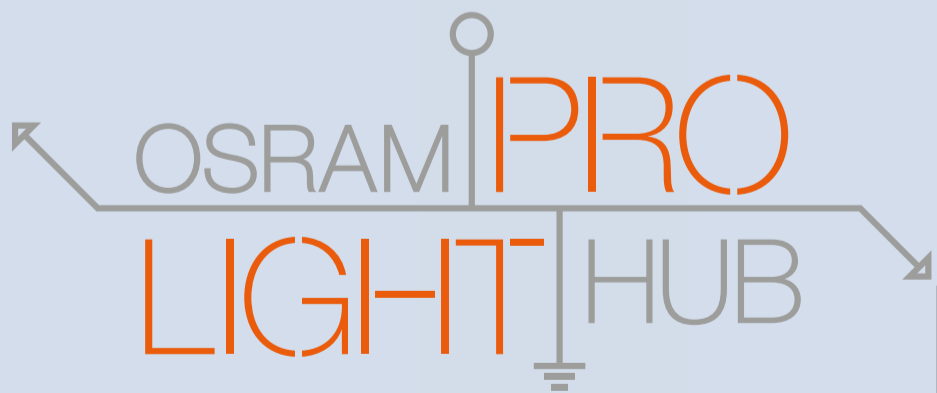
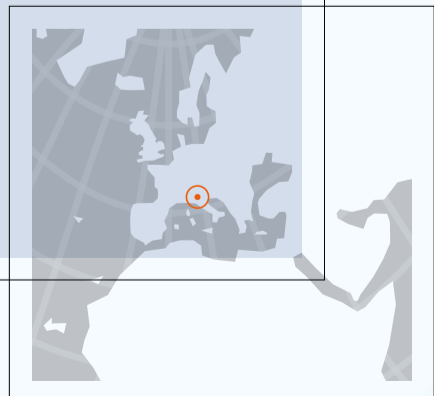


k-pro

professional key-project report



OSRAM PRO LIGHT HUB
THE BICOCCA INDUSTRIAL AREA HAS A NEW POINT
OF REFERENCE FOR ADVANCED LED APPLICATIONS





Solid State Lighting: the future of light has never been so solid

LEDs are the most innovative frontier in lighting technology.

Light can now become the star of a project and, thanks to the features of LEDs, new innovative applications are possible, which can be harmoniously incorporated into spaces.

OSRAM PRO LIGHT HUB offers a new perspective on the possibilities in lighting design, a space able to transcend the classic concept of a showroom as an exhibition of products installed with no precise functional logic. OSRAM PRO LIGHT HUB was created with the goal of offering an authentic experience in the most revolutionary world of *lighting*. It is targeted at all professionals in the

lighting industry and others, presenting itself as a striking and inspiring centre.

A place that brings together ideas not just products. A genuine *meeting point* that presents the most innovative lighting engineering designs to designers, architects and customers and tackles the most current topics as well as future possibilities in the world of lighting, all within an extremely versatile and high-tech setting. The Bicocca industrial area was chosen as the location for the HUB; an urban context in continual development, including culturally, it is often cited as an excellent example of intelligent urban redevelopment. Building the OSRAM PRO LIGHT HUB in Building Sixteen, used in the fifties

SSL

Solid State Lighting

SSL for OSRAM includes the entire chain of LED technologies, from each individual component to LED modules, LED systems, the ECG power supply and the revolutionary OLED technology.

Light Management System

OSRAM's LMS solutions are the perfect answer to many requests, needs and types of environments: lighting control based on daylight that conserves energy or multifunctional management of lighting systems and scenarios.

Everything is easily managed using the touch panel or remote controls.

LMS

by Breda Elettromeccanica (now Gruppo Ansaldo) for manufacturing train motors and transformers, highlights the industrial feel of HUB, while also remaining highly attractive to the world of design and fashion.

Designed by *OSRAM Lighting Services*, the showroom covers an area of approximately 330 m² and two floors; the ground floor includes two areas: an entrance and a more functional area including *office, meeting and reception* areas.

An apartment was created on the first floor with elegant designer furnishings.

This area includes a kitchen, bedroom bathroom and *high-tech* terrace overlooked by the *living* room.



Two images from the inauguration of the OSRAM PRO LIGHT HUB on 14 April, 2011.

The entrance area with the Traxon 16PXL Board RGB that becomes a mirror when turned off; on page 8, the visual effects possible when it is turned on. On the far end wall the LEDVANCE Downlights (M and L versions), the Easy Touch Panel and the iPad.
 On the right, the living area with linear recessed lighting on the wall and floor created using LINEARlight Colormix Flex modules also used as a backlight for the TV panel.



