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| Title | Illuminance Measurement in the Building of Educational Opportunity Expansion Schools, Maha Sarakham Province |
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Abstract

This study aims to measure the illuminance in the building of educational opportunity expansion schools in Maha Sarakham Province, and to compare the results with the standard criteria of CIE. The samples were purposively selected from representative schools located in urban area, semi urban area and local area. Those were Srisawat Wittaya Municipality School, Baan Ta Song Kon School and Baan Men Yai School. The average illuminance in classrooms was measured by using the area measurement method and also compared to the standard criteria of CIE. For performance points, the spot measurement method was used to measure the illuminance and compared to standard criteria of the Department of Labor Protection and Welfare, Ministry of Labor, on subject of the standard setting in administration and management of safety, occupational health and environment about heat, light and noise 2006 (Chapter 2). Lux meter was used in the measurement. The data were collected from 12th November 2015 to 12th December 2015.

The results revealed that the average measurement of area measurement in three schools, 39 classrooms, were in range of 143-909 Lux, while 9 classrooms (23.08%) were not followed the criteria of CIE (it should be not less than 300 Lux). There were 30 classrooms (76.92%) followed the standard criteria. In addition, 37 operating points were measured from 24 For performance points in three schools, the illuminance was 90-2230 Lux, while 24 operating points (64.86%) did not passed the standard criteria. However, there were 13 operating points (35.14%) passed the standard criteria of CIE.