

Multipath Characteristics for Mobile to Mobile Direct Communications based on Channel Measurement in Urban Street Grid 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 grid environments. We present a wideband MIMO channel sounder and antennas used to measure multipath channel characteristics at 3.7GHz frequency band and the result of calibration test to evaluate a system performance before field measurement. We carried out a channel measurement campaign in urban street grid environments in Seoul, Korea. The results of multipath characteristics from collected data in field measurement are compared with the conventional ITU-R channel model parameters in terms of r.m.s delay spread, and angular spread of arrival and departure.

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



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