

FCC Appendix RF Test Data for BT

FCC ID : 2AY2G-ISCAN5

Company : AUTOLAND SCIENTECH CO., LTD

EUT : Automotive computer diagnostic instruments

Model Number : iSCAN 5

Report No. : CTA26051202502

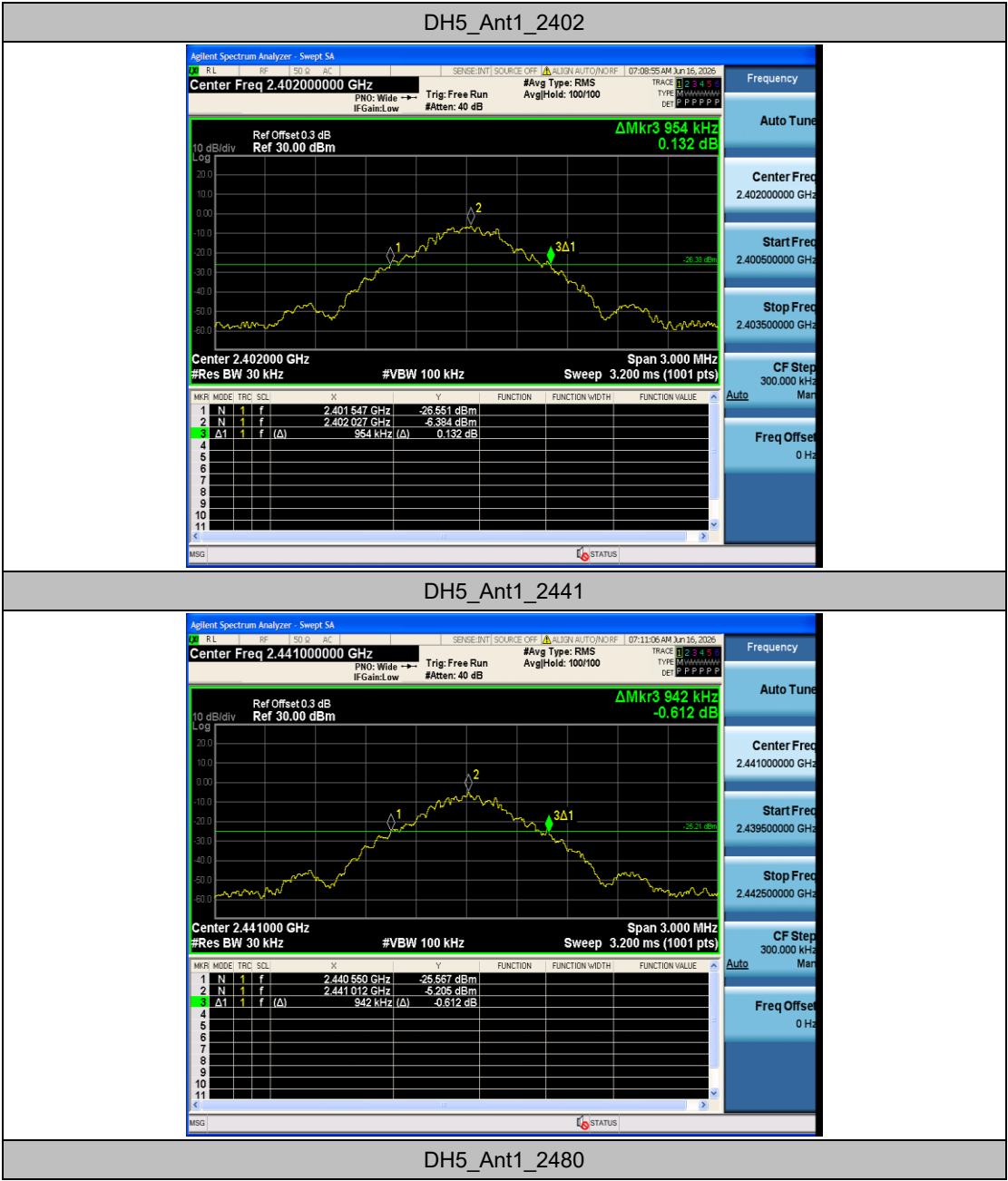
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.547	2402.501	---	---
		2441	0.942	2440.550	2441.492	---	---
		2480	0.897	2479.547	2480.444	---	---
2DH5	Ant1	2402	1.320	2401.349	2402.669	---	---
		2441	1.287	2440.376	2441.663	---	---
		2480	1.284	2479.376	2480.660	---	---
3DH5	Ant1	2402	1.296	2401.361	2402.657	---	---
		2441	1.323	2440.355	2441.678	---	---
		2480	1.308	2479.361	2480.669	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

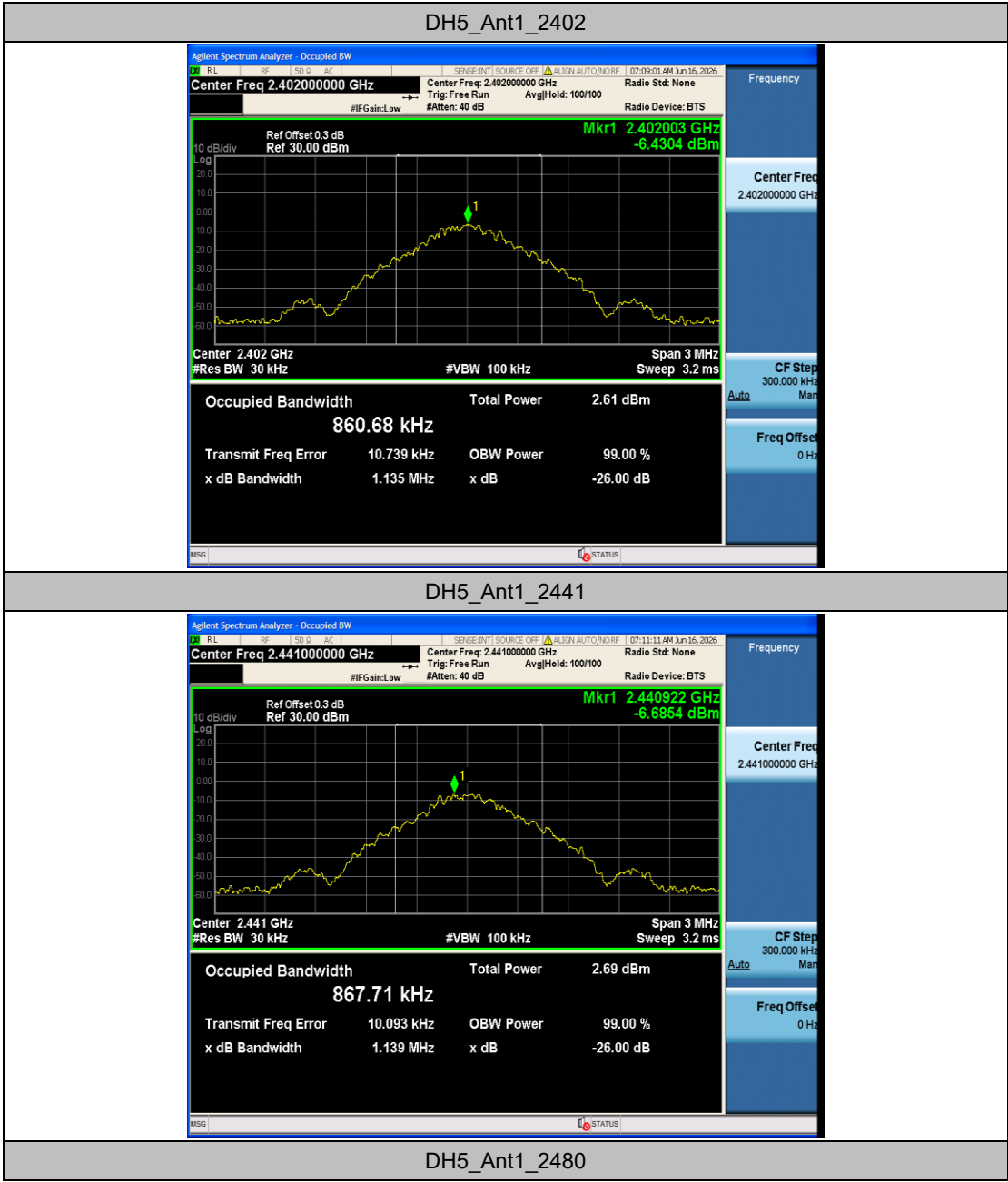


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86068	2401.5804	2402.4411	---	---
		2441	0.86771	2440.5762	2441.4439	---	---
		2480	0.85506	2479.5790	2480.4341	---	---
2DH5	Ant1	2402	1.1939	2401.4137	2402.6076	---	---
		2441	1.1818	2440.4191	2441.6009	---	---
		2480	1.1836	2479.4179	2480.6015	---	---
3DH5	Ant1	2402	1.1987	2401.4116	2402.6103	---	---
		2441	1.1893	2440.4155	2441.6048	---	---
		2480	1.1986	2479.4113	2480.6099	---	---

