

TITTLE	Study on Illuminance and Heat Level in School Building of Child Development Center, Kantharawichai District, MahaSarakham Province
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Abstract

This research study have the objective aim to study the illuminance and heat in the building of Child Development Centers in Kantharawichai District, MahaSarakham Province, total 5 centers, namely :KhokePraMuniciplaity Child Development Center, Wat Buddha Mongala Child Development, Center, Khoke Par Sub-district Administrative Organization Child Development Center, and Child Development Center for Ban NongKaen, NongHwa, Don Bark. The data collection made by sampling measurement for the average illuminance in the class-room using general area measurement method, and comparing the result with the CIE standard criterion. For the working area of the teachers,the spot measurement method was used, and then comparing the result of data with the standard criterion of the Department of Labor Protection and Welfare, Ministry of Labor, on the subject of standard criterion for the management of safety and occupational health, and the environmental of heat, illuminance and sound BE2549 (2006), Section 2. The instrument used to measure illuminance were lux meter, and used for measure the heat in the environment of working area were WBGT, heat stress monitor, Model SK-150 GT, and then compare the result with the WBGT criterion standard in accordance with the Thai Law. Data Collection were performed from 12 November 2015 to 12 December 2015.

The result of research study found that the illuminance have average level at 91-328 lux, by the criterion standard the illuminance must not less than 300 lux, there was only 1 class-room were passed this standard, or only 8.33%. For the result of the

measurement at working area found that the illuminance were at 54-201 lux, all of the sampling spots were not passed the criterion standard. The result for heaty measurement inside the building have the average value at 19.8-28.0°C Wet BulbGlobe , which passed the the criterion standard in all sampling areas (The Criterion standard must not exceed than 34° C Wet BulbGlobe).