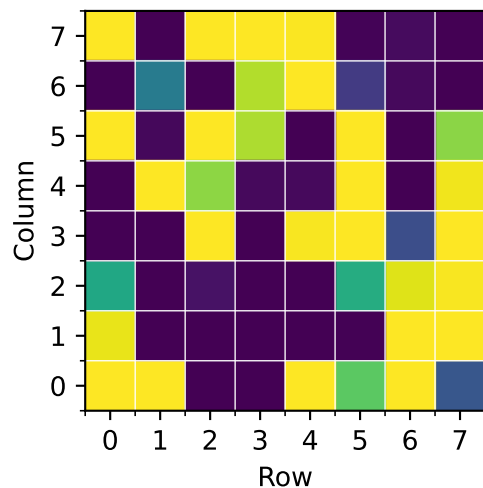


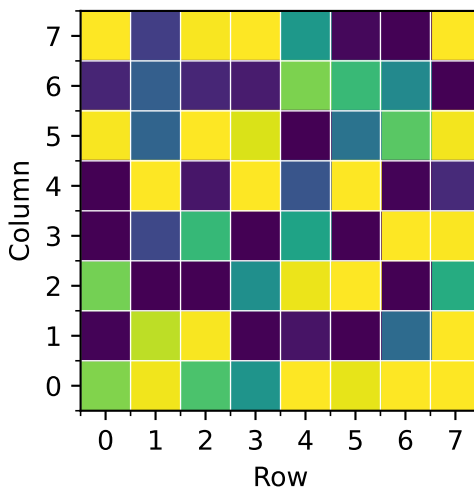
# ES+NN: Mode Collapse at 180°

(Network sacrifices backward steering to maximize forward angles)

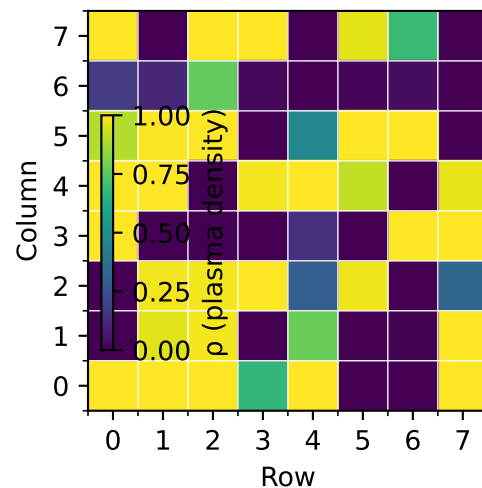
0° Design  
( $P=9.85e+05$ )



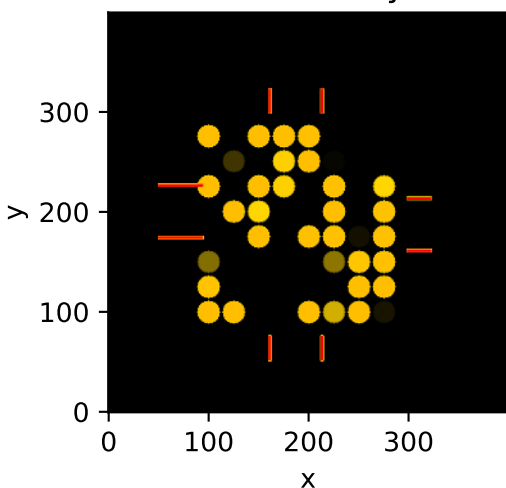
90° Design  
( $P=4.69e+05$ )



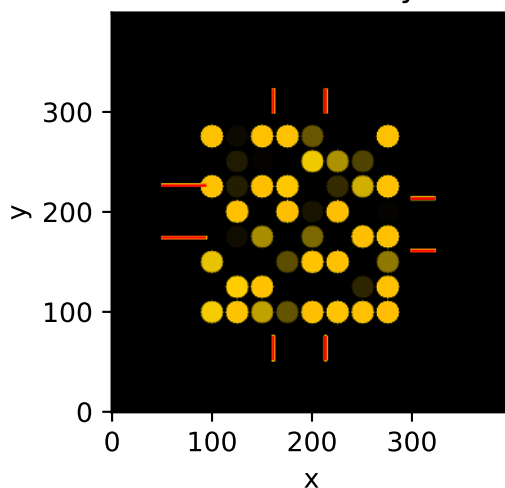
180° Design  
( $P=5.5$ )



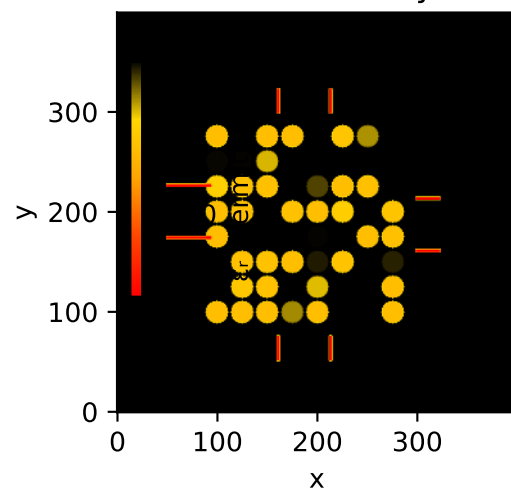
0° Permittivity  $\epsilon_r$



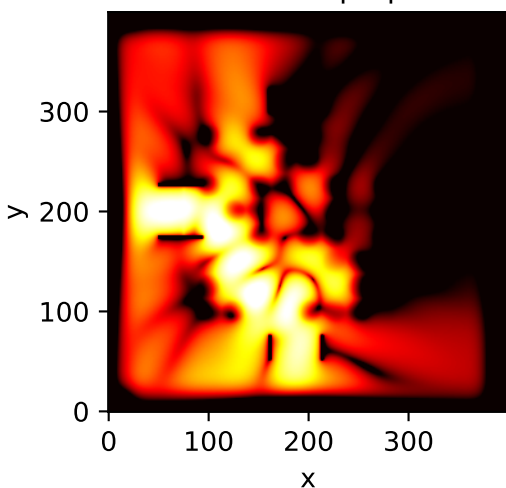
90° Permittivity  $\epsilon_r$



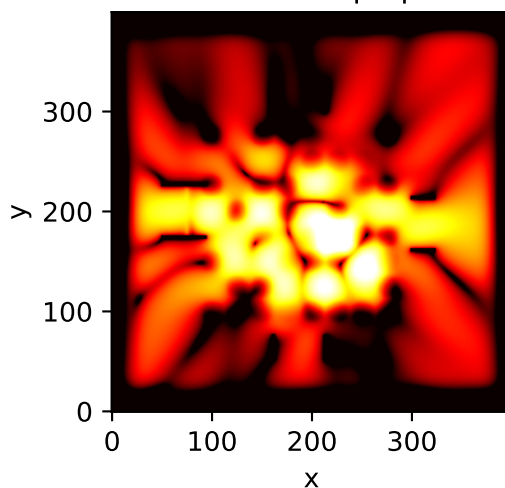
180° Permittivity  $\epsilon_r$



0° Field  $|E_z|^2$



90° Field  $|E_z|^2$



180° Field  $|E_z|^2$

