



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

Product Name: ANC TWS Smart Screen EarBuds

Trade Mark: SENTRY

Test Model: BTA335

FCC ID: 2ACP4CBTA335

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	0.960	2401.517	2402.477	---	---
DH5	Ant1	2441	0.960	2440.520	2441.480	---	---
DH5	Ant1	2480	0.960	2479.517	2480.477	---	---
2DH5	Ant1	2402	1.332	2401.316	2402.648	---	---
2DH5	Ant1	2441	1.317	2440.325	2441.642	---	---
2DH5	Ant1	2480	1.326	2479.319	2480.645	---	---
3DH5	Ant1	2402	1.281	2401.331	2402.612	---	---
3DH5	Ant1	2441	1.311	2440.337	2441.648	---	---
3DH5	Ant1	2480	1.311	2479.334	2480.645	---	---

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	0.84972	2401.5561	2402.4058	---	---
DH5	Ant1	2441	0.86309	2440.5525	2441.4156	---	---
DH5	Ant1	2480	0.85518	2479.5504	2480.4056	---	---
2DH5	Ant1	2402	1.1754	2401.3955	2402.5709	---	---
2DH5	Ant1	2441	1.1928	2440.3875	2441.5803	---	---
2DH5	Ant1	2480	1.1835	2479.3919	2480.5754	---	---
3DH5	Ant1	2402	1.1745	2401.3975	2402.5720	---	---
3DH5	Ant1	2441	1.1817	2440.3957	2441.5774	---	---
3DH5	Ant1	2480	1.1810	2479.3940	2480.5750	---	---

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





Test Graphs



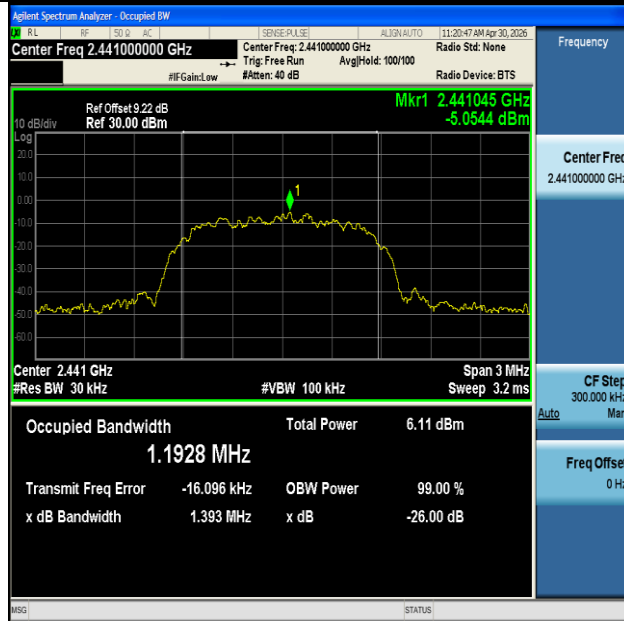


DH5-Ant1-2480



2DH5-Ant1-2402



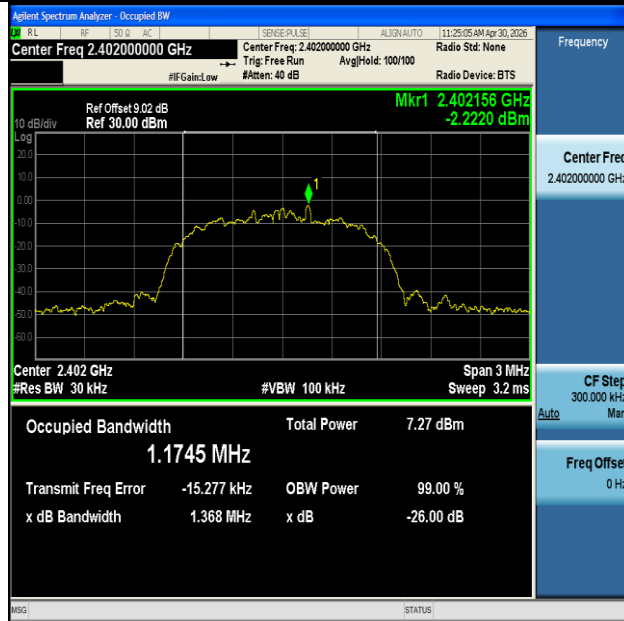


2DH5-Ant1-2441

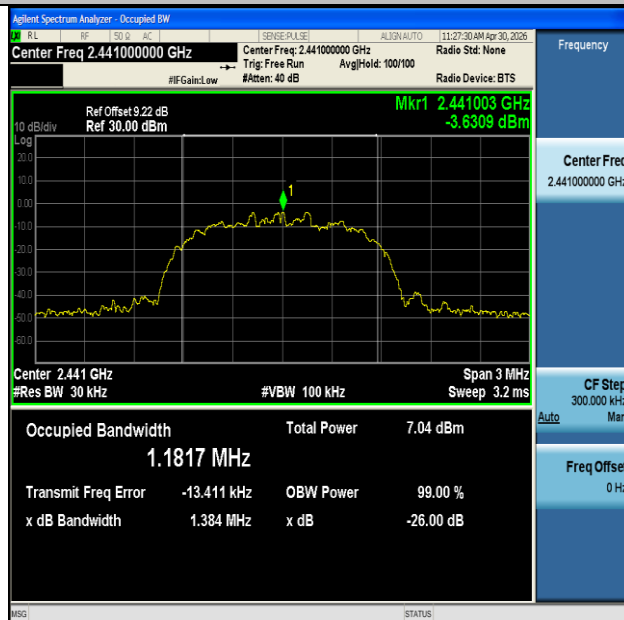


2DH5-Ant1-2480



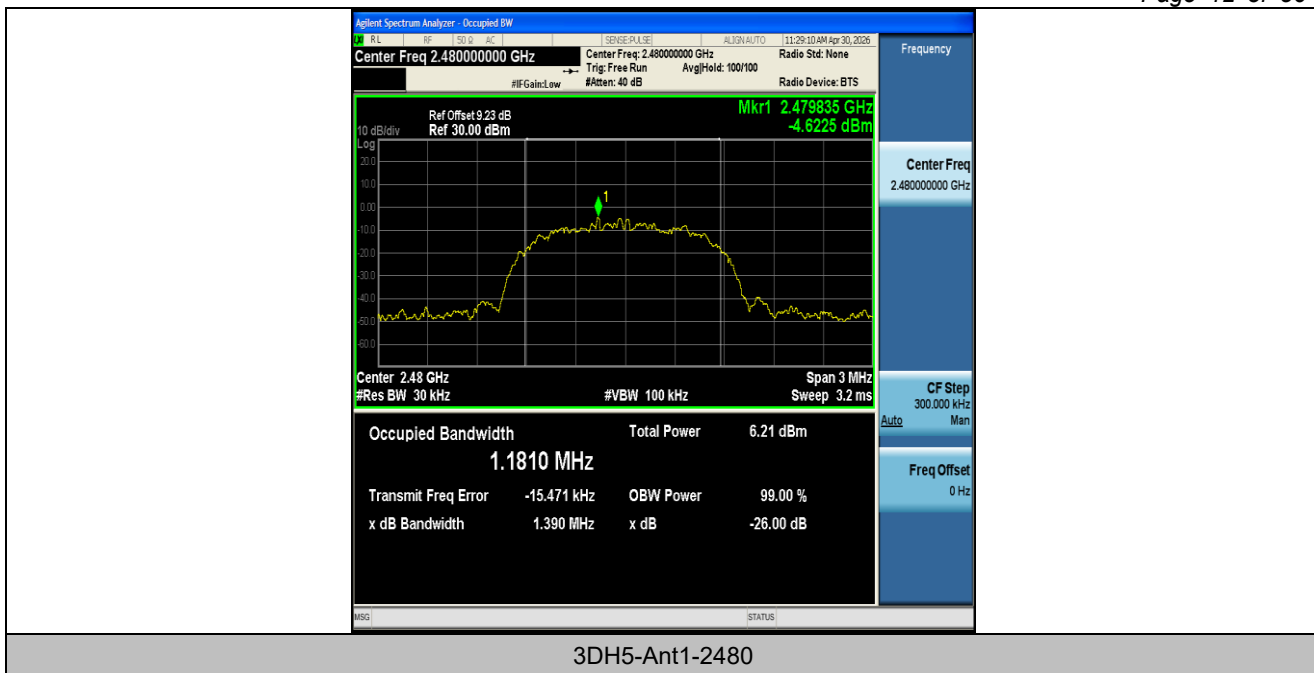


3DH5-Ant1-2402



3DH5-Ant1-2441







Appendix C: Maximum peak conducted output power

Test Result

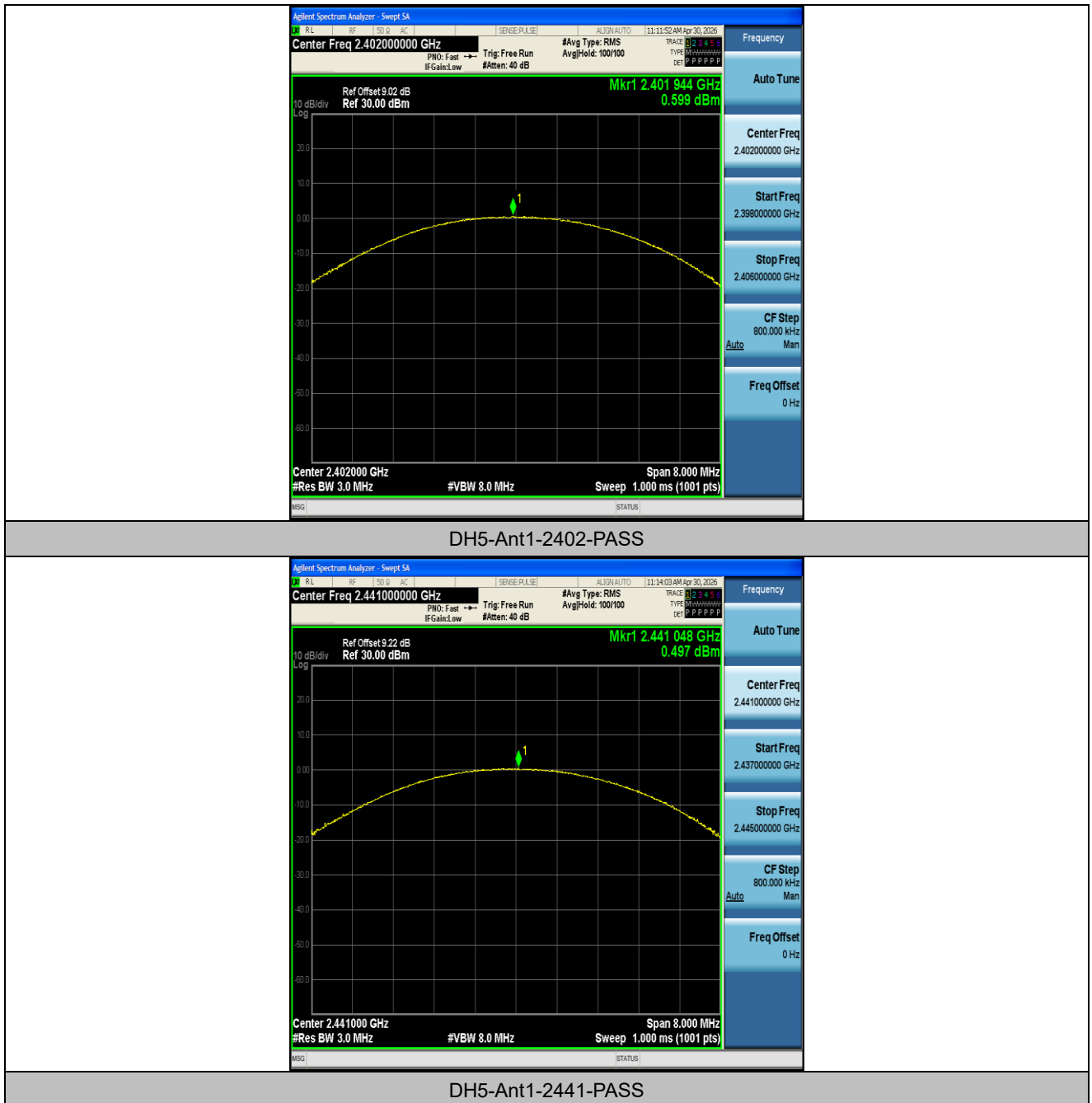
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	0.60	≤30	PASS
DH5	Ant1	2441	0.50	≤30	PASS
DH5	Ant1	2480	-0.16	≤30	PASS
2DH5	Ant1	2402	2.54	≤20.97	PASS
2DH5	Ant1	2441	2.44	≤20.97	PASS
2DH5	Ant1	2480	1.60	≤20.97	PASS
3DH5	Ant1	2402	3.09	≤20.97	PASS
3DH5	Ant1	2441	2.80	≤20.97	PASS
3DH5	Ant1	2480	2.36	≤20.97	PASS

