

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

Product Name: Bluetooth headset

Trade Mark: ART+SOUND

Test Model: ASWH13CT

FCC ID: 2BHI2-ASWH13CT

Environmental Conditions

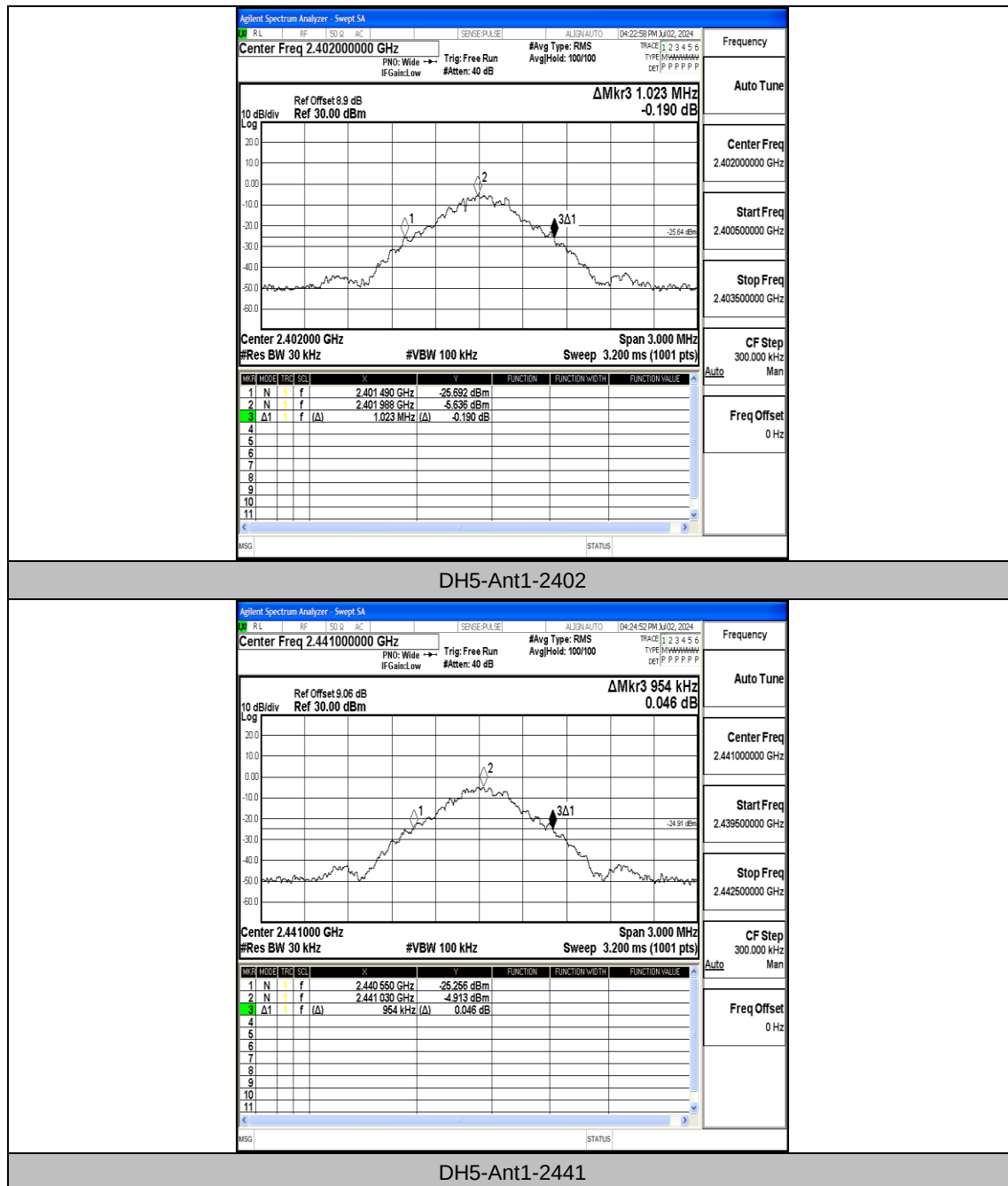
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

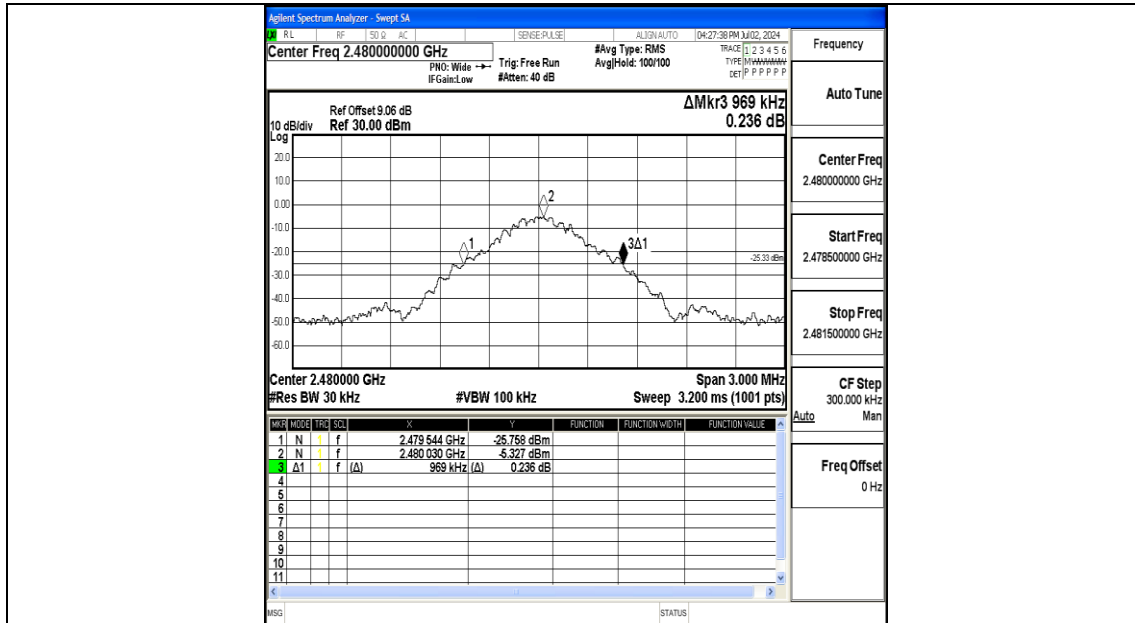
Appendix A: 20dB Emission Bandwidth

Test Result

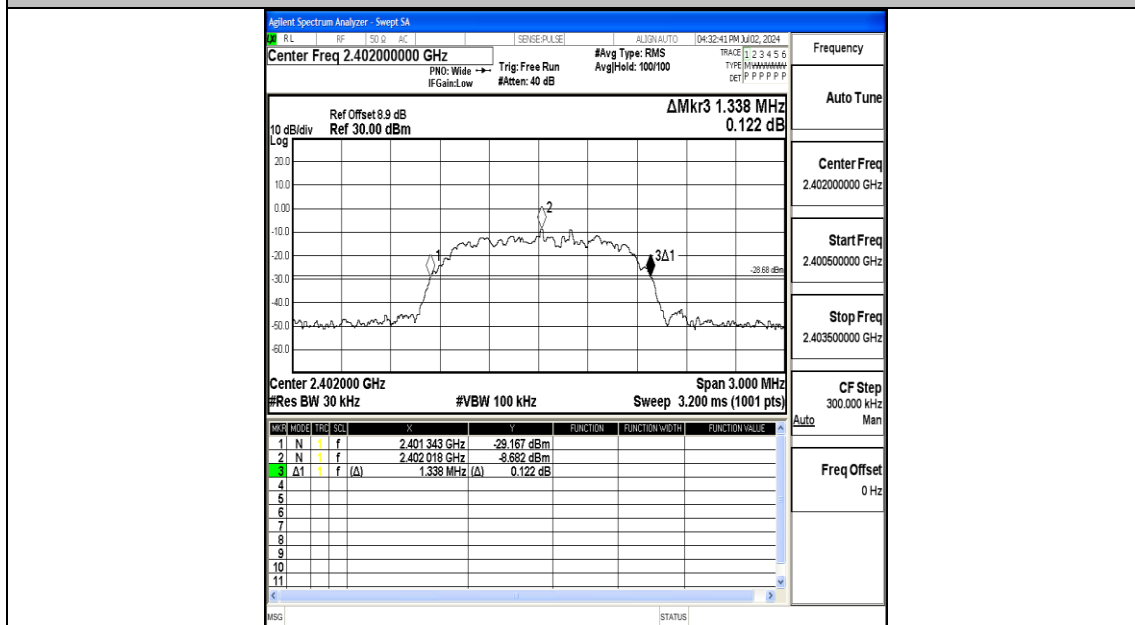
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.023	2401.490	2402.513	---	---
DH5	Ant1	2441	0.954	2440.550	2441.504	---	---
DH5	Ant1	2480	0.969	2479.544	2480.513	---	---
2DH5	Ant1	2402	1.338	2401.343	2402.681	---	---
2DH5	Ant1	2441	1.308	2440.361	2441.669	---	---
2DH5	Ant1	2480	1.287	2479.382	2480.669	---	---

Test Graphs

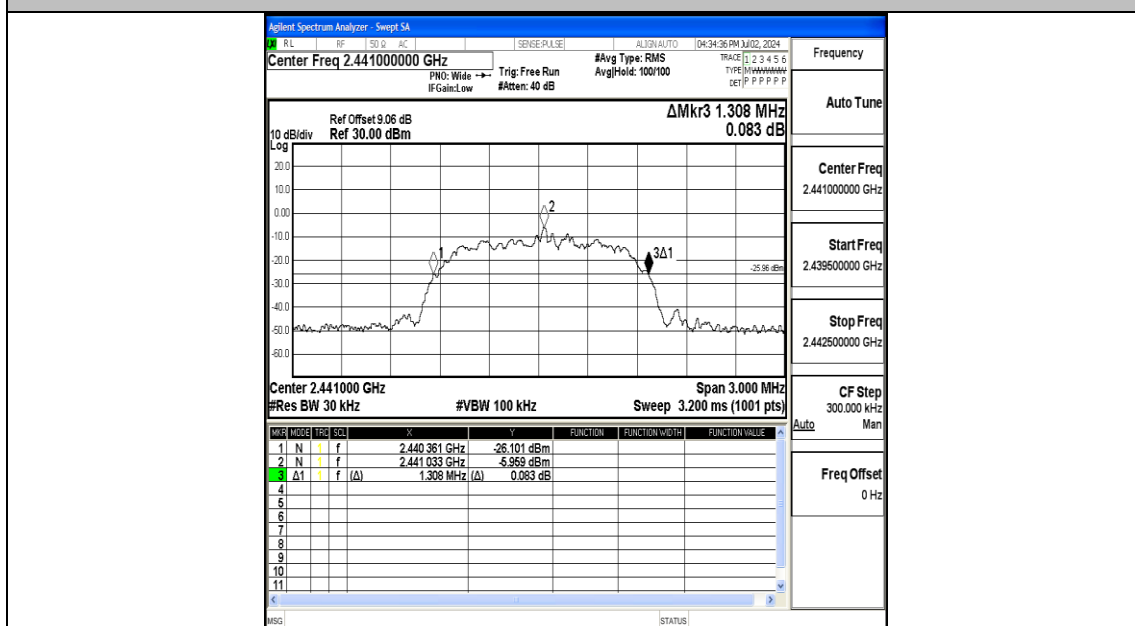




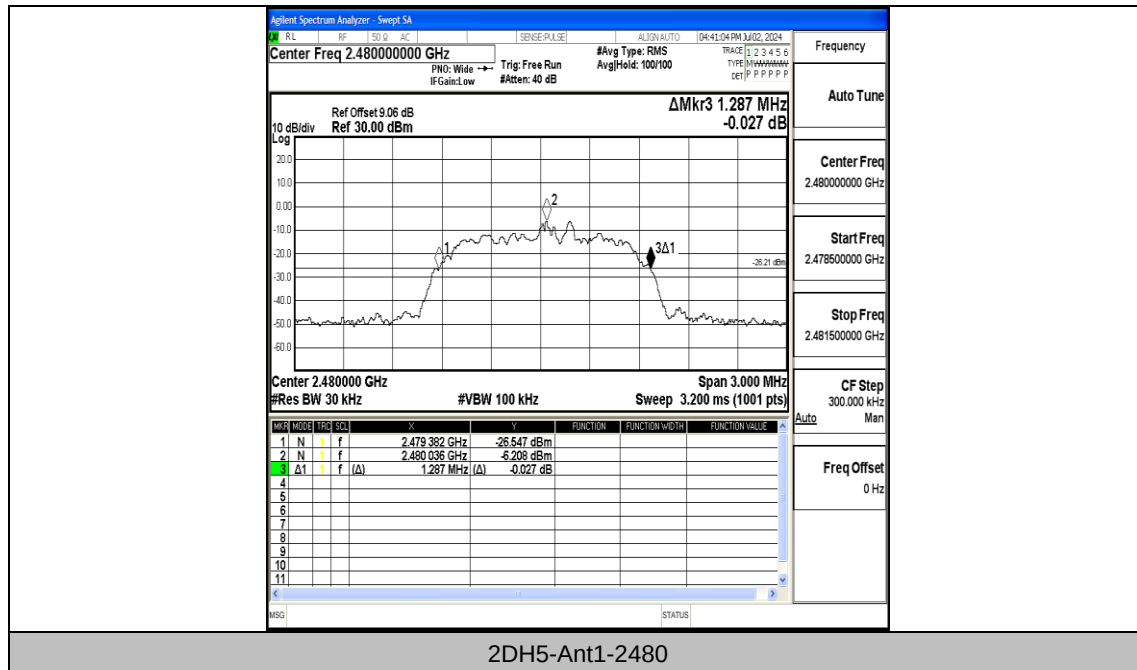
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441

