# RUMBALED (1)



- Compact and articulated: it integrates with all sizes and office spaces.
- Stable: its thick sheet metal base makes this lamp a resistant product with great stability.
- Trendy design: the finesse of the head and its elongated shape promotes a wide diffusion of light on the worktop.
- Energetically efficient: this lamp consumes 75% less energy than incandescent lighting and 35% less energy than fluorescent lighting for the same level of brightness.
- Securing: flicker-free light, provides a powerful and comfortable light that protects your eyes and causes less fatigue.
- Simple and effective: its ON / OFF switch located on the cord is easy to access.
- Rated power: this luminaire contains integrated LED lamps with a power of 5,2 W that can not be replaced
- Lifetime \* of LEDs: 50,000 hours
- Illumination of 1090 Lux at 35 cm
- Color temperature: 4000 K
- Weighted energy consumption: 4,3 kWh / 1000 h
- Luminous efficiency \*\* of LEDs: 135 lm / W
- Energy efficiency: class A / A + / A ++ (spectrum A ++ to E)
- CRI: 82
- 2 years warranty
- Max height: 40 cm / minimum height: 20 cm
- Materials: base and arms in metal with epoxy paint / ABS plastic head

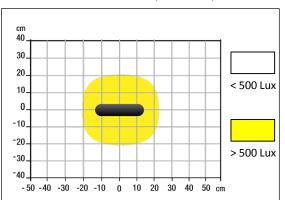




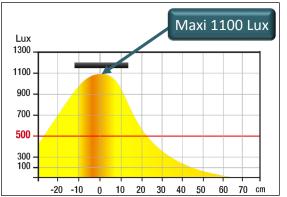




Measurement of Lux on the worktop in 35 cm top view:



Measurement of Lux on the worktop in 35 cm top view:



Energy class:

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SAP no.	Colours	Energy consumption KWh/1000 h	Lux at 35 cm	Lm/W	Colour T°	CRI	Source's lifetime	Warranty	Net weight	EAN code
400093720	Black	4,3	1090	135	4000 K	82	50000h	2 years	0,75 kg	3595560015443

<sup>\*</sup> Average consumption: 1000 h / year \*\* Light emission of the lighting source

# **UNILUX'S ADVICES**

### 1- Why using a desk lamp?

We spend about 8 hours a day at our place of work. Occupational medicine recommends lighting of at least 450 lux. The European standard NF EN 12464-1\* goes up to 500 lux for screen work or reading. You should know that an office equipped with fluorescent ceiling lights usually receives 200 and 300 Lux for those in LED!

The consequences of constant and insufficient artificial interior lighting:

- **Decreased visual comfort**
- Headache
- Badly lapping the general concentration
- Decrease in productivity
- Disturbances of the circadian cycle
- Sleep and mood disorders
- \* Standard NF EN 12 464-1 (European standard): Requirement for lighting indoor workplaces

## 2- Some figures













29 % of employees Report suffering from eyestrain \*

Only on the desk fitted with ceiling lights

Reach the level of 500 Lux prescribed by Occupational

\* Source: http://www.recrutons.fr/ergonomie-du-poste-de-travail.html

Medicine

### 3- The LED's Benefits



High quality and efficient lighting



Longer life



**Energy saving** 



**Eco-responsible** purchase

Workplan

Luminous flow (lm)



Safe for the health

Illumination (lx)

## 4- Somes definitions

Illuminance (Lux) corresponds to a quantity of light received by a surface. So:

- ф: Luminous flux in lumen
- S: surface per m2

Recommended lighting according to DIN EN 12464-1 \* for the office

- 300 Lux: deposit, copy, traffic areas
- 500 Lux: writing, reading, data processing
- 500 Lux: at the reception and at the counter
- 750 Lux: technical drawing

\* DIN EN 12464-1 (DIN 5035-1): European standard that determines the lighting requirements of workstations in enclosed areas, which meet the requirements of comfort and visual performance.

Luminous flux (Im) is defined by the sum of all the radiations emitted by the lamp. It is measured in Lumen, "Im" for short. It is defined from the energy flux (expressed in watts) more often termed radiated power.

The latter is a flow of radiated energy:

$$\Phi = \frac{Q}{t}$$

where Q is the radiated energy, expressed in joules (J) and t in seconds (s)

Luminous efficiency (lm/W) corresponds to the luminous efficiency of the lamp. This value is established by the ratio between the luminous flux and the power consumed. It is measured in "Im / W". The higher the luminous efficiency, the higher the amount of light relative to the power consumed. This data is fundamental for the preservation of the environment since it allows us to reduce energy consumption for the same amount of light emitted.

Color temperature (Kelvin) is defined by the color emitted by the light source. Variation in color temperature is an essential function of the desk lamp in addition to the variation of the intensity, as it allows to customize the lighting and to adapt the appropriate color temperature to the different activities (computer work, concentration, reading, relaxation, rest, ...). This variation in color temperature is measured in "Kelvin", "K" for short.

