

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

Product Name: OPENEAR Q10 - Open-ear earbuds with Ear Hook

Trade Mark: **LEMUNA**

Test Model: Q10

FCC ID: 2AGHA-Q10

Environmental Conditions

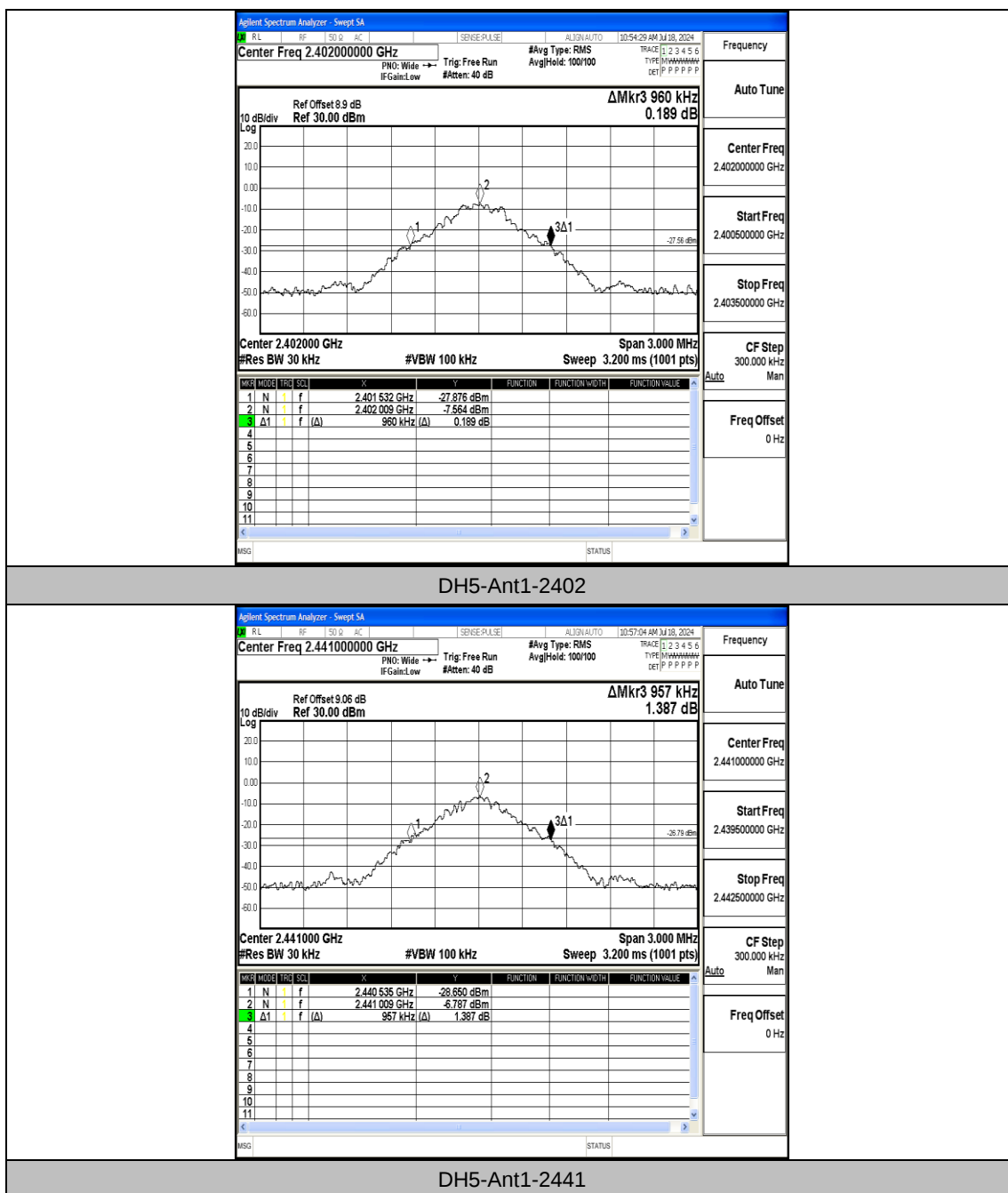
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

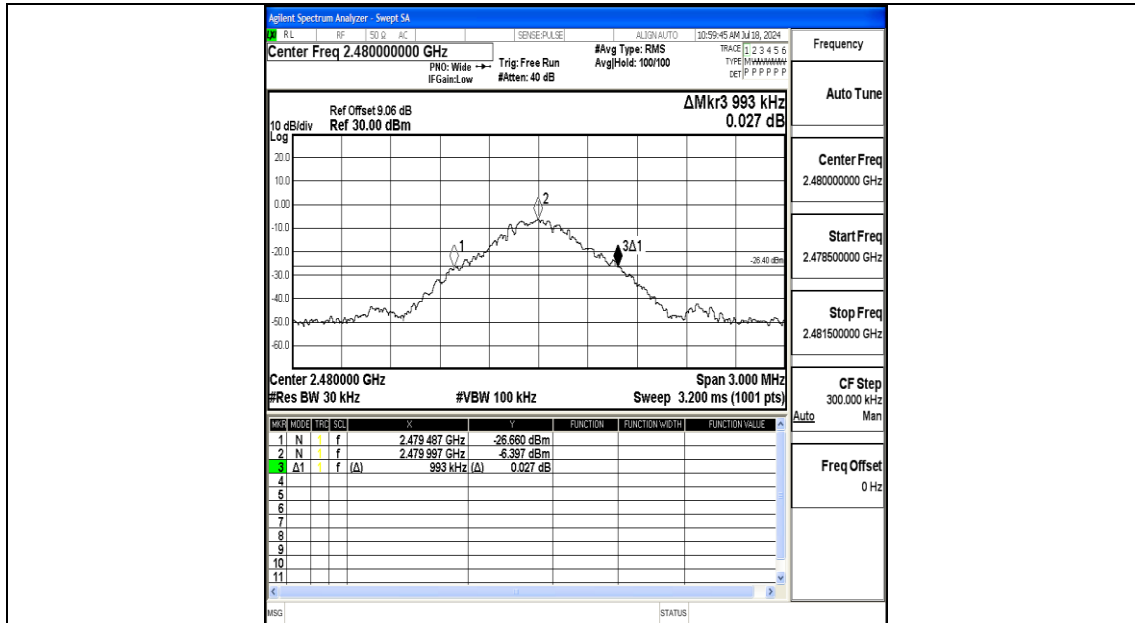
Appendix A: 20dB Emission Bandwidth

Test Result

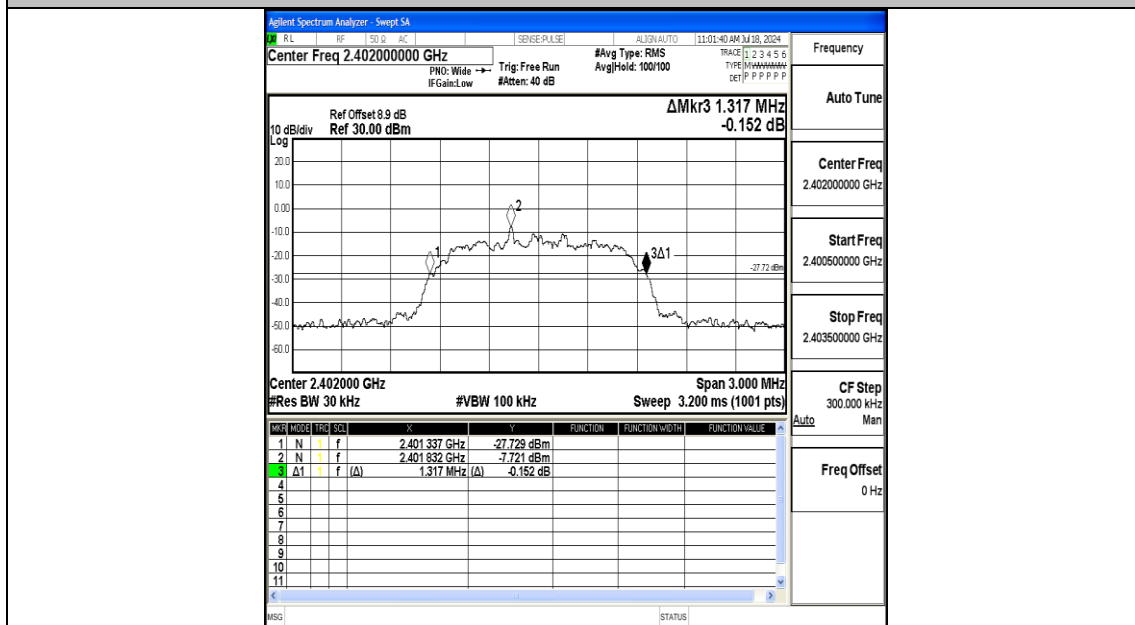
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.960	2401.532	2402.492	---	---
DH5	Ant1	2441	0.957	2440.535	2441.492	---	---
DH5	Ant1	2480	0.993	2479.487	2480.480	---	---
2DH5	Ant1	2402	1.317	2401.337	2402.654	---	---
2DH5	Ant1	2441	1.326	2440.331	2441.657	---	---
2DH5	Ant1	2480	1.308	2479.343	2480.651	---	---

Test Graphs

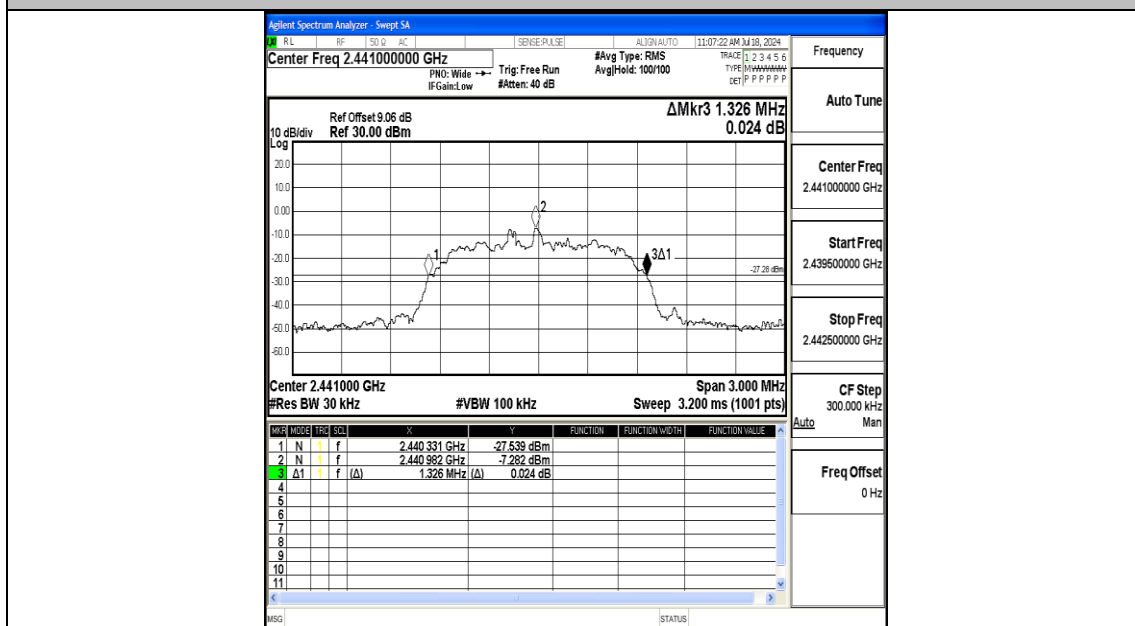




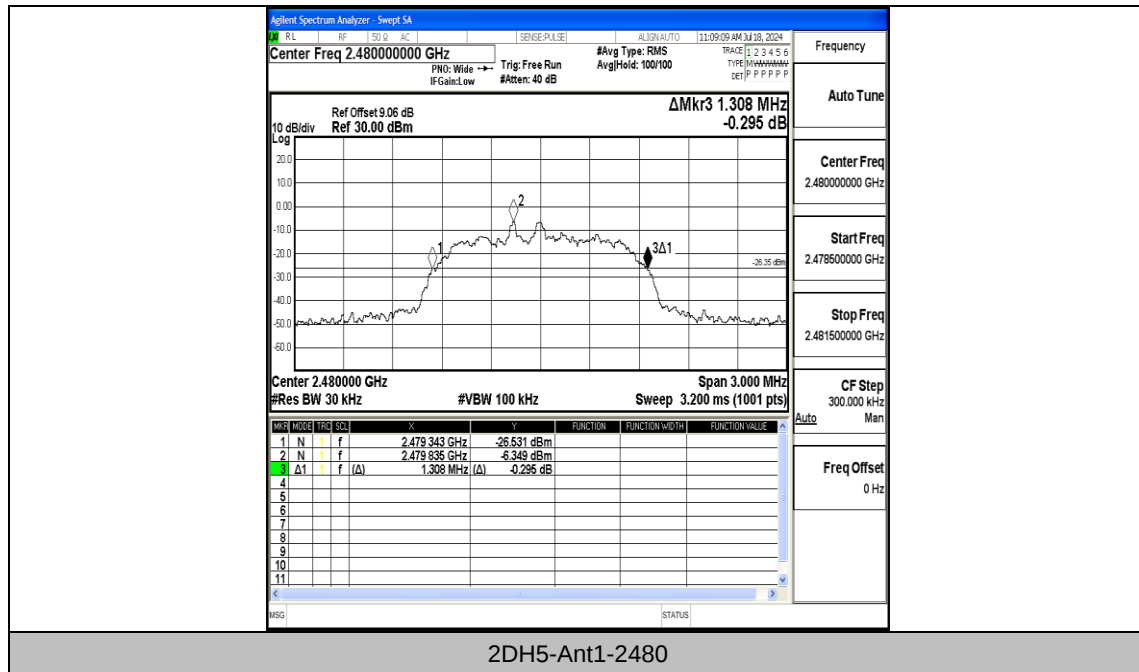
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441

