



ADVISION

new kind of road lighting



Product Line 023B-2011



ADVISION

High-end road lighting

LEDs – revolution in lighting

The revolutionary breakthrough in lighting creation technique, on the threshold of XXI century, is solid-state lighting – LED diodes.



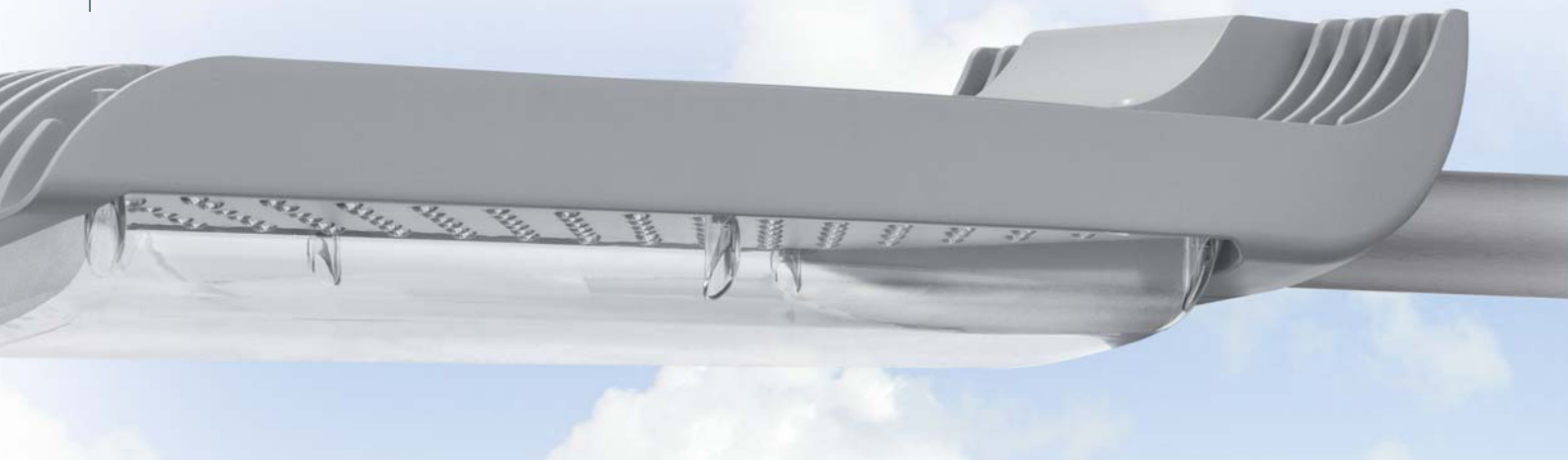
ADVISION – future in lighting roads and urban areas

Road luminaires ADVISION fully use all LED advantages.

- ✘ Extremely long life span
- ✘ Precise and optimal light distribution
- ✘ White light with very high colour rendering index
- ✘ Very low energy consumption
- ✘ Wide possibilities of light control
- ✘ Elegant and modern design



ADVISION luminaires on Dzielna street in Warsaw. Photo: Łukasz Klimek



The best performance criteria

Life span 50,000 hours = over 12 years operation

Extremely long life span over 50,000 hours, professional construction and high quality materials ensure over 12 years operation with average yearly lighting periods equal 4,000 hours.

LEDs with high efficacy and luminaires power choice

High efficacy of LEDs and a wide range of luminaires power: 70W, 90W, 100W, 125W, 150W and 180W, ensure optimal lighting of streets and open areas with different lighting requirements.

Power supply unit with protections

High efficient supplying system with microprocessor which controls the operation of the LEDs is equipped with protection:

- ✘ against short-circuit or spread of the diode, which enables further work of the luminaire even in the case of failure or short-circuit of one of the diodes.

Possibility of power reduction and cooperation with sensors

Power supplier of the ADVISION luminaire may precede the functions of:

- ✘ automatic reduction of power after late evening hours,
- ✘ cooperation with twilight sensor,
- ✘ cooperation with motion sensor.

Easy mounting and inclination adjustment

Special mounting grip ensure possibility of easy vertical and horizontal mounting with angle of inclination adjustment.

The highest tightness IP66

Special gasket system of the cover and control gear chamber ensures the whole luminaire the highest level of IP 66.

Limited maintenance necessity

Compact design of body and cover, high quality materials and integrated with luminaires LED diodes with high level of technological advance guarantee limiting of maintenance to external cleaning only.



Modern construction

1 Body

The body is made of high pressure die-cast aluminium, weather protected by powder painting.

