Place the radiometer (with filter holder toward the lamp) and the lamp mounting (with the lamp you choose to use toward the radiometer), with the vertical rods of the two tripods approximately 3 feet apart. (Either the 250-watt infrared or the 150-watt flood lamp is satisfactory, but the infrared lamp is somewhat preferable.)

By holding the two filters in front of a window, show that one is clear (light-transmitting-heat-absorbing) and the other is opaque (heat-transmitting-light-absorbing). Place both filters in the holder on the radiometer stand. Darken the room with venetian blinds, but you can leave on the overhead lights.

With both filters in place, turn on the lamp and note that there is no effect on the radiometer. Now remove the opaque filter, leaving in place the light-transmitting-heat-absorbing filter, and not that the radiometer turns slowly. Now replace the opaque filter and then remove the clear filter, thus leaving in place only the heat-transmitting-light-absorbing filter. Note that the radiometer turns rapidly. Thus the lamp radiates a great deal more energy in the infrared than in the visible.

**Note:** The two filters are stored either in the holder attached to the radiometer or the holder attached to the thermopile.