

# **Analisis Pengaruh Perubahan Tegangan Sumber Terhadap Penurunan Iluminasi dan Lifetime pada Lampu Pijar, Lampu Led dan Lampu Hemat Energi**

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## **ABSTRACT**

*The fluctuation voltage resource would be caused by distribution voltage value not always at 220 V and affect the electricity lamp features. There is some observation with this research due to the fluctuation of voltage resource on three kinds of electricity lamp during peak load time. This research purpose is to show the existence of fluctuation voltage resource, causing the lamp's lifetime. From this research result to one LED lamp, When 0-hour lamp on, voltage resource value at 227.0 Volt with lamp illumination is 108.4 Lux. When 12-hour lamp on, voltage resource value at 225.9 Volt with lamp illumination 103.3 Lux. A decreasing value of voltage resource with the amount of value is 1.1 Volt and decreasing illumination with a value of 5.1 Lux. And When 24-hour lamp on, voltage resource value at 230 Volt with illumination lamp 97.8 Lux. There is an increasing value of voltage with a value of 4.1 Volt and decreasing illumination lamp with a value of 5.5 Lux. As long as often fluctuation voltage resource value, then the lamp's lifetime will decrease faster*

**Keyword:** *Voltage Resource, Fluctuation, Lifetime, Illumination*