

Appendix RF Test Data for BT

FCC ID : 2A6P9-APID02

Company : Promaster Electronic LLC

EUT : Portable Infotainment Display

Model Number : APID-301

Report No. : CTA25072801102

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	0.957	2401.547	2402.504	---	---
		2441	0.942	2440.553	2441.495	---	---
		2480	0.945	2479.553	2480.498	---	---
2DH5	Ant1	2402	1.278	2401.382	2402.660	---	---
		2441	1.323	2440.346	2441.669	---	---
		2480	1.278	2479.382	2480.660	---	---
3DH5	Ant1	2402	1.308	2401.361	2402.669	---	---
		2441	1.311	2440.361	2441.672	---	---
		2480	1.317	2479.355	2480.672	---	---

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	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87958	2401.5722	2402.4518	---	---
		2441	0.87022	2440.5738	2441.4440	---	---
		2480	0.86956	2479.5746	2480.4442	---	---
2DH5	Ant1	2402	1.1910	2401.4166	2402.6076	---	---
		2441	1.1824	2440.4193	2441.6017	---	---
		2480	1.1871	2479.4180	2480.6051	---	---
3DH5	Ant1	2402	1.1843	2401.4188	2402.6031	---	---
		2441	1.1885	2440.4158	2441.6043	---	---
		2480	1.1901	2479.4160	2480.6061	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



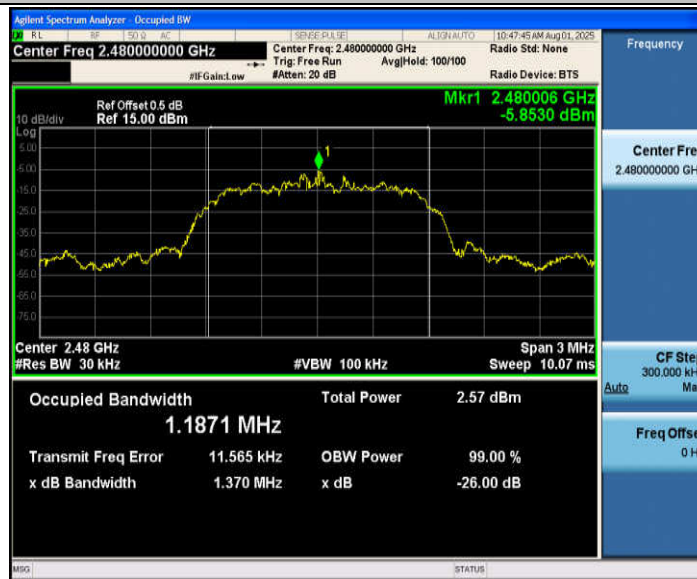
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.08	≤30.00	PASS
		2441	-0.07	≤30.00	PASS
		2480	-0.12	≤30.00	PASS
2DH5	Ant1	2402	-0.71	≤20.97	PASS
		2441	-0.89	≤20.97	PASS
		2480	-0.95	≤20.97	PASS
3DH5	Ant1	2402	-0.33	≤20.97	PASS
		2441	-0.51	≤20.97	PASS
		2480	-0.56	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.172	≥ 0.957	PASS
2DH5	Ant1	Hop	1.196	≥ 0.882	PASS
3DH5	Ant1	Hop	1.212	≥ 0.878	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

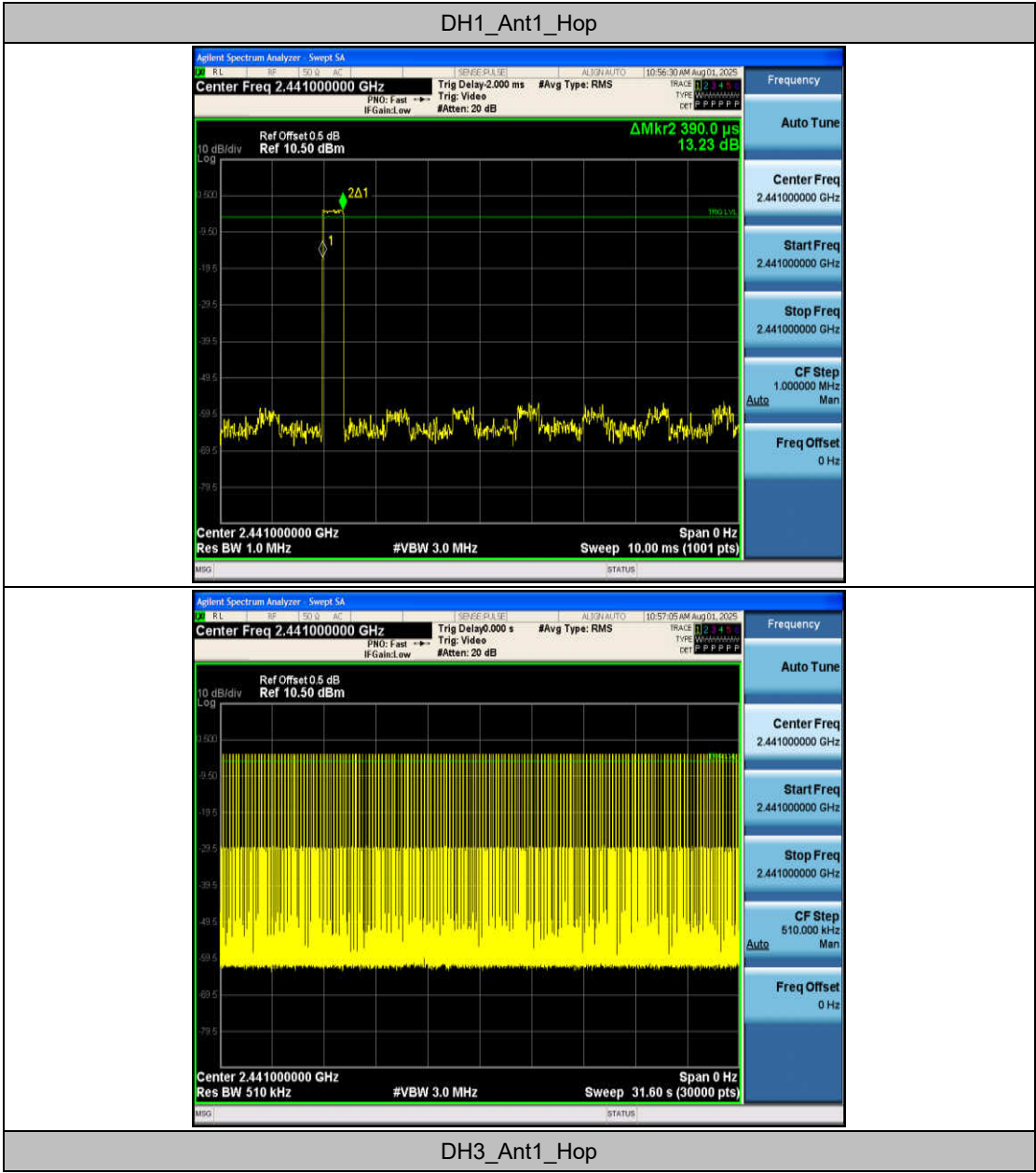


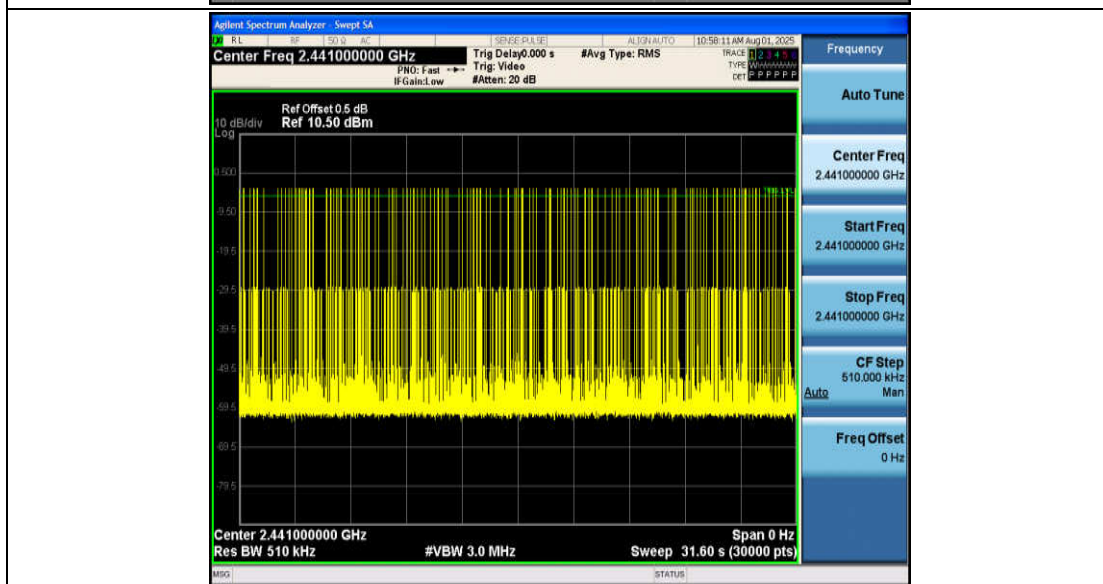
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	162	0.266	≤0.4	PASS
DH5	Ant1	Hop	2.890	107	0.309	≤0.4	PASS
2DH1	Ant1	Hop	0.400	319	0.128	≤0.4	PASS
2DH3	Ant1	Hop	1.650	156	0.257	≤0.4	PASS
2DH5	Ant1	Hop	2.900	115	0.334	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.650	152	0.251	≤0.4	PASS
3DH5	Ant1	Hop	2.900	120	0.348	≤0.4	PASS

