CHAPTER FOUR

4. RESULTS AND DISCUSSION

The result comprises the successful operation of the 'SOLAR POWERED LED STREET LIGHT WITH AUTO INTENSITY CONTROL '. The circuit is stationed in a suitable location that is exposed to sunlight so that immediately it is dark the system automatically switches "ON" the lamps and when the illumination is above 50 lux the lamps are automatically switched "OFF". The values of illumination, voltage, current and temperature is noted from the LCD.

4.1 : As observed on Friday, 20/ 03 / 2021 at 1 :22 pm in the AEC LAB of NEW HORIZION COLLEGE OF ENGINEERING :

Table 1 (Observation of the useage of power in HORIZON COOLLEGE OF ENGINEERING)

S/N;	Current (A)	Voltage (V)	Illumination (lux)	Temperature (°C)	Status of LED
1	0.012	0	69.2	22	OFF
2	0.011	0	53.5	22	ON but Dim
3	0.01	0	46.7	22	ON and Slightly bright
4	0.011	0	3	23	ON and glowing brightly

5 Future Scenario

This design can be enhanced using the following:

1. Solar and Wind Powered Street Lights
2. Time Programmed Sun Tracking Solar Panel