

DIGITAL MULTI ANGLE ILLUMINATOR

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Bachelor Engineering (Hons.) in Electrical**



**MUHAMMAD AFIQ ASYRAF BIN ISHAK
FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM
SELANGOR DARUL EHSAN**

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ABSTRACT

Illuminance can be measured by Lux meter. It can measure light intensity for an area example for working area. Light intensity is important since it must be measured correctly to know is it enough for a person to work. The scope of study is to discover light spread from other angles from the ambient light and the value will be appearing on the LCD screen. A hexagon shape can be used to measure illuminance from 60°, 90°, 120° and 180°. The sensors that are used are photoresistor PGM1200 series. This sensor will transfer the light luminance to current signals by using a voltage divider circuit connected to an Arduino. Arduino is used to convert from an analogue signal to digital signal then will be displayed the value on the LCD as it has been programmed. The multi angle Lux meter is calibrated using HIOKI Lux hi tester 3421 as a reference. As a result, the Multi angle lux meter can measured up to 600 Lux and at side angle of the lux meter have different of Lux.

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