

Case Study. RGB white LED lamp for ceiling application.



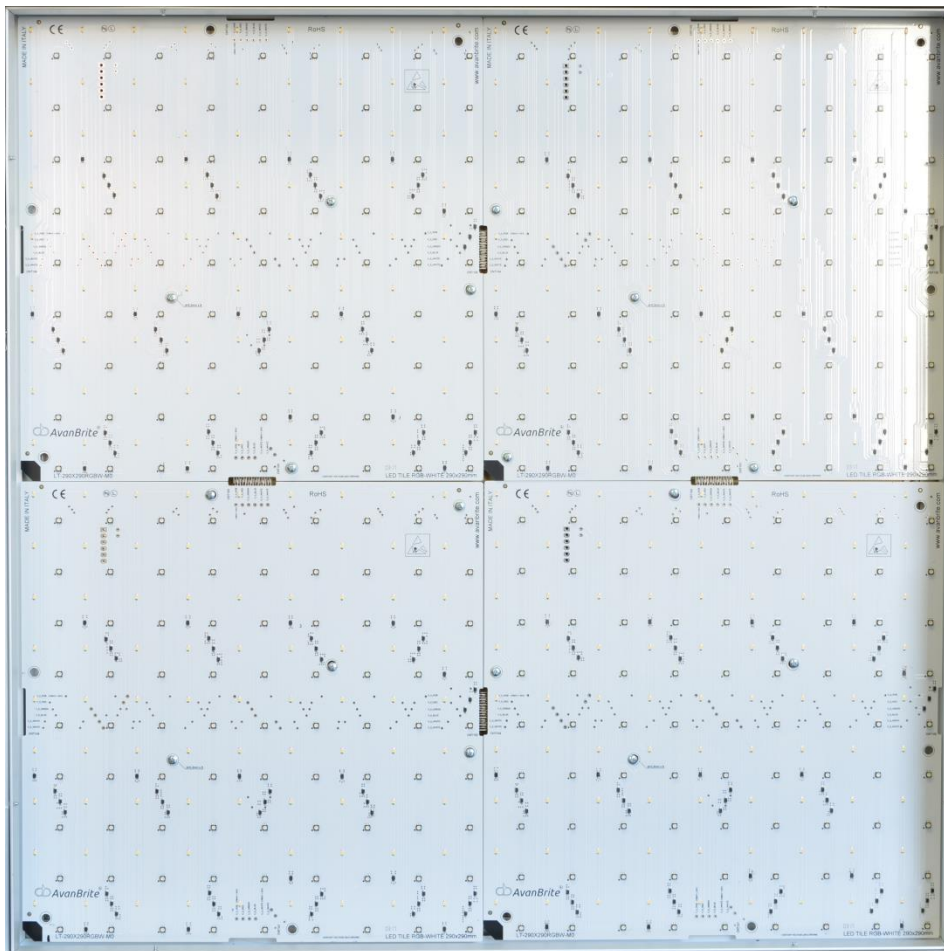
Low power consumption, high CRI and RGB channels for functional lighting.

The aim of the customer, a company mainly focus in electrical installation, was the installation of ceiling lamps 60x60cm suitable for laboratories rooms in a multi-purpose medical office.

The customer required a RGB+White (RGBW) functional lighting that overcome the mere decorative and scenographic effect of common RGB lamp in the market.

A such product in the market is not available, is a matter of fact that RGBW ceiling lamps offered for purchase provide a poor RGB component flux which made it unsuitable as functional lamps, but actually good for decorative and scenographic purpose.

The AvanBrite solution provides a LED engine based on Tabula RGBW LED tile mounted in a anodized aluminium frame with a plenty of covers: clear polycarbonate, prismatic and glare free opal.



Front view for LED lamp without diffusing cover

The Tabula LED engine measures 290x290mm, mounts RGB Nichia LEDs with True-Green technology and Osram Duris E2 white LEDs with CRI >80.

