



Eclair
LED LIGHTING





Eclair series luminaire is the ideal Led lighting solution for any road, street or pedestrian area. Eclair create a more attractive urban living environment and visual comfort for public and residential zones.

It is competitive and efficient and will fit perfectly in retrofit projects as well as new installations on highways, roundabout and urban roads.

The proposed Eclair range consists of three sizes. The Eclair 1 upto 48 LED chips is good choice for service roads, lighting residential streets, ground park & car parking lots. The Eclair 2 upto 80 LEDs is ideally suited for urban roads, lighting collateral streets, and car parks, while the Eclair 3 upto 144 LEDs is perfect for avenues, large roads and moterways.

IP66

IK09



01

Key advantages

ECOLOGY

The Eclair is designed with sustainable material (aluminum and glass) without the use of glue improving the recyclability of the product. The optical system's high level performances combined with various dimming and management options limit energy consumption and consequently the CO2 emissions.

PERFORMANCE

The choice of number of Led modules offers a wide range of lumen packages and future proof solutions. Each Led is associated with a specific lens that generates the photometric distribution of the luminaire. These photometric engines combined with the driving currents and dimming options ensure the optimal lighting performance. The thermal design of Eclair range is based on the heat extraction to maintain the luminous flux over time and ensure the life time of the Leds.

MAINTENANCE

With the reversible fixation device, It's easy to install the Eclair range in side-entry. The tool free access of the IP66 gear and electronic compatment combined in gear tray fixed with screws provide an easy and quick maintenance. The high-level tightness of the optical compartment sealed with an extra-clear glass protector ensures a high quality transmission of the luminous flux.

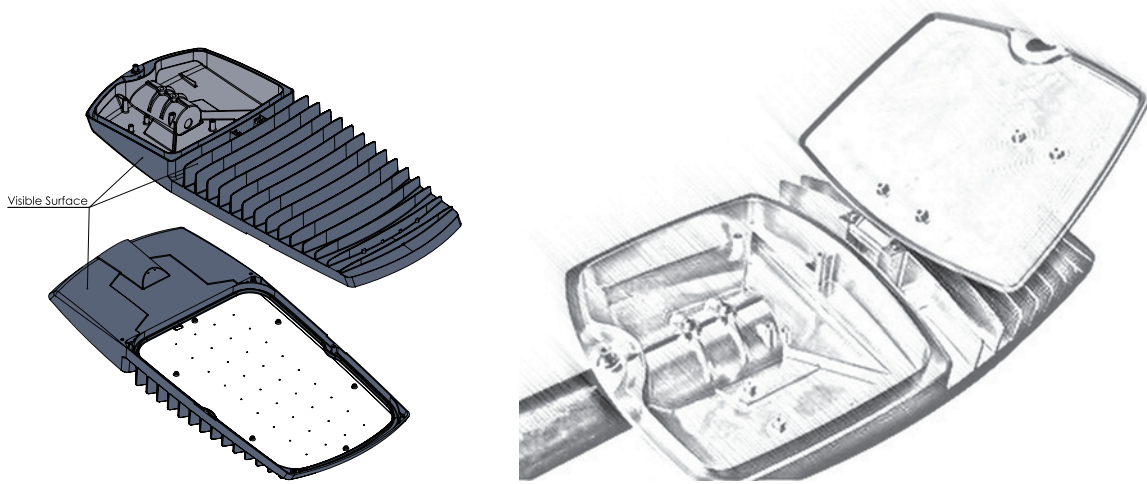
SECURITY

The luminaire is protected for a high voltage surcharge of 10/20kv.



