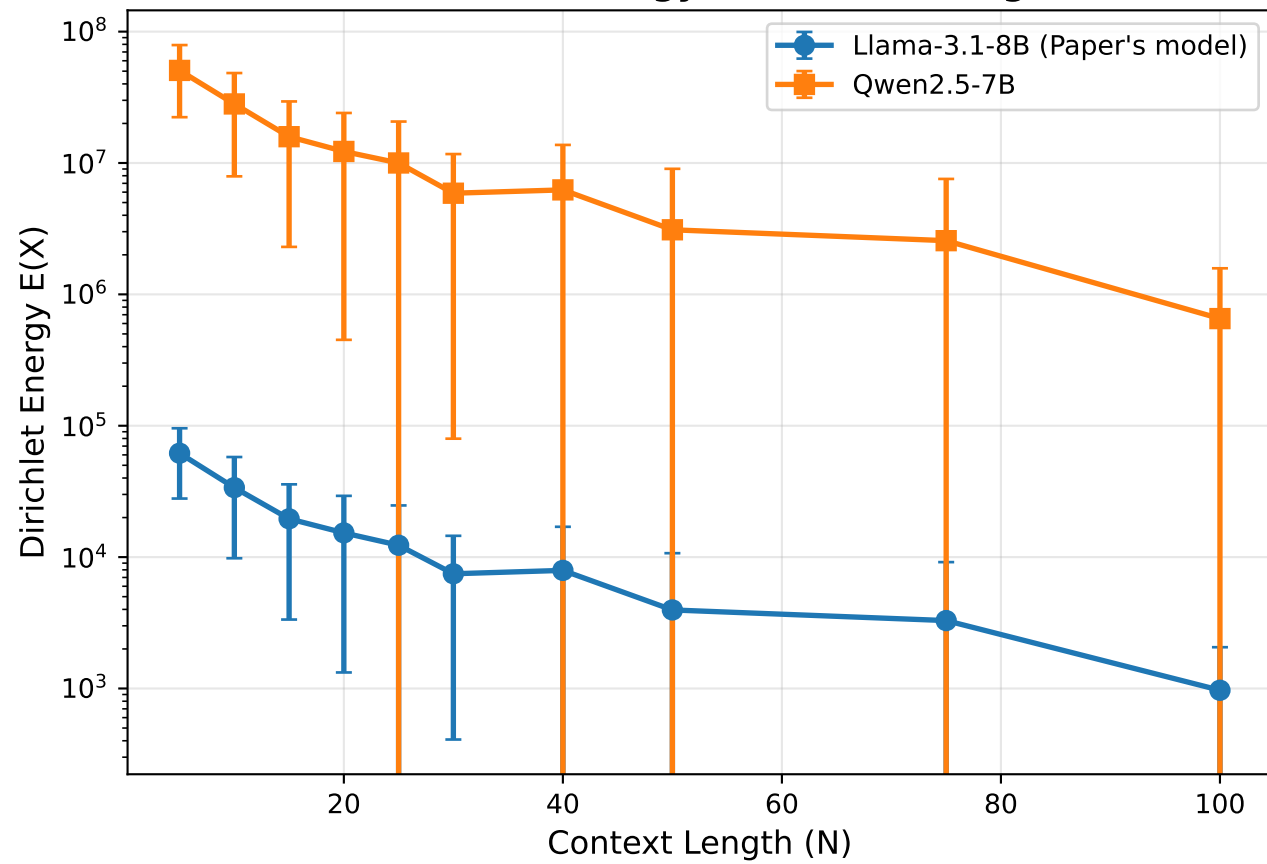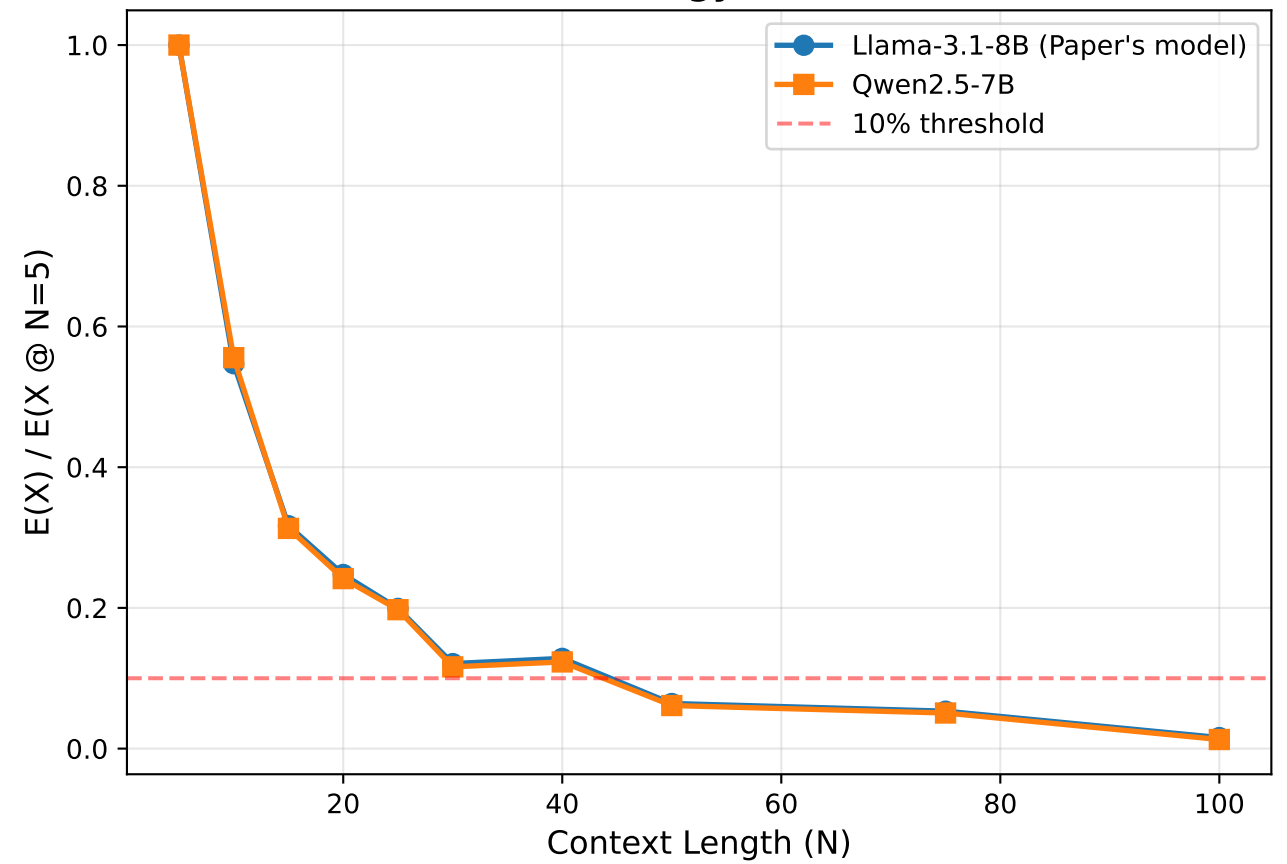**Park et al. (2024) Reproduction: Model Comparison**
Dirichlet Energy Decreases as Context Length Increases
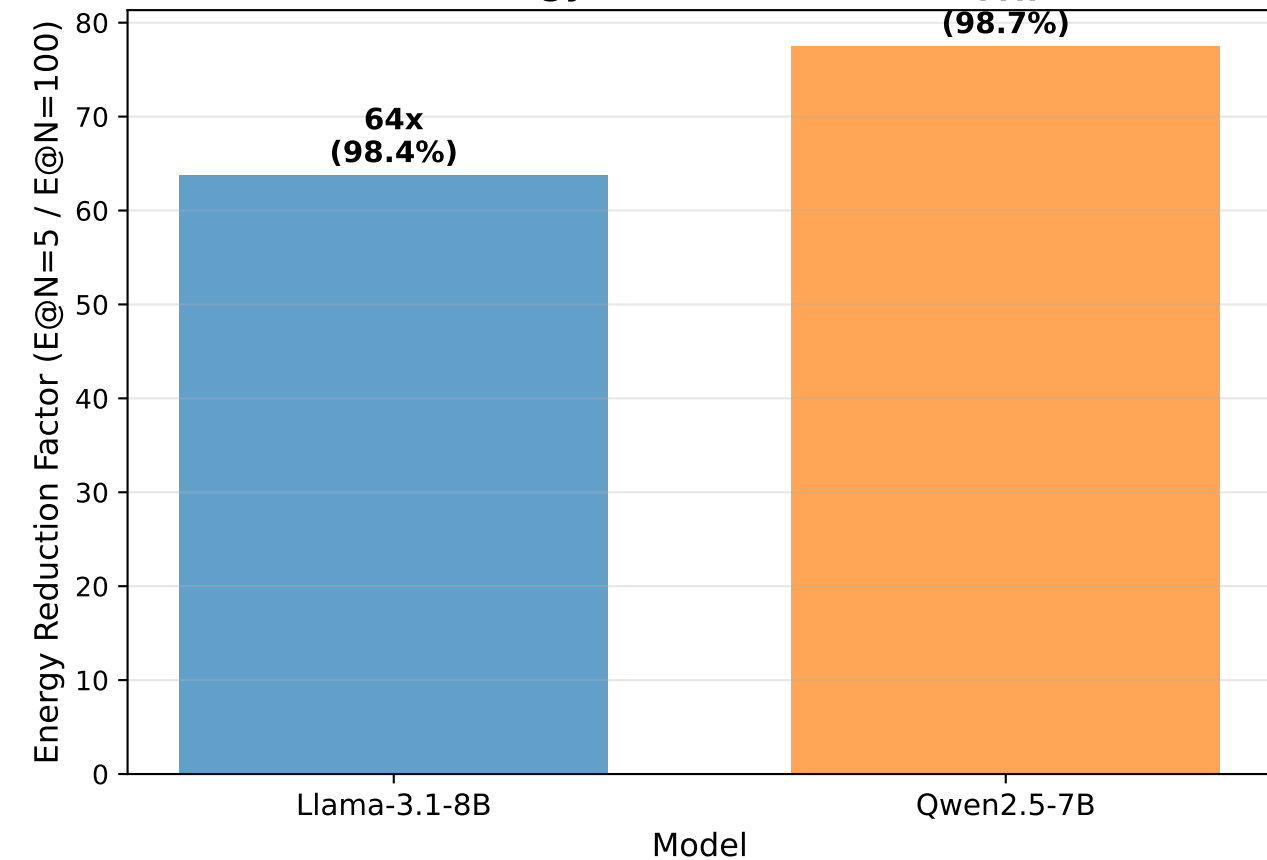
A. Dirichlet Energy vs Context Length

Legend: Llama-3.1-8B (Paper's model); Qwen2.5-7B

X-axis: Context Length (N); Y-axis: Dirichlet Energy E(X)

B. Normalized Energy (Relative to N=5)

Legend: Llama-3.1-8B (Paper's model); Qwen2.5-7B; 10% threshold

X-axis: Context Length (N); Y-axis: E(X) / E(X @ N=5)

C. Total Energy Reduction (N=5 → N=100)

Llama-3.1-8B: 64x (98.4%)
Qwen2.5-7B: 77x (98.7%)

X-axis: Model; Y-axis: Energy Reduction Factor (E@N=5 / E@N=100)

D. Comparison Summary

Metric	Llama-3.1-8B	Qwen2.5-7B	Park et al.
Energy @ N=5	61,789	50,661,295	High
Energy @ N=100	969	654,009	Low
Reduction Factor	64x	77x	Large
Phase Transition	N=5-15	N=5-15	Early N
Layer Analyzed	26/32	20/28	26