Path loss Measurement at Indoor Commercial Areas using 28GHz Channel Sounding System

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Abstract—In this paper, we present path loss characteristics based on channel measurements in indoor commercial area at 28 GHz. The measurement campaign has been conducted in Seoul railway station and Incheon international airport terminal, which were selected to represent indoor hotspot regions in Korea. In order to compensate for the path loss increase due to higher frequencies, high-gain directional horn antennas are used to reliably establish channel links between a transmitter and a receiver. Based on the measurement results, we investigate directional path loss exponents and shadow fading factors using close-in free space path loss model.

Keyword-Millimetre-wave, indoor channel measurement, path loss, shadow fading, channel modelling



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