

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

Product Name: Bluetooth Speaker

Trade Mark: MAILANGSHI

Test Model: M27

FCC ID: 2BMWR-M27

Environmental Conditions

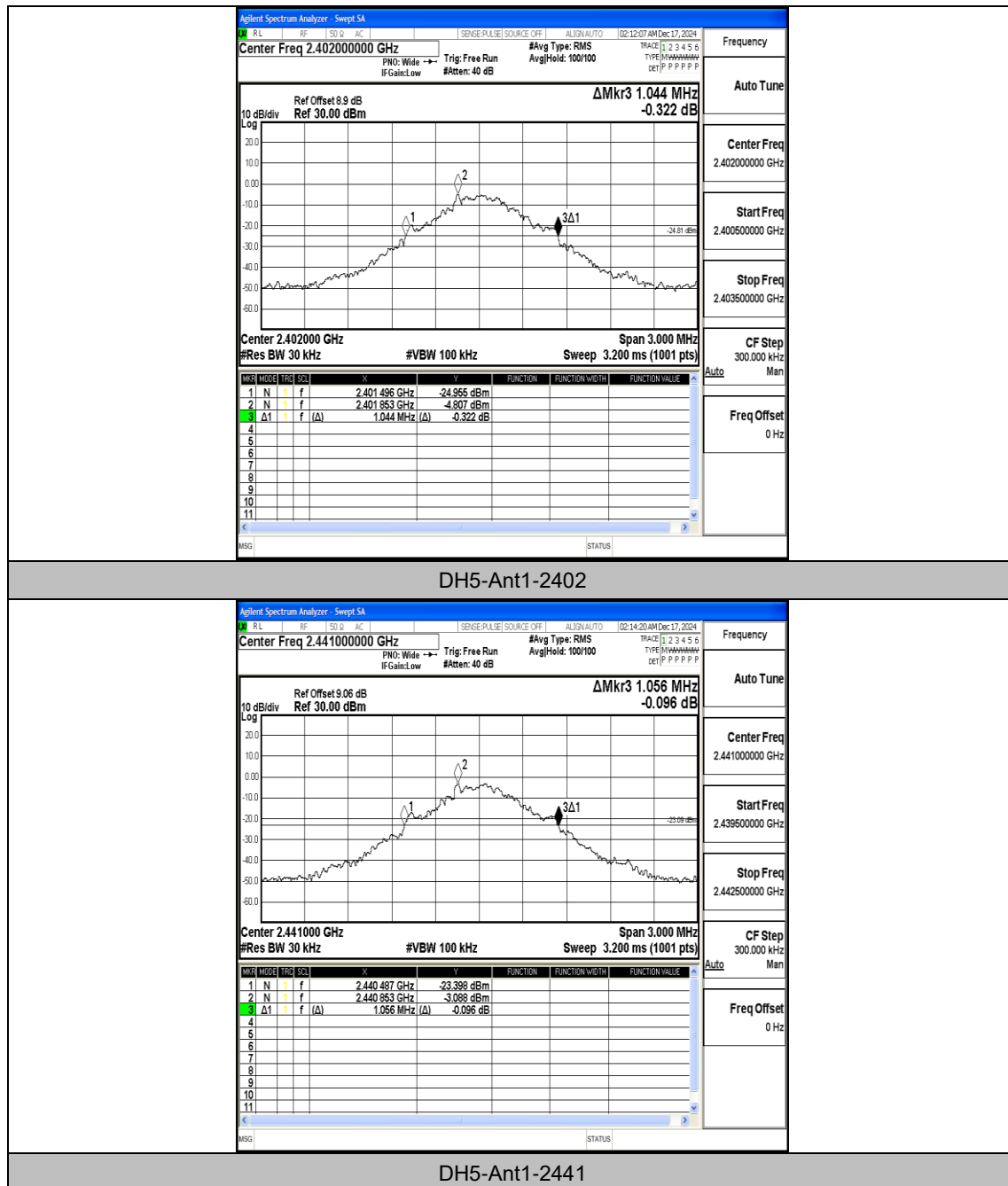
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

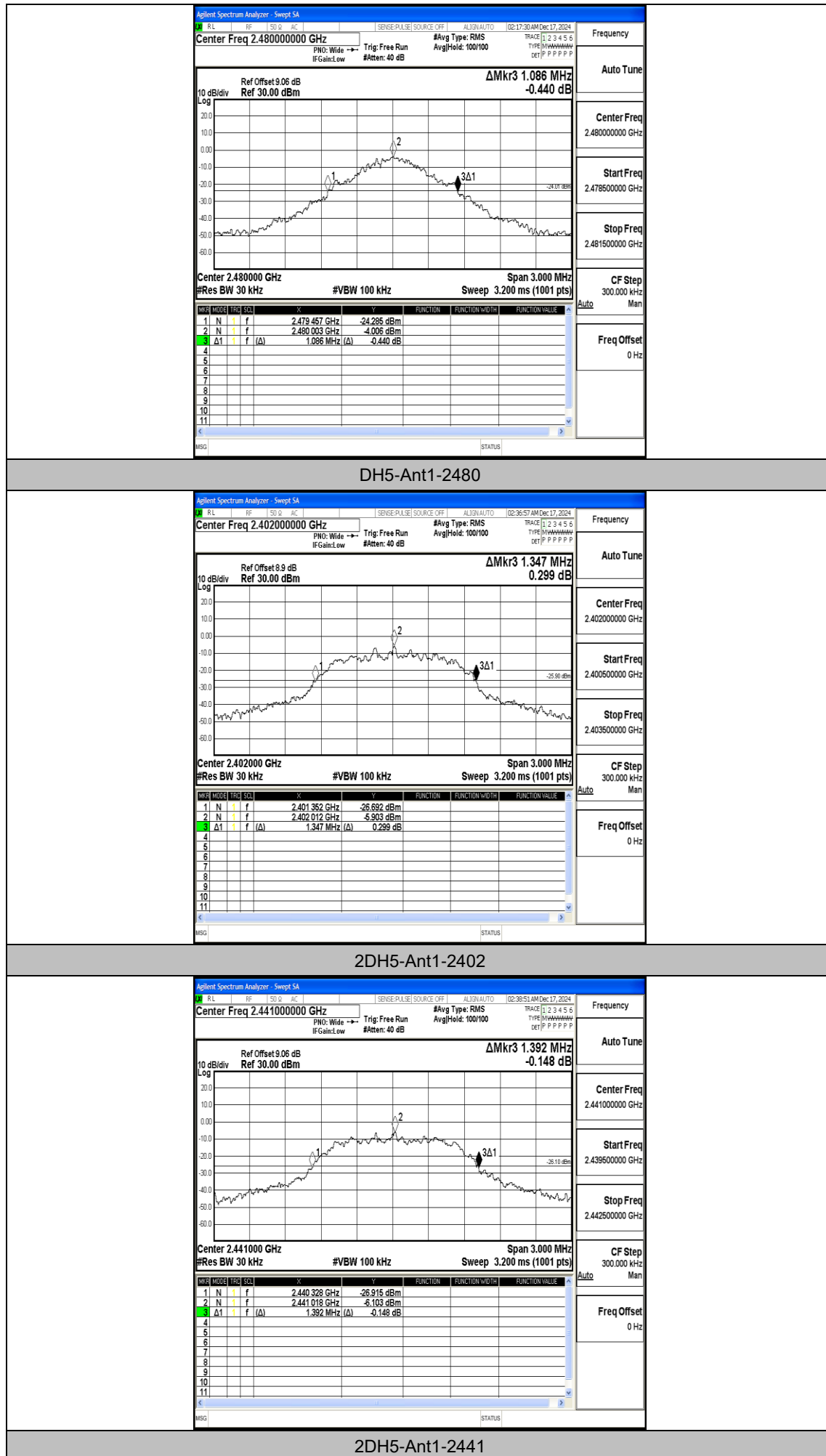
Appendix A: 20dB Emission Bandwidth

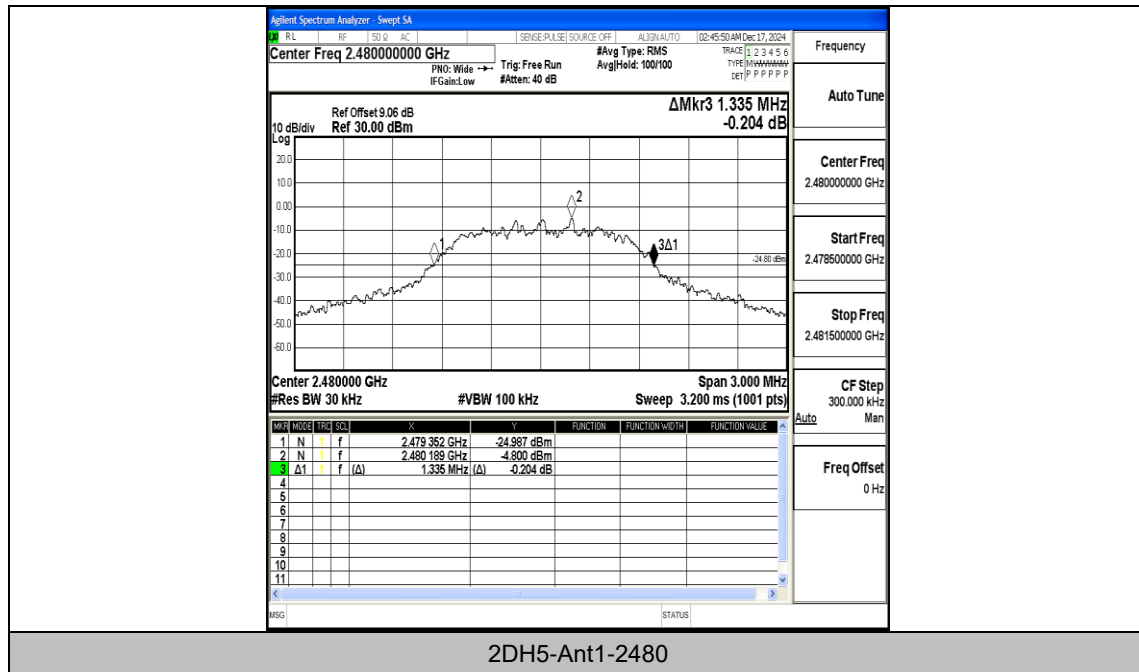
Test Result

Test Mode	Antenna	Frequency [MHz]	20db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	1.044	2401.496	2402.540	---	---
DH5	Ant1	2441	1.056	2440.487	2441.543	---	---
DH5	Ant1	2480	1.086	2479.457	2480.543	---	---
2DH5	Ant1	2402	1.347	2401.352	2402.699	---	---
2DH5	Ant1	2441	1.392	2440.328	2441.720	---	---
2DH5	Ant1	2480	1.335	2479.352	2480.687	---	---

