# LUXIONA Poland magazine

EVENTS ••• REALISATIONS ••• PRODUCTS ••• EXPERT ADVICE •••

metalarte

Sagelux



trell

# **FROM THE EDITOR**



#### FROM THE EDITOR

LUXIONA Magazine attracts ever wider group of readers. With a pleasure we edit consecutive issue no 6 of our magazine. The common denominator of our all previous publications is the presentations of illuminating realizations and new products from LUXIONA Poland. Current issue is enriched by the interview with PhD Szymon Opania, a designer, who developed the project of Didactics and Medical Simulation Centre of Silesia Medical University in Katowice. Moreover, this edition of LUXIONA Magazine our expert brings closer the issue of LED technology, which is developing rapidly these days.

Taking advantage of the opportunity we wish you plenty of success in the coming New Year 2015. Enjoy reading.

The editors of LUXIONA Magazine

- str. 4 🗧 LUXIONA Magazine interviews Rafal Wesolowski, General Director LUXIONA Poland S.A.
- str. 6 Summary of the conferences organized by LUXIONA Poland summer season 2014
- str. 8 Downlight's luminaries offer
- str. 9 Emergency and evacuating luminaries offer (CNBOP)
- str. 10 Mobile version of LUXIONA Poland website
- str. 11 New tool in www.luxiona.pl service

str. 12 • Didactics and Medical Simulation Centre of Silesia Medical University in Katowice str. 16 • Students' Cultural Centre 'Mrowisko' of Silesia Technical University in Gliwice

str. 20 • MAN Truck&Bus Poland in Starachowice

str. 22 • LED technology / MOSAIC LED system

str. 24 • Recommended products from LUXIONA Poland list offer

You are kindly welcome to visit our www.luxiona.pl

www.luxiona.pl

www.luxiona.pl







# LUXIONA Magazine Interviews Rafal Wesolowski, General Director LUXIONA Poland S.A.



Rafał Wesołowski General Director LUXIONA Polska S.A.



Students' Cultural Centre 'Mrowisko' of Silesia Technical University in Gliwice

# **Dear Ladies and Gentlemen,**

with a great pleasure we are giving you another issue of LUXIONA MAGAZINE. I would like to bring closer the most important events and achievements, which took place in the passing year, in the area of marketing, product market, cooperation with our customers and its effects in the form of interesting realisations. We pay a great attention to best possible communication with our customers. On our new website you will find full and actual product offer of LUXIONA Poland S.A. Each product has its own catalogue card, installation manual, photometric data and CE declaration. I also recommend using our new tool to download products technical documentation, which enables completing chosen technical documentation for many products simultaneously. Moreover, responding still growing wide audience of users of smart phones and tablets, we have launched mobile version of www.luxiona.pl website. In the summer season of the year 2014 we organised 12 lighting conferences for our customers from investment market and distribution market. All of these meetings were very successful and the number of participants reached almost 700. We tried to pass professional knowledge to all participants relating to modern lighting solutions, particularly clean objects lighting. The conferences were a great opportunity to get to know our comprehensive product offer, share the experience and professional knowledge for both parties. We believe that the unique form of the conferences provided for participants possibility to break away from daily routines and made them relaxed. I would like to take this opportunity and invite you now to one of our many conferences which we plan to organize in 2015.

The year 2014 was for LUXIONA Poland special from the point of view of launching the competitive offer of professional dedicated lighting for clean premises in hospitals, pharmaceutical, cosmetic, electronic, chemical or food plants and all different kinds of laboratories in which sterile conditions are required. All our luminaries for clean premises are marked with ISO symbol and meet the requirements of PN-EN ISO 14644-1 norm, concerning the cleanliness category of premises ISO 9-3. They also have (COC) certificate confirmed by accredited laboratory. We wrote more about our lighting solutions for clean premises in the previous edition of LUXIONA MAGAZINE. Everyone interested in this issue can read more in the previous edition. I also encourage you to use our specialised 'Catalogue of CLEAN Products' which has been issued this year as well as with 'Catalogue of CLEAN Realisations'. This is an ideal supplement of clearly technical information about examples of use of our luminaries in many clean objects in Poland and abroad. Both catalogues are available on our website www.luxiona.pl.

The third example is of our realisation is the illumination of the We have also enriched our product offer by the wide variety of modern luminaries such as Downlight LED with high guality modern MAN Truck & Bus Polska (verv well known producer of modules LED Energy Star as the light source. In Downlight HV trucks and buses)production hall in Starachowice. In the hall recessed luminaries as well as in surface mounted luminaries illuminated by LUXIONA chassis and bus frames are produced. AC LED technology was applied with the possibility of We applied LED technology, which ensures the reduction of connection luminaries directly to power of 220-240V without operating costs in the area of energy consumption. It also reduces cost of maintenance of the whole illuminating system. additional power supply. The light can be dimmed using most of available dimmers. Homogenous light colour is ensured in The basic luminaire which was used is Atena LED in special version all luminaries which give homogenous light distribution. They made for this project and according to MAN's requirements. The are also equipped with non-glittering protector and they do not supplementation is industrial luminaries Neptun and evacuating cause thermal radiation or UV radiation. Compact LV Downlight luminaries made by LUXIONA Poland. luminaries are also very interesting. They have high luminous flux and possibility to re-tune colour temperature from white All interested in LED technology I recommend an article by -cool to white-warm thanks to CT technology. Whereas, Eugeniusz Oleksiak an experienced constructor and manager of R&D LUXIONA Poland. Our expert pays attention to a rapid the series of LV+PS Downlight luminaries gives the highest luminaries efficiency thanks to patented CREE technology True development of LED technology in luminaries and at the same White and thanks to build-in luminary's optics control system, time lack of clear legal regulations, especially related to colour which ensures unitary light parameters regardless the work rendering ratio. Very interesting are his observations concerning temperature and time of operation. These luminaries are perfect LED light sources features from the point of view a constructor to use in museums, galleries and retail network etc., so wherever of luminaries. The supplementation of the article about LED the colour reproduction is the most important (CRI 95). It is also technology is innovative system MOSAIC. The combination of two elements in the modular ceiling 600x600 practically gives worth to mention NECTOR S integrated system dedicated to quick connection of these luminaries to Plug&Play system. The unlimited opportunities illumination arrangements thanks to it full information about this group of products you will find in combining exceptional aesthetic with illumination functionality. the catalogue 'Downlights Offer' on our website www.luxiona.pl. Further on in this issue of our magazine you will find examples of MOSAIC system arrangement combinations and proposal of Recently we have completed our product offer in the area of the visualisation of the interior using this system. With reference emergency and evacuating lighting with CNBOP certificate, to utilisation and continuous development of LED technology which was placed on our website www.luxiona.pl in the category in our luminaries I encourage you to explore in detail with our of recessed and surface mounted luminaries. We also present newest LED products which we recommend in the product offer there emergency modules and main batteries systems. The full part of this magazine. They are luminaries which you might have summary in this area is available on our website in our new already known from our current offer now in LED version: PATOS O LED, RUBINEO LED, ASTOR LED UP&DOWN, ESSENCE LED, catalogue 'Emergency and evacuation luminaries offer'. ONLINE LED, XS-LINE SQ N LED, X-WALL K9 LED, RUBIN LOOK In this issue of LUXIONA MAGAZINE we would like to introduce LED SMOOTH, BERYL KN LED UP&DOWN, AGAT LED SMOOTH our three more interesting realisations, chosen from many and mentioned earlier and applied in our realisations luminaries ATENA LED and SATURN LED. Two new luminaries deserve others, on which we have worked lately. Each of them is an example of illumination of different kind of building-medical, particular attention: very interesting indirect light luminaire AGAT educational and industrial. POS LED and RING T LED luminaire giving exceptional effect of illuminated ring, available also in surface mounted version and The first described realisation is a prestigious Didactics and suspended version as RING N. Most of our new LED luminaries Medical Simulation Centre of Silesia Medical University in you will find in catalogue 'Product novelties/LED products offer Katowice. Designer PhD Szymon Opania, who developed project on our website www.luxiona.pl.