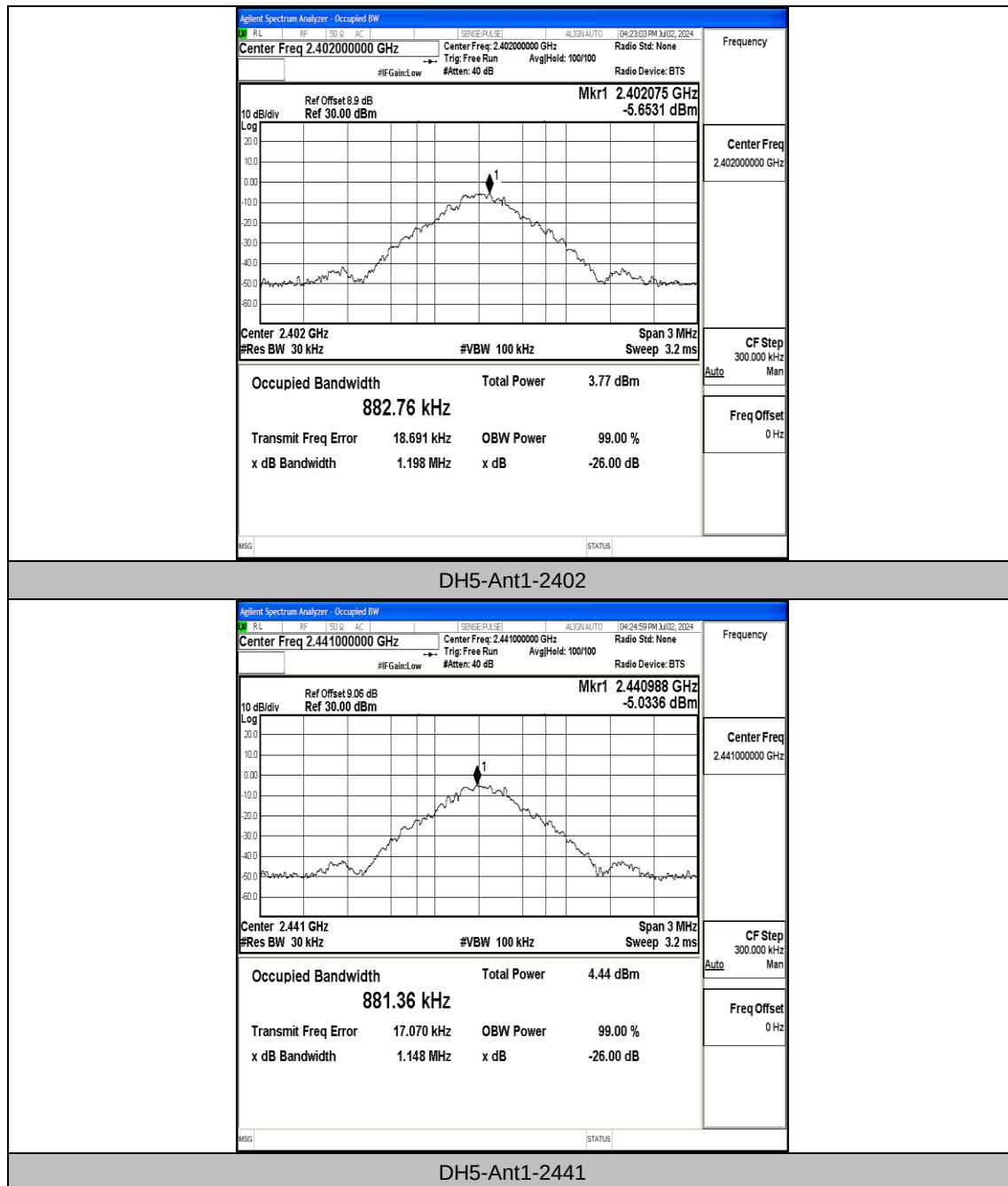


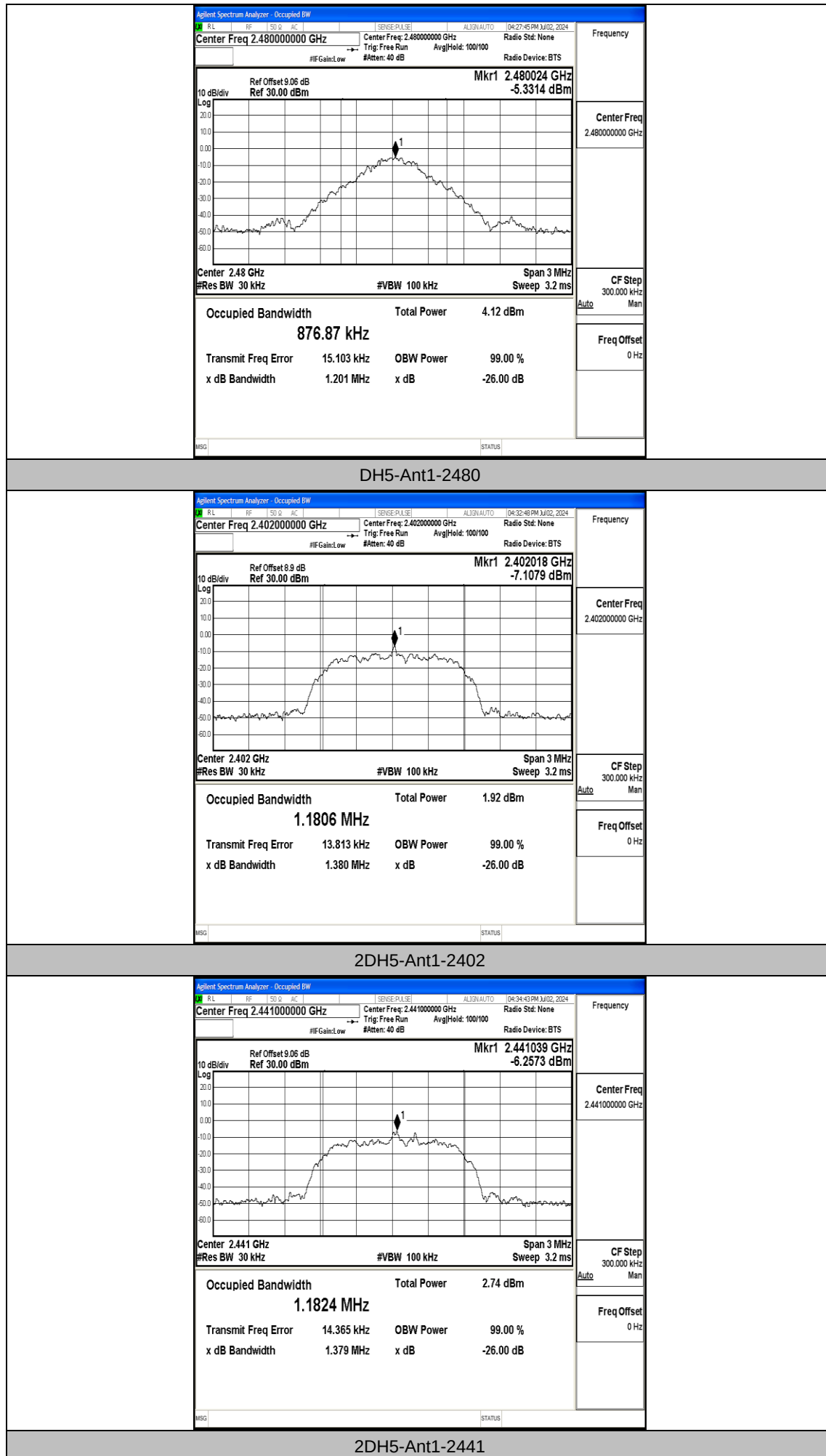
Appendix B: Occupied Channel Bandwidth

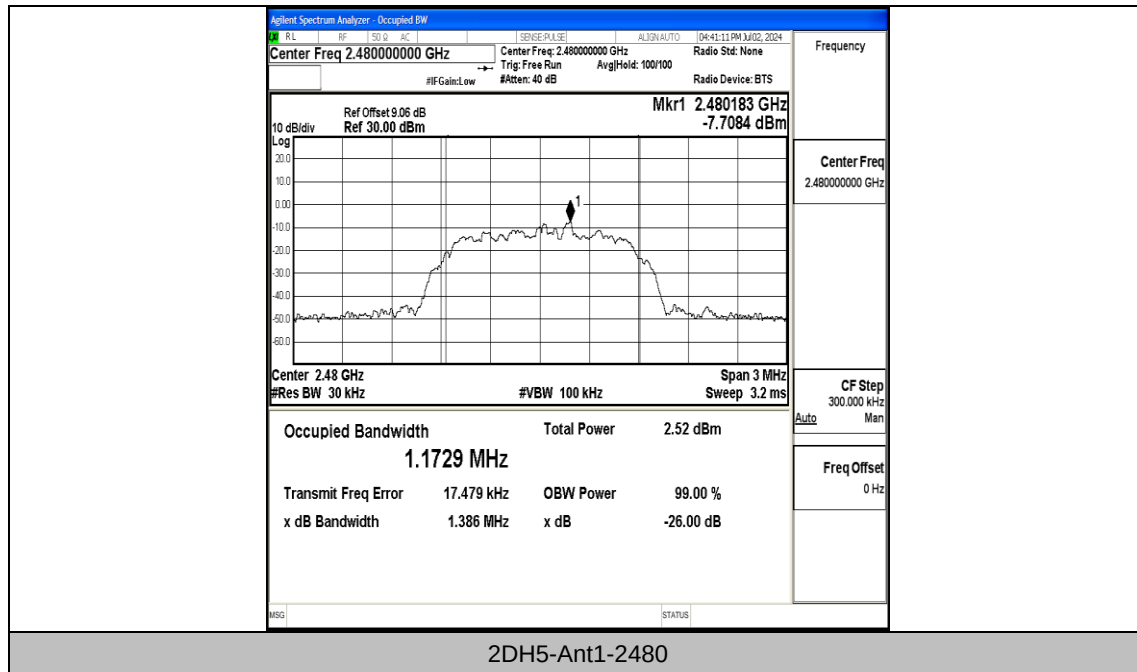
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88276	2401.5773	2402.4601	---	---
DH5	Ant1	2441	0.88136	2440.5764	2441.4578	---	---
DH5	Ant1	2480	0.87687	2479.5767	2480.4535	---	---
2DH5	Ant1	2402	1.1806	2401.4235	2402.6041	---	---
2DH5	Ant1	2441	1.1824	2440.4232	2441.6056	---	---
2DH5	Ant1	2480	1.1729	2479.4310	2480.6039	---	---

Test Graphs





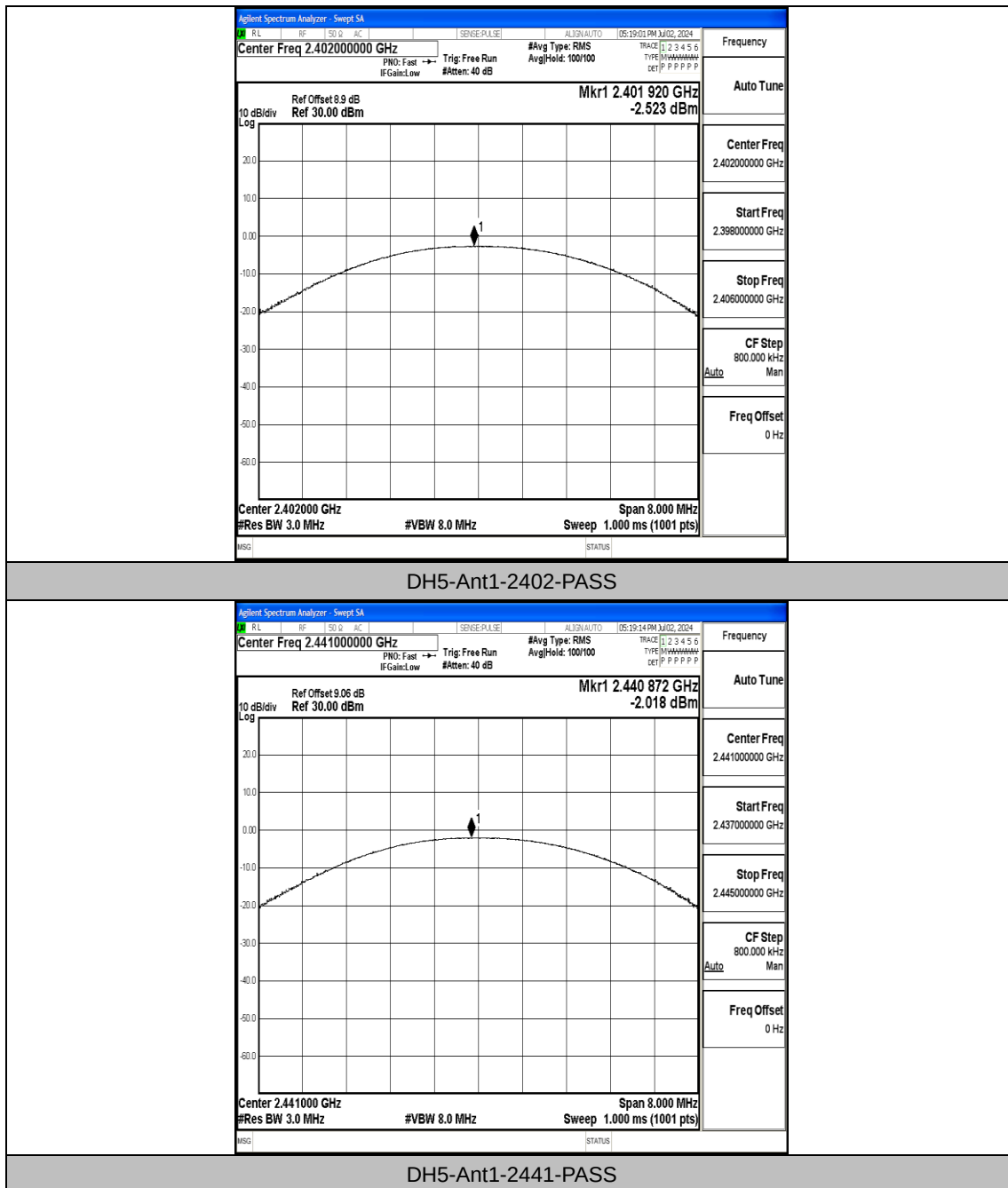


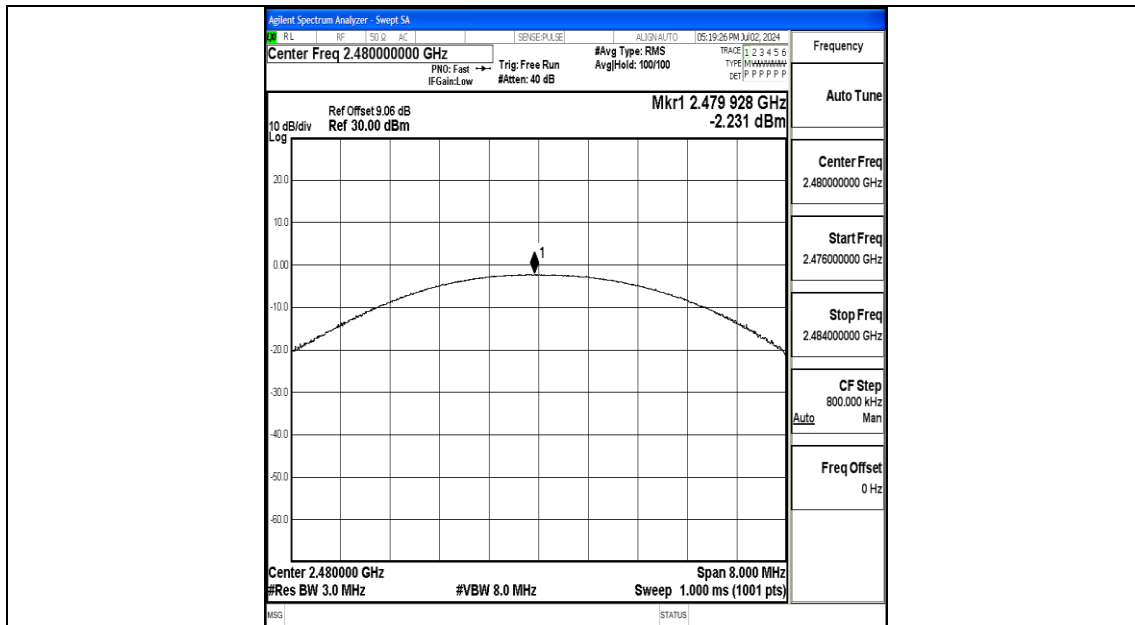
Appendix C: Maximum peak conducted output power

