
FCC Appendix RF Test Data for BT

FCC ID : 2BHX3-TAA06

Company: : Shenzhen Trolink Technology Co., Ltd

EUT : Carplay Box

Model Number : TAA06

Report No. : CTA25033100701

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	2401.544	2402.501	---	---
		2441	0.936	2440.556	2441.492	---	---
		2480	0.930	2479.550	2480.480	---	---
2DH5	Ant1	2402	1.320	2401.349	2402.669	---	---
		2441	1.263	2440.400	2441.663	---	---
		2480	1.332	2479.343	2480.675	---	---
3DH5	Ant1	2402	1.326	2401.346	2402.672	---	---
		2441	1.278	2440.382	2441.660	---	---
		2480	1.329	2479.343	2480.672	---	---

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



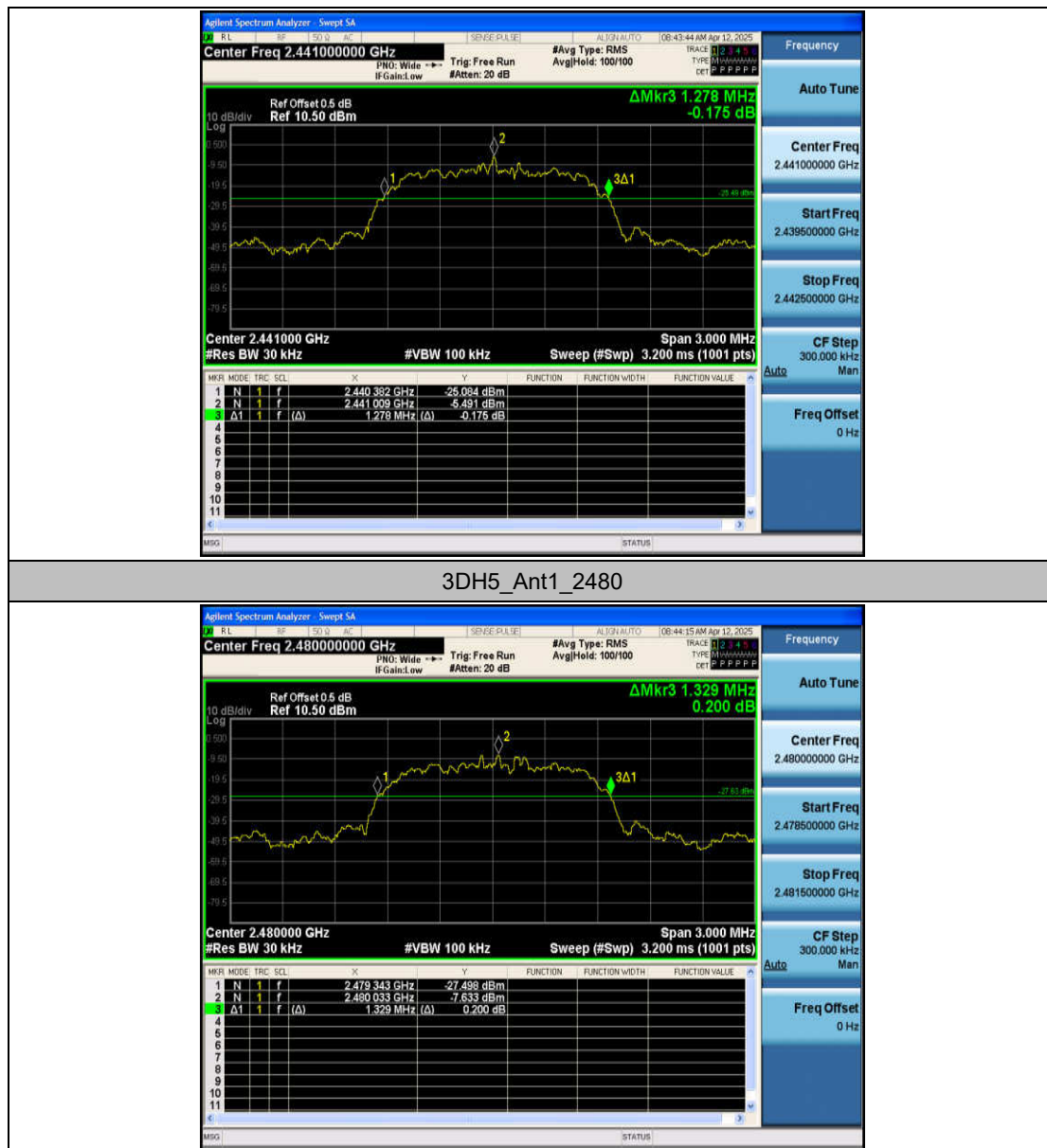
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87165	2401.5744	2402.4460	---	---
		2441	0.87172	2440.5737	2441.4454	---	---
		2480	0.87064	2479.5741	2480.4447	---	---
2DH5	Ant1	2402	1.1842	2401.4186	2402.6028	---	---
		2441	1.1898	2440.4156	2441.6054	---	---
		2480	1.1908	2479.4156	2480.6064	---	---
3DH5	Ant1	2402	1.1854	2401.4172	2402.6026	---	---
		2441	1.1893	2440.4149	2441.6042	---	---
		2480	1.1846	2479.4190	2480.6036	---	---

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	0.07	≤20.97	PASS
		2441	-0.42	≤20.97	PASS
		2480	-0.71	≤20.97	PASS
2DH5	Ant1	2402	-0.80	≤20.97	PASS
		2441	-1.28	≤20.97	PASS
		2480	-1.51	≤20.97	PASS
3DH5	Ant1	2402	-0.82	≤20.97	PASS
		2441	-1.23	≤20.97	PASS
		2480	-1.49	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥ 0.957	PASS
2DH5	Ant1	Hop	1.176	≥ 0.888	PASS
3DH5	Ant1	Hop	1.044	≥ 0.886	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



Appendix E: Time of occupancy

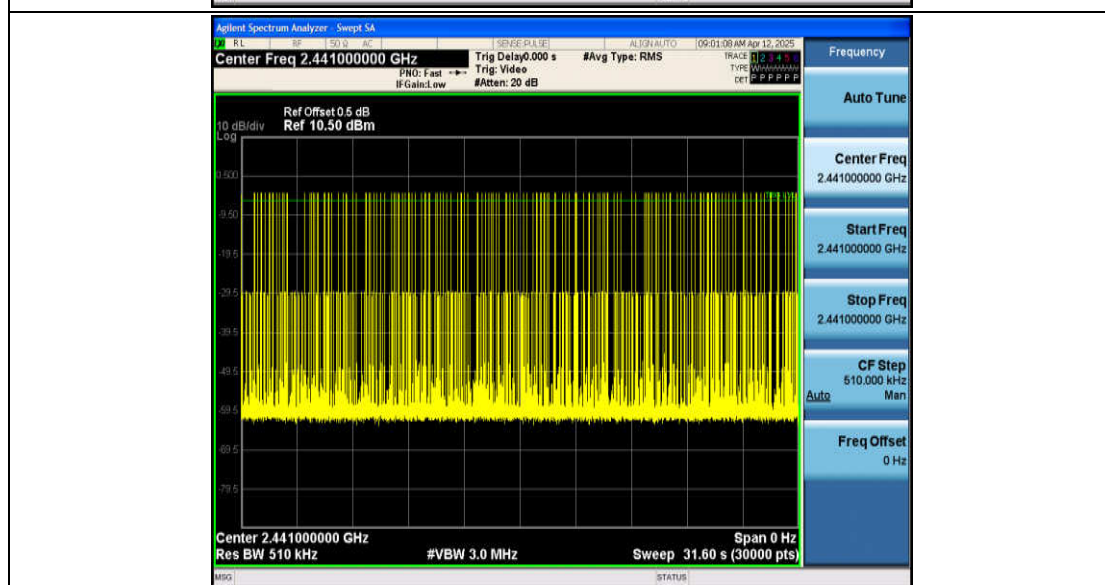
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.380	316	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.650	164	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.900	112	0.325	≤0.4	PASS
2DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.640	155	0.254	≤0.4	PASS
2DH5	Ant1	Hop	2.900	97	0.281	≤0.4	PASS
3DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	157	0.257	≤0.4	PASS
3DH5	Ant1	Hop	2.900	107	0.31	≤0.4	PASS

Figure 10 shows two screenshots of the Agilent Spectrum Analyzer interface, illustrating the results of the frequency hopping test.

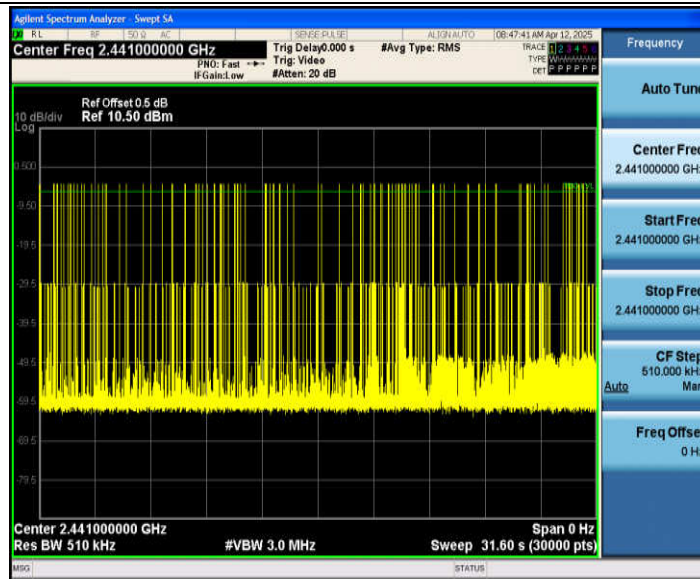
The top screenshot displays the spectrum analyzer results for the DH1_Ant1_Hop test. The center frequency is 2.441000000 GHz, and the span is 0 Hz. The resolution bandwidth (RBW) is 3.0 MHz, and the video bandwidth (VBW) is 3.0 MHz. The sweep time is 10.00 ms (1001 pts). The signal is identified as a 2.41 GHz signal, and the measured power is -0.18 dBm. The spectrum shows a single, sharp peak at the center frequency, indicating a narrowband signal.

The bottom screenshot displays the spectrum analyzer results for the DH3_Ant1_Hop test. The center frequency is 2.441000000 GHz, and the span is 0 Hz. The resolution bandwidth (RBW) is 510 kHz, and the video bandwidth (VBW) is 3.0 MHz. The sweep time is 31.60 s (30000 pts). The signal is identified as a 2.41 GHz signal, and the measured power is -0.18 dBm. The spectrum shows a dense, noisy signal across the entire span, indicating a wideband signal.

