

FCC Appendix RF Test Data for BT

FCC ID : 2BMBM-VV20

Company : Shenzhen Lanxiaoer Technology Co., Ltd

EUT : Bluetooth headphones

Model Number : VV20

Report No. : CTA25102701501

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	0.939	2401.532	2402.471	---	---
		2441	0.963	2440.517	2441.480	---	---
		2480	0.957	2479.520	2480.477	---	---
2DH5	Ant1	2402	1.284	2401.352	2402.636	---	---
		2441	1.308	2440.322	2441.630	---	---
		2480	1.278	2479.352	2480.630	---	---
3DH5	Ant1	2402	1.287	2401.340	2402.627	---	---
		2441	1.305	2440.334	2441.639	---	---
		2480	1.302	2479.331	2480.633	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

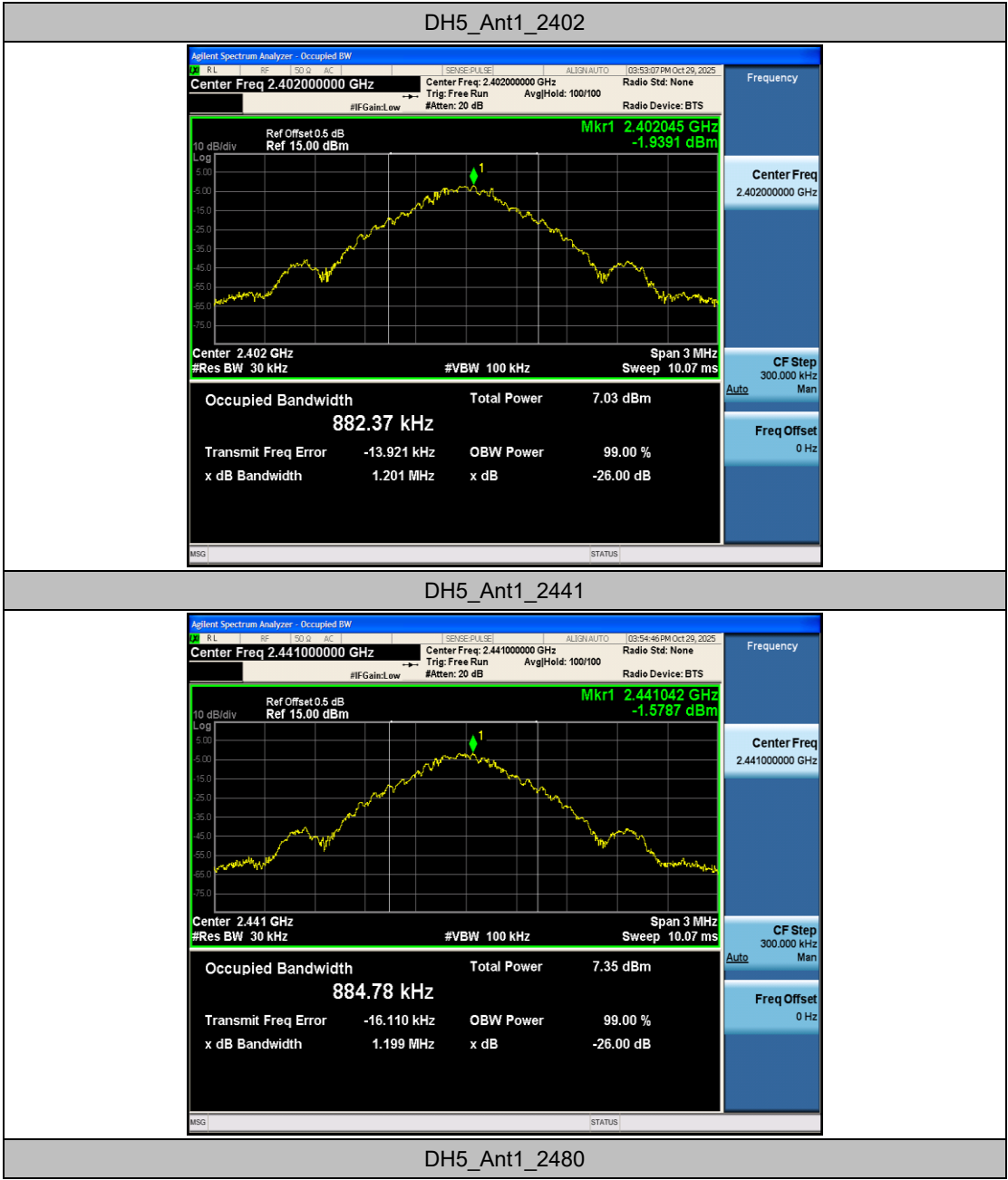


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88237	2401.5449	2402.4273	---	---
		2441	0.88478	2440.5415	2441.4263	---	---
		2480	0.88513	2479.5419	2480.4270	---	---
2DH5	Ant1	2402	1.1792	2401.3928	2402.5720	---	---
		2441	1.1775	2440.3934	2441.5709	---	---
		2480	1.1760	2479.3925	2480.5685	---	---
3DH5	Ant1	2402	1.1758	2401.3955	2402.5713	---	---
		2441	1.1711	2440.3973	2441.5684	---	---
		2480	1.1767	2479.3923	2480.5690	---	---

Test Graphs





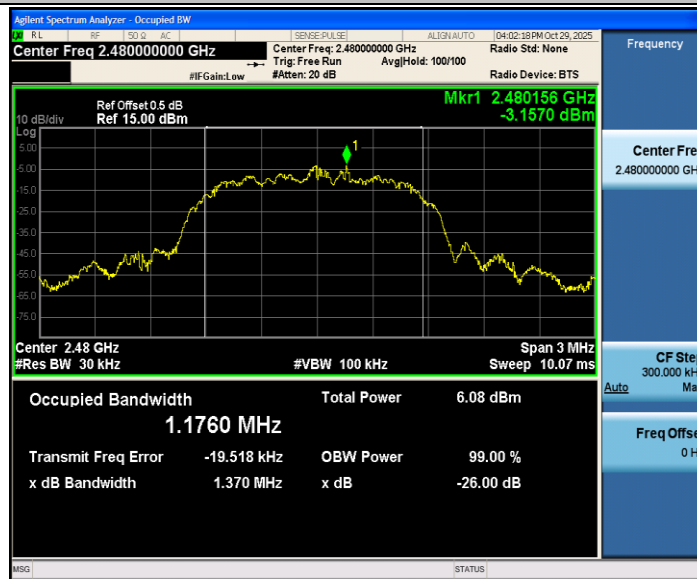
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



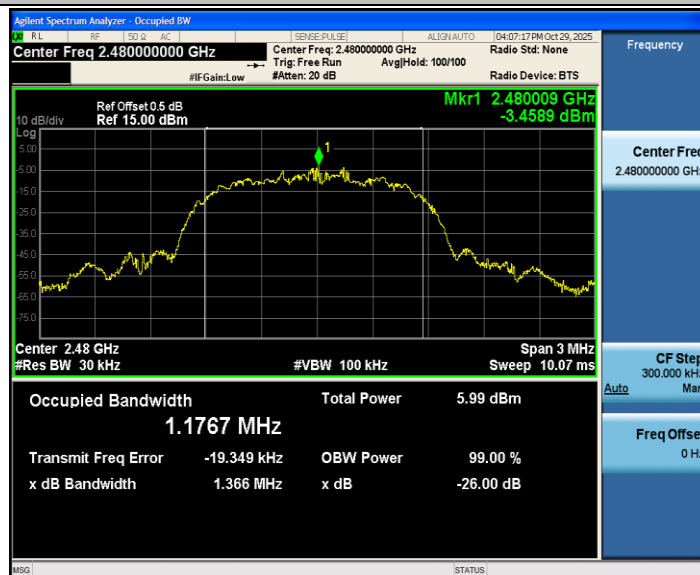
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Left:

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.86	≤20.97	PASS
		2441	1.40	≤20.97	PASS
		2480	1.52	≤20.97	PASS
2DH5	Ant1	2402	0.91	≤20.97	PASS
		2441	1.74	≤20.97	PASS
		2480	1.87	≤20.97	PASS
3DH5	Ant1	2402	1.45	≤20.97	PASS
		2441	2.19	≤20.97	PASS
		2480	2.35	≤20.97	PASS

Right:

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.53	≤20.97	PASS
		2441	1.21	≤20.97	PASS
		2480	1.18	≤20.97	PASS
2DH5	Ant1	2402	0.82	≤20.97	PASS
		2441	1.42	≤20.97	PASS
		2480	1.39	≤20.97	PASS
3DH5	Ant1	2402	1.18	≤20.97	PASS
		2441	1.87	≤20.97	PASS
		2480	1.93	≤20.97	PASS