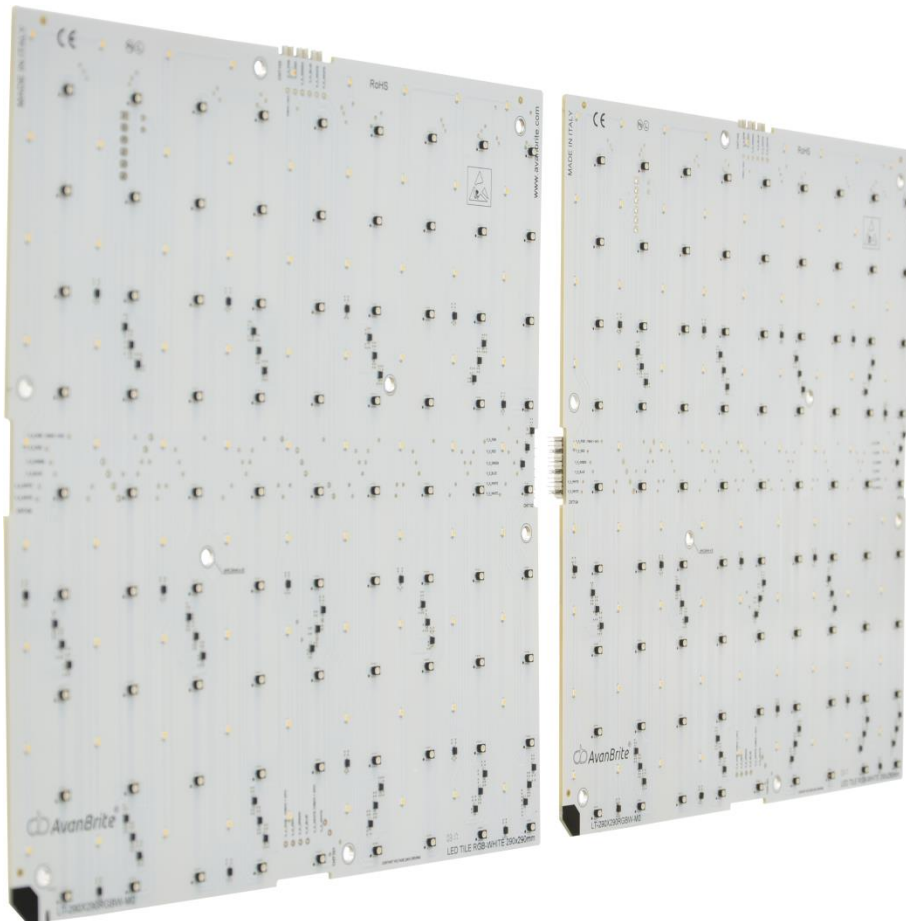
Each LED tile provides a white channel flux up to 1600 lm with a maximum power consumption of 16 Watt.

The built in current controllers for all channels allow to employ a simple constant voltage lamp power supply.

Project highlights

- LED ceiling 60x60cm
- 4 LED tile RGBW 29x29cm
- White channel maximum flux: 6500lm
- Maximum intensity RGB channels: 270-520-130 cd
- White channel CCT 4000K, CRI>80
- RGB functional lighting
- Dimmable
- Maximum power consumption (RGBW ON): 140W
- Weight: 3Kg

Thanks to the 4 hermaphrodite connectors placed on the edges more tiles can be merged together in order to obtain a seamlessly light emission surface homogeneous. The ceiling lamp is made of 4 LED tiles combined to form a square.



The modular LED tiles.

An RF control unit allows the color and intensity regulate of emitted lighting.

The company: “My customer required a RGB and white ceiling lamp with high flux, market didn’t offer a such device. We inquired AvanBrite, they provided a tailored solution in short time.”



Installation collage

Easy to install like a common ceiling lamp the AvanBrite solution provides a functional lighting as per customer requirements.





AvanBrite Srl

Via dell'Artigianato, 91
30023 Concordia Sagittaria (VE)
ITALY

Phone: +39 0421 700117

info@avanbrite.com

www.avanbrite.com

Follow us on:

 @avanbrite

 pinterest.com/avanbrite

 linkedin.com/company/avanbrite