

FCC Appendix RF Test Data for BT

FCC ID : 2ARKF-I-16

Company : Shenzhen Innotrik Technology Co., Ltd

EUT : AI Mini Microphone Speaker

Model Number : I-16

Report No. : CTA25112401202

Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.547	2402.498	---	---
		2441	0.957	2440.547	2441.504	---	---
		2480	0.942	2479.553	2480.495	---	---
2DH5	Ant1	2402	1.284	2401.376	2402.660	---	---
		2441	1.278	2440.382	2441.660	---	---
		2480	1.275	2479.382	2480.657	---	---
3DH5	Ant1	2402	1.284	2401.379	2402.663	---	---
		2441	1.320	2440.346	2441.666	---	---
		2480	1.332	2479.343	2480.675	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

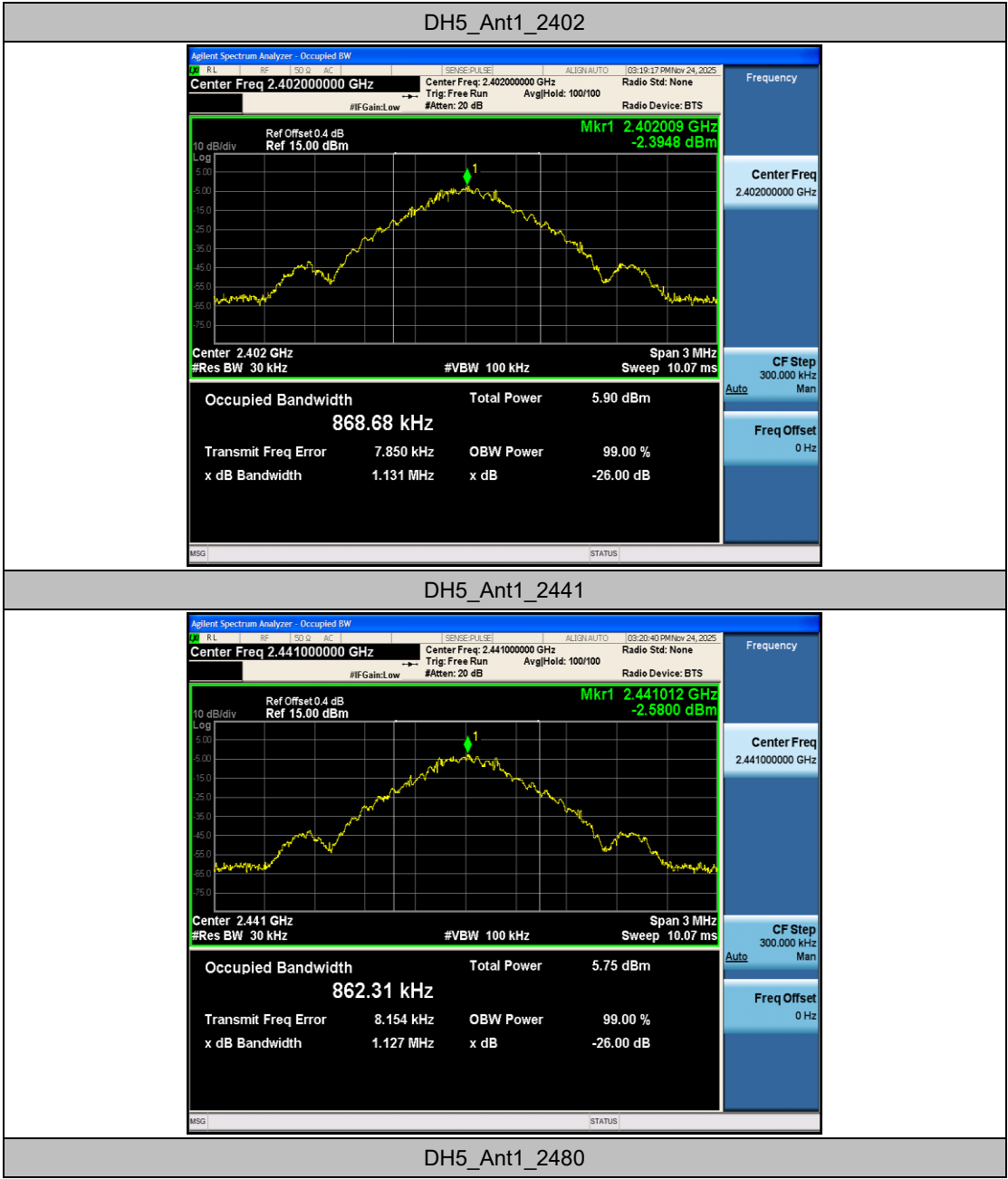


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86868	2401.5735	2402.4422	---	---
		2441	0.86231	2440.5770	2441.4393	---	---
		2480	0.87578	2479.5713	2480.4471	---	---
2DH5	Ant1	2402	1.1868	2401.4157	2402.6025	---	---
		2441	1.1892	2440.4156	2441.6048	---	---
		2480	1.1877	2479.4179	2480.6056	---	---
3DH5	Ant1	2402	1.1920	2401.4148	2402.6068	---	---
		2441	1.1855	2440.4174	2441.6029	---	---
		2480	1.1883	2479.4155	2480.6038	---	---

Test Graphs

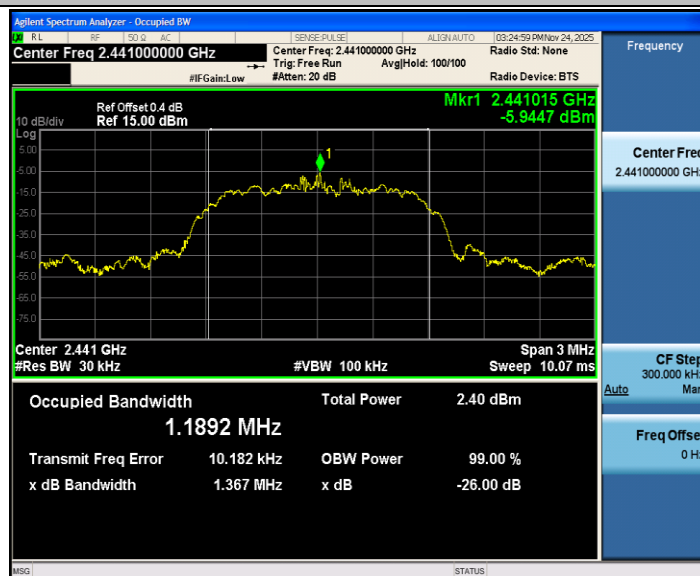




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



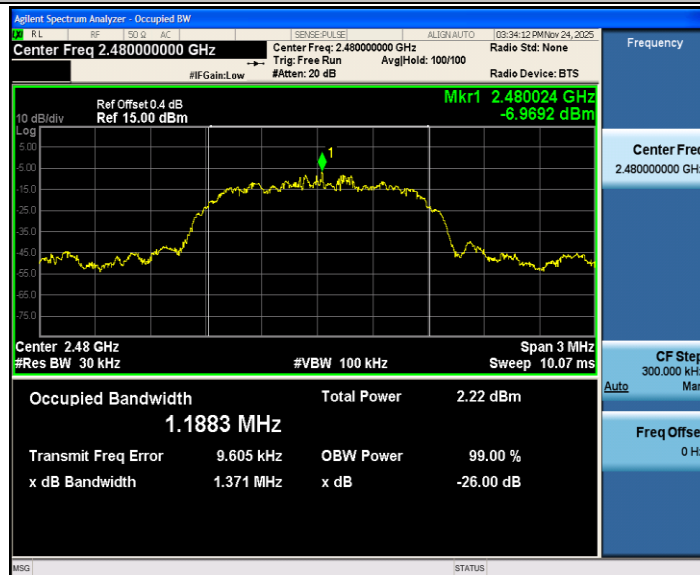
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-0.07	≤20.97	PASS
		2441	-0.31	≤20.97	PASS
		2480	-0.40	≤20.97	PASS
2DH5	Ant1	2402	-0.90	≤20.97	PASS
		2441	-1.09	≤20.97	PASS
		2480	-1.18	≤20.97	PASS
3DH5	Ant1	2402	-0.88	≤20.97	PASS
		2441	-1.12	≤20.97	PASS
		2480	-1.20	≤20.97	PASS