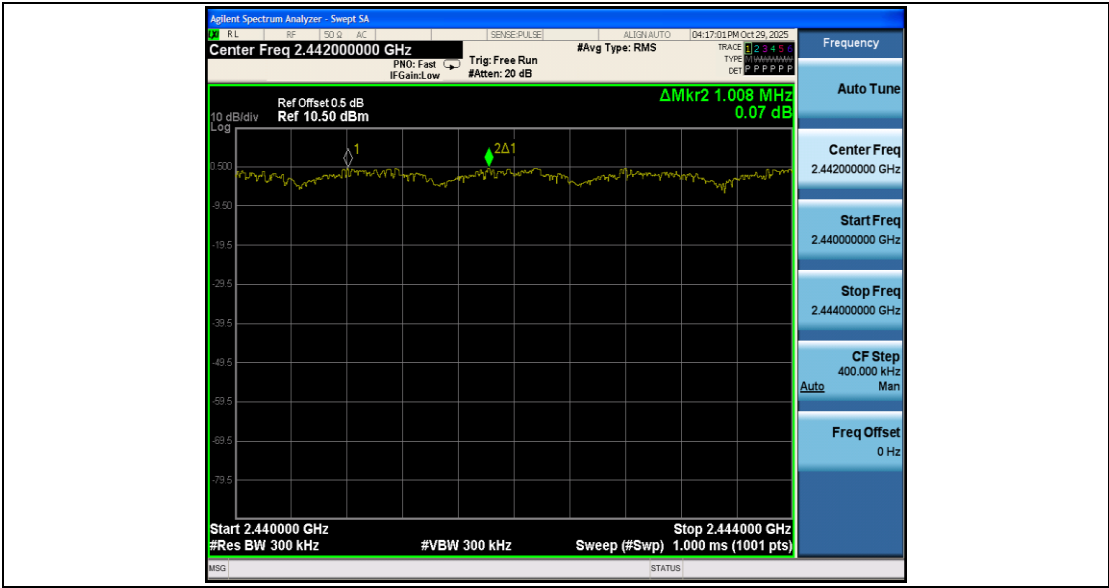
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.16	≥ 0.963	PASS
2DH5	Ant1	Hop	1.192	≥ 0.872	PASS
3DH5	Ant1	Hop	1.008	≥ 0.870	PASS

Test Graphs



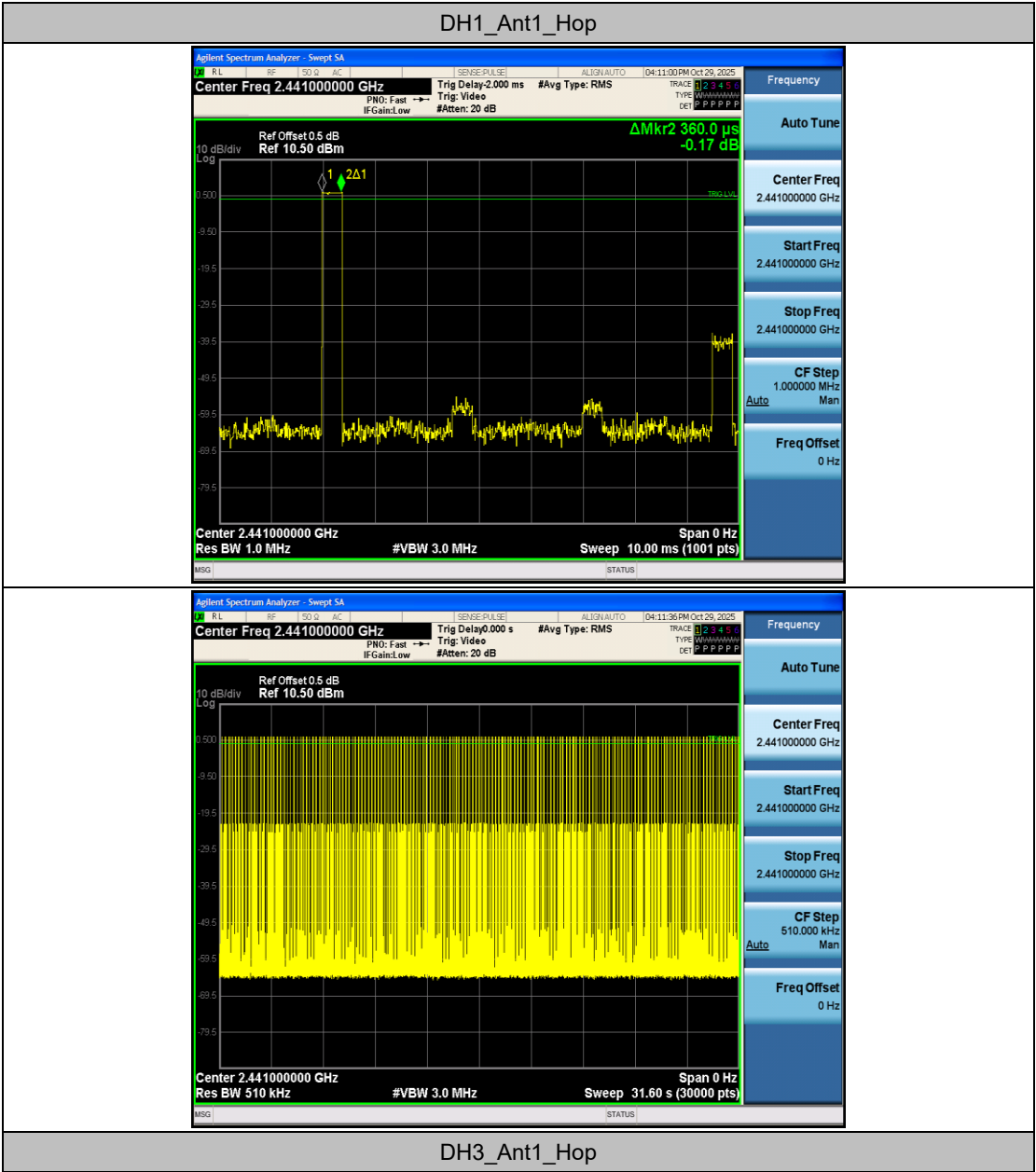


Appendix E: Time of occupancy

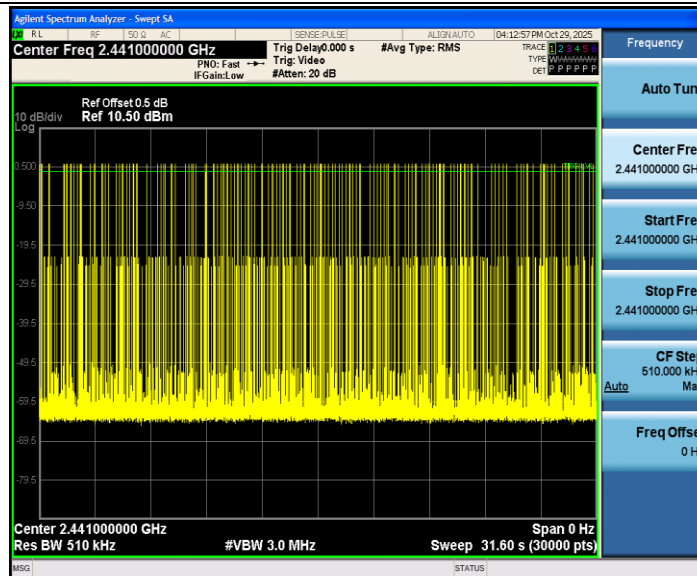
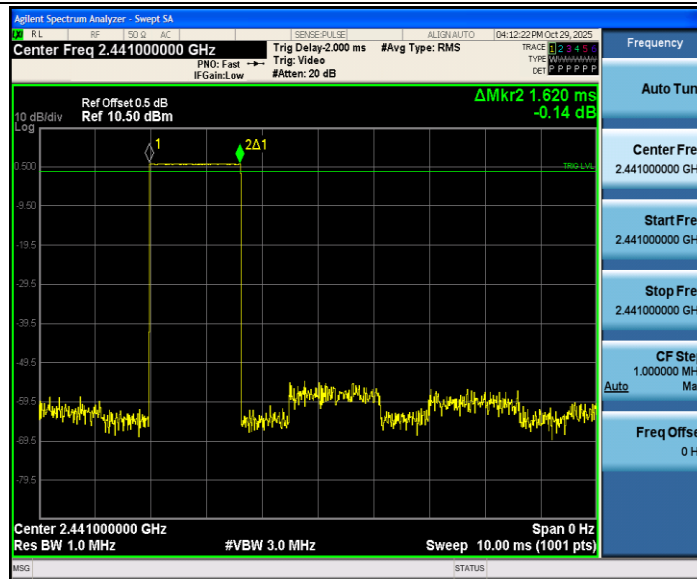
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.360	314	0.113	≤0.4	PASS
DH3	Ant1	Hop	1.620	162	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.860	103	0.295	≤0.4	PASS
2DH1	Ant1	Hop	0.370	317	0.117	≤0.4	PASS
2DH3	Ant1	Hop	1.620	164	0.266	≤0.4	PASS
2DH5	Ant1	Hop	2.870	89	0.255	≤0.4	PASS
3DH1	Ant1	Hop	0.370	319	0.118	≤0.4	PASS
3DH3	Ant1	Hop	1.620	159	0.258	≤0.4	PASS
3DH5	Ant1	Hop	2.880	101	0.291	≤0.4	PASS

