NAlice=10^6; %Logical bits send by Alice probd=0.10; %Probability of bit being a decoy efficB=0.1*0.1*0.9; %Efficiency of Detetor from Bob ProDarkCountBob=10^-5; %Probability of Dark count by Bob ProDarkCountEve=0; %Probability of Dark count by Eve QBERTest=10^3; %Amount of bits compared for QBER Test, in this simulation %they can use the same bit more than once Without the attack, QBER=0, Key Length=15340 and KeyPercent=0.00817 0.4 0.5 0.6 0.9 Eve Efficency 0.4 0.5 0.6 0.7 0.8 0.9 Eve Efficency 0.4 0.5 0.6 0.7 8.0 0.9 Eve Efficency

0.6 0.5 0.4 0.3 0.2 0.1

1000

-1000

 $\times 10^{-3}$

Key Length after QBER

0.2

0.2

0.2

0.3

0.3

0.3

0.1

0.1

0.1