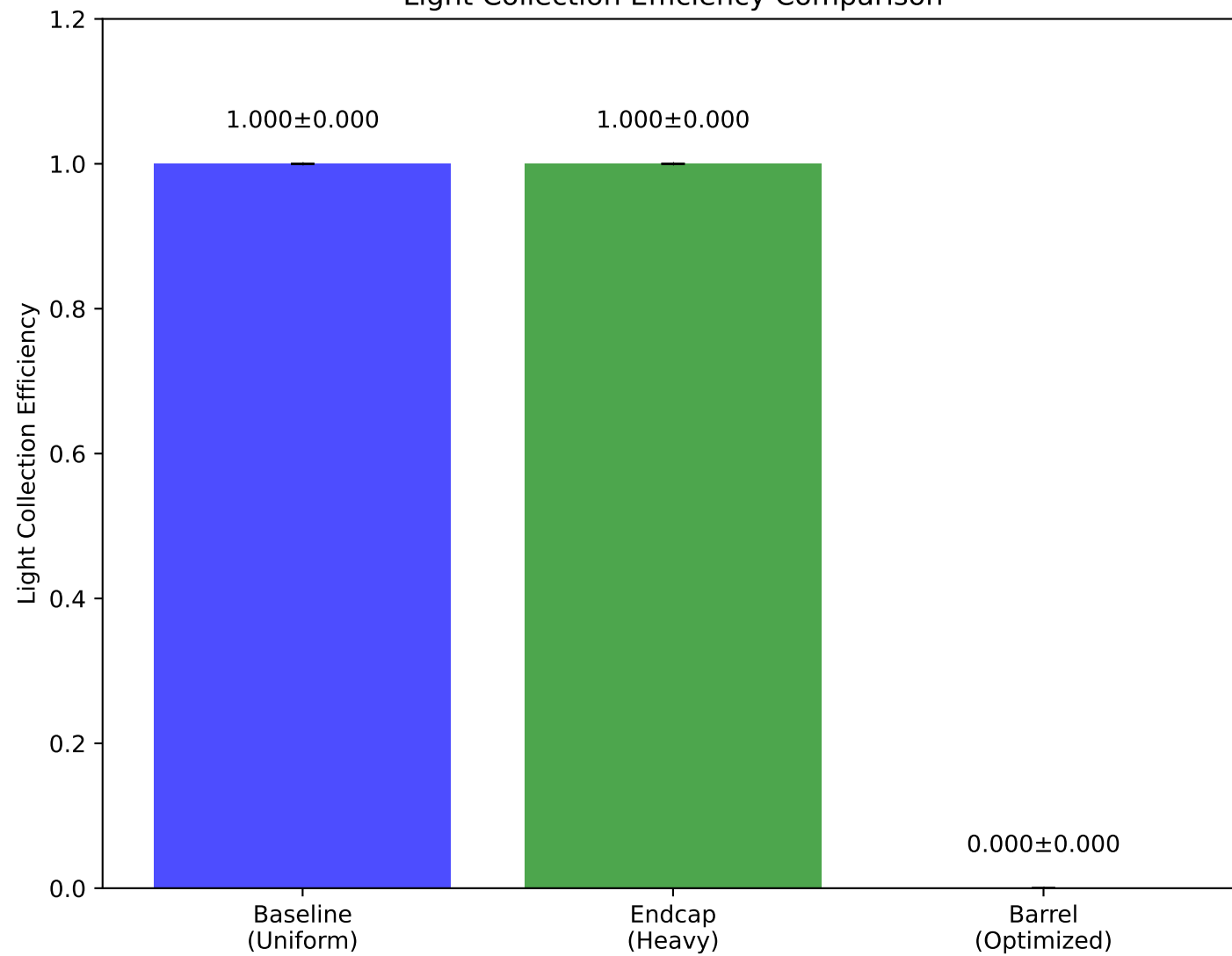
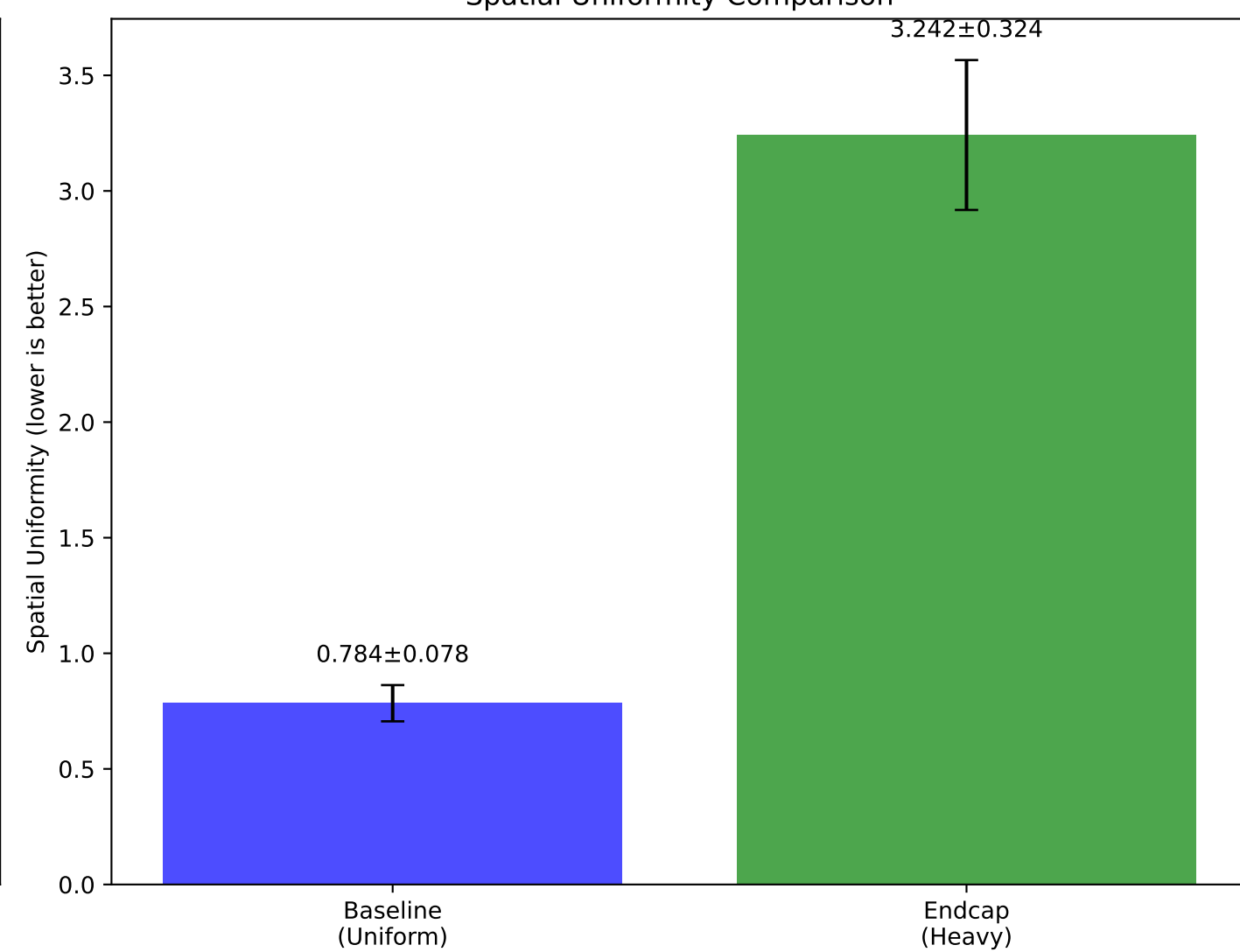