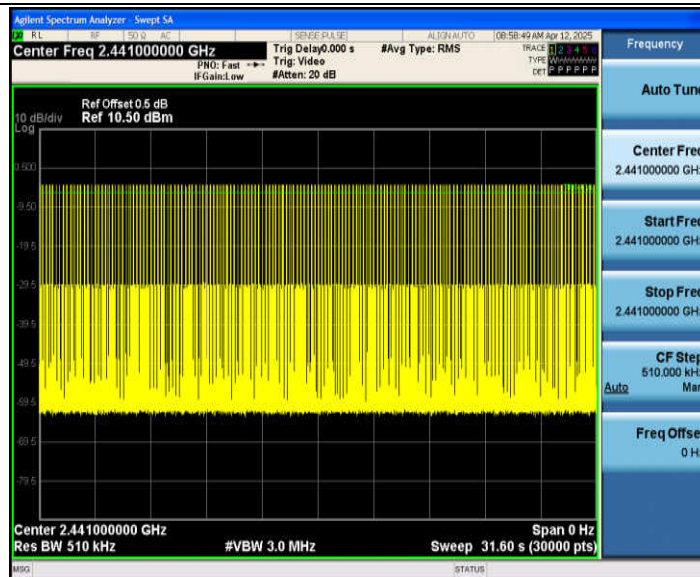
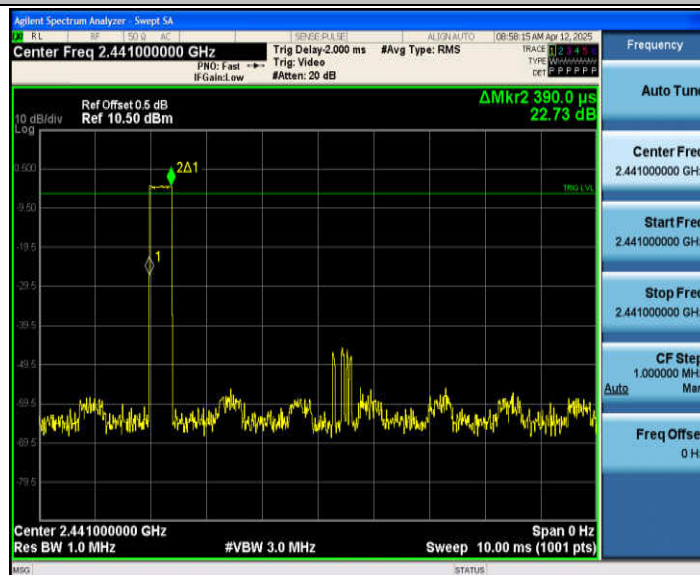


DH5_Ant1_Hop

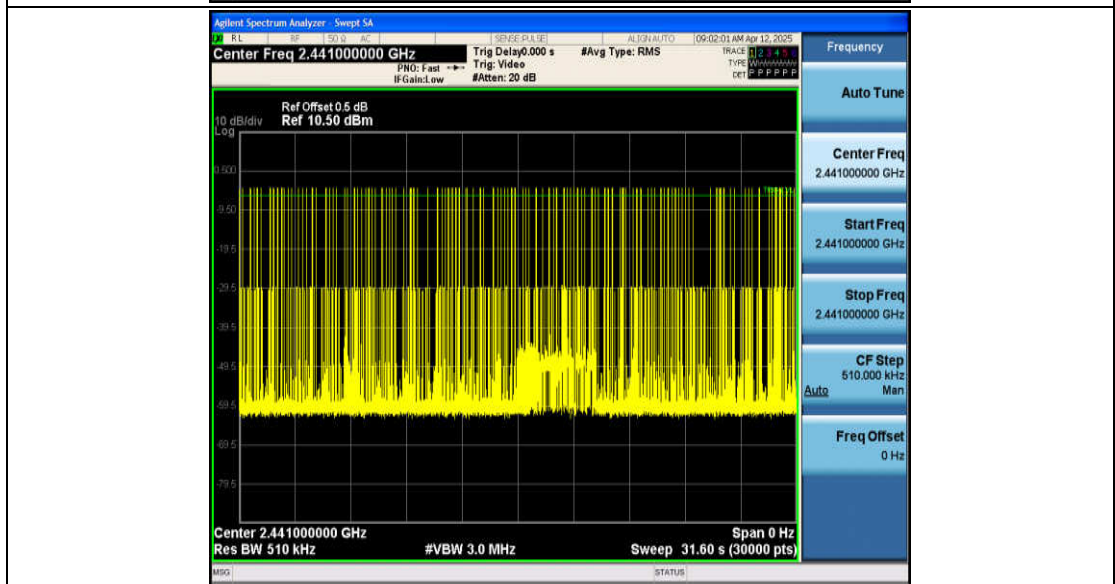
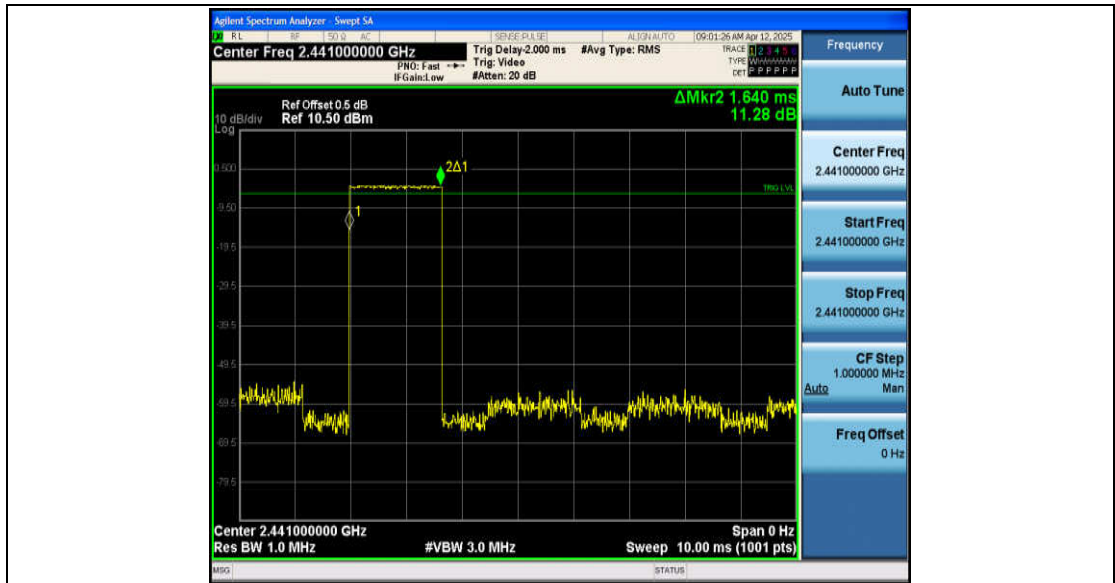




2DH1_Ant1_Hop

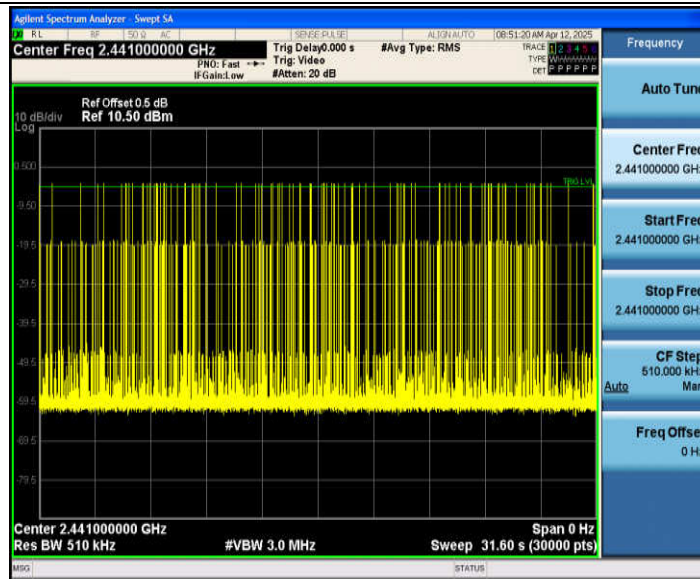


2DH3_Ant1_Hop

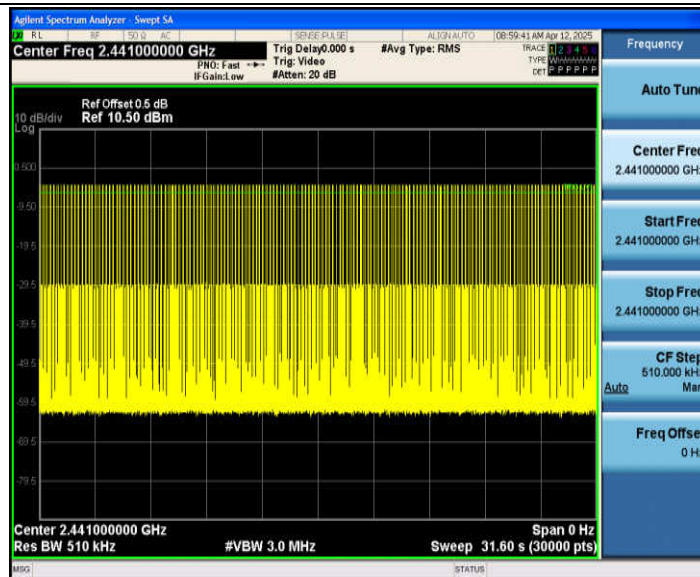
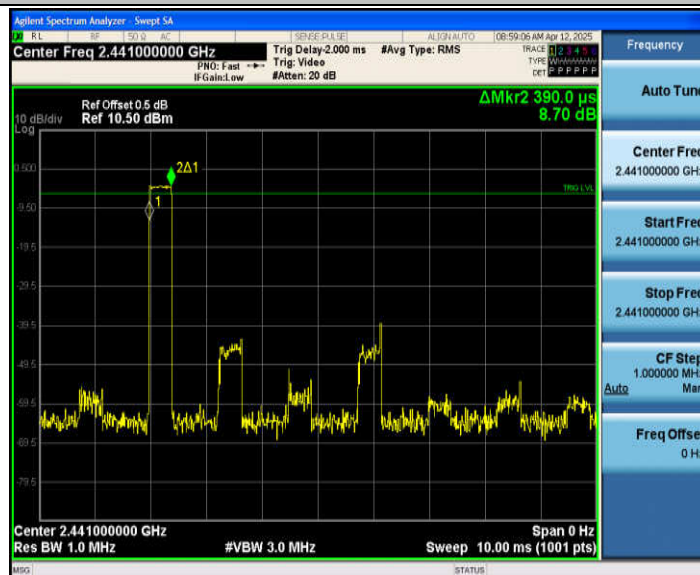


