ABSTRACT

Snellen Chart is a table that used to measure how well a person's vision at various distances or the so-called visual acuity (sharpness of vision).

At some previous devices (Snellen Chart) have been found the same weaknesses with the device that used at most of the hospital, there has been no decision or final results obtained from the examination of the Snellen Chart or in other words, not whether or not there is a normal result of visual acuity patient who has checked visual acuity with Snellen eye chart.

Referring to that causes, the authors developed a Snellen Chart technology by adding a final decision or the result of vision examination eye, they are normal or abnormal in visual acuity of patients that will be shown on a 2x16 LCD screen.

From the results of measurements that have been made, obtained 0,77% error voltage at 4 output ports of AT89s51 IC, 0,38% error voltage at 4 input ports of 74LS154 IC, 1,43% error voltage when the lamp is ON and OFF, and the last one is 2,41% error of 15 seconds timer's when the light is ON.

After a study of the literature, experiments, making the module, and data collection processes, it can be concluded that the "Snellen Chart Disertai Hasil Normal/Tidak Normalnya Ketajaman Penglihatan Berbasis Mikrokontroler" device can be used and appropriate with the plan.

Keywords: Snellen Chart, Visual Acuity, Final Result