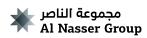
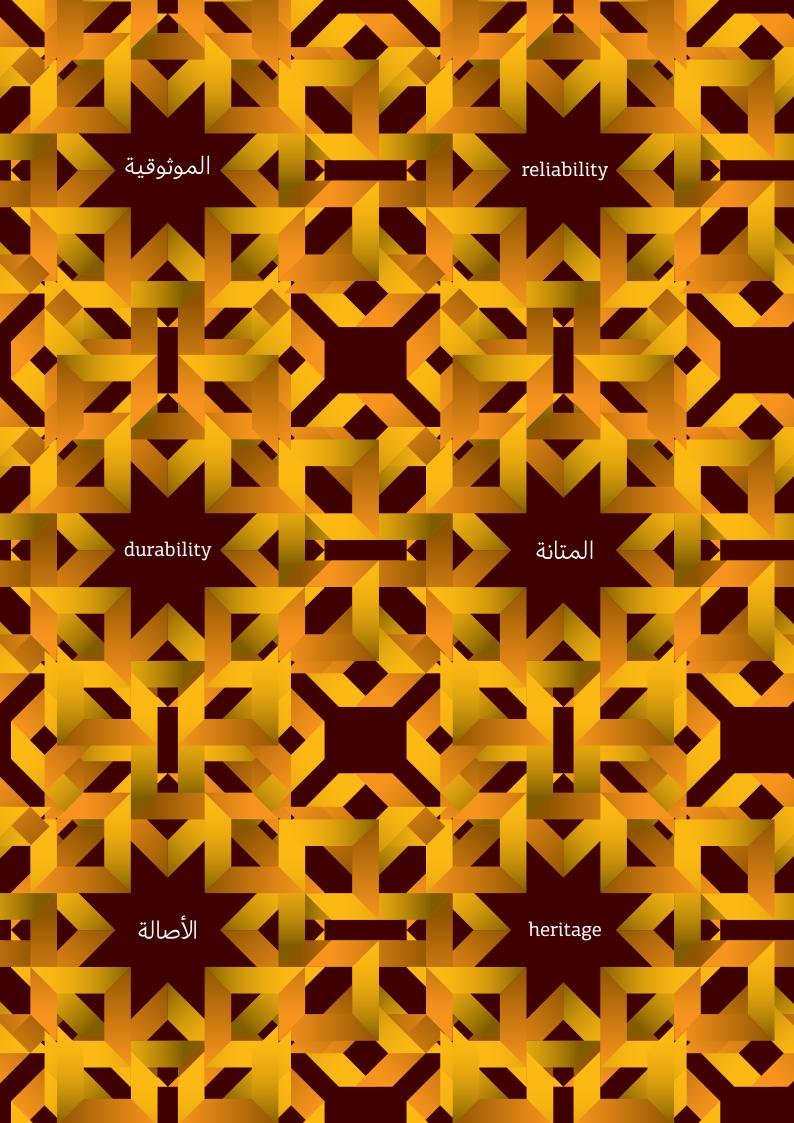
More Light إنارة أكثر





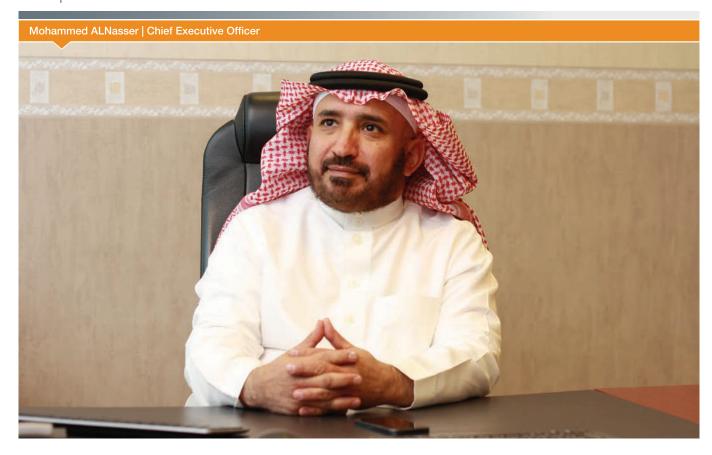


Noortek is Al Nasser's high end professional lighting brand. We offer advanced and reliable solutions for all types of indoor lighting applications, including lighting controls.

We enable you to create more value with lighting applications. More efficiency, more safety, more atmosphere, more comfort: More light.

نورتك هي العلامة التجارية المفضلة التابعة لمجموعة الناصر في مجال الإنارة. نحن نقدم حلولاً متقدمة وموثوقة لجميع أنواع استخدامات الإنارة الداخلية، بما في ذلك التحكم في الإنارة.

نحن نتيح لك إمكانية خلق قيمة أعلى باستخدام الإنارة. المزيد من الكفاءة والأمان وبيئة أفضل: المزيد من الإنارة



Dear All,

First and foremost I would like to thank the contractors, the consultants, the min - istries, municipalities and building owners for the continuous support they have giv - en to NOORTEK over the years. Thanks to you NOORTEK today is an established brand in the market.

In the previous catalogue NOORTEK presented products and services for schools, offices, universities, hospitals, industries, airports and parks and we promised you to work hard to develop product solutions for Road and Tunnel Lighting Applications.