2DH5_Ant1_Hop

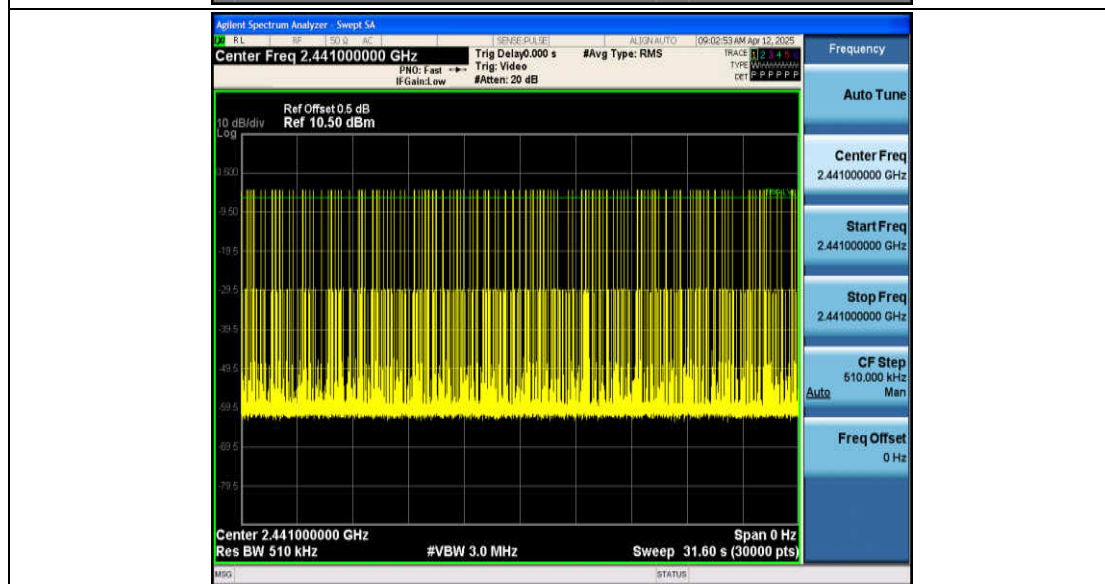




3DH1_Ant1_Hop

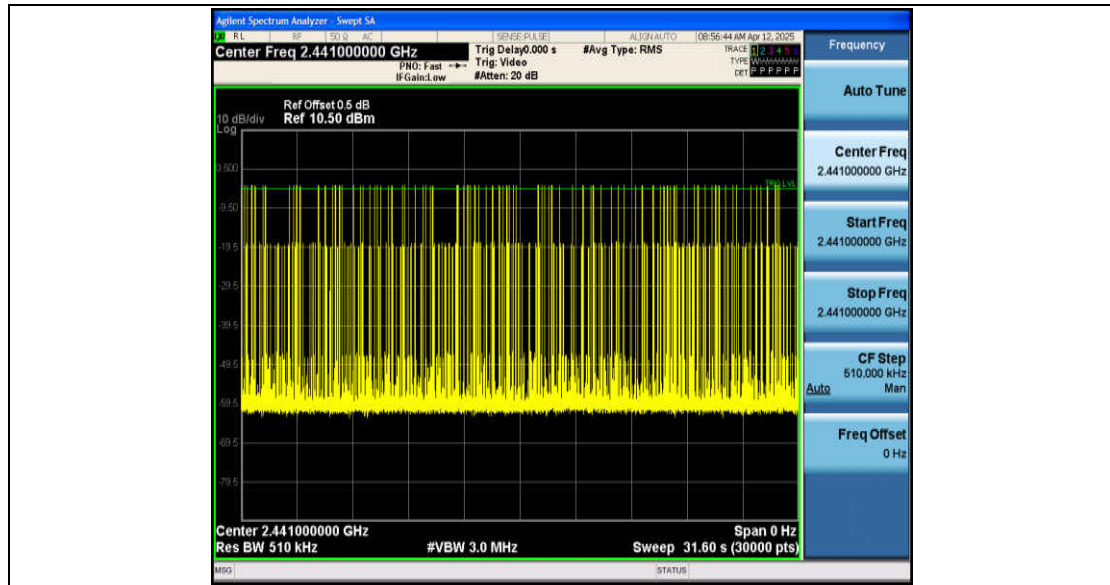


3DH3_Ant1_Hop



3DH5_Ant1_Hop





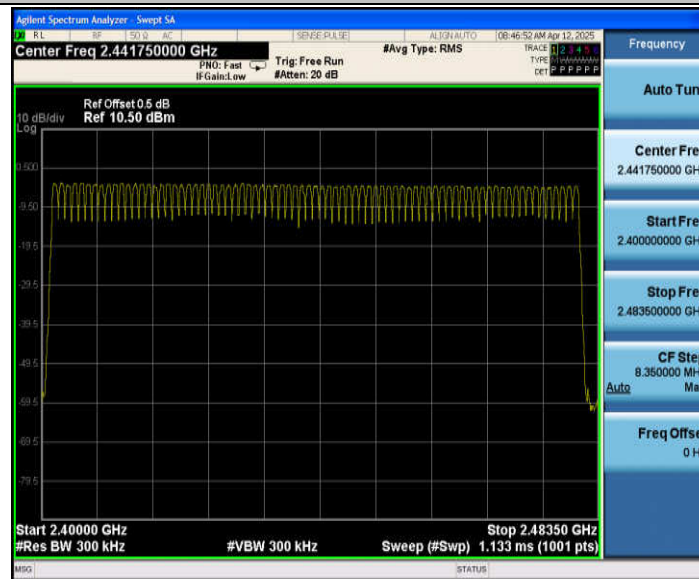
Appendix F: Number of hopping channels

Test Result

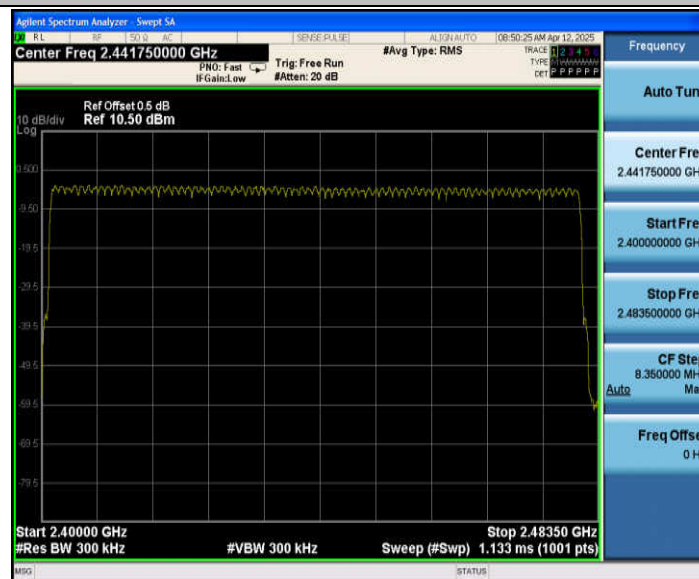
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

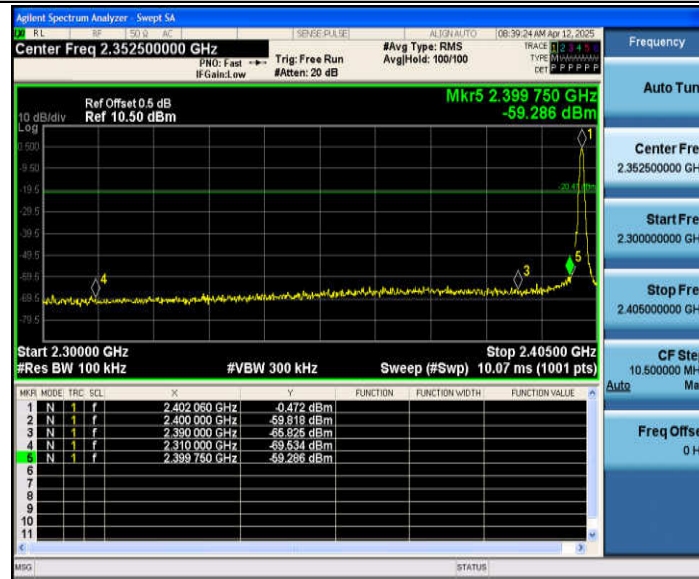
Appendix G: Band edge measurements

Test Result

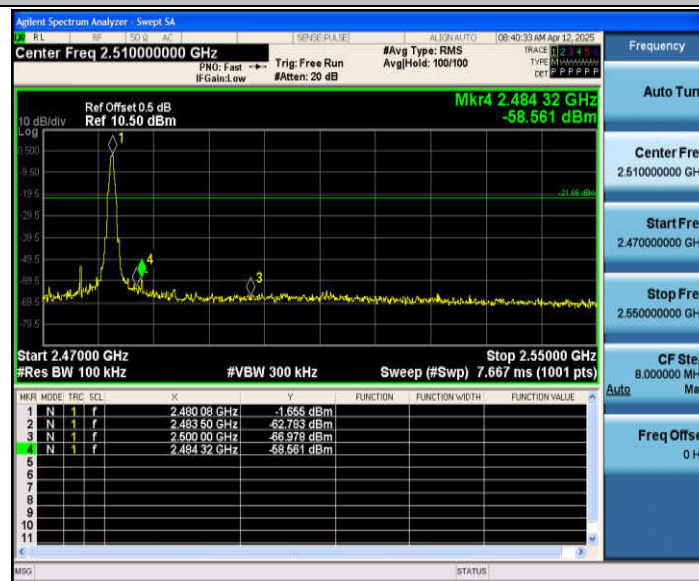
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.47	-59.29	≤-20.47	PASS
		High	2480	-1.66	-58.56	≤-21.66	PASS
		Low	Hop_2402	-4.24	-56.69	≤-24.24	PASS
		High	Hop_2480	-4.59	-64.03	≤-24.59	PASS
2DH5	Ant1	Low	2402	-4.05	-59.39	≤-24.05	PASS
		High	2480	-5.36	-63.65	≤-25.36	PASS
		Low	Hop_2402	-4.58	-63.22	≤-24.58	PASS
		High	Hop_2480	-6.37	-63.98	≤-26.37	PASS
3DH5	Ant1	Low	2402	-5.69	-59.29	≤-25.69	PASS
		High	2480	-5.01	-64.03	≤-25.01	PASS
		Low	Hop_2402	-6.41	-60.9	≤-26.41	PASS
		High	Hop_2480	-6.80	-64.84	≤-26.8	PASS

Test Graphs

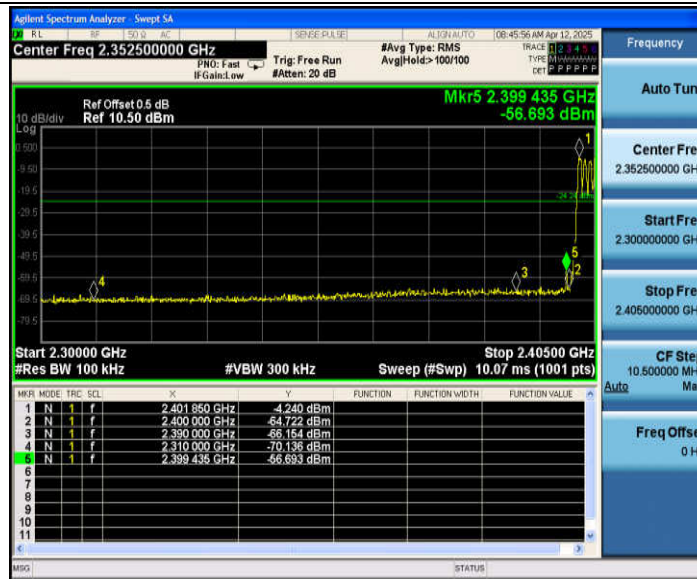
DH5_Ant1_Low_2402



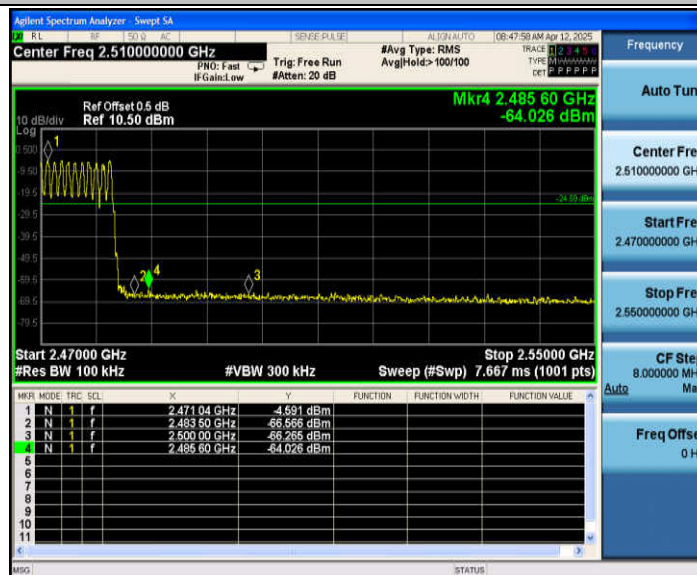
DH5_Ant1_High_2480



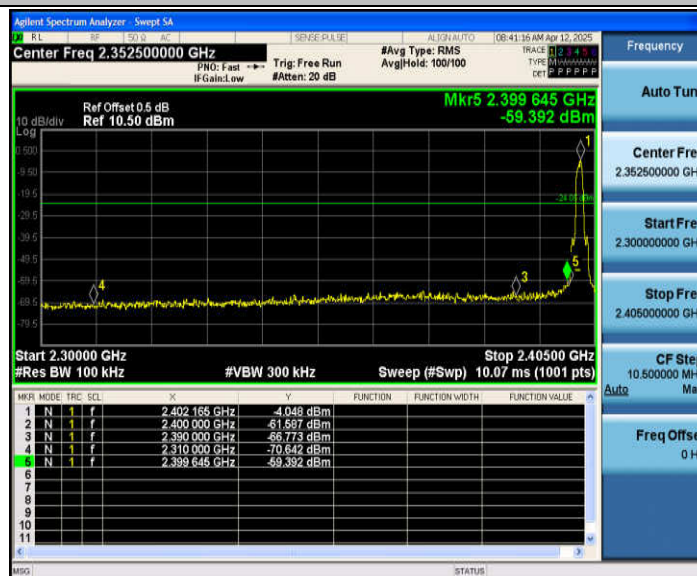
DH5_Ant1_Low_Hop_2402



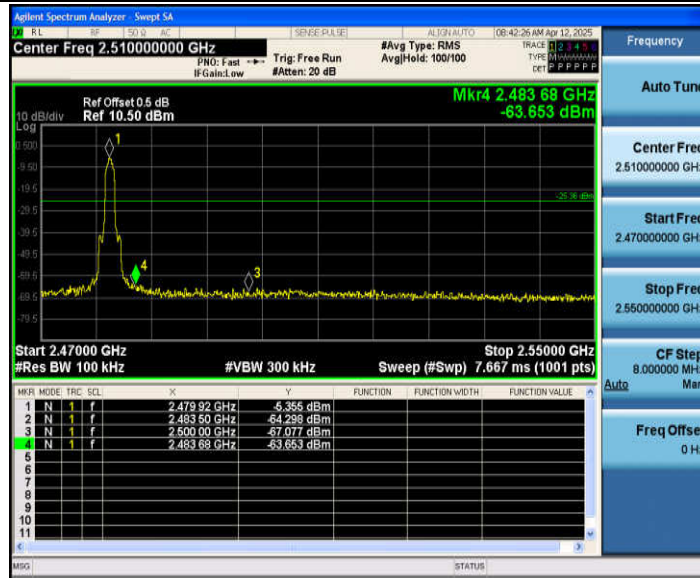
DH5_Ant1_High_Hop_2480



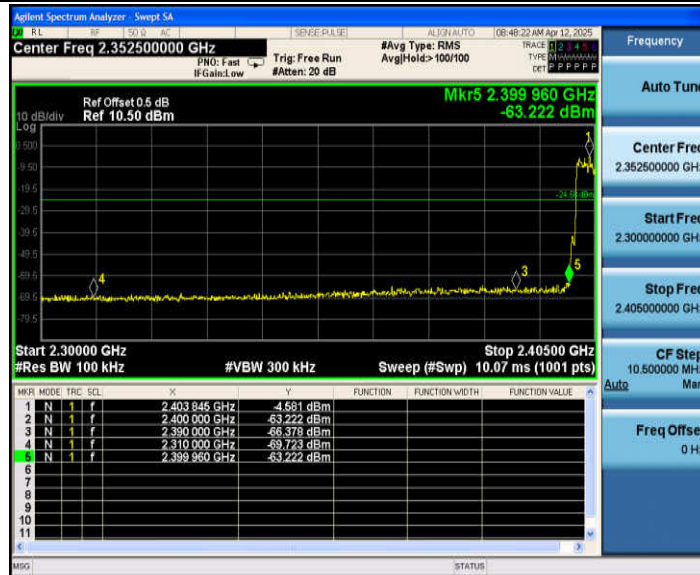
2DH5_Ant1_Low_2402



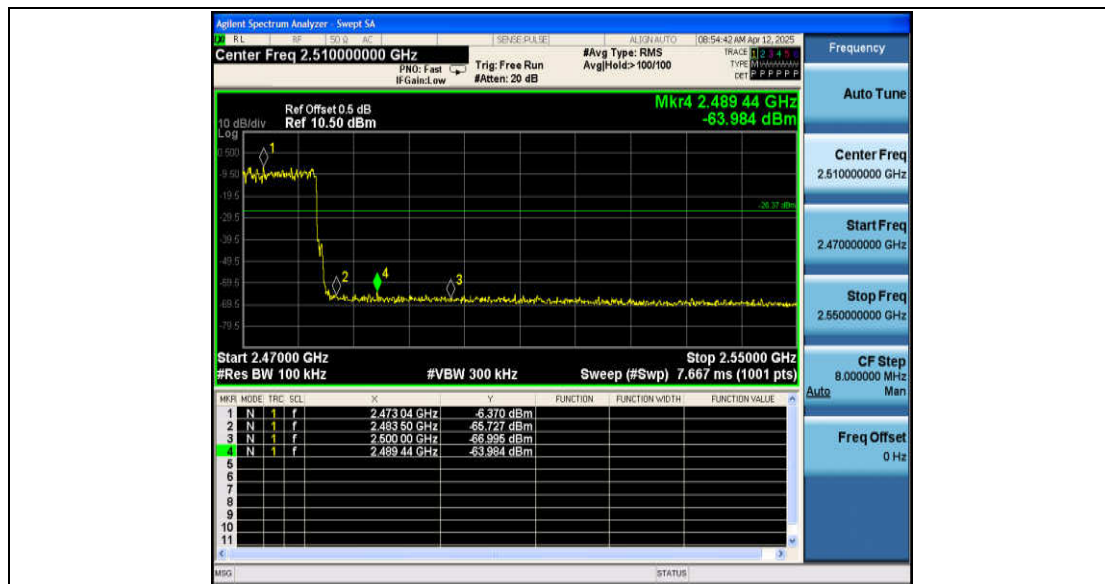
2DH5_Ant1_High_2480



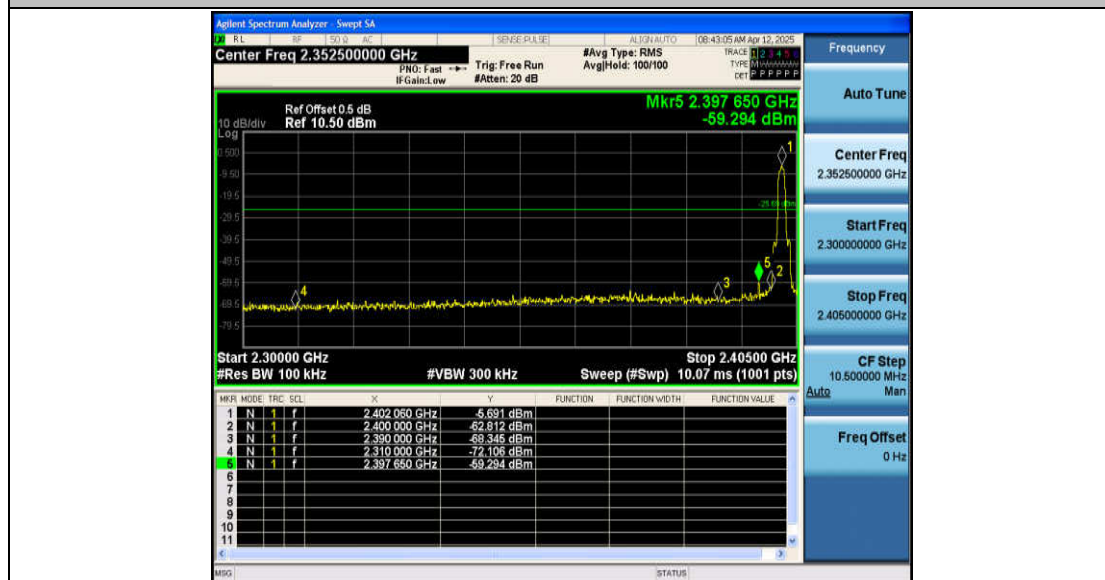
2DH5_Ant1_Low_Hop_2402



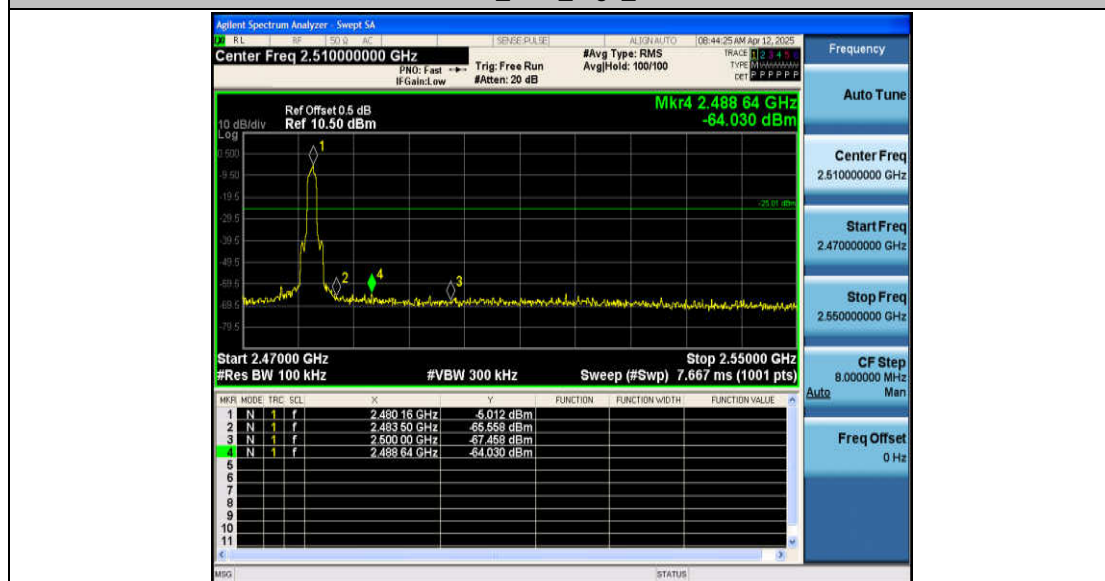
2DH5_Ant1_High_Hop_2480



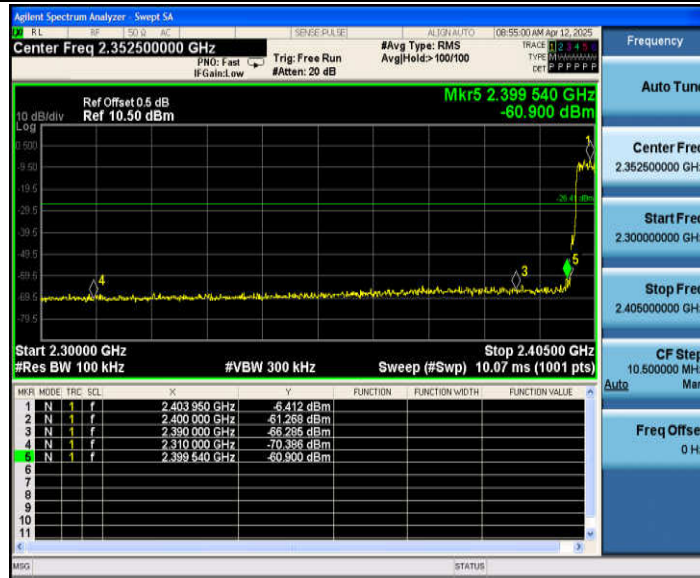
3DH5_Ant1_Low_2402



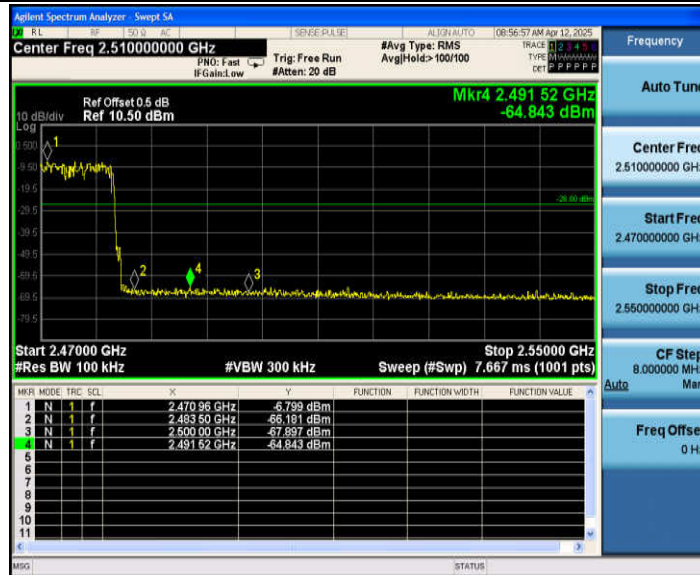
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



Appendix H: Conducted Spurious Emission

Test Result

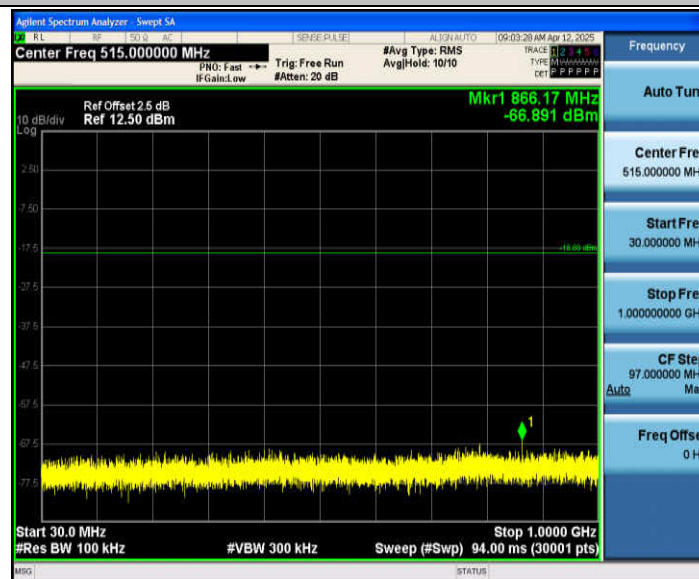
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.11	1.11	---	PASS
			30~1000	1.11	-66.89	≤-18.89	PASS
			1000~26500	1.11	-42.79	≤-18.89	PASS
		2441	Reference	0.32	0.32	---	PASS
			30~1000	0.32	-67.39	≤-19.68	PASS
			1000~26500	0.32	-45.1	≤-19.68	PASS
		2480	Reference	0.26	0.26	---	PASS