of this building together with the team of MARBUD S.C., shares the impressions of work on the illumination this technologically advanced educational and medical institution with the readers of our magazine. Adaptation of this building to a modern medical didactics centre, which served as a hospital laundry in the past, was a great challenge. From the interview with Szymon Opania you can learn about criteria of the design, where the particular emphasis was placed, how assumed functionality of the object influenced on the lighting concept. This interview you can find further in this magazine. In the project luminaries such as Agat LED, Rubin LED, X-Line and Ruby Round were used.

Other realisation is Students Cultural Centre 'Mrowisko' of Silesia Technical University in Gliwice. This is multifunctional and modern students club, which was honoured in the contest for 'The Best Public Space in Silesia Region' in the category of 'revitalized public utility facility'. LUXIONA illuminated this prestigious club using Saturn luminary in order to emphasise industrial character of this place and at the same time highlighting its modernity using LED technology in LED Beryl N luminaire. The exclusiveness of this place is additionally enriched by our luminaries: Tytan Wall Light Up&Down, Dopio, Rubin Look, X-Line.



**Didactics and Medical Simulation Centre** of Silesia Medical University in Katowice

# Summary of the conferences

organized by LUXIONA Poland summer season 2014



# In the summer season of 2014 we prepared 12 technical conferences.

This year's edition of our conferences was very successful and the number of participants reached almost 700 hundred.

This year's edition were dedicated to: architects, electric installation designers, general contractors, investors, workers of regional and nationwide wholesales, decisionmaking people in the area of illumination selection and people from medical and pharmaceutical industry.



This year's edition of our conferences was very successful and the number of participants reached almost 700 hundred.



We hope that the knowledge about luminaries shared during conferences turned to be interesting and useful in everyday work for all participants.

Expressing our gratitude for your attendance we hope that meetings will become a permanent element of our cooperation.

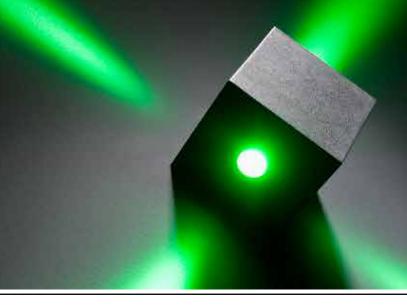
# **Specialist technical training** were conducted by our experts, Awex and Vossloh-Schwabe.

### The subjects debated during the conferences:

- Illumination of the different types of buildings consistent with norms and newest trends
- Modern illuminating solutions including LED technology,

distributor of Vossloh-Schwabe a high quality light sources producer. **Vossloh-Schwabe Germany GmbH is a German company** which produces solutions and components for illumination

We are pleased to inform that LUXIONA Poland is an official technology on a highly advanced Japanese Panasonic system.

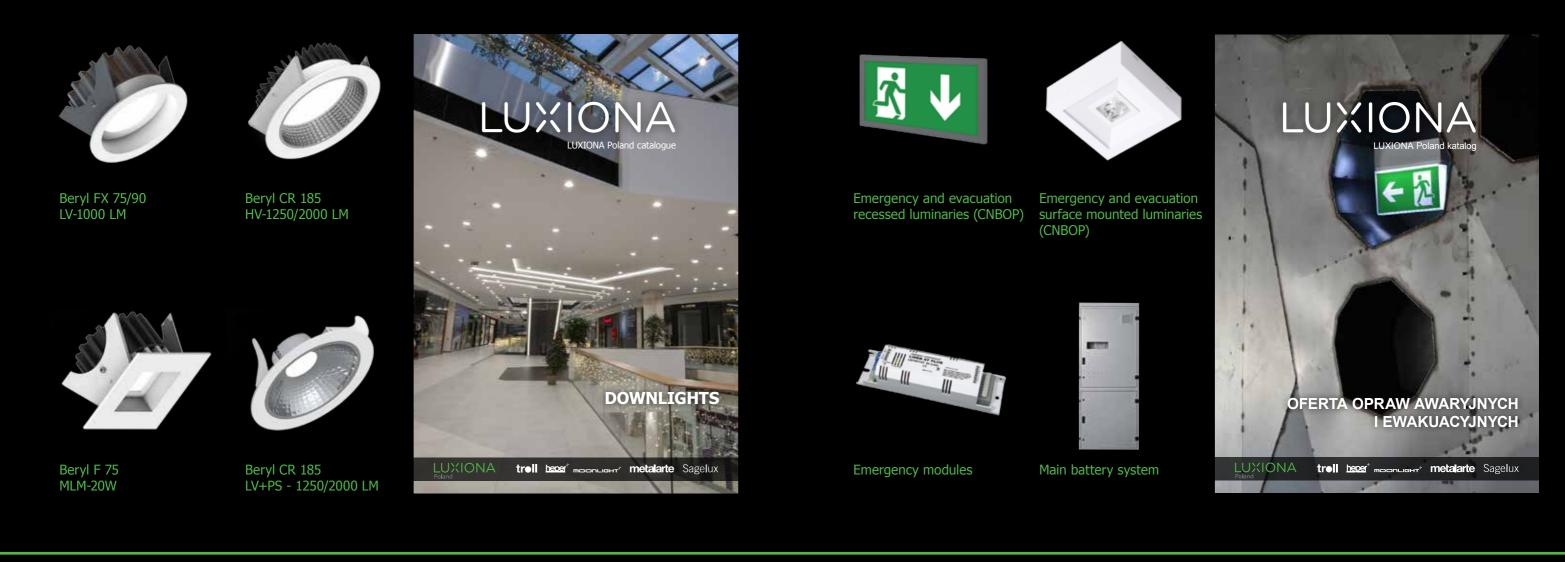


- Clean premises illumination in hospitals, healthcare system objects and pharmaceutical production, electronic and cosmetic industries consistent with PN-EN ISO 14644-1:2005/ cleanliness category,
- LED technology in emergency luminaries,
- Designing and selecting emergency luminaries system.

