



## TECHNICAL DATA

|                                    |                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Application</b>                 | urban roads, residential roads (internal), parks, pedestrians, bicycle routes                    |
| <b>Assembly</b>                    | on extension arms with ø 60 x 90 mm ending                                                       |
| <b>Colour</b>                      | inox / black                                                                                     |
| <b>Ingress protection</b>          | IP 66 for the optical part and the driver                                                        |
| <b>Material</b>                    | anodised aluminium alloy                                                                         |
| <b>Operating temperature range</b> | from -40°C to +55°C                                                                              |
| <b>Expected useful lifetime</b>    | L90B10 - 100 000 h                                                                               |
| <b>CRI</b>                         | >70                                                                                              |
| <b>Input voltage frequency</b>     | 50/60Hz                                                                                          |
| <b>Power factor</b>                | ≥0.95                                                                                            |
| <b>Number of LED</b>               | 12                                                                                               |
| <b>Control system</b>              | Luminaire has the possibility to connect to an external control system via analog signal 1- 10V. |



## TABLE OF VARIANTS

| Code                       | Symbol       | LED power | Luminaire power consumption | LED forward current | Colour temperature (CCT) | LEDs luminous flux <sup>1</sup> | Luminaire luminous flux <sup>1</sup> | Luminous efficacy <sup>1</sup> | Unit volume | Inrush current | Net weight |
|----------------------------|--------------|-----------|-----------------------------|---------------------|--------------------------|---------------------------------|--------------------------------------|--------------------------------|-------------|----------------|------------|
| 213230/1 /... <sup>2</sup> | ISKRA LED 24 | 27 W      | 30 W                        | 760 mA              | 2700 K                   | 4450 lm                         | 4050 lm                              | 135 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213230/3 /... <sup>2</sup> | ISKRA LED 24 | 27 W      | 30 W                        | 760 mA              | 3500 K                   | 4700 lm                         | 4300 lm                              | 143 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213230/4 /... <sup>2</sup> | ISKRA LED 24 | 27 W      | 30 W                        | 760 mA              | 4000 K                   | 5000 lm                         | 4600 lm                              | 153 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213230/6 /... <sup>2</sup> | ISKRA LED 24 | 27 W      | 30 W                        | 760 mA              | 5000 K                   | 5000 lm                         | 4600 lm                              | 153 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213232/1 /... <sup>2</sup> | ISKRA LED 36 | 36 W      | 39.5 W                      | 960 mA              | 2700 K                   | 5350 lm                         | 4900 lm                              | 124 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213232/3 /... <sup>2</sup> | ISKRA LED 36 | 36 W      | 39.5 W                      | 960 mA              | 3500 K                   | 5700 lm                         | 5200 lm                              | 132 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213232/4 /... <sup>2</sup> | ISKRA LED 36 | 36 W      | 39.5 W                      | 960 mA              | 4000 K                   | 6050 lm                         | 5550 lm                              | 141 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |
| 213232/6 /... <sup>2</sup> | ISKRA LED 36 | 36 W      | 39.5 W                      | 960 mA              | 5000 K                   | 6050 lm                         | 5550 lm                              | 141 lm/W                       | 0.001 m³    | 50A / 210µs    | 2.1 kg     |

1) tolerance +/- 7% due to LEDs accuracy

2) symbol of chosen optical system eg. 213230/6/T2 is ISKRA LED 24 5000K with T2 optical system

3) ENEC certificate valid only if T2\_E, T3\_E, ME\_E, SP\_E and DW\_E optics are used. For luminaires with these optics impact protection class is IK08

## DIRECTIVES AND STANDARDS

**DIRECTIVES:** 2014/35/UE (Official Journal of the UE L 96/357 29.03.2014), 2014/30/UE (Official Journal of the UE L 96/79 29.03.2014), 2011/65/UE RoHS (Official Journal of the UE L 174/88 01.07.2011), 2009/125/EC (Official Journal of the UE L 285/10 31.10.2009)

**STANDARDS:** PN-EN IEC 60598-1: 2021-7, PN-EN 60598-2-3: 2006, PN-EN 60529: 2003, PN-EN 62262: 2003, PN-EN 62471: 2010, PN-EN 55015: 2019, PN-EN 61547: 2009, PN-EN 61000-3-2: 2019, PN-EN 61000-3-3: 2014

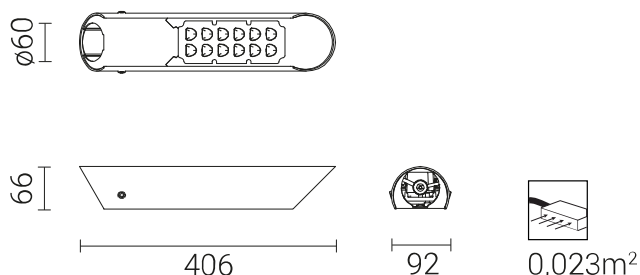
Lighting parameters presented based on laboratory tests according to IESNA LM-79-19

