

**odak**<sup>®</sup> R&D  
CENTER

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smart city technologies

**LED Lighting Fixtures  
2024**

**LUXTRA**<sup>®</sup>  
LED Lighting Systems

is a trademark of

**odak**<sup>®</sup> R&D  
CENTER  
smart city technologies



Odak R&D Center is a technology company that develops value-added and sustainable technologies that make a difference in the fields of smart city technologies (Traffic, Energy, Lighting). Odak R&D Center aims to gather all sub-elements of smart city technologies under the roof of a unique platform by developing new generation hardware, software and subsystems.

Our aim is to develop products (hardware and software) and systems that meet the criteria of medium and high technology in our own fields of activity; to be a company that has brand awareness among the companies specialized in its field in our country and in the world and has signed major projects.

Odak R&D Center contributes to the standard, technical method and software activities developed in our country in the field of traffic. Our engineers receive Ertico Intelligent Transportation Systems (ITS&C-ITS and MaaS) trainings and certificates and develop products/systems with this vision in their applications. At the same time, it also follows IOT-based applications and technologies, which are among the most important parts of smart cities. For this purpose, it also has Lora Alliance Membership.

In addition to Smart City Technologies, we also carry out special projects for the defense industry, aviation and medical sectors. Odak R&D Center has also become a member of OSSA (Ostim Defense and Aviation Cluster), Aselsan Gücümüz Bir and Defense Industry YETEN in order to promote our work in the field of defense industry and increase our awareness of the sector.

Odak R&D Center employees participate in leading competitions in the field of lighting and use leading analysis programs in this field. They can also develop KNX and DALI automation, the leading building automation standard in lighting automation, and realize lighting change/transformation projects using Dialux/Relux within the scope of EN12464 standards.

Odak R&D Center engineering team accelerates your decision-making processes with engineering studies by preparing your lighting change/transformation projects in your factories and facilities in the computer environment in the closest way to reality (over 95% accuracy), together with investment return analysis, and performs the studies you need for a correct investment.

#### MEMBERSHIPS & AWARDS & ACHIEVEMENTS



- LED Lighting Project Competition First Prize
- DIALux evo Featured Project Winner
- Academy Ertico Intelligent Transportation Systems Certificate (ITS&C-ITS)
- Academy Ertico Certificate for Intelligent Transportation Systems (MaaS), 2022





[www.odakarge.com](http://www.odakarge.com)

## LOW BAY LIGHTING LUMINAIRE



ALTAIR 56W



ALTAIR 74W



ALTAIR 106W



ALSHAIN 72W



ALSHAIN 96W

PAGE  
NO

6-9

## HIGH BAY LIGHTING LUMINAIRE



REGULUS 106W



REGULUS 212W



REGULUS 318W



CAPELLA 72W



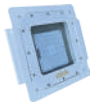
CAPELLA 96W



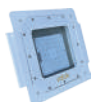
CAPELLA 128W

10-21

## CANOPY LIGHTING LUMINAIRE



CANOPUS 72W



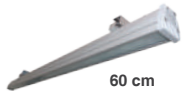
CANOPUS 96W



CANOPUS 128W

22-25

## LINEER LOW BAY LIGHTING LUMINAIRE



60 cm

BELLATRIX  
33W/42W



120 cm

BELLATRIX  
42W/50W

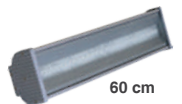


150 cm

BELLATRIX  
50W/59W

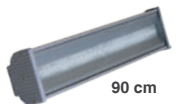
26-27

## LINEER HIGH BAY LIGHTING LUMINAIRE



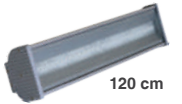
60 cm

LYRA 56W/65W



90 cm

LYRA 85W/100W

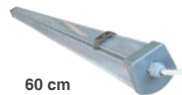


120 cm

LYRA 113W/132W

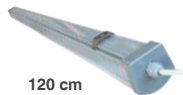
28-31

## WATERPROOF LIGHTING LUMINAIRE



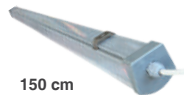
60 cm

HYDRA 18W



120 cm

HYDRA 36W

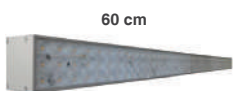


150 cm

HYDRA 65W

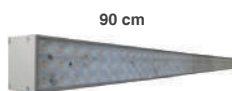
32-34

## LINEAR LIGHTING FIXTURES



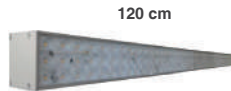
60 cm

ELEGANCE 25W



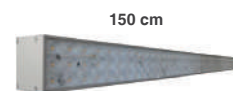
90 cm

ELEGANCE 38W



120 cm

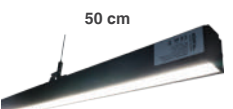
ELEGANCE 51W



150 cm

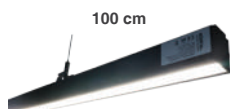
ELEGANCE 36W/48W/90W

35-38



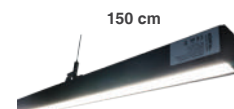
50 cm

LINDA 14W/20W



100 cm

LINDA 27W/40W



150 cm

LINDA 41W/60W

## STREET LIGHTING LUMINAIRES



SKYSTAR  
30 W ~ 60W



SKYSTAR  
60 W ~ 120W



SKYSTAR  
120 W ~ 180W



SKYSTAR  
180 W ~ 250W



SKYSTAR  
250W ~ 320W

PAGE  
NO

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## SOLAR POWERED STREET LIGHTING LUMINAIRES



POLARIS 20 W/Saat



POLARIS 40 W/Saat



POLARIS 60 W/Saat



POLARIS 80 W/Saat



URSA M 30W



URSA M 40W



URSA M 50W



URSA M 60W

41-45

## FLOODLIGHT



DENEK  
250~300 W



HEKA  
400W



VEGA  
500W-600W

46-51

## DOB LED PROJECTORS



30W



50W



100W



150W



200W



300W

52-53

## INFRARED LIGHTING LUMINAIRE



ROSS 10W



ROSS 40W



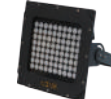
ROSS 70W



BETELGEUSE 70W



BETELGEUSE 100W



BETELGEUSE 125W

54-62

## LIGHTING CONTROL SYSTEMS



LORA GATEWAY  
KONTROLCÜ



NODE  
KONTROLCÜ



NEMASOKETİ

63-66

## EMERGENCY LIGHTING / DIRECTIONAL LUMINAIRES



ALCOR



ALCAID

67-70

# LOW BAY LIGHTING FIXTURES ALTAIR 74 W LOW BAY LIGHTING LUMINAIRE



Application Height



6 m



## Application Areas



Warehouses



Factories



Tunnels

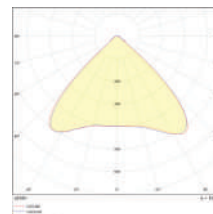


Gyms

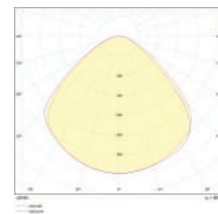


Airports

## Optical Beam Angle



90°



110°

## Information

Low Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed for use in industrial facilities, warehouses and sports facilities with ceiling heights up to 6m.

LED modules with high energy efficiency are used in the luminaires, which have a compact casing structure. It has 90°, 110° and assymetric distributions options for different applications. It is also classified according to energy consumption.

Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminum Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

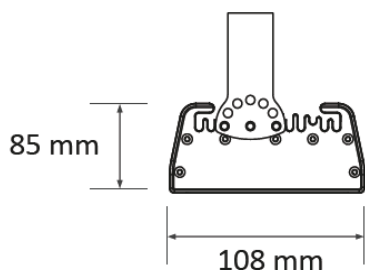
## Optical and Electrical Properties

<b>Power</b>	74 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	10064 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	90° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66,IP 67-IP 68 (opt.) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing

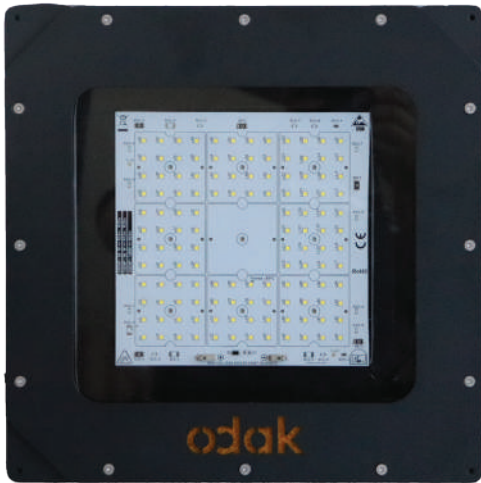


## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
ALT-056SM-00902-865-9005	56W	200-240 V AC 50/60 Hz	7392 lm	90°	200x150x85mm	2,75 kg
ALT-074SM-00902-865-9005	74W	200-240 V AC 50/60 Hz	9768 lm	90°	360x150x85mm	4,2 kg
ALT-106SM-00902-865-9005	106W	200-240 V AC 50/60 Hz	13992 lm	90°	600x150x85mm	5,5 kg
ALT-056SM-01102-865-9005	56W	200-240 V AC 50/60 Hz	7392 lm	110°	200x150x85mm	2,75 kg
ALT-074SM-01102-865-9005	74W	200-240 V AC 50/60 Hz	9768 lm	110°	360x150x85mm	4,2 kg
ALT-106SM-01102-865-9005	106W	200-240 V AC 50/60 Hz	13992 lm	110°	600x150x85mm	5,5 kg

# LOW BAY LIGHTING FIXTURES

## ALSHAIN 72 W LOW BAY LIGHTING LUMINAIRE



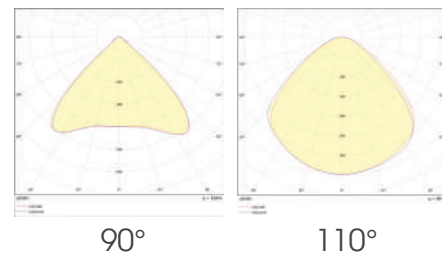
Application Height  
6 m



### Application Areas



### Optical Beam Angle



### Information

Low Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed for use in industrial facilities, warehouses and sports facilities with ceiling heights up to 6m. LED modules with high energy efficiency are used in the luminaires, which have a compact casing structure. It has 90°, 110° and assymetric distributions options for different applications. It is also classified according to energy consumption. Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.



## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

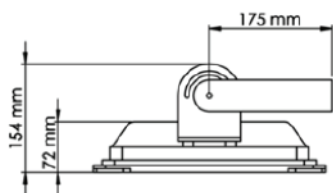
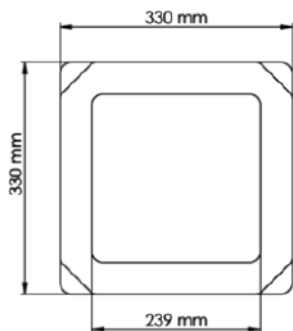
## Optical and Electrical Properties

<b>Power</b>	72 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	9792 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	90° / 110°	<b>Surge Protection Options</b>	6kV (standart), 10kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP66, IP67-IP68 (Optional) Platic , Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
ALS-072SM-00901-850-7016	72W	200-240 V AC 50/60 Hz	9504 lm	90°	330x330x154 mm	7,9 kg
ALS-072CT-00901-850-7016	72W	200-240 V AC 50/60 Hz	9504 lm	90°	330x330x154 mm	7,9 kg
ALS-072BB-00901-865-7016	72W	200-240 V AC 50/60 Hz	9504 lm	90°	330x330x154 mm	7,9 kg
ALS-072SM-00901-850-7016	72W	200-240 V AC 50/60 Hz	9028 lm	110°	330x330x154 mm	7,9 kg
ALS-072CT-00901-850-7016	72W	200-240 V AC 50/60 Hz	9028 lm	110°	330x330x154 mm	7,9 kg
ALS-072BB-00901-850-7016	72W	200-240 V AC 50/60 Hz	9028 lm	110°	330x330x154 mm	7,9 kg

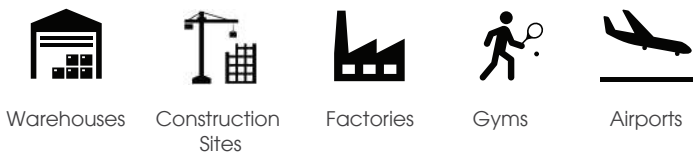
# HIGH BAY LIGHTING FIXTURES REGULUS 106W HIGH BAY LIGHTING LUMINAIRE



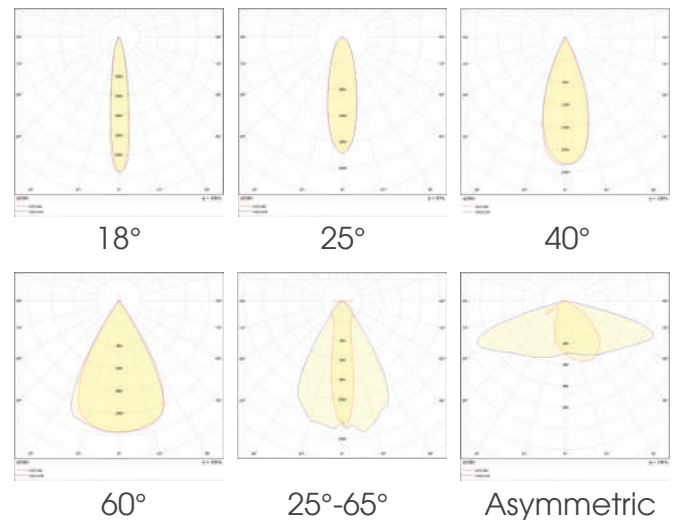
Application Height  
25 m



## Application Areas



## Optical Beam Angle



## Information

High Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed to be used in industrial facilities, warehouses, aircraft hangars and sports facilities with a ceiling height of 7-25m.

LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 18°, 25°, 40°, 60° and asymmetric options for different applications. It is classified according to energy consumption as well as different sizes and dimensions.

Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (Optional)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

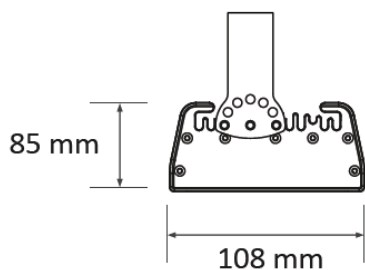
## Optical and Electrical Properties

<b>Power</b>	106 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	14416 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	18° / 25° / 40° / 60° Asymmetric - Double Asymmetric	<b>Surge Protection Options</b>	6kV (standart), 10kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (optional)	<b>Cable Gland</b>	P66, IP67-IP68 (Optional) Platic , Metal
<b>Lifespan - L70</b>	60.000 Hours		

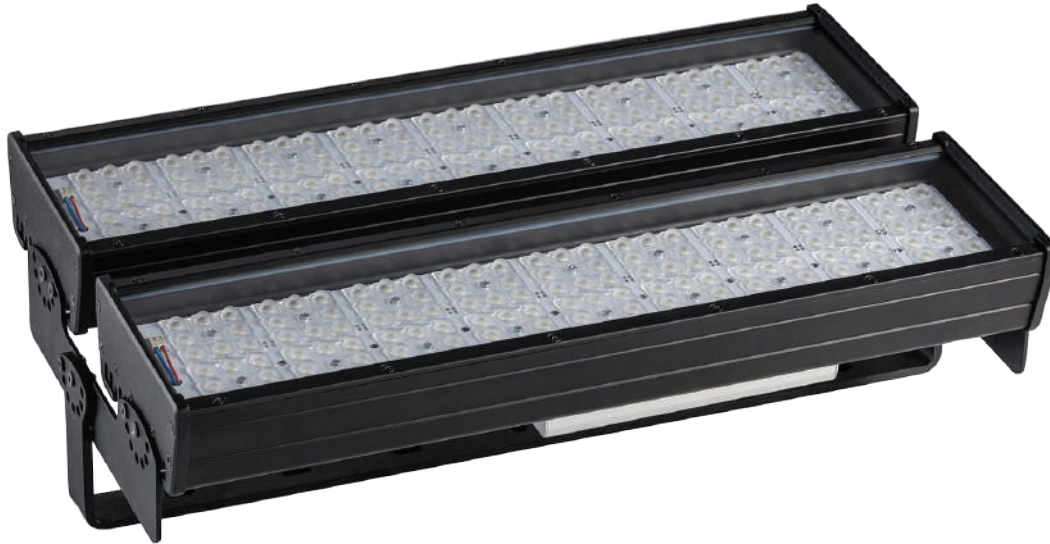
## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
RGL-106BB-00252-865-9005	106W	200-240 V AC 50/60 Hz	13292 lm	18°	200x150x85	5,5 kg
RGL-106BB-00402-865-9005	106W	200-240 V AC 50/60 Hz	13292 lm	40°	200x150x85	5,5kg
RGL-106BB-00602-865-9005	106W	200-240 V AC 50/60 Hz	13292 lm	60°	200x150x85	5,5kg
RGL-106BB-ASY12-865-9005	106W	200-240 V AC 50/60 Hz	13292 lm	20°-70°	200x150x85	5,5 kg

# HIGH BAY LIGHTING FIXTURES REGULUS 212 W HIGH BAY LIGHTING LUMINAIRE



Application Height



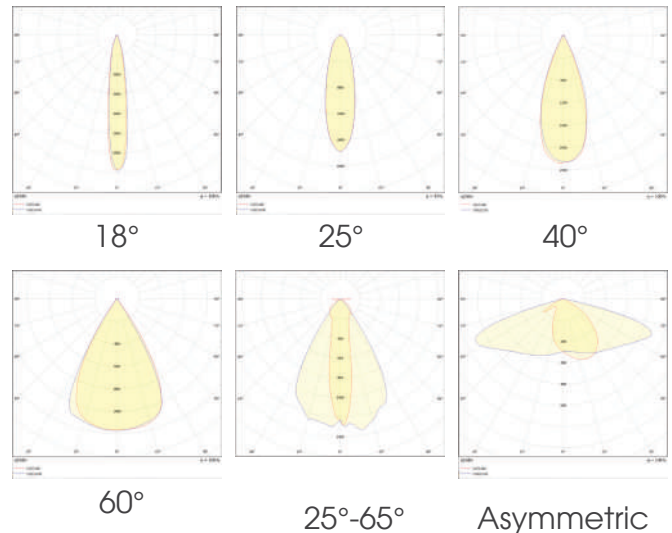
25 m



## Application Areas



## Optical Beam Angle



## Information

High Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed to be used in industrial facilities, warehouses, aircraft hangars and sports facilities with a ceiling height of 7-25m.

LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 18°, 25°, 40°, 60° and asymmetric options for different applications. It is classified according to energy consumption as well as different sizes and dimensions.

Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (optional)"
<b>IP Class</b>	IP 65 - IP 66 (Optional)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

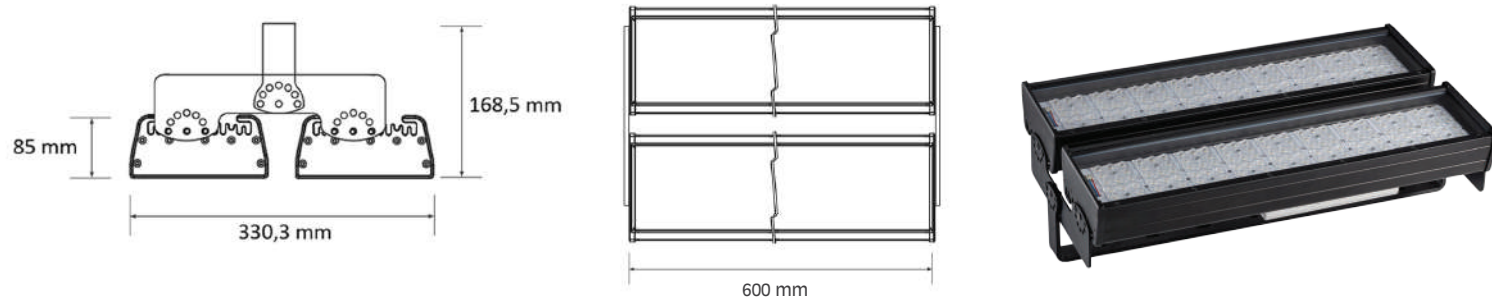
## Optical and Electrical Properties

<b>Power</b>	212 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	28832 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	18° / 25° / 40° / 60° Asymmetric - Double Asymmetric	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (optional)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (optional) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
RGL-212BB-00252-865-9005	212 W	200-240 V AC 50/60 Hz	26585lm	18°	600x300x85 mm	11,5kg
RGL-212BB-00402-865-9005	212 W	200-240 V AC 50/60 Hz	26585lm	40°	600x300x85 mm	11,5kg
RGL-212BB-00602-865-9005	212 W	200-240 V AC 50/60 Hz	26585lm	60°	600x300x85 mm	11,5kg
RGL-212BB-ASY12-865-9005	212 W	200-240 V AC 50/60 Hz	26585lm	20°-70°	600x300x85 mm	11,5kg

# HIGH BAY LIGHTING FIXTURES REGULUS 318 W HIGH BAY LIGHTING LUMINAIRE



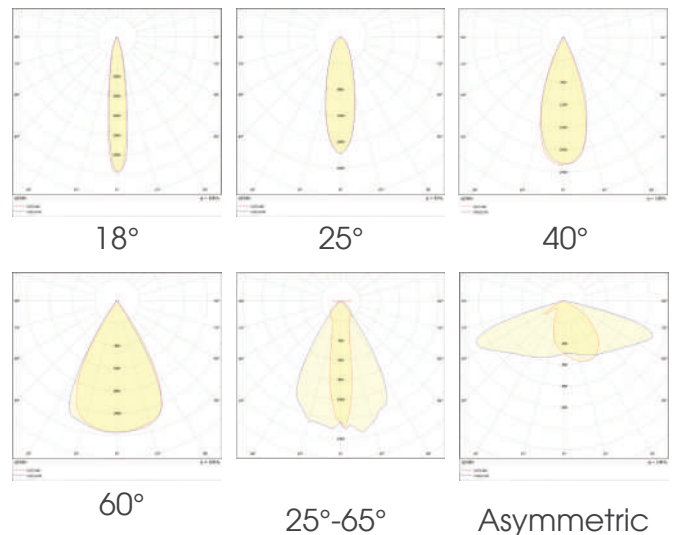
Application Height  
25 m



## Application Areas



## Optical Beam Angle



## Information

High Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed to be used in industrial facilities, warehouses, aircraft hangars and sports facilities with a ceiling height of 7-25m.

LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 18°, 25°, 40°, 60° and asymmetric options for different applications. It is classified according to energy consumption as well as different sizes and dimensions.

Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

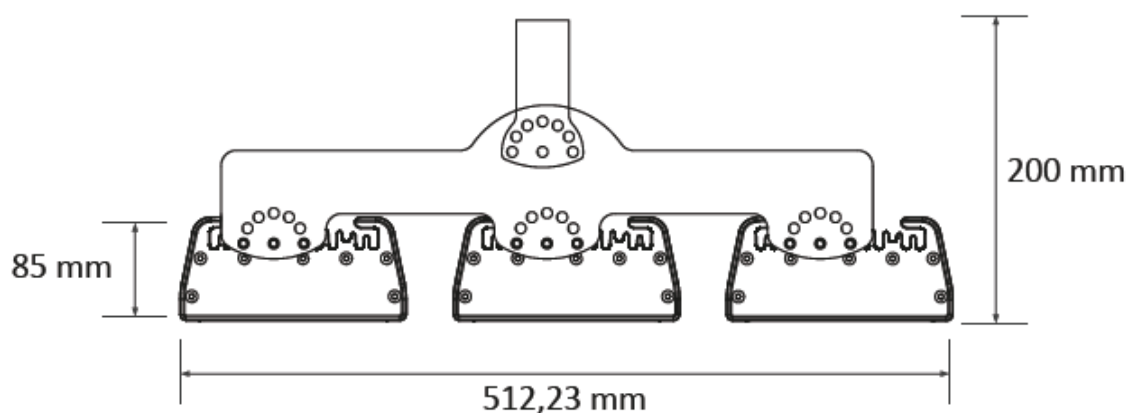
## Optical and Electrical Properties

<b>Power</b>	318 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	43248 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	18° / 25° / 40° / 60° Asymmetric - Double Asymmetric	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (optional)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (optional) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
RGL-318BB-00252-865-9005	318 W	200-240 VAC 50 - 60 HZ	43248 lm	25°	600x460x85 mm	17 kg
RGL-318BB-00402-865-9005	318 W	200-240 VAC 50 - 60 HZ	43248 lm	40°	600x460x85 mm	17 kg
RGL-318BB-00602-865-9005	318 W	200-240 VAC 50 - 60 HZ	43248 lm	60°	600x460x85 mm	17 kg
RGL-318BB-ASY12-865-9005	318 W	200-240 VAC 50 - 60 HZ	43248 lm	ASY°	600x460x85 mm	17 kg

# 212W HIGH BAY LED LIGHTING FIXTURE



## Return on Investment Analysis (ROI)

400W Metal Halide

212W LED Luminaire

Illuminance Level (Eavg)	350 LUX	350 LUX
Bulb Life (Hour)	8.000	60.000
Bulb Life (Piece)	40	40
Number of Bulbs (Piece)	40	0
Bulb Power (W)	400 W	188 W
Driver Losses (W)	60 W	24 W
Luminaire Power (W)	460 W	212 W
Total Consumption Power (kW)	18,4 kW	8,48 kW
Annual Bulb Replacement Cost (\$)	\$ 360	\$ 0,00
Daily Working Hours (Hour/Day)	16	16
Number of Days Worked Annually	330	330
Annual Working Hours (Hour/Year)	5280	5280
Energy Unit Cost (\$/kwh)	\$ 0,16	\$ 0,16
Annual Consumption Cost (kWh)	97.152 kWh	44.774 kWh
Annual Electricity Consumption Cost (\$)	\$ 15.904	\$ 7.164



400 W Metal Halide



212W High Bay LED Lighting Fixture

**Energy Saving**

**%54**

**Payback Period**  
(For New Investment)

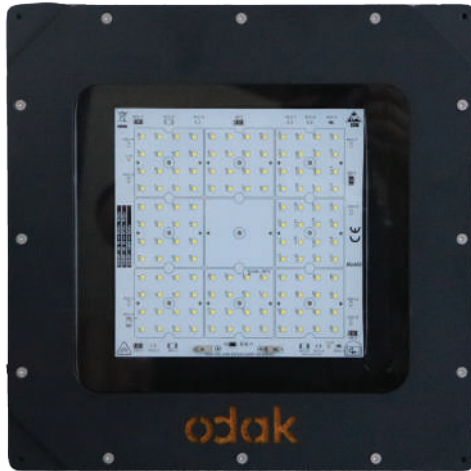
**6 Month**  
(For Change)

**10 Month**





# HIGH BAY LIGHTING FIXTURES CAPELLA 128 W HIGH BAY LIGHTING LUMINAIRE



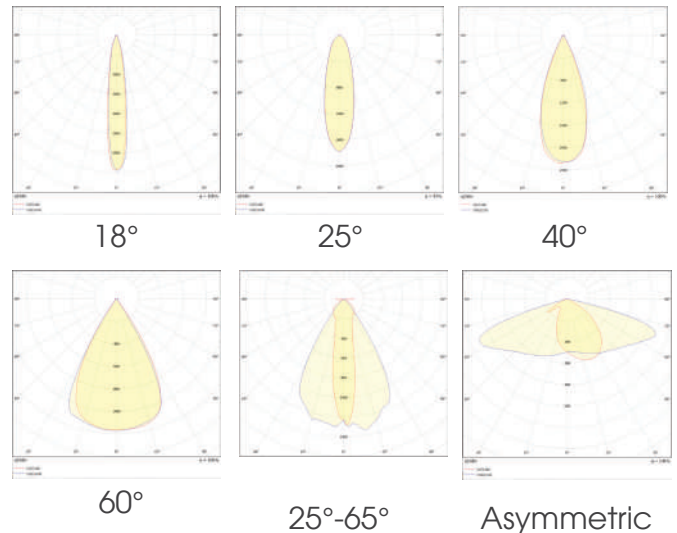
Application Height  
25 m



## Application Areas



## Optical Beam Angle



## Information

High Bay Lighting Luminaire is a LED lighting luminaire with high power and various lenses designed to be used in industrial facilities, warehouses, aircraft hangars and sports facilities with a ceiling height of 7-25m.

LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 18°, 25°, 40°, 60° and asymmetric options for different applications. It is classified according to energy consumption as well as different sizes and dimensions.

Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

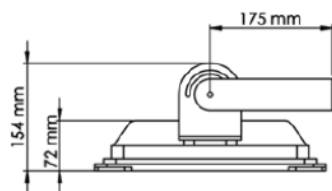
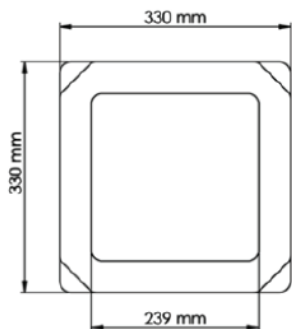
## Optical and Electrical Properties

<b>Power</b>	128 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	17408 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	18° / 25° / 40° / 60° Asymmetric - Double Asymmetric	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (optional)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (optional) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



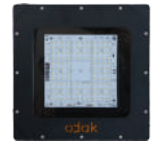
## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
HBS-072HM-00182-865-7016	72 W	200-240 VAC50 - 60 HZ	9792 lm	18°	330x330x154 mm	7,9 kg
HBS-096HM-00252-865-7016	96 W	200-240 VAC50 - 60 HZ	13056 lm	25°	330x330x154 mm	7,9 kg
HBS-128HM-00402-865-7016	128 W	200-240 VAC50 - 60 HZ	17408 lm	40°	1200x115x85 mm	7,9 kg
HBS-072HM-00602-865-7016	72 W	200-240 VAC50 - 60 HZ	9792 lm	60°	330x330x154 mm	7,9 kg
HBS-096HM-25652-865-7016	96 W	200-240 VAC50 - 60 HZ	13056 lm	25°*65°	330x330x154 mm	7,9 kg
HBS-128HM-ASY12-865-7016	128 W	200-240 VAC50 - 60 HZ	17408 lm	ASY°	1200x115x85 mm	7,9 kg

## Return on Investment Analysis (ROI)



250 W Sodium Vapor Fixture



128 W High Bay LED Lighting Fixture

Illuminance Level (Eavg)	350 LUX	350 LUX
Bulb Life (Hour)	10.000	60.000
Bulb Life (Piece)	40	40
Number of Bulbs (Piece)	40	0
Bulb Power (W)	250 W	116 W
Driver Losses (W)	30 W	12 W
Luminaire Power (W)	280 W	128 W
Total Consumption Power (kW)	11,2 kW	5,12 kW
Annual Bulb Replacement Cost (\$)	\$ 300	\$ 0,00
Daily Working Hours (Hour/Day)	16	16
Number of Days Worked Annually	330	330
Annual Working Hours (Hour/Year)	5280	5280
Energy Unit Cost (\$/kwh)	\$ 0,16	\$ 0,16
Annual Consumption Cost (kWh)	59.136 kWh	27.033 kWh
Annual Electricity Consumption Cost (\$)	\$ 9.761	\$ 4.327



250 W Sodium Vapor Fixture



128 W High Bay LED Lighting Fixture



Energy Saving

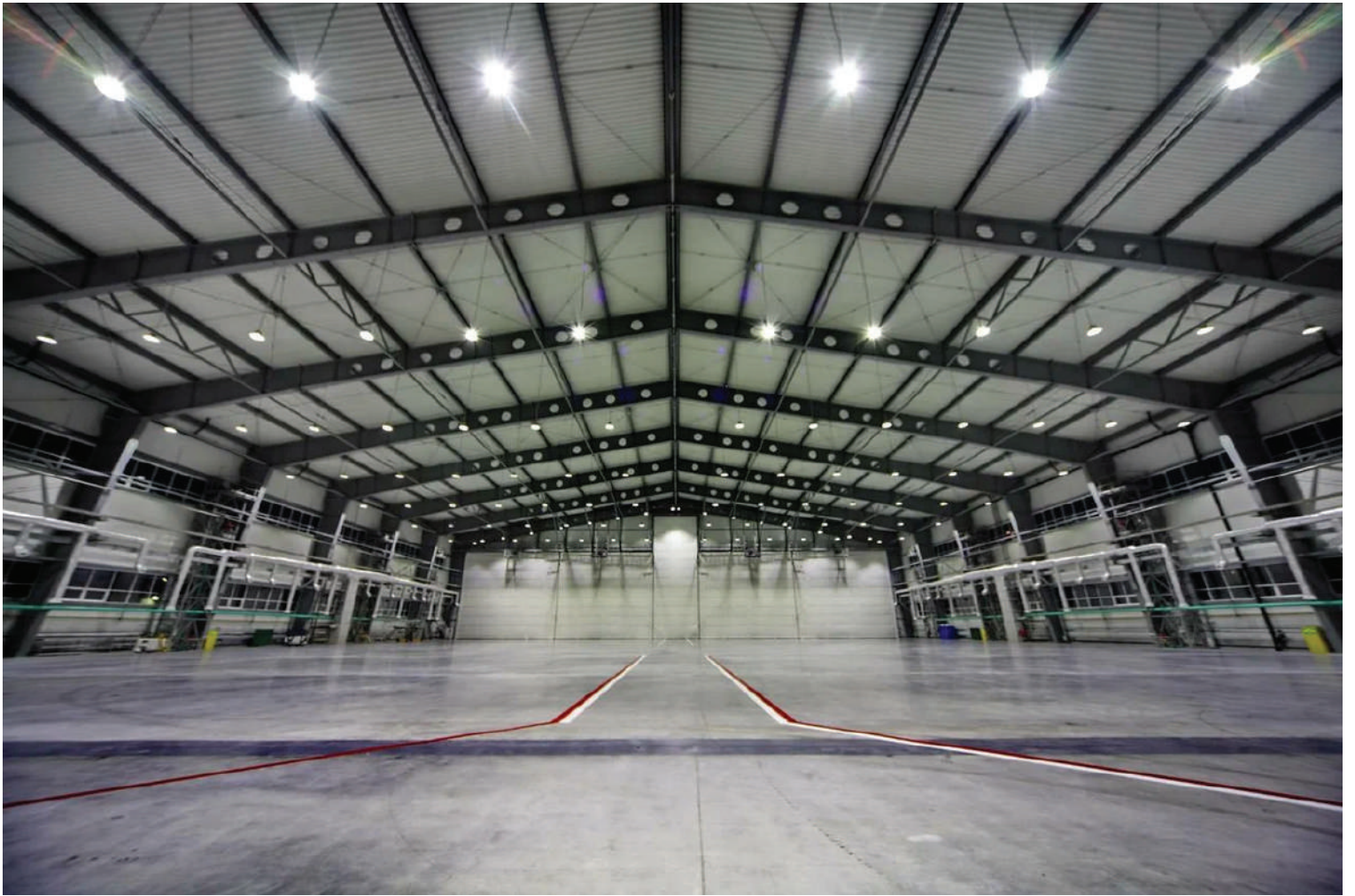
**%55**

Payback Period  
(For New Investment)

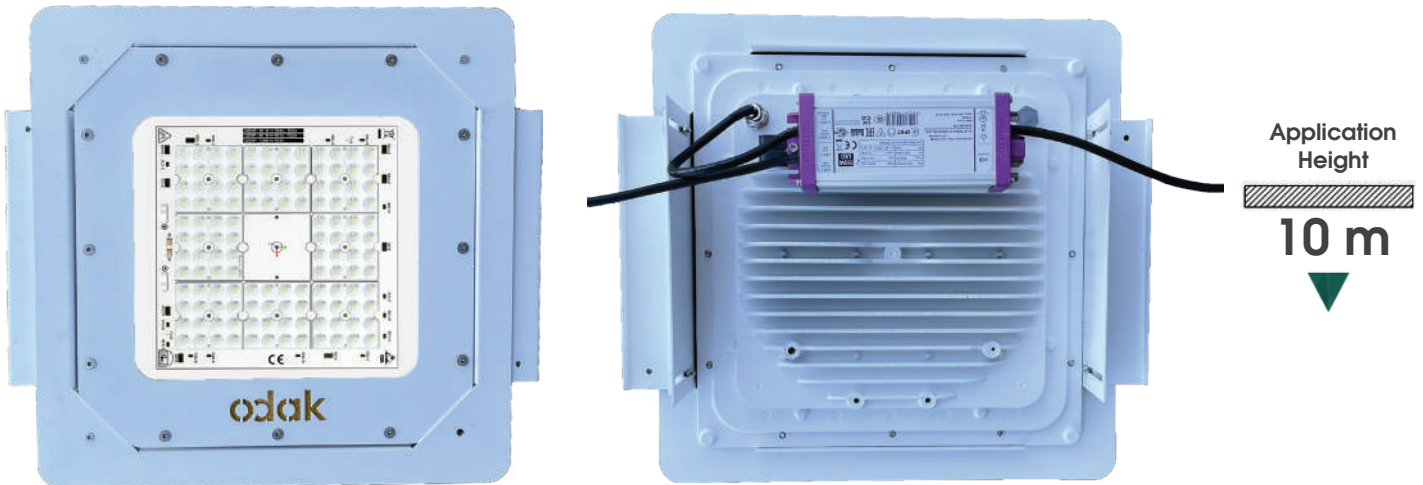
**6 Month**

(For Change)

**12 Month**



# HIGH BAY LIGHTING FIXTURES CANOPUS GAS STATION LIGHTING LUMINAIRE



## Application Areas

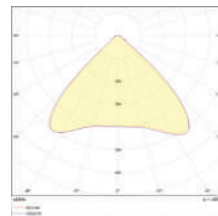


Factories

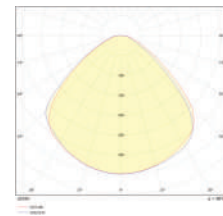


Gas Stations

## Optical Beam Angle



90°



110°

## Information

Canopy / Gas Station Lighting Fixture is a high-power lighting fixture with various lenses designed to have a ceiling height of up to 6m.

LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 90°, 110° angle value options for gas station application. It is also classified according to energy consumption.

