THESIS TITLE: A STUDY OF LIGHTING IN LEARNING CENTRAL

UNIT - CLASSROOM OF UNDERGRADUATE STUDENTS

IN KHON KAEN UNIVERSITY.

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Abstract

The purpose of this research was to study of the lighting in learning central unit - classroom of undergraduate students in Khon Kaen University. The collected data composed of the intensity of lighting IES were measured by Lux meter determined and the opinion of 1,558 students about the lighting and vision in the classroom. The opinion of students were gathered by questionair. The SPSS / PC⁺ computer program was used for data analysis: calculate frequency and percentage.

The results revealed that about 61.53 and 53.33 % of students in central unit - classroom 1 accepted the lighting in the morning and afternoon periods, respectively. About 61.29 % of students accepted the lighting of the central unit - classroom 2 in the morning. For the central unit - classroom 3, 63.15 % of students accepted the lighting in the morning, and 74.03% of those accepted the lighting in the afternoon. About 78.80% and 79.89% of students accepted the lighting of Unit A in the

afternoon. About 78.80% and 79.89% of students accepted the lighting of Unit A in the morning and afternoon periods, respectively. For the Unit B, most of students accepted the lighting in the room (70.04% in the morning, and 78.27% in the afternoon).

For the intensity of lighting of 22 areas in the classrooms, there were 11 areas of central unit - classroom 1 at 9.00-12.00 AM which were appropriate in the range of standard. At 13.00-16.00 PM in central unit - classroom 1, 7 areas had appropriate lighting. The lighting in 9 areas of central unit - classroom 2 at 9.00-12.00 AM were in the range of standard value, but 13 areas were out of standard. At 13.00-16.00 PM, there were 9 areas had appropriate lighting, but 13 areas were out of standard. The lighting in the central unit - classroom 3 at both 9.00-12.00 AM and 13.00-16.00 PM were appropriate for 10 areas. Both Unit A and Unit B had 1 area which was appropriate lighting and 9 areas which were higher value than standard.