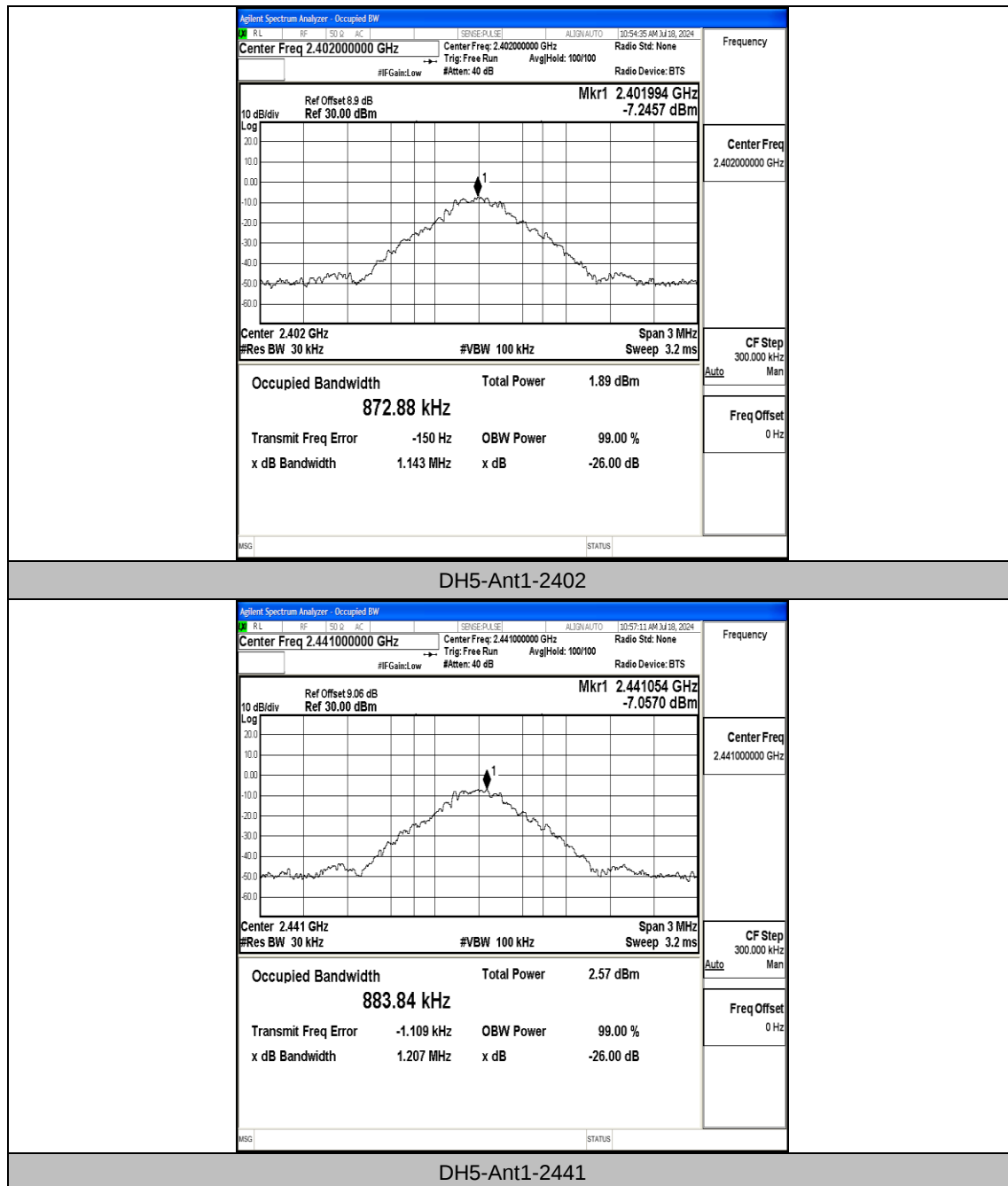


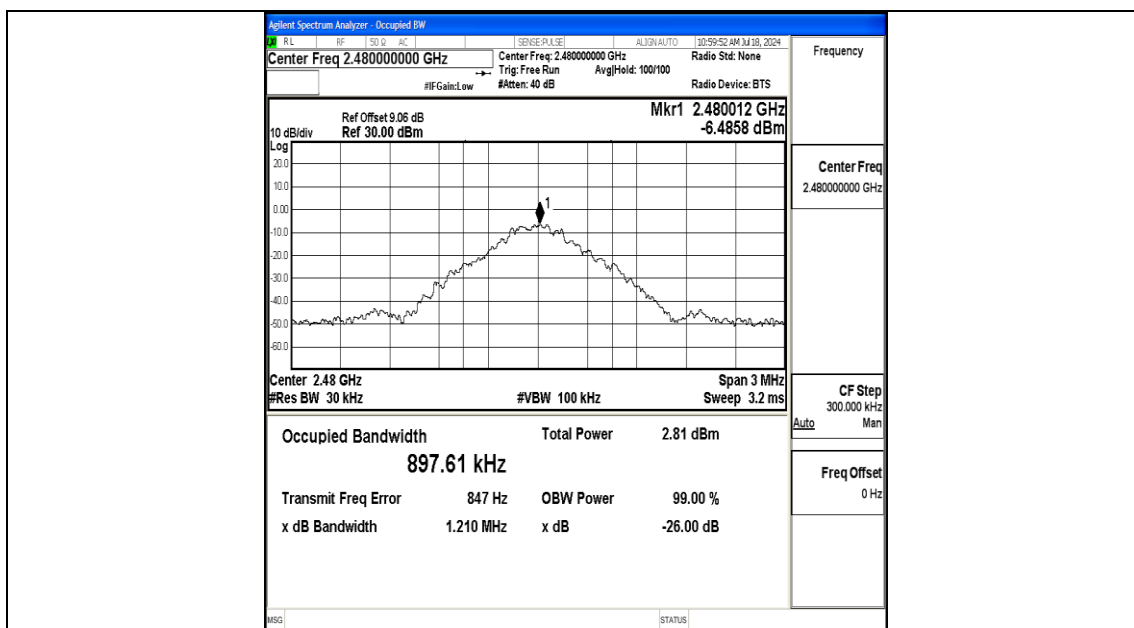
Appendix B: Occupied Channel Bandwidth

Test Result

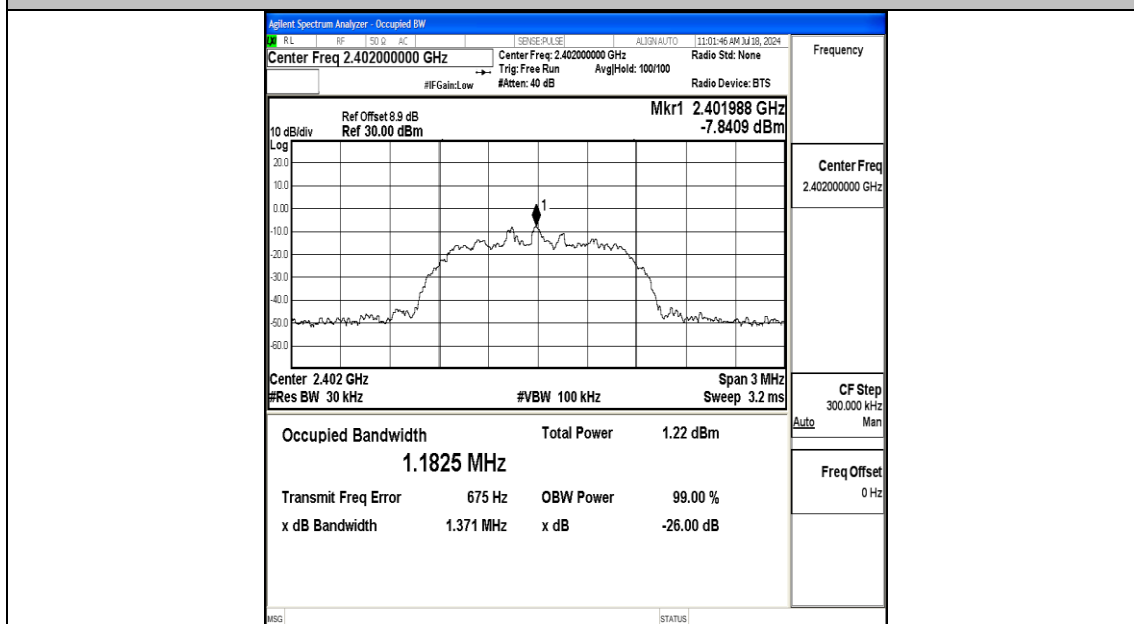
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87288	2401.5634	2402.4363	---	---
DH5	Ant1	2441	0.88384	2440.5570	2441.4408	---	---
DH5	Ant1	2480	0.89761	2479.5520	2480.4497	---	---
2DH5	Ant1	2402	1.1825	2401.4094	2402.5919	---	---
2DH5	Ant1	2441	1.2070	2440.3953	2441.6023	---	---
2DH5	Ant1	2480	1.2040	2479.3972	2480.6012	---	---

Test Graphs

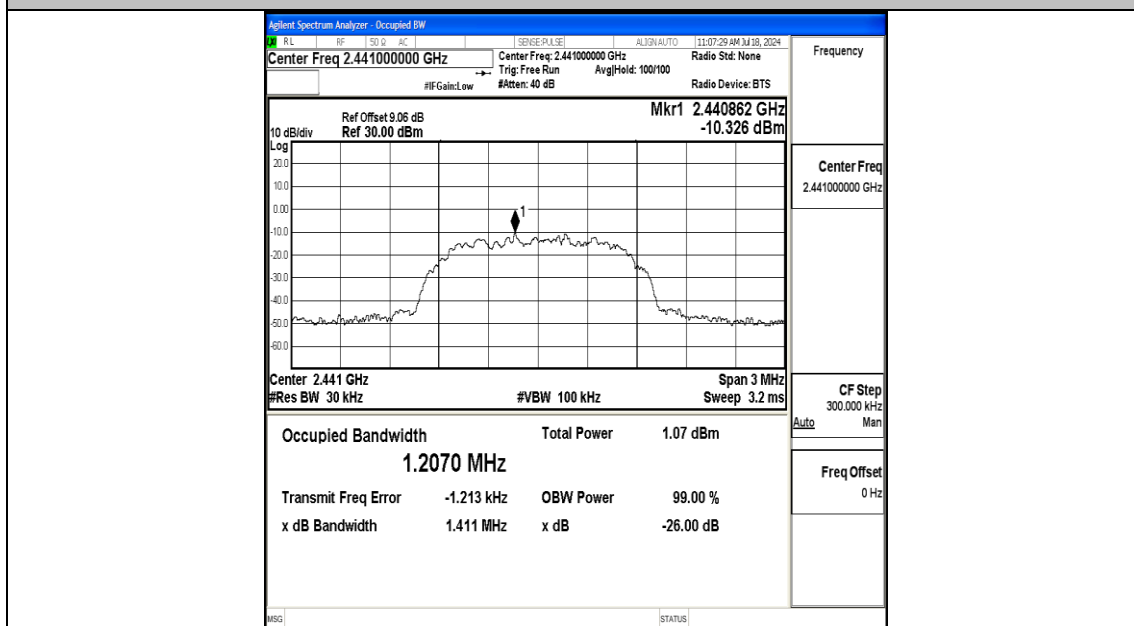




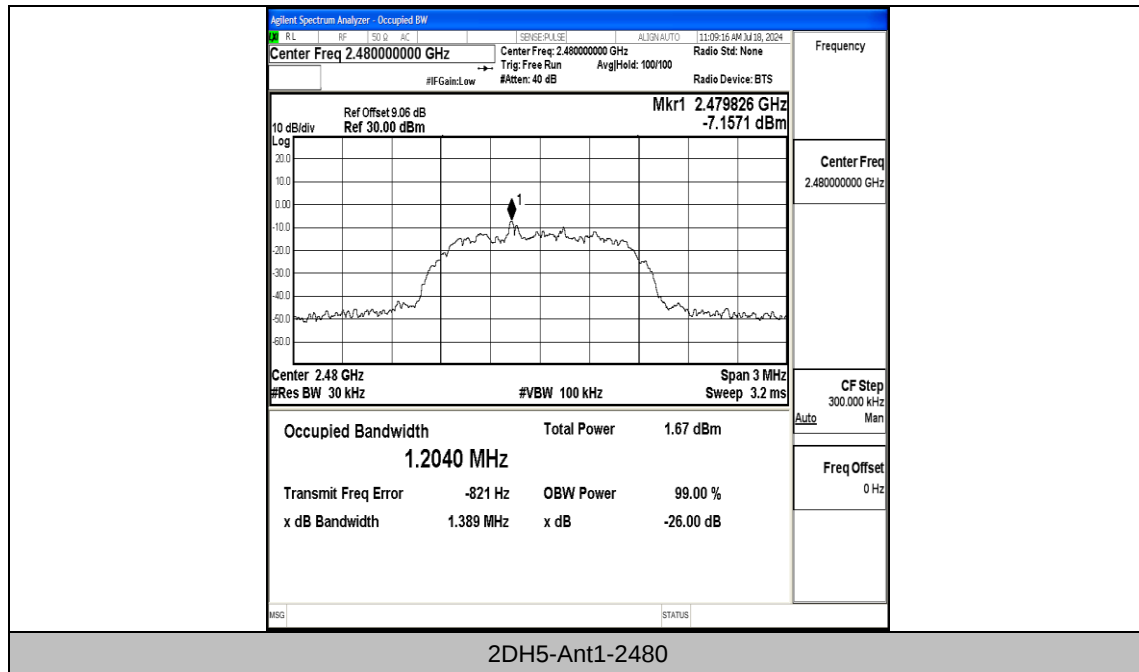
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441

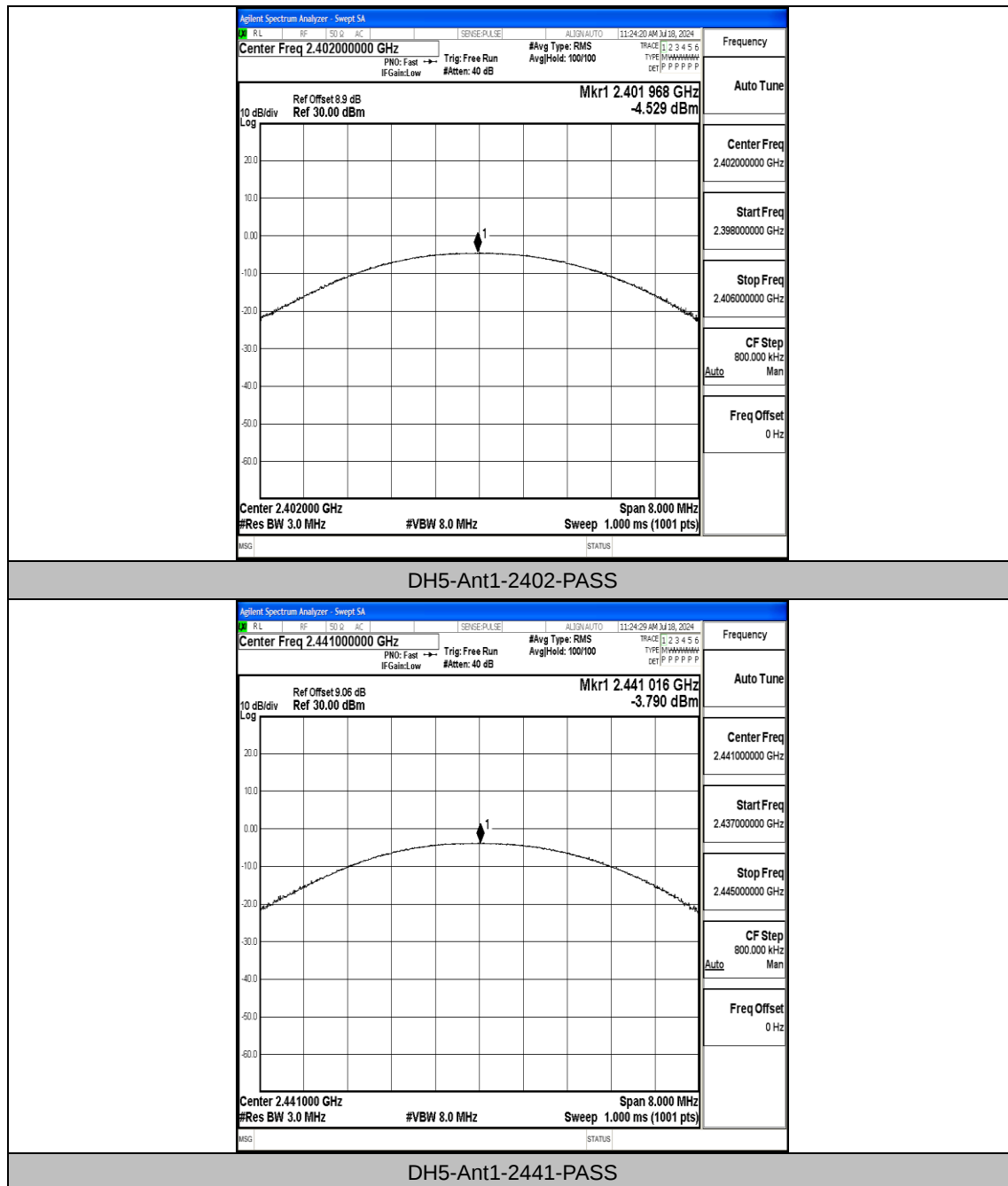


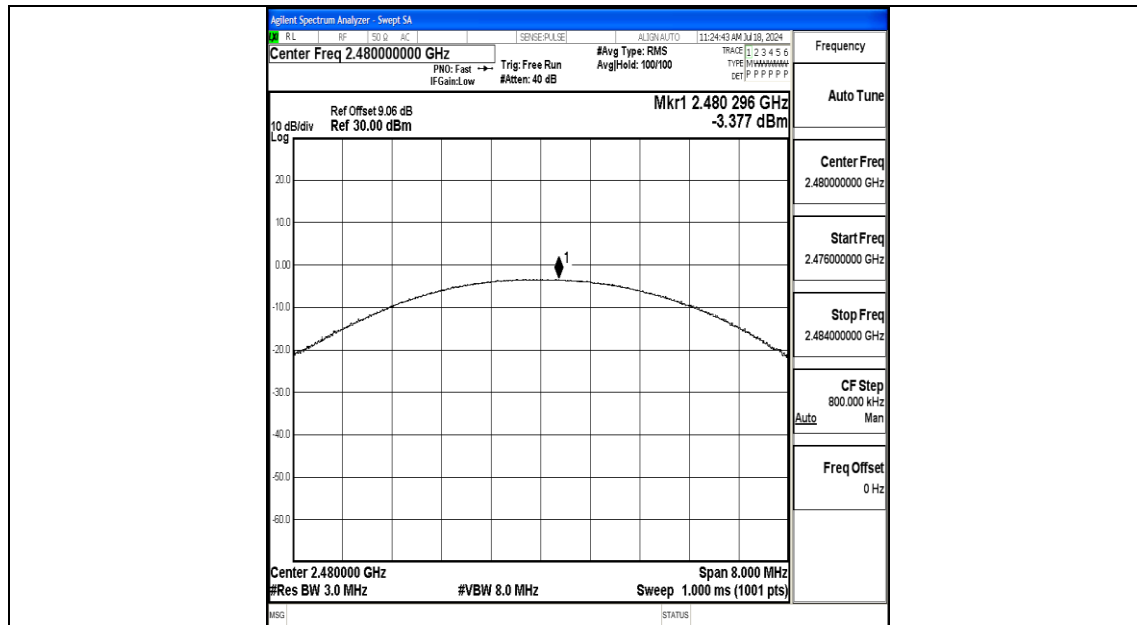
Appendix C: Maximum peak conducted output power

