

ABSTRACT

Phototherapy is therapy using high-intensity irradiation of 425-475 nm (commonly seen as blue light) to remove indirect bilirubin in the body. Light therapy is carried out for 24 hours or at least until the level of bilirubin in the blood returns to the normal threshold. With phototherapy, bilirubin in a baby's body can be broken down and become easily soluble in water without having to be changed by the liver. Light therapy also seeks to maintain bilirubin levels so as not to continue to increase, causing a more fatal risk.

Every room need different lighting. It's depends about the activities. Some reseach about of lighting on productivity have make we knowing about lighting which appropriate with activities will generate maximum productivity and cost reduction. Good lighting is lighting that allows us to see objects clearly done. Therefore we need a device that measures the intensity of light. To realize the design of a device that measures the intensity of light, in this project created a device measuring instrument light intensity using digital light intensity sensor BH1750 to receive light, then the light received will be processed by the microcontroller to be displayed

on the LCD. Measurement of the intensity of light in a room can be done using this tool so that it can be seen the fulfillment of standard light intensity of a room. This instrument has an accuracy of $> 92\%$ and this tool has a cheaper price than existing tools.

Keywords: Phototherapy, Bluelight, light intensity, light sensor, BH1750, luxmeter