Test Graphs





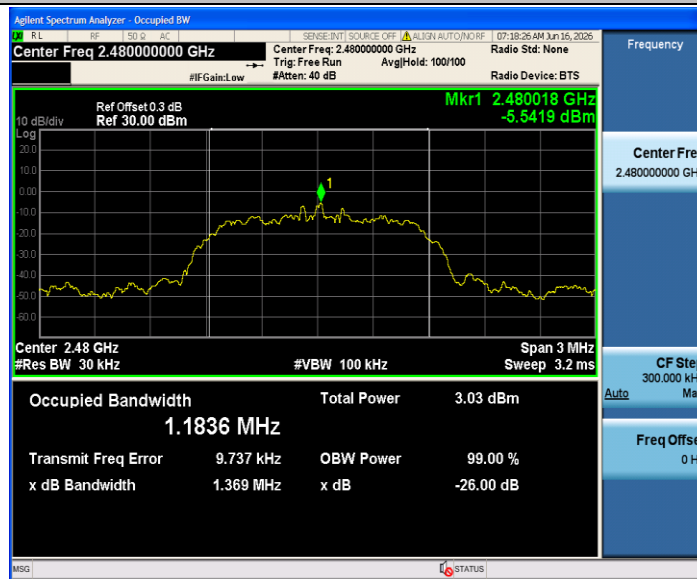
2DH5_Ant1_2402



2DH5_Ant1_2441



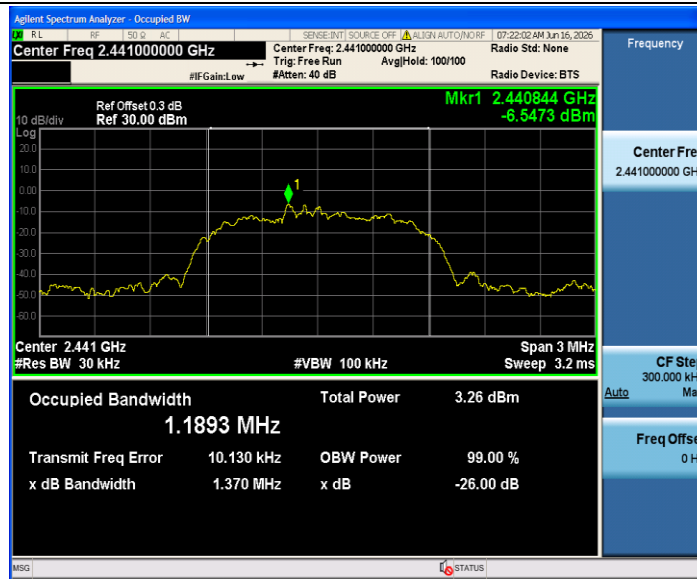
2DH5_Ant1_2480



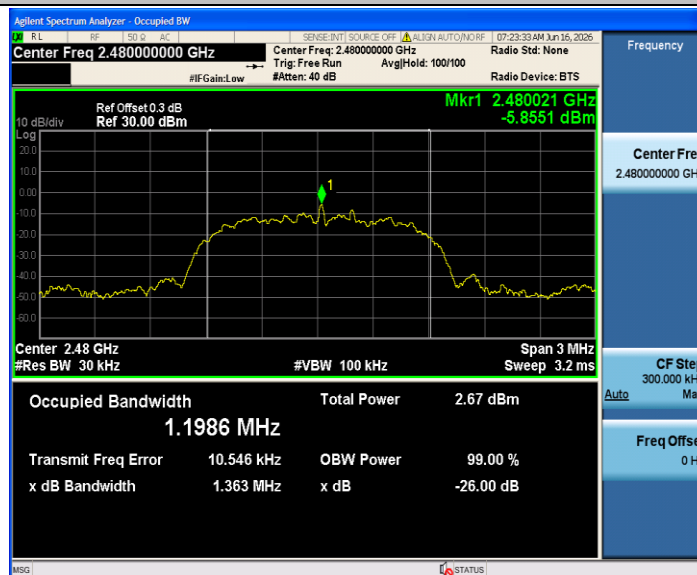
3DH5_Ant1_2402



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	-3.64	≤20.97	PASS
		2441	-3.65	≤20.97	PASS
		2480	-3.90	≤20.97	PASS
2DH5	Ant1	2402	-1.05	≤20.97	PASS
		2441	-1.07	≤20.97	PASS
		2480	-1.33	≤20.97	PASS
3DH5	Ant1	2402	-0.66	≤20.97	PASS
		2441	-0.66	≤20.97	PASS
		2480	-0.89	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.038	≥ 0.954	PASS
2DH5	Ant1	Hop	1.01	≥ 0.880	PASS
3DH5	Ant1	Hop	1.222	≥ 0.882	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

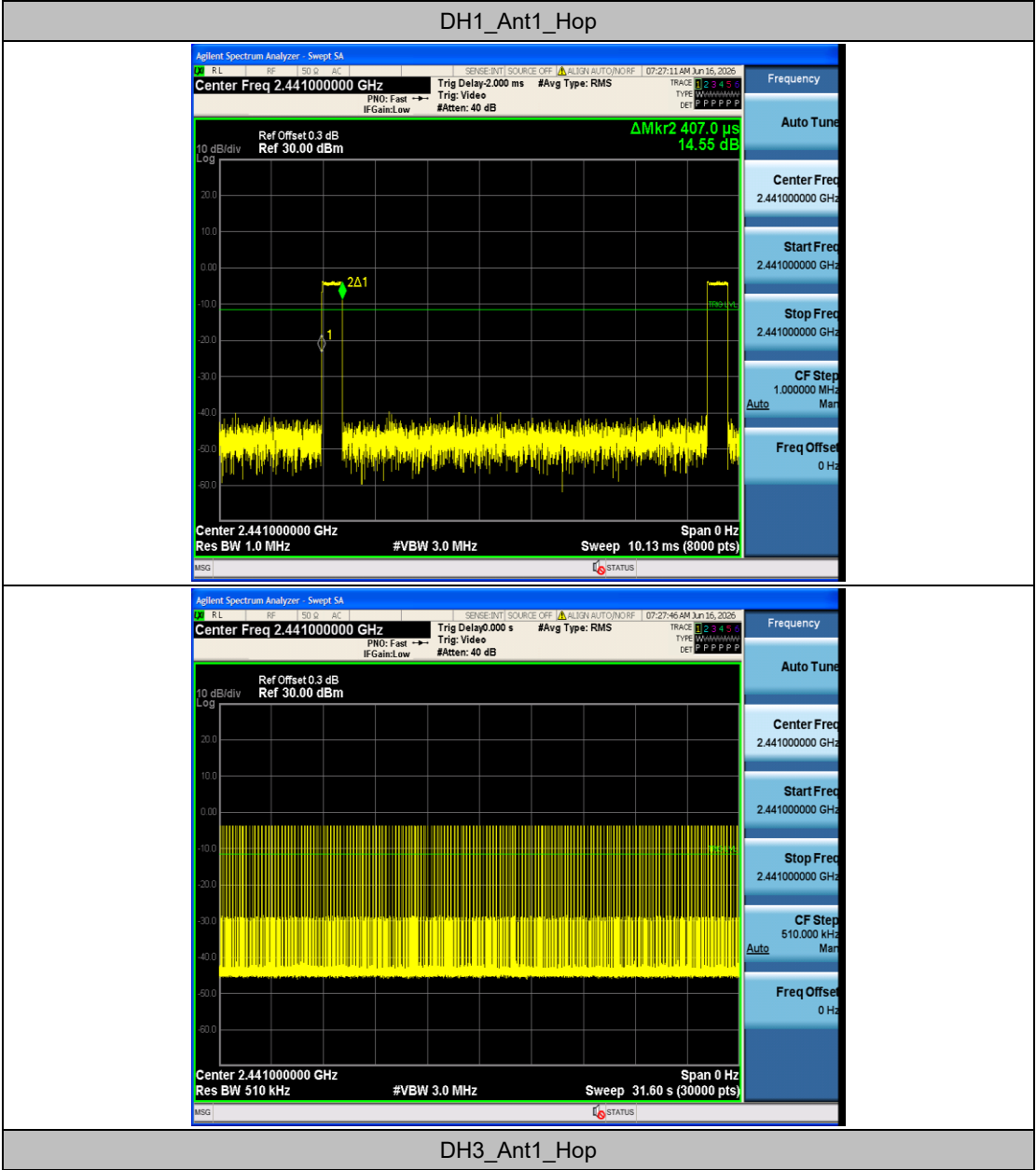


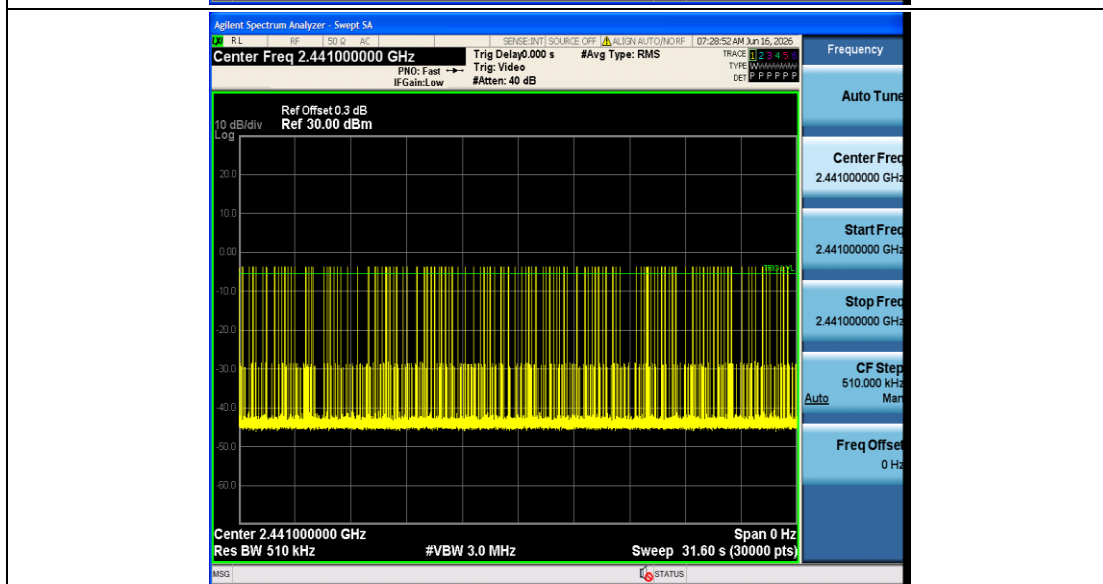
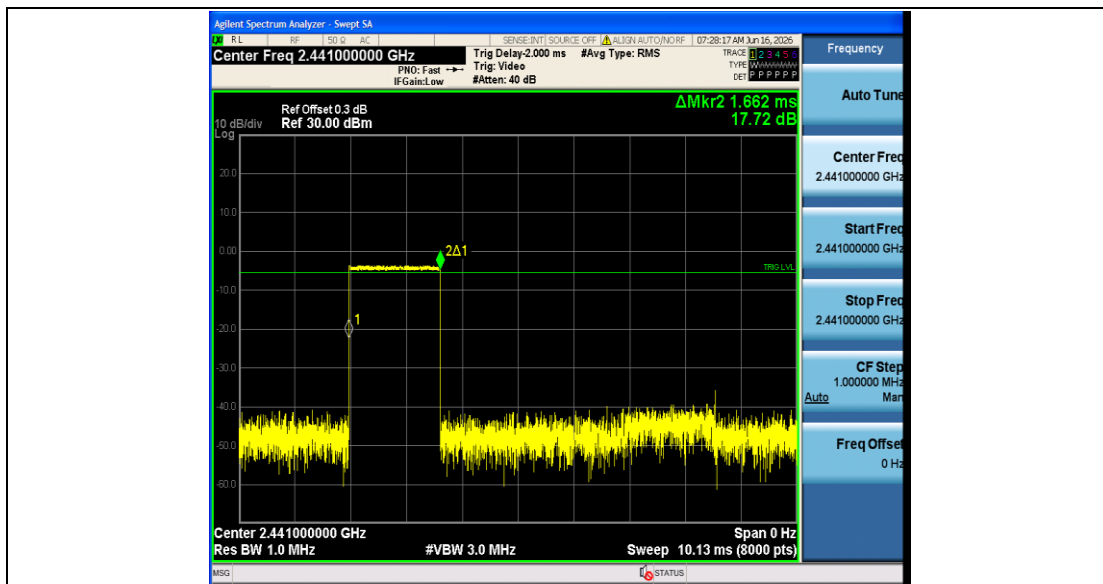
Appendix E: Time of occupancy

