

**9.22** For a dipole antenna of length  $l = 2.5\lambda$ , use Module 9.2 to determine:

- (a) Approximate directions of maximum radiation.
- (b) Antenna directivity.
- (c) Antenna radiation resistance.

**Solution:** (a) According to the radiation pattern, the radiation is maximum along  $\approx \pm 32^\circ$  and  $\pm 148^\circ$ .

(b) Directivity = 3.06.

(c) Radiation resistance =  $120.77 \Omega$ .

