

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

Product Name: Sound bar

Trade Mark: SineAudio, Saiyin, RIOWOIS, Anpharala

Test Model: DS6441S

FCC ID: 2AP93-DS63X

Environmental Conditions

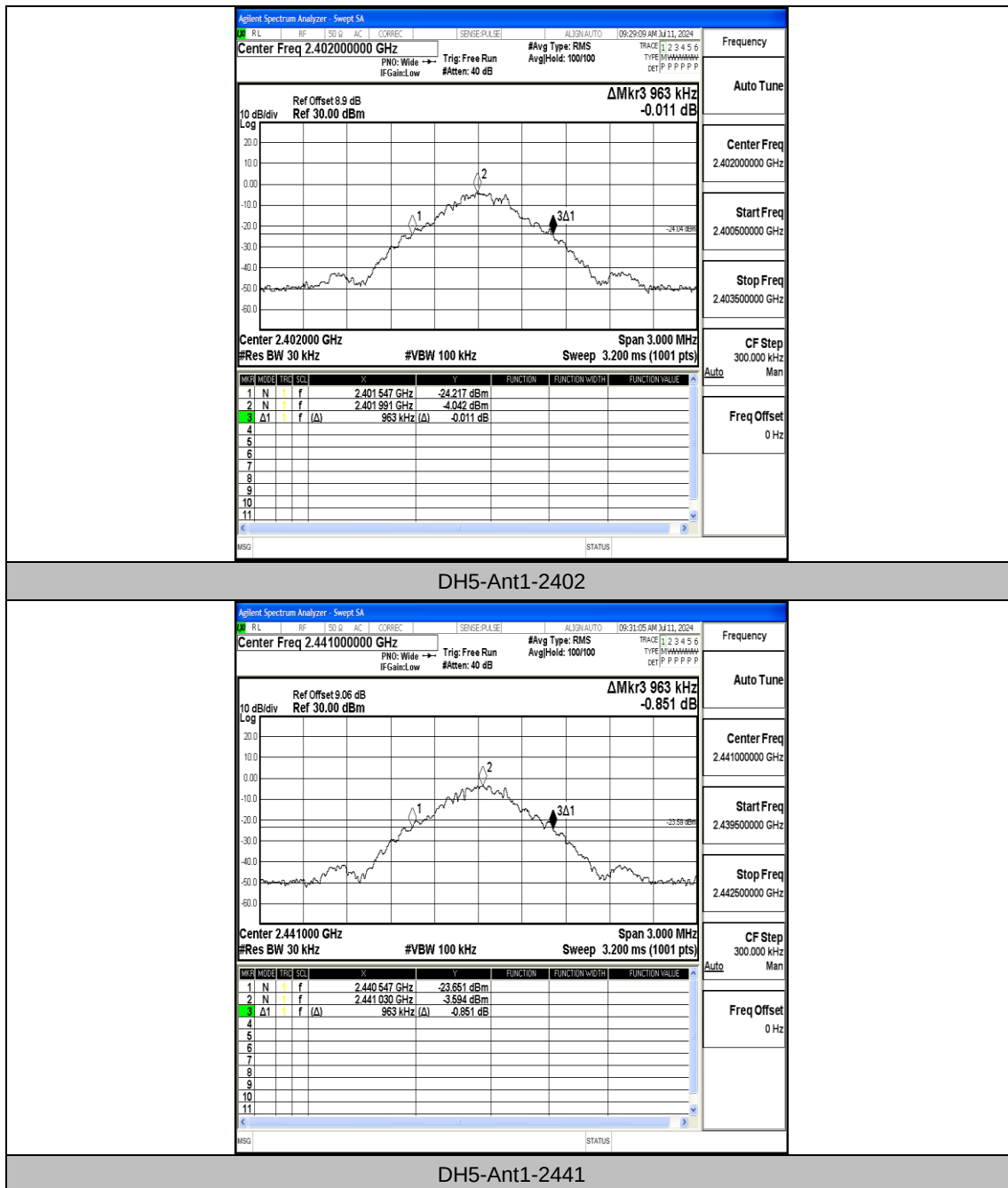
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

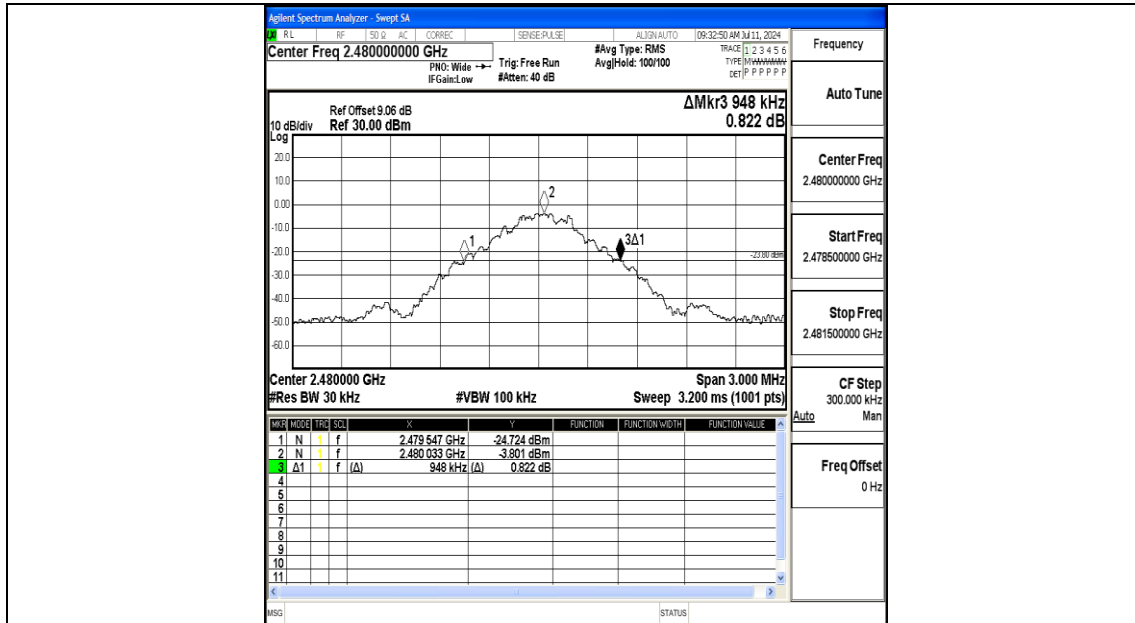
Appendix A: 20dB Emission Bandwidth

Test Result

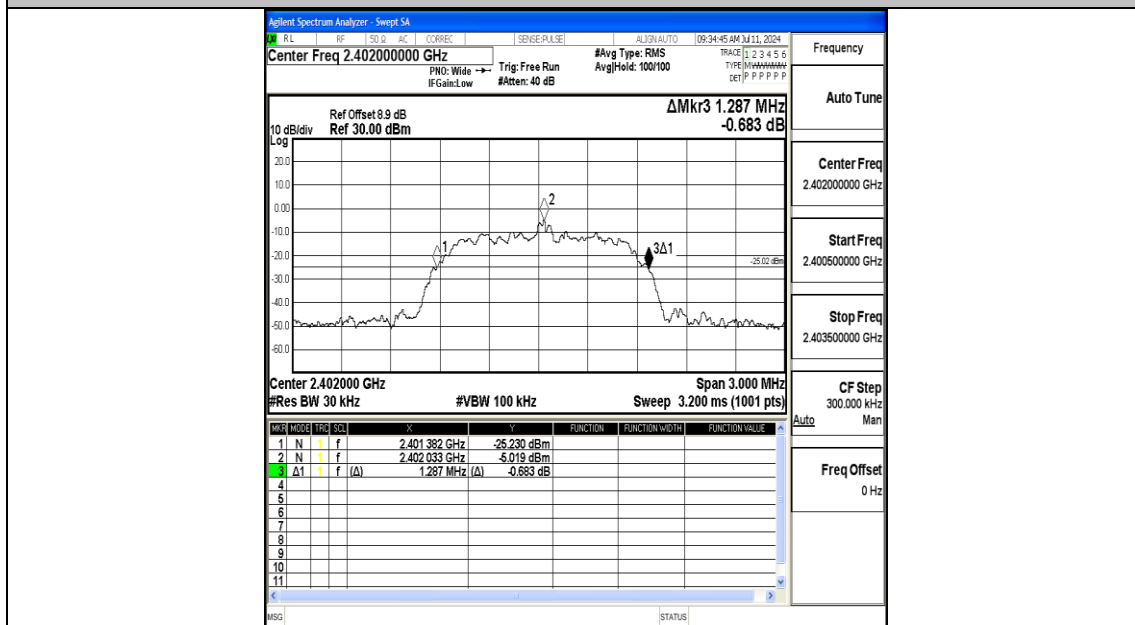
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.963	2401.547	2402.510	---	---
DH5	Ant1	2441	0.963	2440.547	2441.510	---	---
DH5	Ant1	2480	0.948	2479.547	2480.495	---	---
2DH5	Ant1	2402	1.287	2401.382	2402.669	---	---
2DH5	Ant1	2441	1.293	2440.379	2441.672	---	---
2DH5	Ant1	2480	1.281	2479.385	2480.666	---	---
3DH5	Ant1	2402	1.308	2401.361	2402.669	---	---
3DH5	Ant1	2441	1.284	2440.364	2441.648	---	---
3DH5	Ant1	2480	1.302	2479.370	2480.672	---	---