Test Result

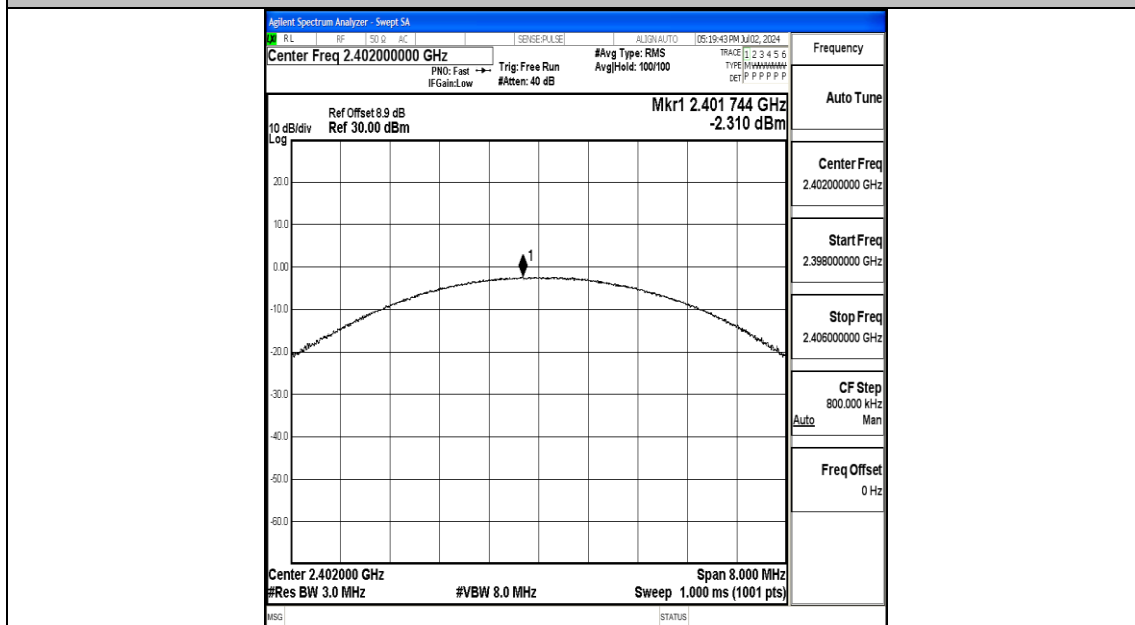
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-2.52	≤20.97	PASS
DH5	Ant1	2441	-2.02	≤20.97	PASS
DH5	Ant1	2480	-2.23	≤20.97	PASS
2DH5	Ant1	2402	-2.31	≤20.97	PASS
2DH5	Ant1	2441	-1.67	≤20.97	PASS
2DH5	Ant1	2480	-1.93	≤20.97	PASS

Test Graphs

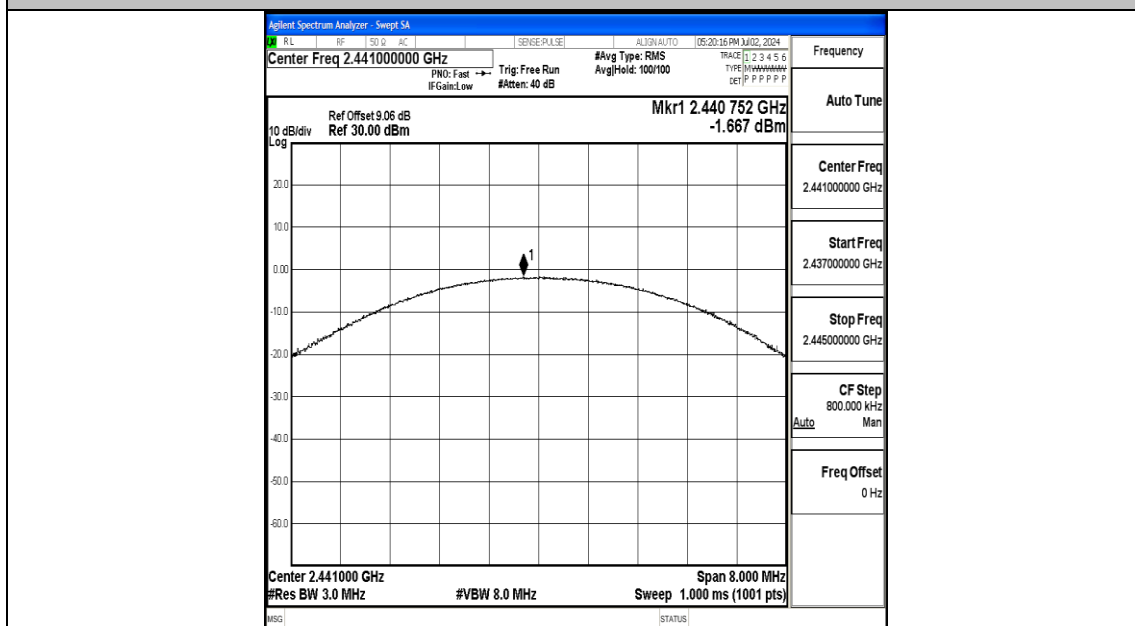




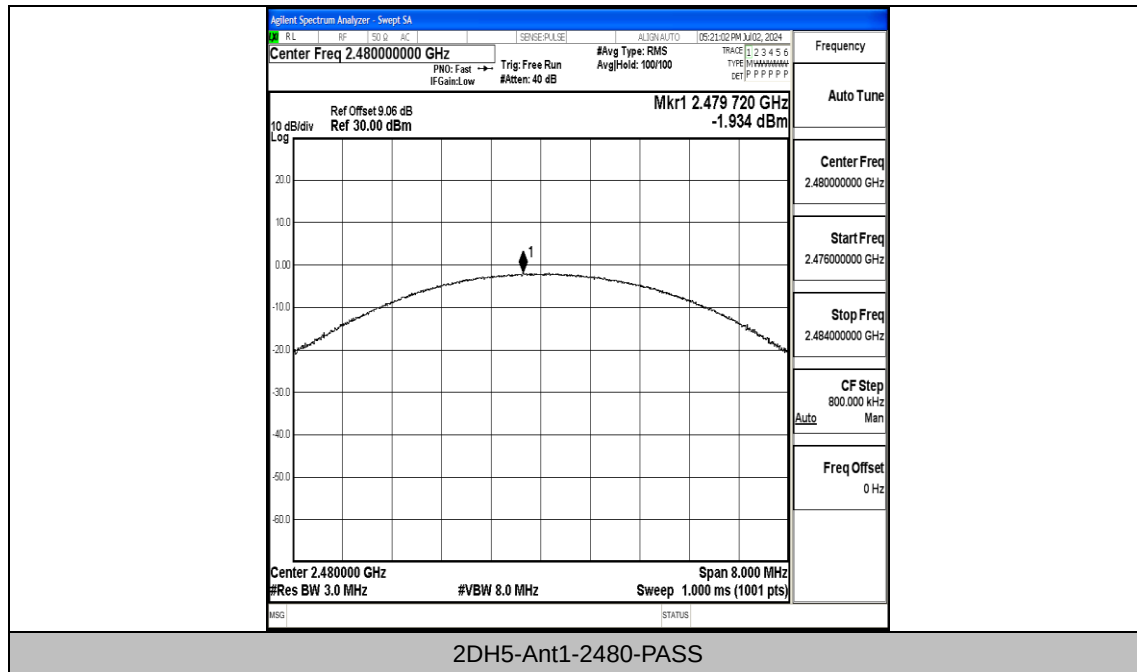
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS

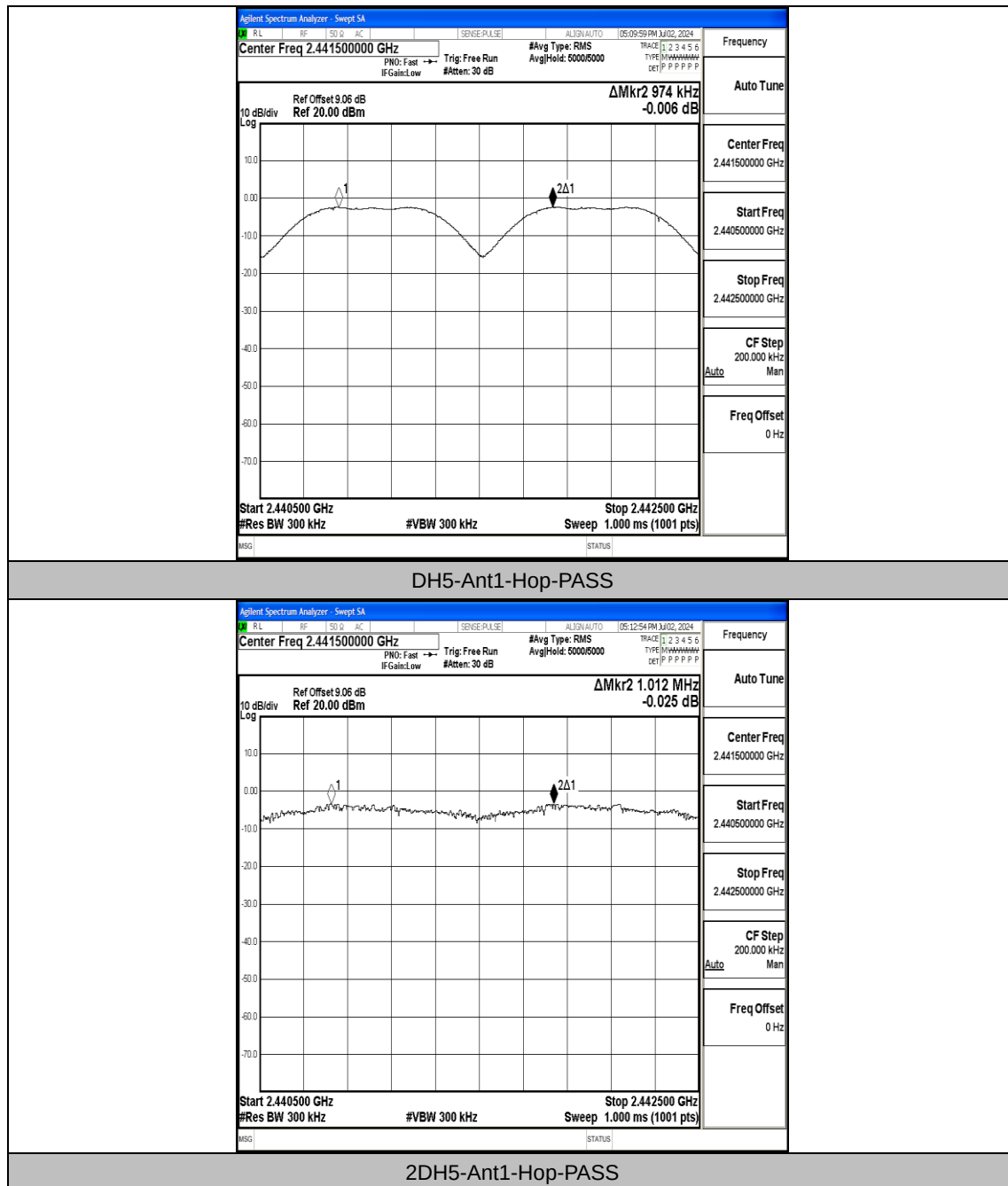


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.974	≥ 0.682	PASS
2DH5	Ant1	Hop	1.012	≥ 0.892	PASS

Test Graphs

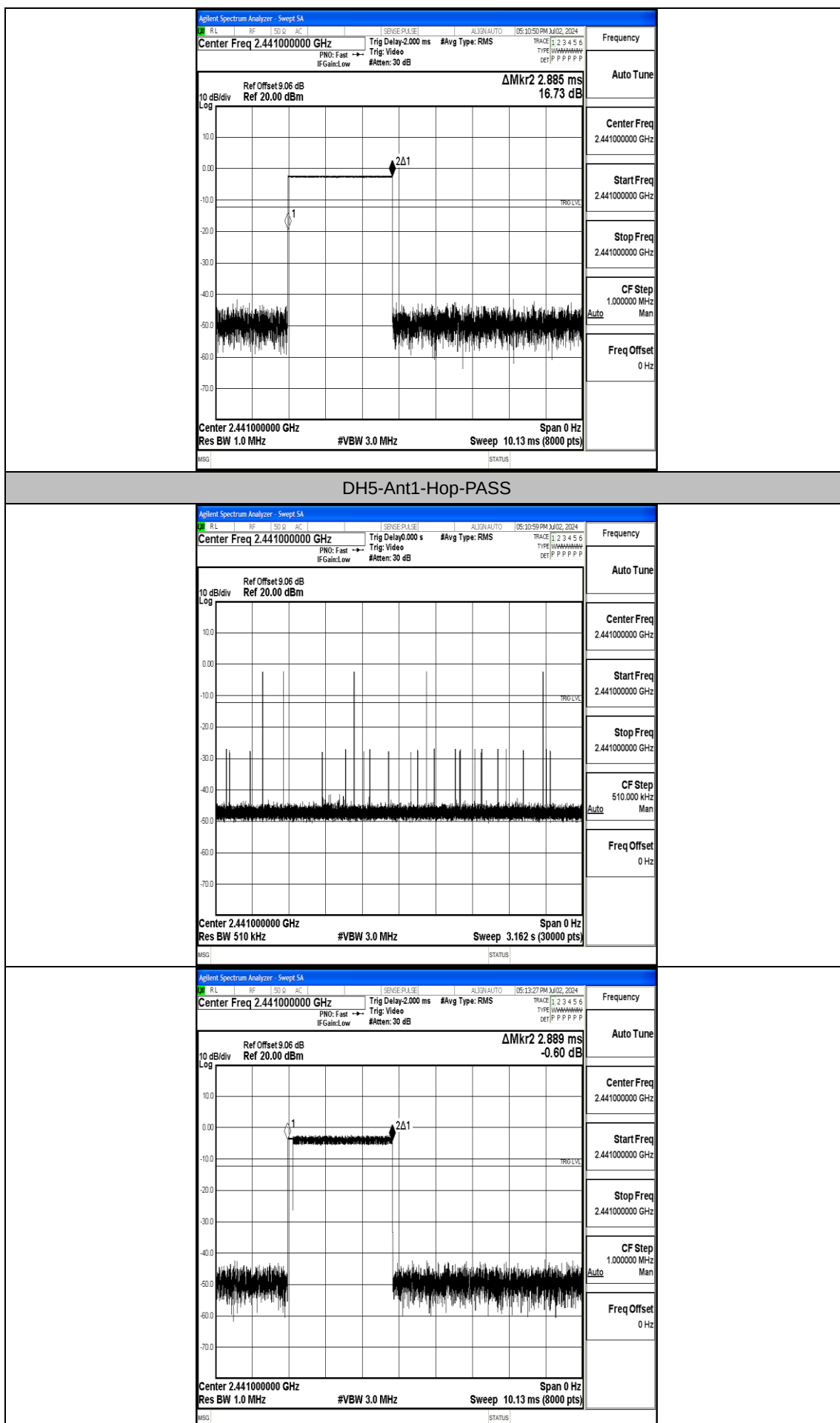


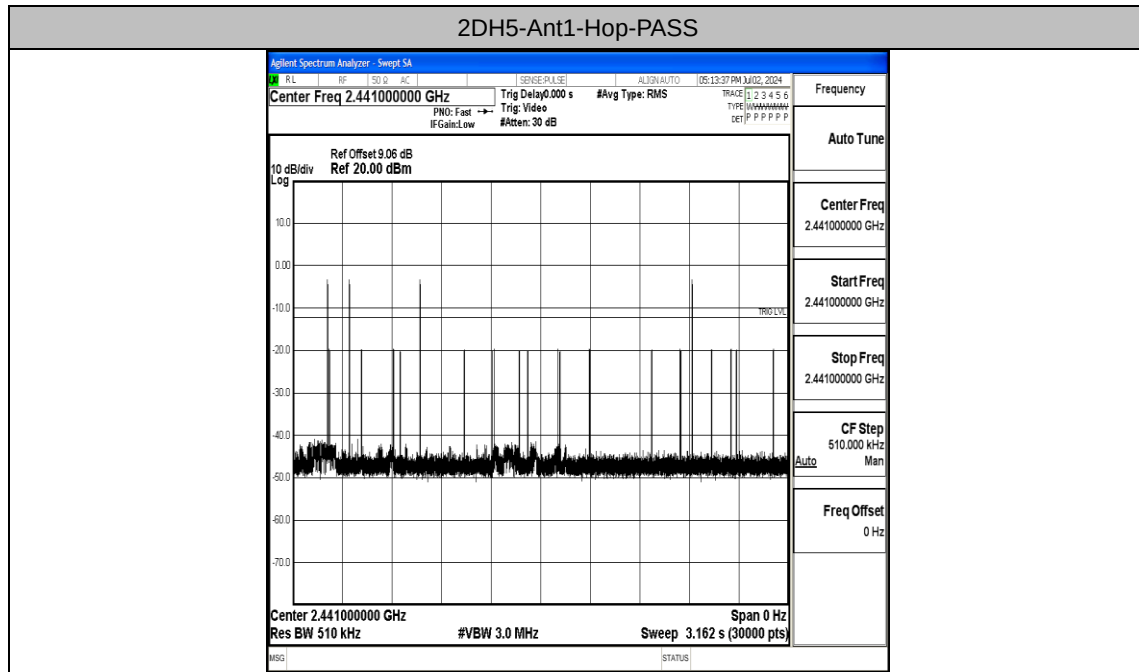
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	60	0.173	≤0.4	PASS
2DH5	Ant1	Hop	2.889	50	0.144	≤0.4	PASS