Test Graphs





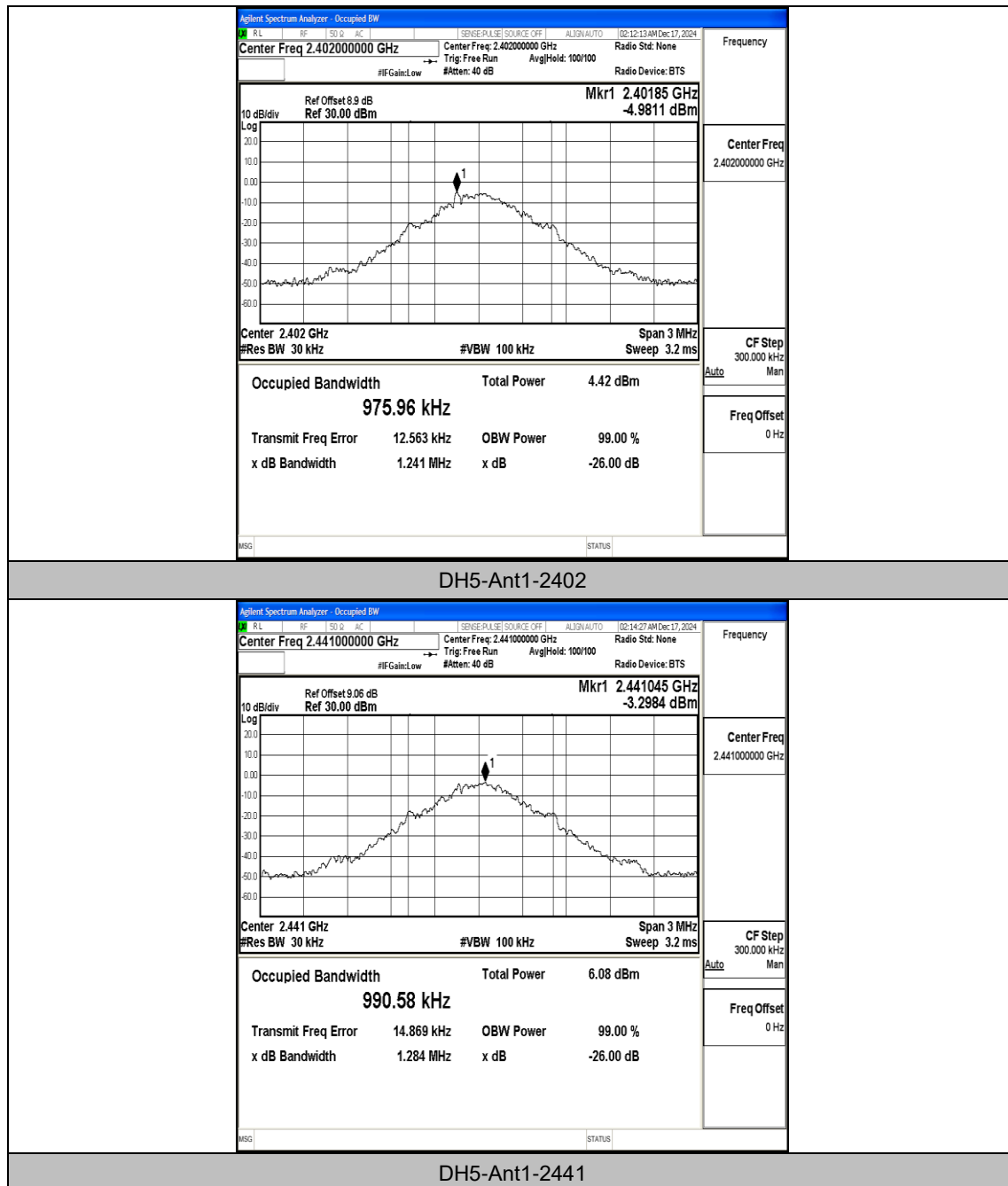


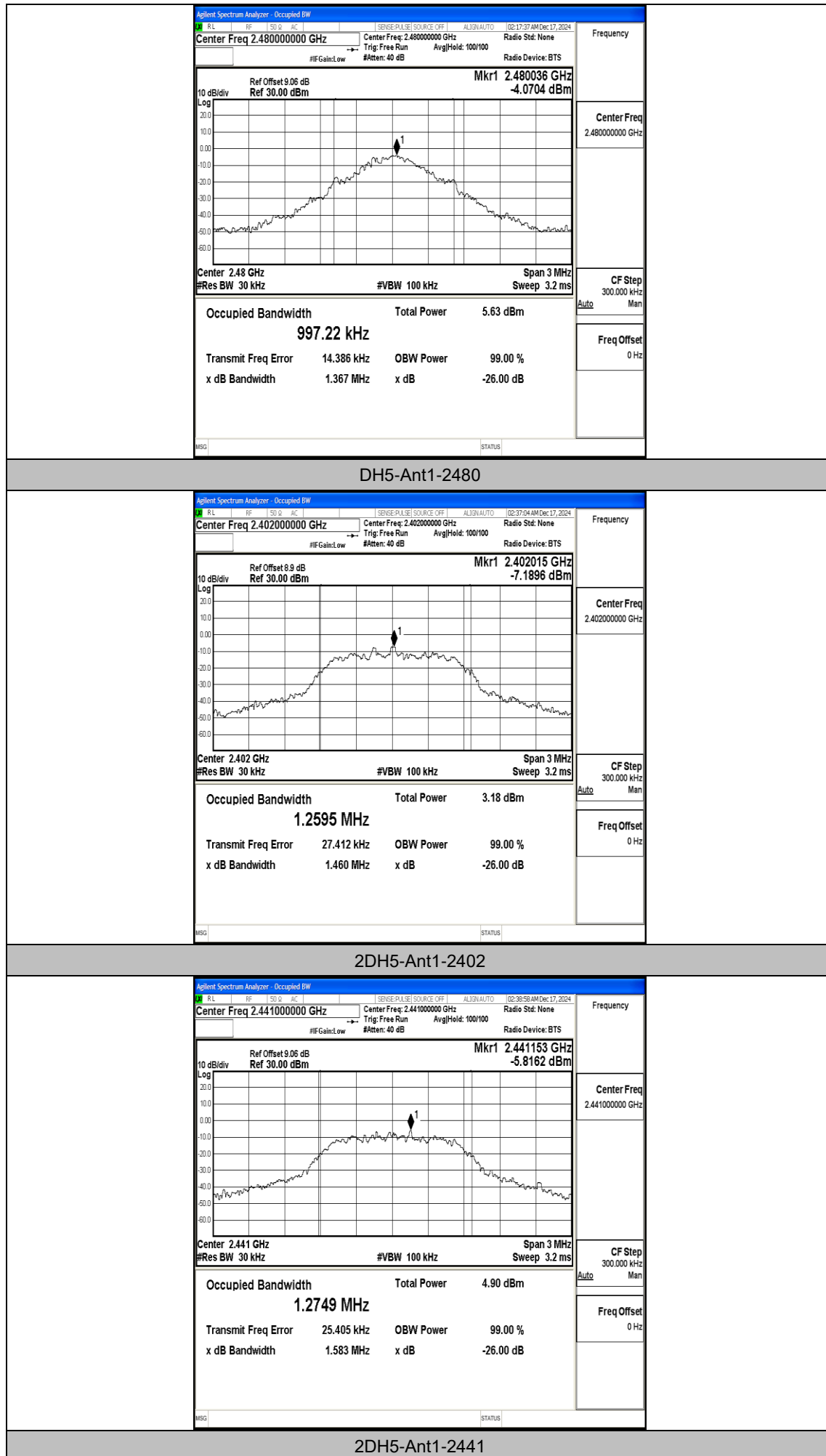
Appendix B: Occupied Channel Bandwidth

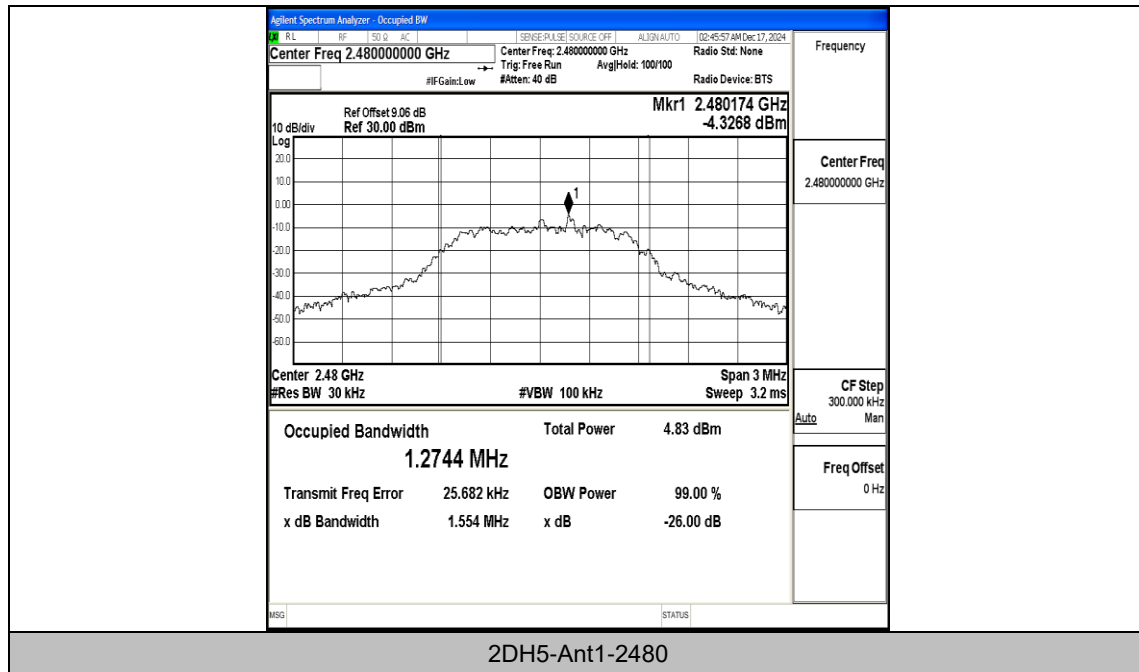
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.97596	2401.5246	2402.5005	---	---
DH5	Ant1	2441	0.99058	2440.5196	2441.5102	---	---
DH5	Ant1	2480	0.99722	2479.5158	2480.5130	---	---
2DH5	Ant1	2402	1.2595	2401.3977	2402.6572	---	---
2DH5	Ant1	2441	1.2749	2440.3880	2441.6629	---	---
2DH5	Ant1	2480	1.2744	2479.3885	2480.6629	---	---

