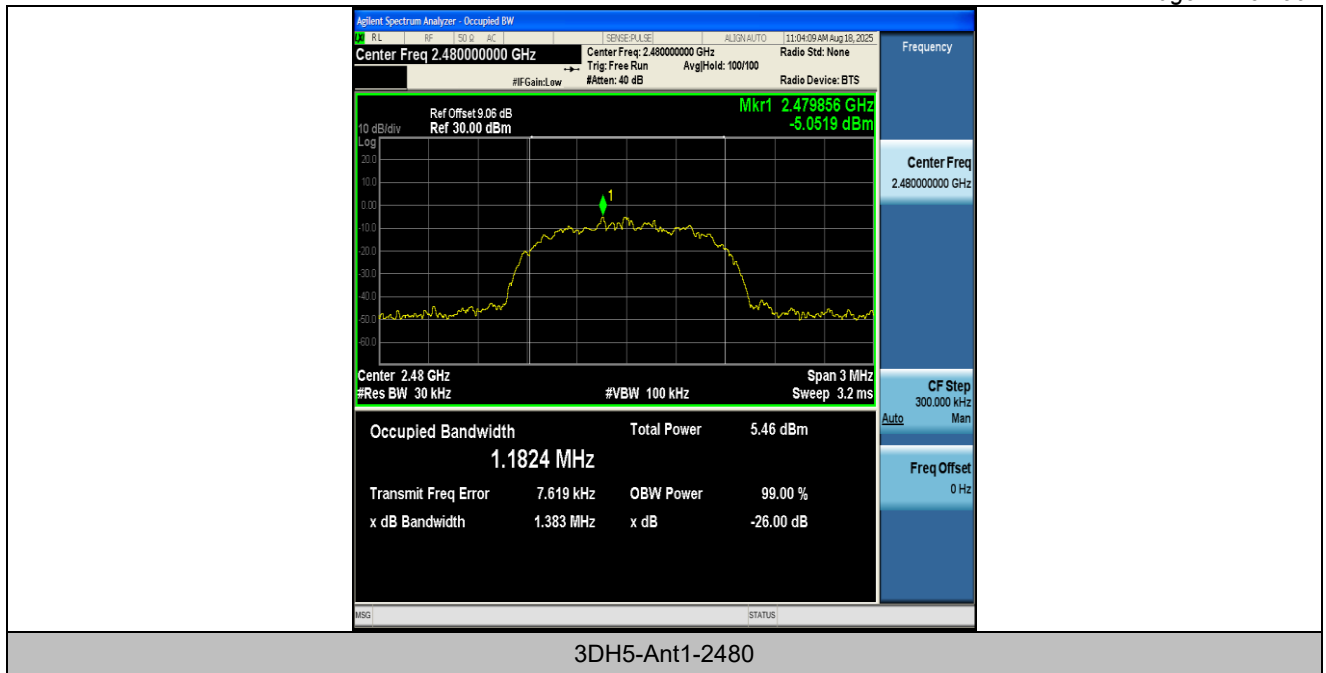


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

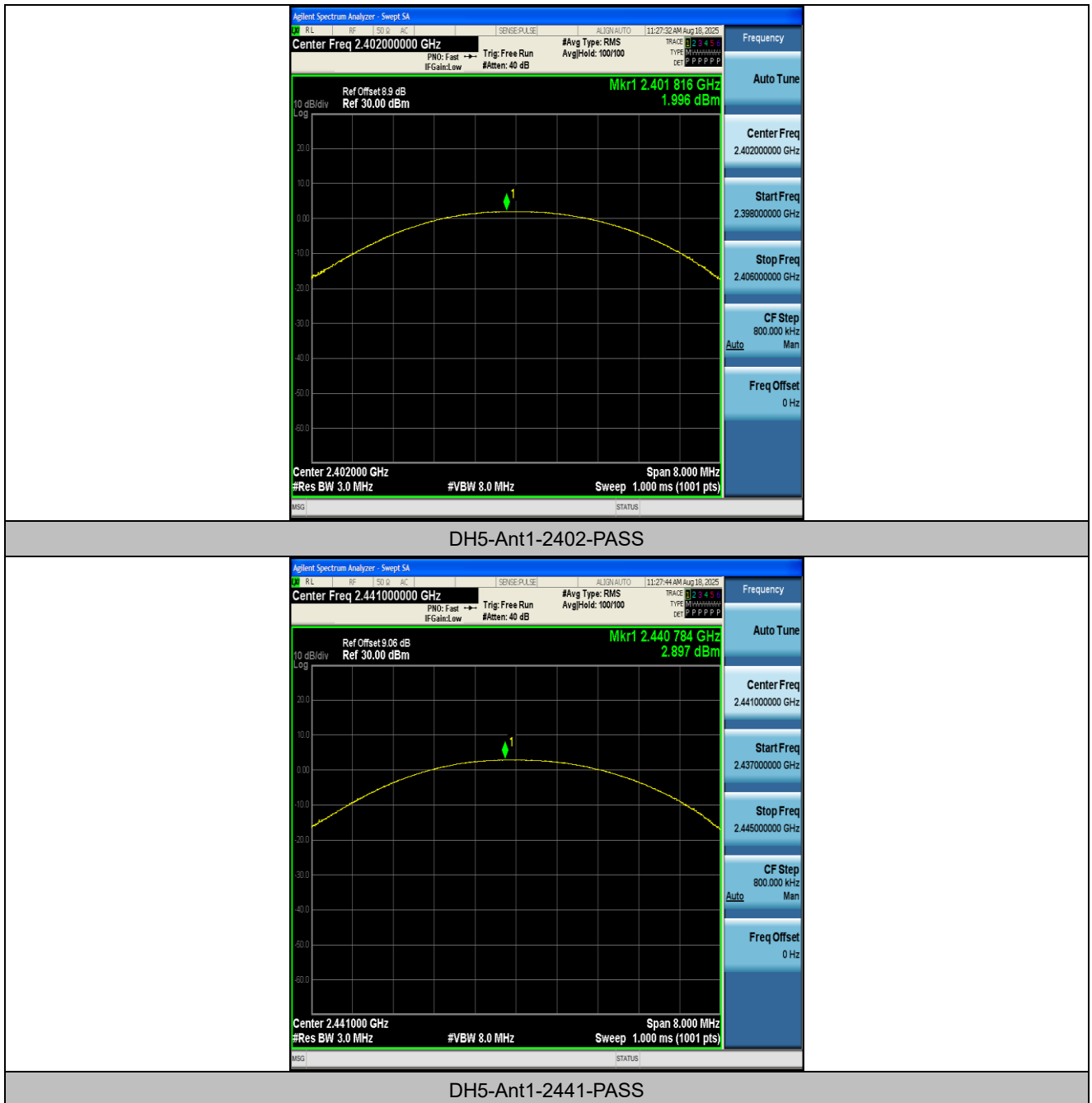
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	2.00	≤30	PASS
DH5	Ant1	2441	2.90	≤30	PASS
DH5	Ant1	2480	3.22	≤30	PASS
2DH5	Ant1	2402	0.22	≤20.97	PASS
2DH5	Ant1	2441	1.55	≤20.97	PASS
2DH5	Ant1	2480	1.89	≤20.97	PASS
3DH5	Ant1	2402	1.22	≤20.97	PASS
3DH5	Ant1	2441	2.09	≤20.97	PASS
3DH5	Ant1	2480	2.86	≤20.97	PASS

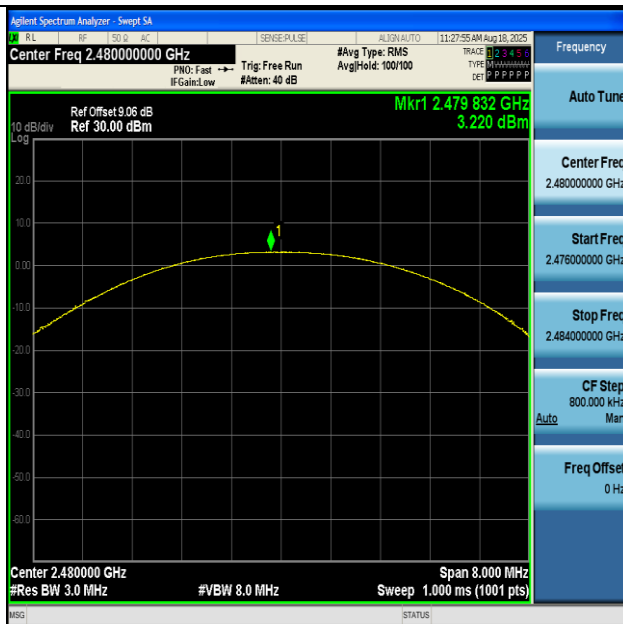
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



