Code (Arduino IDE)

```
#include "EmonLib.h"

#include<Wire.h>

#include<Adafruit_GFX.h>

#include<Adafruit_SSD1306.h>

#define VOLT_CAL 592

EnergyMonitor emon1;

int offset = 20;

int sct_pin = A1;

int rede = 230.0;

int pin_sct = A1;

double power = 0;

double current = 0;

double voltage = 0;

int c_id=1;

void setup()

{

Serial.begin(9600);

emon1.current(sct_pin, 29);

emon1.voltage(1, VOLT_CAL, 1.7);

delay(2000);

}

void loop()

{

emon1.calcVI(25, 1000);
```

```
float supplyVoltage = emon1.Vrms;

double Irms = emon1.calcIrms(1480);

Serial.print("{\"current\":");

current = Irms;

Serial.print(current);

double power = Irms * supplyVoltage;

Serial.print(",\"power\":");

Serial.print(power);

if (supplyVoltage >= 100)

{

Serial.print(",\"voltage\":");

Serial.print(supplyVoltage);

}

else

{

supplyVoltage = 0;

Serial.print(",\"voltage\":");

Serial.print(supplyVoltage);

}

Serial.print(",\"c_id\":");

Serial.print(c_id);

Serial.println("}");

delay(10000);

}
```