			30~1000	0.26	-66.83	≤-19.74	PASS
			1000~26500	0.26	-42.37	≤-19.74	PASS
2DH5	Ant1	2402	Reference	-2.81	-2.81	---	PASS
			30~1000	-2.81	-66.95	≤-22.81	PASS
			1000~26500	-2.81	-50.2	≤-22.81	PASS
		2441	Reference	-2.18	-2.18	---	PASS
			30~1000	-2.18	-67.27	≤-22.18	PASS
			1000~26500	-2.18	-49.37	≤-22.18	PASS
		2480	Reference	-4.91	-4.91	---	PASS
			30~1000	-4.91	-67.37	≤-24.91	PASS
			1000~26500	-4.91	-50.49	≤-24.91	PASS
3DH5	Ant1	2402	Reference	-1.68	-1.68	---	PASS
			30~1000	-1.68	-68.02	≤-21.68	PASS
			1000~26500	-1.68	-49.13	≤-21.68	PASS
		2441	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-67.99	≤-23.54	PASS
			1000~26500	-3.54	-49.52	≤-23.54	PASS
		2480	Reference	-2.30	-2.30	---	PASS
			30~1000	-2.30	-67.49	≤-22.3	PASS
			1000~26500	-2.30	-46.67	≤-22.3	PASS

Test Graphs

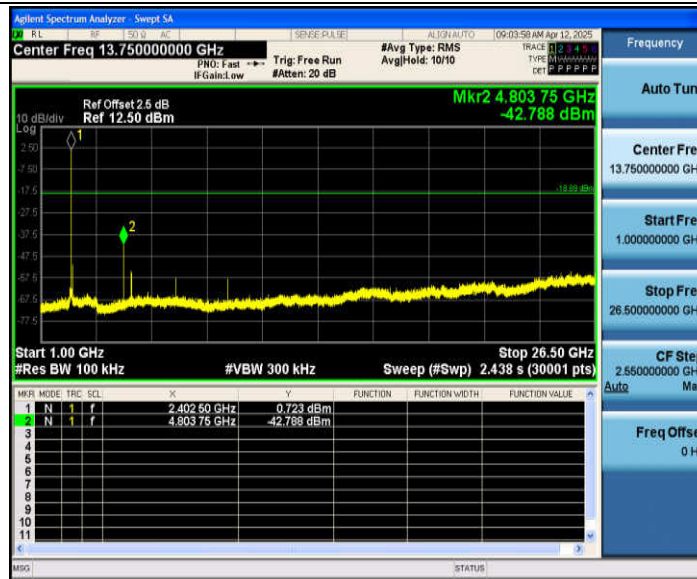
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



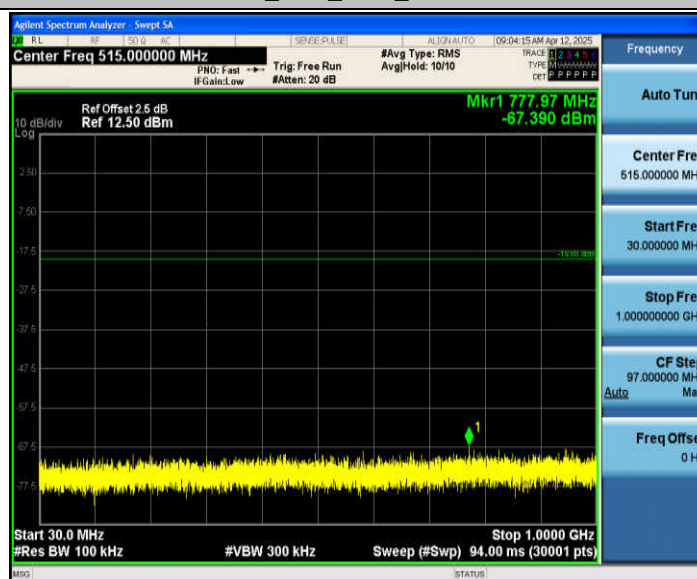
DH5_Ant1_2402_1000~26500



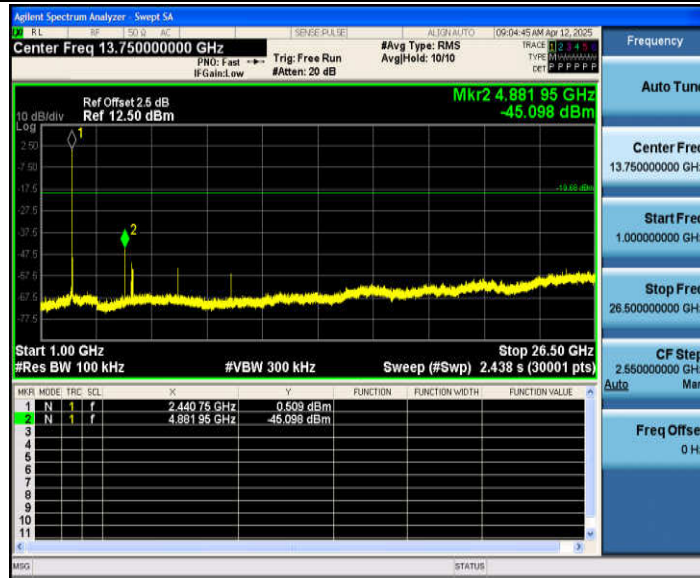
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



