

ABSTRACT

The development of optical technology has reached the wireless communication called VLC (Visible Light Communication). The light source of VLC own one using LED (Light Emitting Diode). LEDs are now widely used for indoor lighting. Therefore, it can be made a tool that can light up a room and can transmit data.

In this study, has been tested system Visible Light Communication for the sending digital data by using beudrate 1,000,000 bps or 1 Mbps. The most optimal distance for the delivery of digital data in the form of text that is at a distance of 40cm.

The results of this final project can send digital data such as text from computer 1 to computer 2 system using Visible Light Communication. The result of the success is can transmit digital data in the form of text ranging from letters, numbers, and symbols as well as perfectly acceptable at the receiver. In a series of LED Driver gain 1.6172 the voltage side and on the frequency gain 12100.6776, for the average intensity of light received at the receiver most optima for data transmission with the percentage of data sent 100% in 5490,556 Lux and from the measurement results power, that power generated at the time it sends the data is greater than at the time of submitting the data, by a margin of 0.1261 Watt.

Keywords: Visible Light Communication, beudrate, digital data sender