

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: ANC Wireless Earbuds****Trade Mark: Tranya****Test Model: Tranya Nova****FCC ID: 2A4AX-NOVA****Environmental Conditions**

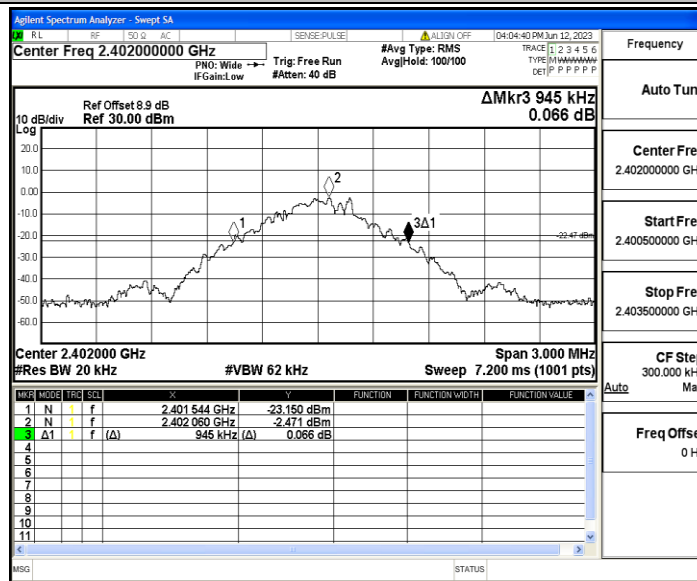
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

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

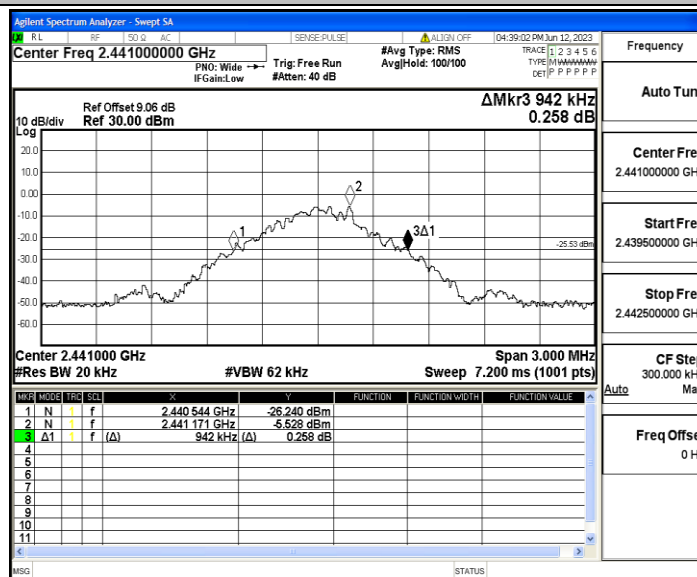
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.544	2402.489	---	---
		2441	0.942	2440.544	2441.486	---	---
		2480	0.945	2479.544	2480.489	---	---
2DH5	Ant1	2402	1.329	2401.340	2402.669	---	---
		2441	1.326	2440.343	2441.669	---	---
		2480	1.344	2479.337	2480.681	---	---
3DH5	Ant1	2402	1.290	2401.361	2402.651	---	---
		2441	1.353	2440.328	2441.681	---	---
		2480	1.302	2479.355	2480.657	---	---

Test Graphs

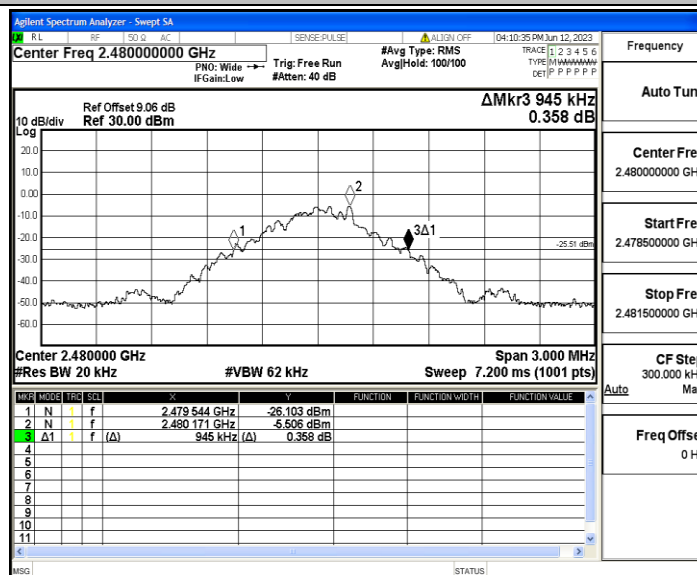
DH5_Ant1_2402



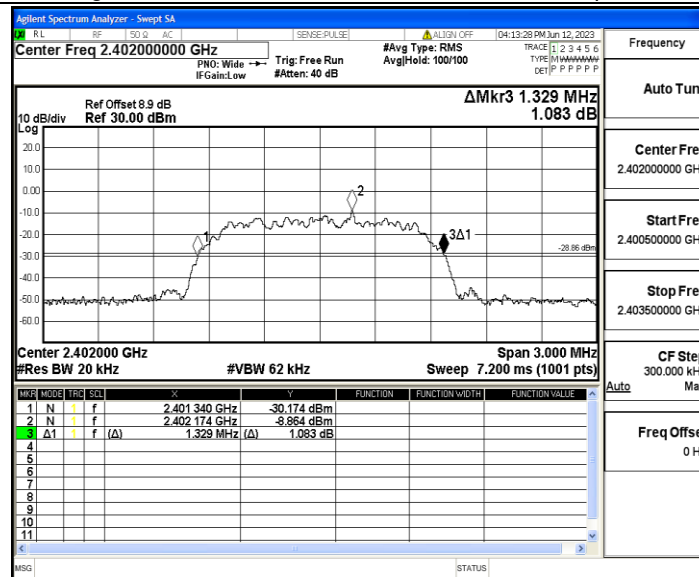
DH5_Ant1_2441



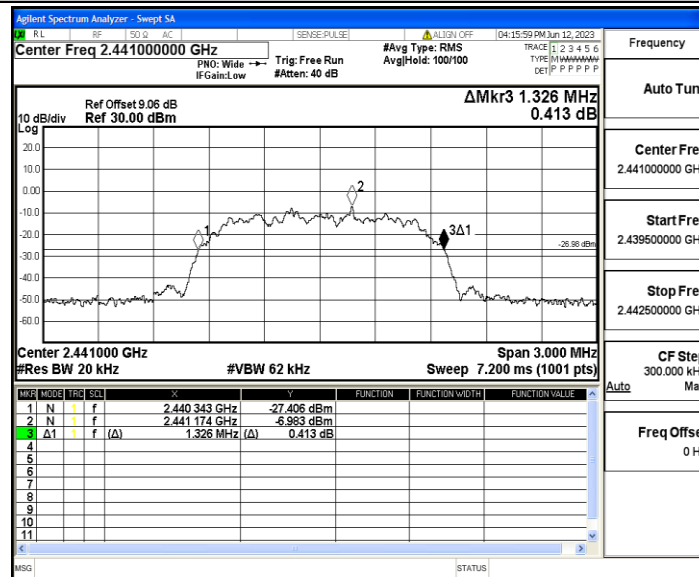
DH5_Ant1_2480



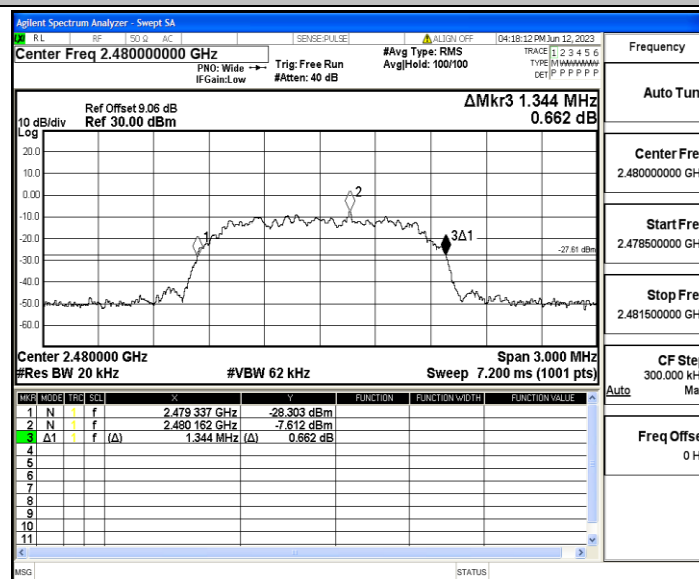
2DH5_Ant1_2402



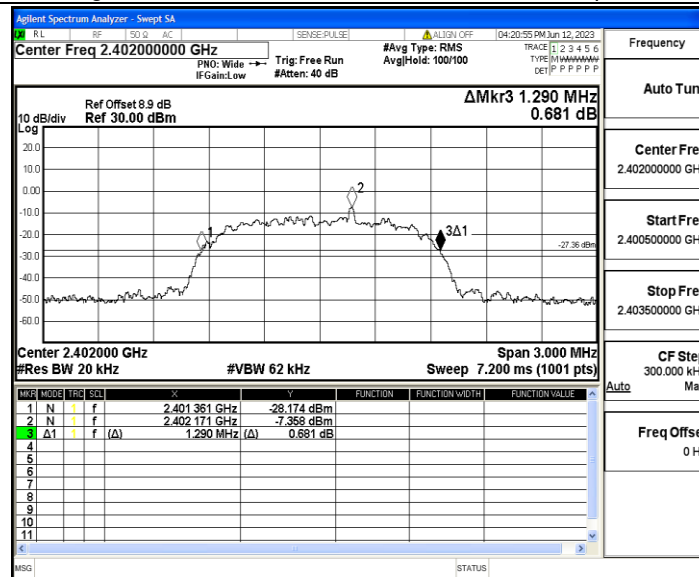
2DH5_Ant1_2441



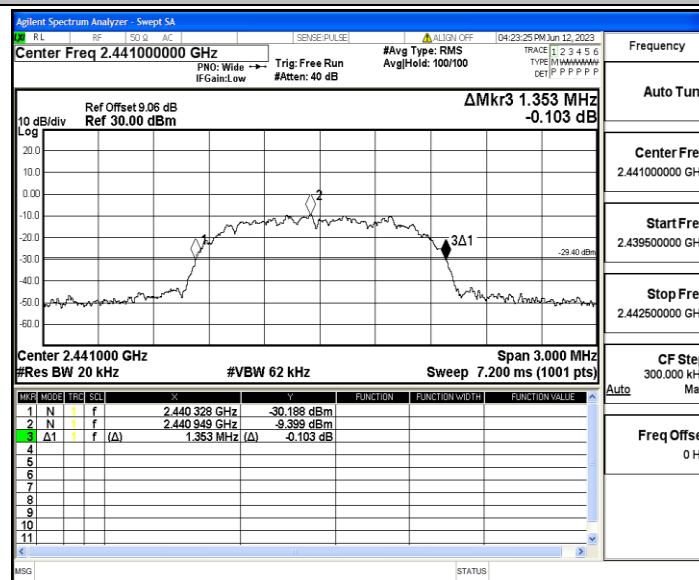
2DH5_Ant1_2480



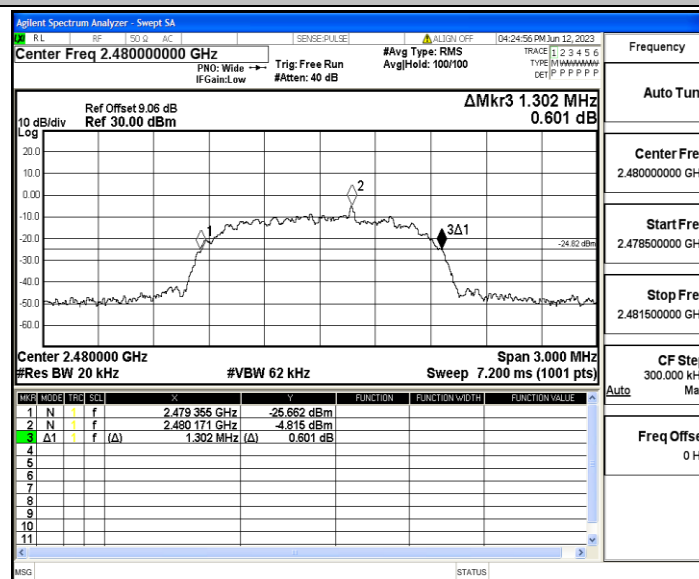
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



