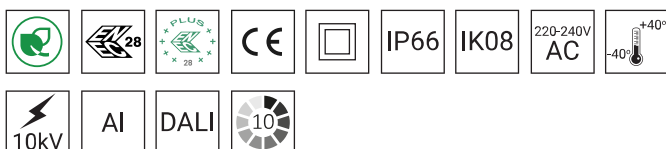


RING 1 LED



TECHNICAL DATA

Application	surrounding office buildings, parks, pedestrians, parkings
Assembly	depending on the type of head: A - pole top mounted or on extension arms with ø 60 x 50 mm, B - pole top mounted with ø 60 x 180 mm
Ingress protection	IP 66
Optical system	PMMA optics, interchangeable LED module
Material	cap – formed aluminium sheet diffuser - tempered glass luminaire body - aluminum alloy, anodized
Unit volume	0.08 m³
Operating temperature range	from -40°C to +40°C
Expected useful lifetime	L90B10 - 100 000 h
CRI	>70
Inrush current	18 A / 280 µs (RING LED 24 - 36), 43 A / 260 µs (RING LED 48 - 72)
Input voltage frequency	50/60Hz
Power factor	≥0.95
Number of LED	16 (24 W, 36 W, 48 W), 32 (72 W)
Control system	Luminaire has the possibility to connect to an external control system via DALI interface (optionally via analog signal 1- 10V).

TABLE OF VARIANTS

Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature (CCT)	LEDs luminous flux¹	Luminaire luminous flux¹	Luminous efficacy¹	Net weight with mounting head type 'A' / 'B'
212030/.../1/...²/C...	RING 1 LED 24	24 W	28 W	500 mA	2700 K	4050 lm	3050 lm	109 lm/W	6,6 kg / 7,1 kg
212030/.../3/...²/C...	RING 1 LED 24	24 W	28 W	500 mA	3500 K	4300 lm	3250 lm	116 lm/W	6,6 kg / 7,1 kg
212030/.../4/...²/C...	RING 1 LED 24	24 W	28 W	500 mA	4000 K	4550 lm	3450 lm	123 lm/W	6,6 kg / 7,1 kg
212030/.../6/...²/C...	RING 1 LED 24	24 W	28 W	500 mA	5000 K	4550 lm	3450 lm	123 lm/W	6,6 kg / 7,1 kg
212032/.../1/...²/C...	RING 1 LED 36	36 W	40 W	750 mA	2700 K	5750 lm	4350 lm	109 lm/W	6,6 kg / 7,1 kg
212032/.../3/...²/C...	RING 1 LED 36	36 W	40 W	750 mA	3500 K	6100 lm	4600 lm	115 lm/W	6,6 kg / 7,1 kg
212032/.../4/...²/C...	RING 1 LED 36	36 W	40 W	750 mA	4000 K	6500 lm	4900 lm	123 lm/W	6,6 kg / 7,1 kg
212032/.../6/...²/C...	RING 1 LED 36	36 W	40 W	750 mA	5000 K	6500 lm	4900 lm	123 lm/W	6,6 kg / 7,1 kg
212033/.../1/...²/C...	RING 1 LED 48	48 W	55 W	1000 mA	2700 K	7300 lm	5550 lm	101 lm/W	6,6 kg / 7,1 kg
212033/.../3/...²/C...	RING 1 LED 48	48 W	55 W	1000 mA	3500 K	7750 lm	5850 lm	106 lm/W	6,6 kg / 7,1 kg
212033/.../4/...²/C...	RING 1 LED 48	48 W	55 W	1000 mA	4000 K	8200 lm	6200 lm	113 lm/W	6,6 kg / 7,1 kg
212033/.../6/...²/C...	RING 1 LED 48	48 W	55 W	1000 mA	5000 K	8200 lm	6200 lm	113 lm/W	6,6 kg / 7,1 kg
212035/.../1/...²/C...	RING 1 LED 72	72 W	79 W	750 mA	2700 K	11520 lm	8750 lm	111 lm/W	6,6 kg / 7,1 kg
212035/.../3/...²/C...	RING 1 LED 72	72 W	79 W	750 mA	3500 K	12250 lm	9300 lm	118 lm/W	6,6 kg / 7,1 kg
212035/.../4/...²/C...	RING 1 LED 72	72 W	79 W	750 mA	4000 K	12950 lm	9800 lm	124 lm/W	6,6 kg / 7,1 kg
212035/.../6/...²/C...	RING 1 LED 72	72 W	79 W	750 mA	5000 K	12950 lm	9800 lm	124 lm/W	6,6 kg / 7,1 kg

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

2) exemplary product code 212030/A/6/T4/C35 is RING 1 LED 24W 5000K luminaire, where /A/ is the 'A' type mounting head, /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

4) ENEC/ENEC+ certificate does not apply to luminaires from 212035 code

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, PN-EN 62722-2-1 (tq=25°C)

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

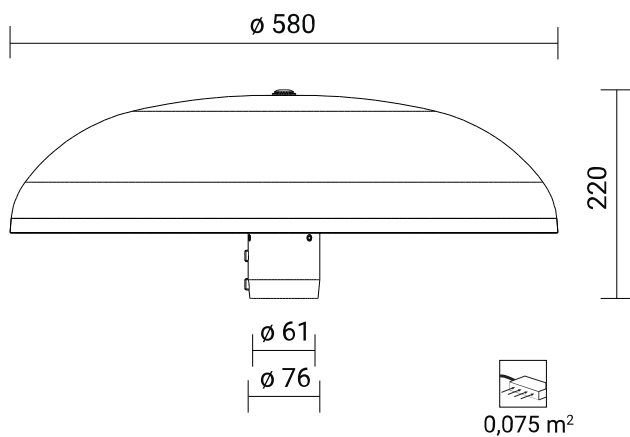
REMOVING ELECTROSTATIC CHARGE FROM LED LUMINAIRE BODY

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:

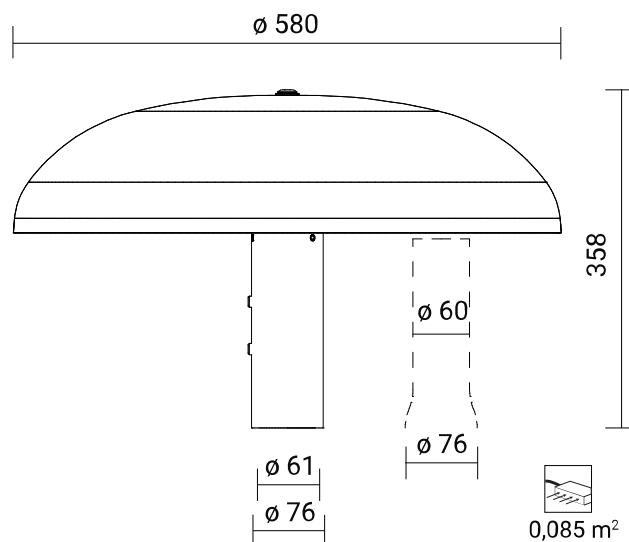
- functional grounding
- LED luminaire with an additional protection device

TECHNICAL DRAWING

RING 1 LED 'A'

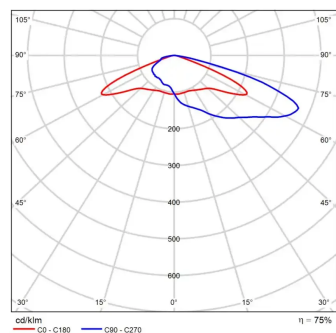


RING 1 LED 'B'

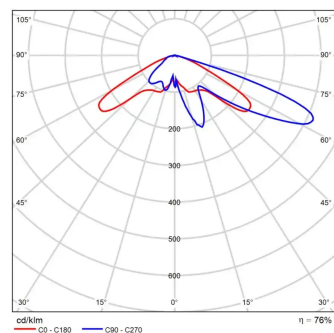


PHOTOMETRIC CURVES

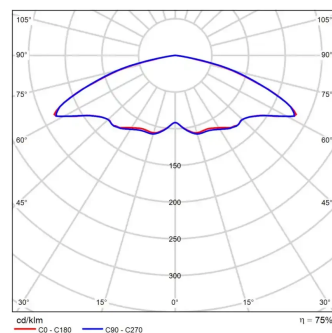
T4



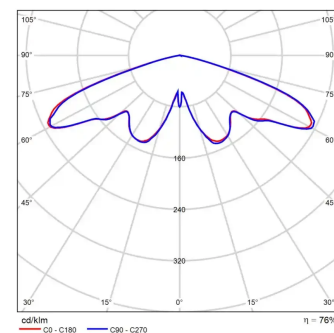
T4 - RING LED 72W



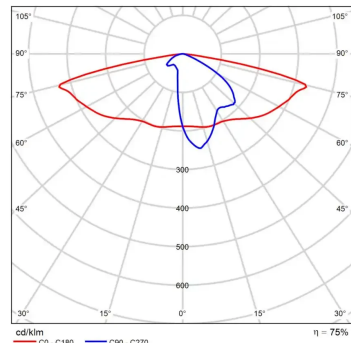
VS



VS - RING LED 72W



SP



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,

ACCETABLE QUANTITY OF LUMINAIRES ON ONE CIRCUIT

Accetable quantity of luminaires RING 1 LED D4i on one circuit, protected by:

Overcurrent switches MCB type B or C

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

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