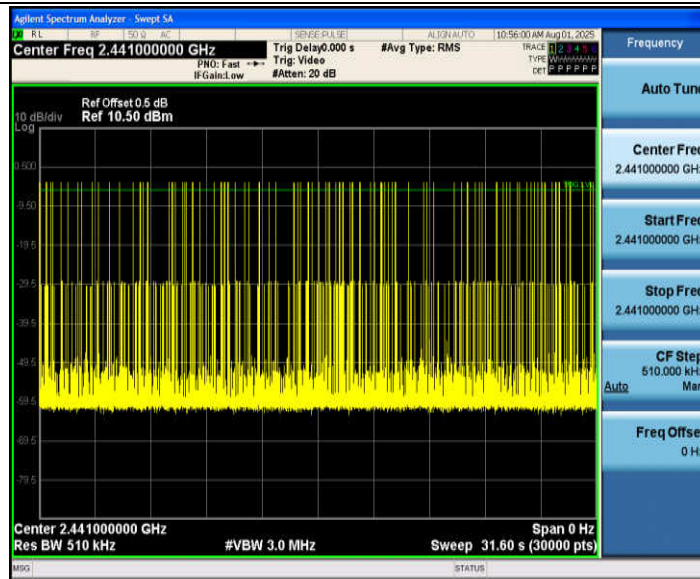
Test Graphs



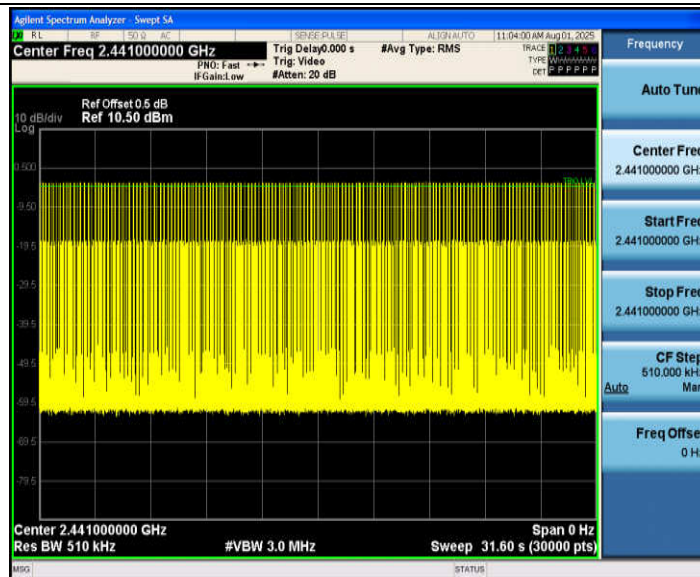


DH5_Ant1_Hop

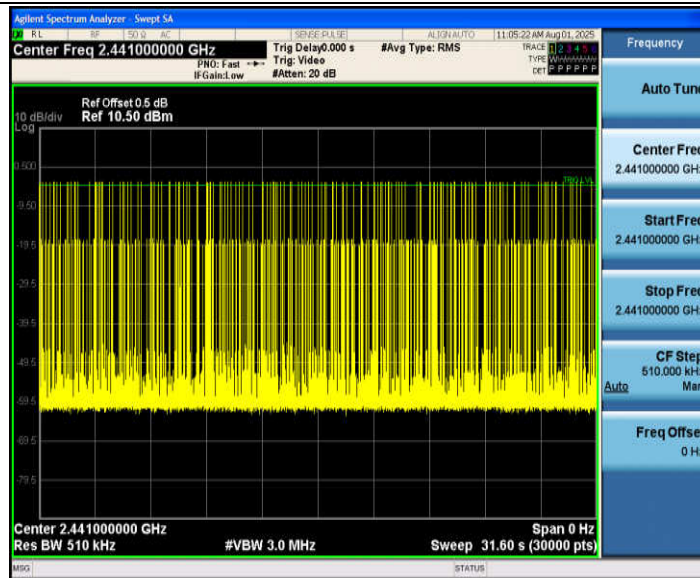




2DH1_Ant1_Hop

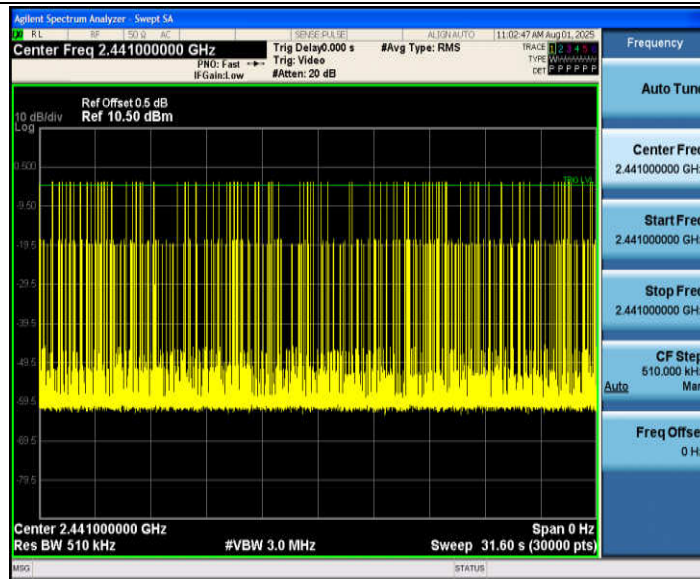


2DH3_Ant1_Hop

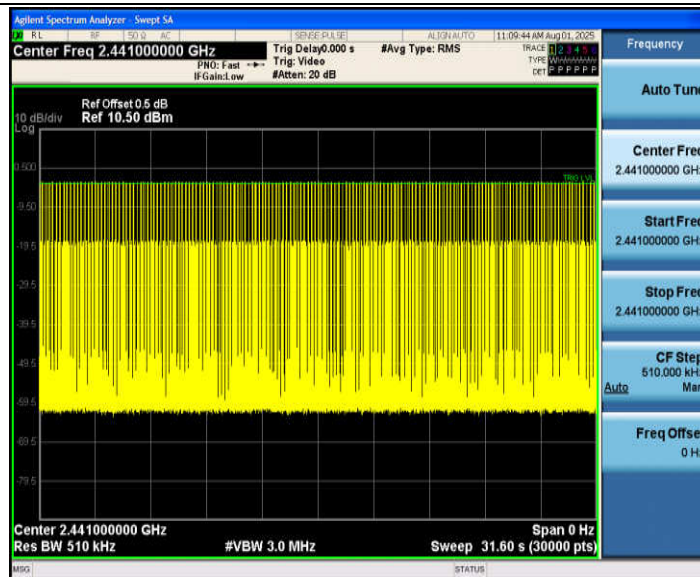


2DH5_Ant1_Hop

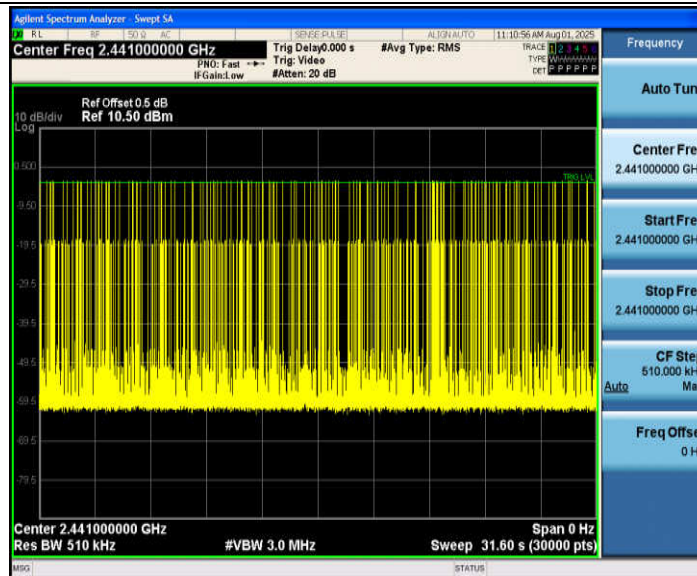




3DH1_Ant1_Hop

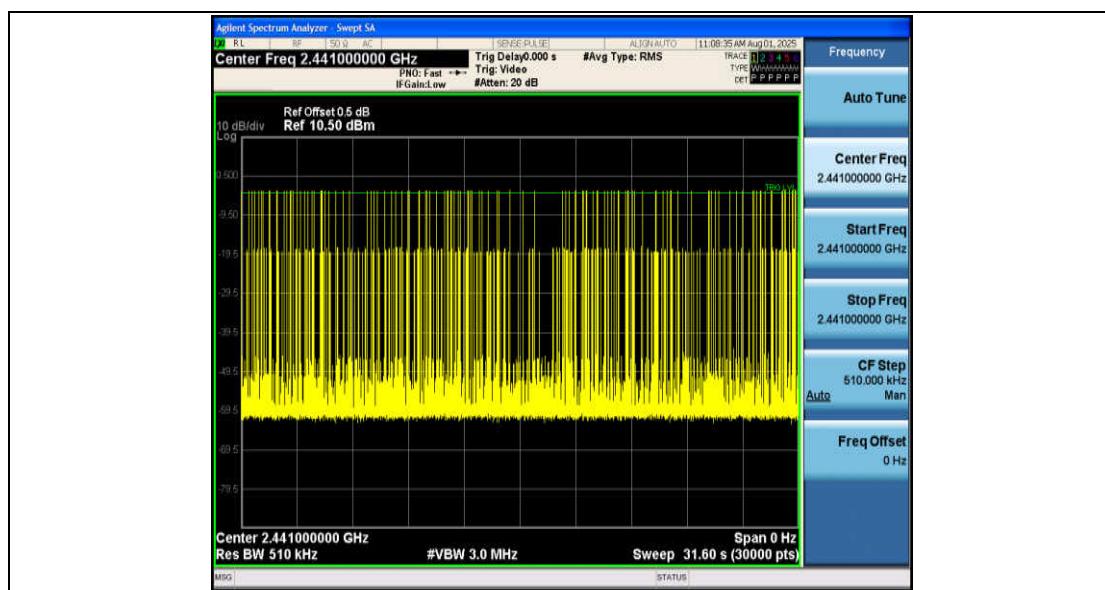


3DH3_Ant1_Hop



3DH5_Ant1_Hop



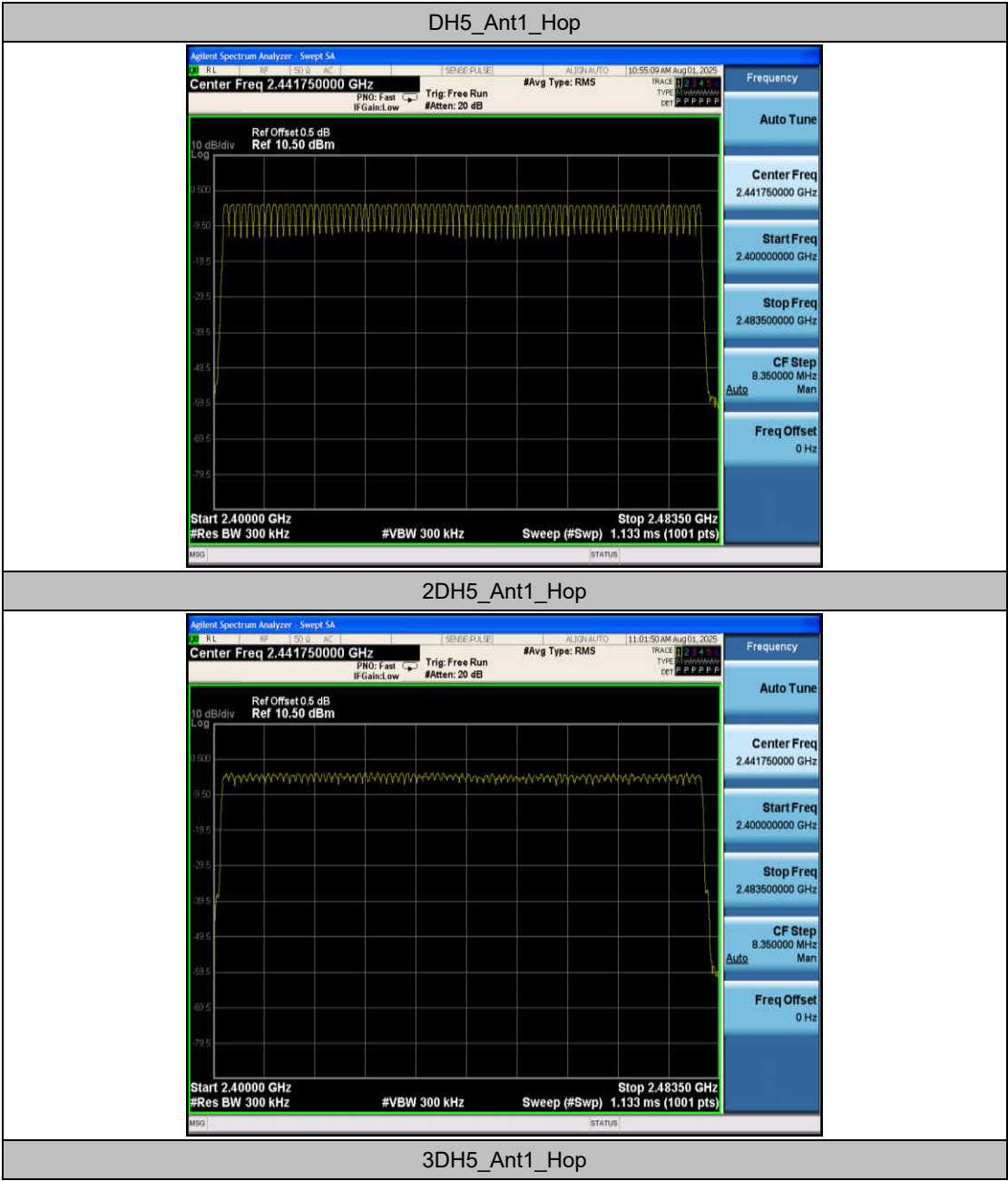


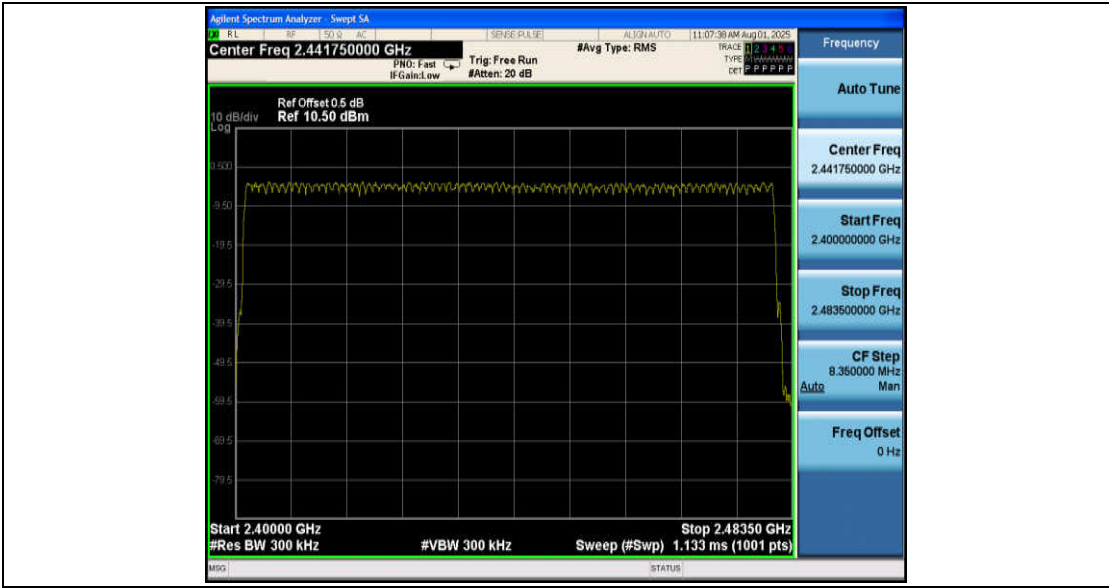
Appendix F: Number of hopping channels

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





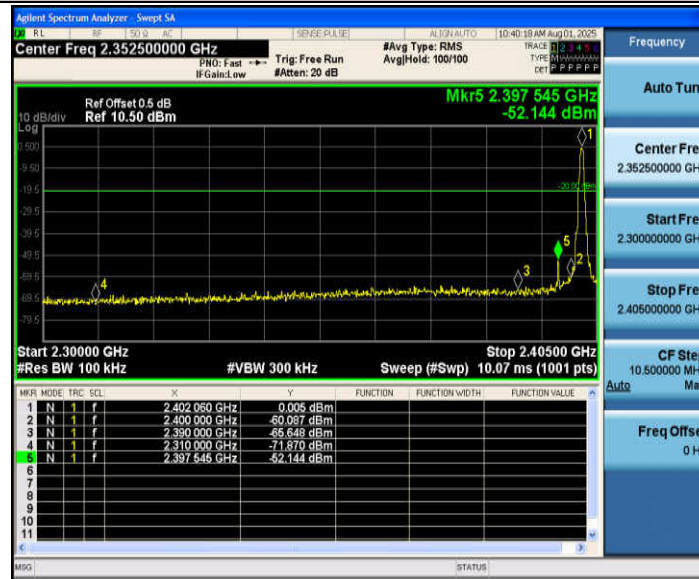
Appendix G: Band edge measurements

Test Result

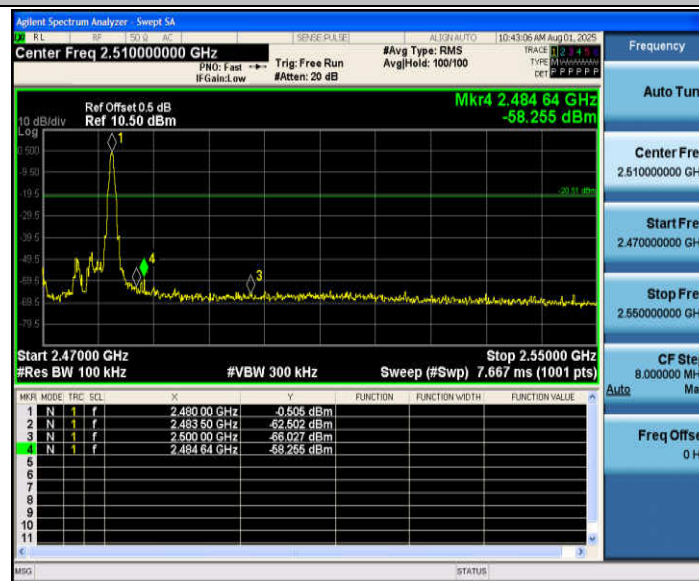
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.01	-52.14	≤ -20	PASS
		High	2480	-0.51	-58.26	≤ -20.51	PASS
		Low	Hop_2402	-5.41	-64.06	≤ -25.41	PASS
		High	Hop_2480	-4.94	-64.39	≤ -24.94	PASS
2DH5	Ant1	Low	2402	-4.17	-53.98	≤ -24.17	PASS
		High	2480	-3.55	-61.78	≤ -23.55	PASS
		Low	Hop_2402	-4.16	-61.28	≤ -24.16	PASS
		High	Hop_2480	-4.05	-64.8	≤ -24.05	PASS
3DH5	Ant1	Low	2402	-6.20	-60.53	≤ -26.2	PASS
		High	2480	-5.76	-54.88	≤ -25.76	PASS
		Low	Hop_2402	-4.01	-55.89	≤ -24.01	PASS
		High	Hop_2480	-4.78	-56.09	≤ -24.78	PASS

