

WIDENING THE COMPETITIVE GAP

NIMBUS GROUP TO PRESENT NEW SERIES OF LUMINAIRES AND VISIONARY LED CONCEPTS AT LIGHT+BUILDING 2010



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Five years ago, when Nimbus first deployed its LED luminaires on a grand scale, the technology was generally looked upon as something of an experiment. Today, over 15 million Nimbus LEDs are lighting up over 5000 realised projects. At Light + Building 2010, our company will be showing additions to our Module Q, R and L series besides a wide range of new products and plans to surprise with cosy-looking forms.

One centre of focus will be the design of technical features such as „IQ“ technology, which are intended to further reduce power consumption. Two new Nimbus LED luminaires have already received awards. „Module L 120“ and „Air Maxx 250“ have been awarded the prize „Design Plus powered by Light+Building“.

Haze: leaves familiar forms behind

Ultra-slim and with its own individual form, „Haze“ is nevertheless unmistakably recognizable as a member of the Nimbus LED family. It integrates formal aspects of the proven „Q“ series and reinterprets them in the addition of variously sized modules. „Thanks to their absolute formal reduction, our LED luminaires are considered the „archetype“ of the minimalist LED luminaire.“ This was how Dietrich Brennenstuhl outlined the design approach which was also applied to „Haze“. With a fitting height of just 14 mm, Haze is extremely slim and has a brilliant chrome-plated surface. 168 conical indentations give off a wide, glare-free beam of light. A technical highlight is the infrared eye integrated in the 14 mm thin acrylic surface for touchless dimming which can be dimmed by moving a hand across the luminaire itself without touching it.

„Design Plus powered by Light + Building“ for two new LED products

The Design Council has honoured two Nimbus LED luminaires with the prize „Design Plus powered by Light+Building“: the ultra-slim „Module L 120“ as well as the „Air Maxx LED 250“ with its brilliant chrome finish. Besides design quality and the overall conception, for the first time ever, the jury also took innovation content as well as technical and ecological quality into account in its decision-making process. Dietrich Brennenstuhl's comment: „We have been meeting these criteria with our LED luminaires for over 5 years now.“

In the „Air Maxx LED 250“, a new Nimbus development was honoured which, in terms of form, has the potential to become a classic: thanks to its chrome-plated or anodised front and sides, the 250 x 135 x 36 mm luminaire can be integrated into a sophisticated, modern setting. 30 LEDs provide warm-white light, two thirds of which is directed upwards. With a power input of just 16 watts, it lights up the room with around 820 lumens – equivalent to the output of a 100 W light bulb. Besides the Air Maxx 250LED, a Zen In with a real wood surface will also be presented for the first time at the L+B.

Our other prize-winner, the Module L 120, is a straight-lined ceiling-mounted or suspended luminaire. Each version is 135 cm long and, at just 20 millimetres, extremely slim. It works effectively as a single luminaire or in series – over long or short distances. This luminaire will also be shown at the L+B a real wood finish. The diffuser surface is made of matt acrylic glass with 120 conical indentations, whose job is to direct the light and reduce glare. The equally thin suspended luminaire is available in chrome-plated aluminium or with a silver anodised finish and can be suspended from 300 to 1800 millimetres with a stainless steel cable. The input power requirement of the Module L 120 has been reduced from 36 to 32 W

Module R XL: Taking it to the limit

With the generously dimensioned suspended luminaires in the Module R XL series, Nimbus has once more exploited the innovative design possibilities offered by light-emitting diodes: at just eight millimetres high, every single version demonstrates how designers are able to work with completely new dimensions and to go to the very limits in terms of form when designing LED luminaires: the light flows directly from matt satin-frost acrylic diffuser panels and is directed by numerous conical indentations. The largest version, Module R 460 XL, has 429 conical indentations in a diameter of 112 centimetres. These impressive luminaires have been used in Unilever's recently opened headquarters in Hamburg's HafenCity.

Frankfurt, April 2010

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Fig. 1 Module L 120“: Received the „Design Plus powered by Light+Building“ design prize and at just 20 millimetres is extremely slim. Suspended luminaire for the office and home. The anodised or chrome-plated aluminium surface gives it a slim and elegant appearance. Also attractive in series arrangement. 32 W LED.next (= 200 W halogen)

Fig. 2, 3 „Module R“: Series with ultra-slim, round LED ceiling and suspended luminaires. The smallest, Module R 9, has a diameter of 110, the largest (XL) 1120 millimetres – these dimensions include an imposing light disc. The satin-frost acrylic diffuser panel includes conical indentations for reducing glare, giving a wide beam directed 99 % downwards. In the smallest version of the suspended luminaires, the Module R 120XL, 38.5 W LED (= 200 W halogen), in the XL version, Module R 460 XL, 126 W LED.next = 600 W halogen). These luminaires were recently installed in the Unilever headquarters in Hamburg. The luminaires are also available with some of the light emitted as indirect lighting.