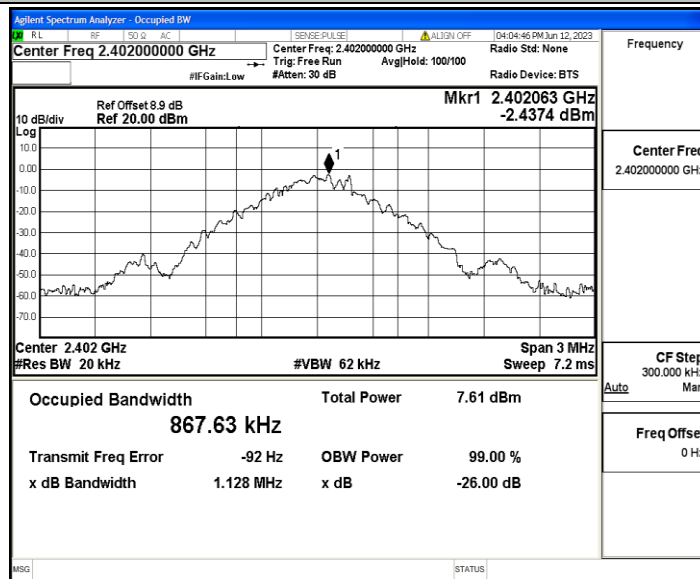
Appendix B: Occupied Channel Bandwidth

Test Result

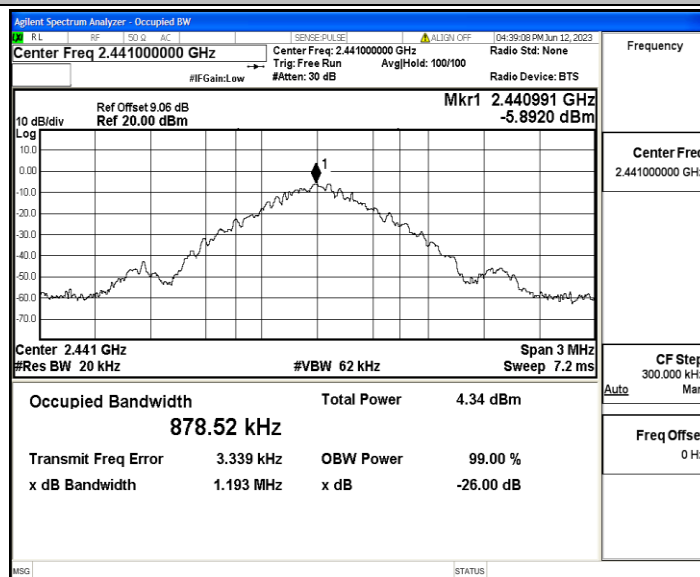
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86763	2401.5661	2402.4337	---	---
		2441	0.87852	2440.5641	2441.4426	---	---
		2480	0.85620	2479.5731	2480.4293	---	---
2DH5	Ant1	2402	1.1903	2401.4105	2402.6008	---	---
		2441	1.1910	2440.4116	2441.6026	---	---
		2480	1.1943	2479.4100	2480.6043	---	---
3DH5	Ant1	2402	1.2006	2401.4002	2402.6008	---	---
		2441	1.1974	2440.4009	2441.5983	---	---
		2480	1.1953	2479.4024	2480.5977	---	---

