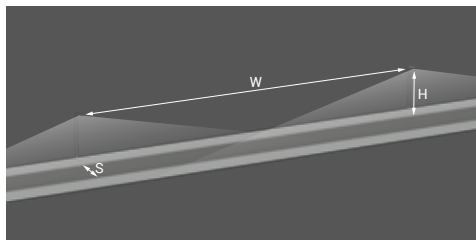


LED luminaires

ISKRA LED / ISKRA LED PROG



Lighting examples



Bicycle and pedestrian path

ISKRA LED 24 W, SP optics

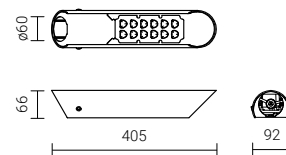
Parameters:

H - luminaire mounting height: 6 m

W - column spacing: 42 m

S - road width: 5 m

Lighting class P3



Application: urban roads, residential streets, parks, pedestrian routes, cycle paths

Installation: on extension arms with ø60 x 90 mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Number of LEDs: 12

Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

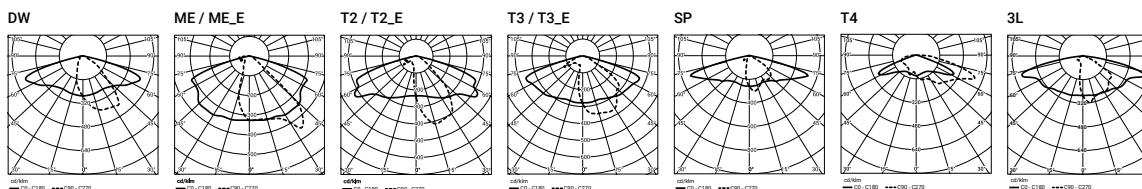
Unit volume: 0,005 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥0.95

Luminaire ISKRA LED optionally has the possibility, to connect to an external control system via analogue 1-10 V signal.

Luminaire ISKRA LED PROG has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal).

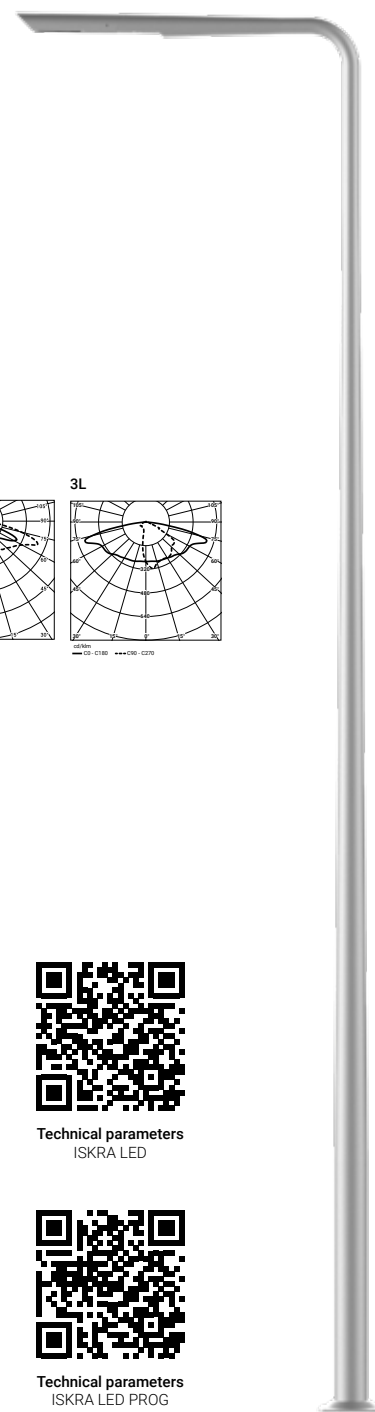


Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weigh
213230/1/...	ISKRA LED 24	27 W	30 W	760 mA	2 700 K	2,1 kg
213230/3/...	ISKRA LED 24	27 W	30 W	760 mA	3 500 K	2,1 kg
213230/4/...	ISKRA LED 24	27 W	30 W	760 mA	4 000 K	2,1 kg
213230/6/...	ISKRA LED 24	27 W	30 W	760 mA	5 000 K	2,1 kg
213232/1/...	ISKRA LED 36	36 W	39,5 W	960 mA	2 700 K	2,1 kg
213232/3/...	ISKRA LED 36	36 W	39,5 W	960 mA	3 500 K	2,1 kg
213232/4/...	ISKRA LED 36	36 W	39,5 W	960 mA	4 000 K	2,1 kg
213232/6/...	ISKRA LED 36	36 W	39,5 W	960 mA	5 000 K	2,1 kg
2132127/1/...	ISKRA LED 12 PROG	12 W	14 W	350 mA	2 700 K	2,1 kg
2132127/3/...	ISKRA LED 12 PROG	12 W	14 W	350 mA	3 500 K	2 kg
2132127/4/...	ISKRA LED 12 PROG	12 W	14 W	350 mA	4 000 K	2 kg
2132127/6/...	ISKRA LED 12 PROG	12 W	14 W	350 mA	5 000 K	2 kg
2132130/1/...	ISKRA LED 24 PROG	24 W	28 W	700 mA	2 700 K	2 kg
2132130/3/...	ISKRA LED 24 PROG	24 W	28 W	700 mA	3 500 K	2 kg
2132130/4/...	ISKRA LED 24 PROG	24 W	28 W	700 mA	4 000 K	2 kg
2132130/6/...	ISKRA LED 24 PROG	24 W	28 W	700 mA	5 000 K	2 kg
2132132/1/...	ISKRA LED 36 PROG	36 W	40 W	1 000 mA	2 700 K	2 kg
2132132/3/...	ISKRA LED 36 PROG	36 W	40 W	1 000 mA	3 500 K	2 kg
2132132/4/...	ISKRA LED 36 PROG	36 W	40 W	1 000 mA	4 000 K	2 kg
2132132/6/...	ISKRA LED 36 PROG	36 W	40 W	1 000 mA	5 000 K	2 kg

/... Symbol of selected optical system

ENEC certificate for ISKRA LED 24, 36, ISKRA LED 12, 24, 36 PROG with T2_E, T3_E and ME_E optics.

3L optics available for ISKRA LED 12W luminaire power only.



Technical parameters
ISKRA LED



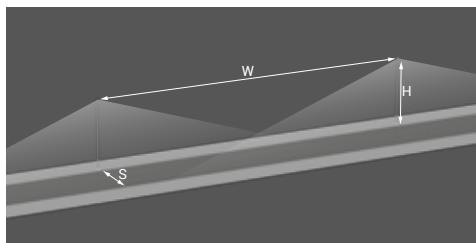
Technical parameters
ISKRA LED PROG

LED luminaires

ISKRA LED ALFA / ISKRA LED ALFA PROG



Lighting examples



Local road

ISKRA LED ALFA 24 W, T3 optics

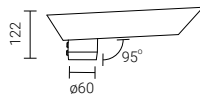
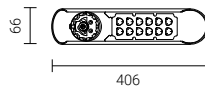
Parameters:

H - luminaire mounting height: 6,5 m

W - column spacing: 32 m

S - road width: 5,5 m

Lighting class M5



Application: urban roads, residential streets, parks, pedestrian routes, cycle paths

Installation: on extension arms with ø60x50 mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Number of LEDs: 12

Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

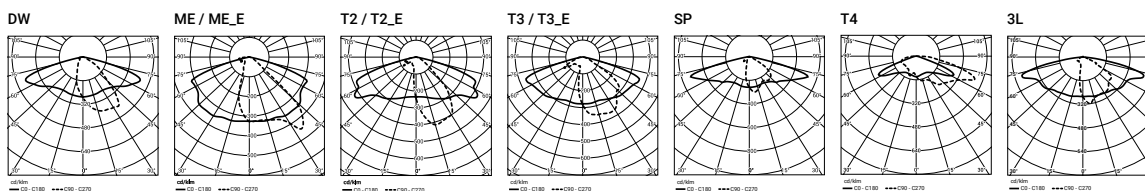
Unit volume: 0,01 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥0.95

Luminaire ISKRA LED ALFA optionally has the possibility, to connect to an external control system via analogue 1-10 V signal.

Luminaire ISKRA LED ALFA PROG has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal)



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
213330/1/...	ISKRA LED ALFA 24	27 W	30 W	760 mA	2 700 K	2,5 kg
213330/3/...	ISKRA LED ALFA 24	27 W	30 W	760 mA	3 500 K	2,5 kg
213330/4/...	ISKRA LED ALFA 24	27 W	30 W	760 mA	4 000 K	2,5 kg
213330/6/...	ISKRA LED ALFA 24	27 W	30 W	760 mA	5 000 K	2,5 kg
213332/1/...	ISKRA LED ALFA 36	36 W	39,5 W	960 mA	2 700 K	2,5 kg
213332/3/...	ISKRA LED ALFA 36	36 W	39,5 W	960 mA	3 500 K	2,5 kg
213332/4/...	ISKRA LED ALFA 36	36 W	39,5 W	960 mA	4 000 K	2,5 kg
213332/6/...	ISKRA LED ALFA 36	36 W	39,5 W	960 mA	5 000 K	2,5 kg
2133127/1/...	ISKRA LED ALFA 12 PROG	12 W	14 W	350 mA	2 700 K	2,2 kg
2133127/3/...	ISKRA LED ALFA 12 PROG	12 W	14 W	350 mA	3 500 K	2,2 kg
2133127/4/...	ISKRA LED ALFA 12 PROG	12 W	14 W	350 mA	4 000 K	2,2 kg
2133127/6/...	ISKRA LED ALFA 12 PROG	12 W	14 W	350 mA	5 000 K	2,2 kg
2133130/1/...	ISKRA LED ALFA 24 PROG	24 W	28 W	700 mA	2 700 K	2,2 kg
2133130/3/...	ISKRA LED ALFA 24 PROG	24 W	28 W	700 mA	3 500 K	2,2 kg
2133130/4/...	ISKRA LED ALFA 24 PROG	24 W	28 W	700 mA	4 000 K	2,2 kg
2133130/6/...	ISKRA LED ALFA 24 PROG	24 W	28 W	700 mA	5 000 K	2,2 kg
2133132/1/...	ISKRA LED ALFA 36 PROG	36 W	40 W	1 000 mA	2 700 K	2,2 kg
2133132/3/...	ISKRA LED ALFA 36 PROG	36 W	40 W	1 000 mA	3 500 K	2,2 kg
2133132/4/...	ISKRA LED ALFA 36 PROG	36 W	40 W	1 000 mA	4 000 K	2,2 kg
2133132/6/...	ISKRA LED ALFA 36 PROG	36 W	40 W	1 000 mA	5 000 K	2,2 kg

/... Symbol of selected optical system

ENEC certificate for ISKRA LED ALFA 24, 36, ISKRA LED ALFA 12, 24, 36 PROG with T2_E, T3_E and ME_E optics.

3L optics available for ISKRA LED 12 W luminaire power only.



Technical parameters
ISKRA LED ALFA



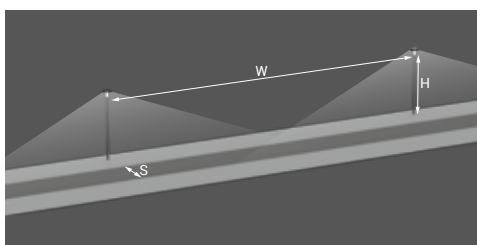
Technical parameters
ISKRA LED ALFA PROG



LED luminaires
ELBA LED



Lighting examples



Pavement

ELBA LED

Parameters:

H – luminaire mounting height: 4 m

W – column spacing: 30 m

S – road width: 3 m

Lighting class P4

Application: parks, pedestrian routes, cycle paths

Installation: directly on the column or on extension arm with $\varnothing 60 \times 50$ mm ending

Protection class: IP 65

Material: cap – formed aluminium sheet
diffuser – frosted cylindrical $\varnothing 200$ mm (PMMA)
base – high-pressure die-casted aluminium alloy

Number of LEDs: 1

Expected useful lifetime: L90B10 - 100 000 h

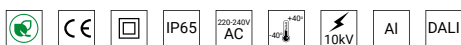
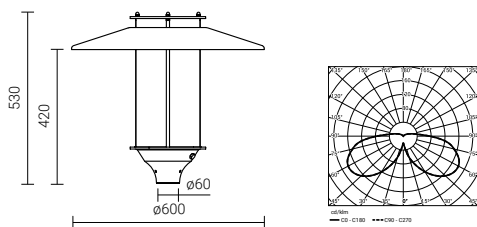
CRI: >70

Unit volume: 0,06 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire ELBA LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal).



