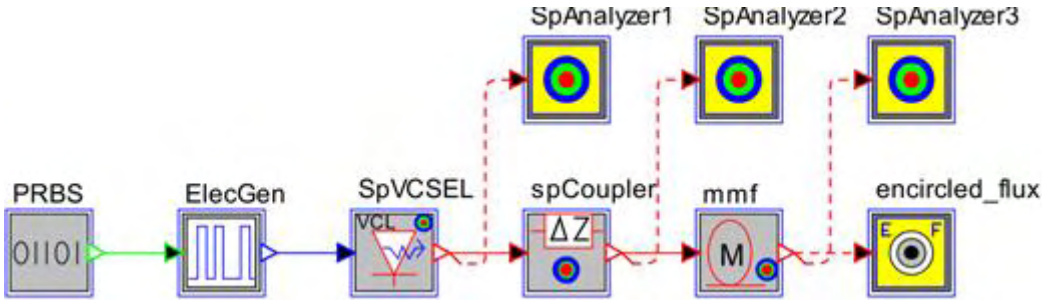
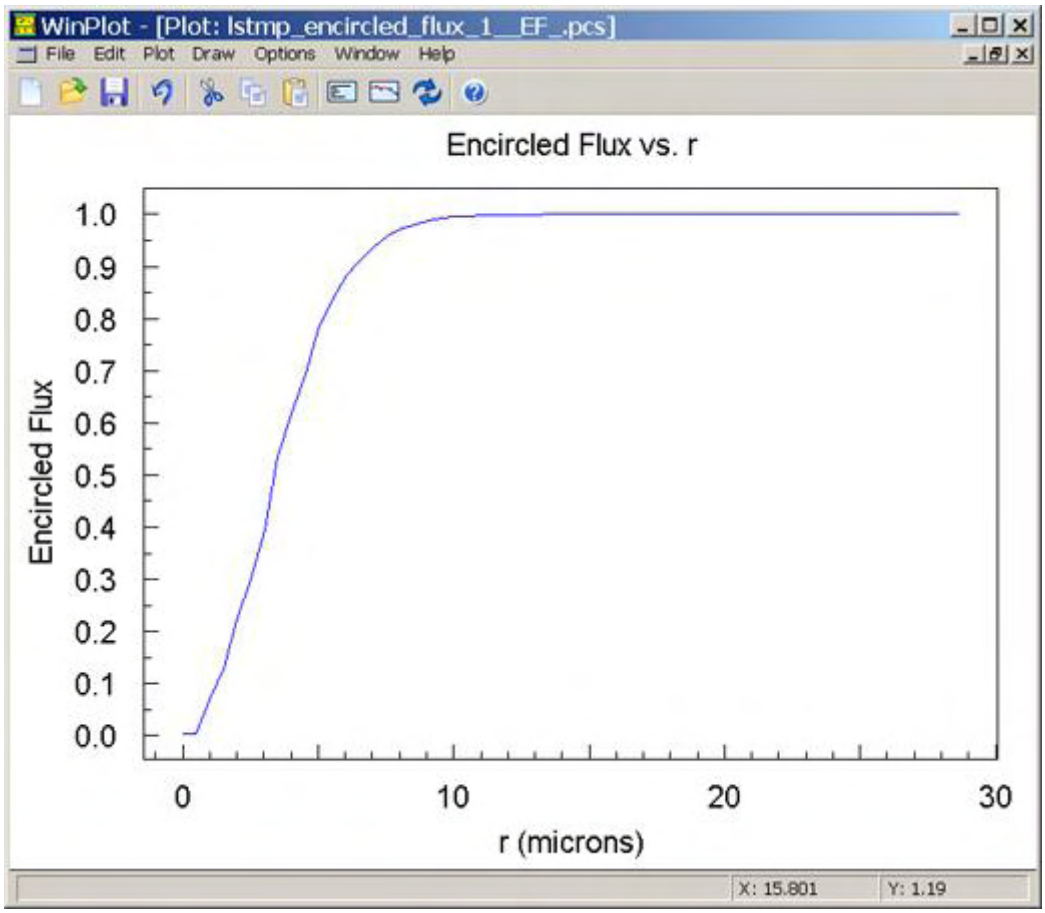
Encircled Flux (EF) Simulation