# DOWNLIGHT's luminaries offer

New catalogue is available on www.luxiona.pl/download Full offer is available on www.luxiona.pl/products

# **Emergency and evacuation** luminaries offer (CNBOP) New catalogue is available on www.luxiona.pl/download Full offer is available on www.luxiona.pl/product





heper

**тоопсіднт**<sup>\*</sup> **metalarte** Sagelux

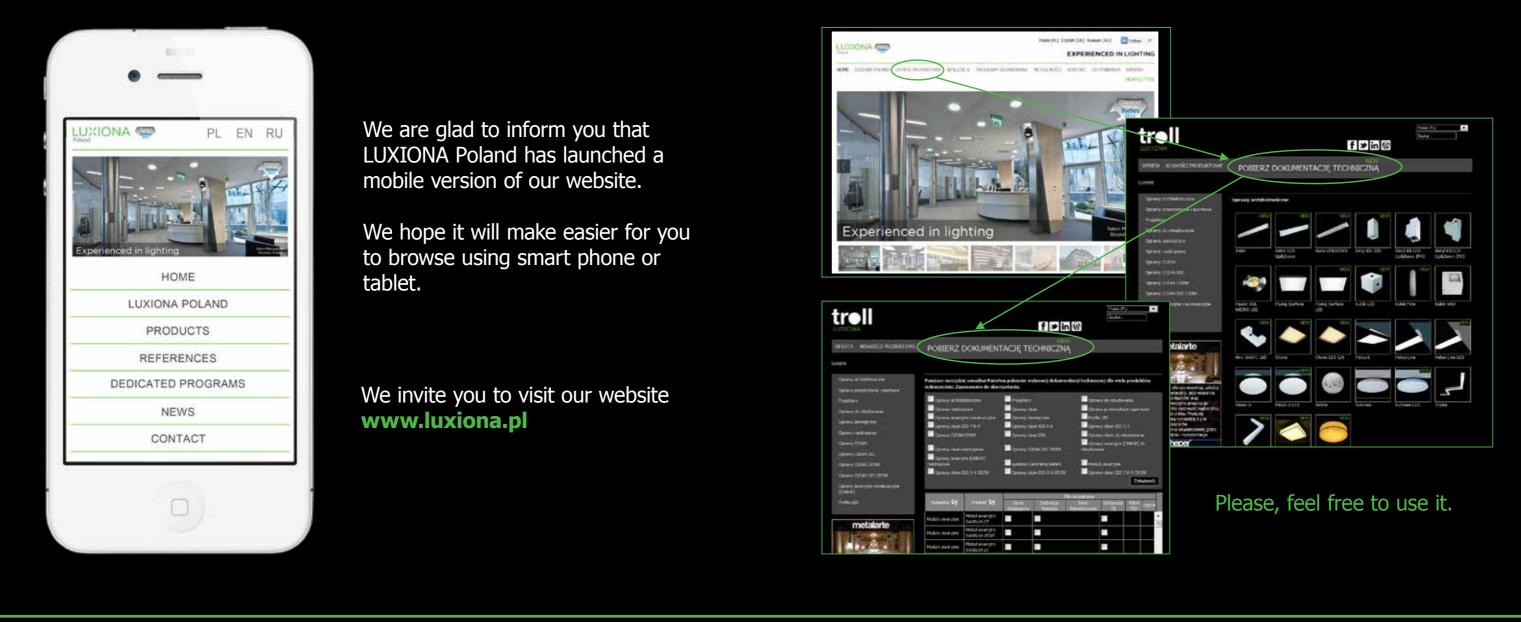


**тоопсіднт**<sup>\*</sup> **metalarte** Sagelux

# Mobile version of LUXIONA Poland website

# New tool on www.luxiona.pl service allows you to download technical documentation of many

service allows you to download tech products at the same time.





heper

**тоопсидит**<sup>\*</sup> **metalarte** Sagelux



**тоопсіднт**<sup>\*</sup> **metalarte** Sagelux

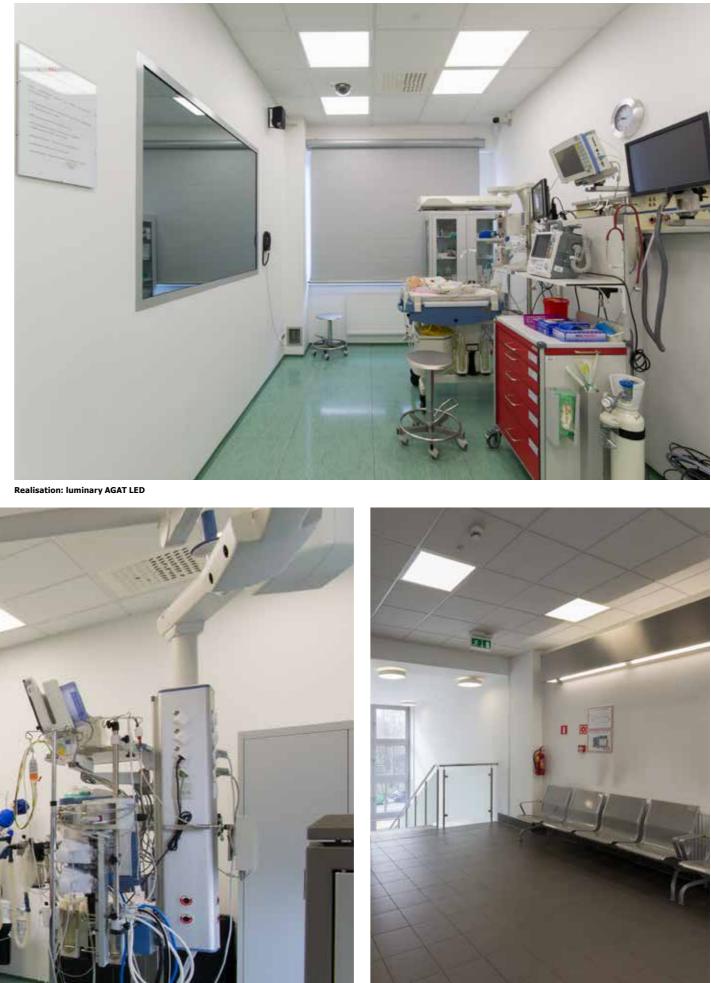
# **Didactics and Medical Simulation Centre** of Silesia Medical University in Katowice