Test Graphs



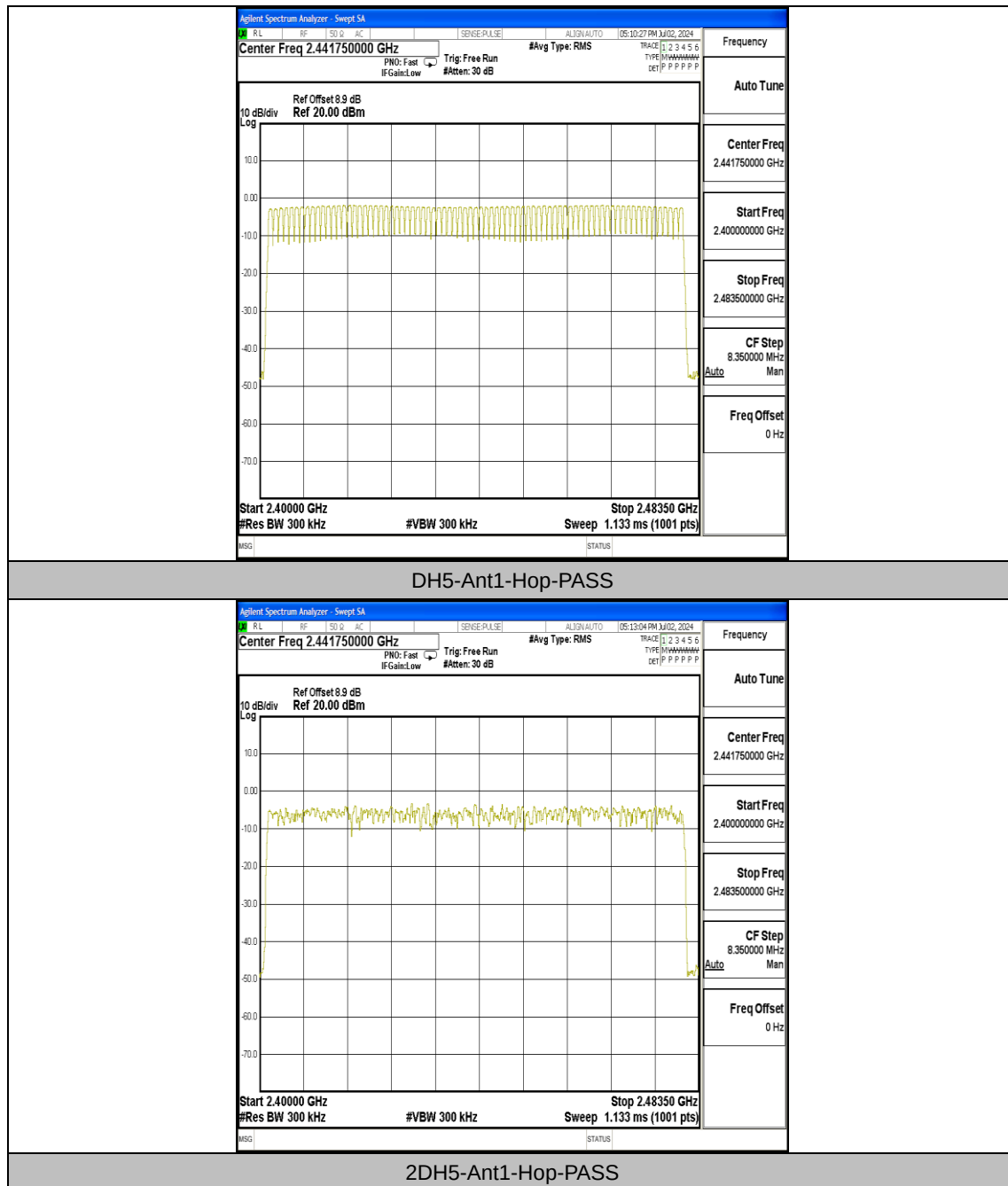


Appendix F: Number of hopping channels

Test Result

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

Test Graphs

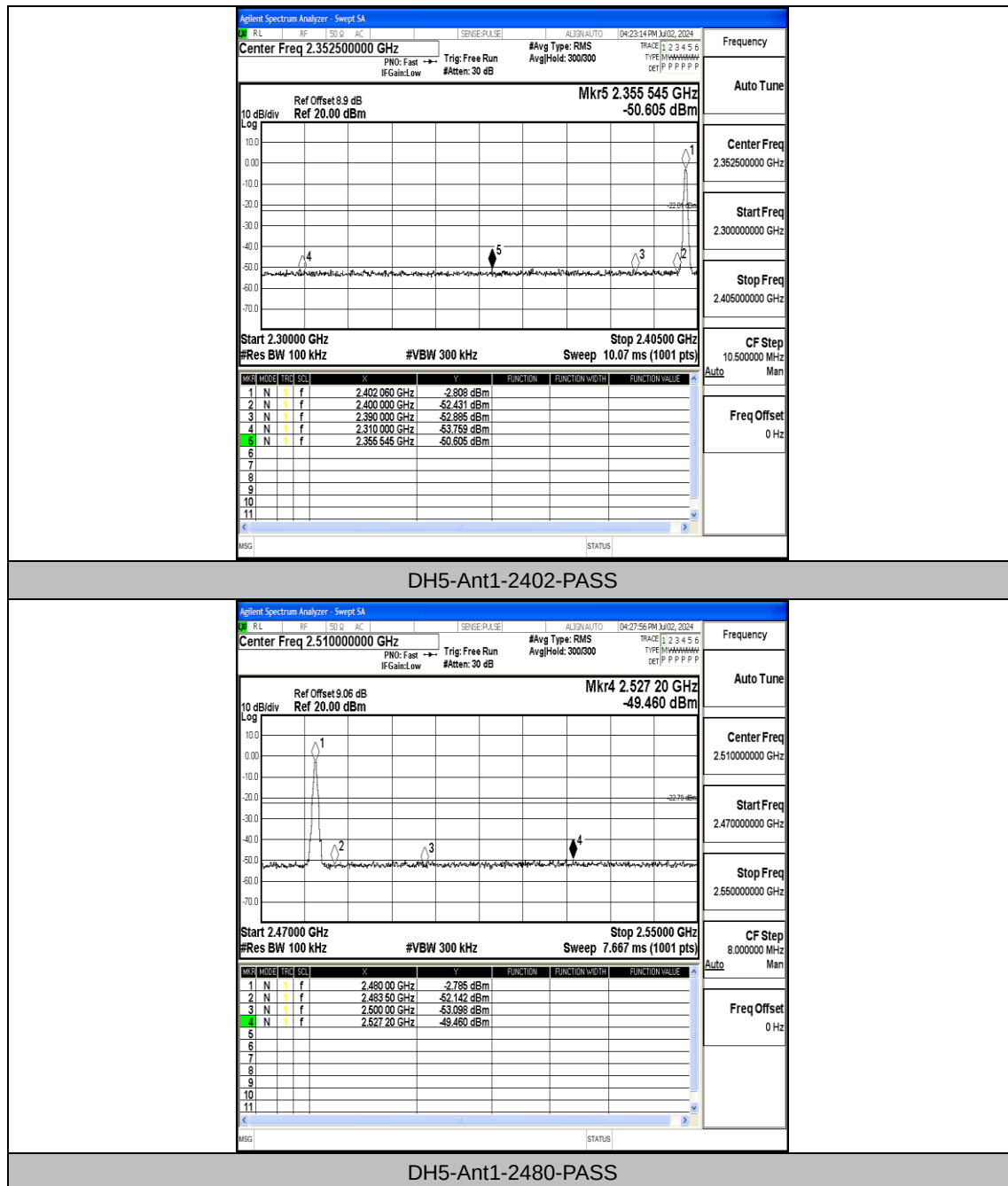


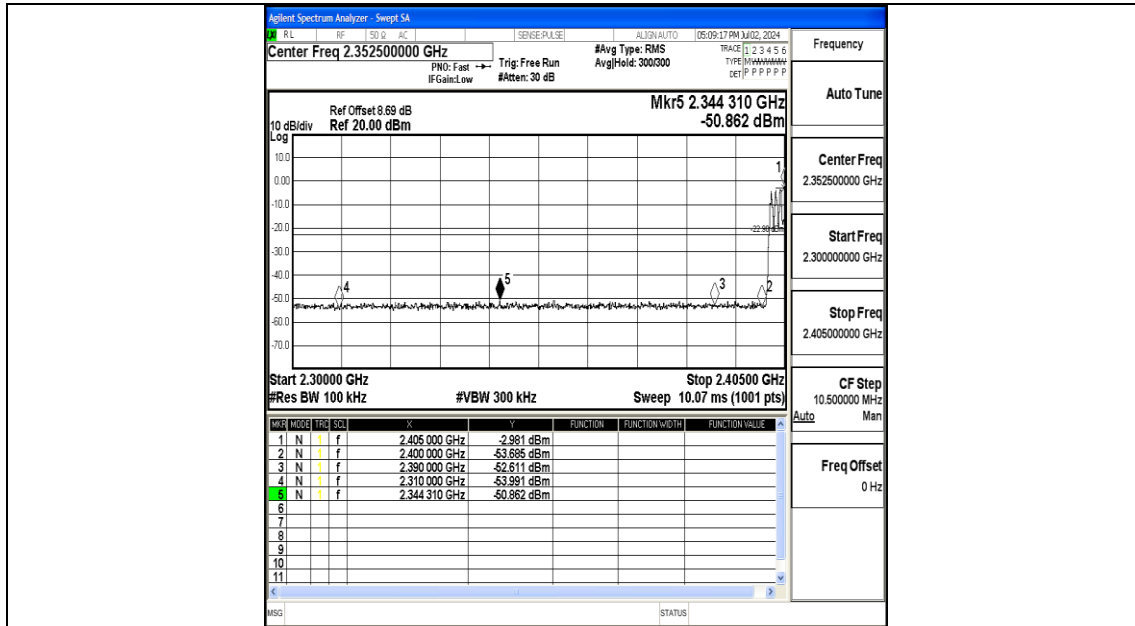
Appendix G: Band edge measurements

Test Result

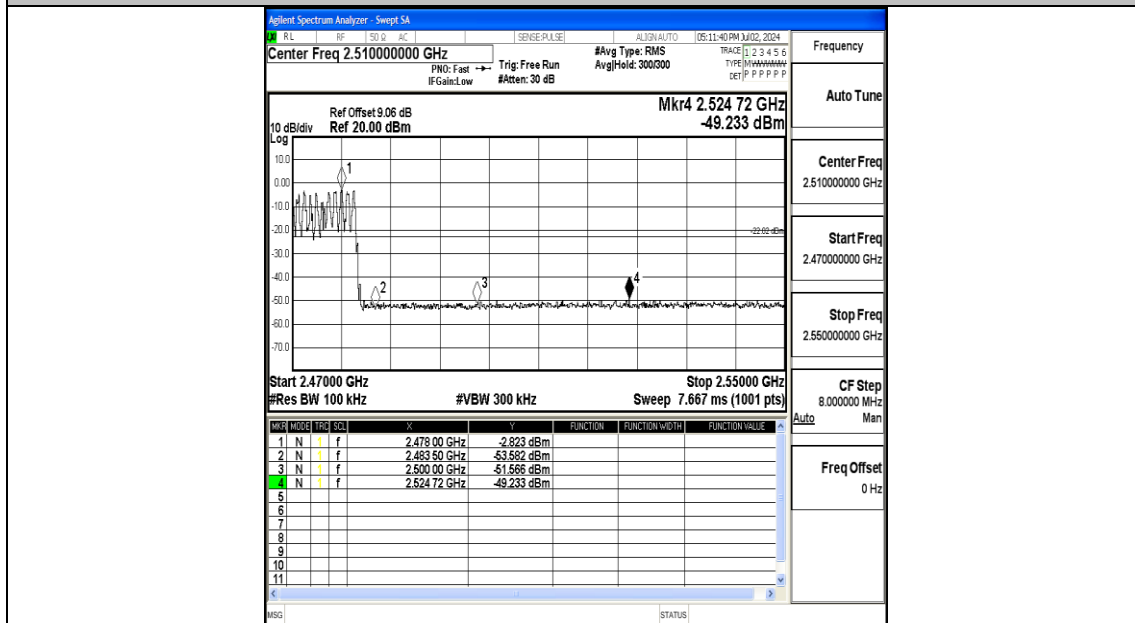
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.81	-50.61	≤ -22.81	PASS
DH5	Ant1	High	2480	-2.79	-49.46	≤ -22.79	PASS
DH5	Ant1	Low	Hop_2402	-2.98	-50.86	≤ -22.98	PASS
DH5	Ant1	High	Hop_2480	-2.82	-49.23	≤ -22.82	PASS
2DH5	Ant1	Low	2402	-3.79	-50.21	≤ -23.79	PASS
2DH5	Ant1	High	2480	-3.73	-47.73	≤ -23.73	PASS
2DH5	Ant1	Low	Hop_2402	-6.50	-50.56	≤ -26.5	PASS
2DH5	Ant1	High	Hop_2480	-5.60	-49.53	≤ -25.6	PASS