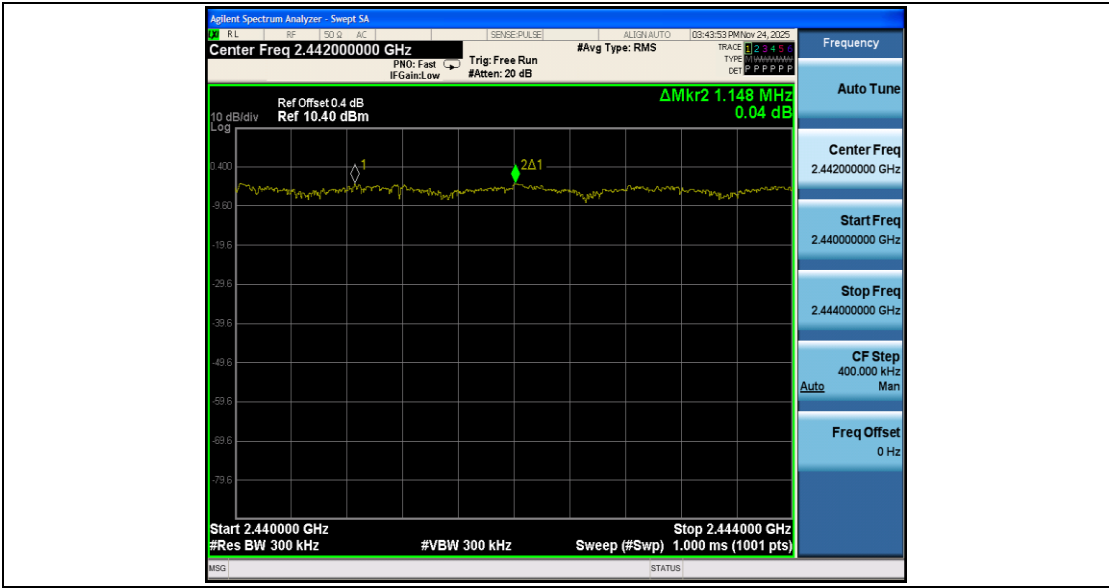
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.02	≥ 0.957	PASS
2DH5	Ant1	Hop	1.108	≥ 0.856	PASS
3DH5	Ant1	Hop	1.148	≥ 0.888	PASS