Test Result

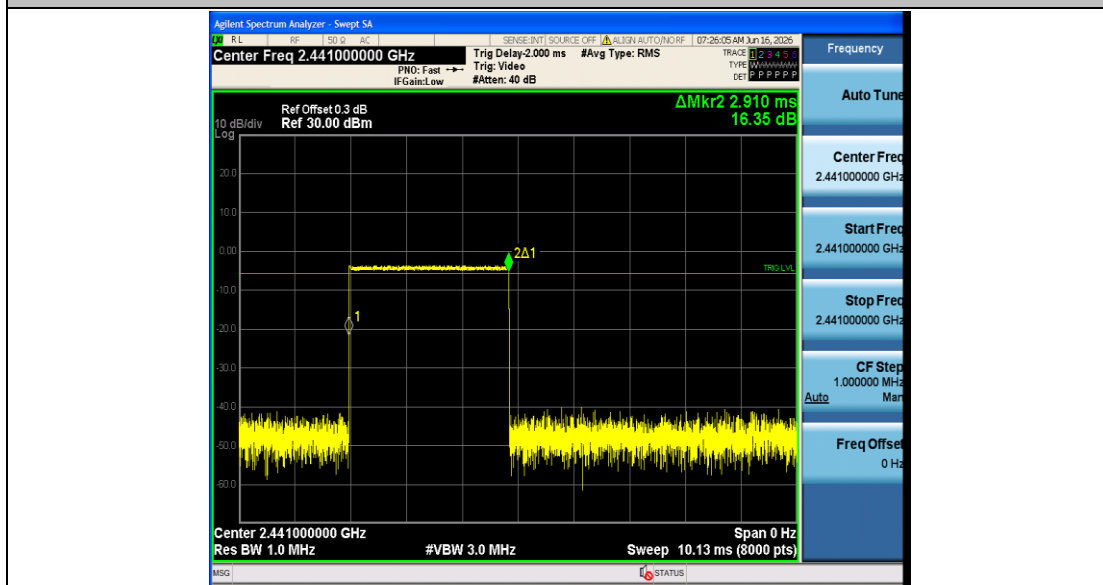
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.407	318	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.662	163	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.910	114	0.332	≤0.4	PASS
2DH1	Ant1	Hop	0.415	319	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.668	162	0.27	≤0.4	PASS
2DH5	Ant1	Hop	2.916	103	0.3	≤0.4	PASS
3DH1	Ant1	Hop	0.415	320	0.133	≤0.4	PASS
3DH3	Ant1	Hop	1.666	159	0.265	≤0.4	PASS
3DH5	Ant1	Hop	2.916	92	0.268	≤0.4	PASS

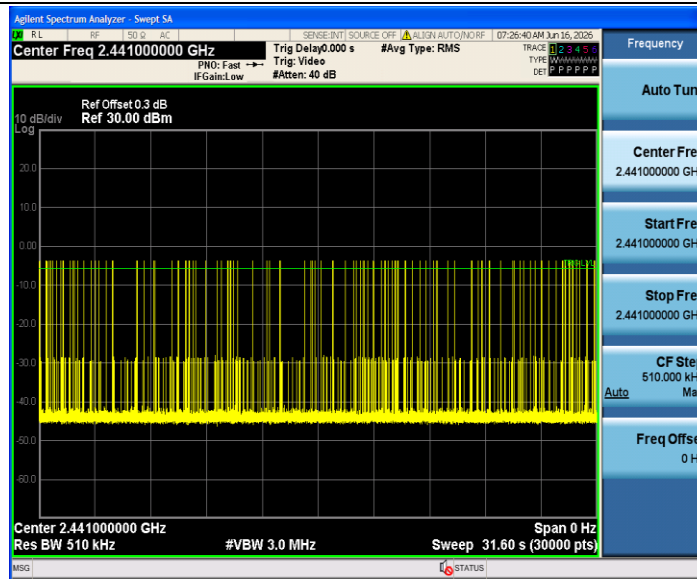
Test Graphs



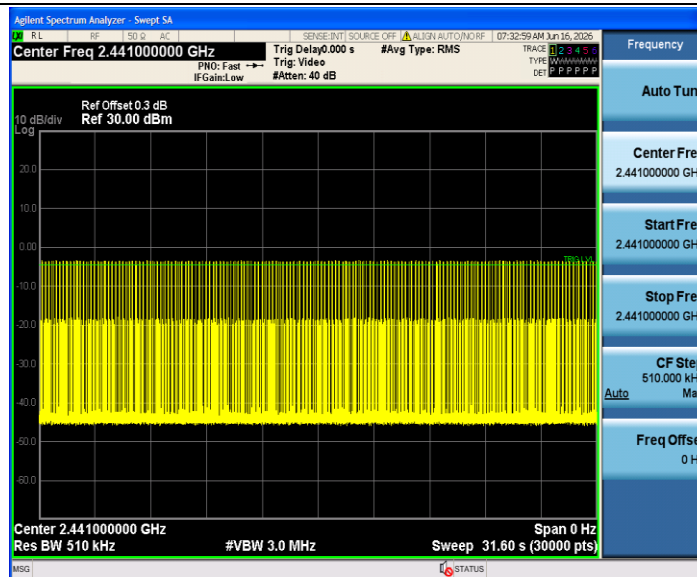
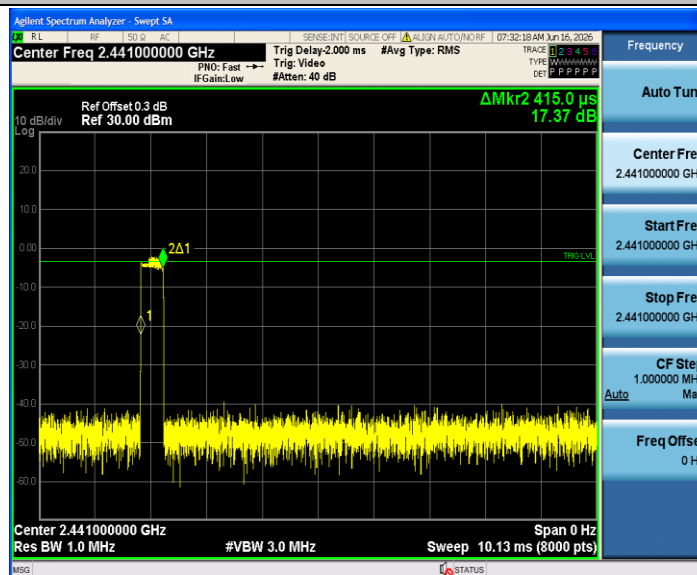


DH5_Ant1_Hop

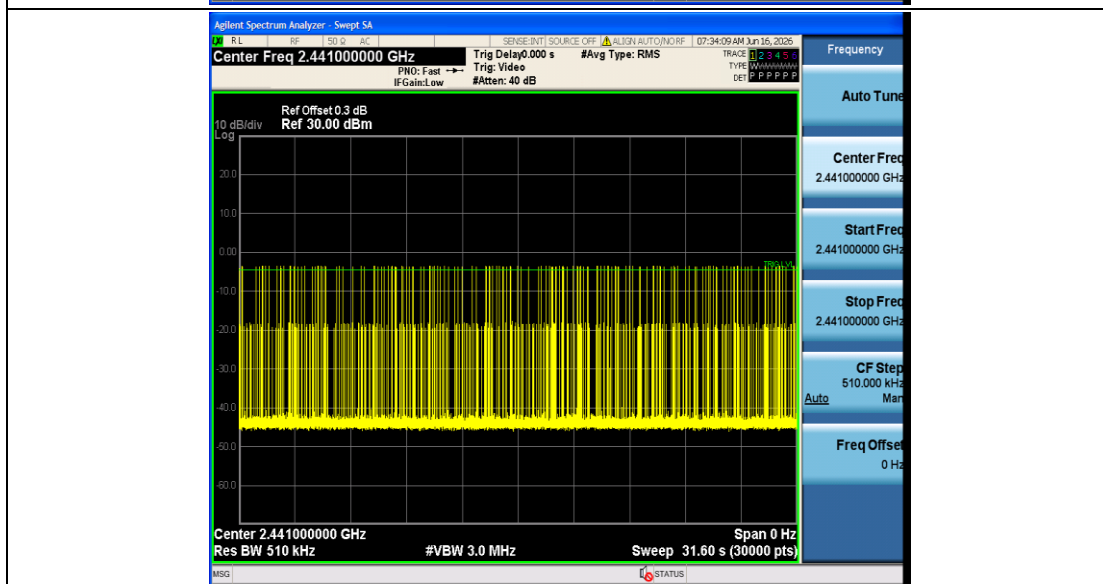
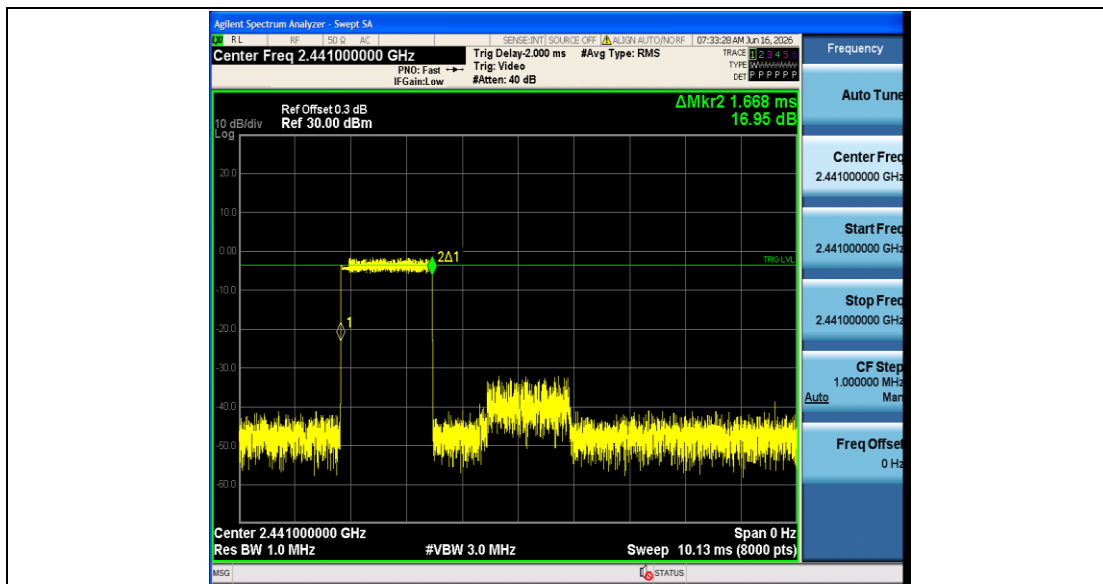




