



Air quality lamp for CO2 metering (MH-Z19, esp32 and neopixel)

t tbk

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Summary

Air quality lamp for CO2 metering. Designed by Lilifree (look at the remix).
Used parts: MH-Z19, esp32 and neopixel



3.29 hrs



3 pcs



0.20 mm



0.40 mm



PET



36 g



Prusa
MK3/S/S+

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Tags: [airquality](#) [co2](#) [esp32](#) [lamp](#) [lolin32](#) [mhz19](#)
[mhz19b](#) [neopixel](#) [wemos](#) [ws2812](#)

This is a air quality lamp for CO2 metering. I used the design from [Lilifree](#) (look at the remix).

The original was for the BME680 Sensor. I needed the case for the MH-Z19. So I changed the inner of the case and the "Top"-part. The "Stand"-part is untouched.

The parts I used inside the case:

- WEMOS ESP LOLIN32
- WS2812 LED ring with 24 LEDs
- MH-Z19b
- 4 small screws to keep the ESP and the BME in place ~M1.7x5
- 3 screws for the top cover ~M3x8

I added the "3mf"-file because of the infill trick (look at the blog post [her](#)).
I used the honeycomb infill with 30%.

This remix is based on



Air quality lamp

by Lilifree

Model files



wemos_lolin32_honeycomb.3mf



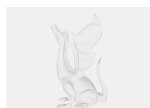
wemos_lolin32.stl



top.stl



stand.3mf



top.fcstd

Print files



wemos_lolin32_02mm_petg_mk3s_1h56m.gcode

PET 0.40 mm 0.20 mm 1.94 hrs 19 g Prusa MK3/S/S+



top_02mm_petg_mk3s_27m.gcode

PET 0.40 mm 0.20 mm 0.46 hrs 5 g Prusa MK3/S/S+



stand_02mm_petg_mk3s_54m.gcode

PET 0.40 mm 0.20 mm 0.89 hrs 12 g Prusa MK3/S/S+

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