

## **ABSTRACT**

The telecomunication technologies more rapidly trigger people telecommunications services rapid and efficient, it takes a technology new tissue access to replace the copper is not able to accommodate the need for people with speed hig. Fiber to the home (FTTH) is a new telecom technologies by using tissue fiber optic access to get home customers in country. By means of technology FTTH telecommunication service accessible faster than using tissue access copper. Housing Cherry Field located in Ciganitri, Bandung District, is the site of the study the finished project FTTH this , and providers used as the data is PT. Telkom. To meet technology FTTH housing this, then required network design of the route lines and in the device that required then analyzed eligibility the system based on the calculation budget parameter link. The research is obtained calculation link budget or total loss of 22,8 dB. With the calculation on the total loss of 22,8 dB, so the damping said worthy of being was still below standardization applied by PT. Telkom is as much as 28 dB.

Keywords: Fiber To The Home (FTTH), Total Loss, OptiSystem.