Test Graphs

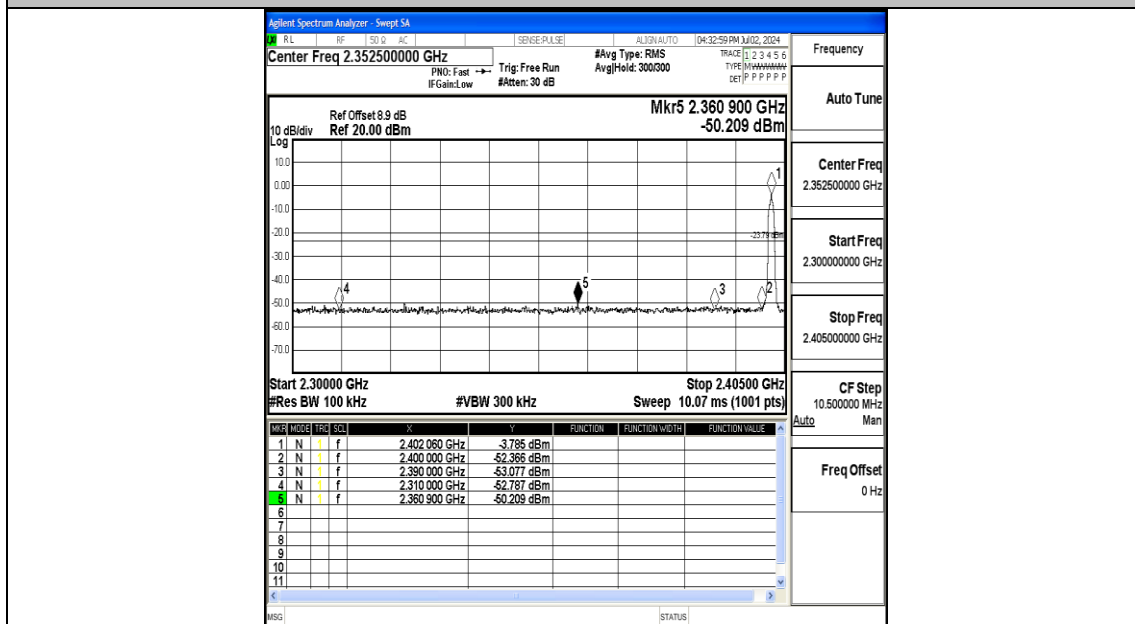




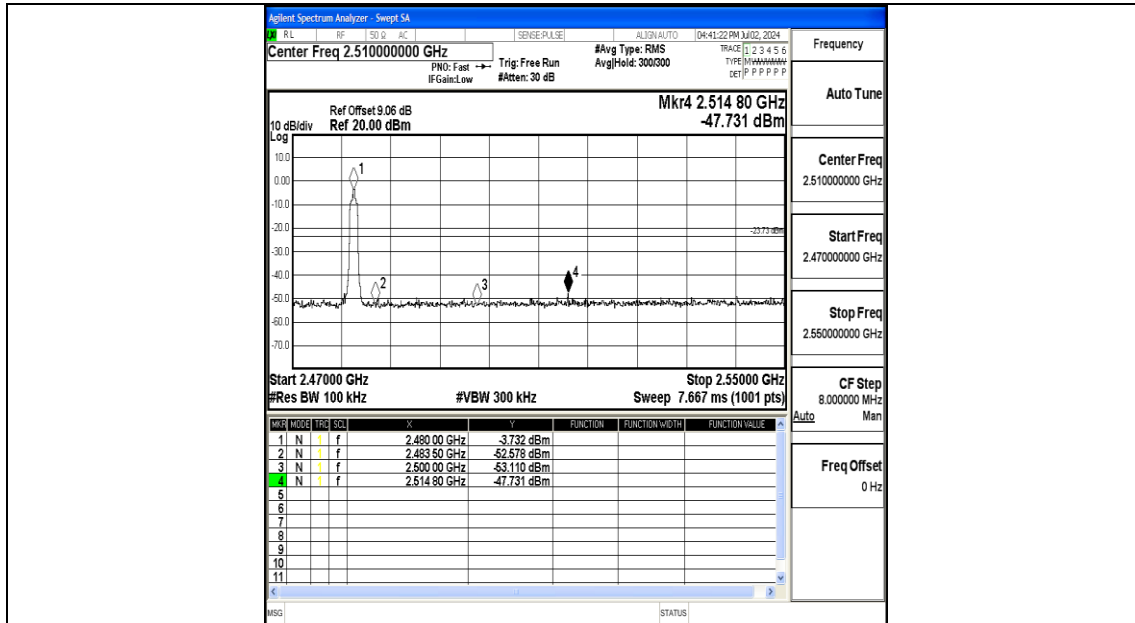
DH5-Ant1-Hop_2402-PASS



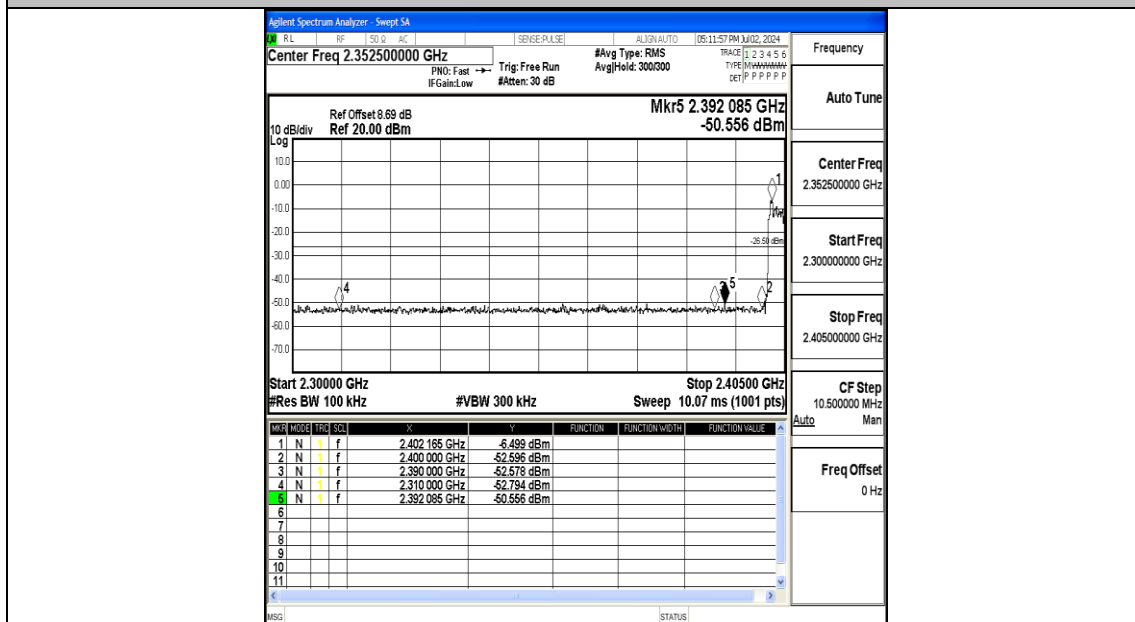
DH5-Ant1-Hop_2480-PASS



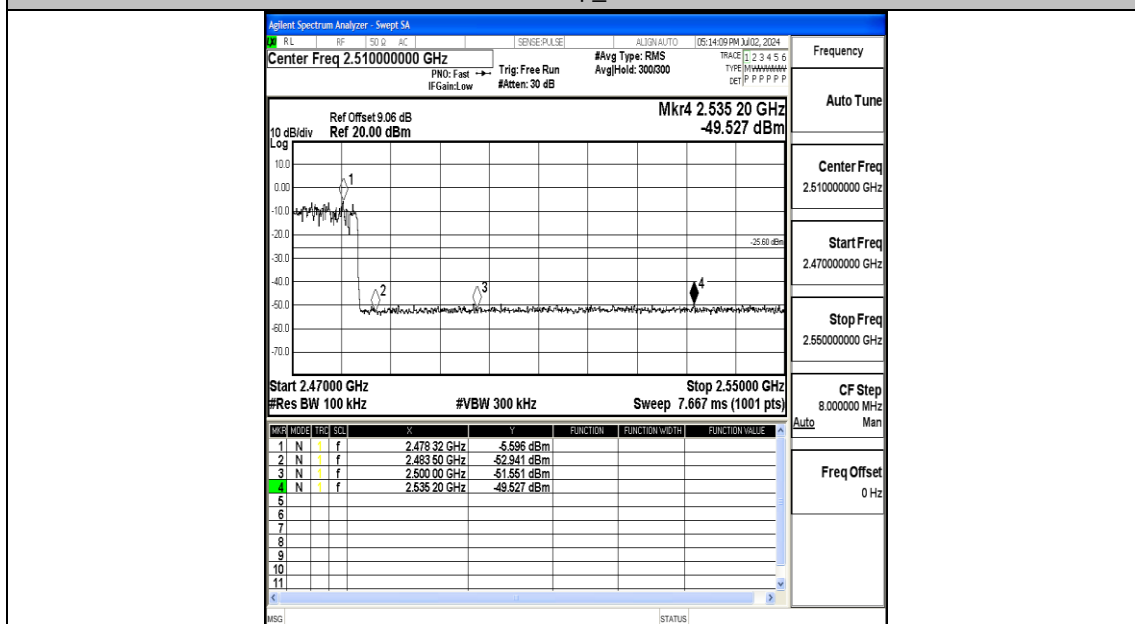
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