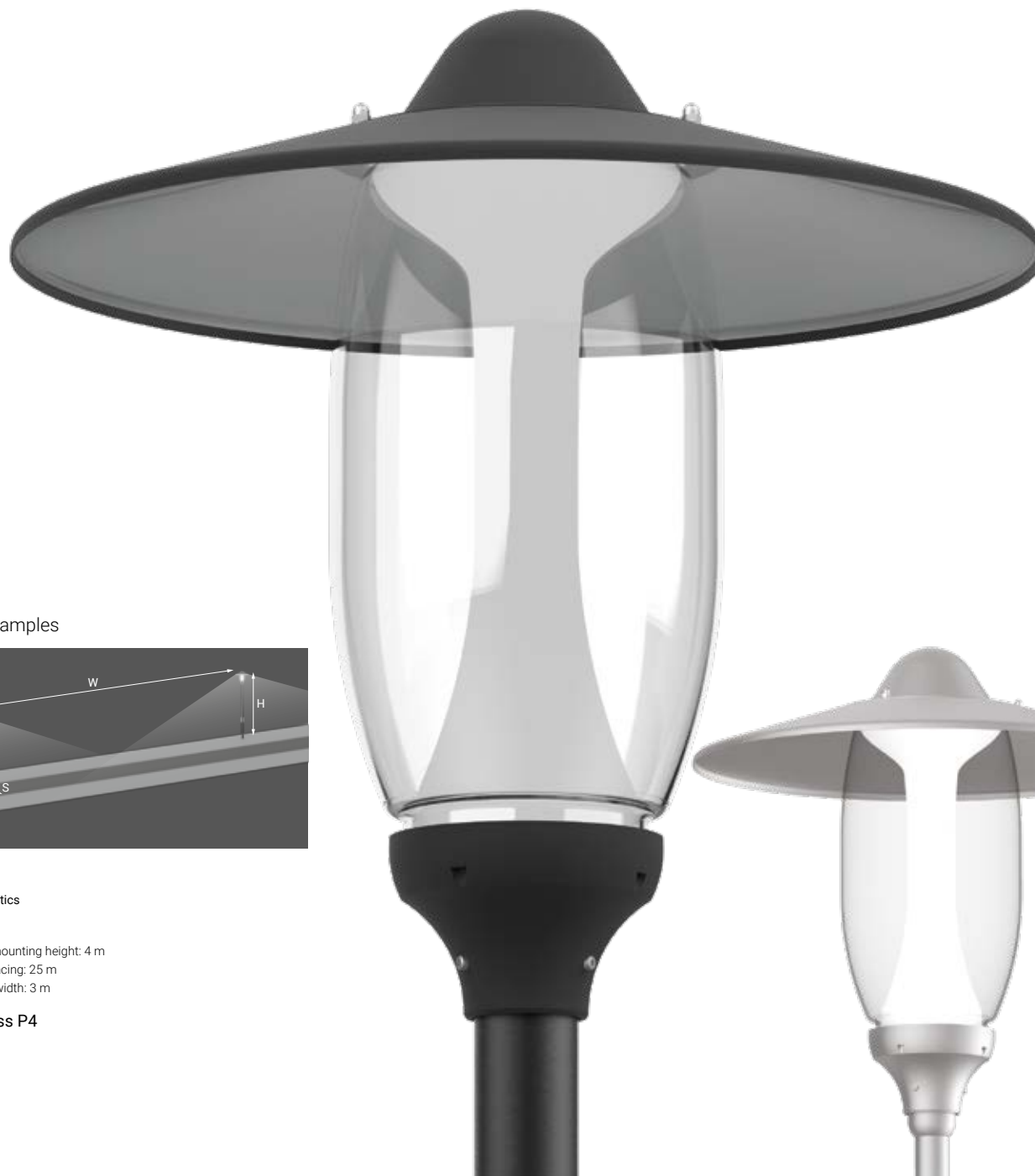
Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
213050/1	ELBA LED black	33 W	36 W	940 mA	2 700 K	5 kg
2131050/1/C45	ELBA LED inox	33 W	36 W	940 mA	2 700 K	5 kg
213050/3	ELBA LED black	33 W	36 W	940 mA	3 500 K	5 kg
2131050/3/C45	ELBA LED inox	33 W	36 W	940 mA	3 500 K	5 kg
213050/4	ELBA LED black	33 W	36 W	940 mA	4 000 K	5 kg
2131050/4/C45	ELBA LED inox	33 W	36 W	940 mA	4 000 K	5 kg



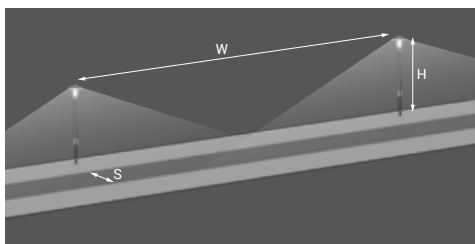
Technical parameters
ELBA LED

LED luminaires

AURIS LED



Lighting examples



Pavement

AURIS LED, A optics

Parameters:

H – luminaire mounting height: 4 m

W – column spacing: 25 m

S – pavement width: 3 m

Lighting class P4

Application: parks, pedestrian routes, cycle paths

Installation: directly on the column or on extension arm with $\varnothing 60 \times 50$ mm ending

Protection class: IP 66

Material: cap – formed aluminium sheet,
diffuser – transparent (PMMA)
base – high-pressure die-casted aluminium alloy

Number of LEDs: 74

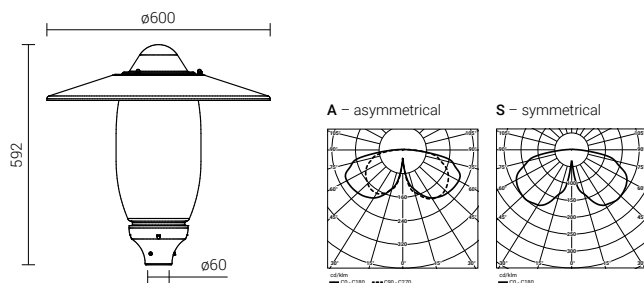
Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

Unit volume: 0,06 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.9



Code	Symbol	LED power	Luminaire power consumption	Colour temperature	Net weight
213563/1/...	AURIS LED black	18 W	20 W	2 700 K	5 kg
213563/1/.../C45	AURIS LED inox	18 W	20 W	2 700 K	5 kg
213563/3/...	AURIS LED black	18 W	20 W	3 500 K	5 kg
213563/3/.../C45	AURIS LED inox	18 W	20 W	3 500 K	5 kg
213563/4/...	AURIS LED black	18 W	20 W	4 000 K	5 kg
213563/4/.../C45	AURIS LED inox	18 W	20 W	4 000 K	5 kg

/... Symbol of selected optical system



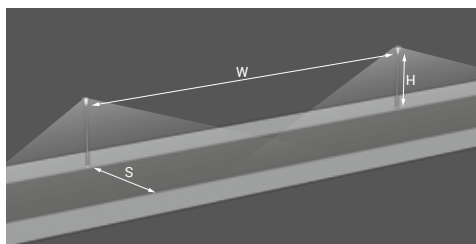
Technical parameters
AURIS LED

LED luminaires

ATLANTIS LED



Lighting examples



Sidewalk

ATLANTIS LED

Parameters:

H – luminaire mounting height: 4 m

W – column spacing: 32 m

S – road width: 4 m

Lighting class P4

Application: parks, pedestrian routes, cycle paths

Installation: directly on the column or on extension arm with $\varnothing 60 \times 50$ mm ending

Protection class: IP 66

Material: cap – formed aluminium sheet,
diffuser – frosted (PMMA),

base – high-pressure die-casted aluminium alloy

Colour: cap – inox, base – painted in RAL 9006

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

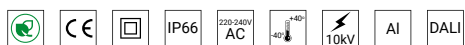
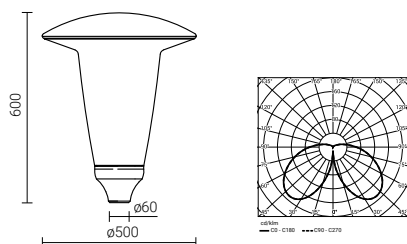
CRI: >70

Unit volume: 0,22 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire ATLANTIS LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
214650/1	ATLANTIS LED	38 W	42 W	800 mA	2 700 K	4,1 kg
214650/3	ATLANTIS LED	38 W	42 W	800 mA	3 500 K	4,1 kg
214650/4	ATLANTIS LED	38 W	42 W	800 mA	4 000 K	4,1 kg
214650/6	ATLANTIS LED	38 W	42 W	800 mA	5 000 K	4,1 kg



Technical parameters
ATLANTIS LED

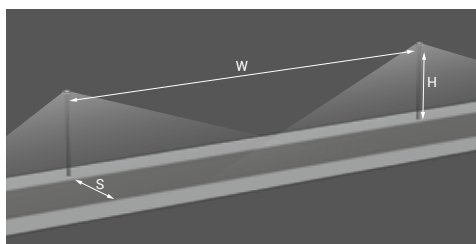


LED luminaires

COSMO DELTA LED



Lighting examples



Local road

COSMO DELTA LED 48 W, T2 optics

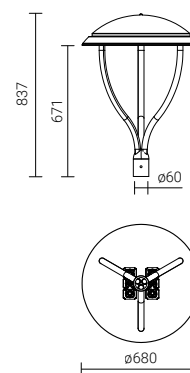
Parameters:

H - luminaire mounting height: 6 m

W - column spacing: 35 m

S - road width: 6 m

Lighting class C3



Application: parks, car parks,

Installation: on extension arms with $\varnothing 60 \times 80$ mm ending

Ingress protection: IP 66 for the optical part and the power supply system

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 24

Expected useful lifetime: L90B10 - 100 000 h

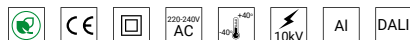
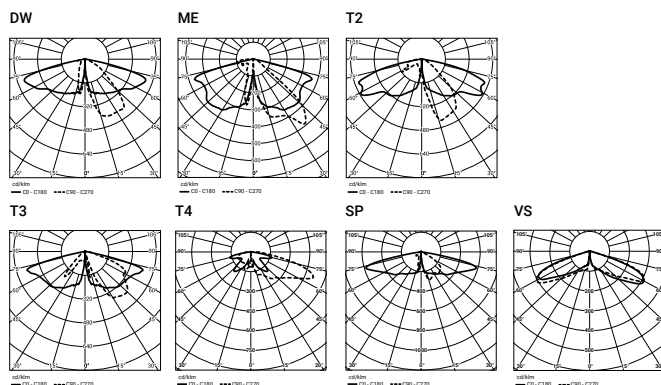
CRI: >70

Unit volume: 0,32 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire COSMO DELTA LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal)



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2148032/1/...	COSMO DELTA LED 36	36 W	42 W	500 mA	2 700 K	13,1 kg
2148032/3/...	COSMO DELTA LED 36	36 W	42 W	500 mA	3 500 K	13,1 kg
2148032/4/...	COSMO DELTA LED 36	36 W	42 W	500 mA	4 000 K	13,1 kg
2148032/6/...	COSMO DELTA LED 36	36 W	42 W	500 mA	5 000 K	13,1 kg
2148033/1/...	COSMO DELTA LED 48	48 W	55 W	700 mA	2 700 K	13,1 kg
2148033/3/...	COSMO DELTA LED 48	48 W	55 W	700 mA	3 500 K	13,1 kg
2148033/4/...	COSMO DELTA LED 48	48 W	55 W	700 mA	4 000 K	13,1 kg
2148033/6/...	COSMO DELTA LED 48	48 W	55 W	700 mA	5 000 K	13,1 kg
2148035/1/...	COSMO DELTA LED 72	72 W	79 W	1 000 mA	2 700 K	13,1 kg
2148035/3/...	COSMO DELTA LED 72	72 W	79 W	1 000 mA	3 500 K	13,1 kg
2148035/4/...	COSMO DELTA LED 72	72 W	79 W	1 000 mA	4 000 K	13,1 kg
2148035/6/...	COSMO DELTA LED 72	72 W	79 W	1 000 mA	5 000 K	13,1 kg

/... Symbol of selected optical system

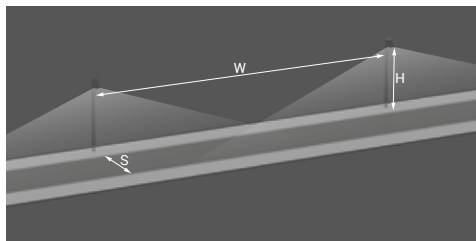


Technical parameters
COSMO DELTA LED

LED luminaires

OW LED

Lighting examples



Park avenue / promenade

OW LED 36, SP optics, transparent diffuser

Parameters:

H – luminaire mounting height: 5,2 m

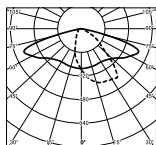
W – column spacing: 34 m

S – road width: 4 m

Lighting class P2

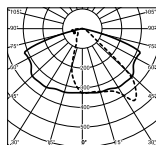


DW



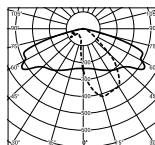
cd/klm
— C0-C180 ••• C90-C270

ME



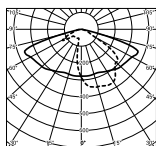
cd/klm
— C0-C180 ••• C90-C270

T2



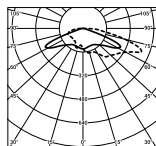
cd/klm
— C0-C180 ••• C90-C270

T3



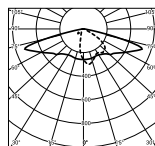
cd/klm
— C0-C180 ••• C90-C270

T4



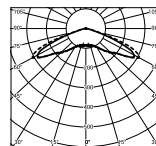
cd/klm
— C0-C180 ••• C90-C270

SP



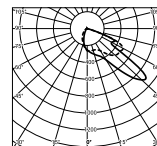
cd/klm
— C0-C180 ••• C90-C270

VS



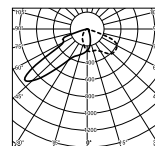
cd/klm
— C0-C180 ••• C90-C270

PP



cd/klm
— C0-C180 ••• C90-C270

PL



cd/klm
— C0-C180 ••• C90-C270

Application: urban roads, residential streets, parks, pedestrian routes, car parks, pedestrian crossing

Installation: on extension arms, wall brackets, columns with extension arms with $\varnothing 42 \times 40$ mm ending

Protection class: IP 66

Material: body and cap – shaped anodised aluminium sheet

Colour: black

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 12 (for 24 W, 36 W); 24 (for 48 W, 60 W, 72 W)

Expected useful lifetime: L90B10 - 100 000 h

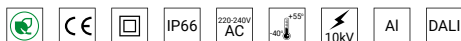
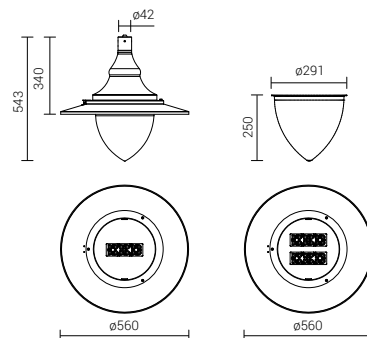
CRI: >70

Unit volume: 0,16 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire OW LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal)



