

Loto - LED - design Alessandro Pedretti



**GENERAL CHARACTERISTICS**

**Housing and frame:** pressed in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

**Optics:** made of PMMA with high temperature resistance and UV rays.

**Diffuser:** extra-clear tempered glass, 4 mm thick, resistant to thermal shocks and impacts (UNI-EN 12150-1: 2001).

**Coating:** the standard liquid immersion coating consists of a first metal surface pre-treatment stage, a successive epoxy cataphoresis corrosion and salt resistant coating, and a final layer of bi-component acrylic liquid UV-stabilised coating.

**Upon request:** coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

**Standard supply:** automatic temperature control inside the device with automatic resetting. With dedicated electronic device to protect the LED module.

**Equipment:** equipped with an air-circulation valve. Complete with IP67 airtight connector for mains connection.

**OTHER CHARACTERISTICS**

**SURGE** Electronic safety device to protect the LED module and the related ballast compliant with EN 61547. It works in two modes:  
 - differential mode: surge between power cables and between the phase and neutral.  
 - common mode: surge between power, L/N and ground cables or between the fixture's body if it is of class II and installed on a metal pole.

**LOW FLICKER** Product with a very low flicker; uniform light for greater eye protection.



**THE RANGE OF LOTO STREET LAMPS IS AVAILABLE IN THE FOLLOWING COLOUR TEMPERATURES:**

**2200K** **2200K (subcode -73):** lamps with warm amber light at a colour temperature of 2200K eliminate the risks of an excessive exposure to harmful blue LED light and allows a "softer" impact on inhabited zones, especially in historic centres.

**3000K - 4000K as standard:** lamps with 3000K-4000K white light, instead, is the best choice for lighting up urban areas, streets, residential centres and generally all areas where this type of light guarantees greater safety and visual comfort.



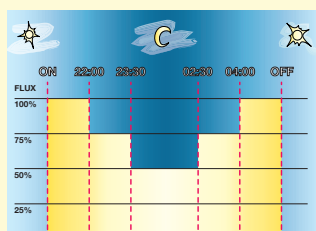
**INTEGRATED ADVANCED PROG (PROG CLD) FUNCTIONS:** the products of this family are supplied with programmable drivers as standard (except for versions with LED COB).

All these functions are already present on standard products and need only to be enabled on request. These functions do not require to make any modification to the system, as the product only needs to be connected to the mains without the use of a control BUS or a pilot cable.

<b>Luminous flux setup</b>	This can be done by programming the drive current values requested when ordering/purchasing the fixture
<b>Virtual Midnight</b> order with <b>subcode -30</b>	Stand-alone system with automatic luminous flux reduction in <b>4 steps</b> (up to <b>max 8 steps</b> available <b>upon request</b> )
<b>Broadcast Prog</b>	This allows the reconfiguration of the Virtual Midnight profile, including the enabling/disabling of all the fixtures installed on the same power line (broadcast function) via a sequence of electrical impulses.
Mains voltage regulation	This allows varying the luminous flux by adjusting the mains voltage between 170 and 250 V AC
<b>CLO</b> (Costant Light Output)	The lighting fixture maintains a constant light output throughout its entire service life
<b>DC power in EM</b>	In centralized emergency systems, the LED Driver automatically detects when the power changes from AC to DC and adjusts the lights to a pre-set value (DC level)
<b>Monitoring (default)</b>	The driver is equipped with a micro-processor that records the operating conditions from the moment it is turned on
Setup via <b>APP</b>	The NFC technology allows users to set the different operating modes via an APP
For more information see page XVI-XX	



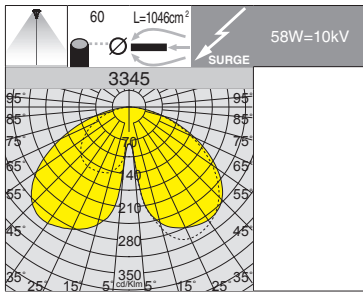
**VIRTUAL MIDNIGHT:** to increase energy savings at night when there are fewer people and vehicles around, a lighting fixture can be programmed according to a specific profile (customizable on request). The fixture reduces its luminous flux through a self-learning process which, depending on the previous switching on and off times, will determine a hypothetical "virtual midnight". This is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The device is integrated in the LED driver and therefore does not require any modification to the system. *In order for the system to function correctly, the system must be adjusted by a device that turns the system on and off on a regular basis every day.*



