

# portfolio



LIGHTING SOLUTIONS

PRODUCT CATALOG 2019

 LUNUX





## A PASSION FOR THE BEST LIGHTING

Light is brightness. And much more. Good lighting can put products and public buildings in the right perspective, optimize working conditions, and boost sales. And not to be forgotten, light is also a factor of well-being and security, and is thus very essential. Who would know that better than you and us? We also know our responsibility as a luminaire manufacturer, supplier, and partner. That is why we not only expanded our product portfolio, but also optimized the competence and flexibility of the new LUNUX. We provide proof of this on the following pages. Our offer corresponds to the current requirement situation. It is popular because modern LED lighting technology and lighting assortments are sustainably adapted to your success.

Sincerely yours,



A white handwritten signature of Franz-Josef Deckers on a dark blue background.

Franz-Josef Deckers,  
Managing Director



A white handwritten signature of Mathias Schmidt on a dark blue background.

Mathias Schmidt,  
Managing Director



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# Our light worlds

No light source is brighter, more efficient, and more environmentally friendly than LED. Everyone can agree on that. But even the most recognized current light source is of no use if we don't make the best of it: A light source that provides comfort, orientation, and maximum security to people inside and outside. And that is exactly what we do. By using state-of-the-art LED lighting technology and producing perfectly adapted and highly efficient luminaires.



## CITY

An urban environment offers ideal design latitude for our creative lighting technology which we are using specifically to make traffic routes, parks, and plazas brighter, safer, and more attractive. At the same time, we are shedding new light on economically and ecologically impressive urban environments.

PAGE 8



## ARCHITECTURE

Modularity facilitates adjustment. This applies to the lighting of modern and historic cities. That is why Eco Circle is the ideal lighting solution for decorative streetlights since the light source is modernized without changing the cityscape.

PAGE 12



## RAILROAD

Due to the highly differentiated application requirements such as railroad crossings, platforms, railroad tracks, pedestrian underpasses, etc., LED railroad lighting has to provide a very variable and versatile range of luminaires. And that is exactly what we have.

PAGE 16

All technical specifications can be downloaded as a complete and up-to-date version at [www.lunix-lighting.com](http://www.lunix-lighting.com) under the respective product.



## INDUSTRY & LOGISTICS

Work and make something happen, that is how value creation works. And that is exactly what we facilitate with our long-life luminaires for industrial, logistics, and storage spaces. Our lighting systems are professionally planned, perfectly adapted, and intelligently controlled.

PAGE 20



## PARKING GARAGES

The atmosphere in underground garages and parking garages is often perceived as oppressive, and this is often due to insufficient illumination. We will achieve a solution that meets high safety requirements with specific light control and flexible light adjustment.

PAGE 24



## PETROL STATIONS

With their diverse spaces, rooms, and functions, petrol station are ideal for lighting which is universally suitable, can be used anywhere, and above all is highly efficient. We also guarantee: Perfect suitability and lighting output as required.

PAGE 28



## PUBLIC BUILDINGS

The reputation and appearance of a community depend to a large extent on the state of its public buildings. With our special lighting program, we promote the prestigious character of the building and public accessibility through bright, friendly spaces.

PAGE 32



## RETAIL TRADE

Friendly staff, a generously presented range of products, and a stimulating atmosphere is precisely what makes successful shops attractive. We contribute to this with special luminaires and spotlights.

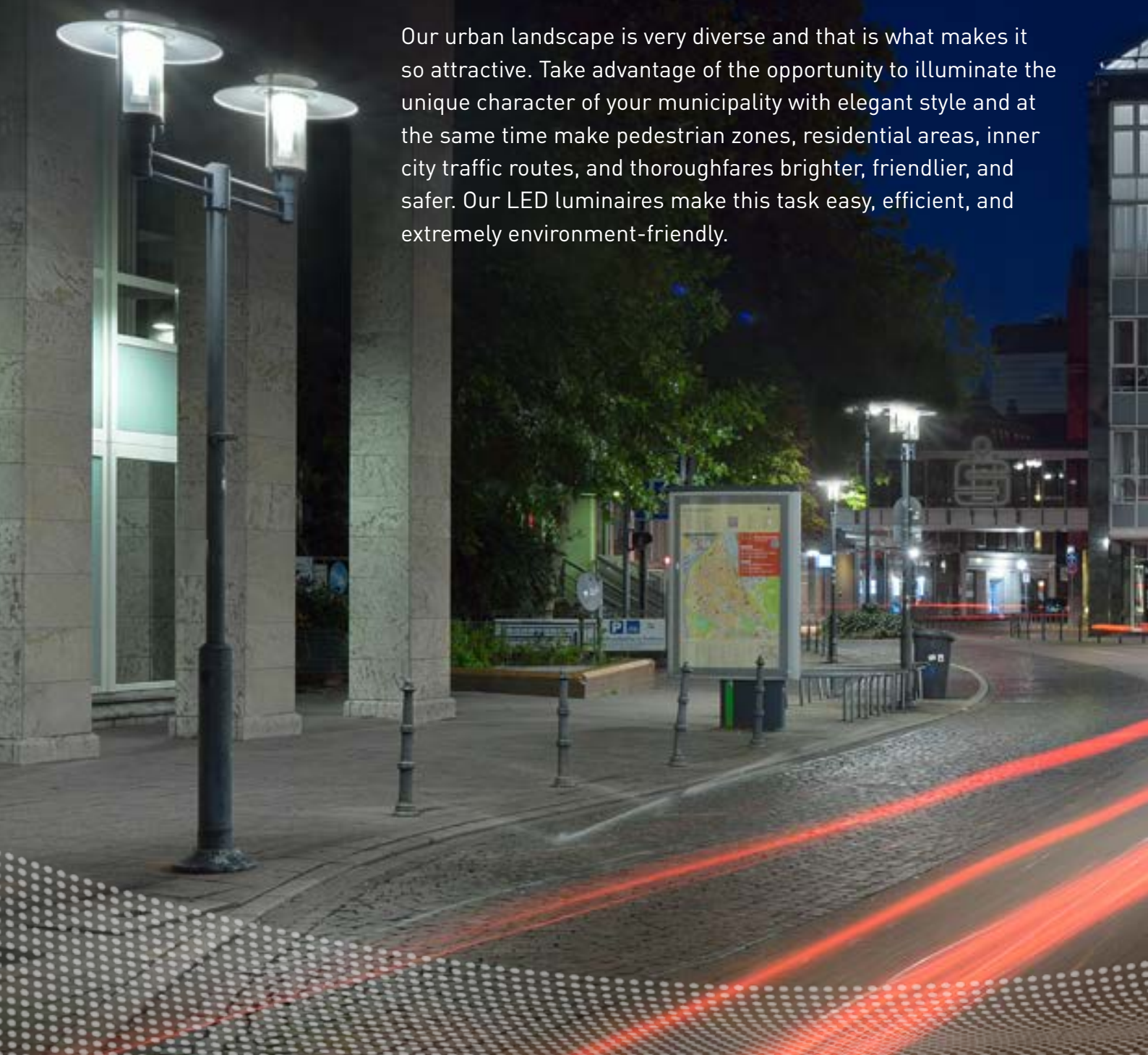
PAGE 36



● CITY

# Welcome to urban light

Our urban landscape is very diverse and that is what makes it so attractive. Take advantage of the opportunity to illuminate the unique character of your municipality with elegant style and at the same time make pedestrian zones, residential areas, inner city traffic routes, and thoroughfares brighter, friendlier, and safer. Our LED luminaires make this task easy, efficient, and extremely environment-friendly.




















# Our products for city lighting














									
	Stateline	Park	Twin	Case	Square	Slim	Slim L	Slim Twin	Helius 120
Roads in residential areas		●	●		●	●	●	●	●
Pedestrian crossings		●	●	●			●	●	
Main roads	●		●	●	●		●	●	●
Parking facilities / walkways		●			●				●
Parking areas	●	●	●	●					●
Bikeways		●							●
Secondary Roads	●	●	●	●		●	●	●	●
Page	46	52	52	52	56	58	58	58	62

									
	Tempus 539	Cylinder Lights C40	Cityline	54x	Shade	Moon	Konus 740	417-2	Mushroom 401-5
Roads in residential areas	●	●	●	●	●	●		●	●
Pedestrian crossings									
Main roads									
Parking facilities / walkways	●	●	●	●	●	●	●	●	●
Parking areas	●	●	●	●	●	●		●	●
Bikeways									
Secondary Roads	●			●					●
Page	88	90	92	94	96	100	106	108	104





													
Helius 121	Helius 120 L	Trapez 143	Trapez 144	Trapez 145	Fritz 114	Fritz 115	Ellipse 130	Ellipse 131	Primus 111	Catenary luminaire 171-8	Jüterborg 1007	500 501 502	Tempus 538
●		●	●	●	●	●	●	●		●	●	●	●
●			●					●					
●		●	●			●		●		●			
				●	●	●	●		●		●	●	●
●	●	●	●	●			●	●			●	●	●
							●						
●		●	●	●	●	●	●	●			●	●	●
62	64	64	66	66	68	68	70	70	74	78	82	84	86

												
24X	Classica 028	03X	Schinkel Lantern 465	Alt-Berlin	Gas Lighting 9650	45x	Cubeline	Cologne 606	Horizonte 7020	Poller 7030	Convex 3066	VGL 31-6 LED
●	●	●	●	●	●	●						
												●
	●	●	●	●	●	●	●	●	●	●	●	
●	●	●										
●	●	●										
102	110	112	116	118	120	122	126	128	132	134	138	142

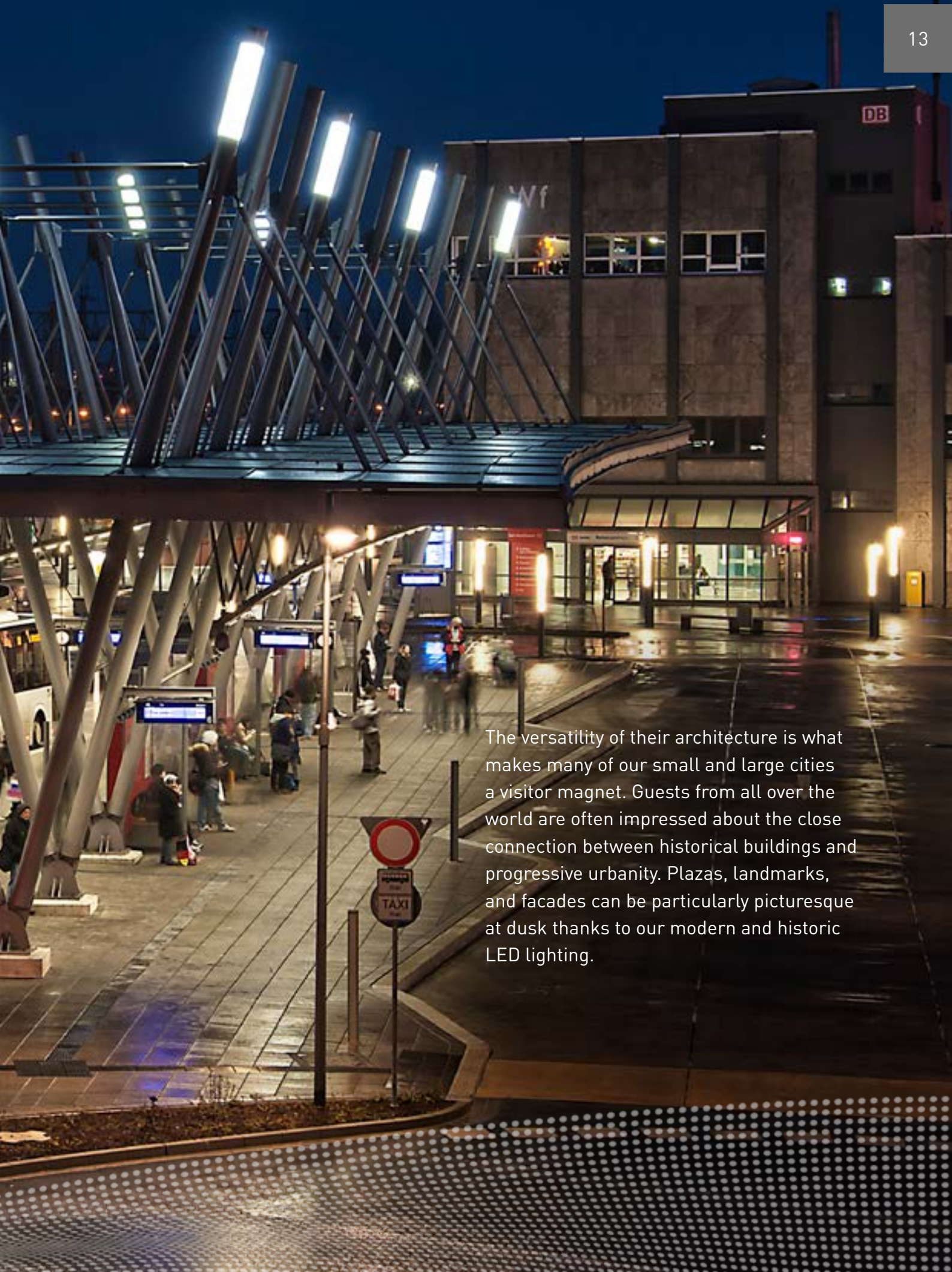


● ARCHITECTURE

# Urban charm





















The versatility of their architecture is what makes many of our small and large cities a visitor magnet. Guests from all over the world are often impressed about the close connection between historical buildings and progressive urbanity. Plazas, landmarks, and facades can be particularly picturesque at dusk thanks to our modern and historic LED lighting.









# Our products for architectural lighting

									
	Square	Fritz 114	Fritz 115	Primus 111	Jüterbog 1007	500 501 502	Tempus 538	Tempus 539	Cityline
Roads in residential areas	●	●	●		●	●	●	●	●
Bridges / staircases									
Pedestrian zones				●					
Historic Buildings									
Parking facilities / walkways	●	●	●	●	●	●	●	●	●
Parking areas	●				●		●	●	●
Plazas	●	●	●	●		●			●
Page	56	68	68	74	82	84	86	88	92

								
	Gas Lighting 9650	45x	Cubeline	Cologne 606	Horizonte 7020	Poller 7030	3001	Convex 3066
Roads in residential areas	●	●						
Bridges / staircases							●	●
Pedestrian zones				●	●	●		
Historic Buildings	●	●						
Parking facilities / walkways	●	●	●	●	●	●		●
Parking areas								
Plazas				●	●	●		
Page	120	122	126	128	132	134	136	138



					
54x	Konus 740	417-2	Shade	Schinkel Lantern 465	Alt-Berlin
●		●	●	●	●
	●				
				●	●
●	●	●	●	●	●
●		●	●		
	●		●		
94	106	108	96	116	118







● RAILROAD

# All aboard

The colorful life and hustle and bustle in railway stations and on platforms has not lost any of its charm even nowadays. The observer is presented with a multi-faceted typology of travelers. Starting with the always fast-paced professional commuter to the visibly expectant vacationer. One thing is true for everyone: They all rely on good orientation, safety, and good light. Our luminaires guarantee that!


































# Brilliant perspective for railroad, city trains, and subways

								
Block Form Lighting DB 17X								
Block Form Lighting DB 18X								
Quantus DB 191								
Quantus DB 192								
Quantus DB 192-1								
Quantus DB 194								
Ellipse DB								
Ellipse LED DB								
Covered platform								
Platform / uncovered platform			●	●			●	●
Railroad crossing								
Railroad track	●	●		●	●	●		
Pedestrian underpass								
Underground passenger transport systems								
Page	146	148	150	150	150	150	154	156





The operators of rail-bound vehicles are not confronted with problems that are typical of other modes of transport and routes. However, there are highly sensitive areas that can only be addressed with state-of-the-art technologies and first-class lighting. This applies for any and all types of railroads, city trains, and subways. The focus is especially on safety for passengers and staff, both on the route and at the stops. LUNUX assists with optimization through expert advice, comprehensive service, and a large portfolio for all interior and exterior areas. With the best light, maximum efficiency, and easy handling.

						
Trapez DB 14X	Trapez LED DB 14X	Fritz DB	162-5 DB	50XX	5010	5010 LED
						
						
						
						
160	162	164	166	168	170	172





● INDUSTRY AND LOGISTICS

# Industrial light

Industrial value creation depends on how well internal business conditions are adapted to workplaces and work processes. This includes office and administration areas, as well as production, warehouses and outdoor areas. Light plays an ever more important role as an influencing factor. Our LED lighting range of products provides decisive accents.

















# Our products for industrial lighting

								
Q-Rail Line	Q-Rail Line	Q-Rail Cross	Q-Rail Plus	IL2 Plus	IL Up	IL Forta	Basic	Box
Exits and entrances								
Outdoor areas / facades					●			
Office space								
Entrance areas / corridors								
Warehouses	●	●	●	●	●	●	●	●
Production workshops	●	●	●	●	●	●	●	●
Technical ancillary rooms						●	●	●
Page	182	182	186	194	202	214	204	212





										
Office Eco	Lyra	Neo	Como 68	Como 170/210	Space Eco	Park	Twin	Helius 120	Helius 121	Helius 120 L
						●	●	●	●	●
						●	●			●
●	●	●	●	●						
●	●	●	●	●	●					
●	●	●	●	●						
216	226	228	230	232	218	52	52	62	62	64



● PARKING GARAGES

# Secure parking

The users of parking garages want high safety standards and clear orientation aids. That is quite feasible. The most suitable means are: consistent camera surveillance and ideal illumination of the parking areas, as well as the entrances and exits. Our luminaires achieve exactly that with constant light quality, customized light control, and flexible light adjustment.




















## Our products for multi-level garage lighting

									
	Basic	Box	IL Forta	IL Up	Office Eco	Lyra	Neo	Como 68	Como 170/210
<b>Exits and entrances</b>									
<b>Outdoor areas / facades</b>				●					
<b>Parking areas</b>									
<b>Inside parking zones</b>	●	●	●						
<b>Technical ancillary rooms</b>	●	●	●		●	●	●	●	●
<b>Page</b>	204	212	214	202	216	226	228	230	232





				
Park	Twin	Helius 120	Helius 121	Helius 120 L
●	●	●	●	●
●	●			●
●	●	●	●	●
52	52	62	62	64



● PETROL STATIONS

# Refueling












The consumer-friendly “day and night service” of modern petrol stations comes with a price. Customers may not immediately understand why. Tenants and operators, however, only need to take a look at their electricity bill. The logical consequence would be to: convert the entire lighting system to smart, energy-saving LED lighting. We will help you with advice and action.







## Our products for petrol station lighting

									
	Frame	IL Forta	Basic	Box	Office Eco	Pacta	Tega	Lyra	Neo
<b>Outdoor areas / facades</b>									
<b>Office space</b>					●			●	●
<b>Parking areas</b>									
<b>Shops</b>					●	●	●	●	●
<b>Petrol area</b>	●			●					
<b>Technical ancillary rooms</b>		●	●	●	●			●	●
<b>Car wash</b>		●	●	●					
<b>Workshops</b>		●	●	●					
<b>Page</b>	208	214	204	212	216	222	224	226	228





							
Como 68	Parum	Q-Rail Line	Q-Rail Cross	IL2 Plus	IL Up	Park	Twin
					●	●	●
●							
						●	●
●	●	●	●				
●							
		●	●	●	●		
230	234	182	182	194	202	52	52



● PUBLIC BUILDINGS

# Open spaces

The optimal success prospects of large-scale urban projects require planning certainty, tight coordination, and smooth cooperation. A real challenge for all parties involved. Nevertheless, by combining different luminaires, we were able to convince our customers in many cases because we have the necessary know-how, as well as a range of LED luminaires that promises the greatest possible benefit for all parties, building owners and users alike.







## Our products for public buildings

						
	Office Eco	Lyra	Neo	Como 68	Como 170/210	Space Eco
<b>Outdoor areas / facades</b>						
<b>Office space</b>	●	●	●	●	●	
<b>Entrance areas / corridors</b>	●	●	●	●	●	●
<b>Technical ancillary rooms</b>	●	●	●	●	●	
<b>Page</b>	216	226	228	230	232	218





			
IL Up	Basic	Box	IL Forta
			
			
202	204	212	214

# Purchasing experience

The customer-friendly, stimulating atmosphere of a store does not come by chance. The successful display of your product range undoubtedly also requires perfect lighting in addition to attention to detail and impeccable arrangements. And we take care of that. It is very easy to create the right mood and harmonious room illumination with our LED spotlights and panel lighting.



























## Our products for shop lighting

									
	Pacta	Tega	Lyra	Neo	Como 68	Como 170/210	Parum	Office Eco	Space Eco
Outdoor areas / facades									
Office space			●	●	●	●		●	
Entrance areas / corridors			●	●	●	●		●	●
Food / Fashion	●	●	●	●			●		
Warehouses									
Shops	●	●	●	●	●	●	●	●	
Technical ancillary rooms			●	●	●	●		●	
Sales rooms	●	●	●	●	●	●	●	●	
Page	222	224	226	228	230	232	234	216	218





								
Q-Rail Line	Q-Rail Cross	IL2 Plus	IL Up	IL Forta	Box	Basic	Park	Twin
			●				●	●
●	●							
●	●	●	●	●	●	●		
●	●							
●	●			●	●	●		
182	182	194	202	214	212	204	52	52

# Let's get smart

## Smart street lighting – Smart City in Lux

It is very apparent that: LED is the light source of the future. We are doing our utmost to further strengthen this strong position within the framework of LUNIX LED lighting technology. We create innovations which sustainably improve light adaptation and efficiency. That is exactly what we are achieving with “SMART,” the intelligent lighting control. Its use opens up unprecedented options for municipal lighting, because the entire administration and flexible control of the system can be handled with “SMART” via a web portal and smartphone. For example, the brightness levels can be dimmed to current requirements at any time, energy consumption is controlled, and electricity costs can be saved.







### SMART+

#### Maximum flexibility

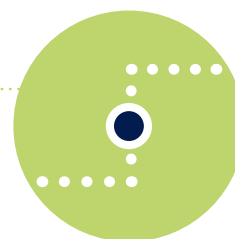
By integrating control components based on radio, UMTS, and Powerline, you will achieve the highest degree of flexibility and greatest possible scope for the integration of the luminaires into customer-specific control systems. In addition, the luminaires can be programmed according to the customer's specific requirements.



### SMART

#### Intelligent control

This control level has an open interface to the light control (1-10 V / DALI) and you therefore have the option to integrate the luminaires into a control system.



### BASIC+

#### Flexible dimmer profile

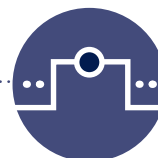
The equipment with memory-programmable module allows self-sufficient control in steps (Astrodimm). This provides a substantially expanded solution adapted to the environment and the respective objectives.



### BASIC

#### Power line control

(This is a network-connected interface control system of 50% / 100%. For infrastructures with 2-phase control.



### EASY BASIC

#### On / Off function

This version completes the intelligent lighting control system as a basic version.



# City and Architecture







STATELINE.  
FLEXIBLE.  
INTELLIGENT.  
MODULAR.

IP67

SMART-BOX is sealed

### SMART-BOX

Consists of an electronic driver and optional intelligent building blocks

### PLUG & PLAY

SMART-BOX can be changed without tools

### FLEXIBLE

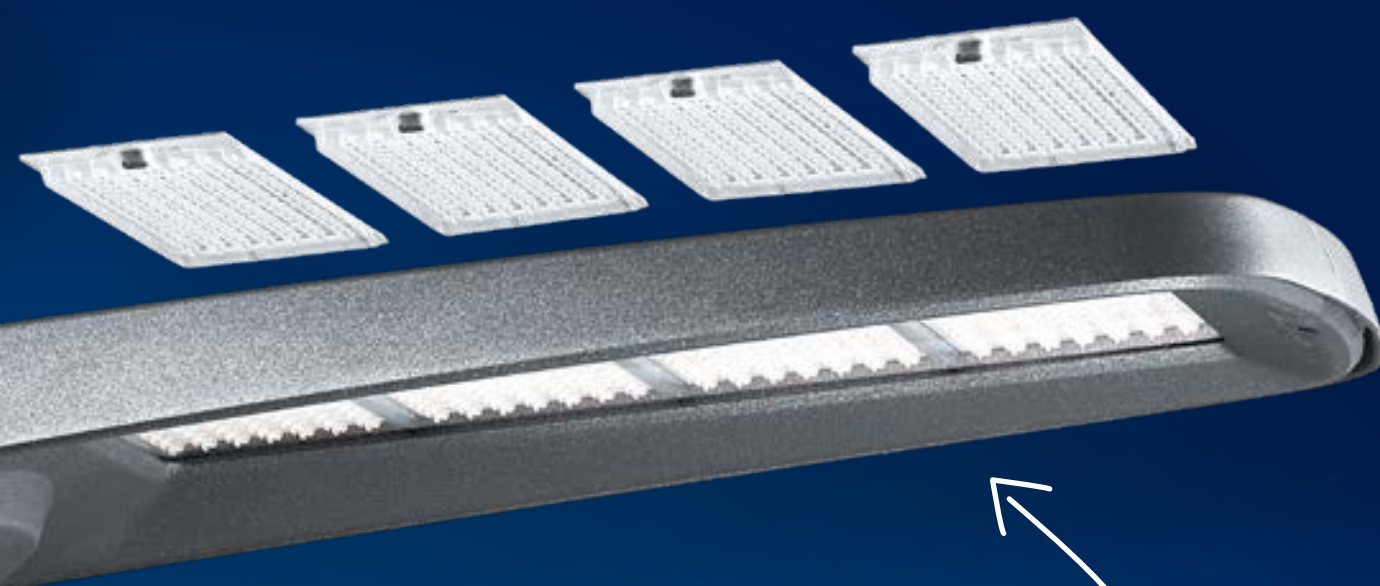
Sensors and antennas can be additionally integrated





## MODULAR

Modular LED module can be changed quickly and without tools (Plug & Play)



**SHOCK  
RESISTANT**  
IK08

**PERFECTLY  
INSULATED**

LED modules are completely coated with silicone

## EASY TO USE

Application areas:  
S and ME classes



## TECHNICAL LIGHTING STATELINE

**Modular LED lighting concept** to cover all different types of streets (S and ME classes)

**Integrated optical system** with guaranteed minimal losses

**Perfectly insulated** LED unit

**Highly adaptable** electronic concept

**Replaceable electronic driver unit**, comprising electronic driver and optional intelligent modules (housing IP67)

### Other advantages:

- Modules and box can be replaced without tools (Plug & Play)
- Optional constant luminous flux possible
- Development and production in Germany

### The most important areas of application:

- All outdoor areas
- Roads in residential areas
- Secondary roads
- Main roads
- Parking areas



BASIC



BASIC+



SMART





SMART+



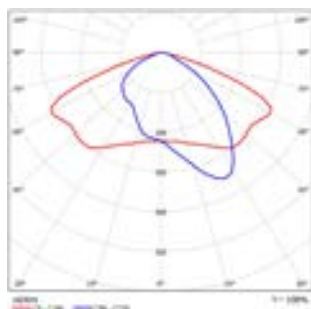
## Technical specifications

### STATELINE

LIGHTING FIXTURES BODY	
Material	Aluminum die casting, PC / ABS fire resistant
Coloring (powder coating)	DB 703
Mounting type	60 or 76 mm spigot size for top-mounted luminaires
Orientation possibilities	42 or 60 mm spigot size for side-mounted luminaires
	Tilt adjustable: 0° to +15°
	Tilt adjustable: -15° to 0°
Dimension (l x w x h)	815 x 350 x 130 mm
Weight	12.5 kg
Area exposed to wind	FW = 0.07 m <sup>2</sup>
IP Protection class	IP67
Glass type	Tempered glass / PMMA
Shock resistance / impact resistance	IK08 (tempered glass)
PHOTOMETRIC PROPERTIES	
Light source type	Lights with 2, 3 or 4 modules
Optical system	Lens optics, integrally molded to the LED, made of optical silicone
Rated luminous flux	4,000 – 20,000 lm
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N)	10 KV
INSTALLATION SUGGESTIONS	
Application areas	All outdoor areas such as roads in residential areas, secondary roads, main roads and parking areas
Installation height	4 – 12 m
Lighting classes	S / ME
Admitted ambient temperature (ta)	from -40 °C to +40 °C
OTHER PROPERTIES	
Certificate	   

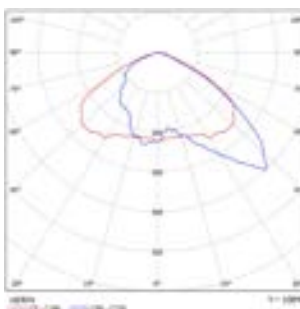
## Optics and light distributions

**M** Streets of the ME and S lighting classes



asymmetrical

**L** Illumination of surfaces



asymmetrical

# ECO MODULE. IT CAN BE THAT SIMPLE. AND IT IS.

The ECO modular concept for sustainable light, today and tomorrow

Protection class  
IP67

Interfaces

Sustainability thanks to using the same interfaces and a 20-year availability guarantee

Plug & Play

Easy installation and removal in the lighting fixtures body via plug connector – “Plug & Play”

Thermal management

Best thermal management through material mix and thermal monitoring

PMMA

Excellent resistance to weathering, aging, and yellowing





## Made in Germany

Development and production  
in Germany

## Simple replacement

Contact security (protection class II)  
enables replacement under load

## Electrical driver electronics

Night-time dimming,  
DALI and 1 - 10 V capability



## Connector



## Optics

9 different optics for  
optimum light – even  
greater efficiency  
through integration  
into the cover lens

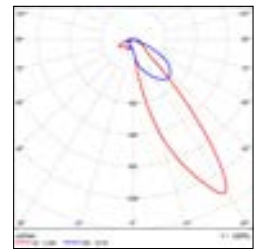
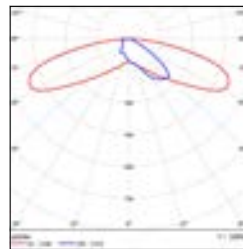
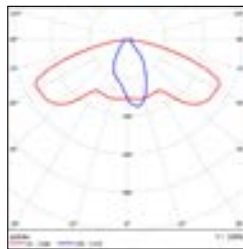
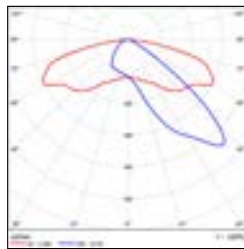
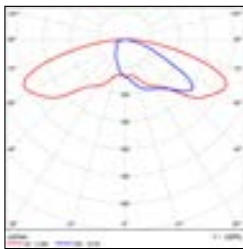
## Variations

A range of different performance  
classes and light colors available.  
Can optionally be used as  
emergency lighting