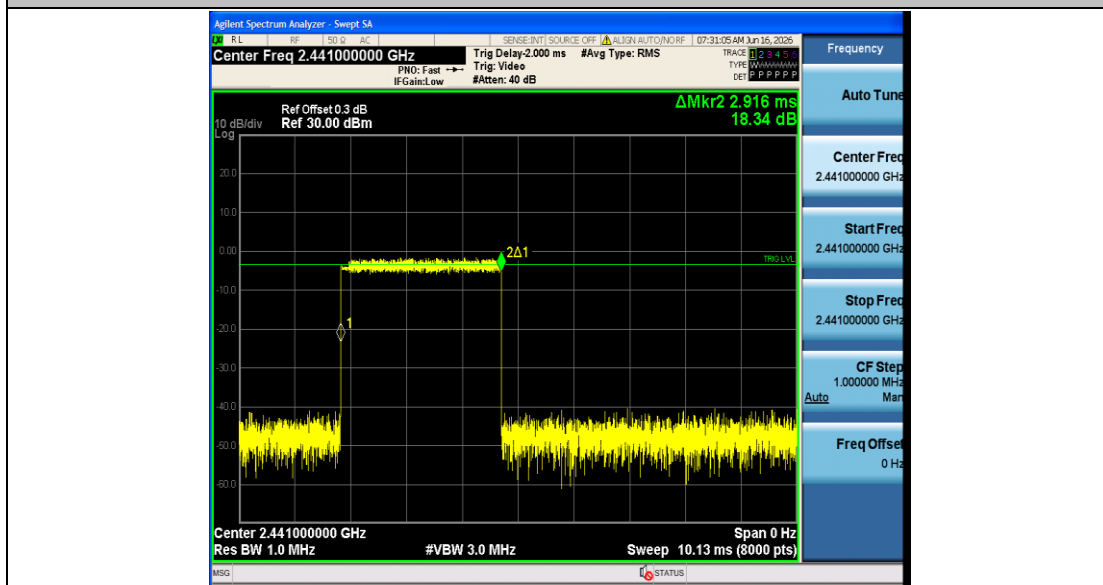
2DH1_Ant1_Hop

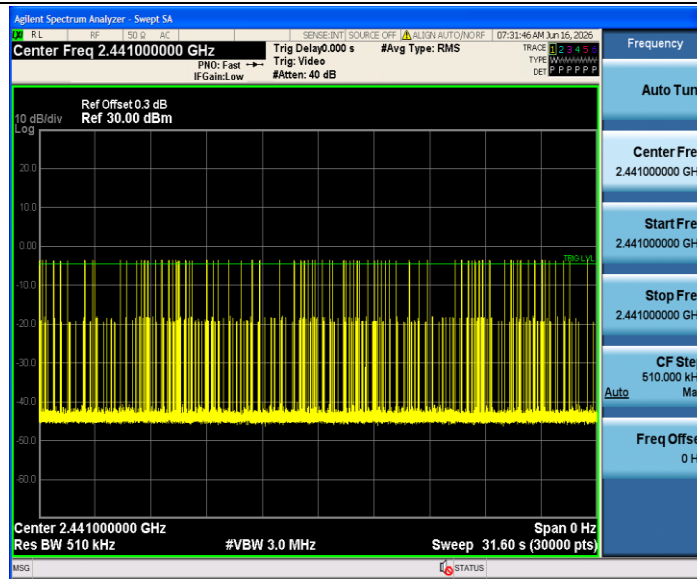


2DH3_Ant1_Hop

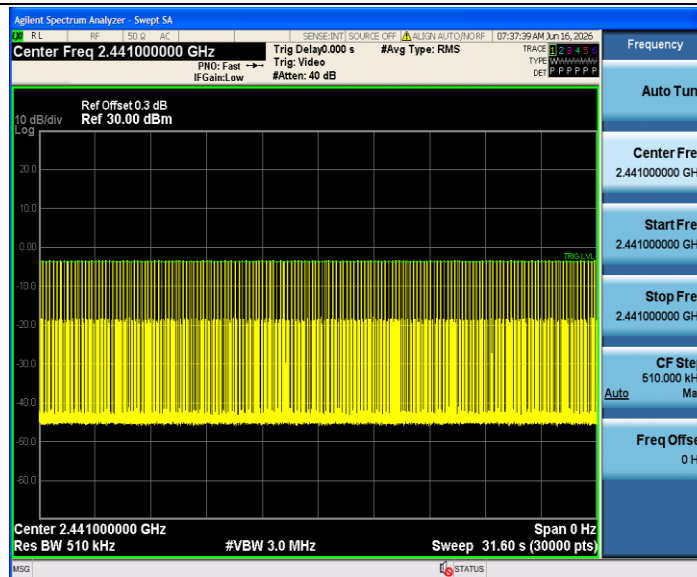
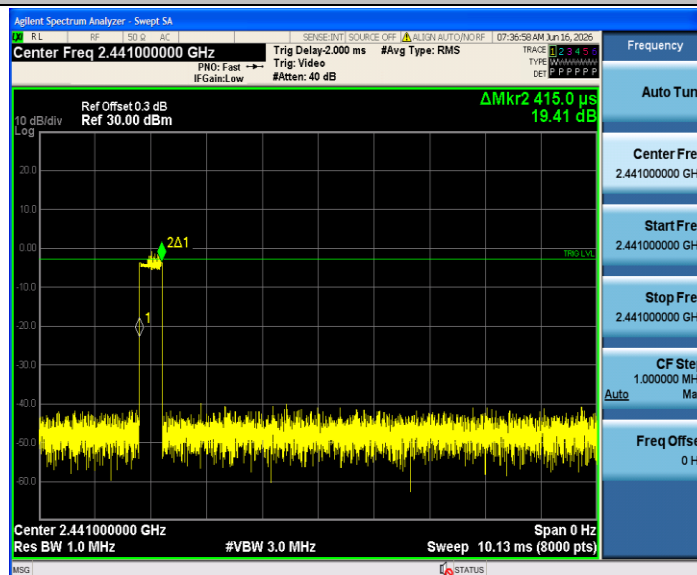


2DH5_Ant1_Hop

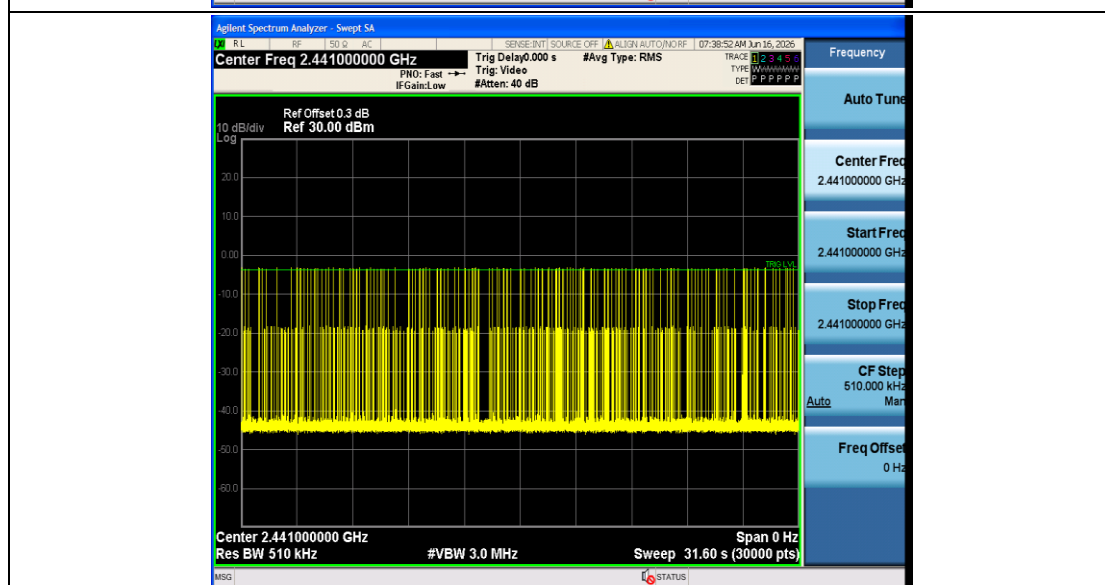
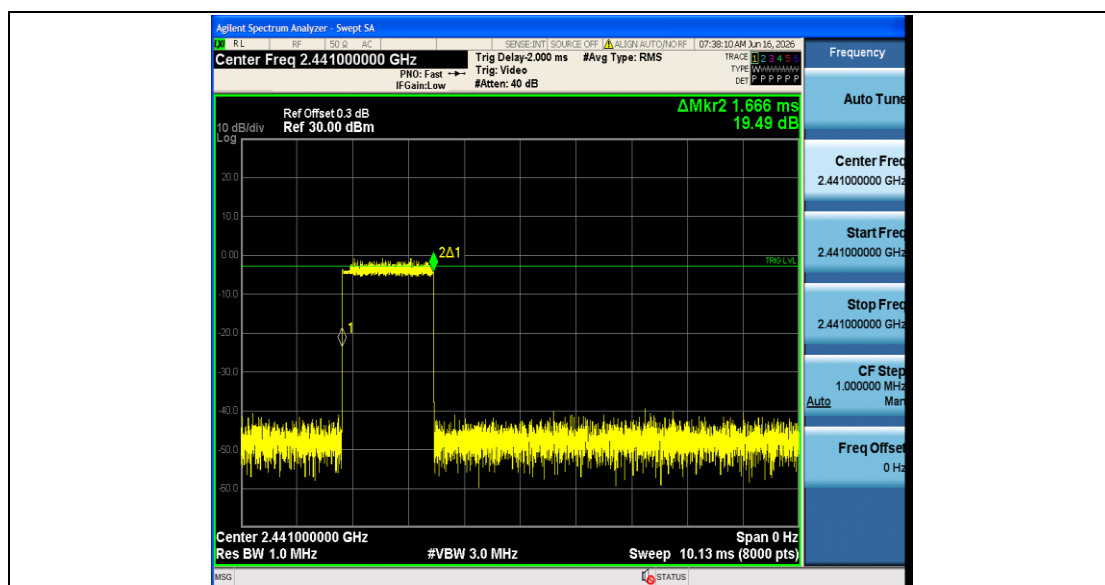