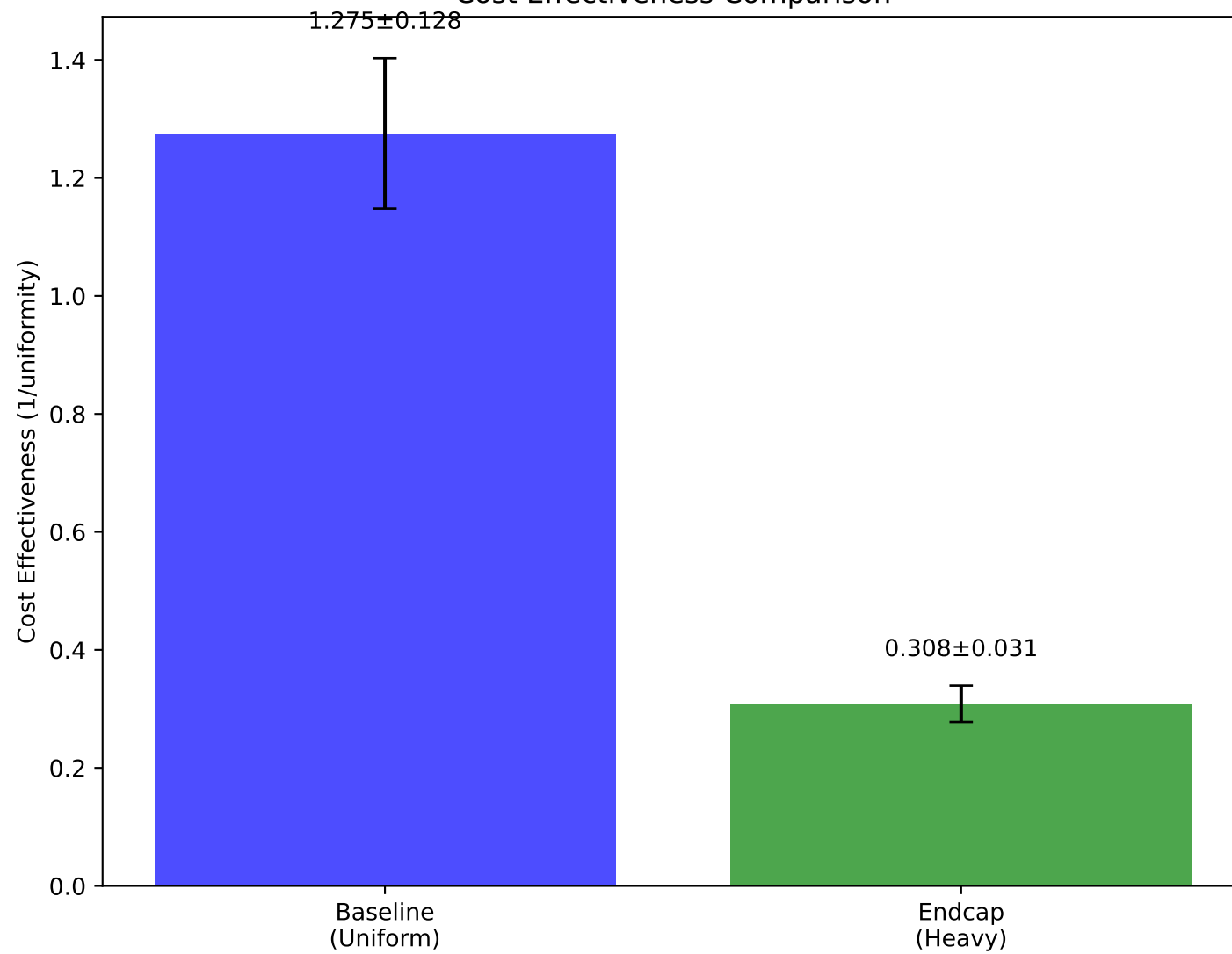
Light Collection Efficiency Comparison



Spatial Uniformity Comparison



Cost Effectiveness Comparison



Statistical Significance Test

Baseline vs Endcap Uniformity:

Difference: 2.458

Combined Error: 0.334

T-statistic: 7.37

Result: Significant ($t > 2.0$)

Note: Barrel configuration failed validation