A Visibility Check Method for Obstruction Warning Signal

Masato UKAI Nozomi NAGAMINE

An obstruction warning signal is an important signalling equipment used at a level crossing. However, it is not possible to check the visibility of such equipment during the train operating hours, because this would require interruption of providing traffic service. In this paper, we propose a method that employs near infrared LEDs, and allows real-time and off-line checking of the visibility of obstruction warning signals in the daytime or the night-time. The method which we have developed, an image processing method using a near infrared camera, proved that it could track and detect specific blinking of signal correctly not only in a static system but in a vehicle installed system. Finally, we report the results of functional field tests.