

RF Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Wireless Headphones****Trade Mark: Tranya****Test Model: X2****FCC ID: 2A4AX-X2****Environmental Conditions**

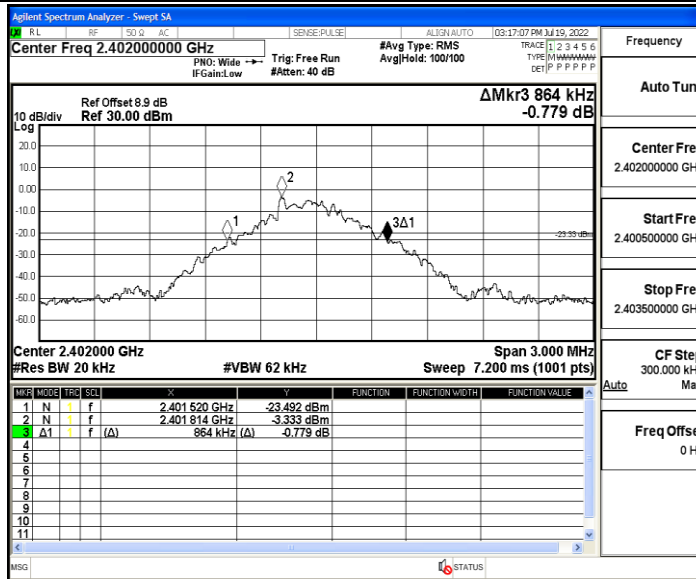
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

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

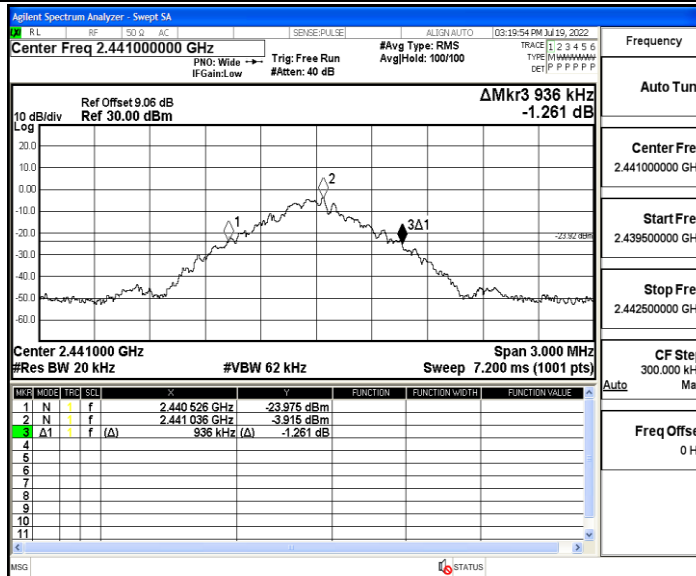
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.864	2401.520	2402.384	---	---
		2441	0.936	2440.526	2441.462	---	---
		2480	0.930	2479.520	2480.450	---	---
2DH5	Ant1	2402	1.311	2401.322	2402.633	---	---
		2441	1.329	2440.313	2441.642	---	---
		2480	1.335	2479.313	2480.648	---	---
3DH5	Ant1	2402	1.305	2401.322	2402.627	---	---
		2441	1.269	2440.331	2441.600	---	---
		2480	1.335	2479.307	2480.642	---	---

