

EE 483/583 Antennas for Wireless Communications (Spring 2017)

Homework 5

Wednesday, February 22, 2017

- 1) 4.2
- 2) 4.6
- 3) 4.9
- 4) 4.17d
- 5) 4.24c- 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.
- 6) 4.26 You can neglect/ignore loss and reactance for this problem.
- 7) 4.30
- 8) 4.42 Do NOT ignore the reactance in this case (Hint: See 4-70a, 8-60b). Check/compare with results using NEC-2 assuming $f = 299.8$ MHz and $l/a = 64$. Note: You may use MathCad, Matlab, ... instead of computer program at end of chapter.
- 9) (EE 583 only) 4.24b- 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.

Due Wednesday, March 1, 2017.