Design and production can be made by determining different light and power values according to the ceiling height and dimensions of the area to be illuminated.

## General Features

<b>Body</b>	Corrosion Res.-High pressure Aluminium Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

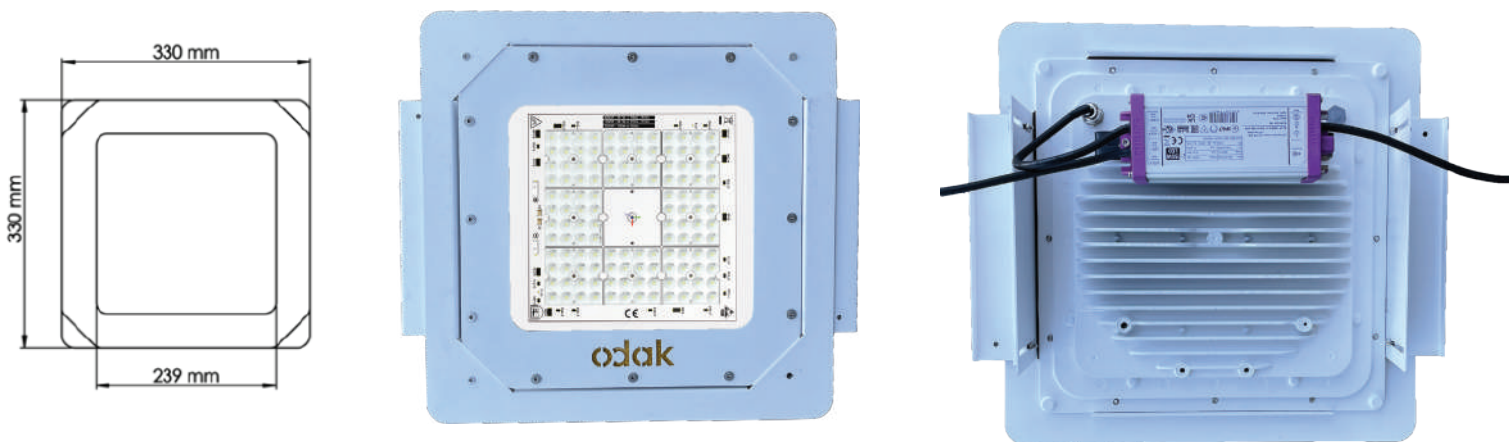
## Optical and Electrical Properties

<b>Power</b>	72 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	9792 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	90° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66,IP 67-IP 68 (opt.) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
GLS-072RM-00902-865-9010	72 W	200-240 VAC 50 - 60 HZ	9792 lm	90°	30x330x154 mm	7,9 kg
GLS-096RM-00902-865-9010	96 W	200-240 VAC 50 - 60 HZ	13056 lm	90°	330x330x154 mm	7,9 kg
GLS-128RM-00902-865-9010	128 W	200-240 VAC50 - 60 HZ	17408 lm	90°	1200x115x85 mm	7,9 kg
GLS-072RM-01102-865-9010	72 W	200-240 VAC 50 - 60 HZ	9792 lm	110°	30x330x154 mm	7,9 kg
GLS-096RM-01102-865-9010	96 W	200-240 VAC 50 - 60 HZ	13056 lm	110°	330x330x154 mm	7,9 kg
GLS-128RM-01102-865-9010	128 W	200-240 VAC50 - 60 HZ	17408 lm	110°	1200x115x85 mm	7,9 kg

# CANOPUS GAS STATION LED LIGHTING FIXTURE 72W

## Return on Investment Analysis (ROI)



150 W Metal Halide



72 W Canopy LED  
Luminaire

Illuminance Level (Eavg)	350 LUX	350 LUX
Bulb Life (Hour)	12.000	60.000
Bulb Life (Piece)	12	40
Number of Bulbs (Piece)	12	0
Bulb Power (W)	150 W	66 W
Driver Losses (W)	22 W	6 W
Luminaire Power (W)	172 W	72 W
Total Consumption Power (kW)	2,06 kW	0,86 kW
Annual Bulb Replacement Cost (\$)	\$ 150	\$ 0,00
Daily Working Hours (Hour/Day)	16	16
Number of Days Worked Annually	330	330
Annual Working Hours (Hour/Year)	5280	5280
Energy Unit Cost (\$/kwh)	\$ 0,16	\$ 0,16
Annual Consumption Cost (kWh)	10.877 kWh	4.540 kWh
Annual Electricity Consumption Cost (\$)	\$ 1.890	\$ 726



150 W Metal Halide



72 W Canopy LED  
Luminaire

Energy Saving

**%59**

Payback Period  
(For New Investment)

**8 Month**  
(For Change)

**15 Month**







## General Application Areas



## General Information

Named after the Bellatrix star, which has been used as a brightness standard for many years, the Bellatrix industrial lighting fixture is designed to replace traditional products with fluorescent light sources in order to provide uninterrupted service in harsh industrial conditions with high temperature, humidity, water and temperature differences.

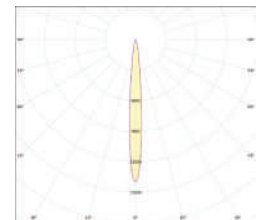
It is used in indoor environments such as industrial facilities, industrial kitchens, car-carpet washing workshops, baths, laundries, and outdoor areas such as parking lots and gardens.

High temperature resistant thanks to its aluminum extrusion body, Bellatrix luminaire; durable, slim, stylish design is quick and easy to install. As a direct alternative to traditional fluorescent luminaires, it provides an average of 50% energy saving with its longer life and durable structure.

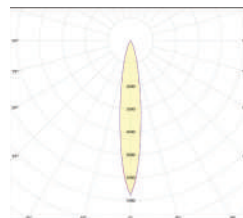
## Optical Beam Angles



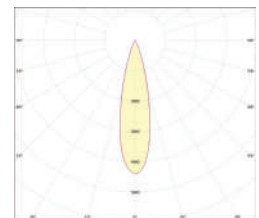
8°



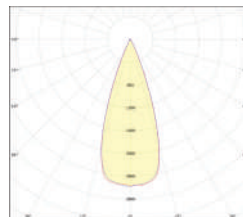
17°



25°



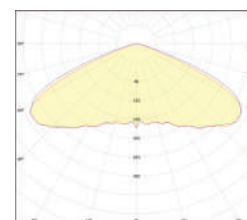
45°



60°



90°



110°

## General Features

<b>Body</b>	Aluminum Extrusion
<b>IP Protection Class</b>	IP66
<b>Luminous Flux</b>	5544 lm
<b>Light Source</b>	LED
<b>Test Standards</b>	TS EN 60598TS, EN 60529, TS EN 62031TS, EN 62262, TS IEC TR 62471TS, EN 62722-2-1

## Optical and Electrical Properties

<b>Power</b>	42W	<b>Işık Açısı</b>	8°/17°/25°/45°/60°/90°/110°
<b>CE Marking</b>	Yes	<b>Güç Faktörü</b>	> 0,9
<b>Optics</b>	PMMA / PC	<b>Max. Gerilim Dayanımı</b>	2kV
<b>Effectiveness Factor</b>	132 lm/W	<b>Renk Sıcaklığı</b>	3000K/4000K/5000K/6500K
<b>Input Voltage</b>	200-240 V AC 50/60 HZ	<b>CRI</b>	>80
<b>Total Harmonic Distortion</b>	<%15	<b>Giriş Gerilimi</b>	200-240 V AC 50/60 HZ
<b>Dimensions</b>	1250x56x66 mm	<b>Ağırlık</b>	2460 gr

## Technical Drawing and Connection Diagram



Product Code	Power	Input Voltage	CCT	Efficiency Factor (lm/W)	Luminous Flux	Light Angle	Dimensions	Weight (gr)	Mounting Type
BLX-033CT-01101-865-9006	33W	200-240 V AC 50/60 Hz	6500K	132	4356lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-042CT-01101-865-9006	42W	200-240 V AC 50/60 Hz	6500K	132	5544lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-050CT-01101-865-9006	50W	200-240 V AC 50/60 Hz	6500K	125	6250lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-059CT-01101-865-9006	59W	200-240 V AC 50/60 Hz	6500K	125	7375lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-033WL-01101-865-9006	33W	200-240 V AC 50/60 Hz	6500K	132	4356lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-042WL-01101-865-9006	42W	200-240 V AC 50/60 Hz	6500K	132	5544lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-050WL-01101-865-9006	50W	200-240 V AC 50/60 Hz	6500K	125	6250lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-059WL-01101-865-9006	59W	200-240 V AC 50/60 Hz	6500K	125	7375lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-033CT-01101-865-00CE	33W	200-240 V AC 50/60 Hz	6500K	132	4356lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-042CT-01101-865-00CE	42W	200-240 V AC 50/60 Hz	6500K	132	5544lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-050CT-01101-865-00CE	50W	200-240 V AC 50/60 Hz	6500K	125	6250lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-059CT-01101-865-00CE	59W	200-240 V AC 50/60 Hz	6500K	125	7375lm	110°	1250X56X66mm	2460	Surface Mounted / Cable Tray
BLX-033WL-01101-865-00CE	33W	200-240 V AC 50/60 Hz	6500K	132	4356lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-042WL-01101-865-00CE	42W	200-240 V AC 50/60 Hz	6500K	132	5544lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-050WL-01101-865-00CE	50W	200-240 V AC 50/60 Hz	6500K	125	6250lm	65°	1250X56X66mm	2460	Wall (Angled)
BLX-059WL-01101-865-00CE	59W	200-240 V AC 50/60 Hz	6500K	125	7375lm	65°	1250X56X66mm	2460	Wall (Angled)



Application Height

12 m



## Application Areas



Office



Factories

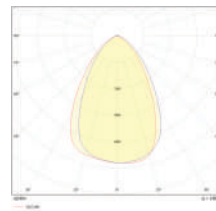


Sports Halls

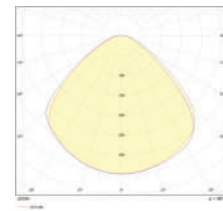


Airports

## Optical Beam Angle



65°



110°

## Information

Lyra Linear High Bay LED Luminaire is designed to replace traditional products with fluorescent light sources, especially in industrial plants, warehouses and sports facilities with ceiling heights from 7m to 12 meters. Lyra is one of the modern constellations in the sky. We named our Linear High Bay Luminaire "Lyra" inspired by modern lines.

## General Features

<b>Body</b>	Corrosion Res.-High pressure Aluminum Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (optional)"
<b>IP Class</b>	IP 65 - IP 66 (Optional)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

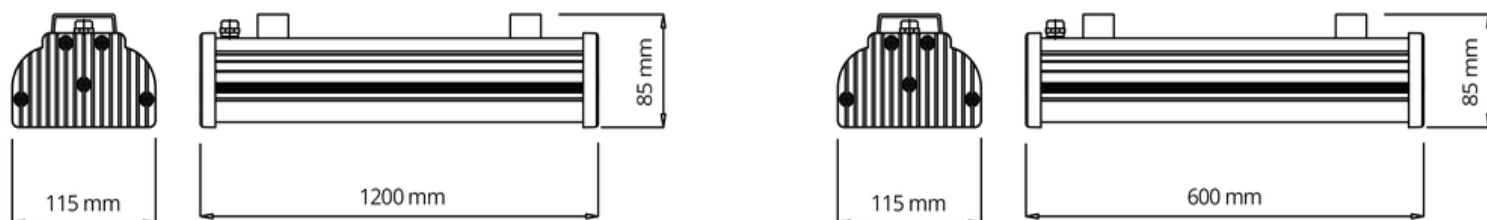
## Optical and Electrical Properties

<b>Power</b>	132 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	17952 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	65° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>136 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (optional)	<b>Cable Gland</b>	IP 66,IP 67-IP 68 (optional) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions	Weight
HBL-056CT-00651-865-7016-HE	56 W	200-240 VAC50 - 60 HZ	7616 lm	65°	600x115x85 mm	2,25 kg
HBL-065CT-00651-865-7016	65 W	200-240 VAC50 - 60 HZ	8840 lm	65°	600x115x85 mm	2,25 kg
HBL-084CT-00651-865-7016-HE	85 W	200-240 VAC50 - 60 HZ	11560 lm	65°	900x115x85 mm	3 kg
HBL-100CT-00651-865-7016	100 W	200-240 VAC50 - 60 HZ	13600 lm	65°	900x115x85 mm	3 kg
HBL-113CT-00651-865-7016-HE	113 W	200-240 VAC50 - 60 HZ	15368 lm	65°	1200x115x85 mm	4 kg
HBL-132CT-00651-865-7016	132 W	200-240 VAC50 - 60 HZ	17952 lm	65°	1200x115x85 mm	4 kg

## Return on Investment Analysis (ROI)



4x54 W Fluorescent

113 W Linear LED Luminaire

Illuminance Level (Eavg)	350 LUX	350 LUX
Bulb Life (Hour)	23.000	60.000
Bulb Life (Piece)	40	40
Number of Bulbs (Piece)	160	0
Bulb Power (W)	188 W	103 W
Driver Losses (W)	28 W	10 W
Luminaire Power (W)	216 W	113 W
Total Consumption Power (kW)	8,64 kW	4,52 kW
Annual Bulb Replacement Cost (\$)	\$ 60	\$ 0,00
Daily Working Hours (Hour/Day)	16	16
Number of Days Worked Annually	330	330
Annual Working Hours (Hour/Year)	5280	5280
Energy Unit Cost (\$/kwh)	\$ 0,16	\$ 0,16
Annual Consumption Cost (kWh)	45.619 kWh	23.865 kWh
Annual Electricity Consumption Cost (\$)	\$ 7.360	\$ 3.790



4x54 W Fluorescent



113 W Linear LED Luminaire

Energy Saving

**%48**

Payback Period  
(For New Investment)

**9 Month**

(For Change)

**19 Month**



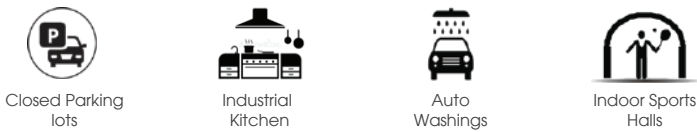


Application Height

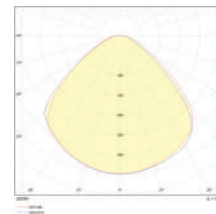
6 m



## Application Areas



## Optical Beam Angle



110°

## Information

Ethanej Luminaires; It is used to protect lighting fixtures from water and moisture in indoor environments such as industrial kitchens, bathrooms, car-carpet washing workshops, baths, laundries, and outdoor areas such as parking lots and gardens where water and moisture are present. Thanks to their durable, slim and stylish design, ethanol luminaires are quick and easy to install. As a direct alternative to traditional fluorescent luminaires, they provide significant energy savings.



## General Features

Body	Plastic Extrusion
Front Cover	Polycarbonate
IP Class	IP 65 - IP 66 (opt.)
Mounting Options	Surface Mounted - Cable Tray - Busbar
Light Source	LED
Light Distribution	PMMA or PC Lens
Testing Standards	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

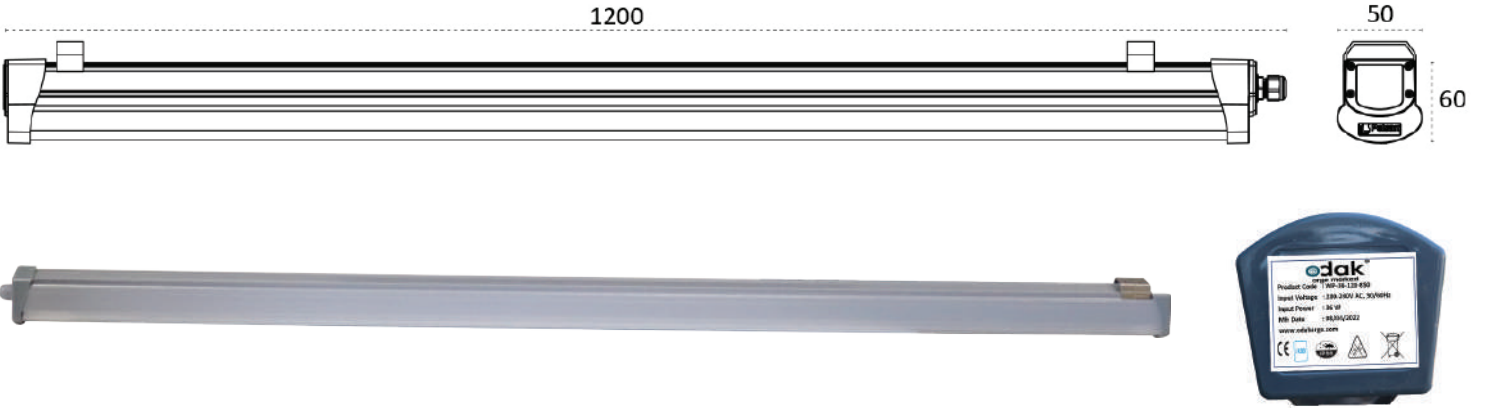
## Optical and Electrical Properties

Power	36 W	Input Frequency	50-60 Hz
Total Luminous	3600 lm	Power Factor	> 0,9
Optic	110°	Surge Protection Options	6 kV (standard) - 10 kV (opt.)
Efficacy	100+ lm/W	Color Temperature (CCT)	3000K / 4000K / 5000K /6500K
Input Voltage	220-240 VAC	Color Rendering Index (CRI)	>80

## Other Specifications

Operating Temperature	-25°C / +55°C	Lifespan - L70	60.000 saat
Impact Resistance	IK 08 - IK 10 (opt.)	Cable Gland	IP 66,IP 67-IP 68 (opt.) Plastic - Metal
Automation Systems	DALI, 1-10V, TRIAC		

## Product Images and Technical Drawing



## Ürün Varyasyonları

Ürün Kodu	Güç	Giriş Gerilimi	Işık Akısı	Işık Açısı	Ölçüleri	Ağırlık
HYD-065SM-01101-865	65W	200-240 V AC 50/60 Hz	6825 lm	110°	50X60X1500 mm	0,85 kg





## Application Areas



Markets



Factories



Sports Halls



Airports

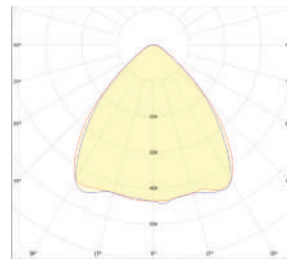


Office

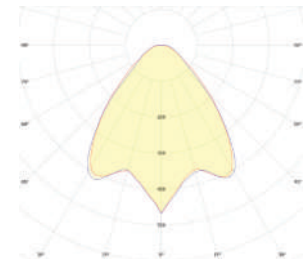
## Information

Elegance Series Market Lighting Fixture is designed to replace traditional products with fluorescent light source, especially in grocery stores, industrial plants, warehouses and sports facilities with ceiling heights from 2.5m to 6 meters. LED light source food lighting fixtures showcase your products at their best by highlighting their colors and textures to make them look fresh, tasty and attractive. It has been determined that UV or color enhancing filters are not effective in preventing food from changing color, but our fixtures designed with LED technology display your food in the most effective way without exposure to UV or infrared rays. By appealing to the visual perception of your customers, you can preserve the freshness of your products and increase your sales. The better your food looks, the fresher, tastier, more attractive and appetizing it is perceived. Our led food lighting fixtures show your product with the best color rendering ratio. It allows you to present it in a way that you can almost taste it by highlighting its colors and textures. In this way, by appealing to the visual perception of your customers, you can enable your customers to buy even the products that are not on their list and increase your turnover

