
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 $Volts = Current * Resistance$
 $Volts = \sqrt{Watts * Resistance}$ 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.