Light Management System, light within hands reach

The HUB welcomes visitors amazing them from the start with impressive applications: at the entrance we find four luminous columns and the PirOLED luminaire, all of which lies under a custom RGB suspension. Three different scenarios can be selected using the Touch Panel: *Welcome*, *Dynamic RGB* and *Relax*. Striking lighting effects can thus be created with touch of the hand.

All applications displayed at the HUB are controlled and activated according to the instructions provided during control system programming. A multimedia wall created with Traxon Board in the entrance area makes it possible to play customizable video contents. Next to the entrance, the *reception* station is equipped with a Glass Touch interface installed in the wall where scenarios can be controlled and lights in the adjacent areas turned on and off. A service space completes this area, including a wardrobe and bathroom, where light is completely automatic thanks to the use of light and movement sensors that activate the individual installations.

In the photo below: the four Traxon Board light columns positioned along the stairs (1PXL RGB, 1PXL DW, 16PXL RGB and 64PXL RGB) are controlled by welcome scenarios, the Traxon Spot XB WW, the Traxon Nanoliner XB9 RGB used as a wall-washer and the LINEARlight Colormix

Flex modules positioned under the furniture at the entrance. On the next page, the curve of light illuminated by the LINEARlight Colormix Flex modules; the perimeter area of the dropped ceiling is defined by rows of recessed downlight systems equipped





THE ENTIRE HUB ON THE iPad

Six Apple iPads positioned in strategic locations provide a more complete view of the HUB, thanks to a custom App. The desired areas can be easily accessed using the Touch Screen and technical specifications for various products viewed and sent to visitors' email addresses through the HUB's Wi-Fi network.

In the bathroom we find a special application of rectangular ORBEOS® OLED modules that are positioned behind the mirror and create a soft and uniform backlighting particularly suited to this type of environment.

The adjacent *meeting* area, a large space over 90 m², is characterized by a dropped ceiling that makes it possible to use various functional and decorative lighting solutions. One example is the thin curvilinear recessed system in the false ceiling that creates a highly attractive decorative element and can create sequenced RGB lighting effects (colour changes).

The general lighting in the *meeting* area is divided into three distinct groups of six independently controlled downlights,

while the external perimeter is fitted with rows of recessed systems equipped with PrevaLED Light Engines used to define the edges of the plasterboard structure while also providing suitable lighting for the use of video projectors during presentations.

The walls of the *meeting* area hold many interesting decorative applications: quadrangular niches closed off by opaline glass illuminated by LED modules or TX mini-projectors with Dynamic White technology for *wall-washing* effects.

The *living* area, defined by a large angular sofa, is characterized by sheets of recessed lights running between the walls and floor, while the video area is decorated with *cove lights* for colour variation effects.

with PrevaLED Core HD light engines, while three groups of six LEDVANCE Downlight XLs create lighting areas dedicated to technical-operational spaces. LINEARlight Powerflex modules were installed along the upper perimeter of the structure for indirect lighting. In the technical area,

quadrangular recessed wall systems are illuminated by LINEARlight Colormix Flex modules. Under the windows in the meeting room, recessed floor Traxon Liner XB DW lights were installed to create a wall-washer effect.



On the terrace, three LINEARlight Flex RGB Protect modules are hidden under the brick balustrade while the perimeter of the sliding curtain includes LINEARlight Power Flex 3000 K modules.