Test Graphs

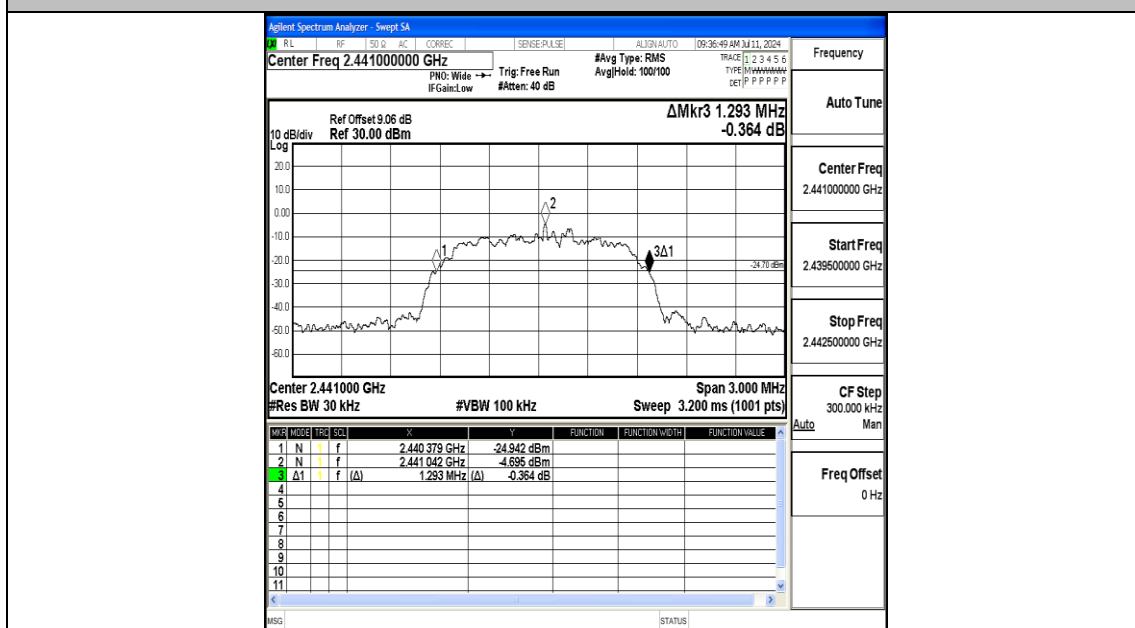




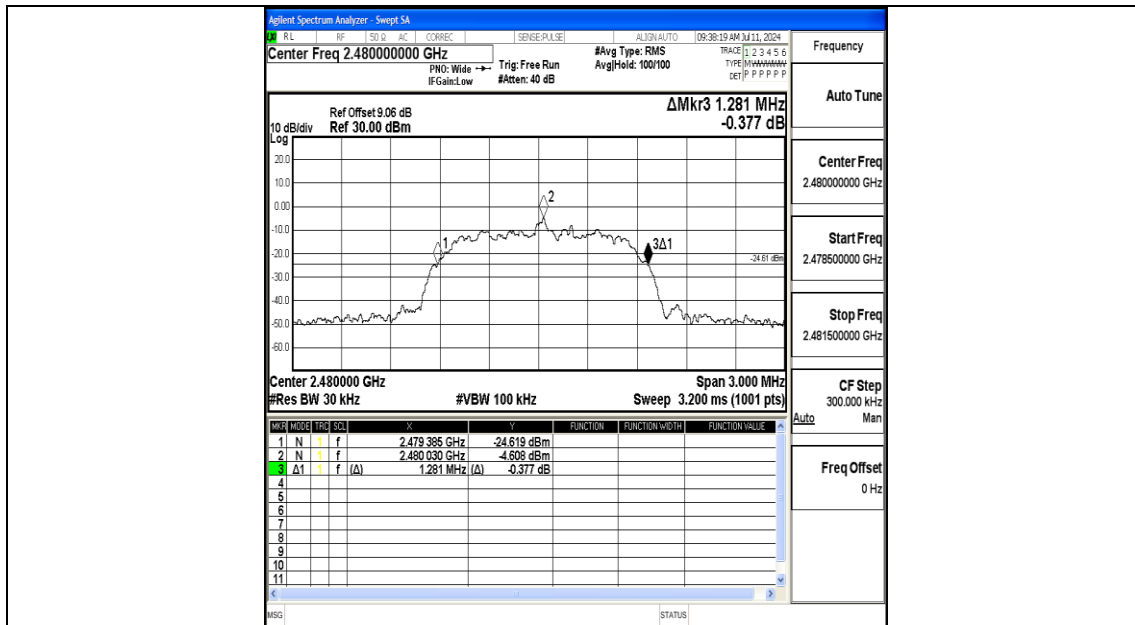
DH5-Ant1-2480



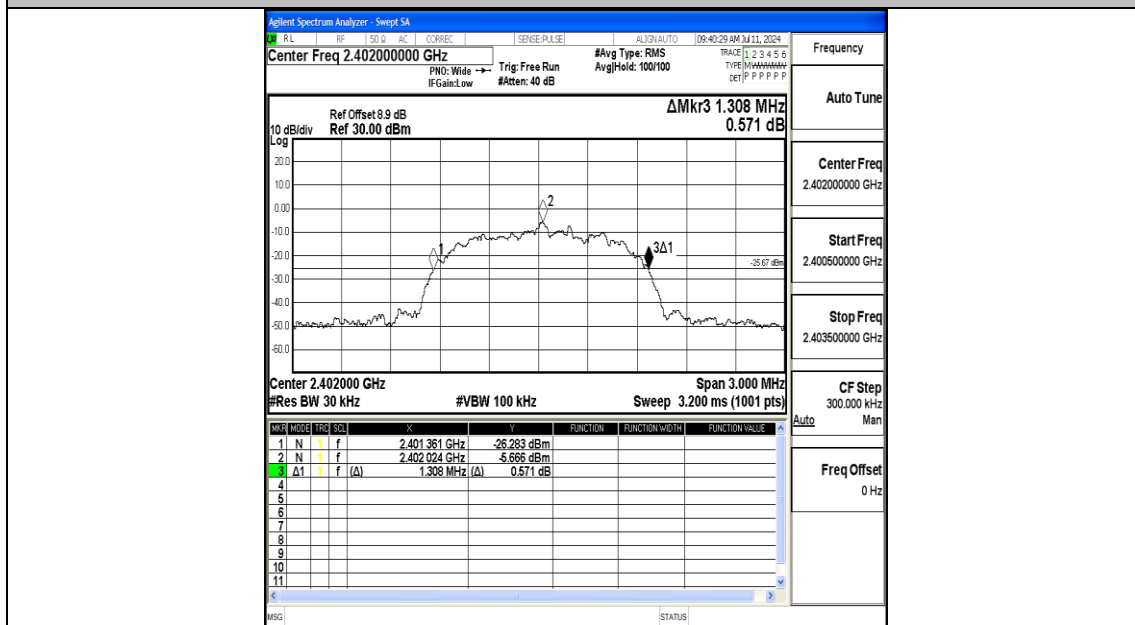
2DH5-Ant1-2402



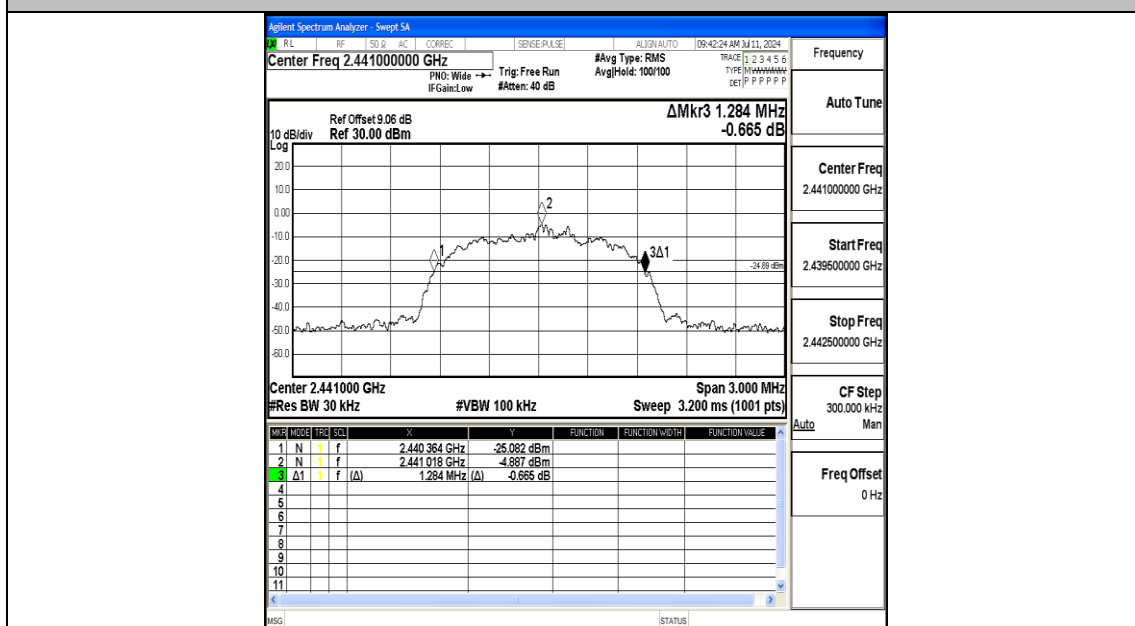
2DH5-Ant1-2441



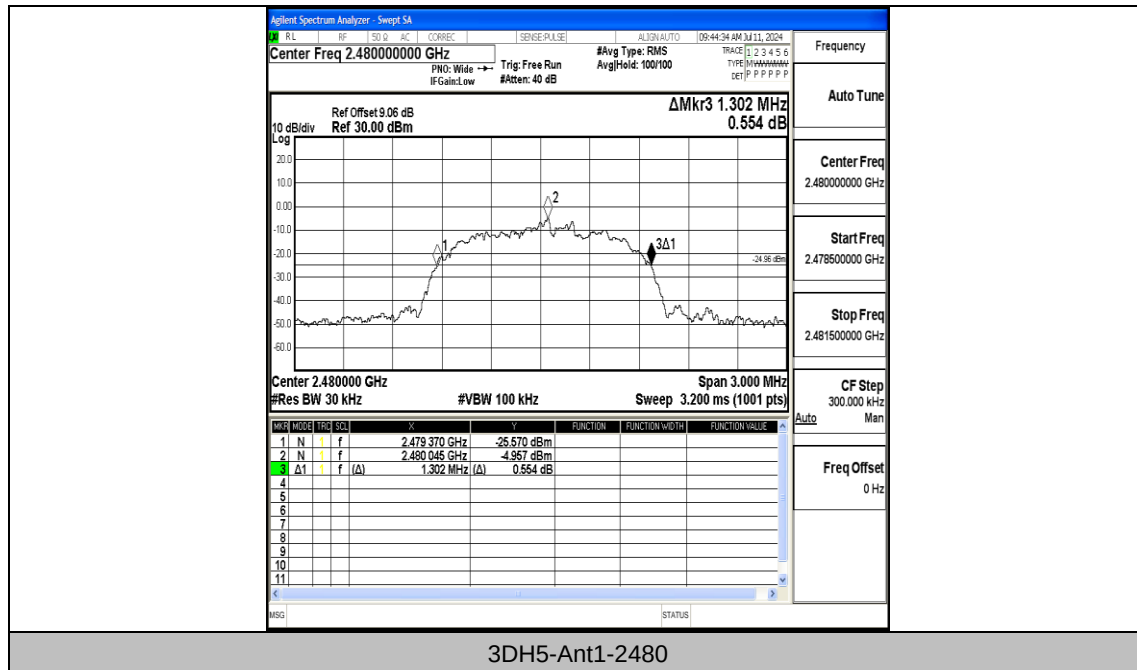
2DH5-Ant1-2480



3DH5-Ant1-2402



3DH5-Ant1-2441

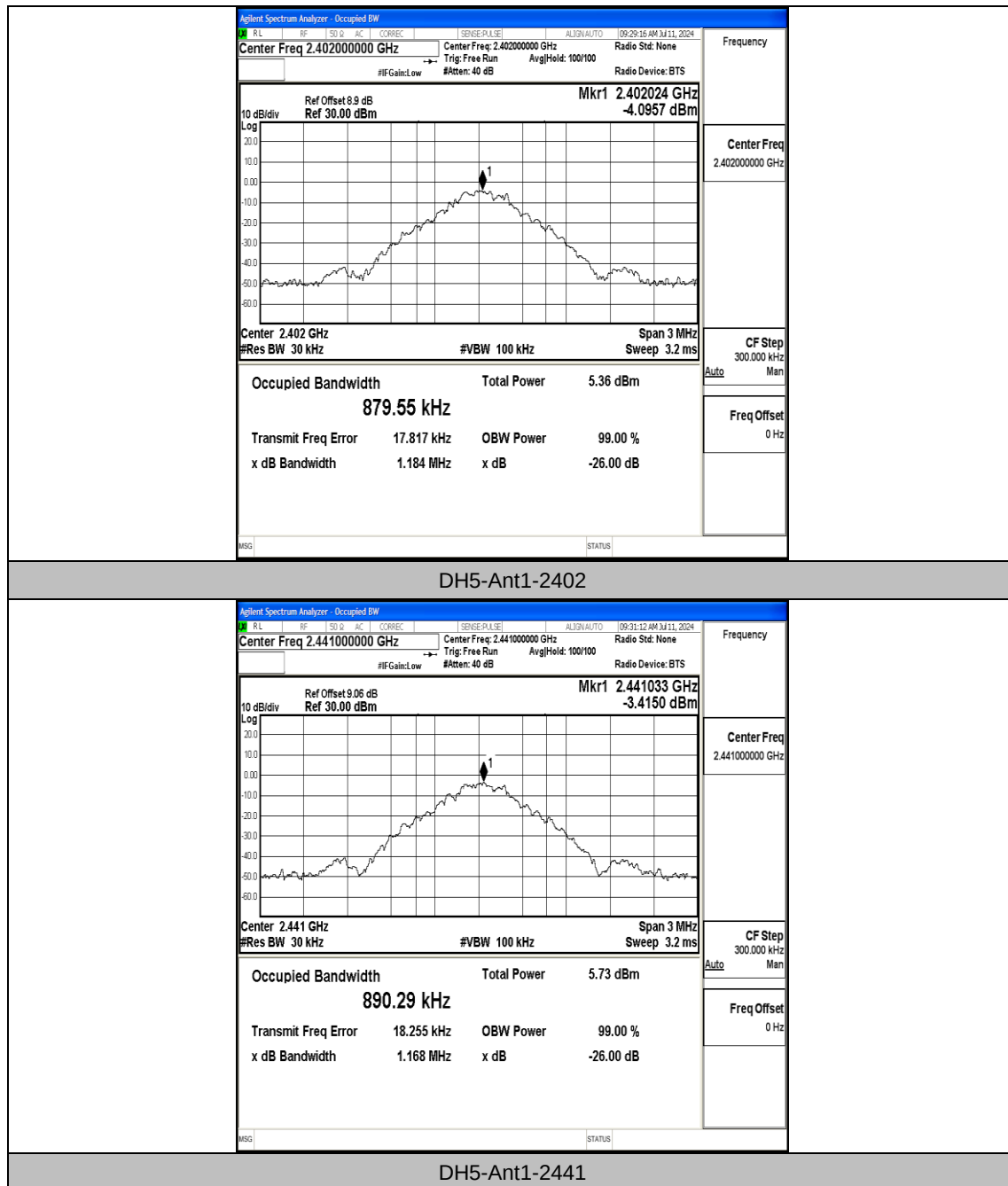


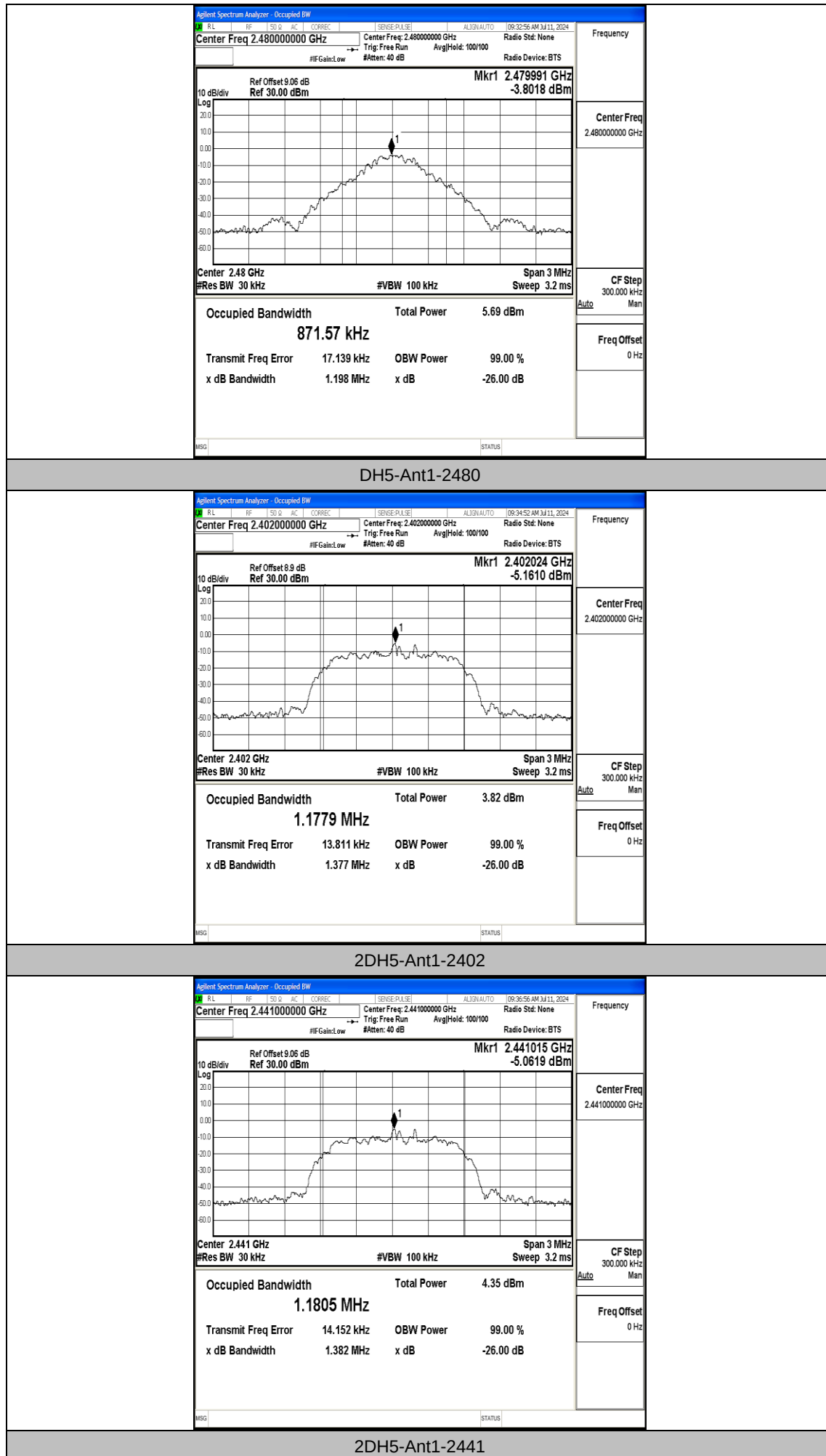
Appendix B: Occupied Channel Bandwidth

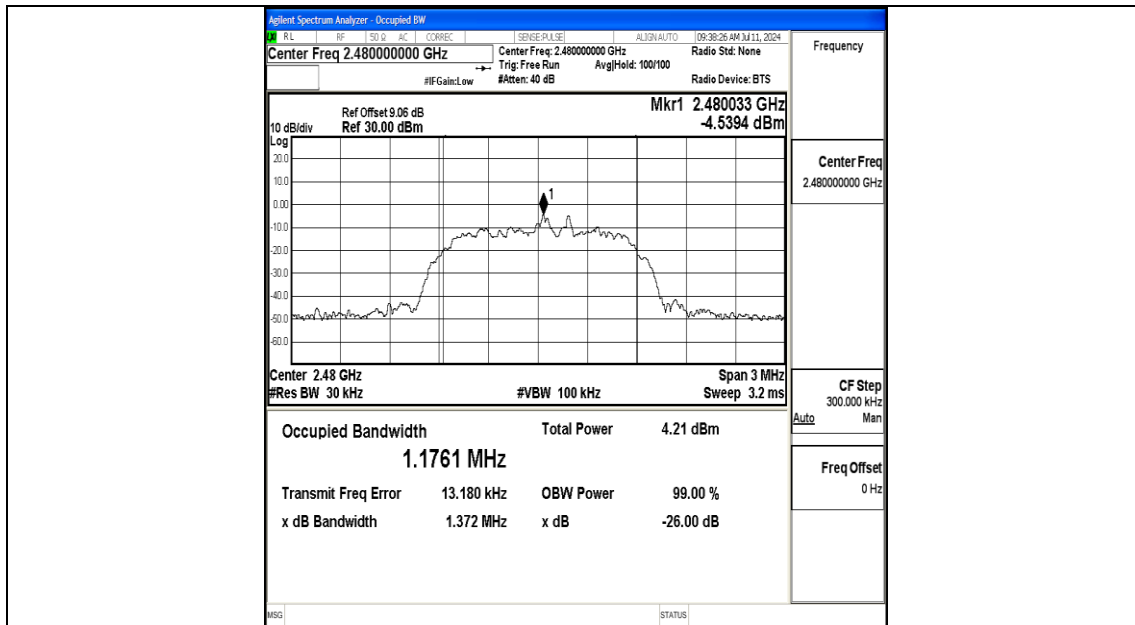
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87955	2401.5780	2402.4576	---	---
DH5	Ant1	2441	0.89029	2440.5731	2441.4634	---	---
DH5	Ant1	2480	0.87157	2479.5814	2480.4529	---	---
2DH5	Ant1	2402	1.1779	2401.4249	2402.6028	---	---
2DH5	Ant1	2441	1.1805	2440.4239	2441.6044	---	---
2DH5	Ant1	2480	1.1761	2479.4251	2480.6012	---	---
3DH5	Ant1	2402	1.1841	2401.4235	2402.6076	---	---
3DH5	Ant1	2441	1.1813	2440.4260	2441.6073	---	---
3DH5	Ant1	2480	1.1836	2479.4240	2480.6076	---	---

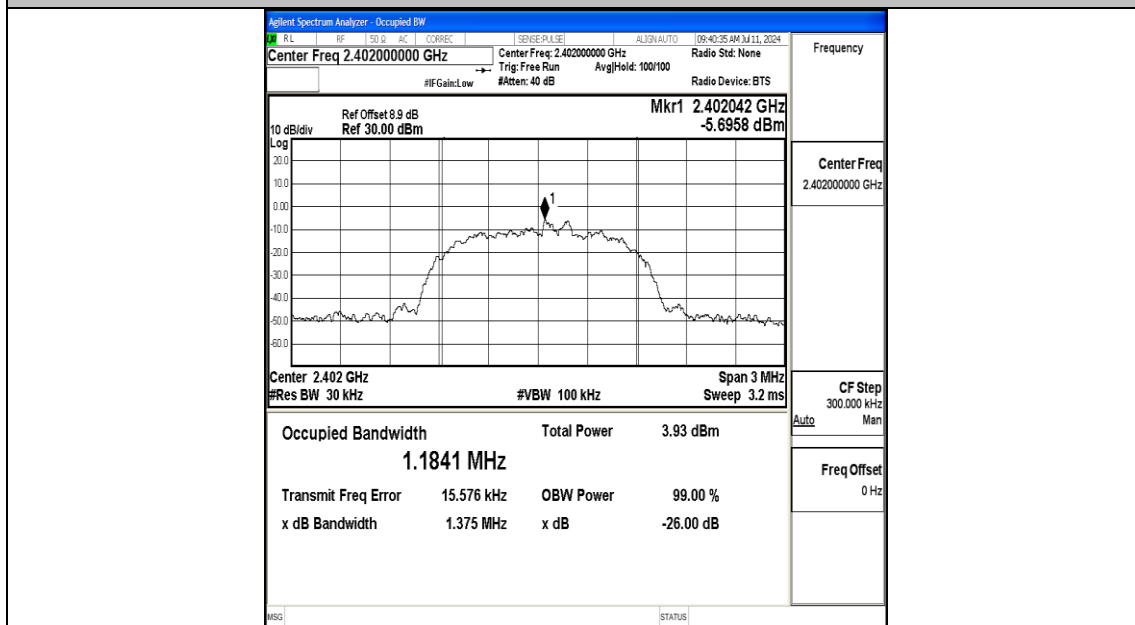
Test Graphs



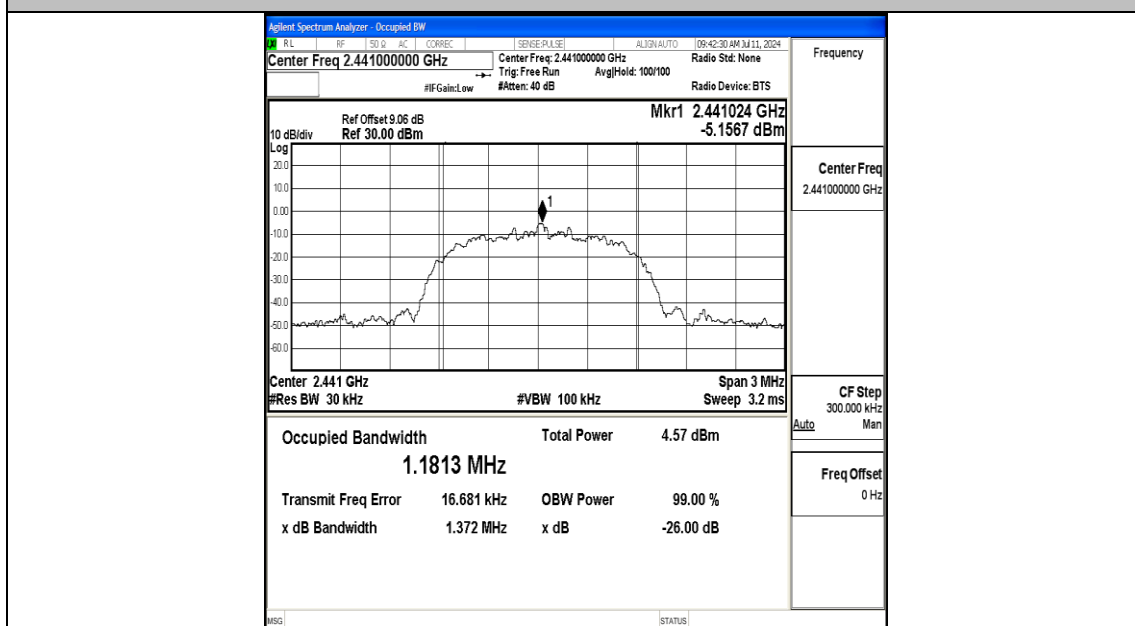




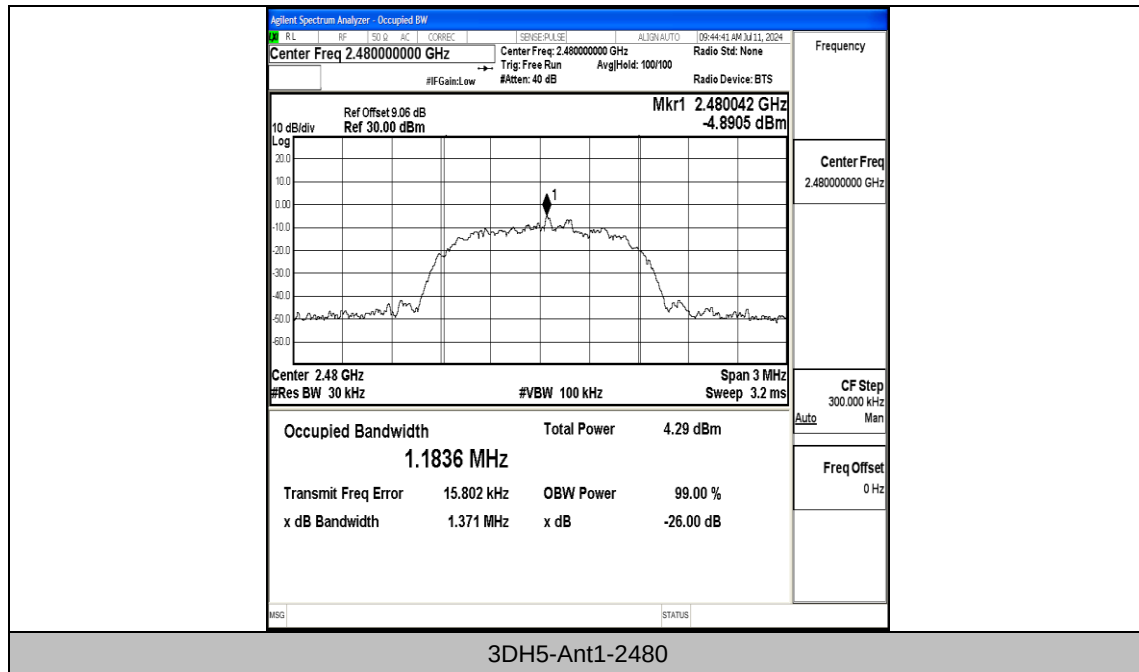
2DH5-Ant1-2480



3DH5-Ant1-2402



3DH5-Ant1-2441

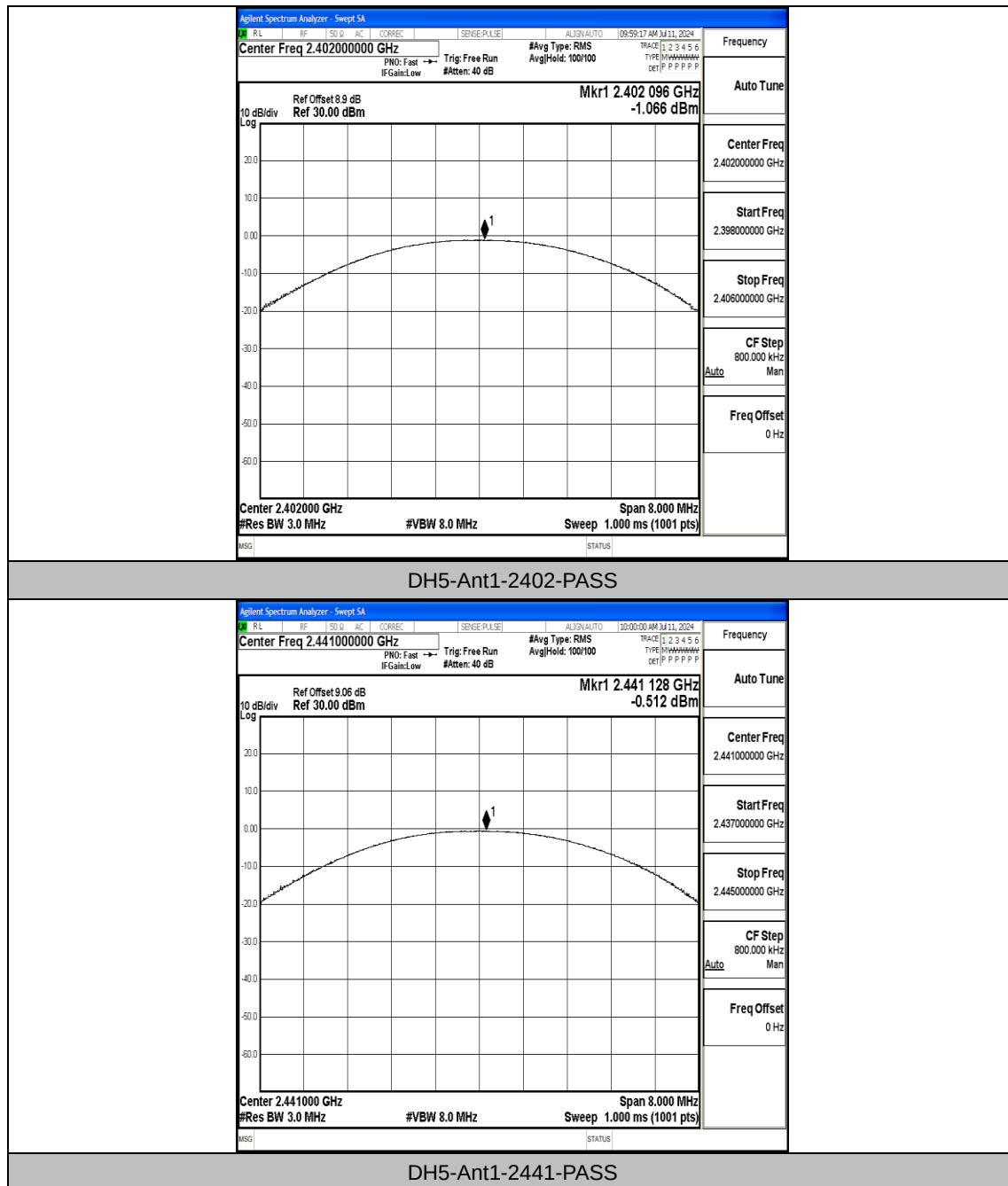


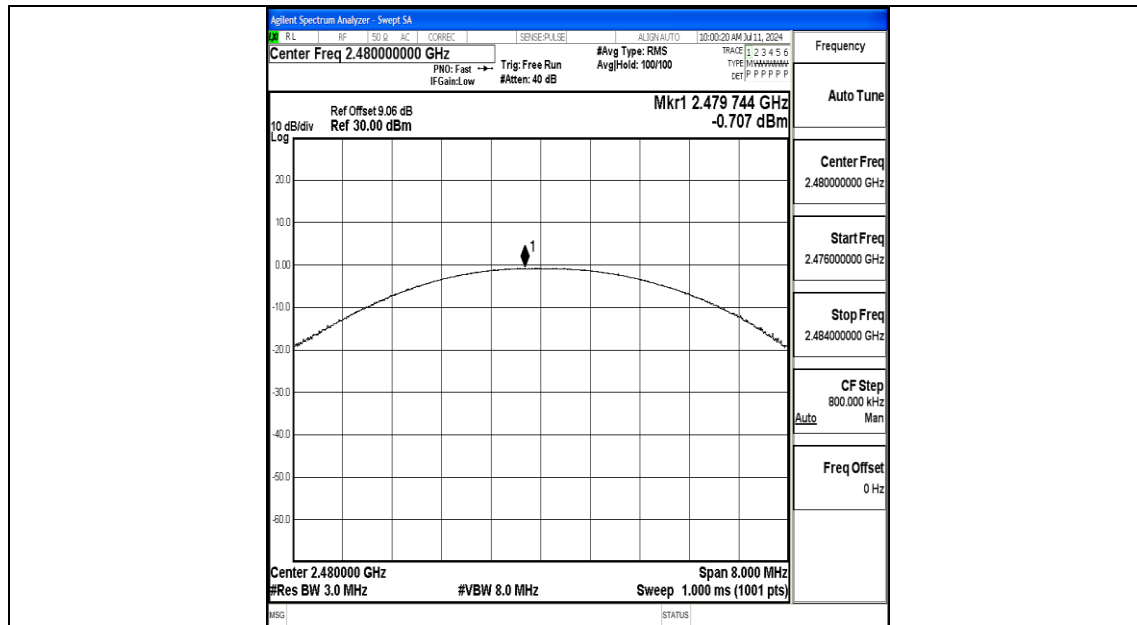
Appendix C: Maximum peak conducted output power

Test Result

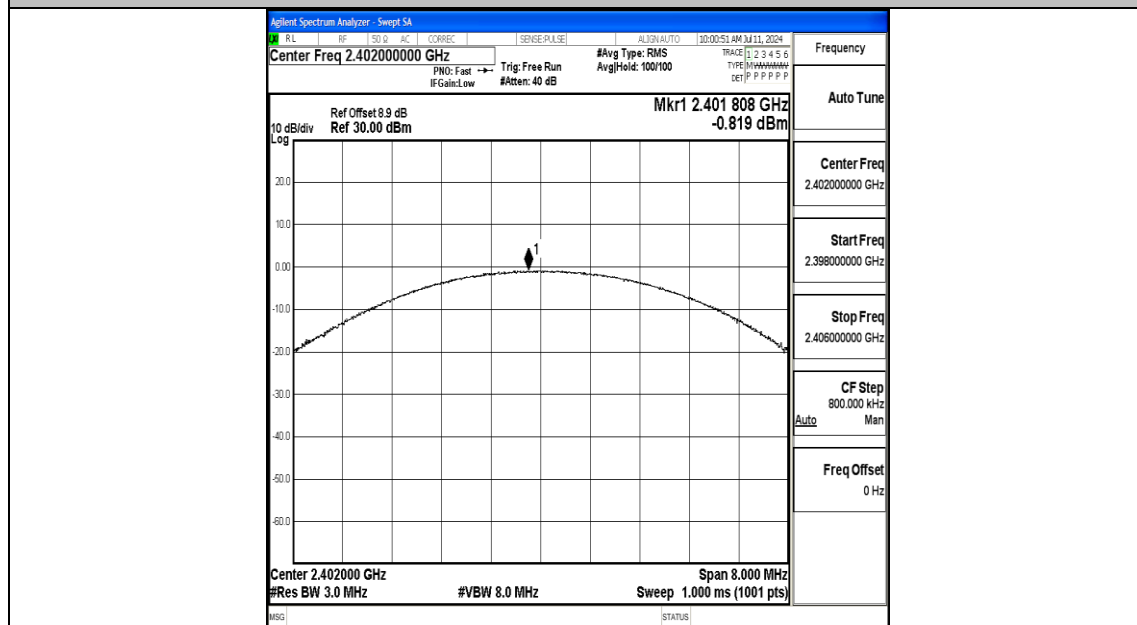
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-1.07	≤20.97	PASS
DH5	Ant1	2441	-0.51	≤20.97	PASS
DH5	Ant1	2480	-0.71	≤20.97	PASS
2DH5	Ant1	2402	-0.82	≤30	PASS
2DH5	Ant1	2441	-0.24	≤30	PASS
2DH5	Ant1	2480	-0.51	≤30	PASS
3DH5	Ant1	2402	-0.31	≤20.97	PASS
3DH5	Ant1	2441	0.29	≤20.97	PASS
3DH5	Ant1	2480	0.09	≤20.97	PASS