Test Graphs



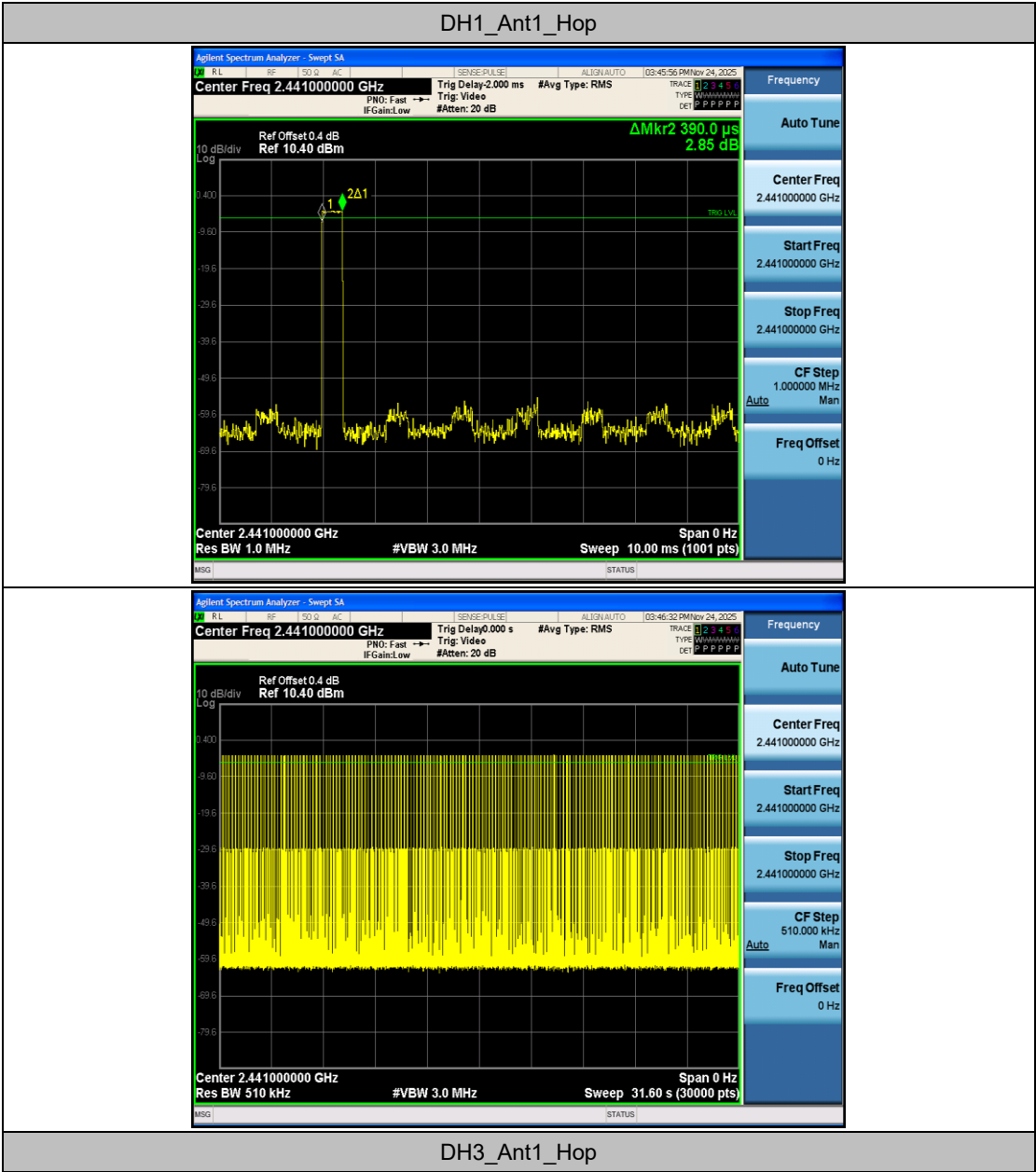


Appendix E: Time of occupancy

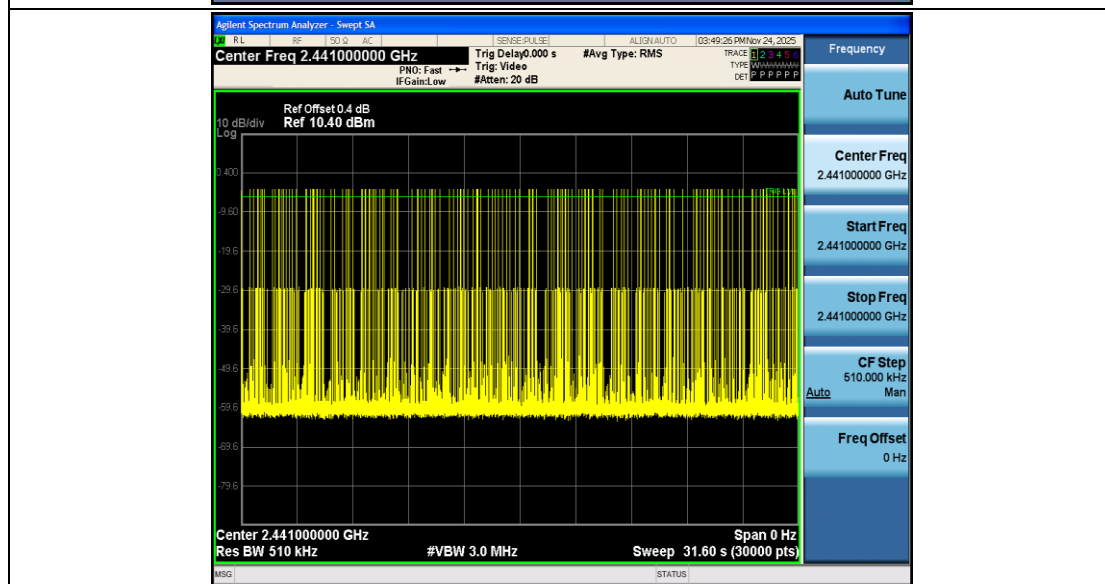
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	317	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.650	157	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.890	110	0.318	≤0.4	PASS
2DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.650	153	0.252	≤0.4	PASS
2DH5	Ant1	Hop	2.900	108	0.313	≤0.4	PASS
3DH1	Ant1	Hop	0.390	314	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.640	153	0.251	≤0.4	PASS
3DH5	Ant1	Hop	2.900	105	0.305	≤0.4	PASS

Test Graphs

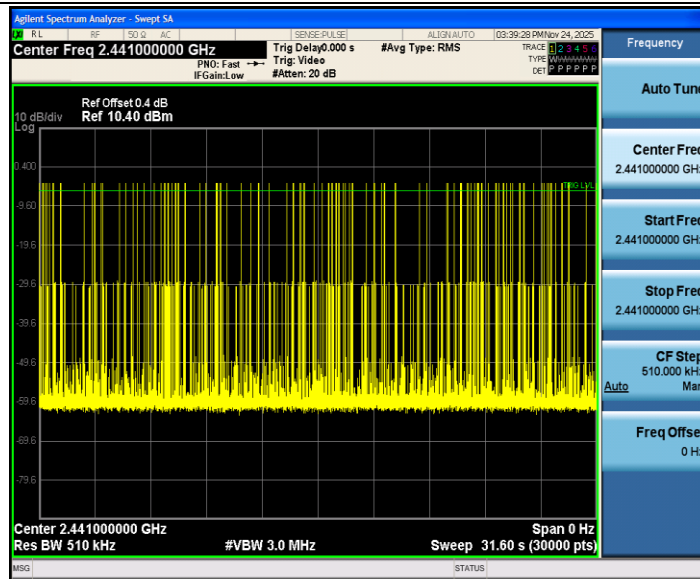


DH3_Ant1_Hop

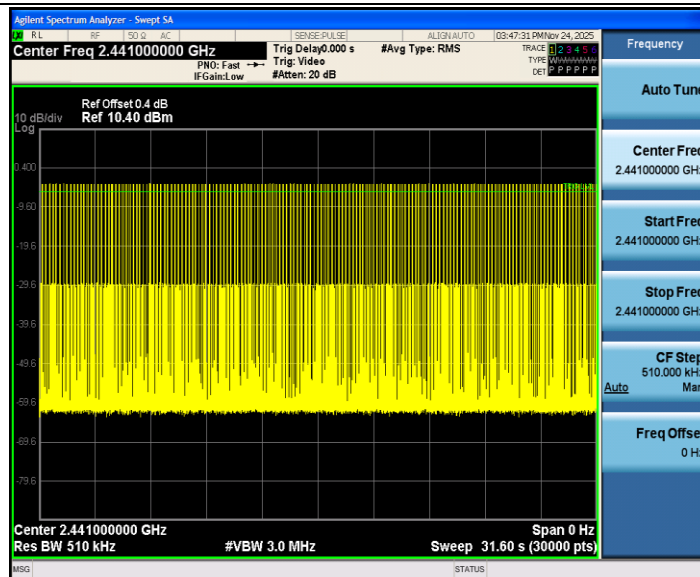
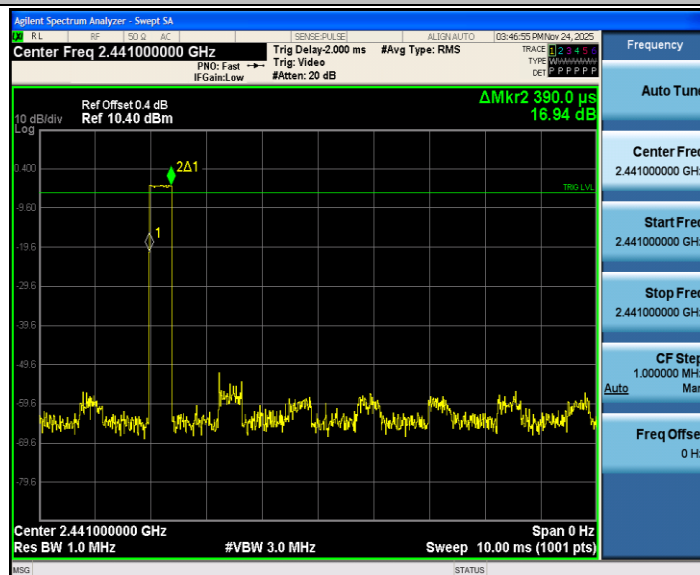


DH5_Ant1_Hop

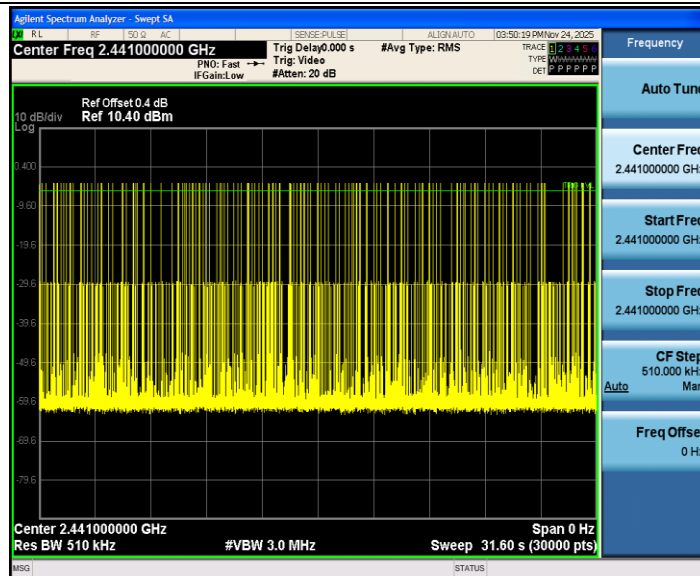
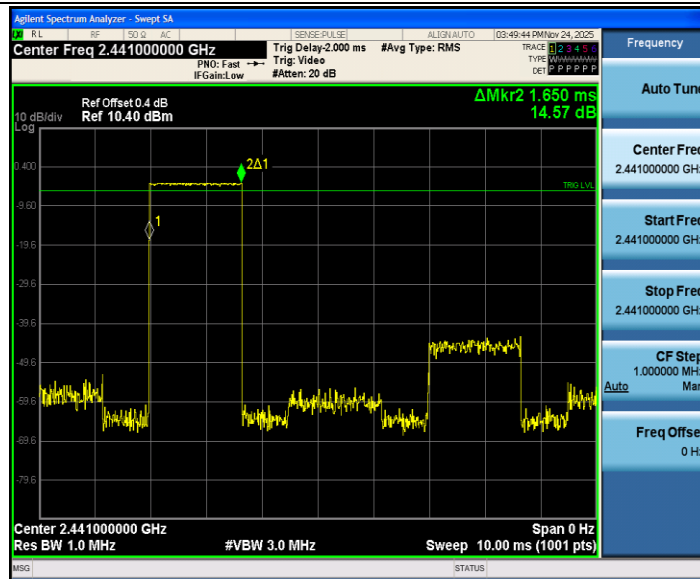




