

# Multipath Channel Characteristics for Propagation between Mobile Terminals in Urban Street Canyon Environments

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**Abstract**—In this paper, we focus on multipath channel characteristics of low-height antenna links for mobile to mobile communications in urban street canyon environments. We present a wideband MIMO channel sounder and antennas used to measure multipath channel characteristics in the 3.7GHz frequency band and the result of calibration test to evaluate a system performance before field measurement. We carried out channel measurement campaigns in typical urban street canyon environments in Seoul, Korea. The root mean square (r.m.s.) delay spread and angular spread characteristics are analyzed with results of their distribution and cumulative density function (CDF) in line of sight (LoS) and non-LoS (NLoS) case respectively.

**Keyword**—Mobile-to-Mobile, multipath characteristics, channel model, channel measurements, channel sounder



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