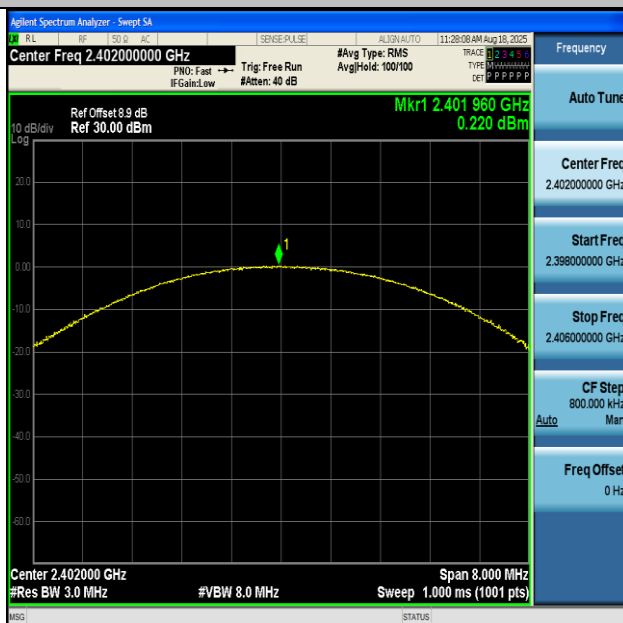


Test Graphs



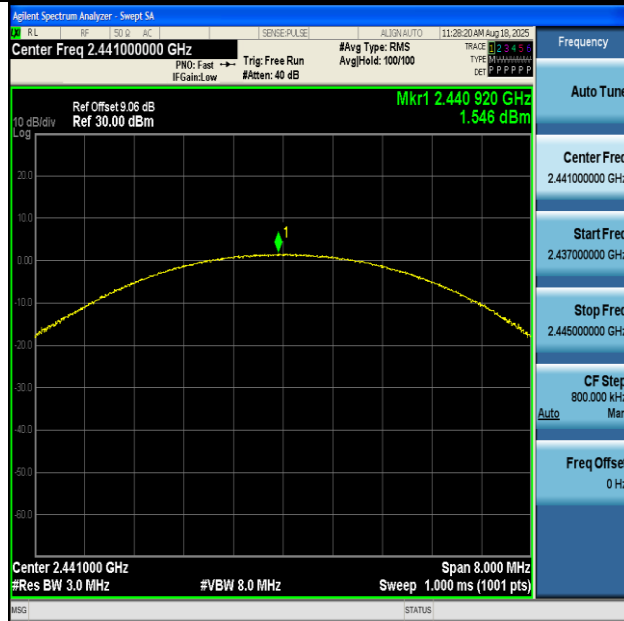


DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



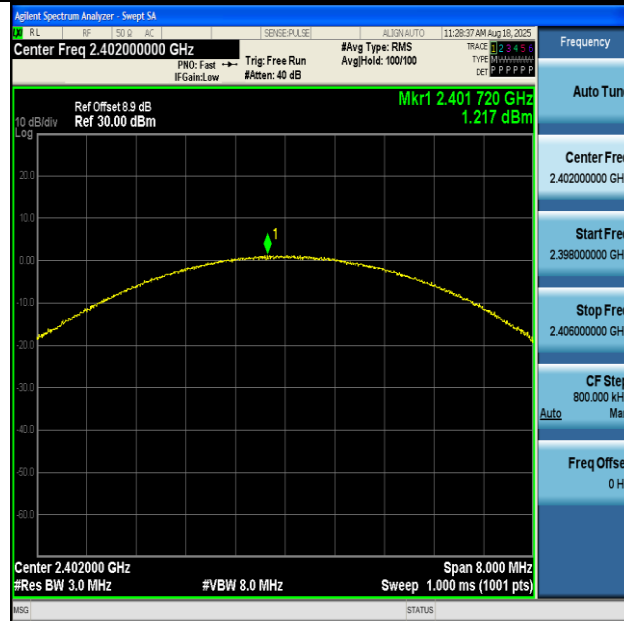


2DH5-Ant1-2441-PASS

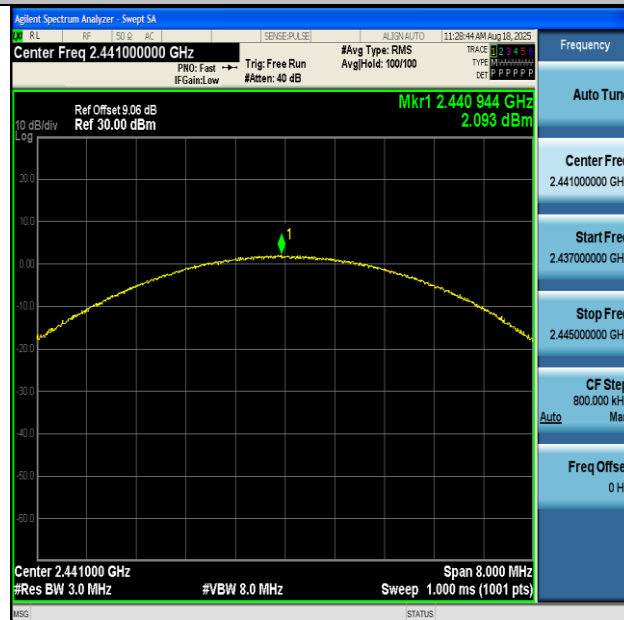


2DH5-Ant1-2480-PASS



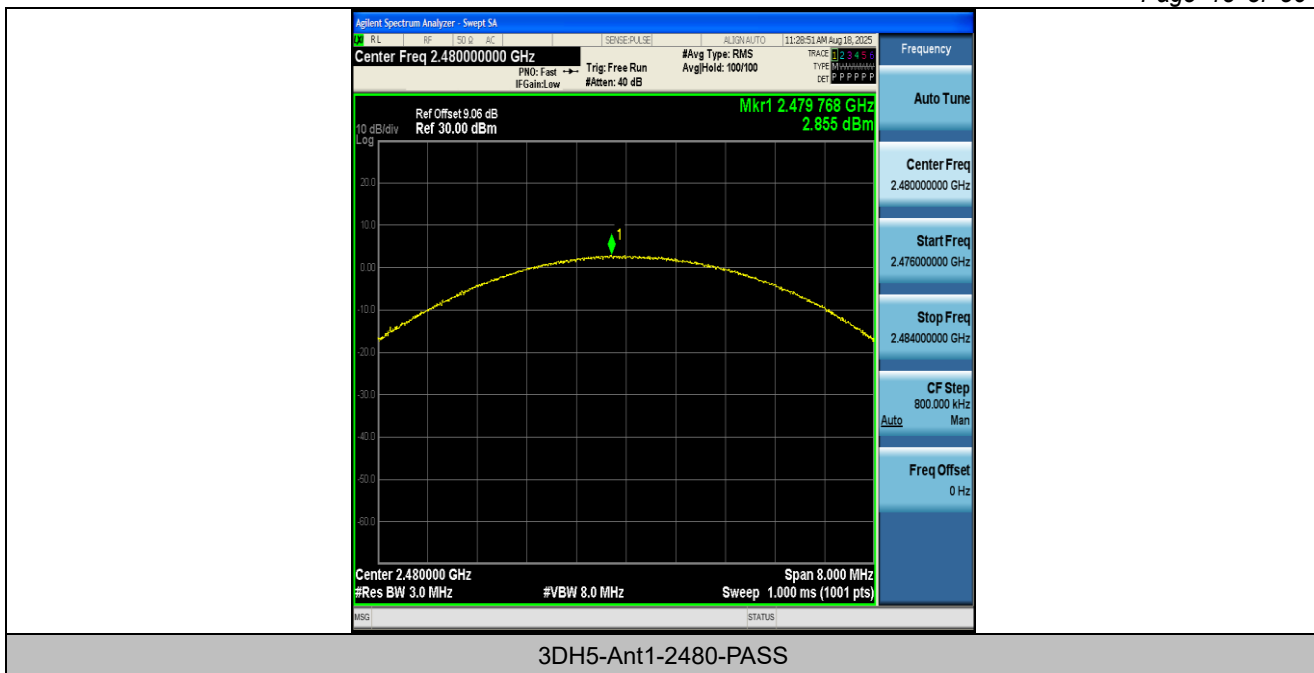


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.994	≥ 0.963	PASS
2DH5	Ant1	Hop	0.986	≥ 0.882	PASS
3DH5	Ant1	Hop	1.022	≥ 0.868	PASS

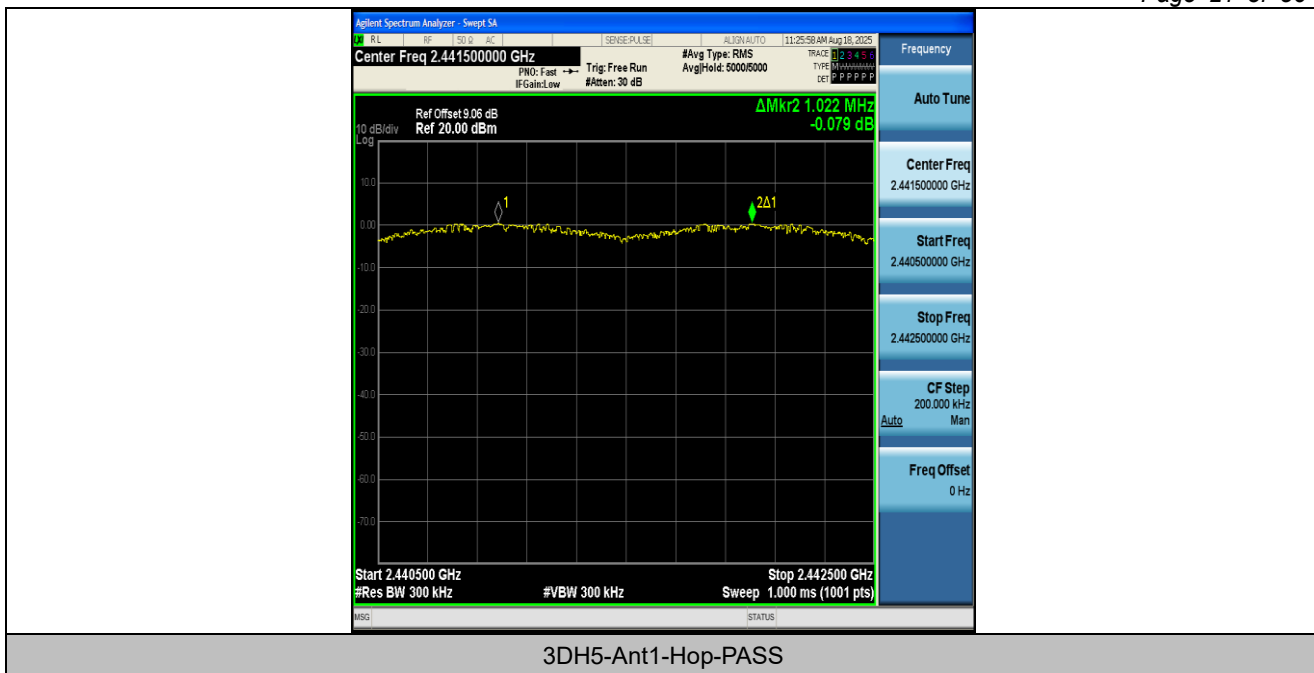
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix E: Time of occupancy

Test Result

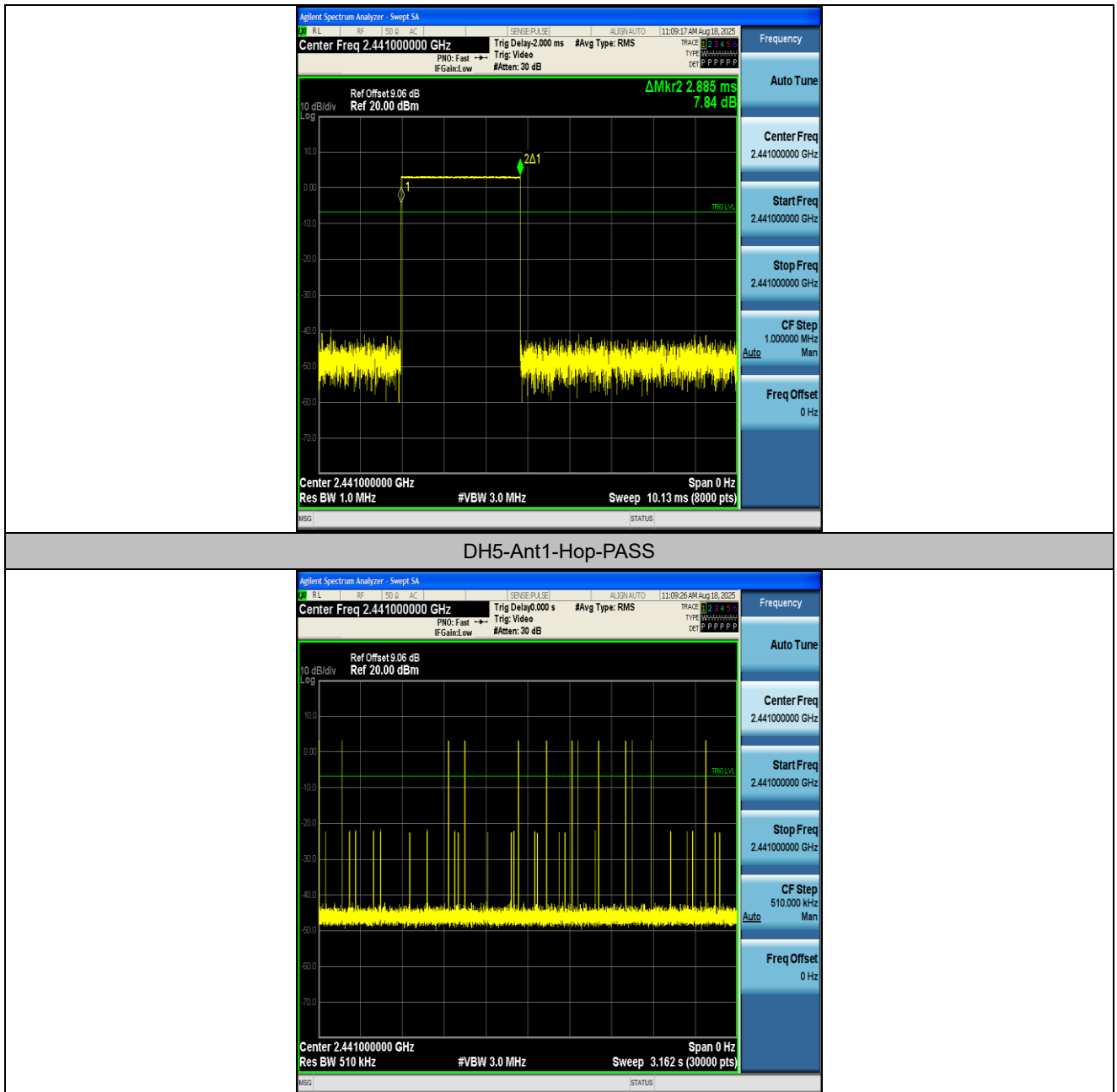
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS
2DH5	Ant1	Hop	2.891	100	0.289	≤0.4	PASS
3DH5	Ant1	Hop	2.893	80	0.231	≤0.4	PASS