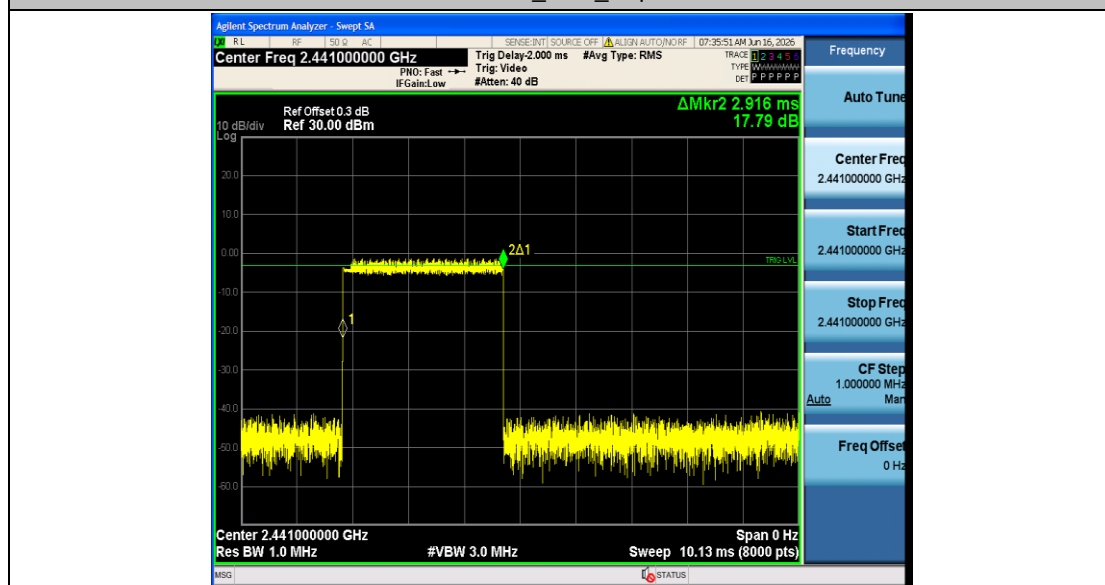
3DH1_Ant1_Hop

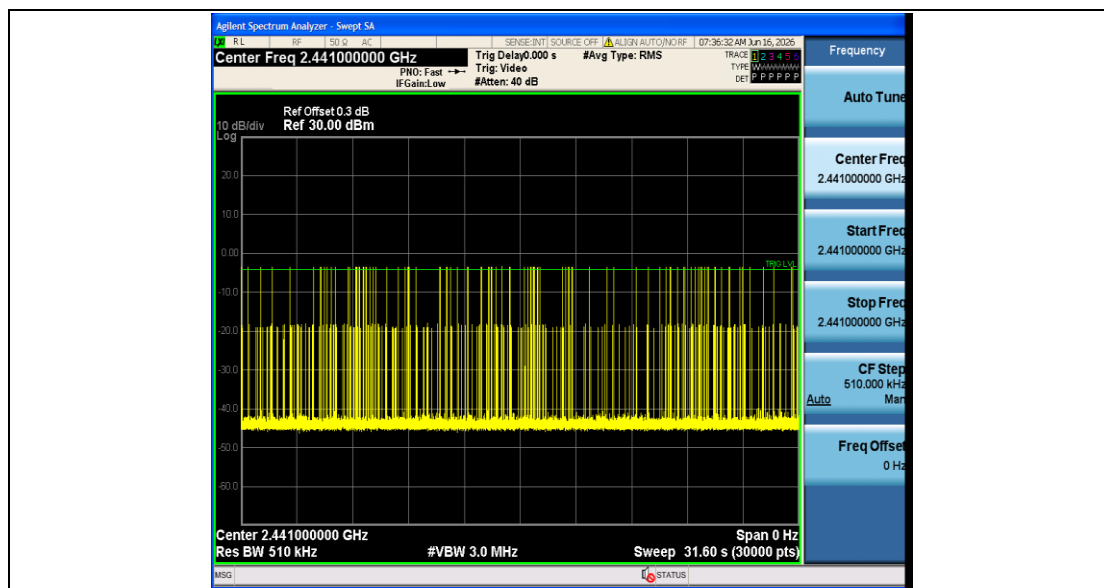


3DH3_Ant1_Hop



3DH5_Ant1_Hop





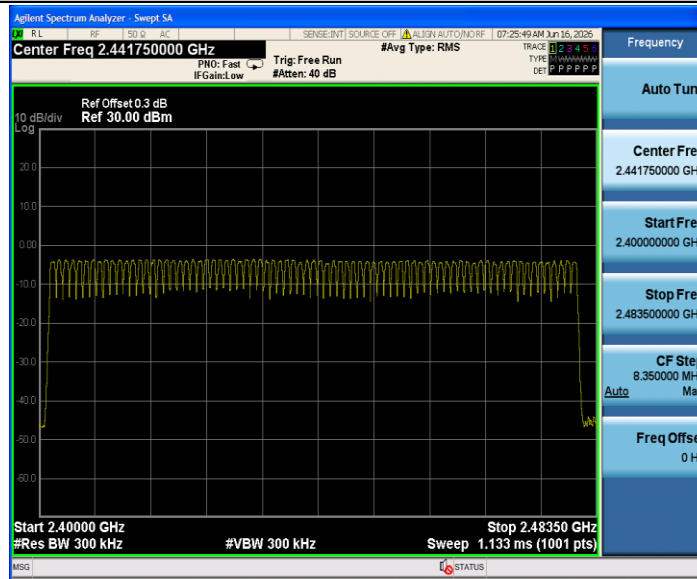
Appendix F: Number of hopping channels

Test Result

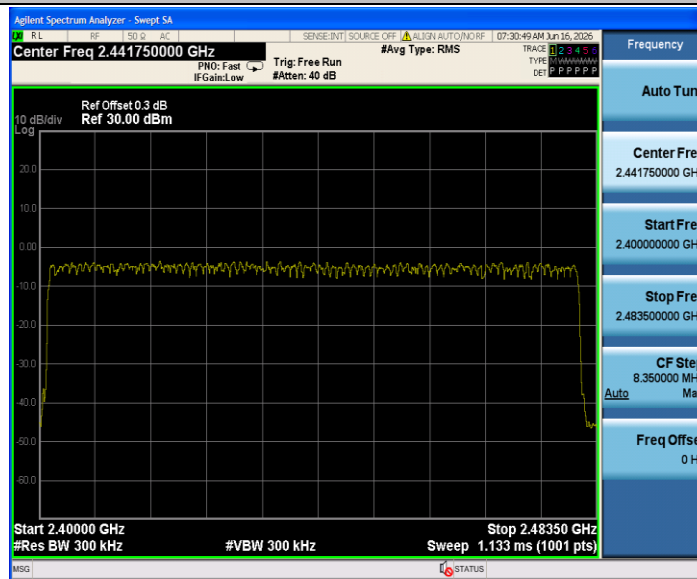
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

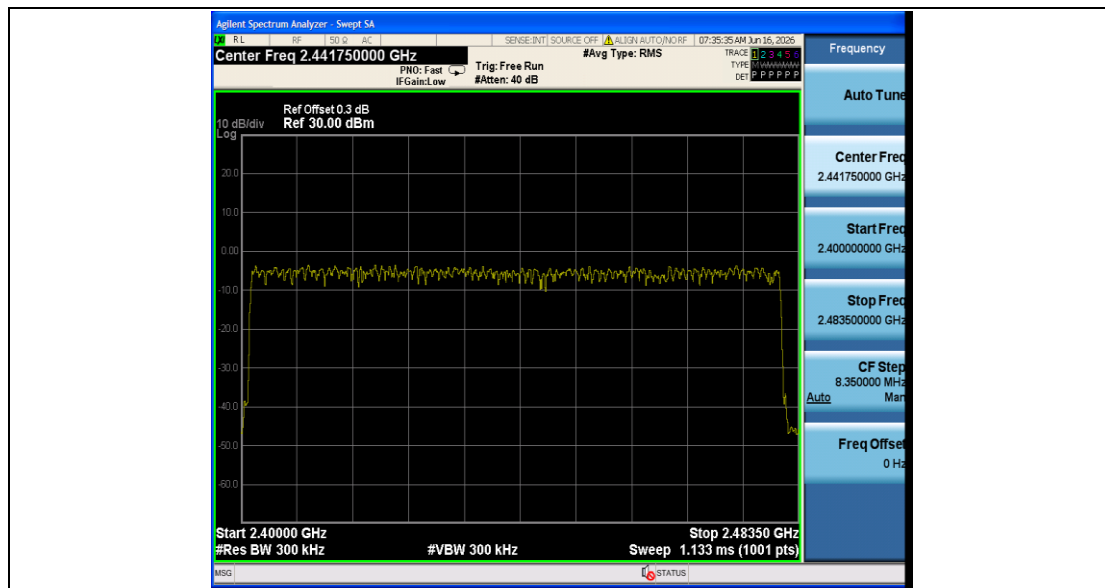
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

