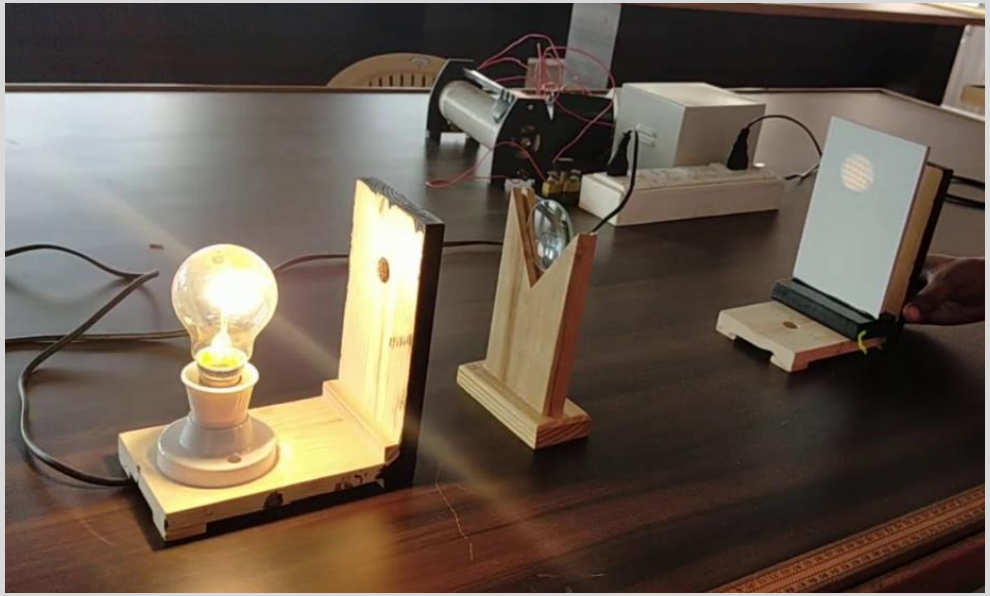
FINDING THE FOCAL LENGTH OF THE LENS – THE IOT TWIN

Group - 13

The experiment

We are given a convex lens and we wish to find its focal length.

Finding the focal length



Problem statement: We are given a convex lens and we are asked to find its focal length.

We achieve this by using a formula that returns the focal length when the position a certain object and its image formed by the lens as its input.

