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APPRAISAL OF THE LIGHTING: PRELIMINARY STUDY ON ADEQUACY LEVEL OF LIGHT INTENSITY IN WORKING ENVIRONMENTS

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Lighting is one of the key physical attributes required for the survival and success of human and other living organisms on earth as it influence the sense of vision. Lighting in built environments or indoor spaces is inevitable in the context of wellbeing and performance of inhabitants. Since people associate activities and illuminance levels in predictable ways, lighting requirement is task and place specific. This study aimed to assess the adequacy of work place lighting in a collection of offices in Vavuniya district based on the day time light intensity measurements using digital Lux meter. Measurements were taken at four different categories of work spaces among the sampled locations. In addition to the light intensity measurements, a questionnaire checklist was obtained. This study revealed that the mean light intensities of executive rooms, standard office rooms, pooled work spaces and record rooms were 104.52, 74.68, 58.53 and 32.54 lx, respectively. In all the four categories, the light intensities are inadequate with respect to the recommended lighting requirements by 41, 56, 68 and 74 percent, respectively. These findings necessitate the improvement of indoor lighting through a revision of the quality and the positioning of light sources. Such improvements could result sustainable use of energy in this energy crisis era.

Keywords: Intensity of light, work space, inadequacy, performance