Test Result

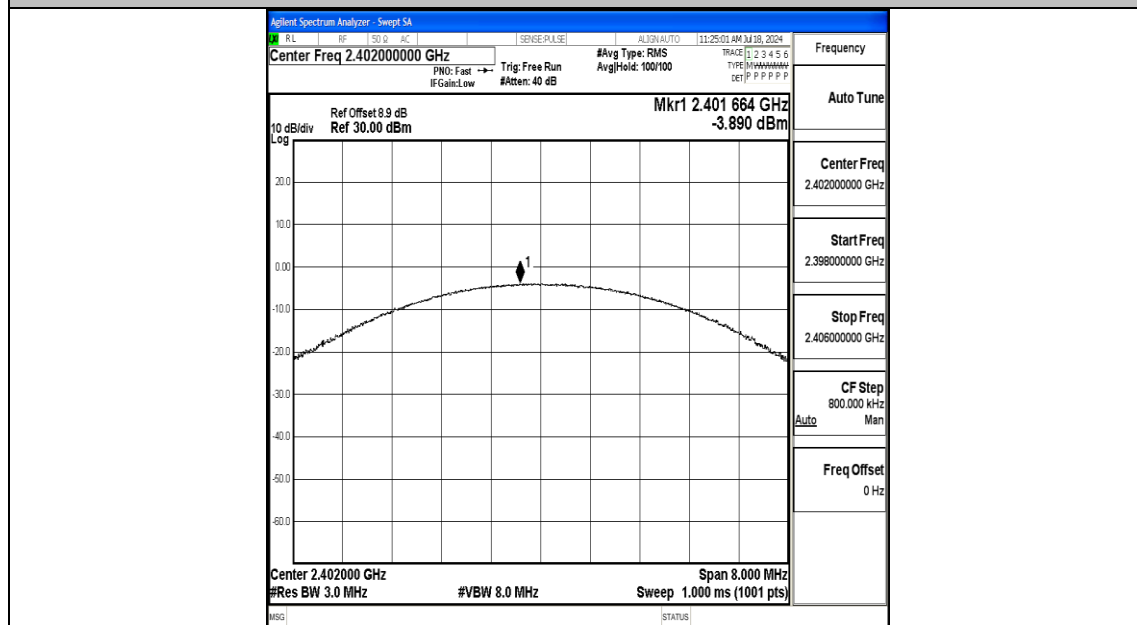
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-4.53	≤20.97	PASS
DH5	Ant1	2441	-3.79	≤20.97	PASS
DH5	Ant1	2480	-3.38	≤20.97	PASS
2DH5	Ant1	2402	-3.89	≤20.97	PASS
2DH5	Ant1	2441	-2.99	≤20.97	PASS
2DH5	Ant1	2480	-2.64	≤20.97	PASS

Test Graphs

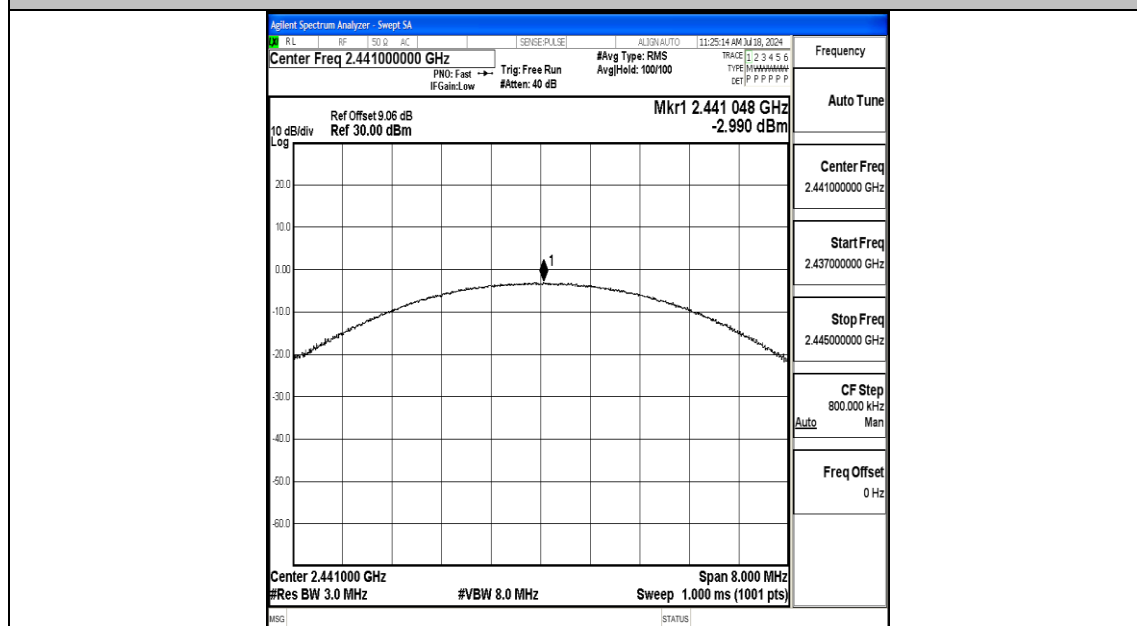




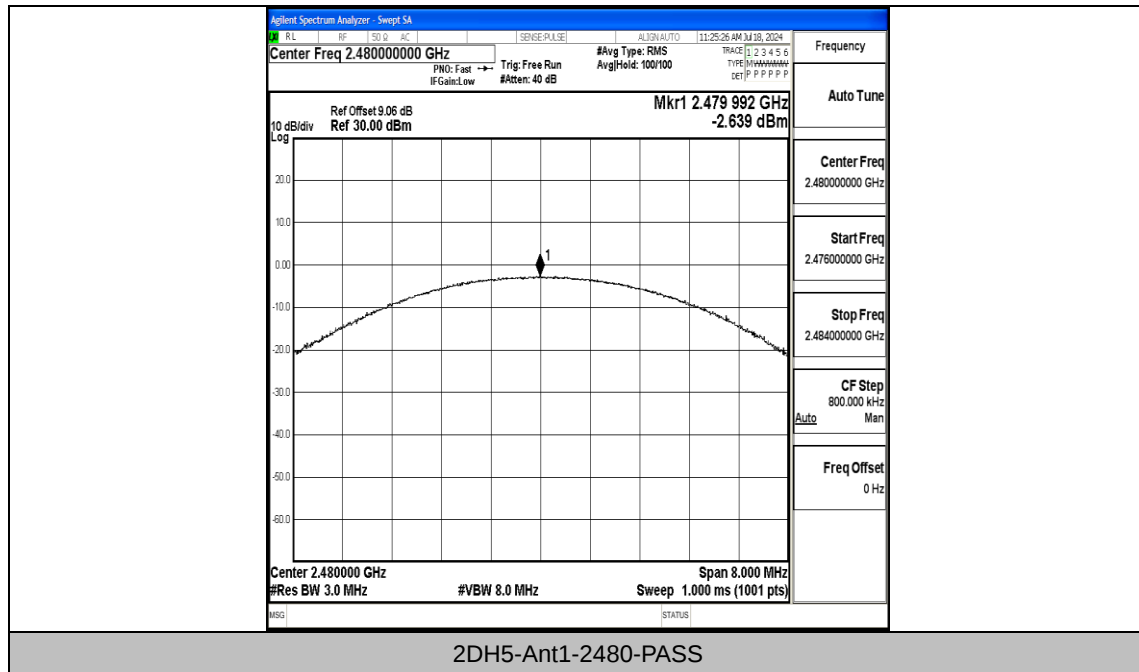
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS

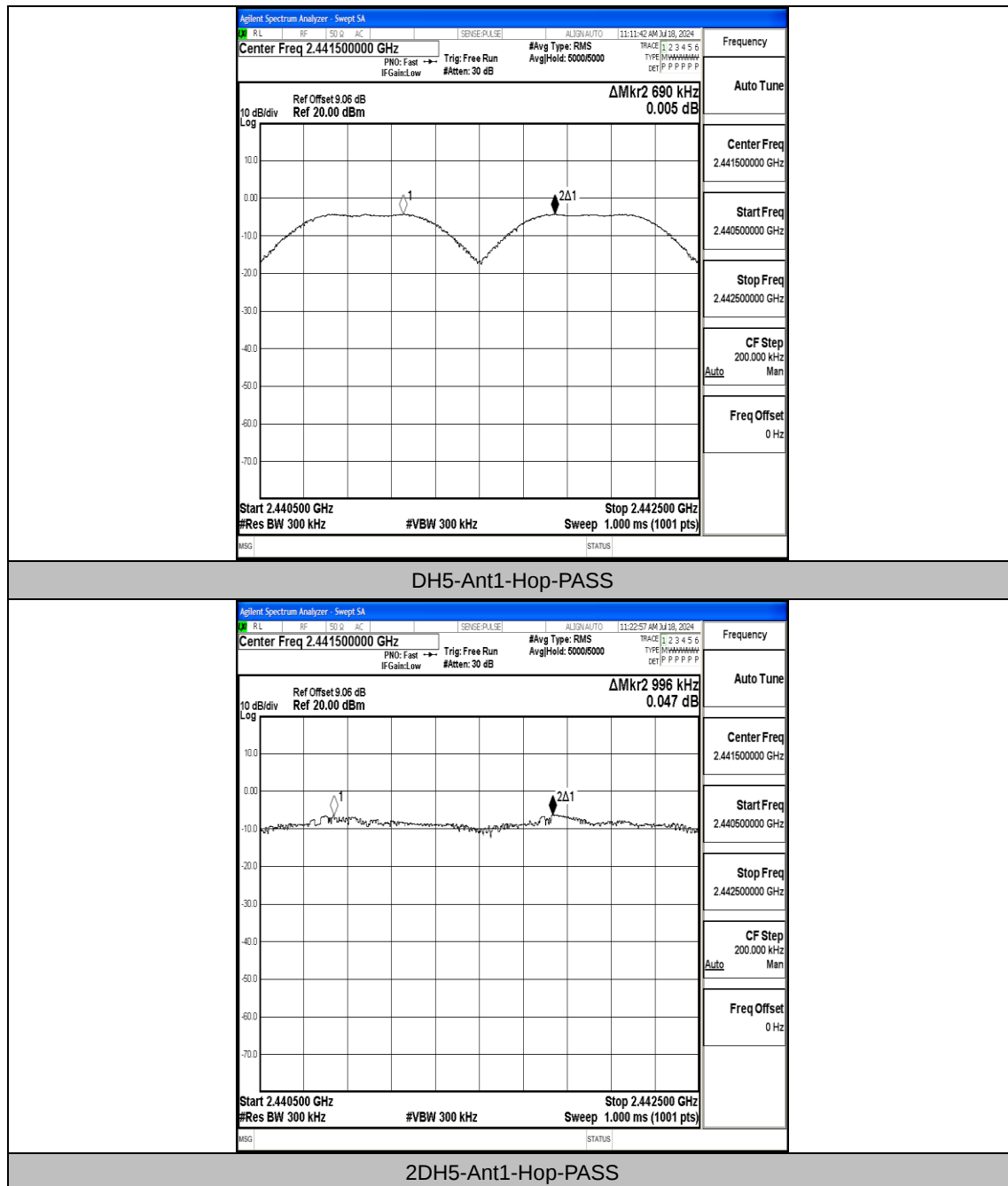


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.69	≥ 0.662	PASS
2DH5	Ant1	Hop	0.996	≥ 0.884	PASS