LUXIONA Poland had a great pleasure to take part in an illuminating project of a prestigious building of Didactics and Medical Simulation Centre of Silesia Medical University in Katowice. Didactics and Medical Simulation Centre is a modern building which consists of complex of simulation Source: facilities; operating theatre, intensive care ward, two SOR rooms, paediatric rooms, ambulance simulator and pre-hospital simulation. Wards are equipped with modern devices, which stimulate real patients reacting accordingly to actions taken by medical students. Devices can be programmed in the way to induce particular physiological conditions with the possibility to monitor life processes. Thanks to such solutions medical students gain the possibility to develop practical skills in life threatening situations. Because of that they are better prepared to contact with patients. Besides simulating rooms this building is equipped with: multimedia centre, programming centre, LUXIONA Poland Editors

multimedia lecture and workshop room, collective work room, multimedia development room for didactics and e-learning and two auditorium halls.

http://cdsm.sum.edu.pl/cdsm.sum.edu.pl/index545c. html?option=com\_content&view=article&id=4&Itemid=5

#### LUXIONA Poland luminaries applied in the project: Agat LED, Rubin LED, X-Line, Rubin round,





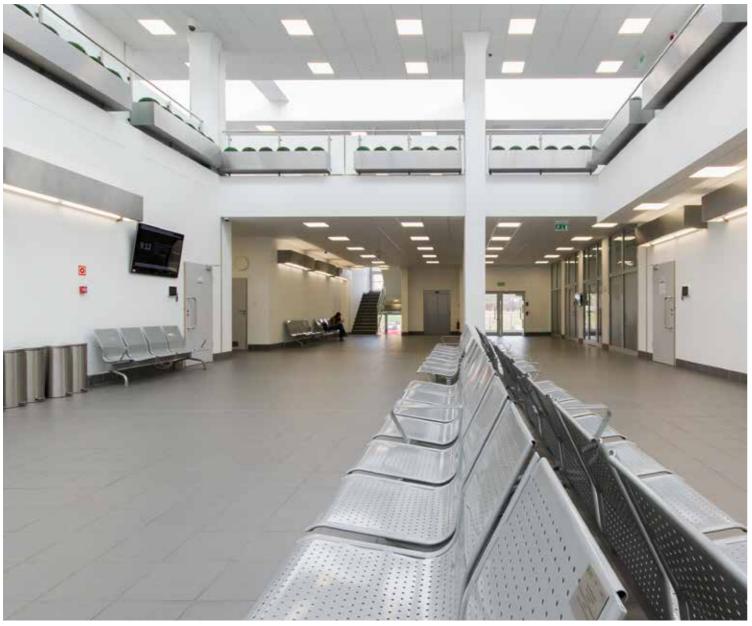
Realisation: luminary AGAT LED

Realisation: luminary AGAT LED

# **Didactics and Medical Simulation Centre**

of Silesia Medical University in Katowice - an interview with Doctor of Science of Architecture, Engineer, Szymon Opania, who developed the project of Didactics and Medical Simulation Centre in Katowice together with the team of MABUD s.c.

# MABUD s.c. Bielika 53 Street, 44-122 Gliwice, tel. 32 231 7782



Didactics and Medical Simulation Centre: luminary Agat LED

#### 1. What is your greatest source of inspiration?

Life, daily life and practice. Each of the team members has its own sensitivity, space imagination and experience. We observe the space which surrounds us, we comment solutions and in each following project we want it to make perfect. As a team we want to make each following project the best we can. The vision develops in the head of the main designer; its realisation is a whole team work. I follow the idea that architecture is like creating the place being optimal answer for the needs of its future users but consistent with aesthetic feeling of its creator.

#### 2. Didactics and Medical Simulation Centre of Silesia Medical University in Katowice is a prestigious realisation which is technologically advanced. What were projects assumptions, where was placed a particular emphasis on?

The assumption of this project is in its basic function, this means didactics centre. The big challenge was the starting point. The adaptation of non-existing building of the hospital laundry for the educational purposes. The problem was with the adjustment of the construction frame, built in 1980s, to current needs for multipurpose education of Medical University students. In the programme of the building they were clearly and distinctively described. That is why to place it in this architectural form, defining the possibility and sensibility of the changes in the construction of an existing building and adopting correct functional layout corresponding to didactic technologies, it was a demanding challenge. However, what is prestigious about this building these are the most modern devices to educate medical students and technical requirements were fully met, which are essential to correct work of teaching equipment.



Realisation: luminary AGAT LED

#### 3. How did functional assumptions influenced on illuminating concept?

The illumination concept is of course tightly connected with the functions of particular rooms. But not only functional assumptions have influence on the illumination concept. Equally valid and sometimes the most important is creation of the right mood, emphasizing or even building the form by using light. Illumination task is not only making it possible to use the room properly but is also a decoration. That is why all aspects must be precisely thought-out. Wrong illumination can spoil even best designed building.

#### 4. Do you use the assistance of the illumination profesionalist's when you work with these kind realizations?



Realisation: luminary X-LINE

# 5. Did you find all expected forms of lighting which were consistent with your project assumptions in offer of LUXIONA Poland?

LUXIONA Poland offer fulfilled the concept of the illumination of Simulation Centre of Silesia Medical University. A complementary element of lighting was individual product to additionally illuminate the main lobby. Their shape is a reflection of hanging flowerpot, which was intended to achieve aesthetically consistent space in the lobby.

# 6. Would you recommend the cooperation with LUXIONA Poland?

Cooperation with LUXIONA Poland representatives and utilization of lighting elements of this company let us achieve the final effect meeting usage and aesthetic needs and creation of desired climate. Let the final effect achieved in Didactics and Medical Simulation Centre of Silesia Medical University is the positive appraisal of our cooperation. As well as in other buildings designed by us, which are appreciated by users and observers.

### Thank you. LUXIONA Poland Editors



Realisation: luminary X-LINE

# Students' Cultural Centre 'Mrowisko'

Silesia Technical University in Gliwice



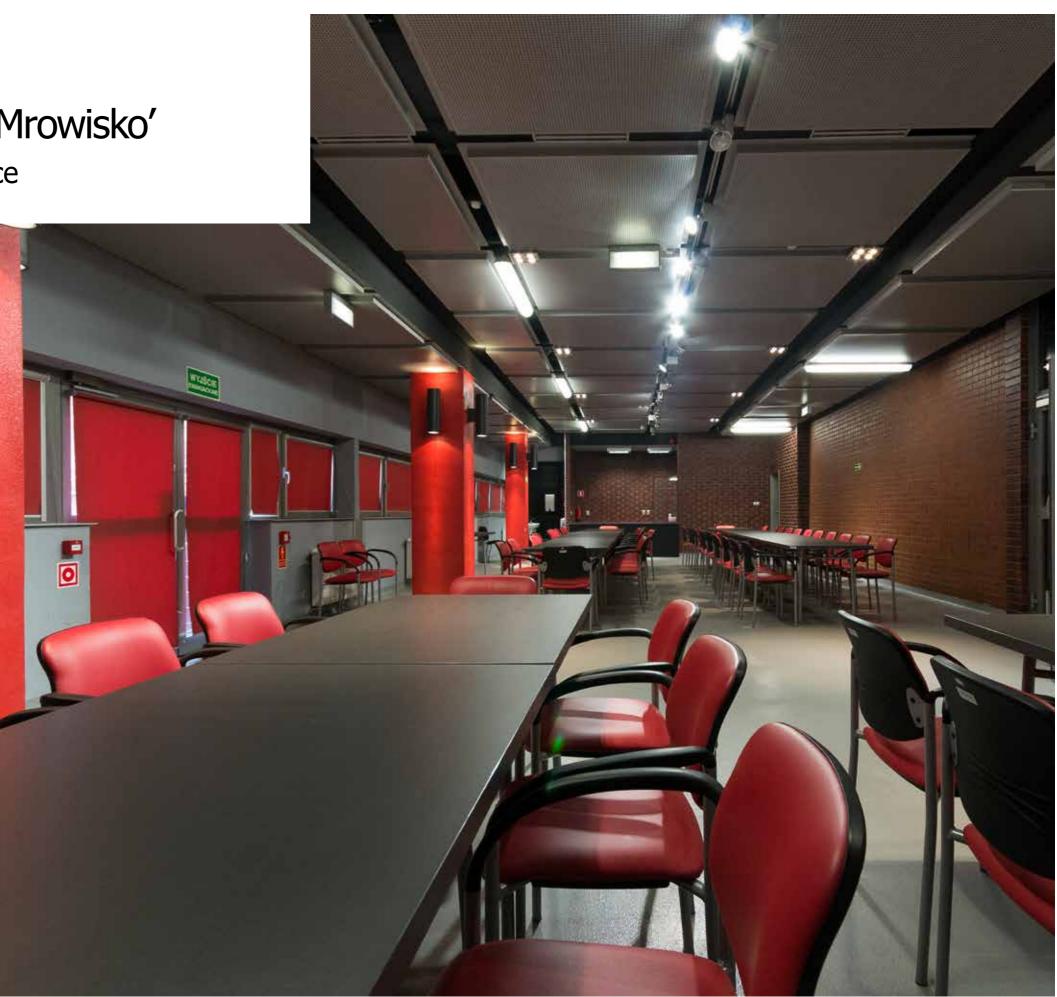
Realisation: luminary SATURN



Realisation: luminary TYTAN KINKIET UP & DOWN

Students' Club 'Mrowisko' is a multifunctional, modern building with an area of 3 000 m2, situated in a campus. The main purpose of this building is to support cultural and entertaining function for students. The Club consists of theatre hall which can hold 250 spectators, premises for students' organizations, conference room and banquet hall. Its prestigious character was recognized in the contest for the best public space in Silesia region in category of re-vitalized public utility facility. The goals of this contest is promotion of development and quality changes in public space, promotion of architectural and urban realizations and increasing the awareness in the area of shaping the public space. LUXIONA Poland had a great pleasure to take part in illuminating this prestigious place. In order to emphasise its industrial character we used Saturn luminaire. Modernity of the Club is also emphasised by LED technology. An example of this technology is Beryl N LED luminaire which is known for its simple form. Besides aesthetic features this luminaire is characterized by high luminous efficacy, reliability and competitive price. Our other luminaries were also used in this project to enrich lighting offer: Dopio, Rubin Clean T5, Hermes, Rubin Look.