Test Graphs

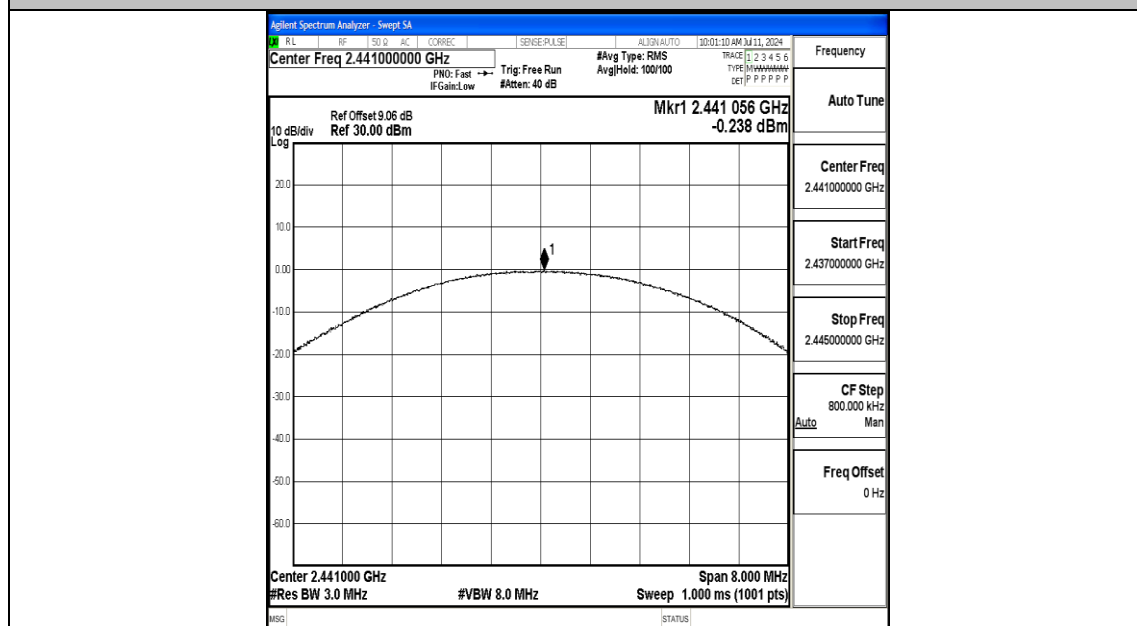




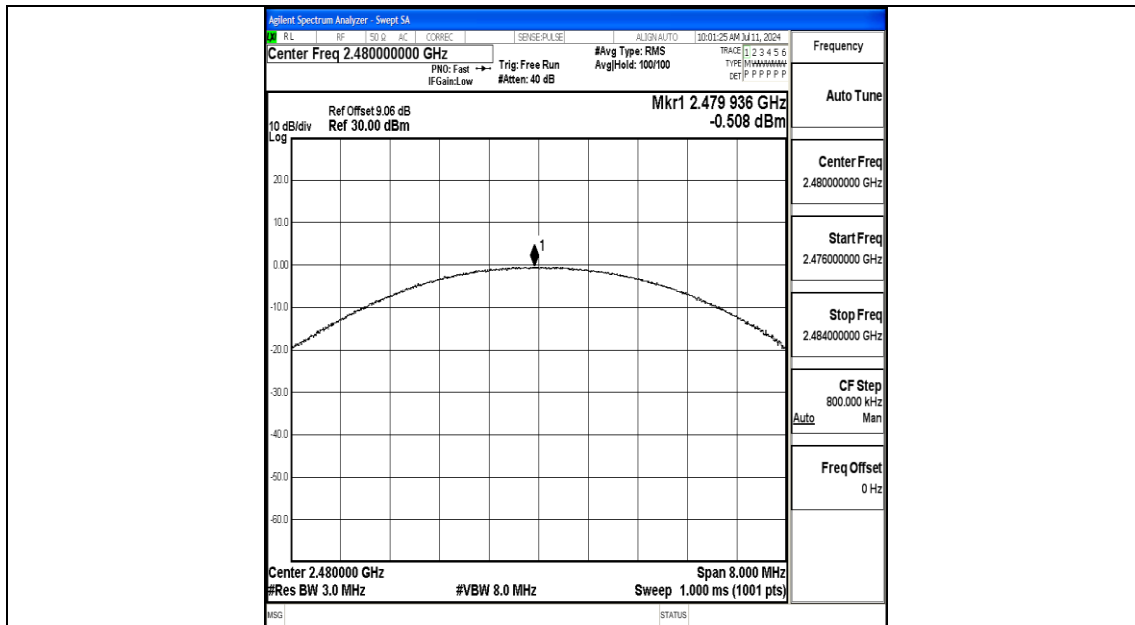
DH5-Ant1-2480-PASS



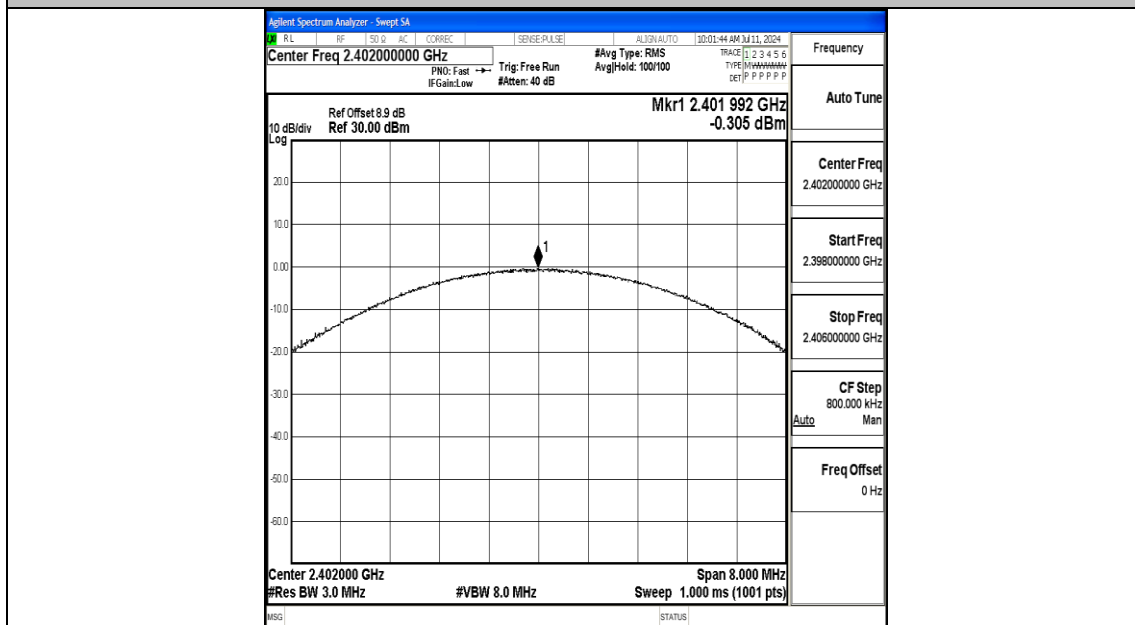
2DH5-Ant1-2402-PASS



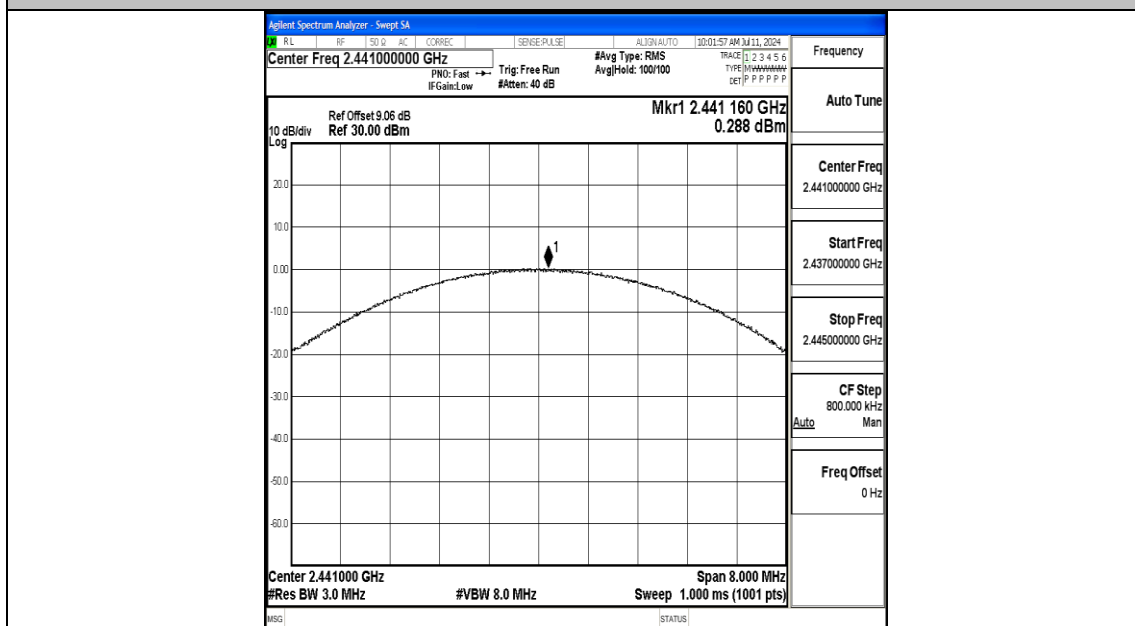
2DH5-Ant1-2441-PASS



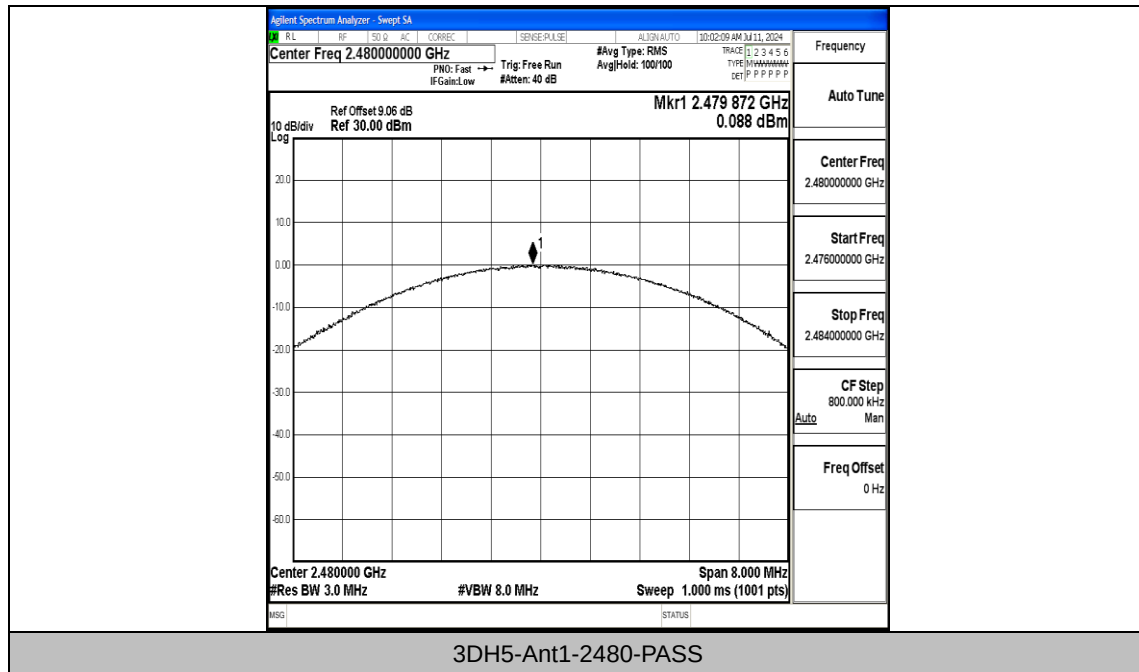
2DH5-Ant1-2480-PASS



3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS

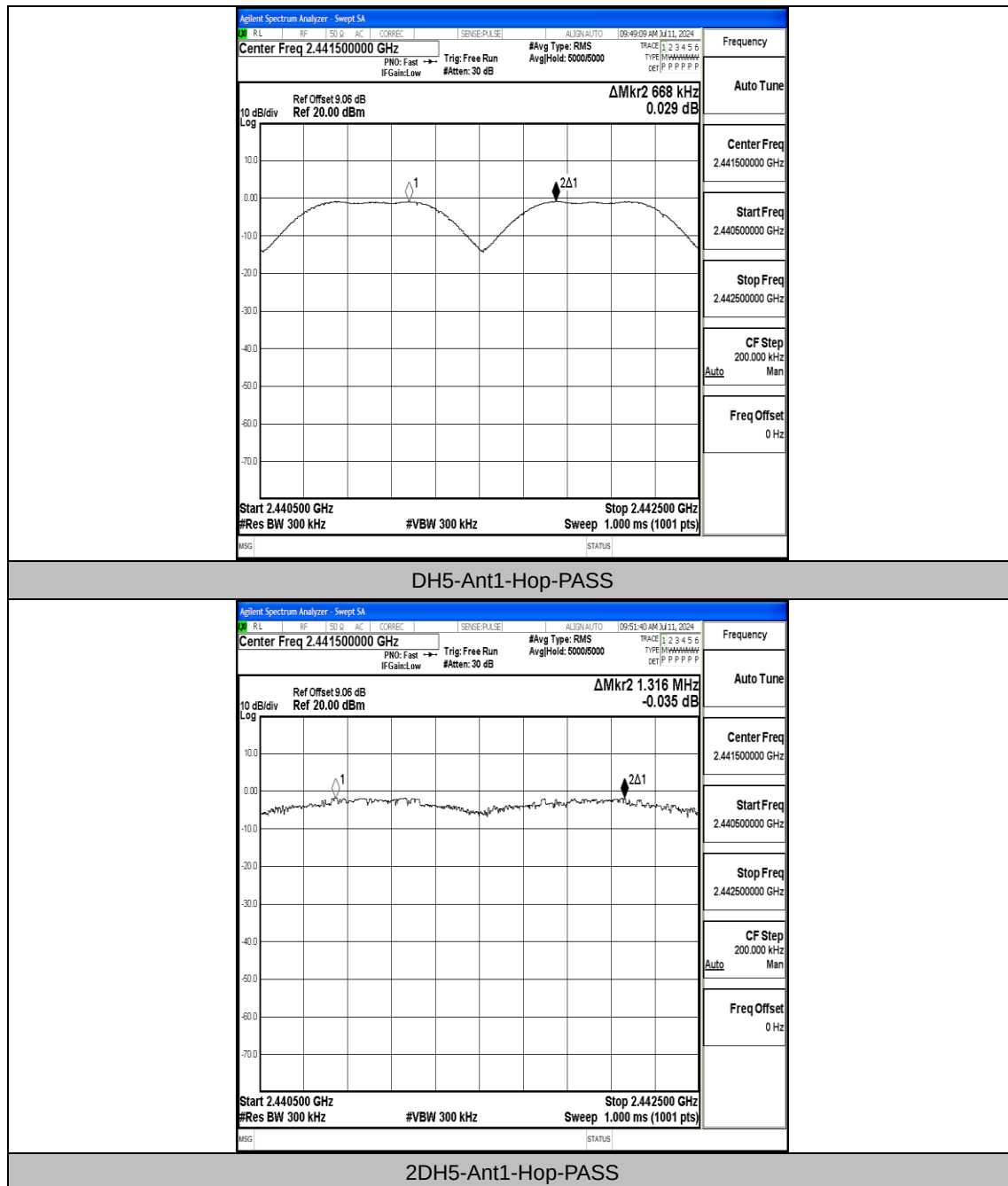


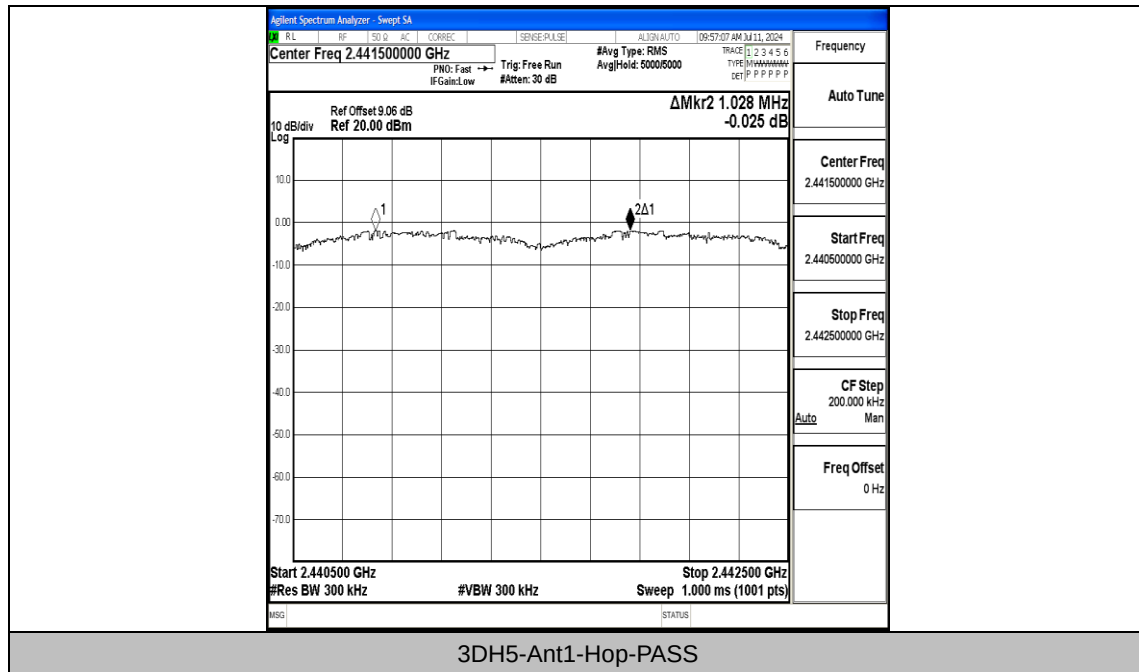
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.668	≥ 0.642	PASS
2DH5	Ant1	Hop	1.316	≥ 1.293	PASS
3DH5	Ant1	Hop	1.028	≥ 0.872	PASS

Test Graphs



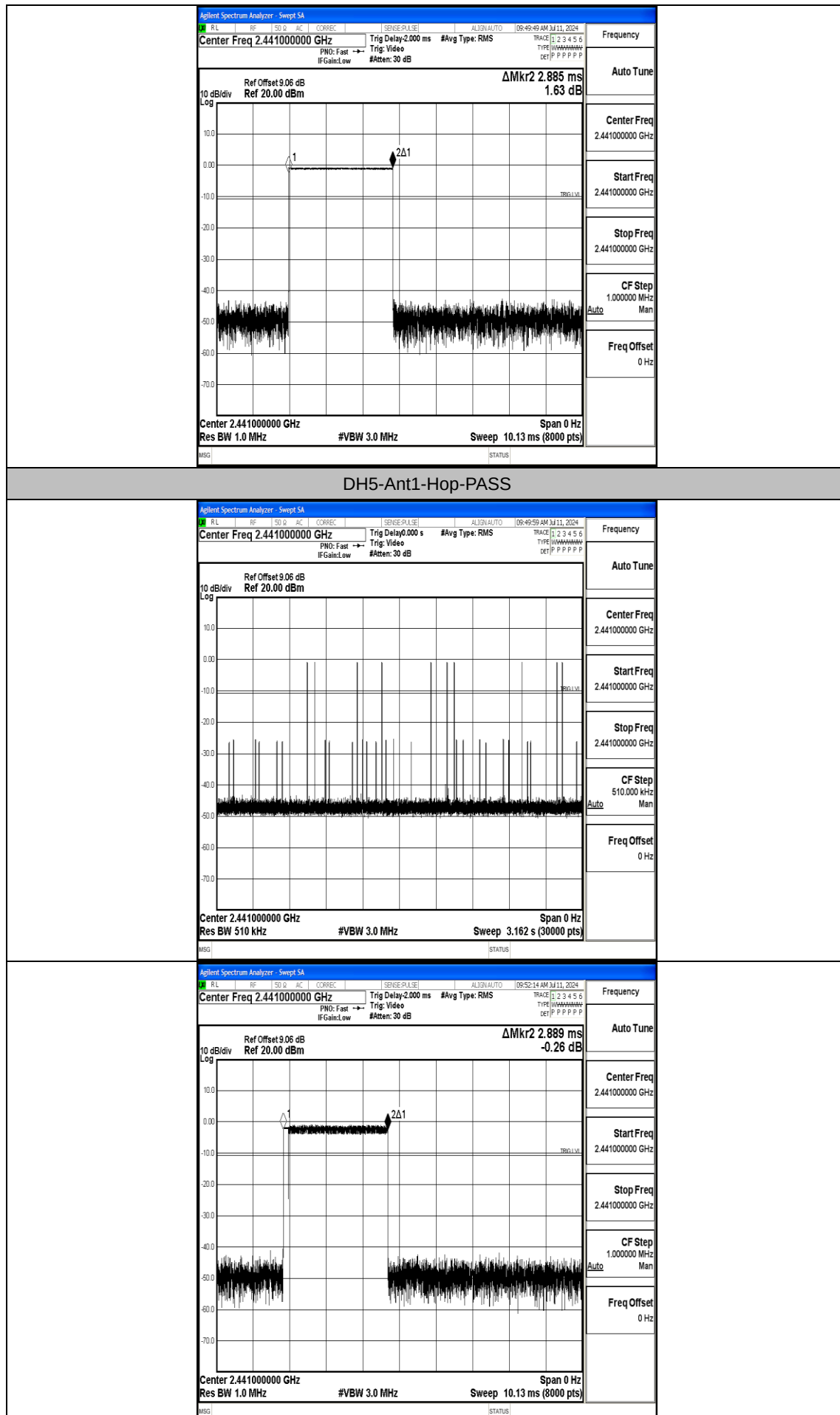


Appendix E: Time of occupancy

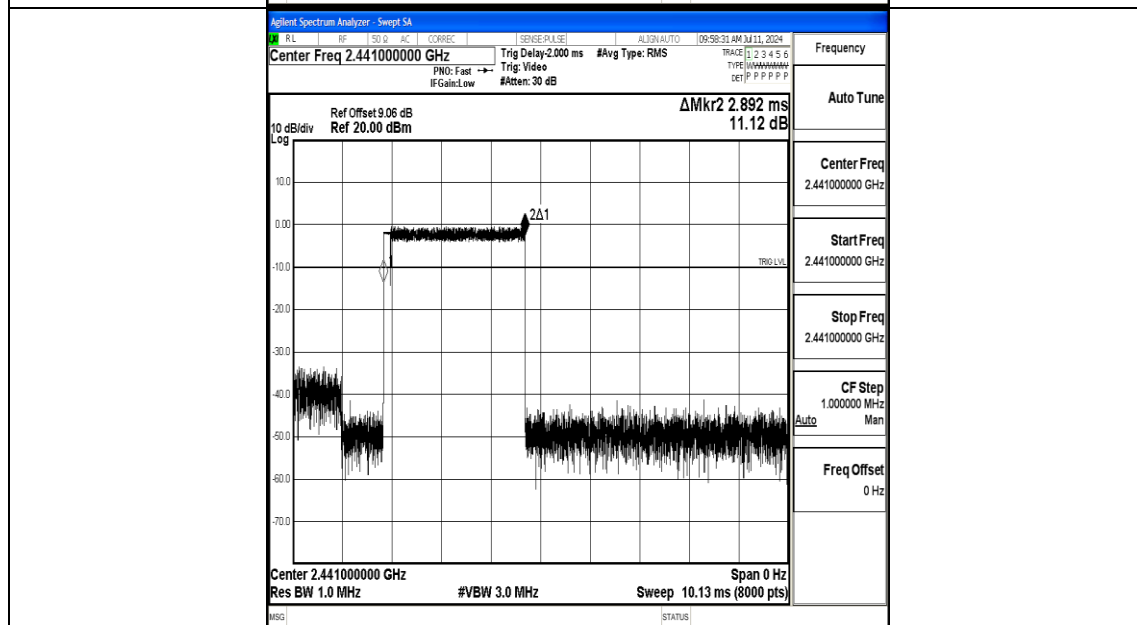
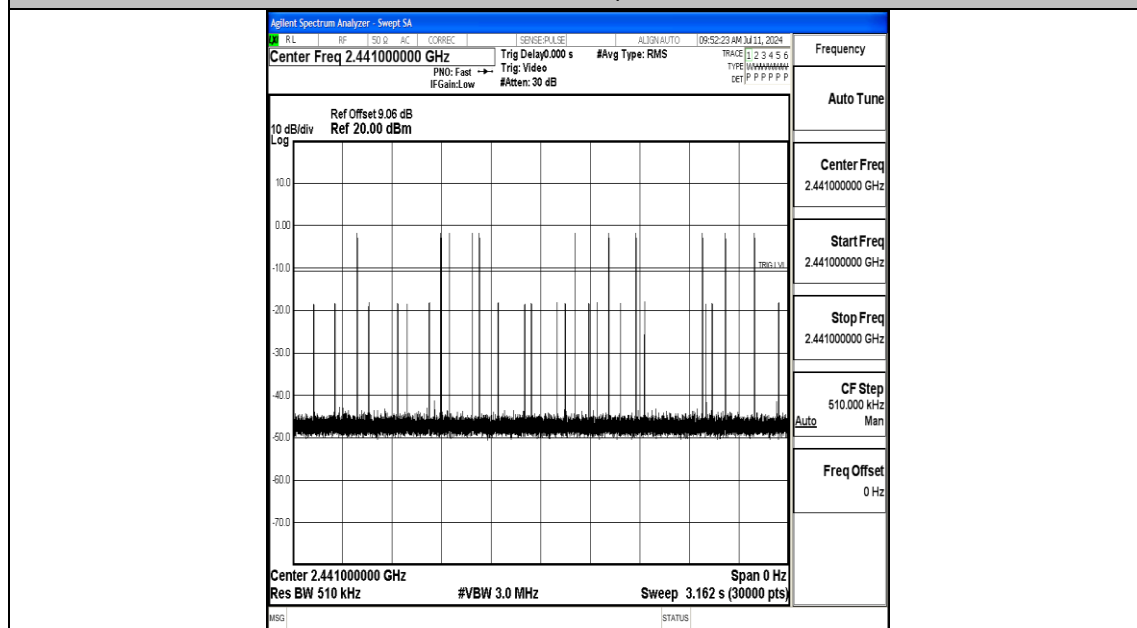
Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	110	0.317	≤0.4	PASS
2DH5	Ant1	Hop	2.889	120	0.347	≤0.4	PASS
3DH5	Ant1	Hop	2.892	120	0.347	≤0.4	PASS

