

↑ - D4i socket from top, ↓ - D4i socket from bottom, ↓ ↑ - D4i socket from top and bottom

## DIRECTIVES AND STANDARDS

**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, PN-EN 62722-2-1 (ta=40°C)

## REMOVING ELECTROSTATIC CHARGE FROM LED LUMINAIRE BODY

- functional grounding
- LED luminaire with an additional protection device

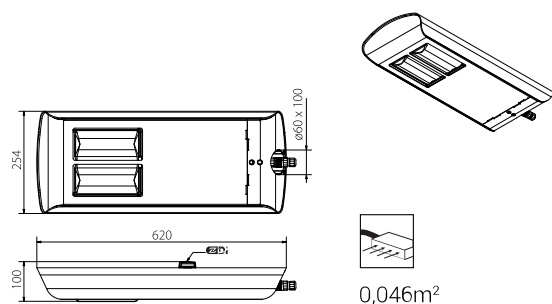
|                                    |                                                                                                                                                                            |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>                 | motorways and expressway, urban roads, residential roads (internal), pedestrians, parkings                                                                                 |
| <b>Assembly</b>                    | on extension arms with ø 60 x 100 mm ending                                                                                                                                |
| <b>Colour</b>                      | inox / black                                                                                                                                                               |
| <b>Ingress protection</b>          | IP 66 for the optical part and the driver                                                                                                                                  |
| <b>Optical system</b>              | PMMA optics, interchangeable LED module, PC-UV diffuser                                                                                                                    |
| <b>Material</b>                    | anodised aluminium alloy                                                                                                                                                   |
| <b>Unit volume</b>                 | -                                                                                                                                                                          |
| <b>Operating temperature range</b> | from -40°C to +40°C                                                                                                                                                        |
| <b>Expected useful lifetime</b>    | L90B10 - 100 000 h                                                                                                                                                         |
| <b>CRI</b>                         | >80                                                                                                                                                                        |
| <b>Inrush current</b>              | 49 A / 290 µs (CUDDLE II LED D4i 48 - 72)<br>24 A / 60 µs (CUDDLE II LED D4i 96 - 144)<br>24 A / 100 µs (CUDDLE II LED D4i x2 96)<br>85 A / 215 µs (CUDDLE II LED D4i 192) |
| <b>Input voltage frequency</b>     | 50/60Hz                                                                                                                                                                    |
| <b>Power factor</b>                | ≥0.95                                                                                                                                                                      |
| <b>Number of LED</b>               | 24                                                                                                                                                                         |
| <b>Control system</b>              | Luminaire can be connected to an external control system and / or sensors via socket compatible with Zhaga Book 18                                                         |

# CUDDLE II LED D4i D 60

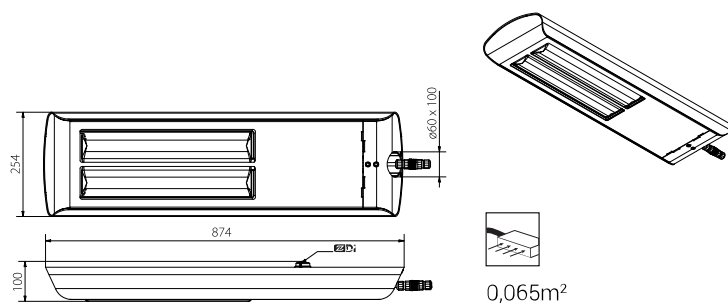


## TECHNICAL DRAWING

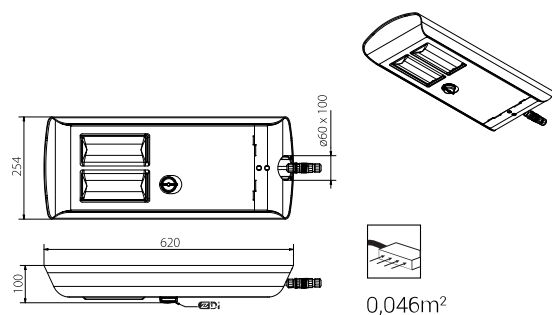
### CUDDLE II LED D4i 48-72 W



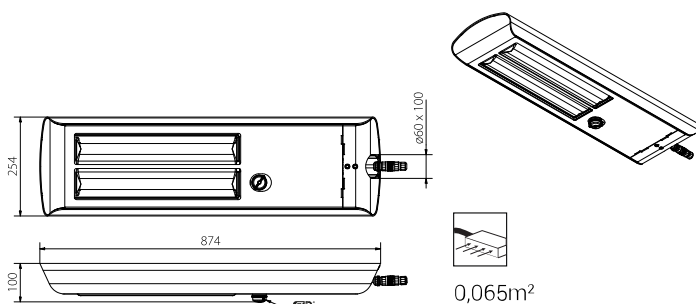
### CUDDLE II LED D4i 96-192 W



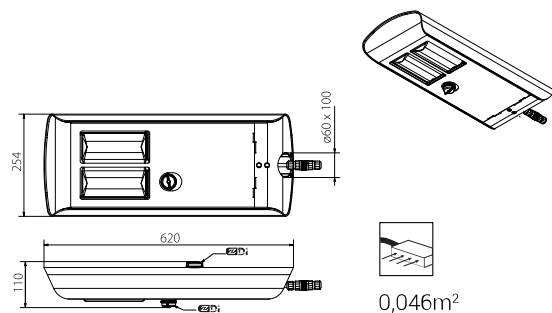
### CUDDLE II LED D4i D 48-72 W



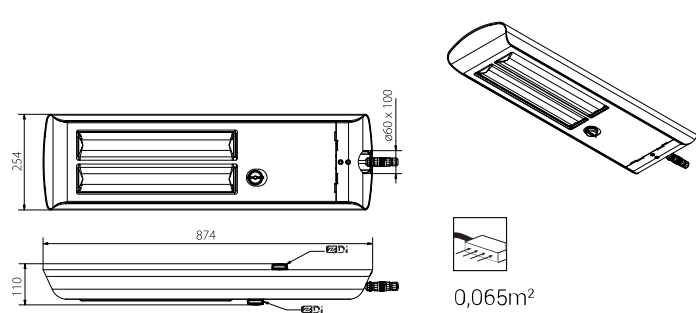
### CUDDLE II LED D4i D 96-192 W



### CUDDLE II LED D4i x2 48-72 W

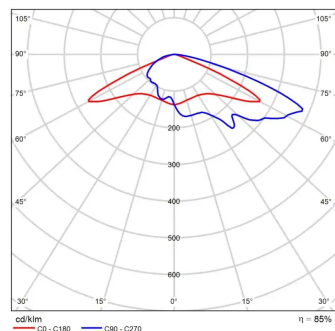


### CUDDLE II LED D4i x2 96-192 W

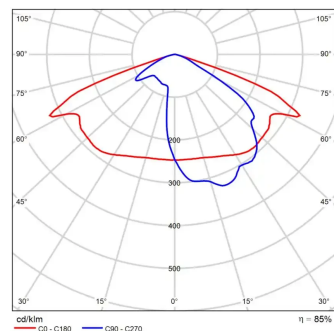


## PHOTOMETRIC CURVES

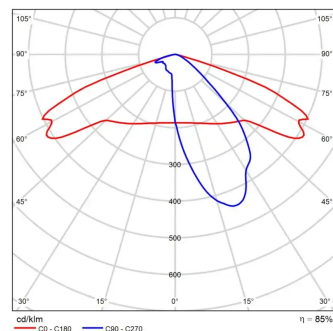
T4



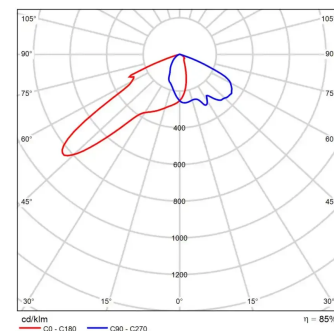
T3



T2



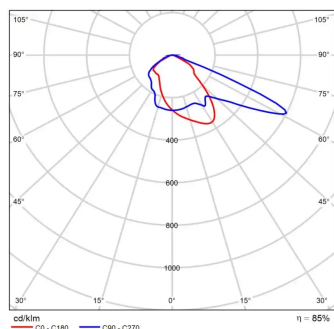
PL



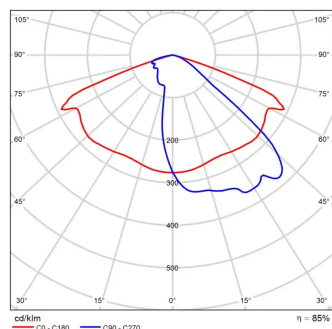
# CUDDLE II LED D4I D 60



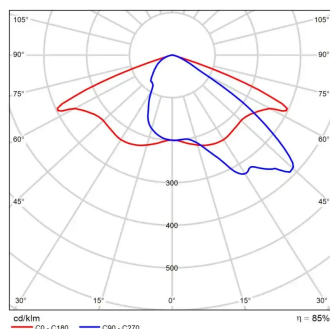
P2



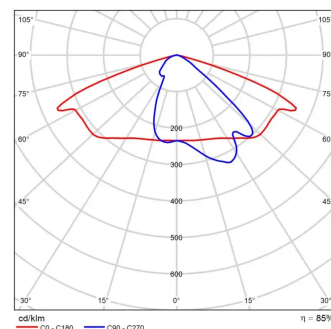
ME



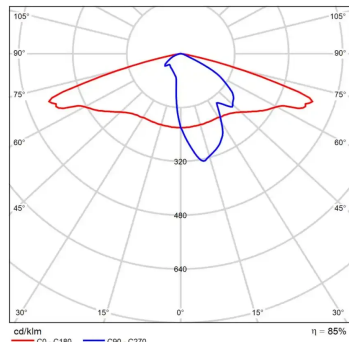
LW



LM



DW



## POWER SYSTEM FUNCTIONS

**Luminaire in standard has following functions of intelligent power supply:**

- Possibility of programming multistage dimming of luminaire, up to 5 intervals in the range of from 10 to 100% of nominal power,
- LED module equipped with thermal protection implemented via an NTC thermistor,
- Regulation of power / luminous flux – the option of setting another value than the catalogue in the range of 30-100% of nominal one,

## ACCETABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Overcurrent switches MCB type B or C

| Luminaire                          | Typ | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|------------------------------------|-----|----|----|----|-----|-----|-----|-----|
| CUDDLE II LED D4i<br>48, 60, 72W   | B   | 4  | 9  | 13 | 23  | 37  | 46  | 58  |
|                                    | C   | 4  | 9  | 13 | 23  | 37  | 46  | 58  |
| CUDDLE II LED D4i<br>96, 120, 144W | B   | 1  | 3  | 5  | 8   | 14  | 17  | 21  |
|                                    | C   | 1  | 4  | 7  | 11  | 19  | 23  | 29  |
| CUDDLE II LED D4i<br>192W          | B   | 0  | 1  | 2  | 3   | 5   | 6   | 7   |
|                                    | C   | 0  | 2  | 3  | 5   | 8   | 10  | 13  |

Fuse – type gG and GL

| Luminaire                 | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|---------------------------|----|----|----|-----|-----|-----|-----|
| CUDDLE II LED D4i<br>48W  | 4  | 9  | 13 | 23  | 37  | 46  | 58  |
| CUDDLE II LED D4i<br>60W  | 4  | 9  | 13 | 23  | 37  | 46  | 58  |
| CUDDLE II LED D4i<br>72W  | 4  | 9  | 13 | 23  | 37  | 46  | 58  |
| CUDDLE II LED D4i<br>96W  | 2  | 4  | 7  | 11  | 19  | 23  | 29  |
| CUDDLE II LED D4i<br>120W | 2  | 4  | 7  | 11  | 19  | 23  | 29  |
| CUDDLE II LED D4i<br>144W | 2  | 4  | 7  | 11  | 19  | 23  | 29  |
| CUDDLE II LED D4i<br>192W | 0  | 2  | 4  | 6   | 12  | 17  | 22  |

## CHROMATICITY

| Chromaticity | x      | y      |
|--------------|--------|--------|
| 2700K        | 0,4582 | 0,4099 |
| 3500K        | 0,4080 | 0,3916 |
| 4000K        | 0,3825 | 0,3798 |
| 5000K        | 0,3451 | 0,3554 |

## PHOTOMETRIC CODE

|       |         |
|-------|---------|
| 2700K | 727/559 |
| 3500K | 735/559 |
| 4000K | 740/559 |
| 5000K | 750/559 |