Fig. 1



Fig. 2



Fig. 3

Fig. 4 Our second prize-winning new product is the elegant, chrome-plated or anodised „Air Maxx 250“. With its classical air, the luminaire fits perfectly into a sophisticated interior. It also contains integrated LED.next technology. Light distribution 65 % upwards, 35 % downwards. 16 W LED (= 100 W halogen)

Fig. 5 „Haze“ is made of satin-frost acrylic glass and aluminium. It integrates features of our proven „Q Module“ and is a sculptural, surprisingly slim suspended luminaire (h = 14 mm). The warm-white light is emitted downwards in a wide beam. (40 W LED.next). Dimming is quite simple: a touchless operation (by means of) an infrared eye integrated in the 14 mm thin acrylic surface.

Fig. 6 The detail from „Haze“ shows a surface with top-quality finishing and fine lines. According to Nimbus CEO Dietrich Brennenstuhl, Nimbus LED luminaires can be seen as the „archetype of the minimalistic LED luminaire“ thanks to their absolute formal reduction.



Fig. 4



Fig. 5

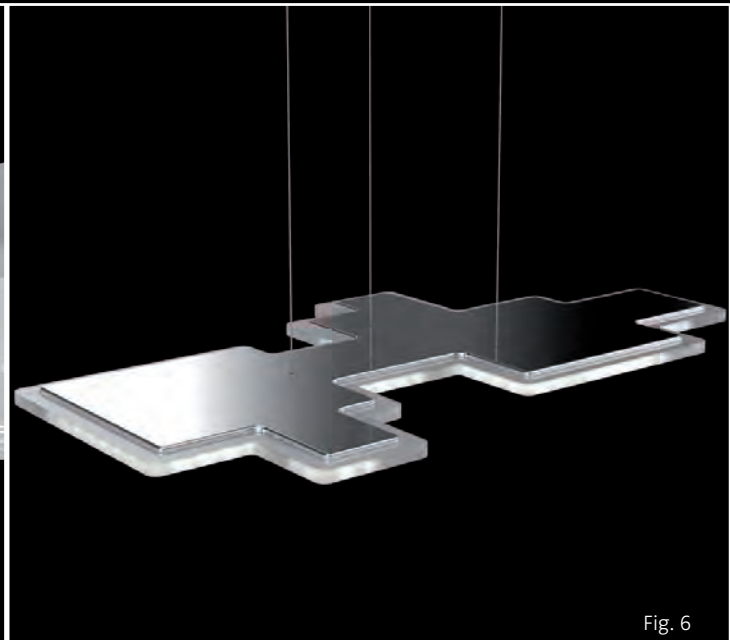


Fig. 6

„WE GROW THE FUTURE“ LED IN THE ARCHITECTURE OF TOMORROW



research

The Nimbus Group develops visionary concepts for the light of the future and has founded a new subsidiary, the Nimbus Research Group (NRC).

„We grow the future“: This maxim represents the corporate culture practised by the Nimbus Group and forms the basis for the company’s realignment to focus on research and science. The goal proclaimed by Nimbus CEO Dietrich Brennenstuhl: „To forge ahead with technical development in the use of LEDs in architecture.“

Brennenstuhl founded the Nimbus Research Company (NRC) as an IQ technology subsidiary of the Nimbus Group in order to be in a position to take up the challenges this goal presents and to come up with future-

proof solutions. NRC's latest project includes the development of intelligent lighting systems in collaboration with renowned universities in the context of the international „Solar Decathlon“ competition. One example: The traditional concept of „light and light switch“ is to be substituted by a new and radical light ceiling solution. The Nimbus Group is cooperating on the project with the University of Wuppertal. NRC is also developing an organic plastic, which is being optimized for Rossoacoustic products and use in LED luminaires. The project has received funding from the German Federal Foundation for the Environment. Other partners in research and science are the ITKE (the University of Stuttgart's Institute of Building Structures and Structural Design), the Fraunhofer Institute and the German Sustainable Building Council.

In NRC, the Nimbus Group also provides a creative platform as a basis for experimentation with new forms, material and surfaces which is independent of restrictions and the wishes of specific clients. The 15 strong design team around Dietrich Brennenstuhl has developed novel concept studies for LED luminaires in time for the Light + Building exhibition. The designs break away from the tried and trusted canon of forms while continuing to be based on the lighting expertise represented by Nimbus LED. next technology.