Innovative lighting scenarios and LED solutions for the first floor

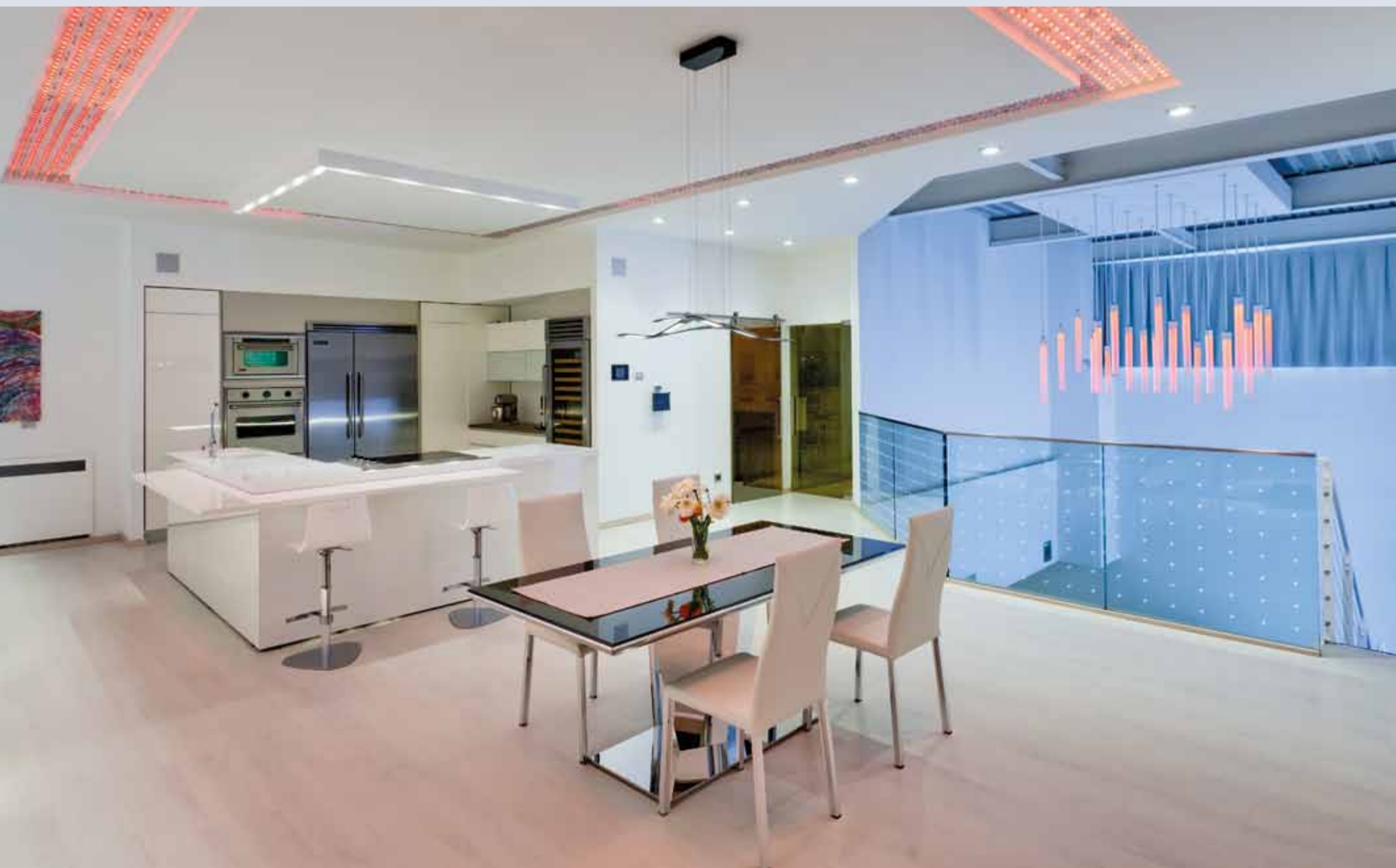
Climbing the stairs to the first floor, visitors are welcomed by a railing in transparent multilayer glass internally illuminated by white LEDs that appear magically suspended; the large connected living area overlooks the terrace, a space perfect for elegant evening events. A ceiling-mounted frame created with Traxon Mesh RGB encircles and

highlights the living area with different scenarios, RGB or monochromatic, which are easily controlled using the Easy Touch Panel.

A custom system was created as another lighting accent, including ten LED COINlight Advance modules. The bathroom on the first floor includes a custom double-emission suspension light: white for direct emission and Colormix for indirect, that, together with the glass shower including internal LEDs, helps to create highly striking atmospheres using the Easy Color Drive wall command.

In the photo below: the custom suspension above the entrance, composed of twenty-two methacrylate elements illuminated by Traxon Spot XB modules. The Traxon Mesh RGB in the ceiling on the first floor, created with transparent modular mesh equipped with 160 LEDs and

measuring 2000 x 312 mm, provides a high protection grade (IP67) and resistance to UV rays, characteristics that make it particularly suitable for outdoor use as well. The Traxon Glassiled used to create the railing and glass shower is created with transparent mesh installed with white LEDs.



The custom suspension in the bathroom on the first floor uses the LINEARlight Power Flex modules with a colour temperature of 3000 °K toward the bottom and LINEARlight DRAGON Colormix for indirect light toward the top.



In the adjacent bedroom, the bed is decorated with LINEARlight Colormix Flex modules used to highlight its lower edge.

The same modules are also used for the headboard: the effect is achieved by coloured light coming from below that passes through the glass and remains invisible up to the frosted edge, thus creating a uniform and diffused effect. In front of the bed, a multimedia installation was created with four 64PXL Mirror Wash RGB panels that create dynamic lighting scenes when turned on and become a mirror when turned off.

The first floor of HUB provides access to the terrace through large glass doors. This area is characterized by a harmonious combination of functional and *mood lighting* solutions.

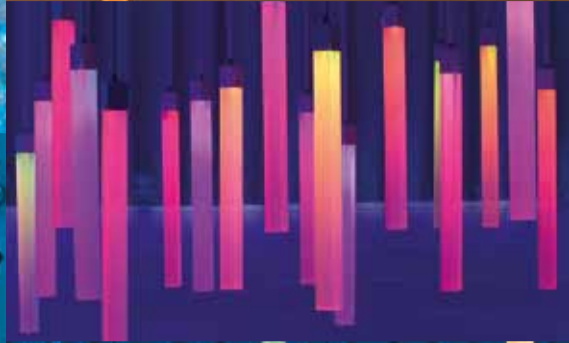
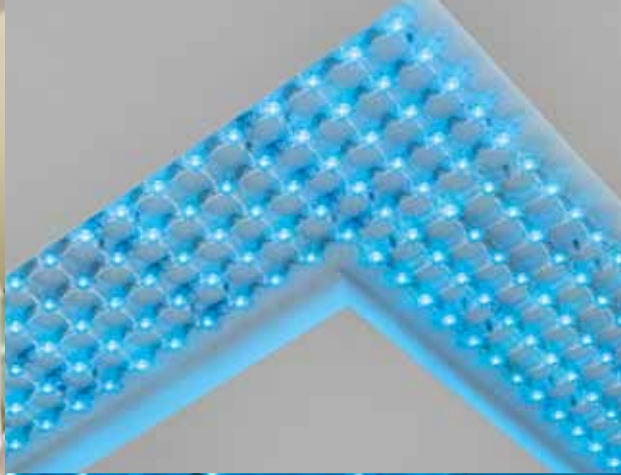
The general lighting is created using wall *appliques* including PrevaLED Light Engines here as well, while flexible, protected modules complete the installation.

LINEARlight 3000 K modules are installed around the perimeter of the curtain while the Flex RGB Protect module was used to add movement to the vertical surface of the railing with dynamic plays of light. The entire external area is controlled using the Easy Touch Panel installed on the first floor.

inserted in layered glass. The general lighting in the living area is completed with LEDVANCE Downlight L, while the twelve LEDVANCE Downlight M modules define the glass wall bordering the terrace.