## Optical Beam Angle



F13853\_  
FLORENCE-Z90  
90°



F16261\_  
FLORENCE-Z90-B  
90°

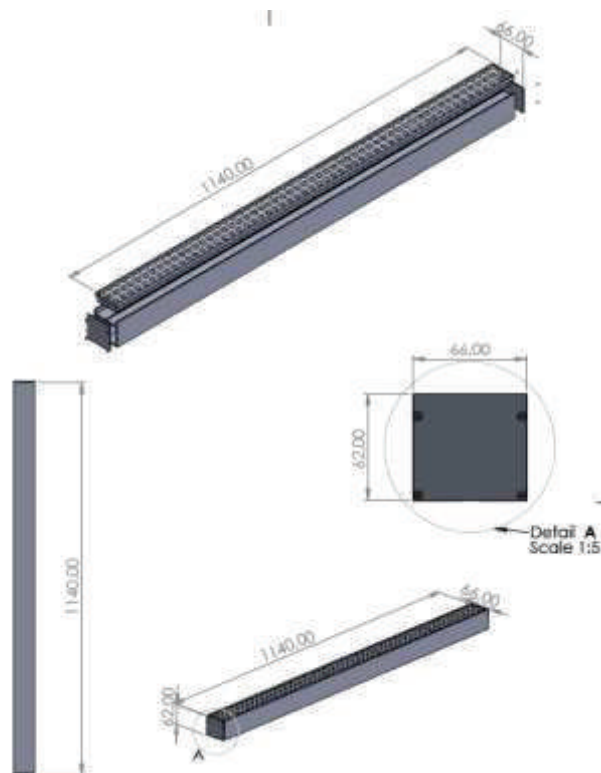
## General Features

Body	Aluminum Extrusion
IP Protection Class	IP 40
Luminous Flux	3600 lm
Light Source	LED
Test Standards	TS EN 60598TS, EN 60529, TS EN 62031TS, EN 62262, TS IEC TR 62471TS, EN 62722-2-1

## Optical and Electrical Properties

Power	25W	Light Angle	90°
CE Marks	Yes	Power Factor	> 0,9
Optic	PMMA / PC	Max Voltage Withstand	2kV
Effectiveness Factor	144 lm/W	Color Temperature	3000K/4000K/5000K/6500K
Input Voltage	200-240 V AC 50/60 HZ	CRI	>80
Total Harmonic Distortion	<%15	Input Voltage	200-240 V AC 50/60 HZ
Dimensions	580x66x62 mm	Weight	2.98 kg

## Technical Drawing (Side View) and Connection



Product Code	Power	Input Voltage	CCT	Luminous Flux	Light Angle	Dimensions	Weight g	Area of Use
SHL-050SM-00901-9016	25W	200-240 V AC 50/60 Hz	4000K/5000K/6500K	3600lm	90°	580X66X62mm	2980	SurfaceMounted
SHL-050PM-00901-9016	25W	200-240 V AC 50/60 Hz	4000K/5000K/6500K	3600lm	90°	580X66X62mm	2980	Pendant



## Application Areas



Markets



Factories



Sports Halls



Airports



Office

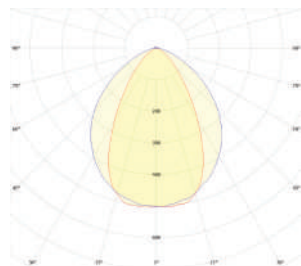
## Information

Linda Series Market Lighting Fixture is designed to replace traditional products with fluorescent light source, especially in grocery stores, industrial plants, warehouses and sports facilities with ceiling heights from 2.5m to 6 meters.

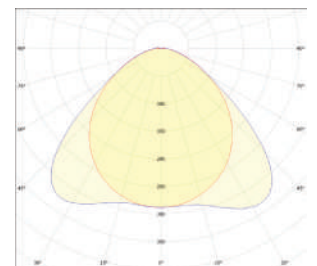
LED light source food lighting fixtures showcase your products at their best by highlighting their colors and textures to make them look fresh, tasty and attractive. It has been determined that UV or color enhancing filters are not effective in preventing food from changing color, but our fixtures designed with LED technology display your food in the most effective way without exposure to UV or infrared rays. By appealing to the visual perception of your customers, you can preserve the freshness of your products and increase your sales.

The better your food looks, the fresher, tastier, more attractive and appetizing it is perceived. Our led food lighting fixtures show your product with the best color rendering ratio. It allows you to present it in a way that you can almost taste it by highlighting its colors and textures. In this way, by appealing to the visual perception of your customers, you can enable your customers to buy even the products that are not on their list and increase your turnover.

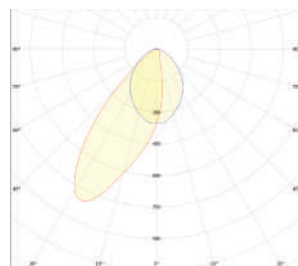
## Optical Beam Angles



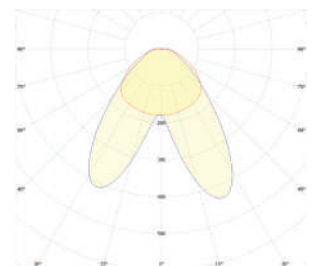
60-90°



100-110°



Asymmetric



Double Asymmetric

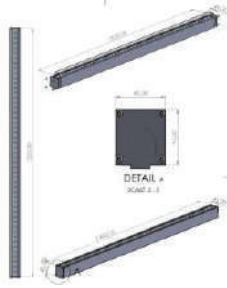
## General Features

<b>Body</b>	Alüminyum Ekstrüzyon
<b>IP Protection Class</b>	IP 40
<b>Luminous Flux</b>	7500 lm
<b>Light Source</b>	LED
<b>Test Standards</b>	TS EN 60598TS, EN 60529, TS EN 62031TS, EN 62262, TS IEC TR 62471TS, EN 62722-2-1

## Optical and Electrical Properties

<b>Power</b>	60W	<b>Light Angle</b>	60°/90°/100°/110°/ASM./D.ASM.
<b>CE Marks</b>	Yes	<b>Power Factor</b>	> 0,9
<b>Optic</b>	PMMA / PC	<b>Max Voltage Withstand</b>	2kV
<b>Effectiveness Factor</b>	125 lm/W	<b>Color Temperature</b>	3000K/4000K/6500K
<b>Input Voltage</b>	200-240 V AC 50/60 HZ	<b>CRI</b>	>80
<b>Total Harmonic Distortion</b>	<%15	<b>Input Voltage</b>	200-240 V AC 50/60 HZ
<b>Dimensions</b>	1505x40x45 mm	<b>Weight</b>	1595 gr

## Technical Drawing (Side View) and Connection Diagram



Product Code	Power	Input Voltage	CCT	Luminous Flux	Light Angle	Dimensions	Area of Use
LND-060PM-00601-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	60°	1505X40X45mm	Pendant
LND-060PM-00901-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	90°	1505X40X45mm	Pendant
LND-060PM-01001-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	100°	1505X40X45mm	Pendant
LND-060PM-01101-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	110°	1505X40X45mm	Pendant
LND-060PM-ASY1-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	ASM.	1505X40X45mm	Pendant
LND-060PM-DASY1-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	D.ASM.	1505X40X45mm	Pendant
LND-0160SM-00601-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	60°	1505X40X45mm	SurfaceMounted
LND-060SM-00901-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	90°	1505X40X45mm	SurfaceMounted
LND-060SM-01001-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	100°	1505X40X45mm	SurfaceMounted
LND-060SM-01101-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	110°	1505X40X45mm	SurfaceMounted
LND-060SM-ASY1-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	ASM.	1505X40X45mm	SurfaceMounted
LND-060PM-DASY1-840-9016	60W	200-240 V AC 50/60 Hz	3000K/4000K/6500K	7500lm	D.ASM.	1505X40X45mm	SurfaceMounted

# STREET LIGHTING FIXTURES SKYSTAR STREET LIGHTING LUMINAIRE



Application  
Height



**6 - 15 m**



## Application Areas



City Lighting



Sea Ports and  
Car Parking

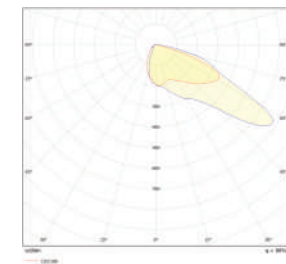
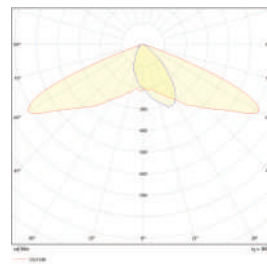
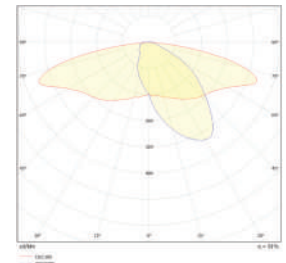
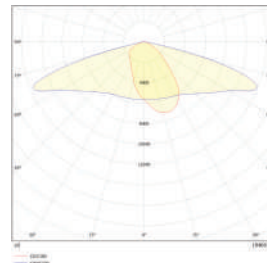


Parks



Environment and  
Security Lighting

## Optical Beam Angle



## Information

Lighting elements equipped with LED light sources, used for illuminating roads and streets, are called Road&Street Luminaires or LED Street Lighting Fixtures. Road&Street lighting fixtures can be used in urban lighting, intercity roads, environmental and security lighting, ports and open parking lots. Since LED Street lighting fixtures are used in outdoor conditions, they must have a minimum IP66 protection class. Street lighting should comply with the international standard EN-60598-2-3 and this conformity should be documented. It has asymmetric lens options with different light distribution for varying road types and classes (M1...M6)

## General Features

<b>Body</b>	Noncorrosive, High pressure die-cast Aluminum Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 66
<b>Mounting Options</b>	Side or top entry mounting(Mounting Diameter $\Phi = 50 / 60$ mm)
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

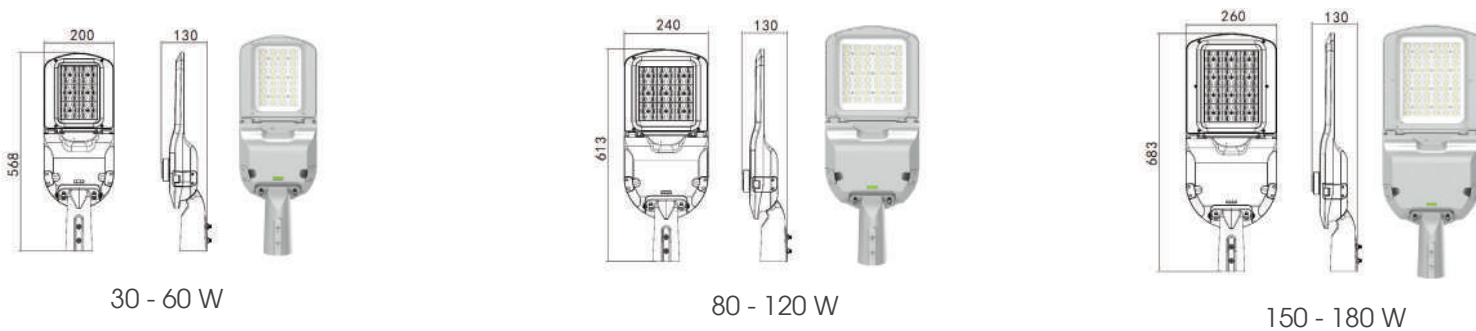
## Optical and Electrical Properties

<b>Power</b>	180 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	27000 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	Asymmetric Type ( I/II/III/IV)	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	>150 lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K /6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	> 70

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (optional) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours	<b>Nema Socket Type</b>	3P(On-Off), 5P(1-10V), 7P(Dali)

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions & Weight
SLS-030SM-ASY12-850-7016	30 W	200-240 VAC 50 - 60 HZ	4500 lm	Asy. Type ( I/II/III/IV)	568x200x130 mm 5,5 kg
SLS-050SM-ASY12-850-7016	50 W	200-240 VAC 50 - 60 HZ	7500 lm	Asy. Type ( I/II/III/IV)	568x200x130 mm 5,5 kg
SLS-060SM-ASY12-850-7016	60 W	200-240 VAC 50 - 60 HZ	9000 lm	Asy. Type ( I/II/III/IV)	568x200x130 mm 5,5 kg
SLS-080SM-ASY12-850-7016	80 W	200-240 VAC 50 - 60 HZ	12000 lm	Asy. Type ( I/II/III/IV)	613x240x130 mm 6,5 kg
SLS-100SM-ASY12-850-7016	100 W	200-240 VAC 50 - 60 HZ	15000 lm	Asy. Type ( I/II/III/IV)	613x240x130 mm 6,5 kg
SLS-120SM-ASY12-850-7016	120 W	200-240 VAC 50 - 60 HZ	18000 lm	Asy. Type ( I/II/III/IV)	613x240x130 mm 6,5 kg
SLS-150SM-ASY12-850-7016	150 W	200-240 VAC 50 - 60 HZ	22500 lm	Asy. Type ( I/II/III/IV)	683x260x130 mm 7,5 kg
SLS-180SM-ASY12-850-7016	180 W	200-240 VAC 50 - 60 HZ	27000 lm	Asy. Type ( I/II/III/IV)	683x260x130 mm 7,5 kg



# SOLAR POWERED FIXTURES POLARIS SOLAR POWERED LIGHTING LUMINAIRE



## Application Areas



Factories

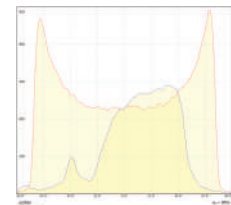
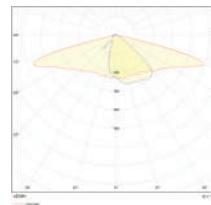


Hobby Gardens



Environment Lighting

## Optical Beam Angle



Asymmetric

## Information

Solar powered street/environment lighting fixture is a lighting fixture designed to be used in park and landscape lighting, industrial facility environmental lighting, to be mounted on poles with a height of 2-4m. LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It is classified according to the solar panel type and LED power, as well as different sizes and dimensions. There are different light distribution and power options according to the area to be illuminated. It provides 20% illumination in a still environment and 100% illumination in a moving environment. With the remote control, the dim range can be changed, the armature can be switched on and off.



## General Features

<b>Body</b>	Aluminium Injection
<b>Remote</b>	Dim range and On/Off
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

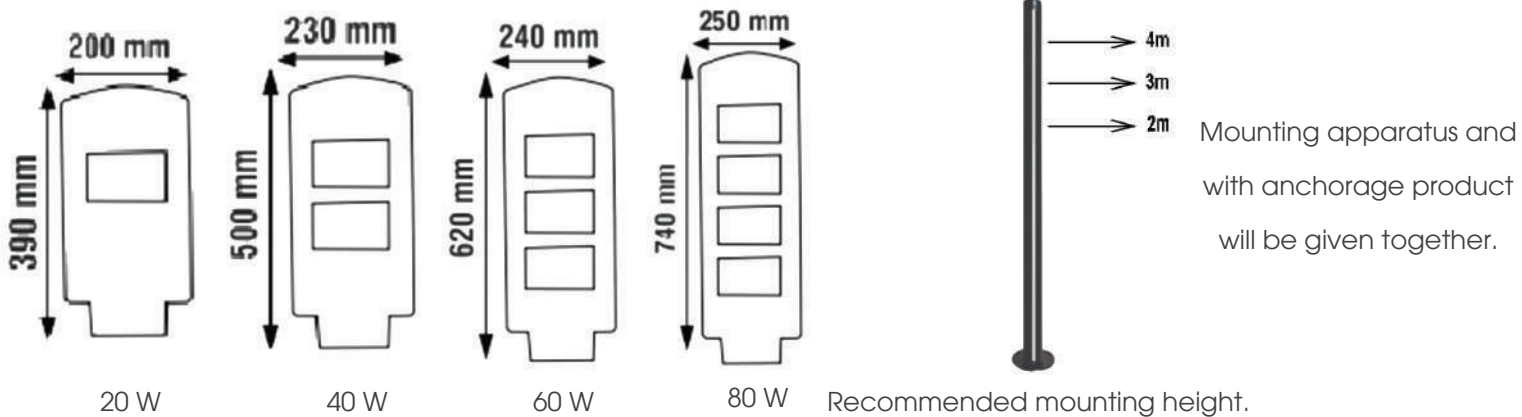
## Optical and Electrical Properties

<b>Power</b>	80 W	<b>Input Frequency</b>	Solar System
<b>Total Luminous</b>	8000 lm	<b>Power Factor</b>	6 kV (standard) - 10 kV (opt.)
<b>Optic</b>	Asymmetric	<b>Surge Protection Options</b>	3000K / 4000K / 5000K / 6500K
<b>Efficacy</b>	100 lm/W	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Lifespan - L70</b>	60.000 Hours
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66, Plastic PG9
<b>Operating Time</b>	3 - 8 Hours		

## Product Images and Technical Drawing



## Product Variations

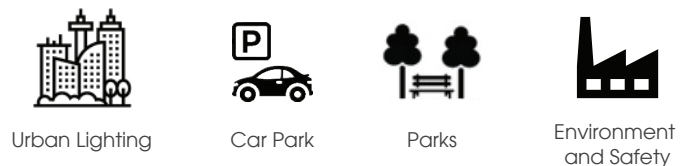
Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions
SPR-020SM-ASY12-850	20 W	Solar	2000 lm	ASY°	390x200x85 mm
SPR-040SM-ASY12-850	40 W	Solar	4000 lm	ASY°	500x230x85 mm
SPR-060SM-ASY12-850	60 W	Solar	6000 lm	ASY°	620x240x85 mm
SPR-080SM-ASY12-850	80 W	Solar	8000 lm	ASY°	740x250x85 mm



## General Information

With Solar Lighting Systems, street, park, beachside and garden lighting projects are realized by placing solar energy panels and batteries to store the energy produced during the day

## Application Areas



In Solar System lighting projects, the working voltage is usually designed as 12V or 24V. Because batteries and solar panels are generally preferred and produced at these voltages. Using MPPT (maximum power point monitoring) solar charge controller to operate the solar powered systems in accordance with the changing seasons and sunshine conditions, to prevent the batteries from being discharged when the solar panel does not produce energy, to charge the batteries optimally, to prevent the batteries from over-discharge and to use them longer. required. Although these devices are expensive compared to PWM chargers, they are much more efficient devices when cost/benefit is considered. Monocrystalline solar panels are preferred in our solar powered lighting systems. As for the battery, Deep Cycle Gel Battery or Lithium Phosphate batteries are recommended. In our recommendation systems, the most advanced devices and technologies preferred in the sector are preferred and Mono crystal solar panels varying from 165W to 330W and systems with 30W, 40W, 50W LED lighting power are recommended according to the desired illuminance value.

