

## ***ABSTRACT***

*This study aims to determine how to configure and work systems on the Mimosa C5x device on a wireless point-to-point network, especially in NLOS conditions. The test was carried out using an FTP transfer system application to determine the data transfer performance referring to the QoS parameters based on the TIPHON standard. The research flow includes literature study, survey, planning pointing, mimosa C5x device configuration, and FTP protocol settings. The test is carried out using the roof of the IOT building and trees as network obstacles. The analysis of the research results includes parameters of throughput, packet loss, delay and jitter. Based on the test results, the throughput, packet loss, delay, and jitter values obtained very good quality in every experiment carried out. The average throughput value obtained from each experiment is 2.27 MBps, 722.82 MBps and 1.06 MBps. Packet loss generated for each test get 0% packet loss. the average jitter value in each test was 0.88 ms, 4.94 ms and 3.2 ms. the average delay value in each test is 0.52 ms, 2.62 ms and 1.69 ms.*

***Keywords:*** *Wireless, point-to-point, FTP, data transfer, QoS Parameter, throughput, packet loss, delay, jitter, pointing, TIPHON.*