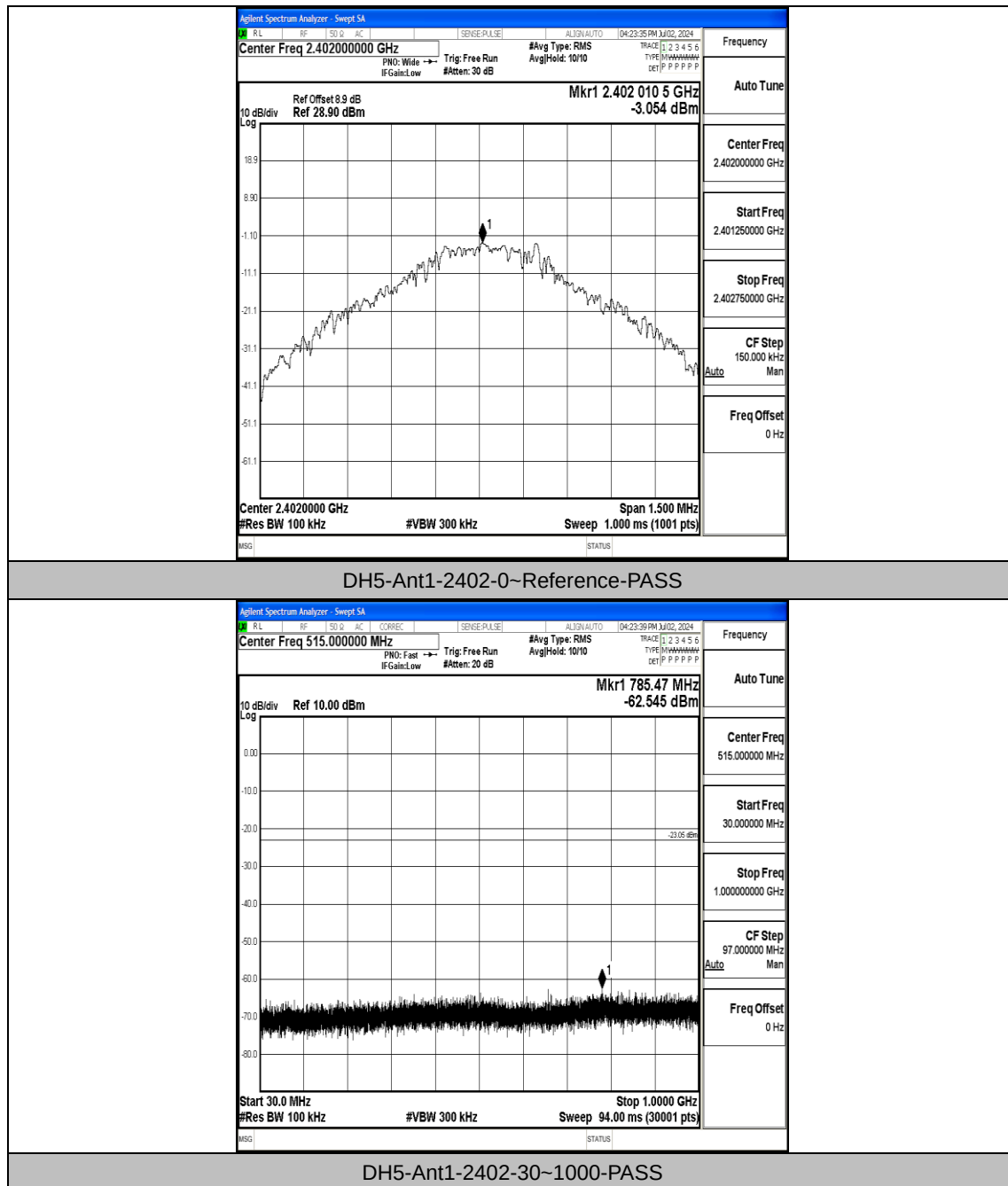
2DH5-Ant1-Hop_2480-PASS

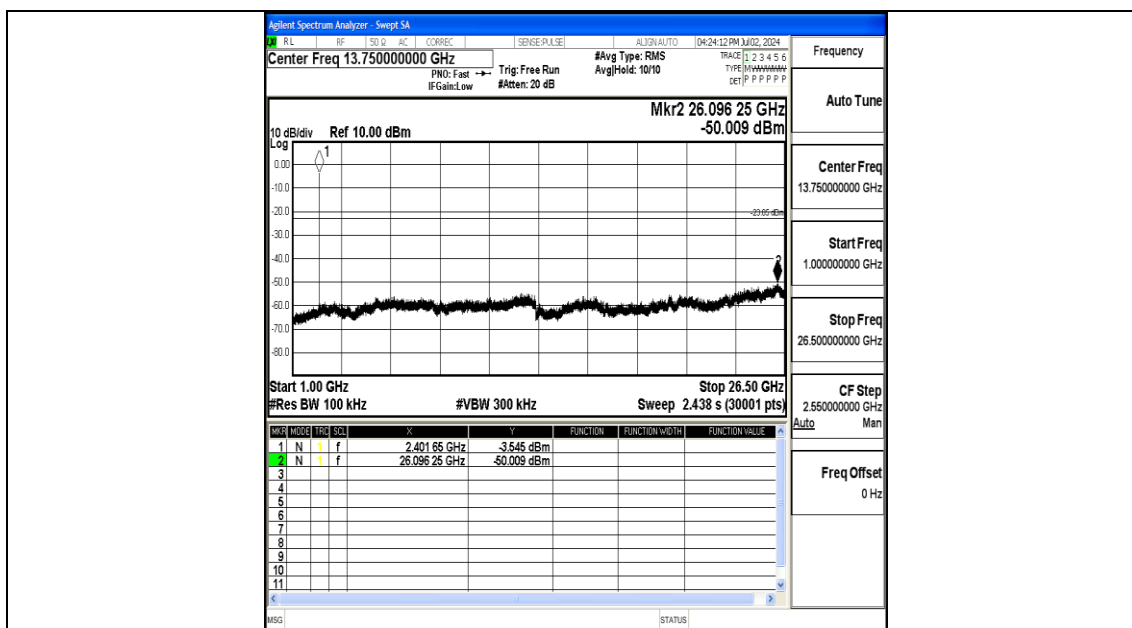
Appendix H: Conducted Spurious Emission

Test Result

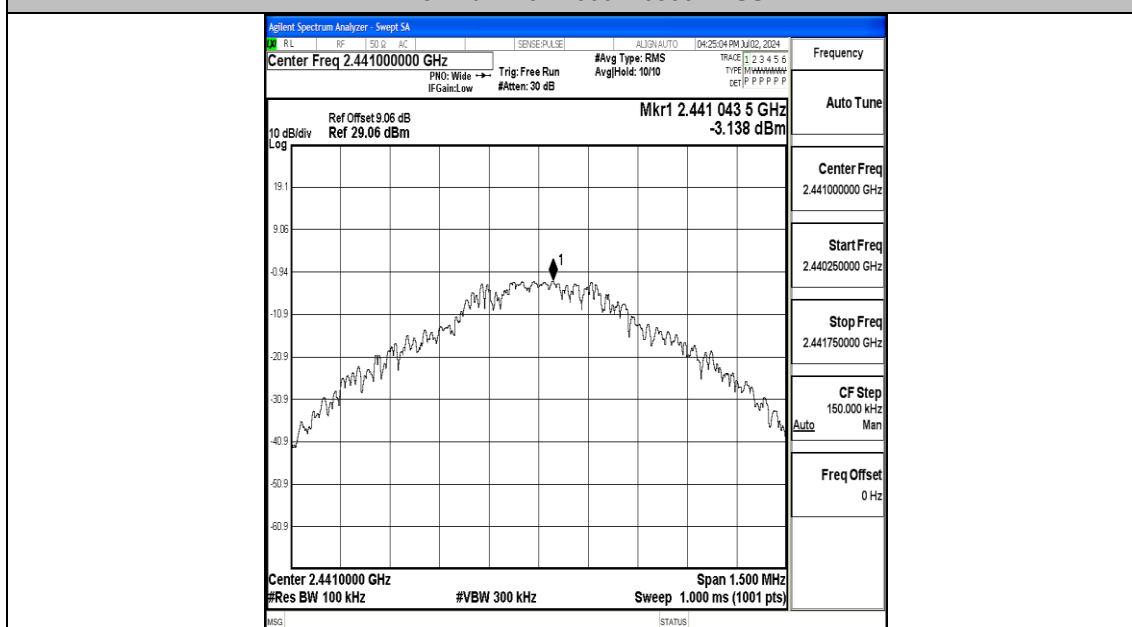
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-3.05	-3.05	---	PASS
DH5	Ant1	2402	30~1000	-3.05	-62.55	≤-23.05	PASS
DH5	Ant1	2402	1000~26500	-3.05	-50.01	≤-23.05	PASS
DH5	Ant1	2441	0~Reference	-3.14	-3.14	---	PASS
DH5	Ant1	2441	30~1000	-3.14	-63	≤-23.14	PASS
DH5	Ant1	2441	1000~26500	-3.14	-50.06	≤-23.14	PASS
DH5	Ant1	2480	0~Reference	-3.45	-3.45	---	PASS
DH5	Ant1	2480	30~1000	-3.45	-63	≤-23.45	PASS
DH5	Ant1	2480	1000~26500	-3.45	-49.83	≤-23.45	PASS
2DH5	Ant1	2402	0~Reference	-4.36	-4.36	---	PASS
2DH5	Ant1	2402	30~1000	-4.36	-62.99	≤-24.36	PASS
2DH5	Ant1	2402	1000~26500	-4.36	-50.72	≤-24.36	PASS
2DH5	Ant1	2441	0~Reference	-6.33	-6.33	---	PASS
2DH5	Ant1	2441	30~1000	-6.33	-63	≤-26.33	PASS
2DH5	Ant1	2441	1000~26500	-6.33	-49.92	≤-26.33	PASS
2DH5	Ant1	2480	0~Reference	-6.69	-6.69	---	PASS
2DH5	Ant1	2480	30~1000	-6.69	-62.21	≤-26.69	PASS
2DH5	Ant1	2480	1000~26500	-6.69	-49.93	≤-26.69	PASS