Test Graphs

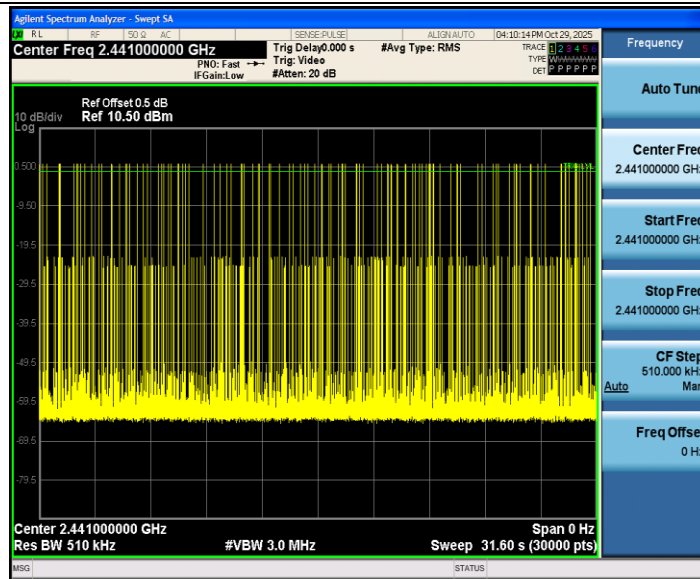


DH3_Ant1_Hop

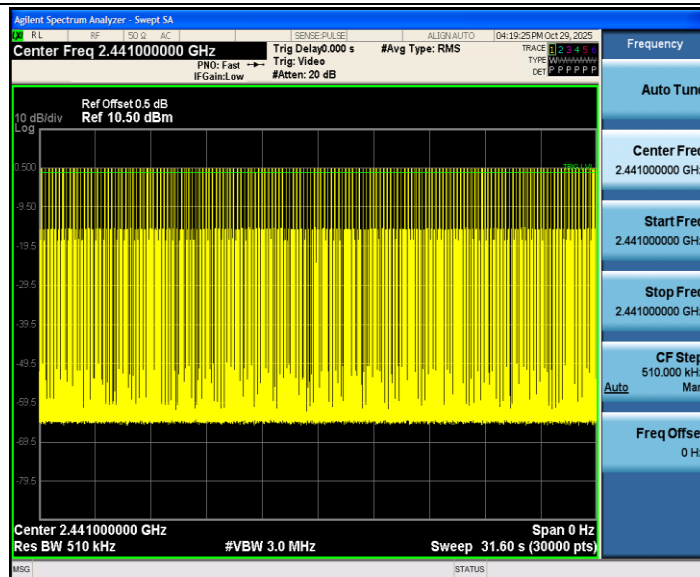
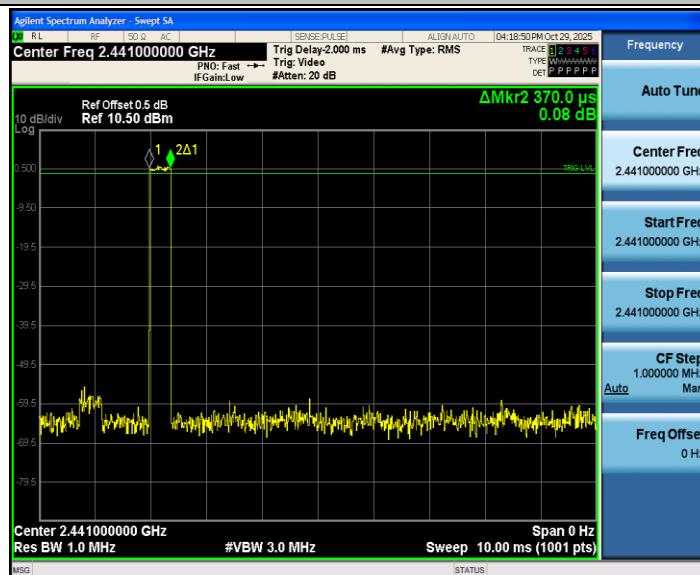


DH5_Ant1_Hop

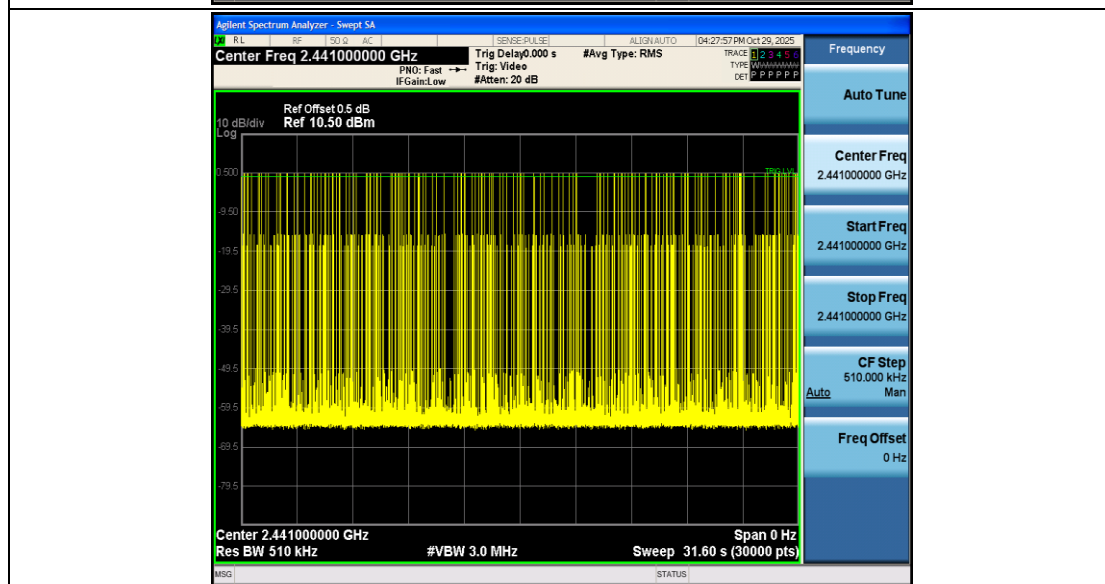
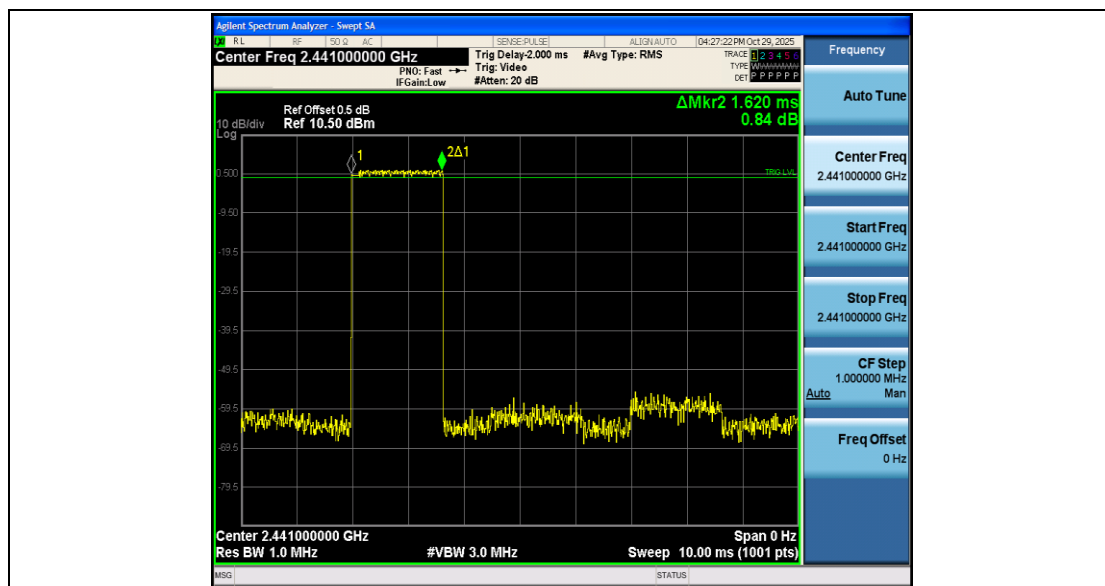