Source: https://www.polsl.pl/Jednostki/CKS/Strony/O\_Centrum.aspx



Realisation: luminary DOPIO



# Students' Cultural Centre 'Mrowisko'

Silesia Technical University in Gliwice



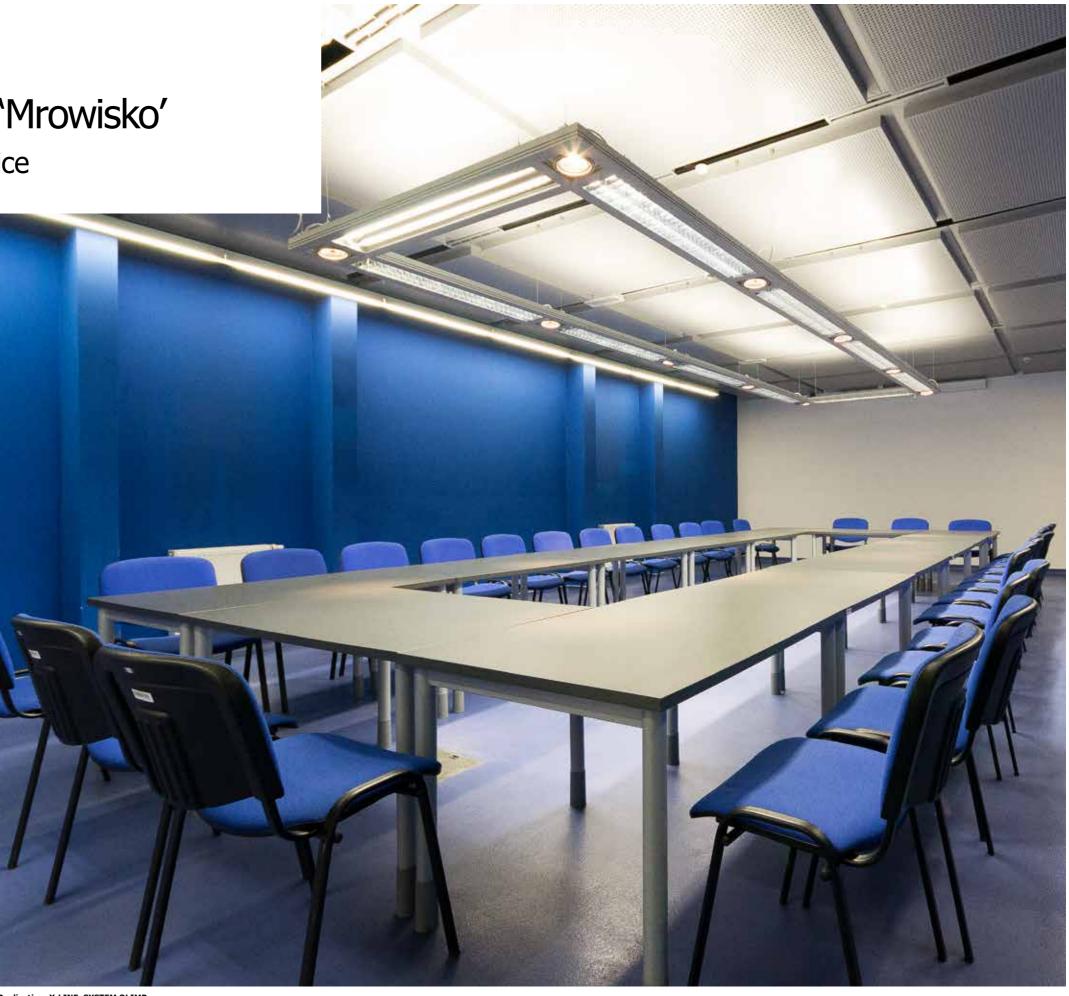
Realisation: RUBIN LOOK



Realisation: BERYL LED N



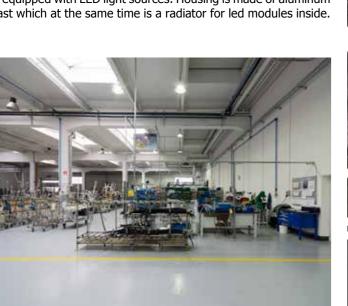
Realisation: BERYL LED N, DOPIO



Realisation: X-LINE, SYSTEM OLIMP

# MAN Truck&Bus Poland in Starachowice

MAN Truck&Bus Polska has been present on Polish market for 20 years. MAN specializes in producing and selling trucks and buses. Company offers complex solutions for variety of uses in marine purposes. Bus frames and chassis are produced in a modern production plant in Starachowice. This modern production plant was illuminated by LUXIONA Poland. Thanks to LED technology applied in luminaires costs of energy consumption during the operating is limited and costs of the maintenance of the whole illumination system are reduced. The main luminaire which was used in illumination system was ATENA LED. It was specially dedicated for this project and MAN's guidelines. ATENA LED is characterized by high level of protection from air pollution and water and is perfect for production plants or warehouses. Atena is equipped with LED light sources. Housing is made of aluminum cast which at the same time is a radiator for led modules inside.



Realisation: luminary ATENA LED



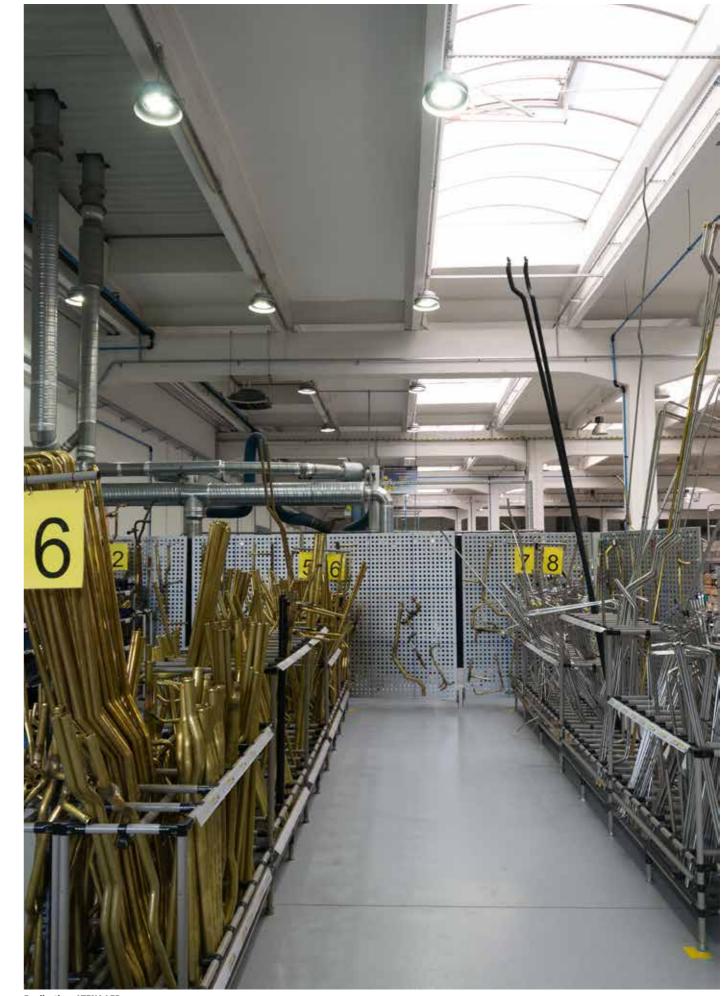
Realisation: luminaires NEPTUN i ATENA

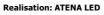


Realisation: luminary NEPTUN



Realisation: Evacuation luminaires of LUXIONA





# **EXPERT ADVICE**

# LED TECHNOLOGY / MOSAIC LED SYSTEM

Over the past years we observe rapid growth of LED luminaires the market share. Current change is connected with crowding out traditional light sources by LED technology. LED technology is becoming more common and more significant for lighting market. It is worth noting that the speed of the development and offensive entering market by new LED light sources is determined by EU Commission regulations 244/2009 and 859/2009. According to these regulations incandescent light sources should be withdrawn from lighting market till 2016. We should be aware that in the near future LED diodes will be the basic artificial light source.

Comparing a technical parameters of LED with other light sources used in lighting industry, it's worth to confirm that LED diodes have definitely more advantages and benefits.

#### The most important features of LED light sources are:

- Surface durability 5 0000 h
- Luminous efficiency-current up to 150 ml/W
- Shock resistance, impacts and vibrations
- No ultraviolet and infrared radiation
- Full power immediate emission of luminous flux after turning on
- Easy brightening and dimming as well as RGB colour mixing
- Small dimensions allowing to miniaturize luminaries
- Ecological construction-LED sources do not contain harmful chemical elements such as, radium, cadmium, and lead.

Current legal status does not follow the technical development in the field of LED technology. As the results there are no clear legal regulations and standards of supervision in the area of technical parameters. One of the unexplained issues is colour rendering index, called Ra or CRI.

It is worth to remember that the above parameter was applied mostly in the case of fluorescent lamps. Ra index adopted to specify how far the spectrum of a particular light is different from natural light spectrum. In order to define Ra index the special table of 8 testing colours chosen experimentally was created. In reality they reflected the quality of emissive spectrum of fluorescent lamp. Individual testing colours were illuminated by tested light and it was determined in what degree the reflection

of this light is close to the model light. Ra index is an arithmetic mean of 8 coefficient components R1-R8.

