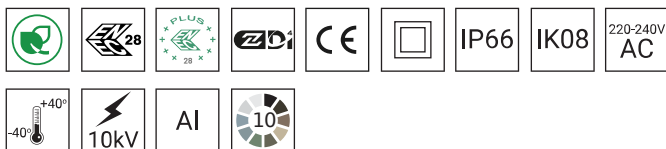


CUDDLE MINI LED D4i



TECHNICAL DATA

Application	urban roads, residential roads (internal), pedestrians, parkings
Assembly	on extension arms with ø 60 x 100 mm ending
Colour	inox / black
Ingress protection	IP 66 for the optical part and the driver
Optical system	PMMA optics, interchangeable LED module, tempered glass diffuser
Material	anodised aluminium alloy
Unit volume	0,01 m³
Operating temperature range	from -40°C to +40°C
Expected useful lifetime	L90B10 - 100 000 h
CRI	>70
Inrush current	24,6 A / 195,5 µs (CUDDLE MINI LED D4i 24 - 36) 98 A / 120 µs (CUDDLE MINI LED D4i 48 - 60)
Input voltage frequency	50/60Hz
Power factor	≥0.95
Number of LED	16
Control system	Luminaire can be connected to an external control system and / or sensors via socket compatible with Zhaga Book 18



TABLE OF VARIANTS

Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature (CCT)	LEDs luminous flux¹	Luminaire luminous flux¹	Luminous efficacy¹	D4i socket	Net weight
2227230/1/...²	CUDDLE MINI LED D4i 24	24 W	26 W	250 mA	2700 K	4450 lm	3250 lm	125 lm/W	1 ↑	3.7 kg
2227230/3/...²	CUDDLE MINI LED D4i 24	24 W	26 W	250 mA	3500 K	4650 lm	3400 lm	131 lm/W	1 ↑	3.7 kg
2227230/4/...²	CUDDLE MINI LED D4i 24	24 W	26 W	250 mA	4000 K	4800 lm	3500 lm	135 lm/W	1 ↑	3.7 kg
2227230/6/...²	CUDDLE MINI LED D4i 24	24 W	26 W	250 mA	5000 K	4750 lm	3450 lm	133 lm/W	1 ↑	3.7 kg
2227232/1/...²	CUDDLE MINI LED D4i 36	36 W	39 W	375 mA	2700 K	6550 lm	4800 lm	123 lm/W	1 ↑	3.7 kg
2227232/3/...²	CUDDLE MINI LED D4i 36	36 W	39 W	375 mA	3500 K	6850 lm	5000 lm	128 lm/W	1 ↑	3.7 kg
2227232/4/...²	CUDDLE MINI LED D4i 36	36 W	39 W	375 mA	4000 K	7050 lm	5150 lm	132 lm/W	1 ↑	3.7 kg
2227232/6/...²	CUDDLE MINI LED D4i 36	36 W	39 W	375 mA	5000 K	6950 lm	5050 lm	129 lm/W	1 ↑	3.7 kg
2227233/1/...²	CUDDLE MINI LED D4i 48	48 W	54 W	500 mA	2700 K	8550 lm	6250 lm	116 lm/W	1 ↑	3.7 kg
2227233/3/...²	CUDDLE MINI LED D4i 48	48 W	54 W	500 mA	3500 K	8950 lm	6500 lm	120 lm/W	1 ↑	3.7 kg
2227233/4/...²	CUDDLE MINI LED D4i 48	48 W	54 W	500 mA	4000 K	9200 lm	6700 lm	124 lm/W	1 ↑	3.7 kg
2227233/6/...²	CUDDLE MINI LED D4i 48	48 W	54 W	500 mA	5000 K	9050 lm	6600 lm	122 lm/W	1 ↑	3.7 kg
2227234/1/...²	CUDDLE MINI LED D4i 60	60 W	67 W	625 mA	2700 K	10450 lm	7650 lm	114 lm/W	1 ↑	3.7 kg
2227234/3/...²	CUDDLE MINI LED D4i 60	60 W	67 W	625 mA	3500 K	10950 lm	7950 lm	119 lm/W	1 ↑	3.7 kg
2227234/4/...²	CUDDLE MINI LED D4i 60	60 W	67 W	625 mA	4000 K	11250 lm	8200 lm	122 lm/W	1 ↑	3.7 kg
2227234/6/...²	CUDDLE MINI LED D4i 60	60 W	67 W	625 mA	5000 K	11050 lm	8050 lm	120 lm/W	1 ↑	3.7 kg
2227630/1/...²	CUDDLE MINI LED D4i D 24	24 W	26 W	250 mA	2700 K	4450 lm	3250 lm	125 lm/W	1 ↓	3.7 kg
2227630/3/...²	CUDDLE MINI LED D4i D 24	24 W	26 W	250 mA	3500 K	4650 lm	3400 lm	131 lm/W	1 ↓	3.7 kg
2227630/4/...²	CUDDLE MINI LED D4i D 24	24 W	26 W	250 mA	4000 K	4800 lm	3500 lm	135 lm/W	1 ↓	3.7 kg
2227630/6/...²	CUDDLE MINI LED D4i D 24	24 W	26 W	250 mA	5000 K	4750 lm	3450 lm	133 lm/W	1 ↓	3.7 kg
2227632/1/...²	CUDDLE MINI LED D4i D 36	36 W	39 W	375 mA	2700 K	6550 lm	4800 lm	123 lm/W	1 ↓	3.7 kg
2227632/3/...²	CUDDLE MINI LED D4i D 36	36 W	39 W	375 mA	3500 K	6850 lm	5000 lm	128 lm/W	1 ↓	3.7 kg
2227632/4/...²	CUDDLE MINI LED D4i D 36	36 W	39 W	375 mA	4000 K	7050 lm	5150 lm	132 lm/W	1 ↓	3.7 kg
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2227633/1/...²	CUDDLE MINI LED D4i D 48	48 W	54 W	500 mA	2700 K	8550 lm	6250 lm	116 lm/W	1 ↓	3.7 kg
2227633/3/...²	CUDDLE MINI LED D4i D 48	48 W	54 W	500 mA	3500 K	8950 lm	6500 lm	120 lm/W	1 ↓	3.7 kg
2227633/4/...²	CUDDLE MINI LED D4i D 48	48 W	54 W	500 mA	4000 K	9200 lm	6700 lm	124 lm/W	1 ↓	3.7 kg
2227633/6/...²	CUDDLE MINI LED D4i D 48	48 W	54 W	500 mA	5000 K	9050 lm	6600 lm	122 lm/W	1 ↓	3.7 kg
2227634/1/...²	CUDDLE MINI LED D4i D 60	60 W	67 W	625 mA	2700 K	10450 lm	7650 lm	114 lm/W	1 ↓	3.7 kg

