

### Journal

Light and Engineering, Volume 18, Issue 2, pp47-53, 2010

### Title

Influence of Daylighting in the EARLY evening on Behaviors and Spatial Evaluations

### Author

Masako Miyamoto<sup>1</sup>, Michiko Kunishima<sup>2</sup>

### Affiliation

- 1 The University of Shiga Prefecture, Japan
- 2 Kyoto Women's Junior College, Japan

### Abstract

The purpose of this research is to examine how the changing daylight in the early evening influences the necessity for artificial lighting and spatial evaluation. The shape of a window is taken up as a comparative condition to obtain the daylight effectively. The interior illuminance changing by actual daylighting was measured, and a pseudo-daylight device was used for the experiment. This can change illuminance based on the actual measurement value. The aspects evaluated are the necessity of the artificial lighting, the easiness of functioning and the atmosphere of the room.

The results are as follows.

The shape of the window influences the evaluation of brightness and the necessity degree of the artificial lighting.

In this research, luminance of the window does not directly influence the evaluation of the brightness of the room.

There are some differences between the evaluation by young people and the evaluation by elderly people.

### Key words

daylight, behaviors, spatial evaluation, living room, shape of window, artificial lighting