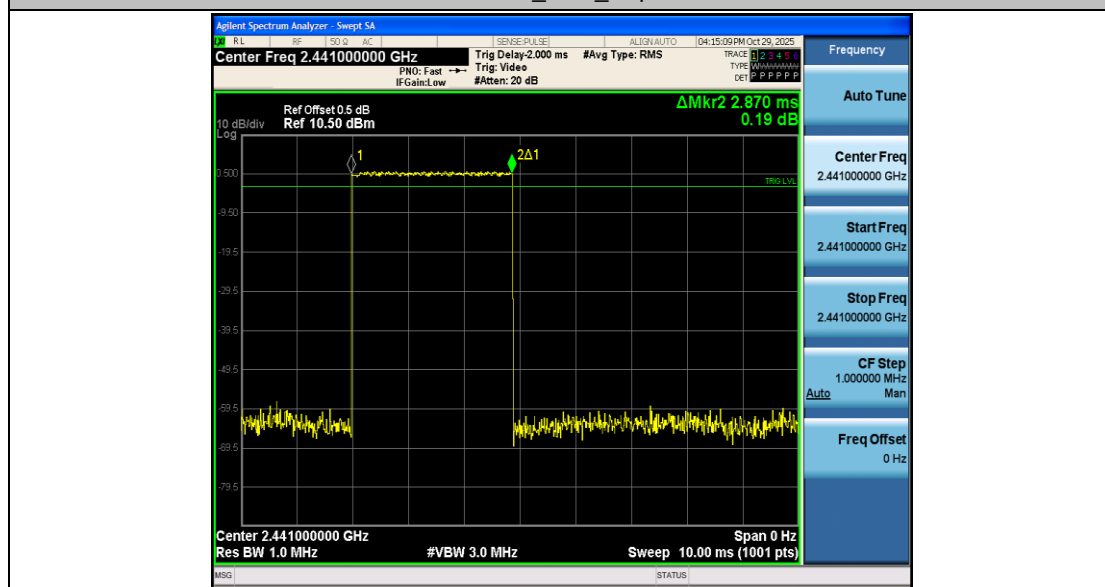
2DH1_Ant1_Hop

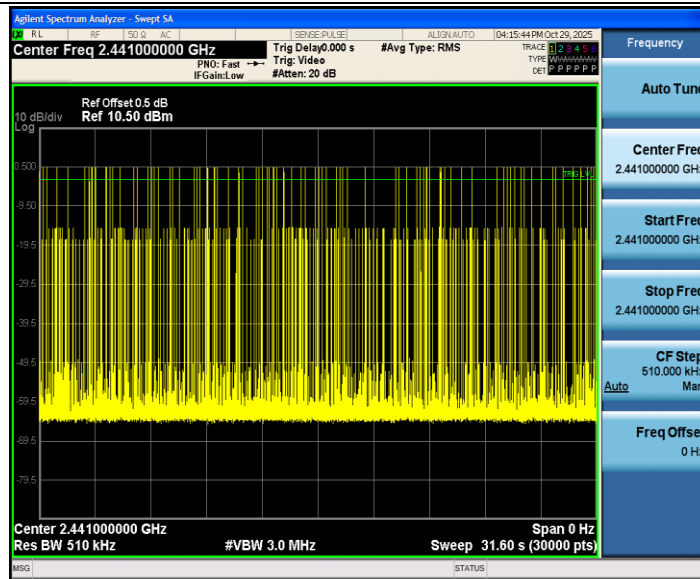


2DH3_Ant1_Hop

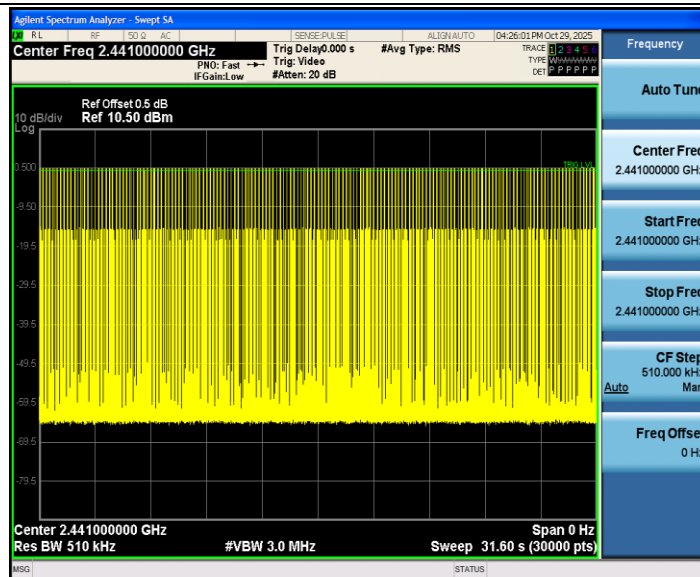
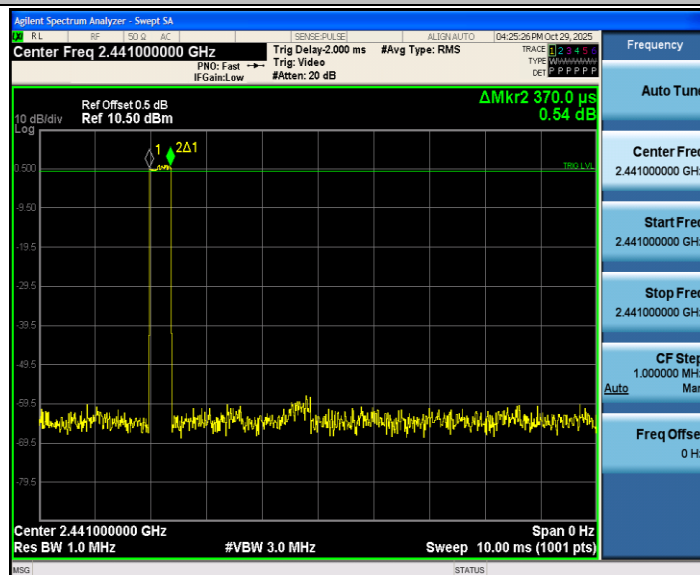


2DH5_Ant1_Hop

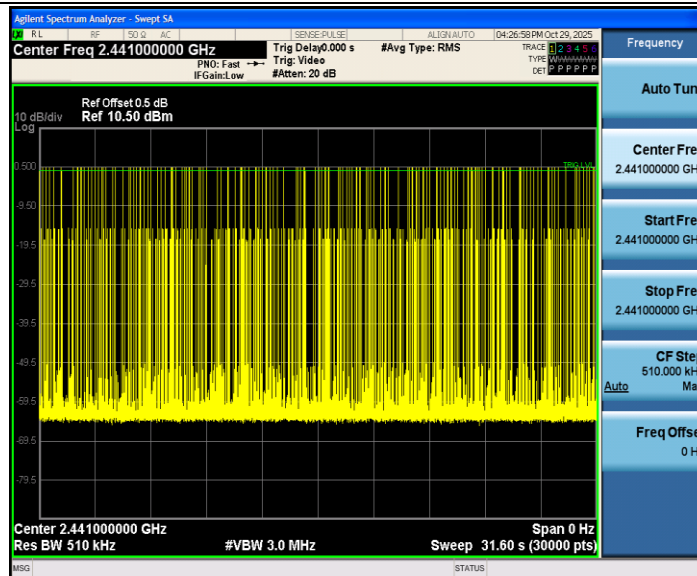
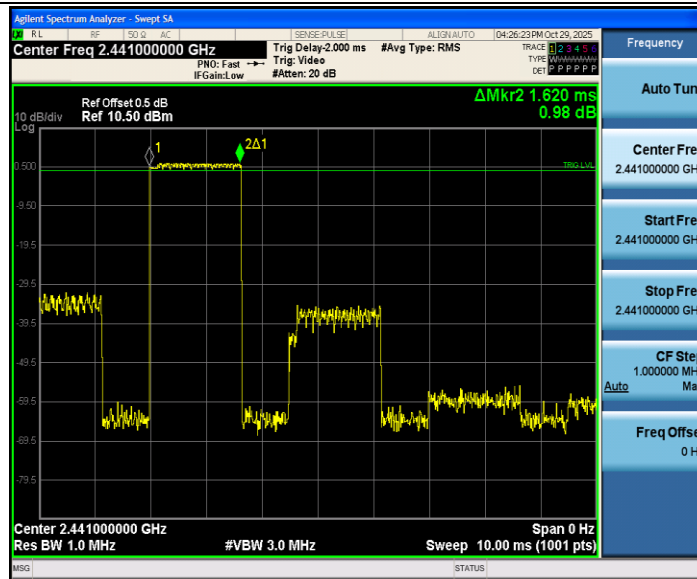




