Assignment 1

Using any of plotting packages (Matlab, Mathematica, Maple, Gnuplot, etc..), generate the polar plot in the E-plane for the following cases:

1. Field pattern (linear scale) for $\lambda/2$ dipole.

2. Power pattern (linear scale) for $\lambda/2$ dipole.

3. Pattern (dB scale) for $\lambda/2$ dipole (make the origin at -40 dB).

4. Pattern (dB scale) for the λ and $5\lambda/2$ dipole (make the origin at -40 dB). Find the SSL (side lobe level) for the latter case.