Test Graphs

DH5_Ant1_Low_2402



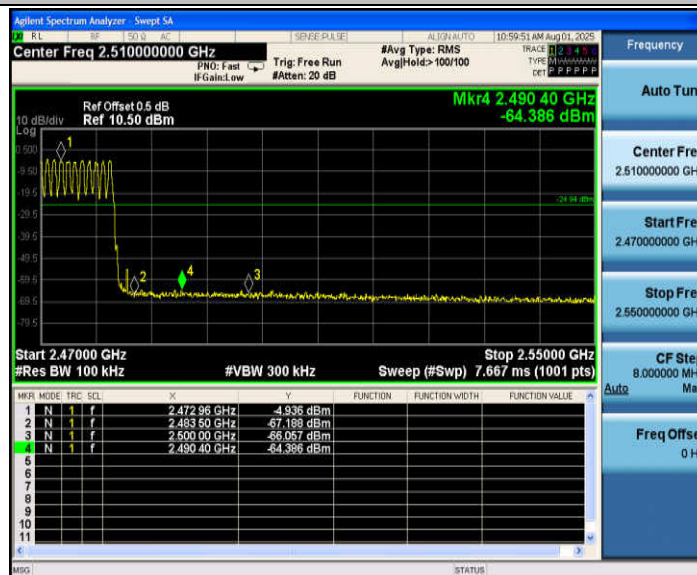
DH5_Ant1_High_2480



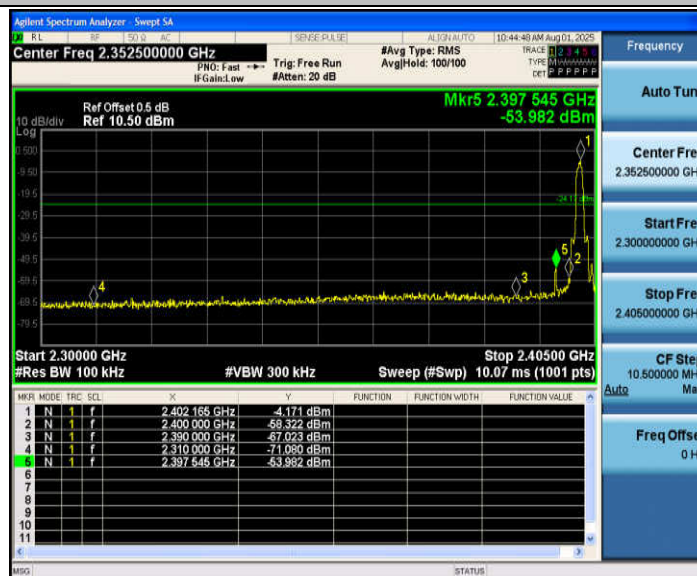
DH5_Ant1_Low_Hop_2402



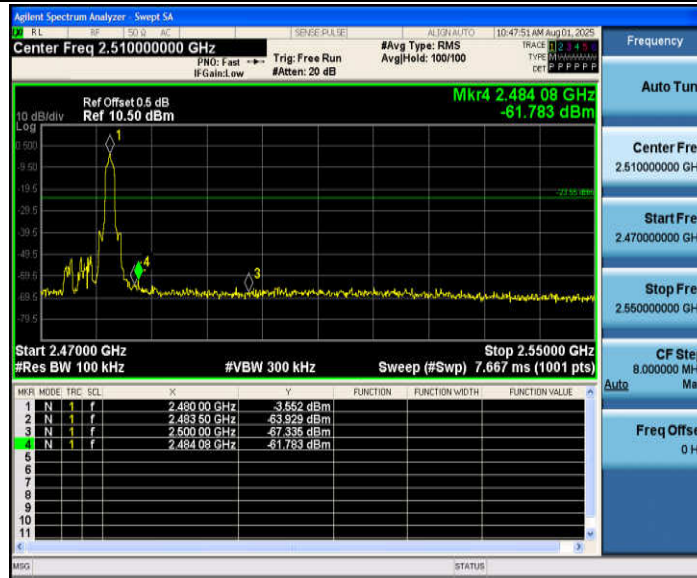
DH5_Ant1_High_Hop_2480



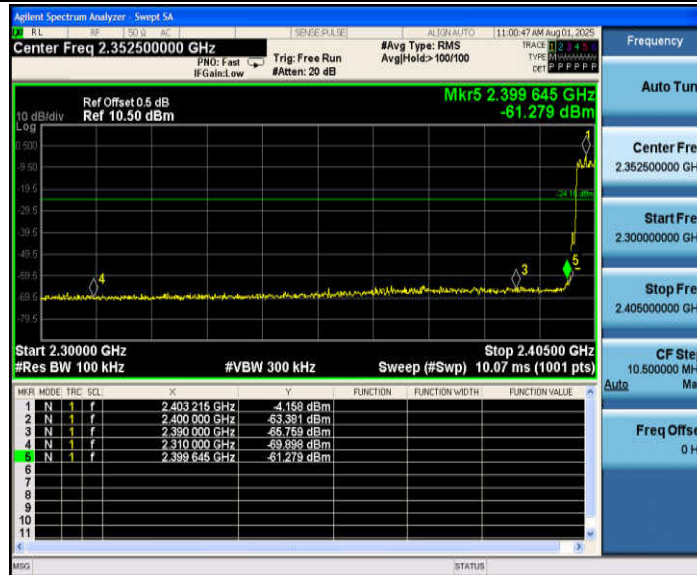
2DH5_Ant1_Low_2402



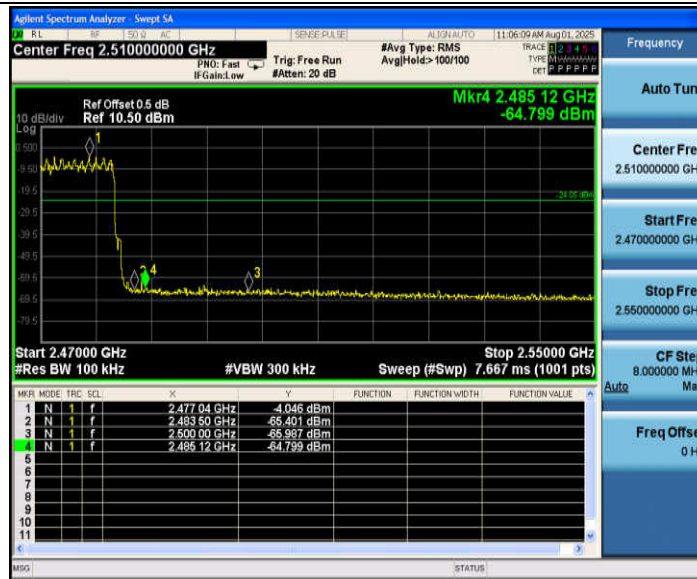