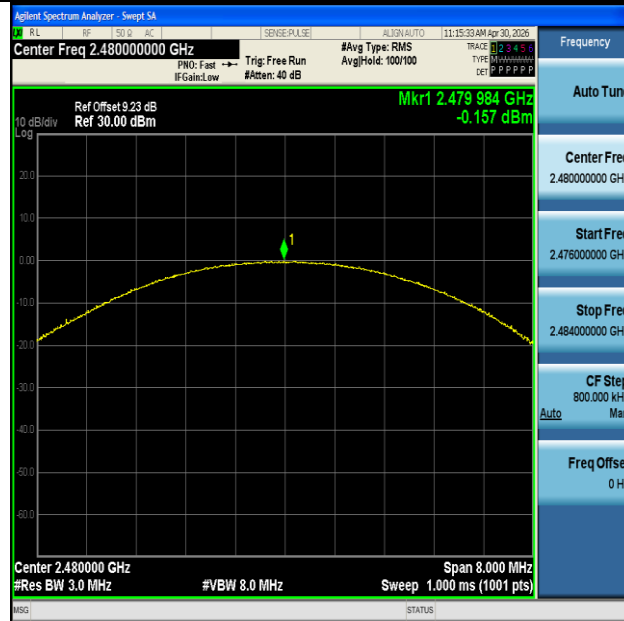
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



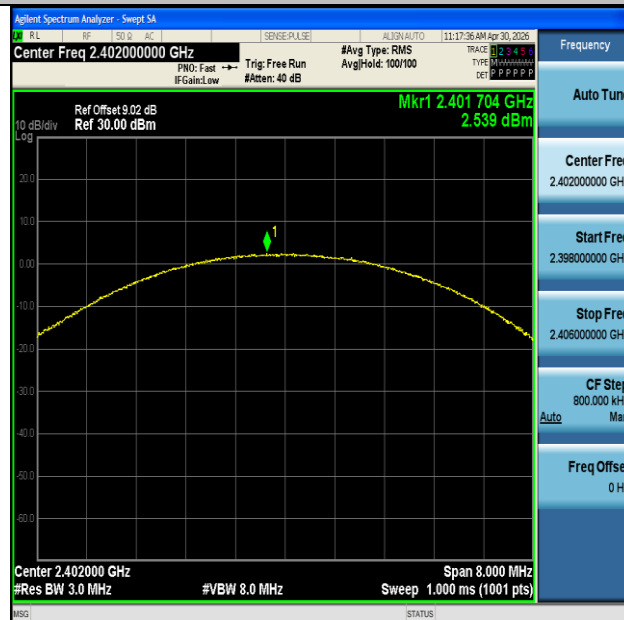


Test Graphs



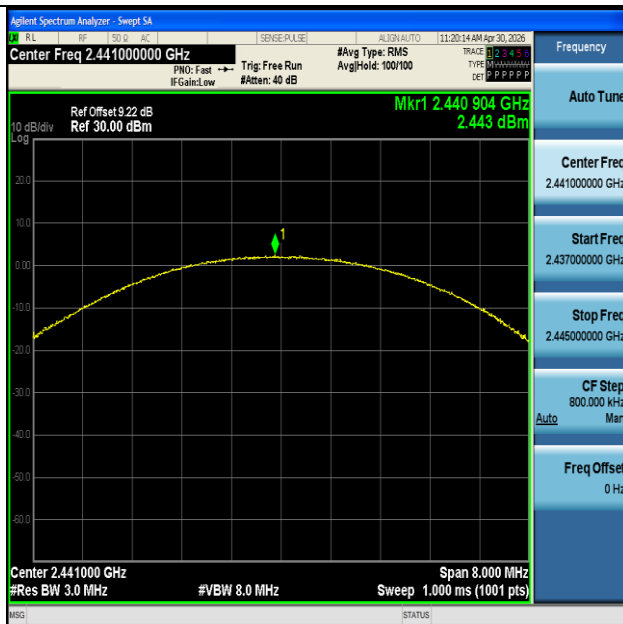


DH5-Ant1-2480-PASS

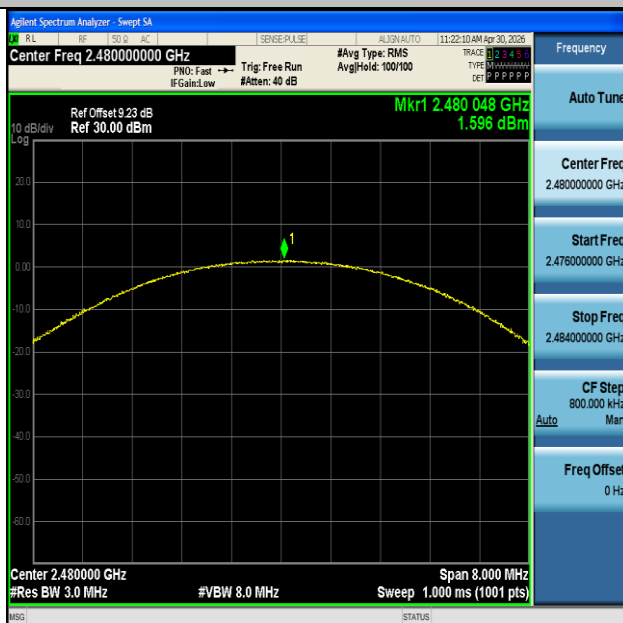


2DH5-Ant1-2402-PASS



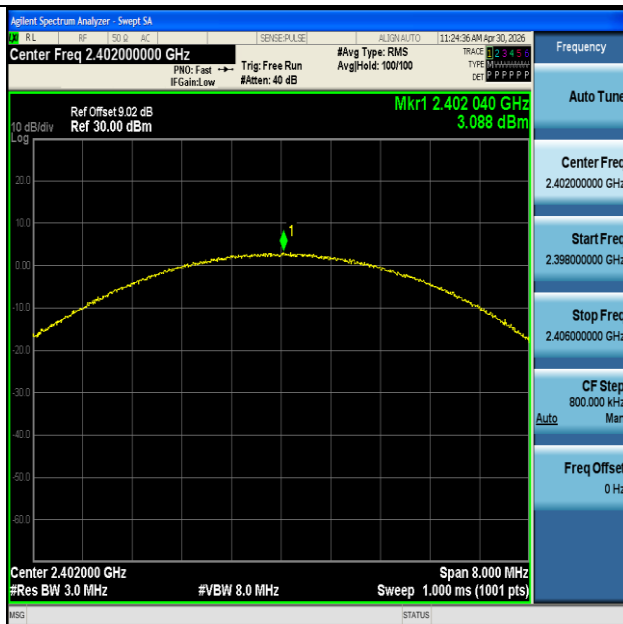


2DH5-Ant1-2441-PASS

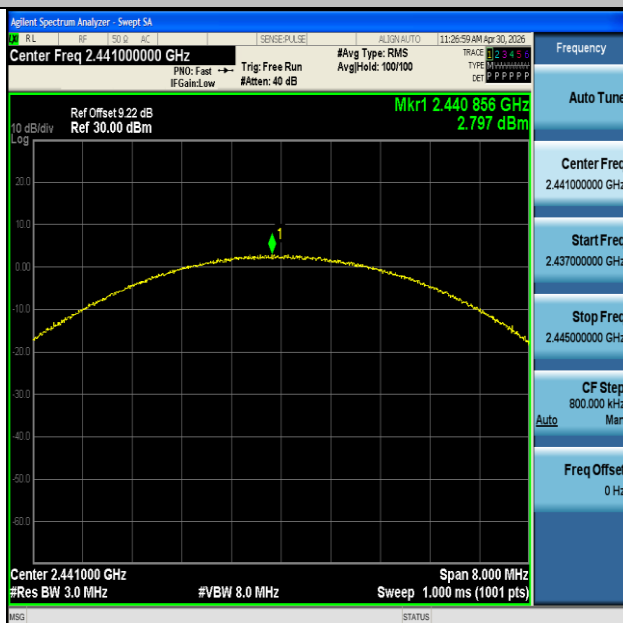


2DH5-Ant1-2480-PASS



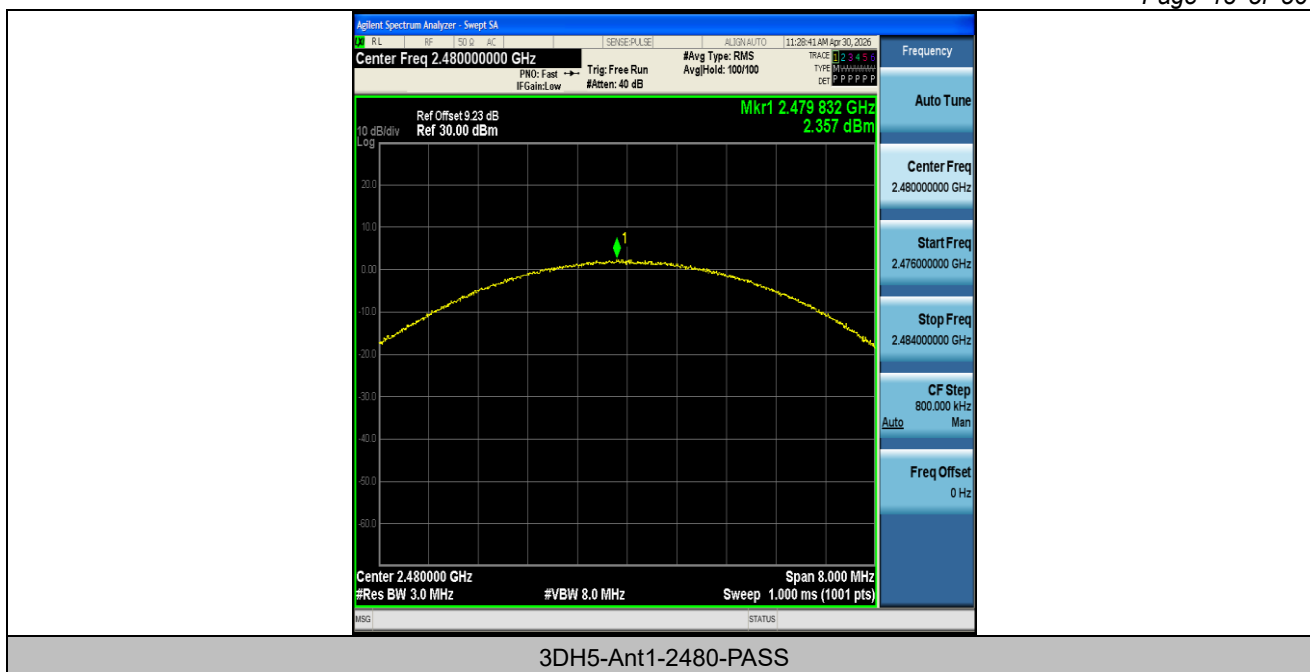


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.996	≥ 0.960	PASS
2DH5	Ant1	Hop	1.01	≥ 0.888	PASS
3DH5	Ant1	Hop	1.004	≥ 0.874	PASS

