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Subject: but

Posted by [dbeardsl](#) on Wed, 17 Apr 2002 20:28:12 GMT

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The volts are different cause I'm calculating sensitivity at 1 Watt. thats why it doesn't look right.---the system of equations  
 $Watts = Current * Volts$   
 $Volts = Current * Resistance$ ---expanded solution  
so  $Watts = Current^2 * Resistance$ so  $Current^2 = Watts / Resistance$ so  $Current = \sqrt{Watts / Resistance}$ since  $Volts = Current * Resistance$   
 $Volts = \sqrt{Watts / Resistance} * Resistance$ so  $Volts = \sqrt{Watts * Resistance}$ so  $2.83V = \sqrt{1W * 8}$  for 8 ohms. $2V = \sqrt{1W * 4}$  for 4 ohms.If you measure sensitivity at 2.82V/1M, then the Voltage will be the same and Wattage will be different.