

Turn your smartphone into a scientific instrument to identify street lamps lighting technology by covering the lenses with a grating https://streetspectra.actionproject.eu/

Satellite data

shows global



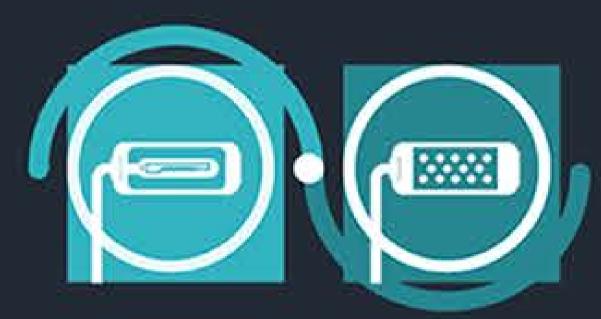
MADRID

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 824603

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E-ALAN 2020 JUNE 16, 2020

The advent of new lighting technologies, particularly light-emitting diodes (LEDs), has raised concerns about the potential negative effects of blue-rich white light.



Scientist are interested on study these lamps and map their locations so light pollution models can be refined.



Madrid 2017

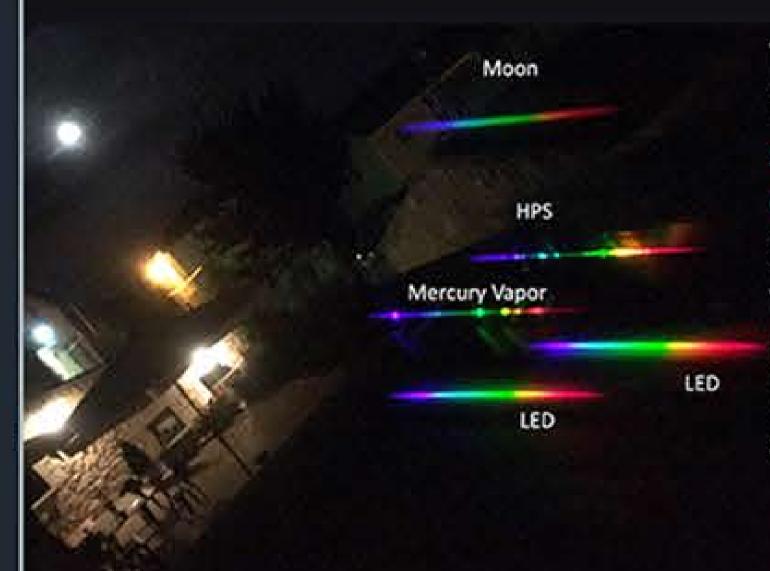


We aim to map and characterize public lighting sources.

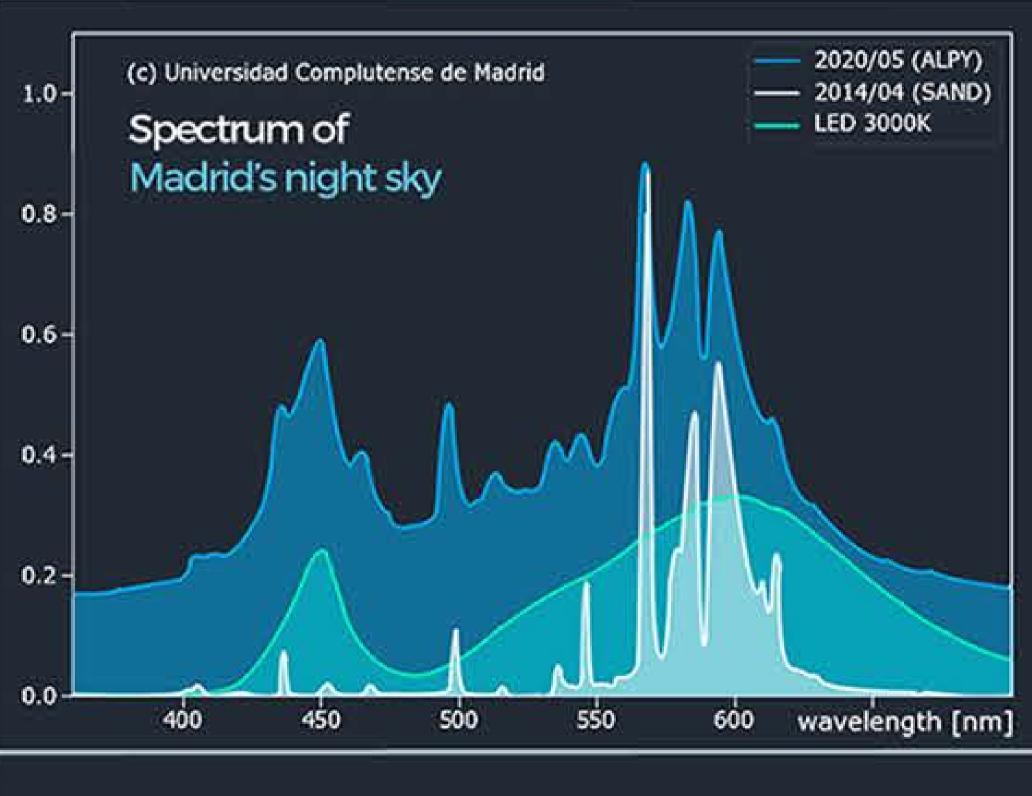
Volunteers use a low cost (500 lines/mm) diffraction grating on top of their smartphones' camera to take pictures of the street lamps and their emission spectra.





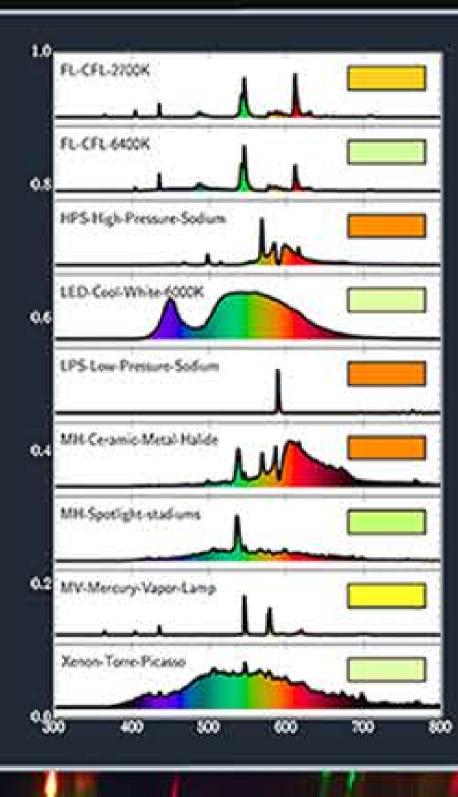


The resulting images allow street lamps classification by comparison with example pictures of well known lighting systems.



Mercury vapor LED

The spectrum of Madrid's night sky (far left) depends on the different lighting technologies used on the lights installed on its streets (right).



How to participate:

1. Download and read the manual you will find at https://streetspectra.actionproject.eu/

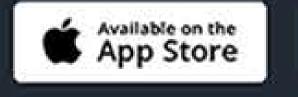


Horizon 2020

European Union

and innovation

2. Download and install opicollect5 in your phone





3. Get a (500 lines/mm) diffraction gratting

















This work is being developed within the framework of the Spanish Network for Light Pollution Studies, REECL. (AYA2015-71542-REDT)

