Public Abstract First Name:Erik Middle Name:Charles Last Name:Becker Adviser's First Name:Scott Adviser's Last Name:Kovaleski Co-Adviser's First Name: Co-Adviser's Last Name: Graduation Term:SP 2011 Department:Electrical Engineering Degree:MS Title:Design and Simulation of a Compact Radiating System for High Power Microwaves in the 4 to 6 GHz Range

As high power microwave technologies have advanced, demands have called for sources and radiators to become more compact. The University of Missouri has designed and simulated a compact radiating system for a compact virtual cathode oscillator. Presented are the modeling results of electromagnetic parameters in the compact structure, in the near, and in the far field regions.