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2109030/1/...	OW LED 24	24 W	28 W	700 mA	2 700 K	4,6 kg
2109030/3/...	OW LED 24	24 W	28 W	700 mA	3 500 K	4,6 kg
2109030/4/...	OW LED 24	24 W	28 W	700 mA	4 000 K	4,6 kg
2109030/6/...	OW LED 24	24 W	28 W	700 mA	5 000 K	4,6 kg
2109032/1/...	OW LED 36	36 W	40 W	1 000 mA	2 700 K	4,6 kg
2109032/3/...	OW LED 36	36 W	40 W	1 000 mA	3 500 K	4,6 kg
2109032/4/...	OW LED 36	36 W	40 W	1 000 mA	4 000 K	4,6 kg
2109032/6/...	OW LED 36	36 W	40 W	1 000 mA	5 000 K	4,6 kg
2109033/1/...	OW LED 48	48 W	55 W	700 mA	2 700 K	5,1 kg
2109033/3/...	OW LED 48	48 W	55 W	700 mA	3 500 K	5,1 kg
2109033/4/...	OW LED 48	48 W	55 W	700 mA	4 000 K	5,1 kg
2109033/6/...	OW LED 48	48 W	55 W	700 mA	5 000 K	5,1 kg
2109034/1/...	OW LED 60	60 W	67 W	830 mA	2 700 K	5,1 kg
2109034/3/...	OW LED 60	60 W	67 W	830 mA	3 500 K	5,1 kg
2109034/4/...	OW LED 60	60 W	67 W	830 mA	4 000 K	5,1 kg
2109034/6/...	OW LED 60	60 W	67 W	830 mA	5 000 K	5,1 kg
2109035/1/...	OW LED 72	72 W	79 W	1 000 mA	2 700 K	5,1 kg
2109035/3/...	OW LED 72	72 W	79 W	1 000 mA	3 500 K	5,1 kg
2109035/4/...	OW LED 72	72 W	79 W	1 000 mA	4 000 K	5,1 kg
2109035/6/...	OW LED 72	72 W	79 W	1 000 mA	5 000 K	5,1 kg



Technical parameters
OW LED

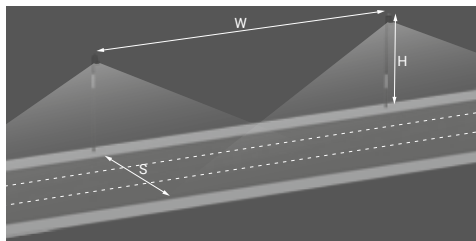
/... Symbol of selected optical system

Code	Symbol	Diffuser weight
690893	Diffuser PMMA transparent do OW LED	0,57 kg
690898	Diffuser PMMA frosted do OW LED	0,57 kg

LED luminaires

OW II LED

Lighting examples



Single carriageway with three lanes

OW II LED 96 W, ME optics, transparent diffuser

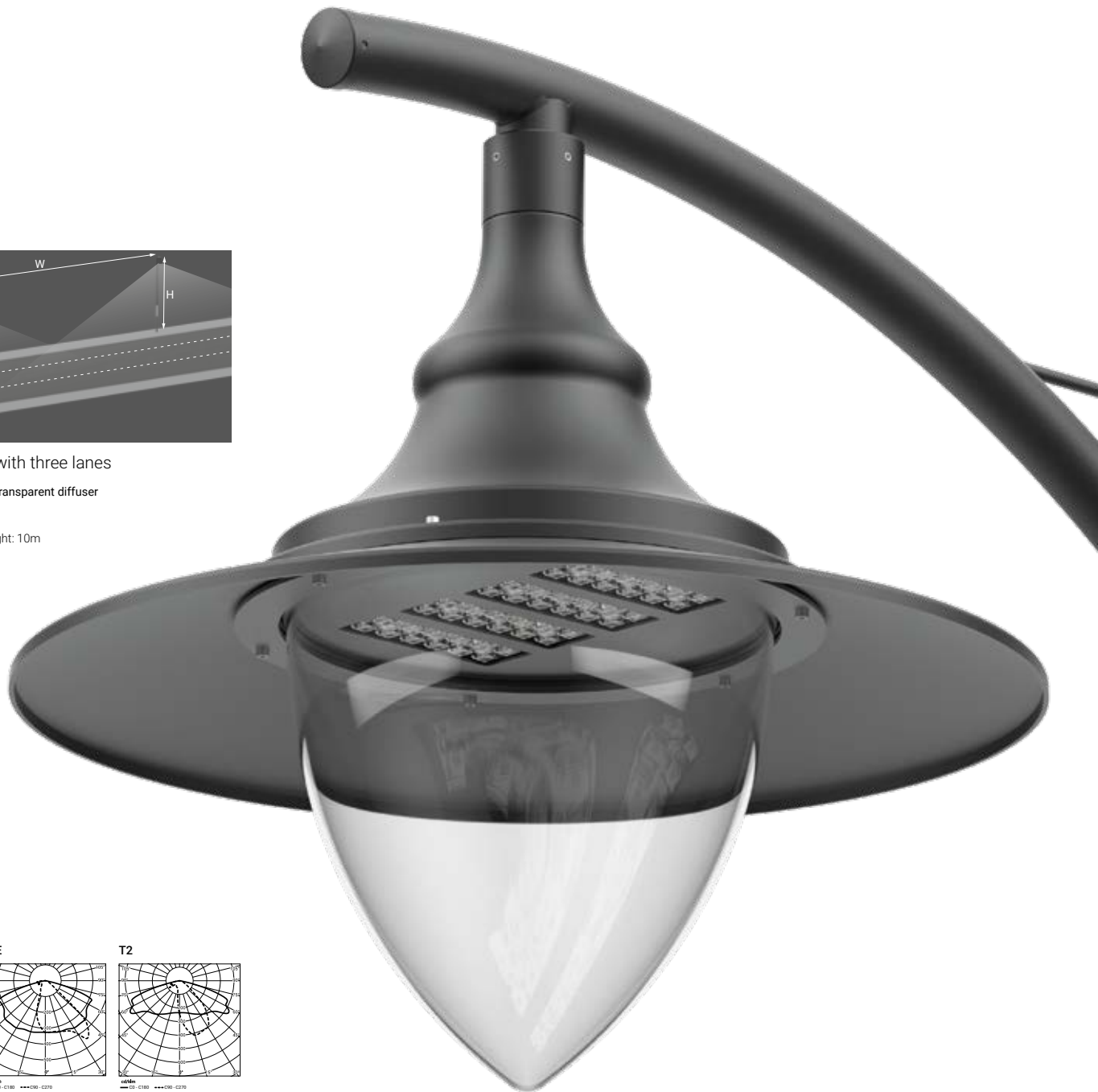
Parameters:

H – luminaire mounting height: 10m

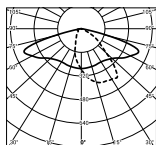
W – column spacing: 38 m

S – road width: 10,5 m

Lighting class M3

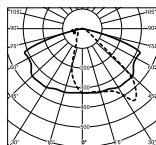


DW



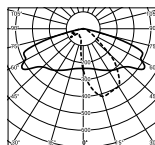
cd/km
— C1-C180 ●●● C180-C270

ME



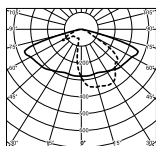
cd/km
— C1-C180 ●●● C180-C270

T2



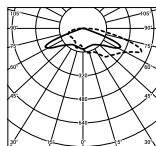
cd/km
— C1-C180 ●●● C180-C270

T3



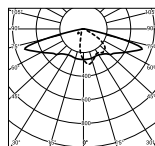
cd/km
— C1-C180 ●●● C180-C270

T4



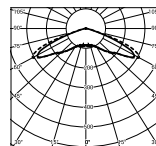
cd/km
— C1-C180 ●●● C180-C270

SP



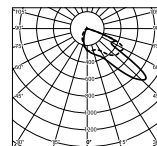
cd/km
— C1-C180 ●●● C180-C270

VS



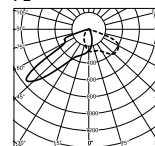
cd/km
— C1-C180 ●●● C180-C270

PP



cd/km
— C1-C180 ●●● C180-C270

PL



cd/km
— C1-C180 ●●● C180-C270

Application: urban roads, residential streets, car parks, pedestrian crossing

Installation: on extension arms, wall brackets, columns with extension arms with $\varnothing 60 \times 50$ mm ending

Protection class: IP 66

Material: body and cap – shaped anodised aluminium sheet

Colour: black

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 48

Expected useful lifetime: L90B10 - 100 000 h

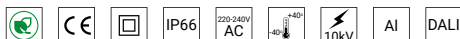
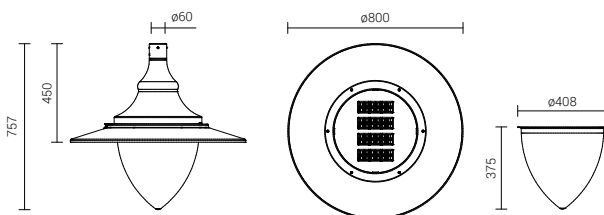
CRI: >70

Unit volume: 0,35 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire OW II LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2109137/1/...	OW II LED 96	96 W	105 W	700 mA	2 700 K	14,5 kg
2109137/3/...	OW II LED 96	96 W	105 W	700 mA	3 500 K	14,5 kg
2109137/4/...	OW II LED 96	96 W	105 W	700 mA	4 000 K	14,5 kg
2109137/6/...	OW II LED 96	96 W	105 W	700 mA	5 000 K	14,5 kg
2109139/1/...	OW II LED 120	120 W	129 W	830 mA	2 700 K	14,5 kg
2109139/3/...	OW II LED 120	120 W	129 W	830 mA	3 500 K	14,5 kg
2109139/4/...	OW II LED 120	120 W	129 W	830 mA	4 000 K	14,5 kg
2109139/6/...	OW II LED 120	120 W	129 W	830 mA	5 000 K	14,5 kg
2109141/1/...	OW II LED 144	144 W	154 W	1 000 mA	2 700 K	14,5 kg
2109141/3/...	OW II LED 144	144 W	154 W	1 000 mA	3 500 K	14,5 kg
2109141/4/...	OW II LED 144	144 W	154 W	1 000 mA	4 000 K	14,5 kg
2109141/6/...	OW II LED 144	144 W	154 W	1 000 mA	5 000 K	14,5 kg

/... Symbol of selected optical system



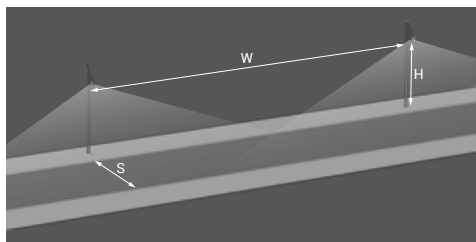
Technical parameters
OW II LED

Code	Symbol	Diffuser weight
691993	Diffuser PMMA transparent do OW II LED	1,5 kg

LED luminaires

DROP LED

Lighting examples



Local road

DROP LED 36W asymmetric

Parameters:

H – luminaire mounting height: 5,2 m

W – column spacing: 24 m

S – road width: 5,5 m

Lighting class C3



Application: residential streets, office buildings' surroundings, parks, pedestrian routes

Installation: on extension arms with $\varnothing 42 \times 30$ mm ending

Protection class: IP 66

Material: anodised aluminium alloy

Colour: inox / graphite

Optical system: PMMA optics

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

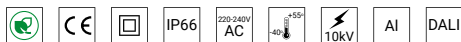
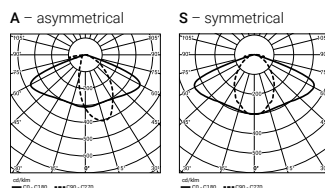
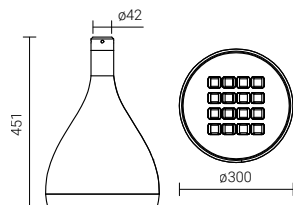
CRI: >70

Unit volume: 0,041 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire DROP LED has the possibility to connect to an external control system via DALI interface (optionally via analogue 1-10V signal).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
214930/1/...	DROP LED 24	24 W	28 W	500 mA	2 700 K	4,9 kg
214930/3/...	DROP LED 24	24 W	28 W	500 mA	3 500 K	4,9 kg
214930/4/...	DROP LED 24	24 W	28 W	500 mA	4 000 K	4,9 kg
214930/6/...	DROP LED 24	24 W	28 W	500 mA	5 000 K	4,9 kg
214932/1/...	DROP LED 36	36 W	41 W	750 mA	2 700 K	4,9 kg
214932/3/...	DROP LED 36	36 W	41 W	750 mA	3 500 K	4,9 kg
214932/4/...	DROP LED 36	36 W	41 W	750 mA	4 000 K	4,9 kg
214932/6/...	DROP LED 36	36 W	41 W	750 mA	5 000 K	4,9 kg
214933/1/...	DROP LED 48	48 W	55 W	1 000 mA	2 700 K	5,2 kg
214933/3/...	DROP LED 48	48 W	55 W	1 000 mA	3 500 K	5,2 kg
214933/4/...	DROP LED 48	48 W	55 W	1 000 mA	4 000 K	5,2 kg
214933/6/...	DROP LED 48	48 W	55 W	1 000 mA	5 000 K	5,2 kg