2 Heat-sink radiator

The ribbed radiator, located in the upper part of body ensures optimal LEDs operation conditions and guarantees very long life span.



3 Strong and tight PC cover

From the bottom, the luminaire is tightly closed by cover made of polycarbonate and fixed to the body by screw wrenches. The high quality polyurethane gasket, formed directly on the body allows obtaining high tightness level of IP 66.

4 CREE LED diodes and optical system

As light sources has been used LEDs made by Cree that belonging to a small group of world leaders in the design and manufacture of semiconductor light sources. To the optimising light distribution of ADVISION luminaires has been used lenticular optical system. Each diode are equipped with individual lens made of polymethylmethacrylate (PMMA) with very high coefficient of light transmission and precise angle of light distribution.

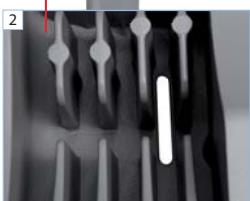
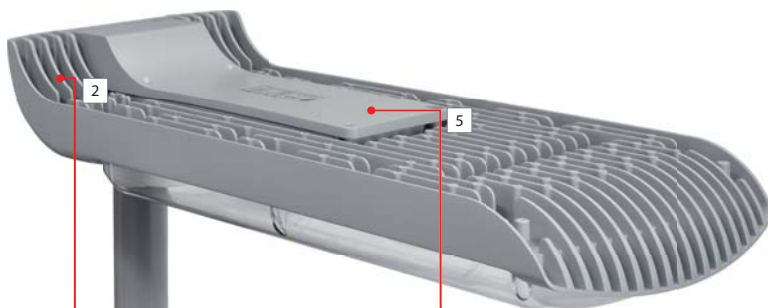


5 Supplying and controlling systems' chamber

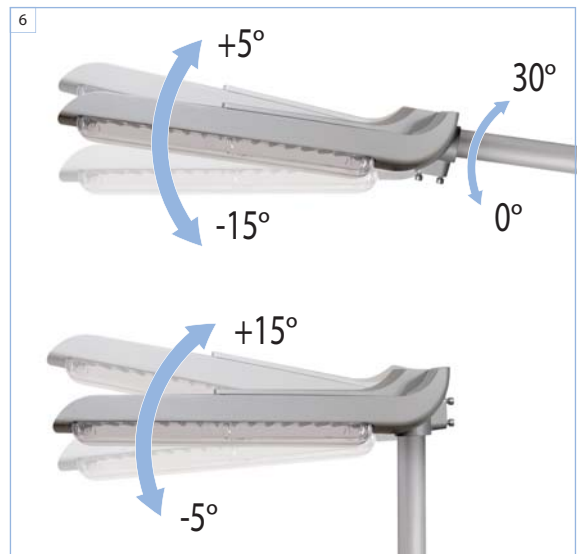
On the upper part of the body is located the supplying and controlling systems' chamber closed by lid with polyurethane gasket which ensure IP equal 66. Inside the chamber has been mounted microprocessor power supplier of the luminaire.



Standard colour version



6 Mounting grip



Adjustable die-cast grip made of aluminum situated at the back of the lamp body enables installing the luminaire on the vertical pole or horizontal extensions arm forming an angle of $0^\circ \div 30^\circ$ with the road surface, with the endings of $42 \div 60$ mm diameter. The construction of the grip enables fluent change of the angle of depression in $-5^\circ/+15^\circ$ on a vertical pole and $-15^\circ/+5^\circ$ on a horizontal extension.

7 Easy and sure connection

The special connector situated on supplying plug by manufacturer ensures easy and reliable mains connection.



8 Power supplier with dimming system

The function of automatic of power reduction is standard set for the period of 4 working hours with the power reduced to about 30%. On special customer request, there is a possibility of setting the reduction period to 0,5 hour - 16 hours in intervals of every 0,5 hour. The microprocessor makes its daytime of power reduction dependent on the average periods of the luminaires work from the previous five days. Therefore, the first reduction of the power takes place the sixth day from the first turning on of the luminaire which was longer than 6 hours. The microprocessor does not take into account the periods shorter than 6 hours. On the basis of the average periods of lighting from the previous five days, the microprocessor defines the middle of the lighting period and starts the reduction of power two hours before this time.