Test Graphs

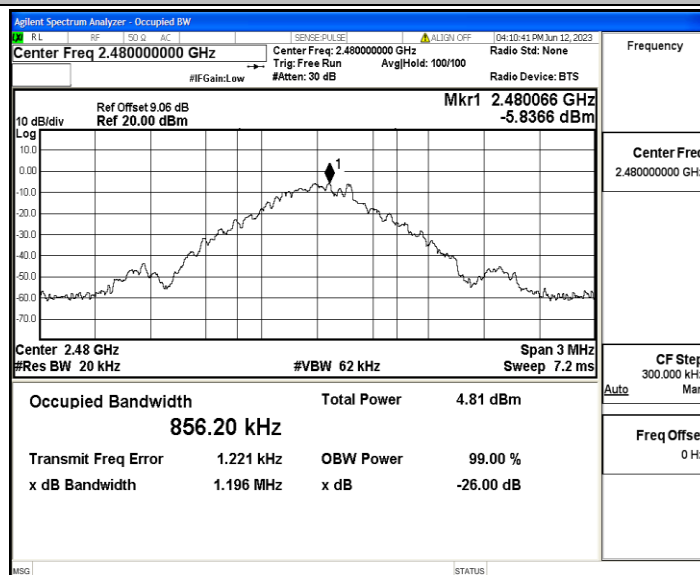
DH5_Ant1_2402



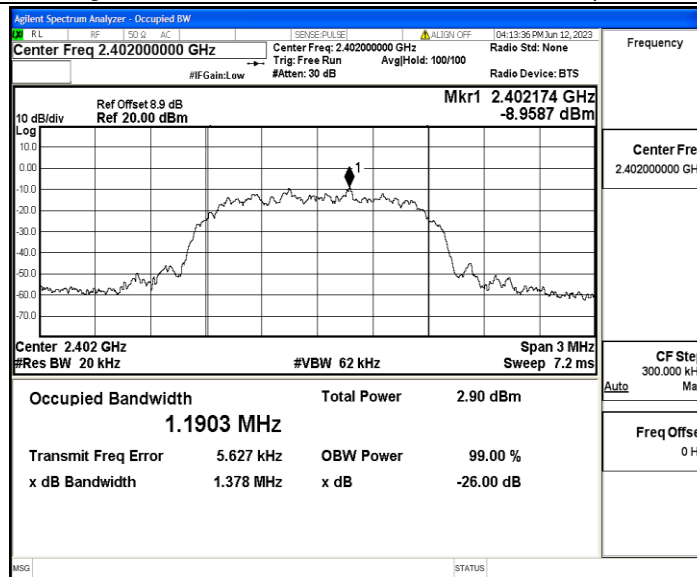
DH5_Ant1_2441



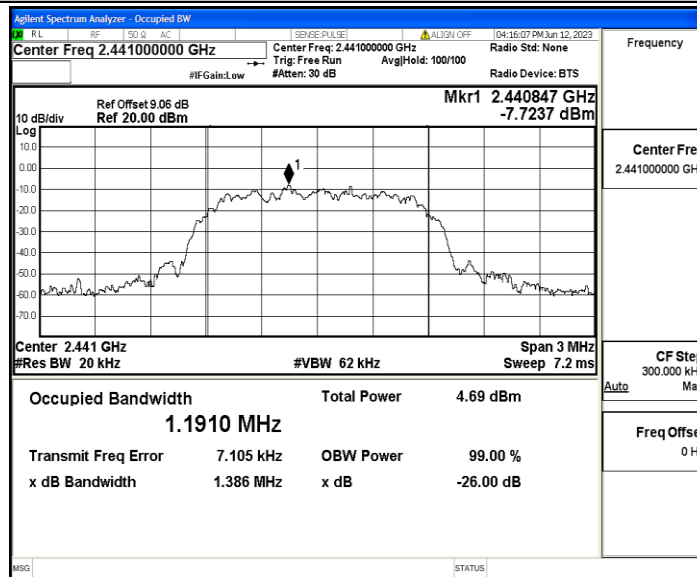
DH5_Ant1_2480



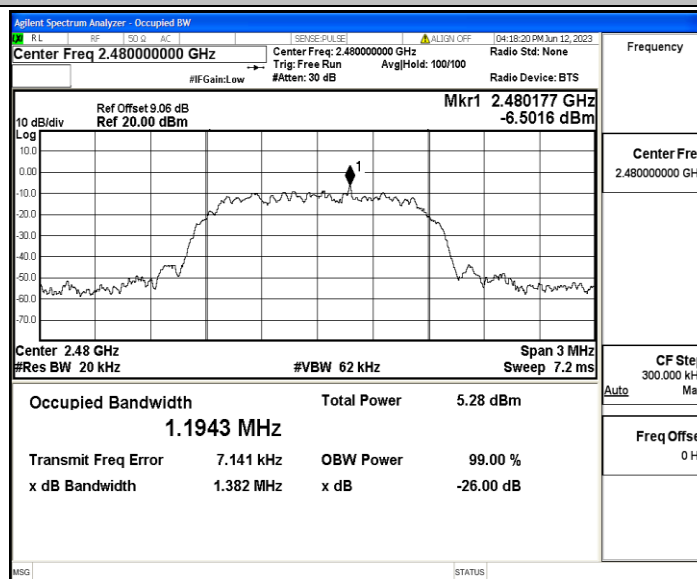
2DH5_Ant1_2402



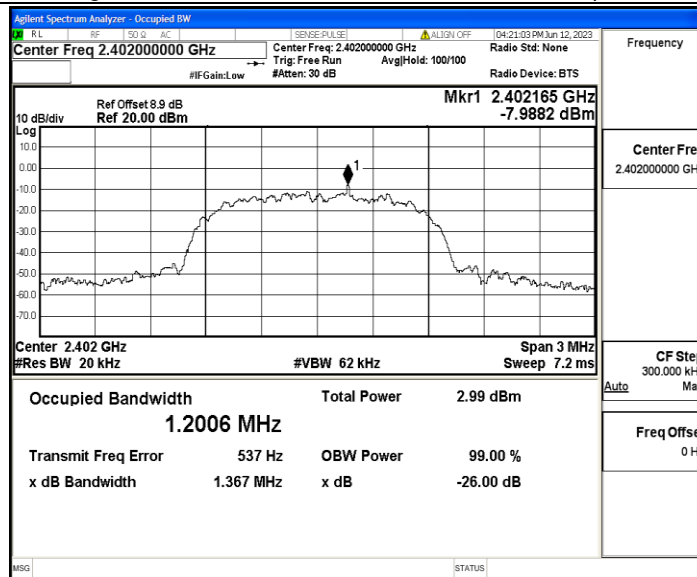
2DH5_Ant1_2441



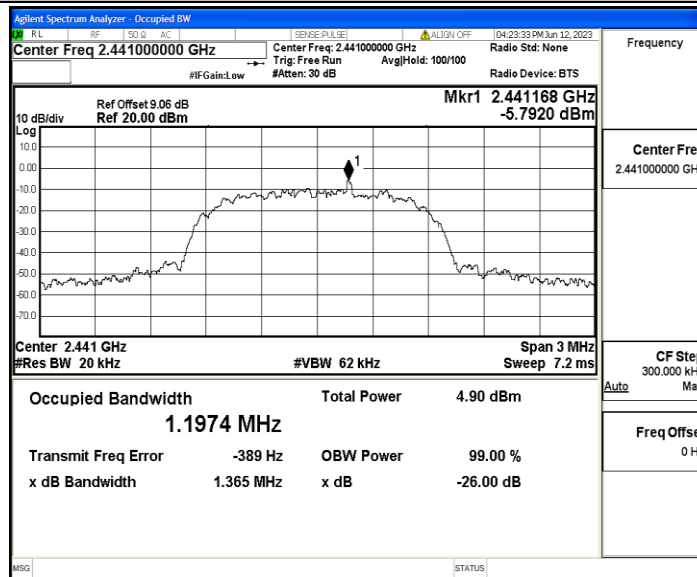
2DH5_Ant1_2480



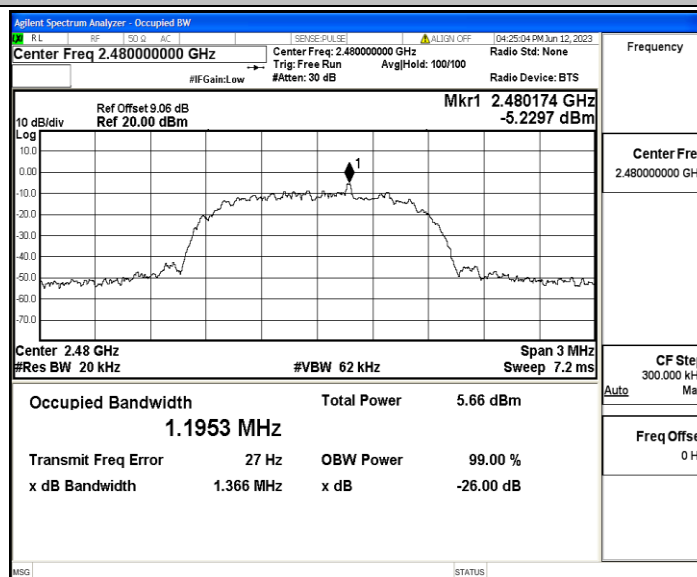
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



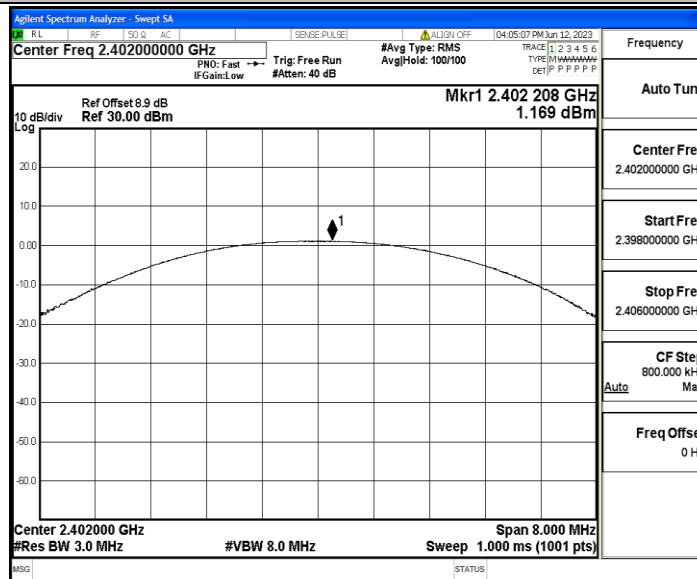
Appendix C: Maximum Peak conducted output power

Test Result

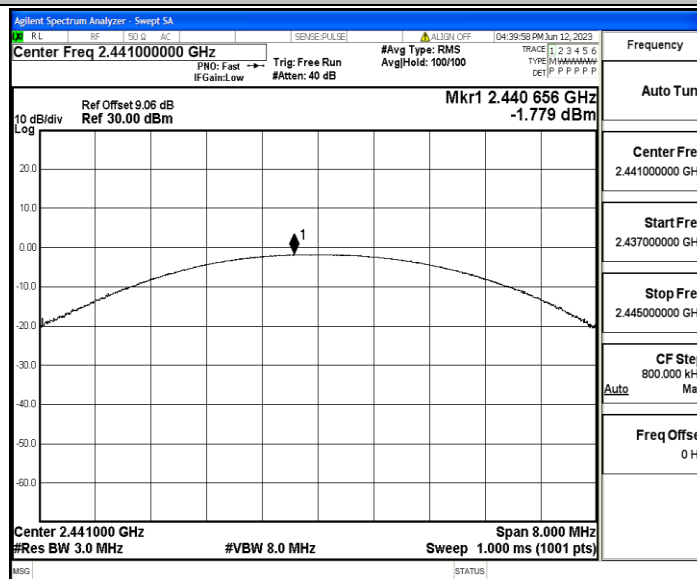
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.17	≤30	PASS
		2441	-1.78	≤30	PASS
		2480	-1.73	≤30	PASS
2DH5	Ant1	2402	-1.25	≤20.97	PASS
		2441	0.49	≤20.97	PASS
		2480	1.13	≤20.97	PASS
3DH5	Ant1	2402	-0.76	≤20.97	PASS
		2441	1.04	≤20.97	PASS
		2480	1.78	≤20.97	PASS