## CHARGING DISCHARGE FROM THE LED LUMINAIRE HOUSING

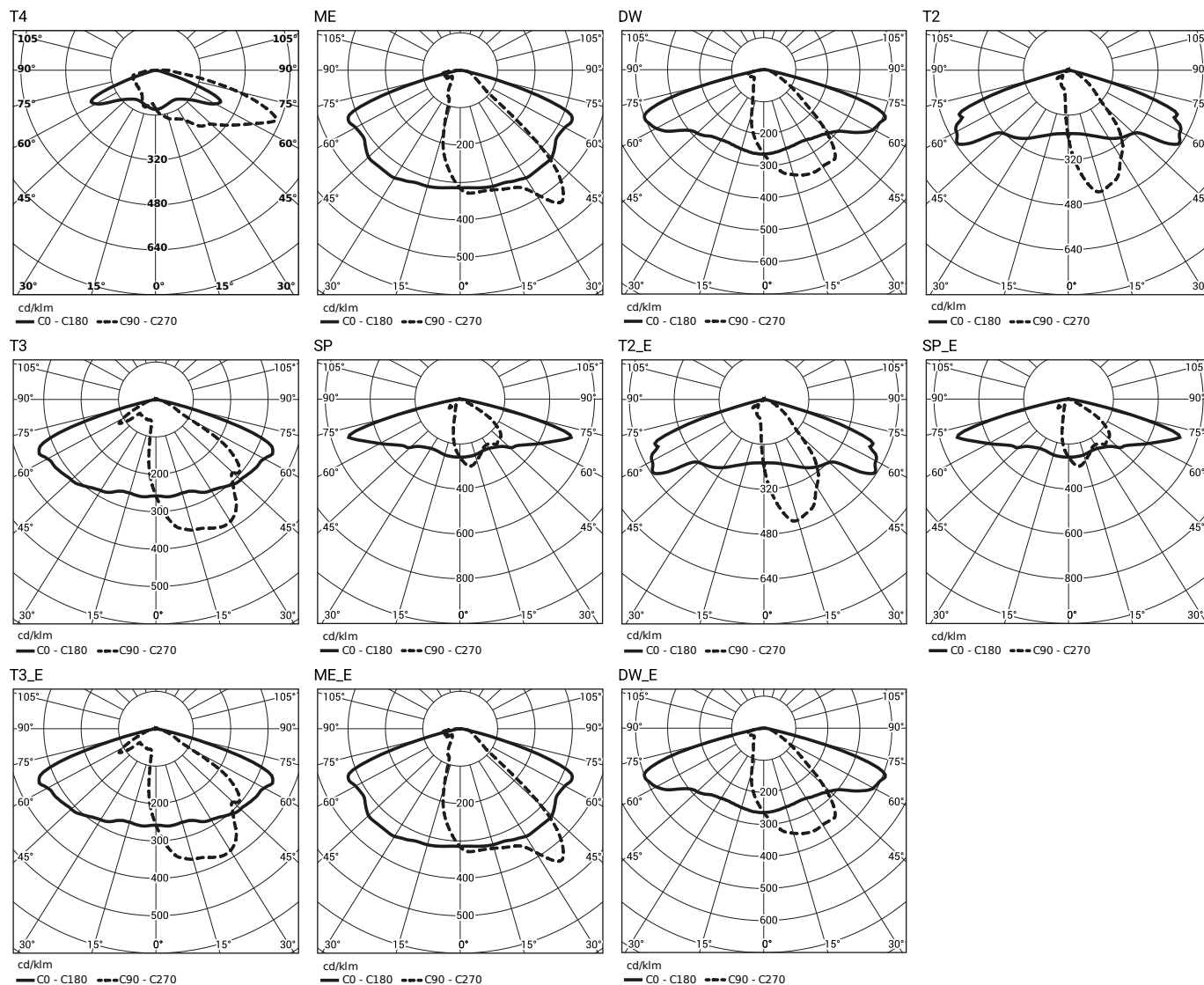
In order to efficient discharge the electrostatic charge from the housing of LED fitting installed on the pole from dielectric material (non-conductive) one of the following solutions is required:

- functional grounding
- LED luminaire with an additional protection device

## TECHNICAL DRAWING



## PHOTOMETRIC CURVES



## POWER SYSTEM FUNCTIONS

The luminaire can optionally be connected to an external control system via the 1-10V interface.

The standard functions of the intelligent power supply system are provided by the ISKRA LED PROG, ISKRA LED ALFA PROG, ISKRA LED P PROG and ISKRA LED P ALFA PROG

## ACCETABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Overcurrent switches MCB type B or C

| Luminaire | Typ | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|-----------|-----|----|----|----|-----|-----|-----|-----|
| ISKRA LED | B   | 1  | 3  | 4  | 7   | 12  | 15  | 18  |
|           | C   | 1  | 5  | 7  | 12  | 20  | 24  | 31  |

Fuse – type gG and GL

| Luminaire | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|-----------|----|----|----|-----|-----|-----|-----|
| ISKRA LED | 0  | 4  | 8  | 11  | 21  | 29  | 42  |