

ECEn 665
Antennas and Propagation for Wireless Communication

Homework #2

Due Jan. 18, 2023 at the beginning of class (may be turned in late for half credit)

1. Derive Eqs. (2.70) from (2.67).
2. Find the vector current moment and far electric field radiated by a y-directed Hertzian dipole represented by the current $J(\bar{r}) = \hat{y} I l \delta(\bar{r} - \bar{r}_0)$ located at the point $\bar{r}_0 = (2, 0, 0)$ m.