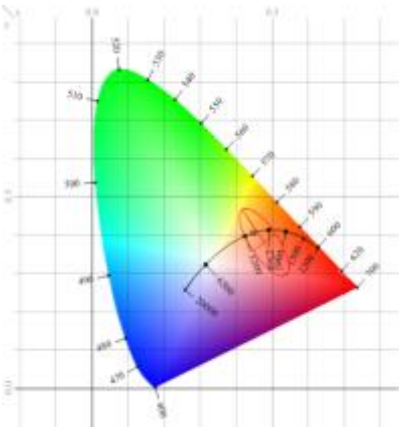
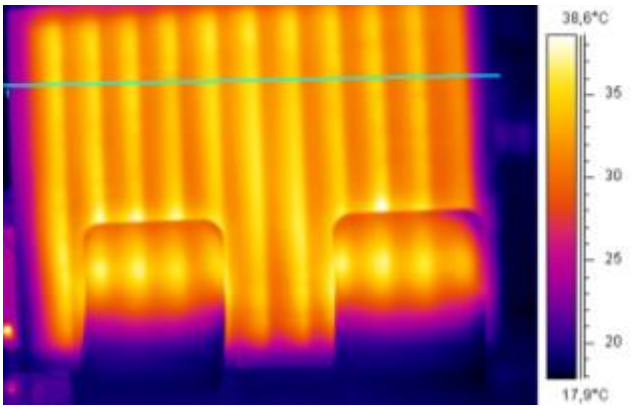
LIGHT PHOTON

Light Photon is equipped with an OLED (Organic Light Emitting Diode) head, setting a new standard in the organic electronics in terms of light quality and emitting surface. OLED light sources use the latest development in nanotechnology. It is composed of a complex stack of thin molecular layers of organic materials that produces white or monochromatic light when electric current is applied. The full diode, including electrodes, is 200nm thick. The OLED technology is currently a unique solution to build large emitting surface sources as opposed to inorganic LED that are limited to high power but small surfaces components. The nanotechnology scientific community is currently developing a full new set of components on organic materials following the same learning curve experienced in silicon microelectronics. From a structural point of view, OLED is a flat lighting source that looks like a thin foil of light. This surface light source can be modelled to various forms, logos, signs, letters and artistic drawings without using any additional optical elements such as lampshade, colour filter or reflector that naturally dim its source and reduce the real power efficiency of the luminaires. The colour of the OLED is directly linked to the material mix used in the emitting layers. This allows to select white light nuance as a painter would do with his palette.
The OLED sources are cool when illuminated, so that they can be touched by hand, in opposition to any existing sources, including high efficiency LED.
OLEDs can be directly recycled in existing waste recycling chains, the high rate of recyclability classifies the OLED among the most environmental friendly light sources.

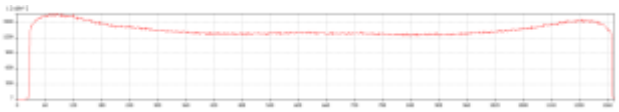
1 White OLED	1007 lm	2800 K	50 W



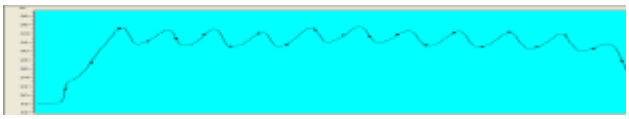
CIE: White OLED Color point compared to Black Body Curve.



Temperature: Temperature distribution in °C over the full lamp head.



Luminance: Luminance distribution in cd/m² over length in mm.



Temperature: Temperature distribution in °C over the length in mm of the lamp head.