

```
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);
}
```