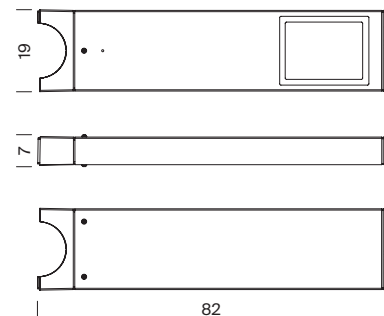


## Rama LED Liviana Luminaire

Gonzalo Milá, 2012

  
SANTA & COLE



Sizes in cm



**Materials:** Powder-coated finish aluminium extrusion luminaire.  
Anodised aluminium extrusion internal heat sink.

Tempered optical glass seal and silicone water-resistant seals.

**Colours:** light grey (RAL 9006).  
(other colours available to order)

**Size (cm):** 82 x 19 x 7

**Weight (kg):** 9.2

**Surface exposed to wind (m<sup>2</sup>):** 0.06

**Installation:** Suitable for pole and wall attachment using a range of fastening accessories.

Component delivered in two parts: luminaire and fastening attachments.

(for further information about accessories, log onto the website [www.santacole.com](http://www.santacole.com)).

**Applicable standards:** UNE-EN 60529, UNE-EN 60598, UNE-EN 55015, UNE-EN 61000, UNE-EN 50102, UNE-EN 62031

UL 1598, UL 8750, (file E-336377)

**Protection levels:** IP66 (protection from dust ingress and high-pressure water jets), suitable for wet locations, IK08 (protection against external mechanical impacts)

**Electrical rating:** Class I (CE), Non-class II (UL)

**Light source:** High-efficiency optical unit with 24 or 48 LEDs

**Nominal lamp power (W):** 24 - 68

**System power (W):** 28 - 75

**Operating current (mA):** 350 or 500

**Colour temperature (K°):** 3000 / 4000

**Luminous flux and efficacy of the floodlight:**

3000K

CRI min80

Luminous flux (lm): 2500-7800

Luminous efficacy (lm/W): 93-105

4000K

CRI typ70

Luminous flux (lm): 2800-9200

Luminous efficacy (lm/W): 102-124

**Light distribution:**

**Severall:** Type II, Type III or Type IV (according to IESNA classification)

**ULOR (Upper Light Output Ratio):** 0%

**Power supply:** constant current driver

**Regulation:**

1-10V/ DALI/Header flux regulation/Programmable automatic regulation

The LED luminaire may be regulated using a number of differing interfaces. These controls allow specific, individual control of light, reducing energy consumption in a sustainable manner.

Constant light output (CLO)

Assures a constant lumen output from the luminaire throughout its lifetime.

**Power factor (cos φ):**

N° LEDs	Current (mA)	P (W) 100%, CLO 80%	P (W) 70%, CLO 80%
24	350	0.97	0.95
	500	0.98	0.97
48	350	0.97	0.95
	500	0.98	0.97

**Operating voltage:** 220-240V 50Hz (CE) / 120-277V 60Hz (UL)

**Recommended wire:**

0.6/1 kV 3x1.5 mm<sup>2</sup>

0.6/1 kV 5x1.5 mm<sup>2</sup> (prog.)

**Temperature operating range (°C):** between -25 and 30 (500 mA)

**Lifetime:** TM21 L70 (10k) > 60.000 h

Thanks to an optimised thermal design, the luminous flux is maintained up to 70% after 60,000 h.

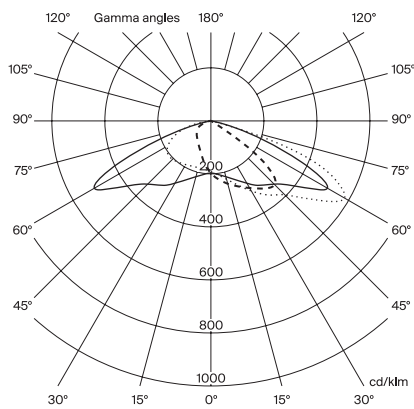
Under exceptional cases when the ambient temperature is excessive, the output may be reduced using the (NTC) active control system that ensures the right operating temperature is maintained.

Reference	N°LEDs	Colour temperature (K°)	Current (mA)	Lamp power (W)	System power (W)	IESNA TII Optics		IESNA TIII Optics		IESNA TIV Optics	
						Luminous flux (lm)	Efficacy (lm/W)	Luminous flux (lm)	Efficacy (lm/W)	Luminous flux (lm)	Efficacy (lm/W)
RLF24A1xx	24	3000 CRI min 80	350	24	28	2802	100	3248	116	3017	108
RLF24B1xx			500	34	40	3962	99	4591	115	4266	107
RLF24A2xx		4000 CRI typ 70	350	24	28	3081	110	3571	128	3317	118
RLF24B2xx			500	34	40	4356	109	5048	126	4690	117
RLF48A1xx	48	3000 CRI min 80	350	48	53	5378	101	6232	118	5790	109
RLF48B1xx			500	68	75	7356	98	8525	114	7920	106
RLF48A2xx		4000 CRI typ 70	350	48	53	6300	119	7302	138	6783	128
RLF48B2xx			500	68	75	8632	115	10003	133	9293	124

**Asymmetric**  
Distribution TII  
LOR 100%  
ULOR 0%±3%

Max. intensity 573.26 cd/klm

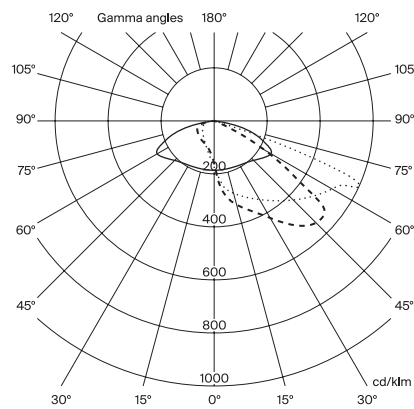
C Halfplanes  
0° — 180°  
90° - - - 270°  
25° ····· 205°



**Asymmetric**  
Distribution TIII  
LOR 100%  
ULOR 0%±3%

Max. intensity 593.70 cd/klm

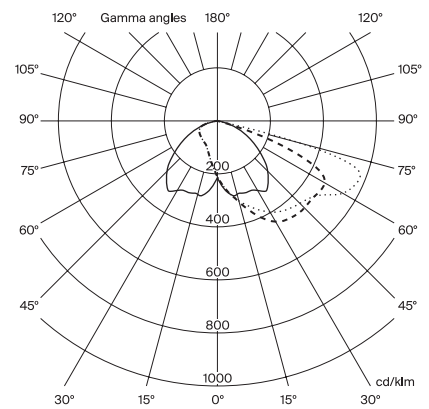
C Halfplanes  
0° — 180°  
90° - - - 270°  
40° ····· 220°



**Asymmetric**  
Distribution TIV  
LOR 100%  
ULOR 0%±3%

Max. intensity 579.34 cd/klm

C Halfplanes  
0° — 180°  
90° - - - 270°  
65° ····· 245°



For calculation in ground type II (according to UNE-40) and wind speed of 29 m/s, with soil formed by loose or wet dirt or sand of medium compactness ( $E_0 = 4800 \text{ KN/m}^2$ ), with HM-20 concrete. Non-binding information. We advise to carry out checks for each situation.