

```
int ADC1;

float V,R,Lux;

void setup()
{
  Serial.begin(115200);
  pinMode(13,OUTPUT);
}

void loop()
{
  ADC1 = analogRead(A0);
  V = 5.0*ADC1/1023;
  R = 10000.0*5.0/V -10000.0;
  Lux = 12518931 * pow(R,-1.4);
  Serial.print(ADC1);
  Serial.print(",");
  Serial.print(V);
  Serial.print(",");
  Serial.print(R);
  Serial.print(",");
  Serial.println(Lux);
  delay(500);

  if(Lux < 20.0)
    digitalWrite(13,1);
  if(Lux > 25.0)
    digitalWrite(13,0);
}
```