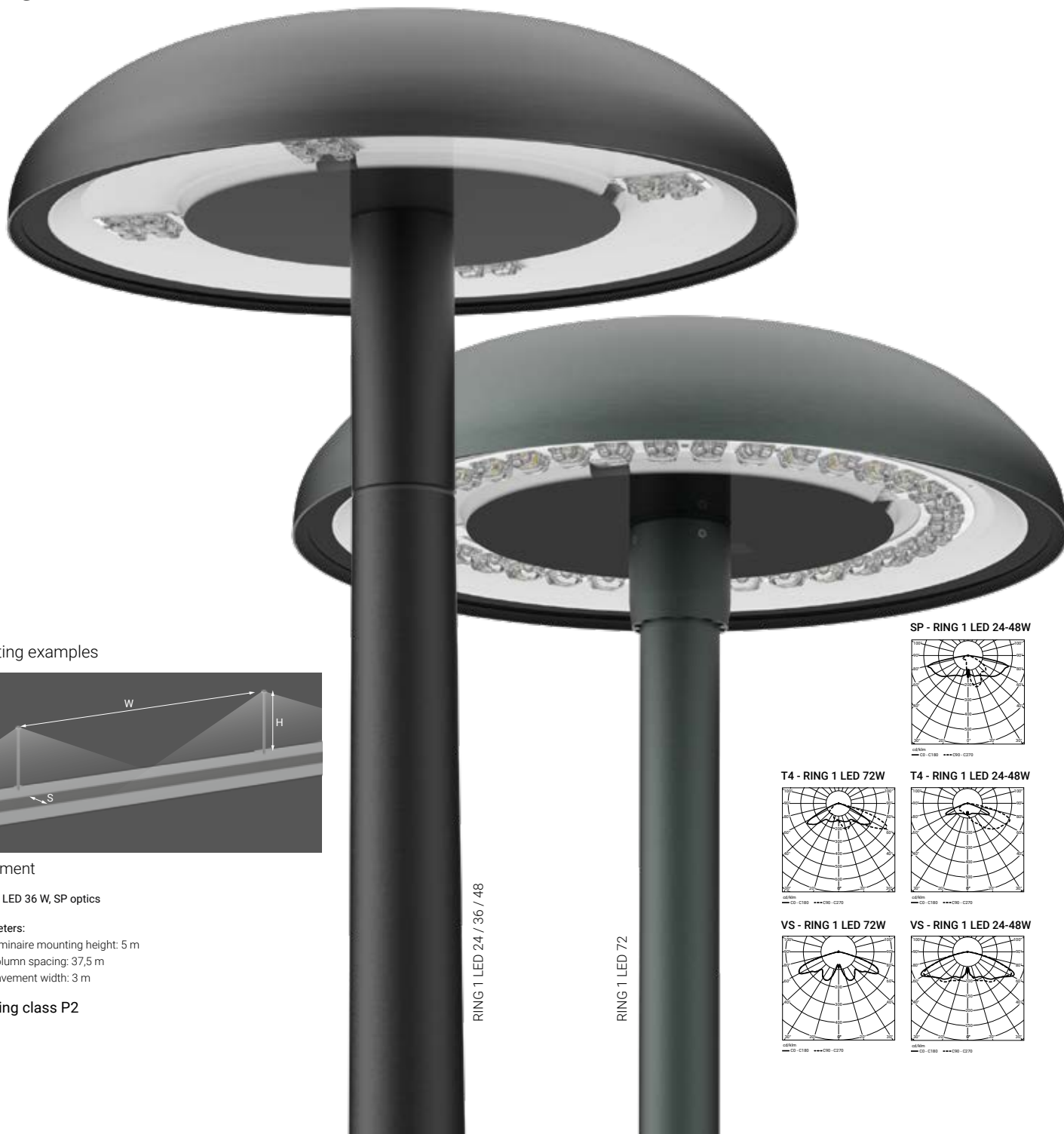


Technical parameters
DROP LED

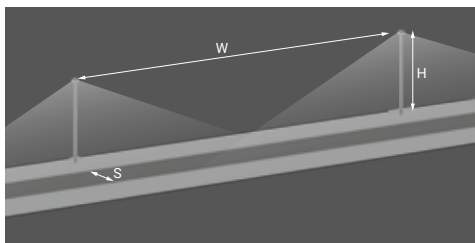
/... Symbol of selected optical system

LED luminaires

RING 1 LED



Lighting examples



Pavement

RING 1 LED 36 W, SP optics

Parameters:

H – luminaire mounting height: 5 m

W – column spacing: 37,5 m

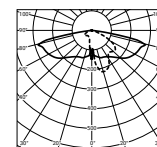
S – pavement width: 3 m

Lighting class P2

RING 1 LED 24 / 36 / 48

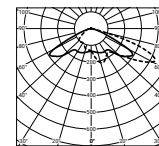
RING 1 LED 72

SP - RING 1 LED 24-48W



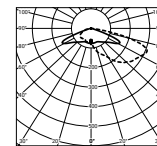
30m
15m

T4 - RING 1 LED 72W



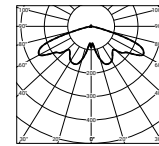
30m
15m

T4 - RING 1 LED 24-48W



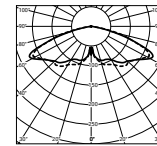
30m
15m

VS - RING 1 LED 72W



30m
15m

VS - RING 1 LED 24-48W



30m
15m

Application: office buildings' surroundings, parks, pedestrian routes, car parks,

Installation: depending on the type of head: A - pole top mounted or on extension arms with $\varnothing 60 \times 50$ mm, B - pole top mounted with $\varnothing 60 \times 180$ mm

Protection class: IP 66

Material: cap – formed aluminium sheet, anodised
diffuser – tempered glass

base – anodised aluminium alloy

Optical system: PMMA optics, interchangeable LED module

Expected useful lifetime: L90B10 - 100 000 h

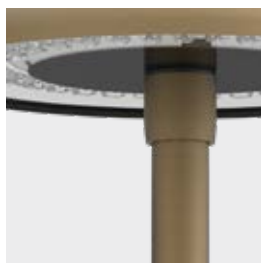
CRI: >70

Unit volume: 0,08 m³

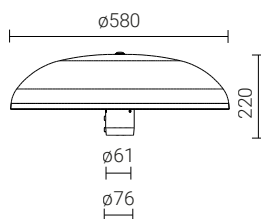
Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

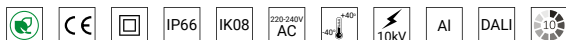
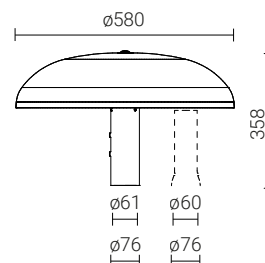
Luminaire RING 1 LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1- 10V).



Mounting head type 'A'



Mounting head type 'B'



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight with mounting head type 'A' / 'B'
212030/.../1/.../C...	RING 1 LED 24	24 W	28 W	500 mA	2 700 K	6,6 kg / 7,1 kg
212030/.../3/.../C...	RING 1 LED 24	24 W	28 W	500 mA	3 500 K	6,6 kg / 7,1 kg
212030/.../4/.../C...	RING 1 LED 24	24 W	28 W	500 mA	4 000 K	6,6 kg / 7,1 kg
212030/.../6/.../C...	RING 1 LED 24	24 W	28 W	500 mA	5 000 K	6,6 kg / 7,1 kg
212032/.../1/.../C...	RING 1 LED 36	36 W	40 W	750 mA	2 700 K	6,6 kg / 7,1 kg
212032/.../3/.../C...	RING 1 LED 36	36 W	40 W	750 mA	3 500 K	6,6 kg / 7,1 kg
212032/.../4/.../C...	RING 1 LED 36	36 W	40 W	750 mA	4 000 K	6,6 kg / 7,1 kg
212032/.../6/.../C...	RING 1 LED 36	36 W	40 W	750 mA	5 000 K	6,6 kg / 7,1 kg
212033/.../1/.../C...	RING 1 LED 48	48 W	55 W	1 000 mA	2 700 K	6,6 kg / 7,1 kg
212033/.../3/.../C...	RING 1 LED 48	48 W	55 W	1 000 mA	3 500 K	6,6 kg / 7,1 kg
212033/.../4/.../C...	RING 1 LED 48	48 W	55 W	1 000 mA	4 000 K	6,6 kg / 7,1 kg
212033/.../6/.../C...	RING 1 LED 48	48 W	55 W	1 000 mA	5 000 K	6,6 kg / 7,1 kg
212035/.../1/.../C...	RING 1 LED 72	72 W	79 W	750 mA	2 700 K	6,6 kg / 7,1 kg
212035/.../3/.../C...	RING 1 LED 72	72 W	79 W	750 mA	3 500 K	6,6 kg / 7,1 kg
212035/.../4/.../C...	RING 1 LED 72	72 W	79 W	750 mA	4 000 K	6,6 kg / 7,1 kg
212035/.../6/.../C...	RING 1 LED 72	72 W	79 W	750 mA	5 000 K	6,6 kg / 7,1 kg

/.../1 – A or B head type

/.../2 – Symbol of selected optical system

/C... – choice of anodising colour

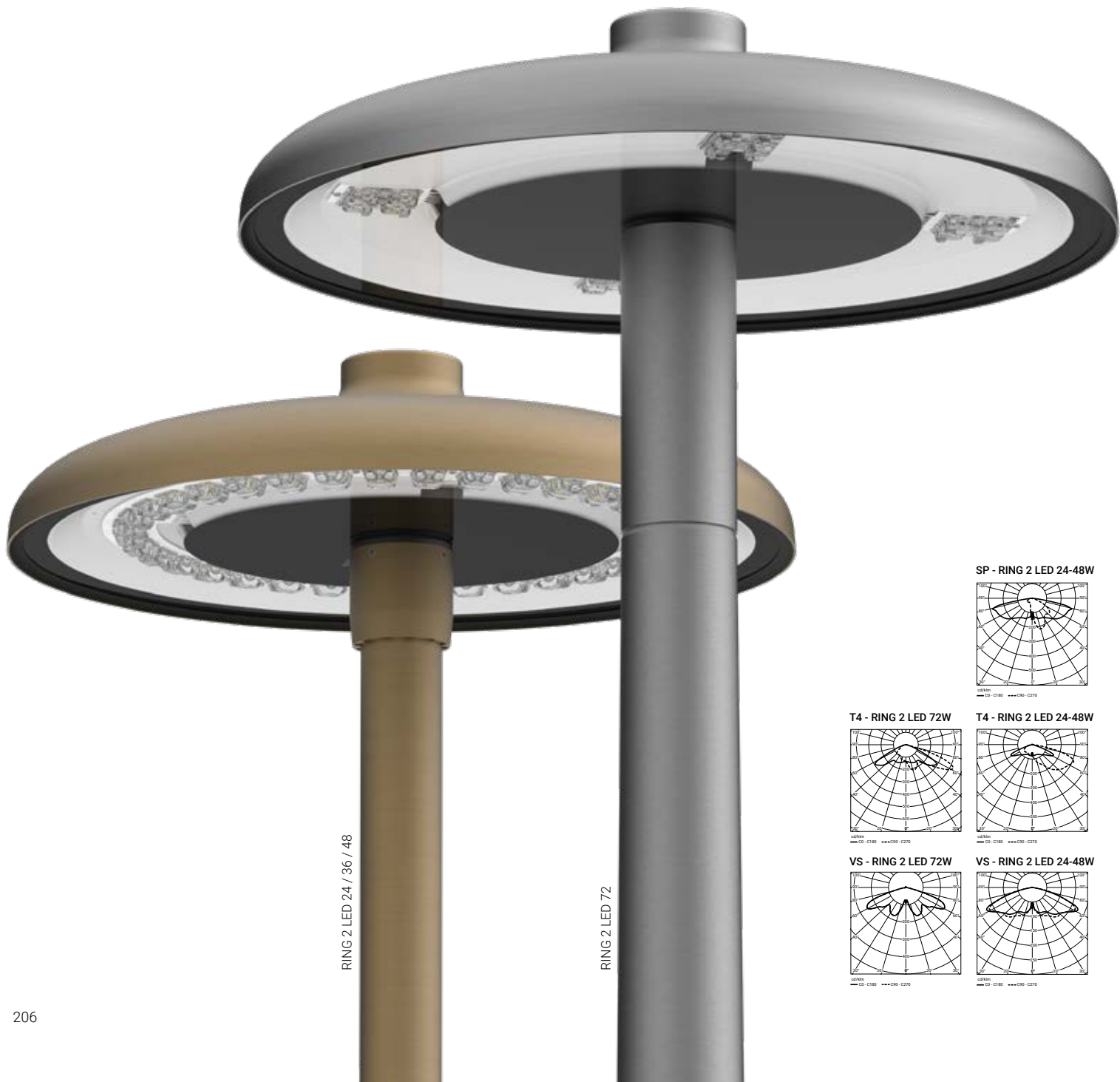


Technical parameters
RING 1 LED



LED luminaires

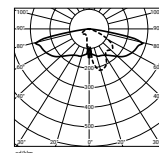
RING 2 LED



RING 2 LED 24 / 36 / 48

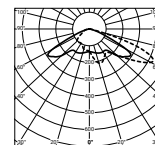
RING 2 LED 72

SP - RING 2 LED 24-48W



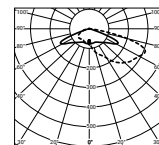
1000mm
● C1 C180 ● C20 C270

T4 - RING 2 LED 72W



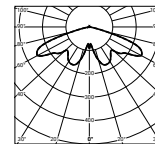
1000mm
● C1 C180 ● C20 C270

T4 - RING 2 LED 24-48W



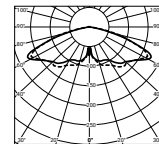
1000mm
● C1 C180 ● C20 C270

VS - RING 2 LED 72W



1000mm
● C1 C180 ● C20 C270

VS - RING 2 LED 24-48W



1000mm
● C1 C180 ● C20 C270

Application: office buildings' surroundings, parks, pedestrian routes, car parks,

Installation: depending on the type of head: A - pole top mounted or on extension arms with $\phi 60 \times 50$ mm,

B - pole top mounted with $\phi 60 \times 180$ mm

Protection class: IP 66

Material: cap – formed aluminium sheet, anodised

diffuser – tempered glass

base – anodised aluminium alloy

Optical system: PMMA optics interchangeable LED module

Colour: inox / graphite

Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

Unit volume: 0,08 m³

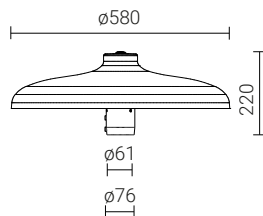
Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

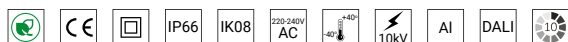
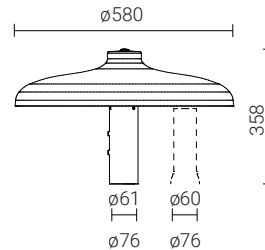
Luminaire RING 2 LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1- 10V).