## ECO MODULES AN OVERVIEW OF ALL MODULES

### StreetLine



#### S

##### S-Optics

##### S lighting class streets

- Particularly wide asymmetrical distribution
- Low installation height (4 – 6 m)
- Large mast spacing (→ 35 m)
- Negative light point projection

#### M

##### M-Optics

##### ME lighting class streets

- Wide distribution, but less range than for S-Optics
- Medium to high installation heights (5 – 10 m)
- Medium mast spacing (25 – 40 m)
- Slight positive to negative light point projections
- Well suited for lights with forward tilt

#### C

##### C-Optics

##### Streets with projecting light points (mast poles with circular curved brackets)

- For narrow streets and paths with medium to high light points (5 – 8 m)
- Medium to large mast spacing (25 – 35 m)

#### U

##### U-Optics

##### Streets with low installation heights (4 – 6 m)

- Large mast spacing (→ 40 m)
- Wide asymmetrical distribution
- Low installation heights

#### F

##### F-Optics

##### Pedestrian crossings

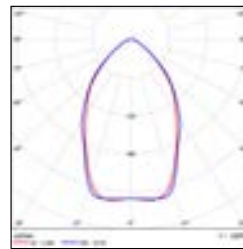
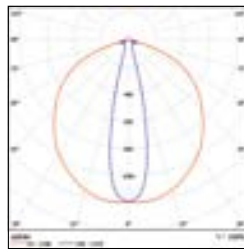
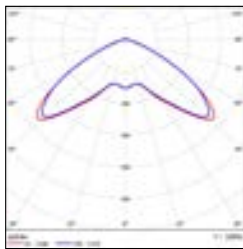
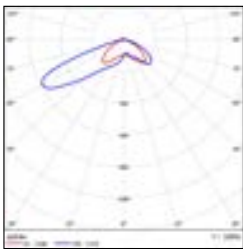
- Specially for pedestrian crossings
- Standards-compliant in accordance with DIN 67523
- Positive contrast for better recognition of pedestrians
- Installation height (4 – 8 m)







## IndustryLine



### P

#### P-Optics

##### Parking garages and underground garages

- Rectangular asymmetrical distribution
- Complete lighting of the parking space
- Reduced glare in the direction of the road lane
- Can be used as emergency lighting

### I

#### I-Optics

##### Petrol station, parking garages and parking decks

- Wide rotationally-symmetrical light distribution
- Versatile and universal application
- Can be used as emergency lighting

### WW

#### WW-Optics

##### Walls, facades and billboards

- Especially narrow emission at one level
- Very homogeneous light

### G

#### G-Optics

##### Petrol stations

- Deep-wide radiating optics



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## TECHNICAL LIGHTING

# STREETLINE

53

TECHNICAL LIGHTING

**Efficient:** High-performance LED lighting technology including light control system

**Costs:** Long-term cost security and cost-structure transparency

**Sustainable:** Luminous flux over lifetime 80% after 100,000 operating hours

**Safe investment:** Replacement part availability of at least 20 years



### Other advantages:

- Modular LED system with integrated electronics
- Technology guarantee
- Average lifetime: 100,000 operating hours
- Demand-oriented configurable, asymmetrical light distribution
- Variably adjustable from  $-15^{\circ}$  to  $+15^{\circ}$  tilt
- Completely preassembled with connection cables and modules
- Intelligent control possible
- Integrated overheating protection
- Maintenance-optimized design

### Application areas:

- Parks
- Plazas
- Roads in residential areas
- Secondary roads
- Main roads



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SMART

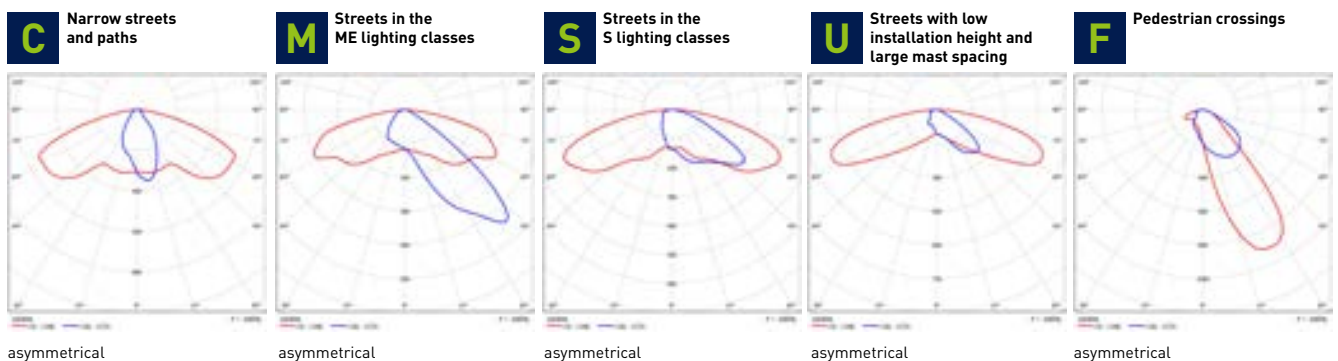
# TECHNICAL LIGHTING STREETLINE

## ●●●● Technical specifications



LIGHTING FIXTURES BODY				
Material	Aluminum die casting		Housing pan and luminaire base made of die-cast aluminum	
Coloring (powder coating)	DB 703		DB 703	
Mounting type	60 or 76 mm spigot size side-mounted or top-mounted luminaires	42 or 65 mm for side-mounted luminaires	60 or 76 mm spigot size for side- mounted or top-mounted luminaires	42 or 65 mm for side-mounted luminaires
Orientation possibilities, tilt adjustable...	-15° to +15°	0° to -15°	-15° to +15°	0° to -15°
Dimensions (length x width x height)	680 x 160 x 110 mm		680 x 240 x 110 mm	
Weight	6.5 kg		9.5 kg	
Area exposed to wind	FW = 0.08 m²		FW = 0.08 m²	
IP Protection class	IP67/ IP69 K		IP67/ IP69 K	
Glass type	PMMA		PMMA	
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	1 Eco module with 14 LEDs or 28 LEDs		2 Eco modules with 14 LEDs or 28 LEDs each	
Optical system	PMMA individual optics		PMMA individual optics	
Rated luminous flux	1,250 – 5,000 lm		2,500 – 10,000 lm	
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI		Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI	
Temperature management	✓		✓	
Constant Light Output (CLO)	Optional		Optional	
ELECTRICAL PROPERTIES				
Protection class	Protection Class II		Protection Class II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz		220 – 240 V/ 50 – 60 Hz	
Surge protection (L-N)	10 KV		10 KV	
INSTALLATION SUGGESTIONS				
Application areas	Parks, plazas, roads in residential areas, secondary roads		Parks, plazas, roads in residential areas, roads in residential areas, secondary roads, main roads	
Installation height	4 – 7 m		4 – 8 m	
Lighting classes	ME / S		ME / S	
Admitted ambient temperature (ta)	-40 °C to +40 °C		-40 °C to +40 °C	
OTHER PROPERTIES				
Certificate	   		   	

## ●●●● Optics and light distribution for Park and Twin



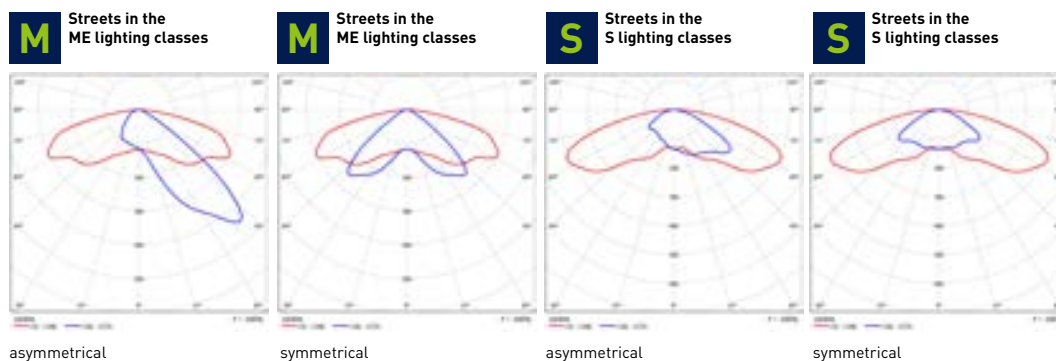




CASE

LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	DB 703
Mounting type	60 or 76 mm spigot size side-mounted or top-mounted luminaires
Orientation possibilities	Tilt adjustable from -15° to +15°
Dimensions (length x width x height)	680 x 440 x 110 mm
Weight	14.5 kg
Area exposed to wind	FW = 0.08 m <sup>2</sup>
IP Protection class	IP67/ IP69 K
Glass type	PMMA
Shock resistance / impact resistance	IK08
PHOTOMETRIC PROPERTIES	
Light source type	4 Eco modules with 14 LEDs or 28 LEDs each
Optical system	PMMA individual optics
Rated luminous flux	5,000 – 20,000 lm
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz
Surge protection (L-N)	10 KV
INSTALLATION SUGGESTIONS	
Application areas	Secondary roads, main roads, roads in residential areas, plazas
Installation height	6 – 12 m
Lighting classes	ME / S
Admitted ambient temperature (ta)	-40 °C to +40 °C
OTHER PROPERTIES	
Certificate	

## ●●● Optics and light distribution for Case



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## TECHNICAL LIGHTING **SQUARE**

**Efficient:** High-performance LED lighting technology including light control system

**Costs:** Long-term cost security and cost-structure transparency

**Sustainable:** Luminous flux over lifetime 80% after 100,000 operating hours

**Safe investment:** Replacement part availability of at least 20 years

### Other advantages:

- Modular LED system with integrated electronics
- 4 LED modules
- Modules, asymmetrical light distribution
- Technology guarantee
- Average lifetime: 60,000 operating hours
- Completely preassembled with connection cables and modules
- Night setback of 50%
- Integrated overheating protection
- Maintenance-optimized design

### Application areas:

- Parks
- Plazas
- Roads in residential areas



BASIC



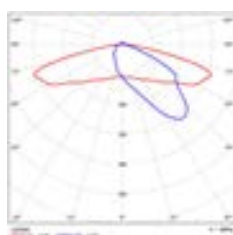
## Technical specifications

### SQUARE

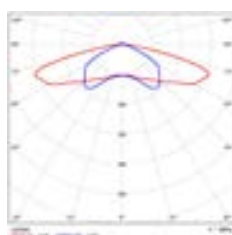
LIGHTING FIXTURES BODY	
Material	Housing wall and luminaire base made of aluminum die casting, housing stanchion made of extruded aluminum profiles
Coloring (powder coating)	DB 703
Mounting type	76 mm spigot size
Dimensions (length x width x height)	700 x 700 x 500 mm
Weight	15.5 kg
Area exposed to wind	FW = 0.15 m <sup>2</sup>
IP Protection class	IP67 / IP69 K
Glass type	PMMA
Shock resistance / impact resistance	IK04 / IK05 / IK08
PHOTOMETRIC PROPERTIES	
Light source type	4 Eco modules with 8 LEDs each
Optical system	PMMA individual optics
Rated luminous flux	2,400 – 6,800 lm
Dimming (Power control)	Control phase
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N)	6 KV
INSTALLATION SUGGESTIONS	
Application areas	Parks, plazas, roads in residential areas
Installation height	4 – 7 m
Lighting classes	ME / S
Admitted ambient temperature (ta)	-40 °C to +40 °C
OTHER PROPERTIES	
Certificate	   

## Optics and light distributions

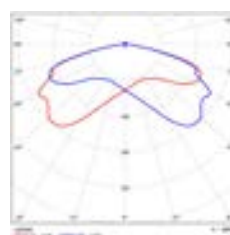
S



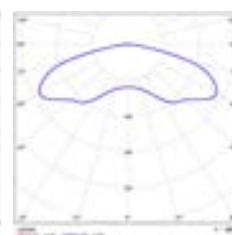
Rectangular asymmetrical distribution



Rectangular symmetrical distribution

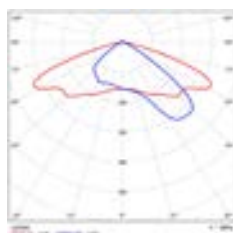


Corner distribution

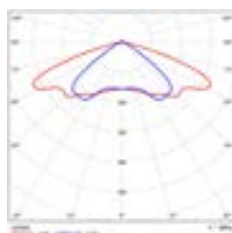


Square distribution

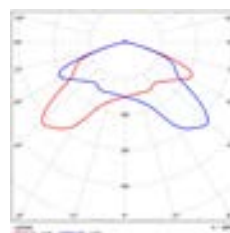
M



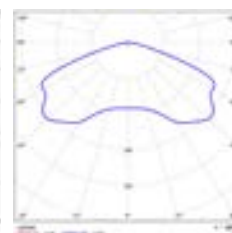
Rectangular asymmetrical distribution



Rectangular symmetrical distribution



Corner distribution



Square distribution

HELLUX





# SLIM

**Modular** LED system with up to 2 modules and integrated electronics

**Sustainable** concept with technology guarantee

**Modular** light distribution

**Completely preassembled** with connection cables and modules

**Availability of replacement parts:** At least 20 years



## Other advantages:

- Aligned to light classes S5 to S2 and ME6 to ME4
- Average lifetime: 100,000 operating hours
- Intelligent control possible
- Integrated overheating protection
- Development and production in Germany

## Application areas:

- Roads in residential areas
- Secondary roads
- Main roads
- Industrial outdoor areas



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# TECHNICAL LIGHTING

## SLIM

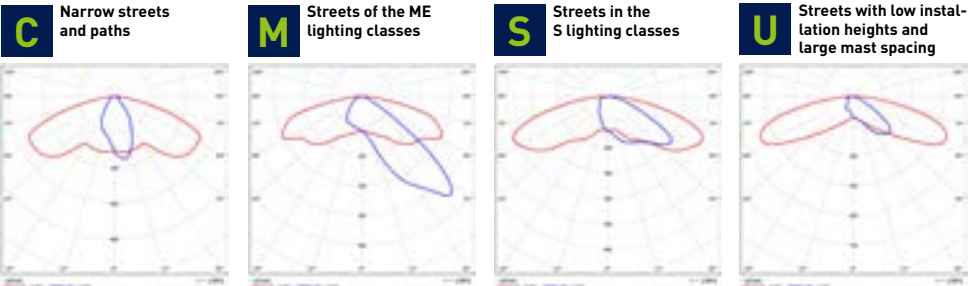
### ● ● ● Technical specifications



LIGHTING FIXTURES BODY			
Material	Extruded aluminum profile		
Coloring (powder coating)	DB 703		
Mounting type	60 or 65 mm spigot size for side-mounted luminaires	42 mm spigot size for side-mounted luminaires	60 or 65 mm spigot size for side-mounted luminaires
Dimensions (length x width x height)	700 x 135 x 110 mm	1,440 x 135 x 110 mm	1,160 x 135 x 110 mm
Weight	4.5 kg	approx. 6.7 kg	approx. 5.8 kg
Area exposed to wind	0.07 m²	0.15 m²	0.12 m²
IP Protection class	IP67/ IP69 K		
Glass type	PMMA		
Shock resistance / impact resistance	IK08		
PHOTOMETRIC PROPERTIES			
Light source type	1 Eco module with 14 LEDs or 28 LEDs each		
Optical system	PMMA individual optics		
Rated luminous flux	1.250 – 5,000 lm		
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI		
Temperature management	✓		
Constant Light Output (CLO)	Optional		
ELECTRICAL PROPERTIES			
Protection class	Protection Class II		
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz		
Surge protection (L-N)	10 KV		
INSTALLATION SUGGESTIONS			
Application areas	Roads in residential areas, secondary roads, main roads, outdoor areas in industrial zones		
Installation height	4 – 8 m		
Lighting classes	ME / S		
Admitted ambient temperature (ta)	-40 °C to +40 °C		
OTHER PROPERTIES			
Certificate	   		

### ● ● ● Optics and light distributions

Example light distribution 2,500 lm installation height: 5 m





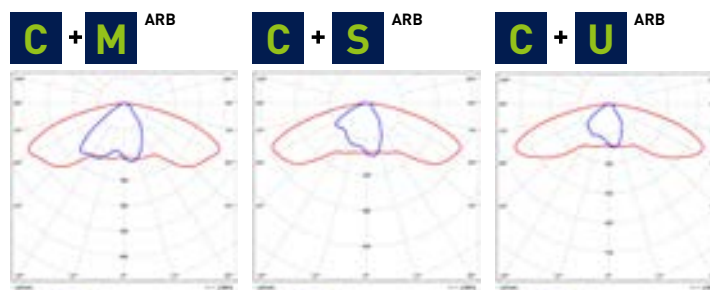


SLIM TWIN

LIGHTING FIXTURES BODY		
Material	Extruded aluminum profile	
Coloring (powder coating)	DB 703	
Mounting type	42 mm spigot size for side-mounted luminaires	60 or 65 mm spigot size for side-mounted luminaires
Dimensions (length x width x height)	1,440 x 135 x 110 mm	1,160 x 135 x 110 mm
Weight	approx. 7.7 kg	approx. 6.8 kg
Area exposed to wind	0.15 m <sup>2</sup>	0.12 m <sup>2</sup>
IP Protection class	IP66/ IP69 K	
Glass type	PMMA	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	2 Eco modules with 14 LEDs or 28 LEDs each	
Optical system	PMMA individual optics	
Rated luminous flux	2,500 – 10,000 lm	
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz	
Surge protection (L-N)	10 KV	
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, secondary roads, main roads, outdoor areas in industrial zones	
Installation height	4 – 8 m	
Lighting classes	ME / S	
Admitted ambient temperature (ta)	-40 °C to +40 °C	
OTHER PROPERTIES		
Certificate	   	

## ● ● ● Optics and light distributions

Example light distribution 5,000 lm, tilt angle from +15°  
Lens alignment diagonal or lengthwise to module



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## TECHNICAL LIGHTING

# HELIUS

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 100.000 h

**Easy installation:** Orientation possibilities in one pass from -10° to +115°

**Future-proof:** Specially designed to use state-of-the-art LED technology

### Other advantages:

- Lumen packages from 1,000 lm to 12,000 lm
- Two different luminaire sizes
- As side-mounted and top-mounted
- Can be pivoted when mounted from -2° to +88° in increments of 5°

### Application areas:

- Main roads, roads in residential areas
- Entrances / exits
- Parking facilities / walkways
- Parking areas
- Bikeways
- Local distributor road



EASY  
BASIC



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SMART



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## Technical specifications



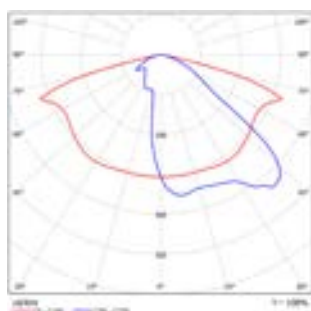
HELIUS 120



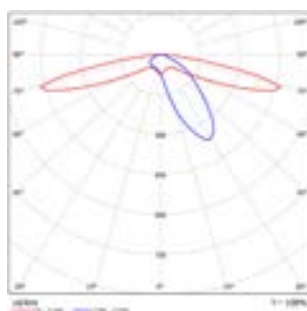
HELIUS 121

LIGHTING FIXTURES BODY				
Material	Aluminum die casting		Aluminum die casting	
Coloring (powder coating)	DB 703		DB 703	
Mounting type	42, 60 or 76 mm Post top or side mounting		42, 60 or 76 mm Post top or side mounting	
Orientation possibilities (in 5°-steps)	-100° to +25° (side-mounted) or -10° to +115° (top-mounted)		-100° to +25° (side-mounted) or -10° to +115° (top-mounted)	
Dimensions (length x width x depth)	515 x 306 x 94 mm		610 x 306 x 94 mm	
Weight	approx. 7 kg		approx. 8 kg	
Area exposed to wind	0.04 m²		0.04 m²	
IP Protection class	IP66		IP66	
Glass type	Tempered glass		Tempered glass	
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	LED modules with high-power LEDs	LED modules with mid-power LEDs (silicone module)	LED modules with high-power LEDs	LED modules with mid-power LEDs (silicone module)
Optical system	Asymmetric wide beam, wide beam or forward-radiating light distribution		Asymmetric wide beam, wide beam or forward-radiating light distribution	
Rated luminous flux	1,000 – 8,000 lm (500 lm steps) at 3,000 / 4,000 K	1,000 – 6,500 lm (500 lm steps) at 3,000 K 1,000 – 8,000 lm (500 lm steps) at 4,000 / 5,000 K	8,500 – 12,000 lm (500 lm steps)	8,000 – 10,000 lm (500 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI		Optional control phase (50 % / 100 %), dimmer profile or DALI	
Interface for light management	NEMA or Zhaga book 18 socket (ZHAGA socket optional on the top and bottom)		NEMA or Zhaga book 18 socket (ZHAGA socket optional on the top and bottom)	
Temperature management	✓		✓	
Constant Light Output (CLO)	Optional		Optional	
ELECTRICAL PROPERTIES				
Protection class	Class I / II		Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz		220 – 240 V / 50 – 60 Hz	
Surge protection (L-N / L N ground)	10 kV		10 kV	
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, entrances / exits, main roads, parking areas / walkways, parking areas, bikeways, secondary roads, pedestrian crossings		Roads in residential areas, entrances / exits, pedestrian crossings, main roads, parking areas, secondary roads	
Installation height	3.5 – 10 m		8 – 12 m	
Lighting classes	M / P		M / P	
Admitted ambient temperature (ta)	-30 °C to +40 °C		-30 °C to +40 °C	
OTHER PROPERTIES				
Certificate				

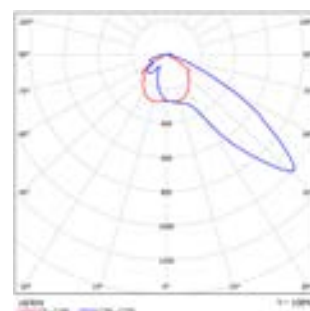
## Optics and light distributions for all variants



Asymmetric wide beam



Wide beam



Forward beam

HELLUX



## TECHNICAL LIGHTING

# HELIUS 120 L

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 100.000 h

**Easy installation:** Orientation possibilities in one pass from  $-10^{\circ}$  to  $+115^{\circ}$

**Future-proof:** Specially designed to use state-of-the-art LED technology

### Other advantages:

- Lumen packages from 4,000 lm to 8,000 lm
- Two different luminaire sizes
- As side-mounted and top-mounted
- Can be pivoted when mounted from  $-2^{\circ}$  to  $+88^{\circ}$  in increments of  $5^{\circ}$

### Application areas:

- Parking areas
- Facades
- Multi-level garage
- Industry



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SMART



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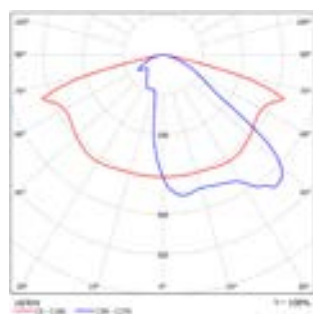


## Technical specifications

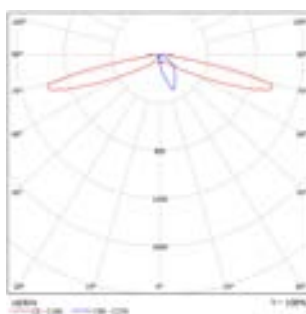
### HELIUS 120 L

LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	RAL 9006 or DB 703
Mounting type	60 or 76 mm Side-mounted or top-mounted
Orientation possibilities (in 5°-steps)	-100° to +25° (side-mounted) or -10° to +115° (top-mounted)
Dimensions (length x width x depth)	515 x 306 x 94 mm
Weight	approx. 7 kg
Area exposed to wind	0.04 m <sup>2</sup>
IP Protection class	IP66
Glass type	Tempered glass
Shock resistance / impact resistance	IK08
PHOTOMETRIC PROPERTIES	
Light source type	LED modules with high-power LEDs
Optical system	Asymmetric wide beam, wide beam or forward-radiating light distribution
Rated luminous flux	4,000 – 8,000 lm (1.000 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, DALI or Zhaga Socket
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L N ground)	6 / 8 kV
INSTALLATION SUGGESTIONS	
Application areas	Parking areas, facades, multi-level garage, industry
Installation height	3.5 – 8 m
Lighting classes	ME / S
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE

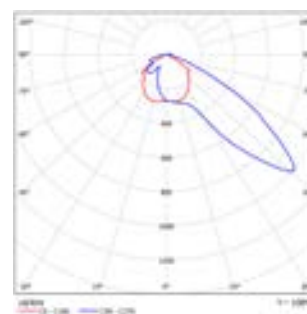
## Optics and light distributions for all variants



Asymmetric wide beam



Wide beam



Forward beam

HELLUX





# TRAPEZ

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 85,000 h

**Holistic:** Unified design of the product family for your various applications



## Other advantages:

- Luminaire series in three sizes
- Optics for various applications

## Application areas:

- Roads in residential areas
- Pedestrian crossings
- Main roads
- Parking areas
- Secondary roads
- Parks and walkways







# TECHNICAL LIGHTING

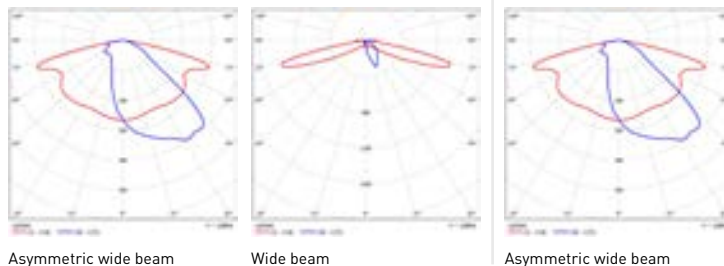
## TRAPEZ

### Technical specifications



LIGHTING FIXTURES BODY				
Material	Aluminum		Aluminum die casting	
Coloring (powder coating)	RAL or DB		RAL or DB	
Mounting type	Side-mounted (Ø 42 x 100 mm) and top-mounted (Ø 76, 60 mm)		Side-mounted (Ø 42 x 100 mm) and top-mounted (Ø 76, 60 mm)	
Orientation possibilities	None (basic inclination of 2°)		Basic inclination of 2°	
Dimensions (length x width x depth)	700 x 250 x 210 mm		870 x 330 x 270 mm	
Weight	approx. 10 kg		approx. 14 kg	
Area exposed to wind	0.08 m²		0.12 m²	
IP Protection class	IP65		IP65	
Glass type	PMMA / PC		PMMA / PC	
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	LED modules with high-power LEDs	LED-Modules with Mid-Power-LED (Silicone Module)	LED modules with high-power LEDs	LED-Modules with Mid-Power-LED (Silicone Module)
Optical system	Asymmetric wide beam, wide beam or forward-radiating light distribution		Asymmetric wide beam, wide beam or forward-radiating light distribution	
Rated luminous flux	1,000 – 8,000 lm (500 lm steps)	1,000 – 10,000 lm (500 lm steps)	4,500 – 12,000 lm (500 lm steps)	4,000 – 11,000 lm (500 steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, DALI or Zhaga Socket		Optional control phase (50 % / 100 %), dimmer profile, DALI or Zhaga Socket	
Interface for light management	NEMA or Zhaga book 18 socket (ZHAGA socket optional on the top and bottom)		NEMA or Zhaga book 18 socket (ZHAGA socket optional on the top and bottom)	
Temperature management	✓		✓	
Constant Light Output (CLO)	Optional		Optional	
ELECTRICAL PROPERTIES				
Protection class	Class I / II		Class I / II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz		220 – 240 V/ 50 – 60 Hz	
Surge protection	10 kV		10 kV	
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, parking facilities/ walkways, parking areas, secondary roads, pedestrian crossings		Roads in residential areas, parking facilities/ walkways, parking areas, secondary roads, pedestrian crossings	
Installation height	3.5 – 8 m		4 – 10 m	
Lighting classes	M / P		M / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C		-25 °C to +35 °C	
OTHER PROPERTIES				
Certificate	 		 	



### Optics and light distributions



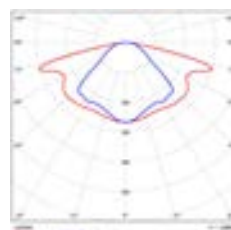




TRAPEZ 143

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	RAL or DB	
Mounting type	Top-mounted (Ø 76, 60 mm)	
Orientation possibilities	None (basic inclination of 2°)	
Dimensions (length x width x depth)	1,420 x 330 x 270 mm	
Weight	approx. 28 kg	
Area exposed to wind	0.19 m²	
IP Protection class	IP65	
Glass type	PMMA / PC	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	LED modules with high-power LEDs	LED-Modules with Mid-Power-LED (Silicone Module)
Optical system	Asymmetric wide beam, wide beam or forward-radiating light distribution	
Rated luminous flux	2x 1,000 – 8,000 lm (500 lm steps)	2x 1,000 – 10,000 lm (500 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI	
Interface for light management	NEMA or Zhaga book 18 socket (ZHAGA socket optional on the top and bottom)	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Class I / II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz	
Surge protection (L-N)	10 kV	
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, main roads, Parking areas, secondary roads	
Installation height	5 – 10 m	
Lighting classes	M / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate	 	

## ● ● ● Optics and light distributions



symmetrical

HELLUX



## TECHNICAL LIGHTING

# FRITZ

**Customizable:** Synthetic decorative trim available in five different colors (Fritz 115 only)

**Versatile:** Suitable as technically functional and as a decorative lighting

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and module at 85,000 h

**Award-winning design:** IF Design Award (Fritz 114)

### Application areas:

- Roads in residential areas
- Main roads
- Parks and walkways
- Plazas
- Secondary roads



EASY  
BASIC



BASIC



BASIC+



SMART



## Technical specifications



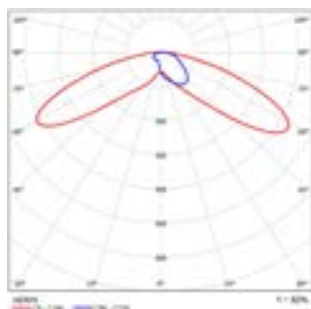
FRITZ 114



FRITZ 115

LIGHTING FIXTURES BODY		
Material	Cast aluminum	Cast aluminum
Coloring (powder coating)	RAL or DB	RAL or DB
Mounting type	Top-mounted (Ø 76 / Ø 60) via support arm	Top-mounted (Ø 76 / Ø 60) via support arm
Orientation possibilities	Basic inclination of 0°	Basic inclination of 0°
Dimensions (length x width x depth)	830 x 340 x 320 mm	1,030 x 380 x 340 mm
Weight	approx. 10 kg	approx. 13 kg
Area exposed to wind	0.096 m²	0.19 m²
IP Protection class	IP65	IP65
Glass type	PMMA	PMMA
Shock resistance / impact resistance	IK08	IK08
PHOTOMETRIC PROPERTIES		
Light source type	LED modules with high-power LEDs	LED modules with high-power LEDs
Optical system	Asymmetric wide beam light distribution	Asymmetric wide beam light distribution
Rated luminous flux	1,000 – 8,000 lm (500 lm steps)	8,500 – 12,000 lm (500 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓	✓
Constant Light Output (CLO)	Optional	Optional
ELECTRICAL PROPERTIES		
Protection class	Class I / II	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L N ground)	6 / 8 kV	6 / 8 kV
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, parking facilities/ walkways, plazas, secondary roads	Roads in residential areas, main roads, parking facilities/ walkways, plazas, secondary roads
Installation height	3.5 – 8 m	5 – 10 m
Lighting classes	ME / S	ME / S
Admitted ambient temperature (ta)	-25 °C to +35 °C	-25 °C to +35 °C
OTHER PROPERTIES		
Certificate	CE	CE
OPTIONS		
Extension for mast Ø 60 / 42x100 mm	✓	✓
Optional surge protection	10 kV	10 kV
Adjustment angle for boom to 1.5°	✓	✓