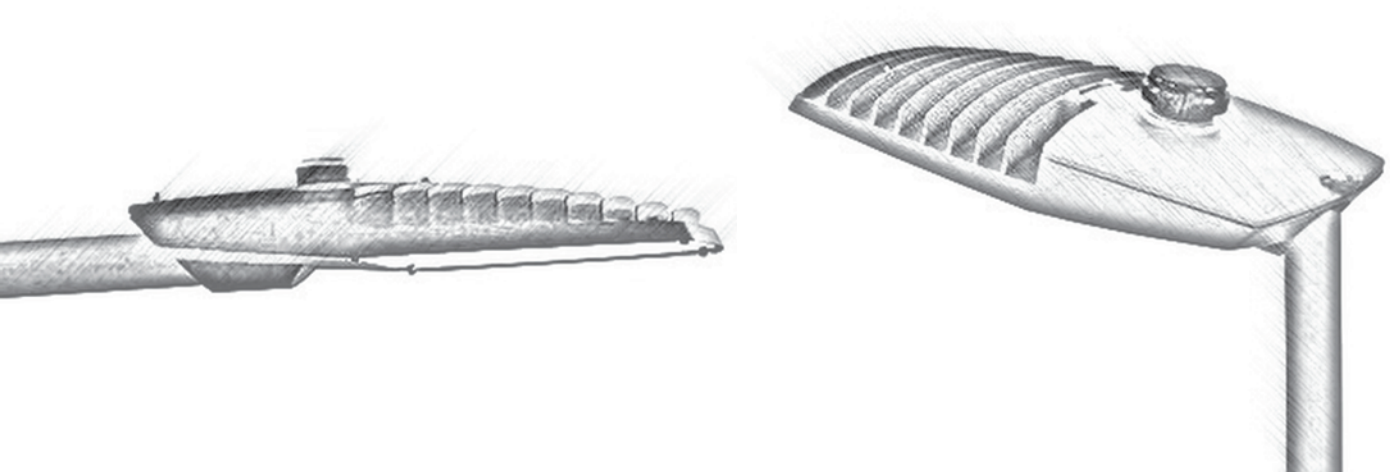
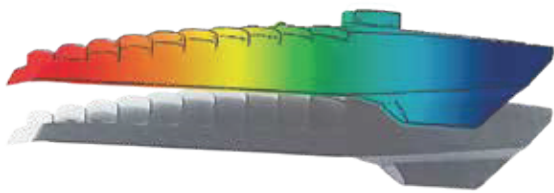
AESTHETIC

A unique style at the top of its category. The Eclair range is the result of the symbiosis between shape and function for a performance level without compromise. All the features are perfectly integrated into a fluid and light aesthetic.



MECHANICAL STRESS AND VIBRATION

FEM is used to understand the physical behavior of the luminaire (mechanical stress and displacements) under the conditions of vibration, of wind speed and of tightening torque of the fixation device. The modifications of the geometry of the luminaire are done until we reach the optimal design.



AESTHETIC

FEM



Tool free access to gear and electronic compartment



Design for an optimal heat dissipation that withstand high temperature (+55°C)



Each Led is associated with a specific lens that generates the photometric distribution of the light.



Warm White 3000K

LUMEN PACKAGE AND POWER

Eclair^①

Description		1M	2M	3M
350 mA	Nominal flux (lm)*	3,069	6,138	8,695
	Power consumption (W)	18	36	51
525 mA	Nominal flux (lm)*	4,385	8,445	12,667
	Power consumption (W)	27	52	78
700 mA	Nominal flux (lm)*	5,776	10,871	15,841
	Power consumption (W)	37	70	102

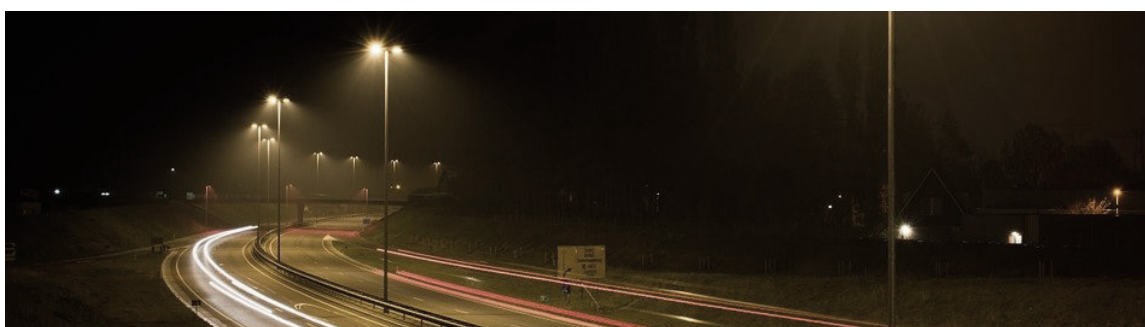
Eclair^②

Description		3M	4M	5M
350 mA	Nominal flux (lm)*	8,695	11,594	14,151
	Power consumption (W)	51	68	83
525 mA	Nominal flux (lm)*	12,667	16,565	20,625
	Power consumption (W)	78	102	127
700 mA	Nominal flux (lm)*	15,841	21,121	26,556
	Power consumption (W)	102	136	171

Eclair^③

Description		5M	6M	7M	8M	9M
350 mA	Nominal flux (lm)*	14,151	17,050	19,778	23,017	25,575
	Power consumption (W)	83	100	116	135	150
525 mA	Nominal flux (lm)*	20,625	24,847	28,907	33,292	37,514
	Power consumption (W)	127	153	178	205	231
700 mA	Nominal flux (lm)*	26,556	32,302	37,272	42,397	47,677
	Power consumption (W)	171	208	240	273	307**

COLOUR TEMPERATURE CHART



* The indicated flux is @ Tp 25°C and based on Led manufacturer's data. Such flux can improve with the advance of Led technology.