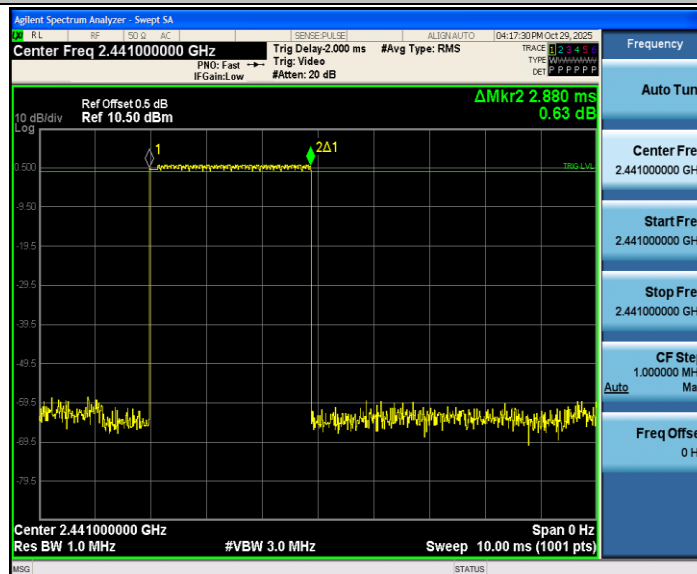
3DH1_Ant1_Hop

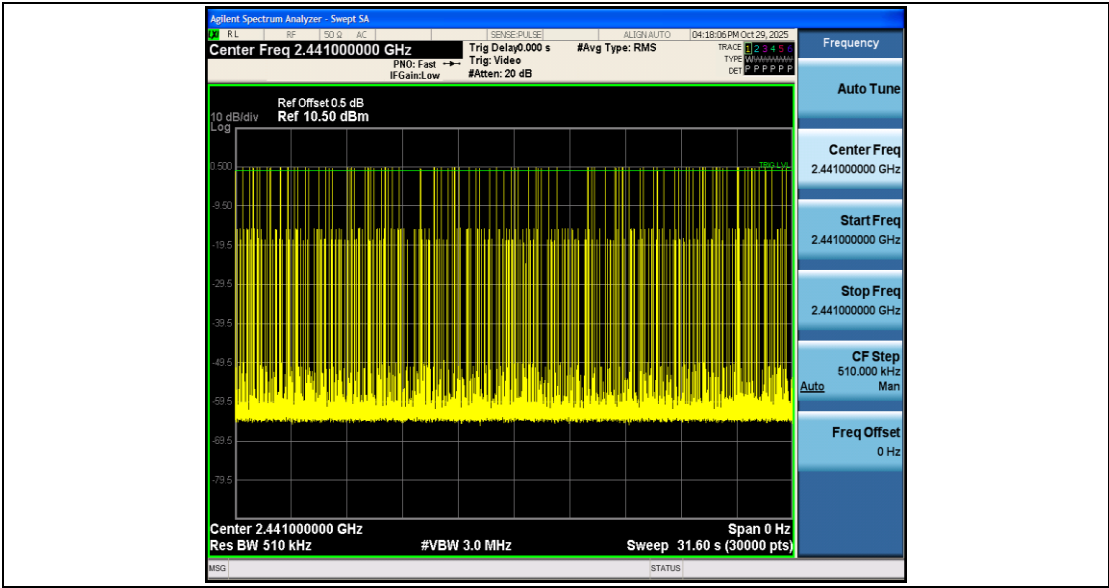


3DH3_Ant1_Hop



3DH5_Ant1_Hop





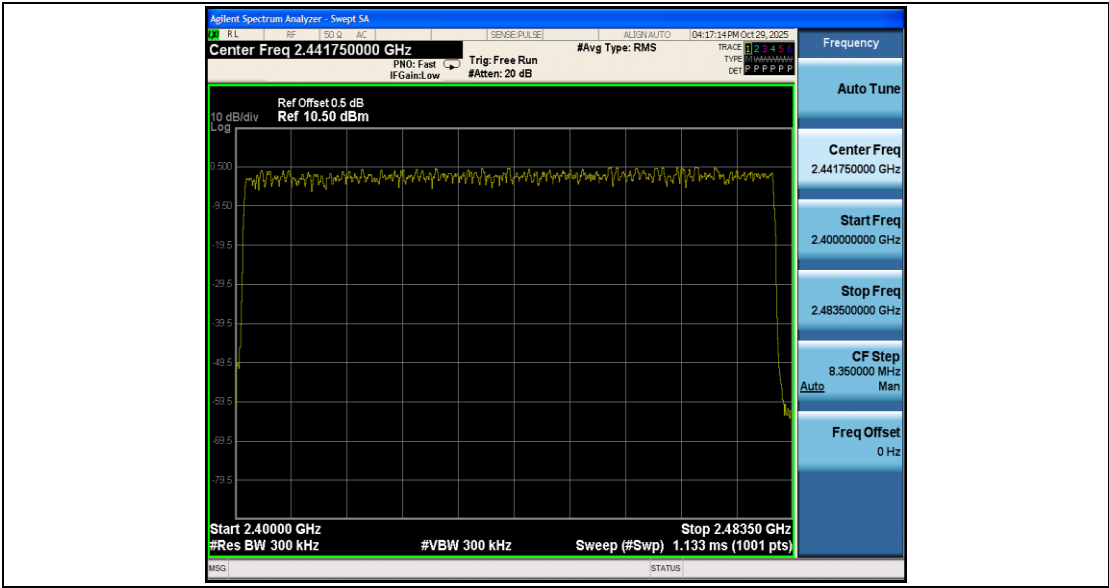
Appendix F: Number of hopping channels

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



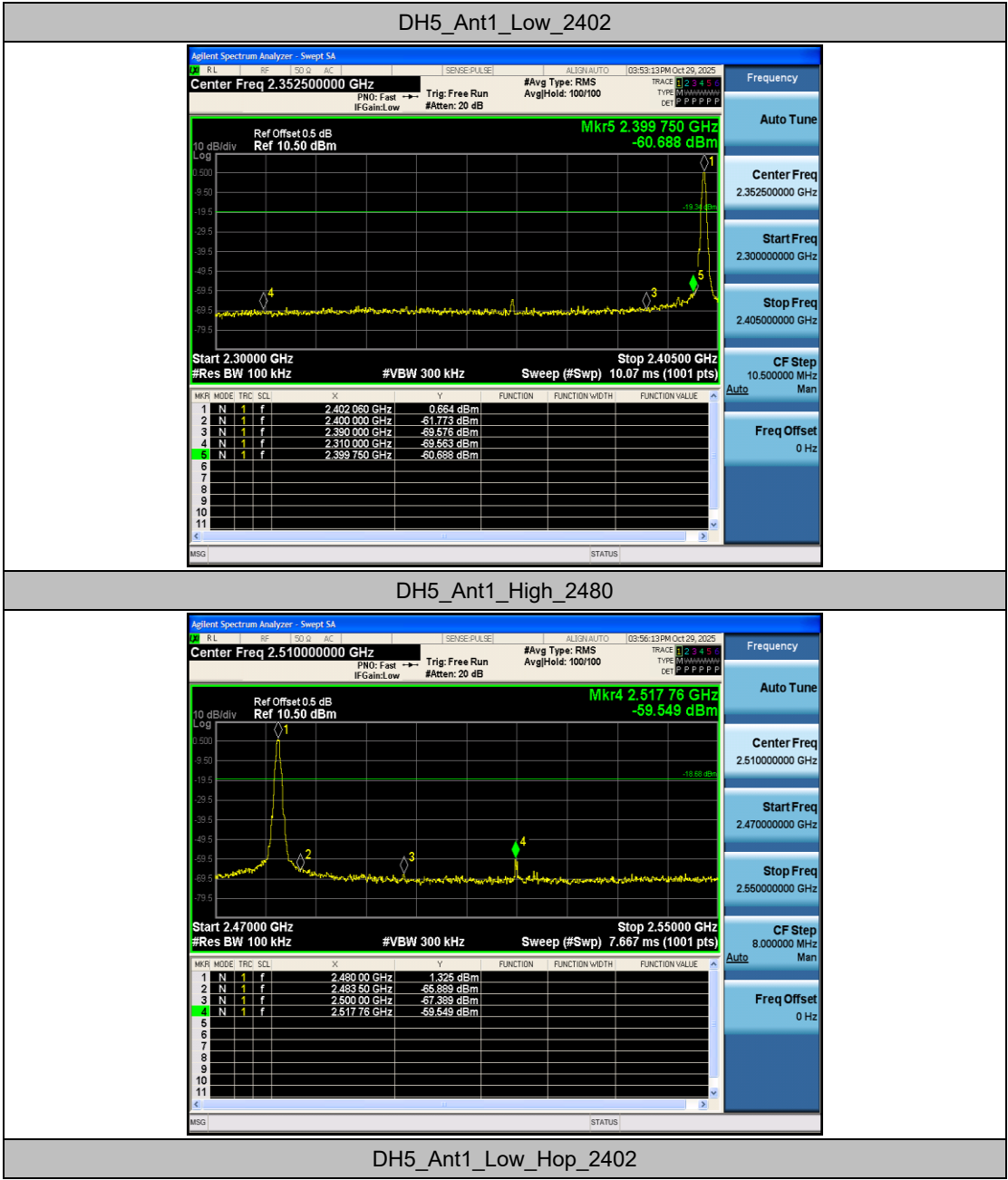


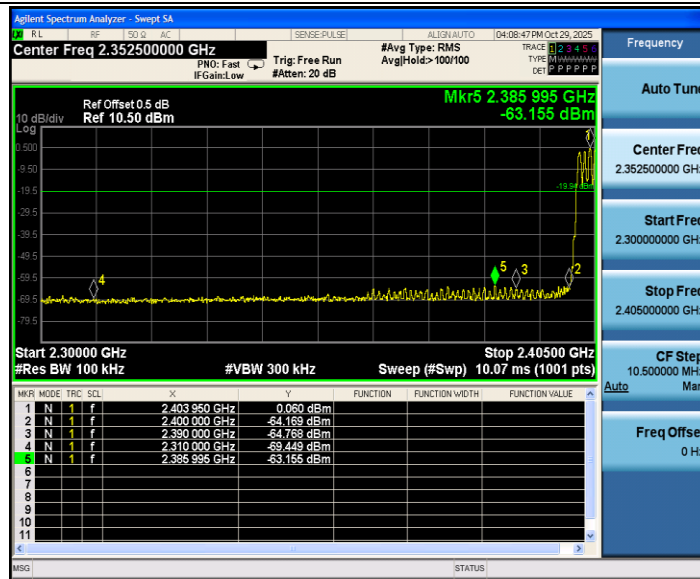
Appendix G: Band edge measurements

Test Result

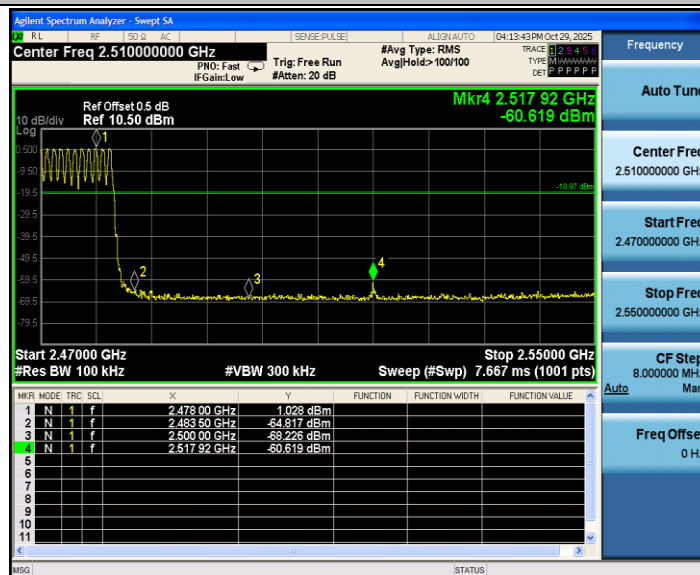
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.66	-60.69	≤-19.34	PASS
		High	2480	1.33	-59.55	≤-18.68	PASS
		Low	Hop_2402	0.06	-63.16	≤-19.94	PASS
		High	Hop_2480	1.03	-60.62	≤-18.97	PASS
2DH5	Ant1	Low	2402	-0.86	-61.09	≤-20.86	PASS
		High	2480	-1.07	-64.1	≤-21.07	PASS
		Low	Hop_2402	-3.65	-63.71	≤-23.65	PASS
		High	Hop_2480	-0.36	-59.01	≤-20.36	PASS
3DH5	Ant1	Low	2402	-0.62	-59.57	≤-20.62	PASS
		High	2480	-0.98	-64.41	≤-20.98	PASS
		Low	Hop_2402	-2.74	-63.09	≤-22.74	PASS
		High	Hop_2480	0.23	-65.11	≤-19.77	PASS

