Sample calculations:

Sample of resuspension of bacteria pellet calculation with constant

E = ((O-B) x V x D )/C

O=0.144 OD600

B=0.057 OD600 of blank

V=100 µl

D=4 fold dilution

C= 0.052 OD600*A. tropicalis*constant

E = ((0.144 OD600 - 0.057 OD600) x 100 μl x 4)/0.052 OD600 = 669 µl

Sample of resuspension of bacteria pellet calculation normalized to OD600 of 0.1

E = ((O-B) x V x D)/0.1 OD600

O =0.144 OD600

B=0.057 OD600 of blank

V= 100µl

D= 4 fold dilution

E = ((0.144 OD600 - 0.057 OD600) x 100 µl x 4)/0.1 OD600 = 348 µL

Sample of CFU per fly calculation, E=C x D/P x V/fly

C=19 CFU

D = 64 fold dilution

P= 10 µl plated

V= 1000µl fly homogenate

F= 5 flies

E = 19 CFU x (64/10µl) x 1000µl/5 fly = 24,320 CFU/fly