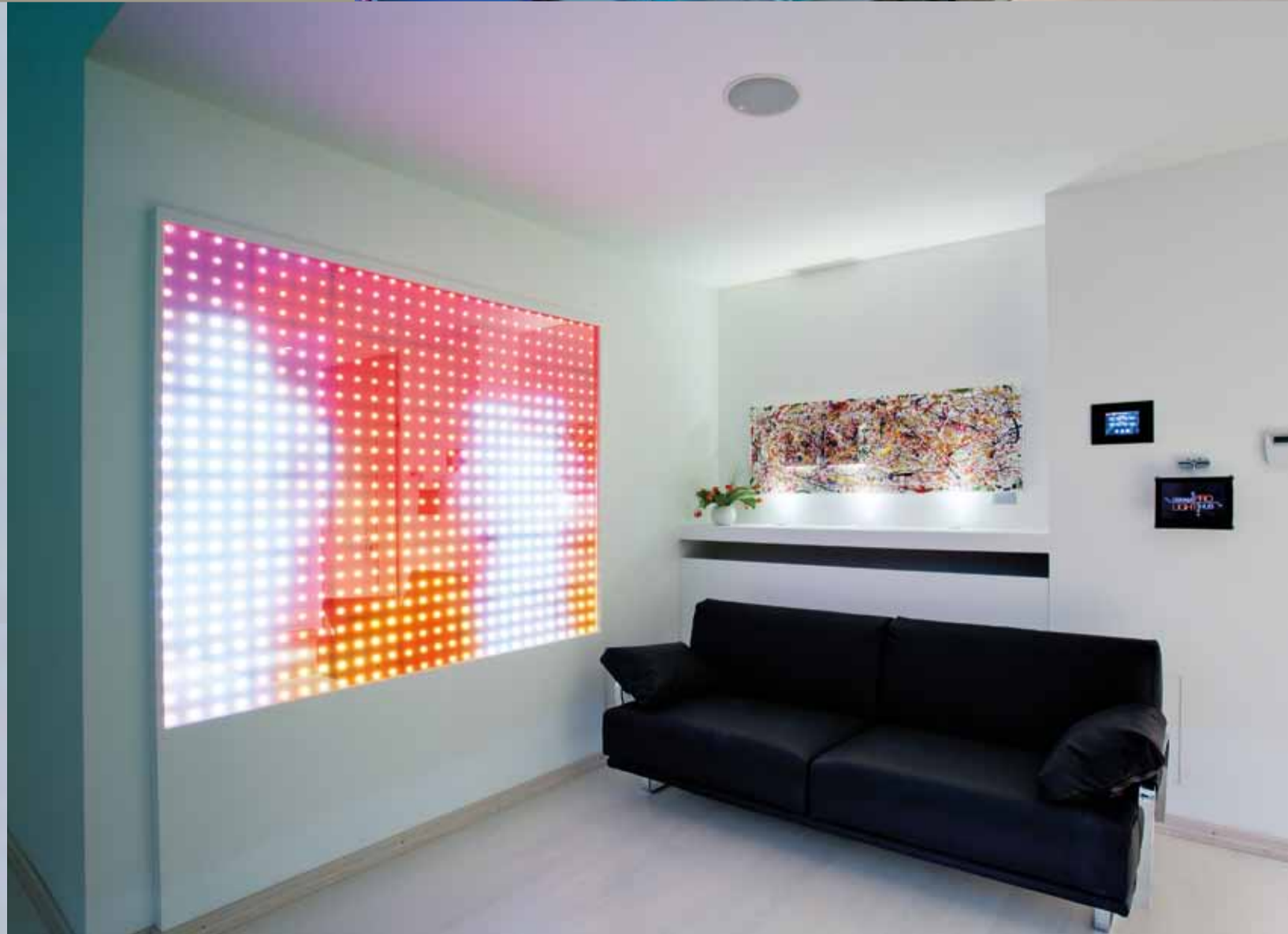
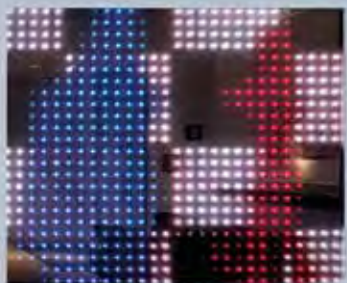
In the photo on this page, a multimedia system in the bedroom composed of 4 Traxon 64PXL Mirror Wash RGB modules. The walk in closet is equipped with automatic lighting thanks to a movement sensor that activates four LEDVANCE Downlight S modules.

