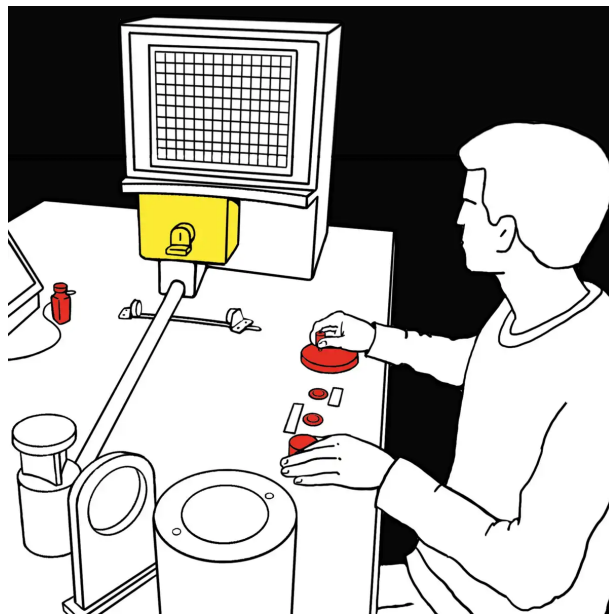


# Hot Light

Can you see all the radiation emitted by a light bulb?



Press the red reset button and turn the black knob to set the lightbulb to full brightness.

Turn the crank fully clockwise, then slowly anticlockwise to pull the light detector through the light spectrum.

Watch the measurement displayed at the monitor.

Now put the small water bottle on the sample table in front of the detector and repeat the experiment without resetting the display. It is possible that you must hold the green button (specific measurement) down.

**What do you notice when you compare both of the graphs?**

A normal bulb radiates not only visible light, but mostly infrared light, which we cannot see but feel as heat. The highest value is therefore already measured in the infrared range, i.e. before the detector passes through the colourful, visible spectrum. Water absorbs this thermal radiation. Since the little bottle is filled with water, it filters the infrared and the detector only records the visible light.