## General Features

Body	Aluminum Injection
Refractor	High Permeability min. 4mm Tempered Glass
IP Class	IP66
Usage	Side or Top Entry Mount (Diameter $\Phi = 50 / 60$ mm)
Light Source	LED
Optic	PC Lens
Testing Standards	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

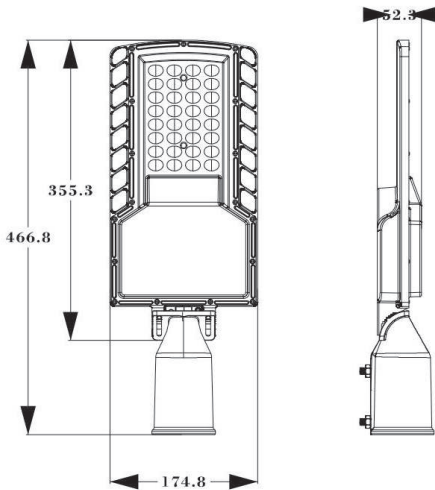
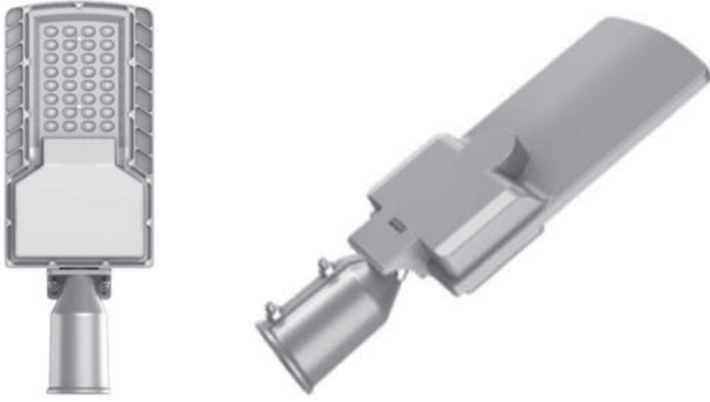
## Optic and Electrical Features

Power	30W/40W/50W	Input Voltage	12V DC - 24V DC
Total Lumens	4500 lm	Total Lumens	2kV -6 kV optional
Optic	Asimetric	Color Temperature	2700K - 6500K
Efficacy	150 lm/W	CRI	>70

## Other Features

Operating Temperature	-25°C / +55°C	Lifspan	60.000 hours
Impact Resistance	IK 08 - IK 10 (optional)	Cable Gland	IP66, M16X1.5
Operating Time	5 - 10 Saat		

## Technical Drawings and Images



Monokristal Solar Panel



LED Armatür



Deep Cycle Jel /LiFePO4 Batarya



MPPT Solar Şarj Kontrol Cihazı

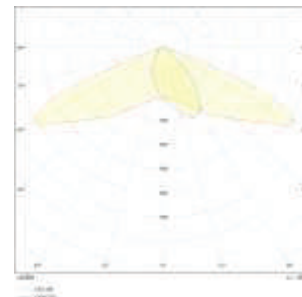


Armatür Direği



Montaj Braketi

## Optical Beam Angle



Asymmetric

## Return on Investment Analysis (ROI)



60 W Solar LED Fixtures



60 W AC LED Fixtures



75 W Sodium Vapor Luminaire

Illuminance Level (Eavg)	20 LUX	20 LUX	20 LUX
Bulb Life (Hour)	60.000	60.000	10.000
Bulb Life (Piece)	40	40	40
Number of Bulbs (Piece)	0	0	40
Bulb Power (W)	60 W	60 W	75 W
Driver Losses (W)	12 W	12 W	30 W
Luminaire Power (W)	72 W	72 W	105 W
Total Consumption Power (kW)	0 kW	2,88 kW	4,2 kW
Annual Bulb Replacement Cost (\$)	\$ 0,00	\$ 0,00	\$ 360
Daily Working Hours (Hour/Day)	12	12	12
Number of Days Worked Annually	330	330	330
Annual Working Hours (Hour/Year)	3960	3960	3960
Energy Unit Cost (\$/kwh)	\$ 0,00	\$ 0,16	\$ 0,16
Annual Consumption Cost (kWh)	0 kWh	11.405 kWh	16.632 kWh
Annual Electricity Consumption Cost (\$)	\$ 0,00	\$ 1.824	\$ 2.661



60 W Solar LED Fixtures



60 W AC LED Fixtures



Energy Saving

**%100**

Payback Period

4 Year 2 Month



60 W Solar LED Fixtures



75 W Sodium Vapor Luminaire



Energy Saving

**%100**

Payback Period

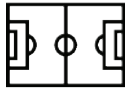
2 Year 2 Month



## General Application Areas



Military Area Lighting



Sports Field Lighting in International Standards



Harbor Lighting



Tower Lighting



Factory Lighting

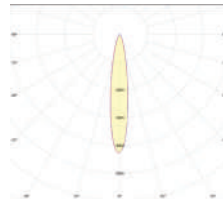


Airport Apron Lighting

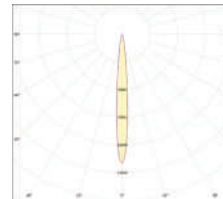


Building Facade Lighting

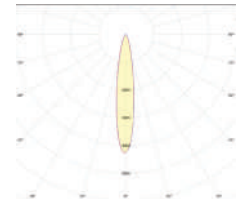
## Optical Beam Angles



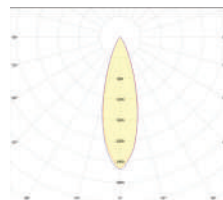
7°



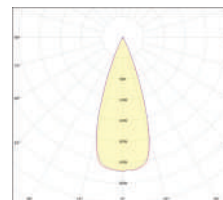
10°



15°



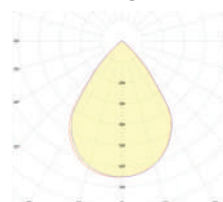
30°



45°



60°



80°

## General Information

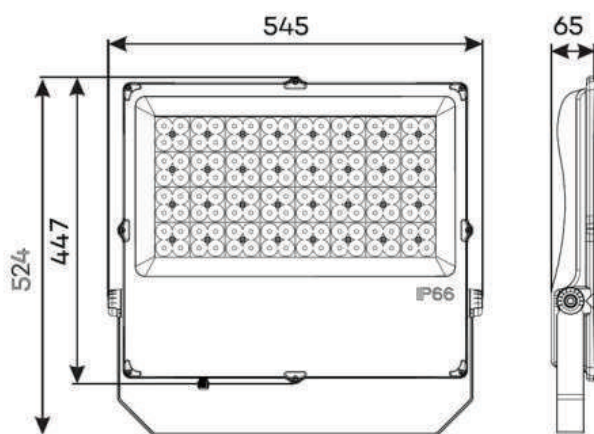
Compliant with 4K TV Broadcast and Shooting Standards Optional Anti-glare visor. Excellent Surface Quality Flicker Free CRI 70 / 80 / 90 & TLCI

## General Features

Model	Deneb
Power	250W 300W
Input Voltage	100 - 277V AC 50/60Hz
Power Coefficient	0,97
Lumen	35709

Number of Led	128 Led High Power	Light Color	3000-4000-5000-6500K
Color Rendering(CRI)	70/80/90 Optional	Led LM80(L70) Lifetime	>60.000 Hours
Operating Temperature	-30 / +55°C	Lens Angle	7°-10°-15°-30°-45°-60°-80° Type II - Type III Asymmetric
Ip Protection Class	IP66 Outdoor	Body Material	Aluminum Injection
Front Section	4mm Tempered Glass	Mounting Foot Screw Diameter	8 (Min.) / 10 (Max.) mm
Mounting Foot 2 Screw Spacing	100 (Min.) / 200 (Max.) mm	Weight	8,5 kg
Dimensions	52,4 x 54,5 x 6,5 cm	Test Standards	EN 60598-1, EN 60598-2-5

## Technical Drawing (Side View) and Connection Diagram

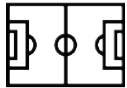




## General Application Areas



Military Area Lighting



Sports Field Lighting in International Standards



Harbor Lighting



Tower Lighting



Factory Lighting

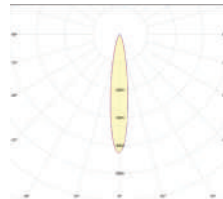


Airport Apron Lighting

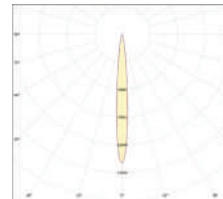


Building Facade Lighting

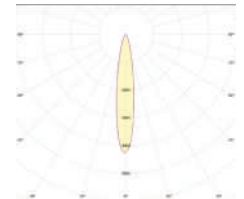
## Optical Beam Angles



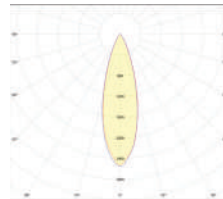
7°



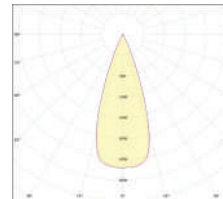
10°



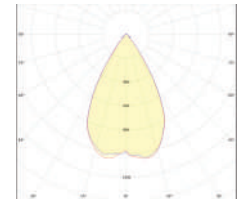
15°



30°



45°



60°



80°

## General Information

Compliant with 4K TV Broadcast and Shooting Standards Optional Anti-glare visor. Excellent Surface Quality Flicker Free CRI 70 / 80 / 90 & TLCI

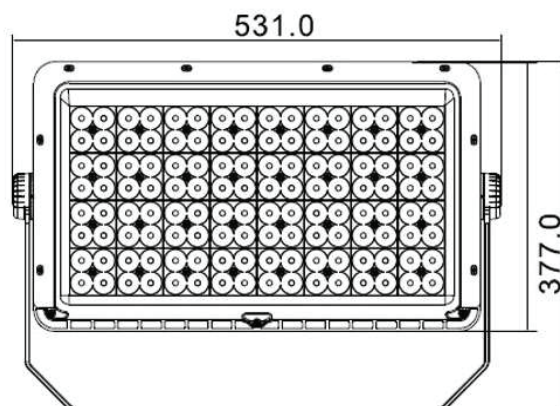


## General Features

Model	Deneb
Power	250W 300W
Input Voltage	100 - 277V AC 50/60Hz
Power Coefficient	0,97
Lumen	35709

Number of Led	128 Led High Power	Light Color	3000-4000-5000-6500K
Color Rendering(CRI)	70/80/90 Optional	Led LM80(L70) Lifetime	>60.000 Hours
Operating Temperature	-30 / +55°C	Lens Angle	7°-10°-15°-30°-45°-60°-80° Type II - Type III Asymmetric
Ip Protection Class	IP66 Outdoor	Body Material	Aluminum Injection
Front Section	4mm Tempered Glass	Mounting Foot Screw Diameter	8 (Min.) / 10 (Max.) mm
Mounting Foot 2 Screw Spacing	100 (Min.) / 200 (Max.) mm	Weight	8,5 kg
Dimensions	52,4 x 54,5 x 6,5 cm	Test Standards	EN 60598-1, EN 60598-2-5

## Technical Drawing (Side View) and Connection Diagram

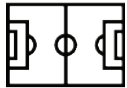




## General Application Areas



Military Area Lighting



Sports Field Lighting in International Standards



Harbor Lighting



Tower Lighting



Factory Lighting

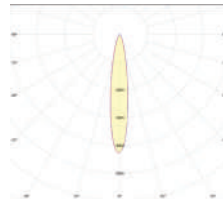


Airport Apron Lighting

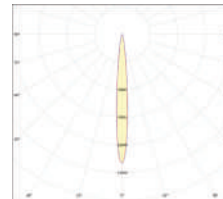


Building Facade Lighting

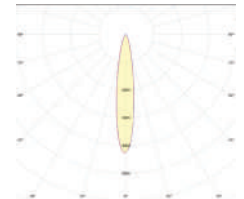
## Optical Beam Angles



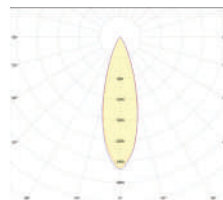
7°



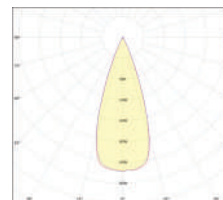
10°



15°



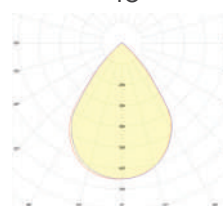
30°



45°



60°



80°

## General Information

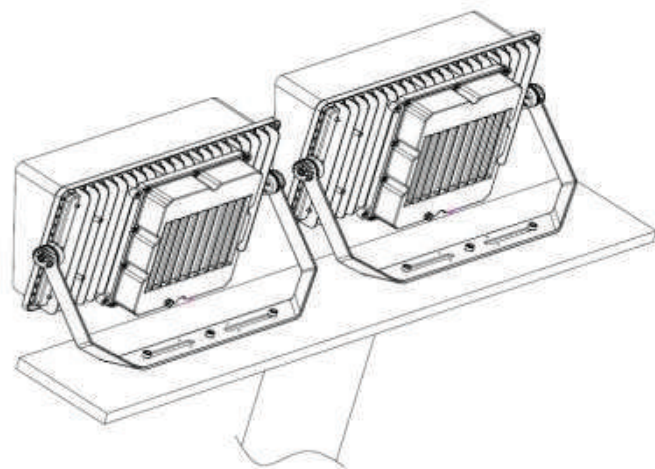
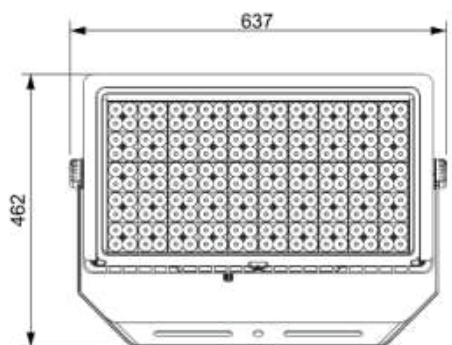
Compliant with 4K TV Broadcast and Shooting Standards Optional Anti-glare visor. Excellent Surface Quality Flicker Free CRI 70 / 80 / 90 & TLCI

## General Features

Model	Deneb
Power	250W 300W
Input Voltage	100 - 277V AC 50/60Hz
Power Coefficient	0,97
Lumen	35709

Number of Led	128 Led High Power	Light Color	3000-4000-5000-6500K
Color Rendering(CRI)	70/80/90 Optional	Led LM80(L70) Lifetime	>60.000 Hours
Operating Temperature	-30 / +55°C	Lens Angle	7°-10°-15°-30°-45°-60°-80° Type II - Type III Asymmetric
Ip Protection Class	IP66 Outdoor	Body Material	Aluminum Injection
Front Section	4mm Tempered Glass	Mounting Foot Screw Diameter	8 (Min.) / 10 (Max.) mm
Mounting Foot 2 Screw Spacing	100 (Min.) / 200 (Max.) mm	Weight	8,5 kg
Dimensions	52,4 x 54,5 x 6,5 cm	Test Standards	EN 60598-1, EN 60598-2-5

## Technical Drawing (Side View) and Connection Diagram





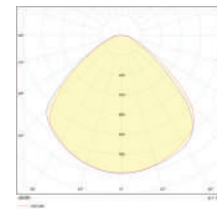
Application Height  
 7 m



**Application Areas**



**Optical Beam Angle**



110°

**Information**

DOB LED Projector Lighting Fixture is a lighting fixture designed to be used in park, garden, square parking lot, building surroundings, walking path, landscape lighting and industrial facility environmental lighting to be mounted on poles with a height of 3-7 m. LED modules with high energy efficiency are used in the luminaires, which have a compact frame structure. It has 90°, 110° angle value options for gas station application. It is also classified according to energy consumption. It is classified according to energy consumption as well as different sizes and dimensions. Design and production can be made by determining different light and power values according to the ceiling height of the area to be illuminated.

## General Features

<b>Body</b>	Aluminium Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted - Cable Tray - Busbar
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

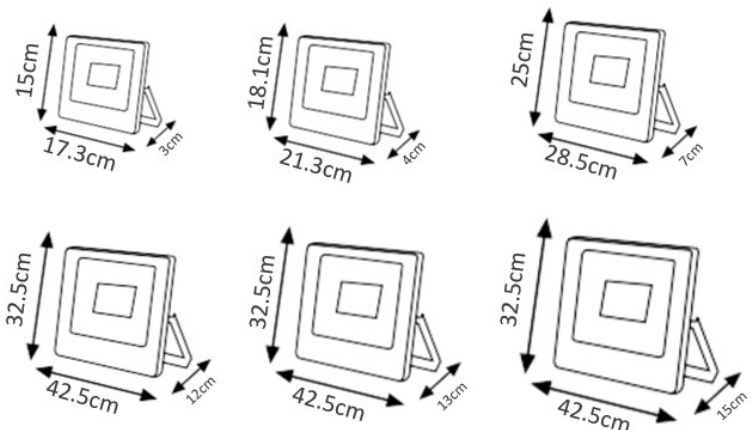
## Optical and Electrical Properties

<b>Power</b>	100 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	8000 lm	<b>Power Factor</b>	> 0,9
<b>Optic</b>	110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Efficacy</b>	80+ lm/W	<b>Color Temperature (CCT)</b>	3000K / 4000K / 5000K / 6500K
<b>Input Voltage</b>	220 - 240 VAC	<b>Color Rendering Index (CRI)</b>	>80

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Lifespan - L70</b>	60.000 Hours
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (optional) Plastic - Metal

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Luminous Flux	Light Angle	Dimensions
DOB-030SM-01101-865	30 W	200-240 V AC 50/60 HZ	110°	2400 lm	150x173x03 mm
DOB-050SM-01101-865	50 W	200-240 V AC 50/60 HZ	110°	4000 lm	181x213x04 mm
DOB-100SM-01101-865	100 W	200-240 V AC 50/60 HZ	110°	8000 lm	250x285x07 mm
DOB-150SM-01101-865	150 W	200-240 V AC 50/60 HZ	110°	12000 lm	325x425x12 mm
DOB-200SM-01101-865	200 W	200-240 V AC 50/60 HZ	110°	16000 lm	325x425x13 mm
DOB-300SM-01101-865	300 W	200-240 V AC 50/60 HZ	110°	24000 lm	325x425x15 mm



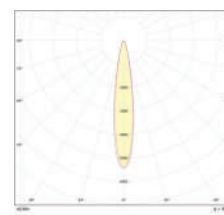
Application Height  
0-30 m



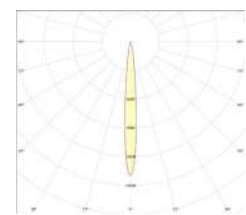
## General Application Areas



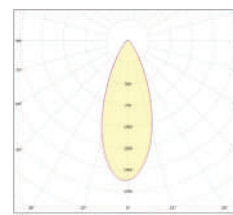
## Optical Beam Angles



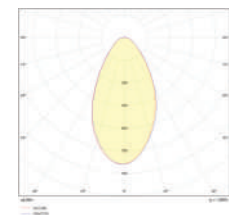
10°



25°



40°



60°

## General Information

The Infrared LED Floodlight is an LED-based lighting device used to support imaging systems. Its energy efficient infrared light has optimized wavelength for night vision. The luminaire body is designed to operate in outdoor conditions. It has a 10° light angle for speed detection, license plate reading and other highway detection systems. Available in 8°, 17°, 25°, 40°, 45°, 60°, 90° and 110° for different applications.

