

ENGR 210/EEAP 240

Lab2: Series & Parallel Resistance

Due: September 2, 1998

In this lab you will perform a simulated laboratory using a HP 34401A Digital Multimeter and various resistors to confirm the various laws governing series and parallel resistance.

Answer the following questions:

1. What were the measured resistances of R1 and R2?

R1=149.8W

R2=1521.3W

2. Resistor R1 is nominally a 150W resistor. What is the color code for 150W?

Answer: browngreen-brown

3. Resistor R2 is nominally a 1500W resistor. What is the color code for 1500W

Answer: brown-green-red

4. What is the measured value of R1 and R2 in series?

Answer: 1.6711 kW

5. How does this compare to the calculated value?

Answer: they are identical. $149.8+1521.3=1671.1$

6. What is the measured resistance of R1||R2?

Answer: 136.4W