

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

void loop()
{
  int AN0 = analogRead(A0); // data 0-1023
  float V = 5.0*AN0/1023.0;
  float R = V*10000.0/(5.0-V);
  float Lux = 12518931*pow(R,-1.4);
  Serial.print(AN0);
  Serial.print(",");
  Serial.print(V);
  Serial.print(",");
  Serial.print(R);
  Serial.print(",");
  Serial.println(Lux);
  if(Lux > 30)
    digitalWrite(13,0);
  if(Lux < 10)
    digitalWrite(13,1);

  delay(200);
}
```