

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Bluetooth Adapter****Trade Mark: Audiopipe****Test Model: AP-BTM-1750IP****FCC ID: ZNGAP-BTM-1750IP****Environmental Conditions**

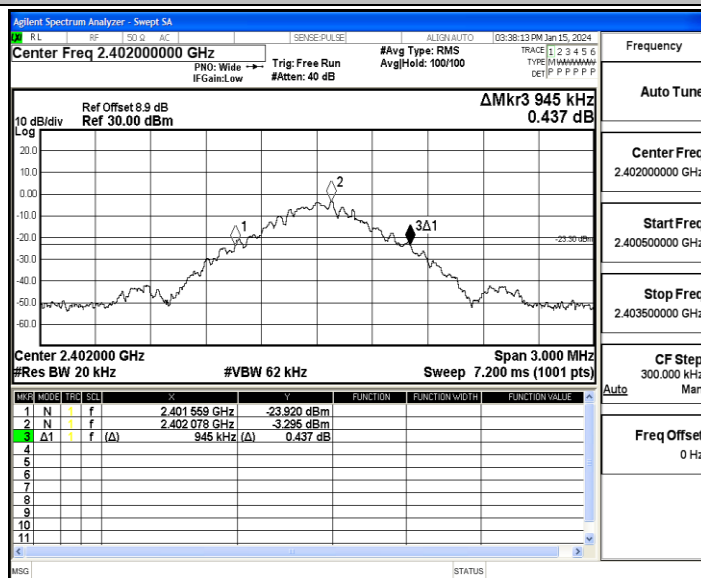
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth**Test Result**

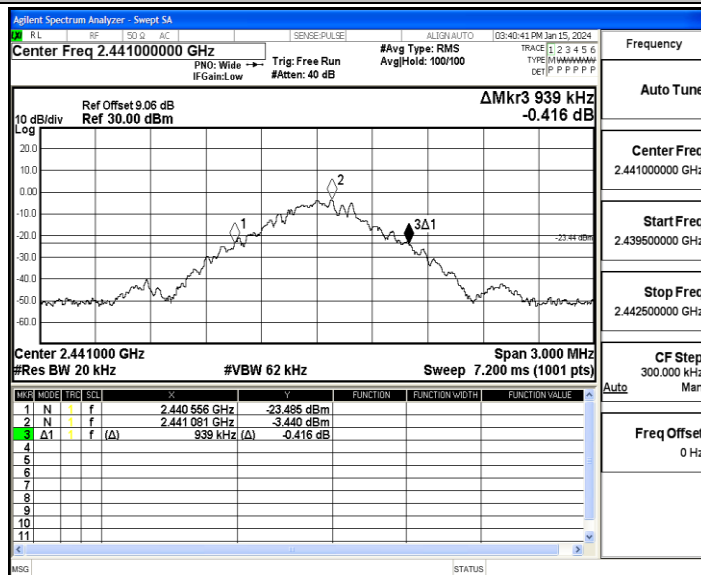
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.559	2402.504	---	---
		2441	0.939	2440.556	2441.495	---	---
		2480	0.945	2479.559	2480.504	---	---
2DH5	Ant1	2402	1.308	2401.364	2402.672	---	---
		2441	1.314	2440.361	2441.675	---	---
		2480	1.320	2479.358	2480.678	---	---
3DH5	Ant1	2402	1.293	2401.367	2402.660	---	---
		2441	1.296	2440.367	2441.663	---	---
		2480	1.314	2479.355	2480.669	---	---

Test Graphs

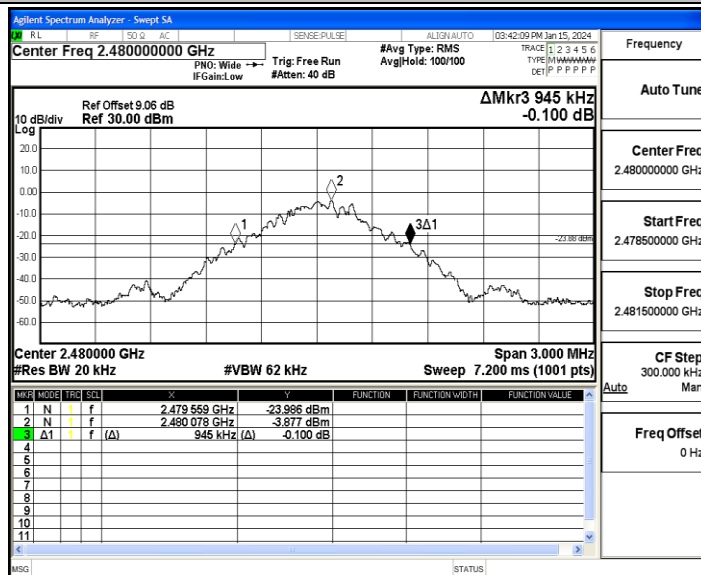
DH5_Ant1_2402



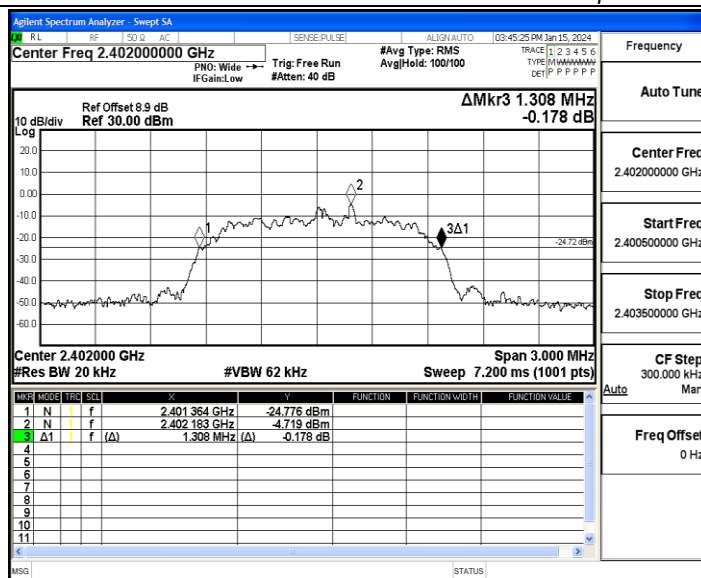
DH5_Ant1_2441



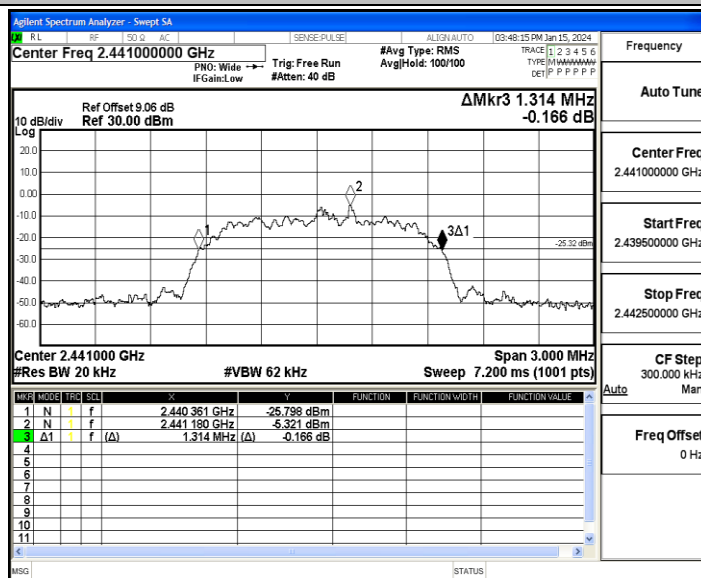
DH5_Ant1_2480



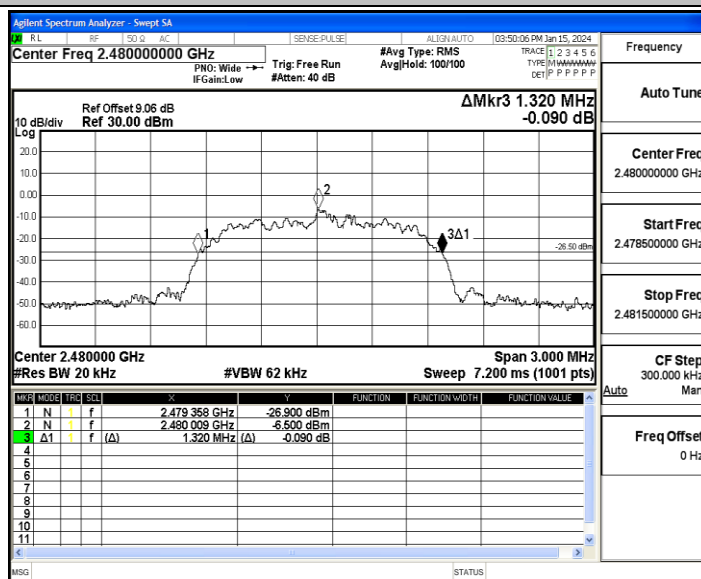
2DH5_Ant1_2402



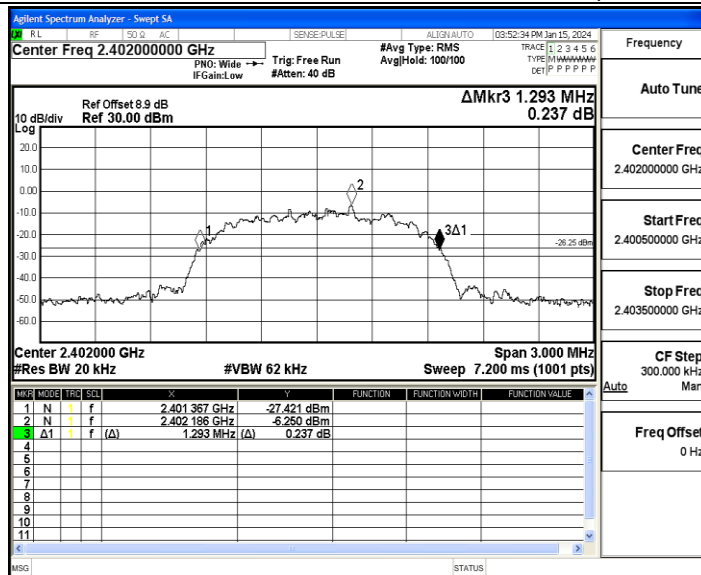
2DH5_Ant1_2441



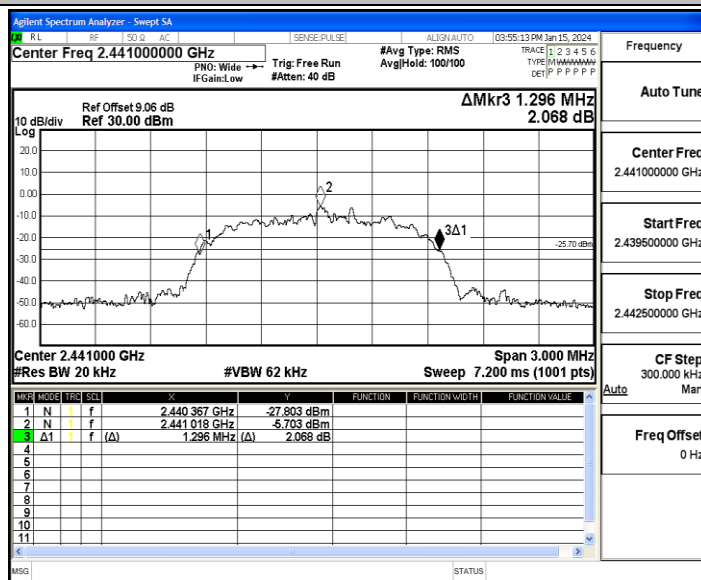
2DH5_Ant1_2480



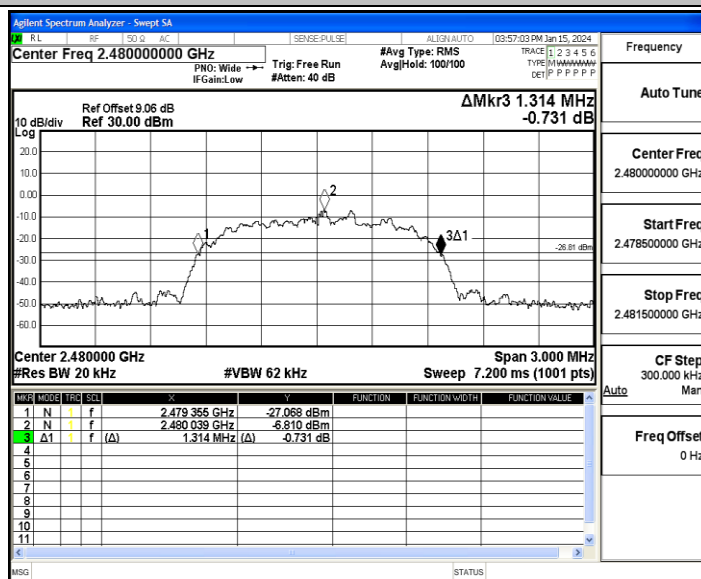
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