In the last period we added many new product families to our indoor portfolio. The enrichment of the indoor portfolio is done to offer you more variety and flexibility to select. To serve you well, AL NASSER PRO, owner of NOORTEK, has expanded their sales and marketing organizations in Riyadh, Jeddah and Dammam.

In 2012 we signed a Partnership Agree -

ment with SCHREDER, Belgium. SCHRE DER is a World Wide Leader in Road and Tunnel Lighting with a long history in Saudi Arabia. The exclusive manufacturing license enabled NOORTEK to offer you a full product range of high quality Road, Tunnel and Architectural Outdoor products.

In 2013 clients and consultants preferred LED products for Road Applications to save energy and maintenance cost. In our catalogue you will find an overview of technical and design criteria that are important when designing and specifying LED road lighting solutions.

For indoor applications we expect that clients and consultants will start preferring led solutions to reduce the monthly energy bill and to avoid maintenance costs.

NOORTEK has developed a full range of LED products. Next to this NOORTEK can provide cost of ownership calculations and payback time calculations to compare an LED installation with a Conventional in - stallation.

The LED technology is the key stone of our 2014 strategy. AL NASSER PRO will fur ther invest in NOORTEK to strengthen the LED product development team, expand the LED product portfolio and complete the manufacturing and testing set up.

Our team is committed to deliver the support you require in the upcoming projects.

Mohammed ALNasser
Chief Executive Officer

COMPANY INTRODUCTION



Our vision | Values | Mangement | People | Products

OUR VISION

We strive to set new market standards for lighting in the Kingdom of Saudi Arabia and want to be a leading manufacturer and supplier of Lighting Solutions in the Middle East Region by providing solutions that drive the standards of tomorrow.

We value you as our customers and learn from you by listening to your needs. We value our staff by listening to their ideas and implementing their suggestions for improvement. Our success relies on people, as people make the difference.

VALUES

Our company value is built on RELIABILITY.

MANAGEMENT

Our management is committed to assuring that we are reliable in meeting all our commitments to our valued customers and towards our staff.

PEOPLE

Our professional team has a high ethical business standard and works hard to ensure that we keep our commitments.

Products

Our organization provides reliable product data which is assured by having our products tested by world class independent companies such as DIAL and KEMA .



Our Team

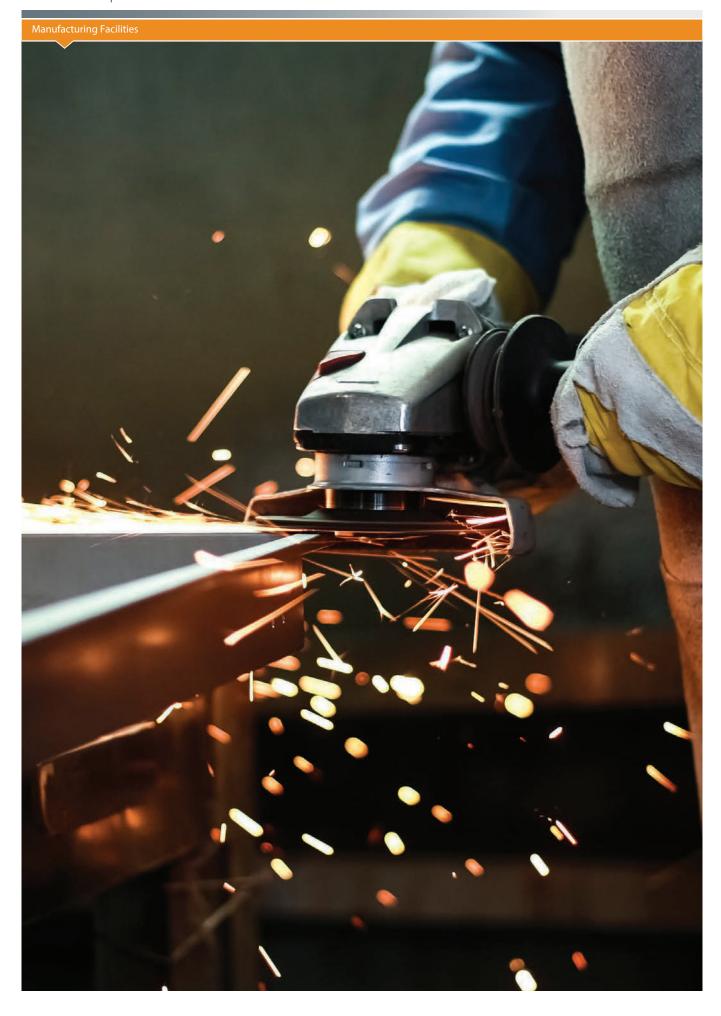
OUR TEAM

The teams we have in Product Development and Marketing are well trained and well educated. The mix of having well experienced European developers with a broad experience in lighting demonstrates the importance we give to knowledge and quality. The experience and knowledge of the teams made it possible to develop a great product portfolio that we present in this catalogue.

Our production and assembly staff is well trained to ensure that each and every product meets our NOORTEK quality standards.

Our inline quality checks are executed by our Quality Control Team. With the latest inline testing equipment and the quality checks of the quality control team, we can guarantee that all NOORTEK products that leave our factory meets the standards. The technical support team is qualified to provide all the technical details you need in the execution of your projects.

The Marketing and Sales team of NOORTEK together with the Lighting Design Team and Technical Support Team are well-trained and are committed to support you in all the different phases of the project. They are equipped to provide you with all required technical information, provide lighting designs and installation support.



Manufacturing Facilities

MANUFACTURING FACILITIES

Our factory is located at Riyadh Industrial City. The total area is 5,400 square meters of which 3,500 square meters is the product floor space.

We work with manufacturing equipment from LVD in Belgium. LVD started in 1925 and has more than 84 years of experience in offering integrated products for sheet metal - working. LVD enables Lighting Technology Company to achieve high levels of produc - tivity. The equipment we installed from LVD are the bending, punching, pressing and shearing machines.

The factory is further equipped with a fully automatic powder coating plant, and auto mated wire cutting and stripping machines. To ensure a proper flow and controlled flow we installed SAP system.



LVD PUNCHING MACHINE



LVD BENDING MACHINE



LVD SHEARING MACHINE

Our Projects

A selection of project references is given to demonstrate that Noortek has the capability to cover different applications. From offices, hospitals, schools, universities to road lighting, architectural lighting and landscape lighting. A few projects we photographed to illustrate how lighting beautifies building and its surroundings and how it creates safety at night when driving.



PROJECT PRODUCT/ SERVICE

Lighting by Noortek

COMPANY

Al Nasser Pro*



PROTECT PRODUCT/ SERVICE King Abdulaziz University Jeddah_Faculty Housing Lighting by Noortek

COMPANY

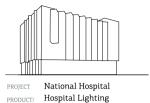
🗱 Al Nasser Pro*



PROJECT PRODUCT/ SERVICE

Berker

COMPANY 🗱 Al Nasser Pro



PRODUCT/ SERVICE

COMPANY 🞝 Noortek



PROJECT PRODUCT/ SERVICE Riyadh metro stations Lighting by Noortek

COMPANY

Al Nasser Pro*

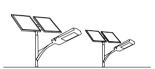


PRODUCT/ SERVICE

SAR stations, Riyadh Lighting by Noortek

COMPANY

Al Nasser Pro*



PROJECT PRODUCT/ SERVICE Riyadh Municipality Solar led light



PROJECT Kingdom Towers, Riyadh PRODUCT/ SERVICE Wiring devices by Berker (Arsys)

COMPANY Al Nasser Pro*



PROJECT PRODUCT/ SERVICE GOSI Park, Ghornata Lighting by Noortek Wiring Devices by Berker

COMPANY

Al Nasser Pro*



PROJECT PRODUCT/ SERVICE Ministry of Interiors Office Lighting/Outdoors

COMPANY

🎎 Noortek "



PRODUCT/ SERVICE

King Saud Uni versity Office lighting

COMPANY Noortek*

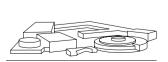


PRODUCT/ SERVICE

Olaya Towers Office lighting

COMPANY

₹ Noortek*



PROJECT PRODUCT/

KAUST, Jeddah Lighting by Salvi/Arcluce

COMPANY

Al Nasser Pro*



District PRODUCT/ SERVICE

Fermax

COMPANY 🎎 Al Nasser Pro*



King Abdullah Financial PROJECT

- Third Saudi Expansion of The Holy Haram Capital upgrading of East & West Piazzas, Holy Haram, Makkah
- •King Abdulla University of Science and Technology (KAUST)
- · GOSI Granada Complex, Riyadh
- Princess Noura University
- Land Forces Ministry of Defense
- Buraidah Medical Hospital
- GOSI Park
- King Abdulla University of Science and Technology
- Prince Sultan Palace, Half Moon, Khobar
- Kingdom Towers King Fahad Road
- Saudi Airlines Building AL Janadiriyah Festival
- Prince Sultan Humanitarian City
- Hilton Hotel Jeddah
- Hilton Hotel Madina
- Ninth Station Project for Electrical -Riyadh
- AL Faysaliya Tower
- Villas For Dar AL Arkan Company All Projects - Riyadh
- Bushra Mall (For Women) Riyadh
- Royal Mall AL Shaikh Salih AL Habeb Group)
- AL Hadithy Mall AL Kharj

- · Meridian Hotel Makkah
- Jarer Mall Jeddah
- Al Sayrafi Mall Jeddah
- Sultan Mall Jeddah
- Al Jamea Mall Jeddah
- Saudi German Hospital Riyadh -Abha
- King Abdulaziz Hospital Riyadh
- Real Estate Holding Company
- movenpick hotel Jeddah
- Holiday Inn Hotel AL olaya
- Westin Hotel Jeddah
- Intercontinental Chalets (AL Murjan) -Abhor
- Cristal Resort Project for Villas Abhor
- Jeddah National Hospital
- IKEA Jeddah
- Aziziyah Towers for Al Rajhi Makkah
- Marriott Hotel Riyadh and Jeddah
- Meridian Hotel Jeddah
- · Al Hada Sheraton Hotel AL Taif
- Hilton Hotel Makkah
- Supply and Operation Department project of Public Security
- Sheraton Hotel Royal Apartments Madina
- Headquarter Business Park, Jeddah

- Oberoi Hotel Sultan of Brunei Suit -Madina
- Dallah Hotel Madina
- Riyadh Palace Hotel
- Al Motlaq Hotel Riyadh
- AL KhozamaTowers Jeddah
- AL Oun Center AL Jaffali Jeddah
- Abha Palace Hotel National Tourism Company
- United Nation Program Riyadh
- Prince Sultan Ben Abdulaziz Palaces -Riyadh - Qassim -Jeddah
- AL Ghazali Main Building Jeddah
- Offices of Military Hospital Al Kharj
- King Abdulaziz Mosque
- The Ministry of Defence projects Tabuk
- Ben Himran Mall Jeddah
- Sheraton Hotel Makkah
- Prince Faisal ben Fahid Compound
- Prince Sultan Palace Al Waha area
- Al Jazeera Sheraton Hotels Cairo , Egypt
- AL Afaliq Center AL Khobar
- AL Mousa Compound 32 Villa AL Khobar
- AL Dabil Tower Dammam
- · Zahran Business Center, Jeddah

- AL Khudary Compound AL Khobar
- · Abdulallateef AL Ali Aleasa Compound
- Riyadh
- AL Mane'a Hospital AL Khobar
- European Village AL Dahran
- AL Majdoe Villas Dammam
- AL Zamil Tourist Project Jubail
- Cement Eastern Region Company
- AL Mutlaq Compound Dammam and Khobar Road
- King Faisal University Housing -Dammam and Khobar road
- AL Haneny Project 36 Villas Jubail
- AL Hindi Tower Dahran Street -Khobar
- AL Muhaisni Towers Makkah
- AL Haramain AL Shareefain Museum
- AL Haramain AL Shareefain Presidency
- AL Mahrajan Intercontinental Village
- Abhor
- Saudi Business Center Jeddah
- · AL Safwa Tower
- Dorrit AL Aziziah Tower
- AL Hamra Hospital Jeddah
- Jarer Library
- Ministry of Interior Technical Department



Manufacture Lights

LED uses less energy and emits less heat. They are designed to create light differently. That's why it takes a lot of extreme caution for workers when manufacturing LED lights and assembling all components as per its design.

What are the Basic Components of LEDs?

LED lights have a small chip with semiconducting material layers. Vorlane calls this manufacturing process the LED driver manufacturing. The driver contains one or several chips mounted on a heat sink covered by a lens.

The LED driver has a programmed circuit board that controls the light. It determines the light sense, dim motion, number of LEDs used, the running voltage, and other critical aspects. As an expert in LED light manufacturing, Vorlane started its manufacturing process by producing the LED driver.

R&D

Product development process:

Product development is both an exciting and difficult endeavor. From initial ideation to research and prototyping, no two product launches are the same. However, there's a general process that can help you get started with the product development process.

The product development process describes the six steps needed to take a product from initial concept to final market launch. This includes identifying a market need, researching the competition, ideating a solution, developing a product roadmap, and building a minimum viable product (MVP).

The product development process has evolved in recent years and is now commonly used by dividing each step into six separate phases. This helps better organize the process and break individual deliverables into smaller tasks.

What is product development?

Product development is the process of building a new product, from ideation all the way through launch. Product development begins with those initial brainstorming sessions, when you're just discussing a budding idea. From there, the process is creative but strategic, and you may have seen it done in a million different ways. But without clear organization, it can be hard to mesh creativity and strategy effectively. Which is where the product development process comes in—a six step framework to help you standardize and define your work.

Is product development the same as product management?

Though they sound almost identical, there's an important difference between product development and product management. Product development describes the process of building a product, where product management is the overseeing of that work. It's a slight difference, but an important distinction. A product manager, who often oversees a team that is in the product development process, will lead product management.

1. The potential and problem analysis stage

The initial stage of the product development process begins by generating new product ideas. This is the product innovation stage, where you brainstorm product concepts based on customer needs, concept testing, and market research.

It's a good idea to consider the following factors when initiating a new product concept:

Target market: Your target market is the consumer profile you're building your product for. These are your potential customers. This is important to identify in the beginning so you can build your product concept around your target market from the start.

Existing products: When you have a new product concept, it's a good idea to evaluate your existing product portfolio. Are there existing products that solve a similar problem? Or does a competitor offer a product that doesn't allow for market share? And if yes, is your new concept different enough to be viable? Answering these questions can ensure the success of your new concept.

Functionality: While you don't need a detailed report of the product functionality just yet, you should have a general idea of what functions it will serve. Consider the look and feel of your product and why someone would be interested in purchasing it.

SWOT analysis: Analyzing your product strengths, weaknesses, opportunities, and threats early in the process can help you build the best version of your new concept. This will ensure your product is different from competitors and solves a market gap.

SCAMPER method: To refine your idea, use brainstorming methods like SCAMPER, which involves substituting, combining, adapting, modifying, putting to another use, eliminating, or rearranging your product concept.

To validate a product concept, consider documenting ideas in the form of a business case. This will allow all team members to have a clear understanding of the initial product features and the objectives of the new product launch.













2. The data collection stage.

Once you've completed the business case and discussed your target market and product functionality, it's time to define the product. This is also referred to as scoping or concept development, and focuses on refining the product strategy.

During this stage, it's important to define specifics including:

- Business analysis: A business analysis consists of mapping out distribution strategy, ecommerce strategy, and a more in-depth competitor analysis. The purpose of this step is to begin building a clearly defined product roadmap.
- Value proposition: The value proposition is what problem
 the product is solving. Consider how it differs from other
 products in the market. This value can be useful for market
 research and for developing your marketing strategy.
- Success metrics: It's essential to clarify success metrics
 early so you can evaluate and measure success once the
 product is launched. Are there key metrics you want to
 look out for? These could be basic KPIs like average order
 value, or something more specific like custom set goals
 relevant to your organization.
- Marketing strategy: Once you've identified your value proposition and success metrics, begin brainstorming a marketing strategy that fits your needs. Consider which channels you want to promote your product on—such as social media or a blog post. While this strategy may need to be revised depending on the finished product, it's a good idea to think about this when defining your product to begin planning ahead of time.

Once these ideas have been defined, it's time to begin building your minimum viable product (MVP) with initial prototyping.

3. The product design stage

With today's innovation, there is more creativity allowed in designing lights. Before manufacturing takes place, the light application, color temperature, brightness, and efficiency of the light should be decided. These mentioned attributes are affected by the diode size, semiconductor materials, types of impurities needed, and the thickness of diode layers.

A successful product design may take several iterations to get just right, and may involve communicating with distributors in order to source necessary materials.

To produce the initial design, you will:

- Source materials: Sourcing materials plays an important role in designing the initial mockup. This may entail working with various vendors and ordering materials or creating your own. Since materials can come from various places, you should document material use in a shared space to reference later if needed.
- Connect with stakeholders: It's important to keep tight communication during the design phase to verify your initial design is on the right track. Share weekly or daily progress reports to share updates and get approvals as needed.
- Receive initial feedback: When the design is complete, ask senior management and project stakeholders for initial feedback. You can then revise the product design as needed until the final design is ready to be developed and implemented.

Once the design is approved and ready to be handed off, move onto the validation phase for final testing before launching the product.



- 1. Identify the requirements.
- 2. Determine the method of lighting.
- 3. Select the lighting equipment.
- Calculate the lighting parameters and adjust the design as required.
- 5. Determine the control system.
- 6. Choice of luminaire.
- 7. Inspect the installation upon completion.







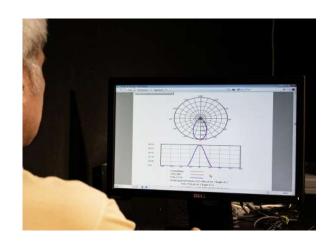
4. The product validation stage

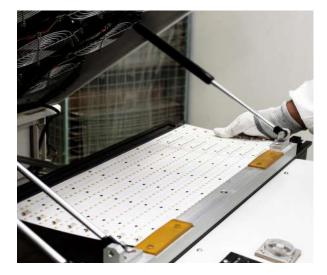
LED Materials Needed

LEDs are made up of diode, and the diode is made from semiconductor materials. The semiconductor is made of crystalline material that needs impurities in order to conduct electricity.

These impurities are not imperfections. They do not lessen the diode value, rather, they enhance it. Doping is the process of adding these impurities, the most commonly used are nitrogen and zinc.

Diodes are powered through electrical wires. Most manufacturers use gold and silver compounds, as these materials can handle being heated and soldered well. These diodes are encased in transparent plastic. Although traditional bulbs are made in glass, LEDs are placed in plastic containers to make them more durable and long-lasting.





5. The product revision stage

To go live with a new product, you first need to validate and test it. This ensures that every part of the product—from development to marketing—is working effectively before it's released to the public.

To ensure the quality of your product, complete the following:

- Concept development and testing: You may have successfully designed your prototype, but you'll still need to work through any issues that arise while developing the concept. This could involve software development or the physical production of the initial prototype. Test functionality by enlisting the help of team members and beta testers to quality assure the development.
- Front-end testing: During this stage, test the front-end functionality for risks with development code or consumerfacing errors. This includes checking the ecommerce functionality and ensuring it's stable for launch.
- Test marketing: Before you begin producing your final product, test your marketing plan for functionality and errors. This is also a time to ensure that all campaigns are set up correctly and ready to launch.

Once your initial testing is complete, you're ready to begin producing the final product concept and launch it to your customer base.

6. Product trial phase

Now it's time to commercialize your concept, which involves launching your product and implementing it on your website. By now, you've finalized the design and quality tested your development and marketing strategy. You should feel confident in your final iteration and be ready to produce your final product. In this stage you should be working on:

- Product development: This is the physical creation
 of your product that will be released to your customers.
 This may require production or additional development
 for software concepts. Give your team the final prototype
 and MVP iterations to produce the product to the correct
 specifications.
- Ecommerce implementation: Once the product has been developed and you're ready to launch, your development team will transition your ecommerce materials to a live state. This may require additional testing to ensure your live product is functioning as it was intended during the previous front-end testing phase.





7. data analysis and reporting stages

Quality Control & Packaging

Noortek ensures that its clients receive their top-notch products. That's why they assess their LED light products through multiple tests. There are 2 significant concerns in quality control, the final product and the manufacturing facility.

Every LED product should be tested to know the following:

Wire bond for operation characteristics. Specific levels of current to produce. Exact light color for the wafers. Lifetime tests Power and heat breakdown. Stress testing

Only the LED lights that passed the test for quality control will be sent to the packaging lines.

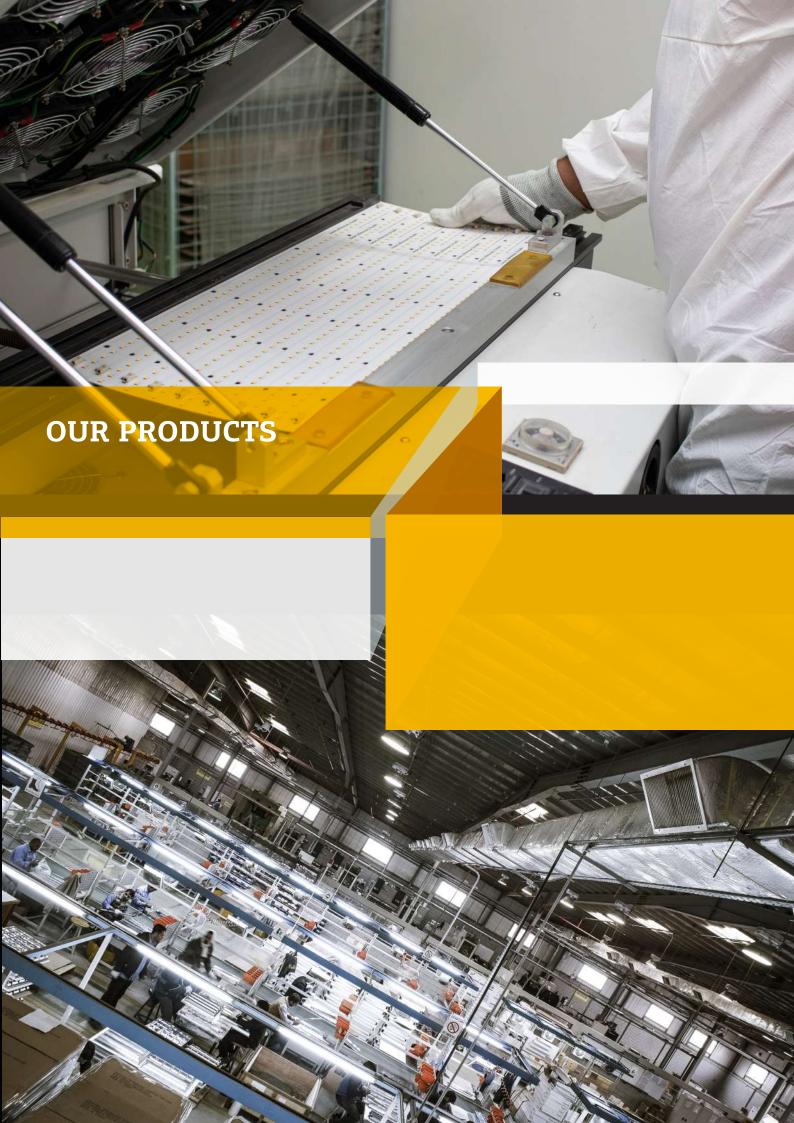
Aside from the final product, the manufacturing line has to be checked. Quality control ends with checking whether the facility still operates safely and reliably. Vorlane knows that several of the processing steps are automated, but some include manual processes. That's why to ensure that their working staff is safe, they should check and improve their manufacturing facility as well..

8. Product release

Final Takeaway

As manufacturers get better with their LED lights, materials are constantly being developed to fabricate blue and white LEDs. Moreover, a wider variety of colors open several opportunities for new applications. Vorlane continuously copes with the innovation and demand of LED lights. If your company is looking for a reliable and expert LED manufacturer, you can browse our products.





1- Haram Project Wall Light Upgrade [WL06X Family]

DESCRIPTIONS:

LED - WL06X IP65 is a general purpose high quality LED bulkhead luminaire for outdoor applications. Using of high quality die cast aluminium housing and frosted tempered glass make this product suitable for the most severe conditions with protection degree IP 65.

APPLICATIONS:

Suitable to be used in : Wall lightig, building surrounding, electrical and mechanical rooms and other similar outdoor applications.



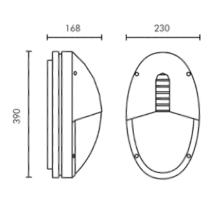








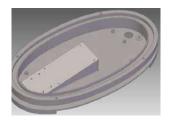
3D model



DIMENSIONS

3D model

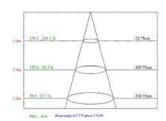


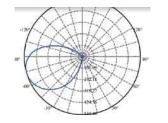




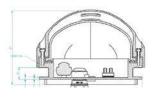








Photometric Data



Dimensions

2-LED UP/Down Linear Light Secure Communications Facility Project (M & ME)

Luminaire type

Pattern fil Suspended luminaire as continuous line version. With integrated LED system. Hide Bacl Color

Applications

For attractive general lighting of offices, sales areas, exhibition spaces, banks and ticket halls. Transparenc

Optical system

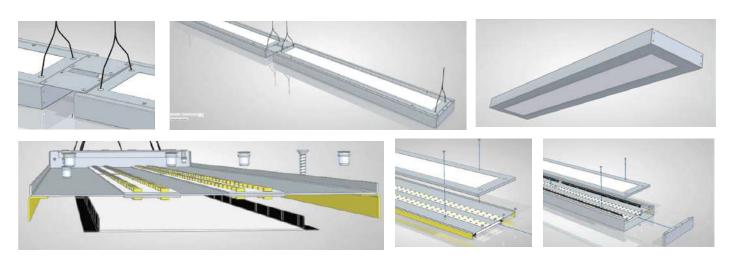
With direct-indirect light distribution. Microprismatic CPD cover for direct component light distribution. VDU-compliant lighting in compliance with EN 12464-1 via limited luminance $L\!\leq\!3000$ cd/m² for beam angles above 65° all round, for computer screens with positive polarity and self-luminance greater than 200 cd/m



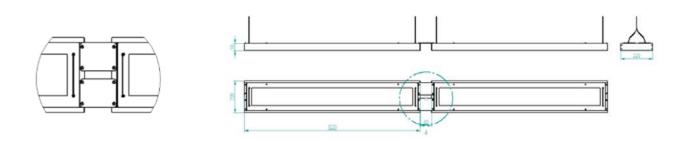
Real product



3D model



Dimensions



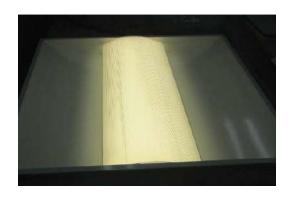
3-LED Direct / Indirect light V1

DESCRIPTIONS

IND LED is an indirect recessed luminaire made of high quality steel housing finished with 3-stages pretreatment electrostatic powder coating. This luminaire is used for creating task / ambient lighting effect. Energy efficiency is obtained using an integrated electronic LED driver with PF higher than 0.95.

APPLICATIONS

Office, Residential, commercial and other similar application $% \left(1\right) =\left(1\right) \left(1\right$

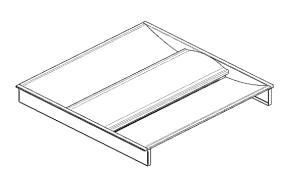


Real product

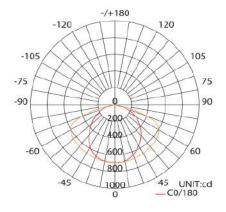




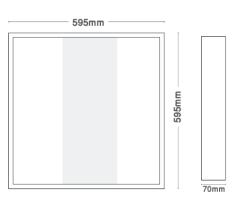
Real product



Sketch



Photometric Data



Dimensions

4-LED Decorative 60x60cm Light

DESCRIPTIONS

3 CHANEL LED is the new decorative proposal to replace convention- al T8 and T5 general lighting luminaries, based on the most advanced LED chips and drivers, it's has long life time (50,000 hrs) with best power consumption and Performance. It's equipped with high effecient electronic European driver as per Saudi and international standards. The housing is made of aluminum with opal PMMA diffuser to provide high light efficiency

APPLICATIONS

Office, Residential, commercial and other similar application $% \left(1\right) =\left(1\right) \left(1\right$

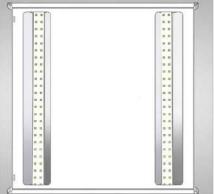


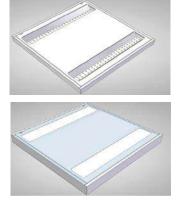
Real product

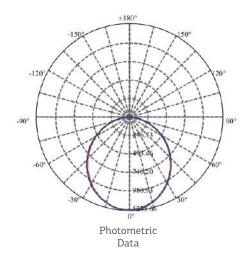


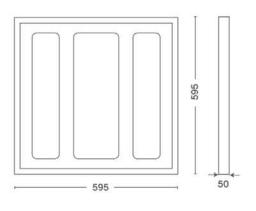
3D model











Dimensions

5- LED Direct / Indirect light V2

DESCRIPTIONS

REC LED-IND(DP-S)-40W is a recessed LED with louver with special super thin body design and has long Life time more than 50,000 hrs with best power consumption and Performance .Offilux LED louver especially designed to create general lighting solutions in Office, Residential, commercial and other similar application It's equipped with high efficient electronic driver as per Saudi and international Standards with painted sheet steel housing with high purity anodised aluminium louver.

APPLICATIONS

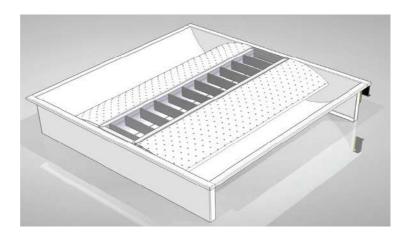
Suitable to be used in :Office, Residential, commercial and other similar application $% \left(1\right) =\left(1\right) =\left(1\right)$

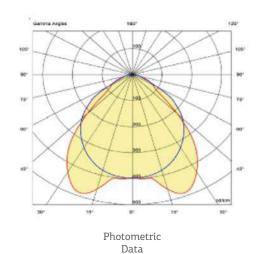


Real product



3D model





Installation

6-LED 16 Cell [60x60cm]

DESCRIPTIONS

16 CELL LED is the new decorative proposal to replace conventional T8 and T5 general lighting luminaries, based on the most advanced LED chips and drivers, it's has long life time (50,000 hrs) with best power consumption and Performance. It's equipped with high effecient electronic European driver as per Saudi and international standards. The housing is made of aluminum with opal PMMA diffuser to provide high light efficiency.

APPLICATIONS

Offices, hotels, hospitals schools and all other similar application $% \left\{ 1,2,\ldots ,n\right\} =0$

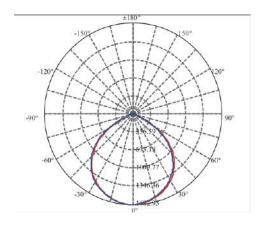


Real product

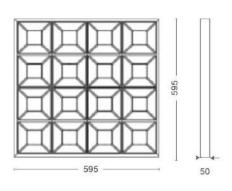
Design by **Noortek** Made in **Saudi Arabia**

Real product





Photometric Data



Dimensions

7- LED 60x60cm

DESCRIPTIONS

CoverLED IP40/44/65 is the new technology to replace conventional T5 and T8 general lighting luminaries With high system lumen output 100 lm/W, based on the most advanced LED chips and drivers, Noortek released the products that can replace all fluorescent configurations which extends product life time with best power consumption and Performance. lighting fixtures which are easy to clean, water proof and dust proof should be used.

APPLICATIONS

Suitable to be used in : hospitals, laboratories, pharmaceutical production and food production .



Real product



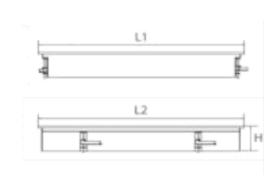


Real product



3D model





8- LED Direct / Indirect light V2

DESCRIPTIONS

WRR DM LED IP40 is a decorative surface mounted wrap around LED luminaire coming with high efficient electronic driver as per Saudi and international standards. The housing is made of steel housing finished with 3-stages pretreatment electrostatic powder coating . The luminaire has polycarbonate covers (prismatic) which gives more light uniformity.

APPLICATIONS

Schools, hospitals, and all other similar applications



3D model



Real product



DESCRIPTIONS

WRR HF LED IP40 is a decorative surface mounted wrap around LED luminaire coming with high efficient electronic driver as per Saudi and international standards. The housing is made of steel housing finished with 3-stages pretreatment electrostatic powder coating . The luminaire has polycarbonate covers (prismatic) which gives more light uniformity.

APPLICATIONS

Schools, hospitals, and all other similar applications $% \left(1,...,n\right) =\left(1,...,n\right)$



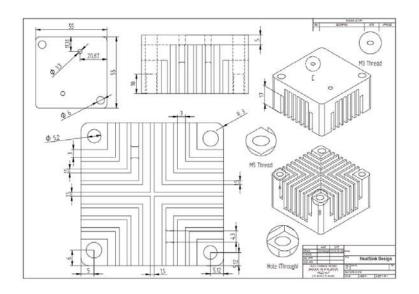
Real product

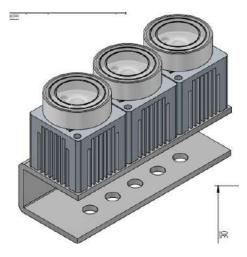


3D model



9- Heat sink design

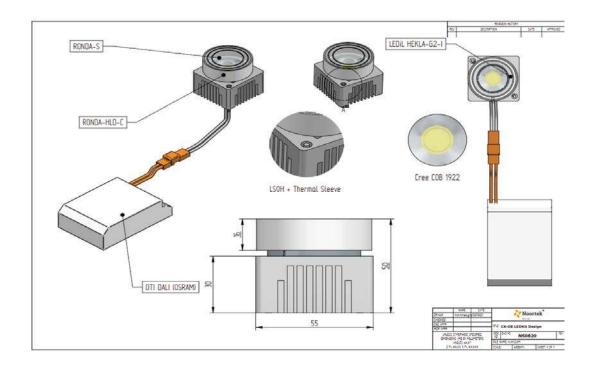




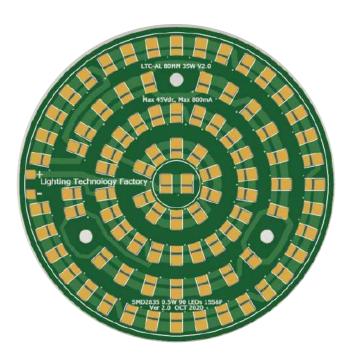
Dimensions 3D model

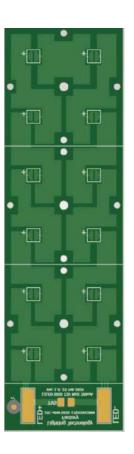
Design by **Noortek** Made in **Saudi Arabia**

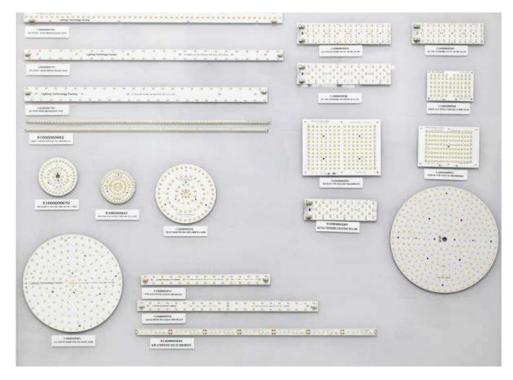
10- Complete Solution for HID Retrofit [Chandeliers]



11- LED Module [PCB Design]









Head office

Malaz - Salahidin Road P.O Box 1246 Riyadh 11431

Tel: +966 1 477 77 00 Fax: +966 1 478 94 69

info@alnasser.com www.noortek.com



www.alnassergroup.com