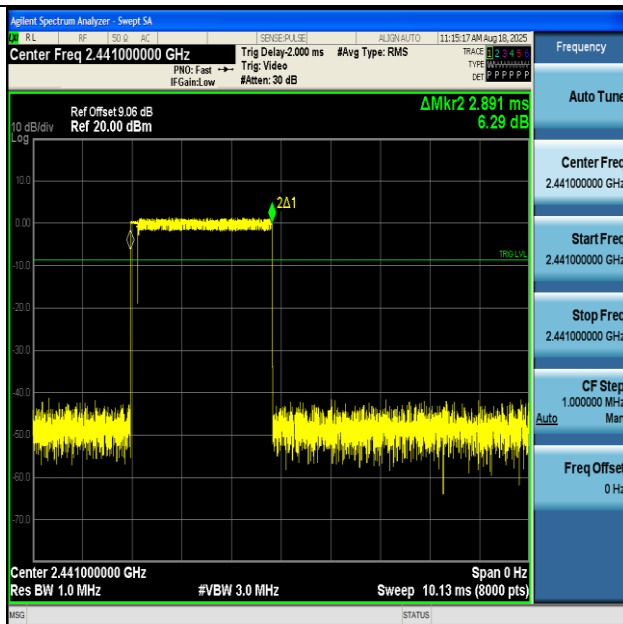
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



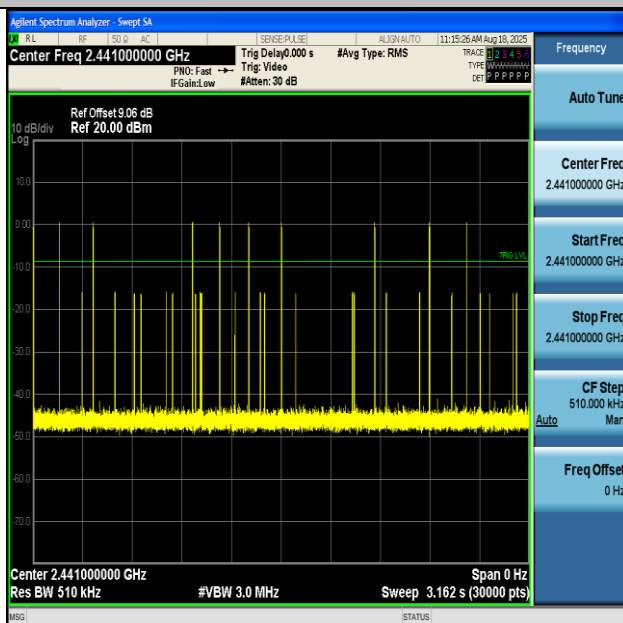


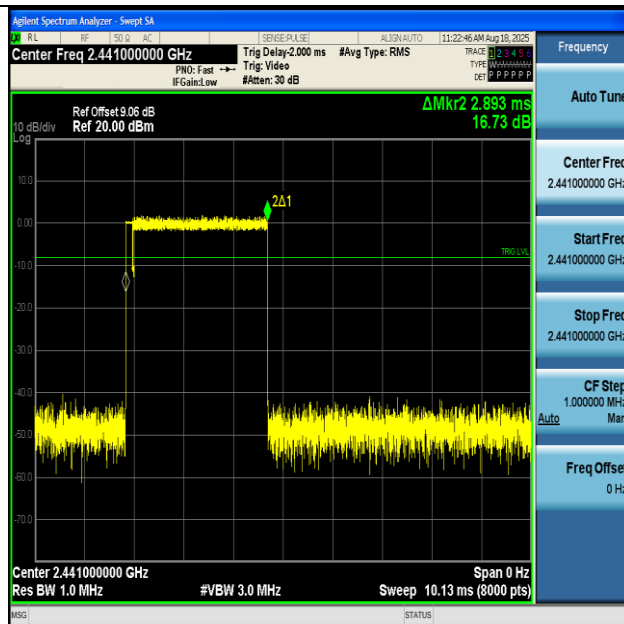
Test Graphs



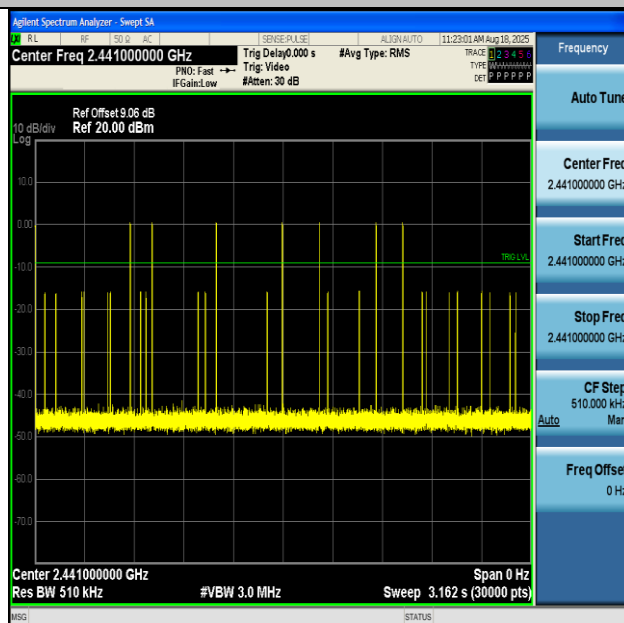


2DH5-Ant1-Hop-PASS





3DH5-Ant1-Hop-PASS





Appendix F: Number of hopping channels

Test Result

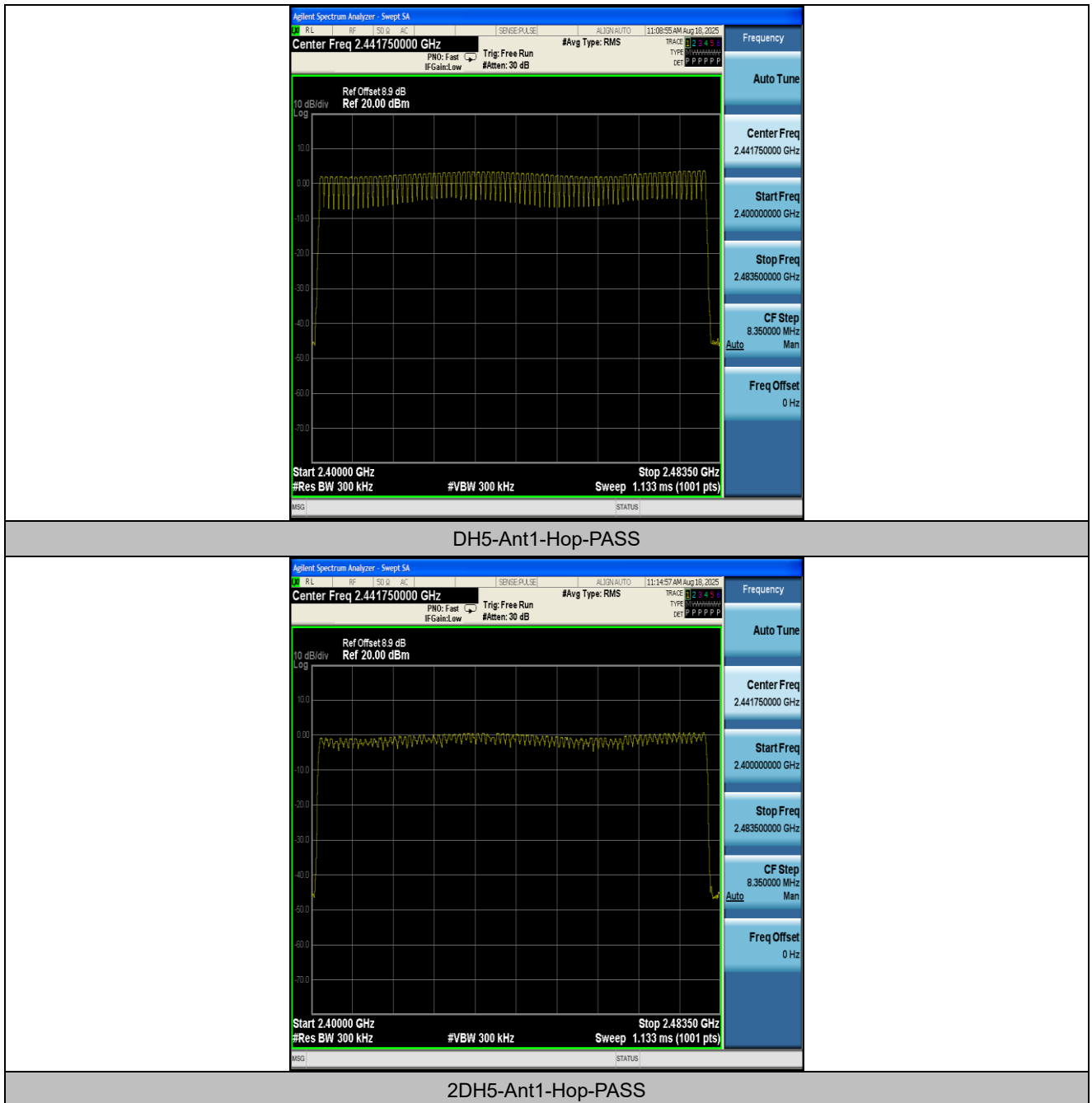
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

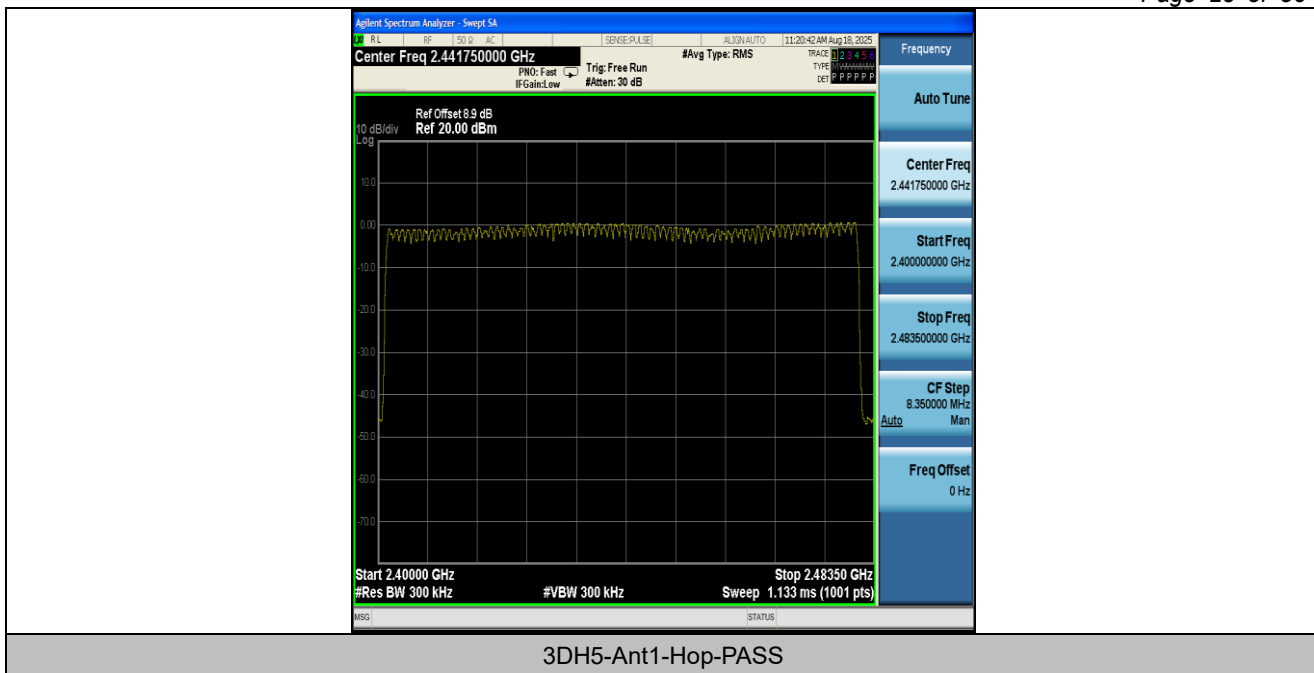
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