## Optics and light distributions for all variants



Asymmetric wide beam

HELLUX



## TECHNICAL LIGHTING

# ELLIPSE

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and module at 85,000 h

**Esthetic:** Simple and clear shape language with a perfect LED design

### Application areas:

- Roads in residential areas
- Pedestrian crossings
- Main roads
- Parking areas
- Secondary roads



EASY  
BASIC



BASIC



BASIC+



SMART



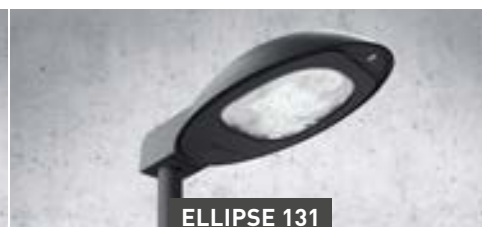
SMART+




## Technical specifications



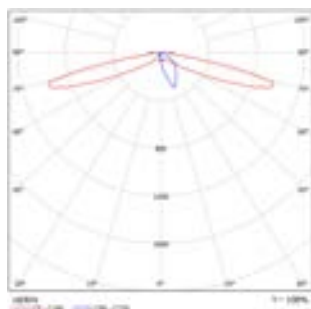
ELLIPSE 130



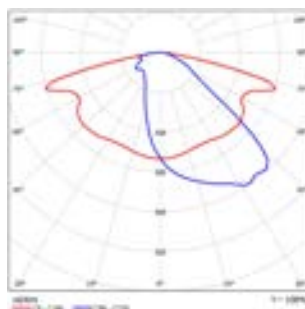
ELLIPSE 131

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	RAL or DB	
Mounting type	Side-mounted or top-mounted (Ø 76 / 60 mm)	
Orientation possibilities	Basic inclination of 5° or 10°	
Dimensions (length, width, depth)	637 x 300 x 180 mm	
Weight	approx. 8.5 kg	
Area exposed to wind	0.1 m²	
IP Protection class	IP66	
Glass type	Tempered glass	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	LED modules with high-power LEDs	LED Modules with Mid-Power-LEDs (Silicone Module)
Optical system	Asymmetric wide beam, wide beam or forward-radiating light distribution	
Rated luminous flux	1,000 – 8,000 lm (500 lm steps)	1,000 – 6,500 lm (500 lm steps) at 3,000 K 1,000 – 8,000 lm (500 lm steps) at 4,000 / 5,000 K
Dimming (Power control)	Optional control phase [50 % / 100 %], dimmer profile or DALI	
Interface for light management	Zhaga book 18 socket (ZHAGA socket optional on the bottom)	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection	10 kV	
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, parking facilities/ walkways, parking areas, bikeways, secondary roads, pedestrian crossings	
Installation height	3.5 – 10 m	
Lighting classes	M / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate		

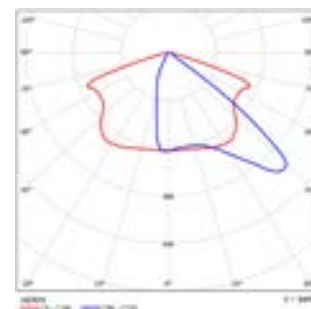
## Optics and light distributions for all variants



Wide beam



Asymmetric wide beam



Asymmetric wide beam







HELLUX



## TECHNICAL LIGHTING

# PRIMUS 111

**Representative:** Particularly suitable for prestigious architectural environments

**Quality “Made in Germany”:** High quality materials, high-end finishing

**Tool-free:** Fold-out luminary top – easy replacement of the LED unit not requiring a lot of tools

### Application areas:

- Pedestrian zones
- Parks and walkways
- Plazas



EASY  
BASIC



BASIC



BASIC+



SMART

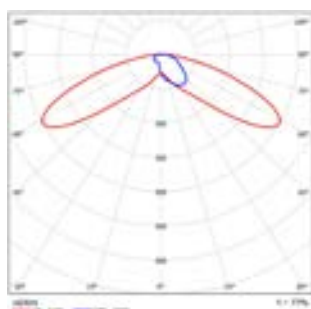


## Technical specifications

### PRIMUS 111

LIGHTING FIXTURES BODY	
Material	Aluminum
Coloring (powder coating)	RAL or DB
Mounting type	Top-mounted
Orientation possibilities	7.5° steps
Dimensions (length x width)	815 x 470 mm
Weight	approx. 16.5 kg
Area exposed to wind	0.12 m <sup>2</sup>
IP Protection class	IP65
Glass type	PMMA (smooth clear or textured), PC (smooth clear or textured)
Shock resistance / impact resistance	IK08
LIGHT SOURCE	
Light source type	LED modules with high-power LEDs
Optical system	Asymmetrical light distribution
Rated luminous flux	2,250 – 7,000 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTY	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L N ground)	6 / 8 KV
INSTALLATION SUGGESTIONS	
Application areas	Pedestrian zones, parking facilities/walkways, plazas
Installation height	4 – 8 m
Lighting classes	ME / S
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE
OPTIONS	
Optional surge protection	10 KV

## Optics and light distributions



Asymmetric wide beam

HELLUX





# CATENARY LUMINAIRE 171-8

**Simple and clear** design language with the latest LED technology

**Tool-free** light source lamp replacement

**Tool-free** disassembly of the E-block

**Dirt-resistant** shaping

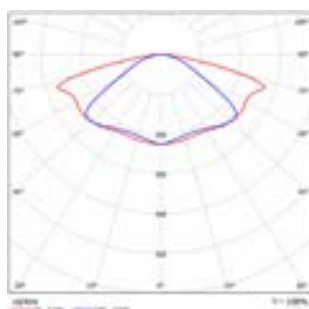
## Application areas:

- Main roads
- Roads in residential areas

## ● ● ● Technical specifications

CATENARY LUMINAIRE 171-8	
LIGHTING FIXTURES BODY	
Material	Aluminum
Coloring (powder coating)	RAL or DB
Mounting type	2-point mounts through tensioning elements with universal joints
Dimension (length x width x height)	564 x 275 x 105 mm
Weight	approx. 8.5 kg
IP Protection class	IP 65
Area exposed to wind	0.11 m <sup>2</sup>
Glass type	Impact-resistant PMMA, clear
Shock resistance / impact resistance	IK 08
PHOTOMETRIC PROPERTIES	
Light source type	LED module
Luminous flux	1,000 – 8,000 lm (500 lm steps)
Light technologies	Single lenses
Light distribution	Symmetrical light distribution
ELECTRICAL PROPERTIES	
Protection class	Protection class I / protection class II
Operating voltage / frequency	230 V / 50 Hz
INSTALLATION SUGGESTIONS	
Application areas	Main roads, roads in residential areas
Installation height	4 – 8 m
OTHER PROPERTIES	
Certificates	CE

## ● ● ● Optics and light distributions



Wide beam

# ECO CIRCLE – MORE EFFICIENCY FOR DESIGN LIGHTING



## SIMPLE REPLACEMENT

Ideal for retrofitting  
decorative street lamps

## PMMA

Polymethylmethacrylate  
(plastic)

## EFFICIENT LIGHT

Efficient LED light up to 3,000 lm

## PLUG & PLAY

Simple installation  
and removal





## DESIGN

Easily integrates into  
existing design luminaires

## THERMAL MANAGEMENT

Best thermal management through material  
mix and temperature monitoring

## OPTIMAL LIGHT CONTROL

For parks and plazas

## SAFETY

Protection Class III

HELLUX



CYLINDER LIGHTS

## JÜTERBOG 1007

**Timeless:** A clear design concept underscores both modern and historical architecture

**Flexible:** Variable application possibilities due to diffuse or clear glass

**Reliable:** Lifetime of the LED driver and module at 85,000 h

### Application areas:

- Roads in residential areas
- Secondary roads
- Plazas
- Walkways



EASY  
BASIC



BASIC






BASIC+

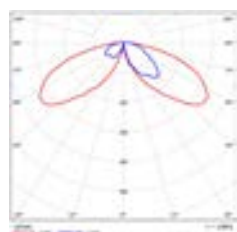


SMART

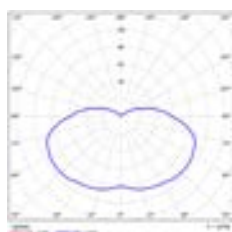
## Technical specifications

JÜTERBOG 1007			JÜTERBOG 1007 CM		
LIGHTING FIXTURES BODY	DIRECT DISTRIBUTION		OPEN DISTRIBUTION	BASIC	BASIC+ / SMART
Material	Aluminum (roof) / aluminum die casting (attachment)			Aluminum die casting	
Coloring (powder coating)	RAL or DB			RAL oder DB	
Mounting type	Top-mounted (Ø 76 mm)			Top-mounted (Ø 76 mm)	
Dimensions (height x diameter)	610 mm x Ø 610 mm			610 mm x Ø 610 mm	
Weight	approx. 8.5 kg			approx. 8.5 kg	
Area exposed to wind	0.122 m²			0.122 m²	
IP Protection class	IP54			IP54	
Glass type	PMMA (smooth clear)	PMMA (diffuse)		PMMA (smooth clear)	
Shock resistance / impact resistance	IK08			IK08	
PHOTOMETRIC PROPERTIES					
Light source type	LED modules with high-power LEDs	LED modules with mid-power LEDs		Circle module with high-power LEDs	
Optical system	Asymmetric wide beam or rotational symmetric (Zhaga board)	open distribution (TLS modul)		Rectangular symmetrical or rectangular asymmetrical	
Rated luminous flux	1,000 – 3,500 lm (250 lm steps)	2,250 / 3,250 lm (3,000 K) 2,500 / 3,500 lm (4,000 K)		1,500 lm (2,200 K / 2,700 K) / 2,250 lm (4,000 K)	1,000 – 2,000 lm (2,200 K) 1,500 – 2,750 lm (3,000 K) 1,500 – 3,250 lm (4,000 K)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI			Control phase (50 % / 100 %)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓			✓	
Constant Light Output (CLO)	Optional			–	Optional
ELECTRICAL PROPERTIES					
Protection class	Protection Class I / II			Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz			220 – 240 V / 50 – 60 Hz	
Surge protection	10 KV			4 KV	10 KV
INSTALLATION SUGGESTIONS					
Application areas	Residential area roads and secondary roads	Plazas, walkways		Parks, plazas, roads in residential areas, pedestrian zones	
Installation height	3 – 5 m			3 – 5 m	
Lighting classes	ME / S			ME / S / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C			-25 °C bis +35 °C	
OTHER PROPERTIES					
Certificate	CE			CE   	

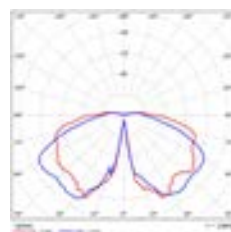
## Optics and light distributions



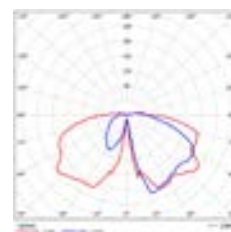
Asymmetric wide beam



Open distribution



symmetrical



asymmetrical



HELLUX



## CYLINDER LIGHTS

# 500 / 501 / 502

**Flexible:** Variable application possibilities due to diffuse or clear glass

**Reliable:** Lifetime of the LED driver and LED module at 85,000 h

### Other advantages:

- As hanging or top-mounted luminaire
- Clear or frosted luminaire glass

### Application areas:

- Roads in residential areas
- Secondary roads
- Plazas
- Walkways



EASY  
BASIC

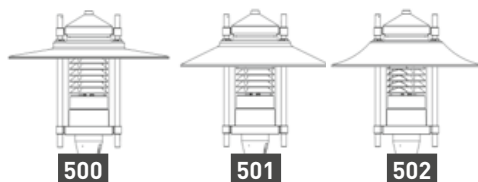


BASIC+



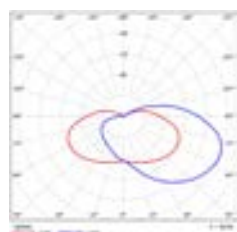
SMART

## Technical specifications

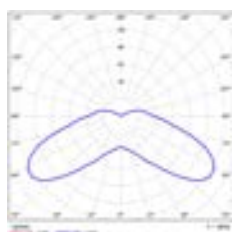


LIGHTING FIXTURES BODY		DIRECT DISTRIBUTION		OPEN DISTRIBUTION		DIRECT DISTRIBUTION		OPEN DISTRIBUTION	
Material		Aluminum (roof) / aluminum die casting (attachment)				Aluminum (roof) / aluminum die casting (attachment)			
Coloring (powder coating)		RAL or DB				RAL or DB			
Mounting type		Top-mounted (Ø 76 mm)				Top-mounted (Ø 76 mm)			
Dimensions (height x diameter)		735 mm x Ø 780 mm / Ø 730 mm				735 mm x Ø 780 mm / Ø 730 mm			
Weight		approx. 8.5 kg				approx. 8.5 kg			
Area exposed to wind		0.195 m² / 0.203 m² / 0.205 m² / 0.173 m²				0,152 m²			
IP Protection class		IP65				IP65			
Glass type		PMMA (smooth clear)		PMMA (diffuse)		PMMA (smooth clear)		PMMA (diffuse)	
Shock resistance / impact resistance		IK08				IK08			
PHOTOMETRIC PROPERTIES									
Light source type		LED module with high-power LEDs		LED module with mid-power LEDs		LED module with high-power LEDs		LED module with mid-power LEDs	
Optical system		Asymmetric wide beam or rotational symmetric (Zhaga board)		open distribution (TLS modul)		Asymmetric wide beam or rotational symmetric		open distribution	
Rated luminous flux		1,000 – 3,500 lm (250 lm steps)		2,250 / 3,250 lm (3,000 K) 2,500 / 3,500 lm (4,000 K)		1,000 – 2,000 lm (2,200 K) 1,500 – 2,750 lm (3,000 K) 1,500 – 3,250 lm (4,000 K)			
Dimming (Power control)		Optional control phase (50 % / 100 %), dimmer profile or DALI				Optional control phase (50 % / 100 %), dimmer profile or DALI			
Temperature management		✓				✓			
Constant Light Output (CLO)		Optional				Optional			
ELECTRICAL PROPERTIES									
Protection class		Class I / II				Class I / II			
Operating voltage / frequency		220 – 240 V / 50 – 60 Hz				220 – 240 V / 50 – 60 Hz			
Surge protection		10 kV				6 / 8 kV			
INSTALLATION SUGGESTIONS									
Application areas		Residential area roads and secondary roads		Plazas, walkways		Residential area roads and secondary roads, plazas, walkways			
Installation height		3 – 5 m				3 – 5 m			
Lighting classes		M / P		P		M / P		P	
Admitted ambient temperature (ta)		-25 °C to +35 °C				-25 °C to +35 °C			
OTHER PROPERTIES									
Certificate		CE				CE			
OPTIONS									
Roof variants in different versions		500-2, 501-2, 502-2				500-2, 501-2, 502-2			

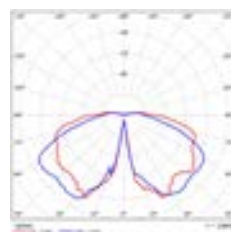
## Optics and light distributions



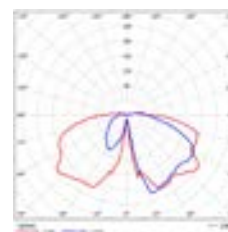
Asymmetric wide beam



symmetrical



symmetrical



asymmetrical

HELLUX



CYLINDER LIGHTS

## TEMPUS 538

**Timeless:** Decorative skylight with modern lighting technology

**Easy to maintain:** Can be opened tool-free with the cover at the top

**Sustainable:** Electrocomponents can be removed without the need of tools

### Application areas:

- Roads in residential areas
- Secondary roads
- Plazas
- Walkways
- Parks
- Pedestrian zones



EASY  
BASIC



BASIC







BASIC+



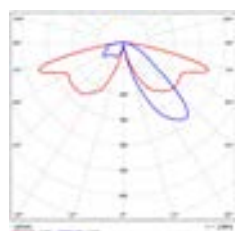
SMART



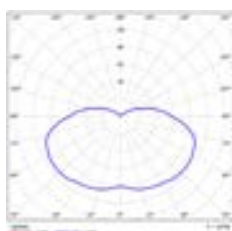
## Technical specifications

538			538 CM		
LIGHTING FIXTURES BODY	DIRECT DISTRIBUTION		OPEN DISTRIBUTION	BASIC	BASIC+ / SMART
Material	Aluminum die casting			Aluminum die casting	
Coloring (powder coating)	RAL or DB			RAL or DB	
Mounting type	Side-mounted (Ø 76 or 60 mm)			Top-mounted (Ø 76 mm)	
Orientation possibilities	-			-	
Dimensions (height x diameter)	640 mm x Ø 531 mm			640 mm x Ø 531 mm	
Weight	8 kg			8 kg	
Area exposed to wind	0.1 m²			0.1 m²	
IP Protection class	IP55			IP55	
Glass type	PMMA (smooth clear)	PMMA (diffuse)		PMMA (smooth clear)	
Shock resistance / impact resistance	IK08			IK08	
PHOTOMETRIC PROPERTIES					
Light source type	LED modules with high-power LEDs			Circle module with high-power LEDs	
Optical system	Asymmetric wide beam or rotational symmetric (Zhaga board)	open distribution (TLS modul)		Rectangular symmetrical or rectangular asymmetrical	
Rated luminous flux	1,000 – 3,500 lm (250 lm steps)	2,250 / 3,250 lm (3,000 K) 2,500 / 3,500 lm (4,000 K)		1,500 lm (2,200 / 2,700 K) / 2,000 lm (3,000 K) / 2,250 lm (4,000 K)	1,000 – 2,000 lm (2,200 K) 1,500 – 2,750 lm (3,000 K) 1,500 – 3,250 lm (4,000 K)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI			Control phase (50 % / 100 %)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓			✓	
Constant Light Output (CLO)	Optional			-	Optional
ELECTRICAL PROPERTIES					
Protection class	Protection Class I / II			Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz			220 – 240 V / 50 – 60 Hz	
Surge protection	10 KV			4 KV	10 KV
INSTALLATION SUGGESTIONS					
Application areas	Residential area roads and secondary roads	Plazas, walkways		Parks, plazas, roads in residential areas, pedestrian zones	
Installation height	3 – 5 m			3 – 5 m	
Lighting classes	ME / S			ME / S / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C			-40 °C to +40 °C	
OTHER PROPERTIES					
Certificate	CE			CE    	

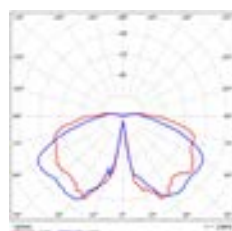
## Optics and light distributions



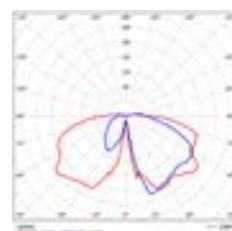
Asymmetric wide beam



open distribution



symmetrical



asymmetrical

HELLUX



CYLINDER LIGHTS

## TEMPUS 539

**Timeless:** Decorative skylight with modern lighting technology

**Easy to maintain:** Can be opened tool-free with the cover at the top

**Sustainable:** Electrocomponents can be removed without the need of tools

### Application areas:

- Roads in residential areas
- Secondary roads
- Walkways
- Parks
- Pedestrian zones



EASY  
BASIC



BASIC






BASIC+

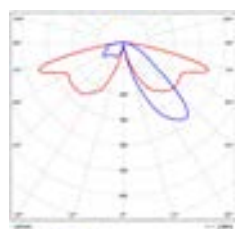


SMART

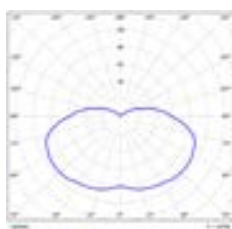
## Technical specifications

539			539 CM		
LIGHTING FIXTURES BODY	DIRECT DISTRIBUTION		OPEN DISTRIBUTION	BASIC	BASIC+ / SMART
Material	Aluminum die casting			Aluminum die casting	
Coloring (powder coating)	RAL or DB			RAL or DB	
Mounting type	Side-mounted (Ø 76 or 60 mm)			Top-mounted (Ø 76 mm)	
Orientation possibilities	-			-	
Dimensions (height x diameter)	710 mm x Ø 205 mm			710 mm x Ø 205 mm	
Weight	6 kg			6 kg	
Area exposed to wind	0.1 m²			0.1 m²	
IP Protection class	IP55			IP55	
Glass type	PMMA (smooth clear)	PMMA (diffuse)		PMMA (smooth clear)	
Shock resistance / impact resistance	IK08			IK08	
PHOTOMETRIC PROPERTIES					
Light source type	LED modules with high-power LEDs			Circle module with high-power LEDs	
Optical system	Asymmetric wide beam or rotational symmetric (Zhaga board)	open distribution (TLS modul)		Rectangular symmetrical or rectangular asymmetrical	
Rated luminous flux	1,000 – 3,500 lm (250 lm steps)	2,250 / 3,250 lm (3,000 K) 2,500 / 3,500 lm (4,000 K)		1,500 lm (2,200 K / 2,700 K) / 2,000 lm (3,000 K) / 2,250 lm (4,000 K)	1,500 – 3,250 lm
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI			Control phase (50 % / 100 %)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓			✓	
Constant Light Output (CLO)	Optional			Optional	
ELECTRICAL PROPERTIES					
Protection class	Protection Class I / II			Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz			220 – 240 V / 50 – 60 Hz	
Surge protection	10 KV			4 KV	10 KV
INSTALLATION SUGGESTIONS					
Application areas	Residential area roads, secondary roads and walkways			Residential area roads, secondary roads and walkways	
Installation height	3 – 5 m			3 – 5 m	
Lighting classes	ME / S			ME / S / P	
Admitted ambient temperature (ta)	-25 °C to +35 °C			-40 °C to +40 °C	
OTHER PROPERTIES					
Certificate	CE			CE   	

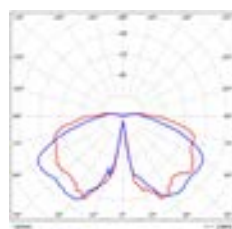
## Optics and light distributions



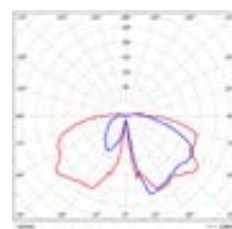
Asymmetric wide beam



open distribution



symmetrical



asymmetrical



HELLUX



BASIC



BASIC+



SMART

# CYLINDER LIGHT C40

**Modular** LED system with integrated electronics

**Maintenance-optimized** design

**Luminous flux over lifetime** 80% after 100,000 operating hours




**Symmetrical / asymmetrical** light distribution

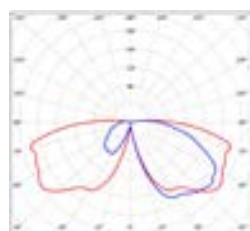
**Fully pre-assembled** with connection cable and Eco Circle module

## Application areas:

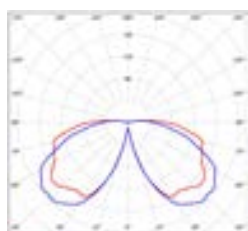
- Parks
- Plazas
- Roads in residential areas
- Pedestrian zones

## ● ● ● Technical specifications

CYLINDER LIGHT C40		
LIGHTING FIXTURES BODY	BASIC	BASIC+ / SMART
Material	Luminaire base made of die-cast aluminum, screen and cover made of aluminum, cover lens made of PMMA	
Coloring (powder coating)	DB703	
Mounting type	76 mm spigot size, reduction part 60 mm	
Dimensions (height x diameter)	536 mm x Ø 580 mm	
Weight	8 kg	
Area exposed to wind	0.12 m <sup>2</sup>	
IP Protection class	IP65	
Glass type	PMMA	
Shock resistance / impact resistance	IK04	
PHOTOMETRIC PROPERTIES		
Light source type	1 Circle module with 14 LEDs	
Optical system	Rectangular symmetrical or rectangular asymmetrical	
Rated luminous flux	1,500 lm (2,200 K / 2,700 K) / 2,000 lm (3,000 K) / 2,250 lm (4,000 K)	1,000 – 2,000 lm (2,200 K) / 1,500 – 3,000 lm (3,000 K) / 1,500 – 3,250 lm (4,000 K)
Dimming (Power control)	Control phase (50 % / 100 %)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓	
Constant Light Output (CLO)	–	Optional
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection (L-N)	4 kV	6 kV
INSTALLATION SUGGESTIONS		
Application areas	Parks, plazas, roads in residential areas, pedestrian zones	
Installation height	3 – 5 m	
Lighting classes	S / P	
Admitted ambient temperature (ta)	-40 °C to +40 °C	
OTHER PROPERTIES		
Certificate (Module)	  	



asymmetrical



symmetrical

## ● ● ● Optics and light distributions

HELLUX



## CYLINDER LIGHTS **CITYLINE**

**Modular** LED system with integrated electronics

**Maintenance-optimized** design

**Luminous flux over lifetime 80 %** after 100,000 operating hours

**Symmetrical / asymmetrical** light distribution

**Fully pre-assembled** with connection cable and Eco Circle module

### Application areas:

- Parks
- Plazas
- Roads in residential areas
- Pedestrian zones



EASY  
BASIC



BASIC





BASIC+



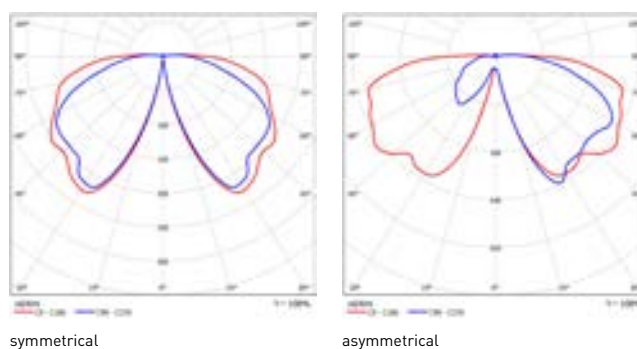
SMART



## Technical specifications

CITYLINE	
LIGHTING FIXTURES BODY	BASIC BASIC+ / SMART
Material	Luminaire base made of die-cast aluminum, aluminum housing stanchion, aluminum shade and cover
Coloring (powder coating)	similar to DB703
Mounting type	60 / 76 mm spigot size
Dimensions (height x diameter)	650 mm x Ø 465 mm
Weight	8.5 kg
Area exposed to wind	0.08 m <sup>2</sup>
IP Protection class	IP55
Glass type	Plexiglass XT
PHOTOMETRIC PROPERTIES	
Light source type	Circle module with high-power LEDs
Optical system	Rectangular symmetrical or rectangular asymmetrical
Rated luminous flux	1,500 lm (2,200 K / 2,700 K) / 1,750 lm (3,000 K) / 2,000 lm (4,000 K)
Dimming (Power control)	Control phase (50 % / 100 %) Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	– Optional
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N)	4 KV 6 KV
INSTALLATION SUGGESTIONS	
Application areas	Parks, plazas, roads in residential areas, pedestrian zones
Installation height	3 – 5 m
Lighting classes	ME / S / P
Admitted ambient temperature (ta)	-40 °C to +40 °C
OTHER PROPERTIES	
Certificate (Module)	CE  10  EMC

## Optics and light distributions



HELLUX



## CYLINDER LIGHTS

# 545 / 546

**Easy to maintain:** Can be opened tool-free with the cover at the top

**Sustainable:** Electrocomponents can be removed without the need of tools

### Other advantages:

- Symmetrical / asymmetrical light distribution

### Application areas:

- Roads in residential areas
- Secondary roads
- Plazas
- Walkways



EASY  
BASIC



BASIC+



SMART

## Technical specifications



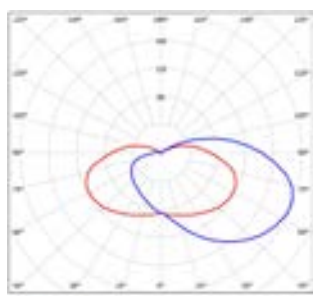
545



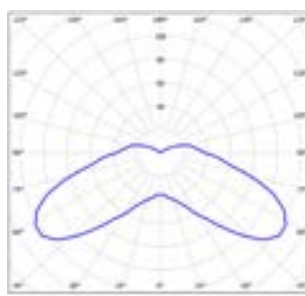
546

LIGHTING FIXTURES BODY	545		546	
	DIRECT DISTRIBUTION	OPEN DISTRIBUTION	DIRECT DISTRIBUTION	OPEN DISTRIBUTION
Material	Aluminum (roof) / aluminum die casting		Aluminum (roof) / aluminum die casting	
Coloring (powder coating)	RAL or DB		RAL or DB	
Mounting type	Top-mounted (Ø 76 mm)		Top-mounted (Ø 76 mm)	
Orientation possibilities	–		–	
Dimensions (height x diameter)	555 mm x Ø 650 mm		605 mm x Ø 650 mm	
Weight	approx. 12 kg		approx. 12.1 kg	
Area exposed to wind	0.15 m²		0.15 m²	
IP Protection class	IP65		IP65	
Glass type	PMMA (smooth clear)	PMMA (opal)	PMMA (smooth clear)	PMMA (opal)
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	LED modules with high-power LEDs (Zhaga board)	LED modules with mid-power LEDs (TLS modul)	LED modules with high-power LEDs (Zhaga board)	LED modules with mid-power LEDs (TLS modul)
Optical system	Asymmetric wide beam / rotational symmetric	open distribution	Asymmetric wide beam / rotational symmetric	open distribution
Rated luminous flux	1,000–3,500 lm (250 lm steps)	2,250 / 3,250 lm (3.000 K) 2,500 / 3,500 lm (4.000 K)	1,000–3,500 lm (250 lm steps)	2,250 / 3,250 lm (3.000 K) 2,500 / 3,500 lm (4.000 K)
Dimming (Power control)	Optional control phase (50 % / 100 %), Dimmer profile or DALI		Optional control phase (50 % / 100 %), Dimmer profile or DALI	
Temperature management	✓		✓	
Constant Light Output (CLO)	Optional		Optional	
ELECTRICAL PROPERTIES				
Protection class	Class I / II		Class I / II	
Rated voltage / operating voltage	220 – 240 V/ 50 – 60 Hz		220 – 240 V/ 50 – 60 Hz	
Surge protection	10 kV		10 kV	
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, parking facilities/ walkways, parking areas, secondary roads		Roads in residential areas, parking facilities/ walkways, parking areas, secondary roads	
Installation height	3 – 5 m		3 – 5 m	
Lighting classes	M / S	S	M / S	S
Admitted ambient temperature (ta)	-25 °C to +35 °C		-25 °C to +35 °C	
OTHER PROPERTIES				
Certificate	CE		CE	