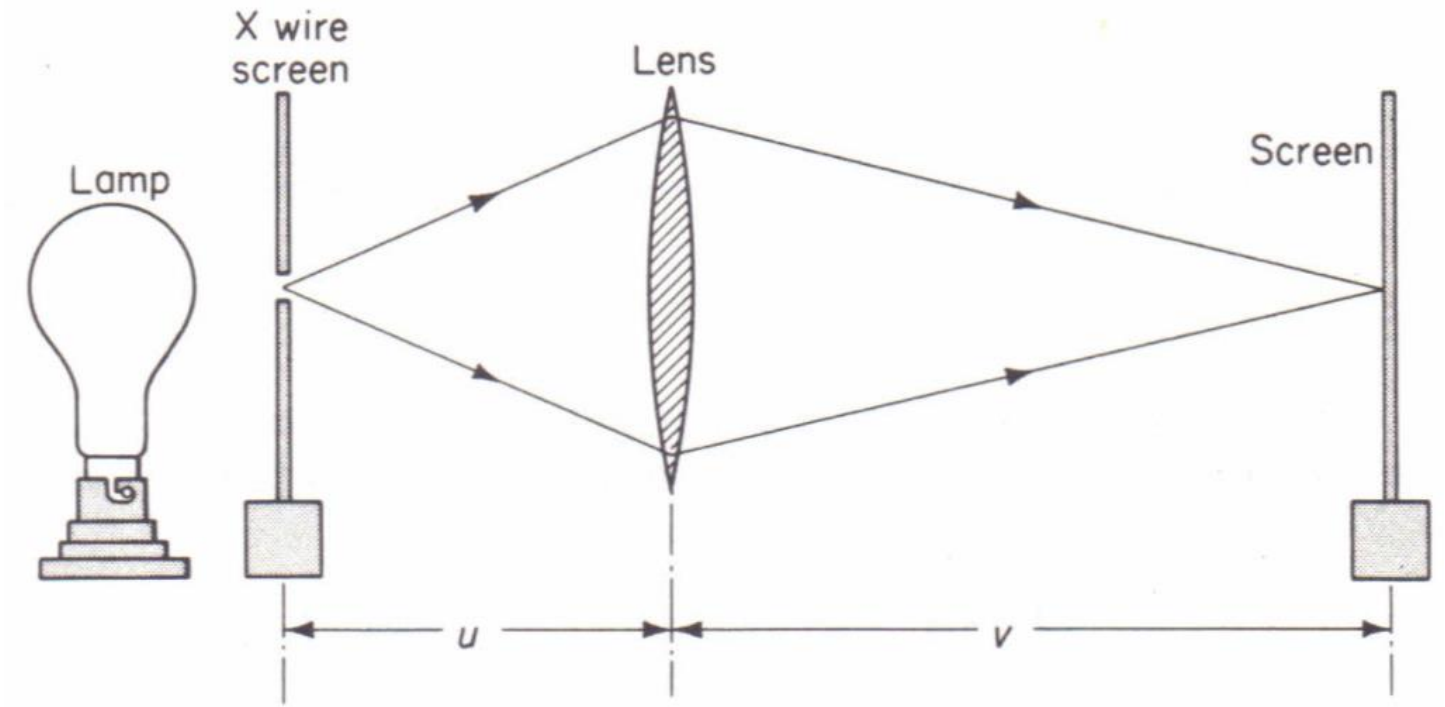


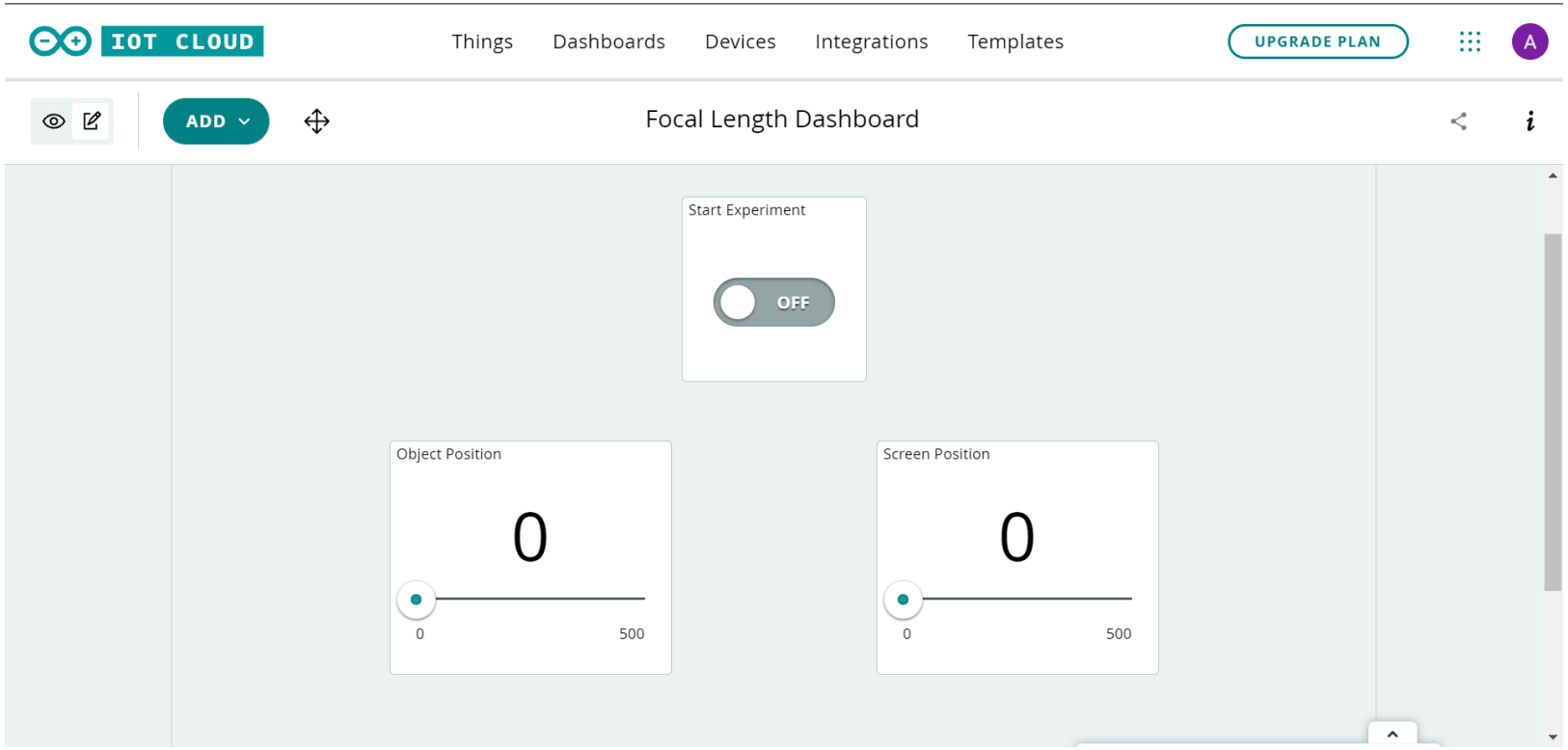
Fig. 24.14. Focal length of a lens by *u* and *v* method