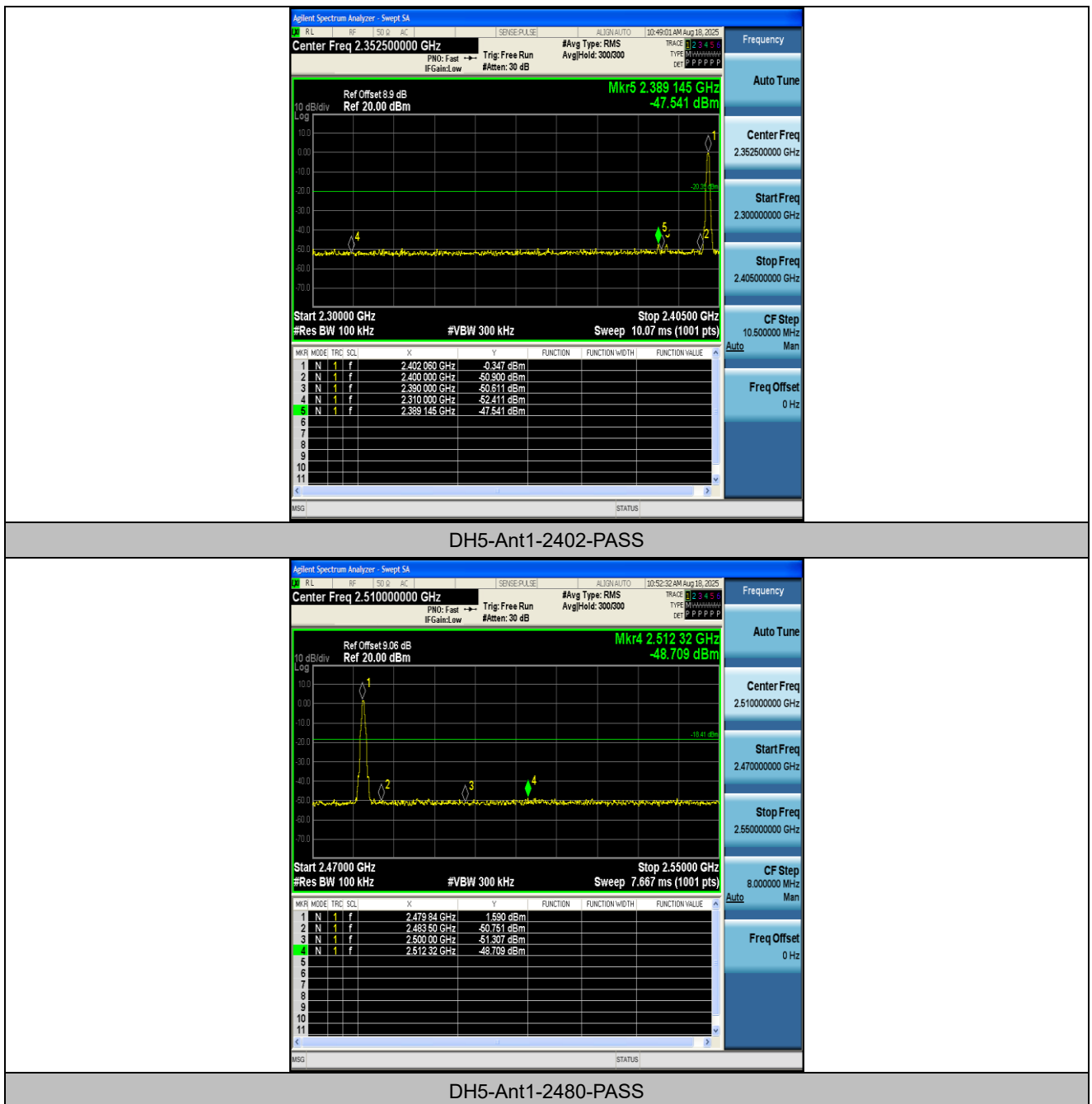
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.35	-47.54	≤-20.35	PASS
DH5	Ant1	High	2480	1.59	-48.71	≤-18.41	PASS
DH5	Ant1	Low	Hop_2402	0.82	-48.32	≤-19.18	PASS
DH5	Ant1	High	Hop_2480	3.17	-48.21	≤-16.83	PASS
2DH5	Ant1	Low	2402	-3.01	-49.2	≤-23.01	PASS
2DH5	Ant1	High	2480	-1.71	-48.93	≤-21.71	PASS
2DH5	Ant1	Low	Hop_2402	-4.69	-49.71	≤-24.69	PASS
2DH5	Ant1	High	Hop_2480	-0.66	-48.57	≤-20.66	PASS
3DH5	Ant1	Low	2402	-2.80	-48.71	≤-22.8	PASS
3DH5	Ant1	High	2480	-1.12	-47.76	≤-21.12	PASS
3DH5	Ant1	Low	Hop_2402	-4.48	-49.32	≤-24.48	PASS
3DH5	Ant1	High	Hop_2480	-1.45	-48.6	≤-21.45	PASS

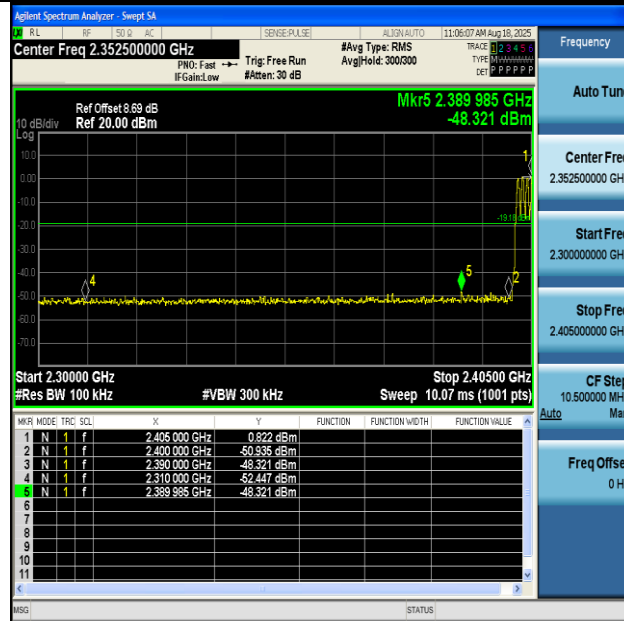
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