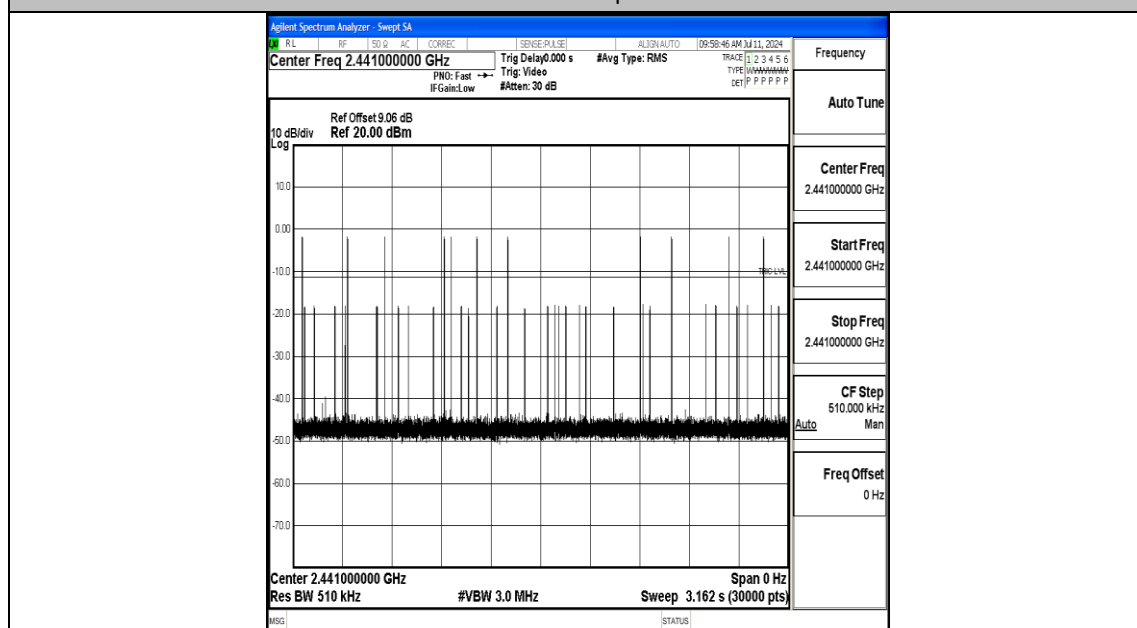
Test Graphs



2DH5-Ant1-Hop-PASS



3DH5-Ant1-Hop-PASS

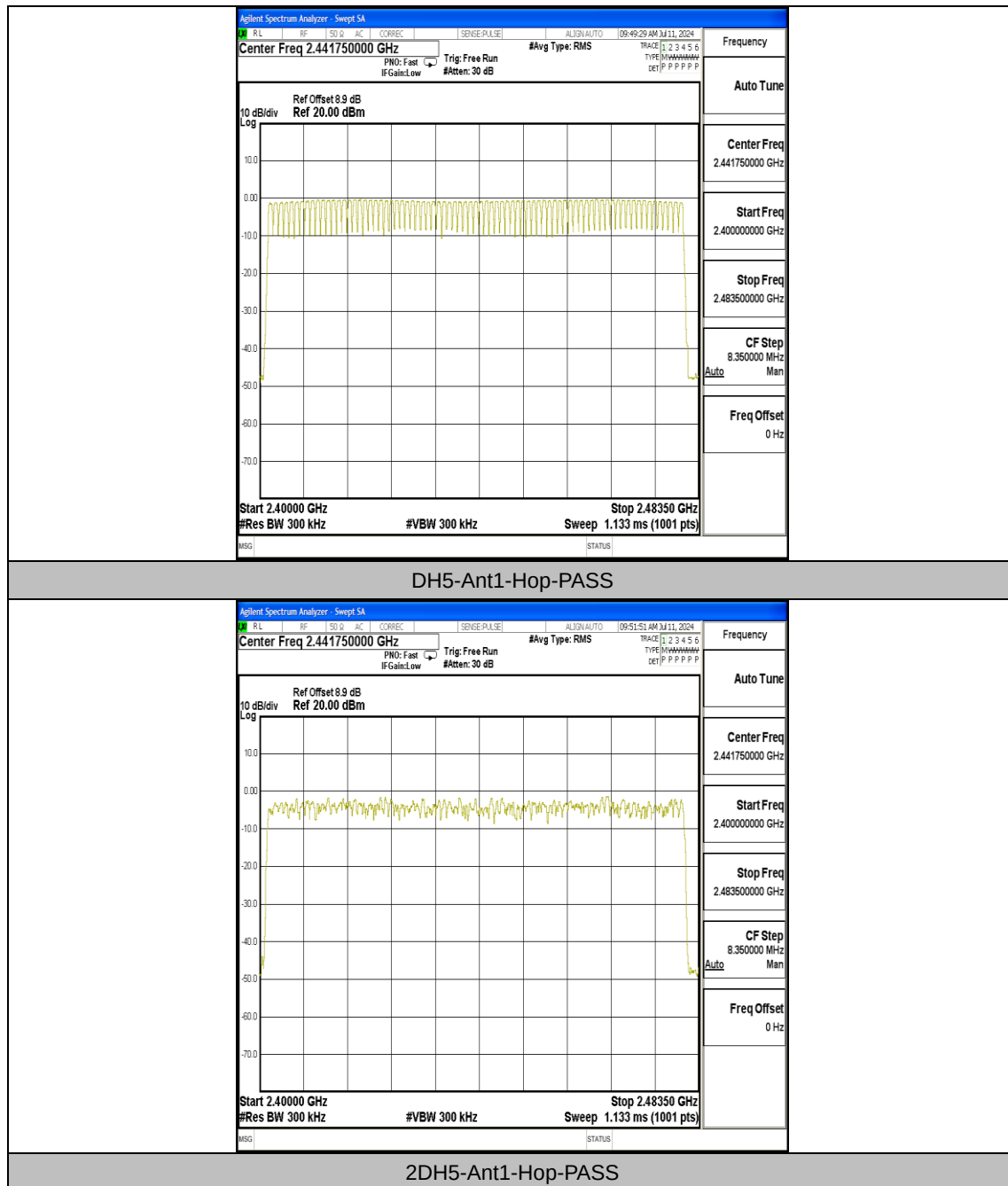


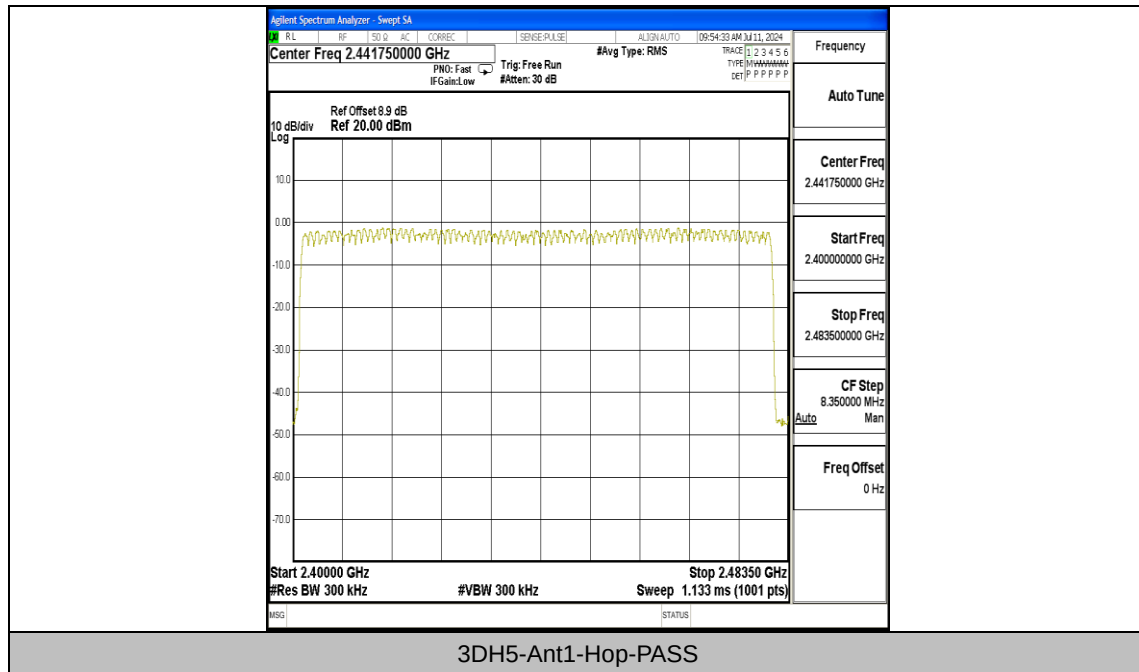
Appendix F: Number of hopping channels

Test Result

TestMode	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

Test Graphs



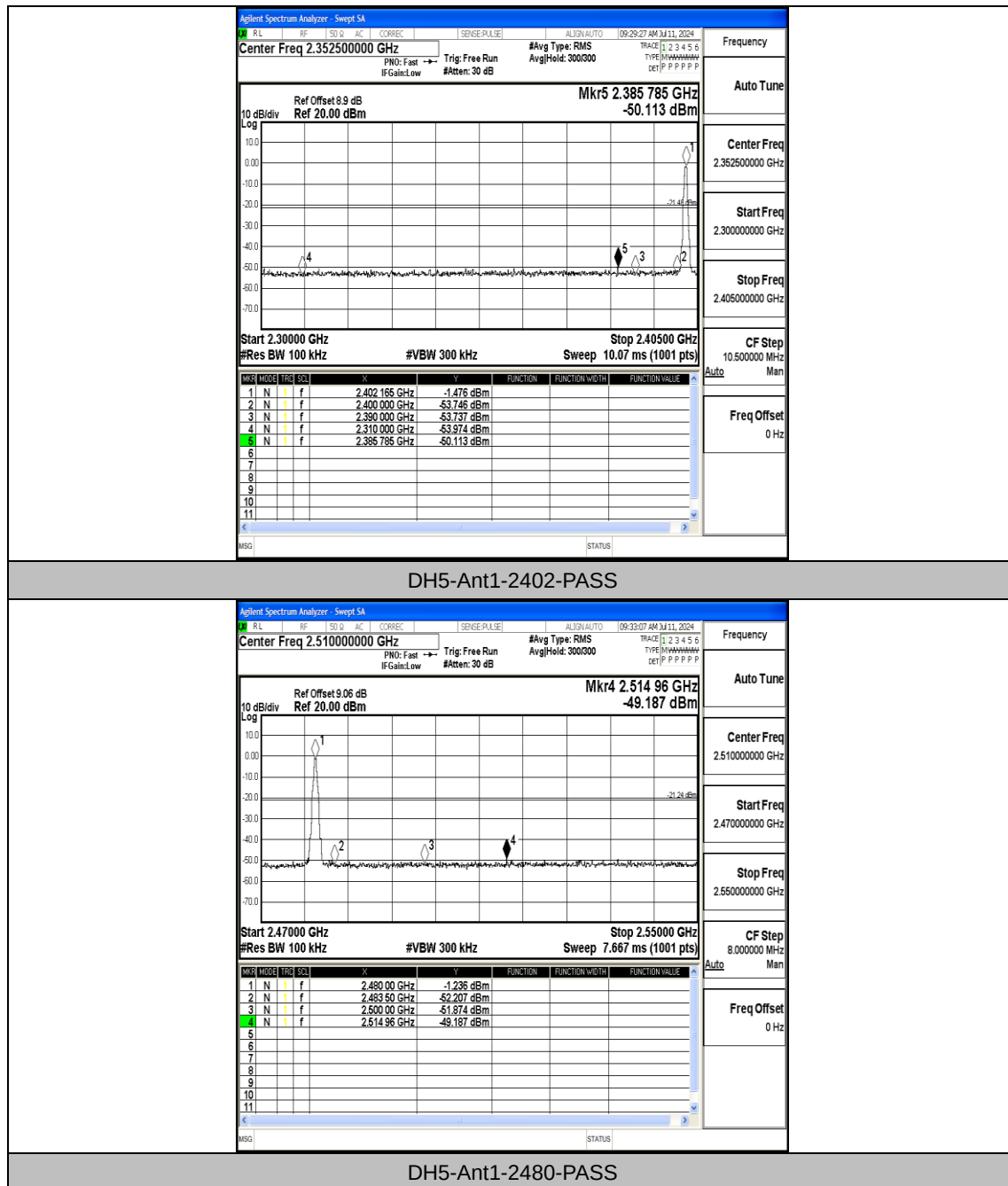


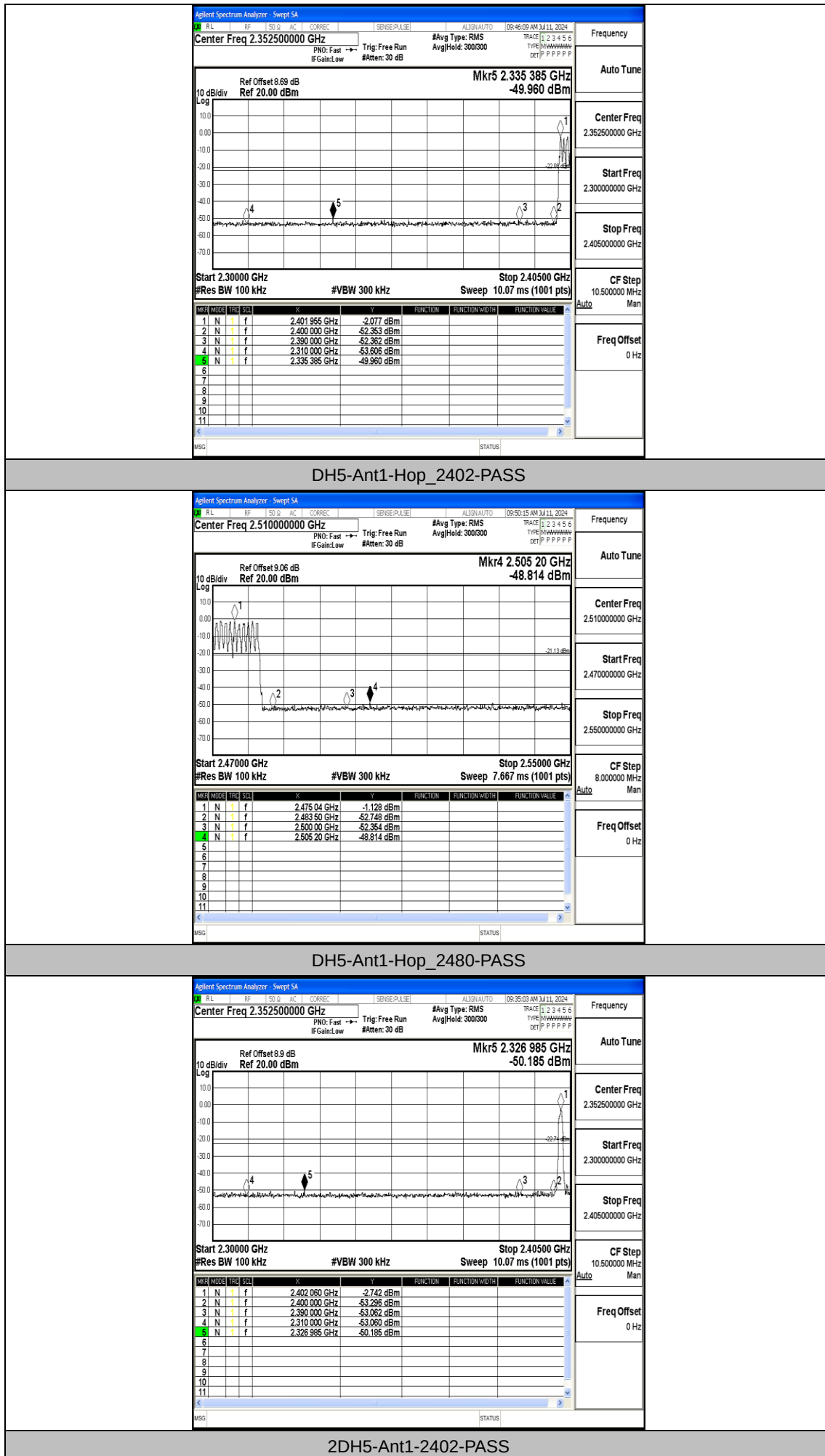
Appendix G: Band edge measurements

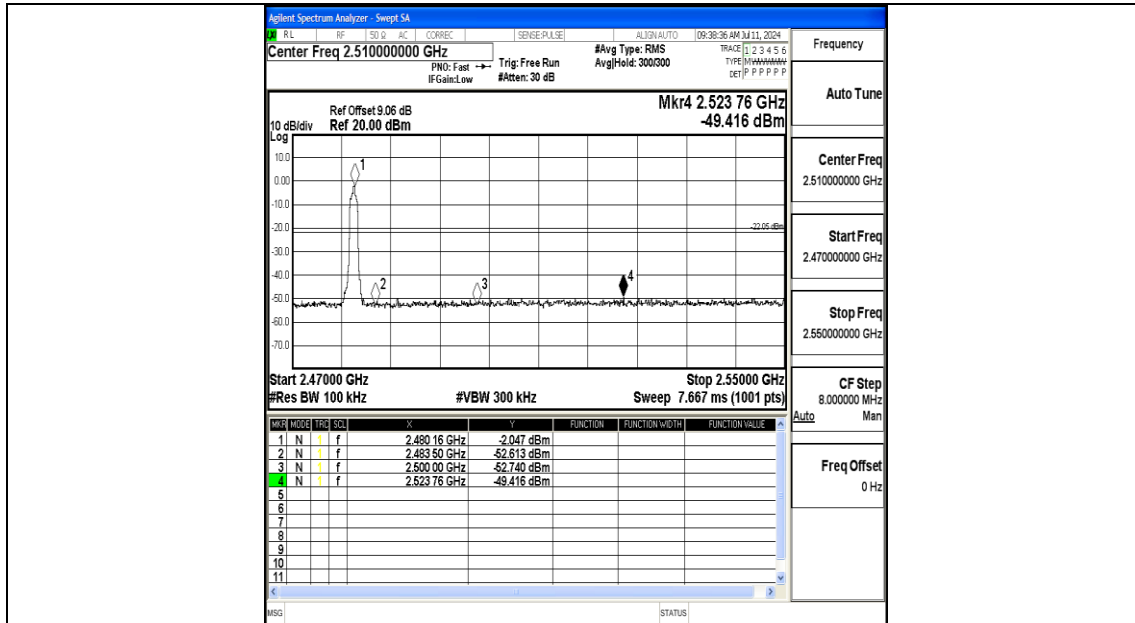
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.48	-50.11	≤-21.48	PASS
DH5	Ant1	High	2480	-1.24	-49.19	≤-21.24	PASS
DH5	Ant1	Low	Hop_2402	-2.08	-49.96	≤-22.08	PASS
DH5	Ant1	High	Hop_2480	-1.13	-48.81	≤-21.13	PASS
2DH5	Ant1	Low	2402	-2.74	-50.19	≤-22.74	PASS
2DH5	Ant1	High	2480	-2.05	-49.42	≤-22.05	PASS
2DH5	Ant1	Low	Hop_2402	-4.94	-50.65	≤-24.94	PASS
2DH5	Ant1	High	Hop_2480	-2.26	-49.46	≤-22.26	PASS
3DH5	Ant1	Low	2402	-2.68	-50.5	≤-22.68	PASS
3DH5	Ant1	High	2480	-2.23	-49.16	≤-22.23	PASS
3DH5	Ant1	Low	Hop_2402	-2.69	-51.05	≤-22.69	PASS
3DH5	Ant1	High	Hop_2480	-2.06	-48.96	≤-22.06	PASS