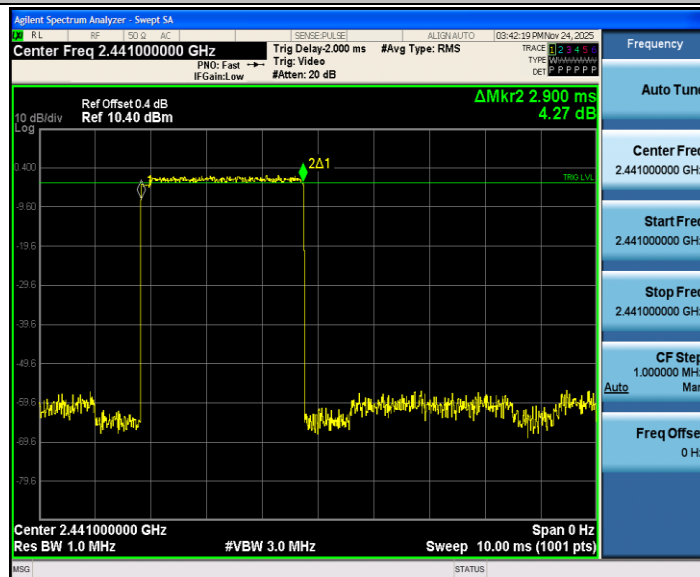
2DH1_Ant1_Hop

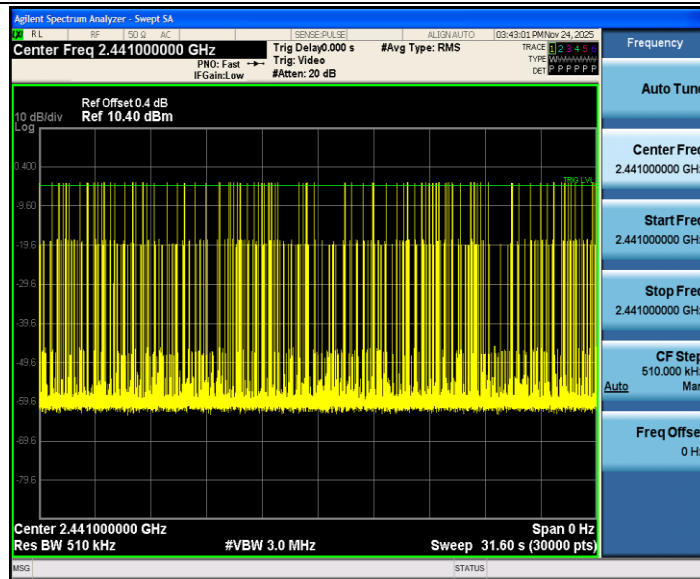


2DH3_Ant1_Hop

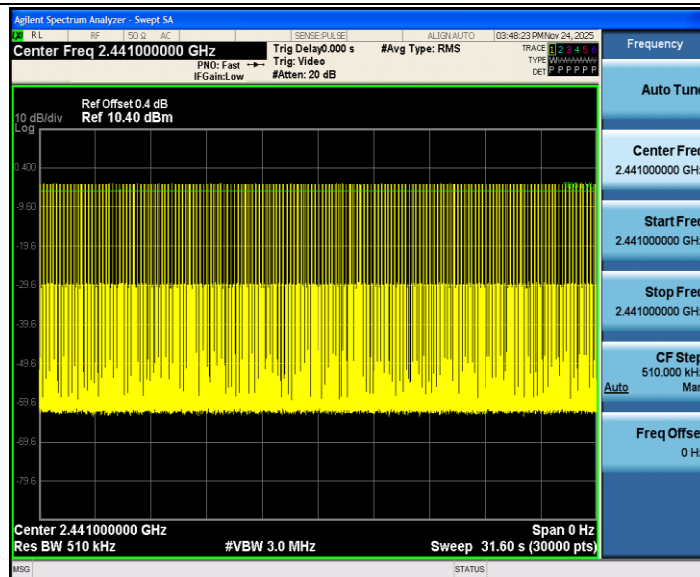
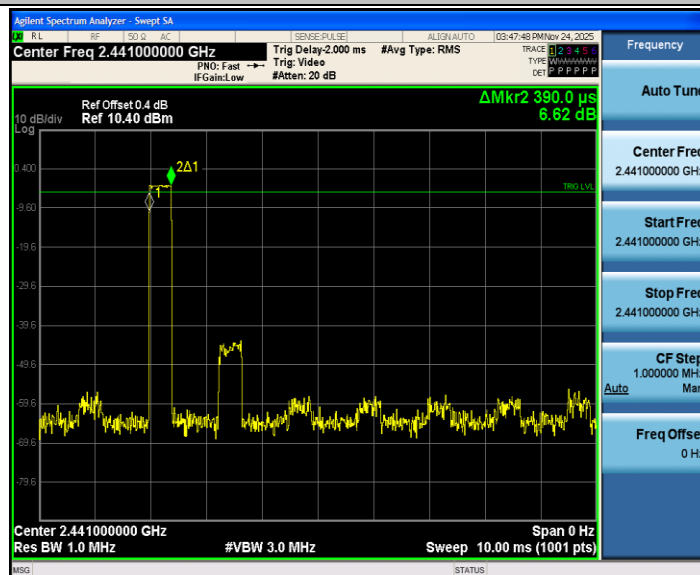


