

# **OPTIMIZATION OF PUBLIC STREET LIGHTING ON ROAD KERTEK – SELOMERTO, WONOSOBO REGENCY**

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## **ABSTRACT**

*One form of social service effort that is very strategic and provides services to the community is the Public Street Lighting (LPJU). One of the public street lighting plans that is carried out at the same time replacing the existing street lamps on Jalan Kertek-Selomerto to increase the efficiency of electric power from the lights that have been installed. Kertek-Selomerto road has a road width of 6 meters with a road length of 10.4 km. Layout Street lights on the right/left side of the road, with an average distance between poles of 45-55 m. The choice of the type of lamp used considers the SON-T 100 W lamp which has a light intensity of 6.9 Lux and an 80 W LED lamp with a light intensity of 6.4 Lux. Considering in terms of materialization, lamp prices, and lamp life, the price of SON-T 100 W lamps is cheaper than 80 W LED lamps, so the SON-T 100 W lamp was chosen. In the planning carried out, the value of power efficiency and monthly electricity bill savings was obtained. by 20% compared to existing or installed lamps.*

**Keywords:** *Street Light Planning, LPJU, Power Efficiency.*