CUDDLE MINI LED D4I



2227634/3/... ²	CUDDLE MINI LED D4i D 60	60 W	67 W	625 mA	3500 K	10950 lm	7950 lm	119 lm/W	1 ↓	3.7 kg
2227634/4/... ²	CUDDLE MINI LED D4i D 60	60 W	67 W	625 mA	4000 K	11250 lm	8200 lm	122 lm/W	1 ↓	3.7 kg
2227634/6/... ²	CUDDLE MINI LED D4i D 60	60 W	67 W	625 mA	5000 K	11050 lm	8050 lm	120 lm/W	1 ↓	3.7 kg
2227430/1/... ²	CUDDLE MINI LED D4i x2 24	24 W	26 W	250 mA	2700 K	4450 lm	3250 lm	125 lm/W	1 ↑ / 1 ↓	3.7 kg
2227430/3/... ²	CUDDLE MINI LED D4i x2 24	24 W	26 W	250 mA	3500 K	4650 lm	3400 lm	131 lm/W	1 ↑ / 1 ↓	3.7 kg
2227430/4/... ²	CUDDLE MINI LED D4i x2 24	24 W	26 W	250 mA	4000 K	4800 lm	3500 lm	135 lm/W	1 ↑ / 1 ↓	3.7 kg
2227430/6/... ²	CUDDLE MINI LED D4i x2 24	24 W	26 W	250 mA	5000 K	4750 lm	3450 lm	133 lm/W	1 ↑ / 1 ↓	3.7 kg
2227432/1/... ²	CUDDLE MINI LED D4i x2 36	36 W	39 W	375 mA	2700 K	6550 lm	4800 lm	123 lm/W	1 ↑ / 1 ↓	3.7 kg
2227432/3/... ²	CUDDLE MINI LED D4i x2 36	36 W	39 W	375 mA	3500 K	6850 lm	5000 lm	128 lm/W	1 ↑ / 1 ↓	3.7 kg
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2227434/1/... ²	CUDDLE MINI LED D4i x2 60	60 W	67 W	625 mA	2700 K	10450 lm	7650 lm	114 lm/W	1 ↑ / 1 ↓	3.7 kg
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2227434/6/... ²	CUDDLE MINI LED D4i x2 60	60 W	67 W	625 mA	5000 K	11050 lm	8050 lm	120 lm/W	1 ↑ / 1 ↓	3.7 kg

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

2) symbol of chosen optical system eg. 2227233/6/T2 is CUDDLE MINI LED D4i 48 5000K with T2 optical system

*For the CUDDLE MINI LED D4i luminaire with P2 and PL optics it is possible to choose an additional light colour temperature: 5700K. The product code is then supplemented with the designation '/7'. Example: 2227233/7/P2 -CUDDLE MINI LED D4i 48W 5700K luminaire with P2 optics

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

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:

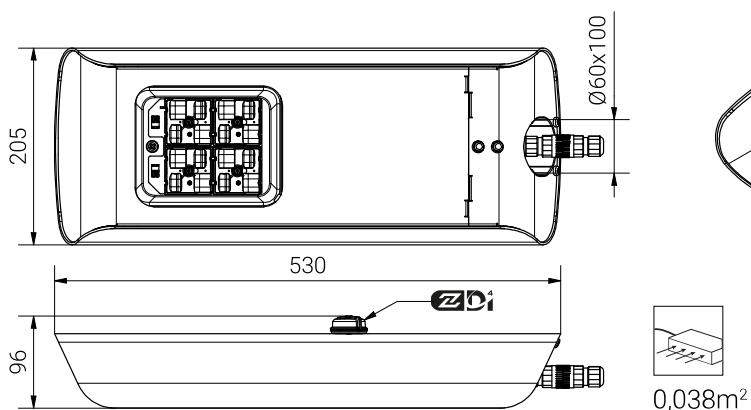
- functional grounding

- LED luminaire with an additional protection device

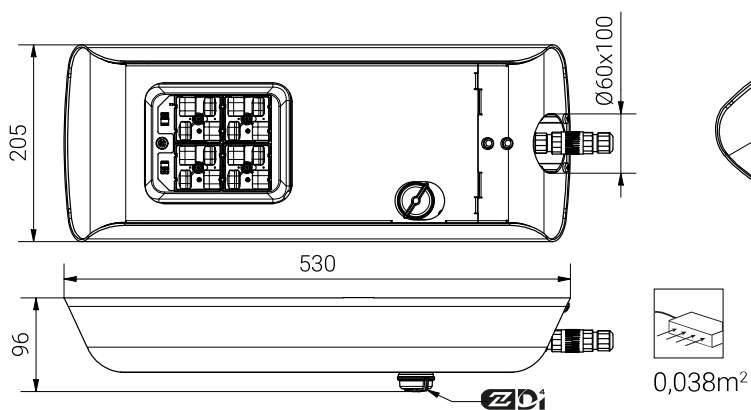
CUDDLE MINI LED D4i

TECHNICAL DRAWING

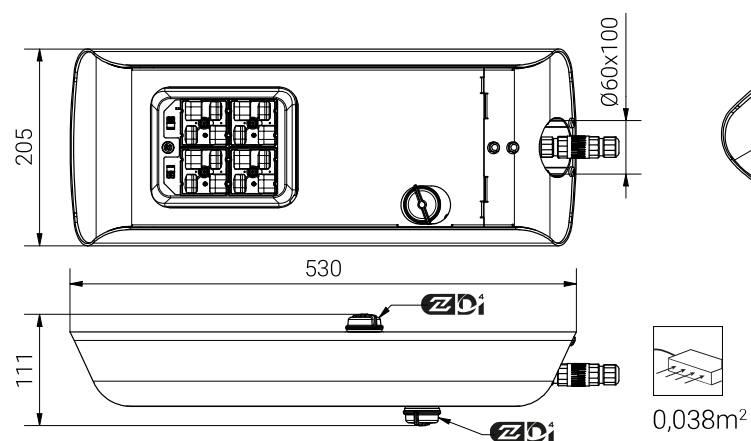
CUDDLE MINI LED D4i



CUDDLE MINI LED D4i D

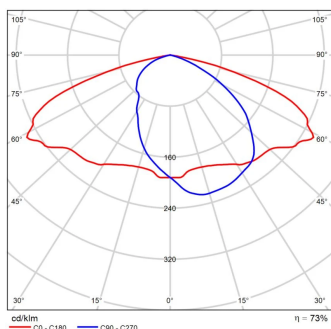


CUDDLE MINI LED D4i x2

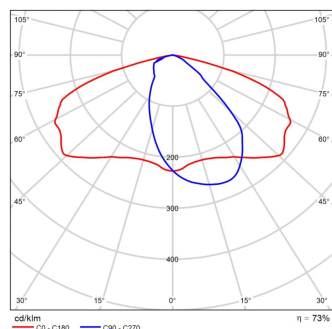


PHOTOMETRIC CURVES

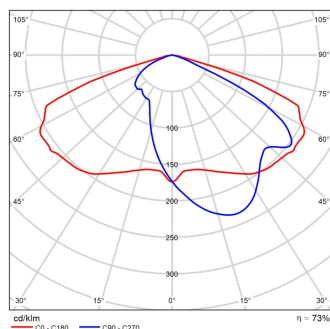
DW



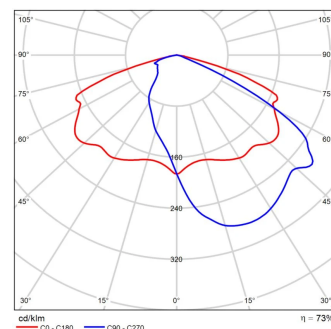
LN



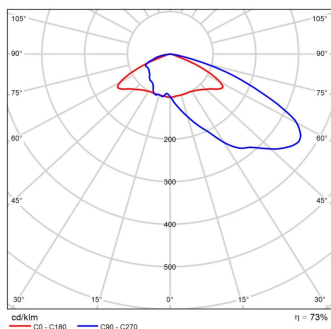
T3



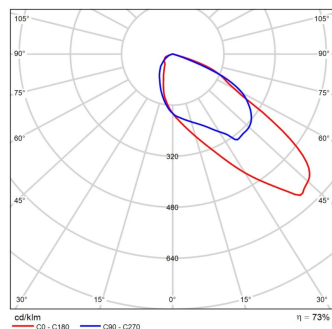
LW



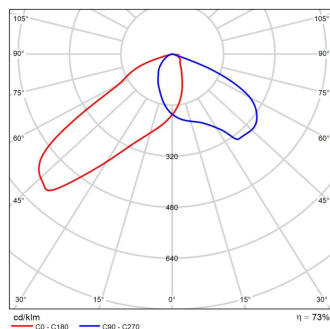
T4



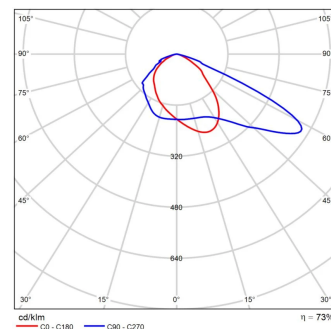
PP



PL



P2



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 MINI LED 24, 36W	B	4	7	12	18	30	37	46
	C	4	12	18	31	51	62	78
CUDDLE MINI LED 48W	B	1	2	4	6	10	12	15
	C	1	4	6	10	17	20	26
CUDDLE MINI LED 60W	B	4	8	13	20	33	41	51
	C	4	13	20	34	56	68	85

Fuse – type gG and GL

Luminaire	2A	4A	6A	10A	16A	20A	25A
CUDDLE MINI LED 24, 36W	1	10	20	26	52	71	101
CUDDLE MINI LED 48W	0	4	8	11	22	31	44
CUDDLE MINI LED 60W	0	2	4	5	11	16	22