This equation is for Carbon nanotube field effect transistor in which ballistic transport is loss less scattering of electron .How to

If ballistic transport is assumed, the current I is given by the Landauer equation

 

where T(E) is the transmission probability for the scattering region, i.e., the channel, h is Planck’s constant, and spin- and CN band-degeneracy have been included. If the band diagram is known, then, it is sufficient to compute T(E) in order to determine the terminal current.