

## **Development of Pre-test for Electromagnetic Emission from Traction Inverters on Railway Vehicles**

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EMC compliance tests for confirming no interference to railway signaling systems are becoming more important in manufacturing railway vehicles. This paper describes a pre-test for verifying radiative emission from traction systems on railway vehicles. First, the paper derives a simple calculation model of interference between traction systems and beacons used in railway signals. Next, the paper shows the experimental validations performed at combined-tests and with completed vehicles, which indicate the usefulness of the derived model. Lastly, the paper shows the result of applying the proposed pre-test to an actual DC railcar.