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





Test Graphs





Appendix E: Time of occupancy

Test Result

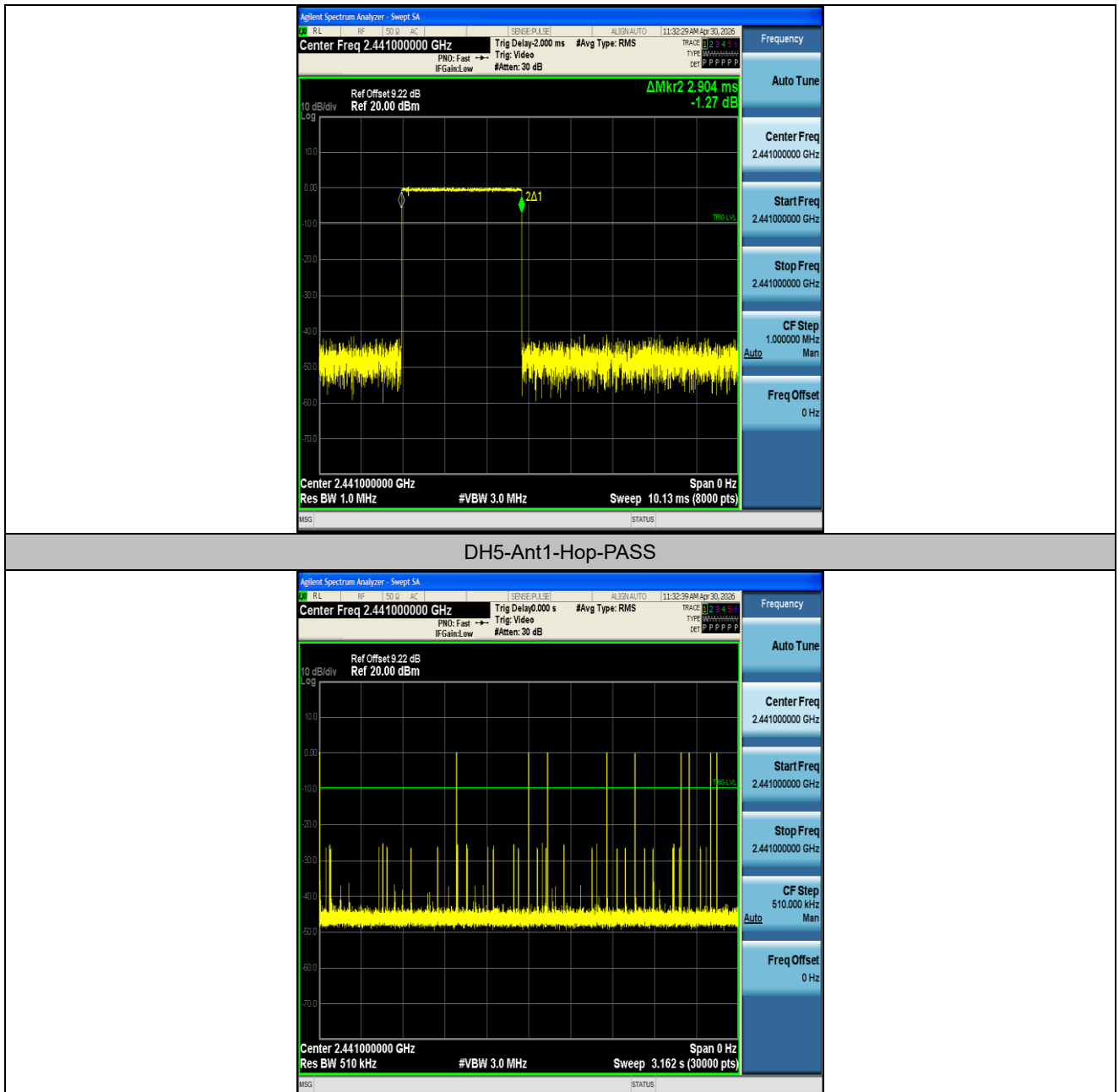
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.904	100	0.29	≤0.4	PASS
2DH5	Ant1	Hop	2.911	80	0.233	≤0.4	PASS
3DH5	Ant1	Hop	2.912	130	0.379	≤0.4	PASS

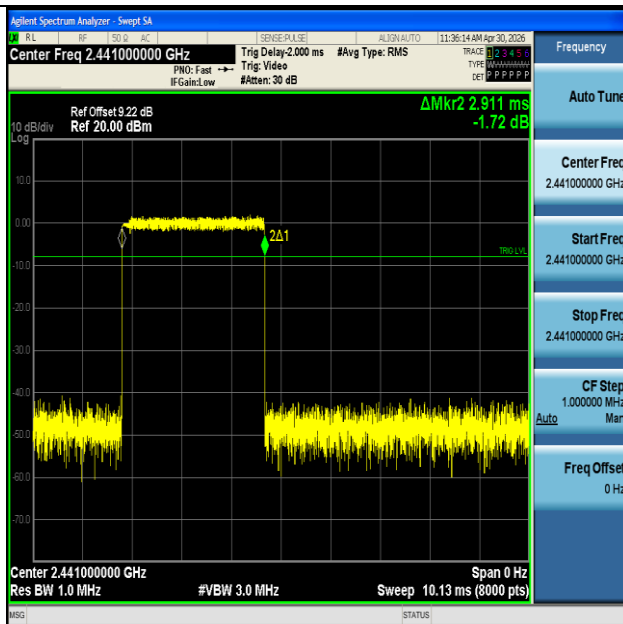
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



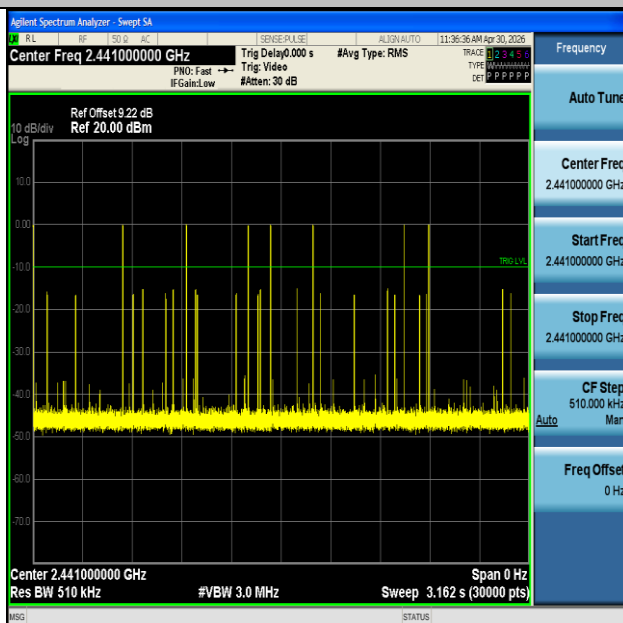


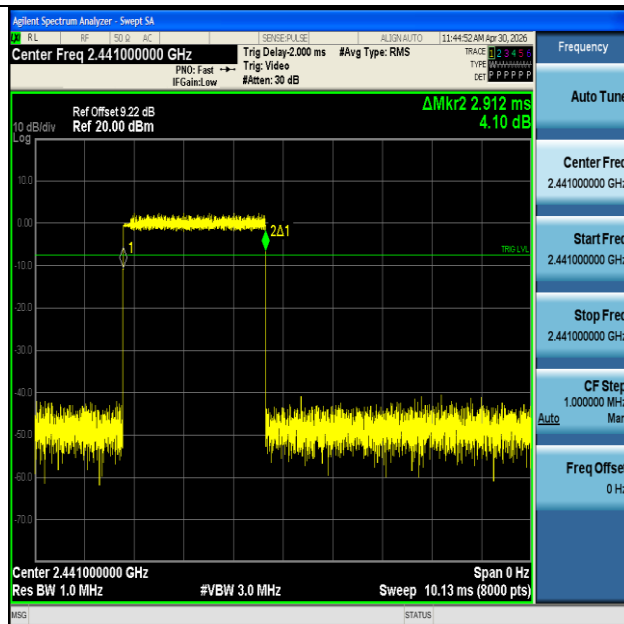
Test Graphs



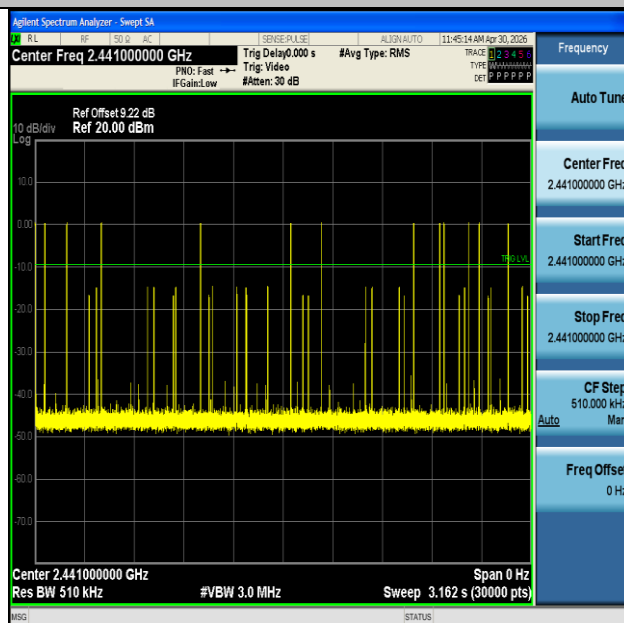


2DH5-Ant1-Hop-PASS





3DH5-Ant1-Hop-PASS





Appendix F: Number of hopping channels

Test Result

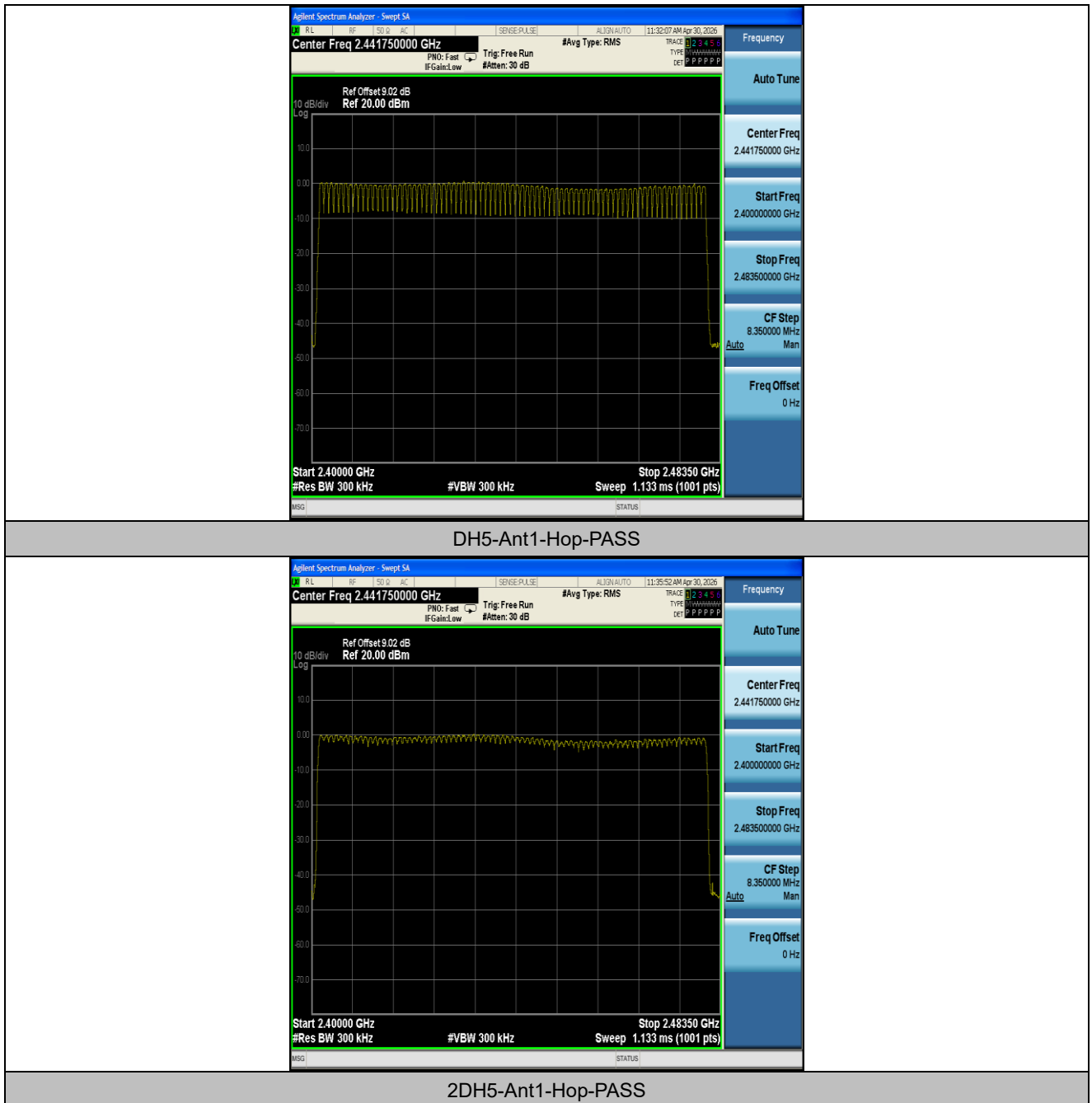
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