Mounting head type 'A'



Mounting head type 'B'



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight with mounting head type 'A' / 'B'
212130/.../1/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	2 700 K	6,6 kg / 7,1 kg
212130/.../3/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	3 500 K	6,6 kg / 7,1 kg
212130/.../4/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	4 000 K	6,6 kg / 7,1 kg
212130/.../6/.../2/C...	RING 2 LED 24	24 W	28 W	500 mA	5 000 K	6,6 kg / 7,1 kg
212132/.../1/.../3/C...	RING 2 LED 36	36 W	40 W	750 mA	2 700 K	6,6 kg / 7,1 kg
212132/.../3/.../3/C...	RING 2 LED 36	36 W	40 W	750 mA	3 500 K	6,6 kg / 7,1 kg
212132/.../4/.../3/C...	RING 2 LED 36	36 W	40 W	750 mA	4 000 K	6,6 kg / 7,1 kg
212132/.../6/.../3/C...	RING 2 LED 36	36 W	40 W	750 mA	5 000 K	6,6 kg / 7,1 kg
212133/.../1/.../4/C...	RING 2 LED 48	48 W	55 W	1 000 mA	2 700 K	6,6 kg / 7,1 kg
212133/.../3/.../4/C...	RING 2 LED 48	48 W	55 W	1 000 mA	3 500 K	6,6 kg / 7,1 kg
212133/.../4/.../4/C...	RING 2 LED 48	48 W	55 W	1 000 mA	4 000 K	6,6 kg / 7,1 kg
212133/.../6/.../4/C...	RING 2 LED 48	48 W	55 W	1 000 mA	5 000 K	6,6 kg / 7,1 kg
212135/.../1/.../7/C...	RING 2 LED 72	72 W	79 W	750 mA	2 700 K	6,6 kg / 7,1 kg
212135/.../3/.../7/C...	RING 2 LED 72	72 W	79 W	750 mA	3 500 K	6,6 kg / 7,1 kg
212135/.../4/.../7/C...	RING 2 LED 72	72 W	79 W	750 mA	4 000 K	6,6 kg / 7,1 kg
212135/.../6/.../7/C...	RING 2 LED 72	72 W	79 W	750 mA	5 000 K	6,6 kg / 7,1 kg

/.../1 – A or B head type

/.../2 – Symbol of selected optical system

/C... – choice of anodising colour

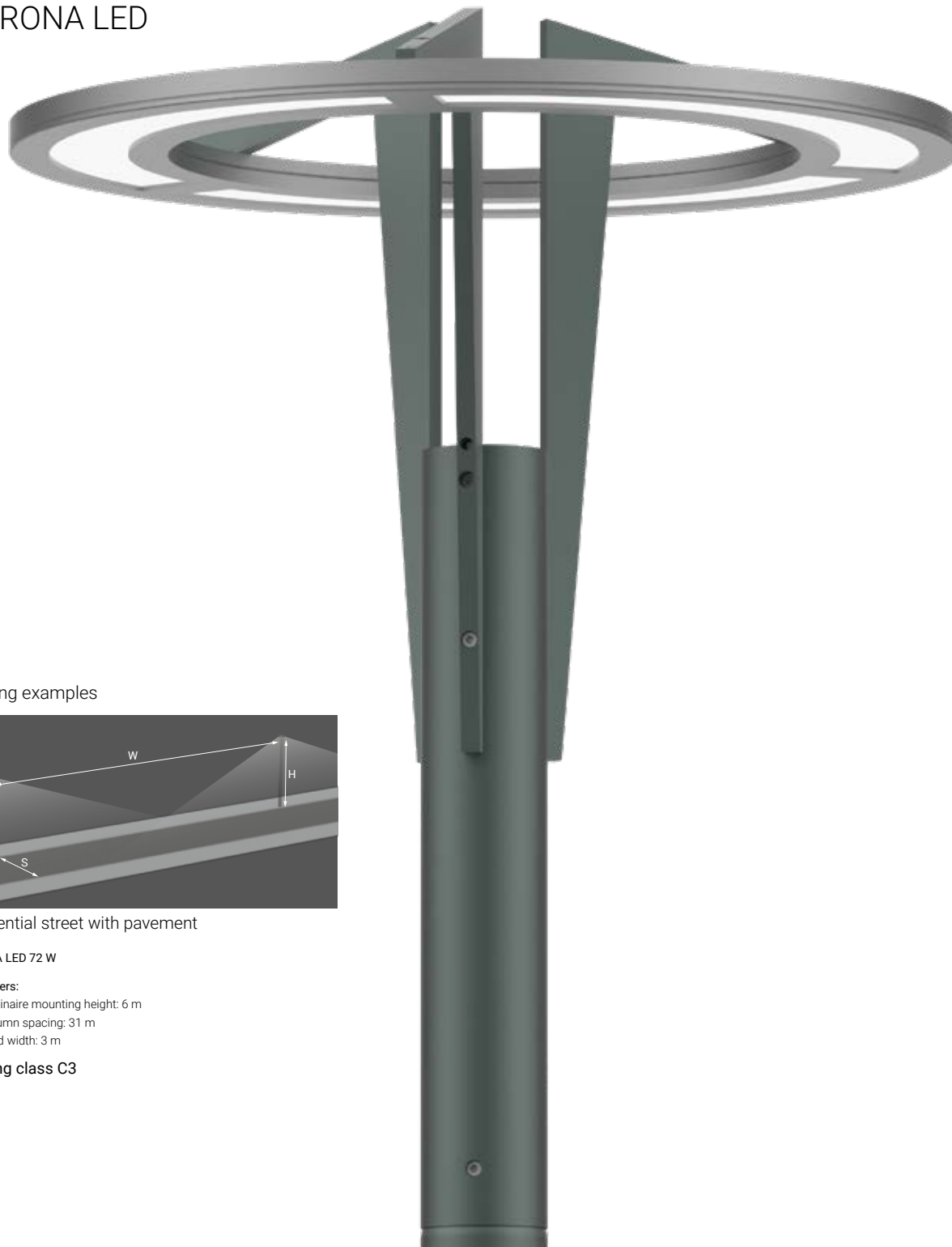


Technical parameters
RING 2 LED

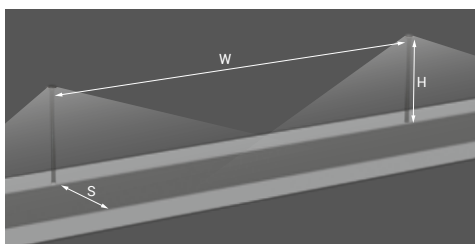


LED luminaires

CORONA LED



Lighting examples



Residential street with pavement

CORONA LED 72 W

Parameters:

H – luminaire mounting height: 6 m

W – column spacing: 31 m

S – road width: 3 m

Lighting class C3

Application: office buildings' surroundings, parks, car parks,

Installation: directly on the column with $\varnothing 60 \times 80$ mm ending

Protection class: IP 66

Material: body anodised aluminium alloy
frosted diffuser (PMMA),

Colour: inox / graphite

Number of LEDs: 216

Expected useful lifetime: L90B10 - 100 000 h

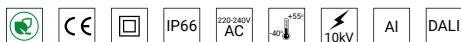
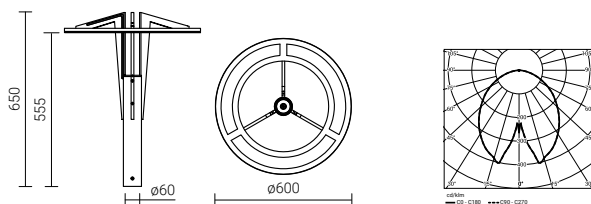
CRI: >70

Unit volume: 0,25 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire CORONA LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
214735/1	CORONA LED 72	72 W	80 W	1 000 mA	2 700 K	11,2 kg
214735/3	CORONA LED 72	72 W	80 W	1 000 mA	3 500 K	11,2 kg
214735/4	CORONA LED 72	72 W	80 W	1 000 mA	4 000 K	11,2 kg
214735/6	CORONA LED 72	72 W	80 W	1 000 mA	5 000 K	11,2 kg



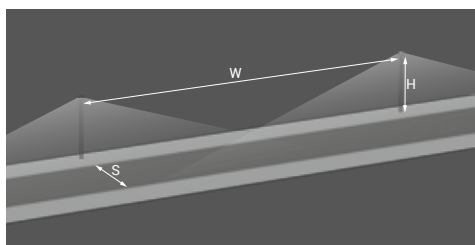
Technical parameters
CORONA LED

LED luminaires

MIRA LED



Lighting examples



Pedestrian walkway 5 m

MIRA LED 36 W

Parameters:

H – luminaire mounting height: 5,5 m

W – column spacing: 31 m

S – road width: 5 m

Lighting class P3

Application: residential streets, office buildings' surroundings, parks, pedestrian routes, cycle paths

Installation: directly on the column with $\varnothing 60 \times 80$ mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / graphite

Optical system: PMMA optics

Number of LEDs: 12

Expected useful lifetime: L90B10 - 100 000 h

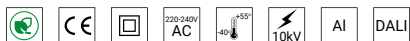
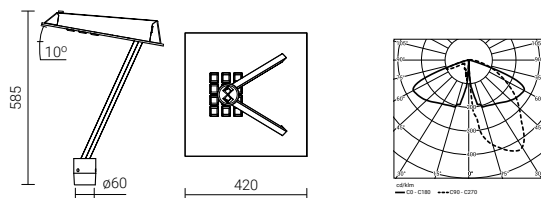
CRI: >70

Unit volume: 0,155 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire MIRA LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
214530/1	MIRA LED 24	24 W	28 W	700 mA	2 700 K	6,5 kg
214530/3	MIRA LED 24	24 W	28 W	700 mA	3 500 K	6,5 kg
214530/4	MIRA LED 24	24 W	28 W	700 mA	4 000 K	6,5 kg
214530/6	MIRA LED 24	24 W	28 W	700 mA	5 000 K	6,5 kg
214532/1	MIRA LED 36	36 W	40 W	1 000 mA	2 700 K	6,5 kg
214532/3	MIRA LED 36	36 W	40 W	1 000 mA	3 500 K	6,5 kg
214532/4	MIRA LED 36	36 W	40 W	1 000 mA	4 000 K	6,5 kg
214532/6	MIRA LED 36	36 W	40 W	1 000 mA	5 000 K	6,5 kg



Technical parameters
MIRA LED

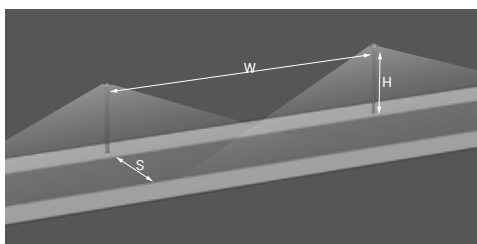


LED luminaires

MIZAR LED



Lighting examples



Bicycle and pedestrian path

MIZAR LED 36 W

Parameters:

H – luminaire mounting height: 5 m

W – column spacing: 27 m

S – road width: 4 m

Lighting class P3

Application: office buildings' surroundings, parks, pedestrian routes, car parks,

Installation: directly on the column with $\varnothing 60 \times 80$ mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / graphite

Optical system: PMMA optics

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

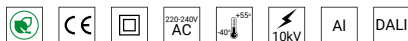
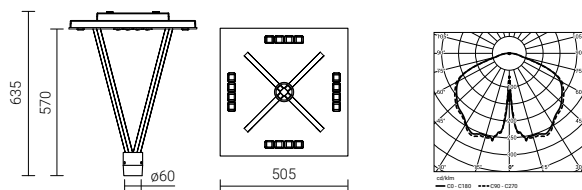
CRI: >70

Unit volume: 0,172 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire MIZAR LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
214432/1	MIZAR LED 36	36 W	41 W	750 mA	2 700 K	9,6 kg
214432/3	MIZAR LED 36	36 W	41 W	750 mA	3 500 K	9,6 kg
214432/4	MIZAR LED 36	36 W	41 W	750 mA	4 000 K	9,6 kg
214432/6	MIZAR LED 36	36 W	41 W	750 mA	5 000 K	9,6 kg
214433/1	MIZAR LED 48	48 W	55 W	1 000 mA	2 700 K	9,6 kg
214433/3	MIZAR LED 48	48 W	55 W	1 000 mA	3 500 K	9,6 kg
214433/4	MIZAR LED 48	48 W	55 W	1 000 mA	4 000 K	9,6 kg
214433/6	MIZAR LED 48	48 W	55 W	1 000 mA	5 000 K	9,6 kg

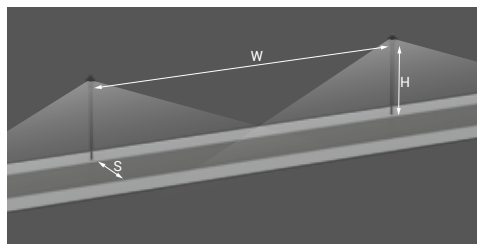


Technical parameters
MIZAR LED

LED luminaires
OS-1 LED



Lighting examples



Park avenue

OS-1 LED

Parameters:

H – luminaire mounting height: 4,5 m

W – column spacing: 28 m

S – road width: 4 m

Lighting class P3

Application: parks, pedestrian routes

Installation: on columns, extension arms, aluminium and steel wall brackets, arm systems with spigot ending $\varnothing 60 \times 60$ mm deep and on plastic poles type S and SP with spigot ending type „B”

Protection class: IP 66 for the optical part and IP 54 for the power supply system

Material: body – UV resistant polypropylene with glass fibre

Colour: black / inox LED panel

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

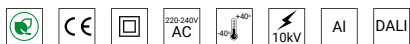
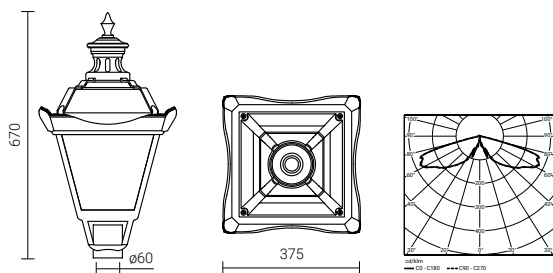
CRI: >70

Unit volume: 0,1 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire OS-1 LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
211250/1	OS-1 LED	38 W	42 W	800 mA	2 700 K	5,2 kg
211250/3	OS-1 LED	38 W	42 W	800 mA	3 500 K	5,2 kg
211250/4	OS-1 LED	38 W	42 W	800 mA	4 000 K	5,2 kg
211250/6	OS-1 LED	38 W	42 W	800 mA	5 000 K	5,2 kg



Technical parameters
OS-1 LED

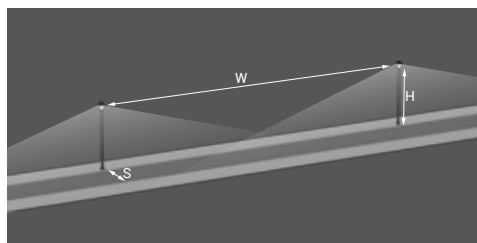


LED luminaires

OS-11 LED



Lighting examples



Pavement

OS-11 LED, frosted diffuser, T2 optics

Parameters:

H – luminaire mounting height: 4,5 m

W – column spacing: 35 m

S – pavement width: 4 m

Lighting class P3

Application: parks, pedestrian routes

Installation: on columns, extension arms, aluminium and steel wall brackets, arm systems with spigot ending 60 x 60 mm deep and on plastic poles type S and SP with spigot ending type „B”

Protection class: IP 66 for the optical part and IP 54 for the power supply system

Material: body – UV resistant polypropylene with glass fibre diffuser – frosted or transparent (PMMA)

Optical system: PMMA optics, interchangeable LED module

Colour: black

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

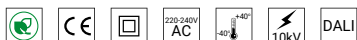
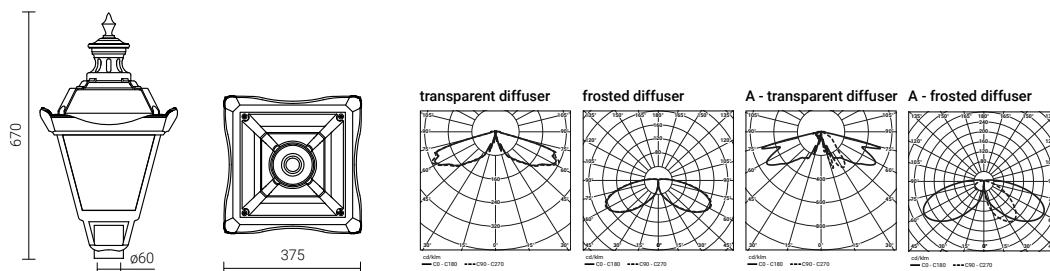
CRI: >70

Unit volume: 0,1 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0,95

Luminaire OS-11 LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	Diffuser	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2110050/1	OS-11 LED	frosted	38 W	42 W	800 mA	2 700 K	4,6 kg
2110050/3	OS-11 LED	frosted	38 W	42 W	800 mA	3 500 K	4,6 kg
2110050/4	OS-11 LED	frosted	38 W	42 W	800 mA	4 000 K	4,6 kg
2110050/6	OS-11 LED	frosted	38 W	42 W	800 mA	5 000 K	4,6 kg
2112050/1	OS-11 LED	transparent	38 W	42 W	800 mA	2 700 K	4,8 kg
2112050/3	OS-11 LED	transparent	38 W	42 W	800 mA	3 500 K	4,8 kg
2112050/4	OS-11 LED	transparent	38 W	42 W	800 mA	4 000 K	4,8 kg
2112050/6	OS-11 LED	transparent	38 W	42 W	800 mA	5 000 K	4,8 kg
2110050/1/A	OS-11 LED	frosted	38 W	42 W	800 mA	2 700 K	4,6 kg
2110050/3/A	OS-11 LED	frosted	38 W	42 W	800 mA	3 500 K	4,6 kg
2110050/4/A	OS-11 LED	frosted	38 W	42 W	800 mA	4 000 K	4,6 kg
2110050/6/A	OS-11 LED	frosted	38 W	42 W	800 mA	5 000 K	4,6 kg
2112050/1/A	OS-11 LED	transparent	38 W	42 W	800 mA	2 700 K	4,8 kg
2112050/3/A	OS-11 LED	transparent	38 W	42 W	800 mA	3 500 K	4,8 kg
2112050/4/A	OS-11 LED	transparent	38 W	42 W	800 mA	4 000 K	4,8 kg
2112050/6/A	OS-11 LED	transparent	38 W	42 W	800 mA	5 000 K	4,8 kg



Technical parameters
OS-11 LED

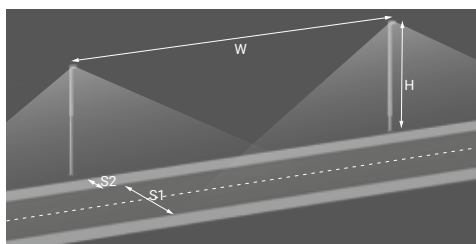


LED luminaires

CUDDLE MINI LED



Lighting examples



Single carriageway with two lanes + pavement

CUDDLE MINI LED 48 W, LN optics

Parameters:

H – luminaire mounting height: 8 m

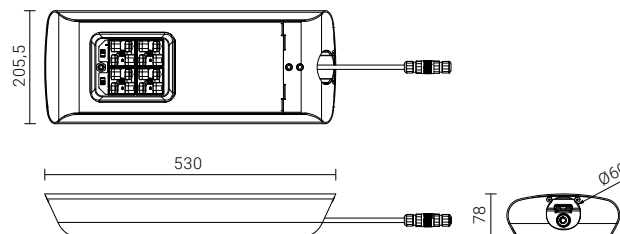
W – column spacing: 42 m

S1 – road width: 7 m

S2 – pavement width: 2 m

Lighting class

M5 - Carriageway | P4 - Pavement



Application: motorways and expressways, urban roads, (internal) residential roads, pedestrian routes, car parks,
Installation: directly on extension arm with ø60x100 mm ending

Protection class: IP 66

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module, tempered glass diffuser

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

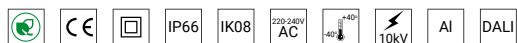
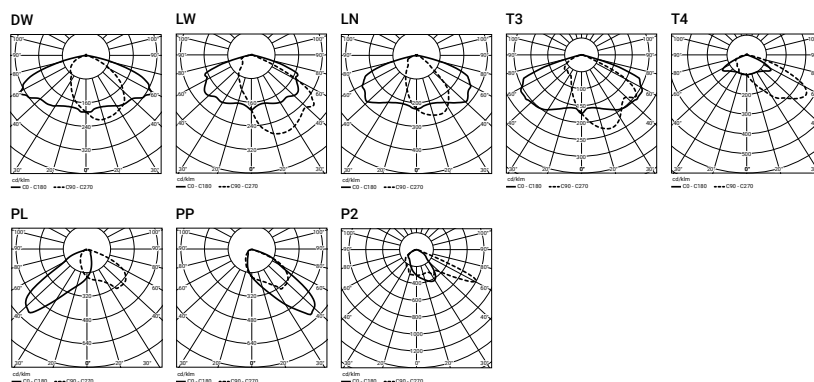
CRI: >70

Unit volume: 0,01 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥0.95

Luminaire CUDDLE MINI LED optionally has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight Luminaires netto
222730/1/...	CUDDLE MINI LED 24	24 W	26 W	500 mA	2 700 K	3,7kg
222730/3/...	CUDDLE MINI LED 24	24 W	26 W	500 mA	3 500 K	3,7kg
222730/4/...	CUDDLE MINI LED 24	24 W	26 W	500 mA	4 000 K	3,7kg
222730/6/...	CUDDLE MINI LED 24	24 W	26 W	500 mA	5 000 K	3,7kg
222732/1/...	CUDDLE MINI LED 36	36 W	39 W	750 mA	2 700 K	3,7kg
222732/3/...	CUDDLE MINI LED 36	36 W	39 W	750 mA	3 500 K	3,7kg
222732/4/...	CUDDLE MINI LED 36	36 W	39 W	750 mA	4 000 K	3,7kg
222732/6/...	CUDDLE MINI LED 36	36 W	39 W	750 mA	5 000 K	3,7kg
222733/1/...	CUDDLE MINI LED 48	48 W	54 W	1 000 mA	2 700 K	3,7kg
222733/3/...	CUDDLE MINI LED 48	48 W	54 W	1 000 mA	3 500 K	3,7kg
222733/4/...	CUDDLE MINI LED 48	48 W	54 W	1 000 mA	4 000 K	3,7kg
222733/6/...	CUDDLE MINI LED 48	48 W	54 W	1 000 mA	5 000 K	3,7kg

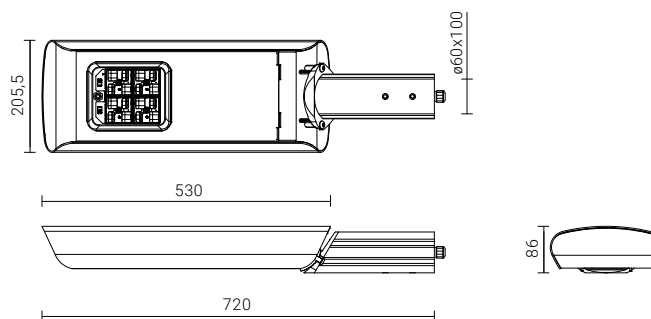
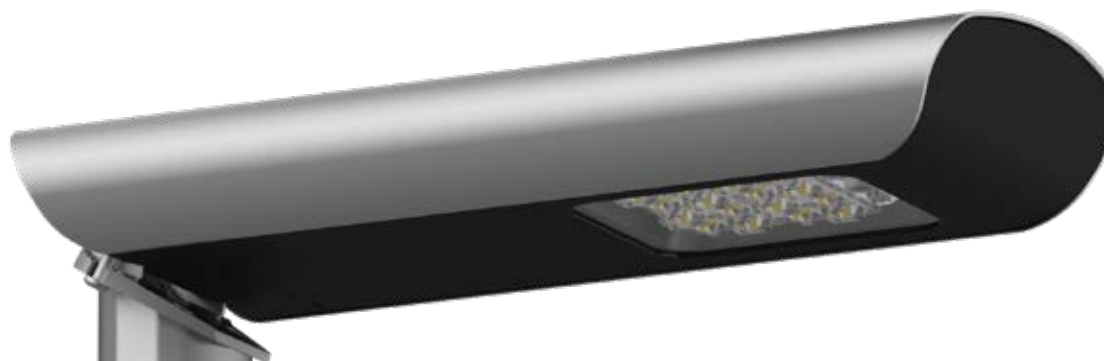
/... - Symbol of selected optical system



Technical parameters
CUDDLE MINI LED

LED luminaires

CUDDLE MINI LED REG



Application: motorways and expressways, urban roads, (internal) residential roads, pedestrian routes, car parks,

Installation: directly on column with $\varnothing 60 \times 180$ mm ending or on extension arm with $\varnothing 60 \times 100$ mm ending

Protection class: IP 66

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module, tempered glass diffuser

Number of LEDs: 16

Expected useful lifetime: L90B10 - 100 000 h

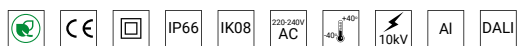
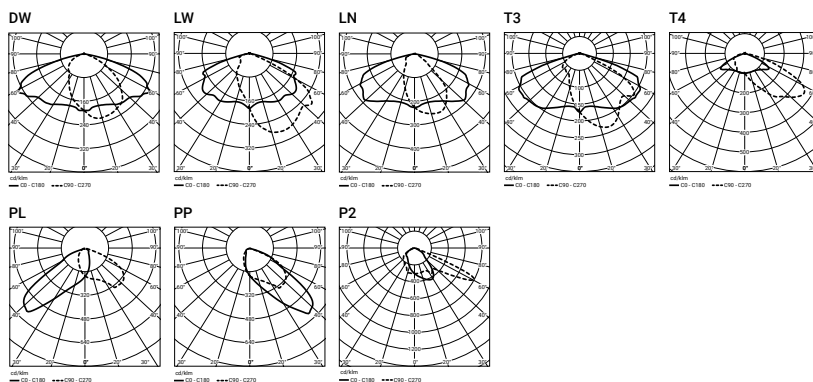
CRI: >70

Unit volume: 0,013 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire CUDDLE MINI LED REG optionally has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10 V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight Luminaires netto
222830/1/...	CUDDLE MINI LED REG 24	24 W	26 W	500 mA	2 700 K	5,0kg
222830/3/...	CUDDLE MINI LED REG 24	24 W	26 W	500 mA	3 500 K	5,0kg
222830/4/...	CUDDLE MINI LED REG 24	24 W	26 W	500 mA	4 000 K	5,0kg
222830/6/...	CUDDLE MINI LED REG 24	24 W	26 W	500 mA	5 000 K	5,0kg
222832/1/...	CUDDLE MINI LED REG 36	36 W	39 W	750 mA	2 700 K	5,0kg
222832/3/...	CUDDLE MINI LED REG 36	36 W	39 W	750 mA	3 500 K	5,0kg
222832/4/...	CUDDLE MINI LED REG 36	36 W	39 W	750 mA	4 000 K	5,0kg
222832/6/...	CUDDLE MINI LED REG 36	36 W	39 W	750 mA	5 000 K	5,0kg
222833/1/...	CUDDLE MINI LED REG 48	48 W	54 W	1 000 mA	2 700 K	5,0kg
222833/3/...	CUDDLE MINI LED REG 48	48 W	54 W	1 000 mA	3 500 K	5,0kg
222833/4/...	CUDDLE MINI LED REG 48	48 W	54 W	1 000 mA	4 000 K	5,0kg
222833/6/...	CUDDLE MINI LED REG 48	48 W	54 W	1 000 mA	5 000 K	5,0kg

/... - Symbol of selected optical system



Technical parameters
CUDDLE MINI LED

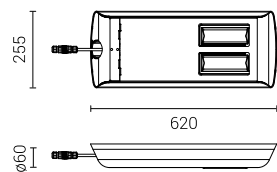


LED luminaires

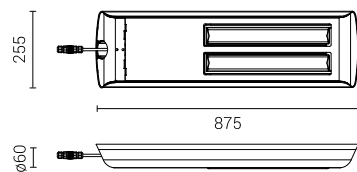
CUDDLE II LED



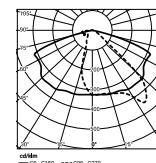
CUDDLE II LED 48W, 60W, 72W



CUDDLE II LED 96W, 120W, 144W, 192W

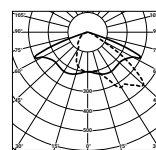


ME



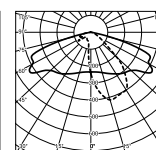
ø60mm
— C1-C180 ●●● C90-C270

LW



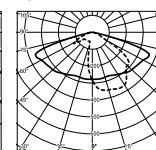
ø60mm
— C1-C180 ●●● C90-C270

T2



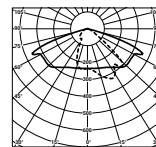
ø60mm
— C1-C180 ●●● C90-C270

T3



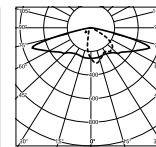
ø60mm
— C1-C180 ●●● C90-C270

LM



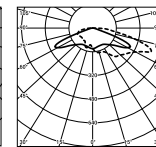
ø60mm
— C1-C180 ●●● C90-C270

DW



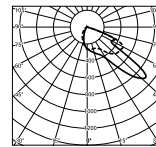
ø60mm
— C1-C180 ●●● C90-C270

T4



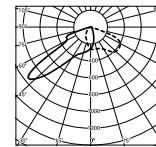
ø60mm
— C1-C180 ●●● C90-C270

PP



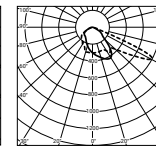
ø60mm
— C1-C180 ●●● C90-C270

PL



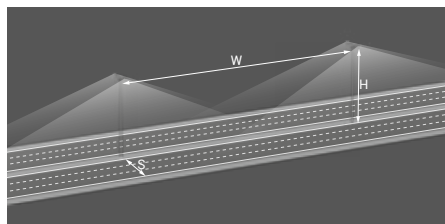
ø60mm
— C1-C180 ●●● C90-C270

P2



ø60mm
— C1-C180 ●●● C90-C270

Lighting examples



Six-lane road
with median strip

CUDDLE II LED 96 W, T3 optics

Parameters:

H – luminaire mounting height: 12 m

W – column spacing: 35 m

S – road width: 7 m

Lighting class M2

Application: highways and expressways, urban roads, (internal) residential streets, pedestrian routes, car parks,

Installation: on extension arms with ø60x100 mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module, tempered glass diffuser

Number of LEDs: 24 (for 48 W, 60 W, 72 W); 64 (for 96 W, 120 W, 144 W, 192 W)

Operating temperature range: from -40°C to +40°C

Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

Unit volume: 0,024 m³ (for 48 W, 60 W, 72 W), 0,033 m³ (for 96 W, 120 W, 144 W, 192 W)

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0,95

Luminaire CUDDLE II LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10V).

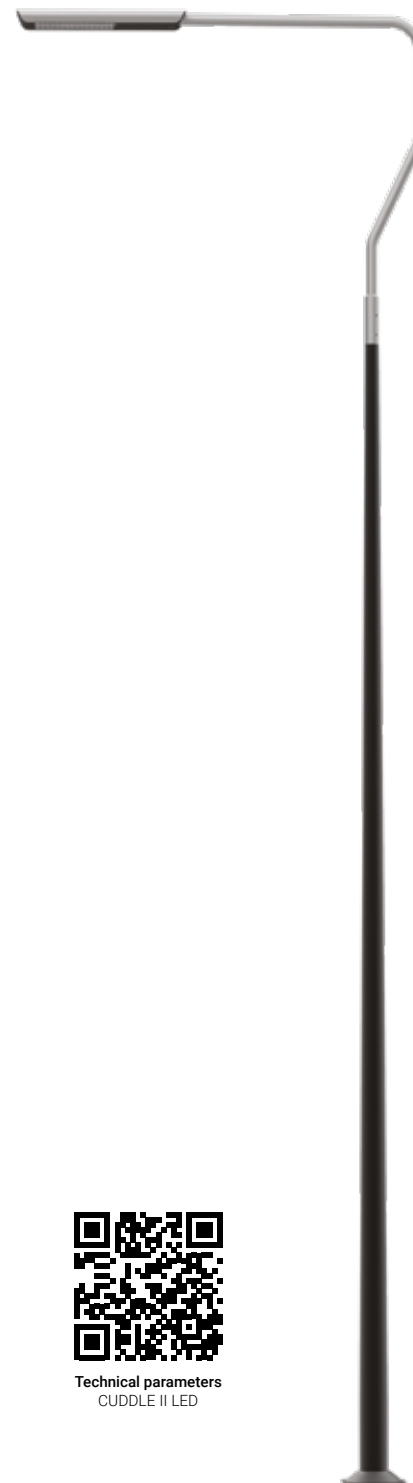


Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2223033/1/...	CUDDLE II LED 48	48 W	55 W	700 mA	2 700 K	5,2 kg
2223033/3/...	CUDDLE II LED 48	48 W	55 W	700 mA	3 500 K	5,2 kg
2223033/4/...	CUDDLE II LED 48	48 W	55 W	700 mA	4 000 K	5,2 kg
2223033/6/...	CUDDLE II LED 48	48 W	55 W	700 mA	5 000 K	5,2 kg
2223034/1/...	CUDDLE II LED 60	60 W	67 W	830 mA	2 700 K	5,2 kg
2223034/3/...	CUDDLE II LED 60	60 W	67 W	830 mA	3 500 K	5,2 kg
2223034/4/...	CUDDLE II LED 60	60 W	67 W	830 mA	4 000 K	5,2 kg
2223034/6/...	CUDDLE II LED 60	60 W	67 W	830 mA	5 000 K	5,2 kg
2223035/1/...	CUDDLE II LED 72	72 W	79 W	1 000 mA	2 700 K	5,2 kg
2223035/3/...	CUDDLE II LED 72	72 W	79 W	1 000 mA	3 500 K	5,2 kg
2223035/4/...	CUDDLE II LED 72	72 W	79 W	1 000 mA	4 000 K	5,2 kg
2223035/6/...	CUDDLE II LED 72	72 W	79 W	1 000 mA	5 000 K	5,2 kg
2223037/1/...	CUDDLE II LED 96	96 W	105 W	500 mA	2 700 K	8,3 kg
2223037/3/...	CUDDLE II LED 96	96 W	105 W	500 mA	3 500 K	8,3 kg
2223037/4/...	CUDDLE II LED 96	96 W	105 W	500 mA	4 000 K	8,3 kg
2223037/6/...	CUDDLE II LED 96	96 W	105 W	500 mA	5 000 K	8,3 kg
2223039/1/...	CUDDLE II LED 120	120 W	129 W	625 mA	2 700 K	8,3 kg
2223039/3/...	CUDDLE II LED 120	120 W	129 W	625 mA	3 500 K	8,3 kg
2223039/4/...	CUDDLE II LED 120	120 W	129 W	625 mA	4 000 K	8,3 kg
2223039/6/...	CUDDLE II LED 120	120 W	129 W	625 mA	5 000 K	8,3 kg
2223041/1/...	CUDDLE II LED 144	144 W	154 W	750 mA	2 700 K	8,3 kg
2223041/3/...	CUDDLE II LED 144	144 W	154 W	750 mA	3 500 K	8,3 kg
2223041/4/...	CUDDLE II LED 144	144 W	154 W	750 mA	4 000 K	8,3 kg
2223041/6/...	CUDDLE II LED 144	144 W	154 W	750 mA	5 000 K	8,3 kg
2223046/1/...	CUDDLE II LED 192	192 W	205 W	1 000 mA	2 700 K	8,5 kg
2223046/3/...	CUDDLE II LED 192	192 W	205 W	1 000 mA	3 500 K	8,5 kg
2223046/4/...	CUDDLE II LED 192	192 W	205 W	1 000 mA	4 000 K	8,5 kg
2223046/6/...	CUDDLE II LED 192	192 W	205 W	1 000 mA	5 000 K	8,5 kg

/... Symbol of selected optical system



Technical parameters
CUDDLE II LED

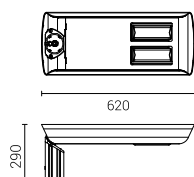
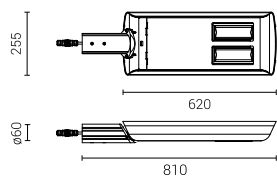


LED luminaires

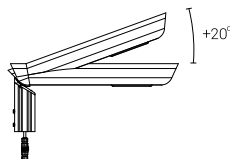
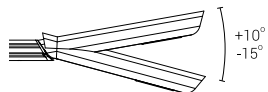
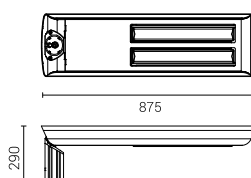
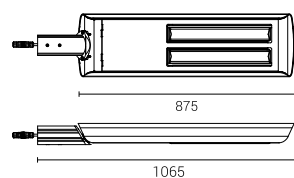
CUDDLE II LED REG



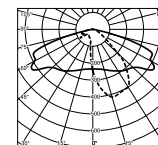
CUDDLE II LED REG 48W, 60W, 72W



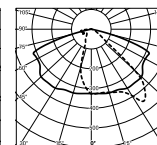
CUDDLE II LED REG 96W, 120W, 144W, 192W



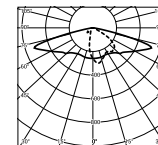
T2



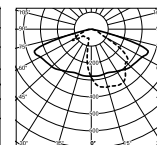
ME



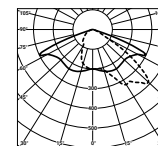
DW



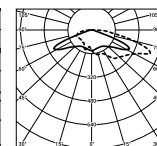
T3



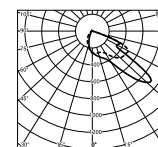
LW



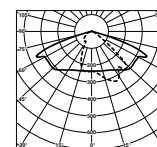
T4



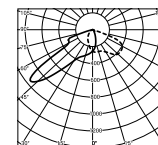
PP



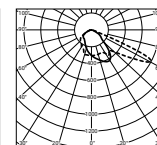
LM



PL



P2



Application: highways and expressways, urban roads, residential streets, pedestrian routes, car parks,

Installation: on column or on extension arm with $\varnothing 60 \times 100$ mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module, diffuser z PC-UV

Number of LEDs: 24 (for 48 W, 60 W, 72 W); 64 (for 96 W, 120 W, 144 W, 192 W)

Operating temperature range: from -40°C to $+40^{\circ}\text{C}$

Expected useful lifetime: L90B10 - 100 000 h

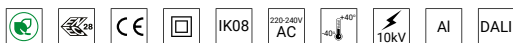
CRI: >70

Unit volume: 0,024 m³ (for 48 W, 60 W, 72 W), 0,033 m³ (for 96 W, 120 W, 144 W, 192 W)

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire CUDDLE II LED REG has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2223133/1/...	CUDDLE II LED REG 48	48 W	55 W	700 mA	2 700 K	6 kg
2223133/3/...	CUDDLE II LED REG 48	48 W	55 W	700 mA	3 500 K	6 kg
2223133/4/...	CUDDLE II LED REG 48	48 W	55 W	700 mA	4 000 K	6 kg
2223133/6/...	CUDDLE II LED REG 48	48 W	55 W	700 mA	5 000 K	6 kg
2223134/1/...	CUDDLE II LED REG 60	60 W	67 W	830 mA	2 700 K	6 kg
2223134/3/...	CUDDLE II LED REG 60	60 W	67 W	830 mA	3 500 K	6 kg
2223134/4/...	CUDDLE II LED REG 60	60 W	67 W	830 mA	4 000 K	6 kg
2223134/6/...	CUDDLE II LED REG 60	60 W	67 W	830 mA	5 000 K	6 kg
2223135/1/...	CUDDLE II LED REG 72	72 W	79 W	1 000 mA	2 700 K	6 kg
2223135/3/...	CUDDLE II LED REG 72	72 W	79 W	1 000 mA	3 500 K	6 kg
2223135/4/...	CUDDLE II LED REG 72	72 W	79 W	1 000 mA	4 000 K	6 kg
2223135/6/...	CUDDLE II LED REG 72	72 W	79 W	1 000 mA	5 000 K	6 kg
2223137/1/...	CUDDLE II LED REG 96	96 W	105 W	500 mA	2 700 K	9,1 kg
2223137/3/...	CUDDLE II LED REG 96	96 W	105 W	500 mA	3 500 K	9,1 kg
2223137/4/...	CUDDLE II LED REG 96	96 W	105 W	500 mA	4 000 K	9,1 kg
2223137/6/...	CUDDLE II LED REG 96	96 W	105 W	500 mA	5 000 K	9,1 kg
2223139/1/...	CUDDLE II LED REG 120	120 W	129 W	625 mA	2 700 K	9,1 kg
2223139/3/...	CUDDLE II LED REG 120	120 W	129 W	625 mA	3 500 K	9,1 kg
2223139/4/...	CUDDLE II LED REG 120	120 W	129 W	625 mA	4 000 K	9,1 kg
2223139/6/...	CUDDLE II LED REG 120	120 W	129 W	625 mA	5 000 K	9,1 kg
2223141/1/...	CUDDLE II LED REG 144	144 W	154 W	750 mA	2 700 K	9,1 kg
2223141/3/...	CUDDLE II LED REG 144	144 W	154 W	750 mA	3 500 K	9,1 kg
2223141/4/...	CUDDLE II LED REG 144	144 W	154 W	750 mA	4 000 K	9,1 kg
2223141/6/...	CUDDLE II LED REG 144	144 W	154 W	750 mA	5 000 K	9,1 kg
2223146/1/...	CUDDLE II LED REG 192	192 W	205 W	1 000 mA	2 700 K	9,3 kg
2223146/3/...	CUDDLE II LED REG 192	192 W	205 W	1 000 mA	3 500 K	9,3 kg
2223146/4/...	CUDDLE II LED REG 192	192 W	205 W	1 000 mA	4 000 K	9,3 kg
2223146/6/...	CUDDLE II LED REG 192	192 W	205 W	1 000 mA	5 000 K	9,3 kg

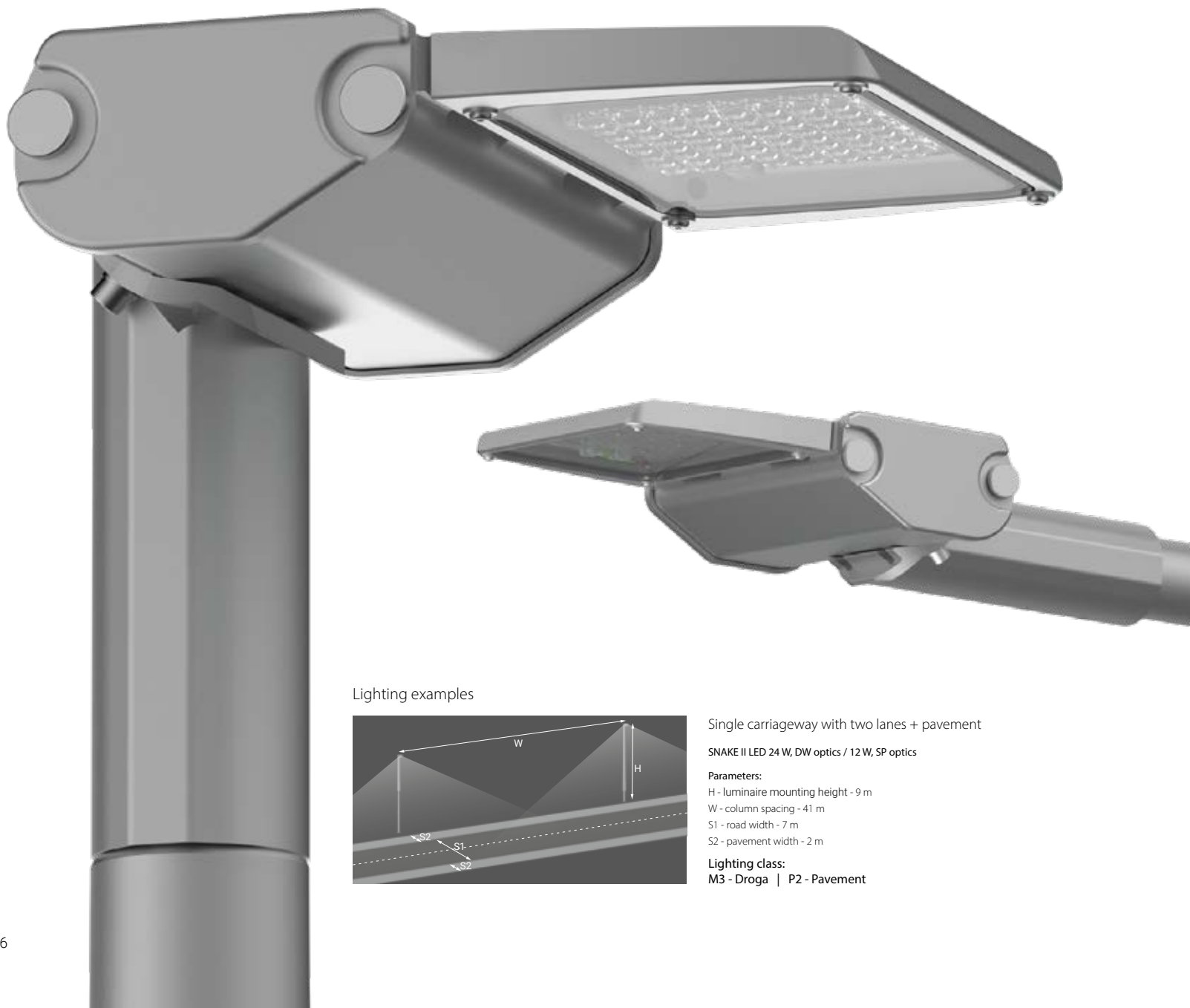
/... Symbol of selected optical system



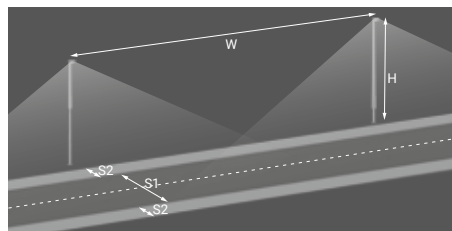
Technical parameters
CUDDLE II LED REG

LED luminaires

LOCO LED



Lighting examples



Single carriageway with two lanes + pavement

SNAKE II LED 24 W, DW optics / 12 W, SP optics

Parameters:

H - luminaire mounting height - 9 m

W - column spacing - 41 m

S1 - road width - 7 m

S2 - pavement width - 2 m

Lighting class:

M3 - Droga | P2 - Pavement

Application: motorways and expressways, urban roads, (internal) residential roads, pedestrian routes, car parks,

Installation: directly on the column or on extension arm with $\varnothing 42 - \varnothing 60 \times 100$ mm ending

Protection class: IP 66

Material: anodised aluminium alloy

diffuser – tempered glass

Colour: inox

Optical system: PMMA optics interchangeable LED module

Number of LEDs: 64 (for 48 W), 96 (for 72 W), 128 (for 96 W)

Expected useful lifetime: L90B10 - 100 000 h

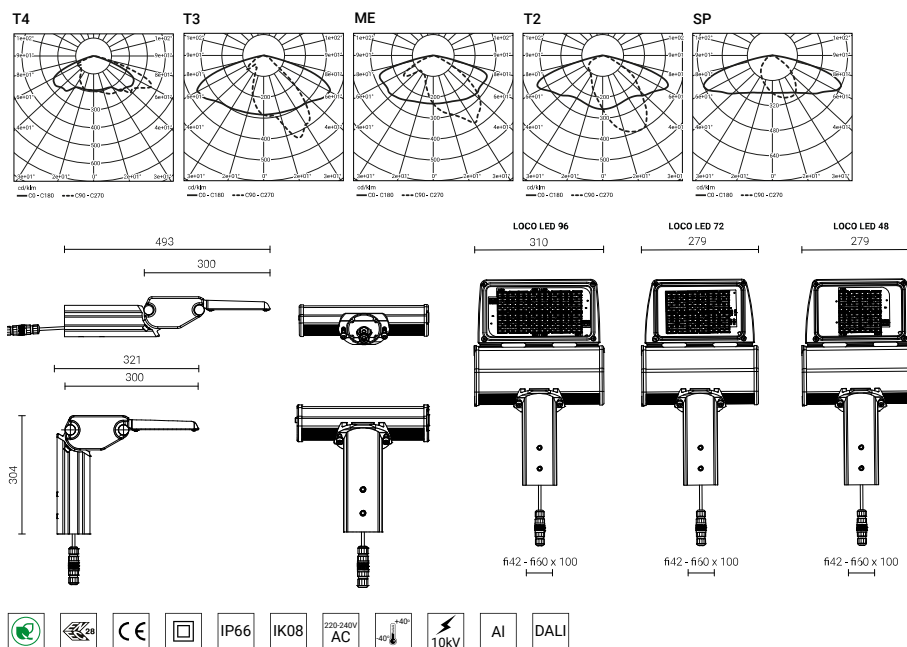
CRI: >70

Unit volume: 0,027 m³

Input voltage frequency: 50/60 Hz

Power factor: ≥ 0.95

Luminaire LOCO LED optionally has the possibility, to connect to an external control system via analogue 1-10 V signal.



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2226033/1/... ²	LOCO LED 48	48 W	55 W	500 mA	2 700 K	5.3 kg
2226033/3/... ²	LOCO LED 48	48 W	55 W	500 mA	3 500 K	5.3 kg
2226033/4/... ²	LOCO LED 48	48 W	55 W	500 mA	4 000 K	5.3 kg
2226035/1/... ²	LOCO LED 72	72 W	80 W	1 000 mA	2 700 K	5.3 kg
2226035/3/... ²	LOCO LED 72	72 W	80 W	1 000 mA	3 500 K	5.3 kg
2226035/4/... ²	LOCO LED 72	72 W	80 W	1 000 mA	4 000 K	5.3 kg
2226037/1/... ²	LOCO LED 96	96 W	104 W	500 mA	2 700 K	5.7 kg
2226037/3/... ²	LOCO LED 96	96 W	104 W	500 mA	3 500 K	5.7 kg
2226037/4/... ²	LOCO LED 96	96 W	104 W	500 mA	4 000 K	5.7 kg

/... Symbol of selected optical system



Technical parameters
LOCO LED

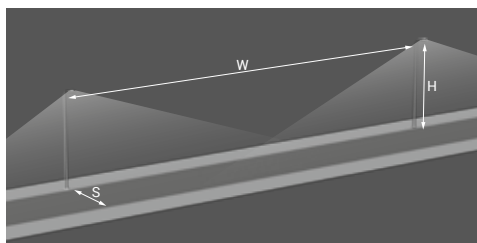


LED luminaires

COSMO LED



Lighting examples



Local road

COSMO LED 72 W, T3 optics

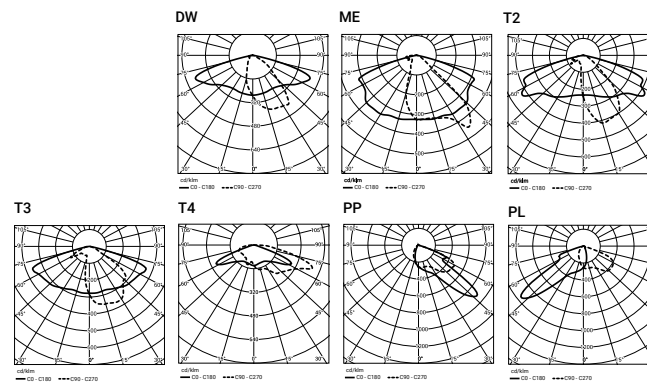
Parameters:

H – luminaire mounting height: 9,5 m

W – column spacing: 42 m

S – road width: 6 m

Lighting class M4



Application: urban roads, residential streets, pedestrian routes, car parks,

Installation: on extension arm with $\varnothing 60 \times 100$ mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 24

Expected useful lifetime: L90B10 - 100 000 h

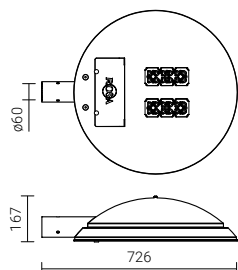
CRI: >70

Unit volume: 0,073 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire COSMO LED has the possibility to connect to an external control system via DALI interface (optionally via analogue signal 1-10V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2210033/1/...	COSMO LED 48	48 W	55 W	700 mA	2 700 K	10,2 kg
2210033/3/...	COSMO LED 48	48 W	55 W	700 mA	3 500 K	10,2 kg
2210033/4/...	COSMO LED 48	48 W	55 W	700 mA	4 000 K	10,2 kg
2210033/6/...	COSMO LED 48	48 W	55 W	700 mA	5 000 K	10,2 kg
2210034/1/...	COSMO LED 60	60 W	67 W	830 mA	2 700 K	10,2 kg
2210034/3/...	COSMO LED 60	60 W	67 W	830 mA	3 500 K	10,2 kg
2210034/4/...	COSMO LED 60	60 W	67 W	830 mA	4 000 K	10,2 kg
2210034/6/...	COSMO LED 60	60 W	67 W	830 mA	5 000 K	10,2 kg
2210035/1/...	COSMO LED 72	72 W	79 W	1 000 mA	2 700 K	10,2 kg
2210035/3/...	COSMO LED 72	72 W	79 W	1 000 mA	3 500 K	10,2 kg
2210035/4/...	COSMO LED 72	72 W	79 W	1 000 mA	4 000 K	10,2 kg
2210035/6/...	COSMO LED 72	72 W	79 W	1 000 mA	5 000 K	10,2 kg

/... Symbol of selected optical system



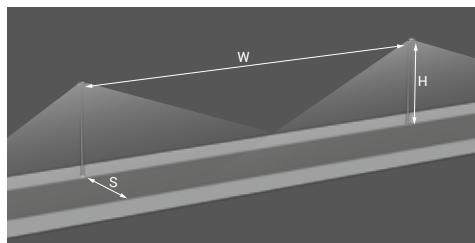
Technical parameters
COSMO LED

LED luminaires

COSMO LED ALFA



Lighting examples



Urban road

COSMO LED ALFA 72 W, DW optics

Parameters:

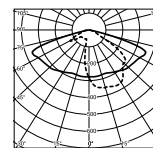
H – luminaire mounting height: 7 m

W – column spacing: 31 m

S – road width: 7 m

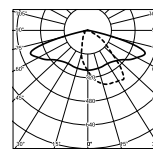
Lighting class M3

T3



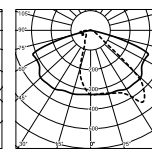
cd/m²
— C1-180 — C20- C270

DW



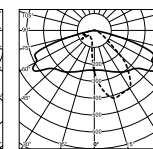
cd/m²
— C1-180 — C20- C270

ME



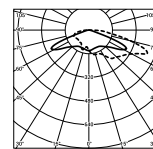
cd/m²
— C1-180 — C20- C270

T2



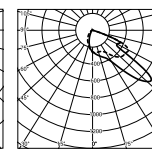
cd/m²
— C1-180 — C20- C270

T4



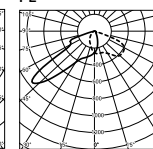
cd/m²
— C1-180 — C20- C270

PP



cd/m²
— C1-180 — C20- C270

PL



cd/m²
— C1-180 — C20- C270

Application: urban roads, residential streets, pedestrian routes, car parks,

Installation: directly on column with $\varnothing 60 \times 80$ mm ending

Protection class: IP 66 for the optical part and the power supply system

Material: anodised aluminium alloy

Colour: inox / black

Optical system: PMMA optics, interchangeable LED module

Number of LEDs: 24

Expected useful lifetime: L90B10 - 100 000 h

CRI: >70

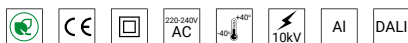
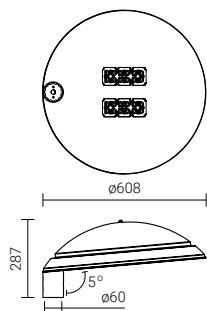
Unit volume: 0,073 m³

Input voltage frequency: 50/60 Hz

Power factor: $\geq 0,95$

Luminaire COSMO LED ALFA has the possibility to connect to an external control system via

DALI interface (optionally via analogue signal 1-10V).



Code	Symbol	LED power	Luminaire power consumption	LED forward current	Colour temperature	Net weight
2212033/1/...	COSMO LED ALFA 48	48 W	55 W	700 mA	2 700 K	11,5 kg
2212033/3/...	COSMO LED ALFA 48	48 W	55 W	700 mA	3 500 K	11,5 kg
2212033/4/...	COSMO LED ALFA 48	48 W	55 W	700 mA	4 000 K	11,5 kg
2212033/6/...	COSMO LED ALFA 48	48 W	55 W	700 mA	5 000 K	11,5 kg
2212034/1/...	COSMO LED ALFA 60	60 W	67 W	830 mA	2 700 K	11,5 kg
2212034/3/...	COSMO LED ALFA 60	60 W	67 W	830 mA	3 500 K	11,5 kg
2212034/4/...	COSMO LED ALFA 60	60 W	67 W	830 mA	4 000 K	11,5 kg
2212034/6/...	COSMO LED ALFA 60	60 W	67 W	830 mA	5 000 K	11,5 kg
2212035/1/...	COSMO LED ALFA 72	72 W	79 W	1 000 mA	2 700 K	11,5 kg
2212035/3/...	COSMO LED ALFA 72	72 W	79 W	1 000 mA	3 500 K	11,5 kg
2212035/4/...	COSMO LED ALFA 72	72 W	79 W	1 000 mA	4 000 K	11,5 kg
2212035/6/...	COSMO LED ALFA 72	72 W	79 W	1 000 mA	5 000 K	11,5 kg

/... Symbol of selected optical system



Technical parameters
COSMO LED ALFA





**Nordic
EcoEnergy**

**Svensk
Återförsäljare**
Nordic Eco Energy AB

Tel. 070-644 28 16 - info@nordicecoenergy.se - www.nordicecoenergy.se