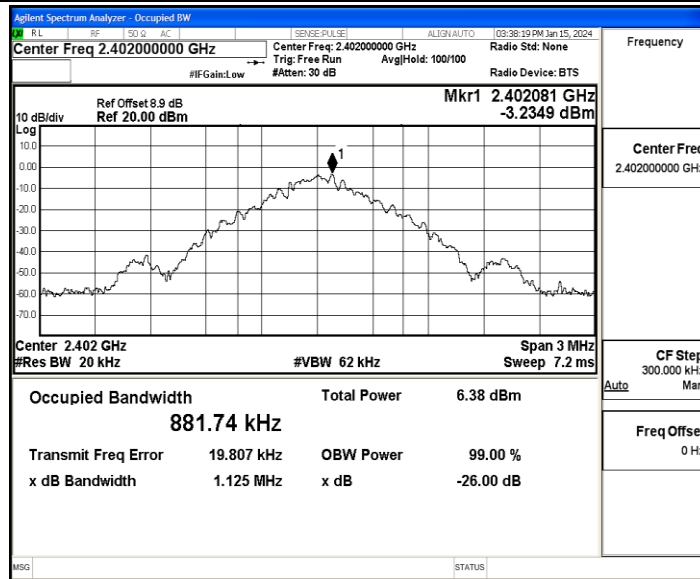
Appendix B: Occupied Channel Bandwidth

Test Result

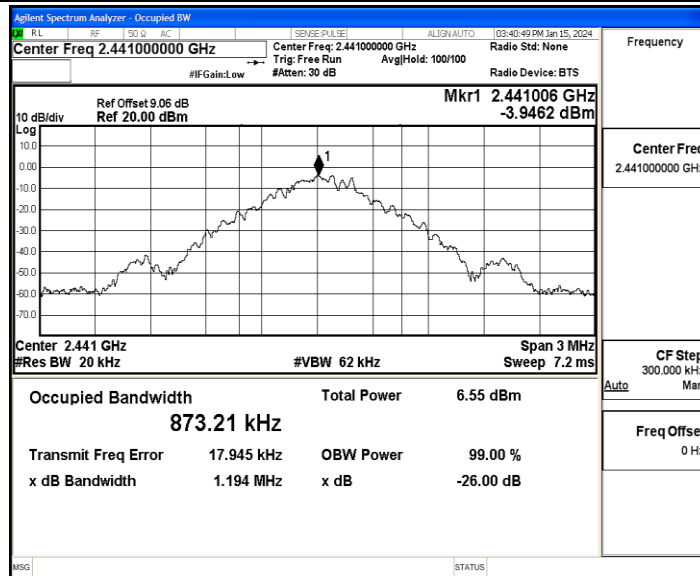
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88174	2401.5789	2402.4607	---	---
		2441	0.87321	2440.5813	2441.4546	---	---
		2480	0.86886	2479.5824	2480.4513	---	---
2DH5	Ant1	2402	1.1754	2401.4301	2402.6055	---	---
		2441	1.1788	2440.4281	2441.6069	---	---
		2480	1.1784	2479.4288	2480.6072	---	---
3DH5	Ant1	2402	1.1808	2401.4230	2402.6038	---	---
		2441	1.1799	2440.4240	2441.6039	---	---
		2480	1.1894	2479.4164	2480.6058	---	---

Test Graphs

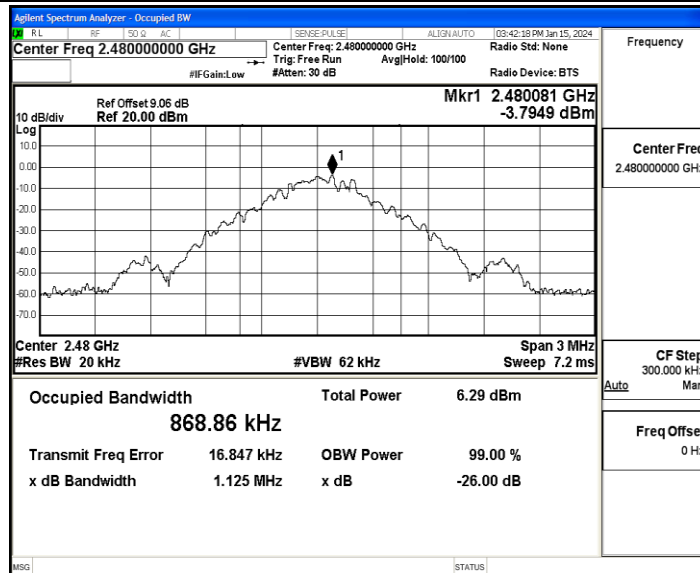
DH5_Ant1_2402



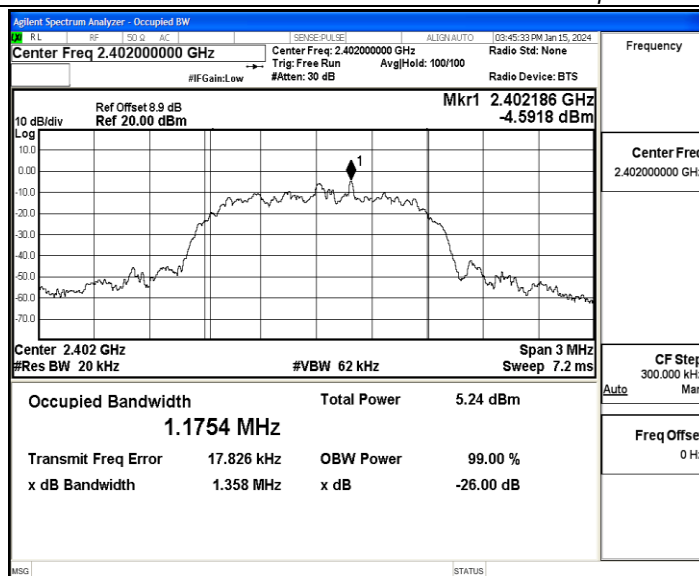
DH5_Ant1_2441



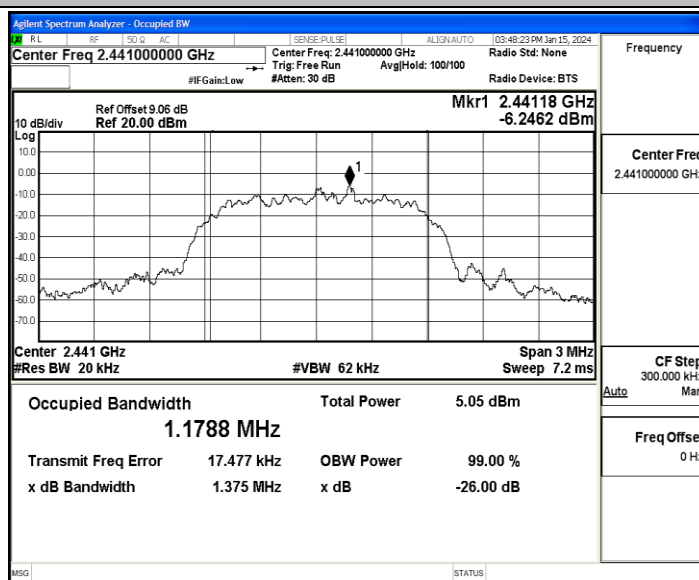
DH5_Ant1_2480



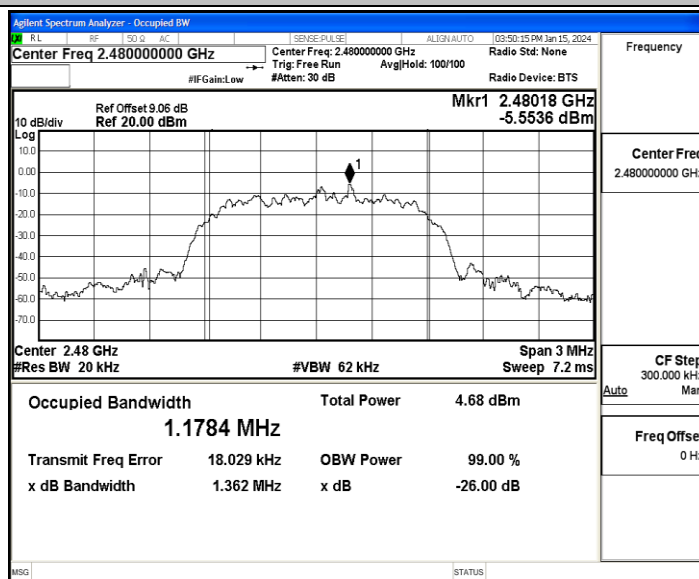
2DH5_Ant1_2402



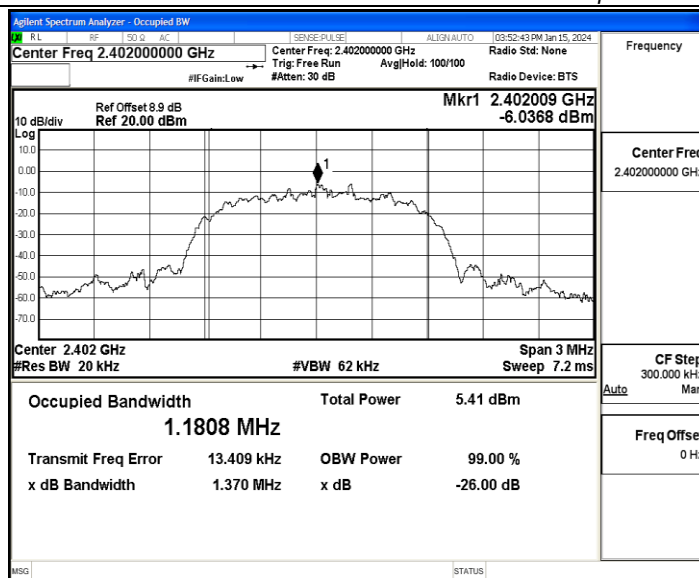
2DH5_Ant1_2441



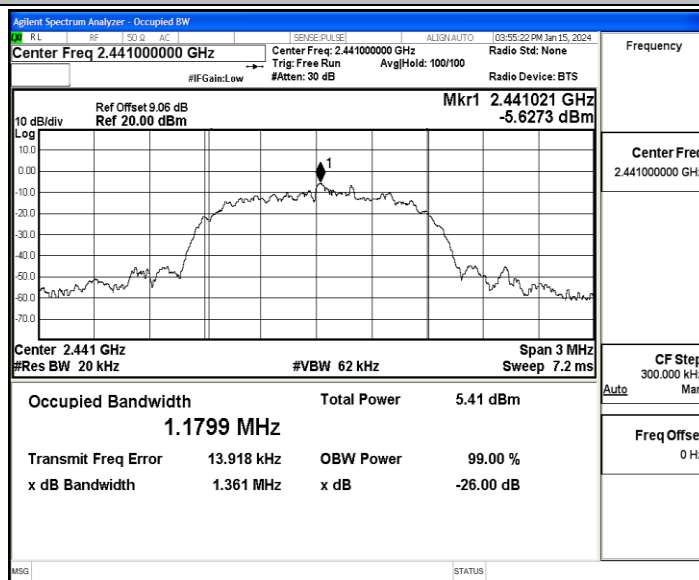
2DH5_Ant1_2480



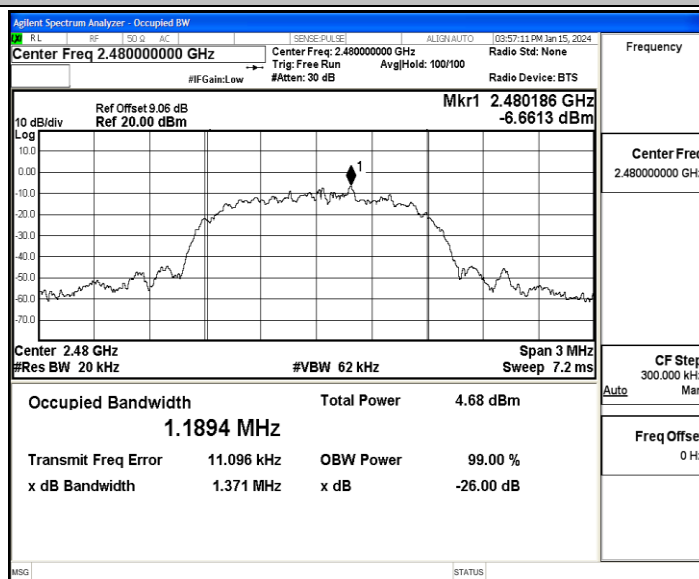
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



