

```
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);
}
```