** Limited to 50 °C Ta

Note: Led module geometry according to Zhaga book 15.

LUMEN

LIGHT

Neutral White 4000K
LUMEN PACKAGE AND POWER

Eclair^①

Description		1M	2M	3M
350 mA	Nominal flux (lm)*	3,251	6,502	9,211
	Power consumption (W)	18	36	51
525 mA	Nominal flux (lm)*	4,603	8,866	13,299
	Power consumption (W)	27	52	78
700 mA	Nominal flux (lm)*	6,027	11,403	16,616
	Power consumption (W)	37	70	102

Eclair^②

Description		3M	4M	5M
350 mA	Nominal flux (lm)*	9,211	12,281	14,990
	Power consumption (W)	51	68	83
525 mA	Nominal flux (lm)*	13,299	17,391	21,653
	Power consumption (W)	78	102	127
700 mA	Nominal flux (lm)*	16,616	22,154	27,856
	Power consumption (W)	102	136	171

Eclair^③

Description		5M	6M	7M	8M	9M
350 mA	Nominal flux (lm)*	14,990	18,060	20,950	24,381	27,090
	Power consumption (W)	83	100	116	135	150
525 mA	Nominal flux (lm)*	21,653	26,086	30,349	34,952	39,385
	Power consumption (W)	127	153	178	205	231
700 mA	Nominal flux (lm)*	27,856	33,883	39,096	44,472	50,010
	Power consumption (W)	171	208	240	273	307**

COLOUR TEMPERATURE CHART



* The indicated flux is @ T_p 25°C and based on Led manufacturer's data. Such flux can improve with the advance of Led technology.

** Limited to 50 °C T_a

Note: Led module geometry according to Zhaga book 15.

LUMEN

LIGHT

Eclair ^{① ② ③}

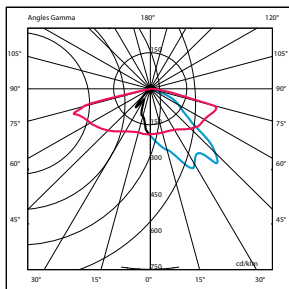


SERIES

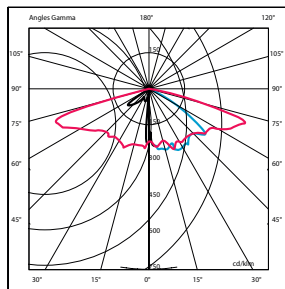
COLOR TEMPERATURES



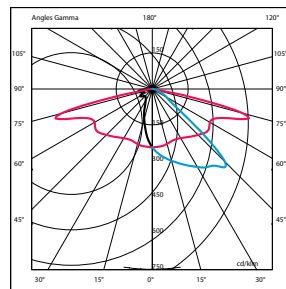
LIGHT DISTRIBUTION



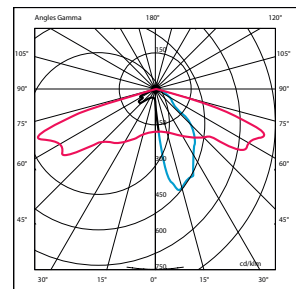
RESIDENTIAL



URBAN



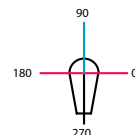
NARROW



MOTORWAY

C Demi-plans

- 270.0 —
- 180.00 — .0
- 90.0 —

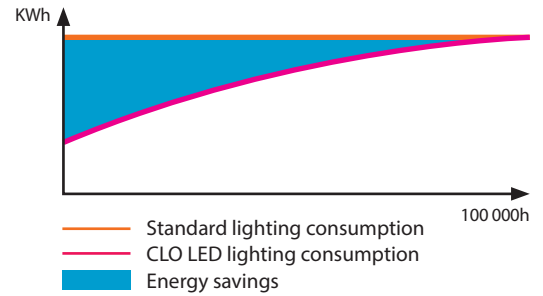


NB: Other light distributions available on demand in compliance with the Ledil 2x2 Strada range

