2.997 Optical Engineering Assignment #5

Fall '99 Posted Nov. 1, 1999 — Due Nov. 10, 1999

- **1.** JG problem 2-3 (p. 28).
- **2.** JG problem 2-4 (p. 28).
- **3.** JG problem 2-5 (p. 28).
- 4. JG problem 2-10 (p. 29).
- **5.** JG problem 2-14 (p. 30-31).
- **6.** JG problem 3-5 (p. 61).
- 7. A two dimensional function has value 1 inside an ellipse of semi-axes a, b, and value 0 outside the ellipse. The ellipse is centered on the origin of coordinates and the semi-axes are oriented parallel to the Cartesian axes. Find the 2D Fourier transform of this function.