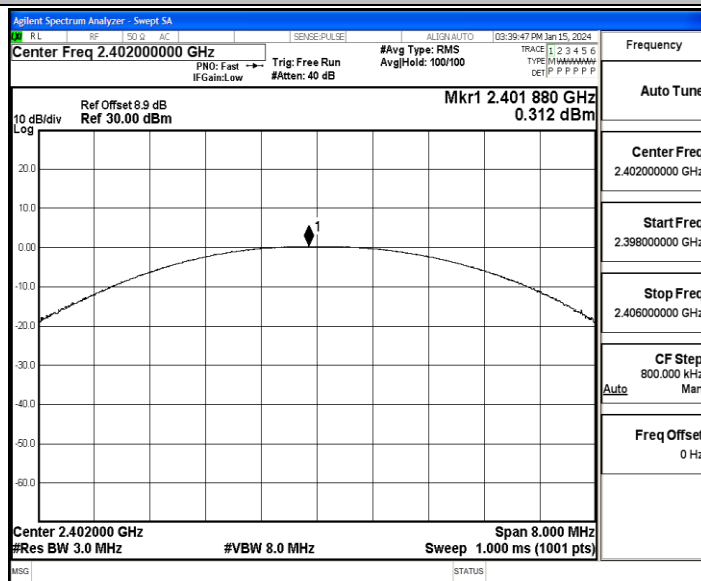
Appendix C: Maximum Peak conducted output power

Test Result

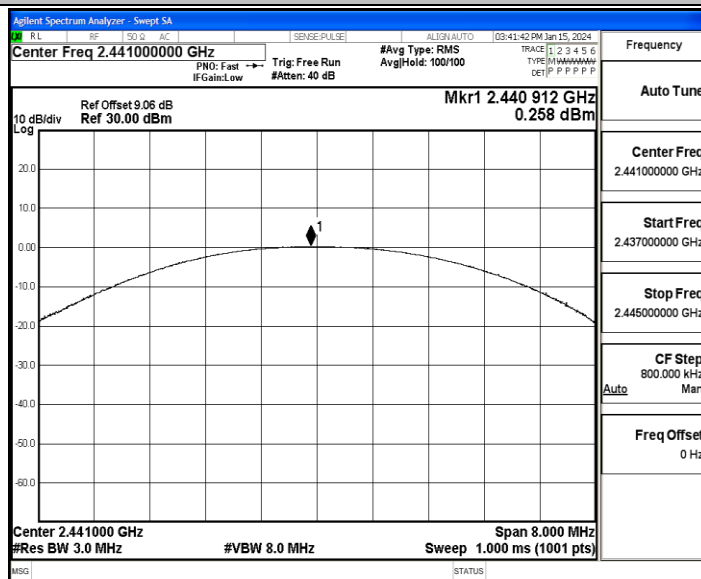
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.31	≤ 20.97	PASS
		2441	0.26	≤ 20.97	PASS
		2480	-0.16	≤ 20.97	PASS
2DH5	Ant1	2402	0.64	≤ 20.97	PASS
		2441	0.57	≤ 20.97	PASS
		2480	0.11	≤ 20.97	PASS
3DH5	Ant1	2402	1.07	≤ 20.97	PASS
		2441	1.11	≤ 20.97	PASS
		2480	0.73	≤ 20.97	PASS