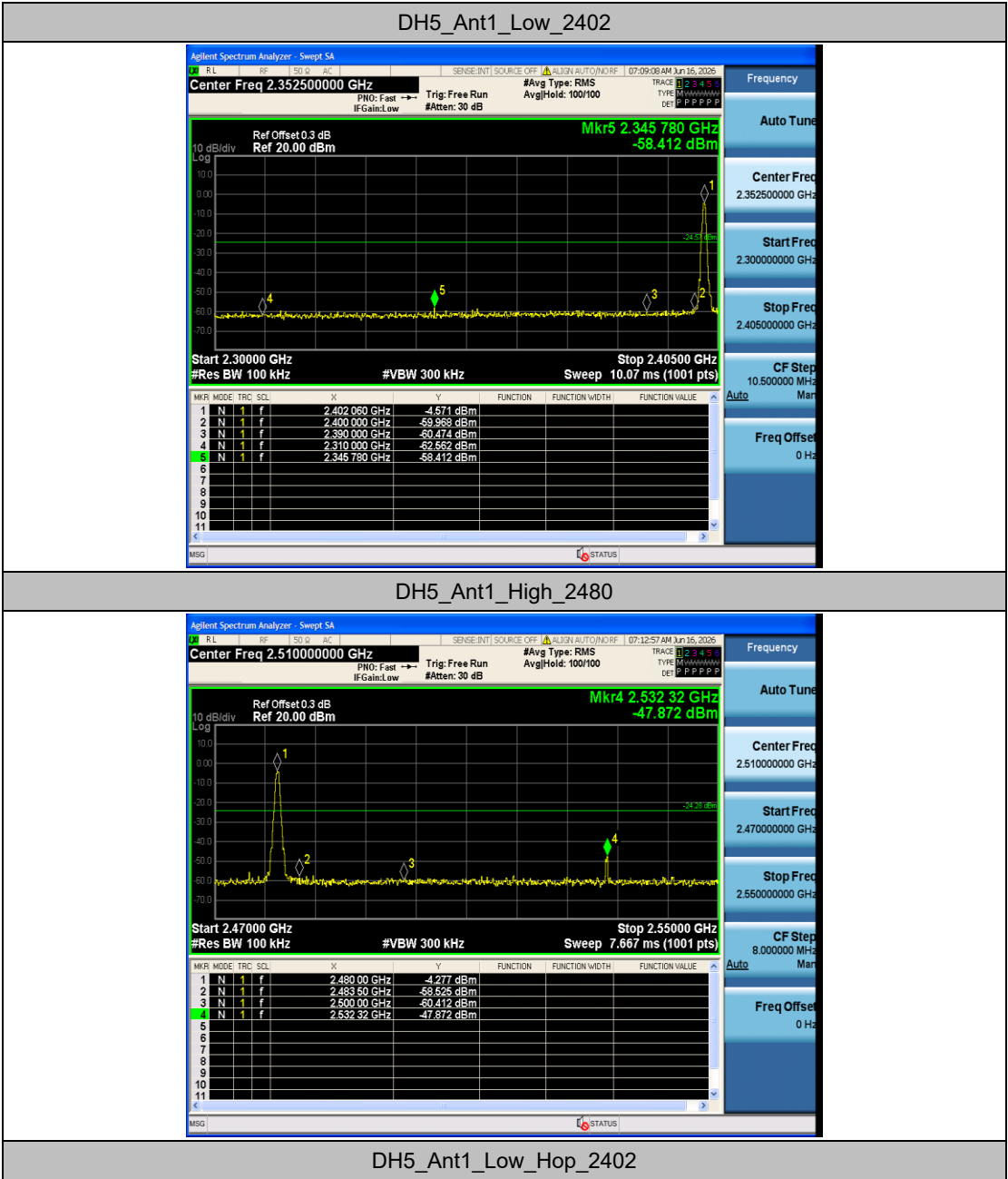


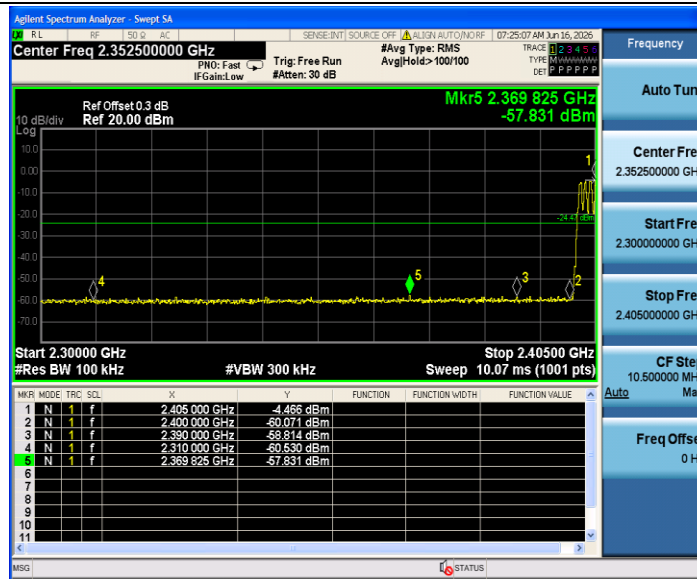
Appendix G: Band edge measurements

Test Result

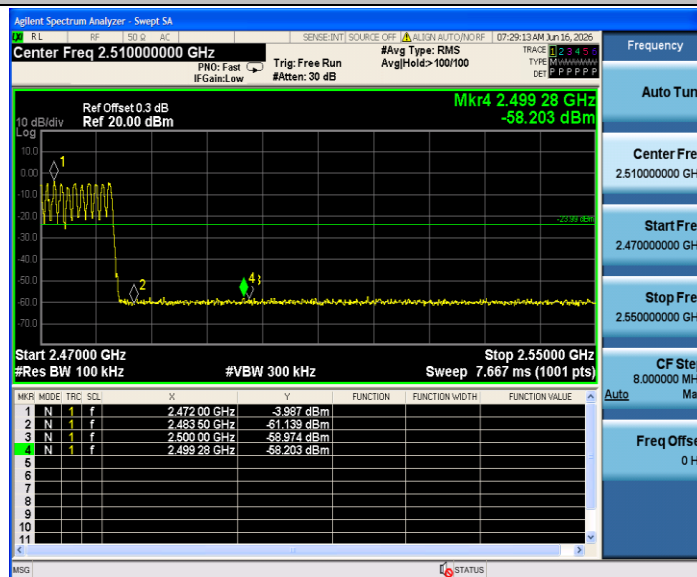
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.57	-58.41	≤-24.57	PASS
		High	2480	-4.28	-47.87	≤-24.28	PASS
		Low	Hop_2402	-4.47	-57.83	≤-24.47	PASS
		High	Hop_2480	-3.99	-58.2	≤-23.99	PASS
2DH5	Ant1	Low	2402	-3.96	-58.36	≤-23.96	PASS
		High	2480	-6.83	-56.94	≤-26.83	PASS
		Low	Hop_2402	-6.73	-58.31	≤-26.73	PASS
		High	Hop_2480	-5.58	-57.41	≤-25.58	PASS
3DH5	Ant1	Low	2402	-4.84	-57.51	≤-24.84	PASS
		High	2480	-4.05	-58.25	≤-24.05	PASS
		Low	Hop_2402	-6.46	-58.45	≤-26.46	PASS
		High	Hop_2480	-4.65	-57.52	≤-24.65	PASS