Technical data

ADVISION luminaires with lenticular optical system

Index	Model	Light source	Luminaire power	Number of LEDs	LEDs arrangement	Light colour	Correlated colour temperature	Summary LEDs luminous flux*	Body colour	
YU-WO0074-76	ADVISION 615L1	LEDs XP-G type	70W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	8300 lm	RAL 7040	
YU-WO0074-77	ADVISION 618L1		70W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	8700 lm	RAL 7040	
YU-WO0065-15	ADVISION 615L1		90W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	10800 lm	RAL 7040	
YU-WO0074-78	ADVISION 618L1		90W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	10900 lm	RAL 7040	
YU-WO0074-79	ADVISION 615L1		100W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	11500 lm	RAL 7040	
YU-WO0074-80	ADVISION 618L1		100W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	12100 lm	RAL 7040	
YU-WO0074-81	ADVISION 615L1		125W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	14200 lm	RAL 7040	
YU-WO0065-19	ADVISION 618L1		125W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	15000 lm	RAL 7040	
YU-WO0074-82	ADVISION 615L1		150W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	17400 lm	RAL 7040	
YU-WO0074-83	ADVISION 618L1		150W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	18100 lm	RAL 7040	
YU-WO0074-84	ADVISION 615L1		180W	90	6 lines, 15 diodes on each	daylight	5000 ÷ 8300K	20400 lm	RAL 7040	
YU-WO0074-85	ADVISION 618L1		180W	108	6 lines, 18 diodes on each	daylight	5000 ÷ 8300K	20900 lm	RAL 7040	
YU-WO0074-86	ADVISION 615L1		LEDs XP-E type	70W	90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	6700 lm	RAL 7040
YU-WO0074-87	ADVISION 618L1			70W	108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	6800 lm	RAL 7040
YU-WO0074-88	ADVISION 615L1	90W		90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	8400 lm	RAL 7040	
YU-WO0074-89	ADVISION 618L1	90W		108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	8800 lm	RAL 7040	
YU-WO0067-87	ADVISION 615L1	100W		90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	9000 lm	RAL 7040	
YU-WO0074-90	ADVISION 618L1	100W		108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	9500 lm	RAL 7040	
YU-WO0074-91	ADVISION 615L1	125W		90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	11000 lm	RAL 7040	
YU-WO0069-62	ADVISION 618L1	125W		108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	11500 lm	RAL 7040	
YU-WO0074-92	ADVISION 615L1	150W		90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	13000 lm	RAL 7040	
YU-WO0074-93	ADVISION 618L1	150W		108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	13800 lm	RAL 7040	
YU-WO0074-94	ADVISION 615L1	180W		90	6 lines, 15 diodes on each	neutral white	3700 ÷ 5000K	15000 lm	RAL 7040	
YU-WO0074-95	ADVISION 618L1	180W	108	6 lines, 18 diodes on each	neutral white	3700 ÷ 5000K	15900 lm	RAL 7040		

* based on data supplied by the LEDs manufacturer, luminous flux depending on luminaires power (detailed adjustment with manufacturer)

Electrical parameters and construction data

Voltage (U)	90 ÷ 264V AC*
Frequency (f)	47 ÷ 63Hz*
Power factor (cos φ)	≥ 0,95*
Total harmonic distortion (THD)	11,80%
Rated power (P)	70 ÷ 180W
Energetic efficiency of the luminaire	90%*
Protection class	IP 66
Protection rate	I
Materials: housing / cover	aluminium / polycarbonate
Dimensions (length x width x height)	785 x 294 x 159
Net weight	11,8 ÷ 12,5kg
Side surface exposed to wind	0,083m ²
Luminaire temperature	< 50°C
Operating temperature	-30°C ÷ 40°C

Lighting system parameters

Secondary optical system	lenses
Luminaire efficiency (η)	78%
Number of light sources – LED diodes	90 / 108 pcs of LEDs
Correlated colour temperature (CCT)	3700 ÷ 8300K*
Colour rendering index (CRI)	70 ÷ 80*
Durability of LED diodes	> 50000 hours

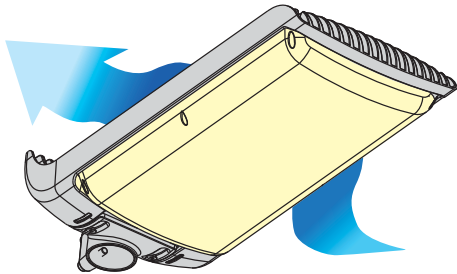
* according to LEDs manufacturer data



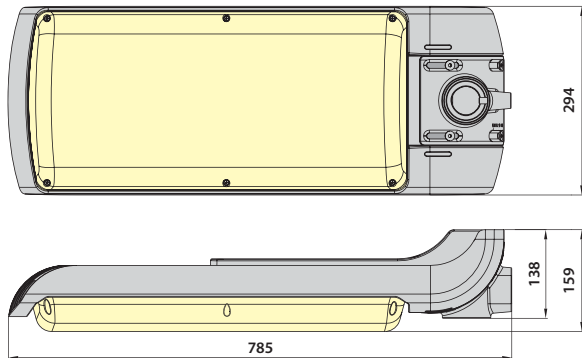
On special customer wish it is possible to make versions in other colour according to RAL palette.