## Optics and light distributions for all variants



Asymmetric wide beam



symmetrical



HELLUX



EASY  
BASIC



BASIC+



SMART

# CYLINDER LIGHTS

## SHADE

97

CYLINDER LIGHTS

Modular LED system with integrated electronics

Maintenance-optimized design

Luminous flux over lifetime 80% after 100,000 operating hours

Symmetrical / asymmetrical light distribution

Fully pre-assembled with connection cable and Eco Circle module

### Other advantages:

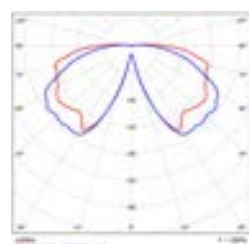
- Average lifetime: 100,000 operating hours
- Replacement part availability of at least 20 years
- Integrated overheating protection
- Development and production in Germany

### Application areas:

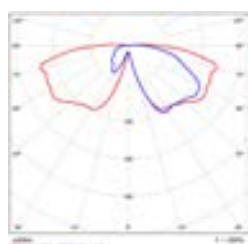
- Parks
- Plazas
- Roads in residential areas
- Pedestrian zones

### ● ● ● Technical specifications

SHADE	
LIGHTING FIXTURES BODY	BASIC BASIC+ / SMART
Material	Luminaire base made of die-cast aluminum, aluminum housing stanchion, aluminum shade and cover, cover lens made of PMMA
Coloring (powder coating)	DB703
Mounting type	76 mm spigot size
Dimensions (height x diameter)	650 mm x Ø 425 mm
Weight	8.5 kg
IP Protection class	IP65
Glass type	PMMA
PHOTOMETRIC PROPERTIES	
Light source type	Circle module with high-power LEDs
Optical system	Rectangular symmetrical or rectangular asymmetrical
Rated luminous flux	1,500 lm (2,200 / 2,700 K) 1,750 lm (3,000 K) 2,000 lm (4,000 K)
Dimming (Power control)	Control phase (50 % / 100 %)
Temperature management	✓
Constant Light Output (CLO)	– Optional
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N)	4 kV 10 kV
INSTALLATION SUGGESTIONS	
Application areas	Parks, plazas, roads in residential areas, pedestrian zones
Installation height	3 – 5 m
Lighting classes	S / P
Admitted ambient temperature (ta)	-40 °C to +40 °C
OTHER PROPERTIES	
Certificate (Module)	CE 10 DE EMC



symmetrical



asymmetrical

### ● ● ● Optics and light distributions











## SPHERE LIGHTS **MOON**

Modular LED system with integrated electronics

Technology guarantee

Adapted to lighting classes S6 to S5

Luminous flux over lifetime 80% after 100,000 operating hours

Optionally with clear or white matt luminaire sphere

### Other advantages:

- Average lifetime: 100,000 operating hours
- Replacement part availability of at least 20 years
- Modular light distribution
- Fully preassembled with connection cable and module
- Integrated overheating protection
- Maintenance-optimized design

### Application areas:

- Parks
- Plazas
- Roads in residential areas
- Pedestrian zones



BASIC







BASIC+



SMART



## Technical specifications

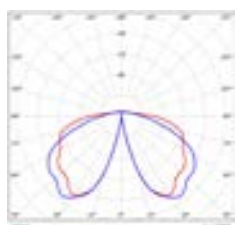
LIGHTING FIXTURES BODY		MOON	
	BASIC	BASIC+ / SMART	
Material	Luminaire sphere made of PC (clear or matt), mast base made of PC		
Coloring (mast foot)	RAL 9005 (black)		
Mounting type	60 / 76 mm spigot size		
Orientation possibilities	-		
Dimension	Sphere diameter: 400 / 450 / 500 mm		
Weight	3.5 – 4 kg		
IP Protection class	IP67		
Glass type	PC (clear or frosted)		
Shock resistance / impact resistance	IK08		
PHOTOMETRIC PROPERTIES			
Light source type	Circle module with high-power LEDs		
Optical system	Rectangular symmetrical or rectangular asymmetrical		
Rated luminous flux	1,750 lm (2,200 K / 2,700 K) / 2,000 lm (3,000 K) / 2,250 lm (4,000 K)	1,000 – 2,250 lm (2,200 K) 1,500 – 3,250 lm (3,000 K) 1,500 – 3,500 lm (4,000 K)	
Dimming (Power control)	Control phase (50 % / 100 %)	Optional control phase (50 % / 100 %), dimmer profile or DALI	
Temperature management	✓		
Constant Light Output (CLO)	-	Optional	
ELECTRICAL PROPERTIES			
Protection class	Protection Class II		
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz		
Surge protection (L-N)	4 KV	10 KV	
INSTALLATION SUGGESTIONS			
Application areas	Parks, plazas, roads in residential areas, pedestrian zones		
Installation height	3 – 5 m		
Lighting classes	S / P		
Admitted ambient temperature (ta)	-40 °C to +40 °C		
OTHER PROPERTIES			
Certificate (Module)	  10  		



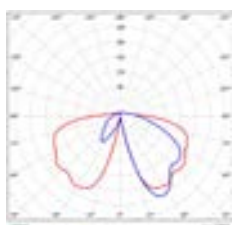
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CLEAR

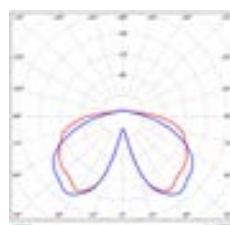
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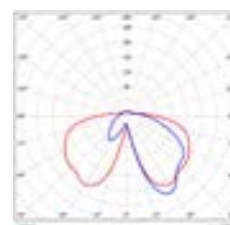
symmetrical



asymmetrical



symmetrical



asymmetrical

## Optics and light distributions



HELLUX



## SPHERE LIGHTS

# 240 / 241-7

**Holistic:** Unified design of the product family for your various applications

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 85.000 h

**Economical:** Equipment of the proven lighting fixtures body with the latest LED technology

### Other advantages:

- Timeless: A clear design concept underscores both modern and historical architecture
- Versatile: Suitable for technical and decorative lighting

### Application areas:

- Roads in residential areas
- Plazas
- Parking areas
- Secondary roads



EASY  
BASIC



BASIC



BASIC+



SMART

## Technical specifications



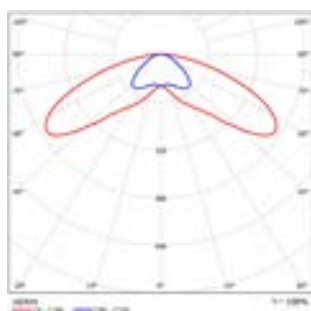
240



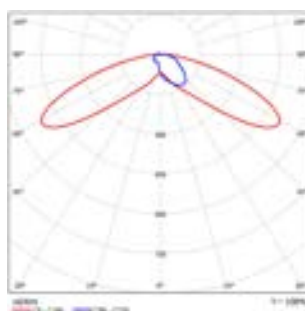
241-7

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	Aluminum die casting
Coloring (powder coating)	RAL or DB	RAL or DB
Mounting type	Rope mounting / tapered mounting (K-G ½)	Rope mounting / tapered mounting (K-G ½)
Orientation possibilities	–	–
Dimensions (height x diameter)	390 x Ø 395 mm	500 x Ø 560 mm
Weight	8.5 kg	10 kg
Area exposed to wind	0.13 m²	0.196 m²
IP Protection class	IP65	IP65
Glass type	PMMA (smooth clear)	PMMA (smooth clear)
Shock resistance / impact resistance	IK08	IK08
PHOTOMETRIC PROPERTIES		
Light source type	LED modules with high-power LEDs	LED modules with high-power LEDs
Optical system	Asymmetrical wide beam or asymmetrical forward beam	Asymmetrical wide beam or asymmetrical forward beam
Rated luminous flux	1,000 – 2,500 lm (250 lm steps)	2x (1,000 – 2,500) lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓	✓
Constant Light Output (CLO)	Optional	Optional
ELECTRICAL PROPERTIES		
Protection class	Protection Class I / II	Protection Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L N ground)	6 / 8 kV	6 / 8 kV
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, plazas, parking areas, secondary roads	Roads in residential areas, plazas, parking areas, secondary roads
Installation height	3 – 5 m	5 – 8 m
Lighting classes	M / S	M / S
Admitted ambient temperature (ta)	-25 °C to +35 °C	-25 °C to +35 °C
OTHER PROPERTIES		
Certificate	CE	CE
OPTIONS		
Optional surge protection	10 kV	10 kV

## Optics and light distributions for all variants



Wide beam



Asymmetric wide beam

HELLUX



## MUSHROOM LIGHTS

# MUSHROOM 401-5

**Economical:** Conversion of the proven lighting fixtures body with the latest LED technology

**Easy to maintain:** Can be opened tool-free upwards with the roof retaining screw

**Flexible:** Variable application possibilities due to diffuse or clear glass

**Sustainable:** Replacement part availability of at least 20 years (circle module)

### Application areas:

- Roads in residential areas
- Secondary roads
- Plazas
- Walkways
- Parks
- Pedestrian zones



EASY  
BASIC



BASIC



BASIC+



SMART



## Technical specifications



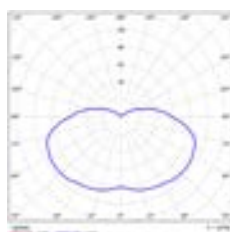
MUSHROOM 401-5



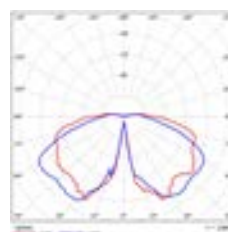
MUSHROOM 401-5 CM

LIGHTING FIXTURES BODY		DIRECT DISTRIBUTION		OPEN DISTRIBUTION	BASIC		BASIC+ / SMART	
Material		Aluminum die-cast (top section) / aluminum (roof)			Aluminum die-cast (top section) / aluminum (roof)			
Coloring (powder coating)		RAL or DB			RAL or DB			
Mounting type		Top-mounted			Top-mounted Ø 76 mm			
Orientation possibilities		-			-			
Dimensions (height x diameter)		535 x Ø 640 mm			535 x Ø 640 mm			
Weight		8 kg			7.5 kg			
Area exposed to wind		0.14 m²			0.14 m²			
IP Protection class		IP54			IP54			
Glass type		PMMA (smooth clear)	PMMA (diffuse)		PMMA (smooth clear)			
Shock resistance / impact resistance		IK08			IK08			
PHOTOMETRIC PROPERTIES								
Light source type		LED modules with high-power LEDs			Circle module with high-power LEDs			
Optical system		Asymmetric wide beam or rotational symmetric (Zhaga board)		open distribution (TLS modul)	Rectangular symmetrical or rectangular asymmetric			
Rated luminous flux		1,000 – 3,500 lm (250 lm steps)		2,250 / 3,250 lm (3,000 K) 2,500 / 3,500 lm (4,000 K)	1,500 lm (2,200 / 2,700 K) / 2,000 lm (3,000 K) / 2,250 lm (4,000 K)		1,000 – 2,000 lm (2,200 K) 1,500 – 2,750 lm (3,000 K) 1,500 – 3,250 lm (4,000 K)	
Dimming (Power control)		Optional control phase (50 % / 100 %), dimmer profile or DALI			Control phase (50 % / 100 %)		Optional control phase (50 % / 100 %), dimmer profile or DALI	
Temperature management		✓			✓			
Constant Light Output (CLO)		Optional			-		Optional	
ELECTRICAL PROPERTIES								
Protection class		Protection Class I / II			Protection Class II			
Operating voltage / frequency		220 – 240 V / 50 – 60 Hz			220 – 240 V / 50 – 60 Hz			
Surge protection		10 KV			4 KV		10 KV	
INSTALLATION SUGGESTIONS								
Application areas		Roads in residential areas, parking facilities / walkways, parking areas, secondary roads			Roads in residential areas, parking facilities / walkways, parking areas, secondary roads			
Installation height		3 – 5 m			3 – 5 m			
Lighting classes		ME / S		S	ME / S / P			
Admitted ambient temperature (ta)		-25 °C to +35 °C			-40 °C to +40 °C			
OTHER PROPERTIES								
Certificate		CE			CE ENEC 10 DVE EMC			

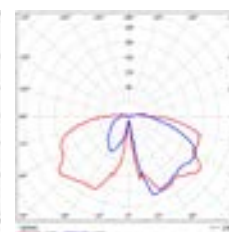
## Optics and light distributions



Open distribution



symmetrical



asymmetrical

HELLUX



# MUSHROOM LIGHTS

## KONUS 740

107

MUSHROOM LIGHTS

**Unique:** protected design!

**Awarded:** Red Dot Design Award

**Representative:** Particularly suitable for prestigious architectural environments

**Quality “Made in Germany”:** High quality materials, high-end finishing

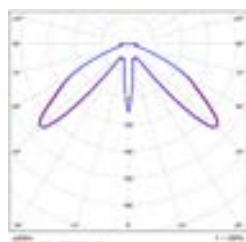
### Application areas:

- Plazas
- Parking facilities
- Walkways
- Pedestrian zones

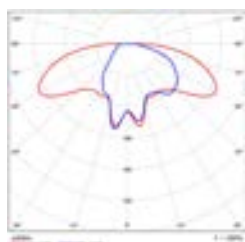
### ● ● ● Technical specifications

KONUS 740		
LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	RAL or DB	
Mounting type	Top-mounted (120 or 76 mm)	
Dimensions (height x diameter)	696 x Ø 512 mm	
Weight	approx. 9.5 kg	
Area exposed to wind	0.25 m²	
IP Protection class	IP65 (light head), IP54 (electrical unit)	
Glass type	PMMA (smooth clear)	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	COB LED module	
Optical system	Asymmetrical light distribution	Rotationally-symmetrical light distribution
Rated luminous flux	1,000 – 2,000 lm	
ELECTRICAL PROPERTIES		
Protection class	Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection (L-N / L N ground)	2 kV	
INSTALLATION SUGGESTIONS		
Application areas	Pedestrian zones, parking facilities, walkways, plazas	
Installation height	3 – 5 m	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate	CE	
OPTIONS		
Adapter at Ø 60 mm	✓	

### ● ● ● Optics and light distributions



Indirect open illumination



Asymmetric wide beam



HELLUX



**Low-glare:** Reduce glare by fine-textured glass

**Easy to maintain:** Can be opened without tools with the roof locking screw

**Reliable:** Lifetime of the LED driver and LED module at 85,000 h

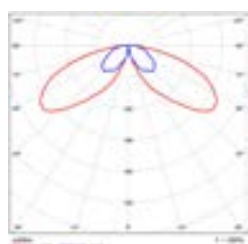
#### Application areas:

- Roads in residential areas
- Plazas
- Parks and walkways

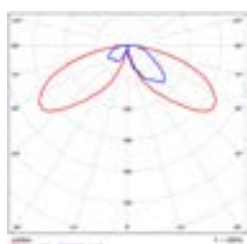
#### ● ● ● Technical specifications

417-2	
LIGHTING FIXTURES BODY	
Material	Aluminum (roof) / aluminum die casting (attachment)
Coloring (powder coating)	RAL or DB
Mounting type	Top-mounted (Ø 76 mm)
Dimensions (height x diameter)	380 x Ø 610 mm
Weight	approx. 7 kg
Area exposed to wind	0.136 m <sup>2</sup>
IP Protection class	IP65
Glass type	PC
Shock resistance / impact resistance	IK08
PHOTOMETRIC PROPERTIES	
Light source type	LED modules with high-power LEDs
Optical system	Asymmetrical wide and free-radiant light distribution (Zhaga board)
Rated luminous flux	1,000–3,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %) dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection	10 kV
INSTALLATION SUGGESTIONS	
Application areas	Roads in residential areas, squares, parking facilities and paths
Installation height	3 – 5 m
Lighting classes	ME / S
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE

#### ● ● ● Optics and light distributions



symmetrical

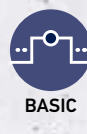


Asymmetric wide beam

HELLUX



EASY  
BASIC



BASIC



BASIC+



SMART



**Economical:** Equipment of the proven lighting fixtures body with the latest LED technology

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 85.000 h

**Individually:** Mounting on different decorative mast extensions

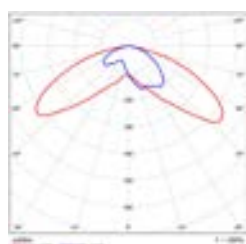
#### Application areas:

- Roads in residential areas
- Bikeways
- Plazas
- Parks and walkways

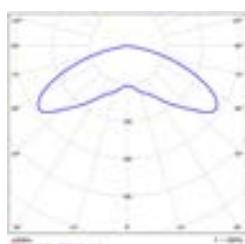
#### ● ● ● Technical specifications

CLASSICA 028		
LIGHTING FIXTURES BODY		
Material	Aluminum	
Coloring (powder coating)	RAL or DB	
Mounting type	Tapered mounting (K-G ½)	
Orientation possibilities	–	
Dimensions (height x diameter)	450 x Ø 550 mm	
Weight	approx. 6 kg	
Area exposed to wind	0.093 m²	
IP Protection class	IP55	
Glass type	PMMA (smooth clear)	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	LED modules with high-power LEDs	
Optical system	Asymmetrical wide beam	Wide beam
Rated luminous flux	1,000 – 3,000 lm (250 lm steps)	
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Protection Class I or Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection	10 kV	
INSTALLATION SUGGESTIONS		
Application areas	Roads in residential areas, bikeways, plazas	
Installation height	3 – 5 m	
Lighting classes	ME / S	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate	CE	

#### ● ● ● Optics and light distributions



Asymmetric wide beam



Wide beam

HELLUX



**Economical:** Equipment of the proven lighting fixtures body with the latest LED technology

**Sustainable:** Tool-free change of electronic and LED modules

**Reliable:** Lifetime of the LED driver and LED modules at 85.000 h

**Timeless:** Decorative skylight with modern lighting technology (032 and 033 only)



## Application areas:

- Roads in residential areas
- Plazas
- Bikeways
- Secondary roads






# SHADED LIGHTING

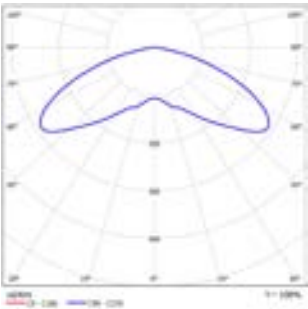
## 03X

### Technical specifications

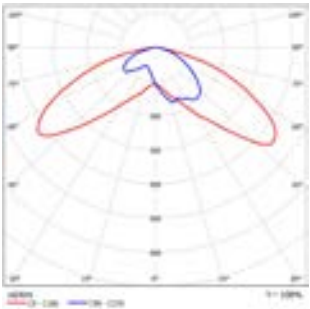


LIGHTING FIXTURES BODY				
Material	Aluminum die casting (dome) / aluminum (shade)			
Coloring (powder coating)	RAL or DB			
Mounting type	Tapered mounting [K-G ¾]			
Orientation possibilities	-			
Dimensions (height x diameter)	520 x Ø 530 mm		520 x Ø 590 mm	
Weight	approx. 5.5 kg			
Area exposed to wind	0.11 m²			
IP Protection class	IP54			
Glass type	PMMA (smooth clear)			
Shock resistance / impact resistance	IK08			
PHOTOMETRIC PROPERTIES				
Light source type	LED modules with high-power LEDs			
Optical system	Asymmetrical wide beam	Wide beam	Asymmetrical wide beam	Wide beam
Rated luminous flux	1,000 – 3,000 lm (250 lm steps)			
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI			
Temperature management	✓			
Constant Light Output (CLO)	Optional			
ELECTRICAL PROPERTY				
Protection class	Protection Class I / II			
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz			
Surge protection (L-N / L N ground)	6 / 8 kV			
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, plazas, bikeways			
Installation height	3 – 5 m			
Lighting classes	ME / S			
Admitted ambient temperature (ta)	-25 °C to +35 °C			
OTHER PROPERTIES				
Certificate				
OPTIONS				
Optional surge protection	10 kV			

### Optics and light distributions for all variants



Wide beam

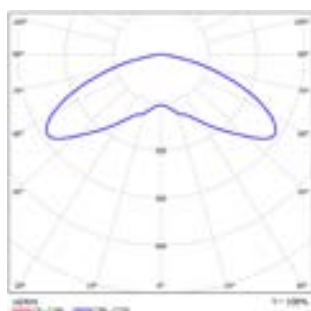


Asymmetric wide beam

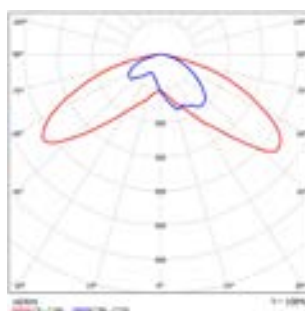


LIGHTING FIXTURES BODY	
Material	Aluminum die casting (dome) / aluminum (shade)
Coloring (powder coating)	RAL or DB
Mounting type	Tapered mounting (K-G ½)
Orientation possibilities	–
Dimensions (height x diameter)	770 x Ø 750 mm
Weight	approx. 10 kg
Area exposed to wind	0.195 m²
IP Protection class	IP54
Glass type	PMMA (smooth clear)
Shock resistance / impact resistance	IK08
PHOTOMETRIC PROPERTIES	
Light source type	LED modules with high-power LEDs
Optical system	Asymmetrical wide beam or wide beam
Rated luminous flux	1,000–3,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTY	
Protection class	Protection Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection	10 kV
INSTALLATION SUGGESTIONS	
Application areas	Roads in residential areas, bikeways, plazas
Installation height	3 – 5 m
Lighting classes	M / S
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE

- ● ● Optics and light distributions for all variants



Wide beam



Asymmetric wide beam

HELLUX



HISTORICAL LIGHTING

## SCHINKEL LANTERN 465

**True to detail:** Historic lamp with the latest LED technology

**Flexible:** State-of-the-art lighting solutions make it versatile

**Easy to maintain:** low to no maintenance required

**Application areas:**

- Roads in residential areas
- Historical places
- Parking facilities



EASY  
BASIC



BASIC



BASIC+



SMART





HELLUX



HISTORICAL LIGHTING

## ALT-BERLIN 9000

**True to detail:** Historic lamp with the latest LED technology

**Flexible:** State-of-the-art lighting solutions make it versatile

**Economical:** 90% energy saving compared to a conventional gas luminaire

**Easy to maintain:** Easy maintenance through top cap

**Application areas:**

- Roads in residential areas
- Secondary roads
- Historical places
- Parking facilities



EASY  
BASIC



BASIC



BASIC+



SMART



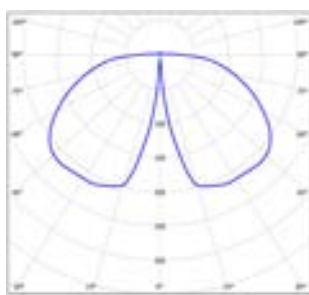
SMART+

## Technical specifications

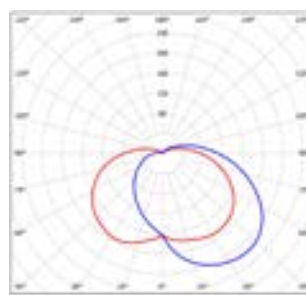
### ALT-BERLIN 9000

LIGHTING FIXTURES BODY		
Material	Cast aluminum (body), aluminum (roof)	
Coloring (powder coating)	RAL or DB	
Mounting type	Mast attachment (60 mm / 76 mm) with ladder (cast mast)	
Dimensions (height x diameter)	840 x Ø 417 mm	
Weight	approx. 14 kg	
Area exposed to wind	0.385 m²	
IP Protection class	IP54	
Glass type	PC (smooth clear or textured)	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	Gas-fueled imitation with mid-power LEDs	LED modules with high-power LEDs
Optical system	Rotational symmetric	Asymmetric wide beam
Rated luminous flux	900 – 2,500 lm (250 lm steps)	1,000 – 3,000 lm (250 lm steps)
Dimming (Power control)	–	Optional control phase (50 % / 100 %), Dimmer profile or DALI
Temperature management	–	✓
Constant Light Output (CLO)	–	Optional
ELECTRICAL PROPERTIES		
Protection class	Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection (L-N / L N ground)	6 / 8 kV	
INSTALLATION SUGGESTIONS		
Application areas	Residential area roads and secondary roads, historic sites, parking facilities	
Installation height	2.8 – 4 m	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate	CE	

## Optics and light distributions



symmetrical



Asymmetric wide beam



HELLUX



**True to detail:** Reproduction of the old incandescent gas mantle lighting with the latest LED technology

**Economical:** 90% energy saving compared to a conventional gas luminaire

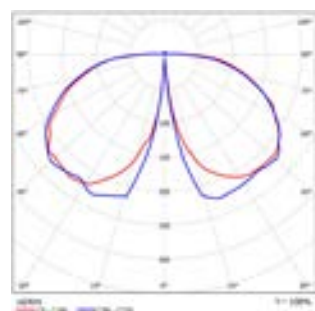
**Service-friendly:** low to no maintenance

#### Application areas:

- Roads in residential areas
- Historical places

#### ● ● ● Technical specifications

LED GAS LIGHTING 9650	
LIGHTING FIXTURES BODY	
Material	Aluminum, hot-dip galvanized steel, stainless steel
Coloring (powder coating)	RAL or DB
Mounting type	Top-mounted (76 mm)
Dimensions (height x diameter)	840 x Ø 420 mm
Weight	approx. 8.5 kg
Area exposed to wind	0.13 m²
IP Protection class	IP54 / IP65 (LED unit)
Glass type	Real glass
PHOTOMETRIC PROPERTIES	
Light source type	Gas-fueled imitation with mid-power LEDs
Optical system	Symmetrical light distribution
Rated luminous flux	900 – 2,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L/N ground)	6 kV
INSTALLATION SUGGESTIONS	
Application areas	Roads in residential areas, historic sites
Installation height	2.5 – 4 m
Lighting classes	S
Admitted ambient temperature (ta)	-25 °C to +25 °C
OTHER PROPERTIES	
Certificate	CE
OPTIONS	
Optional surge protection	10 kV



100% 100%

HELLUX





**True to detail:** Historic lamp with the latest LED technology

**Easy to maintain:** Little to no maintenance required



#### Other advantages:

- Luminaire series in four sizes
- Luminaire cover folds up
- Symmetrical or asymmetrical light distribution

#### Application areas:

- Roads in residential areas
- Historical places
- Parking facilities



HISTORICAL LIGHTING

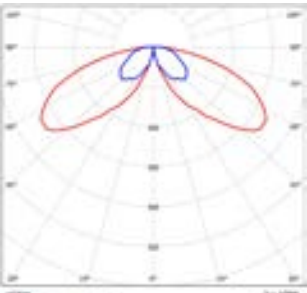
45X

●●●● Technical specifications

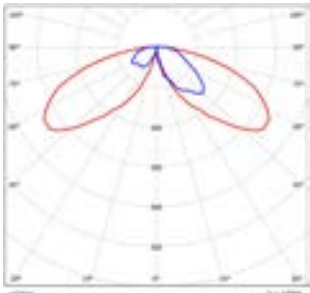


LIGHTING FIXTURES BODY				
Material	Aluminum and cast aluminum		Aluminum and cast aluminum	
Coloring (powder coating)	RAL or DB		RAL or DB	
Mounting type	Top-mounted (Ø 76 mm) / antique cast mast		Top-mounted (Ø 76 mm) / antique cast mast	
Orientation possibilities	–		–	
Dimensions (length x width x height)	450 x 450 x 620 mm		450 x 450 x 710 mm	
Weight	approx. 10 kg		approx. 10 kg	
Area exposed to wind	0.22 m²		0.22 m²	
IP Protection class	IP54		IP54	
Glass type	PMMA (smooth clear / textured / opal)		PMMA (smooth clear / textured / opal)	
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	Gas-fueled imitation with mid-power LEDs	LED modules with high-power LEDs	Incandescent mantle light imitation with mid-power LEDs	LED modules with high-power LEDs
Optical system	Rotational symmetric	Asymmetrical wide beam	Rotational symmetric	Asymmetrical wide beam
Rated luminous flux	1,000 – 2,500 lm (250 lm steps)	1,000 – 3,500 lm (250 lm steps)	1,000 – 2,500 lm (250 lm steps)	1,000 – 3,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), Dimmer profile or DALI		Optional control phase (50 % / 100 %), Dimmer profile or DALI	
Temperature management	✓		✓	
Constant Light Output (CLO)	✓		✓	
ELECTRICAL PROPERTIES				
Protection class	Class I / II		Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz		220 – 240 V / 50 – 60 Hz	
Surge protection	10 kV		10 kV	
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, historical sites, parking facilities		Roads in residential areas, historical sites, parking facilities	
Installation height	3 – 5 m		3 – 5 m	
Lighting classes	S		S	
Admitted ambient temperature (ta)	-25 °C to +35 °C		-25 °C to +35 °C	
OTHER PROPERTIES				
Certificate	CE		CE	

●●●● Optics and light distributions for all variants



symmetrical



Asymmetrical wide beam



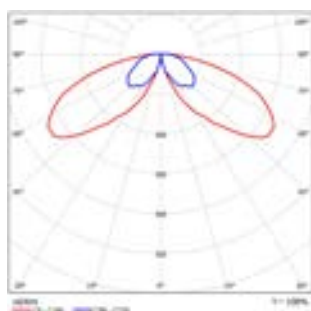
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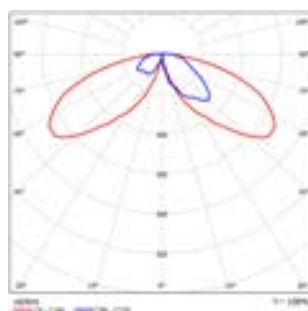
456

