

## In-Building Wideband Multipath Characteristics of 2.5 and 60 GHz

Anderson, C.R., Rappaport, T.S., Bae, K., Verstak, A., Ramakrishnan, N., Tranter, W.H., Shaffer, C.A., Watson, L.T.

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### Abstract:

This paper contains measured data for 2.5 and 60 GHz in-building partition loss. Path loss measurements were recorded using a broadband sliding correlator channel sounder which recorded over 39000 power delay profiles (PDP) in 22 separate locations in a modern office building. Transmitters and receivers were separated by distances ranging from 3.5 to 27.4 meters, and were separated by a variety of obstructions, in order to emulate future single-cell-per-room wireless networks. These measurements may aid in the development of future in-building wireless networks in the unlicensed 2.4 GHz and 60 GHz bands.

### Index Terms:

In building propagation, path loss, partition loss, millimeter wavelength