



## TECHNICAL DATA

<b>Application</b>	surrounding office buildings, parks, pedestrians, parkings
<b>Assembly</b>	depending on the type of head: A - pole top mounted or on extension arms with $\varnothing$ 60 x 50 mm, B - pole top mounted with $\varnothing$ 60 x 180 mm
<b>Ingress protection</b>	IP 66
<b>Optical system</b>	PMMA optics, interchangeable LED module
<b>Material</b>	cap - formed aluminium sheet diffuser - tempered glass luminaire body - aluminum alloy, anodized
<b>Operating temperature range</b>	from -40°C to +40°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>	$\geq 0.95$
<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 with mounting head type 'A' / 'B'
212130/.../1/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	2700 K	3350 lm	2550 lm	91 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212130/.../3/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	3500 K	3550 lm	2700 lm	96 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212130/.../4/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	4000 K	4050 lm	3050 lm	109 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212130/.../6/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	5000 K	4050 lm	3050 lm	109 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212132/.../1/.../2/C...	RING 2 LED 36	36 W	40 W	750 mA	2700 K	4750 lm	3600 lm	90 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212132/.../3/.../2/C...	RING 2 LED 36	36 W	40 W	750 mA	3500 K	5100 lm	3850 lm	96 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212132/.../4/.../2/C...	RING 2 LED 36	36 W	40 W	750 mA	4000 K	5750 lm	4350 lm	109 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212132/.../6/.../2/C...	RING 2 LED 36	36 W	40 W	750 mA	5000 K	5750 lm	4350 lm	109 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212133/.../1/.../2/C...	RING 2 LED 48	48 W	55 W	1000 mA	2700 K	6000 lm	4550 lm	83 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212133/.../3/.../2/C...	RING 2 LED 48	48 W	55 W	1000 mA	3500 K	6450 lm	4850 lm	88 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212133/.../4/.../2/C...	RING 2 LED 48	48 W	55 W	1000 mA	4000 K	7250 lm	5500 lm	100 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212133/.../6/.../2/C...	RING 2 LED 48	48 W	55 W	1000 mA	5000 K	7250 lm	5500 lm	100 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212135/.../1/.../2/C...	RING 2 LED 72	72 W	79 W	750 mA	2700 K	9400 lm	8050 lm	102 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212135/.../3/.../2/C...	RING 2 LED 72	72 W	79 W	750 mA	3500 K	10100 lm	8646 lm	109 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212135/.../4/.../2/C...	RING 2 LED 72	72 W	79 W	750 mA	4000 K	11450 lm	9798 lm	124 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg
212135/.../6/.../2/C...	RING 2 LED 72	72 W	79 W	750 mA	5000 K	11450 lm	9798 lm	124 lm/W	0.08 m <sup>3</sup>	6,6 kg / 7,1 kg

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

2) exemplary product code 212130/A/6/T4/C35 is RING 2 LED 24W 5000K luminaire, where /A/ is the mounting head type 'A', /T4/ is the T4 optical system, /C35 is the anodizing color of the C35 luminaire black

3) the weight of the luminaire with the head type 'A' is 6.6 kg / with the head type 'B' is 7.1 kg

## 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

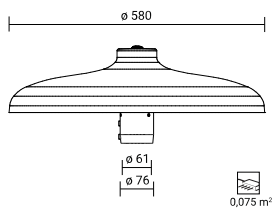
## CHARGING DISCHARGE FROM THE LED LUMINAIRE HOUSING

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:

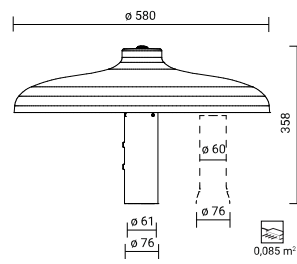
- functional grounding
- LED luminaire with an additional protection device

## TECHNICAL DRAWING

RING 2 LED 'A'

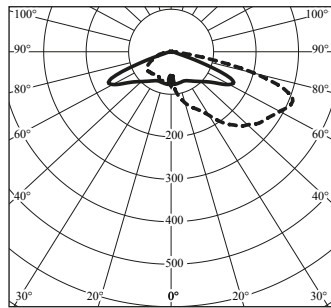


RING 2 LED 'B'



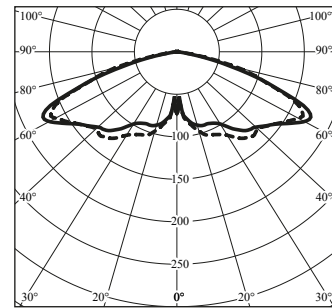
## PHOTOMETRIC CURVES

T4



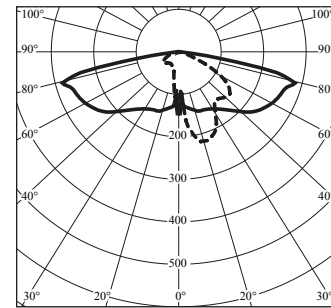
cd/klm  
— C0 - C180    - - - C90 - C270

VS



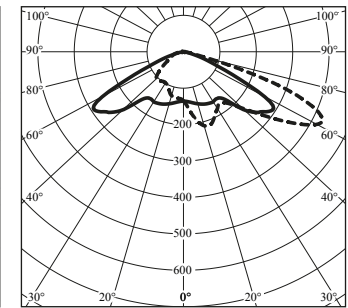
cd/klm  
— C0 - C180    - - - C90 - C270

SP



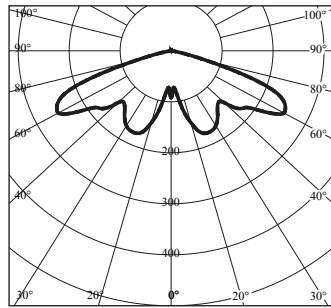
cd/klm  
— C0 - C180    - - - C90 - C270

T4 - RING LED 72W



cd/klm  
— C0 - C180    - - - C90 - C270

VS - RING LED 72W



cd/klm  
— C0 - C180    - - - C90 - C270

## 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,

## ACCETABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Accetable quantity of luminaires RING 2 LED on one circuit, protected by:

Overcurrent switches MCB type B or C

Luminaire	Typ	2A	4A	6A	10A	16A	20A	25A
RING 2 LED	B	4	7	12	18	30	37	46
	C	4	12	18	31	51	62	78

Fuse – type gG and GL

Luminaire	2A	4A	6A	10A	16A	20A	25A
RING 2 LED	1	10	20	26	52	71	101