Test Graphs

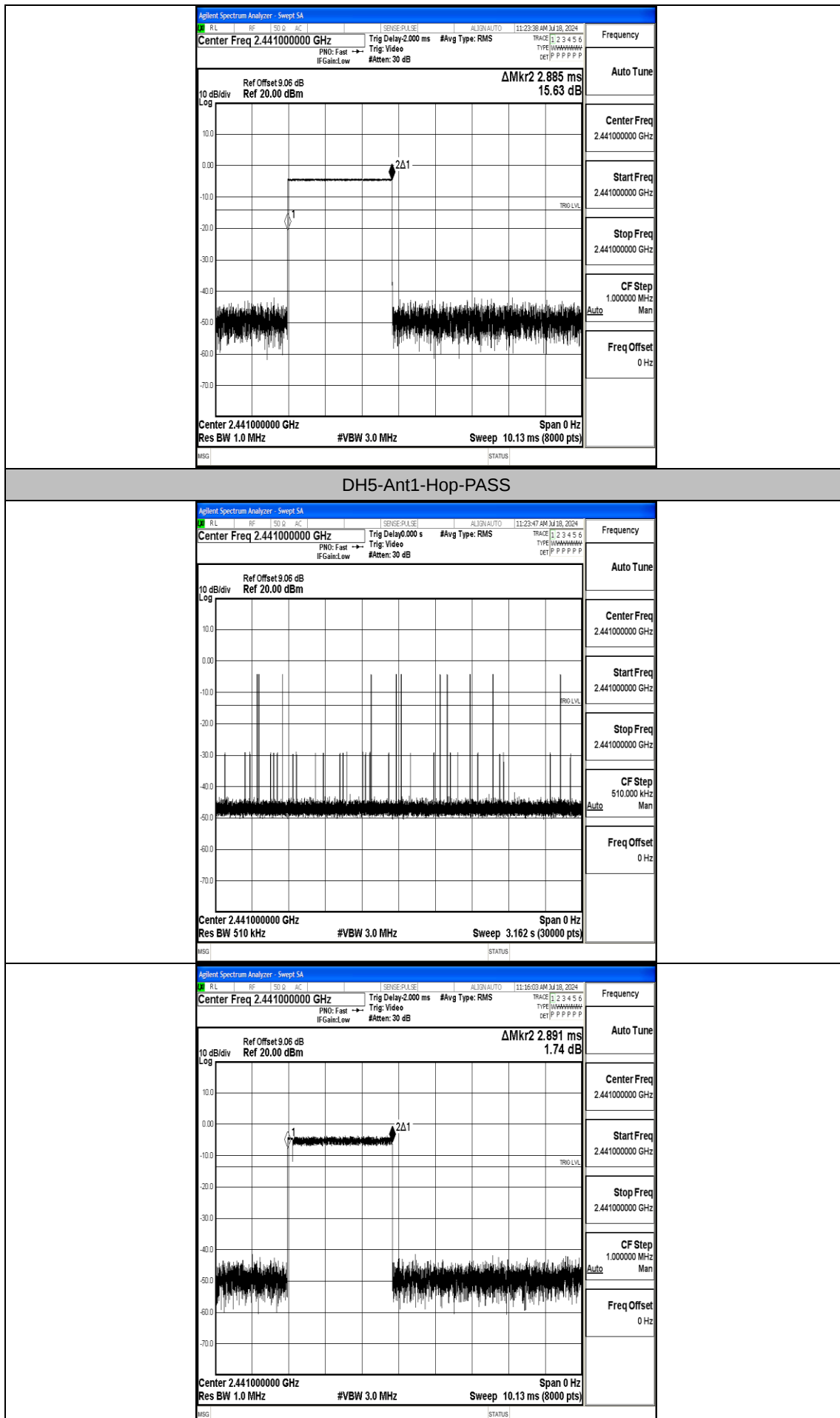


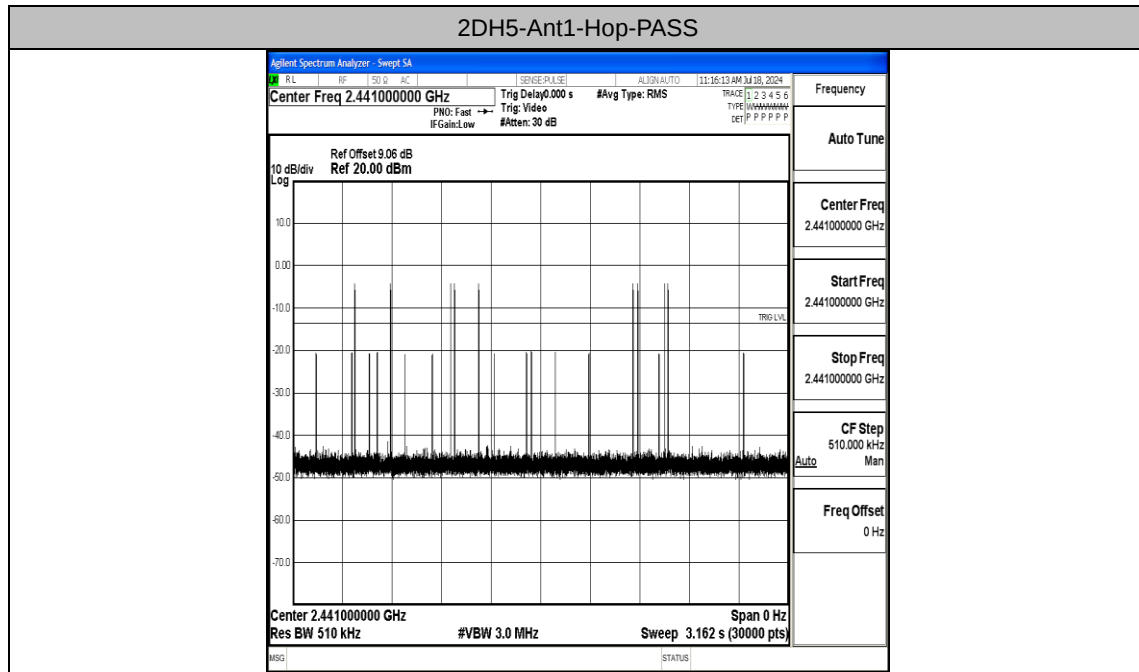
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	120	0.346	≤0.4	PASS
2DH5	Ant1	Hop	2.891	100	0.289	≤0.4	PASS

Test Graphs



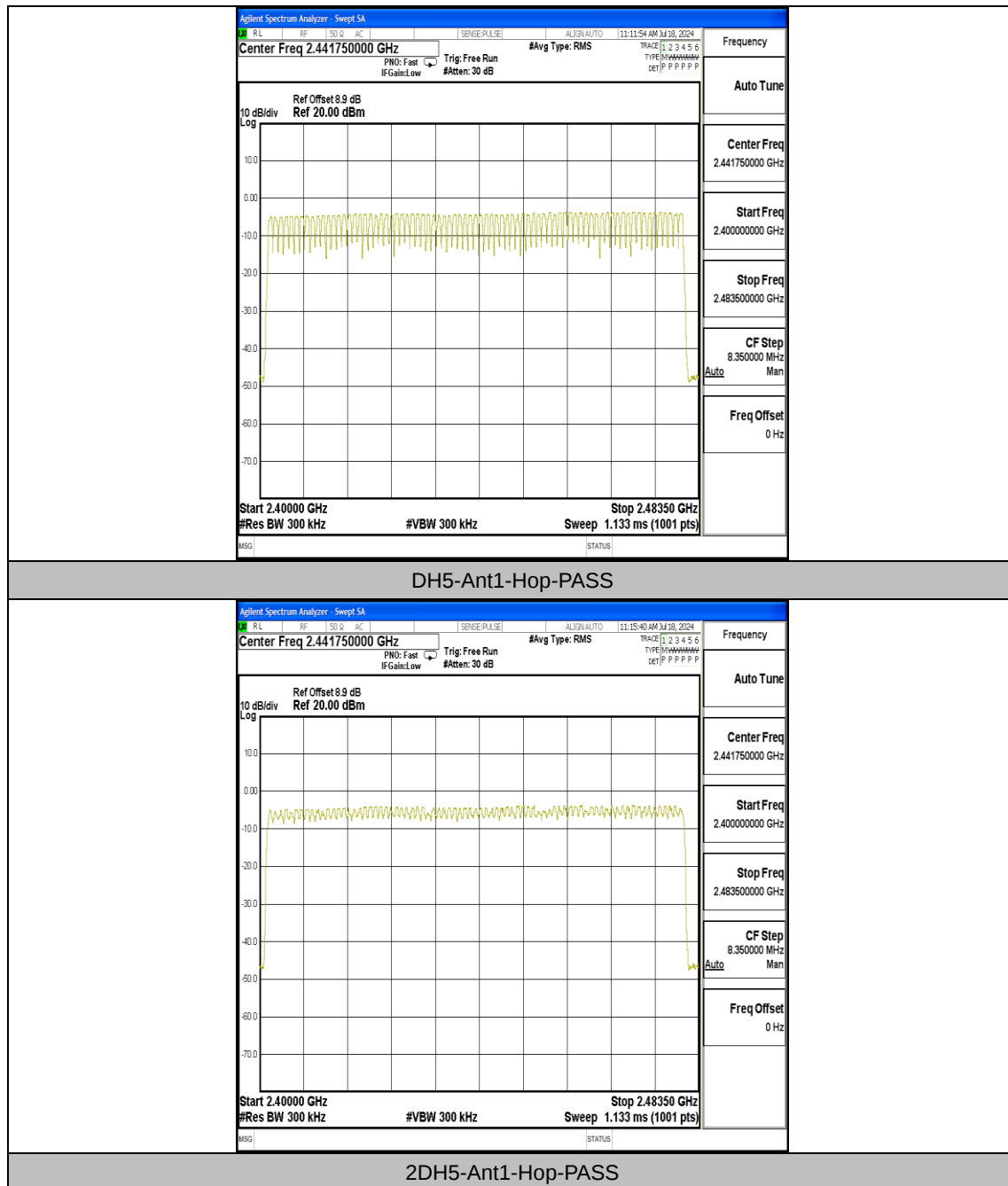


Appendix F: Number of hopping channels

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

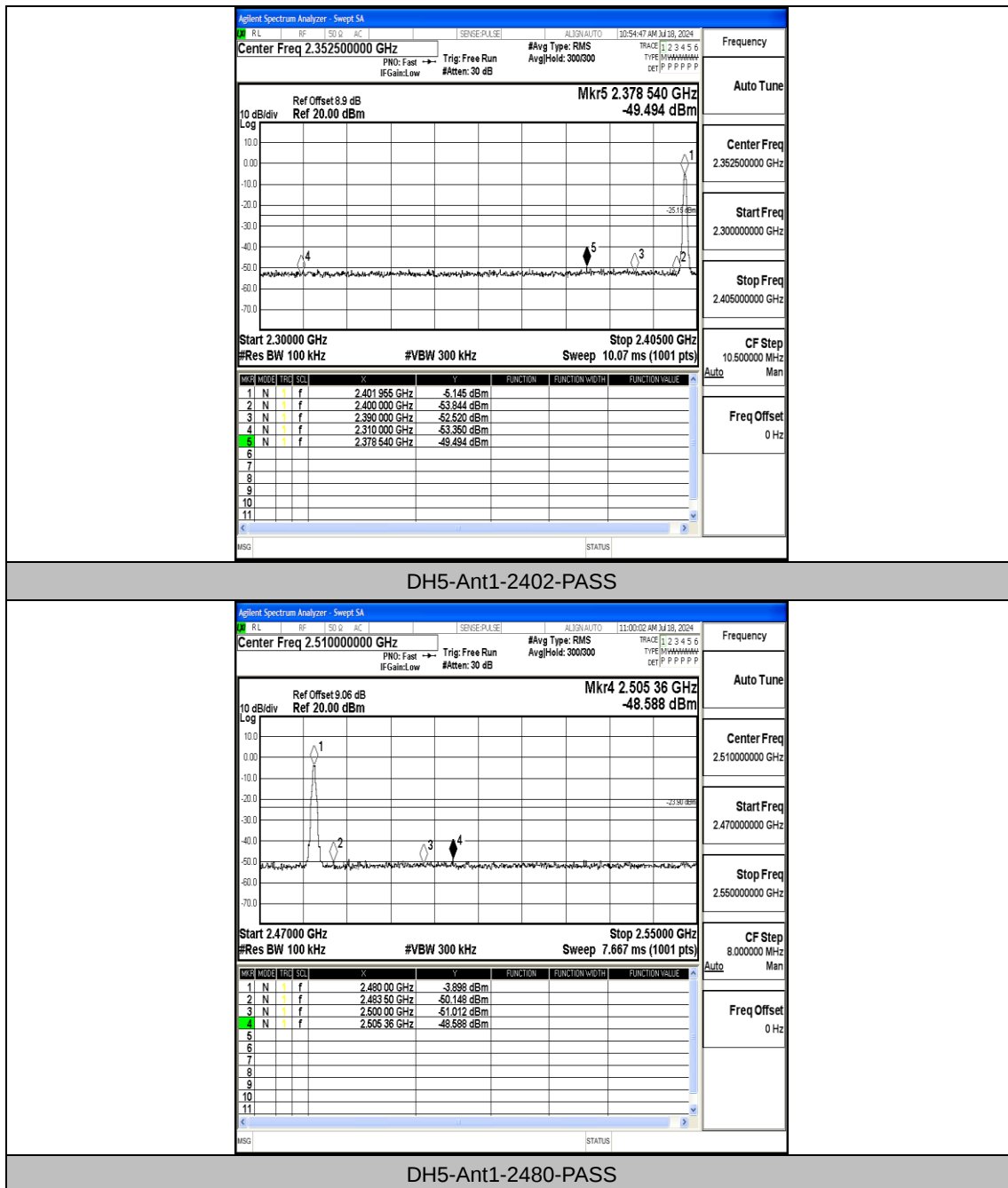


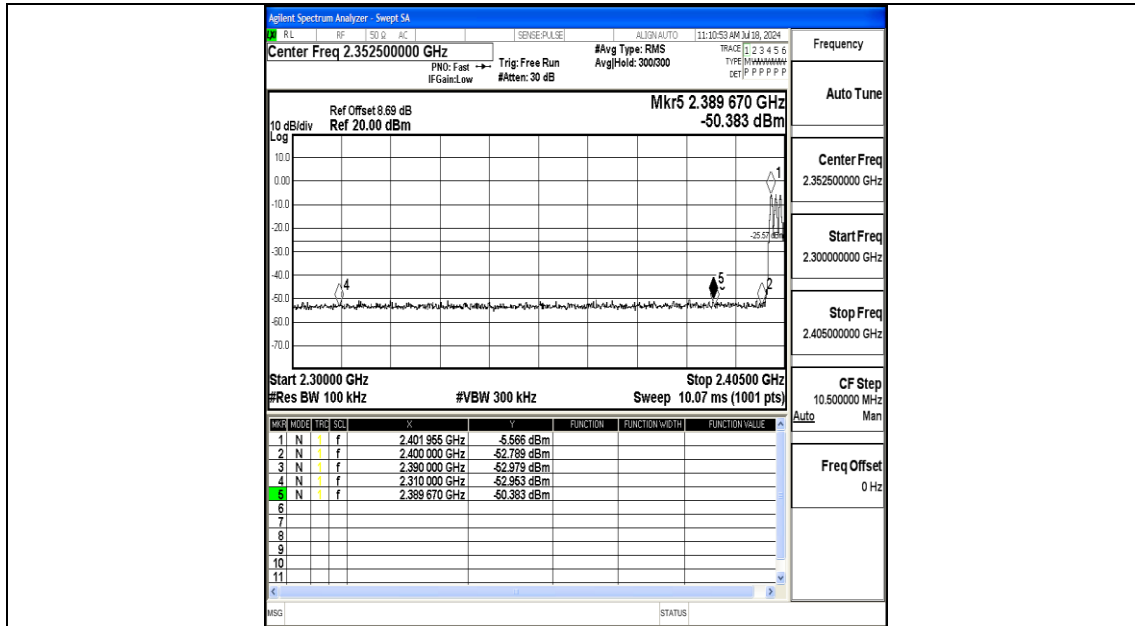
Appendix G: Band edge measurements

Test Result

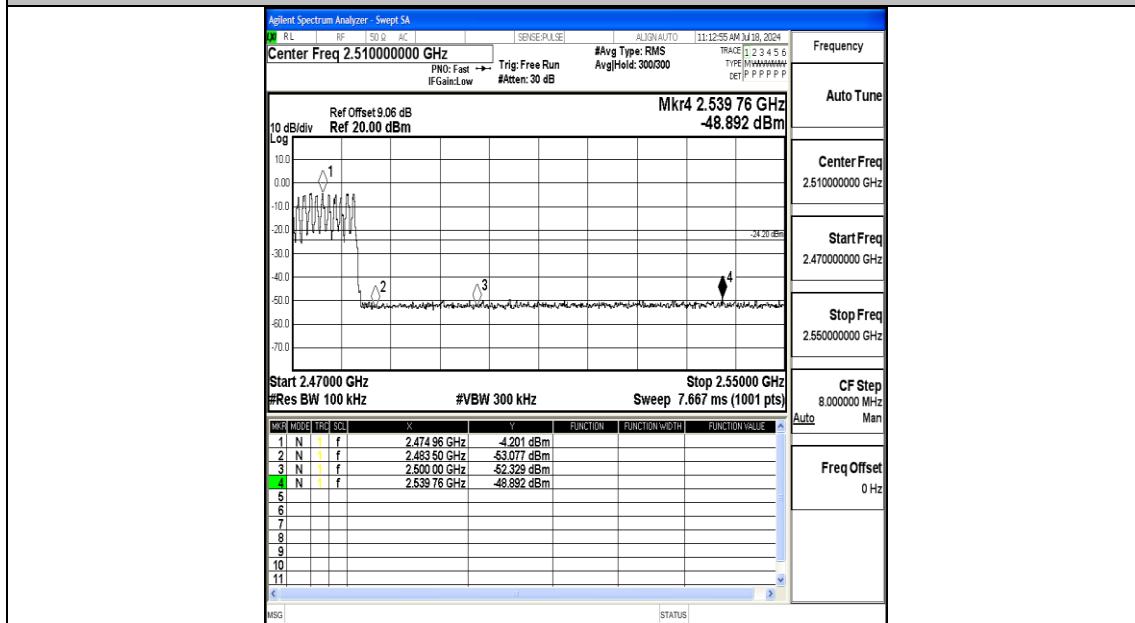
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-5.15	-49.49	≤ -25.15	PASS
DH5	Ant1	High	2480	-3.90	-48.59	≤ -23.9	PASS
DH5	Ant1	Low	Hop_2402	-5.57	-50.38	≤ -25.57	PASS
DH5	Ant1	High	Hop_2480	-4.20	-48.89	≤ -24.2	PASS
2DH5	Ant1	Low	2402	-5.31	-50.18	≤ -25.31	PASS
2DH5	Ant1	High	2480	-3.96	-49.47	≤ -23.96	PASS
2DH5	Ant1	Low	Hop_2402	-6.09	-51.01	≤ -26.09	PASS
2DH5	Ant1	High	Hop_2480	-4.02	-49.2	≤ -24.02	PASS