LIGHTING FIXTURES BODY				
Material	Aluminum		Aluminum	
Coloring (powder coating)	RAL or DB		RAL or DB	
Mounting type	Top-mounted (Ø 76 mm) / antique cast mast		Top-mounted (Ø 76 mm) / antique cast mast	
Orientation possibilities	-		-	
Dimensions (length x width x height)	450 x 450 x 970 mm		450 x 450 x 795 mm	
Weight	approx. 10 kg		approx. 10 kg	
Area exposed to wind	0.22 m²		0.22 m²	
IP Protection class	IP54		IP54	
Glass type	PMMA (smooth clear / textured / opal)		PMMA (smooth clear / textured / opal)	
Shock resistance / impact resistance	IK08		IK08	
PHOTOMETRIC PROPERTIES				
Light source type	Incandescent mantle light imitation with mid-power LEDs	LED modules with high-power LEDs	Incandescent mantle light imitation with mid-power LEDs	LED modules with high-power LEDs
Optical system	Rotational symmetric	Asymmetrical wide beam	Rotational symmetric	Asymmetrical wide beam
Rated luminous flux	1,000 – 2,500 lm (250 lm steps)	1,000 – 3,500 lm (250 lm steps)	1,000 – 2,500 lm (250 lm steps)	1,000 – 3,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), Dimmer profile or DALI		Optional control phase (50 % / 100 %), Dimmer profile or DALI	
Temperature management	✓		✓	
Constant Light Output (CLO)	Optional		Optional	
ELECTRICAL PROPERTIES				
Protection class	Class I / II		Class I / II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz		220 – 240 V / 50 – 60 Hz	
Surge protection	10 kV		10 kV	
INSTALLATION SUGGESTIONS				
Application areas	Roads in residential areas, historical sites, parking facilities		Roads in residential areas, historical sites, parking facilities	
Installation height	3 – 5 m		3 – 5 m	
Lighting classes	S		S	
Admitted ambient temperature (ta)	-25 °C to +35 °C		-25 °C to +35 °C	
OTHER PROPERTIES				
Certificate	CE		CE	

- ● ● Optics and light distributions for all variants



symmetrical



Asymmetric wide beam





## BOLLARD MAST LIGHTS CUBELINE

**Innovative:** Modular LED system with integrated electronics

**Flexible:** Intelligent interface control possible

**Safe investment:** Sustainable concept with technology guarantee

**Durable:** Luminous flux over lifetime 80% after 100,000 operating hours

**Sustainable:** Replacement part availability of at least 20 years

### Other advantages:

- Equipment with Eco LED modules
- Aligned to light classes S5 to S2 and ME6 to ME4
- Completely preassembled with connection cables and modules
- Development and production in Germany

### Application areas:

- Parks
- Plazas



BASIC



BASIC+



SMART

## Technical specifications



CUBELINE PARK



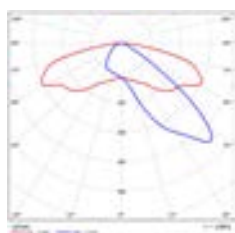
CUBELINE PARK²

LIGHTING FIXTURES BODY		
Material	Extruded aluminum profile	
Coloring (powder coating)	RAL or DB 703	
Mounting type	Mounting with flange plate	
Orientation possibilities	-	
IP Protection class	IP67 / IP69 K	
Glass type	PMMA	
Shock resistance / impact resistance	IK04 / IK05 / IK08	
PHOTOMETRIC PROPERTIES		
Light source type	1 luminaire head with one Eco module	2 luminaire heads with one Eco module each
Optical system	PMMA individual optics	
Rated luminous flux	600 / 800 / 1,250 / 1,700 / 2,500 / 3,000 / 3,500 / 4,000 / 4,500 / 5,000 lm	1,200 / 1,600 / 2,500 / 3,400 / 5,000 / 6,000 / 7,000 / 8,000 / 9,000 / 10,000 lm
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile, 1 – 10 Volt or DALI	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz	
Surge protection (L-N)	6 kV / 10 KV	
INSTALLATION SUGGESTIONS		
Application areas	Parks, plazas	
Installation height	4 – 5 m	
Lighting classes	S	
Admitted ambient temperature (ta)	-40 °C to +40 °C	
OTHER PROPERTIES		
Certificate	   	

## Optics and light distributions

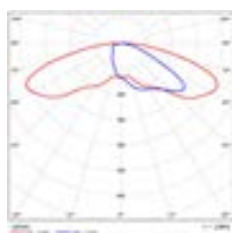
Example light distribution 2,500 lm  
installation height: 5 m

**M** Streets in the  
ME lighting classes



asymmetrical

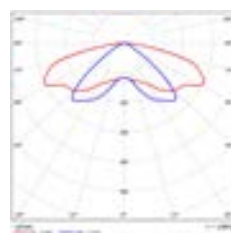
**S** Streets in the  
S lighting classes



asymmetrical

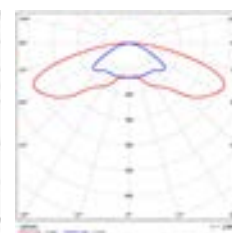
Sample light distribution 5,000 lm  
installation height: 5 m

**M** Streets in the  
ME lighting classes



symmetrical

**S** Streets in the  
S lighting classes



symmetrical

HELLUX





# BOLLARD MAST LIGHTS

## COLOGNE 606

129

BOLLARD MAST LIGHTS

**Variable:** The height of the light column and the light exit surface can be adjusted as required

**Scalable:** Light exit surfaces can also be switched individually

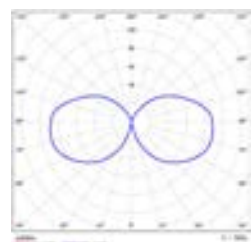
**Modern:** The modern design fits perfectly into modern architectural environments

### Application areas:

- Plazas
- Pedestrian zones
- Parking facilities
- Walkways

### ● ● ● Technical specifications

COLOGNE 606		
LIGHTING FIXTURES BODY		
Material	Aluminum	
Coloring (powder coating)	RAL or DB	
Mounting type	Mounted with flange plate or a ground element	
Orientation possibilities	-	
Dimensions (height above ground x diameter)	4,500 x Ø 230 mm	
Weight	about 9.5 kg/ m	
Area exposed to wind	0.23 m²/ m	
IP Protection class	IP54	
Glass type	PMMA (clear or diffuse)	
Shock resistance / impact resistance	IK08	
PHOTOMETRIC PROPERTIES		
Light source type	High-power LED	COB LED module
Optical system	Asymmetrical, rotational symmetric	open distribution
Rated luminous flux	1,000 – 3,500 lm (250 lm steps)	
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI	
Temperature management	✓	
Constant Light Output (CLO)	Optional	
ELECTRICAL PROPERTIES		
Protection class	Protection Class I / II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz	
Surge protection (L-N / L/N ground)	6 / 8 kV	
INSTALLATION SUGGESTIONS		
Application areas	Plazas, walkways, pedestrian zones	
Installation height	3 – 8 m	
Lighting classes	-	
Admitted ambient temperature (ta)	-25 °C to +35 °C	
OTHER PROPERTIES		
Certificate	CE	
OPTIONS		
Optional surge protection	10 kV	
Length adjustment on project basis	3,000 – 6,000 mm	



symmetrical

### ● ● ● Optics and light distributions









HELLUX



EASY  
BASIC



BASIC+



SMART

**Variable:** The height of the light column and the light exit surface can be adjusted as required

**Scalable:** Light exit surfaces can also be switched individually

**Modern:** The modern square design fits perfectly into modern architectural environments

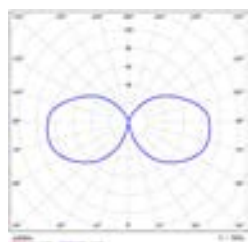
#### Application areas:

- Plazas
- Pedestrian zones
- Parking facilities
- Walkways

#### ● ● ● Technical specifications

HORIZONTE 7020	
LIGHTING FIXTURES BODY	
Material	Extruded aluminum profile
Coloring (powder coating)	RAL or DB
Mounting type	Flange plate (bottom plate)
Orientation possibilities	–
Dimensions (length x width x depth)	(1,200 – 4,000) x 140 x 140 mm
Weight	approx. 8 kg/ m
Area exposed to wind	0.14 m <sup>2</sup> / m
IP Protection class	IP44
Glass type	PMMA (clear or diffuse)
Shock resistance / impact resistance	–
PHOTOMETRIC PROPERTIES	
Light source type	LED modules with high-power LEDs
Optical system	Symmetrical or asymmetrical light distribution
Rated luminous flux	1,000 – 6,500 lm (250 lm steps)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz
Surge protection (L-N / L N ground)	6 / 8 kV
INSTALLATION SUGGESTIONS	
Application areas	Plazas, pedestrian zones, parking facilities, walkways
Installation height	1 – 6 m
Lighting classes	–
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE
OPTIONS	
Length adjustment on project basis	1,000 – 6,000 mm

#### ● ● ● Optics and light distributions



symmetrical

HELLUX



EASY  
BASIC



BASIC+



SMART



# BOLLARD MAST LIGHTS

## POLLER 7030

135

BOLLARD MAST LIGHTS

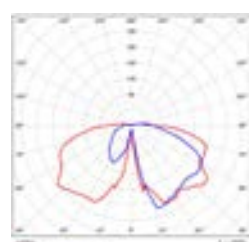
**Modern:** The design fits perfectly into modern environment

**Variable:** Height of light pillar and the light emission surface can be adapted to customer requirements

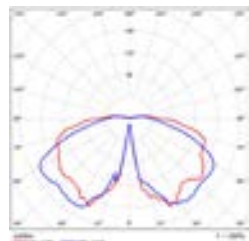
### Application areas:

- Plazas
- Pedestrian zones
- Parking facilities
- Walkways

### ● ● ● Technical specifications



asymmetrical rectangular



symmetrical rectangular

### POLLER 7030

LIGHTING FIXTURES BODY	
Material	Extruded aluminum profile
Coloring (powder coating)	RAL or DB
Mounting type	Flange plate (bottom plate)
Orientation possibilities	–
Dimensions (length x diameter)	1,100 mm x Ø 150 mm
Weight	approx. 8 kg/ m
Area exposed to wind	0.16 m <sup>2</sup> / m
IP Protection class	IP65
Glass type	PMMA (clear)
Shock resistance / impact resistance	IK08
PHOTOMETRIC PROPERTIES	
Light source type	Circle module with high-power LEDs
Optical system	Symmetrical or asymmetrical light distribution
Rated luminous flux	1,250 – 2,750 lm (3,000 K) 1,250 – 3,250 lm (4,000 K)
Dimming (Power control)	Optional control phase (50 % / 100 %), dimmer profile or DALI
Temperature management	✓
Constant Light Output (CLO)	Optional
ELECTRICAL PROPERTIES	
Protection class	Class II
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz
Surge protection (L-N / L/N ground)	6 kV
INSTALLATION SUGGESTIONS	
Application areas	Plazas, pedestrian zones, parking facilities, walkways
Installation height	1.1 m
Lighting classes	–
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	
OPTIONS	
Assembly by means of ground piece	Optional
Rear door possible on the back	300 x 100 mm
Special height	On request

HELLUX



# BANISTER HANDRAIL LIGHTING

## LED HANDRAIL 3001

137

HANDRAIL LIGHTING

**Variable:** Different lengths and diameters for special applications

**Secure:** Homogenous illumination of public areas

**Esthetic:** Modern design language is integrated into existing architecture

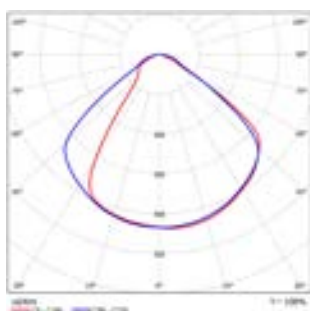
### Application areas:

- Stairs
- Bridges

### ● ● ● Technical specifications

LED HANDRAIL 3001	
LIGHTING FIXTURES BODY	
Material	Profile of polished stainless steel tube
Coloring (powder coating)	DB 703
Mounting type	Conditional mounting
Dimensions (length x diameter)	Project specific x Ø 48 mm / Ø 42 mm
Weight	approx. 3.5 kg/ m
IP Protection class	IP65 (LED module)
Glass type	PMMA
Shock resistance / impact resistance	IK10
PHOTOMETRIC PROPERTIES	
Light source type	LED module with low-power LEDs (1/2 Chip)
Optical system	Symmetrical and asymmetrical light distribution
Rated luminous flux	40 – 150 lm/ m
Dimming (Power control)	–
Temperature management	–
Constant Light Output (CLO)	–
ELECTRICAL PROPERTIES	
Protection class	Protection Class III
Rated voltage / operating voltage	24 V
INSTALLATION SUGGESTIONS	
Application areas	Stairs, bridges
Installation height	0.7 – 1 m
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE

### ● ● ● Optics and light distributions





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# CONVEX 3066

**Esthetic:** Rounded, convex shape integrates inconspicuously into existing architecture

**Variable:** Light output possible from two sides

**Flexible:** Mounting without visible mounting points

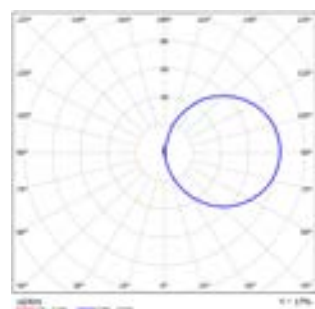
**Vandalism-proof:** Special design concept for high impact resistance

## Application areas:

- Bridges
- Stairs
- Parking facilities
- Walkways

## ● ● ● Technical specifications

CONVEX 3066	
LIGHTING FIXTURES BODY	
Material	Extruded aluminum profile
Coloring (powder coating)	RAL or DB
Mounting type	Between two railing struts (30 and 40 mm) (strut-free space 100 – 120 mm)
Dimensions (length x width x depth)	727 x 155 x 90 mm
Weight	approx. 4 kg
Area exposed to wind	0.1 m <sup>2</sup>
IP Protection class	IP65 (electrical unit)
Glass type	PC (opal)
Shock resistance / impact resistance	IK10
PHOTOMETRIC PROPERTIES	
Light source type	LED module with mid-power LEDs
Optical system	Asymmetrical light distribution
Rated luminous flux	350 – 1,000 lm
Dimming (Power control)	–
Temperature management	–
Constant Light Output (CLO)	–
ELECTRICAL PROPERTIES	
Protection class	Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection (L-N / L N ground)	6 kV
INSTALLATION SUGGESTIONS	
Application areas	Bridges, stairs, parking facilities, walkways
Installation height	0.5 – 1 m
Admitted ambient temperature (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	CE
OPTIONS	
2-sided light output	✓



## ● ● ● Optics and light distributions







HELLUX





## PEDESTRIAN CROSSING LIGHTS

**VGL 31-6 LED**

**Information and directional signs** for the lighting of pedestrian crossings according to DIN 67523

**Positive contrast** for better recognition of pedestrians

**Printed** in accordance with StVO 350

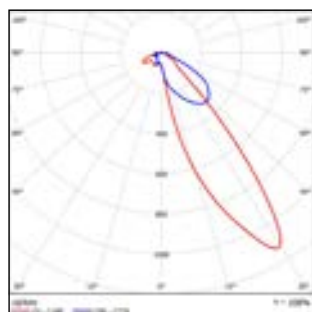
**Other advantages:**

- 5 to 6 m mast poles with circular curved brackets
- Road widths: up to 9 m

## ● ● ● Technical specifications

VGL 31-6 LED	
LIGHTING FIXTURES BODY	
Material	Aluminum
Coloring (powder coating)	RAL 7003
Mounting type	Mounting tabs
Dimensions (w x h x d)	770 x 890 x 300 mm
Weight	21.5 kg
Area exposed to wind	FW = 0.6 m <sup>2</sup>
IP Protection class	IP54
Glass type	PMMA
PHOTOMETRIC PROPERTIES	
Light source type	LED
Optical system	PMMA individual optics
Rated luminous flux	7,000 lm (amber) / 5,000 lm (4,000 / 5,000 K)
ELECTRICAL PROPERTIES	
Protection class	Protection Class I / II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Pedestrian crossings
Installation height	5 – 6 m
OTHER PROPERTIES	
Certificate	CE

## ● ● ● Optics and light distributions



## ● ● ● Version



Amber



Clear



# Railroad









## RAILROAD TRACK MAST LIGHTING

# BLOCK FORM LIGHTING 17X

Luminaire as double or single luminaire in two sizes

Tool-free light source lamp replacement

Tool-free disassembly of the E-block

Possibility of tool-free conversion of the light source

### Other advantages:

- Optimized silicone sealing
- Dirt-resistant shaping
- DB listed

### Application areas:

- Railroad track edges
- Railroad tracks
- Access roads




## Technical specifications



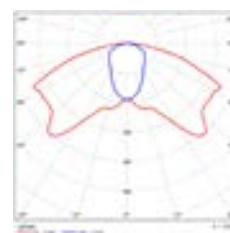
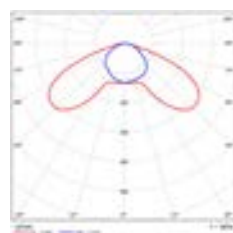
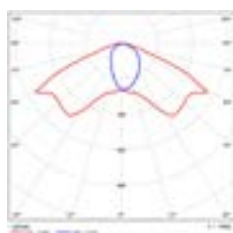
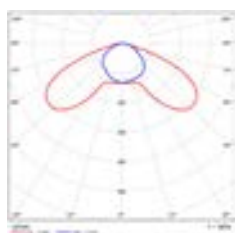
BLOCK FORM LIGHTING 171



BLOCK FORM LIGHTING 173

LIGHTING FIXTURES BODY		
Material	Aluminum	
Coloring (powder coating)	RAL or DB	
Mounting type	Mast attachment (Ø 76 or 60 mm), mast attachment (Ø 42 x 100 mm)	Top-mounted (Ø 76 mm)
Orientation possibilities	Basic inclination of 6°	Basic inclination of 0°
Dimensions (length x width x height)	570 x 275 x 150 mm	1.080 x 275 x 150 mm
Weight	approx. 8.5 kg	approx. 14 kg
IP Protection class	IP54	
Area exposed to wind	0.11 m²	0.22 m²
Glass type	Impact-resistant PMMA, clear flat	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	HS or HI light source	
Light technologies	Reflector	
Light distribution	Wide beam or asymmetrical beam light distribution	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	230 V / 50 Hz	
INSTALLATION SUGGESTIONS		
Application areas	Railroad track edges, access roads	Railroad tracks, access roads
Installation height	5 – 6 m	6 – 12 m
OTHER PROPERTIES		
Certificates	 	
OPTIONS		
Hanging light with cable mounting	✓	–
Wall bracket	Dual boom, triple boom	–
Reduction piece for mast attachment Ø 60 mm	–	✓
Railroad track reflector	✓	✓
Pedestrian crossing reflector	–	✓

## Optics and light distributions





## RAILROAD TRACK MAST LIGHTING

# BLOCK FORM LIGHTING 18X

Luminaire as double or single luminaire in two sizes

Tool-free light source lamp replacement

Tool-free disassembly of the E-block

Possibility of tool-free conversion of the light source

### Other advantages:

- Optimized silicone sealing
- Dirt-resistant shaping
- DB listed

### Application areas:

- Railroad track edges
- Railroad tracks
- Access roads



## Technical specifications



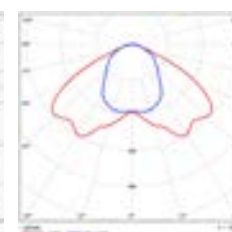
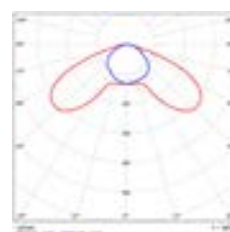
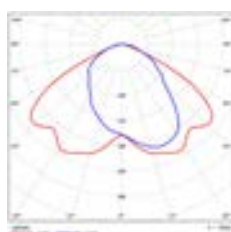
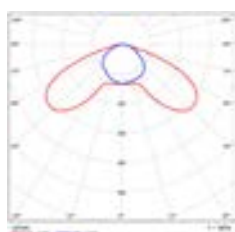
BLOCK FORM LIGHTING 181



BLOCK FORM LIGHTING 183-8

LIGHTING FIXTURES BODY		
Material	Aluminum	
Coloring (powder coating)	RAL or DB	
Mounting type	Top-mounted (Ø 76 mm)	
Orientation possibilities	Basic inclination of 6°	Basic inclination of 0°
Dimensions (length x width x height)	675 x 345 x 200 mm	1,320 x 345 x 200 mm
Weight	approx. 12.5 kg	approx. 22.5 kg
IP Protection class	IP54	
Area exposed to wind	0.196 m²	0.264 m²
Glass type	Impact-resistant PMMA, clear flat	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	HS or HI light source	
Light technologies	Reflector	
Light distribution	Wide beam or asymmetrical beam light distribution	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	230 V / 50 Hz	
INSTALLATION SUGGESTIONS		
Application areas	Railroad tracks, railroad track edges, access roads	Railroad tracks, access roads
Installation height	8 – 14 m	6 – 14 m
OTHER PROPERTIES		
Certificates	 	
OPTIONS		
Pedestrian crossing reflector	✓	✓
Hanging light with cable mounting	✓	–
Dual boom, triple boom	✓	–
Railroad track reflector	✓	✓
Emergency light	13 W (Dulux T/ E) or 60 W Halopin	13 W (Dulux T/ E) or 60 / 75 W Halopin
Reduction piece for mast attachment Ø 60 mm	✓	✓

## Optics and light distributions





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# QUANTUS DB LED

**DB listed:** It is geared to the requirements of Deutsche Bahn

**Increased reliability** due to separate circuits

**Physiologically:** Reduction of glare by using mid-power LEDs

**Reliable:** Best thermal management by large LED Modules

**Sustainable:** Low current supply and intelligent LED wiring

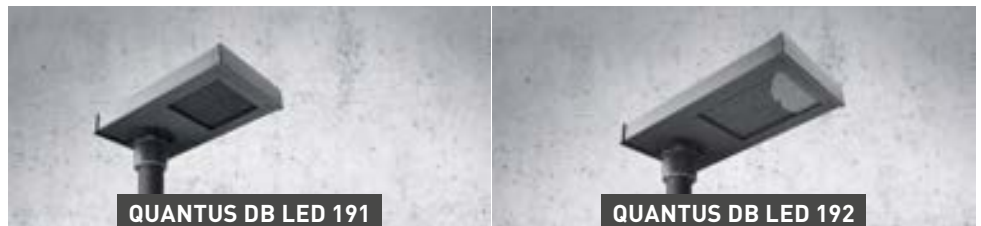




## Application areas:

- Railroad tracks
- Railroad track edges
- Walkways
- Platforms
- DB listed

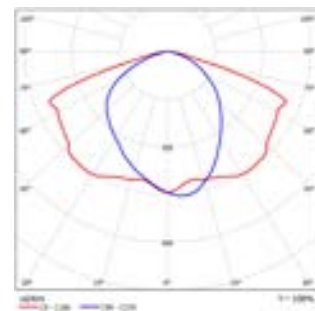
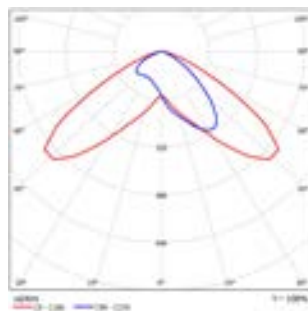
# QUANTUS DB LED

## Technical specifications



LIGHTING FIXTURES BODY		
Material	Extruded aluminum profile / die-cast aluminum	
Coloring (powder coating)	DB 703	
Mounting type	Side-mounted attachment (Ø 76 mm)	
Orientation possibilities	Basic inclination of 0°	
Dimensions (length x width x height)	520 x 306 x 72 mm	610 x 306 x 72 mm
Weight	approx. 8 kg	approx. 9 kg
Maximum area exposed to wind	0,19 m²	
IP Protection class	IP65	
Glass type	Impact-resistant PMMA	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	LED light engine with mid-power LEDs	
Optical system	Asymmetric wide beam light distribution	
Rated luminous flux	2,300 / 3,500 / 5,000 / 7,000 lm	9,775 – 11,000 lm
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	Protection Class II / Protection Class III (driver in the post)
Rated voltage / operating voltage	230 V	
Frequency	50 Hz	
Surge protection (L-N / LIN ground)	8 kV	4 kV
INSTALLATION SUGGESTIONS		
Application areas	Platforms	Railroad tracks, railroad track edges, walkways
Installation height	6 – 8 m	12 – 14 m
Admitted ambient temperature (ta)	-25 °C to +45 °C	
OTHER PROPERTIES		
Certificate	 	
OPTIONS		
Reduction piece to Ø 60 mm	✓	✓
Light shielding towards the back through shutter	✓	✓

## Optics and light distributions









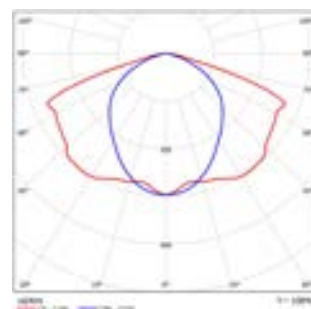
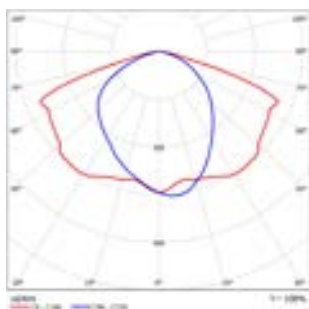
QUANTUS DB LED 192-1



QUANTUS DB LED 194

LIGHTING FIXTURES BODY		
Material	Extruded aluminum profile / die-cast aluminum	
Coloring (powder coating)	DB 703	
Mounting type	Side-mounted attachment (Ø 76 mm)	
Orientation possibilities	Basic inclination of 0°	
Dimensions (length x width x height)	1,010 x 306 x 72 mm	1,200 x 306 x 72 mm
Weight	approx. 11.5 kg	approx. 11.7 kg
Maximum area exposed to wind	0,31 m²	0,37 m²
IP Protection class	IP65	
Glass type	Impact-resistant PMMA	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	LED light engine with mid-power LEDs	
Optical system	Asymmetric wide beam light distribution	
Rated luminous flux	6,900 / 11,000 / 12,600 / 13,650 / 15,750 lm	2 x 9.775 lm / 2 x 11,000 lm
ELECTRICAL PROPERTIES		
Protection class	Protection Class II / Protection Class III (driver in the post)	
Rated voltage / operating voltage	230 V	
Frequency	50 Hz	
Surge protection (L-N / L N ground)	4 kV	
INSTALLATION SUGGESTIONS		
Application areas	Railroad track edges, walkways	
Installation height	12 – 14 m	
Admitted ambient temperature (ta)	-25 °C to +45 °C	
OTHER PROPERTIES		
Certificate	 	
OPTIONS		
Reduction piece to Ø 60 mm	✓	✓
Light shielding towards the back through shutter	✓	✓

### ● ● ● Optics and light distributions





## TRAIN STATION PLATFORM MAST LUMINAIRE **ELLIPSE DB 13X**

**Tool-free** light source lamp replacement

**Automatic** power disconnection when opening the luminaire

**Simple:** Disassembly of the E-block

**Adjustable angle of incidence:** 2° to 14° in the defined 3° grid (DB 131 only)

### **Other advantages:**

- Optimized silicone sealing
- Dirt-resistant shaping
- Elegant
- DB listed

### **Application areas:**

- Platforms
- Railroad tracks

## Technical specifications



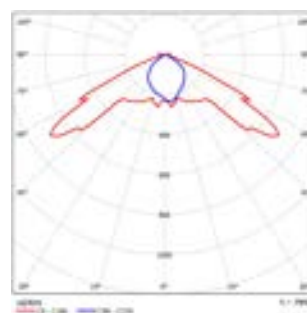
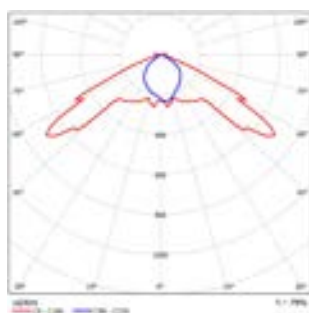
ELLIPSE DB 130



ELLIPSE DB 131

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	RAL or DB	
Mounting type	Side-mounted / top-mounted (Ø 76 or 60 mm)	
Orientation possibilities	Basic inclination of 2°	Basic inclination of 2° (adjustable in 3° steps up to 14°)
Dimensions (length x width x height)	637 x 300 x 180 mm	860 x 340 x 187 mm
Weight	8.5 kg	11.5 – 12.5 kg
IP Protection class	IP65	IP66
Area exposed to wind	0.14 m²	0.15 m²
Glass type	Silicate glass, flat	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	HI and HS light source	
Light technologies	Mirror optics	
Light distribution	Extremely wide beam light distribution	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	230 V / 50 Hz	
INSTALLATION SUGGESTIONS		
Application areas	Platforms	Platforms, railroad track
Installation height	6 – 8 m	5 – 10 m
OTHER PROPERTIES		
Certificate / energy efficiency class	 	
OPTIONS		
emergency light component	–	60 W

## Optics and light distributions





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## TRAIN STATION PLATFORM MAST LUMINAIRE **ELLIPSE LED DB 131**

**Sustainable:** Easy lamp replacement

**Efficient:** Reduce glare by using mid-power LEDs

**Esthetic:** Simple and clear shape language with a perfect LED design

### **Application areas:**

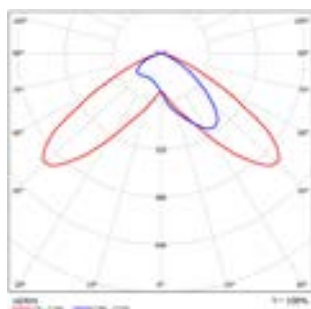
- Platforms

## Technical specifications

### ELLIPSE LED DB 131

LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	DB 703
Mounting type	Mast attachment or mast attachment (Ø 76 / 60 mm)
Orientation possibilities	2° – 14° (in 3° steps)
Dimensions (length, width, depth)	860 x 340 x 180 mm
Weight	approx. 11.5 kg
Area exposed to wind	0.15 m²
IP Protection class	IP66
Glass type	Tempered glass
LIGHT SOURCE	
Light source type	LED modules with mid-power LEDs
Optical system	Wide-angle light distribution
Rated luminous flux	2,400 – 7,200 lm
ELECTRICAL PROPERTY	
overall performance	20 – 60 W
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
Surge protection	6 kV
INSTALLATION SUGGESTIONS	
Application areas	Platforms
Installation height	6 – 8 m
Permissible ambient temp.	-25 °C to +45 °C
OTHER PROPERTIES	
Certificate	CE 

## Optics and light distributions









The HELLUX logo is displayed in white, uppercase letters on a solid green rectangular background.

