



PyLeap NeoPixel Light Meter for Circuit Playground Bluefruit

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<https://learn.adafruit.com/pyleap-neopixel-light-meter>

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Table of Contents

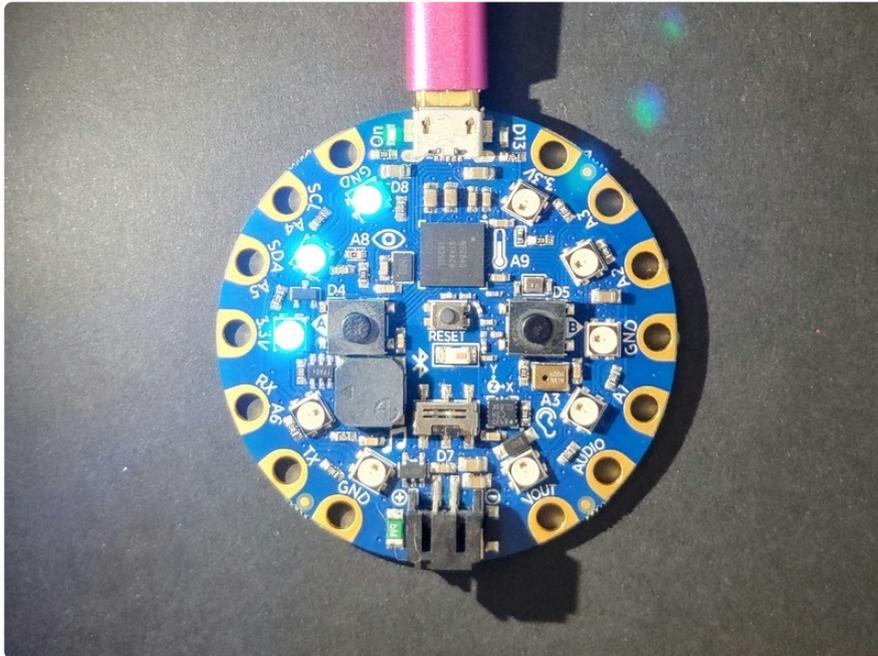
NeoPixel Light Meter

3

NeoPixel Light Meter

There is a **light sensor** and **ten NeoPixel LEDs** on your Circuit Playground Bluefruit. This example uses the ten LEDs to indicate light level from the light sensor.

Try shining a flashlight at your Circuit Playground Bluefruit to see the number of lit pixels increase, or cover up the board to see the number of lit pixels decrease.



```
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"""
Circuit Playground Bluefruit NeoPixel Light Meter.

Shine a light on the front of the Circuit Playground Bluefruit to see the number of
NeoPixels lit
up increase. Cover the front of the CPB to see the number decrease.
"""
from adafruit_circuitplayground import cp

# Choose a color. Defaults to cyan. This is an RGB value, where (r, g, b)
# represents red, green,
# and blue. Each value has a range of 0-255, where 0 is off and 255 is max
# intensity. You can
# update these values to change the colors. For example, (0, 255, 0) would be max
# green. You can
# combine numbers within the range to make other colors such as (255, 0, 180) being
# pink.
# Try it out!
color_value = (0, 255, 255)

cp.pixels.auto_write = False
cp.pixels.brightness = 0.3

def scale_range(value):
```

```
"""Scale a value from 0-320 (light range) to 0-9 (NeoPixel range).  
Allows remapping light value to pixel position."""  
return round(value / 320 * 9)
```

```
while True:  
    peak = scale_range(cp.light)  
  
    for i in range(10):  
        if i <= peak:  
            cp.pixels[i] = color_value  
        else:  
            cp.pixels[i] = (0, 0, 0)  
    cp.pixels.show()
```