1. Exhaustive
    - Every $k = [4, 16]$ bit pattern sent through encoder and verified. For each k, 2^k unique patterns are sent.
2. Random
    (a) For a random k (`$random($now)`), split into 6 ranges:
        - $k \in [17, 31]$
        - $k \in [33, 63]$
        - $k \in [65, 127]$
        - $k \in [128, 255]$
        - $k \in [256, 511]$
        - $k \in [512, 1024]$

        Run 2, 3, 5, 8, 12, 20 times respectively.

    (b) Always do random 32, 64.
3. Memory-style tests
    (a) Walking 0: Same 6 ranges, pick a random k from each range. Exhaustive walking 0.

    (b) Walking 1: Same 6 ranges, pick a random k from each range. Exhaustive walking 1.