HELLUX



## TRAIN STATION PLATFORM MAST LUMINAIRE **TRAPEZ DB 14X**

**Available as double or single light**

**Tool-free** light source lamp replacement

**Tool-free** disassembly of the E-block

**Possibility of tool-free** conversion to other light sources

### **Other advantages:**

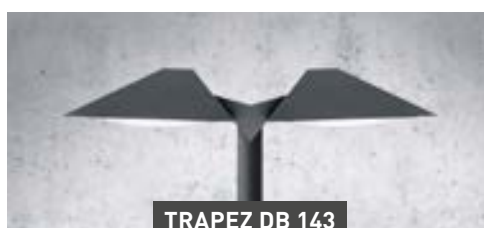
- Optimized silicone sealing
- Dirt-resistant shaping
- DB listed

### **Application areas:**

- Platforms
- Access roads



## Technical specifications



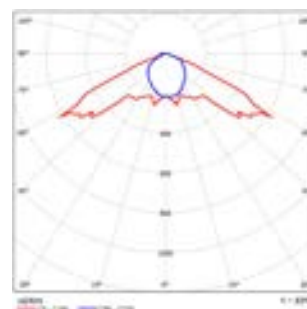
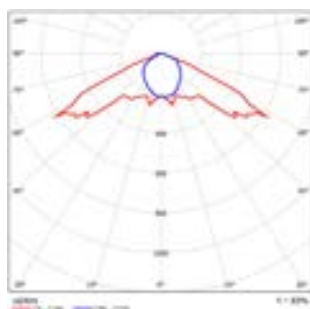
TRAPEZ DB 143



TRAPEZ DB 144

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	RAL or DB	
Mounting type	Top-mounted (Ø 76 mm)	Mast attachment / mast attachment (Ø 76 mm)
Orientation possibilities	Basic inclination of 0°	Basic inclination of 3°
Dimensions (length x width x height)	1,420 x 330 x 235 mm	870 x 330 x 235 mm
Weight	16 kg	8.5 kg
IP Protection class	IP65	
Area exposed to wind	0.22 m²	0.12 m²
Glass type	Acrylic glass, flat	
Shock resistance / impact resistance	IK10	
PHOTOMETRIC PROPERTIES		
Light source type	HI and HS light source	
Light technologies	Mirror optics	
Light distribution	Extremely wide beam light distribution	
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	
Operating voltage / frequency	230 V / 50 Hz	
INSTALLATION SUGGESTIONS		
Application areas	Platforms, paths	Platforms, paths
Installation height	6 – 8 m	
OTHER PROPERTIES		
Certificate / energy efficiency class	 	
OPTIONS		
emergency light component	60 W	

## Optics and light distributions





HELLUX



## TRAIN STATION PLATFORM MAST LUMINAIRE **TRAPEZ LED DB 14X**

**Practical:** Tool-free light source lamp replacement

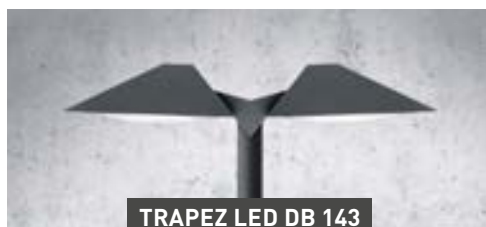
**Optimized** silicone sealing

**Dirt-resistant** shaping

### **Application areas:**

- Platforms


## Technical specifications



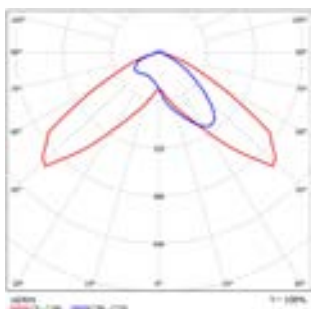
TRAPEZ LED DB 143



TRAPEZ LED DB 144

LIGHTING FIXTURES BODY		
Material	Aluminum die casting	
Coloring (powder coating)	DB 703	
Mounting type	Mast attachment / mast attachment (Ø 76 mm)	
Orientation possibilities	Basic inclination of 3°	
Dimensions (length, width, depth)	1,420 x 330 x 270 mm	
Weight	16 kg	8.5 kg
Area exposed to wind	0.22 m²	0.12 m²
IP Protection class	IP65	
Glass type	Acrylic glass, flat	
LIGHT SOURCE		
Light source type	LED modules with mid-power LEDs	
Optical system	Wide-angle light distribution	
Rated luminous flux	2x 1,200 – 2x 5,000 lm	2,400 – 7,200 lm
ELECTRICAL PROPERTY		
Overall performance	20 – 60 W	
Protection class	Protection Class II	
Rated voltage / operating voltage	220 – 240 V	
Frequency	50 – 60 Hz	
Surge protection	6 kV	
INSTALLATION SUGGESTIONS		
Application areas	Platforms	
Installation height	6 – 8 m	
Permissible ambient temp.	-25 °C to +45 °C	
OTHER PROPERTIES		
Certificate	 	

## Optics and light distributions for all variants



HELLUX





# FRITZ DB 114

**Tool-free** light source lamp replacement

**Easy** disassembly of the E-block

**Optimized** silicone sealing

**Dirt-resistant** shaping

**Versatile** design variants

## Other advantages:

- Elegant platform light
- DB-listed

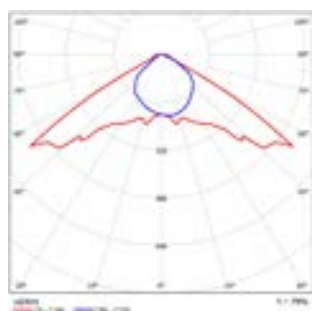
## Application areas:

- Platforms

## ● ● ● Technical specifications

FRITZ DB 114	
<b>LIGHTING FIXTURES BODY</b>	
Material	Cast aluminum
Coloring (powder coating)	RAL 9006
Mounting type	via system accessories
Orientation possibilities	Basic inclination of 0°
Dimensions (length x width x height)	566 x 339 x 235 mm
Weight	13.0 kg
IP Protection class	IP65
Area exposed to wind	0.096 m²
Glass type	Acrylic glass 2-piece
Shock resistance / impact resistance	IK10
<b>PHOTOMETRIC PROPERTIES</b>	
Light source type	HI and HS light source
Optical system	Extremely wide beam light distribution
<b>ELECTRICAL PROPERTIES</b>	
Protection class	Protection Class II
Operating voltage / frequency	230 V / 50 Hz
<b>INSTALLATION SUGGESTIONS</b>	
Application areas	Platforms
Installation height	6 – 8 m
<b>OTHER PROPERTIES</b>	
Certificates	CE 
<b>OPTIONS</b>	
emergency light component	60 W

## ● ● ● Optics and light distributions



HELLUX



## RAILWAY CROSSING MAST LIGHTING

## 162-5

The only listed conventional railroad crossing luminaire

Corresponds to the DB requirements for railway crossings

Open and replace light source without tools with quick release fasteners

E-block can be replaced without tools

## Other advantages:

- DB listed
- Integrated igniter for instant hot re-ignition

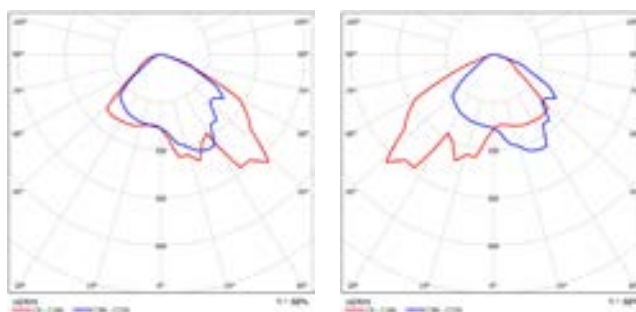
## Application areas:

- Railroad crossings

## ● ● ● Technical specifications

RAILWAY CROSSING LUMINAIRES 162-5	
LIGHTING FIXTURES BODY	
Material	Aluminum
Coloring (powder coating)	RAL or DB
Mounting type	Side-mounting (Ø 76 or Ø 60 mm), top-mounting (60 x 100 mm or 42 x 100 mm)
Orientation possibilities	Basic inclination of 5° (adjustable in 3° steps up to 14°)
Dimensions (length x width x height)	600 x 330 x 180 mm
Weight	approx. 13 – 15 kg
IP Protection class	IP65 (lamp compartment)
Area exposed to wind	0.1 m <sup>2</sup>
Glass type	Tempered glass, smooth clear
Shock resistance / impact resistance	IK10
PHOTOMETRIC PROPERTIES	
Light source type	HST-DE
Light technologies	Reflector
Light distribution	Right or left beam light distribution
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	230 V / 50 Hz
INSTALLATION SUGGESTIONS	
Application areas	Railroad crossings
Installation height	8 – 10 m

## ● ● ● Optics and light distributions

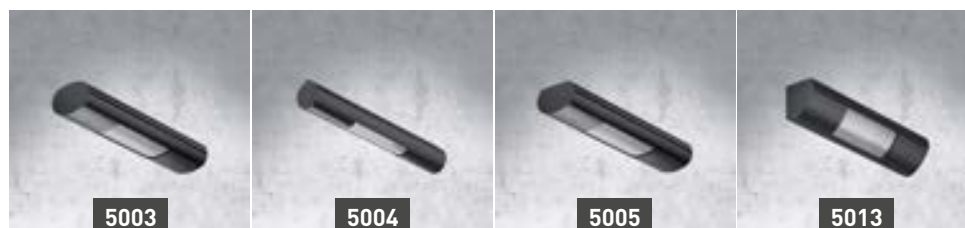




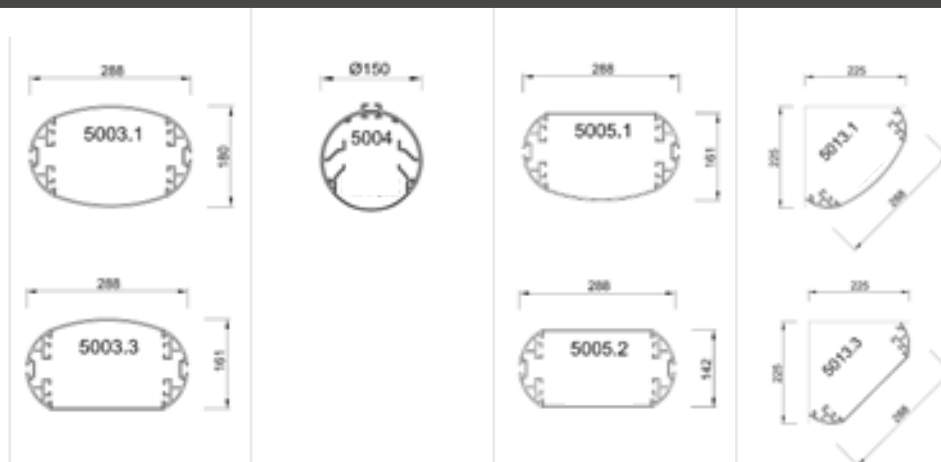
HELLUX



● ● ● Technical specifications



DESCRIPTION				
System-bound media channel system for the illumination of...	... covered platforms, halls, underpasses, entrances, ramps, and stairs			... underpasses, connecting passages and tunnel systems
Light source	Can be equipped with commercially available moisture-proof luminaires, object-specific or based on individual requirements			
Material	Body made of extruded aluminum profile			
Design	Oval	Round	Oval	Corner profile
Overall length	modular, up to a max. of 6 meters per segment			
Cable and line supports	Continuously integrated			
Color	according to RAL or DB specification			
Mounting	Easy to assemble thanks to the integrated T-slot for various suspended or other mounting options			Wall and ceiling with mounting bracket
Possibility to install...	Camera systems and low-profile loudspeaker systems with hole group			
Other	–			Particularly suitable for low ceilings.
CROSS-SECTION AND VARIANTS				





## LIGHT TUBE SYSTEMS


# LIGHT & MEDIA CHANNEL SYSTEM 5010

**Flexible:** Mounting by integrated T-slot for various suspensions

**Universal / Flexible:** Additional integration of media such as speakers and camera system.

**Reliable:** approved in accordance with DB requirements





### Application areas:

- Platforms
  - Underground passenger transport systems
- 

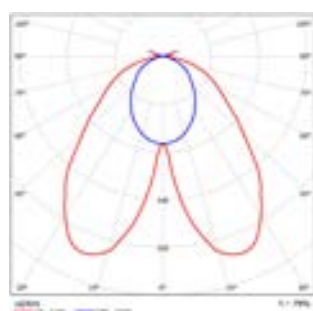


## Technical specifications

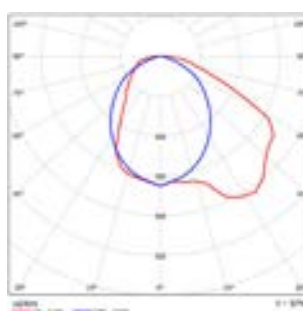
Technical specifications

		
	<b>5010</b>	<b>5010</b>
LIGHTING FIXTURES BODY	HIGH DESIGN	FLAT DESIGN
Material	Extruded aluminum profile	Extruded aluminum profile
Coloring (powder coating)	RAL 9006	RAL 9006
Mounting type	Suspension with T-slot	Suspension with T-slot
Dimensions (length x width x height)	1,500 x 125 x 250 mm	1,500 x 125 x 140 mm
Weight	15 kg/ lfm	12 kg/ lfm
Area exposed to wind	0.25 m²/ lfm	0.14 m²/ lfm
IP Protection class	IP54	IP54
Glass type	PC with prism structure	PC with prism structure
Shock resistance / impact resistance	IK10	IK10
PHOTOMETRIC PROPERTIES		
Light source type	Provided for fluoresent light T5	Provided for fluoresent light T5
Optical system	Symmetrical or asymmetrical light distribution	Symmetrical or asymmetrical light distribution
Rated luminous flux	35 / 49 W      3,070 / 4,300 lm	35 / 49 W      3,070 / 4,300 lm
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	Protection Class II
Rated voltage / operating voltage	220 – 240 V	220 – 240 V
Frequency	50 / 60 Hz	50 / 60 Hz
INSTALLATION SUGGESTIONS		
Application areas	Platforms, underground passenger transport systems	Platforms, underground passenger transport systems
Installation height	3 – 4 m	3 – 4 m
Admitted ambient temperature (ta)	-25 °C to +35 °C	-25 °C to +35 °C
OTHER PROPERTIES		
Certificate		
OPTIONS		
Emergency light function	✓	✓

## Optics and light distributions



Symmetrical light distribution



Asymmetrical light distribution



## LIGHT TUBE SYSTEMS


# LIGHT & MEDIA CHANNEL SYSTEM 5010 LED

**Flexible:** Mounting by integrated T-slot for various suspensions





**Universal / Flexible:** Additional integration of media such as speakers and camera system.

**Reliable:** approved in accordance with DB requirements

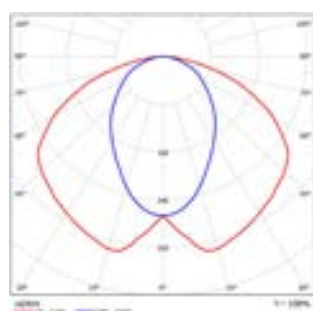
### Application areas:

- Platforms
  - Underground passenger transport systems
- 

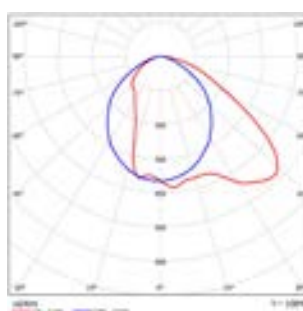
## Technical specifications

		
	<b>5010</b>	<b>5010</b>
LIGHTING FIXTURES BODY		
	HIGH DESIGN	FLAT DESIGN
Material	Extruded aluminum profile	Extruded aluminum profile
Coloring (powder coating)	RAL 9006	RAL 9006
Mounting type	Suspension with T-slot	Suspension with T-slot
Dimensions (length x width x height)	1,500 x 125 x 250 mm	1,500 x 125 x 140 mm
Weight	15 kg/ lfm	12 kg/ lfm
Area exposed to wind	0.25 m <sup>2</sup> / lfm	0.14 m <sup>2</sup> / lfm
IP Protection class	IP54	IP54
Glass type	PC with prism structure	PC with prism structure
Shock resistance / impact resistance	IK10	IK10
PHOTOMETRIC PROPERTIES		
Light source type	LED	LED
Optical system	Symmetrical or asymmetrical light distribution	Symmetrical or asymmetrical light distribution
Rated luminous flux	3.250 – 6.000 lm	3.250 – 6.000 lm
ELECTRICAL PROPERTIES		
Protection class	Protection Class II	Protection Class II
Rated voltage / operating voltage	220 – 240 V	220 – 240 V
Frequency	50 / 60 Hz	50 / 60 Hz
INSTALLATION SUGGESTIONS		
Application areas	Platforms, underground passenger transport systems	Platforms, underground passenger transport systems
Installation height	3 – 4 m	3 – 4 m
Admitted ambient temperature (ta)	-25 °C to +35 °C	-25 °C to +35 °C
OTHER PROPERTIES		
Certificate		
OPTIONS		
Emergency light function	✓	✓

## Optics and light distributions



Symmetrical light distribution



Asymmetrical light distribution



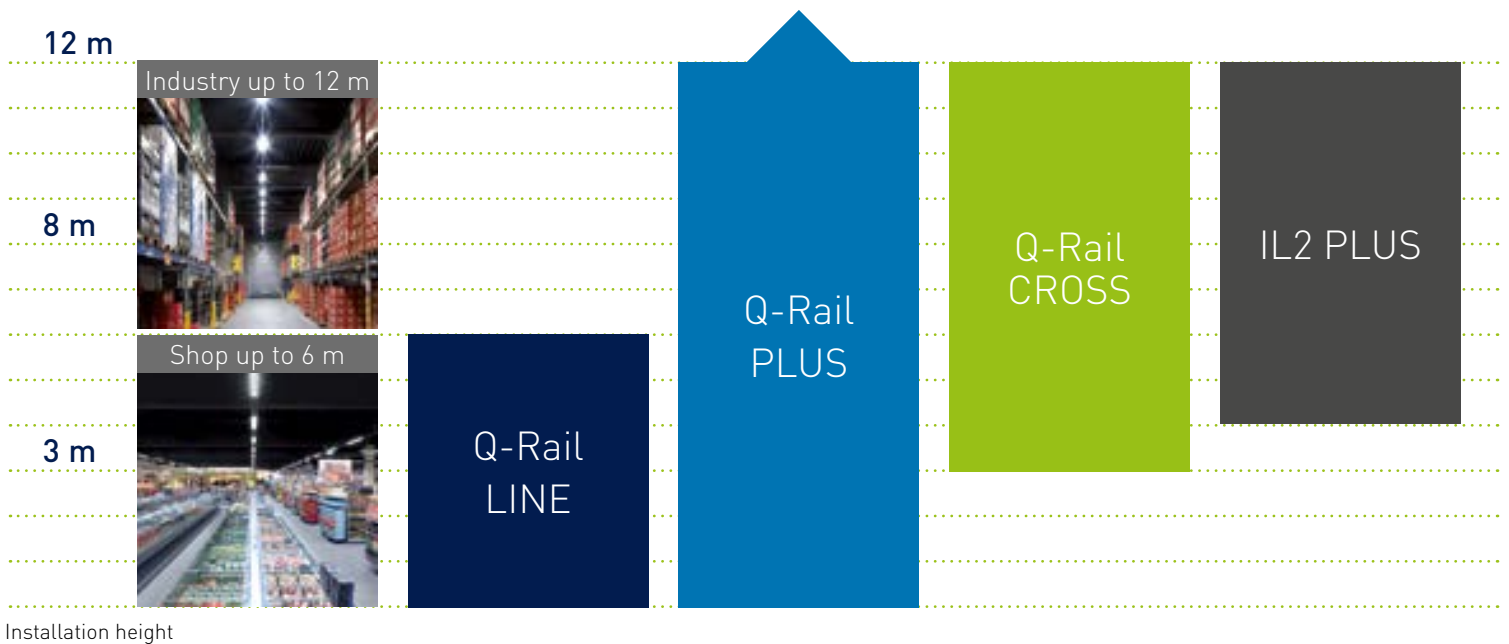
# Industry and interior





# Comparison of light line systems

Our light line systems conquer halls and markets where goods are produced or shipped, stored or sold. And it makes sense because they score not only because of their simple assembly and maintenance, but are also guarantees for best light quality, economical power consumption and environmental compatibility.



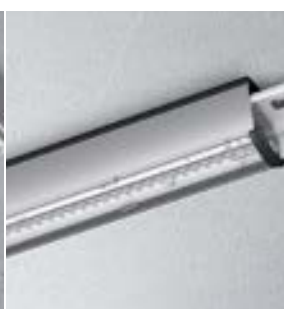
## The right light for every room

More than any other light source, our Q-RAIL and IL2 PLUS LED light-band systems are the ideal solution for a simple, coherent and functional solution. They guarantee constant light quality and homogenous illumination, a demand-oriented optics and perfectly adapted light distribution. This means they have exactly the qualities that are required in production and storage, in retail and logistics.





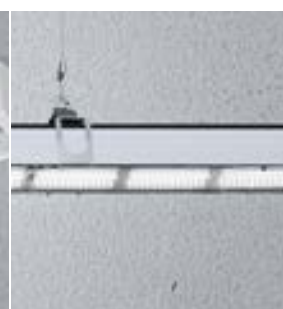
Q-Rail LINE



Q-Rail PLUS



Q-Rail CROSS



IL2 PLUS

	Q-Rail LINE	Q-Rail PLUS	Q-Rail CROSS	IL2 PLUS
<b>Areas of application:</b>	Manufacturing facilities, sales areas	Warehouses, logistics, industrial and manufacturing facilities	Halls, warehouses, sales areas, manufacturing facilities	Halls, warehouses, manufacturing facilities
<b>Assembly:</b>	Light inserts can be installed tool-free with the quick assembly system	Light inserts can be installed tool-free with the quick assembly system	Light inserts can be installed tool-free with the quick assembly system	Simple and practically tool-free with the Plug & Play process
<b>Flexibility:</b>	Different optics for different applications	Different optics for different applications	Versatile through four different optical variants	Optimal through modular design and different optics
<b>Efficiency:</b>	Mid-power LED modules with up to 134 lm/W	Mid-power LED modules with up to 155 lm/W	Mid-power LED modules with up to 160 lm/W	Mid-power LED modules with up to 150 lm/W
<b>Extras:</b>	Sensors, emergency lighting, integration of busbars, spotlights	Sensors, emergency lighting, integration of busbars, spotlights	Sensors, emergency lighting, integration of busbars, spotlights	Intelligent temperature monitoring and control, sensors can be retrofitted at any time, extension of the protection class to IP40 or IP54 possible at any time









# Q-RAIL LED – the all-rounder among light band systems

## VARIATIONS

Different light colors (3,000 K / 4,000 K)  
and performance levels available (4,000 – 12,000 lm),  
3 different track lengths available (1.5 m / 3 m / 4.5 m)

## MADE IN GERMANY

Development and production in Germany



## SUPPORT RAILS

Possible with through  
wiring up to 14 poles,  
a plug connection every 1.5 m

## EMERGENCY LIGHTING

With special variations,  
emergency lighting is also possible

## PLUG&PLAY

Tool-free assembly and replacement of support rails and light modules

## DURABILITY

Support rails and roll profile made of plastic-coated, galvanized sheet metal

## VARIABILITY

Variable contacts with phase selection

## LIGHT MODULE

L80B10 50,000h with 5 different light distributions and opal cover, on-off and DALI

## SENSOR SYSTEM

Intelligent sensor system integrated in the module







# Q-RAIL

**Economical:** Operating cost savings (up to 85% compared to fluorescent lights)

**Fast:** Light inserts can be installed with quick-assembly system without tools

**Flexible:** Different optics for different applications

**Efficient:** Mid-power LED modules with up to 160 lm/W



## Other advantages:

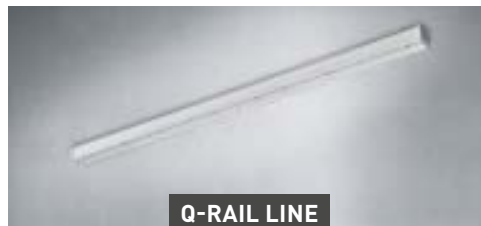
- Energy efficiency
- Variants with emergency lighting
- Variants for integrating busbar spotlights
- Sensors can be integrated
- Optimized light distribution
- 80% luminous flux after an average service lifetime of 50,000 operating hours
- Mercury-free
- Development and production in Germany

## Application areas:

- Warehouses
- Logistics buildings
- Factory facilities
- Production workshops
- Sales rooms

# LIGHT LINE SYSTEMS

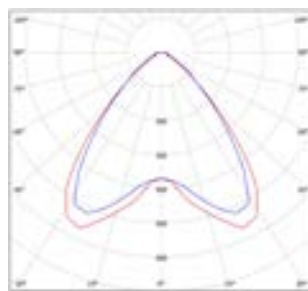
## Q-RAIL



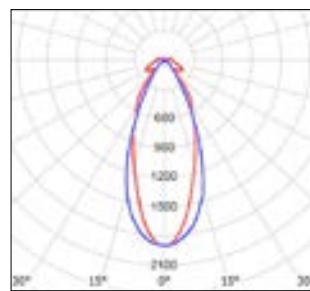
### ● ● ● Technical specifications

LIGHTING FIXTURES BODY		W-OPTICS (WIDE BEAM) N-OPTICS (NARROW BEAM)	OPAL COVER
Material	Steel section		
Coloring (powder coating)	RAL 9010 (pure white)		
Mounting type	Chain suspension system, system ceiling mounting, ceiling mounting		
Dimensions (length x width x height)	1,494 x 70 x 32.5 mm		1,494 x 70 x 40.5 mm
Weight 1.5 m	approx. 1.8 kg		
IP Protection class	IP20		
PHOTOMETRIC PROPERTIES			
Light source type	LED modules with 102 mid-power LEDs		
Optical system	Wide and narrow beam light distribution	Opal cover	
Rated luminous flux	4,000 / 5,500 / 6,600 lm	2,600 / 4,000 / 5,500 lm	
Dimming (Power control)	On – Off / DALI		
ELECTRICAL PROPERTIES			
Protection class	Protection Class I		
Rated voltage / operating voltage	220 – 240 V/ 50 – 60 Hz		
INSTALLATION SUGGESTIONS			
Application areas	Industrial facilities, production workshops, sales areas		
Specific installation	Q-RAIL light line system		
Installation height	3 – 6 m		
Permissible ambient temperature at (ta)	2,600 / 4,000 / 5,500 lm, -25 °C to +35 °C		
OTHER PROPERTIES			
Certificate	    DIN 10500		
OPTIONS			
End cap Q-ED LED	IP20		
Blind cover Q-BA LED	1,494 mm		
Support rail Q-TS	1,494 / 2,988 / 4,482 mm		
Rail connector Q-SV	✓		
Rail suspension Q-SA / Q-SAC / Q-SAS / Q-SAD	✓		

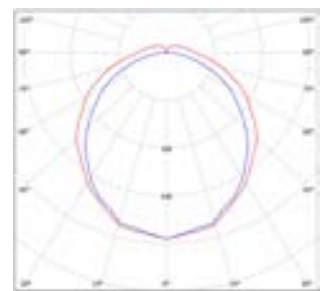
### ● ● ● Optics and light distributions



W-Optics (wide beam)

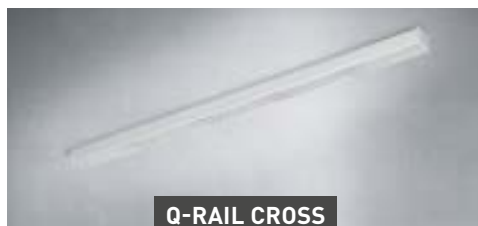


N-Optics (narrow beam)



Opal cover

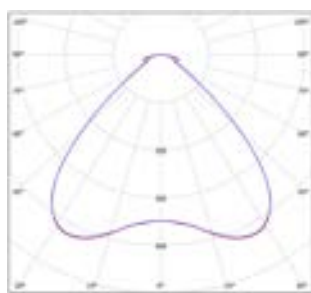




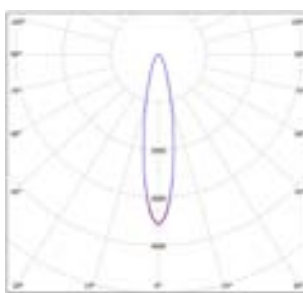
Q-RAIL CROSS

LIGHTING FIXTURES BODY	
Material	Steel section
Coloring (powder coating)	RAL 9010 (pure white)
Mounting type	Chain suspension system, system ceiling mounting, ceiling mounting
Dimensions (length x width x height)	1,494 x 70 x 41 mm
Weight per 1.5 m	approx. 1.8 kg
IP Protection class	IP20
PHOTOMETRIC PROPERTIES	
Light source type	LED modules with 160 mid-power LEDs
Optical system	Wide-, low- and two-double-asymmetric beam light distribution
Rated luminous flux	4,000 / 5,500 / 6,600 / 7,600 / 8,000 / 8,500 / 9,800 / 12,000 lm
Dimming (Power control)	On - Off / DALI
ELECTRICAL PROPERTIES	
Protection class	Protection Class I
Operating voltage / frequency	220 - 240 V / 50 - 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Warehouses, logistics buildings, industrial halls, production workshops, sales areas
Specific installation	Q-RAIL light line system
Installation height	3 - 20 m
Permissible ambient temperature at (ta)	-25 °C to +35 °C
OTHER PROPERTIES	
Certificate	   
OPTIONS	
End cap Q-ED LED	IP20
Blind cover Q-BA LED	1,494 mm
Support rail Q-TS	1,494 / 2,988 / 4,482 mm
Rail connector Q-SV	✓
Rail suspension Q-SA / Q-SAC / Q-SAS / Q-SAD	✓

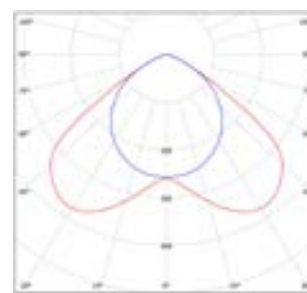
- ● ● Optics and light distributions for all variants



Wide beam



Narrow beam



Double asymmetrical







**Economical:** Operating cost saving (up to 85% in comparison to fluorescent lamps)

**Easy:** Tool less installation with quick mounting system





**Flexible:** Various optics for different application areas

**Efficient:** Mid power LED module with up to 155 lm/W

**Save:** Emergency lighting feasible

#### Application areas:

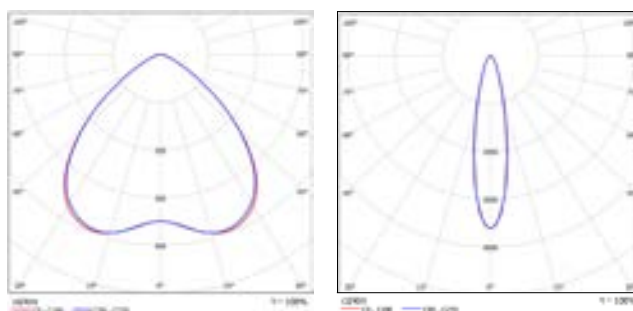
- Warehouses
- Logistics Halls
- Industrial Halls
- Production Halls
- Sales Rooms

