

A Flicker Mitigation Modulation Scheme for Visible Light Communications

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Abstract—LED (light-emitting diodes) lighting is steadily finding its way into the market of artificial illumination. An additional characteristic of LED lighting is the ability to accommodate switching times that are high enough to transmit data via the visible light it emit. This paper proposes a scheme for providing a data transmission with less flicker in VLC (visible light communication). The scheme utilizes a modulation using dual slope pulses. Due to its moderately increasing and decreasing pulse characteristic. This scheme can also be effectively used in an extremely low light condition. A recovery process in the receiver is proposed.

(P19)Keyword—flicker mitigation, light dimming, pulse dual slope modulation, visible light communications



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