The concept studies will be presented to a broader public for the first time at this year's Light+Building. The inviting, lush green meadow on the Nimbus exhibition stand this year stands for the future that these concepts represent.

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Nimbus concept studies: The minimal size of light-emitting diodes is enough to stir the heart of any designer: completely new forms become possible: from ultra-slim geometric or elliptical forms right through to deconstructive designs that remind one of the experimental architecture of Zaha Hadid. In future, designers will be able to go to the very limits in terms of form. The novel concept studies created within the Nimbus Research Company (NRC) may well become reality not long after this year's Light + Building.



The designs take inspiration from the Nimbus „Office Air“, which has virtually become a classic in the office field. One can see the potential they hold: the Nimbus design team has come up with various types of covering as an experiment in diversity: one of them is a panel made of quality wood which makes for a warm and cosy atmosphere. Fig. below left: the integrated minispot – a small but exquisite detail.



LEDS WITH „INTELLIGENT“ CONTROL LIGHTING ADJUSTS ITSELF PERFECTLY TO THE SURROUNDING CONDITIONS

Extremely economical and efficient LED luminaires are just getting themselves established on the market, but already the next round of savings is just around the corner. Thanks to their in-built „intelligent“ control system, luminaires with Nimbus LED.next technology can achieve even higher savings. They react to presence, movement and the level of daylight and automatically adjust the lighting to the ideal level. Ambient light sensors, presence detectors and dimmer units are integrated in the luminaire in the smallest of spaces. Besides simple adjustment on the luminaire itself, the functions can also be configured via apps and WLAN. A number of luminaires can communicate with one another quite simply via two-wire connections independent of the network.

KEY WORDS: BUILDING AND LIVING, RENOVATING, SAVING ENERGY, AMBIENCE



Fig. left The Nimbus Group's Module Q36 IQ offers integrated lighting control in just 13 mm of installed height. Energy savings of up to 90 % are possible.

Fig. right The Office Air LED luminaire is available with a presence detector and ambient light sensor, making for optimum ease of operation. The luminaire automatically switches itself on when a person is present, controls the brightness at the workplace depending on the surrounding conditions and switches itself off again when a person leaves their workplace for a longer time.

You can find more pictures and detailed texts at www.nimbus-group.com/presse

or at

www.context-kommunikation.de/nimbus.html

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EXPERIENCING LED TECHNOLOGY NIMBUS GROUP OPENS MOCK-UPS IN EUROPE, ASIA AND OVERSEAS

The light bulb is disappearing – and, as far as many consumers are concerned – there is no substitute in sight. However, LED luminaires have long shown themselves to be a viable alternative. Anyone can test the truth of this claim at first hand in the Nimbus Group's professional light laboratories: in these Mock-Ups one can experience how effective innovative LED.next luminaires are in comparison to halogen or compact fluorescent lamps. Or that besides their comparatively low power consumption, LED luminaires offer other benefits for anyone building a house or for planners: for example, an extremely long lifetime, no maintenance, low heat development and a pleasant, warm lighting effect. As a result of the great interest they have aroused, you can now find Mock-Ups all around the world – since March, for example, in Hong Kong and from this summer in Shanghai.

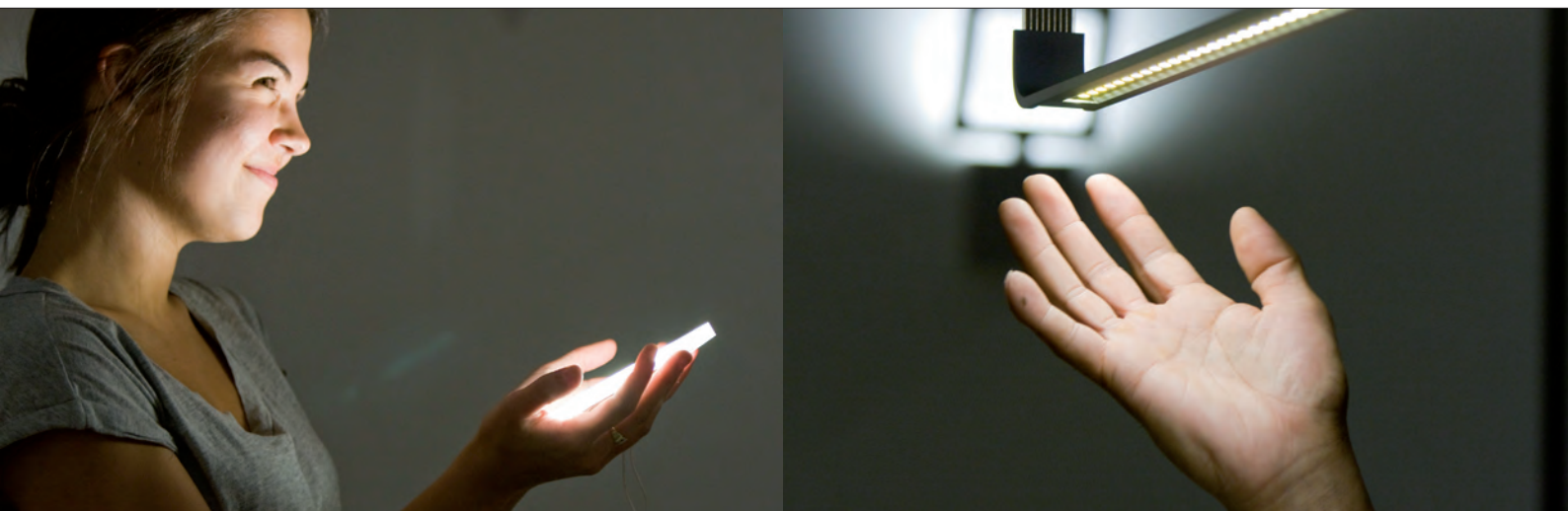


Fig. left and right: Customers can experience for themselves the benefits of Nimbus LEDs, such as low heat development and a pleasant, warm lighting effect, at numerous Mock-Ups like this one in Australia.

3000 NIMBUS LED LUMINAIRES FOR UNILEVER – NEW CORPORATE HEADQUARTERS WITH EXEMPLARY ENERGY CONCEPT

The new Unilever corporate headquarters (Behnisch Architekten, Stuttgart) in Hamburg's HafenCity is setting standards with a unique energy concept. Light is an integral part of the building: extremely energy-efficient Nimbus LED luminaires light up 35,000 square metres on 6 levels. By deciding in favour of this innovative concept, Unilever will be able to save several hundred thousand euros every year. Nimbus CEO Dietrich Brennenstuhl: „In future, there will be no alternative to LED!“ Unilever quickly recognised the sign of the times: ecological responsibility brings economic benefits.



Abb. links The Unilever building on the Strandkai in Hamburg is the largest building in the world to be exclusively fitted with LED general lighting.

Abb. rechts Two „LED light rings“ turn the heads of all who enter the atrium of the new Unilever building. They consist of an eighty-mm high supporting structure made of aluminium. LEDs are integrated throughout the entire supporting structure.

REPRESENTATIVE AND FUNCTIONAL NEW LIGHT FOR BANKS

Regardless of whether the building project is large and representative or small and practical: Nimbus LED luminaires offer a multitude of possibilities for mastering the most wide-ranging of lighting requirements. That is the reason why more and more banking institutions are deciding in favour of future-oriented lighting. The grand old „Alte Bahnhof“ (Old Station) or Ottmerbau, built in 1845, has been in use as the Nord/LB Braunschweig’s headquarters for private banking consulting since 2009. The suspended LED luminaire Q 400 XL was deployed as a flexible lighting solution, as it can be used for festive occasions such as receptions or for more functional events such as presentations and seminars thanks to its pleasant warm-white light with a high level of colour rendering.

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Fig. left Module Q 400 LED.next luminaires generate a pleasant warm-white light with a high level of colour rendering thanks to their partially diffuse light and the brilliance of the LEDs. This means that, depending on requirements, the luminaire can be used to produce a festive or more functional atmosphere in the large hall of the Nord/LB in Braunschweig.
Fig. right The Module Q 64 XL LED.next luminaire was deployed to light the staircases.

You can find more pictures and detailed texts at www.nimbus-group.com/presse
or at
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TWO SHINING EXAMPLES – HOMES WITH LED TECHNOLOGY SAVE ENERGY

Two homes fitted exclusively with LED luminaires, one on Sylt and the other in Stuttgart, show how increasing energy costs can be held at bay while still achieving a luxuriant lighting effect. LED technology has developed at breath-taking speed in recent years and light-emitting diodes are now able to bathe rooms in a warm, cosy light. The clients are not only very pleased with the high level of energy efficiency and extremely long lifetime of the virtually maintenance-free diodes but also with the intelligent control technology and timeless puristic design of the luminaires, which discreetly and effectively blend into a modern living environment.

