**Abstract**

This project mainly deals with the analysis of Multipath propagation in a 60 GHz static

channel with various possible combinations of angular misalignment of the Receiver. The

measurement and data collection were done by the *Department of Radio Electronics, Brno*

*University of Technology*, Brno, Czech Republic. The received power data was collected

for all the various angular combinations. [Azimuthal variation (-25˚ to 35˚) and Elevation

variation (5˚ to -5˚)]. This gave 39 angular combinations and measurements were done

for 81 frequency points (56-64 GHz in steps of 0.1 GHz). From those received power data

we obtained the magnitude and phase responses. After that we generated the time domain

Power Delay Profiles, estimated RMS Delay Spreads and Tapped Delay Line (TDL) filter

models to characterize the wireless channel. We also perform the Bit Error Rate BER of

the channel. The Tap Delay Line model can be used as a multipath model of the channel

which can be used for analysis of Inter Symbol Interference (ISI) and maximum data rate

calculations. The analysis that we have done considers the static channel characteristics

as a function of possible Receiver misalignment, at 60 GHz frequency.