Test Graphs

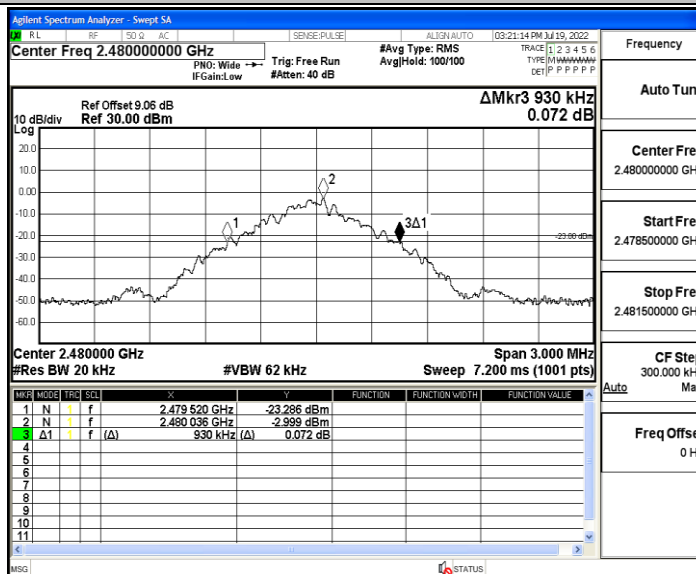
DH5_Ant1_2402



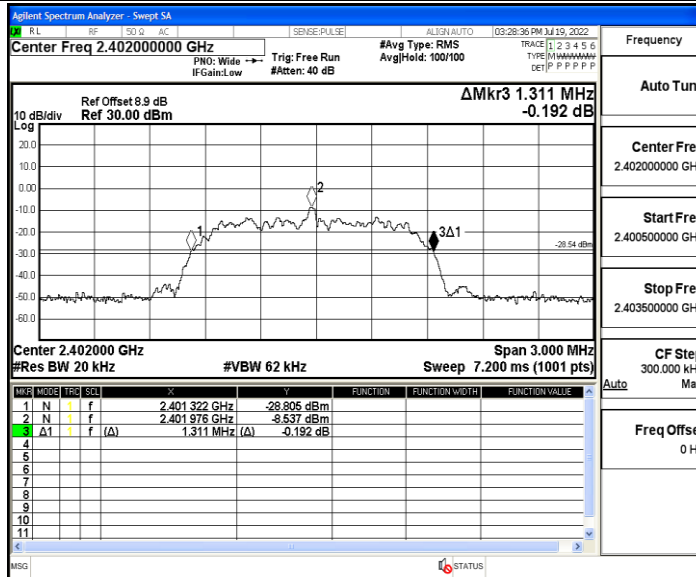
DH5_Ant1_2441



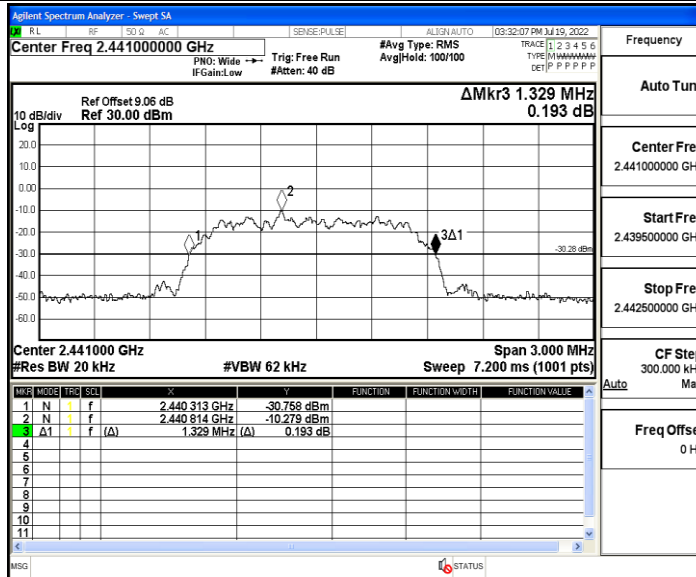
DH5_Ant1_2480



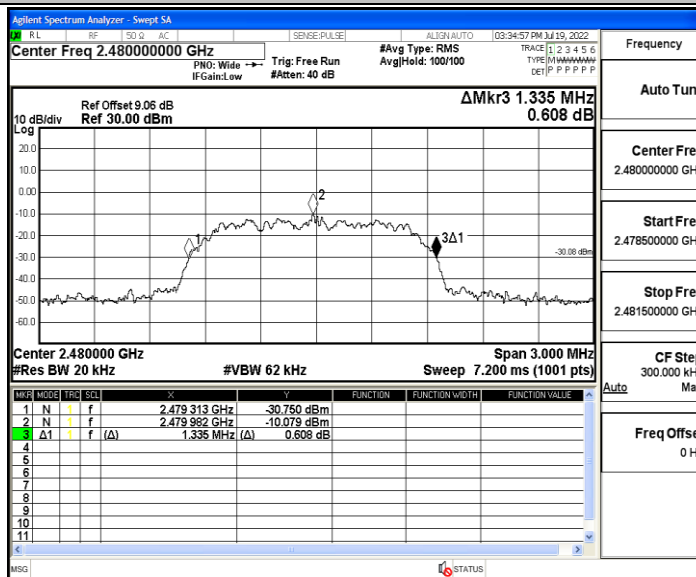
2DH5_Ant1_2402



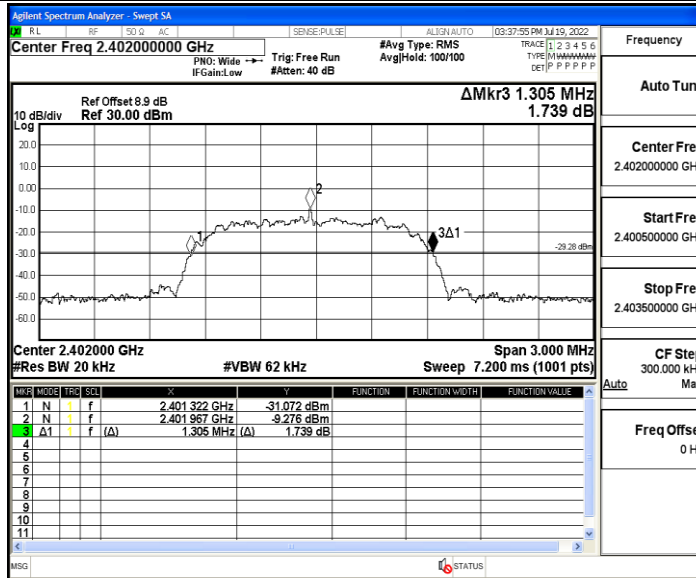
2DH5_Ant1_2441



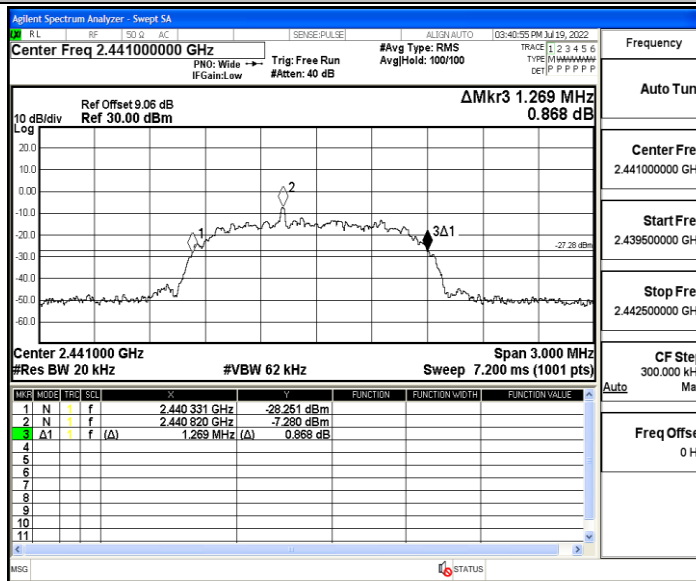
2DH5_Ant1_2480



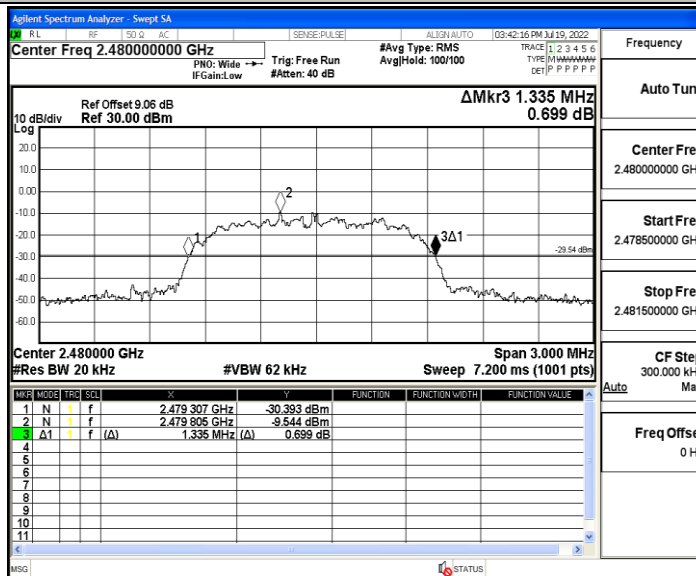
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



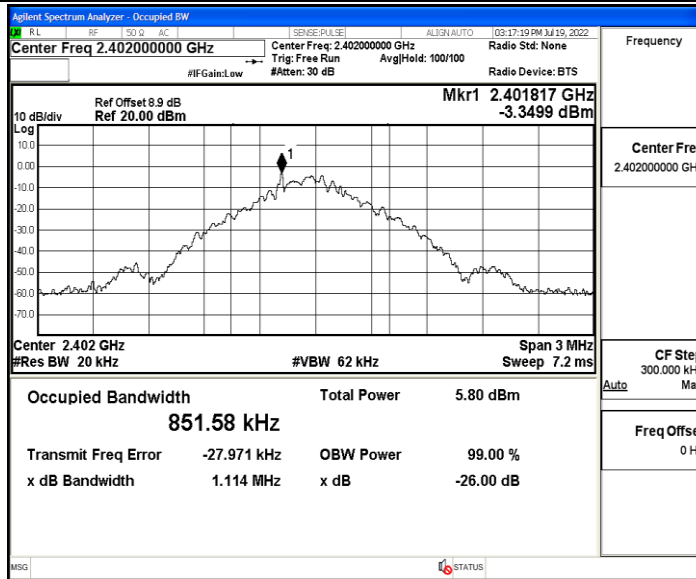
Appendix B: Occupied Channel Bandwidth

Test Result

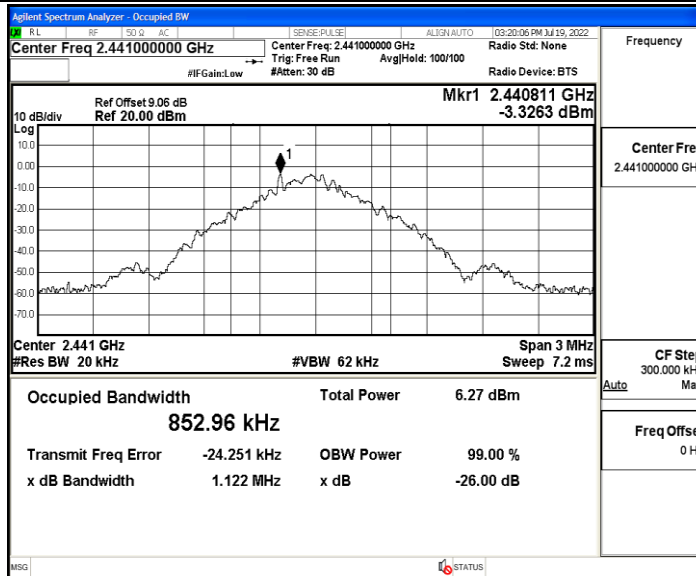
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85158	2401.546	2402.398	---	---
		2441	0.85296	2440.549	2441.402	---	---
		2480	0.86500	2479.545	2480.410	---	---
2DH5	Ant1	2402	1.1815	2401.385	2402.566	---	---
		2441	1.1852	2440.386	2441.571	---	---
		2480	1.1971	2479.381	2480.578	---	---
3DH5	Ant1	2402	1.1846	2401.381	2402.565	---	---
		2441	1.1821	2440.386	2441.568	---	---
		2480	1.1933	2479.375	2480.568	---	---