Test Graphs





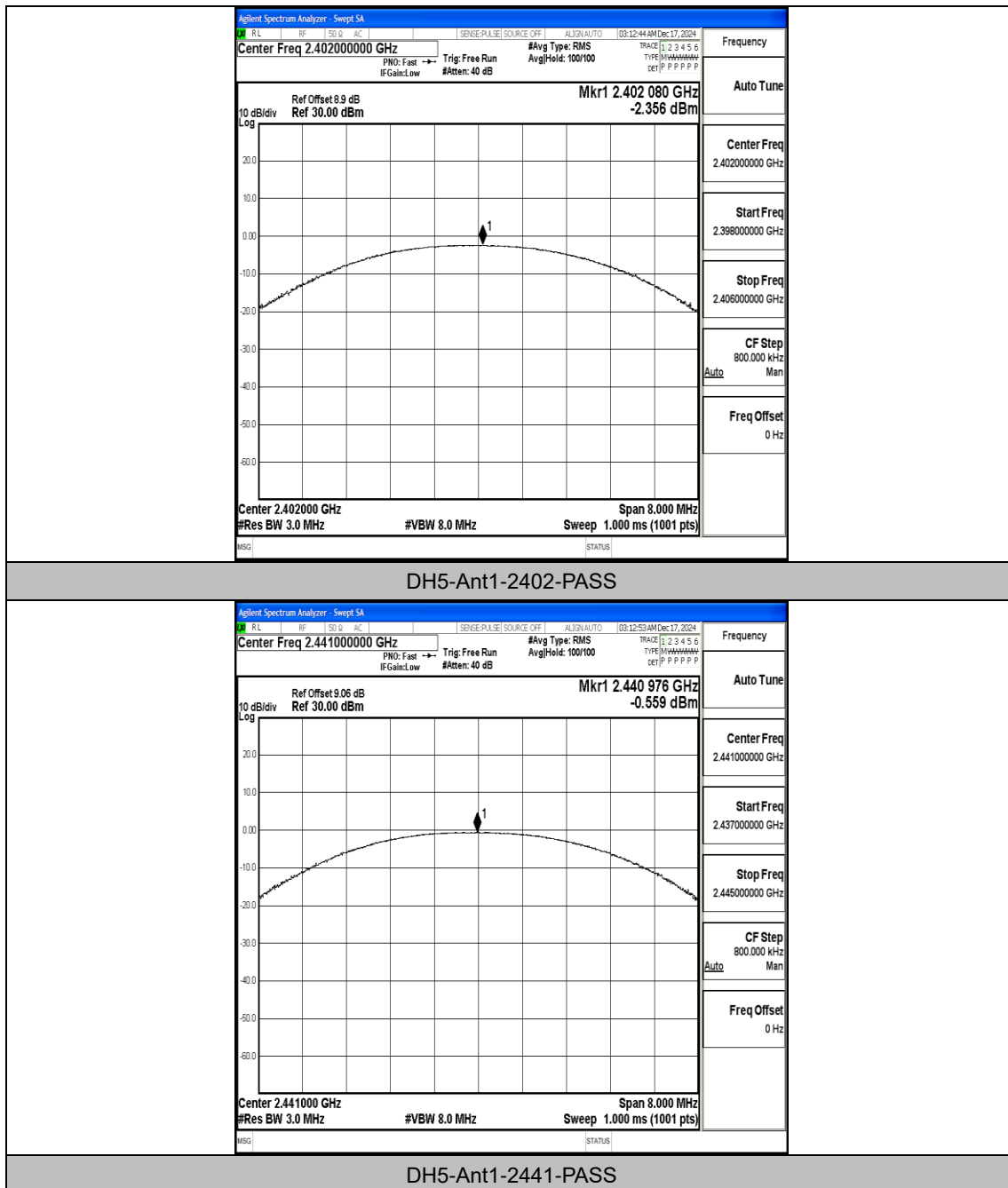


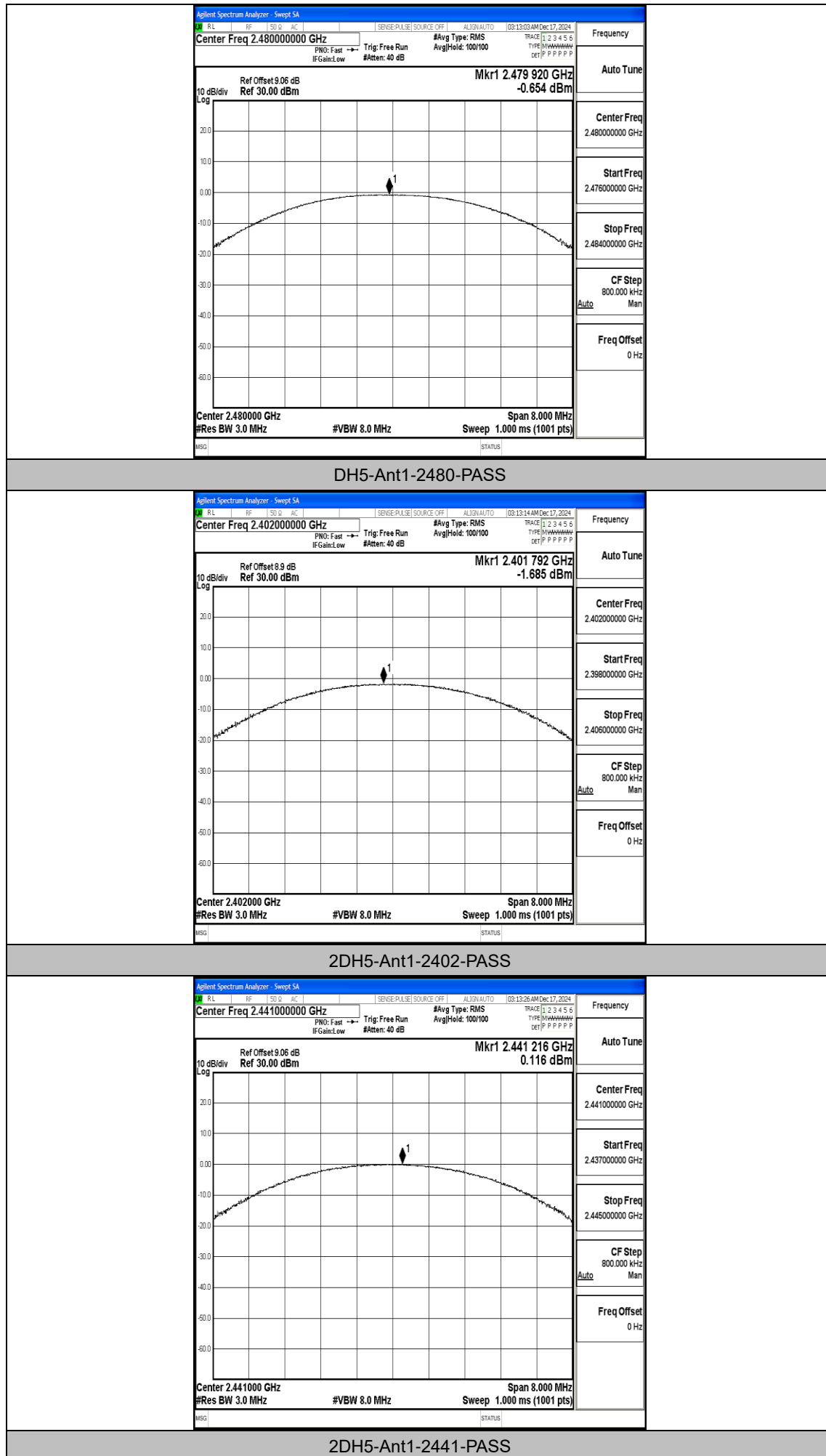
Appendix C: Maximum peak conducted output power

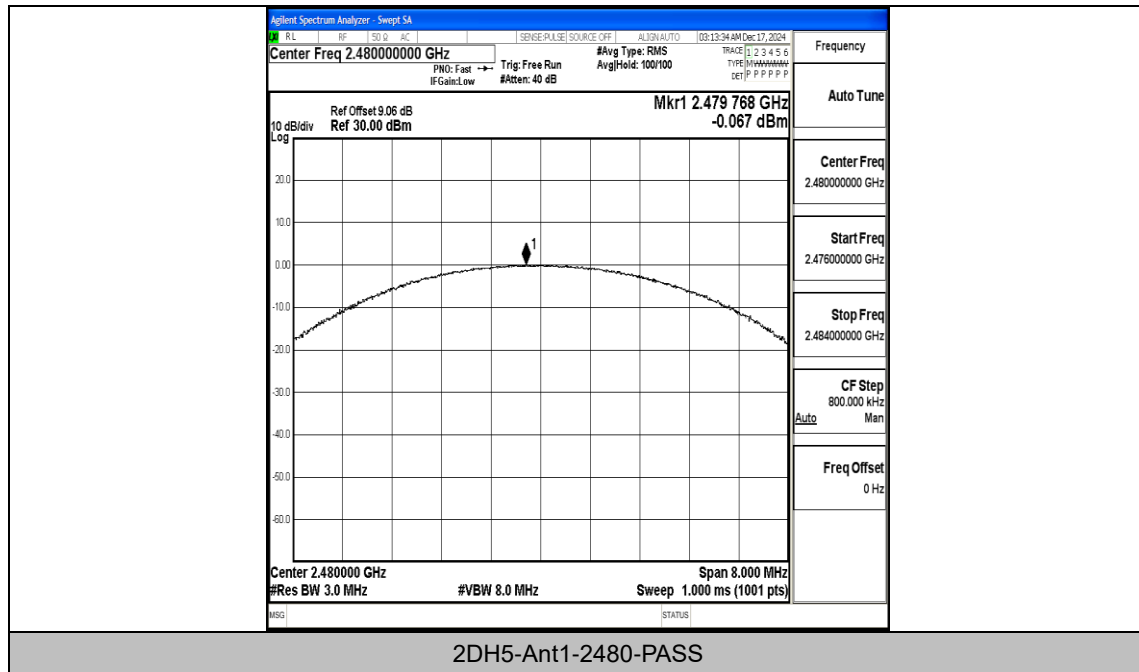
Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	-2.36	≤20.97	PASS
DH5	Ant1	2441	-0.56	≤20.97	PASS
DH5	Ant1	2480	-0.65	≤20.97	PASS
2DH5	Ant1	2402	-1.69	≤20.97	PASS
2DH5	Ant1	2441	0.12	≤20.97	PASS
2DH5	Ant1	2480	-0.07	≤20.97	PASS

Test Graphs





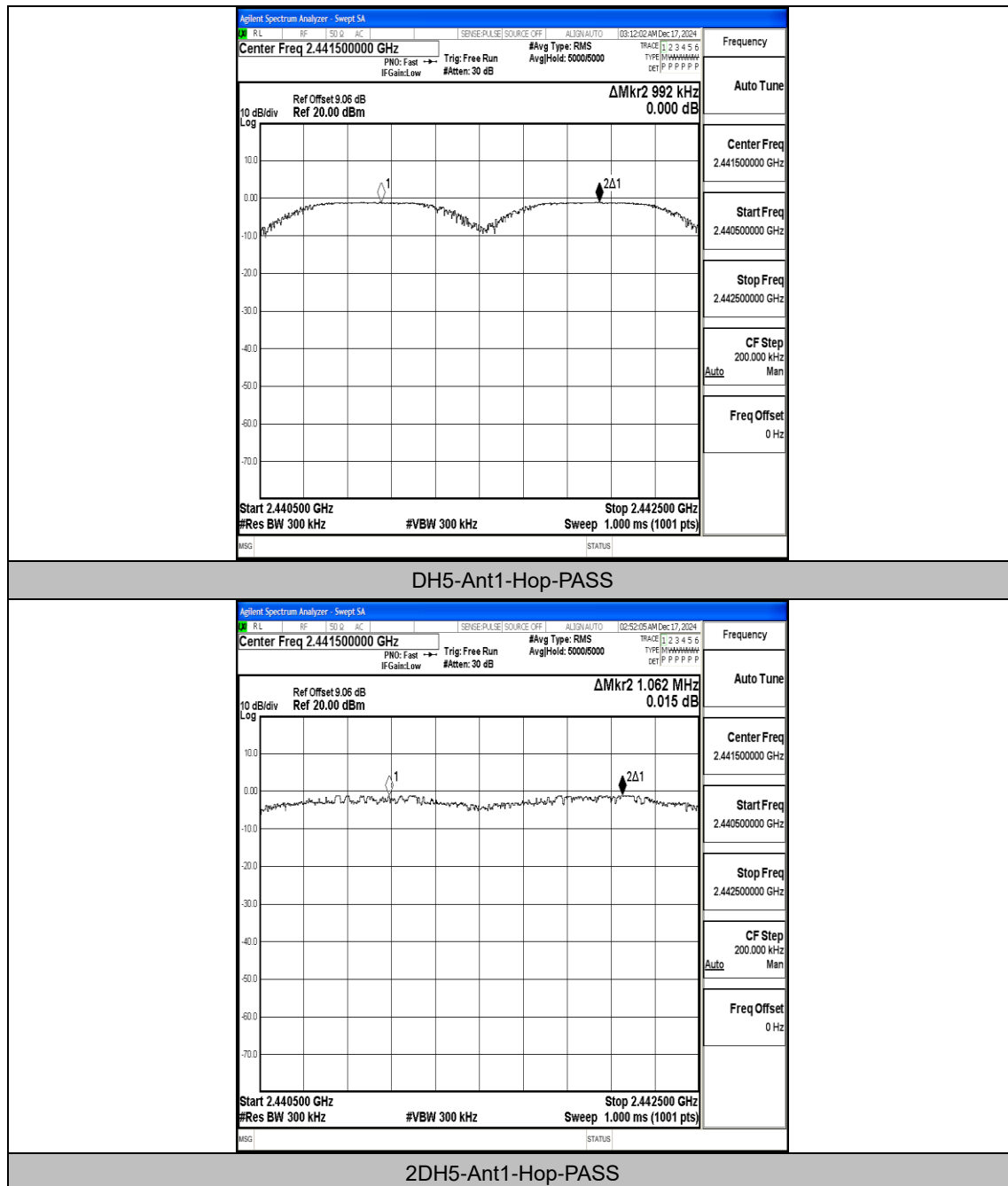


Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.992	≥ 0.724	PASS
2DH5	Ant1	Hop	1.062	≥ 0.928	PASS

Test Graphs

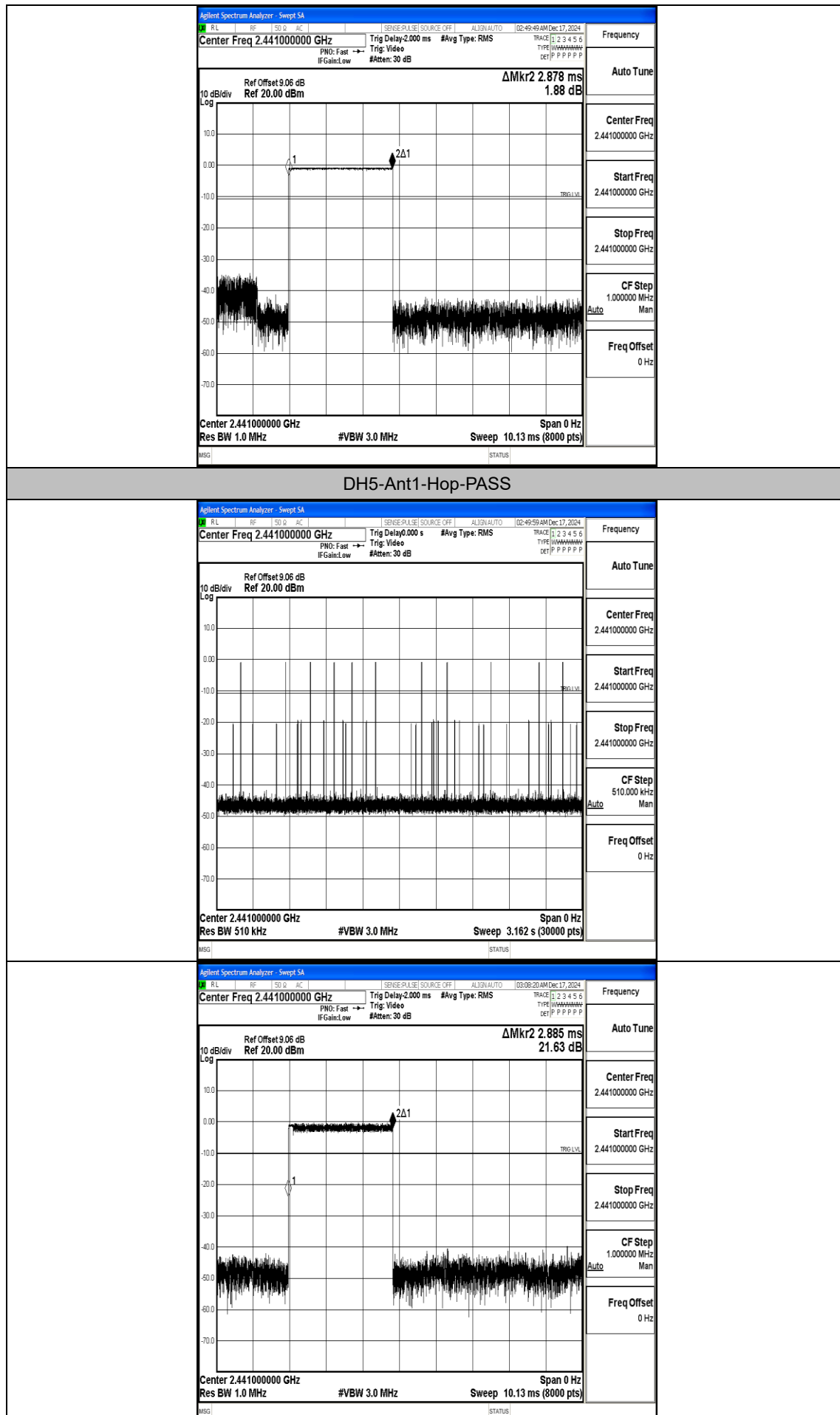


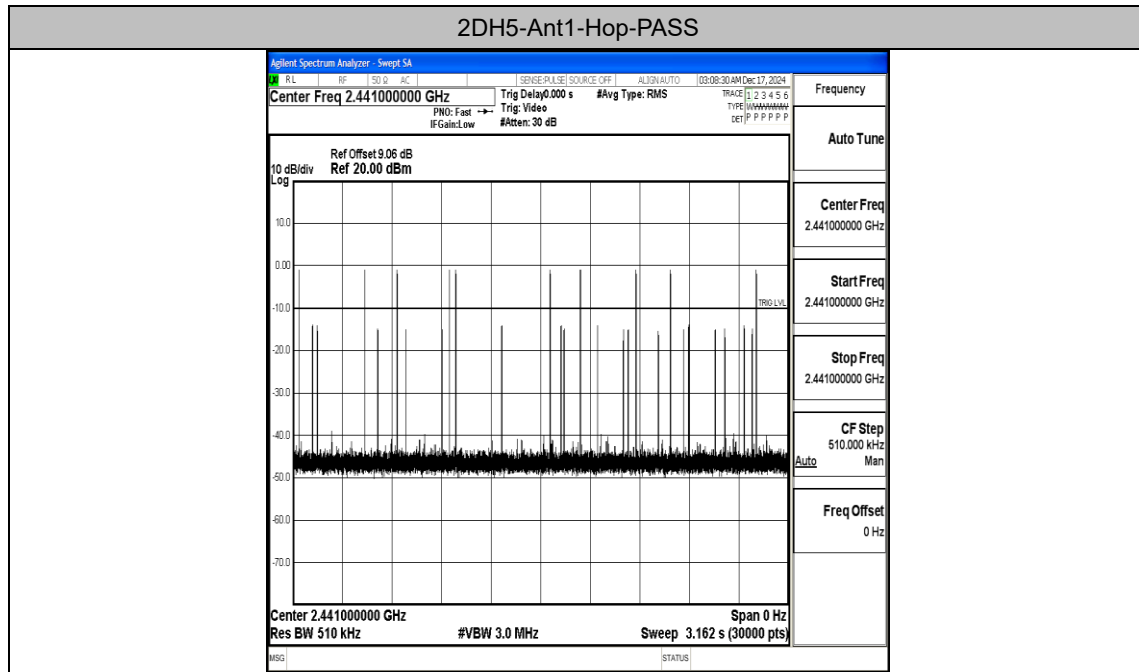
Appendix E: Time of occupancy

Test Result

Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS
2DH5	Ant1	Hop	2.885	110	0.317	≤0.4	PASS