Test Graphs

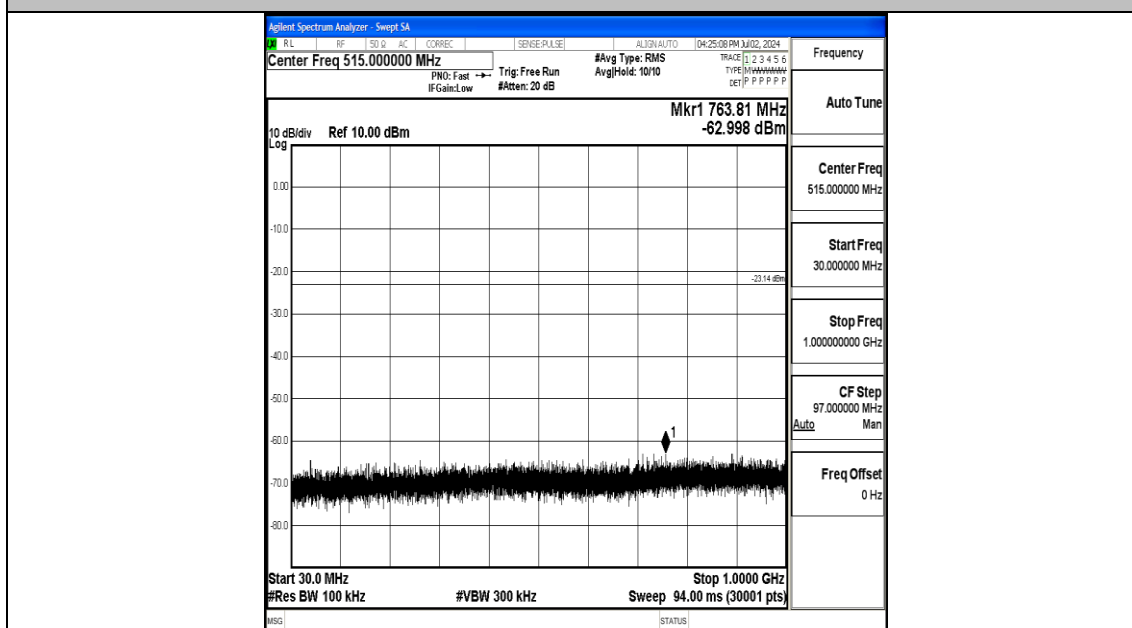




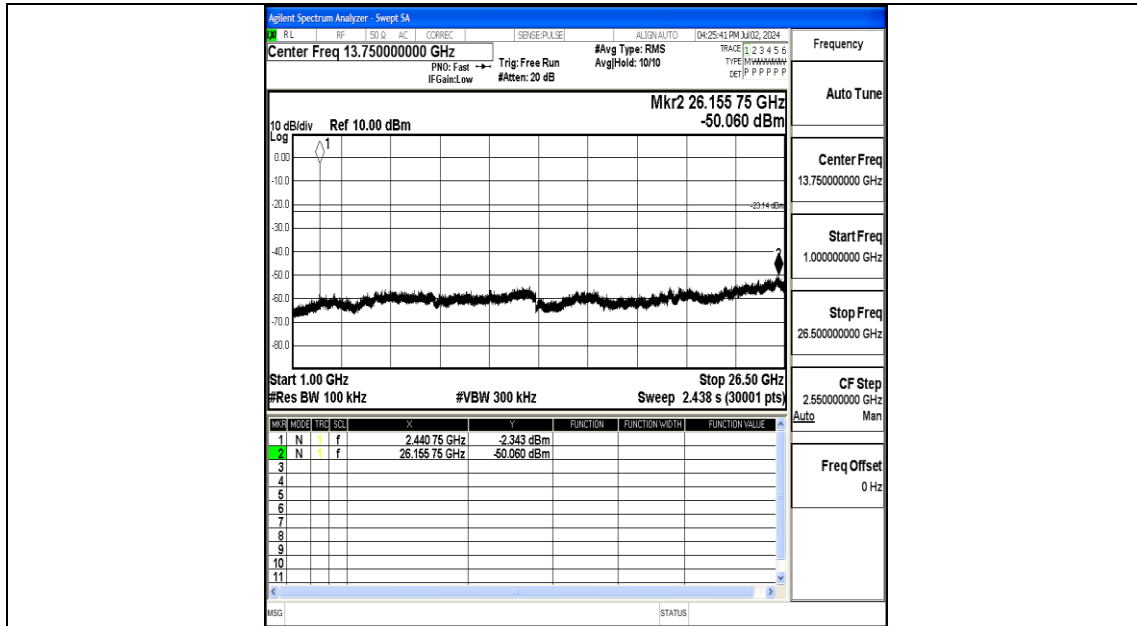
DH5-Ant1-2402-1000~26500-PASS



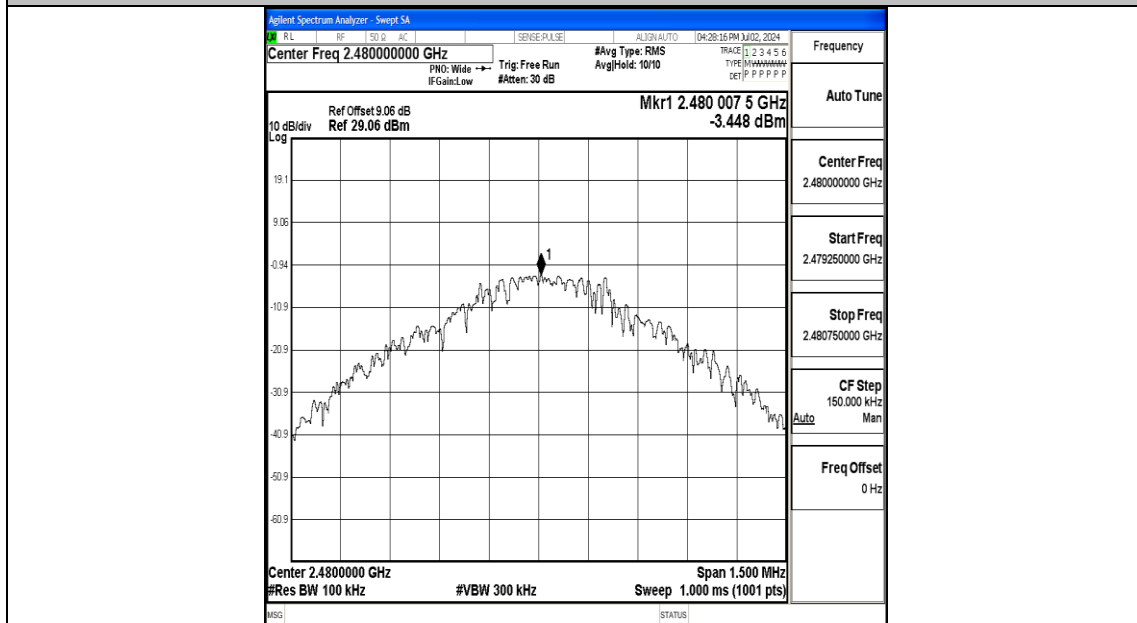
DH5-Ant1-2441-0~Reference-PASS



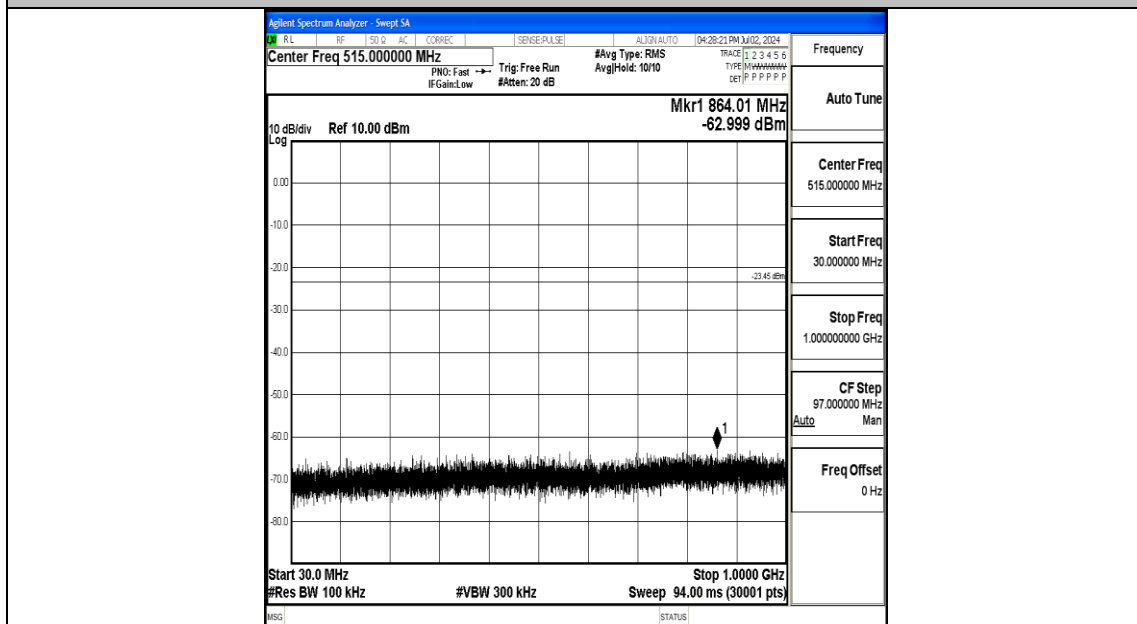
DH5-Ant1-2441-30~1000-PASS



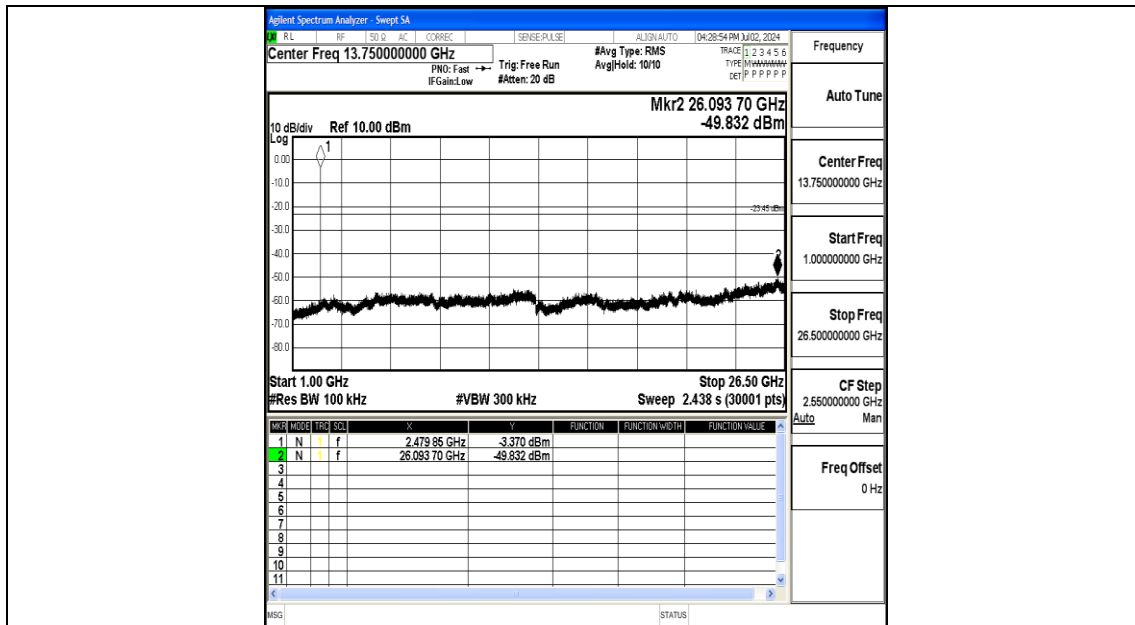
DH5-Ant1-2441-1000~26500-PASS



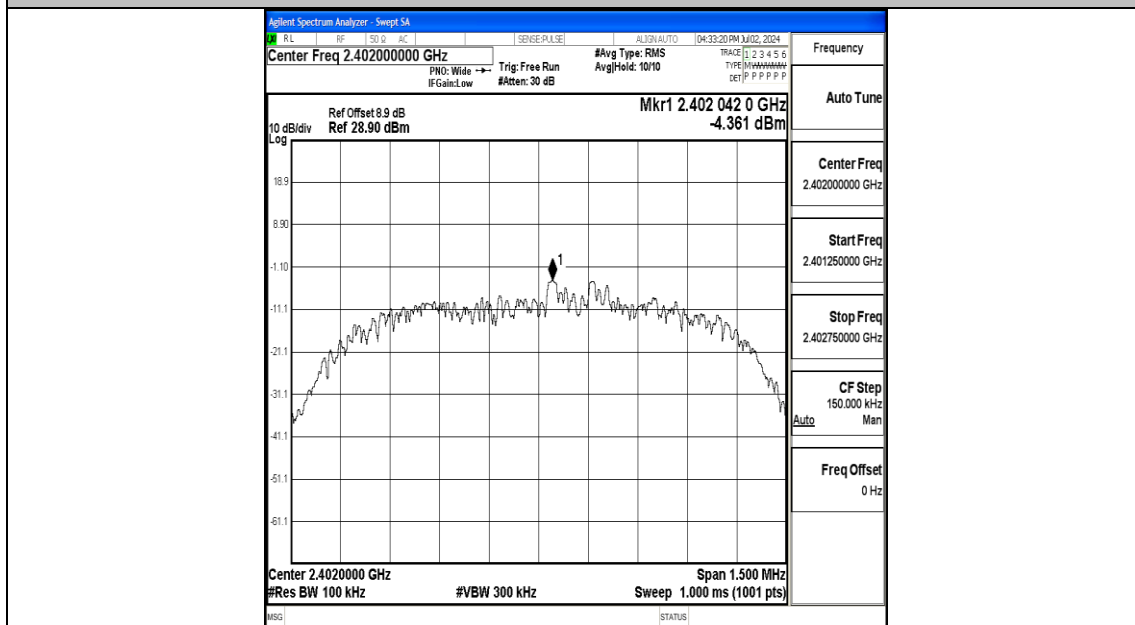
DH5-Ant1-2480-0~Reference-PASS



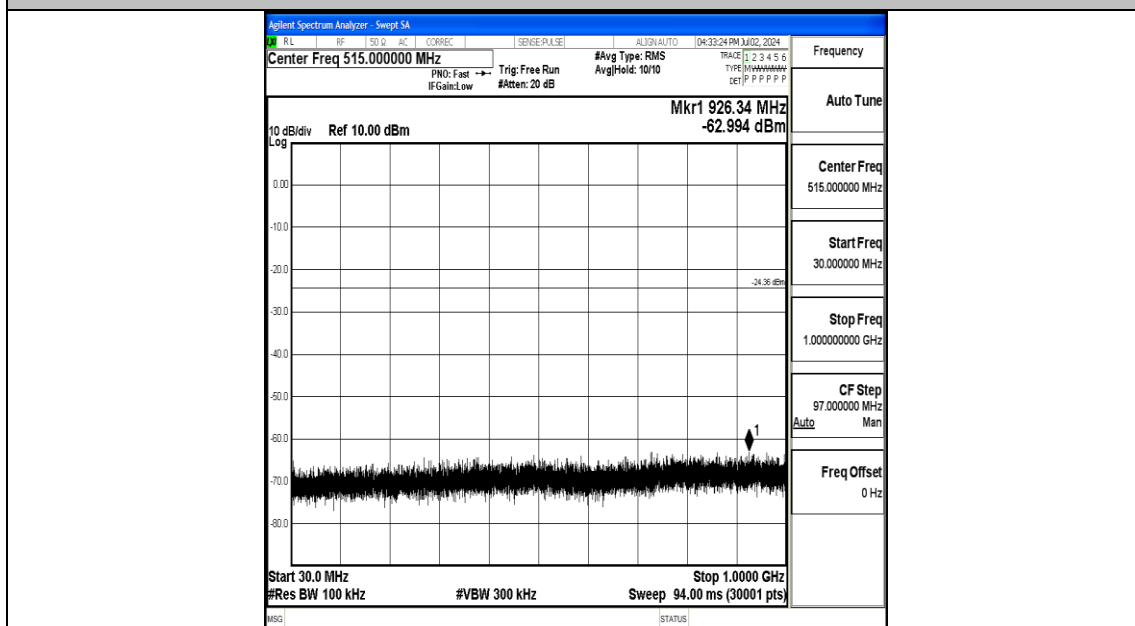
DH5-Ant1-2480-30~1000-PASS



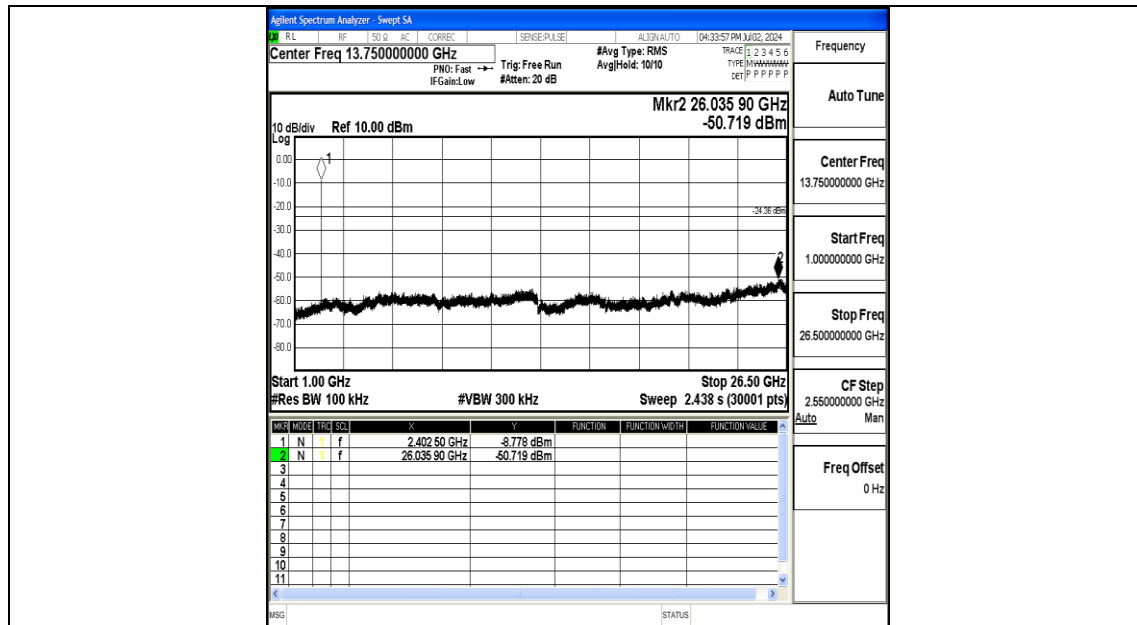
DH5-Ant1-2480-1000~26500-PASS



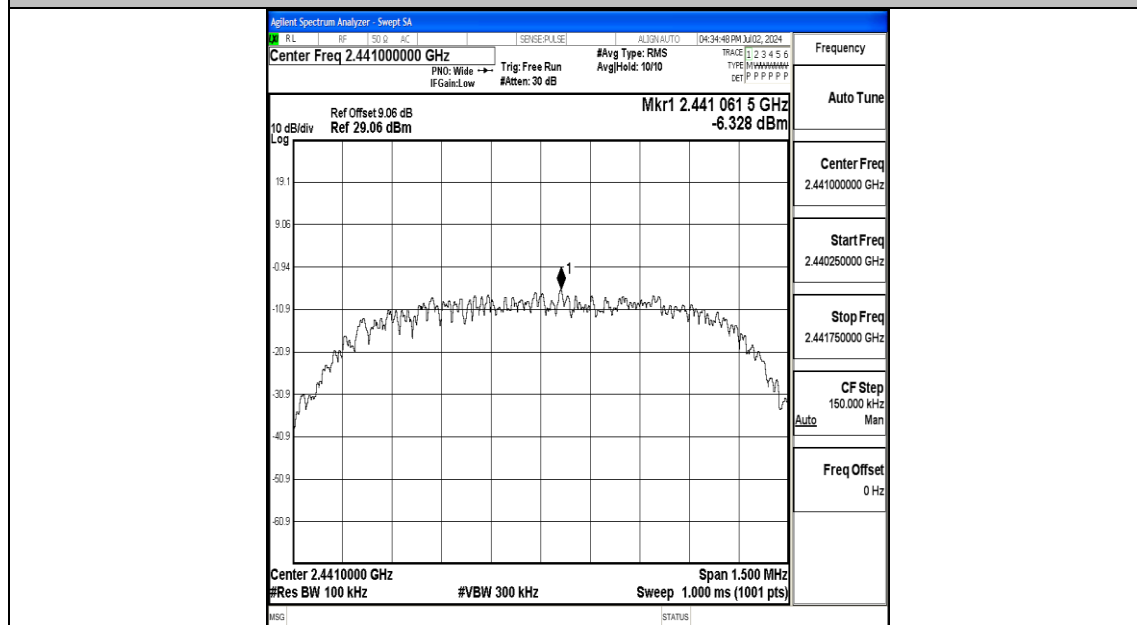
2DH5-Ant1-2402-0~Reference-PASS



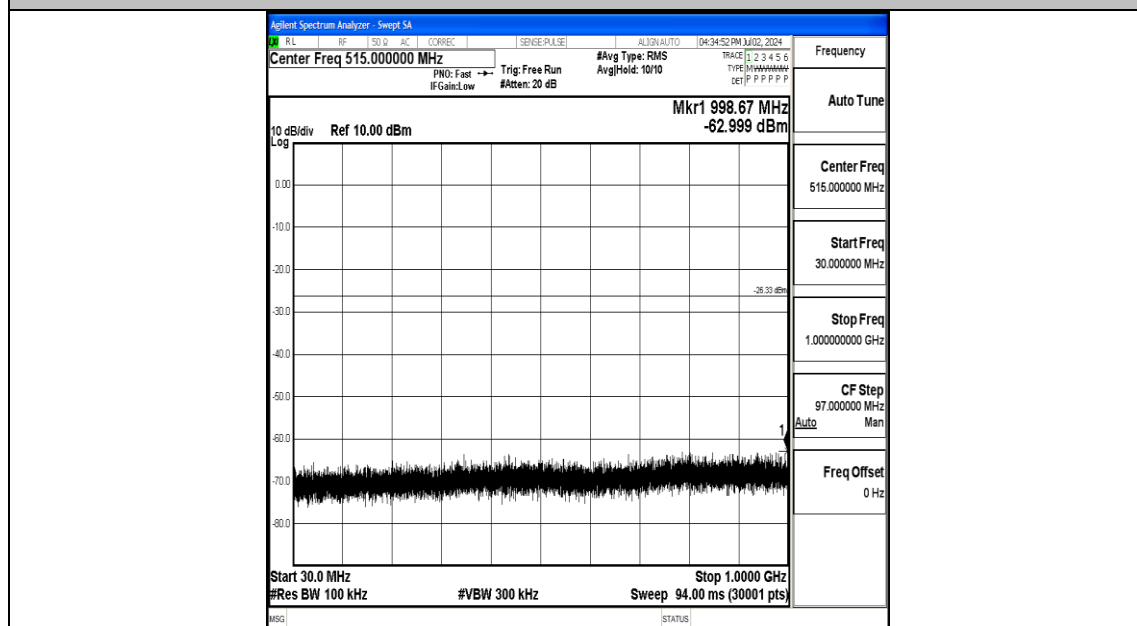
2DH5-Ant1-2402-30~1000-PASS



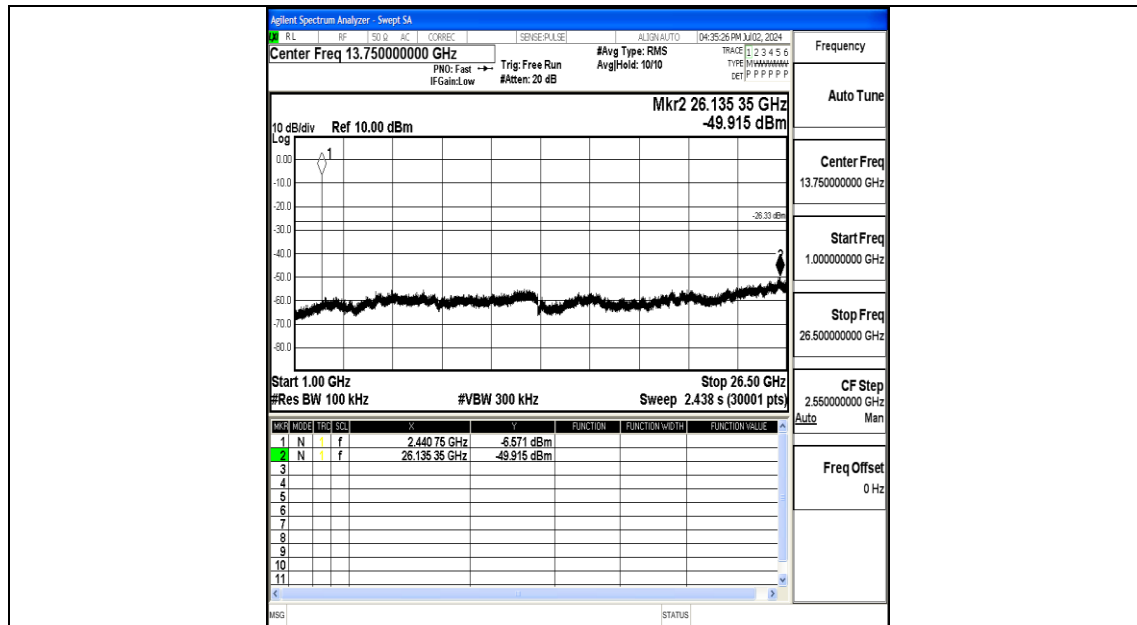
2DH5-Ant1-2402-1000~26500-PASS



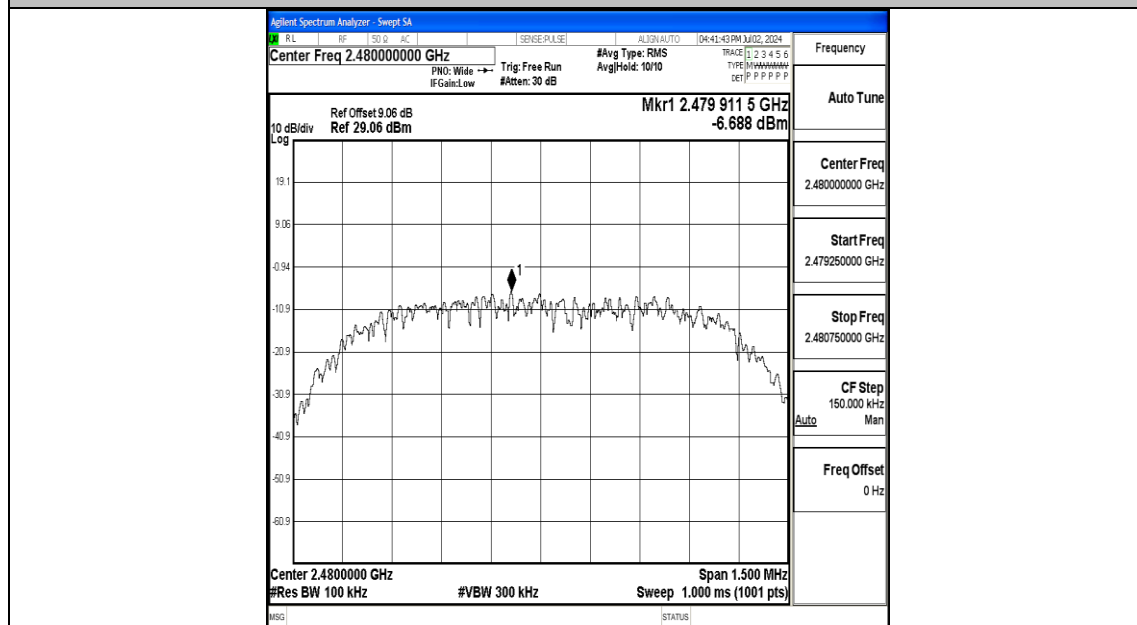