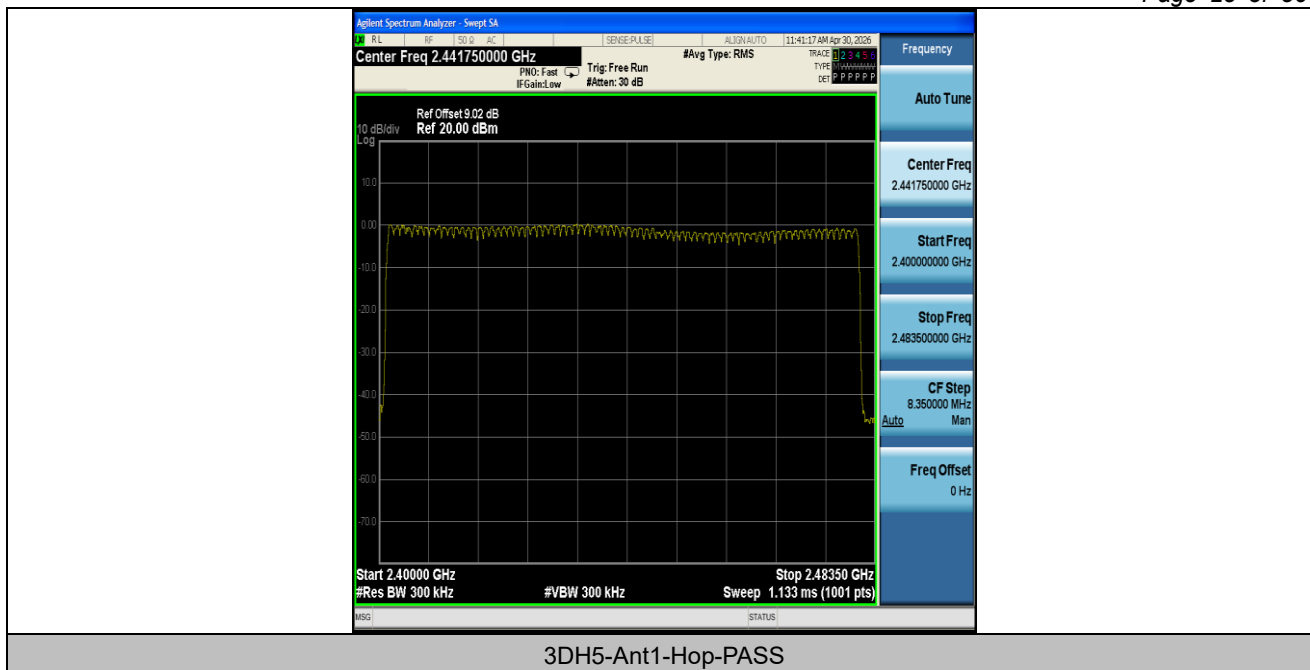
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





Test Graphs







Appendix G: Band edge measurements

Test Result

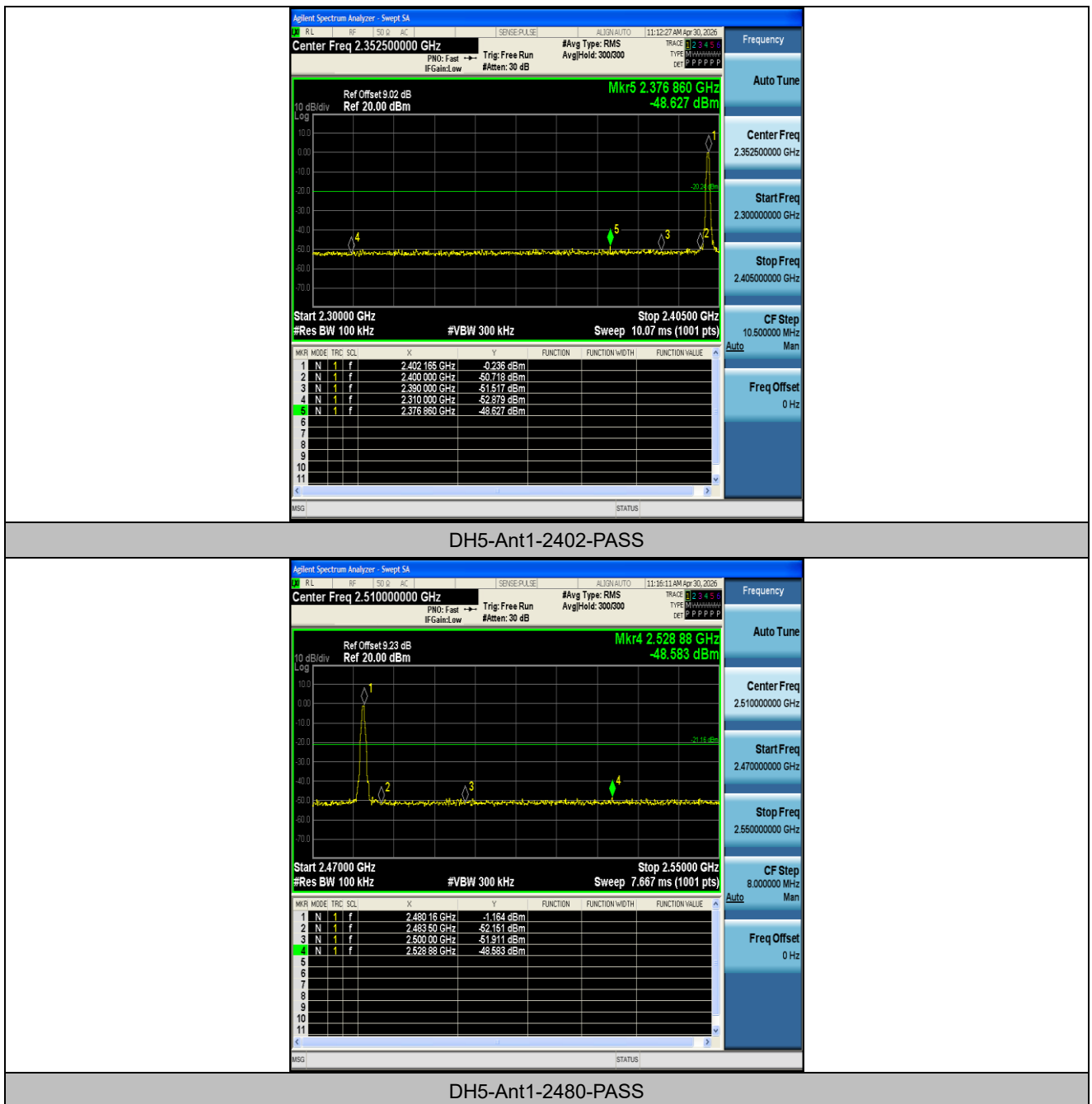
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.24	-48.63	≤-20.24	PASS
DH5	Ant1	High	2480	-1.16	-48.58	≤-21.16	PASS
DH5	Ant1	Low	Hop_2402	-0.45	-48.91	≤-20.45	PASS
DH5	Ant1	High	Hop_2480	-1.25	-48.19	≤-21.25	PASS
2DH5	Ant1	Low	2402	-0.49	-49	≤-20.49	PASS
2DH5	Ant1	High	2480	-1.02	-48.71	≤-21.02	PASS
2DH5	Ant1	Low	Hop_2402	-3.23	-48.85	≤-23.23	PASS
2DH5	Ant1	High	Hop_2480	-2.24	-49.11	≤-22.24	PASS
3DH5	Ant1	Low	2402	0.13	-48.89	≤-19.88	PASS
3DH5	Ant1	High	2480	-0.69	-48.51	≤-20.69	PASS
3DH5	Ant1	Low	Hop_2402	-0.56	-48.33	≤-20.56	PASS
3DH5	Ant1	High	Hop_2480	-1.00	-48.5	≤-21	PASS

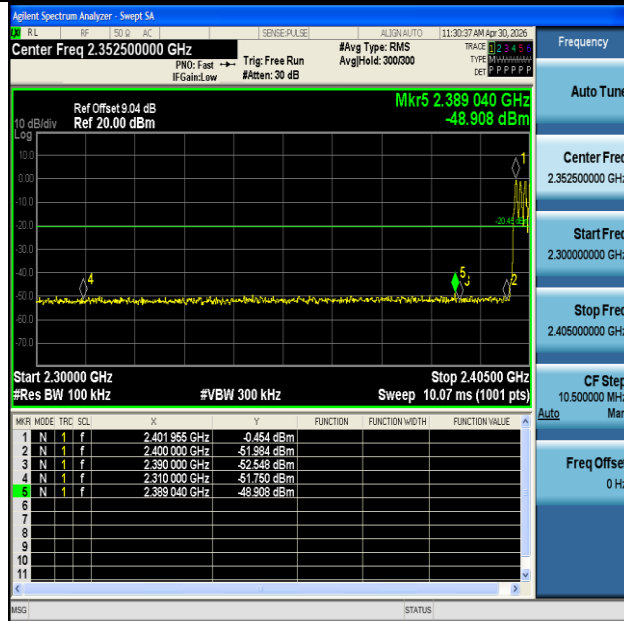
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