Test Graphs

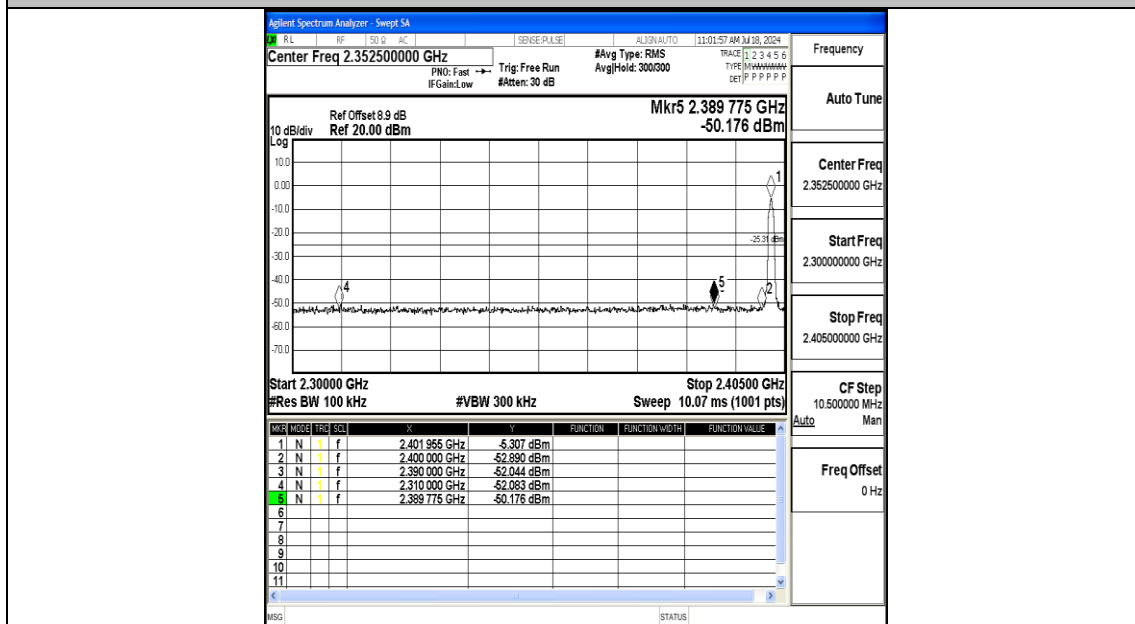




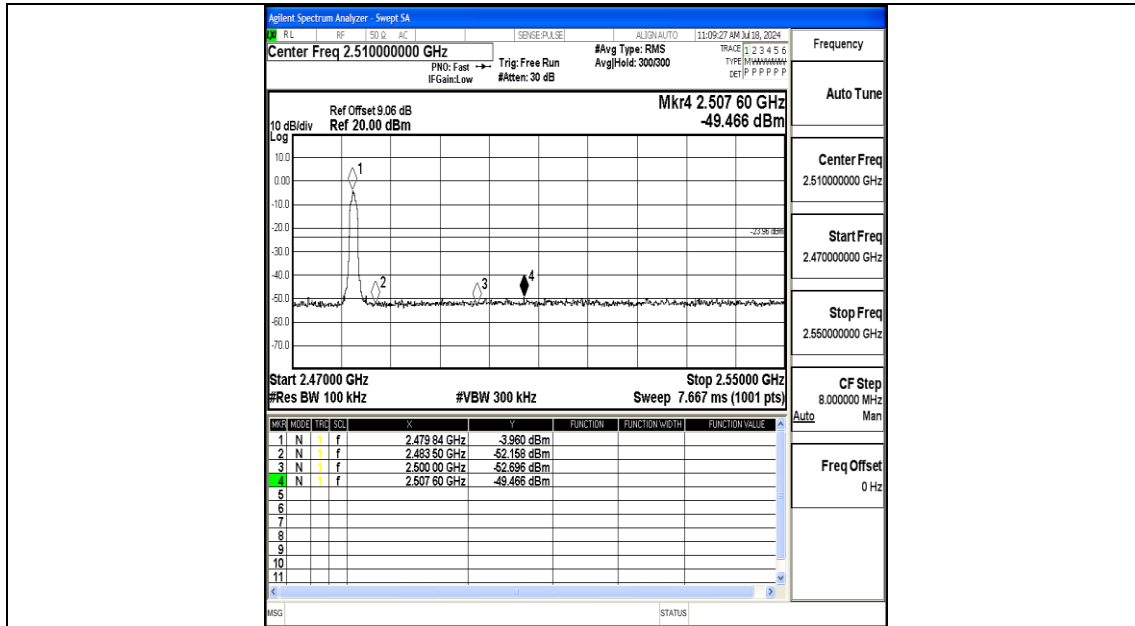
DH5-Ant1-Hop_2402-PASS



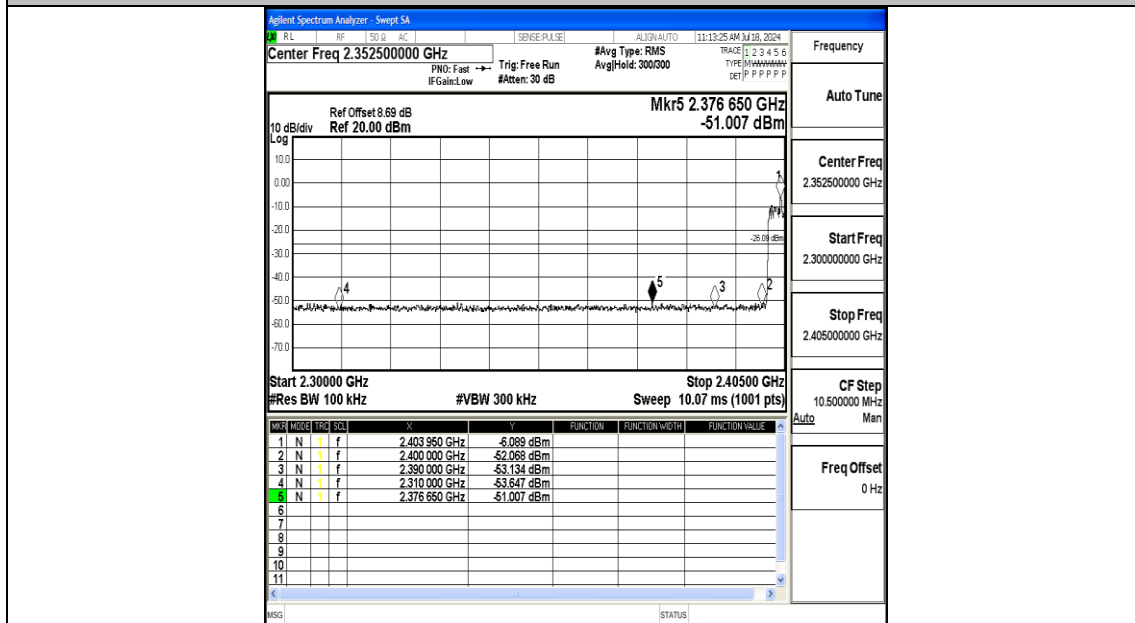
DH5-Ant1-Hop_2480-PASS



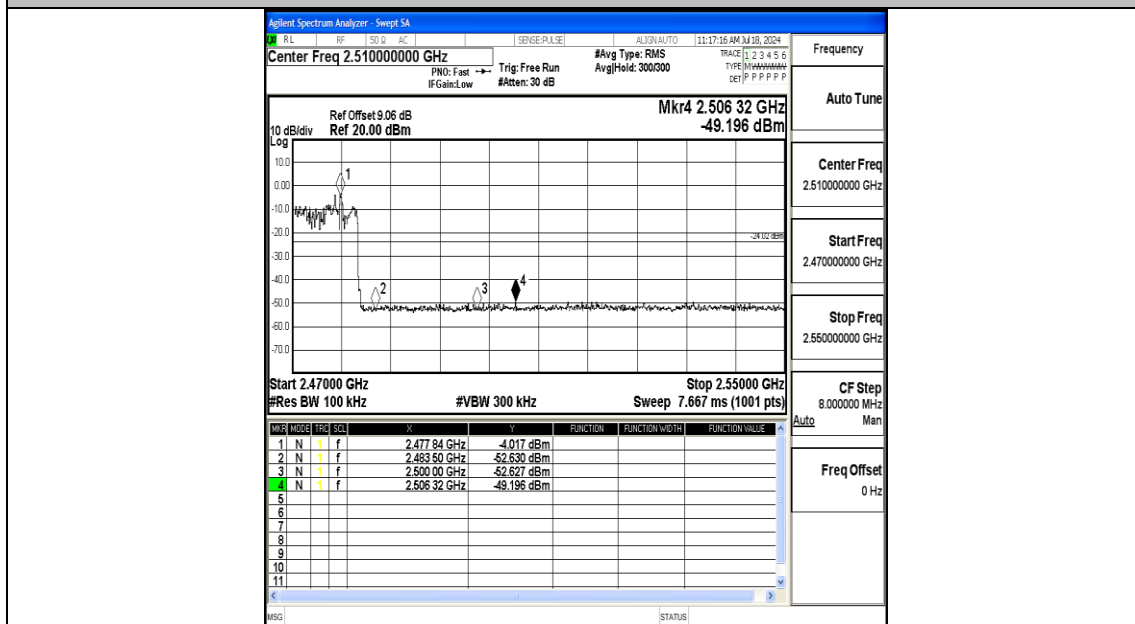
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