## General Features

Body	Aluminum Extrusion
Color Options	9006 Matte, Anodized
IP Protection Class	IP66 - IP67 (Optional)
Front Cover	Tempered Glass
Light Source	LED
Lens	PMMA
Test Standards	EN 60598-1, EN 60529, LM 79-18EN 60598-2-5, IEC TR 62778

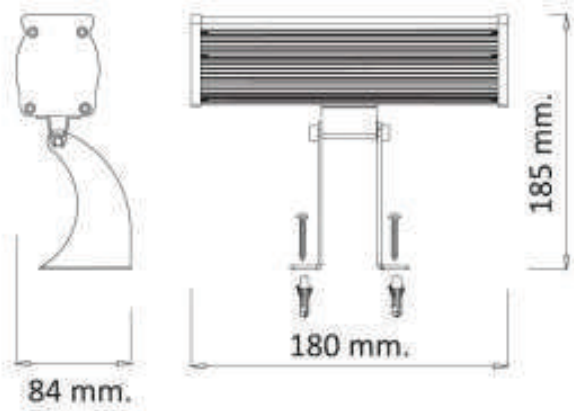
## Optical and Electrical Properties

Power	8 W	Giriş Frekans	50-60 Hz
Wavelength	850 nm	Güç Faktörü	> 0,9
Infrared Emission	2.84 W	Max Gerilim Dayanımı	6 kV - 10 kV (opsiyonel)
Light Angle	10°, 25°, 40°, 60°	Dalga Boyu	850 nm
Input Voltage	220 -240 VAC / 12-24V DC (ops.)		
Throttling Options	Dimensions 188x142x65 mm 1-10V, TRIAC, DALI		

## Other Features

Operating Temperature	-25°C / +55°C	CE Marking	Yes
Impact Resistance Class	IK 08 - IK 10 (optional)	RoHS Compliance	Yes
Lifetime	30.000 Hours		

## Technical Drawing (Side View) and Connection Diagram



## Product Variations

Product Code	Power	Input Voltage	Color Temperature (CCT)	Light Angle	Dimensions	Ağırlık
ROS-008SM-00252-850-7016	8 W	200-240 V AC 50/60 Hz	IR	25°	188x142x65 mm	1kg

# INFRARED LIGHTING FIXTURES

## ROSS 40 W INFRARED LIGHTING LUMINAIRE



ILLUMINATED  
FIELD DISTANCE  
**25-200 m**



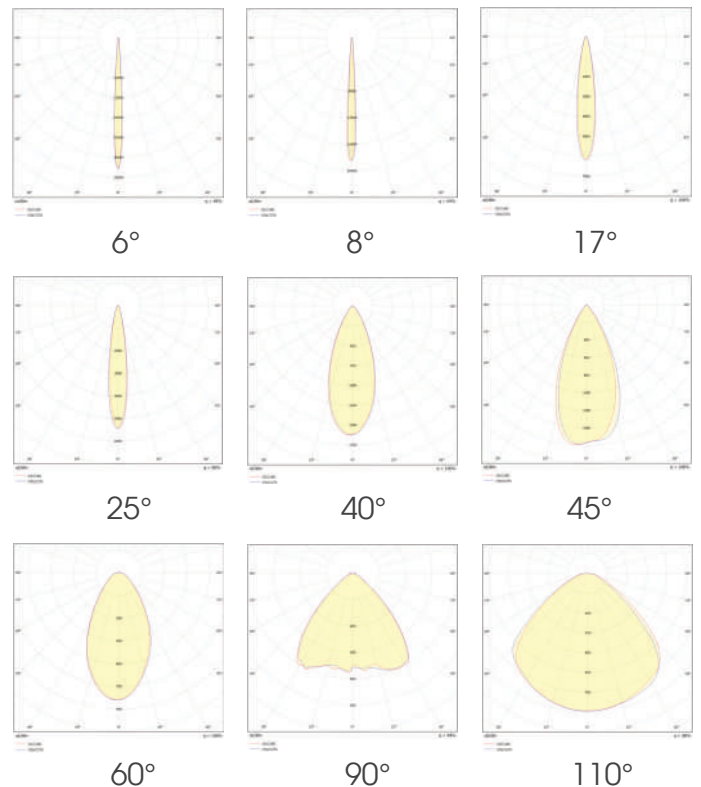
### Application Areas



### Information

Infrared LED Projector is LED based lighting device used to support imaging systems. Its energy-efficient infrared light has a wavelength optimized for night vision. Lighting fixture body is designed to work in outdoor conditions. It has a 10° light angle for speed detection, license plate reading and other road detection systems. It has 8°, 17°, 25°, 40°, 45°, 60°, 90° and 110° options for different applications.

### Optical Beam Angle





## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted
<b>Light Source</b>	LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

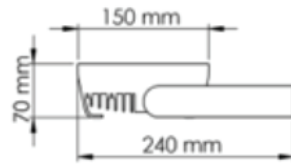
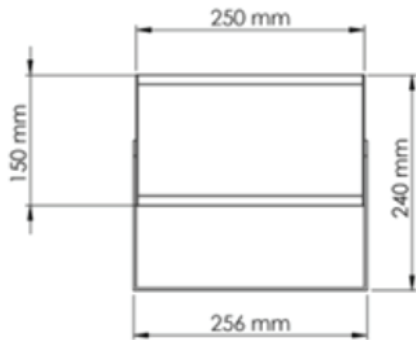
## Optical and Electrical Properties

<b>Power</b>	40 W	<b>Input Frequency</b>	50-60 Hz
<b>IR Emission</b>	7,2 W	<b>Power Factor</b>	> 0,9
<b>Optic</b>	6° / 8° / 17° / 25° / 40° / 40° / 60° / 90° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Input Voltage</b>	220 - 240 VAC	<b>Wavelength</b>	850 nm

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 54, Plastic PG9,
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing




## Product Variations

Product Code	Power	Input Voltage	Infrared Emission	Wavelength	Light Angle	Dimensions and Weight
IRS-040SM-00082-850-7016	40 W	200-240 VAC50 - 60 HZ	7,2 W	850 nm	8°	250x150x70 mm 2,7 kg
IRS-040SM-00252-850-7016	40 W	200-240 VAC50 - 60 HZ	7,2 W	850 nm	25°	250x150x70 mm 2,7 kg
IRS-040SM-00452-850-7016	40 W	200-240 VAC50 - 60 HZ	7,2 W	850 nm	45°	250x150x70 mm 2,7 kg
IRS-040SM-01102-850-7016	40 W	200-240 VAC50 - 60 HZ	7,2 W	850 nm	110°	250x150x70 mm 2,7 kg

# INFRARED LIGHTING FIXTURES

## ROSS 70 W INFRARED LIGHTING LUMINAIRE



ILLUMINATED  
FIELD DISTANCE  
  
**25-200 m**  
▼



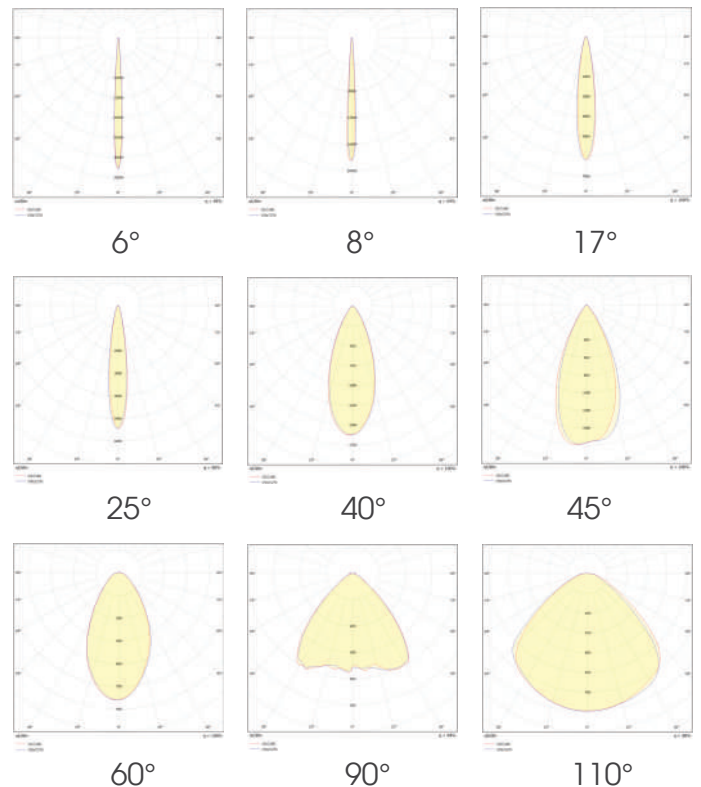
### Application Areas



### Information

Infrared LED Projector is LED based lighting device used to support imaging systems. Its energy-efficient infrared light has a wavelength optimized for night vision. Lighting fixture body is designed to work in outdoor conditions. It has a 10° light angle for speed detection, license plate reading and other road detection systems. It has 8°, 17°, 25°, 40°, 45°, 60°, 90° and 110° options for different applications.

### Optical Beam Angle



## General Features

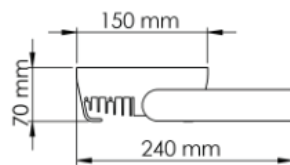
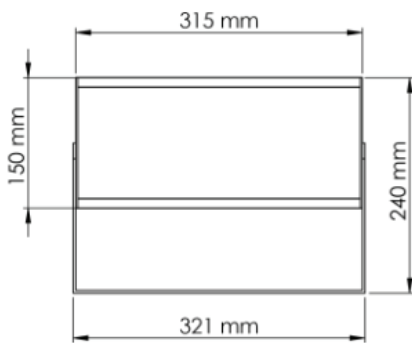
<b>Body</b>	Corrosion Res. High pressure Aluminium Extrusion
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 65 - IP 66 (opt.)
<b>Mounting Options</b>	Surface Mounted
<b>Light Source</b>	Infrared LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

## Optical and Electrical Properties

<b>Power</b>	70 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	13 W	<b>Power Factor</b>	> 0,9
<b>Optic</b>	6° / 8° / 17° / 25° / 40° / 40° / 60° / 90° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Input Voltage</b>	220 - 240 VAC	<b>Wavelength</b>	850 nm

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Systems</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (opt.) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		



## Product Variations

Product Code	Power	Input Voltage	Infrared Emission	Wavelength	Light Angle	Dimensions and Weight
IRS-047SM-00082-850-7016	47 W	200-240 VAC	9 W	850 nm	8°	315x150x70 mm 7,9 kg
IRS-070SM-00252-850-7016	70W	200-240 VAC	13 W	850 nm	25°	315x150x70 mm 7,9 kg
IRS-047SM-00452-850-7016	47 W	200-240 VAC	9 W	850 nm	45°	315x150x70 mm 7,9 kg
IRS-070SM-01102-850-7016	70W	200-240 VAC	13 W	850 nm	110°	315x150x70 mm 7,9 kg

# INFRARED LIGHTING FIXTURES BETELGEUSE 125 W INFRARED LIGHTING LUMINAIRE



ILLUMINATED  
FIELD DISTANCE  
**25-200 m**



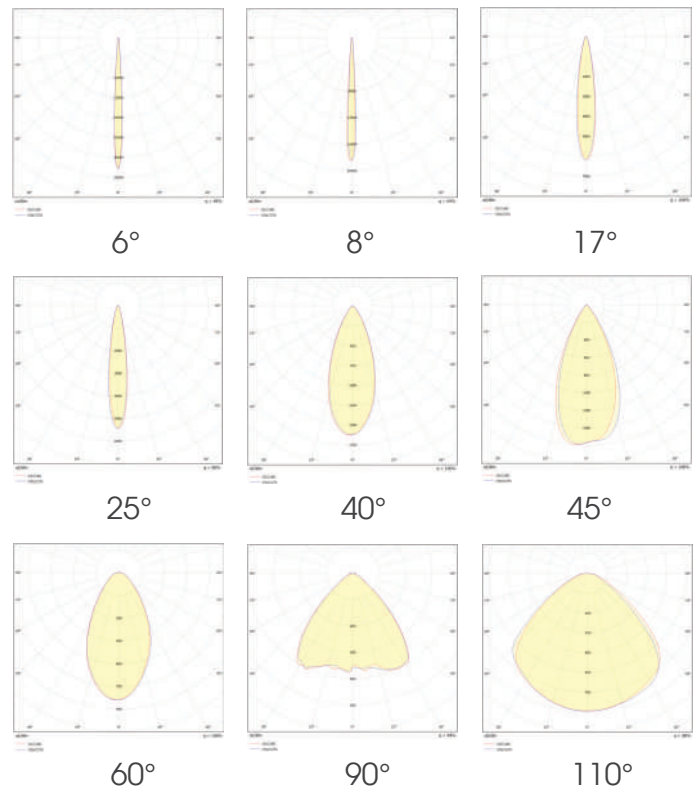
## Application Areas



## Information

Infrared LED Projector is LED based lighting device used to support imaging systems. Its energy-efficient infrared light has a wavelength optimized for night vision. Lighting fixture body is designed to work in outdoor conditions. It has a 10° light angle for speed detection, license plate reading and other road detection systems. It has 8°, 17°, 25°, 40°, 45°, 60°, 90° and 110° options for different applications.

## Optical Beam Angle



## General Features

<b>Body</b>	Corrosion Res. High pressure Aluminium Injection
<b>Optical Cover</b>	High permeability min. 4 mm tempered glass "UV resistant (opt.)"
<b>IP Class</b>	IP 66 - IP 67 (opt.)
<b>Mounting Options</b>	Surface Mounted
<b>Light Source</b>	Infrared LED
<b>Light Distribution</b>	PMMA or PC Lens
<b>Testing Standards</b>	TS EN 60598, TS EN 62031, TS IEC TR 62471, TS EN 60529, TS EN 62262, TS EN 62722-2-1

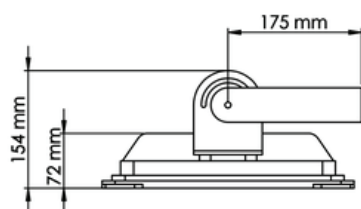
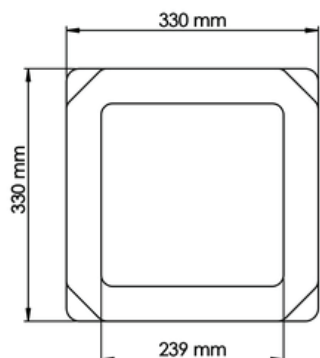
## Optical and Electrical Properties

<b>Power</b>	125 W	<b>Input Frequency</b>	50-60 Hz
<b>Total Luminous</b>	27 W	<b>Power Factor</b>	> 0,9
<b>Optic</b>	6° / 8° / 17° / 25° / 40° / 40° / 60° / 90° / 110°	<b>Surge Protection Options</b>	6 kV (standard) - 10 kV (opt.)
<b>Input Voltage</b>	220 - 240 VAC	<b>Wavelength</b>	850 nm

## Other Specifications

<b>Operating Temperature</b>	-25°C / +55°C	<b>Automation Compatibility</b>	DALI, 1-10V, TRIAC
<b>Impact Resistance</b>	IK 08 - IK 10 (opt.)	<b>Cable Gland</b>	IP 66, IP 67-IP 68 (opt.) Plastic - Metal
<b>Lifespan - L70</b>	60.000 Hours		

## Product Images and Technical Drawing



## Product Variations

Product Code	Power	Input Voltage	Infrared Emission	Wavelength	Light Angle	Dimensions and Weight
IRS-070SM-00082-850-7016	70 W	200-240 VAC 50 - 60 HZ	13W	8°	850 nm	330x330x72 mm 7,9 kg
IRS-100SM-00252-850-7016	100W	200-240 VAC 50 - 60 HZ	21W	25°	850 nm	330x330x72 mm 7,9 kg
IRS-125SM-00452-850-7016	125 W	200-240 VAC 50 - 60 HZ	27W	45°	850 nm	330x330x72 mm 7,9 kg
IRS-070SM-00172-850-7016	70 W	200-240 VAC 50 - 60 HZ	13W	17°	850 nm	330x330x72 mm 7,9 kg
IRS-100SM-00602-850-7016	100W	200-240 VAC 50 - 60 HZ	21W	60°	850 nm	330x330x72 mm 7,9 kg
IRS-125SM-01102-850-7016	125 W	200-240 VAC 50 - 60 HZ	27W	110°	850 nm	330x330x72 mm 7,9 kg





## General Information

LoRa Data Collector providing individual communication with nodes using a 470/868/915 MHz wireless interface.

In addition to its main functions, the LoRa data collector controls all electrical equipment in the cabin, collects data from the electricity meter and other connected devices and sends the live status of the entire LoRa system to the server via GSM/GPRS/3G mobile network. LoRa data collector programming and light level programming is performed remotely from the software.

## LoRa Gateway Features

Input Voltage	100 - 277 VAC 50/60 Hz
Power	2W
Power Factor	>0,9
Protocol	LoRa
RF Frequency	470/868/915 MHz
RF Tx Power	17 dBm
Control Capacity	200 Armature
Protection Class	IP66
Operating Temperature	-40°C / +70°C
Body	Aluminum
Voltage Protection	10 kV
Weight	4 kg
Dimensions	230x 200.5 x 85



## General Information

Wireless node controller mounted on the body of each luminaire and controlled by LoRa Gateway with RF 433/865/868/915 MHz frequencies. Provides load control (on/off) and dimming function in luminaires.

