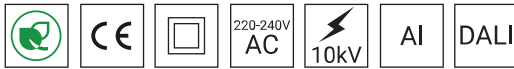


## TECHNICAL DATA

<b>Application</b>	motorways and expressway, urban roads, pedestrians, parkings
<b>Assembly</b>	on extension arms with ø 60 x 95 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 (for 48 W, 60 W, 72 W, 96 W, 120 W), from -40°C to +40°C (for 144 W)
<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>Control system</b>	Luminaire has the possibility to connect to an external control system via DALI interface (optionally via analog signal 1- 10V).



## TABLE OF TYPES

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	Net weight
2220033/1/... <sup>2</sup>	URSA LED 48	48 W	55 W	700 mA	2700 K	7050 lm	6450 lm	118 lm/W	0.028 m <sup>3</sup>	8 kg
2220033/3/... <sup>2</sup>	URSA LED 48	48 W	55 W	700 mA	3500 K	7350 lm	6800 lm	124 lm/W	0.028 m <sup>3</sup>	8 kg
2220033/4/... <sup>2</sup>	URSA LED 48	48 W	55 W	700 mA	4000 K	8400 lm	7650 lm	139 lm/W	0.028 m <sup>3</sup>	8 kg
2220033/6/... <sup>2</sup>	URSA LED 48	48 W	55 W	700 mA	5000 K	8450 lm	7700 lm	140 lm/W	0.028 m <sup>3</sup>	8 kg
2220034/1/... <sup>2</sup>	URSA LED 60	60 W	68 W	830 mA	2700 K	8150 lm	7450 lm	112 lm/W	0.028 m <sup>3</sup>	8 kg
2220034/3/... <sup>2</sup>	URSA LED 60	60 W	68 W	830 mA	3500 K	8500 lm	7800 lm	117 lm/W	0.028 m <sup>3</sup>	8 kg
2220034/4/... <sup>2</sup>	URSA LED 60	60 W	68 W	830 mA	4000 K	9650 lm	8850 lm	133 lm/W	0.028 m <sup>3</sup>	8 kg
2220034/6/... <sup>2</sup>	URSA LED 60	60 W	68 W	830 mA	5000 K	9850 lm	9000 lm	135 lm/W	0.028 m <sup>3</sup>	8 kg
2220035/1/... <sup>2</sup>	URSA LED 72	72 W	79 W	1000 mA	2700 K	9450 lm	8650 lm	110 lm/W	0.028 m <sup>3</sup>	8 kg
2220035/3/... <sup>2</sup>	URSA LED 72	72 W	79 W	1000 mA	3500 K	9900 lm	9100 lm	116 lm/W	0.028 m <sup>3</sup>	8 kg
2220035/4/... <sup>2</sup>	URSA LED 72	72 W	79 W	1000 mA	4000 K	11250 lm	10300 lm	131 lm/W	0.028 m <sup>3</sup>	8 kg
2220035/6/... <sup>2</sup>	URSA LED 72	72 W	79 W	1000 mA	5000 K	11450 lm	10450 lm	122 lm/W	0.028 m <sup>3</sup>	8 kg
2220037/1/... <sup>2</sup>	URSA LED 96	96 W	105 W	700 mA	2700 K	14100 lm	12900 lm	123 lm/W	0.037 m <sup>3</sup>	10 kg
2220037/3/... <sup>2</sup>	URSA LED 96	96 W	105 W	700 mA	3500 K	14700 lm	13600 lm	130 lm/W	0.037 m <sup>3</sup>	10 kg
2220037/4/... <sup>2</sup>	URSA LED 96	96 W	105 W	700 mA	4000 K	16800 lm	15300 lm	146 lm/W	0.037 m <sup>3</sup>	10 kg
2220037/6/... <sup>2</sup>	URSA LED 96	96 W	105 W	700 mA	5000 K	16900 lm	15400 lm	147 lm/W	0.037 m <sup>3</sup>	10 kg
2220039/1/... <sup>2</sup>	URSA LED 120	120 W	129 W	830 mA	2700 K	16300 lm	14900 lm	116 lm/W	0.037 m <sup>3</sup>	10 kg
2220039/3/... <sup>2</sup>	URSA LED 120	120 W	129 W	830 mA	3500 K	17000 lm	15600 lm	121 lm/W	0.037 m <sup>3</sup>	10 kg
2220039/4/... <sup>2</sup>	URSA LED 120	120 W	129 W	830 mA	4000 K	19300 lm	17700 lm	138 lm/W	0.037 m <sup>3</sup>	10 kg
2220039/6/... <sup>2</sup>	URSA LED 120	120 W	129 W	830 mA	5000 K	19700 lm	18000 lm	140 lm/W	0.037 m <sup>3</sup>	10 kg
2220041/1/... <sup>2</sup>	URSA LED 144	144 W	154 W	1000 mA	2700 K	18900 lm	17300 lm	113 lm/W	0.037 m <sup>3</sup>	10 kg
2220041/3/... <sup>2</sup>	URSA LED 144	144 W	154 W	1000 mA	3500 K	19800 lm	18200 lm	119 lm/W	0.037 m <sup>3</sup>	10 kg
2220041/4/... <sup>2</sup>	URSA LED 144	144 W	154 W	1000 mA	4000 K	22500 lm	20600 lm	134 lm/W	0.037 m <sup>3</sup>	10 kg
2220041/6/... <sup>2</sup>	URSA LED 144	144 W	154 W	1000 mA	5000 K	22900 lm	20900 lm	136 lm/W	0.037 m <sup>3</sup>	10 kg

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

2) symbol of chosen optical system eg. 2220033/6/T2 is URSA LED 48 5000K with T2 optical system

## 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, 2009/125/EC

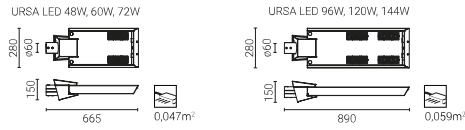
**STANDARDS:** PN-EN 60598-1: 2015, PN-EN 60598-2-3: 2006, PN-EN 60529: 2003, PN-EN 62262: 2003, PN-EN 62471:2010, PN-EN 55015: 2013, PN-EN 61547: 2009, PN-EN 61000-3-2: 2014 , PN-EN 61000-3-3: 2013

## CHARGING DISCHARGE FROM THE LED LUMINAIRE HOUSING

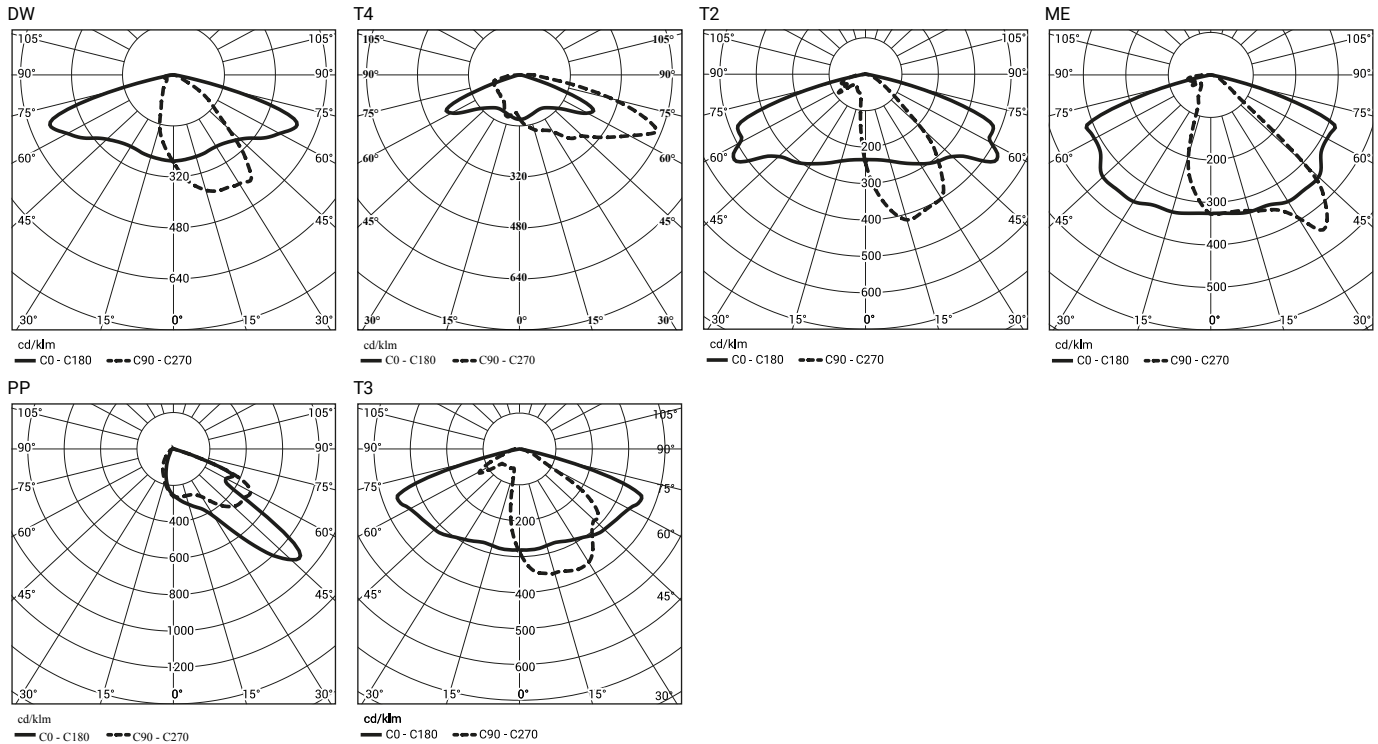
In order to efficient discharge the electrostatic charge from the housing of LED fitting installed on the pole from dielectric material (non-conductive) one of the following solutions is required:

- functional grounding
- LED luminaire with an additional protection device

## TECHNICAL DRAWING



## PHOTOMETRIC CURVES



## POWER SYSTEM FUNCTIONS

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,
- Temperature protection of LED module (from overheating) in case of unintentional luminaire operation during the,
- 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

Luminaire	Typ	2A	4A	6A	10A	16A	20A	25A
URSA LED 48, 60, 72W	B	1	2	4	6	11	13	17
	C	1	4	6	11	18	22	28
URSA LED 96, 120, 144W	B	1	1	3	5	8	12	12
	C	1	3	5	8	13	16	20

Fuse – type gG and GL

Luminaire	2A	4A	6A	10A	16A	20A	25A
URSA LED 48, 60, 72W	1	2	11	19	30	38	47
URSA LED 96, 120, 144W	1	1	6	9	15	19	24