2DH5_Ant1_High_2480



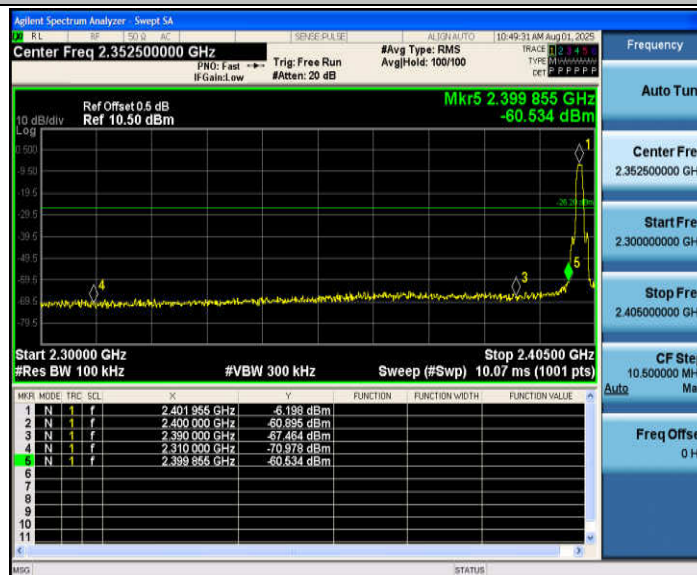
2DH5_Ant1_Low_Hop_2402



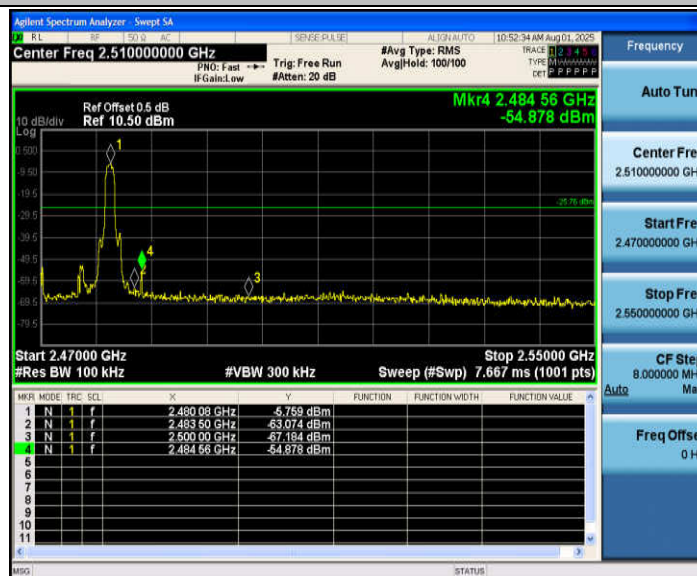
2DH5_Ant1_High_Hop_2480



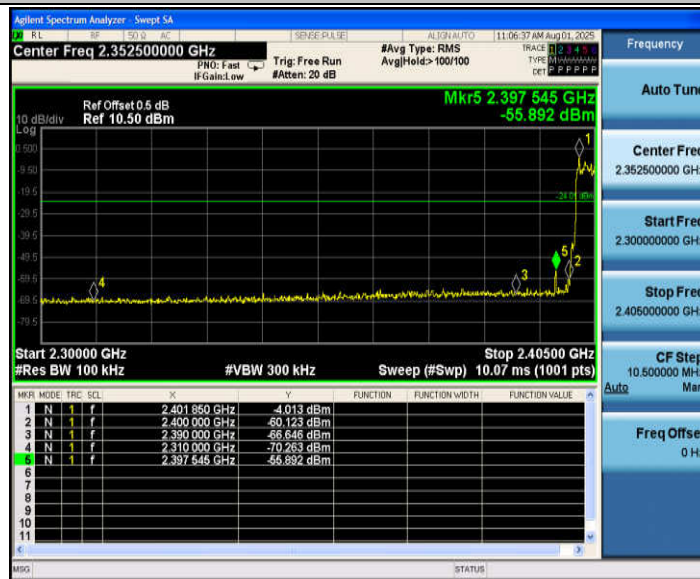
3DH5_Ant1_Low_2402



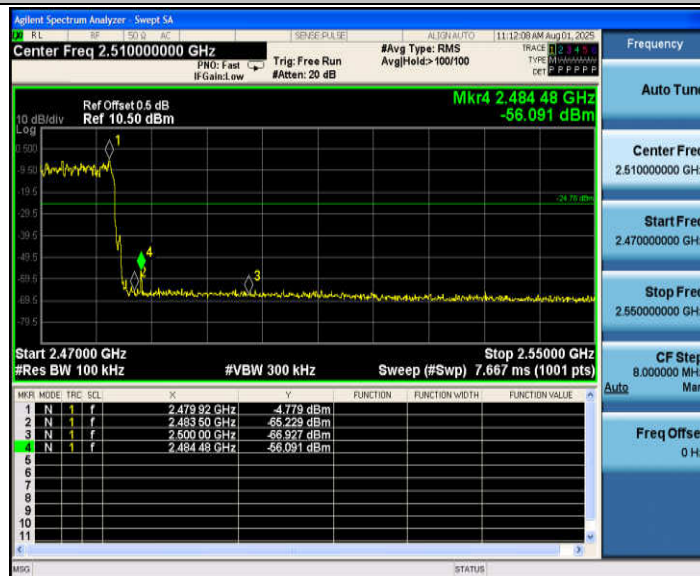
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

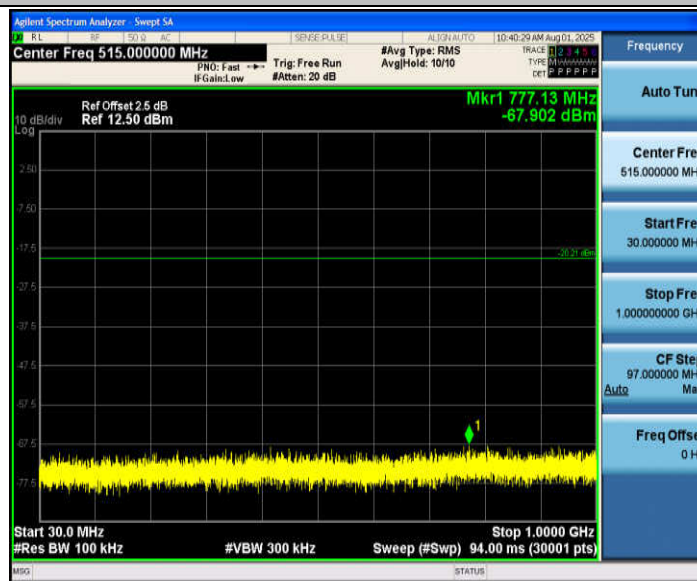
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-67.9	≤-20.21	PASS
			1000~26500	-0.21	-41.87	≤-20.21	PASS
		2441	Reference	-1.07	-1.07	---	PASS
			30~1000	-1.07	-67.48	≤-21.07	PASS
			1000~26500	-1.07	-43.56	≤-21.07	PASS
		2480	Reference	-0.99	-0.99	---	PASS
			30~1000	-0.99	-68.32	≤-20.99	PASS
			1000~26500	-0.99	-42.33	≤-20.99	PASS
2DH5	Ant1	2402	Reference	-6.10	-6.10	---	PASS
			30~1000	-6.10	-65.95	≤-26.1	PASS
			1000~26500	-6.10	-47.8	≤-26.1	PASS
		2441	Reference	-3.68	-3.68	---	PASS
			30~1000	-3.68	-67.56	≤-23.68	PASS
			1000~26500	-3.68	-47.96	≤-23.68	PASS
		2480	Reference	-4.95	-4.95	---	PASS
			30~1000	-4.95	-67.79	≤-24.95	PASS
			1000~26500	-4.95	-49.91	≤-24.95	PASS
3DH5	Ant1	2402	Reference	-5.00	-5.00	---	PASS
			30~1000	-5.00	-68.06	≤-25	PASS
			1000~26500	-5.00	-43.26	≤-25	PASS
		2441	Reference	-4.25	-4.25	---	PASS
			30~1000	-4.25	-67.32	≤-24.25	PASS
			1000~26500	-4.25	-48.86	≤-24.25	PASS
		2480	Reference	-6.19	-6.19	---	PASS
			30~1000	-6.19	-67.7	≤-26.19	PASS
			1000~26500	-6.19	-49.73	≤-26.19	PASS

Test Graphs

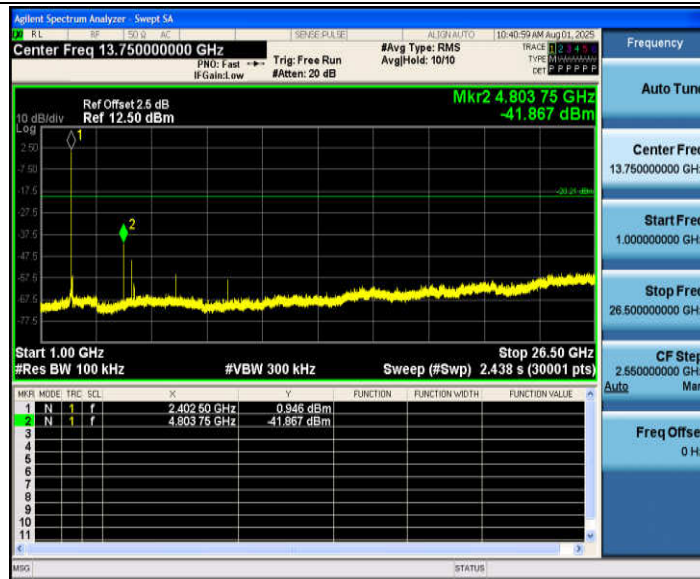
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



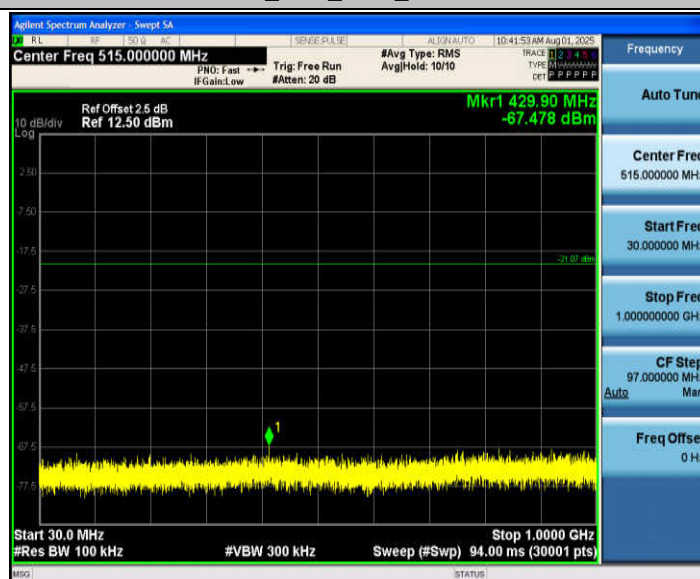
DH5_Ant1_2402_1000~26500



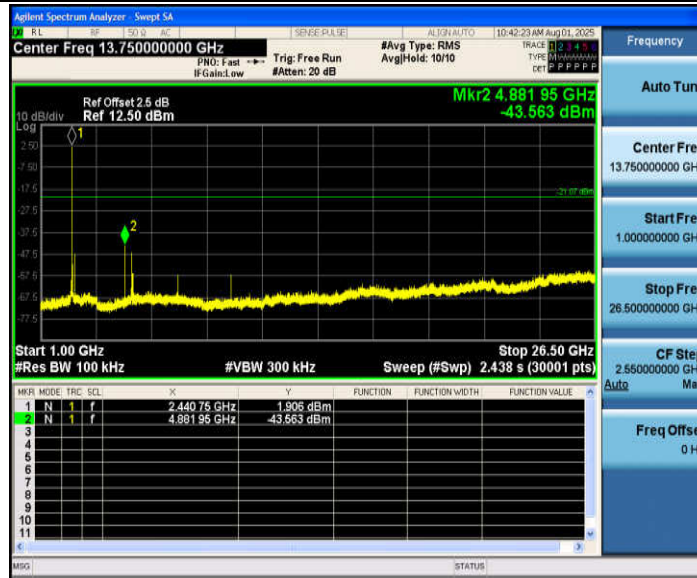
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



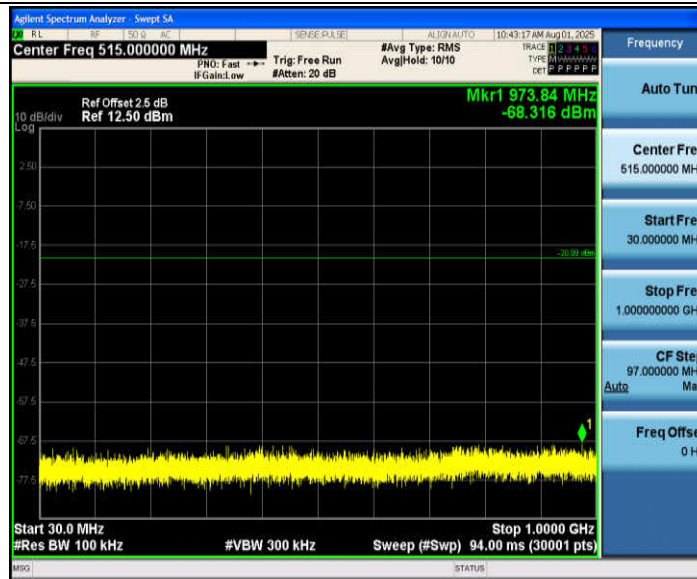
DH5_Ant1_2441_1000~26500



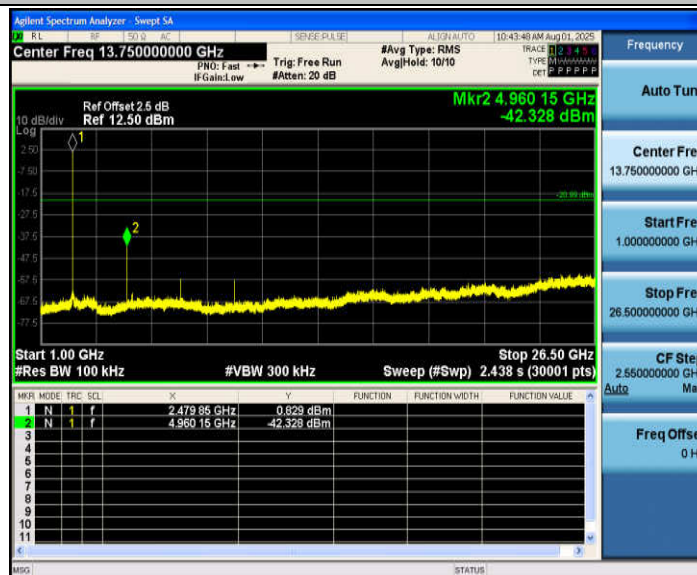
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



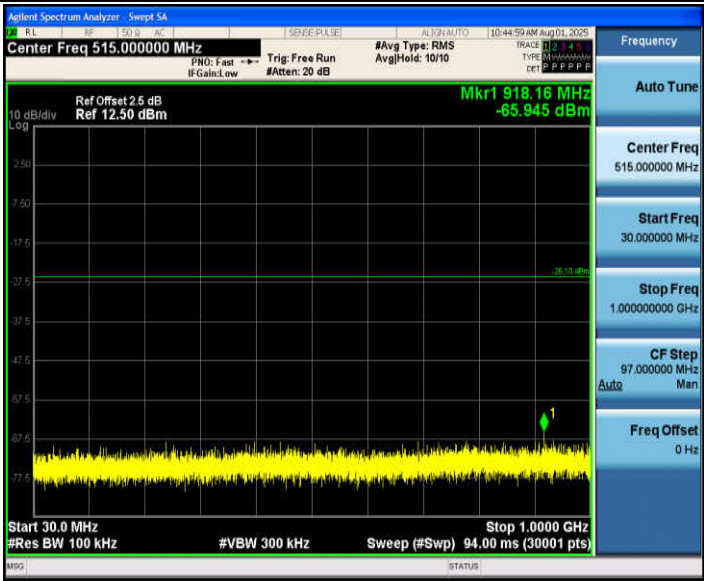
DH5_Ant1_2480_1000~26500



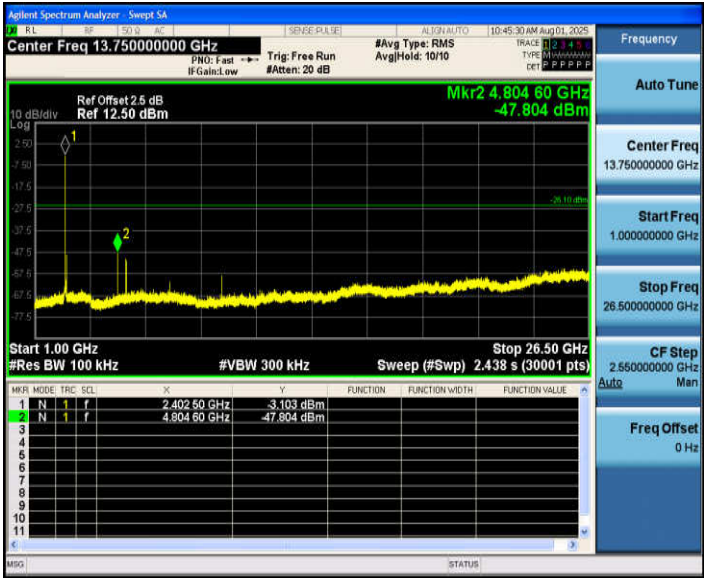
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



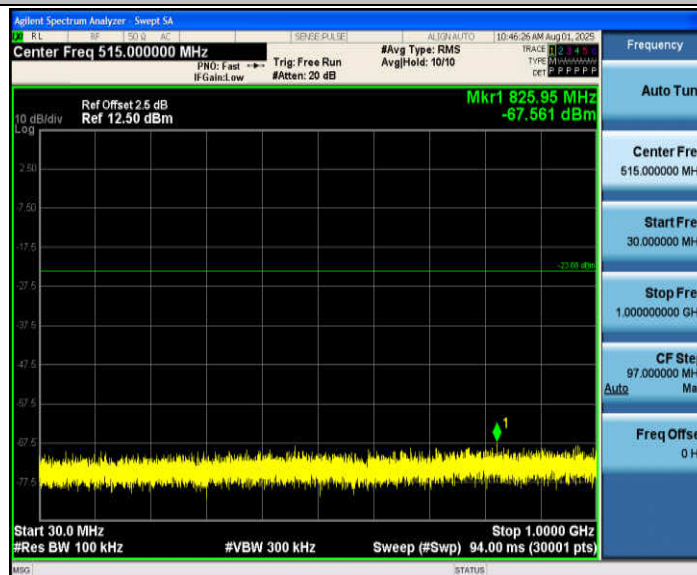
2DH5_Ant1_2402_1000~26500



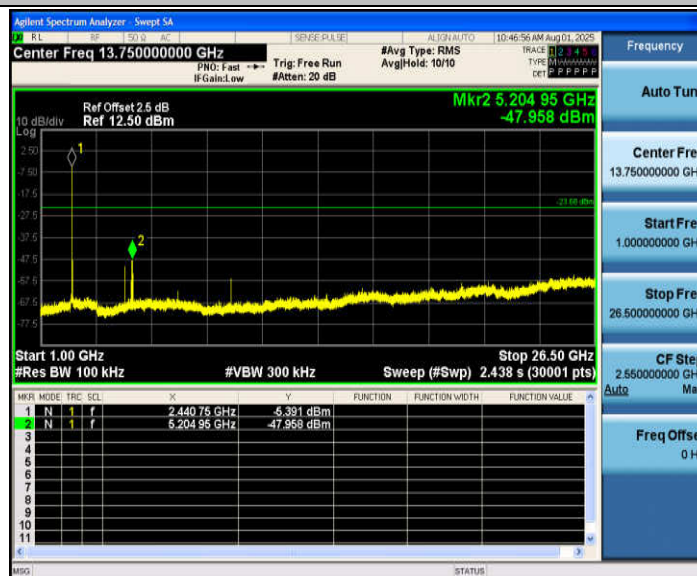
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



2DH5_Ant1_2441_1000~26500

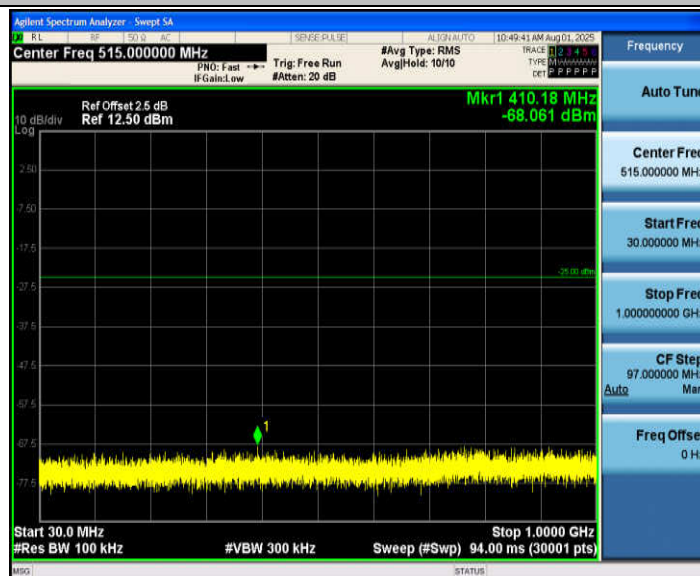




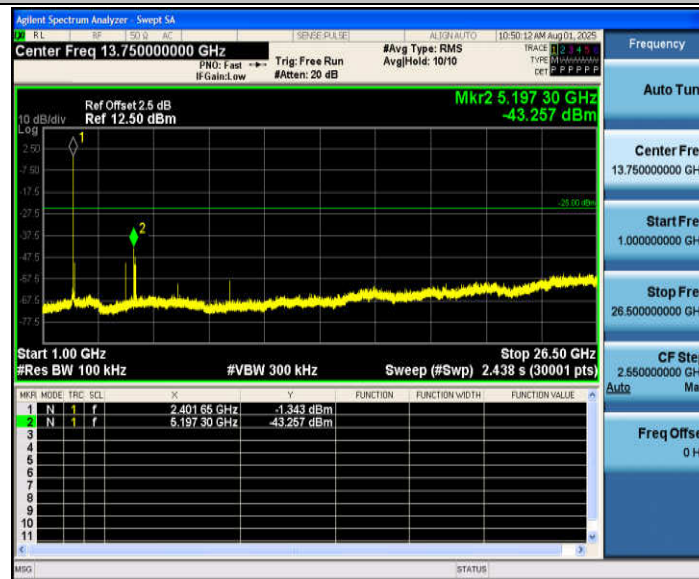
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



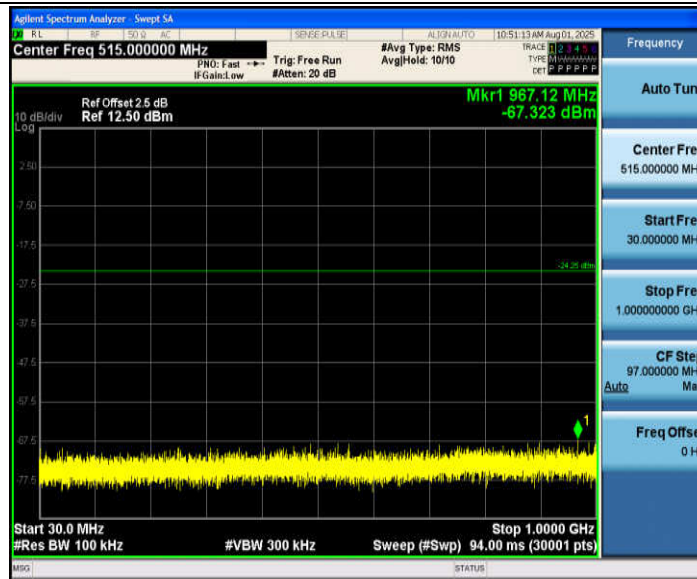
3DH5_Ant1_2402_1000~26500



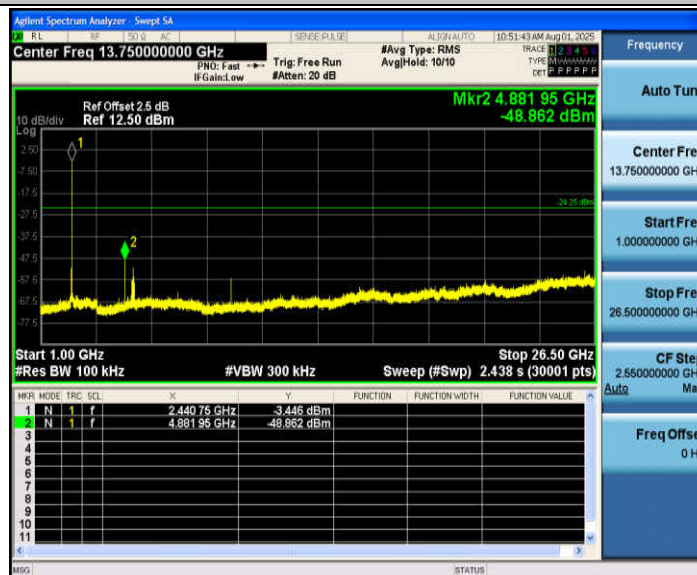
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



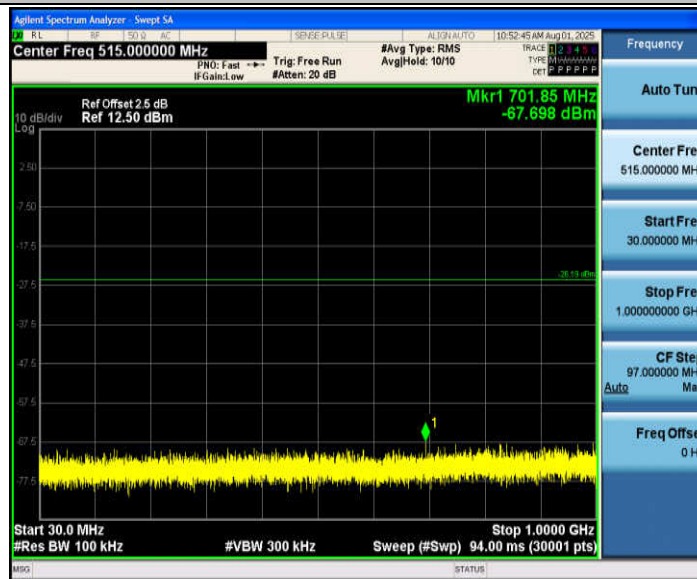
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
3DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---

Test Graphs

DH5_Ant1_2402



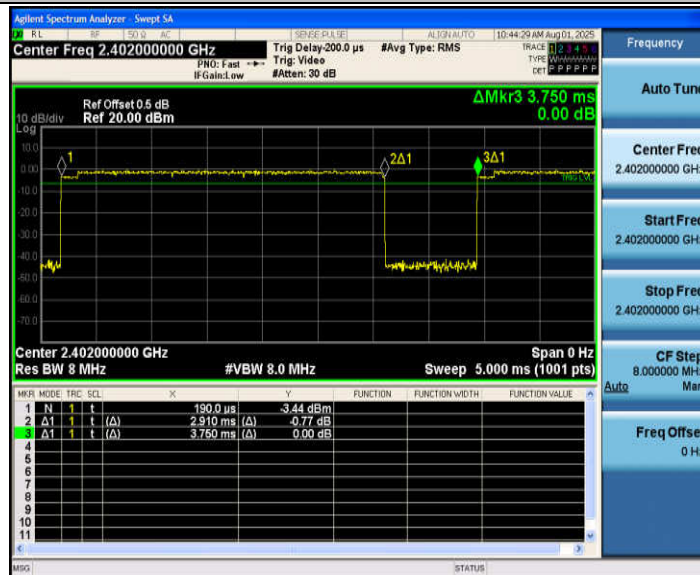
DH5_Ant1_2441



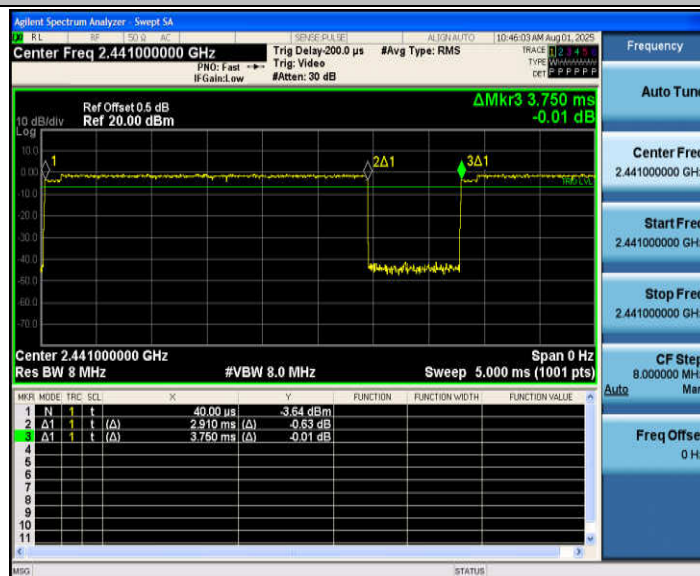
DH5_Ant1_2480



2DH5_Ant1_2402



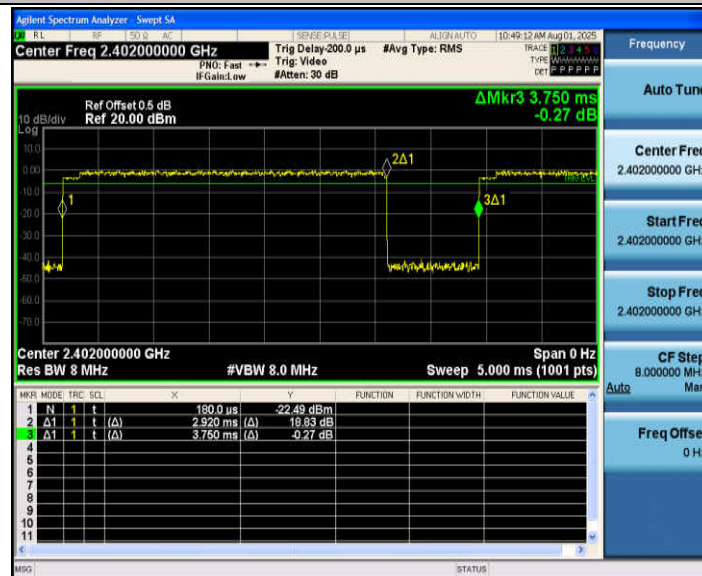
2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