Test Graphs



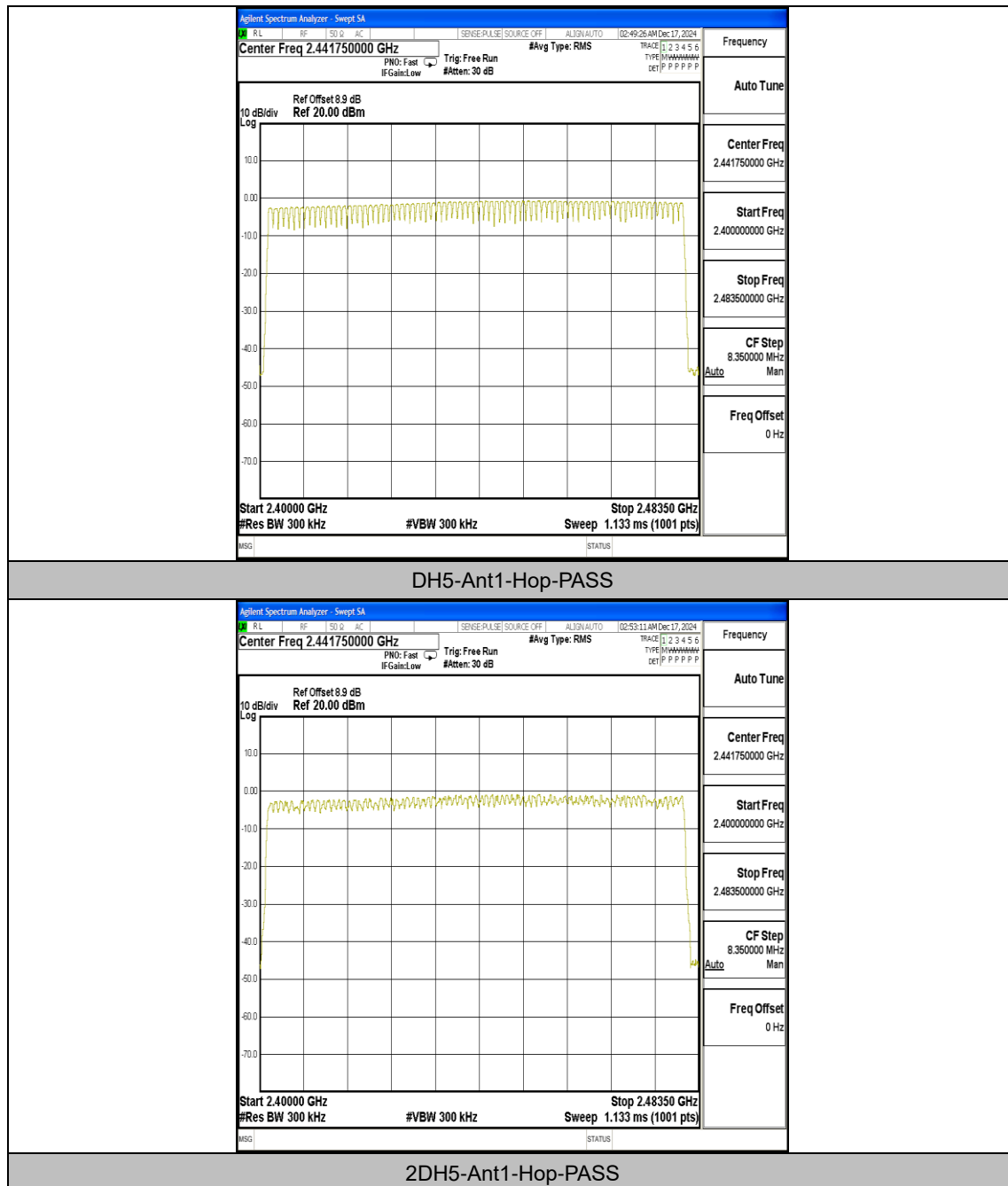


Appendix F: Number of hopping channels

Test Result

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

Test Graphs

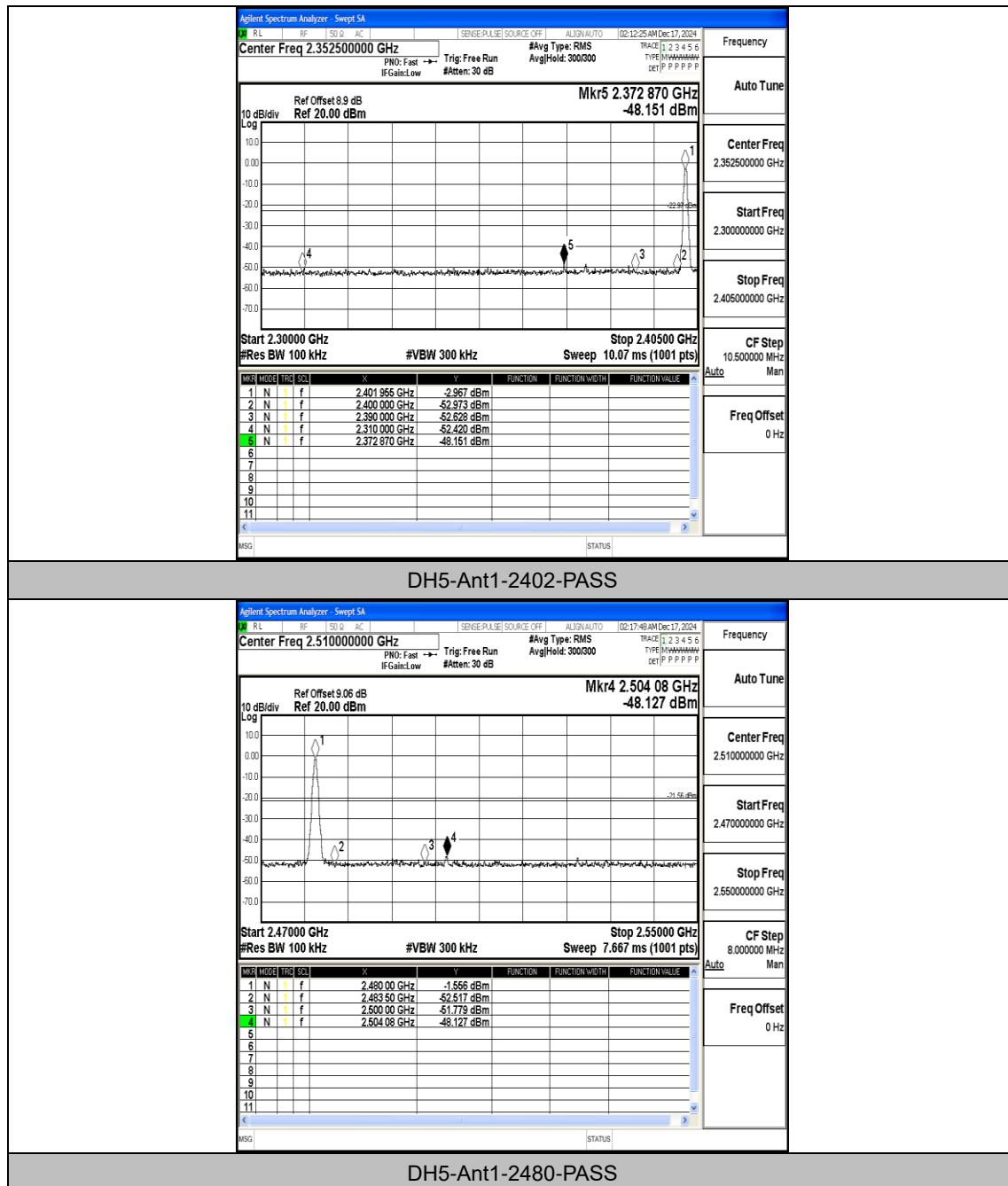


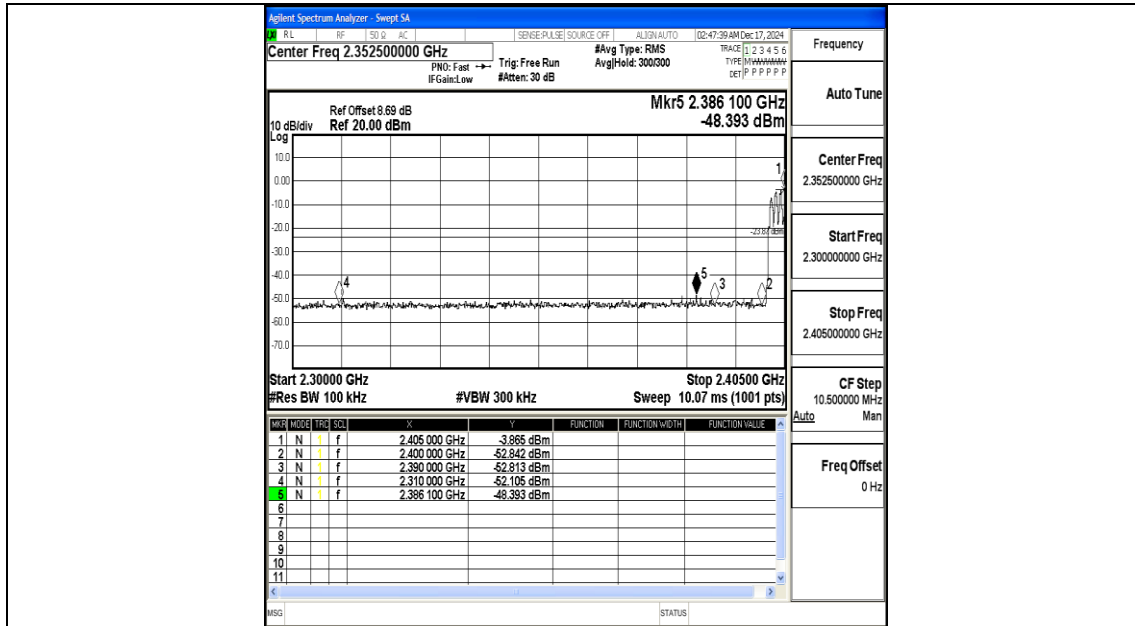
Appendix G: Band edge measurements

Test Result

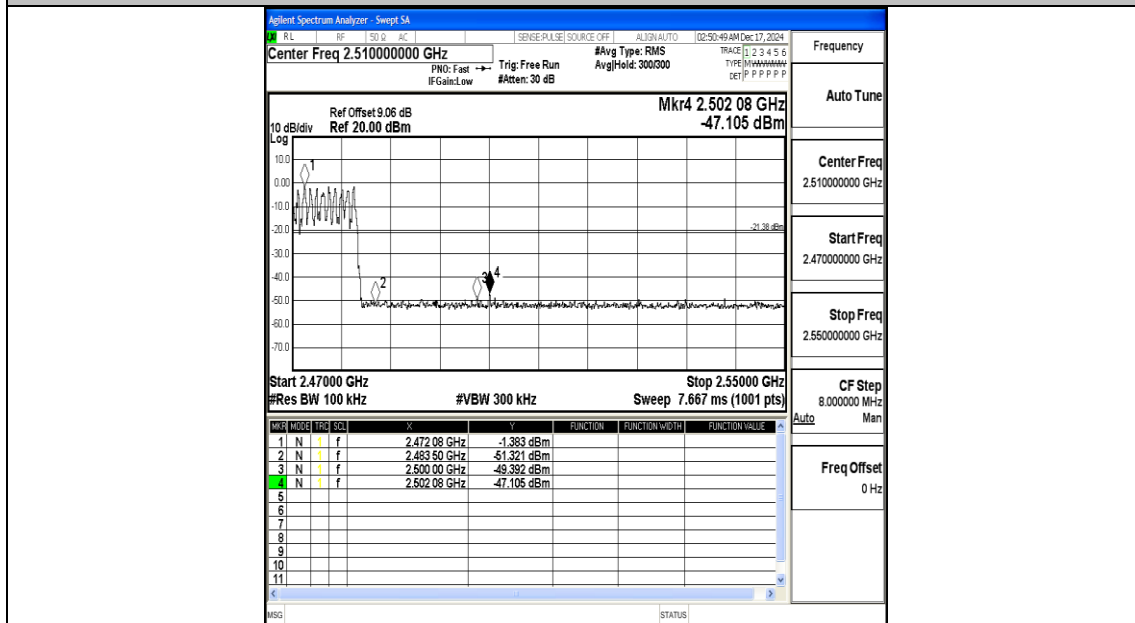
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.97	-48.15	≤-22.97	PASS
DH5	Ant1	High	2480	-1.56	-48.13	≤-21.56	PASS
DH5	Ant1	Low	Hop_2402	-3.87	-48.39	≤-23.87	PASS
DH5	Ant1	High	Hop_2480	-1.38	-47.11	≤-21.38	PASS
2DH5	Ant1	Low	2402	-3.17	-49.49	≤-23.17	PASS
2DH5	Ant1	High	2480	-3.19	-48.95	≤-23.19	PASS
2DH5	Ant1	Low	Hop_2402	-3.59	-49.78	≤-23.59	PASS
2DH5	Ant1	High	Hop_2480	-2.21	-49.24	≤-22.21	PASS

Test Graphs

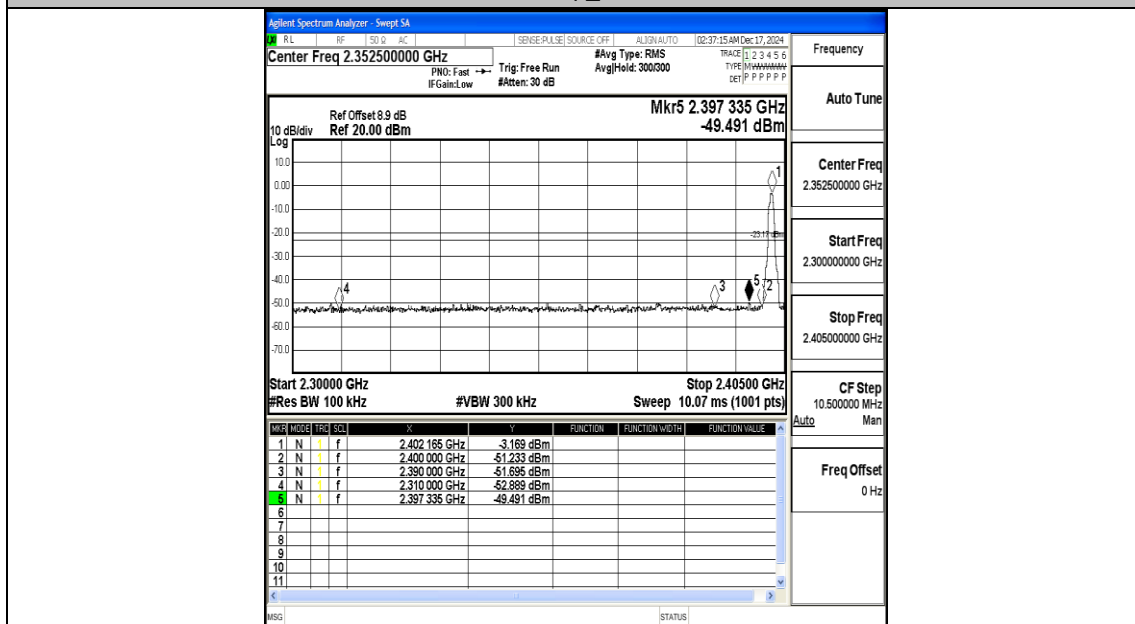




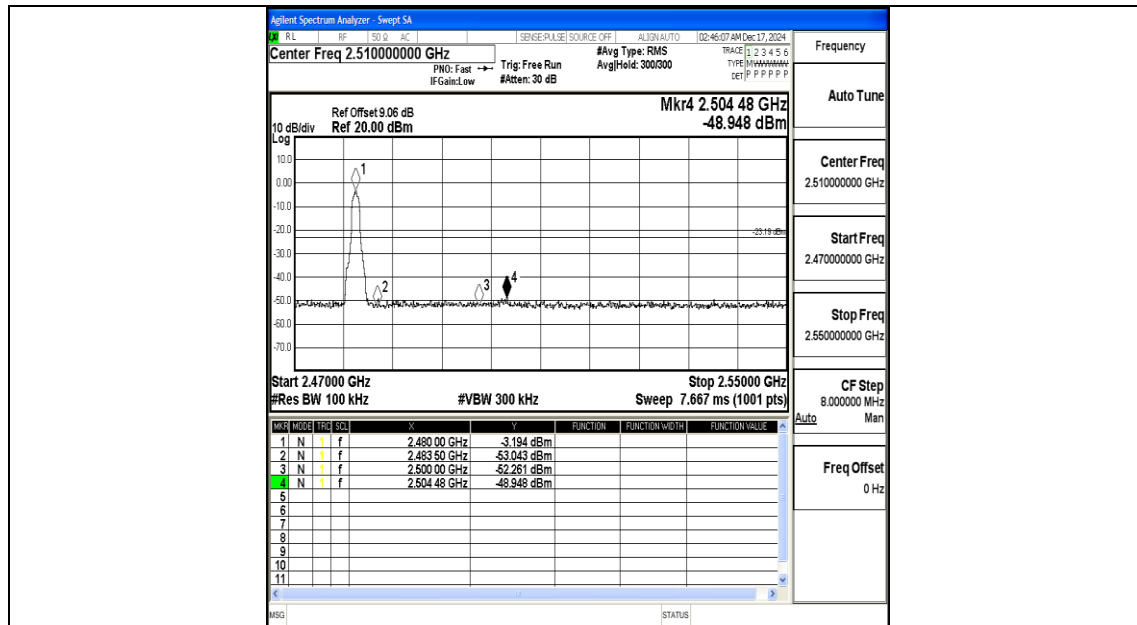
DH5-Ant1-Hop_2402-PASS



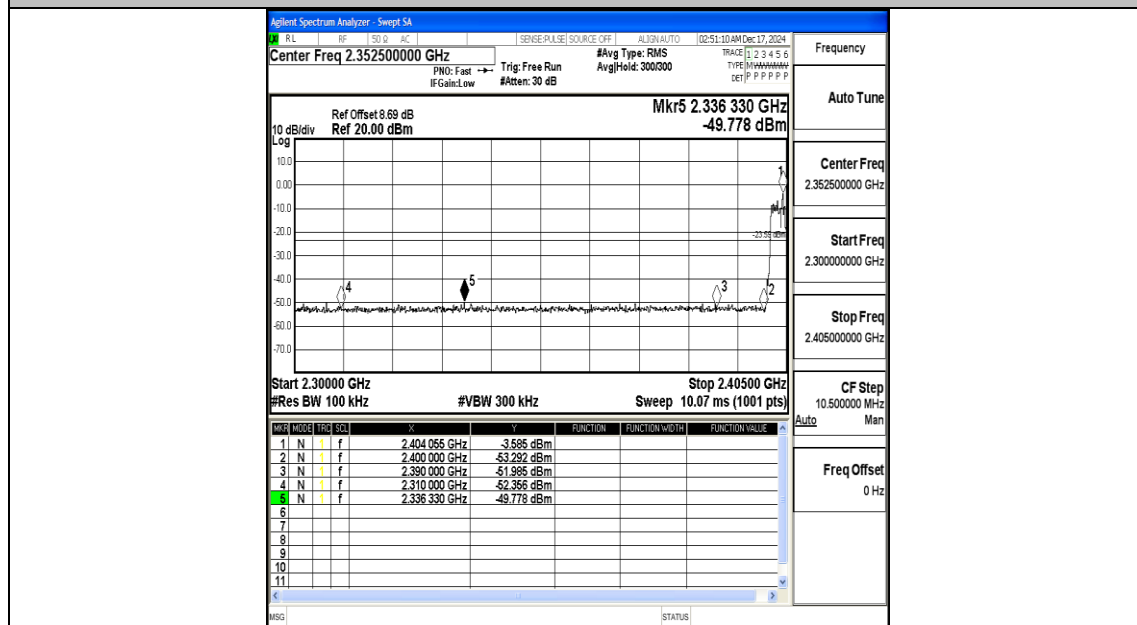
DH5-Ant1-Hop_2480-PASS



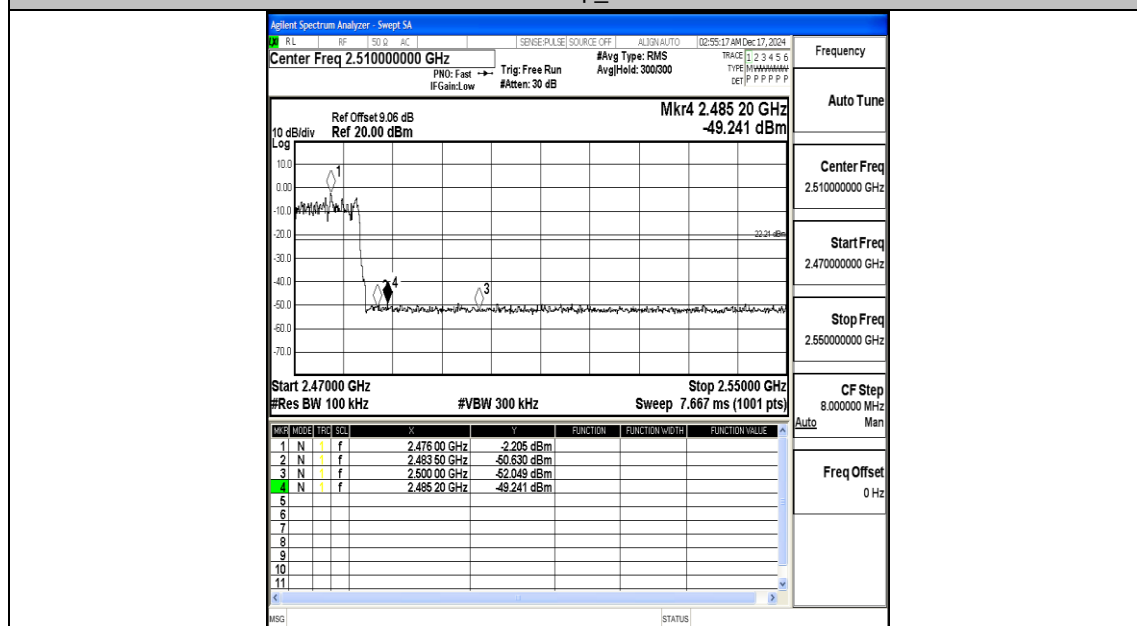
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