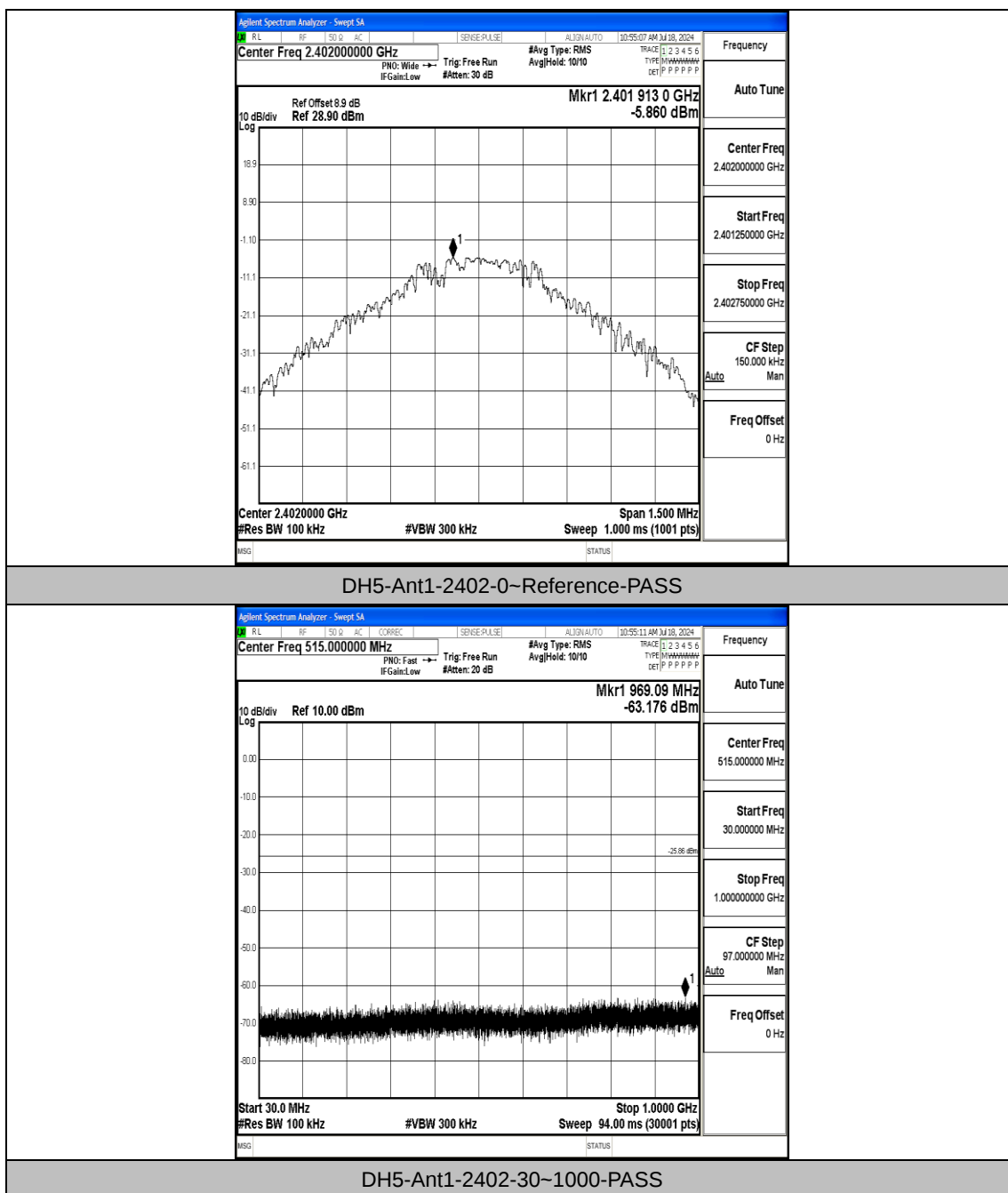
2DH5-Ant1-Hop_2480-PASS

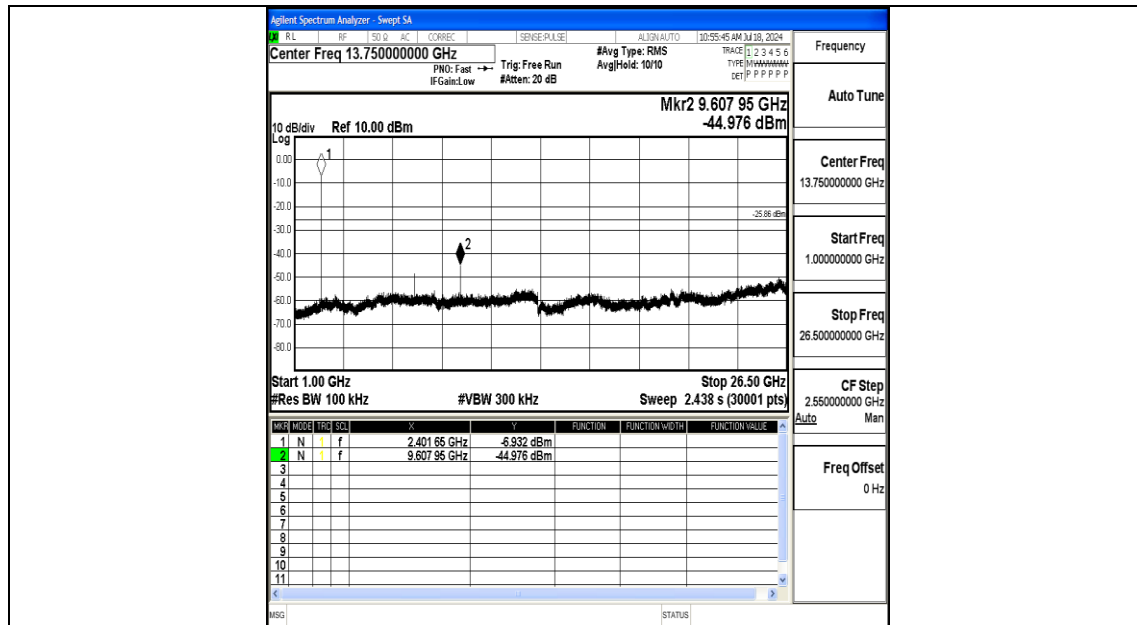
Appendix H: Conducted Spurious Emission

Test Result

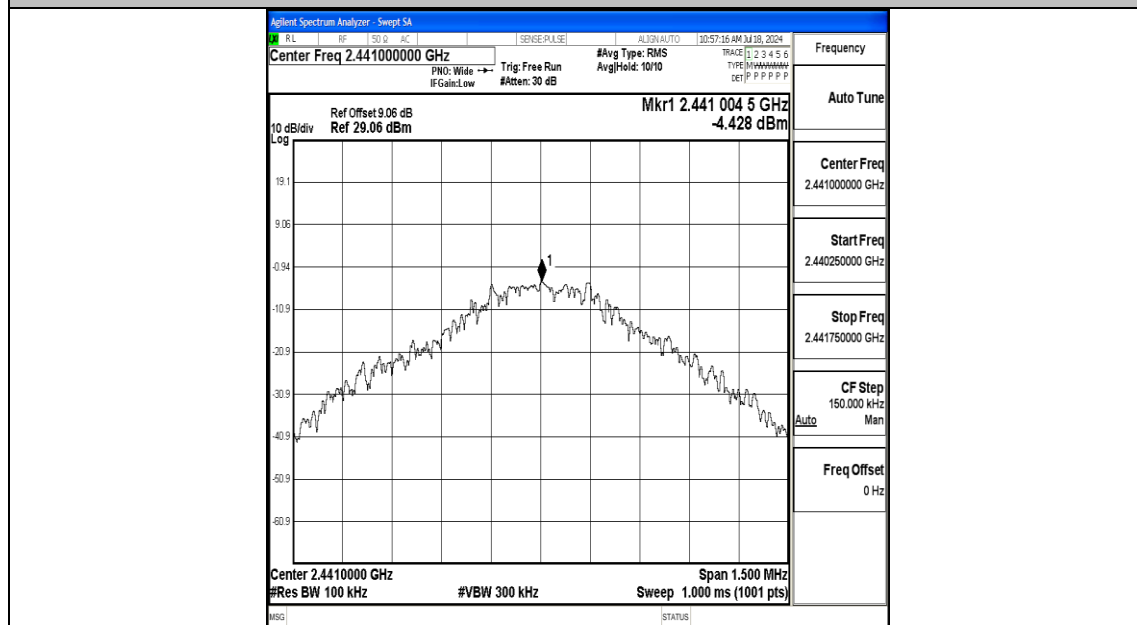
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-5.86	-5.86	---	PASS
DH5	Ant1	2402	30~1000	-5.86	-63.18	≤-25.86	PASS
DH5	Ant1	2402	1000~26500	-5.86	-44.98	≤-25.86	PASS
DH5	Ant1	2441	0~Reference	-4.43	-4.43	---	PASS
DH5	Ant1	2441	30~1000	-4.43	-61.73	≤-24.43	PASS
DH5	Ant1	2441	1000~26500	-4.43	-44.44	≤-24.43	PASS
DH5	Ant1	2480	0~Reference	-4.66	-4.66	---	PASS
DH5	Ant1	2480	30~1000	-4.66	-62.11	≤-24.66	PASS
DH5	Ant1	2480	1000~26500	-4.66	-44.42	≤-24.66	PASS
2DH5	Ant1	2402	0~Reference	-5.41	-5.41	---	PASS
2DH5	Ant1	2402	30~1000	-5.41	-62.32	≤-25.41	PASS
2DH5	Ant1	2402	1000~26500	-5.41	-44.5	≤-25.41	PASS
2DH5	Ant1	2441	0~Reference	-8.65	-8.65	---	PASS
2DH5	Ant1	2441	30~1000	-8.65	-62.98	≤-28.65	PASS
2DH5	Ant1	2441	1000~26500	-8.65	-44.89	≤-28.65	PASS
2DH5	Ant1	2480	0~Reference	-7.06	-7.06	---	PASS
2DH5	Ant1	2480	30~1000	-7.06	-62.93	≤-27.06	PASS
2DH5	Ant1	2480	1000~26500	-7.06	-44.02	≤-27.06	PASS