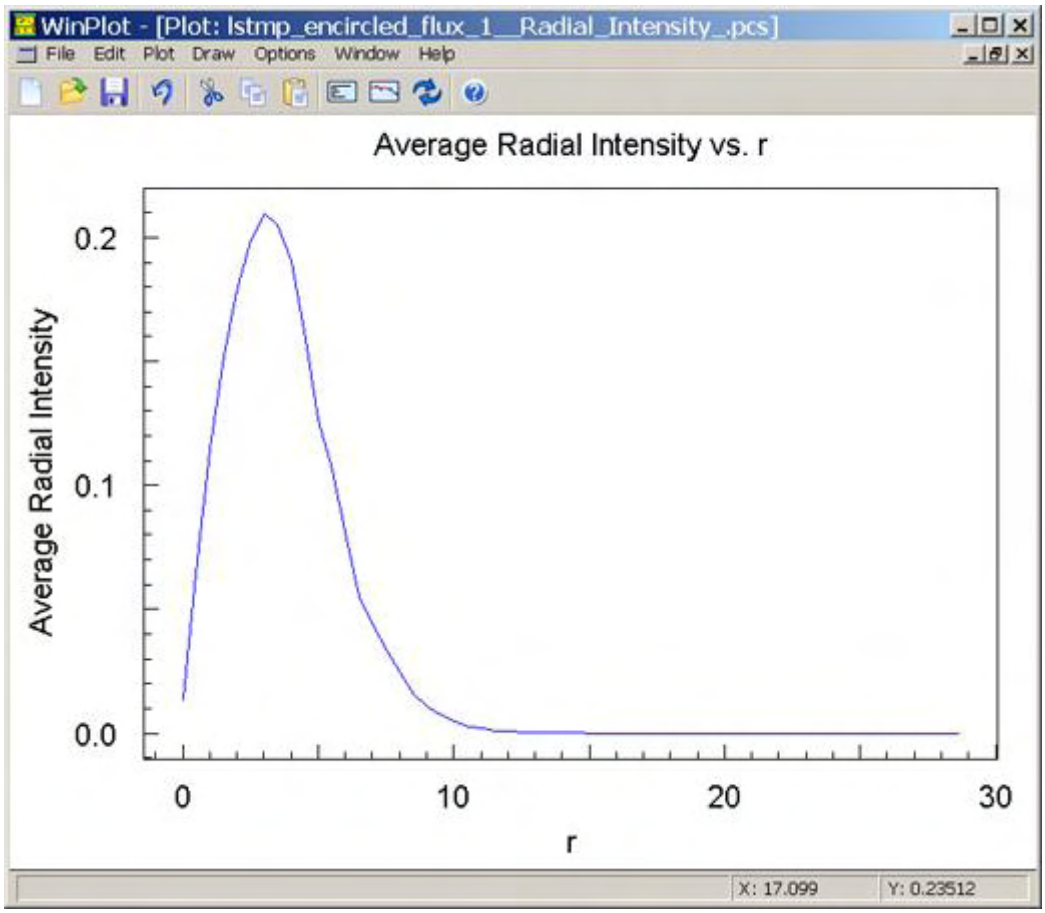
Tools Used: ModeSYS

The encircled flux is a measure of the amount of optical power that falls within a given radial distance from the fiber axis. Consider the layout as shown below which illustrates a topology with a multimode fiber and the encircled flux analysis tool:



The encircled flux and radial intensity plots corresponding to above layout are shown below:





The encircled flux plot above correctly shows that the integrated power at the fiber axis (r = 0) is zero and that it rises quickly, peaking at about 8 microns. Because the encircled flux is normalized by its maximum value, it ranges from 0 to 1.