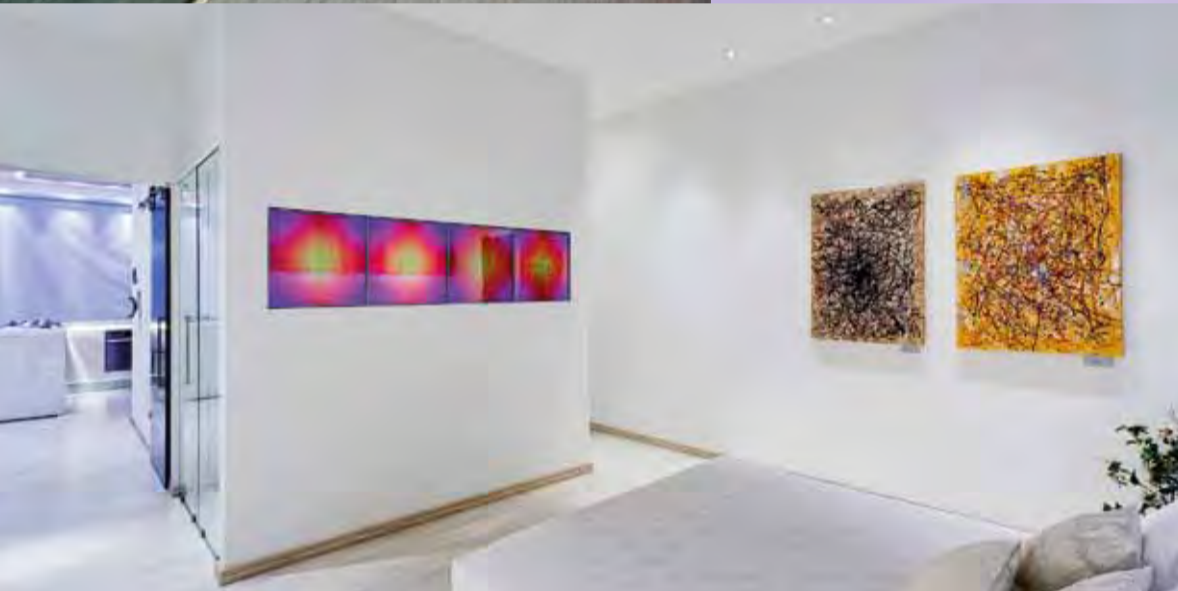




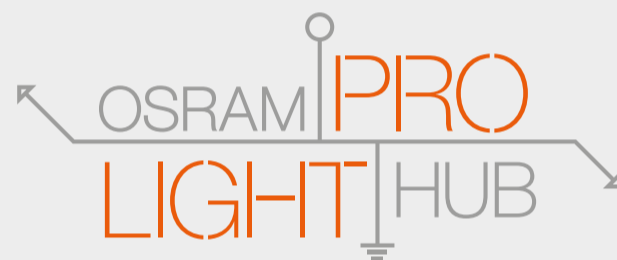
traxon | e:cue

Traxon E:CUE, a company in joint venture with OSRAM, is a global leader in architainment installations (architectural lighting for entertainment) and LED lighting systems. The know-how of a leading innovator in RGB and high-beam white light installations paired with the strength of a global player produces an offer that ranges from unique LED lighting systems to extremely advanced control solutions. The company's expertise is apparent in over 3000 prestigious lighting installations around the world, including the systems created for the Tower Bridge during The Arc Show in London in 2009 and the Guggenheim Museum in New York.