Test Graphs

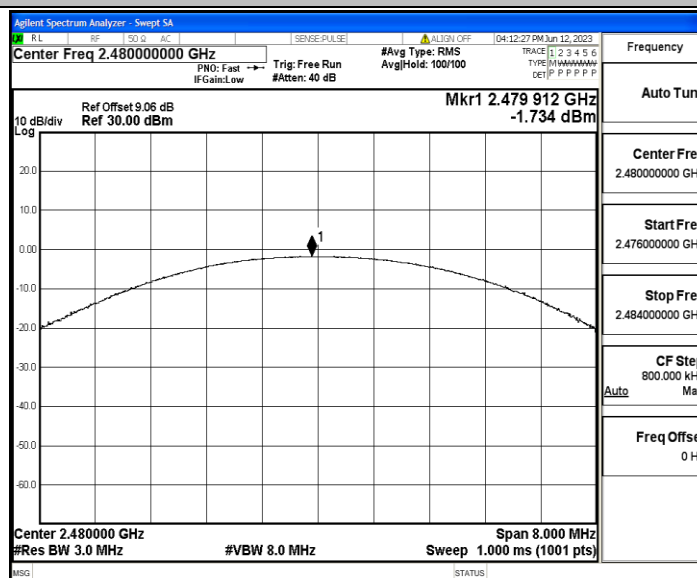
DH5_Ant1_2402



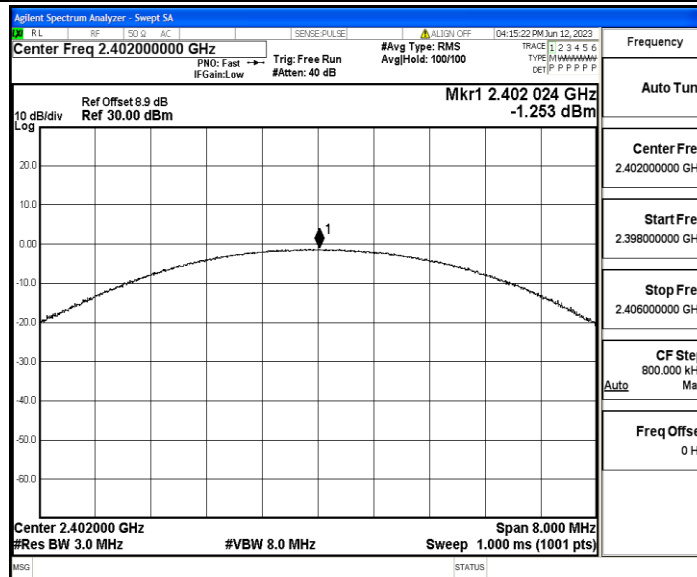
DH5_Ant1_2441



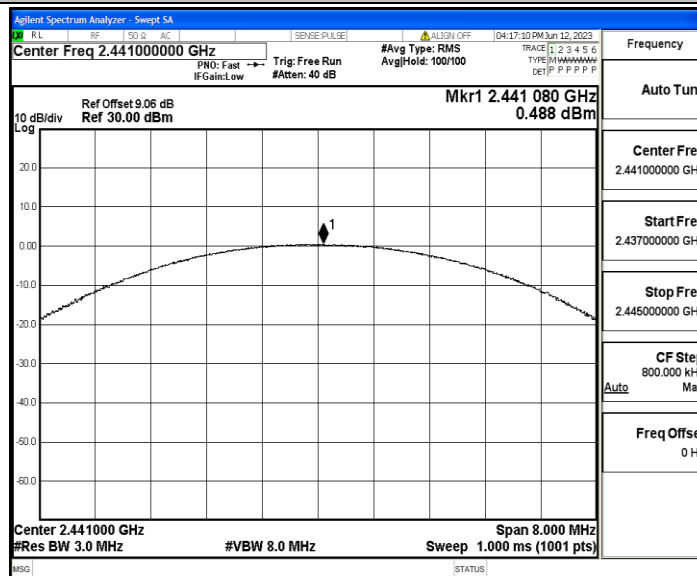
DH5_Ant1_2480



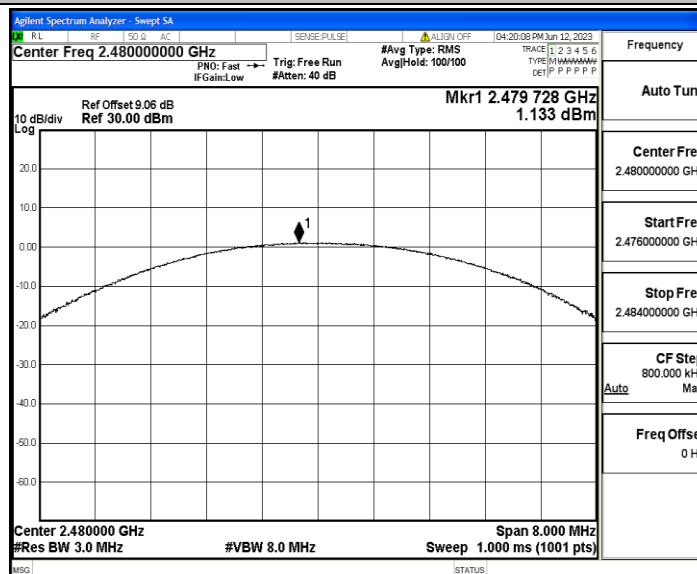
2DH5_Ant1_2402



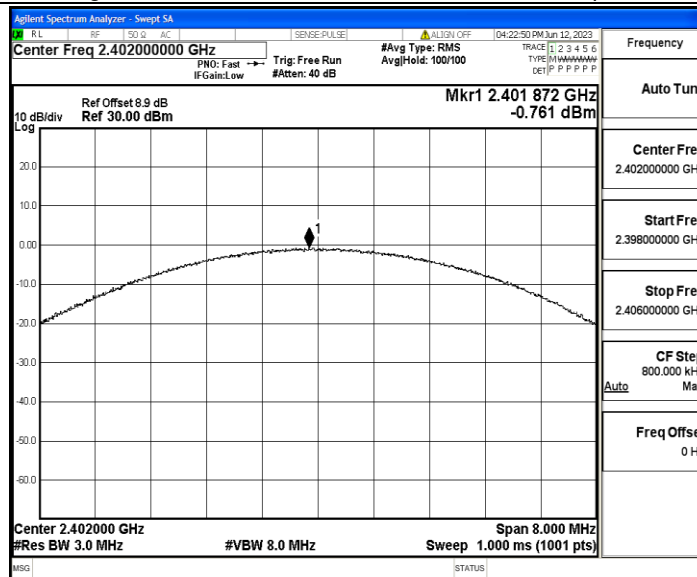
2DH5_Ant1_2441



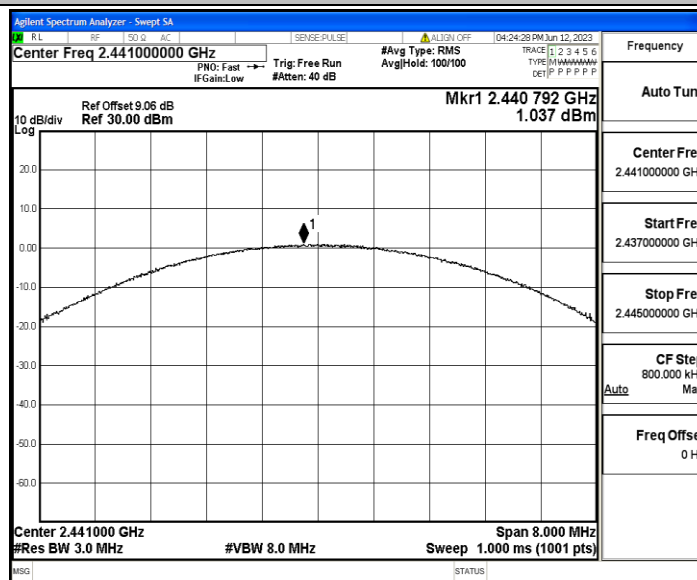
2DH5_Ant1_2480



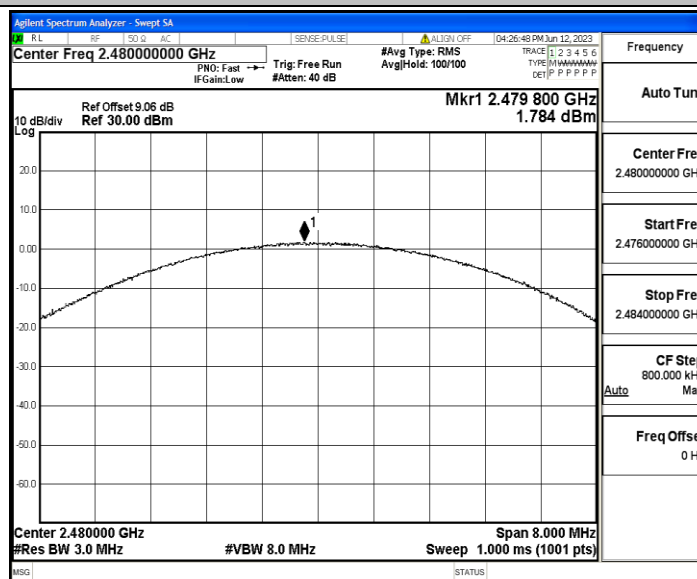
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



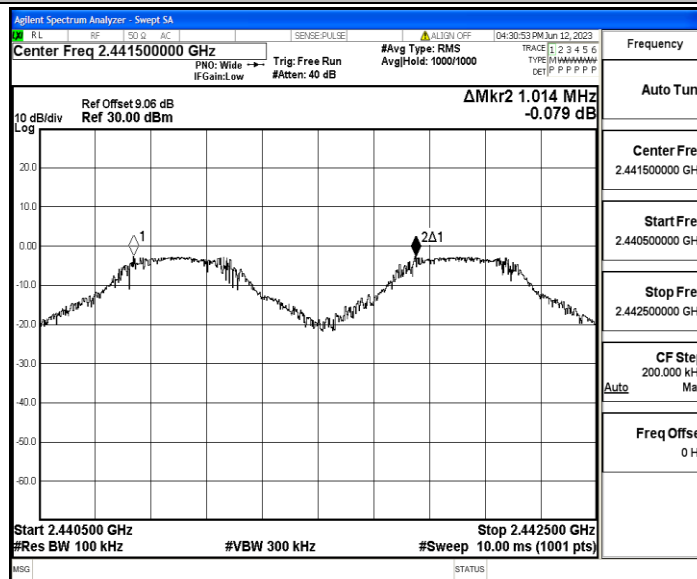
Appendix D: Carrier frequency separation

Test Result

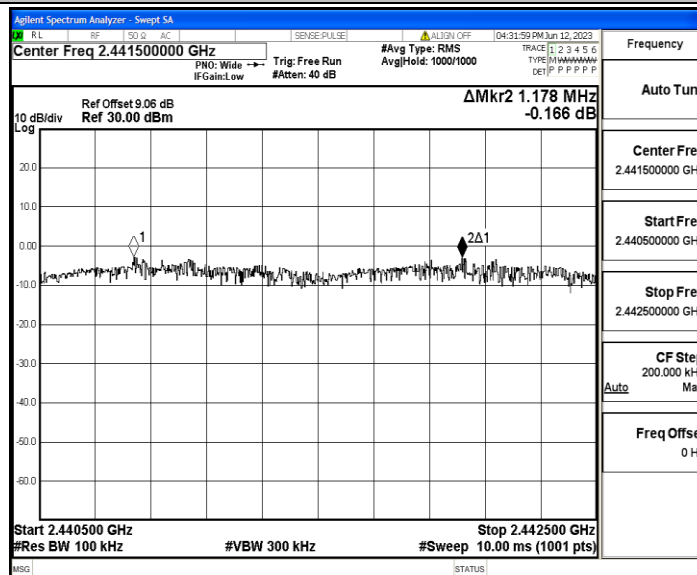
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.014	≥ 0.945	PASS
2DH5	Ant1	Hop	1.178	≥ 0.896	PASS
3DH5	Ant1	Hop	1.014	≥ 0.902	PASS

Test Graphs

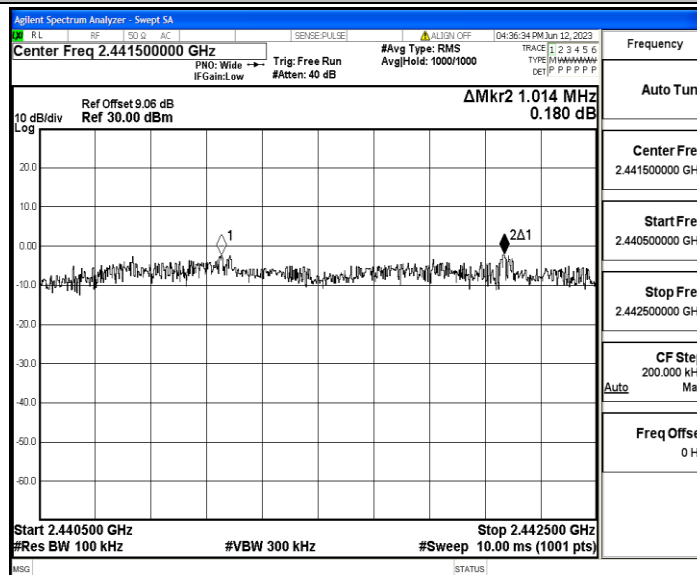
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