LIGHT

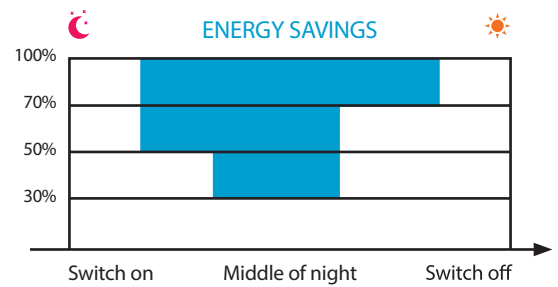
CONSTANT LUMEN OUTPUT

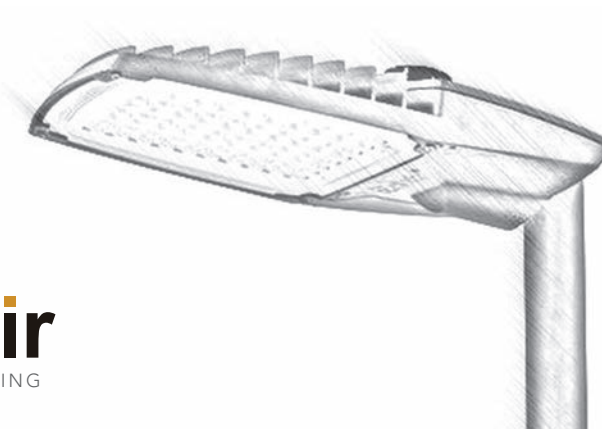
The constant lumen maintenance feature of the driver helps to maintain the required output of the fixture at a constant level throughout its lifetime. In general, Leds lumen output will depreciate over time and in order to maintain sufficient light level towards the end of lifetime, the Leds are driven at a higher current than initially and will result in more energy consumption. The constant lumen maintenance will give the flexibility to drive the Leds at optimal driving current throughout its lifetime. This helps in energy savings, constant light output and enhanced reliability of the system.



SMART CITY CONNECTIVITY

Eclair luminaires could be equipped with a 5-7 pin contacts Nema receptacle (conform to ANSI C136 41 standard) allowing the use of any connector node. Eclair luminaire equipped with the new 4 pin contacts Zhaga book 18 receptacle combined with drivers based on DALI 2.0 interface will make your luminaires ready for current and future IoT possibilities. An additional new 4 pin contacts Zhaga book 18 receptacle can also be used to attach a downward motion sensor to the luminaire.





	Weight	Height
①	4,7 kg	4 to 10 m
②	6,5 kg	4 to 14 m
③	8,6 kg	8 to 30 m

WEIGHT & HEIGHT

* Aerodynamic resistance

CHARACTERISTICS

Insulation class	Class I (II in option)
Nominal voltage	120V - 277V or 347V-480 V 50-60 Hz
Tightness level	IP66 for gear and optical compartment
Impact resistance	IK09
Gear tray	Removable without tool
Gear acces	Free tool acces
Operating temperature	-40°C > +55°C

MATERIALS

Fixation-Body-Cover	Die-cast aluminium EN1706 AC 47100 powder painted
Protector	Extra clear tempered glass. Anti-reflective glass in option
Color	Grey AKZO 900 sand. All RAL color in option
Gasket	Extruded silicone

LED SOURCE

LED module	Removable & Future Proof (according to ZHAGA book 15)
LED source efficiency	204 lm/W @ 350mA Tj=85°C 4000K
LED current	350 mA / 525 mA / 700 mA
Surge protection	Integrated surge protection device 10/20kV
Color rendering index	CRI > 70
Life time (Tq=25°C)	L70 B30 > 100 000 hrs @ 700 mA L80 B20 > 100 000 hrs @ 700 mA

OPTIONS

Light distributions	All distributions compatible with the 2x2 strada lenses from Ledil
Color temperature	CCT 3000K other CCTs on demand
Color rendering index	CRI > 80
Programmations	Constant Lumen Output / Time-related dimming system
Lighting management system	All versions folowing Zagma Book 18 / Drivers based on DALI 2.0 interface
Installation	Pre-cable with custom lenght
Life time (Tq=25°C)	L90 B10 > 100 000 hrs @ 700 mA

Eclair
LED LIGHTING



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