When the analysis of LED light spectrum began, it turned out that outer areas of the spectrum corresponding to red and blue colour in Ra are not represented at all. Mainly in these areas white diodes have the biggest problem to reproduce the colour. That is why the colour rendering index CRI was introduced, for which a table of 14 testing colours was defined. CRI index is an arithmetic mean of 14 coefficient components. Thanks to that it is possible to define more precisely the deviation of tested model spectrum in the area of colour rendering. To define the CRI index we use spectrometer, which have a table of 15 testing colours. Works on creating more perfect colour rendering index are in progress. So far, CRI (also called Ra) is the most known and commonly used parameter, which defines colour rendering for particular light source. It should be noted that since the rule for white diode was adopted as a standard to mix a blue light made by p-n connector and the light made by three-pronged luminophore, we can achieve CRI index on the level of 95. Certainly, it is not the end of LED technology development; on the contrary, we will observe its further development. LED technology will improve technical parameters and decrease costs of lighting. In reference to above article, as a flagship example of LED solution, which was prepared in R&D department of LUXIONA Poland, I would like to present MOSAIC system based on LED technology. Observations show, that it is the one of the most interesting lighting systems available on the market today. MOSAIC structure consists of two elements: arch and straight element. Combination of these two elements gives unlimited possibilities of indoor lighting arrangements. Thanks to this solution we gain possibility to link aesthetic with lighting functionality. MOSAIC system is dedicated for suspended, modular ceilings with dimensions of 600x600. By applying colourful diffusers or LED RGB straps there is a possibility to achieve additional colouristic effects. The use of LED light sources in MOSAIC system gives the possibility to dimmer easily; thanks to it the user saves more energy.

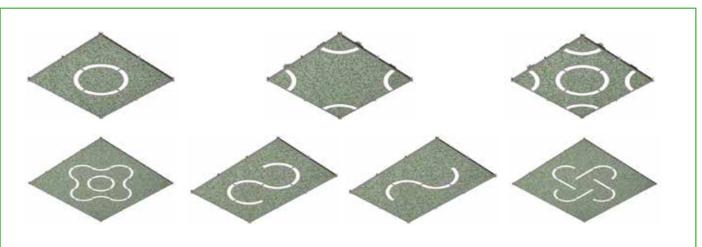
The MOSAIC system has the potential, additional elements can be designed for example, create a triangle which will increase its attractiveness. Currently it is possible to change the arrangements in easy way by turning particular elements by 90 degrees.

> **Eugeniusz Oleksiak** Research & Development Manager

#### Arch and straight element of LED MOSAIC system



Examples of arrangement combinations of LED MOSAIC system



Indoor arrangement based on LED MOSAIC system





# PRODUCTS

### **Recommended products from LUXIONA Poland offer**



### X-WALL K9 LED

Surface mounted and wall luminary. Luminary body made from aluminum profile, its screen made from plastic. Its asymmetric optical system together with the screen provides high energetic efficiency. This product is equipped with highly efficient LED modules with luminous flux ranging from 1300lm to 8800lm. Colour temperature 3000K or 4000K. Pressurisation degree-IP44. Luminary recommended for: hospital bathrooms, patient rooms, indoor hospital transportation.



### SMOOTH RUBIN LOOK LED SMOOTH

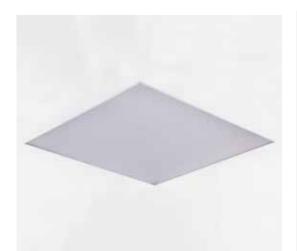
Surface mounted luminary equipped in highly efficient LED sources. The luminous flux of LED sources is 3750lm (28W), 7500lm (56W) or 15000lm (112W). Luminary available in two configurations depending on the color temperature of the light source – 3000K or 4000K. Luminary coffer made of steel sheet, powder coated in white (RAL9016) or grey (RAL9006). Available diffusers: PMMA opal diffuser or micro-prismatic diffuser. Level of protection against dust or water penetration-IP44.



### BERYL KN LED Up&Down IP65

Luminary adapted to be mounted on walls. High lighting efficiency LEDs with 2x1, 2W power were used as light sources. Temperature colour 3000K or 6000K. Optical system consists of professional lens that provide light distribution of 5° - 21° angle. Owing to the optical system solutions, the product is highly effective. Its body is made from anodized aluminum profile. It is resistant to solids, dust, and liquids penetration – IP65.

This type of luminary is recommended for decorative or accent illumination, e.g. in restaurants, pubs, or cafes.



### AGAT LED SMOOTH

Luminaire is equipped with highly efficient LED sources of the newest lighting generation, with the average durability of 50000h. LED lighting stream is 3750lm (28W of electric power), 7500lm (56W), or 15000 (112W). Its colour temperature is 3000K (warm white color), or 4000K (neutral white color). Diffuser is made from white polymethyl methacrylate with the light transparency greater than 70%, or from polymethyl methacrylate with micro prism structure, with the light transparency greater than 90% (micro prism part of diffuser is the outer side of the luminary). Diffuser is located in a steel frame which is powder coated in white. The frame is mounted to the luminary body by the use of springs. There is no need to use any extra tools to mount or dismantle the luminary. The body is made from steel sheet. Luminary resistant to solids, dust, and moisture penetration -IP20/43.







## PATOS O LED

Nowadays architectural lighting should embody an irreproachable style and high quality of lighting parameters. A luminaire is expected to be exceptional in respect of its design – simple and elegant. Patos is designed for lighting galleries, museums, offices, clubs, restaurants and hotels; it gives any interior individual modern character. Fitting designed for suspended plasterboard ceilings, adapted to befit the ceiling surface. Body made of powder coated steel. Diffuser with very good light transmission coefficient and light diffusion parameters. Mounting should take place before the ceiling surface is finished. After the finishing work of the ceiling is ended, the diffuser is installed.

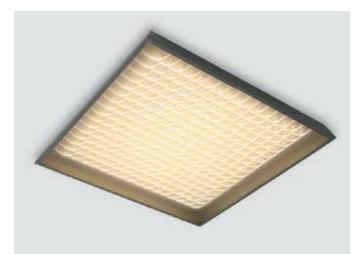
### **RUBINEO LED**

Hermetic luminary dedicated for clean rooms (IP20/54). Luminary adapted to be mounted on suspended plasterboard ceilings, and equipped in highly efficient LED sources. The luminous flux of the diodes used is 1800lm, 3700lm, or 6500lm. Colour temperature is 3000K (the warm colour), or 4000K (the neutral color). Luminary is partly hidden in a suspended ceiling, and thanks to such operation it is less visible for a potential viewer what makes it more attractive. Luminary body made from steel sheet which is powder coated in white. Luminary recommended as the element of the general room illumination: wards, nurseries, or clinics. Accessories: LED power suppliers with possible regulation of the luminous flux.

### ASTOR LED UP&DOWN

Luminary adapted to be surface mounted. Its body made from anodized aluminum profile. The suspended version is equipped with 1500mm long suspension system with the smooth regulation of the suspension length included. Its construction limits the glare effect, and allows distribution of light toward the upper and lower half-space. The luminous flux of LED sources is 2600/4400 lm, or 3900/6600 lm (directed up / directed down). Luminary available in two configurations depending on the colour temperature of the light source - 3000K or 4000K. Diffuser which directs the light towards the lower parts of space is made from polymethyl methacrylate. The light directed towards the upper part of space penetrates the micro-prism. Upon the request of the client luminary is equipped with electronic power supplier or the supplier with suppliers with possible regulation of the luminous flux in DIM DALI system. Purpose: public facilities, modern structures, offices, conference halls, etc.

### **Recommended products from LUXIONA Poland offer**



### OTONO

The lighting fitting is made of powder-painted steel sheet. At the request of the client, it is possible to make the fitting housing of aluminum or stainless steel. The application of special MPRM diffusers combined with LED modules produced by renowned companies made it possible to achieve the visual effects which have never been available on the market before. The fitting is installed on surfacemounted or hanged on the slings. Accessories: dimmable electronic gear with the possibility of luminous flux regulation, motion detector. Other RAL colours available on special request. Level of protection against solids, dust and moisture penetration-IP20.



### **RING T**

Sophisticated luminary providing the effect of a lighting ring designed for suspended plasterboard ceilings, equipped with highly efficient LED sources, or adapter to TR-5 fluorescents with 2Gx13 socket, and 40 and 60W power. The luminary provides possibility for unique illumination of interior. The luminous flux of LED sources is 5500 lm or 5800 lm (53W electric power). Color temperature is 2700K or 4000K. The color rendering indicator is Ra>80. Luminary housing is made from powder coated steel sheet in white (RAL 9010). The luminary diffuser is made from opal PMMA. Luminary is protected against water and dust penetration – IP43. It has the first class protection against the electric shock. Accessories: electronic discharge system with possible luminous flux regulation.



### MARKET LINE LED

Luminary adapted to illuminate shelves in shops. Using of this luminaire allows achieving low illumination value of displayed shelves and at the same time it reduces illumination value on the floor. Luminaires is adapted to be installed on pendants. It is also possible to connect luminaires in one lighting lane. Highly efficient LED light sources of average durability of 50000h are applied. Colour temperature is 3000K or 4000K. Housing of the luminaire made of steel sheet. Micro -prism diffuser. For better efficiency inside the luminaire, the polished aluminum reflectors are used. Both symmetrical and asymmetrical options of light distribution are available. Level of protection against solids, dust and moisture penetration-IP20.









# NEPTUN LED

Ceiling mounted hermetic luminaries with highly efficient LED sources providing extra protection from the foreign body and water streams penetration that may be experienced from various directions, as well as protect against random impacts (IK10). Luminaries perfect to be installed in humid and dusty interiors. Luminary body and lampshade made from polycarbonate provide the maximum protection from mechanical damages. Color temperature of the applied LED sources is 3000K or 4000K. Power generators with possible lighting stream regulation can be used optionally. Neptun LED luminaries are offered with the metal clips in standard version. Purpose: illuminating halls, warehouses, underground paths, parking lots etc.

## X-LINE SQ N LED

Luminary made from aluminum profile adapted to be mounted on suspensions, or directly on a solid ceiling construction. The suspended version is equipped with 1500mm long suspension system with the smooth regulation of the suspension length included. Highly efficient LED luminaires make the light sources. Colour temperature 3000K or 4000K. Diodes luminous flux is from 5200 lm to 8800 lm. Opalized PMMA micro-prism diffuser. Luminary to be used in offices, conference halls, all structures of public sectors.

# SATURN LED

Interior hanging luminary equipped in highly efficient LED sources. The luminous flux of the diodes used is 3000 lm or 5000lm. Color temperature is 4000K. The luminary lampshade shall be made from polycarbonate or aluminum. Luminary housing made from aluminum profile. Purpose: illuminating recreational areas, halls, entrances, shops and shopping malls.

# ATENA LED

Industrial suspended luminary with LED sources included. Body made from aluminum cast which at the same time plays role of a radiator for LED modules which are placed inside. The body is powder coated in grey. Luminary luminous flux is 15000 Im (129W power), 20000 Im (172W) or 25000 Im (215W). Color temperature of the applied LED sources is 5000K. Luminary is highly resistant to dust and water penetration – IP65. Purpose: halls, warehouses, etc.



### Office of the Management Board / Trade Office:

Sochaczewska 110 Street 05-850 Ożarów Mazowiecki, Macierzysz near Warsaw + 48 22 721 72 72 sekretariat@luxiona.com www.luxiona.pl www.luxiona.com

LUXIONA Poland S.A./Production Facility

Jacentów 167 27-580 Sadowie + 48 15 868 40 78 sekretariat\_jacentow@luxiona.com

#### **Export Department:**

FR, ES, IT + 48 604 442 101 export@luxiona.com

RU, DE, UA, BG + 48 668 864 023 export@luxiona.com

GB, FI + 48 606 292 344 export@luxiona.com

BE, DK, NL, NO, SE + 48 600 967 210 export@luxiona.com LT, EE, LV, BY + 370 650 22 522 export@luxiona.com

GB, IE, HU, RO + 48 600 987 439 export@luxiona.com

DE, AT, CH + 48 602 137 973 export@luxiona.com

CZ, SK, HR, SI, H, BiH, SRB, MK, AL, MD, KZ, ISR export@luxiona.com

trell <u>heper</u>

LUXIONA Poland is part of the Spanish LUXIONA Group, which for more than 80 years has been successfully operating on the international market of the lighting industry. The mission of LUXIONA Poland is to create complementary lighting solutions, in accordance with the most recent technologies as well as legal and social requirements. For that reason, an active team constantly works on innovative technical solutions, keeping in mind the need for saving energy and protecting the environment. The team does not cease to enhance the quality of our products and the efficiency of our services, permanently analyzing the needs of our Customers.

The LUXIONA Group, including LUXIONA Poland which continues to implement the Group strategy, specializes in the composition and creation of indoor and outdoor lighting systems, basing on the vast experts' experience and the broad scope of product brands. An integral part in the offer of LUXIONA Poland are comprehensive lighting solutions, which cover both the production and design services, in the widest sense of the word, delivered by high class designers and ready to meet the requirements of, among others: architectural spaces, areas in the so-called clean rooms, commercial surfaces etc.

LUXIONA Poland is an indisputable leader on the market of CLEAN ROOM type of solutions – for the so-called clean premises i.e. sterile lighting in hospital premises, lighting in pharmaceutical plants or chemical laboratories.

LUXIONA Poland hires professionals from the lighting industry having vast experience in the business. In managing a project, the team of LUXIONA Poland guarantees the application of the best possible technical solutions in the area of ultimate use of lighting solutions. The LUXIONA Poland team specializes in implementing projects which require an individual approach and the application of modern technologies.



# Marketing Department:

+ 48 22 721 72 44 marketing.poland@luxiona.com

тоопціянт<sup>+</sup> metalarte

Sagelux