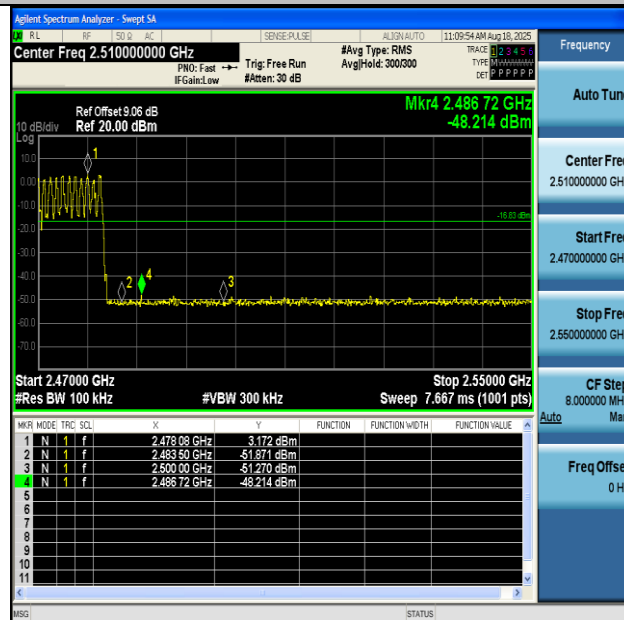


Test Graphs



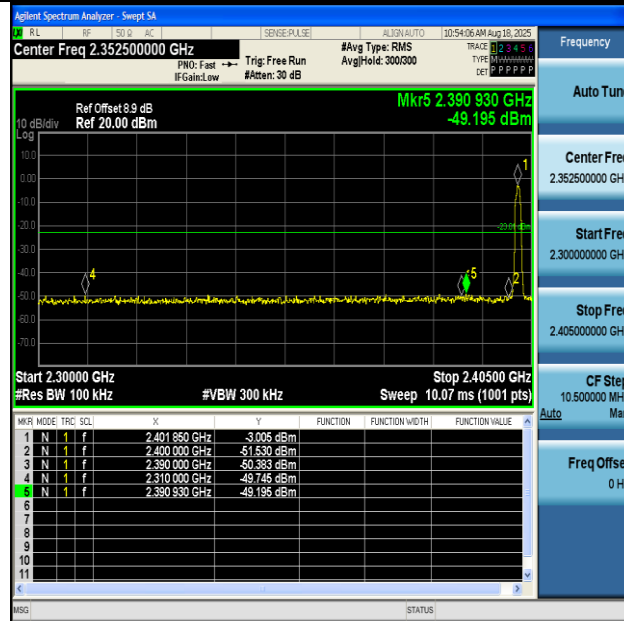


DH5-Ant1-Hop_2402-PASS

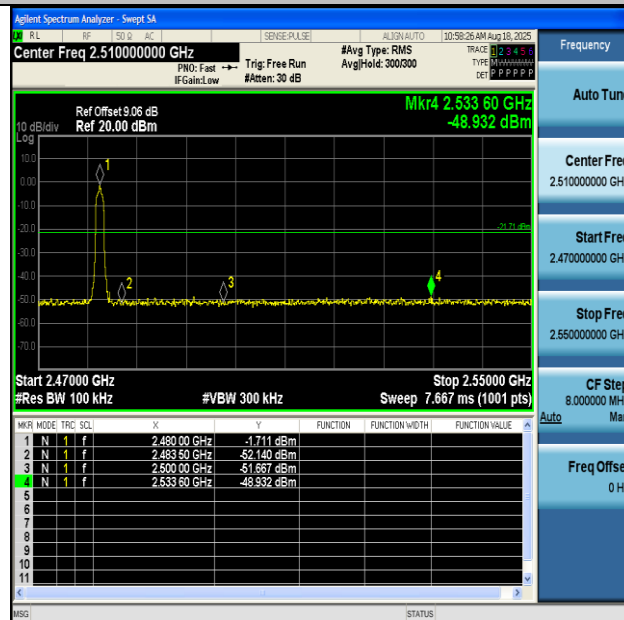


DH5-Ant1-Hop_2480-PASS



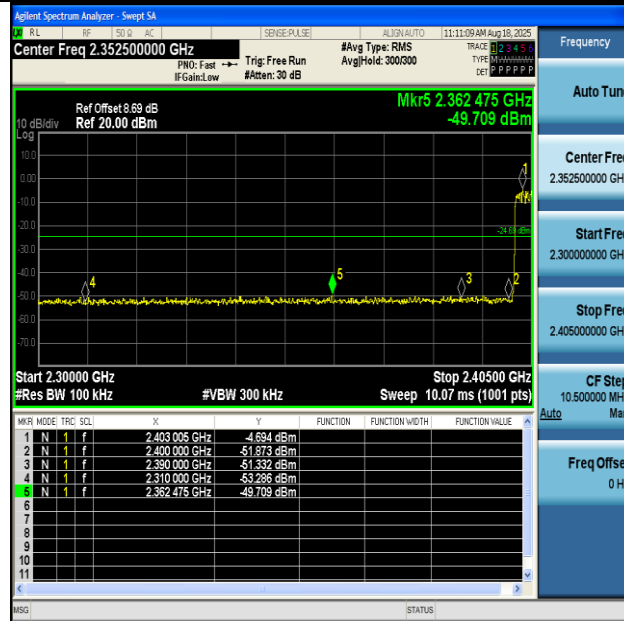


2DH5-Ant1-2402-PASS

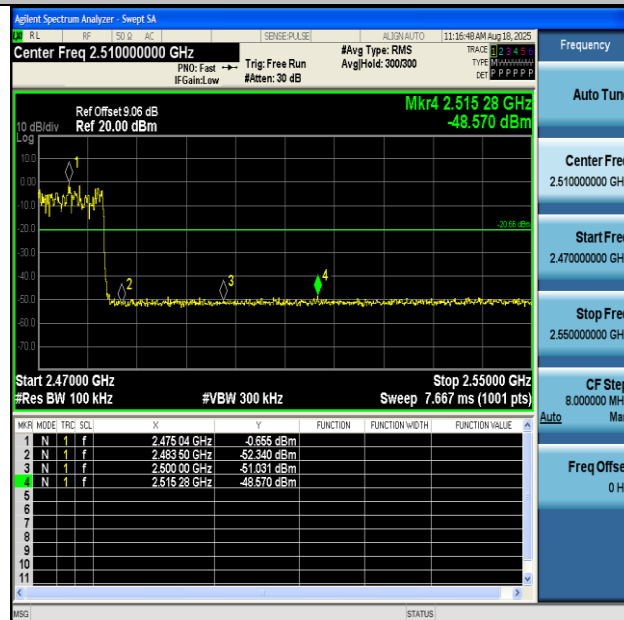


2DH5-Ant1-2480-PASS



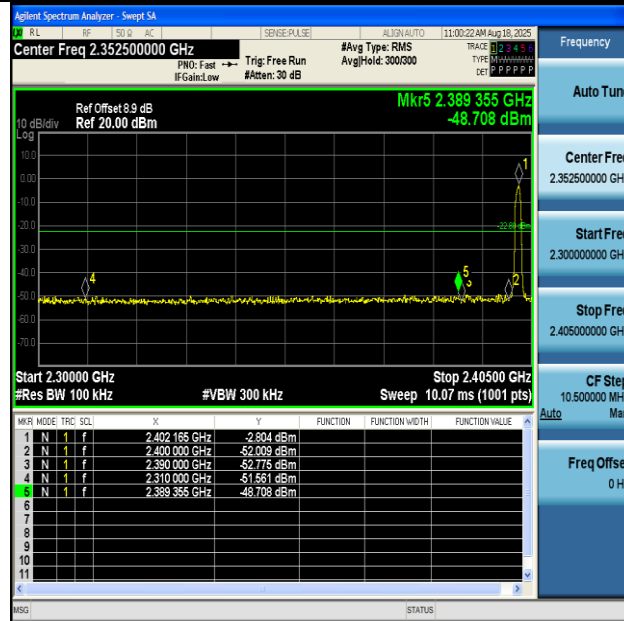


2DH5-Ant1-Hop_2402-PASS

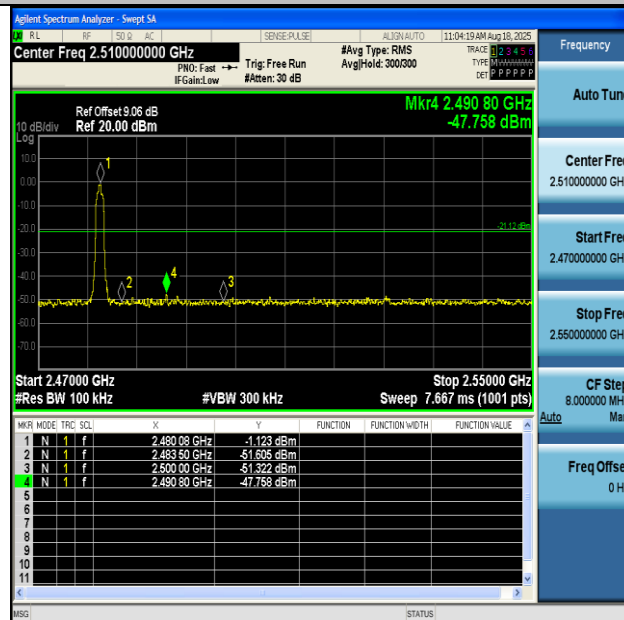


2DH5-Ant1-Hop_2480-PASS



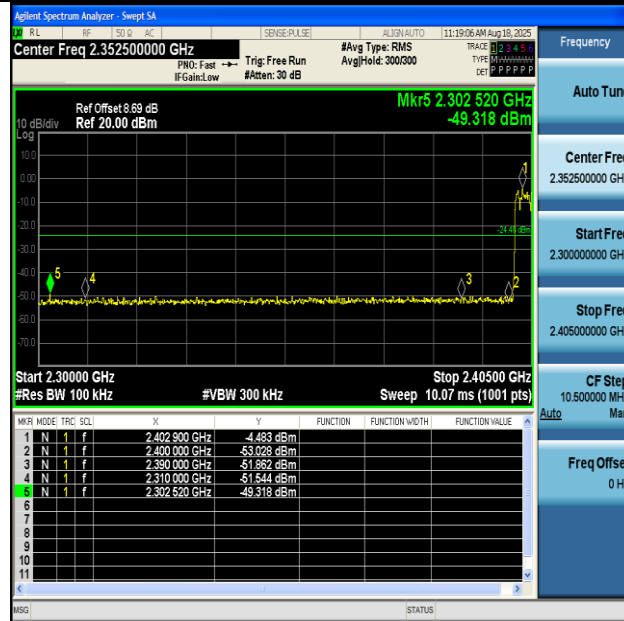


3DH5-Ant1-2402-PASS

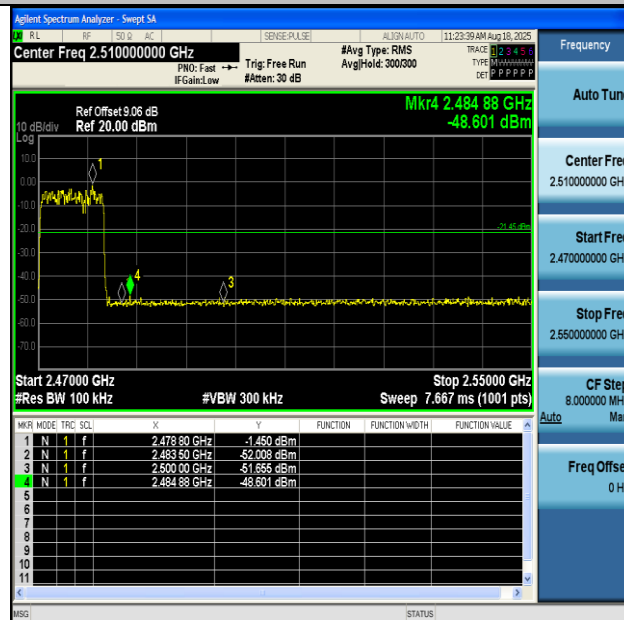


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

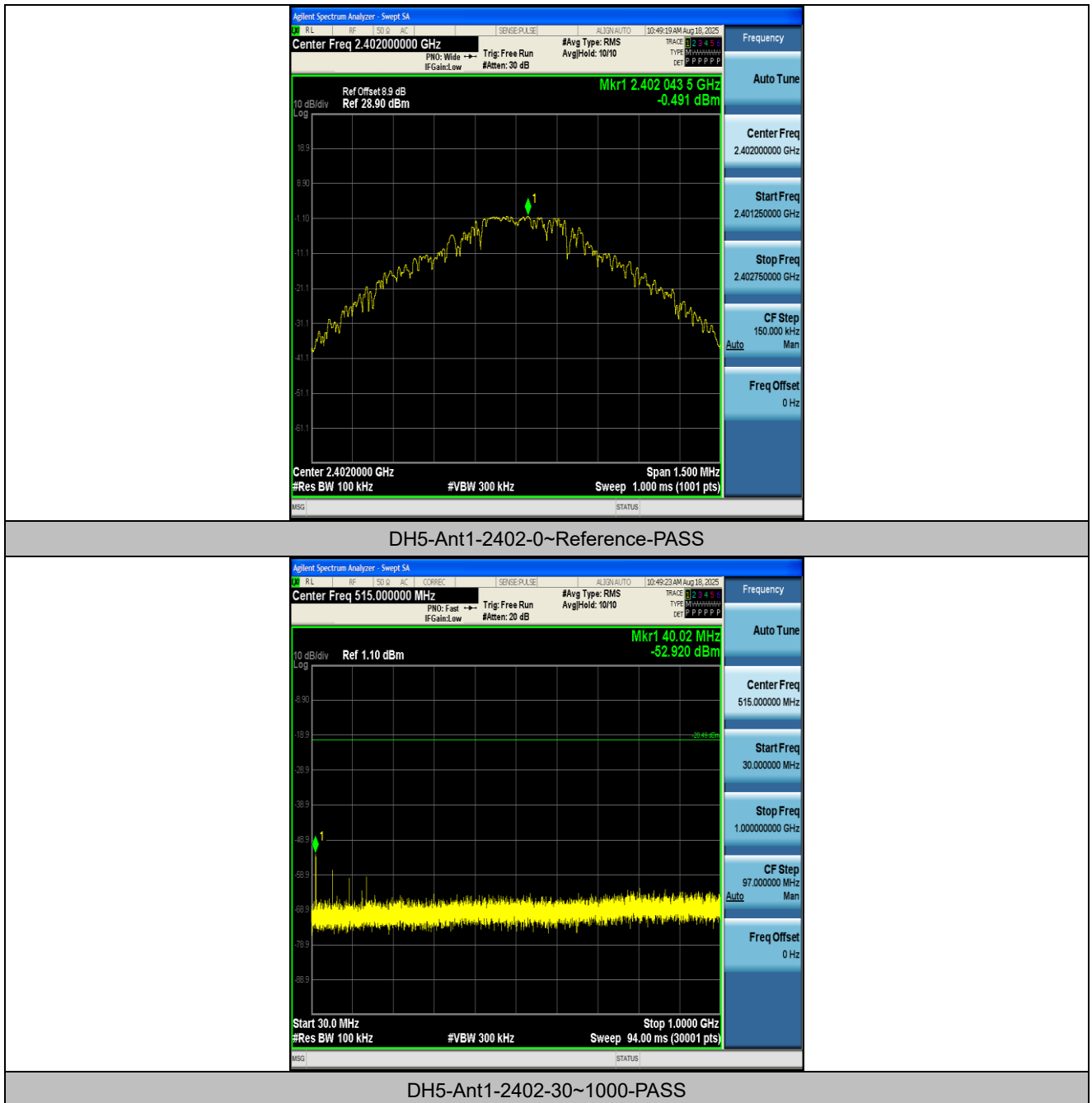
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-0.49	-0.49	---	PASS
DH5	Ant1	2402	30~1000	-0.49	-52.92	≤-20.49	PASS
DH5	Ant1	2402	1000~26500	-0.49	-45.71	≤-20.49	PASS
DH5	Ant1	2441	0~Reference	1.24	1.24	---	PASS
DH5	Ant1	2441	30~1000	1.24	-52.83	≤-18.76	PASS
DH5	Ant1	2441	1000~26500	1.24	-44.99	≤-18.76	PASS
DH5	Ant1	2480	0~Reference	0.78	0.78	---	PASS
DH5	Ant1	2480	30~1000	0.78	-52.71	≤-19.22	PASS
DH5	Ant1	2480	1000~26500	0.78	-45.53	≤-19.22	PASS
2DH5	Ant1	2402	0~Reference	-3.17	-3.17	---	PASS
2DH5	Ant1	2402	30~1000	-3.17	-52.94	≤-23.17	PASS
2DH5	Ant1	2402	1000~26500	-3.17	-45.36	≤-23.17	PASS
2DH5	Ant1	2441	0~Reference	-4.88	-4.88	---	PASS
2DH5	Ant1	2441	30~1000	-4.88	-53.31	≤-24.88	PASS
2DH5	Ant1	2441	1000~26500	-4.88	-44.84	≤-24.88	PASS
2DH5	Ant1	2480	0~Reference	-3.75	-3.75	---	PASS
2DH5	Ant1	2480	30~1000	-3.75	-52.88	≤-23.75	PASS
2DH5	Ant1	2480	1000~26500	-3.75	-45.17	≤-23.75	PASS
3DH5	Ant1	2402	0~Reference	-5.35	-5.35	---	PASS
3DH5	Ant1	2402	30~1000	-5.35	-53.03	≤-25.35	PASS
3DH5	Ant1	2402	1000~26500	-5.35	-45.43	≤-25.35	PASS
3DH5	Ant1	2441	0~Reference	-4.88	-4.88	---	PASS
3DH5	Ant1	2441	30~1000	-4.88	-52.87	≤-24.88	PASS
3DH5	Ant1	2441	1000~26500	-4.88	-45.54	≤-24.88	PASS
3DH5	Ant1	2480	0~Reference	-4.25	-4.25	---	PASS
3DH5	Ant1	2480	30~1000	-4.25	-53.19	≤-24.25	PASS
3DH5	Ant1	2480	1000~26500	-4.25	-44.77	≤-24.25	PASS