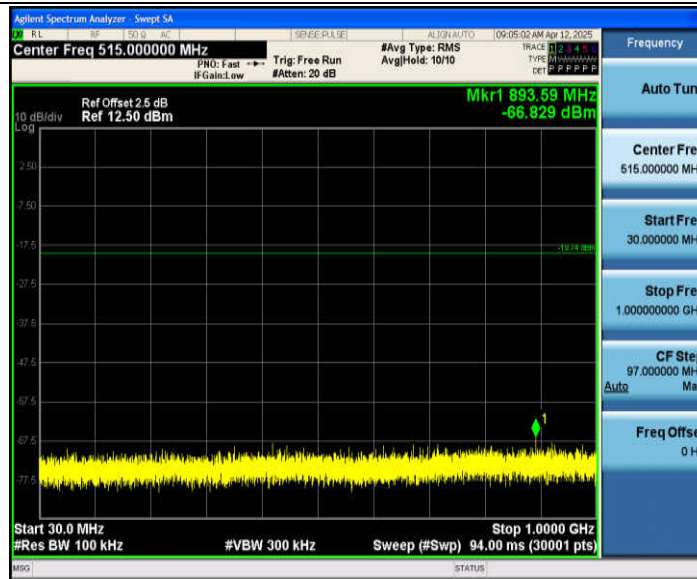
DH5_Ant1_2441_1000~26500



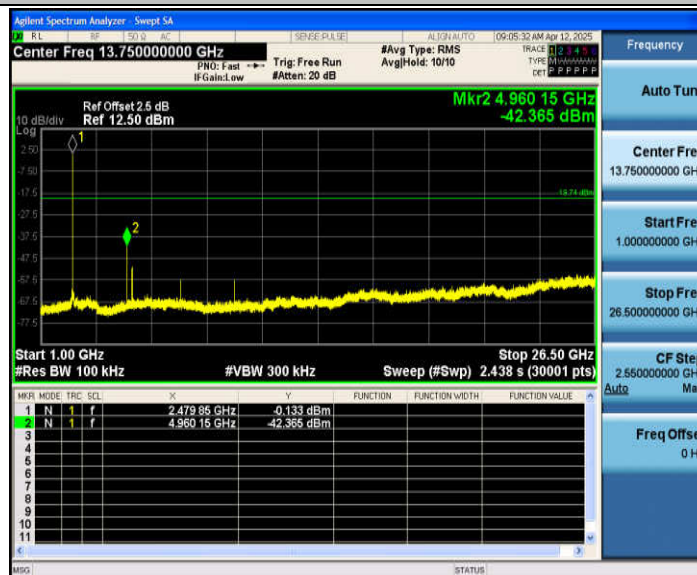
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



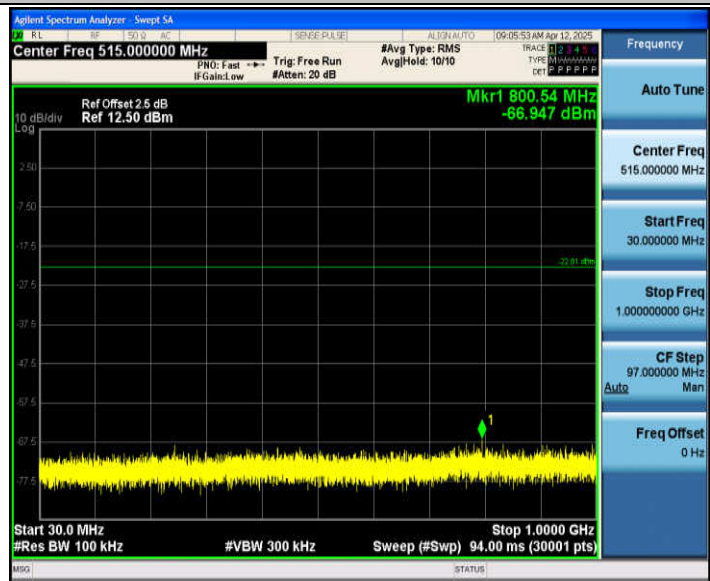
DH5_Ant1_2480_1000~26500



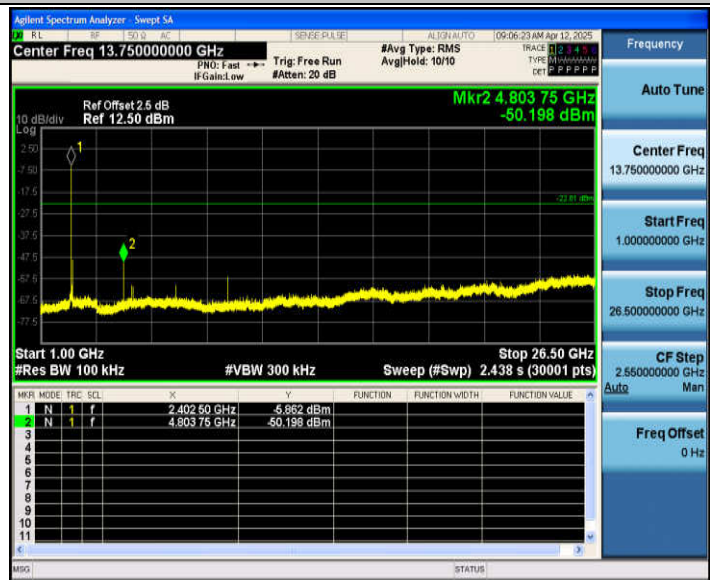
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



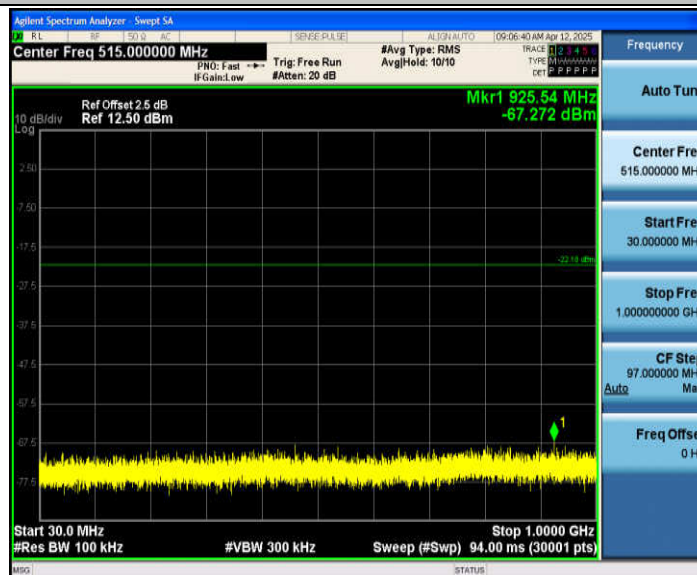
2DH5_Ant1_2402_1000~26500



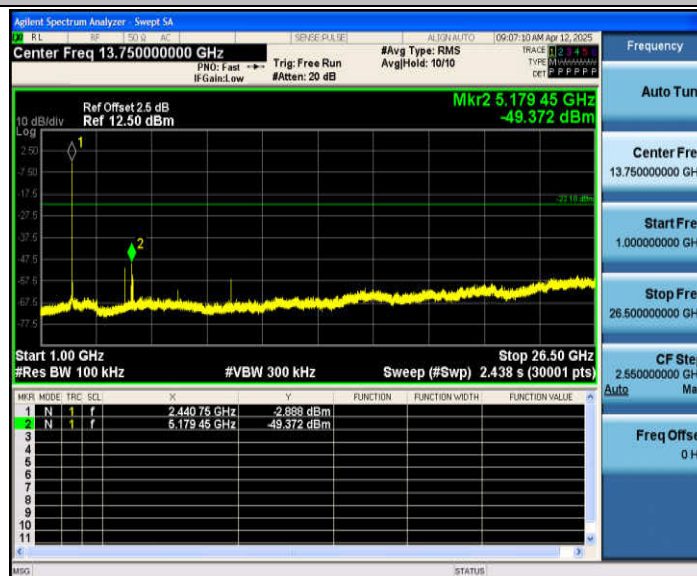
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



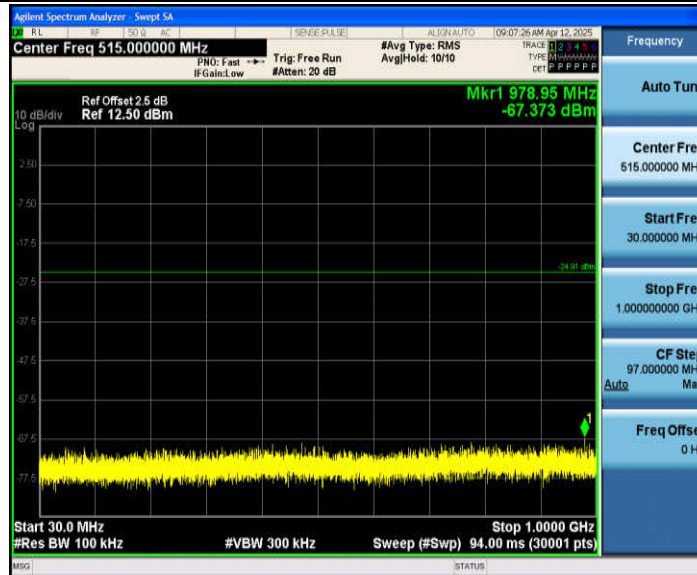
2DH5_Ant1_2441_1000~26500



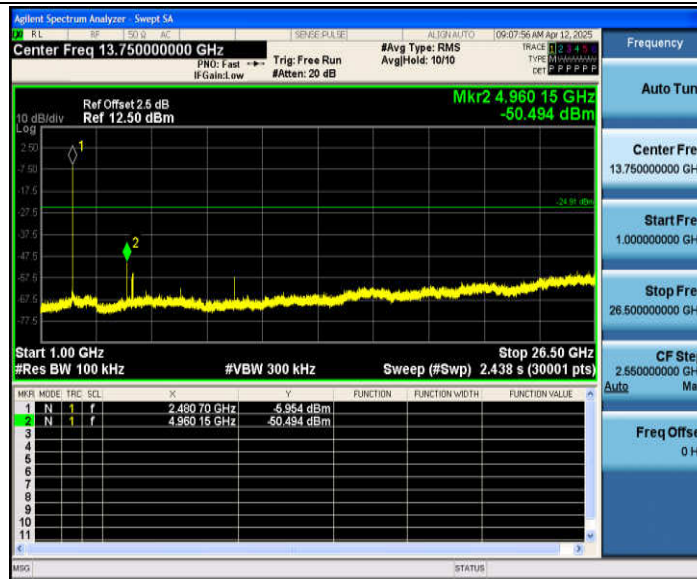
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



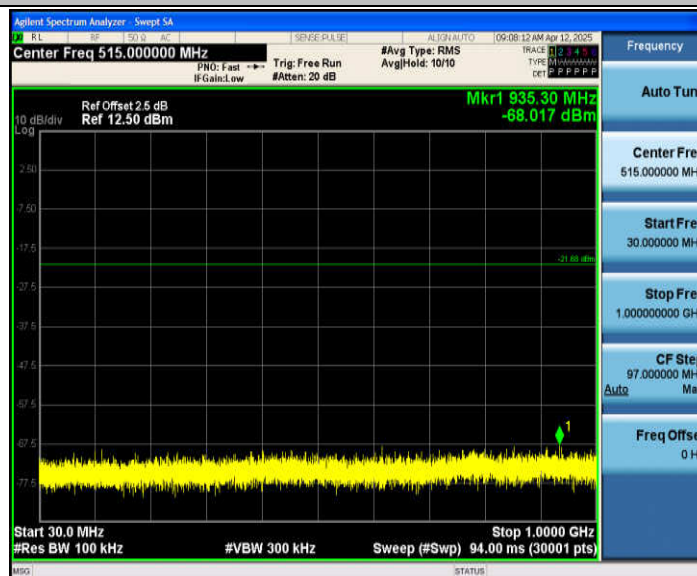
2DH5_Ant1_2480_1000~26500



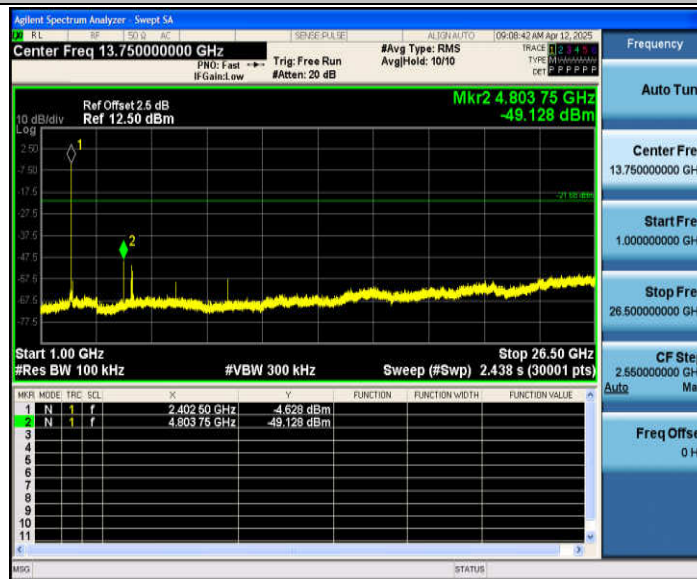
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



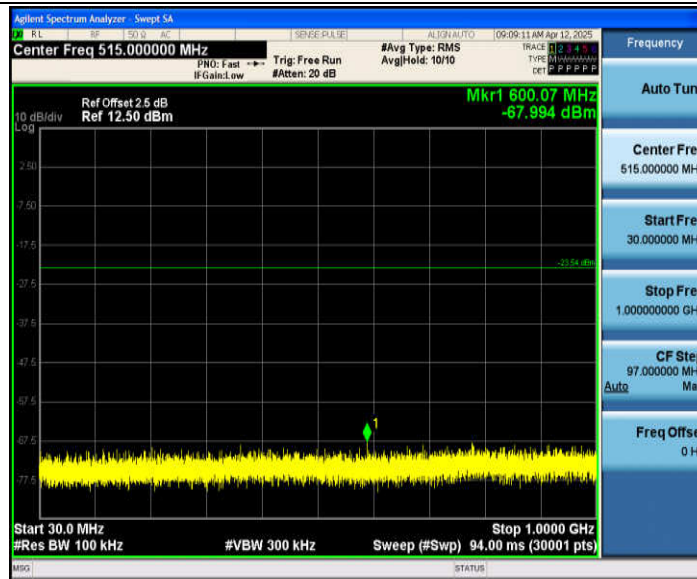
3DH5_Ant1_2402_1000~26500



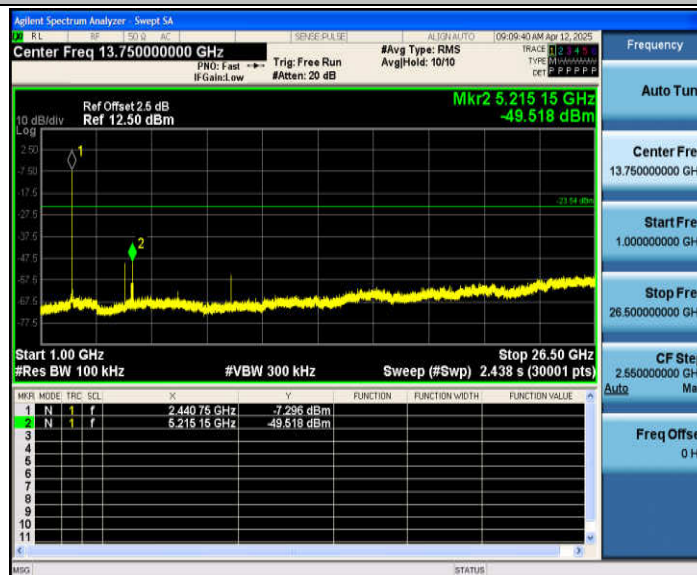
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



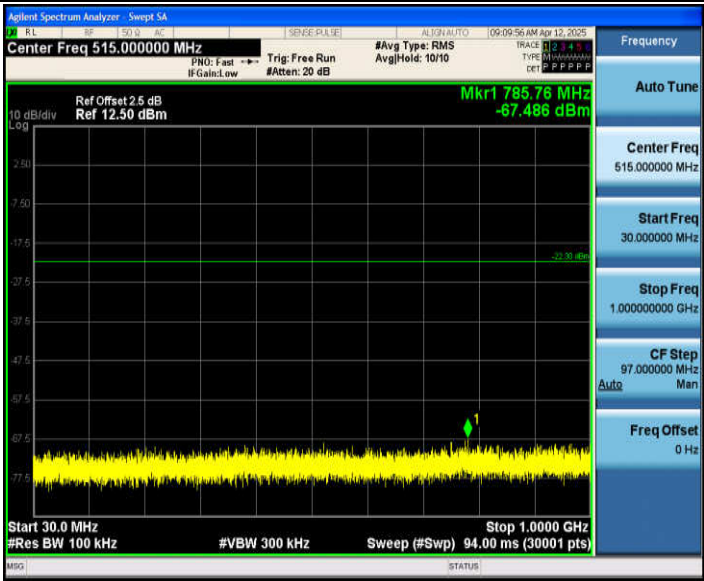
3DH5_Ant1_2441_1000~26500



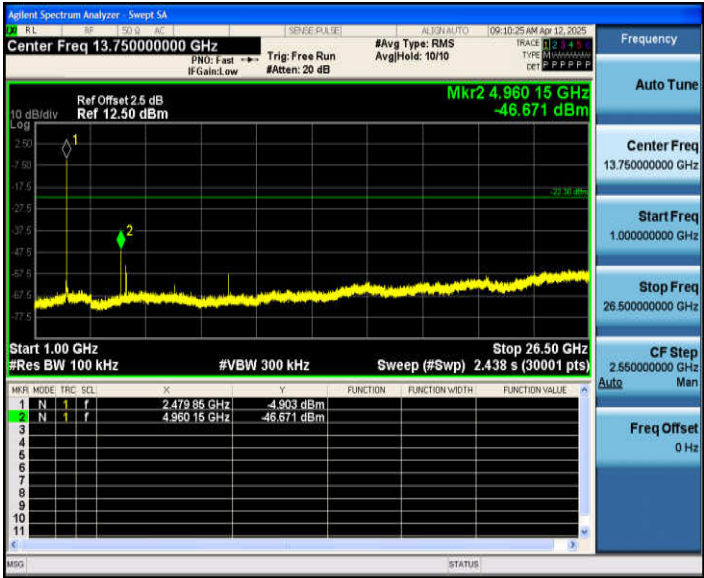
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500

