

Adequacy of Amount of Light for Performance of Selected Tasks in Selected Households in Ludhiana

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ABSTRACT The present study was carried out in *Punjab* with the objective to survey the existing lighting conditions, to determine the light intensity in different rooms and to determine adequacy of amount of light (level of illumination) for the performance of selected tasks in the selected households. Sixty households each from two localities i.e. approved (*Sarabha Nagar*) and unapproved (*Haibowal*) were randomly selected for the present study. Light intensity in selected parts of house and work areas was measured to determine adequacy of amount of light. Results revealed that openings on outer walls were less than one fourth of wall area in both localities. In unapproved locality provision of skylight was found more. Fluorescent tubes and incandescent bulbs were more frequently used in both the localities and compact fluorescent lamps, halogen lamps, chandeliers and ceiling lights was found to be very limited. Entrance of selected houses of both localities received maximum sunlight. Lobby and storeroom received minimum sunlight. Assessed daylight was found to be maximum in entrance in both localities. Assessed light from fluorescent tube was observed to be higher as compared to incandescent bulb in all areas of both localities. Non significant difference was found between objective and subjective assessment of light intensity with and without artificial light except for lobby and kitchen. Comparison with recommended values of light intensity revealed that in social zone, light intensity was more than recommended and in private zone it was less than recommendations given by National Building Code of India, 2002. Mean observed value for light intensity was found to be highest for writing i.e. 206.27 lux and 181.67 lux and lowest for ironing i.e. 134.92 lux and 124.50 lux from approved and unapproved locality respectively. Task related lighting for all the activities was also found to be much less in intensity than recommended values in both the localities.