Lecture 1 - Experiment

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1 Introduction

In ophthalmology there are many tests that can perform in a non invasive way. In order to do that automatically we will use a smartphone to perform a psychophysical tests.

We can control the intensity of a point in the screen of smartphone by absolute values, but we want this values in a standard measurement unit, wich is commonly used by professionals of this field.

This report will describe how we made our experiment and show some results got.

2 Method

We used a device called luximetry to get measurements of a point's intensities in the screen. In order to block the light from outside, we built a small paperboard box and we painted it inside with black color to minimize possible effects light reflectance.

The point area painted in the screen was measured in 3 different sizes, with diameters of 300, 200 and 100 millimeters.

3 Results

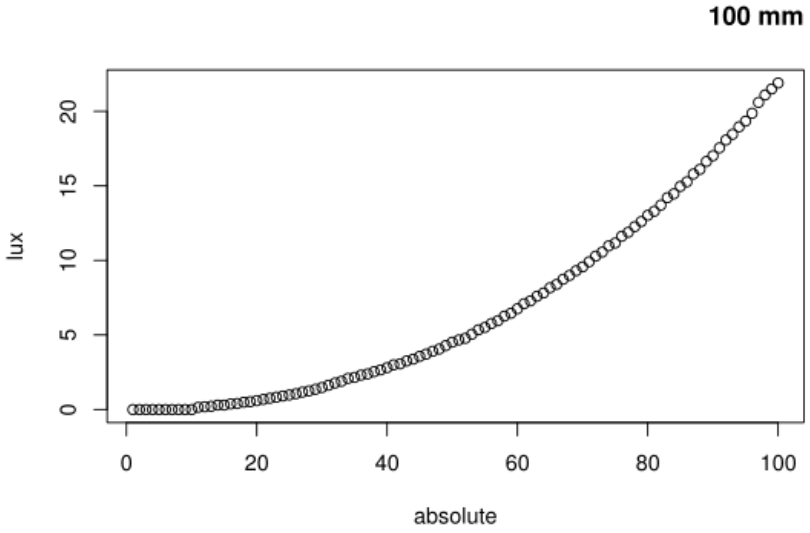

Figure 1: Relation lux x absolute

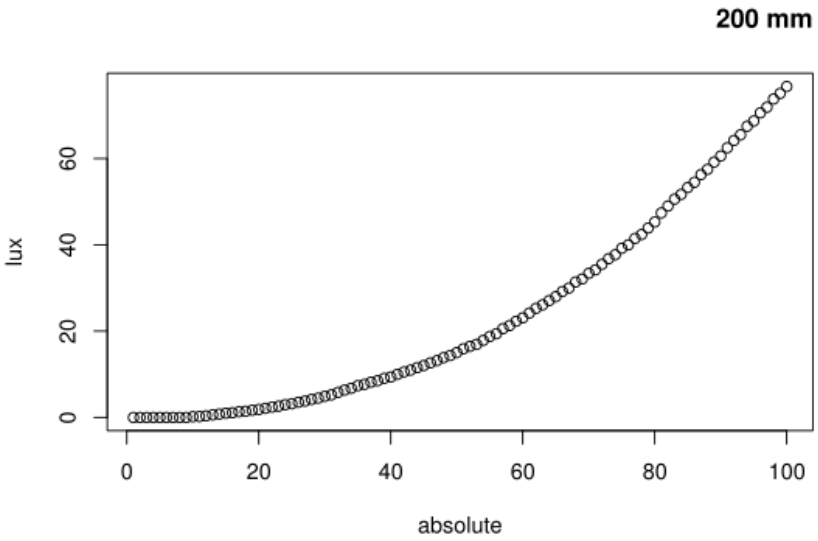

Figure 2: Relation lux x absolute

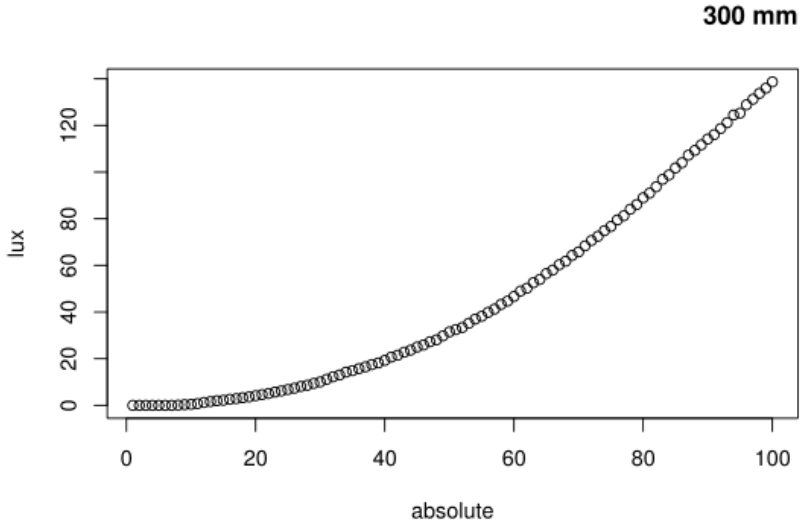

Figure 3: Relation lux x absolute