## Electrical Properties

Input Voltage	100 – 277 VAC 50/60 Hz
Idle Operating Power	≤ 1,2 W
Load Power	Max. 1000 W
Load Current	Max. 16 A
Ripple Factor	< 3%
Operating Temperature	-40°C / +55°C

## Interface and Protocol Features

Luminaire Control Interface	DAC 1-10V/PWM
Giriş - Çıkış Konnektörleri	Leads 3P/5P/7P, Nema Soket
Communication Mode	ISM Band RF 433/865/868/915 MHz

## Mechanical Properties

Body	: Hard Plastic Case, IP66
Dimensions	Ø94 x 97 mm
Ağırlığı	0,3 kg
Weight	Mor(+) / Gri (-)

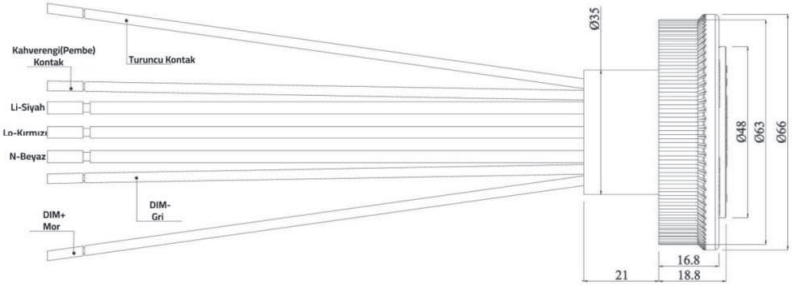
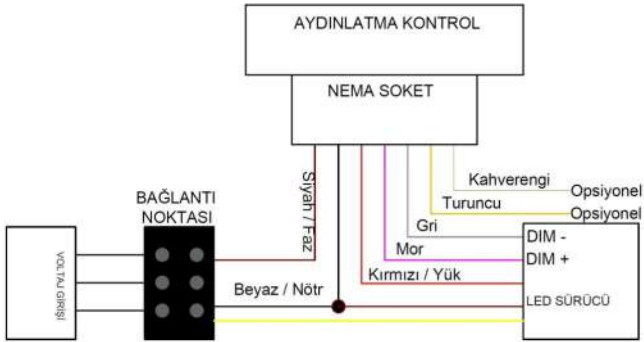




## General Features

Input Voltage (AC)	480 VAC max.
Dimming Voltage Input (DC)	30 VDC max.
Input Current	15 A max
Dimming Current	250 mA max.
Operating Temperature	-40 °C - +70 °C
Moisture	%99
Max. Voltage withstand	3 kV / 60 Hz
3 Pin Socket	3 power input contact
5 Pin Socket	3 power input contact 0-10 VDC Signal Input
7 pin Socket	3 power input contact 0-10 VDC Signal Input DALI Signal Input
Cable Types	power input contact (3x2,5 mm2) Signal Input Cable (2x0,75 mm2 veya 4x0,75 mm2)
Body	Bakelite
Additional Accessory	Silicone Conta
Standards	ANSI C136.41 - UL773

## Product Images and Technical Drawing



## Product Variations

Product Code	Description	Input Voltage	Input Current	Dimensions	Cable Length
NM01-6603	3 pin Nema Socket (On-Off)	480 VAC 50-60 Hz	15 A	Ø = 66 mm	20 - 40 - 60 cm
NM01-6603	5 pin Nema Socket (1-10V)	480 VAC 50-60 Hz	15 A	Ø = 66 mm	20 - 40 - 60 cm
NM01-6603	7 pin Nema Socket (DALI)	480 VAC 50-60 Hz	15 A	Ø = 66 mm	20 - 40 - 60 cm



## General Information

- Single or double face
- Aluminum anodized body
- Polycarbonate side cover and hanger bracket
- SMD LED application
- Battery charge indicator with green LED
- Emergency test button
- High temperature resistant, industrial grade Ni-Cd battery
- Battery overcharge and discharge protection
- Screen printed transparent plexiglass
- Side illuminated
- Possibility of ceiling, wall or suspended ceiling mounting
- Optional 110 VAC compatibility
- Optional metal hanger or hook options

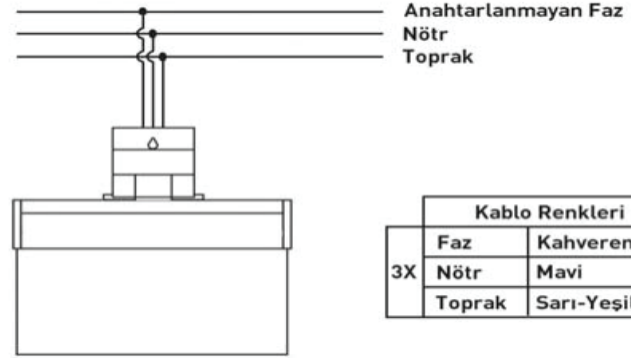
## General Features

Supply Voltage	230 VAC 50/60 Hz
Power	4,87 W
Power Factor (PF)	0.61
Ambient Temperature (ta)	0 °C ... +40 °C
Rated Duration	3 hours
Battery Charging Time	24 hours
Battery Type	3,6 V Ni-Cd
Sign Dimensions	122 x 253 mm
Viewing Distance : 19 m	20 m
Protection Class : IP 20	IP 20
Insulation Class : I	I
Surface Mounted Box Size (mm) : 38 x 245 x 187	40 x 274 x 195
Recessed Box Size(mm) : 102 x 312 x 187	102 x 342 x 195

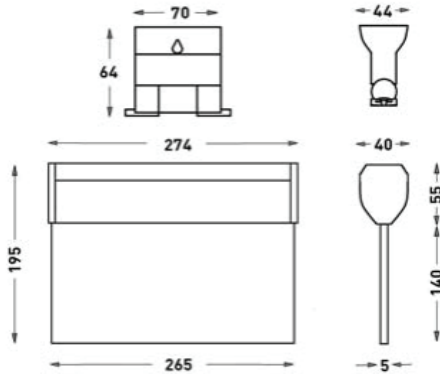
### Flush Mounting Dimension



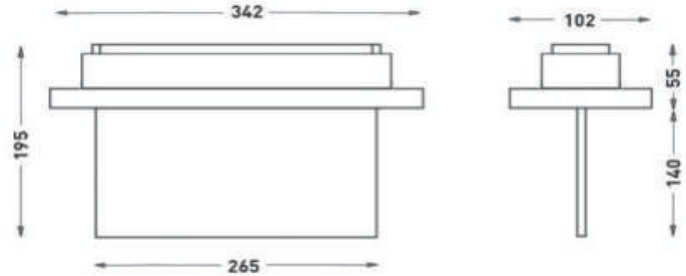
### Network Connection



### Technical Drawing / Surface Mounted



### Technical Drawing / Under Plaster



## Product List

Product Code	Emergency Burn Time	Grid Drawn Power	Power Factor(PF)	Operation Mode	Light Source	Routing Type	Mounting Method	Weight (kg)	Dimension (mm)
ALC-005SM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,665	40 x 274 x195
ALC-005SMAH-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,885	40 x 274 x195
ALC-005HM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,745	40 x 274 x195
ALC-005RM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Under Plaster	1,220	102 x 342 x195



## General Information

- Single or double face
- Aluminum anodized body
- Polycarbonate side cover and hanger bracket
- SMD LED application
- Battery charge indicator with green LED
- Emergency test button
- High temperature resistant, industrial grade Ni-Cd battery
- Battery overcharge and discharge protection
- Screen printed transparent plexiglass
- Side illuminated
- Possibility of ceiling, wall or suspended ceiling mounting
- Optional 110 VAC compatibility
- Optional metal hanger or hook options

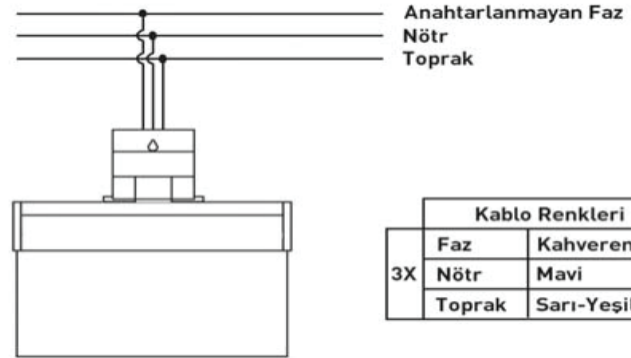
## General Features

Supply Voltage	230 VAC 50/60 Hz
Power	4,87 W
Power Factor (PF)	0.61
Ambient Temperature (ta)	0 °C ... +40 °C
Rated Duration	3 hours
Battery Charging Time	24 hours
Battery Type	3,6 V Ni-Cd
Sign Dimensions	122 x 253 mm
Viewing Distance : 19 m	20 m
Protection Class : IP 20	IP 20
Insulation Class : I	I
Surface Mounted Box Size (mm) : 38 x 245 x 187	40 x 274 x 195
Recessed Box Size(mm) : 102 x 312 x 187	102 x 342 x 195

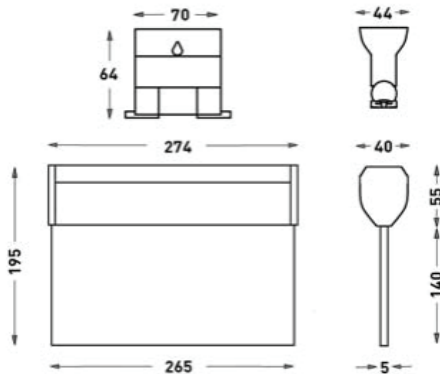
### Flush Mounting Dimension



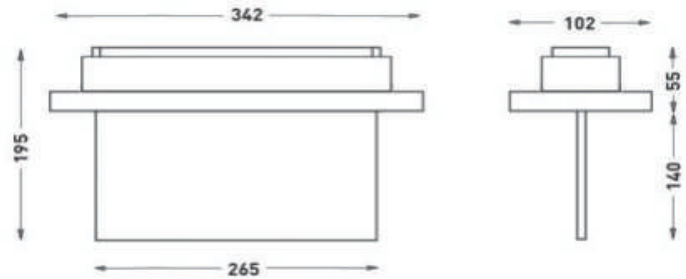
### Network Connection



### Technical Drawing / Surface Mounted



### Technical Drawing / Under Plaster



## Product List

Product Code	Emergency Burn Time	Grid Drawn Power	Power Factor(PF)	Operation Mode	Light Source	Routing Type	Mounting Method	Weight (kg)	Dimension (mm)
ALC-005SM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,665	40 x 274 x195
ALC-005SMAH-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,885	40 x 274 x195
ALC-005HM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Surface Mounted	0,745	40 x 274 x195
ALC-005RM-01201-865-00CE	3 hours	4,87	0,61	Continuous	8 x SMD LED	Double Faced	Under Plaster	1,220	102 x 342 x195

# PRODUCT CODING TEMPLATE

**A L T**

Product Family Code

**0 5 6 S M**

Product Power Consumption

106: 106 W

Mounting Type

HM: Chain or Mapa  
WL: Wall

**0 0 9 0 1**

Optic

0090: 90°

Automation Type

3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

CCT

30: 3000K

65: 6500K

**9 0 0 5**

RAL CODE

7016: Anthracite Gray

**A L S**

Product Family Class  
ALS: ALSHAIN

**0 7 2 S M**

Product Power Consumption

072: 72 W

096: 96 W

Mounting Type

SM Surface  
CT: Cable Tray  
BB Busbar  
HM Chain or Mapa  
WL: Wall

**0 0 9 0 1**

Optic

0090: 90°

0110: 110°

0120: 120°

Automation Type

1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

8: 80 CRI

9: 90 CRI

CCT

30: 3000K

40: 4000K

50: 5000K

65: 6500K

**7 0 1 6**

RAL CODE

7016: Anthracite Gray

9005: Black

**R G L**

Product Family Class  
RGL: REGULUS

**1 0 6 S M**

Product Power Consumption

106: 106 W

212: 212 W

318: 318 W

Mounting Type

SM Surface  
CT: Cable Tray  
BB Busbar  
HM Chain or Mapa  
WL: Wall

**0 0 1 8 1**

Optic

0018: 18°

0040: 40°

0060: 60°

ASY1: Asymmetric

Automation Type

1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

8: 80 CRI

9: 90 CRI

CCT

30: 3000K

40: 4000K

50: 5000K

65: 6500K

**9 0 0 5**

RAL CODE

7016: Anthracite Gray

9005: Black

**C P L**

Product Code  
CPL: CAPELLA

**0 7 2 S M**

Product Power Consumption

072: 72 W

096: 96 W

128: 128 W

Mounting Type

SM: Surface  
CT: Cable Tray  
BB: Busbar  
HM: Chain or Mapa  
WL: Wall

**0 0 6 0 1**

Optic

0018: 18°

0040: 40°

0060: 60°

ASY1: Asymmetric

ASY2: 20°-70°

Automation Type

1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

8: 80 CRI

9: 90 CRI

CCT

30: 3000K

40: 4000K

50: 5000K

65: 6500K

**7 0 1 6**

RAL CODE

7016: Anthracite Gray

9005: Black

**C N P**

Product Family Code  
CNP: CANOPUS

**0 7 2 R M**

Product Power Consumption

072: 72 W

096: 96 W

128: 128 W

Mounting Type

CN: Canopy  
SM: Surface  
RM: Flush Mounted  
CT: Cable Tray  
BB: Busbar  
HM: Chain or Mapa  
WL: Wall

**0 0 9 0 1**

Optic

0090: 90°

0110: 110°

0120: 120°

Automation Type

1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

8: 80 CRI

9: 90 CRI

CCT

30: 3000K

40: 4000K

50: 5000K

65: 6500K

**9 0 1 0**

RAL CODE

7016: Anthracite Gray

9005: Black

**B L X**

Product Family Code  
BLX: BELLATRIX

**0 3 3 S M**

Product Power Consumption

033: 33 W

042: 42 W

050: 50 W

059: 59 W

Mounting Type

SM: Surface Mounted  
CT: Cable Tray  
BB: Busbar  
WL: Wall

**0 1 1 0 1**

Optic

0008: 8°

0017: 17°

0025: 25°

0045: 45°

0060: 60°

0090: 90°

0120: 120°

Automation Type

1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 5**

CRI

7: 70 CRI

8: 80 CRI

9: 90 CRI

CCT

30: 3000K

40: 4000K

50: 5000K

65: 6500K

**9 0 0 6**

RAL CODE

9006: Metallic Gray

00CE: Anodizing

7016: Anthracite Gray

# PRODUCT CODING TEMPLATE

L Y R

Product Family Code  
LYR: LYRA

0 7 2 S M

Product Power Consumption  
056: 56 W  
065: 65 W  
085: 85 W  
100: 100 W  
113: 113 W  
133: 133 W

Mounting Type  
SM: Surface  
CT: Cable Tray  
BB: Busbar  
HM :Chain or Mapa  
WL: Wall

0 1 1 0 1

Optic  
0065: 65°  
0110: 110°  
0120: 120°

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 6 5

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

CCT  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

0 0 C E

RAL CODE  
9006: Metallic Gray  
00CE: Anodizing

H Y D

Product Family Code  
HYD: HYDRA

0 1 8 S M

Product Power Consumption  
018: 18 W  
036: 36 W  
065: 65 W

Mounting Type  
SM: Surface Mounted  
CT: Cable Tray  
BB: Busbar  
WL: Wall

0 1 1 0 1

Optic  
0110: 110°

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 6 5

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

CCT  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

7 0 1 6

RAL CODE  
7016: Anthracite Gray

E L G

Product Family Code  
ELG: ELEGANCE

0 5 1 S M

Product Power Consumption  
025: 25 W  
036: 36 W  
038: 38W  
048: 48 W  
051: 51 W  
090: 90 W

Mounting Type  
PM: Pendant  
SM: Surface  
CT: Cable Tray

0 0 3 0 1

Optic  
0030: 30°  
0060: 60°  
0090: 90°  
ASY1: Asimetrik  
DASY: Double Asimetrik

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 6 5

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

CCT  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

9 0 1 6

RAL CODE  
9016: White  
9006: Gray  
00CE: Anodizing

L N D

Product Family Code  
LND: LINDA

0 4 0 P M

Product Power Consumption  
014: 14 W  
020: 20 W  
027: 27 W  
040: 40 W  
041: 41 W  
060: 60 W

Mounting Type  
PM: Pendant  
SM: Surface  
CT: Cable Tray

0 0 9 0 1

Optic  
0090: 90°  
6090: 60°X90°  
1011: 100°X110°  
ASY1: Asymmetric  
DASY Double Asymmetric

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 4 0

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

CCT  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

9 0 1 6

RAL CODE  
9016: White  
9006: Gray

S K Y

Product Family Code  
SKY: SKYSTAR

0 3 0 D M

Product Power Consumption  
030: 30 W  
050: 50 W  
060: 60 W  
080: 80 W  
100: 100 W  
120: 120 W  
150: 150 W  
180: 180 W  
250: 250 W  
320: 320 W

Mounting Type  
DM: Pole Mount  
WL: Wall Mount

A S Y 1 2

Optic  
ASY1: TYPE 1  
ASY2: TYPE 2  
ASY3: TYPE 3  
ASY4: TYPE 4  
ASY5: TYPE 5

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 5 0

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

CCT  
22:2200K  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

7 0 1 6

RAL CODE  
7016: Anthracite Gray  
9006: Light Gray

U R S

Product Family Code  
URS: URSA-M

0 3 0 D M

Product Power Consumption  
030: 30 W  
040: 40 W  
050: 50 W

Mounting Type  
DM Pole Mount  
WL: Wall Mount

A S Y 1 2

Optic  
ASY1: TYPE 1  
ASY2: TYPE 2  
ASY3: TYPE 3  
ASY4: TYPE 4  
ASY5: TYPE 5

Automation Type  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

8 6 5

CRI  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

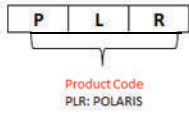
CCT  
22: 2200K  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

7 0 1 6

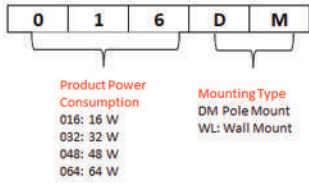
RAL CODE  
7016: Anthracite Gray  
9006: Light Gray



# PRODUCT CODING TEMPLATE

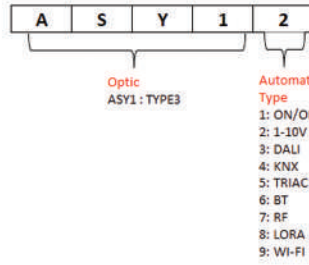


**Product Code**  
PLR: POLARIS



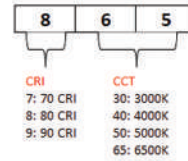
**Product Power Consumption**  
016: 16 W  
032: 32 W  
048: 48 W  
064: 64 W

**Mounting Type**  
DM Pole Mount  
WL: Wall Mount



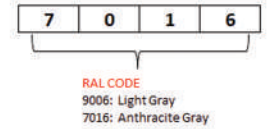
**Optic**  
ASY1: TYPE3

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI



**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

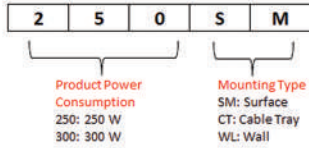
**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K



**RAL CODE**  
9006: Light Gray  
7016: Anthracite Gray

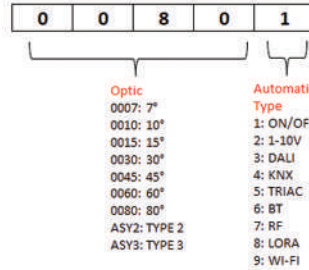


**Product Family Code**  
DNB: DENEK



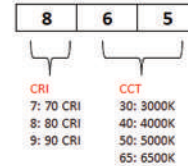
**Product Power Consumption**  
250: 250 W  
300: 300 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray  
WL: Wall



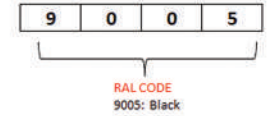
**Optic**  
0007: 7°  
0010: 10°  
0015: 15°  
0030: 30°  
0045: 45°  
0060: 60°  
0080: 80°  
ASY2: TYPE 2  
ASY3: TYPE 3

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

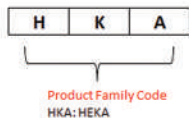


**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

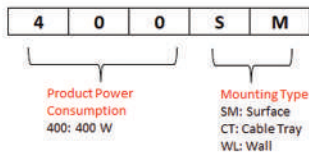
**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K



**RAL CODE**  
9005: Black

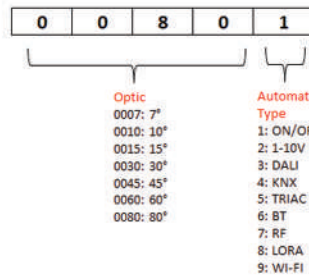


**Product Family Code**  
HKA: HEKA



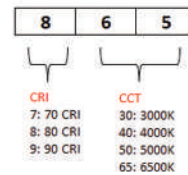
**Product Power Consumption**  
400: 400 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray  
WL: Wall



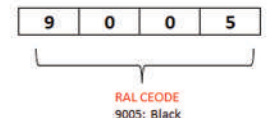
**Optic**  
0007: 7°  
0010: 10°  
0015: 15°  
0030: 30°  
0045: 45°  
0060: 60°  
0080: 80°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

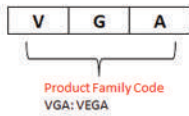


**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

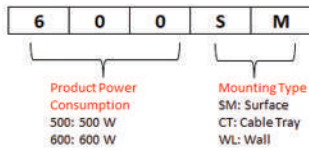
**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K



**RAL CODE**  
9005: Black

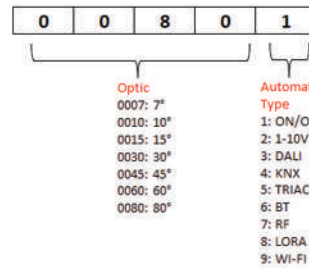


**Product Family Code**  
VGA: VEGA



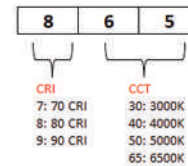
**Product Power Consumption**  
500: 500 W  
600: 600 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray  
WL: Wall



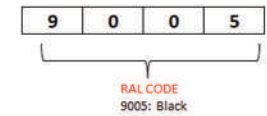
**Optic**  
0007: 7°  
0010: 10°  
0015: 15°  
0030: 30°  
0045: 45°  
0060: 60°  
0080: 80°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

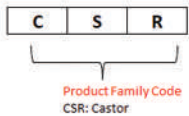


**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

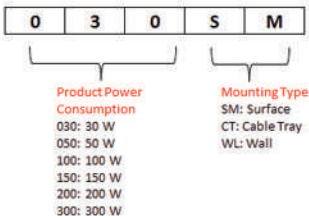
**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K



**RAL CODE**  
9005: Black

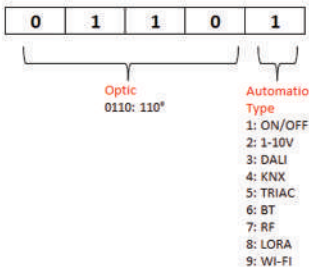


**Product Family Code**  
CSR: Castor



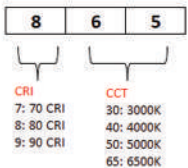
**Product Power Consumption**  
030: 30 W  
050: 50 W  
100: 100 W  
150: 150 W  
200: 200 W  
300: 300 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray  
WL: Wall



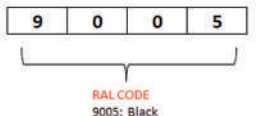
**Optic**  
0110: 110°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

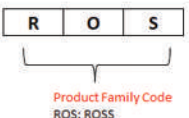


**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

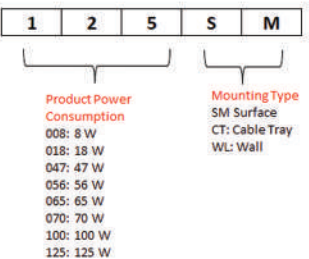
**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K



**RAL CODE**  
9005: Black

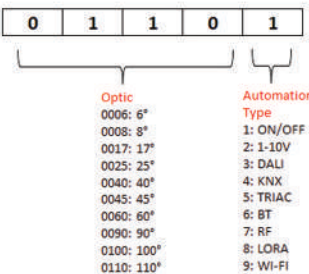


**Product Family Code**  
ROS: ROSS



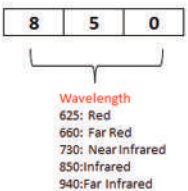
**Product Power Consumption**  
008: 8 W  
018: 18 W  
047: 47 W  
056: 56 W  
065: 65 W  
070: 70 W  
100: 100 W  
125: 125 W

**Mounting Type**  
SM Surface  
CT: Cable Tray  
WL: Wall

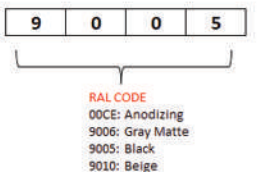


**Optic**  
0006: 6°  
0008: 8°  
0017: 17°  
0025: 25°  
0040: 40°  
0045: 45°  
0060: 60°  
0090: 90°  
0100: 100°  
0110: 110°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI



**Wavelength**  
625: Red  
660: Far Red  
730: Near Infrared  
850: Infrared  
940: Far Infrared



**RAL CODE**  
00CE: Anodizing  
9006: Gray Matte  
9005: Black  
9010: Beige

**B T L**

**Product Family Code**  
BTL: BETELGEUSE

**1 2 5 S M**

**Product Power Consumption**  
070: 70 W  
100: 100 W  
125: 125 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray  
WL: Wall

**0 0 0 8 2**

**Optic**  
0008: 8°  
0017: 17°  
0025: 25°  
0040: 40°  
0045: 45°  
0060: 60°  
0090: 90°  
0110: 110°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 5 0**

**Wavelength**  
625: Red  
660: Far Red  
730: Near Infrared  
850: Infrared  
940: Far Infrared

**7 0 1 6**

**RAL CODE**  
7016: Anthracite Gray  
9005: Black

**O C T**

**Product Family Code**  
OCT: OCTAMOL

**8 0 0 S M**

**Product Power Consumption**  
800: 800 W

**Mounting Type**  
SM: Surface  
CT: Cable Tray

**0 1 2 0 1**

**Optic**  
0120: 120°  
0900: 90°  
0060: 60°

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**7 4 1**

**CRI**  
7: 70 CRI  
8: 80 CRI  
9: 90 CRI

**CCT**  
30: 3000K  
40: 4000K  
50: 5000K  
65: 6500K

**Supporting Light**  
1: Deep RED  
2: Hyper RED  
3: Hyper RED+Deep RED  
4: Blue  
5: Green  
6: Lemon  
7: UVA  
8: UVB  
9: UVC

**9 0 0 5**

**RAL CODE**  
00CE: Anodizing  
7016: Anthracite Gray

**S C L**

**Product Family Code**  
SCL: Smart City Lighting Systems  
SCL: Akıllı Şehir Aydınlatma Sistemi

**2 0 0 6 6**

**Number of Groups Managed**  
200: 200 Armature

**Protection Class**  
66: IP66

**2 3 2 0 8**

**Dimension**  
2320: 23cm X 20cm

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 8**

**Operating Frequency**  
433: 433 Mhz  
470: 470 Mhz  
868: 868 Mhz  
915: 915 Mhz

**9 0 0 6**

**RAL CODE**  
RAL 9005: Black  
RAL 9006: Gray

**S C L**

**Product Family Code**  
SCL: Smart City Lighting Systems  
SCL: Akıllı Şehir Aydınlatma Sistemi

**N M 0 1 5**

**Compatible Nema Socket**  
NM01: Nema Socket NM01-6605

**Pin Count**  
3: 3 Pin (On/Off)  
5: 5 Pin (1-10V)  
7: 7 Pin (DALI)

**9 4 9 7 8**

**Dimension**  
9497: Ø94 x Height 97 mm

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI  
4: KNX  
5: TRIAC  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**8 6 8**

**Operating Frequency**  
433: 433 Mhz  
868: 868 Mhz  
915: 915 Mhz

**9 0 0 5**

**RAL CODE**  
RAL 9005: Black  
RAL 9006: Gray

**S C L**

**Product Family Code**  
SCL: Smart City Lighting Systems  
SCL: Akıllı Şehir Aydınlatma Sistemi

**N M 0 1 3**

**Compatible Nema Socket**  
NM01: Nema Socket NM01

**Pin Count**  
3: 3 Pin (On/Off)  
5: 5 Pin (1-10V)  
7: 7 Pin (DALI)

**6 6 1 9 1**

**Dimension**  
6619: Ø66 x Height 18.8 mm

**Automation Type**  
1: ON/OFF  
2: 1-10V  
3: DALI

**0 0 0**

**RAL CODE**  
RAL 9005: Black  
RAL 9006: Gray

**9 0 0 5**

**RAL CODE**  
RAL 9005: Black  
RAL 9006: Gray

**S C L**

**Product Family Code**  
SCL: Smart City Lighting Systems  
SCL: Akıllı Şehir Aydınlatma Sistemi

**N M 0 1 3**

**Compatible Nema Socket**  
NM01: Nema Socket NM01

**Pin Count**  
3: 3 Pin (On/Off)

**7 4 4 1 1**

**Dimension**  
7441: Ø73 x Height 41 mm

**Automation Type**  
1: ON/OFF

**0 0 1**

**Circuit Type**  
001: Short Circuit/Short Circuit  
002: Open Circuit/Open Circuit  
003: Photocell/ Photocell

**9 0 0 5**

**RAL CODE**  
RAL 9005: Black  
RAL 9006: Gray  
3020: Red  
5005: Blue

# PRODUCT CODING TEMPLATE

**A L C**

Product Family Code  
ALC: ALCOR

**0 0 5 S M**

Product Power Consumption  
005: 4,87 W

Mounting Type  
SM: Surface  
RM: Plastering  
HM: Surface Mounted Chain  
AH: Surface Mount Adjustable  
Hanger Wire

**3 1 2 2 1**

Working Time in Outage  
1: 1 hour  
3: 3 hours

Pictogram  
P1:  
P2:  
P3:  
P4:

Number of Direction  
1: Single  
2: Double

Automation Type  
1: ON/OFF  
3: DALI  
4: KNX  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**7 6 5**

CRI  
7: 70 CRI

CCT  
65: 6500K

**2 4 C E**

Visible Distance  
20: 20 meters  
24: 24meters  
30: 30 meters

RAL CODE  
00CE: Anodizing  
9016 : White  
9006 : Matte Gray

**A L D**

Product Family Code  
ALD: ALKAID

**0 0 3 S M**

Product Power Consumption  
003: 3,25 W

Mounting Type  
HM: Surface Mounted Chain  
SM: Surface  
RM: Plastering  
AH: Surface Mount Adjustable  
Hanger Wire

**3 1 2 0 1**

Working Time in Outage  
1: 1 hour  
3: 3 hours

Pictogram  
P1:  
P2:  
P3:  
P4:

Number of Direction  
1: Single  
2: Double

Automation Type  
1: ON/OFF  
3: DALI  
4: KNX  
6: BT  
7: RF  
8: LORA  
9: WI-FI

**7 6 5**

CRI  
7: 70 CRI



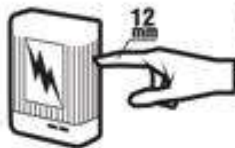









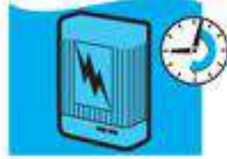

CCT  
65: 6500K

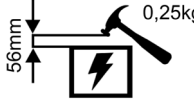
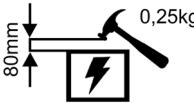
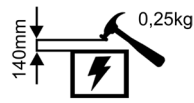
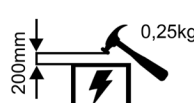
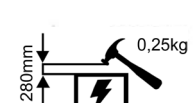
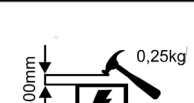
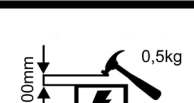
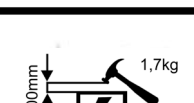
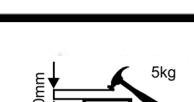
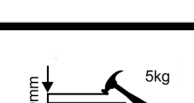
**2 4 C E**



















Visible Distance  
20: 20 meters  
24: 24meters  
30: 30 meters

RAL CODE  
00CE: Anodizing  
9016 : White  
9006 : Matte Gray

## IP (Ingress Protection) Ratings Guide

SOLIDS		WATER	
<b>1</b>	 <p>Protected against a solid object greater than 50 mm such as a hand.</p>	<b>1</b>	 <p>Protected against vertically falling drops of water. Limited ingress permitted.</p>
<b>2</b>	 <p>Protected against a solid object greater than 12.5 mm such as a finger.</p>	<b>2</b>	 <p>Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.</p>
<b>3</b>	 <p>Protected against a solid object greater than 2.5 mm such as a screwdriver.</p>	<b>3</b>	 <p>Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted for three minutes.</p>
<b>4</b>	 <p>Protected against a solid object greater than 1 mm such as a wire.</p>	<b>4</b>	 <p>Protected against water splashed from all directions. Limited ingress permitted.</p>
<b>5</b>	 <p>Dust Protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours.</p>	<b>5</b>	 <p>Protected against jets of water. Limited ingress permitted.</p>
<b>6</b>	 <p>Dust tight. No Ingress of dust. Two to eight hours.</p>	<b>6</b>	 <p>Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.</p>
<p>Rating Example:</p> <h1>IP65</h1> <p>INGRESS PROTECTION</p>		<b>7</b>	 <p>Protection against the effects of immersion in water between 15 cm and 1 m for 30 minutes.</p>
		<b>8</b>	 <p>Protection against the effects of immersion in water under pressure for long periods.</p>

IK No	Energy		Equivalent impact
00	Non-protected		No protection
01	Protected against 0.14 joules impact		Equivalent to impact of 0.25 kg mass dropped from 56 mm above impacted surface
02	Protected against 0.2 joules impact		Equivalent to impact of 0.25 kg mass dropped from 80 mm above impacted surface
03	Protected against 0.35 joules impact		Equivalent to impact of 0.25 kg mass dropped from 140 mm above impacted surface
04	Protected against 0.5 joules impact		Equivalent to impact of 0.25 kg mass dropped from 200 mm above impacted surface
05	Protected against 0.7 joules impact		Equivalent to impact of 0.25 kg mass dropped from 280 mm above impacted surface
06	Protected against 1 joules impact		Equivalent to impact of 0.25 kg mass dropped from 400 mm above impacted surface
07	Protected against 2 joules impact		Equivalent to impact of 0.25 kg mass dropped from 400 mm above impacted surface
08	Protected against 3 joules impact		Equivalent to impact of 1.7 kg mass dropped from 300 mm above impacted surface
09	Protected against 10 joules impact		Equivalent to impact of 5 kg mass dropped from 200 mm above impacted surface
10	Protected against 20 joules impact		Equivalent to impact of 5 kg mass dropped from 400 mm above impacted surface

	<p>Tridonic products comply with the requirements of 2004/108/EC, 2006/95/EC, 2009/125/EG and 2011/65/EU (RoHS), and are entitled to bear the CE mark. EC declarations of conformity can be requested via the internet at <a href="http://www.tridonic.com">www.tridonic.com</a>, menu "Technical data".</p>
	<p>RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) summarises EU directive 2002/95/EC on the prohibition of certain substances in the manufacture and processing of electrical and electronic equipment and components.</p>
	<p>The ENEC mark (European Norms Electrical Certification) is a European mark of conformity and confirms that the device on which the symbol is shown complies with all the requirements of the ENEC scheme. Test certificates can be requested via the Internet at <a href="http://www.tridonic.com">www.tridonic.com</a>, menu "Technical data".</p>
	<p>Protection class II device in which protection against electric shock is not based solely on the basic insulation but in which there are additional safety features such as double or enhanced insulation. It is independent of the protection measures of the fixed installation</p>
	<p>Reinforced insulation. The device is designed to be used in class II equipments and does not need any protection earth.</p>
	<p>Mark for an independent gear.</p>
	<p>The device is suitable for installing on or in furniture which is made from materials with unknown flammability properties</p>
	<p>Pictogram for temperature-protected devices. The temperature shown is the maximum surface temperature in the event of a fault at rated ambient temperature</p>
	<p>Safety Extra-Low-voltage</p>
	<p>Type of protection (IP20 indoor, IP66 and IP67 outdoor)</p>
	<p>Short-circuit-proof with safety insulation / Non-short-circuit-proof with safety insulation.</p>
	<p>Short-circuit-proof without safety insulation.</p>
	<p>ESD protection necessary.</p>
	<p>DALI is an acronym and stands for "Digital Addressable Lighting Interface" set out in the technical standard IEC 62386 that guarantees the exchangeability of dimmable devices. Building on the long-established benefits of DALI, the DALI-2 certification program brings the promise of significantly improved interoperability and additional functionality compared with current DALI systems in the market</p>
	<p>The Control gear / LED Driver is suitable for the use in emergency lighting.</p>
	<p>The emergency control gear / LED Driver has an inbuilt automatic test functionality complying with IEC 62034.</p>
	<p>Eurasian Conformity: Mark of conformity for customs union (Russia, Kazakhstan, Belarus)</p>
	<p>ready2mains for LED luminaire dimming and configuration via the mains.</p>

## General standards for Lighting Fixtures

<b>TS EN 60598-1:</b>	General requirements for luminaires
<b>TS EN 60598-2-XX(1...25):</b>	Aydınlatma Armatürleri için özel güvenlik standartları
<b>TS EN 62031:</b>	Genel Aydınlatma için LED Modüllerinin Güvenlik Özellikleri
<b>TS IEC TR 62471:</b>	Photobiological Safety Test Standard
<b>TS IEC TR 62778:</b>	IEC 62471 for Blue Light Hazard Assessment application
<b>TS EN 62493:</b>	Regarding people exposed to Electromagnetic Field lighting equipment inspection
<b>TS EN 60529:</b>	Degrees of IP protection provided with enclosures (IP test)
<b>TS EN 62262:</b>	Electrical Equipment against external mechanical impacts Tests for protection (IK test standard)
<b>TS EN 62722-1:</b>	Lighting Fixture Performance standard- General Requirements
<b>TS EN 62722-2-1:</b>	Lighting Fixture Performance standard- Requirements for LED Luminaire
<b>TS EN 60998:</b>	For Low Voltage Circuits Connection schemes General features
<b>IES LM-80-18:</b>	Measurement of Luminous Flux Continuity of LED Light Sources
<b>IES TM 21-11:</b>	Luminous Flux Lifetime Prediction Method of LED Light Sources
<b>IES TM 28-14:</b>	LED Lamp and LED Light Source Luminaires Luminous Flux Continuity Prediction standard

## Standards for LED Drivers used in Lighting Fixtures

<b>TS EN 61347-1:</b>	Lamp Control Pattern – General Safety Features
<b>TS EN 61347-2-13:</b>	Special rules for electronic control scheme used for LED Modules (operated with DC and AC Current)
<b>TS EN 62384:</b>	For LED Modules (DC or AC current supply working with) electronic control scheme performance properties
<b>TS EN 55015:</b>	Limit of Radio Frequency Distortion Characteristics Values and Measuring Methods
<b>TS EN 61547:</b>	Devices used for general lighting EMU immunity Rules
<b>*TS EN 61000- X- Y:</b>	Voltage, current, sudden high under EMC tests criteria such as voltage and test parameters and tests shows.

## Photometric Measurements of Lighting Fixtures related standards

<b>TS EN 13032-1/2/3/4:</b>	Photometric data of Lighting Fixtures measurement and presentation standard
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