Test Graphs

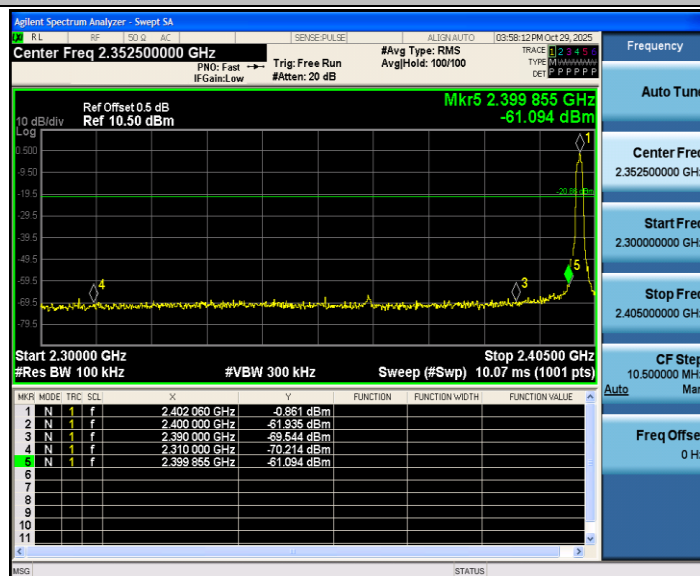




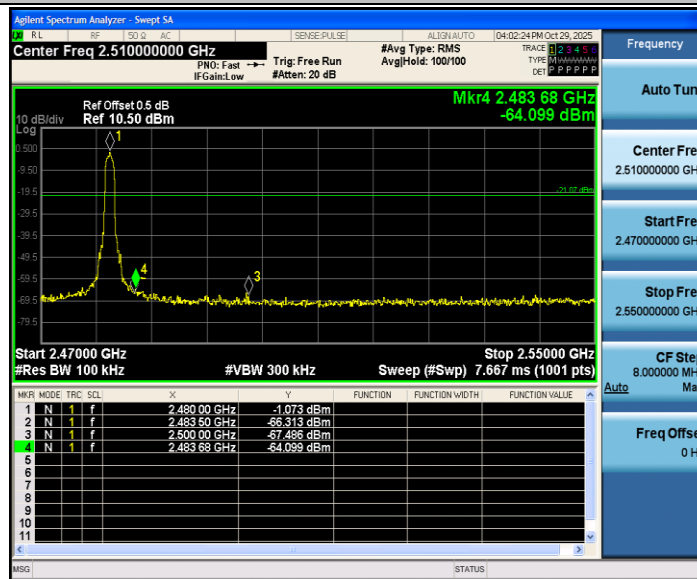
DH5_Ant1_High_Hop_2480



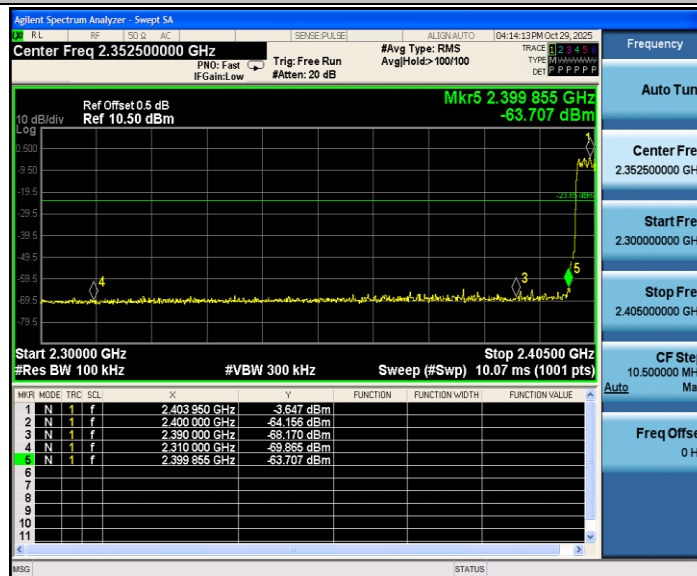
2DH5_Ant1_Low_2402



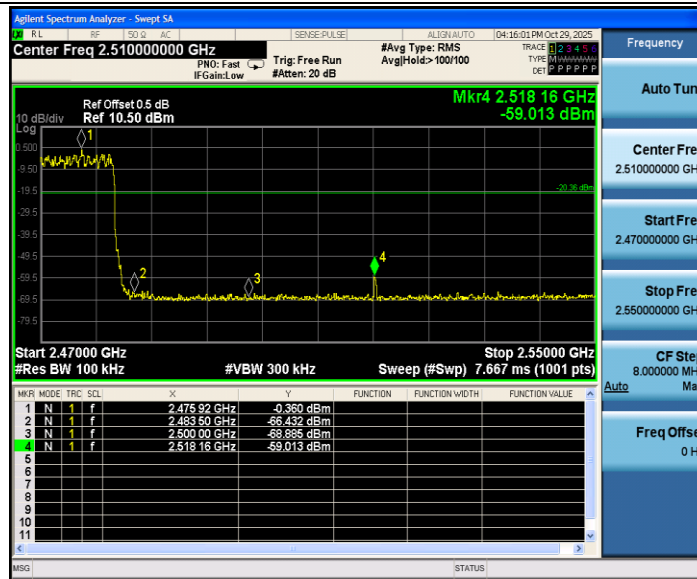
2DH5_Ant1_High_2480



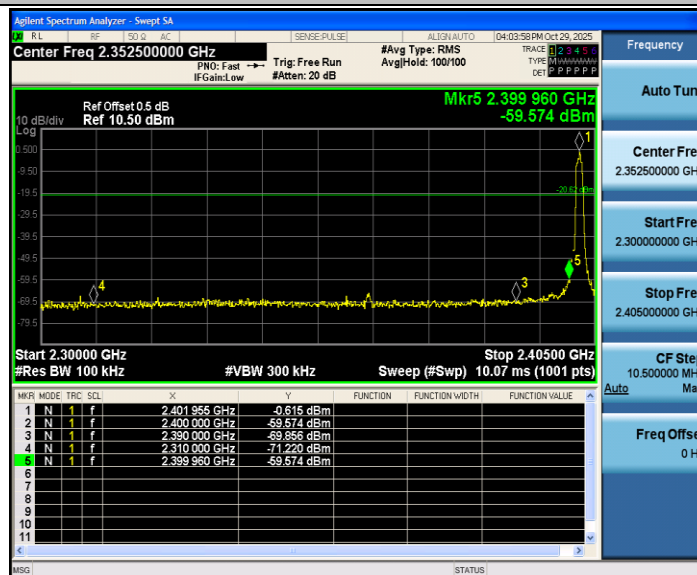
2DH5_Ant1_Low_Hop_2402



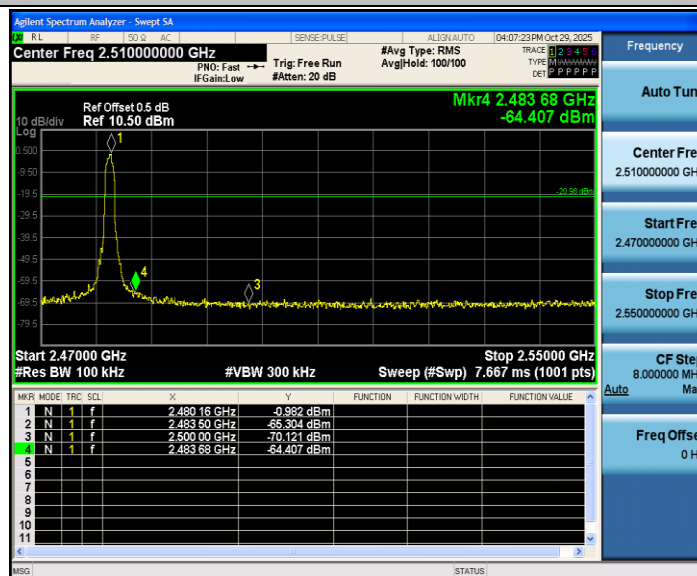
2DH5_Ant1_High_Hop_2480



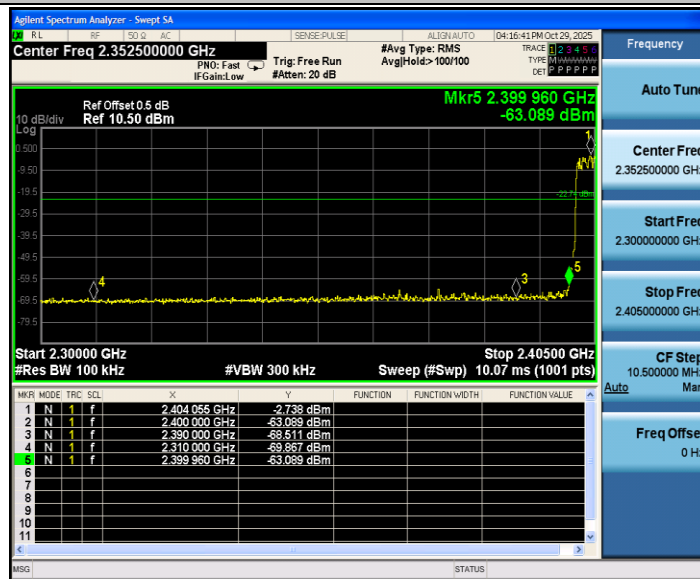
3DH5_Ant1_Low_2402



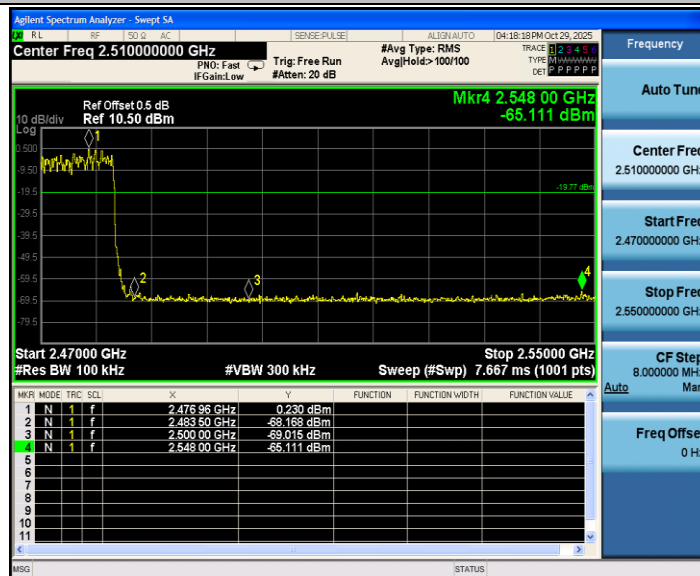
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

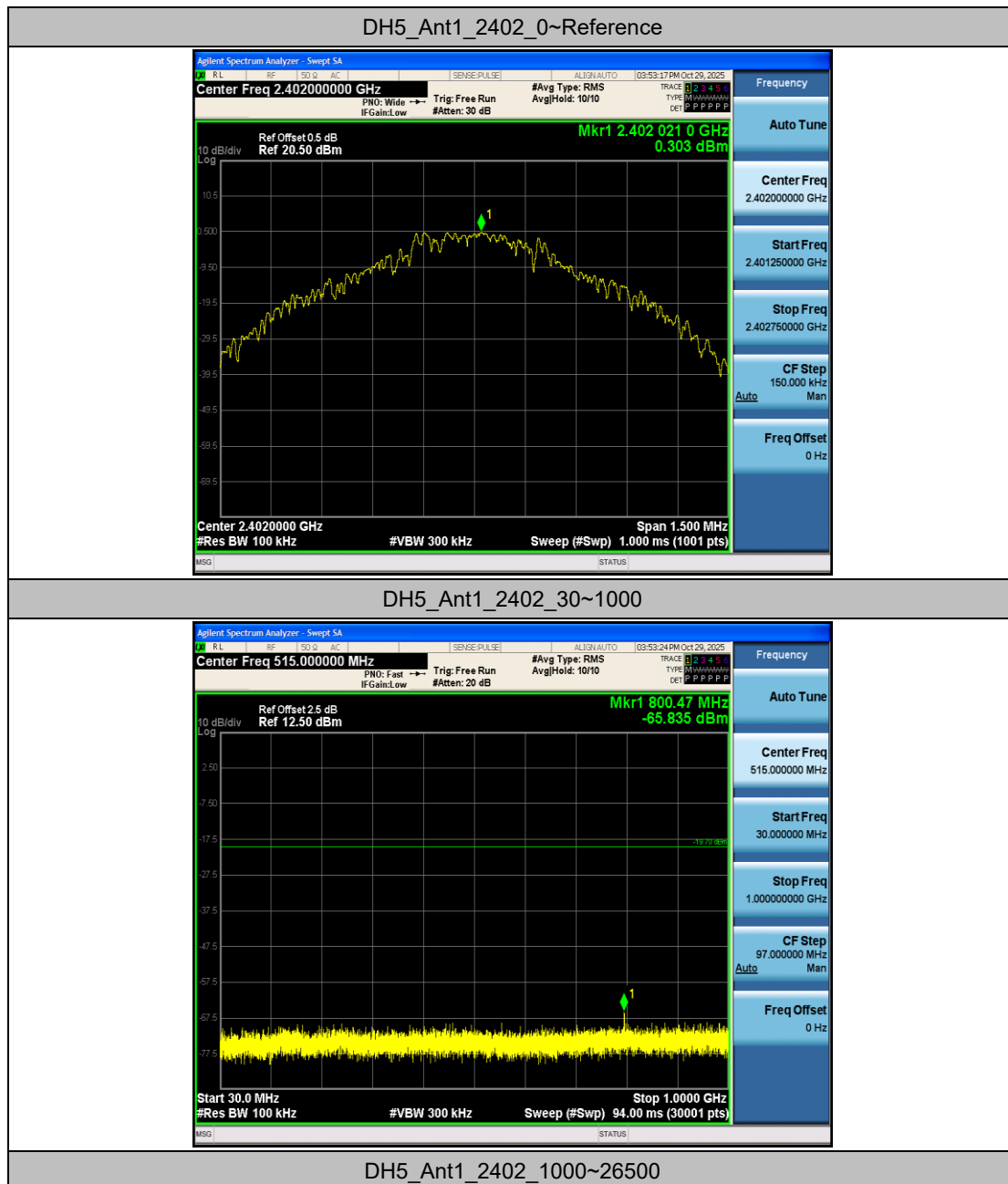


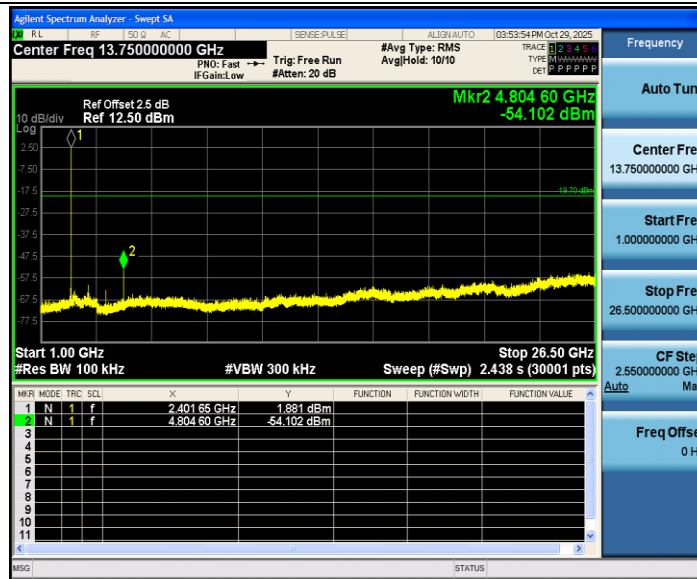
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.30	0.30	---	PASS
			30~1000	0.30	-65.84	≤-19.7	PASS
			1000~26500	0.30	-54.1	≤-19.7	PASS
		2441	Reference	1.18	1.18	---	PASS
			30~1000	1.18	-66.22	≤-18.82	PASS