Q-RAIL PLUS	
LIGHT HOUSING	
Material	High-quality and torsion-resistant mounting rail made of aluminum, cover made of PP
Mounting type	Chain suspension
Dimensions (Length x Breadth x Height)	1,500 / 3,000 / 4,500 x 90 x 85 mm
IP Protection class	IP54
ILLUMINANT PROPERTIES	
Light source	LED-Moduls with 160 Mid-Power-LEDs
Optical system	Wide and narrow beam light distribution
Rated luminous flux	2.000 – 10.000 lm
ELECTRICAL PROPERTIES	
Electrical protection class	Class I
Operating / voltage	220 – 240 V / 50-60 Hz
INSTALLATION REQUIREMENTS	
Application areas	Warehouses, logistics halls, industrial halls, production halls, sales rooms
Light point height	3 – 20 m (*1)
Admitted ambient temperature (ta)	- 25 °C to + 35 °C (*2)
OTHER PROPERTIES	
Certification	   

\*1: Depending on the reflectance of the premises

\*2: Depending on the luminous flux

● ● ● Optics and light distributions



## LIGHT LINE SYSTEMS

# Q-RAIL SENSORS

### ● ● ● Area sensors



**STEINEL IS 3360 MX**

TECHNICAL SPECIFICATIONS	
Integration	Sensor integrated in the light insert, 1,494 mm
Daylight sensor	✓
Presence sensor	✓
Version	Motion detector with daylight control
Type of sensor	Passive infrared
Interface control system	DALI
Dimming	only via DALI Master or DALI control
Ambient temperature range	-20 °C to +50 °C
Required support rail	7-wire version
INSTALLATION DATA	
Installation height	4 – 14 m
Detection range	Can be adjusted via cover panel
Area of coverage	Range radial Ø 12 m (113 m²) / Range tangential Ø 36 m (1,018 m²)
Light sensor working area	2 – 1,000 lx
APPLICATION	
Scope of application	Area sensor for production workshops, warehouses and logistics buildings
Number of adjustable light points	30

### ● ● ● Passage way sensors



**STEINEL IS 345 MX**

TECHNICAL SPECIFICATIONS	
Integration	Sensor integrated in the light insert, 1,494 mm
Daylight sensor	✓
Presence sensor	✓
Version	Motion detector with daylight control
Type of sensor	Passive infrared
Interface control system	DALI
Dimming	only via DALI Master or DALI control
Ambient temperature range	-20 °C to +50 °C
Required support rail	7-wire version
INSTALLATION DATA	
Installation height	4 – 14 m
Detection range	Can be adjusted via cover panel
Area of coverage	Radial range 30 x 4 m (120 m²) / Tangential range 30 x 4 m (120 m²)
Light sensor working area	2 – 1,000 lx
APPLICATION	
Scope of application	Passageway sensor for high-bay warehouses, logistics buildings and production workshops
Number of adjustable light points	30



## Area sensors



TECHNICAL SPECIFICATIONS	
Integration	Sensor integrated in the light insert, 1,494 mm
Daylight sensor	✓
Presence sensor	✓
Version	Motion detector with daylight control
Type of sensor	Passive infraredActive radar
Interface control system	DALI
Dimming	10 – 100 % (switch off possible)
Ambient temperature range	0 °C to +50 °C
Required support rail	7-wire version
INSTALLATION DATA	
Installation height	up to 5 mup to 13 m
Detection range	Adjustable via shutterSensor adjustable up to 90° / 7 m
Detection angle	40° – 90°35° / 80°
Area of coverage	max. 6 mmax. 25 m
Light sensor working area	20 – 800 lx
APPLICATION	
Scope of application	Production workshops, warehouses, office areasHigh-bay warehouse, production workshop, warehouses
Number of adjustable light points	32

## Accessories



### Steinel remote control

- Intuitive, easy and safe commissioning
- Daylight and presence function can be activated individually
- Operation by smartphone via app
- To configure the Steinel sensors
- IR transmission
- Data storage possible
- Different scenes selectable

### Osram remote control

- Easy and safe commissioning
- Daylight and presence function can be activated individually
- PC software for creating individual programs
- To configure the Osram sensors
- IR transmission
- Data storage possible
- Different scenes selectable









# IL2 PLUS – THE HIGHLY FLEXIBLE LIGHT LINE SYSTEM

## THERMAL MANAGEMENT

Permanent temperature  
monitoring of LED & electronic driver,  
temperature range from -25 °C to 50 °C

## VARIATIONS

Different light colors  
(4,000 k / 6,500 k)  
and performance levels available  
(4,000 lm / 4,700 lm),  
Four (4) different track lengths  
available (0.60 m to 4.20 m),  
a plug-in connector every 0.6 m

## PLUG & PLAY

Tool-free replacement  
of electronic driver and LED module  
is possible during operation



## FLEXIBILITY

Different optics can be used in every  
track. Individual protection classes can  
be upgraded retrospectively at any time.

# LIGHT MANAGEMENT

Targeted luminaire design, efficient light control optionally upgradable

193

## SENSOR SYSTEM

Intelligent sensor technology at any point of the rail Expandable

## EMERGENCY LIGHTING

LED module and electronic driver as Emergency lighting can be integrated, special solution for addressable luminaires

## ALUMINUM

High-quality and durable aluminum tracks

## ELECTRONIC DRIVER

DALI

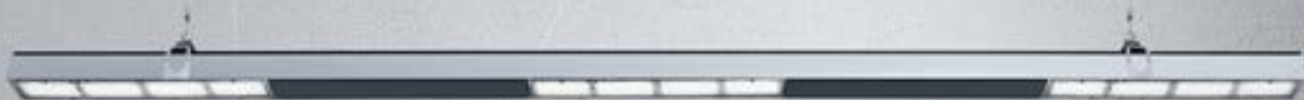
## MADE IN GERMANY

Development and production in Germany

## LED MODULE

3 different light distributions







# IL2 PLUS

**Secure:** Warp-resistant aluminum rails

**Innovative:** Intelligent temperature management

**Scalable:** Emergency lighting is possible

**Flexible:** Sensor technology can be integrated and expanded at any point on the rail

**Safe investment:** Replacement part availability of at least 20 years



## Other advantages:

- Highly flexible LED light line system
- Modular design
- Simple and practically tool-free installation
- Separate replacement of electronic drivers and LED module
- The IP Protection class of the luminaire can be upgraded to IP54 at any time
- At least 80% luminous flux after an average lifetime of 60,000 operating hours

## Application areas:






- Warehouses
- Logistics buildings
- Factory facilities
- Production workshops

# LIGHT LINE SYSTEMS

## IL2 PLUS

### ● ● ● Technical specifications

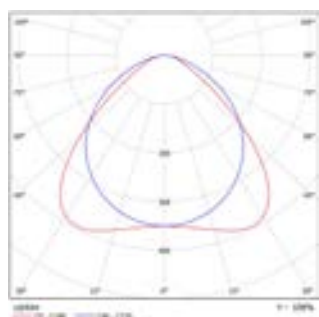


LIGHTING FIXTURES BODY	
Material	High-quality and warp-resistant support rail made of aluminum, covering of PP
Coloring (powder coating)	Support rail in aluminum color
Mounting type	Chain suspension
Dimensions (length x width x height)	LED module: 592 x 72 mm Support rail: 0.6 m / 1.20 m / 3.00 m / 4.20 m Length: 600 / 1,200 / 3,000 / 4,200 x 90 x 85 mm
Weight per 0.6 m	2.2 kg with complete module equipment, 1.3 kg without module equipment
IP Protection class	IP20 / IP40 / IP54 (modular expandable or retrofittable at any time)
PHOTOMETRIC PROPERTIES	
Light source type	LED module each with 104 LEDs
Optical system	W-Optics wide-beam, N-Optics low-beam, XN-Optics extra deep-radiant
Rated luminous flux (4,000 K)	4,000 / 4,700 lm
Dimming (Power control)	DALI
Temperature management	NTC control in the electronic driver and LED module
ELECTRICAL PROPERTIES	
Protection class	System: Protection Class I Electronic driver and modules: Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Warehouses, logistics buildings, industrial halls, production workshops
Installation height	3 – 16 m
Admitted ambient temperature (ta)	4,000 lm: -25 °C to +50 °C / 4,700 lm: -25 °C to +45 °C
OTHER PROPERTIES	
Certificate / energy efficiency class	    

## ● ● ● Optics and light distributions

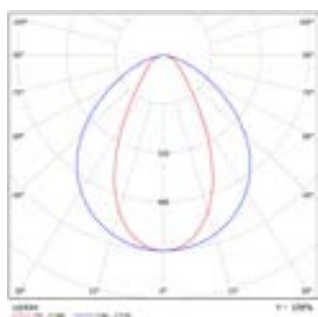
### **W** W-Optics Production workshops

- Wide beam
- Very homogeneous illumination
- Large line light intervals also in the case of low installation heights



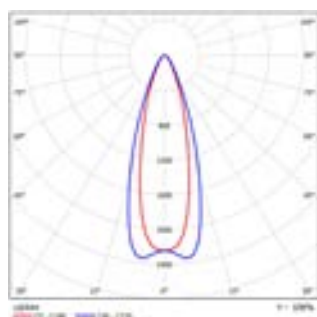
### **N** N-Optics high industrial facilities

- Narrow beam
- Narrow radiation characteristics
- Optimized for high light points



### **XN** XN-Optics high-bay warehouses

- Very narrow radiation
- Ideal for very high light points





## LIGHT LINE SYSTEMS

# IL2 PLUS – SENSORS

### ● ● ● Sensors



STEINEL IS 3360 MX

TECHNICAL SPECIFICATIONS	
Integration	Sensor integrated in adapter box
Daylight sensor	✓
Presence sensor	✓, including constant lighting control
Version	Motion detector with daylight control
Type of sensor	Passive infrared
Interface control system	DALI
Dimming	only via DALI Master or DALI control
Ambient temperature range	-20 °C to +50 °C
Required support rail	7-wire version
INSTALLATION DATA	
Installation height	4 – 14 m
Detection range	Can be adjusted via cover panel
Area of coverage	Range radial Ø 12 m (113 m²) / Range tangential Ø 36 m (1,018 m²)
Light sensor working area	2 – 1,000 lx
APPLICATION	
Scope of application	Area sensor for production workshops, warehouses and logistics buildings
Number of adjustable light points	30

### ● ● ● Accessories



#### Steinel remote control

- Easy and safe commissioning
- Daylight and presence function can be activated individually
- Operation by smartphone via app
- To configure the Steinel sensors
- IR transmission
- Data storage possible
- Different scenes selectable

**STEINEL IS 345 MX**

TECHNICAL SPECIFICATIONS	
Integration	Sensor integrated in adapter box
Daylight sensor	✓
Presence sensor	✓, including constant lighting control
Version	Motion detector with daylight control
Type of sensor	Passive infrared
Interface control system	DALI
Dimming	only via DALI Master or DALI control
Ambient temperature range	-20 °C to +50 °C
Required support rail	7-wire version
INSTALLATION DATA	
Installation height	4 – 14 m
Detection range	Can be adjusted via cover panel
Area of coverage	Radial range 30 x 4 m (120 m²) / Tangential range 30 x 4 m (120 m²)
Light sensor working area	2 – 1,000 lx
APPLICATION	
Scope of application	Passageway sensor for high-bay warehouses, logistics buildings and production workshops
Number of adjustable light points	30

IL UP.  
SIMPLE. INNOVATIVE.  
SUSTAINABLE.

## LED UNIT

L80B10 after 60,000 h

## PROTECTION CLASS

IP65

## EASY-TO-CLEAN

Smooth surfaces  
without cooling fins

## DESIGN

Flat design, clear lines

## ACCESSORIES

Replaceable glass protective  
screen for extreme  
environmental conditions,  
adjustable holder

## OPTICS

2 different optics for optimized  
light at every height





## THERMAL MANAGEMENT

Permanent temperature monitoring  
of the LED and electronic driver,  
temperature range  
from -30 °C to +70 °C



## VARIATIONS

Different light colors  
(4,000 k, 5,000 K, 6,500 k) and  
performance levels available  
(8,000 – 38,000 lm)

## ELECTRICAL DRIVER ELECTRONICS

DALI with additional option  
Constant Light Output (CLO)



## SHOCK RESISTANCE / IMPACT RESISTANCE

IK10 (protective screen)



## UGR <22

Industry-compliant according  
to DIN EN 12464-1 for  
industry workplaces



reddot award 2016  
winner



## HIGH BAY LIGHTS

# IL UP

**High performance optics:** Homogenous light pattern without color shifts and unique glare control

**Universal:** Temperature ranges from -25 °C to +70 °C (IL Up L to + 60 °C)

**Flexible:** Different optics for different applications

**Efficient:** Mid-power LEDs with up to 167 lm/W

### Other advantages:

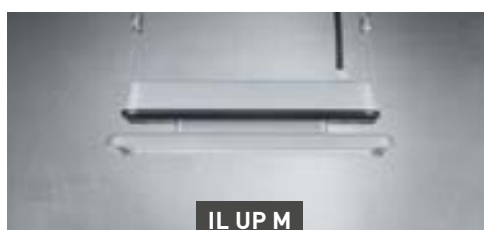
- Variants from 8,000 lm to 37,000 lm
- Lighting concept with intelligent driver and DALI, Constant Light Output
- Protection Class IP65
- Basic body made of die-cast aluminum
- Flat design, no cooling fins
- Simple installation
- Oil-resistant
- Replaceable glass protective screen offers protection in tough environmental conditions (optional) IK10

- Electronic drivers can be individually replaced
- 20-year availability of replacement parts
- Development and production in Germany

### Application areas:

- Halls
- Warehouse
- Manufacturing facilities
- Logistics
- Gyms

## Technical specifications



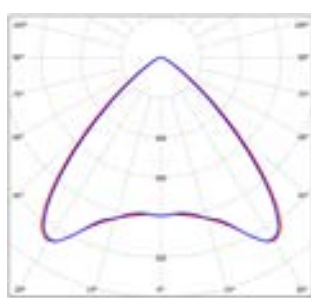
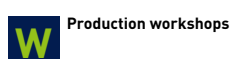
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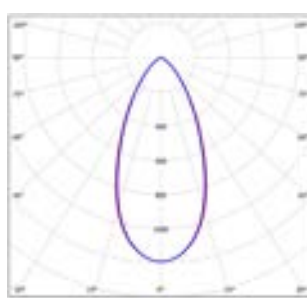
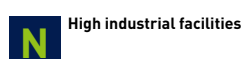
IL UP L

LIGHTING FIXTURES BODY		
Material	Aluminum die cast	Aluminum die cast
Coloring (powder coating)	RAL 9005 / RAL 9006	RAL 9005 / RAL 9006
Mounting type	Adjustable holder, cable suspension, 1-point suspension	Adjustable holder, cable suspension, 1-point suspension
Dimensions (length x width x height)	476 x 403 x 117 mm	585 x 476 x 117 mm
Weight	8.2 kg	10.8 kg
IP Protection class	IP65	IP65
PHOTOMETRIC PROPERTIES		
Light source type	380 mid-power LEDs	570 mid-power LEDs
Optical system	Wide and narrow beam light distribution	Wide and narrow beam light distribution
Angle of radiation	86° (W-Optics), 54° (N-Optics)	86° (W-Optics), 54° (N-Optics)
Rated luminous flux	8,000 – 24,000 lm	20,500 – 37,000 lm
(UGR) Unified Glare Rating	19 / 20 (W-Optics) / 17 / 18 (N-Optics)	19 / 20 (W-Optics) / 17 / 18 (N-Optics)
Dimming (Power control)	DALI / DALI CLO	On – Off / DALI / DALI CLO
Temperature management	✓	✓
Constant Light Output (CLO)	✓	✓
ELECTRICAL PROPERTIES		
Protection class	Protection Class I	Protection Class I
Rated voltage / operating voltage	220 – 240 V	220 – 240 V
Frequency	50 / 60 Hz	50 / 60 Hz
INSTALLATION SUGGESTIONS		
Application areas	Halls, warehouses, production facilities, logistics	Halls, warehouses, production facilities, logistics
Installation height	6 – 30 m	6 – 30 m
Admitted ambient temperature (ta)	-25 °C to +70 °C (Special versions)	-25 °C to +60 °C (Special versions)
OTHER PROPERTIES		
Certificate	DIN 10500	DIN 10500
OPTIONS		
Wireless Communication	In combination with sensors and simple control software	In combination with sensors and simple control software
Tempered glass protective screen	Optionally extendable to IK10	Optionally extendable to IK10
Outdoor use	Possible upon request	Possible upon request

## Optics and light distributions for all variants



Symmetrical



Asymmetric wide beam



### Universal bracket:

The IL UP can be flexibly and safely installed because of its adjustable wall or ceiling bracket - it is also impact resistant if used in sports facilities.



### Single-point suspension



### Wire cables

## Accessories





## FUNCTIONAL LUMINAIRES

# BASIC

**Innovative:** Easy replacement of the modules as a Plug & Play system

**Modular design** allows installation of the LED module directly on the ceiling

**Integrated:** Thermal management


**Controls:** Dimming

### Other advantages:

- Energy efficiency
- Weather resistance
- Optimized light distribution
- Minimum of 80% luminous flux after an average lifetime of 100,000 operating hours
- Mercury-free
- Upgradeable through plug connection
- Development and production in Germany

### Application areas:

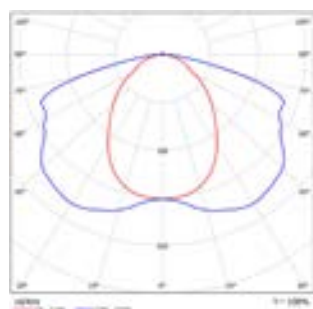
- Factory facilities
- Production workshops
- Petrol stations
- Parking garages
- Outdoor areas

	BASIC 2500 LM		BASIC 3400 LM	BASIC 3600 LM
LIGHTING FIXTURES BODY				
Mounting type	Mounting brackets for direct screwing			
Dimensions (length x width x height)	466 x 78 x 62 mm			
Weight	1.3 kg			
IP Protection class	IP65			
Glass type	PMMA / PC			
Shock resistance / impact resistance	IK08			
PHOTOMETRIC PROPERTIES				
Light source type	LED module each with 14 LEDs	LED module each with 28 LEDs	LED module each with 14 LEDs	
Rated luminous flux (per module)	2,500 lm	3,400 lm	3,600 lm	
Dimming (Power control)	Night-time dimming 100 % / 50 %, switch 100 % / 10 % or controllable with common DALI controllers*	Night-time dimming 100 % / 50 %, switch 100 % / 10 % or controllable with common DALI controllers*	Night-time dimming 100 % / 50 %, switch 100 % / 10 % or controllable with common DALI controllers*	
ELECTRICAL PROPERTIES				
Protection class	Protection Class II	Protection Class I	Protection Class II	
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz			
INSTALLATION SUGGESTIONS				
Application areas	Factory facilities, production workshops, petrol stations, parking facilities, outdoor areas			
Installation height	2 - 6 m			
Admitted ambient temperature (ta)	-25 °C to + 35 °C			
OTHER PROPERTIES				
Certificate / energy efficiency class	     DIN 10500	    	    	

\* List of compatible controllers on request

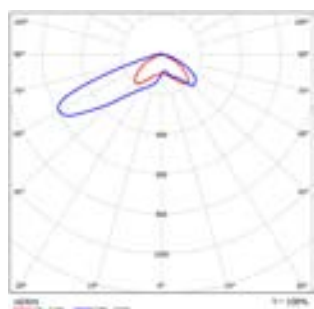
## Optics and light distributions for all variants

### P Parking garages and underground garages



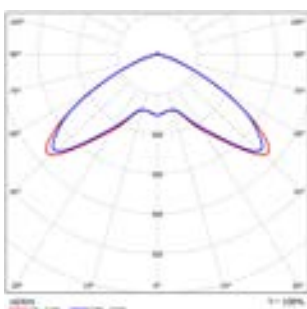
symmetrical

### P Parking garages and underground garages

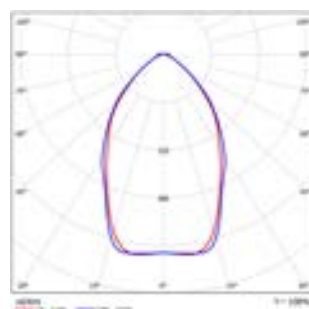


asymmetrical

### I Petrol stations, parking garages and parking decks



### G Petrol stations



## Accessories



### Shade:

The elegant shade, made of high-quality stainless steel, is resistant to corrosion. It serves to round off the design and as an LED module mount for all moisture-proof luminaires.



### Basic module holder:

The Basis module mount enables all moisture-proof modules to be installed on the ceiling quickly and flexibly. It is possible to implement both light points as well as through-wired luminaire variations.



Unw	13.09
Diesel	13.19
Super	14.79
Super E10	15.19
Super	14.79
Super E10	15.19
Super	15.99







## FUNCTIONAL LUMINAIRES

# FRAME

**Modular design** enables coupling of the LED module to the housing

**Optimized** light distribution

**Robust:** Weather resistance

**Controls:** Dimming

### Other advantages:

- Energy efficiency
- Modules can be easily replaced with a Plug & Play system at any time
- Integrated thermal management
- Minimum of 80% luminous flux after an average lifetime of 100,000 operating hours
- Development and production in Germany

### Application areas:

- Petrol stations
- Parking garages
- Outdoor areas

## Technical specifications

Technical specifications

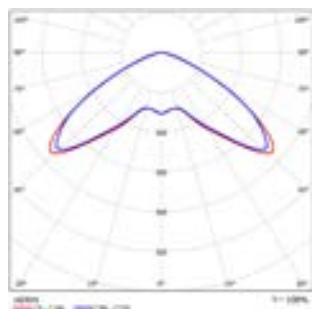
FRAME

FRAME

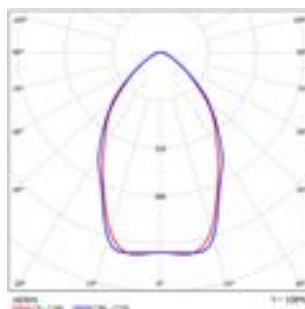
LIGHTING FIXTURES BODY	SURFACE-MOUNTED LUMINAIRE				RECESSED LUMINAIRE			
Material	Cover lens module made of PMMA. Housing and mounting bracket made of galvanized steel							
Coloring (powder coating)	Painted in RAL 9003 (signal white)							
Mounting type	Ceiling mounted, perforated frames. Modules are clipped in to mounts				Ceiling mounting: Mounting angle for variable ceiling thicknesses (up to 120 mm), installation height including connection box: 155 mm			
Dimensions (length x width x height)	557 x 411 x 92 mm				557 x 411 mm (outside cover), installation dimensions (L x W): 360 x 320 mm (indoor)			
Weight	Housing 4.8 kg	1 module 5.8 kg	2 modules 6.7 kg	3 modules 7.7 kg	Housing 4.5 kg	1 module 5.5 kg	2 modules 6.4 kg	3 modules 7.4 kg
IP Protection class	IP65							
Glass type	PMMA							
Shock resistance / impact resistance	IK08							
PHOTOMETRIC PROPERTIES								
Light source type	Recessed or surface-mounted luminaires with 1, 2 or 3 LED modules each with 14 LEDs or 28 LEDs							
Optical system	I- or G-Optics, PMMA single optics							
Rated luminous flux	2,500 / 5,000 / 7,500 / 10,000 / 15,000 lm							
Dimming (Power control)	Night-time dimming or DALI							
Temperature management	NTC control							
ELECTRICAL PROPERTIES								
Protection class	Protection Class II							
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz							
INSTALLATION SUGGESTIONS								
Application areas	Petrol stations, parking facilities, outdoor areas							
Installation height	2 – 6 m							
Admitted ambient temperature (ta)	-40 °C to +40 °C							
OTHER PROPERTIES								
Certificate / energy efficiency class	<div> <div>CE</div> <div>RoHS</div> <div>DE</div> <div>EMC</div> <div>A++</div> <div>A+</div> <div>A</div> <div> <div> <div></div> <div>DIN 10500</div> </div> </div> </div>							
VERSION	SURFACE-MOUNTED LUMINAIRE				RECESSED LUMINAIRE			
	<div> <div>2 modules</div> <div>3 modules</div> </div>				<div> <div>2 modules</div> <div>3 modules</div> </div>			

## Optics and light distributions for all variants

**I** Petrol stations, parking garages and parking decks



**G** Petrol stations











## FUNCTIONAL LUMINAIRES

# BOX

**Innovative:** Easy replacement of the modules as a Plug & Play system

**Modular** design enables coupling of the LED module to the housing

**Integrated** thermal management

**Controls:** Dimming

### Other advantages:

- Energy efficiency
- Modules can be easily replaced via the Plug & Play system at any time
- Weather resistance
- Optimized light distribution
- 20-year replacement part guarantee
- Minimum of 80% luminous flux after an average lifetime of 100,000 operating hours
- Mercury-free
- Development and production in Germany

### Application areas:

- Factory facilities
- Production workshops
- Petrol stations
- Parking garages
- Outdoor areas

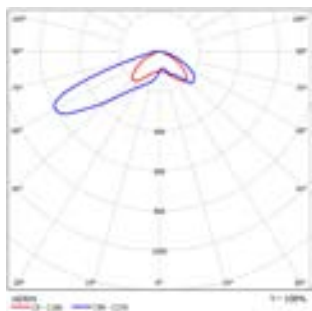


## ●●● Technical specifications

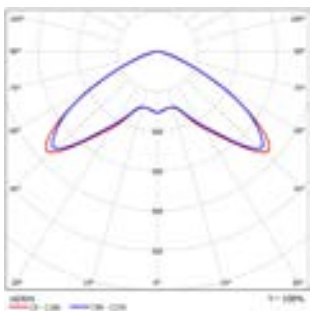
		
	<b>BOX</b>	<b>BOX</b>
<b>LIGHTING FIXTURES BODY</b>	<b>1 MODULE</b>	<b>2 MODULES</b>
Material	Housing made of extruded aluminum profile, connection box and end caps made of PC	
Coloring (powder coating)	Painted similar to RAL 9006	
Mounting type	Direct screw coupling for ceiling installation	
Dimensions (length x width x height)	499 / 515 x 103 x 105 mm	960 / 978 x 103 x 105 mm
Weight	2.7 / 3.0 / 3.3 kg	5.2 / 5.5 / .7 kg
IP Protection class	IP65	
Glass type	PMMA	
<b>PHOTOMETRIC PROPERTIES</b>		
Light source type	1 or 2 Eco modules with 14 LEDs or 28 LEDs	
Optical system	P-, I-, G-Optics, PMMA single optics	
Dimming (Power control)	Night-time dimming or DALI	
Temperature management	NTC control	
<b>ELECTRICAL PROPERTIES</b>		
Protection class	Protection Class II	
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz	
<b>INSTALLATION SUGGESTIONS</b>		
Application areas	Factory facilities, production workshops, petrol stations, parking facilities, outdoor areas	
Installation height	2 – 6 m	
Admitted ambient temperature (ta)	-40 °C to + 40 °C	
<b>OTHER PROPERTIES</b>		
Certificate / energy efficiency class	       	

## ●●● Optics and light distributions for all variants

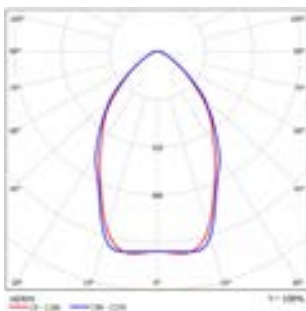
**P** Parking garages and underground garages



**I** Petrol stations, parking garages, and parking decks



**G** Petrol stations





## MOISTURE-PROOF LUMINAIRES

# IL FORTA

**Economical:** Reduced operating costs for existing moisture-proof luminaires

**Easy installation:** Simple installation

**Robust:** IP66 and IK08

**Effizient:** LED modules with 115 and 135 lm/W









### Other advantages:

- Energy efficiency
- Proven housing concept
- Installation without need to open the luminaire
- Version with through wiring
- Mounting accessories included
- 80% luminous flux after an average service lifetime of 50,000 operating hours
- Development and production in Germany

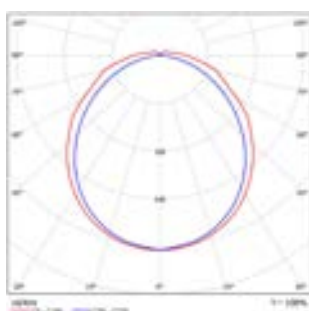
### Application areas:

- Factory facilities
- Production workshops
- Logistics buildings
- Canopies
- Car wash

## Technical specifications

		IL FORTA ST		IL FORTA HE	
LIGHTING FIXTURES BODY		IL FORTA ST 1.2	IL FORTA ST 1.5	IL FORTA HE 1.2	IL FORTA HE 1.5
Material	Housing trough: Fiberglass reinforced polyester, cover: PMMA				
Coloring	Housing trough RAL 7035				
Mounting type	Chain suspension, ceiling mounting, wall mounting				
Dimensions (length x width x height)	1,213 mm (DV + 48 mm) x 76 mm x 67 mm	1,493 mm (DV + 48 mm) x 76 mm x 67 mm	1,213 mm (DV + 48 mm) x 76 mm x 67 mm	1,493 mm (DV + 48 mm) x 76 mm x 67 mm	
Weight	1.9 kg	2.3 kg	1.9 kg	2.3 kg	
Shock resistance / impact resistance	IK08				
IP Protection class	IP66				
PHOTOMETRIC PROPERTIES					
Light source type	LED modul				
Optical system	Wide-angle light distribution				
Rated luminous flux	4,200 lm	5,700 lm	4,000 lm	6,000 lm	
Dimming (Power control)	On – Off / DALI				
Sensor	Variante mit integriertem HF Sensor erhältlich				
ELECTRICAL PROPERTIES					
Protection class	Protection Class I				
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz				
INSTALLATION SUGGESTIONS					
Application areas	Factory, production and logistics buildings, canopies, car washes, parking garages				
Installation height	2 – 6 m				
Permissible ambient temperature at (ta)	-25 °C to +35 °C				
OTHER PROPERTIES					
Certificate	    DIN 10500			    DIN 10500	
Assembly	with the included mounting accessories				
Connection	with included plug			via supplied mounting accessories, anti-theft clamps optional	
Electrical design	Single-ended connection (Z) or through-wiring (DV)				
Emergency light	Battery 3 h				
Sensors	Can be integrated (on request)				