The focal length formula

$$\frac{1}{u} - \frac{1}{v} = \frac{1}{f}$$

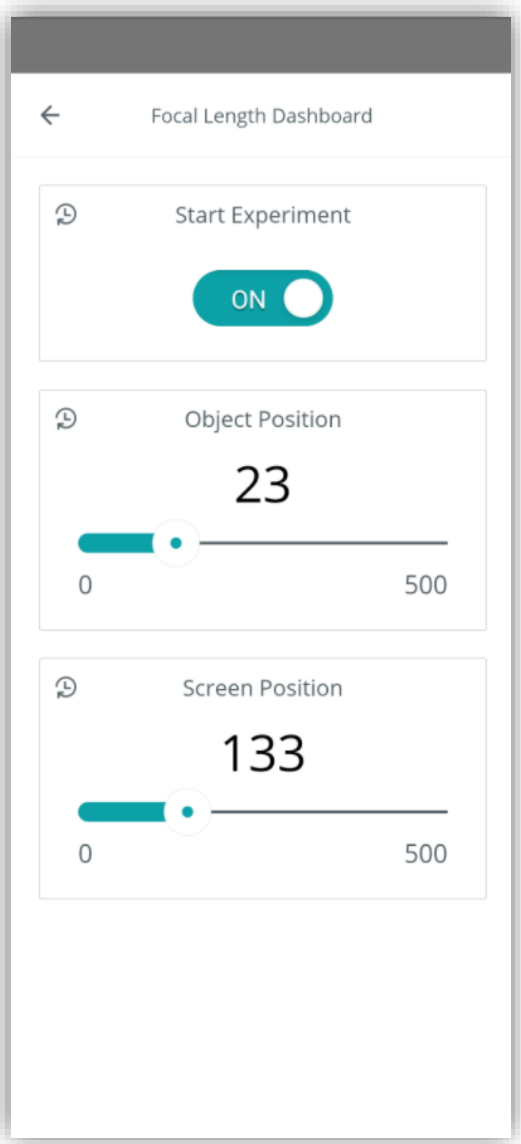
Or this can be written more conveniently as:

$$f = \frac{uv}{u - v}$$



Dashboard

This is the dashboard as seen on a PC.



Dashboard

This is the dashboard as seen on a mobile.

Video demonstration of the working setup

- https://youtu.be/Cc_y7yKKmvU

So, we hope that the concept of RTL will be a great success! ☺

Title Lorem Ipsum

LOREM IPSUM DOLOR SIT AMET, CONSECTETUER ADIPISCING ELIT.

NUNC VIVERRA IMPERDIET ENIM. FUSCE EST. VIVAMUS A TELLUS.

PELLENTESQUE HABITANT MORBI TRISTIQUE SENECTUS ET NETUS.