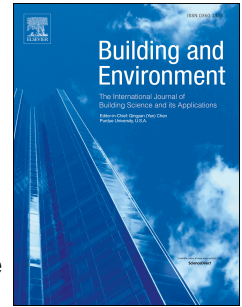


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Lighting up the office: The effect of wall luminance on room appraisal, office workers' performance, and subjective alertness

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Title:

Lighting up the office: The effect of wall luminance on room appraisal, office workers' performance, and subjective alertness

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Abstract

Creating the right environment is considered essential in today's office designs to foster collaboration, concentration and creativity. Much, however, is still unknown with regard to how lighting affects the office knowledge worker. In this study, we have explored the effects of a single, carefully isolated lighting design parameter, namely wall luminance, on the appraisal of an office space, the affective state of the occupants, their subjective alertness and their performance on a key knowledge worker task: problem solving. Room appraisal increased significantly with higher wall luminance, both on attractiveness and illumination. No effects were found on the pleasure, arousal or dominance dimensions of emotion ratings by the participants, nor were effects found on the performance of divergent and convergent problem-solving tasks. Unexpectedly, wall luminance did affect the subjective alertness of the participants, as participants were able to maintain

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