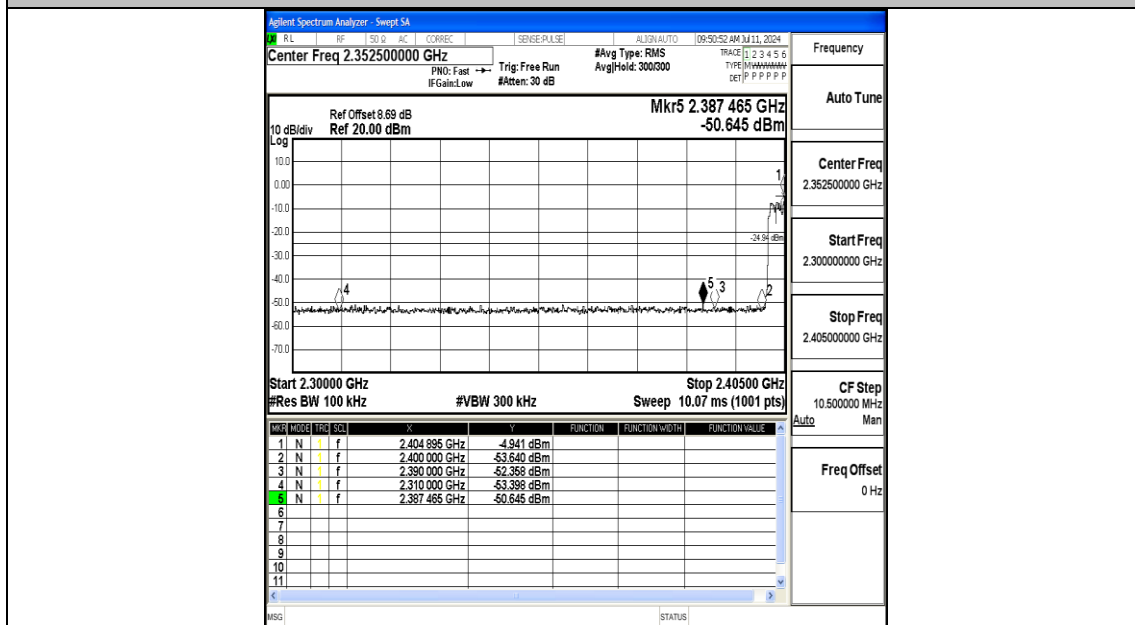
Test Graphs



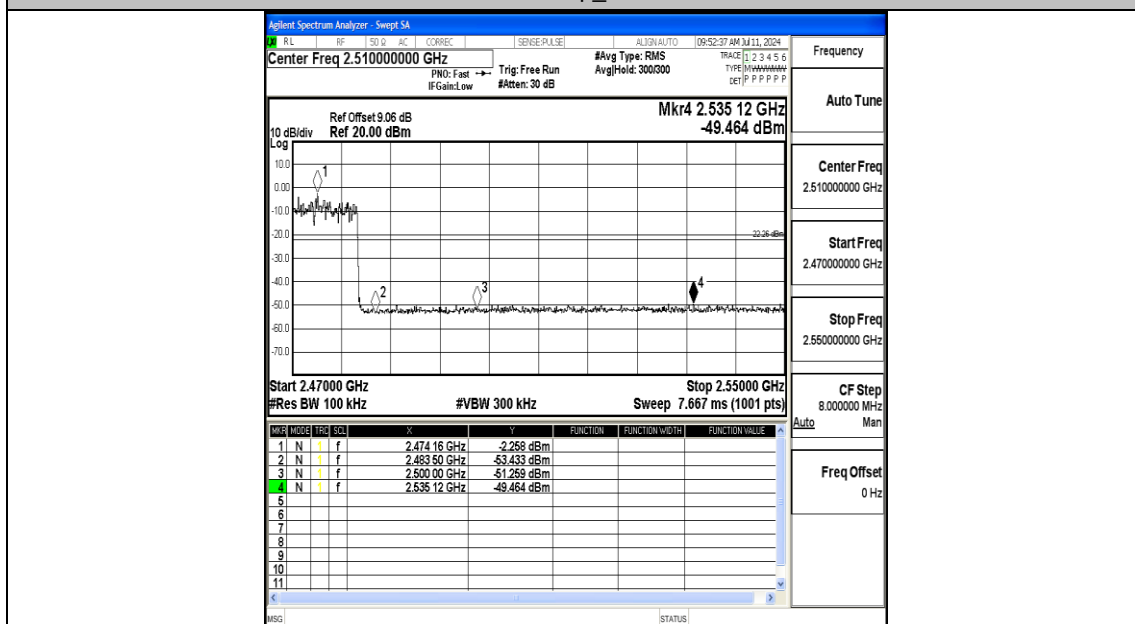




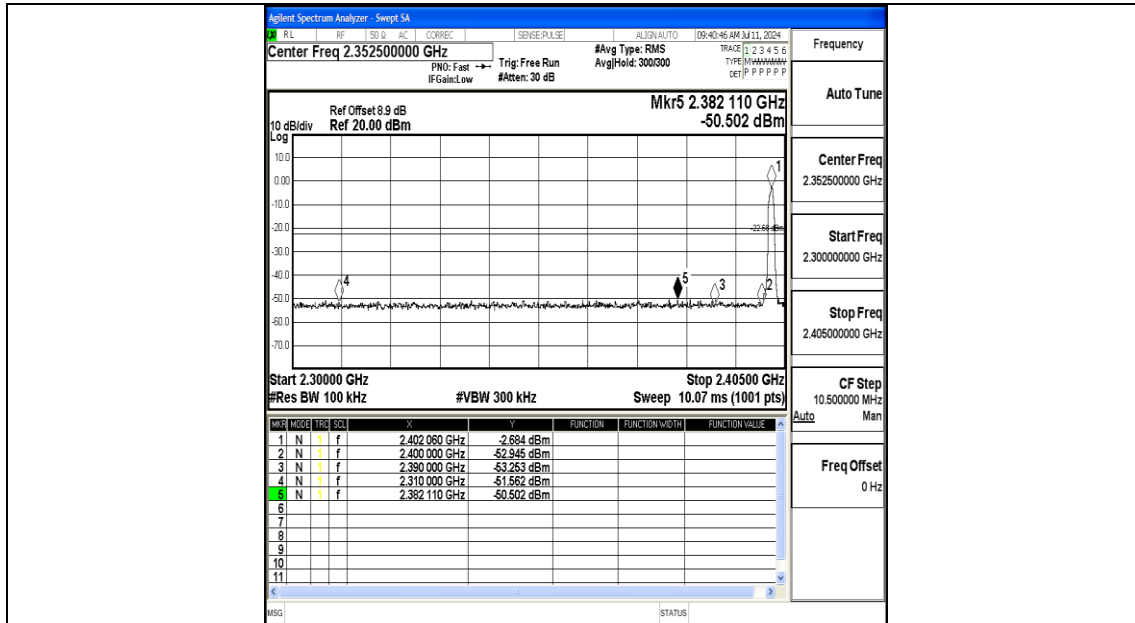
2DH5-Ant1-2480-PASS



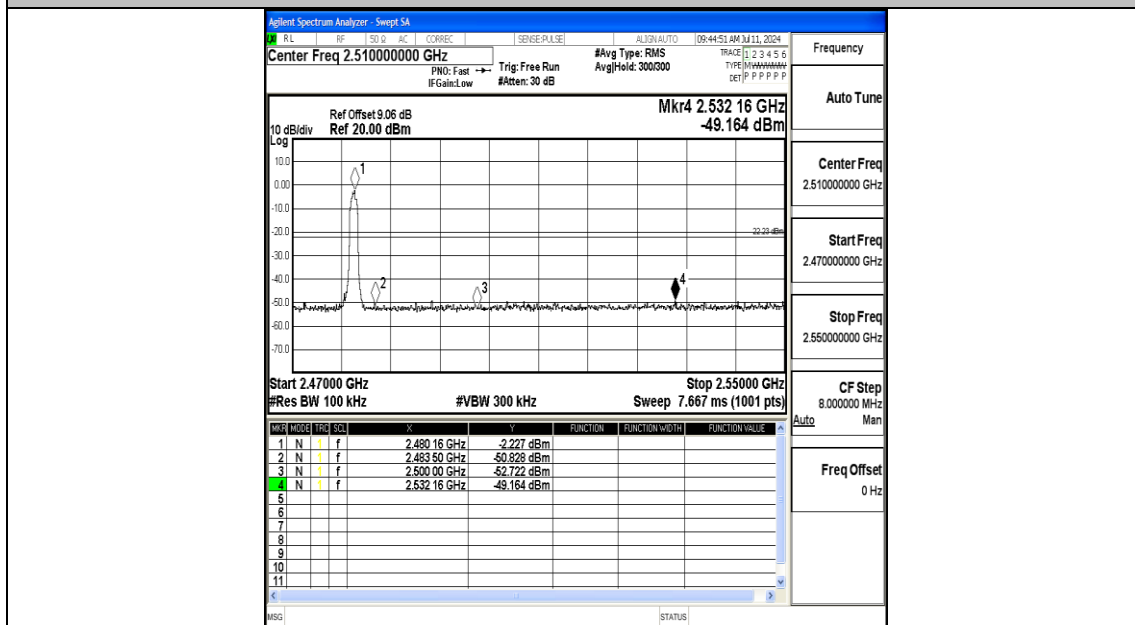
2DH5-Ant1-Hop_2402-PASS



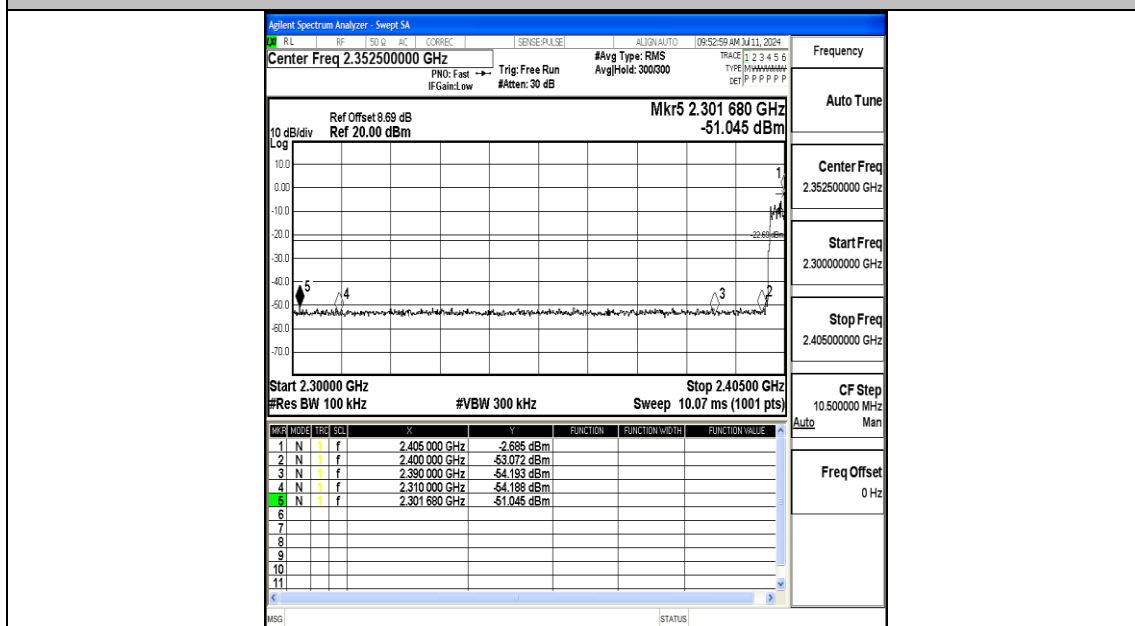
2DH5-Ant1-Hop_2480-PASS



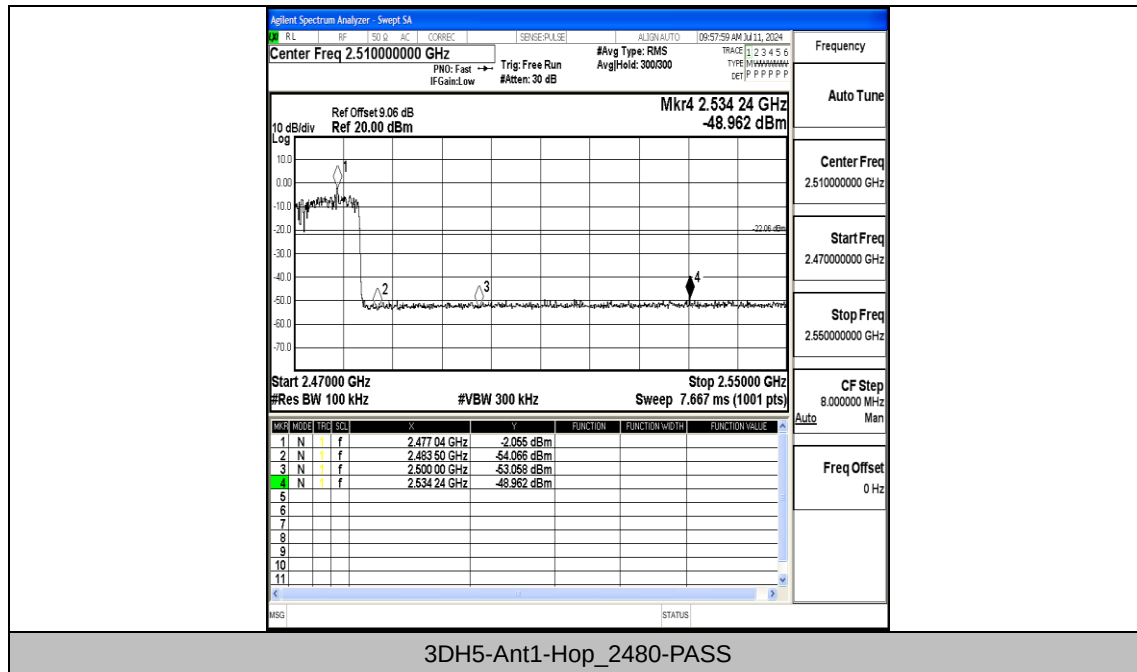
3DH5-Ant1-2402-PASS



3DH5-Ant1-2480-PASS



3DH5-Ant1-Hop_2402-PASS

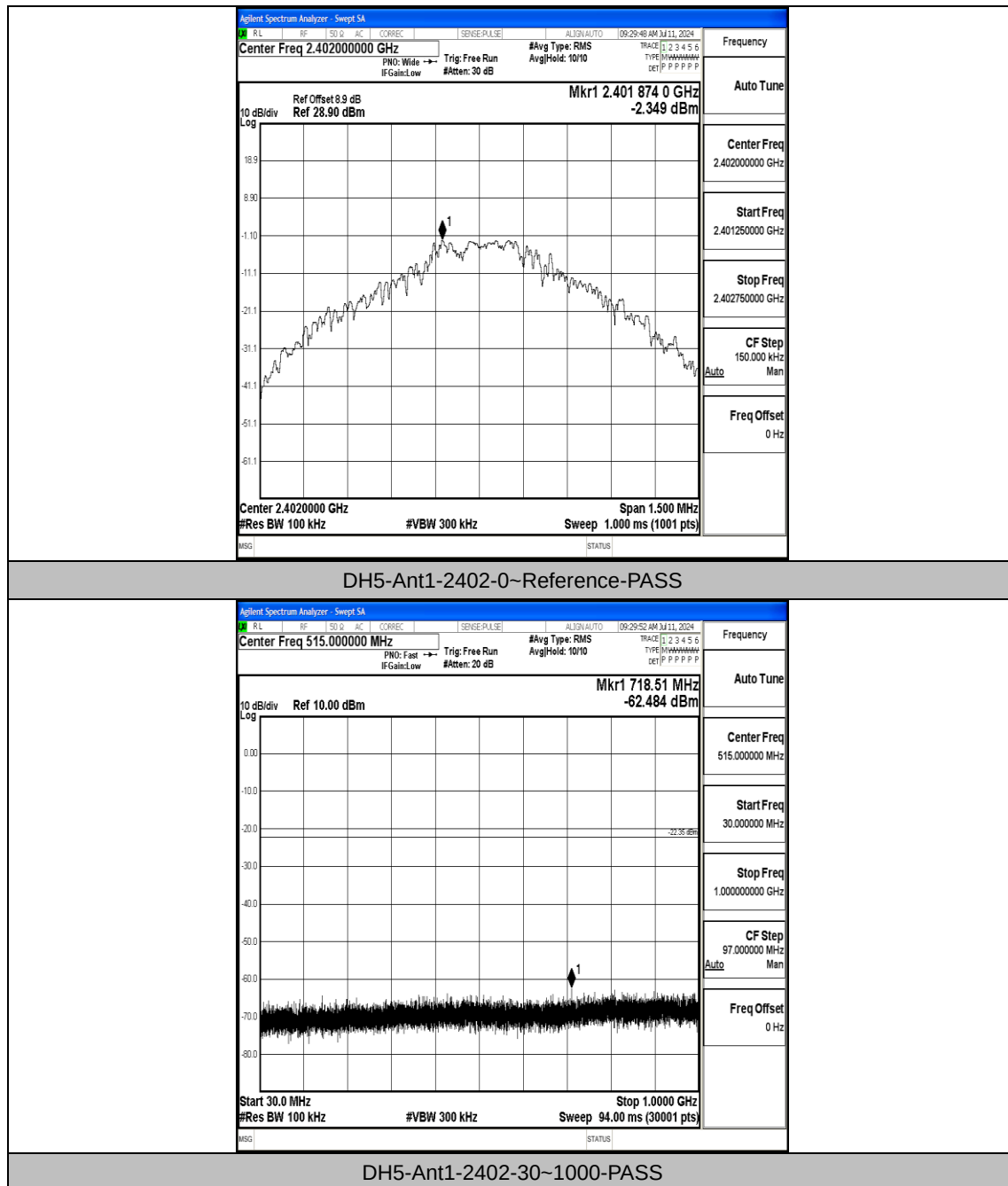


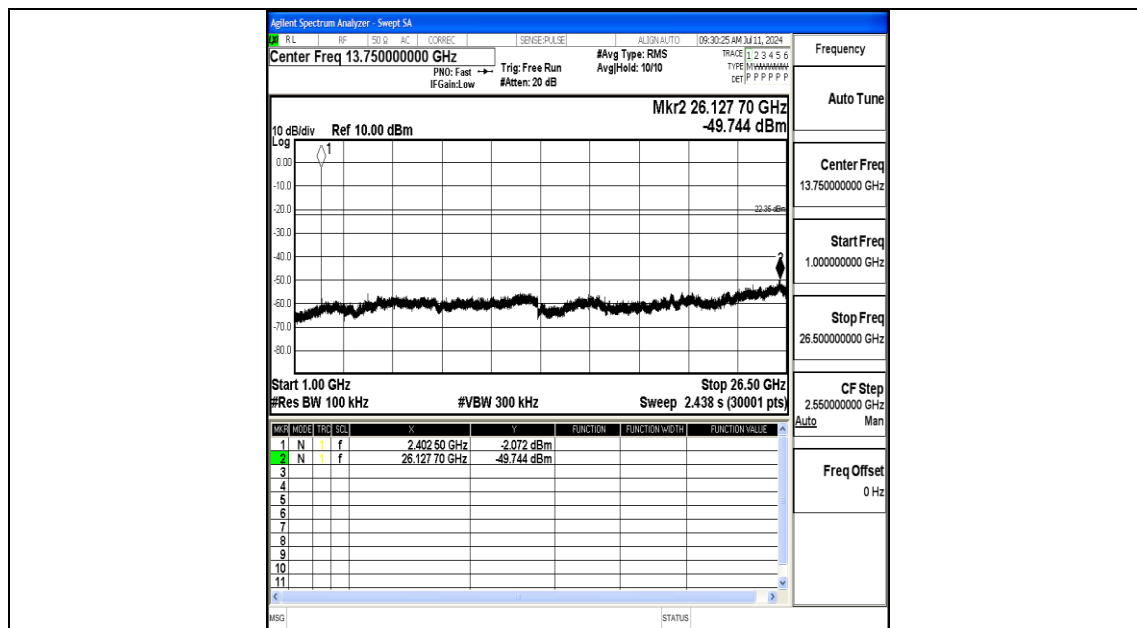
Appendix H: Conducted Spurious Emission

Test Result

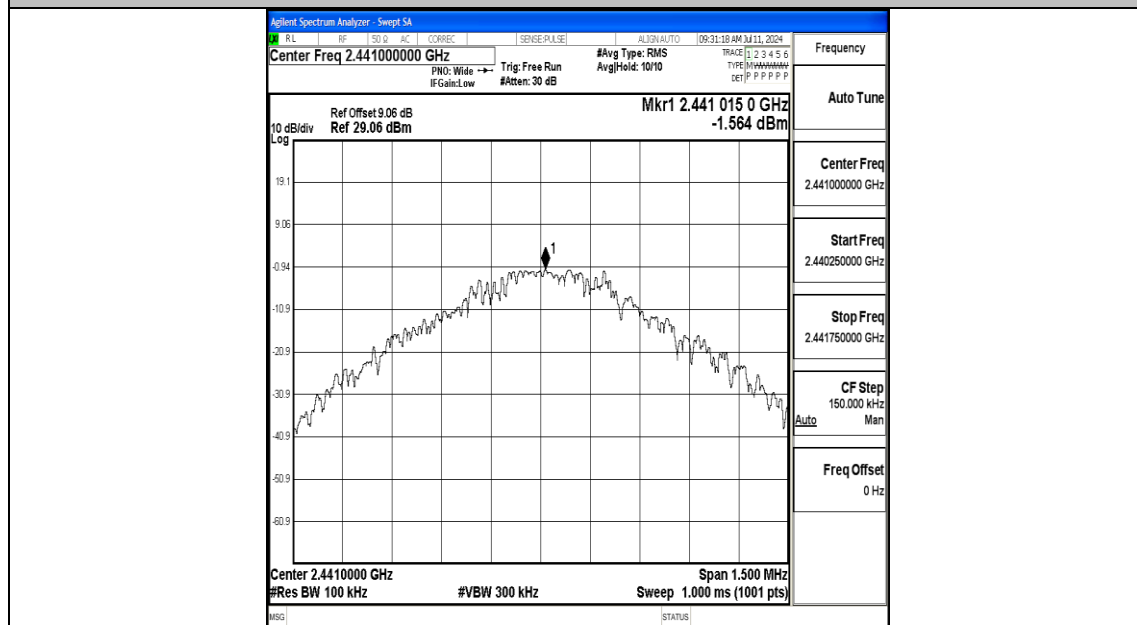
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-2.35	-2.35	---	PASS
DH5	Ant1	2402	30~1000	-2.35	-62.48	≤-22.35	PASS
DH5	Ant1	2402	1000~26500	-2.35	-49.74	≤-22.35	PASS
DH5	Ant1	2441	0~Reference	-1.56	-1.56	---	PASS
DH5	Ant1	2441	30~1000	-1.56	-63.06	≤-21.56	PASS
DH5	Ant1	2441	1000~26500	-1.56	-50.11	≤-21.56	PASS
DH5	Ant1	2480	0~Reference	-1.81	-1.81	---	PASS
DH5	Ant1	2480	30~1000	-1.81	-62.32	≤-21.81	PASS
DH5	Ant1	2480	1000~26500	-1.81	-50.18	≤-21.81	PASS
2DH5	Ant1	2402	0~Reference	-2.87	-2.87	---	PASS
2DH5	Ant1	2402	30~1000	-2.87	-63.07	≤-22.87	PASS
2DH5	Ant1	2402	1000~26500	-2.87	-49.48	≤-22.87	PASS
2DH5	Ant1	2441	0~Reference	-4.73	-4.73	---	PASS
2DH5	Ant1	2441	30~1000	-4.73	-62.81	≤-24.73	PASS
2DH5	Ant1	2441	1000~26500	-4.73	-50.25	≤-24.73	PASS
2DH5	Ant1	2480	0~Reference	-3.17	-3.17	---	PASS
2DH5	Ant1	2480	30~1000	-3.17	-62.5	≤-23.17	PASS
2DH5	Ant1	2480	1000~26500	-3.17	-50.3	≤-23.17	PASS
3DH5	Ant1	2402	0~Reference	-4.65	-4.65	---	PASS
3DH5	Ant1	2402	30~1000	-4.65	-62.72	≤-24.65	PASS
3DH5	Ant1	2402	1000~26500	-4.65	-49.54	≤-24.65	PASS
3DH5	Ant1	2441	0~Reference	-3.06	-3.06	---	PASS
3DH5	Ant1	2441	30~1000	-3.06	-63.12	≤-23.06	PASS
3DH5	Ant1	2441	1000~26500	-3.06	-49.89	≤-23.06	PASS
3DH5	Ant1	2480	0~Reference	-4.56	-4.56	---	PASS
3DH5	Ant1	2480	30~1000	-4.56	-61.99	≤-24.56	PASS
3DH5	Ant1	2480	1000~26500	-4.56	-50.7	≤-24.56	PASS