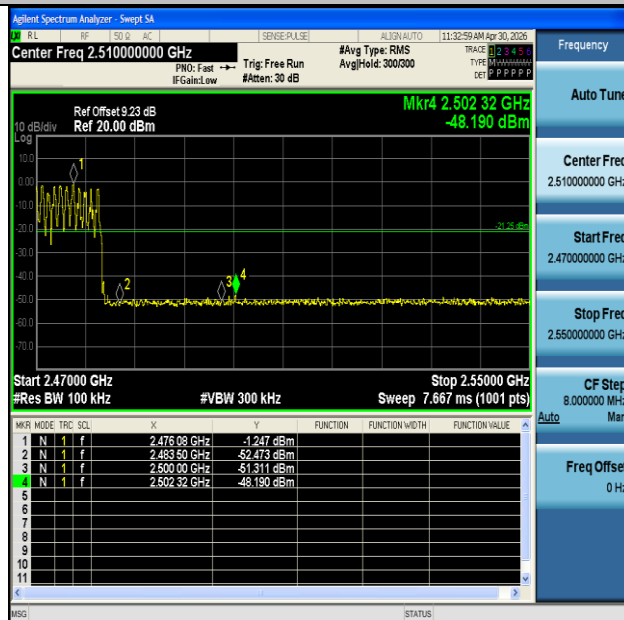


Test Graphs



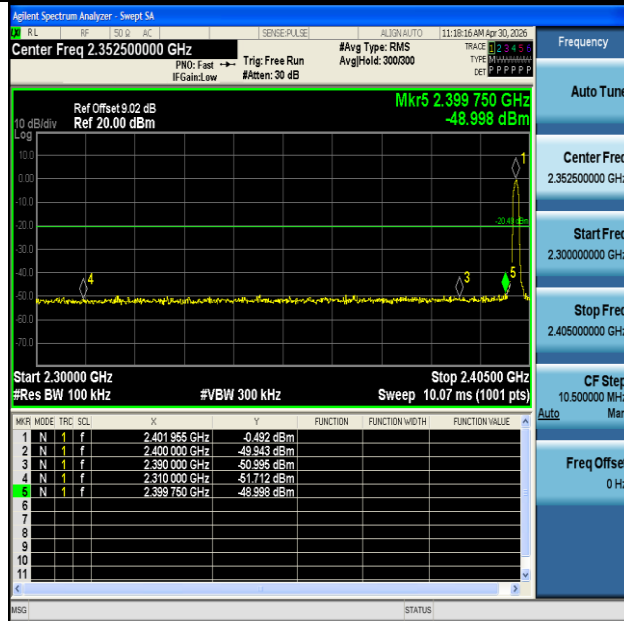


DH5-Ant1-Hop_2402-PASS

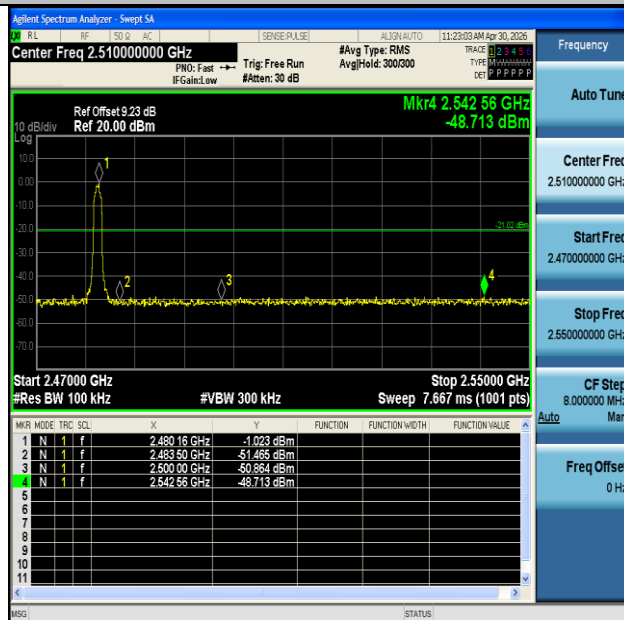


DH5-Ant1-Hop_2480-PASS



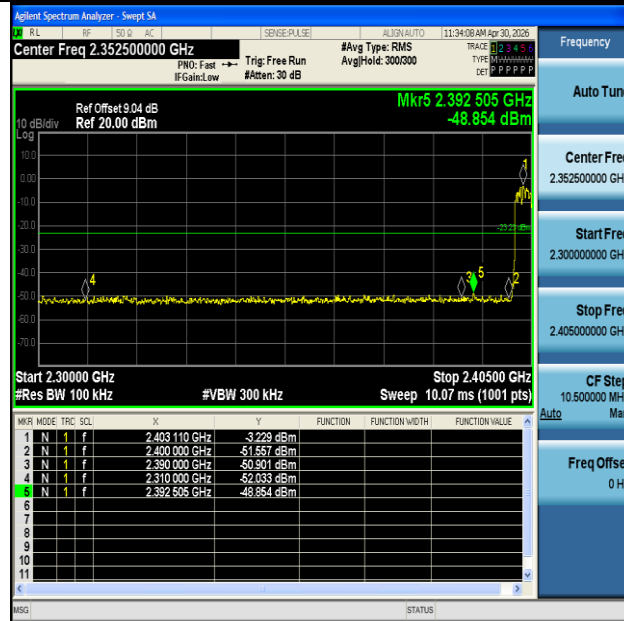


2DH5-Ant1-2402-PASS

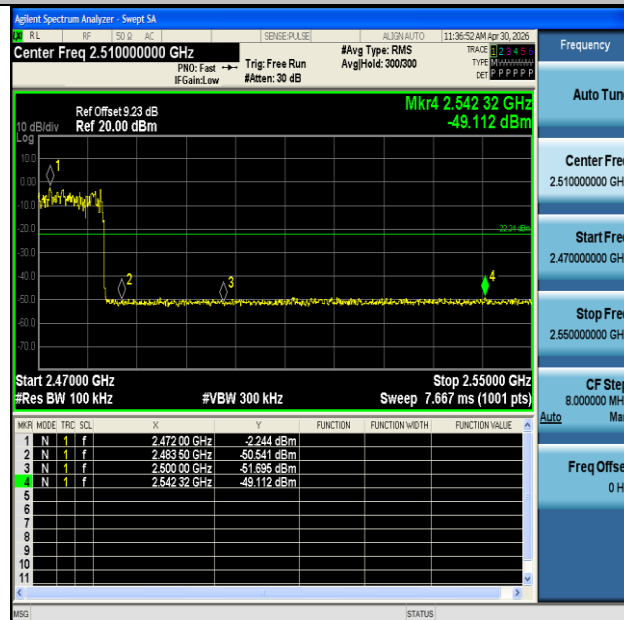


2DH5-Ant1-2480-PASS



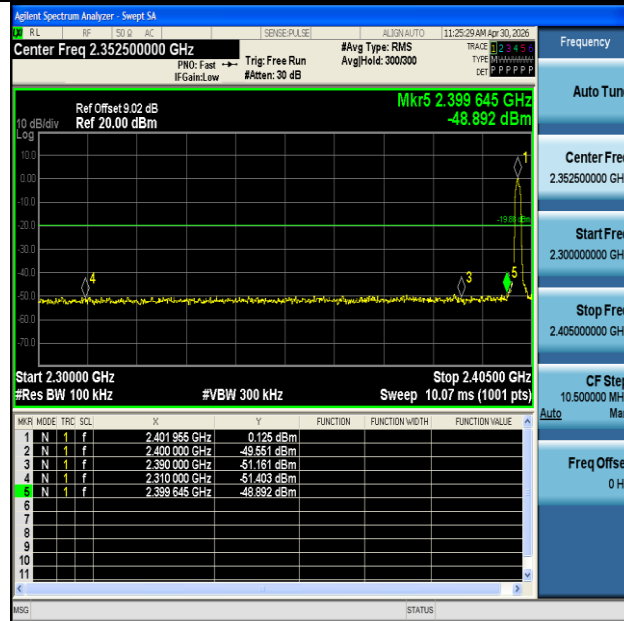


2DH5-Ant1-Hop_2402-PASS

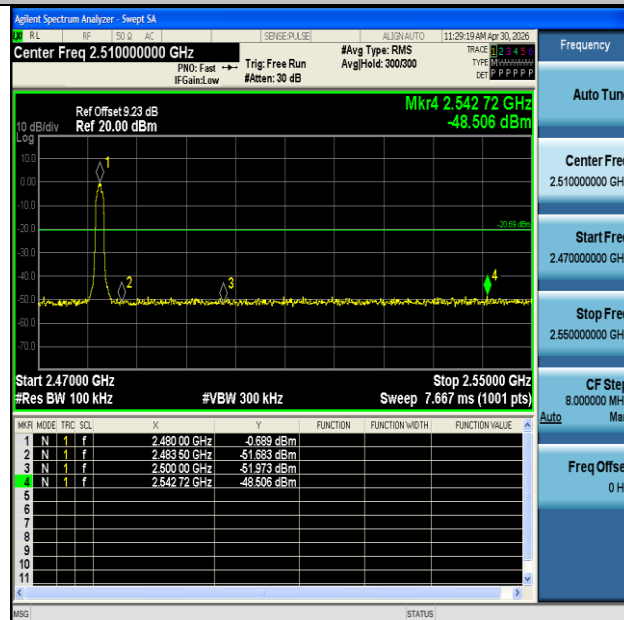


2DH5-Ant1-Hop_2480-PASS



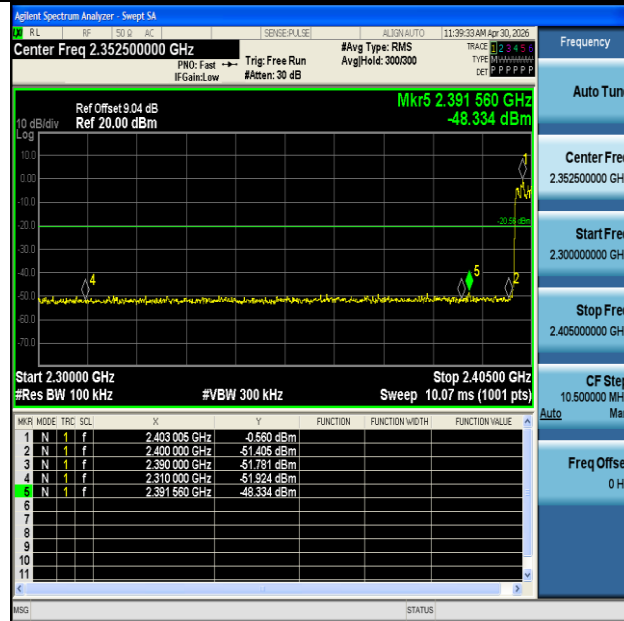


3DH5-Ant1-2402-PASS

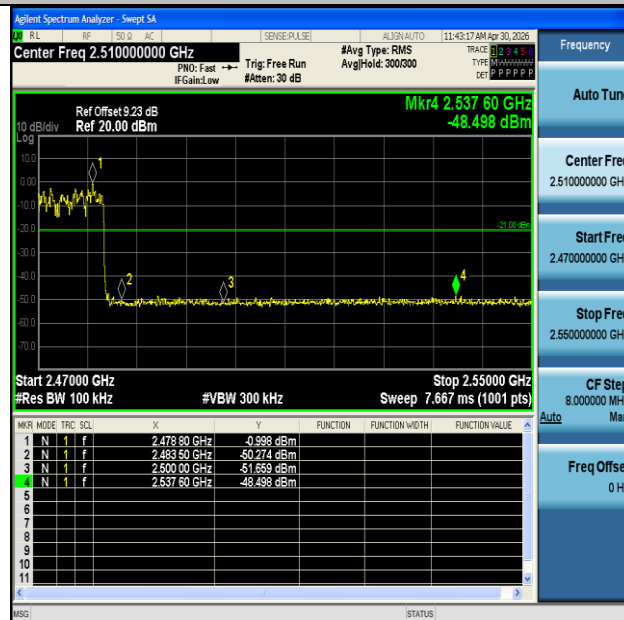


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop_2402-PASS



3DH5-Ant1-Hop_2480-PASS





Appendix H: Conducted Spurious Emission

Test Result

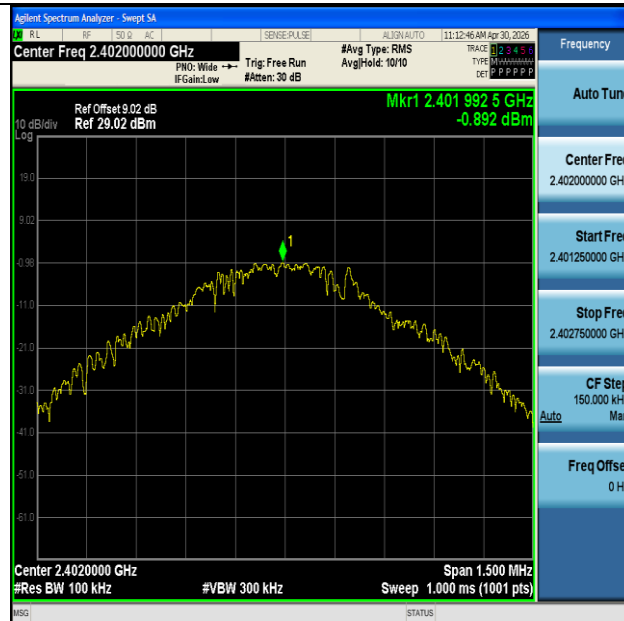
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-0.89	-0.89	---	PASS
DH5	Ant1	2402	30~1000	-0.89	-62.37	≤-20.89	PASS
DH5	Ant1	2402	1000~26500	-0.89	-37.31	≤-20.89	PASS
DH5	Ant1	2441	0~Reference	-0.84	-0.84	---	PASS
DH5	Ant1	2441	30~1000	-0.84	-62.73	≤-20.84	PASS
DH5	Ant1	2441	1000~26500	-0.84	-37.09	≤-20.84	PASS
DH5	Ant1	2480	0~Reference	-1.82	-1.82	---	PASS
DH5	Ant1	2480	30~1000	-1.82	-62.35	≤-21.82	PASS
DH5	Ant1	2480	1000~26500	-1.82	-36.58	≤-21.82	PASS
2DH5	Ant1	2402	0~Reference	-1.11	-1.11	---	PASS
2DH5	Ant1	2402	30~1000	-1.11	-63.09	≤-21.11	PASS
2DH5	Ant1	2402	1000~26500	-1.11	-37.81	≤-21.11	PASS
2DH5	Ant1	2441	0~Reference	-3.06	-3.06	---	PASS
2DH5	Ant1	2441	30~1000	-3.06	-62.71	≤-23.06	PASS
2DH5	Ant1	2441	1000~26500	-3.06	-36.98	≤-23.06	PASS
2DH5	Ant1	2480	0~Reference	-4.16	-4.16	---	PASS
2DH5	Ant1	2480	30~1000	-4.16	-62.72	≤-24.16	PASS
2DH5	Ant1	2480	1000~26500	-4.16	-36.69	≤-24.16	PASS
3DH5	Ant1	2402	0~Reference	-2.34	-2.34	---	PASS
3DH5	Ant1	2402	30~1000	-2.34	-61.68	≤-22.34	PASS
3DH5	Ant1	2402	1000~26500	-2.34	-37.29	≤-22.34	PASS
3DH5	Ant1	2441	0~Reference	-2.46	-2.46	---	PASS
3DH5	Ant1	2441	30~1000	-2.46	-62.73	≤-22.46	PASS
3DH5	Ant1	2441	1000~26500	-2.46	-37.24	≤-22.46	PASS
3DH5	Ant1	2480	0~Reference	-2.69	-2.69	---	PASS
3DH5	Ant1	2480	30~1000	-2.69	-62.73	≤-22.69	PASS
3DH5	Ant1	2480	1000~26500	-2.69	-37.49	≤-22.69	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.

