Prob. to Improve the Approximate Solution b_{op} (by QAOA Depth p)

$p = 1$, $\alpha = 0.582$, $\alpha = 2.977$

$p = 2$, $\alpha = 0.408$, $\alpha = 3.171$

$p = 3$, $\alpha = 0.447$, $\alpha = 3.012$

$p = 4$, $\alpha = 0.382$, $\alpha = 2.988$

$p = 5$, $\alpha = 0.282$, $\alpha = 3.258$

$p = 6$, $\alpha = 0.445$, $\alpha = 3.498$

$p = 7$, $\alpha = 0.377$, $\alpha = 3.282$

$p = 8$, $\alpha = 0.330$, $\alpha = 3.148$

$p = 9$, $\alpha = 0.231$, $\alpha = 2.383$

$p = 10$, $\alpha = 0.225$, $\alpha = 2.768$

Y-axis: $P(|v_{new} - t|^2 < |b_{op} - t|^2)$

X-axis: Lattice Dimension $l \cdot \log_2 N / \log_2 \log_2 N$