Test Graphs

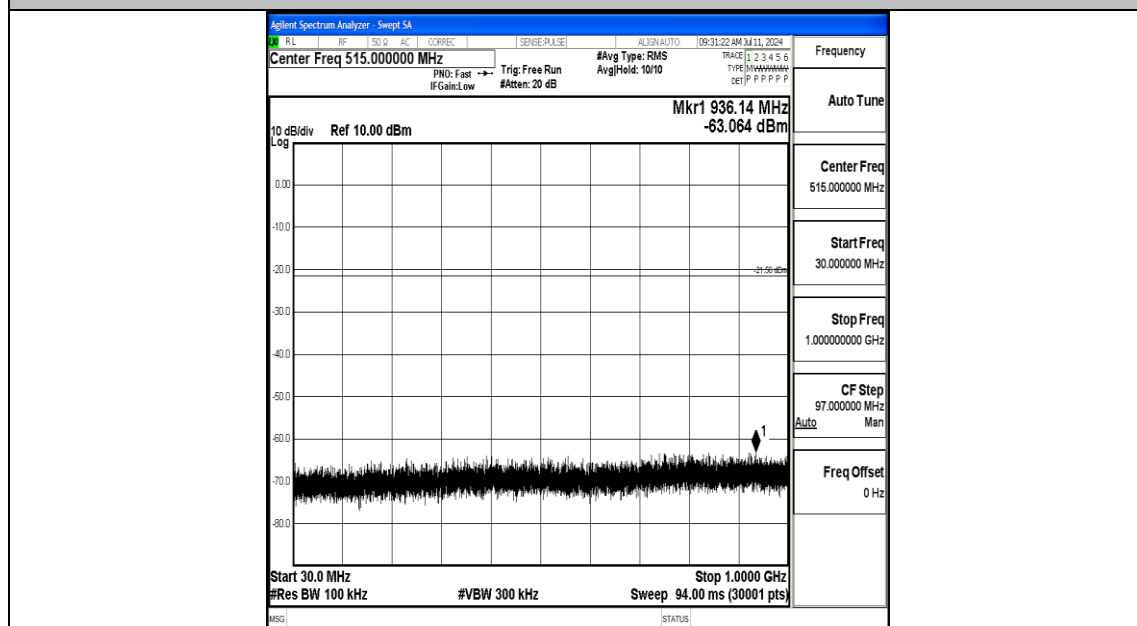




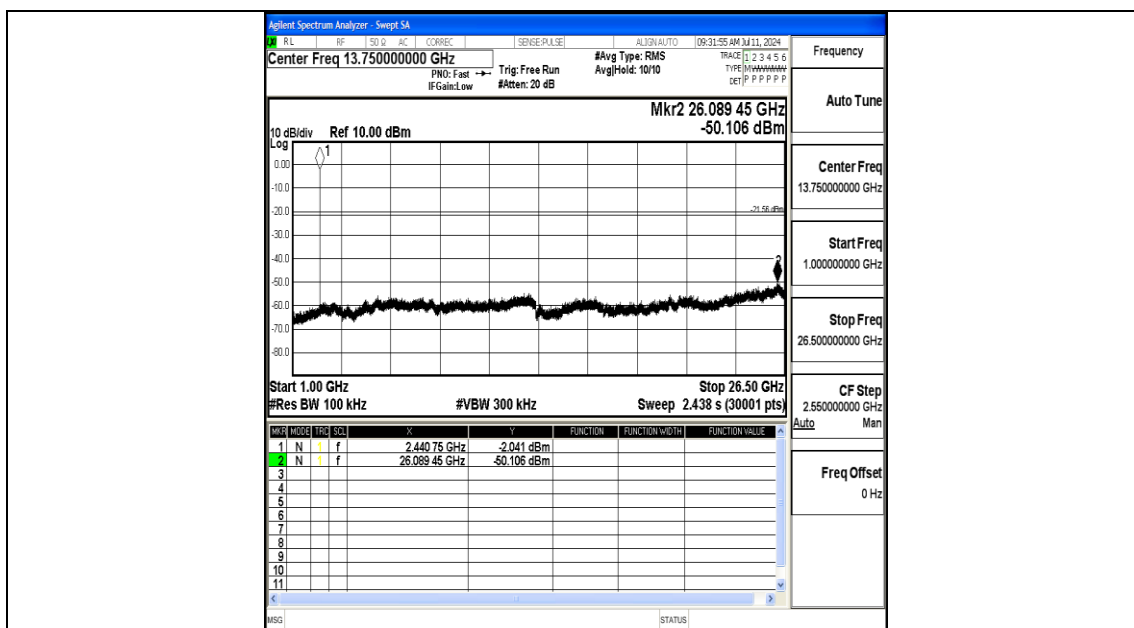
DH5-Ant1-2402-1000~26500-PASS



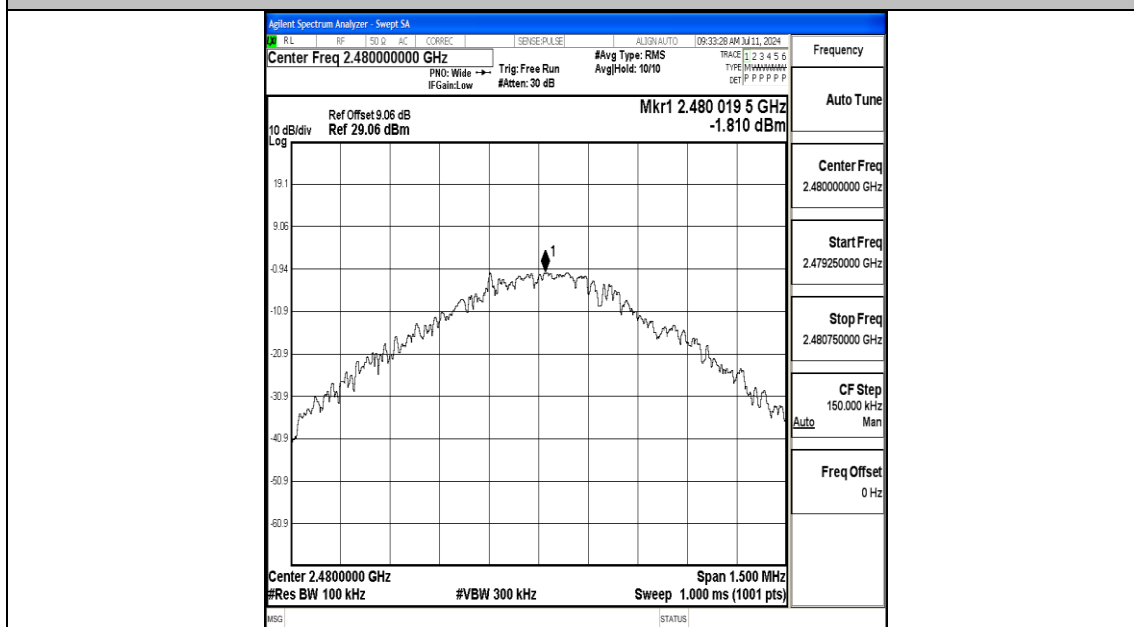
DH5-Ant1-2441-0~Reference-PASS



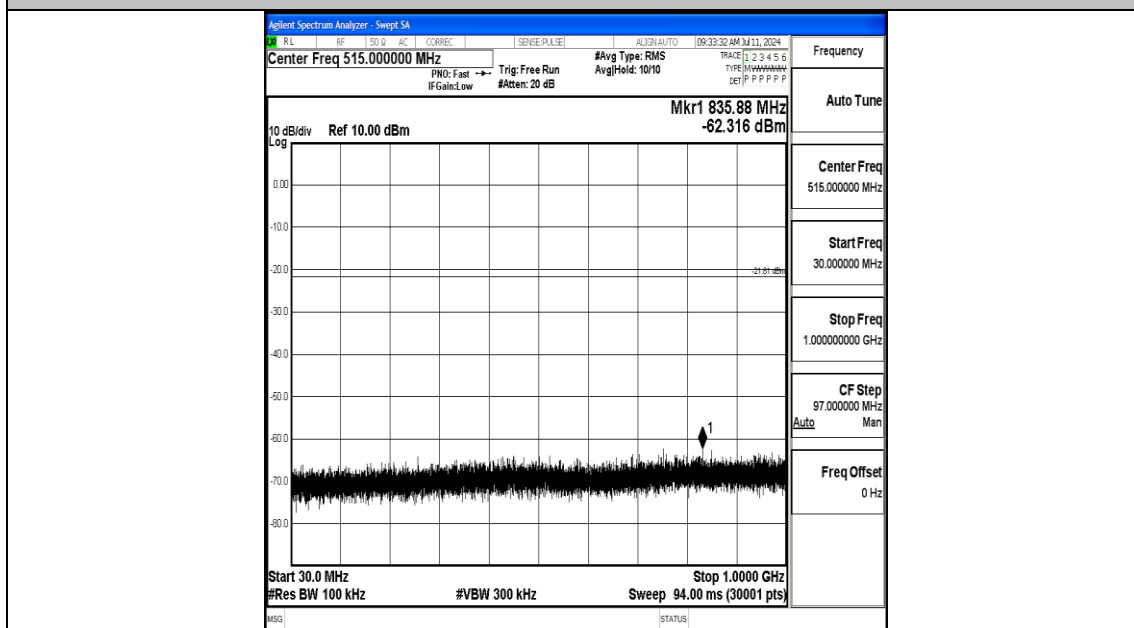
DH5-Ant1-2441-30~1000-PASS



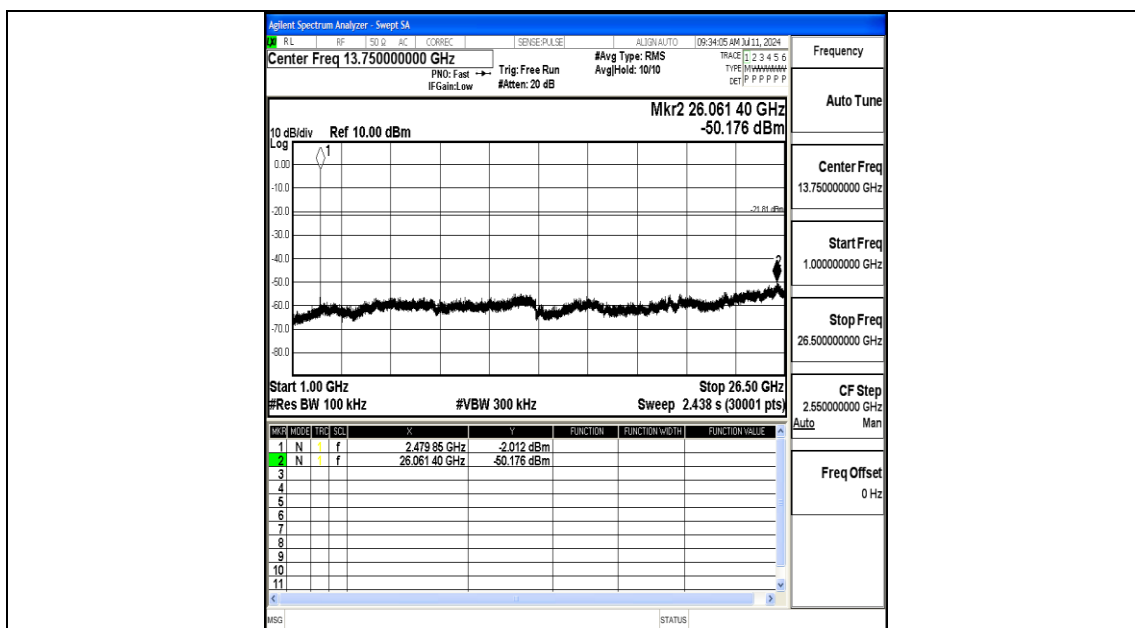
DH5-Ant1-2441-1000~26500-PASS



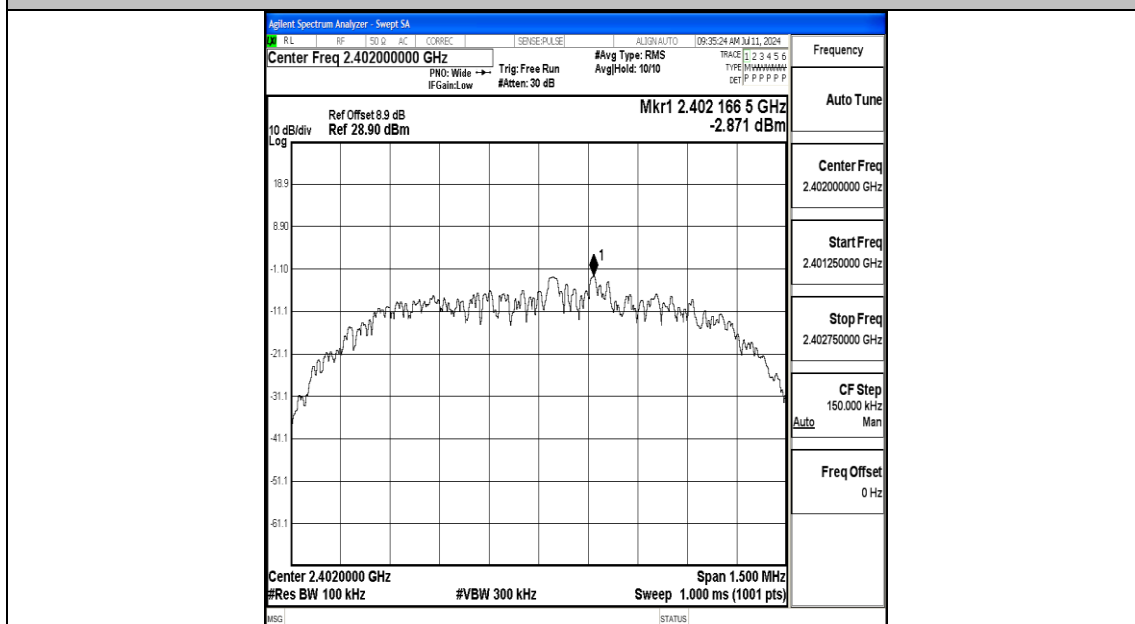
DH5-Ant1-2480-0~Reference-PASS



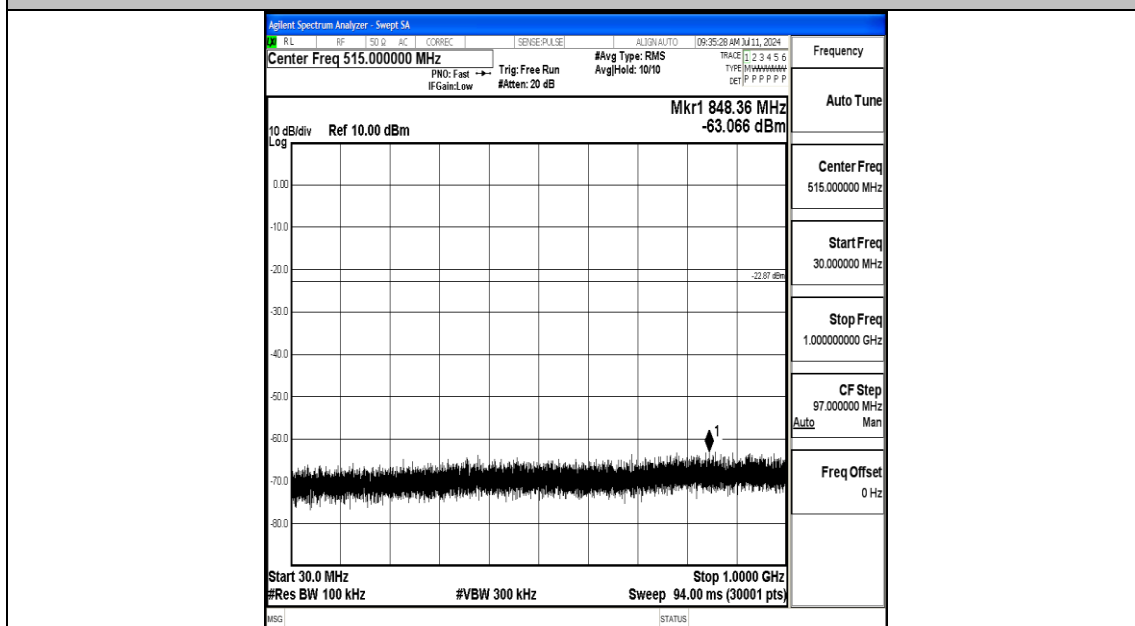
DH5-Ant1-2480-30~1000-PASS



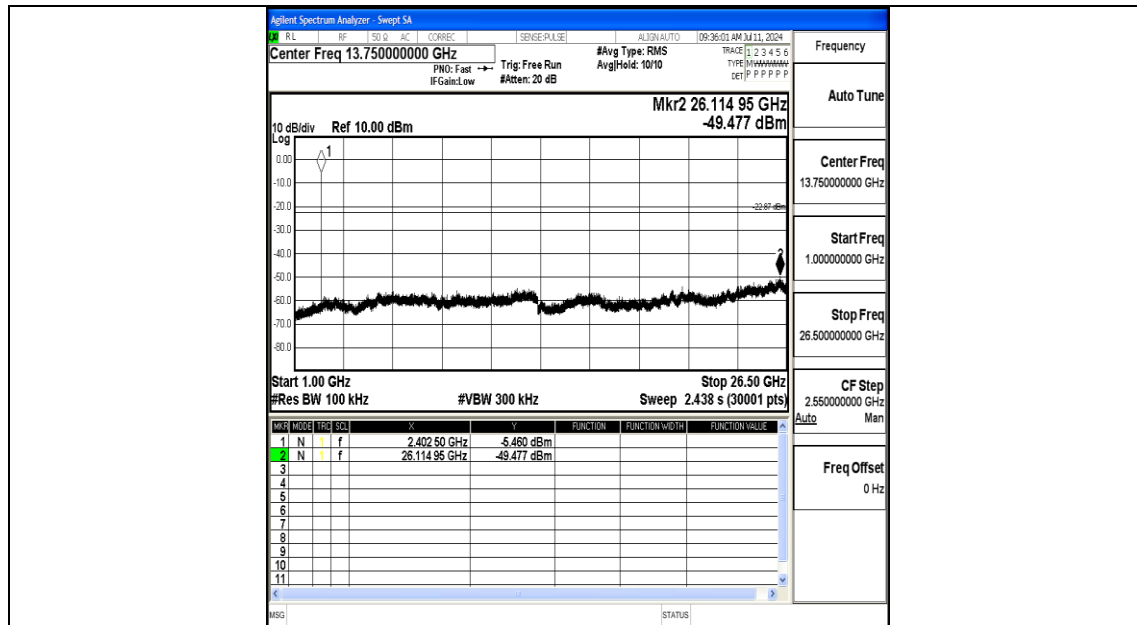
DH5-Ant1-2480-1000~26500-PASS



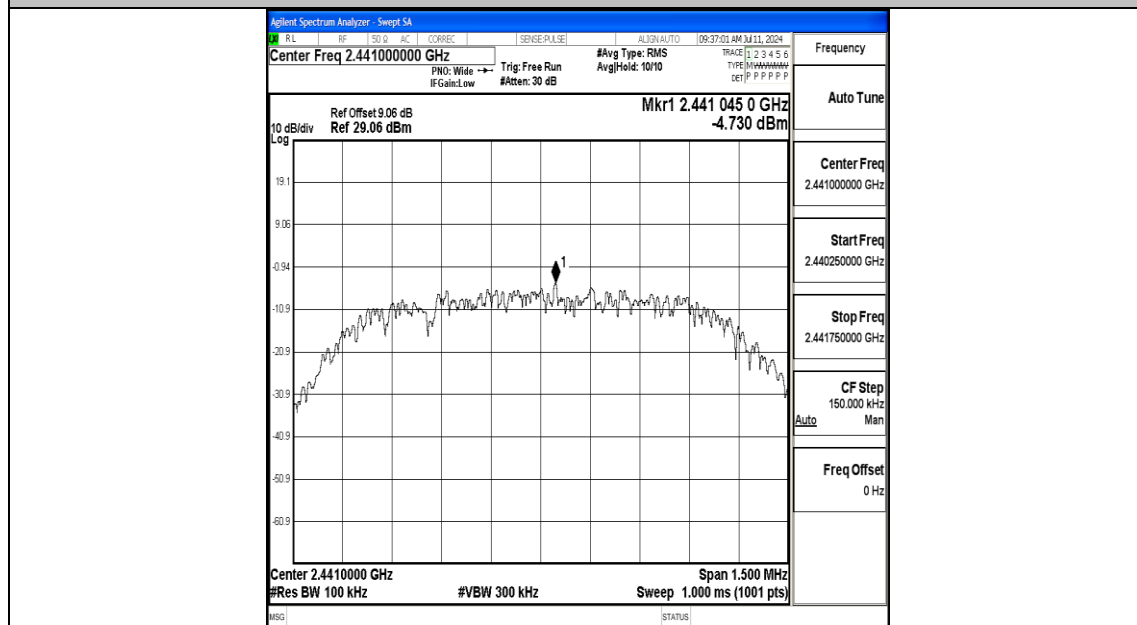
2DH5-Ant1-2402-0~Reference-PASS



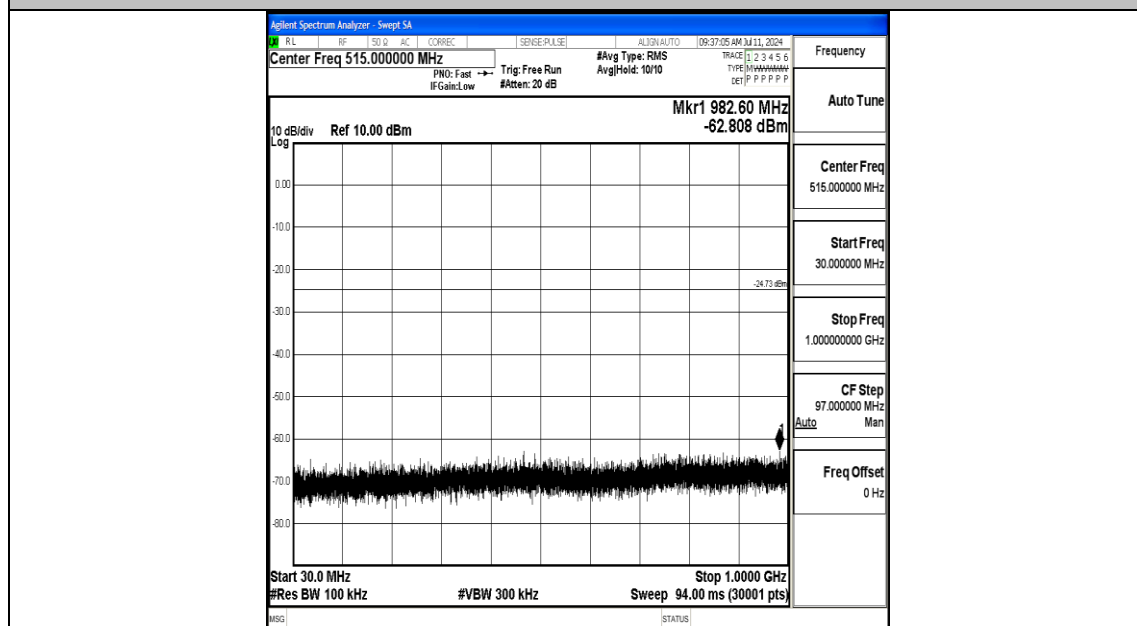
2DH5-Ant1-2402-30~1000-PASS



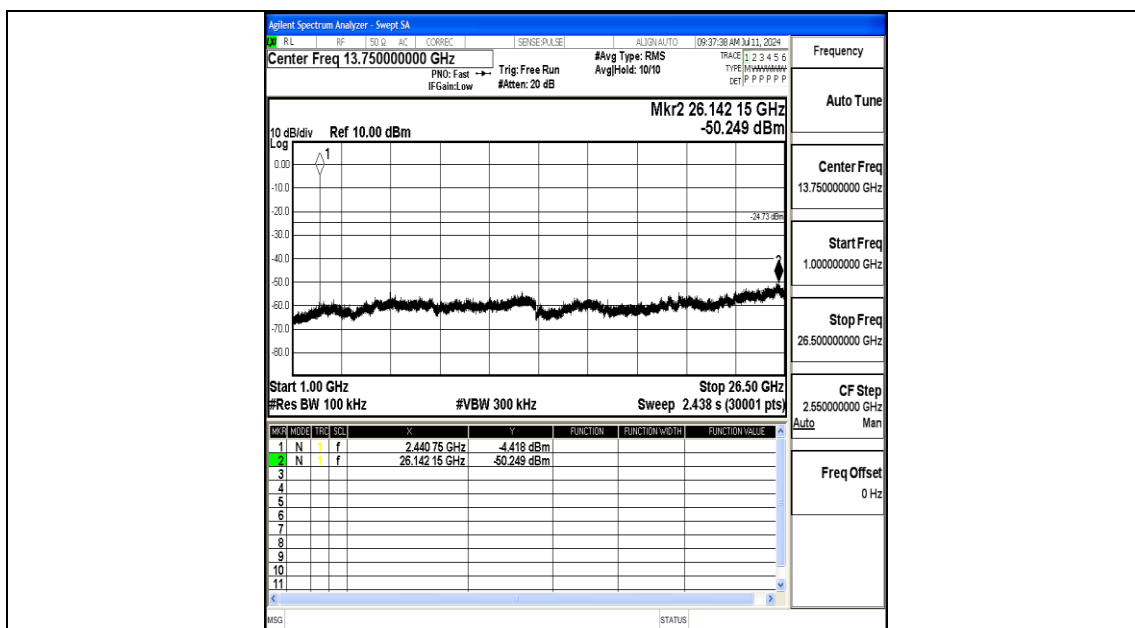
2DH5-Ant1-2402-1000~26500-PASS



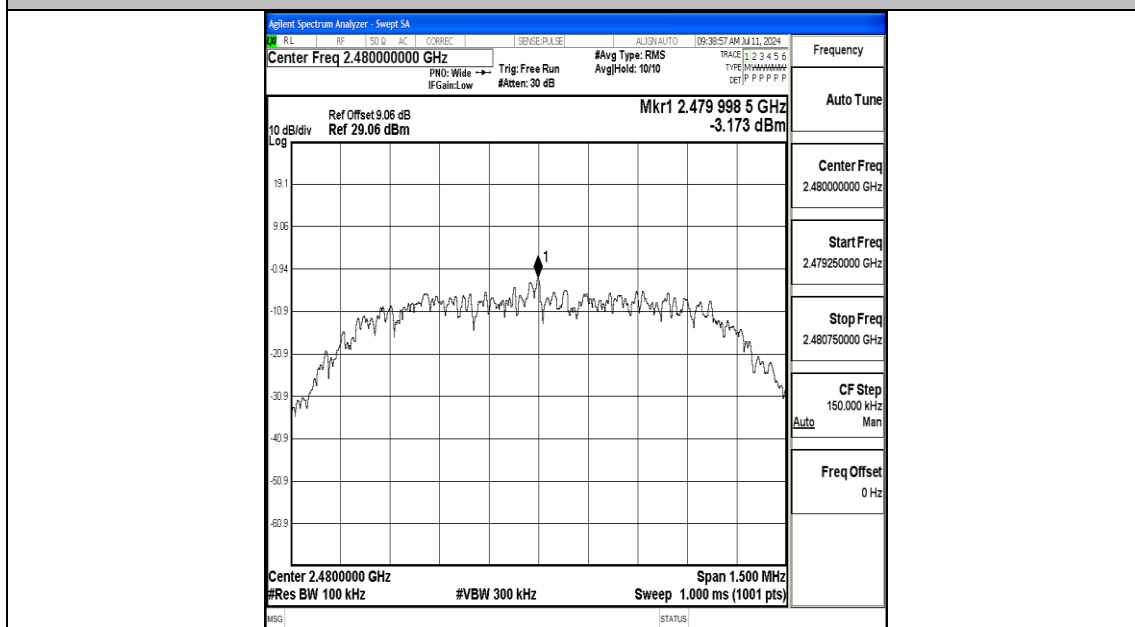
2DH5-Ant1-2441-0~Reference-PASS



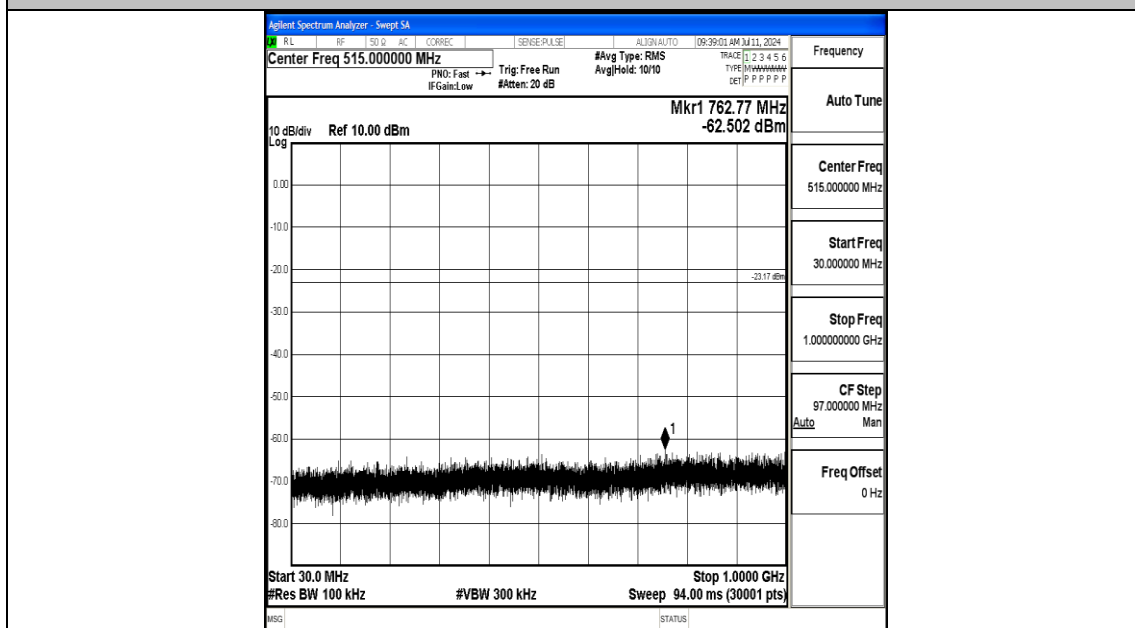
2DH5-Ant1-2441-30~1000-PASS



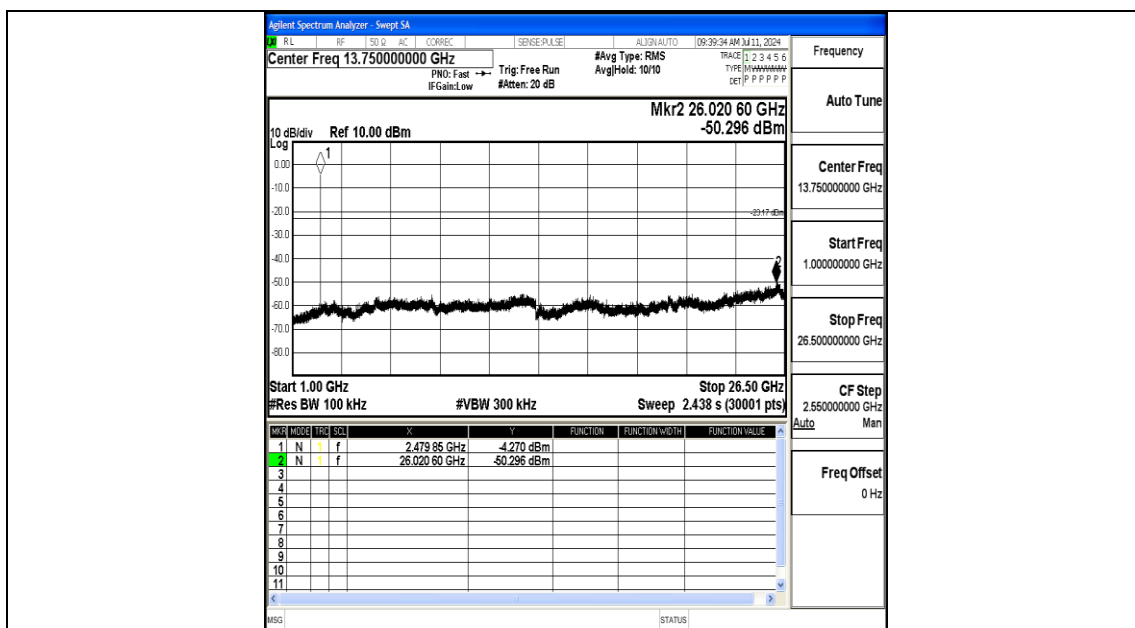
2DH5-Ant1-2441-1000~26500-PASS



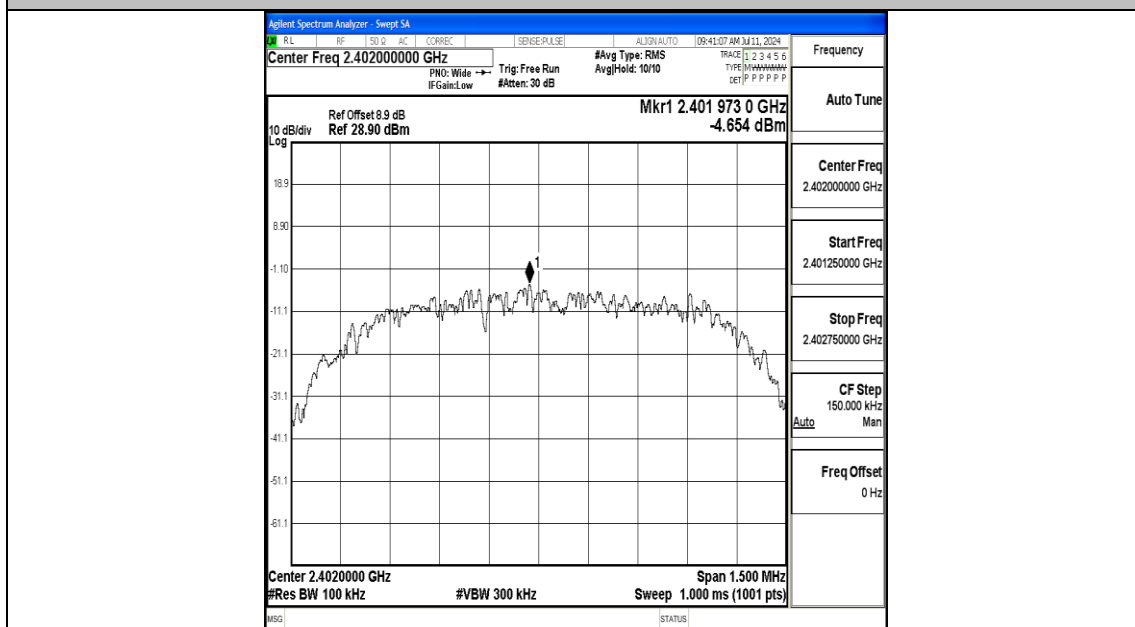
2DH5-Ant1-2480-0~Reference-PASS



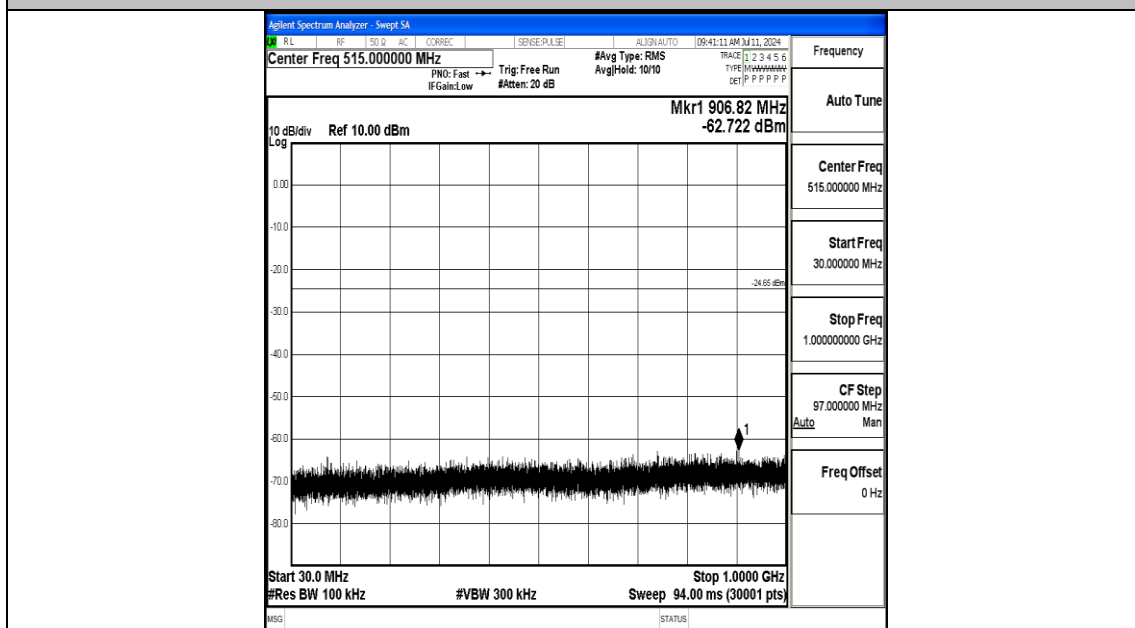
2DH5-Ant1-2480-30~1000-PASS



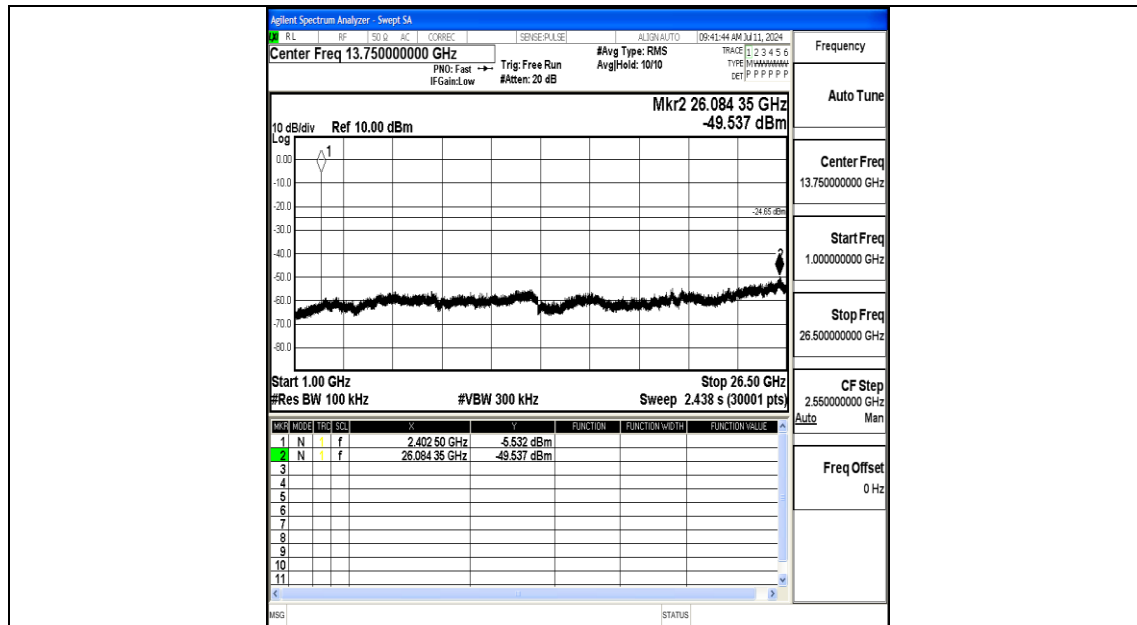
2DH5-Ant1-2480-1000~26500-PASS



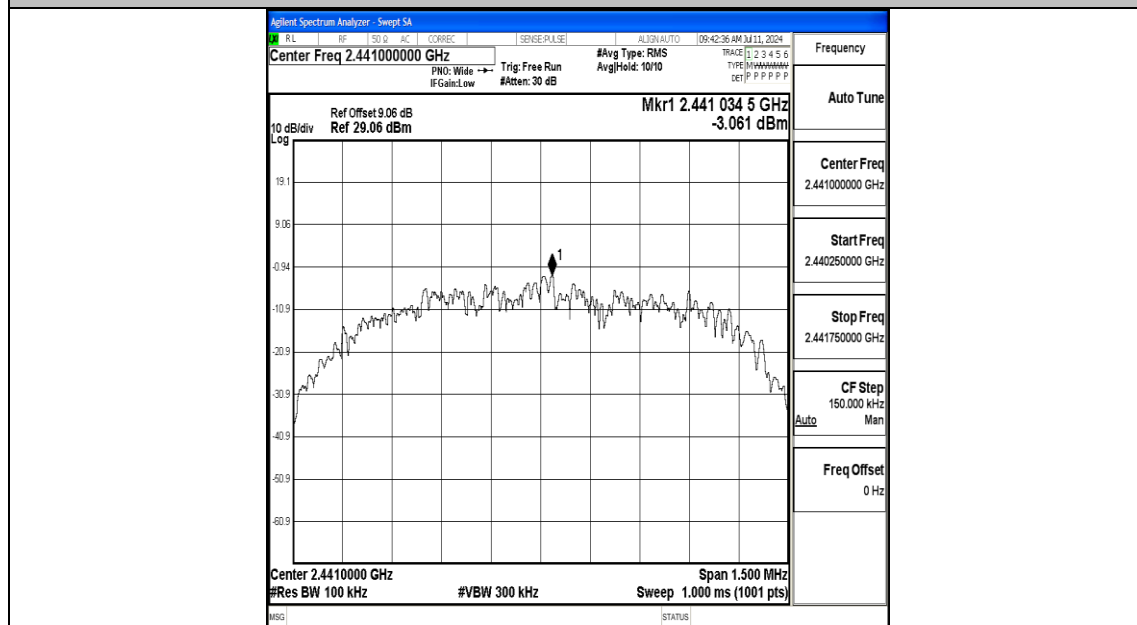
3DH5-Ant1-2402-0~Reference-PASS



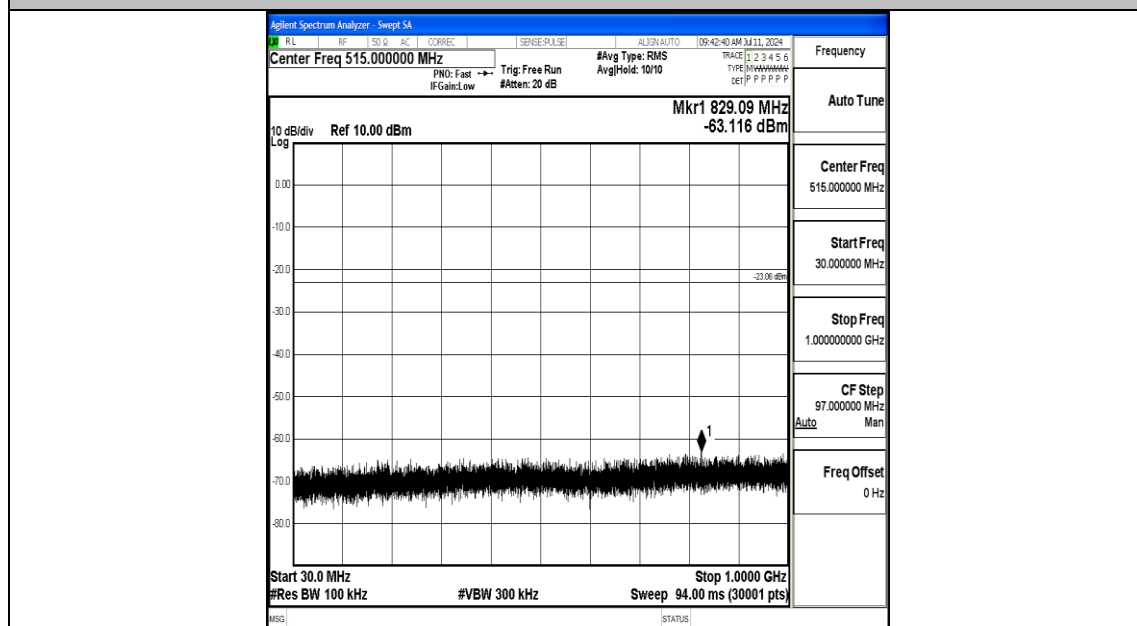
3DH5-Ant1-2402-30~1000-PASS



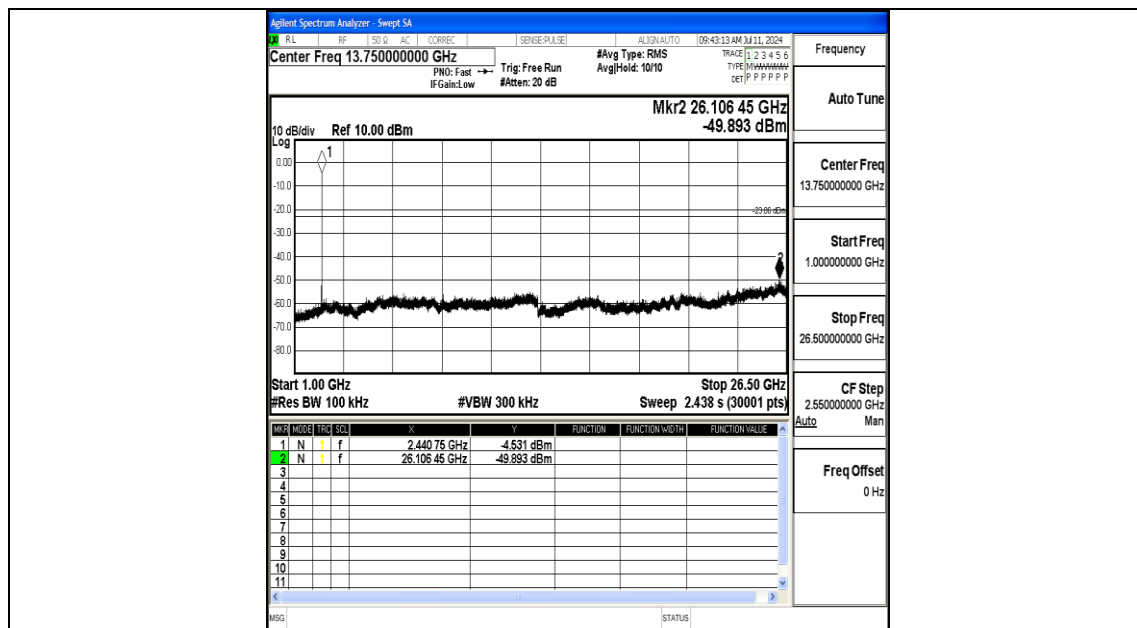
3DH5-Ant1-2402-1000~26500-PASS



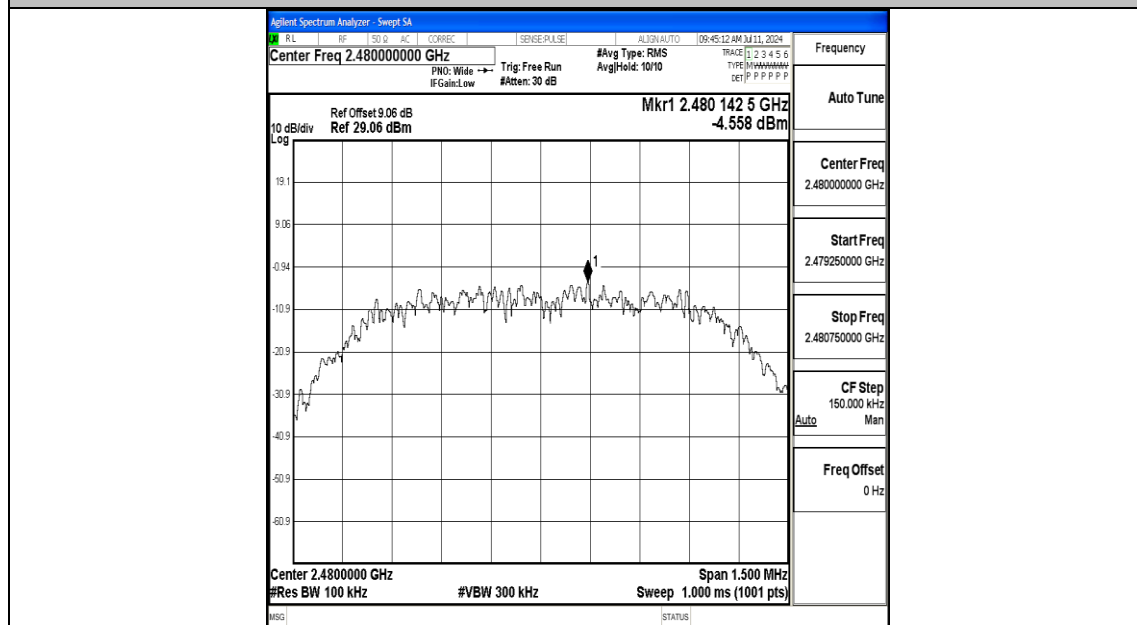
3DH5-Ant1-2441-0~Reference-PASS



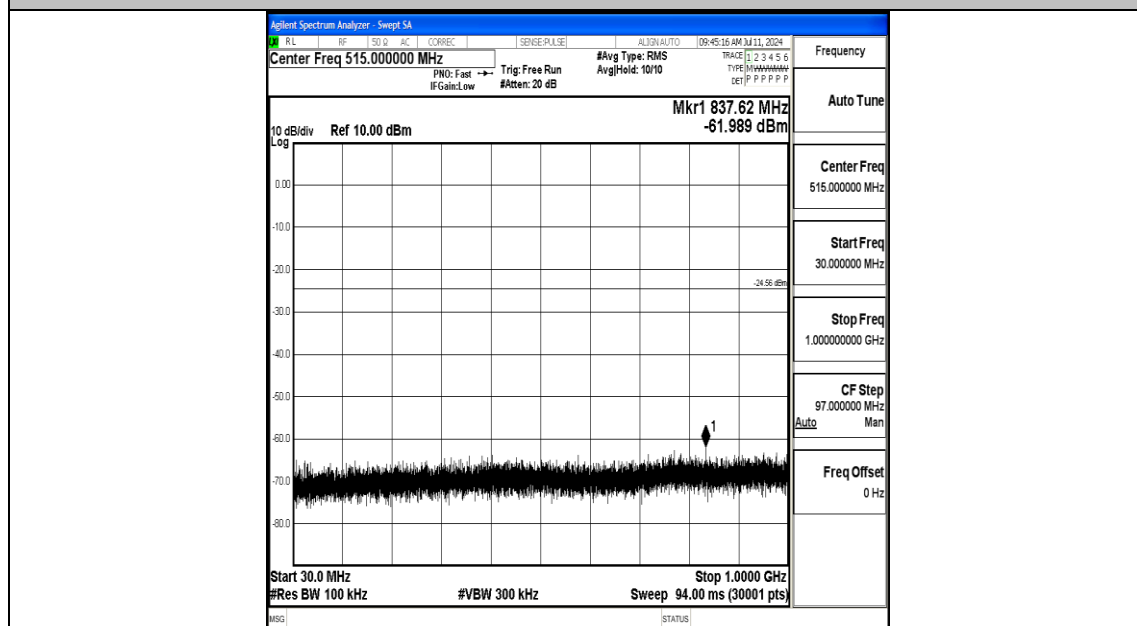
3DH5-Ant1-2441-30~1000-PASS



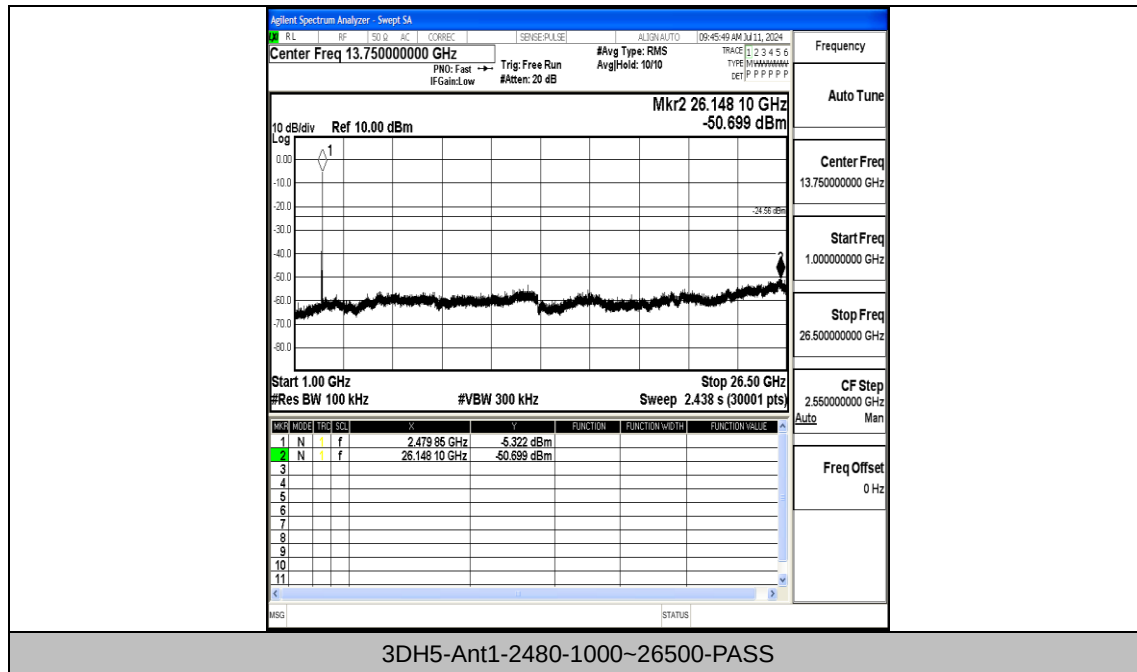
3DH5-Ant1-2441-1000~26500-PASS



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



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