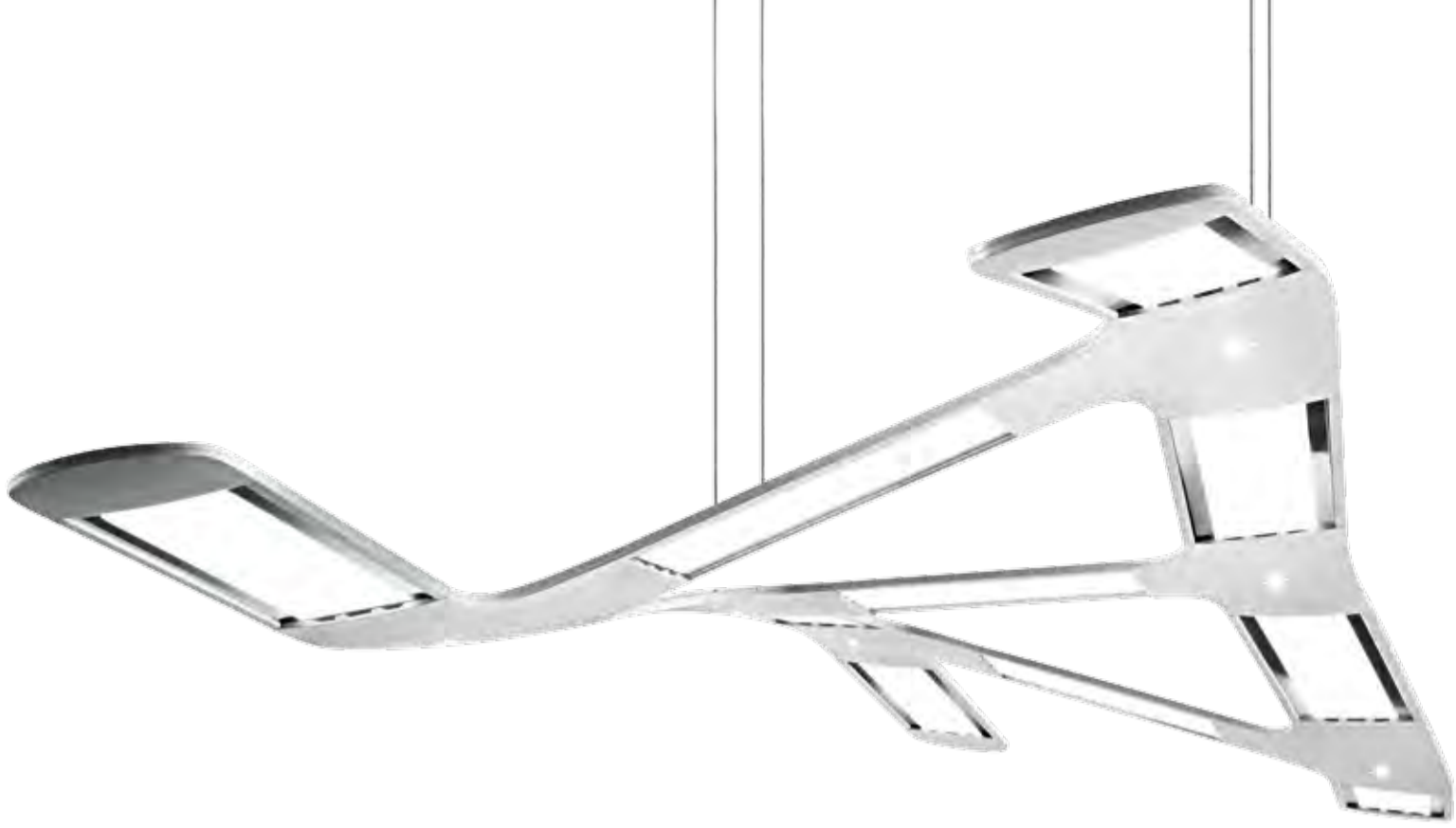


OSRAM PRO LIGHT HUB is in Milano Bicocca
Building Sixteen, viale Sarca 336



OSRAM PRO LIGHT HUB is a space that can be outfitted
and viewed on-demand. For information or to book a visit
contact: osramhub.bicocca@osram.com





OLED Revolution

**Much more than simple light.
A new technology becomes a source of inspiration
for architects and lighting designers.**

OLED is an acronym for *Organic Light Emitting Diode*. This is an advanced technology that makes it possible to create extremely thin two-dimensional elements that require no additional heat dissipator. In addition to offering advantages such as low voltage operation and the absence of mercury, OLED is distinguished by certain unique properties.



*Rectangular ORBEOS®
installed in the bathroom mirror*



The Airabesc suspension, presented at the inauguration of the OSRAM PRO LIGHT HUB, was given the **Red Dot Award: product design 2011**



reddot design award

The light source is extremely thin and characterized by a surface that emits light uniformly without creating glare.

OSRAM has always been on the cutting edge of new technologies and for several years now has been committed to OLED product development. In 2008 the *Early Future* lamp by Ingo Maurer was created with the first OLED panels produced. By the end of 2009 ORBEOS® was introduced on the market as the first OLED light source by OSRAM. ORBEOS® was presented in Italy on May 25, 2010 during an event at the Museum of Science and Technology in Milan entitled "Organically luminous: Intelligent light was never so flexible". The prototype for the PirOLED luminaire was put on display during the event; designed by Martin Moeck, it includes 5 circular ORBEOS® panels mounted on a brushed steel frame that resembles the helical structure of DNA.

Using two buttons on the base the OLEDs can be turned on and a power LED activated. Inspired by the new rectangular ORBEOS® modules, Dietmar Fissl of 2DO-DESIGN created the *Airabesc* luminaire, presented in advance during the inauguration of the OSRAM PRO LIGHT HUB.

The system, which received the **Red Dot Award: product design 2011**, uses eleven ORBEOS® and six Oslon Warm White LEDs.

Both systems can be viewed at the HUB, the *PirOLED* lamp on the ground floor in the lobby and *Airabesc* on the first floor in the *living area*. The special features of OLED panels were also exploited in creating the lighting in the ground floor bathroom.

The two large mirrors over the two sinks were embedded with twelve rectangular ORBEOS® modules that are perfectly flush with the surface of the mirror and thus appear to continue non-stop.

The PirOLED lamp at the entrance to the HUB



OSRAM ORBEOS® OLED

OSRAM currently offers three different ORBEOS® modules: two circular panels with an \varnothing 79 mm emission area on the octagonal base and different finishes on the surface, a diffuser (CDW-031), a mirror (CMW-031) and a rectangular model with an emission area measuring 112, 89x35 mm with a mirrored surface (RMW-046). The CMW-031 and RMW-046 models are also available with a flexible printed circuit board for connection to a power source. All ORBEOS® have a colour temperature of 2800 °K, last on average up to 5000 hours (B50 - L70) and can be dimmed.



ORBEOS® CDW-031



ORBEOS® CMW-031



ORBEOS® RMW-046
with flexible printed circuit board

SISTEMA DALI PROFESSIONAL

System with 4 DALI lines suitable for lighting control; manages up to 256 DALI power supplies and up to 50 button interfaces or connectable sensors.

SISTEMA EASY DMX

System designed for simply controlling equipment and devices. Individual control of up to 64 DMX channels and up to 16 independent points of light. The option of programming up to 64 light scenes and 4 sequences.