2DH5_Ant1_Hop

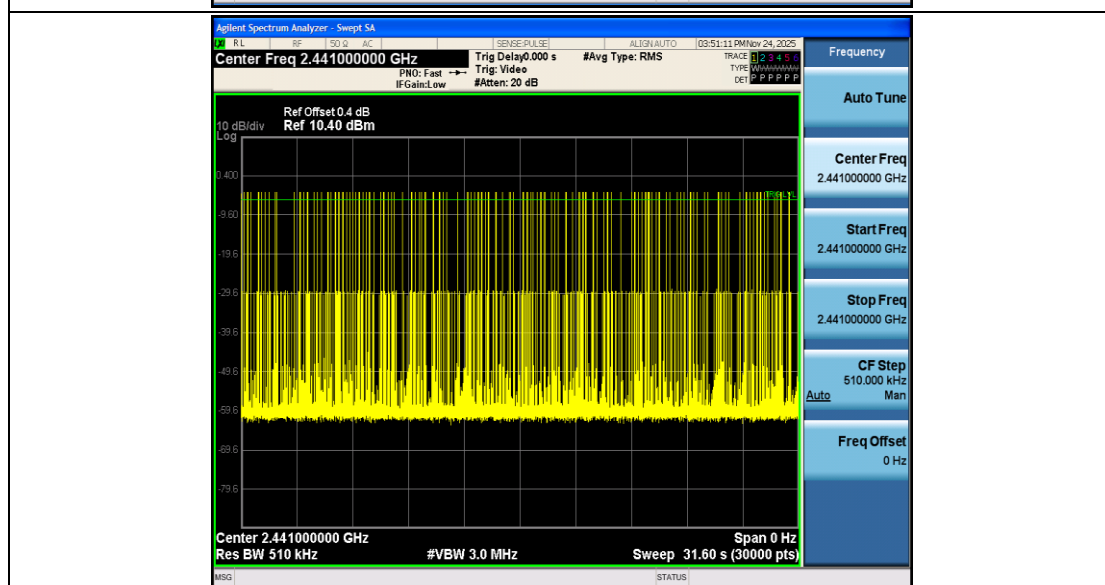




3DH1_Ant1_Hop

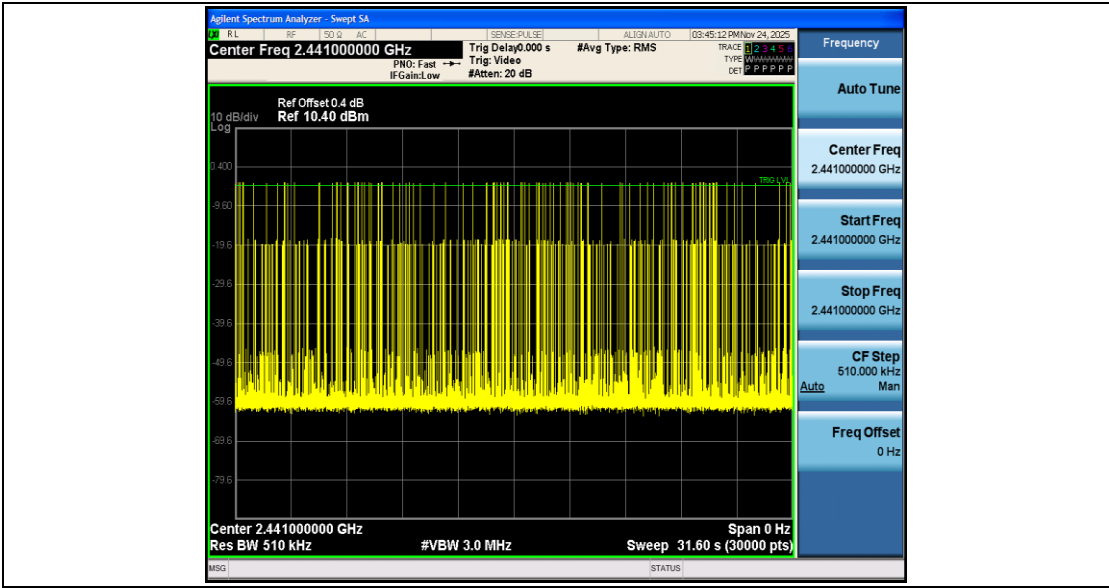


3DH3_Ant1_Hop



3DH5_Ant1_Hop





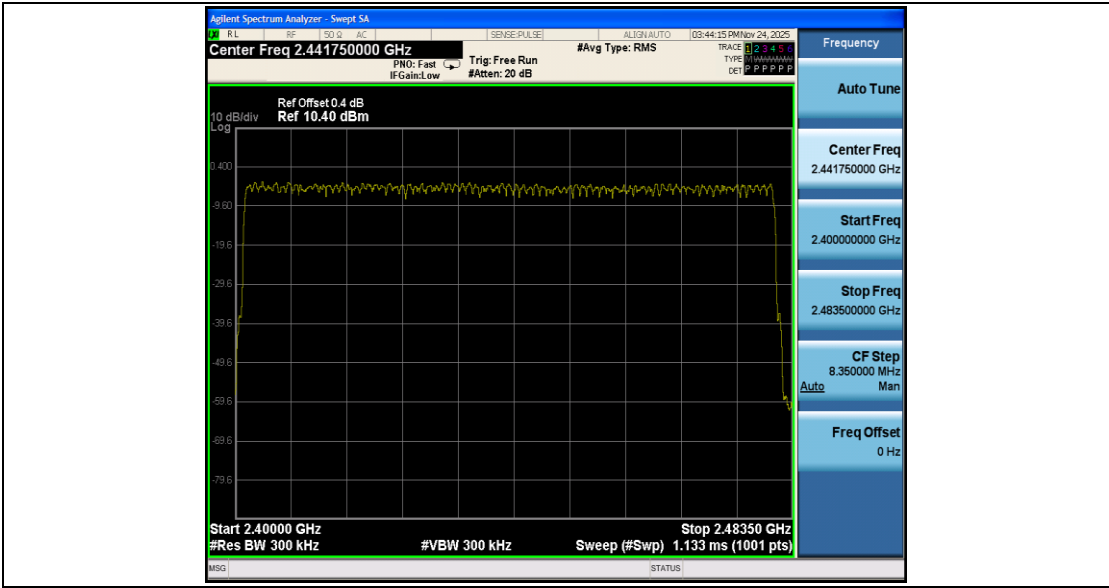
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	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



