ABSTRACT
In this paper, it was discussed the vertical control that design the uniform distribution and the cosecant square distribution. Because the Base Station Antenna to set up in a multi-story building, that down title 6 degree increase communication quality. Cosecant square patterns have as low a level as possible toward the interference zone where the same frequency is used and, conversely, have as high a level as possible toward the service zone. In the virtual those using a Wilkinson power divider (WPD) and an Unequal power divider (UPD). The result of operate frequency range is from 1.7GHz through 2.2GHz in the WPD for s11 to be small than -10dB and the isolation to be small than -20dB. In the UPD for s11 to be small -10dB and amplitude and phase all conform to the cosecant square patterns and down title 6 degree. The purpose of first case is attention in high isolation for WPD. The second case is emphasized in cosecant square patterns and down tilted 6 degree for UPD.

Keywords : isolation ; cosecant square patterns ; down title ; Wilkinson power divider ; unequal power divider ; phase delay

