



## UV/vis/fluorimeter cuvette holder with 4 LED slots for irradiation



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updated 8. 10. 2022 | published 8. 10. 2022

### Summary

A contraption which fits around a standard 1x1 cm (internal) pathlength UV/vis or fluorimeter cuvette. Four LEDs fit...

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Tags: [cuvette](#) [fluorimeter](#) [irradiation](#) [led](#) [photochemistry](#)  
[polymerisation](#) [polymerization](#) [spectrometer](#)  
[spectrophotometer](#)

This was migrated from my Thingiverse profile and is from 2015.

A contraption which fits around a standard 1x1 cm (internal) pathlength UV/vis or fluorimeter cuvette. Four LEDs fit around the sides allowing the sample to be irradiated from all four sides while being magnetically stirred from below. Useful for e.g. repeated irradiation/spectrometry cycles in photochemical kinetics measurements.

LEDs kept at constant distance from sample: so long as they are well below the liquid level and efficient stirring is maintained, constant and uniform irradiation of the sample can be assumed.

The LEDs in the pictures are infrared and were used for infrared photopolymerisation research work. Other wavelengths may of course be substituted: all standard 5 mm LEDs should fit.

This was one of my first designs after getting the 3D printer in 2015.

## **Print Settings**

### **Printer Brand:**

RepRap

### **Printer:**

Ormerod 2

### **Rafts:**

No

### **Supports:**

No

### **Notes:**

PLA standard settings.

## **How I Designed This**

Designed in OpenSCAD, sliced with Slic3er.

## **Model files**



**ir\_led\_cuvette\_holder.stl**

[Find source .stl files on Thingiverse.com](#)

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