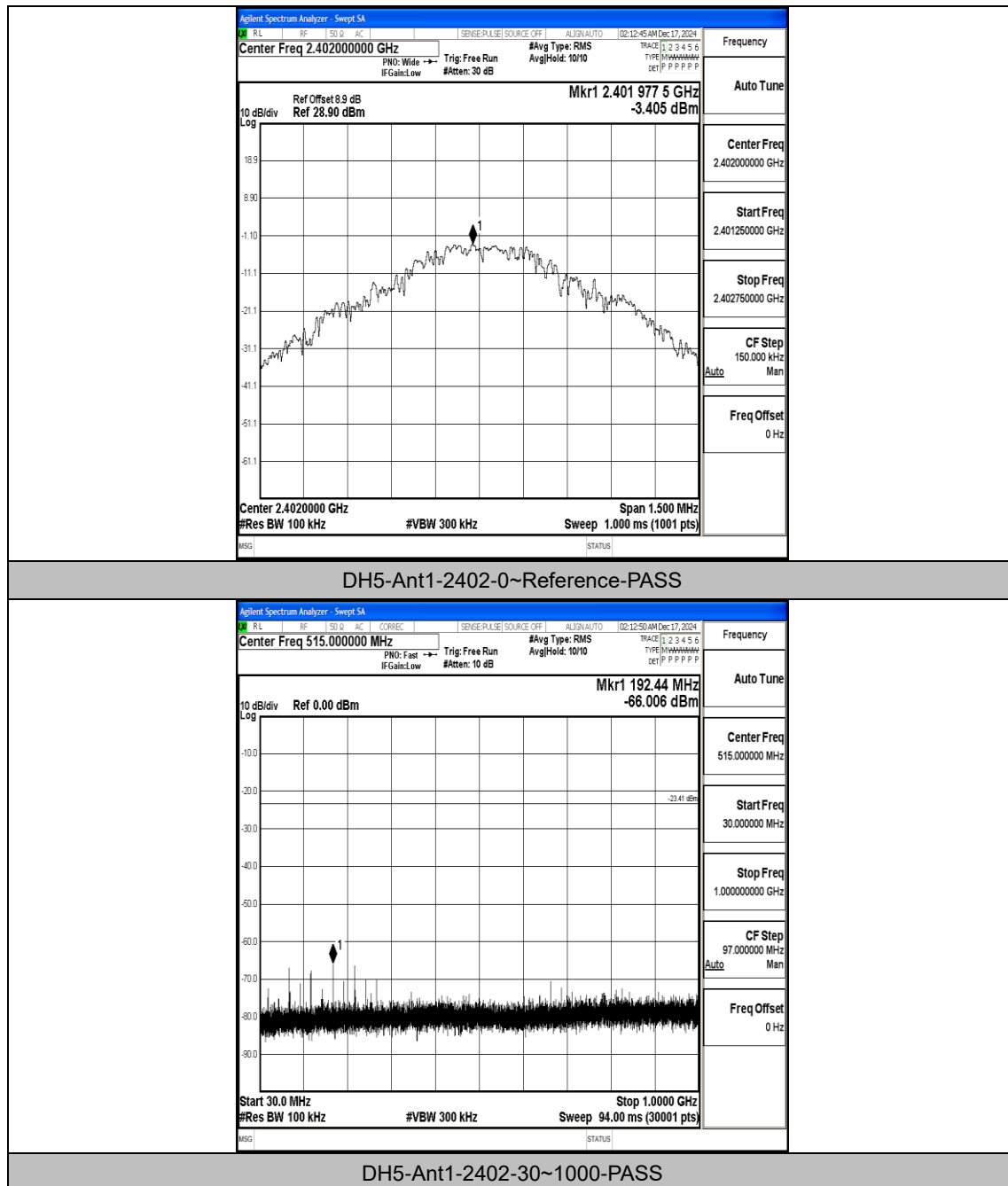
2DH5-Ant1-Hop_2480-PASS

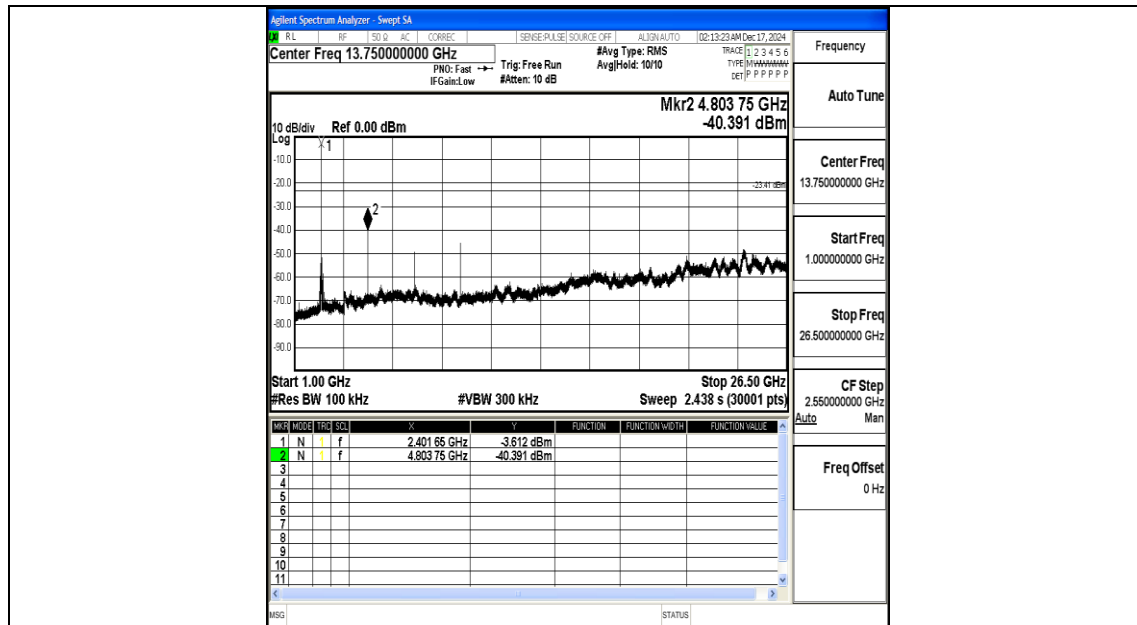
Appendix H: Conducted Spurious Emission

Test Result

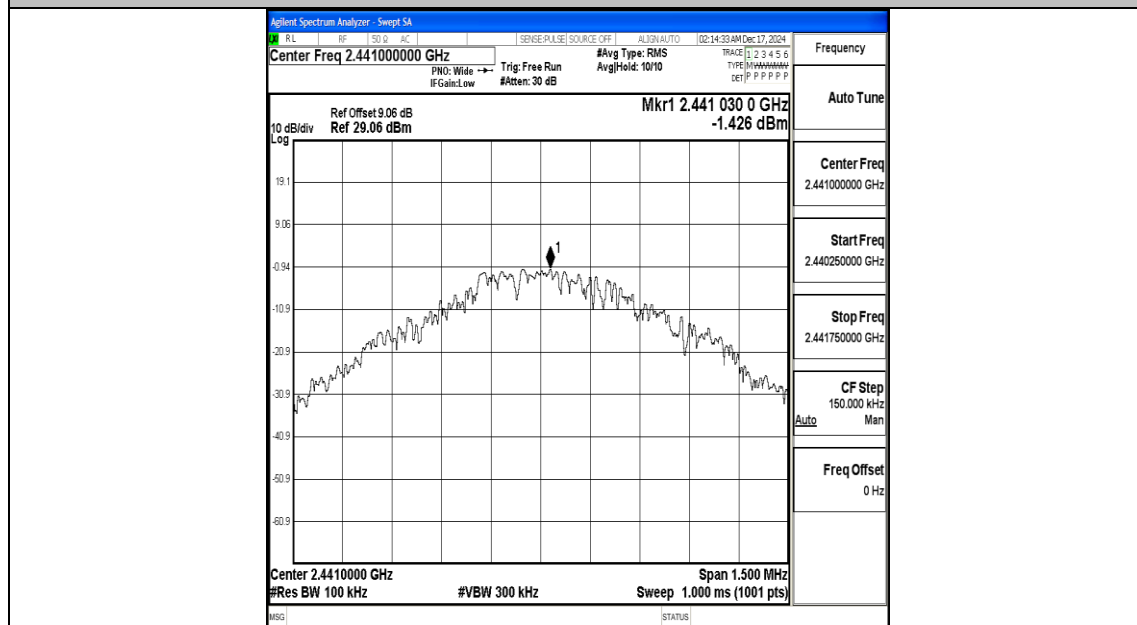
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-3.41	-3.41	---	PASS
DH5	Ant1	2402	30~1000	-3.41	-66.01	≤-23.41	PASS
DH5	Ant1	2402	1000~26500	-3.41	-40.39	≤-23.41	PASS
DH5	Ant1	2441	0~Reference	-1.43	-1.43	---	PASS
DH5	Ant1	2441	30~1000	-1.43	-60.29	≤-21.43	PASS
DH5	Ant1	2441	1000~26500	-1.43	-39.38	≤-21.43	PASS
DH5	Ant1	2480	0~Reference	-2.15	-2.15	---	PASS
DH5	Ant1	2480	30~1000	-2.15	-65.01	≤-22.15	PASS
DH5	Ant1	2480	1000~26500	-2.15	-41.42	≤-22.15	PASS
2DH5	Ant1	2402	0~Reference	-6.83	-6.83	---	PASS
2DH5	Ant1	2402	30~1000	-6.83	-68.49	≤-26.83	PASS
2DH5	Ant1	2402	1000~26500	-6.83	-41.39	≤-26.83	PASS
2DH5	Ant1	2441	0~Reference	-2.27	-2.27	---	PASS
2DH5	Ant1	2441	30~1000	-2.27	-64.92	≤-22.27	PASS
2DH5	Ant1	2441	1000~26500	-2.27	-41.43	≤-22.27	PASS
2DH5	Ant1	2480	0~Reference	-4.63	-4.63	---	PASS
2DH5	Ant1	2480	30~1000	-4.63	-63.98	≤-24.63	PASS
2DH5	Ant1	2480	1000~26500	-4.63	-41.89	≤-24.63	PASS

Test Graphs

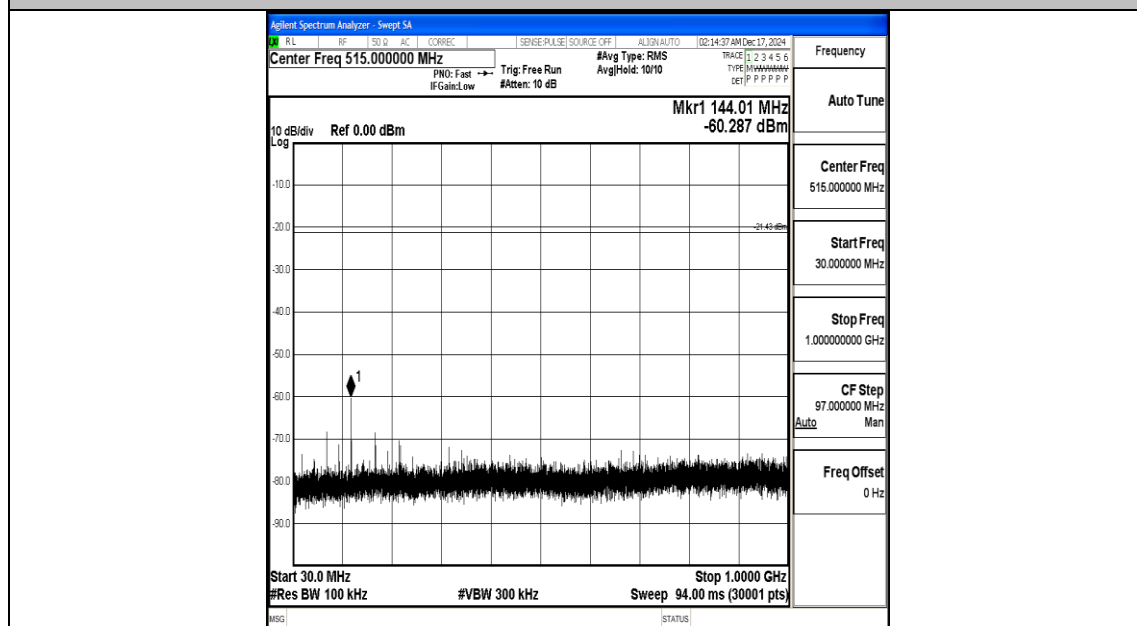




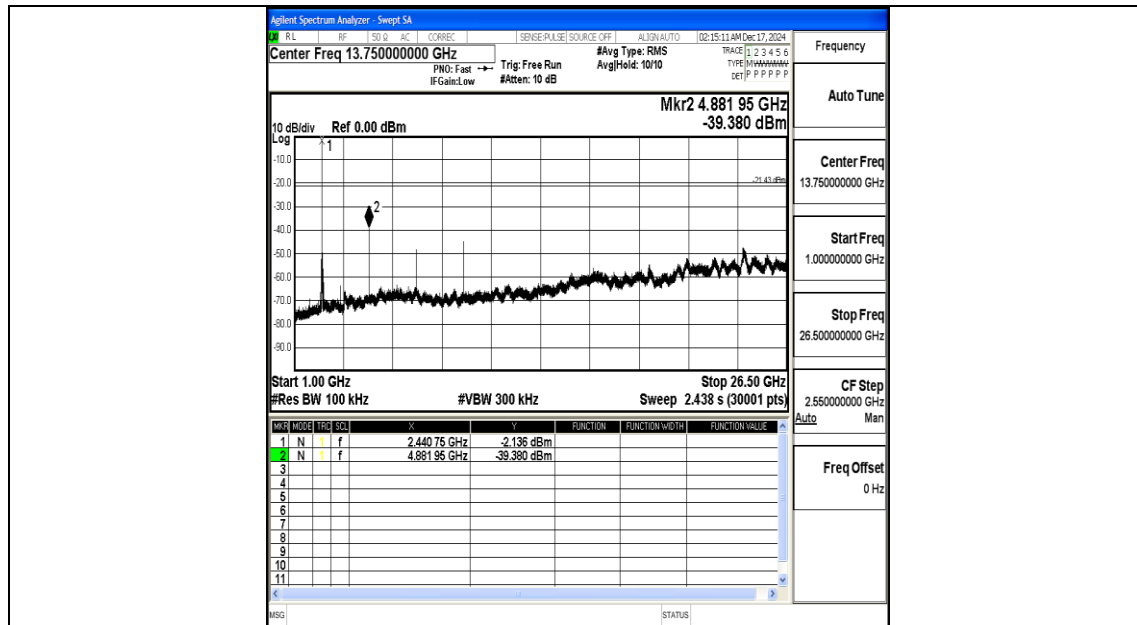
DH5-Ant1-2402-1000~26500-PASS



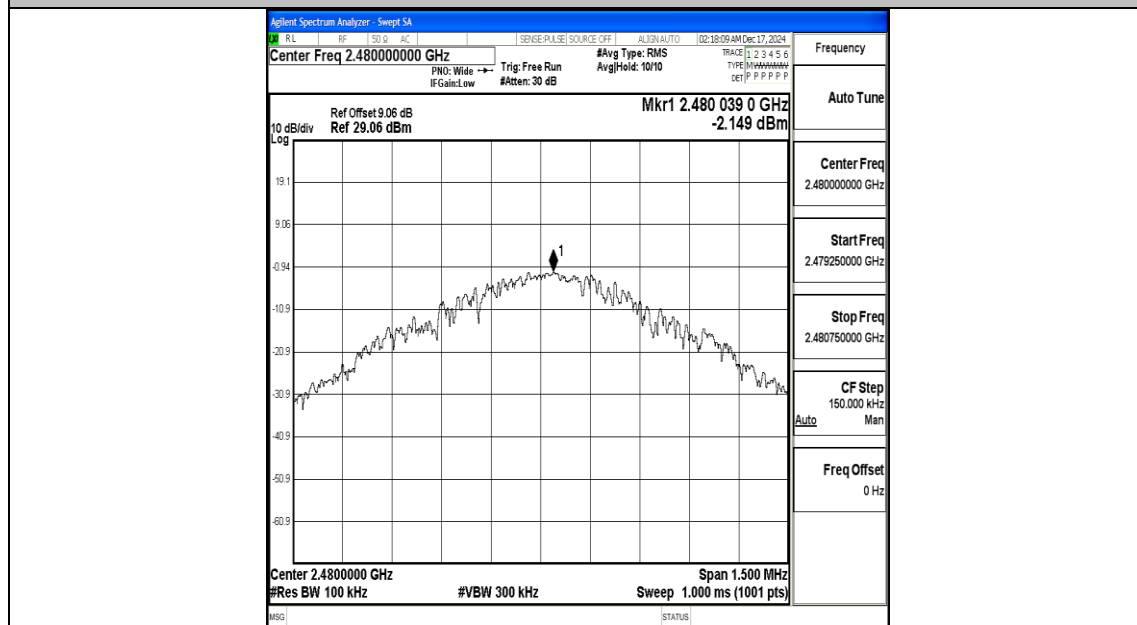
DH5-Ant1-2441-0~Reference-PASS



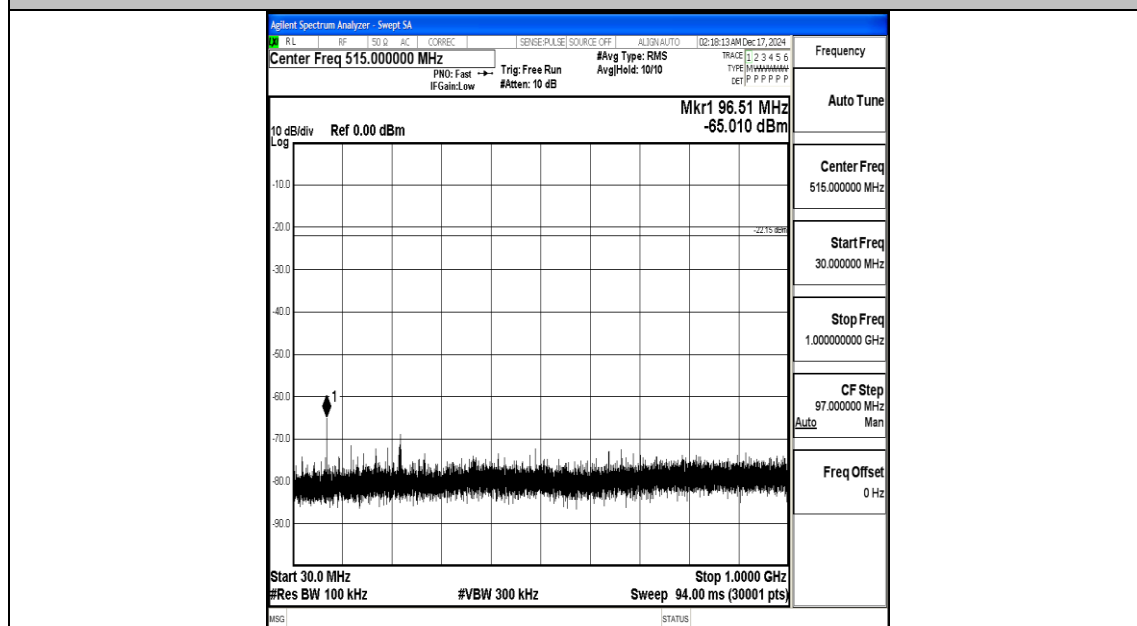
DH5-Ant1-2441-30~1000-PASS



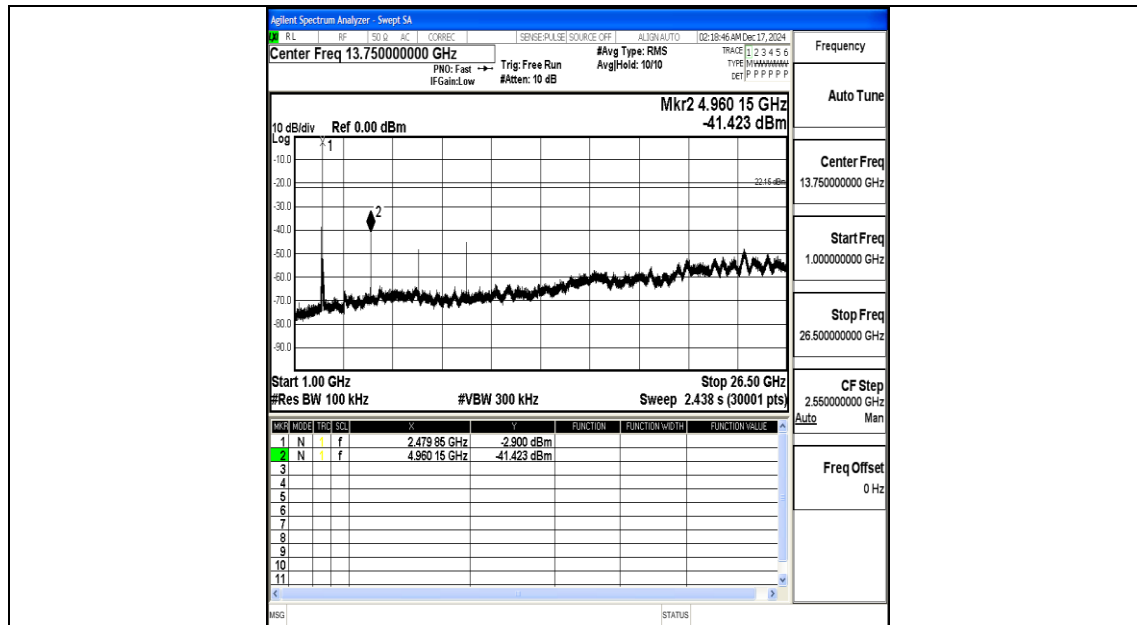
DH5-Ant1-2441-1000~26500-PASS



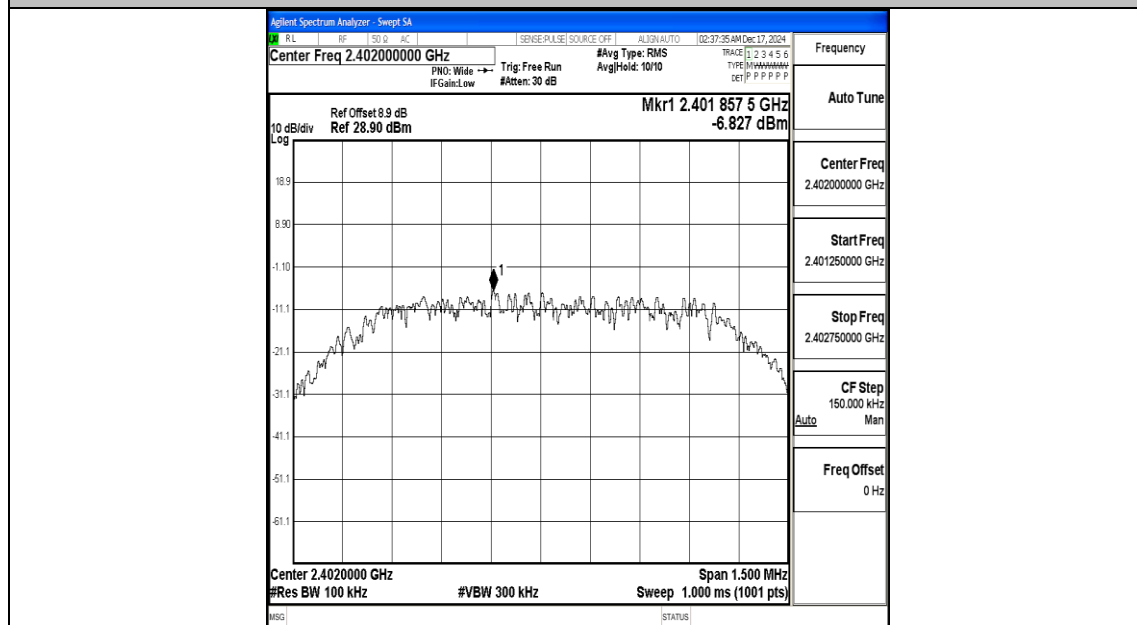
DH5-Ant1-2480-0~Reference-PASS



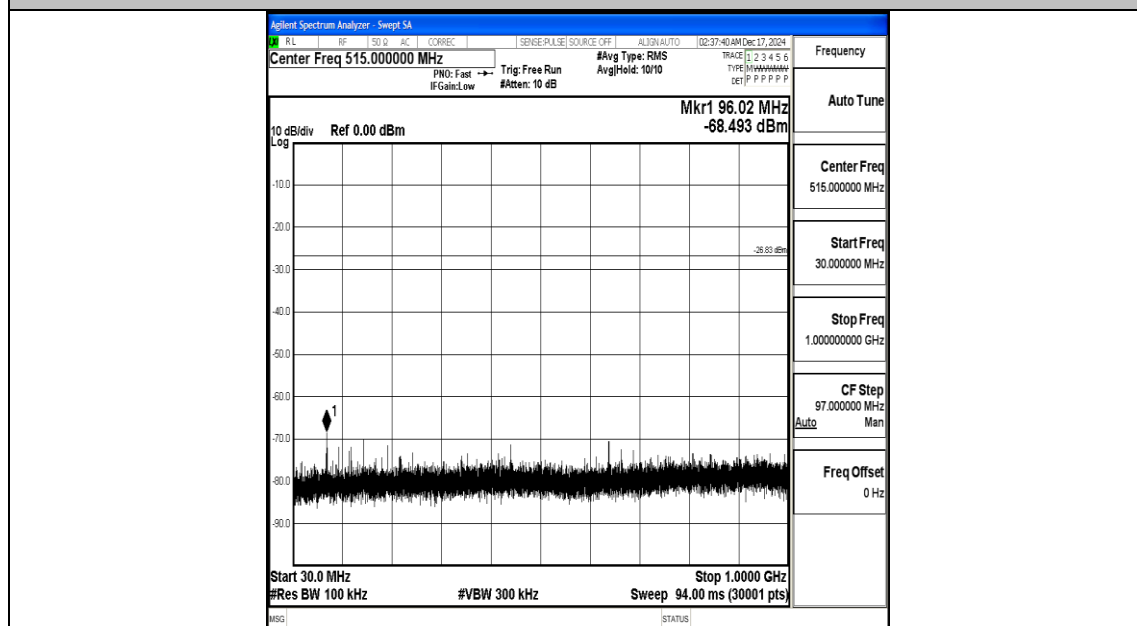
DH5-Ant1-2480-30~1000-PASS



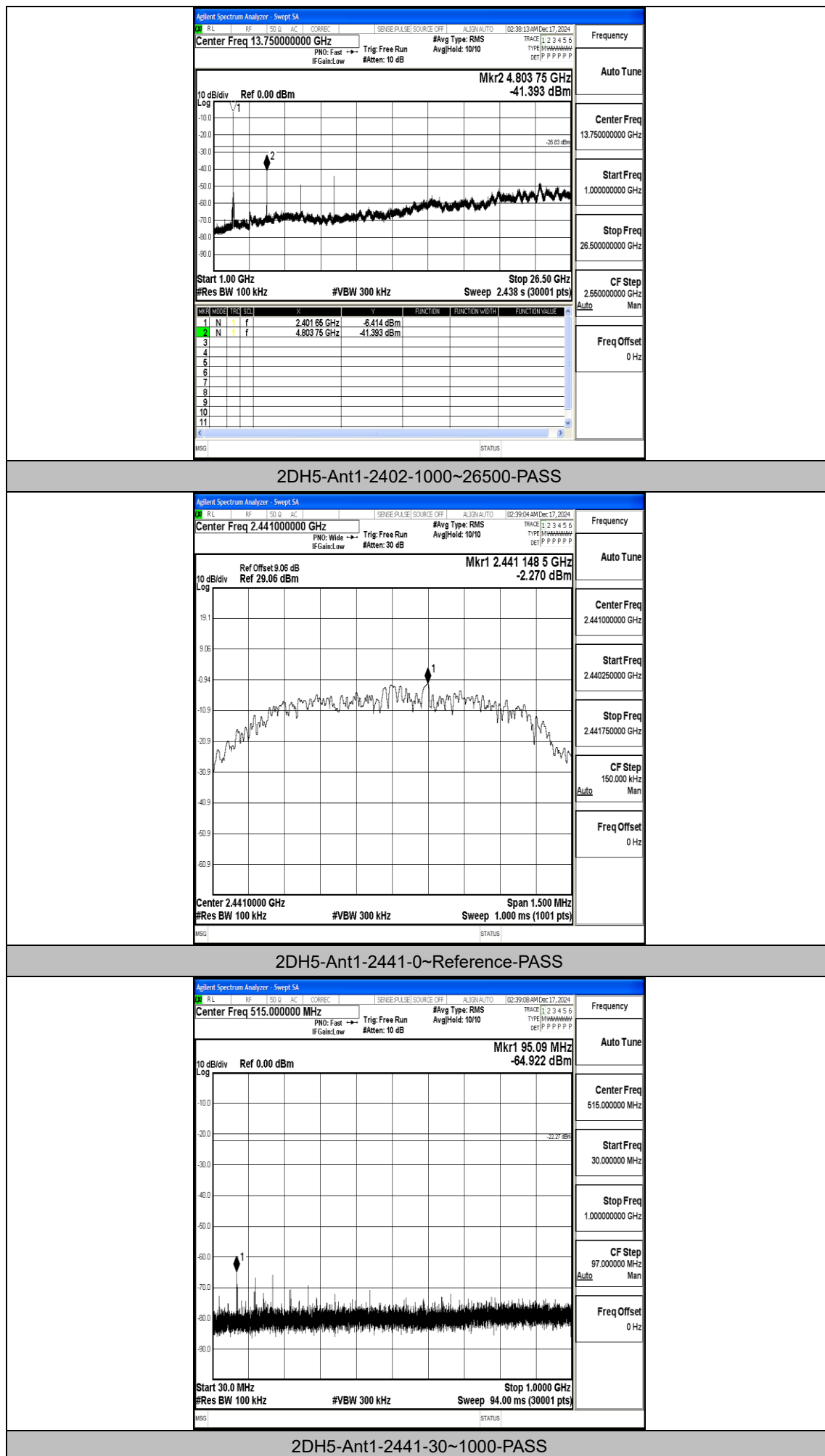
DH5-Ant1-2480-1000~26500-PASS

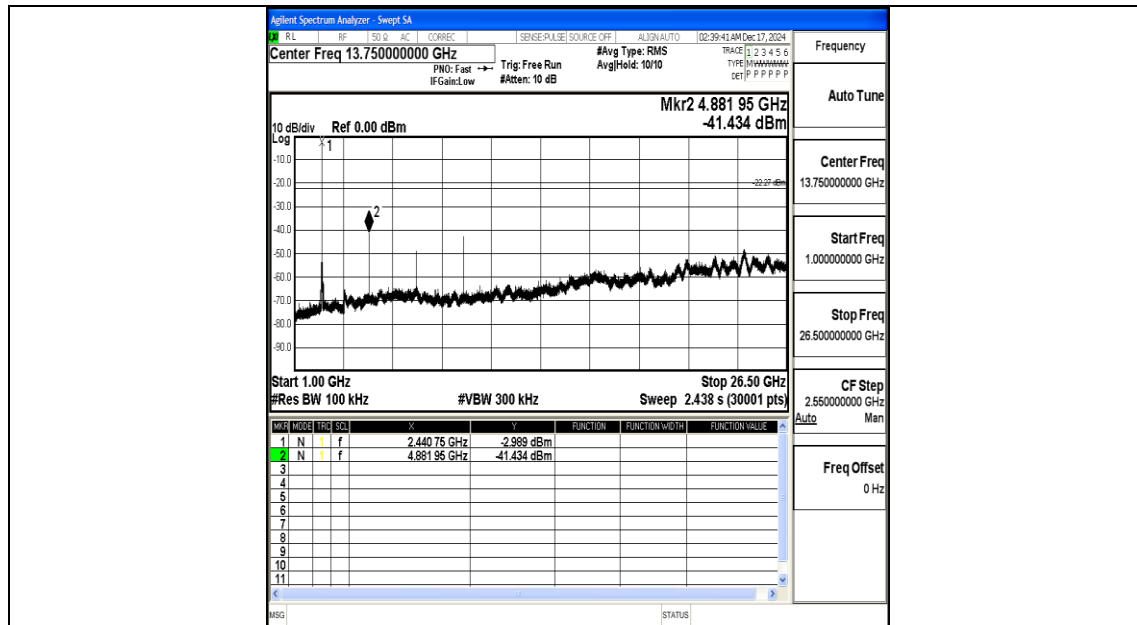