Test Graphs

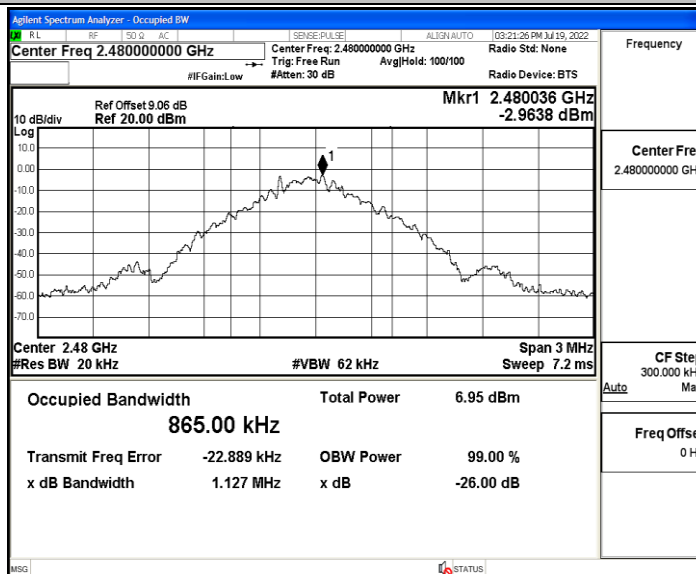
DH5_Ant1_2402



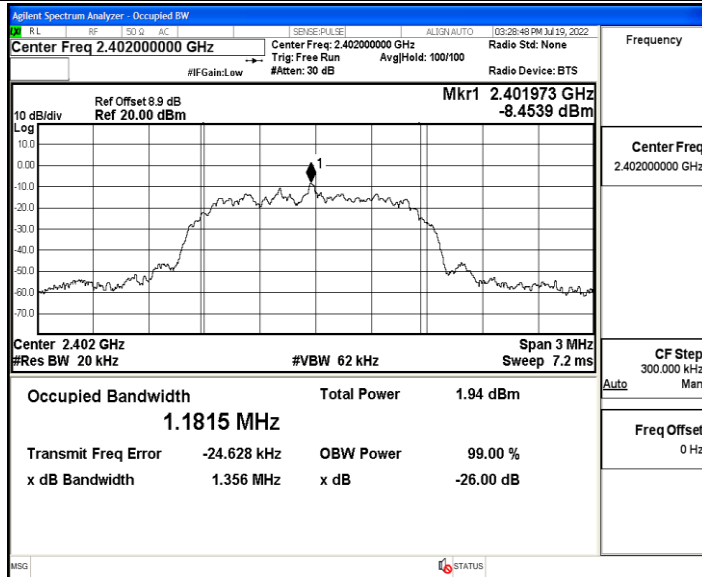
DH5_Ant1_2441



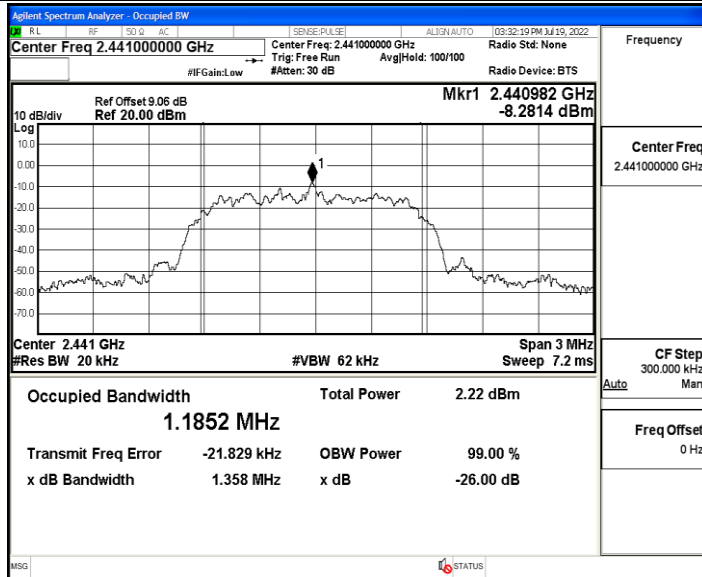
DH5_Ant1_2480



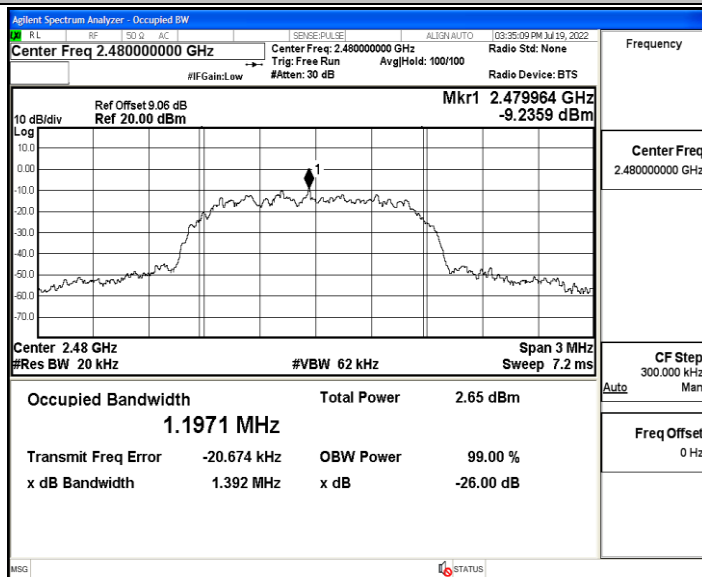
2DH5_Ant1_2402



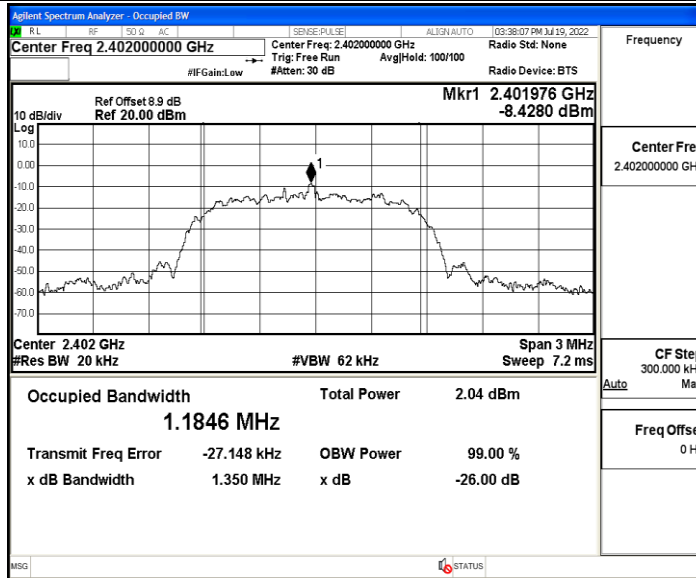
2DH5_Ant1_2441



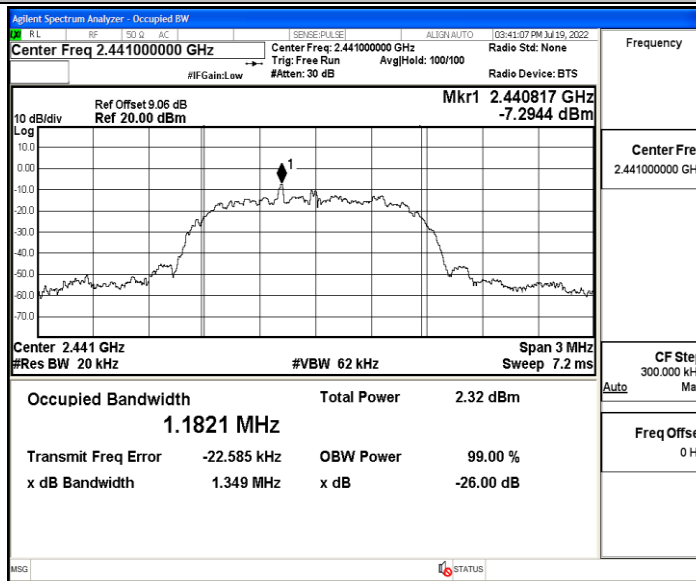
2DH5_Ant1_2480



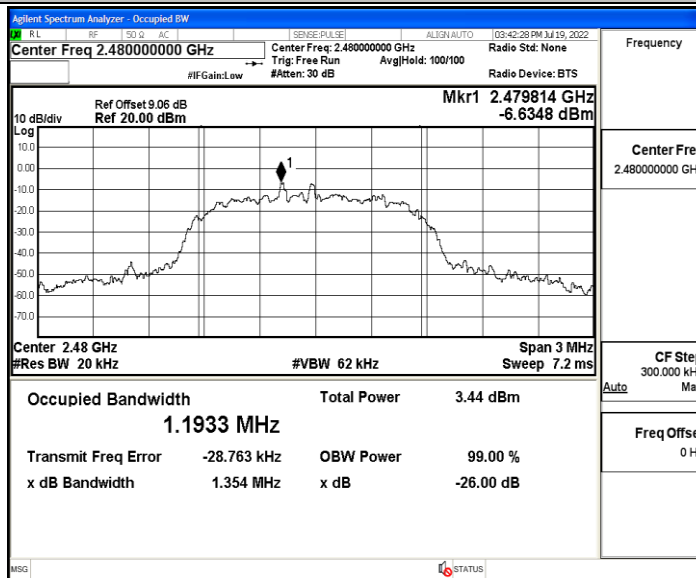
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



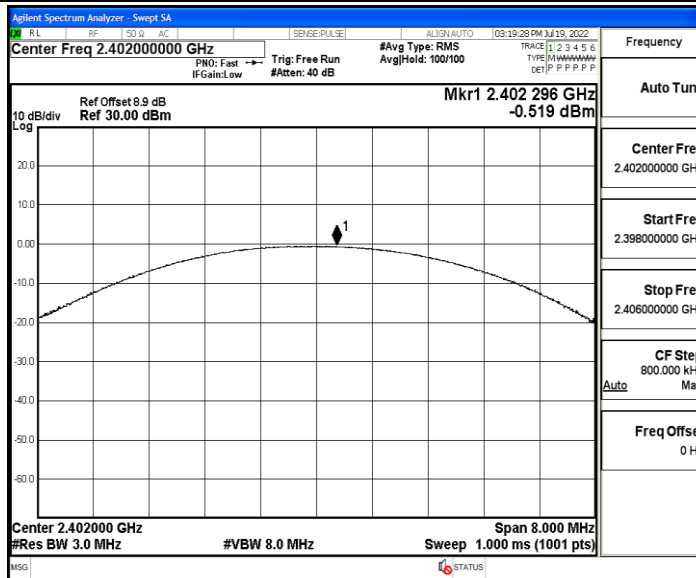
Appendix C: Maximum Peak conducted output power

Test Result

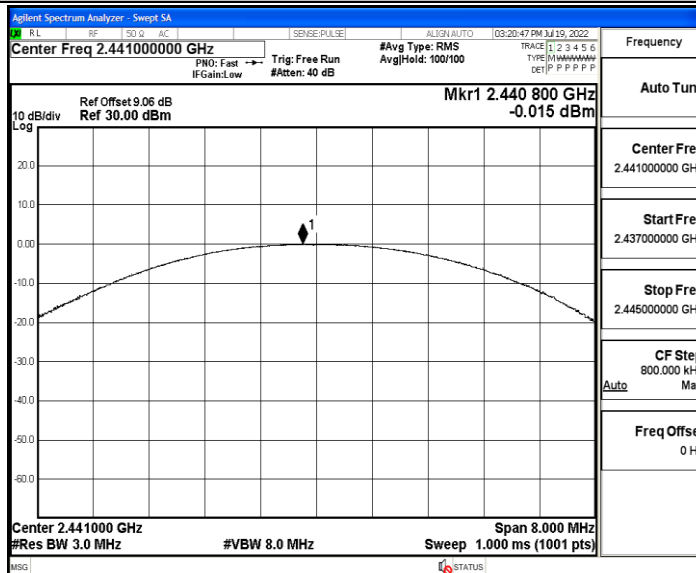
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-0.52	≤30	PASS
		2441	-0.02	≤30	PASS
		2480	0.86	≤30	PASS
2DH5	Ant1	2402	-1.8	≤20.97	PASS
		2441	-1.25	≤20.97	PASS
		2480	-0.62	≤20.97	PASS
3DH5	Ant1	2402	-1.28	≤20.97	PASS
		2441	-0.72	≤20.97	PASS
		2480	-0.05	≤20.97	PASS