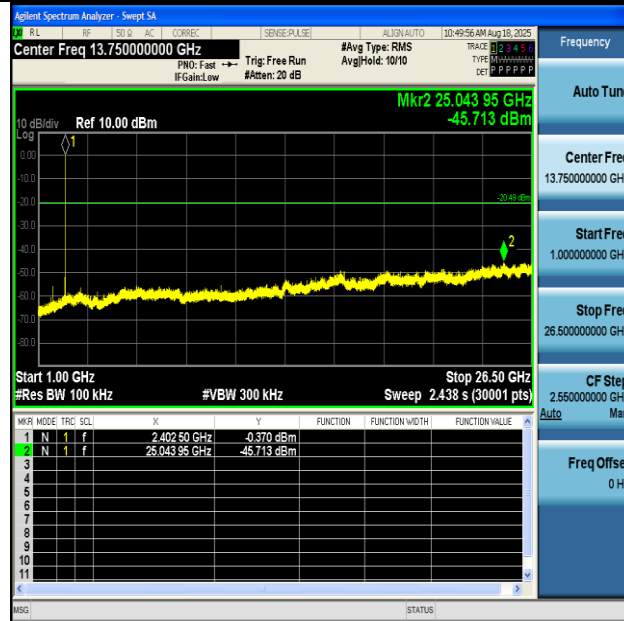
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