## Optics and light distributions







## PANEL LIGHTING

# OFFICE ECO

**Illumination:** Particularly homogenous and wide illumination

**Efficient:** Sustainable concept with technology guarantee

**Flat, robust** design

**Flexible:** Available in the size variations Eco 600 and Eco 1200

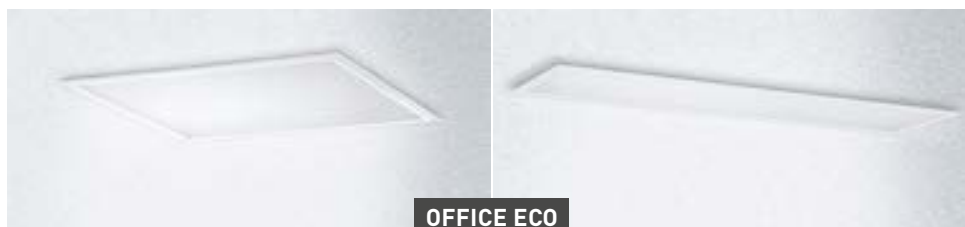
### Other advantages:

- Patented light control
- Special versions for computer workstations
- Extremely flat structural shape
- Sleek design with diffuse lens
- Standard dimensions for easy installation in existing infrastructures
- Installation packet for additional installation situations can be ordered separately

### Application areas:

- Offices
- Hotels
- Reception areas
- Conference rooms
- Hallways

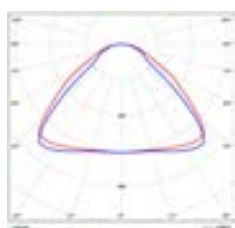
## Technical specifications



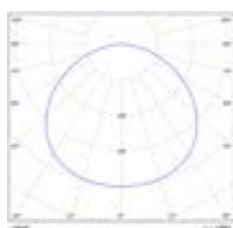
OFFICE ECO

LIGHTING FIXTURES BODY		600		OFFICE ECO		1200			
Material		Housing made of aluminum, white							
Mounting type		Ceiling recessed		Ceiling suspension		Ceiling recessed		Ceiling suspension	
Dimensions		625 x 625 mm		600 x 600 mm		1,250 x 312.5 mm		1,200 x 300 mm	
IP Protection class		IP20							
PHOTOMETRIC PROPERTIES									
Optical system				Prism / translucent					
Rated luminous flux				4,200 lm					
Dimming (Power control)				On - Off / DALI					
ELECTRICAL PROPERTIES									
Protection class				Protection Class I					
Rated voltage / operating voltage				230 V					
Frequency				50 / 60 Hz					
INSTALLATION SUGGESTIONS									
Application areas				Offices, hotels, reception and conference rooms, corridors					
Admitted ambient temperature (ta)				-20 °C to +45 °C					
OTHER PROPERTIES									
Certificate				 					
OPTIONS									
Suitable for use with computer workstations				UGR 19 with prism structure					

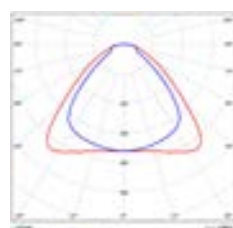
## Optics and light distributions



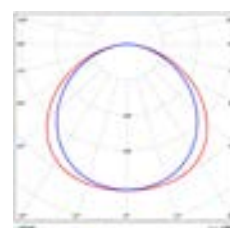
With prisms



Without prisms



With prisms



Without prisms



DESIGN FOR 600 AND 1200

CEILING RECESSED



CEILING SURFACE MOUNTED



CEILING SUSPENSION





# WALL AND CEILING LIGHTS

## SPACE ECO

219

WALL AND CEILING LIGHTS

**Cost-effective:** Operating cost savings and long service life

**Easy installation:** Easy assembly

**Robust:** IP44 dust-proof for high requirements

**Optics:** Very evenly illuminated cover

### Other benefits:

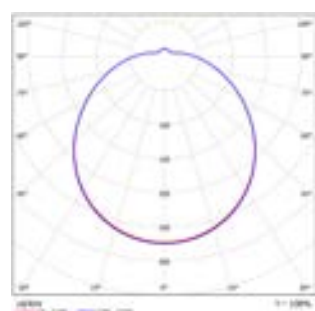
- Very homogeneous illumination
- Classic design
- Universal application
- Brand electrical ballast
- Easy assembly

### Applications:

- Staircases
- Hallways
- Passages
- Corridors

### ● ● ● Technical specifications

SPACE ECO	
LIGHTING FIXTURES BODY	
Material	Housing base unit: painted sheet steel cover: PMMA
Colour	Housing base unit RAL 9010
Mounting type	Ceiling or wall mounting
Dimension (diameter x height)	Ø 360 x 105 mm    Ø 410 x 115 mm
Weight	0.8 kg    1.0 kg
IP Protection class	IP44
PHOTOMETRIC PROPERTIES	
Light source	Mid-Power LEDs
Optical system	Wide-angle light distribution
Rated luminous flux	1,600 lm    2,000 / 2,600 lm
Dimming (Power control)	On / Off
Sensor	Version with integrated HF sensor available
ELECTRICAL PROPERTIES	
Electrical protection class	SK I
EB	Branded electrical ballast
Rated voltage / operating voltage	220 - 240 V / 50 - 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Staircases, hallways, passages and corridors
Installation height	1.5 - 4 m
Permissible ambient temperature range at (ta)	-20° C to +35° C
OTHER PROPERTIES	
Certificate	CE A+
Mounting	with supplied mounting accessories



### ● ● ● Optics and light distribution



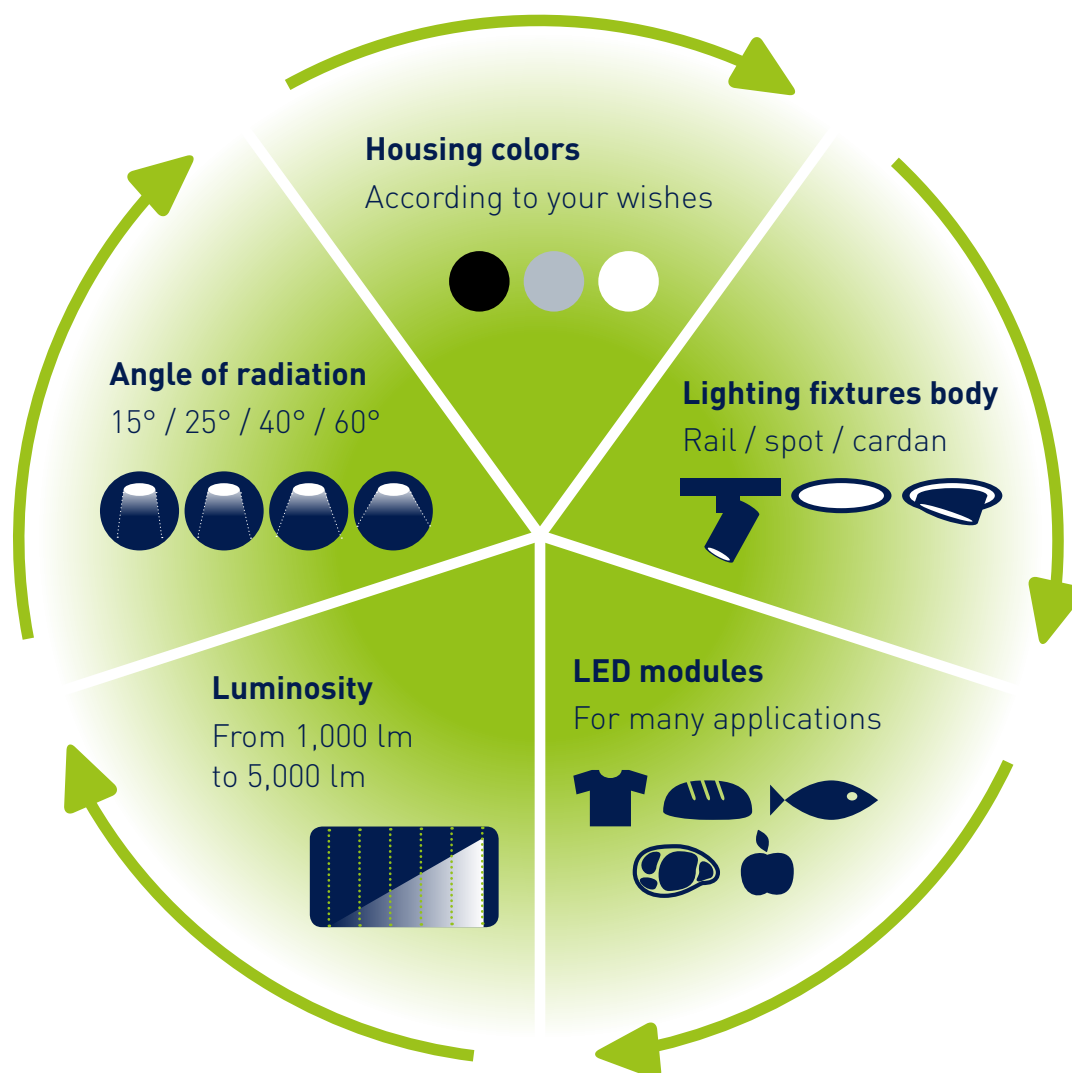
Bedien dich!

KAFFEE & TEE

JE NUR  
2.90

SCHMIED

# Customized lighting according to your wishes – it's your choice



Quality



**Z Zhaga**





**Flexible:** Reflector can be changed without tools, different angles of radiation available

**Universal adapter** for 3-phase busbars

**Zhaga standard**

**Compact, subtle design,** Lighting fixtures body made of die-cast aluminum

#### Other advantages:

- High efficiency aluminum reflectors
- High quality protective glass, over 99% transmission
- High luminous efficiency, of up to > 90%
- Passive cooling
- Can be tilted and pivoted
- Universal adapter for 3-phase busbars
- Components from well-known manufacturers
- LED lifetime: 50,000 hours to 70% luminous flux
- 5-year system warranty

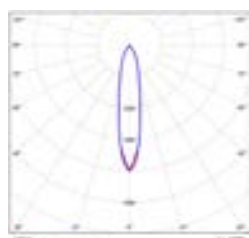
#### Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

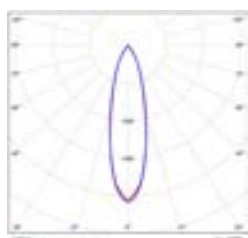
#### ● ● ● Technical specifications

PACTA	
LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	White / Silver / Black
Mounting type	Mounting on 3-phase busbars
Orientation possibilities	Can be tilted and pivoted (350 °)
Dimensions (diameter x height)	Ø 88 x 117 mm (without adapter)
Weight	920 g
IP Protection class	IP20
Glass type	Transmission glass (> 99 %)
PHOTOMETRIC PROPERTIES	
Optical system	Reflector technology
Angle of radiation	25° / 35°
Rated luminous flux	2,000–4,000 lm
Dimming (Power control)	On – Off
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Sales and conference areas, showrooms, reception areas
OTHER PROPERTIES	
Certificate	   

#### ● ● ● Optics and light distributions



20°



35°







# BUSBAR SPOTLIGHTS

## TEGA

225

BUSBAR SPOTLIGHTS

**Flexible:** Reflector can be changed without tools, different angles of radiation available

**Universal adapter** for 3-phase busbars

**Zhaga standard**

**Elegant design**

**Lighting fixtures body** made of die-cast aluminum

### Other advantages:

- Elegant design, lighting fixtures body made of die-cast aluminum
- Cooling unit and housing are made in one cast
- High efficiency aluminum reflectors
- High quality protective glass, over 99% transmission
- High luminous efficiency, of up to > 90%
- Passive cooling
- Can be tilted and pivoted
- Universal adapter for 3-phase busbars
- Components from well-known manufacturers
- LED lifetime: 50,000 hours to 70% luminous flux
- 5-year system warranty

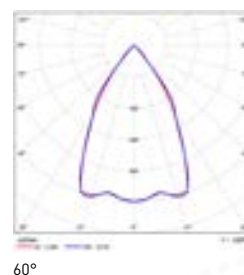
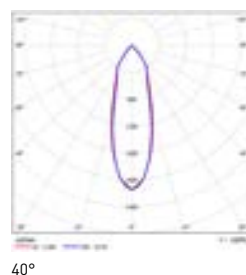
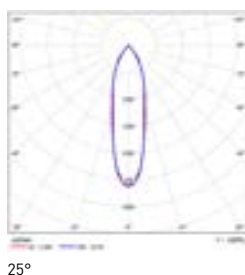
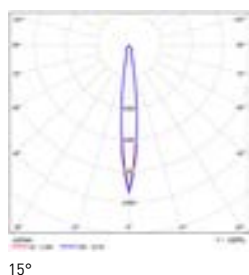
### Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

### ● ● ● Technical specifications

TEGA		TEGA XS	
LIGHTING FIXTURES BODY			
Material	Aluminum die casting		
Coloring (powder coating)	White / Silver / Black		
Mounting type	Mounting on 3-phase busbars		
Orientation possibilities	Can be tilted and pivoted (350 °)		
Dimensions (diameter x height)	Ø 115 x 129 mm (without adapter)	Ø 93 x 78 mm (without adapter)	
Weight	1,355 g	1,000 g	
IP Protection class	IP20		
Glass type	Transmission glass (> 99 %)	Transmission glass (> 99 %)	
PHOTOMETRIC PROPERTIES			
Optical system	Reflector technology		
Angle of radiation	15° / 25° / 40° / 60°		
Rated luminous flux	2,000–5,000 lm	2,000–4,500 lm	
Dimming (Power control)	On – Off / DALI		
ELECTRICAL PROPERTIES			
Protection class	Protection Class II		
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz		
INSTALLATION SUGGESTIONS			
Application areas	Sales and conference areas, showrooms, reception areas		
OTHER PROPERTIES			
Certificate	   		

### ● ● ● Optics and light distributions





**Flexible:** Reflector can be changed without tools, different angles of radiation available

**Zhaga standard**

**Elegant design**

**Lighting fixtures body** made of die-cast aluminum

**High efficiency reflectors** made of aluminum

## Other advantages:

- High quality protective glass, over 99% transmission
- High luminous efficiency, of up to > 90%
- Passive cooling
- Can be tilted and pivoted
- DALI dimmable (optional)
- Components from well-known manufacturers
- LED lifetime: 50,000 hours to 70% luminous flux
- 5-year system warranty

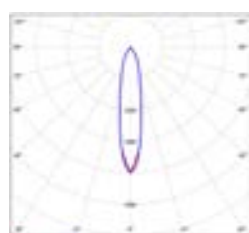
## Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

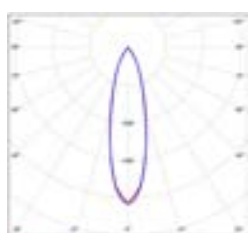
## Technical specifications

	LYRA 170	LYRA 150	LYRA 110
LIGHTING FIXTURES BODY			
Material	Aluminum die casting		
Coloring (powder coating)	White / Silver / Black		
Mounting type	Ceiling recessed		
Orientation possibilities	can be pivoted gimbals	Can be tilted and pivoted	
Dimension	180 x 120 mm (Ø x h)	170 x 170 x 114 mm (l x b x h)	120 x 110 mm (Ø x h)
Weight	1,005 g	1,100 g	650 g
IP Protection class	IP20		
Glass type	Transmission glass (> 99 %)		
PHOTOMETRIC PROPERTIES			
Light source type	COB LED		
Optical system	Reflector technology		
Angle of radiation	15° / 25° / 40° / 60°		25° / 35°
Rated luminous flux	2,000 – 5,000 lm		2,000 – 3,000 lm
Dimming (Power control)	On – Off / DALI		
ELECTRICAL PROPERTIES			
Protection class	Protection Class II		
Operating voltage / frequency	220 – 240 V/ 50 – 60 Hz		
INSTALLATION SUGGESTIONS			
Application areas	Sales rooms, conference rooms, showrooms, reception areas		
Installation dimensions	170 mm (Ø)	150 x 150 mm (l x b)	110 mm (Ø)
OTHER PROPERTIES			
Certificate	   		

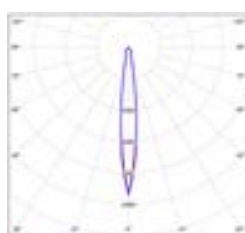
## Optics and light distributions



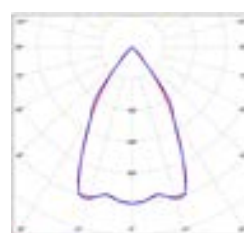
Lyra 110, 20°



Lyra 110, 35°



Lyra 150 / 170, 15°



Lyra 150 / 170, 60°





**Flexible:** Reflector can be changed without tools, different angles of radiation available

**Zhaga standard**

**Compact design**

**Lighting fixtures body** made of die-cast aluminum

**High efficiency reflectors** made of aluminum

## Other advantages:

- High-quality transmission glass, over 99% transmission
- High luminous efficiency, of up to > 90%
- Passive cooling
- Can be tilted and pivoted
- DALI dimmable (optional)
- Components from well-known manufacturers
- LED lifetime: 50,000 hours to 70% luminous flux
- 5-year system warranty

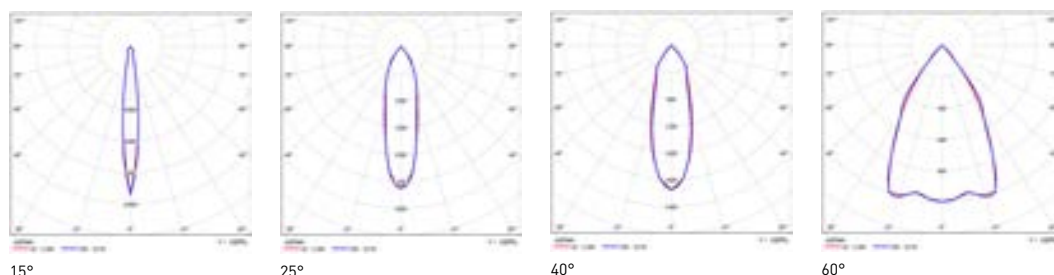
## Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

## Technical specifications

NEO	
LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	White / Silver / Black
Mounting type	Ceiling recessed
Orientation possibilities	Can be tilted and pivoted
Dimensions (diameter x height)	Ø 170 x 155 mm
Weight	1,340 g
IP Protection class	IP20
Glass type	Transmission glass (> 99 %)
PHOTOMETRIC PROPERTIES	
Light source type	COB LED
Optical system	Reflector technology
Angle of radiation	15° / 25° / 40° / 60°
Rated luminous flux	2,000 – 5,000 lm
Dimming (Power control)	On – Off / DALI
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Sales and conference areas, showrooms, reception areas
Installation dimensions (diameter)	Ø 160 mm
OTHER PROPERTIES	
Certificate	CE A A+ A++

## Optics and light distributions









**Compact design**, subtle design

**Special reflector** with halogen optics

**Integrated** driver

**Can be tilted**

#### Other advantages:

- Dimmable
- Subtle design, compact design
- Lighting fixtures body made of die-cast aluminum
- With integrated driver, direct 230V connection
- Dimensions like halogen recessed spotlight
- Suitable for through wiring

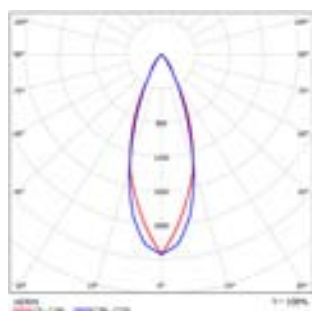
#### Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

#### ● ● ● Technical specifications

COMO 68	
LIGHTING FIXTURES BODY	
Material	Aluminum die casting
Coloring (powder coating)	White / Silver
Mounting type	Ceiling recessed
Orientation possibilities	Can be tilted
Dimensions (diameter x height)	Ø 86 x 62 mm
Weight	170 g
IP Protection class	IP20
PHOTOMETRIC PROPERTIES	
Optical system	Reflector technology
Angle of radiation	38°
Rated luminous flux	600 lm
Dimming (Power control)	On – Off
ELECTRICAL PROPERTIES	
Operating voltage / frequency	220 – 240 V / 50 Hz
INSTALLATION SUGGESTIONS	
Application areas	Sales and conference areas, showrooms, reception areas
Specific installation	Ceiling thickness: 1 – 25 mm
Installation dimensions (diameter x depth)	Ø 68 x min. 120 mm
Admitted ambient temperature (ta)	max. 45 °C
OTHER PROPERTIES	
Certificate	CE A+

#### ● ● ● Optics and light distributions



38°



**Form:** Flat Downlight

**Efficient:** High efficiency thanks to COB-LED

**Lifespan:** quality product with over 100,000h lifetime

**Light quality:** High color accuracy of 2 SDCM

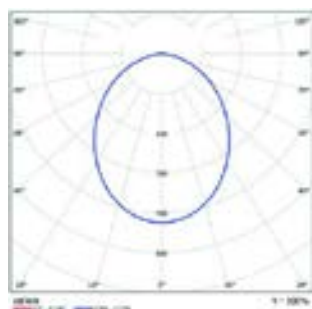
#### Application areas:

- Salesrooms
- Conference rooms
- Showrooms
- Reception areas

#### ● ● ● Technical specifications

COMO 170		COMO 210	
LIGHTING FIXTURES BODY			
Material	Aluminum die casting		
Coloring (powder coating)	White		
Mounting type	Ceiling installation		
Dimensions (diameter x height)	Ø 196 x 70 mm	Ø 242 x 66.7 mm	
IP Protection class	IP44 (room-side) / IP 20		
PHOTOMETRIC PROPERTIES			
Light source	COB-LED		
Optical system	Frosted glass		
Angle of Radiation	95°		
Rated luminous flux	1,600 lm / 1,900 lm / 2,500 lm	3,400 lm	
Colour accuracy	2 SDCM		
ELECTRICAL PROPERTIES			
Protection class	SK II		
Operating voltage / Frequency	220 – 240 V / 50 Hz		
INSTALLATION SUGGESTIONS			
Application areas	Salesrooms, conference rooms, showrooms, reception areas		
Installation dimensions	Ø 170 mm	Ø 210 mm	
Permissible ambient temperature (ta)	0 °C bis +30 °C		
OTHER PROPERTIES			
Certificate			

#### ● ● ● Optics and light distributions



38°





**Flexible:** Reflector can be changed without tools, different angles of radiation available

**Zhaga standard**

**Elegant design**

#### Other advantages:

- Lighting fixtures body made of die-cast aluminum
- High efficiency aluminum reflectors
- High quality protective glass, over 99% transmission
- High luminous efficiency of up to > 90%
- Passive cooling
- Components from well-known manufacturers
- LED lifetime: 50,000 hours to 70% luminous flux
- 5-year system warranty

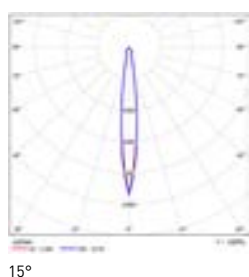
#### Application areas:

- Sales rooms
- Conference rooms
- Showrooms
- Reception areas

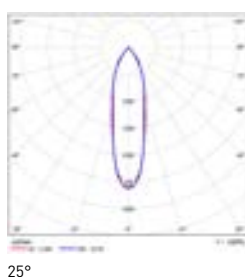
#### ● ● ● Technical specifications

PARUM	
LIGHTING FIXTURES BODY	
Material	Housing made of die-cast aluminum
Coloring (powder coating)	White / Silver / Black
Mounting type	Wire suspension
Dimensions (diameter x height)	Ø 320 x 250 mm
IP Protection class	IP20
Glass type	SIFLEX transmission glass (> 99 %)
PHOTOMETRIC PROPERTIES	
Light source type	COB LED
Optical system	Reflector technology
Angle of radiation	15° / 25° / 40° / 60°
Rated luminous flux	2,000 – 5,000 lm
Dimming (Power control)	On – Off / DALI
ELECTRICAL PROPERTIES	
Protection class	Protection Class II
Operating voltage / frequency	220 – 240 V / 50 – 60 Hz
INSTALLATION SUGGESTIONS	
Application areas	Sales and conference areas, showrooms, reception areas
OTHER PROPERTIES	
Certificate	CE A A+ A++

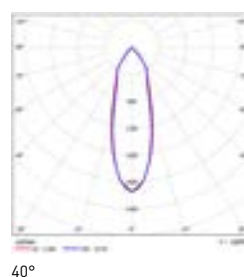
#### ● ● ● Optics and light distributions



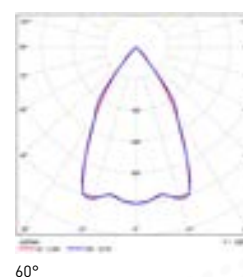
15°



25°



40°



60°



# 7 good reasons for LUNUX

Since its introduction, the many excellent qualities of our modular LED lighting technology have fascinated businesses and communities. As part of our current portfolio, we offer innovative, practical, and design-oriented LED light solutions for almost all needs, sectors, and areas. They are always energy efficient, sustainable, reliable, and easy to install. Just as expected from LUNUX.

1

## Research and Development

We want to play a decisive role in shaping the future of light, which is why we concentrate our skills on just one area. Above all, we are already investing in better ideas, consistent research, and innovative technology today. The result is impressive: Intelligent luminaires for all areas of life.

2

## Quality tests

Of course, we want to be sure that users can rely on our products in every detail. Therefore, all luminaires have to undergo meticulous tests to make sure that they meet with our high-quality requirements and that they are customer-friendly in every sense of the word.

3

## Production at the Laatzen location

LUNUX manufactures smart LED lighting solutions "Made in Germany." Luminaires that are exactly aligned to what the applications require. However, this calls for two things: Highly qualified specialists and production facilities, which are state-of-the-art and flexible enough to react even to unusual requests on short notice. And that is exactly what we have!

### Our brands:

**LUNUX**  
**HELLUX**

**Our Service Center Germany and International: +49 511 820 10-100**

**Further information: [www.lunux-lighting.com](http://www.lunux-lighting.com)**

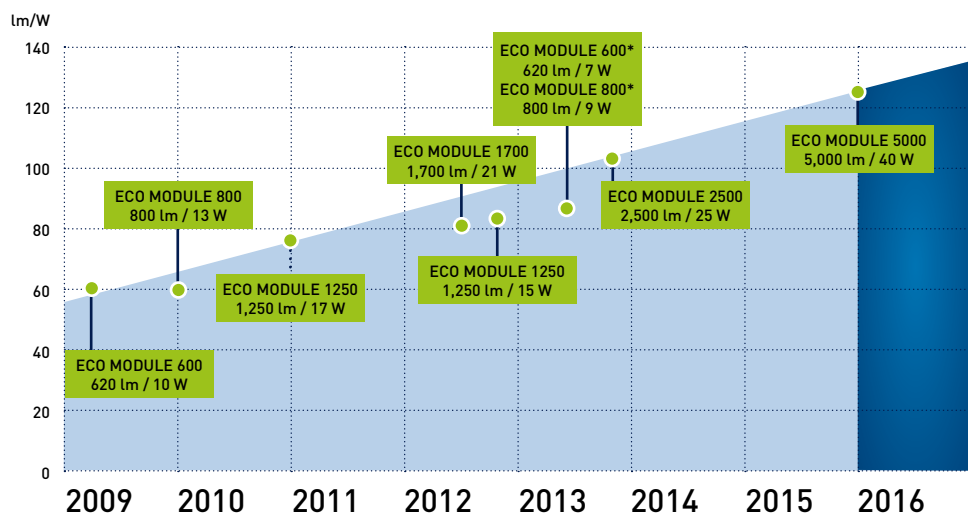
General inquiries:  
[info@lunux-lighting.com](mailto:info@lunux-lighting.com)

Sales international:  
[export@lunux-lighting.com](mailto:export@lunux-lighting.com)

National sales:  
[vertrieb@lunux-lighting.com](mailto:vertrieb@lunux-lighting.com)



## Development process of a brilliant idea



## The ECO Light Revolution

The ECO module system is a brilliant highlight within the rapid success story of LED lighting technology. And this story continues to be written. Most recently with a 5,000 lm module. Good for our customers. Because they benefit from the improved energy efficiency of state-of-the-art module technology by simple modulation. And that still in 20 years from now! This gives the ECO module system a unique, forward-looking dynamic.

## Free color selection

The color spectrum of our luminaires covers the entire pallet according to RAL. Open to every taste and every environment. From subtle to brilliant. A color program that inspires light ideas.



4

### Ideal lighting concepts for workshops, warehouses, and outdoor areas

LED has changed the world. LINUX adds a highlight to that. Thanks to intelligent light control, homogeneous illumination, and individual light distribution, we offer extremely efficient, energy-saving and environmentally-friendly light solutions, which are perfectly adapted to the installation site and the surrounding area.

5

### Technical consultation on site

A change of system would only be sensible if it pays for itself. This, of course, also applies to a planned switch to LED luminaires. You can find out how much you will be saving which is based on an analysis that we will do according to your specifications. Then you can compare and decide.

6

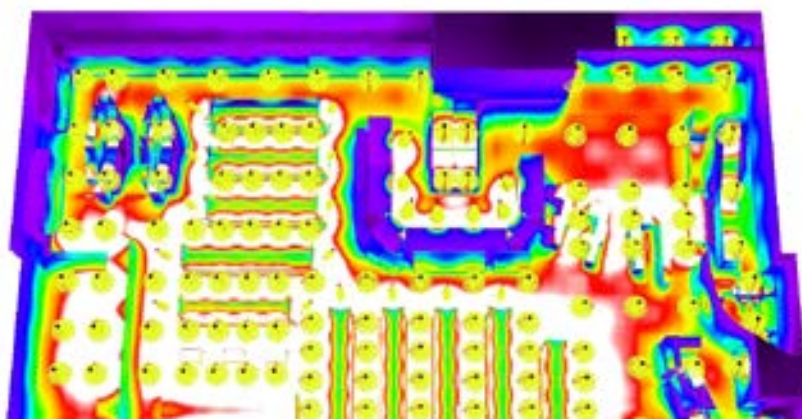
### Professional lighting planning

Properly planned light combines conceptual clarity with a functionally suitable space, environment, and conducive application. Moreover, our light planning is always based on an objective association of experience and individual wishes.

7

### Special solutions by arrangement

We would be happy to support you thoroughly and professionally in the development of a customized lighting concept. From inventory to the point-by-point determination of the expected operating costs. We are certain that: Together we will always find a lighting solution that perfectly meets your wishes and requirements.













**LUCIDA S.E.A. PTE. LTD.**

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**<http://lucida-lightsolution.com/>**

Data may vary due to actual version.

Subject to technical changes. All statements without guarantee.