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Fig. left In the middle of grass-covered dunes in Hörnum on the island of Sylt: the semi-detached holiday homes clearly signal modernity – with respect to both the interior design and the lighting.

Fig. right There is not a single conventional light fitting to be found in either of the semi-detached homes. A height-adjustable Linie C suspended luminaire hangs over the dining table.

LIGHT WITH IQ – A COMPANY PROFILE

The Nimbus Group, based in Stuttgart, offers LEDs with „intelligent control“. Dietrich Brennenstuhl and his company are among the pioneers of LED lighting and offer a consulting service in the company’s very own MOCK-UP.



Dietrich Brennenstuhl, CEO of the Nimbus Group and a qualified architect, is a man in demand. Company CEOs, architects and their clients seek his advice when it comes to efficient lighting solutions for buildings. He prefers to receive his clients in the company’s very own Mock-Up, a light laboratory covering 1500 square metres which combines the features of a showroom and a light comparison room. Mock-Up has everything one could possibly need to find lighting which is highly efficient and sustainable while meeting the most exacting demands in terms of design – for large-scale projects like the Unilever headquarters in Hamburg’s Hafen-City, recently fitted throughout with Nimbus LED luminaires, through to light solutions for individual homes.

Around 10 years ago, Brennenstuhl got involved with the issue of energy efficiency and LEDs, gathering around him a highly qualified team of engineers, lighting specialists and product developers. The development

department now numbers 15 employees. In 2006 at „Light + Building“, the world’s leading lighting fair, he first presented a complete series of luminaires based on LEDs. Contrary to prevailing opinion at the time, it was possible to deploy these extremely economical, very slim and rather unusually designed luminaires throughout entire houses and large-scale projects. Dietrich Brennenstuhl found out what it is like to be ahead of one’s time. However, confidence in this new type of luminaire had yet to grow. During this phase, it was essential to work with future-oriented clients who recognised the great potential of LED luminaires and who could be convinced of their benefits – which are unbeatable in comparison to other forms of lighting, for example their extremely long lifetime, the fact that they need no maintenance and their comparatively low power consumption. In the meantime, the Nimbus Group has lit administration buildings, banks, restaurants, showrooms and private homes with LEDs and has won a number of international design awards. The company is currently experiencing a real boom in terms of the acceptance of and demand for LEDs.

In an interview, the Stuttgart entrepreneur Dietrich Brennenstuhl speaks about the great benefits offered by LEDs

Not long ago you made the following daring prognosis: „Ten years from now, there will be no more conventional light sources on the market.“ However, the debate about the light bulb ban has recently shown that people are pretty attached to their traditional light sources.

D. Brennenstuhl: But the current debate has also shown that people are very reluctant to use energy-saving bulbs, especially in the home. In the last 20 years, this light source has not really managed to find acceptance. The LED, on the other hand, has fascinated the hearts of designers right from the very beginning thanks to the fantastic design possibilities which unfold with and around the light source. What is more, the LED beats the benefits of the energy-saving bulb hands down and is already in a position to reproduce the warm light quality of the light bulb. In much the same way as the steam engine still enjoys a positive image, the light bulb will never lose the affection we have for it as a historic companion throughout a whole century. I am going to stick to my prognosis, in fact I now think that the whole process will go much faster!

In the meantime, you have lit a lot of objects exclusively with LEDs. How have these lighting solutions proved themselves in practice? Are your customers satisfied?

D. Brennenstuhl: Our first large-scale LED project has been in continuous service for over 4 years now. Over 160,000 LEDs were installed; the failure rate is 0. But we didn't always get away unscathed and in some projects we had to replace circuit boards. That happened after a low number of burning hours and up to now has only occurred in isolated cases. Those kinds of experience have given us cause to push our quality requirements even higher. The level of satisfaction among our customers and users in Europe, Australia and Asia is very high; we get very positive feedback from all over the world.

LED technology has proved in practice that it can achieve significant energy savings. You now have the capability to exploit this potential to an even higher degree.

D. Brennenstuhl: Yes, our LED.next technology will make LED luminaires „intelligent“. We offer the possibility of equipping every luminaire with a miniature movement detector. In the home, for example, some rooms or corridors are only used for a short time. Switching all lights off when leaving a room is not very convenient for the user and often makes a place seem less cosy, especially living areas. The „intelligent“ luminaire automatically dims to 20 % standby output when it does not detect any more movement. Here in Stuttgart and a number of other cities, we have a light comparison and testing room, our Mock-Up. Anyone who is interested in our LED luminaires is invited to come along, take a look and ask for our advice.

Stuttgart, April 2010