Technical data

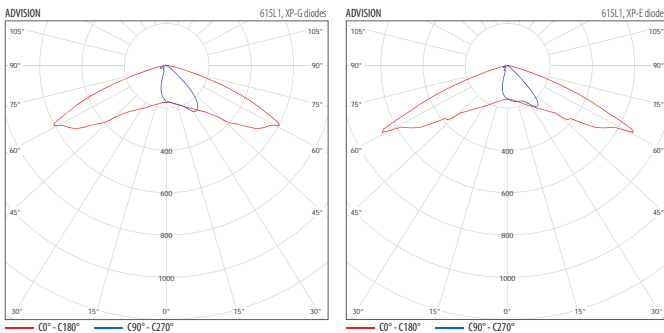
Side surface exposed to wind



0.083m²



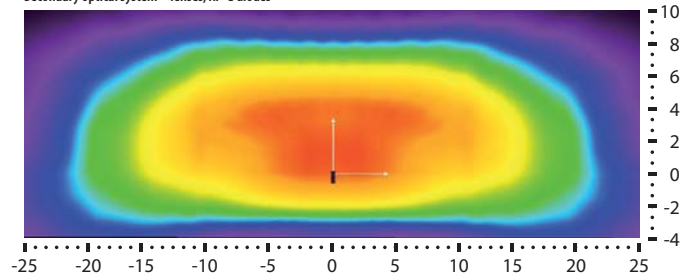
Light distribution



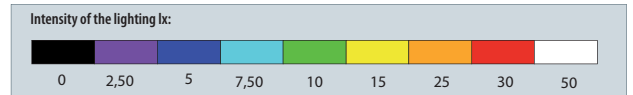
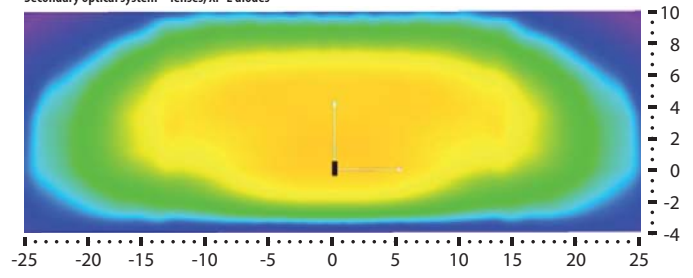
Lighting intensity distribution

- hanging height of luminaire – 10m
- lightened area dimensions 50 x 18m

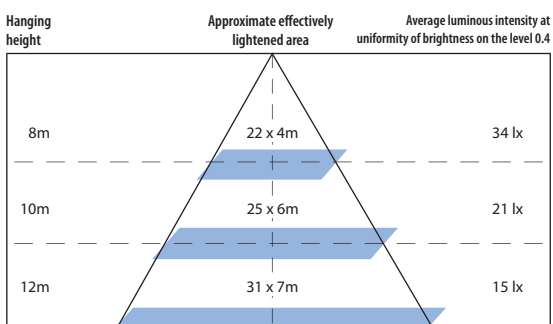
Luminous intensity distribution – ADVISION 615L1
Secondary optical system – lenses, XP-G diodes



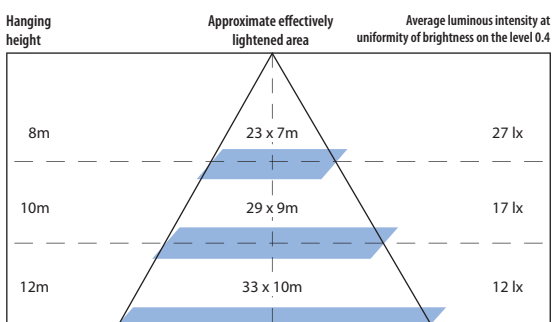
Luminous intensity distribution – ADVISION 615L1
Secondary optical system – lenses, XP-E diodes



Effectively lightened areas



ADVISION 615L – optical system – lenses, XP-G diodes



ADVISION 615L – optical system – lenses, XP-E diodes

Luminous intensity at uniformity of brightness on the level 0,4		
Hanging height	Average luminous intensity	Maximum luminous intensity
XP-G diodes		
8m	34 lx	44 lx
10m	21 lx	28 lx
12m	15 lx	19 lx
XP-E diodes		
8m	27 lx	33 lx
10m	17 lx	21 lx
12m	12 lx	14 lx