**UNIVERSITY OF GAZİANTEP**

**DEPARTMENT OF ENGINEERING PHYSICS**

**EP 336 ENGINEERING PHYSICS LABORATORY – I**

**Exp 2: Characteristic of a Photovoltaic Cell**

**Name-Surname:**

**Student ID:**

**Submission Date:**

**DATA SHEET**

**Table 1: The short circuit current and the open circuit voltage of the photovoltaic cell.**

|  |  |  |
| --- | --- | --- |
| **Lamp Filament Voltage (V)** | **Short Circuit Current (μA)** | **Open Circuit Voltage (V)** |
| **1** | **0** | **0** |
| **2** | **0** | **0.6** |
| **3** | **2.6** | **2.25** |
| **4** | **20.6** | **3.56** |
| **5** | **69.9** | **4.9** |
| **6** | **164.8** | **6.32** |
| **7** | **324.3** | **7.78** |
| **8** | **606** | **9.16** |
| **9** | **802** | **10.13** |
| **10** | **803** | **10.16** |

**Calculations:**

* Draw the short circuit output current as a function of lamp filament voltage graph by using the Table 1 data
* Draw the open circuit voltage as a function of lamp filament voltage graph by using the Table 1 data
* Explain briefly the working principle of the photovoltaic cell.