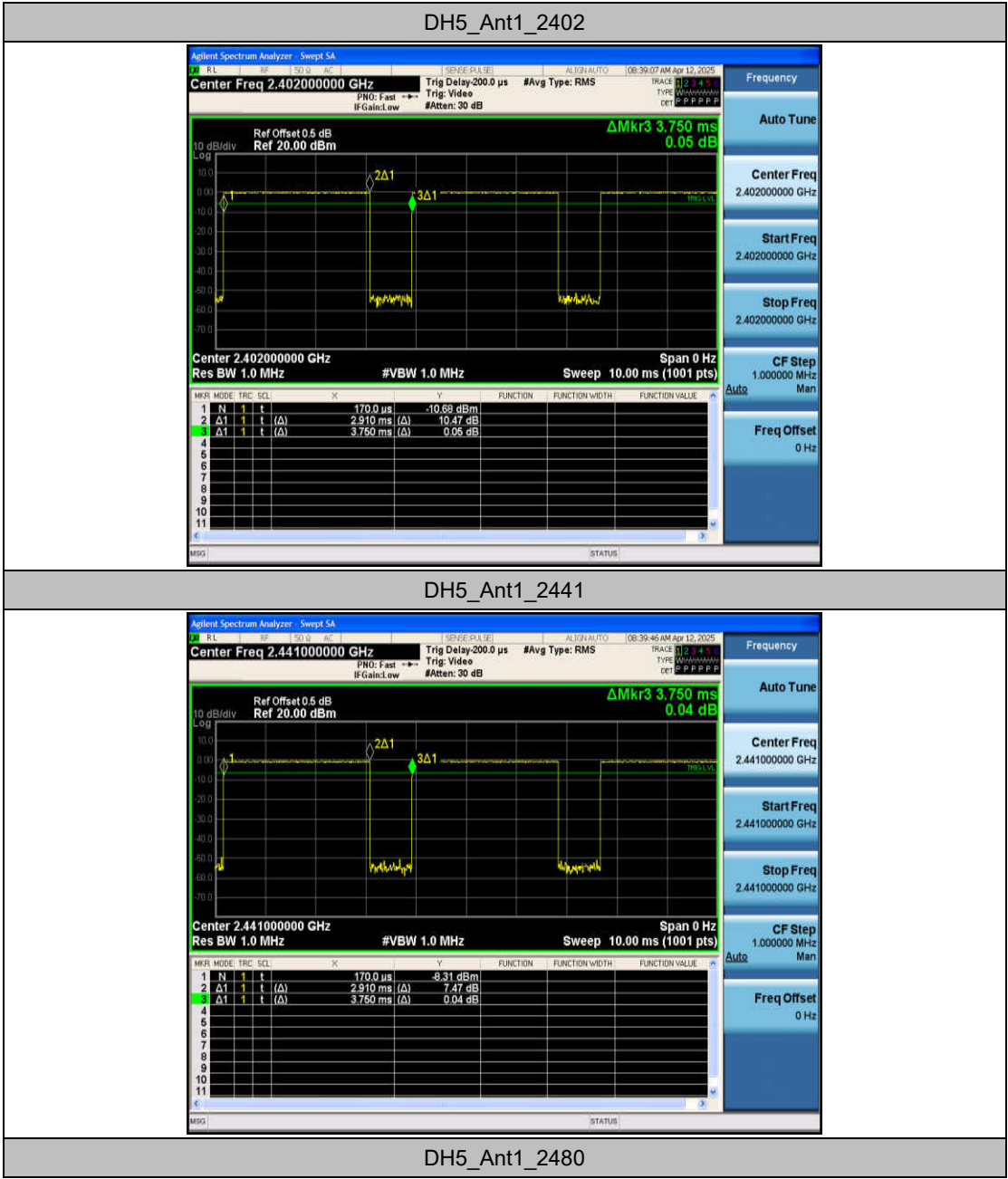


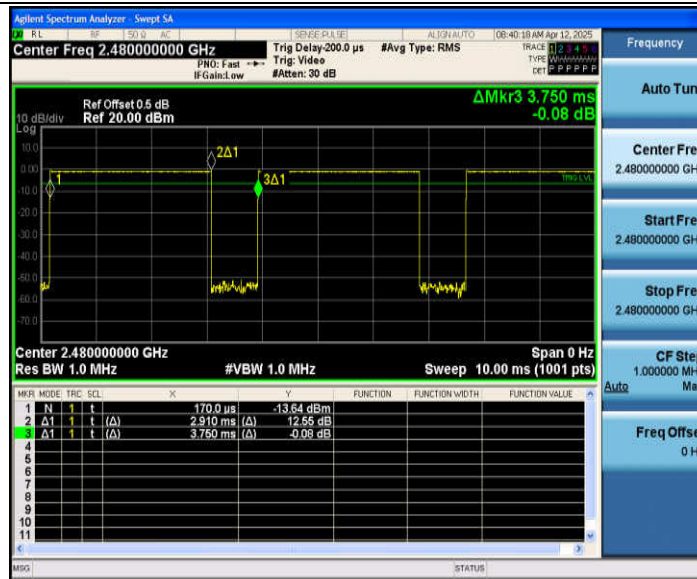
Appendix I: Duty Cycle

Test Result

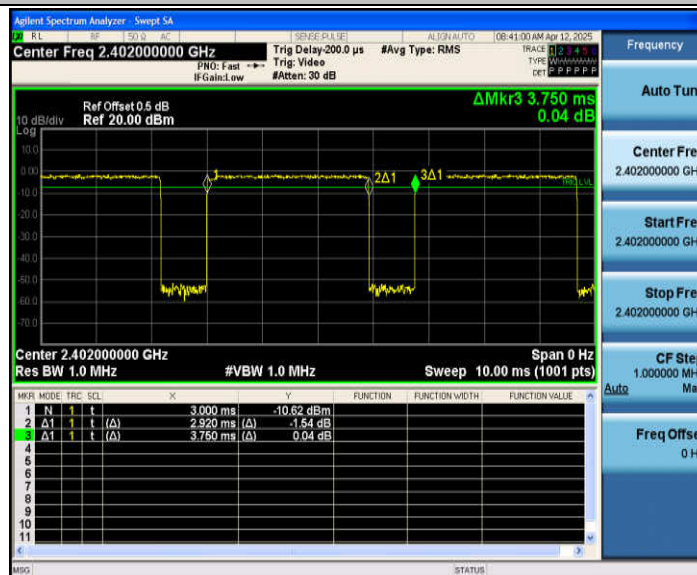
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09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

Test Graphs

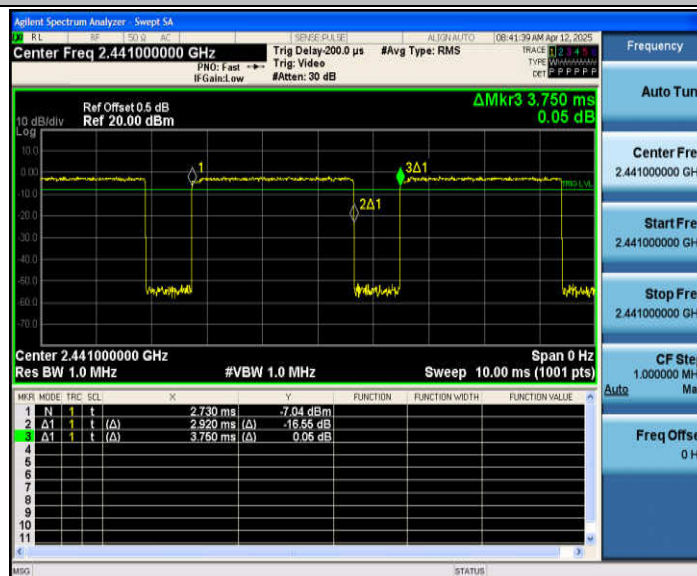




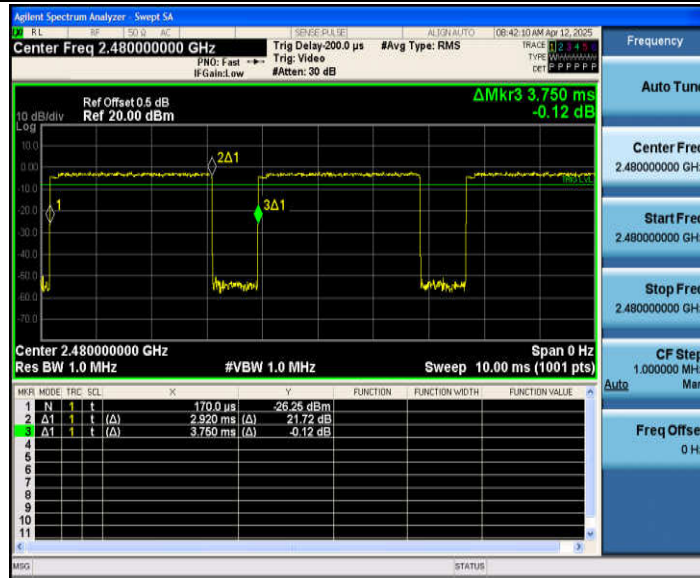
2DH5_Ant1_2402



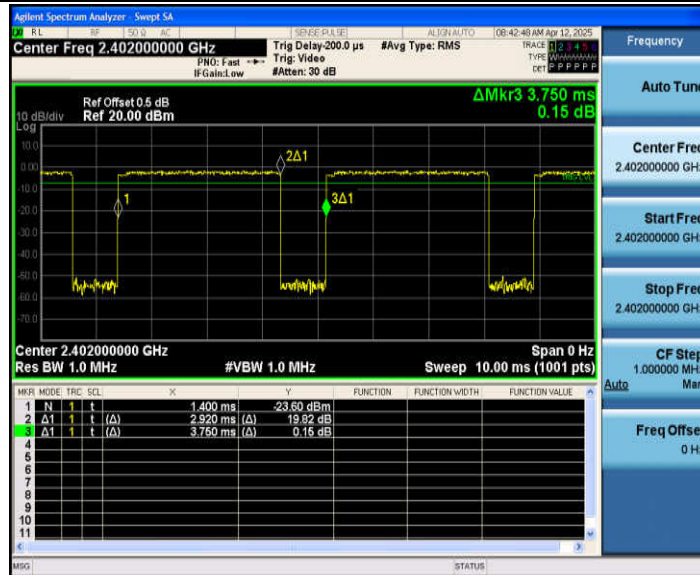
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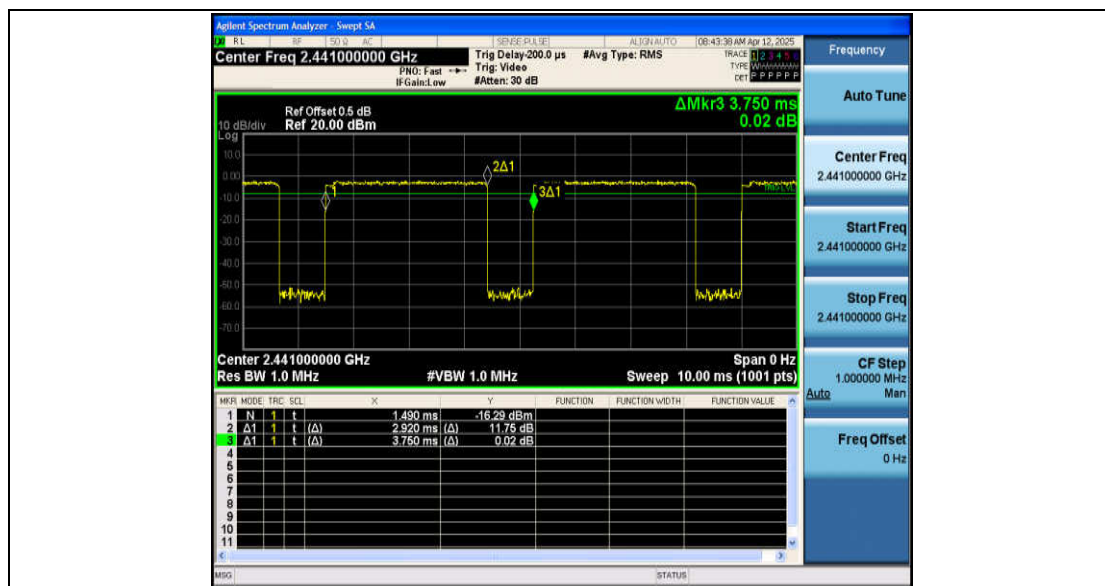
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