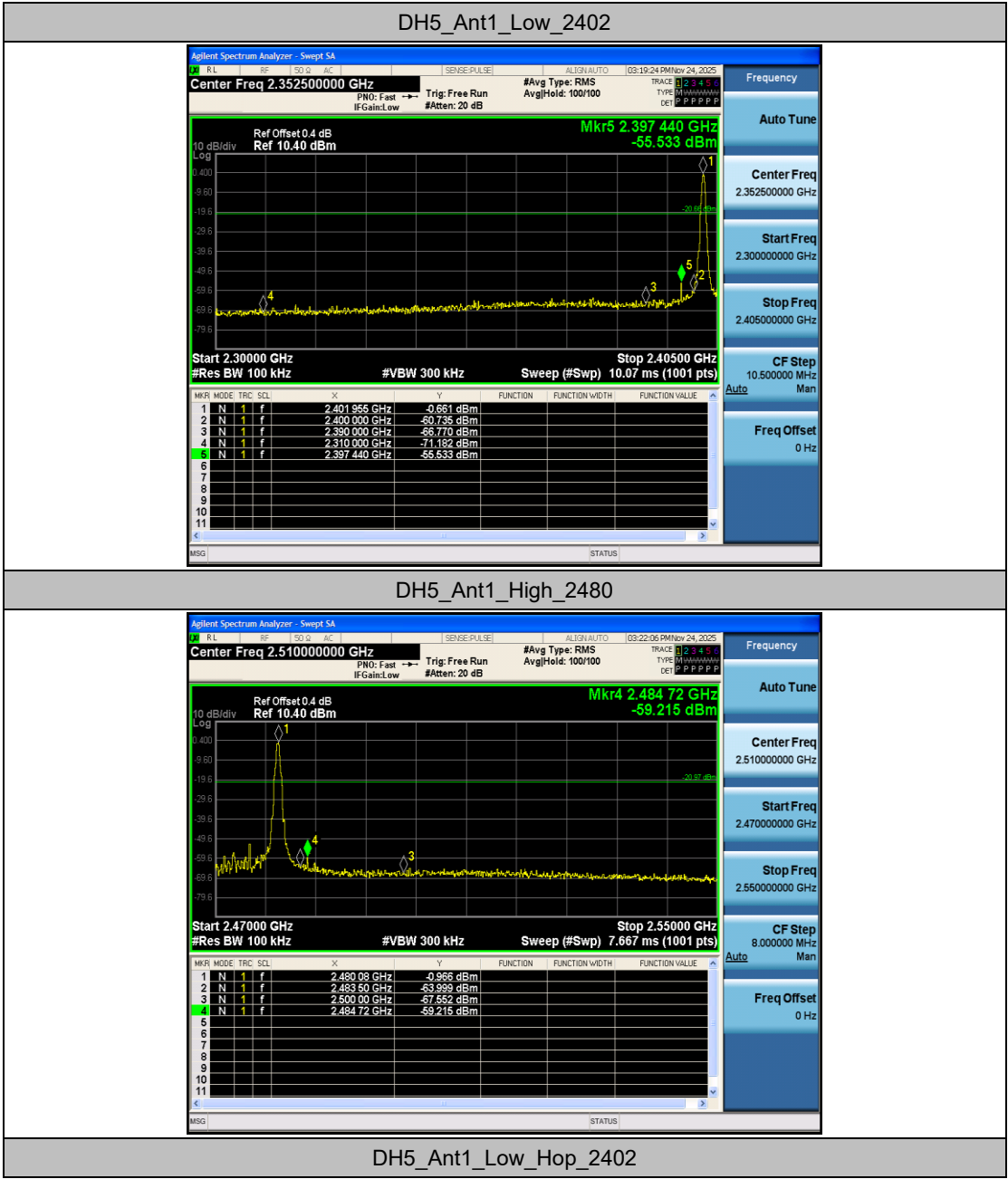


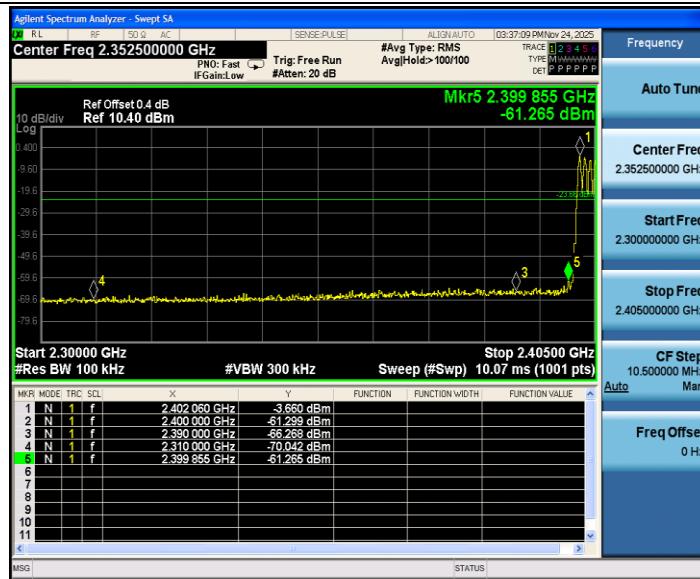
Appendix G: Band edge measurements

Test Result

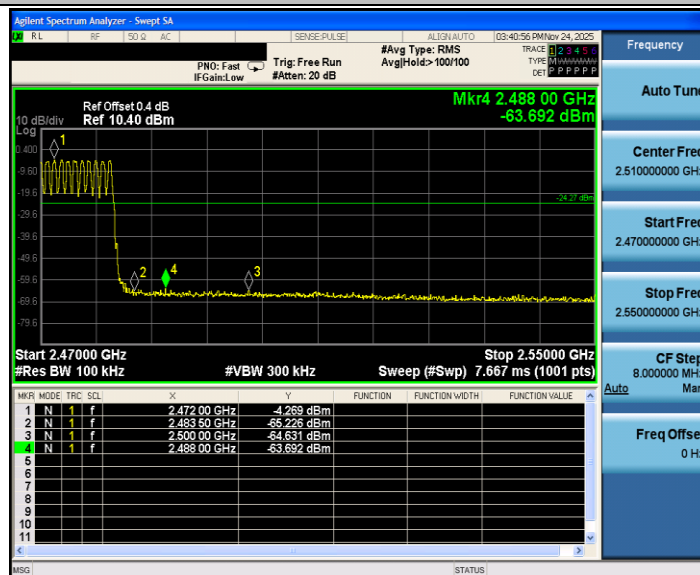
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.66	-55.53	≤-20.66	PASS
		High	2480	-0.97	-59.22	≤-20.97	PASS
		Low	Hop_2402	-3.66	-61.27	≤-23.66	PASS
		High	Hop_2480	-4.27	-63.69	≤-24.27	PASS
2DH5	Ant1	Low	2402	-4.46	-59.52	≤-24.46	PASS
		High	2480	-6.75	-64.89	≤-26.75	PASS
		Low	Hop_2402	-6.80	-63.5	≤-26.8	PASS
		High	Hop_2480	-5.13	-64.27	≤-25.13	PASS
3DH5	Ant1	Low	2402	-4.74	-57.78	≤-24.74	PASS
		High	2480	-5.00	-62.88	≤-25	PASS
		Low	Hop_2402	-6.42	-62.39	≤-26.42	PASS
		High	Hop_2480	-5.64	-64.49	≤-25.64	PASS

