

Differential Signaling Spread-Spectrum Modulation of the In-Door LED Visible Light Wireless Communications using Mobile-Phone Camera

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Abstract : Visible light communication combined with spread spectrum modulation is demonstrated in this study. Differential signaling method also ensures the proposed system that can support high immunity to ambient light interference. Experiment result shows the proposed system has 6 dB gain comparing with the original On-Off Keying modulation scheme.

Keywords : Visible Light Communication (VLC), Spread Spectrum Modulation (SSM), On-Off Keying, visible light communication

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