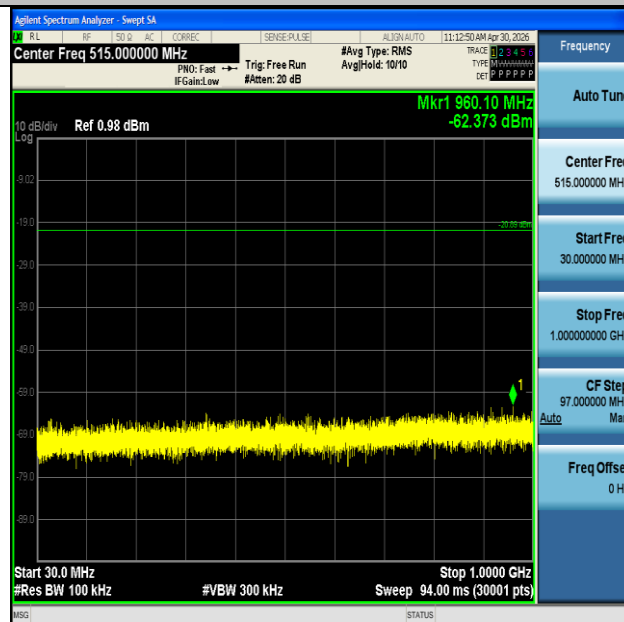




Test Graphs

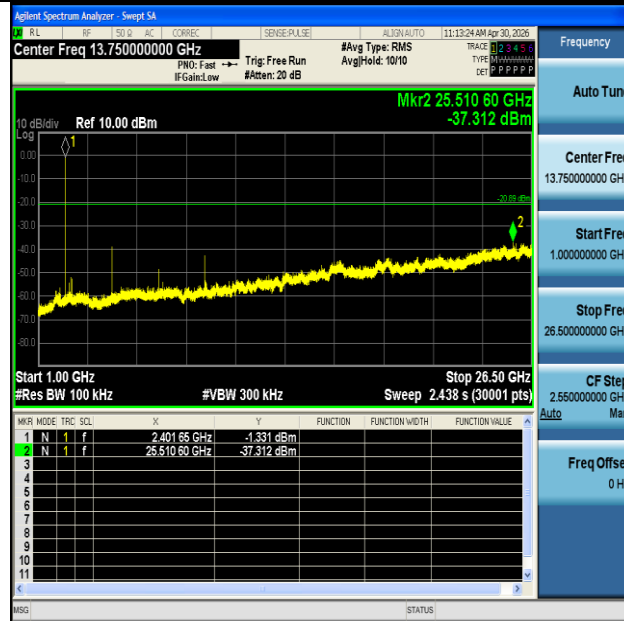


DH5-Ant1-2402-0~Reference-PASS

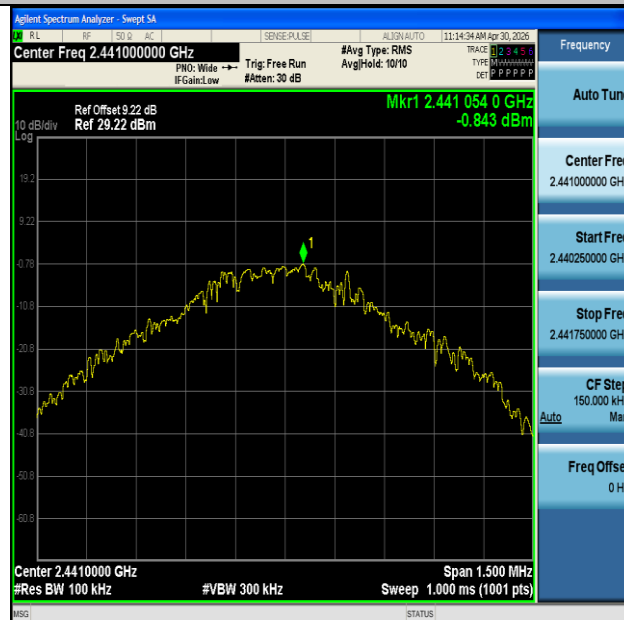


DH5-Ant1-2402-30~1000-PASS



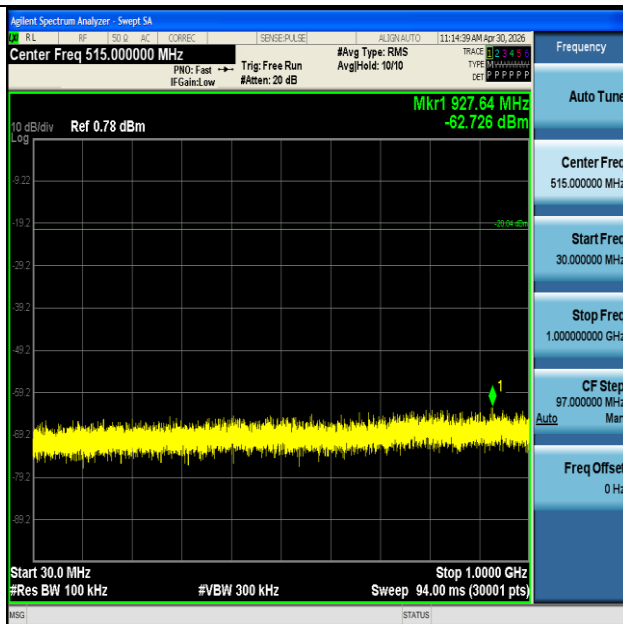


DH5-Ant1-2402-1000~26500-PASS

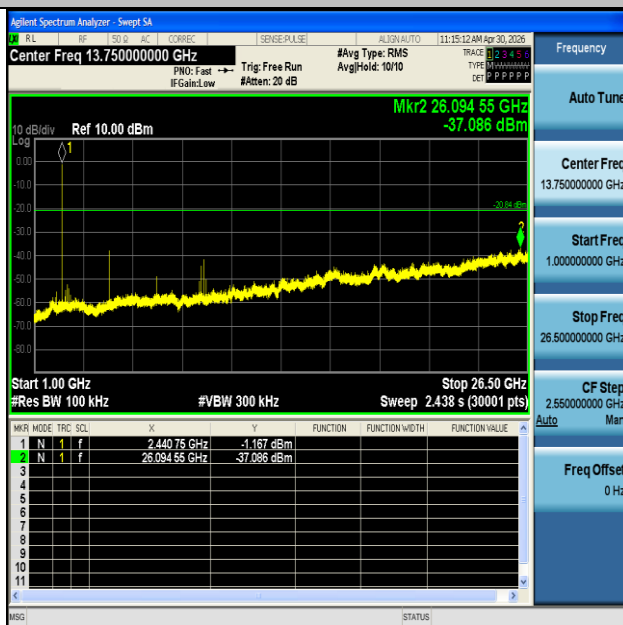


DH5-Ant1-2441-0~Reference-PASS





DH5-Ant1-2441-30~1000-PASS

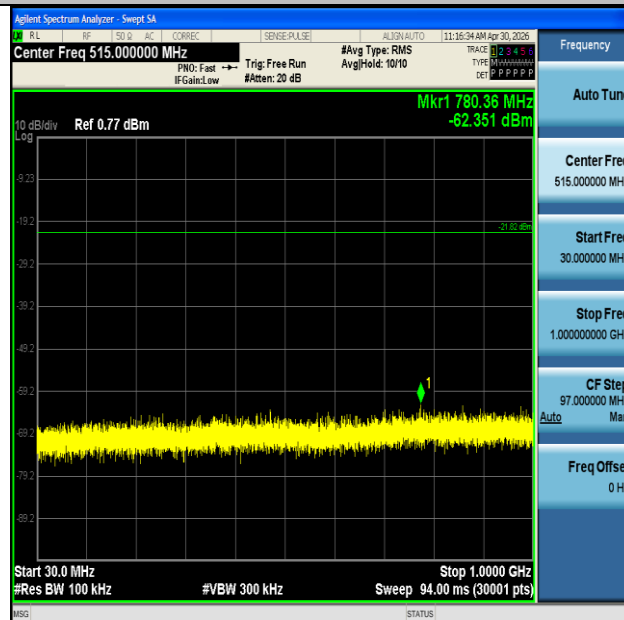


DH5-Ant1-2441-1000~26500-PASS





DH5-Ant1-2480-0~Reference-PASS

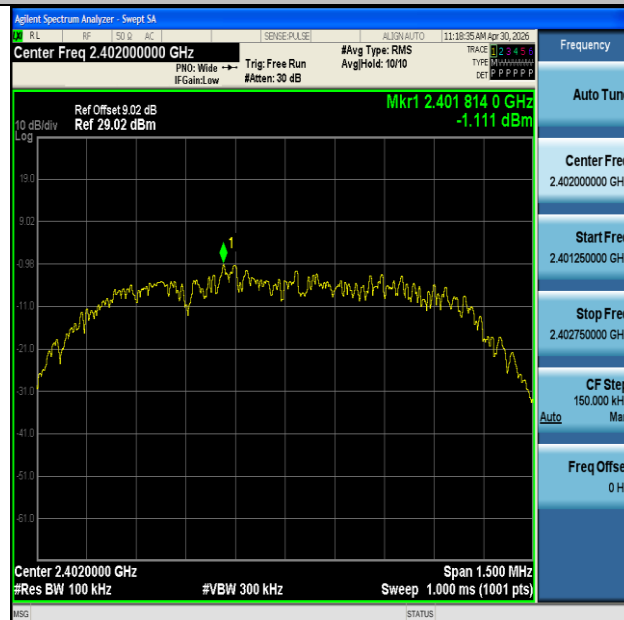


DH5-Ant1-2480-30~1000-PASS



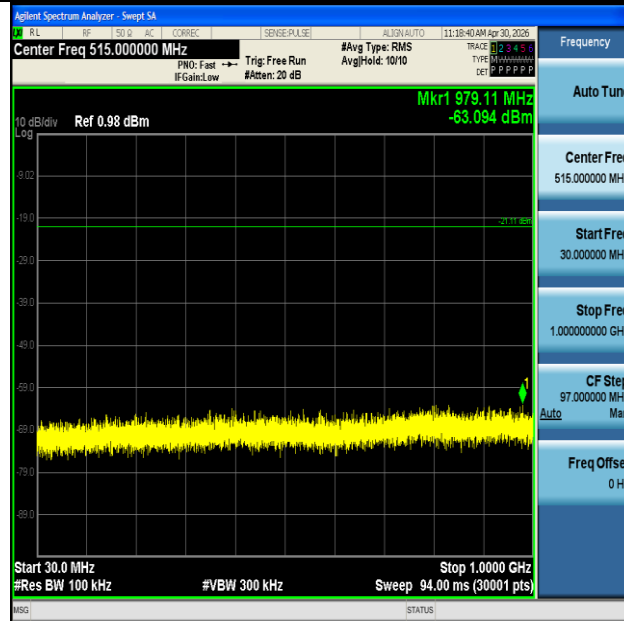


DH5-Ant1-2480-1000~26500-PASS

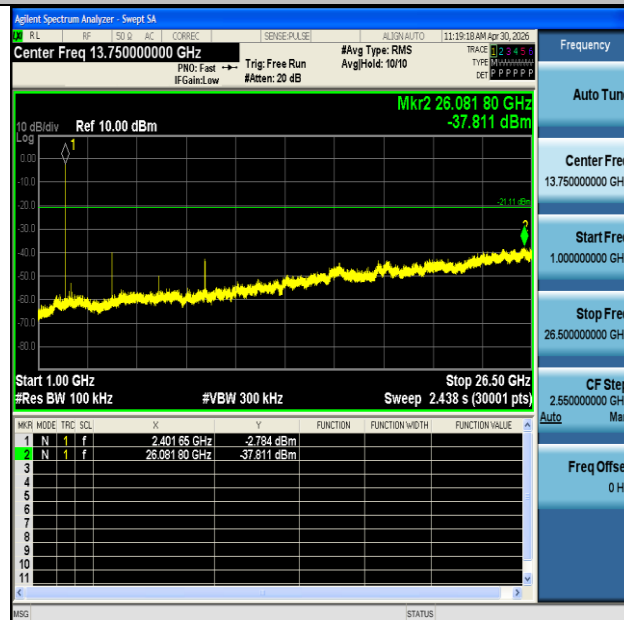


2DH5-Ant1-2402-0~Reference-PASS



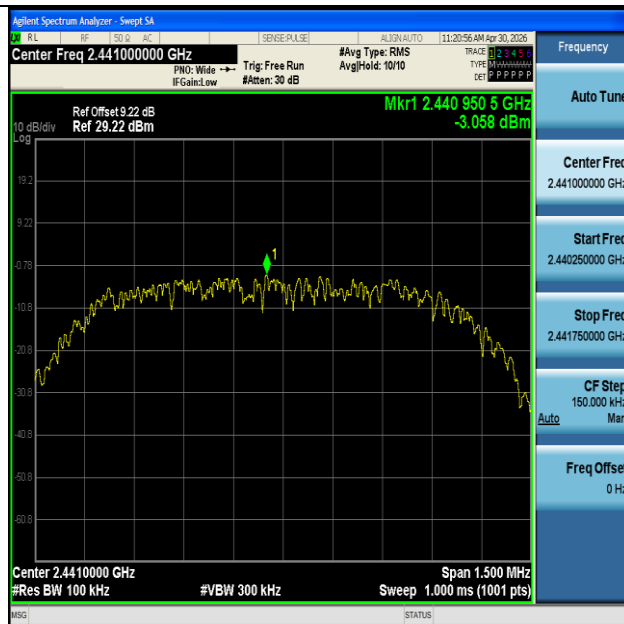


2DH5-Ant1-2402-30~1000-PASS

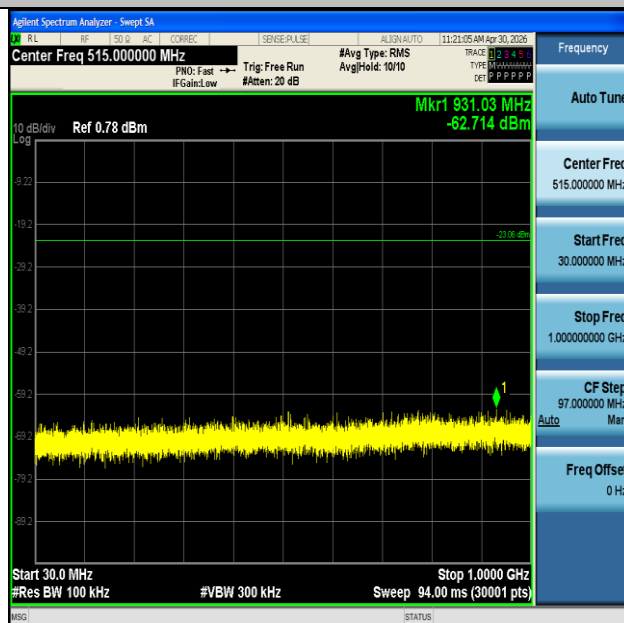


2DH5-Ant1-2402-1000~26500-PASS