Test Graphs

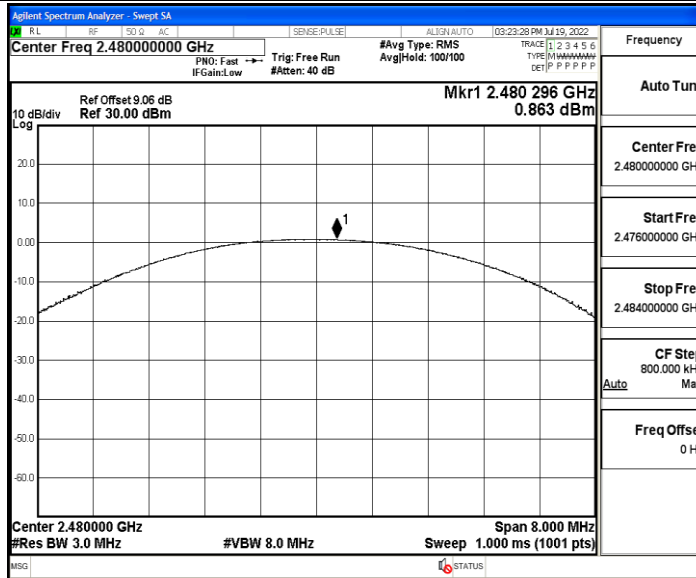
DH5_Ant1_2402



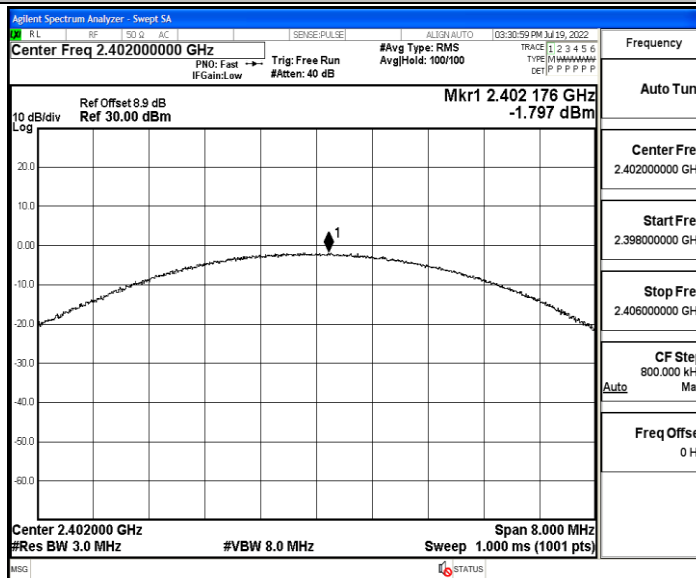
DH5_Ant1_2441



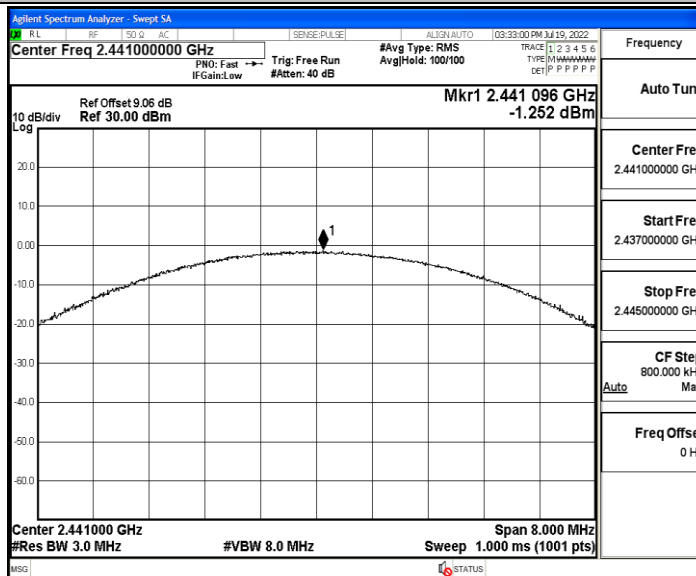
DH5_Ant1_2480



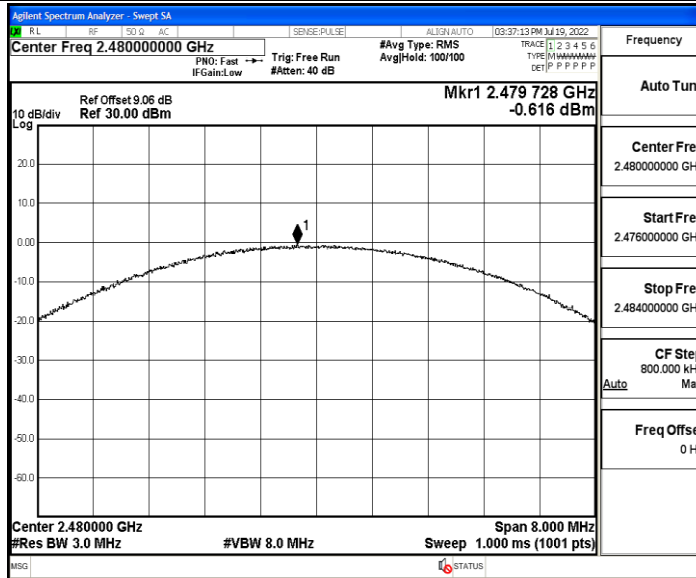
2DH5_Ant1_2402



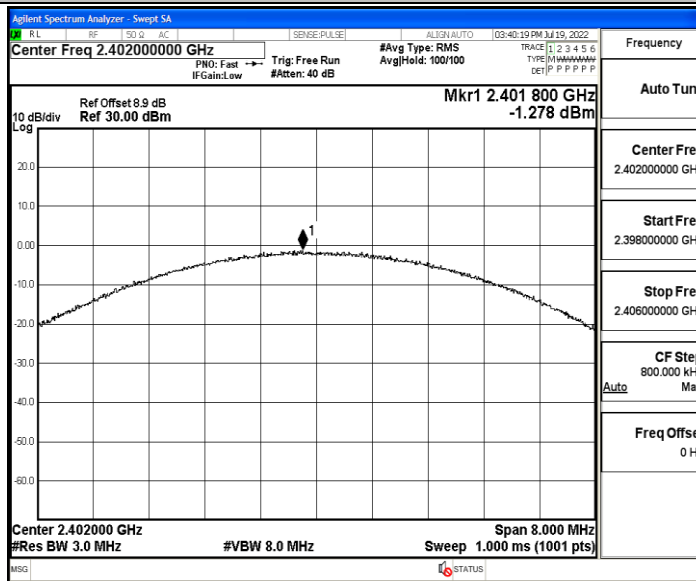
2DH5_Ant1_2441



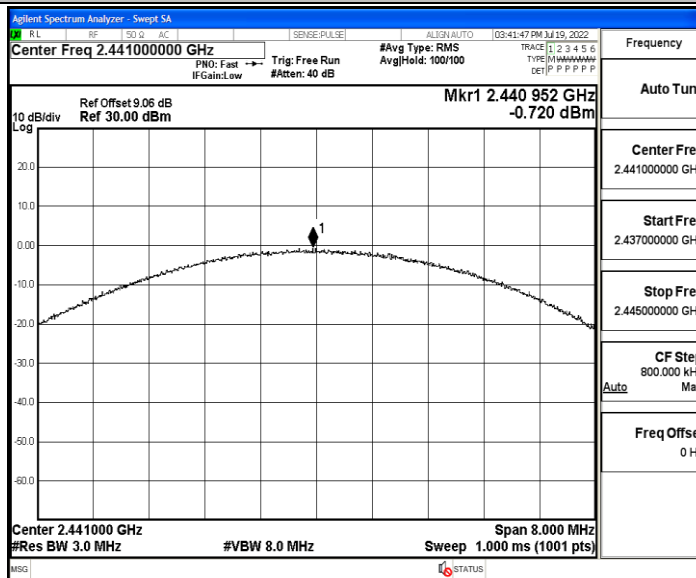
2DH5_Ant1_2480



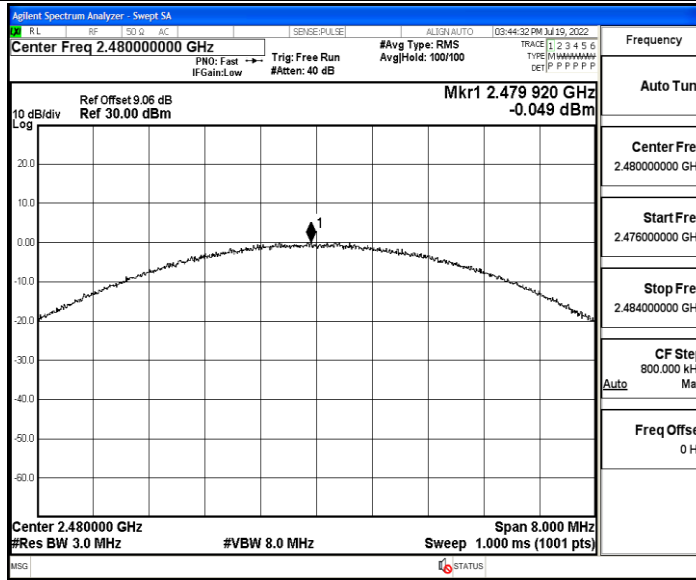
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



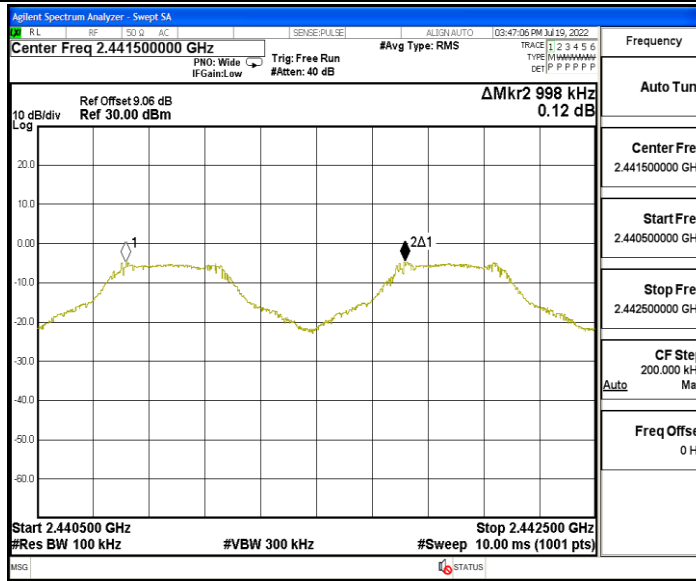
Appendix D: Carrier frequency separation

Test Result

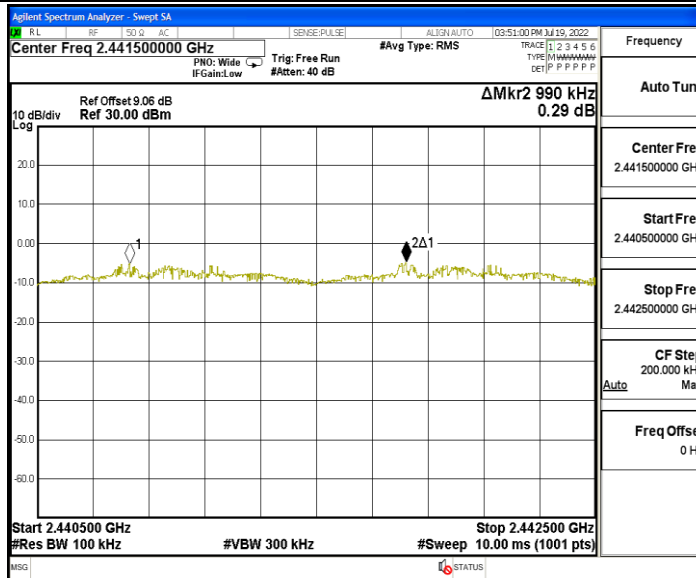
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.998	≥0.936	PASS
2DH5	Ant1	Hop	0.99	≥0.890	PASS
3DH5	Ant1	Hop	0.984	≥0.890	PASS

Test Graphs

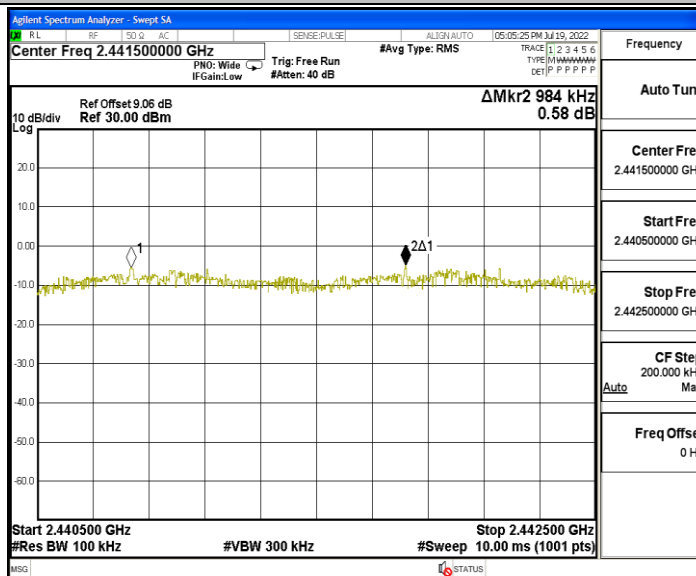
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



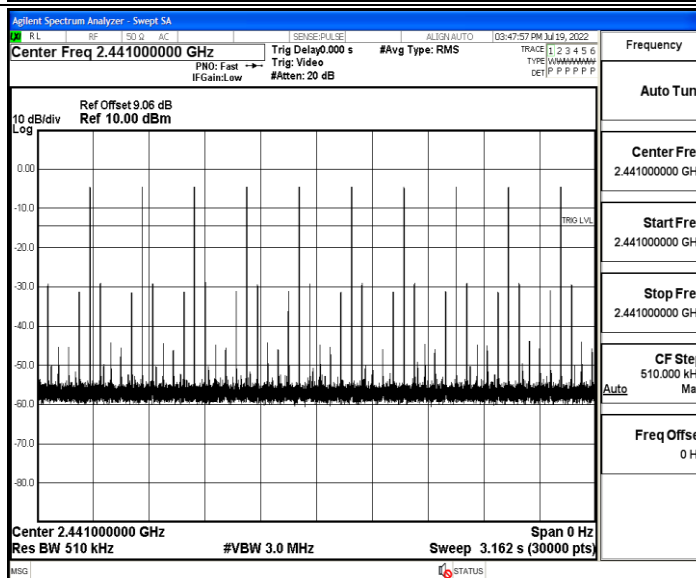
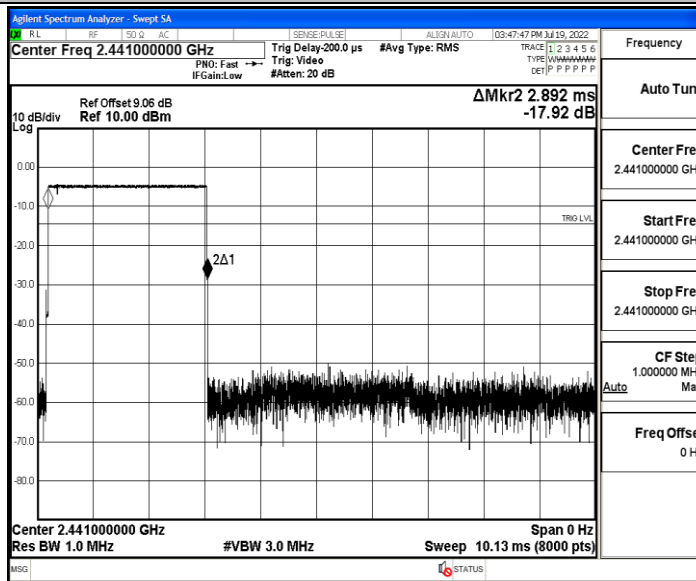
Appendix E: Time of occupancy

Test Result

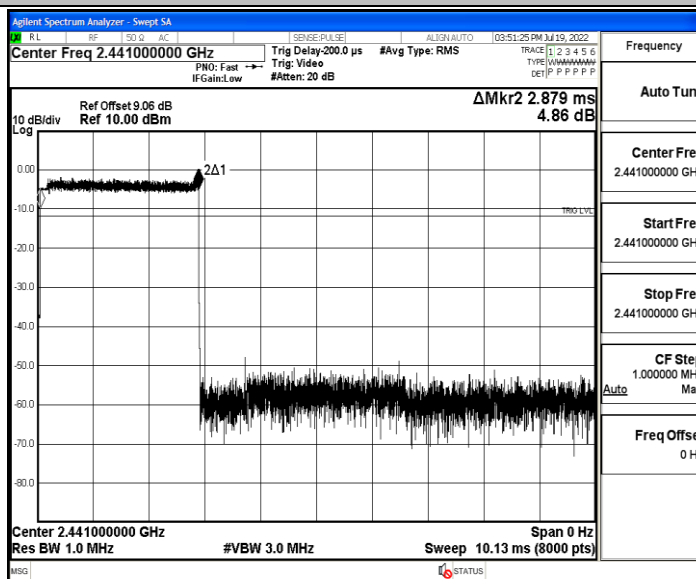
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	110	0.318	≤0.4	PASS
2DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS
3DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS

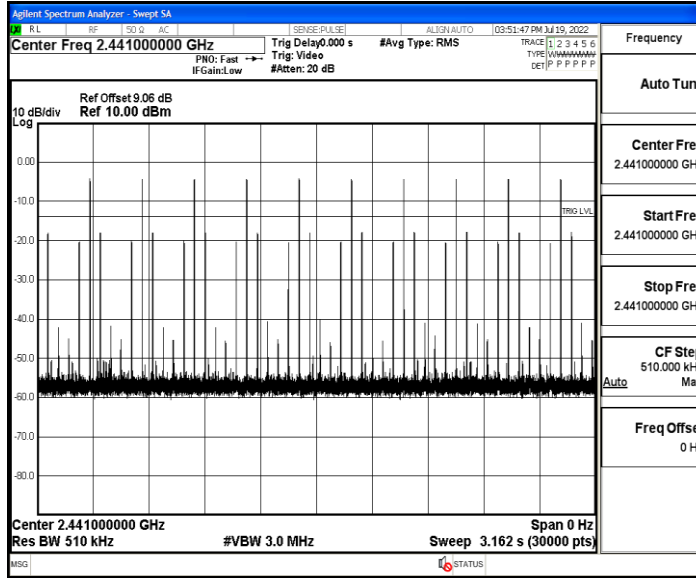
Test Graphs

DH5_Ant1_Hop

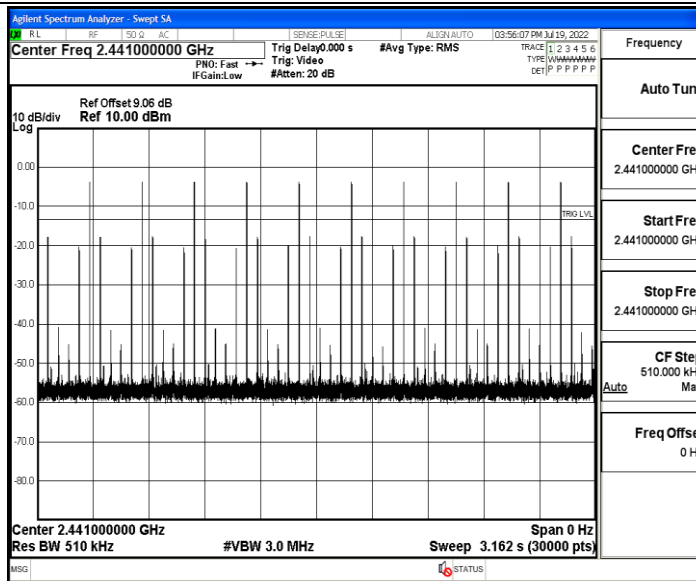
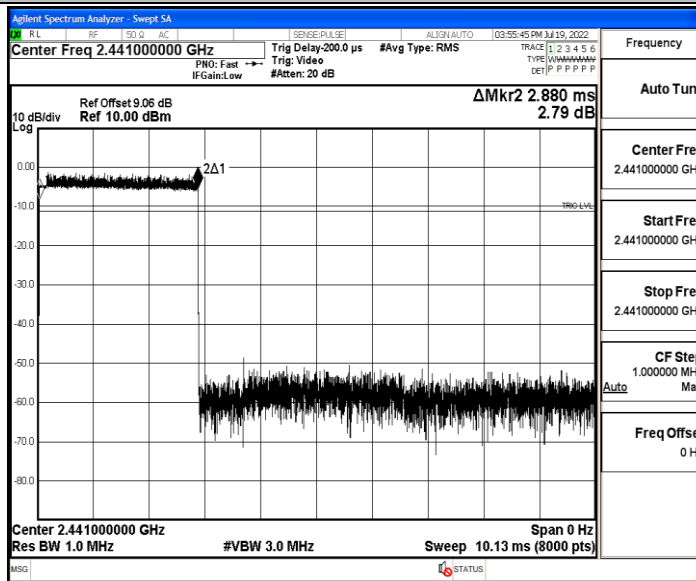


2DH5_Ant1_Hop





3DH5_Ant1_Hop



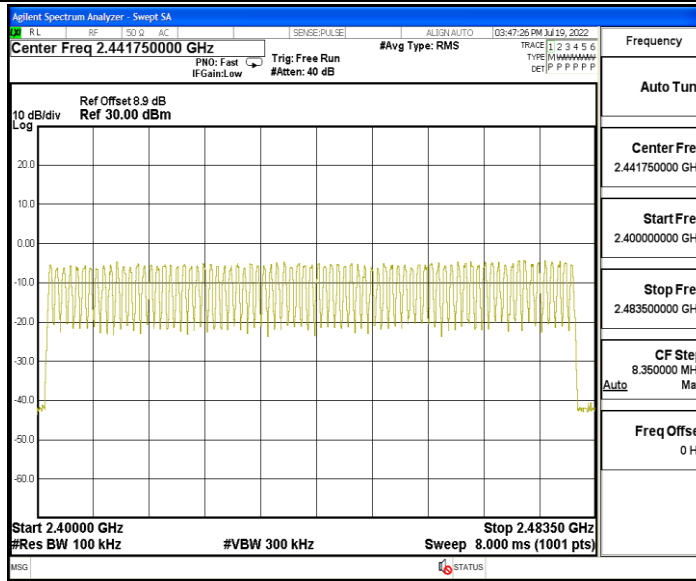
Appendix F: Number of hopping channels

Test Result

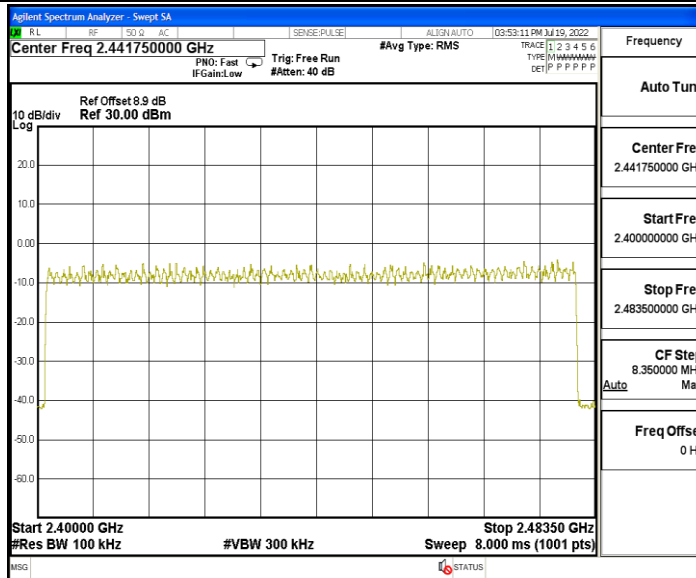
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

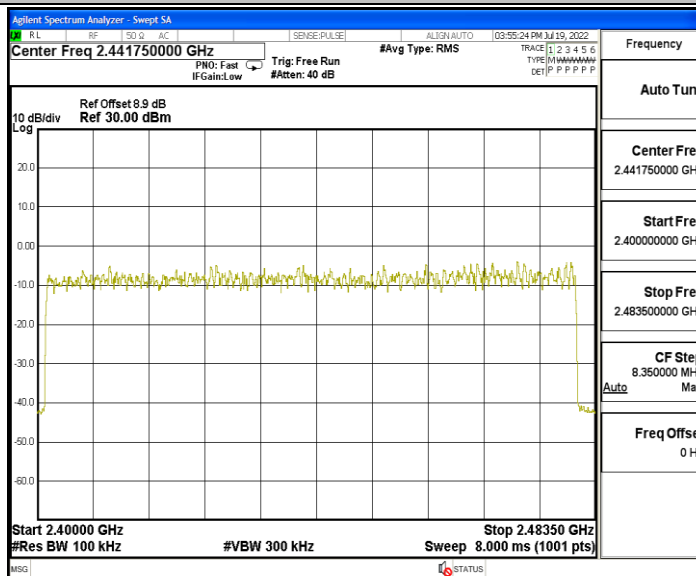
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



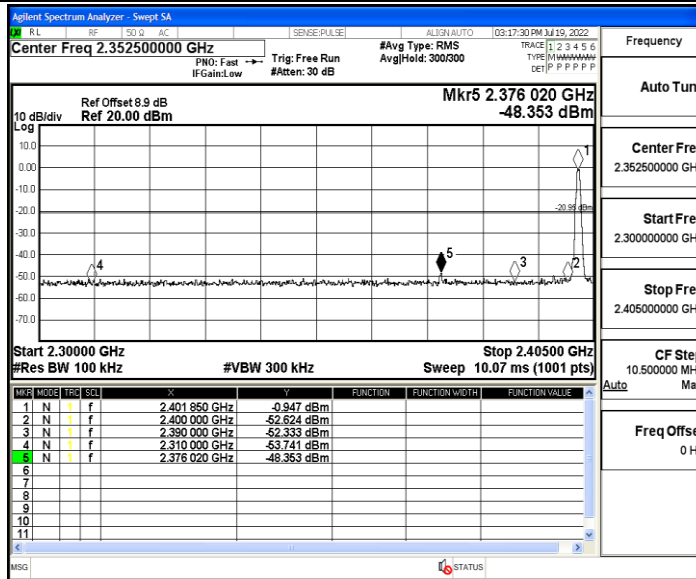
Appendix G: Band edge measurements

Test Result

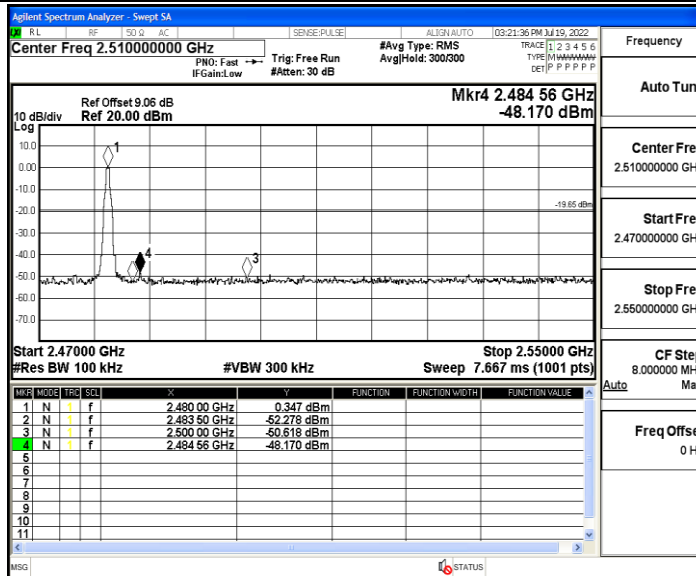
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.95	-48.35	≤ -20.95	PASS
		High	2480	0.35	-48.17	≤ -19.65	PASS
		Low	Hop_2402	-5.77	-50.37	≤ -25.77	PASS
		High	Hop_2480	-3.82	-48.87	≤ -23.82	PASS
2DH5	Ant1	Low	2402	-6.74	-50.57	≤ -26.74	PASS
		High	2480	-4.86	-49.25	≤ -24.86	PASS
		Low	Hop_2402	-7.67	-50.71	≤ -27.67	PASS
		High	Hop_2480	-4.67	-48.94	≤ -24.67	PASS
3DH5	Ant1	Low	2402	-5.54	-50.19	≤ -25.54	PASS
		High	2480	-5.64	-49.7	≤ -25.64	PASS
		Low	Hop_2402	-7.93	-50.71	≤ -27.93	PASS
		High	Hop_2480	-6.07	-49.39	≤ -26.07	PASS