2DH5-Ant1-2402-0~Reference-PASS

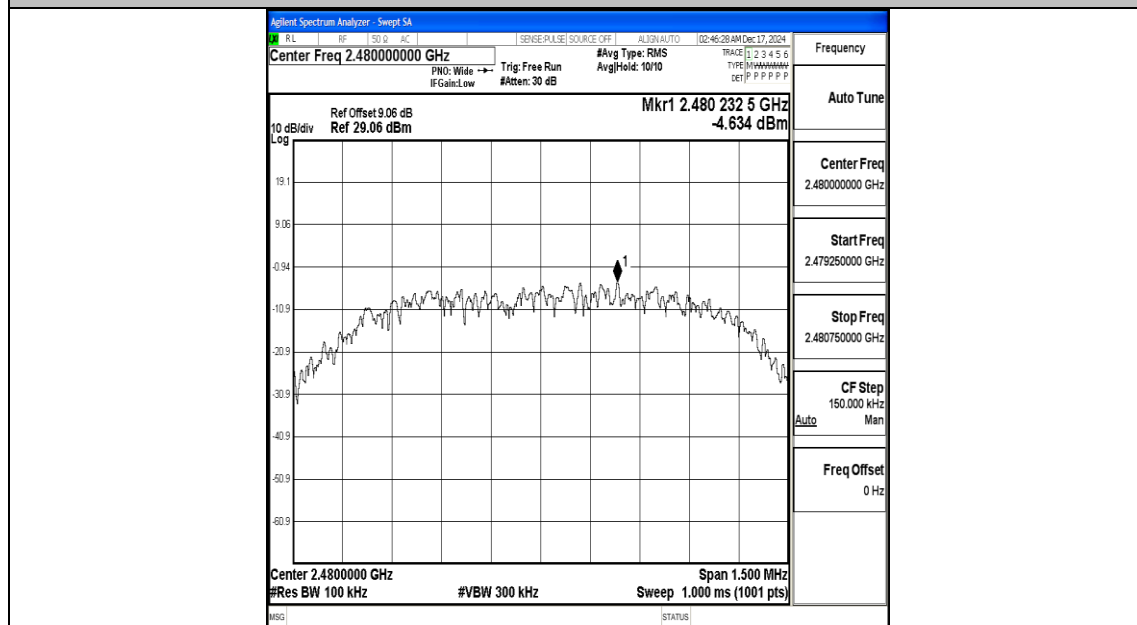


2DH5-Ant1-2402-30~1000-PASS

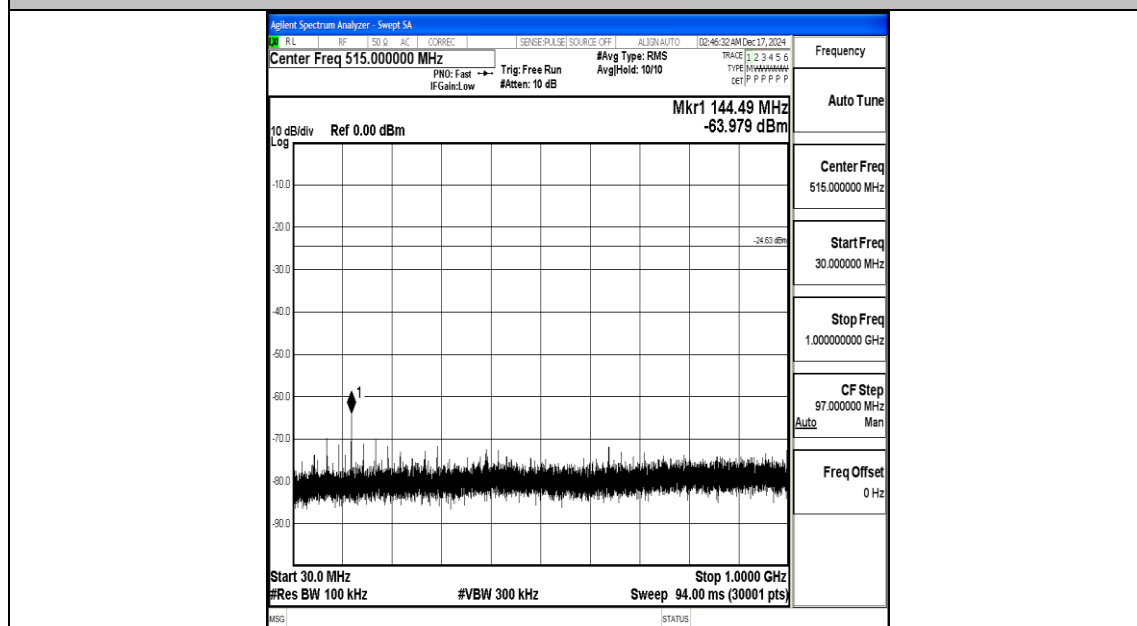




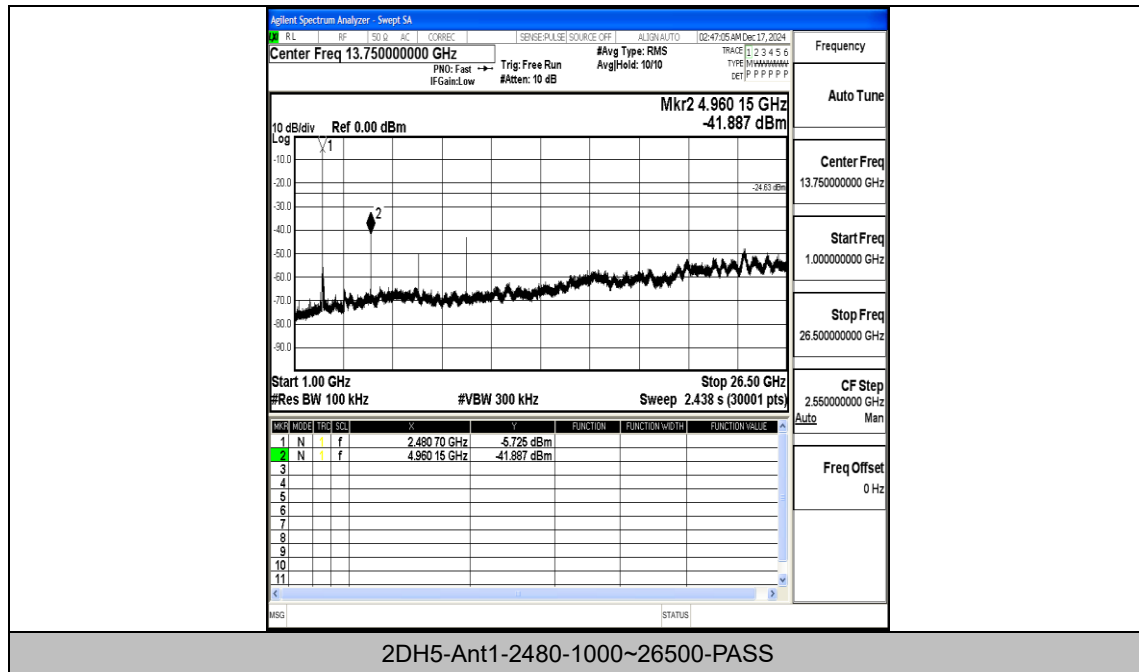
2DH5-Ant1-2441-1000~26500-PASS



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



2DH5-Ant1-2480-30~1000-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	2.87	3.75	76.53	1.16
DH5	Ant1	2441	2.88	3.75	76.80	1.15
DH5	Ant1	2480	2.87	3.75	76.53	1.16
2DH5	Ant1	2402	2.88	3.74	77.01	1.13
2DH5	Ant1	2441	2.88	3.75	76.80	1.15
2DH5	Ant1	2480	2.89	3.75	77.07	1.13

Test Graphs