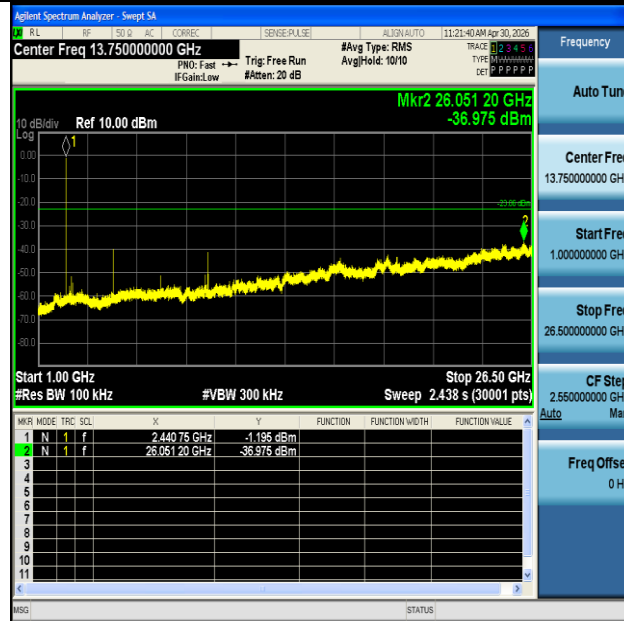


2DH5-Ant1-2441-0~Reference-PASS

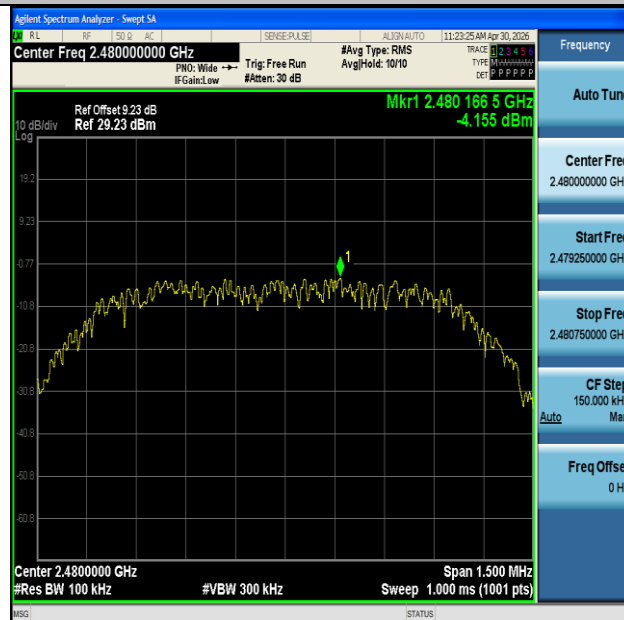


2DH5-Ant1-2441-30~1000-PASS



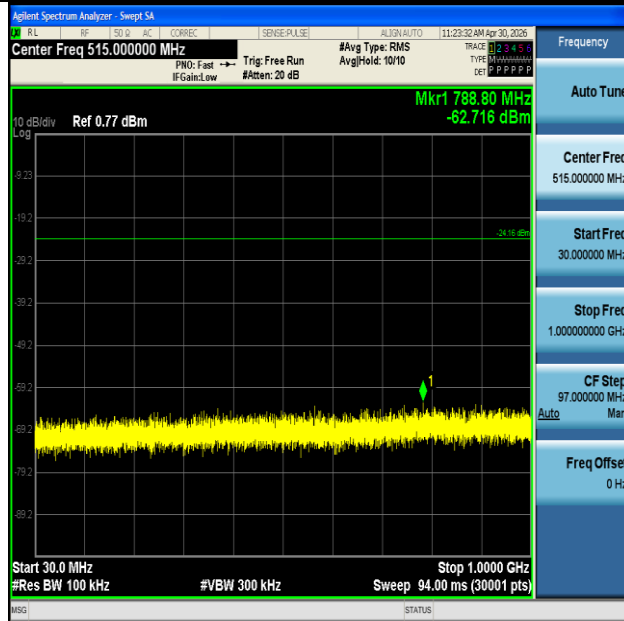


2DH5-Ant1-2441-1000~26500-PASS

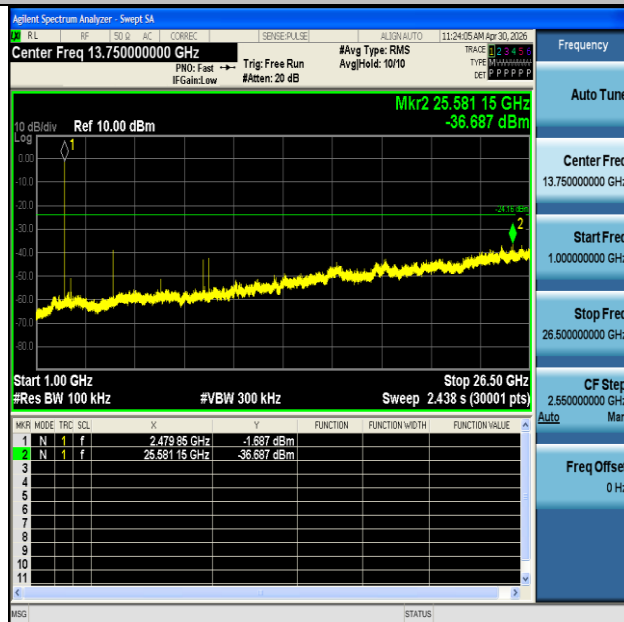


2DH5-Ant1-2480-0~Reference-PASS





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

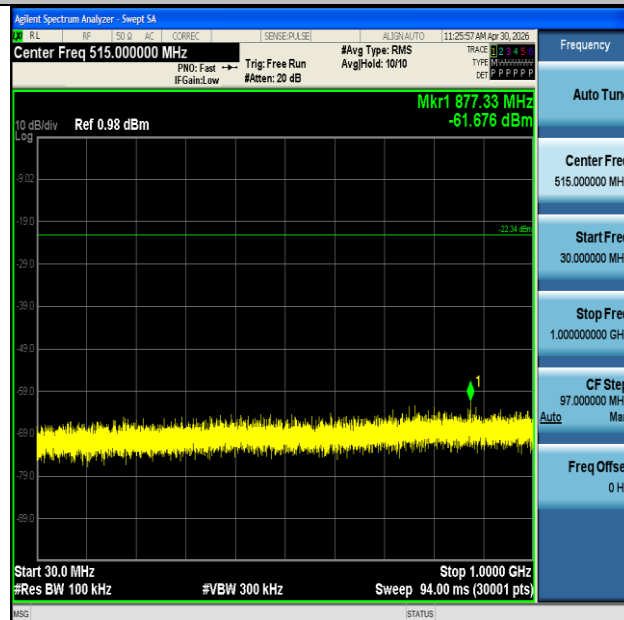


2DH5-Ant1-2480-1000~26500-PASS





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

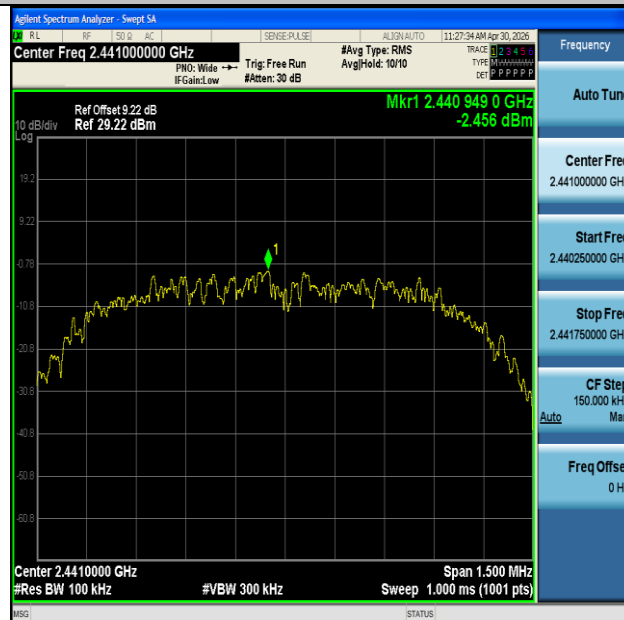


3DH5-Ant1-2402-30~1000-PASS



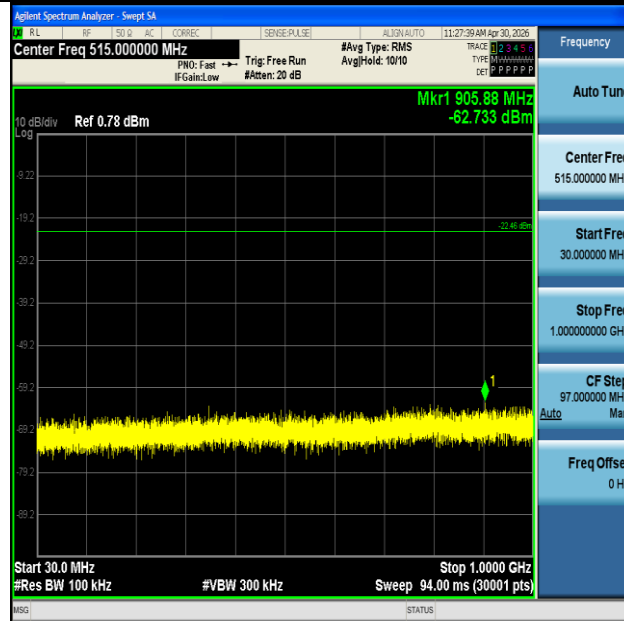


3DH5-Ant1-2402-1000~26500-PASS

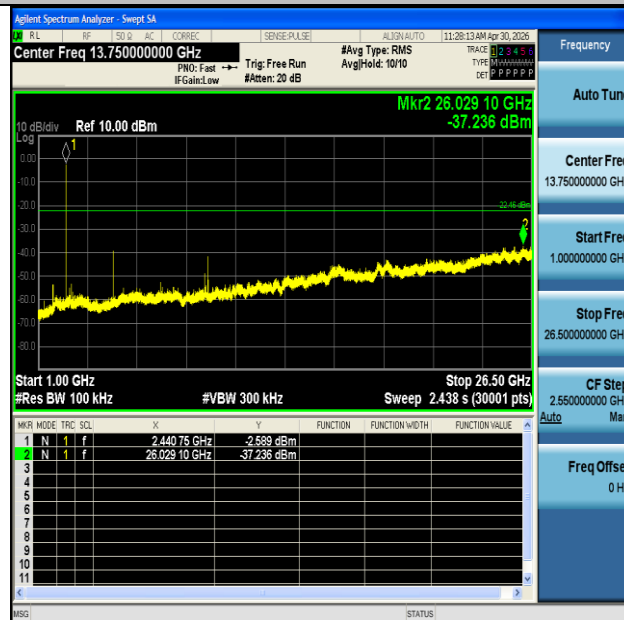


3DH5-Ant1-2441-0~Reference-PASS





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

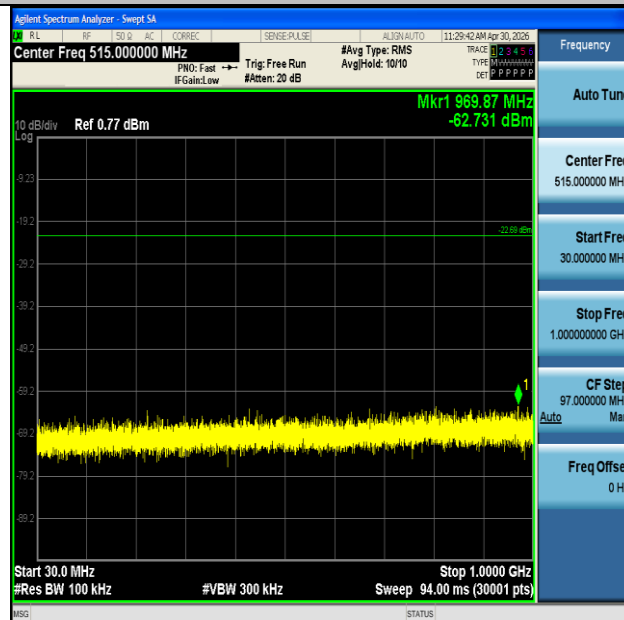


3DH5-Ant1-2441-1000~26500-PASS



