

## TECHNICAL DATA

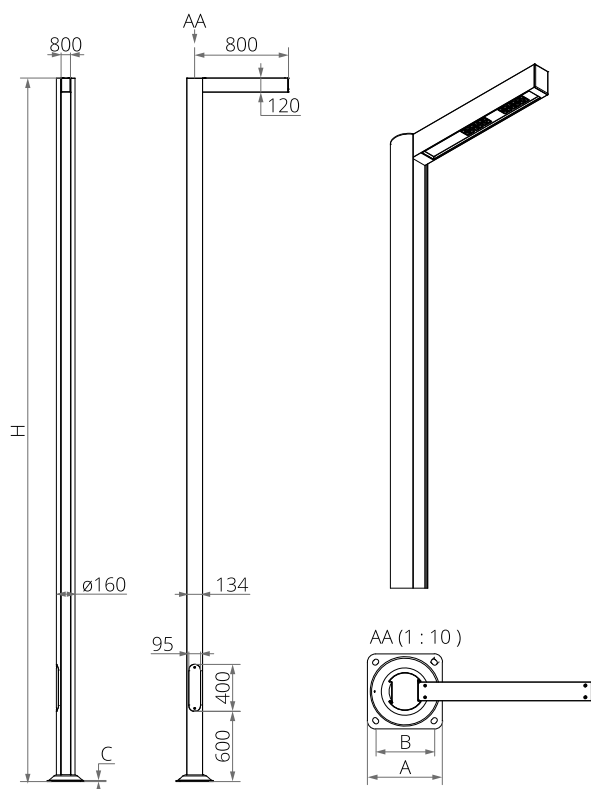
|                                 |  |
|---------------------------------|--|
| <b>Application</b>              | urban roads, residential roads (internal), surrounding office buildings, parks, pedestrians, parkings  |
| <b>Colour</b>                   | inox / grey  |
| <b>Ingress protection</b>       | IP 66 for the optical part and the driver  |
| <b>Optical system</b>           | PMMA optics, interchangeable LED module  |
| <b>Material</b>                 | anodised aluminium alloy   |
| <b>Unit volume</b>              | 0,50 m <sup>3</sup> (BEAM I LED 4,0 m)<br>0,60 m <sup>3</sup> (BEAM I LED 5,0 m)<br>0,80 m <sup>3</sup> (BEAM I LED 6,0 m)<br>1,10 m <sup>3</sup> (BEAM I LED 7,0 m)<br>1,30 m <sup>3</sup> (BEAM I LED 8,0 m) |
| <b>Expected useful lifetime</b> | L90B10 - 100 000 h   |
| <b>CRI</b>                      | >70  |
| <b>Inrush current</b>           | 21 A / 225 μs (BEAM I LED 24 - 36)<br>55 A / 200 μs (BEAM I LED 48 - 72)   |
| <b>Input voltage frequency</b>  | 50/60Hz  |
| <b>Power factor</b>             | ≥0.95  |
| <b>Number of LED</b>            | 12 - (24 W, 36 W); 24 - (48 W, 60 W, 72 W)   |
| <b>Control system</b>           | LED lighting set has the possibility to connect to an external control system via DALI interface (optionally via analog signal 1-10V).   |



## TABLE OF VARIANTS - HEIGHTS

| Symbol     | Height [H] | Dimension of the base plate (A)/(B)/(C) | Concrete footing / reinforcement basket type | Concrete footing / reinforcement basket code | Fasteners | Net weight |
|------------|------------|---|--|--|-----------|------------|
| BEAM I LED | 4,0m - 40  | 224 / 180 / 8                           | B-50 / Z-50                                  | 311150 / 311205                              | 4006      | 28,0kg     |
| BEAM I LED | 5,0m - 50  | 320 / 250 / 10                          | B-60 / Z-60                                  | 311160 / 311206                              | 4008      | 35,5kg     |
| BEAM I LED | 6,0m - 60  | 320 / 250 / 10                          | B-60 / Z-60                                  | 311160 / 311206                              | 4008      | 41,0kg     |
| BEAM I LED | 7,0m - 70  | 400 / 300 / 10                          | B-70, B-71 / Z-70, Z-71                      | 311170, 311171 / 311207, 311271              | 4012      | 49,0kg     |
| BEAM I LED | 8,0m - 80  | 400 / 300 / 12                          | B-70, B-71 / Z-70, Z-71                      | 311170, 311171 / 311207, 311271              | 4012      | 54,5kg     |

## HOW TO GENERATE VARIANT CODES



Order code

**2160000/32/3/T3**

### Arm height - H

40 - 4 m  
45 - 4,5 m  
50 - 5 m  
55 - 5,5 m  
60 - 6 m  
65 - 6,5 m  
70 - 7 m  
75 - 7,5 m  
80 - 8 m

### Arm power variant

e.g. 32/3/T3 is  
LINE I LED 36, 3500K,  
T3 optics

## TABLE OF VARIANTS - LIGHTING

| 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 |
|-----------------------|---------------|-----------|-----------------------------|---------------------|--------------------------|---------------------------------|--------------------------------------|-------------------|
| 30/1/... <sup>2</sup> | BEAM I LED 24 | 24W       | 28W                         | 700mA               | 2700K                    | 4050lm                          | 3250lm                               | 116lm/W           |
| 30/3/... <sup>2</sup> | BEAM I LED 24 | 24W       | 28W                         | 700mA               | 3500K                    | 4350lm                          | 3500lm                               | 125lm/W           |
| 30/4/... <sup>2</sup> | BEAM I LED 24 | 24W       | 28W                         | 700mA               | 4000K                    | 4550lm                          | 3650lm                               | 130lm/W           |
| 30/6/... <sup>2</sup> | BEAM I LED 24 | 24W       | 28W                         | 700mA               | 5000K                    | 4550lm                          | 3650lm                               | 130lm/W           |
| 32/1/... <sup>2</sup> | BEAM I LED 36 | 36W       | 40W                         | 1000mA              | 2700K                    | 5450lm                          | 4400lm                               | 110lm/W           |
| 32/3/... <sup>2</sup> | BEAM I LED 36 | 36W       | 40W                         | 1000mA              | 3500K                    | 5800lm                          | 4700lm                               | 118lm/W           |
| 32/4/... <sup>2</sup> | BEAM I LED 36 | 36W       | 40W                         | 1000mA              | 4000K                    | 6150lm                          | 4950lm                               | 124lm/W           |
| 32/6/... <sup>2</sup> | BEAM I LED 36 | 36W       | 40W                         | 1000mA              | 5000K                    | 6150lm                          | 4950lm                               | 124lm/W           |
| 33/1/... <sup>2</sup> | BEAM I LED 48 | 48W       | 55W                         | 700mA               | 2700K                    | 8150lm                          | 6600lm                               | 120lm/W           |
| 33/3/... <sup>2</sup> | BEAM I LED 48 | 48W       | 55W                         | 700mA               | 3500K                    | 8650lm                          | 7000lm                               | 127lm/W           |
| 33/4/... <sup>2</sup> | BEAM I LED 48 | 48W       | 55W                         | 700mA               | 4000K                    | 9150lm                          | 7400lm                               | 135lm/W           |
| 33/6/... <sup>2</sup> | BEAM I LED 48 | 48W       | 55W                         | 700mA               | 5000K                    | 9150lm                          | 7400lm                               | 135lm/W           |
| 34/1/... <sup>2</sup> | BEAM I LED 60 | 60W       | 67W                         | 830mA               | 2700K                    | 9300lm                          | 7500lm                               | 112lm/W           |
| 34/3/... <sup>2</sup> | BEAM I LED 60 | 60W       | 67W                         | 830mA               | 3500K                    | 9850lm                          | 7950lm                               | 119lm/W           |
| 34/4/... <sup>2</sup> | BEAM I LED 60 | 60W       | 67W                         | 830mA               | 4000K                    | 10450lm                         | 8450lm                               | 126lm/W           |
|                       | BEAM I LED 60 | 60W       | 67W                         | 830mA               | 5000K                    | 10450lm                         | 8450lm                               | 126lm/W           |

34/6/...<sup>2</sup>

|                       |               |     |     |        |       |         |        |         |
|-----------------------|---------------|-----|-----|--------|-------|---------|--------|---------|
| 35/1/... <sup>2</sup> | BEAM I LED 72 | 72W | 79W | 1000mA | 2700K | 10900lm | 8800lm | 111lm/W |
| 35/3/... <sup>2</sup> | BEAM I LED 72 | 72W | 79W | 1000mA | 3500K | 11600lm | 9350lm | 118lm/W |
| 35/4/... <sup>2</sup> | BEAM I LED 72 | 72W | 79W | 1000mA | 4000K | 12300lm | 9950lm | 126lm/W |
| 35/6/... <sup>2</sup> | BEAM I LED 72 | 72W | 79W | 1000mA | 5000K | 12300lm | 9950lm | 126lm/W |

1) tolerance +/- 5% due to LEDs accuracy

2) symbol of chosen optical system eg. 30/3/T2 is a braket BEAM I LED 24 with T2 optical system, 3500K

Finish: option of elastomer protection in the colour of LED lighting sets up to the height of 350 mm (as standard for CI63, CI65, CI75, CI78 interference colors)

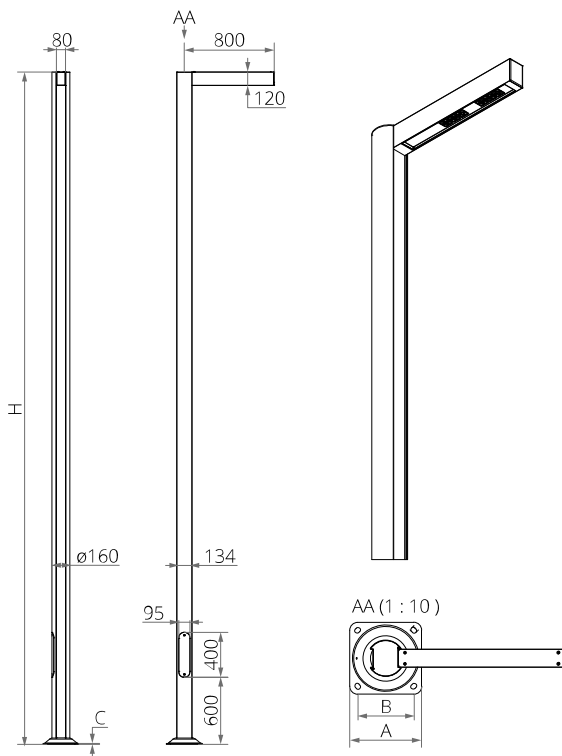
## DIRECTIVES AND STANDARDS

**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

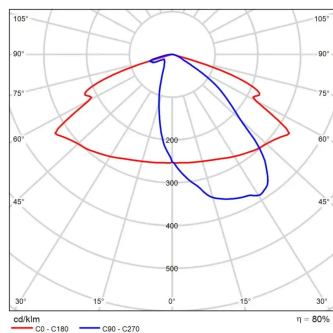
Lighting parameters presented based on laboratory tests according to IESNA LM-79-19

## TECHNICAL DRAWING

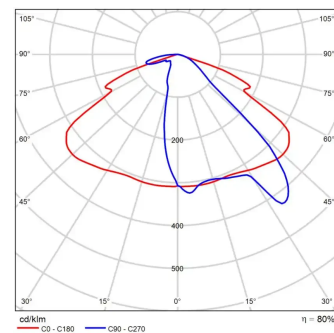


## PHOTOMETRIC CURVES

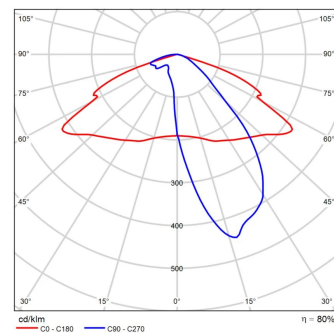
DW



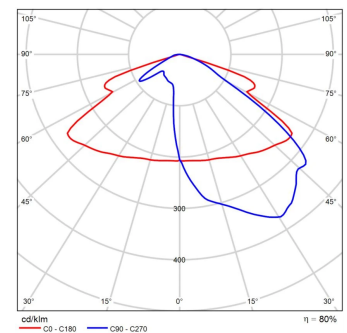
ME



T2



T3



## POWER SYSTEM FUNCTIONS

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

- Connection to outside control system by DALI interface (operation of analog signal 1-10V as an option),
- 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,

## ACCEPTABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Overcurrent switches MCB type B or C

| Lighting sets             | Type | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|---------------------------|------|----|----|----|-----|-----|-----|-----|
| BEAM I LED<br>24, 36W     | B    | 3  | 6  | 10 | 16  | 26  | 32  | 40  |
|                           | C    | 3  | 10 | 16 | 27  | 44  | 54  | 67  |
| BEAM I LED<br>48, 60, 72W | B    | 1  | 2  | 4  | 6   | 11  | 13  | 17  |
|                           | C    | 1  | 4  | 6  | 11  | 18  | 22  | 28  |

Fuse – type gG and GL

| Lighting sets             | 2A | 4A | 6A | 10A | 16A | 20A | 25A |
|---------------------------|----|----|----|-----|-----|-----|-----|
| BEAM I LED<br>24, 36W     | 1  | 10 | 19 | 25  | 50  | 68  | 97  |
| BEAM I LED<br>48, 60, 72W | 0  | 4  | 8  | 11  | 21  | 29  | 42  |

## ACCEPTABLE HEIGHT

| BEAM I LED     | Acceptable height of the LED lighting set |  |                        |   |
|----------------|---|--|------------------------|---|
| Field category | I zone Vref. = 22 m/s                     | I & III zone, up to 450m a.s.l. Vref. = 24 m/s | II zone Vref. = 26 m/s | III zone up to 755m a.s.l. Vref. = 28 m/s |
| I              | 7,5                                       | 7  | 6,5                    | 6   |
| II             | 8   | 7,5  | 7                      | 6,5                                       |
| III            | 8   | 8  | 7,5                    | 7   |
| IV             | 8   | 8  | 8                      | 7,5                                       |