Test Graphs

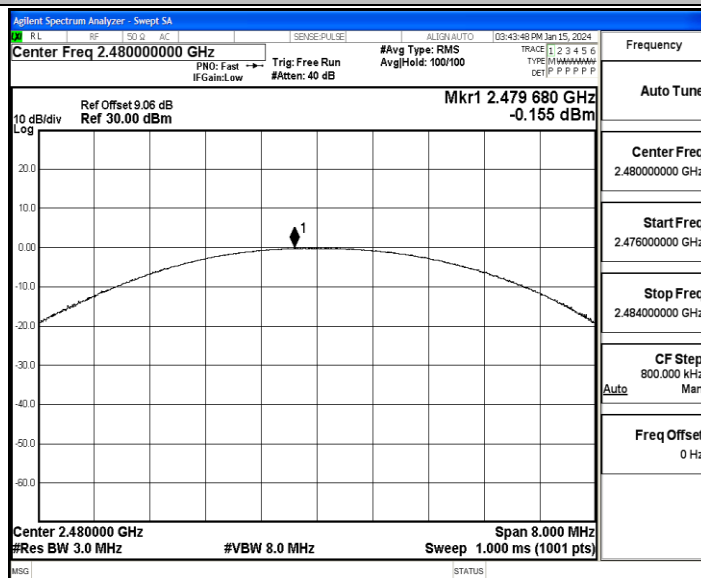
DH5_Ant1_2402



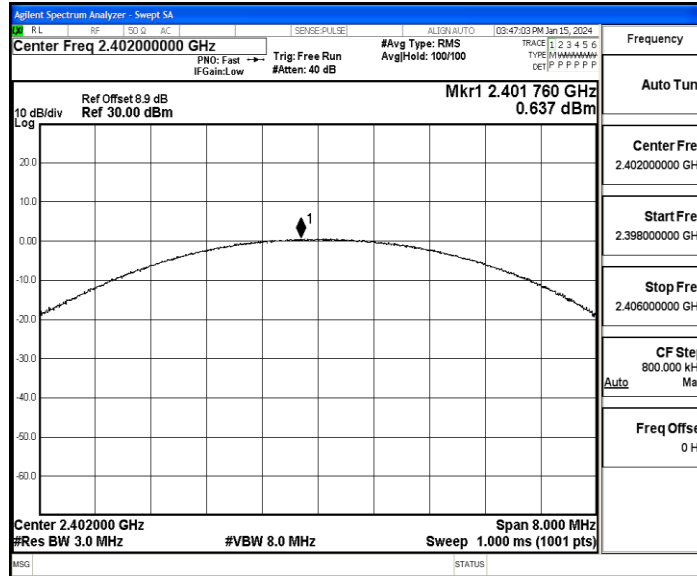
DH5_Ant1_2441



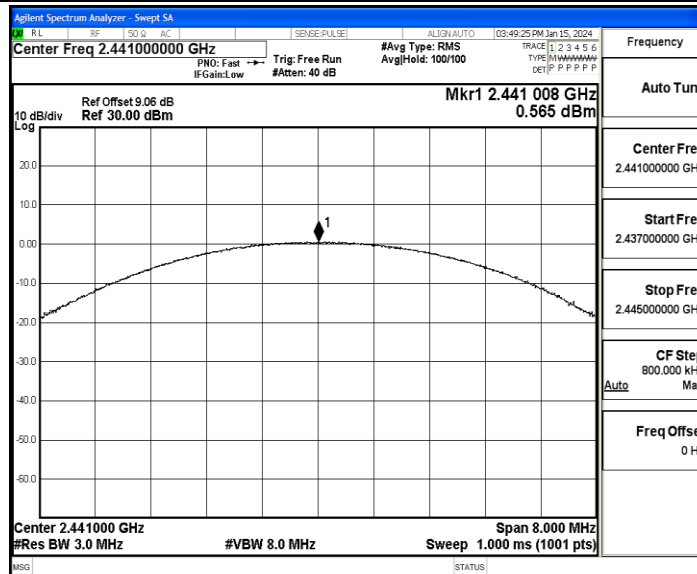
DH5_Ant1_2480



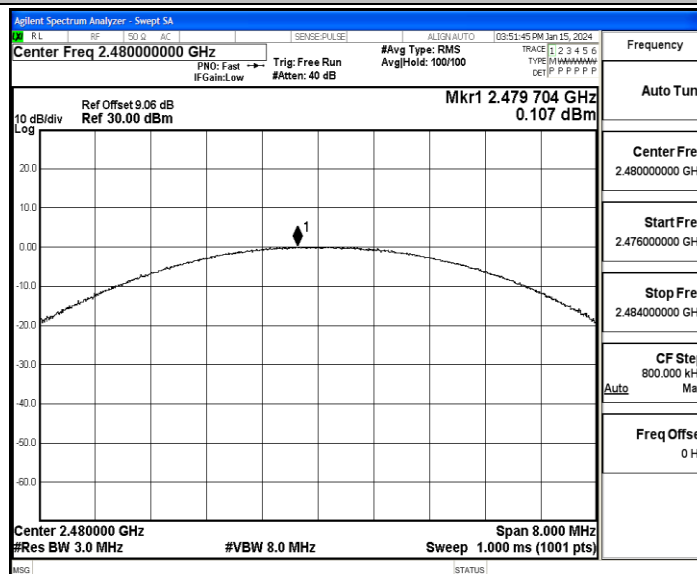
2DH5_Ant1_2402



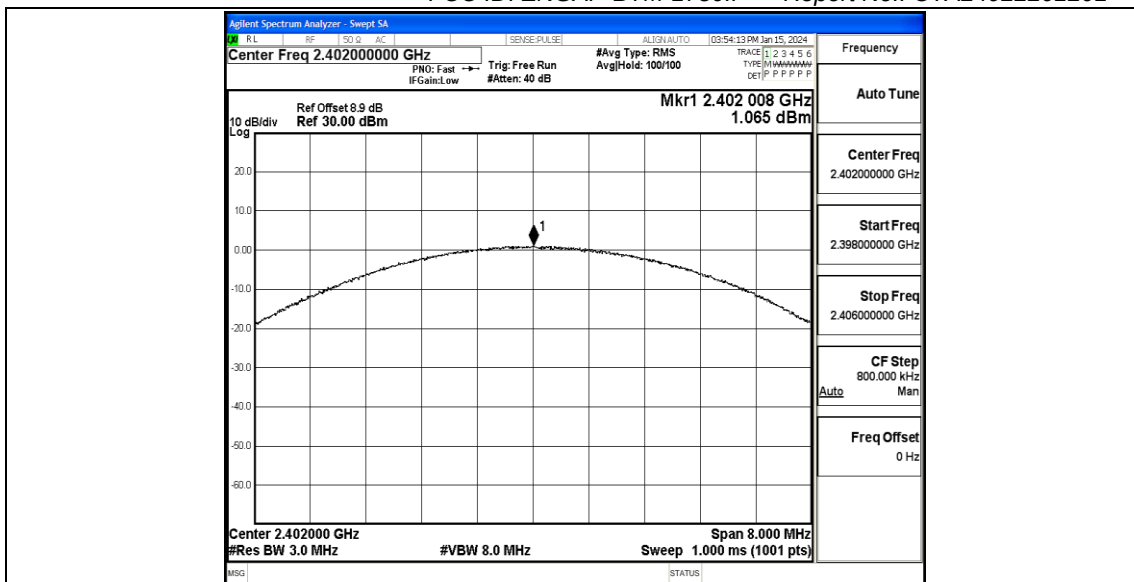
2DH5_Ant1_2441



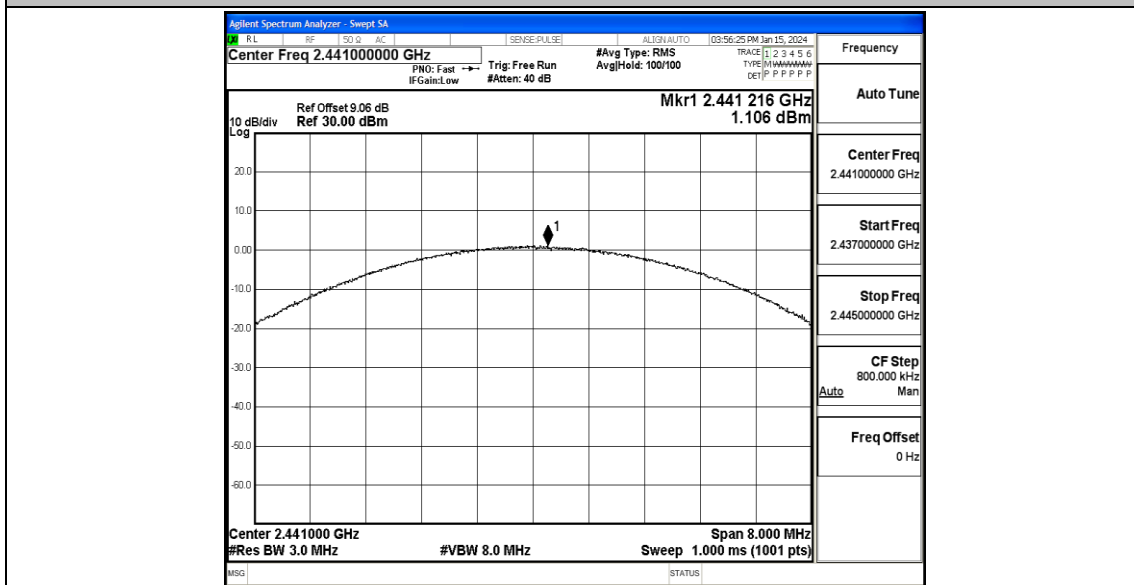
2DH5_Ant1_2480



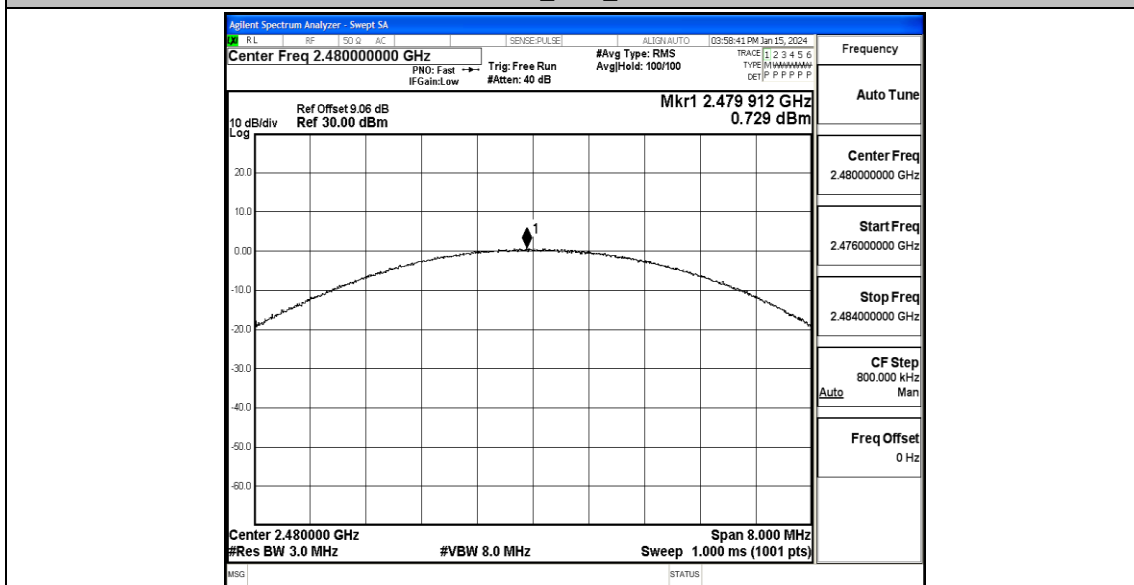
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

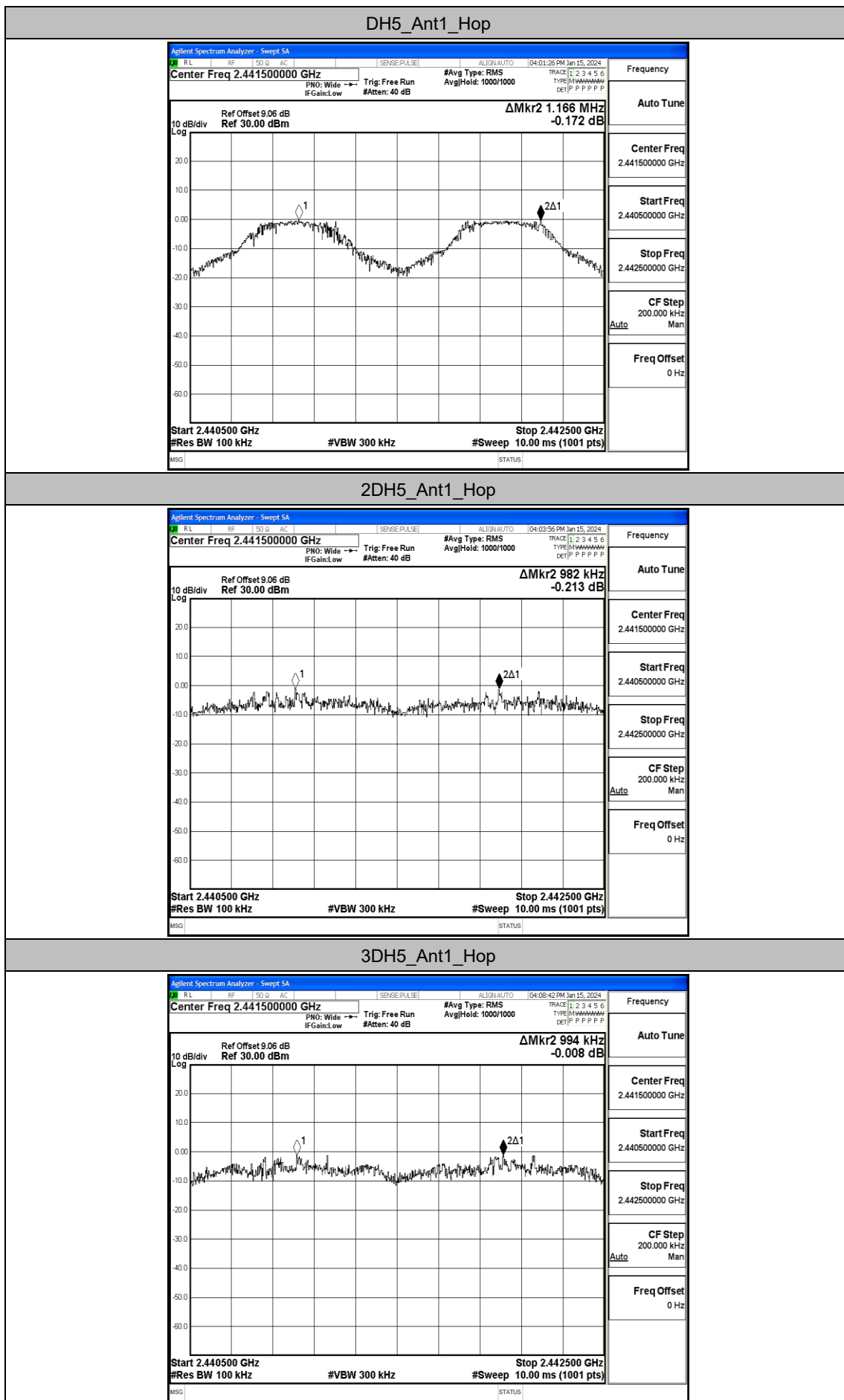


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.166	≥ 0.945	PASS
2DH5	Ant1	Hop	0.982	≥ 0.880	PASS
3DH5	Ant1	Hop	0.994	≥ 0.876	PASS

