

EE 483/583 Antennas for Wireless Communications (Spring 2025)

Homework 6

Wednesday, February 26, 2025

- 1) 4.3
- 2) 4.18c
- 3) 4.25 w/ $\ell = 0.1\lambda$ - As part of your solution, compute radiation R_r and loss R_L resistances using equations from text and again using NEC (show input file and relevant part of output). Compare answers. You do not need to use program **Dipole**.
- 4) 4.34
- 5) 4.45 Antenna NOT resonant (i.e., we'll consider reactance). Hence- a) Also find reactance. c) Also find reflection coefficient (phasor format w/ angle in degrees). Note: You may use MathCad, Matlab, ... instead of the computer program **Dipole** at end of chapter.
- 6) **EE 483 only:** 4.31
- 6) **EE 583 only:** 4.26

Due Wednesday, March 5, 2025