MODULI LINEARLIGHT COLORMIX FLEX®

System created on a flexible plate for dynamic colour applications (RGB). Each module includes LEDs containing 3 chips in red (R), green (G) and blue (B).

MODULI LINEARLIGHT POWER FLEX®

LED module created on a flexible printed circuit board that provides backlighting for complex structures. This compact and powerful light source can be used to light transparent materials and diffusers.

MODULI LINEARLIGHT FLEX® PROTECT

LED module with an intense light flow for external use (IP67). Elevated UV radiation, salt fog corrosion and flash point resistance according to the glow wire test.

MODULI LINEARLIGHT DRAGON® COLORMIX

LED module that provides intense chromatic effects. 18 Golden DRAGON® power LEDs on a thin and narrow metal-core circuit generate dynamic coloured light for systems or niches.

LEDVANCE DOWNLIGHT

Downlight system for recessed installation in dropped ceilings equipped with white Oslon LEDs in Warm White (3000 °K) and Natural White (4000 °K) temperatures. Available in M (ø 80 mm), L (ø 140 mm) and XL (ø 195 mm) versions.

COINLIGHT® ADVANCED

Downlight system for recessed installation in dropped ceilings equipped with three Golden DRAGON® Plus LEDs. Designed for accent lighting thanks to the reduced beam width (36°). Available in three white colour temperatures: 3000 °K, 4000 °K and 5400 °K.

EASY HYBRID REMOTE

Digital infrared radio remote control at 868,3 MHz. Control of up to 8 lighting scenes, 8 light groups and 4 sequences. Base for wall mounting and colour LCDs with adjustable backlighting.

EASY COLOR DRIVE

Dual technology for connections using 4 conductor signal cables or wireless systems with remote control at 868,3 MHz. Control of up to 8 lighting scenarios, 8 light groups and 4 sequences. Base for wall mounting and LEDs with adjustable backlighting colour.

LS/PD MULT3 CI

Light and movement sensor for recessed ceiling installation.

EASY TOUCH PANEL

Wall interface programmable using the Easy PC Kit software.

GLASS TOUCH 12

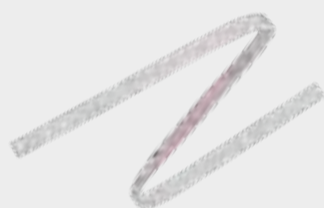
Wall interface that can be set with 12 programmed functions. It is connected to the control unit through the e:bus DALI Gateway.

TRAXON NANOLINER XB

System of modular high-powered yet small recessed spotlights equipped with 9 power LEDs designed to provide even illumination even at considerable distances. Available in the RGB (3 Red LEDs, 3 Green LEDs and 3 Blue LEDs) and Dynamic White (6 Warm White LEDs, 3 Cool White LEDs alternated) version.

TRAXON 1PXL BOARD RGB

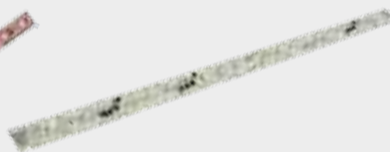
Modular element composed of 16 wide beam LEDs at 120°. Thanks to the modularity and compatibility of DMX control, it is suitable for architectural and entertainment applications. Available in RGB and Dynamic White versions.



LINEARlight Colormix Flex®



LINEARlight Power Flex®



LINEARlight DRAGON® Colormix



DALI Professional Controller



DALI e:bus Gateway



EASY DMX 16x4 S0



DALI Switch S0



COINlight® Advanced



LEDVANCE® Downlight S



LEDVANCE® Downlight M



LEDVANCE® Downlight L



LS/PD Multi 3



Glass Touch 12



EASY Touch Panel



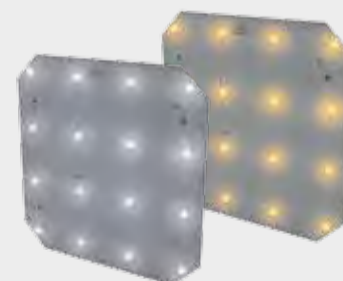
LEDVANCE® Downlight XL



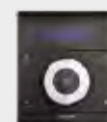
LINEARlight Flex® Protect



Traxon Nano Liner XB DW
Traxon Nano Liner XB RGB



Traxon 1PXL Board DW
Traxon 1PXL Board RGB



EASY Color Drive



EASY Hybrid Remote Control

Project name	OSRAM PRO LIGHT HUB
Project description	Application of LMS products and LED lighting technology
Project coordination	OSRAM Lighting Services
Creation	ALA Total Living

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SEE THE WORLD IN A NEW LIGHT