			1000~26500	1.18	-53.28	≤-18.82	PASS
		2480	Reference	0.65	0.65	---	PASS
			30~1000	0.65	-63.86	≤-19.35	PASS
			1000~26500	0.65	-46.81	≤-19.35	PASS
2DH5	Ant1	2402	Reference	-4.39	-4.39	---	PASS
			30~1000	-4.39	-68.08	≤-24.39	PASS
			1000~26500	-4.39	-55.26	≤-24.39	PASS
		2441	Reference	-3.46	-3.46	---	PASS
			30~1000	-3.46	-67.66	≤-23.46	PASS
			1000~26500	-3.46	-55.38	≤-23.46	PASS
		2480	Reference	-2.48	-2.48	---	PASS
			30~1000	-2.48	-65.58	≤-22.48	PASS
			1000~26500	-2.48	-55.31	≤-22.48	PASS
3DH5	Ant1	2402	Reference	-3.61	-3.61	---	PASS
			30~1000	-3.61	-67.06	≤-23.61	PASS
			1000~26500	-3.61	-55.38	≤-23.61	PASS
		2441	Reference	-3.31	-3.31	---	PASS
			30~1000	-3.31	-68.06	≤-23.31	PASS
			1000~26500	-3.31	-55.3	≤-23.31	PASS
		2480	Reference	-3.13	-3.13	---	PASS
			30~1000	-3.13	-65.53	≤-23.13	PASS
			1000~26500	-3.13	-55.26	≤-23.13	PASS

