## Measurement Methodology

## 1 1. Setup

One board (stationary) is placed at the **center of a circle**.

The second board (movable) is placed at specific points along the circle, spaced every **45 degrees**. Both boards are positioned at the same level of height and oriented vertically to each other.

### 2 2. Measurement Points

The movable board is positioned at **three distances** from the stationary board:

- 100 cm
- $\bullet$  150 cm
- 200 cm

#### 3. Board Orientation

Both boards remain **vertically oriented** to each other.

Measurements are performed with the boards aligned at the same height.

## 3 4. Measurement Process

At each position (distance and angle combination):

- 1. 8 Measurements are taken:
  - The movable board starts in the **same orientation** as the stationary board.
  - After each measurement, the movable board is rotated 45 degrees clockwise.
  - This process continues for 8 rotations until a full 360-degree rotation is completed.
- 2. At each position, data is collected for 1 minute to ensure consistency and equal samples.

### 4 5. Additional Rotation

After each 45° rotation, the movable board is also rotated along its **longer edge**. This ensures data is collected for various board orientations.

# 5 6. Summary

Measurements are taken at:

- 3 distances: 100 cm, 150 cm, 200 cm.
- 8 angles: 0°, 45°, 90°, ..., 315°.

At each angle, the movable board is **additionally rotated** along its longer edge. Each position is measured for **1 minute**.

# 6 Visualization

The diagram illustrates:

- 1. The positions of the stationary and movable boards.
- 2. The circular placement of the movable board at 8 angles.
- 3. The additional rotation of the movable board along its **longer edge** at each point.

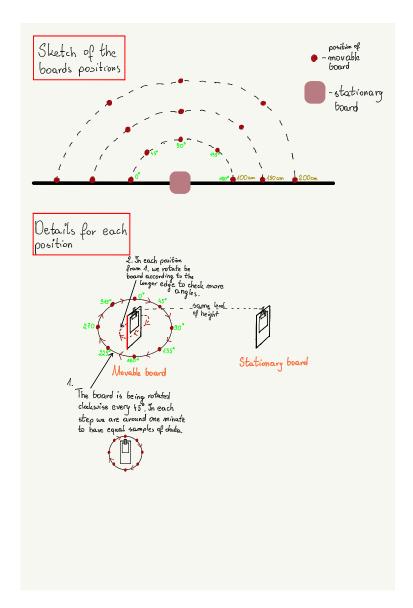


Figure 1: Measurement Setup