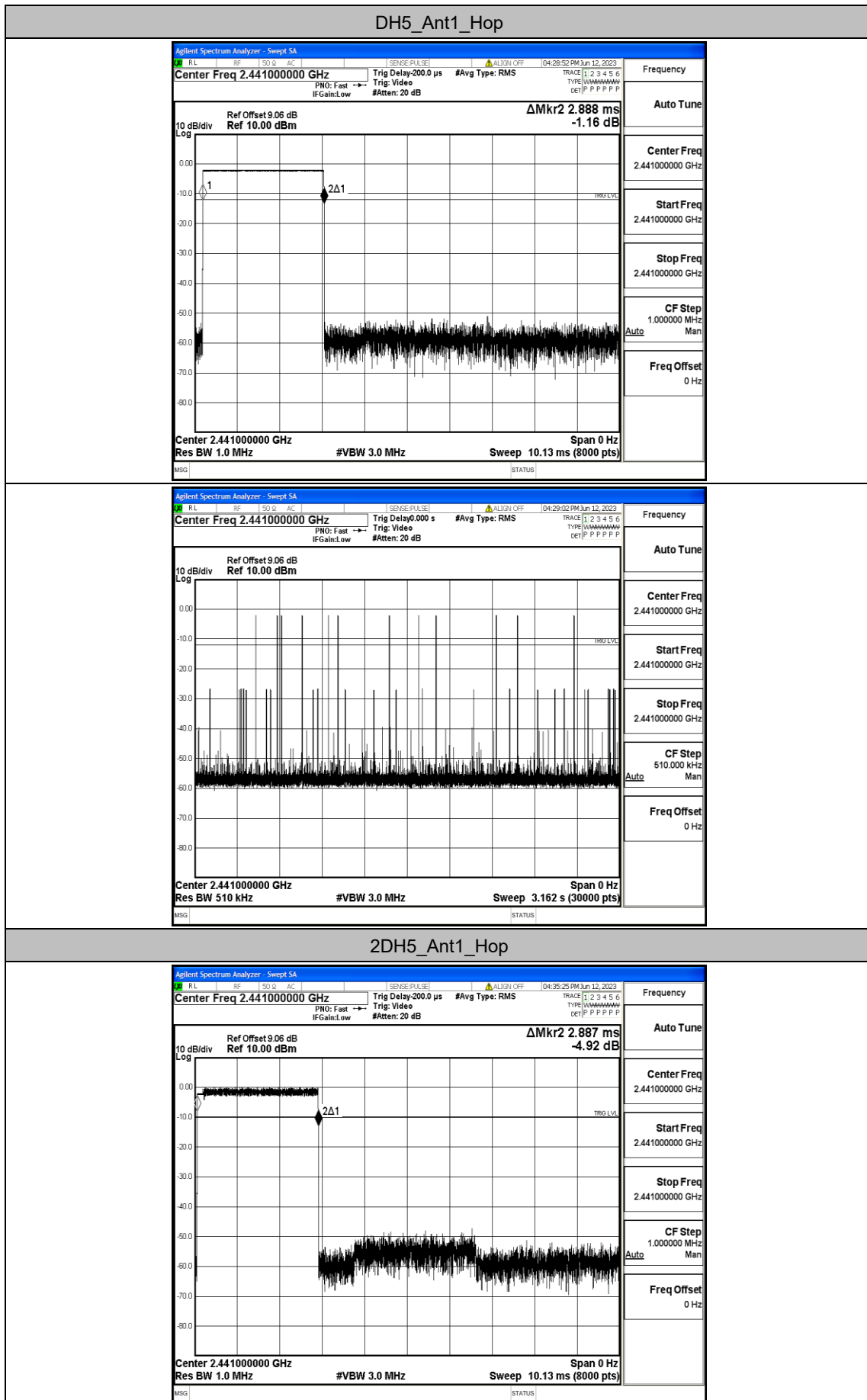


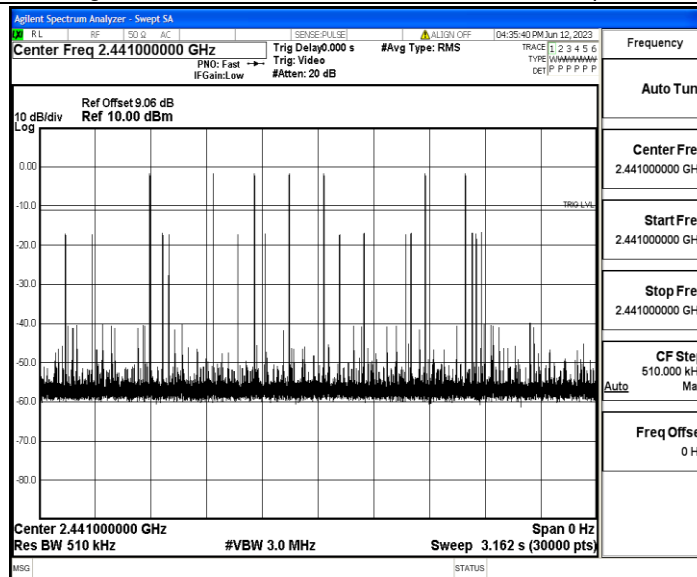
Appendix E: Time of occupancy

Test Result

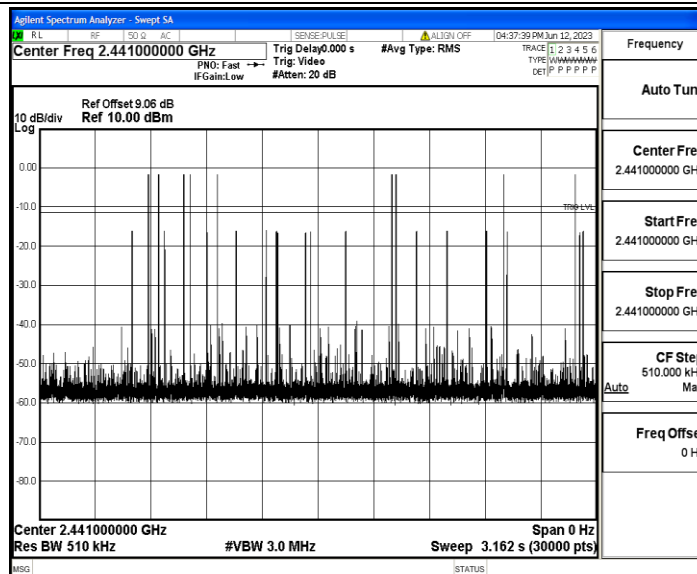
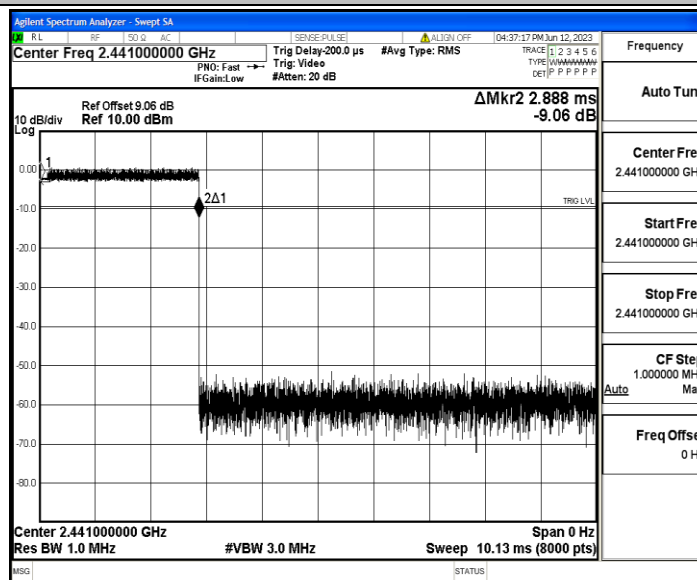
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.888	130	0.375	≤0.4	PASS
2DH5	Ant1	Hop	2.887	80	0.231	≤0.4	PASS
3DH5	Ant1	Hop	2.888	100	0.289	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop



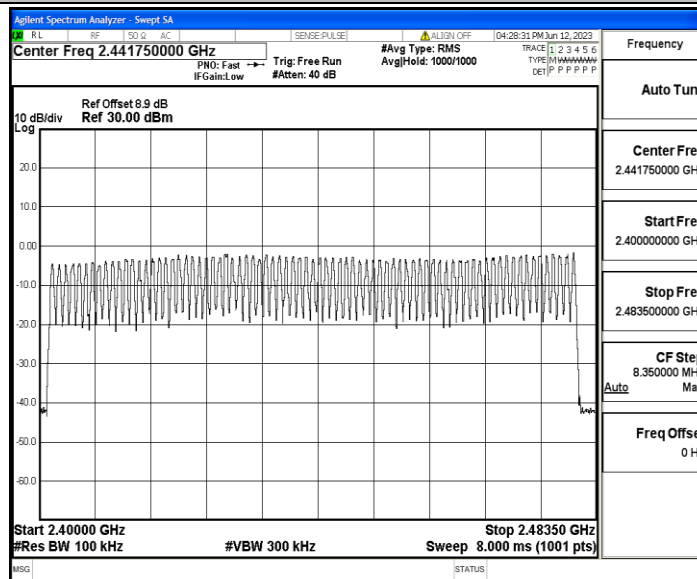
Appendix F: Number of hopping channels

Test Result

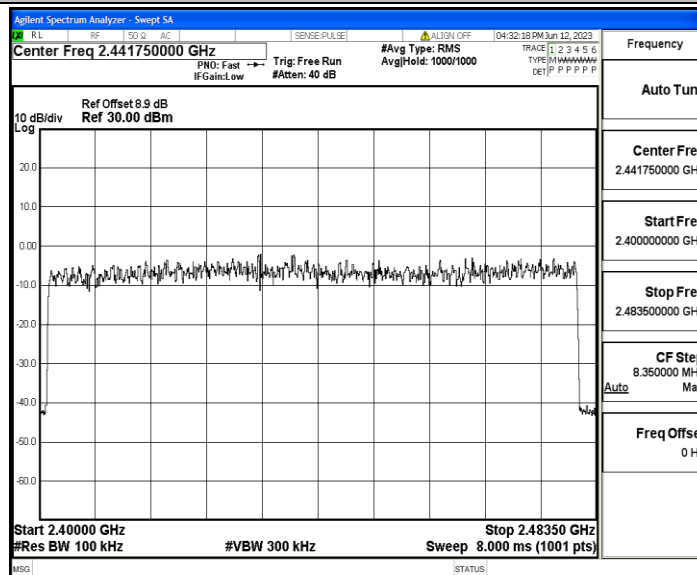
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

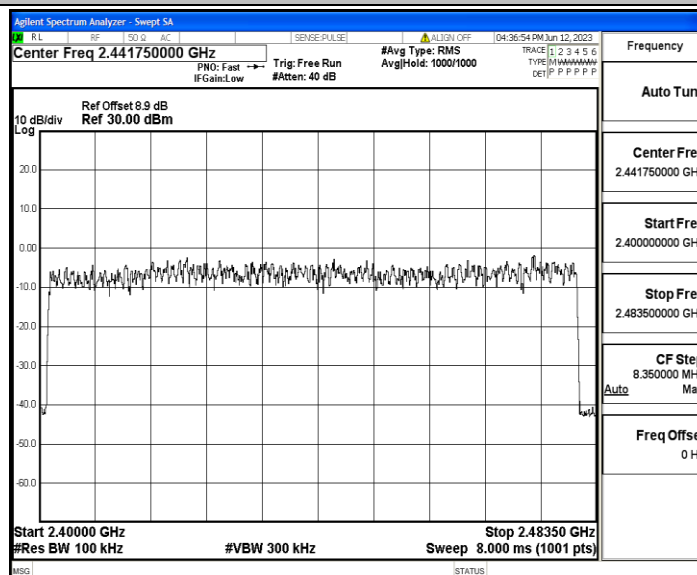
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



