



RAMA LED

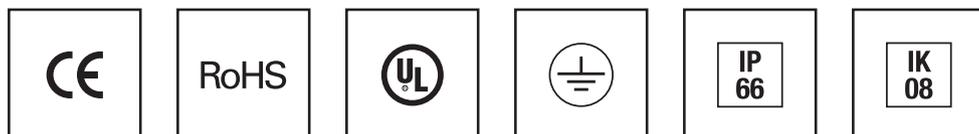
Product description

1

1.1 Description

Tree of light created with a threefold objective: targeting light downwards, energy efficiency and offering an optional number of luminaires at differing heights and positions. The high efficiency of the LED system affords excellent energy-efficiency, accurate control of emitted light, and the option to adjust the light according to the requirements of each project. Long useful life of over 60,000 hours.

1.2 Luminaire characteristics



1.3 Material and finishes

Extruded aluminium body with paint finish. Clamp and cap made of injection aluminium with paint finish.

Extruded aluminium interior heat sink with black anodised finish.

Tempered glass diffuser.

The tubular pole, available in differing diameters and heights, can be made as follows: Single-section poles, height 4.70 m and 6.00 m, Ø 127 mm, made of hot-dip galvanised steel with paint finish.

Two-section poles, height 8.20 m, lower section Ø 152 mm and upper section Ø 127 mm, both made of hot-dip galvanised steel with a paint finish for 5 luminaires at different heights.

Two-section poles joined by screws, height 8.20 m, lower section Ø 152 mm, made of hot-dip galvanised steel and painted, and upper section Ø 129 mm made of AISI 304 polished stainless steel.



Extruded aluminium

Painted

RAL 9006



Extruded aluminium

Painted

RAL 9007



Extruded aluminium

Painted

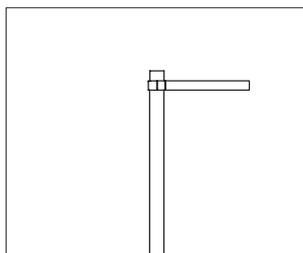
RAL 7024

The poles and clamps are manufactured with the same painted finish options as the luminaire.