Test Graphs

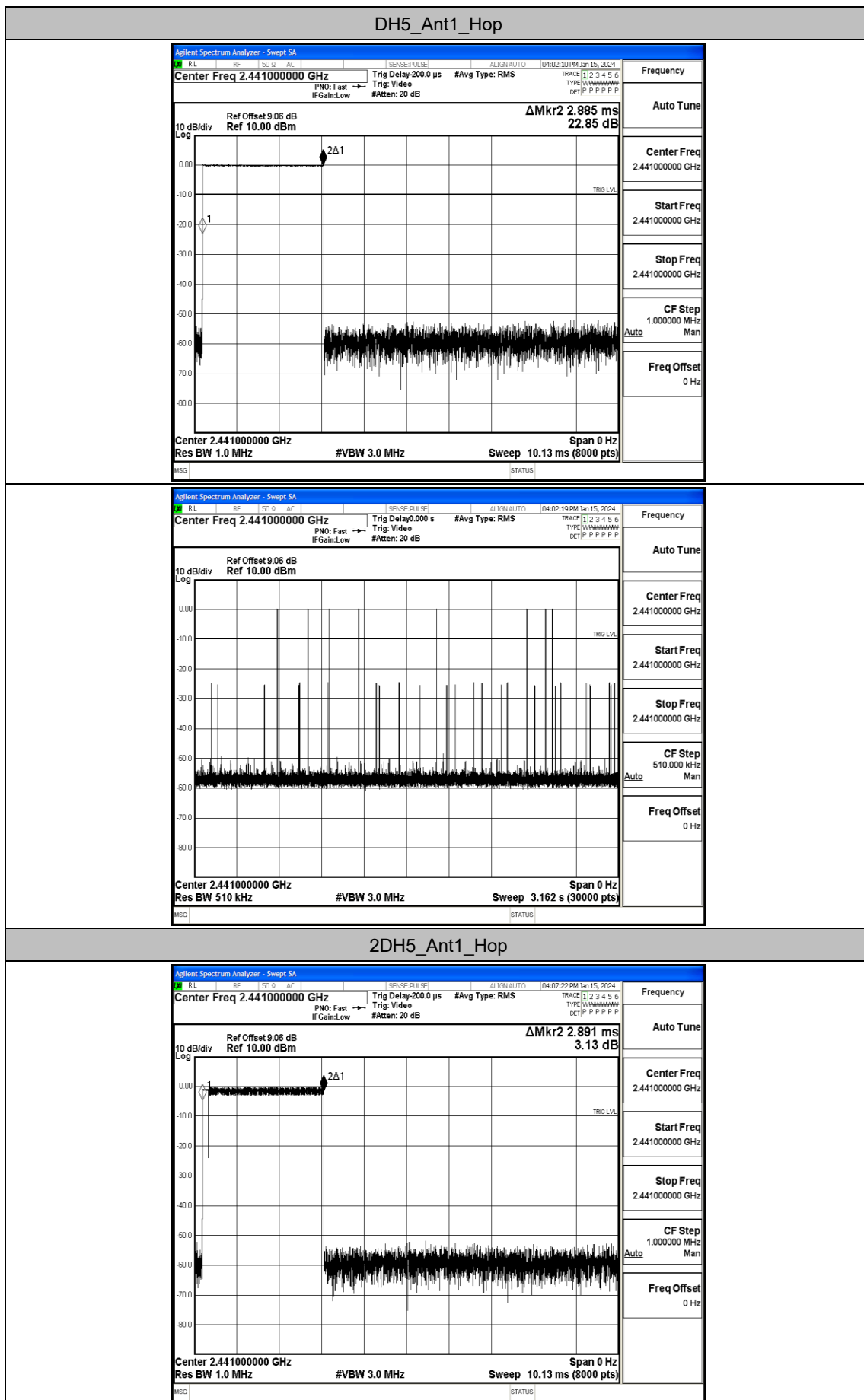


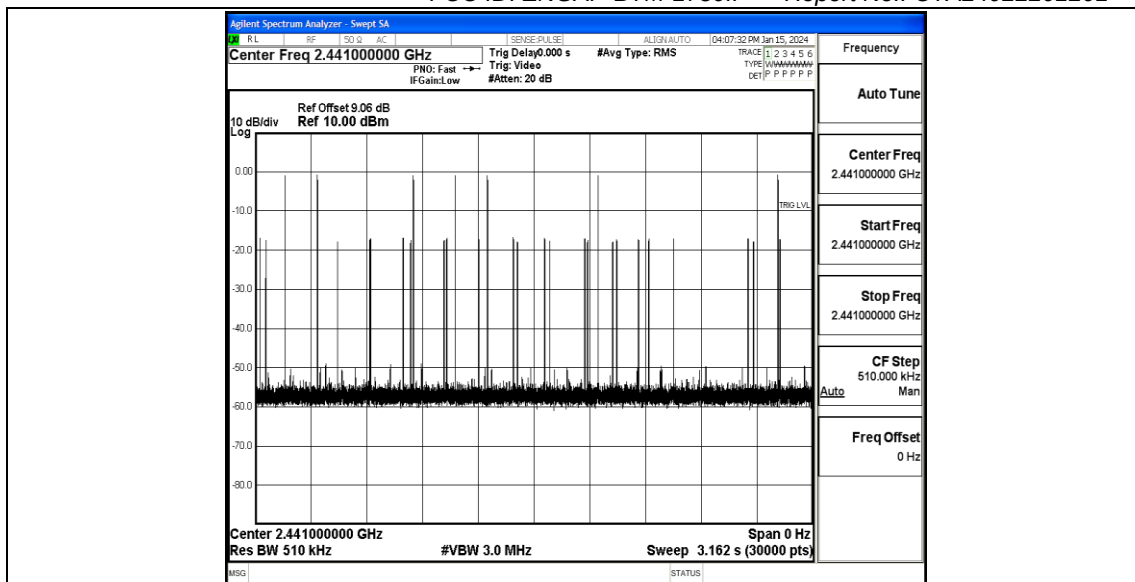
Appendix E: Time of occupancy

Test Result

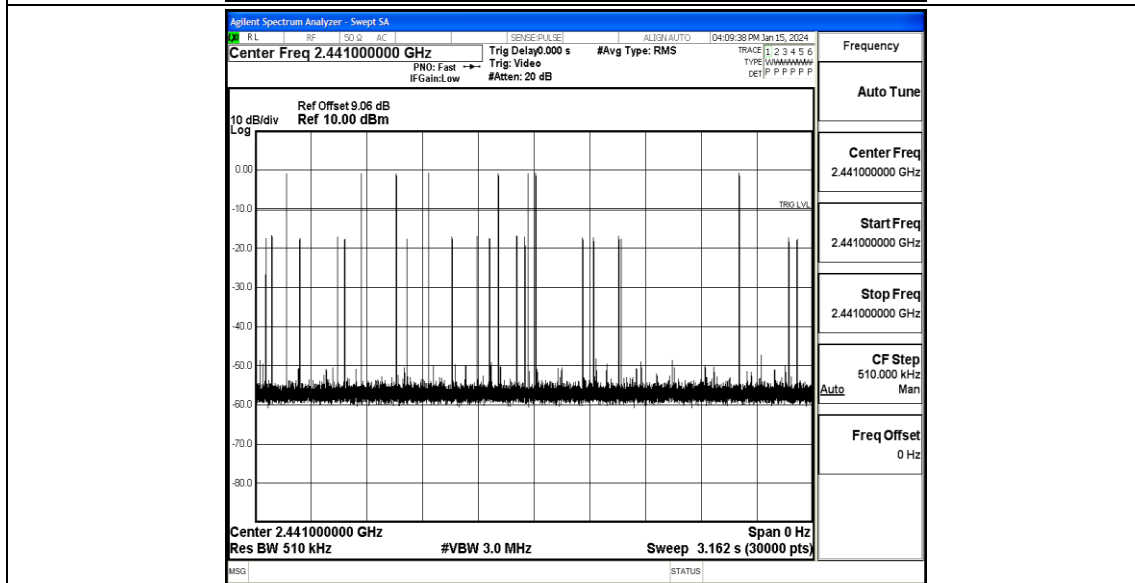
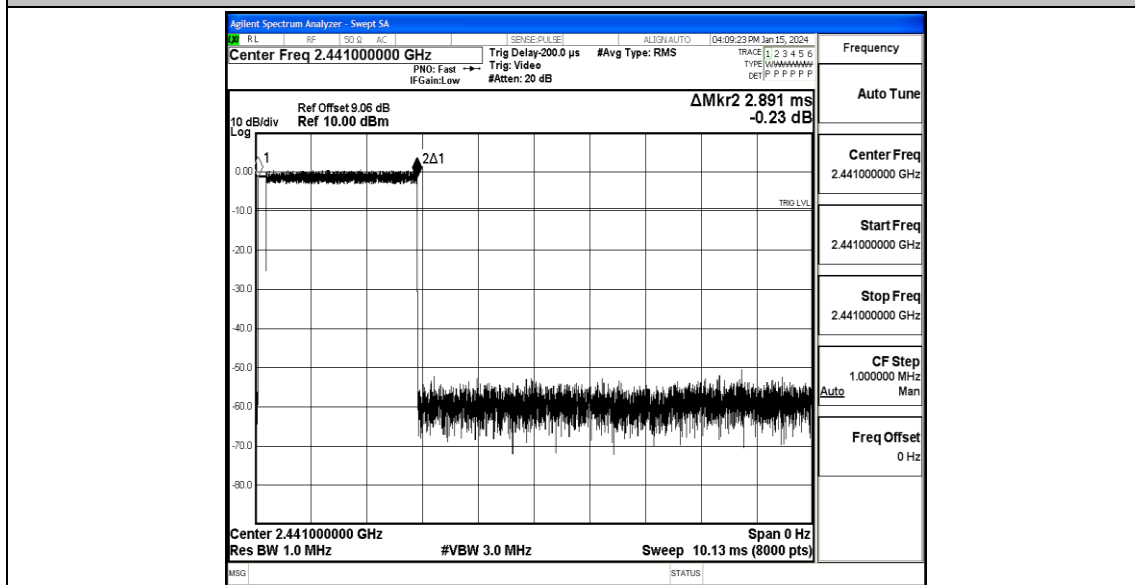
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	90	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.891	80	0.231	≤0.4	PASS
3DH5	Ant1	Hop	2.891	90	0.26	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop

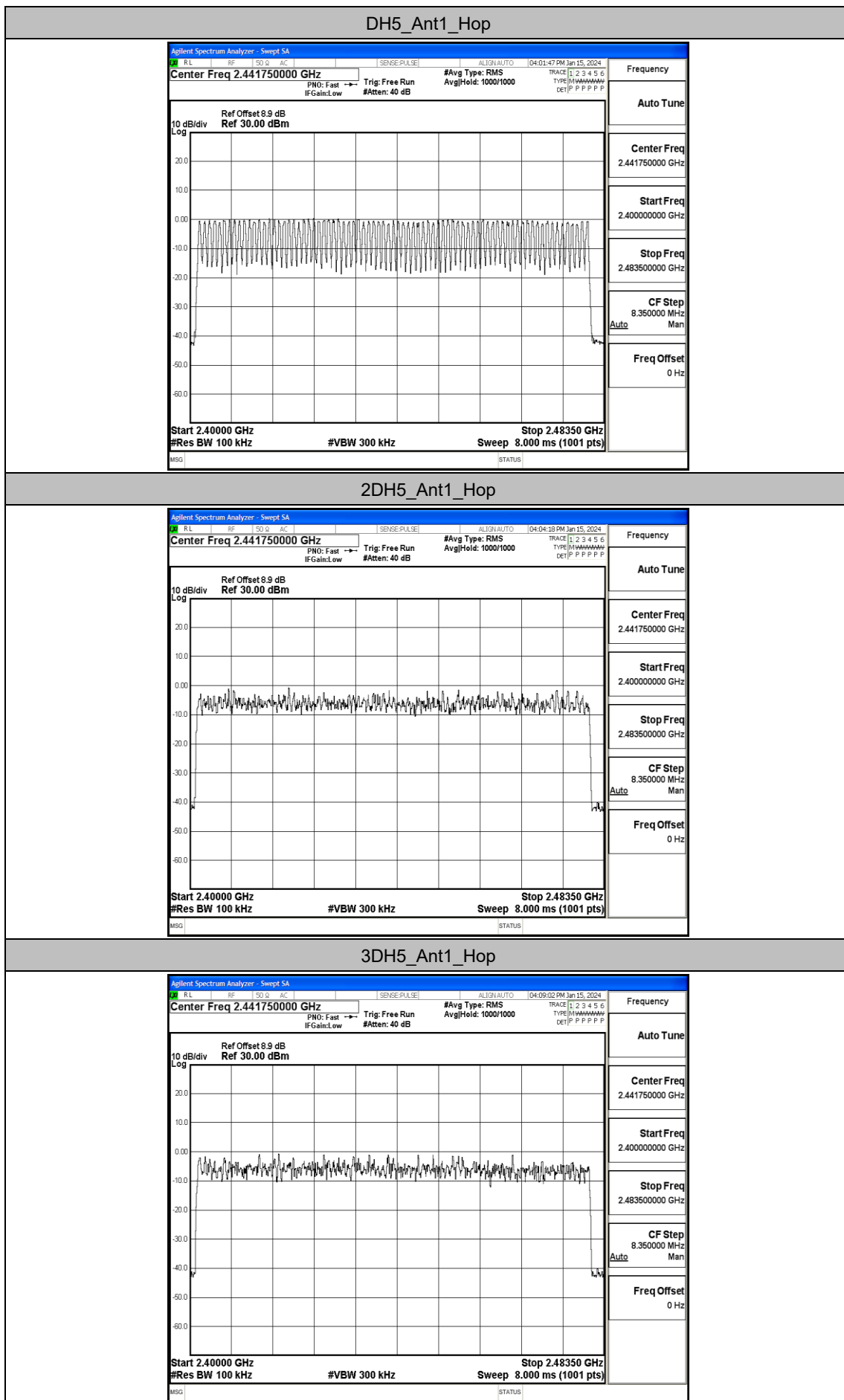


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	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



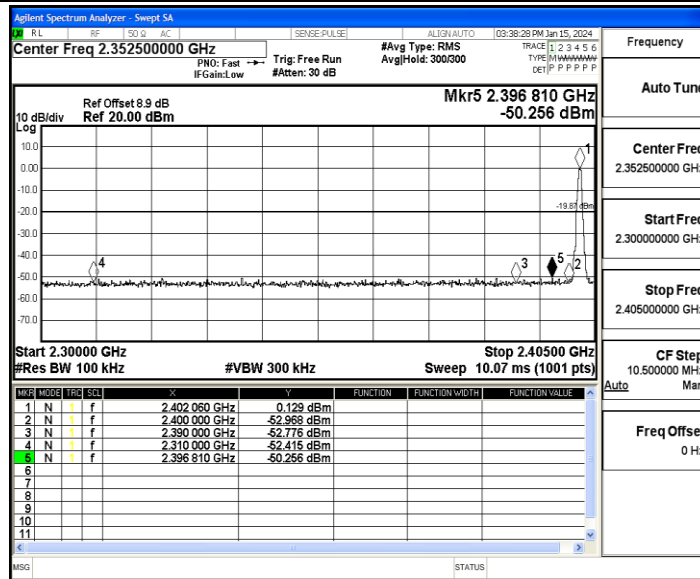
Appendix G: Band edge measurements

Test Result

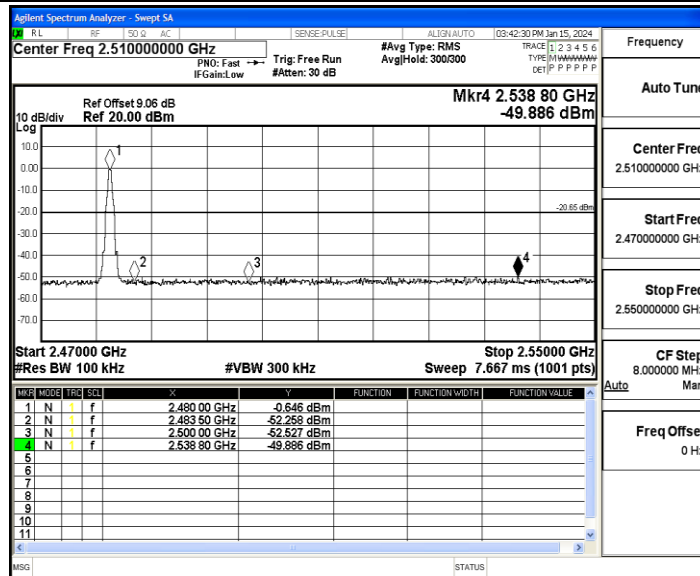
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.13	-50.26	≤ -19.87	PASS
		High	2480	-0.65	-49.89	≤ -20.65	PASS
		Low	Hop_2402	-1.31	-50.79	≤ -21.31	PASS
		High	Hop_2480	-0.68	-49.66	≤ -20.68	PASS
2DH5	Ant1	Low	2402	-1.16	-50.62	≤ -21.16	PASS
		High	2480	-3.30	-49.45	≤ -23.3	PASS
		Low	Hop_2402	-1.35	-50.91	≤ -21.35	PASS
		High	Hop_2480	-4.09	-48.82	≤ -24.09	PASS
3DH5	Ant1	Low	2402	-0.87	-50.21	≤ -20.87	PASS
		High	2480	-1.46	-49.79	≤ -21.46	PASS
		Low	Hop_2402	-3.94	-49.98	≤ -23.94	PASS
		High	Hop_2480	-3.02	-49.38	≤ -23.02	PASS

Test Graphs

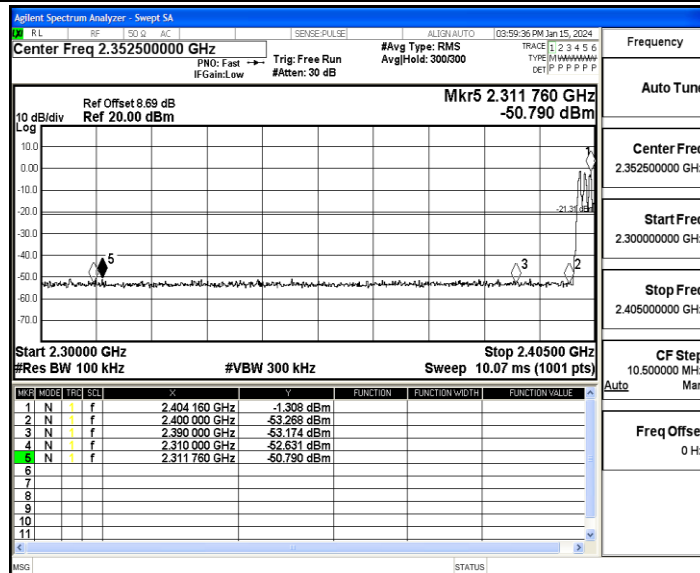
DH5_Ant1_Low_2402



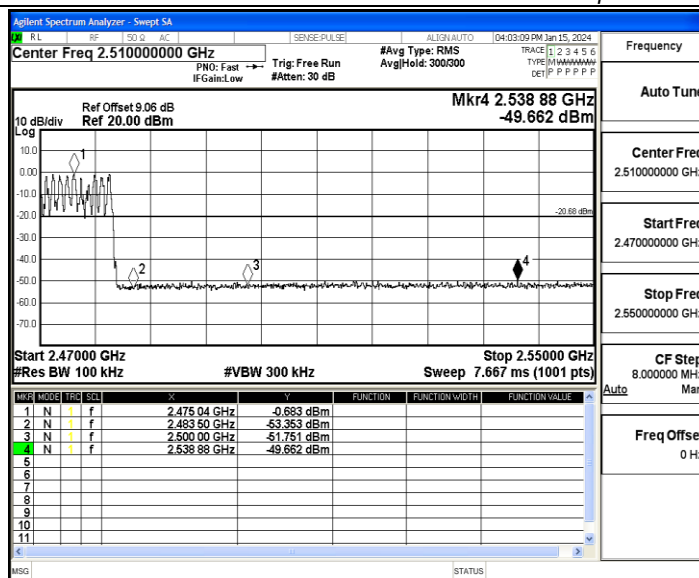
DH5_Ant1_High_2480



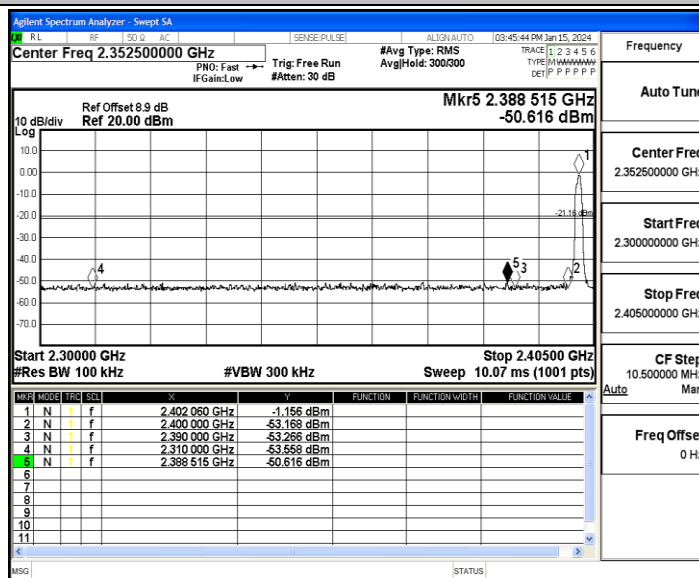
DH5_Ant1_Low_Hop_2402



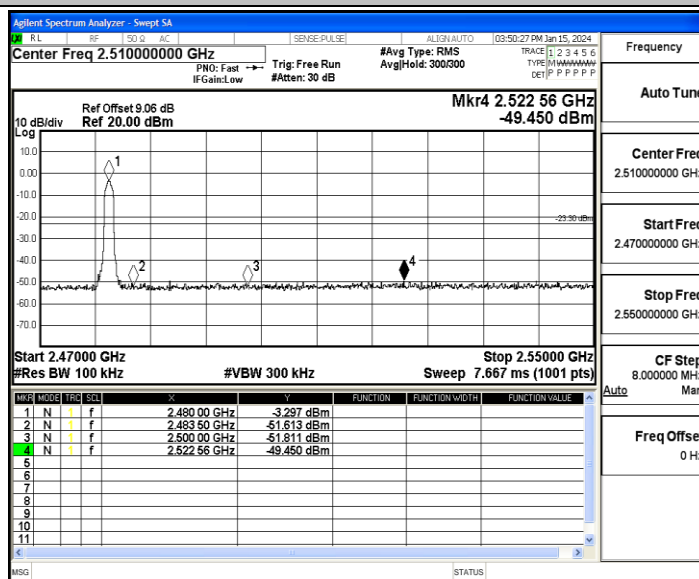
DH5_Ant1_High_Hop_2480



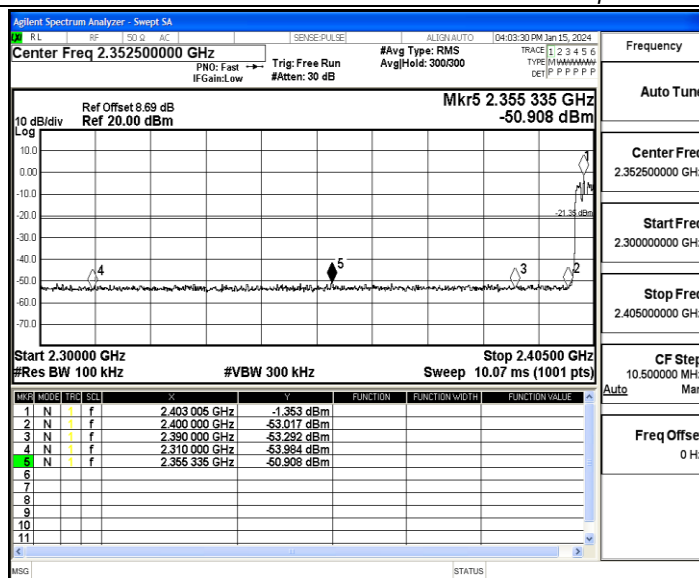
2DH5_Ant1_Low_2402



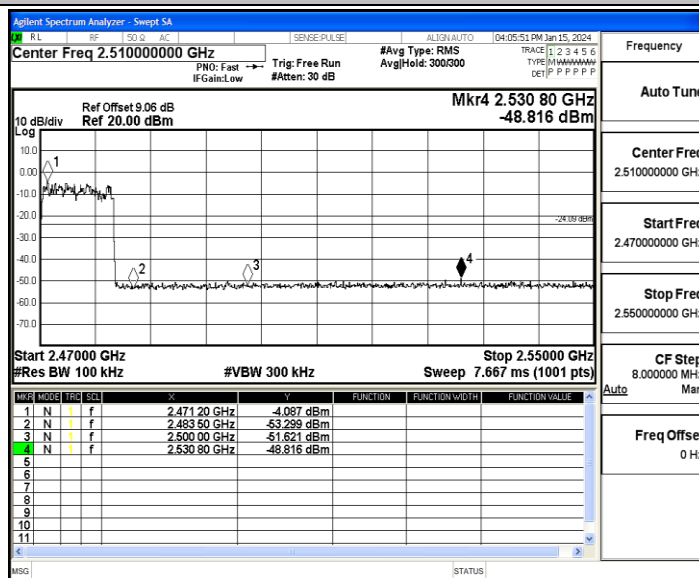
2DH5_Ant1_High_2480



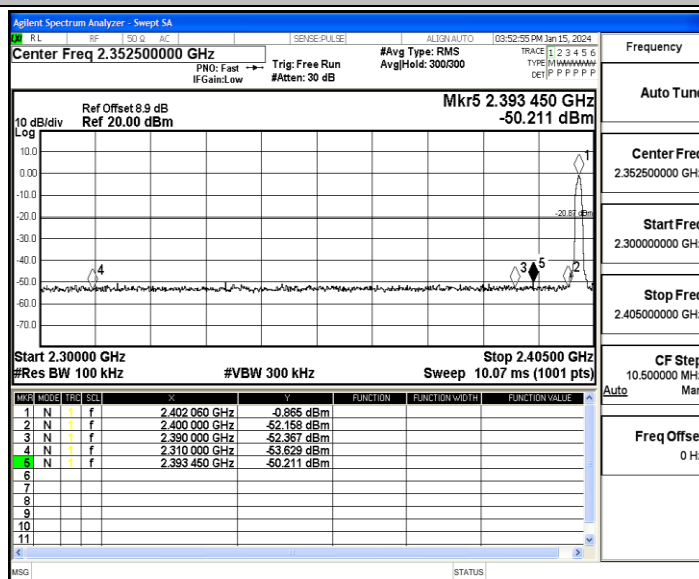
2DH5_Ant1_Low_Hop_2402



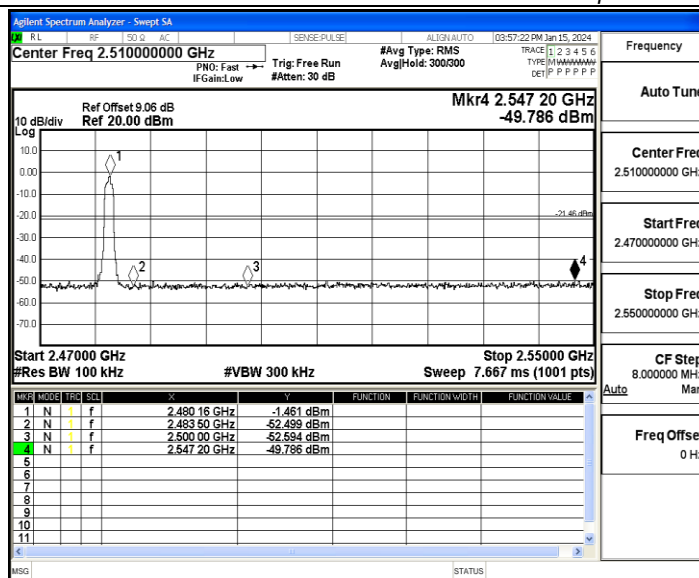
2DH5_Ant1_High_Hop_2480



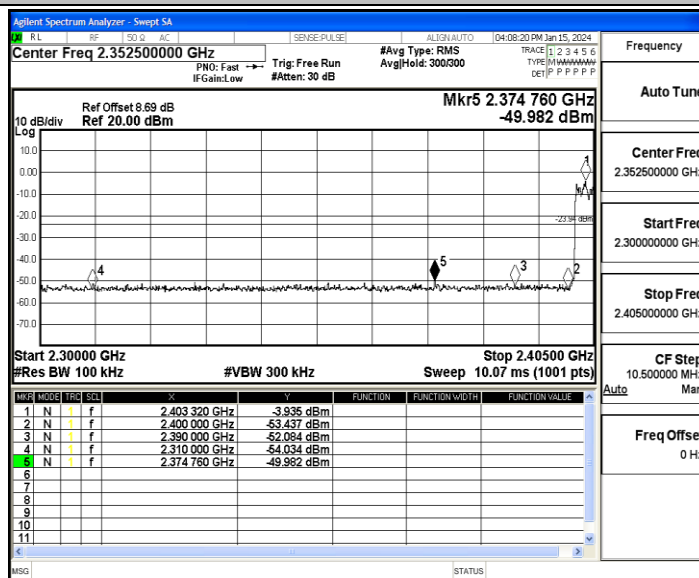
3DH5_Ant1_Low_2402



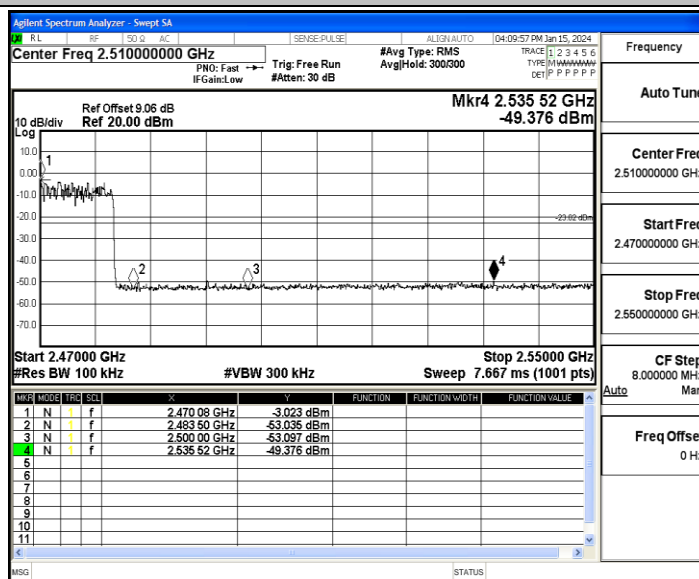
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

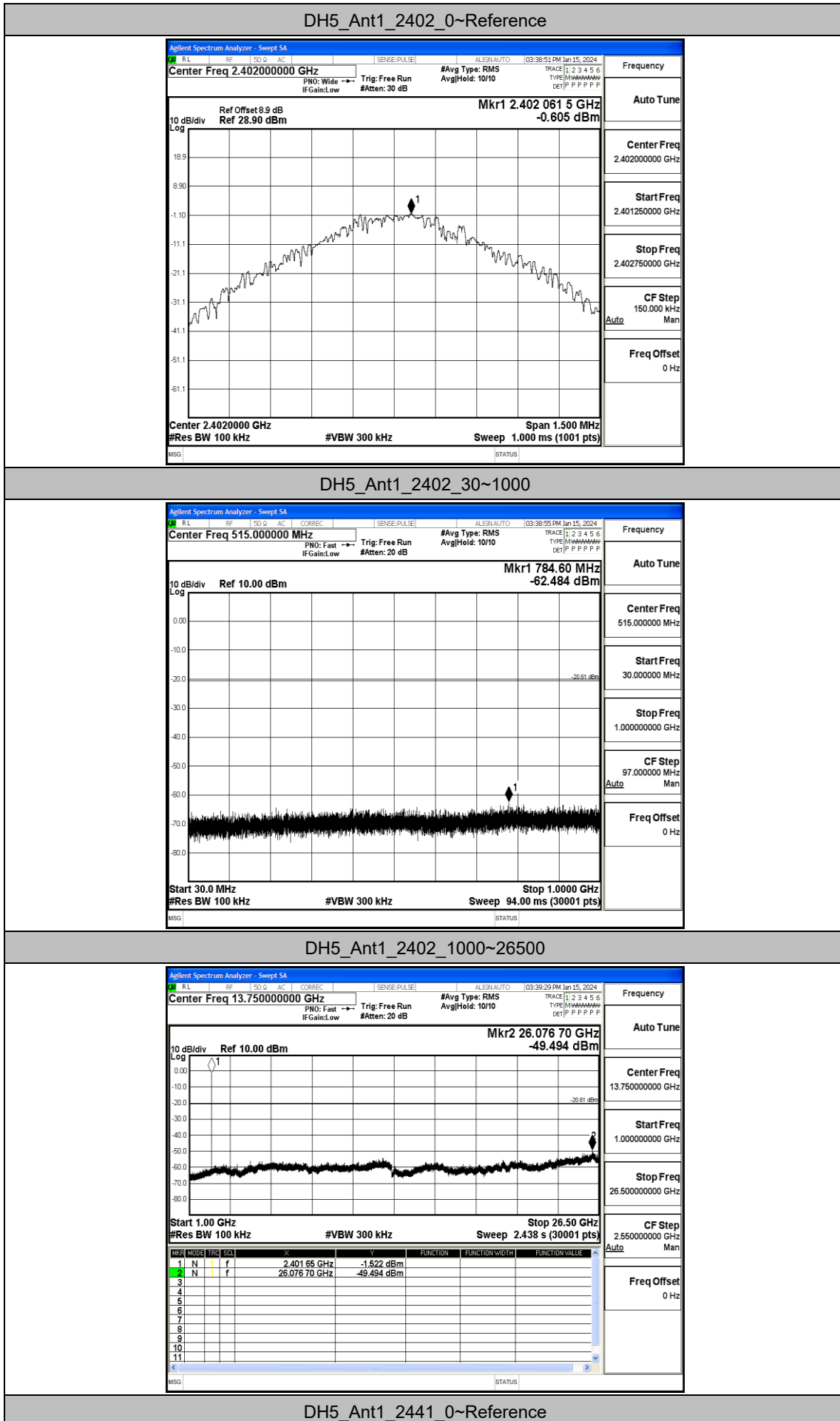


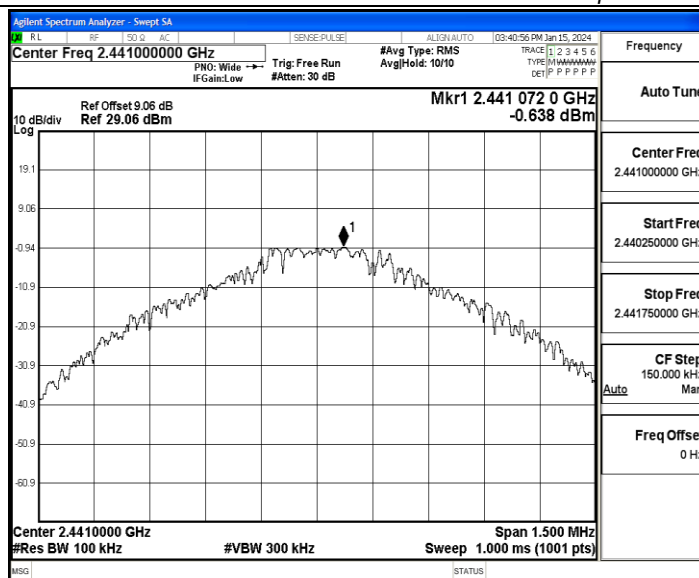
Appendix H: Conducted Spurious Emission

Test Result

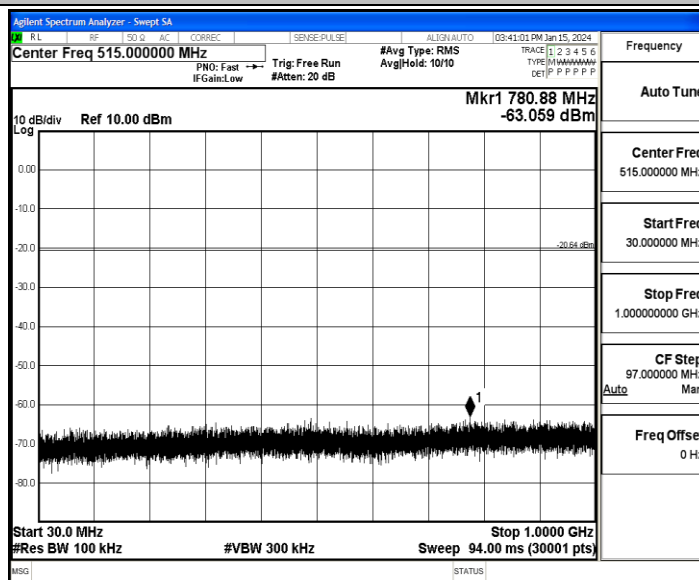
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.61	-0.61	---	PASS
			30~1000	-0.61	-62.48	≤-20.61	PASS
			1000~26500	-0.61	-49.49	≤-20.61	PASS
		2441	Reference	-0.64	-0.64	---	PASS
			30~1000	-0.64	-63.06	≤-20.64	PASS
			1000~26500	-0.64	-50.88	≤-20.64	PASS
		2480	Reference	-1.22	-1.22	---	PASS
			30~1000	-1.22	-63.19	≤-21.22	PASS
			1000~26500	-1.22	-50.12	≤-21.22	PASS
2DH5	Ant1	2402	Reference	-4.14	-4.14	---	PASS
			30~1000	-4.14	-62.74	≤-24.14	PASS
			1000~26500	-4.14	-51.03	≤-24.14	PASS
		2441	Reference	-1.15	-1.15	---	PASS
			30~1000	-1.15	-63.33	≤-21.15	PASS
			1000~26500	-1.15	-50.47	≤-21.15	PASS
		2480	Reference	-3.04	-3.04	---	PASS
			30~1000	-3.04	-62.66	≤-23.04	PASS
			1000~26500	-3.04	-50.63	≤-23.04	PASS
3DH5	Ant1	2402	Reference	-2.42	-2.42	---	PASS
			30~1000	-2.42	-63.23	≤-22.42	PASS
			1000~26500	-2.42	-50.62	≤-22.42	PASS
		2441	Reference	-3.98	-3.98	---	PASS
			30~1000	-3.98	-62.21	≤-23.98	PASS
			1000~26500	-3.98	-50.6	≤-23.98	PASS
		2480	Reference	-2.98	-2.98	---	PASS
			30~1000	-2.98	-62.73	≤-22.98	PASS
			1000~26500	-2.98	-50.8	≤-22.98	PASS