Test Graphs

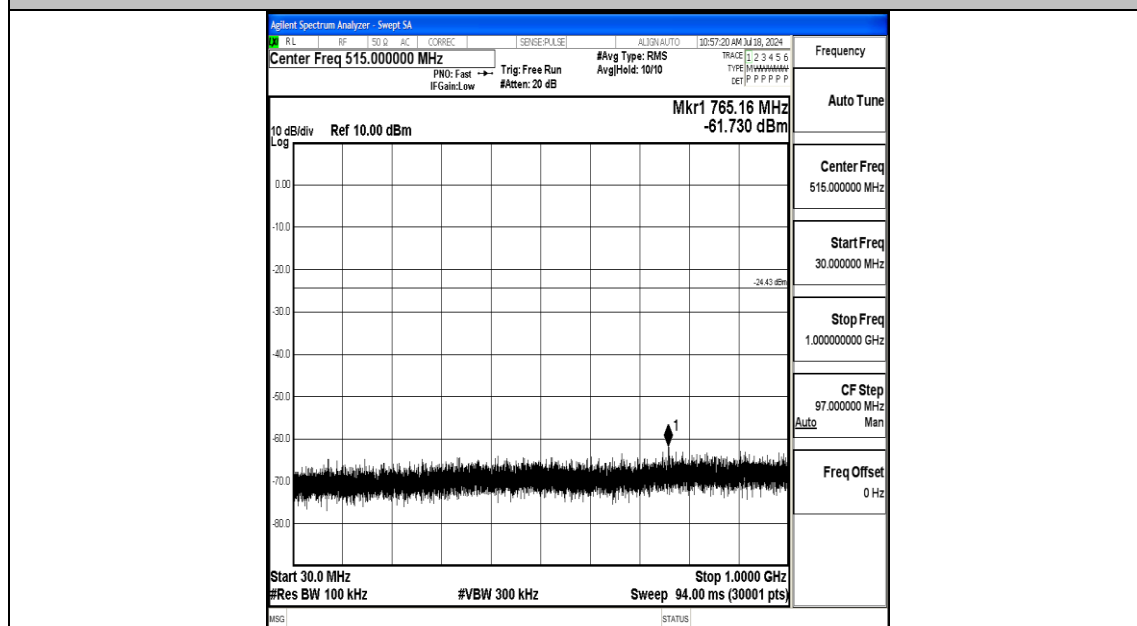




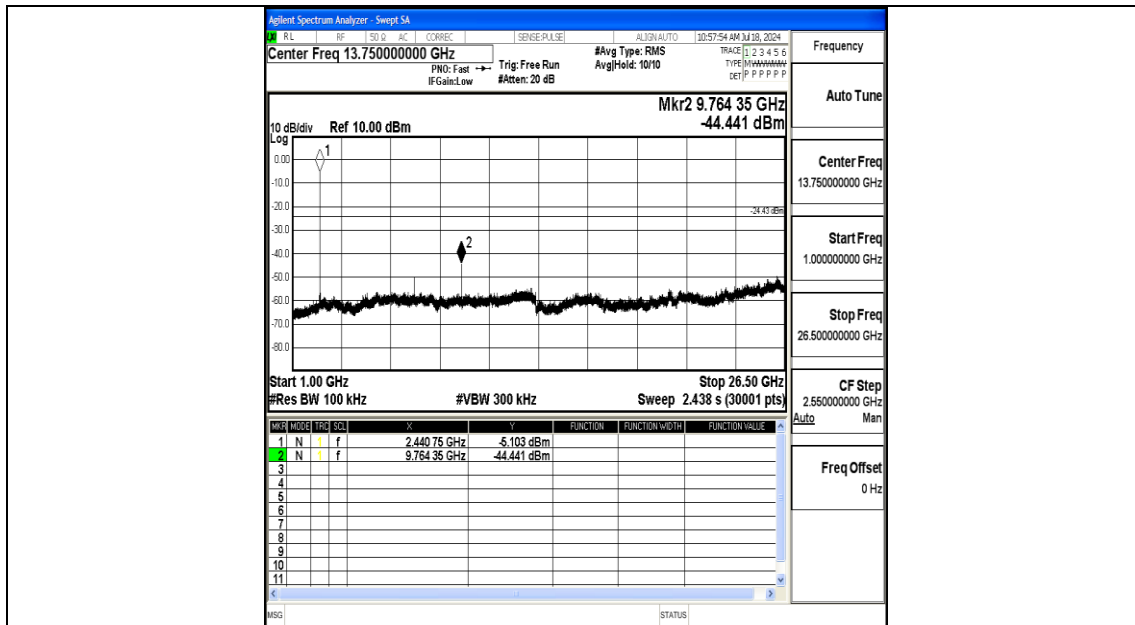
DH5-Ant1-2402-1000~26500-PASS



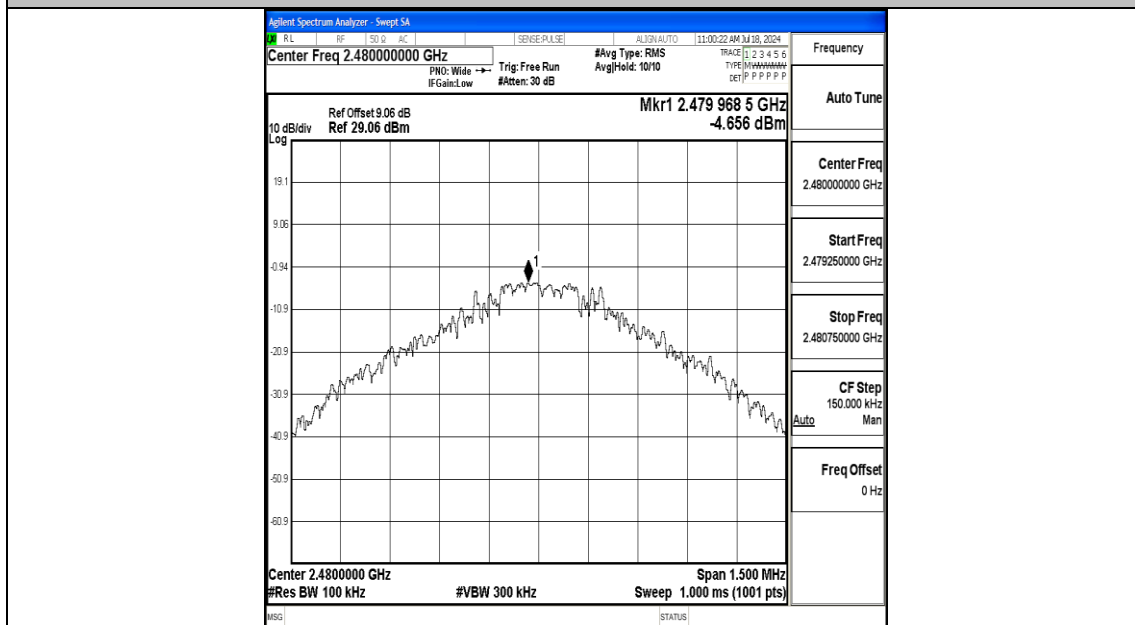
DH5-Ant1-2441-0~Reference-PASS



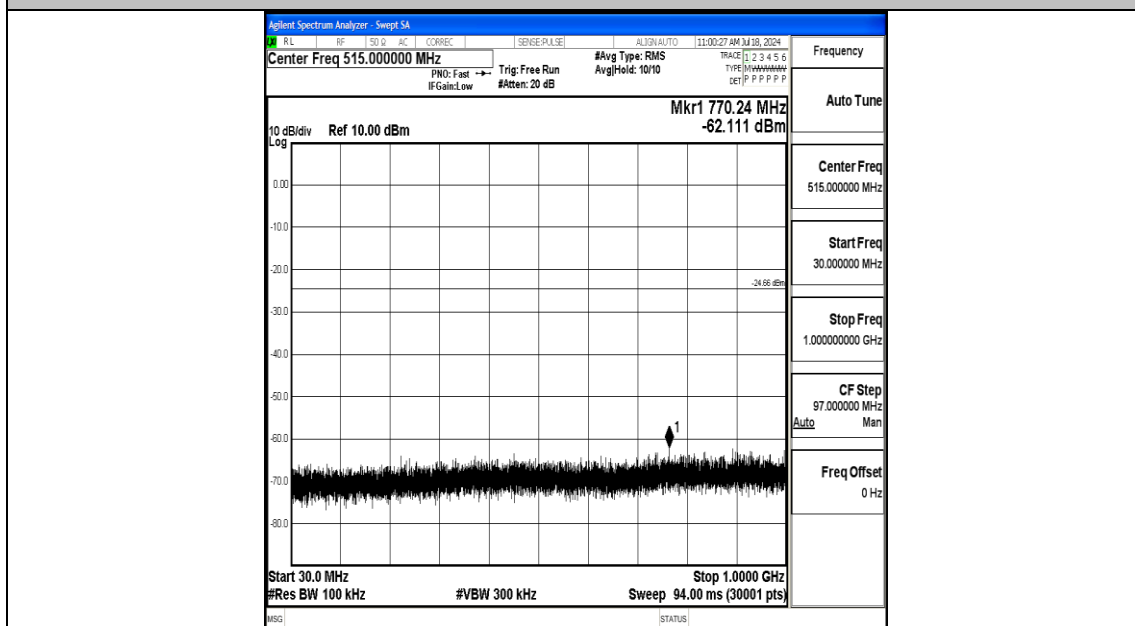
DH5-Ant1-2441-30~1000-PASS



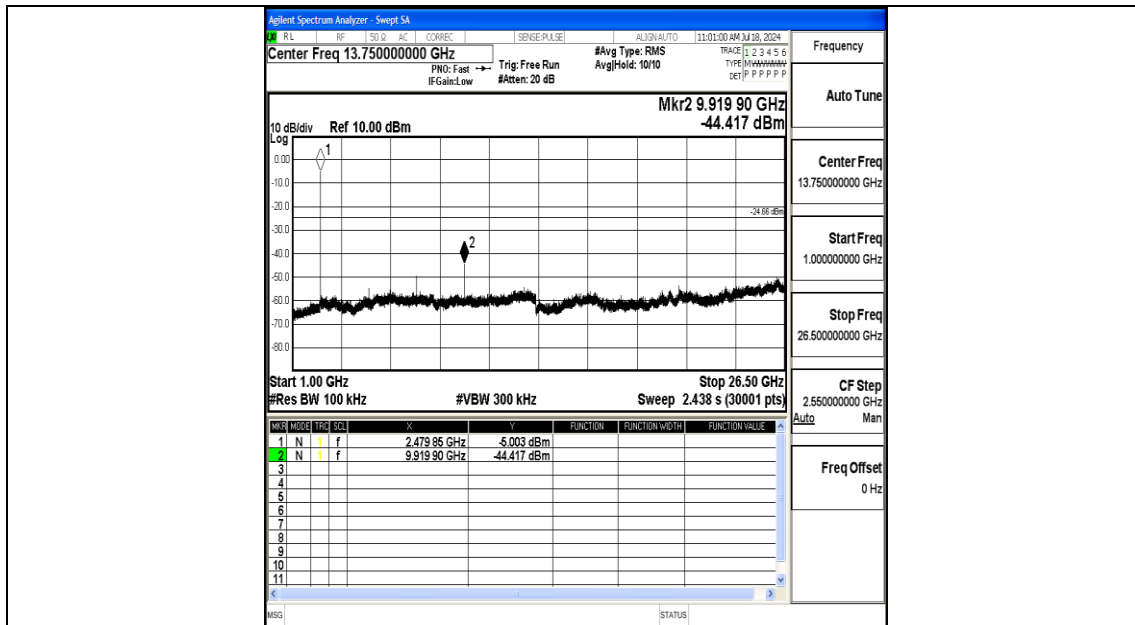
DH5-Ant1-2441-1000~26500-PASS



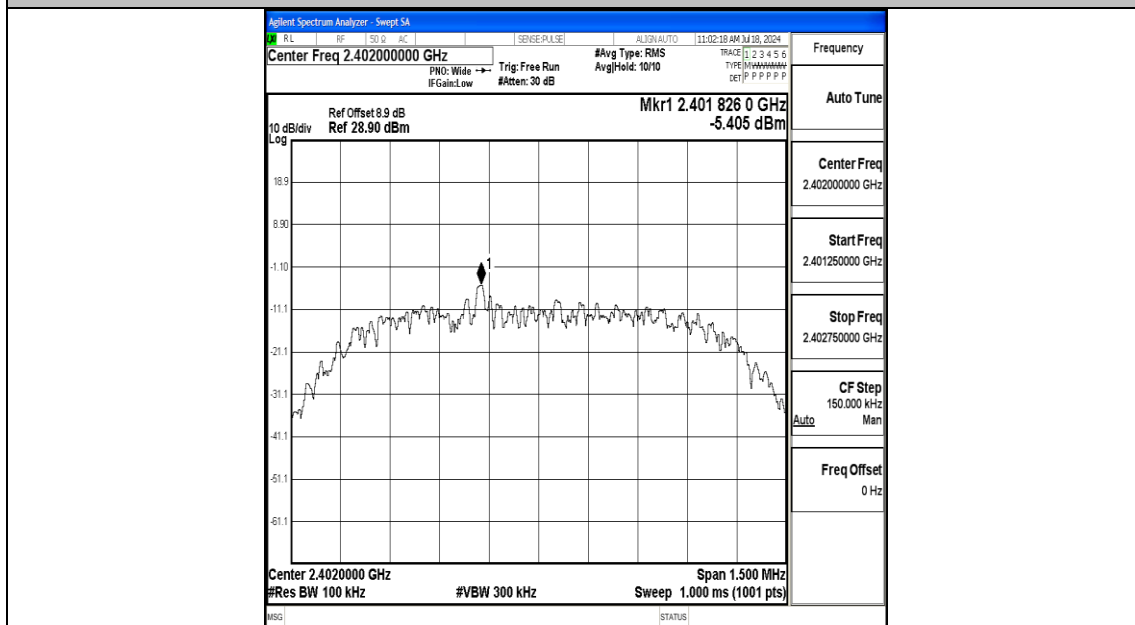
DH5-Ant1-2480-0~Reference-PASS



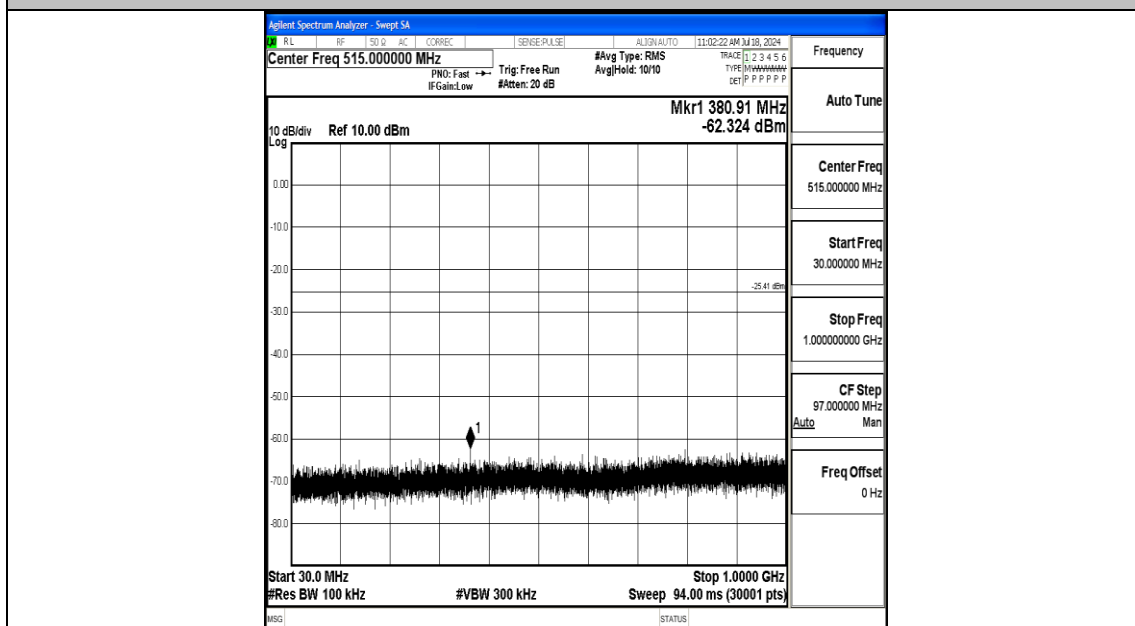
DH5-Ant1-2480-30~1000-PASS



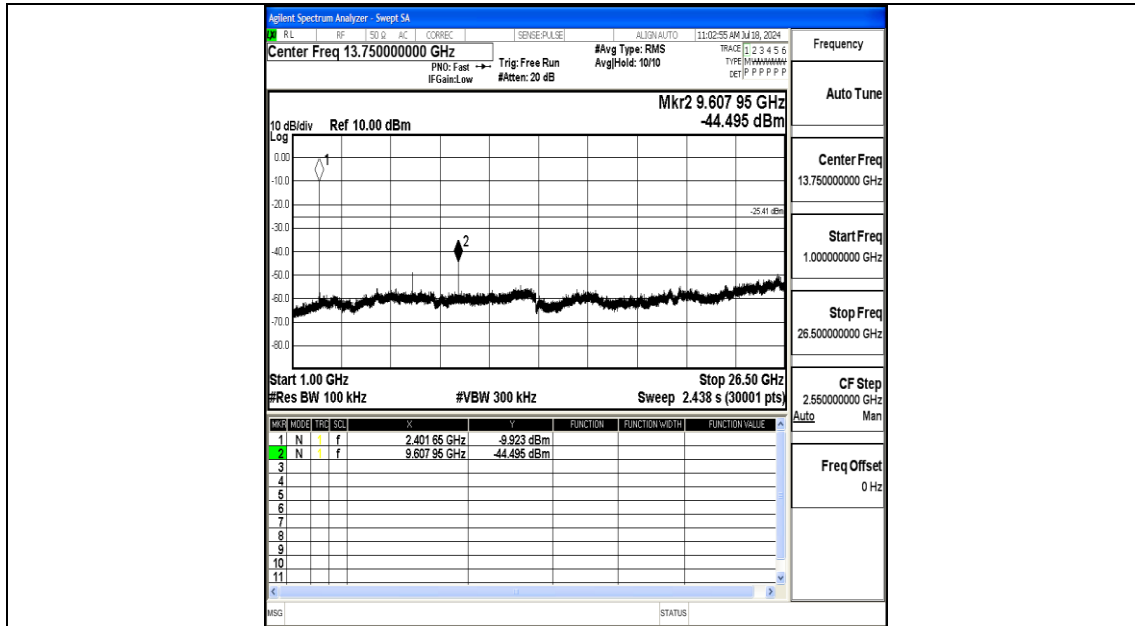
DH5-Ant1-2480-1000~26500-PASS



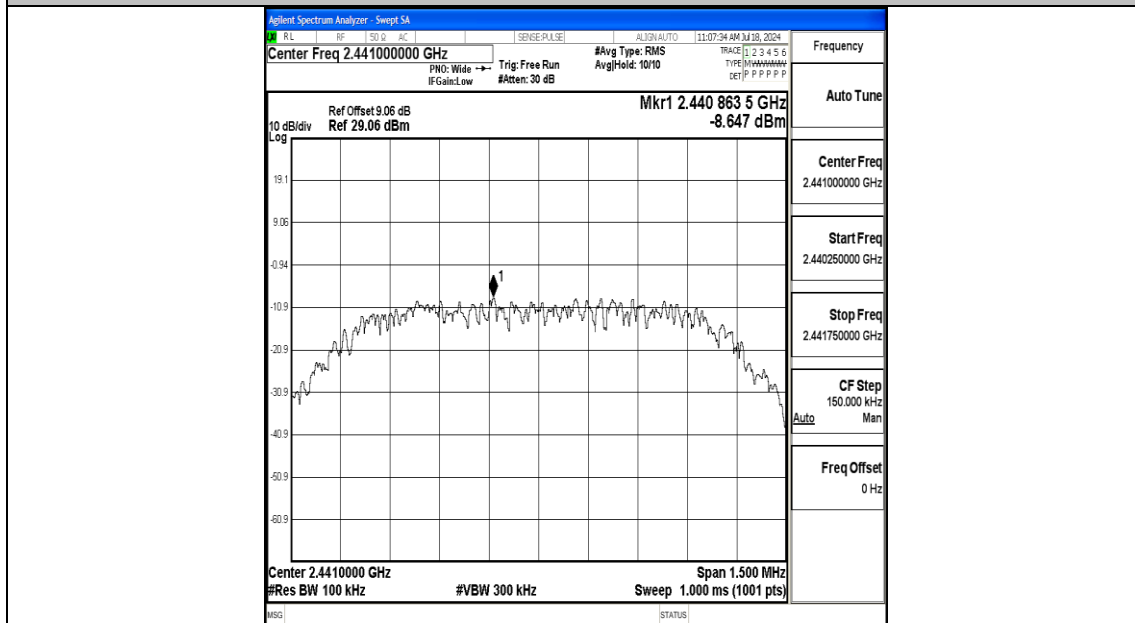
2DH5-Ant1-2402-0~Reference-PASS



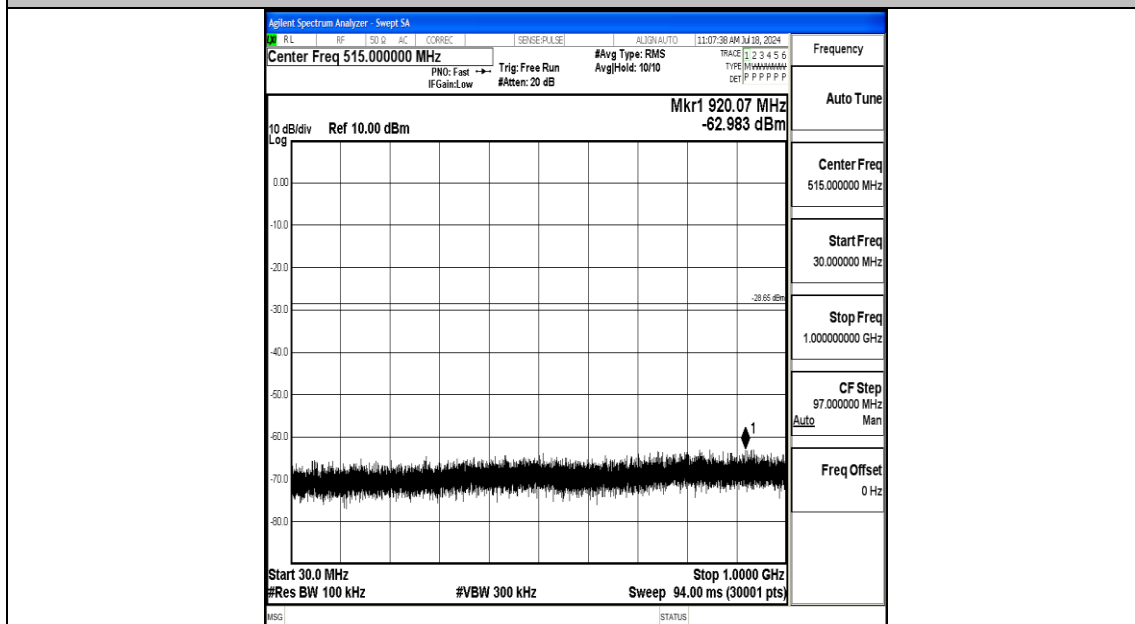
2DH5-Ant1-2402-30~1000-PASS



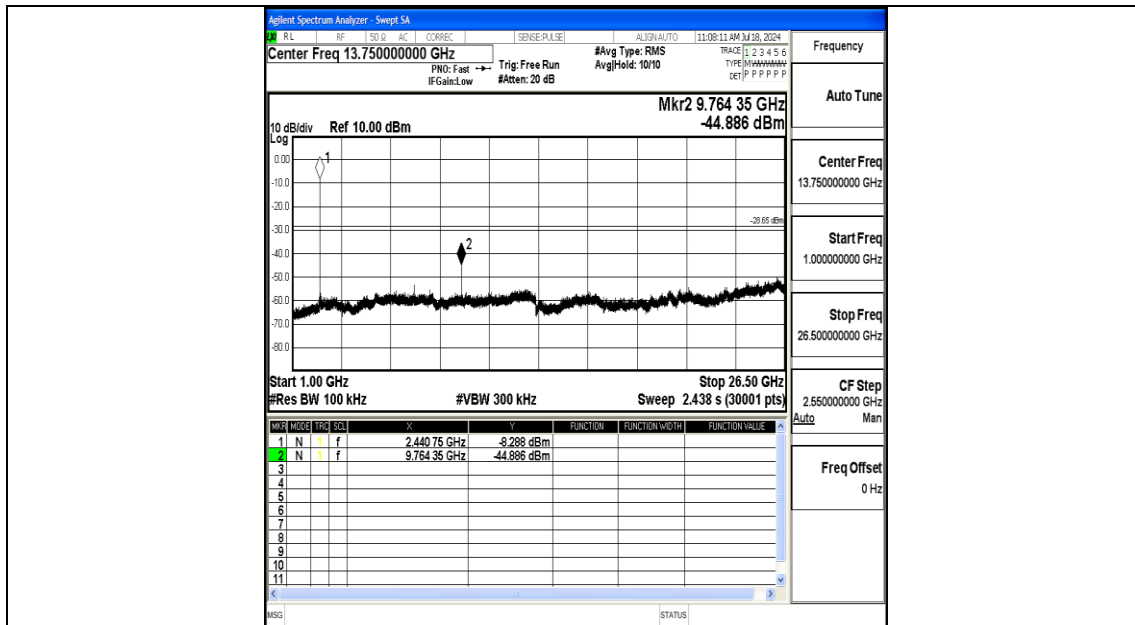
2DH5-Ant1-2402-1000~26500-PASS



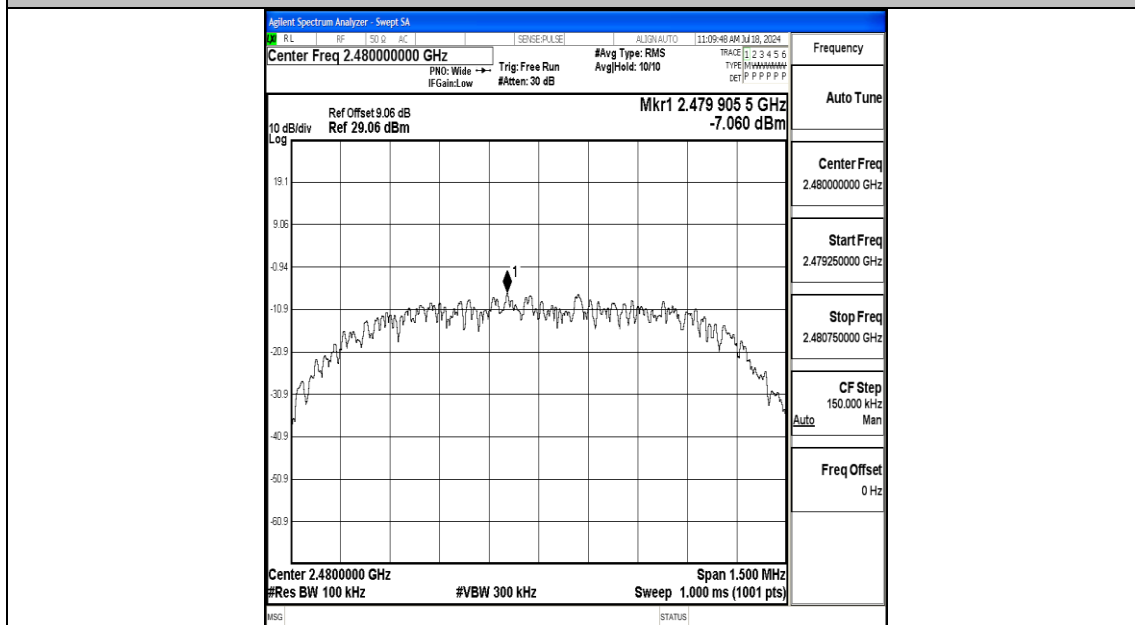