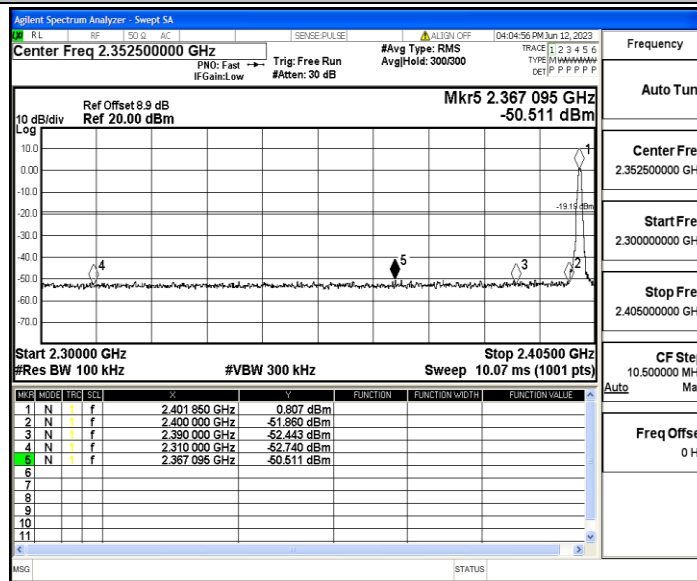
Appendix G: Band edge measurements

Test Result

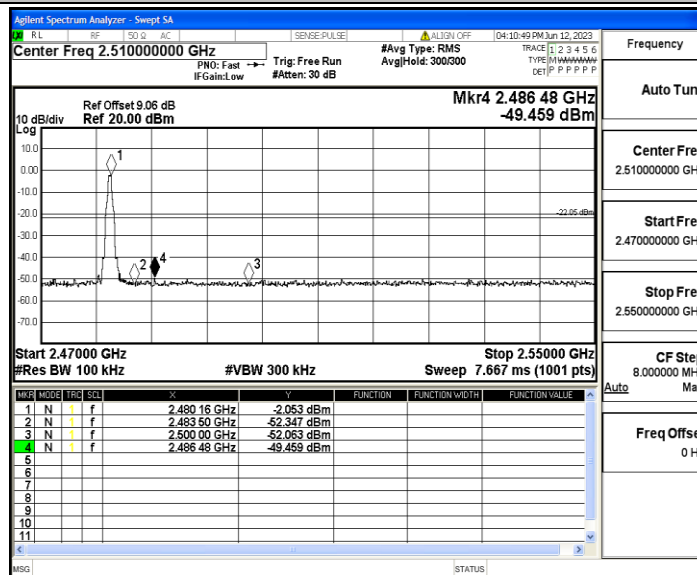
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.81	-50.51	≤ -19.19	PASS
		High	2480	-2.05	-49.46	≤ -22.05	PASS
		Low	Hop_2402	-4.71	-50.87	≤ -24.71	PASS
		High	Hop_2480	-1.80	-48.67	≤ -21.8	PASS
2DH5	Ant1	Low	2402	-5.23	-50.26	≤ -25.23	PASS
		High	2480	-1.84	-49.55	≤ -21.84	PASS
		Low	Hop_2402	-6.60	-50.73	≤ -26.6	PASS
		High	Hop_2480	-3.36	-49.09	≤ -23.36	PASS
3DH5	Ant1	Low	2402	-3.92	-49.22	≤ -23.92	PASS
		High	2480	-1.43	-49.14	≤ -21.43	PASS
		Low	Hop_2402	-6.21	-50.18	≤ -26.21	PASS
		High	Hop_2480	-2.19	-49.49	≤ -22.19	PASS