Test Graphs

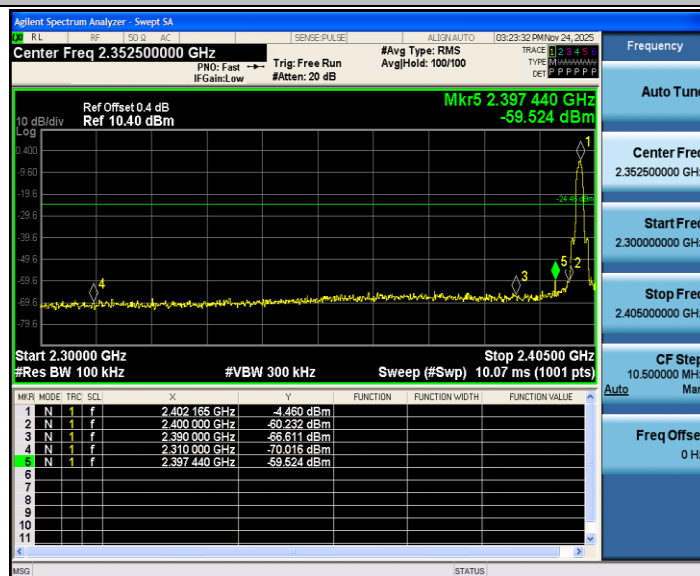




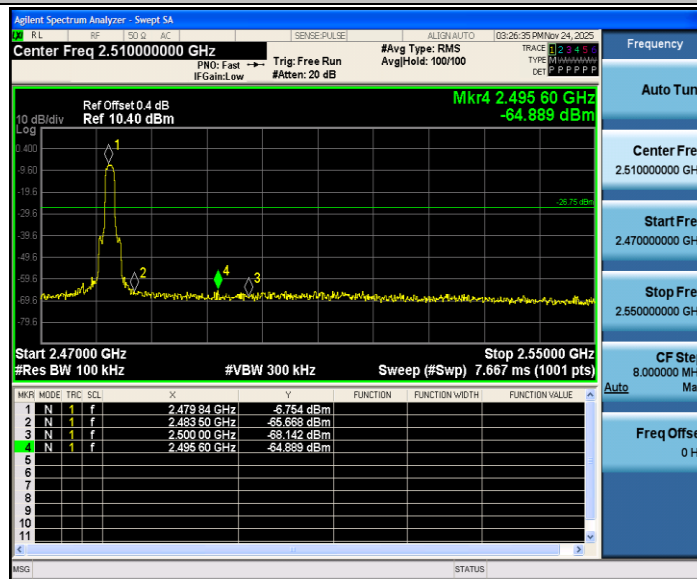
DH5_Ant1_High_Hop_2480



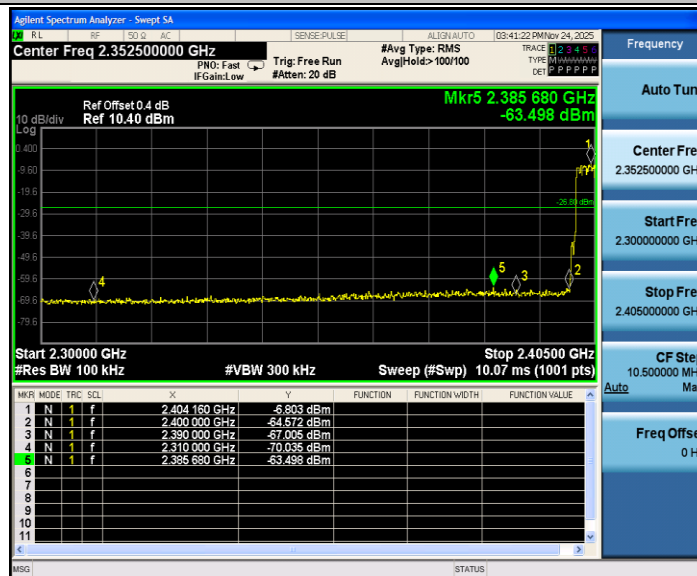
2DH5_Ant1_Low_2402



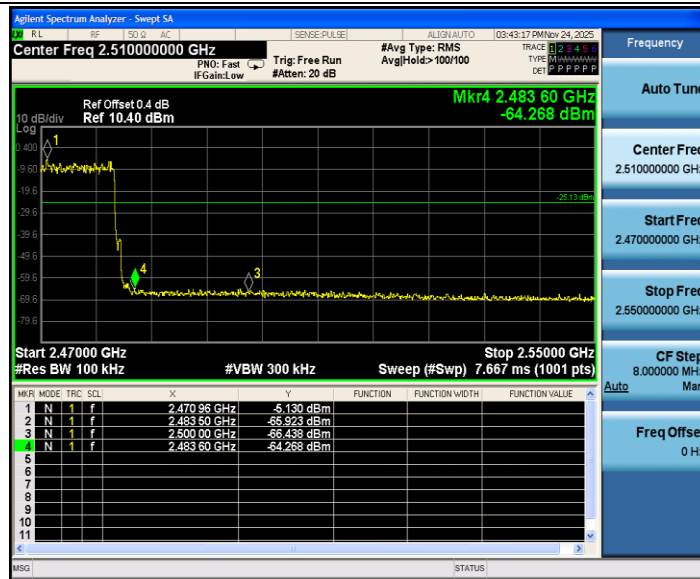
2DH5_Ant1_High_2480



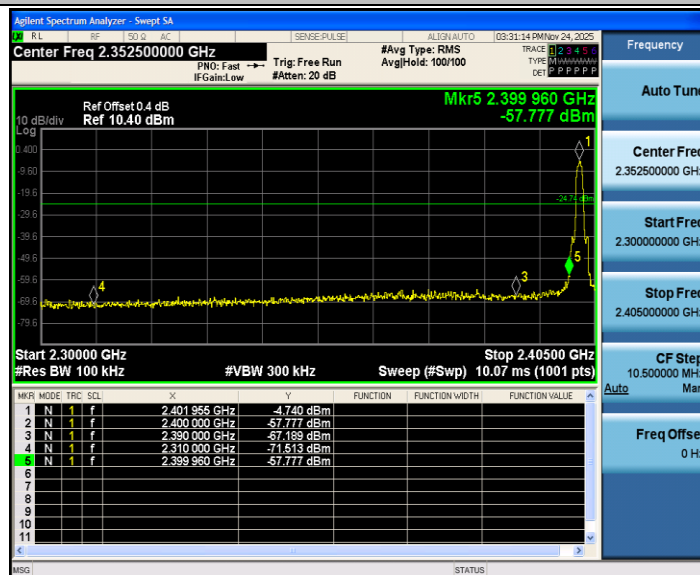
2DH5_Ant1_Low_Hop_2402



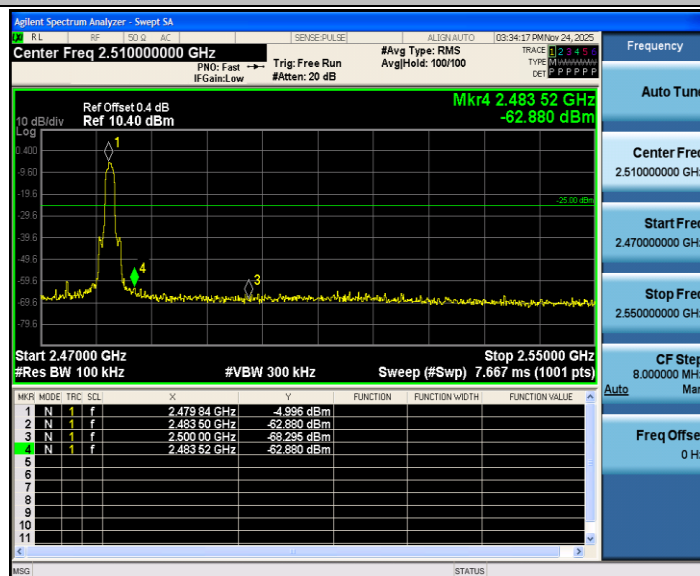
2DH5_Ant1_High_Hop_2480



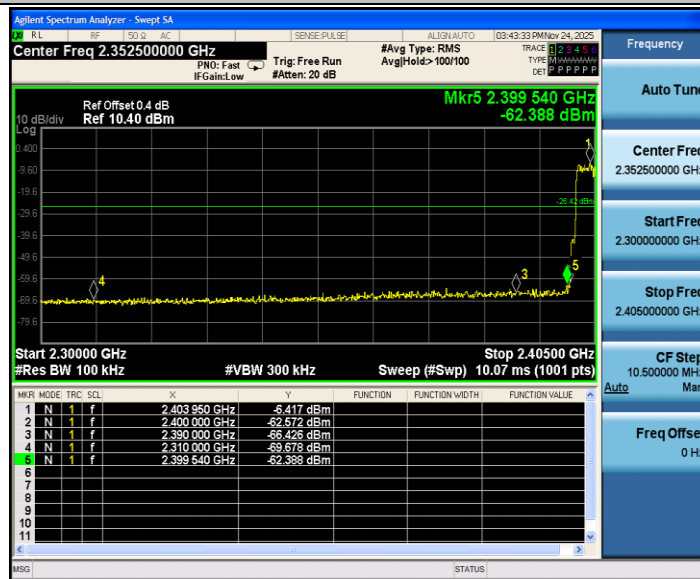
3DH5_Ant1_Low_2402



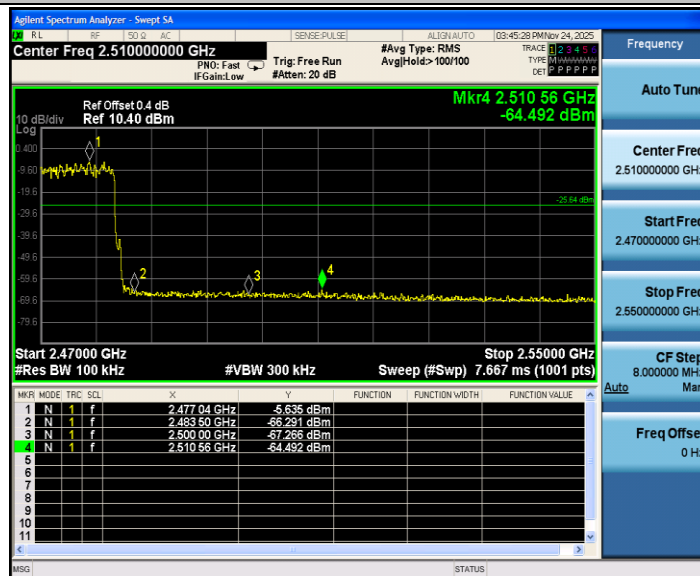
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

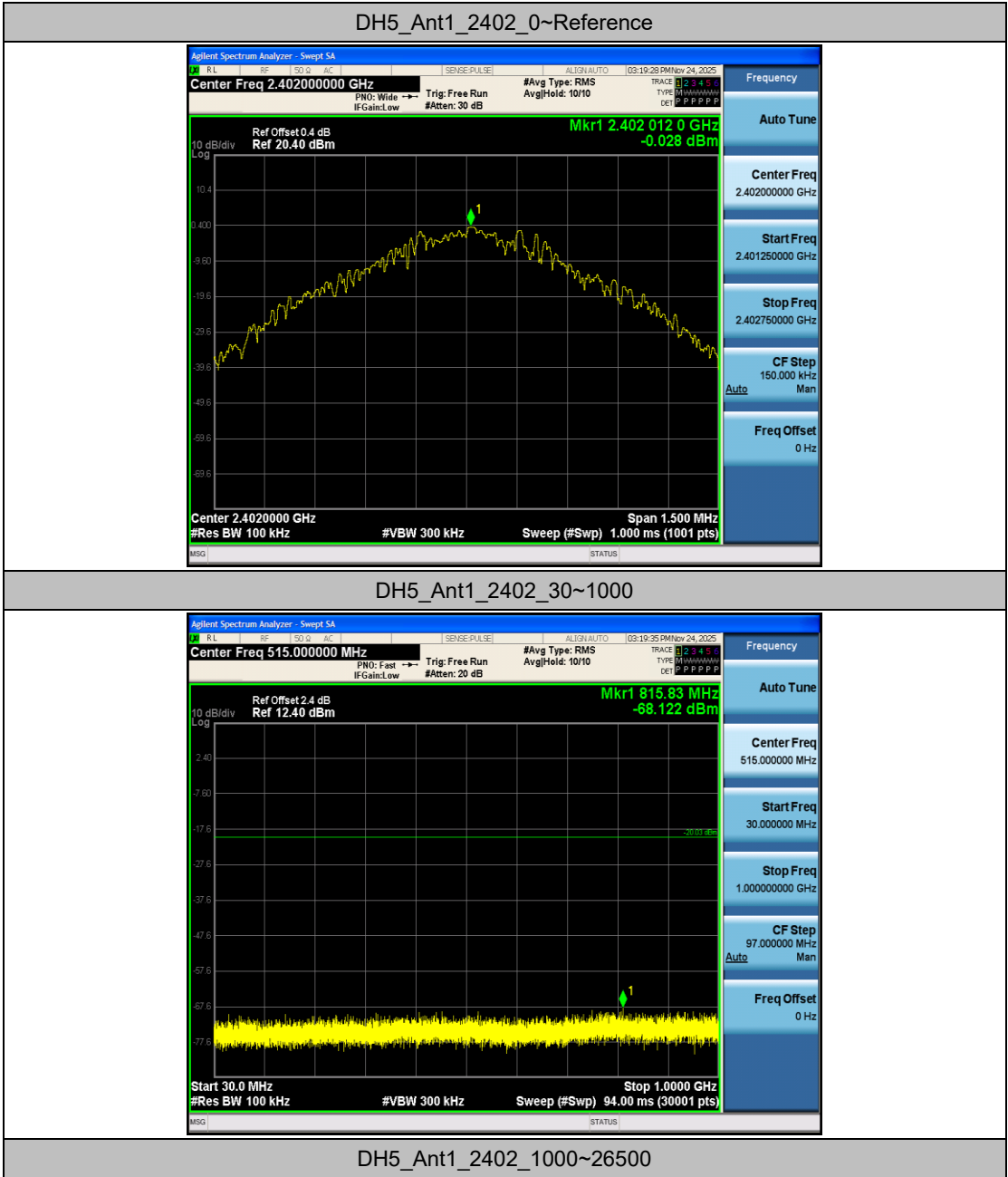


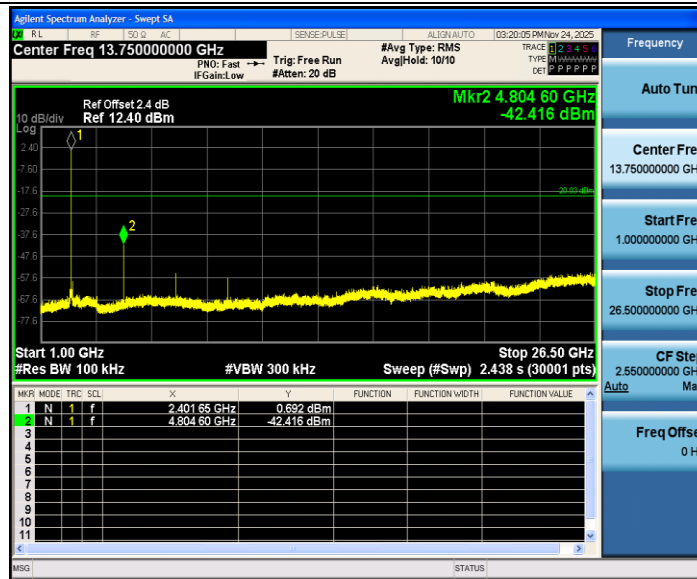
Appendix H: Conducted Spurious Emission

Test Result

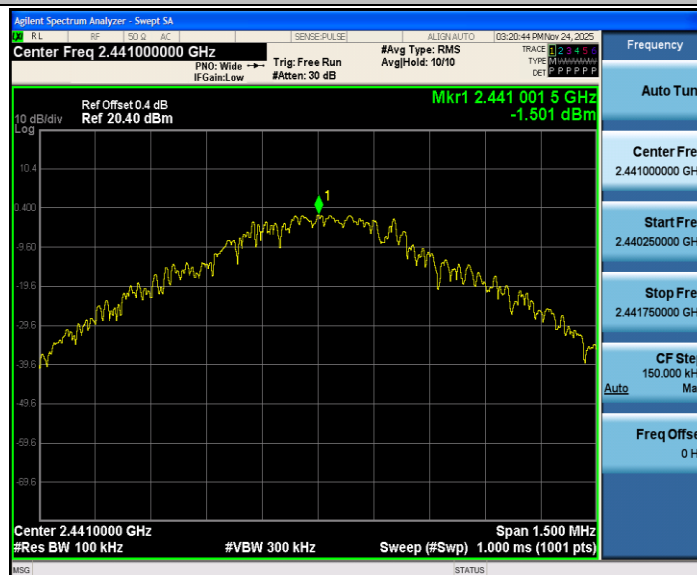
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.03	-0.03	---	PASS
			30~1000	-0.03	-68.12	≤-20.03	PASS
			1000~26500	-0.03	-42.42	≤-20.03	PASS
		2441	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-37.53	≤-21.5	PASS
			1000~26500	-1.50	-44.22	≤-21.5	PASS
		2480	Reference	-1.43	-1.43	---	PASS
			30~1000	-1.43	-34.82	≤-21.43	PASS
			1000~26500	-1.43	-42.99	≤-21.43	PASS
2DH5	Ant1	2402	Reference	-5.03	-5.03	---	PASS
			30~1000	-5.03	-67.46	≤-25.03	PASS
			1000~26500	-5.03	-51.13	≤-25.03	PASS
		2441	Reference	-5.59	-5.59	---	PASS
			30~1000	-5.59	-67.8	≤-25.59	PASS
			1000~26500	-5.59	-48.87	≤-25.59	PASS
		2480	Reference	-5.87	-5.87	---	PASS
			30~1000	-5.87	-67.92	≤-25.87	PASS
			1000~26500	-5.87	-28.74	≤-25.87	PASS
3DH5	Ant1	2402	Reference	-7.04	-7.04	---	PASS
			30~1000	-7.04	-67.74	≤-27.04	PASS
			1000~26500	-7.04	-50.7	≤-27.04	PASS
		2441	Reference	-5.58	-5.58	---	PASS
			30~1000	-5.58	-68.2	≤-25.58	PASS
			1000~26500	-5.58	-50.33	≤-25.58	PASS
		2480	Reference	-7.14	-7.14	---	PASS
			30~1000	-7.14	-68.2	≤-27.14	PASS
			1000~26500	-7.14	-51.01	≤-27.14	PASS

Test Graphs





DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

