

# Barcode Scanner Testing Machine

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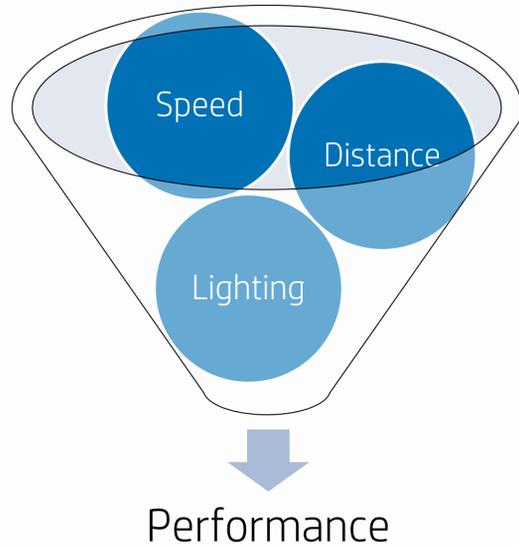


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## THE PROBLEM



HP does not have a way to compare the performance of scanners from different suppliers at different price-points



**Problem Statement:**  
Find a way to normalize an environment under a given set of factors to gauge scanner performance

## THE SOLUTION

**Stepper motor**  
Spins the barcode wheel at adjustable speeds

**Interchangeable wheel**  
Accommodates different types of barcodes with different contrasts



**Tunable lightbulb**  
Adjustable hue and brightness to simulate different environments

**Laboratory clamp**  
Can be regulated to hold any scanner at any height

**Linear actuator**  
Moves the carriage to specified distances

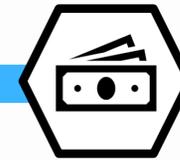
## THE RESULTS



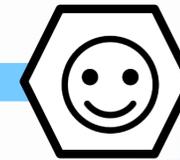
Reduce the number of service calls



Speeds up processes in service centers



Better ROI on smaller investment



Increased customer satisfaction



Customizable system