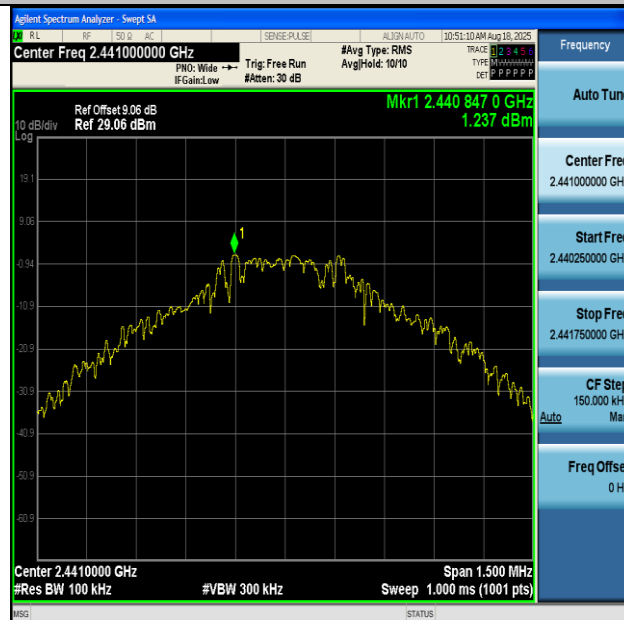


Test Graphs





DH5-Ant1-2402-1000~26500-PASS

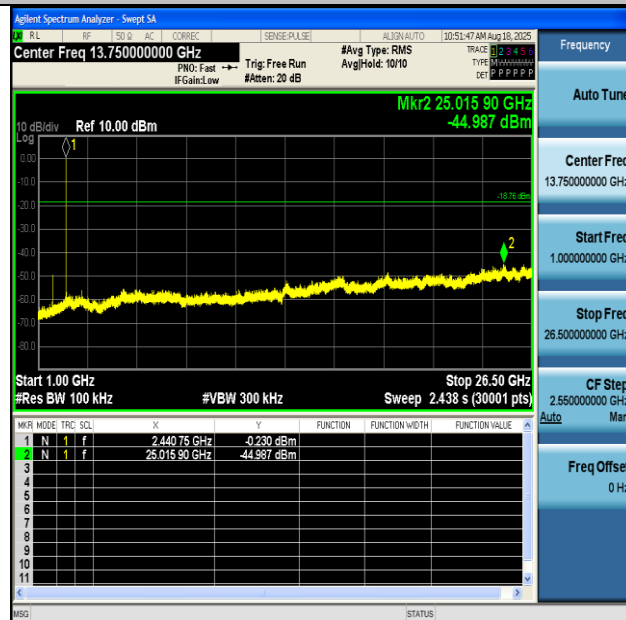


DH5-Ant1-2441-0~Reference-PASS





DH5-Ant1-2441-30~1000-PASS

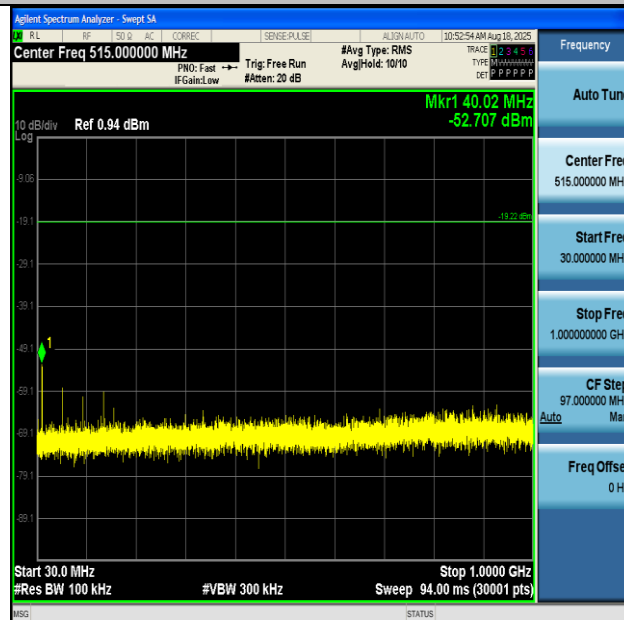


DH5-Ant1-2441-1000~26500-PASS



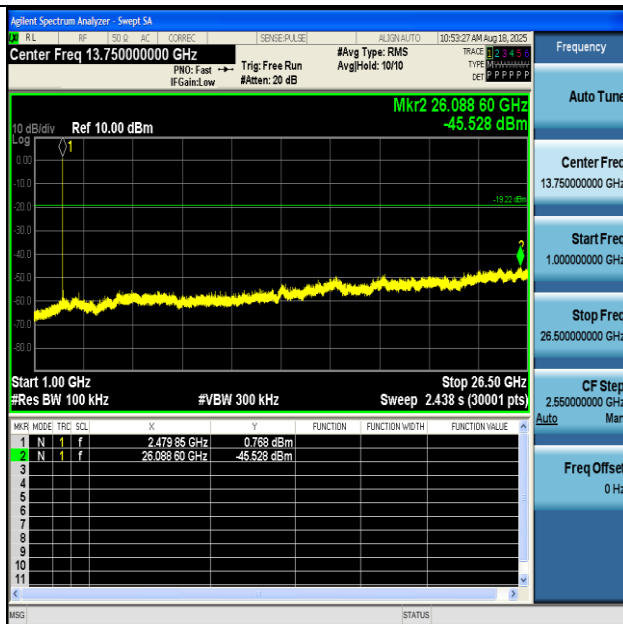


DH5-Ant1-2480-0~Reference-PASS

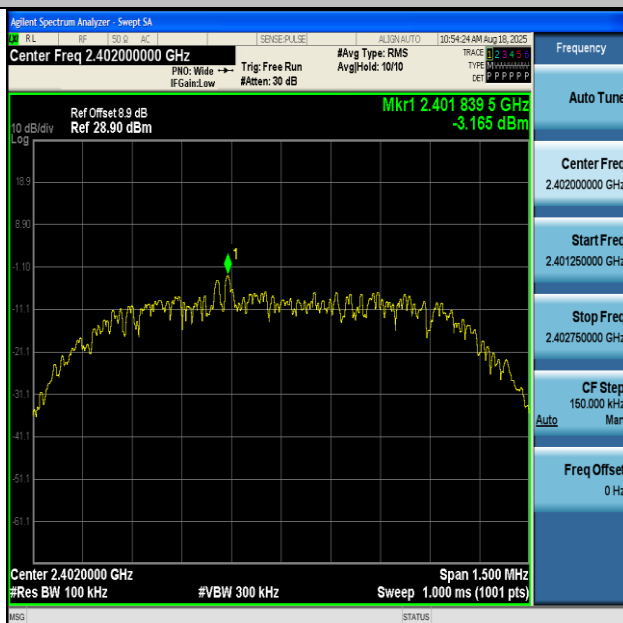


DH5-Ant1-2480-30~1000-PASS



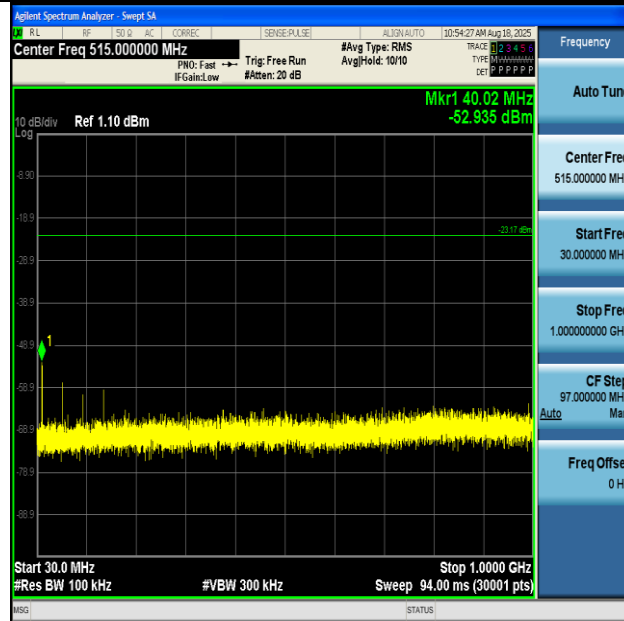


DH5-Ant1-2480-1000~26500-PASS

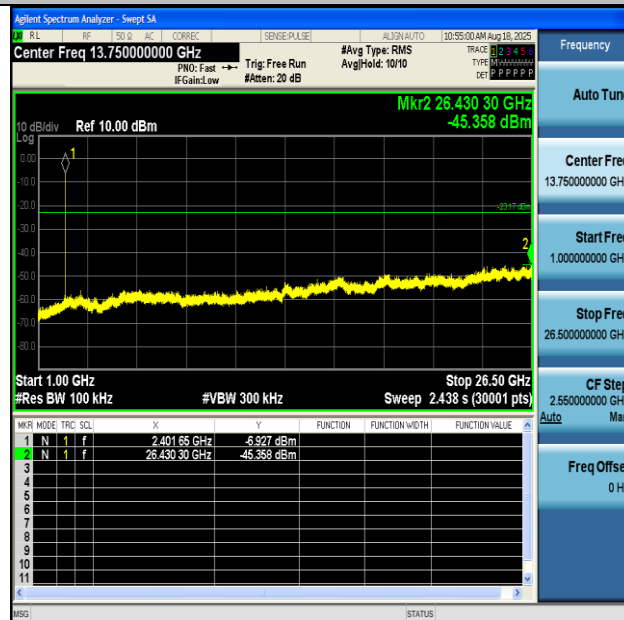


2DH5-Ant1-2402-0~Reference-PASS





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

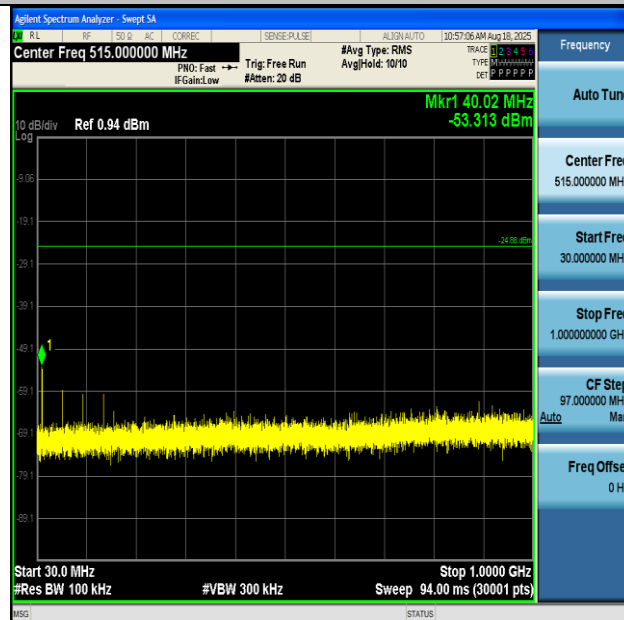


2DH5-Ant1-2402-1000~26500-PASS



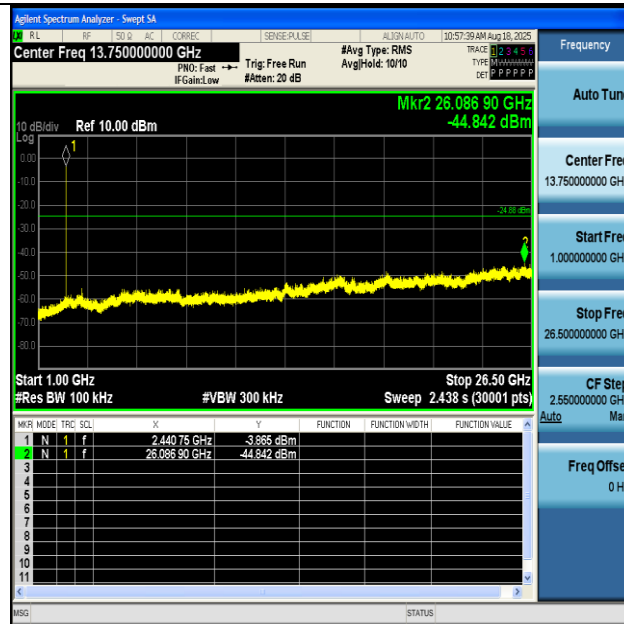


2DH5-Ant1-2441-0~Reference-PASS

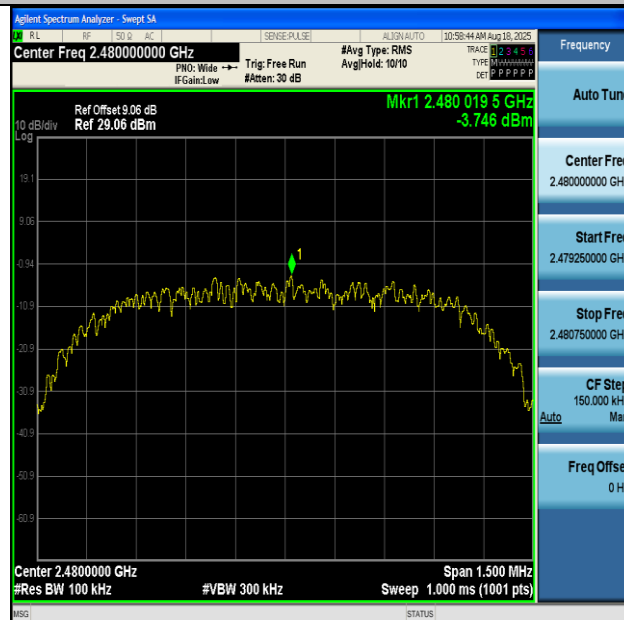


2DH5-Ant1-2441-30~1000-PASS



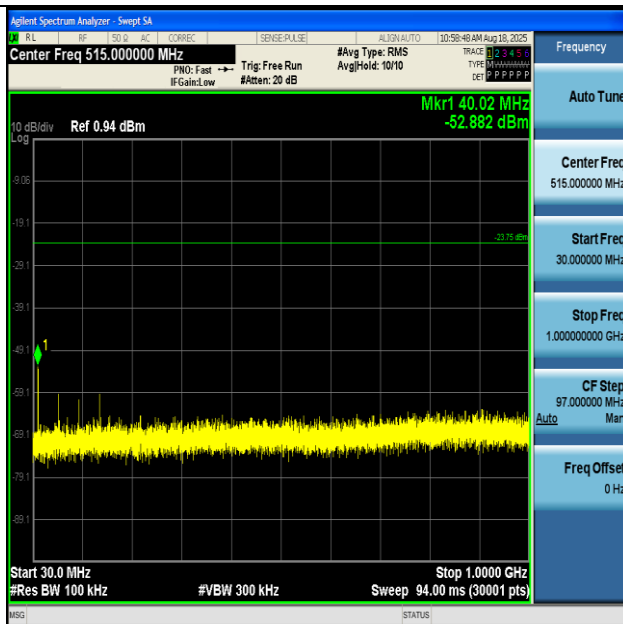


2DH5-Ant1-2441-1000~26500-PASS

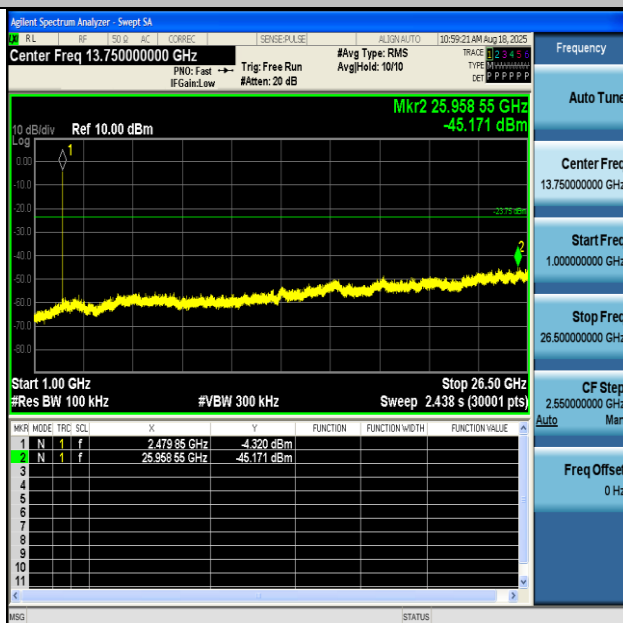


2DH5-Ant1-2480-0~Reference-PASS





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

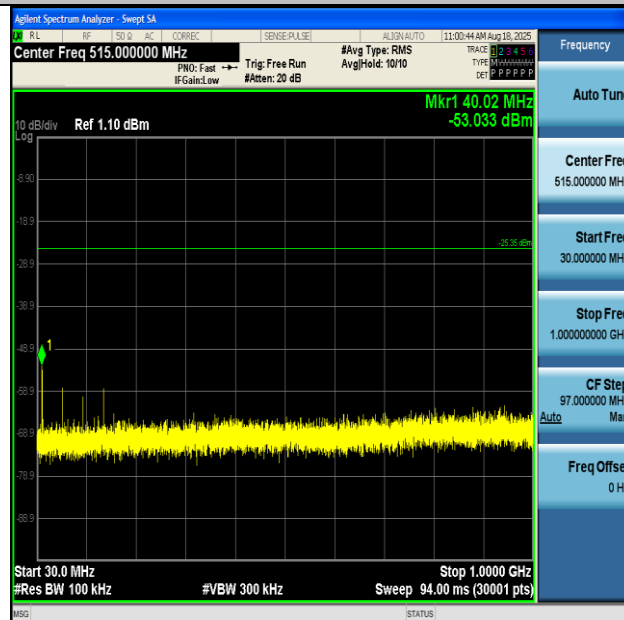


2DH5-Ant1-2480-1000~26500-PASS



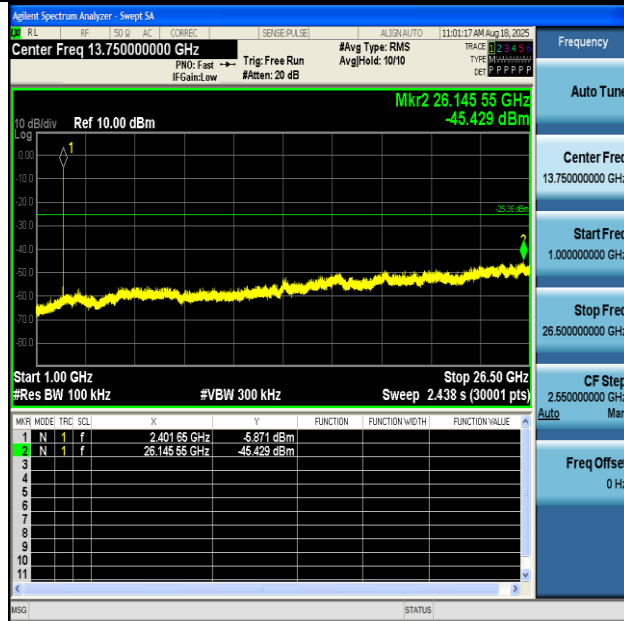


3DH5-Ant1-2402-0~Reference-PASS



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