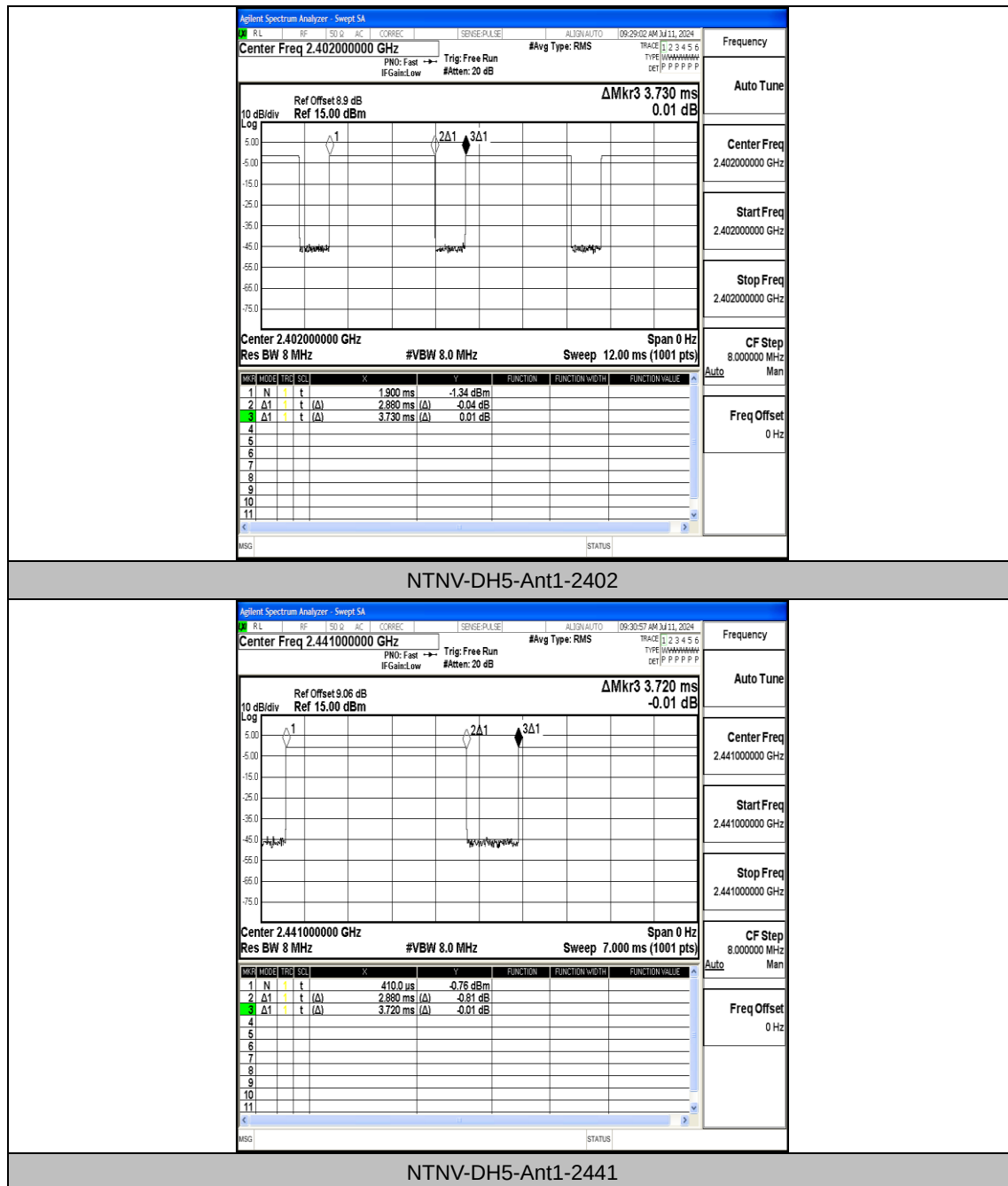


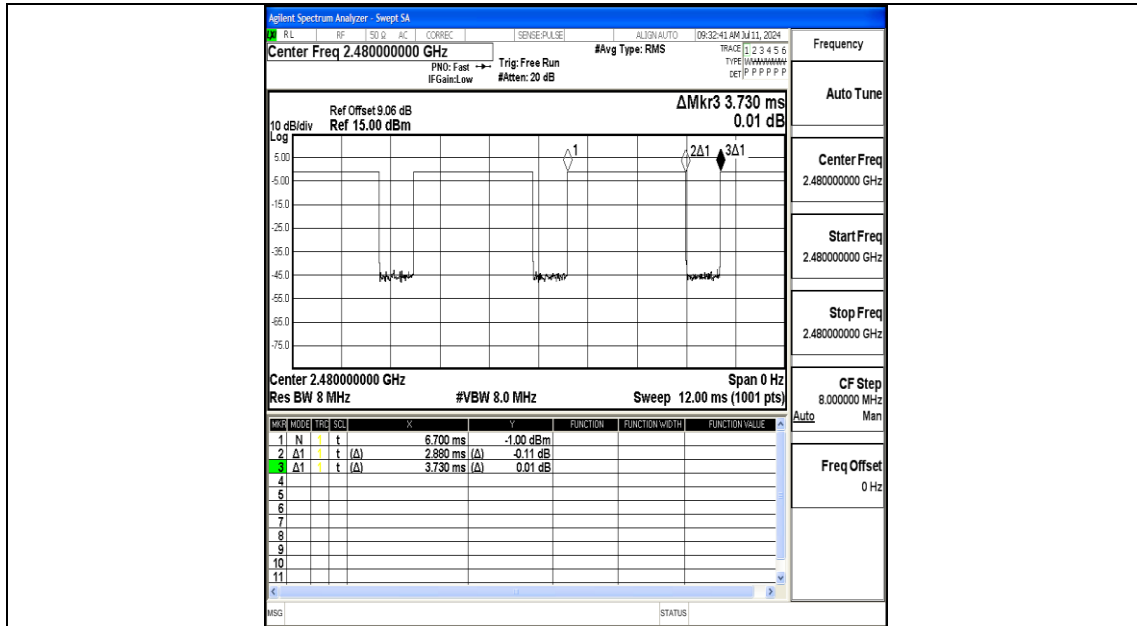
Appendix I: Duty Cycle

Test Result

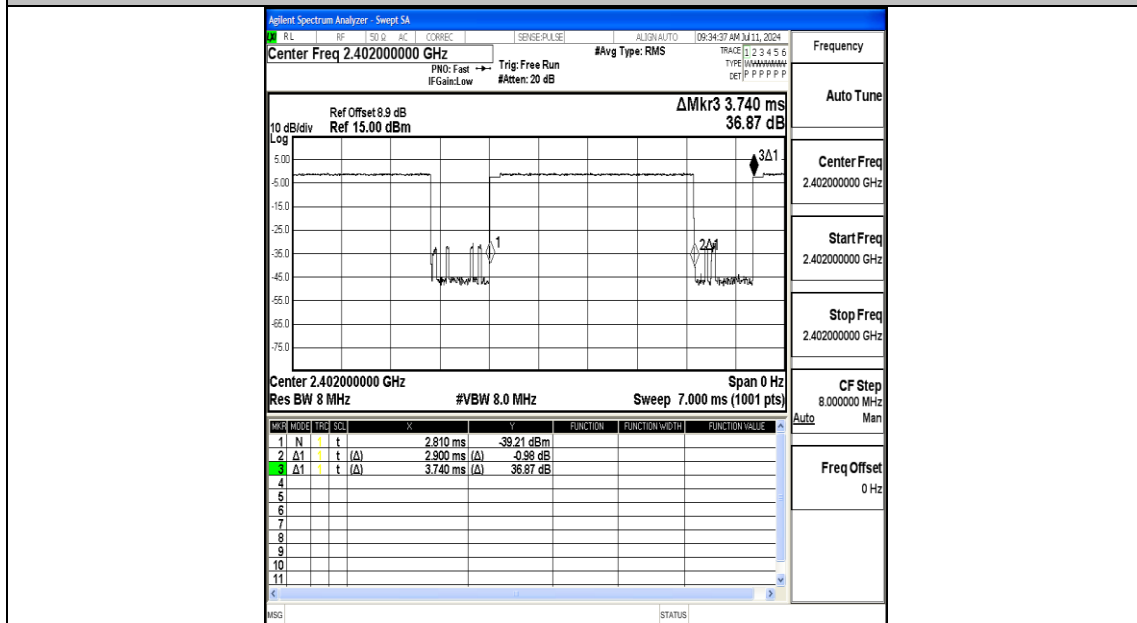
TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.88	3.73	77.21	1.12
DH5	Ant1	2441	2.88	3.72	77.42	1.11
DH5	Ant1	2480	2.88	3.73	77.21	1.12
2DH5	Ant1	2402	2.90	3.74	77.54	1.10
2DH5	Ant1	2441	2.89	3.73	77.48	1.11
2DH5	Ant1	2480	2.89	3.73	77.48	1.11
3DH5	Ant1	2402	2.89	3.74	77.27	1.12
3DH5	Ant1	2441	2.89	3.74	77.27	1.12
3DH5	Ant1	2480	2.89	3.73	77.48	1.11

Test Graphs

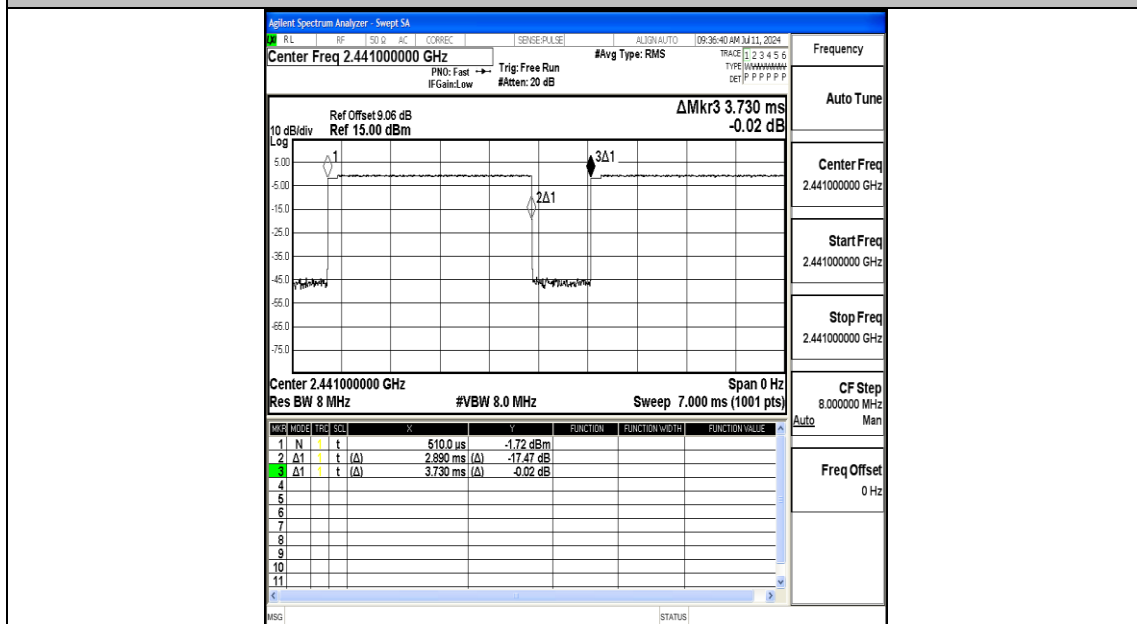




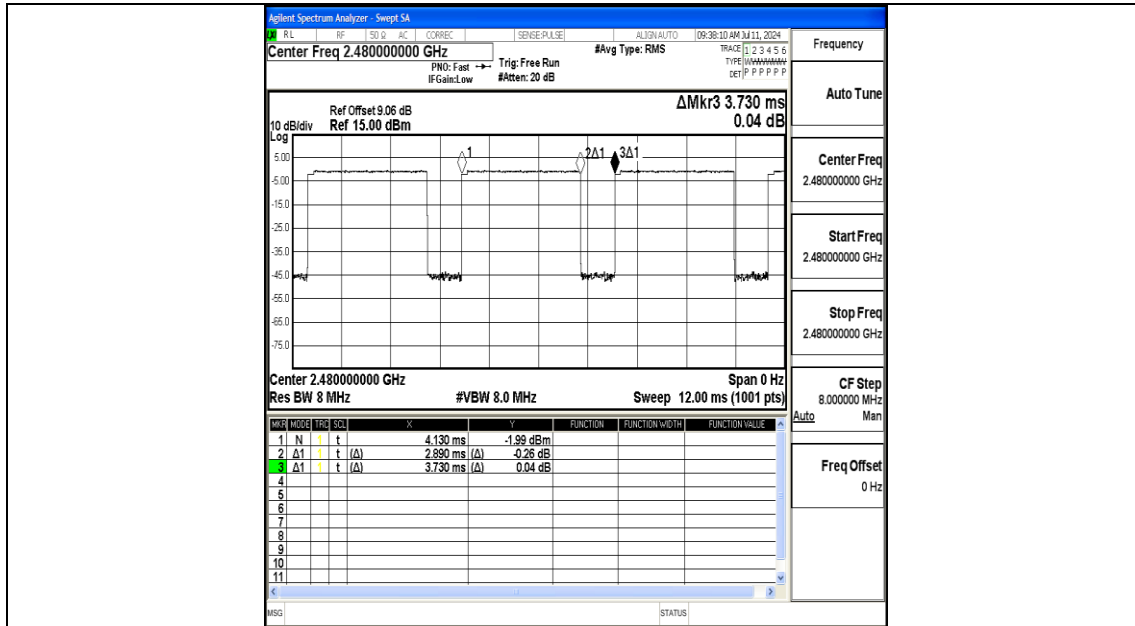
NTNV-DH5-Ant1-2480



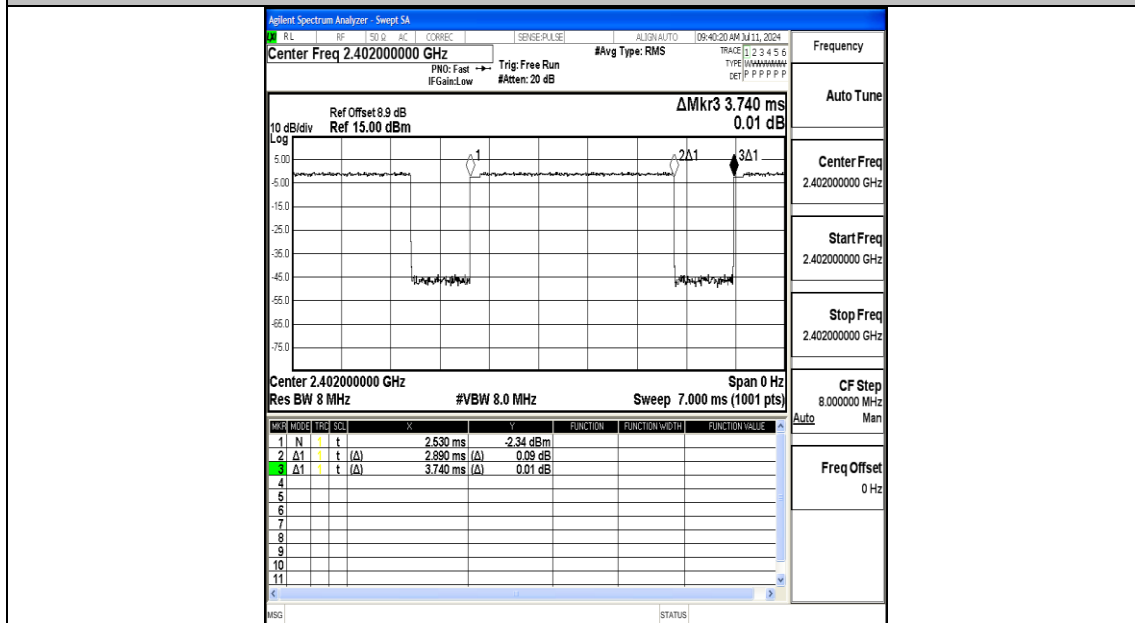
NTNV-2DH5-Ant1-2402



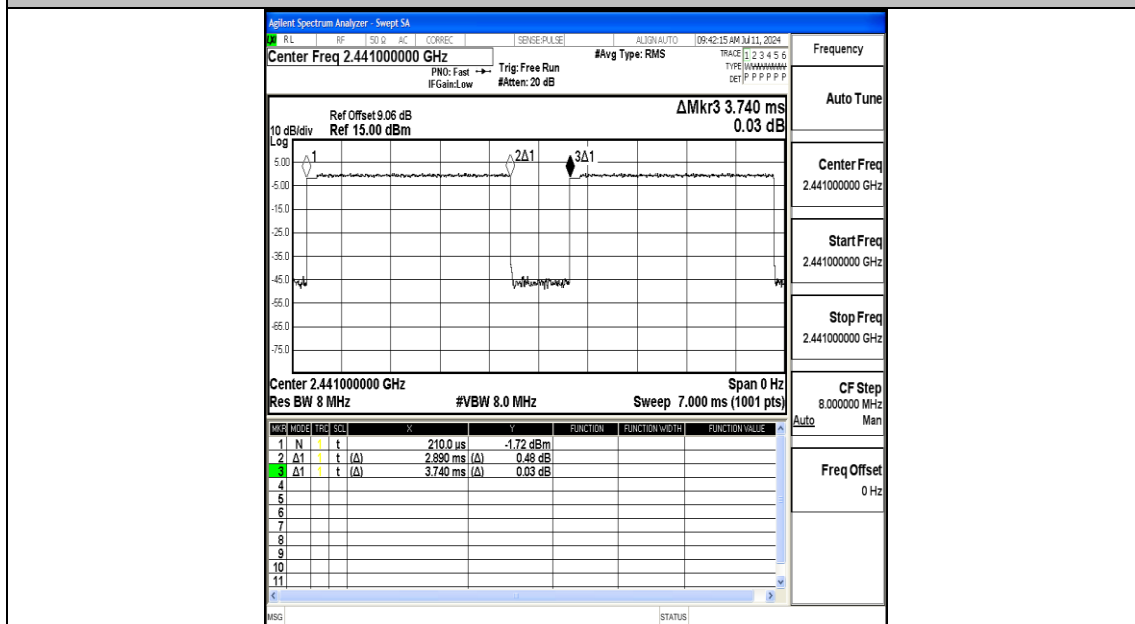
NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480



NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441