Test Graphs

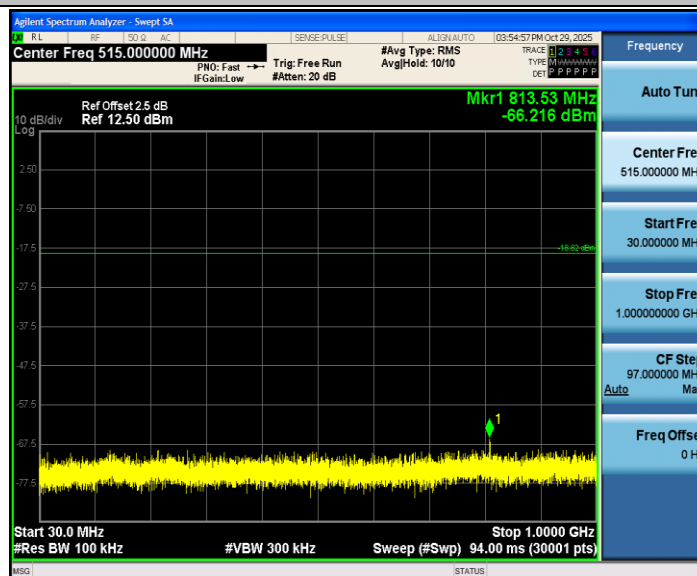




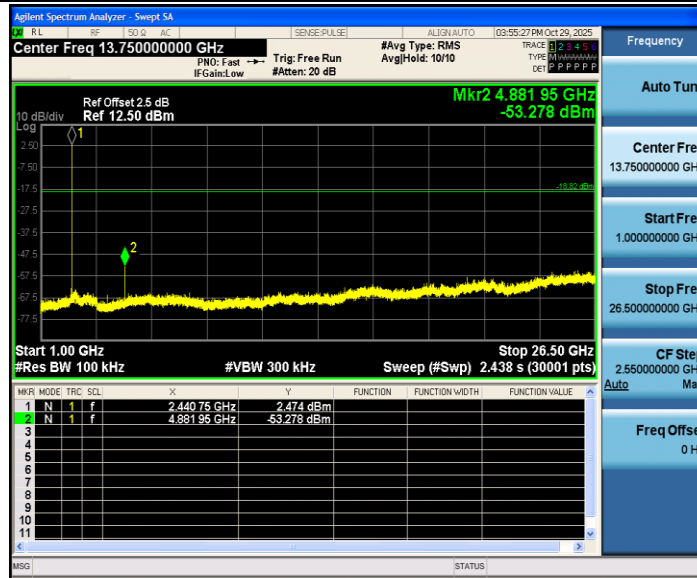
DH5_Ant1_2441_0~Reference



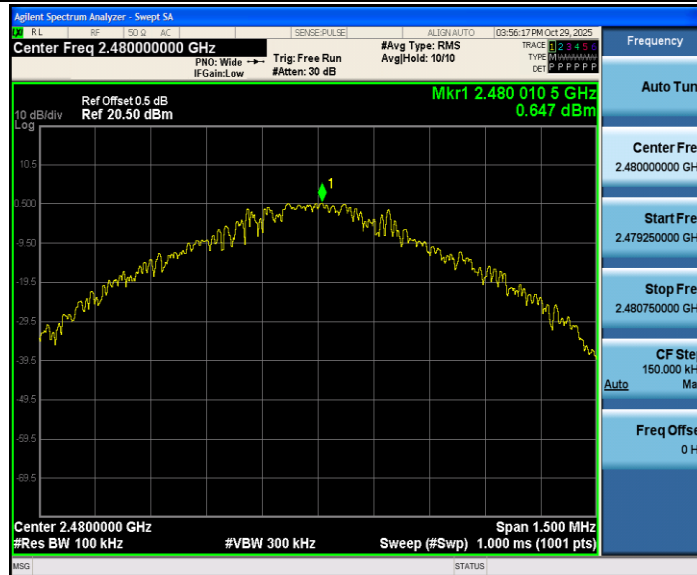
DH5_Ant1_2441_30~1000



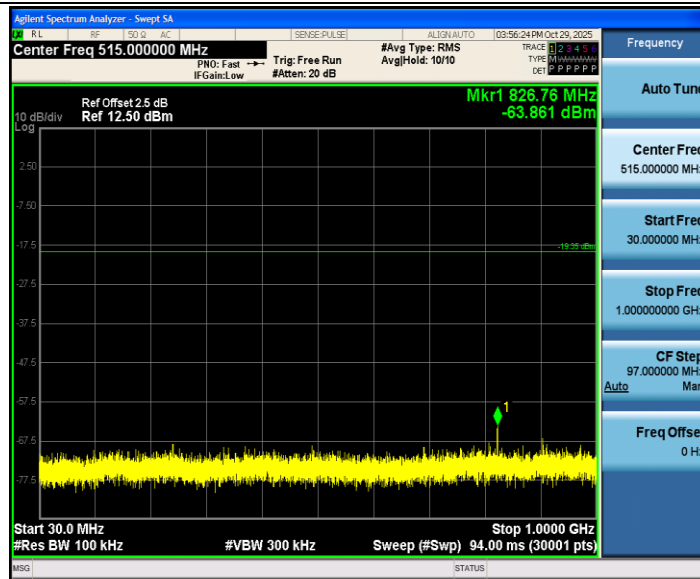
DH5_Ant1_2441_1000~26500



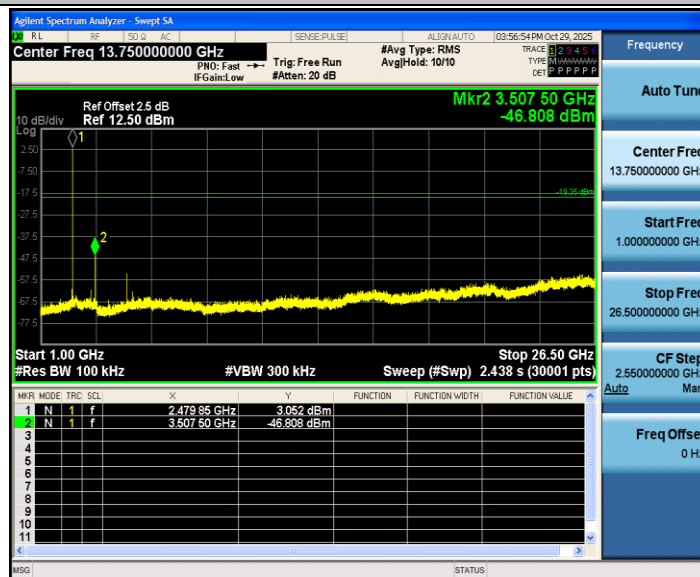
DH5_Ant1_2480_0~Reference



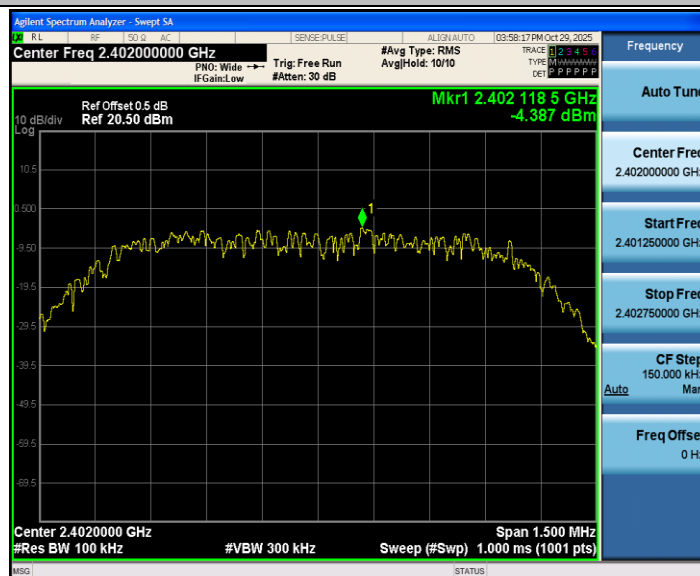
DH5_Ant1_2480_30~1000



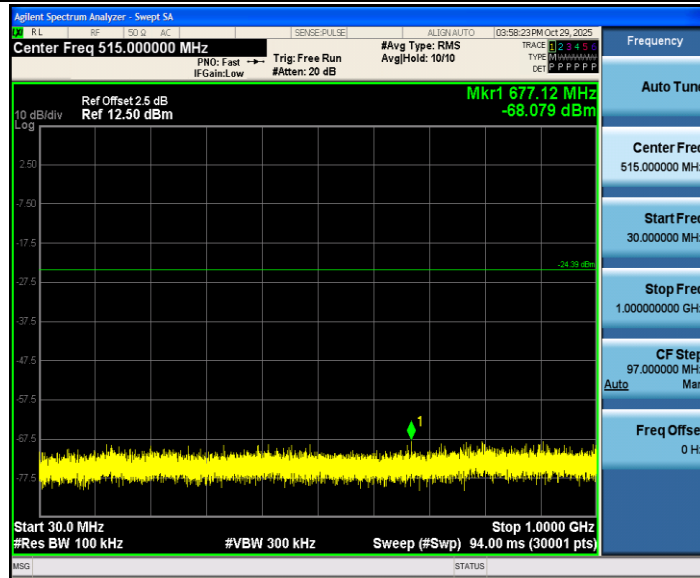
DH5_Ant1_2480_1000~26500



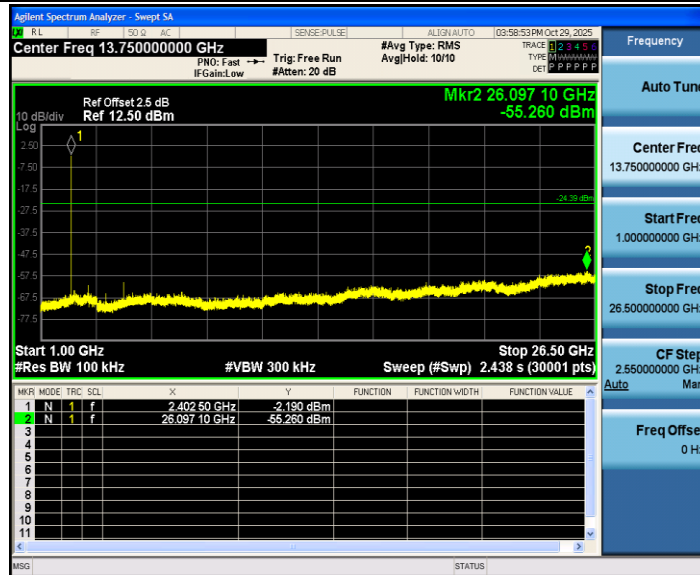
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference