



# Light Guide for Grocery Stores and Supermarkets



Light can deliver an amazing customer experience. And customer experience delivers revenues for your business.

Selling groceries is a highly competitive industry. Nowadays, consumers have a lot of options on their hands, from small corner shops and specialty stores to large hypermarkets and even online shopping. It's no wonder that the new competitive edge for retailers is customer experience, especially in the fresh food sector.

Yet, what is it that makes customer experience great and increases purchase intent? It's what people see, sense, smell, touch and hear. And seeing is perhaps the largest factor of all.

Shoppers naturally associate the good appearance of food with good taste and quality. This is why supermarket lighting is very important in making produce look fresh, colorful and wonderfully appetizing.

Greentek offers a wide range of LED luminaries that will:

- **Increase revenue**
- **Influence buying behavior**
- **Improve customer experience**
- **Enhance the value perception of your brand**



# Light Concept Design

Lighting a store, beyond practical considerations such as grocery presentation, is about adhering to current design trends and tailoring them to your brand.

This is why we don't do cookie-cutter lighting projects, but take the time to understand your brand requirements, customer profile and retail trends. Based on all these, our team of light designers work with architects and interior designers to create a light concept suited to your own particular needs.

We also work on luminaire design – if the project requires an existing luminaire to be adapted or an entirely new one to be developed – from shape, housing material, special color temperature or any other parameter.

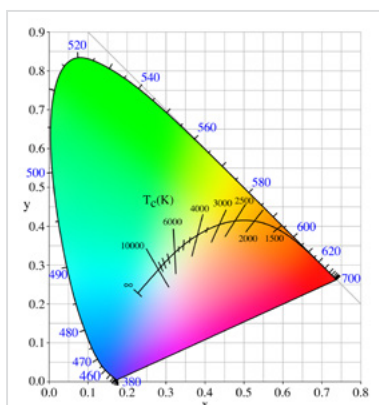
**Whatever light you dream of,  
we can create it!**

# General lighting, integrated lighting and accent lighting

Lighting a store is typically divided into three main areas, according to light purpose and different areas of importance:

- General lighting to enable visual comfort. It has to be uniform, glare-free and tailored to ceiling type and height. Greentek designed a family of suspended line luminaires for the optimal vertical and horizontal illumination of large areas.
- Integrated lighting to illuminate large aisles, refrigerators or counters and make them feel welcoming and abundant.
- Accent lighting to create points of focus, attract attention and create energy, against the background of the general illuminance. Accent lighting is achieved through special temperature colors and varying beam angles.

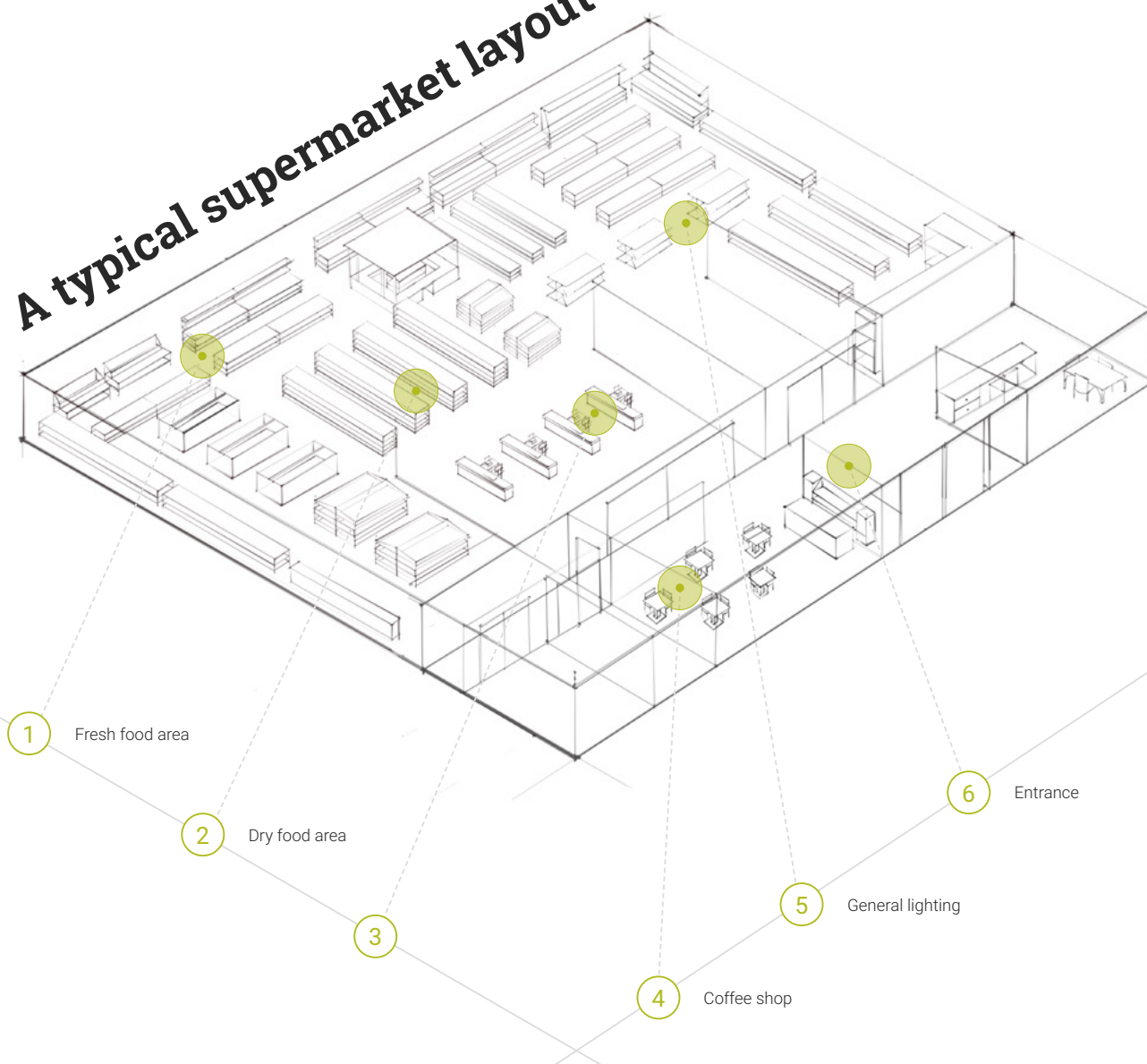
## SPECIAL TEMPERATURE COLORS



Special temperature colors deviate from the Planckian curve, thus giving off “colored light” whether pink, yellow or cool blue.

All Greentek accent luminaires have a high rendering index ( $CRI \geq 90$ ), that helps deliver rich, vibrant colors without fading or discoloring your featured merchandise.

# A typical supermarket layout



1

**CASTER:** Accent lighting with special colors for meat, fish, bakery, cheese and fruit and vegetables – presents merchandising at its best, while preserving its freshness.



2

**CRI / CRE:** Shelf luminaires provide a uniform, comfortable light for dry food and non-food products.



3

**LENYK SLIM TRK:** A sleek track-mounted luminaire that delivers uniform lighting for industrial and retail applications. It can be mounted in continuous rows for an impressive effect.



4

**AMYAS:** With an elegant and clean design, Amyas can be mounted by suspension on the ceiling or directly to a wall, as wall luminaire. Easily installed and maintained. Suitable for special color temperatures.



5

**GALAXY SLIM TRK:** General lighting luminaire with sleek design provides sufficient ambient light for all store areas.



6

**ARTUS N:** Clean, elegant luminaire creates a professional and welcoming atmosphere over the info desk.

# Entrance Lighting

The first impression is the strongest and usually the right one. Even from afar, you sense if a store attracts you or not. This effect is generated by what you glance inside and most importantly, by the entrance lighting. Entrance lighting can invite and hold attention, guide customers inside and create the right brand experience.



## **KAYPRO:**

Office grade luminaires with low UGR (19). Sound absorbent in order to minimize background noise and enhance focus.



## **JUNIPER:**

Recessed spotlight, provides the perfect combination of efficiency, light comfort and design.



## **ARTUS N:**

Elegant, pendant luminaire. Comes in various length sizes, to match any area requirements.

# General Illumination

The store general illumination should provide an uniform, comfortable lighting, that doesn't distract from accent points of light, meant to illuminate the merchandise.

Also, the general illumination system should be flexible, efficient and easy to install since installation height is usually over 7m up from the ground.

For all these reasons we recommend Galaxy Slim TRK, a track-mounted luminaire with various beam angles (including double - asymmetric) that is easily mounted or replaced, depending on needs.



## **GALAXY SLIM TRK**

Available in different module combinations, with different lengths and types of optics - for a general lighting that amazes through its impressive efficiency and lighting quality ratings.

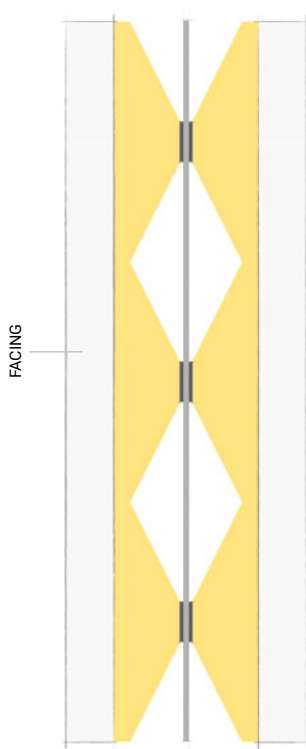
Very high efficiency: 137lm/w for the 60cm form factor and up to 151lm/w for the 120cm version.



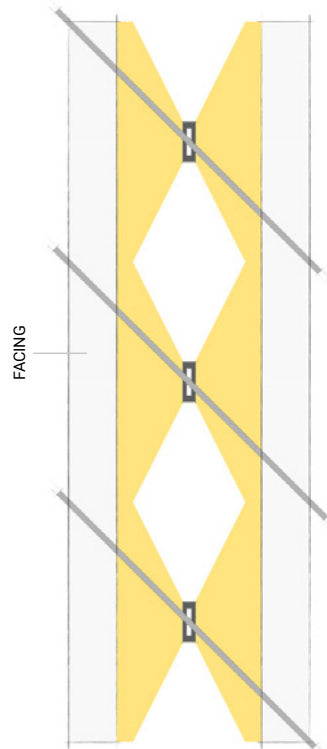
## Types of mounting

Galaxy Slim can be mounted in a variety of ways, so that it accommodates any display shelving layout and any track layout.

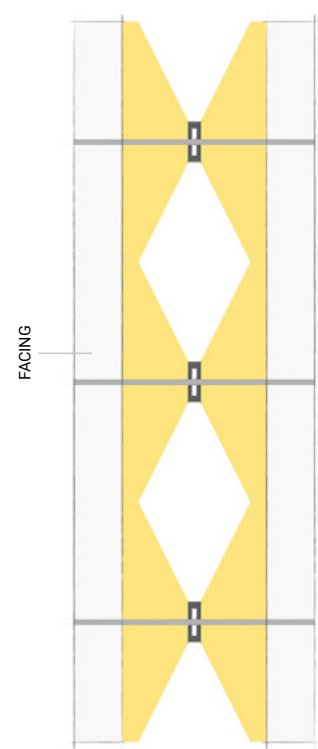
This high flexibility also takes into account and helps with future changes to shelves layout. Luminaires just have to be rotated, without specialized help.



Tracks parallel  
to facing  
(3R2, 3R4)

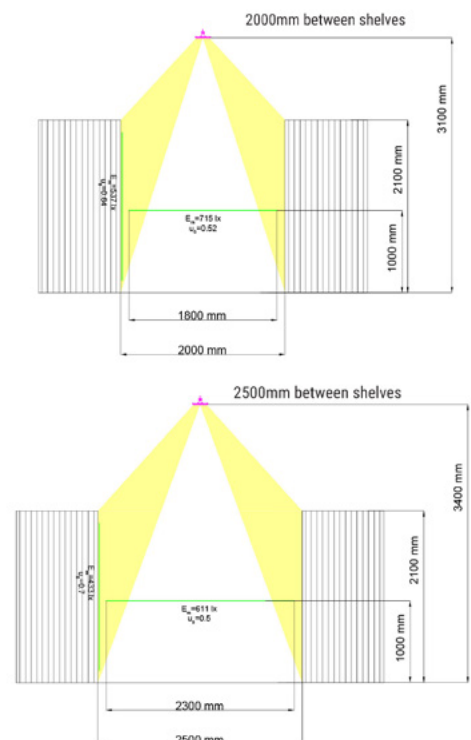
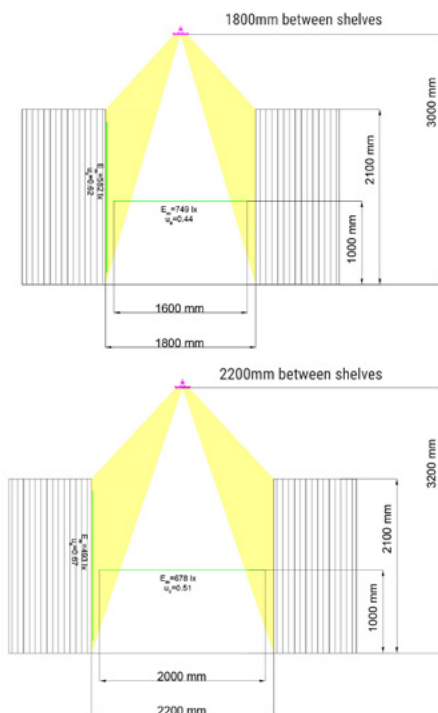


Tracks at 45°  
to facing  
(3R2)



Tracks at 90°  
to facing  
(3R2)

## Aisle configuration





# Meat

## Fresh Meat (FSM)

The correct illumination of meat products is a complex combination of many factors. Meat needs to look fresh and appealing and at the same time, it must be displayed in a way that cannot mislead customers about its condition. Many studies show that meat produce and charcuterie is one of the main criteria for choosing a store. Therefore, showing meat at its best becomes a key driver for revenue.

FSM is a special light designed to enhance the redness and thus the freshness of meat products. It also accentuates the white of marbled meat, raising the contrast between red and white.

## Frozen Meat (FZM)

Frozen meat is difficult to showcase properly as ice crystals dull the redness of the meat, rendering it pale pink or blotchy. This is why frozen meat needs a special color - FZM - that brings out the red and pink hues even if the meat is packed in protective transparent film. Thus, an impression of freshness is preserved, helping customers choose faster and feel better about their purchase.



### **CASTER:**

Caster perfectly fits large retail spaces with a wide range of goods, requiring special light. It also provides adaptable beam angles.

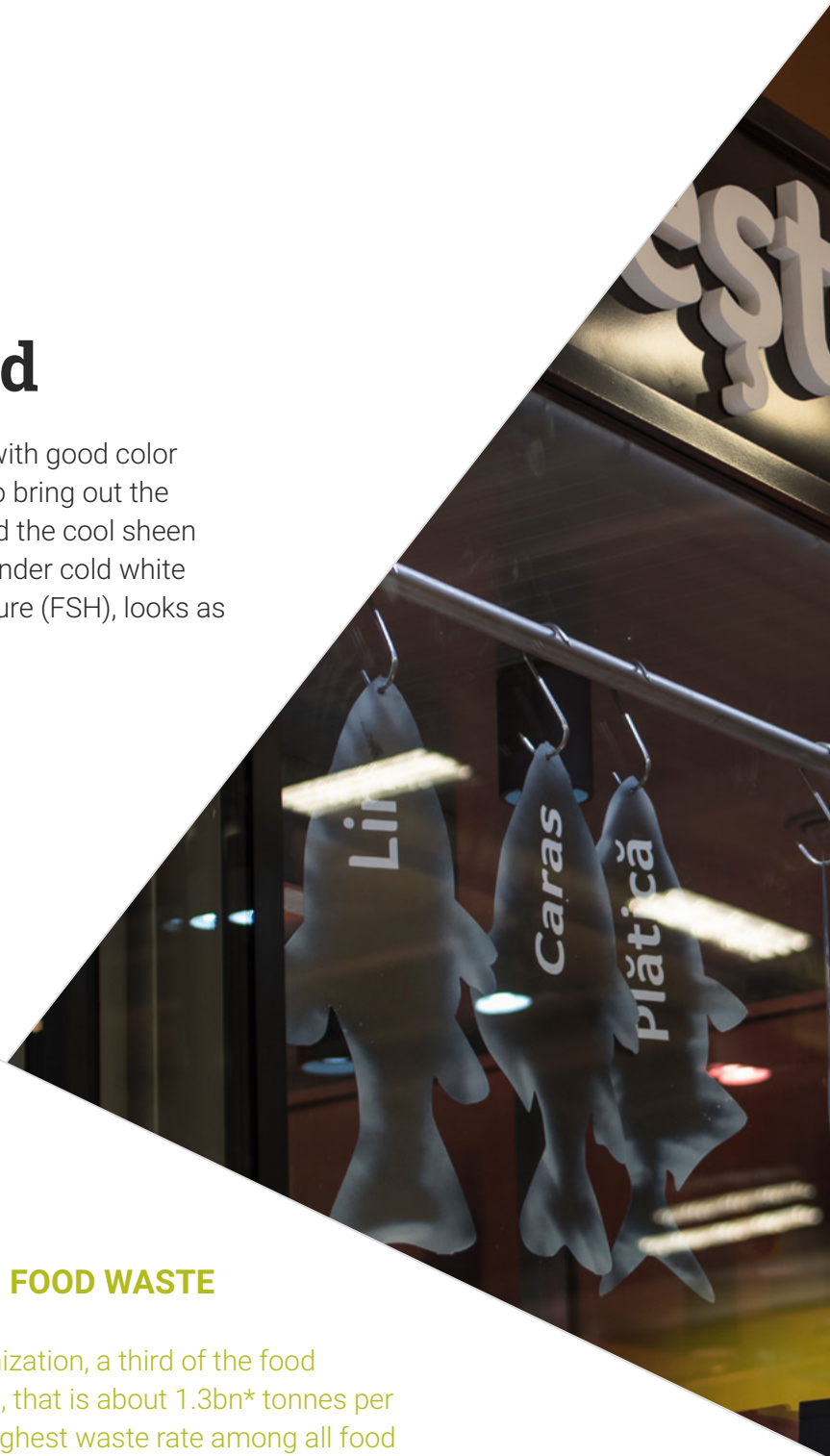


### **AMYAS:**

Amyas provides the perfect combination of efficiency, light comfort and design, without compromising performance. It can also be mounted to walls.

## Fish & seafood

For the fish display, light sources with good color rendering are necessary in order to bring out the appetizing redness of the flesh and the cool sheen of the skin. Fish, when displayed under cold white light with a special color temperature (FSH), looks as fresh as if it was just caught.



### SUSTAINABILITY AND PREVENTING FOOD WASTE

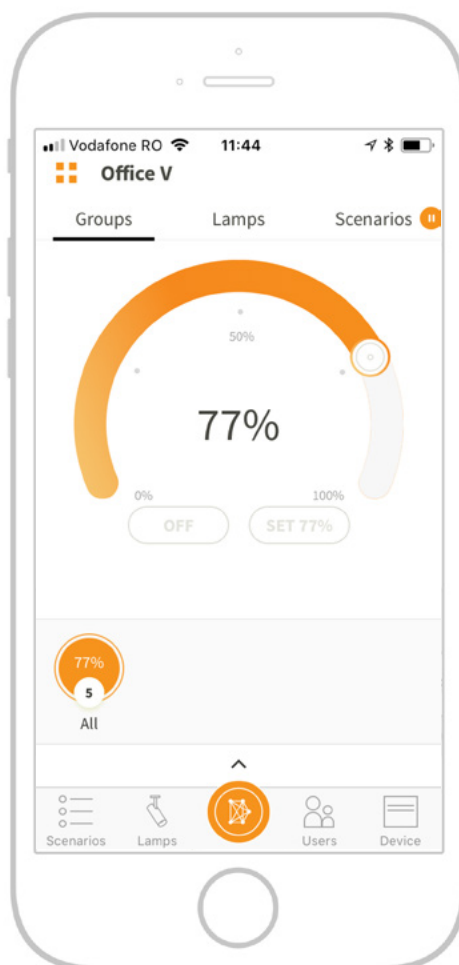
According to UN Food and Agriculture Organization, a third of the food produced for human consumption is wasted, that is about 1.3bn\* tonnes per year. Fruits, vegetables and meat have the highest waste rate among all food products.

Fresh meat is particularly susceptible to waste because its appearance alters quickly in contact with the environment, even though it's perfectly good for consumption. The problem is that supermarkets that overstock meat because full shelves are more enticing than empty ones. And this waste costs supermarkets in lost revenue.

To prevent waste, supermarkets should make sure that the lightening systems help prevent bad appearance through heat emissions or discoloration and, at the same time, enhance the true colors of meat products, to help shoppers make responsible buying decisions.

\* Source: <http://www.fao.org/news/story/en/item/74192/icode/>

**DARA**  
LIGHTING



## DARA LIGHTING

Dara Lighting is a modular, scalable, cloud-based and IoT-enabled solution designed for easy personalization and control of the lighting system. With just a mobile application you can control the lights, create lighting scenarios and optimize the energy consumption - all without extra cabling or wall switches.

With the dashboard, you have access to complex reports on energy usage, luminaire usage and scheduled maintenance.

And, with several types of devices simple devices - installation and commissioning process is a breeze.









## Fruit, Vegetables and Flowers

Showcase fruits and vegetables at their best!

The fruit and vegetable section is one of the most colorful areas of a store, a highly sensory place that needs to be enhanced in order to provide the best customer experience. And make people want to touch and smell the produce.

A warm and brilliant light with CRI  $\geq 90$ , similar to daylight, brings out the rich colors and textures of the merchandise. Produce is shown in its natural, intense state, shiny and fresh.

Greentek developed track mounted, suspended spotlights combined with a special color temperature LED source specifically designed for this area.



### CASTER:

Caster system includes spotlights fitted in electric tracks, thus allowing for any type of change, with no need for major technical work. The special colored light is tightly focused on the desired objects.



### RAYLAN:

This luminaire combines modern minimalist design with the finest components and that latest technology in contemporary profile lighting.



## FLOWERS

See, smell and buy.

Simply put, you'll buy more when products have a high contrast color. Flowers are exceptionally suited to impulse purchases, so this area needs to be at least five times brighter than the surrounding areas. Track mounted luminaires with special color temperature (AGI), combined with the general lighting are perfect, making all flowers stand out.



### **SEDONA:**

Blends well into a wide variety of surroundings.



### **CASTER:**

Caster perfectly fits large retail spaces with a wide range of goods, requiring special light. It also provides adaptable beam angles.

## AGI LIGHT

Recent research has shown that the color rendering index (CRI) is not sufficient to characterize the quality of a light source, because it's limited to just 8 colors. Gamut Area Index (GAI) was thus defined – as a measure of hue saturation or chroma. The GAI index is a much better indicator of how the human eye perceives the world. CRI measures color consistency across a spectrum, AGI measures hue saturation.

This is why Greentek engineers developed AGI, a type of light that is very suitable for grocery lighting. AGI 35 light is recommended for retailers that tend to move displays quite often. Thus, instead of changing the luminaire, you can just use AGI luminaires for all merchandise colors.

This feature saves up time and most importantly, money.



## Bakery and Pastries

Pair smell with crisp appearance to increase sales.

All bread products, under the right light, will look particularly appealing and crisp as if just taken out of the oven.

Our LED luminaires equipped with special color temperature (FBS) bring out the brown-yellow shades. They have excellent color rendition and crisp light with superior color accuracy and consistency.

To highlight each category and make them stand out, we recommend track spotlights – embedded in electric tracks, that can be adjusted to focus illuminance on very specific areas. Just as well, depending on the design, you can use recessed directional spotlights, that are mounted into or onto the ceiling and adjusted as necessary.



**TULIP:**

Tulip is a track mounted, adjustable accent lighting luminaire. It narrowly focuses the beam on certain displays that you want to stand out. Tulip has several accessories: barndoor, honey comb and deepfront.



**CASTER:**

Caster perfectly fits large retail spaces with a wide range of goods, requiring special light. It also provides adaptable beam angles.



**SOLA L:**

Tubular suspended luminaire with an interesting slim silhouette. Sola is not only geometrically interesting, its sleek design blends with a wide range of environments.



**RIGAN:**

Fits perfectly in modern spaces with a wide range of goods.





## Cheese, Fresh Pasta and Deli

The cheese and deli areas are another highlight point in the shopping trip. It is here that customers get to taste food and indulge. Here, special color (BVF) directional luminaires bring out the yellowness of cheese and texture, taking care not to emit any heat that could potentially damage the merchandise.



### **CASTER:**

Caster perfectly fits large retail spaces with a wide range of goods, requiring special light. It also provides adaptable beam angles.





# Beverages

## **Wine:**

Wine bottles under the right lighting are perceived to be more valuable, thus the impact of price is diminished. Numerous studies show that wine quality perception is largely subjective and easily influenced by context. The light you shine on them is a huge part of this context.

## **Spirits & liquor:**

In the alcoholic beverages sections, you should use accentuating spotlights to create more dynamics, preciousness and exclusivity.

## **Water & juices:**

Bottled water, either still or sparkling, should appear crisp and cool and while juices should appear rich and full of color.



**CASTER:** Caster system includes spotlights fitted in electric tracks, thus allowing for any type of change, with no need for major technical work. The special colored light is tightly focused on the desired objects.



**CRI / CRE:** Shelf luminaires provide a uniform, comfortable light for dry food and non-food products.



**LENYK SLIM TRK:** Elegant, track - mounted luminaire. Comes in various length sizes, to match any area requirements.

# Pantry, Non-food and Household Goods

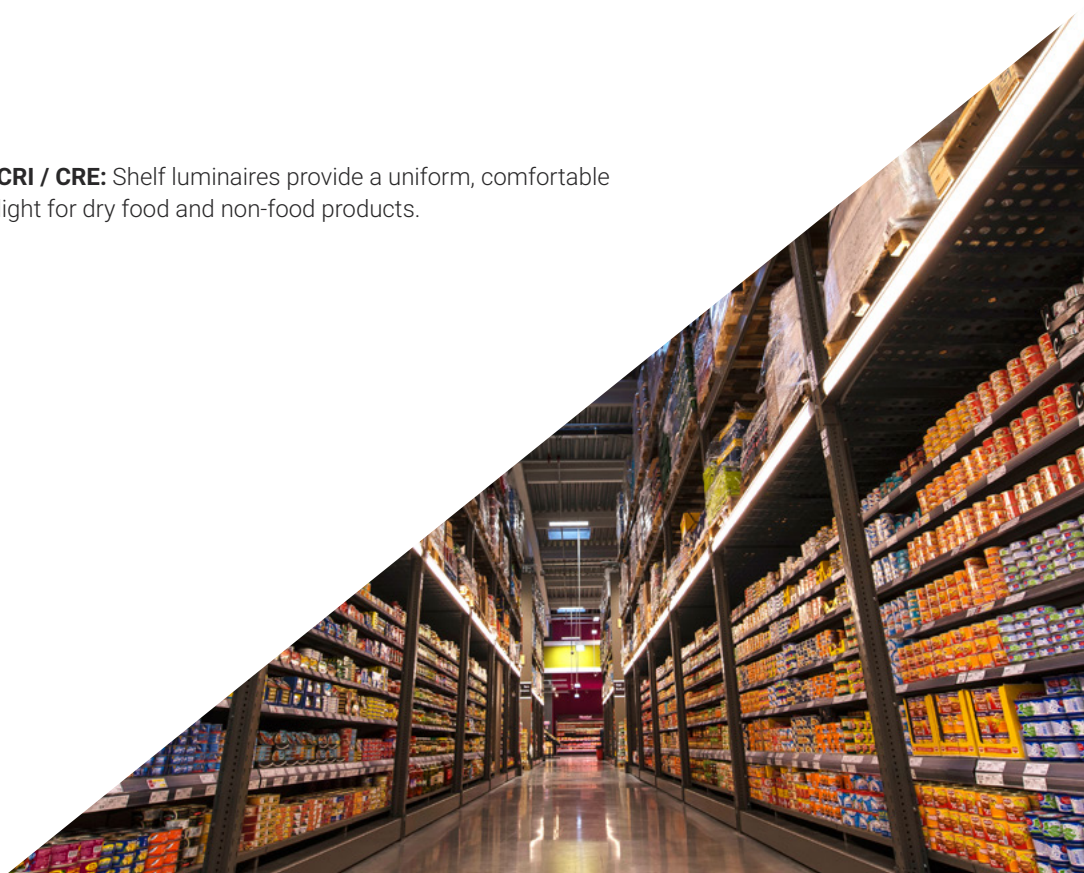
Showcase, guide and help customer choose.

A lot of the products in a supermarket are non-food, located on shelves in long aisles. This area is best illuminated using continuous-line linear fixtures positioned in parallel and above, ensuring that all the emitted light is provided where it is needed.

The Greentek family of under-cabinet lighting offers the industry's most extensive range of options for shelf illumination.



**CRI / CRE:** Shelf luminaires provide a uniform, comfortable light for dry food and non-food products.





## Freezers and Refrigerators

Freezers have to be illuminated uniformly, across the entire surface, without any point of special focus. A colder light, about 4000K is also important to visually communicate coolness and freshness. To ensure this effect, we provide LED luminaires suitable for any type of refrigerators and freezers. Also, depending on the merchandise - line luminaires also come in several special color temperatures - warmer for cheese or frozen pastry and cooler for frozen fish or vegetables.



**Canopy Lighting**



**Cabinet Lighting**



**Frozen Islands**



**Frame Lighting**



**Serving Counters**



## Cash Desk and Office Spaces

**Crisp white light for increased productivity and safety.**

Cash desk areas need lighting compliant with standards for office spaces, to support continuous concentration and eliminate the room for error due to tiredness or repetitive tasks. Luminaires with horizontal illuminance levels of 550-650 lux and good glare reduction values are required.



**LENYK SLIM TRK:** Elegant, track - mounted luminaire. Comes in various length sizes, to match any area requirements.

## Cafes and Lounges

One of the emerging trends in retail is that of cafes and restaurants within supermarket area. The corresponding trend is that of restaurants selling groceries. The lines are definitely blurring.

This is why, if you plan to have a café within the shopping area – it's best to create a different atmosphere and identity with interior design but also lighting. To provide a refresh & relax area, you can be more creative and daring, with specially designed hospitality luminaires.



**AMYAS:** Amyas provides the perfect combination of efficiency, light comfort and design, without compromising performance. It can also be mounted to walls.



**RAYLAN:** This luminaire combines modern minimalist design with the finest components and that latest technology in contemporary profile lighting.





## Parking Spaces

Parking spaces need to be bright, to provide the safety customers desire. As such, luminaires are designed for long life, durability and an unobtrusive architectural blending, no matter the configuration.



**CASEY:** Outdoor luminaire suitable for canopied parking spaces.



**MYRIAKY:** Uniform, powerful light for outdoor areas and industrial facilities.



# References














**TRUST:** We have 8+ years' experience developing innovative led lighting solutions.

**SPECIAL COLORS:** Greentek is a pioneer in developing special tonal effects for retail and DIY industries, proven to enhance purchase intent.

**FLEXIBILITY AND CUSTOMISATION:** For us, business is personal. Greentek can develop or adjust luminaires according to your needs in order to create savings and value.

**INCREDIBLE CUSTOMER CARE:** We are in the business of customer care and we happen to create led luminaires. We take a 360° client view from technical consultancy, Intelligent Light Solutions, Project Management and site survey, to on-site implementation, product development and lab testing.

**LIGHT CONCEPT & DESIGN:** Our lighting experts analyze your lighting infrastructure and provide you the best plan to implement it, based on the latest industry requirements and trends.

**MADE IN EU:** In order to keep high quality, Greentek luminaires are designed and manufactured in the European Union using European components.

**DIVERSITY:** We cover all ranges of ceiling mounted and light distribution systems, special colors and other niche products.

## Why Greentek?



182 A, GH. Titeica Street  
020303, 2<sup>nd</sup> District  
Bucharest, Romania

[www.greentek.eu](http://www.greentek.eu)  
[office@greentek.eu](mailto:office@greentek.eu)  
[sales@greentek.eu](mailto:sales@greentek.eu)