2DH5-Ant1-2441-0~Reference-PASS



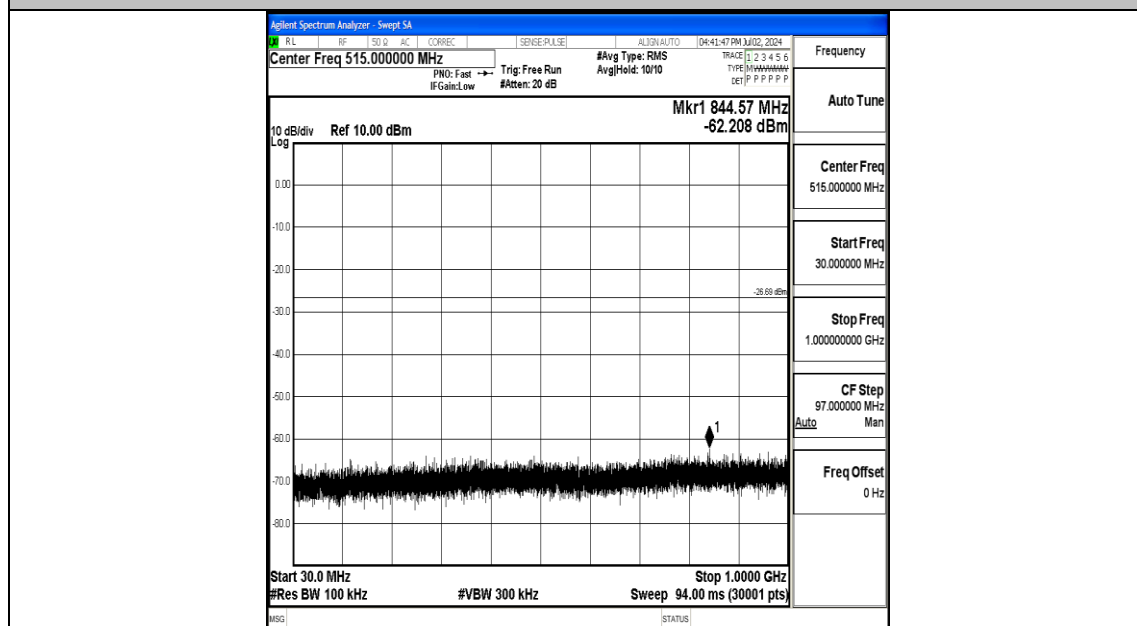
2DH5-Ant1-2441-30~1000-PASS



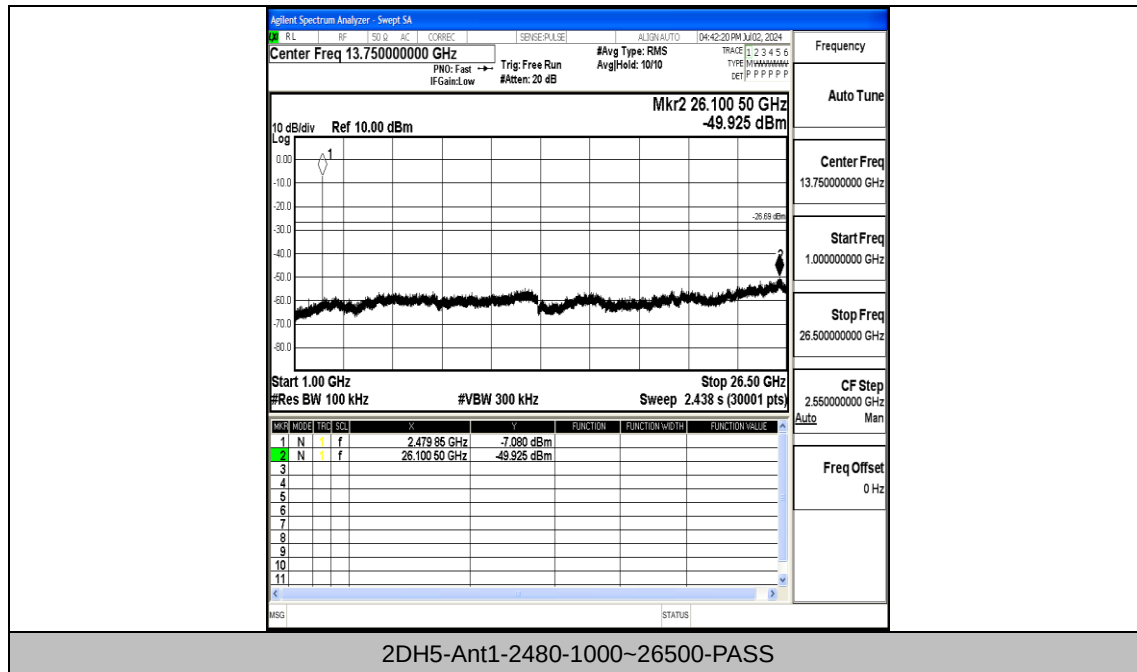
2DH5-Ant1-2441-1000~26500-PASS



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



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

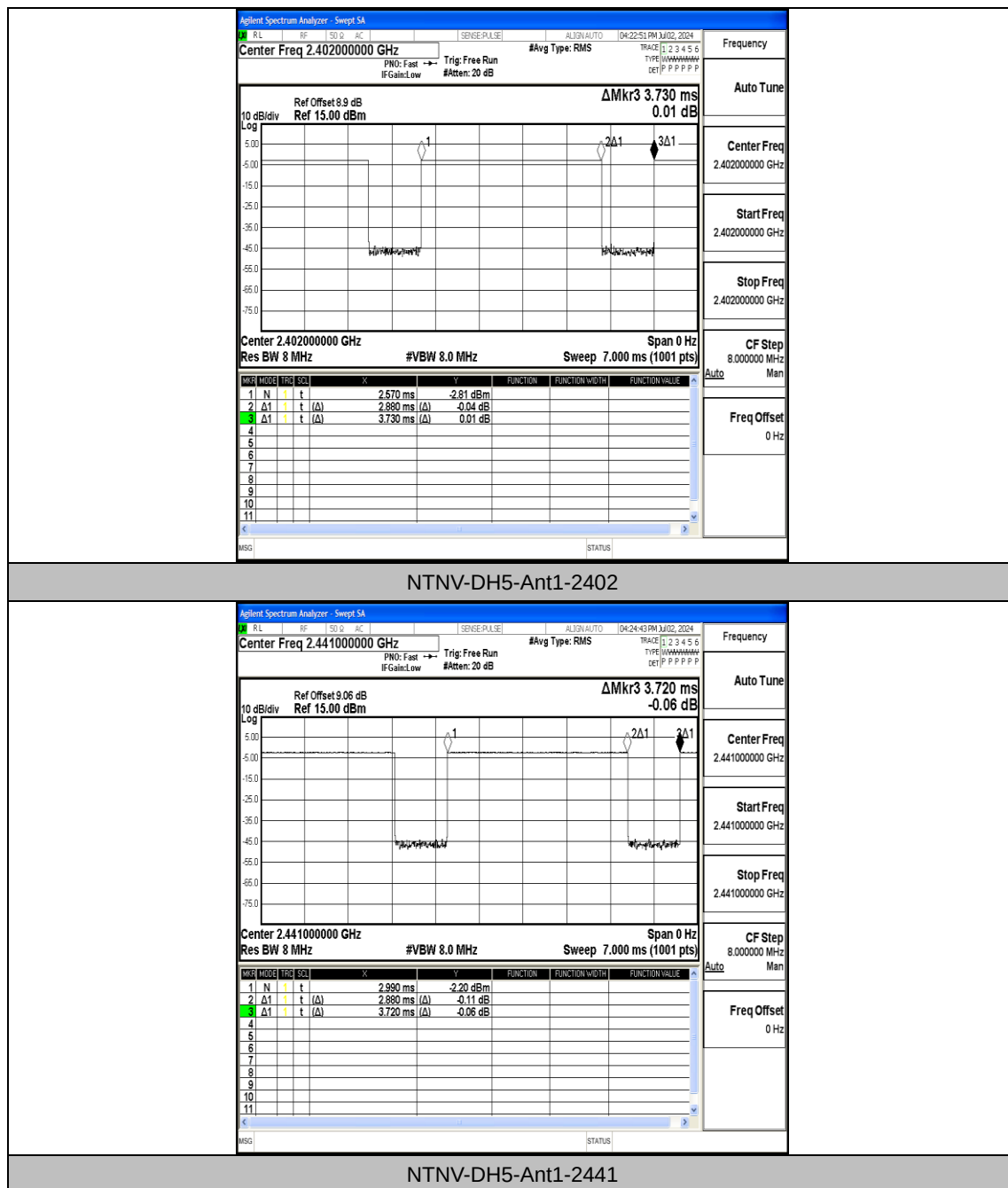


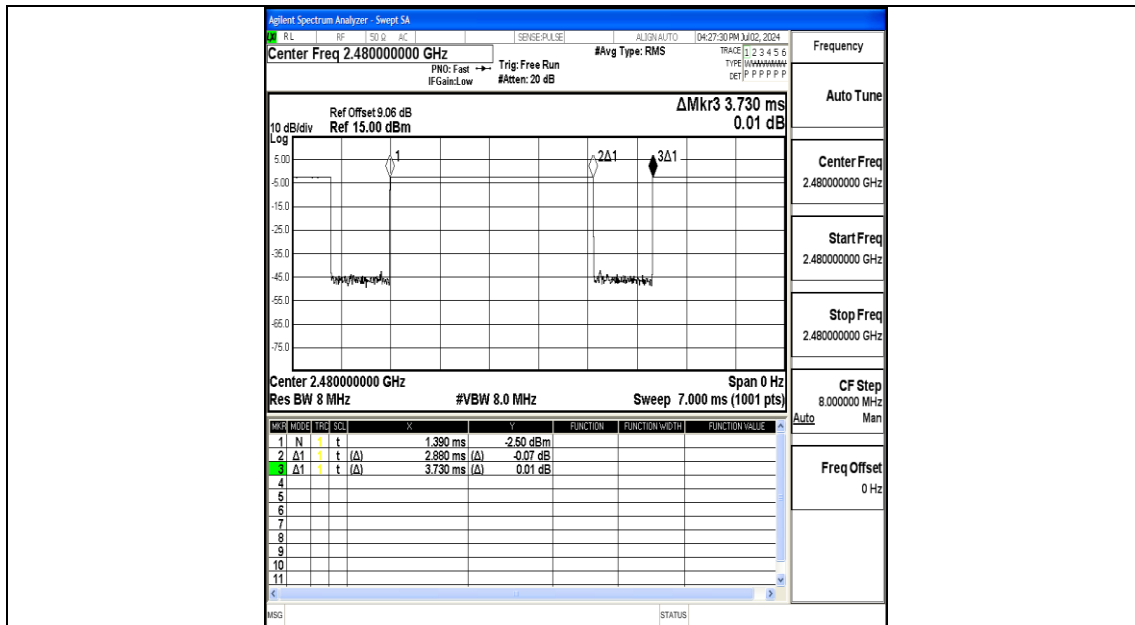
Appendix I: Duty Cycle

Test Result

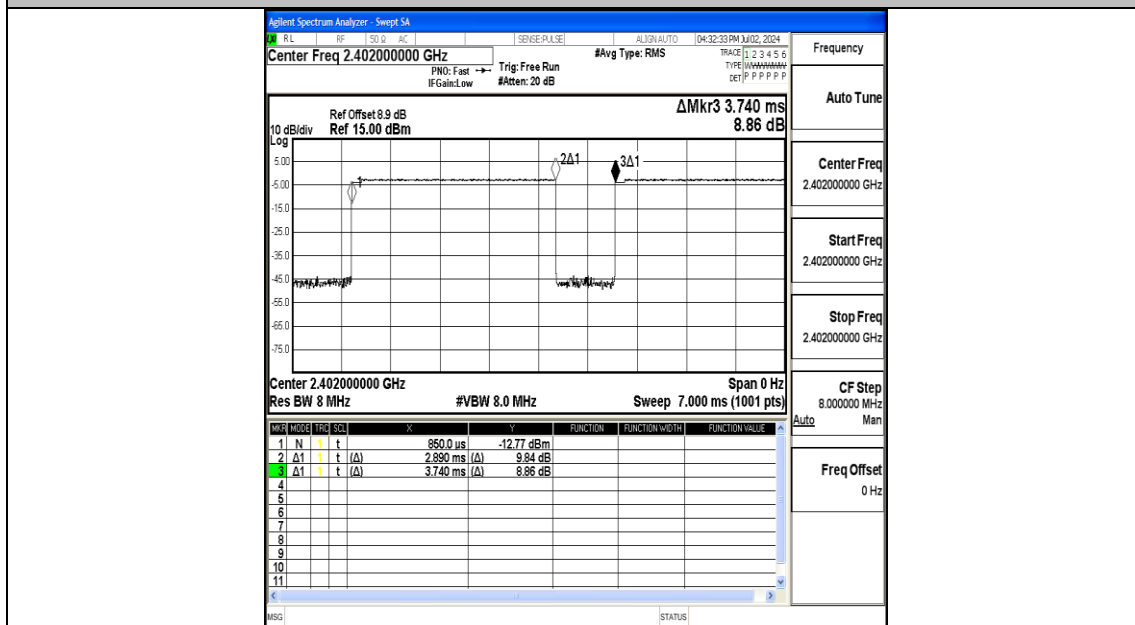
TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.88	3.73	77.21	1.12
DH5	Ant1	2441	2.88	3.72	77.42	1.11
DH5	Ant1	2480	2.88	3.73	77.21	1.12
2DH5	Ant1	2402	2.89	3.74	77.27	1.12
2DH5	Ant1	2441	2.89	3.73	77.48	1.11
2DH5	Ant1	2480	2.90	3.74	77.54	1.10

Test Graphs

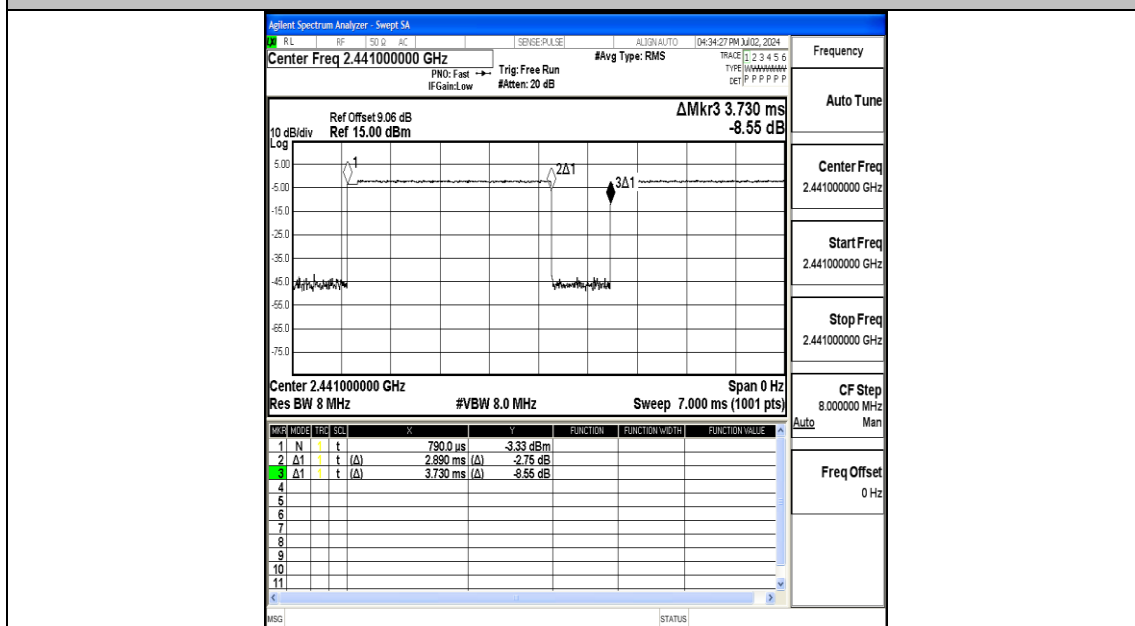




NTNV-DH5-Ant1-2480



NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441

