Result Analysis

To choose the best result set among all the options that we have calculated, we have picked up some parameters such as equivalent distribution, number of iterations, maximum energy and so on to decide which type of deployment can give the maximum amount of energy and hence increasing the lifetime of the overall network.

**Random Deployment**

The calculations of the energy saved are shown in table 2. There are five iterations and we have calculated the energy saved for every node which sums up to 864823.7 PicoJoules in case of maximum energy saving. Considering the initial energy of nodes as 1 Joule and not taking duty cycle into account we have calculated the number of days by using the formula

Days =   
where Es=Energy saved and 1day=86400 seconds.

Putting the value of ES as 864823.7 we get 13 days and 3 hours.

**Spiral Deployment**

The calculations of the energy saved are shown in table 3. There are five iterations and we have calculated the energy saved for every node which sums up to 848969.0 PicoJoules in case of maximum energy saving. Considering the initial energy of nodes as 1 Joule and not taking duty cycle into account we have calculated the number of days by using the formula

Days =   
where Es=Energy saved and 1day=86400 seconds.

Putting the value of ES as 864823.7 we get 13 days and 6 hours.

**Square Deployment**

The calculations of the energy saved are shown in table 2. There are five iterations and we have calculated the energy saved for every node which sums up to 838600.7 PicoJoules in case of maximum energy saving. Considering the initial energy of nodes as 1 Joule and not taking duty cycle into account we have calculated the number of days by using the formula

Days =   
where Es=Energy saved and 1day=86400 seconds.

Putting the value of ES as 864823.7 we get 13 days and 8 hours.

So from the above calculations we can say that the square deployment is performing better than the other two deployment as the network will remain active for a longer time in case of square deployment.