Test Graphs

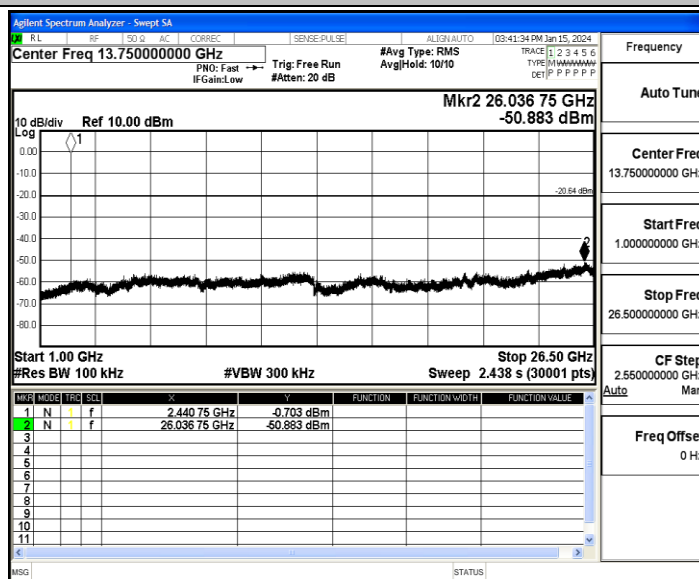




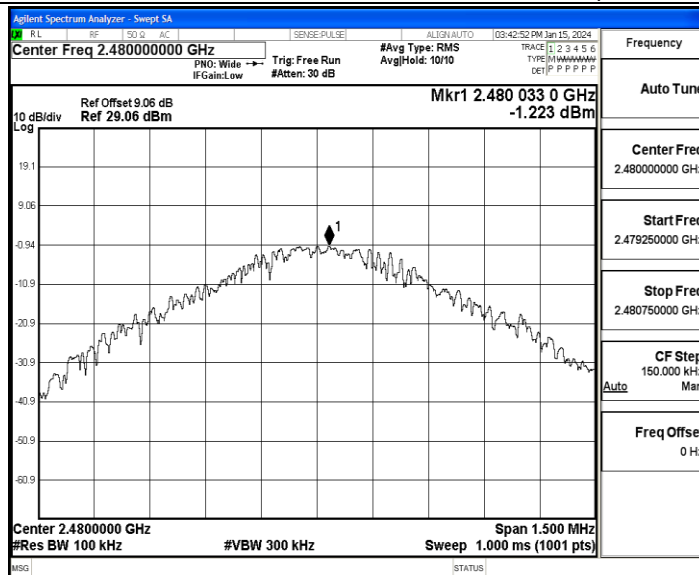
DH5_Ant1_2441_30~1000



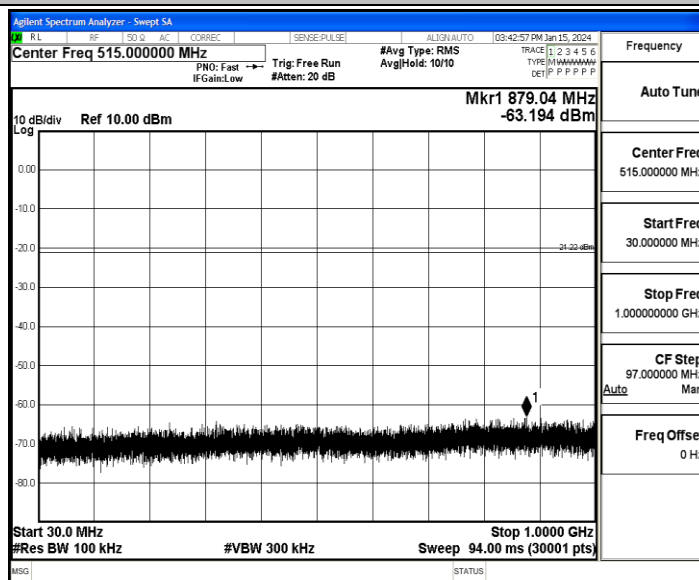
DH5_Ant1_2441_1000~26500



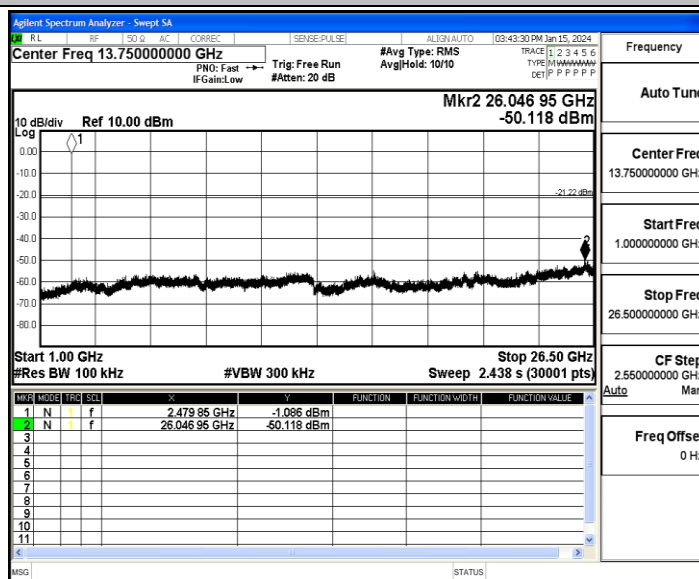
DH5_Ant1_2480_0~Reference



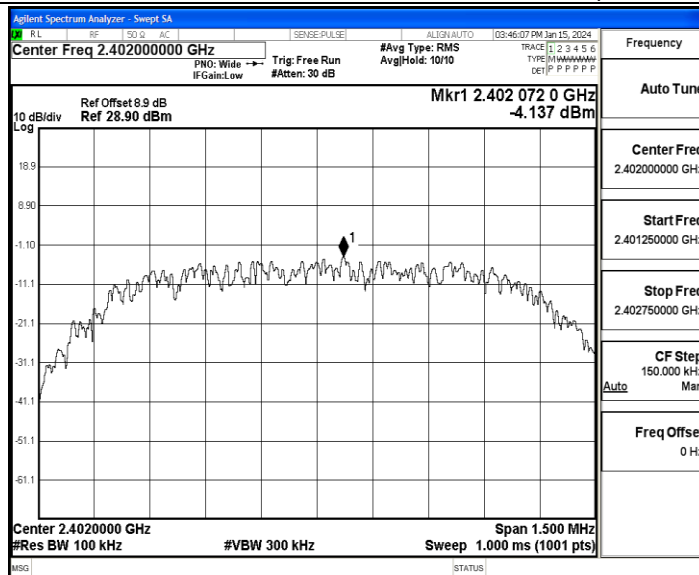
DH5_Ant1_2480_30~1000



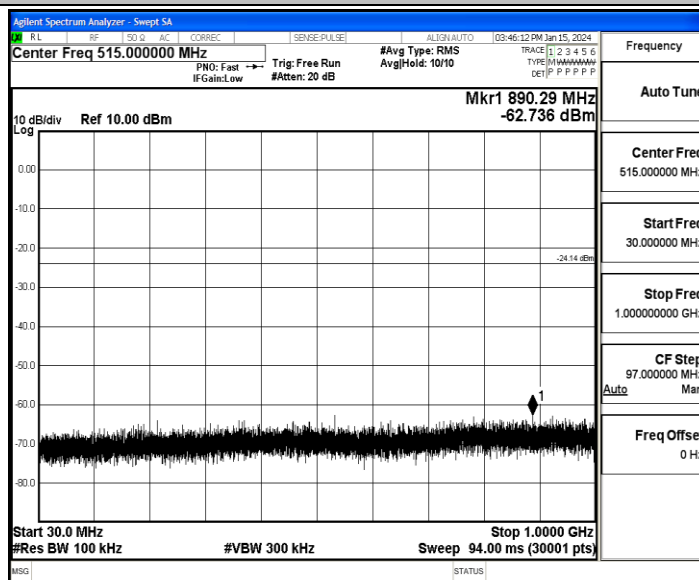
DH5_Ant1_2480_1000~26500



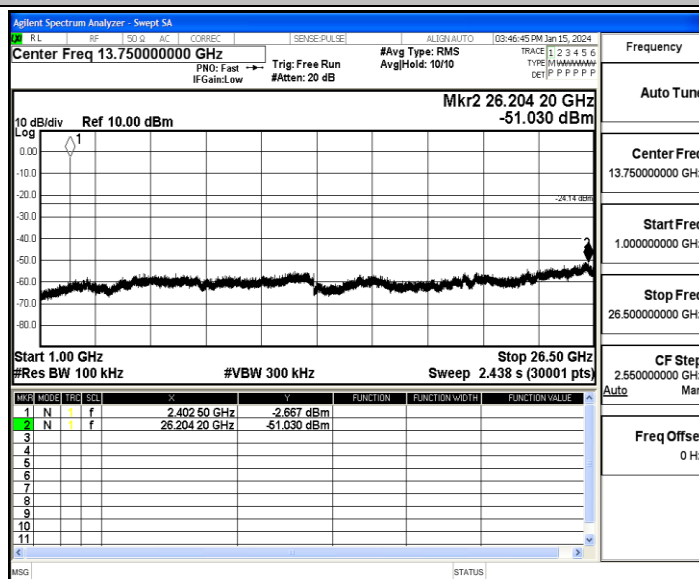
2DH5_Ant1_2402_0~Reference



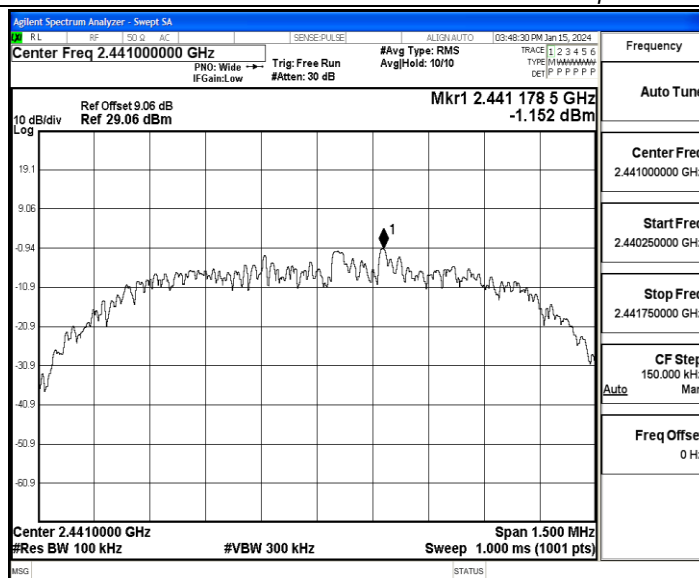
2DH5_Ant1_2402_30~1000



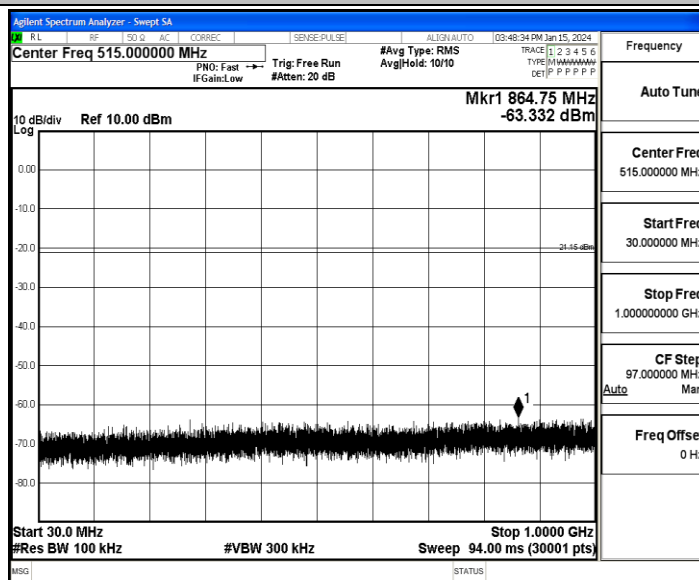
2DH5_Ant1_2402_1000~26500



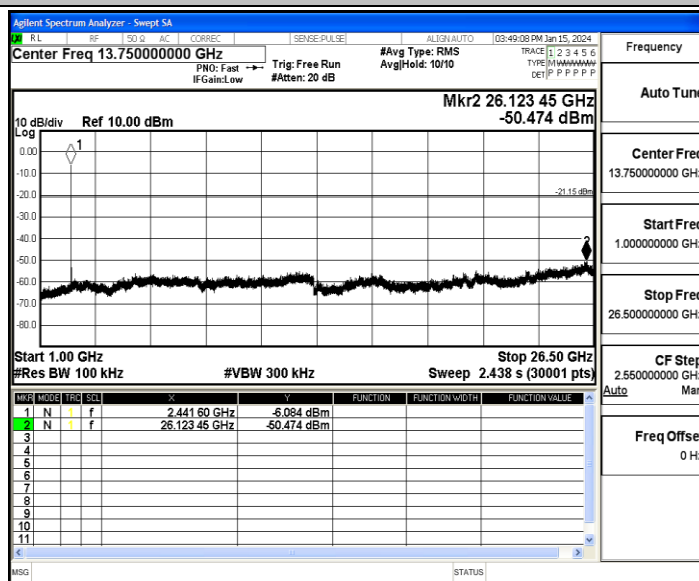
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference