

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

void loop()
{
  int AN0 = analogRead(A0); // data 0-1023
  float V = 5.0*AN0/1023;
  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.print(Lux);
  delay(200);
  if(Lux>30)
    digitalWrite(13,0);
  if(Lux<20)
    digitalWrite(13,1);
}
```