2DH5-Ant1-2441-0~Reference-PASS



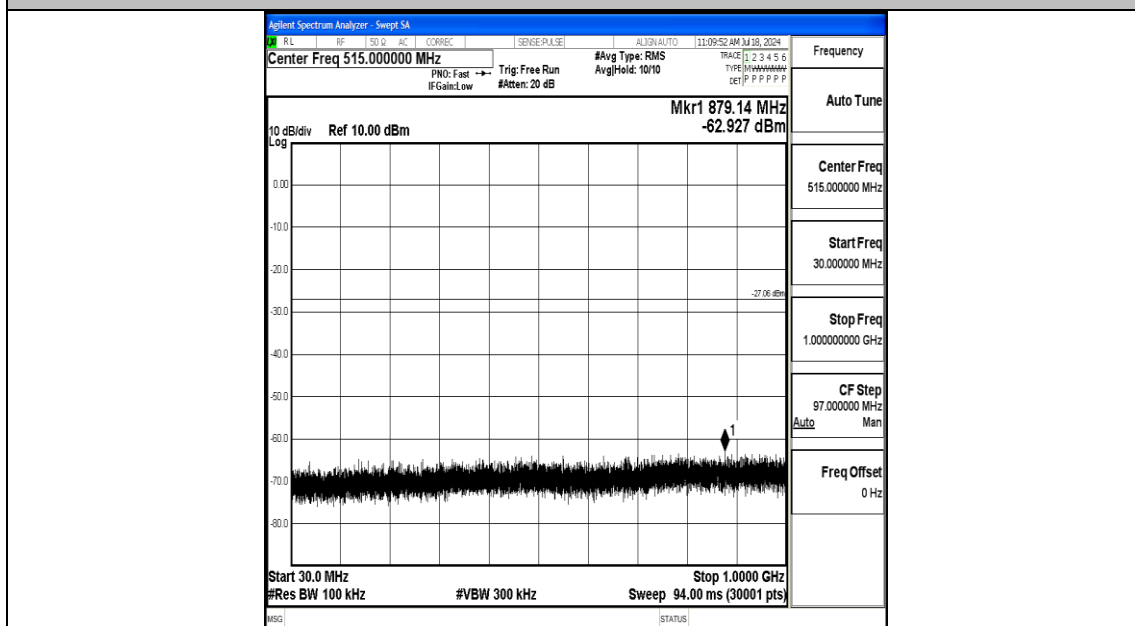
2DH5-Ant1-2441-30~1000-PASS



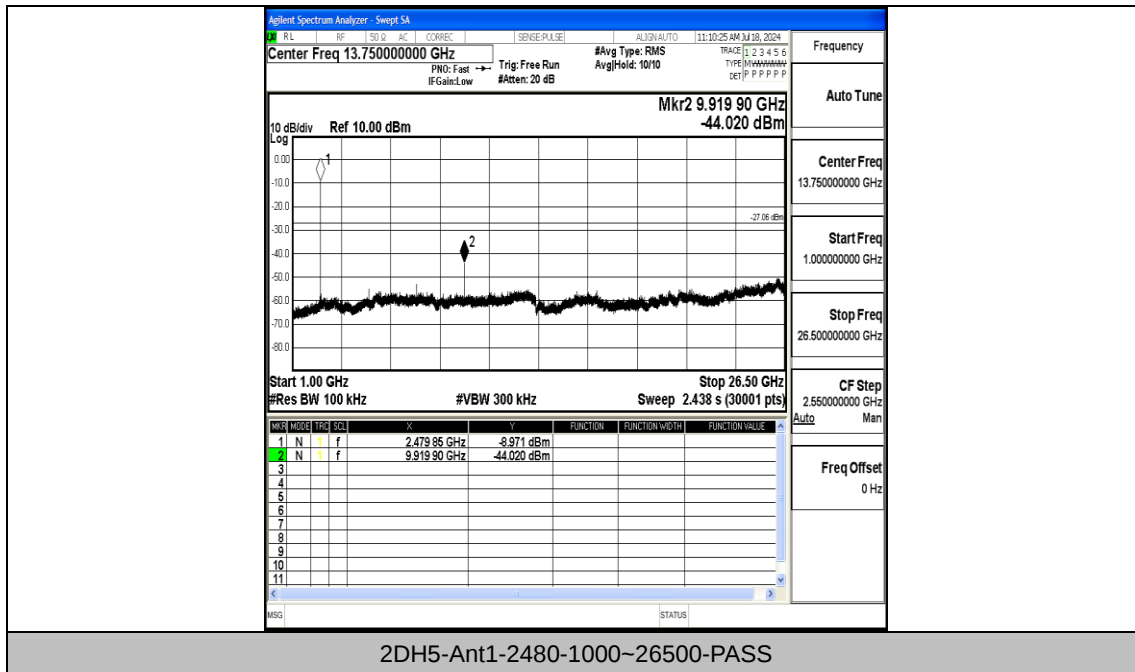
2DH5-Ant1-2441-1000~26500-PASS



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



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

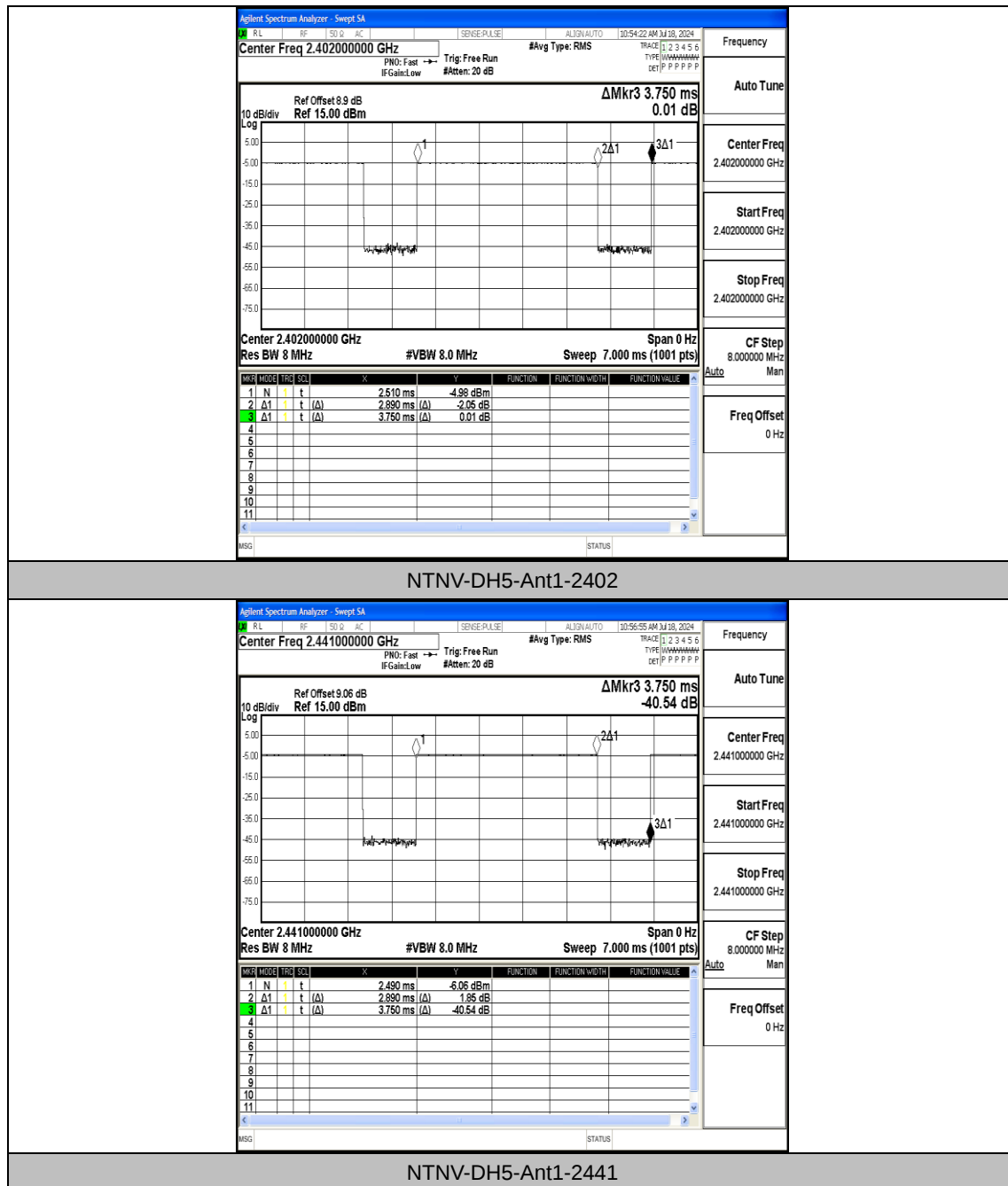


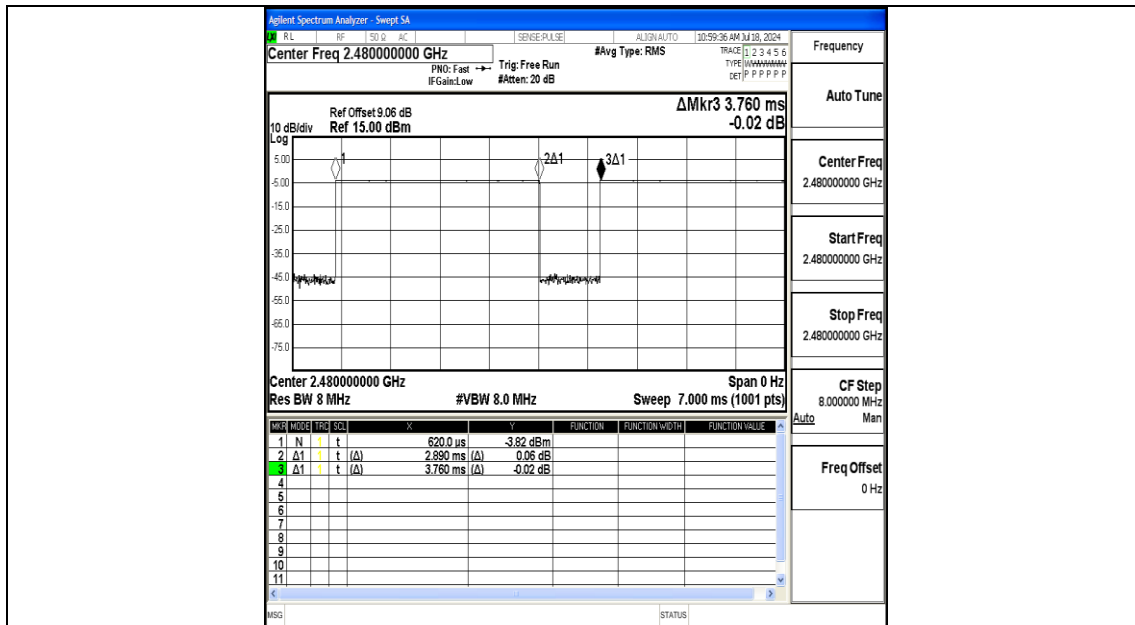
Appendix I: Duty Cycle

Test Result

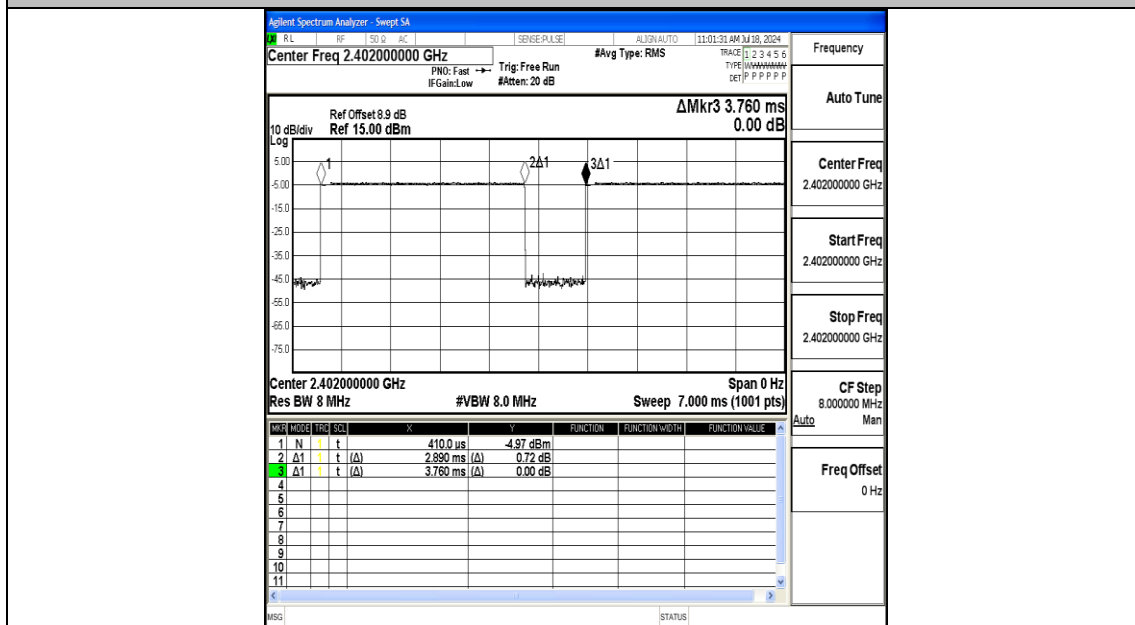
TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.89	3.75	77.07	1.13
DH5	Ant1	2441	2.89	3.75	77.07	1.13
DH5	Ant1	2480	2.89	3.76	76.86	1.14
2DH5	Ant1	2402	2.89	3.76	76.86	1.14
2DH5	Ant1	2441	2.89	3.74	77.27	1.12
2DH5	Ant1	2480	2.90	3.74	77.54	1.10

Test Graphs

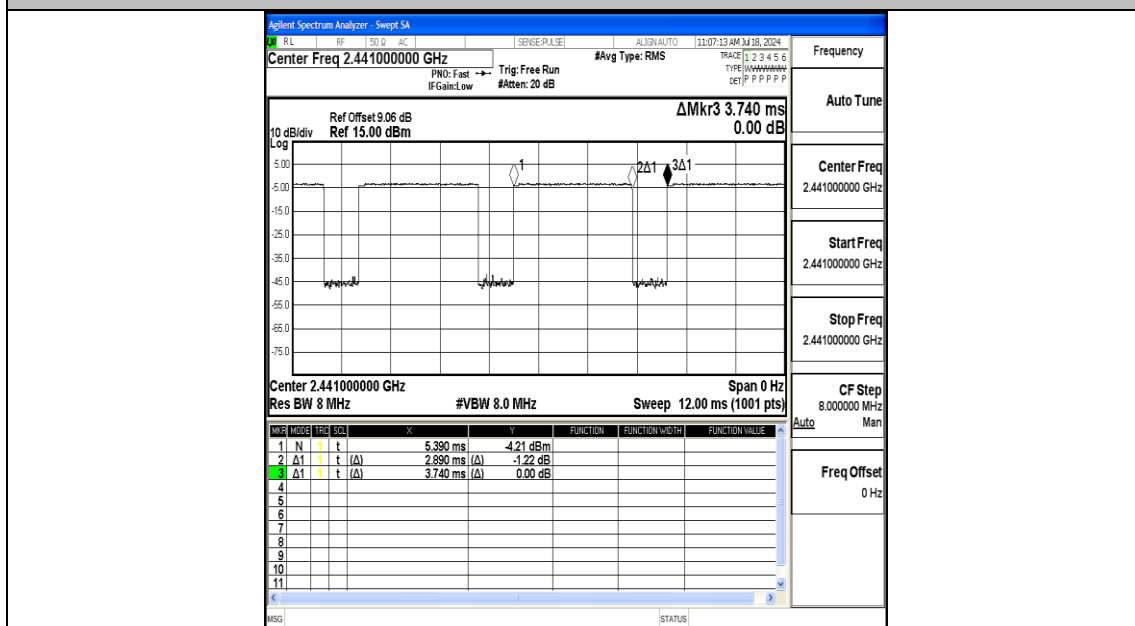




NTNV-DH5-Ant1-2480



NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441