Factory settings	
Time	Flux
on ÷ 22:00	100%
22:00 ÷ 23:30	75%
23:30 ÷ 02:30	50%
02:30 ÷ 04:00	75%
04:00 ÷ off	100%

**Virtual Midnight subcode -30:** fixtures are equipped with a device to reduce flux in **4 steps** based on the calculation of the virtual midnight.

**ATTENTION:** original settings and time slots for the "virtual midnight" value can be customized in up to 8 steps upon request

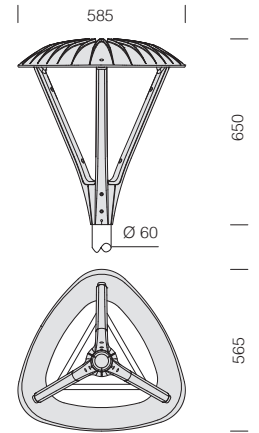


CRI 90

AMBER COB



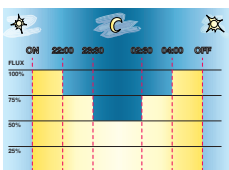
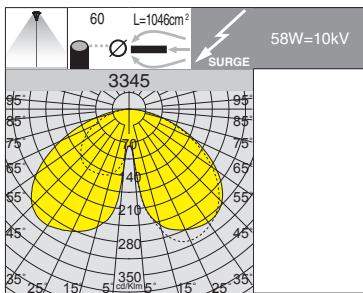
IP66IK09



3345 Loto 6 - COB					
wattage (1400mA)	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			weight	W tot	K - ølm 1400mA - CRI
LED COB	grey 9007	12.50	330264-00	58	4000K - 3502lm - CRI 90
	graphite		330265-00		
LED COB	grey 9007	12.50	330264-39	58	3000K - 3257lm - CRI 90
	graphite		330265-39		
LED COB AMBER	grey 9007	12.50	330264-73	58	2200K - 3934lm - AMBER
	graphite		330265-73		

LED: Power factor ≥0.9.  
Luminous flux maintenance 80%  
50.000h (L80B20).

Note: when ordering, make sure you select the **AMBER LED** type best suited for your lighting design and installation needs.

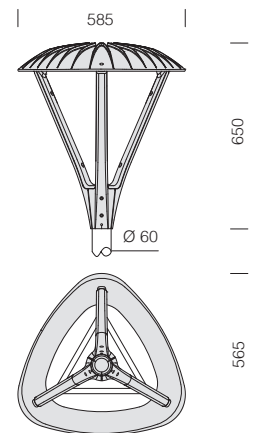


CRI 90

AMBER COB



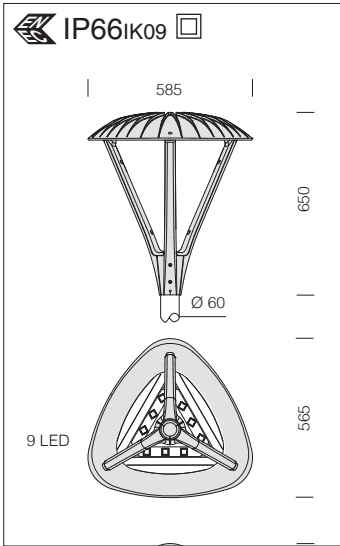
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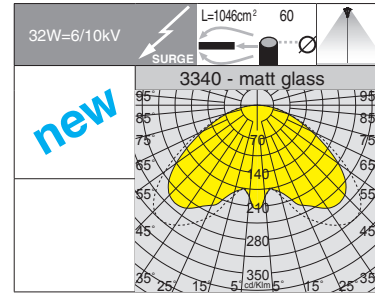
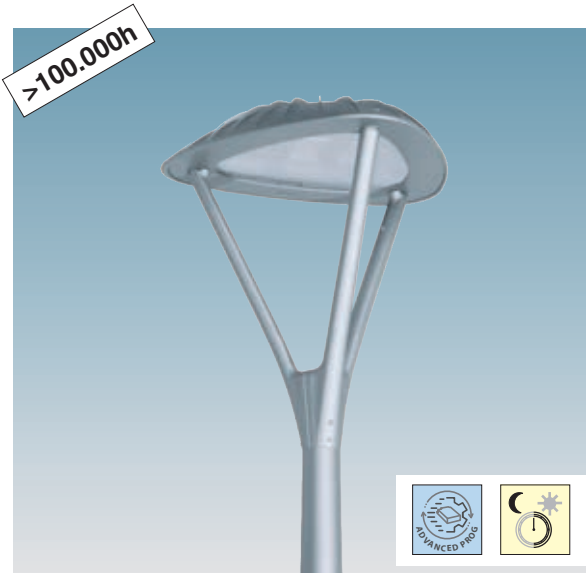
3345 Loto 6 MIDNIGHT - COB					
wattage (1400mA)	colour	weight	CLD MIDNIGHT		LUMEN OUTPUT (tq= 25 °C)
			weight	W tot	K - ølm 1400mA - CRI
LED COB	grey 9007	12.50	330264-30	58	4000K - 3502lm - CRI 90
	graphite		330265-30		
LED COB	grey 9007	12.50	330264-3028	58	3000K - 3257lm - CRI 90
	graphite		330265-3028		
LED COB AMBER	grey 9007	12.50	330264-3073	58	2200K - 3934lm - AMBER
	graphite		330265-3073		

LED: Power factor ≥0.9.  
Luminous flux maintenance 80%  
50.000h (L80B20).

Note: when ordering, make sure you select the **AMBER LED** type best suited for your lighting design and installation needs.



**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).

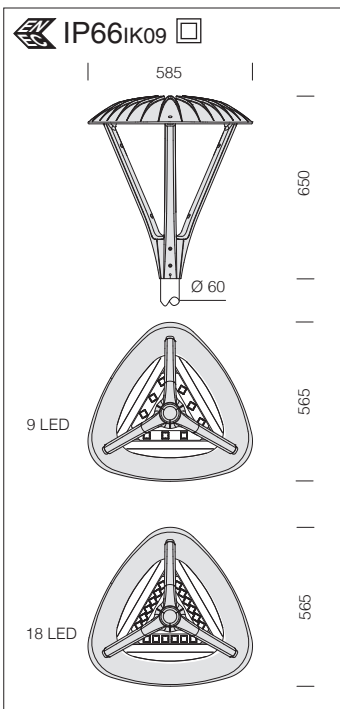


Upon request: (subcode -39)	
LED	3000K - CRI 80

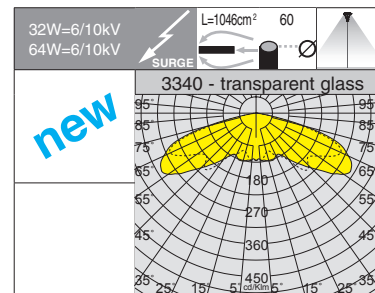
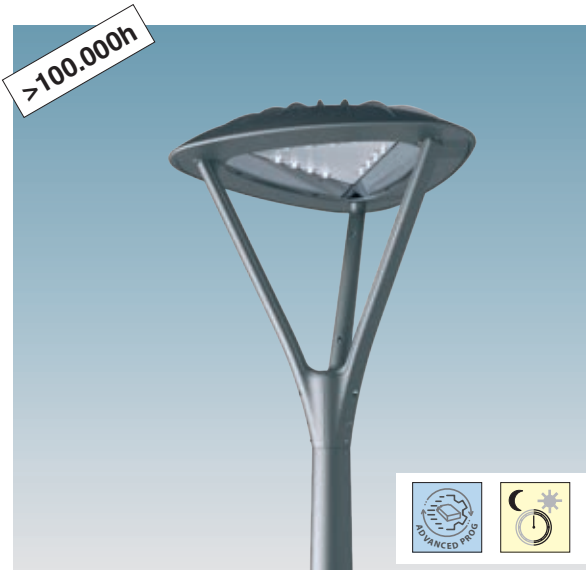
3340 Loto 2 - wide beam - matt					
CLD PROG				LUMEN OUTPUT (tq= 25 °C)	
wattage (550mA)	colour	weight	code	W tot	K - ølm 550mA - CRI
<b>LED</b>	grey 9007	12.50	330214-00	<b>32</b>	4000K - 2933lm - CRI 80
	graphite	12.50	330215-00		