Test Graphs

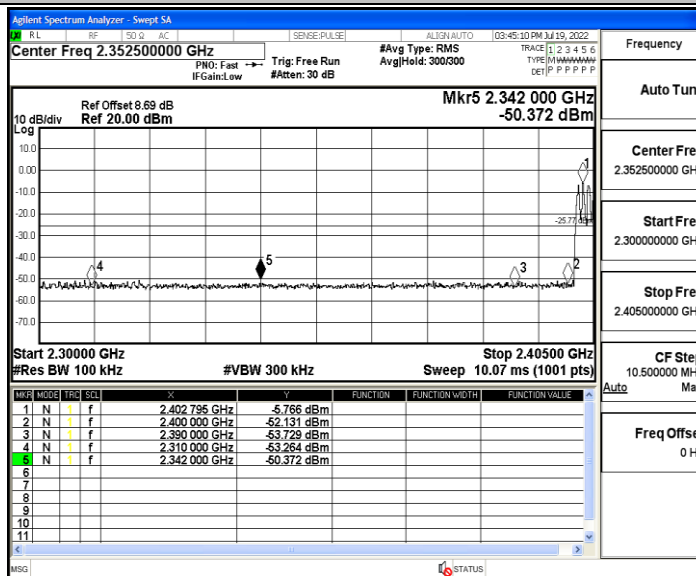
DH5_Ant1_Low_2402



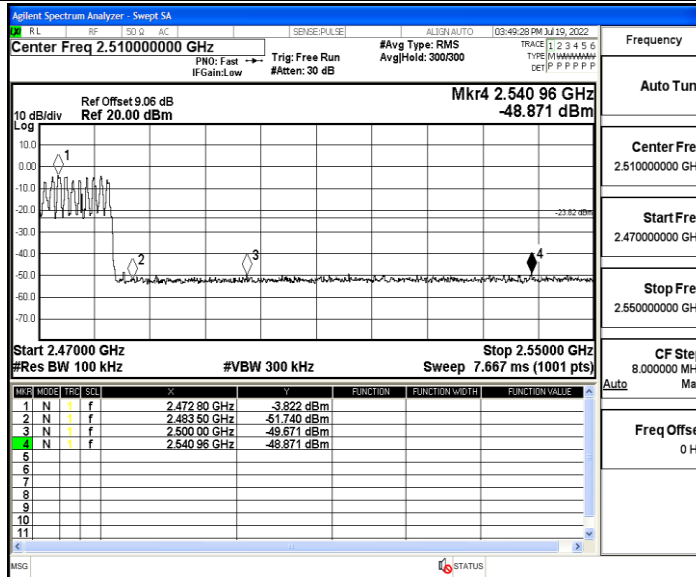
DH5_Ant1_High_2480



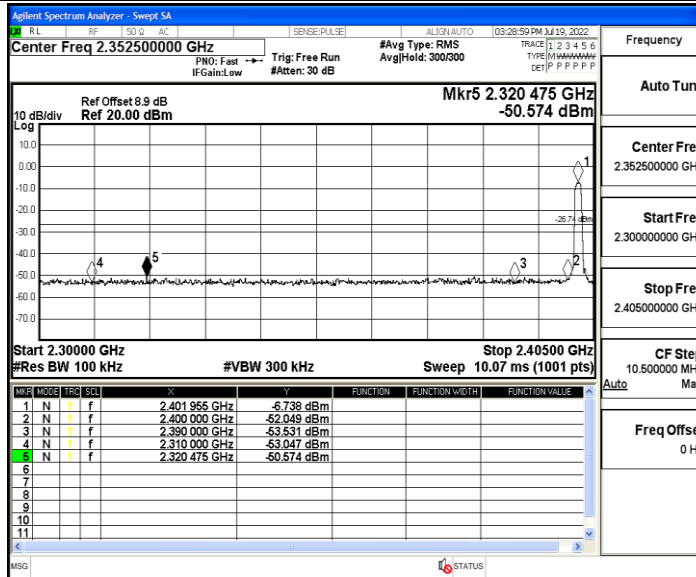
DH5_Ant1_Low_Hop_2402



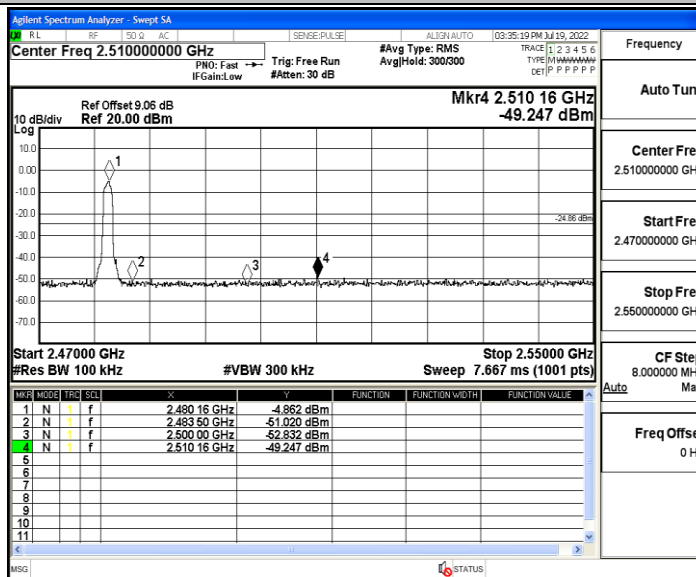
DH5_Ant1_High_Hop_2480



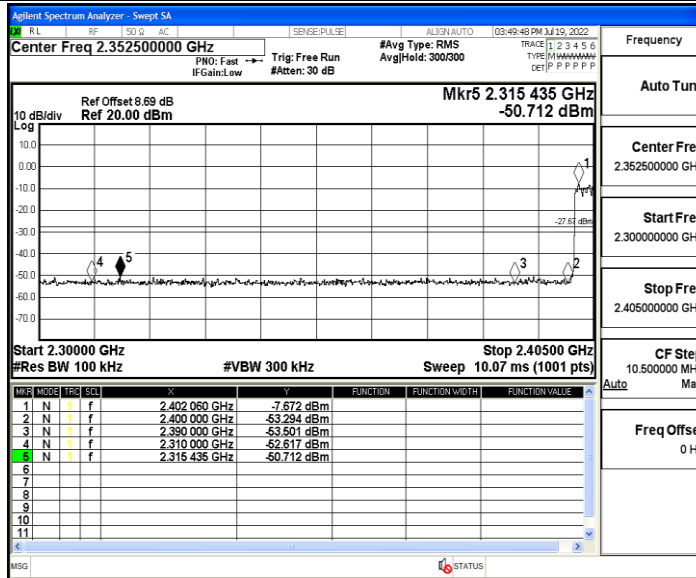
2DH5_Ant1_Low_2402



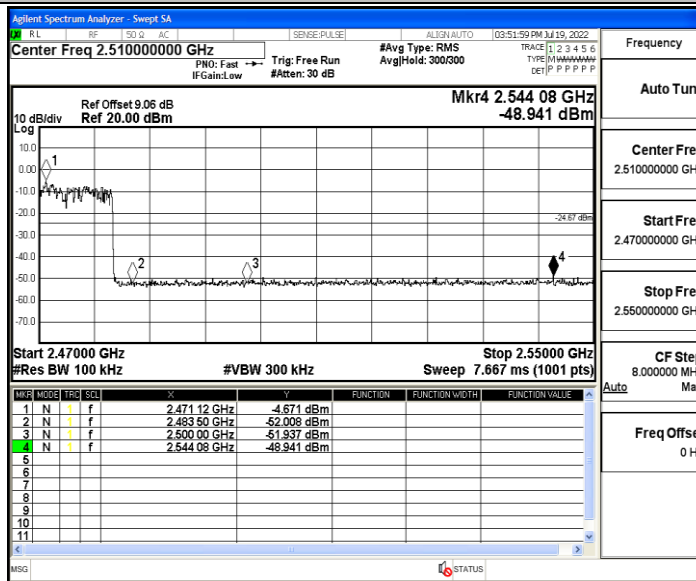
2DH5_Ant1_High_2480



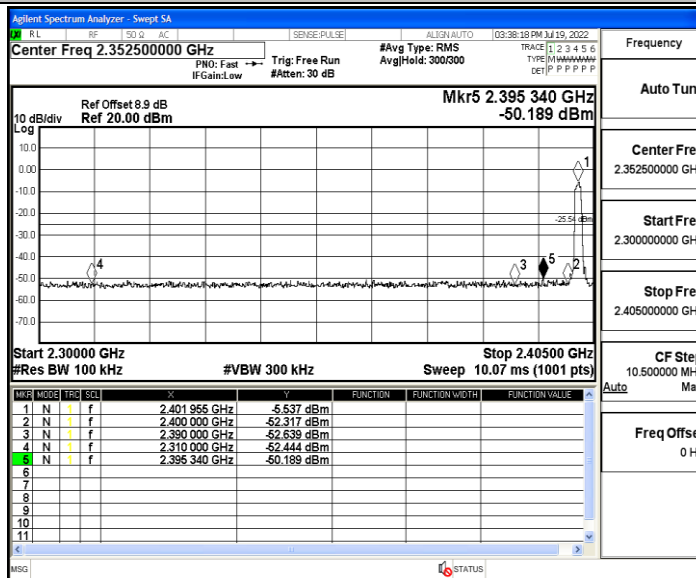
2DH5_Ant1_Low_Hop_2402



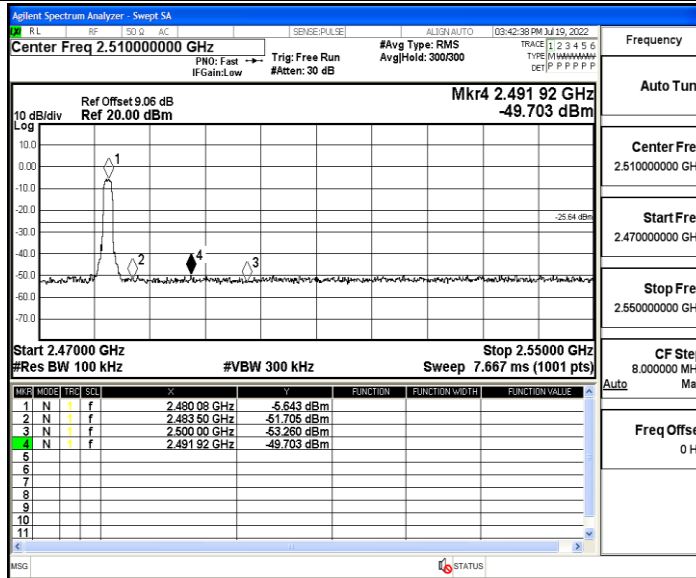
2DH5_Ant1_High_Hop_2480



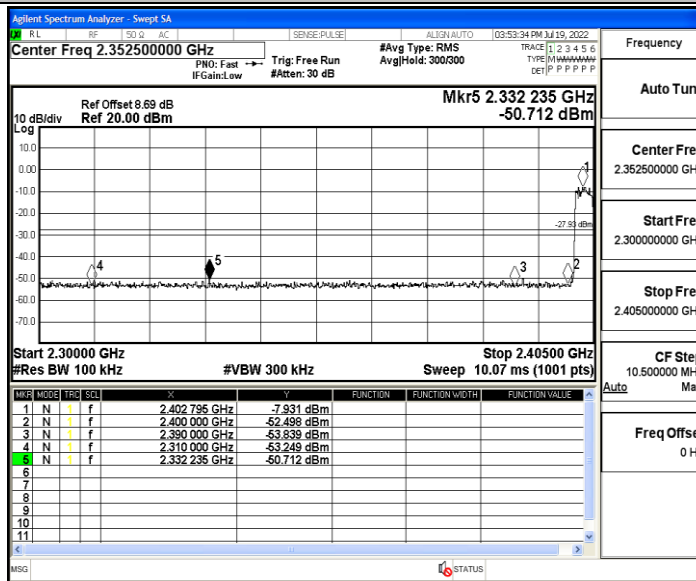
3DH5_Ant1_Low_2402



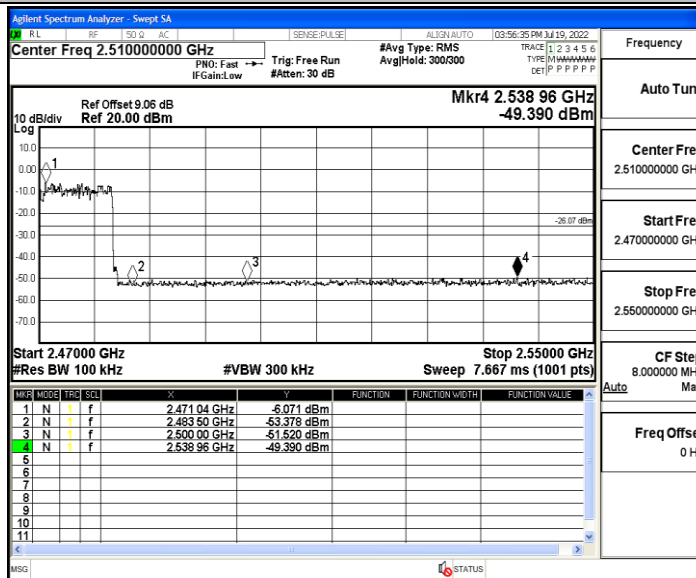
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



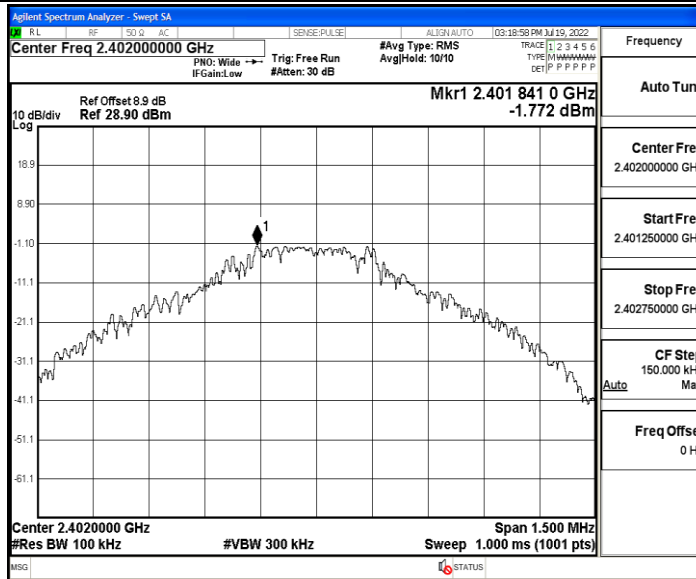
Appendix H: Conducted Spurious Emission

Test Result

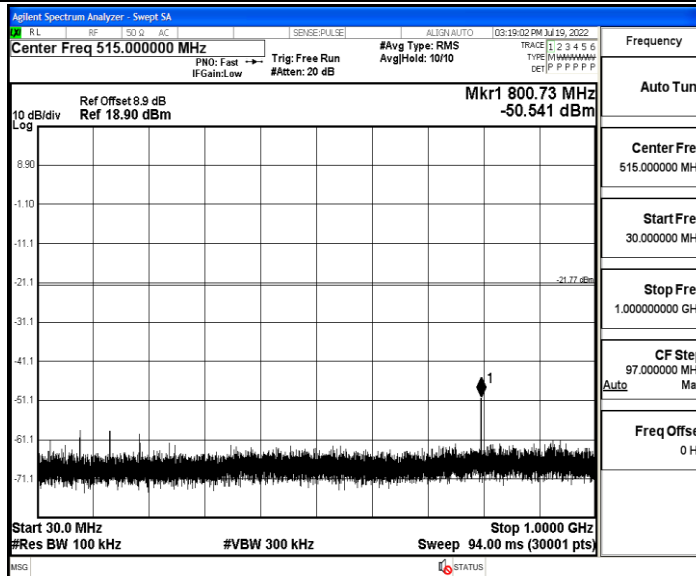
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.77	-1.77	---	PASS
			30~1000	-1.77	-50.54	≤-21.77	PASS
			1000~26500	-1.77	-41.29	≤-21.77	PASS
		2441	Reference	-1.15	-1.15	---	PASS
			30~1000	-1.15	-49.64	≤-21.15	PASS
			1000~26500	-1.15	-44	≤-21.15	PASS
		2480	Reference	-0.31	-0.31	---	PASS
			30~1000	-0.31	-48.15	≤-20.31	PASS
			1000~26500	-0.31	-39.84	≤-20.31	PASS
2DH5	Ant1	2402	Reference	-6.20	-6.20	---	PASS
			30~1000	-6.20	-57.54	≤-26.2	PASS
			1000~26500	-6.20	-49.01	≤-26.2	PASS
		2441	Reference	-6.79	-6.79	---	PASS
			30~1000	-6.79	-53.43	≤-26.79	PASS
			1000~26500	-6.79	-47.48	≤-26.79	PASS
		2480	Reference	-5.87	-5.87	---	PASS
			30~1000	-5.87	-54.61	≤-25.87	PASS
			1000~26500	-5.87	-49.55	≤-25.87	PASS
3DH5	Ant1	2402	Reference	-5.93	-5.93	---	PASS
			30~1000	-5.93	-56.67	≤-25.93	PASS
			1000~26500	-5.93	-50.77	≤-25.93	PASS
		2441	Reference	-7.35	-7.35	---	PASS
			30~1000	-7.35	-54.66	≤-27.35	PASS
			1000~26500	-7.35	-50	≤-27.35	PASS
		2480	Reference	-4.84	-4.84	---	PASS
			30~1000	-4.84	-53.63	≤-24.84	PASS
			1000~26500	-4.84	-49.01	≤-24.84	PASS

Test Graphs

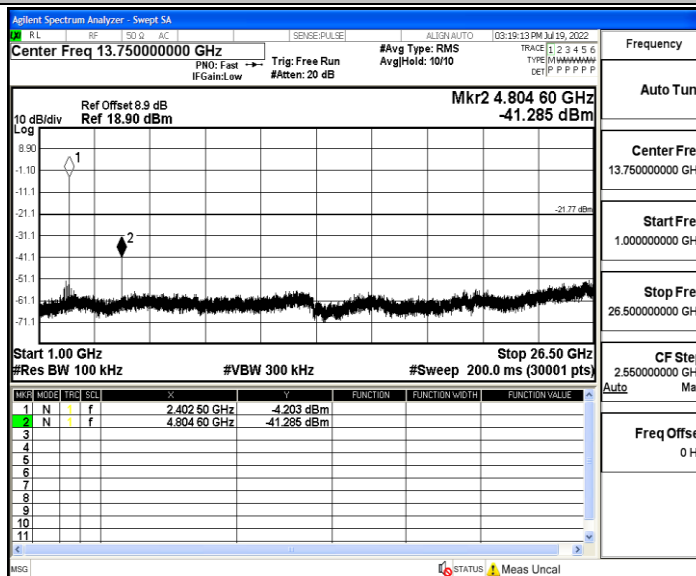
DH5_Ant1_2402_0~Reference



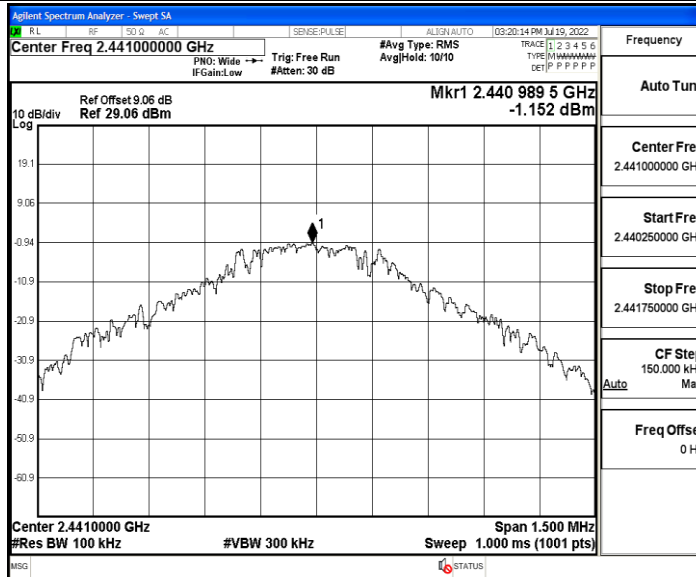
DH5_Ant1_2402_30~1000



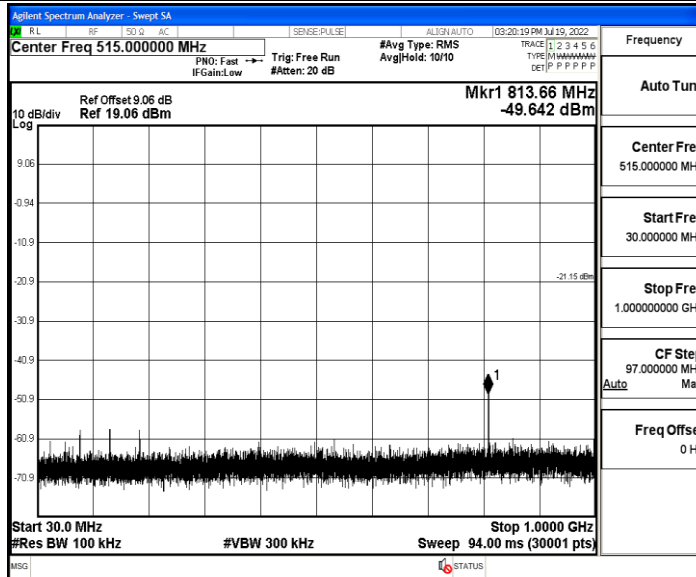
DH5_Ant1_2402_1000~26500



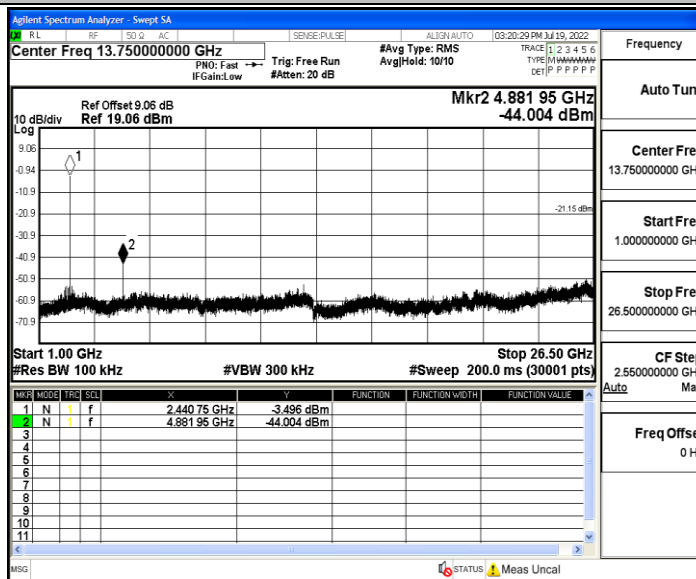
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0~Reference