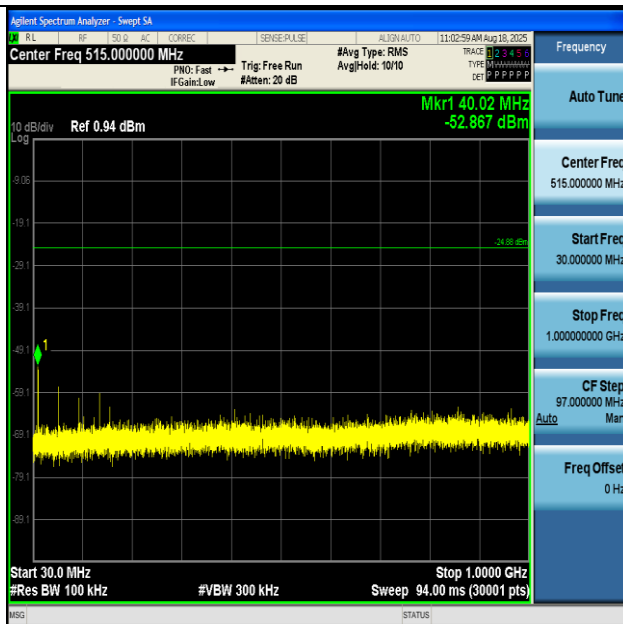


3DH5-Ant1-2402-1000~26500-PASS

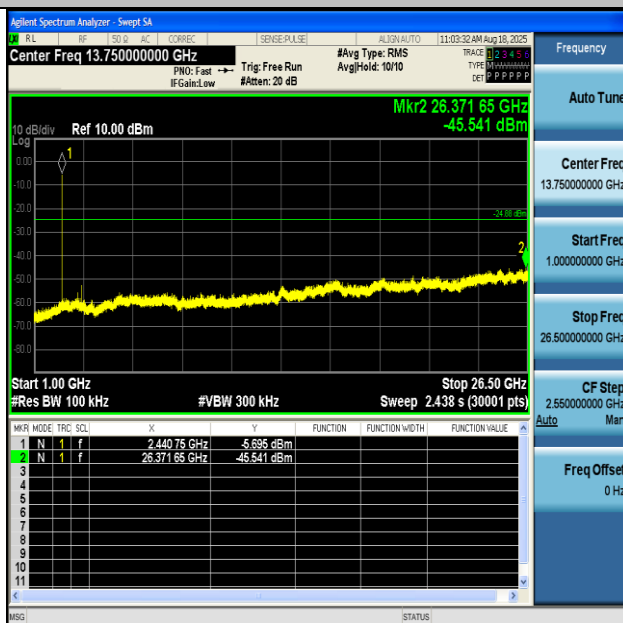


3DH5-Ant1-2441-0~Reference-PASS





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

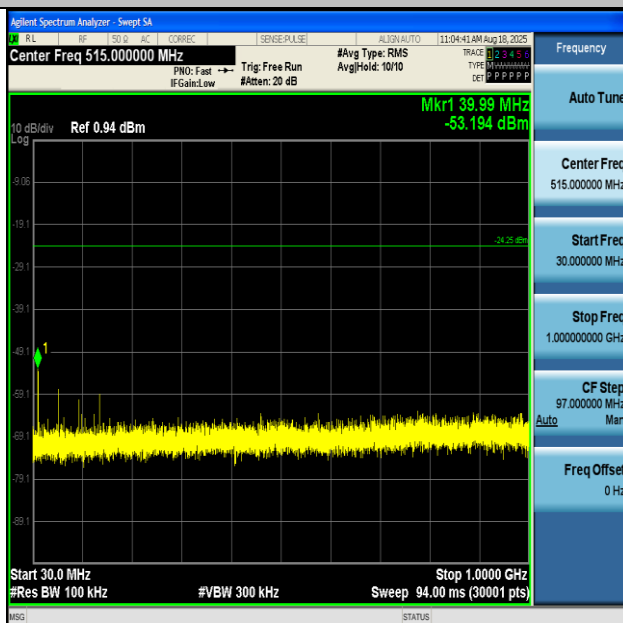


3DH5-Ant1-2441-1000~26500-PASS



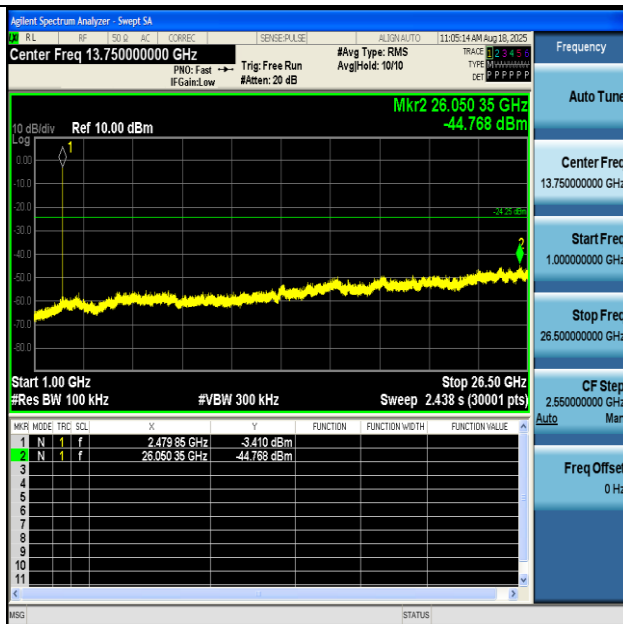


3DH5-Ant1-2480-0~Reference-PASS



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	3.73	77.21	1.12
DH5	Ant1	2441	2.88	3.73	77.21	1.12
DH5	Ant1	2480	2.88	3.73	77.21	1.12
2DH5	Ant1	2402	2.89	3.74	77.27	1.12
2DH5	Ant1	2441	2.75	3.59	76.60	1.16
2DH5	Ant1	2480	2.89	3.73	77.48	1.11
3DH5	Ant1	2402	2.89	3.73	77.48	1.11
3DH5	Ant1	2441	2.89	3.74	77.27	1.12
3DH5	Ant1	2480	2.74	3.59	76.32	1.17

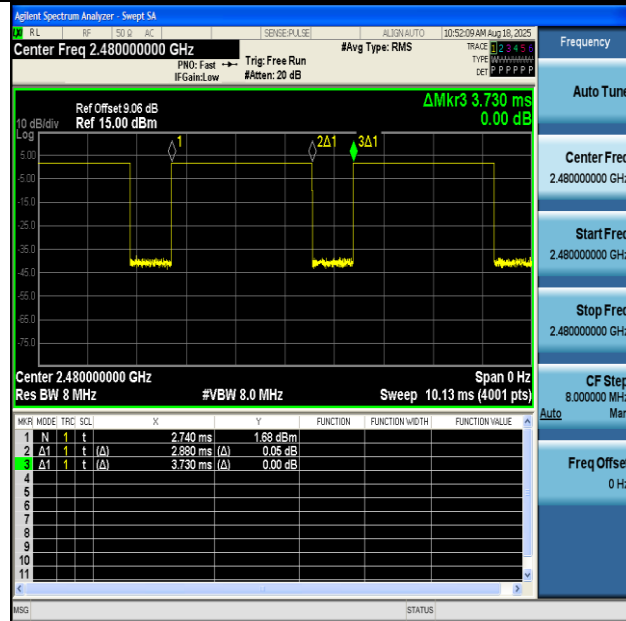
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



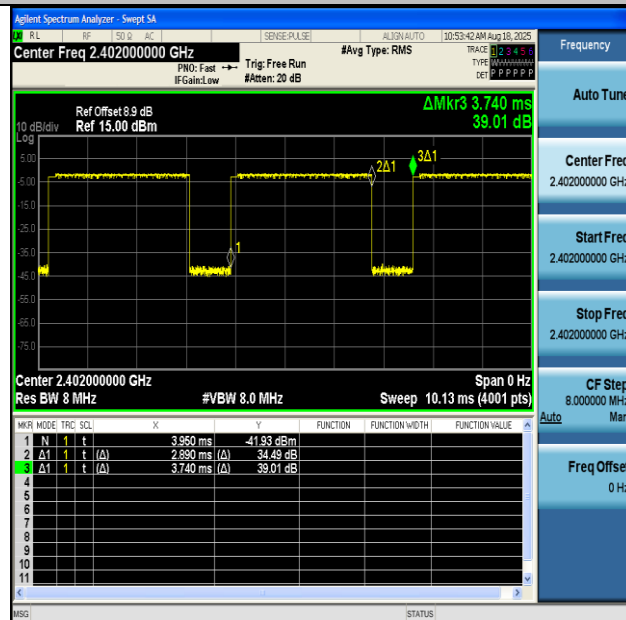


Test Graphs



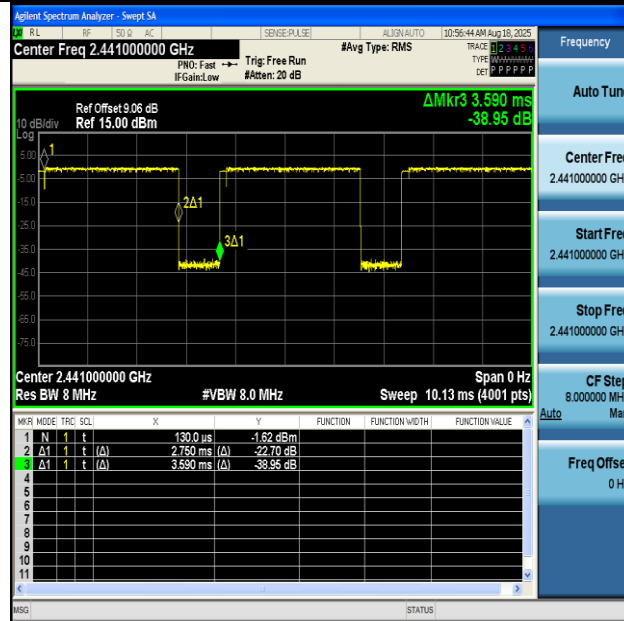


NTNV-DH5-Ant1-2480

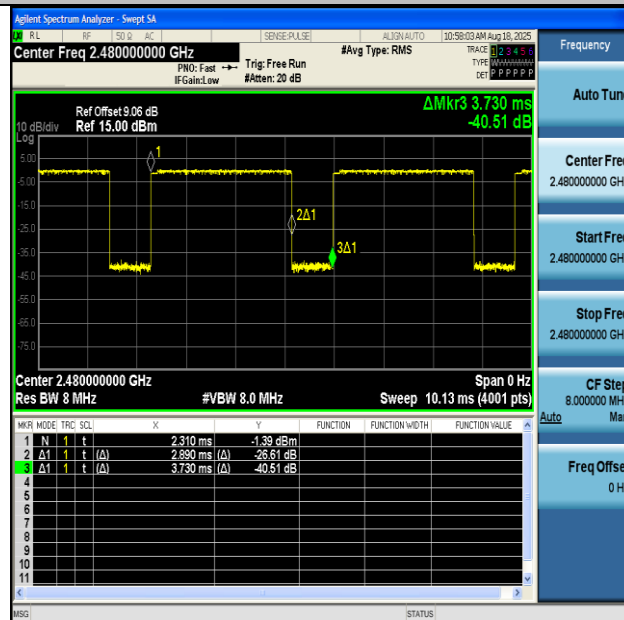


NTNV-2DH5-Ant1-2402



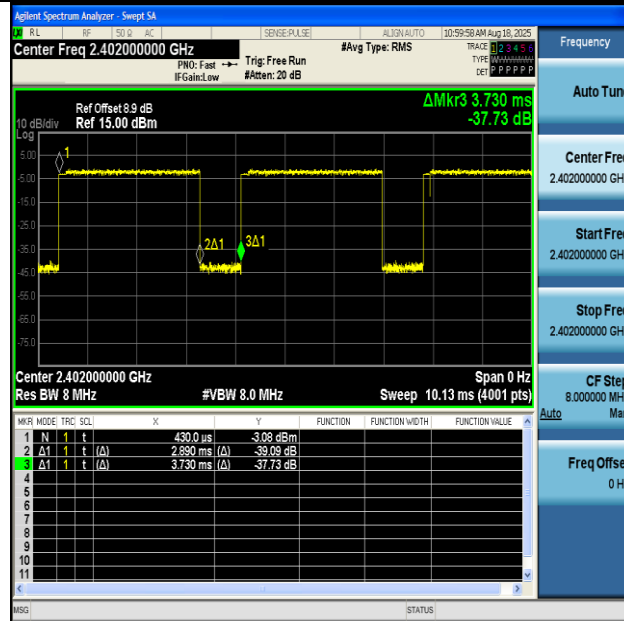


NTNV-2DH5-Ant1-2441

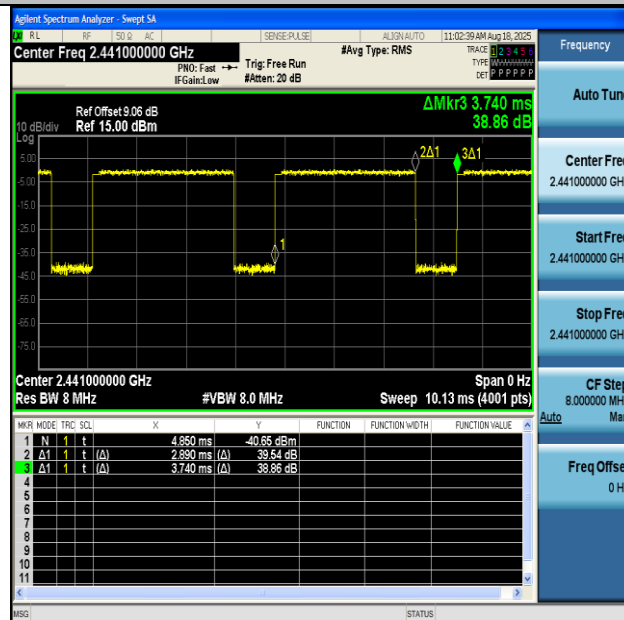


NTNV-2DH5-Ant1-2480



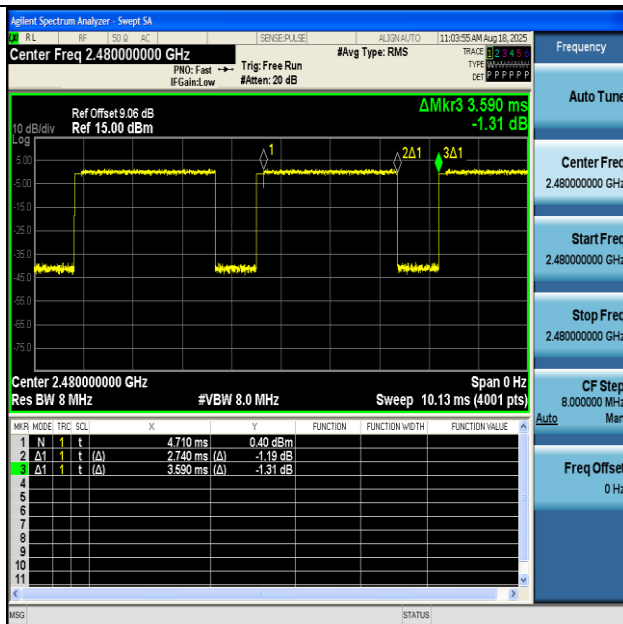


NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441





NTNV-3DH5-Ant1-2480