Integrated **ADVANCED PROG** functions (see table on p. 325).

Example	Power supply	n.LED	W tot	ølm
upon request	350mA	9	20	1937lm



**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).



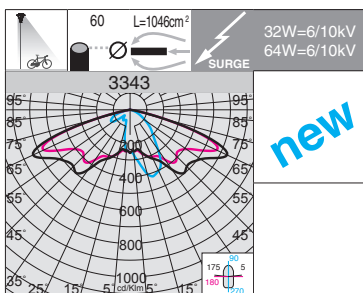
3340 Loto 1 - wide beam					
CLD PROG				LUMEN OUTPUT (tq= 25 °C)	
wattage (550mA)	colour	weight	code	W tot	K - ølm 550mA - CRI
<b>LED</b>	grey 9007	12.50	330210-00	<b>32</b>	4000K - 3960lm - CRI 80
	graphite		330211-00		
<b>LED</b>	grey 9007	12.50	330210-39	<b>32</b>	3000K - 3683lm - CRI 80
	graphite		330211-39		
<b>LED</b>	grey 9007	12.80	330212-00	<b>64</b>	4000K - 7922lm - CRI 80
	graphite		330213-00		
<b>LED</b>	grey 9007	12.80	330212-39	<b>64</b>	3000K - 7367lm - CRI 80
	graphite		330213-39		

Integrated **ADVANCED PROG** functions (see table on p. 325).

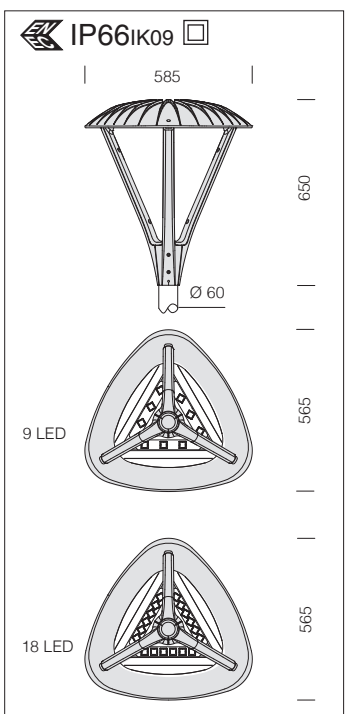
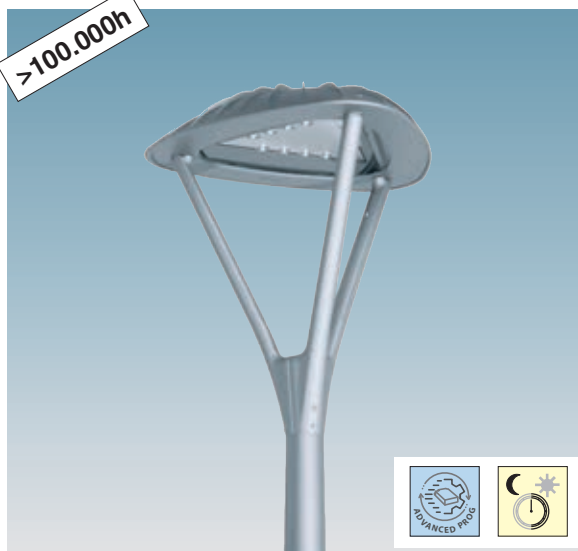
Example	Power supply	n.LED	W tot	K	ølm
upon request	350mA	9	20	<b>4000K</b>	2615lm
		18	41		5231lm
upon request	350mA	9	20	<b>3000K</b>	2432lm
		18	41		4665lm

- RG0
- Ethr
- +40°C -30°C
- U.V.
- ZONA 1
- LOW FLICKER

- 3000K
- 4000K



>100.000h

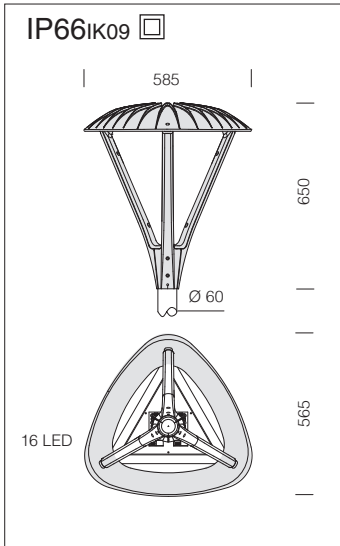


**LED:** Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).

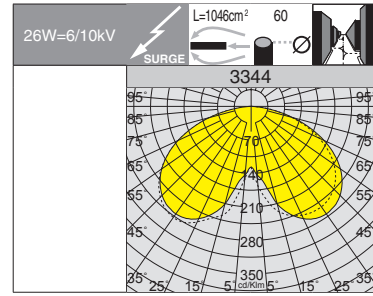
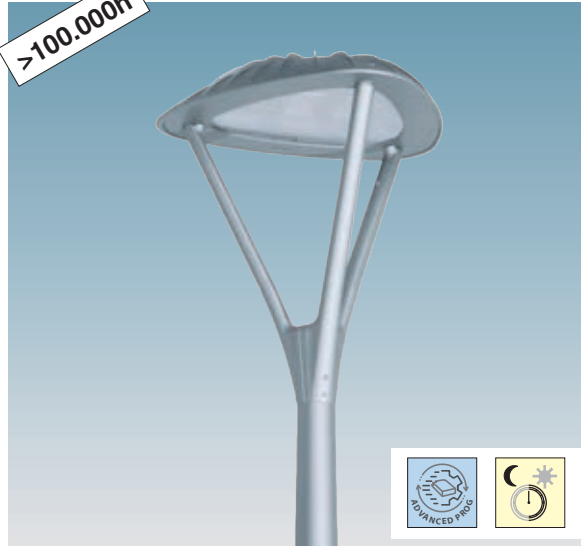
3343 Loto 4 - cycleways					
CLD PROG				LUMEN OUTPUT (tq= 25 °C)	
wattage (550mA)	colour	weight	code	W tot	K - ølm 550mA - CRI
LED	grey 9007	12.50	330240-00	32	4000K - 3956lm - CRI 80
	graphite		330241-00		
LED	grey 9007	12.50	330240-39	32	3000K - 3679lm - CRI 80
	graphite		330241-39		
LED	grey 9007	12.80	330242-00	64	4000K - 7913lm - CRI 80
	graphite		330243-00		
LED	grey 9007	12.80	330242-39	64	3000K - 7359m - CRI 80
	graphite		330243-39		

Integrated **ADVANCED PROG** functions (see table on p. 325).

Example	Power supply	n.LED	W tot	K	ølm	n.LED	W tot	K	ølm
upon request	350mA	9	20	4000K	2612lm	9	20	3000K	2429lm
		18	41		5225lm	18	41		4859lm
upon request	700mA	9	41	4000K	5225lm	9	41	3000K	4859lm
		18	81		10451lm	18	81		9719lm



>100.000h



Upon request: (subcode -39)	
LED	3000K - CRI 80

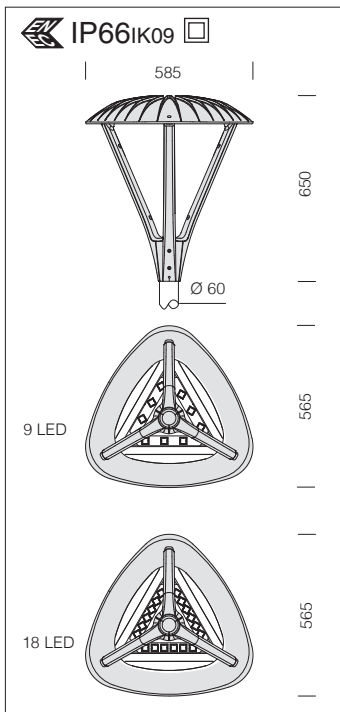
- RG0 E1hr
- +40°C -30°C
- U.V.
- ZONA 1
- LOW FLICKER

LED: Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).

