

***Abstract: Experimental Evaluation of Reliable Link Quality for  
Wireless Sensor Network Application***

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**Abstract**

There are a lot of challenges and design issues could affect the study of connection reliability in wireless sensor network applications. In order to measure link quality, we use link quality indicator as radio hardware link quality metrics in IEEE 802.15.4 based on wireless sensor networks. Link quality measurement in an outdoor environment is performed using low power wireless sensor nodes. All of our experiments are performed in low duty cycle operation with wireless radios, which comply with the IEEE 802.15.4. We have analyzed the performance using wireless link quality. The experimental result show some factors like interference, fading, congestion and other environmental factors are affected to the wireless link quality and packet reception rate in wireless sensor networks.

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