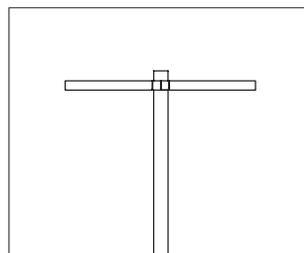
Design options

2

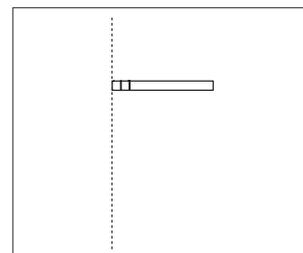
2.1 Connection



Single luminaire



Double luminaire

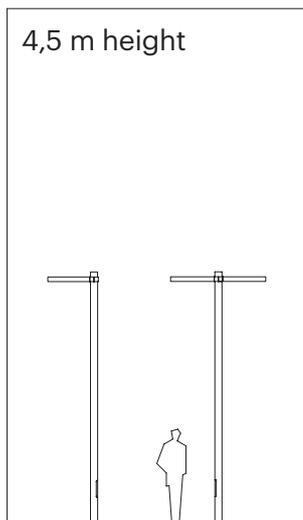


Wall mounted

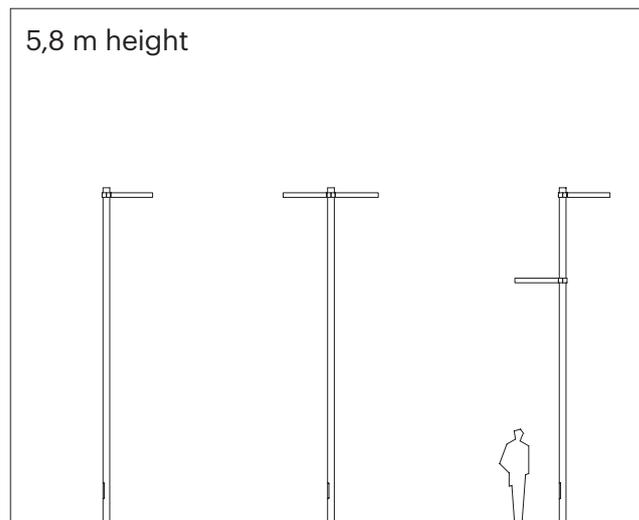
luminaire

2.2 Pole configurations

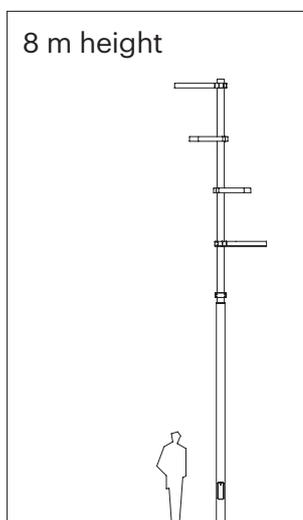
4,5 m height



5,8 m height



8 m height



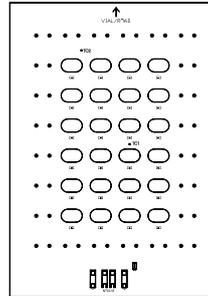
Light unit

3

3.1 Lamp

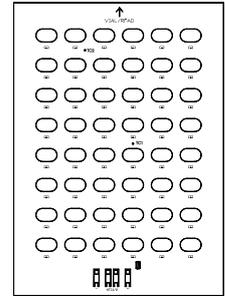
Optical unit with LED technology with light distribution refractor lenses. Adjustable electronic fittings.

A:
Optical unit



24 LED

Board



48 LED

Board

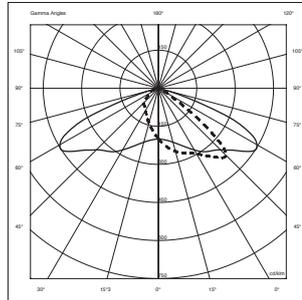
B:
LED configurations

Colour temperature (°K)	3000K-CRI80 (min.)		4000K-CRI70 (min.)	
no LED	24	48	24	48
Operating current (mA)	350	350	350	350
Nominal lamp power (W)	23	46	23	46
System power (W)	33	66	33	66
Luminaire luminous flux (lm/W)	2.313	4.438	2.804	5.248
Luminaire efficacy (lm/W)	3.270	6.071	3.900	7.191
	83	85	100	100
	82	82	98	97

Unidad lumínica

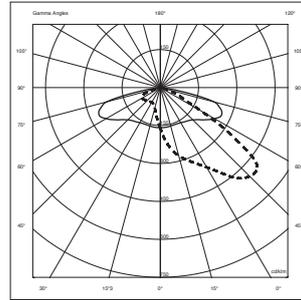
3

3.2 Light distribution



ST 2 Type II*

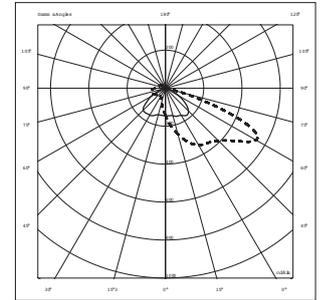
asymmetric



ST 3 Type III*

asymmetric

NEW DISTRIBUTION



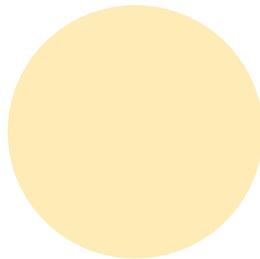
ST 4 Type IV*

asymmetric

NEW DISTRIBUTION

* According to IESNA classification (Illuminating Engineering Society of North America)

3.3 Colour temperature



3000 K

Warm white



4000 K

Neutral white

Light unit

3

3.4 Programming options

1-10 V system

Allows remote control of the luminous flux between 10% and 100% using an analogue signal ($V_i \geq 8V$: 100% / $V_i \leq 1V$: 10%)

Dali system (Digital Adressable Lighting Interface)

This is a very reliable digital bi-directional system to regulate the luminous flux and receive data on the status of the light plates for maintenance purposes.

The luminaires can be reprogrammed remotely using auxiliary devices to change the initial programming pattern.

Dynadimmer

The flow of light can be adjusted according to the time of day to save energy.

An example of dimming with Dynadimmer:

Until 11pm: luminaire function 100%
11pm to 5am: luminaire function 70%
After 5am: luminaire function 90%

AmpDim (phase-cut dimming)

This type of dimming does not require an additional control line. A standard controller is connected between the power line and the electronic equipment. The voltage variation can control the flow between 1% and 100%.