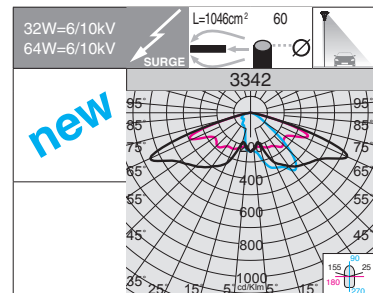
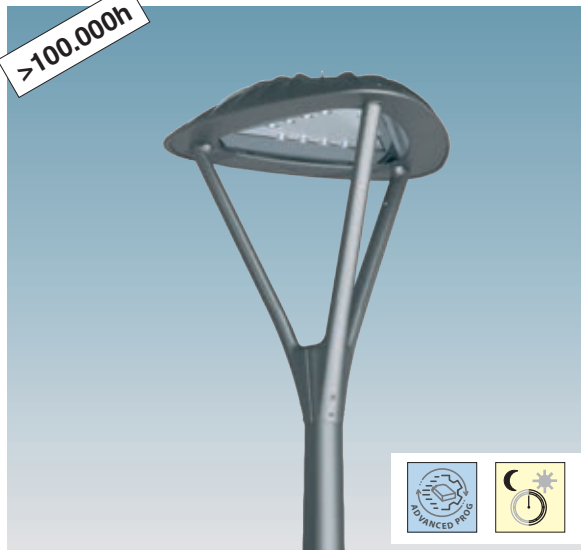
3344 Loto 5 - wide beam					
CLD PROG				LUMEN OUTPUT (tq= 25 °C)	
wattage (530mA)	colour	weight	code	W tot	K - $\phi$ lm 530mA - CRI
	grey 9007	12.50	330250-00	26	4000K - 2845lm - CRI 70
	graphite		330251-00		

Integrated **ADVANCED PROG** functions (see table on p. 325).

Example	Power supply	n.LED	W tot	$\phi$ lm
upon request	700mA	16	35	3757lm



>100.000h



32W=6/10kV 64W=6/10kV		L=1046cm <sup>2</sup>	60	3342
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- RG0 E1hr
- +40°C -30°C
- U.V.
- ZONA 1
- LOW FLICKER

LED: Power factor  $\geq 0.9$ .  
Luminous flux maintenance 80%:  
>100.000h (L80B10).

3342 Loto 3 - asymmetric					
CLD PROG				LUMEN OUTPUT (tq= 25 °C)	
wattage (550mA)	colour	weight	code	W tot	K - $\phi$ lm 550mA - CRI
LED	grey 9007	12.50	330230-00	32	4000K - 4010lm - CRI 80
	graphite		330231-00		
LED	grey 9007	12.50	330230-39	32	3000K - 3729lm - CRI 80
	graphite		330231-39		
LED	grey 9007	12.80	330232-00	64	4000K - 8005lm - CRI 80
	graphite		330233-00		
LED	grey 9007	12.80	330232-39	64	3000K - 7445lm - CRI 80
	graphite		330233-39		

Integrated **ADVANCED PROG** functions (see table on p. 325).

Example	Power supply	n.LED	W tot	K	$\phi$ lm	n.LED	W tot	K	$\phi$ lm
upon request	350mA	9	20	4000K	2643lm	9	20	3000K	2458lm
		18	41		5286lm	18	41		4916lm
upon request	700mA	9	41	4000K	5286lm	9	41	3000K	4916lm
		18	81		10570lm	18	81		9830lm