ABSTRACT

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Study Program	:	*Electrical Engineering*
Title	:	*Analysis of the Effect of Armature Type on the Quality of Light Using SNI 03-6575-2001 and GBCI Standards in the FT.2 Building, Engineering Faculty of Siliwangi University, Mugarsari Campus*

Lighting is one of the things that affects the process of teaching and learning activities in the classroom. In the lighting system, the use of armatures and types of lamps by producing lux values that meet SNI 03-6575-2001 standards can provide comfort in carrying out the teaching and learning process. In the FT.2 Building there are several rooms that have lux values that do not meet the standards, so it is necessary to adjust the types of armatures and lamps used to be able to meet the appropriate lux value standards based on SNI 03-6575-2001 and have a high efficiency value in terms of the type of lamp used. Apart from artificial lighting, the FT.2 Building of the Faculty of Engineering, Mugarsari Campus, which has a building design that has many windows so that the opportunity to apply the Green Building concept is large enough to increase efficiency in terms of lighting, therefore the purpose of this study is to determine the appropriate type of armature, the efficiency value of the lamps used and the suitability of the Green Building concept in the FT.2 Building. Based on the adjustment result, FT.2 Building is recommended to use armature and lamp type Philips Philips RC463B PSU with power 23 W 2800 lm and Philips RC463B PSD with power 24.5 W 3400 lm with lamp efficiency value of 81,1% and 92,5%. The suitability of the Green Building concept in the FT.2 Building obtained a building area of 1,592.8^{m2} with a minimum area in accordance with the concept of natural lighting based on GBCI of 477.84^{m2} and obtained a total area in accordance with the GBCI concept of 1,281.1^{m2} where the area has exceeded the minimum area and is in accordance with the Green Building concept.

Keywords: Armature, Green Building, Lighting System.