Test Graphs

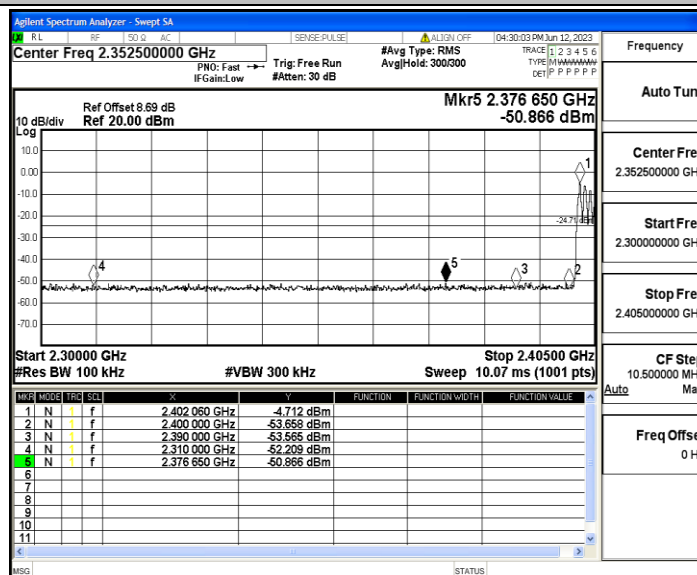
DH5_Ant1_Low_2402



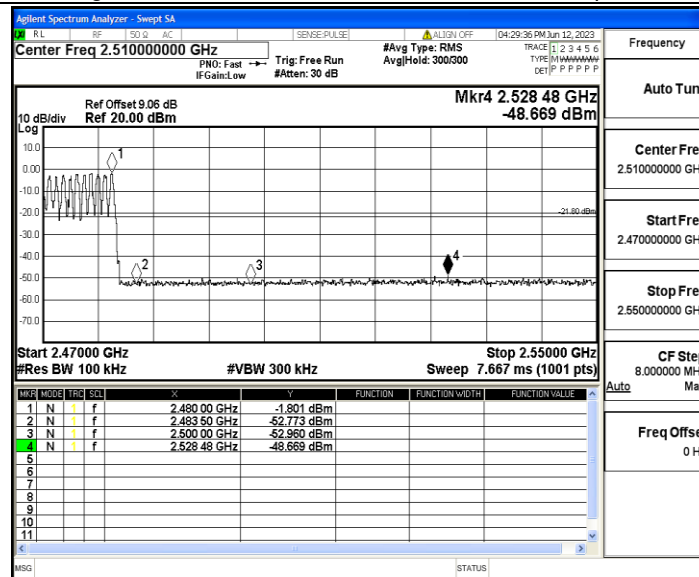
DH5_Ant1_High_2480



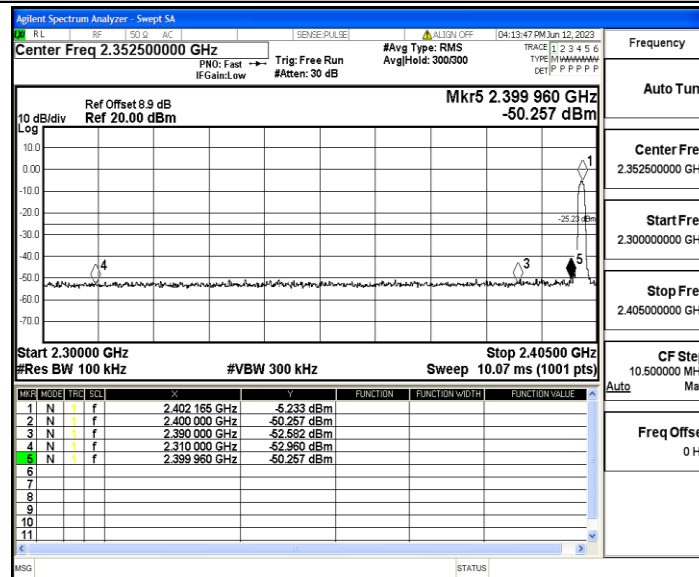
DH5_Ant1_Low_Hop_2402



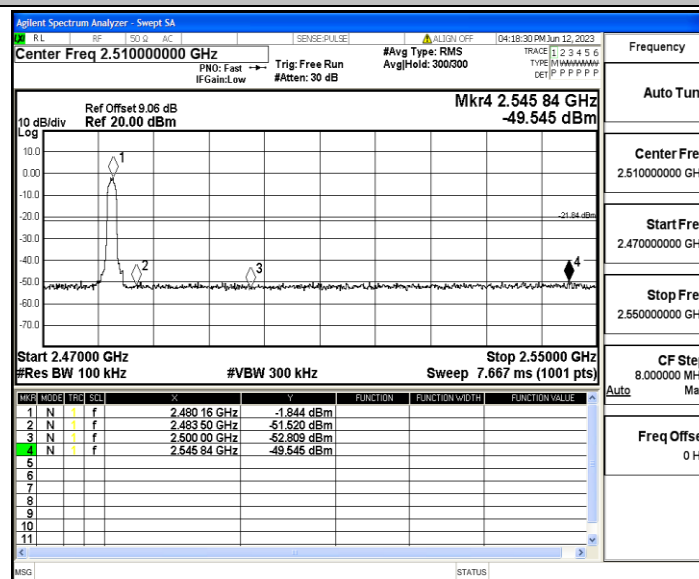
DH5_Ant1_High_Hop_2480



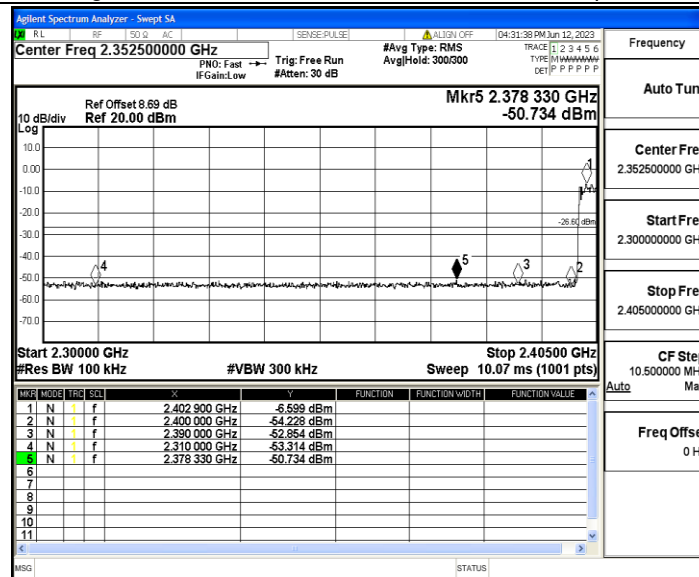
2DH5_Ant1_Low_2402



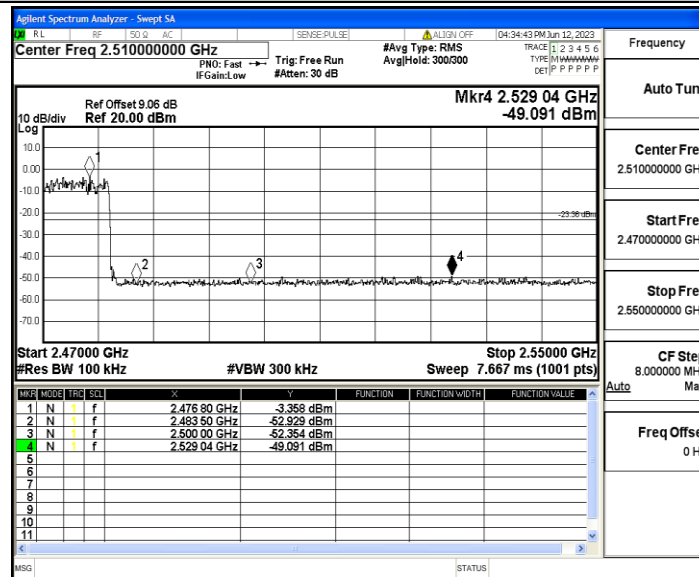
2DH5_Ant1_High_2480



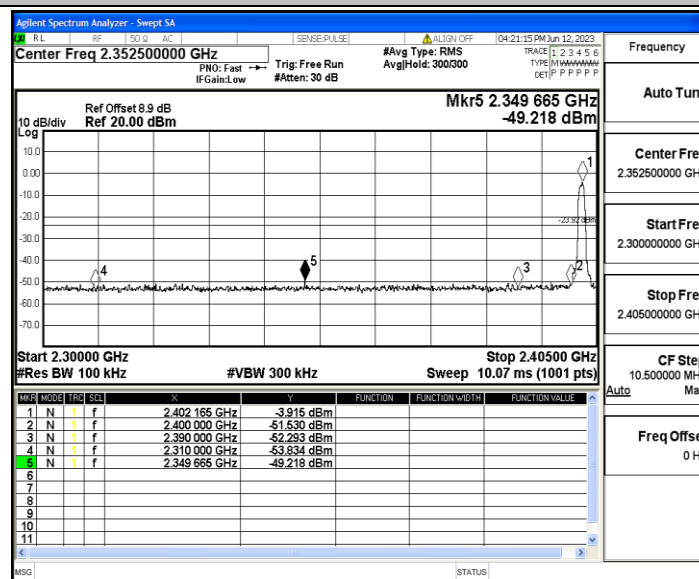
2DH5_Ant1_Low_Hop_2402



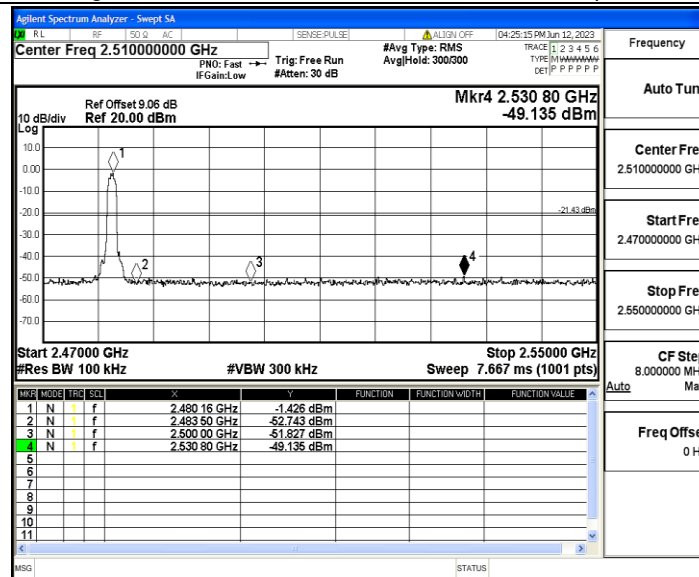
2DH5_Ant1_High_Hop_2480



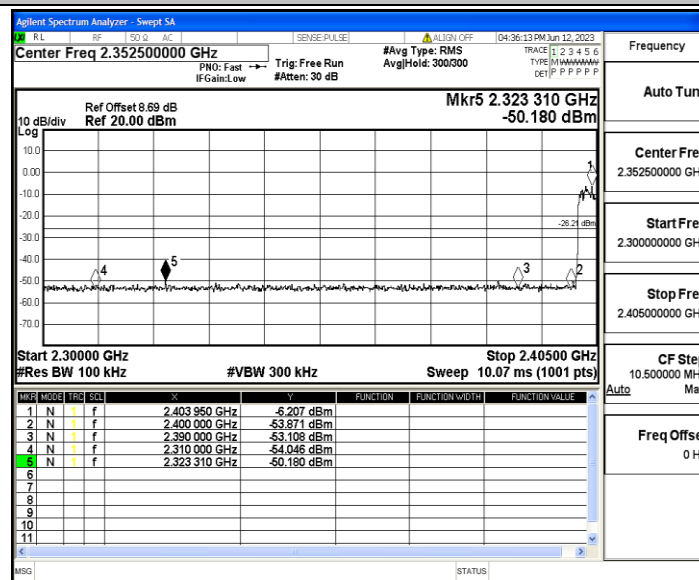
3DH5_Ant1_Low_2402



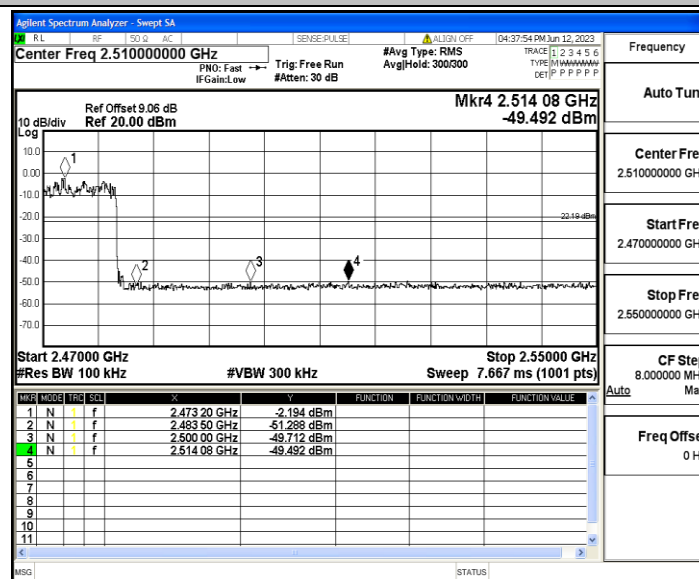
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



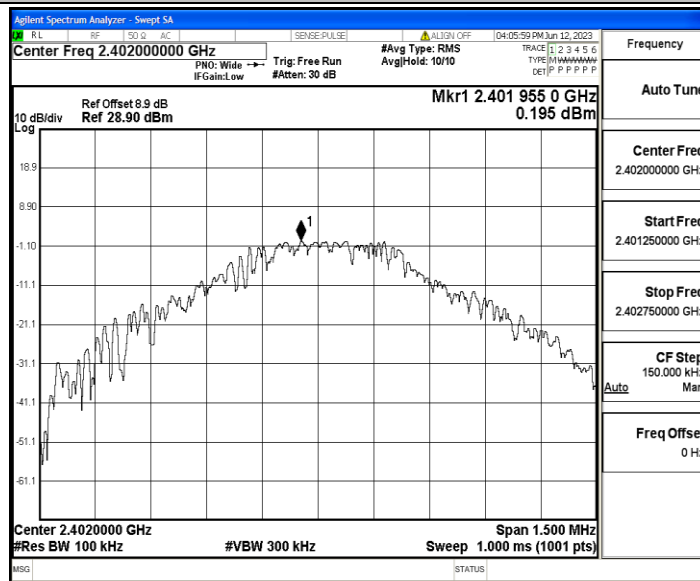
Appendix H: Conducted Spurious Emission

Test Result

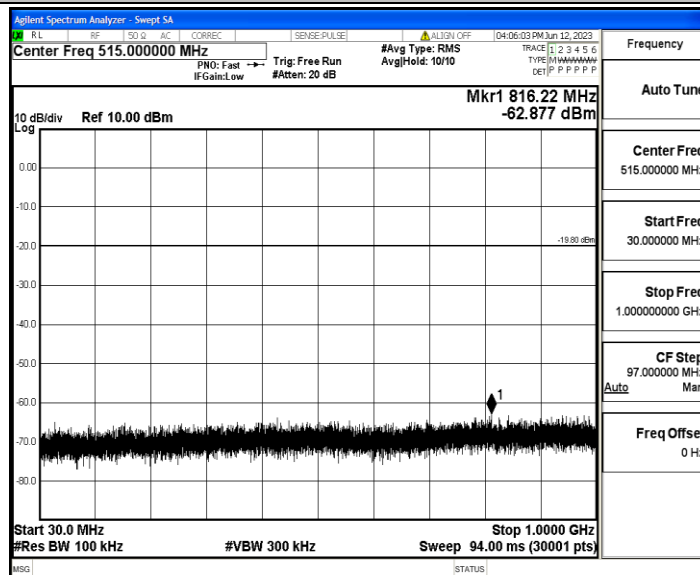
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.20	0.20	---	PASS
			30~1000	0.20	-62.88	≤-19.8	PASS
			1000~26500	0.20	-50.36	≤-19.8	PASS
		2441	Reference	-2.79	-2.79	---	PASS
			30~1000	-2.79	-62.53	≤-22.79	PASS
			1000~26500	-2.79	-50.7	≤-22.79	PASS
		2480	Reference	-2.67	-2.67	---	PASS
			30~1000	-2.67	-62.32	≤-22.67	PASS
			1000~26500	-2.67	-50.99	≤-22.67	PASS
2DH5	Ant1	2402	Reference	-4.08	-4.08	---	PASS
			30~1000	-4.08	-62.68	≤-24.08	PASS
			1000~26500	-4.08	-50.28	≤-24.08	PASS
		2441	Reference	-5.56	-5.56	---	PASS
			30~1000	-5.56	-62.41	≤-25.56	PASS
			1000~26500	-5.56	-50.7	≤-25.56	PASS
		2480	Reference	-3.98	-3.98	---	PASS
			30~1000	-3.98	-63.24	≤-23.98	PASS
			1000~26500	-3.98	-50.51	≤-23.98	PASS
3DH5	Ant1	2402	Reference	-6.15	-6.15	---	PASS
			30~1000	-6.15	-62	≤-26.15	PASS
			1000~26500	-6.15	-49.95	≤-26.15	PASS
		2441	Reference	-4.17	-4.17	---	PASS
			30~1000	-4.17	-62.05	≤-24.17	PASS
			1000~26500	-4.17	-50.76	≤-24.17	PASS
		2480	Reference	-3.79	-3.79	---	PASS
			30~1000	-3.79	-62.33	≤-23.79	PASS
			1000~26500	-3.79	-49.96	≤-23.79	PASS

