

Design and implementation of a visual acuity measurement device based on the 5-meter vision chart

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Abstract: This topic addresses the necessity of improving current visual acuity measurement methods to meet the increasing demands for accuracy in assessing users' vision. The objective is to design and implement a visual acuity testing device based on a 5-meter visual acuity chart, aiming to enhance the efficiency of vision testing in medical facilities and communities. The research process includes identifying technical requirements, analyzing the operating principles of traditional visual acuity charts, designing a data acquisition system, and conducting experimental applications. The expected results will contribute to technological development in the medical field and improve the quality of vision care services.

Keywords: Visual acuity testing device, 5m visual acuity chart, Medical technology