Test Graphs

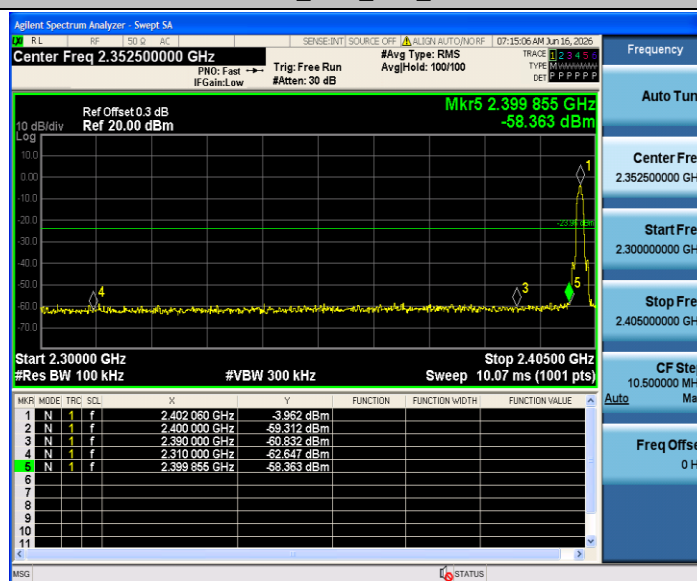




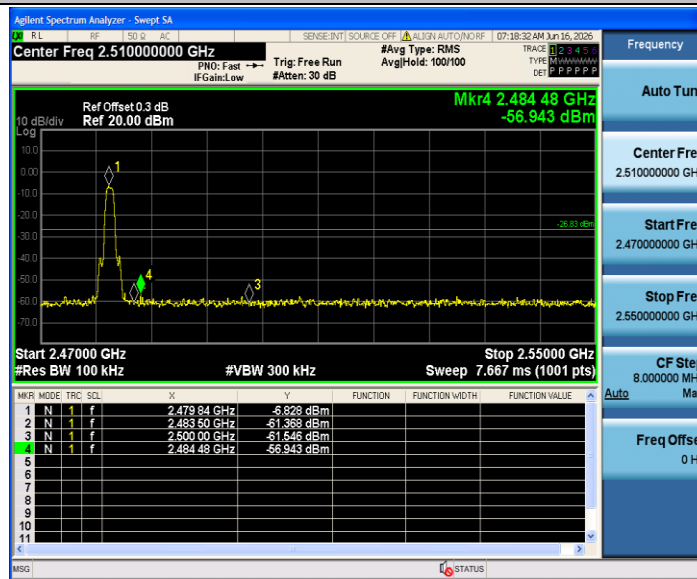
DH5_Ant1_High_Hop_2480



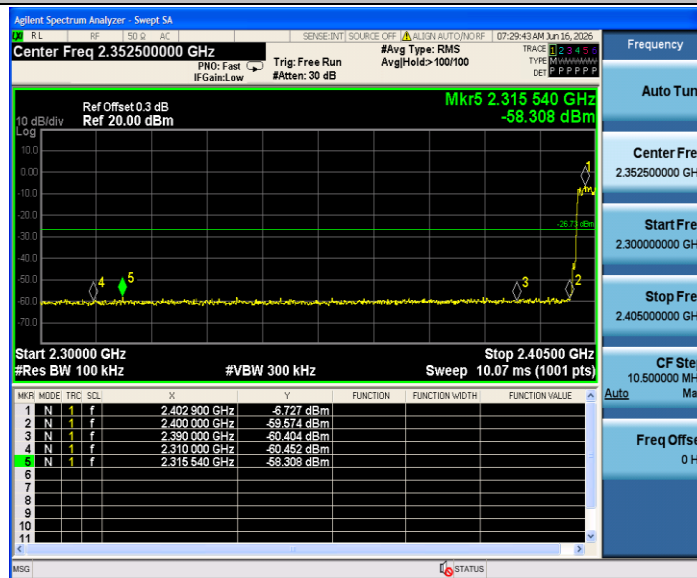
2DH5_Ant1_Low_2402



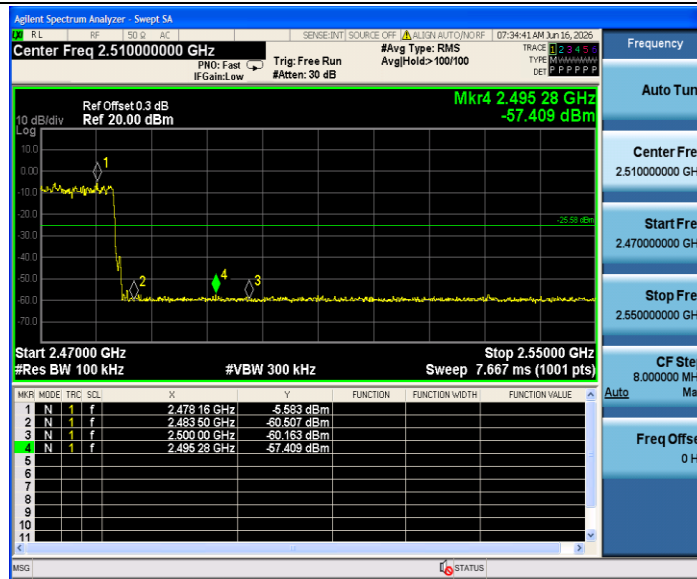
2DH5_Ant1_High_2480



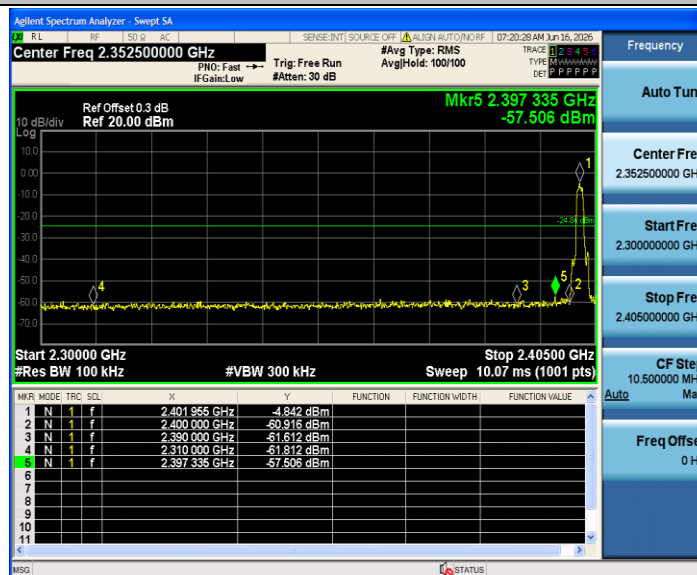
2DH5_Ant1_Low_Hop_2402



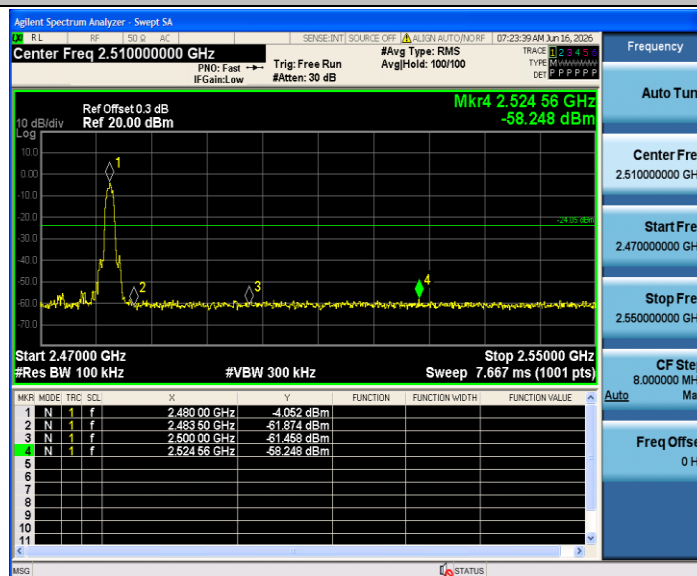
2DH5_Ant1_High_Hop_2480



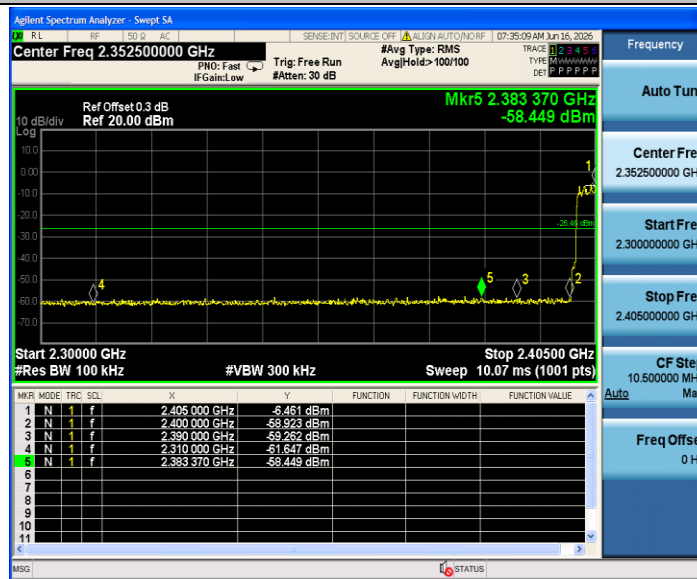
3DH5_Ant1_Low_2402



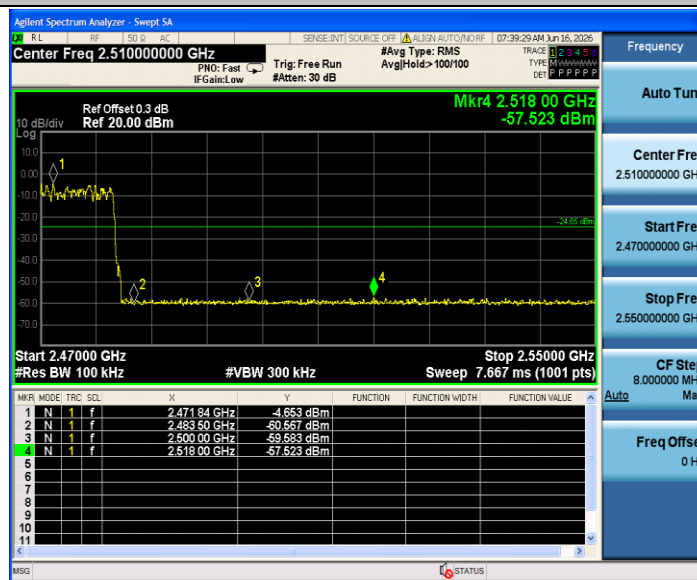
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

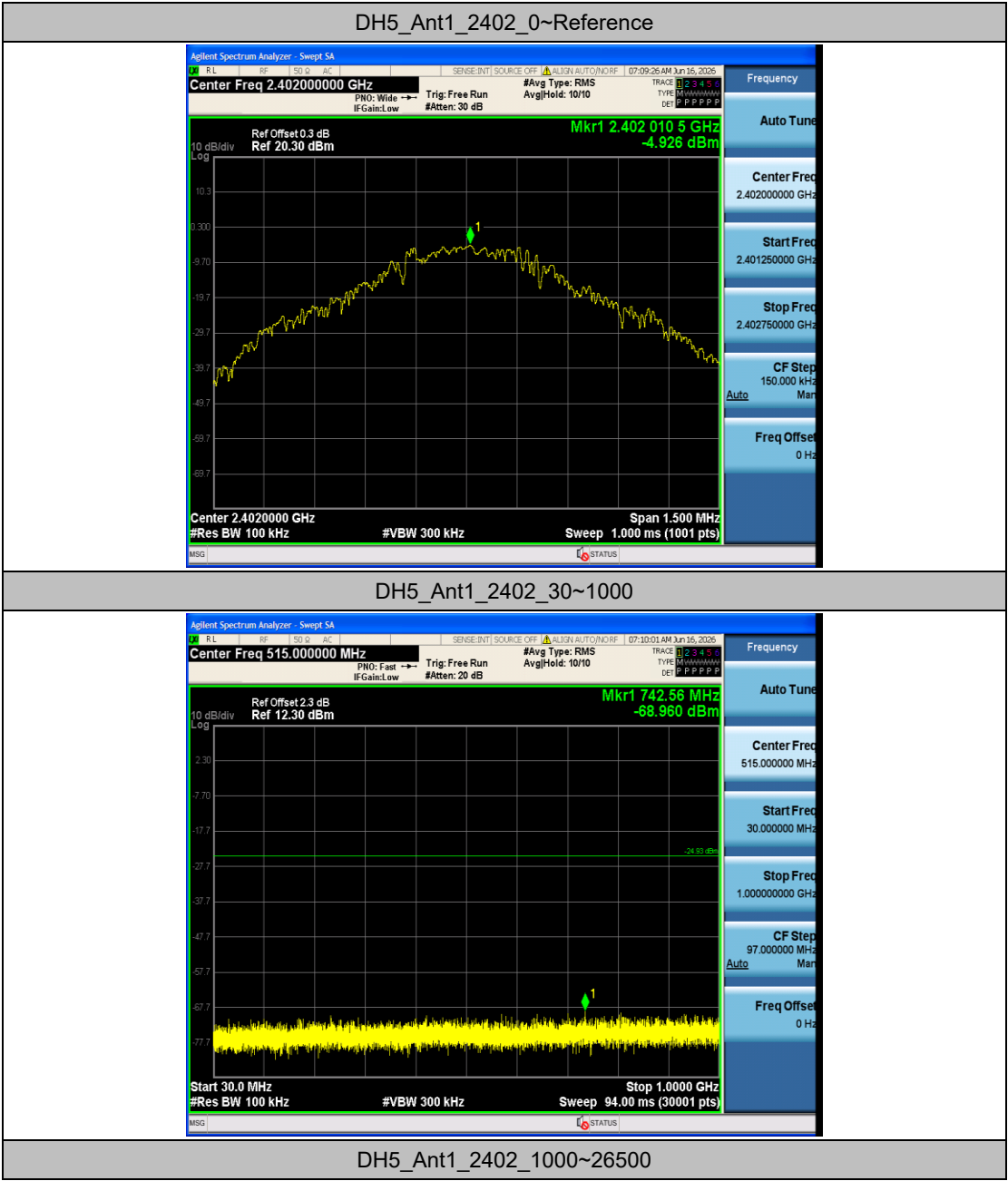


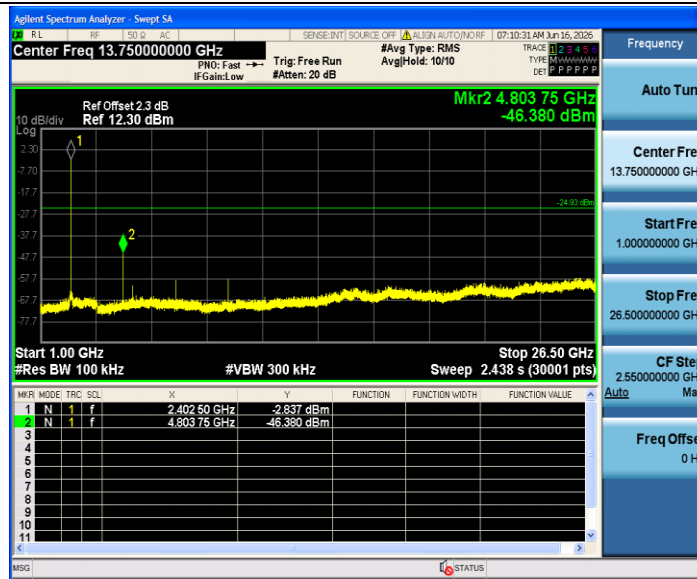
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.93	-4.93	---	PASS
			30~1000	-4.93	-68.96	≤-24.93	PASS
			1000~26500	-4.93	-46.38	≤-24.93	PASS
		2441	Reference	-5.03	-5.03	---	PASS
			30~1000	-5.03	-61.27	≤-25.03	PASS
			1000~26500	-5.03	-46.9	≤-25.03	PASS
		2480	Reference	-5.16	-5.16	---	PASS
			30~1000	-5.16	-67.97	≤-25.16	PASS
			1000~26500	-5.16	-46.34	≤-25.16	PASS
2DH5	Ant1	2402	Reference	-7.46	-7.46	---	PASS
			30~1000	-7.46	-52.83	≤-27.46	PASS
			1000~26500	-7.46	-48.25	≤-27.46	PASS
		2441	Reference	-7.36	-7.36	---	PASS
			30~1000	-7.36	-68.92	≤-27.36	PASS
			1000~26500	-7.36	-46.71	≤-27.36	PASS
		2480	Reference	-5.15	-5.15	---	PASS
			30~1000	-5.15	-67.89	≤-25.15	PASS
			1000~26500	-5.15	-49.57	≤-25.15	PASS
3DH5	Ant1	2402	Reference	-5.81	-5.81	---	PASS
			30~1000	-5.81	-69.12	≤-25.81	PASS
			1000~26500	-5.81	-45.12	≤-25.81	PASS
		2441	Reference	-6.51	-6.51	---	PASS
			30~1000	-6.51	-68.53	≤-26.51	PASS
			1000~26500	-6.51	-48.25	≤-26.51	PASS
		2480	Reference	-4.54	-4.54	---	PASS
			30~1000	-4.54	-69.39	≤-24.54	PASS
			1000~26500	-4.54	-46.23	≤-24.54	PASS

Test Graphs

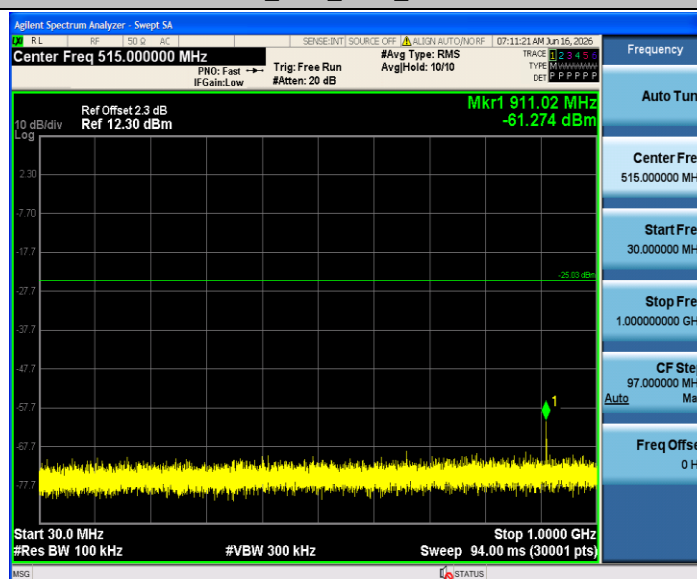




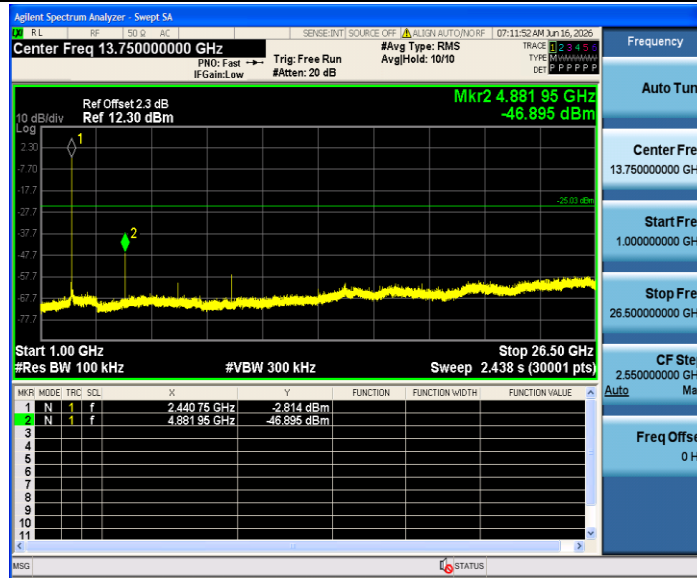
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



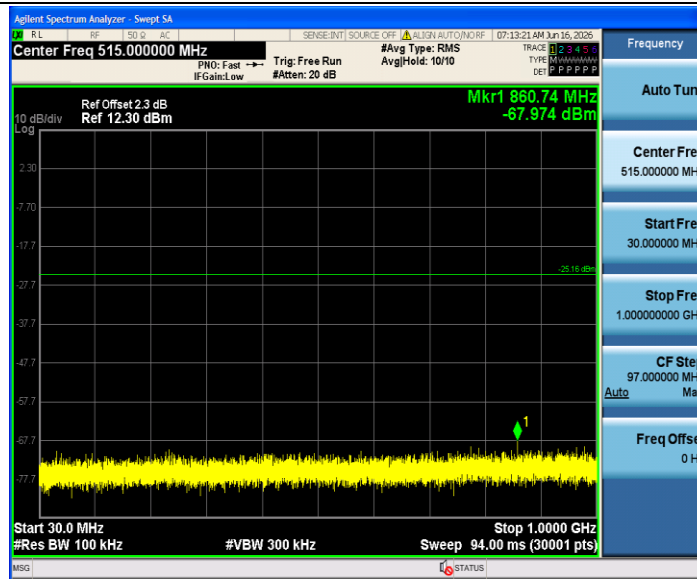
DH5_Ant1_2441_1000~26500



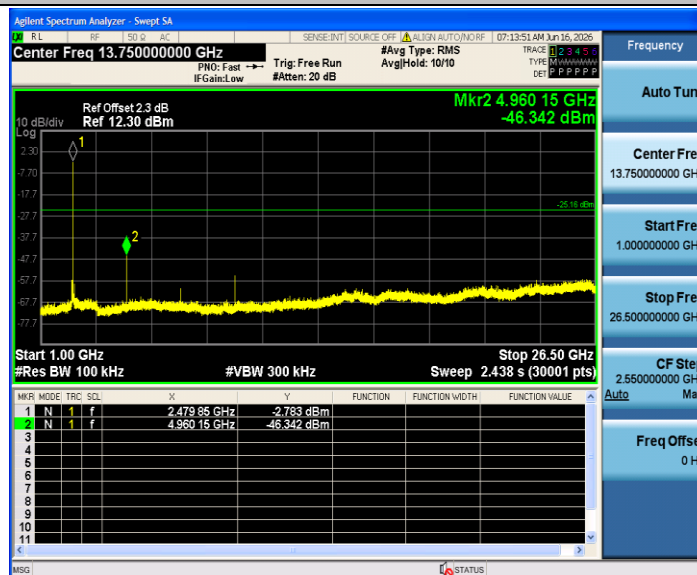
DH5_Ant1_2480_0~Reference



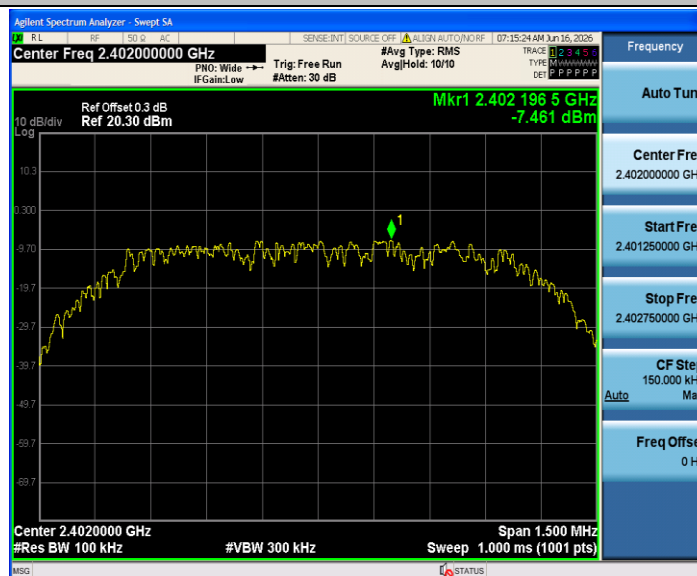
DH5_Ant1_2480_30~1000



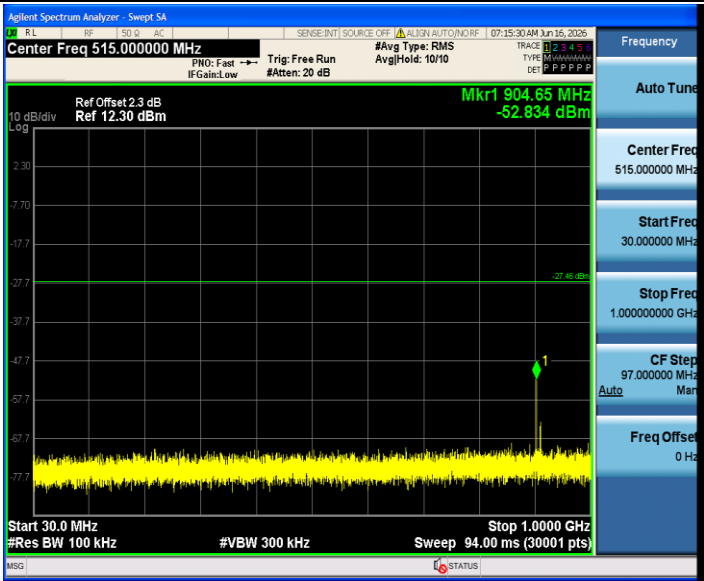
DH5_Ant1_2480_1000~26500



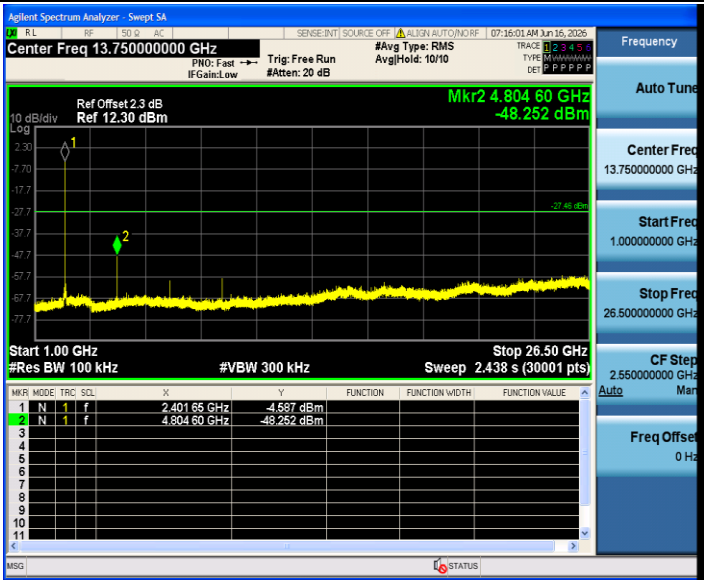
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference