

ABSTRAK

Lampu penerangan jalan atau Penerangan Jalan Umum (PJU) merupakan bagian dari bangunan pelengkap jalan yang digunakan untuk menerangi jalan maupun lingkungan di sekitar jalan. Jalan By Pass Padang dengan total panjang jalan 26.700 meter, lebar jalan 16 meter dan jarak tiang ke tiang 40 meter, telah terpasang PJU dengan jenis lampu SON T. Berdasarkan perhitungan dengan menggunakan metode titik (point by point) PJU di jalan By Pass Padang masih belum sesuai dengan iluminasi rata-rata yang berlaku berdasarkan IES (Illuminating Engineering Society) yaitu 15-20 lux. Maka dari itu diperlukan perhitungan dan analisa untuk mendapatkan intensitas penerangan atau pencahayaan yang baik dan merata sesuai dengan Standar Nasional Indonesia (SNI). Untuk mensimulasikan intensitas penerangan pada PJU peneliti menggunakan software DIALux. Dari hasil perhitungan yang telah dilakukan pada PJU jalan By Pass Padang yaitu jenis lampu SON T 150 Watt memiliki kuat pencahayaan rata-rata 22,87 lux dengan jarak tiang ke tiang 40 meter. Sedangkan PJU dengan jenis lampu LED 80 Watt memiliki kuat pencahayaan rata-rata sebesar 26,21 Lux.

Kata kunci : *PJU, lampu SON T, lampu LED, Intensitas Penerangan, Software DIALux*

ABSTRACT

Street lighting or Public Street Lighting (PJU) is part of a complementary road building that is used to illuminate roads and the environment around the road. Jalan By Pass Padang with total road length of 26,700 meters, width of road 16 meters and distance of pole to pole 40 meters, has been installed PJU with the type of SON T lamp. Based on calculations using the point by point method PJU on the By Pass Padang road is still not according to the average illumination that applies based on the IES (Illuminating Engineering Society) which is 15-20 lux. Therefore, calculations and analyzes are needed to obtain good or even lighting intensity or lighting in accordance with the Indonesian National Standard (SNI). To simulate the intensity of lighting in PJU researchers used DIALux software. From the results of calculations that have been done on the By Pass Padang PJU, the type of SON T 150 Watt lamp has an average lighting power of 22.87 lux with a distance of 40 meters to the pole. Whereas the PJU with the type of 80 Watt LED lamp has an average lighting power of 26.21 Lux.

Keywords : PJU, SON T lights, LED lights, Intensity Lighting, DIALux Software