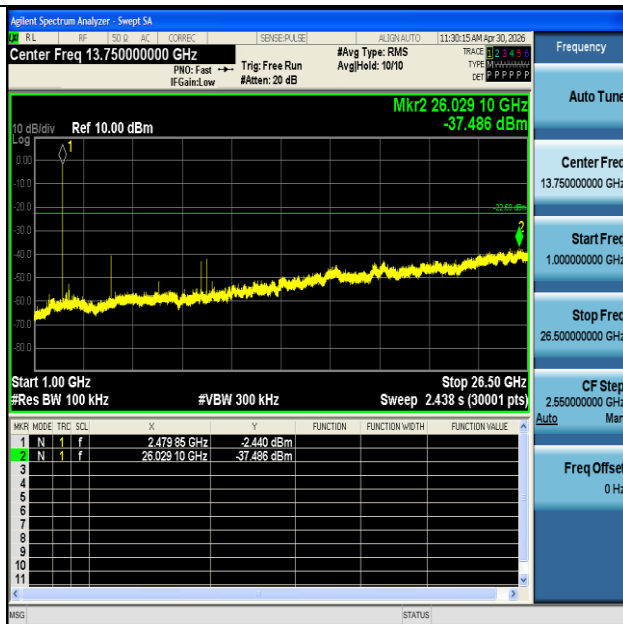


3DH5-Ant1-2480-0~Reference-PASS



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	2.90	3.75	77.33	1.12
DH5	Ant1	2480	2.90	3.74	77.54	1.10
2DH5	Ant1	2402	2.90	3.75	77.33	1.12
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	2.90	3.74	77.54	1.10
3DH5	Ant1	2441	2.91	3.75	77.60	1.10
3DH5	Ant1	2480	2.90	3.75	77.33	1.12

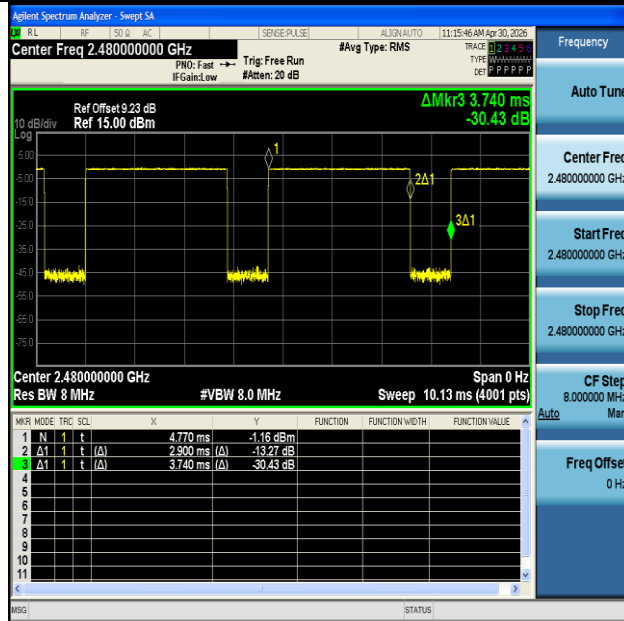
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



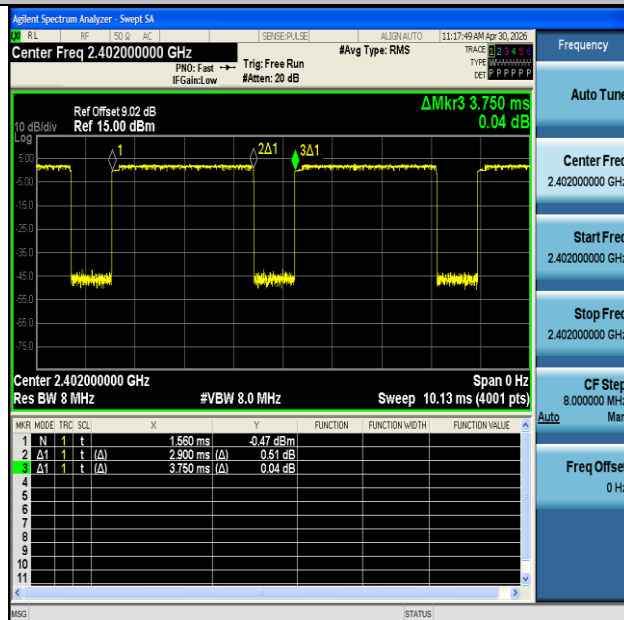


Test Graphs



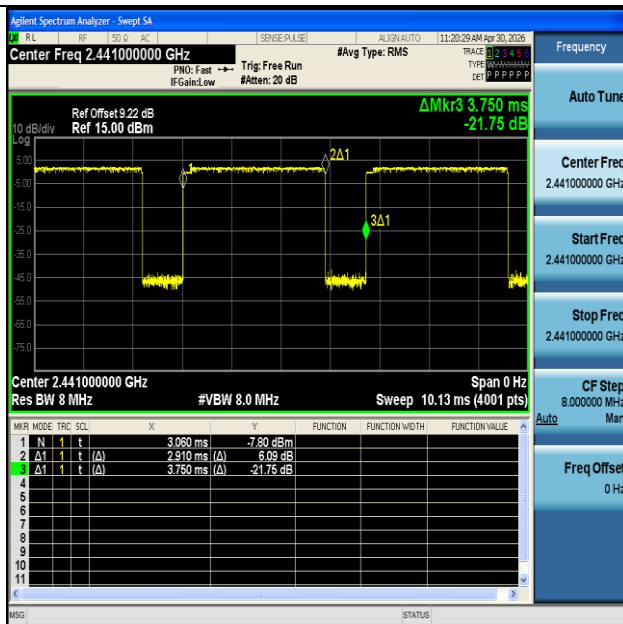


NTNV-DH5-Ant1-2480

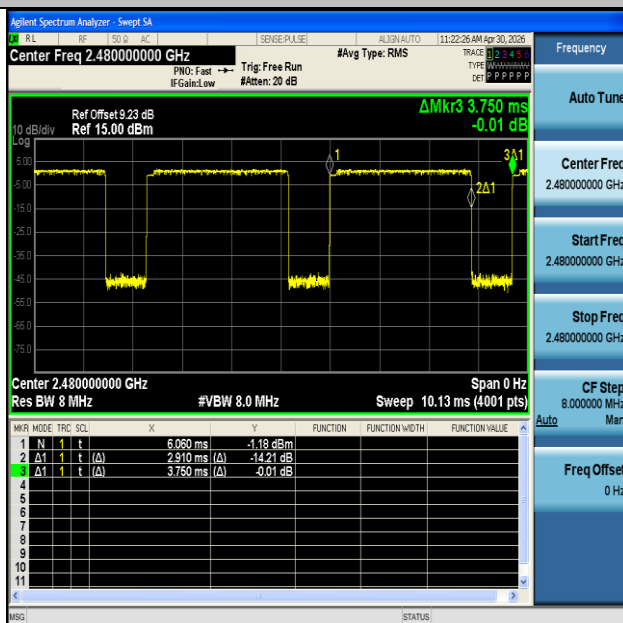


NTNV-2DH5-Ant1-2402





NTNV-2DH5-Ant1-2441

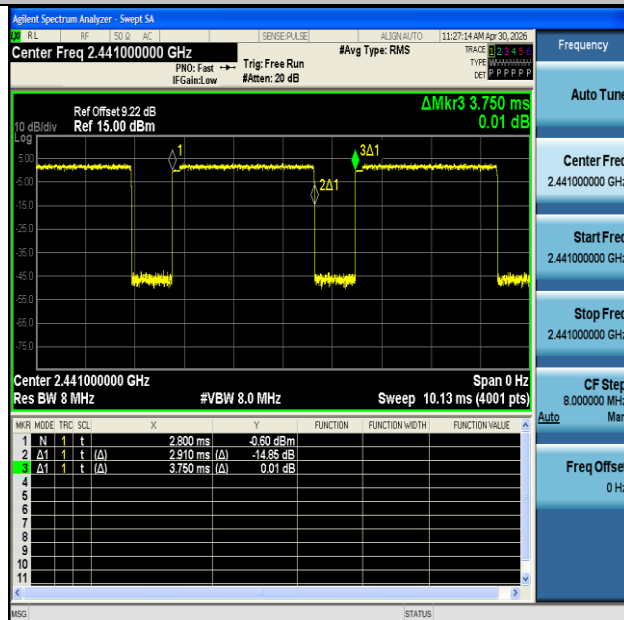


NTNV-2DH5-Ant1-2480



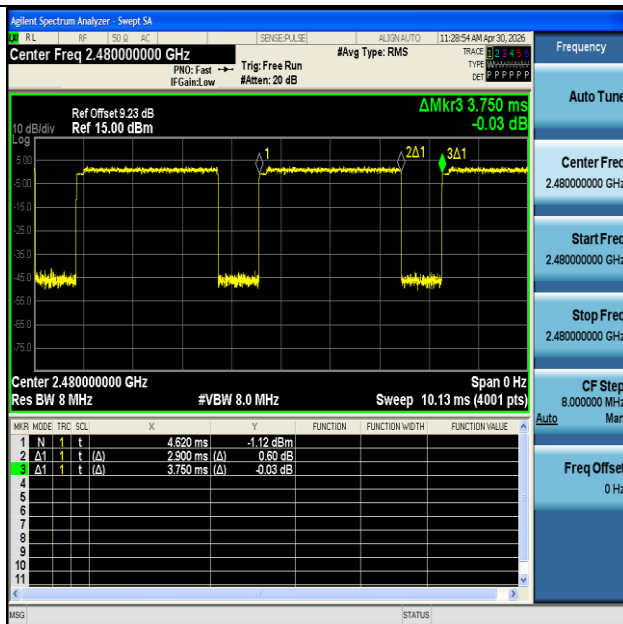


NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441





NTNV-3DH5-Ant1-2480

