“Ley de Ohm”

Practice 2

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1CM10

March 11TH, 2019

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# Practice development

## Dependency of Voltage

Without turning on the voltage source and set at 2.5 KΩ the value of the potentiometer. Build the circuit of the figure 1 using the protoboard. Once built, turn on the voltage source and now change its value from 0V to 15V as showed on the table 1.

Imagen que contiene texto

Descripción generada automáticamente

R=1KΩ ½ Watt

Potentionmeter

Figure 1. Circuit

Table 1. Values of electric currents

|  |  |  |
| --- | --- | --- |
| Voltage source (V) | Electric current (measured) | Electric current (Calculated) |
| 0 | 4.13 µ amps | 0 amps |
| 1 | 253.93 µ amps | 0.282 milliamps |
| 2 | 486.4 µ amps | 0.563 milliamps |
| 3 | 0.7273 milliamps | 0.845 milliamps |
| 4 | 0.9938 milliamps | 1.127 milliamps |
| 5 | 1.238 milliamps | 1.409 milliamps |
| 6 | 1.4761 milliamps | 1.69 milliamps |
| 7 | 1.7152 milliamps | 1.972 milliamps |
| 8 | 1.9585 milliamps | 2.253 milliamps |
| 9 | 2.2080 milliamps | 2.535 milliamps |
| 10 | 2.4572 milliamps | 2.817 milliamps |
| 11 | 2.7110 milliamps | 3.098 milliamps |
| 12 | 2.9357 milliamps | 3.38 milliamps |
| 13 | 3.1950 milliamps | 3.661 milliamps |
| 14 | 3.4458 milliamps | 3.944 milliamps |
| 15 | 3.6832 milliamps | 4.224 milliamps |

Now we put the data on a graph to look at the differences of the empiric way and the math way.

## dependency on resistance

With the voltage source turned off, set the value

# Conclusions

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# Calculations

For this practice, there were no calculations.

# Simulations

This practice has no simulation.

