

Abstract

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The Effect of Natural Light on the Performance of Visible Light Communication Systems

Visible Light Communication (VLC) offers advantages of low energy consumption, licence free and RF interference free operation. One application area for VLC is in the provision of health centred services circumventing issues of interference with any biomedical device within the environment. VLC performance is affected by natural light restricting systems availability and reliability. The paper presents an analysis of the performance of VLC systems under different meteorological conditions. The evaluation considered the impact of natural light as a function of different reflection surfaces in different room sizes.