Test Graphs

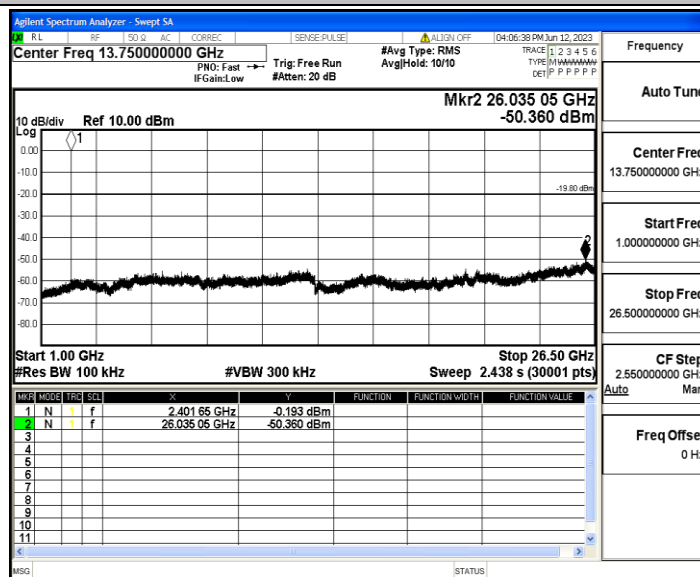
DH5_Ant1_2402_0~Reference



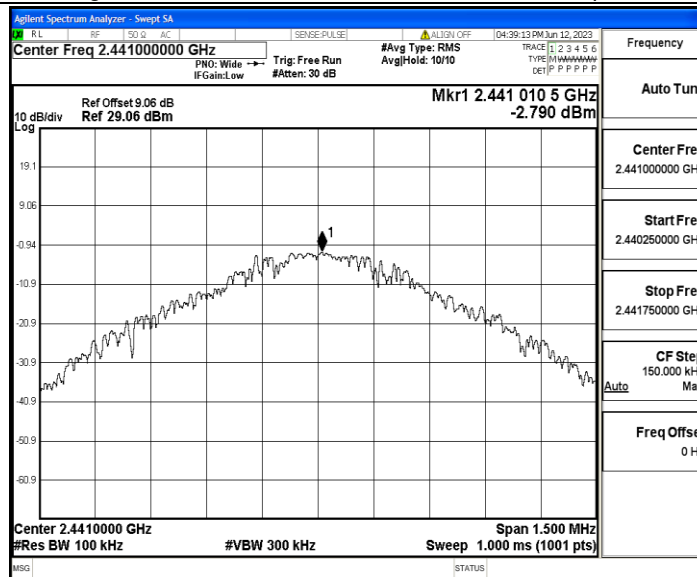
DH5_Ant1_2402_30~1000



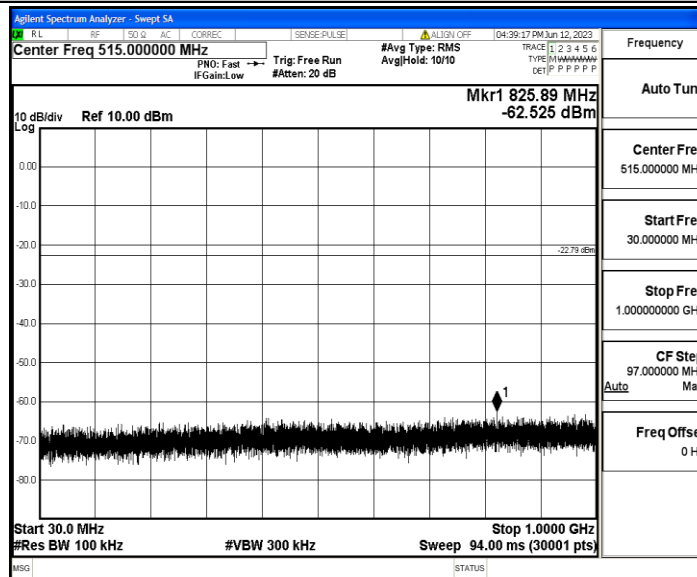
DH5_Ant1_2402_1000~26500



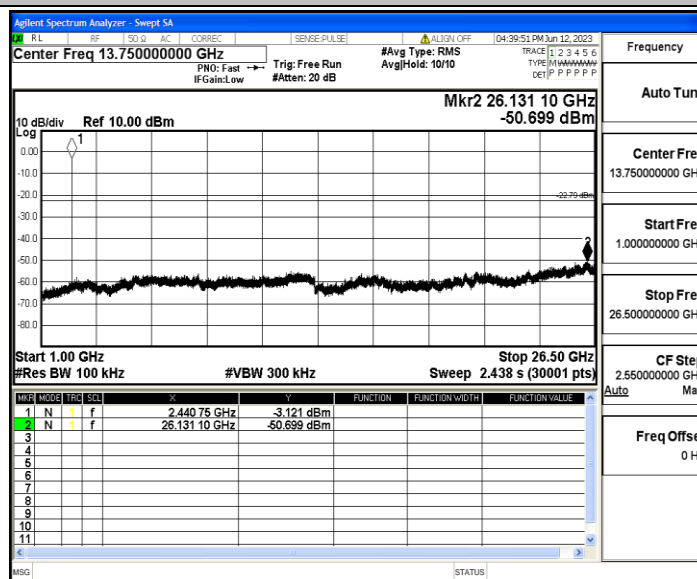
DH5_Ant1_2441_0~Reference



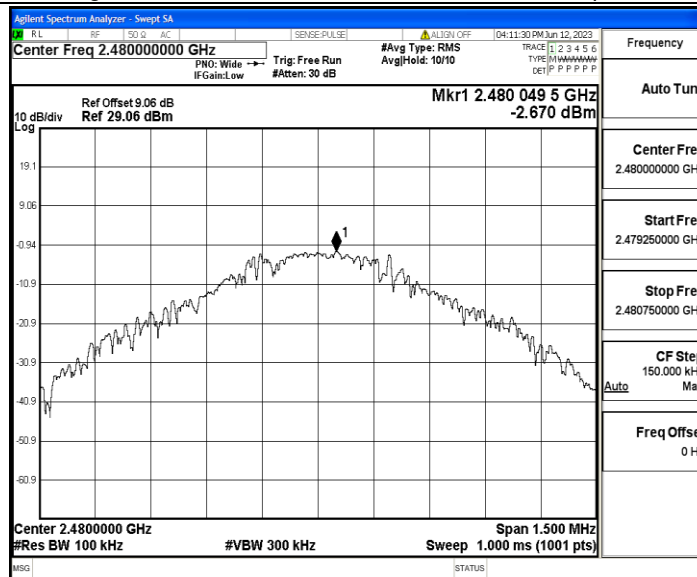
DH5_Ant1_2441_30~1000



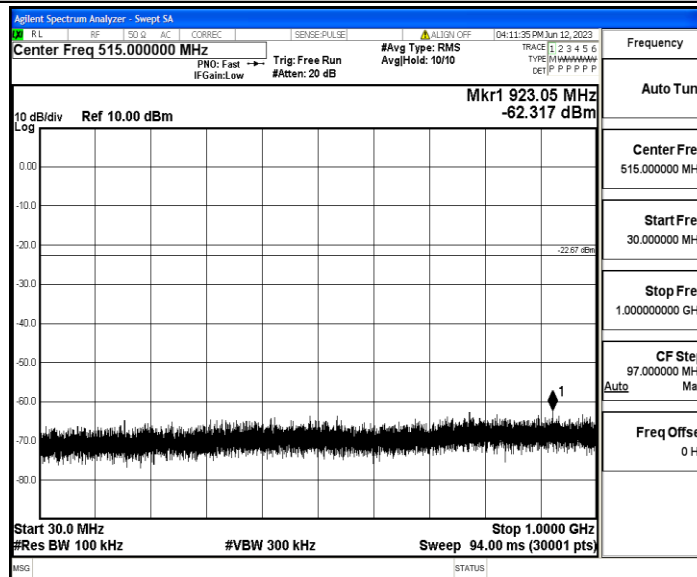
DH5_Ant1_2441_1000~26500



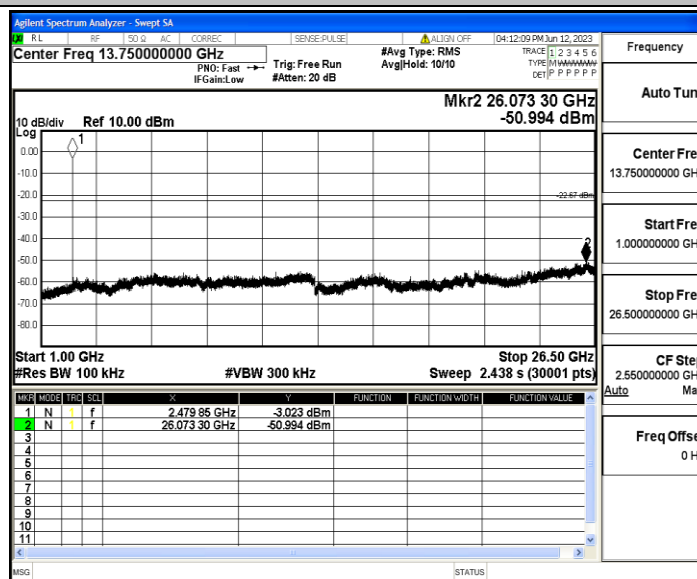
DH5_Ant1_2480_0~Reference



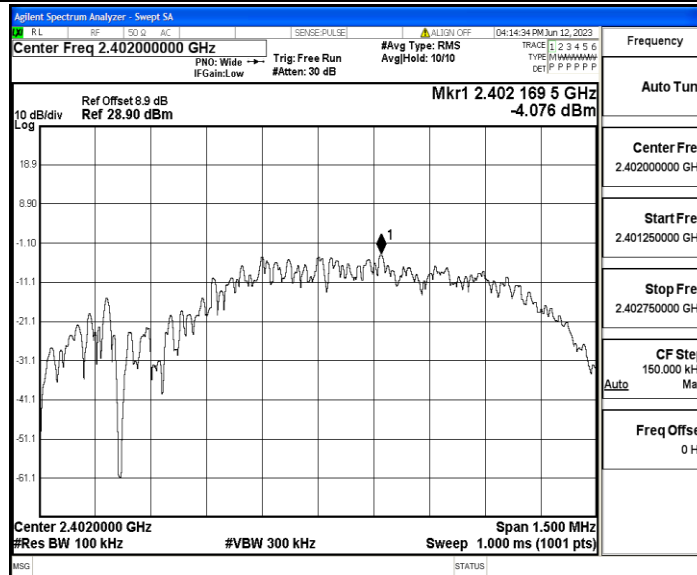
DH5_Ant1_2480_30~1000



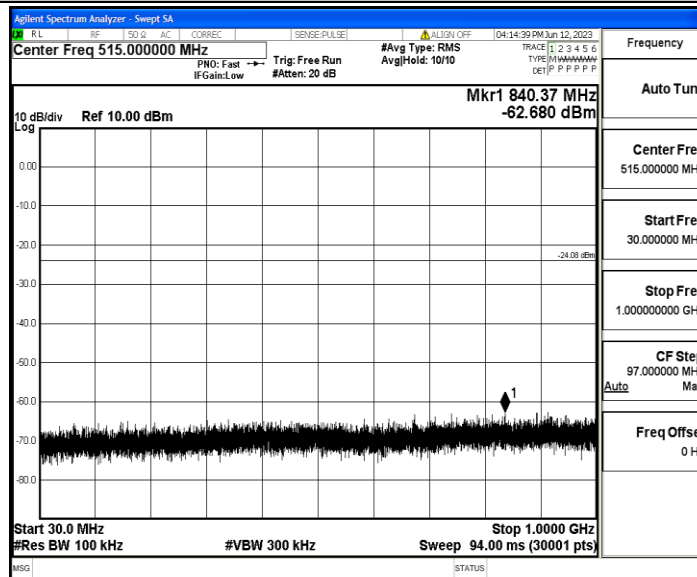
DH5_Ant1_2480_1000~26500



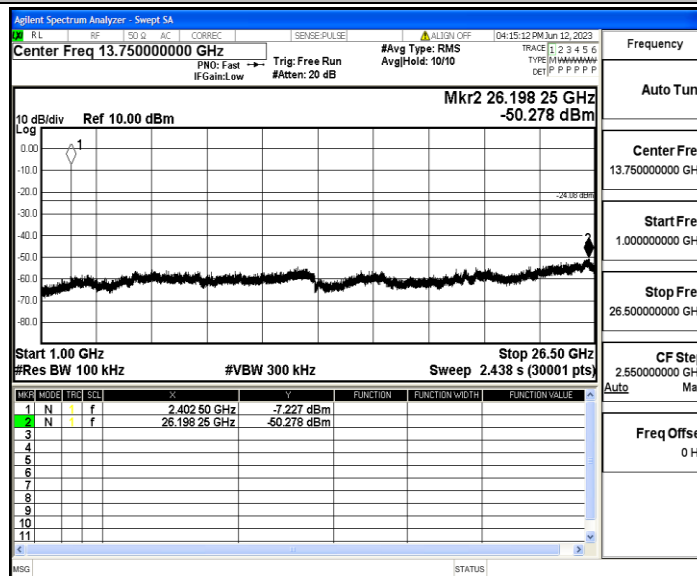
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference