a)

Based on calculation

M2 = M1 = 3lambda is doable, so M1=M2 = 3lambda = 270nm M5=M6 = 2lambda = 180nm

M3=M4=4lambda = 360nm

Based on simulation

M1 M2 sizes are too small to hold Vq below VTN, therefore increases M1 M2 sizes to 4 lambda = 360nm = M3=M4

Figures: