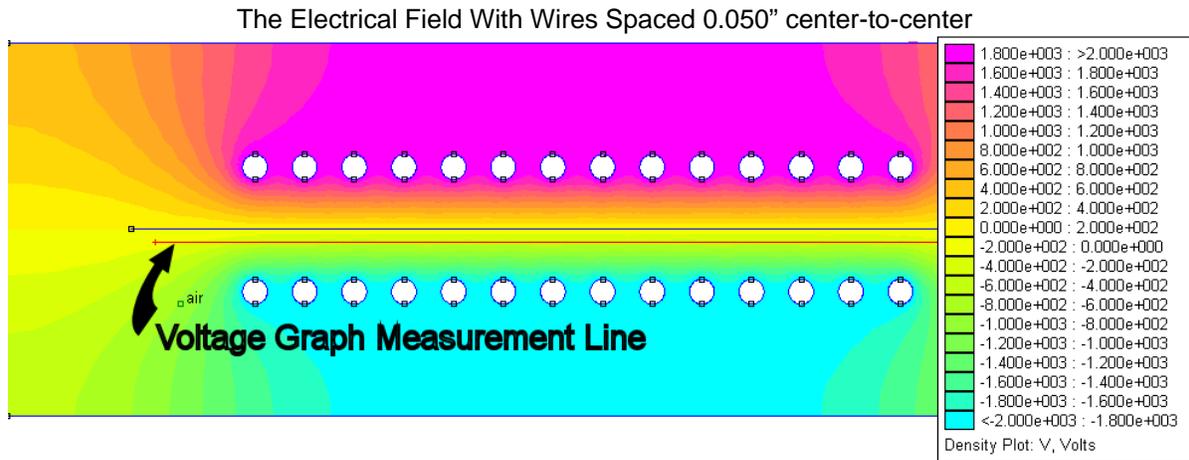
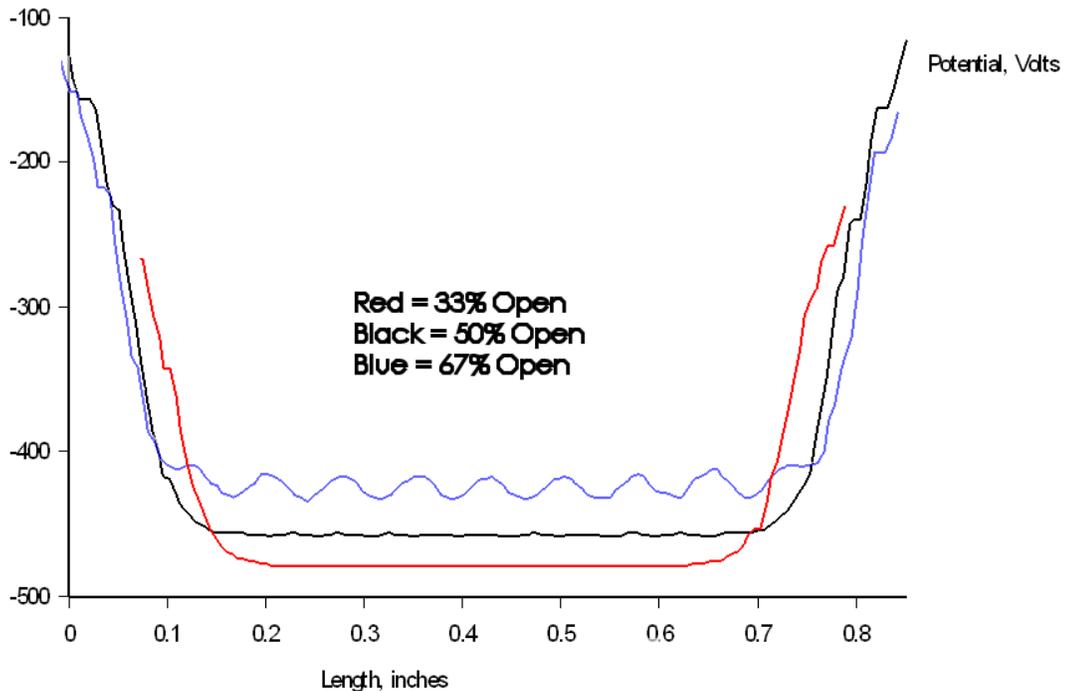


A Comparison of Electric Field With Different Wire Spacing

Three [FEMM](#) simulations were done to determine any difference in the electric field between electrostatic loudspeaker wire stators with different wire spacing. The conductors were modeled as 0.025" diameter, 22 AWG wire. The diaphragm was centered and 0.050" away from the nearest edge of each line of wires, the stators, and set at 0 volts. The upper stator was set at +2000 volts and the lower stator at -2000 volts. The wires were simulated at 0.0375", 0.050", and 0.075" center-to-center distances, corresponding to 33%, 50%, and 67% open respectively.



The graph below shows the simulation's voltage measured at a line parallel to the diaphragm and 0.0125" below it. As the percentage of open area decreases, the voltage near the diaphragm increases and becomes more even in intensity.



Please disregard the length below 0.2" and above 0.6". That is the area outside of the influence of the stator wires.